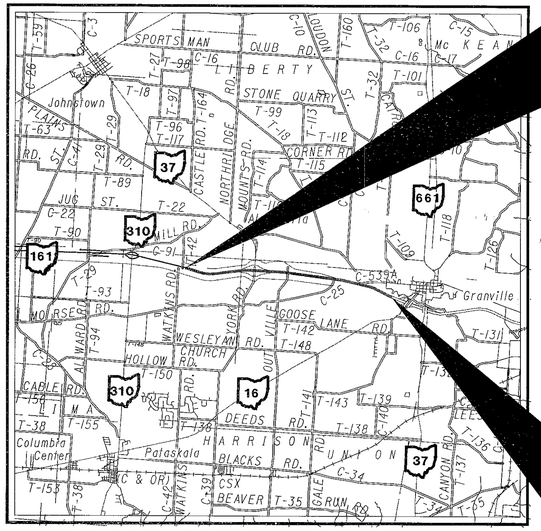


BEGIN PROJECT
STA. 351+00
S.L.M. 6.65

END PROJECT
STA. 654+00
S.L.M. 12.39

LOCATION MAP

LATITUDE: N40°04'22" LONGITUDE: W82°37'58"

SCALE IN MILES
0 1 2 3 4 5 6

N

PORTION TO BE IMPROVED _ _ _

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CALCULATED JMA
CHECKED CPU

DESIGN DESIGNATIONS

DESIGN DESIGNATION (S.R. 161)

CURRENT ADT (2010)	37,000
DESIGN YEAR ADT (2030)	59,100
DESIGN HOURLY VOLUME (2030)	7,100
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	5%
DESIGN SPEED	70 M.P.H.
LEGAL SPEED	65 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL FREEWAY

DESIGN DESIGNATION (WATKINS-YORK FRONTAGE ROAD)

CURRENT ADT (2010)	1,040
DESIGN YEAR ADT (2030)	1,240
DESIGN HOURLY VOLUME (2030)	150
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL PRINCIPAL ARTERIAL

DESIGN DESIGNATION (OUTVILLE ROAD)

CURRENT ADT (2010)	1,920
DESIGN YEAR ADT (2030)	2,410
DESIGN HOURLY VOLUME (2030)	290
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL MAJOR COLLECTOR

DESIGN DESIGNATION (SERVICE ROAD 10)

CURRENT ADT (2010)	20
DESIGN YEAR ADT (2030)	40
DESIGN HOURLY VOLUME (2030)	4
DIRECTIONAL DISTRIBUTION	50%
TRUCK (24 HOUR B&C)	1%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL LOCAL

DESIGN DESIGNATION (OUTVILLE-MORSE FRONTAGE ROAD)

CURRENT ADT (2010)	630
DESIGN YEAR ADT (2030)	750
DESIGN HOURLY VOLUME (2030)	100
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL MINOR COLLECTOR

DESIGN DESIGNATION (MORSE ROAD)

CURRENT ADT (2010)	440
DESIGN YEAR ADT (2030)	540
DESIGN HOURLY VOLUME (2030)	65
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL MINOR COLLECTOR

DESIGN DESIGNATION (RELOCATED WORTHINGTON RD. NORTH)

CURRENT ADT (2010)	1,060
DESIGN YEAR ADT (2030)	1,250
DESIGN HOURLY VOLUME (2030)	150
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL MINOR COLLECTOR

DESIGN DESIGNATION (S.R. 37)

CURRENT ADT (2010)	6,840
DESIGN YEAR ADT (2030)	8,300
DESIGN HOURLY VOLUME (2030)	6,400
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	11%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL PRINCIPAL ARTERIAL

DESIGN DESIGNATION (SERVICE ROAD 11)

CURRENT ADT (2010)	200
DESIGN YEAR ADT (2030)	250
DESIGN HOURLY VOLUME (2030)	25
DIRECTIONAL DISTRIBUTION	50%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL LOCAL

DESIGN DESIGNATION (C.R. 539A EXTENSION)

CURRENT ADT (2010)	1,060
DESIGN YEAR ADT (2030)	1,250
DESIGN HOURLY VOLUME (2030)	150
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL MINOR COLLECTOR

DESIGN DESIGNATION (YORK ROAD)

CURRENT ADT (2010)	2,700
DESIGN YEAR ADT (2030)	3,400
DESIGN HOURLY VOLUME (2030)	410
DIRECTIONAL DISTRIBUTION	60%
TRUCK (24 HOUR B&C)	4%
DESIGN SPEED	55 M.P.H.
LEGAL SPEED	55 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - RURAL LOCAL

DESIGN EXCEPTIONS:

DESIGN FEATURE	APPROVAL DATE	SHEET NUMBERS
SERVICE ROAD 10 HORIZONTAL ALIGNMENT STOPPING SIGHT DISTANCE SUPERELEVATION	11/30/2004	6, 658
SERVICE ROAD 11 HORIZONTAL ALIGNMENT SUPERELEVATION	12/17/2004	6, 738-740
OUTVILLE-MORSE FRONTAGE RD SHOULDER WIDTH	8/11/2004	35-37, 760-768

LIC-161-6.65
LIC-37-10.25

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SCHEMATIC PLAN

LIC-161-6.65
LIC-37-10.25

HORIZONTAL SCALE IN FEET
0 250 500 1000

CALCULATED JMA
CHECKED FJA

NOTE: FOR ALL WETLANDS, SEE WETLAND AVOIDANCE NOTE ON SHEET 49. FOR CULTURALLY SENSITIVE SITES, SEE CULTURAL SENSITIVE SITES TO BE AVOIDED NOTE ON SHEET 50.

EQUATION:
STA. 150+52.34 ℄ SURVEY & CONST. SERVICE RD. 10 -
STA. 150+32.10 ℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

BEGIN PROJECT
STA. 351+00.00
S.L.M. 6.65

BEGIN WORK
STA. 103+50.00
WATKINS-YORK
FRONTAGE ROAD

BEGIN WORK
WESTBOUND LANES
STA. 356+00.00

BEGIN WORK
STA. 143+00.00
SERVICE RD. 10

BEGIN WORK
STA. 150+32.10
RELOCATED
WORTHINGTON RD. NORTH

END WORK
STA. 150+52.34
SERVICE RD. 10

BEGIN WORK
S.L.M. 10.75
STA. 394+00.00
S.R. 37

END WORK
STA. 212+25.08
WATKINS-YORK
FRONTAGE RD.

END WORK
STA. 419+71.00
YORK RD.

BEGIN WORK
STA. 212+58.82
SERVICE RD. II

END WORK
STA. 243+17.17
SERVICE RD. II

END WORK
STA. 233+00.00
RELOCATED
WORTHINGTON RD.
NORTH

END WORK
STA. 26+25.00
OUTVILLE RD.

BEGIN WORK
STA. 497+43.92
OUTVILLE-MORSE
FRONTAGE RD.

BEGIN WORK
STA. 18+60.00
OUTVILLE RD.

STRUCTURE NO.
LIC-37-1175

STRUCTURE NO.
LIC-161-0712 L&R

STRUCTURE NO.
LIC-37-1225 L&R

STRUCTURE NO.
LIC-37-1255

P.C. STA. 346+54.16
P.T. STA. 362+20.55
P.C. STA. 374+65.36
P.T. STA. 394+77.67
P.C. STA. 394+93.96
P.C. STA. 430+93.83
P.T. STA. 412+54.54
P.C. STA. 411+02.83
P.T. STA. 445+09.42
P.I. STA. - 419+37.99
Δ - 00° 19' 13" (LT)
NO CURVE
P.I. STA. - 421+24.65
P.I. STA. - 26+27.28
Δ - 00° 14' 15" (RT)
NO CURVE
P.I. STA. - 25+06.83
Δ - 00° 47' 03" (RT)
NO CURVE
P.I. STA. - 18+00.00
Δ - 00° 26' 29" (LT)
NO CURVE

MATCH LINE STA. 364+00.00
MATCH LINE STA. 510+00.00

℄ SURVEY & CONST. S.R. 161
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
℄ SURVEY & CONST. SERVICE RD. 10
℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD.
℄ SURVEY & CONST. SERVICE RD. II
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH
℄ SURVEY & CONST. SERVICE RD. II
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.
℄ SURVEY & CONST. RAMP I
℄ SURVEY & CONST. RAMP J
℄ SURVEY & CONST. RAMP K
℄ SURVEY & CONST. RAMP L
℄ SURVEY & CONST. YORK RD.
℄ SURVEY & CONST. OUTVILLE RD.

STA. 402+21.04 ℄ SURVEY & CONST. S.R. 37 -
STA. 451+87.75 ℄ SURVEY & CONST. RAMP I -
STA. 450+21.62 ℄ SURVEY & CONST. RAMP J

STA. 417+63.14 ℄ SURVEY & CONST. YORK RD. -
STA. 212+25.08 ℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD. -
STA. 212+58.82 ℄ SURVEY & CONST. SERVICE RD. II

STA. 411+12.78 ℄ SURVEY & CONST. S.R. 37 -
STA. 451+60.74 ℄ SURVEY & CONST. RAMP K -
STA. 450+41.60 ℄ SURVEY & CONST. RAMP L
STA. 411+12.78 ℄ SURVEY & CONST. YORK ROAD

STA. 20+50.00 ℄ SURVEY & CONST. OUTVILLE RD. -
STA. 497+31.85 ℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.

STA. 395+70.02 ℄ SURVEY & CONST. S.R. 37 -
STA. 212+83.63 ℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

STA. 497+21.01 ℄ SURVEY & CONST. S.R. 37 -
STA. 22+66.21 ℄ SURVEY & CONST. OUTVILLE RD.

STA. 406+76.96 ℄ SURVEY & CONST. S.R. 37 -
STA. 451+13.72 ℄ SURVEY & CONST. S.R. 161

TANGENT FROM P.C. STA. 394+53.96
TANGENT FROM P.C. STA. 411+02.83

87°30'00" 87°30'00"
74°52'58" 86°41'06"
87°28'17" 87°31'45"
85°07'42"
89°24'16"

S 03° 53' 25" W
N 82° 41' 36" E
S 72° 15' 10" E
N 82° 35' 35" E
S 48° 49' 46" E
S 71° 30' 41" E
S 62° 19' 41" E
N 78° 39' 25" E
S 86° 47' 24" E
S 03° 02' 18" W
N 08° 58' 05" E
S 03° 03' 05" W
N 04° 26' 11" E
N 05° 21' 00" E
N 05° 06' 45" E
N 04° 19' 42" E
S 86° 16' 03" E

SIMPSON RUN
WOOTS RUN
WATKINS RD.
YORK RD.
OUTVILLE RD.
SR 161 WORTHINGTON RD
SR 37

6" ASHLAND OIL PIPELINE
10" ASHLAND OIL PIPELINE

WETLAND

BY OTHERS
PHASE 1
PHASE 2
E040 (452)

FS 54 FS 79 FS 77 FS 78 FS 51 FS 93 FS 94 FS 84 FS 85 FS 134 FS 130 FS 98 FS 100 FS 101 FS 114 FS 99 FS 109 FS 97 FS 96 FS 95 FS 108 FS 107 FS 106 FS 75 FS 59 FS 57 FS 63 FS 62 FS 58 FS 60 FS 55 FS 56 FS 3

AS 16 AS 15 AS 54 AS 53 AS 52 AS 51 AS 14 AS 13 AS 12 AS 11 AS 10 AS 8 AS 7 AS 6 AS 5 AS 4 AS 2

33 Li 718* 33 Li 717* LIC-1221-14*, FS 126/AS 15 33 Li 661* LIC-1232-14*/AS 11 33 Li 662* 33 Li 707* 33 Li 706* 33 Li 665* 33 Li 700* 33 Li 699* 33 Li 671* FS 61 FS 69 AS 8 33 Li 668* 33 Li 670* 33 Li 713* 33 Li 658*, LIC-1228-14*/AS 13 33 Li 653* 33 Li 654* 33 Li 655* 33 Li 656* 33 Li 657* 33 Li 714* 33 Li 715* 33 Li 716* 33 Li 712* 33 Li 708* 33 Li 660* 33 Li 709* 33 Li 710* 33 Li 711* 33 Li 659* LIC-1223-14*/AS 52 LIC-1224-14*/AS 14 LIC-1226-14*/AS 53 LIC-1222-14*/AS 50 LIC-1231-14*/AS 12 33 Li 663* 33 Li 664*

FS 10 FS 17 FS 16 FS 15 FS 14 FS 18 FS 13 FS 12 FS 19 FS 11 FS 80 FS 9 FS 8 FS 7 FS 6 FS 5 FS 74 FS 73 FS 50 FS 4 FS 20 FS 21 FS 76 FS 2

210+00 200+00 190+00 180+00 170+00 160+00 150+00 140+00 130+00 120+00 110+00 100+00 90+00 80+00 370+00 380+00 390+00 400+00 410+00 420+00 430+00 440+00 450+00 460+00 470+00 480+00 490+00 500+00 230+00 240+00 320+00 330+00 340+00 350+00 360+00

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NOTE: FOR ALL WETLANDS, SEE WETLAND AVOIDANCE NOTE ON SHEET 49. FOR CULTURALLY SENSITIVE SITES, SEE CULTURAL SENSITIVE SITES TO BE AVOIDED NOTE ON SHEET 50.

MATCH LINE STA. 510+00.00

MATCH LINE STA. 656+00.00

BEGIN WORK
STA. 295+50.00
C.R. 539A
EXTENSION

LIC-1243-14*/AS 55

33 Li 672*
33 Li 673* AS 64
33 Li 674*
S 80° 18' 55" E
33 Li 675*
FS 66
FS 67
S 82° 24' 26" E
33 Li 676*
FS 70
33 Li 678*
33 Li 677*
FS 133
33 Li 679*
33 Li 696* WETLAND
33 Li 698*
33 Li 697*
33 Li 695*
S 81° 37' 13" E
33 Li 694*
33 Li 693*
33 Li 692*
33 Li 691*
33 Li 690*
33 Li 689*
33 Li 688*
33 Li 687*
N 84° 25' 33" E
33 Li 681*
33 Li 682*
LIC-1245-15*/AS 5
LIC-281-15*/AS 4
33 Li 683*
33 Li 685*
FS 131
33 Li 680*
FS 132

290+00
300+00
310+00
320+00
330+00
340+00
350+00
360+00
520+00
530+00
540+00
550+00
560+00
570+00
580+00
590+00
600+00
610+00
620+00
630+00
640+00
650+00

© SURVEY & CONST. S.R. 37

© SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.

END WORK
STA. 18+49.92
MORSE RD.

LIC-268-15*/AS 6

BRIDGE C.R.
539A EXTENSION

10" ASHLAND OIL PIPELINE

6" ASHLAND OIL PIPELINE

STRUCTURE NO.
LIC-37-1405 L&R

CHINNEY CREEK

S 76° 33' 53" E

RACCOON CREEK

BROADWAY

END WORK
STA. 364+40.00
C.R. 539A
EXTENSION

10" ASHLAND OIL PIPELINE

S 62° 50' 23" E

RACCOON CREEK

STA. 565+00.00
MEDIAN CROSSING
N 05° 54' 12" E

P.C. STA. 561+38.22

N 35° 56' 45" E
© SURVEY & CONST.
MORSE ROAD

P.T. STA. 576+05.56

P.C. STA. 612+71.61

P.T. STA. 622+07.50

P.C. STA. 641+26.50

P.T. STA. 655+43.68

WETLAND
(SEE WETLAND AVOIDANCE NOTE ON SHEET 49)

WETLAND

6" ASHLAND OIL PIPELINE

END WORK
STA. 584+40.00
OUTVILLE-MORSE
FRONTAGE RD.

BRIDGE OUTVILLE-MORSE FRONTAGE ROAD

660+00
670+00
680+00

S 69° 26' 38" E

END WORK &
RESURFACING
STA. 662+00.00

END WORK &
RESURFACING
STA. 679+00.00
S.L.M. 12.86

FS 1

E040 (452)

END PROJECT
STA. 654+00.00
S.L.M. 12.39

BEGIN WORK
STA. 7+75.00
MORSE RD.

MORSE RD

© SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE RD.

88°18'38"

© SURVEY & CONST.
MORSE ROAD

STA. 561+59.63 © SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD =
STA. 18+49.92 © SURVEY & CONST. MORSE ROAD

MATCH LINE STA. 656+00.00

HORIZONTAL SCALE IN FEET
0 250 500 1000

CALCULATED JMA
CHECKED FJA

SCHEMATIC PLAN

LIC-161-6.65
LIC-37-10.25

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S.R. 161/37 CURVE DATA

P.I. STA. = 354+37.66	P.I. STA. = 384+88.00	P.I. STA. = 438+03.66	P.I. STA. = 491+53.90	P.I. STA. = 573+72.12	P.I. STA. = 617+41.76	P.I. STA. = 648+36.87
Δ = 03° 54′ 58″ (RT)	Δ = 25° 09′ 15″ (LT)	Δ = 10° 37′ 01″ (RT)	Δ = 04° 22′ 58″ (RT)	Δ = 05° 50′ 33″ (RT)	Δ = 13° 43′ 30″ (RT)	Δ = 06° 36′ 15″ (LT)
Dc = 00° 15′ 00″	Dc = 01° 15′ 00″	Dc = 00° 45′ 00″	Dc = 00° 45′ 00″	Dc = 01° 15′ 00″	Dc = 01° 28′ 00″	Dc = 00° 28′ 00″
R = 22,918.31′	R = 4,583.66′	R = 7,639.44′	R = 7,639.44′	R = 4,583.66′	R = 3,906.55′	R = 12,277.67′
T = 783.50′	T = 1,022.64′	T = 709.83′	T = 292.32′	T = 233.90′	T = 470.15′	T = 708.37′
L = 1,566.39′	L = 2,012.31′	L = 1,415.59′	L = 584.36′	L = 467.39′	L = 935.80′	L = 1,415.18′
E = 13.39′	E = 112.69′	E = 32.91′	E = 5.59′	E = 5.96′	E = 28.19′	E = 20.42′
e_{max} = NC	e_{max} = 0.044	e_{max} = 0.028	e_{max} = 0.028	e_{max} = 0.044	e_{max} = 0.051	e_{max} = 0.018

S.R. 37 CURVE DATA

P.I. STA. = 395+81.69	P.I. STA. = 411+78.69
Δ = 01° 16′ 38″ (RT)	Δ = 00° 45′ 31″ (RT)
Dc = 00° 30′ 00″	Dc = 00° 30′ 00″
R = 11,459.16′	R = 11,459.16′
T = 127.73′	T = 75.85′
L = 255.44′	L = 151.71′
E = 0.71′	E = 0.25′
e_{max} = NC	e_{max} = NC

RELOCATED WORTHINGTON ROAD NORTH CURVE DATA

P.I. STA. = 193+70.21	P.I. STA. = 207+00.00	P.I. STA. = 217+99.96	P.I. STA. = 227+95.54
Δ = 36° 25′ 42″ (LT)	Δ = 39° 41′ 55″ (RT)	Δ = 29° 27′ 57″ (RT)	Δ = 39° 00′ 54″ (LT)
Dc = 06° 00′ 00″	Dc = 06° 00′ 00″	Dc = 06° 00′ 00″	Dc = 06° 00′ 00″
R = 954.93′	R = 954.93′	R = 954.93′	R = 954.93′
Ls = 265.19′	Ls = 265.19′	Ls = 265.19′	Ls = 265.19′
Θ_s = 07° 57′ 21″	Θ_s = 07° 57′ 21″	Θ_s = 07° 57′ 21″	Θ_s = 07° 57′ 21″
LT = 176.97′	LT = 176.97′	LT = 176.97′	LT = 176.97′
ST = 88.56′	ST = 88.56′	ST = 88.56′	ST = 88.56′
x = 264.68′	x = 264.68′	x = 264.68′	x = 264.68′
y = 12.26′	y = 12.26′	y = 12.26′	y = 12.26′
k = 132.51′	k = 132.51′	k = 132.51′	k = 132.51′
p = 3.07′	p = 3.07′	p = 3.07′	p = 3.07′
Δc = 20° 31′ 01″ (LT)	Δc = 23° 47′ 14″ (RT)	Δc = 13° 33′ 16″ (RT)	Δc = 23° 06′ 13″ (LT)
Lc = 341.95′	Lc = 396.45′	Lc = 225.91′	Lc = 385.06′
Ts = 447.75′	Ts = 478.34′	Ts = 384.42′	Ts = 471.89′
Es = 53.60′	Es = 63.58′	Es = 35.63′	Es = 61.41′
e_{max} = 0.083	e_{max} = 0.083	e_{max} = 0.083	e_{max} = 0.083

C.R. 539A EXTENSION CURVE DATA

P.I. STA. = 313+44.17	P.I. STA. = 322+55.21	P.I. STA. = 336+26.62	P.I. STA. = 360+04.05
Δ = 01° 18′ 17″ (LT)	Δ = 00° 47′ 13″ (LT)	Δ = 05° 50′ 33″ (RT)	Δ = 19° 00′ 34″ (LT)
Dc = 00° 30′ 00″	Dc = 00° 30′ 00″	Dc = 01° 13′ 38″	Dc = 03° 00′ 00″
R = 11,459.16′	R = 11,459.16′	R = 4,668.74′	R = 1,909.86′
T = 130.49′	T = 78.70′	T = 238.24′	Ls = 159.00′
L = 260.96′	L = 157.40′	L = 476.07′	Θ_s = 02° 23′ 06″
E = 0.74′	E = 0.27′	E = 6.07′	LT = 106.01′
e_{max} = NC	e_{max} = NC	e_{max} = 0.030	ST = 53.01′
			x = 158.97′
			y = 2.21′
			k = 79.50′
			p = 0.55′
			Δc = 14° 14′ 22″ (LT)
			Lc = 474.64′
			Ts = 399.35′
			Es = 14.84′
			e_{max} = 0.062

SERVICE ROAD 10 CURVE DATA

P.I. STA. = 145+26.74	P.I. STA. = 146+98.16
Δ = 08° 44′ 01″ (RT)	Δ = 24° 04′ 10″ (LT)
Dc = 12° 00′ 42″	Dc = 20° 02′ 01″
(NDC Dc = 6° 00′ MAX)	(NDC Dc = 6° 00′ MAX)
R = 477.00′	R = 286.00′
T = 36.43′	T = 60.97′
L = 72.71′	L = 120.15′
E = 1.39′	E = 6.43′
e_{max} = NC	e_{max} = NC
NO SPIRAL (NDC 265.19′ SPIRAL)	NO SPIRAL (NDC 265.19′ SPIRAL)

RAMP K CURVE DATA

P.I. STA. = 437+53.40	P.I. STA. = 441+79.34	P.I. STA. = 447+90.43
Δ = 12° 28′ 42″ (RT)	Δ = 22° 10′ 47″ (RT)	Δ = 25° 00′ 15″ (LT)
Dc = 02° 15′ 00″	Dc = 07° 30′ 00″	Dc = 10° 00′ 00″
R = 2,546.48′	R = 763.94′	R = 572.96′
T = 278.40′	T = 149.74′	T = 127.04′
L = 554.60′	L = 295.73′	L = 250.04′
E = 15.17′	E = 14.54′	E = 13.92′
e_{max} = 0.056	e_{max} = 0.083	e_{max} = 0.072

WATKINS-YORK FRONTAGE ROAD CURVE DATA

P.I. STA. = 120+71.00	P.I. STA. = 143+69.72	P.I. STA. = 194+97.02	P.I. STA. = 206+84.64
Δ = 01° 30′ 42″ (RT)	Δ = 25° 09′ 15″ (LT)	Δ = 48° 34′ 39″ (RT)	Δ = 22° 40′ 55″ (LT)
Dc = 00° 30′ 00″	Dc = 01° 12′ 53″	Dc = 06° 00′ 00″	Dc = 06° 00′ 00″
R = 11,459.16′	R = 4,716.66′	R = 954.93′	R = 954.93′
T = 151.15′	T = 1,052.31′	Ls = 265.19′	Ls = 265.19′
L = 302.29′	L = 2,070.70′	Θ_s = 07° 57′ 21″	Θ_s = 07° 57′ 21″
E = 1.00′	E = 115.96′	LT = 176.97′	LT = 176.97′
e_{max} = NC	e_{max} = 0.030	ST = 88.56′	ST = 88.56′
		x = 264.68′	x = 264.68′
		y = 12.26′	y = 12.26′
		k = 132.51′	k = 132.51′
		p = 3.07′	p = 3.07′
		Δc = 32° 39′ 57″ (RT)	Δc = 06° 46′ 14″ (LT)
		Lc = 544.44′	Lc = 112.84′
		Ts = 564.83′	Ts = 324.65′
		Es = 96.10′	Es = 22.14′
		e_{max} = 0.083	e_{max} = 0.083

OUTVILLE-MORSE FRONTAGE ROAD CURVE DATA

P.I. STA. = 512+00.30	P.I. STA. = 573+67.71
Δ = 03° 51′ 37″ (RT)	Δ = 05° 50′ 33″ (RT)
Dc = 0° 30′ 00″	Dc = 01° 15′ 00″
R = 11,459.16′	R = 4,583.66′
T = 386.17′	T = 233.90′
L = 772.05′	L = 467.39′
E = 6.51′	E = 5.96′
e_{max} = NC	e_{max} = 0.030

MORSE ROAD CURVE DATA

P.I. STA. = 13+47.39
Δ = 29° 02′ 33″ (LT)
Dc = 06° 00′ 00″
R = 954.93′
Ls = 256.35′
Θ_s = 07° 41′ 26″
LT = 171.06′
ST = 85.60′
x = 255.89′
y = 11.45′
k = 128.10′
p = 2.87′
Δc = 13° 39′ 42″ (LT)
Lc = 227.69′
Ts = 376.18′
Es = 34.47′
e_{max} = 0.083

RAMP I CURVE DATA

P.I. STA. = 440+88.24	P.I. STA. = 448+45.43
Δ = 20° 30′ 00″ (LT)	Δ = 23° 51′ 58″ (RT)
Dc = 07° 30′ 00″	Dc = 10° 00′ 00″
R = 764.49′	R = 573.69′
T = 138.24′	T = 121.24′
L = 273.33′	L = 238.66′
E = 12.40′	E = 12.67′
e_{max} = 0.083	e_{max} = 0.072

RAMP J CURVE DATA

P.I. STA. = 454+18.04	P.I. STA. = 459+41.24	P.I. STA. = 463+88.76
Δ = 32° 23′ 57″ (RT)	Δ = 26° 00′ 00″ (LT)	Δ = 08° 18′ 07″ (LT)
Dc = 11° 30′ 00″	Dc = 07° 30′ 00″	Dc = 01° 30′ 00″
R = 498.22′	R = 763.94′	R = 3,819.72′
T = 144.74′	T = 176.37′	T = 277.22′
L = 281.73′	L = 346.67′	L = 553.46′
E = 20.60′	E = 20.09′	E = 10.05′
e_{max} = 0.076	e_{max} = 0.083	e_{max} = 0.041

RAMP L CURVE DATA

P.I. STA. = 454+27.21	P.I. STA. = 460+42.93
Δ = 27° 16′ 57″ (LT)	Δ = 29° 09′ 25″ (RT)
Dc = 10° 00′ 00″	Dc = 07° 30′ 00″
R = 572.96′	R = 763.94′
T = 139.05′	T = 198.69′
L = 272.82′	L = 388.76′
E = 16.63′	E = 25.41′
e_{max} = 0.072	e_{max} = 0.083

SERVICE ROAD 11 CURVE DATA

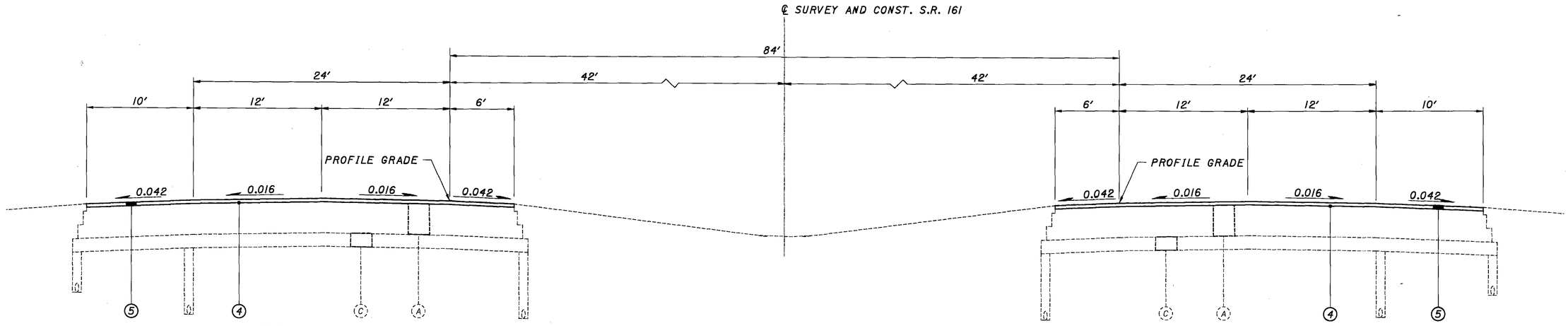
P.I. STA. = 214+89.99	P.I. STA. = 219+02.01	P.I. STA. = 225+44.05
Δ = 81° 05′ 19″ (LT)	Δ = 52° 06′ 41″ (RT)	Δ = 32° 16′ 35″ (RT)
Dc = 27° 56′ 57″	Dc = 09° 59′ 57″	Dc = 9° 59′ 57″
(NDC Dc = 6° 00′ MAX)	(NDC Dc = 6° 00′ MAX)	(NDC Dc = 6° 00′ MAX)
R = 205.00′	R = 573.00′	R = 573.00′
T = 175.36′	T = 280.16′	T = 165.80′
L = 290.13′	L = 521.15′	L = 322.78′
E = 64.77′	E = 64.82′	E = 23.51′
e_{max} = 0.081	e_{max} = 0.080	e_{max} = 0.080
NO SPIRAL (NDC 265.19′ SPIRAL)	NO SPIRAL (NDC 265.19′ SPIRAL)	NO SPIRAL (NDC 265.19′ SPIRAL)

CALCULATED JMA
CHECKED CPU

HORIZONTAL CURVE DATA

LIC-161-6.65
LIC-37-10.25

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NORMAL SECTION - S.R. 161

TYPICAL SECTIONS - S.R. 161

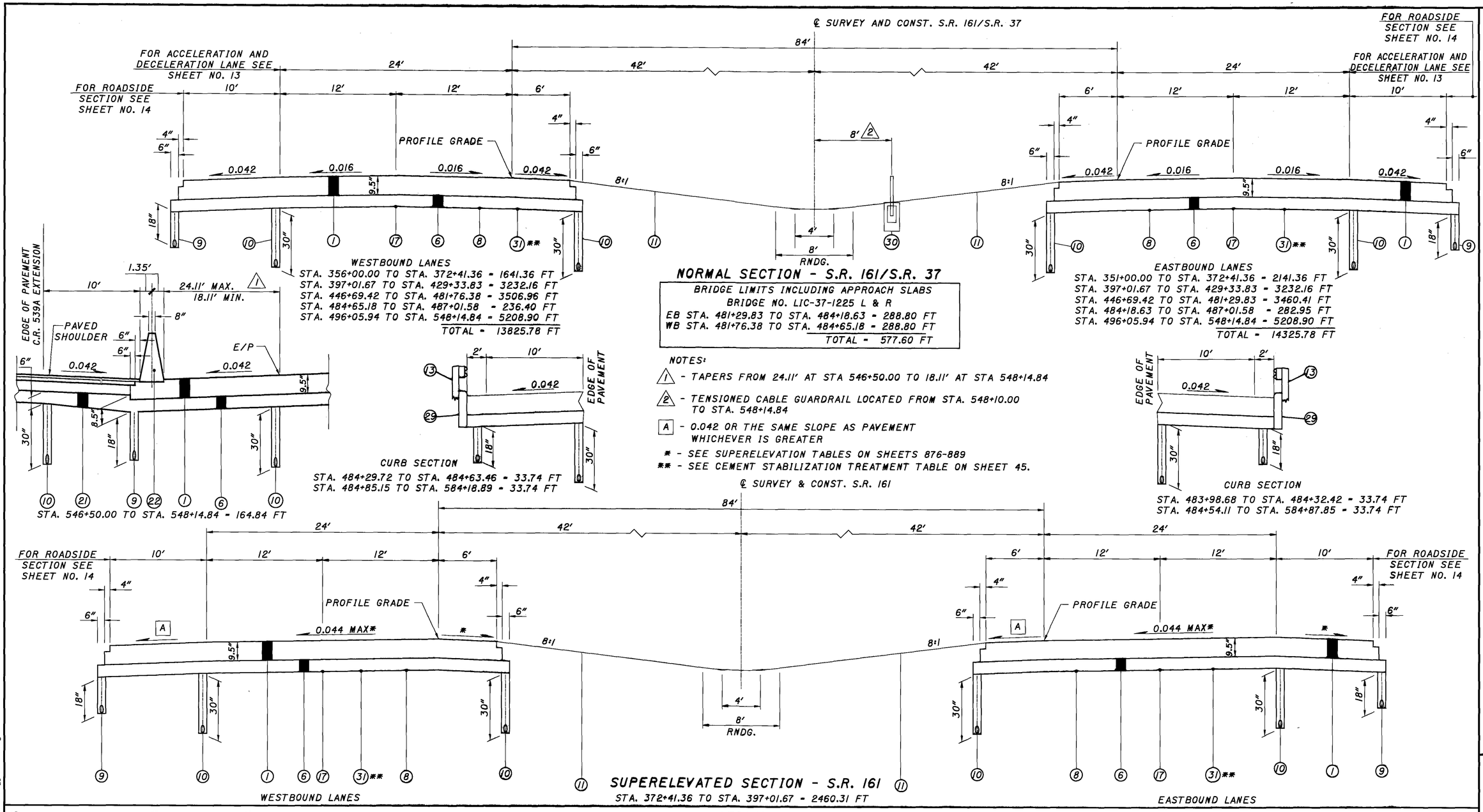
LIC-161-6.65
LIC-37-10.25

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

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LEGEND

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

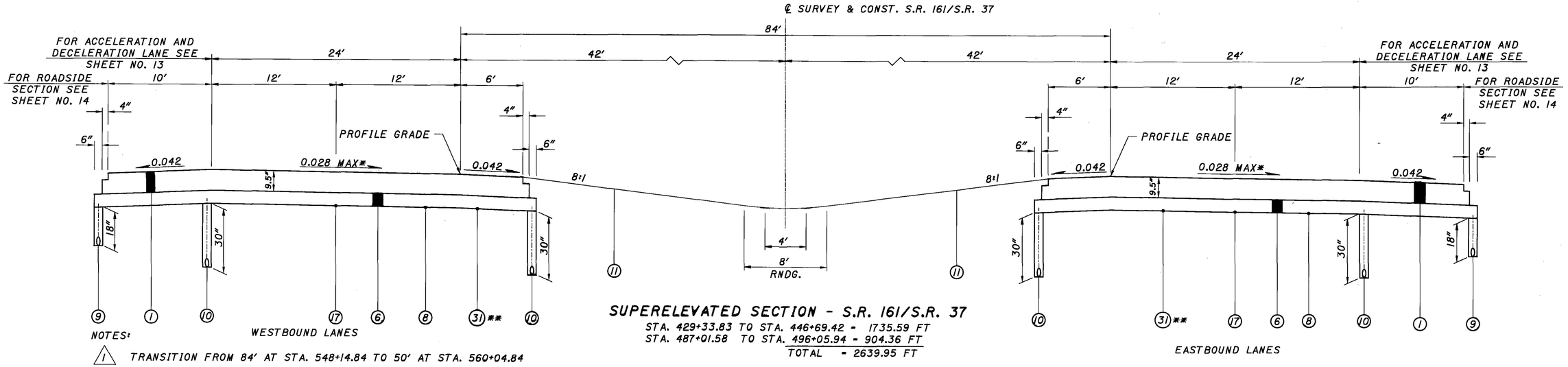
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 161/S.R. 37

LIC-161-6.65
LIC-37-10.25

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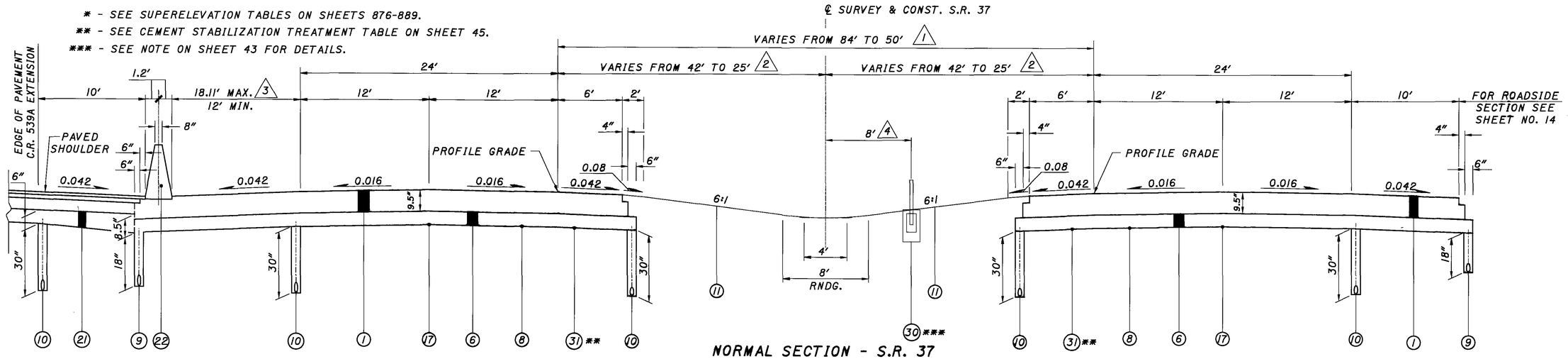
SUPERELEVATED SECTION - S.R. 161/S.R. 37

STA. 429+33.83 TO STA. 446+69.42 - 1735.59 FT
STA. 487+01.58 TO STA. 496+05.94 - 904.36 FT
TOTAL - 2639.95 FT

NOTES:

1. TRANSITION FROM 84' AT STA. 548+14.84 TO 50' AT STA. 560+04.84
2. TRANSITION FROM 42' AT STA. 548+14.84 TO 25' AT STA. 560+04.84
3. TAPERS FROM 18.11' AT STA. 548+14.84 TO 12' AT STA. 552+24.27
4. TENSIONED CABLE GUARDRAIL LOCATED FROM STA. 548+14.84 TO STA. 560+04.84

* - SEE SUPERELEVATION TABLES ON SHEETS 876-889.
** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.
*** - SEE NOTE ON SHEET 43 FOR DETAILS.



NORMAL SECTION - S.R. 37

STA. 548+14.84 TO STA. 560+04.84 - 1190.00 FT

WESTBOUND LANES

EASTBOUND LANES

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

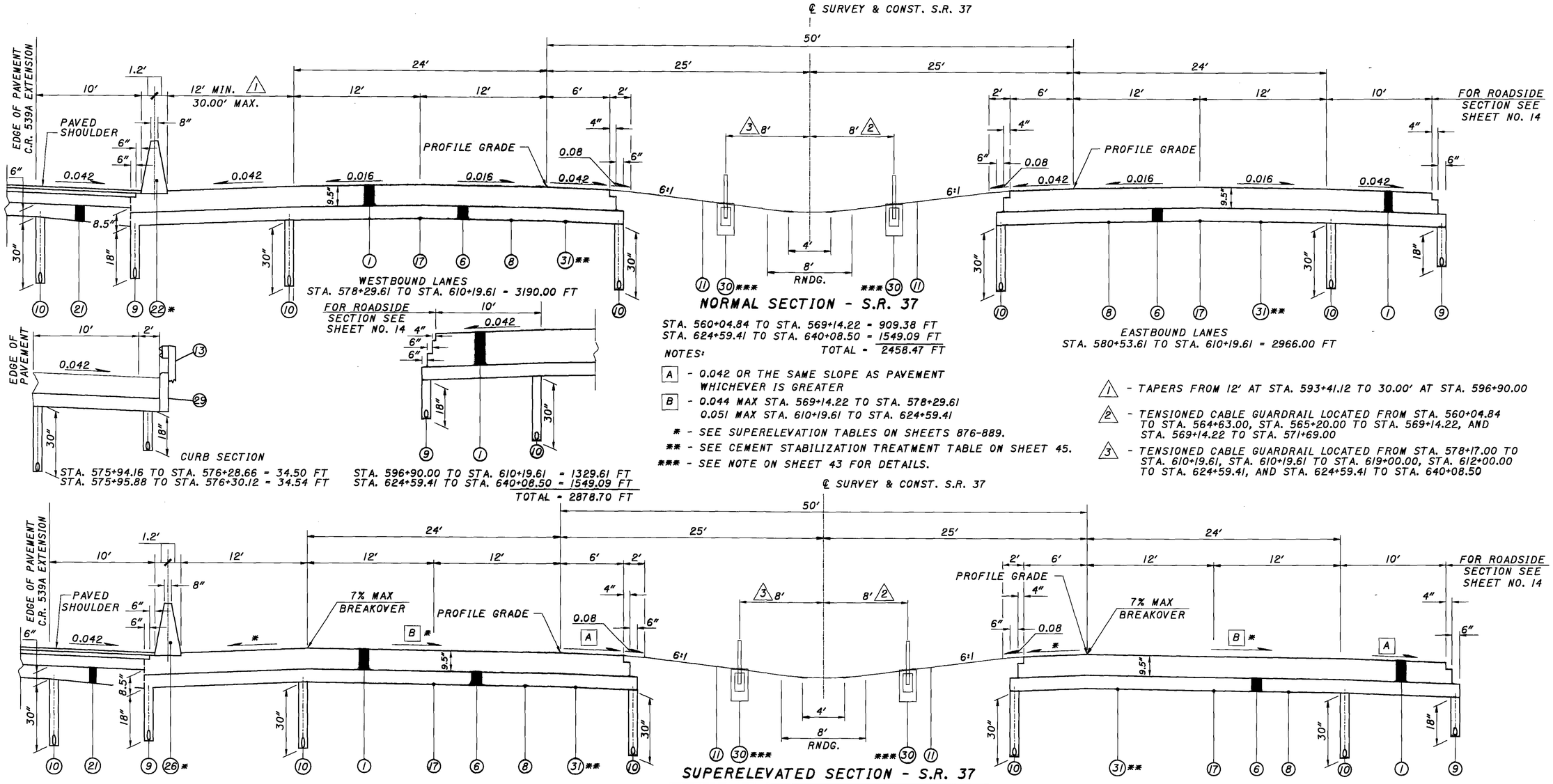
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 161/S.R. 37

LIC-161-6.65
LIC-37-10.25

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(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

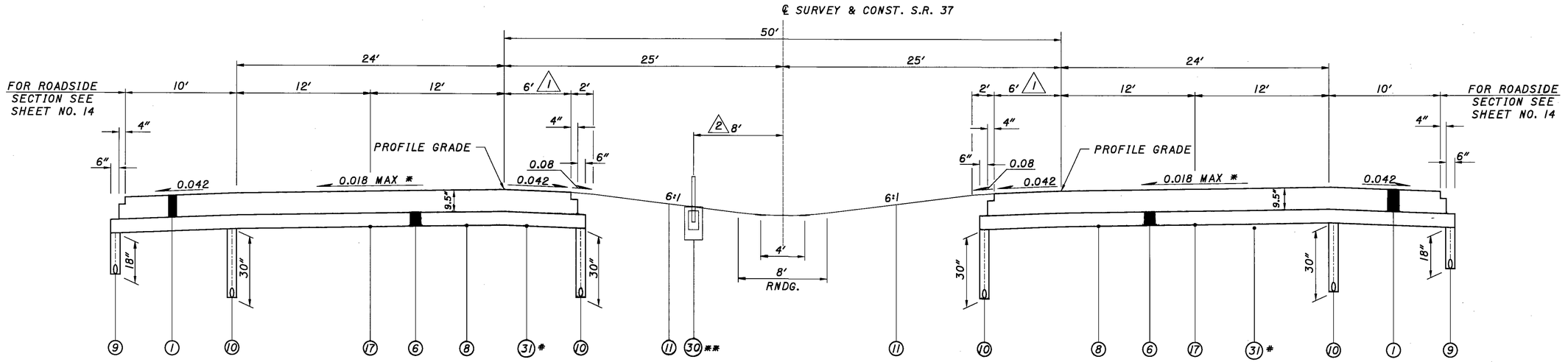
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8″ ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6″ AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6″ BASE PIPE UNDERDRAINS (18″ DEPTH), 707.31
(10) ITEM 605 - 6″ SHALLOW PIPE UNDERDRAINS (30″ DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4″ ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9″ NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15″
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5″ ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8″ AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾″ ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12″
(28) ITEM 605 - 12″ AGGREGATE DRAIN (8″ DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17″
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 37

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LIC-37-10.25

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WESTBOUND LANES

EASTBOUND LANES

SUPERELEVATED SECTION - S.R. 37

STA. 640+08.50 TO STA. 654+00.00- 1391.50 FT

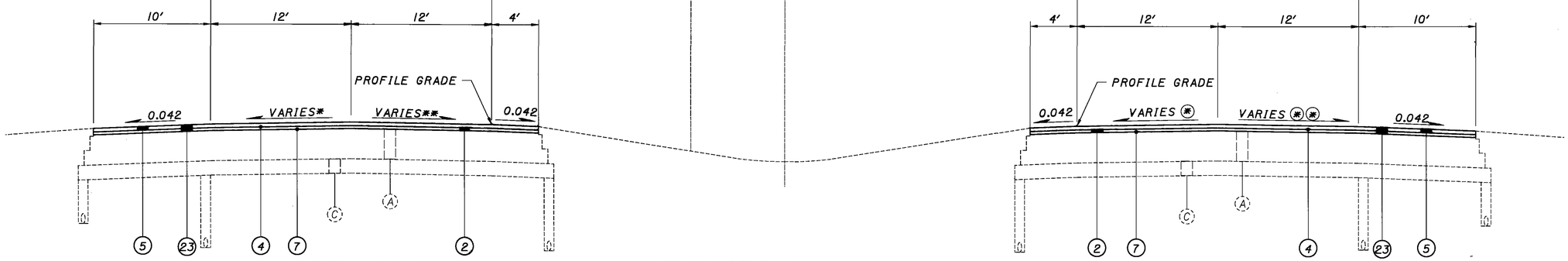
1 - TRANSITION FROM 6' AT STA. 653+25.00 TO 4' AT STA. 654+00.00

2 - TENSIONED CABLE GUARDRAIL LOCATED FROM STA. 640+08.50 TO STA. 654+00.00 AND STA. 654+00.00 TO STA. 659+00.00

\# - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

** - SEE NOTE ON SHEET 43 FOR DETAILS.

NOTE:
SEE SUPERELEVATION TABLES ON SHEETS 876-889



WESTBOUND LANES

STA. 654+00.00 TO STA. 679+00.00 - 2500.00 FT

NORMAL SECTION - S.R. 37

EASTBOUND LANES

STA. 654+00.00 TO STA. 662+00.00 - 80.00 FT

* 0.013 AT STA. 654+00
** 0.017 AT STA. 654+00

⊛ 0.015 AT STA. 654+00
⊛⊛ 0.014 AT STA. 654+00

LEGEND

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

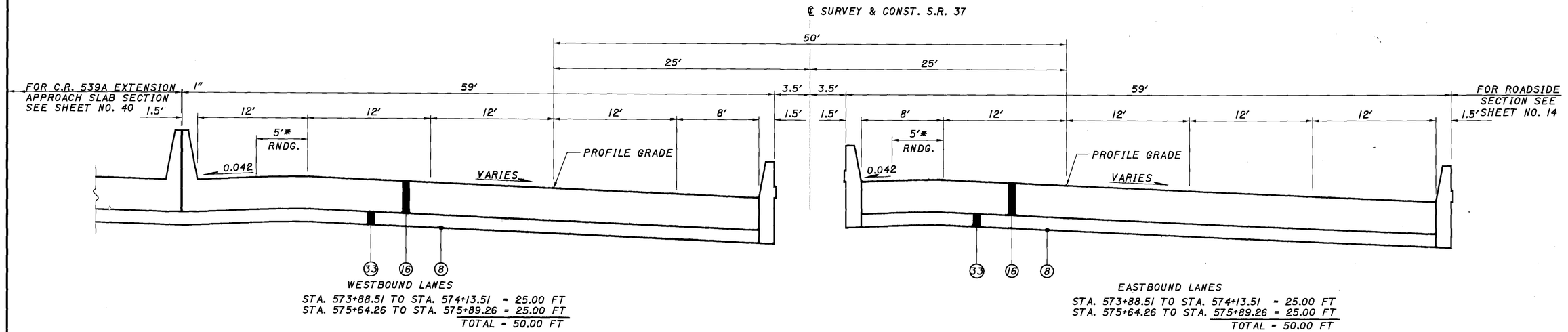
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 37

LIC-161-6.65
LIC-37-10.25

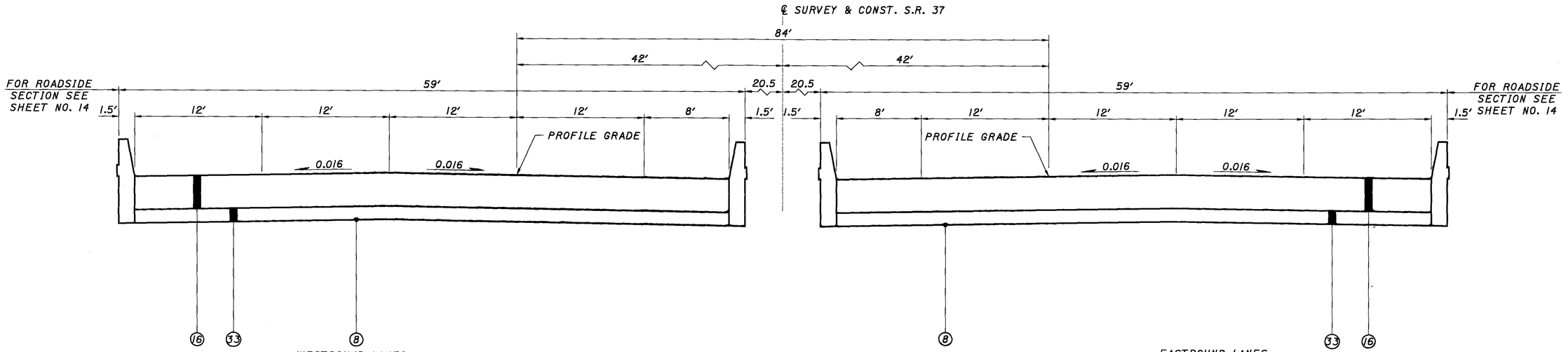
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APPROACH SLAB SUPERELEVATED SECTION - S.R. 37

* TRANSITION FROM 0.026 TO 5' ROUNDING THROUGH APPROACH SLAB



APPROACH SLAB NORMAL SECTION - S.R. 37

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 37

LIC-161-6.65
LIC-37-10.25

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NOTES:

[1] - TAPERS FROM 0' AT STA. 424+54.00 TO 16' AT STA. 432+26.95
16' FROM STA. 432+26.95 TO STA. 440+34.31

16' FROM STA. 462+15.54 TO STA. 464+94.74
TAPERS FROM 16' AT STA. 464+94.74 TO 12' AT STA. 466+69.83

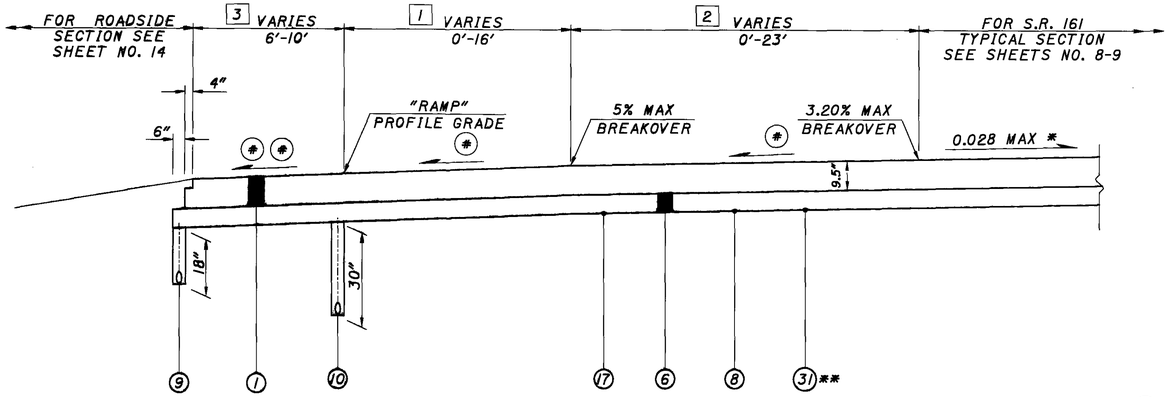
12' FROM STA. 466+65.00 TO 469+11.00
TAPERS FROM 12' AT STA. 469+11.00 TO 0' AT STA. 470+11.00

[2] - TAPERS FROM 0' AT STA. 432+26.95 TO 23' AT STA. 440+34.31
TAPERS FROM 23' AT STA. 462+15.54 TO 0' AT STA. 466+65.00

[3] - TAPERS FROM 10' AT STA. 424+54.00 TO 8' AT STA. 425+50.00
8' FROM STA. 425+50.00 TO STA. 439+54.53

TAPERS FROM 8' AT STA. 439+54.53 TO 6' AT STA. 440+00.00
6' FROM STA. 440+00.00 TO STA. 440+34.31

* - SEE SUPERELEVATION TABLES ON SHEETS 876-893



TYPICAL ACCELERATION/DECELERATION LANE - S.R. 161/S.R. 37

S.R. 161/S.R. 37 RAMP "I" STA. 424+54.00 TO STA. 440+34.31 = 1580.31 FT
S.R. 161/S.R. 37 RAMP "J" STA. 462+15.54 TO STA. 470+11.00 = 795.46 FT
TOTAL = 2375.77 FT

(*) - SLOPES VARY, SEE RAMP TERMINI DETAILS ON SHEETS

(*)(*) - 0.042 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

NOTES:

△1 - TAPERS FROM 0' AT STA. 431+40.00 TO 12' AT STA. 432+40.00
12' FROM STA. 432+40.00 TO STA. 434+75.00

TAPERS FROM 12' AT STA. 434+75.00 TO 16' AT STA. 436+57.26
16' FROM STA. 436+57.26 TO STA. 439+40.51

16' FROM STA. 461+42.92 TO STA. 469+69.75
TAPERS FROM 16' AT STA. 469+69.75 TO 0' AT STA. 477+38.00

△2 - TAPERS FROM 0' AT STA. 436+57.26 TO 23' AT STA. 439+40.51
TAPERS FROM 23' AT STA. 461+42.92 TO 0' AT STA. 469+69.75

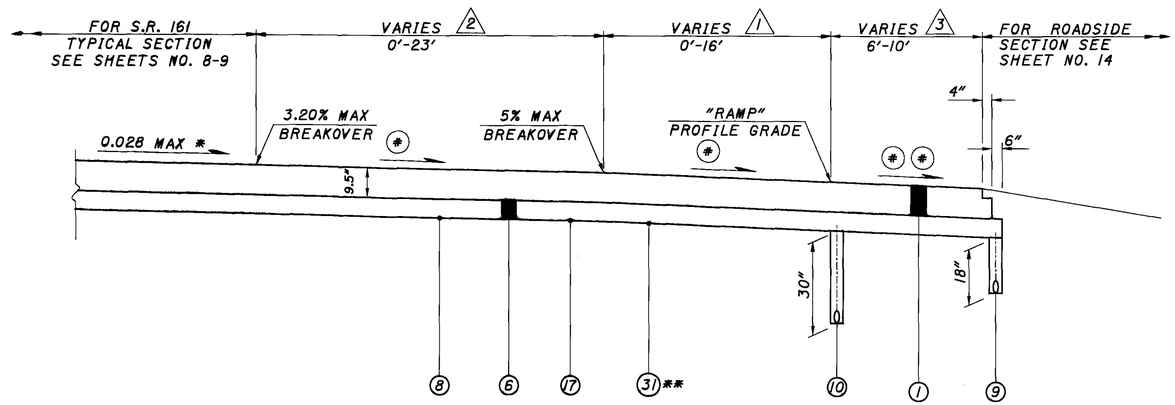
△3 - TAPERS FROM 10' AT STA. 431+40.00 TO 8' AT STA. 432+40.00
8' AT STA. 432+40.00 TO STA. 439+40.51

6' FROM STA. 461+42.92 TO STA. 461+88.44
TAPERS FROM 6' AT STA. 461+88.44 TO 8' AT STA. 462+37.84

8' FROM STA. 462+37.84 TO STA. 476+42.00
TAPERS FROM 8' AT STA. 476+42.00 TO 10' AT STA. 477+38.00

* - SEE SUPERELEVATION TABLES ON SHEETS 876-893

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



TYPICAL DECELERATION/ACCELERATION LANE - S.R. 161/S.R 37

S.R. 161/S.R. 37 RAMP "K" STA. 431+40.00 TO STA. 439+40.51 = 800.51 FT
S.R. 161/S.R. 37 RAMP "L" STA. 461+42.92 TO STA. 477+38.00 = 1595.08 FT
TOTAL = 2395.59 FT

LEGEND

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

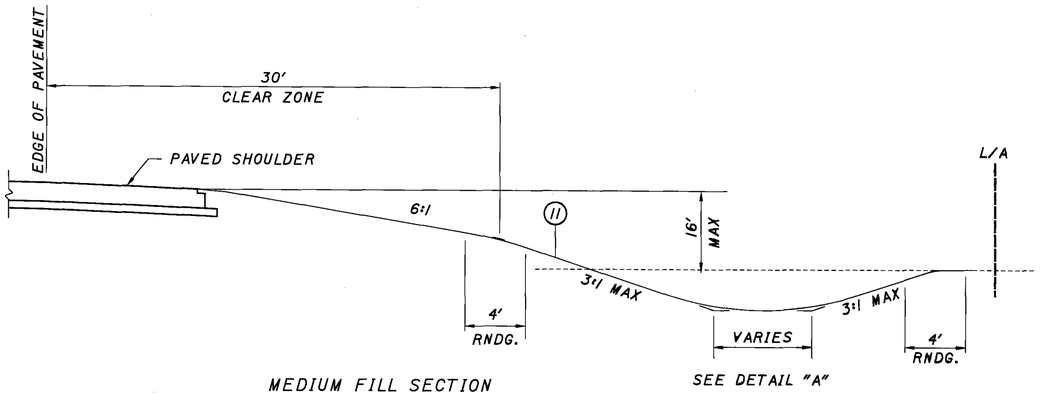
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 161

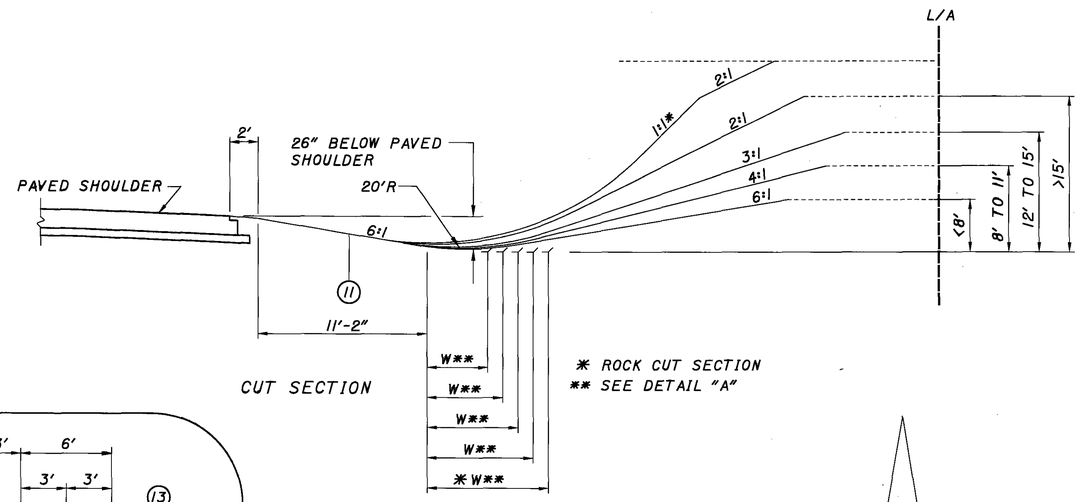
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LIC-37-10.25

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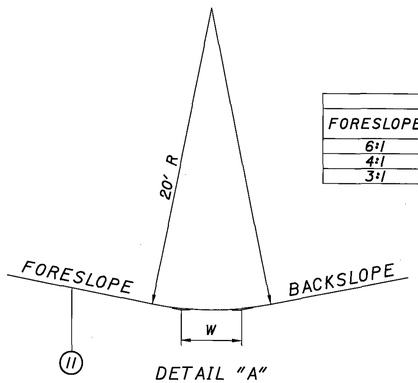


MEDIUM FILL SECTION — SEE DETAIL "A"



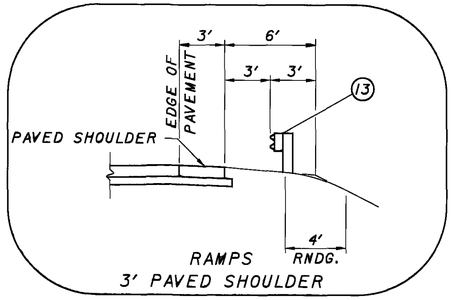
CUT SECTION

* ROCK CUT SECTION
** SEE DETAIL "A"

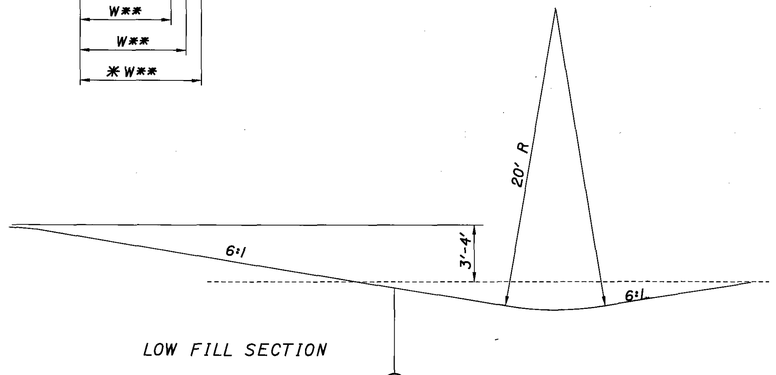


DETAIL "A"
20' RADIUS

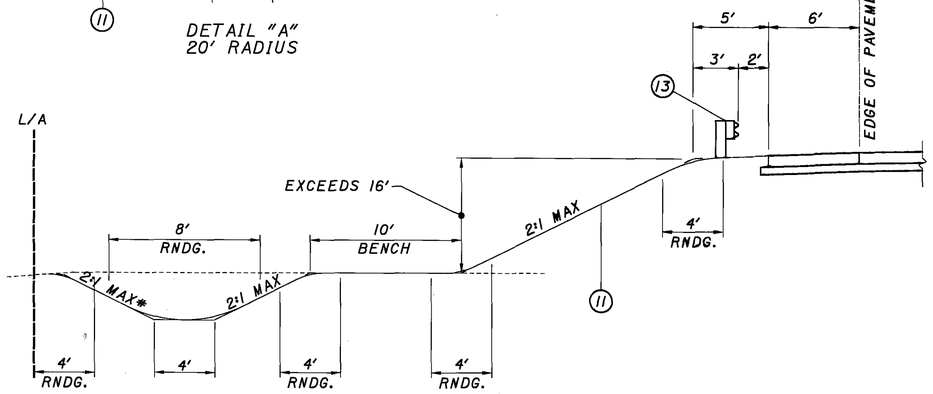
W					
FORESLOPE	BACKSLOPE				
	6:1	4:1	3:1	2:1	1:1
6:1	3'-4"	4'-2"	4'-11"	6'-5"	10'
4:1	4'-2"	5'-0"	5'-9"		
3:1	4'-11"	5'-9"	6'-6"		



RAMPS
3' PAVED SHOULDER

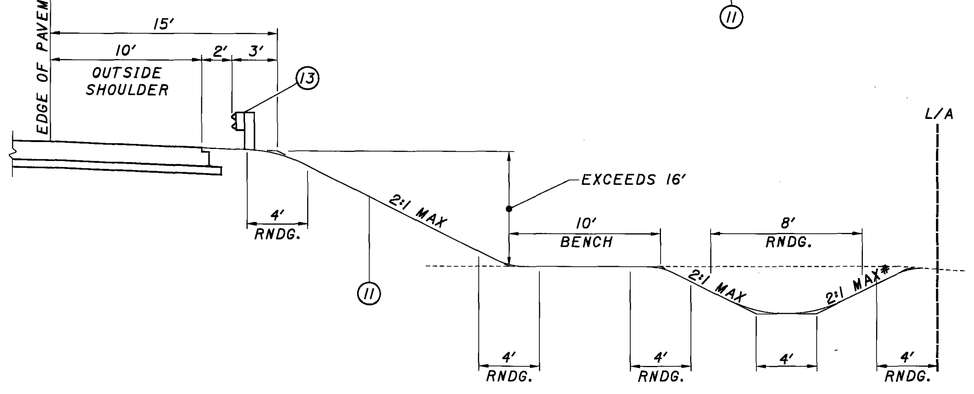


LOW FILL SECTION



RAMPS TYPICAL PLACEMENT OF GUARDRAIL AND BARRIER GRADING

\# - OR AS SHOWN ON CROSS SECTIONS



S.R. 161 TYPICAL PLACEMENT OF GUARDRAIL AND BARRIER GRADING

\# - OR AS SHOWN ON CROSS SECTIONS

LEGEND

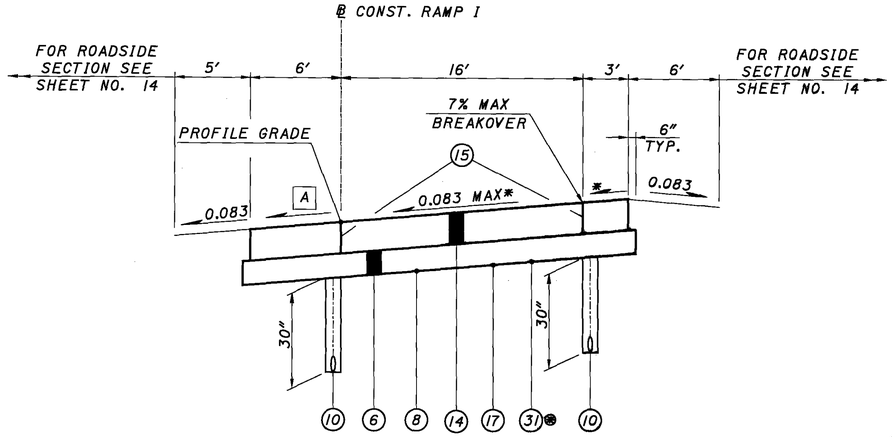
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 161

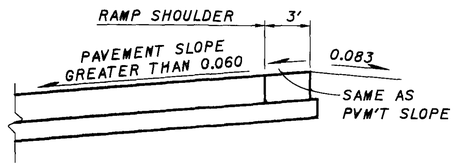
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LIC-37-10.25

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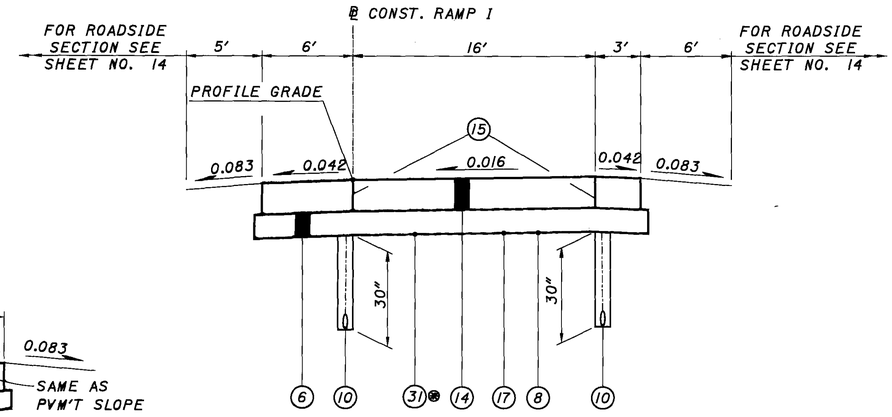
SUPERELEVATED SECTION - RAMP I

STA. 440+28.41 TO STA. 444+51.60 = 423.19 FT



PAVEMENT SLOPE GREATER THAN 0.060

3′ SHOULDER



NORMAL SECTION - RAMP I

STA. 444+51.60 TO STA. 445+59.32 = 107.72 FT

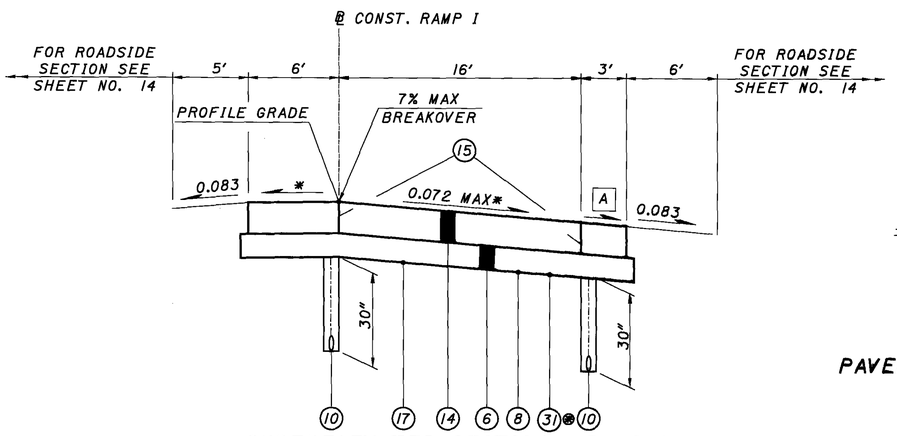
NOTES:

A - 0.04 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

* - SEE SUPERELEVATION TABLE ON SHEET 890

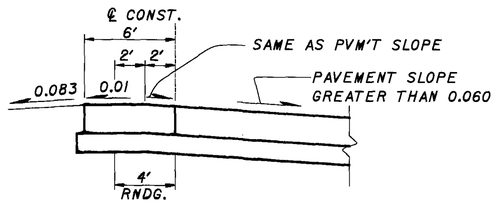
** - SEE PAVEMENT DETAILS ON SHEET 917

⊛ - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



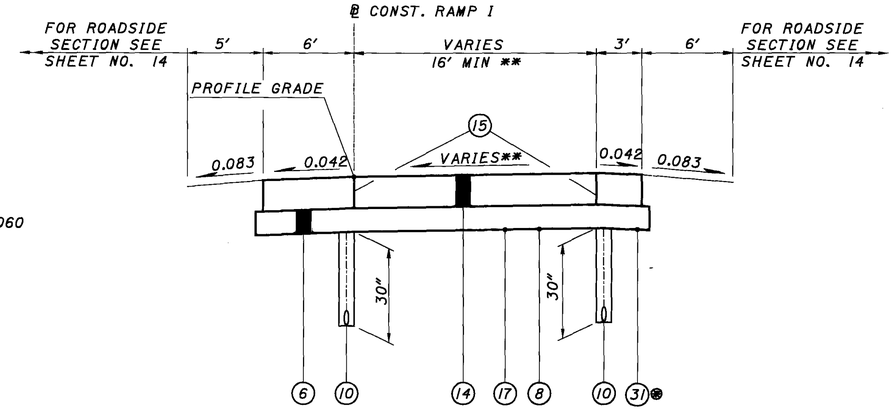
SUPERELEVATED SECTION - RAMP I

STA. 445+59.32 TO STA. 451+27.72 = 568.40 FT



PAVEMENT SLOPE GREATER THAN 0.060

6′ SHOULDER



NORMAL SECTION - RAMP I

STA. 451+27.72 TO STA. 451+69.73 = 42.01 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

1. ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
2. ITEM 448 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
3. ITEM 302 - 8″ ASPHALT CONCRETE BASE, PG64-22
4. ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
5. ITEM 448 - 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
6. ITEM 304 - 6″ AGGREGATE BASE
7. ITEM 407 - TACK COAT
8. ITEM 204 - SUBGRADE COMPACTION
9. ITEM 605 - 6″ BASE PIPE UNDERDRAINS (18″ DEPTH), 707.31
10. ITEM 605 - 6″ SHALLOW PIPE UNDERDRAINS (30″ DEPTH), 707.31
11. ITEM 659 - SEEDING AND MULCHING
12. ITEM 301 - 4″ ASPHALT CONCRETE BASE, PG64-22

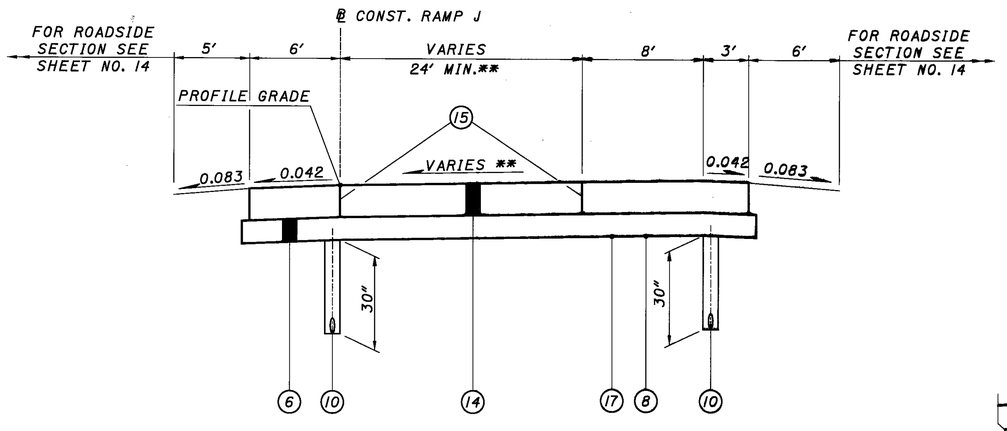
LEGEND

13. ITEM 606 - GUARDRAIL, TYPE 5
14. ITEM 452 - 9″ NON-REINFORCED CONCRETE PAVEMENT
15. STANDARD LONGITUDINAL JOINT
16. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15″
17. ITEM 204 - PROOF ROLLING
18. ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
19. ITEM 301 - 5″ ASPHALT CONCRETE BASE, PG64-22
20. ITEM 304 - 8″ AGGREGATE BASE
21. ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
22. ITEM 622 - CONCRETE BARRIER, TYPE A
23. ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
24. ITEM 301 - 3¾″ ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
25. ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
26. ITEM 622 - CONCRETE BARRIER, TYPE C
27. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12″
28. ITEM 605 - 12″ AGGREGATE DRAIN (8″ DEPTH)
29. ITEM 609 - CURB, TYPE 6
30. ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
31. ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
32. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17″
33. ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - RAMP I

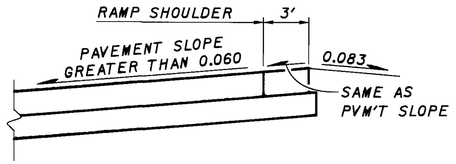
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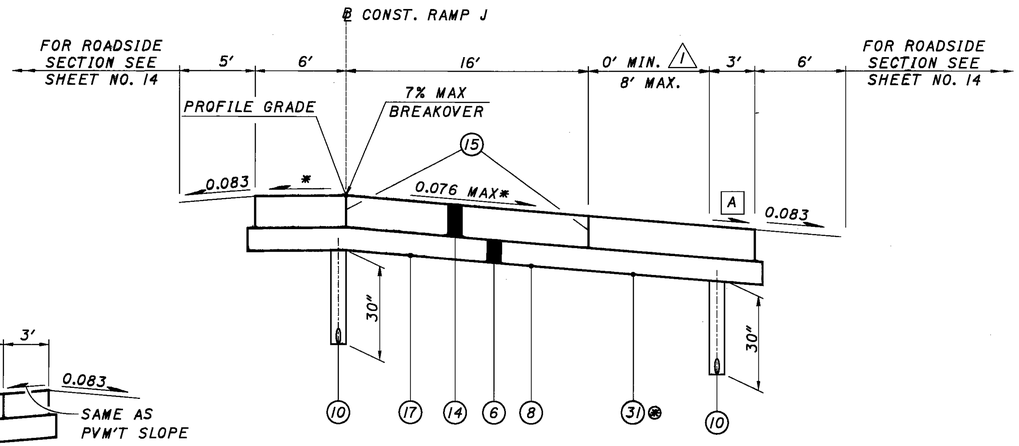
NORMAL SECTION - RAMP J

STA. 450+39.62 TO STA. 450+80.10 = 40.48 FT



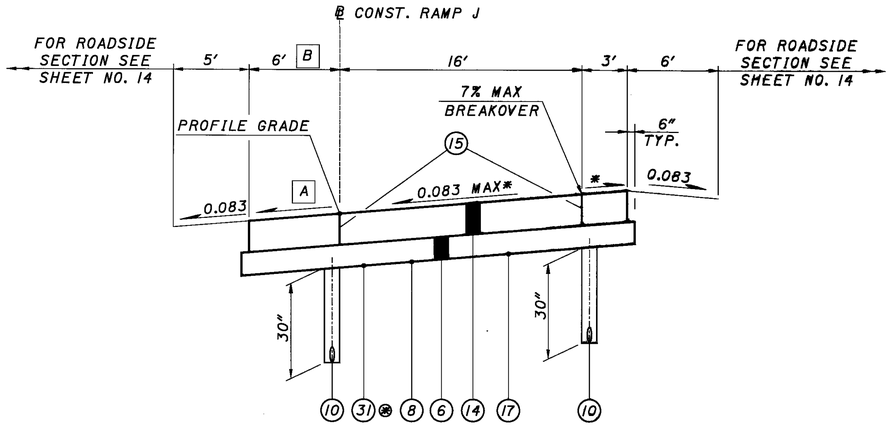
PAVEMENT SLOPE GREATER THAN 0.060

3′ SHOULDER



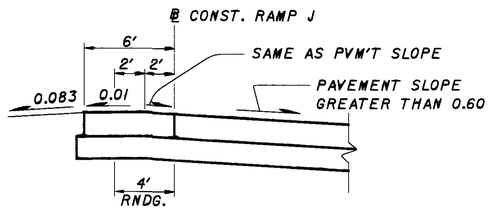
SUPERELEVATED SECTION - RAMP J

STA. 450+80.10 TO STA. 456+36.41 = 556.31 FT



SUPERELEVATED SECTION - RAMP J

STA. 456+36.41 TO STA. 462+11.54 = 575.13 FT



PAVEMENT SLOPE GREATER THAN 0.060

6′ SHOULDER

NOTES:

A - 0.04 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

B - 6′ FROM STA. 456+36.41 TO STA. 461+61.54 TAPERS FROM 6′ AT STA. 461+61.54 TO 8′ AT STA. 462+11.54

⚠1 - TAPERS FROM 8′ AT STA. 452+22.95 TO 0′ AT STA. 452+72.95

* - SEE SUPERELEVATION TABLE ON SHEET 891.

** - SEE PAVEMENT DETAILS ON SHEETS 913-916.

⊛ - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

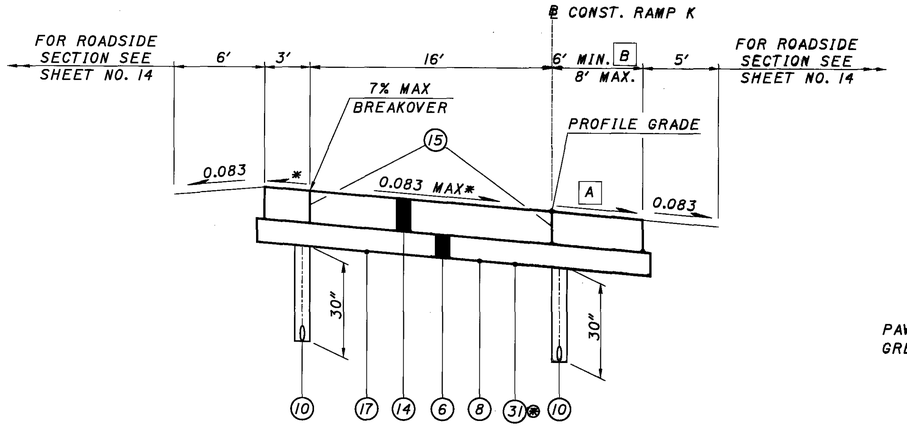
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8″ ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6″ AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6″ BASE PIPE UNDERDRAINS (18″ DEPTH), 707.31
(10) ITEM 605 - 6″ SHALLOW PIPE UNDERDRAINS (30″ DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4″ ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9″ NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15″
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5″ ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8″ AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾″ ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12″
(28) ITEM 605 - 12″ AGGREGATE DRAIN (8″ DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17″
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - RAMP J

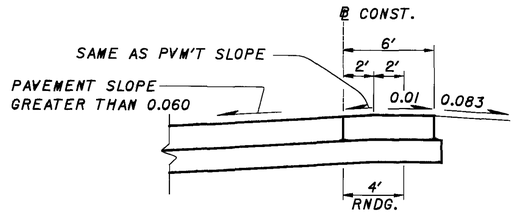
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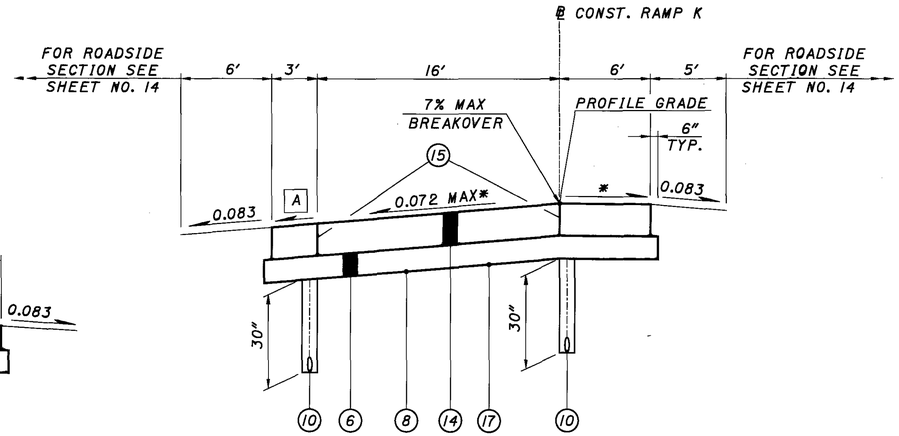
SUPERELEVATED SECTION - RAMP K

STA. 439+29.60 TO STA. 444+94.36 - 564.76 FT



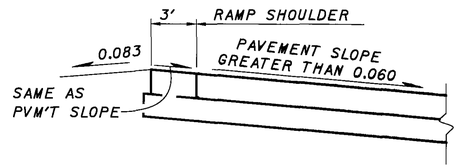
PAVEMENT SLOPE GREATER THAN 0.060

6' SHOULDER



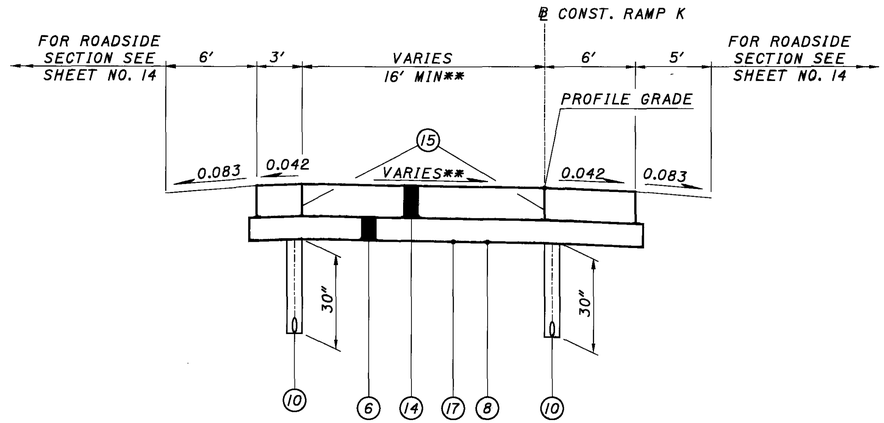
SUPERELEVATED SECTION - RAMP K

STA. 444+94.36 TO STA. 450+78.30 - 583.94 FT



PAVEMENT SLOPE GREATER THAN 0.060

3' SHOULDER



NORMAL SECTION - RAMP K

STA. 450+78.30 TO STA. 451+42.60 - 64.30 FT

NOTES:

A - 0.04 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

B - TAPERS FROM 8' AT STA. 439+29.60 TO 6' AT STA. 439+79.60
6' FROM STA. 439+79.60 TO STA. 444+94.36

* - SEE SUPERELEVATION TABLE ON SHEET 892

** - SEE PAVEMENT DETAILS ON SHEETS 909-912

⊛ - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

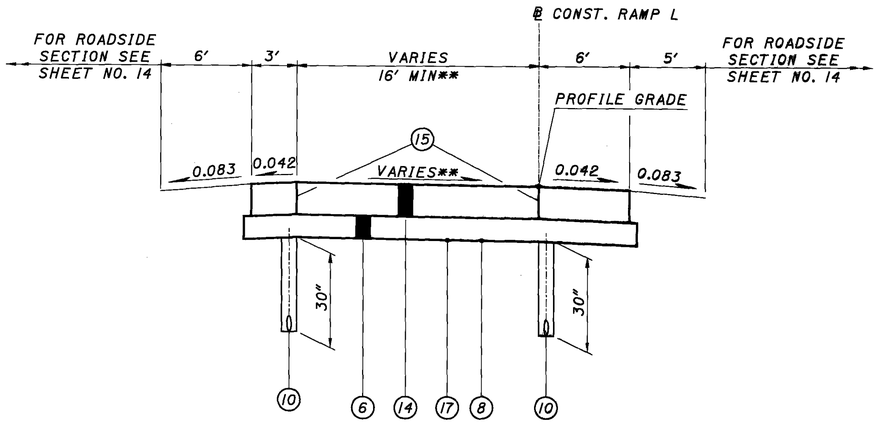
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - RAMP K

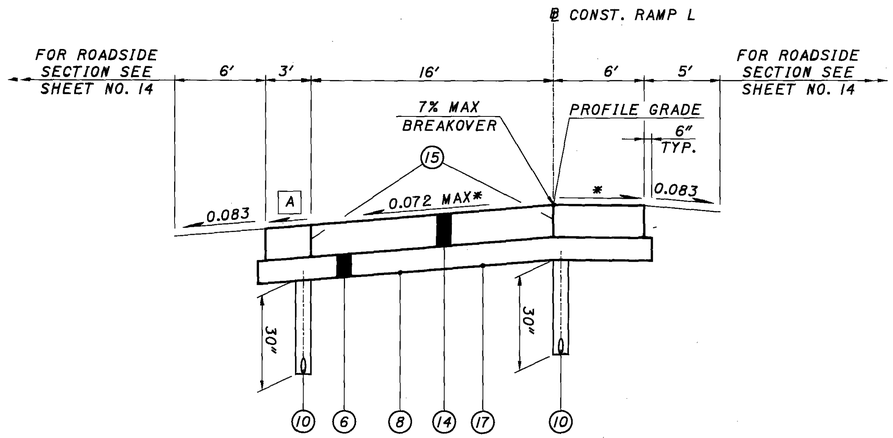
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NORMAL SECTION - RAMP L

STA. 450+59.48 TO STA. 451+23.27 - 63.79 FT



SUPERELEVATED SECTION - RAMP L

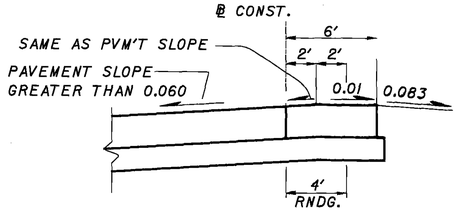
STA. 451+23.27 TO STA. 457+02.61 - 579.34 FT

NOTES:

A - 0.042 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

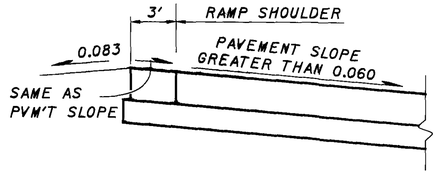
* - SEE SUPERELEVATION TABLE ON SHEET 893.

** - SEE PAVEMENT DETAILS ON SHEETS 913-916.



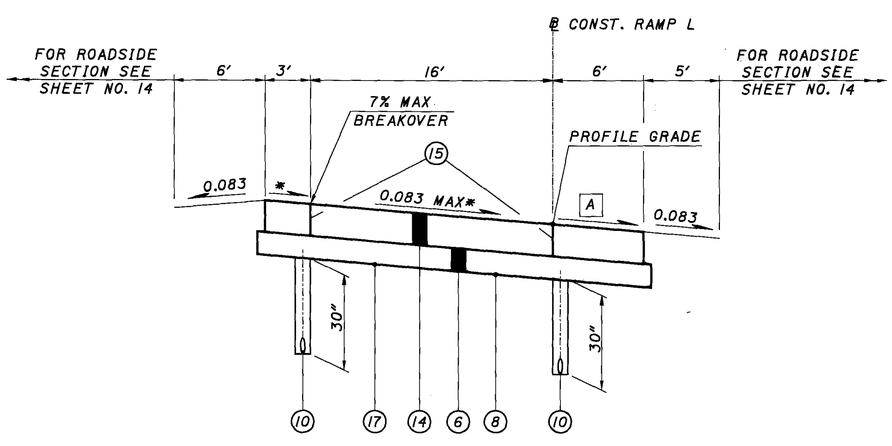
PAVEMENT SLOPE GREATER THAN 0.060

6' SHOULDER



PAVEMENT SLOPE GREATER THAN 0.060

3' SHOULDER



SUPERELEVATED SECTION - RAMP L

STA. 457+02.61 TO STA. 461+40.40 - 437.79 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22

LEGEND

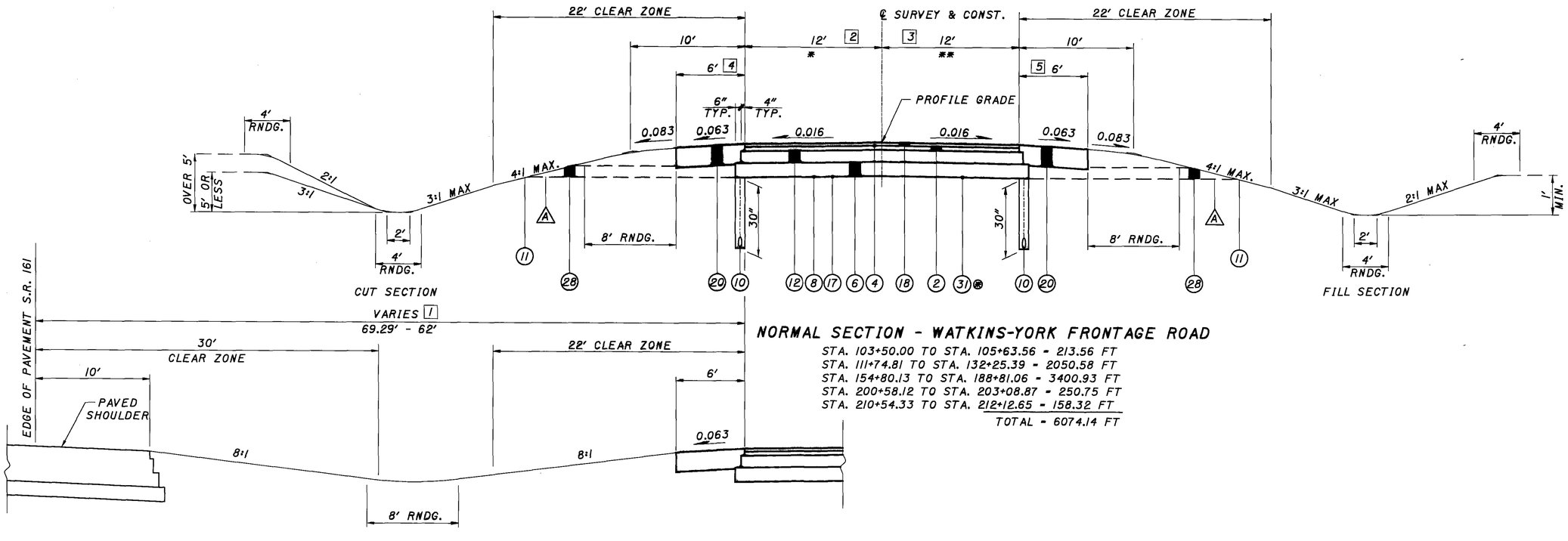
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - RAMP L

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NORMAL SECTION - WATKINS-YORK FRONTAGE ROAD

STA. 103+50.00 TO STA. 105+63.56 - 213.56 FT
STA. 111+74.81 TO STA. 132+25.39 - 2050.58 FT
STA. 154+80.13 TO STA. 188+81.06 - 3400.93 FT
STA. 200+58.12 TO STA. 203+08.87 - 250.75 FT
STA. 210+54.33 TO STA. 212+12.65 - 158.32 FT
TOTAL - 6074.14 FT

NOTES:

1 - TAPERS FROM 69.29' AT STA. 113+00.00 TO 62' AT STA. 122+22.14
62' FROM STA. 122+22.14 TO STA. 132+25.39
TAPERS FROM 62' AT STA. 133+17.41 TO 62.17' AT STA. 143+52.76
TAPERS FROM 62.17' AT STA. 143+52.76 TO 62' AT STA. 153+88.11
62' FROM STA. 154+80.13 TO STA. 188+81.06

** - VARIES STA. 211+80.67 RT TO STA. 212+12.65 RT.
SEE PAVEMENT DETAILS SHEET 919

* - VARIES STA. 211+63.70 LT. TO STA. 211+97.48 LT.
SEE PAVEMENT DETAILS SHEET 919

⊛ - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

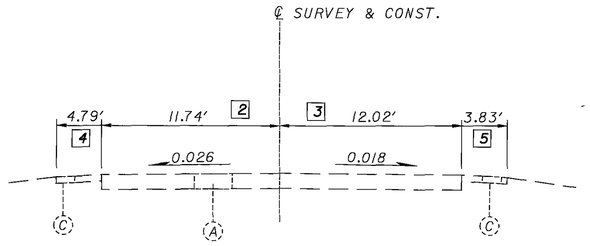
A - AGGREGATE DRAINS FROM STA. 103+50 TO STA. 105+50

2 TAPERS FROM 11.74' AT STA. 105+50.00 TO 12' AT STA. 103+65.00

3 TAPERS FROM 12.02' AT STA. 105+50.00 TO 12' AT STA. 103+65.00

4 TAPERS FROM 4.79' AT STA. 105+50.00 TO 6' AT STA. 103+65.00

5 TAPERS FROM 3.83' AT STA. 105+50.00 TO 6' AT STA. 103+65.00



ADJOINING SECTION WATKINS-YORK FRONTAGE ROAD
STA. 103+50.00

LEGEND

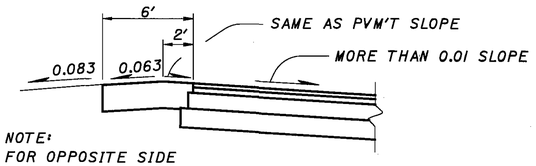
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

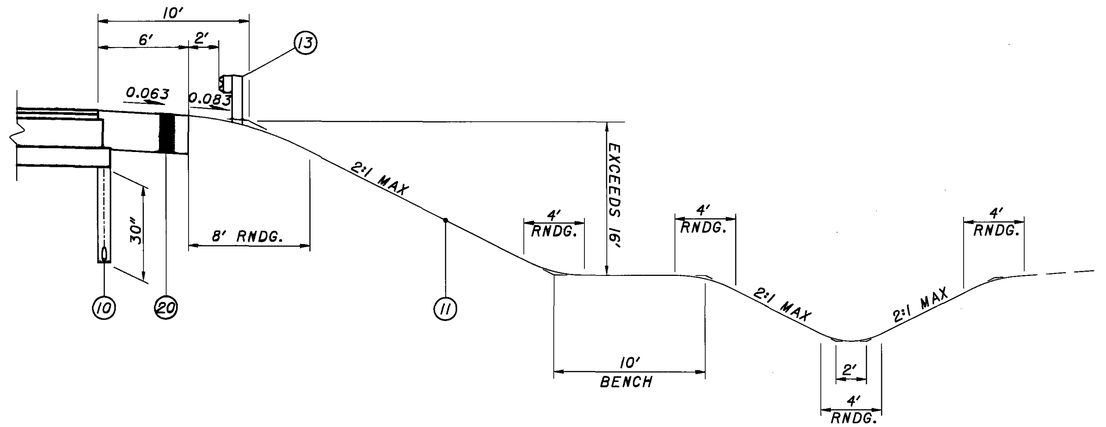
TYPICAL SECTIONS - WATKINS-YORK FRONTAGE ROAD

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PAVEMENT SLOPE GREATER THAN 0.01



FILL SECTION

WATKINS-YORK FRONTAGE ROAD BARRIER GRADING

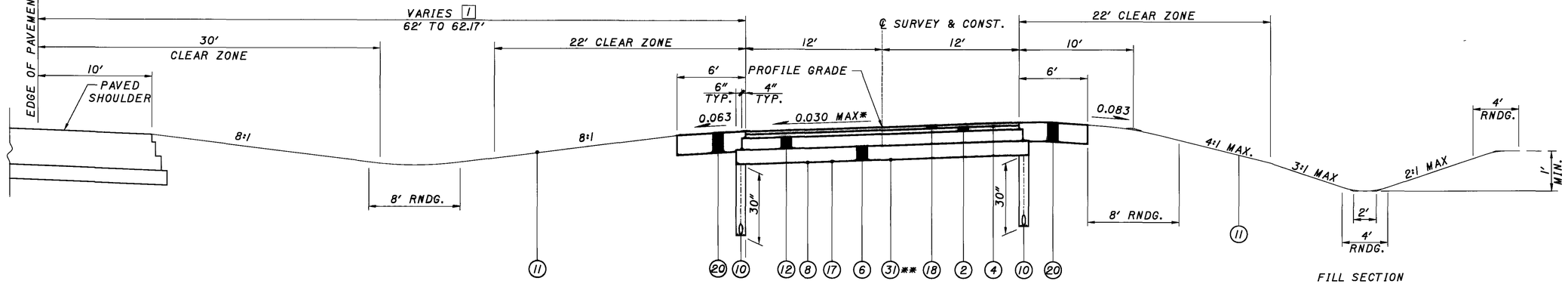
STA. 131+50.00 TO STA. 134+50.00 = 300.00 FT
STA. 192+00.00 TO STA. 196+50.00 = 450.00 FT
TOTAL = 750.00 FT

NOTES:

* - SEE SUPERELEVATION TABLES ON SHEETS 894-898.

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

[1] - 62' FROM STA. 132+25.39 TO STA. 133+17.41
TAPERS FROM 62' AT STA. 133+17.41 TO 62.17' AT STA. 143+52.76
TAPERS FROM 62.17 AT STA. 143+52.76 TO 62' AT STA. 153+88.11
62' FROM STA. 153+88.11 TO STA. 154+80.13



FILL SECTION

SUPERELEVATED SECTION - WATKINS-YORK FRONTAGE ROAD

STA. 132+25.39 TO STA. 154+80.13 = 2254.74 FT

LEGEND

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

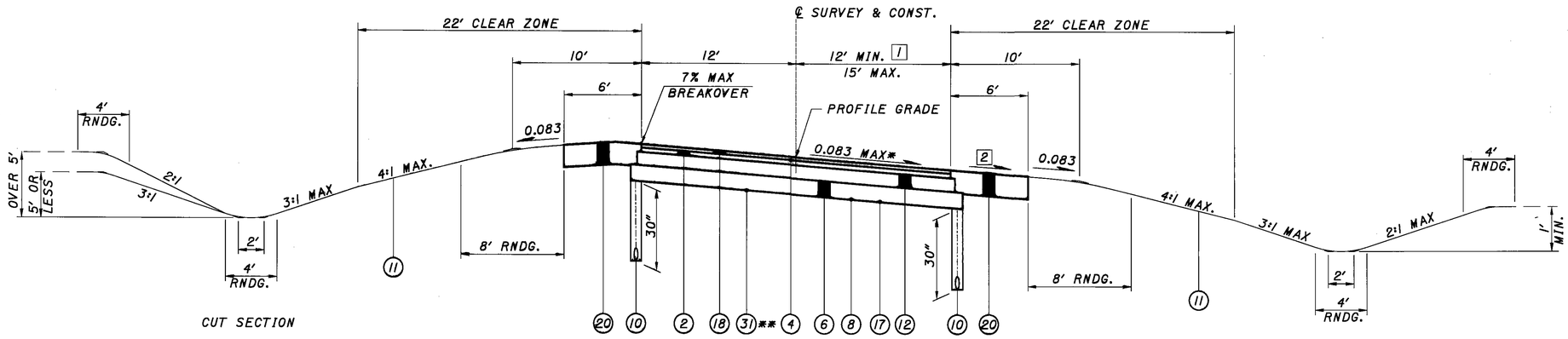
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - WATKINS-YORK FRONTAGE ROAD

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LIC-37-10.25

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CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - WATKINS-YORK FRONTAGE ROAD

STA. 105+63.56 TO STA. 111+74.81 - 611.25 FT
STA. 188+81.06 TO STA. 200+58.12 - 1177.06 FT
TOTAL = 1788.31 FT

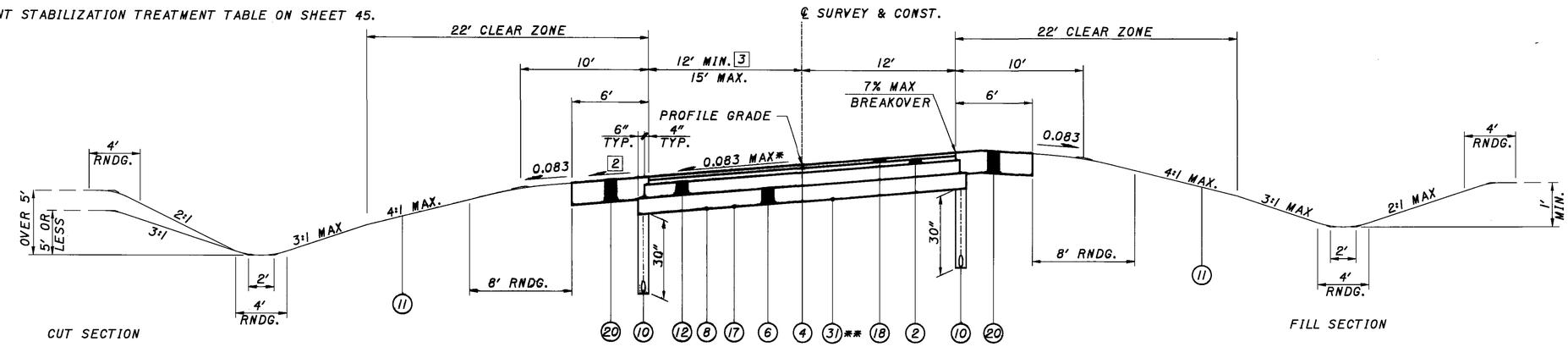
[1] - TAPERS FROM 12' AT STA. 189+32.18 TO 15' AT STA. 191+97.37
15' AT STA. 191+97.37 TO STA. 197+41.81
TAPERS FROM 15' AT STA. 197+41.81 TO 12' AT STA. 200+07.00

[2] - 0.063 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

[3] - TAPERS FROM 12' AT STA. 203+59.99 TO 15' AT STA. 206+25.18
15' AT STA. 206+25.18 TO STA 207+38.02
TAPERS FROM 15' AT STA. 207+38.02 TO 12' AT STA. 210+03.21

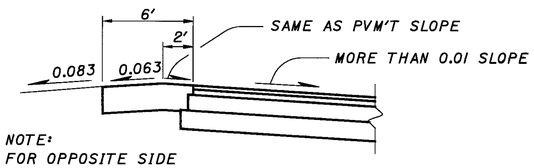
* - SEE SUPERELEVATION TABLES ON SHEETS 894-898.

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



CUT SECTION

FILL SECTION



NOTE:
FOR OPPOSITE SIDE
DETAILS ARE REVERSED.

PAVEMENT SLOPE GREATER THAN 0.01

SUPERELEVATED SECTION - WATKINS-YORK FRONTAGE ROAD

STA. 203+08.87 TO STA. 210+54.33 - 745.46 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

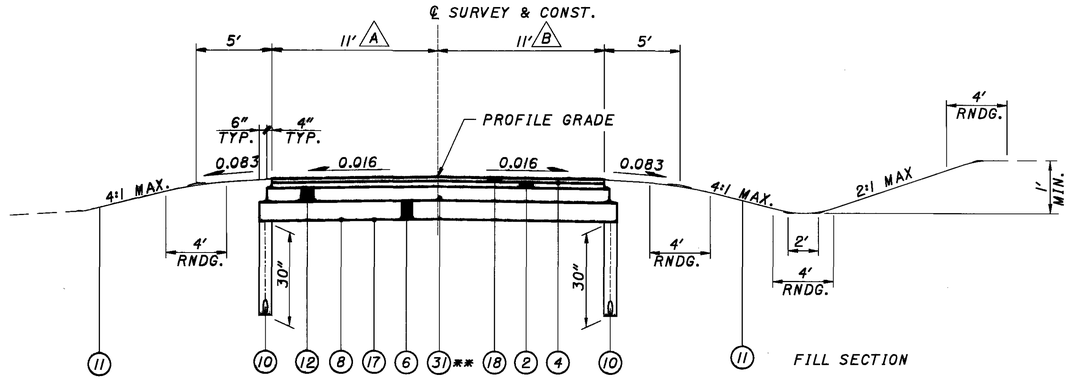
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - WATKINS-YORK FRONTAGE ROAD

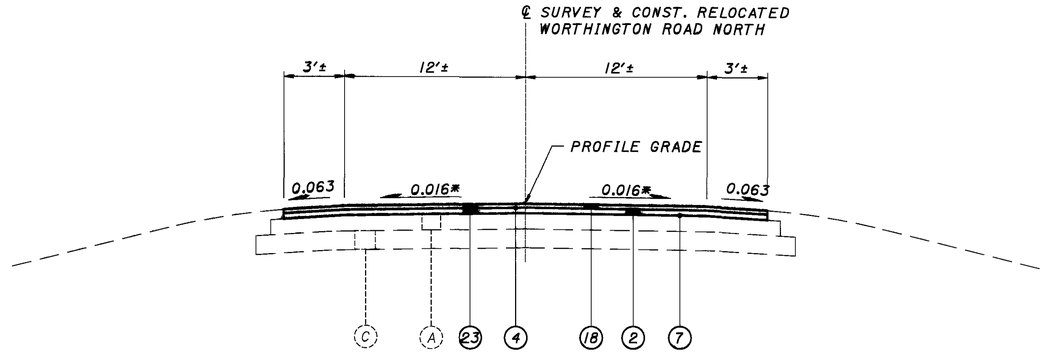
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NORMAL SECTION - SERVICE ROAD 10

STA. 145+65.48 TO STA. 148+50.00 - 284.52 FT



RESURFACING AND WIDENING SECTION - SERVICE ROAD 10

STA. 148+50.00 TO STA. 150+52.34 - 202.34 FT

NOTES:

(A) - VARIES FROM 0.00' AT STA. 145+65.48 TO 32.90' AT STA. 146+12.46 AND FROM 32.90' AT STA. 146+12.46 TO 11' AT STA. 146+73.10. 11' FROM STA. 146+73.10 TO STA. 147+57.34. VARIES FROM 11' AT STA. 147+57.34 TO 12.22' AT STA. 148+50.00.

(B) - VARIES FROM 34.21' AT STA. 145+65.48 TO 67.10' AT STA. 146+12.46 AND FROM 67.10' AT STA. 146+12.46 TO 11' AT STA. 147+30.44. 11' FROM STA. 147+30.44 TO STA. 148+50.00

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

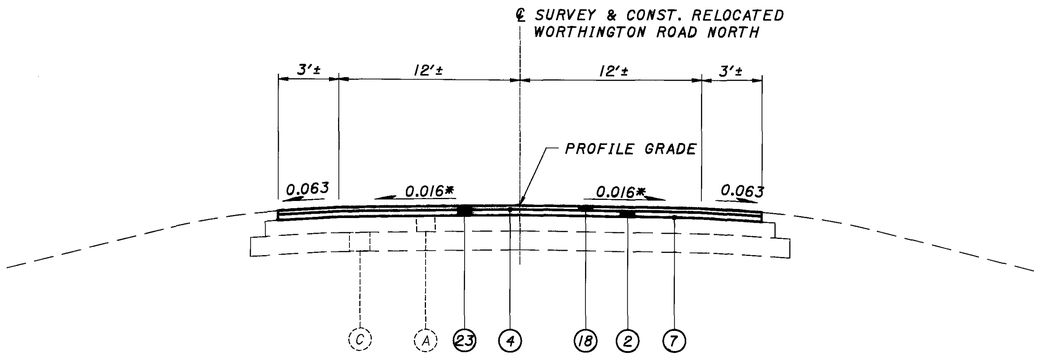
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - SERVICE ROAD 10

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RESURFACING AND WIDENING SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 150+32.10 TO STA. 188+50.00 - 3817.90 FT

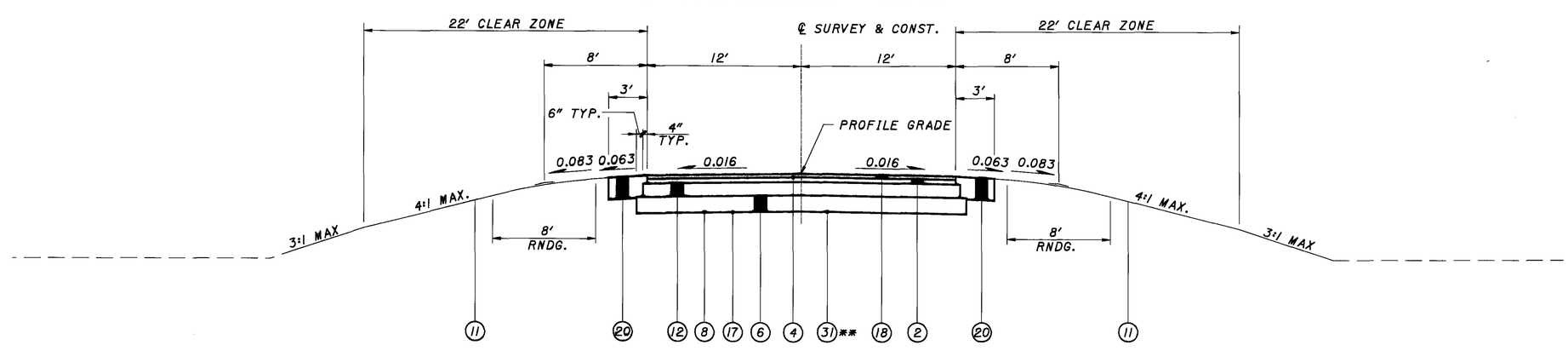
STA. EQUATION:
STA. 150+52.34 - SERVICE ROAD 10 -
STA. 150+32.10 - RELOCATED WORTHINGTON ROAD

* - PLANE 3" OFF OF EXISTING ASPHALT TO ACHIEVE A PAVEMENT SLOPE OF 0.016

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

RESURFACING AND WIDENING SECTION - (SERVICE ROAD 10)

STA. 148+50.00 TO STA. 150+52.34 - 202.34 FT



CULVERT REPLACEMENT SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 167+43.00 TO STA. 168+12.00 - 69.00 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22

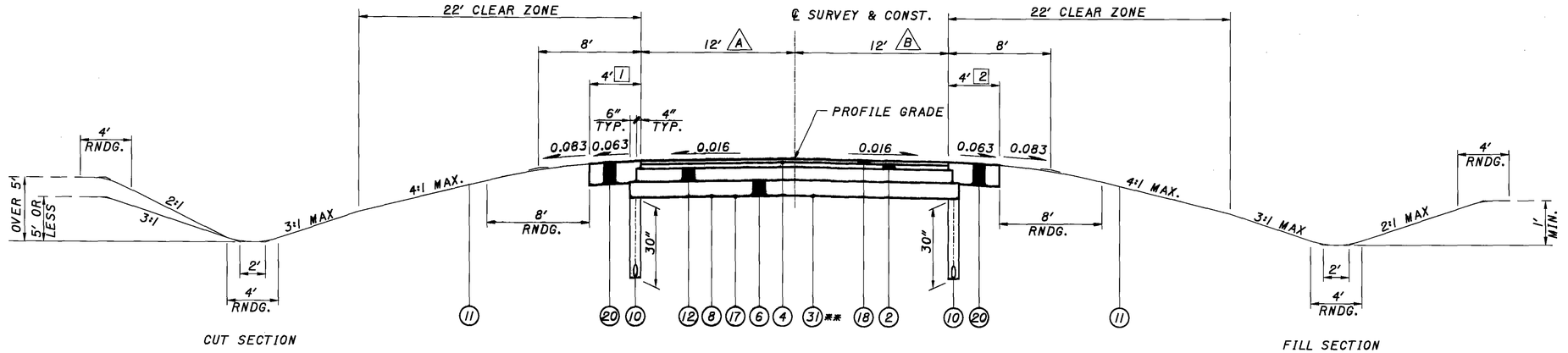
LEGEND

(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - SERVICE ROAD 10 AND RELOCATED WORTHINGTON ROAD NORTH

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CUT SECTION

FILL SECTION

NORMAL SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 188+50.00 TO STA. 188+71.34 - 21.34 FT
STA. 198+45.91 TO STA. 201+70.54 - 324.63 FT
TOTAL - 345.97 FT

NOTES:

A - TAPERS FROM 11.71' AT STA. 188+50.00 TO 12.00' AT STA. 188+75.00

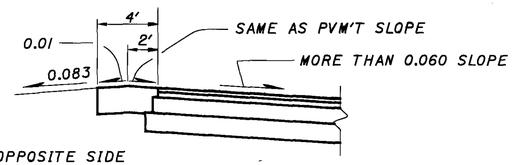
B - TAPERS FROM 11.71' AT STA. 188+50.00 TO 12.00' AT STA. 188+75.00

1 - TAPERS FROM 3.10' AT STA. 188+50.00 TO 4.00' AT STA. 188+75.00

2 - TAPERS FROM 3.45' AT STA. 188+50.00 TO 4.00' AT STA. 188+75.00

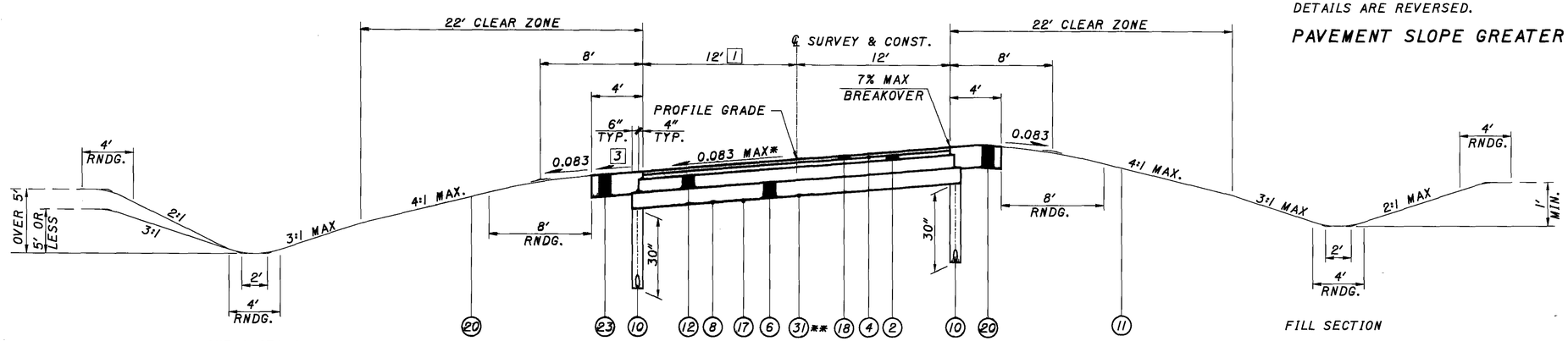
* - SEE SUPERELEVATION TABLES ON SHEETS 900-903

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



NOTE:
FOR OPPOSITE SIDE
DETAILS ARE REVERSED.

PAVEMENT SLOPE GREATER THAN 0.060



CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 188+71.34 TO STA. 198+45.91 - 974.57 FT

1 - TAPERS FROM 12' AT STA. 189+22.46 TO 15' AT STA. 191+87.65
15' AT STA. 191+87.65 TO STA. 195+29.60
TAPERS FROM 15' AT STA. 195+29.60 TO 12' AT STA. 197+94.79

3 - 0.060 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

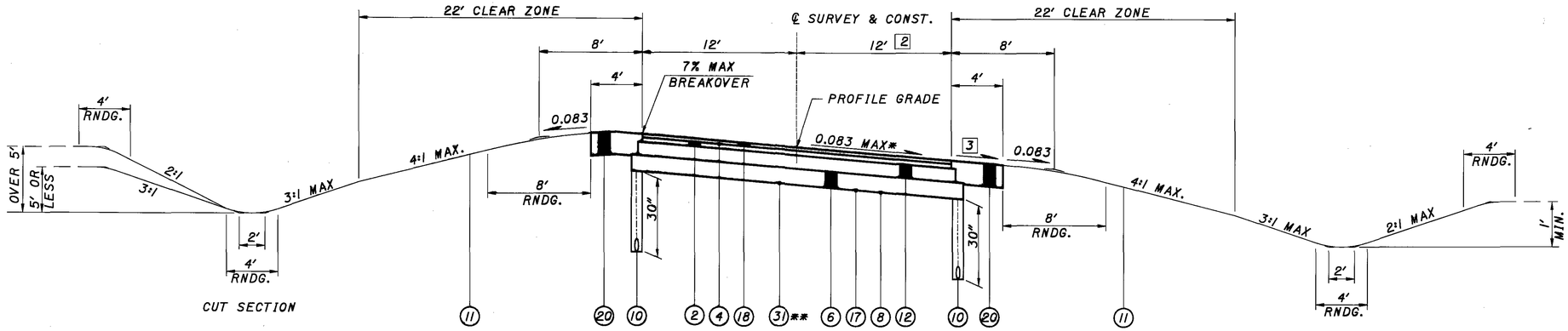
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - RELOCATED WORTHINGTON ROAD NORTH

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LIC-37-10.25

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CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - RELOCATED WORTHINGTON ROAD NORTH

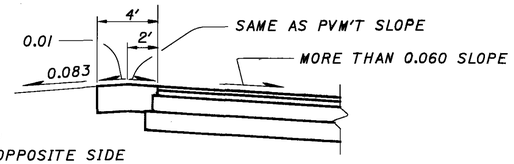
STA. 201+70.54 TO STA. 211+99.62 - 1029.08 FT

2 - TAPERS FROM 12' AT STA. 202+21.66 TO 15' AT STA. 204+86.85
15' AT STA. 204+86.85 TO STA. 208+83.31
TAPERS FROM 15' AT STA. 208+83.31 TO 12' AT STA. 211+48.50

3 - 0.060 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

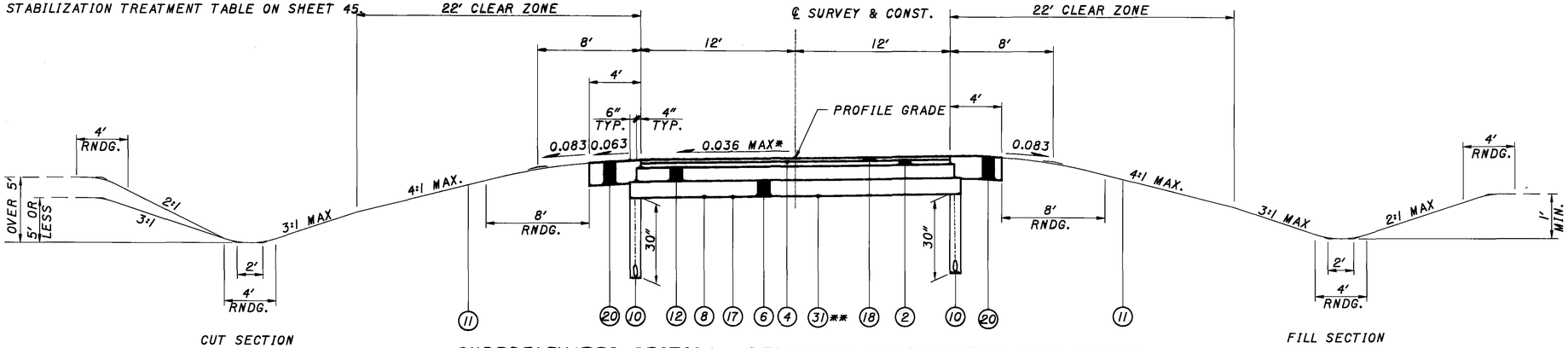
* - SEE SUPERELEVATION TABLES ON SHEETS 900-903

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45



NOTE:
FOR OPPOSITE SIDE
DETAILS ARE REVERSED.

PAVEMENT SLOPE GREATER THAN 0.060



CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 211+99.62 TO STA. 212+71.75 (SUSPEND WORK) - 72.13 FT
STA. 212+95.85 (RESUME WORK) TO STA. 213+64.42 - 68.57 FT
TOTAL - 140.70 FT

NOTES:

FOR STA. 212+71.75 TO STA 212+95.85 SEE INTERSECTION DETAILS ON SHEET 923

LEGEND

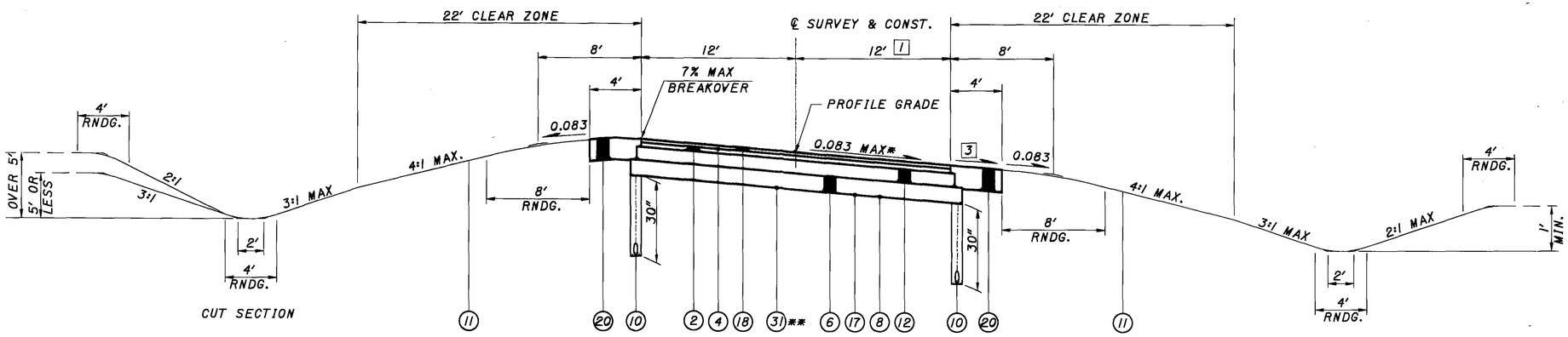
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

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TYPICAL SECTIONS - RELOCATED WORTHINGTON ROAD NORTH

LIC-161-6.65
LIC-37-10.25



CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - RELOCATED WORTHINGTON ROAD NORTH

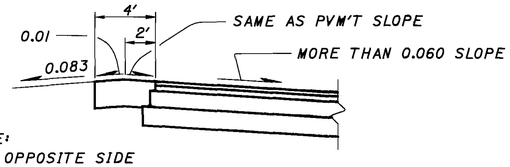
STA. 213+64.42 TO STA. 222+22.95 = 858.53 FT

1 - TAPERS FROM 12' AT STA. 214+15.54 TO 15' AT STA. 216+80.73
15' AT STA. 216+80.73 TO STA. 219+06.64
TAPERS FROM 15' AT STA. 219+06.64 TO 12' AT STA. 221+71.83

3 - 0.060 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

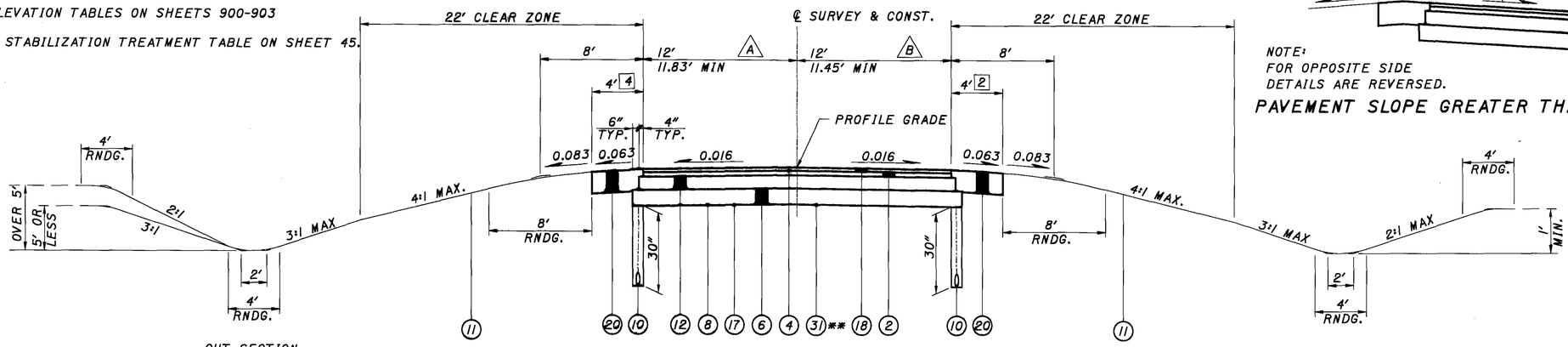
* - SEE SUPERELEVATION TABLES ON SHEETS 900-903

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



NOTE:
FOR OPPOSITE SIDE
DETAILS ARE REVERSED.

PAVEMENT SLOPE GREATER THAN 0.060



CUT SECTION

FILL SECTION

NORMAL SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 222+22.95 TO STA. 222+72.53= 49.58 FT

A - TAPERS FROM 12' AT STA. 232+75.00 TO 11.83' AT STA. 233+00.00

B - TAPERS FROM 12' AT STA. 232+75.00 TO 11.45' AT STA. 233+00.00

4 - TAPERS FROM 4' AT STA. 232+75.00 TO 2.25' AT STA. 233+00.00

2 - TAPERS FROM 4' AT STA. 232+75.00 TO 3.19' AT STA. 233+00.00

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

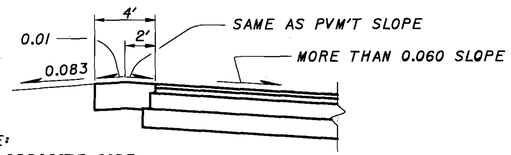
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[2] - TAPERS FROM 12' AT STA. 223+23.65 TO 15' AT STA. 225+88.84
15' AT STA. 225+88.84 TO STA. 229+73.90
TAPERS FROM 15' AT STA. 229+73.90 TO 12' AT STA. 232+39.09

[3] - 0.060 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

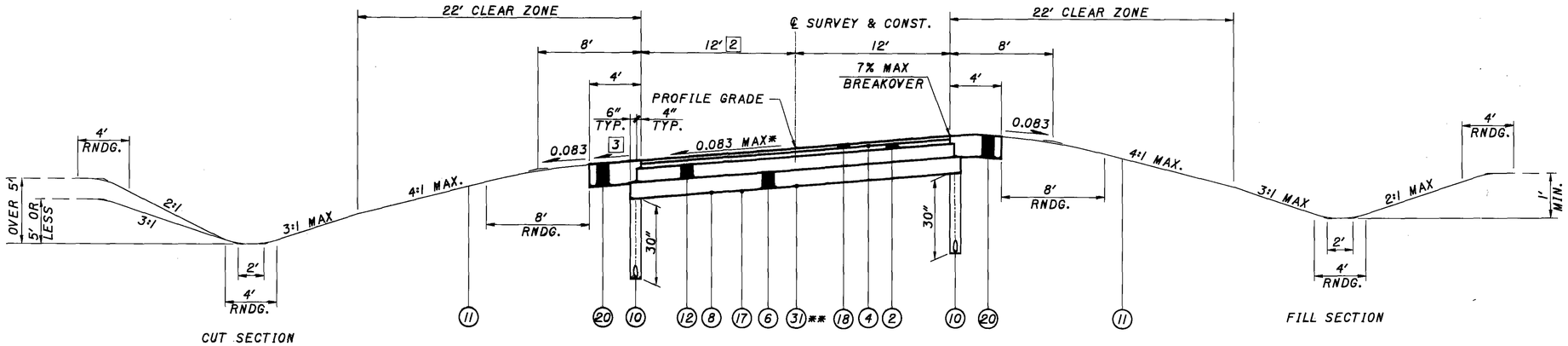
* - SEE SUPERELEVATION TABLES ON SHEETS 900-903

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



NOTE:
FOR OPPOSITE SIDE
DETAILS ARE REVERSED.

PAVEMENT SLOPE GREATER THAN 0.060

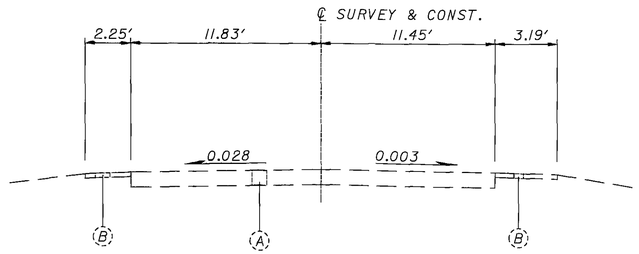


CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - RELOCATED WORTHINGTON ROAD NORTH

STA. 222+72.53 TO STA. 233+00.00 - 1027.47 FT



ADJOINING SECTION RELOCATED WORTHINGTON ROAD NORTH
STA. 233+00.00

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22

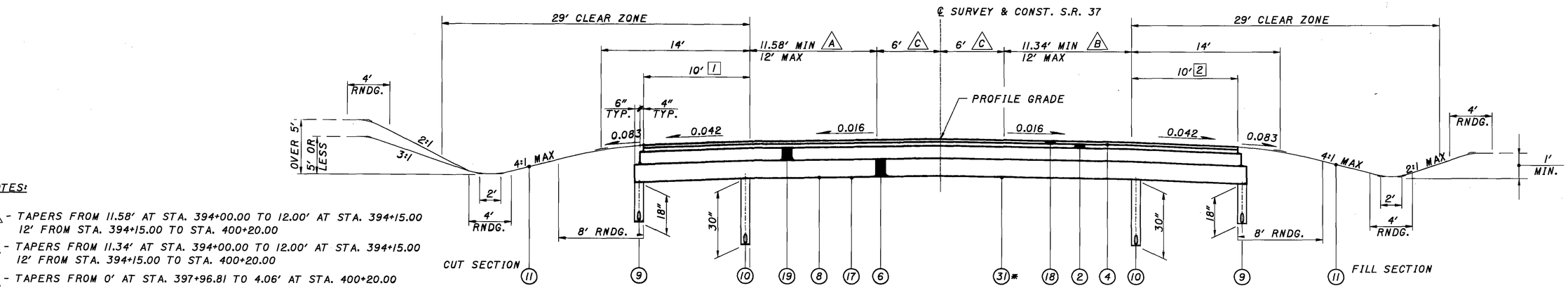
LEGEND

(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - RELOCATED WORTHINGTON ROAD NORTH

LIC-161-6.65
LIC-37-10.25

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NOTES:

A - TAPERS FROM 11.58' AT STA. 394+00.00 TO 12.00' AT STA. 394+15.00
12' FROM STA. 394+15.00 TO STA. 400+20.00

B - TAPERS FROM 11.34' AT STA. 394+00.00 TO 12.00' AT STA. 394+15.00
12' FROM STA. 394+15.00 TO STA. 400+20.00

C - TAPERS FROM 0' AT STA. 397+96.81 TO 4.06' AT STA. 400+20.00

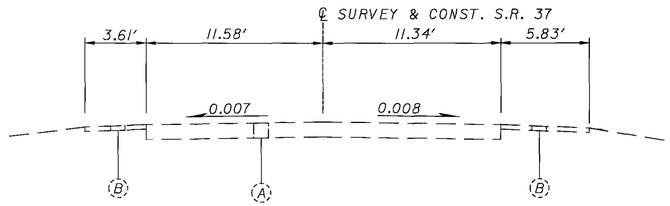
1 - TAPERS FROM 3.61' AT STA. 394+00.00 TO 10.00' AT STA. 395+22.05

2 - TAPERS FROM 5.83' AT STA. 394+00.00 TO 10.00' AT STA. 395+33.97

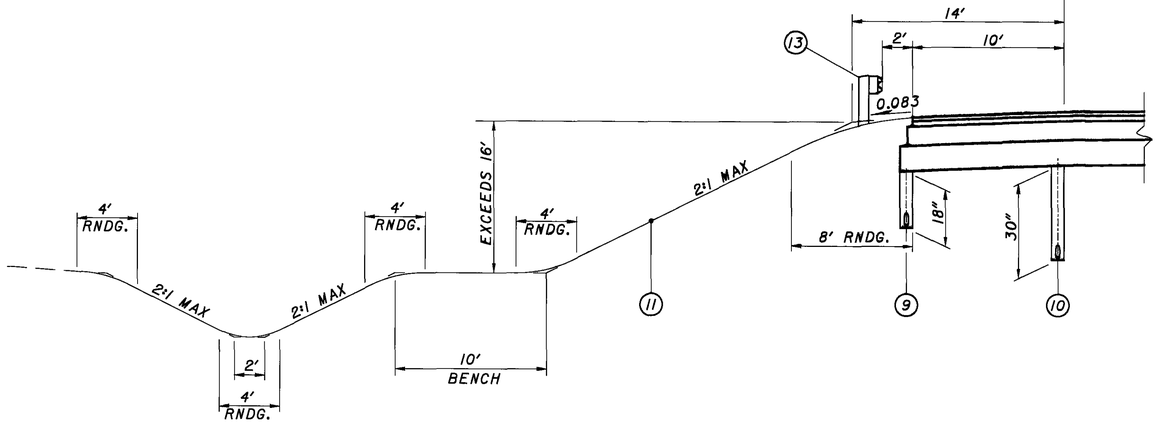
* - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

NORMAL SECTION - S.R. 37

STA. 394+00.00 TO STA. 400+20.00 - 620.00 FT



ADJOINING SECTION S.R. 37
STA. 394+00.00



S.R. 37 BARRIER GRADING

LEGEND

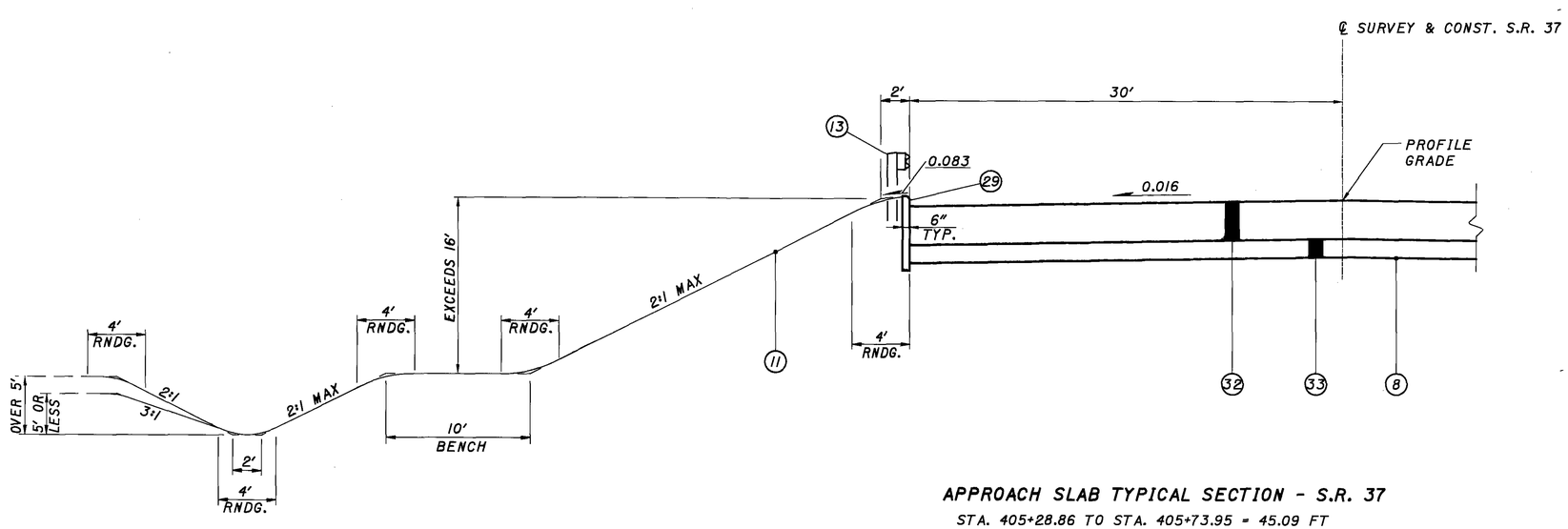
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 37

LIC-161-6.65
LIC-37-10.25

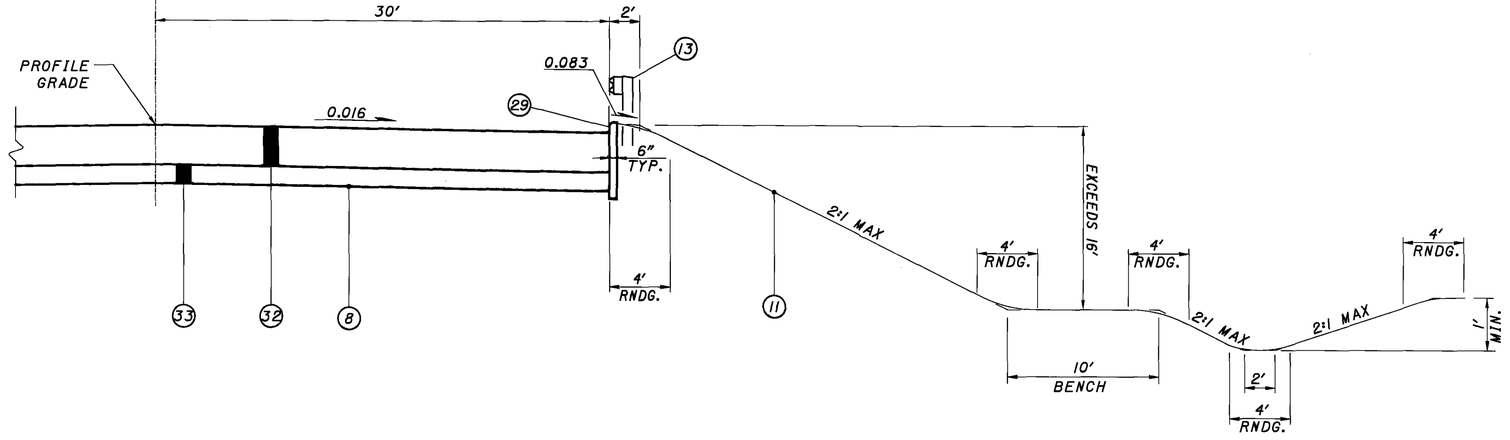
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CUT SECTION

APPROACH SLAB TYPICAL SECTION - S.R. 37

STA. 405+28.86 TO STA. 405+73.95 = 45.09 FT
STA. 407+79.95 TO STA. 408+34.03 = 54.08 FT
TOTAL = 99.17 FT



FILL SECTION

LEGEND

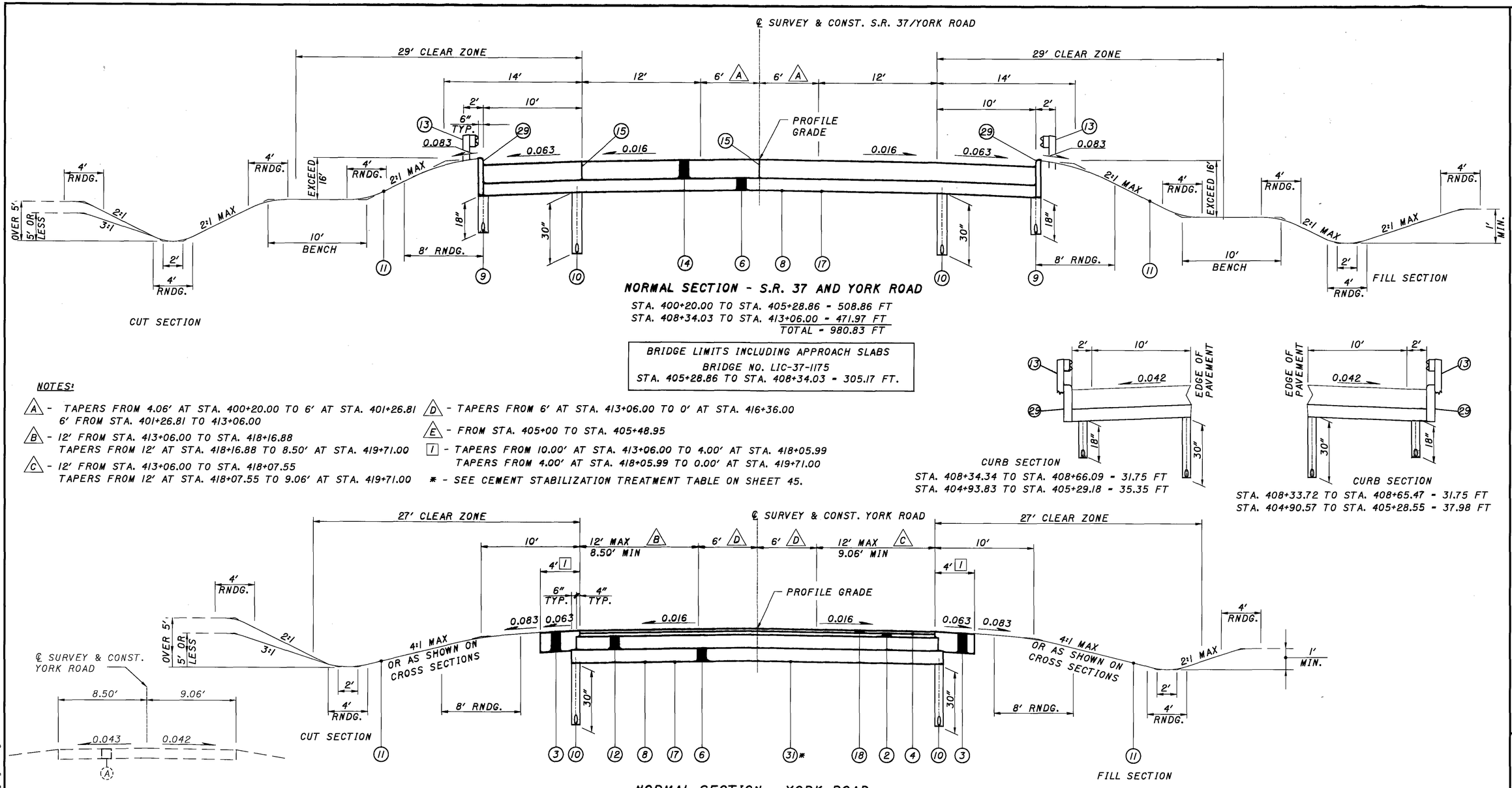
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 37

LIC-161-6.65
LIC-37-10.25

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NORMAL SECTION - S.R. 37 AND YORK ROAD

STA. 400+20.00 TO STA. 405+28.86 - 508.86 FT
STA. 408+34.03 TO STA. 413+06.00 - 471.97 FT
TOTAL - 980.83 FT

BRIDGE LIMITS INCLUDING APPROACH SLABS
BRIDGE NO. LIC-37-1175
STA. 405+28.86 TO STA. 408+34.03 - 305.17 FT.

CURB SECTION
STA. 408+34.34 TO STA. 408+66.09 - 31.75 FT
STA. 404+93.83 TO STA. 405+29.18 - 35.35 FT

CURB SECTION
STA. 408+33.72 TO STA. 408+65.47 - 31.75 FT
STA. 404+90.57 TO STA. 405+28.55 - 37.98 FT

NOTES:

- (A) - TAPERS FROM 4.06' AT STA. 400+20.00 TO 6' AT STA. 401+26.81
  6' FROM STA. 401+26.81 TO 413+06.00
- (B) - 12' FROM STA. 413+06.00 TO STA. 418+16.88
  TAPERS FROM 12' AT STA. 418+16.88 TO 8.50' AT STA. 419+71.00
- (C) - 12' FROM STA. 413+06.00 TO STA. 418+07.55
  TAPERS FROM 12' AT STA. 418+07.55 TO 9.06' AT STA. 419+71.00
- (D) - TAPERS FROM 6' AT STA. 413+06.00 TO 0' AT STA. 416+36.00
- (E) - FROM STA. 405+00 TO STA. 405+48.95
- [1] - TAPERS FROM 10.00' AT STA. 413+06.00 TO 4.00' AT STA. 418+05.99
  TAPERS FROM 4.00' AT STA. 418+05.99 TO 0.00' AT STA. 419+71.00
- * - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

ADJOINING SECTION YORK ROAD
STA. 419+71.00

NORMAL SECTION - YORK ROAD

STA. 413+06.00 TO STA. 419+71.00 - 665.00 FT

LEGEND

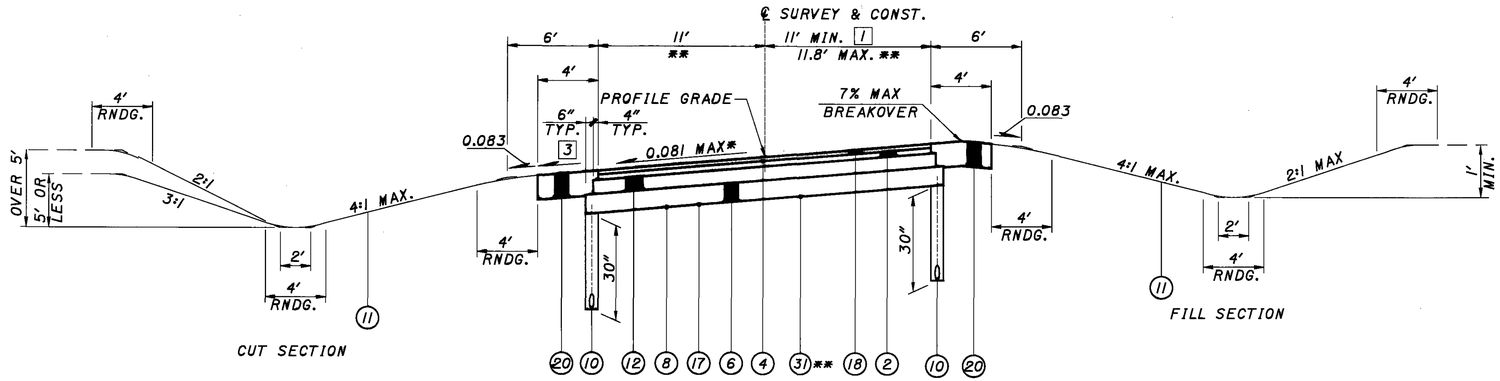
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.; TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - S.R. 37/YORK ROAD

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LIC-37-10.25

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SUPERELEVATED SECTION - SERVICE ROAD 11

STA. 212+70.82 TO STA. 216+13.31 - 342.49 FT

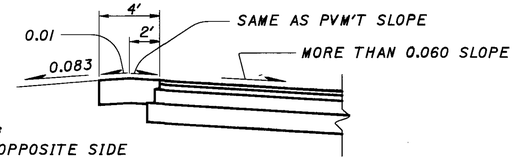
1 - TAPERS FROM 11′ AT STA. 215+70.65 TO 11.80′ AT STA. 216+13.31

2 - TAPERS FROM 11.80′ AT STA. 216+13.31 TO 15.50′ AT STA. 218+26.59
15.50′ FROM STA. 218+26.59 TO STA. 226+29.94
TAPERS FROM 15.50′ AT STA. 226+29.94 TO 11′ AT STA. 228+85.88

3 - 0.060 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

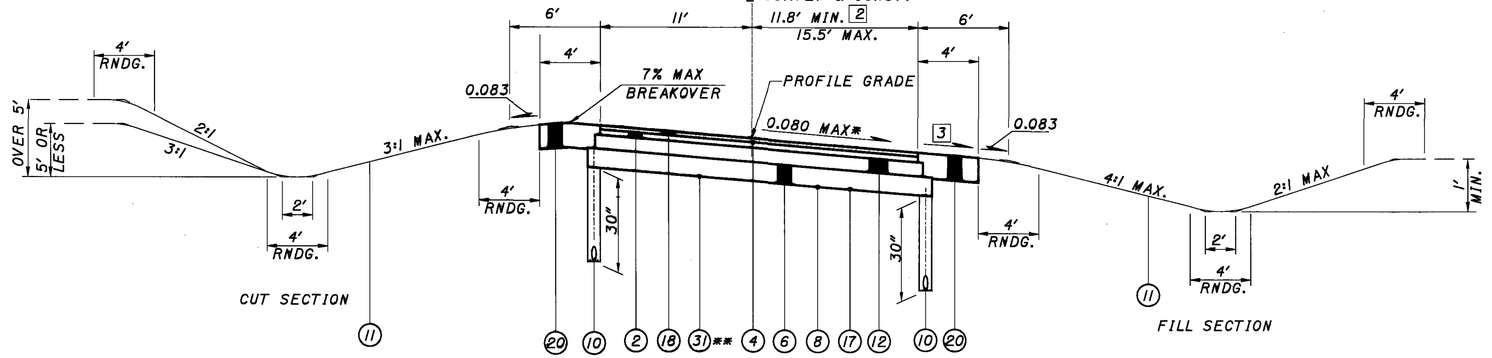
* - SEE SUPERELEVATION TABLES ON SHEETS 904-905.

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



NOTE:
FOR OPPOSITE SIDE
DETAILS ARE REVERSED.

PAVEMENT SLOPE GREATER THAN 0.060



SUPERELEVATED SECTION - SERVICE ROAD 11

STA. 216+13.31 TO STA. 228+85.88 - 1272.57 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

1. ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
2. ITEM 448 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
3. ITEM 302 - 8″ ASPHALT CONCRETE BASE, PG64-22
4. ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
5. ITEM 448 - 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
6. ITEM 304 - 6″ AGGREGATE BASE
7. ITEM 407 - TACK COAT
8. ITEM 204 - SUBGRADE COMPACTION
9. ITEM 605 - 6″ BASE PIPE UNDERDRAINS (18″ DEPTH), 707.31
10. ITEM 605 - 6″ SHALLOW PIPE UNDERDRAINS (30″ DEPTH), 707.31
11. ITEM 659 - SEEDING AND MULCHING
12. ITEM 301 - 4″ ASPHALT CONCRETE BASE, PG64-22

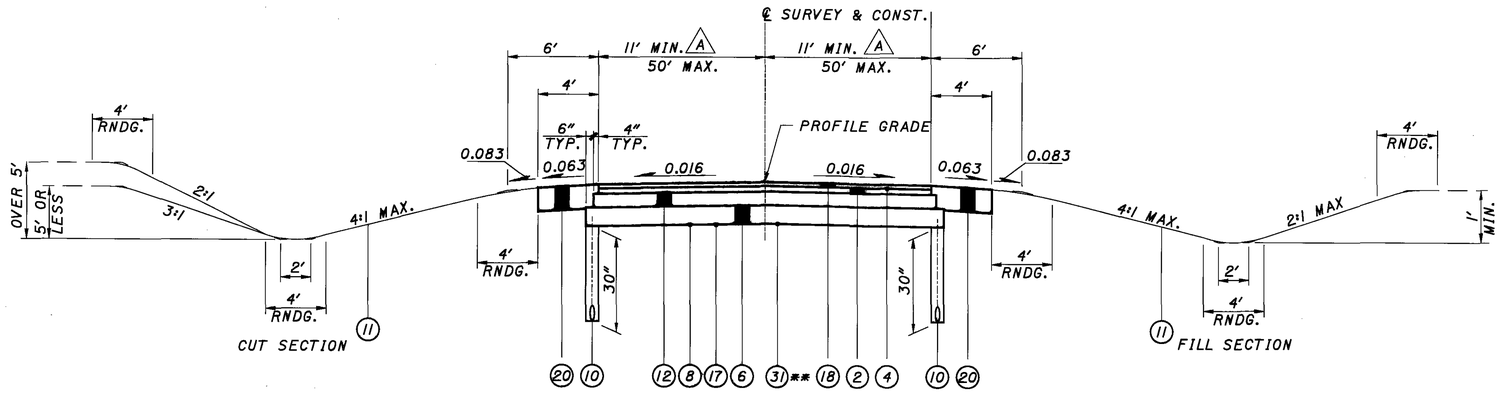
LEGEND

13. ITEM 606 - GUARDRAIL, TYPE 5
14. ITEM 452 - 9″ NON-REINFORCED CONCRETE PAVEMENT
15. STANDARD LONGITUDINAL JOINT
16. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15″
17. ITEM 204 - PROOF ROLLING
18. ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
19. ITEM 301 - 5″ ASPHALT CONCRETE BASE, PG64-22
20. ITEM 304 - 8″ AGGREGATE BASE
21. ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
22. ITEM 622 - CONCRETE BARRIER, TYPE A
23. ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
24. ITEM 301 - 3¾″ ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
25. ITEM 448 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
26. ITEM 622 - CONCRETE BARRIER, TYPE C
27. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12″
28. ITEM 605 - 12″ AGGREGATE DRAIN (8″ DEPTH)
29. ITEM 609 - CURB, TYPE 6
30. ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
31. ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
32. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17″
33. ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - SERVICE ROAD 11

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LIC-37-10.25

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NORMAL SECTION - SERVICE ROAD 11

STA. 228+85.88 TO STA. 242+99.58 - 1413.70 FT

Ⓐ - TAPERS FROM 11' AT STA. 241+78.10 TO 50' (MAX) AND TO 0' AT STA. 242+99.58 (CUL-DE-SAC). SEE PAVEMENT DETAILS ON SHEET 923.

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

Ⓐ ASPHALT PAVEMENT Ⓑ SHOULDER Ⓒ AGGREGATE BASE

LEGEND

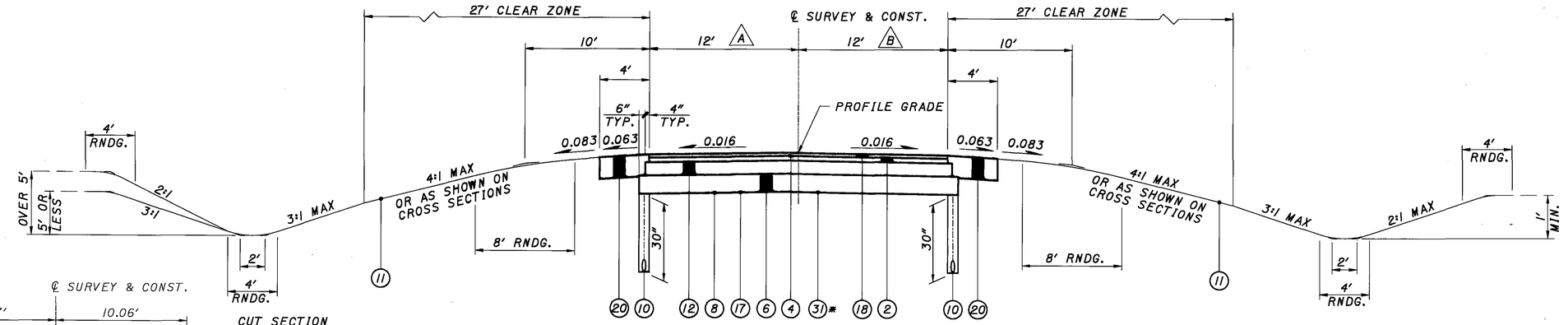
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - SERVICE ROAD 11

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LIC-37-10.25

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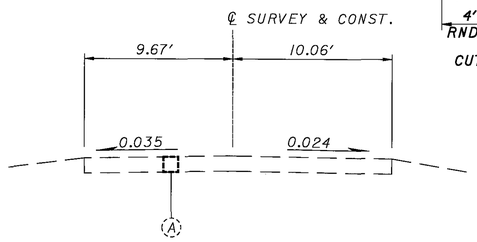
CUT SECTION

FILL SECTION

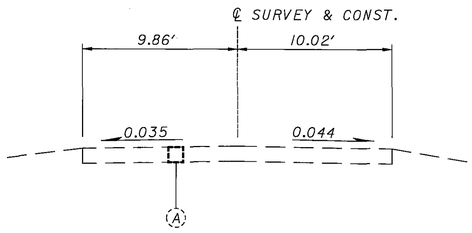
NORMAL SECTION - OUTVILLE ROAD

STA. 18+60.00 TO STA. 21+10.79 = 250.79 FT
STA. 24+14.29 TO STA. 26+25.00 = 210.71 FT
TOTAL = 461.50 FT

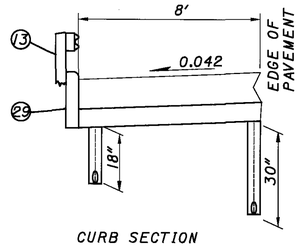
BRIDGE LIMITS INCLUDING APPROACH SLABS
BRIDGE NO. LIC-37-1255
STA. 21+10.79 TO STA. 24+14.29 - 303.50 FT



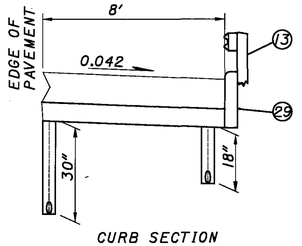
ADJOINING SECTION OUTVILLE ROAD
STA. 18+60.00



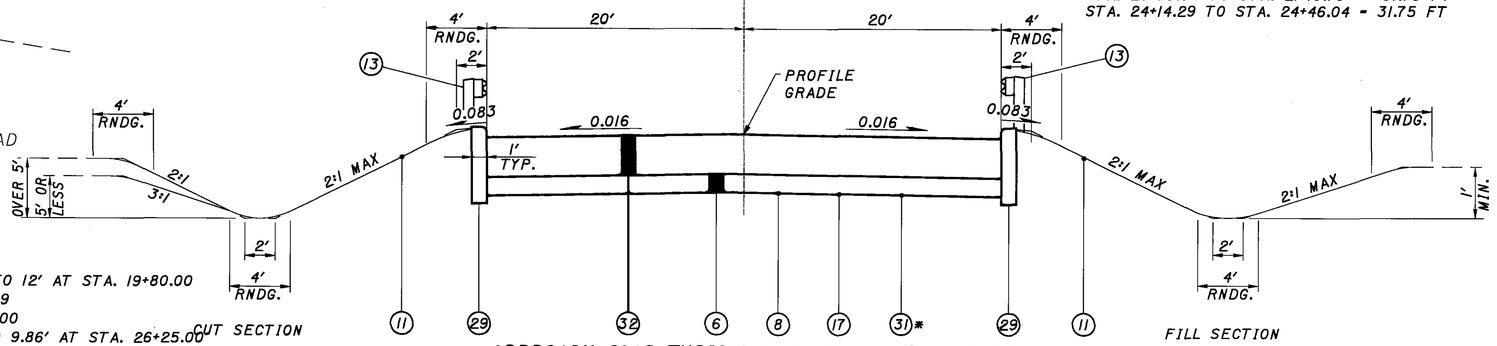
ADJOINING SECTION OUTVILLE ROAD
STA. 26+25.00



CURB SECTION
STA. 20+79.04 TO STA. 21+10.79 - 31.75 FT
STA. 24+14.29 TO STA. 24+46.04 - 31.75 FT



CURB SECTION
STA. 20+79.44 TO STA. 21+11.19 - 31.75 FT
STA. 24+13.15 TO STA. 24+44.90 - 31.75 FT



CUT SECTION

FILL SECTION

APPROACH SLAB TYPICAL SECTION - OUTVILLE ROAD

STA. 21+10.79 TO STA. 21+63.21 = 52.42 FT
STA. 23+69.21 TO STA. 24+14.29 = 45.08 FT
TOTAL = 97.50 FT

NOTES:

A - TAPERS FROM 9.67' AT STA. 18+60.00 TO 12' AT STA. 19+80.00
12' FROM STA. 19+80.00 TO STA. 21+10.79
12' FROM STA. 23+94.21 TO STA. 24+98.00
TAPERS FROM 12' AT STA. 24+98.00 TO 9.86' AT STA. 26+25.00

B - TAPERS FROM 10.06' AT STA. 18+60.00 TO 12' AT STA. 19+80.00
12' FROM STA. 19+80.00 TO STA. 21+38.21
12' FROM STA. 24+14.29 TO STA. 24+98.00
TAPERS FROM 12' AT STA. 24+98.00 TO 10.02' AT STA. 26+25.00

* - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22

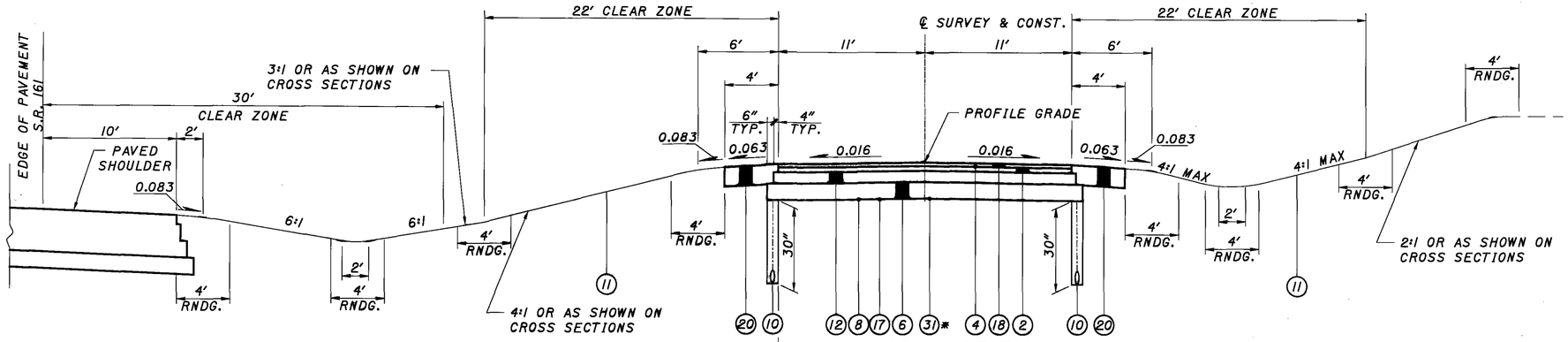
LEGEND

(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - OUTVILLE ROAD

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LIC-37-10.25

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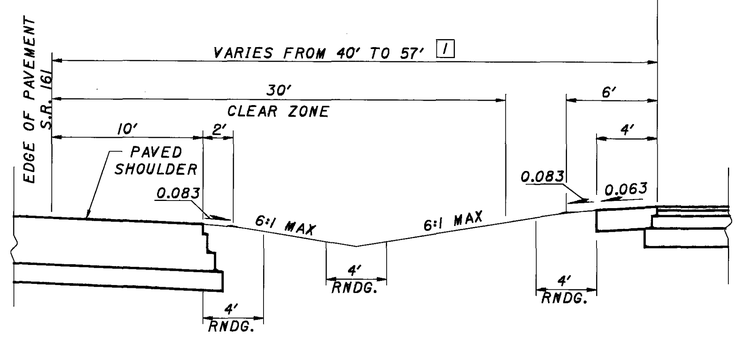


CUT SECTION

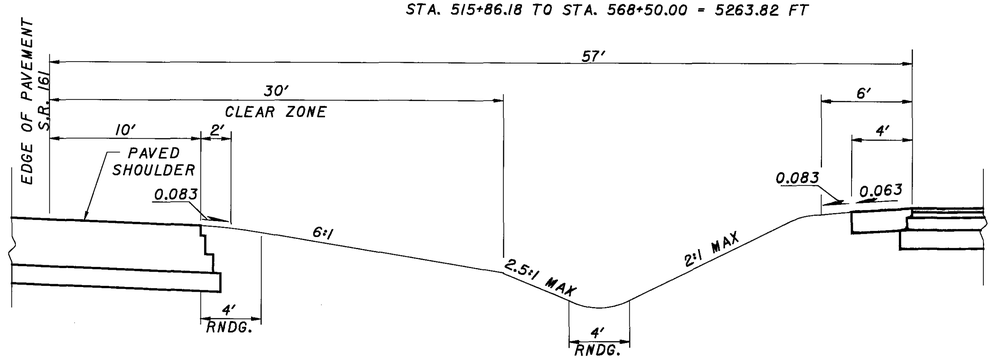
FILL SECTION

NORMAL SECTION
OUTVILLE-MORSE FRONTAGE ROAD

STA. 497+43.92 TO STA. 570+49.46 = 7305.54 FT
STA. 576+85.55 TO STA. 580+00.00 = 314.45 FT
TOTAL = 7618.99 FT



STA. 515+86.18 TO STA. 568+50.00 = 5263.82 FT



STA. 568+50.00 TO STA. 580+00.00 = 1150.00 FT

NOTES:

1 - 40' AT STA. 515+86.18 TO STA. 548+16.40
TAPERS FROM 40' AT STA. 548+16.40 TO 57' AT STA. 560+06.40
57' AT STA. 560+06.40 TO STA. 580+00.00

* - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

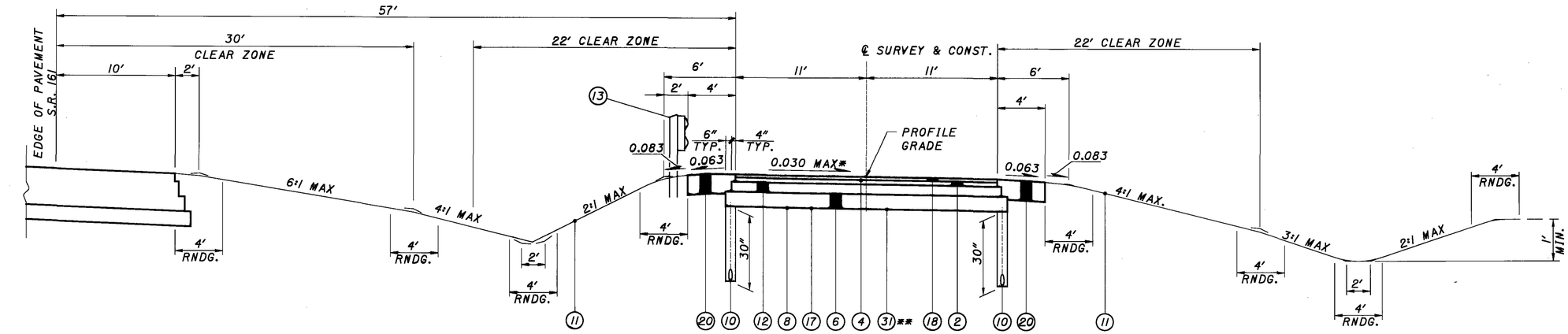
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

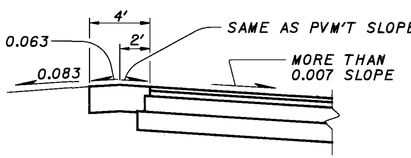
TYPICAL SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

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FILL SECTION



PAVEMENT SLOPE GREATER THAN 0.007

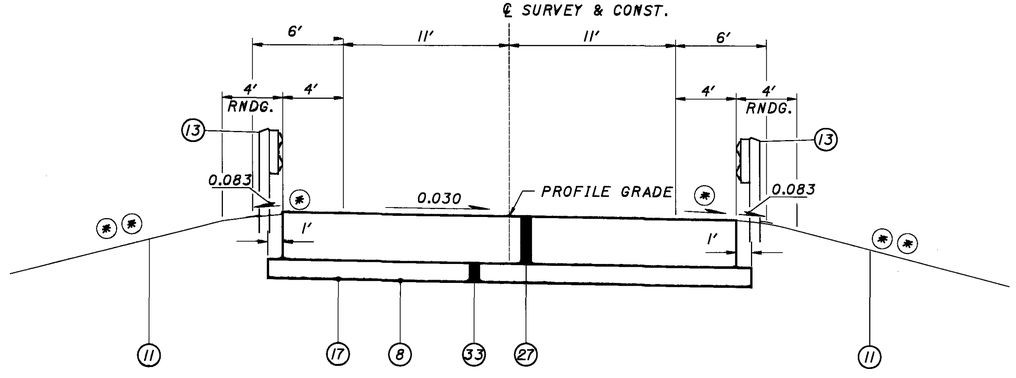
SUPERELEVATED SECTION - OUTVILLE-MORSE FRONTAGE ROAD

STA. 570+49.46 TO STA. 573+91.11 = 341.65 FT
STA. 575+71.86 TO STA. 576+85.55 = 113.69 FT
TOTAL = 455.34 FT

BRIDGE LIMITS INCLUDING APPROACH SLABS
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
STA. 573+91.11 TO STA. 576+85.55 = 294.44 FT

* - SEE SUPERELEVATION TABLE ON SHEET 906

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



(*) - TRANSITION FROM 0.04 TO 0.03 THROUGH APPROACH SLAB

(**) - FOR ROADSIDE SLOPE SEE CROSS SECTIONS ON SHEETS 818-819.

APPROACH SLAB SUPERELEVATED SECTION OUTVILLE-MORSE FRONTAGE ROAD

STA. 573+91.11 TO STA. 574+06.11 = 15.00 FT
STA. 575+56.86 TO STA. 575+71.86 = 15.00 FT
TOTAL = 30.00 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

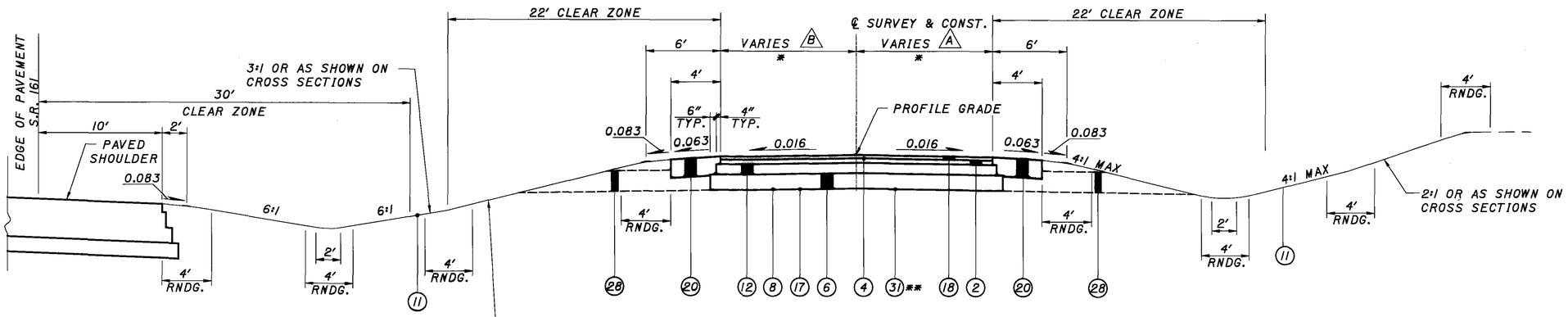
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

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NORMAL SECTION
OUTVILLE-MORSE FRONTAGE ROAD

STA. 580+00.00 TO STA. 584+40.00 - 440.00 FT
TOTAL - 440.00 FT

NOTES:

Ⓐ - TAPERS FROM 11' AT STA. 583+01.47 TO 89' MAX, RT. (CUL-DE-SAC)

Ⓑ - TAPERS FROM 11' AT STA. 583+86.98 TO 0.00' AT STA. 584+17.47, LT. (CUL-DE-SAC)

* - SEE PAVEMENT DETAILS ON SHEET 924

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

Ⓐ ASPHALT PAVEMENT Ⓑ SHOULDER Ⓒ AGGREGATE BASE

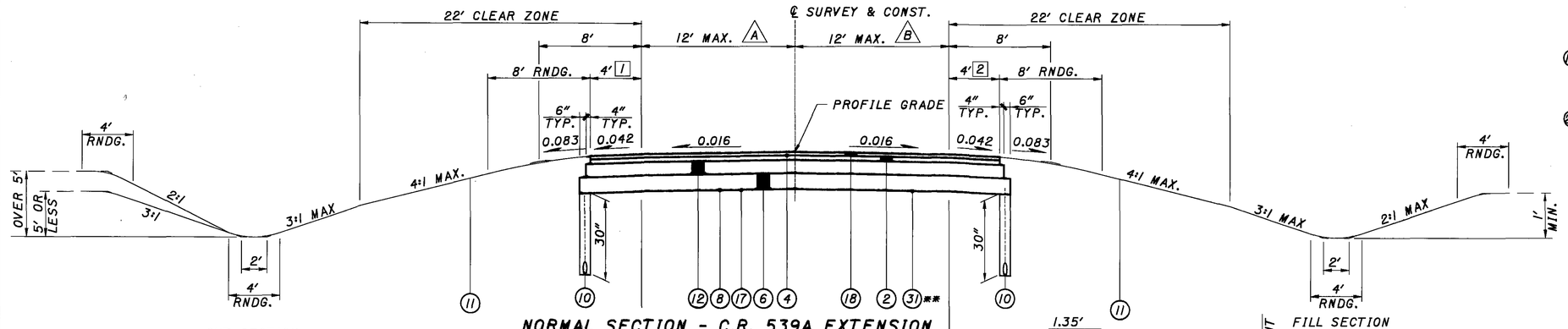
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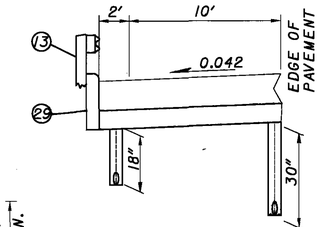
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T- 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T-12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T-17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD

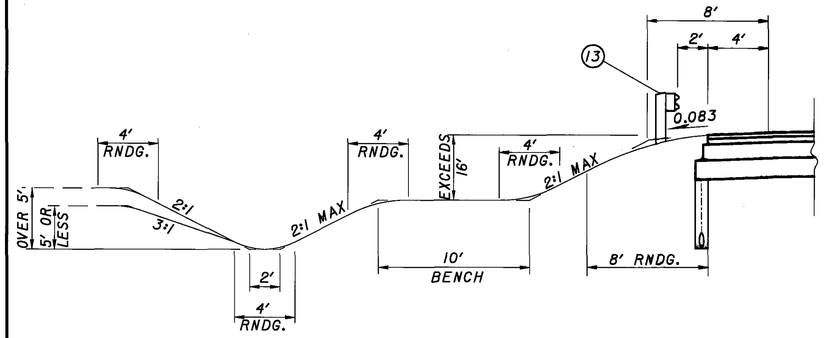
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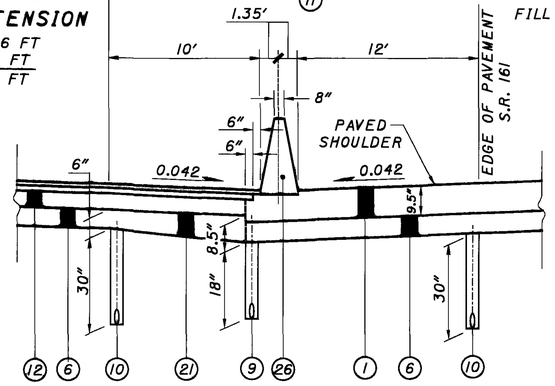




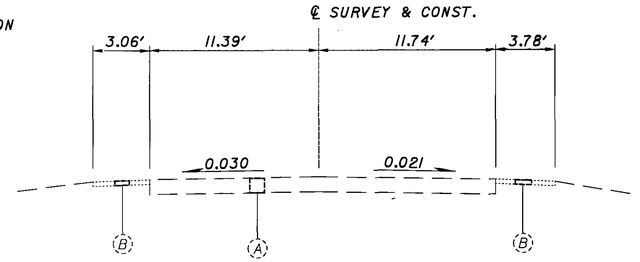
CURB SECTION
STA. 338+50.79 TO STA. 338+84.24 = 33.45 FT



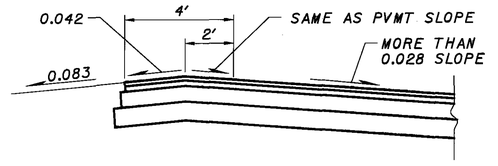
BARRIER GRADING
STA. 302+00.00 TO STA. 321+00.00



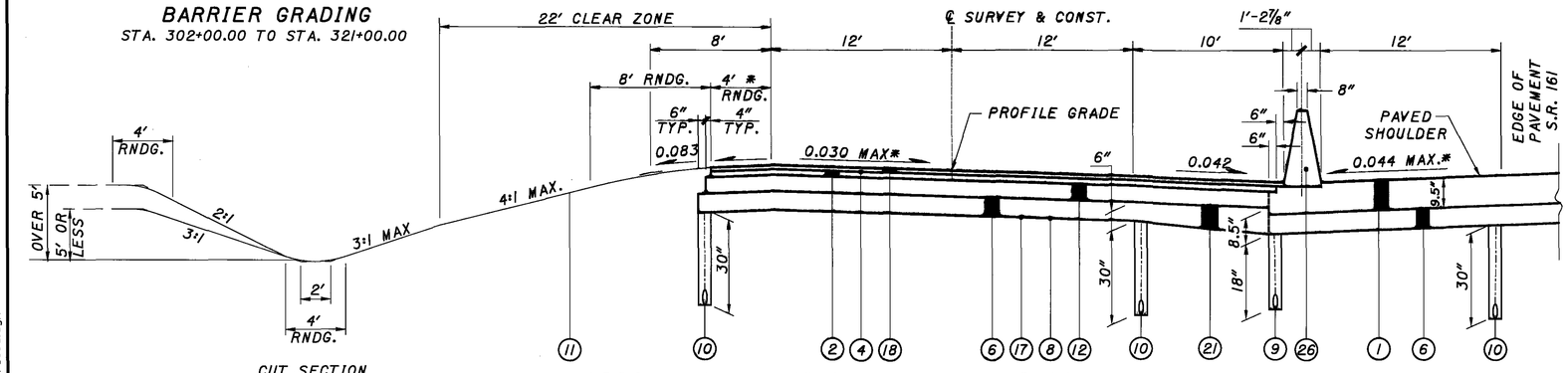
STA. 309+01.02 TO STA. 332+96.36 = 2395.34 FT
STA. 339+56.46 TO STA. 355+63.67 = 1607.21 FT



ADJOINING SECTION C.R. 539A EXTENSION
STA 295+50.00



PAVEMENT SLOPE GREATER THAN 0.028



CUT SECTION

SUPERELEVATED SECTION - C.R. 539A EXTENSION
STA. 332+96.36 TO STA. 336+45.19 = 348.83 FT
STA. 338+45.95 TO STA. 339+56.46 = 110.51 FT
TOTAL = 459.34 FT

BRIDGE LIMITS INCLUDING APPROACH SLABS
BRIDGE NO. C.R. 539A EXTENSION
STA. 336+45.19 TO STA. 338+45.95 = 200.76 FT

△A - TAPERS FROM 11.39' AT STA. 295+50.00 TO 12.00' AT STA. 296+00.00

△B - TAPERS FROM 11.74' AT STA. 295+50.00 TO 12.00' AT STA. 296+00.00

1 - TAPERS FROM 3.06' AT STA. 295+50.00 TO 4.00' AT STA. 296+00.00

2 - TAPERS FROM 3.72' AT STA. 295+50.00 TO 4.00' AT STA. 296+00.00
4' FROM STA. 296+00.00 TO STA. 309+01.02
10' FROM STA. 309+01.02 TO STA. 332+96.36 AND FROM STA. 339+56.46 TO STA. 355+63.67

* - SEE SUPERELEVATION TABLES ON SHEET 907.

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

LEGEND

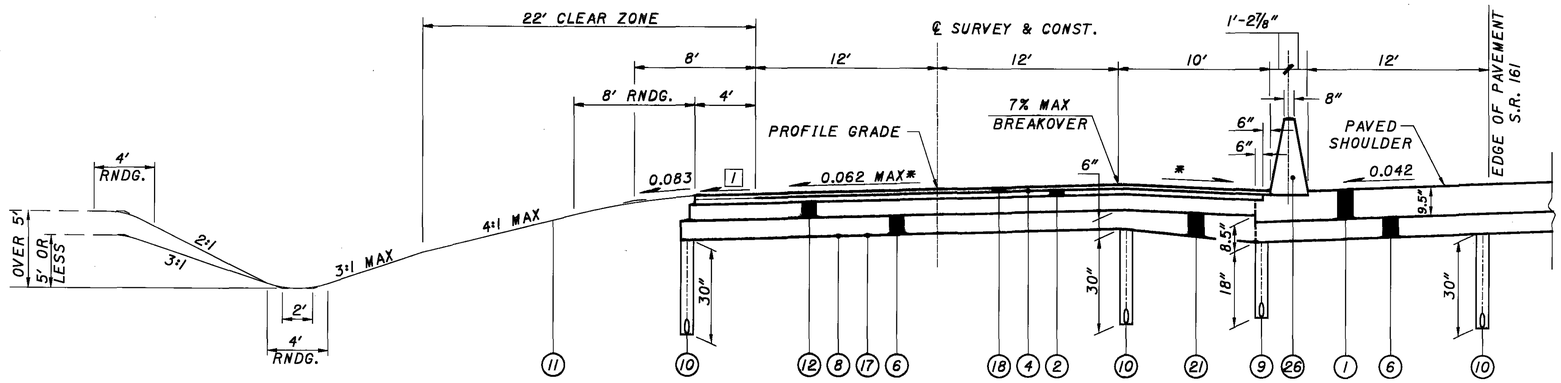
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - C.R. 539A EXTENSION

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LIC-37-10.25

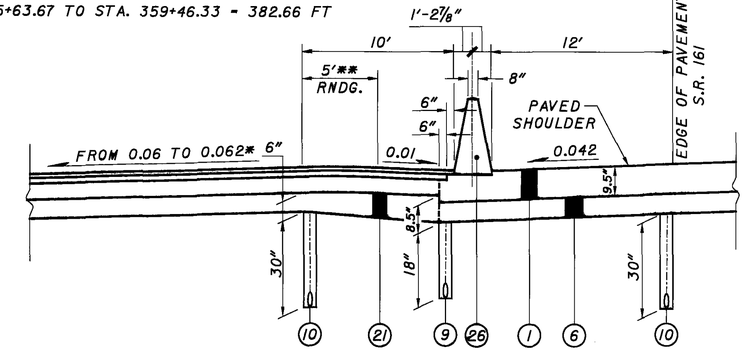
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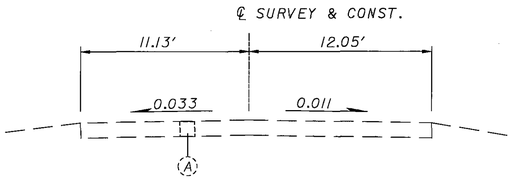
CUT SECTION

SUPERELEVATED SECTION - C.R. 539A EXTENSION

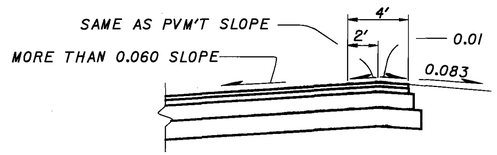
STA. 355+63.67 TO STA. 359+46.33 - 382.66 FT



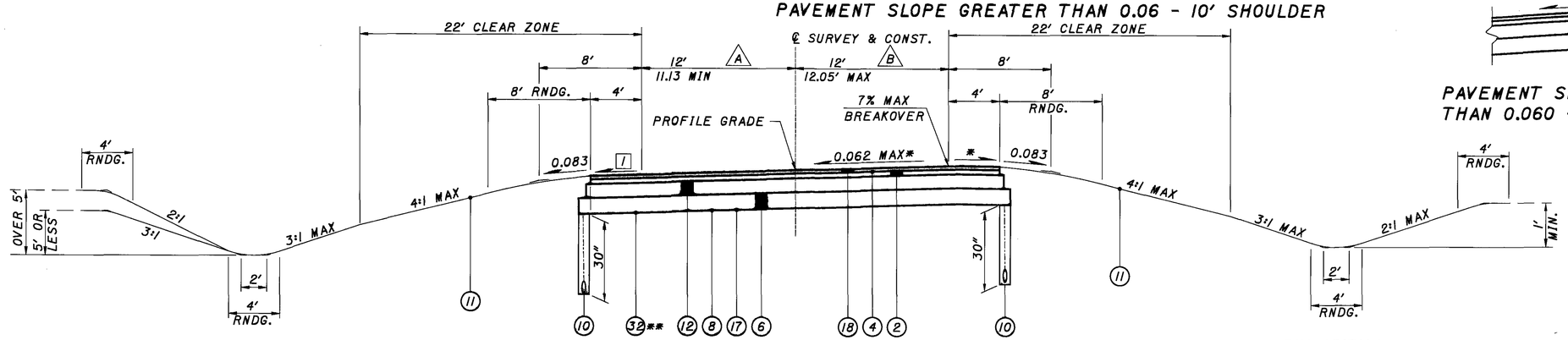
PAVEMENT SLOPE GREATER THAN 0.06 - 10' SHOULDER



ADJOINING SECTION - C.R. 539A EXTENSION
STA 364+40.00



PAVEMENT SLOPE GREATER THAN 0.060 - 4' SHOULDER



CUT SECTION

FILL SECTION

SUPERELEVATED SECTION - C.R. 539A EXTENSION

STA. 359+46.33 TO STA. 364+40.00 - 493.67 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

LEGEND

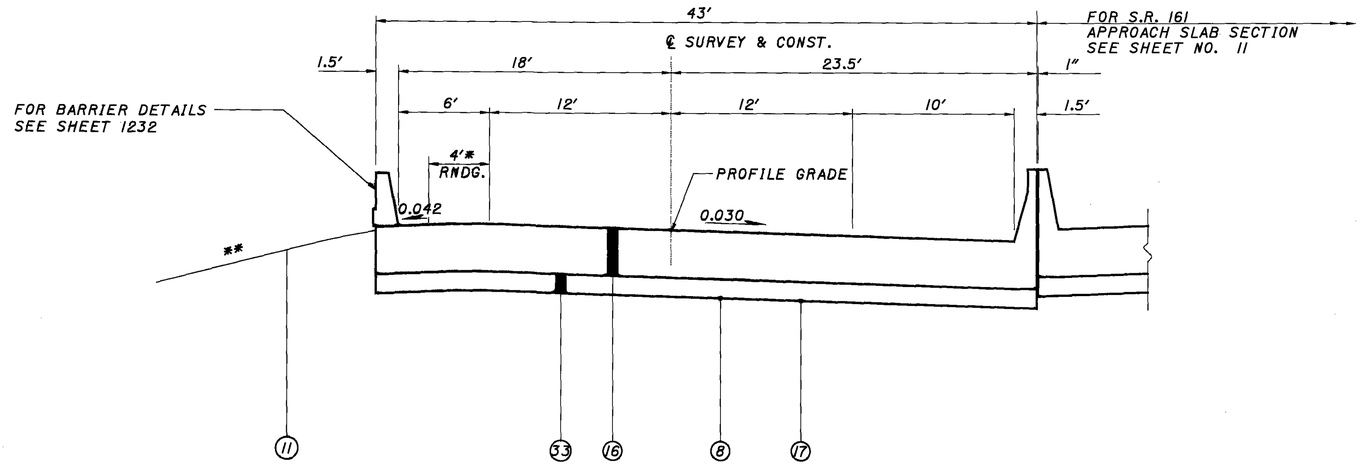
(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

△A - TAPERS FROM 12.00' AT STA. 363+90.00 TO 11.13' AT STA. 364+40.00
△B - TAPERS FROM 12.00' AT STA. 363+90.00 TO 12.05' AT STA. 364+40.00
[1] - 0.042 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER
* - SEE SUPERELEVATION TABLES ON SHEET 907
** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.

TYPICAL SECTIONS - C.R. 539A EXTENSION

LIC-161-6.65
LIC-37-10.25

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* - TRANSITION FROM 0.042 TO 4' ROUNDING THROUGH APPROACH SLAB

** - FOR ROADSIDE SLOPE SEE CROSS SECTIONS

APPROACH SLAB TYPICAL SECTION - C.R. 539A

STA. 336+45.19 TO STA. 336+70.19 - 25.00 FT
STA. 338+20.95 TO STA. 338+45.95 - 25.00 FT
TOTAL - 50.00 FT

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

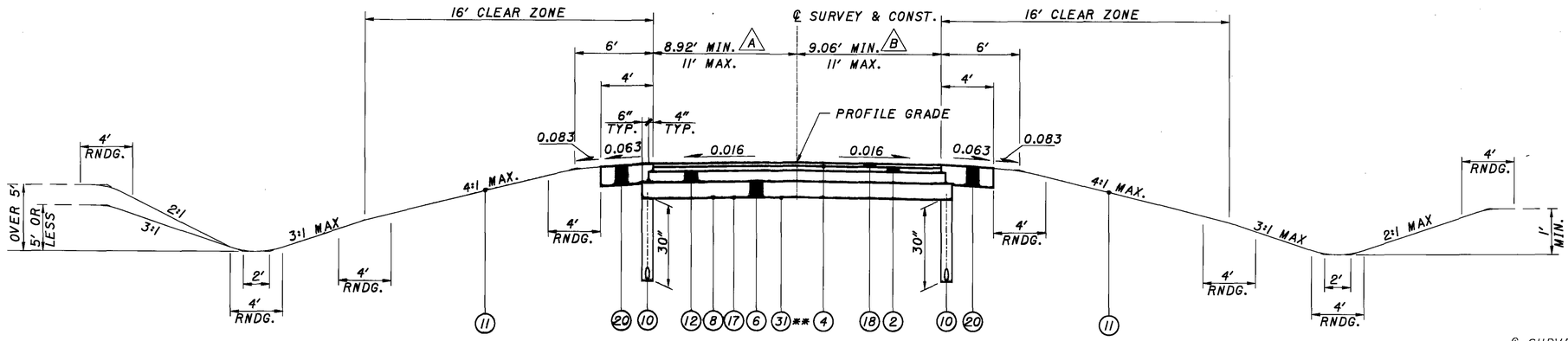
LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

TYPICAL SECTIONS - C.R. 539A EXTENSION

LIC-161-6.65
LIC-37-10.25

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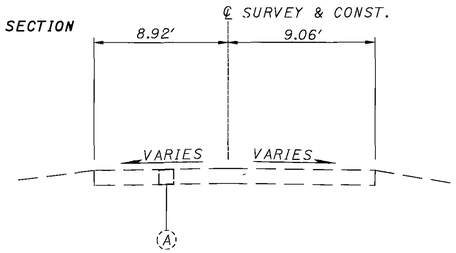


CUT SECTION

NORMAL SECTION - MORSE ROAD

STA. 7+75.00 TO STA. 9+21.79 = 146.79 FT
STA. 17+61.02 TO STA. 18+38.92 = 77.90 FT
TOTAL = 224.69 FT

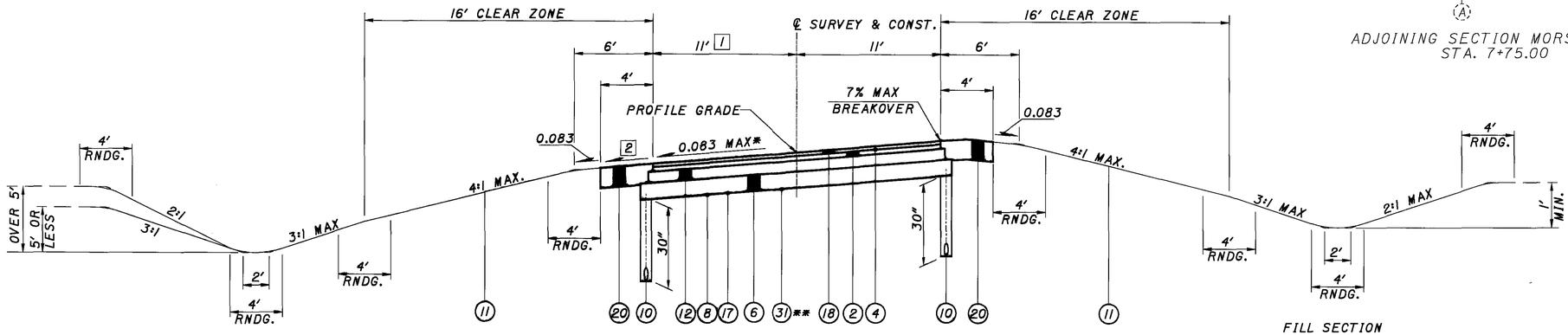
FILL SECTION



ADJOINING SECTION MORSE ROAD
STA. 7+75.00

A - TAPERS FROM 8.92' AT STA. 7+75.00 TO 11' AT STA. 8+90.00

B - TAPERS FROM 9.06' AT STA. 7+75.00 TO 11' AT STA. 8+90.00



CUT SECTION

SUPERELEVATED SECTION - MORSE ROAD

STA. 9+21.79 TO STA. 17+61.02 = 839.23 FT

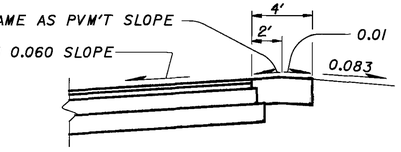
FILL SECTION

1 - TAPERS FROM 11' AT STA. 9+71.21 TO 14.5' AT STA. 12+27.56
14.5' AT STA. 12+27.56 TO STA 14+55.25
TAPERS FROM 14.5' AT STA. 14+55.25 TO 11' AT STA. 17+11.60

2 - 0.063 OR THE SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

* - SEE SUPERELEVATION TABLE ON SHEET 908.

** - SEE CEMENT STABILIZATION TREATMENT TABLE ON SHEET 45.



PAVEMENT SLOPE GREATER THAN 0.060

LEGEND

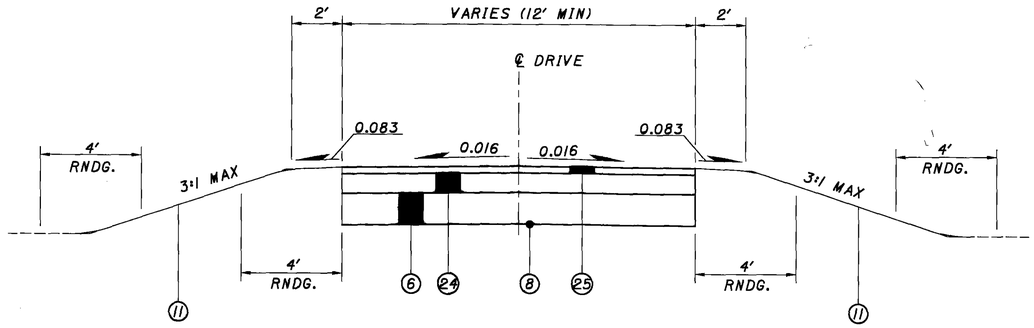
(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22
(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

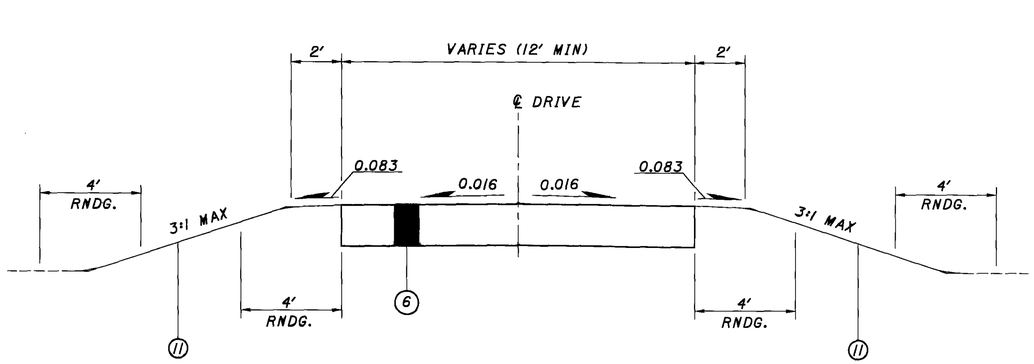
TYPICAL SECTIONS - MORSE ROAD

LIC-161-6.65
LIC-37-10.25

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ASPHALT RESIDENTIAL
DRIVE SECTION



AGGREGATE FIELD
DRIVE SECTION

(A) ASPHALT PAVEMENT (B) SHOULDER (C) AGGREGATE BASE

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(2) ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
(3) ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
(5) ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(6) ITEM 304 - 6" AGGREGATE BASE
(7) ITEM 407 - TACK COAT
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31
(10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31
(11) ITEM 659 - SEEDING AND MULCHING
(12) ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22

LEGEND

(13) ITEM 606 - GUARDRAIL, TYPE 5
(14) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
(15) STANDARD LONGITUDINAL JOINT
(16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T- 15"
(17) ITEM 204 - PROOF ROLLING
(18) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
(19) ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22
(20) ITEM 304 - 8" AGGREGATE BASE
(21) ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)
(22) ITEM 622 - CONCRETE BARRIER, TYPE A
(23) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
(24) ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
(25) ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
(26) ITEM 622 - CONCRETE BARRIER, TYPE C
(27) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T-12"
(28) ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)
(29) ITEM 609 - CURB, TYPE 6
(30) ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)
(31) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(32) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T-17"
(33) ITEM 203 - GRANULAR MATERIAL, TYPE B

DRIVES TYPICAL SECTIONS

LIC-161-6.65
LIC-37-10.25

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ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC:
AMERICAN ELECTRIC POWER CO. CENTRAL OHIO REGION (AEP)
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
(614) 883-6828

AMERICAN ELECTRIC POWER TRANSMISSION (AEP)
700 MORRISON ROAD
GAHANNA, OHIO 43230
(EMERGENCY PHONE # 614-552-1801)

TELECOMMUNICATIONS:
ALLTEL
611 HEBRON ROAD
HEATH, OHIO 43056
(740) 349-8866

GAS:
COLUMBIA GAS DISTRIBUTION
2429 LINDEN AVENUE
ZANESVILLE, OHIO 43701
(740) 450-1224

COLUMBIA GAS TRANSMISSION CORPORATION
301 MAPLE STREET
SUGAR GROVE, OHIO 43155
(740) 746-2219

LICKING RURAL ELECTRIC
NATIONAL GAS AND OIL COMPANY
1500 GRANVILLE ROAD
NEWARK, OHIO 43055
(614) 344-4087

SOUTHEAST NATURAL GAS
P.O. BOX 430
FRAZEYBURG, OHIO 43822
(740) 828-2892

CABLE:
INSIGHT COMMUNICATIONS
3770 EAST LIVINGSTON AVENUE
COLUMBUS, OHIO 43227
(614) 501-9432

PETROLEUM:
MARATHON ASHLAND PIPELINE
840 HEATH ROAD
HEATH, OHIO 43056
(419) 421-2211

TELEPHONE:
SPRINT
441 WEST BROAD STREET
PATASKALA, OHIO 43062
(740) 927-8301

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. NAV 1988 DATUM.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

REFERENCE POINTS AND BENCH MARKS

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCH MARKS AT THE PRE-CONSTRUCTION MEETING.

CONSTRUCTION PLAN

REFERENCE IS HEREBY MADE TO THE FOLLOWING DESIGNATED PLANS FOR FORMER CONSTRUCTION PROJECTS. PORTIONS OF WHICH COVER AREAS INCLUDED IN THIS PROPOSED IMPROVEMENT.

FRA-161-23.20/LIC-161-0.00

COPIES OF THESE PLANS ARE ON FILE EITHER AT THE DISTRICT 5 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION OR AT THE OFFICE OF THE ADMINISTRATOR OF CONTRACT SALES IN COLUMBUS, OHIO.

OPPORTUNITY TO PARTNER

THE CONTRACTOR ON THIS PROJECT IS INVITED TO ENTER INTO A COOPERATIVE PARTNERSHIP AGREEMENT WITH THE DEPARTMENT. THE OBJECTIVE OF THIS AGREEMENT IS THE TIMELY COMPLETION OF THE WORK AND A QUALITY PRODUCT THAT WILL BE A SOURCE OF PRIDE TO BOTH THE DEPARTMENT AND THE CONTRACTOR. THE "PARTNERING AGREEMENT" WILL NOT AFFECT THE TERMS AND CONDITIONS OF THE CONTRACT. IT IS A DOCUMENT WHICH IS SOLELY INTENDED TO ESTABLISH AN ENVIRONMENT OF COOPERATION BETWEEN THE PARTIES. PARTICIPATION IN "PARTNERING" IS VOLUNTARY AND NOT A REQUIREMENT OF THE CONTRACT.

CONTRACTOR'S USE OF ODOT RIGHT-OF-WAY

THE CONTRACTOR IS REQUIRED TO HIRE A CULTURAL RESOURCE ENVIRONMENTAL CONSULTANT PER CONSTRUCTION AND MATERIAL SPECIFICATIONS IN 105.16. PERFORM A CULTURAL RESOURCE INVESTIGATION TO VERIFY ALL WASTE AND BORROW AREAS COMPLY WITH CMS 105.16 AND 107.11. THE CONTRACTOR SHALL AVOID IMPACTING ANY AREA WITHIN 100 FEET OF RACCOON CREEK ON PARCEL 248 OTHER THAN TO CONSTRUCT THE DRAINAGE DITCH SHOWN IN THE PROJECT PLANS (STA. 646+34 LT).

ROADWAY

CLEARING AND GRUBBING, AS PER PLAN

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN.

ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN.

ALL TREES AND STUMPS WILL ALREADY BE REMOVED FROM THIS PROJECT (LIC-161-6.65/LIC-37-10.25, PID 77221) BY THE FIRST PHASE OF S.R. 161 (FRA 161-23.20/LIC-161-0.00, PID 24486). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMAINING TREES, STUMP REMOVAL AND CLEARING AND GRUBBING WITHIN THE RIGHT-OF-WAY LIMITS OF THIS PROJECT (LIC-161-6.65/LIC-37-10.25, PID 77221) AS PER ITEM 201.

ALL CLEARING AND GRUBBING ACTIVITIES ALONG SIMPSON RUN ARE LIMITED TO THE IDENTIFIED CONSTRUCTION LIMITS ON THE NORTH SIDE OF THE STREAM.

ITEM 204 - PROOF ROLLING

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES SHALL BE MADE IN ACCORDANCE WITH ITEM 607.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

LOCATION OF GUARDRAIL

THE LOCATION OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC

ITEM 606 - ANCHOR ASSEMBLY, TYPE B-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

1) THE SRT-350, GUARDRAIL END TERMINAL AS MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4370).

THE LENGTH OF THE SRT-350 SYSTEM IS CONSIDERED TO BE 37'-6", INCLUSIVE OF THREE 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

CALCULATED JMA
CHECKED FJA

GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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ITEM 606 - ANCHOR ASSEMBLY, TYPE B-98 (CONT.)

DWG. #	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
SS444 SS444M	SLOTTED RAIL TERMINAL POST LAYOUT AND ERECTION DETAILS SRT-350 (12.5, 8 POST)	7/12/99 Rev. 1 7/12/99	8/27/99
SS425M	SLOTTED RAIL TERMINAL SRT-350 POST LAYOUT AND ERECTION DETAILS (12.5, 9 POST)	6/21/97 Rev. 1	3/6/98

2) THE FLEAT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO 44224, (TELEPHONE: 330-346-0721).

THE LENGTH OF THE FLEAT-350 IS CONSIDERED TO BE 37'-6", INCLUSIVE OF THREE 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
FLT-M	FLARED ENERGY ABSORBING TERMINAL (FLEAT-350) ASSEMBLY	4/16/98	7/31/98

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4-INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4-INCHES ABOVE THE GROUND LINE.

THE FACE OF THE TYPE B-98 IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19: APPROXIMATELY 36" W x 12" H FOR THE SRT-350 AND 14" W x 20" H FOR THE FLEAT.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE B-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

1) THE ET-2000 (1997) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF TWO 25'-0" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
SS265M	ET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98
SS142	ET-2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/ PL POSTS 1-4	4/12/00	7/31/00
SS141	ET-2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, POSTS 1-4	2/29/00	7/31/00
SS158	ET-2000 PLUS 50'-0" WITH 12'-6" PANELS AND HBA POSTS 1-4 PLAN, ELEVATION AND SECTION	5/22/00	7/31/00

2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO, 44224, (TELEPHONE: 330-346-0721).

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF FOUR 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98

THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18".

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4-INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4-INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 606 - GUARDRAIL, MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)

ITEM 606 - GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A TENSIONED CABLE GUARDRAIL SYSTEM MEETING NCHRP REPORT 350 TEST LEVEL-3 REQUIREMENTS BY USING ONE OF THE THREE FOLLOWING PRODUCTS:

1) BRIFEN WIRE ROPE SAFTY FENCE, BRIFEN USA, 9215 S. SHIELDS BLVD. OKLAHOMA CITY, OKLAHOMA 73160 PH: 405-793-9500 OR 866-427-4336

2) TRINITY CABLE SAFETY SYSTEM (CASS), TRINITY INDUSTRIES, 2525 STEMMONS FREEWAY, DALLAS, TEXAS 75207 (CONTACT: BRIAN SMITH 214-631-4420 OR 800 527-6050 EXT. 8140)

3) MARION STEEL'S WIRE ROPE BARRIER , MARION STEEL COMPANY, 912 CHENEY AVE., MARION, OHIO 43302 (CONTACT: RICK MAUER, 603-430-935 OR 603-490-1603).

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE SYSTEM SHALL HAVE A MAXIMUM DEFLECTION OF 8.00 FT.

PAYMENT FOR THE ABOVE WORK SHALL BE AT THE UNIT BID PRICE FOR:

ITEM 606 - GUARDRAIL, MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)

ITEM 606 - GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL

THE BID PRICE SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL CABLE GUARDRAIL SYSTEM, INCLUDING ALL RELATED HARDWARE, GRADING, EMBANKMENT, AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER AND ODOT PROJECT ENGINEER.

POSTS ARE SET IN SOCKETED CONCRETE FOUNDATIONS AND SHALL NOT BE PERMANENTLY INSTALLED UNTIL THEIR RESPECTIVE RUNS OF TENSIONED CABLE GUARDRAIL ARE READY FOR FINAL CONNECTION TO THE END TERMINAL ASSEMBLY.

THE CONTRACTOR SHALL REPLACE ANY POST DAMAGED DURING INSTALLATION AS DETERMINED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

THE CONTRACTOR SHALL PROVIDE DELINEATORS ON THE GUARDRAIL POSTS AT A MINIMUM INTERVAL OF 100 FT.

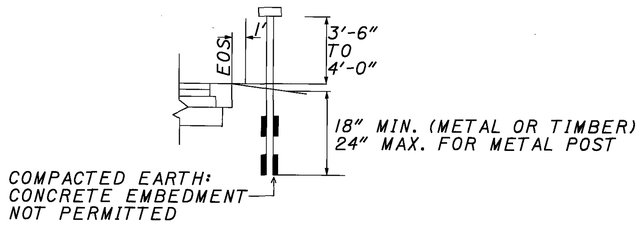
ROADWAY	LOCATION FROM	LOCATION TO	SIDE	606 GUARDRAIL, MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED) FT.	606 GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL EACH
S.R. 37	548+10	564+63	RT	1653	2
S.R. 37	565+20	571+69	RT	649	2
S.R. 37	578+17	613+00	LT	3483	2
S.R. 37	612+00	647+00	LT	3500	2
S.R. 37	646+00	659+00	LT	1300	2
TOTALS CARRIED TO GENERAL SUMMARY				10585	10

CALCULATED JMA
CHECKED FJA

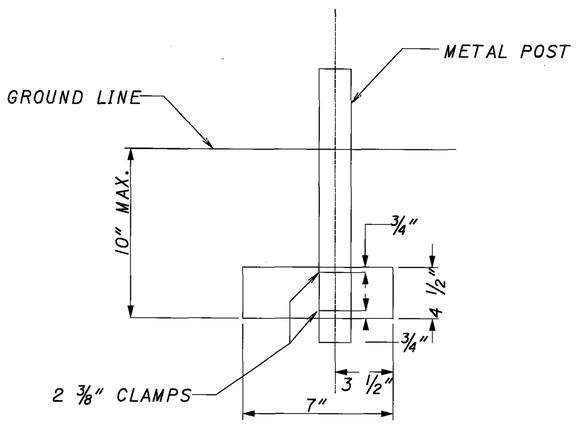
GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

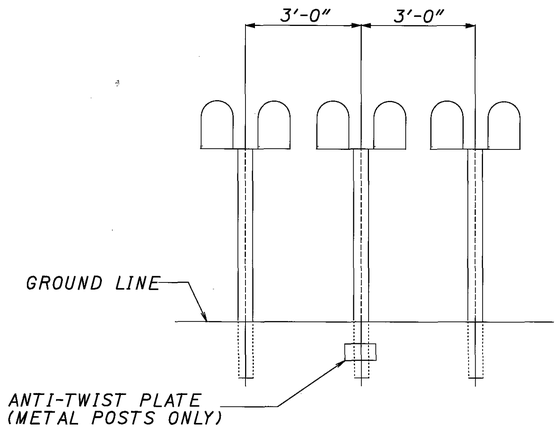
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DRIVEWAY WITH MAILBOX APPROACH



ANTI-TWIST PLATE



GROUP MAILBOX INSTALLATION

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4"x4" SQUARE OR 4-1/2" DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

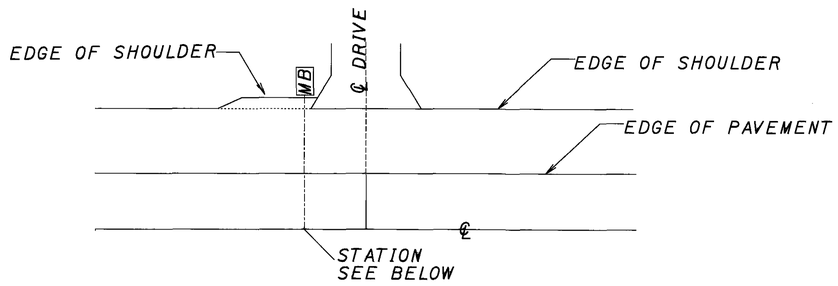
PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE) (DOUBLE). THE FOLLOWING QUANTITY'S HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

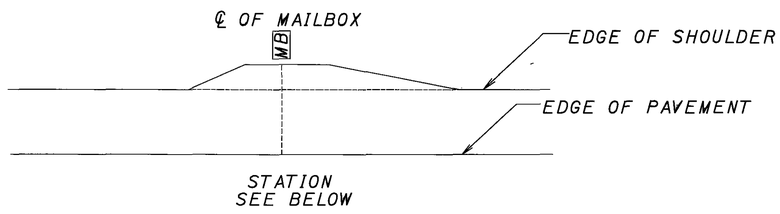
ITEM SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE 6 EACH
ITEM SPECIAL MAILBOX SUPPORT SYSTEM, DOUBLE 3 EACH

SHALL BE PLACED AT THE FOLLOWING LOCATIONS:

REFERENCE NO.	SHEET NO.	SURVEY AND CONSTRUCTION (STATION OF DRIVE)	SIDE	SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE EACH	SPECIAL MAILBOX SUPPORT SYSTEM, DOUBLE EACH
		WORTHINGTON RD. N			
1-MB	667	189+07.00	LT.	1	
2-MB	670	228+05.00	RT.	1	
		SERVICE RD. 10			
3-MB	658	145+80.00	LT.		1
4-MB	658	147+21.00	LT.		1
		SERVICE RD. 11			
5-MB	738	220+22.00	RT.	1	
		OUTVILLE-MORSE			
6-MB	763	529+43.00	RT.	1	
7-MB	763	533+25.00	RT.		1
		MORSE RD.			
8-MB	870	13+94.00	RT.	1	
		C.R. 539A			
9-MB	826	321+43.00	LT.	1	
TOTAL (CARRIED TO GENERAL SUMMARY)				6	3



TYPICAL DRIVEWAY WITH MAILBOX APPROACH



TYPICAL MAILBOX APPROACH

NOTE: ALL DRIVEWAY MAILBOX APPROACHES ARE AS PER STD. CONSTRUCTION DRAWING BP-4.1

CALCULATED SPT
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GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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GENERAL NOTES

ITEM 606 - IMPACT ATTENUATOR, TYPE 3-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING IMPACT ATTENUATORS:

1) QUADGUARD LMC (11 BAY UNIT) MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., ONE EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

THE LENGTH OF THE QUADGUARD LMC IS 33'-4". IT IS 36" WIDE AT THE TENSION STRUT BACKUP AND 48" WIDE OVERALL. IT IS 32" TALL. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
QLTSCVR-U	QUADGUARD LMC SYSTEM WITH TENSION STRUT BACKUP	12/12/97 Rev. A	3/6/98

2) REACT 350.9 MANUFACTURED BY ROAD SAFETY SERVICE, INC., 80 REMINGTON BLVD., RONKONKOMA, NY 11779-6910 (TELEPHONE: 516-588-6200 OR 516-262-3324).

THE LENGTH OF THE REACT 350.9 IS 27'-6". IT IS 36" WIDE AND 48" TALL.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./ REV. DATE	ODOT APPROVAL DATE
RSS-RCT-97003-01	REACT 350 SHEET 1 OF 4	12/15/97	3/6/98

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 3-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP

SUBGRADE SOILS SHALL BE TREATED WITH CEMENT STABILIZATION TO A DEPTH OF 14 INCHES AND TO A WIDTH OF 18 INCHES BEYOND THE EDGE OF THE PAVED SHOULDERS WHEREVER THE FINISHED SUBGRADE SURFACE IS IN A CUT, AT OR NEAR GRADE, OR WITHIN 3 FEET ABOVE EXISTING GRADE. CEMENT TREATMENT OF SUBGRADE NEED NOT BE PERFORMED WHEREVER BEDROCK IS ENCOUNTERED WITHIN 2 FEET OF THE PROPOSED BOTTOM OF FLEXIBLE OR RIGID PAVEMENT, WHERE ITEM 203 ROCK UNDERCUTS AND REPLACEMENT TO SUBGRADE ARE TO BE PERFORMED. THE FOLLOWING TABLE PROVIDES THE APPROXIMATE STATION LIMITS WHERE CEMENT TREATMENT OF SUBGRADE SHOULD BE PERFORMED. THE STATION LIMITS BETWEEN CEMENT TREATMENT AND ROCK CUT ARE APPROXIMATE, AND SHOULD BE ADJUSTED BY THE PROJECT ENGINEER IN THE FIELD TO MEET THE ACTUAL ENCOUNTERED SUBGRADE CONDITIONS.

ALIGNMENT	STATION	TO	STATION	RECOMMENDED SUBGRADE TREATMENT
S.R. 161 (RT.)	351+00	TO	392+75	ITEM 206 CEMENT STABILIZATION
S.R. 161/S.R. 37 (RT.)	407+50	TO	481+00	ITEM 206 CEMENT STABILIZATION
S.R. 37 (RT.)	489+25	TO	499+00	ITEM 206 CEMENT STABILIZATION
S.R. 37 (RT.)	499+00	TO	511+50	ITEM 203 ROCK CUT & REPLACE
S.R. 37 (RT.)	511+50	TO	549+00	ITEM 206 CEMENT STABILIZATION
S.R. 37 (RT.)	560+25	TO	570+50	ITEM 206 CEMENT STABILIZATION
S.R. 37 (RT.)	588+50	TO	654+00	ITEM 206 CEMENT STABILIZATION
S.R. 161 (LT.)	360+00	TO	391+00	ITEM 206 CEMENT STABILIZATION
S.R. 161/S.R. 37 (LT.)	400+75	TO	481+78	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	489+00	TO	499+00	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	499+00	TO	511+50	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	511+50	TO	527+75	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	534+25	TO	545+00	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	559+00	TO	569+50	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	611+75	TO	630+00	ITEM 206 CEMENT STABILIZATION
S.R. 37 (LT.)	645+50	TO	654+00	ITEM 206 CEMENT STABILIZATION
ITEM 206:	EASTBOUND LANES - 113,831 SQ. YD. WESTBOUND LANES - 89,478 SQ. YD.			
WATKINS-YORK RD.	103+50	TO	151+50	ITEM 206 CEMENT STABILIZATION
WATKINS-YORK RD.	165+25	TO	212+25	ITEM 206 CEMENT STABILIZATION
ITEM 206:	WATKINS YORK FRONTAGE RD. - 28,938 SQ. YD.			
SERVICE RD. 11	212+58	TO	243+17	ITEM 206 CEMENT STABILIZATION
ITEM 206:	SERVICE RD. 11 - 9,611.8 SQ. YD.			
SERVICE RD. 10	145+65.98	TO	151+50	ITEM 206 CEMENT STABILIZATION
ITEM 206:	SERVICE RD. 10 - 1,685.9 SQ. YD.			
WORTHINGTON RD.	150+50	TO	233+00	ITEM 206 CEMENT STABILIZATION
ITEM 206:	RELOCATED WORTHINGTON RD. NORTH - 14,531.2 SQ. YD.			
RAMP I	440+28	TO	448+50	ITEM 206 CEMENT STABILIZATION
ITEM 206:	RAMP I - 2,557 SQ. YD.			
RAMP J	454+00	TO	462+12	ITEM 206 CEMENT STABILIZATION
ITEM 206:	RAMP J - 2,526 SQ. YD.			
RAMP K	439+30	TO	444+50	ITEM 206 CEMENT STABILIZATION
ITEM 206:	RAMP K - 1,618 SQ. YD.			
S.R. 37	394+00	TO	399+00	ITEM 206 CEMENT STABILIZATION
ITEM 206:	S.R. 37 - 2,633 SQ. YD.			
YORK RD.	416+00	TO	419+71	ITEM 206 CEMENT STABILIZATION
ITEM 206:	YORK RD. - 1,937 SQ. YD.			
OUTVILLE RD.	18+60	TO	21+63	ITEM 206 CEMENT STABILIZATION
OUTVILLE RD.	23+69	TO	26+25	ITEM 206 CEMENT STABILIZATION
ITEM 206:	OUTVILLE RD. - 1,284.8 SQ. YD.			
OUTVILLE-MORSE RD.	497+32	TO	502+50	ITEM 206 CEMENT STABILIZATION
OUTVILLE-MORSE RD.	502+50	TO	510+50	ITEM 203 ROCK CUT & REPLACE
OUTVILLE-MORSE RD.	510+50	TO	551+25	ITEM 206 CEMENT STABILIZATION
OUTVILLE-MORSE RD.	560+25	TO	571+75	ITEM 206 CEMENT STABILIZATION
OUTVILLE-MORSE RD.	578+25	TO	584+40	ITEM 206 CEMENT STABILIZATION
ITEM 206:	OUTVILLE-MORSE FRONTAGE RD. - 23,313 SQ. YD.			
MORSE RD.	7+75	TO	18+50	
ITEM 206:	MORSE RD. - 3,042 SQ. YD.			
C.R. 539 EXTENSION	295+50	TO	301+25	ITEM 206 CEMENT STABILIZATION
C.R. 539 EXTENSION	322+00	TO	330+25	ITEM 206 CEMENT STABILIZATION
C.R. 539 EXTENSION	359+75	TO	364+40	ITEM 206 CEMENT STABILIZATION
ITEM 206:	C.R. 539A - 8,714 SQ. YD.			
ITEM 206:	TOTAL- 305,701 SQ. YD.			

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THE STABILIZATION OF THE SUBGRADE AS LISTED ABOVE:

ITEM 206 CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP 305,701 SQ. YD.
ITEM 206 CEMENT 10,593 TON
ITEM 206 CURING COAT 305,701 SQ.YD.
ITEM 206 CONTRACTOR DESIGNED CHEMICALLY STABILIZED SUBGRADE LUMP

CALCULATIONS:
CEMENT @ 69.3 LBS./SQ. YD.
305,701 SQ. YD. x 69.3 LBS. = 21,185,079 LBS. / 2000 = 10,593 TON

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

ITEM 880 - ASPHALT CONCRETE WITH WARRANTY

LIFT THICKNESS (AND STEP WIDTHS) SHOWN IN THE PLAN ARE FOR QUANTITY ESTIMATION ONLY AND ARE NOT REQUIRED LIFT THICKNESSES FOR ACTUAL CONSTRUCTION.

ITEM 204- GEOTEXTILE FABRIC

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER AT ANY WET SOIL SITUATIONS ENCOUNTERED DURING CONSTRUCTION.

ITEM 204 GEOTEXTILE FABRIC 10,000 SY

ITEM 203 - GRANULAR MATERIAL, TYPE D, AS PER PLAN

IN THE AREAS INDICATED ON THE TABLE BELOW, GRANULAR MATERIAL, TYPE D, AND FILTER FABRIC MAY BE PLACED BY THE METHOD OF END DUMPING IF SURFACE WATER IS PRESENT AT THE TIME OF CONSTRUCTION. END DUMPING METHODS MAY BE USED UP TO AN ELEVATION 2 FEET (0.5 METERS) ABOVE THE WATER LEVEL. ABOVE THIS ELEVATION, EMBANKMENT CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH 203.05 TO 203.07 INCLUSIVE. WHERE END DUMPING IS PERMITTED, NORMAL CLEARING AND GRUBBING SHALL BE PERFORMED BUT THE REQUIREMENTS OF 201.04 FOR SCALPING SHALL BE WAIVED.

ALIGNMENT	STATION TO STATION	SIDE	QUANTITY (CU.YD.)
SR 161	398+00 TO 409+50	RT & LT	4383
SR 161	436+00 TO 443+60	RT & LT	1813
SR 161	460+80 TO 463+50	RT & LT	1250
SR 37	541+75	RT & LT	369
SR 37	552+00 TO 558+00	RT & LT	1335
SR 37	589+25 TO 589+75	RT	44
SR 37	593+50 TO 604+50	RT	1609
SR 37	620+50 TO 621+50	RT	42
WATKINS-YORK FRONTAGE RD	156+50 TO 160+50	RT & LT	1828
WATKINS-YORK FRONTAGE RD	193+00 TO 195+00	RT & LT	962
REL. WORTHINGTON RD NORTH	207+50 TO 210+70	RT & LT	1017
RAMP I	444+30 TO 446+75	RT & LT	433
RAMP L	451+00 TO 461+30	RT & LT	1991
SERVICE RD 11	228+75 TO 229+50	RT & LT	358
OUTVILLE-MORSE FRONTAGE RD	540+25 TO 541+70	RT & LT	395
CR 539A EXTENSION	304+30	RT & LT	156
CR 539A EXTENSION	331+50 TO 333+50	LT	965
		TOTAL	18950

ITEM 203 GRANULAR MATERIAL, TYPE D, AS PER PLAN 18,950 CU. YD.
ITEM 204 GEOTEXTILE FABRIC 10,000 SQ. YD.

ITEM 618 RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE)

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE INSTALLATION OF ITEM 618 RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE), AS PER STANDARD CONSTRUCTION DRAWING BP-9.1.

RUMBLE STRIPS TO BE INSTALLED ON S.R. 161
S.R. 161 (WESTBOUND LANES)
STA. 356+00.00 TO STA. 654+00.00 = 29,800 FT x 2 (MEDIAN AND OUTSIDE) = 59,600 / 5,280= 11.29 MILE
S.R. 161 (EASTBOUND LANES)
STA. 351+00.00 TO STA. 654+00.00= 30,300 FT x 2 (MEDIAN AND OUTSIDE) =60,600 / 5,280 = 11.48 MILE

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
ITEM 618 RUMBLE STRIPS, TYPE 2 (ASPHALT CONC.) 22.77 MILE

ITEM 202 - RAISED PAVEMENT MARKER REMOVED

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF THE RAISED PAVEMENT MARKERS AS PER 202.

RAISED PAVEMENT MARKERS QUANTITIES ARE FOR REMOVALS ON EXISTING S.R. 161 & S.R. 37

ITEM 202 RAISED PAVEMENT MARKER REMOVED 490 EACH

ITEM 605- SPRING DRAINS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR DRAINING ANY SPRINGS SHOWN IN THE PLAN OR ENCOUNTERED DURING CONSTRUCTION. THE FOLLOWING TYPES OF PIPES MAY BE USED: 707.33, 707.41, 707.42 OR 707.45 PERFORATED PER 707.31.

SPRING DRAINS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD CONSTRUCTION DRAWING DM-1.1 AND PAID FOR AT THE CONTRACT PRICE FOR:

ITEM 605 6" UNCLASSIFIED PIPE UNDERDRAIN, FOR SPRINGS 200 FT
ITEM 605 AGGREGATE DRAIN, FOR SPRINGS 200 FT

LIC-161-6.65
LIC-37-10.25

$USER
$DATE&
$FILE&

$TIMESTAMP&

SURFACE SMOOTHNESS FOR BRIDGES AND BRIDGE APPROACHES

DESCRIPTION: THIS SPECIFICATION SUPERSEDES THE REQUIREMENTS OF 451.12 AND PROVIDES THE SURFACE SMOOTHNESS REQUIREMENTS FOR BRIDGES AND BRIDGE APPROACHES.

EQUIPMENT: EQUIPMENT FOR CORRECTIVE DIAMOND GRINDING SHALL MEET THE REQUIREMENTS OF 257.02.

SMOOTHNESS MEASUREMENT: THE DEPARTMENT WILL PERFORM THE SURFACE SMOOTHNESS MEASUREMENT USING THE DEPARTMENT'S ASTM E 950 CLASS I INERTIAL NON-CONTACT ROAD PROFILER. PRIOR TO THE BRIDGE AND ADJACENT PAVEMENT BEING OPENED TO TRAFFIC, CONTACT THE OFFICE OF PAVEMENT ENGINEERING TO SCHEDULE SMOOTHNESS MEASUREMENT.

ALLOW FOR SUFFICIENT TIME TO PERFORM CORRECTIVE WORK THAT MAY BE REQUIRED AFTER SMOOTHNESS MEASUREMENT. THE DEPARTMENT WILL MEASURE HIGHWAY SURFACE SMOOTHNESS IN BOTH WHEEL PATHS FOR EACH MARKED TRAFFIC LANE. WHEELPATHS ARE LOCATED PARALLEL TO THE CENTERLINE OF THE HIGHWAY AND APPROXIMATELY 3.0 FEET (1.0 M) INSIDE ALL LANE EDGES, MEASURED TRANSVERSELY. THE DEPARTMENT WILL MEASURE THE ENTIRE LENGTH OF THE BRIDGE ENCOUNTER WHICH, STARTS 25 FOOT (7.6 M) BEFORE THE BEGINNING OF THE ENTRY APPROACH SLAB AND STOPS 25 FOOT (7.6 M) BEYOND THE END OF THE EXIT APPROACH SLAB AND INCLUDES APPROACH PAVEMENT, ENTRY APPROACH SLAB, BRIDGE DECK, EXIT APPROACH SLAB, AND EXIT PAVEMENT. THE DEPARTMENT WILL MAKE THREE MEASUREMENTS PER WHEELPATH PER LANE AND AVERAGE THE RESULTS FOR EACH MARKED LANE.

PRIOR TO SMOOTHNESS MEASUREMENT, ENSURE THE PAVEMENT HAS CURED FOR THE TIME SPECIFIED IN 511.17. NOTIFY THE ENGINEER EACH DAY PRIOR TO PERFORMING ANY MEASUREMENTS. REMOVE ALL DIRT AND DEBRIS FROM THE SURFACE TO BE MEASURED PRIOR TO THE SURFACE SMOOTHNESS MEASUREMENTS.

THE DEPARTMENT WILL CALCULATE THE INTERNATIONAL ROUGHNESS INDEX (IRI) ACCORDING TO ASTM E 1926(98) FOR EACH MARKED TRAFFIC LANE ALONG THE MEASURED LENGTH OF THE BRIDGE ENCOUNTER. THE IRI FOR THE EACH MARKED LANE IS THE AVERAGE OF THE IRI FOR THE TWO WHEEL PATHS OF THE THREE REPEAT MEASUREMENTS. THE DEPARTMENT WILL PROVIDE COPIES OF THE RESULTS TO THE ENGINEER INCLUDING ELECTRONIC COPIES OF ALL LONGITUDINAL PAVEMENT PROFILES IN ERD FORMAT (UNIVERSITY OF MICHIGAN TRANSPORTATION RESEARCH INSTITUTE'S ENGINEERING RESEARCH DIVISION [ERD] FORMAT).

PROVIDE NECESSARY TRAFFIC CONTROL AND SURVEY STATIONING FOR ALL SURFACE SMOOTHNESS MEASUREMENTS.

MANDATORY CORRECTIVE WORK: PERFORM CORRECTIVE WORK WHEN THE IRI EXCEEDS 150 INCHES PER MILE (2.37 M/KM) FOR A MARKED TRAFFIC LANE ALONG THE MEASURED LENGTH OF THE BRIDGE ENCOUNTER. SUBMIT A CORRECTIVE WORK PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING CORRECTIVE WORK. DO NOT PERFORM CORRECTIVE WORK BEFORE RECEIVING THE ENGINEER'S APPROVAL.

THE DEPARTMENT WILL PAY AN INCENTIVE BASED ONLY ON THE MEASURED IRI PRIOR TO ANY MANDATORY CORRECTIVE WORK. THE DEPARTMENT WILL NOT PAY AN INCENTIVE FOR A MARKED TRAFFIC LANE WITH AN IRI OF 150 INCHES PER MILE (2.37m/km) OR GREATER.

AFTER PERFORMING CORRECTIVE WORK, THE DEPARTMENT WILL RE-MEASURE EACH MARKED TRAFFIC LANE WHERE CORRECTIVE WORK WAS PERFORMED TO ENSURE THE IRI IS 150 INCHES PER MILE (2.37 M/KM) OR LESS. PERFORM ADDITIONAL CORRECTIVE WORK UNTIL THE IRI IS 150 INCHES PER MILE (2.37 M/KM) OR LESS.

OPTIONAL CORRECTIVE WORK: IF THE IRI IS 150 INCHES PER MILE OR LESS FOR A MARKED TRAFFIC LANE ALONG A MEASURED LENGTH OF THE BRIDGE. THE CONTRACTOR MAY SUBMIT A CORRECTIVE WORK PLAN TO THE ENGINEER FOR APPROVAL TO COLLECT OR INCREASE AN INCENTIVE. DO NOT PERFORM CORRECTIVE WORK BEFORE RECEIVING THE ENGINEER'S APPROVAL.

BASIS FOR PAYMENT: THE DEPARTMENT WILL PAY FOR SURFACE SMOOTHNESS FOR EACH MARKED TRAFFIC LANE ALONG THE LENGTH OF THE BRIDGE ENCOUNTER ON AN INCENTIVE BASIS ACCORDING TO THE PAY SCHEDULE IN THE APPENDIX.

THE DEPARTMENT WILL PAY FOR APPROACH PAVEMENT, APPROACH SLABS AND BRIDGE DECK CONCRETE UNDER SEPERATE ITEMS.

APPENDIX

PAY SCHEDULE

IRI		PAYMENT	IRI		PAYMENT
INCHES/MI	M/KM		INCHES/MI	M/KM	
80 OR LESS	1.26 OR LESS	X	116	1.83	0.486X
81	1.28	0.996X	117	1.85	0.471X
82	1.29	0.971X	118	1.86	0.457X
83	1.31	0.957X	119	1.88	0.443X
84	1.33	0.943X	120	1.89	0.429X
85	1.34	0.929X	121	1.91	0.414X
86	1.36	0.914X	122	1.93	0.400X
87	1.37	0.900X	123	1.94	0.386X
88	1.39	0.886X	124	1.96	0.371X
89	1.40	0.871X	125	1.97	0.357X
90	1.42	0.857X	126	1.99	0.343X
91	1.44	0.843X	127	2.00	0.329X
92	1.45	0.829X	128	2.02	0.341X
93	1.47	0.814X	129	2.04	0.300X
94	1.48	0.800X	130	2.05	0.286X
95	1.50	0.786X	131	2.07	0.271X
96	1.52	0.771X	132	2.08	0.257X
97	1.53	0.757X	133	2.10	0.243X
98	1.55	0.743X	134	2.11	0.229X
99	1.56	0.729X	135	2.13	0.214X
100	1.58	0.714X	136	2.15	0.200X
101	1.59	0.700X	137	2.16	0.186X
102	1.61	0.686X	138	2.18	0.171X
103	1.63	0.671X	139	2.19	0.157X
104	1.64	0.657X	140	2.21	0.143X
105	1.66	0.643X	141	2.23	0.129X
106	1.67	0.629X	142	2.24	0.114X
107	1.69	0.614X	143	2.26	0.100X
108	1.70	0.600X	144	2.27	0.086X
109	1.72	0.586X	145	2.29	0.071X
110	1.74	0.571X	146	2.30	0.057X
111	1.75	0.557X	147	2.32	0.043X
112	1.77	0.543X	148	2.34	0.029X
113	1.78	0.529X	149	2.35	0.014X
114	1.80	0.514X	150	2.37	0.000X
115	1.82	0.500X	OVER 150	OVER 2.37	MANDATORY CORRECTION

$$X = \frac{0.20 \times \text{UNIT BID PRICE} \times \text{ACCEPTED QUANTITY FOR BRIDGE DECK CONCRETE}}{\text{(NUMBER OF MARKED TRAVELED LANES)}}$$

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN (45 DAY WAITING PERIOD S.R. 37 @ S.R. 161.)

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16 IS FOR THE EMBANKMENT CONSTRUCTION ON S.R. 37 IN THE AREA OF THE BRIDGE APPROACH EMBANKMENT AT S.R. 161. THE EMBANKMENT FROM STA. 404+73.95 TO THE BRIDGE AND FROM THE BRIDGE TO STA. 408+79.95 SHALL BE CONSTRUCTED UP TO WITHIN ONE FOOT OF THE SUBGRADE AND THEN UNDERGO A WAITING PERIOD OF 45 DAYS PRIOR TO FINAL GRADING AND PAVING. THE WAITING PERIOD MAY BE MODIFIED BY THE ENGINEER BASED ON THE SETTLEMENT PLATFORM READINGS. FOR SETTLEMENT PLATFORM LOCATIONS AND QUANTITIES, SEE SHEET 52.

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN (45 DAY WAITING PERIOD S.R. 37 @ MOOTS RUN.)

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16 IS FOR THE EMBANKMENT CONSTRUCTION ON S.R. 37 IN THE AREA OF THE BRIDGE APPROACH EMBANKMENT AT MOOTS RUN. THE EMBANKMENT FROM STA. 480+54.83 TO THE BRIDGE AND FROM THE BRIDGE TO STA. 485+40.18 SHALL BE CONSTRUCTED UP TO WITHIN ONE FOOT OF THE SUBGRADE AND THEN UNDERGO A WAITING PERIOD OF 45 DAYS PRIOR TO FINAL GRADING AND PAVING. THE WAITING PERIOD MAY BE MODIFIED BY THE ENGINEER BASED ON THE SETTLEMENT PLATFORM READINGS. FOR SETTLEMENT PLATFORM LOCATIONS AND QUANTITIES, SEE SHEET 52.

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN (45 DAY WAITING PERIOD S.R. 37 @ CHINNEY CREEK)

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16 IS FOR THE EMBANKMENT CONSTRUCTION ON S.R. 37 IN THE AREA OF THE BRIDGE APPROACH EMBANKMENT AT CHINNEY CREEK. THE EMBANKMENT FROM STA. 573+13.51 TO THE BRIDGE AND FROM THE BRIDGE TO STA. 576+64.26 SHALL BE CONSTRUCTED UP TO WITHIN ONE FOOT OF THE SUBGRADE AND THEN UNDERGO A WAITING PERIOD OF 45 DAYS PRIOR TO FINAL GRADING AND PAVING. THE WAITING PERIOD MAY BE MODIFIED BY THE ENGINEER BASED ON THE SETTLEMENT PLATFORM READINGS. FOR SETTLEMENT PLATFORM LOCATIONS AND QUANTITIES, SEE SHEET 52.

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN (45 DAY WAITING PERIOD C.R. 539A @ CHINNEY CREEK)

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16 IS FOR THE EMBANKMENT CONSTRUCTION ON C.R. 539A EXTENSION IN THE AREA OF THE BRIDGE APPROACH EMBANKMENT AT CHINNEY CREEK. THE EMBANKMENT FROM STA. 335+70.19 TO THE BRIDGE AND FROM THE BRIDGE TO STA. 339+20.95 SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE AND THEN UNDERGO A WAITING PERIOD OF 45 DAYS PRIOR TO FINAL GRADING AND PAVING. THE WAITING PERIOD MAY BE MODIFIED BY THE ENGINEER BASED ON THE SETTLEMENT PLATFORM READINGS. FOR SETTLEMENT PLATFORM LOCATIONS AND QUANTITIES, SEE SHEET 52.

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN (45 DAY WAITING PERIOD OUTVILLE-MORSE FRONTAGE RD @ CHINNEY CREEK)

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16 IS FOR THE EMBANKMENT CONSTRUCTION ON OUTVILE-MORSE FRONTAGE RD IN THE AREA OF THE BRIDGE APPROACH EMBANKMENT AT CHINNEY CREEK. THE EMBANKMENT FROM STA. 573+06.11 TO THE BRIDGE AND FROM THE BRIDGE TO STA. 576+56.86 SHALL BE CONSTRUCTED UP TO WITHIN ONE FOOT OF THE SUBGRADE AND THEN UNDERGO A WAITING PERIOD OF 45 DAYS PRIOR TO FINAL GRADING AND PAVING. THE WAITING PERIOD MAY BE MODIFIED BY THE ENGINEER BASED ON THE SETTLEMENT PLATFORM READINGS. FOR SETTLEMENT PLATFORM LOCATIONS AND QUANTITIES, SEE SHEET 52.

ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN

IF SETTLEMENT OF SOILS ARE ENCOUNTERED IN AREAS OF SETTLEMENT PLATFORMS AT THE LOCATIONS IDENTIFIED IN THE PLANS, A CONTINGENCY QUANTITY HAS BEEN PROVIDED TO ACCOUNT FOR THE SETTLEMENT. THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER. THE STATE OF OHIO RESERVES THE RIGHT TO NON-PERFORM 100% OF THIS CONTINGENCY QUANTITY.

ITEM 203
GRANULAR MATERIAL, TYPE B, 703.16, AS PER PLAN 933 CY

CALCULATED NOK
CHECKED JMA

GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

$USER
$DATE$
$FILE$
$TIMESTAMP$
revised by ss 03/09/07

CALCULATED JMA
CHECKED FJA

GENERAL NOTES

DRAINAGE

CATCH BASINS AND MANHOLES, AS PER PLAN

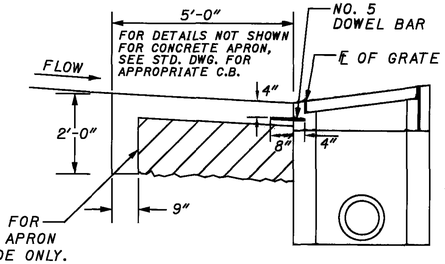
THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 802 SHALL GOVERN THE CONSTRUCTION AND INSTALLATION OF THE CATCH BASINS AND MANHOLES LISTED BELOW.
THE CATCH BASINS AND MANHOLES SHALL BE PRECAST OR CAST IN PLACE CONCRETE. BRICK OR CONCRETE BLOCK WILL NOT BE PERMITTED.

CATCH BASIN, NO. 2-2B, AS PER PLAN
CATCH BASIN, NO. 3A, AS PER PLAN
MANHOLE NO. 3, AS PER PLAN

ITEM 604 CATCH BASIN NO. 4 & 8, AS PER PLAN

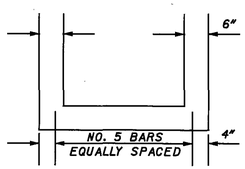
NOTE:

THIS DETAIL SHALL BE USED FOR NO. 4 & 8 CATCH BASINS, AS PER PLAN. FOR DETAILS NOT SHOWN, SEE STAND. DWG. CB-3.2 AND CB-3.4



PROVIDE A CUT-OFF WALL FOR THE FULL WIDTH OF THE APRON ALONG THE UPSTREAM SIDE ONLY. TWO CUT-OFF WALLS WILL BE REQUIRED FOR CATCH BASINS IN SAGS.

THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 802 SHALL GOVERN THE INSTALLATION OF THE PROPOSED CATCH BASIN. THE CONCRETE APRON SHALL BE PLACED AND BACK-FILLED AS SHOWN ABOVE AND IN THE STANDARD DRAWING FOR THE PERTINENT CATCH BASIN.
BAR LOCATION DETAIL FOR CATCH BASIN NO. 4 AND 8.



THE NUMBER OF BARS NEEDED ALONG EACH SIDE OF A CATCH BASIN NO. 4 WITH A CONCRETE APRON IS 7. FOR A CATCH BASIN NO. 8, THE NUMBER OF BARS NEEDED ALONG EACH SIDE WITH A CONCRETE APRON IS 4

CATCH BASIN NO.	TOTAL BARS FOR	
	STD. APRON	SAG APRON
4	7	14
8	12	16

THE FURNISHING AND PLACING OF STEEL FOR THE 5/8" X 12" DOWEL BARS SHALL BE PER ITEM 509 REINFORCING STEEL. THE DOWEL BARS SHALL BE EPOXY COATED AS PER 509.10. THE DOWEL BARS SHALL BE INSTALLED PER ITEM 510 OR CAST INTO THE CATCH BASIN. BOLT IN INSERTS MAY BE USED. THE CATCH BASIN SHALL BE PRECAST OR CAST-IN-PLACE CONCRETE. BRICK OR CONCRETE BLOCK WILL NOT BE PERMITTED. THE 6" CONCRETE APRON SHALL BE REINFORCED PER 601.04(C).

PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 604 CATCH BASIN, NO. 4 AND 8, AS PER PLAN, AND SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, LABOR, TOOLS AND EQUIPMENT INCIDENTAL TO COMPLETE THE WORK FOR THIS ITEM.

ITEM 603 120" CONDUIT, TYPE A, 706.02, 1500 D-LOAD, AS PER PLAN OR 120" CONDUIT, TYPE A, AS PER PLAN (A)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 120" CONDUIT, TYPE A, 706.02, 1500 D-LOAD OR 120" CONDUIT, TYPE A, 707.02 (0.109) ALUMINIZED, 707.02 (0.109) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.109), 707.04 [1" CORR.] (0.109) ASPHALT COATED & PAVED, 707.02 (0.109) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.164), 707.23 W/CFP (0.100)

ITEM 603 96" CONDUIT, TYPE A, 706.02, 2250 D-LOAD, AS PER PLAN OR 102" CONDUIT, TYPE A, AS PER PLAN (B)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 96" CONDUIT, TYPE A, 706.02, 2250 D-LOAD OR 102" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.079) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.079), 707.04 [1" CORR.] (0.079), ASPHALT COATED & PAVED, 707.02 (0.079) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.135), 707.23 W/CFP (0.100)

ITEM 603 102" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 108" CONDUIT, TYPE A, AS PER PLAN (C)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 102" CONDUIT, TYPE A, 706.02, 1250 D-LOAD OR 108" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.079) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.079), 707.04 [1" CORR.] (0.079) ASPHALT COATED & PAVED, 707.02 (0.079) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.135), 707.23 W/CFP (0.100)

ITEM 603 54" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 60" CONDUIT, TYPE A, AS PER PLAN (D)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 54" CONDUIT, TYPE A, 706.02, OR 60" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.060), 707.23 W/CFP (0.100)

ITEM 603 36" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT, TYPE A, AS PER PLAN (E)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 36" CONDUIT, TYPE A, 706.02, OR 42" CONDUIT, TYPE A, 707.01 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.109) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.04 [0.5" CORR.] (0.064) ASPHALT COATED & PAVED, 707.22 W/CFP (0.060), 707.21 W/CFP (0.105)

ITEM 603 42" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT, TYPE A, AS PER PLAN (F)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 42" CONDUIT, TYPE A, 706.02, OR 42" CONDUIT, TYPE A, 707.01 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.109) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.04 [0.5" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.22 W/CFP (0.060), 707.21 W/CFP (0.105)

ITEM 603 84" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 84" CONDUIT, TYPE A, AS PER PLAN (G)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 84" CONDUIT, TYPE A, 706.02, 1250 D-LOAD OR 84" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.105), 707.23 W/CFP (0.100)

ITEM 603 42" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 48" CONDUIT, TYPE A, AS PER PLAN (H)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 42" CONDUIT, TYPE A, 706.02, 1250 D-LOAD OR 48" CONDUIT, TYPE A, 707.01 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.109) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.04 [0.5" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.22 W/CFP (0.060), 707.21 W/CFP (0.105)

ITEM 603 54" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 60" CONDUIT, TYPE A, AS PER PLAN (I)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 54" CONDUIT, TYPE A, 706.02, 1250 D-LOAD OR 60" CONDUIT, TYPE A, 707.01 (0.109) ALUMINIZED, 707.01 (0.109) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.109), 707.04 [0.5" CORR.] (0.109) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.21 W/CFP (0.135), 707.22 W/CFP (0.060), 707.23 W/CFP (0.100)

ITEM 603 36" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 36" CONDUIT, TYPE A, AS PER PLAN (J)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 36" CONDUIT, TYPE A, 706.02 OR 36" CONDUIT, TYPE A, 707.01 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.109) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.04 [0.5" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.22 W/CFP (0.075), 707.21 W/CFP (0.075)

LIC-161-6.65
LIC-37-10.25

tduffney
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ITEM 603 24" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 24" CONDUIT, TYPE A, AS PER PLAN (K)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 24" CONDUIT, TYPE A, 706.02, OR 24" CONDUIT, TYPE A, 707.01 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.109) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.04 [0.5" CORR.] (0.064) ASPHALT COATED & PAVED, 707.21 W/CFP (0.060)

ITEM 603 90" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 96" CONDUIT, TYPE A, AS PER PLAN (L)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 90" CONDUIT, TYPE A, 706.02 OR 96" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.105), 707.23 W/CFP (0.100)

ITEM 603 54" CONDUIT, TYPE A, 706.02 AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (M)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 54" CONDUIT, TYPE A, 706.02 OR 66" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.21 W/CFP (0.164), 707.22 W/CFP (0.075), 707.23 W/CFP (0.100)

ITEM 603 60" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (N)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 60" CONDUIT, TYPE A, 706.02 OR 66" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.21 W/CFP (0.135), 707.22 W/CFP (0.075), 707.23 W/CFP (0.100)

ITEM 603 102" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 102" CONDUIT, TYPE A, AS PER PLAN (O)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 102" CONDUIT, TYPE A, 706.02 OR 102" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.135), 707.23 W/CFP (0.100)

ITEM 603 27" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 33" CONDUIT, TYPE A, AS PER PLAN (P)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 27" CONDUIT, TYPE A, 706.02 AS PER PLAN, OR 33" CONDUIT, TYPE A, 707.01 (0.109) GALVANIZED,707.01 (0.064) ALUMINIZED, 707.05 (0.064) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.21 W/CFP (0.075)

ITEM 603 18" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 21" CONDUIT, TYPE A, AS PER PLAN (Q)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 18" CONDUIT, TYPE A, 706.02, OR 21" CONDUIT, TYPE A, 707.01 (0.109) GALVANIZED, 707.01 (0.064) ALUMINIZED, 707.05 (0.064) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.21 W/CFP (0.060)

ITEM 603 60" CONDUIT, TYPE A, 706.02, 2250 D-LOAD, AS PER PLAN, OR 78" CONDUIT, TYPE A, AS PER PLAN (R)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 60" CONDUIT, TYPE A, 706.02, 2250 D-LOAD OR 78" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED- ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.135), 707.23 W/CFP (0.125)

ITEM 603 60" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (S)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 60" CONDUIT, TYPE A, 706.02 OR 66" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.21 W/CFP (0.164), 707.22 W/CFP (0.075), 707.23 W/CFP (0.100)

ITEM 603 30" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 36" CONDUIT, TYPE A, AS PER PLAN (T)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 30" CONDUIT, TYPE A, 706.02 OR 36" CONDUIT, TYPE A, 707.01 (0.064) ALUMINIZED, 707.01 (0.109) GALVANIZED, 707.05 (0.064) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064) POLYMER COATED, 707.02 (0.064) GALVANIZED W/CFP, 707.21 W/CFP (0.075), 707.22 W/CFP (0.060)

ITEM 603 78" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 84" CONDUIT, TYPE A, AS PER PLAN (U)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 78" CONDUIT, TYPE A, 706.02 OR 84" CONDUIT, TYPE A, 707.02 (0.079) ALUMINIZED, 707.02 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.07 (0.138) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [1" CORR.] (0.064), 707.04 [1" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.03 (0.168), 707.03 (0.109) W/CFP, 707.22 W/CFP (0.105), 707.23 W/CFP (0.100)

ITEM 603 42" CONDUIT, TYPE A, 706.02 AS PER PLAN OR 48" CONDUIT, TYPE A, AS PER PLAN (V)

THE FOLLOWING DESCRIPTION IS THE PROPOSED CONDUIT AND THE ALTERNATE FOR THAT CONDUIT AS LISTED IN THE GENERAL SUMMARY.

ITEM 603 42" CONDUIT, TYPE A, 706.02 OR 48" CONDUIT, TYPE A, 707.01 (0.079) ALUMINIZED, 707.01 (0.064) ALUMINIZED-ASPHALT COATED & PAVED, 707.05 (0.109) GALVANIZED-ASPHALT COATED & PAVED, 707.04 [0.5" CORR.] (0.064), 707.04 [0.5" CORR.] (0.064) ASPHALT COATED & PAVED, 707.02 (0.064) GALVANIZED W/CFP, 707.21 W/CFP (0.105)

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE (RIGHT OF WAY) (CONSTRUCTION) LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOW LINE ELEVATION OF THE DITCH. LATERAL FIELD TITLES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

603	8" CONDUIT, TYPE B	500 FT.
603	6" CONDUIT, TYPE E	500 FT.
603	6" CONDUIT, TYPE F	500 FT.
601	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	200 CU. YD.

ITEM 605, AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT THE LOCATIONS SHOWN BELOW FOR A TOTAL OF 270 FT. ITEM 605 AGGREGATE DRAIN HAS BEEN CARRIED TO A GENERAL SUMMERY.

LOCATION	STA. TO STA.
WATKINS-YORK FRONTAGE RD	103+50 TO 105+50 LT./RT. @25' STAGGERED = 9 x 10' = 90'
OUTVILLE-MORSE FRONTAGE RD	580+00 TO 584+25 LT./RT. @25' STAGGERED = 18 x 10 = 180'
ITEM 605, AGGREGATE DRAIN	= 270'

CALCULATED JMA CHECKED FJA

GENERAL NOTES

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EROSION CONTROL

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREA AS PER PLAN

ITEM 659 COMMERCIAL FERTILIZER 125 TON
1 TON PER 7,410 SQ. YD. OF THE PERMANENT SEEDED AREA
921,009 SQ. YD. / 7,410 = 125 TON

ITEM 659 LIME 191 ACRE
921,009 SQ. YD. / 4,840 = 191 ACRE

ITEM 659 WATER 4,974 M. GAL.
0.0054 M. GAL PER SQ. YD. OF THE PERMANENT SEEDED AREA
921,009 SQ. YD. x 0.0054 = 4,974 M. GAL

ITEM 659 MOWING 2073 M. SQ. FT.
0.00225 M. SQ. FT. PER SQ. YD. OF THE PERMANENT SEEDED AREA
921,009 SQ. YD. x 0.00225 = 2,073 M. SQ. FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE PLACED BY THE CONTRACTOR WITH THE ENGINEER'S CONCURRENCE FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

ITEM 659 REPAIR SEEDING AND MULCHING 46,051 SQ. YD.
5% OF THE PERMANENT SEEDED AREA
0.05 x 921,009 SQ. YD. = 46,051 SQ. YD.

ITEM 659 INTER-SEEDING 46,051 SQ. YD.
5% OF THE PERMANENT SEEDED AREA
0.05 x 921,009 SQ. YD. = 46,051 SQ. YD.

ITEM 659 COMMERCIAL FERTILIZER 31 TON
1 TON PER 29,940 SQ. YD. OF THE PERMANENT SEEDED AREA
921,009 SQ. YD. ÷ 29,940 = 31 TON

ITEM 659 WATER 796 M. GAL.
0.00216 M. GAL. PER 40% OF THE SEEDED AREA
921,009 SQ. YD. x 0.40 x 0.00216 = 796 M. GAL

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 14,405 M. GAL
0.004 M. GAL. PER CU. YD. OF THE TOTAL EARTHWORK
2,181,926 (EXCAVATION) + 1,419,283 (EMBANKMENT) =
3,601,209 CU. YD. (TOTAL)
3.601.209 CU. YD. x 0.004 = 14,405 M. GAL.

WATER QUALITY

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED STRIPS (& SWALES)

VEGETATED STRIPS (& SWALES) HAVE BEEN USED IN THIS PLAN. TAKE CARE TO GRADE THESE AREAS AS THE PLAN INDICATES. STABILIZE THE STRIP (& SWALE) WITH THE PERMANENT EROSION PROTECTION ITEMS. THE FOLLOWING TABLE IDENTIFIES THE LOCATIONS OF THESE BMPS.

VEGETATED STRIPS (& SWALES)

ROADWAY	LOCATION		SIDE
	FROM	TO	
S.R. 161	373+25.00	374+25.00	RT
S.R. 161	445+50.00	446+50.00	LT
S.R. 161	374+05.00	375+05.00	LT
S.R. 161	408+25.00	409+25.00	LT
S.R. 161	456+35.00	457+35.00	LT
S.R. 161	457+35.00	458+35.00	LT
S.R. 161	445+50.00	446+50.00	RT
S.R. 161	446+50.00	447+50.00	LT
S.R. 161	445+50.00	446+50.00	LT
S.R. 161	409+25.00	410+25.00	LT
S.R. 161	463+50.00	464+50.00	LT
S.R. 161	463+50.00	464+50.00	LT
S.R. 161	462+50.00	463+50.00	RT
S.R. 161	469+00.00	470+00.00	RT
S.R. 161	470+00.00	471+00.00	RT
S.R. 37	448+00.00	449+00.00	RT
S.R. 37	469+00.00	470+00.00	LT
S.R. 37	470+00.00	471+00.00	LT
S.R. 37	480+50.00	481+60.00	LT
S.R. 37	484+50.00	485+50.00	LT
S.R. 37	484+41.00	485+41.00	RT
S.R. 37	513+50.00	514+50.00	LT
S.R. 37	524+00.00	525+00.00	LT
S.R. 37	531+50.00	532+50.00	RT
S.R. 37	532+00.00	533+00.00	LT
S.R. 37	532+50.00	533+50.00	RT
S.R. 37	533+00.00	534+00.00	LT
S.R. 37	557+50.00	558+50.00	RT
S.R. 37	572+94.00	573+94.00	RT
S.R. 37	583+50.00	584+50.00	RT
S.R. 37	592+50.00	593+50.00	RT
S.R. 37	602+00.00	603+00.00	LT
S.R. 37	605+00.00	606+00.00	RT
S.R. 37	645+00.00	646+00.00	LT
S.R. 37	646+00.00	647+00.00	LT
S.R. 37	646+34.00	647+34.00	RT
S.R. 37	645+34.00	646+34.00	RT
S.R. 37	653+00.00	654+00.00	LT
REL. WORTHINGTON N.	208+00.00	209+00.00	RT
REL. WORTHINGTON N.	209+00.00	210+00.00	RT
REL. WORTHINGTON N.	209+00.00	210+00.00	LT
REL. WORTHINGTON N.	215+00.00	216+00.00	LT
REL. WORTHINGTON N.	222+00.00	223+00.00	RT
C.R. 539A	297+50.00	298+50.00	LT
C.R. 539A	361+50.00	362+50.00	LT
RAMP 1	447+50.00	448+50.00	LT
SERVICE RD. 11	228+00.00	229+00.00	LT
SERVICE RD. 12	511+50.00	512+50.00	RT
SERVICE RD. 12	522+50.00	523+50.00	RT
SERVICE RD. 12	532+00.00	533+00.00	RT
SERVICE RD. 12	557+40.00	558+40.00	RT
SERVICE RD. 12	572+96.00	573+96.00	LT
SERVICE RD. 12	575+77.00	576+77.00	LT
WATKINS YORK	118+50.00	119+50.00	RT
WATKINS YORK	132+50.00	133+50.00	RT
WATKINS YORK	193+00.00	194+00.00	RT
WATKINS YORK	202+50.00	203+50.00	RT
WATKINS YORK	203+00.00	204+00.00	RT
WATKINS YORK	204+00.00	205+00.00	RT

WATERWAY PERMITS

THE CONTRACTOR SHALL COMPLY WITH ALL OF THE CORPS OF ENGINEERS SECTION 404 PERMIT AND THE OHIO EPA SECTION 401 WATER QUALITY CERTIFICATION. COPIES OF THE 404 PERMIT AND THE 401 WATER QUALITY CERTIFICATION ARE INCLUDED IN THE PLANS AS SPECIAL PROVISIONS.

WETLAND AVOIDANCE

THE WETLANDS LISTED IN TABLE 1 BELOW ARE LOCATED WITHIN OR ADJACENT TO THE PROJECT AREA. THE CONTRACTOR SHALL AVOID IMPACTS TO THE AREAS OF THE WETLANDS LOCATED OUTSIDE THE PROJECT CONSTRUCTION LIMITS. THE CONTRACTOR MAY NOT USE THE WETLAND AREAS FOR STAGING; ALLOW ANY CONSTRUCTION ACTIVITIES, MATERIAL STORAGE, MATERIAL WASTE OR ANY OTHER TYPE OF WORK IN THE WETLAND AREAS. THE WETLAND AREAS ARE NOTED ON SCHEMATIC PLAN SHEETS (SHEETS 4-6). AVOIDING UN-PERMITTED WETLAND IMPACTS IS NECESSARY TO COMPLY WITH THE APPROVED 404/401 AND ISOLATED WETLAND PERMITS, THEREFORE, THE 404/401 AND ISOLATED WETLAND PERMITS WILL TAKE PRECEDENCE OVER ANY AGREEMENT BETWEEN THE CONTRACTOR AND LANDOWNER(S). THE APPROVED 404/401 AND ISOLATED WETLAND PERMITS ARE INCLUDED IN THE PROJECT PLANS AS SPECIAL CONDITIONS.

TABLE 1:

STATION	PARCEL #	PROPERTY OWNER
211+50 L - WORTHINGTON ROAD - WETLAND 117	188	RICHARD SEVERANCE
236+00 R - SERVICE ROAD 11 - WETLAND 124	201 & 209	ROBET BAKER & JOHN & BETTY HANKINSON
486+00 L - MAINLINE - WELAND 136	216	DAVID & MARY MORITZ
319+00 L - CR 539A EXTENSION - WETLAND 89a	233	LARRY & RENEE MARTIN
332+50 L - CR 539A EXTENSION - WETLAND 88c	240	EVA MONTGOMERY
589+70 R - MAINLINE - WETLAND 10	244	RICHARD NESS
599+00 R - MAINLINE - WETLAND 11	244 & 246	RICHARD NESS & OWENS CORNING FIBERGLASS CORP.
607+00 R - MAINLINE - WETLAND 12	246	OWENS CORNING FIBERGLASS CORP.
621+00 - MAINLINE - WETLAND 13b	246	OWENS CORNING FIBERGLASS CORP.

THE WETLANDS LISTED IN TABLE 2 ON SHEET 50 ARE LOCATED OUTSIDE THE CONSTRUCTION LIMITS BUT WITHIN THE PROJECT STUDY AREA. IMPACTS TO THESE WETLANDS AREAS ARE NOT PERMITTED UNDER THE APPROVED SECTION 404/401 AND ISOLATED WETLAND PERMITS. THE CONTRACTOR SHALL AVOID IMPACTING THESE WETLANDS UNLESS IT CAN BE DEMONSTRATED TO THE PROJECT ENGINEER THAT THE APPROPRIATE PERMITS HAVE BEEN OBTAINED.

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GENERAL NOTES

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WETLAND AVOIDANCE (CONT.)

TABLE 2:

WETLAND #	PROPERTY OWNER
105	STEVEN & ELIZABETH TUTTLE
106	MICHAEL & PAULA MCINTOSH
107	ROBERT & RUTH CALDWELL
108	GEORGE & FRANCIS DAVIDSON & MARY JUDY
109	EASTWING HOLDING COMPANY
110	WILBERT & ALICE BODEN
111	SCOTT & SANDRA MOWERY
112	MAYER GLIMCHER
113	GEORGE DAVIDSON
114	GEORGE DAVIDSON
116	DOUGLAS BENNETT & RICHARD SEVERANCE
119	ROBERT BAKER
120, 121, 122, 123, 125, 126, 127, 131	ROBERT BAKER
129, 143, 144	JOHN & BETTY HANKINSON
134, 135, 137	DAVID & MARY MORITZ
139, 140	RONALD KISSEL
145	JOHN & BETTY HANKINSON & EVA MONTGOMERY
151	JERRY & ANN JACKSON & MARILYN VANNESS
153, 154	STEVEN & KAREN WILLIAMS
88a, 90	LARRY & RENEE MARTIN
89b	JOHN & BETTY HANKINSON
88b	LARRY & RENEE MARTIN & EVA MONTGOMERY
148	EVA MONTGOMERY
155, 9a, 9b	GEORGE MCMILLIN
13, 13a, 15, 16, 17	OWENS CORNING FIBERGLASS CORP.
14	OWENS CORNING FIBERGLASS CORP. & GRANVILLE TOWNSHIP
8	SALLY & MATTHEW BRIGHAM & GRANVILLE LAND CONSERVANCY
6, 7	T.J. EVANS FOUNDATION
2, 3	LEEANN BAILEY
156	LEEANN BAILEY & PAUL KENT

THE WETLAND BOUNDARIES CAN BE IDENTIFIED IN THE FIELD BY CONTACTING THE DISTRICT ENVIRONMENTAL COORDINATOR @ (740) 323-5191.

CULTURALLY SENSITIVE AREAS

AS A RESULT OF THE NEPA AND THE SECTION 106 PROCESS THERE WERE SEVERAL AREAS IDENTIFIED AS CULTURALLY SENSITIVE AREAS THAT MUST BE AVOIDED. THE AVOIDANCE OF THESE SITES IS IN COMPLIANCE WITH THE SIGNED AGREEMENT WITH THE OHIO HISTORIC PRESERVATION OFFICE (OHPO), AND THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT). ODOT HAS AGREED TO PROTECT THESE CULTURALLY SENSITIVE SITES IN THE PROJECT AREA AND ASSURED THE OHPO THAT THESE LOCALES WILL BE PROTECTED FROM ALL ANCILLARY CONSTRUCTION ACTIVITIES (E.G., BORROW AREAS, WASTE AREAS, PARKING OF EQUIPMENT, STORAGE OF MATERIALS). THESE SITES ARE CATEGORIZED AS MITIGATION SITES, SITES TO BE AVOIDED AND TOTAL AVOIDANCE . AS SUCH, THE AGREEMENT BETWEEN ODOT AND THE OHPO WILL TAKE PRECEDENCE OVER ANY AGREEMENT THE CONTRACTOR AND THE LANDOWNERS(S) OF THESE SITES MAY HAVE REGARDING BORROW AREAS, ETC.

ANY SITE PROPOSED BY THE CONTRACTOR FOR OFF PROJECT ANCILLARY CONSTRUCTION (STAGE AREAS, WASTE LOCATIONS AND/OR BORROW LOCATIONS) SHALL FIRST BE INVESTIGATED BY THE CONTRACTOR FOR ENVIRONMENTAL SENSITIVITY. ANY THAT ARE DETERMINED TO BE SENSITIVE IN NATURE SHALL NOT BE DISTURBED UNLESS CLEARANCE IS MADE THROUGH THE APPROPRIATE CONTROLLING AGENCY/OFFICE AND ALL FEDERAL, STATE AND LOCAL LAWS ARE COMPLETED WITH, INCLUDING, BUT NOT LIMITED TO, THE NATIONAL HISTORIC PRESERVATION ACT AND LOCAL FLOOD PLAIN/FLOOD WAY REGULATIONS. ALL DEPARTMENT ENVIRONMENTAL INFORMATION CONCERNING THE LOCATIONS OUTSIDE THE LIMITS OF THIS PROJECT IS AVAILABLE FOR THE REVIEW AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5, 9600 JACKSONTOWN ROAD, JACKSONTOWN, OHIO 43030. CONTACT AMY TOOHEY (740) 323-5191.

THERE MAY BE CULTURAL SITES ELIGIBLE FOR NOMINATION TO THE NATIONAL REGISTER OF HISTORICAL PLACES (NRHP). THE CONTRACTOR SHALL NOT DISTURB ANY OF THESE SITES UNLESS THESE SITES ARE PROFESSIONALLY SURVEYED, EVALUATED AND CLEARANCE IS MADE THROUGH THE OHIO HISTORIC PRESERVATION OFFICE (OHPO).

THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING AN ODOT PREQUALIFIED ARCHAEOLOGICAL CONSULTING FIRM TO FIELD SURVEY, EVALUATE AND CLEAR WITH THE OHPO ANY ENVIRONMENTALLY SENSITIVE SITE. A LIST OF ODOT PRE QUALIFIED FIRMS IS AVAILABLE AT: WWW.DOT.STATE.OH.US/CONTRACT/CONSULT/PDF/PREQUAL-ENVIRON.PDF.

ALL WORK AND COST ASSOCIATED WITH THE COMPLIANCE OF THIS NOTE, ANY ADDITIONAL COST WHICH MAY ARISE AS A RESULT OF THE CONTRACTOR'S CHOICE OF ANCILLARY LOCATIONS SHALL BE BORNE BY THE CONTRACTOR AND INCLUDED IN THE VARIOUS BID ITEMS ASSOCIATED WITH ANCILLARY CONSTRUCTION, SUCH AS MOBILIZATION, BORROW AND EXCAVATION.

CULTURALLY MITIGATION SITES

IN COMPLIANCE WITH THE MEMORANDUM OF AGREEMENT WITH THE OHIO HISTORIC PRESERVATION OFFICE (OHPO), THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) HAS AGREED TO PROTECT ONE CULTURALLY SENSITIVE SITE LOCATED IN PHASE II OF THE FRA/LIC-161-6.65 (PID 77221) PROJECT UNTIL AN ARCHAEOLOGICAL MITIGATION CAN BE COMPLETED ON EACH SITE AND OHPO APPROVAL OBTAINED (33LI094/1096). THIS APPROVAL FROM THE OHIO HISTORICAL PRESERVATION OFFICE IS NOT ANTICIPATED UNTIL NOVEMBER 2007.

STATION	PARCEL #	PROPERTY OWNER (2005)
465+00 - 470+00	212	LANA BAKER - 66319536-00.000
	201	ROBERT E. BAKER - 66-317328-0.00

ADDITIONAL DETAILS REGARDING THE LOCATION OF THE SITES IS AVAILABLE AT THE ODOT DISTRICT 5 OFFICE (AMY TOOHEY (740) 323-5191) OR THE ODOT OFFICE OF ENVIRONMENTAL SERVICES (PAUL GRAHAM (614) 466-5099).

CULTURAL SENSITIVE SITES TO BE AVOIDED AND LOCATED IN PHASE II OF S.R. 161 PROJECT

IN COMPLIANCE WITH THE NEPA AND SECTION 106 PROCESS ODOT HAS AGREED WITH THE OHIO HISTORIC PRESERVATION OFFICE (OHPO) THAT DURING CONSTRUCTION THE CULTURALLY SENSITIVE SITE EAST OF MINK ROAD, AND NORTH OF EXISTING FORMER S.R. 161, WILL BE AVOIDED AND PROTECTED FROM ALL ANCILLARY CONSTRUCTION ACTIVITIES (E.G., BORROW AREA, WASTE AREA, PARKING OF EQUIPMENT, STORAGE OF MATERIALS). AS SUCH, THE AGREEMENT BETWEEN ODOT AND THE OHPO WILL TAKE PRECEDENCE OVER ANY AGREEMENT THE CONTRACTOR AND LANDOWNERS(S) OF THESE SITES MAY HAVE REGARDING BORROW AREAS, ETC.

ADDITIONAL DETAILS REGARDING THE LOCATION OF THE SITES IS AVAILABLE AT THE ODOT DISTRICT 5 OFFICE (AMY TOOHEY (740) 323-5191) OR ODOT-OFFICE OF ENVIRONMENTAL SERVICES (PAUL GRAHAM (614) 466-5099).

TOTAL AVOIDANCE OF CULTURAL SENSITIVE SITES LOCATED IN PROXIMITY TO THE PROJECT

IN COMPLIANCE WITH THE NEPA AND SECTION 106 PROCESS ODOT HAS AGREED WITH THE OHIO HISTORIC PRESERVATION OFFICE (OHPO) THAT DURING CONSTRUCTION THOSE SITES NOTED IN TABLE 2 WILL BE AVOIDED AND PROTECTED FROM ALL ANCILLARY CONSTRUCTION ACTIVITIES (E.G., BORROW AREA, WASTE AREA, PARKING OF EQUIPMENT, STORAGE OF MATERIALS). AS SUCH, THE AGREEMENT BETWEEN ODOT AND THE OHPO WILL TAKE PRECEDENCE OVER ANY AGREEMENT THE CONTRACTOR AND LANDOWNERS(S) OF THESE SITES MAY HAVE REGARDING BORROW AREAS, ETC. THE LOCATIONS OF THE CULTURALLY SENSITIVE SITES ARE NOTED BY TAX PARCEL NUMBER OR ODOT FRA/LIC (PID 77221) PARCEL NUMBER.

PROPERTY OWNER (2005)	TAX PARCEL NO./ODOT PARCEL NUMBER
GEORGE L. AND FRANCES DAVISON (33LI712)	663I7832-00.000/ 184
JOSEPH AND ANITA HALE (33LI712)	663I7826-00.001/ 192
STEVEN L. AND PAM HILLS (33LI712)	663I7826-01.000/ 193
ROBERT E. BAKER (33LI1195)	663I7327-00.000/ 201
JAMES AND JEAN WILLIAMS (LIC-1236-14)	66379992-00.000/ 215
JOHN AND JOY WAJEK (LIC-1237-14)	NORTH SIDE OF FORMER S.R. 161, WEST OF MOOTS RUN
DAVID AND MARY MORTIX (33LI701)	663I9026-00.000/ 216
BETTY AND JOHN HANKINSON (33LI697 AND 33LI696)	663I8132-00.000/ 226
BETTY AND JOHN HANKINSON (33LI697 AND 33LI696)	66I3I844-00.000/ 226
RICHARE NESS JR. (LIC-281-15)	19042630-00.000/ 244
DANIEL VAN NESS ET AL (33LI128)	663I9206-00.000/ 230

ADDITIONAL DETAILS REGARDING THE LOCATION OF THE SITES IS AVAILABLE AT THE ODOT DISTRICT 5 OFFICE (AMY TOOHEY (740) 323-5191) OR ODOT-OFFICE OF ENVIRONMENTAL SERVICES (PAUL GRAHAM (614) 466-5099).

IN ACCORDANCE WITH THE RECOMMENDATION FROM THE OHIO HISTORIC PRESERVATION OFFICE REMOVAL OF ANY VEGETATION SHOULD BE KEPT TO A MINIMUM IN THE AREA OF STA. 583+00 TO STA. 589+00 MAIN LINE AND CUL-DE-SAC ADJACENT TO STA. 583+00 AND STA. 584+00. AS MUCH OF THE EXISTING VEGETATION SHOULD BE PRESERVED DURING CONSTRUCTION.

UNEXPECTED ARCHAEOLOGICAL DISCOVERY

IN THE EVENT OF THE INADVERTENT DISCOVERY OF ARCHAEOLOGICAL ITEMS DURING CONSTRUCTION, INCLUDING HUMAN REMAINS, THE PROJECT WILL CEASE IMMEDIATELY IN THE AREA OF THE DISCOVERY, A REASONABLE EFFORT TO PROTECT THE ITEMS WILL BE MADE BY THE CONTRACTOR, AND NOTICE PROVIDED TO THE ODOT DISTRICT 5 ENVIRONMENTAL COORDINATOR, JACKSONTOWN ROAD, P.O. BOX 306, JACKSONTOWN, OHIO 43030, PHONE (740) 323-4400. THIS REQUIREMENT IS IN COMPLIANCE WITH THE PART OF NAGPRA SECTION 3(d) OF 25 USC 3002 (d).

CALCULATED JMA
CHECKED FJA

GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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PROJECTS IN OR NEAR A DRINKING WATER SOURCE

THIS PROJECT IS LOCATED IN OR NEAR THE SOURCE OF A PUBLIC DRINKING WATER SUPPLY. IN ORDER TO MINIMIZE THE POTENTIAL TO CONTAMINATE THIS WATER SUPPLY, PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL NOT BE PERFORMED FROM STA. 600+00 TO STA. 680+00. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO LARRY FRUTH OF GRANVILLE WATER DEPARTMENT AT 740-587-0165 OR (CELL) 740-404-0434. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR SHOULD CONTACT THE VILLAGE OF GRANVILLE FIRE DEPARTMENT BY CALLING 911 FOR CLEAN UP OF THE SPILL.

ABANDONMENT OF DRINKING WATER WELLS

ANY IMPACTED WATER WELLS WILL BE PROPERLY ABANDONED. IMPACTED PROPERTIES MAY HAVE A NEW WELL DRILLED OR CONNECTED TO THE EXISTING WATER SERVICE LINE. THE FORMER DRINKING WATER WELLS SHALL BE ABANDONED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF NATURAL RESOURCE (ONDR) TECHNICAL GUIDELINES FOR SEALING UNUSED WELLS. PAYMENT FOR THIS WORK SHALL BE AS PER ITEM SPECIAL - DRINKING WATER WELL ABANDONMENT.

BASIS OF PAYMENT:
THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE AFOREMENTIONED WORK. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE ROADWAY REMOVAL SUBSUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL - DRINKING WATER WELL ABANDONMENT 23 EACH

TEMPORARY STREAM CROSSINGS

THE TEMPORARY STREAM CROSSINGS/CONSTRUCTION ACCESS FILLS AT MOOTS RUN AND CHINNEY CREEK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED 404/401 PERMITS. ONLY CLEAN NON-ERODIBLE FILL MATERIALS MAY BE USED AND ALL MATERIALS ASSOCIATED WITH THE TEMPORARY FILLS SHALL BE REMOVED AS SOON AS POSSIBLE UPON COMPLETION OF BRIDGE WORK.

PETROLEUM CONTAMINATED SOIL FOR CHINNEY RUN

I.1 INTRODUCTION

ENVIRONMENTAL STUDIES HAVE SHOWN THAT THERE IS A POTENTIAL FOR ENCOUNTERING PETROLEUM CONTAMINATED MATERIALS WITHIN THE EXCAVATION LIMITS LOCATED ON THE STA. 574+00 TO STA. 576+00 (MAIN LINE) AND STA. 337+00 TO STA. 339+00 (C.R. 539A), NORTH OF EXISTING S.R. 161 AT CHINNEY RUN. IN THE EVENT THESE MATERIALS ARE ENCOUNTERED WITHIN THE AFOREMENTIONED LIMITS, THE CONTRACTOR SHALL MANAGE THESE MATERIALS ACCORDING TO THE FOLLOWING NOTES. ALL EXCAVATION WITHIN THE AFOREMENTIONED LIMITS SHALL BE PAID FOR UNDER THE ORIGINAL PLAN BID ITEMS.

I.2 MATERIAL HANDLING

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH FIVE (5) DAYS NOTICE PRIOR TO ANY EXCAVATION WITHIN THE AFOREMENTIONED LIMITS TO PERMIT ARRANGING FOR THE NECESSARY TESTING SERVICES. ALL MATERIAL EXCAVATED BY THE CONTRACTOR BETWEEN THE AFOREMENTIONED LIMITS SHALL BE SUBJECT TO TESTING BY AN INSPECTOR PROVIDED BY THE CONTRACTOR.

ALL MATERIAL EXCAVATED BY THE CONTRACTOR BETWEEN THE AFOREMENTIONED LIMITS MAY BE STOCKPILED IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ODOT ENGINEER. THE CONTRACTOR SHALL STOCKPILE THE MATERIALS IN A LEAKPROOF, COVERED CONTAINER PROVIDED BY THE CONTRACTOR.

THE ODOT ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE REGULATED MATERIALS ON AN IMPERMEABLE MEMBRANE. THE MEMBRANE SHALL BE SURROUNDED BY BALES OF STRAW TO PREVENT THESE MATERIALS FROM COMING IN CONTACT WITH THE ORIGINAL SOILS. AN IMPERMEABLE MEMBRANE SHALL BE PLACED OVER THE STOCKPILE TO PREVENT CONTACT WITH PRECIPITATION AND/OR SURFACE RUNOFF.

AS AN ALTERNATIVE, THE ODOT ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THESE EXCAVATED MATERIALS FROM THE AFOREMENTIONED LIMITS INTO TRUCKS FOR SUBSEQUENT DISPOSAL.

I.3 MATERIAL SAMPLING AND DISPOSAL

THE CONTRACTOR SHALL PROPERLY TEST (FOR DISPOSAL), TRANSPORT AND DISPOSE OF THE REGULATED MATERIALS IN A LICENSED (BY THE LOCAL DEPARTMENT OF HEALTH) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) SOLID WASTE FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING SAMPLING AND ANALYSIS (FOR DISPOSAL PURPOSES) OF THE EXCAVATED MATERIALS AND CONTAINERIZED WATER WITHIN THE AFOREMENTIONED LIMITS. COPIES OF THE ANALYTICAL TEST RESULTS SHALL BE PROVIDED TO THE ODOT ENGINEER.

I.4 GENERAL NOTES

ALL TRANSPORT VEHICLES USED FOR THE MOVEMENT OF REGULATED MATERIALS SHALL MEET ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS. THE CONTRACTOR SHALL MAINTAIN RECORDS (SUCH AS MANIFESTS, LANDFILL TICKETS, DAILY LOGS, ETC.) TO DOCUMENT THE SOURCE, MOVEMENT, AND DESTINATION OF EACH TRUCKLOAD OF CONTAMINATED MATERIAL. ONE COPY OF EACH OF THESE RECORDS SHALL BE SUBMITTED TO THE ODOT ENGINEER.

I.5 BASIS OF PAYMENT

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT AND MATERIALS NECESSARY TO PROPERLY HANDLE, STORE, TEST (FOR DISPOSAL), TRANSPORT AND DISPOSAL, INCLUDING ANY REQUIRED PERMITS, APPROVALS OR FEES, OF REGULATED MATERIALS WITHIN THE AFOREMENTIONED LIMITS. PAYMENT OF THIS WORK SHALL BE MADE AT THE CONTRACT PRICE PER TON. THE BASIS FOR CONVERSION FROM CUBIC YARD TO TON IS 1.5 TON/CUBIC YARD. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL - WORK INVOLVING SOLID WASTE 150 TON

SPILLKIT

IF IN SOLE SOURCE AQUIFER: THE PROJECT IS LOCATED WITHIN THE BOUNDARIES OF THE REGION'S SOLE SOURCE AQUIFER. BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. ON-SITE STORAGE OF PETROLEUM PRODUCTS/CHEMICALS IS TO BE MINIMIZED. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED.

NOT IN SOLE SOURCE AQUIFER, BUT IN AREA OF SWPA OR PRIVATE WELLS: BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED.

TREE PROTECTION

THE CONTRACTOR SHALL NOT DISTURB THE VEGETATION AND TREES LOCATED ON THE SOUTHERN BANK OF SIMPSON RUN BETWEEN STA. 353+00 TO STA. 369+00.

THE CONTRACTOR SHALL NOT REMOVE TREES BEYOND AREAS REQUIRED FOR CONSTRUCTION IF THE GRADING SECTION IS IN A CUT WITH A 3:1 BACK SLOPE OR IS IN FILL WITH A DEPTH REQUIRING A GUARDRAIL AND OUTSIDE OF THE CLEAR ZONE. IN THE EVENT OF FENCE CONSTRUCTION THE REMOVAL MUST BE WITHIN THE RIGHT-OF-WAY LIMITS AND SHOULD NOT BE GREATER THAN 10 FEET IN WIDTH IN DENSE GROWTH. WHERE TREES ARE SCATTERED, THE REMOVAL SHOULD BE CONFINED TO TREES THAT ARE IN LINE WITH THE FENCE AND/OR GUARDRAIL OR IN THE CLEAR ZONE.

PRECAST WINGWALLS, HEADWALLS AND FOOTERS

AT THE OPTION OF THE CONTRACTOR, A PRECAST WINGWALL, HEADWALL, OR FOOTER MAY BE FURNISHED PER ITEM 602. THE PRECAST OPTION FURNISHED WILL MEET THE CAST-IN-PLACE STRUCTURAL DESIGN LOADINGS, DESIGN HEIGHT, AND DESIGN LENGTH DIMENSIONS.

FULL COMPENSATION FOR THE PRECAST WINGWALL, HEADWALL, OR FOOTER IS THE NUMBER OF CUBIC YARDS OF ITEM 511 OR SUPPLEMENTAL SPECIFICATION 898 AND POUNDS OF ITEM 509 FOR THE CORRESPONDING CAST-IN-PLACE STRUCTURE.

CALCULATED JMA
CHECKED FJA

GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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SETTLEMENT PLATFORM NOTES

ITEM SPECIAL - SETTLEMENT PLATFORM

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE OFFICE OF GEOTECHNICAL ENGINEERING, ATTENTION: GEOTECHNICAL DESIGN COORDINATOR, AFTER EACH SETTLEMENT READING IS RECORDED.

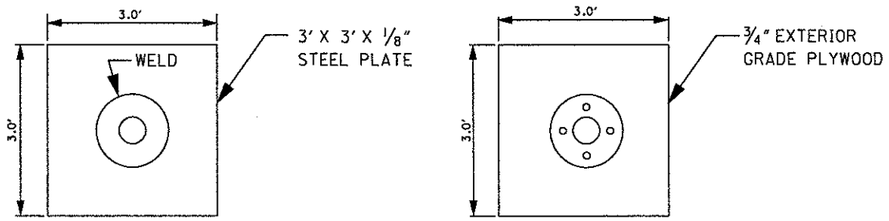
MATERIALS: SOUND LUMBER SUCH AS 19MM (3/4-INCH) EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 2-1/2-INCH STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 36" X 36" X 1/8" MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

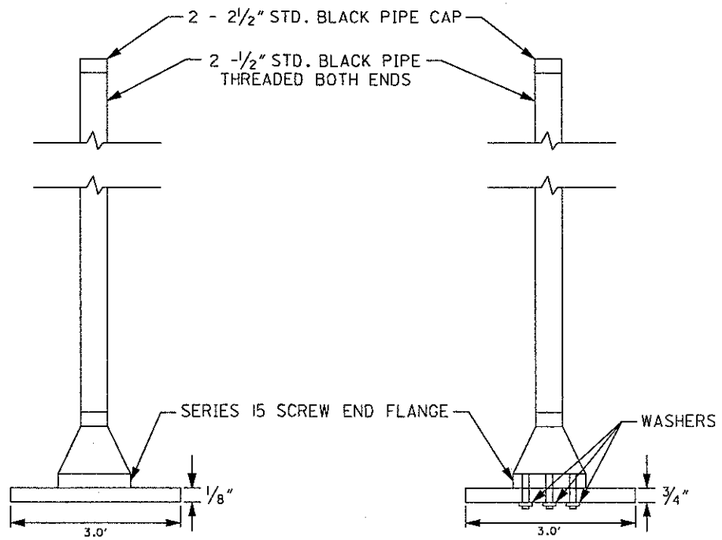
CONSTRUCTION METHODS: THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

PRIOR TO PAVING, THE TOP OF THE SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF TWO FEET BELOW THE FINISHED SURFACE OF THE SUBGRADE OR FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

METHOD OF MEASUREMENT: THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR "ITEM SPECIAL- SETTLEMENT PLATFORMS" WHICH IS COMPENSATION FOR CONSTRUCTING MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.





THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE

ITEM SPECIAL SETTLEMENT PLATFORM 30 EACH

GENERAL NOTES

1. SETTLEMENT PLATFORM SHALL BE PLACED AT THE LOCATION INDICATED IN THE PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. CONTRACTOR HAS OPTION OF USING EITHER STEEL OR PLYWOOD PLATFORM BASE.
3. CONTRACTOR SHALL FURNISH MATERIALS AND LABOR TO EXTEND PIPE UP THROUGH ENTIRE FILL.
4. SETTLEMENT PLATFORM SHALL BE ANCHORED BY STAKES DRIVEN AT EACH CORNER TO PREVENT OVERTURNING.
5. A MINIMUM OF 300 FEET OF EMBANKMENT SHALL BE CONSTRUCTED BACK AND AHEAD OF EACH SETTLEMENT PLATFORM WITH THE REQUIREMENT OF 45 CALENDAR DAY WAITING PERIOD. WHERE THE ROADWAY ALIGNMENT CARRIES BRIDGE STRUCTURE, THIS REQUIREMENT SHALL BE EXTENDED TO THE LIMITS OF ITEM 203 GRANULAR MATERIAL, TYPE B, 703.16.

SETTLEMENT PLATFORM LOCATIONS:		
PROPOSED S.R. 161/ S.R. 37	RAMP I	RAMP L
STA. 395+50 (E.B. & W.B. LANES) STA. 399+50 (E.B. & W.B. LANES) STA. 462+50 (E.B. & W.B. LANES) STA. 549+00 (E.B. & W.B. LANES) STA. 551+00 (E.B. & W.B. LANES) STA. 554+00 (E.B. & W.B. LANES) STA. 573+00 (E.B. & W.B. LANES) STA. 576+00 (E.B. & W.B. LANES) STA. 481+50 (E.B. & W.B. LANES) STA. 484+50 (E.B. & W.B. LANES)	STA. 442+00	STA. 451+00 STA. 453+00 STA. 455+50
	RAMP K	
	STA. 448+50 STA. 451+00	S.R. 37 OVER S.R.161
		STA. 405+00 18' L & R STA. 408+50 18' L & R

CALCULATED JMA CHECKED FJA

SETTLEMENT PLATFORM NOTES

LIC-161-6.65
LIC-37-10.25

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BACKSLOPE DRAIN NOTES

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING BACKSLOPE DRAINS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER.

ALTHOUGH CONSIDERED "AS NEEDED", IT IS RECOMMENDED THAT BACKSLOPE DRAINS BE CONSTRUCTED AT THE FOLLOWING LOCATIONS:

SR 37 (OUTVILLE-MORSE FRONTAGE ROAD) STA. 510+00 TO 521+00 RT, AND
SR 37 (OUTVILLE-MORSE FRONTAGE ROAD) STA. 534+00 TO 541+50 RT

CONSTRUCTION METHODS: A DRAIN SHALL BE INSTALLED WITHIN THE SEEPAGE ZONE TO COLLECT ANY SEEPAGE ACCUMULATION SO AS TO MINIMIZE DETRIMENTAL EFFECTS TO THE REMAINING BACKSLOPE. THE DRAIN SHALL CONSIST OF A TYPE A GEOTEXTILE FABRIC PLACED AGAINST THE SEEPAGE ZONE FACE TO STOP THE MIGRATION OF FINES. A MINIMUM OF 5 FEET OF DURABLE STONE (ITEM 601 TYPE C ROCK CHANNEL PROTECTION IS ACCEPTABLE) SHALL THEN BE PLACED AGAINST THE FABRIC TO BUTTRESS AND DRAIN THE SEEPAGE ZONE.

IF SEEPAGE IS NOT FLOWING DURING CONSTRUCTION, THE DRAIN MAY BE EXCAVATED INTO THE SLOPE SO THAT THE DURABLE ROCK IS FLUSH WITH THE FACE OF THE BACKSLOPE.

DEPENDING UPON WHERE ON THE BACKSLOPE THE SEEPAGE ZONE IS ENCOUNTERED, ONE OF TWO TYPES OF SEEPAGE CONTROL SHALL BE USED.

<u>WITHIN 10 FEET OF THE PROPOSED SUBGRADE ELEVATION:</u>

DRAIN SHALL BE INSTALLED SO THAT IT DRAINS DIRECTLY INTO THE ROADWAY DRAINAGE DITCH.

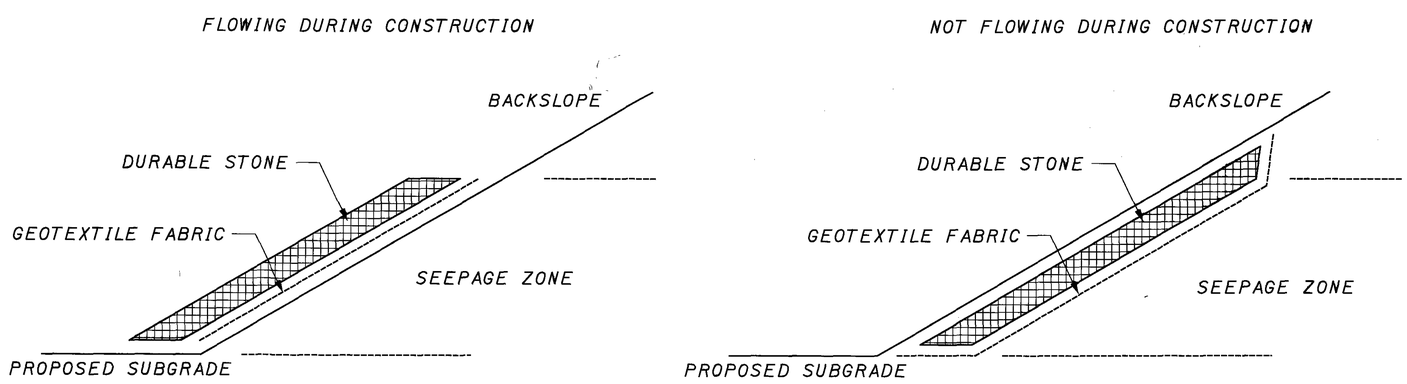
<u>MORE THAN 10 FEET ABOVE THE PROPOSED SUBGRADE ELEVATION:</u>

A DRAINAGE BENCH SHOULD BE INSTALLED AT THE BASE OF THE SEEPAGE ZONE TO COLLECT ANY WATER ACCUMULATION FROM THE DRAIN. THE BENCH SHALL BE AT LEAST 10 FEET WIDE, SLOPED BACK TOWARDS THE BACKSLOPE, AND HAVE A SLOPE FOR POSITIVE DRAINAGE PARALLEL TO THE ROADWAY ALIGNMENT. A ROCK LINED DRAINAGE CHANNEL SHOULD BE PLACED FROM THE BENCH TO THE ROADWAY DRAINAGE DITCH NO LESS THAN EVERY 200 FEET.

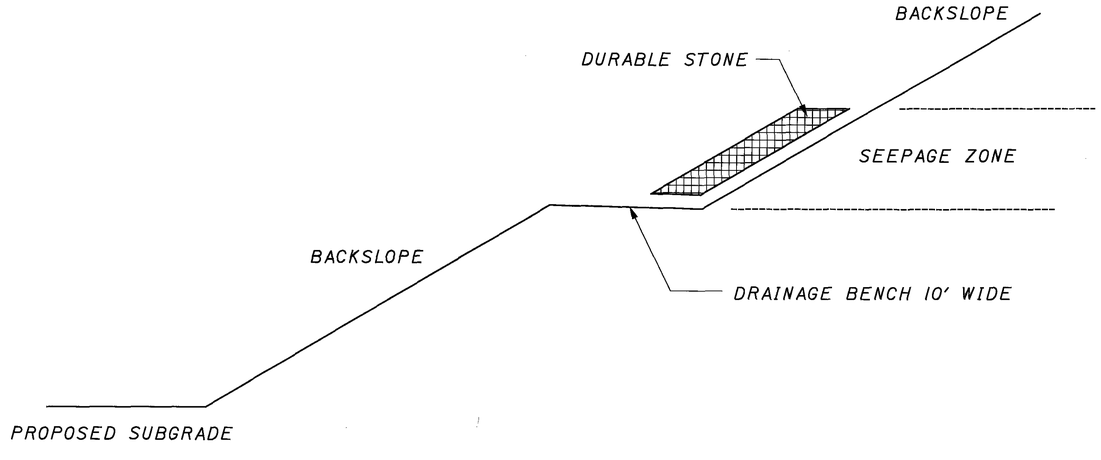
IF LARGE AMOUNTS OF SEEPAGE ARE ENCOUNTERED, THE BACKSLOPE MAY NEED TO BE FLATTENED TO PREVENT SLOPE INSTABILITY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER

ITEM 204 GEOTEXTILE FABRIC	2500 S.Y.
ITEM 601 ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	4167 C.Y.



TYPICAL SECTION FOR DRAINS



TYPICAL SECTION FOR DRAINAGE BENCH

CALCULATED JMA
CHECKED FJA

GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. THE CONTRACTOR IS ADVISED THAT NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 100 FT.. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, THE CONTRACTOR IS ADVISED THAT COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA) WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION. THE CONTRACTOR IS ADVISED THAT NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

THE FEDERAL AVIATION ADMINISTRATION
GREAT LAKES REGIONAL OFFICE
AIR TRAFFIC DIVISION AGL-530
2300 EAST DEVON AVENUE
DES PLAINES, ILLINOIS 60018
(847) 294-7566

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
(614) 793-5046

ITEM SPECIAL AS BUILT CONSTRUCTION PLANS

THE CONTRACTOR WILL PROVIDE AS BUILT CONSTRUCTION PLANS FOR THE AREA OF S.R. 37 & C.R. 539A FROM STA. 584+00.00 TO STA. 595+00.00, LT OF THE CENTERLINE. NO FILL WILL BE PLACED IN THIS AREA, UNTIL THE CONDITIONAL LETTER OF MAP REVISION (CLOMR) FROM FEMA HAS BEEN RECEIVED.
THE DISTRICT ANTICIPATES TO RECEIVE APPROVED CLOMR BY JUNE 2007.

THE PLANS WILL BE SUBMITTED TO THE DISTRICT FIVE PRODUCTION DEPARTMENT FOR PRELIMINARY AND FINAL REVIEWS.

THE PLANS WILL BE SUBMITTED IN ELECTRONIC FORMAT. THE ORIGINAL ELECTRONIC FILES WILL BE PROVIDED TO THE CONTRACTOR BY THE DISTRICT FIVE PRODUCTION OFFICE UPON REQUEST.
THE AS BUILT PLANS WILL INCLUDE TYPICAL SECTIONS, PLAN AND PROFILE AND CROSS SECTION SHEETS.

THE PAYMENT FOR ALL OF THE ABOVE WORK AS DESCRIBED SHALL BE INCLUDED UNDER THE LUMP SUM PAYMENT FOR ITEM SPECIAL AS BUILT CONSTRUCTION PLANS.
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM SPECIAL AS BUILT CONSTRUCTION PLANS LUMP

ITEM 832 - STORM WATER POLLUTION PREVENTION PLAN

UNDER THE DATA RECOVERY PHASE (ARCHEOLOGICAL) OF THE PROJECT, A PORTION OF THE PROPOSED ALIGNMENT WAS EXCAVATED AND DE-STABILIZED. THAT AREA IS LOCATED BETWEEN STATION 465+00 AND STATION 470+00 ON THE PROPOSED S.R. 161 ALIGNMENT AND BOUNDED BY THE PROPOSED LIMITED ACCESS RIGHT-OF-WAY ON THE NORTH AND SOUTH SIDES.
THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR STABILIZING THIS AREA UNDER THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO BE DEVELOPED FOR THIS ROADWAY PROJECT. THE PROPOSED SWPPP SHALL MEET ALL REQUIREMENTS AS STIPULATED UNDER SUPPLEMENTAL SPECIFICATION 832.

COSTS FOR ALL LABOR, EQUIPMENT AND MATERIALS FOR THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR THIS PROJECT'S ITEM 832 - STORM WATER POLLUTION PREVENTION PLAN - LUMP SUM.

ITEM 203 - EMBANKMENT

THE PLAN CROSS-SECTIONS HAVE BEEN CREATED USING LYDAR SURVEY.
DUE TO POSSIBLE DISCREPANCIES IN THE SURVEY INFORMATION FOR THE PROJECT, A CONTINGENCY QUANTITY HAS BEEN PROVIDED TO ACCOUNT FOR THE ADDITIONAL EMBANKMENT.
THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY.
THE STATE RESERVES THE RIGHT TO NON-PERFORM 100% OF THE CONTINGENCY QUANTITY.

ITEM 203 EMBANKMENT 35,000 CY

ITEM 653 TOPSOIL FURNISHED AND PLACED

A QUANTITY OF ITEM 653 TOPSOIL FURNISHED AND PLACED HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE PROJECT ENGINEER. THE TOPSOIL WILL BE PLACED IN A 12" THICKNESS IN THOSE AREAS WHERE ITEM 203 GRANULAR MATERIAL, TYPE B, AS PER PLAN IS TO BE CONSTRUCTED. THE TOPSOIL WILL BE PLACED ON THE SLOPES OF THE GRANULAR MATERIAL TO PROVIDE AREAS FOR THE PERMANENT SEEDING OF THE SLOPES.

COSTS FOR ALL LABOR, EQUIPMENT AND MATERIALS FOR THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 653 TOPSOIL FURNISHED AND PLACED. ALL THE REQUIREMENTS OF ITEM 653 SHALL GOVERN THE PLACEMENT OF THE TOPSOIL

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 653 TOPSOIL FURNISHED AND PLACED 7,000 CU.YD.

CALCULATED
CHECKED

GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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GENNOTE1.DGN 03/12/07

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 502 STRUCTURE FOR MAINTAINING TRAFFIC, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

TRAFFIC SHALL BE MAINTAINED AS PER THE DETAIL SHEETS AND SPECIFICATIONS AND AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS LATEST REVISION, IN ADDITION THE FOLLOWING REQUIREMENTS SHALL APPLY:

THE CONTRACTOR SHALL SUBMIT, IN WRITING A SCHEDULE OF OPERATIONS TO THE DISTRICT DEPUTY DIRECTOR AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY, AS PER 614.03 (C).

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR THE PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL REQUIRED TRAFFIC CONTROL DEVICES SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

DRUMS SHALL BE PROPERLY REFLECTORIZIED (HIGH INTENSITY, FLORESCENT SHEETING) PLASTIC DRUMS AND WEIGHTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL INVOLVED IN PLACING AND REMOVING ALL ITEM 622 PORTABLE CONCRETE BARRIER, 32".

THE CONTRACTOR SHALL ARRANGE THIS OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIME TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

TEMPORARY FEATHERS USING ITEM 448 WILL BE REQUIRED AT ANY LOCATION DESIGNATED BY THE PROJECT ENGINEER. THEY SHALL BE INSTALLED ACCORDING TO BP-3.1 AND REMOVED WHEN NO LONGER REQUIRED.

THE PLANS INDICATE THE MINIMUM SIGNAGE WHICH MUST BE INSTALLED AND/OR MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

EXISTING SIGNS OR CONTRACTOR SUPPLIED SIGNS SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.

ANY CONFLICTING SIGNS AND PAVEMENT MARKINGS WHETHER INSIDE OR OUTSIDE THE WORK LIMITS SHALL BE REMOVED OR COVERED AND TEMPORARY SIGNS AND MARKINGS ERECTED AND PLACED WHEN APPLICABLE BY THE CONTRACTOR.

THE ENGINEER SHALL RECORD INSTALLATION AND REMOVAL OF PROPOSED SIGNS, COVERED OR REMOVED AND UNCOVERED OR REERECTED SIGNS IN THE PROJECT DIARY.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 614, MAINTAINING TRAFFIC	LUMP SUM

DISINCENTIVE

DISINCENTIVES WILL BE ASSESSED AS INDICATED IN THE TABLE FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED TIME LIMIT.

DISINCENTIVES		
DETOUR LIMITATIONS	CLOSURE DURATION	DISINCENTIVE PER DAY
S.R. 37	7 DAYS	$4,000
YORK ROAD	120 DAYS	$3,000
WATKINS ROAD	120 DAYS	$500
MORSE ROAD	60 DAYS	$600
OUTVILLE ROAD	120 DAYS	$3,000

HOLIDAYS/ SPECIAL EVENTS:

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC ON S.R. 161 DURING THE FOLLOWING DESIGNATED HOLIDAYS:

CHRISTMAS	INDEPENDENCE DAY
NEW YEARS	LABOR DAY
EASTER	THANKSGIVING
MEMORIAL DAY	MOTHERS DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12 NOON FRIDAY THROUGH 6 AM MONDAY
MONDAY	12 NOON FRIDAY THROUGH 6 AM TUESDAY
TUESDAY	12 NOON MONDAY THROUGH 6 AM WEDNESDAY
WEDNESDAY	12 NOON TUESDAY THROUGH 6 AM THURSDAY
THURSDAY	12 NOON WEDNESDAY THROUGH 6 AM MONDAY
FRIDAY	12 NOON THURSDAY THROUGH 6 AM MONDAY
SATURDAY	12 NOON FRIDAY THROUGH 6 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN (THE AMOUNT OF $2,000 PER DAY) (IN ACCORDANCE WITH CMS 108.07).

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B	200 CU. YD.
ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C	200 CU. YD.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	1000 CU. YD.
ITEM 616, WATER	8 M. GAL.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

CONCRETE MEDIAN BARRIER REPLACEMENT

REMOVING, GRADING AND INSTALLING THE REPLACEMENT BARRIER IN A CONTINUOUS OPERATION SHALL BE LIMITED TO 1000 LINEAR FEET AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

ITEM 614, WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND REMOVE WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS (R2-1-48) (55 MPH) WITHIN THE WORK LIMITS ON S.R. 161 AND S.R. 37 IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT OR MINIMUM SPEED SIGNS WITHIN THE REDUCED SPEED ZONE. WHEN THE WORK ZONE SPANDS A CHANGE IN SPEED LIMIT. STANDARD SPEED LIMIT SIGNS SHALL BE PLACED AT THE TERMINUS OF THE WORK ZONE. ALL STANDARD SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED SIGNS IS INCIDENTAL TO THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN 4 HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN 4 HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF ANY LANE RESTRICTION EXPECTED TO LAST AT LEAST 30 DAYS, OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF DIVIDED HIGHWAYS, 500 FEET IN ADVANCE OF THE LANE REDUCTION TAPER. THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, 250 FEET IN ADVANCE OF THE LANE REDUCTION TAPER ON UNDIVIDED HIGHWAYS. THE SIGN SHALL BE REPEATED, ON THE SIDE NEAREST TRAFFIC, EVERY 1 MILE FOR 55 MPH ZONES AND EVERY ½ MILE FOR 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE. A SIGN TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN GOOD USED CONDITION PROVIDED THE SIGNS MEET CURRENT O.D.O.T. SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19 AND U.S. DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION FOR TYPE III-C SHEETING, FP-85. WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO (2) ITEM 630 GROUND MOUNTED SUPPORTS, NO. 3 POSTS.

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

CALCULATED MMR
CHECKED CSR

MAINTENANCE OF TRAFFIC NOTES

LIC-161-6.65
LIC-37-10.25

$USER$
$DATE$
$FILE$
$TIMESTAMP$

ITEM 614, WORK ZONE SPEED LIMIT SIGN (CONT.)

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTION, MAINTENANCE, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614, WORK ZONE SPEED LIMIT SIGN 14 EACH

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR)

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER (AND OFFICIAL PATROL CAR WITH WORKING TOP-MOUNTED EMERGENCY FLASHING LIGHTS) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEOS ARE ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH: THE OHIO STATE HIGHWAY PATROL, GRANVILLE PATROL POST, 3855 OUTVILLE ROAD SW, GRANVILLE, OHIO, 43023 (740-927-0065) OR LICKING COUNTY SHERIFF'S DEPARTMENT, 155 E. MAIN STREET, NEWARK, OHIO 43055 (740-670-5555).

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR). THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR 300 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

IF CONTRACTORS WISH TO UTILIZE LEOS FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER SQUARE FOOT FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 300 SQUARE FEET HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

WORK ZONE INCREASED PENALTIES SIGN

R11-H5a-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL UDEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDER DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

(THE SIGNS SHALL BE DUAL MOUNTED. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS.)

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 14 EACH

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC	25,000 CU. YD.
EMBANKMENT FOR MAINTAINING TRAFFIC	11,500 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614 DETOUR SIGNING

DETOURS FOR YORK RD, OUTVILLE RD, MORSE RD, AND WATKINS RD SHALL BE IMPLEMENTED AS SHOWN ON SHEETS 58-60. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR. PAYMENT FOR DETOURS, INCLUDING MATERIAL, LABOR, AND EQUIPMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 DETOUR SIGNING.

CONTRACTOR EQUIPMENT/VEHICLE STORAGE/OBSTRUCTIONS

CONSTRUCTION EQUIPMENT, PRIVATE VEHICLES AND MATERIALS SHALL NOT BE PARKED OR STORED ON THE ROADWAY OR ADJACENT TO THE ROADWAY WITHIN 30' OF A LANE UNLESS BEHIND A GUARDRAIL OR BARRIER.

WRITTEN NOTICE OF CLOSURE

AT LEAST SEVEN DAYS PRIOR TO A ROAD CLOSURE, ADVANCED WRITTEN NOTIFICATION SHALL BE MADE TO LOCAL AGENCIES OR OFFICALS HAVING JURSDICTION OVER THE FOLLOWING: EMERGENCY SERVICES IN THE AREA (POLICE, FIRE, MEDICAL), SCHOOL BUS ROUTES, COTA, UTILITY SERVICES AND MAINTENANCE OF LOCAL ROADS. IF, SUBSEQUENT TO THAT NOTIFICATION, THE START DATE IS CHANGED, THEN A NEW SEVEN-DAY NOTIFICATION WILL BE REQUIRED. THE ROAD CANNOT BE CLOSED UNLESS THIS PRIOR NOTIFICATION PROCESS HAS BEEN ACCOMPLISHED. THE SAME SHALL BE NOTIFIED WHEN A CLOSURE HAS CONCLUDED.

PAYMENT FOR THE NOTIFICATION REQUIRED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 WORK ZONE CROSSOVER LIGHTING SYSTEM

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSOVERS ON A TWO-LANE, TWO-WAY OPPERATION. THE SYSTEM SHALL BE AS SHOWN ON SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, CERTIFIED DRAWING REQUIREMENT OF 625.04, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

POLES MAY BE LESS THAN 30 FT FROM THE EDGE OF PAVEMENT WHEN BEHIND GUARDRAIL. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM, SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

THE APPROXIMATE STATIONS FOR EACH CROSSOVER IS AS FOLLOWS:
℄ CROSSOVER LOCATION: STA. 655+00.00

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE:

ITEM 614 WORK ZONE CROSSOVER LIGHTING SYSTEM 1 EACH

CALCULATED MMR
CHECKED CSR

MAINTENANCE OF TRAFFIC NOTES

LIC-161-6.65
LIC-37-10.25

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DESIGNED LOCAL DETOUR ROUTE

DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THE ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNED LOCAL DETOUR ROUTE.

ITEM 301, ASPHALT CONCRETE BASE, PG 64-22	150 CU. YD.
ITEM 304, AGGREGATE BASE	150 CU. YD.
ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	750 CU. YD.
ITEM 407, TACK COAT	200 GAL.
ITEM 642, CENTER LINE	2.0 MILE

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE PROJECT ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED HAUL ROADS.

ITEM 301, ASPHALT CONCRETE BASE, PG 64-22	250 CU. YD.
ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	750 CU. YD.
ITEM 407, TACK COAT	200 GAL.

TEMPORARY ACCESS TO DRIVES AND APPROACHES

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC TO DRIVES AND APPROACHES. ALL DRIVES SHALL BE PROVIDED ACCESS AS PER 614.02(A).

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B	1000 CU. YD.
ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C	500 CU. YD.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	200 CU. YD.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING IMPACT ATTENUATORS:

1. THE QUADGUARD CZ, (24 INCHES WIDE SIX-BAY) WORK ZONE

IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER:	QSCZCVR-T4
DRAWING NAME:	QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES
DRAWING/REVISION DATE:	5/13/99 REV. J
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35-40-10
DRAWING NAME:	QUADGUARD SYSTEM CONCRETE PAD, CZ, QG
DRAWING/REVISION DATE:	11/19/97 REV. D
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35-40-16
DRAWING NAME:	QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG
DRAWING/REVISION DATE:	7/30/99 REV. F
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35405IZ
DRAWING NAME:	QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, QG, 24, 30, 36
DRAWING/REVISION DATE:	5/17/99
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35-40-18
DRAWING NAME:	TRANSITION ASSEMBLY, 4 OFFSET, QG
DRAWING/REVISION DATE:	6/25/99 REV. F
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35400260
DRAWING NAME:	QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY
DRAWING/REVISION DATE:	11/19/97 REV. C
ODOT APPROVAL DATE:	8/27/99

2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE : 330-545-4373).

THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER:	SS450
DRAWING NAME:	CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS
DRAWING/REVISION DATE:	3/12/99 REV. 1
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	SS455
DRAWING NAME:	TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION & SECTIONS
DRAWING/REVISION DATE:	2/18/99
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	SS461
DRAWING NAME:	TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, ELEVATION & SECTIONS
DRAWING/REVISION DATE:	6/30/99 REV. 1
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	SS462
DRAWING NAME:	TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION & SECTIONS
DRAWING/REVISION DATE:	6/30/99
ODOT APPROVAL DATE:	8/27/99

3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS, INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH, 44515, (TELEPHONE 330-799-9291).

THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT 24' LONG AND 35" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV DATE	ODOT APPROVAL DATE
A040416	UNIVERSAL TAU-II PARTS LIST	4/22/04	10/16/04
A040420	UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP	4/28/04	10/16/04
A040105	UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERENCED ON A04020)	1/07/04	10/16/04
B040239	APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)	4/21/04	10/16/04

4. THE GREAT CZ IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC.

THIS ATTENUATOR MAY BE USED UNTIL JANUARY 1, 2007 IF THE ITEM WAS PURCHASED BEFORE OCTOBER 1, 1998 AND IS IN THE CONTRACTOR'S INVENTORY.

THE CONTRACTOR SHALL PROVIDE A REPLACEMENT UNIT WHEN AN IMPACT IS SEVERE ENOUGH TO REQUIRE COMPLETE REPLACEMENT OF THE ATTENUATOR. THE CONTRACTOR SHALL HAVE A SPARE PARTS PACKAGE AVAILABLE ON THE PROJECT SITE AR ALL TIMES WHEN AN ATTENUATOR IS IN PLACE. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE COMPLETE SPARE PARTS PACKAGE FOR EVERY ONE TO SIX UNITS INSTALLED ON THE PROJECT SITE. FOR EXAMPLE, FIVE INSTALLED UNITS REQUIRE ONE SPARE PARTS PACKAGE AND SEVEN INSTALLED UNITS REQUIRE TWO SPARE PARTS PACKAGES

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. PAYMERN FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT, MAINTAIN, REPAIR, REPLACE, OR RELOCATE A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACURER

ITEM 614, WORK ZONE IMPACT ATTENUATOR, FOR HAZARDS OF OF 24" AND LESS THAN 36" WIDE, (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

1. QUADGUARD CZ WORK ZONE IMPACT ATTENUATOR MANUFACTURED MBY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER:	QSCZCVR-T4
DRAWING NAME:	QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES
DRAWING/REVISION DATE:	5/13/99 REV. J
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35-40-10
DRAWING NAME :	QUADGUARD SYSTEM CONCRETE PAD, CZ, QG
DRAWING/REVISION DATE:	11/19/97 REV. D
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35-40-16
DRAWING NAME :	QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG
DRAWING/REVISION DATE:	7/30/99 REV. F
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35405IZ
DRAWING NAME:	QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, QG, 24, 30, 36
DRAWING/REVISION DATE:	5/17/99
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35-40-18
DRAWING NAME:	TRANSITION ASSEMBLY, 4 OFFSET, QG
DRAWING/REVISION DATE:	6/25/99 REV. F
ODOT APPROVAL DATE:	8/27/99
DRAWING NUMBER:	35400260
DRAWING NAME:	QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY
DRAWING/REVISION DATE:	11/19/97 REV. C
ODOT APPROVAL DATE:	8/27/99

2. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS, INC., SALES SUPPORT, 2183 ELM TRACE, AUSTIONTOWN, OH, 44515, (TELEPHONE 330-799-9291).

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

CALCULATED MMR
CHECKED CSR

MAINTENANCE OF TRAFFIC NOTES

LIC-161-6.65
LIC-37-10.25

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ITEM 614, WORK ZONE IMPACT ATTENUATOR, FOR HAZARDS OF 24" AND LESS THAN 36" WIDE (UNIDIRECTIONAL OR BIDIRECTIONAL) (CONT.)

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SYSTEM CAPACITY	UNIVERSAL TAU-II CRASH CUSHION SYSTEM CONFIGURATION CHART	1/06/04 V5	10/16/04
A040416	UNIVERSAL TAU-II PARTS LIST	4/22/04	10/16/04
A040420	UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP	4/28/04	10/16/04
A040105	UNIVERSAL TAU-II FOUNDATION, PCB BACK-STOP (REFERENCED ON A04020)	1/07/04	10/16/04
B040239	APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)	4/21/04	10/16/04

THE CONTRACTOR SHALL PROVIDE A REPLACEMENT UNIT WHEN AN IMPACT IS SEVERE ENOUGH TO REQUIRE COMPLETE REPLACEMENT OF THE ATTENUATOR. THE CONTRACTOR SHALL HAVE A SPARE PARTS PACKAGE AVAILABLE ON THE PROJECT SITE AT ALL TIMES WHEN AN ATTENUATOR IS IN PLACE. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE COMPLETE SPARE PARTS PACKAGE FOR EVERY ONE TO SIX UNITS INSTALLED ON THE PROJECT SITE. FOR EXAMPLE, FIVE INSTALLED UNITS REQUIRE ONE SPARE PARTS PACKAGE AND SEVEN INSTALLED UNITS REQUIRE TWO SPARE PARTS PACKAGES.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT, MAINTAIN, REPAIR, REPLACE OR MRELOCATE A COMPLETE AND FUNCTIONAL IMPACT ATTERNUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DROPOFFS IN WORK ZONES

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON SHEET NO. 54D. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT HTTP://WWW.DOT.STATE.OH.US/TESTLAB/APPLISTS/MISC/PCMS.HTM. THE LIST CURRENTLY CONTAINS CLASS I, II, AND III UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 1250 FT., 850 FT. AND 650 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE HIGH-INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 1 HOUR FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCT ION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NON-COMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 144 SIGN-MONTH

ADVANCE WORK ZONE INFORMATION

ADVANCE WORK ZONE INFORMATION SIGNS, AS USED IN THIS NOTE, ARE FIXED MESSAGE TYPES. THE SIGNS ARE TO BE LOCATED AT EXTREME DISTANCE FROM THE WORK AREA, AS SHOWN IN THE PLANS. THE SIGNS SHALL BE BLACK ON ORANGE (INCLUDING A BLACK BORDER). THE LAYOUT SHALL BE IN CONFORMANCE WITH TEM SECTION 211. WHEN REGULATORY INFORMATION IS PROVIDED, IT SHALL BE DISPLAYED SEPARATELY AS A STANDARD BLACK-ON-WHITE SIGN. MIXING OF BLACK-ON-WHITE REGULATORY INFORMATION ON A BLACK-ON-ORANGE INFORMATION SIGN IS PROHIBITED. IF THE MOTORIST IS BEING DETOURED OR IF AN ALTERNATE ROUTE IS PROVIDED, THE ROUTE SHOULD BE SIGNED WITH ASSEMBLIES CONSISTING OF THE APPROPRIATE BLACK-ON-ORANGE DETOUR OR ALT MARKER WITH A STANDARD ROUTE MARKER AND ARROW PLATE. IF MORE TARGET VALUE IS DESIRED, THIS TRAIL BLAZER INFORMATION MAY BE SHOWN ON AN ORANGE PANEL (OMUTCD SECTION 2D.32).

ROUTE MARKER ASSEMBLIES SHALL BE SIZED ACCORDING TO THE TYPE OF ROAD ON WHICH THEY ARE LOCATED IN ACCORDANCE WITH THE OMUTCD.

SUPPORTS FOR SIGN INSTALLATIONS SHALL CONFORM TO ALL EXISTING STANDARDS FOR PERMANENT SIGNS. THESE SIGNS SHOULD NOT BE ATTACHED TO EXISTING SUPPORTS.

WHERE THE PLANS CALL FOR AN OVERLAY TO COVER A PORTION OF AN EXISTING SIGN, THE OVERLAY SHALL BE BLACK-ON-ORANGE. LETTER SIZES SHOULD BE THE SAME AS ON THE EXISTING SIGNS. WHEN LANE ARROWS ARE TO BE COVERED, RATHER THAN USING A BLANK OVERLAY, THE LEGEND "LANE CLOSED" SHALL BE USED. WHEN A RAMP IS BEING CLOSED, RATHER THAN USING A BLANK OVERLAY TO COVER THE ENTIRE SIGN, THE LEGEND "CLOSED" SHALL BE USED ON A DIAGONAL OVERLAY (LOWER LEFT TO UPPER RIGHT) ON THE SIGN. THE SIZE OF LETTERING ON OVERLAYS AND THE SIZE OF THE OVERLAY ARE INDICATED IN THE PLANS. THE MINIMUM LETTER SIZE FOR "LANE CLOSED" SHALL BE 10" E. THE MINIMUM LETTER SIZE FOR THE DIAGONAL "CLOSED"OVERLAY SHALL BE 12" E.

ALL ADVANCE WORK ZONE INFORMATION SIGN INSTALLATIONS LOCATED OUTSIDE OF THE PROJECT WORK LIMITS SHALL BE PAID FOR UNDER APPROPRIATE 630 ITEMS (SIGNS, SUPPORTS, CONCRETE, BREAKAWAY CONNECTION, OVERLAYS, REMOVALS, ETC.).

WORKSITE TRAFFIC SUPERVISOR

THE CONTRACTOR SHALL EMPLOY (OTHER THAN THE SUPERINTENDENT) AND SUBJECT TO THE APPROVAL OF THE ENGINEER, A CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS). THE WTS MAY BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

1. AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA), PHONE NUMBER 1-800-272-8772, CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS)
2. THE NATIONAL SAFETY COUNCIL, TRAFFIC CONTROL ZONES SUPERVISORS COURSE, PHONE NUMBER 1-800-441-5103
3. NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0528

THE WTS POSITION IS ESTABLISHED FOR THE PURPOSE OF MONITORING AND CORRECTING ANY TRAFFIC CONTROL DEFICIENCIES IN THE WORK ZONE. THE WTS MUST ALSO COORDINATE WITH ALL LAW ENFORCING AGENCIES RESPONSIBLE FOR THE ROADWAY UNDER CONSTRUCTION AND RETRIEVE ALL CRASH REPORTS (OH-1) THAT OCCUR DURING THE CONSTRUCTION SEASON. THE WTS SHALL OVERSEE ALL OPERATIONS THAT AFFECT THE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH THE WORK ZONE. TRAFFIC CONTROL AND CRASH DATA EVALUATION BE THE WTS MAIN DUTY WHILE THE WORK ZONE IS IN PLACE.

THE WTS SHALL BE PRESENT WHEN THE WORK ZONE IS BEING SET UP, AND SHALL ALSO BE PRESENT WHEN THE CONTRACTOR OR SUBCONTRACTOR INSTALLS A TRAFFIC RESTRICTION, LANE CLOSURE, ETC. IN LIEU OF THE WTS BEING PRESENT WHEN A SUBCONTRACTOR HAS A WORK ZONE IN PLACE, THE CONTRACTOR MAY USE HIS OWN PERSONNEL THAT IS A CERTIFIED WTS. THE CONTRACTOR OR SUBCONTRACTOR MUST PRESENT A COPY OF HIS WTS CERTIFICATE TO THE PROJECT ENGINEER.

CALCULATED MMR CHECKED CSR

MAINTENANCE OF TRAFFIC NOTES

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LIC-37-10.25

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DAILY, INCLUDING WEEKENDS AND HOLIDAYS, THE WTS SHALL SPEND A MINIMUM OF ONE HOUR REVIEWING THE WORK ZONE AND/OR CRASH DATA FOR DEFICIENCIES AND MAINTAINING THE WORK ZONE. THE WTS MUST RECOMMEND SOLUTIONS TO ADDRESS ANY ISSUES THAT ARE POTENTIALLY CREATING CRASHES WITH IN THE WORK ZONE. THE WTS MUST PRESENT THESE RECOMENDATIONS TO THE ENGINEER AND THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) FOR APPROVAL AT ALL PROJECT PROGRESS MEETINGS. UPON APPROVAL BY THE ENGINEER AND THE DWZTM, THE CONTRACTOR MUST IMPLEMENT THE RECOMMENDED SOLUTIONS TO THE WORK ZONES WITHIN ONE WEEK. THESE HOURS MAY ADJUSTED BY THE ENGINEER BUT MUST BE PERFORMED ONCE A DAY DURING THE CONSTRUCTION SEASONS. THE WTS MUST INSPECT THE WORK ZONE AT THE BEGINNING AND THE END OF EACH WORK DAY AND ONE TIME PER WEEK DURING THE HOURS OF DARKNESS.

A RECORD OF EACH DAY'S REVIEW SHALL BE GIVEN TO THE PROJECT ENGINEER THE FOLLOWING WORK DAY. ALSO IN WRITING THE WTS REPORT SHALL INCLUDE: TRAFFIC CONTROL DEVICE CONDITION, PLACEMENT, VISIBILITY, TRAFFIC FLOW CONDITIONS, INCIDENTS, ACCIDENTS, CONGESTION POINTS, ADEQUACY OF ADVANCED WARNING SIGNS BEYOND PROJECT LIMITS, INTERACTION OF WORK VEHICLES AND TRAFFIC, PROPER STORAGE OF MATERIALS AND EQUIPMENT.

IF THE RESTRICTIONS ARE SHORT TERM, THE WTS SHALL MONITOR THE ZONE FOR COMPLIANCE. DURING THE LANE CLOSURE THE WTS SHALL MAKE SURE ALL TRAFFIC CONTROL ITEMS ARE FUNCTIONING PROPERLY. TRAFFIC CONTROL AND CRASH DATA EVALUATION SHALL BE THE WTS'S MAIN DUTY DURING IMPLEMENTATION OF ZONES OR SHORT TERM ZONES. THE WTS SHALL HAVE THE AUTHORITY TO HAVE DEFICIENCIES CORRECTED AS SOON AS POSSIBLE. THE WTS SHALL PROVIDE THE DWZTM A SKETCH OF THE TRAFFIC CONTROL PLAN (TCP) EVERY DAY THERE IS TO BE A SHORT TERM TRAFFIC RESTRICTION, LANE CLOSURE, ETC. THIS TCP SHALL SHOW HOW THE WORK ZONES ARE TO BE IMPLEMENTED.

THE WTS SHALL BE AVAILABLE ON A 24-HOUR BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. A 24-HOUR PHONE NUMBER SHALL BE MADE AVAILABLE TO THE PROJECT ENGINEER IN ORDER TO CONTACT THE WTS. THE WTS SHALL HAVE A PAGER AND THE PHONE NUMBER PROVIDED TO THE PROJECT ENGINEER.

FAILURE OF THE CONTRACTOR TO COMPLY WITH ANY OF THE ABOVE, SHALL CONSTITUTE CAUSE FOR THE PROJECT ENGINEER TO DEDUCT $500.00 PER DAY FROM MONEY DUE TO THE CONTRACTOR, NOT AS A PENALTY, BUT AS A LIQUIDATION DAMAGE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED FOR THE WORKSITE TRAFFIC SUPERVISOR:

ITEM 614	WORKSITE TRAFFIC SUPERVISOR	20 MONTHS

WORK ZONE DELINEATION

IN TRANSITION AREAS FOR LANE SHIFTS EQUAL TO OR GREATER THAN 4 FEET AND FOR CROSSOVERS, THE CONTRACTOR SHALL PROVIDE DELINEATION AS FOLLOWS:

1. ON ASPHALT SURFACES, DELINEATION SHALL BE BY USE OF 642 TYPE 2 ALKYD PAINT OR 643 POLYESTER, WITH 621 PERMANENT RAISED PAVEMENT MARKERS. THIS MARKING SHALL CONSIST OF 4 INCH EDGE LINES, 8 INCH CHANNELIZING LINES, AND RAISED PAVEMENT MARKERS. IN THE TRANSITION AREA, THE RAISED PAVEMENT MARKERS SHALL BE LOCATED AT 20 FT. SPACING ALONG THE EDGE LINES AND CHANNELIZING LINES. IN THE TANGENT AREAS, THE RAISED PAVEMENT MARKERS SHALL BE LOCATED AT 120 FT. SPACING ALONG THE LANE LINES.

   REMOVAL OF RAISED PAVEMENT MARKERS, WHEN NO LONGER NEEDED, SHALL BE AS PER 202.10. REMOVAL OF THE EXISTING SURFACE COURSE WITHIN THE TRANSITION AREA SHALL BE MADE AS PER 202.05, TO A DEPTH NECESSARY TO MATCH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PROPOSED PAVEMENT. THE TRANSITION AREA SHALL BE RESURFACED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED, USING THE SAME MATERIAL USED FOR THE SURFACE COURSE FOR THE PROJECT. FOR DETAILS ON THIS DELINEATION SCHEME SEE PLAN INSERT SHEET 52A.

2. ON CONCRETE PAVEMENT, DELINEATION IN THE TRANSITION AREA DURING THE CONSTRUCTION SEASON SHALL BE BY USE OF 873 WET REFLECTIVE REMOVABLE TAPE. DURING THE WINTER SEASON (DECEMBER 1 THROUGH MARCH 31) DELINEATION IN THE TRANSITION AREA SHALL BE BY USE OF 643 POLYESTER. IN THE WINTER, PIECES (4 X 12 INCHES) OF 873 WET REFLECTIVE REMOVABLE TAPE SHALL ALSO BE PROVIDED AT 20 FOOT INCREMENTS, OFFSET FROM EACH OF THE CHANNELIZING LINES.

   IN THE TANGENT AREA, DELINEATION SHALL BE PROVIDED BY USE OF 643 POLYESTER FOR LONG LINE MARKING, WITH PIECES OF 873 WET REFLECTIVE REMOVEABLE TAPE (4" X 12") TO BE PROVIDED AT 80 FOOT INCREMENTS, ALONG THE LANE LINES. FOR DETAILS SEE PLAN INSERT SHEET 52B.

   ALL MATERIAL FURNISHED FOR 873 WET REFLECTIVE TAPE SHALL BE LISTED ON THE DEPARTMENT'S PREQUAILIFIED LISTS. THE INSTALLATION OF ALL MATERIALS SHALL MEET OR EXCEED THE MANUFACTURERS' RECCOMENDATIONS.

   AFTER REMOVEABLE PAVEMENT MARKINGS HAVE BEEN INSTALLED, THEY SHALL BE CUT AT 10 FOOT (3 METER) OR SHORTER INTERVALS.

THE TRANSITION AREA FOR SHIFT TAPERS IS GENERALLY CONSIDERED TO BEGIN 300 FT (90 M) IN ADVANCE OF THE BEGINNING OF THE SHIFT TAPER AND TO END 300 FT (90 M) BEYOND THE TERMINATION OF THE SHIFT TAPER. THE TRANSITION AREA FOR CROSSOVERS IS GENERALLY CONSIDERED TO BEGIN 300 FT (90 M) IN ADVANCE OF THE BEGINNING OF THE CROSSOVER GEOMETRICS AND TO END 300 FT (90 M) BEYOND THE TERMINATION OF THE CROSSOVER GEOMETRICS.

PAYMENT FOR ALL WORK ZONE DELINEATION SHALL BE MADE AS TRANSITION AREA DELINEATION. PAYMENT SHALL BE MADE AT THE CONTRACT BID PRICE PER FOOT (METER) OF TRANSITION AREA AND SHALL INCLUDE THE COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING, IF NECESSARY, THE APPROPRIATE DELINEATION SCHEME SPECIFIED ABOVE. PAYMENT SHALL ALSO INCLUDE THE COST OF REMOVAL OF THE SURFACE COURSE WITHIN THE TRANSITION AREA AND RESURFACING OF THE AREA.

PAYMENT FOR ITEM 614 TANGENT AREA DELINEATION SHALL BE MADE AT THE CONTRACT BID PRICE PER FOOT (METER) OF TANGENT AREA AND SHALL INCLUDE THE COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING, IF NECESSARY, THE APPROPRIATE DELINEATION SCHEME SPECIFIED ABOVE.

PAYMENT SHALL ALSO INCLUDE REPLACEMENT, AS PER 614.11.A (CONSTRUCTION AND MATERIALS SPECIFICATIONS) OR 614.115.D (PROPOSAL NOTE 101-2002), OF ANY PART OF THE DELINEATION SYSTEM WHICH, IN THE JUDGEMENT OF THE ENGINEER, FAILS. LANE CLOSURES REQUIRED TO REPAIR OR REPLACE MISSING TAPE OR RAISED PAVEMENT MARKERS WILL BE AT THE ENGINEER'S APPROVAL AND AT THE CONTRACTOR'S COST.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
614	2530 FEET	TRANSITION AREA DELINEATION

ITEM 614 WORK ZONE CROSSOVER LIGHTING SYSTEM, AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER AS PREVIOUSLY INSTALLED DURING LIC-161-0.00. THE SYSTEM SHALL BE AS SHOWN ON SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, CERTIFIED DRAWING REQUIREMENT OF 625.04, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

POLES MAY BE LESS THAN 30 FT FROM THE EDGE OF PAVEMENT WHEN BEHIND GUARDRAIL. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

THE APPROXIMATE STATIONS FOR EACH CROSSOVER IS AS FOLLOWS:
℄ CROSSOVER LOCATION: STA. 342+00.00

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE:

ITEM 614 WORK ZONE CROSSOVER LIGHTING SYSTEM, AS PER PLAN	1 EACH

CALCULATED MMR
CHECKED CSR

MAINTENANCE OF TRAFFIC NOTES

LIC-161-6.65
LIC-37-10.25

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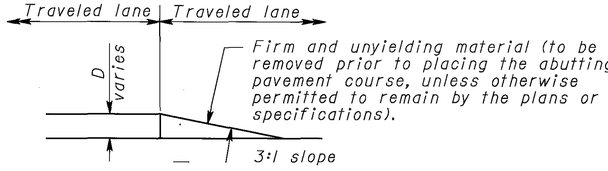
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GENERAL NOTES

1. It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. The suggested treatments are intended for high volume projects that will last at least seven days and have an active work zone 1 mile [1.6 km] or less in length. For guidance on the use of this sheet, see L&D Manual Volume One, Section 500. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for **Item 614 - Maintaining Traffic.**
2. While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
4. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
5. Where concrete barrier is specified, it shall be in accordance with **SCD RM-4.2** and Item 622.
6. When drums are specified for a drop-off condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
7. When OW-151 (Low Shoulder) signs or OW-155 (Shoulder Drop-Off) signs or OW-171 (Uneven Lanes) signs are required, they shall be placed 750' [230 m] in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all inter secting roadways within the limits of the condition. When the drop-off condition extends more than 0.5 mile [800 m], additional signs should be erected at intervals of 1.0 mile [1600 m] or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate a difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10' [3.0 m], drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" [125] and approval is granted by the Project Engineer.
10. Pavement Repairs (or similar work):
    a. Lengths greater than 60' [18 m] - utilize appropriate treatment from Condition I.
    b. Lengths of 60' [18 m] or less - repairs shall be effected in accordance with CMS 255.08. Drums may be used as a separtor adjacent to the traveled lane.

OPTIONAL WEDGE TREATMENT
(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.
2. OW-171 sign required.

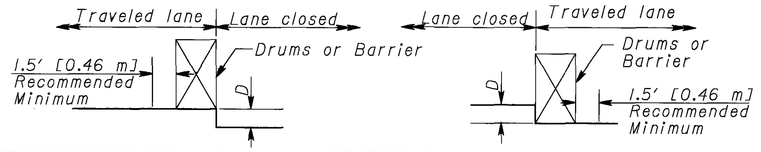


CONDITION I
DROP-OFFS BETWEEN TRAVELED LANES

1. These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D	Treatment
≤1½" [≤40]	Erect OW-171 sign.
1½"-3" [40-75]	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
>3"-5" [>75-125]	Lane closure utilizing drums as shown below.
>5" [>125]	Lane closure utilizing portable concrete barrier as shown below.

* Cones may be used for daytime only conditions.

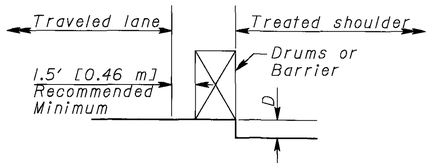


CONDITION II
DROP-OFFS WITHIN GRADED SHOULDER AREA

1. The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
2. The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials or concrete). For the purpose herein, its maximum width shall be considered to be 12' [3.6 m].

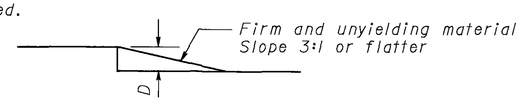
D	Treatment
≤1½" [≤40]	1) Erect OW-155 signs.
>1½"-5" [>40-125]	1) If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below OR 2) If minimum. lane width* requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
>5"-12" [125-305] Daylight only	If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below.
>5"-24" [>125-610]	1) If minimum lane width* requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If minimum lane width* requirements cannot be met, close adjacent lane utilizing drums.
>24" [>610]	Lane closure utilizing portable concrete barrier as shown below.

* Minimum lane widths shall be 10' [3.0 m] unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

1. This treatment may not be used within a bitumunos shoulder where a hot longitudnal joint per CMS 401.15 is required.
2. OW-151 signs required.

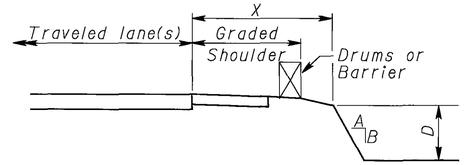


CONDITION III
DROP-OFFS BEYOND GRADED SHOULDER OR BACK OF CURB

1. See Note 2 under Condition II.
2. Use Chart A or B below, as applicable.

CHART A

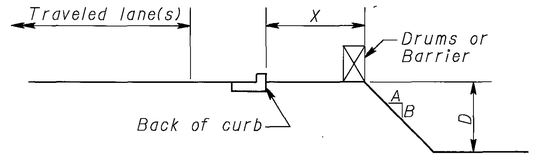
USE FOR: 1. Uncurbed Facilities.
2. Curbed Facilities, where:
   a. Curbs are less than 6" [150] in height.
   b. Curbs are 6" [150] or greater in height and the legal speed is greater than 40 mph [70 km/h].



X	D	A/B	Treatment Required	
			Day	Night
0-4' [0-1.2 m]	Any	Any	(a)	(a)
4'-30' [1.2-9.1 m]	Any	3:1 or Flatter	None	None
4'-12' [1.2-3.6 m]	≤3" [≤75]	Steeper than 3:1	None	None
4'-12' [1.2-3.6 m]	>3"-≤12" [>75-≤305]	Steeper than 3:1	Drums	Drums
4'-12' [1.2-3.6 m]	>12" [>305]	Steeper than 3:1	Drums	Barrier
>12'-20' [>3.6-6.1 m]	<12" [<305]	Steeper than 3:1	None	None
>12'-20' [>3.6-6.1 m]	>12"-<24" [>305-≤610]	Steeper than 3:1	Drums	Drums
>12'-20' [>3.6-6.1 m]	>24" [>610]	Steeper than 3:1	Drums	Barrier
>20'-30' [>6.1-9.1 m]	<24" [<610]	Steeper than 3:1	None	None
>20'-30' [>6.1-9.1 m]	>24" [>610]	Steeper than 3:1	Drums	Barrier
>30' [>9.1 m]	Any	Any	None	None
(a) Use treatment specified under Condition II.				

CHART B

USE FOR: Curbed facilities, where the curb is 6" [150] or greater in height and the legal speed is 40 mph [70 km/h] or less.



X	D	A/B	Treatment Required	
			Day	Night
0-10' [0-3.0 m]	<12" [<305]	Any	None	Drums
0-10' [0-3.0 m]	>12" [>305]	Any	Drums	Drums
>10' [>3.0 m]	Any	Any	None	None

NOTE: All metric dimensions (in brackets [ ]) are in millimeters unless otherwise noted.

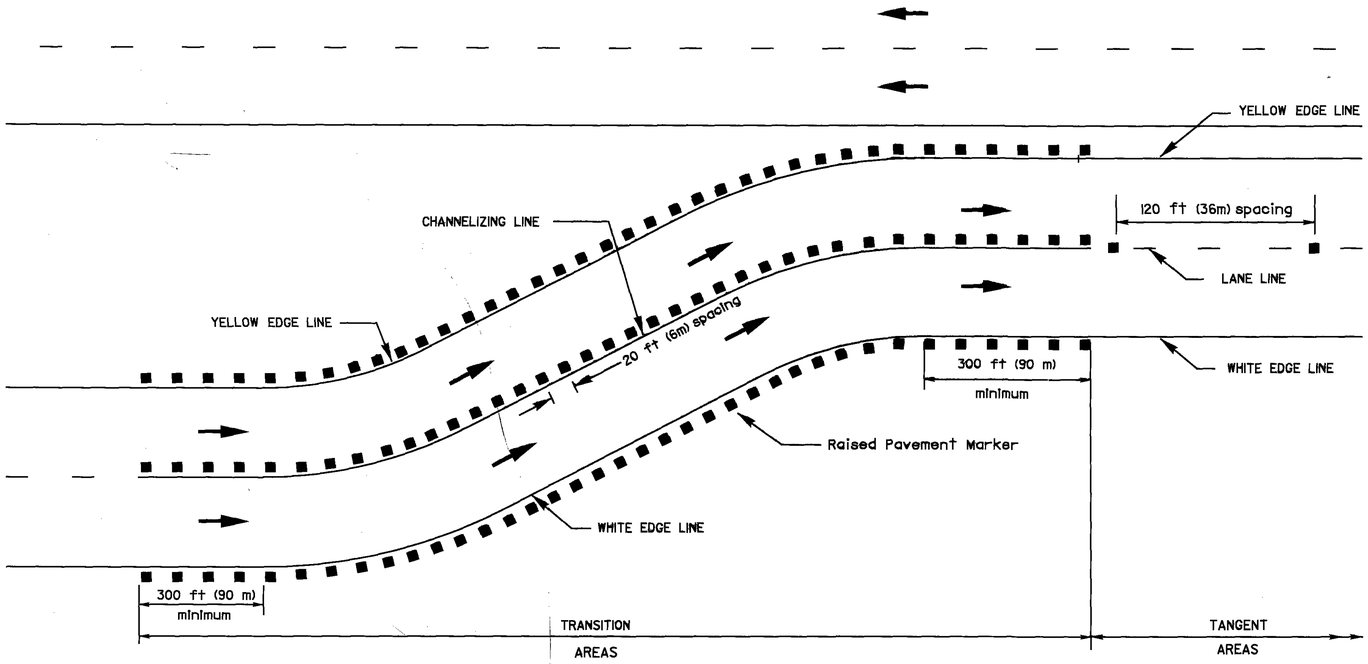
CALCULATED MMR CHECKED CSR

MAINTENANCE OF TRAFFIC GENERAL NOTES

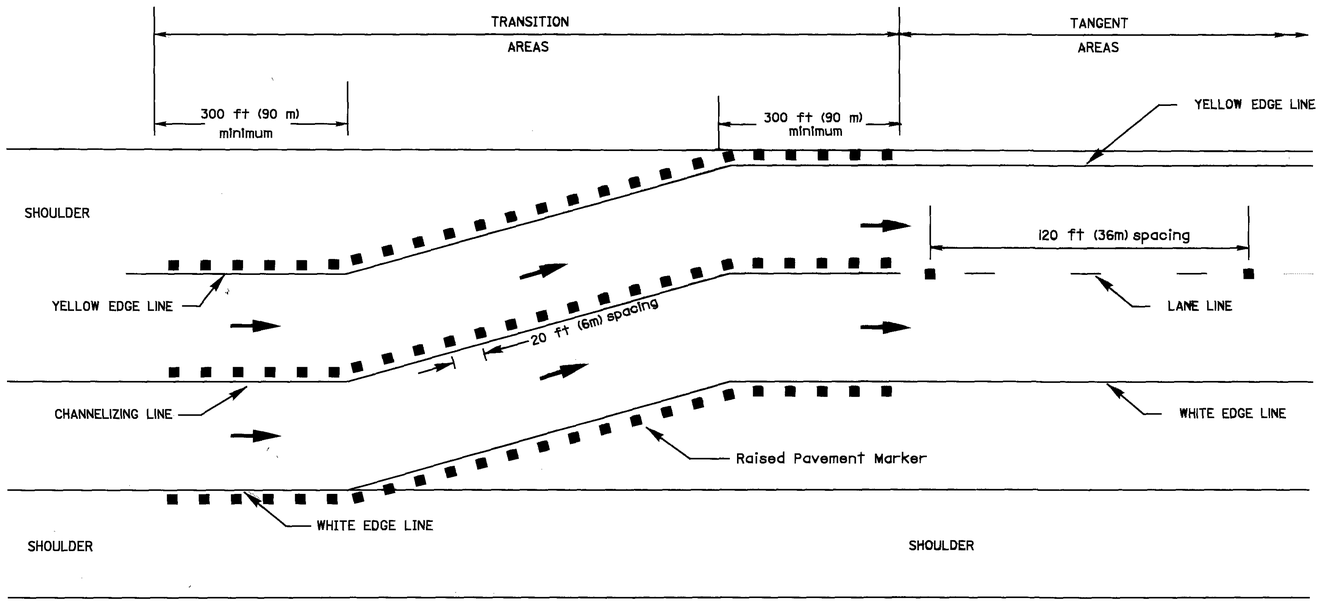
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WORK ZONE DELINEATION FOR CROSSOVERS



WORK ZONE DELINEATION FOR LANE SHIFTS

LEGEND

- RPM
- DIRECTION OF TRAVEL

NOTES

1. This drawing presents delineation procedures for freeways and expressways on asphalt surfaces. Procedures are provided for transition areas and for tangent areas. The procedures for transition areas apply to crossovers and to lane shifts of 4 feet (1.2 m) or greater. Delineation of transition areas for shifts of less than 4 inches (1.2 m) shall be as per the tangent area delineation.

2. Raised Pavement Markers shall meet the following seasonal specifications:
   a) Raised Pavement Markers in place during the normal construction season may be either 621 Raised Pavement Markers or 614 Work Zone Raised Pavement Markers (WZRPMs). The normal construction season with regard to use of WZRPMs shall be the period from April 1 through October 15.
   b) At locations where it is intended that Raised Pavement Markers will winter over, 621 Raised Pavement Markers shall be provided.
   c) At locations where it is intended that work will continue beyond October 15 but will be completed prior to the beginning of snow-plowing season, 614 WZRPMs may remain in place until such time. Snow-plowing season shall be as specified in the plans. If snow-plowing season is not specified in the plans, it shall be assumed that snow-plowing season runs from October 16 through March 31. If project delays, not the fault of ODOT, cause work to extend into the snow-plowing season, the contractor shall be responsible for replacing WZRPMs with 621 Raised Pavement Markers, as determined by the Engineer, at the contrator's expense.

3. All material furnished shall be listed on the Department's Prequalified Lists.

4. The geometrics of the crossover shall be as shown in the plans. Additional details are provided in Standard Construction Drawing MT-95.70.

5. See Standard Construction Drawings MT-102.10 and MT-102.20 for more details concerning lane shifts.

6. Spacing of raised pavement markers (RPMs) shall be at 20 feet (6 m) center-to-center for all long-line marking within transition areas. Within tangent areas RPMs shall be provided only along the lane lines, spaced at 120 foot (36 m) center-to-center.

7. The RPMs shall be 1-way, facing oncomming traffic, and shall be white or yellow to match the color of the associated line marking.

8. Along the edge lines, the RPMs shall be offset a maximum of 4 inches (100 mm) to the outside of the lines. Along the channelizing lines, the RPMs shall be offset to the left of the lines by no more than 1 inch (25 mm). Along the lane lines the RPMs shall be centered between dashes.

9. The RPMs shall be removed when they are no longer appropriate.

10. Holes resulting from removal of 621 RPMs shall be filled as per 202.10. If removal of the 621 RPMs does not take place immediately after the highlighted alignment becomes invalid, the reflectors within the 621 RPMs shall be removed.

11. Following removal of 621 RPMs resurfacing of the transition shall be performed. The resurfacing shall be performed at the time the surface course is being applied. In preparation for resurfacing, the existing pavement shall be removed to a depth necessary to match the level of the intermediate course of the proposed pavement.

CALCULATED MMR
CHECKED CSR

MAINTENANCE OF TRAFFIC GENERAL NOTES

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LIC-37-10.25

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GENERAL

PROP. S.R. 161/37
PORTIONS OF THE REALIGNED S.R. 161/S.R. 37 CAN BE CONSTRUCTED AT ANY TIME. ALL SECONDARY ROADS WITHIN THE LIMITS OF THIS PROJECT SHALL CONTINUE WITH EXISTING TRAFFIC PATTERNS. EXCEPTIONS ARE NOTED IN THIS SEQUENCE OF OPERATIONS OR AS DIRECTED BY THE PROJECT ENGINEER.

NOTE: ADD THE FINAL SURFACE COAT AT THE FOLLOWING LOCATIONS;
STA. 309+20 TO STA. 351+00 (PROP. 161 EASTBOUND LANES)
STA. 318+00 TO STA. 356+00 (PROP. 161 WESTBOUND LANES)

CONSTRUCTION OF THIS PROJECT HAS BEEN DIVIDED INTO THREE (3) PHASES, AND FURTHER REDUCED TO STAGES WHERE CHANGES IN TRAFFIC PATTERNS ARE REQUIRED.

THE SEQUENCE OF CONSTRUCTION PHASING AND STAGING IS AS FOLLOWS:

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC.

THE CONTRACTOR WILL NOT BE ALLOWED TO START WORK ON ANY PHASE OF CONSTRUCTION UNTIL APPROVAL HAS BEEN GRANTED BY THE PROJECT ENGINEER.

ALTERNATIVE METHODS:
IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATIVE METHODS FOR MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCES TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLANS SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DIRECTOR.

SEQUENCE OF OPERATIONS

PHASE 1, STAGE 1

ROAD & PAVEMENT FOR MAINTAINING TRAFFIC

1. CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC ALONG EXISTING S.R. 161 FROM STA. 10+52 TO STA. 31+19 AND FROM STA. 52+98 TO STA. 78+49, AS SHOWN ON THE PHASE 1, STAGE 1 AND OVERALL PHASING PLANS.

PHASE 1, STAGE 2

RELOCATED WORTHINGTON ROAD NORTH

1. CONSTRUCT RELOCATED WORTHINGTON ROAD NORTH FROM STA. 188+50 TO STA. 229+77, AS SHOWN ON THE PHASE 1, STAGE 2 AND OVERALL PHASING PLANS.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PHASE 2, STAGE 1

GENERAL

1. CLOSE S.R. 37/YORK ROAD AND OUTVILLE ROAD. DETOUR TRAFFIC AS SHOWN ON THE DETOUR PLAN, PHASE 2, STAGE 1, AND OVERALL PHASING PLANS.
   MORSE ROAD SHALL NOT BE CLOSED UNTIL THE RE-OPENING OF S.R. 37/YORK ROAD OR OUTVILLE ROAD.
   UNTIL THE OPENING OF THROUGH TRAFFIC ON S.R. 310, FOLLOW STATE AND LOCAL DETOUR ROUTES AS DESIGNATED ON PHASE 1 CONSTRUCTION.
2. SIGN EASTBOUND CROSSOVER ON THE WEST END OF THE PROJECT FOR SHIFTING TRAFFIC.
3. SHIFT TRAFFIC TO THE RELOCATED WORTHINGTON ROAD NORTH AT STA. 188+50.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. S.R. 161/S.R. 37

4. CONSTRUCT PROPOSED EASTBOUND S.R. 161/S.R. 37 FROM STA. 360+00 TO STA. 569+00, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.

   PROPOSED EASTBOUND S.R. 161 FROM STA. 351+00 TO STA. 360+00 SHALL NOT BEGIN UNTIL THE OPENING OF THE WESTBOUND LANES OF S.R. 161 ON PROJECT NO. 060150.

5. CONSTRUCT PROPOSED WESTBOUND S.R. 161/S.R. 37 FROM STA. 383+00 TO STA. 542+50 AND FROM STA. 572+00 TO STA. 645+00, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. WATKINS-YORK FRONTAGE ROAD

6. CONSTRUCT PROPOSED WATKINS-YORK FRONTAGE ROAD, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.

   PROPOSED WATKINS-YORK FRONTAGE ROAD FROM STA. 103+50 TO STA. 112+00 SHALL NOT BEGIN UNTIL THE OPENING OF THE WESTBOUND LANES OF S.R. 161 ON PROJECT NO. 060150.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

RAMP I, J, K, & L

7. CONSTRUCT PROPOSED RAMPS I, J, K, & L, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.

PROP. SERVICE ROAD 11

8. CONSTRUCT PROPOSED SERVICE ROAD 11, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. S.R. 37/YORK ROAD

9. CONSTRUCT PROPOSED S.R. 37/YORK ROAD FROM STA. 394+00 TO STA. 395+50 AND FROM STA. 395+80 TO STA. 419+71, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS. (PROPOSED S.R. 37 FROM STA. 395+50 TO STA. 395+80 WILL BE CONSTRUCTED IN PHASE 1, STAGE 2 AS PART OF THE RELOCATED WORTHINGTON ROAD NORTH CONSTRUCTION)
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. OUTVILLE ROAD

10. CONSTRUCT PROPOSED OUTVILLE ROAD FROM STA. 18+60 TO STA. 26+25, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS. AT THE END OF THE 120 DAY CLOSURE, ALL SAFETY FEATURES ARE TO BE INSTALLED AND ALL LANES ARE TO BE AVAILABLE FOR USE BY THE PUBLIC.
    NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. OUTVILLE-MORSE FRONTAGE ROAD

11. CONSTRUCT PROPOSED OUTVILLE-MORSE FRONTAGE ROAD, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.
    NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. MORSE ROAD

12. CONSTRUCT PROPOSED MORSE ROAD, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.
    NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. C.R. 539A EXTENSION

13. CONSTRUCT THE PROPOSED C.R. 539A EXTENSION FROM STA. 328+00 TO STA. 362+18, AS SHOWN ON THE PHASE 2, STAGE 1 AND OVERALL PHASING PLANS.
    NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PHASE 2, STAGE 2

ROAD AND PAVEMENT FOR MAINTAINING TRAFFIC

1. CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC FOR THE TWO CROSSOVERS ON THE EAST END OF THE PROJECT FROM STA. 651+57 TO STA. 658+41 AND SIGN THE WESTBOUND CROSSOVER FOR SHIFTING TRAFFIC, AS SHOWN ON THE PHASE 2, STAGE 2 AND OVERALL PHASING PLANS.
2. CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC FROM STA. 565+55 TO STA. 572+00, AS SHOWN ON THE PHASE 2, STAGE 2 AND OVERALL PHASING PLANS.
3. CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC FROM STA. 645+00 TO STA. 654+50, AS SHOWN ON THE PHASE 2, STAGE 2 AND OVERALL PHASING PLANS.
4. CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC ON C.R. 539A CONNECTION AS SHOWN ON SHEET 62A & 74.

PHASE 2, STAGE 3

GENERAL

1. SIGN THE EASTBOUND CROSSOVER ON THE EAST END OF THE PROJECT FOR SHIFTING TRAFFIC AS SHOWN ON THE PHASE 2, STAGE 3 AND OVERALL PHASING PLANS.
2. SHIFT TRAFFIC TO WESTBOUND S.R. 161/S.R. 37 AT STA. 566+00, AS SHOWN ON PHASE 2, STAGE 3 AND OVERALL PHASING PLANS.

PROP. S.R. 161/S.R. 37

3. CONSTRUCT PROPOSED EASTBOUND S.R. 37 FROM STA. 569+00 TO STA. 654+00, AS SHOWN ON THE PHASE 2, STAGE 3 AND OVERALL PHASING PLANS.

PHASE 3, STAGE 1

GENERAL

1. SIGN THE WESTBOUND CROSSOVER ON THE WEST END OF THE PROJECT FOR SHIFTING TRAFFIC, AS SHOWN ON THE PHASE 3, STAGE 1 AND OVERALL PHASING PLANS.
2. RE-SIGN THE WESTBOUND CROSSOVER ON THE EAST END OF THE PROJECT FOR SHIFTING TRAFFIC, AS SHOWN ON THE PHASE 3, STAGE 1 AND OVERALL PHASING PLANS.
3. SHIFT TRAFFIC TO EASTBOUND S.R. 161/S.R. 37, AS SHOWN ON PHASE 3, STAGE 1 AND OVERALL PHASING PLANS.

PROP. S.R. 161/S.R. 37

4. CONSTRUCT PROPOSED WESTBOUND S.R. 161/S.R. 37 FROM STA. 360+00 TO STA. 383+00, FROM STA. 542+50 TO STA. 572+00, AND FROM STA. 645+00 TO STA. 654+00, AS SHOWN ON THE PHASE 3, STAGE 1 AND OVERALL PHASING PLANS.

PROP. C.R. 539A EXTENSION

5. CONSTRUCT PROPOSED C.R. 539A EXTENSION FROM STA. 295+50 TO STA. 328+00 AND FROM STA. 362+18 TO STA. 364+40, AS SHOWN ON THE PHASE 3, STAGE 1 AND OVERALL PHASING PLANS.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

PROP. SERVICE ROAD 10

6. CONSTRUCT PROPOSED SERVICE ROAD 10 FROM STA. 143+00 TO STA. 148+50, AS SHOWN ON THE OVERALL PHASING PLANS.
   NOTE: ALL DRIVES WILL BE MAINTAINED AT ALL TIMES.

RELOCATED WORTHINGTON ROAD NORTH

7. RESURFACE RELOCATED WORTHINGTON ROAD NORTH FROM STA. 148+50 TO STA. 188+50, AS SHOWN ON THE OVERALL PHASING PLANS.

CALCULATED ZTW
CHECKED CSR

SEQUENCE OF OPERATIONS

LIC-161-6.65
LIC-37-10.25

54F
1349

MH106SRI61.DGN 3/8/2007

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED ZTW
CHECKED CSR

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	PHASE	STAGE	614 WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL) EACH	614 WORK ZONE IMPACT ATTENUATOR EACH	614 WORK ZONE RAISED PAVEMENT MARKER EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 OBJECT MARKER, ONE WAY EACH	614 OBJECT MARKER, TWO WAY EACH	614 WORK ZONE CENTER LINE, CLASS I, 642 PAINT MILE	614 WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT MILE	614 WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT MILE	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SQ. YD.	615 ROADS FOR MAINTAINING TRAFFIC LUMP	622 PORTABLE CONCRETE BARRIER, 32" LIN. FT.
78		@ FOR M.O.T. (EX. WORTHINGTON RD.)	10+00.00	31+70.00	℄	1	1												
78	CL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	10+00.00	31+70.00	℄	1	1							0.41			4519.52	LUMP	
78	EL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	10+00.00	31+70.00	LT	1	1								0.41				
78	EL-2	@ FOR M.O.T. (EX. WORTHINGTON RD.)	10+00.00	31+70.00	RT	1	1								0.41				
78		@ FOR M.O.T. (EX. WORTHINGTON RD.)	19+35.00	26+20.00	LT	1	1	1			14		14						685
79	CL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	51+54.00	51+93.00	℄	1	1							0.04					
79	EL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	50+00.00	51+93.00	LT	1	1								0.01				
80	CL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	51+93.00	65+00.00	℄	1	1							0.25					
80	EL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	51+93.00	65+00.00	LT	1	1								0.25				
80	EL-2	@ FOR M.O.T. (EX. WORTHINGTON RD.)	53+00.00	65+00.00	RT	1	1								0.23				
80		@ FOR M.O.T. (EX. WORTHINGTON RD.)	61+90.00	65+00.00	LT	1	1				7		7						314
80-81		@ FOR M.O.T. (EX. WORTHINGTON RD.)	52+98.00	78+49.00	℄	1	1										5188.71	LUMP	
81	CL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	65+00.00	78+75.00	℄	1	1							0.26					
81	EL-1	@ FOR M.O.T. (EX. WORTHINGTON RD.)	65+00.00	78+75.00	LT	1	1								0.26				
81	EL-2	@ FOR M.O.T. (EX. WORTHINGTON RD.)	65+00.00	78+75.00	RT	1	1								0.26				
81		@ FOR M.O.T. (EX. WORTHINGTON RD.)	65+00.00	67+15.00	LT	1	1	1			5		5						221
82	TY-1	S.R. 161	318+55.00	339+00.00	RT	2	1									0.39			
82		S.R. 161	337+50.00	339+00.00	RT	2	1			14									
82	EL-1	S.R. 161	338+56.00	339+00.00	RT	2	1								0.01				
83	EL-1	S.R. 161	339+00.00	347+62.00	LT&RT	2	1								0.16				
83	TY-1	S.R. 161	339+00.00	347+62.00	LT&RT	2	1									0.16			
83		S.R. 161	339+00.00	345+00.00	LT&RT	2	1	1		55									
83		S.R. 161	343+03.00	347+62.00	LT	2	1				10	20							459
83	CL-1	S.R. 161	347+82.00	352+00.00	LT	2	1							0.08					
84	CL-1	S.R. 161	352+00.00	365+00.00	LT	2	2							0.25					
84	EL-2	S.R. 161	360+00.00	365+00.00	LT	2	2								0.10				
84	EL-3	S.R. 161	360+00.00	365+00.00	RT	2	2								0.10				
84		S.R. 161	360+00.00	370+80.00	LT	2	2										6720.00	LUMP	
85	CL-1	S.R. 161	365+00.00	370+80.00	LT	2	2							0.11					
85	EL-2	S.R. 161	365+00.00	370+80.00	LT	2	2								0.11				
85	EL-3	S.R. 161	365+00.00	370+80.00	RT	2	2								0.11				
104		S.R. 161	372+69.00	379+15.00	RT	2	1				14		14						669
105		S.R. 37	531+58.00	537+30.00	LT	2	1				12		12						593
106		S.R. 37	539+83.00	544+81.00	LT	2	1		1		11		11						508
107		S.R. 37	577+75.00	581+00.00	LT	2	1		1		7		7						325
108		S.R. 37	581+00.00	587+00.00	LT	2	1				12		12						600
109		S.R. 37	587+00.00	591+73.00	LT	2	1				10		10						483
110		S.R. 37	620+11.00	625+90.00	LT	2	1				12		12						600
111		S.R. 37	644+44.00	649+99.00	RT	2	3				12		12						577
86		S.R. 37	564+25.00	571+00.00	LT	2	2			34							1496.21	LUMP	
87	CL-2	S.R. 37	645+00.00	650+91.00	RT	2	2							0.11					
87	EL-4	S.R. 37	645+00.00	649+00.00	RT	2	2								0.08				
87		S.R. 37	652+08.00	658+50.00	LT&RT	2	2			62									
87		S.R. 37	645+00.00	658+41.00	LT	2	2										4319.97	LUMP	
87	EL-5	S.R. 37	652+08.00	658+50.00	LT&RT	2	2								0.12				
87	TY-2	S.R. 37	652+72.00	658+50.00	LT&RT	2	2									0.11			
87		S.R. 37	651+11.00	654+85.00	RT	2	2		1		8	16							374
88		S.R. 37	658+50.00	659+15.00	LT	2	2			7									
88	TY-2	S.R. 37	658+50.00	672+00.00	LT	2	2									0.25			
89	TY-2	S.R. 37	672+00.00	678+69.00	LT	2	2									0.13			
91	CL-3	S.R. 37	566+00.00	575+00.00	LT	2	3							0.17					
91	EL-6	S.R. 37	566+00.00	575+00.00	LT	2	3								0.17				
91	EL-7	S.R. 37	566+00.00	575+00.00	RT	2	3								0.17				
73	CL-3	S.R. 37	575+00.00	590+00.00	LT	2	3							0.28					
73	EL-6	S.R. 37	575+00.00	590+00.00	LT	2	3								0.28				
TOTALS (THIS SHEET)								3	3	172	134	36	116	1.96	3.24	1.04	22244.41	LUMP	6408
TOTALS CARRIED TO SHEET 57								3	3	172	134	36	116	1.96	4.28		22244.41	LUMP	6408

LIC-161-6.65
LIC-37-10.25

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SHT. NO.	REF. NO.	ROADWAY	LOCATION		SIDE	PHASE	STAGE	614	614	614	614	614	614	614	614	614	615		622
			FROM	TO				WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	WORK ZONE IMPACT ATTENUATOR	WORK ZONE RAISED PAVEMENT MARKER	BARRIER REFLECTOR, TYPE B	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT	WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	ROADS FOR MAINTAINING TRAFFIC	PORTABLE CONCRETE BARRIER, 32"
								EACH	EACH	EACH	EACH	EACH	EACH	MILE	MILE	MILE	SQ. YD.	LUMP	LIN. FT.
73	EL-7	S.R. 37	575+00.00	590+00.00	RT	2	3								0.28				
74	CL-3	S.R. 37	590+00.00	615+00.00	LT	2	3							0.47					
74	EL-6	S.R. 37	590+00.00	615+00.00	LT	2	3								0.47				
74	EL-7	S.R. 37	590+00.00	615+00.00	RT	2	3								0.47				
75	CL-3	S.R. 37	615+00.00	640+00.00	LT	2	1							0.47					
75	EL-6	S.R. 37	615+00.00	640+00.00	LT	2	1								0.47				
75	EL-7	S.R. 37	615+00.00	640+00.00	RT	2	1								0.47				
76	CL-3	S.R. 37	640+00.00	645+00.00	LT	2	1							0.10					
76	EL-6	S.R. 37	640+00.00	645+00.00	LT	2	1								0.10				
76	EL-7	S.R. 37	640+00.00	645+00.00	RT	2	1								0.10				
92	CL-3	S.R. 37	645+00.00	649+91.00	LT	2	3							0.10					
92	EL-6	S.R. 37	645+00.00	654+50.00	LT	2	3								0.18				
92	EL-7	S.R. 37	645+00.00	656+28.00	LT&RT	2	3								0.22				
92		S.R. 37	650+00.00	656+00.00	LT&RT	2	3			58									
92		S.R. 37	650+11.00	658+50.00	LT	2	3		1		17	34							837.8
92	TY-3	S.R. 37	652+53.00	658+21.00	LT&RT	2	3									0.11			
93		S.R. 37	658+50.00	672+00.00	LT	2	3				7	7							314.4
93	TY-2	S.R. 37	658+50.00	672+00.00	LT	2	3									0.26			
94	TY-2	S.R.37	672+00.00	678+68.00	LT	2	3									0.12			
96	EL-8	S.R. 161	332+00.00	339+00.00	LT	3	1								0.14				
96	TY-4	S.R. 161	336+40.00	339+00.00	LT	3	1									0.05			
96		S.R. 161	336+84.00	339+00.00	RT	3	1				5	5							226.2
96	TY-1	S.R. 161	325+00.00	339+00.00	RT	3	1									0.27			
97	EL-8	S.R. 161	339+00.00	347+61.00	LT&RT	3	1								0.17				
97	TY-1	S.R. 161	339+00.00	341+40.00	RT	3	1									0.05			
97	TY-4	S.R. 161	339+00.00	345+40.00	LT&RT	3	1									0.12			
97		S.R. 161	339+00.00	349+10.00	RT	3	1		1		21	42							1009.7
97		S.R. 161	340+00.00	348+60.00	LT&RT	3	1			58									
97	CL-4	S.R. 161	349+30.00	352+00.00	RT	3	1							0.05					
97	EL-9	S.R. 161	351+00.00	352+00.00	LT	3	1								0.02				
97	EL-10	S.R. 161	351+00.00	352+00.00	RT	3	1								0.02				
98	CL-4	S.R. 161	352+00.00	365+00.00	RT	3	1							0.25					
98	EL-9	S.R. 161	352+00.00	365+00.00	LT	3	1								0.25				
98	EL-10	S.R. 161	352+00.00	365+00.00	RT	3	1								0.25				
64	CL-4	S.R. 161	356+00.00	382+00.00	RT	2	1							0.50					
64	EL-9	S.R. 161	356+00.00	382+00.00	LT	2	1								0.50				
64	EL-10	S.R. 161	356+00.00	382+00.00	RT	2	1								0.50				
65	CL-4	S.R. 161	382+00.00	408+00.00	RT	2	1							0.50					
65	EL-9	S.R. 161	382+00.00	408+00.00	LT	2	1								0.50				
65	EL-10	S.R. 161	382+00.00	408+00.00	RT	2	3								0.50				
66	CL-4	S.R. 161	408+00.00	436+00.00	RT	2	3							0.53					
66	EL-9	S.R. 161	408+00.00	436+00.00	LT	2	3								0.53				
66	EL-10	S.R. 161	408+00.00	436+00.00	RT	2	3								0.53				
67	CL-4	S.R. 161/S.R. 37	436+00.00	464+00.00	RT	2	3							0.53					
67	EL-9	S.R. 161/S.R. 37	436+00.00	464+00.00	LT	2	3								0.53				
67	EL-10	S.R. 161/S.R. 37	436+00.00	464+00.00	RT	2	3								0.53				
69	CL-4	S.R. 37	464+00.00	490+00.00	RT	2	3							0.50					
69	EL-9	S.R. 37	464+00.00	490+00.00	LT	2	3								0.50				
69	EL-10	S.R. 37	464+00.00	490+00.00	RT	2	3								0.50				
70	CL-4	S.R. 37	490+00.00	515+00.00	RT	2	3							0.47					
70	EL-9	S.R. 37	490+00.00	515+00.00	LT	2	3								0.47				
70	EL-10	S.R. 37	490+00.00	515+00.00	RT	2	3								0.47				
71	CL-4	S.R. 37	515+00.00	540+00.00	RT	2	3							0.47					
71	EL-9	S.R. 37	515+00.00	540+00.00	LT	2	3								0.47				
71	EL-10	S.R. 37	515+00.00	540+00.00	RT	2	3								0.47				
TOTALS (THIS SHEET)								0	2	116	50	88	0	4.94	10.61	0.98	0.00	LUMP	2388
TOTALS CARRIED TO SHEET 57								0	2	116	50	88	0	4.94	11.59		0.00	LUMP	2388

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED ZTW
CHECKED CSR

LIC-161-6.65
LIC-37-10.25

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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	PHASE	STAGE	614 WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL) EACH	614 WORK ZONE IMPACT ATTENUATOR EACH	614 WORK ZONE RAISED PAVEMENT MARKER EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 OBJECT MARKER, ONE WAY EACH	614 OBJECT MARKER, TWO WAY EACH	614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT MILE	614 WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT MILE	614 WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT MILE	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SQ. YD.	615 ROADS FOR MAINTAINING TRAFFIC LUMP	622 PORTABLE CONCRETE BARRIER, 32" LIN. FT.	622 GLARE SCREEN LIN. FT.
72	CL-4	S.R. 37	540+00.00	565+00.00	RT	2	3							0.47						
72	EL-9	S.R. 37	540+00.00	565+00.00	LT	2	3								0.47					
72	EL-10	S.R. 37	540+00.00	565+00.00	RT	2	3								0.47					
73	CL-4	S.R. 37	565+00.00	590+00.00	RT	2	3							0.47						
73	EL-9	S.R. 37	565+00.00	590+00.00	LT	2	3								0.47					
73	EL-10	S.R. 37	565+00.00	590+00.00	RT	2	3								0.47					
74	CL-4	S.R. 37	590+00.00	615+00.00	RT	2	3							0.47						
74	EL-9	S.R. 37	590+00.00	615+00.00	LT	2	3								0.47					
74	EL-10	S.R. 37	590+00.00	615+00.00	RT	2	3								0.47					
75	CL-4	S.R. 37	615+00.00	640+00.00	RT	2	3							0.47						
75	EL-9	S.R. 37	615+00.00	640+00.00	LT	2	3								0.47					
75	EL-10	S.R. 37	615+00.00	640+00.00	RT	2	3								0.47					
76	CL-4	S.R. 37	640+00.00	645+00.00	RT	2	3							0.09						
76	EL-9	S.R. 37	640+00.00	645+00.00	LT	2	3								0.09					
76	EL-10	S.R. 37	640+00.00	645+00.00	RT	2	3								0.09					
100	CL-4	S.R. 37	645+00.00	650+91.00	RT	3	1							0.11						
100	EL-9	S.R. 37	645+00.00	658+50.00	LT&RT	3	1								0.25					
100	EL-10	S.R. 37	645+00.00	654+00.00	RT	3	1								0.17					
100		S.R. 37	651+11.00	654+85.00	RT	3	1		1		8	16							384.0	384.0
100	TY-5	S.R. 37	652+72.00	658+50.00	LT&RT	3	1									0.11				
100		S.R. 37	653+00.00	658+50.00	LT&RT	3	1			46										
101		S.R. 37	658+50.00	659+15.00	LT	3	1			7										
TOTALS THIS SHEET								0	1	53	8	16	0	2.08	4.36	0.11	0.00	LUMP	384	384
TOTALS CARRIED TO MAINTENANCE OF TRAFFIC SUBSUMMARY BELOW								0	1	53	8	16	0	2.08	4.47		0.00	LUMP	384	384
MAINTENANCE OF TRAFFIC SUBSUMMARY																				
TOTALS FROM SHEET 55								3	3	172	134	36	116	1.96	4.28		22244.41	LUMP	6408	6408
TOTALS FROM SHEET 56								0	2	116	50	88	0	4.94	11.59		0.00	LUMP	2388	2388
TOTALS FROM SHEET 57 (THIS SHEET)								0	1	53	8	16	0	2.08	4.47		0.00	LUMP	384	384
TOTALS CARRIED TO GENERAL SUMMARY								3	6	341	192	140	116	8.98	20.34		22244	LUMP	9180	9180

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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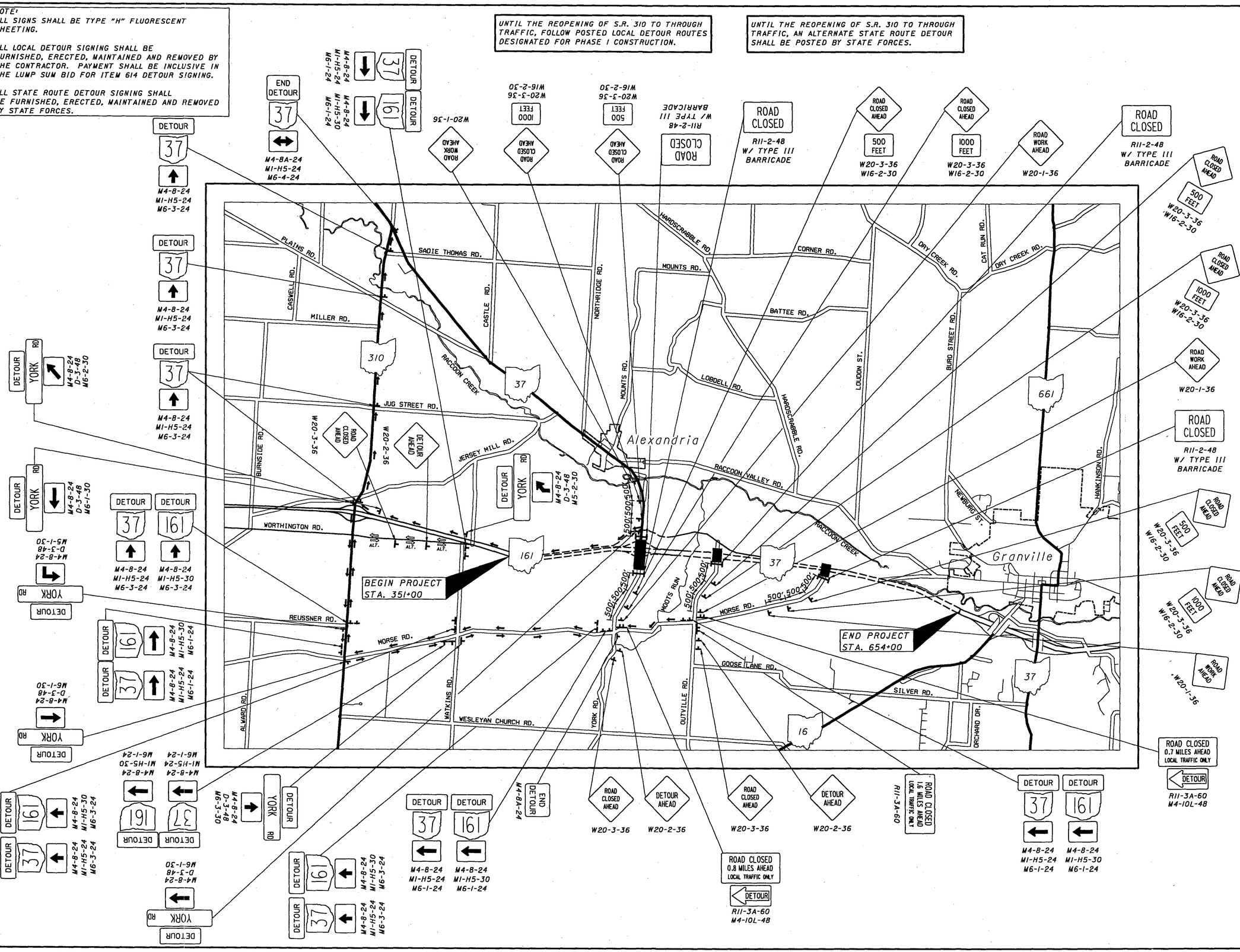
NOTE:
ALL SIGNS SHALL BE TYPE "H" FLUORESCENT SHEETING.

ALL LOCAL DETOUR SIGNING SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR. PAYMENT SHALL BE INCLUSIVE IN THE LUMP SUM BID FOR ITEM 614 DETOUR SIGNING.

ALL STATE ROUTE DETOUR SIGNING SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY STATE FORCES.

UNTIL THE REOPENING OF S.R. 310 TO THROUGH TRAFFIC, FOLLOW POSTED LOCAL DETOUR ROUTES DESIGNATED FOR PHASE I CONSTRUCTION.

UNTIL THE REOPENING OF S.R. 310 TO THROUGH TRAFFIC, AN ALTERNATE STATE ROUTE DETOUR SHALL BE POSTED BY STATE FORCES.



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$FILE$
$TIMESTAMP$

CALCULATED ZTW
CHECKED CSR

HORIZONTAL SCALE IN MILES
0 0.25 5

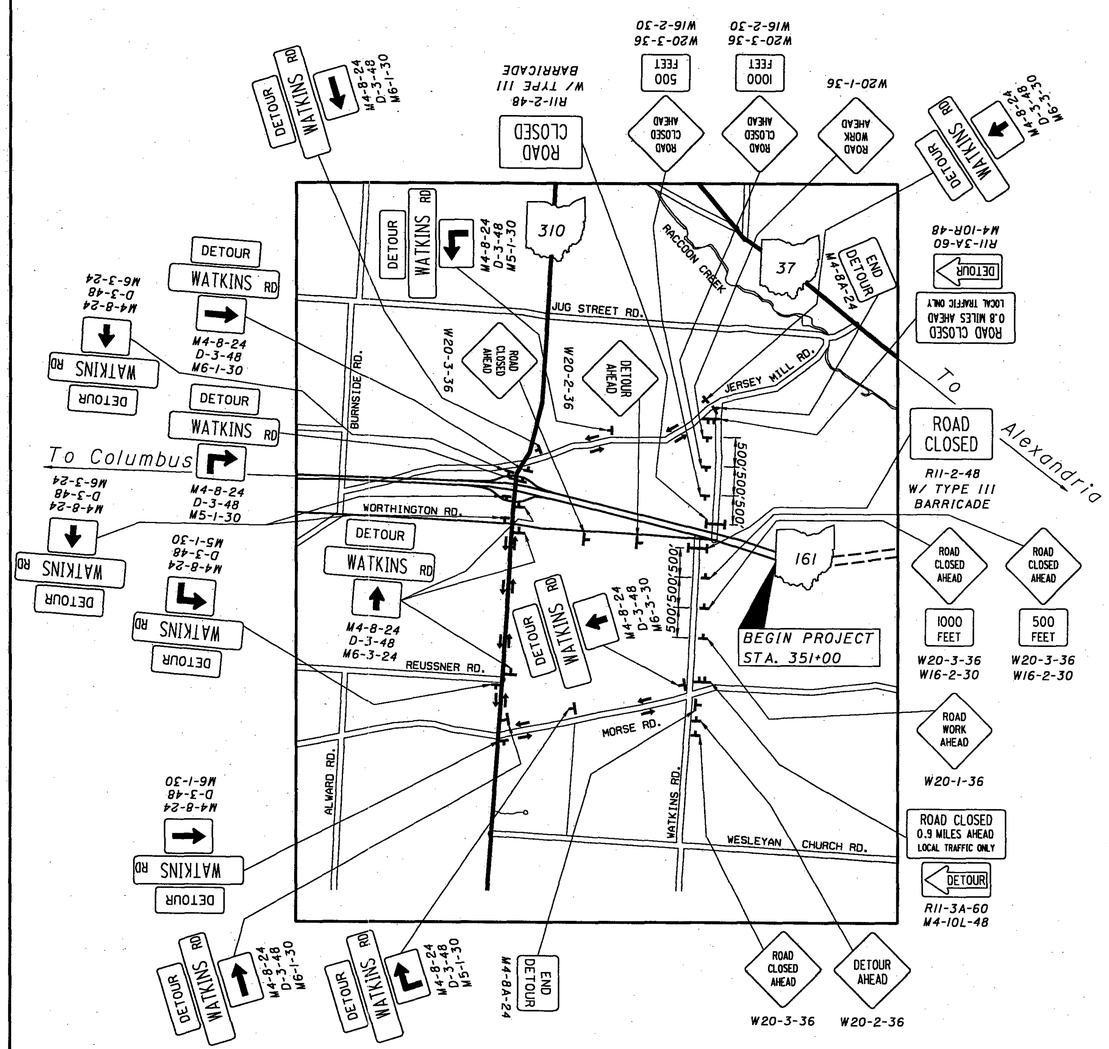
DETOUR PLAN - S.R. 37, S.R.161 AND OUTVILLE ROAD,

LIC-161-6.65
LIC-37-10.25

NOTE:
ALL SIGNS SHALL BE TYPE "H" FLUORESCENT SHEETING.

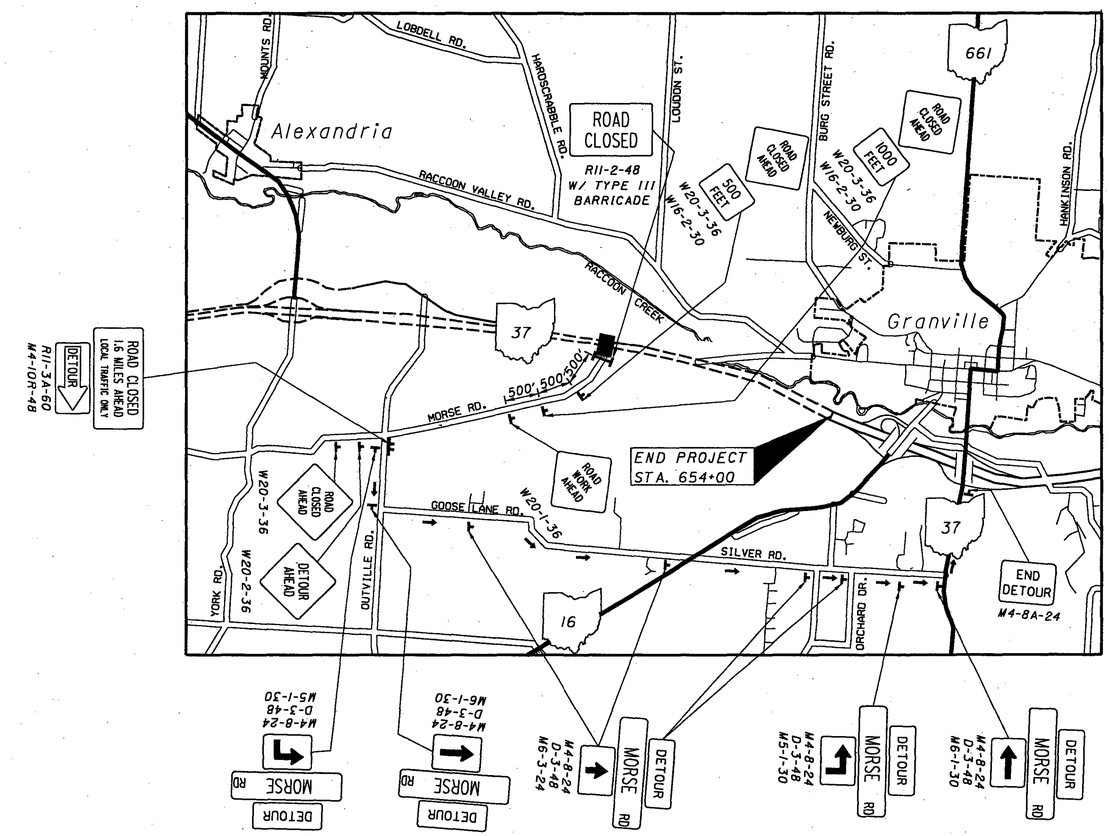
ALL LOCAL DETOUR SIGNING SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR. PAYMENT SHALL BE INCLUSIVE IN THE LUMP SUM BID FOR ITEM 614 DETOUR SIGNING.

NOTE:
FOR THE PLACEMENT OF THE 'ROAD CLOSED' SIGNS, BARRICADES, AND ADDITIONAL CONSTRUCTION SIGNS AT THE INTERSECTION OF WORTHINGTON ROAD & WATKINS ROAD AND THEN FURTHER EAST OF WATKINS ROAD ALONG WORTHINGTON ROAD, SEE MAINTENANCE OF TRAFFIC PLANS FOR PHASE 2, STAGES 1 & 2, SHEETS 82-87.



DETOUR - WATKINS ROAD

UNTIL THE REOPENING OF S.R. 310 TO THROUGH TRAFFIC, FOLLOW POSTED LOCAL DETOUR ROUTES DESIGNATED FOR PHASE 1 CONSTRUCTION.



DETOUR - MORSE ROAD

$USER$
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HORIZONTAL SCALE IN MILES
0 0.25 .5 1

CALCULATED ZTW
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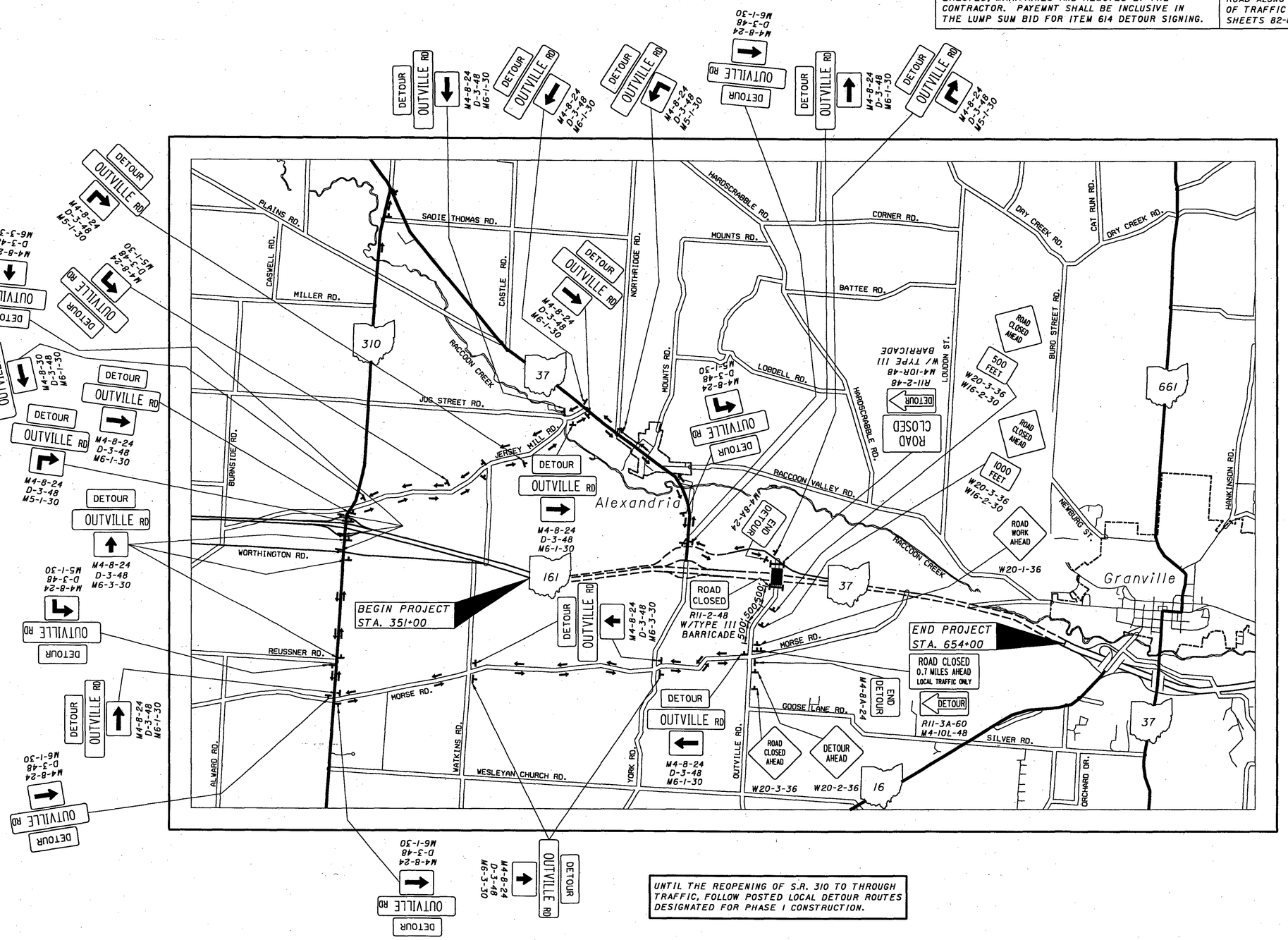
DETOUR PLAN - WATKINS ROAD AND MORSE ROAD

LIC-161-6.65
LIC-37-10.25

NOTE:
ALL SIGNS SHALL BE TYPE "H" FLUORESCENT SHEETING.

ALL LOCAL DETOUR SIGNING SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR. PAYEMNT SHALL BE INCLUSIVE IN THE LUMP SUM BID FOR ITEM 614 DETOUR SIGNING.

NOTE:
FOR THE PLACEMENT OF THE 'ROAD CLOSED' SIGNS, BARRICADES, AND ADDITIONAL CONSTRUCTION SIGNS AT THE INTERSECTION OF WORTHINGTON ROAD & WATKINS ROAD AND THEN FURTHER EAST OF WATKINS ROAD ALONG WORTHINGTON ROAD, SEE MAINTENANCE OF TRAFFIC PLANS FOR PHASE 2, STAGES 1 & 2, SHEETS 82-87.



UNTIL THE REOPENING OF S.R. 310 TO THROUGH TRAFFIC, FOLLOW POSTED LOCAL DETOUR ROUTES DESIGNATED FOR PHASE I CONSTRUCTION.

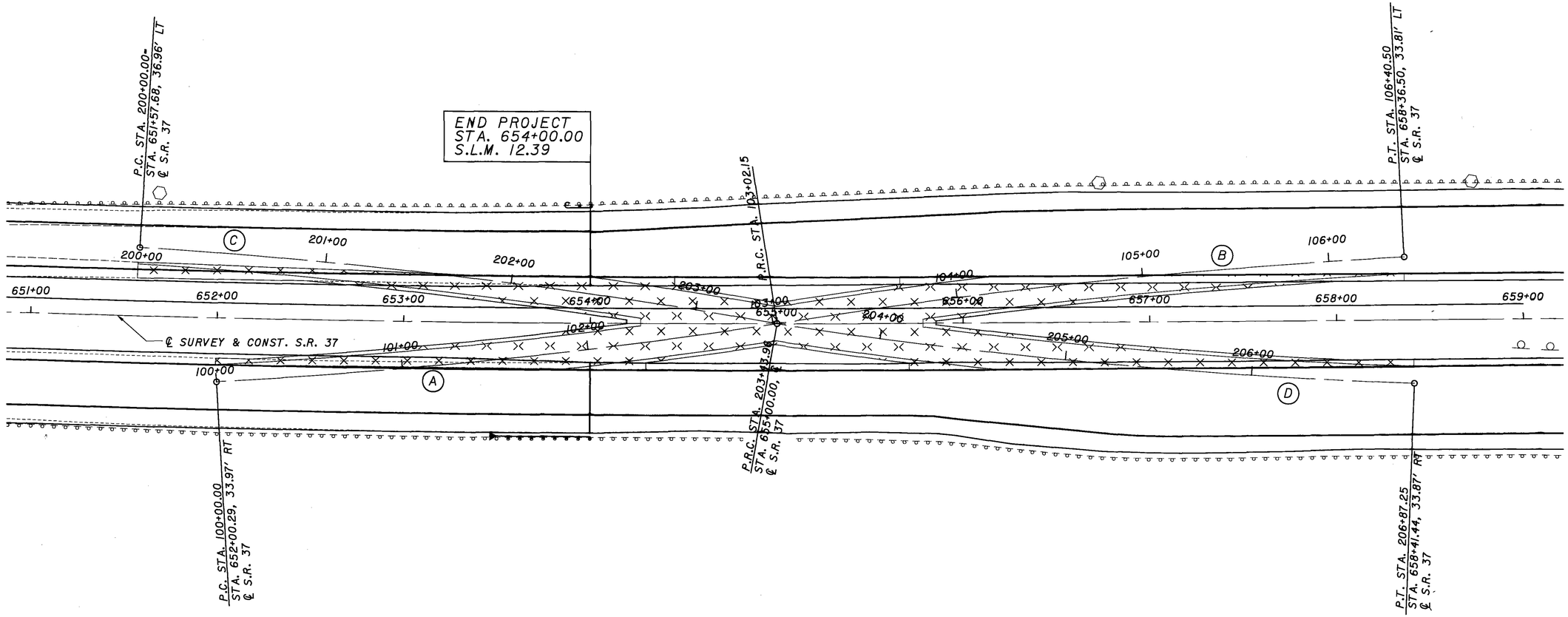
HORIZONTAL SCALE IN MILES
0 .25 .5 1

CALCULATED ZTW
CHECKED CSR

DETOUR PLAN - OUTVILLE ROAD

LIC-161-6.65
LIC-37-10.25

$USER$
$DATE$
$FILEA$
$TIMESTAMP$



A

P.I. STA. = 101+51.19
Δ = 05° 32′ 22″ (LT)
Dc = 01° 50′ 00″
R = 3,125.23′
T = 151.19′
L = 302.15′
E = 3.66′

B

P.I. STA. = 104+71.49
Δ = 06° 12′ 11″ (RT)
Dc = 01° 50′ 00″
R = 3,125.23′
T = 169.34′
L = 338.35′
E = 4.58′

C

P.I. STA. = 201+72.15
Δ = 06° 18′ 21″ (RT)
Dc = 01° 50′ 00″
R = 3,125.23′
T = 172.15′
L = 343.96′
E = 4.74′

D

P.I. STA. = 205+15.78
Δ = 06° 17′ 38″ (LT)
Dc = 01° 50′ 00″
R = 3,125.23′
T = 171.82′
L = 343.30′
E = 4.72′

- PHASE 2, STAGE 2 CONSTRUCTION (PAVEMENT FOR MAINTAINING TRAFFIC)

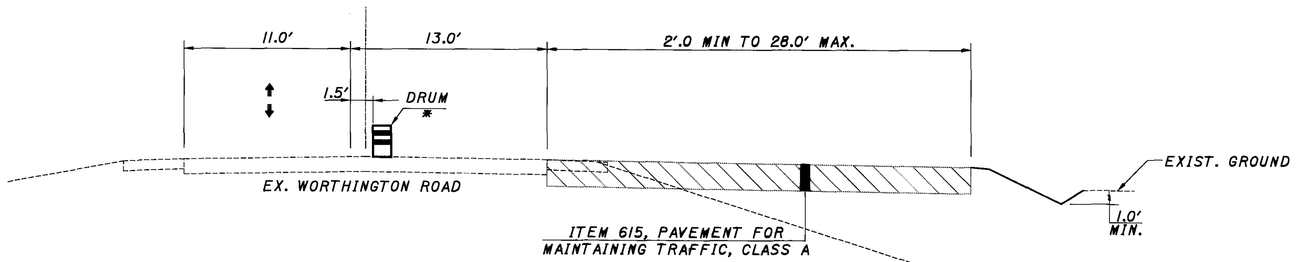
HORIZONTAL SCALE IN FEET
0 15 30 60

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC CROSSOVER DETAIL

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MAINTENANCE OF TRAFFIC
TYPICAL SECTION,
PHASE I STAGE I

* DRUM SHOWN IS FOR THE FLAGGING OPERATION ONLY. DURING NON-WORKING HOURS THE DRUMS ARE TO BE PLACED BEHIND EDGE LINE.

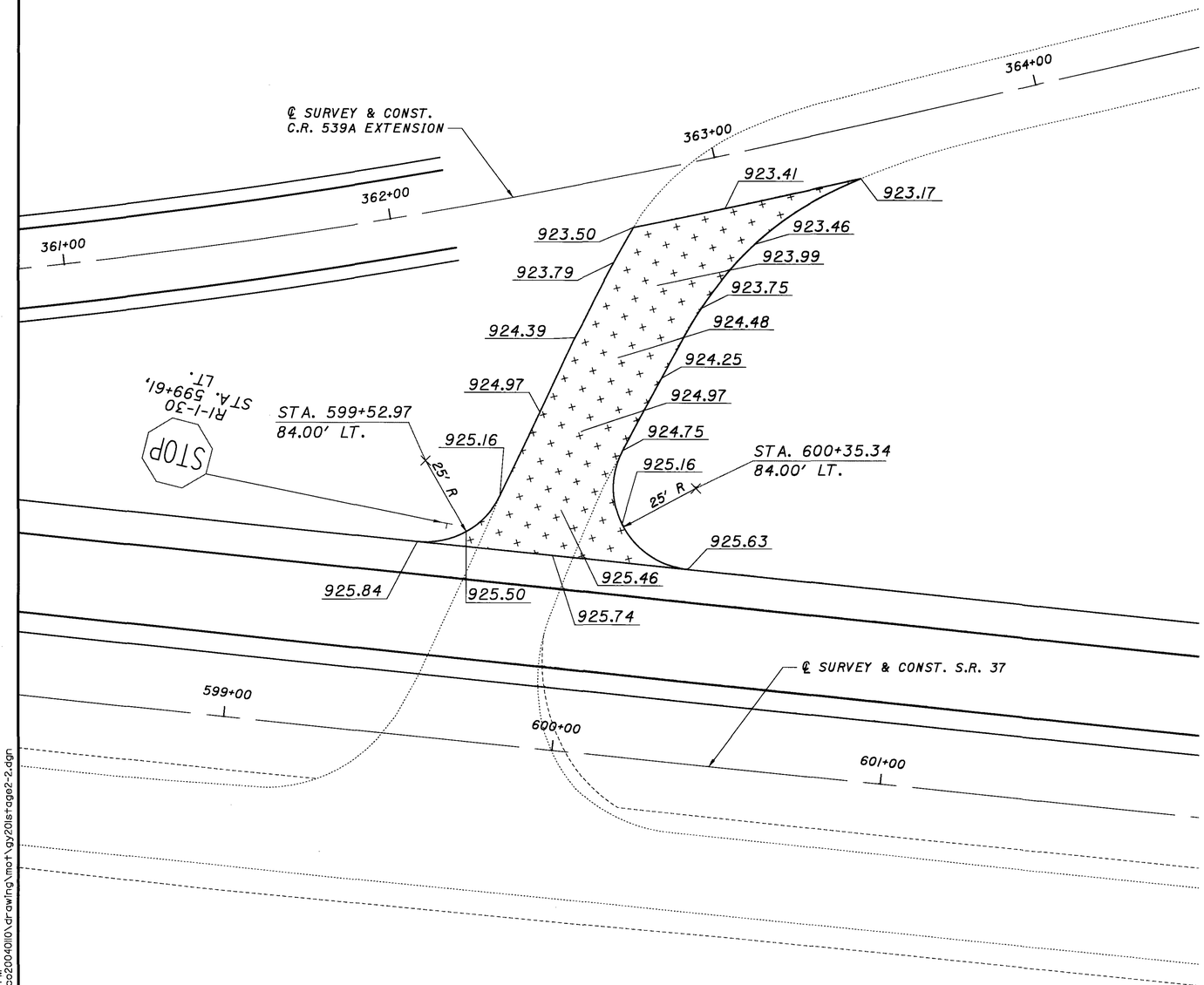
CALCULATED ZTW
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MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

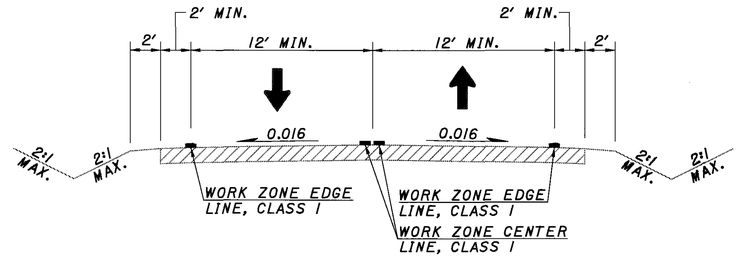
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NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 2, PLEASE SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.



MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE 2, STAGE 2

(NOT TO SCALE)

- PHASE 2, STAGE 2 CONSTRUCTION (PAVEMENT FOR MAINTAINING TRAFFIC)

HORIZONTAL SCALE IN FEET

0 10 20 40

CALCULATED ZTW

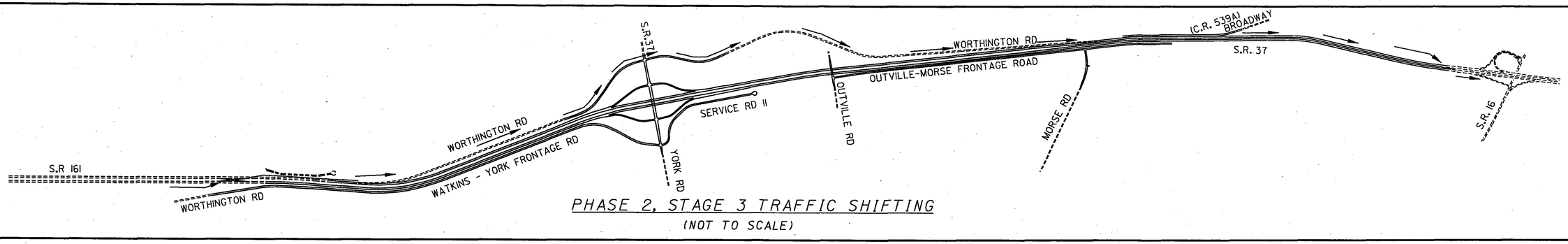
DESIGNED CSR

MAINTENANCE OF TRAFFIC DETAIL PHASE 2, STAGE 2

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LIC-37-10.25

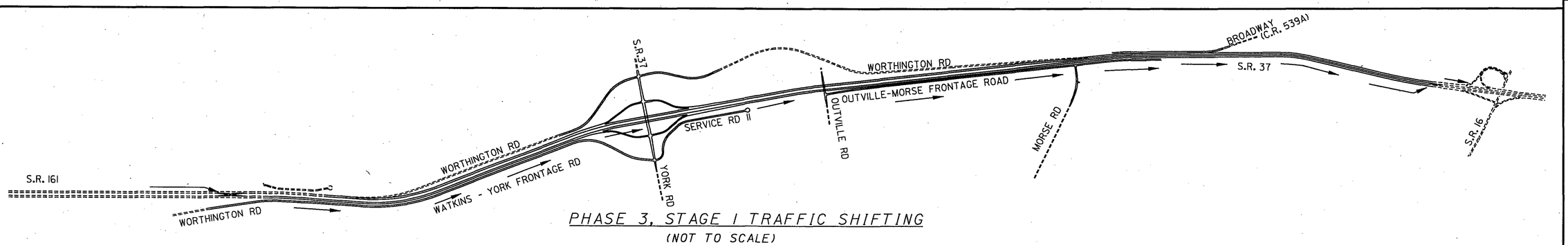
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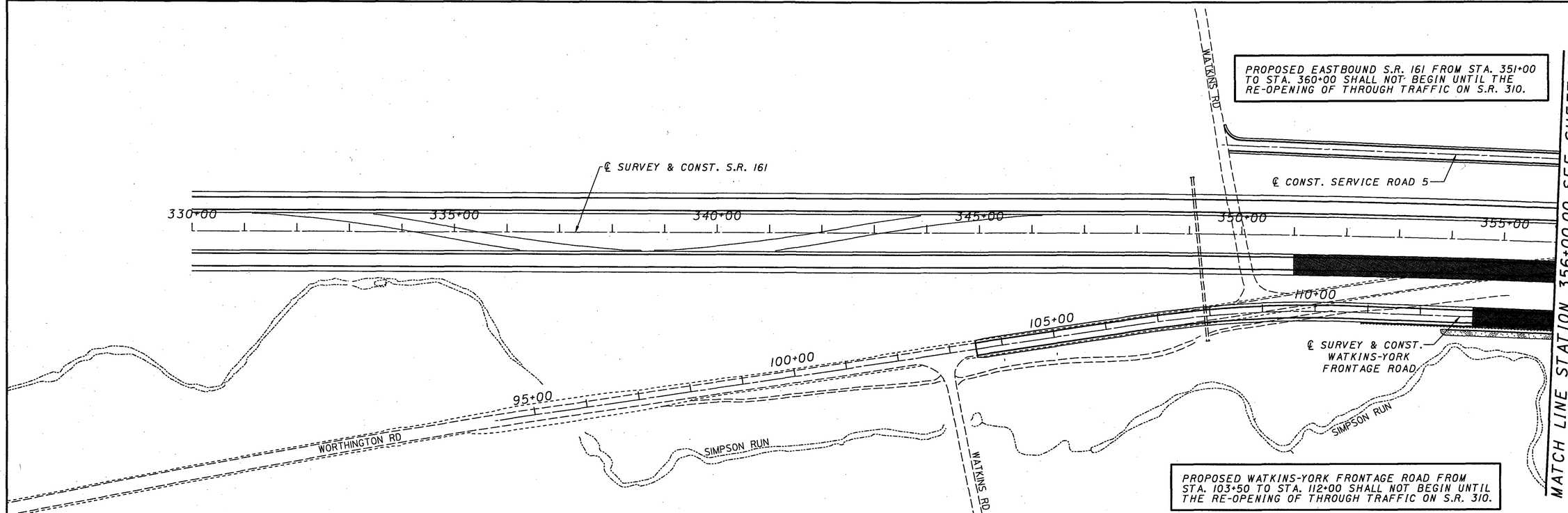
PHASE 2, STAGE 3 TRAFFIC SHIFTING

(NOT TO SCALE)



PHASE 3, STAGE 1 TRAFFIC SHIFTING

(NOT TO SCALE)



HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

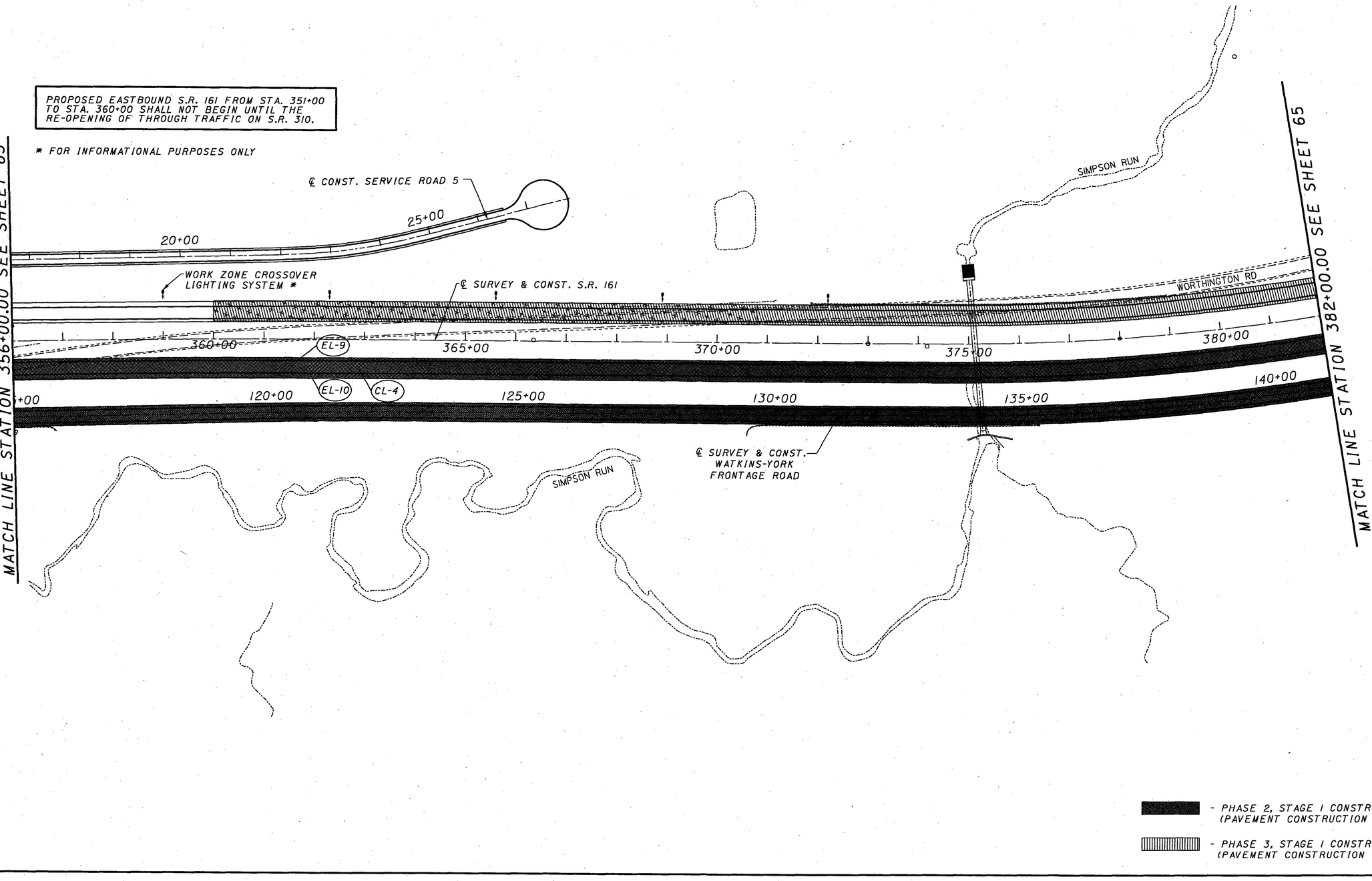
LIC-161-6.65
LIC-37-10.25

63
1349

$USER
$DATE$
$FILEA$
$TIMESTAMP$

PROPOSED EASTBOUND S.R. 161 FROM STA. 351+00 TO STA. 360+00 SHALL NOT BEGIN UNTIL THE RE-OPENING OF THROUGH TRAFFIC ON S.R. 310.

* FOR INFORMATIONAL PURPOSES ONLY



- PHASE 2, STAGE I CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)
- PHASE 3, STAGE I CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

64
1349

$TIMESTAMP$
$USER
$DATE$
$FILEA$

MATCH LINE STATION 382+00.00 SEE SHEET 64

℄ SURVEY & CONST. SERVICE ROAD 10

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

WORTHINGTON RD

145+00 150+00 155+00 160+00 165+00

℄ SURVEY & CONST. S.R. 161

385+00 390+00 EL-9 395+00 400+00 405+00

145+00 150+00 EL-10 CL-4 155+00 160+00 165+00

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

MATCH LINE STATION 408+00.00 SEE SHEET 66

- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)
- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)
- PHASE 3, STAGE 1 CONSTRUCTION (RESURFACING)

N

0 50 100 200
HORIZONTAL SCALE IN FEET

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

65
1349

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MATCH LINE STATION 408+00.00 SEE SHEET 65

MATCH LINE STATION 436+00.00 SEE SHEET 67

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

170+00 175+00 180+00 185+00 190+00

410+00 415+00 420+00 425+00 430+00 435+00

EL-9 EL-10 CL-4

195+00

- PHASE 1, STAGE 1 CONSTRUCTION (ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC)
- PHASE 1, STAGE 2 CONSTRUCTION (PAVEMENT CONSTRUCTION - WORTHINGTON RD)
- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)
- PHASE 3, STAGE 1 CONSTRUCTION (RESURFACING)

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

66
1349

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MATCH LINE STATION 400+00.00 SEE SHEET 68

MATCH LINE STATION 436+00.00 SEE SHEET 66

MATCH LINE STATION 464+00.00 SEE SHEET 69

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

℄ SURVEY & CONST. SR 37

℄ RAMP "I"

℄ RAMP "J"

℄ RAMP "K"

℄ RAMP "L"

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. S.R. 37

℄ CONST. SERVICE ROAD II

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

℄ SURVEY & CONST. YORK ROAD

WORTHINGTON RD

200+00 195+00 440+00 445+00 450+00 455+00 460+00 405+00 410+00 415+00 420+00 225+00 220+00 215+00 210+00 205+00

EL-9 EL-10 CL-4

- PHASE 1, STAGE 1 CONSTRUCTION (ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC)
- PHASE 1, STAGE 2 CONSTRUCTION (PAVEMENT CONSTRUCTION - WORTHINGTON RD)
- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

67
1349

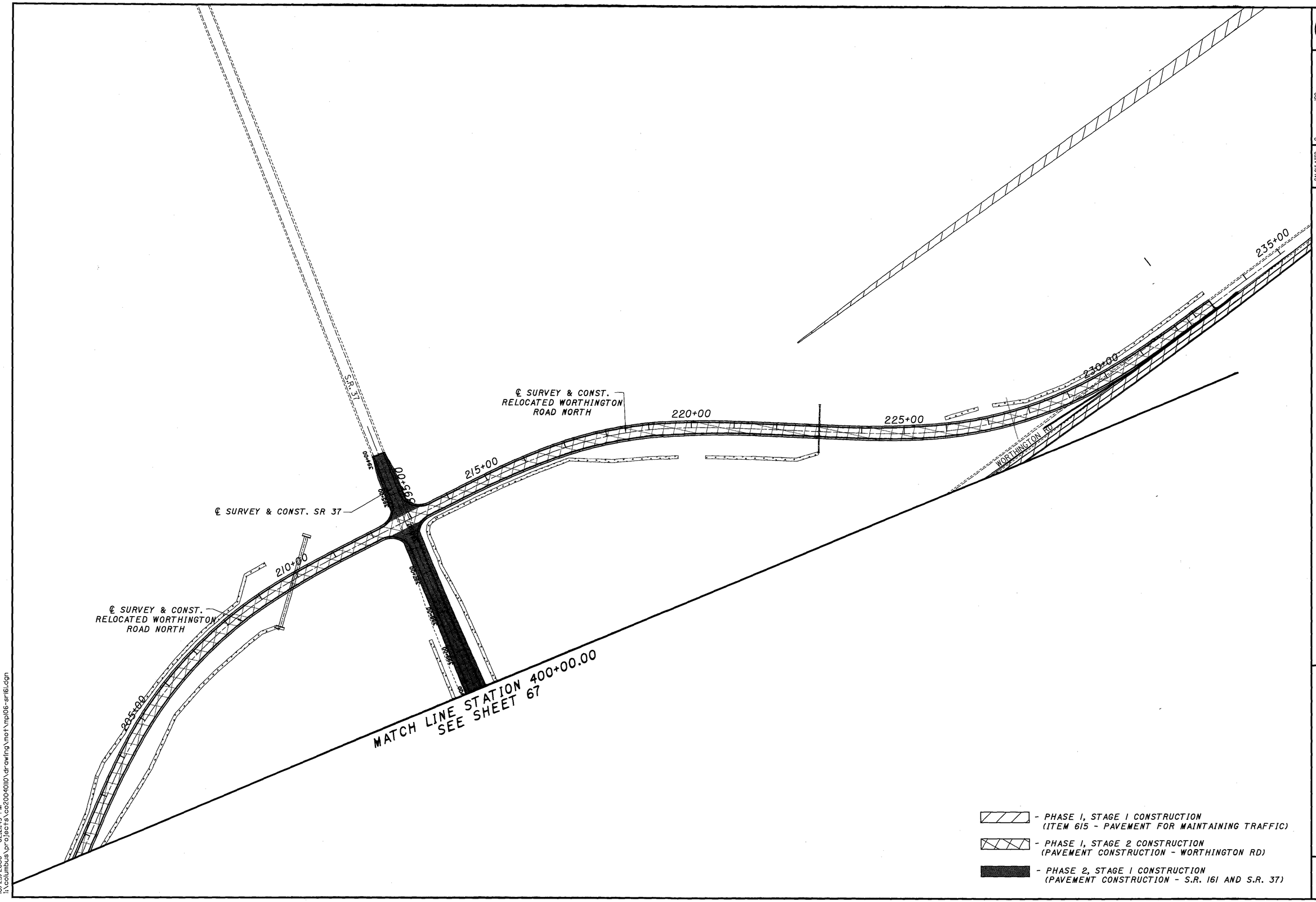
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MAINTENANCE OF TRAFFIC
OVERALL PHASING

CALCULATED ZTW
CHECKED CSR

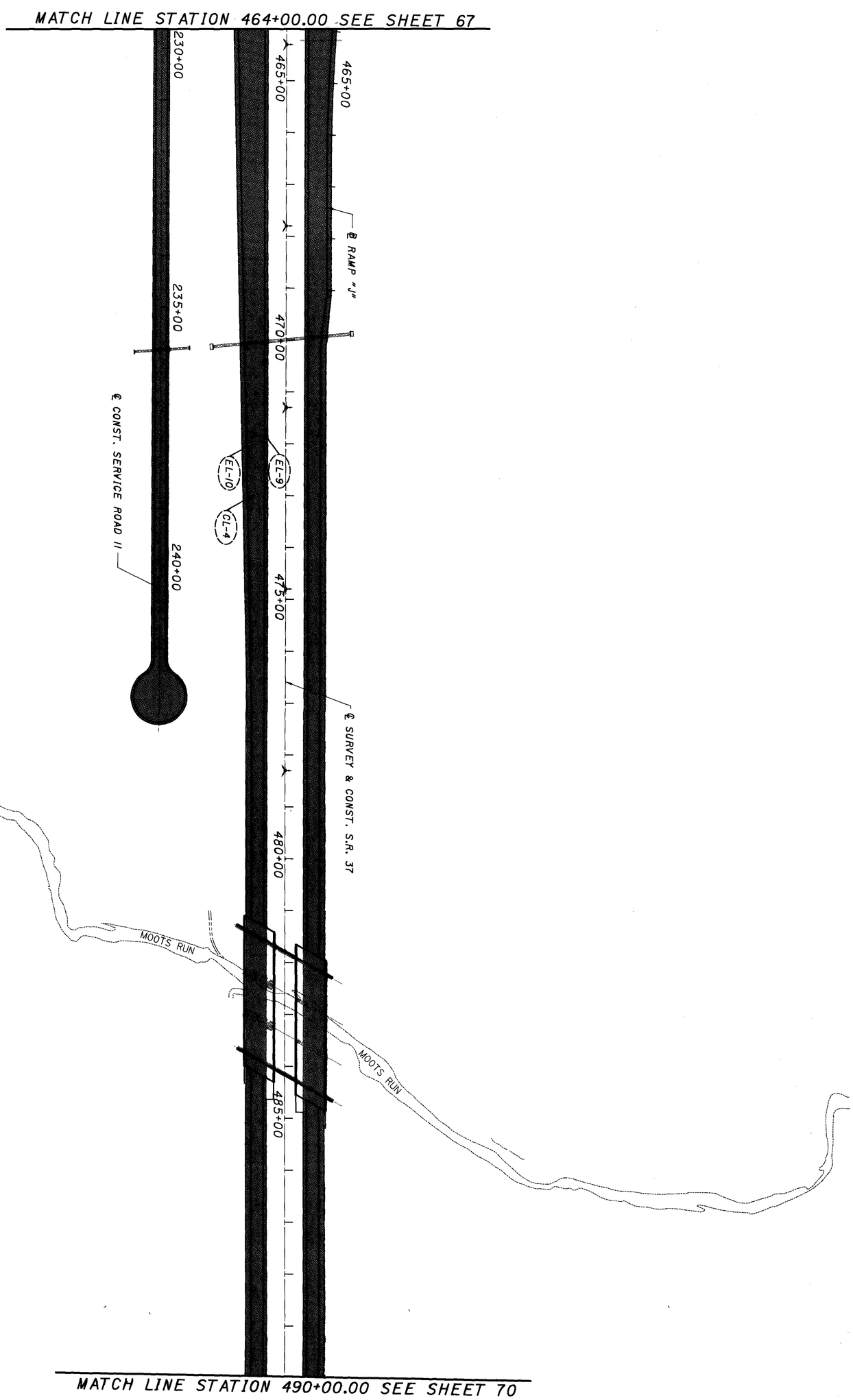
0 50 100 200
HORIZONTAL SCALE IN FEET

LIC-161-6.65
LIC-37-10.25



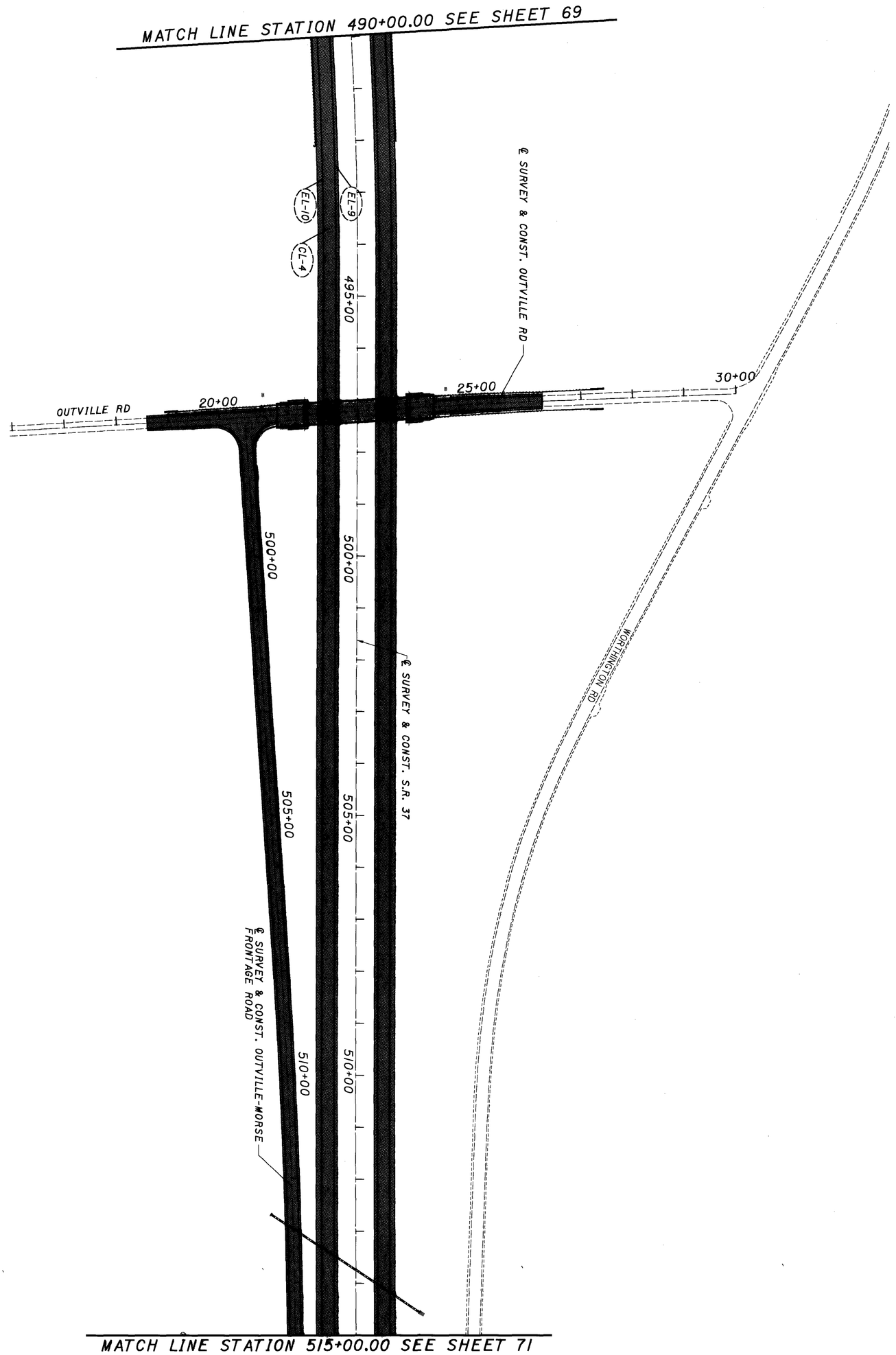
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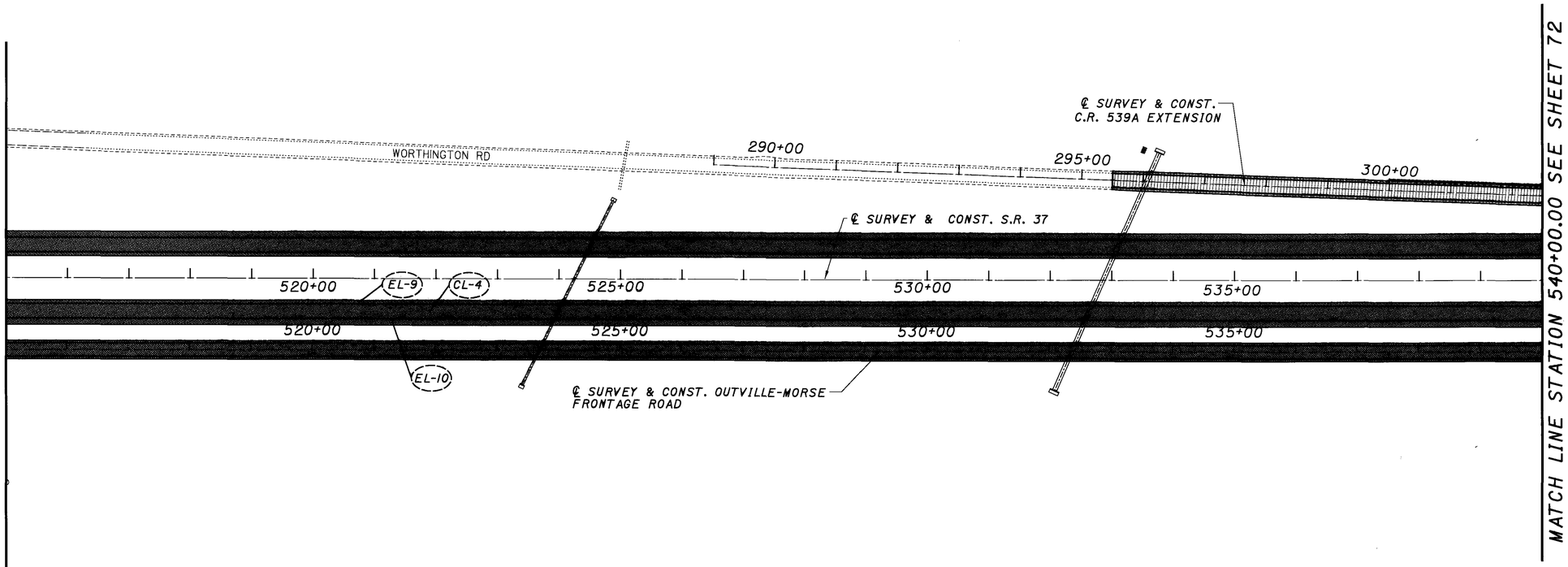
69 / 349	LIC-161-6.65 LIC-37-10.25	MAINTENANCE OF TRAFFIC OVERALL PHASING	CALCULATED ZTW CHECKED CSR	0 100 50 200 HORIZONTAL SCALE IN FEET

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- PHASE 2, STAGE I CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

70 / 349	LIC-161-6.65 LIC-37-10.25	MAINTENANCE OF TRAFFIC OVERALL PHASING	CALCULATED ZTW CHECKED CSR	0 100 50 200 HORIZONTAL SCALE IN FEET



- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)
- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

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CALCULATED ZTW
CHECKED CSR

0 50 100 200
HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

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MATCH LINE STATION 565+00.00 SEE SHEET 72

330+00
335+00
340+00
345+00
350+00
EL-6
EL-9
570+00
EL-10
570+00
575+00
580+00
580+00
585+00
EL-7
CL-3
CL-4

℄ SURVEY & CONST.
C.R. 539A EXTENSION

℄ SURVEY & CONST. S.R. 37

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

PHASE 2, STAGE 2 CONSTRUCTION (PAVEMENT FOR MOT)
PHASE 3, STAGE 1 CONSTRUCTION
(PAVEMENT CONSTRUCTION)

CHINNEY CREEK

MATCH LINE STATION 590+00.00 SEE SHEET 74

- PHASE 2, STAGE 1 CONSTRUCTION (ITEM 615 - PAVEMENT CONSTRUCTION
- PHASE 2, STAGE 2 CONSTRUCTION (PAVEMENT FOR MAINTAINING TRAFFIC)
- PHASE 2, STAGE 3 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)
- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

N

0 50 100 200
HORIZONTAL SCALE IN FEET

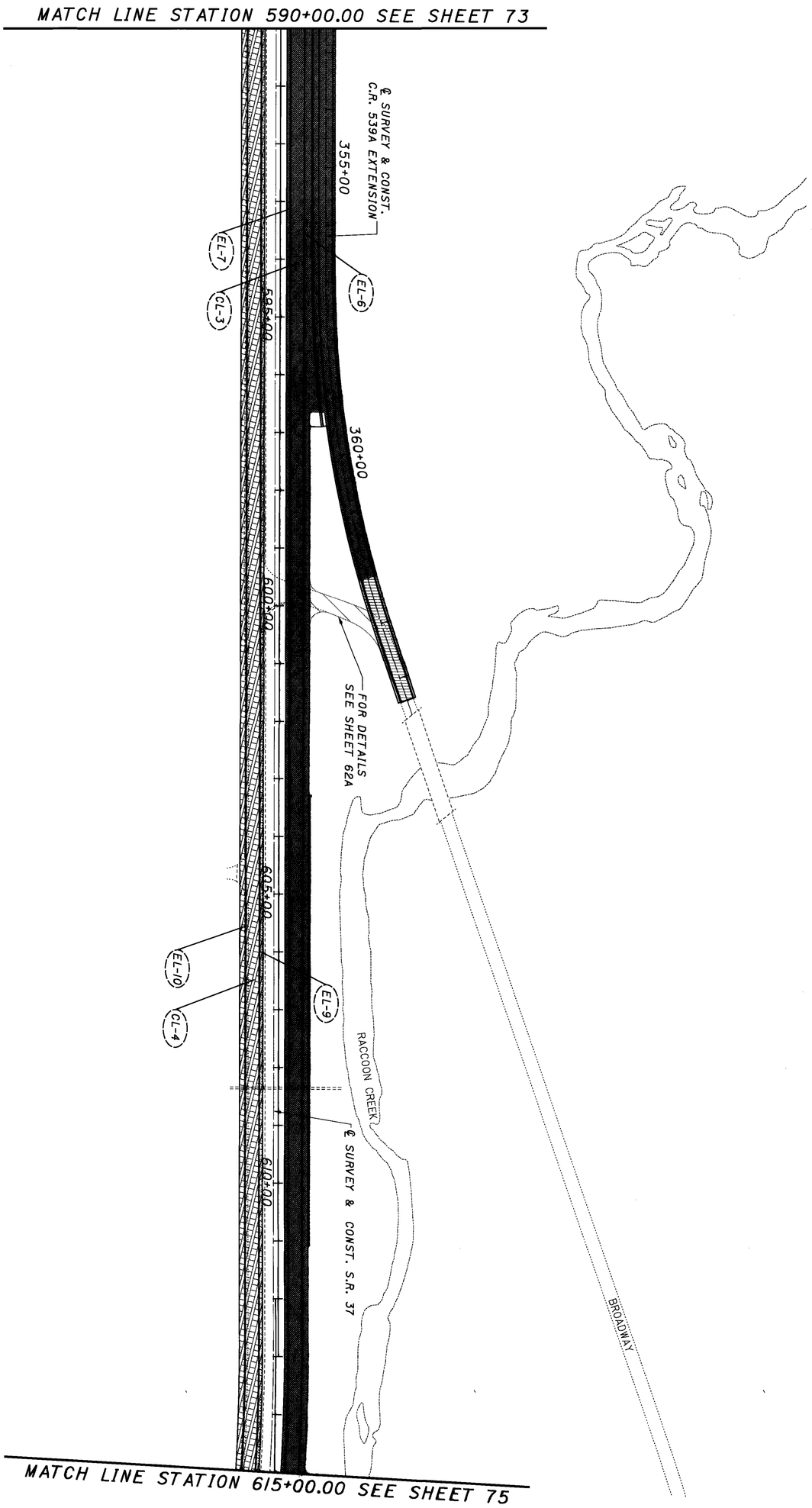
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC
OVERALL PHASING

LIC-161-6.65
LIC-37-10.25

73
1349

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- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)
- PHASE 2, STAGE 2 CONSTRUCTION (ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC)
- PHASE 2, STAGE 3 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)
- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

74
1349

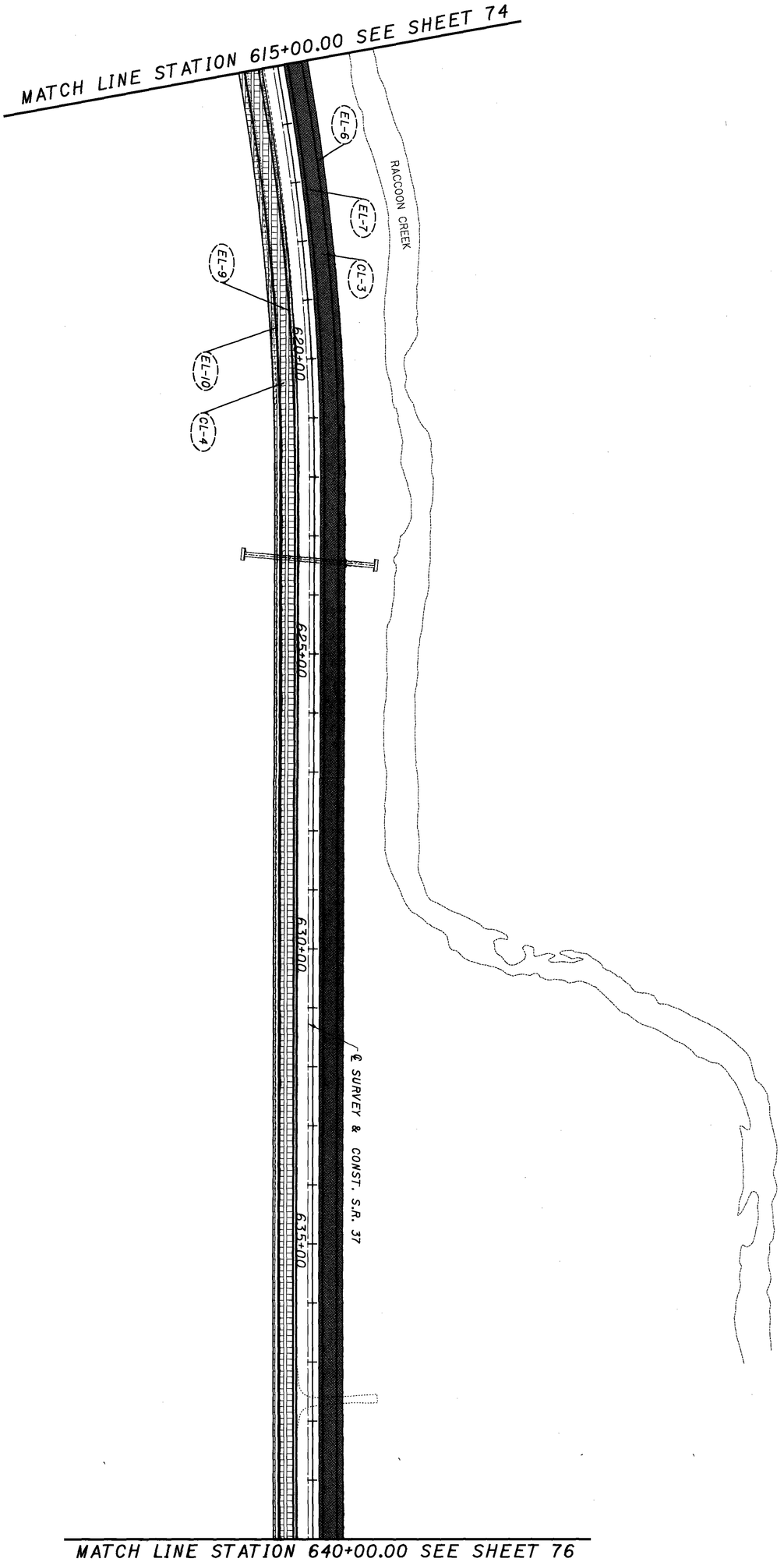
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LIC-37-10.25

MAINTENANCE OF TRAFFIC
OVERALL PHASING

CALCULATED ZTW
CHECKED CSR

0 50 100 200
HORIZONTAL SCALE IN FEET

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- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

- PHASE 2, STAGE 3 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

75
1349

LIC-161-6.65
LIC-37-10.25

MAINTENANCE OF TRAFFIC
OVERALL PHASING

CALCULATED ZTW
CHECKED CSR

0 100
50 200
HORIZONTAL SCALE IN FEET

RACCOON CREEK

RACCOON CREEK

PHASE 2, STAGE 2 CONSTRUCTION (PAVEMENT FOR MOT)
PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)

MATCH LINE STATION 640+00.00 SEE SHEET 75

℄ SURVEY & CONST. S.R. 37

EL-6 EL-7 CL-3

EL-9 EL-10 CL-4

645+00 650+00 655+00 660+00

S.R. 37

S.R. 37

END PROJECT
STA. 654+00.00
S.L.M. 12.39

END RESURFACING
STA. 662+00.00
S.R. 37

MATCH LINE STATION 665+00.00 SEE SHEET 77

NOTE:
FOR CROSS OVER DETAIL SEE SHEET NO. 61

- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)
- PHASE 2, STAGE 2 CONSTRUCTION (ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC)
- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

0 50 100 200 HORIZONTAL SCALE IN FEET

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC OVERALL PHASING

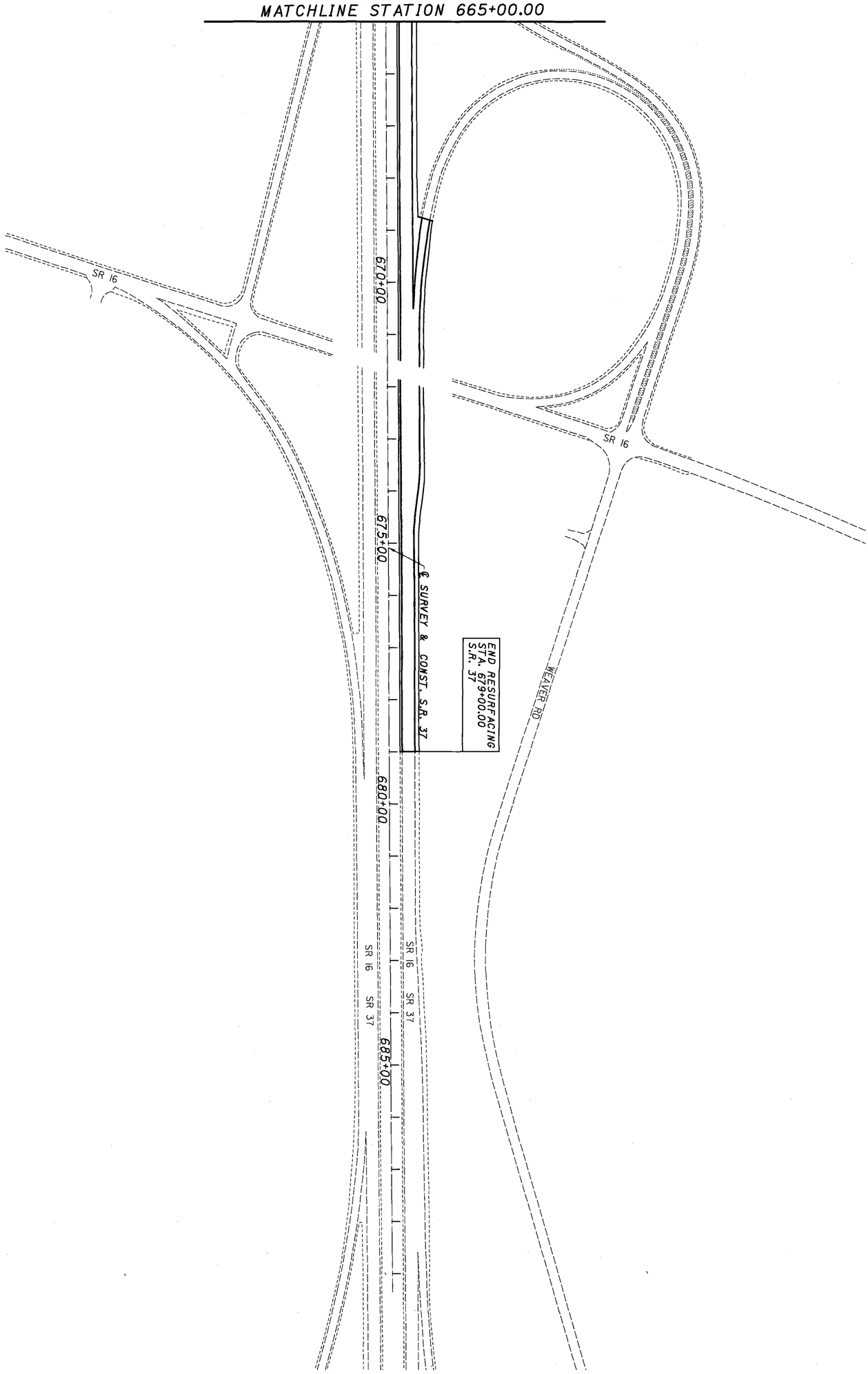
LIC-161-6.65
LIC-37-10.25

76
349

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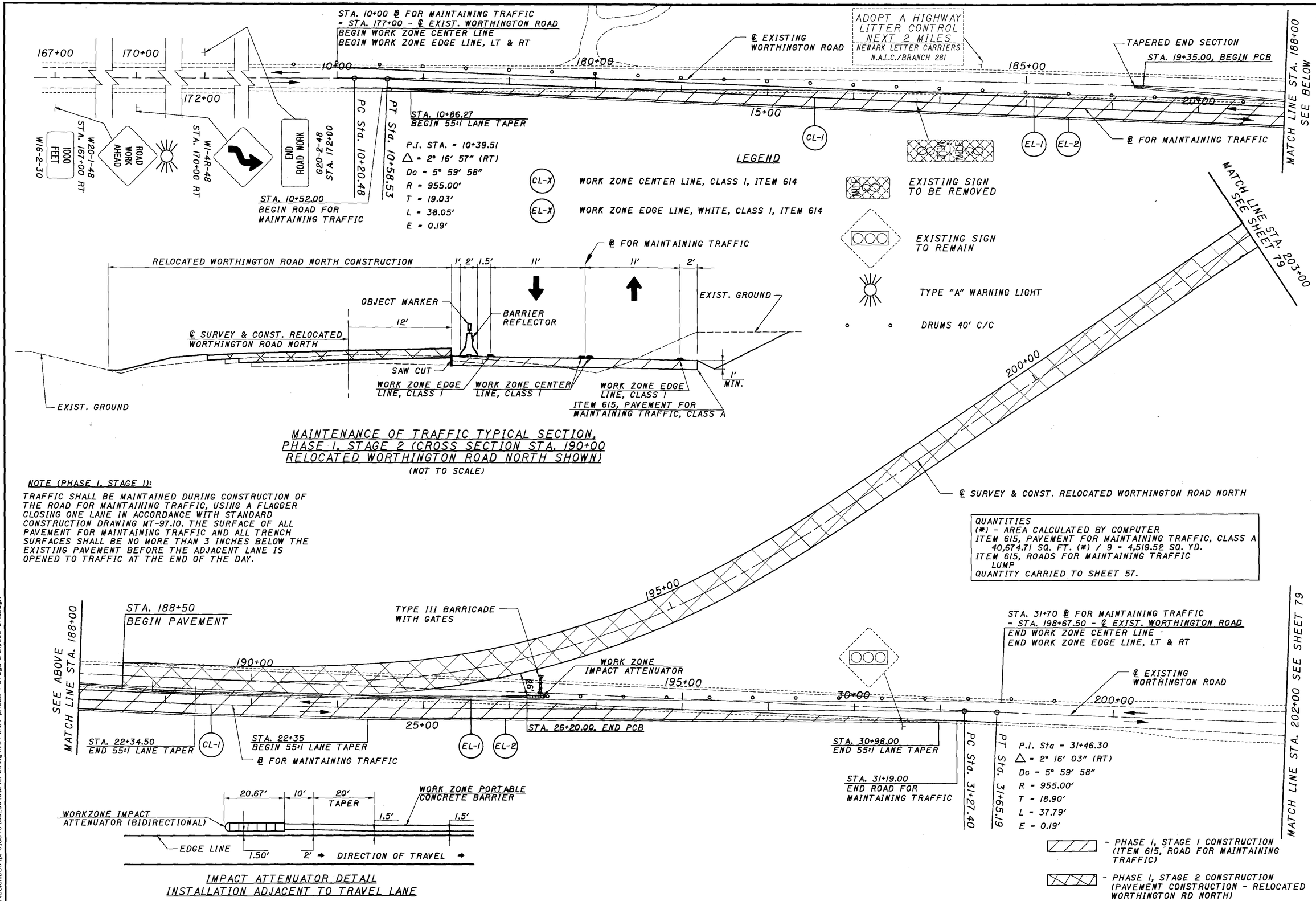
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SEE SHEET 76
MATCHLINE STATION 665+00.00



77 / 349	LIC-161-6.65 LIC-37-10.25	**MAINTENANCE OF TRAFFIC** **OVERALL PHASING**

0 100
50 200
HORIZONTAL
SCALE IN FEET



N

0 25 50 100
HORIZONTAL
SCALE IN FEET

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 1, STAGES 1 & 2

LIC-161-6.65
LIC-37-10.25

78
1349

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MATCH LINE STA. 203+00 SEE SHEET 78

205+00

210+00

215+00

℄ SURVEY & CONST. RELOCATED
WORTHINGTON ROAD NORTH

MATCH LINE STA. 216+00 SEE SHEET 80

LEGEND

CL-X — WORK ZONE CENTER LINE, CLASS I, ITEM 614

EL-X — WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614

ONLY — EXISTING SIGN TO REMAIN

- PAVEMENT MARKING REMOVAL

- PHASE I, STAGE 2 CONSTRUCTION (PAVEMENT CONSTRUCTION - RELOCATED WORTHINGTON RD NORTH)

DRUMS 40' C/C

ONLY

S.R. 37

WEST 37

NORTH 37

WEST 161

SPEED LIMIT 55

℄ EXISTING
WORTHINGTON ROAD

205+00

210+00

WORTHINGTON ROAD

MATCH LINE STA. 202+00 SEE SHEET 78

SPEED LIMIT 55

Worthington Road

York Road

191

37

STA. 50+00 - ℄ FOR MAINTAINING TRAFFIC -
STA. 213+7.80 ℄ EXIST. WORTHINGTON ROAD
BEGIN WORK ZONE CENTER LINE

STA. 51+54
BEGIN 101 WORK ZONE
EDGE LINE TAPER, LT

EL-1

CL-1

50+00

℄ FOR MAINTAINING TRAFFIC

EAST 37

MATCH LINE STA. 215+00 SEE SHEET 80

NOTE (PHASE I, STAGE I):

TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE PAVEMENT FOR MAINTAINING TRAFFIC, TYPE I, AS PER PLAN, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10.
THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC
PHASE 1, STAGES 1 & 2

LIC-161-6.65
LIC-37-10.25

79
1349

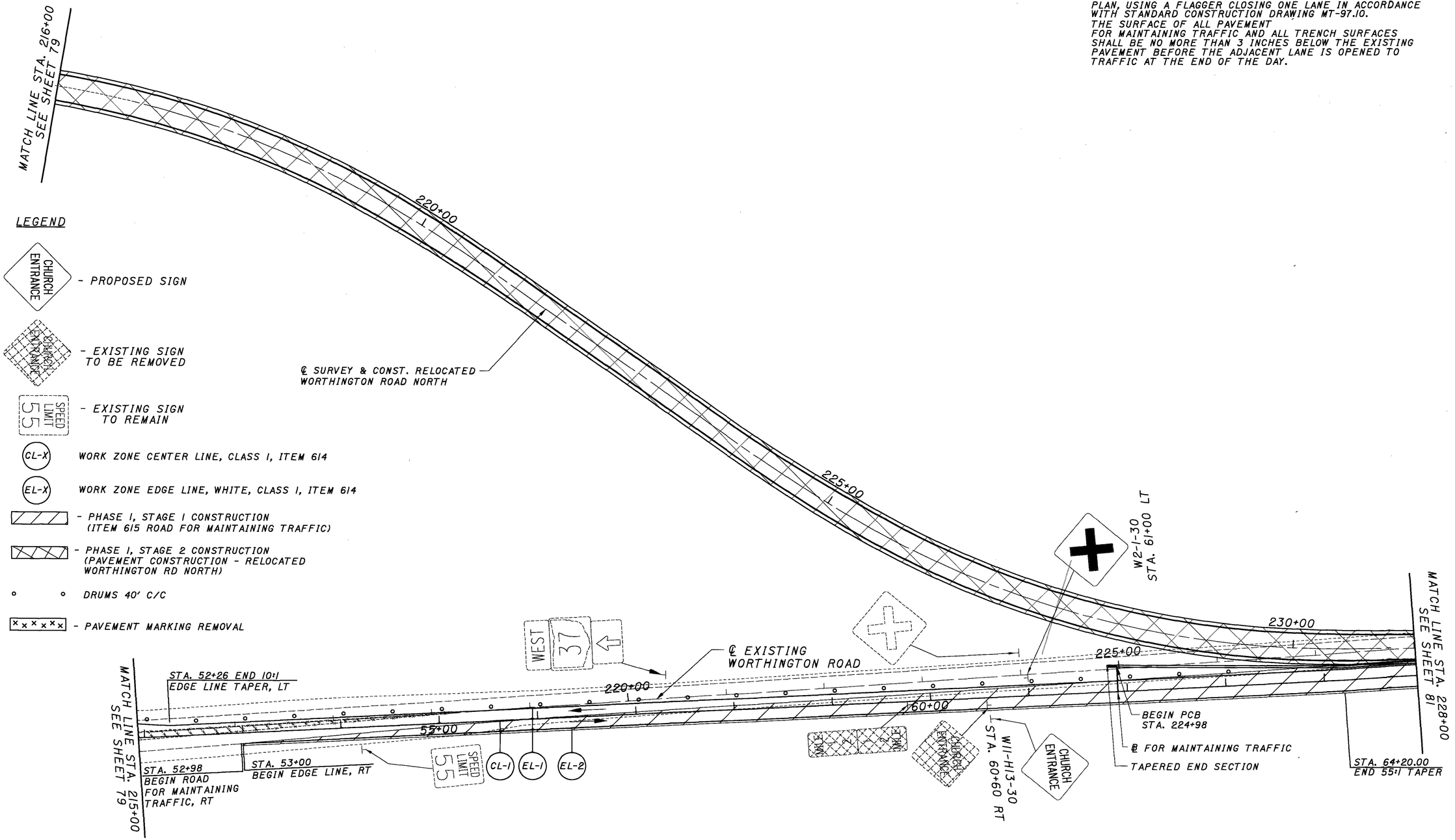
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NOTE (PHASE I, STAGE I):

TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE PAVEMENT FOR MAINTAING TRAFFIC, TYPE I, AS PER PLAN, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10.
THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.

LEGEND

- CHURCH ENTRANCE - PROPOSED SIGN
- CHURCH ENTRANCE - EXISTING SIGN TO BE REMOVED
- SPEED LIMIT 55 - EXISTING SIGN TO REMAIN
- (CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614
- (EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614
- PHASE I, STAGE I CONSTRUCTION (ITEM 615 ROAD FOR MAINTAINING TRAFFIC)
- PHASE I, STAGE 2 CONSTRUCTION (PAVEMENT CONSTRUCTION - RELOCATED WORTHINGTON RD NORTH)
- DRUMS 40' C/C
- PAVEMENT MARKING REMOVAL



N

0 25 50 100
HORIZONTAL SCALE IN FEET

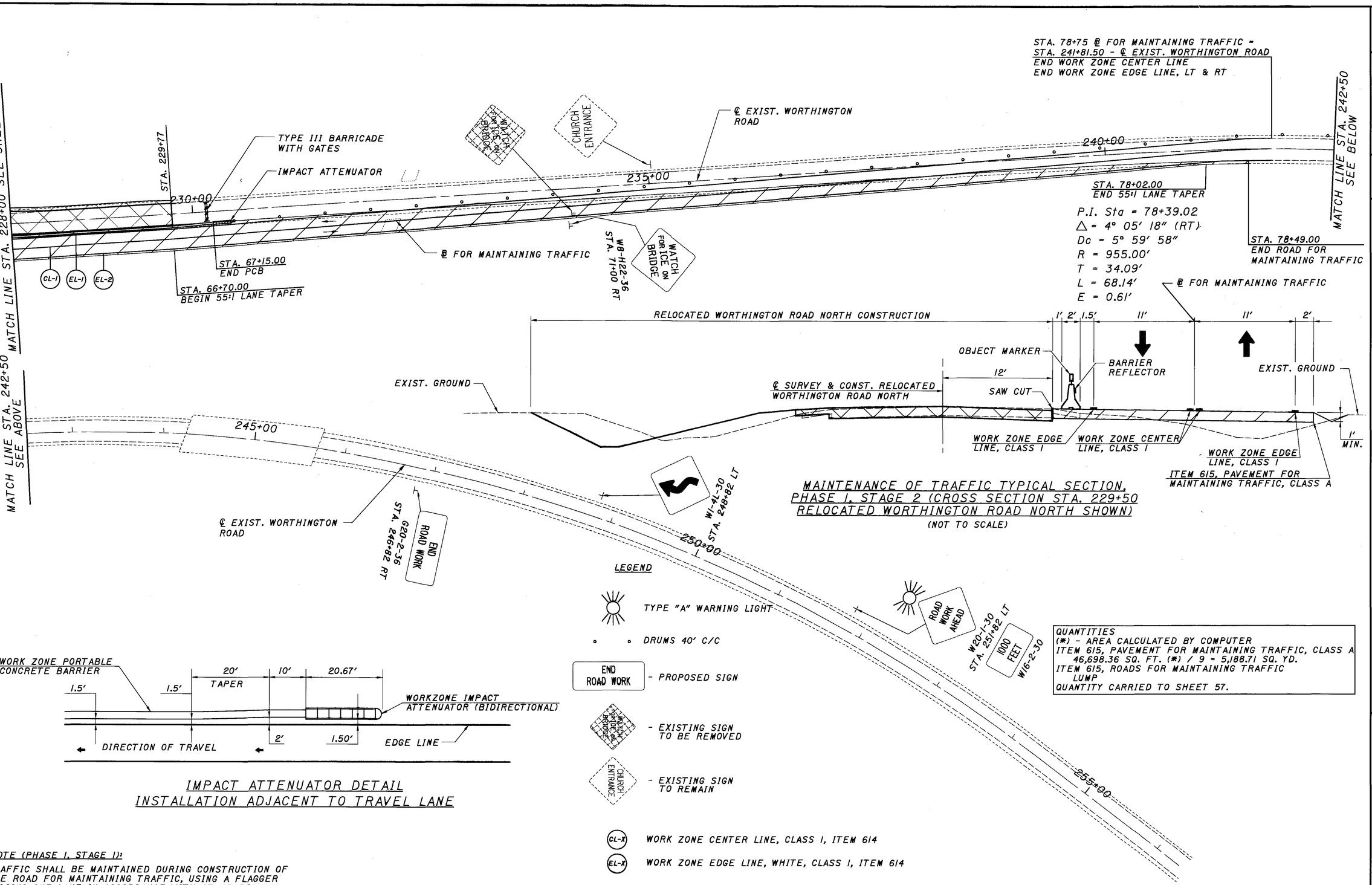
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 1, STAGES 1 & 2

LIC-161-6.65
LIC-37-10.25

80
1349

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MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE I, STAGE 2 (CROSS SECTION STA. 229+50 RELOCATED WORTHINGTON ROAD NORTH SHOWN)

(NOT TO SCALE)

IMPACT ATTENUATOR DETAIL INSTALLATION ADJACENT TO TRAVEL LANE

NOTE (PHASE I, STAGE I):

TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE ROAD FOR MAINTAINING TRAFFIC, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10. THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.

LEGEND

- TYPE "A" WARNING LIGHT
- DRUMS 40′ C/C
- END ROAD WORK - PROPOSED SIGN
- WATCH FOR ICE ON BRIDGE - EXISTING SIGN TO BE REMOVED
- CHURCH ENTRANCE - EXISTING SIGN TO REMAIN
- CL-X WORK ZONE CENTER LINE, CLASS I, ITEM 614
- EL-X WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614
- PHASE I, STAGE I CONSTRUCTION (ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC)
- PHASE I, STAGE 2 CONSTRUCTION (PAVEMENT CONSTRUCTION - RELOCATED WORTHINGTON RD NORTH)

QUANTITIES
(*) - AREA CALCULATED BY COMPUTER
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
46,698.36 SQ. FT. (*) / 9 = 5,188.71 SQ. YD.
ITEM 615, ROADS FOR MAINTAINING TRAFFIC
LUMP
QUANTITY CARRIED TO SHEET 57.

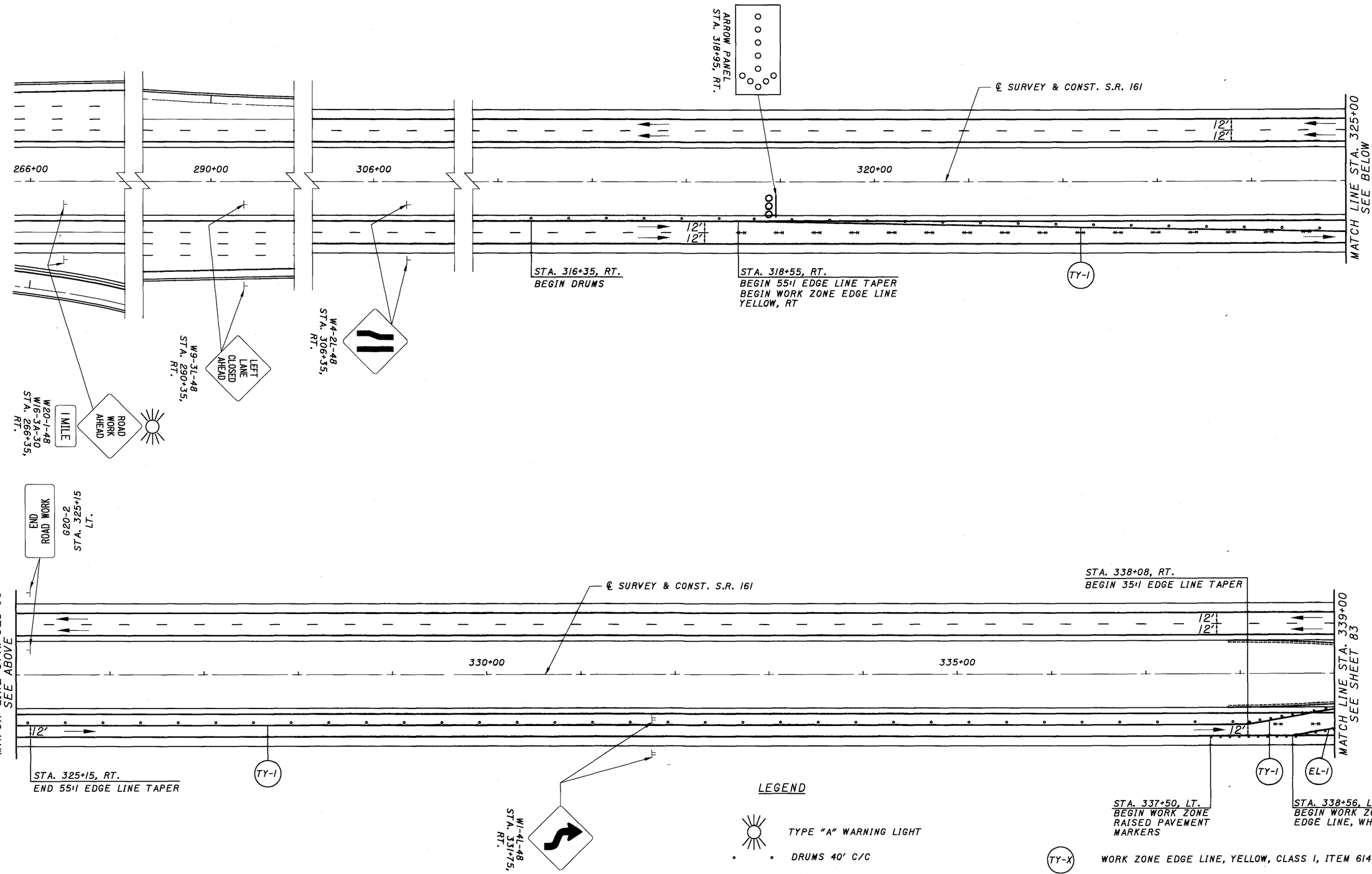
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 1, STAGES 1 & 2

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LIC-37-10.25

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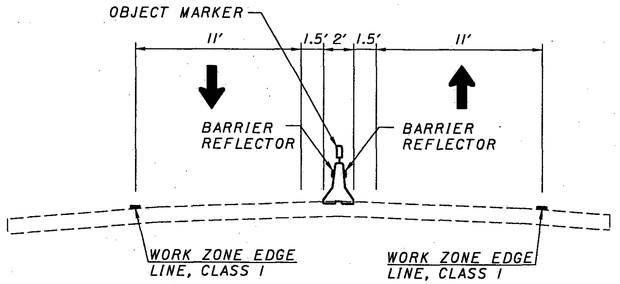
CALCULATED ZTW
CHECKED CSR

0 25 50 100
HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PHASE 2, STAGES 1 & 2

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LIC-37-10.25

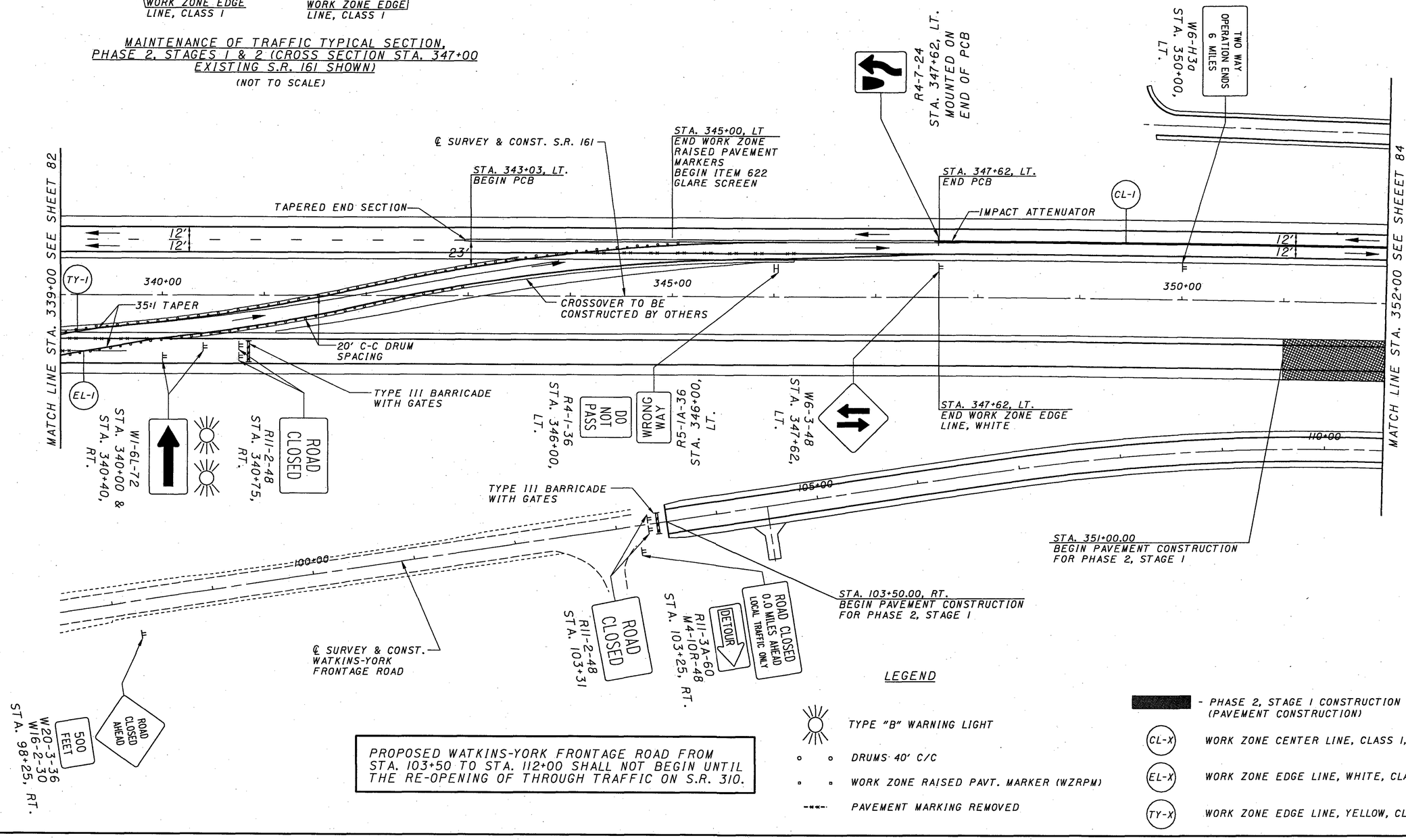
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MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE 2, STAGES 1 & 2 (CROSS SECTION STA. 347+00 EXISTING S.R. 161 SHOWN)

(NOT TO SCALE)

PROPOSED EASTBOUND S.R. 161 FROM STA. 351+00 TO STA. 360+00 SHALL NOT BEGIN UNTIL THE RE-OPENING OF THROUGH TRAFFIC ON S.R. 310.



PROPOSED WATKINS-YORK FRONTAGE ROAD FROM STA. 103+50 TO STA. 112+00 SHALL NOT BEGIN UNTIL THE RE-OPENING OF THROUGH TRAFFIC ON S.R. 310.

LEGEND

- TYPE "B" WARNING LIGHT
- DRUMS 40' C/C
- WORK ZONE RAISED PAVT. MARKER (WZRPM)
- PAVEMENT MARKING REMOVED
- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)
- (CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614
- (EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614
- (TY-X) WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED ZTW | CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 2, STAGES 1 & 2

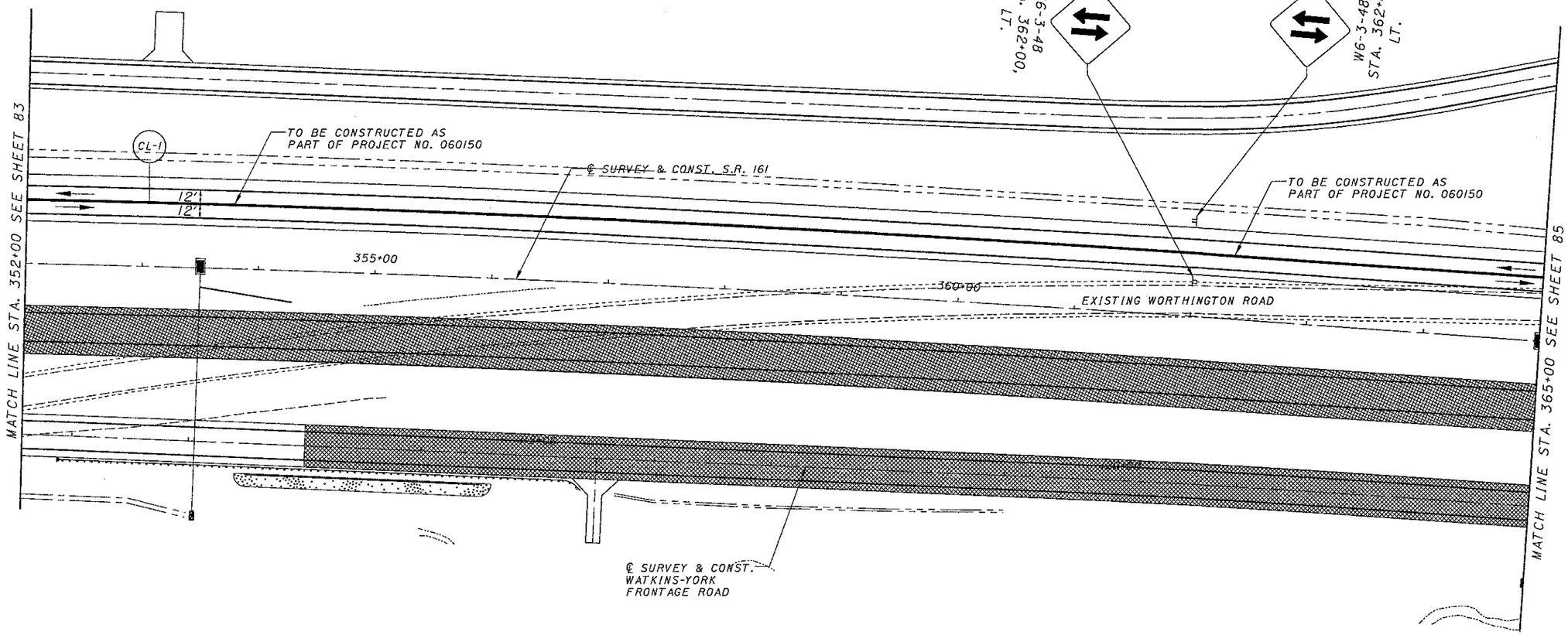
LIC-161-6.65
LIC-37-10.25

$USER $DATE$ $FILE$ $TIMESTAMP$

NOTE (PHASE 2, STAGE 2):

TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE ROAD FOR MAINTAINING TRAFFIC, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10. THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.

PROPOSED EASTBOUND S.R. 161 FROM STA. 351+00 TO STA. 360+00 SHALL NOT BEGIN UNTIL THE RE-OPENING OF THROUGH TRAFFIC ON S.R. 161.



LEGEND

- TYPE "A" WARNING LIGHT
- DRUMS 40' C/C
- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION
- PHASE 2, STAGE 2 CONSTRUCTION (ITEM 615, ROAD FOR MAINTAINING TRAFFIC)
- CL-X — WORK ZONE CENTER LINE, CLASS I, ITEM 614
- EL-X — WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

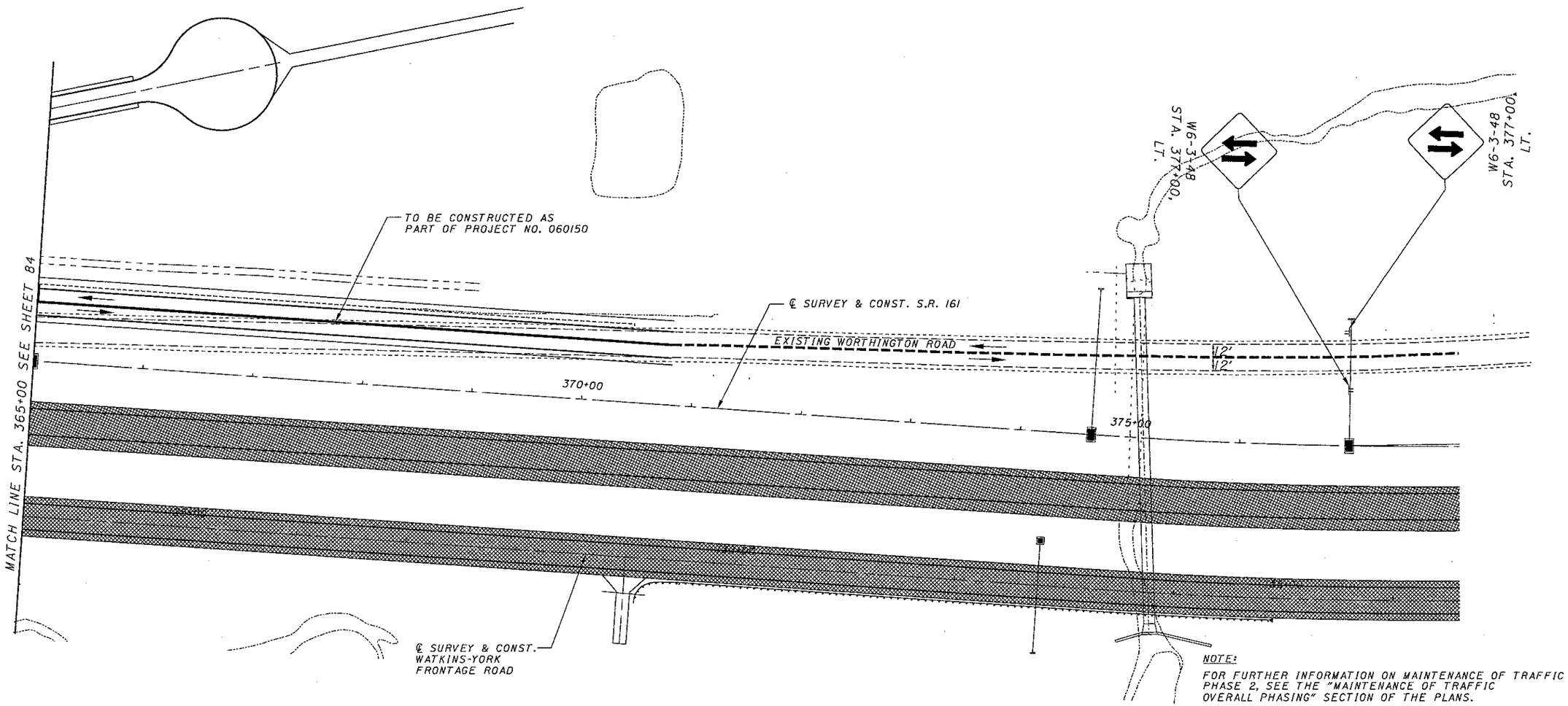
MAINTENANCE OF TRAFFIC
PHASE 2, STAGES 1 & 2

LIC-161-6.65
LIC-37-10.25

84
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

NOTE (PHASE 2, STAGE 2):
TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE ROAD FOR MAINTAINING TRAFFIC, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10. THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.



NOTE:
FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 2, SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.

LEGEND

TYPE "A" WARNING LIGHT

DRUMS 40' C/C

- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)

- PHASE 2, STAGE 2 CONSTRUCTION (ITEM 615, ROAD FOR MAINTAINING TRAFFIC)

(CL-X) WORK ZONE CENTER LINE, CLASS 1, ITEM 614

(EL-X) WORK ZONE EDGE LINE, WHITE, CLASS 1, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC
PHASE 2, STAGES 1 & 2

LIC-161-6.65
LIC-37-10.25

85
1349

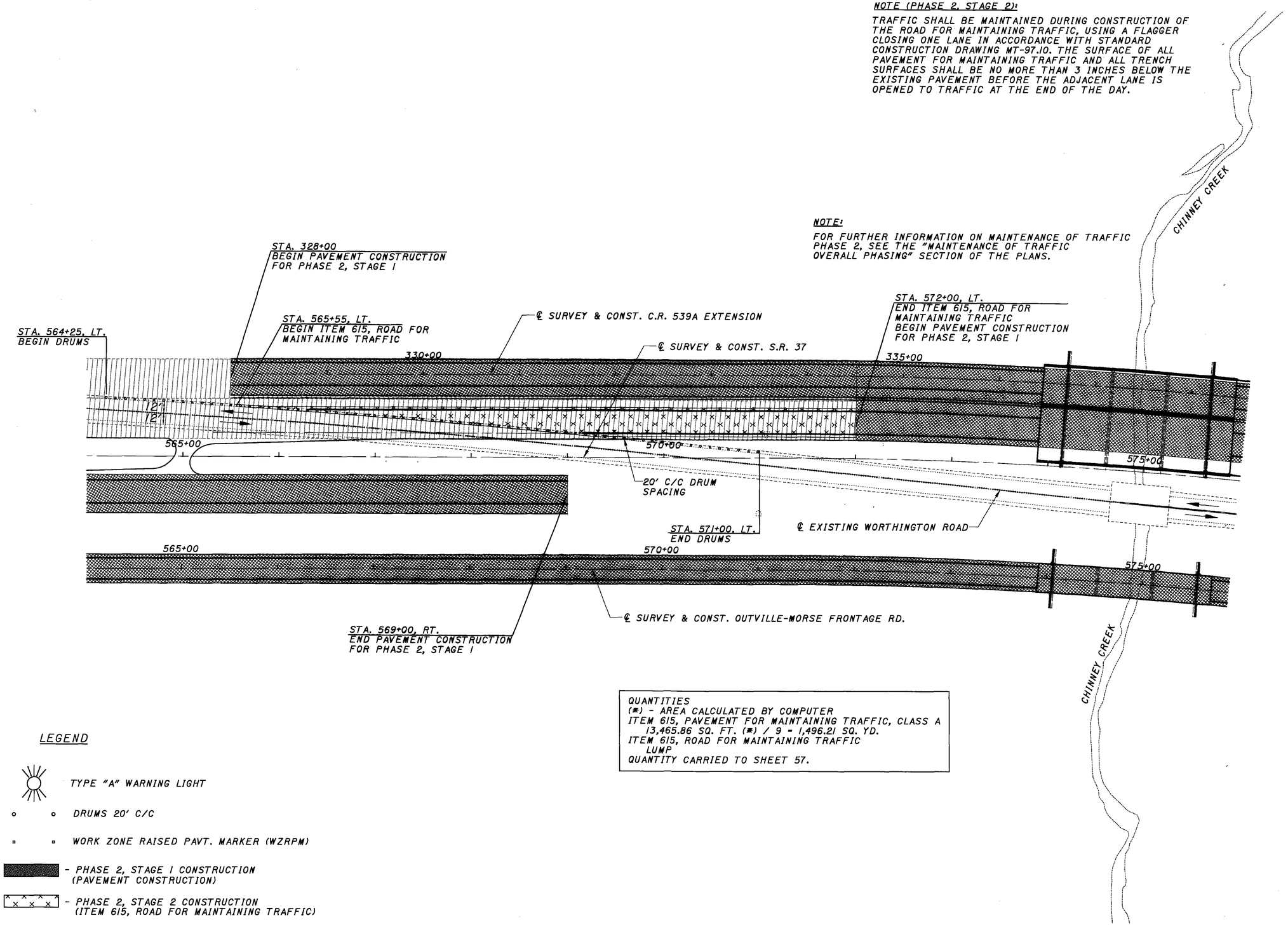
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$DATE$
$FILE$
$TIMESTAMP$

NOTE (PHASE 2, STAGE 2):

TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE ROAD FOR MAINTAINING TRAFFIC, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10. THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.

NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 2, SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.



QUANTITIES
(*) - AREA CALCULATED BY COMPUTER
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
13,465.86 SQ. FT. (*) / 9 = 1,496.21 SQ. YD.
ITEM 615, ROAD FOR MAINTAINING TRAFFIC
LUMP
QUANTITY CARRIED TO SHEET 57.

LEGEND

- TYPE "A" WARNING LIGHT
- DRUMS 20' C/C
- WORK ZONE RAISED PAVT. MARKER (WZRPM)
- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)
- PHASE 2, STAGE 2 CONSTRUCTION (ITEM 615, ROAD FOR MAINTAINING TRAFFIC)

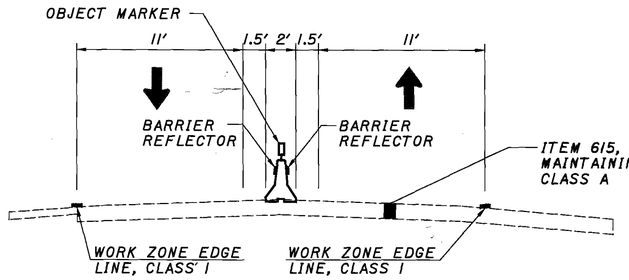
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 2, STAGE 2

LIC-161-6.65
LIC-37-10.25

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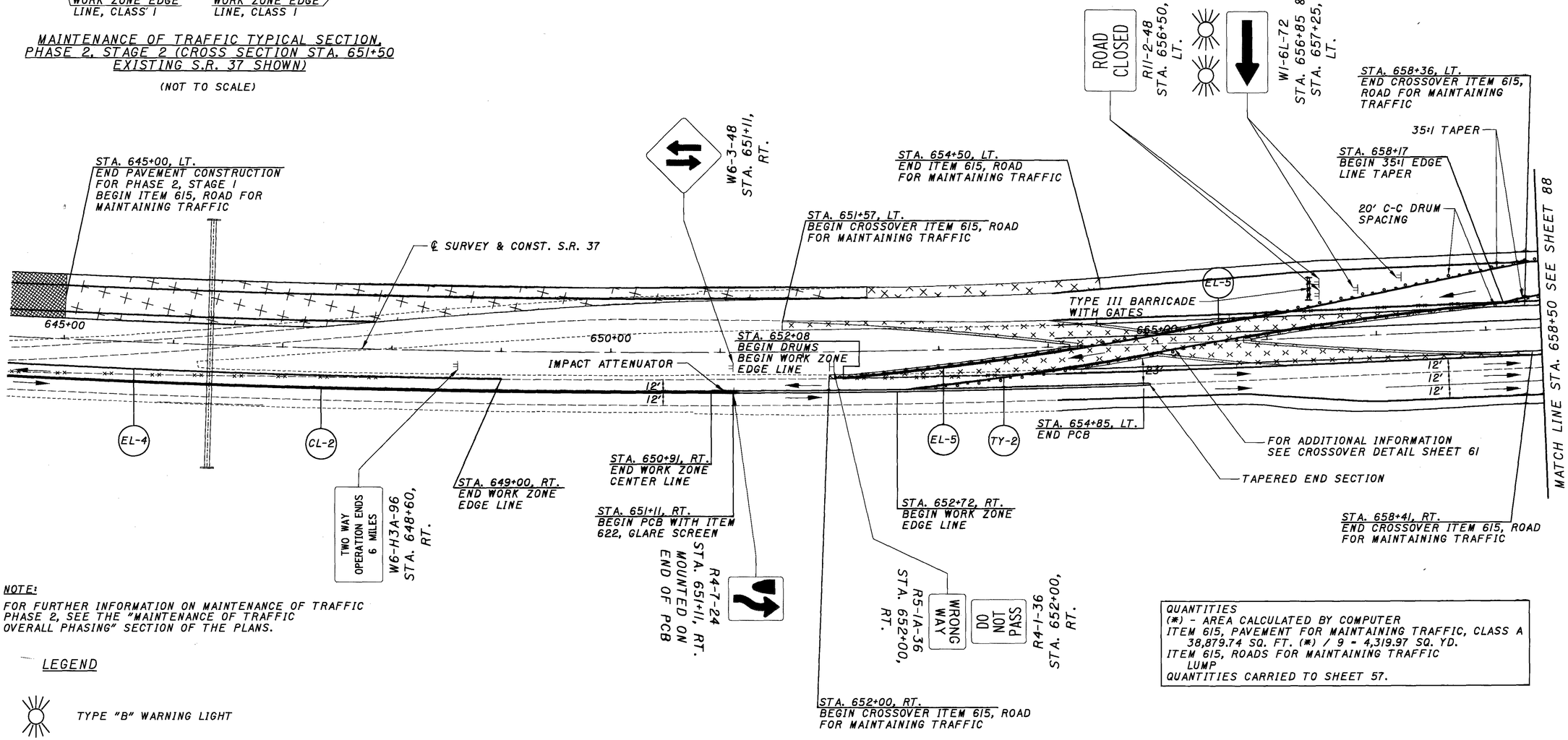
MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE 2, STAGE 2 (CROSS SECTION STA. 651+50 EXISTING S.R. 37 SHOWN)

(NOT TO SCALE)

NOTE (PHASE 2, STAGE 2):

TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION OF THE ROAD FOR MAINTAINING TRAFFIC, USING A FLAGGER CLOSING ONE LANE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-97.10. THE SURFACE OF ALL PAVEMENT FOR MAINTAINING TRAFFIC AND ALL TRENCH SURFACES SHALL BE NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BEFORE THE ADJACENT LANE IS OPENED TO TRAFFIC AT THE END OF THE DAY.

INSTALL WORK ZONE CROSSOVER LIGHTING SYSTEM AS PER STANDARD CONSTRUCTION DRAWING MT-100.00.



NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 2, SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.

QUANTITIES
(*) - AREA CALCULATED BY COMPUTER
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
38,879.74 SQ. FT. (*) / 9 = 4,319.97 SQ. YD.
ITEM 615, ROADS FOR MAINTAINING TRAFFIC
LUMP
QUANTITIES CARRIED TO SHEET 57.

LEGEND

- TYPE "B" WARNING LIGHT
- DRUMS 40' C/C
- WORK ZONE RAISED PAVT. MARKER (WZRPM)
- PAVEMENT MARKING REMOVED
- PHASE 2, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)
- PHASE 2, STAGE 2 CONSTRUCTION (ITEM 615, ROAD FOR MAINTAINING TRAFFIC)
- (CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614
- (EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614
- (TY-X) WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

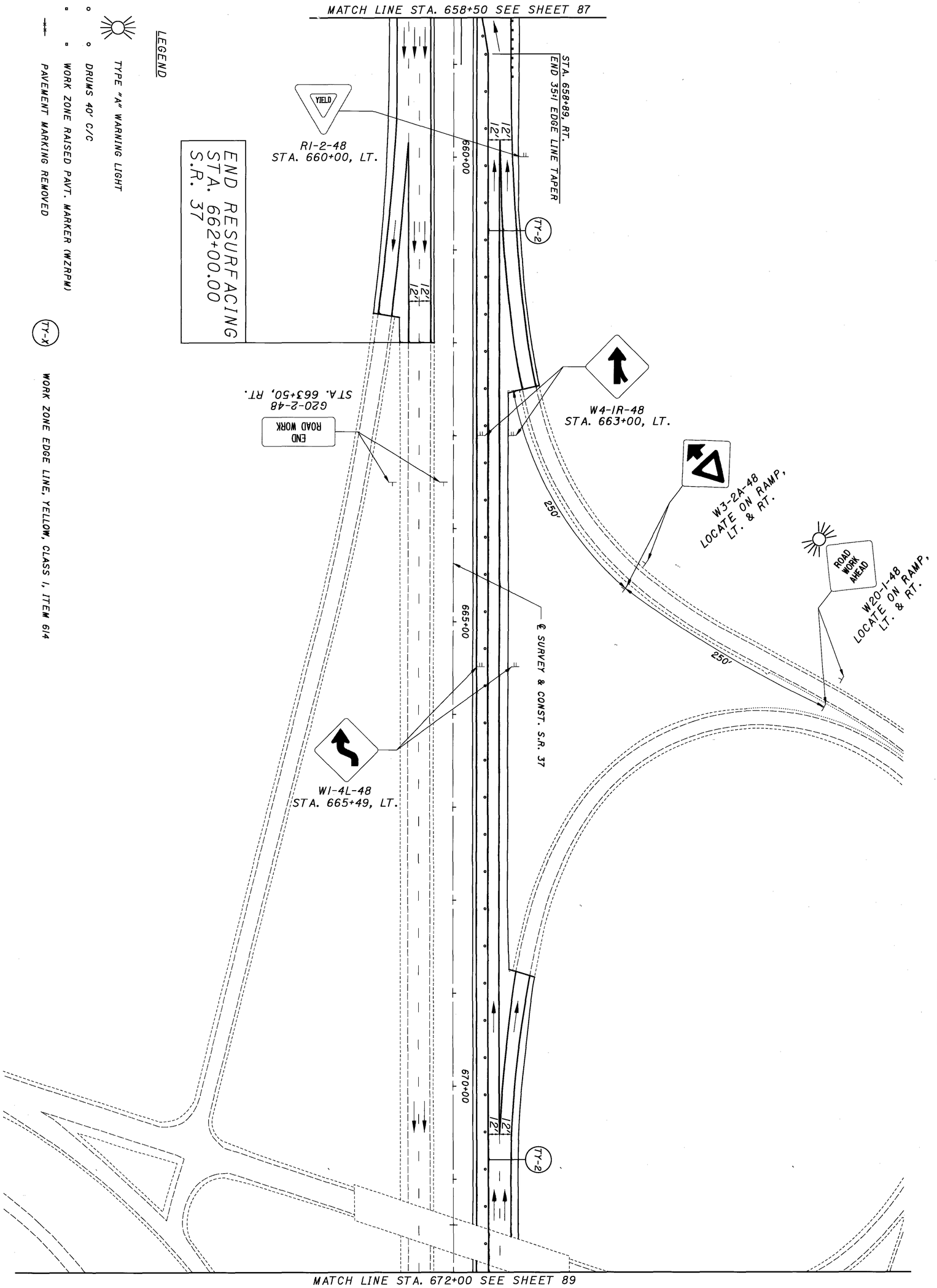
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 2, STAGES 1 & 2

LIC-161-6.65
LIC-37-10.25

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88 / 349	LIC-161-6.65 LIC-37-10.25	MAINTENANCE OF TRAFFIC PHASE 2, STAGE 2	CALCULATED ZTW CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

END RESURFACING
STA. 679+00.00
S.R. 37

STA. 672+09, LT.
BEGIN 55:1 EDGE LINE TAPER

TY-2

STA. 678+69, LT.
END 55:1 EDGE LINE TAPER

℄ SURVEY & CONST. S.R. 37

STA. 680+89, LT.
END DRUMS

12'
12'

675+00

680+00

12'
12'
12'

MATCH LINE STA. 672+00 SEE SHEET 88

MATCH LINE STA. 685+00 SEE SHEET 90

ARROW PANEL
STA. 678+29, LT.

LEGEND

TYPE "B" WARNING LIGHT

DRUMS 40' C/C

WORK ZONE RAISED PAVT. MARKER (WZRPM)

PAVEMENT MARKING REMOVED

TY-X — WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 2, STAGE 2

LIC-161-6.65
LIC-37-10.25

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MATCH LINE STA. 685+00 SEE SHEET 89

LEGEND

TYPE "A" WARNING LIGHT

℄ SURVEY & CONST. S.R. 37

699+00

W4-2L-48
STA. 688+69, LT.

150'

ROAD WORK AHEAD

W20-1-48
LOCATE ON RAMP, LT. & RT.

LEFT LANE CLOSED AHEAD

W9-H3-48
APPROX. STA. 698+69, LT.

699+00

731+00

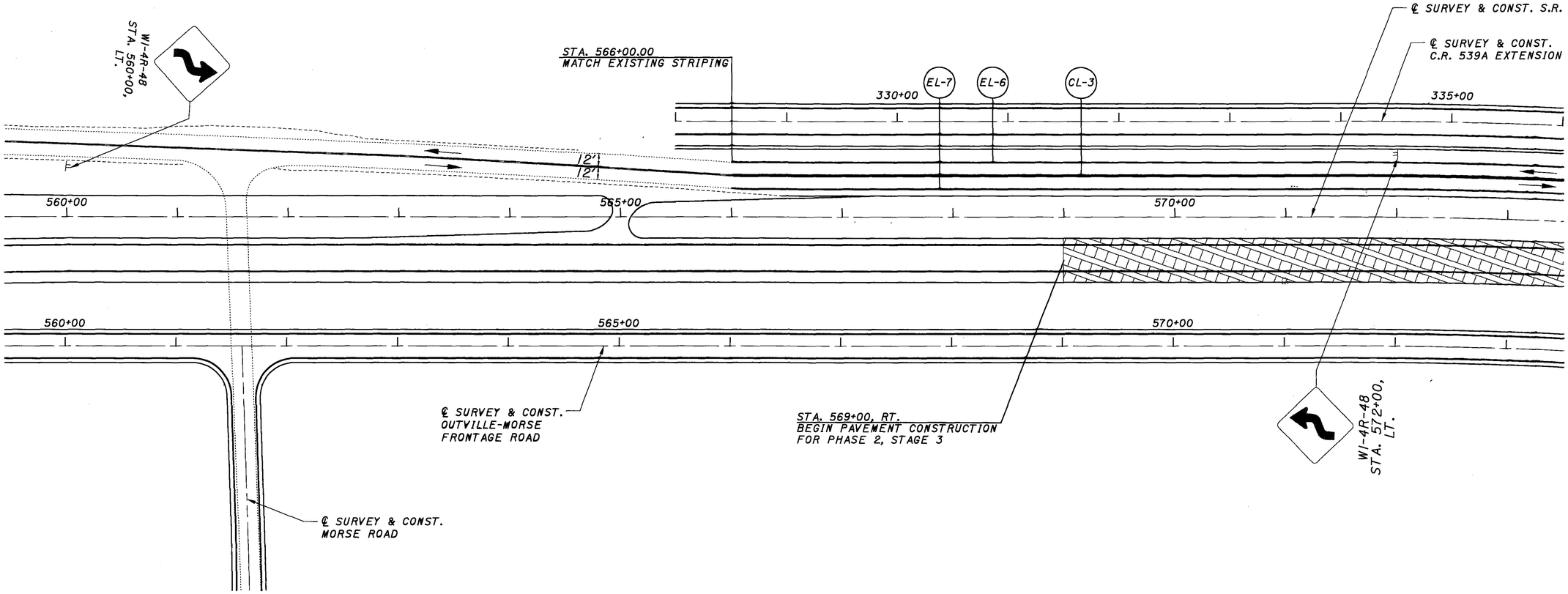
ROAD WORK AHEAD

1 MILE

W20-1-48
W16-3A-30
APPROX. STA. 730+69, LT.

NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 2, PLEASE SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.



LEGEND

- PHASE 2, STAGE 3 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)

(CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614

(EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614

N

0 25 50 100 HORIZONTAL SCALE IN FEET

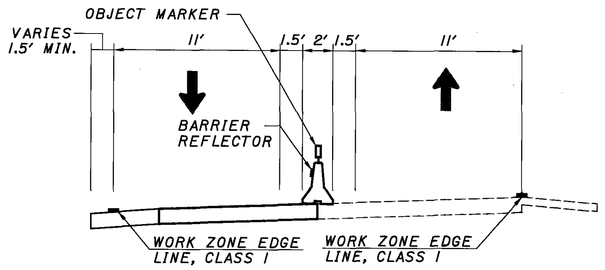
CALCULATED ZTW

CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 2, STAGE 3

LIC-161-6.65
LIC-37-10.25

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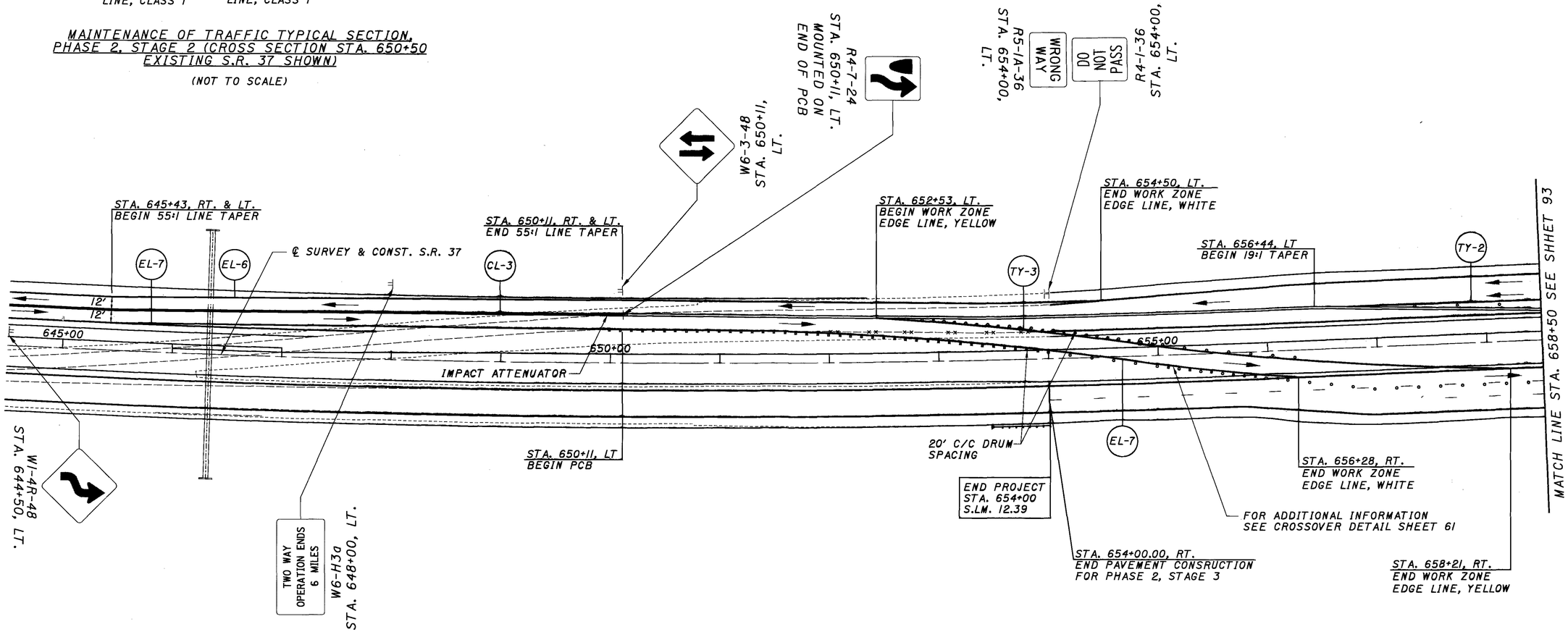


MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE 2, STAGE 2 (CROSS SECTION STA. 650+50 EXISTING S.R. 37 SHOWN)

(NOT TO SCALE)

NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 2, SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.



LEGEND

- TYPE "B" WARNING LIGHT
- DRUMS 40' C/C
- WORK ZONE RAISED PAVT. MARKER (WZRPM)
- PAVEMENT MARKING REMOVED
- PHASE 2, STAGE 3 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 37)
- (CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614
- (EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614
- (TY-X) WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

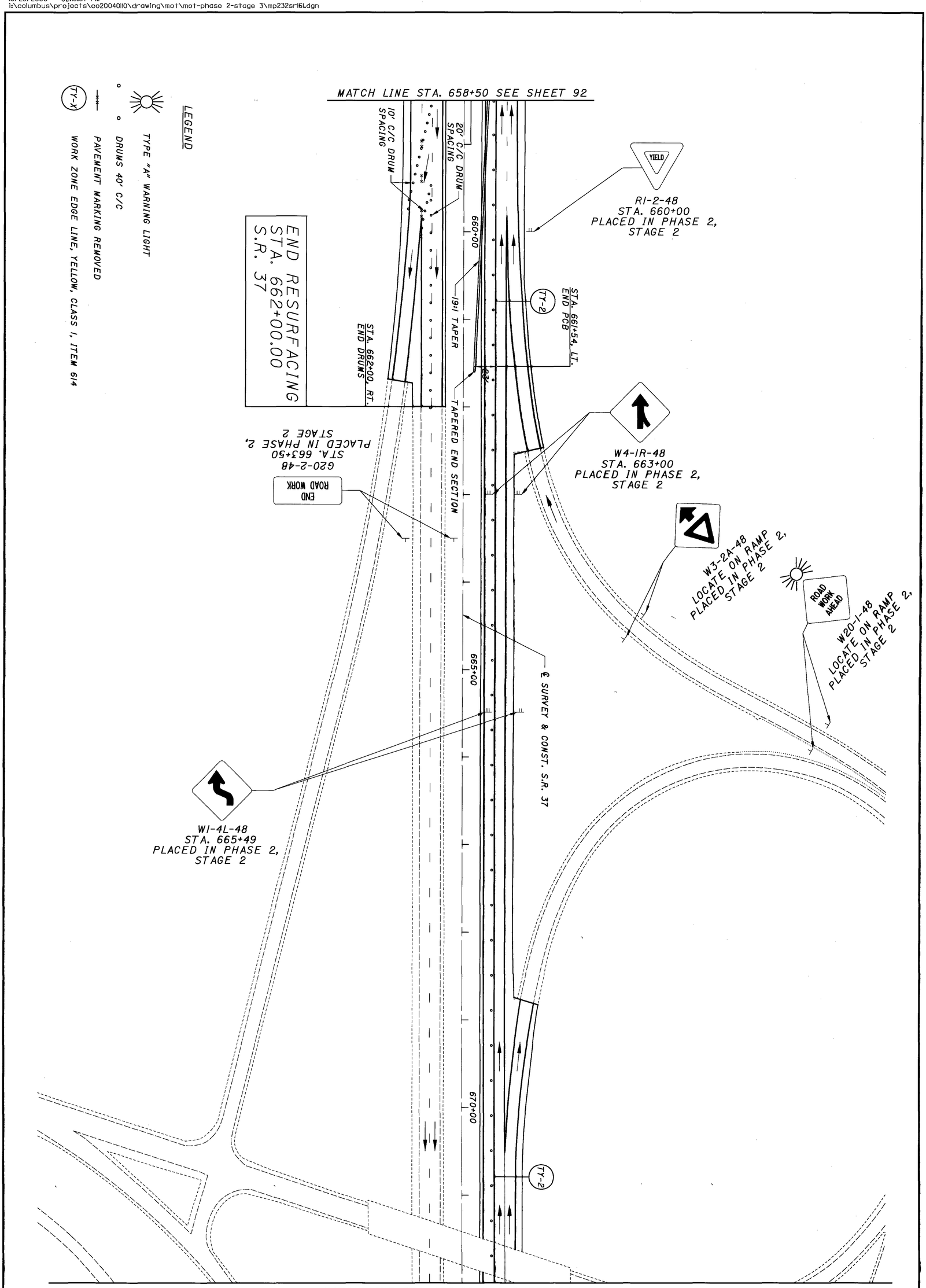
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 2, STAGE 3

LIC-161-6.65
LIC-37-10.25

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93 / 349	LIC-161-6.65 LIC-37-10.25	**MAINTENANCE OF TRAFFIC PHASE 2, STAGE 3**	CALCULATED ZTW CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

END RESURFACING
STA. 679+00.00
S.R. 37

STA. 678+68, LT.
END WORK ZONE
EDGE LINE, YELLOW

TY-2

℄ SURVEY & CONST. S.R. 37

12'
12'

675+00

680+00

MATCH LINE STA. 672+00 SEE SHEET 93

MATCH LINE STA. 685+00 SEE SHEET 95

ARROW PANEL
PLACED IN PHASE 2,
STAGE 2

LEGEND

- DRUMS 40' C/C
- WORK ZONE RAISED PAVT. MARKER (WZRPM)
- PAVEMENT MARKING REMOVED
- (TY-X) WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC
PHASE 2, STAGE 3

LIC-161-6.65
LIC-37-10.25

94
1349

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LEGEND

TYPE "A" WARNING LIGHT

MATCH LINE STA. 685+00 SEE SHEET 94

℄ SURVEY & CONST. S.R. 37

690+00

W4-2L-48
PLACED IN PHASE 2,
STAGE 1

ROAD WORK AHEAD

W20-1-48
PLACED IN PHASE 2,
STAGE 1

LEFT LANE CLOSED AHEAD

W9-H3-48
PLACED IN PHASE 2,
STAGE 1

ROAD WORK AHEAD

1 MILE

W20-1-48
W16-3A-30
PLACED IN PHASE 2,
STAGE 1

LIC-161-6.65
LIC-37-10.25

MAINTENANCE OF TRAFFIC
PHASE 2, STAGE 3

CALCULATED ZTW
CHECKED CSR

0 50
25 100
HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC
PHASE 3, STAGE 1

LIC-161-6.65
LIC-37-10.25

96
1349

CALCULATED ZTW
CHECKED CSR

0 25 50 100
HORIZONTAL SCALE IN FEET

LEGEND

TYPE "A" WARNING LIGHT

DRUMS 40' C/C

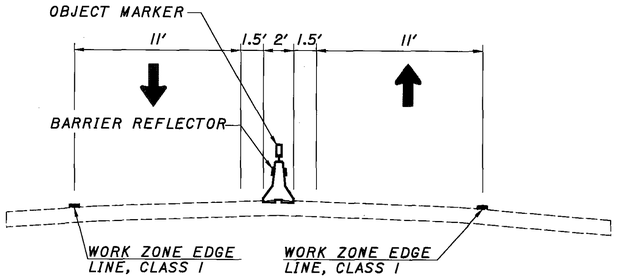
WORK ZONE RAISED PAVT. MARKER (WZRPM)

PAVEMENT MARKING REMOVED

EL-X WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614

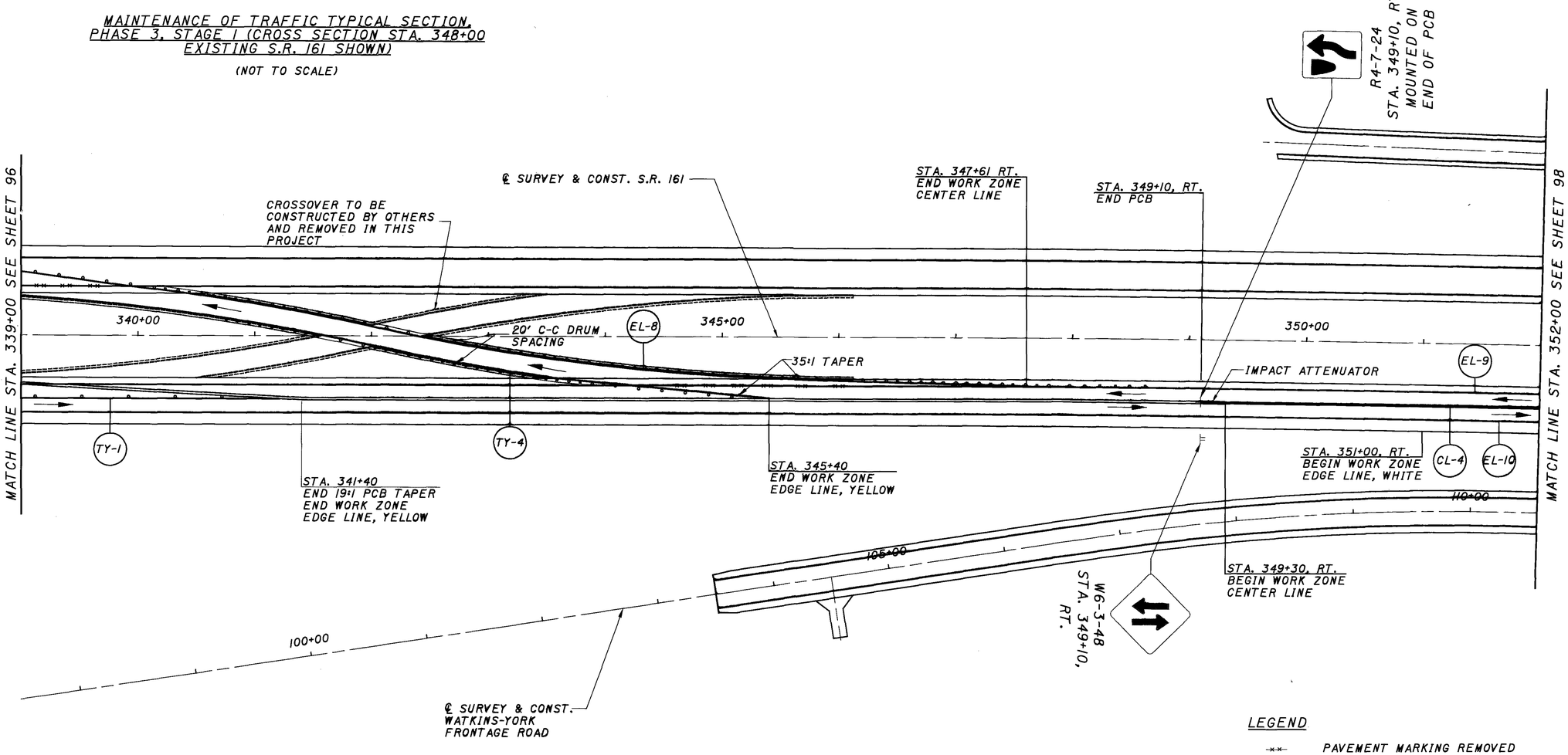
TY-X WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

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MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE 3, STAGE 1 (CROSS SECTION STA. 348+00 EXISTING S.R. 161 SHOWN)

(NOT TO SCALE)



LEGEND

- PAVEMENT MARKING REMOVED
- DRUMS 40' C/C
- WORK ZONE RAISED PAVT. MARKER (WZRPM)
- (CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614
- (EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614
- (TY-X) WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 3, STAGE 1

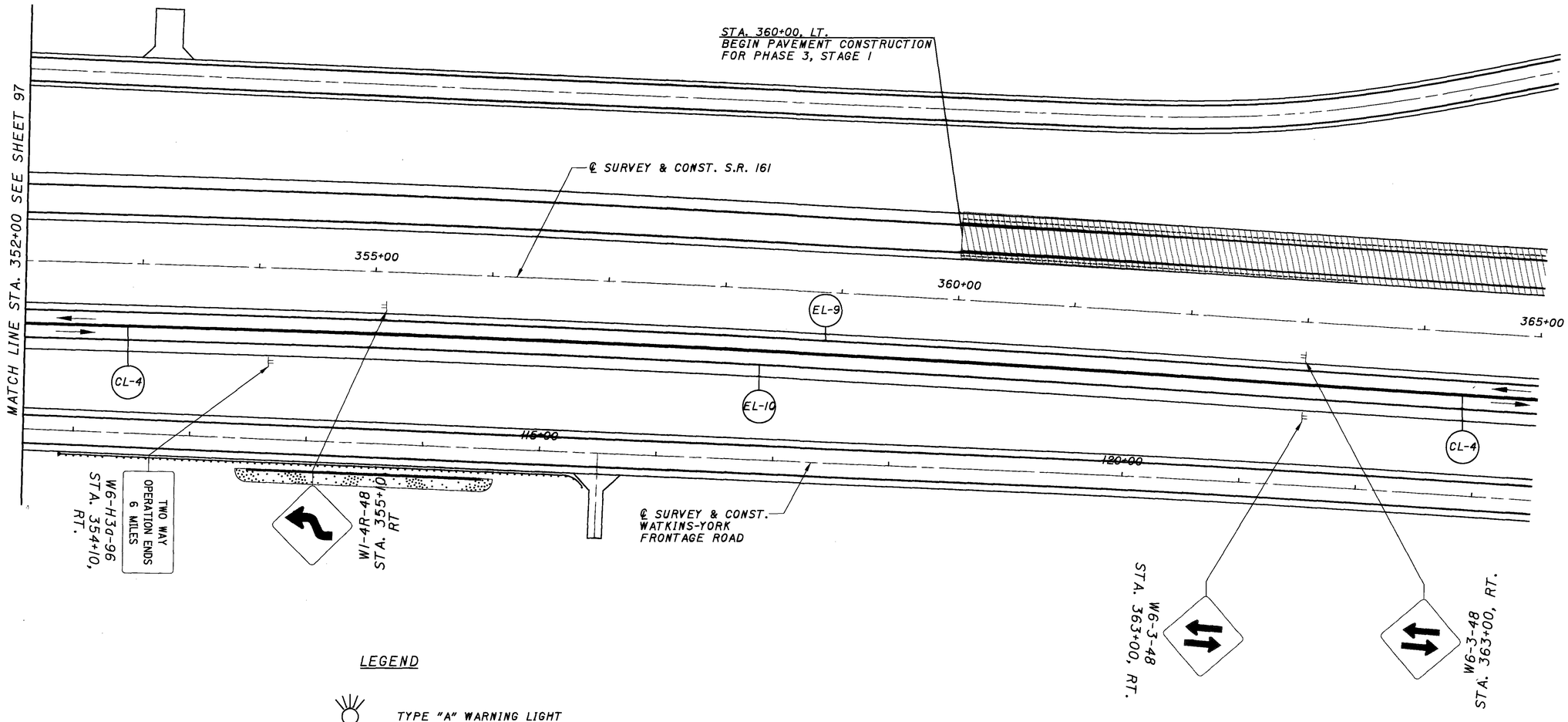
LIC-161-6.65
LIC-37-10.25

97
1349

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NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 3, PLEASE SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.



LEGEND

TYPE "A" WARNING LIGHT

DRUMS 40' C/C

- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION - S.R. 161)

CL-X WORK ZONE CENTER LINE, CLASS 1, ITEM 614

EL-X WORK ZONE EDGE LINE, YELLOW, CLASS 1, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

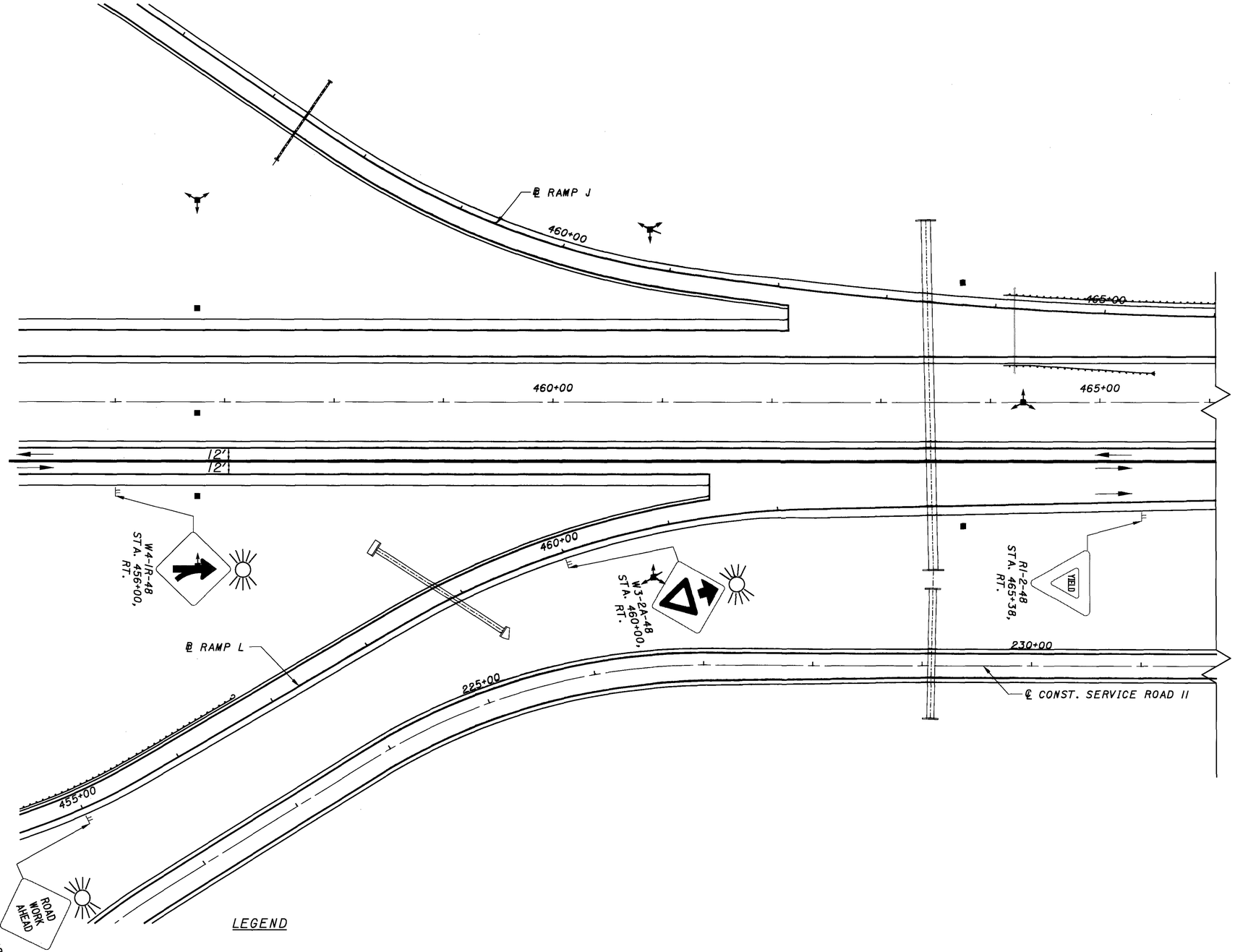
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 3, STAGE 1

LIC-161-6.65
LIC-37-10.25

98
1349

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NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 3, PLEASE SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.

LEGEND

TYPE "A" WARNING LIGHT

DRUMS 40' C/C

(CL-X) WORK ZONE CENTER LINE, CLASS I, ITEM 614

(EL-X) WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614

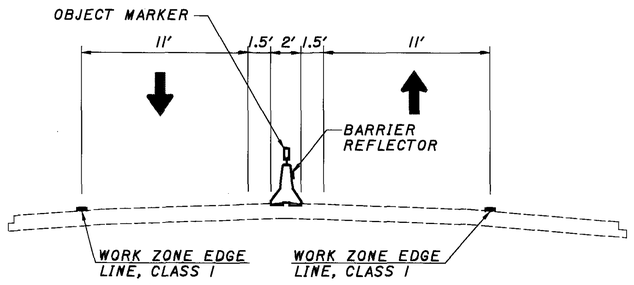
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 3, STAGE 1

LIC-161-6.65
LIC-37-10.25

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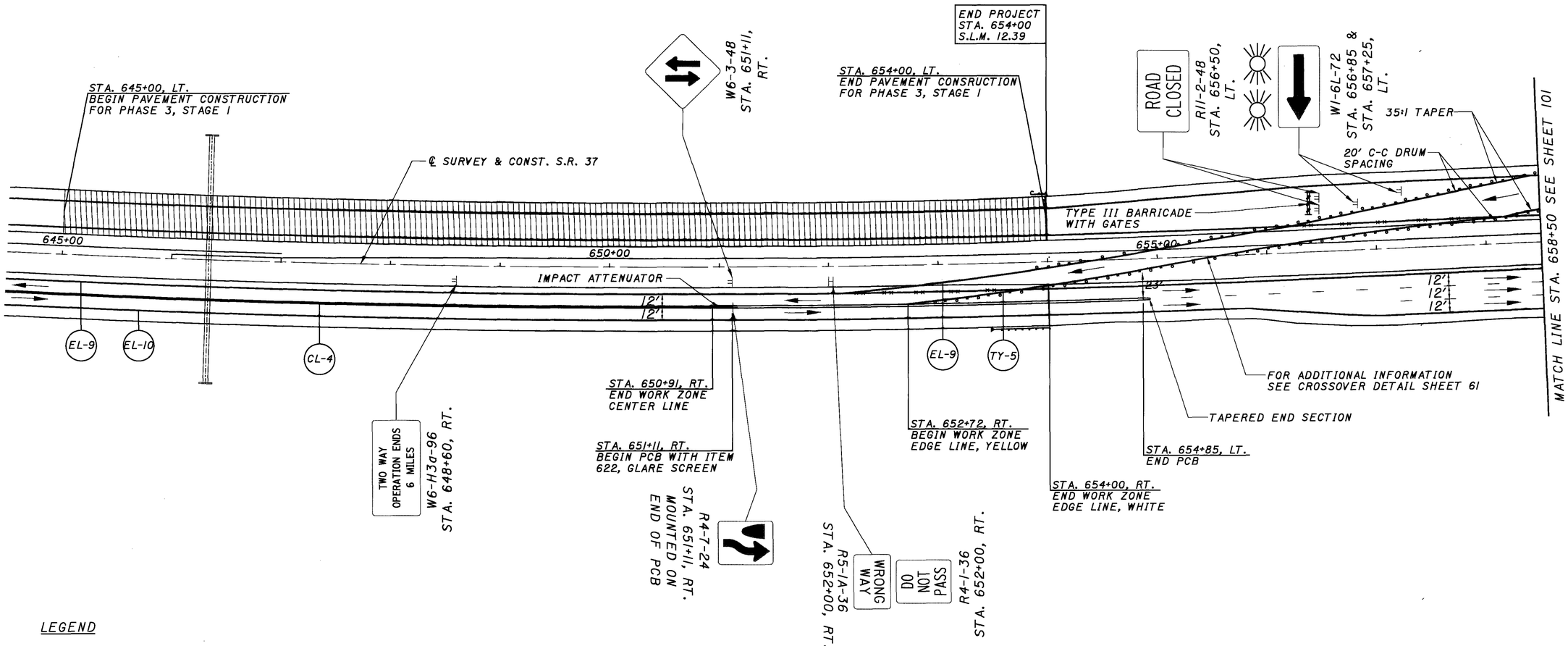


MAINTENANCE OF TRAFFIC TYPICAL SECTION, PHASE 3, STAGE 1 (CROSS SECTION STA. 651+50 NEWLY CONSTRUCTED S.R. 37 SHOWN)

(NOT TO SCALE)

NOTE:

FOR FURTHER INFORMATION ON MAINTENANCE OF TRAFFIC PHASE 3, SEE THE "MAINTENANCE OF TRAFFIC OVERALL PHASING" SECTION OF THE PLANS.



LEGEND

TYPE "B" WARNING LIGHT

DRUMS 40' C/C

WORK ZONE RAISED PVMT. MARKER (WZRPM)

PAVEMENT MARKING REMOVED

- PHASE 3, STAGE 1 CONSTRUCTION (PAVEMENT CONSTRUCTION)

CL-X WORK ZONE CENTER LINE, CLASS I, ITEM 614

EL-X WORK ZONE EDGE LINE, WHITE, CLASS I, ITEM 614

TY-X WORK ZONE EDGE LINE, YELLOW, CLASS I, ITEM 614

HORIZONTAL SCALE IN FEET
0 25 50 100

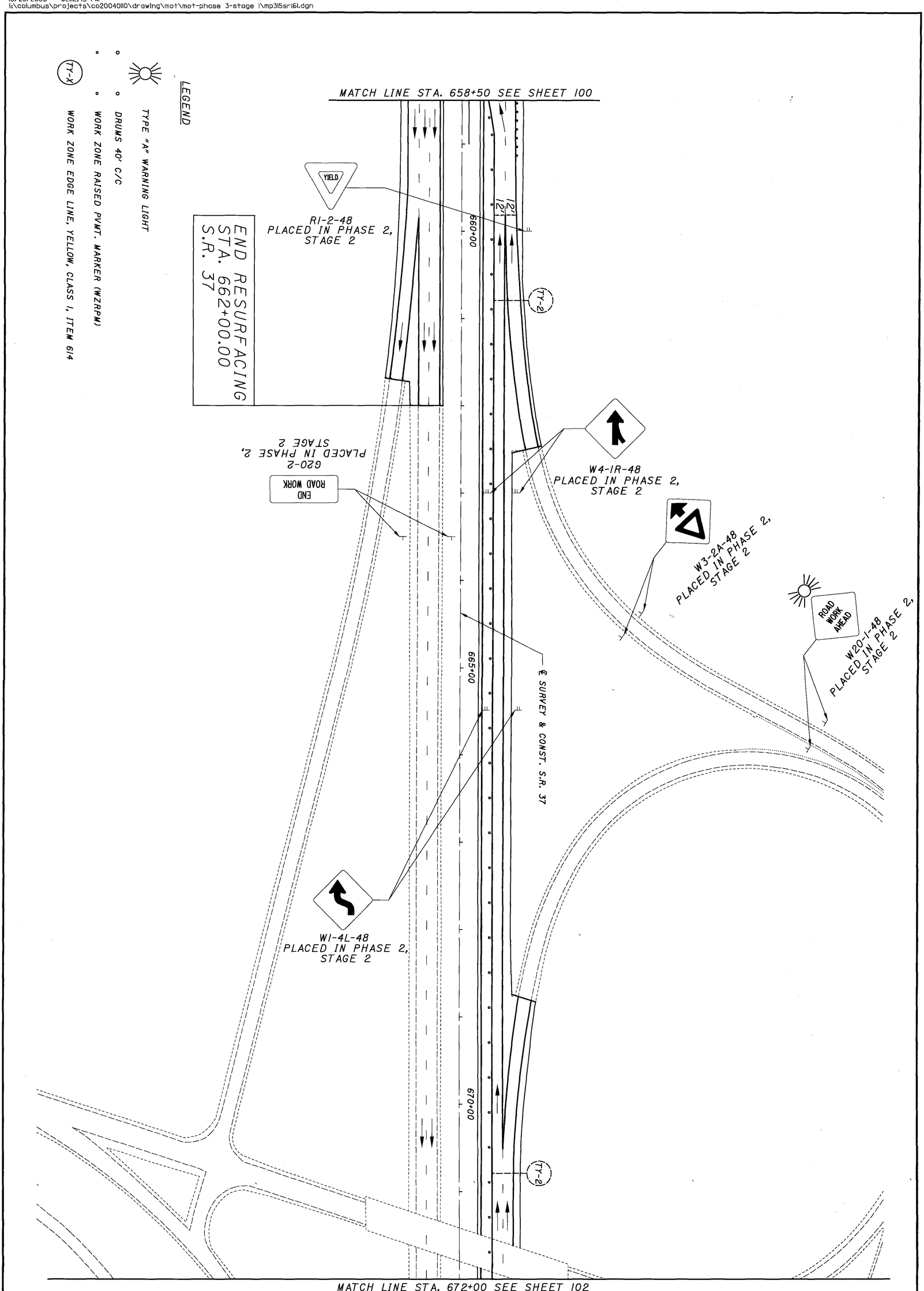
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC PHASE 3, STAGE 1

LIC-161-6.65
LIC-37-10.25

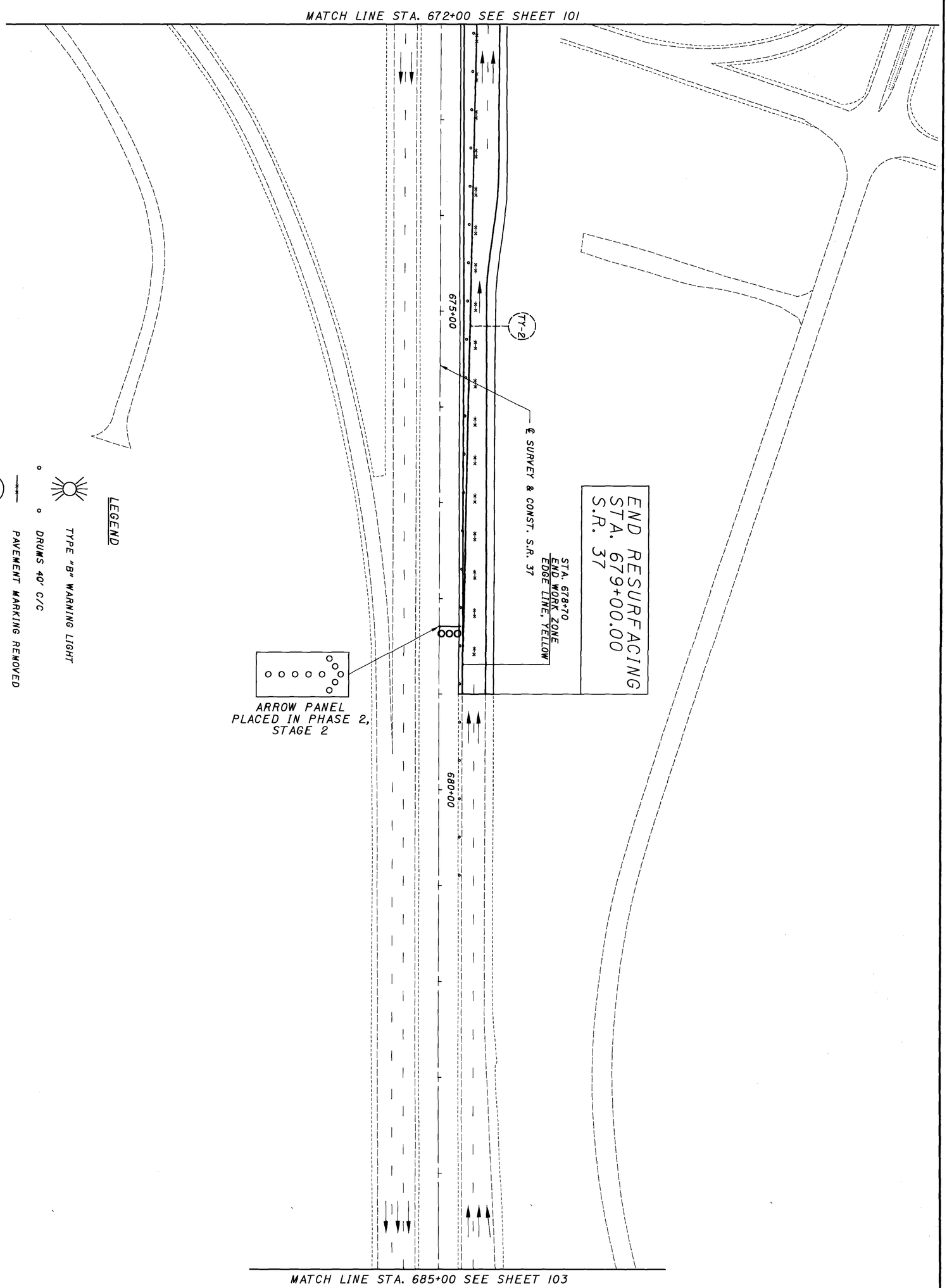
100
349

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101 (349)	LIC-161-6.65 LIC-37-10.25	MAINTENANCE OF TRAFFIC PHASE 3, STAGE 1	CALCULATED ZTW CHECKED CSR	0 50 100 25 HORIZONTAL SCALE IN FEET

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102 / 1349	LIC-161-6.65 LIC-37-10.25	MAINTENANCE OF TRAFFIC PHASE 3, STAGES 1	CALCULATED ZTW CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

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MATCH LINE STA. 685+00 SEE SHEET 102

LEGEND

TYPE "A" WARNING LIGHT

℄ SURVEY & CONST. S.R. 37

690+00

W4-2L-48
PLACED IN PHASE 2,
STAGE 2

ROAD WORK AHEAD

W20-1-48
PLACED IN PHASE 2,
STAGE 2

LEFT LANE CLOSED AHEAD

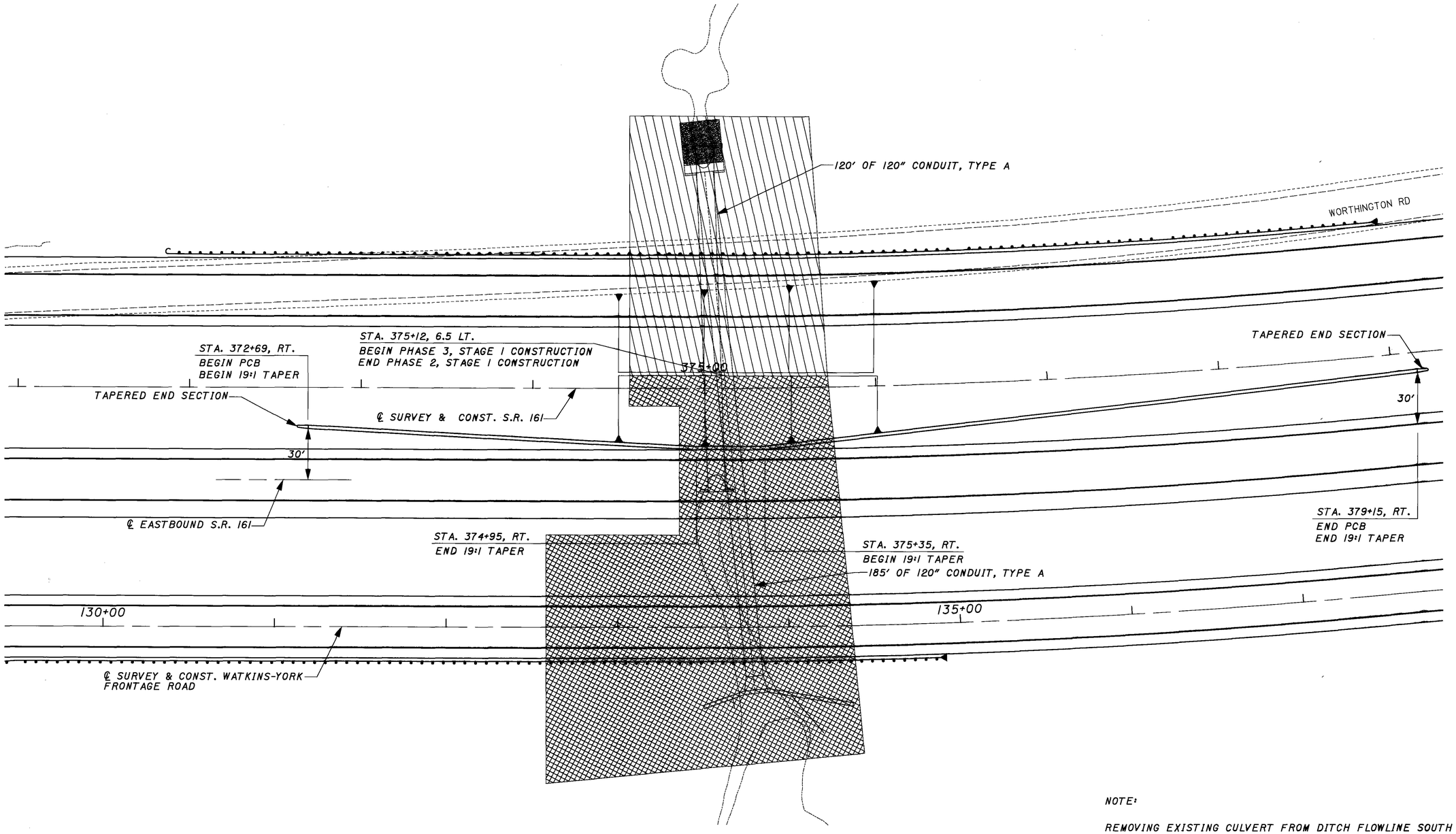
W9-H3-48
PLACED IN PHASE 2,
STAGE 2

ROAD WORK AHEAD

1 MILE

W20-1-48
W16-3A-30
PLACED IN PHASE 2,
STAGE 2

103 / 1349	LIC-161-6.65 LIC-37-10.25	MAINTENANCE OF TRAFFIC PHASE 3, STAGES 1	CALCULATED ZTW CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET



NOTE:

REMOVING EXISTING CULVERT FROM DITCH FLOWLINE SOUTH BEFORE BEGINNING PHASE 2, STAGE 1 CONSTRUCTION.

- PHASE 2, STAGE 1 CONSTRUCTION

- PHASE 3, STAGE 1 CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 15 30 60

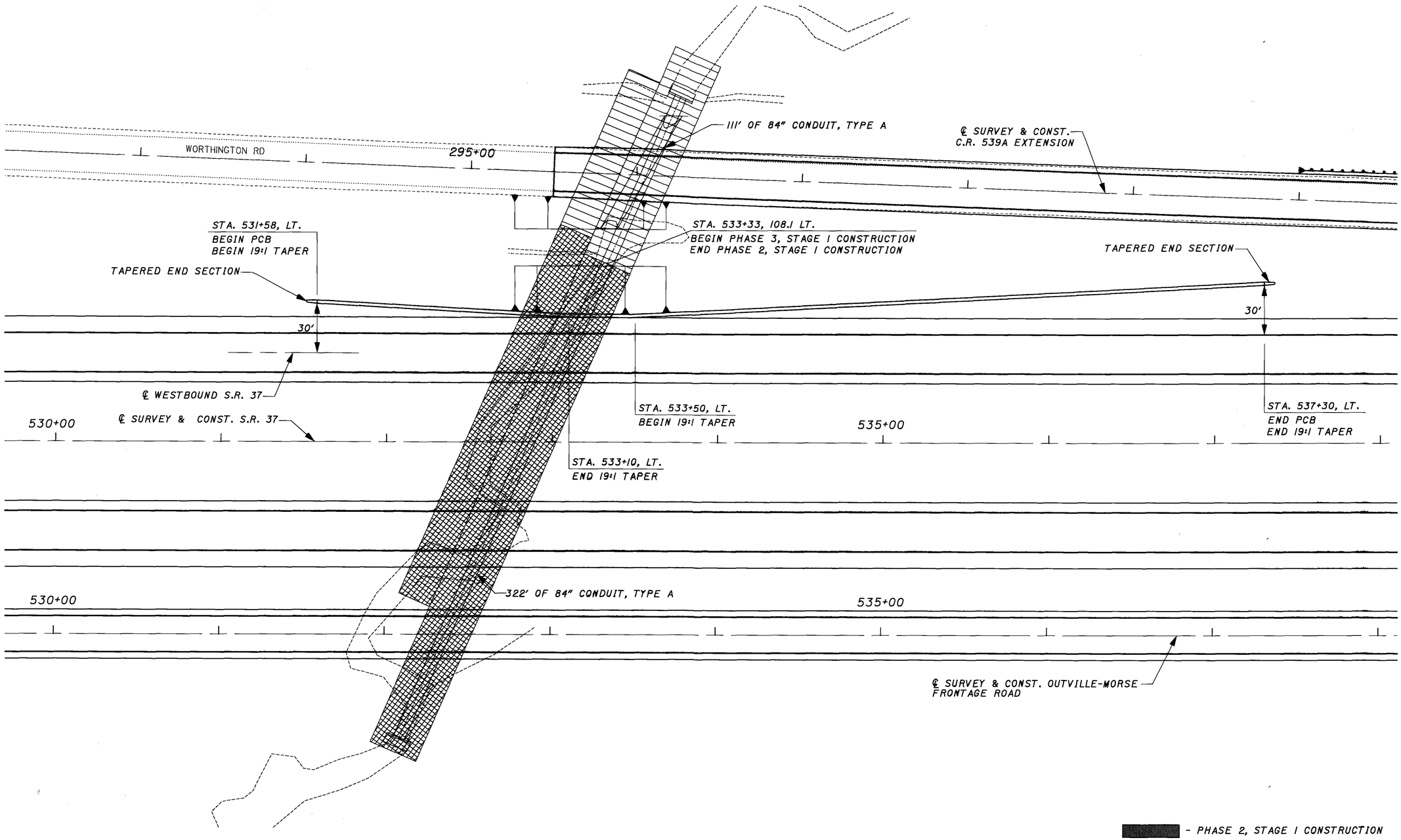
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 1 - S.R. 37 - STA. 375+13

LIC-161-6.65
LIC-37-10.25

104
1349

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HORIZONTAL SCALE IN FEET
0 15 30 60

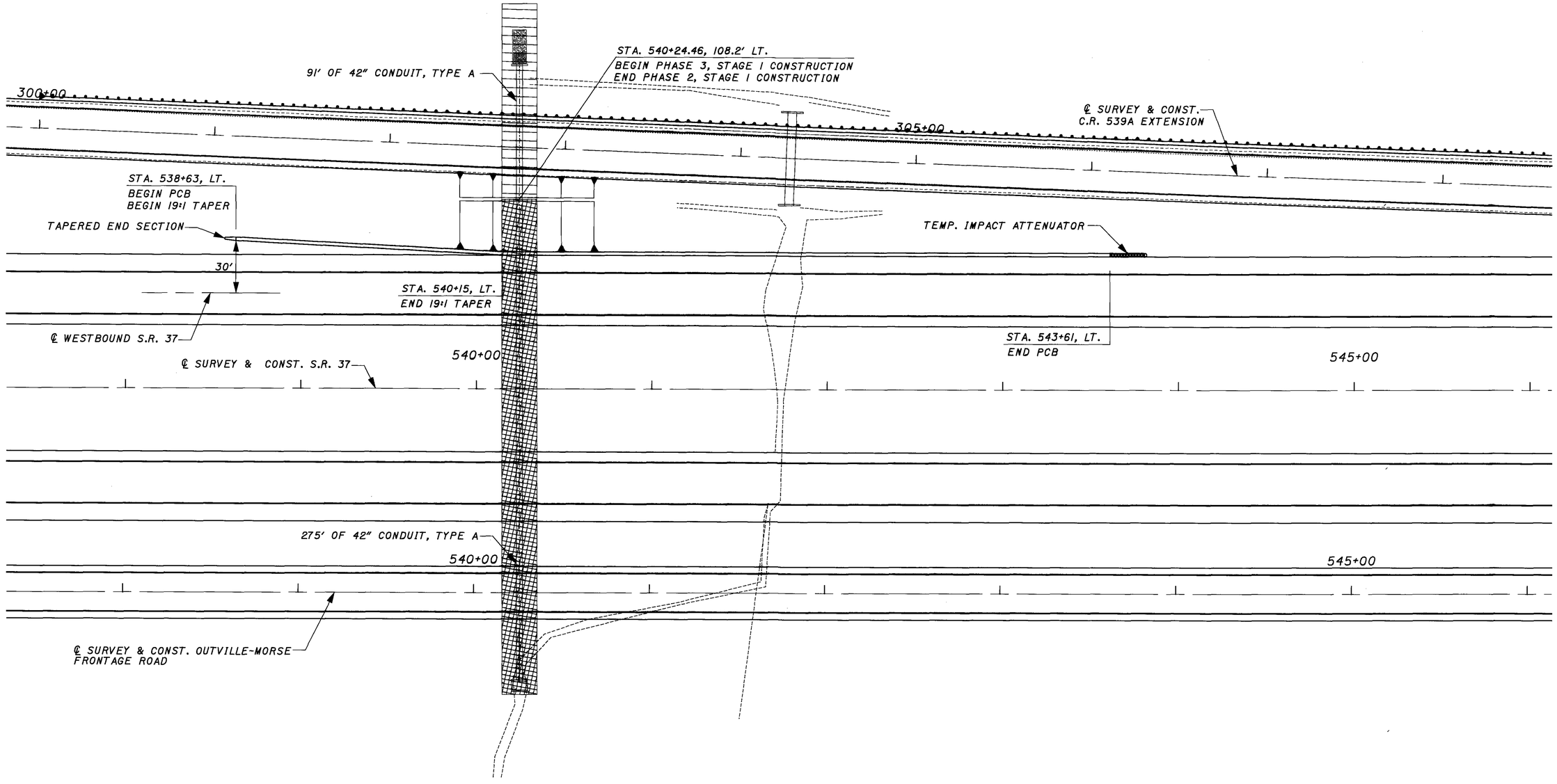
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 8 - S.R. 37 - STA. 532+86

LIC-161-6.65
LIC-37-10.25

105
349

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HORIZONTAL SCALE IN FEET
0 15 30 60

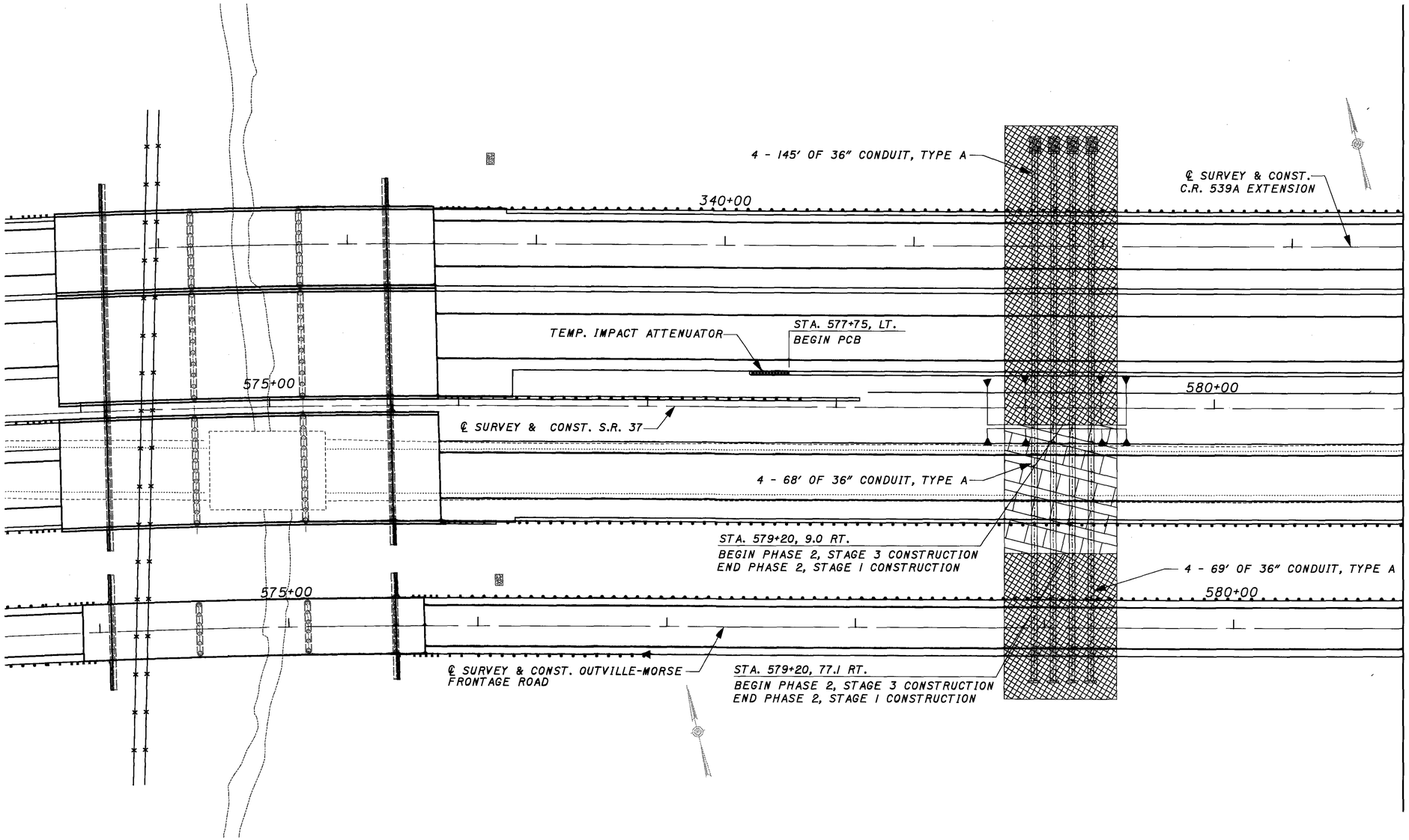
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 9 - S.R. 37 - STA. 540+24.46

LIC-161-6.65
LIC-37-10.25

106
1349

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HORIZONTAL SCALE IN FEET
0 15 30 60

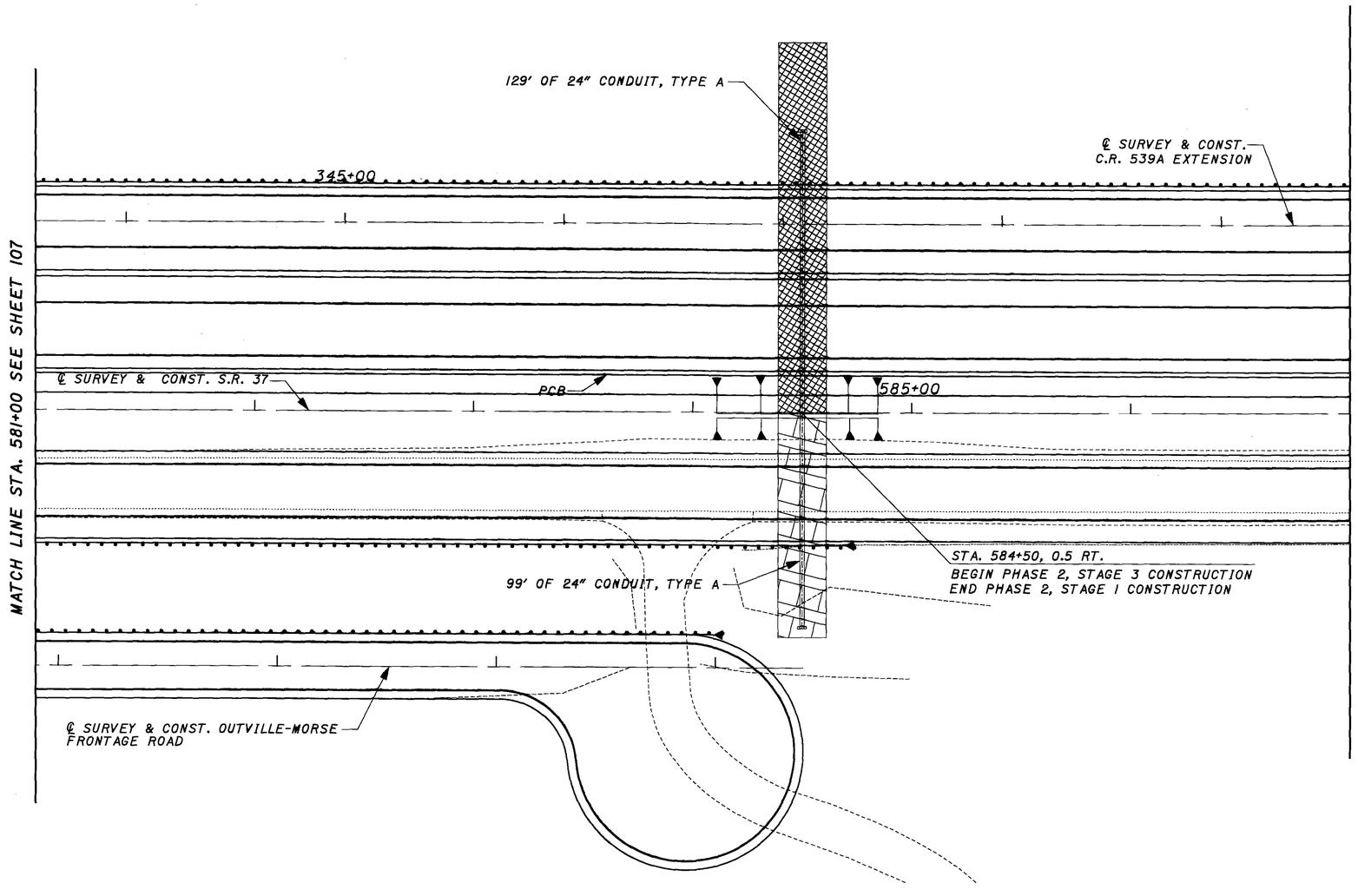
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL CULVERT
NO. 11 - S.R. 37 - STA. 579+05 TO STA. 579+35

LIC-161-6.65
LIC-37-10.25

107
1349

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- PHASE 2, STAGE 1 CONSTRUCTION

- PHASE 2, STAGE 3 CONSTRUCTION

N

0 15 30 60
HORIZONTAL
SCALE IN FEET

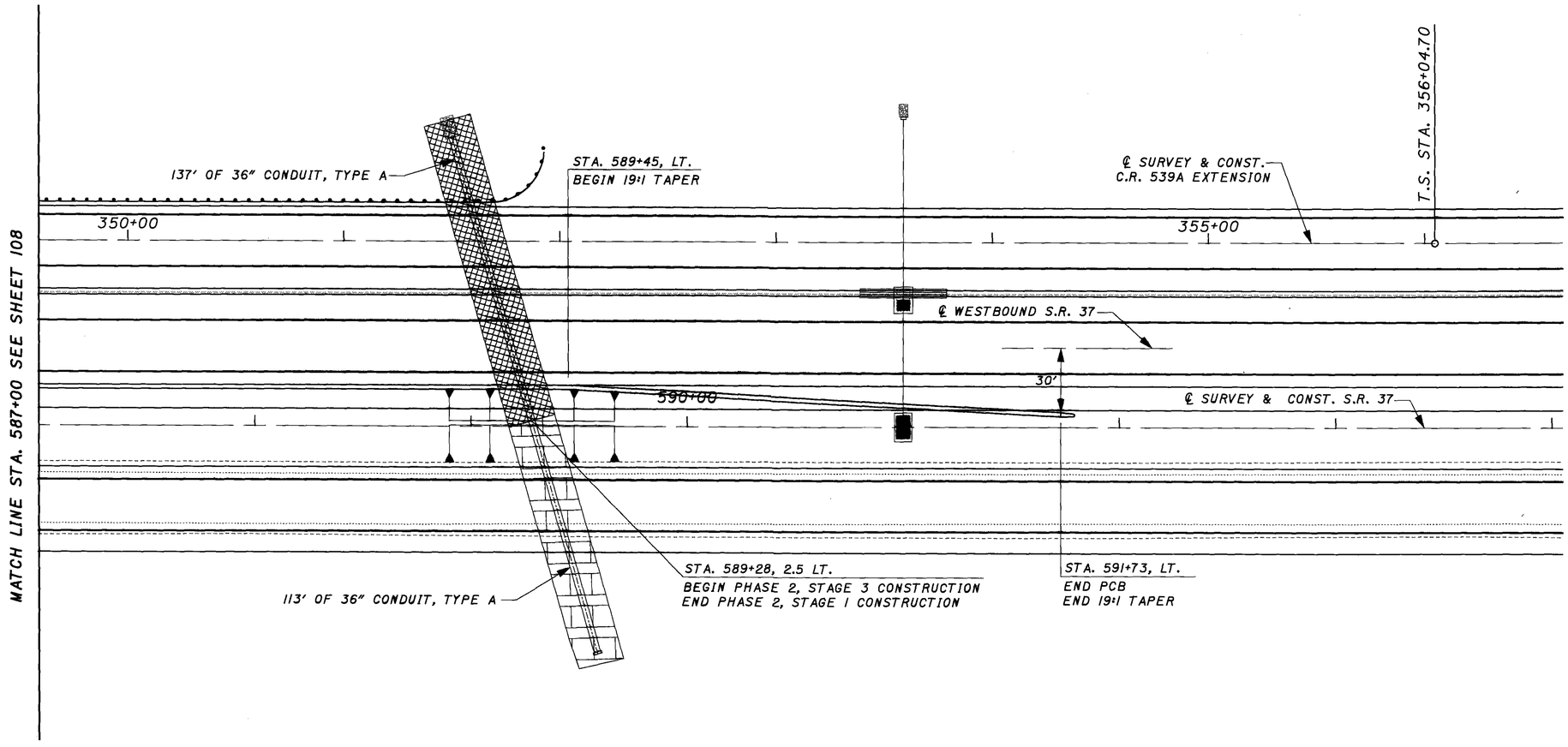
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 12 - S.R. 37 - STA. 584+50

LIC-161-6.65
LIC-37-10.25

108
1349

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- PHASE 2, STAGE 1 CONSTRUCTION

- PHASE 2, STAGE 3 CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 15 30 60

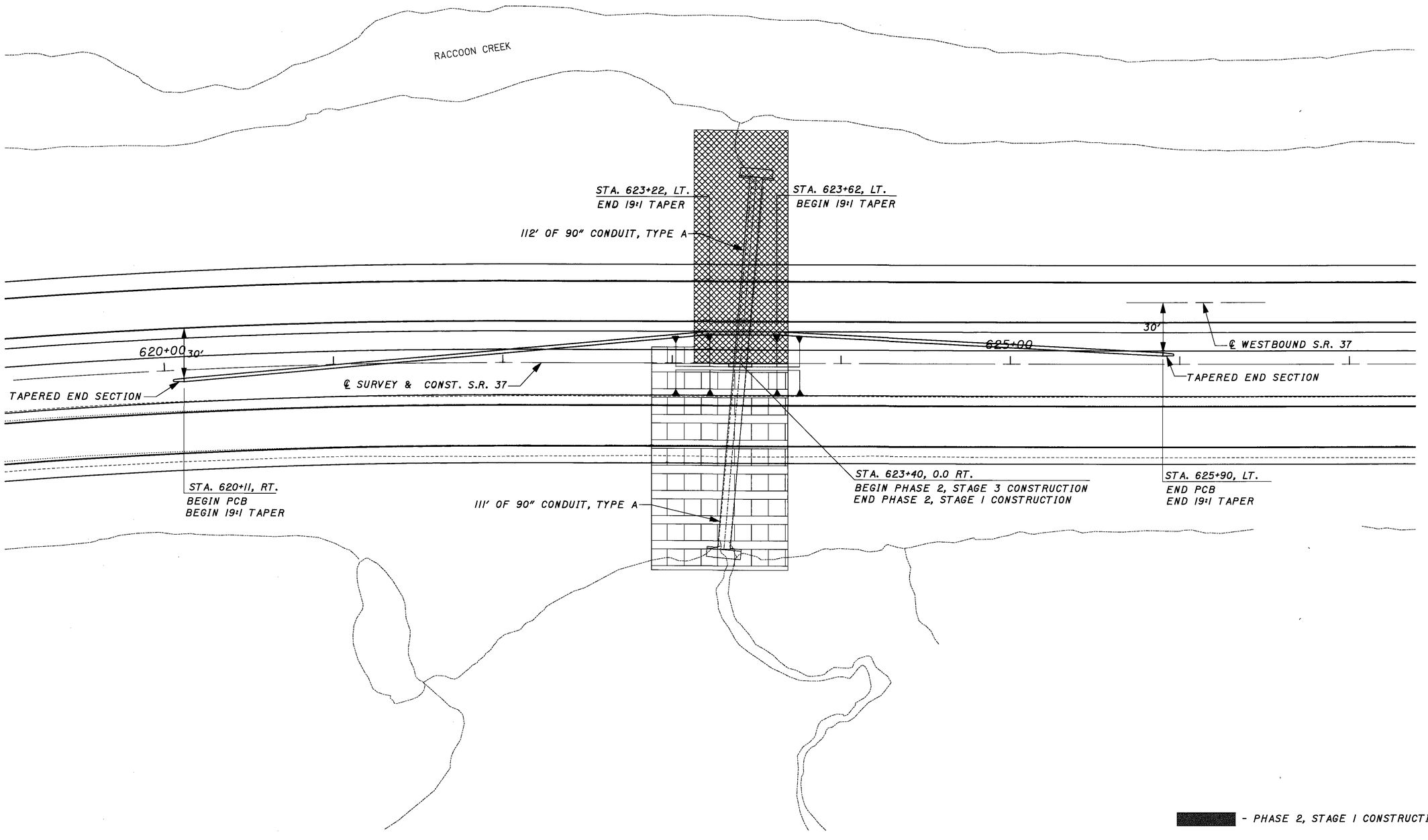
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 22 - S.R. 37 - STA. 589+28

LIC-161-6.65
LIC-37-10.25

109
1349

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HORIZONTAL SCALE IN FEET
0 15 30 60

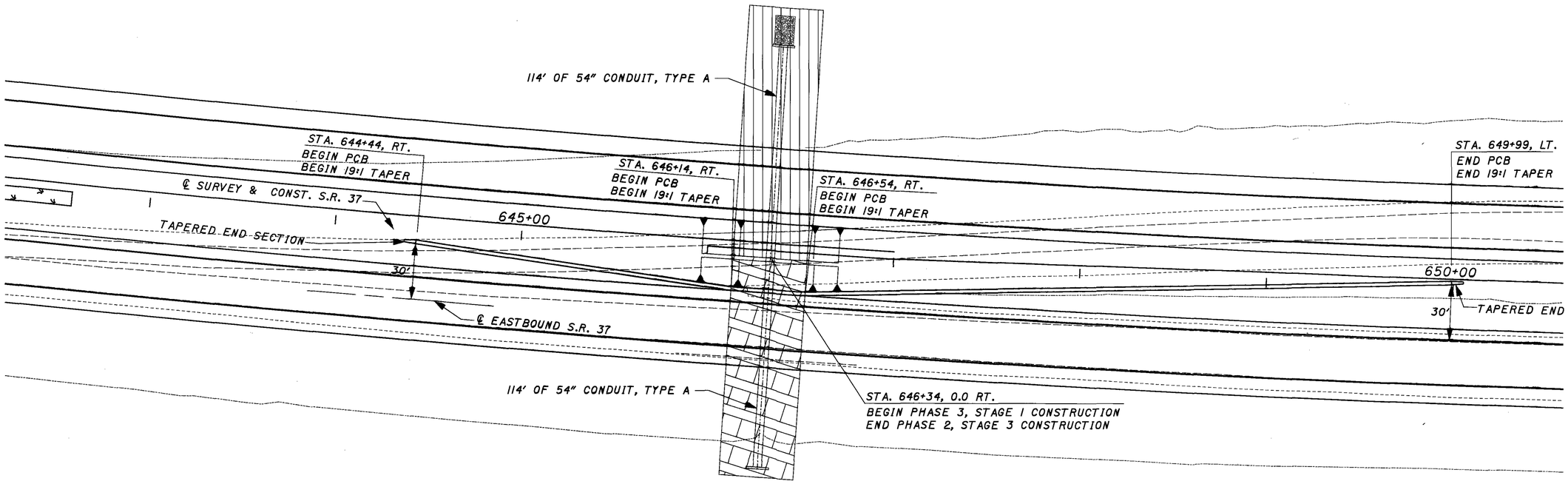
CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 13 - S.R. 37 - STA. 623+40

LIC-161-6.65
LIC-37-10.25

110
1349

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HORIZONTAL SCALE IN FEET
0 15 30 60

CALCULATED ZTW
CHECKED CSR

MAINTENANCE OF TRAFFIC DETAIL
CULVERT NO. 14 - S.R. 37 - STA. 646+34

LIC-161-6.65
LIC-37-10.25

111
1349

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SHEET NUMBER																						ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
42	43	44	45	46	48	49	51	52	52A	52B	122	125	127	128	133	136	137	147	149	1030	1078						
																										ROADWAY	
LUMP																						201	11001	LUMP		CLEARING AND GRUBBING, AS PER PLAN	42
											28											202	20010	28	EACH	HEADWALL REMOVED	
											91370											202	23000	91370	SQ YD	PAVEMENT REMOVED	
											2361											202	30000	2361	SQ FT	WALK REMOVED	
											833											202	35100	833	FT	PIPE REMOVED, 24" AND UNDER	
											1245											202	35200	1245	FT	PIPE REMOVED, OVER 24"	
											12165											202	38000	12165	FT	GUARDRAIL REMOVED	
			490								28											202	53100	28	EACH	MAILBOX REMOVED	
																						202	54000	490	EACH	RAISED PAVEMENT MARKER REMOVED	
											3											202	58100	3	EACH	CATCH BASIN REMOVED	
											18											202	62700	18	EACH	SEPTIC TANK REMOVED	
											23											SPECIAL	20266000	23	EACH	DRILLED WATER WELL ABANDONED	
											3											202	67000	3	EACH	REGULATED UNDERGROUND STORAGE TANK REMOVED	
											28569											202	75000	28569	FT	FENCE REMOVED	
												2106513									75449	203	10000	2181962	CU YD	EXCAVATION	
										35000		1337484									718	203	20000	1373202	CU YD	EMBANKMENT	
				933								155860										203	35111	156793	CU YD	GRANULAR MATERIAL, TYPE B, AS PER PLAN	46
			18950																			203	35131	18950	CU YD	GRANULAR MATERIAL, TYPE D, AS PER PLAN	45
								22														SPECIAL	20365000	22	EACH	SETTLEMENT PLATFORM	
															126898							204	10000	126898	SQ YD	SUBGRADE COMPACTION	
															146							204	45000	146	HOUR	PROOF ROLLING	
			10000						2500													204	50000	12500	SQ YD	GEOTEXTILE FABRIC	
			10593																			206	10500	10593	TON	CEMENT	
			305701																			206	11000	305701	SQ YD	CURING COAT	
			305701																			206	15000	305701	SQ YD	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
			LUMP																			206	30000	LUMP		CONTRACTOR DESIGNED CHEMICALLY STABILIZED SUBGRADE	
												18168.75										606	13000	18168.75	FT	GUARDRAIL, TYPE 5	
												387.50										606	13020	387.5	FT	GUARDRAIL, TYPE 5 WITH DOUBLE RAILS	
												4										606	22000	4	EACH	ANCHOR ASSEMBLY, TYPE B-98	
												24										606	22010	24	EACH	ANCHOR ASSEMBLY, TYPE E-98	
												23										606	26500	23	EACH	ANCHOR ASSEMBLY, TYPE T	
												4										606	32160	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE TST	
												17										606	35000	17	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE I	
												2										606	35100	2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
	10585																					606	98000	10585	FT	GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION	
																										LINE POST (SOCKETED)	
	10																					606	98100	10	EACH	GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL	
												2										606	60010	2	EACH	IMPACT ATTENUATOR, TYPE I-98 (BIDIRECTIONAL)	
												2										606	60030	2	EACH	IMPACT ATTENUATOR, TYPE 3-98	
														58514								607	15000	58514	FT	FENCE, TYPE 47	
														2								607	40500	2	EACH	GATE, TYPE 47	
												522										609	26000	522	FT	CURB, TYPE 6	
												4085										622	10000	4085	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE A	
												713										622	10120	713	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C	
												4										622	24800	4	EACH	CONCRETE BARRIER END SECTION, TYPE A	
												4837										622	80000	4837	FT	GLARE SCREEN	
		6																				SPECIAL	69050100	6	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	
		3																				SPECIAL	69050200	3	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	
							150															SPECIAL	69065010	150	TON	WORK INVOLVING SOLID WASTE	
										LUMP												SPECIAL	69091000	LUMP		AS BUILT CONSTRUCTION PLANS	
																										EROSION CONTROL	
																	169					601	11000	169	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB	
																		232				601	21050	232	SQ YD	TIED CONCRETE BLOCK MAT, TYPE I	
																	300					601	32000	300	CU YD	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER	
																	382					601	32100	382	CU YD	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
					200												23					601	32200	223	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
												3132				55				163		601	32204	3350	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER	
									4167													601	34200	4167	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	
										7000												653	10000	7000	CU YD	TOPSOIL FURNISHED AND PLACED	
												893260									27749	659	00510	921009	SQ YD	SEEDING AND MULCHING, CLASS 2	
						46051																659	14000	46051	SQ YD	REPAIR SEEDING AND MULCHING	
						46051																659	15000	46051	SQ YD	INTER-SEEDING	
						156																659	20000	156	TON	COMMERCIAL FERTILIZER	
						191																659	31000	191	ACRES	LIME	
						5770																659	35000	5770	GALLON	WATER	
						2073																659	40000	2073	M SQ FT	MOWING	
													42438									670	00700	42438	SQ YD	DITCH EROSION PROTECTION	
																					2950	670	00560	2950	SQ YD	SLOPE EROSION PROTECTION MAT, TYPE F	
													5298									671	15060	5298	SQ YD	EROSION CONTROL MAT, TYPE G	
										LUMP									LUMP			832	15000	LUMP		STORM WATER POLLUTION PREVENTION PLAN	

CALCULATED JMA
CHECKED FJA

GENERAL SUMMARY

LIC-161-6.65
LIC-37-10.25

112
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$FILEA$

SHEET NUMBER							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO
48	127	136	137	147	149	1078						
											EROSION CONTROL, CONT.	
					1133430		832	30000	1133430	EACH	EROSION CONTROL	
	2106						836	10000	2106	SQ YD	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	
	853						836	10020	853	SQ YD	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2	
	582						836	10030	582	SQ YD	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 3	
											STREAM RELOCATION	
						115	601	34100	115	CU YD	ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER	
						215	601	35000	215	CU YD	ROCK CHANNEL PROTECTION, MISC.: NO. 2 OVERSIZE RIVER ROCK	
						215	601	35000	215	CU YD	ROCK CHANNEL PROTECTION, MISC.: NO. 57 ROUNDS RIVER ROCK	
						298	661	20060	298	EACH	DECIDUOUS SHRUB, 3' HEIGHT, CORNUS AMMONMUM- SILKY DOGWOOD	
						329	661	20060	329	EACH	DECIDUOUS SHRUB, 3' HEIGHT, SAMBUCUS CANADENSIS- ELDERBERRY	
						392	661	20060	392	EACH	DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM DENTATUM- ARROWOOD ←	
						376	661	20060	376	EACH	DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM PRUNIFOLIUM- BLACKHAW	
						13	661	40080	13	EACH	DECIDUOUS SHADE TREE, 2" CALIPER, ACER RUBRUM- RED MAPLE	
						14	661	40080	14	EACH	DECIDUOUS SHADE TREE, 2" CALIPER, NYSSA SYLVATICA- BLACK GUM	
						15	661	40080	15	EACH	DECIDUOUS SHADE TREE, 2" CALIPER, PLATANUS OCCIDENTALIS- SYCAMORE	
						14	661	40080	14	EACH	DECIDUOUS SHADE TREE, 2" CALIPER, SALIX NIGRA- BLACK WILLOW	
						22330	662	31000	22330	GALLON	LANDSCAPE WATERING	
											DRAINAGE	
			LUMP				503	21300	LUMP		UNCLASSIFIED EXCAVATION	
			12955				509	10000	12955	POUND	EPOXY COATED REINFORCING STEEL	
			136				512	10100	136	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
			37				516	13600	37	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	
			LUMP				518	21230	LUMP		POROUS BACKFILL WITH FILTER FABRIC	
			73				518	40000	73	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
			8				518	40010	8	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
		12.9	311				602	20000	324	CU YD	CONCRETE MASONRY	
				8402			603	00510	8402	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, 707.31	
				5835			603	00900	5835	FT	6" CONDUIT, TYPE B	
500							603	01400	500	FT	6" CONDUIT, TYPE E	
500							603	01500	500	FT	6" CONDUIT, TYPE F	
500							603	01800	500	FT	8" CONDUIT, TYPE B	
		84					603	04400	84	FT	12" CONDUIT, TYPE B	
		2635					603	05900	2635	FT	15" CONDUIT, TYPE B	
		861					603	06100	861	FT	15" CONDUIT, TYPE C	
		1879					603	06400	1879	FT	15" CONDUIT, TYPE D	
		505					603	06700	505	FT	15" CONDUIT, TYPE F 707.05 TYPE C	
			88				603	07201	88	FT	18" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 21" CONDUIT, TYPE A, AS PER PLAN (Q)	48
		876					603	07400	876	FT	18" CONDUIT, TYPE B	
		1170					603	07600	1170	FT	18" CONDUIT, TYPE C	
		82					603	08200	82	FT	18" CONDUIT, TYPE F 707.05 TYPE C	
		355					603	08900	355	FT	21" CONDUIT, TYPE B	
		300					603	09100	300	FT	21" CONDUIT, TYPE C	
		36					603	09700	36	FT	21" CONDUIT, TYPE F 707.05 TYPE C	
		259					603	10400	259	FT	24" CONDUIT, TYPE B	
		37					603	10900	37	FT	24" CONDUIT, TYPE D	
			229				603	10201	229	FT	24" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 24" CONDUIT, TYPE A, AS PER PLAN (K)	48
			113				603	11701	113	FT	27" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 33" CONDUIT, TYPE A, AS PER PLAN (P)	48
		632					603	11900	632	FT	27" CONDUIT, TYPE B	
		111					603	12400	111	FT	27" CONDUIT, TYPE D	
			103				603	13201	103	FT	30" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 36" CONDUIT, TYPE A, AS PER PLAN (T)	48
		364					603	13400	364	FT	30" CONDUIT, TYPE B	
			344				603	16201	344	FT	36" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT, TYPE A, AS PER PLAN (E)	47
			250				603	16200	250	FT	36" CONDUIT, TYPE A, 706.02	
			1128				603	16201	1128	FT	36" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 36" CONDUIT, TYPE A, AS PER PLAN (J)	47
		97					603	16400	97	FT	36" CONDUIT, TYPE B	
			335				603	19201	335	FT	42" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT, TYPE A, AS PER PLAN (F)	47
			353				603	19201	353	FT	42" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 48" CONDUIT TYPE A, AS PER PLAN (H)	47
			108				603	19201	108	FT	42" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 48" CONDUIT, TYPE A, AS PER PLAN (V)	48

CALCULATED JMA CHECKED FJA

GENERAL SUMMARY

LIC-161-6.65
LIC-37-10.25

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SHEET NUMBER																ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION
45	48	54A	125	133	136	137	147	1033	1077											
						267										603	22201	267	FT	54" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 60" CONDUIT, TYPE A, AS PER PLAN (D)
						326										603	22201	326	FT	54" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 60" CONDUIT, TYPE A, AS PER PLAN (I)
						228										603	22201	228	FT	54" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (M)
						106										603	23601	106	FT	60" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (N)
						139										603	23601	139	FT	60" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (S)
						441										603	23601	441	FT	60" CONDUIT, TYPE A, 706.02, 2250 D-LOAD, AS PER PLAN OR 78" CONDUIT, TYPE A, AS PER PLAN (R)
						120										603	27001	120	FT	78" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 84" CONDUIT, TYPE A, AS PER PLAN (U)
						426										603	28001	426	FT	84" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 84" CONDUIT, TYPE A, AS PER PLAN (G)
						222										603	29001	222	FT	90" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 96" CONDUIT, TYPE A, AS PER PLAN (L)
						568										603	30001	568	FT	96" CONDUIT, TYPE A, 706.02, 2250 D-LOAD, AS PER PLAN OR 102" CONDUIT, TYPE A, AS PER PLAN (B)
						322										603	31001	322	FT	102" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 108" CONDUIT, TYPE A, AS PER PLAN (C)
						221										603	31001	221	FT	102" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 102" CONDUIT, TYPE A, AS PER PLAN (O)
						305										603	34001	305	FT	120" CONDUIT, TYPE A, 706.02, 1500 D-LOAD, AS PER PLAN OR 120" CONDUIT, TYPE A, AS PER PLAN (A)
						457										603	59100	457	FT	103" X 71" CONDUIT, TYPE A, 707.22
					15											604	00801	15	EACH	CATCH BASIN, NO. 3A, AS PER PLAN
					44	1										604	01201	45	EACH	CATCH BASIN, NO. 4, AS PER PLAN
						1										604	02801	1	EACH	CATCH BASIN, NO. 8, AS PER PLAN
					1											604	04501	1	EACH	CATCH BASIN, NO. 2-2B, AS PER PLAN
					2											604	31501	2	EACH	MANHOLE NO. 3, AS PER PLAN
					1	1										604	20500	2	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE A
					3											604	20520	3	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C
							130									604	36600	130	EACH	PRECAST REINFORCED CONCRETE OUTLET
							192599									605	11100	192599	FT	6" SHALLOW PIPE UNDERDRAINS, 707.31
							10782									605	13300	10782	FT	6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31
200																605	13402	200	FT	6" UNCLASSIFIED PIPE UNDERDRAINS FOR SPRINGS
							58752									605	14000	58752	FT	6" BASE PIPE UNDERDRAINS, 707.31
	270															605	31100	270	FT	AGGREGATE DRAINS
200																605	32200	200	FT	AGGREGATE DRAINS FOR SPRINGS
				319																**PAVEMENT**
				29691												252	01500	319	FT	FULL DEPTH PAVEMENT SAWING
		400		12495												254	01000	29691	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
				116												301	46000	12895	CU YD	ASPHALT CONCRETE BASE, PG64-22
				160												301	48000	116	CU YD	ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)
																302	46000	160	CU YD	ASPHALT CONCRETE BASE, PG64-22
		150		75848												304	20000	75998	CU YD	AGGREGATE BASE
		400		2227												407	10000	2627	GALLON	TACK COAT
				8713												407	14000	8713	GALLON	TACK COAT FOR INTERMEDIATE COURSE
				2170												448	46904	2170	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
				6747												448	46050	6747	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
				4243												448	47020	4243	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
				36												448	48020	36	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
				120												451	30000	120	FT	SPECIAL - PRESSURE RELIEF JOINT, TYPE A
				18788												452	13000	18788	SQ YD	9" NON-REINFORCED CONCRETE PAVEMENT
22.77																618	40600	23	MILE	RUMBLE STRIPS _____ (ASPHALT CONCRETE)
				72850												880	15000	72850	CU YD	ASPHALT CONCRETE (7 YEAR WARRANTY)
									9											**LIGHTING**
									13							625	01500	9	EACH	CABLE SPLICING KIT
									8							625	13200	13	EACH	LIGHT TOWER, BBBB100
									21							625	13406	8	EACH	LIGHT TOWER, BBBBBB120
									8820							625	15200	21	EACH	LIGHT TOWER FOUNDATION, 36" X 25' DEEP
																625	24330	8820	FT	1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 5000 VOLT CABLES
									680							625	25500	680	FT	CONDUIT, 3", 725.04
									8							625	26261	8	EACH	LUMINAIRE, HIGH MAST, ASYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN
									92							625	26261	92	EACH	LUMINAIRE, HIGH MAST, SYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN

CALCULATED JMA
CHECKED FJA

GENERAL SUMMARY

LIC-161-6.65
LIC-37-10.25

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| SHEET NUMBER | | |

SHEET NUMBER									ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
49	53	54	54A	54B	54C	57	122	1030						
													BUILDING DEMOLITION, CONT.	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 STORY BARN	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 STORY FRAME HORSE BARN	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 1/2 STORY METAL/BLOCK BARN	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 2 STORY BARN	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 2 STORY WOOD BARN	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: FRAME BUILDING PARKING	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: FRAME GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: WOOD GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 STORY BLOCK GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 1/2 STORY FRAME GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 1/2 STORY METAL GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 1 1/2 CAR FRAME GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 2 CAR GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 2 CAR FRAME GARAGE	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: 2 1/2 CAR GARAGE METAL	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: SHED	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: FRAME SHED	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: WOOD FRAME SHED	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: WOOD SHED	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: COVERED DOG PEN	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: CORN CRIB	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: SILO	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: CONC SILO	
							LUMP		202	56000	LUMP		BUILDING DEMOLISHED: METAL SILO	
													FOR STRUCTURE GENERAL SUMMARIES SEE SHEETS 1103, 1135, 1168, 1200, 1228, & 1243	
													MAINTENANCE OF TRAFFIC	
	200		1000						410	12000	1200	CU YD	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
	200		500						410	13000	700	CU YD	TRAFFIC COMPACTED SURFACE, TYPE C	
		300							614	11100	300	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
					20				614	11500	20	MONTH	WORKSITE TRAFFIC SUPERVISOR	
					2530				614	11600	2530	FT	TRANSITION AREA DELINEATION	
						3			614	12338	3	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	
						6			614	12350	6	EACH	WORK ZONE IMPACT ATTENUATOR	
		LUMP							614	12420	LUMP		DETOUR SIGNING	
		14							614	12470	14	EACH	WORK ZONE SPEED LIMIT SIGN	
		14							614	12484	14	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		300							614	12510	300	SQ FT	REPLACEMENT SIGN	
		50							614	12600	50	EACH	REPLACEMENT DRUM	
		1							614	12756	1	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
					1				614	12757	1	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM, AS PER PLAN	54C
	1000		200						614	13000	1200	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
						341			614	12800	341	EACH	WORK ZONE RAISED PAVEMENT MARKER	
						192			614	13300	192	EACH	BARRIER REFLECTOR, TYPE B	
						140			614	13350	140	EACH	OBJECT MARKER, ONE WAY	
						116			614	13360	116	EACH	OBJECT MARKER, TWO WAY	
				144					614	18601	144	SIGN-MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	54B
						8.98			614	21100	8.98	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
						20.34			614	22100	20.34	MILE	WORK ZONE EDGE LINE, CLASS I, 642 PAINT	
						LUMP			615	10000	LUMP		ROADS FOR MAINTAINING TRAFFIC	
						22244			615	20000	22244	SQ YD	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
14405	8								616	10000	8	M. GAL.	WATER	
						9180			622	40020	9180	FT	PORTABLE CONCRETE BARRIER, 32"	
						9180			622	80000	9180	FT	GLARE SCREEN	
	LUMP								SPECIAL	10810000	LUMP		SPECIAL- CPM PROGRESS SCHEDULE	
									614	11000	LUMP		MAINTAINING TRAFFIC	
									619	16020	20	MONTH	FIELD OFFICE, TYPE C	
									623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
									624	10000	LUMP		MOBILIZATION	

CALCULATED JMA
CHECKED WAA

GENERAL SUMMARY

LIC-161-6.65
LIC-37-10.25

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	202 BUILDING DEMOLISHED: 1 STORY FRAME LUMP	BUILDING DEMOLISHED: 1 STORY HOUSE LUMP	BUILDING DEMOLISHED: 1 1/2 STORY FRAME LUMP	BUILDING DEMOLISHED: 2 STORY FRAME LUMP	BUILDING DEMOLISHED: 2 1/2 STORY FRAME LUMP	BUILDING DEMOLISHED: 1 STORY BARN LUMP	BUILDING DEMOLISHED: 2 STORY BARN LUMP	BUILDING DEMOLISHED: FRAME GARAGE LUMP	BUILDING DEMOLISHED: 2 CAR FRAME GARAGE LUMP	BUILDING DEMOLISHED: 2 1/2 CAR GARAGE METAL LUMP	BUILDING DEMOLISHED: FRAME SHED LUMP	BUILDING DEMOLISHED: WOOD FRAME SHED LUMP	BUILDING DEMOLISHED: WOOD SHED LUMP	HEADWALL REMOVED EACH	PAVEMENT REMOVED SQ YD	WALK REMOVED SQ FT	PIPE REMOVED. 24" AND UNDER FT	PIPE REMOVED. OVER 24" FT	GUARDRAIL REMOVED FT	MAILBOX REMOVED EACH	CATCH BASIN REMOVED EACH	SEPTIC TANK REMOVED EACH	SPECIAL - DRILLED WATER WELL ABANDONED EACH	REGULATED UNDERGROUND STORAGE TANK REMOVED EACH	FENCE REMOVED FT
155	R-1	S.R. 161	351+00	357+50	RT															2272									
156	R-1	S.R. 161	357+50	370+00	RT&LT															4240									
156	R-2	S.R. 161	364+40	366+36	LT																				196				
157	R-1	S.R. 161	370+00	382+50	LT															4125									
157	R-2	S.R. 161	374+88	375+16	RT&LT														2					203					
157	R-3	S.R. 161	374+78	374+84	LT																	115							
157	R-4	S.R. 161	371+82	378+40	LT																			658					
157	R-5	S.R. 161	380+67	381+00	LT																	33							
157	R-6	S.R. 161	381+21	381+23	RT																	31							
157	R-7	S.R. 161	371+15		LT																				1				
157	R-8	S.R. 161	371+50		LT																								
157	R-9	S.R. 161	381+10		LT																				1				
158	R-1	S.R. 161	382+50	387+00	LT															1431					2				
158	R-2	S.R. 161	382+88	383+17	RT																	30							
158	R-3	S.R. 161	385+20		RT				LUMP																				
158	R-4	S.R. 161	385+52		RT																					1			
158	R-5	S.R. 161	391+30		RT																					3			
158	R-6	S.R. 161	391+75		RT								LUMP																
158	R-7	S.R. 161	392+30		RT																						1		
158	R-8	S.R. 161	384+50	385+73	RT																								125
158	R-9	S.R. 161	385+77	387+85	RT&LT																								716
159	R-1	S.R. 161	406+52	406+92	RT&LT																								200
160	R-1	S.R. 161	411+14		LT																							1	
160	R-2	S.R. 161	411+17		RT	LUMP																							
160	R-3	S.R. 161	412+15		RT						LUMP																		
160	R-4	S.R. 161	412+44		RT										LUMP														
160	R-5	S.R. 161	412+59		RT							LUMP																	
160	R-6	S.R. 161	412+95		RT												LUMP												
161	R-1	S.R. 161	425+65	427+66	RT&LT																								660
161	R-2	S.R. 161	426+16	430+62	RT&LT																								560
161	R-3	S.R. 161	429+26	430+53	RT																								450
162	R-1	S.R. 161	432+61		RT										LUMP														
162	R-2	S.R. 161	432+79		RT			LUMP																					
162	R-3	S.R. 161	432+78		RT																							1	
162	R-4	S.R. 161	432+94		RT																						1		
162	R-5	S.R. 161	433+48	433+83	RT																								80
162	R-6	S.R. 161	433+77		RT											LUMP													
162	R-7	S.R. 161	434+23	434+56	RT&LT																								125
162	R-8	S.R. 161	436+57	444+64	LT																			825					
162	R-9	S.R. 161	432+93	443+35	RT															3407									
162	R-10	S.R. 161	436+59	437+02	LT														1			80				1			
163	R-1	S.R. 161	445+43		LT																						3		
163	R-2	S.R. 161	445+82		LT	LUMP																							
163	R-3	S.R. 161	445+96		LT																						1		
163	R-4	S.R. 161	446+02		RT													LUMP											
163	R-5	S.R. 161	452+24		LT		LUMP																						
163	R-6	S.R. 161	452+28		LT																						1		
163	R-7	S.R. 161	452+89		LT													LUMP											
163	R-8	S.R. 161	453+06		LT																						1		
163	R-9	S.R. 161	451+45	455+00	RT&LT																								553
163	R-10	S.R. 161	456+32		LT													LUMP											
163	R-11	S.R. 161	456+33		LT		LUMP																						
163	R-12	S.R. 161	456+94		LT																						1		
163	R-13	S.R. 161	457+18		LT													LUMP											
TOTALS (THIS SHEET)						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	3	15475	0	289	203	1679	4	1	9	4	2	3469
TOTALS CARRIED TO SHEET 122						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	3	15475	0	289	203	1679	4	1	9	4	2	3469

CALCULATED BER
CHECKED FJA

ROADWAY REMOVAL SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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ROADWAY REMOVAL SUBSUMMARY

CALCULATED BER CHECKED FJA

LIC-161-6.65
LIC-37-10.25

118
1349

202

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	BUILDING DEMOLISHED, 1 STORY FRAME	BUILDING DEMOLISHED, 2 STORY WOOD HOUSE	BUILDING DEMOLISHED, 2 STORY WOOD BARN	BUILDING DEMOLISHED, FRAME GARAGE	BUILDING DEMOLISHED, WOOD GARAGE	BUILDING DEMOLISHED, WOOD SHED	BUILDING DEMOLISHED, CONC SILO	STRUCTURE REMOVED, OVER 20 FOOT SPAN	HEADWALL REMOVED	PAVEMENT REMOVED	WALK REMOVED	PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	GUARDRAIL REMOVED	MAILBOX REMOVED	CATCH BASIN REMOVED	SEPTIC TANK REMOVED	SPECIAL - DRILLED WATER WELL ABANDONED	REGULATED UNDERGROUND STORAGE TANK REMOVED	FENCE REMOVED
						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	EACH	SQ YD	SQ FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	FT
163	R-14	S.R. 161	455+00	457+00	LT																				478
163	R-15	S.R. 161	455+54	456+17	LT																				95
163	R-16	S.R. 161	457+23	457+50	LT																				91
163	R-17	S.R. 161	446+15		RT						LUMP														
164	R-1	S.R. 161	457+50	457+77	LT																				120
164	R-2	S.R. 161	464+48		LT						LUMP														
164	R-3	S.R. 161	461+88	466+45	RT&LT																				800
165	R-1	S.R. 161	467+85		RT&LT																				435
167	R-1	S.R. 37	490+03	490+40	RT&LT																				376
168	R-1	S.R. 37	512+68		LT																		1		
168	R-2	S.R. 37	513+99	515+00	RT&LT																				567
168	R-3	S.R. 37	513+55	514+04	LT																				120
168	R-4	S.R. 37	509+64	513+36	RT&LT																				751
168	R-5	S.R. 37	513+21		LT																		1		
169	R-1	S.R. 37	515+00	518+75	LT																				405
169	R-2	S.R. 37	518+23		RT	LUMP																			
169	R-3	S.R. 37	518+70		RT				LUMP																
169	R-4	S.R. 37	517+27	518+90	RT&LT																				760
169	R-5	S.R. 37	518+95	525+26	LT																				689
169	R-6	S.R. 37	524+59	525+92	RT																				287
169	R-7	S.R. 37	525+13		RT																		1		
169	R-8	S.R. 37	525+22		RT							LUMP													
169	R-9	S.R. 37	525+63		LT			LUMP																	
169	R-10	S.R. 37	527+00		RT					LUMP															
169	R-11	S.R. 37	527+33		RT&LT		LUMP																		
170	R-1	S.R. 37	527+54		RT																		1		
170	R-2	S.R. 37	527+83		RT																	1			
170	R-3	S.R. 37	534+00	540+00	RT&LT																				945
171	R-1	S.R. 37	540+00	546+03	RT																				750
171	R-2	S.R. 37	545+93	550+06	RT																				550
171	R-3	S.R. 37	551+83	552+50	RT																				200
171	R-4	S.R. 37	550+35		LT															1					
172	R-1	S.R. 37	552+50	552+96	RT																				160
172	R-2	S.R. 37	552+89	561+32	RT																				828
172	R-3	S.R. 37	557+13	558+63	LT														150						
172	R-4	S.R. 37	558+10	558+18	LT									2				96							
172	R-5	S.R. 37	561+89	565+00	RT																				367
172	R-6	S.R. 37	554+02	565+00	RT&LT										3775										
173	R-1	S.R. 37	565+00	567+08	RT																				316
173	R-2	S.R. 37	565+00	574+08	RT&LT										3169										
173	R-3	S.R. 37	567+08	567+47	RT												40								
173	R-4	S.R. 37	567+87	571+48	LT														363						
173	R-5	S.R. 37	570+97	571+10	RT&LT									2				90							
173	R-6	S.R. 37	571+90	572+20	RT												30								
173	R-7	S.R. 37	573+90	574+68	RT														78						
173	R-8	S.R. 37	573+93	574+67	RT														73						
173	R-9	S.R. 37	574+66	575+29	RT								LUMP												
173	R-10	S.R. 37	575+29	576+02	RT														73						
173	R-11	S.R. 37	575+29	576+09	RT														78						
173	R-12	S.R. 37	579+29	577+50	RT										729										
174	R-1	S.R. 37	577+50	590+00	RT										4582										
174	R-2	S.R. 37	584+64	586+10	RT																				171
174	R-3	S.R. 37	586+16		RT																		1		
174	R-4	S.R. 37	585+90	588+58	RT																				257
174	R-5	S.R. 37	589+64	589+74	RT&LT									2				137							
174	R-6	S.R. 37	584+07	586+01	RT																				195
TOTALS (THIS SHEET)						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	6	12255	0	70	323	815	1	0	1	5	0	10713
TOTALS CARRIED TO SHEET 122						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	6	12255	0	70	323	815	1	0	1	5	0	10713

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202

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	BUILDING DEMOLISHED: 1 STORY BRICK LUMP	BUILDING DEMOLISHED: 1 STORY FRAME LUMP	BUILDING DEMOLISHED: 1 1/2 STORY FRAMED HOUSE LUMP	BUILDING DEMOLISHED: 2 STORY FRAME & BLOCK RESIDENTIAL LUMP	BUILDING DEMOLISHED: 1 STORY FRAME OUT BUILDING LUMP	BUILDING DEMOLISHED: METAL OUT BUILDING LUMP	BUILDING DEMOLISHED: 1 STORY FRAME HORSE BARN LUMP	BUILDING DEMOLISHED: FRAME BUILDING PARKING LUMP	BUILDING DEMOLISHED: 1 STORY BLOCK GARAGE LUMP	BUILDING DEMOLISHED: 1 1/2 STORY METAL GARAGE LUMP	BUILDING DEMOLISHED: 1 1/2 CAR FRAME GARAGE LUMP	BUILDING DEMOLISHED: COVERED DOG PEN LUMP	BUILDING DEMOLISHED: CORN CRIB LUMP	BUILDING DEMOLISHED: METAL SILO LUMP	PAVEMENT REMOVED SQ YD	WALK REMOVED SQ FT	PIPE REMOVED, 24" AND UNDER FT	PIPE REMOVED, OVER 24" FT	GUARDRAIL REMOVED FT	MAILBOX REMOVED EACH	CATCH BASIN REMOVED EACH	SEPTIC TANK REMOVED EACH	SPECIAL - DRILLED WATER WELL ABANDONED EACH	REGULATED UNDERGROUND STORAGE TANK REMOVED EACH	FENCE REMOVED FT
175	R-1	S.R. 37	590+00	602+50	RT															4946				940						
175	R-2	S.R. 37	593+10	602+50	RT															1150										184
175	R-3	S.R. 37	599+40	601+67	RT&LT																									1259
175	R-4	S.R. 37	600+66	602+50	LT																									
176	R-1	S.R. 37	602+50	615+00	LT																			212						
176	R-2	S.R. 37	602+50	604+48	LT															4954										
176	R-3	S.R. 37	602+50	615+00	RT																			825						
176	R-4	S.R. 37	604+77	613+09	LT																			51						
176	R-5	S.R. 37	614+49	615+00	LT															4889										
177	R-1	S.R. 37	615+00	627+50	RT																			1160						
177	R-2	S.R. 37	615+00	626+60	RT																		215							1266
177	R-3	S.R. 37	615+00	627+50	LT																			75						
177	R-4	S.R. 37	623+31	623+51	RT&LT																									925
177	R-5	S.R. 37	626+90	627+50	RT																									
178	R-1	S.R. 37	627+50	636+69	LT																			488						
178	R-2	S.R. 37	627+50	632+29	RT															4973										400
178	R-3	S.R. 37	627+50	640+00	RT																			747						
178	R-4	S.R. 37	636+00	640+00	RT																			176						
178	R-5	S.R. 37	632+59	640+00	RT																			210						
178	R-6	S.R. 37	635+92	637+55	LT																									195
178	R-7	S.R. 37	637+90	640+00	RT																									1240
178	R-8	S.R. 37	638+04	640+22	LT																			1250						
179	R-1	S.R. 37	640+00	652+50	LT																									1260
179	R-2	S.R. 37	640+00	652+50	RT&LT																			1250						
179	R-3	S.R. 37	640+00	652+50	RT															2944										
179	R-4	S.R. 37	640+00	652+50	RT															4938										
179	R-5	S.R. 37	642+13	652+50	RT&LT																		136							
179	R-6	S.R. 37	640+00	652+50	RT															626										
179	R-7	S.R. 37	646+34		RT&LT															637										
180	R-1	S.R. 37	652+50	654+00	RT																			150						
180	R-2	S.R. 37	652+50	654+00	LT																									
180	R-3	S.R. 37	652+50	654+00	LT																			150						
180	R-4	S.R. 37	652+50	654+00	RT																									
590	R-1	WATKINS-YORK	120+39	125+77	RT&LT																									607
590	R-2	WATKINS-YORK	125+72	126+80	RT&LT																									208
590	R-3	WATKINS-YORK	128+30		RT			LUMP																						
591	R-1	WATKINS-YORK	137+01		RT											LUMP														
591	R-2	WATKINS-YORK	137+36		RT																					1				
591	R-3	WATKINS-YORK	137+57		RT		LUMP																							
591	R-4	WATKINS-YORK	137+84		RT																							1		
591	R-5	WATKINS-YORK	137+91		RT																						1			
591	R-6	WATKINS-YORK	141+35		RT	LUMP																								
591	R-7	WATKINS-YORK	141+44		RT																						1			
591	R-8	WATKINS-YORK	141+60		RT																						1			
591	R-9	WATKINS-YORK	142+13		RT																						1			
592	R-1	WATKINS-YORK	143+44		RT&LT					LUMP																				
592	R-2	WATKINS-YORK	143+97		RT								LUMP																	
592	R-3	WATKINS-YORK	143+99		RT													LUMP												
592	R-4	WATKINS-YORK	150+97		RT										LUMP															
592	R-5	WATKINS-YORK	151+60		RT														LUMP											
595	R-1	WATKINS-YORK	185+56		RT							LUMP																		
595	R-2	WATKINS-YORK	187+18		RT																					2				
595	R-3	WATKINS-YORK	187+69		RT				LUMP																					
595	R-4	WATKINS-YORK	188+36		LT												LUMP													
595	R-5	WATKINS-YORK	190+29		RT&LT						LUMP																			
595	R-6	WATKINS-YORK	187+68		RT																						1			
597	R-1	WATKINS-YORK	210+26		RT									LUMP																
TOTALS (THIS SHEET)						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	30057	0	0	351	7684	0	0	4	4	1	7544
TOTALS CARRIED TO SHEET 122						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	30057	0	0	351	7684	0	0	4	4	1	7544

CALCULATED BER
CHECKED FJA

ROADWAY REMOVAL SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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ROADWAY REMOVAL SUBSUMMARY

CALCULATED BER
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

202

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	BUILDING DEMOLISHED: 1 STORY FRAME	BUILDING DEMOLISHED: 1 STORY FRAME/BRICK	BUILDING DEMOLISHED: 1 STORY STONE/WOOD	BUILDING DEMOLISHED: 1 1/2 STORY	BUILDING DEMOLISHED: 2 STORY FRAME	BUILDING DEMOLISHED: METAL BARN	BUILDING DEMOLISHED: 1 1/2 STORY FRAME GARAGE	BUILDING DEMOLISHED: 2 CAR GARAGE	BUILDING DEMOLISHED: SHED	HEADWALL REMOVED	PAVEMENT REMOVED	WALK REMOVED	PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	GUARDRAIL REMOVED	MAILBOX REMOVED	CATCH BASIN REMOVED	SEPTIC TANK REMOVED	SPECIAL - DRILLED WATER WELL ABANDONED	REGULATED UNDERGROUND STORAGE TANK REMOVED	FENCE REMOVED
						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	EACH	SQ YD	SQ FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	FT
597	R-2	WATKINS-YORK	211+01		RT&LT	LUMP																				
597	R-3	WATKINS-YORK	211+16		RT&LT																			1		
597	R-4	WATKINS-YORK	211+13	211+38	RT&LT												231									
658	R-1	SERVICE ROAD 10	145+26	148+50	RT&LT											986										
658	R-2	SERVICE ROAD 10	147+18		LT																3					
663	R-1	REL. WORTHINGTON RD N	150+75	151+00	RT													33								
664	R-1	REL. WORTHINGTON RD N	151+09		RT																1					
665	R-1	REL. WORTHINGTON RD N	167+43	168+12	RT&LT											181										
665	R-2	REL. WORTHINGTON RD N	167+05	167+95	RT															90						
665	R-3	REL. WORTHINGTON RD N	167+57	168+47	LT															90						
665	R-4	REL. WORTHINGTON RD N	167+55	167+99	RT&LT														80							
665	R-5	REL. WORTHINGTON RD N	169+74		RT																1					
667	R-1	REL. WORTHINGTON RD N	189+15	189+50	LT													35								
667	R-2	REL. WORTHINGTON RD N	191+88	193+19	LT																					150
667	R-3	REL. WORTHINGTON RD N	189+58		RT																1					
667	R-4	REL. WORTHINGTON RD N	190+31		RT																1					
669	R-1	REL. WORTHINGTON RD N	213+51	213+92	LT																					78
669	R-2	REL. WORTHINGTON RD N	214+05		RT&LT		LUMP																			
669	R-3	REL. WORTHINGTON RD N	214+44		RT																			1		
669	R-4	REL. WORTHINGTON RD N	214+92		RT							LUMP														
669	R-5	REL. WORTHINGTON RD N	215+26		RT&LT												162									
669	R-6	REL. WORTHINGTON RD N	215+17	215+34	RT&LT																					110
670	R-1	REL. WORTHINGTON RD N	227+43	227+80	RT										2			40								
670	R-2	REL. WORTHINGTON RD N	227+71	228+00	RT										2			33								
670	R-3	REL. WORTHINGTON RD N	227+56	233+00	RT&LT											1916										
690	R-1	RAMP I	442+71	443+00	LT															30						
691	R-1	RAMP I	443+00	445+84	RT&LT															295						
691	R-2	RAMP I	443+69	444+47	RT&LT										2				131							
691	R-3	RAMP I	443+00	451+88	RT&LT											4599										
691	R-4	RAMP I	450+47		LT																			1		
691	R-5	RAMP I	450+63		RT&LT					LUMP																
698	R-1	RAMP J	454+60	456+26	RT&LT																					216
698	R-2	RAMP J	456+26	456+92	RT&LT																					138
698	R-3	RAMP J	450+59	454+58	RT&LT											2977										
714	R-1	RAMP L	450+76	458+57	RT&LT																					815
714	R-2	RAMP L	452+24	452+58	RT&LT																					117
723	R-1	S.R. 37	399+08	399+49	LT																					55
723	R-2	S.R. 37	400+55		LT									LUMP												
723	R-3	S.R. 37	401+35		LT	LUMP																		1		
723	R-4	S.R. 37	401+25		LT								LUMP													
723	R-5	S.R. 37	394+00	403+00	RT&LT											4902										
723	R-6	S.R. 37	396+07		LT																2					
723	R-7	S.R. 37	399+79		LT																1					
723	R-8	S.R. 37	401+45		LT																1					
723	R-9	S.R. 37	399+36		LT									LUMP												
724	R-1	S.R. 37	404+47	404+48	RT&LT										1			35				1				
724	R-2	S.R. 37	406+90	410+69	LT																					379
724	R-3	S.R. 37	410+59		RT&LT										2				26							
724	R-4	S.R. 37	411+47	411+66	LT										2			20								
724	R-5	S.R. 37	412+87		RT																	3				
724	R-6	S.R. 37	403+00	413+00	RT&LT											2341										
724	R-7	S.R. 37	411+28		RT																1					
724	R-8	S.R. 37	412+20		LT				LUMP																	
724	R-9	S.R. 37	412+30		LT						LUMP															
725	R-1	S.R. 37	413+41		RT			LUMP																		
725	R-2	S.R. 37	413+84		RT																			1		
		TOTALS (THIS SHEET)				LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	11	17902	393	196	237	505	12	1	3	5	0	2058
		TOTALS CARRIED TO SHEET 122				LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	11	17902	393	196	237	505	12	1	3	5	0	2058

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ROADWAY REMOVAL SUBSUMMARY

CALCULATED BER
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

202

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	BUILDING DEMOLISHED: 1 STORY FRAME	BUILDING DEMOLISHED: 2 STORY FRAME	BUILDING DEMOLISHED: 1 1/2 STORY METAL/BLOCK BARN	BUILDING DEMOLISHED: 2 STORY WOOD BARN	BUILDING DEMOLISHED: SILO	HEADWALL REMOVED	PAVEMENT REMOVED	WALK REMOVED	PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	GUARDRAIL REMOVED	MAILBOX REMOVED	CATCH BASIN REMOVED	SEPTIC TANK REMOVED	SPECIAL - DRILLED WATER WELL ABANDONED	REGULATED UNDERGROUND STORAGE TANK REMOVED	FENCE REMOVED
						LUMP	LUMP	LUMP	LUMP	LUMP	EACH	SQ YD	SQ FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	FT
725	R-3	S.R. 37	414+04	414+33	RT									29								
725	R-4	S.R. 37	414+98	415+16	RT									17								
725	R-5	S.R. 37	413+83	413+90	LT																	58
725	R-6	S.R. 37	417+72	471+94	RT									22								
725	R-7	S.R. 37	413+00	419+71	RT&LT							1342										
725	R-8	S.R. 37	413+33		RT												1					
725	R-9	S.R. 37	414+37		RT												2					
725	R-10	S.R. 37	415+20		RT												1					
725	R-11	S.R. 37	417+96		RT												1					
738	R-1	SERVICE ROAD 11	218+14	218+70	RT&LT																	97
738	R-2	SERVICE ROAD 11	218+75	218+93	LT									24								
755	R-1	OUTVILLE	18+60	26+25	RT&LT							1726										
763	R-1	OUTVILLE-MORSE	529+64		RT														1			
765	R-1	OUTVILLE-MORSE	550+87		RT															1		
765	R-2	OUTVILLE-MORSE	550+93		RT		LUMP															
766	R-1	OUTVILLE-MORSE	567+12		RT															1		
766	R-2	OUTVILLE-MORSE	568+95		RT															1		
767	R-1	OUTVILLE-MORSE	569+83		RT				LUMP													
767	R-2	OUTVILLE-MORSE	570+00	574+64	RT																	504
767	R-3	OUTVILLE-MORSE	575+74	580+50	RT&LT																	476
768	R-1	OUTVILLE-MORSE	580+50	582+87	LT																	237
824	R-1	C.R. 539A	294+93	296+27	RT											140						
824	R-2	C.R. 539A	295+60	296+99	LT											140						
824	R-3	C.R. 539A	295+86	296+19	RT&LT						2				78							
824	R-4	C.R. 539A	296+30	296+65	RT									34								
824	R-5	C.R. 539A	295+50	302+50	RT&LT							2329										
824	R-6	C.R. 539A	296+18		RT												2					
825	R-1	C.R. 539A	304+29		RT&LT						2				53							
825	R-2	C.R. 539A	307+36		LT																	51
825	R-3	C.R. 539A	308+26		LT	LUMP																
825	R-4	C.R. 539A	308+82		LT															1		
825	R-5	C.R. 539A	308+84	309+34	LT									52								
825	R-6	C.R. 539A	309+90		LT					LUMP												
825	R-7	C.R. 539A	310+65		LT			LUMP														
825	R-8	C.R. 539A	311+10		LT								1968									
825	R-9	C.R. 539A	310+99	311+31	LT																	127
825	R-10	C.R. 539A	302+50	315+00	RT&LT							4182										
825	R-11	C.R. 539A	309+36	315+00	LT											564						
825	R-12	C.R. 539A	308+42		LT												1					
825	R-13	C.R. 539A	309+32		LT												1					
826	R-1	C.R. 539A	315+00	326+43	RT&LT							3924										
826	R-2	C.R. 539A	315+29	319+93	LT																	465
826	R-3	C.R. 539A	315+00	321+21	LT											638						
826	R-4	C.R. 539A	321+13	321+50	LT									37								
826	R-5	C.R. 539A	323+58	327+50	LT																	418
826	R-6	C.R. 539A	327+31		RT													1				
826	R-7	C.R. 539A	321+57		LT												1					
827	R-1	C.R. 539A	327+50	334+05	RT&LT																	600
827	R-2	C.R. 539A	329+95	330+03	LT																	35
827	R-3	C.R. 539A	330+03	333+75	RT&LT																	309
827	R-4	C.R. 539A	334+22		RT															1		
870	R-1	MORSE	7+75	18+39	LT																	1068
870	R-2	MORSE	13+99	14+28	RT						2			29								
870	R-3	MORSE	15+65	18+39	RT																	340
TOTALS (THIS SHEET)						LUMP	LUMP	LUMP	LUMP	LUMP	6	13503	1968	244	131	1482	10	1	1	5	0	4785
TOTALS CARRIED TO SHEET 122						LUMP	LUMP	LUMP	LUMP	LUMP	6	13503	1968	244	131	1482	10	1	1	5	0	4785

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ROADWAY REMOVAL SUBSUMMARY

CALCULATED BER
CHECKED FJA

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	202 BUILDING DEMOLISHED: 1 STORY BRICK	BUILDING DEMOLISHED: 1 STORY FRAME	BUILDING DEMOLISHED: 1 STORY FRAME/BRICK	BUILDING DEMOLISHED: 1 STORY STONE/WOOD	BUILDING DEMOLISHED: 1 STORY HOUSE	BUILDING DEMOLISHED: 1 1/2 STORY		BUILDING DEMOLISHED: 1 1/2 STORY FRAME	BUILDING DEMOLISHED: 1 1/2 STORY FRAMED HOUSE	BUILDING DEMOLISHED: 2 STORY FRAME	BUILDING DEMOLISHED: 2 STORY WOOD HOUSE	BUILDING DEMOLISHED: 2 STORY FRAME & BLOCK RESIDENTIAL	BUILDING DEMOLISHED: 2 1/2 STORY FRAME	BUILDING DEMOLISHED: 1 STORY FRAME OUT BUILDING	BUILDING DEMOLISHED: METAL OUT BUILDING		BUILDING DEMOLISHED: METAL BARN	BUILDING DEMOLISHED: 1 STORY BARN	BUILDING DEMOLISHED: 1 STORY FRAME HORSE BARN	BUILDING DEMOLISHED: 1 1/2 STORY METAL/BLOCK BARN	BUILDING DEMOLISHED: 2 STORY BARN	BUILDING DEMOLISHED: 2 STORY WOOD BARN	BUILDING DEMOLISHED: FRAME BUILDING PARKING	BUILDING DEMOLISHED: FRAME GARAGE
						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP
870	R-4	MORSE	18+14		RT&LT																								
870	R-5	MORSE	7+75	18+39	RT&LT																								
870	R-6	MORSE	13+88		RT																								
TOTALS (THIS SHEET)						0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
TOTALS FROM SHEET 117						0	LUMP	0	0	LUMP	0		LUMP	0	LUMP	0	0	LUMP	0	0		0	LUMP	0	0	LUMP	0	0	LUMP
TOTALS FROM SHEET 118						0	LUMP	0	0	0	0		0	0	0	LUMP	0	0	0	0		0	0	0	0	0	LUMP	0	LUMP
TOTALS FROM SHEET 119						LUMP	LUMP	0	0	0	0		0	LUMP	0	0	LUMP	0	LUMP	LUMP		0	0	LUMP	0	0	0	LUMP	0
TOTALS FROM SHEET 120						0	LUMP	LUMP	LUMP	0	LUMP		0	0	LUMP	0	0	0	0	0		LUMP	0	0	0	0	0	0	0
TOTALS FROM SHEET 121						0	LUMP	0	0	0	0		0	0	LUMP	0	0	0	0	0		0	0	0	LUMP	0	LUMP	0	0
TOTALS TO GENERAL SUMMARY						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	202 BUILDING DEMOLISHED: WOOD GARAGE	BUILDING DEMOLISHED: 1 STORY BLOCK GARAGE	BUILDING DEMOLISHED: 1 1/2 STORY FRAME GARAGE	BUILDING DEMOLISHED: 1 1/2 STORY METAL GARAGE	BUILDING DEMOLISHED: 1 1/2 CAR FRAME GARAGE	BUILDING DEMOLISHED: 2 CAR GARAGE	BUILDING DEMOLISHED: 2 CAR FRAME GARAGE	BUILDING DEMOLISHED: 2 1/2 CAR GARAGE METAL	BUILDING DEMOLISHED: SHED	BUILDING DEMOLISHED: FRAME SHED	BUILDING DEMOLISHED: WOOD FRAME SHED	BUILDING DEMOLISHED: WOOD SHED	BUILDING DEMOLISHED: COVERED DOG PEN	BUILDING DEMOLISHED: CORN CRIB	BUILDING DEMOLISHED: SILO	BUILDING DEMOLISHED: CONC SILO	BUILDING DEMOLISHED: METAL SILO	STRUCTURE REMOVED, OVER 20 FOOT SPAN	HEADWALL REMOVED	PAVEMENT REMOVED	WALK REMOVED	PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	GUARDRAIL REMOVED
						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	EACH	SQ YD	SQ FT	FT	FT	FT
870	R-4	MORSE	18+14		RT&LT																			2			34		
870	R-5	MORSE	7+75	18+39	RT&LT																				2178				
870	R-6	MORSE	13+88		RT																								
TOTALS (THIS SHEET)						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2178	0	34	0	0
TOTALS FROM SHEET 117						0	0	0	0	0	0	LUMP	LUMP	0	LUMP	LUMP	LUMP	0	0	0	0	0	0	3	15475	0	289	203	1679
TOTALS FROM SHEET 118						LUMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LUMP	0	6	12255	0	70	323	815
TOTALS FROM SHEET 119						0	LUMP	LUMP	0	LUMP	0	0	0	0	0	0	0	LUMP	LUMP	0	0	LUMP	0	0	30057	0	0	351	7684
TOTALS FROM SHEET 120						0	0	LUMP	0	0	LUMP	0	0	LUMP	0	0	0	0	0	0	0	0	0	11	17902	393	196	237	505
TOTALS FROM SHEET 121						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LUMP	0	0	6	13503	1968	244	131	1482
TOTALS TO GENERAL SUMMARY						LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	28	91370	2361	833	1245	12165

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	202 MAILBOX REMOVED	CATCH BASIN REMOVED	SEPTIC TANK REMOVED	SPECIAL - DRILLED WATER WELL ABANDONED	REGULATED UNDERGROUND STORAGE TANK REMOVED	FENCE REMOVED
						EACH	EACH	EACH	EACH	EACH	FT
870	R-4	MORSE	18+14		RT&LT						
870	R-5	MORSE	7+75	18+39	RT&LT						
870	R-6	MORSE	13+88		RT	1					
TOTALS (THIS SHEET)						1	0	0	0	0	0
TOTALS FROM SHEET 117						4	1	9	4	2	3469
TOTALS FROM SHEET 118						1	0	1	5	0	10713
TOTALS FROM SHEET 119						0	0	4	4	1	7544
TOTALS FROM SHEET 120						12	1	3	5	0	2058
TOTALS FROM SHEET 121						10	1	1	5	0	4785
TOTALS TO GENERAL SUMMARY						28	3	18	23	3	28569

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SHT. NO.	REF. NO.	ROADWAY	LOCATION		SIDE	203	203	203	601	606										609	622				626				659
			FROM	TO		EXCAVATION	EMBANKMENT	GRANULAR MATERIAL, TYPE B	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER FABRIC	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE 5 WITH DOUBLE RAILS	ANCHOR ASSEMBLY, TYPE B-98	ANCHOR ASSEMBLY, TYPE E-98	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 1ST	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	IMPACT ATTENUATOR, TYPE 350 (BIDIRECTIONAL)	IMPACT ATTENUATOR, TYPE 3-98	CURB, TYPE 6	CONCRETE BARRIER, SINGLE SLOPE, TYPE A	CONCRETE BARRIER, SINGLE SLOPE, TYPE C	CONCRETE BARRIER END SECTION, TYPE A	GLARE SCREEN	BARRIER REFLECTOR, TYPE A	BARRIER REFLECTOR, TYPE B	BARRIER REFLECTOR, TYPE A2	BARRIER REFLECTOR, TYPE B2	SEEDING & MULCHING
						CU YD	CU YD	CU YD	CU YD	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	EACH	FT	EACH	EACH	EACH	EACH	SQ YD
157	GR-1	S.R. 161	371+87.50	379+00.00	LT					650.0			1	1											9				
162	GR-1	S.R. 161	434+00.00	438+95.00	RT					437.5			1	1											6				
162	GR-2	S.R. 161 / RAMP I	434+37.50	450+00.00	LT					1500.0			1	1											22				
162	GR-3	S.R. 161	435+80.00	437+42.50	LT					100.0		1		1															
164	GR-1	S.R. 161/ RAMP J	464+12.50	466+50.00	LT					175.0			1	1															
164	GR-2	S.R. 161	464+12.50	465+50.00	LT					75.0		1		1															
166	GR-1	S.R. 37	477+68.23	481+11.98	RT					293.75			1			1									4				
166	GR-2	S.R. 37	479+93.02	481+11.77	LT					112.5		1				1									2				
166	GR-3	S.R. 37	483+96.67	492+09.17	LT					800.0				1			1								9				
166	GR-4	S.R. 37	484+52.00	486+02.00	LT					112.5		1				1									2				
166	GR-5	S.R. 37	484+83.05	492+01.79	LT					668.75			1			1									8				
166	BR-1	S.R. 37	481+11.98	483+96.67	RT																					3			
166	BR-2	S.R. 37	481+43.02	484+29.72	RT																					4			
166	BR-3	S.R. 37	481+65.30	484+52.00	LT																					4			
166	BR-4	S.R. 37	481+96.34	484+83.04	LT																					4			
166	C-1	S.R. 37	483+98.68	484+32.42	RT															33.74									
166	C-2	S.R. 37	484+29.72	484+63.46	RT															33.74									
166	C-3	S.R. 37	484+54.11	484+87.85	LT															33.74									
166	C-4	S.R. 37	484+85.15	485+18.89	LT															33.74									
171	B-1	S.R. 37	546+50.00	552+50.00	LT														1		590		1	600		7		7	
172	B-1	S.R. 37	552+50.00	565+00.00	LT																1250			1250		12		12	
173	B-1	S.R. 37	565+00.00	569+14.22	LT																404.2		1	414.2		4		4	
173	B-2	S.R. 37	569+14.22	573+89.89	LT																	475.7		475.7		5		5	
173	B-3	S.R. 37	575+87.95	577+50.00	LT																	156.8		156.8		2		2	
173	GR-1	S.R. 37	570+45.45	573+89.20	RT					293.75			1			1									4				
173	GR-2	S.R. 37	571+65.24	573+90.49	RT						193.75					1		1									3		
173	GR-3	S.R. 37	575+87.05	578+12.30	LT						193.75					1		1									3		
173	GR-4	S.R. 37	575+86.15	584+73.65	RT					875.0				1			1								10				
173	BR-1	S.R. 37	573+89.89	575+87.95	LT																					3		3	
173	BR-2	S.R. 37	573+88.61	575+89.06	LT																					3			
173	BR-3	S.R. 37	573+88.39	575+89.38	RT																					3			
173	BR-4	S.R. 37	573+87.15	575+90.62	RT																					3			
173	C-1	S.R. 37	575+90.62	576+30.12	RT															39.5									
173	C-2	S.R. 37	575+89.16	576+28.66	LT															39.5									
173	C-3	S.R. 37	575+87.03	576+25.36	LT															38.33									
174	B-1	S.R. 37	577+50.00	578+29.61	LT																	79.6		79.6		1		1	
174	B-2	S.R. 37	578+29.61	590+00.00	LT																1160.4		1	1170.4		12		12	
175	B-1	S.R. 37	590+00.00	596+90.00	LT														1		680		1	690		8		8	
176	GR-1	S.R. 37	603+30.00	611+05.00	LT					712.5			1	1											9				
180	GR-1	S.R. 37	653+50.00	654+00.00	RT								1												1				
180	GR-2	S.R. 37	653+87.50	654+00.00	LT									1											1				
589	GR-1	WATKINS-YORK	110+87.50	115+37.50	RT					387.5			1	1															
590	GR-1	WATKINS-YORK	129+50.00	134+87.50	RT					437.5			2														7		
595	GR-1	WATKINS-YORK	188+32.01	197+00.82	RT					812.5			1	1													15		
706/725	GR-1	RAMP K / S.R. 37	444+70.00	413+86.58	RT					787.5			1	1											10		4		
706/724	GR-2	RAMP K / S.R. 37	450+84.98	408+31.72	LT/RT					275.0				1		1											3		
714/724	GR-1	RAMP L / S.R. 37	456+71.33	408+28.05	LT					856.25				1		1									9		4		
714/724	GR-2	RAMP L / S.R. 37	453+12.50	415+66.89	RT/LT					600.00			1	1											3		6		
723-724	GR-1	S.R. 37	402+49.28	405+30.65	RT					468.75				1		1											5		
723-724	GR-2	S.R. 37	402+87.43	405+31.18	LT					268.75				1		1											3		
724	BR-1	S.R. 37	405+31.18	408+28.05	LT																							3	
724	BR-2	S.R. 37	405+30.65	408+28.05	RT																							3	
724	C-1	S.R. 37	404+90.57	405+28.55	RT															37.98									
724	C-2	S.R. 38	404+93.83	405+29.18	LT															35.35									
724	C-3	S.R. 39	408+33.72	408+65.47	RT															31.75									
TOTALS (THIS SHEET)						0.0	0.0	0.0	0.0	11700.0	387.5	4	15	18	0	11	2	2	2	357.4	4084.6	712.1	4	4836.7	109	78	53	60	0
TOTALS CARRIED TO SHEET 125						0.0	0.0	0.0	0.0	11700.0	387.5	4	15	18	0	11	2	2	2	357.4	4084.6	712.1	4	4836.7	109	78	53	60	0

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ROADWAY SUBSUMMARY

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LIC-37-10.25

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SHT. NO.	REF. NO.	ROADWAY	LOCATION		SIDE	203	203	203	601	606										609	622			626				659
			FROM	TO		EXCAVATION	EMBANKMENT	GRANULAR MATERIAL, TYPE B	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER FABRIC	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE 5 WITH DOUBLE RAILS	ANCHOR ASSEMBLY, TYPE B-98	ANCHOR ASSEMBLY, TYPE E-98	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE TST	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	IMPACT ATTENUATOR, TYPE 1-98 (BIDIRECTIONAL)	IMPACT ATTENUATOR, TYPE 3-98	CURB, TYPE 6	CONCRETE BARRIER, SINGLE SLOPE, TYPE A	CONCRETE BARRIER, SINGLE SLOPE, TYPE C	GLARE SCREEN	BARRIER REFLECTOR, TYPE A	BARRIER REFLECTOR, TYPE B	BARRIER REFLECTOR, TYPE A2	BARRIER REFLECTOR, TYPE B2	SEEDING & MULCHING, CLASS 2
						CU YD	CU YD	CU YD	CU YD	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	EACH	EACH	EACH	EACH	SQ YD
724	C-4	S.R. 37	408+34.34	408+66.09	LT															31.75								
755	GR-1	OUTVILLE ROAD	18+95.19	21+13.94	LT					168.75			1			1										3		
755	GR-2	OUTVILLE / OUT-MORSE	21+11.76	498+51.15	RT/LT					93.75			1			1										3		
755	GR-3	OUTVILLE ROAD	24+13.33	27+44.58	LT					281.25			1			1										4		
755	GR-4	OUTVILLE ROAD	24+11.15	27+42.40	RT					281.25			1			1										4		
755	BR-1	OUTVILLE ROAD	21+17.27	24+13.34	LT																						3	
755	BR-2	OUTVILLE ROAD	21+11.76	24+11.15	RT																						3	
755	C-1	OUTVILLE ROAD	20+80.19	21+11.94	LT															31.75								
755	C-2	OUTVILLE ROAD	20+79.44	21+09.65	RT															33.5								
755	C-3	OUTVILLE ROAD	24+15.44	24+48.94	LT															33.5								
755	C-4	OUTVILLE ROAD	24+13.15	24+46.65	RT	8208	108													33.5								4814
766	GR-1	OUTVILLE-MORSE	566+09.67	574+03.42	LT					712.50			1		1										8		
767	GR-1	OUTVILLE-MORSE	572+13.00	574+02.89	RT					150.00				1	1										3		
767	GR-2	OUTVILLE-MORSE	575+59.56	584+03.31	LT					762.50			1		1										9		
767	GR-3	OUTVILLE-MORSE	575+60.07	576+91.32	RT					50.00			1		1										2		
767	BR-1	OUTVILLE-MORSE	574+13.61	575+59.08	LT																				2		
767	BR-2	OUTVILLE-MORSE	574+13.07	575+59.65	RT																				2		
824	GR-1	C.R. 539A	299+99.30	302+50.00	LT					200.7			1														
825	GR-1	C.R. 539A	302+50.00	308+86.73	LT					636.8				1													
825	GR-2	C.R. 539A	309+07.28	321+03.56	LT					1200.0				2											13		
827	GR-1	C.R. 539A	329+78.95	336+47.70	LT					618.75			1			1									7		
827	GR-2	C.R. 539A	338+43.45	351+92.61	LT					1312.50				1		1									15		
827	BR-1	C.R. 539A	336+52.73	338+48.92	LT																						2	
155		S.R. 161				10145	285																					3584
156		S.R. 161				82070	4115																					22676
157		S.R. 161				54096	12905																					23053
158		S.R. 161				50149	28047																					21929
159		S.R. 161				2426	73681																					21286
160		S.R. 161				7098	21451																					21157
161		S.R. 161				20491	13093																					22006
162		S.R. 161				33427	156886																					25589
163		S.R. 161				42381	3759																					27281
164		S.R. 161				22312	37271																					20204
165		S.R. 37				119001	2336																					24124
166		S.R. 37				76462	29186	66760	2437																			29239
167		S.R. 37				290375	1972																					30428
168		S.R. 37				269207	4865																					25125
169		S.R. 37				72294	13368																					21696
170		S.R. 37				61578	24599																					18648
171		S.R. 37				35462	51342																					13020
172		S.R. 37				17868	45667																					8872
173		S.R. 37				3108	2112	21620	695																			7963
174		S.R. 37				698	56535																					10999
175		S.R. 37				791	30579																					15458
176		S.R. 37				4536	24747																					17031
177		S.R. 37				11452	16816																					16261
178		S.R. 37				14101	18680																					20465
179		S.R. 37				10650	28877																					25558
180		S.R. 37				1442	1004																					3315
588		WATKINS-YORK				219	76																					480
589		WATKINS-YORK				8644	2431																					7776
590		WATKINS-YORK				10654	23027																					9329
591		WATKINS-YORK				55508	19156																					11823
TOTALS (THIS SHEET)						1396853	748976	88380	3132.0	6468.8	0.0	0.0	9.0	5.0	4.0	6.0	0.0	0.0	0.0	164.0	0.0	0.0	0.0	0.0	0.0	75.0	8.0	531189
TOTALS CARRIED TO SHEET 125						1396853	748976	88380	3132.0	6468.8	0.0	0	9	5	4	6	0	0	0	164.0	0.0	0.0	0.0	0	0	75	8	531189

CALCULATED BER CHECKED FJA

ROADWAY SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	203 EXCAVATION	203 EMBANKMENT	203 GRANULAR MATERIAL, TYPE B AS PER PLAN	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER FABRIC	606 GUARDRAIL, TYPE 5	606 GUARDRAIL, TYPE 5 WITH DOUBLE RAILS	606 ANCHOR ASSEMBLY, TYPE B-98	606 ANCHOR ASSEMBLY, TYPE E-98	606 ANCHOR ASSEMBLY, TYPE T	606 BRIDGE TERMINAL ASSEMBLY, TYPE TST	606 BRIDGE TERMINAL ASSEMBLY, TYPE 1	606 BRIDGE TERMINAL ASSEMBLY, TYPE 2	606 IMPACT ATTENUATOR, TYPE 1-98 (BIDIRECTIONAL)	606 IMPACT ATTENUATOR, TYPE 3-98	609 CURB, TYPE 6	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE A	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE C	622 CONCRETE BARRIER END SECTION, TYPE A	622 GLARE SCREEN	626 BARRIER REFLECTOR, TYPE A	626 BARRIER REFLECTOR, TYPE B	626 BARRIER REFLECTOR, TYPE A2	626 BARRIER REFLECTOR, TYPE B2	659 SEEDING & MULCHING, CLASS 2
						CU YD	CU YD	CU YD	CU YD	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	EACH	FT	EACH	EACH	EACH	EACH	SQ YD
592		WATKINS-YORK				14191	23510																						10643
593		WATKINS-YORK				2658	31986																						10758
594		WATKINS-YORK				2968	5164																						7520
595		WATKINS-YORK				19005	6277																						11744
596		WATKINS-YORK				46656	35882																						17511
597		WATKINS-YORK				46656	35882																						4725
658		SERVICE RD 10				1668	78																						1891
663		REL. WORTHINGTON RD N				0	0																						0
664		REL. WORTHINGTON RD N				0	0																						0
665		REL. WORTHINGTON RD N				119	53																						501
666		REL. WORTHINGTON RD N				0	0																						0
667		REL. WORTHINGTON RD N				19488	706																						10154
668		REL. WORTHINGTON RD N				19202	17272																						15784
669		REL. WORTHINGTON RD N				4601	27952																						11879
670		REL. WORTHINGTON RD N				2061	1753																						5620
690		RAMP I				3456	10918																						2500
691		RAMP I				7102	25284																						15674
698		RAMPJ				12376	7989																						12015
699		RAMPJ				4427	0																						1198
705		RAMP K				1681	1116																						1715
706		RAMP K				20504	40676																						21589
714		RAMP L				481	49656																						10575
715		RAMP L				252	3722																						1450
723		S.R. 37				1134	16185																						7772
724		S.R. 37				541	41161	49068																						10579
725		S.R. 37				1270	10142																						6104
738		SERVICE RD 11				4378	3102																						6767
739		SERVICE RD 11				10779	6830																						9912
740		SERVICE RD 11				995	4013																						4373
755		OUTVILLE RD				8208	108																						4814
760		OUTVILLE-MORSE				49075	240																						8614
761		OUTVILLE-MORSE				135111	1392																						16259
762		OUTVILLE-MORSE				44321	3714																						9826
763		OUTVILLE-MORSE				35151	6677																						9027
764		OUTVILLE-MORSE				104735	119																						16091
765		OUTVILLE-MORSE				7838	21094																						8652
766		OUTVILLE-MORSE				21704	3387																						7356
767		OUTVILLE-MORSE				5139	3854	4791																						5783
768		OUTVILLE-MORSE				3643	280																						1500
824		C.R. 539A				1713	2755																						5460
825		C.R. 539A				1281	49669																						9881
826		C.R. 539A				19056	15107																						8775
827		C.R. 539A				53	15950	13621																						6194
828		C.R. 539A				0	33747																						5134
829		C.R. 539A				506	20591																						7198
870		MORSE RD				23477	2515																						10554
TOTALS (THIS SHEET)						709660	588508	67480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	362071
TOTALS FROM SHEET 123						0	0	0	0	11700.00	387.5	4	15	18	0	11	2	2	2	357.4	4084.6	712.1	4	4836.7	109	78	53	60	0
TOTALS FROM SHEET 124						1396853	748976	88380	3132	6468.75	0	0	9	5	4	6	0	0	0	164	0	0	0	0	0	0	75	8	531189
TOTALS TO GENERAL SUMMARY						2106513	1337484	155860	3132	18168.75	387.5	4	24	23	4	17	2	2	2	522	4085	713	4	4837	109	78	128	68	893260

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ROADWAY SUBSUMMARY

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SHT. NO.	REF. NO.	ROADWAY	LOCATION		SIDE	670	671	836	
			FROM	TO		DITCH EROSION PROTECTION	EROSION CONTROL MAT, TYPE G	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2
						SQ YD	SQ YD	SQ YD	SQ YD
155	E-1	S.R. 161	351+92	353+42	℄	125			
156	E-1	S.R. 161	369+00	370+00	LT	110			
156	E-2	S.R. 161	363+42	364+92	℄	125			
157	E-1	S.R. 161	370+00	374+86	LT				411
157	E-2	S.R. 161	374+33	377+49	RT	394			
157	E-3	S.R. 161	373+06	374+56	℄	125			
157	E-4	S.R. 161	374+73	376+23	℄	125			
157	E-5	S.R. 161	377+08	378+58	℄	125			
157	E-6	S.R. 161	380+08	381+58	℄	125			
157	E-7	S.R. 161	372+67	374+17	RT	125			
159	E-1	S.R. 161	399+00	406+00	LT	778			
159	E-2	S.R. 161	406+00	407+50	LT	184			
159	E-3	S.R. 161	399+00	407+50	RT	945			
159	E-4	S.R. 161	397+42	398+92	℄	125			
159	E-5	S.R. 161	406+42	407+50	℄	90			
160	E-1	S.R. 161	407+50	409+25	LT	215			
160	E-2	S.R. 161	407+50	409+00	RT	167			
160	E-3	S.R. 161	415+92	417+42	℄	125			
160	E-4	S.R. 161	407+50	407+92	℄	35			
161	E-1	S.R. 161	429+00	432+50	RT	291			
161	E-2	S.R. 161	425+42	426+92	℄	125			
162	E-1	S.R. 161	432+50	434+00	RT	124			
162	E-2	S.R. 161	434+00	437+45	RT				
162	E-3	S.R. 161	437+45	440+00	RT	209			
162	E-4	S.R. 161	434+01	437+28	LT				
162	E-5	S.R. 161	441+00	445+00	LT	369			
162	E-6	S.R. 161	440+57	445+00	RT	359			
162	E-7	S.R. 161	436+42	437+92	℄	125			
163	E-1	S.R. 161	445+00	446+25	LT	115			
163	E-2	S.R. 161	446+25	446+51	LT	26			
163	E-3	S.R. 161	445+00	446+58	RT	130			
163	E-4	S.R. 161	446+60	450+00	LT	340			
163	E-5	S.R. 161	446+92	448+42	℄	125			
163	E-6	S.R. 161	455+42	456+92	℄	125			
164	E-1	S.R. 161	458+42	459+92	℄	125			
164	E-2	S.R. 161	461+42	463+92	℄	125			
164	E-3	S.R. 161	466+50	467+50	LT	94			
165	E-1	S.R. 161	467+50	469+78	LT	235			
165	E-2	S.R. 37	477+00	477+50	RT	42			
165	E-3	S.R. 37	467+92	469+42	℄	125			
166	E-1	S.R. 37	477+50	481+50	RT	337			
166	E-2	S.R. 37	484+50	490+00	LT				442
166	E-3	S.R. 37	484+50	490+00	RT	467			
166	E-4	S.R. 37	479+42	480+92	℄	125			
166	E-5	S.R. 37	484+72	486+22	℄	125			
166	E-6	S.R. 37	486+38	487+88	℄	125			
166	E-7	S.R. 37	489+08	490+00	℄	77			
167	E-1	S.R. 37	490+00	498+00	LT	977			
167	E-2	S.R. 37	490+00	498+00	RT	883			
167	E-3	S.R. 37	492+08	493+58	℄	125			
167	E-4	S.R. 37	495+08	496+58	℄	125			
167	E-5	S.R. 37	497+83	499+33	℄	125			
167	E-6	S.R. 37	490+00	490+58	℄	48			
168	E-1	S.R. 37	506+00	514+50	LT	954			
168	E-2	S.R. 37	512+00	515+00	RT	252			
TOTALS (THIS SHEET)						11997	0	0	853
TOTALS CARRIED TO SHEET 127						11997	0	0	853

SHT. NO.	REF. NO.	ROADWAY	LOCATION		SIDE	670	671	836		
			FROM	TO		DITCH EROSION PROTECTION	EROSION CONTROL MAT, TYPE G	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 3
						SQ YD	SQ YD	SQ YD	SQ YD	SQ YD
168	E-3	S.R. 37	513+42	514+92	℄	125				
169	E-1	S.R. 37	515+00	527+50	RT	1083				
169	E-2	S.R. 37	519+50	525+00	LT	541				
169	E-3	S.R. 37	522+42	523+92	℄	125				
169	E-4	S.R. 37	524+03	527+50	℄	386				
170	E-1	S.R. 37	527+50	528+00	RT	44				
170	E-2	S.R. 37	528+00	532+17	RT	463				
170	E-3	S.R. 37	529+00	533+04	LT	337				
170	E-4	S.R. 37	527+50	532+32	℄	536				
170	E-5	S.R. 37	532+68	534+18	℄	125				
171	E-1	S.R. 37	548+92	550+42	℄	125				
172	E-1	S.R. 37	556+60	558+10	℄	125				
172	E-2	S.R. 37	563+10	564+60	℄	125				
173	E-1	S.R. 37	576+00	577+50	RT	116				
173	E-2	S.R. 37	565+10	566+42	℄	110				
173	E-3	S.R. 37	569+42	570+92	℄	125				
173	E-4	S.R. 37	571+92	573+42	℄	125				
174	E-1	S.R. 37	577+50	587+00	RT	792				
174	E-2	S.R. 37	581+42	582+92	℄	125				
174	E-3	S.R. 37	589+49	590+00	℄	43				
175	E-1	S.R. 37	590+00	590+80	℄	67				
175	E-2	S.R. 37	597+42	598+92	℄	125				
176	E-1	S.R. 37	605+42	606+92	℄	125				
176	E-2	S.R. 37	613+42	614+92	℄	125				
176	E-3	S.R. 37	603+00	615+00	LT		2726			
177	E-1	S.R. 37	621+42	622+92	℄	125				
177	E-2	S.R. 37	615+00	627+50	LT		2374			
178	E-1	S.R. 37	631+32	632+82	℄	125				
178	E-2	S.R. 37	632+98	634+48	℄	125				
178	E-3	S.R. 37	627+50	629+00	LT		198			
179	E-1	S.R. 37	641+08	642+58	℄	125				
179	E-2	S.R. 37	651+92	625+50	℄	48				
180	E-1	S.R. 37	652+50	653+42	℄	77				
590	E-1	WATKINS-YORK FRONTAGE RD	128+00	128+81	RT	68				
590	E-2	WATKINS-YORK FRONTAGE RD	129+20	130+00	RT	67				
591	E-1	WATKINS-YORK FRONTAGE RD	130+00	133+50	RT	295				
591	E-2	WATKINS-YORK FRONTAGE RD	134+50	140+00	RT	467				
592	E-1	WATKINS-YORK FRONTAGE RD	146+40	150+98	RT	389				
592	E-2	WATKINS-YORK FRONTAGE RD	151+83	155+00	RT	267				
593	E-1	WATKINS-YORK FRONTAGE RD	155+00	167+00	RT	1004				
594	E-1	WATKINS-YORK FRONTAGE RD	177+00	180+00	RT	250				
595	E-1	WATKINS-YORK FRONTAGE RD	180+00	184+43	RT	369				
595	E-2	WATKINS-YORK FRONTAGE RD	184+99	187+68	RT	222				
595	E-3	WATKINS-YORK FRONTAGE RD	188+71	192+50	RT	307				
596	E-1	WATKINS-YORK FRONTAGE RD	192+71	198+00	RT	409				
596	E-2	WATKINS-YORK FRONTAGE RD	197+00	198+78	LT	148				
596	E-3	WATKINS-YORK FRONTAGE RD	199+21	203+50	LT	392				
596	E-4	WATKINS-YORK FRONTAGE RD	204+00	205+00	RT	86				
597	E-1	WATKINS-YORK FRONTAGE RD	205+74	207+50	LT	147				
597	E-2	WATKINS-YORK FRONTAGE RD	205+76	207+36	RT	133				
597	E-3	WATKINS-YORK FRONTAGE RD	209+00	211+50	LT	213				
597	E-4	WATKINS-YORK FRONTAGE RD	207+36	209+00	RT	208				
597	E-5	WATKINS-YORK FRONTAGE RD	209+00	211+03	RT	229				
597	E-6	WATKINS-YORK FRONTAGE RD	205+00	205+20	RT	17				
597	E-7	WATKINS-YORK FRONTAGE RD	205+00	205+34	LT	28				
TOTALS (THIS SHEET)						12358	5298	0	0	0
TOTALS CARRIED TO SHEET 127						12358	5298	0	0	0

CALCULATED BER
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DITCH EROSION PROTECTION SUBSUMMARY

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DITCH EROSION PROTECTION SUBSUMMARY

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	670 DITCH EROSION PROTECTION SQ YD	671 EROSION CONTROL MAT, TYPE G SQ YD	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1 SQ YD	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2 SQ YD	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 3 SQ YD
667	E-1	REL. WORTHINGTON RD NORTH	189+00	189+15	LT	13				
667	E-2	REL. WORTHINGTON RD NORTH	189+51	200+00	LT	859				
668	E-1	REL. WORTHINGTON RD NORTH	200+00	203+33	LT	279				
668	E-2	REL. WORTHINGTON RD NORTH	200+20	209+00	RT	709				
668	E-3	REL. WORTHINGTON RD NORTH	203+70	209+50	LT	513				
669	E-1	REL. WORTHINGTON RD NORTH	213+50	219+66	RT	501				
669	E-2	REL. WORTHINGTON RD NORTH	220+34	223+00	RT	223				
670	E-1	REL. WORTHINGTON RD NORTH	226+00	226+82	LT	71				
670	E-2	REL. WORTHINGTON RD NORTH	227+18	233+00	LT	506				
691	E-1	RAMP I	446+62	450+00	RT	262				
698	E-1	RAMP J	456+50	461+00	LT	573				
698	E-2	RAMP J	451+00	457+35	RT	816				
699	E-1	RAMP J	461+00	463+22	LT	292				
706	E-1	RAMP K	446+00	450+45	LT	456				
706	E-2	RAMP K	449+00	450+63	RT	146				
714	E-1	RAMP L	451+00	456+50	RT			638		
714	E-2	RAMP L	456+50	459+50	RT			458		
715	E-1	RAMP L / S.R. 161	459+50	463+46	RT			582		
723	E-1	S.R. 37 / RAMP J	396+00	451+00	LT	519				
723	E-2	S.R. 37 / RAMP I	398+50	451+00	RT	283				
724	E-1	S.R. 37	403+17	405+50	LT	247				
724	E-2	S.R. 37	409+00	410+00	RT	84				
724	E-3	S.R. 37	412+00	413+00	LT			92		
724	E-4	S.R. 37	411+98	413+00	RT	85				
725	E-1	S.R. 37	413+00	417+00	LT			336		
725	E-2	S.R. 37	413+00	417+00	RT	367				
725	E-3	S.R. 37	418+00	419+50	LT	168				
725	E-4	S.R. 37	418+00	419+50	RT	168				
738	E-1	SERVICE ROAD II	213+00	219+81	RT	538				
738	E-2	SERVICE ROAD II	220+22	226+00	RT	470				
739	E-1	SERVICE ROAD II	226+00	231+81	RT	484				
739	E-2	SERVICE ROAD II	232+17	235+01	RT	237				
739	E-3	SERVICE ROAD II	234+50	235+78	LT	111				
739	E-4	SERVICE ROAD II	235+78	237+00	LT	105				
739	E-5	SERVICE ROAD II	236+00	237+00	LT	84				
740	E-1	SERVICE ROAD II	237+00	242+50	LT	467				
740	E-2	SERVICE ROAD II	237+00	238+75	RT	146				
740	E-3	SERVICE ROAD II	239+23	242+33	RT	260				
755	E-1	OUTVILLE RD	18+60	20+31	RT	158				
760	E-1	OUTVILLE-MORSE FRONTAGE RD	498+00	500+83	RT	284				
760	E-2	OUTVILLE-MORSE FRONTAGE RD	501+19	503+50	RT	232				
761	E-1	OUTVILLE-MORSE FRONTAGE RD	503+50	505+00	RT	150				
761	E-2	OUTVILLE-MORSE FRONTAGE RD	505+00	511+50	RT	593				
761	E-3	OUTVILLE-MORSE FRONTAGE RD	511+50	512+50	RT	120				
761	E-4	OUTVILLE-MORSE FRONTAGE RD	513+00	513+83	RT	81				
761	E-5	OUTVILLE-MORSE FRONTAGE RD	514+20	514+50	RT	26				
762	E-1	OUTVILLE-MORSE FRONTAGE RD	514+50	520+82	RT	528				
762	E-2	OUTVILLE-MORSE FRONTAGE RD	521+24	523+50	RT	195				
762	E-3	OUTVILLE-MORSE FRONTAGE RD	524+62	525+50	RT	74				
763	E-1	OUTVILLE-MORSE FRONTAGE RD	525+50	529+01	RT	293				
763	E-2	OUTVILLE-MORSE FRONTAGE RD	529+40	231+43	RT	178				
763	E-3	OUTVILLE-MORSE FRONTAGE RD	532+12	532+61	RT	43				
763	E-4	OUTVILLE-MORSE FRONTAGE RD	533+22	533+31	RT	7				
		TOTALS (THIS SHEET)				12853	0	2106	0	0
		TOTALS CARRIED				12853	0	2106	0	0

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	670 DITCH EROSION PROTECTION SQ YD	671 EROSION CONTROL MAT, TYPE G SQ YD	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1 SQ YD	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2 SQ YD	836 SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 3 SQ YD
763	E-5	OUTVILLE-MORSE FRONTAGE RD	533+65	536+50	RT	238				
763	E-6	OUTVILLE-MORSE FRONTAGE RD	532+33	533+83	LT	162				
764	E-1	OUTVILLE-MORSE FRONTAGE RD	536+50	539+41	RT	245				
764	E-2	OUTVILLE-MORSE FRONTAGE RD	540+19	543+00	RT	234				
765	E-1	OUTVILLE-MORSE FRONTAGE RD	550+00	550+20	RT	17				
765	E-2	OUTVILLE-MORSE FRONTAGE RD	550+56	558+50	RT	663				
766	E-1	OUTVILLE-MORSE FRONTAGE RD	558+50	561+00	RT	211				
766	E-2	OUTVILLE-MORSE FRONTAGE RD	562+07	567+07	RT	555				
766	E-3	OUTVILLE-MORSE FRONTAGE RD	567+46	568+00	RT	60				
766	E-4	OUTVILLE-MORSE FRONTAGE RD	568+00	569+50	RT	125				
767	E-1	OUTVILLE-MORSE FRONTAGE RD	569+50	567+64	RT	183				
767	E-2	OUTVILLE-MORSE FRONTAGE RD	571+92	573+42	LT	126				
767	E-3	OUTVILLE-MORSE FRONTAGE RD	572+37	573+95	RT	130				
824	E-1	C.R. 539A EXTENSION	298+00	302+50	LT	375				
824	E-2	C.R. 539A EXTENSION	295+70	296+90	RT	100				
825	E-1	C.R. 539A EXTENSION	302+50	308+48	LT	498				
825	E-2	C.R. 539A EXTENSION	309+54	312+96	LT	285				
870	E-1	MORSE RD	7+75	12+82	LT	417				
870	E-2	MORSE RD	13+21	18+31	LT	430				
870	E-3	MORSE RD	8+20	14+00	RT	494				
870	E-4	MORSE RD	14+36	18+03	RT	317				
870	E-5	MORSE RD	7+72	7+83	RT	10				
		TOTALS (THIS SHEET)				5230	0	0	0	0
		TOTALS FROM SHEET 126				11997	0	0	853	582
		TOTALS FROM SHEET 126				12358	5298	0	0	0
		TOTALS FROM SHEET 127				12853	0	2106	0	0
		TOTALS TO GENERAL SUMMARY				42438	5298	2106	853	582

CALCULATED BER
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FENCE SUBSUMMARY

CALCULATED BER
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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	607 FENCE, TYPE 47 FT	607 GATE, TYPE 47 EACH			FOR INFORMATION ONLY CORNER POST ASSEMBLY	INTERMEDIATE POST ASSEMBLY	ABUTMENT CONNECTION	END POST ASSEMBLY	FENCE CROSSING, TYPE 2
1254	F-1	S.R. 161	344+23.70	370+00.00	RT	2576					3		1	1
1254	F-2	S.R. 161	355+00.00	370+00.00	LT	1500					2		1	
1254	F-3	S.R. 161	370+00.00	397+00.00	RT	2748					7			2
1254	F-4	S.R. 161	370+00.00	397+00.00	LT	2657				2	4			5
1255	F-1	S.R. 161	397+00.00	420+00.00	RT	2748								
1255	F-2	S.R. 161	397+00.00	420+00.00	LT	2298					3			1
1255	F-3	S.R. 161	420+00.00	440+00.00	RT	1998					4			
1255	F-4	S.R. 161	420+00.00	440+00.00	LT	2056					5			
1256	F-1	RAMP K / S.R. 37	440+00.00	417+14.53	RT	1535				1	6		1	1
1256	F-2	RAMP I / S.R. 37	440+00.00	396+49.29	LT/RT	1581				1	3		1	1
1256	F-3	S.R. 37 / RAMP J	395+92.85	460+00.00	LT	1497				2	5		1	
1256	F-4	S.R. 37 / RAMP L	417+24.35	460+00.00	LT/RT	1386				3	4		1	1
1256	F-5	S.R. 37	417+81.91	418+51.08	RT	88				1			2	
1256	F-6	S.R. 37	417+90.26	418+50.07	LT	82				1			2	
1256	F-7	S.R. 37	394+61.90	395+13.24	RT	97				1			2	
1256	F-8	S.R. 37	394+62.14	395+35.48	LT	97				1			2	
1257	F-1	S.R. 161/S.R. 37	460+00.00	480+00.00	RT	2007					6			4
1257	F-2	S.R. 161/S.R. 37	460+00.00	480+00.00	LT	2007					3			2
1257	F-3	S.R. 37	480+00.00	481+27.39	RT	186				1		1		1
1257	F-4	S.R. 37	481+41.67	481+66.06	LT&RT	48						2		
1257	F-5	S.R. 37	480+00.00	482+31.82	LT	319				1		1		1
1257	F-6	S.R. 37	483+60.77	497+00.90	RT	1438				2		2		2
1257	F-7	S.R. 37	484+28.96	484+53.35	LT&RT	48						2		
1257	F-8	S.R. 37	484+67.15	496+86.24	LT	1309				2		2		2
1257	F-9	S.R. 37	497+56.07	500+00.00	RT	263				1		1		
1257	F-10	S.R. 37	497+41.55	500+00.00	LT	294				1		1		1
1258	F-1	S.R. 37	500+00.00	525+00.00	RT	2502					6			
1258	F-2	S.R. 37	500+00.00	525+00.00	LT	2502					4			1
1258	F-3	S.R. 37	525+00.00	546+50.11	RT	2155					1			
1258	F-4	S.R. 37	525+00.00	550+00.00	LT	2500					6	1		2
1259	F-1	S.R. 37	550+00.00	574+10.94	RT	2411					1	1		
1259	F-2	S.R. 37	573+88.39	573+88.61	LT&RT	7						2		
1259	F-3	S.R. 37	575+66.51	600+00.00	RT	2433				1	8	1		2
1259	F-4	S.R. 37	575+89.16	575+89.38	LT&RT	7						2		
1259	F-5	S.R. 37	596+89.63	600+00.00	LT	314					1	1		1
1259	F-6	S.R. 37	574+11.01	574+11.26	RT	13						2		
1260	F-1	S.R. 37	600+00.00	625+00.00	RT	2473					6			1
1260	F-2	S.R. 37	600+00.00	625+00.00	LT	2526					5			1
1260	F-3	S.R. 37	625+00.00	650+00.00	RT	2509	1				3			1
1260	F-4	S.R. 37	625+00.00	650+00.00	LT	2499	1				3			1
1261	F-1	S.R. 37	650+00.00	654+00.00	RT	404							1	
1261	F-2	S.R. 37	650+00.00	654+00.00	LT	396					1		1	
TOTALS THIS SHEET						58514	2			22	100	22	16	35
TOTALS TO GENERAL SUMMARY						58514	2							

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PAVEMENT SUBSUMMARY

CALCULATED CLB
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STATION TO STATION	LENGTH (L)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=LxW	PLANIMETERED AREAS	204 PROOF ROLLING	204 SUBGRADE COMPACTION	252 FULL DEPTH PAVEMENT SAWING	254 PAVEMENT PLANING, ASPHALT CONCRETE	302 8" ASPHALT CONCRETE BASE, PG64-22	302 6.5" ASPHALT CONCRETE BASE, PG64-22 (INFO ONLY)	304 6" AGGREGATE BASE	304 8" AGGREGATE BASE	304 AGGREGATE BASE (THICKNESS VARIABLE)	407 TACK COAT AT 0.075 GAL / SQ.YD.	407 TACK COAT FOR INTERMEDIATE COURSE AT 0.05 GAL / SQ.YD.	442 1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (INFO ONLY)	442 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A (INFO ONLY)	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	448 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	448 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	880 ASPHALT CONCRETE (7 YEAR WARRANTY)
	FT	FT	SQ FT	SQ FT	HOUR	SQ YD	FT	SQ YD	CU YD	CU YD	CU YD	CU YD	CU YD	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
S.R. 161/ S.R. 37 - EASTBOUND LANES																					
STA. 309+20.00 TO STA. 351+00.00	4180.00	40.00	167200.00												928.9						
STA. 351+00.00 TO STA. 431+40.00	8040.00	40.00	321600.00		12.8	3841.3				6559.4	6203.7					1488.9	1488.9		774.1		9537.2
STA. 431+40.00 TO STA. 439+40.51	800.51			43303.60	1.7	507.8.3				879.5	826.6					200.5	200.5				1280.4
STA. 439+40.51 TO STA. 461+42.92	2202.41	40.00	88096.40		3.5	10522.6				1796.8	1699.4					407.9	407.9				2612.5
STA. 461+42.92 TO STA. 477+38.00	1595.08			87224.66	3.4	10223.3				1771.2	1664.5					403.8	403.8				2578.8
STA. 477+38.00 TO STA. 481+29.83	391.83			15632.50	0.6	1867.6				318.9	301.6					72.4	72.4				463.6
BRIDGE LIMITS STA 481+54.83 To 483+93.63																					
APPROACH SLABS STA 481+29.83 To 481+54.83 STA 483+93.63 To 484+18.63																					
STA. 484+18.63 TO STA. 484+63.46	44.83			2696.40	0.1	314.5				54.7	51.3					12.5	12.5				79.7
STA. 484+63.46 TO STA. 562+67.59	7804.13	40.00	312165.20		12.4	37286.4				6366.9	6021.7					1445.2	1445.2				9257.4
STA. 562+67.59 TO STA. 565+19.72	252.13			11260.60	0.4	1335.2				229.3	216.3					52.1	52.1				333.5
STA. 565+19.72 TO STA. 573+88.51	868.79	40.00	34751.60		1.4	4150.9				708.8	670.4					160.9	160.9				1030.6
BRIDGE LIMITS STA 574+13.51 To 575+64.26																					
APPROACH SLABS STA 573+88.51 To 574+13.51 STA 575+64.26 To 575+89.26																					
STA. 575+89.26 TO STA. 576+30.12	40.86			1691.40	0.1	201.6				34.5	32.6					7.8	7.8				50.1
STA. 576+30.12 TO STA. 653+25.00	7694.88	40.00	307795.20		12.3	36764.4				6277.8	5937.4					1425.0	1425.0				9127.8
STA. 653+25.00 TO STA. 654+00.00	75.00	40.00	3000.00		0.1	358.3				61.2	57.9					13.9	13.9				89.0
STA. 654+00.00 TO STA. 662+00.00	800.00			37793.70				4199.3						314.9	210.0				175.0	204.1	
ADJUSTMENT FOR CEMENT STABILIZATION						-113831.0															
S.R. 161/ S.R. 37 - WESTBOUND LANES																					
STA. 318+00.00 TO STA. 356+00.00	3800.00	40.00	152000.00												844.4				703.7		
STA. 356+00.00 TO STA. 424+54.00	6854.00	40.00	274160.00		10.9	32746.9				5591.8	5288.6					1269.3	1269.3				8130.3
STA. 424+54.00 TO STA. 440+34.31	1580.31			86289.20	3.4	10114.5				1752.2	1646.7					399.5	399.5				2551.2
STA. 440+34.31 TO STA. 462+15.54	2181.23	40.00	87249.20		3.5	10421.4				1779.5	1683.0					403.9	403.9				2587.4
STA. 462+15.54 TO STA. 470+11.00	795.46			43347.60	1.7	5081.6				880.3	827.3					200.7	200.7				1281.6
STA. 470+11.00 TO STA. 481+76.38	1165.38			46925.80	1.9	5602.4				957.0	905.0					217.2	217.2				1391.5
BRIDGE LIMITS STA 482+01.38 To 484+10.18																					
APPROACH SLABS STA 481+76.38 To 482+01.38 STA 484+10.18 To 484+65.18																					
STA. 484+65.18 TO STA. 485+18.89	53.71			2324.10	0.1	276.1				47.3	44.7					10.8	10.8				68.9
STA. 485+18.89 TO STA. 546+50.00	6131.11	40.00	245244.40		9.8	29293.1				5002.0	4730.8					1135.4	1135.4				7272.8
STA. 546+50.00 TO STA. 552+24.31	574.31			26512.50	1.1	3191.5				557.0	524.8					122.7	122.7				802.5
STA. 552+24.31 TO STA. 564+80.28	1255.97	42.00	52750.74		2.1	6398.5				1113.3	1050.9					244.2	244.2				1601.7
STA. 564+80.28 TO STA. 567+32.41	252.13			11764.80	0.5	1415.1				247.1	232.7					54.5	54.5				356.0
STA. 567+32.41 TO STA. 573+88.51	656.10			27684.60	1.1	3356.7				584.1	551.4					128.2	128.2				840.5
BRIDGE LIMITS STA 574+13.51 To 575+64.26																					
APPROACH SLABS STA 573+88.51 To 574+13.51 STA 575+64.26 To 575+89.26																					
STA. 575+89.26 TO STA. 576+28.68	39.42			2252.60	0.1	267.2				46.9	44.0					10.4	10.4				67.8
STA. 576+28.68 TO STA. 593+41.12	1712.44	42.00	71922.48		2.9	8723.9				1517.9	1432.8					333.0	333.0				2183.8
STA. 593+41.12 TO STA. 596+90.00	348.88			16522.80	0.7	1985.1				346.8	326.5					76.5	76.5				499.7
STA. 596+90.00 TO STA. 653+25.00	5635.00	40.00	225400.00		9.0	26922.8				4597.3	4348.0					1043.5	1043.5				6684.3
STA. 653+25.00 TO STA. 654+00.00	75.00	40.00	3000.00		0.1	358.3				61.2	57.9					13.9	13.9				89.0
STA. 654+00.00 TO STA. 679+00.00	2500.00			111641.80				12404.6						930.3	620.2				516.9	603.0	
ADJUSTMENT FOR CEMENT STABILIZATION						-89478.0															
TOTAL - S.R. 161/ S.R. 37					97.6	89362.6	0	16603.9	0	50140.7	47378.6	0	0	1245.3	2603.5	11354.5	11354.5	0	2169.6	807.1	72849.7
TOTALS (THIS SHEET)					97.6	89362.6	0	16603.9	0	50140.7	47378.6	0	0	1245.3	2603.5	11354.5	11354.5	0	2169.6	807.1	72849.7
TOTALS CARRIED TO SHEET 133					97.6	89362.6	0	16603.9	0	50140.7	47378.6	0	0	1245.3	2603.5	11354.5	11354.5	0	2169.6	807.1	72849.7

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STATION TO STATION	LENGTH (L)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=LxW	PLANIMETERED AREAS	204 PROOF ROLLING	204 SUBGRADE COMPACTION	252 FULL DEPTH PAVEMENT SAWING	254 PAVEMENT PLANING, ASPHALT CONCRETE	301 3-3/4" ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	301 4" ASPHALT CONCRETE BASE, PG64-22	301 5" ASPHALT CONCRETE BASE, PG64-22	302 8" ASPHALT CONCRETE BASE, PG64-22	304 6" AGGREGATE BASE	304 8" AGGREGATE BASE	304 AGGREGATE BASE (THICKNESS VARIABLE)	TACK COAT AT 0.075 GAL / SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE AT 0.05 GAL / SQ.YD.	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	448 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	448 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	452 9" NON-REINFORCED CONCRETE PAVEMENT
	FT	FT	SQ FT	SQ FT	HOUR	SQ YD	FT	SQ YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	SQ YD
WATKINS-YORK FRONTAGE ROAD																						
STA. 103+50.00 TO STA. 103+65.00	15.00			358.20	0.0	44.8	32.4			4.5			7.1	4.4			2.0	1.4		1.9		
STA. 103+65.00 TO STA. 189+32.18	8567.18	24.00	205612.32		8.6	2570.5				2608.9			4072.1	2538.4			1142.3	793.3		1110.6		
STA. 189+32.18 TO STA. 191+97.37	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	78.6			37.6	26.1		36.5		
STA. 191+97.37 TO STA. 197+41.81	544.44	27.00	14699.88		0.6	1814.8				186.0			289.0	161.3			81.7	56.7		79.4		
STA. 197+41.81 TO STA. 200+07.00	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	78.6			37.6	26.1		36.5		
STA. 200+07.00 TO STA. 203+59.99	352.99	24.00	8471.76		0.4	1059.0				107.5			167.8	104.6			47.1	32.7		45.8		
STA. 203+59.99 TO STA. 206+25.18	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	78.6			37.6	26.1		36.5		
STA. 206+25.18 TO STA. 207+38.02	112.84	27.00	3046.68		0.1	376.1				38.5			59.9	33.4			16.9	11.8		16.5		
STA. 207+38.02 TO STA. 210+03.21	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	78.6			37.6	26.1		36.5		
STA. 210+03.21 TO STA. 212+12.65	209.44			5740.20	0.2	707.6				72.6			112.8	62.1			31.9	22.1		31.0		
ADJUSTMENT FOR CEMENT STABILIZATION						-28938.0																
TOTAL - WATKINS YORK FRONTAGE ROAD					**11.0**	**4124.9**	**32.4**			**3360.7**			**5242.3**	**3218.6**			**1472.1**	**1022.3**		**1431.2**		
SERVICE ROAD 10																						
STA. 145+65.48 TO STA. 147+57.10	191.62			11986.25	0.5	1422.1				149.6			227.9				66.6	46.2		64.7		
STA. 147+57.10 TO STA. 148+50.00	92.90	22.61	2100.47		0.1	263.9	29.6			26.7			41.8				11.7	8.1		11.3		
STA. 148+50.00 TO STA. 150+52.34	202.34	29.90	6049.97					672.2								50.4	33.6	23.3		32.7		
ADJUSTMENT FOR CEMENT STABILIZATION						-1685.9																
TOTAL - SERVICE ROAD 10					**0.6**	**0.0**	**29.6**	**672.2**		**176.3**			**269.6**			**50.4**	**111.9**	**77.7**		**108.8**		
RELOCATED WORTHINGTON ROAD NORTH																						
STA. 150+32.10 TO STA. 167+43.00	1710.90	29.75	50890.72					5654.5								424.1	282.7	196.3		274.9		
STA. 167+43.00 TO STA. 168+12.00	69.00	24.00	1656.00		0.1	207.0	59.5			21.0			32.8	10.2			9.2	6.4		8.9		
STA. 168+12.00 TO STA. 188+50.00	2038.00	29.85	60834.30					6759.4								507.0	338.0	234.7		328.6		
STA. 188+50.00 TO STA. 188+75.00	25.00	23.71	592.63		0.0	74.2	23.4			7.5			11.7	4.9			3.3	2.3		3.2		
STA. 188+75.00 TO STA. 189+22.46	47.46	24.00	1139.04		0.0	142.4				14.5			22.6	9.4			6.3	4.4		6.2		
STA. 189+22.46 TO STA. 191+87.65	265.19	25.50	6762.35		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 191+87.65 TO STA. 195+29.60	341.95	27.00	9232.65		0.4	1139.8				116.8			181.5	67.5			51.3	35.6		49.9		
STA. 195+29.60 TO STA. 197+94.79	265.19	25.50	6762.35		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 197+94.79 TO STA. 202+21.66	426.87	24.00	10244.88		0.4	1280.6				130.0			202.9	84.3			56.9	39.5		55.3		
STA. 202+21.66 TO STA. 204+86.85	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 204+86.85 TO STA. 208+83.31	396.46	27.00	10704.42		0.4	1321.5				135.4			210.5	78.3			59.5	41.3		57.8		
STA. 208+83.31 TO STA. 211+48.50	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 211+48.50 TO STA. 212+71.75	123.25			4068.70	0.2	493.2				51.2			79.2	24.3			22.6	15.7		22.0		
STA. 212+95.85 TO STA. 214+15.54	119.69			3966.00	0.2	480.6				49.9			77.1	23.6			22.0	15.3		21.4		
STA. 214+15.54 TO STA. 216+80.73	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 216+80.73 TO STA. 219+06.64	225.91	27.00	6099.57		0.3	753.0				77.2			119.9	44.6			33.9	23.5		32.9		
STA. 219+06.64 TO STA. 221+71.83	265.19	25.50	6762.35		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 221+71.83 TO STA. 223+23.65	151.82	24.00	3643.68		0.2	455.5				46.2			72.2	30.0			20.2	14.1		19.7		
STA. 223+23.65 TO STA. 225+88.84	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 225+88.84 TO STA. 229+73.90	385.06	27.00	10396.62		0.4	1283.5				131.5			204.4	76.1			57.8	40.1		56.2		
STA. 229+73.90 TO STA. 232+39.09	265.19	25.50	6762.34		0.3	839.8				85.7			133.4	52.4			37.6	26.1		36.5		
STA. 232+39.09 TO STA. 232+75.00	35.91	24.00	861.84		0.0	107.7				10.9			17.1	7.1			4.8	3.3		4.7		
STA. 232+75.00 TO STA. 233+00.00	25.00	23.64	591.00		0.0	74.0				7.5			11.7	4.9			3.3	2.3		3.2		
ADJUSTMENT FOR CEMENT STABILIZATION						-14531.2																
TOTAL - WORTHINGTON ROAD NORTH					**4.8**	**0.0**	**82.9**	**12413.9**		**1485.1**			**2310.9**	**884.5**		**931.0**	**1272.3**	**883.6**		**1237.0**		
RAMP I																						
STA. 440+28.41 TO STA. 45074.72	1046.31	25.00	26157.75		1.1	3255.2							503.8									2906.4
STA. 45074.72 TO STA. 45169.73	95.01			3140.93	0.1	380.7							59.9									349.0
ADJUSTMENT FOR CEMENT STABILIZATION						-2557.0																
RAMP J																						
STA. 450+39.62 TO STA. 451+03.86	64.24			2456.30	0.1	294.3							46.7									272.9
STA. 451+03.86 TO STA. 452+22.95	119.09	33.00	3929.97		0.2	476.4							75.0									436.7
STA. 452+22.95 TO STA. 452+72.93	49.98	29.00	1449.42		0.1	177.7							27.8									161.0
STA. 452+72.93 TO STA. 461+61.53	888.60	25.00	22215.00		0.9	2764.5							427.8									2468.3
STA. 461+61.53 TO STA. 462+11.54	50.01	26.00	1300.26		0.1	161.1							25.0									144.5
ADJUSTMENT FOR CEMENT STABILIZATION						-2526.0																
RAMP K																						
STA. 439+29.60 TO STA. 439+79.60	50.00	26.00	1300.00		0.1	161.1							25.0									144.4
STA. 439+79.60 TO STA. 450+87.49	1107.89	25.00	27697.25		1.1	3446.8							533.4									3077.5
STA. 439+79.60 TO STA. 451+42.60	1163.00			2152.90	0.2	626.9							61.4									239.2
ADJUSTMENT FOR CEMENT STABILIZATION						-1618.0																
RAMP L																						
STA. 450+59.48 TO STA. 451+54.50	95.02			3254.40	0.1	393.3							62.0									361.6
STA. 451+54.50 TO STA. 461+40.40	985.90	25.00	24647.50		1.0	3067.2							474.7									2738.6
TOTAL RAMPS					**5.1**	**8504.2**							**2322.5**									**13300.2**
TOTALS (THIS SHEET)					**21.5**		**144.9**	**13086.1**		**5022.1**			**10145.3**	**4103.0**		**981.5**	**2856.3**	**1983.5**		**2777.0**	**0**	**13300.2**
TOTALS CARRIED TO SHEET 133					**21.5**		**144.9**	**13086.1**		**5022.1**			**10145.3**	**4103.0**		**981.5**	**2856.3**	**1983.5**		**2777.0**	**0**	**13300.2**

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PAVEMENT SUBSUMMARY

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STATION TO STATION	LENGTH (L)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=LxW	PLANIMETERED AREAS	204 PROOF ROLLING	204 SUBGRADE COMPACTION	252 FULL DEPTH PAVEMENT SAWING	254 PAVEMENT PLANING, ASPHALT CONCRETE	301 3-3/4" ASPHALT CONCRETE BASE, P664-22 (DRIVEWAYS)	301 4" ASPHALT CONCRETE BASE, P664-22	301 5" ASPHALT CONCRETE BASE, P664-22	302 8" ASPHALT CONCRETE BASE, P664-22	304 6" AGGREGATE BASE	304 8" AGGREGATE BASE	304 AGGREGATE BASE (THICKNESS VARIABLE)	TACK COAT AT 0.075 GAL / SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE AT 0.05 GAL / SQ.YD.	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, P664-22	448 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, P670-22M	448 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, P664-22	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, P664-22 (DRIVEWAYS)	451 SPECIAL - PRESSURE RELIEF JOINT, TYPE A	452 9" NON-REINFORCED CONCRETE PAVEMENT
	FT	FT	SQ FT	SQ FT	HOUR	SQ YD	FT	SQ YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	FT	SQ YD
S.R. 37 / YORK ROAD																							
STA. 394+00.00 TO STA. 394+15.00	15.00	31.21	468.08		0.02	57.0	30.6				7.4		9.1				2.6	1.8		2.5			
STA. 394+15.00 TO STA. 395+01.88	86.88	35.57	3089.89		0.12	372.3					48.6		59.9				17.2	11.9		16.7			
STA. 395+01.88 TO STA. 396+37.51	135.63			3255.60	0.12	361.7					50.2		60.3				18.1	12.6		17.6			
STA. 396+37.51 TO STA. 400+20.00	382.49	48.06	18382.47		0.72	2170.0					287.6		352.2				102.1	70.9		99.3			
STA. 400+20.00 TO STA. 401+26.81	106.81	54.09	5776.82		0.23	677.5							110.3									641.9	
STA. 401+26.81 TO STA. 402+60.59	133.78			4815.90	0.18	535.1							89.2									535.1	
STA. 402+60.59 TO STA. 405+28.86	268.27	56.00	15023.12		0.59	1758.7							286.5									1669.2	
BRIDGE LIMITS STA 405+73.95 To 407+79.95																							
APPROACH SLABS STA 405+28.86 To 405+73.95																						60.0	
STA 407+79.95 To 408+34.03																						60.0	
STA. 408+34.03 TO STA. 410+73.26	239.23	56.00	13396.88		0.52	1568.3							255.5										1488.5
STA. 410+73.26 TO STA. 412+06.31	133.05			4787.50	0.18	531.9							92.8										531.9
STA. 412+06.31 TO STA. 413+06.00	99.69	56.00	5582.64		0.22	653.5							106.5										620.3
STA. 413+06.00 TO STA. 417+01.76	395.76	30.00	11872.80		0.48	1451.1				149.8		159.7	232.1				66.0	45.8		64.1			
STA. 417+01.76 TO STA. 418+16.88	115.12			2762.00	0.10	306.9				34.1			51.1				15.3	10.7		14.9			
STA. 418+16.88 TO STA. 419+71.00	154.12	20.69	3188.74		0.14	405.7	17.6			40.6		30.4	63.8				17.7	12.3		17.2			
ADJUSTMENT FOR CEMENT STABILIZATION						-2633.0																	
TOTAL - S.R. 37 / YORK ROAD					3.5	8216.7	30.6			183.9	393.8	159.7	1705.4				221.3	153.7		215.1		120.0	5487.0
SERVICE ROAD 11																							
STA. 212+77.87 TO STA. 213+14.63	36.76			1657.14	0.1	184.1				20.5			30.7	7.3			9.2	6.4		9.0			
STA. 213+14.63 TO STA. 215+70.65	256.02	22.00	5632.44		0.24	711.2				71.6			112.2	50.6			31.3	21.7		30.4			
STA. 215+70.65 TO STA. 216+13.31	42.66	22.40	955.58		0.0	120.4				12.1			19.0	8.4			5.3	3.7		5.2			
STA. 216+13.31 TO STA. 218+26.59	213.28	24.65	5257.35		0.2	655.2				66.7			103.9	42.1			29.2	20.3		28.4			
STA. 218+26.59 TO STA. 226+29.94	803.35	26.50	21288.78		0.9	2633.2				269.4			419.0	158.7			118.3	82.1		115.0			
STA. 226+29.94 TO STA. 228+85.88	255.94	24.25	6206.55		0.3	774.9				78.7			122.8	50.6			34.5	23.9		33.5			
STA. 228+85.88 TO STA. 241+78.10	1292.22	22.00	28428.84		1.2	3589.5				361.6			566.3	255.3			157.9	109.7		153.6			
STA. 228+85.88 TO STA. 242+99.58	1413.70			8488.68	0.3	943.2				104.8			157.2	279.2			47.2	32.7		45.8			
ADJUSTMENT FOR CEMENT STABILIZATION						-9611.8																	
TOTAL SERVICE ROAD 11					3.2	0.0				985.5			1531.3	852.1			432.9	300.6		420.8			
OUTVILLE ROAD																							
STA. 18+60.00 TO STA. 19+80.00	120.00	21.87	2623.80		0.11	331.5	28.1			33.4			52.3	23.7			14.6	10.1		14.2			
STA. 19+80.00 TO STA. 21+10.79	130.79			3152.25	0.1	350.3				38.9			58.4	25.8			17.5	12.2		17.0			
BRIDGE LIMITS STA 21+63.21 To 23+69.21																							
APPROACH SLABS STA 21+10.79 To 21+63.21																							
STA 23+69.21 To 24+14.29																							
STA. 24+14.29 TO STA. 24+98.00	83.71	24.00	2009.04		0.08	251.1				25.5			39.8	16.5			11.2	7.8		10.9			
STA. 24+98.00 TO STA. 26+25.00	127.00	21.94	2786.38		0.12	351.9	27.9			35.4			55.5	25.1			15.5	10.7		15.0			
ADJUSTMENT FOR CEMENT STABILIZATION						-1284.8																	
TOTAL - OUTVILLE ROAD					0.4	0.0	56.0			133.2			206.0	91.2			58.7	40.8		57.1			
OUTVILLE - MORSE FRONTAGE ROAD																							
STA. 497+43.95 TO STA. 497+97.49	53.54			2184.08	0.1	242.7				27.0			40.4	10.6			12.1	8.4		11.8			
STA. 497+97.49 TO STA. 573+91.11	7593.62	22.00	167059.64		7.03	21093.4				2125.0			3328.1	1500.0			928.1	644.5		902.3			
BRIDGE LIMITS STA 574+06.11 To 575+56.86																							
APPROACH SLABS STA 573+91.11 To 574+06.11																							
STA 575+56.86 To 575+71.86																							
STA. 575+71.86 TO STA. 583+01.47	729.61	22.00	16051.42		0.68	2026.7				204.2			319.8	186.2			89.2	61.9		86.7			
STA. 583+01.47 TO STA. 584+40.00	138.53			9407.51	0.3	1045.3				116.1			174.2	27.4			52.3	36.3		50.8			
ADJUSTMENT FOR CEMENT STABILIZATION						-2331.3.0																	
TOTAL - OUTVILLE-MORSE FRONTAGE ROAD					8.1	1095.0				2472.2			3862.5	1724.1			1081.7	751.2		1051.6			
TOTALS (THIS SHEET)					15.2	9311.7	86.6	0	0	3774.9	393.8	159.7	7305.1	2667.4	0	0	1794.6	1246.2	0	1744.7	0	120.0	5487.0
TOTALS CARRIED TO SHEET 133					15.2	9311.7	86.6	0	0	3774.9	393.8	159.7	7305.1	2667.4	0	0	1794.6	1246.2	0	1744.7	0	120.0	5487.0

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PAVEMENT SUBSUMMARY

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STATION TO STATION	SIDE	LENGTH (L)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=LxW	PLANIMETERED AREAS	204 PROOF ROLLING	204 SUBGRADE COMPACTION	252 FULL DEPTH PAVEMENT SAWING	254 PAVEMENT PLANING, ASPHALT CONCRETE	301 3-3/4" ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	301 4" ASPHALT CONCRETE BASE, PG64-22	301 5" ASPHALT CONCRETE BASE, PG64-22	302 8" ASPHALT CONCRETE BASE, PG64-22	304 6" AGGREGATE BASE	304 8" AGGREGATE BASE	304 AGGREGATE BASE (THICKNESS VARIABLE)	TACK COAT AT 0.075 GAL / SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE AT 0.05 GAL / SQ.YD.	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	448 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	448 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	448 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	452 9" NON-REINFORCED CONCRETE PAVEMENT
		FT	FT	SQ FT	SQ FT	HOUR	SQ YD	FT	SQ YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	SQ YD
CR 539A EXTENSION NORTH																							
STA. 295+50.00 TO STA. 296+00.00		50.00	30.22	1511.00		0.06	184.6	30.2			19.1			29.5				8.4	5.8		8.2		
STA. 296+00.00 TO STA. 309+00.64		1300.64	32.00	41620.48		1.69	5058.0				524.5			810.9				231.2	160.6		224.8		
STA. 309+00.64 TO STA. 336+45.19		2744.55	37.00	101548.35		4.07	12198.0				1276.3					552.7		564.2	391.8		548.5		
BRIDGE LIMITS																							
STA 336+70.19 To 338+20.95																							
APPROACH SLABS																							
STA 336+45.19 To 336+70.19																							
STA 338+20.95 To 338+45.95																							
STA. 338+45.95 TO STA. 359+46.33		2100.38	37.00	77714.06		3.11	9335.0				976.7					423.0		431.7	299.8		419.8		
STA. 359+46.33 TO STA. 363+90.00		443.67	32.00	14197.44		0.58	1725.4				178.9			276.6				78.9	54.8		76.7		
STA. 363+90.00 TO STA. 364+40.00		50.00	31.60	1579.75		0.06	192.2	31.2			19.9			30.8				8.8	6.1		8.5		
ADJUSTMENT FOR CEMENT STABILIZATION							-8714.0																
TOTAL - CR 539A EXTENSION						9.6	19979.2	61.4			2995.4			1147.8		975.7		1323.2	918.9		1286.4		
MORSE ROAD																							
STA. 7+75.00 TO STA. 8+90.00		115.00	19.99	2298.85		0.10	293.8	26.0			29.3			46.1	29.3			12.8	8.9		12.4		
STA. 8+90.00 TO STA. 9+71.21		81.21	22.00	1786.62		0.08	225.6				22.7			35.6	20.7			9.9	6.9		9.6		
STA. 9+71.21 TO STA. 12+27.56		256.35	23.75	6088.31		0.25	761.9				77.3			120.7	65.4			33.8	23.5		32.9		
STA. 12+27.56 TO STA. 14+55.25		227.69	25.50	5806.10		0.24	721.0				73.6			114.5	58.1			32.3	22.4		31.4		
STA. 14+55.25 TO STA. 17+11.60		256.35	23.75	6088.31		0.25	761.9				77.3			120.7	65.4			33.8	23.5		32.9		
STA. 17+11.60 TO STA. 18+02.55		90.95	22.00	2000.90		0.08	252.6				25.5			39.9	23.2			11.1	7.7		10.8		
STA. 18+02.55 TO STA. 18+38.92		36.37			226.69	0.01	25.2				2.8			4.2	7.2			1.3	0.9		1.2		
ADJUSTMENT FOR CEMENT STABILIZATION							-3042.0																
TOTAL - MORSE ROAD						1.0	0.0	26.0			308.4			481.6	269.4			135.0	93.7		131.2		
DRIVEWAYS																							
S.R. 37 DRIVEWAY # 1																							
632+50.00	RT	55.00	18.00		1383.95		153.8							25.6									
S.R. 37 DRIVEWAY # 2																							
632+50.00	LT	61.00	18.00		1500.52		166.7							27.8									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 1																							
104+50.00	RT	34.00	12.00		508.00		56.4							9.4									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 2																							
115+50.00	RT	55.20	12.00		857.92		95.3							15.9									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 3																							
129+00.00	RT	61.77	12.00		937.25		104.1							17.4									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 4																							
141+93.89	RT	198.53	12.00		2593.94		288.2							48.0									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 5																							
145+50.00	RT	42.00	12.00		699.79		77.8							13.0									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 6																							
151+55.02	RT	162.60	12.00		2172.55		241.4							40.2									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 7																							
172+00.00	RT	36.86	12.00		638.32		70.9							11.8									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 8																							
184+75.00	RT	122.53	12.00		1679.93		186.7							31.1									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 9																							
188+20.00	RT	94.68	12.00		2363.87		262.7							43.8									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 10																							
199+00.00	LT	140.60	12.00		1882.44		209.2							34.9									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 11																							
201+00.00	RT	213.85	12.00		2762.17		306.9							51.2									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 12																							
205+50.00	LT	56.80	12.00		877.83		97.5							16.3									
WATKINS YORK FRONTAGE RD. DRIVEWAY # 13																							
205+50.00	RT	40.83	12.00		677.52		75.3			7.8				12.5								2.6	
SERVICE ROAD 10 DRIVEWAY # 1																							
145+64.96	LT	55.56	12.00		1038.53		115.4							19.2									
SERVICE ROAD 10 DRIVEWAY # 2																							
147+45.29	LT	75.23	12.00		2266.73		251.9							42.0									
WORTHINGTON ROAD NORTH DRIVEWAY # 1																							
189+32.26	LT	32.00	12.00		663.96		73.8							12.3									
WORTHINGTON ROAD NORTH DRIVEWAY # 2																							
200+00.00	RT	107.20	12.00		1542.40		171.4							28.6									
WORTHINGTON ROAD NORTH DRIVEWAY # 3																							
203+50.00	LT	158.80	12.00		2159.55		240.0							40.0									
TOTALS (THIS SHEET)						10.6	23224.5	87.4	0	7.8	3303.8	0	0	2170.3	269.4	975.7	0	1458.1	1012.6	0	1417.6	0	0
TOTALS CARRIED TO SHEET 133						10.6	23224.5	87.4	0	7.8	3303.8	0	0	2170.3	269.4	975.7	0	1458.1	1012.6	0	1417.6	0	0

PAVEMENT SUBSUMMARY

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STATION TO STATION	SIDE	LENGTH (L)	PLANIMETERED AREAS	204 PROOF ROLLING	204 SUBGRADE COMPACTION	252 FULL DEPTH PAVEMENT SAWING	254 PAVEMENT PLANING, ASPHALT CONCRETE	301 3-3/4" ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	301 4" ASPHALT CONCRETE BASE, PG64-22	301 5" ASPHALT CONCRETE BASE, PG64-22	302 8" ASPHALT CONCRETE BASE, PG64-22	302 6.5" ASPHALT CONCRETE BASE, PG64-22 (INFO ONLY)	304 6" AGGREGATE BASE	304 8" AGGREGATE BASE	304 AGGREGATE BASE (THICKNESS VARIABLE)	TACK COAT AT 0.075 GAL / SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE AT 0.05 GAL / SQ.YD.	1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm. TYPE A (INFO ONLY)	1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm. TYPE A (INFO ONLY)	1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	SPECIAL - PRESSURE RELIEF JOINT, TYPE A	452 9" NON-REINFORCED CONCRETE PAVEMENT	880 ASPHALT CONCRETE (7 YEAR WARRANTY)
		FT	SQ FT	HOUR	SQ YD	FT	SQ YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	FT	SQ YD	CU YD
WORTHINGTON ROAD NORTH DRIVEWAY # 4																										
220+00.00	RT	107.40	1545.95		171.8								28.6													
WORTHINGTON ROAD NORTH DRIVEWAY # 5																										
227+00.00	LT	37.11	702.56		78.1								13.0													
WORTHINGTON ROAD NORTH DRIVEWAY # 6																										
227+82.69	RT	79.78	1556.22	0.1	172.9			18.0					28.8													
SERVICE ROAD II DRIVEWAY #1																										
220+00.00	RT	108.00	1578.21		175.4								29.2													
SERVICE ROAD II DRIVEWAY #2																										
232+00.00	RT	36.00	688.00		76.4								12.7													
SERVICE ROAD II DRIVEWAY #3																										
239+00.00	RT	84.96	1275.52		141.7								23.6													
SERVICE ROAD II DRIVEWAY #4																										
242+50.00	RT	48.00	800.84		89.0								14.8													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 1																										
501+00.00	RT	110.81	1585.72		176.2								29.4													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 2																										
514+00.00	RT	284.58	3671.07		407.9								68.0													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 3																										
521+00.00	RT	28.86	602.32		66.9								11.2													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 4																										
524+50.00	RT	30.04	616.34		68.5								11.4													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 5																										
529+20.00	RT	40.06	920.97		102.3								17.1													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 6																										
533+00.00	RT	302.44	3893.31	0.2	432.6			45.1					72.1											15.02		
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 7																										
533+50.00	RT	243.87	3216.04	0.2	357.3			37.2					59.6											12.41		
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 8																										
539+75.00	RT	164.55	2230.61		247.8								41.3													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 9																										
550+19.80	RT	63.59	1048.56		116.5								19.4													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 10																										
567+26.28	RT	26.38	572.59		63.6								10.6													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 11																										
572+00.00	RT	128.50	1723.27		191.5								31.9													
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 12																										
583+12.02	RT	21.00	662.45	0.04	73.6			7.7					12.3											2.56		
OUTVILLE-MORSE FRONTAGE RD. DRIVEWAY # 13																										
583+41.15	RT	183.01	2412.32		268.0								44.7													
C.R. 539A DRIVEWAY # 1																										
309+00.00	LT	237.79	3109.39		345.5								57.6													
C.R. 539A DRIVEWAY # 2																										
321+25.00	LT	74.94	1180.76		131.2								21.9													
C.R. 539A DRIVEWAY # 3																										
329+50.00	LT	180.72	2253.00		250.3								41.7													
C.R. 539A DRIVEWAY # 4																										
334+50.00	LT	175.59	2254.22		250.5								41.7													
C.R. 539A DRIVEWAY # 5																										
352+00.00	LT	124.13	1694.37		188.3								31.4													
MORSE ROAD DRIVEWAY #1																										
8+01.27	RT	21.96	519.60		57.7								9.6													
MORSE ROAD DRIVEWAY #2																										
13+00.00	LT	35.35	681.39		75.7								12.6													
MORSE ROAD DRIVEWAY #3																										
14+14.65	RT	142.95	1994.08		221.6								36.9													
TOTAL DRIVEWAYS				0.5	8244.1			115.8					1374.0											38.60		
TOTALS (THIS SHEET)				0.5	4998.9			108.0					833.1											35.99		
TOTALS FROM SHEET 129				97.6	89362.6	0	16603.9	0	0	0	0	50140.7	47378.6	0	0	1245.3	2603.5	11354.5	11354.5	0	2169.6	807.1	0	0	0	72849.7
TOTALS FROM SHEET 130				21.5		144.9	13086.1	0	5022.1	0	0	0	10145.3	4103.0	0	981.5	2856.3	0	0	1983.5	0	2777.0	0	0	13300.2	0
TOTALS FROM SHEET 131				15.2	9311.7	86.6	0	0	3774.9	393.8	159.7	0	7305.1	2667.4	0	0	1794.6	0	0	1246.2	0	1744.7	0	120.0	5487.0	0
TOTALS FROM SHEET 132				10.6	23224.5	87.4	0	7.8	3303.8	0	0	0	2170.3	269.4	975.7	0	1458.1	0	0	1012.6	0	1417.6	0	0	0	0
GRAND TOTALS				145.4	126897.7	318.87	29690.1	115.8	12100.8	393.8	159.7	50140.7	67832.5	7039.8	975.7	2226.8	8712.5	11354.5	11354.5	4242.4	2169.6	6746.5	35.99	120.00	18787.2	72849.7
TOTALS TO GENERAL SUMMARY				146	126898	319	29691	116	12495		160		75848							4243	2170	6747	36	120	18788	72850

PAVEMENT SUBSUMMARY

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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CU YD	602 CONCRETE MASONRY CU YD	603 12" CONDUIT, TYPE B FT	603 15" CONDUIT, TYPE B FT	603 15" CONDUIT, TYPE C FT	603 15" CONDUIT, TYPE D FT	603 15" CONDUIT, TYPE F 707.05 TYPE C FT	603 18" CONDUIT, TYPE B FT	603 18" CONDUIT, TYPE C FT	603 18" CONDUIT, TYPE F 707.05 TYPE C FT	603 21" CONDUIT, TYPE B FT	603 21" CONDUIT, TYPE C FT	603 21" CONDUIT, TYPE F 707.05 TYPE C FT	603 24" CONDUIT, TYPE B FT	603 24" CONDUIT, TYPE D FT	603 27" CONDUIT, TYPE B FT	603 27" CONDUIT, TYPE D FT	603 30" CONDUIT, TYPE B FT	603 36" CONDUIT, TYPE B FT	604 CATCH BASIN, NO. 3A, AS PER PLAN EACH	604 CATCH BASIN, NO. 4, AS PER PLAN EACH	604 CATCH BASIN, NO. 2-2B, AS PER PLAN EACH	604 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE A EACH
155	D-1	S.R. 161	353+50.00		RT	1.56	0.27		204																	1		
156	D-1	S.R. 161	365+00.00		RT	1.56	0.27		204																	1		
157	D-1	S.R. 161	374+64.57		LT	1.56	0.27		91			45														1		
157	D-2	S.R. 161	377+00.00		LT	1.33	0.33						112													1		
157	D-3	S.R. 161	377+00.00	380+00.00	℄					300																1		
159	D-1	S.R. 161	399+00.00		LT		0.33						108													1		
160	D-1	S.R. 161	408+00.00		LT	1.11	0.27		110																	1		
160	D-2	S.R. 161	417+50.00		LT	1.11	0.27		111																	1		
161	D-1	S.R. 161	427+00.00		LT		0.33						114													1		
162	D-1	S.R. 161	437+50.00	438+00.00	RT																			166		1		
162	D-2	S.R. 161	438+00.00		LT	1.94	0.60																	198		1		
163	D-1	S.R. 161	446+57.74	448+50.00	RT														259							1		
163	D-2	S.R. 161	448+50.00	446+59.90	LT																283					1		
163	D-3	S.R. 161	446+59.90	445+61.96	LT	2.00	0.53														218					1		
163	D-4	S.R. 161	457+00.00	460+00.00	℄									300												1		
164	D-1	S.R. 161	460+00.00	463+00.00	℄												300									1		
164	D-2	S.R. 161	463+00.00		LT	1.33	0.39									124		36								1		
165	D-1	S.R. 161	469+50.00		LT	1.11	0.27		117																	1		
166	D-1	S.R. 37	481+00.00		RT	1.33	0.33						85		44											1		
166	D-2	S.R. 37	484+54.96	484+23.92	RT				64																		1	
166	D-3	S.R. 37	484+23.92		RT	1.33	0.27					44														1		
166	D-4	S.R. 37	484+79.35	485+10.39	LT				64																	1		
166	D-5	S.R. 37	485+10.39		LT	1.33	0.27					45														1		
166	D-6	S.R. 37	486+29.79		LT	1.56	0.33						129													1		
166	D-7	S.R. 37	486+29.79	489+00.00	℄									270												1		
166	D-8	S.R. 37	489+00.00	492+00.00	℄									300												1		
167	D-1	S.R. 37	492+00.00	495+00.00	℄									300												1		
167	D-2	S.R. 37	495+00.00	496+00.00	LT					99																		
167	D-3	S.R. 37	496+00.00	497+50.00	LT					150																		
167	D-4	S.R. 37	497+50.00	497+75.00	LT					35																1		
168	D-1	S.R. 37	515+00.00		LT	1.11	0.27		120																	1		
169	D-1	S.R. 37	524+00.00		LT	1.33	0.27		114																	1		
170	D-1	S.R. 37	532+25.00	532+60.00	RT											95										1		
170	D-2	S.R. 37	532+60.00	533+12.00	LT																131					1		
170	D-3	S.R. 37	533+12.00	533+50.00	LT	3.00	0.76																		97	1		
171	D-1	S.R. 37	550+50.00		LT	1.11	0.27		125			48														1		
172	D-1	S.R. 37	564+68.00	566+50.00	LT/RT				182																	1		
173	D-1	S.R. 37	566+50.00		LT	1.33	0.27		159																	1		
173	D-2	S.R. 37	571+00.00	573+50.00	LT					250																1		
173	D-3	S.R. 37	573+50.00		RT								86													1		
173	D-4	S.R. 37	573+50.00		LT											59										1		
173	D-5	S.R. 37	573+50.00		LT	1.78	0.39									77												
173	D-6	S.R. 37	576+20.16	576+21.62	LT/RT				66																	1		
173	D-7	S.R. 37	576+21.62		RT	1.33	0.27			27																1		
174	D-1	S.R. 37	583+00.00		LT	1.33	0.27		127																	1		
175	D-1	S.R. 37	591+00.00		LT				62																	1		
175	D-2	S.R. 37	591+00.00		LT	1.33	0.33						83															1
175	D-3	S.R. 37	599+00.00		RT	1.33	0.27		104																	1		
176	D-1	S.R. 37	607+00.00		LT	1.11	0.27		76																	1		
176	D-2	S.R. 37	615+00.00		LT	1.11	0.27		98																	1		
177	D-1	S.R. 37	623+00.00		RT	1.33	0.27		93																	1		
178	D-1	S.R. 37	632+89.82		LT	1.33	0.33						91													1		
178	D-2	S.R. 37	632+24.52	632+75.78	LT						52																	
179	D-1	S.R. 37	641+00.00		LT	1.33	0.27		103																	1		
180	D-1	S.R. 37	653+50.00		LT	1.33	0.27		107																	1		
588	D-1	WATKINS-YORK	104+33.00	104+68.00	RT						35																	
590	D-1	WATKINS-YORK	128+81.00	129+20.00	RT						39																	
TOTALS THIS SHEET						42.72	10.38	0	2501	861	126	182	808	1170	44	355	300	36	259	0	632	0	364	97	6	44	0	1
TOTALS CARRIED TO SHEET 136						42.72	10.38	0	2501	861	126	182	808	1170	44	355	300	36	259	0	632	0	364	97	6	44	0	1

DRAINAGE SUBSUMMARY- STORM SEWER

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CALCULATED CLB
CHECKED WAA

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DRAINAGE SUBSUMMARY- STORM SEWER

CALCULATED CLB
CHECKED WAA

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CU YD	602 CONCRETE MASONRY CU YD	603 12" CONDUIT, TYPE B FT	603 15" CONDUIT, TYPE B FT	603 15" CONDUIT, TYPE C FT	603 15" CONDUIT, TYPE D FT	603 15" CONDUIT, TYPE F 707.05 TYPE C FT	603 18" CONDUIT, TYPE B FT	603 18" CONDUIT, TYPE C FT	603 18" CONDUIT, TYPE F 707.05 TYPE C FT	603 21" CONDUIT, TYPE B FT	603 21" CONDUIT, TYPE C FT	603 21" CONDUIT, TYPE F 707.05 TYPE C FT	603 24" CONDUIT, TYPE B FT	603 24" CONDUIT, TYPE D FT	603 27" CONDUIT, TYPE B FT	603 27" CONDUIT, TYPE D FT	603 30" CONDUIT, TYPE B FT	603 36" CONDUIT, TYPE B FT	604 CATCH BASIN, NO. 3A, AS PER PLAN EACH	604 CATCH BASIN, NO. 4, AS PER PLAN EACH	604 CATCH BASIN, NO. 2-2B, AS PER PLAN EACH	604 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE A EACH	604 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C EACH	604 MANHOLE, NO. 3, AS PER PLAN EACH
591	D-1	WATKINS-YORK	132+75.49		LT&RT	1.78	0.33						68		38												1			
591	D-2	WATKINS-YORK	141+74.00	142+12.00	RT						38																			
592	D-1	WATKINS-YORK	145+29.00	145+71.00	RT						42																			
592	D-2	WATKINS-YORK	150+98.40	151+83.10	RT						86																			
594	D-1	WATKINS-YORK	171+82.00	172+19.00	RT						37																			
595	D-1	WATKINS-YORK	184+43.00	184+99.00	RT						57																			
595	D-2	WATKINS-YORK	187+68.00	188+71.00	RT						105																			
596	D-1	WATKINS-YORK	198+77.40	199+22.70	LT						42																			
596	D-2	WATKINS-YORK	200+81.00	201+19.00	RT						38																			
597	D-1	WATKINS-YORK	205+34.00	205+74.00	LT						40																			
597	D-2	WATKINS-YORK	205+19.53	205+76.46	RT						56																			
658	D-1	SERVICE ROAD 10	147+19.71	147+69.70	LT						46																			
667	D-1	REL. WORTHINGTON RD	189+15.20	189+50.30	LT						35																			
667	D-2	REL. WORTHINGTON RD	199+83.00	200+20.00	RT						37																			
668	D-1	REL. WORTHINGTON RD	203+33.00	203+70.00	LT						37																			
669	D-1	REL. WORTHINGTON RD	219+66.30	220+33.40	RT						64																			
670	D-1	REL. WORTHINGTON RD	226+82.20	227+18.80	LT						35																			
670	D-2	REL. WORTHINGTON RD	227+61.50	228+03.90	RT						44																			
724	D-1	S.R. 37	405+02.33		LT	1.33	0.27					55													1					
724	D-2	S.R. 37	404+99.07		RT	1.33	0.27					60													1					
724	D-4	S.R. 37	408+58.72		RT	1.33	0.27					55													1					
724	D-3	S.R. 37	408+59.34		LT	1.33	0.27					87													1					
738	D-1	SERVICE ROAD 11	219+81.20	220+22.20	RT						37																			
739	D-1	SERVICE ROAD 11	231+81.00	232+17.00	RT						36																			
740	D-1	SERVICE ROAD 11	238+75.00	239+23.00	RT						48																			
740	D-2	SERVICE ROAD 11	242+33.00	242+67.00	RT						34																			
755	D-2	OUTVILLE ROAD	20+86.09	20+86.94	LT & RT				43																1					
755	D-1	OUTVILLE ROAD	20+86.94		LT	1.33	0.27					30													1					
755	D-4	OUTVILLE ROAD	24+38.15	24+40.44	LT & RT				36																1					
755	D-3	OUTVILLE ROAD	24+40.44		LT	1.33	0.27		16																1					
760	D-1	OUTVILLE-MORSE	500+83.00	501+19.00	RT						36																			
761	D-1	OUTVILLE-MORSE	513+83.00	514+20.00	RT						36																			
762	D-1	OUTVILLE-MORSE	520+82.00	521+24.00	RT						42																			
763	D-1	OUTVILLE-MORSE	529+01.00	529+40.00	RT						39																			
763	D-2	OUTVILLE-MORSE	532+61.10	533+22.30	RT						63																			
763	D-3	OUTVILLE-MORSE	533+30.60	533+65.50	RT						36																			
764	D-1	OUTVILLE-MORSE	539+41.26	540+19.00	RT						78																			
765	D-1	OUTVILLE-MORSE	550+20.00	550+56.10	RT						36																			
766	D-1	OUTVILLE-MORSE	567+06.79	567+45.77	RT																	39								
767	D-1	OUTVILLE-MORSE	571+64.63	572+36.03	RT																	72								
768	D-1	OUTVILLE-MORSE	584+74.40	585+00.00	RT						66																			
768	D-2	OUTVILLE-MORSE	584+44.60	584+73.30	RT						62																			
825	D-1	C.R. 539A	308+48.34	309+53.56	LT						105																			
826	D-1	C.R. 539A	320+60.10	321+43.70	LT						86																			
827	D-1	C.R. 539A	338+76.60	338+75.74	LT & RT				39																				1	
827	D-2	C.R. 539A	338+75.74		LT	1.33	0.27					36													1					
829	D-1	C.R. 539A	359+46.00		LT & R	1.11	0.21	84																					1	
870	D-1	MORSE	7+83.20	8+20.30	RT															37										
870	D-2	MORSE	12+82.10	13+21.00	LT						37																			
870	D-3	MORSE	13+99.90	14+35.50	RT						37																			
TOTALS THIS SHEET						12.21	2.43	84	134	0	1753	323	68	0	38	0	0	0	0	37	0	111	0	0	9	0	1	0	2	0
TOTALS FROM SHEET 135						42.72	10.38	0	2501	861	126	182	808	1170	44	355	300	36	259	0	632	0	364	97	6	44	0	1	1	2
TOTALS TO GENERAL SUMMARY						55	12.9	84	2635	861	1879	505	876	1170	82	355	300	36	259	37	632	111	364	97	15	44	1	1	3	2

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| SHT. NO. | REF. NO. | ROADWAY | SIDE | 503 | 509 | 512 | 516 | 518 | | | 601 | | | | 602 | 603 | | | |

SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT. TYPE 1	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS, 707.31	605 6" SHALLOW PIPE UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY)					
																			PLUG	TEE	45° WYE	CROSS	45° ELL	18.5° ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
990	U-1	S.R. 161	351+00	RT	77.00	1070.30	353+50	℄	-	1062.71	CB		34	43		250								
990	U-2	S.R. 161	351+00	RT	66.00	1069.74	353+50	RT	66.00	1066.86	U-1						250			1				
990	U-3	S.R. 161	351+00	RT	35.00	1069.46	353+50	RT	35.00	1066.58	U-1		2				250			1	1			
990	U-4	S.R. 161	353+50	RT	77.00	1067.42	359+00	RT	77.00	1061.10	U-6		2			550				1	1			
990	U-5	S.R. 161	353+50	RT	66.00	1066.86	359+00	RT	66.00	1060.54	U-6		1				550			1	1			
990	U-6	S.R. 161	353+50	RT	35.00	1066.58	359+00	RT	237.80	1051.43	OUTLET	1.78	134	68	1		550			1				2
990	U-7	S.R. 161	359+00	RT	77.00	1061.10	364+00	RT	77.00	1055.35	U-8		2			500				1	1			
990	U-8	S.R. 161	359+00	RT	66.00	1060.54	364+00	RT	198.50	1046.18	OUTLET	1.78	97	36	1		500			1				2
990	U-9	S.R. 161	359+00	RT	35.00	1060.26	365+00	℄	-	1051.50	CB		35				600			1				
990	U-10	S.R. 161	360+00	LT	35.00	1059.11	365+00	LT	35.00	1053.36	U-12						500					1		
990	U-11	S.R. 161	360+00	LT	66.00	1059.39	365+00	LT	66.00	1053.64	U-12						500					1		
990	U-12	S.R. 161	360+00	LT	77.00	1059.95	365+00	LT	-	1051.17	CB		35	42		500				1				
990	U-13	S.R. 161	364+00	RT	77.00	1055.35	369+00	RT	77.00	1049.60	U-15		2			500				1	1			
990	U-14	S.R. 161	364+00	RT	66.00	1054.79	369+00	RT	66.00	1049.04	U-15		1				500			1	1			
990	U-15	S.R. 161	365+00	RT	35.00	1053.36	369+00	RT	210.10	1039.60	OUTLET	1.78	111	68	1		400			1				
991	U-1	S.R. 161	369+00	RT	77.00	1049.60	374+64.57	℄	-	1041.00	CB		35	42		565				1				
991	U-2	S.R. 161	369+00	RT	66.00	1049.04	374+64.57	RT	66.00	1044.43	U-1						565					1		
991	U-3	S.R. 161	369+00	RT	35.00	1048.76	374+64.57	RT	35.00	1043.50	U-1						565					1		
991	U-4	S.R. 161	365+00	LT	35.00	1053.36	371+00	LT	102.15	1044.80	OUTLET	1.78	26	43	1		600			1				
991	U-5	S.R. 161	365+00	LT	66.00	1053.64	371+00	LT	66.00	1046.74	U-4		1				600			1	1			
991	U-6	S.R. 161	365+00	LT	77.00	1054.20	371+00	LT	77.00	1047.30	U-4		2			600				1	1			
991	U-7	S.R. 161	371+00	LT	35.00	1046.50	374+64.57	LT	35.00	1043.50	U-9		1				365			1	1			
991	U-8	S.R. 161	371+00	LT	66.00	1046.74	374+64.57	LT	66.00	1043.13	U-9						365					1		
991	U-9	S.R. 161	371+00	LT	77.00	1047.30	374+64.57	℄	-	1041.00	CB		34	44		365				1				
991	U-10	S.R. 161	374+64.57	RT	77.00	1044.99	380+00	℄	-	1044.81	CB					535				1				
991	U-11	S.R. 161	374+64.57	RT	66.00	1044.43	380+00	RT	66.00	1050.85	U-10		4				535			1	1			
991	U-12	S.R. 161	374+64.57	RT	35.00	1043.50	380+00	RT	35.00	1049.48	U-10		3				535			1	1			
991	U-13	S.R. 161	374+64.57	LT	35.00	1043.50	380+00	LT	35.00	1049.61	U-15		2				535			1	1			
991	U-14	S.R. 161	374+64.57	LT	66.00	1043.13	380+00	LT	66.00	1048.73	U-15						535					1		
991	U-15	S.R. 161	374+64.57	LT	77.00	1043.69	380+00	℄	-	1044.81	CB					535				1				
991	U-16	S.R. 161	380+00	℄	-	1044.81	389+06.87	RT	77.00	1062.50	CB		35	42		907				1	1	1		
991	U-17	S.R. 161	380+00	RT	66.00	1050.85	389+06.87	RT	66.00	1061.79	U-16						907			1	1	1		
991	U-18	S.R. 161	380+00	RT	35.00	1049.48	389+06.87	RT	35.00	1060.42	U-16						907			1	1	1		
991	U-19	S.R. 161	380+00	LT	35.00	1049.61	389+06.87	LT	35.00	1060.55	U-21						907			1	1	1		
991	U-20	S.R. 161	380+00	LT	66.00	1048.73	389+06.87	LT	66.00	1059.67	U-21						907			1	1	1		
991	U-21	S.R. 161	380+00	℄	-	1044.81	389+06.87	LT	77.00	1060.19	CB		40	44		907				1	1	1		
991	U-22	S.R. 161	389+06.87	RT	77.00	1062.50	394+00	RT	77.00	1057.55	U-24		4			494				1	1	1		
991	U-23	S.R. 161	389+06.87	RT	66.00	1061.79	394+00	RT	66.00	1056.86	U-24		3				494			1	1	1		
991	U-24	S.R. 161	389+06.87	RT	35.00	1060.42	394+00	RT	221.10	1045.13	OUTLET	1.78	111	114	1		494			1	1			2
991	U-25	S.R. 161	389+06.87	LT	35.00	1060.55	394+00	LT	126.60	1045.30	OUTLET	1.78	51	43	1		494			1	1			2
991	U-26	S.R. 161	389+06.87	LT	66.00	1059.67	394+00	LT	66.00	1054.84	U-25						494			1		1		
991	U-27	S.R. 161	389+06.87	LT	77.00	1060.19	394+00	LT	77.00	1055.38	U-25		1			494				1	1	1		
992	U-1	S.R. 161	394+00	RT	77.00	1057.55	399+00	℄	-	1043.00	CB		31	43		500				1				
992	U-2	S.R. 161	394+00	RT	66.00	1056.86	399+00	RT	66.00	1045.46	U-1						500					1		
992	U-3	S.R. 161	394+00	RT	35.00	1055.56	399+00	RT	35.00	1045.18	U-1		2				500			1	1			
992	U-4	S.R. 161	394+00	LT	35.00	1055.65	399+00	℄	-	1043.30	CB		33				500			1				
992	U-5	S.R. 161	394+00	LT	66.00	1054.84	398+95	LT	109.80	1041.10	OUTLET	1.78	33	12	1		495			1				2
992	U-6	S.R. 161	394+00	LT	77.00	1055.38	398+95	LT	77.00	1046.02	U-5		1			495				1	1			
992	U-7	S.R. 161	399+00	RT	77.00	1046.02	404+00	RT	77.00	1035.62	U-9		2			500				1	1			
992	U-8	S.R. 161	399+00	RT	66.00	1045.46	404+00	RT	66.00	1035.06	U-9		1				500			1	1			
992	U-9	S.R. 161	399+00	RT	35.00	1045.17	404+00	RT	186.10	1030.90	OUTLET	1.78	85	68	1		500			1				2
992	U-10	S.R. 161	399+00	LT	35.00	1045.18	404+00	LT	104.60	1032.40	OUTLET	1.78	27	43	1		500			1				2
992	U-11	S.R. 161	398+95	LT	66.00	1045.46	404+00	LT	66.00	1035.06	U-10		1				505			1	1			
992	U-12	S.R. 161	398+95	LT	77.00	1046.02	404+00	LT	77.00	1035.62	U-10		2			505				1	1			
992	U-13	S.R. 161	404+00	RT	77.00	1035.62	408+00	℄	-	1028.00	CB		32	43		400				1				
992	U-14	S.R. 161	404+00	RT	66.00	1035.06	408+00	RT	66.00	1029.90	U-13						400					1		
992	U-15	S.R. 161	404+00	RT	35.00	1034.78	408+00	RT	35.00	1029.62	U-13		2				400			1	1			
992	U-16	S.R. 161	404+00	LT	35.00	1034.78	408+00	℄	-	1028.00	CB		33				400			1				
992	U-17	S.R. 161	404+00	LT	66.00	1035.06	408+05	LT	111.40	1025.00	OUTLET	1.78	35	12	1		405			1				2
992	U-18	S.R. 161	404+00	LT	77.00	1035.62	408+05	LT	77.00	1030.44	U-17		1			405				1	1			
992	U-19	S.R. 161	408+00	RT	77.00	1030.46	417+50	℄	-	1023.00	CB		32	43		950				1				
TOTALS THIS SHEET												17.80	1161	893	10	11457	21009	0	12	51	30	10	0	16
TOTALS CARRIED TO SHEET 147												17.80	1161	893	10	11457	21009	0	12	51	30	10	0	16

CALCULATED CLB CHECKED CSR

UNDERDRAIN SUBSUMMARY-S.R. 161

LIC-161-6.65
LIC-37-10.25

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UNDERDRAIN SUBSUMMARY - S.R. 161

CALCULATED CLB
CHECKED CSR

LIC-161-6.65
LIC-37-10.25

SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT, TYPE 1	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS. 707.31	605 6" SHALLOW PIPE UNDERDRAINS. 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS. 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY)						
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT									PLUG	° TEE	45 WYE	CROSS	45 ELL	18.5 ° ELL	25 ELL
												SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH
992	U-20	S.R. 161	408+00	RT	66.00	1029.90	417+50	RT	66.00	1025.15	U-19						950					1			
992	U-21	S.R. 161	408+00	RT	35.00	1029.62	417+50	RT	35.00	1024.87	U-19		2				950			1	1				
992	U-22	S.R. 161	408+00	LT	35.00	1029.62	417+50	℄	-	1023.00	CB		33				950			1					
992	U-23	S.R. 161	408+05	LT	66.00	1029.88	417+55	LT	112.10	1020.00	OUTLET	1.78	36	12	1		950			1					
992	U-24	S.R. 161	408+05	LT	77.00	1030.44	417+55	LT	77.00	1025.69	U-23		1			950				1	1				
993	U-1	S.R. 161	417+50	RT	77.00	1025.71	422+00	RT	77.00	1023.46	U-3		2			450				1	1				
993	U-2	S.R. 161	417+50	RT	66.00	1025.15	422+00	RT	66.00	1022.90	U-3		1				450			1	1				
993	U-3	S.R. 161	417+50	RT	35.00	1024.87	422+00	RT	179.40	1020.70	OUTLET	1.78	78	68	1		450			1					
993	U-4	S.R. 161	417+50	LT	35.00	1024.85	422+00	LT	112.60	1017.60	OUTLET	1.78	36	43	1		450			1					
993	U-5	S.R. 161	417+55	LT	66.00	1025.13	422+00	LT	66.00	1022.90	U-4		1				445			1	1				
993	U-6	S.R. 161	417+55	LT	77.00	1025.69	422+00	LT	77.00	1023.46	U-4		2			445				1	1				
993	U-7	S.R. 161	422+00	RT	77.00	1023.46	427+00	℄	-	1018.00	CB		32	43		500				1					
993	U-8	S.R. 161	422+00	RT	66.00	1022.90	427+00	RT	66.00	1020.32	U-7						500					1			
993	U-9	S.R. 161	422+00	RT	35.00	1022.62	427+00	RT	35.00	1020.09	U-7		2				500			1	1				
993	U-10	S.R. 161	422+00	LT	35.00	1022.62	427+00	℄	-	1018.00	CB		33				500			1					
993	U-11	S.R. 161	422+00	LT	66.00	1022.90	426+95	LT	115.00	1015.60	OUTLET	1.78	36	10	1		495			1					
993	U-12	S.R. 161	422+00	LT	77.00	1023.46	426+95	LT	79.08	1020.95	U-11		2			495				1	1				
993	U-13	S.R. 161	427+00	RT	77.00	1020.93	432+00	RT	83.10	1014.47	U-15		2			500				1	1				
993	U-14	S.R. 161	427+00	RT	66.00	1020.32	432+00	RT	73.20	1013.83	U-15						500					1			
993	U-15	S.R. 161	427+00	RT	35.00	1020.09	432+00	RT	210.60	995.40	OUTLET	1.78	105	73	1		500			1					2
993	U-16	S.R. 161	427+00	LT	35.00	1020.11	432+00	LT	116.60	1013.60	OUTLET	1.78	25	58	1		500			1					
993	U-17	S.R. 161	426+95	LT	71.08	1020.39	432+00	LT	81.44	1015.31	U-16		2				505			1	1				
993	U-18	S.R. 161	426+95	LT	79.08	1020.95	432+00	LT	90.44	1015.99	U-16		3			505				1	1				
993	U-19	S.R. 161	432+00	RT	83.11	1014.47	435+50	RT	87.63	1009.80	U-20		1			350				1	1				
993	U-20	S.R. 161	432+00	RT	73.20	1013.83	435+50	RT	134.17	1000.60	OUTLET	1.78	48	10	1		350			1					
993	U-21	S.R. 161	432+00	RT	42.00	1014.46	438+00	℄	-	1004.50	CB		33				600			1					
993	U-22	S.R. 161	432+00	LT	42.00	1014.46	438+00	℄	-	1004.50	CB		33				600			1					
993	U-23	S.R. 161	432+00	LT	81.44	1015.31	435+50	LT	139.00	998.80	OUTLET	1.78	34	9	1		350			1					
993	U-24	S.R. 161	432+00	LT	90.44	1015.31	435+50	LT	97.71	1010.49	U-23		1			350				1	1				
993	U-25	S.R. 161	435+50	RT	87.63	1009.80	439+00	RT	109.60	1004.40	U-26		2			350				1	1				
993	U-26	S.R. 161	435+50	RT	78.63	1009.32	439+00	RT	141.56	999.50	OUTLET	1.78	33	9	1		350			1				2	
993	U-27	S.R. 161	435+50	LT	88.70	1009.93	439+00	LT	95.22	1005.36	U-29						350					1			
993	U-28	S.R. 161	435+50	LT	97.71	1010.49	439+00	LT	104.22	1005.92	U-29		1			350				1	1				
993	U-29	S.R. 161	436+54	LT	66.00	1009.52	439+00	LT	201.46	979.80	OUTLET	1.78	102	38	1		246			1				2	
993	U-30	S.R. 161	438+00	RT	35.00	1006.66	443+00	RT	105.10	998.30	OUTLET	1.78	28	42	1		500			1					
993	U-31	S.R. 161	438+00	LT	35.00	1006.66	443+00	LT	120.90	995.00	OUTLET	1.78	43	43	1		500			1				2	
993	U-32	S.R. 161	439+40.51	RT	77.00	1005.00	443+00	RT	77.00	1000.33	U-30		2			360				1	1				
993	U-33	S.R. 161	439+40.51	RT	66.00	1004.40	443+00	RT	66.00	999.73	U-30						360					1			
993	U-34	S.R. 161	440+34.31	LT	66.00	1005.35	443+00	LT	66.00	1001.09	U-31		2				266			1	1				
993	U-35	S.R. 161	440+34.31	LT	77.00	1005.12	443+00	LT	77.00	1001.67	U-31		3			266				1	1				
994	U-1	S.R. 161	443+00	RT	77.00	1000.33	448+50	℄	-	991.00	CB		32	42		550				1					
994	U-2	S.R. 161	443+00	RT	66.00	999.73	448+50	RT	66.00	993.25	U-1						550					1			
994	U-3	S.R. 161	443+00	RT	35.00	1000.16	448+50	RT	35.00	993.01	U-1		2				550			1	1				
994	U-4	S.R. 161	443+00	LT	35.00	1000.16	448+50	LT	35.00	993.01	U-6		2				550			1	1				
994	U-5	S.R. 161	443+00	LT	66.00	1001.09	448+50	LT	66.00	993.25	U-6						550					1			
994	U-6	S.R. 161	443+00	LT	77.00	1001.67	448+50	℄	-	991.00	CB		32	42		550				1					
994	U-7	S.R. 161	448+50	RT	77.00	993.85	457+00	℄	-	984.75	CB		32	42		850				1					
994	U-8	S.R. 161	448+50	RT	66.00	993.25	457+00	RT	66.00	987.00	U-7						850					1			
994	U-9	S.R. 161	448+50	RT	35.00	993.01	457+00	RT	35.00	986.76	U-7		2				850			1	1				
994	U-10	S.R. 161	448+50	LT	35.00	993.01	457+00	LT	35.00	986.76	U-12		2				850			1	1				
994	U-11	S.R. 161	448+50	LT	66.00	993.25	457+00	LT	66.00	987.00	U-12						850					1			
994	U-12	S.R. 161	448+50	LT	77.00	993.85	457+00	℄	-	984.75	CB		32	42		850				1					
994	U-13	S.R. 161	457+00	RT	77.00	987.60	461+42.92	RT	77.00	985.23	U-14		2			443				1	1				
994	U-14	S.R. 161	457+00	RT	66.00	987.00	461+42.92	RT	183.40	976.50	OUTLET	1.78	73	63	1		443			1					2
994	U-15	S.R. 161	457+00	RT	35.00	986.76	460+00	℄	-	983.00	CB		32				300			1					
994	U-16	S.R. 161	457+00	LT	35.00	986.76	460+00	℄	-	983.00	CB		32				300			1					
994	U-17	S.R. 161	457+00	LT	66.00	987.00	462+15.54	LT	158.20	980.40	OUTLET	1.78	56	37	1		516			1					
994	U-18	S.R. 161	457+00	LT	77.00	987.60	462+15.54	LT	77.00	985.02	U-17		1			516				1	1				
994	U-19	S.R. 161	460+00	RT	35.00	985.26	464+50	RT	124.50	981.80	OUTLET	1.78	25	67	1		450			1					
994	U-20	S.R. 161	460+00	LT	35.00	985.26	465+00	LT	137.80	973.60	OUTLET	1.78	48	56	1		500			1				2	
994	U-21	S.R. 161	461+42.92	RT	66.00	984.71	464+50	RT	66.00	983.25	U-19		1				307			1	1				
TOTALS THIS SHEET												28.48	1206	849	16	9630	22483	0	0	52	25	9	0	8	4
TOTALS CARRIED TO SHEET 147												28.48	1206	849	16	9630	22483	0	0	52	25	9	0	8	4

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SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT, TYPE I	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS, 707.31	605 6" SHALLOW PIPE UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY) PLUG	TEE	45 WYE	CROSS	18.5 ELL	45 ELL	25 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH
994	U-22	S.R. 161	462+15.54	LT	105.11	982.98	465+00	LT	81.79	982.35	U-20		1				285			1	1				
994	U-23	S.R. 161	462+15.54	LT	114.05	883.66	465+00	LT	90.82	983.03	U-20		2			285				1	1				
994	U-24	S.R. 161	462+37.84	RT	106.24	983.29	464+50	RT	102.83	982.86	U-19		2			213				1	1				
994	U-25	S.R. 161	461+42.92	RT	111.23	982.40	464+50	RT	92.83	982.18	U-19						257	50				1			
995	U-1	S.R. 161	464+50	RT	102.83	982.86	469+50	℄	-	978.80	CB		32	57		500				1					
995	U-2	S.R. 161	464+50	RT	92.83	982.40	469+50	RT	82.42	980.09	U-1						500			1		1			
995	U-3	S.R. 161	464+50	RT	35.00	983.01	469+50	RT	35.00	980.51	U-1		2				500			1	1				
995	U-4	S.R. 161	465+00	LT	35.00	982.76	469+50	℄	-	978.80	CB		33				450			1					
995	U-5	S.R. 161	465+00	LT	81.79	982.35	469+55	LT	117.70	976.20	OUTLET	1.78	35	9	1		455			1					
995	U-6	S.R. 161	465+00	LT	90.82	983.03	469+55	LT	83.59	981.27	U-5		2			455				1	1				
995	U-7	S.R. 161/S.R. 37	469+50	RT	91.42	980.77	479+50	RT	77.00	976.35	U-12		6			1000				1	1				
995	U-8	S.R. 161/S.R. 37	469+50	RT	82.42	980.09	479+50	RT	66.00	975.75	U-12		5				1000			1	1				
995	U-9	S.R. 161/S.R. 37	469+50	RT	35.00	980.51	479+50	RT	35.00	975.51	U-12		4				1000			1	1				
995	U-10	S.R. 161/S.R. 37	469+50	LT	35.00	980.51	479+50	LT	35.00	975.51	U-12						1000					1			
995	U-11	S.R. 161/S.R. 37	469+55	LT	74.55	980.59	479+50	LT	66.00	975.75	U-12						995					1			
995	U-12	S.R. 161/S.R. 37	469+55	LT	83.59	981.27	479+50	RT	107.00	972.30	OUTLET	1.78	100	84	1	995				1					
995	U-13	S.R. 37	479+50	RT	77.00	976.35	481+11.82	RT	77.00	975.54	U-14		1			162				1	1				
995	U-14	S.R. 37	479+50	RT	66.00	975.75	481+17.36	RT	127.70	954.70	OUTLET	1.78	56	12	1		168			1			2		
995	U-15	S.R. 37	479+50	RT	35.00	975.51	481+33.94	℄	-	972.50	CB		47				184			1					
995	U-16	S.R. 37	479+50	LT	35.00	975.51	481+73.76	℄	-	972.50	CB		82				224			1					
995	U-17	S.R. 37	479+50	LT	66.00	975.75	481+90.34	LT	100.00	970.40	OUTLET	1.78	31	12	1		241			1				1	1
995	U-18	S.R. 37	479+50	LT	77.00	976.35	481+95.87	LT	77.00	975.12	U-17		1			246				1	1				
995	U-19	S.R. 37	484+24.10	RT	77.00	973.98	486+29.79	RT	77.00	973.17	U-20		1			206				1	1				
995	U-20	S.R. 37	484+29.64	RT	66.00	973.34	486+29.79	RT	122.00	955.30	OUTLET	1.78	49	11	1		201			1					2
995	U-21	S.R. 37	484+46.22	RT	35.00	973.02	486+29.79	℄	-	970.00	CB		33				184			1					
995	U-22	S.R. 37	484+86.04	LT	35.00	972.83	486+29.79	℄	-	970.00	CB		33				144			1					
995	U-23	S.R. 37	485+02.62	LT	66.00	972.99	486+35	LT	127.60	952.50	OUTLET	1.78	56	11	1		133			1					2
995	U-24	S.R. 37	485+08.15	LT	77.00	973.56	486+35	LT	77.00	973.17	U-23		1			127				1	1				
995	U-25	S.R. 37	486+29.79	RT	77.00	973.17	490+00	RT	77.00	976.61	U-20					370									
995	U-26	S.R. 37	486+29.79	RT	66.00	972.61	490+00	RT	66.00	976.01	U-20						370								
995	U-27	S.R. 37	486+29.79	RT	35.00	972.33	490+00	RT	35.00	976.43	U-21						370								
995	U-28	S.R. 37	486+29.79	LT	35.00	972.33	492+00	LT	35.00	977.61	U-22						570								
995	U-29	S.R. 37	486+35	LT	66.00	972.61	492+00	LT	66.00	978.52	U-23						565								
995	U-30	S.R. 37	486+35	LT	77.00	973.17	492+00	LT	77.00	979.12	U-23					565									
996	U-1	S.R. 37	490+00	RT	77.00	976.61	495+00	RT	77.00	981.69	U-3		1			500				1	1				
996	U-2	S.R. 37	490+00	RT	66.00	976.01	495+00	RT	66.00	981.09	U-3						500					1			
996	U-3	S.R. 37	490+00	RT	110.00	970.40	495+00	RT	35.00	981.12	OUTLET	1.78	34	42	1		500			1			2		
996	U-4	S.R. 37	492+00	LT	35.00	977.61	495+00	LT	35.00	981.12	U-6						300					1			
996	U-5	S.R. 37	492+00	LT	66.00	978.52	495+00	LT	66.00	981.62	U-6						300					1			
996	U-6	S.R. 37	492+00	℄	-	975.50	495+00	LT	77.00	982.22	CB		33	41		300				1					
996	U-7	S.R. 37	495+00	℄	-	976.61	497+75	RT	77.00	985.18	CB		32	43		275				1					
996	U-8	S.R. 37	495+00	RT	66.00	981.09	497+75	RT	66.00	984.58	U-7						275					1			
996	U-9	S.R. 37	495+00	RT	35.00	981.12	497+75	RT	35.00	984.34	U-7		2				275			1	1				
996	U-10	S.R. 37	495+00	LT	35.00	981.12	497+75	LT	35.00	984.34	U-12						275					1			
996	U-11	S.R. 37	495+00	LT	66.00	981.62	497+75	LT	66.00	984.58	U-12						275					1			
996	U-12	S.R. 37	495+00	℄	-	982.00	497+75	LT	77.00	985.18	CB		33	41		275				1					
996	U-13	S.R. 37	497+75	℄	-	982.00	506+05.75	RT	77.00	991.65	CB		33	43		831				1	1				
996	U-14	S.R. 37	497+75	RT	66.00	984.58	506+05.75	RT	66.00	991.05	U-13						831			1		1			
996	U-15	S.R. 37	497+75	RT	35.00	984.34	506+05.75	RT	35.00	990.81	U-13		2				831			1	1				
996	U-16	S.R. 37	497+75	LT	35.00	984.34	506+05.75	LT	35.00	990.81	U-18		2				831			1	1				
996	U-17	S.R. 37	497+75	LT	66.00	984.58	506+05.75	LT	66.00	991.05	U-18						831			1		1			
996	U-18	S.R. 37	497+75	℄	-	982.00	506+05.75	LT	77.00	991.65	CB		33	43		831				1	1				
996	U-19	S.R. 37	506+05.75	RT	77.00	991.65	515+00	℄	-	980.50	CB		32	42		894				1	1				
996	U-20	S.R. 37	506+05.75	RT	66.00	991.05	515+00	RT	66.00	982.63	U-19						894			1		1			
996	U-21	S.R. 37	506+05.75	RT	35.00	990.81	515+00	RT	35.00	982.39	U-19						894			1	1				
996	U-22	S.R. 37	506+05.75	LT	35.00	990.81	515+00	℄	-	980.50	CB		33				894			1	1				
996	U-23	S.R. 37	506+05.75	LT	66.00	991.05	514+95	LT	116.80	979.40	OUTLET	1.78	40	11	1		889			1	1				
996	U-24	S.R. 37	506+05.75	LT	77.00	991.65	514+95	LT	77.00	983.23	U-23		1			889				1	1	1			
997	U-1	S.R. 37	515+00	RT	77.00	983.23	524+00	RT	77.00	959.89	U-2		1			900				1	1				
997	U-2	S.R. 37	515+00	RT	66.00	982.63	524+00	RT	164.40	957.50	OUTLET	1.78	56	43	1		900			1					
TOTALS THIS SHEET												16.02	983	545	9	10819	20291	50	12	41	19	13	4	1	5
TOTALS CARRIED TO SHEET 147												16.02	983	545	9	10819	20291	50	12	41	19	13	4	1	5

CALCULATED CLB
CHECKED CSR

UNDERDRAIN SUBSUMMARY - S.R. 161

LIC-161-6.65
LIC-37-10.25

SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT. TYPE 1	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS. 707.31	605 6" SHALLOW PIPE UNDERDRAINS. 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS. 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY)					
																			PLUG	TEE	45 WYE	CROSS	45 ELL	18.5 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
997	U-3	S.R. 37	515+00	RT	35.00	982.39	524+00	℄	-	957.00	CB		33				900			1				
997	U-4	S.R. 37	515+00	LT	35.00	982.39	524+00	℄	-	957.00	CB		33				900			1				
997	U-5	S.R. 37	514+95	LT	66.00	982.63	523+95	LT	114.70	953.30	OUTLET	1.78	39	11	1		900			1				2
997	U-6	S.R. 37	514+95	LT	77.00	983.23	523+95	LT	77.00	960.03	U-5		1			900				1	1			
997	U-7	S.R. 37	524+00	RT	77.00	959.89	528+50	LT	110.80	942.80	OUTLET	1.78	103	85	1	450				1				
997	U-8	S.R. 37	524+00	RT	66.00	959.29	528+50	RT	66.00	947.51	U-7						450					1		
997	U-9	S.R. 37	524+00	RT	35.00	959.89	528+50	RT	35.00	947.27	U-7		1				450			1	1			
997	U-10	S.R. 37	524+00	LT	35.00	959.89	528+50	LT	35.00	947.27	U-7		4				450			1	1			
997	U-11	S.R. 37	523+95	LT	66.00	959.43	528+50	LT	66.00	947.51	U-7		6				445			1	1			
997	U-12	S.R. 37	523+95	LT	77.00	960.23	528+50	LT	77.00	948.11	U-7		7			445				1	1			
997	U-13	S.R. 37	528+50	RT	77.00	948.11	532+44.89	RT	77.00	944.40	U-14		2			395				1	1			
997	U-14	S.R. 37	528+50	RT	66.00	947.51	532+44.89	RT	88.30	943.50	CB		23	11			395			1			1	
997	U-15	S.R. 37	528+50	RT	35.00	947.27	532+44.89	℄	-	941.50	CB		36				395			1			1	
997	U-16	S.R. 37	528+50	LT	35.00	947.27	532+44.89	℄	-	941.50	CB		36				395			1			1	
997	U-17	S.R. 37	528+50	LT	66.00	947.51	532+44.89	LT	113.80	938.10	OUTLET	1.78	38	11	1		395			1				2
997	U-18	S.R. 37	528+50	LT	77.00	948.11	532+44.89	LT	77.00	944.40	U-17		1			395				1	1			
997	U-19	S.R. 37	532+44.89	RT	77.00	944.40	537+50	RT	77.00	946.66	U-14					505								
997	U-20	S.R. 37	532+44.89	RT	66.00	943.80	537+50	RT	66.00	946.06	U-14						505							
997	U-21	S.R. 37	532+44.89	RT	35.00	943.56	537+50	RT	35.00	945.82	U-15						505							
997	U-22	S.R. 37	532+44.89	LT	35.00	943.56	537+50	LT	35.00	945.82	U-16						505							
997	U-23	S.R. 37	532+44.89	LT	66.00	943.80	537+50	LT	66.00	946.06	U-17						505							
997	U-24	S.R. 37	532+44.89	LT	77.00	944.40	537+50	LT	77.00	946.66	U-17					505								
997	U-25	S.R. 37	537+50	LT	115.60	939.80	543+00	RT	77.00	949.03	OUTLET	1.78	109	84	1	550			1	1				
997	U-26	S.R. 37	537+50	RT	66.00	946.06	543+00	RT	66.00	948.43	U-25						550		1			1		
997	U-27	S.R. 37	537+50	RT	35.00	945.82	543+00	RT	35.00	948.19	U-25		1				550		1	1	1			
997	U-28	S.R. 37	537+50	LT	35.00	945.82	543+00	LT	35.00	948.19	U-25		4				550		1	1	1			
997	U-29	S.R. 37	537+50	LT	66.00	946.06	543+00	LT	66.00	948.43	U-25		4				550		1	1	1			
997	U-30	S.R. 37	537+50	LT	77.00	946.66	543+00	LT	77.00	949.03	U-25		5			550			1	1	1			
998	U-1	S.R. 37	543+00	RT	77.00	949.03	550+50	℄	-	940.46	CB	1.78	120	131	1	750			1	1				
998	U-2	S.R. 37	543+00	RT	66.00	948.43	550+50	RT	66.00	944.98	U-1						750		1			1		
998	U-3	S.R. 37	543+00	RT	35.00	948.19	550+50	RT	35.00	944.74	U-1		1				750		1	1	1			
998	U-4	S.R. 37	543+00	LT	35.00	948.19	550+50	℄	-	944.74	CB		3				750		1	1	1			
998	U-5	S.R. 37	543+00	LT	66.00	948.43	550+50	LT	66.00	944.98	U-7		4				750		1	1	1			
998	U-6	S.R. 37	543+00	LT	77.00	949.03	546+50	LT	91.20	949.03	U-7					350		15	1				2	
998	U-7	S.R. 37	546+50	LT	91.20	947.02	550+00	℄	-	945.19	CB		5			400				1	1			
998	U-8	S.R. 37	550+50	RT	77.00	945.58	553+00	RT	70.07	944.31	U-10		2			250				1	1			
998	U-9	S.R. 37	550+50	RT	66.00	944.98	553+00	RT	59.07	943.71	U-10		1				250			1	1			
998	U-10	S.R. 37	550+50	RT	35.00	944.74	553+00	RT	160.10	939.40	OUTLET	1.78	61	73	1		250			1			2	
998	U-11	S.R. 37	550+50	LT	35.00	944.74	553+00	LT	161.20	923.90	OUTLET	1.78	83	55	1		250			1			2	
998	U-12	S.R. 37	550+50	LT	66.00	944.98	553+00	LT	59.07	943.71	U-11		1				250			1	1			
998	U-13	S.R. 37	550+50	LT	85.72	945.19	553+00	LT	72.16	944.18	U-11		2			250				1	1			
998	U-14	S.R. 37	553+00	RT	70.07	944.31	558+19	℄	-	939.50	CB		19	42		519				1				
998	U-15	S.R. 37	553+00	RT	59.07	943.71	558+19	RT	51.93	941.06	U-14						519					1		
998	U-16	S.R. 37	553+00	RT	28.07	943.71	558+19	RT	20.93	940.82	U-14		2				519			1	1			
998	U-17	S.R. 37	553+00	LT	28.07	943.47	558+19	℄	-	939.50	CB		20				519			1				
998	U-18	S.R. 37	553+00	LT	59.07	941.71	558+14	LT	65.00	941.00	INLET		11				514			1				
998	U-19	S.R. 37	553+00	LT	72.16	944.18	558+14	LT	65.00	941.55	INLET					514								
998	U-20	S.R. 37	558+19	RT	62.90	941.66	564+68	LT	3.00	937.00	CB		19	41		649				1				
998	U-21	S.R. 37	558+19	RT	51.93	941.06	564+68	RT	49.00	937.76	U-20						649					1		
998	U-22	S.R. 37	558+19	RT	20.93	940.82	564+68	RT	18.00	937.61	U-20		1				649			1	1			
998	U-23	S.R. 37	558+19	LT	20.93	940.82	564+68	LT	18.00	937.61	U-25		1				649			1	1			
998	U-24	S.R. 37	558+14	LT	51.93	941.06	564+68	LT	49.00	937.76	U-25						654					1		
998	U-25	S.R. 37	558+14	LT	65.00	941.55	564+68	LT	3.00	937.40	CB		13	44		654				1				
999	U-1	S.R. 37	564+68	RT	60.00	938.36	569+00	RT	60.00	936.15	U-3		3			432				1	1			
999	U-2	S.R. 37	564+68	RT	49.00	937.76	569+00	RT	49.00	935.55	U-3		2				432			1	1			
999	U-3	S.R. 37	564+68	RT	18.00	937.61	569+00	RT	86.10	933.80	OUTLET	1.78	25	43	1		432			1				
999	U-4	S.R. 37	564+68	LT	18.00	937.61	569+00	LT	146.20	918.80	OUTLET	1.78	48	83	1		432			1			2	
999	U-5	S.R. 37	564+68	LT	49.00	937.76	569+00	LT	49.00	935.55	U-4		1				432			1	1			
999	U-6	S.R. 37	564+68	LT	62.00	938.24	569+00	LT	62.00	936.03	U-4		2			432				1	1			
999	U-7	S.R. 37	569+00	RT	60.00	936.15	573+94	LT	3.30	930.50	CB		48	43		494				1			1	
999	U-8	S.R. 37	569+00	RT	49.00	935.55	573+94	RT	49.00	931.98	U-7						494					1		
TOTALS THIS SHEET												16.02	984	757	9	10389	21189	15	12	46	26	7	12	4
TOTALS CARRIED TO SHEET 147												16.02	984	757	9	10389	21189	15	12	46	26	7	12	4

UNDERDRAIN SUBSUMMARY - S.R. 161

CALCULATED CLB
CHECKED CSR

LIC-161-6.65
LIC-37-10.25

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SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT, TYPE I	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS, 707.31	605 6" SHALLOW PIPE UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY) PLUG	TEE	45 WYE	CROSS	45 ELL	25 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
999	U-9	S.R. 37	569+00	RT	18.00	935.31	573+94	RT	18.00	932.77	U-7		2				494			1	1			
999	U-10	S.R. 37	569+00	LT	18.00	935.31	573+94	LT	3.30	930.50	CB		46				494			1			1	
999	U-11	S.R. 37	569+00	LT	49.00	935.55	573+50	LT	62.00	934.20	INLET		9				450			1				
999	U-12	S.R. 37	569+00	LT	62.00	936.03	573+50	LT	62.00	934.96	INLET					450								
999	U-13	S.R. 37	573+50	LT	62.00	934.30	573+94	LT	62.00	934.75	INLET							44	1					
999	U-14	S.R. 37	575+94	RT	60.00	931.67	581+00	LT	128.30	921.00	OUTLET	1.78	66	124	1	506				1			2	
999	U-15	S.R. 37	575+94	RT	49.00	931.19	581+00	RT	49.00	929.43	U-14						506					1		
999	U-16	S.R. 37	575+94	RT	18.00	931.77	581+00	RT	18.00	929.19	U-14		1				506			1	1			
999	U-17	S.R. 37	575+94	LT	18.00	931.77	581+00	LT	18.00	929.19	U-14		1				506			1	1			
999	U-18	S.R. 37	575+94	LT	49.00	932.83	581+00	LT	49.00	929.43	U-14		2				506			1	1			
999	U-19	S.R. 37	575+94	LT	62.00	933.31	581+00	LT	62.00	929.91	U-14		3			506				1	1			
999	U-20	S.R. 37	581+00	RT	60.00	930.03	586+00	RT	60.00	927.48	U-22		2			500				1	1			
999	U-21	S.R. 37	581+00	RT	49.00	929.43	586+00	RT	49.00	926.88	U-22		1				500			1	1			
999	U-22	S.R. 37	581+00	RT	18.00	929.19	586+00	RT	82.30	926.00	OUTLET	1.78	22	42	1		500			1				
999	U-23	S.R. 37	581+00	LT	18.00	929.19	586+00	LT	130.40	917.60	OUTLET	1.78	32	83	1		500			1			2	
999	U-24	S.R. 37	581+00	LT	49.00	929.43	586+00	LT	49.00	926.88	U-23		1				500			1	1			
999	U-25	S.R. 37	581+00	LT	62.00	929.91	586+00	LT	62.00	927.36	U-23		2			500				1	1			
1000	U-1	S.R. 37	586+00	RT	60.00	927.48	591+00	℄	-	923.50	CB		16	42		500				1				
1000	U-2	S.R. 37	586+00	RT	49.00	926.43	591+00	RT	49.00	924.59	U-1						500					1		
1000	U-3	S.R. 37	586+00	RT	18.00	926.64	591+00	RT	18.00	924.35	U-1		2				500			1	1			
1000	U-4	S.R. 37	586+00	LT	18.00	926.64	591+00	℄	-	923.50	CB		16				500			1				
1000	U-5	S.R. 37	586+00	LT	49.00	926.88	591+00	LT	58.35	924.50	INLET		9				500			1				
1000	U-6	S.R. 37	586+00	LT	62.00	927.36	591+00	LT	62.00	925.08	INLET					500								
1000	U-7	S.R. 37	591+00	RT	60.00	925.20	596+00	RT	60.00	923.94	U-11		3			500				1	1			
1000	U-8	S.R. 37	591+00	RT	49.00	924.59	596+00	RT	49.00	923.94	U-11		2				500			1	1			
1000	U-9	S.R. 37	591+00	RT	18.00	924.35	596+00	RT	18.00	923.10	U-11		1				500			1	1			
1000	U-10	S.R. 37	591+00	LT	18.00	924.35	596+00	LT	18.00	923.10	U-11		1				500			1	1			
1000	U-11	S.R. 37	591+00	LT	49.00	924.59	596+00	RT	106.60	914.40	OUTLET	1.78	85	73	1		500			1				2
1000	U-12	S.R. 37	591+00	LT	62.00	925.08	596+90	LT	82.00	922.73	INLET					590								
1000	U-13	S.R. 37	596+00	RT	60.00	923.94	601+50	RT	60.00	922.57	U-15		2			550				1	1			
1000	U-14	S.R. 37	596+00	RT	49.00	923.34	601+50	RT	49.00	921.97	U-15		1				550			1	1			
1000	U-15	S.R. 37	596+00	RT	18.00	923.10	601+50	RT	106.00	913.20	OUTLET	1.78	47	42	1		550			1				2
1000	U-16	S.R. 37	596+00	LT	18.00	923.10	601+50	LT	103.40	914.10	OUTLET	1.78	45	42	1		550			1				2
1000	U-17	S.R. 37	596+00	LT	49.00	923.34	601+50	LT	49.00	921.97	U-16		1				550			1	1			
1000	U-18	S.R. 37	596+90	LT	60.00	923.67	601+50	LT	60.00	922.57	U-16		2			460				1	1			
1000	U-19	S.R. 37	601+50	RT	60.00	922.57	607+00	RT	60.00	921.19	U-20		1			550				1	1			
1000	U-20	S.R. 37	601+50	RT	49.00	921.97	607+00	RT	107.90	911.20	OUTLET	1.78	50	11	1		550			1				2
1000	U-21	S.R. 37	601+50	RT	18.00	921.73	607+00	℄	-	920.00	CB		16				550			1				
1000	U-22	S.R. 37	601+50	LT	18.00	921.73	607+00	℄	-	920.00	CB		16				550			1				
1000	U-23	S.R. 37	601+50	LT	49.00	921.97	606+95	LT	74.00	918.14	OUTLET	1.78	15	11	1		545			1				2
1000	U-24	S.R. 37	601+50	LT	60.00	922.57	606+95	LT	60.00	921.20	U-23		1			545				1	1			
1000	U-25	S.R. 37	607+00	RT	60.00	921.19	611+00	RT	60.00	920.01	U-27		2			400			1	1	1			
1000	U-26	S.R. 37	607+00	RT	49.00	920.59	611+00	RT	49.00	919.41	U-27		1				400		1	1	1			
1000	U-27	S.R. 37	607+00	RT	18.00	920.35	611+00	RT	91.60	915.50	OUTLET	1.78	32	43	1		400		1	1				2
1000	U-28	S.R. 37	607+00	LT	18.00	920.35	611+00	LT	95.80	914.40	OUTLET	1.78	36	43	1		400		1	1				2
1000	U-29	S.R. 37	606+95	LT	49.00	920.60	611+00	LT	49.00	919.77	U-28		2				405		1	1	1			
1000	U-30	S.R. 37	606+95	LT	60.00	921.20	611+00	LT	60.00	920.37	U-28		3			405			1	1	1			
1000	U-31	S.R. 37	611+00	RT	60.00	918.86	615+00	RT	60.00	917.86	U-32		1					400	1	1	1			
1000	U-32	S.R. 37	611+00	RT	49.00	918.37	615+00	RT	86.20	915.10	OUTLET	1.78	27	11	1			400	1	1	1			2
1000	U-33	S.R. 37	611+00	RT	18.00	919.35	615+00	℄	-	918.00	CB		16					400	1	1				
1000	U-34	S.R. 37	611+00	LT	18.00	919.28	615+00	℄	-	918.00	CB		16					400	1	1				
1000	U-35	S.R. 37	611+00	LT	49.00	919.59	614+95	LT	96.20	914.53	OUTLET	1.78	37	11	1			395	1	1				2
1000	U-36	S.R. 37	611+00	LT	60.00	920.19	614+95	LT	60.00	919.19	U-35		1					395	1	1	1			
1001	U-1	S.R. 37	615+00	RT	60.00	917.86	620+00	RT	60.00	916.61	U-3		2					500		1	1			
1001	U-2	S.R. 37	615+00	RT	49.00	917.37	620+00	RT	49.00	916.12	U-3							500				1		
1001	U-3	S.R. 37	615+00	RT	18.00	918.35	620+00	RT	96.80	910.32	OUTLET	1.78	38	42	1			500		1				2
1001	U-4	S.R. 37	615+00	LT	18.00	918.28	620+00	LT	93.40	914.19	OUTLET	1.78	34	43	1			500		1				2
1001	U-5	S.R. 37	614+95	LT	49.00	918.59	620+00	LT	49.00	917.34	U-4		1					505		1	1			
1001	U-6	S.R. 37	614+95	LT	60.00	919.19	620+00	LT	60.00	917.94	U-4		2					505		1	1			
1001	U-7	S.R. 37	620+00	RT	60.00	916.61	625+00	RT	60.00	915.36	U-9		2					500	1	1	1			
1001	U-8	S.R. 37	620+00	RT	49.00	916.12	625+00	RT	49.00	914.87	U-9		1					500	1	1	1			
							TOTALS THIS SHEET					24.92	776	663	14	7462	15462	6444	15	54	32	3	5	22
							TOTALS CARRIED TO SHEET 147					24.92	776	663	14	7462	15462	6444	15	54	32	3	5	22

CALCULATED CLB
CHECKED CSR

UNDERDRAIN SUBSUMMARY - S.R. 161

LIC-161-6.65
LIC-37-10.25

SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT., TYPE 1	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS, 707.31	605 6" SHALLOW PIPE UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY) PLUG	TEE	45 WYE	CROSS	45 °ELL	25 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
1001	U-9	S.R. 37	620+00	RT	18.00	917.10	625+00	RT	97.00	910.30	OUTLET	1.78	38	42	1			500		1				2
1001	U-10	S.R. 37	620+00	LT	18.00	917.03	625+00	LT	87.10	913.62	OUTLET	1.78	27	42	1			500	1	1				2
1001	U-11	S.R. 37	620+00	LT	49.00	917.34	625+00	LT	49.00	916.09	U-10		1					500		1	1			
1001	U-12	S.R. 37	620+00	LT	60.00	917.94	625+00	LT	60.00	916.69	U-10		2					500		1	1			
1001	U-13	S.R. 37	625+00	RT	60.00	916.69	630+00	RT	60.00	915.44	U-15		2			500			1	1	1			
1001	U-14	S.R. 37	625+00	RT	49.00	916.09	630+00	RT	49.00	914.84	U-15		1				500		1	1	1			
1001	U-15	S.R. 37	625+00	RT	18.00	915.85	630+00	RT	93.50	910.23	OUTLET	1.78	34	42	1		500			1				2
1001	U-16	S.R. 37	625+00	LT	18.00	915.85	630+00	LT	91.80	910.80	OUTLET	1.78	32	42	1		500		1	1				2
1001	U-17	S.R. 37	625+00	LT	49.00	916.09	630+00	LT	49.00	914.84	U-16		1				500			1	1			
1001	U-18	S.R. 37	625+00	LT	60.00	916.69	630+00	LT	60.00	915.44	U-16		2			500				1	1			
1001	U-19	S.R. 37	630+00	RT	60.00	915.44	632+90	RT	60.00	914.86	U-20		1			290				1	1			
1001	U-20	S.R. 37	630+00	RT	49.00	914.84	632+90	RT	90.70	910.60	OUTLET	1.78	31	11	1		290			1				2
1001	U-21	S.R. 37	630+00	RT	18.00	914.60	632+90	℄	-	913.50	CB		16				290			1				
1001	U-22	S.R. 37	630+00	LT	18.00	914.60	632+90	℄	-	913.50	CB		16				290			1				
1001	U-23	S.R. 37	630+00	LT	49.00	914.84	632+95	LT	92.20	910.10	OUTLET	1.78	33	11	1		295			1				2
1001	U-24	S.R. 37	630+00	LT	60.00	915.44	632+95	LT	60.00	914.86	U-23		1			295				1	1			
1001	U-25	S.R. 37	632+90	RT	60.00	914.86	638+00	RT	60.00	916.16	U-20					510								
1001	U-26	S.R. 37	632+90	RT	49.00	914.26	638+00	RT	49.00	915.56	U-20						510							
1001	U-27	S.R. 37	632+90	RT	18.00	914.02	638+00	RT	18.00	915.32	U-21						510							
1001	U-28	S.R. 37	632+90	LT	18.00	914.02	638+00	LT	18.00	915.32	U-22						510							
1001	U-29	S.R. 37	632+95	LT	49.00	914.26	638+00	LT	49.00	915.56	U-23						505							
1001	U-30	S.R. 37	632+95	LT	60.00	914.86	638+00	LT	60.00	916.16	U-23					505								
1001	U-31	S.R. 37	638+00	RT	60.00	916.16	643+00	RT	60.00	918.07	U-33		2			500				1	1			
1001	U-32	S.R. 37	638+00	RT	49.00	915.56	643+00	RT	49.00	917.47	U-33		1				500			1	1			
1001	U-33	S.R. 37	638+00	RT	98.50	909.30	643+00	RT	18.00	916.79	OUTLET	1.78	39	42	1		500			1				2
1001	U-34	S.R. 37	638+00	LT	100.00	908.80	643+00	LT	18.00	916.79	OUTLET	1.78	41	42	1		500			1				2
1001	U-35	S.R. 37	638+00	LT	49.00	915.56	643+00	LT	49.00	916.60	U-34		1				500			1	1			
1001	U-36	S.R. 37	638+00	LT	60.00	916.16	643+00	LT	60.00	917.20	U-34		2			500				1	1			
1002	U-1	S.R. 37	643+00	RT	60.00	918.07	648+00	RT	60.00	919.35	U-3		3			500			1	1	1			
1002	U-2	S.R. 37	643+00	RT	49.00	917.47	648+00	RT	49.00	918.75	U-3		2				500		1	1	1			
1002	U-3	S.R. 37	643+00	RT	107.80	908.10	648+00	RT	18.00	918.08	OUTLET	1.78	49	43	1		500		1	1				2
1002	U-4	S.R. 37	643+00	LT	106.70	907.60	648+00	LT	18.00	918.08	OUTLET	1.78	48	42	1		500		1	1				2
1002	U-5	S.R. 37	643+00	LT	49.00	916.60	648+00	LT	49.00	917.89	U-4						500		1			1		
1002	U-6	S.R. 37	643+00	LT	60.00	917.20	648+00	LT	60.00	918.49	U-4		2			500			1	1	1			
1002	U-7	S.R. 37	648+00	RT	60.00	919.63	654+00	RT	60.00	917.74	U-8		1			600			1	1	1			
1002	U-8	S.R. 37	648+00	RT	49.00	918.75	654+00	RT	90.00	913.70	OUTLET	1.78	31	11	1		600		1	1				2
1002	U-9	S.R. 37	648+00	RT	18.00	918.08	654+00	℄	-	916.00	CB		53				600		1	1			1	
1002	U-10	S.R. 37	648+00	LT	18.00	918.08	654+00	℄	-	916.00	CB		53				600		1	1			1	
1002	U-11	S.R. 37	648+00	LT	49.00	918.25	654+00	LT	108.00	907.10	OUTLET	1.78	50	11	1		600		1	1				2
1002	U-12	S.R. 37	648+00	LT	60.00	918.49	654+00	RT	60.00	916.87	U-11		1			600			1	1	1			
TOTALS THIS SHEET												21.36	617	381	12	5800	11600	2000	16	33	17	1	2	24
TOTALS CARRIED TO SHEET 147												21.36	617	381	12	5800	11600	2000	16	33	17	1	2	24

CALCULATED CLB
CHECKED CSR

UNDERDRAIN SUBSUMMARY - S.R. 161

LIC-161-6.65
LIC-37-10.25

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SHEET NO.	REFERENCE NO.	ROADWAY	STATION	SIDE	OFFSET	INVERT	STATION	SIDE	OFFSET	INVERT	OUTLET TYPE	601	603	603	604	605	605	605	BENDS AND BRANCHES (FOR INFORMATION ONLY)					
			FROM				TO					TIED CONCRETE BLOCK MAT, TYPE I	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	6" CONDUIT, TYPE B	PRECAST REINFORCED CONCRETE OUTLET	6" BASE PIPE UNDERDRAINS, 707.31	6" SHALLOW PIPE UNDERDRAINS, 707.31	6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	PLUG	TEE	45 WYE	CROSS	45 ELL	25 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
1012	U-1	RAMP I	439+00	RT	16.00	1006.83	442+50	RT	16.00	1001.85	U-2		2				350			1	1			
1012	U-2	RAMP I	439+00	\	-	1006.20	442+50	RT	53.00	999.90	OUTLET	1.78	36	18	1		350			1				
1012	U-3	RAMP I	442+50	RT	16.00	1001.85	446+70	LT	45.10	982.00	OUTLET	1.78	47	18	1		445	25		1			2	
1012	U-4	RAMP I	442+50	\	-	1001.09	446+70	\	-	996.94	U-3		2				470			1	1			
1012	U-5	RAMP I	446+70	RT	16.00	995.69	451+60	RT	35.00	1000.42	U-3						380	110	1					
1012	U-6	RAMP I	446+70	\	-	996.94	451+15	LT	5.00	998.65	U-3						445		1					
1013	U-1	RAMP J	450+55	RT	30.00	1000.36	455+00	LT	29.00	985.90	OUTLET	1.78	28	18	1		445		1	1				
1013	U-2	RAMP J	450+95	\	-	998.04	455+00	\	-	987.33	U-1		2				405			1	1			
1013	U-3	RAMP J	455+00	RT	16.00	986.49	458+50	LT	34.90	983.30	OUTLET	1.78	35	17	1		125	225		1				
1013	U-4	RAMP J	455+00	\	-	987.33	458+50	\	-	984.77	U-4						350					1		
1013	U-5	RAMP J	458+50	RT	16.00	985.37	462+12	RT	16.00	983.62	UD SR161						162	200				1		
1013	U-6	RAMP J	458+50	\	-	984.77	462+12	\	-	982.96	UD SR161						362					1		
1014	U-1	RAMP K	439+00	\	-	1004.11	441+58	LT	72.00	999.80	OUTLET	1.78	100	19	1		258			1			1	
1014	U-2	RAMP K	439+00	LT	16.00	1005.00	441+58	LT	16.00	1003.23	U-1		3				258			1	1			
1014	U-3	RAMP K	441+58	\	-	1001.90	446+50	\	-	1008.69	U-1						492							
1014	U-4	RAMP K	441+58	LT	16.00	1003.23	446+50	LT	16.00	1007.72	U-1						492							
1014	U-5	RAMP K	446+50	\	-	1008.69	451+22	RT	16.00	1017.37	U-6		2				472		1	1	1			
1014	U-6	RAMP K	446+50	RT	57.70	998.10	451+35	LT	30.00	1018.13	OUTLET	1.78	59	18	1		485		1	1				2
1015	U-1	RAMP L	450+80	RT	20.00	1017.28	455+60	\	-	997.88	UD SR 11		-	15			480		1	1	1			
1015	U-2	RAMP L	450+70	LT	32.00	1018.05	455+60	LT	16.00	997.00	UD SR 11		15	-			490		1	1	1			
1015	U-3	RAMP L	455+60	\	-	997.88	461+41	\	-	982.45	UD SR161						581		1			1		
1015	U-4	RAMP L	455+60	LT	16.00	997.00	461+41	LT	16.00	982.19	UD SR161						581		1			1		
1004	U-1	WATKINS-YORK	106+00	LT	12.50	1069.53	107+66	LT	12.50	1070.96	U-2						166		1	1	1			
1004	U-2	WATKINS-YORK	106+00	RT	12.50	1069.36	107+66	RT	12.50	1068.00	OUTLET	1.78	27	25	1		166		1	1				
1004	U-3	WATKINS-YORK	107+66	LT	12.50	1070.96	116+00	LT	12.50	1061.70	U-4						834		1	1	1			
1004	U-4	WATKINS-YORK	107+66	RT	12.50	1069.47	116+00	RT	34.00	1061.60	OUTLET	1.78	10	25	1		834		1	1				
1004	U-5	WATKINS-YORK	116+00	RT	12.50	1061.70	117+50	RT	12.50	1060.03	UD SR161		3				150		1	1	1			
1004	U-6	WATKINS-YORK	116+00	LT	12.50	1061.60	117+50	LT	12.50	1060.03	UD SR161		3				150		1	1	1			
1004	U-7	WATKINS-YORK	117+50	RT	12.50	1060.03	122+50	RT	12.50	1054.47	UD SR161		3				500			1	1			
1004	U-8	WATKINS-YORK	117+50	LT	12.50	1060.03	122+50	LT	12.50	1054.47	UD SR161		3				500			1	1			
1004	U-9	WATKINS-YORK	122+50	RT	12.50	1054.47	127+50	RT	12.50	1048.91	UD SR161		2				500			1	1			
1004	U-10	WATKINS-YORK	122+50	LT	12.50	1054.47	127+50	LT	12.50	1048.91	UD SR161		2				500			1	1			
1005	U-1	WATKINS-YORK	127+50	RT	12.50	1048.91	133+10	RT	12.50	1044.20	U-2		1				560			1	1			
1005	U-2	WATKINS-YORK	127+50	LT	12.50	1048.91	133+10	RT	61.20	1027.70	OUTLET	1.78	53	25	1		560			1			2	
1005	U-3	WATKINS-YORK	133+10	RT	12.50	1044.20	138+67	RT	12.50	1050.70	UD SR161						557							
1005	U-4	WATKINS-YORK	133+10	LT	12.50	1043.85	138+67	LT	12.50	1049.98	UD SR161						557							
1005	U-5	WATKINS-YORK	138+67	RT	12.50	1050.70	147+81	RT	12.50	1061.78	UD SR161		25	51			914		1	1				
1005	U-6	WATKINS-YORK	138+67	LT	12.50	1049.98	147+81	LT	12.50	1061.06	UD SR161						914		1			1		
1005	U-7	WATKINS-YORK	147+81	RT	12.50	1061.78	153+10	RT	12.50	1056.17	UD SR161		4				529			1	1			
1005	U-8	WATKINS-YORK	147+81	LT	12.50	1061.06	153+10	LT	12.50	1055.45	UD SR161		2				529			1	1			
1006	U-1	WATKINS-YORK	153+10	RT	12.50	1056.17	158+00	RT	12.50	1045.42	U-2		1				490			1	1			
1006	U-2	WATKINS-YORK	153+10	LT	12.50	1055.45	158+00	RT	65.20	1034.90	OUTLET	1.78	55	25	1		490			1				2
1006	U-3	WATKINS-YORK	158+00	RT	12.50	1045.42	163+10	RT	12.50	1034.80	UD SR161		2				510			1	1			
1006	U-4	WATKINS-YORK	158+00	LT	12.50	1045.42	163+10	LT	12.50	1034.80	UD SR161		2				510			1	1			
1006	U-5	WATKINS-YORK	163+10	RT	12.50	1034.80	167+50	RT	12.50	1029.61	U-6		1				440			1	1			
1006	U-6	WATKINS-YORK	163+10	LT	12.50	1034.80	167+50	RT	45.80	1030.84	OUTLET	1.78	30	25	1		440			1				
1006	U-7	WATKINS-YORK	167+50	RT	12.50	1029.61	173+50	RT	12.50	1026.61	U-8		1				600			1	1			
1006	U-8	WATKINS-YORK	167+50	LT	12.50	1029.61	173+50	RT	36.50	1025.90	OUTLET	1.78	25	25	1		600			1				
1006	U-9	WATKINS-YORK	173+50	RT	12.50	1026.61	177+50	RT	12.50	1024.64	U-10		2				400			1	1			
1006	U-10	WATKINS-YORK	173+50	LT	12.50	1026.61	177+50	RT	42.50	1022.40	OUTLET	1.78	42	25	1		400			1				
1007	U-1	WATKINS-YORK	177+50	RT	12.50	1024.64	181+10	RT	12.50	1022.85	UD SR161		3				360			1	1			
1007	U-2	WATKINS-YORK	177+50	LT	12.50	1024.64	181+10	LT	12.50	1022.85	UD SR161		3				360			1	1			
1007	U-3	WATKINS-YORK	181+10	RT	12.50	1022.85	186+00	RT	12.50	1020.42	U-4		1				490			1	1			
1007	U-4	WATKINS-YORK	181+10	LT	12.50	1022.85	186+00	RT	51.70	1014.40	OUTLET	1.78	41	25	1		490			1				
1007	U-5	WATKINS-YORK	186+00	RT	12.50	1020.42	191+10	RT	14.80	1013.65	UD SR161		2				510			1	1			
1007	U-6	WATKINS-YORK	186+00	LT	12.50	1020.42	191+10	LT	12.50	1015.03	UD SR161		3				510			1	1			
1007	U-7	WATKINS-YORK	191+10	RT	14.80	1013.65	196+00	RT	15.50	1006.01	U-8						490					1		
1007	U-8	WATKINS-YORK	191+10	LT	12.50	1015.03	196+00	RT	56.50	992.00	OUTLET	1.78	45	27	1		490			1				
1007	U-9	WATKINS-YORK	196+00	RT	15.50	1006.01	203+00	RT	12.50	999.31	U-10		1				600	100		1	1			
TOTALS THIS SHEET												26.70	729	401	15	0	27478	660	17	46	30	7	5	4
TOTALS CARRIED TO SHEET 147												26.70	729	401	15	0	27478	660	17	46	30	7	5	4

CALCULATED CLB
CHECKED CSR

UNDERDRAIN SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT, TYPE I	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE, UNDERDRAINS, 707.31	605 6" SHALLOW PIPE, UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE, UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY) PLUG	TEE	45 WYE	CROSS	45 ELL	18.5 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
1007	U-10	WATKINS-YORK	196+00	LT	12.50	1008.25	203+00	RT	37.30	999.40	OUTLET	1.78	26	25	1		600	100		1				
1007	U-11	WATKINS-YORK	203+00	RT	12.50	991.31	208+50	RT	12.50	1009.65	U-10						525	25						
1007	U-12	WATKINS-YORK	203+00	LT	12.50	991.31	208+50	RT	48.90	1008.41	U-10						525	25		1				
1008	U-1	WATKINS-YORK	208+50	RT	12.50	1009.65	212+10	RT	12.50	1015.04	U-2		3				360		1	1	1			
1008	U-2	WATKINS-YORK	208+50	RT	14.50	1008.41	211+95	LT	35.50	1014.70	OUTLET	1.78	36	28	1		345		1	1				
1009	U-1	SERVICE RD 10	145+65.48	RT	1.00	1059.44	148+50	RT	11.83	1056.25	U-2		1					337	2	1	1			
1009	U-2	SERVICE RD 10	145+65.48	LT	1.00	1059.44	148+50	RT	41.43	1055.10	OUTLET	1.78	28	25	1			326	2	1				
1010	U-1	REL. WORTHINGTON RD N	188+50	RT	12.20	1015.90	193+50	RT	12.50	1009.77	U-2		4				500		1	1	1			
1010	U-2	REL. WORTHINGTON RD N	188+50	LT	12.20	1015.90	193+50	RT	76.00	998.80	OUTLET	1.78	63	30	1		500		1	1				2
1010	U-3	REL. WORTHINGTON RD N	193+50	RT	12.50	1009.77	203+00	RT	12.90	979.04	U-4						950					1		
1010	U-4	REL. WORTHINGTON RD N	193+50	LT	12.50	1007.53	203+00	RT	49.00	974.90	OUTLET	1.78	37	25	1		950			1				2
1010	U-5	REL. WORTHINGTON RD N	203+00	RT	12.90	979.04	208+88	LT	59.90	961.00	OUTLET	1.78	46	30	1		588			1				
1010	U-6	REL. WORTHINGTON RD N	203+00	LT	12.50	979.64	208+88	LT	12.50	967.64	U-5		4				588			1	1			
1010	U-7	REL. WORTHINGTON RD N	208+88	RT	15.50	965.57	212+65	RT	67.50	973.95	U-5						407							
1010	U-8	REL. WORTHINGTON RD N	208+88	LT	12.50	967.68	212+43	LT	14.50	970.56	U-5						355		1					
1011	U-1	REL. WORTHINGTON RD N	212+88	RT	70.00	973.95	218+00	RT	15.50	964.57	U-2						530					1		
1011	U-2	REL. WORTHINGTON RD N	213+30	LT	17.50	970.72	218+00	RT	54.70	959.50	OUTLET	1.78	41	28	1		470			1				2
1011	U-3	REL. WORTHINGTON RD N	218+00	RT	15.50	964.57	223+50	RT	12.50	963.17	U-4		2				350	200		1	1			
1011	U-4	REL. WORTHINGTON RD N	218+00	LT	12.50	966.81	223+50	RT	42.30	960.60	OUTLET	1.78	29	26	1		550			1				
1011	U-5	REL. WORTHINGTON RD N	223+50	RT	12.50	963.17	227+50	RT	34.00	961.80	OUTLET	1.78	22		1		400			1				
1011	U-6	REL. WORTHINGTON RD N	227+50	RT	12.50	962.00	233+00	LT	33.50	956.40	OUTLET	1.78	22	25	1		550		1	1				
1011	U-7	REL. WORTHINGTON RD N	223+50	LT	12.50	962.88	233+00	LT	12.50	956.85	U-6		1				950		1	1	1			
1016	U-1	S.R. 37	394+00	LT	53.49	961.00	395+50	RT	12.00	970.55	OUTLET	1.78	40	26	1		155		2	1				
1016	U-2	S.R. 37	394+00	LT	12.00	965.14	395+55	LT	45.00	970.39	U-1		3				160		2	1	1			
1016	U-3	S.R. 37	396+40	RT	22.50	974.84	400+50	RT	27.10	992.02	U-6		2			410				1	1			
1016	U-4	S.R. 37	396+40	RT	12.00	974.24	400+50	RT	16.50	991.42	U-6		1				410			1	1			
1016	U-5	S.R. 37	396+40	LT	12.00	974.24	400+50	LT	16.50	991.42	U-6						410					1		
1016	U-6	S.R. 37	396+40	RT	86.10	962.30	400+50	LT	27.10	992.02	OUTLET	1.78	65	45	1	410				1				2
1016	U-7	S.R. 37	400+50	RT	27.10	992.02	401+90	RT	40.00	998.37	U-8		2			160			1	1	1			
1016	U-8	S.R. 37	400+50	RT	50.00	989.20	402+20	RT	72.00	998.40	OUTLET	1.78	23	12	1		220		1	1				
1016	U-9	S.R. 37	400+50	LT	47.60	990.20	402+23	LT	73.00	997.70	OUTLET	1.78	20	13	1		223		1	1				
1016	U-10	S.R. 37	400+50	LT	27.10	992.02	402+15	LT	67.00	998.38	U-9		2			195			1	1	1			
1016	U-11	S.R. 37	402+60	LT	70.00	989.80	405+50	RT	28.50	1012.85	OUTLET	1.78	58	90	1	290				1			1	
1016	U-12	S.R. 37	402+60	RT	18.00	1000.55	405+50	RT	18.00	1012.25	U-11						290					1		
1016	U-13	S.R. 37	402+60	LT	18.00	1000.55	405+50	LT	18.00	1012.25	U-11		1				290			1	1			
1016	U-14	S.R. 37	402+60	LT	28.50	1001.15	405+50	LT	28.50	1012.85	U-11		2			290				1	1			
1016	U-15	S.R. 37	408+40	RT	28.50	1018.76	409+51	RT	28.50	1019.25	U-18		2			111			1	1	1			
1016	U-16	S.R. 37	408+40	RT	18.00	1018.16	409+51	RT	18.00	1018.65	U-18		1				111		1	1	1			
1016	U-17	S.R. 37	408+40	LT	18.00	1018.16	409+51	LT	18.00	1018.65	U-18						111		1			1		
1016	U-18	S.R. 37	408+40	RT	73.00	1000.80	409+51	LT	28.50	1019.25	OUTLET	1.78	58	48	1	111			1	1			2	
1016	U-19	S.R. 37	409+51	RT	28.50	1019.25	410+75	RT	28.50	1018.64	U-22		2			124			1	1	1			
1016	U-20	S.R. 37	409+51	RT	18.00	1018.65	410+75	RT	18.00	1018.04	U-22		1				124		1	1	1			
1016	U-21	S.R. 37	409+51	LT	18.00	1018.65	410+75	LT	18.00	1018.04	U-22						124		1			1		
1016	U-22	S.R. 37	409+51	LT	28.50	1019.25	410+75	RT	87.90	1003.10	OUTLET	1.78	58	90	1	124			1	1			3	
1017	U-1	S.R. 37	411+32	RT	45.00	1017.80	415+23	RT	23.10	1013.26	U-2		3			411				1	1			
1017	U-2	S.R. 37	411+27	RT	40.00	1017.12	415+23	RT	58.00	1008.20	OUTLET	1.78	35	10	1		421			1				
1017	U-3	S.R. 37	411+32	LT	38.00	1017.11	415+23	LT	59.00	1008.00	OUTLET	1.78	36	10	1		411			1				
1017	U-4	S.R. 37	411+38	LT	45.00	1017.79	415+23	LT	23.10	1013.26	U-3		3			405				1	1			
1017	U-5	S.R. 37	415+23	RT	23.10	1013.26	416+00	RT	21.30	1013.51	U-2					77			1					
1017	U-6	S.R. 37	415+23	RT	14.00	1012.60	417+21	RT	18.00	1013.90	U-2						198		1					
1017	U-7	S.R. 37	415+23	LT	14.00	1012.60	419+71	LT	12.00	1019.32	U-3						448		1					
1017	U-8	S.R. 37	415+23	LT	23.10	1013.26	416+00	LT	21.30	1013.51	U-3					77			1					
1017	U-9	S.R. 37	417+83	RT	18.00	1014.95	419+71	RT	12.00	1019.32	WAT YORK UD						188		1					
1018	U-1	SERVICE RD 11	212+82	RT	25.00	1015.29	222+00	LT	142.70	985.80	OUTLET	1.78	115	44	1		918		1	1				
1018	U-2	SERVICE RD 11	212+82	LT	23.00	1014.46	222+00	LT	11.50	990.82	U-1		2				918		1	1	1			
		TOTALS THIS SHEET										35.60	900	630	20	3195	17123	1013	34	41	20	6	6	8
		TOTALS CARRIED TO SHEET 147										35.60	900	630	20	3195	17123	1013	34	41	20	6	6	8

CALCULATED CLB
DRECKED CSR

UNDERDRAIN SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT, TYPE 1	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE, UNDERDRAINS, 707.31	605 6" SHALLOW PIPE UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY)					
																			PLUG	TEE	45 WYE	CROSS	45 ELL	18.5 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
1018	U-3	SERVICE RD 11	222+00	RT	16.00	989.88	226+83	LT	63.70	976.70	OUTLET	1.78	50	29	1		458	25		1				
1018	U-4	SERVICE RD 11	222+00	LT	11.50	990.82	226+83	LT	11.50	981.67	U-3		4				458	25		1	1			
1018	U-5	SERVICE RD 11	226+83	RT	14.90	980.07	230+50	RT	11.50	985.61	U-3						342	25						
1018	U-6	SERVICE RD 11	226+83	LT	11.50	981.67	230+50	LT	11.50	985.61	U-3						342	25						
1018	U-7	SERVICE RD 11	230+50	LT	37.10	983.60	235+00	RT	11.50	992.60	OUTLET	1.78	26	23	1		450			1				
1018	U-8	SERVICE RD 11	230+50	LT	11.50	985.61	235+00	LT	11.50	992.60	U-7		2				450			1	1			
1018	U-9	SERVICE RD 11	235+00	LT	39.00	990.10	238+00	RT	11.50	994.84	OUTLET	1.78	27	24	1		300			1				
1018	U-10	SERVICE RD 11	235+00	LT	11.50	992.60	238+00	LT	11.50	994.84	U-9		2				300			1	1			
1019	U-1	SERVICE RD 11	238+00	RT	11.50	994.84	243+00	℄	-	998.19	U-2		3				547			1	1			
1019	U-2	SERVICE RD 11	238+00	RT	40.80	991.90	243+00	℄	-	998.19	OUTLET	1.78	29	24	1		547			1				
1020	U-1	OUTVILLE RD	18+60	RT	12.50	1016.50	20+40	RT	60.00	1012.09	O.M. UD						215		1					
1020	U-2	OUTVILLE RD	18+60	LT	12.50	1016.50	21+13	LT	12.50	1011.84	U-3		1				253		1	1	1			
1020	U-3	OUTVILLE RD	20+62	RT	60.00	1011.99	21+13	LT	49.90	1001.00	OUTLET	1.78	41	24	1		90		1	1			2	
1020	U-4	OUTVILLE RD	23+94.21	RT	12.50	1006.67	25+50	LT	35.20	1003.20	OUTLET	1.78	24	24	1		156		1	1				
1020	U-5	OUTVILLE RD	23+94.21	LT	12.50	1006.67	25+50	LT	12.50	1003.67	U-4		1				156		1	1	1			
1021	U-1	OUTVILLE-MORSE	497+93	RT	11.50	1012.09	502+50	LT	83.60	991.30	OUTLET	1.78	75	22	1		457		1	1				2
1021	U-2	OUTVILLE-MORSE	497+93	LT	11.50	1011.99	502+50	LT	11.50	1004.77	U-1		1				457		1	1	1			
1021	U-3	OUTVILLE-MORSE	502+50	RT	11.50	1004.77	507+50	LT	49.70	992.50	OUTLET	1.78	39	22	1		500			1				2
1021	U-4	OUTVILLE-MORSE	502+50	LT	11.50	1004.77	507+50	LT	11.50	996.13	U-3		1				500			1	1			
1021	U-5	OUTVILLE-MORSE	507+50	RT	11.50	996.13	512+50	RT	11.50	987.13	U-6		1				500			1	1			
1021	U-6	OUTVILLE-MORSE	507+50	LT	11.50	996.13	512+50	RT	50.20	982.00	OUTLET	1.78	40	22	1		500			1				2
1022	U-1	OUTVILLE-MORSE	512+50	RT	11.50	987.13	522+50	RT	11.50	963.63	U-2		1				1000			1	1			
1022	U-2	OUTVILLE-MORSE	512+50	LT	11.50	987.13	522+50	RT	50.60	958.40	OUTLET	1.78	41	22	1		1000			1				2
1022	U-3	OUTVILLE-MORSE	522+50	RT	11.50	963.63	524+00	RT	11.50	959.38	UD SR161		1				150			1	1			
1022	U-4	OUTVILLE-MORSE	522+50	LT	11.50	963.63	524+00	LT	11.50	959.38	UD SR161		1				150			1	1			
1022	U-5	OUTVILLE-MORSE	524+00	RT	11.50	959.38	528+00	RT	11.50	948.60	U-6		1				400			1	1			
1022	U-6	OUTVILLE-MORSE	524+00	LT	11.50	959.38	528+00	RT	34.90	947.30	OUTLET	1.78	24	23	1		400			1				
1022	U-7	OUTVILLE-MORSE	528+00	RT	11.50	948.60	532+45	RT	11.50	943.88	U-8		1				445			1	1			
1022	U-8	OUTVILLE-MORSE	528+00	LT	11.50	948.60	532+45	RT	53.30	938.00	OUTLET	1.78	43	22	1		445			1				2
1022	U-9	OUTVILLE-MORSE	532+45	RT	11.50	943.89	541+00	RT	11.50	947.90	U-8						855							
1022	U-10	OUTVILLE-MORSE	532+45	LT	11.50	943.89	541+00	LT	11.50	947.90	U-8						855							
1023	U-1	OUTVILLE-MORSE	541+00	RT	11.50	947.90	542+99	RT	11.50	948.53	U-2		2				199		1	1	1			
1023	U-2	OUTVILLE-MORSE	541+00	RT	37.30	946.00	542+99	LT	11.50	948.53	OUTLET	1.78	26	23	1		199		1	1				
1023	U-3	OUTVILLE-MORSE	542+99	RT	11.50	948.53	553+00	RT	11.50	943.81	UD SR161		2				1001		1	1	1			
1023	U-4	OUTVILLE-MORSE	542+99	LT	11.50	948.53	553+00	LT	11.50	943.81	UD SR161		1				1001		1	1	1			
1023	U-5	OUTVILLE-MORSE	553+00	RT	11.50	943.81	558+00	RT	11.50	941.26	U-6		1				500			1	1			
1023	U-6	OUTVILLE-MORSE	553+00	LT	11.50	943.81	558+00	RT	56.20	932.70	OUTLET	1.78	47	22	1		500			1				2
1024	U-1	OUTVILLE-MORSE	558+00	RT	11.50	941.26	566+50	LT	117.00	932.40	CB		63	64			850			1				
1024	U-2	OUTVILLE-MORSE	558+00	LT	11.50	941.26	566+50	LT	11.50	935.44	U-1		2				850			1	1			
1024	U-3	OUTVILLE-MORSE	566+50	RT	11.50	935.44	571+00	RT	11.50	931.81	U-4						450					1		
1024	U-4	OUTVILLE-MORSE	566+50	LT	11.50	935.44	571+00	RT	51.50	924.80	OUTLET	1.78	42	22	1		450			1				2
1024	U-5	OUTVILLE-MORSE	571+00	RT	11.50	931.81	573+95	RT	11.50	929.17	U-6						295		1			1		
1024	U-6	OUTVILLE-MORSE	571+00	LT	11.50	932.05	573+95	RT	54.10	921.30	OUTLET	1.78	45	22	1		295		1	1				2
1024	U-7	OUTVILLE-MORSE	575+76	RT	11.50	927.03	579+50	RT	11.50	922.52	U-8		1				374		2	1	1			
1024	U-8	OUTVILLE-MORSE	575+76	LT	11.50	927.69	579+50	RT	31.40	922.10	OUTLET	1.78	21	22	1		374		2	1				
1026	U-1	C.R. 539A	295+50	RT	15.70	937.96	298+83	LT	48.30	931.40	OUTLET	1.78	33	32	1		333		1	1				
1026	U-2	C.R. 539A	295+50	LT	15.50	937.96	298+83	LT	16.50	936.50	U-1		1				333		1	1	1			
1026	U-3	C.R. 539A	298+83	RT	16.50	936.50	302+50	RT	16.50	941.82	U-1						367							
1026	U-4	C.R. 539A	298+83	LT	16.50	936.50	302+50	LT	16.50	941.82	U-1						367							
1026	U-5	C.R. 539A	302+50	LT	57.90	933.60	306+61	RT	16.50	947.92	OUTLET	1.78	43	32	1		411		1	1				
1026	U-6	C.R. 539A	302+50	LT	16.50	941.82	306+61	LT	16.50	947.92	U-5		1				411		1	1	1			
1026	U-7	C.R. 539A	306+61	RT	16.50	947.92	313+00	RT	12.00	944.90	UD SR161		3				639		1	1	1			
1026	U-8	C.R. 539A	306+61	LT	16.50	947.92	313+00	LT	16.50	944.78	UD SR161		3				639		1	1	1			
		TOTALS THIS SHEET										33.82	817	520	19	0	24516	100	23	44	24	2	2	16
		TOTALS CARRIED TO SHEET 147										33.82	817	520	19	0	24516	100	23	44	24	2	2	16

CALCULATED CLB
CHECKED CSR

UNDERDRAIN SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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SHEET NO.	REFERENCE NO.	ROADWAY	FROM STATION	FROM SIDE	FROM OFFSET	FROM INVERT	TO STATION	TO SIDE	TO OFFSET	TO INVERT	OUTLET TYPE	601 TIED CONCRETE MAT, TYPE 1	603 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	603 6" CONDUIT, TYPE B	604 PRECAST REINFORCED CONCRETE OUTLET	605 6" BASE PIPE UNDERDRAINS, 707.31	605 6" SHALLOW PIPE UNDERDRAINS, 707.31	605 6" UNCLASSIFIED PIPE UNDERDRAINS, 707.31	BENDS AND BRANCHES (FOR INFORMATION ONLY) PLUG	TEE	45 WYE	CROSS	45 ELL	18.5 ELL
			FROM	LT/RT	FT	FT	TO	LT/RT	FT	FT		SY	FT	FT	EACH	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
1027	U-1	C.R. 539A	313+00	RT	12.00	944.90	315+50	RT	12.00	943.72	UD SR37						250		1	1	1			
1027	U-2	C.R. 539A	313+00	LT	16.50	944.78	315+50	LT	16.50	943.56	UD SR37		1				250			1	1			
1027	U-3	C.R. 539A	315+50	RT	12.00	943.72	320+65	RT	12.00	941.09	U-4		1				515			1	1			
1027	U-4	C.R. 539A	315+50	LT	16.50	943.56	320+65	RT	22.00	940.50	INLET		10	28			515			1				
1027	U-5	C.R. 539A	320+65	RT	12.00	941.09	328+00	LT	37.70	936.00	OUTLET	1.78	22	29	1		735			1				
1027	U-6	C.R. 539A	320+65	LT	16.50	940.93	328+00	LT	16.50	937.18	U-5		1				735			1	1			
1027	U-7	C.R. 539A	328+00	RT	12.00	937.34	331+50	RT	12.00	935.56	UD SR37		1				350			1	1			
1027	U-8	C.R. 539A	328+00	LT	16.50	937.18	331+50	LT	16.50	935.40	UD SR37		2				350			1	1			
1027	U-9	C.R. 539A	331+50	RT	12.00	935.56	336+50	LT	51.30	921.00	OUTLET	1.78	38	29	1		500		1	1				
1027	U-10	C.R. 539A	331+50	LT	16.50	935.40	336+50	LT	16.50	933.40	U-9		2				500		1	1	1			
1028	U-1	C.R. 539A	338+51	RT	12.00	931.87	343+60	RT	12.00	929.39	UD SR37		1				509		1	1	1			
1028	U-2	C.R. 539A	338+51	LT	16.50	932.32	343+60	LT	16.50	929.23	UD SR37		2				509		1	1	1			
1028	U-3	C.R. 539A	343+60	RT	12.00	929.39	348+60	RT	12.00	926.84	UD SR37						500					1		
1028	U-4	C.R. 539A	343+60	LT	16.50	929.23	348+60	LT	16.50	926.68	UD SR37		1				500			1	1			
1028	U-5	C.R. 539A	348+60	RT	12.00	926.84	353+60	RT	12.00	924.58	U-6		1				500			1	1			
1028	U-6	C.R. 539A	348+60	LT	16.50	926.68	353+60	RT	22.70	924.00	INLET		7	32			500			1				
1028	U-7	C.R. 539A	353+60	RT	12.00	924.58	359+46	RT	23.00	922.70	INLET		11				236	350		1				
1028	U-8	C.R. 539A	353+60	LT	16.50	924.42	359+41	LT	59.40	914.40	OUTLET	1.78	44		1		581			1				2
1028	U-9	C.R. 539A	359+46	RT	16.50	922.87	364+40	LT	51.60	913.20	OUTLET	1.78	37	32	1		494		1	1				2
1028	U-10	C.R. 539A	359+41	LT	16.50	921.07	364+40	LT	15.60	917.96	U-9		1				349	150	1	1	1			
1029	U-1	MORSE RD	7+75	RT	11.50	987.54	12+00	LT	36.00	968.60	OUTLET	1.78	22	26	1		425		1	1				
1029	U-2	MORSE RD	7+75	LT	11.50	987.54	12+00	LT	15.00	969.83	U-1						425		1			1		
1029	U-3	MORSE RD	12+00	RT	11.50	971.72	18+10	RT	11.50	940.12	U-4		1				610		1	1	1			
1029	U-4	MORSE RD	12+00	LT	15.00	969.83	18+10	RT	33.50	939.70	OUTLET	1.78	23	20	1		610		1	1				
											TOTALS THIS SHEET	10.68	229	196	6	0	11448	500	11	22	13	2	0	4
											TOTALS FROM SHEET 138	17.80	1161	893	10	11457	21009	0	12	51	30	10	0	16
											TOTALS FROM SHEET 139	28.48	1206	849	16	9630	22483	0	0	52	25	9	0	8
											TOTALS FROM SHEET 140	16.02	983	545	9	10819	20291	50	12	41	19	13	1	4
											TOTALS FROM SHEET 141	16.02	984	757	9	10389	21189	15	12	46	26	7	12	4
											TOTALS FROM SHEET 142	24.92	776	663	14	7462	15462	6444	15	54	32	3	5	0
											TOTALS FROM SHEET 143	21.36	617	381	12	5800	11600	2000	16	33	17	1	2	0
											TOTALS FROM SHEET 144	26.70	729	401	15	0	27478	660	17	46	30	7	5	0
											TOTALS FROM SHEET 145	35.60	900	630	20	3195	17123	1013	34	41	20	6	6	8
											TOTALS FROM SHEET 146	33.82	817	520	19	0	24516	100	23	44	24	2	2	16
											TOTALS	231.40	8402	5835	130	58752	192599	10782	152	430	236	60	33	60
											TOTALS CARRIED TO GENERAL SUMMARY	232	8402	5835	130	58752	192599	10782						

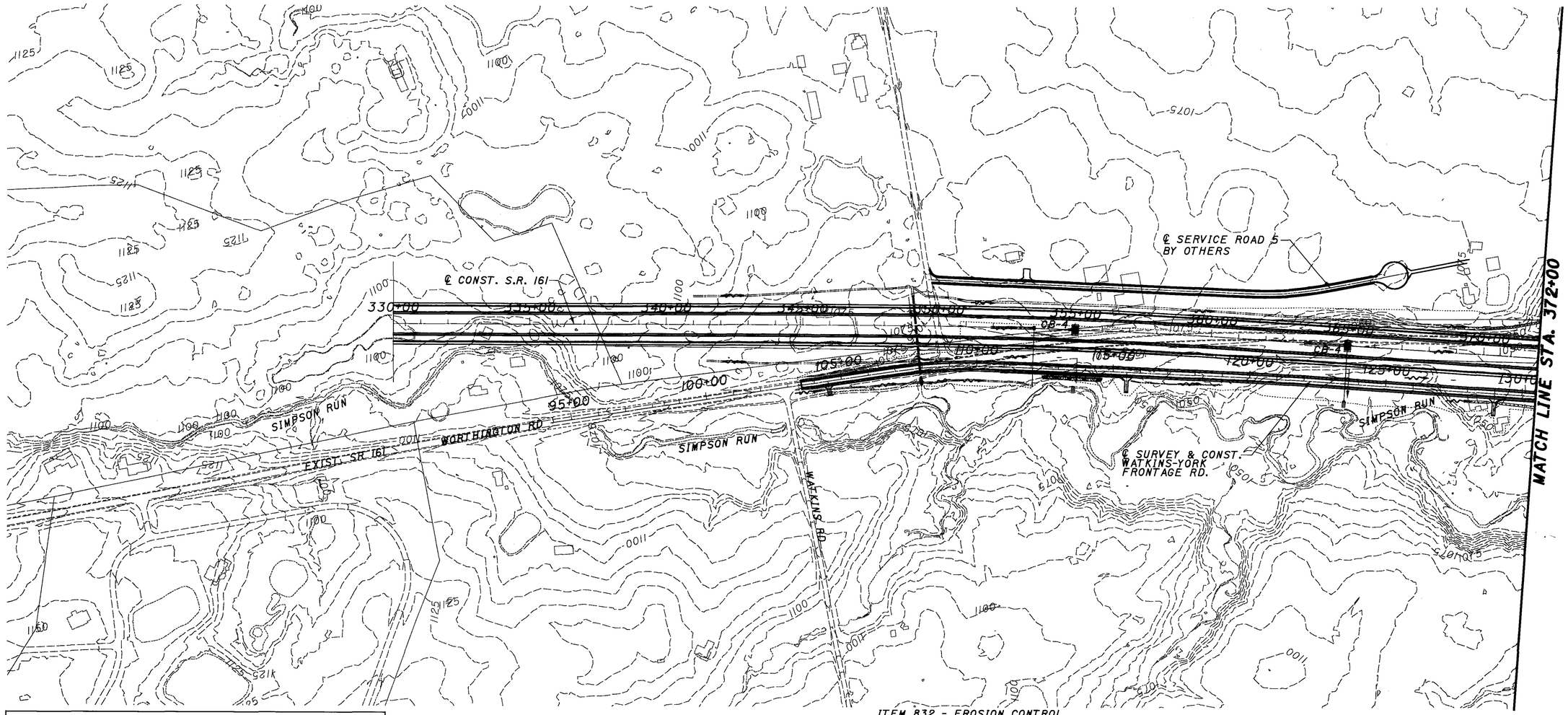
CALCULATED CLB
CHECKED CSR

UNDERDRAIN SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

147
1349

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PROJECT DATA	
TOTAL AREA (RIGHT-OF-WAY)	286.82 AC.
PROJECT EARTH DISTURBED AREA	299.17 AC.
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	41.00 AC.
NOTICE OF INTENT EARTH DISTURBED AREA	340.17 AC.
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.52
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE	0.62
SOIL DATA	SEE SOIL PROFILE
IMMEDIATE RECEIVING WATERS	RACCOON CREEK
SUBSEQUENT RECEIVING WATER	LICKING RIVER
IMPERVIOUS PAVED AREA PRE-CONSTRUCTION	26.95 AC.
IMPERVIOUS PAVED AREA POST-CONSTRUCTION	87.09 AC.

GRANVILLE, OHIO (No. N 4000-W 8230/7.5)
JERSEY, OHIO (No. N 4000-W 8237.5/7.5)
USGS QUADRANGLE MAPS

LATITUDE: N 40° 04′ 22″
LONGITUDE: W 82° 37′ 58″

SOIL AND WATER CONSERVATION MAPS
LICKING COUNTY SOILS SURVEY
INDEX SHEET NO. 39-41

THE RECEIVING WATERS ARE NOT A REGULATED TOTAL MAXIMUM DAILY LOAD (TMDL) WATER BODY.

LEGEND

FLOW DIRECTION

DRAINAGE AREA LIMIT

ITEM 832 - EROSION CONTROL
ITEM 832 - STORM WATER POLLUTION PREVENTION PLAN

AFTER THE CONTRACT IS AWARDED AND PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL DEVELOP STORM SEWER POLLUTION PREVENTION PLAN (SWPPP). THE PLAN WILL BE KEPT ON SITE FOR REVIEW AT ANY TIME DURING CONSTRUCTION. THE CONTACTOR SHALL USE CADD DRAWINGS PROVIDED BY ODOT. SUPPLEMENTAL SPECIFICATION 832 SHALL BE USED FOR ITEMS TO BE FURNISHED AND PAYMENT TO BE BASED AS PER 832.14.

THE FOLLOWING ESTIMATED QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY:

ITEM 832 - EROSION CONTROL	1,133,430	EACH
ITEM 832 - STORM WATER POLLUTION PREVENTION PLAN		LUMP

PROJECT DESCRIPTION

CONSTRUCTION OF 5.74 MILES OF NEW FOUR LANE DIVIDED RURAL FREEWAY AND CONSTRUCTION OF THREE SERVICE ROADS. THIS PROJECT INCLUDES CONSTRUCTION OF EIGHT NEW STRUCTURES: ONE STRUCTURE OVER PROPOSED SR 161 AT SR 37, ONE STRUCTURE OVER PROPOSED SR 161 AT OUTVILLE ROAD, TWIN STRUCTURE OVER MOOTS RUN AND TWIN STRUCTURE OVER CHINNEY CREEK; RECONSTRUCTION OF VARIOUS LOCAL ROADS.

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED JMA
CHECKED CSR

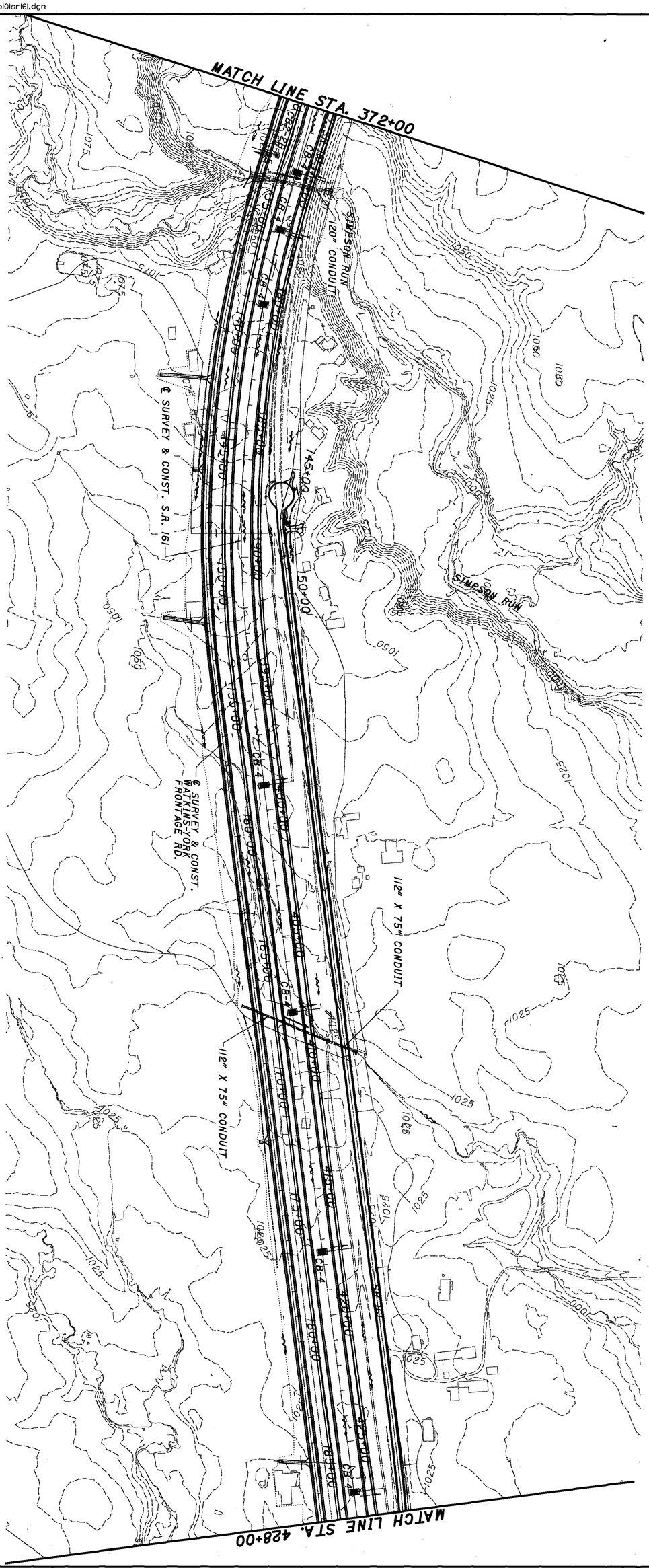
PROJECT SITE PLAN
STA. 351+00 TO STA. 372+00

LIC-161-6.65
LIC-37-10.25

149
1349

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150 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**PROJECT SITE PLAN** **STA. 372+00 TO STA. 428+00**	CALCULATED JMA CHECKED CSR	0 200 100 400 HORIZONTAL SCALE IN FEET

MATCH LINE STA. 428+00

MATCH LINE STA. 486+00

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

℄ SURVEY & CONST. S.R. 37

℄ CONST. RAMP I

℄ CONST. RAMP J

℄ CONST. RAMP K

℄ CONST. RAMP L

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD.

℄ SURVEY & CONST. SERVICE RD. II

℄ CONST. S.R. 161

102" CONDUIT

95" CONDUIT

60" CONDUIT

30" CONDUIT

15" CONDUIT

54" CONDUIT

78" CONDUIT

CB-1

CB-3A

CB-4

YORK RD

MOOTS RUN

HORIZONTAL SCALE IN FEET

0 100 200 400

CALCULATED JMA

CHECKED CSR

PROJECT SITE PLAN

STA. 428+00 TO STA. 486+00

LIC-161-6.65

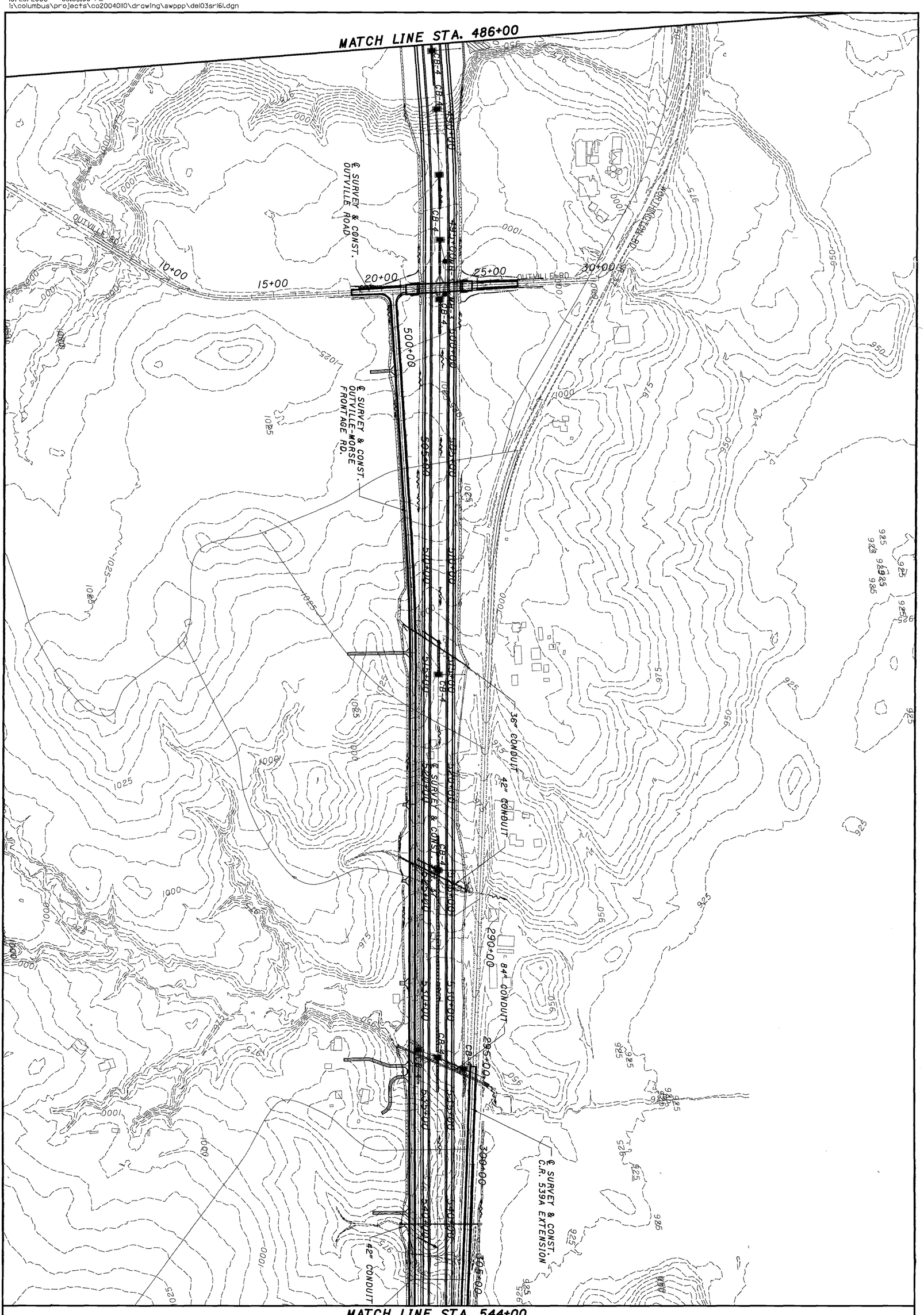
LIC-37-10.25

151

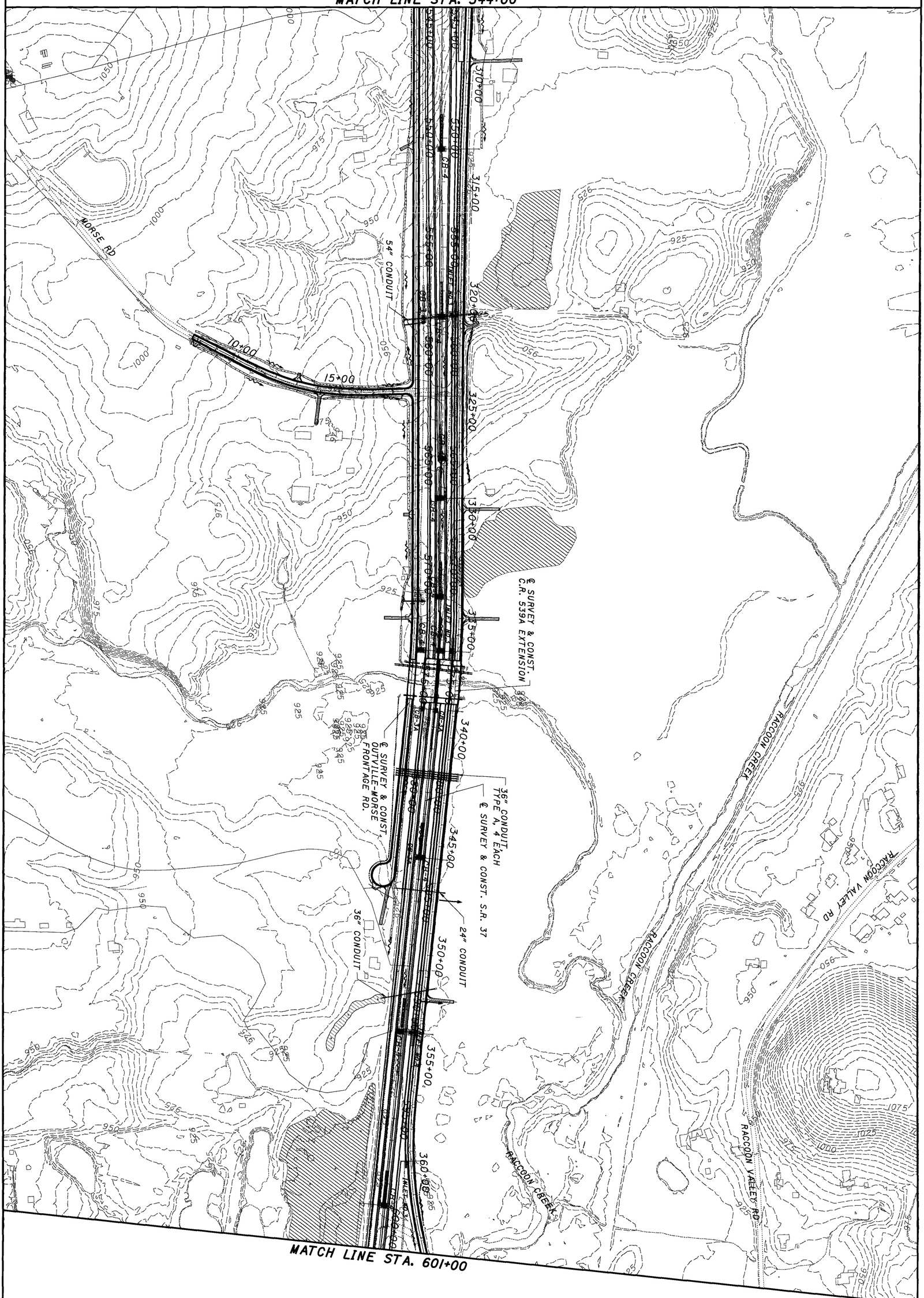
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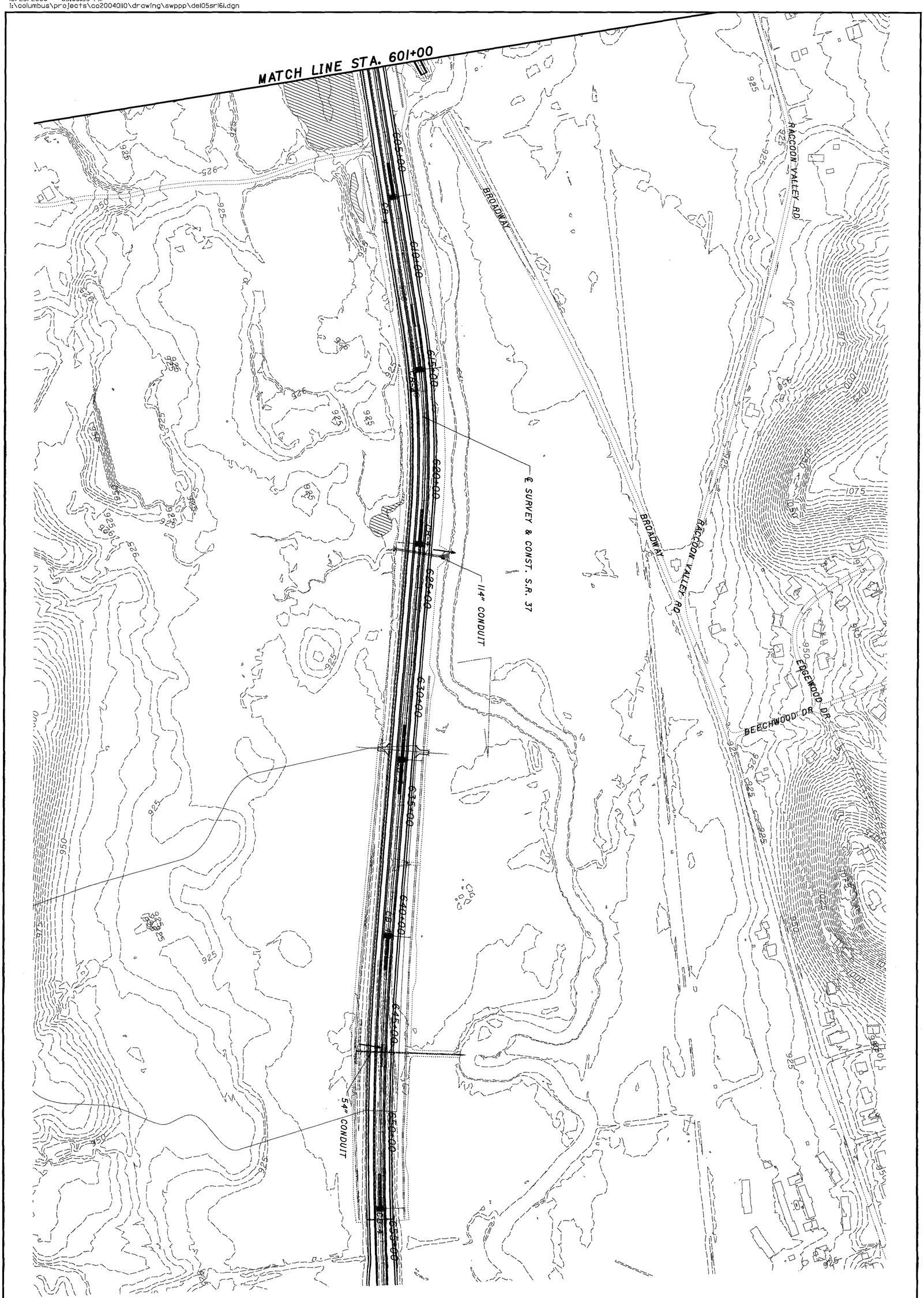

MATCH LINE STA. 486+00
CB-4
CB-4
CB-4

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153 / 349	LIC-161-6.65 LIC-37-10.25	PROJECT SITE PLAN STA. 544+00 TO STA. 601+00	CALCULATED JMA CHECKED CSR	0 200 100 400 HORIZONTAL SCALE IN FEET

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I54 / 1349	LIC-161-6.65 LIC-37-10.25	PROJECT SITE PLAN STA. 601+00 TO STA. 654+00	CALCULATED JMA CHECKED CSR	0 200 100 400 HORIZONTAL SCALE IN FEET

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-127.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR RETAINING WALL DETAILS SEE SHEETS 1030-1032.

S.R. 161 CURVE DATA
P.I. STA = 354+37.66
Δ = 03° 54′ 58″ (RT)
Dc = 00° 15′ 00″
R = 22,918.31′
T = 783.50′
L = 1,566.39′
E = 13.39′
emax = NC

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	10145 CU. YD.
203 EMBANKMENT	285 CU. YD.
659 SEEDING AND MULCHING	3584 SQ. YD.

FRA/LIC-161-23.20/0.00 BY OTHERS

BEGIN PROJECT
BEGIN WORK
S.R. 161
STA. 351+00.00
S.L.M. 6.65
E040 (452)

STA. 351+00.00, RT.
BEGIN FULL DEPTH PAVEMENT

STA. 356+00.00, LT.
BEGIN FULL DEPTH PAVEMENT

℄ SERVICE ROAD 5 BY OTHERS

CONSTRUCTION LIMITS

℄ SURVEY & CONST. S.R. 161

AEP EASTBOUND LANES

AEP (OVERHEAD)

P.C. STA. 346+54.16

MATCH LINE 357+50 S.R. 161
SEE SHEET 156

1 STORY WOOD FRAME HOUSE

WOOD SLAT AND BLOCK STORAGE BUILDING

OPEN STORAGE

HALF METAL OPEN STORAGE

HALF BLOCK ENCLOSED STORAGE

METAL GRAIN BINS

CB-4, AP.P. 354+42

15" CONDUIT

PROP. RETAINING WALL

LIMITS OF ROCK CHANNEL PROTECTION, TYPE C, 2′-0″ THICK

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD.

SIMPSON AVE.

STA. 106+04.59
STA. 107+63.59
STA. 109+74.78
STA. 111+33.78

S 76° 10′ 08″ E
S 73° 44′ 51″ E
S 73° 45′ 52″ E

LOT 11
LOT 7

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

-1.76 %
-1.15 %

P.V.C. STA. = 348+00.00
P.V.C. ELEV. = 1077.89

P.V.I. STA. = 349+50.00
P.V.I. ELEV. = 1075.28
300′ V.C.
K = 492

P.V.T. STA. = 350+00.00
P.V.T. ELEV. = 1075.53

AEP (RT.)
SPRINT (RT.)

EXIST. ℄ SURVEY AND CONST.

PROPOSED PROFILE

PROP. CB-4, AP.P.
STA. 353+50
GRATE ELEV. = 1066.20
INV. 15" SW = 1062.71

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE - S.R. 161
STA. 345+00 TO STA. 357+50

LIC-161-6.65
LIC-37-10.25

155
349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	82070 CU. YD.
203 EMBANKMENT	4115 CU. YD.
659 SEEDING AND MULCHING	22676 SQ. YD.

S.R. 161 CURVE DATA
P.I. STA = 354+37.66
Δ = 03° 54′ 58″ (RT)
Dc = 00° 15′ 00″
R = 22,918.31′
T = 783.50′
L = 1,566.39′
E = 13.39′
e_{max} = NC

MATCH LINE 357+50 S.R. 161 SEE SHEET 155

MATCH LINE 370+00 S.R. 161 SEE SHEET 157

℄ SERVICE ROAD 5 BY OTHERS

CONSTRUCTION LIMITS

WESTBOUND LANES

EASTBOUND LANES

SPRINT

P.T. STA. 362+20.55

CB-4, AP.P.

S 72° 15′ 10″ E

℄ SURVEY & CONST. S.R. 161

15" CONDUIT

WOOD SHED

2 STORY WOOD HOUSE

PUMP HOUSE

AEP

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD.

2½ STORY FRAME & BRICK HOUSE

SIMPSON RUN

P.C. STA. 119+19.85

P.T. STA. 122+22.14

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

EXIST. ℄ SURVEY AND CONST.

PROPOSED PROFILE

-1.15 %

SPRINT TELEPHONE

AEP

PROP. CB-4, AP.P.
STA. 365+00
GRATE ELEV. = 1052.77
INV. 15" SW = 1049.00

1070
1060
1050
1040

358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R 161
STA. 357+50 TO STA. 370+00

LIC-161-6.65
LIC-37-10.25

156
349

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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	54096 CU. YD.
203 EMBANKMENT	12905 CU. YD.
659 SEEDING AND MULCHING	23053 SQ. YD.

S.R. 161 CURVE DATA
P.I. STA = 384+88.00
Δ = 25° 09' 15" (LT)
Dc = 01° 15' 00"
R = 4,583.66'
T = 1,022.64'
L = 2,012.31'
E = 112.69'
e_{max} = 0.044

STA. 371+87.50, 78' LT. BEG. TYPE T ANCH. ASSM.
STA. 372+00.00, 78' LT. END TYPE T ANCH. ASSM.
STA. 379+00.00, 78' LT. END TYPE E-98 ANCH. ASSM.
STA. 378+50.00, 78' LT. BEG. TYPE E-98 ANCH. ASSM.

MATCH LINE 370+00 S.R. 161 SEE SHEET 156
MATCH LINE 382+50 S.R. 161 SEE SHEET 158
SIMPSON RUN
WOVEN WIRE FENCE
GRAVEL
SPRINT CONC. DITCH
TYPE 5 GUARDRAIL
WESTBOUND LANES
EASTBOUND LANES
P.C. STA. 374+65.36
EX. CB
CB-4, AP.P.
CULVERT NO. 1
CB2-2B, AP.P.
WOODS
18" CONDUIT
15" CONDUIT
TRIPLE 6"
18" CMP
12" CMP
CONSTRUCTION LIMITS
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
120" CONDUIT, TYPE A
1½ STORY FRAME
1½ STORY BARN
T ESMT
1-1/2 CAR FRAME GARAGE
1-STORY FRAME
1-STORY BRICK
2" REDBUD
SHED
1-1/2 STORY STUCCO
DECK
SPLIT RAIL FENCE
PICKET
LAWN
LAWN AREA
AFA
R/W
LA-R/W
LA

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
P.V.I. STA. = 375+00.00
P.V.I. ELEV. = 1045.93
500' V.C. K = 187
P.V.C. STA. = 372+50.00
P.V.C. ELEV. = 1040.01
P.V.I. STA. = 377+50.00
P.V.I. ELEV. = 1049.75
-1.15 %
+1.53 %
EXIST. ℄ SURVEY AND CONST.
PROPOSED PROFILE
PROP. CB-4, AP.P.
STA. 374+64.57
GRATE ELEV. = 1042.83
INV. 15" NE = 1037.83
120" X 305' CONDUIT, TYPE A
PROP. CB-4, AP.P.
STA. 377+00
GRATE ELEV. = 1044.38
INV. 18" NE = 1039.04
INV. 15" SE = 1039.29
PROP. CB-4, AP.P.
STA. 380+00
GRATE ELEV. = 1048.92
INV. 15" NW = 1044.81

370+00 371+00 372+00 373+00 374+00 375+00 376+00 377+00 378+00 379+00 380+00 381+00 382+00
1060 1050 1040 1030

CALCULATED JMA
CHECKED FJA
HORIZONTAL SCALE IN FEET 0 25 50 100

PLAN AND PROFILE - S.R. 161
STA. 370+00 TO STA. 382+50

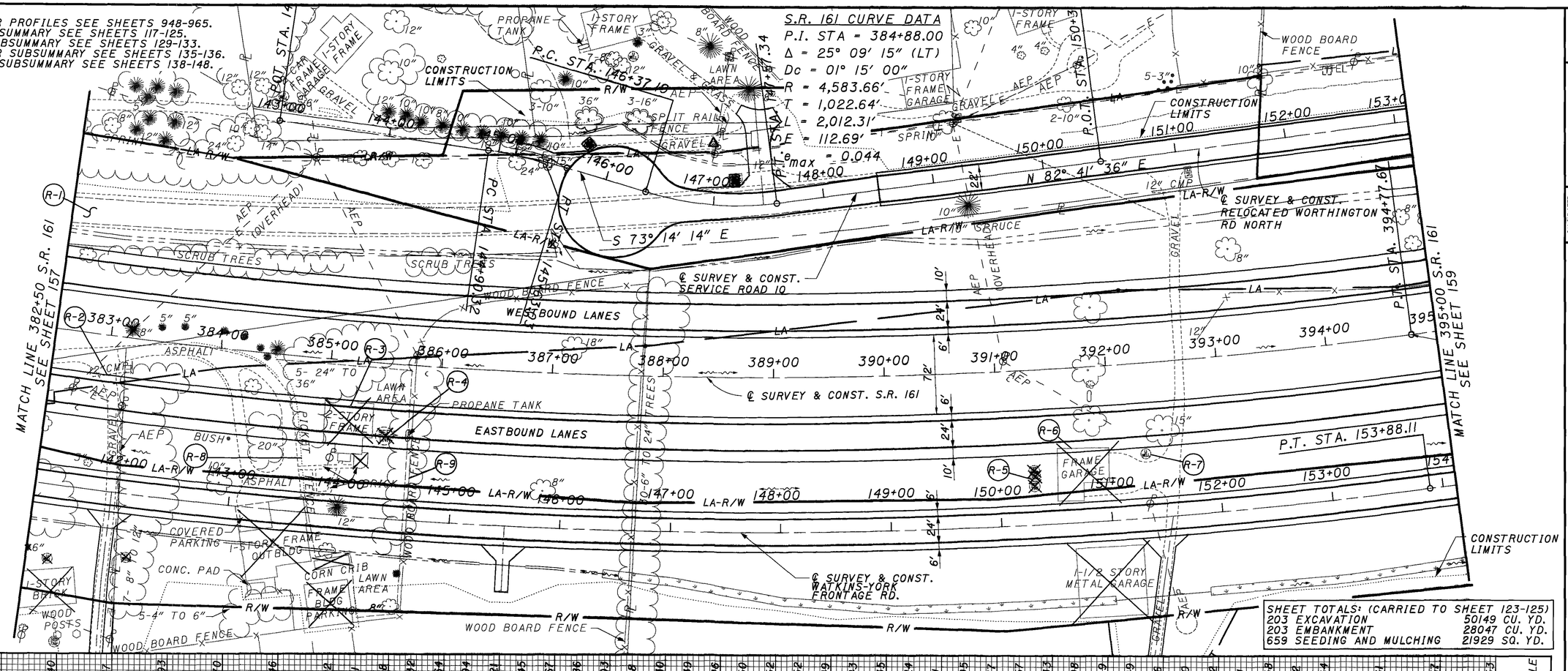
LIC-161-6.65
LIC-37-10.25

157
1349

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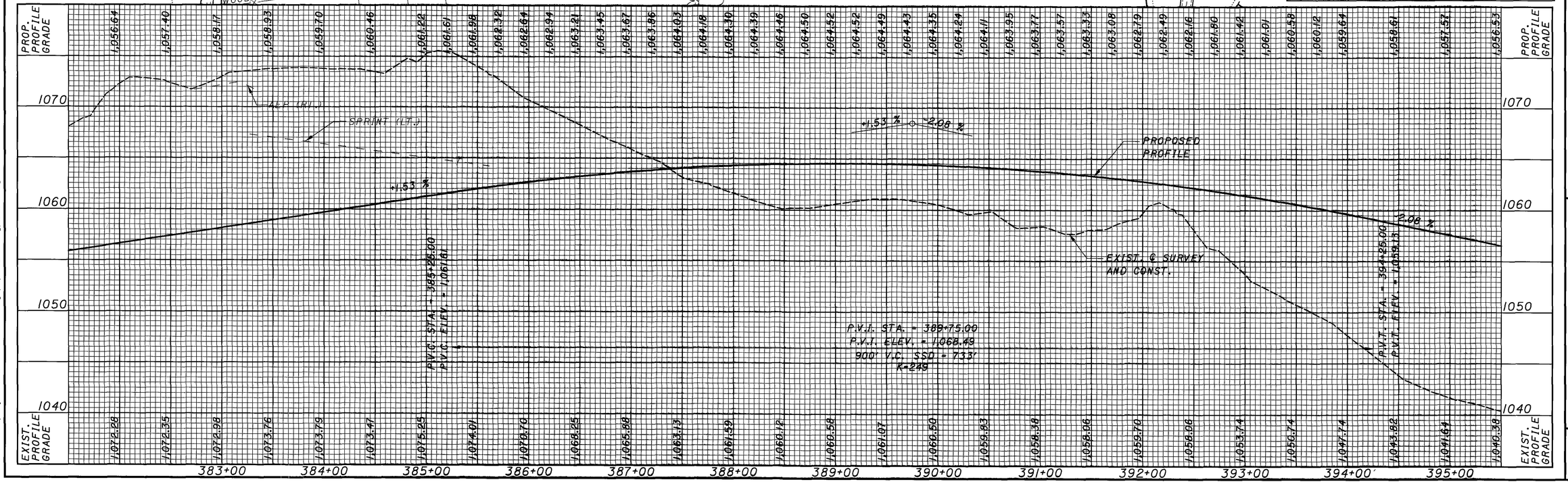
NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

S.R. 161 CURVE DATA
P.I. STA = 384+88.00
Δ = 25° 09′ 15″ (LT)
Dc = 01° 15′ 00″
R = 4,583.66′
T = 1,022.64′
L = 2,012.31′
E = 112.69′
e max = 0.044



SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	50149 CU. YD.
203 EMBANKMENT	28047 CU. YD.
659 SEEDING AND MULCHING	21929 SQ. YD.



HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 161
STA. 382+50 TO STA. 395+00

LIC-161-6.65
LIC-37-10.25

158
349

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PLAN AND PROFILE - S.R. 161
STA. 395+00 TO STA. 407+50

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

159
1349

MATCH LINE 395+00 S.R. 161 SEE SHEET 158

MATCH LINE 407+50 S.R. 161 SEE SHEET 160

AEP (OVERHEAD)
SMOOTH WIRE FENCE
SPRINT
CONSTRUCTION LIMITS
2-STORY FRAME BARN
CONC. SILO
GRAVEL
AEP
SHRUB
15" CPP
5-4" LOCUST
DEAD
TWIN 8"
CONDUIT
CB-4, AP.P.
N 82° 35' 35" E
N 82°41'
CULTIVATED FIELD
WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 161
℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
4" STEEL GAS COLUMBIA GAS
6" STEEL GAS
4-10"
6"-7" X 4'-7" CONDUIT, TYPE A
25-6" TO 15" TREES
LA-R/W
R/W
E-1
E-2
E-3
E-4
E-5
D-1
R-1

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	2426 CU. YD.
203 EMBANKMENT	7368I CU. YD.
659 SEEDING AND MULCHING	21286 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
2.08 %
PROPOSED PROFILE
EXIST. ℄ SURVEY AND CONST.
P.V.I. STA. = 406+00.00
P.V.I. ELEV. = 1,034.69
300' V.C.
K=190
P.V.C. STA. = 404+50.00
P.V.C. ELEV. = 1,037.81
P.V.T. STA. = 407+50.00
P.V.T. ELEV. = 1,033.94
0.50 %
PROP. CB-4, AP.P.
STA. 399+00
GRATE ELEV. = 1044.61
INV. 18" N = 1041.76
AEP
4" STEEL GAS LINE

1,057.57 1,056.53 1,055.49 1,054.45 1,053.41 1,052.37 1,051.33 1,050.29 1,049.25 1,048.21 1,047.17 1,046.13 1,045.09 1,044.05 1,043.01 1,041.97 1,040.93 1,039.89 1,038.85 1,037.81 1,037.31 1,036.84 1,036.40 1,035.99 1,035.62 1,035.28 1,034.98 1,034.70 1,034.46 1,034.26 1,034.08 1,033.94

1041.64 1040.38 1040.81 1042.15 1044.26 1045.93 1041.56 1037.76 1036.30 1035.95 1036.45 1038.97 1037.26 1034.56 1032.71 1031.70 1031.01 1030.74 1030.66 1031.09 1029.90 1028.27 1027.76 1026.62 1025.95 1027.33

1060 1050 1040 1030

395+00 396+00 397+00 398+00 399+00 400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00

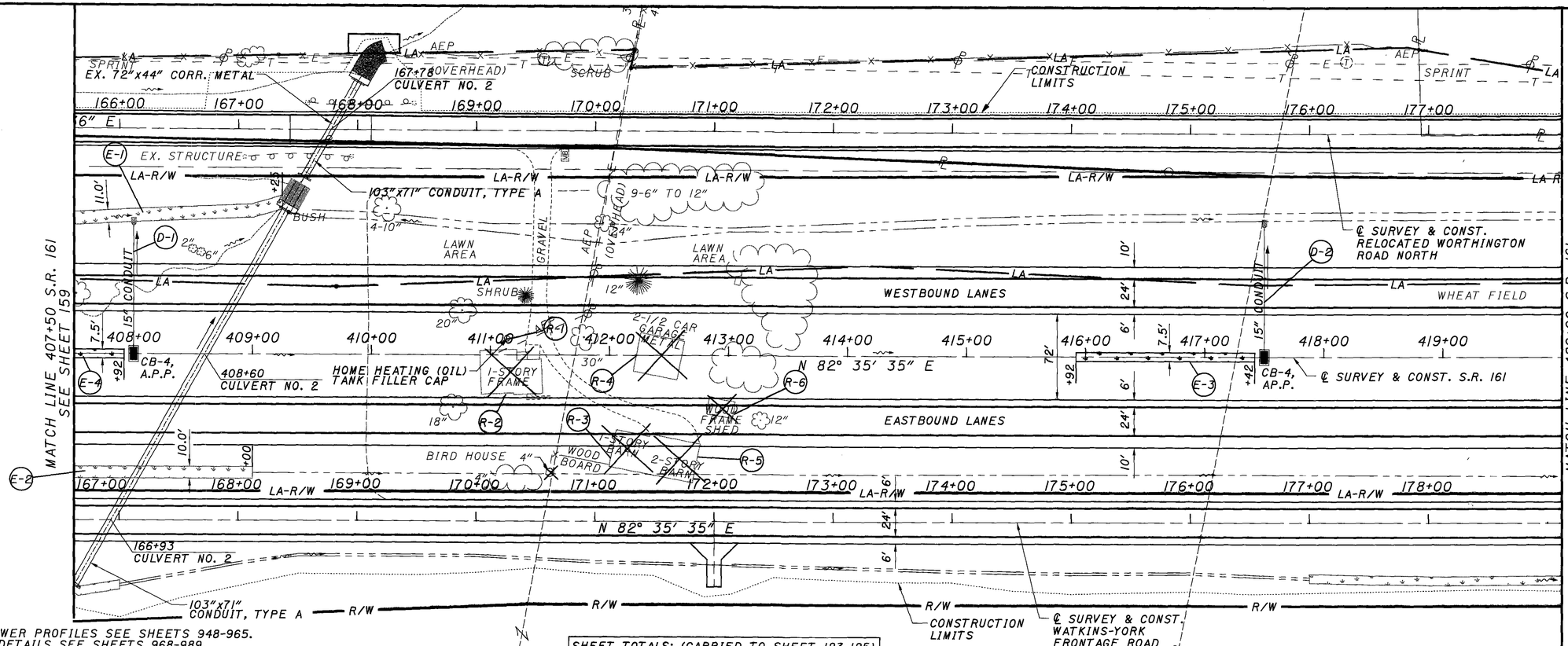
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PLAN AND PROFILE - S.R. 161
STA. 407+50 TO STA. 420+00

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

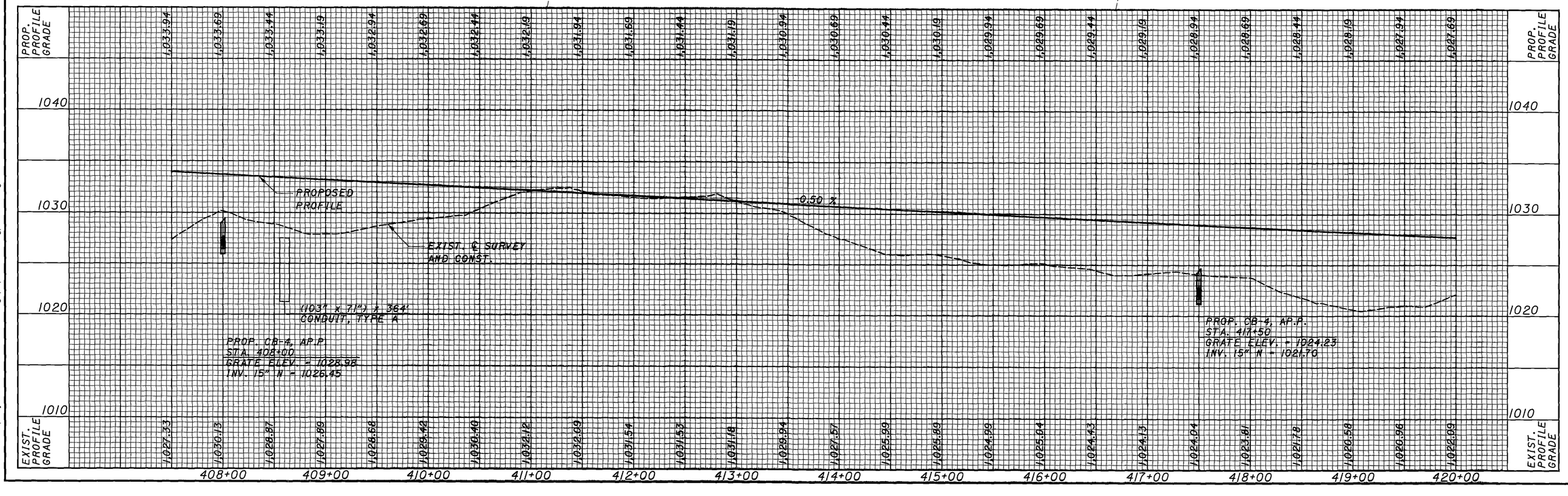
HORIZONTAL SCALE IN FEET
0 25 50 100



NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	7098 CU. YD.
203 EMBANKMENT	21451 CU. YD.
659 SEEDING AND MULCHING	21157 SQ. YD.



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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR LIGHTING DETAILS SEE SHEETS 1069-1077.

MATCH LINE 420+00 S.R. 161 SEE SHEET 160

MATCH LINE 432+50 S.R. 161 SEE SHEET 162

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

P.C. STA. 182+41.82
BEGIN ACCELERATION LANE STA. 424+54.00, 66.00' LT.
STA. 424+54.00, 76.00' LT.
BEGIN TAPER
10' SHOULDER

STA. 425+50.00, 76.00' LT.
END TAPER
8' SHOULDER

P.T. STA. 186+90.36

N 84° 56' 09" E

N 82° 35' 35" E

P.C. STA. 430+93.83

CB-4, AP.P.

18" CONDUIT

WESTBOUND LANES

EASTBOUND LANES

RIDING AREA

CONSTRUCTION LIMITS

WOOD BOARD FENCE

SMOOTH WIRE FENCE

GRAVEL

LAWN AREA

COVERED DOG PEN

2 STORY FRAME & BLOCK RESIDENTIAL

BASKETBALL HOOP

SATELLITE DISH

FRAME SHED

1 STORY FRAME HORSE BARN

METAL OUT BLDG.

HEDGE ROW

WOOD GATE

ESMT

AEP (OVERHEAD)

BUSHES

BRIARS & WEEDS

SPRINT

12"CMP

15"CMP

6-10" TO 15" CMP

END PVMT. TAPER
STA. 432+40.00, 78' RT.
END TAPER, 8' SHLDR
STA. 432+40.00, 86' RT.

BEGIN DECELERATION LANE
STA. 431+40.00, 66' RT.
BEGIN TAPER, 10' SHLDR.
STA 431+40.00, 76' RT.

S.R. 161 CURVE DATA
P.I. STA. = 438+03.66
Δ = 10° 37' 01" (RT)
Dc = 00° 45' 00"
R = 7,639.44'
T = 709.83'
L = 1,415.59'
E = 32.91'
emax = 0.028

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	20491 CU. YD.
203 EMBANKMENT	13093 CU. YD.
659 SEEDING AND MULCHING	22001 SQ. YD.

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

PROPOSED PROFILE

-0.50 %

-1.30 %

AEP

EXIST. ℄ SURVEY AND CONST.

AEP (RT.)

PROP. CB-4, AP.P.
STA. 427+00
GRATE ELEV. = 1019.46
INV. 18" N = 1016.17

P.V.C. STA. = 426+50.00
P.V.C. ELEV. = 1,024.44

P.V.I. STA. = 428+00.00
P.V.I. ELEV. = 1,023.59
300' V.C. SSD = 1499' K=375

P.V.T. STA. = 429+50.00
P.V.T. ELEV. = 1,021.74

420+00 421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00

1030 1020 1010 1000

HORIZONTAL SCALE IN FEET
0 25 50 100

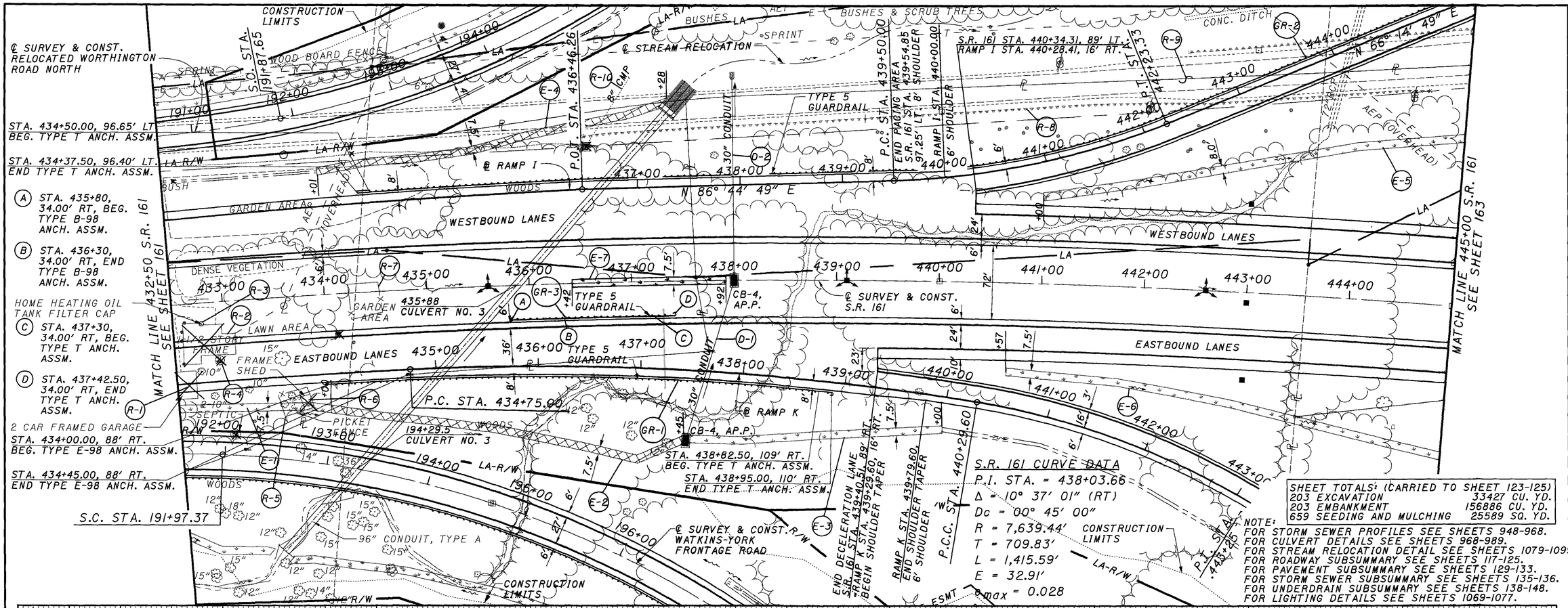
CALCULATED JMA
CHECKED FJA

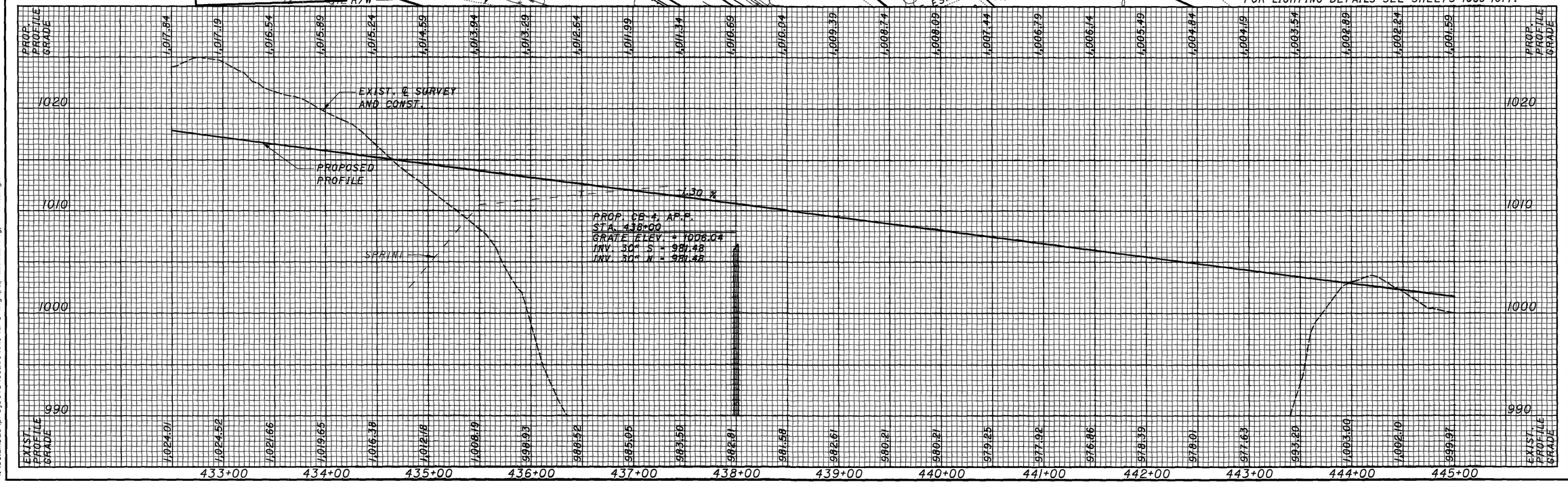
PLAN AND PROFILE - S.R. 161
STA. 420+00 TO STA. 432+50

LIC-161-6.65
LIC-37-10.25

161
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HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 161
STA. 432+50 TO STA. 445+00

LIC-161-6.65
LIC-37-10.25

162
1349

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MATCH LINE 445+00 S.R. 161 SEE SHEET 162

MATCH LINE 457+50 S.R. 161 SEE SHEET 164

P.T. STA. 445+09.42

ASPHALT

GRAVEL

CB-4, AP.P.

27" CONDUIT

24" CONDUIT

AEP (OVERHEAD)

WETLAND
TOTAL AREA= 0.452 AC.
DISTURBED
AREA= 0.452 AC.

WELL

1-STY FRAME

WOODS

WOOD SHED

℄ SURVEY & CONST. S.R. 161

S 86° 47' 24" E

90°35'49"

CB-3A, A.P.P.

15" CONDUIT

18" CONDUIT

SPRINT

LIGHT

1-STY HOUSE

BURN PILE

BRUSH

SMOOTH WIRE FENCE

CHAINLINK FENCE

GRAVEL DR.

SHRUBS

1-STY HOUSE (VERIFY)

WOOD SHED

BIRD HSE

SEPTIC

FUEL TANK

SCRAP METAL

3" APPLE TREE

℄ SURVEY & CONST. S.R. 161 STA. 451+13.72 = ℄ SURVEY & CONST. S.R. 37 STA. 406+76.95

STREAM RELOCATION

℄ SURVEY & CONST. S.R. 37

EP (NORTHBOUND)

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR STREAM RELOCATION DETAIL SEE SHEETS 1079-1099
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR LIGHTING DETAILS SEE SHEETS 1069-1077.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	42381 CU. YD.
203 EMBANKMENT	3759 CU. YD.
659 SEEDING AND MULCHING	27281 SQ. YD.

PROPOSED STRUCTURE DATA

TYPE: TWO-SPAN PRESTRESSED CONCRETE I-BEAM WITH REINFORCED CONCRETE CAP, COLUMN PIER, AND REINFORCED CONCRETE SEMI-INTEGRAL ABUTMENTS SUPPORTED ON MSE WALLS
SPANS: 101'-6", 101'-6"
ROADWAY: 60'-0" TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0° 35' 49" LF
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (45'-1" R.A./54'-1" F.A.)
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40° 04' 25" N
LONGITUDE: 82° 36' 20" W

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

PROPOSED PROFILE

-1.30 %

EXIST. ℄ SURVEY AND CONST.

PROP. CB-4, AP.P.
STA. 448+50
GRATE ELEV. = 992.35
INV. 24" SW = 975.71
INV. 27" NW = 975.46

P.V.C. STA. = 449+50.00
P.V.C. ELEV. = 995.74

17.26' MIN. CLEARANCE
STA. 450+83.63
℄ S.R. 37
STA. 451+13.72

P.V.I. STA. = 451+00.00
P.V.I. ELEV. = 993.79
300' V.C.
K=375

P.V.T. STA. = 452+50.00
P.V.T. ELEV. = 993.04

-1.30 %

-0.50 %

AEP (INT.)

SPRINT

PROP. CB-4, AP.P.
STA. 457+00
GRATE ELEV. = 986.08
INV. 18" E = 980.80

445+00 446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+00 454+00 455+00 456+00 457+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 161
STA. 445+00 TO STA. 457+50

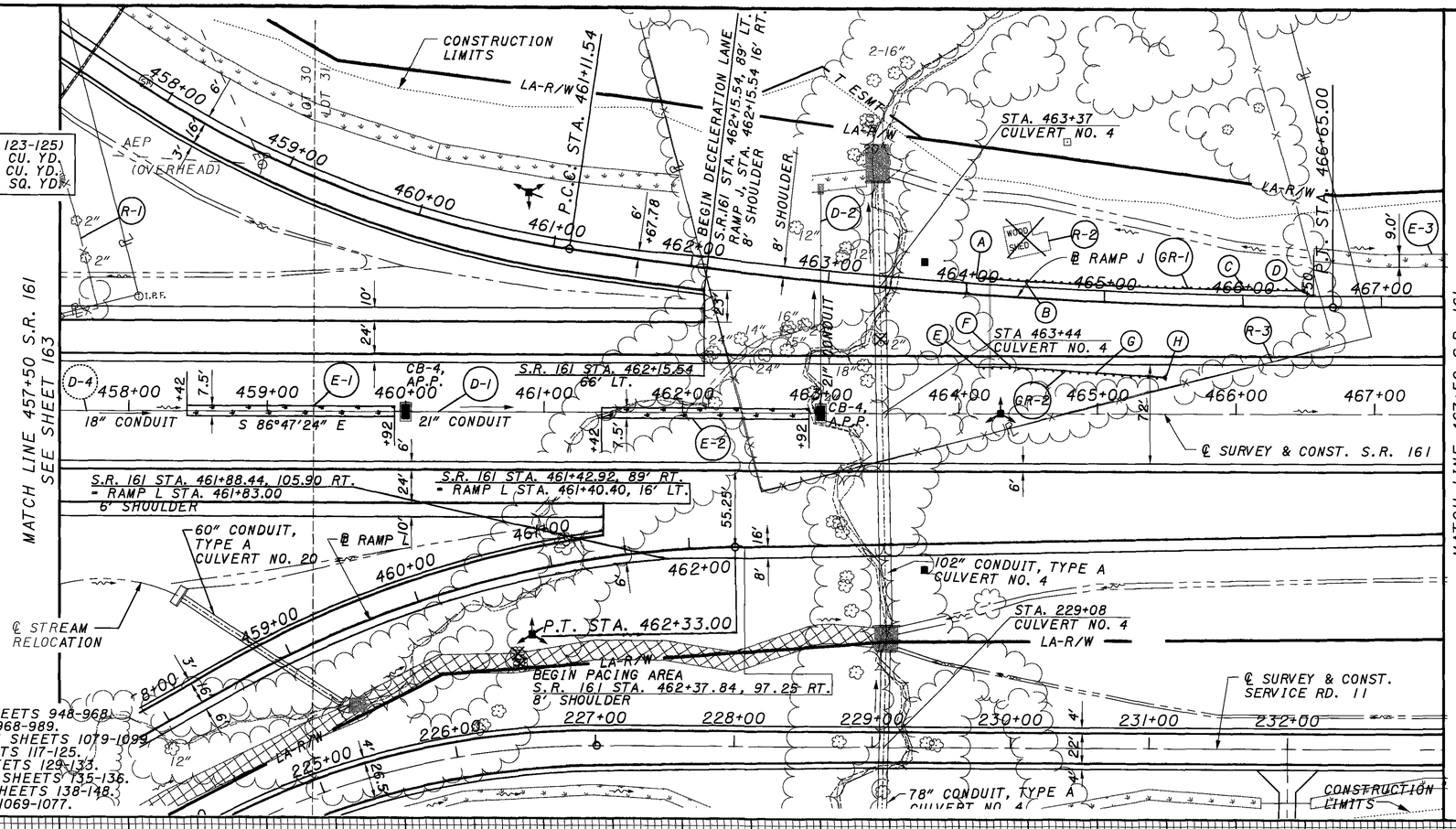
LIC-161-6.65
LIC-37-10.25

163
1349

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	22312 CU. YD.
203 EMBANKMENT	37271 CU. YD.
659 SEEDING AND MULCHING	20204 SQ. YD.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR STREAM RELOCATION DETAIL SEE SHEETS 1079-1099.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR LIGHTING DETAILS SEE SHEETS 1069-1077.



(A) STA. 464+12.50, 98.71' LT
BEG. TYPE T ANCH. ASSM.

(B) STA. 464+25.00, 97.88' LT
END TYPE T ANCH. ASSM.

(C) STA. 466+00, 90.64' LT
BEG. TYPE E-98 ANCH. ASSM.

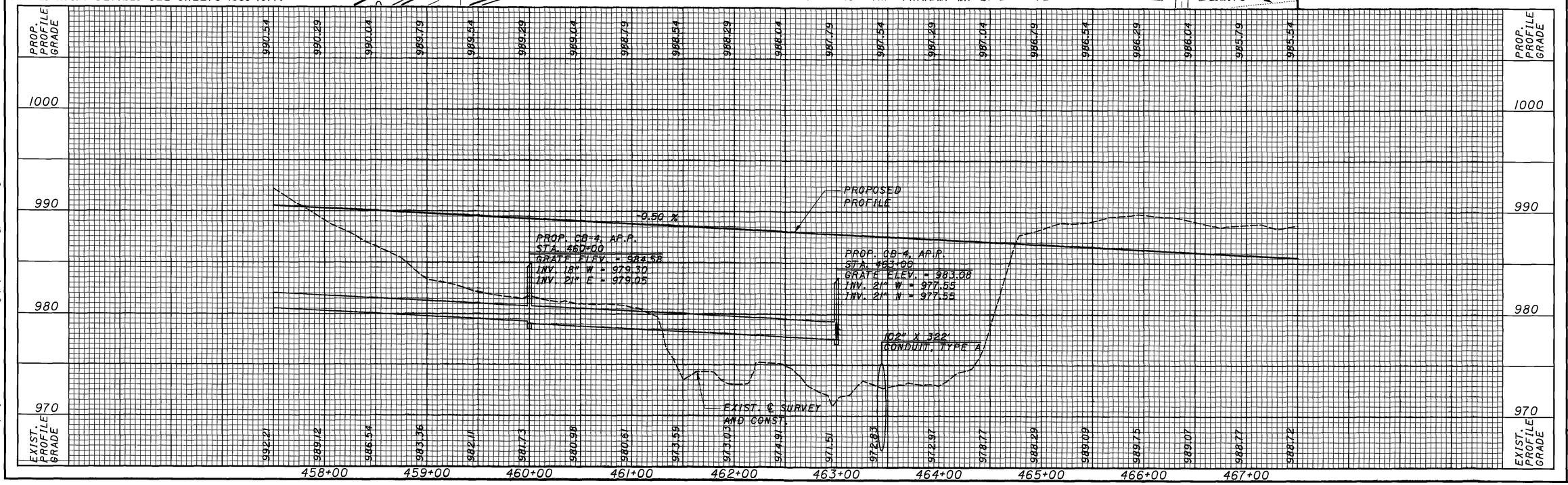
(D) STA. 466+50, 90.05' LT
END TYPE E-98 ANCH. ASSM.

(E) STA. 464+12.50, 34.00' LT
BEG. TYPE T ANCH. ASSM.

(F) STA. 464+25.00, 34.00' LT
END TYPE T ANCH. ASSM.

(G) STA. 465+00, 29.83' LT
BEG. TYPE B-98 ANCH. ASSM.

(H) STA. 465+50, 26.50' LT
END TYPE B-98 ANCH. ASSM.



PLAN AND PROFILE - S.R. 161
STA. 457+50 TO STA. 467+50

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

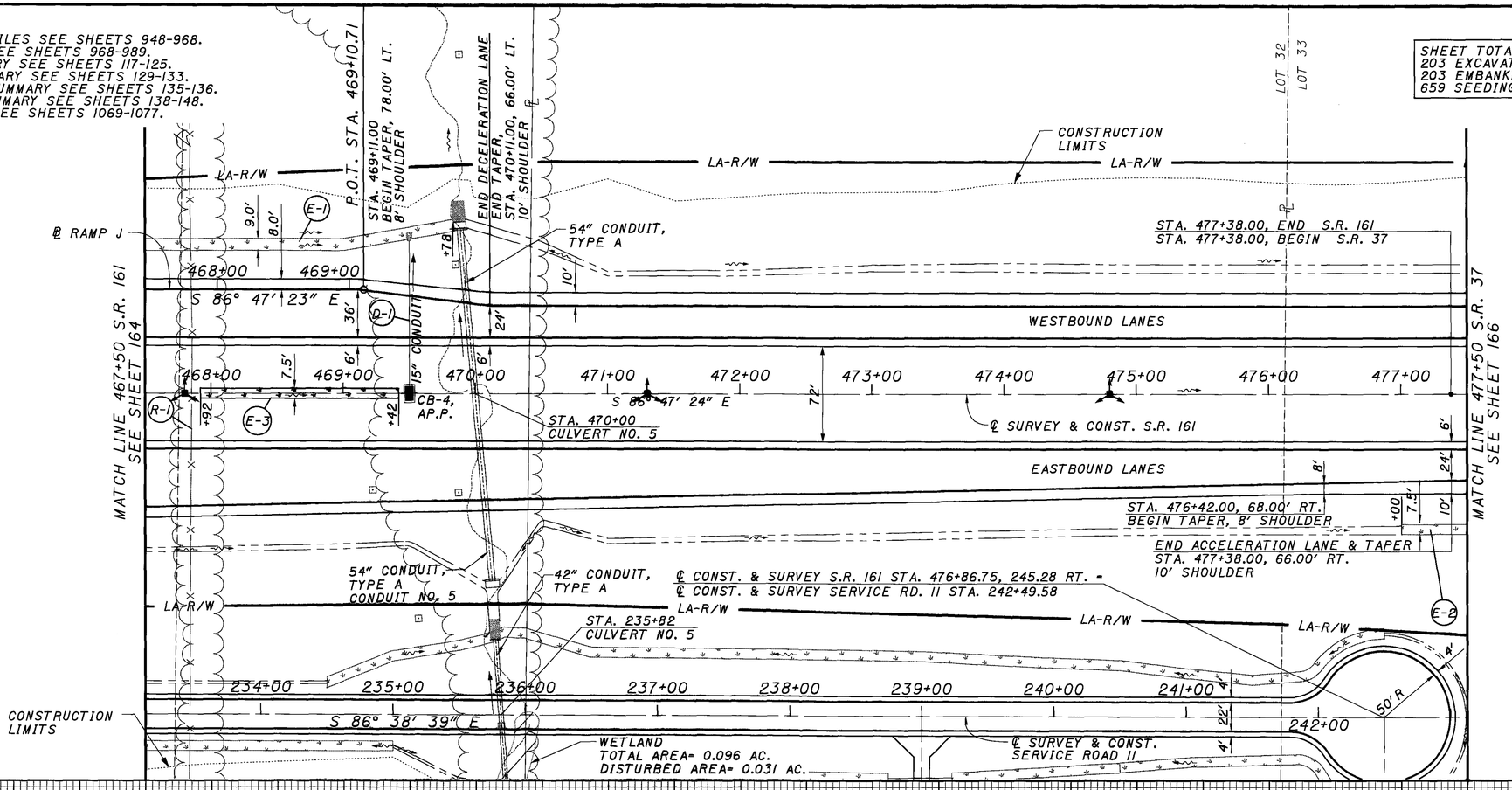
LIC-161-6.65
LIC-37-10.25

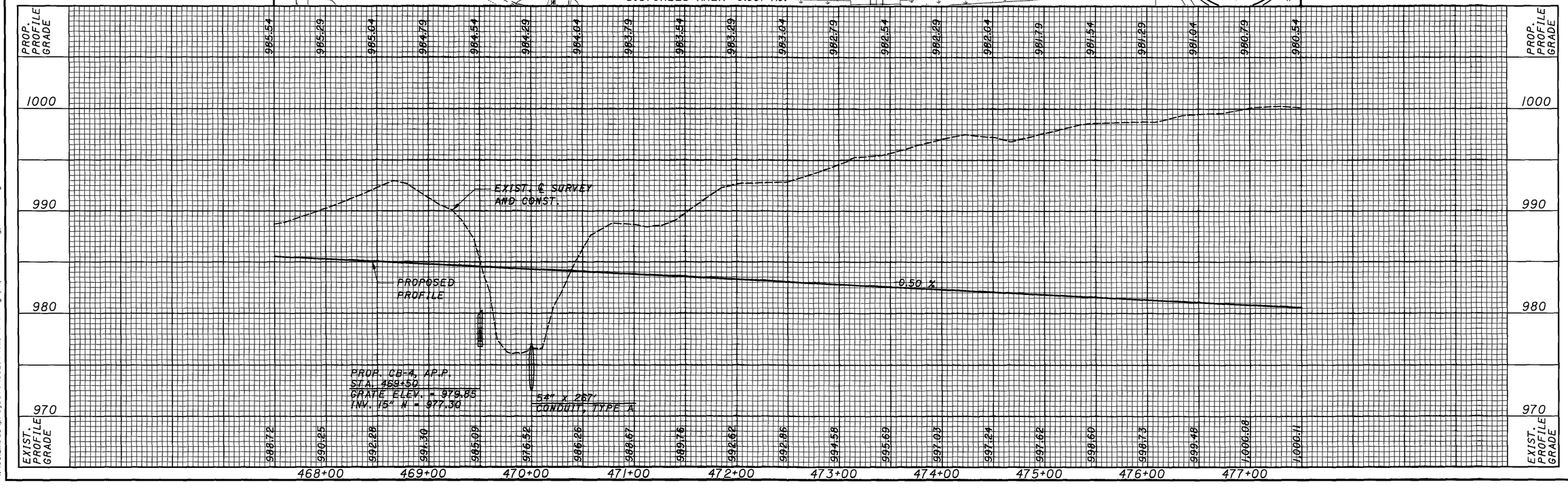
164
1349

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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR LIGHTING DETAILS SEE SHEETS 1069-1077.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	11900 CU. YD.
203 EMBANKMENT	2336 CU. YD.
659 SEEDING AND MULCHING	24124 SQ. YD.





PLAN AND PROFILE - S.R. 161/S.R. 37
STA. 467+50 TO STA. 477+50

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
DECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR LIGHTING DETAILS SEE SHEETS 1069-1077.

MATCH LINE 477+50 S.R. 37 SEE SHEET 165

MATCH LINE 490+00 S.R. 37 SEE SHEET 167

STA. 481+43.02, 22' LT.
END TYPE I
BRG. TERM. ASSM.

STA. 481+11.77, 22' LT.
BEGIN TYPE I
BRG. TERM. ASSM.

STA. 485+14.29, 78' LT.
END TYPE I BRG. TERM. ASSM.

STA. 484+83.04, 78' LT.
BEG. TYPE I BRG. TERM. ASSM.

WETLAND
TOTAL AREA- 0.084 AC.
DISTURBED AREA- 0.000 AC.

LOT 33

LOT 34

T ESMT.

LA-R/W

CONSTRUCTION LIMITS

STA. 480+30.52, 16.6' LT.
END TYPE B-98 ANCH. ASSM.

STA. 479+93.02, 14' LT.
BEGIN TYPE B-98 ANCH. ASSM.

STA. 485+64.50, 16.6' LT.
END TYPE B-98 ANCH. ASSM.

STA. 486+02.00, 14' LT.
BEG. TYPE B-98 ANCH. ASSM.

TYPE 5 GUARDRAIL

WESTBOUND LANES

EASTBOUND LANES

CB-3A, AP.P.

CB-4, AP.P.

18" CONDUIT

15" CONDUIT

S 86° 47' 24" E

℄ SURVEY & CONST. S.R. 37

STA. 484+83.25, 22' LT.
END TYPE I BRG. TERM. ASSM.

STA. 484+52.00, 22' LT.
BEG. TYPE I BRG. TERM. ASSM.

STA. 478+18.23, 78' RT.
END TYPE E-98
ANCH. ASSM.

STA. 477+68.23, 78' RT.
BEG. TYPE E-98
ANCH. ASSM.

STA. 480+80.73, 78' RT.
BEG. TYPE I
BRG. TERM. ASSM.

STA. 481+11.98, 78' RT.
END TYPE I
BRG. TERM. ASSM.

STA. 484+21.67, 78' RT.
BEG. TYPE 2 BRG. TERM. ASSM.

STA. 483+96.67, 78' RT.
END TYPE 2 BRG. TERM. ASSM.

MOOTS RUN

ITEM 203: GRANULAR MATERIAL, TYPE B 27,777 CY

ITEM 601: ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER 2437 CY

TOTAL CARRIED TO ROADWAY SUBSUMMARY

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	76462 CU. YD.
203 EMBANKMENT	68019 CU. YD.
659 SEEDING AND MULCHING	29239 SQ. YD.

S.R. 37 CURVE DATA
P.I. STA. = 491+53.90
Δ = 04° 22' 58" (RT)
Dc = 00° 45' 00"
R = 7,639.44'
T = 292.32'
L = 584.36'
E = 5.59'
e_{max} = 0.028
P.C. STA. = 488+61.58

PROPOSED STRUCTURE DATA
TYPE: THREE-SPAN PRESTRESSED CONC. I-BEAM WITH SEMI-INTEGRAL ABUTMENTS AND CAP AND COLUMN PIERS
SPANS: 77'-11", 79'-2", 77'-11" C/C SUPPORTS
ROADWAY: 56'-0" TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 29°00'00" LF
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40°04'20" N
LONGITUDE: 82°35'40" W

PROPOSED PROFILE

EXIST. ℄ SURVEY AND CONST.

PROP. CB-3A, AP.P.
STA. 484+54.96, 22.00' RT
GRATE ELEV. = 976.53
INV. 15" S = 971.32

PROP. CB-3A, AP.P.
STA. 484+23.98, 78.00' RT
GRATE ELEV. = 976.82
INV. 15" S = 970.12
INV. 15" N = 970.12

PROP. CB-3A, AP.P.
STA. 485+10.39, 78' LT
GRATE ELEV. = 976.53
INV. 15" S = 969.76
INV. 15" N = 969.76

PROP. CB-3A, AP.P.
STA. 485+25.00
GRATE ELEV. = 976.67
P.V.C.
P.V.C.

BRIDGE LIMITS = 230.80'

-0.50 %

+1.17 %

P.V.T. STA. = 488+75.00
P.V.T. ELEV. = 977.84

PROP. CB-4, AP.P.
STA. 486+29.79
GRATE ELEV. = 971.66
INV. 18" N = 961.41
INV. 18" E = 961.41

P.V.I. STA. = 487+00.00
P.V.I. ELEV. = 975.79
350' V.C.
K=210

PROP. INLET CB-4
STA. 489+00
GRATE ELEV. = 973.47
INV. 18" W = 966.27
INV. 18" E = 966.27

PROP. CB-4, AP.P.
STA. 481+06
GRATE ELEV. = 974.10
INV. 18" S = 969.80

PROP. CB-3A, AP.P.
STA. 481+79.35, 22.00' LT
GRATE ELEV. = 976.40
INV. 15" N = 970.96

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

980.54 980.29 980.04 979.79 979.54 979.29 979.04 978.79 978.54 978.29 976.04 977.79 977.54 977.29 977.04 976.79 976.66 976.55 976.41 976.42 976.40 976.41 976.45 976.52 976.62 976.75 976.91 977.09 977.31 977.56 976.13 976.72 976.30

1006.11 998.85 997.96 997.28 995.61 992.66 983.57 979.50 958.37 952.60 947.77 950.86 953.13 953.29 954.03 954.35 953.96 953.27 953.72 953.50 953.41 954.12 956.11 968.15 981.59 997.45

990 980 970 960

478+00 479+00 480+00 481+00 482+00 483+00 484+00 485+00 486+00 487+00 488+00 489+00 490+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 477+50 TO STA. 490+00

LIC-161-6.65
LIC-37-10.25

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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

MATCH LINE 490+00 S.R. 37 SEE SHEET 166

MATCH LINE 502+50 S.R. 37 SEE SHEET 168

CONSTRUCTION LIMITS

LA-R/W

R/W

P.I. STA. = 25+06.83
Δ = 00° 47′ 03″ (RT.)
NO CURVE

CB-3A, A.P.P.

℄ SURVEY & CONST. S.R. 37 STA. 497+21.01 = ℄ SURVEY & CONST. OUTVILLE RD STA. 22+66.21

STA. 491+51.79, 78′ LT.
BEG. TYPE E-98 ANCH. ASSM.

STA. 492+01.79, 78′ LT.
END TYPE E-98 ANCH. ASSM.

GR-9, GR-3, R-1

E-1, E-2, E-3, E-4, E-5, E-6

D-1, D-2, D-3, D-4, D-8

TYPE 5 GUARDRAIL

18″ CONDUIT

15″ CONDUIT

MH-3, A.P.P.

CB-4, A.P.P.

WESTBOUND LANES

EASTBOUND LANES

SPRINT (OVERHEAD)

S 82° 24′ 26″ E
℄ SURVEY & CONST. S.R. 37

86°44′08″

89°24′16″

℄ SURVEY & CONST. OUTVILLE RD STA. 20+50.00 = ℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD STA. 497+31.85

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.

℄ SURVEY & CONST. OUTVILLE ROAD

S.R. 37 CURVE DATA

P.I. STA. = 491+53.90
Δ = 04° 22′ 58″ (RT)
Dc = 00° 45′ 00″
R = 7,639.44′
T = 292.32′
L = 584.36′
E = 5.59′
e_{max} = 0.028

P.T. STA. 494+45.94

STA. 491+96.67, 78′ RT.
BEG. TYPE T ANCH. ASSM.

STA. 492+09.17, 78′ RT.
END TYPE T ANCH. ASSM.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	290375 CU. YD.
203 EMBANKMENT	1972 CU. YD.
659 SEEDING AND MULCHING	30428 SQ. YD.

PROPOSED STRUCTURE DATA

TYPE: TWO-SPAN PRESTRESSED CONCRETE I-BEAM WITH REINFORCED CONCRETE CAP, COLUMN PIER, AND REINFORCED CONCRETE SEMI-INTEGRAL ABUTMENTS SUPPORTED ON MSE WALLS
SPANS: 101′-6″, 101′-6″
ROADWAY: 40′-0″ TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 3° 15′ 52″ LF
WEARING SURFACE: 1″ MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40° 04′ 20″ N
LONGITUDE: 82° 35′ 20″ W

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

979.30 979.99 980.47 981.06 981.64 982.23 982.81 983.40 983.98 984.57 985.15 985.74 986.32 986.91 987.49 988.08 988.66 989.25 989.83 990.42 991.00 991.59 991.87 992.14 992.40 992.65 992.98 993.10 993.31 993.50

997.45 1002.64 1004.37 1006.18 1005.18 1003.64 1002.64 1004.58 1006.18 1008.03 1006.60 1006.60 1007.91 1007.88 1006.06 1005.07 1008.98 1009.94 1010.49 1012.46 1015.65 1018.60 1020.57 1021.84 1023.89 1025.51 1027.10

1010 1000 990 980

EXIST. ℄ SURVEY AND CONST.

PROPOSED PROFILE

PROP. MANHOLE NO. 3, A.P.P.
STA. 496+00, 25.00′ LT
GRATE ELEV. = 984.74
INV. 15″ SW = 977.93
INV. 15″ E = 977.93

PROP. CB-4, A.P.P.
STA. 495+00
GRATE ELEV. = 980.48
INV. 18″ W = 976.11
INV. 15″ NE = 976.42

PROP. CB-4, A.P.P.
STA. 492+00
GRATE ELEV. = 976.98
INV. 18″ E = 971.57
INV. 18″ W = 971.57

+1.17 %

℄ OUTVILLE RD STA. 497+21.01 = 17.29′ MIN. CLEARANCE = 997.28

PROP. MANHOLE NO. 3, A.P.P.
STA. 497+50, 25.00′ LT
GRATE ELEV. = 986.51
INV. 15″ W = 980.22
INV. 15″ SE = 980.22

PROP. CB-4, A.P.P.
STA. 497+75
GRATE ELEV. = 983.63
INV. 15″ NW = 980.74

P.V.C. STA. = 500+50
P.V.C. ELEV. = 991.58

P.V.I. STA. = 510+00.00
P.V.I. ELEV. = 1,002.70
1,300′ VCE
GSD = 1012′
K=475

490+00 491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 490+00 TO STA. 502+50

LIC-161-6.65
LIC-37-10.25

167
349

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MATCH LINE 502+50 S.R. 37
SEE SHEET 167

MATCH LINE 515+00 S.R. 37
SEE SHEET 169

CONSTRUCTION LIMITS
R/W
AEP (OVERHEAD)
GRAVEL & DIRT
SPRINT
LA
LA-R/W
LOT 35
LOT 36
FIELD DR.
6"PVC VERTICAL PIPE
OLD WELL
WELL
AEP (OVERHEAD)
DEAD
15" WALNUT
WOOD FENCE
15" CONDUIT
36" CONDUIT, TYPE A
CB-4, AP.P.
E-1
E-2
E-3
R-1
R-2
R-3
R-4
R-5
D-1
10.0'
24'
6'
72'
4'
22'
7.5'
WESTBOUND LANES
EASTBOUND LANES
503+00 504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00
S 82° 24' 26" E
℄ SURVEY & CONST. S.R. 37
513+74
CULVERT NO. 6
512+97
CULVERT NO. 6
P.C. STA. 508+14.13
℄ SURVEY & CONST.
OUTVILLE-MORSE FRONTAGE ROAD

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	269207 CU. YD.
203 EMBANKMENT	4865 CU. YD.
659 SEEDING AND MULCHING	25125 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
993.50 993.68 993.85 994.01 994.15 994.28 994.39 994.49 994.58 994.66 994.73 994.77 994.80 994.83 994.84 994.83 994.82 994.79 994.74 994.69 994.62 994.53 994.44 994.33 994.21 994.07 993.92 993.76 993.59 993.40 993.20 992.99 992.76 992.52 992.26 992.00 991.72 991.43 991.12 990.80 990.47 990.12 989.76 989.39 989.01 988.61 988.20 987.77 987.33 986.88 986.42
1027.10 1028.68 1030.01 1031.10 1032.22 1033.51 1032.44 1030.95 1028.31 1027.62 1026.63 1025.28 1022.28 1019.24 1016.53 1011.40 1006.39 1005.86 1003.81 1001.51 998.49 995.72 995.74 996.18 999.25 999.35
1000 990 980 970
+1.17 % -2.83 %
EXIST. ℄ SURVEY AND CONST.
PROPOSED PROFILE
P.V.I. STA. = 510+00.00
P.V.I. ELEV. = 1002.70
1,900' V.C. SSD = 1012'
K=475
36" x 544' CONDUIT, TYPE A
503+00 504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00 515+00

PLAN AND PROFILE - S.R. 37
STA. 502+50 TO STA. 515+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

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MATCH LINE 515+00 S.R. 37 SEE SHEET 168

MATCH LINE 527+50 S.R. 37 SEE SHEET 170

SPRINT — WELL — GRAVEL — 24" — LA — SHRUBS — PIONEER PRODUCTS SIGN — ASPHALT — TWIN 12" — CONC. DITCH — 2-STY BLOCK BARN — LOT 37 — LOT 38 — LOT 39 — AEP (OVERHEAD) — LA-R/W — FIELD DR. — GRAVEL — ASPHALT — PICKET FENCE — CONSTRUCTION LIMITS — 15" CONDUIT — PICKET EENCE — CONC. WALK — WESTBOUND LANES — EASTBOUND LANES — S 82° 24' 26" E — ℄ SURVEY & CONST. S.R. 37 — ℄ SURVEY & CONST. C.R. 539A EXTENSION — CB-4, AP.P. — 1 STY FRAME GARAGE — AC UNIT — PROPANE — DECK — GATE — SHRUBS — BUSH — 2-STY WOOD BARN — FENCE — CONC. SILO — GRAVEL DR. — BASKETBALL HOOP — 1 STY WOOD HOUSE — WOOD GARAGE — CONDUIT — 524+25 CULVERT NO. 7 — 523+69 CULVERT NO. 7 — 42" CONDUIT, TYPE A — ℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD — BIRD HOUSE — P.T. STA. 515+86.18 — R/W — T ESMT — CONSTRUCTION LIMITS

516+00 517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00 525+00 526+00 527+00

R-1 R-2 R-3 R-4 R-5 R-6 R-7 R-8 R-9 R-10 R-11 E-1 E-2 E-3 E-4 D-1

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	72294 CU. YD.
203 EMBANKMENT	13368 CU. YD.
659 SEEDING AND MULCHING	21696 SQ. YD.

PROP. PROFILE GRADE

986.42 985.94 985.45 984.95 984.43 983.90 983.36 982.80 982.23 981.65 981.05 980.45 979.82 979.19 978.54 977.88 977.20 976.52 975.81 974.98 974.08 973.08 972.08 971.07 970.15 968.74 967.32 965.91 964.49 963.08 961.66 960.25 958.83 957.42 956.00 955.31 954.65 954.02 953.41

EXIST. PROFILE GRADE

999.35 997.72 997.43 995.94 995.01 994.73 995.34 994.78 994.17 990.14 985.31 978.05 971.74 966.66 963.49 961.09 958.78 957.04 954.89 951.62 955.55 957.89 956.16 952.88 950.67 950.56

980 970 960 950

EXIST. ℄ SURVEY AND CONST.

PROP. CB-4, AP.P.
STA. 515+00
GRATE ELEV. = 981.81
INV. 15" N = 979.80

P.V.I. STA. = 519+50.00
P.V.I. ELEV. = 975.82

P.V.I. STA. = 510+00.00
P.V.I. ELEV. = 1,002.70
1,900' V.C. 550 - 1012'
K=475

PROPOSED PROFILE

PROP. CB-4, AP.P.
STA. 524+00
GRATE ELEV. = 958.54
INV. 15" N = 955.50

42" x 335' CONDUIT, TYPE A

P.V.C. STA. = 526+50.00
P.V.C. ELEV. = 956.01

P.V.I. STA. = 530+00.00
P.V.I. ELEV. = 946.10
700' V.C.
K=210

AEP (CT.)

515+00 516+00 517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00 525+00 526+00 527+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 515+00 TO STA. 527+50

LIC-161-6.65
LIC-37-10.25

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MATCH LINE 527+50 S.R. 37
SEE SHEET 169

MATCH LINE 540+00 S.R. 37
SEE SHEET 171

GRAVEL
GATE
METAL BARN
ASPHALT DR.
GRAVEL DR.
OVERHEAD
SPRINT
METAL GUARDRAIL
CONSTRUCTION LIMITS
LA
LA-R/W
R/W
WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. C.R. 539A EXTENSION
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.
SEPTIC
WOOD BRIDGE
METAL POLE BARN
STONE WALL
T ESMT
84" CONDUIT, TYPE A
24" CONDUIT
12"
15"
18"
20"
24"
CB-4, AP.P.
296+06 CULVERT NO. 8
532+86 CULVERT NO. 8
532+36 CULVERT NO. 8
S 80° 18' 55" E
S 82° 24' 26" E
E-1
E-2
E-3
E-4
E-5
D-1
D-2
D-3
R-1
R-2
R-3

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	61578 CU. YD.
203 EMBANKMENT	24599 CU. YD.
659 SEEDING AND MULCHING	18648 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
P.V.I. STA. = 530+00.00
P.V.I. ELEV. = 946.10
700' V.C.
K=210
-2.83 %
+0.50 %
℄ EXIST. STA. = 533+50.00
P.V.I. ELEV. = 947.95
EXIST. ℄ SURVEY AND CONST.
PROPOSED PROFILE
84" x 43'
CONDUIT, TYPE A
PROP. CB-4, AP.P.
STA. 532+60
GRATE ELEV. = 943.10
INV. 21" S = 936.33
INV. 27" N = 935.83

953.41 952.84 952.30 951.78 951.30 950.84 950.42 950.02 949.66 949.32 949.01 948.74 948.49 948.27 948.09 947.93 947.80 947.64 947.60 947.59 947.61 947.66 947.74 947.85 948.10 948.35 948.60 948.85 949.10 949.35 949.60 949.85 950.10 950.35 950.60 950.85 951.10

950.56 944.61 942.76 942.61 943.69 944.18 942.64 941.99 941.41 940.92 940.05 939.18 939.54 946.18 954.46 962.13 967.37 969.66 968.09 969.05 968.00 964.22 961.96 959.05 959.37 962.41

528+00 529+00 530+00 531+00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00

960 950 940 930

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 527+50 TO STA. 540+00

LIC-161-6.65
LIC-37-10.25

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349

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PLAN AND PROFILE - S.R. 37
STA. 540+00 TO STA. 552+50

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

171
349

MATCH LINE 540+00 S.R. 37 SEE SHEET 170

MATCH LINE 552+50 S.R. 37 SEE SHEET 172

CONSTRUCTION LIMITS
FIELD
SEPTIC
PROPANE TANK
TV TOWER
ST. ALBANS TWP
GRANVILLE TWP
GRAVEL T ESMT
GRASS
1-STY FRAME
TEL. PED
AEP
SILO
1-1/2 STY METAL/BLOCK BARN
CONC. PAD
SPRINT
R/W
LA
℄ SURVEY & CONST. C.R. 539A EXTENSION
GRAVEL
YARD
E
AEP (OVERHEAD)
302+73.17 CULVERT NO. 9
303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00 314+00
P.C. STA. 312+13.68
P.T. STA. 314+74.64
14" CONC.
IMPACT ATTENUATOR TYPE 3-98
D-1
S 80° 18' 55" E
LA-R/W
CONCRETE BARRIER
22.83'
24.11'
BEGIN CONC. BARRIER TYPE A STA. 546+50.00, 90.11' LT.
B-1
WESTBOUND LANES
24'
6'
10'
18'
12'
END MEDIAN TAPER STA. 552+24.27, LT. & RT.
R-4
15" CONDUIT
PROP. TENSIONED CABLE GR.
BEGIN TERM.
541+00 542+00 543+00 544+00 545+00 546+00 547+00 548+00 549+00 550+00 551+00 552+00
S 82° 24' 26" E
540+24.46 CULVERT NO. 9
℄ SURVEY & CONST. S.R. 37
WOODS
BEGIN PROP. CABLE GR.
50'+/-
72'
+10
+92
E-1
7.5'
CB-4, AP.P.
+42
TREES
EASTBOUND LANES
R-1
R-2
BEGIN MEDIAN TAPER STA. 548+14.84, LT. & RT.
22'
R-3
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
540+26.19 CULVERT NO. 9
36" CONDUIT, TYPE A
SEPTIC AREA
2-STY FRAME
GRAVEL DR.
PROPANE TANK
ESMT

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	35462 CU. YD.
203 EMBANKMENT	5/342 CU. YD.
659 SEEDING AND MULCHING	13020 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
960 950 940 930

951.10 951.35 951.60 951.85 951.96 952.06 952.13 952.18 952.21 952.22 952.21 952.18 952.12 952.05 951.95 951.84 951.58 951.32 951.07 950.81 950.56 950.30 950.05 949.79 949.54 949.28 949.03 948.77 948.52 948.26 948.01 947.76

962.41 963.18 961.44 949.77 945.40 953.29 964.13 968.37 966.58 959.03 951.79 951.87 950.42 948.68 945.58 943.51 940.91 935.07 932.33 930.36 930.04 929.12 929.67 929.67 929.89 930.18

+0.50 % +0.50 % -0.51 % -0.51 %

PROPOSED PROFILE

P.V.C. STA. = 541+50.00
P.V.C. ELEV. = 951.85

P.V.I. STA. = 543+00.00
P.V.I. ELEV. = 952.60
300' V.C. S50 = 12.8'
K-297

P.V.T. STA. = 544+50.00
P.V.T. ELEV. 951.84

EXIST. ℄ SURVEY AND CONST.

PROP. CB-4, AP.P.
STA. 550+50
GRATE ELEV. = 944.66
INV. 15" N = 940.46

36" X 36' CONDUIT, TYPE A

SPRINT

540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+00 548+00 549+00 550+00 551+00 552+00

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MATCH LINE 552+50 S.R. 37 SEE SHEET 171

MATCH LINE 565+00 S.R. 37 SEE SHEET 173

4TH QUARTER TWP. LOT 4 ST. ALBANS TWP. 3RD QUARTER GRANVILLE TWP.

WETLAND
TOTAL AREA = 3.067 AC.
DISTURBED AREA = 0.000 AC.

PROP. FUTURE 10" GAS LINE

6" ASHLAND OIL PIPELINE

CONSTRUCTION LIMITS

EXIST. UTILTY EASEMENT

WOODS

SPRINT

AEP (OVERHEAD)

WIRE FENCE

EX. 4'x6' CONC. PIPE

GATE

ESMT

P.C. STA. 321+76.51

P.T. STA. 323+33.91

LOT 29

LOT 28

℄ SURVEY & CONST. C.R. 539A EXTENSION

316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00

S 81° 37' 13" E

S 82° 24' 26" E

EX. CB

LA-R/W

CONCRETE BARRIER

WESTBOUND LANES

INLET NO.3 TYPE A

15" CONDUIT

553+00 554+00 555+00 556+00 557+00 558+00 559+00 560+00 561+00 562+00 563+00 564+00 565

℄ SURVEY & CONST. S.R.37

CB-4, AP.P.

PROP. TENSIONED CABLE GR.

558+19 CULVERT # 10

END MEDIAN TAPER STA. 560+04.84, 25' LT. & RT.

END TERM. 50'+/-

END PROP. CABLE GR.

EASTBOUND LANES

TREES

CB-8, AP.P.

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

558+30 CULVERT NO. 10

54" CONDUIT, TYPE A

STA. 565+00.00 MEDIAN CROSSING

℄ SURVEY & CONST. MORSE ROAD STA. 18+49.92

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD STA. 561+59.63

R/W

CONSTRUCTION LIMITS

S.T. STA. 17+11.60

N 05° 54' 12" E

18"

30"

24"

℄ SURVEY & CONST. MORSE ROAD

PASTURE

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	17868 CU. YD.
203 EMBANKMENT	45667 CU. YD.
659 SEEDING AND MULCHING	8872 SQ. YD.

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

947.76 947.50 947.24 946.99 946.73 946.48 946.22 945.97 945.71 945.46 945.20 944.95 944.69 944.44 944.18 943.93 943.67 943.42 943.16 942.91 942.65 942.40 942.14 941.89 941.63 941.38

950 940 930 920

PROPOSED PROFILE

EXIST. ℄ SURVEY AND CONST.

PROP. CB-4, AP.P.
STA. 558+18.51
GRATE ELEV. = 941.27
INV. 54" N = 926.82
INV. 54" S = 926.62

-0.51 %

54" x 326' CONDUIT, TYPE A

PROP. CB-4, AP.P.
STA. 564+68, 3.00' LT.
GRATE ELEV. = 938.43
INV. 15" E = 933.66

930.18 930.29 930.66 931.60 931.84 932.25 932.60 932.63 932.99 933.26 933.33 932.87 936.18 937.89 938.37 939.81 941.38 942.69 945.66 948.35 952.43 953.02 952.03 950.54 948.08 944.38

553+00 554+00 555+00 556+00 557+00 558+00 559+00 560+00 561+00 562+00 563+00 564+00 565+00

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED JMA CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 552+50 TO STA. 565+00

LIC-161-6.65
LIC-37-10.25

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SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	3107 CU. YD.
203 EMBANKMENT	17354 CU. YD.
659 SEEDING AND MULCHING	7899 SQ. YD.

ITEM 203: GRANULAR MATERIAL, TYPE B 11320 CY
ITEM 601: ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER 695 CY
TOTAL CARRIED TO ROADWAY SUBSUMMARY

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

MATCH LINE 565+00 S.R. 37 SEE SHEET 172

MATCH LINE 577+50 S.R. 37 SEE SHEET 174

STA. 565+00.00 MEDIAN CROSSING

℄ SURVEY & CONST. C.R. 539A EXTENSION

℄ SURVEY & CONST. EASTBOUND LANES S.R. 37

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

WETLAND
TOTAL AREA= 2.96 AC.
DISTURBED AREA= 0.299 AC.

P.C. STA. 333+88.38

P.C. STA. 571+38.22

P.C. STA. 571+33.81

P.T. STA. 338+64.44

P.T. STA. 576+01.20

S 82° 24' 26" E

S 76° 33' 53" E

WESTBOUND LANES

CONCRETE BARRIER

21" CONDUIT

21" CONDUIT TYPE 5 GUARDRAIL

CONCRETE INLET NO. 3

15" CONDUITS

15" CONDUIT

15" CMP

BEGIN PROP. CABLE GR.

END PROP. CABLE GR.

END TERM. 50'+/-

EX. 6½'x4' CATTLE CROSSING

TYPE 5 GUARDRAIL

PROP. FUTURE 6" GAS LINE

PROP. FUTURE 10" GAS LINE

CONSTRUCTION LIMITS

STA. 573+59.24, 5' RT.
BEG. TYPE I BRG. TERM. ASSM.

STA. 573+90.49, 5' RT.
END TYPE I BRG. TERM. ASSM.

EXIST. UTILITY EASEMENT

STA. 575+87.05, 5' LT.
END TYPE I BRG. TERM. ASSM.

STA. 576+18.30, 5' LT.
BEG. TYPE I BRG. TERM. ASSM.

STA. 571+65.24, 5' RT.
BEG. TYPE I-98 IMP. ATT.

STA. 571+96.74, 5' RT.
END TYPE I-98 IMP. ATT.

STA. 570+45.45, 61' RT.
BEG. TYPE E-98 ANCH. ASSM.

STA. 570+95.45, 61' RT.
END TYPE E-98 ANCH. ASSM.

STA. 573+57.95, 61' RT.
BEG. TYPE I BRG. TERM. ASSM.

STA. 573+89.20, 61' RT.
END TYPE I BRG. TERM. ASSM.

S.R. 37 CURVE DATA
P.I. STA. = 573+72.12
Δ = 05° 50' 33" (RT)
Dc = 01° 15' 00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'
emax = 0.044

(A) STA. 575+86.15, 61' RT. BEG. TYPE 2 BRG. TERM. ASSM.

(B) STA. 576+11.15, 61' RT. END TYPE 2 BRG. TERM. ASSM.

CB-3A, A.P.P.
CB-4, A.P.P.
CB-4A, A.P.P.
CB-4, A.P.P.

1-STY WOOD BARN
2-STY WOOD BARN
CONC. PAD
WATER LINE
GRASS DRIVE
GRAVEL DR.
GRAVEL
PASTURE
TREES
WELL
CHIMNEY
CREEK
WIRE FENCE
AEP
AEP (OVERHEAD)
LA
LA-R/W
R/W
T ESMT
E ESMT
CONDUIT
GRASS

PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE ABUTMENTS AND PIERS
SPANS: 46'-0", 57'-6", 46'-0" C/C SUPPORT ALONG REFERENCE CHORD
ROADWAY: 56'-0" LEFT/56'-0" RIGHT
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°00'00" TO REFERENCE CHORD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: CURVE RIGHT
SUPERELEVATION: 0.044 MAX.
LATITUDE: 40°04'20" N
LONGITUDE: 82°33'45" W

PROPOSED PROFILE
EXIST. ℄ SURVEY AND CONST.
AEP (ALT.)
WATER LINE
-0.51 %

PROP. CB-4, AP.P.
STA. 565+50, 1.24' RT
GRATE ELEV. = 937.56
INV. 15" W = 930.32
INV. 15" N = 930.52

PROP. CB-4, AP.P.
STA. 571+00, 1.11' LT
GRATE ELEV. = 935.40
INV. 15" E = 932.40

PROP. CB-4, AP.P.
STA. 573+50, 3.35' LT
GRATE ELEV. = 934.42
INV. 15" W = 931.42
INV. 18" S = 924.50
INV. 21" N = 924.33

BRIDGE LIMITS = 150.75'
+13.51'
+64.26'

PROP. CB-3A, AP.P.
STA. 576+20.15, 5.00' LT
GRATE ELEV. = 934.88
INV. 15" S = 931.54

PROP. CB-3A, AP.P.
STA. 576+21.62, 61.00' RT
GRATE ELEV. = 934.48
INV. 15" N = 929.76
INV. 15" S = 929.76

HW100 EL. 926.00
HW50 EL. 925.40

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

941.38 941.12 940.87 940.61 940.36 940.10 939.85 939.59 939.34 939.08 938.83 938.57 938.32 938.06 937.81 937.55 937.30 937.04 936.79 936.53 936.28 936.02 935.77 935.51 935.26 935.00

944.38 940.10 937.80 936.57 936.48 936.47 936.42 936.31 935.95 935.44 934.77 933.96 932.94 931.51 931.10 929.00 927.42 926.04 925.65 923.75 918.70 922.47 921.95 921.28 921.46 922.05

950 940 930 920

565+00 566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00 574+00 575+00 576+00 577+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 565+00 TO STA. 577+50

LIC-161-6.65
LIC-37-10.25

173
1349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)
203 EXCAVATION 698 CU. YD.
203 EMBANKMENT 56535 CU. YD.
659 SEEDING AND MULCHING 10999 SQ. YD.

STA. 577+80.80, 5' LT. BEG. TYPE I-98 IMP. ATT.
STA. 578+12.30, 5' LT. END TYPE I-98 IMP. ATT.
PROP. FUTURE 6" GAS LINE
EXIST. UTILTY EASEMENT
PROP. FUTURE 10" GAS LINE
TYPE 5 GUARDRAIL
CONSTRUCTION LIMITS
10" ASHLAND OIL PIPELINE (TO BE REMOVED BY OTHERS)
℄ SURVEY & CONST. C.R. 539A EXTENSION
LOT 26
LOT 25
T ESMT
R/W
AEP (OVERHEAD)
347+09 CULVERT NO. 12
351+63.50 CULVERT NO. 22
MATCH LINE 577+50 S.R. 37 SEE SHEET 173
MATCH LINE 590+00 S.R. 37. SEE SHEET 175
BEGIN PROP. CABLE GR.
50'+/- BEGIN TERM.
WESTBOUND LANES
PROP. TENSIONED CABLE GR.
584+50 CULVERT NO. 12
24" CONDUIT, TYPE A
CONCRETE BARRIER
S 76° 33' 53" E
CULVERT NO. II
℄ SURVEY & CONST. S.R. 37
CB-4, AP.P.
EASTBOUND LANES
589+29.00 CULVERT NO. 22
P.O.T. STA. 584+40.00
WOOD POST
WIRE FENCE
TREES & WOODS
LANDSCAPING
GATE
SHRUBS
GRAVEL
WELL
SEPTIC
2-STY FRAME
SHED
PROPANE TANK
GOLF COURSE
SAND TRAP
ELEC. METER
SPLIT RAIL
SIGN
ASHMONT DR.
WOOD FENCE
1½ STY WOOD BARN
TREES
PINES
GRASS
WETLAND
TOTAL AREA= 0.274 AC.
DISTURBED AREA= 0.014 AC.
RAISED FLOWER BEDS
36" CONDUIT, TYPE A TO BE ABANDONED & REMOVED BY OTHERS
EXIST. UTILTY EASEMENT
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
℄ CONST. & SURVEY S.R. 37 STA. 583+95.56 RT. = ℄ CONST. & SURVEY OUTVILLE-MORSE FRONTAGE RD. STA. 583+86.18

(A) STA. 584+61.15, 61' RT. BEG. TYPE T ANCH. ASSM.

(B) STA. 584+73.65, 61' RT. END TYPE T ANCH. ASSM.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
-0.51 %
PROP. CB 4, AP.P. STA. 583+00 GRATE ELEV. = 929.09 INV. 15" N = 923.88
36" x 88ft CONDUIT, TYPE A
GAS LINE
24" x 229' CONDUIT, TYPE A
AEP LINE
PROPOSED PROFILE
P.V.C. STA.=588+75.00 P.V.C. ELEV.=929.27
P.V.I. STA.=590+00.00 P.V.I. ELEV.=928.64 250' V.C. K=962
EXIST. ℄ SURVEY AND CONST.
36" CONC.
GAS LINE
CONDUIT, TYPE A

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HORIZONTAL SCALE IN FEET 0 25 50 100
CALCULATED JMA CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 577+50 TO STA. 590+00

LIC-161-6.65
LIC-37-10.25

174
1349

EXIST. UTILTY EASEMENT
10" ASHLAND OIL PIPELINE
R/W
CONSTRUCTION LIMITS
18" CONDUIT
INLET NO. 3
CONCRETE BARRIER
15" CONDUIT
CB-4, AP.P.
CONSTRUCTION LIMITS
WETLAND
TOTAL AREA= 0.274 AC.
DISTURBED AREA= 0.014 AC.
P.S. STA. 356+04.70
S.C. STA. 357+63.70
LOT 25
LOT 24
AEP (OVERHEAD)
IMPACT ATTENUATER, TYPE 3-98
STA. 596+90.00 END CONC. BARRIER TYPE C
SM ESMT
12" CONDUIT
TREES & WOODS
TREES & DENSE BRUSH
S.T. STA. 363+97.34
C.S. STA. 362+38.34
N 84° 25' 33" E
GRASS FIELD
GRAVEL
TREES DENSE BRUSH
4' WIRE FENCE
ASPHALT PILE
ASPHALT
INLET NO. 3
GRASS FIELD
℄ SURVEY & CONST. C.R. 539A EXTENSION
WESTBOUND LANES
EASTBOUND LANES
PROP. TENSIONED CABLE GR.
GRASS FIELD
S 76° 33' 53" E
℄ SURVEY & CONST. S.R. 37
CB-4, AP.P.
15" CONDUIT
WETLAND
TOTAL AREA= 7.085 AC.
DISTURBED AREA= 0.499 AC.
4' WIRE FENCE
TREES
SWAMP
MATCH LINE 590+00 S.R. 37 SEE SHEET 174
MATCH LINE 602+50 S.R. 37 SEE SHEET 176

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	791 CU. YD.
203 EMBANKMENT	30579 CU. YD.
659 SEEDING AND MULCHING	15458 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
940
930
920
910
P.V.I. STA.=590+00.00
P.V.I. ELEV.=928.63
250' V.C.
K=962
℄ P.V.I. STA.=591+25.00
P.V.I. ELEV.=928.32
0.25 %
-0.25 %
PROPOSED PROFILE
PROP. CB-4, AP.P.
STA. 591+00
GRATE ELEV. = 925.25
INV. 15" N = 920.06
EXIST. ℄ SURVEY AND CONST
PROP. CB-4, AP.P.
STA. 599+00
GRATE ELEV. = 925.25
INV. 15" S = 918.06
928.71 928.62 928.53 928.46 928.38 928.25 928.13 928.00 927.88 927.75 927.63 927.50 927.38 927.25 927.13 927.00 926.88 926.75 926.63 926.50 926.38 926.25 926.13 926.00 925.88 925.75 925.63 925.50
922.69 922.99 923.48 923.74 923.50 923.60 923.91 923.23 923.65 922.65 922.58 922.31 922.27 922.25 922.13 922.13 922.27 922.45 922.91 924.06 923.83 923.74 923.59 922.41 920.98 920.88
590+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+00 599+00 600+00 601+00 602+00

PLAN AND PROFILE - S.R. 37
STA. 590+00 TO STA. 602+50
LIC-161-6.65
LIC-37-10.25
HORIZONTAL SCALE IN FEET
CALCULATED JMA
CHECKED FJA
175
1349

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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR STREAM RELOCATION DETAILS SEE SHEETS 1079-1099.

MATCH LINE 602+50 S.R. 37 SEE SHEET 175

MATCH LINE 615+00 S.R. 37 SEE SHEET 177

AEP (OVERHEAD)
TREES DENSE BRUSH
CH ESMT
10" ASHLAND OIL PIPELINE
SAND
STA. 603+30.00, 61' LT. BEG. TYPE T ANCH. ASSM.
STA. 603+42.50, 61' LT. END TYPE T ANCH. ASSM.
EXIST. UTILITY EASEMENT
RACCOON CREEK
STA. 611+05.00, 61' RT. END TYPE E-98 ANCH. ASSM.
STA. 610+55.00, 61' RT. BEG. TYPE E-98 ANCH. ASSM.
LOT 23
LOT 22
TREES BRUSH
T ESMT
TREES, BRUSH
CONSTRUCTION LIMITS
TYPE 5 GUARDRAIL
END PROP. CABLE GR.
15" CONDUIT
GRASS FIELD
WESTBOUND LANES
PROP. TENSIONED CABLE GR.
END TERM. 50'+/-
200' 50:1 TAPER
603+00 604+00 605+00 606+00 607+00 608+00 609+00 610+00 611+00 612+00 613+00 614+00
CB-4, AP.P.
℄ SURVEY & CONST. S.R. 37
S 76° 33' 53" E
50'+/- BEGIN TERM.
BEGIN PROP. CABLE GR.
EASTBOUND LANES
WETLAND
TOTAL AREA= 7.085 AC.
DISTURBED AREA= 0.499 AC.
℄ STREAM RELOCATION
EX. 42" CONC. PIPE
4' WIRE FENCE
ASPHALT DR.
GATE
6' CHAINLINK
GRASS
WETLAND
TOTAL AREA= 0.139 AC.
DISTURBED AREA= 0.000 AC.
GRAVEL DR.
SMALL TREES
P.C. STA. 612+71.61

S.R. 37 CURVE DATA
P.I. STA. = 617+41.76
Δ = 13° 43' 30" (RT)
Dc = 01° 28' 00"
R = 3,906.55'
T = 470.15'
L = 935.80'
E = 28.19'
e_{max} = 0.051

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	4536 CU. YD.
203 EMBANKMENT	24747 CU. YD.
659 SEEDING AND MULCHING	17031 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
930
920
910
900
925.50 925.38 925.25 925.13 925.00 924.88 924.75 924.63 924.50 924.38 924.25 924.13 924.00 923.88 923.75 923.63 923.50 923.38 923.25 923.13 923.00 922.88 922.75 922.63 922.50 922.38
920.88 920.57 920.98 920.72 921.62 921.80 921.69 921.18 921.53 921.67 921.54 921.73 921.99 921.05 922.19 922.24 922.57 922.71 922.90 922.87 922.83 923.42 923.46 923.43 923.26 923.00
603+00 604+00 605+00 606+00 607+00 608+00 609+00 610+00 611+00 612+00 613+00 614+00 615+00

PROPOSED PROFILE
0.25 %
EXIST. ℄ SURVEY AND CONST.
PROP. CB-4, AP.P.
STA. 607+00
GRATE ELEV. = 921.37
INV. 15" N = 918.06
EX. 42" CONC. PIPE
AEP

PLAN AND PROFILE - S.R. 37
STA. 602+50 TO STA. 615+00

LIC-161-6.65
LIC-37-10.25

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

176
1349

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NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

MATCH LINE 615+00 S.R. 37 SEE SHEET 176

MATCH LINE 627+50 S.R. 37 SEE SHEET 178

CONSTRUCTION LIMITS

CH ESMT — WOODS — CH ESMT — CH ESMT — WOODS

RACCOON CREEK

AEP (OVERHEAD) E — LOT 22 — LOT 21

T ESMT — T ESMT — GRASS FIELD — 4' WIRE FENCE

SH. ESMT — LA — LA — 4' WIRE FENCE

WESTBOUND LANES — 24' — 6' — 44' — 6' — 45' — 24'

EASTBOUND LANES

PROP. TENSIONED CABLE GR.

15" CONDUIT

CB-4, AP.P.

℄ SURVEY & CONST. S.R. 37

616+00 617+00 618+00 619+00 620+00 621+00 622+00 623+00 624+00 625+00 626+00 627+00

623+40 CULVERT # 13

S 62° 50' 23" E

90" CONDUIT, TYPE A

15" CONDUIT — 192' — 38'

P.T. STA. 622+07.41

4' WIRE FENCE

GRASS

CONSTRUCTION LIMITS

R-1 R-2 R-3 R-4 R-5 D-1 D-2 E-1 E-2

TREES BRUSH — TREES BRUSH — WOODS HEAVY BRUSH

AEP — AEP — E — (OVERHEAD)

WETLAND
TOTAL AREA = 0.259 AC.
DISTURBED AREA = 0.013 AC.

S.R. 37 CURVE DATA
P.I. STA. = 617+41.76
Δ = 13° 43' 30" (RT)
Dc = 01° 28' 00"
R = 3,906.55'
T = 470.15'
L = 935.80'
E = 28.19'
e_{max} = 0.05↓

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	11452 CU. YD.
203 EMBANKMENT	16816 CU. YD.
659 SEEDING AND MULCHING	16261 SQ. YD.

PROP. PROFILE GRADE — EXIST. PROFILE GRADE

922.38 922.25 922.13 922.00 921.88 921.75 921.63 921.50 921.38 921.25 921.13 921.00 920.88 920.75 920.63 920.50 920.38 920.25 920.13 920.00 919.88 919.75 919.63 919.50 919.38 919.25

923.00 922.73 922.71 922.76 922.62 922.19 922.58 922.44 922.36 922.01 921.66 921.44 921.11 920.96 920.88 920.81 920.70 920.49 920.30 920.19 919.68 919.43 918.98 919.17 918.99 919.21

930 920 910 900

EXIST. ℄ SURVEY AND CONST.

-0.25 %

AEP LINE

PROPOSED PROFILE

PROP. CB-4, AP.P.
STA. 615+00
GRATE ELEV. = 919.25
INV. 15" NE = 915.18

PROP. CB-4, AP.P.
STA. 623+00
GRATE ELEV. = 917.25
INV. 15" SW = 913.06

90" x 222' CONDUIT, TYPE A

615+00 616+00 617+00 618+00 619+00 620+00 621+00 622+00 623+00 624+00 625+00 626+00 627+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - S.R. 37
STA. 615+00 TO STA. 627+50

LIC-161-6.65
LIC-37-10.25

177
1349

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MATCH LINE 627+50 S.R. 37
SEE SHEET 177

MATCH LINE 640+00 S.R. 37
SEE SHEET 179

RACCOON CREEK
CH ESM1
WOODS
FIELD
GRASS FIELD
CONSTRUCTION LIMITS
4' WIRE FENCE
LA
AEP
SH ES
COLUMBIA GAS 24"
COLUMBIA GAS 16"
ASPHALT DR.
LOT 19
LOT 20
LOT 21
CONDUIT
PROP. TENSIONED CABLE GR.
WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 37
S 62° 50′ 23″ E
CB-4, AP.P.
GRAVEL DR.
+50.00 18′ COMM. DR. (GRAVEL)
BUSH
BRUSH
TREES
TREES & BRUSH
OVERHEAD 69 KV ELECTRIC LINE
10″
6″
2-3″
628+00 629+00 630+00 631+00 632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00

R-1 R-2 R-3 R-4 R-5 R-6 R-7 R-8
D-1 D-2
E-1 E-2 E-3

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-968.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR DRIVEWAY PROFILES SEE SHEETS 931-937.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	14101 CU. YD.
203 EMBANKMENT	18680 CU. YD.
659 SEEDING AND MULCHING	20465 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

919.25 919.13 919.00 918.88 918.75 918.63 918.50 918.38 918.25 918.19 918.14 918.09 918.07 918.05 918.05 918.06 918.09 918.13 918.18 918.32 918.47 918.62 918.76 918.91 919.06 919.20 919.35 919.50 919.65 919.79 919.94

919.21 918.74 918.52 918.25 918.12 917.90 917.68 917.72 917.30 916.96 916.86 917.30 916.80 917.91 916.51 916.57 916.95 916.93 916.24 916.00 916.11 918.53 914.37 914.26 914.45 914.65 914.97

930
920
910
900

P.V.I. STA. = 633+00.00
P.V.I. ELEV. = 917.88
250′ V.C.
K=463
P.V.C. STA. = 631+75.00
P.V.C. ELEV. = 918.19
P.V.T. STA. = 634+25.00
P.V.T. ELEV. = 918.26
+0.25 %
-0.25 %
+0.29 %
PROPOSED PROFILE
EXIST. ℄ SURVEY AND CONST.
PROP. CB-4, AP.P.
STA. 632+89.82
GRATE ELEV. = 914.53
INV. 18″ NE = 911.48
24″ COLUMBIA GAS
16″ COLUMBIA GAS

628+00 629+00 630+00 631+00 632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00

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CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE - S.R. 37
STA. 627+50 TO STA. 640+00

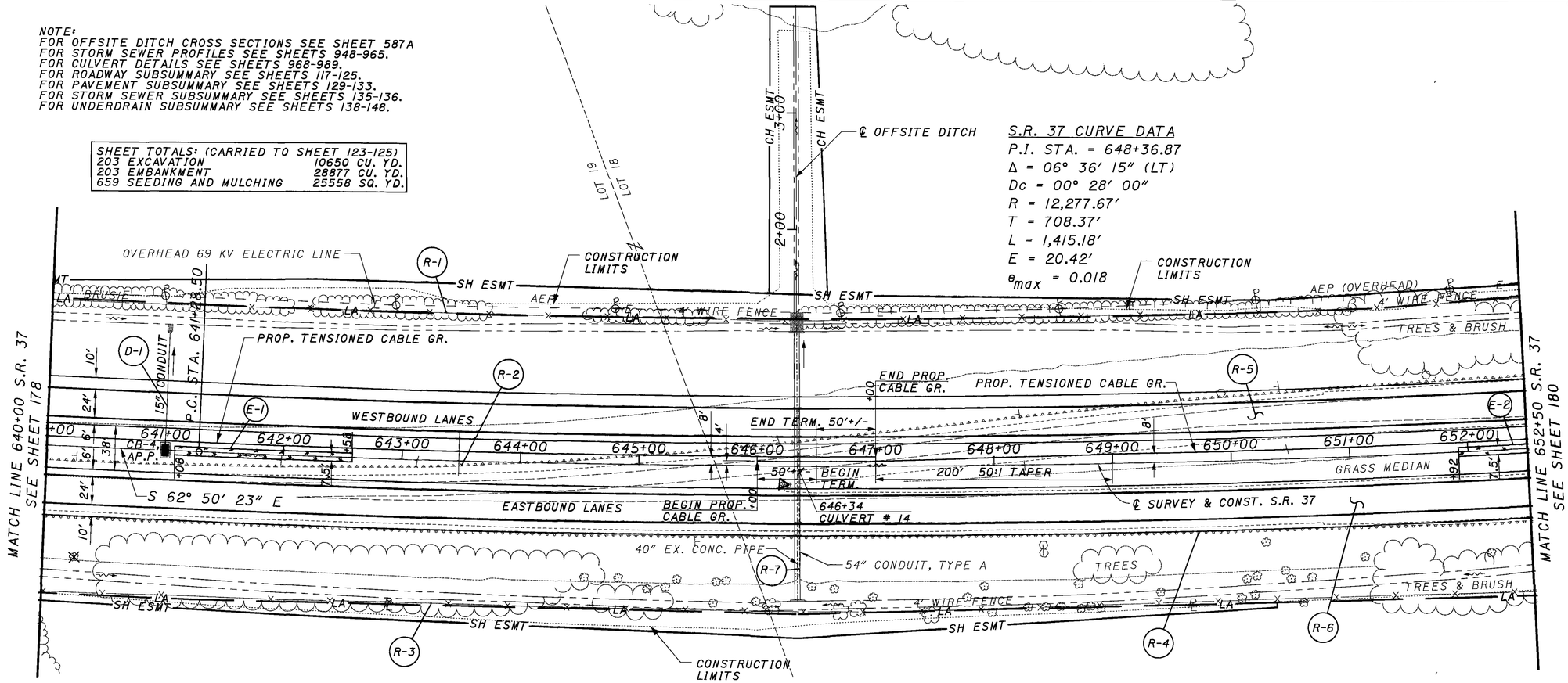
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LIC-37-10.25

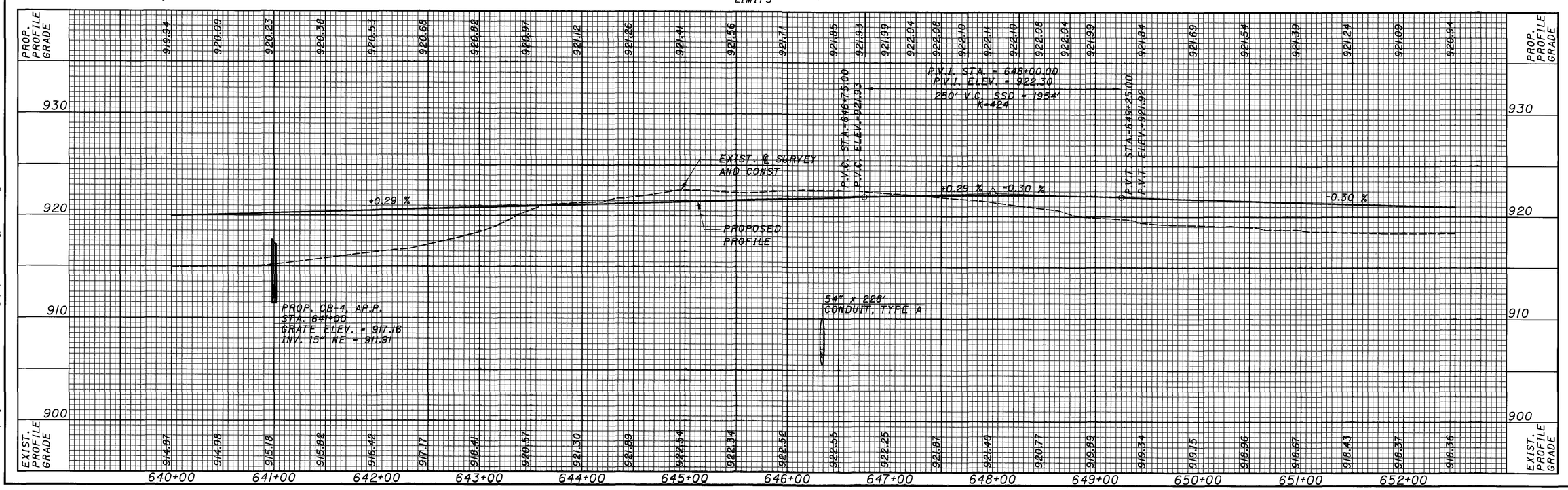
178
1349

NOTE:
FOR OFFSITE DITCH CROSS SECTIONS SEE SHEET 587A
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	10650 CU. YD.
203 EMBANKMENT	28877 CU. YD.
659 SEEDING AND MULCHING	25558 SQ. YD.

S.R. 37 CURVE DATA
P.I. STA. = 648+36.87
Δ = 06° 36′ 15″ (LT)
Dc = 00° 28′ 00″
R = 12,277.67′
T = 708.37′
L = 1,415.18′
E = 20.42′
e_{max} = 0.018





PLAN AND PROFILE - S.R. 37
STA. 640+00 TO STA. 652+50

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

179
1349

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END PROJECT
STA. 654+00.00
S.L.M. 12.39

BEGIN RESURFACING

E040 (452)

BEGIN PVMT. TRANSITION
BEGIN SHLD. TRANSITION
STA. 653+25.00 (LT. & RT.)

CONSTRUCTION LIMITS

STA. 653+87.50, 64.00' LT.
BEGIN TYPE T ANCH. ASSM.

STA. 654+00.00, 64.00' LT.
END TYPE T ANCH. ASSM.

STA. 654+00.00, 62.00' RT.
END TYPE E-98 ANCH. ASSM.

STA. 653+50.00, 62.00' RT.
BEGIN TYPE E-98 ANCH. ASSM.

SOY BEAN FIELD

AEP
OVERHEAD 69 KV ELECTRIC LINE

WOODS
TREES & BRUSH

LOT 18
LOT 17
LOT 17
LOT 16

4' WIRE FENCE
SW ESMT
LA
R-3
R-2
GR-2
10'
7.5'
24'
15" CONDUIT
D-1
653+00
654+00
655+00
656+00
657+00
658+00
659+00
660+00
661+00
662+00
663+00
664+00
P.T. STA. 655+43.68
PROP. TENSIONED CABLE GR.
END PROP. CABLE GR.
EX. GUARDRAIL (TO REMAIN)
CONST. LIMITS
WESTBOUND LANES
EX. CB
CB-4, AP.P.
END TERM. 50'+/-
S 69° 26' 38" E
℄ SURVEY & CONST. S.R. 37
EASTBOUND LANES
OVERHEAD SIGN ROUTE/DIRECTIONAL
E-1
R-1
R-4
GR-1
60" CONC.
8'
42"
12"
9'
4'
TREES & BRUSH

SEE SHEET 179
MATCH LINE 652+50 S.R. 37

MATCH LINE 665+00 S.R. 37
SEE SHEET 180A

END WORK & RESURFACING
STA. 662+00.00
S.R. 37

S.R. 37 CURVE DATA
P.I. STA. = 648+36.87
Δ = 06° 36' 15" (LT)
Dc = 00° 28' 00"
R = 12,277.67'
T = 708.37'
L = 1,415.18'
E = 20.42'
e_{max} = 0.018

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	1442 CU. YD.
203 EMBANKMENT	1004 CU. YD.
659 SEEDING AND MULCHING	3315 SQ. YD.



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HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

S.R. 37 - PLAN AND PROFILE
STA. 652+50 TO STA. 665+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

NOTE:
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-134.

SEE SHEET 180
MATCH LINE 665+00 S.R. 37

MATCH LINE 677+50 S.R. 37
SEE SHEET 180B

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 37

S 69° 26′ 38″ E

EX. GUARDRAIL (TO REMAIN)

CONSTRUCTION LIMITS

SALT RUN

MEP (OVERHEAD)

8′ 24′ 4′ 42′

+00 666+00 667+00 668+00 669+00 670+00 671+00 672+00 673+00 674+00 675+00 676+00 677+00

PROP. PROFILE GRADE: 919.05 918.92 918.78 918.64 918.58 918.52 918.51 918.55 918.89 919.20 919.39 919.59 919.86 920.15 920.58 921.01 921.43 921.84 922.28 922.65 922.50 922.51 923.66 924.72 925.17

EXIST. PROFILE GRADE: 916.36 916.13 916.06 916.20 916.20 915.55 916.27 916.82 917.82 918.26 918.11 918.60 919.60 920.30 920.54 920.23 920.32 918.98 919.34 919.86 920.87 921.33 922.18 922.18 922.43

930 920 910 900

666+00 667+00 668+00 669+00 670+00 671+00 672+00 673+00 674+00 675+00 676+00 677+00

S.R. 37 - PLAN AND PROFILE
STA. 665+00 TO STA. 677+50 S.R. 37

HORIZONTAL SCALE IN FEET: 0 25 50 100

CALCULATED JMA
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

180A
349

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END WORK & RESURFACING STA. 679+00.00 S.R. 37

SEE SHEET 180A MATCH LINE 677+50 S.R. 37

℄ SURVEY & CONST. S.R. 37

CONSTRUCTION LIMITS

8'

24'

4'

42'

WESTBOUND LANES

EASTBOUND LANES

AEP (OVERHEAD)

10" ASHLAND PIPELINE

AEP

E

G

W

TENNIS COURT

678+00 679+00 680+00 681+00 682+00 683+00 684+00 685+00 686+00 687+00 688+00 689+00

S 69° 26' 38" E

P.O.T. STA. 689+35.30

NOTE:
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-134.

PROP. PROFILE GRADE

925.89 925.90 926.31

930 920 910 900

EXIST. PROFILE GRADE

922.61 922.85 923.21

678+00 679+00 680+00 681+00 682+00 683+00 684+00 685+00 686+00 687+00 688+00 689+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

S.R. 37 - PLAN AND PROFILE
STA. 677+50.00 TO STA. 689+35.30 S.R. 37

LIC-161-6.65
LIC-37-10.25

180B
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
5	116		
		5	107
0	0		
0	0		
0	0		
0	0		
		5	107

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 350+00 TO STA. 351+50 RT.

LIC-161-6.65
LIC-37-10.25

181
1349

ITEM 206 CEMENT STABILIZATION

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W
8:1
EX. TEL.
EX. TEL.
99.1' RT
E=1069.7
1072.95
351+50.00
1075.87

STA. 351+00 (AHEAD)

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W
8:1
6:1
7.5:1
EX. TEL.
EX. TEL.
94.1' RT
E=1070.1
4.9'
1073.53
351+00.00
1073.53

EX. LA R/W
PROP. LA R/W
EX. TEL.
1074.13
350+50.00

EX. LA R/W
PROP. LA R/W
EX. TEL.
1074.78
350+00.00

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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182 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 350+00 TO STA. 351+50 LT.

CALCULATED JMA
CHECKED BER

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		180	0		
				269	4
		111	4		
				157	35
		59	34		
				59	139
SHEET TOTAL				485	178

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 352+00 TO STA. 353+00 RT.

LIC-161-6.65
LIC-37-10.25

183
1349

50 100 150 200 250

1100 1090 1080 1070 1060 1050

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W

8:1

103.6' RT
E=1067.4

1071.23
353+00.00
1079.15

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W

8:1

102.0' RT
E=1068.2

1071.80
352+50.00
1077.35

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W

8:1

EX. TEL.

100.4' RT
E=1068.9

1072.38
352+00.00
1076.64

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

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SEEDING	
END WIDTH	SQ. YDS.
28	
	150
26	
	142
25	
	133
	425

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1100 1090 1080 1070 1060 1050

PROP. LA R/W

1071.23
353+00.00
1079.15

PROP. LA R/W

1071.80
352+50.00
1077.35

PROP. LA R/W

1072.38
352+00.00
1076.64

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 352+00 TO STA. 353+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
387	0		
		632	0
296	0		
		504	0
248	0		
		396	0
		1532	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 353+50 TO STA. 354+50 RT.

LIC-161-6.65
LIC-37-10.25

185
1349

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1

2.0' RT
E=1065.0
1059.50
354+50.00
1087.52

105.6' RT
E=1065.4

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1

105.5' RT
E=1066.0
1070.08
354+00.00
1084.72

PROP. CB-4, A.P.P.
STA. 355+00.00
GRATE ELEV. = 1066.20
INV. 15" SW = 1060.75

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W

8:1

2.9' RT
E=1066.2
1070.65
353+50.00
1082.20

105.2' RT
E=1066.6

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHEET 948

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
64	
	261
30	
	164
29	
	158
	583

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1100 1090 1080 1070 1060 1050

PROP. LA R/W

EX. LA R/W

1069.50
354+50.00
1087.52

PROP. LA R/W

EX. LA R/W

1070.08
354+00.00
1084.72

PROP. LA R/W

PROP. CB-4, A.P.P.
STA. 355+00.000
GRATE ELEV. = 1066.20
INV. 15" SW = 1060.75

1070.65
353+50.00
1082.20

FOR ADDITIONAL INFORMATION
SEE STORM SEWER PROFILE SHEET 948

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 353+50 TO STA. 354+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		699	0		
				1199	0
		596	0		
				1000	0
		484	0		
				806	0
SHEET TOTAL				3005	0

℄ 50 100 150 200 250

1100 1090 1080 1070 1060 1050 1040

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
℄=1063.3
1067.78
356+00.00
1076.53

105.6' RT
℄=1063.7

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
℄=1063.9
1068.35
355+50.00
1079.25

105.7' RT
℄=1064.2

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

105.6' RT
℄=1064.8
1068.93
355+00.00
1083.34

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL 50 100 150 200

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 355+00 TO STA. 356+00 RT.

LIC-161-6.65
LIC-37-10.25

187
1349

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SEEDING	
END WIDTH	SQ. YDS.
72	
	378
64	
	356
64	
	356
1090	SHEET TOTAL

250 200 150 100 50 ℄

PROP. R/W

PROP. LA R/W

EX. LA R/W

BEGIN WORK WESTBOUND
STA. 356+00.00

1067.78
356+00.00
1076.53

PROP. R/W

PROP. LA R/W

EX. LA R/W

1068.35
355+50.00
1079.25

PROP. R/W

PROP. LA R/W

EX. LA R/W

1068.93
355+00.00
1083.34

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1100 1090 1080 1070 1060 1050 1040

200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 355+00 TO STA. 356+00 LT.

LIC-161-6.65
LIC-37-10.25

188
1349

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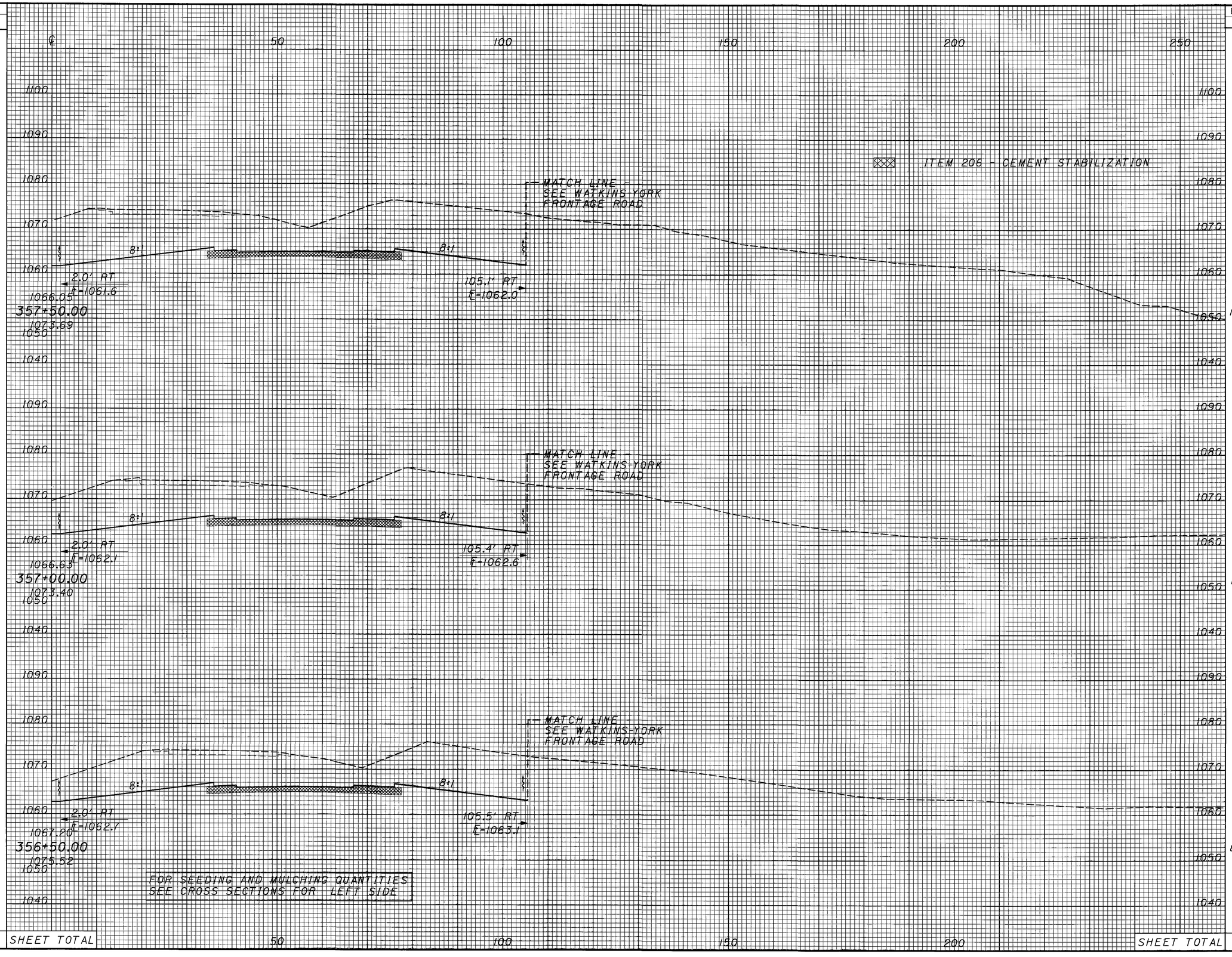
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1129	0		
		1981	0
1011	0		
		1713	0
839	0		
		1424	0
		5118	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 356+50 TO STA. 357+50 RT.

LIC-161-6.65
LIC-37-10.25



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SEEDING END WIDTH	SEEDING SQ. YDS.
88	
	475
83	
442	
76	
	411
1328	SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 356+50 TO STA. 357+50 LT.

LIC-161-6.65
LIC-37-10.25

190
1349

250 200 150 100 50 ℄

PROP. R/W
PROP. LA R/W
EX. LA R/W
8:1
1066.05
357+50.00
1073.69

PROP. R/W
PROP. LA R/W
EX. LA R/W
8:1
1066.63
357+00.00
1073.40

PROP. R/W
PROP. LA R/W
EX. LA R/W
8:1
1067.20
356+50.00
1075.52

1100 1090 1080 1070 1060 1050 1040

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50

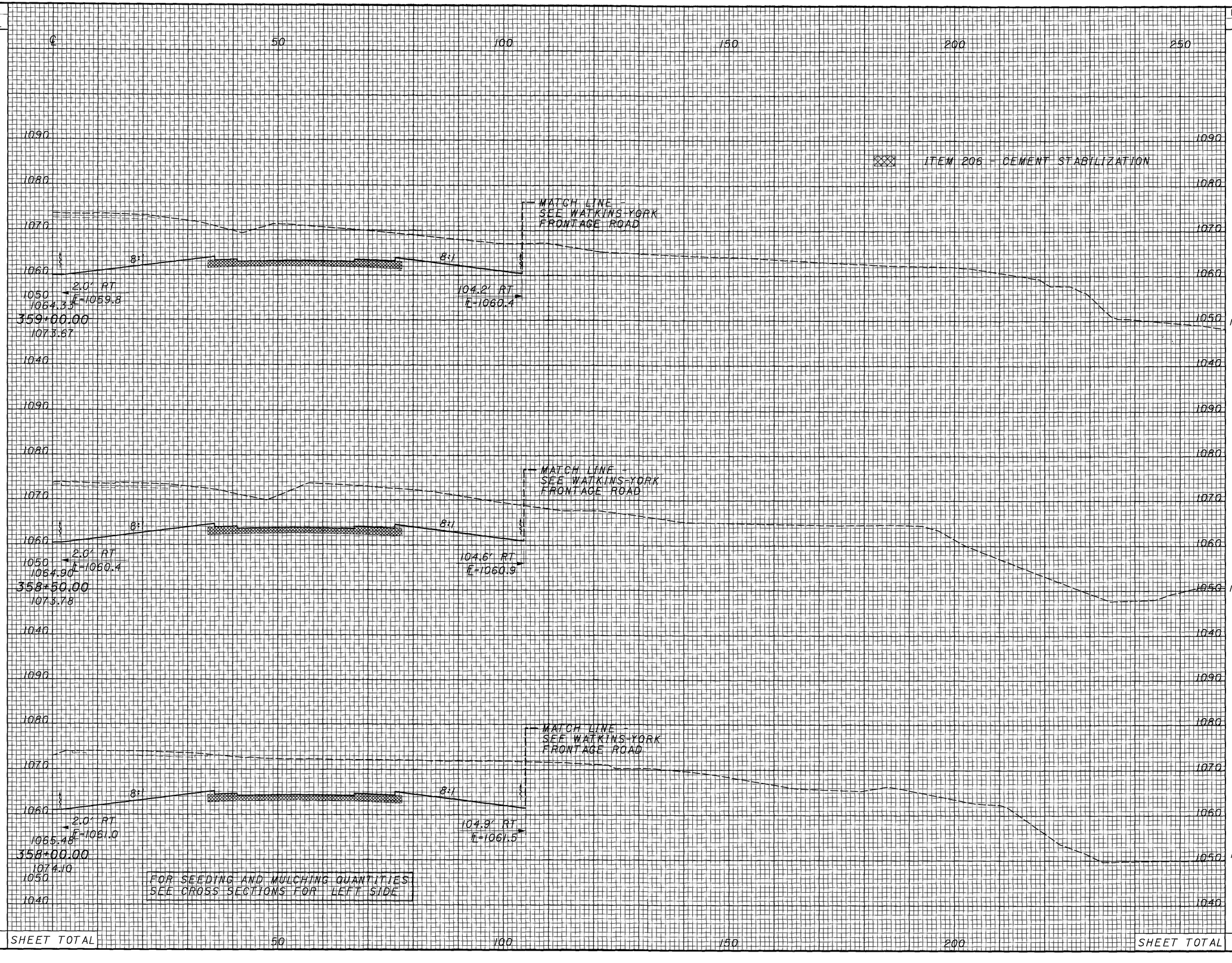
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 358+00 TO STA. 359+00 RT.

LIC-161-6.65
LIC-37-10.25

191
1349

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SEEDING	
END WIDTH	SQ. YDS.
101	553
98	528
92	500
1581	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. R/W
PROP. LA R/W
EX. LA R/W
8:1
1½
1064.33
359+00.00
1073.67

PROP. R/W
PROP. LA R/W
EX. LA R/W
8:1
1½
1064.30
358+50.00
1073.78

PROP. R/W
PROP. LA R/W
EX. LA R/W
8:1
1½
1065.48
358+00.00
1074.10

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 358+00 TO STA. 359+00 LT.

LIC-161-6.65
LIC-37-10.25

192
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2705	0		
(1009)	(3)		
		5008	0
		(1905)	(6)
2704	0		
(1048)	(3)		
		3602	0
		(970)	(3)
1187	0		
		2158	0
SHEET TOTAL		10768	0
		(2875)	(9)

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 359+50 TO STA. 360+50 RT.

LIC-161-6.65
LIC-37-10.25

193
1349

℄ 50 100 150 200 250

1090 1080 1070 1060 1050 1040

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
℄-1058.1
1062.60
360+50.00
1072.76

102.8' RT
℄-1058.9

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
℄-1058.7
1063.18
360+00.00
1073.23

103.3' RT
℄-1059.4

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
℄-1059.3
1063.75
359+50.00
1073.54

103.8' RT
℄-1059.9

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.

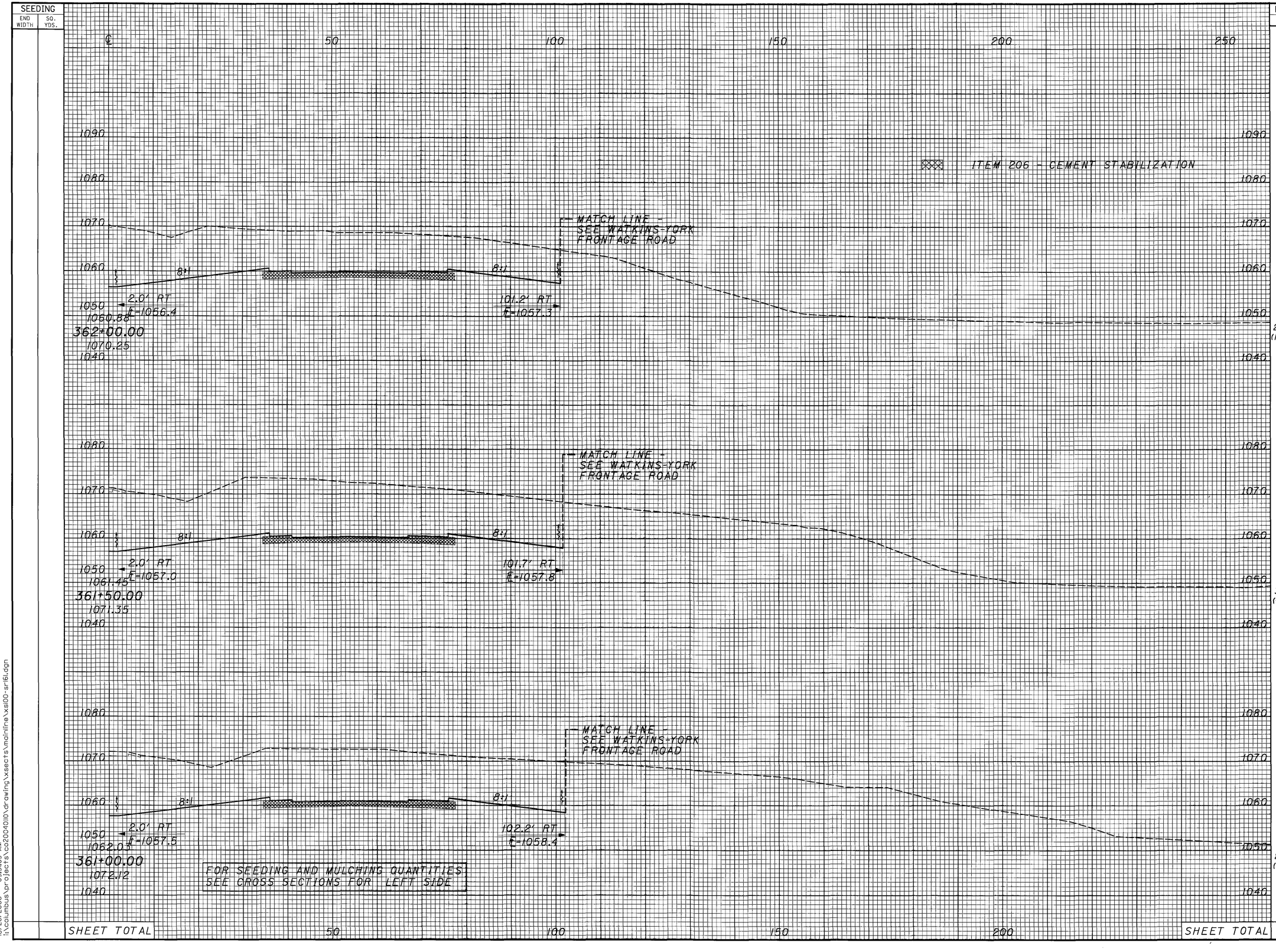
END AREA		VOLUME	
CUT	FILL	CUT	FILL
2943 (1242)	0 (3)		
		5596 (2244)	0 (6)
3100 (1182)	0 (3)		
		5626 (2119)	0 (6)
2976 (1106)	0 (3)		
		5260 (1958)	0 (6)
		16482 (4363)	0 (18)

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 361+00 TO STA. 362+00 RT.

LIC-161-6.65
LIC-37-10.25

195
349



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SEEDING END WIDTH	SEEDING SQ. YDS.
	177
	979
	175
	966
	173
	952
	2897

250 200 150 100 50 ℄

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

ITEM 206 - CEMENT STABILIZATION

PROP. R/W
PROP. LA R/W
EX. LA R/W
EX. TEL
2.5:1
6:1
8:1
91.0' LT
℄=1058.2
1060.88
362+00.00
1070.25

PROP. R/W
PROP. LA R/W
EX. LA R/W
EX. TEL
2.5:1
6:1
8:1
91.0' LT
℄=1058.7
1061.45
361+50.00
1071.35

PROP. R/W
PROP. LA R/W
EX. LA R/W
EX. TEL
2.5:1
6:1
8:1
91.0' LT
℄=1059.3
1062.03
361+00.00
1072.12

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1090 1080 1070 1060 1050 1040

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 361+00 TO STA. 362+00 LT.

LIC-161-6.65
LIC-37-10.25

196
1349

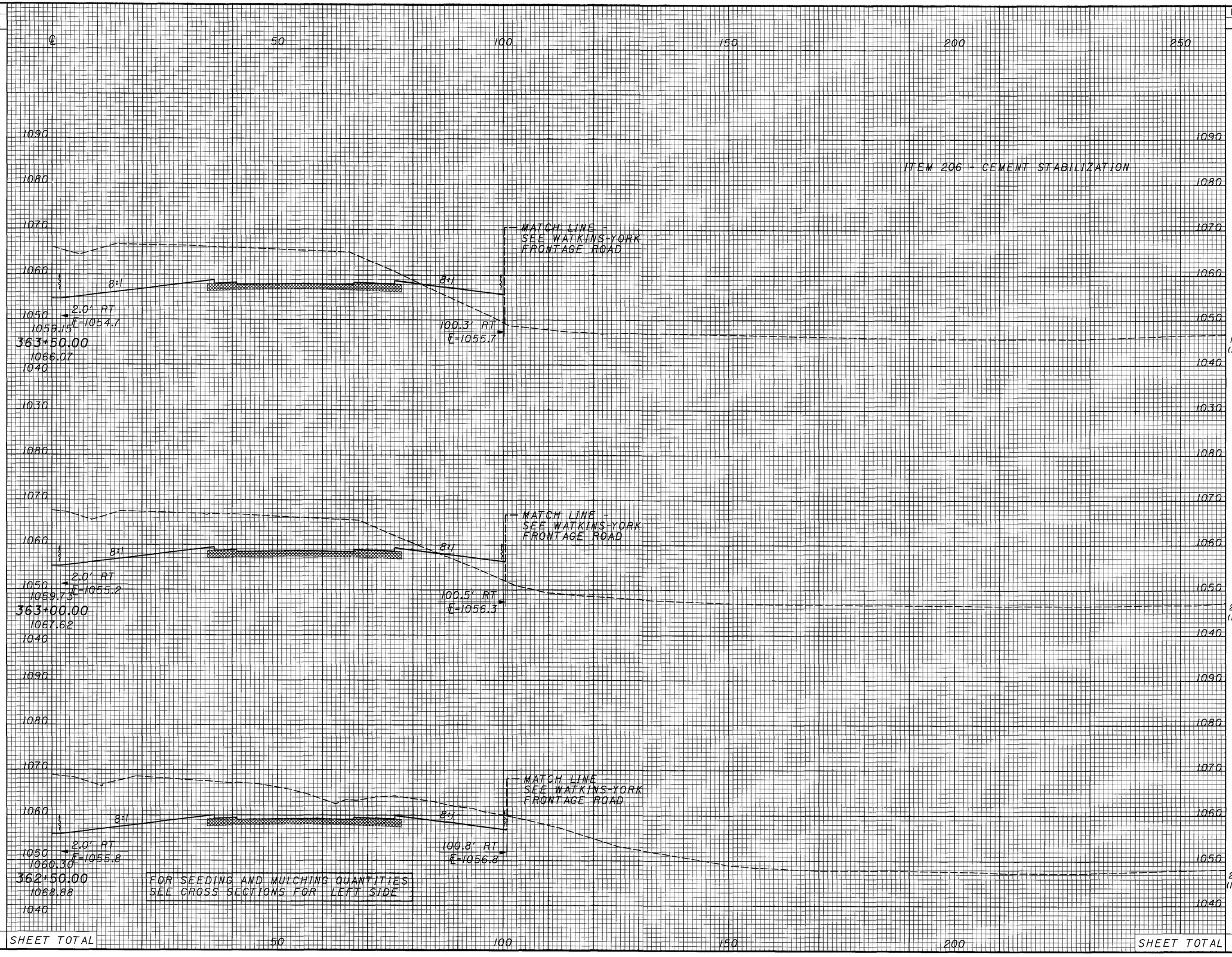
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 362+50 TO STA. 363+50 RT.

LIC-161-6.65
LIC-37-10.25



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SEEDING	
END WIDTH	SQ. YDS.
179	
176	
177	
	2955

ITEM 206 - CEMENT STABILIZATION

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

200 150 100 50 ℄

EX. LA R/W
PROP. LA R/W
EX. TEL
2.5:1
6"
8:1
91.0' LT
℄=1056.4
1059.15
363+50.00
1066.07

EX. LA R/W
PROP. LA R/W
EX. TEL
2.5:1
6"
8:1
91.0' LT
℄=1057.0
1059.73
363+00.00
1067.62

PROP. R/W
EX. LA R/W
PROP. LA R/W
EX. TEL
2.5:1
6"
8:1
91.0' LT
℄=1057.6
1060.30
362+50.00
1068.68

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL
988			
982			
985			
SHEET TOTAL			

200 150 100 50 SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 362+50 TO STA. 363+50 LT.

LIC-161-6.65
LIC-37-10.25

198
1349

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SEEDING	
END WIDTH	SQ. YDS.

ITEM 206 CEMENT STABILIZATION

PROP. CB-4, A.P.P.
STA. 365+00.000
GRATE ELEV. = 1052.77
INV. 15" SW = 1049.00

8:1 8:1

1057.43 2.0' RT
365+00.00 E-1052.9
1061.47

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHEET 948

100.1' RT
E-1054.0

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

1058.00 2.0' RT
364+50.00 E-1053.5
1062.93

100.2' RT
E-1054.6

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

1058.58 2.0' RT
364+00.00 E-1054.1
1064.28

100.3' RT
E-1055.1

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1062 (250)	274 (91)		
1440 (257)	124 (78)	2317 (469)	369 (157)
1678 (300)	77 (28)	2887 (516)	187 (98)
		3377 (540)	126 (29)
		8581 (1525)	682 (284)

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 364+00 TO STA. 365+00 RT.

LIC-161-6.65
LIC-37-10.25

199
1349

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SEEDING	
END WIDTH	SQ. YDS.
	181
	1011
	183
	1013
	182
	1004
	3028

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.

ITEM 206 - CEMENT STABILIZATION

℄ 50 100 150 200 250

1090 1080 1070 1060 1050 1040 1030

8:1 8:1

2.0' RT
E-1051.2
1055.70
366+50.00
1059.93

99.9' RT
E-1052.3

— MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
E-1051.8
1056.28
366+00.00
1060.66

100.0' RT
E-1052.9

— MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT
E-1052.4
1056.85
365+50.00
1060.97

100.0' RT
E-1053.4

— MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1333 (245)	271 (4)		
		2213 (454)	510 (64)
1057 (245)	280 (65)		
		1869 (458)	569 (144)
962 (250)	334 (91)		
		1874 (463)	563 (169)
		5956 (1375)	1642 (377)

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 365+50 TO STA. 366+50 RT.

LIC-161-6.65
LIC-37-10.25

201
349

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SEEDING	
END WIDTH	SQ. YDS.
185	1020
182	1010
181	1006
	3036

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED IN PERMANENT EARTHWORK QUANTITIES

EX. LA R/W — PROP. LA R/W — EX. TEL — 2.5:1 — 6:1 — 8:1

91.0' LT
E=1053.0
1055.70
366+50.00
1059.93

EX. LA R/W — PROP. LA R/W — EX. TEL — 2.5:1 — 6:1 — 8:1

88.6' LT
E=1053.9
1056.28
366+00.00
1060.66

EX. LA R/W — PROP. LA R/W — EX. TEL — 2.5:1 — 6:1 — 8:1

88.0' LT
E=1054.6
1056.85
365+50.00
1060.97

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1090 1080 1070 1060 1050 1040 1030

END AREA		VOLUME	
CUT	FILL	CUT	FILL
SHEET TOTAL			

CALCULATED JMA CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 365+50 TO STA. 366+50 LT.

LIC-161-6.65
LIC-37-10.25

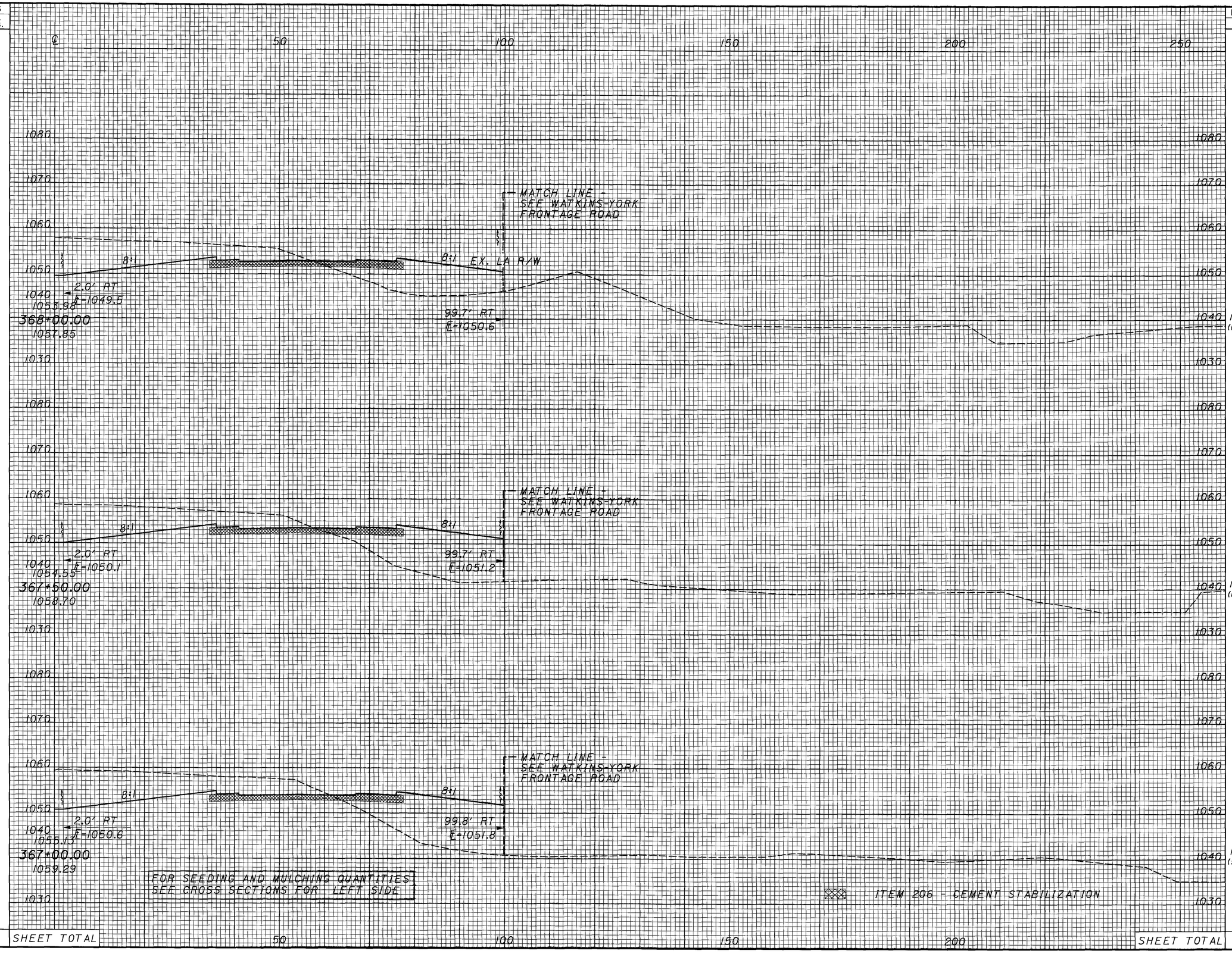
202
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 367+00 TO STA. 368+00 RT.

LIC-161-6.65
LIC-37-10.25

203
1349

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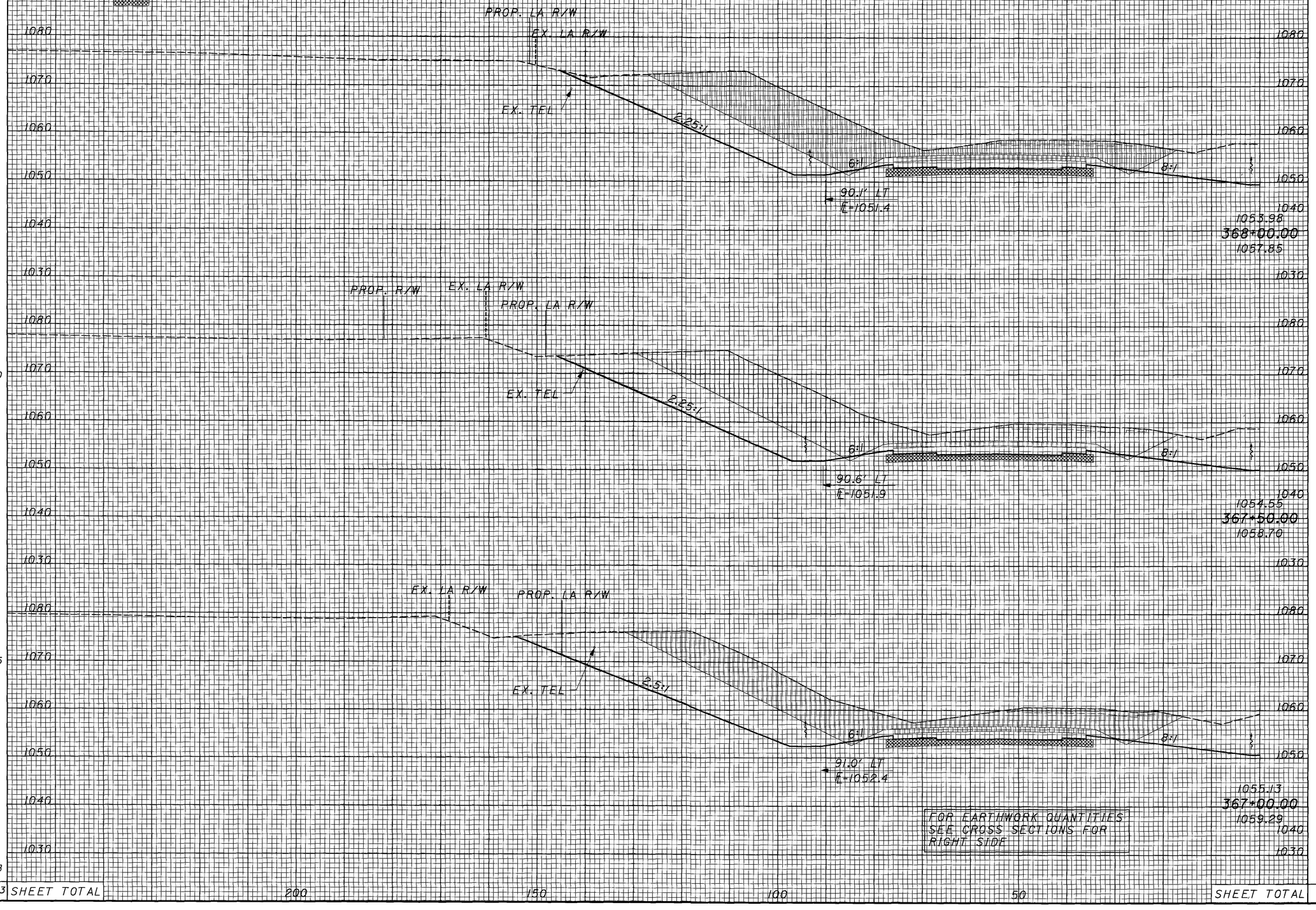
SEEDING	
END WIDTH	SQ. YDS.
	172
	960
	173
	985
	182
	1018
	2963

SHEET TOTAL

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH PERMANENT EARTHWORK QUANTITIES



FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 367+00 TO STA. 368+00 LT.

LIC-161-6.65
LIC-37-10.25

204
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

50 100 150 200 250

1080 1070 1060 1050 1040 1030

ITEM 206 - CEMENT STABILIZATION

EX. LA R/W

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT E=1047.8

99.4' RT E=1048.9

1052.25

369+50.00

1055.45

1633 (443) 0 (0)

EX. LA R/W

MATCH LINE - SEE WATKINS YORK FRONTAGE ROAD

8:1 8:1

2.0' RT E=1048.3

99.5' RT E=1049.5

1052.83

369+00.00

1055.78

1664 (499) 0 (0)

3053 (872) 0 (0)

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

EX. LA R/W

8:1 8:1

2.0' RT E=1048.9

99.6' RT E=1050.1

1053.40

368+50.00

1056.84

1569 (537) 0 (0)

2994 (959) 0 (0)

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

2753 (1084) 180 (0)

8800 (2915) 180 (0)

CROSS SECTIONS - S.R. 161 STA. 368+50 TO STA. 369+50 RT.

LIC-161-6.65
LIC-37-10.25

205
1349

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SEEDING	
END WIDTH	SQ. YDS.
183	
	1012
181	
	988
174	
	963
	2963

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

PROP. LA R/W
EX. LA R/W
EX. TEL
2.5:1
6:1
8:1
91.0' LT
℄=1049.5
1052.25
369+50.00
1055.45

PROP. LA R/W
EX. LA R/W
EX. TEL
2.5:1
6:1
8:1
91.0' LT
℄=1050.1
1052.83
369+00.00
1055.78

PROP. LA R/W
EX. LA R/W
EX. TEL
2.25:1
6:1
8:1
89.7' LT
℄=1050.9
1053.40
368+50.00
1056.84

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1080 1070 1060 1050 1040 1030

2963 SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 368+50 TO STA. 369+50 LT.

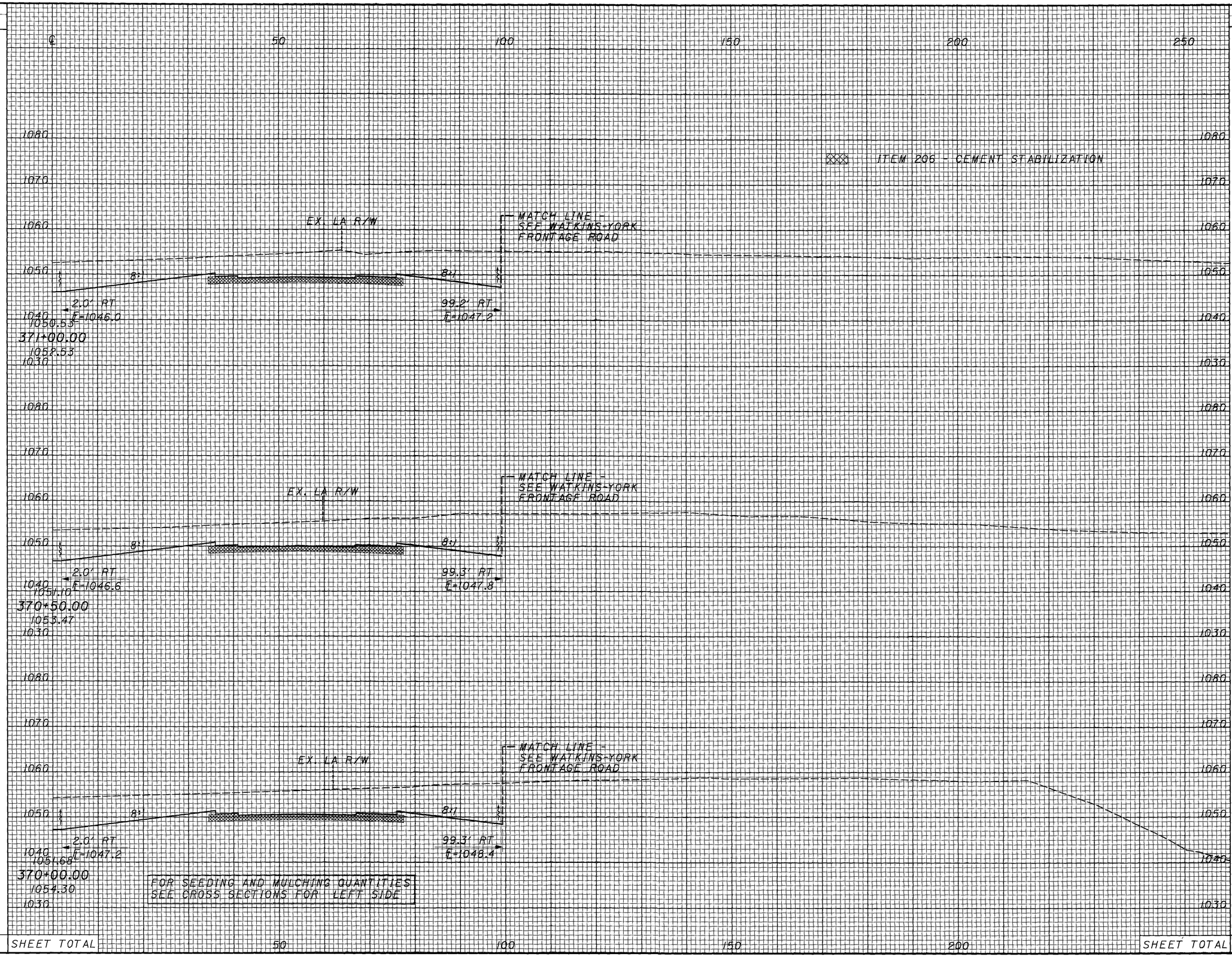
LIC-161-6.65
LIC-37-10.25

206
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		1317	0		
				2503 (190)	2 (0)
		1386 (205)	2 (0)		
				2604 (496)	2 (0)
		1425 (331)	0 (0)		
				2832 (719)	0 (0)
				7939 (1405)	4 (0)

CALCULATED JMA
CHECKED BER



SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 370+00 TO STA. 371+00 RT.

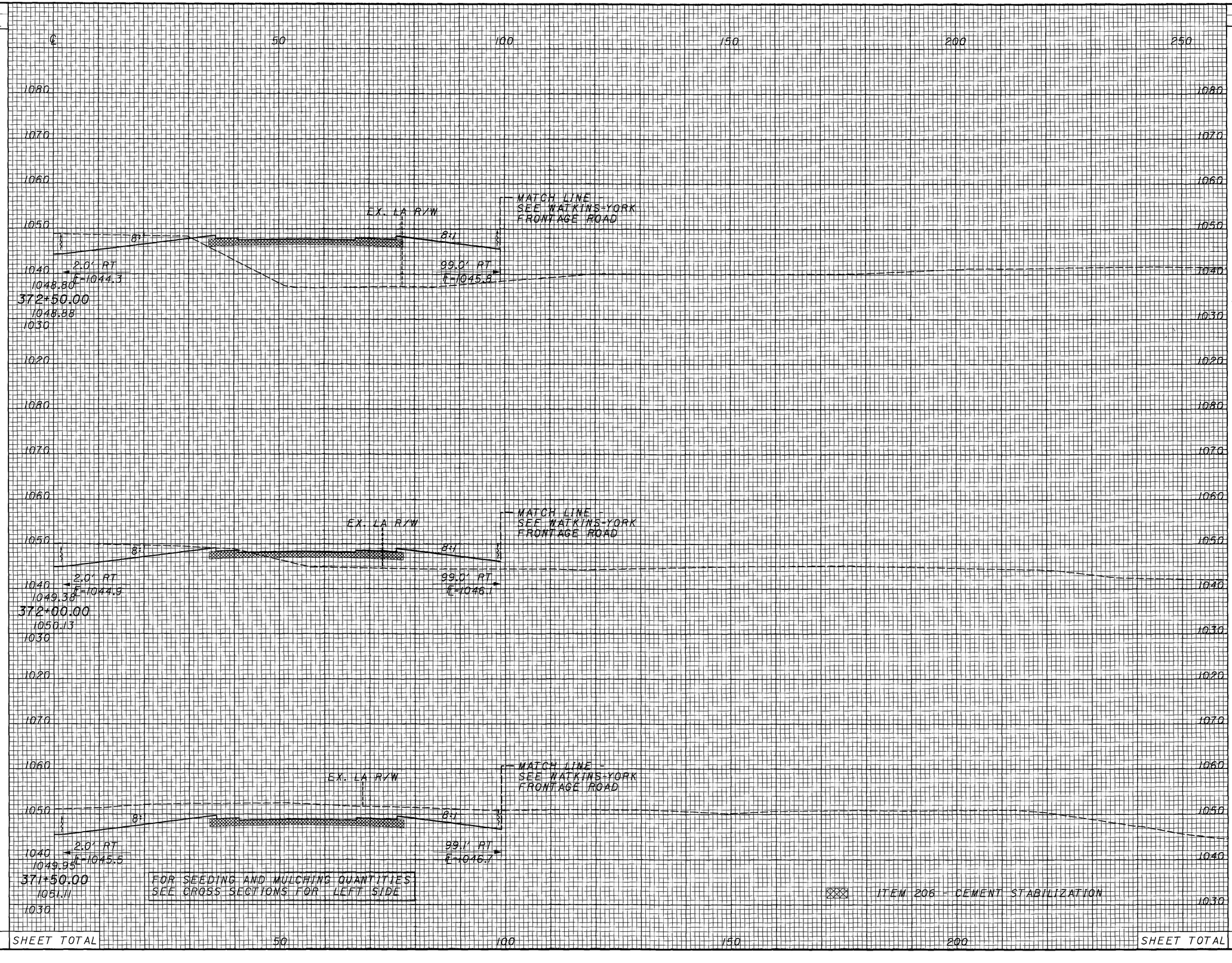
LIC-161-6.65
LIC-37-10.25

207
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING		END AREA		VOLUME		
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	
						CALCULATED JMA
						CHECKED BER



				309	589	
				629	694	
				370	160	
				1241	148	
				970	0	
				2118	0	
SHEET TOTAL				3988	842	

CROSS SECTIONS - S.R. 161
STA. 371+50 TO STA. 372+50 RT.

LIC-161-6.65
LIC-37-10.25

209
1349

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SEEDING	
END WIDTH	SQ. YDS.
160	
	925
173	
	988
183	
	1034
	2947

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W
EX. LA R/W
EX. TEL
114.0' LT
Elev=1031.7
127.0' LT
℄=1030.2
1048.80
372+50.00
1048.88

PROP. LA R/W
EX. LA R/W
EX. TEL
134.3' LT
℄=1034.0
1049.38
372+00.00
1050.13

PROP. LA R/W
EX. LA R/W
EX. TEL
114.9' LT
℄=1039.5
1049.95
371+50.00
1051.11

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

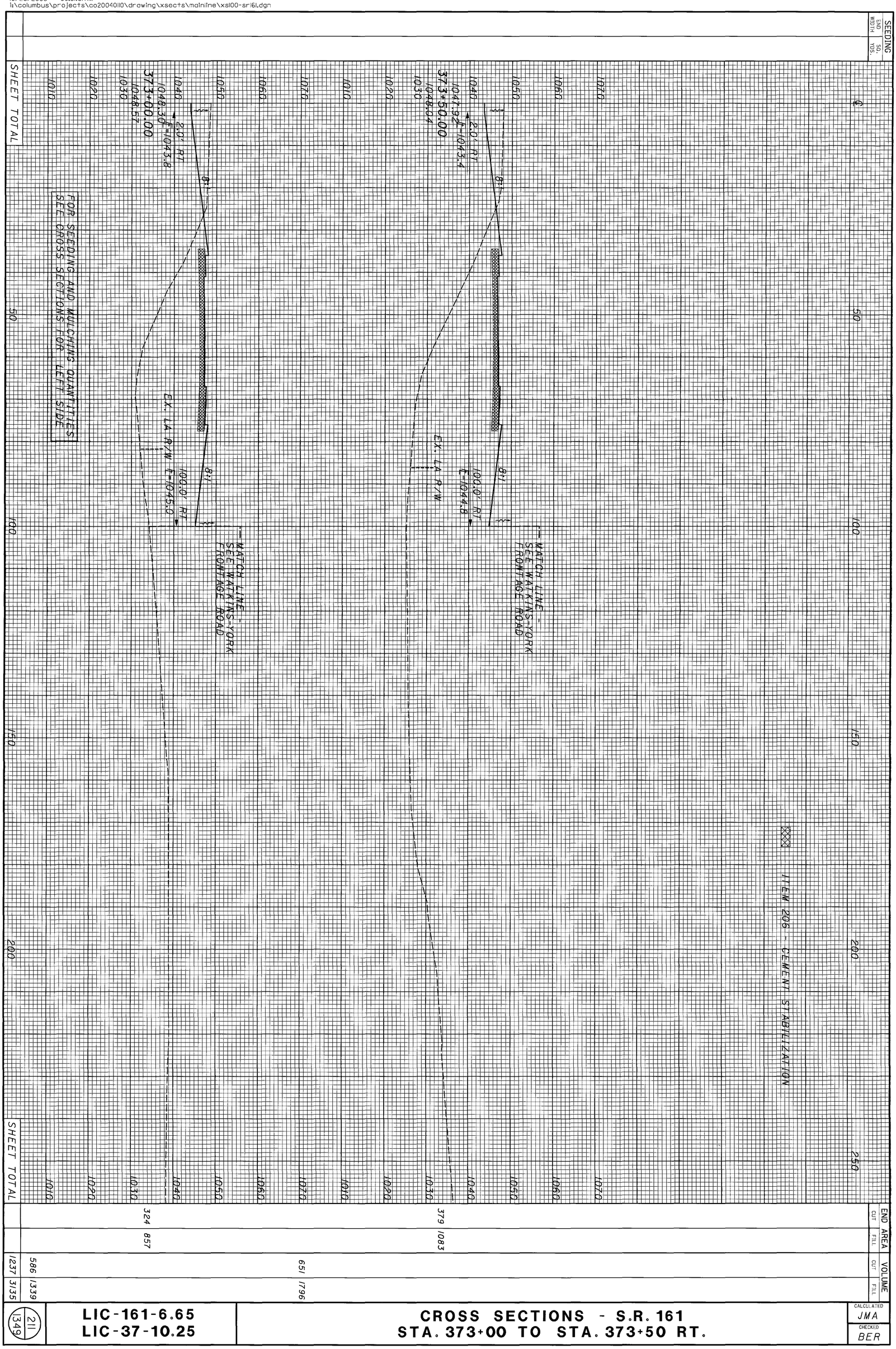
SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 371+50 TO STA. 372+50 LT.

LIC-161-6.65
LIC-37-10.25

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21 (349)	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 373+00 TO STA. 373+50 RT.

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.
173	
	947
168	
	911
1858	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.

STA 375+13, CULVERT NO. 1,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 968

PROP. CB-4, A.P.P.
STA. 374+64.57
GRATE ELEV. = 1042.83
INV. 15" NE = 1037.83

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

ITEM 206 - CEMENT STABILIZATION

8:1

2.0' RT
℄-1043.1
1047.60
375+00.00
1046.80

102.9' RT
℄-1044.9

EX. LA R/W

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 949

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄-1043.1
1047.58
374+50.00
1047.07

101.3' RT
℄-1044.6

EX. LA R/W

PROP. CH. ESMT.

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄-1043.2
1047.68
374+00.00
1047.91

100.6' RT
℄-1044.6

EX. LA R/W

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL
509	1461		
		957	2257
525	976		
		905	1892
453	1068		
		770	1991
SHEET TOTAL		2632	6140

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 374+00 TO STA. 375+00 RT.

LIC-161-6.65
LIC-37-10.25

213
1349

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SEEDING	
END WIDTH	SQ. YDS.
175	1033
197	1076
191	1011
	3120

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

STA. 375+13, CULVERT NO. 1,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 968

PROP. CB-4, A.P.P.
STA. 374+64.57
GRATE ELEV. = 1042.83
INV. 15" NE = 1037.83

142.8' LT
E=1018.8

PROP. LA R/W
EX. LA R/W
EX. TEL

1047.60
375+00.00
1046.80

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 949

131.3' LT
Elev=1022.3

PROP. LA R/W
EX. LA R/W
EX. TEL

145.8' LT
E=1019.7

1041.58
374+50.00
1047.07

127.6' LT
Elev=1023.3

PROP. R/W
EX. LA R/W
PROP. LA R/W
EX. TEL

142.1' LT
E=1021.8

1047.68
374+00.00
1047.91

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 374+00 TO STA. 375+00 LT.

LIC-161-6.65
LIC-37-10.25

214
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

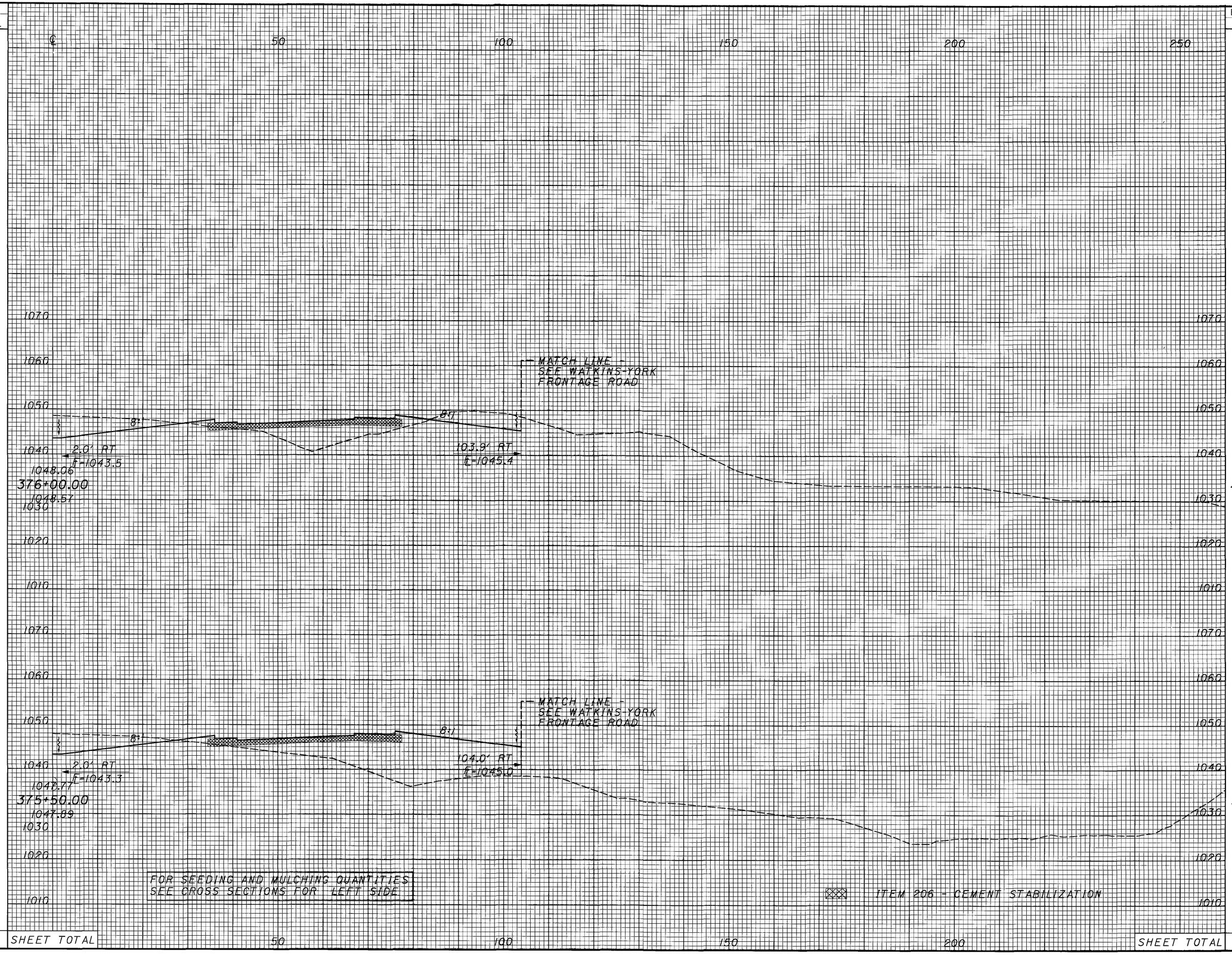
END AREA		VOLUME	
CUT	FILL	CUT	FILL
444	175		
		707	587
319	459		
		766	1778
SHEET TOTAL		1473	2365

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 375+50 TO STA. 376+00 RT.

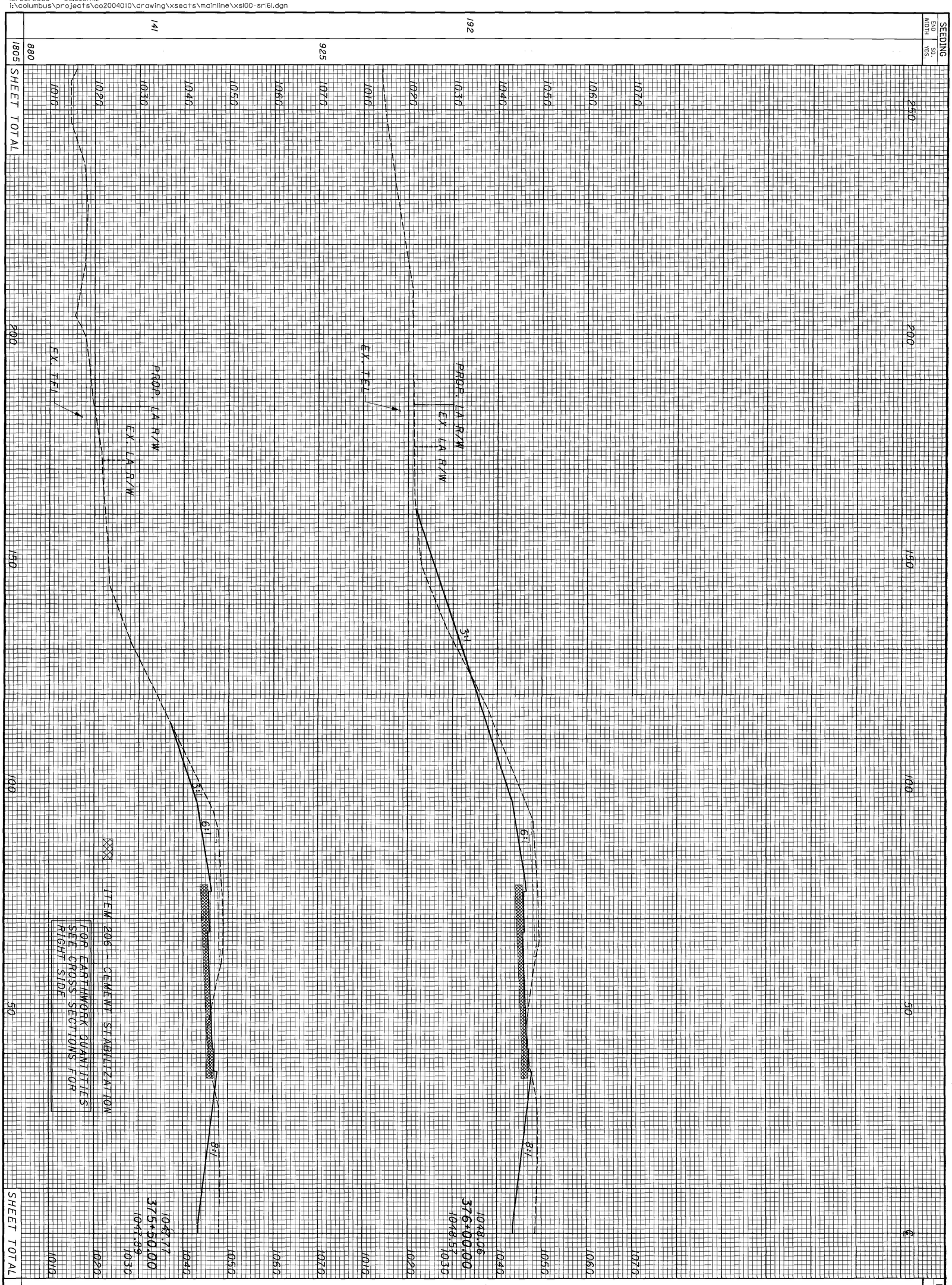
LIC-161-6.65
LIC-37-10.25

215
1349



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216 / 349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 375+50 TO STA. 376+00 LT.

CALCULATED JMA
CHECKED BER

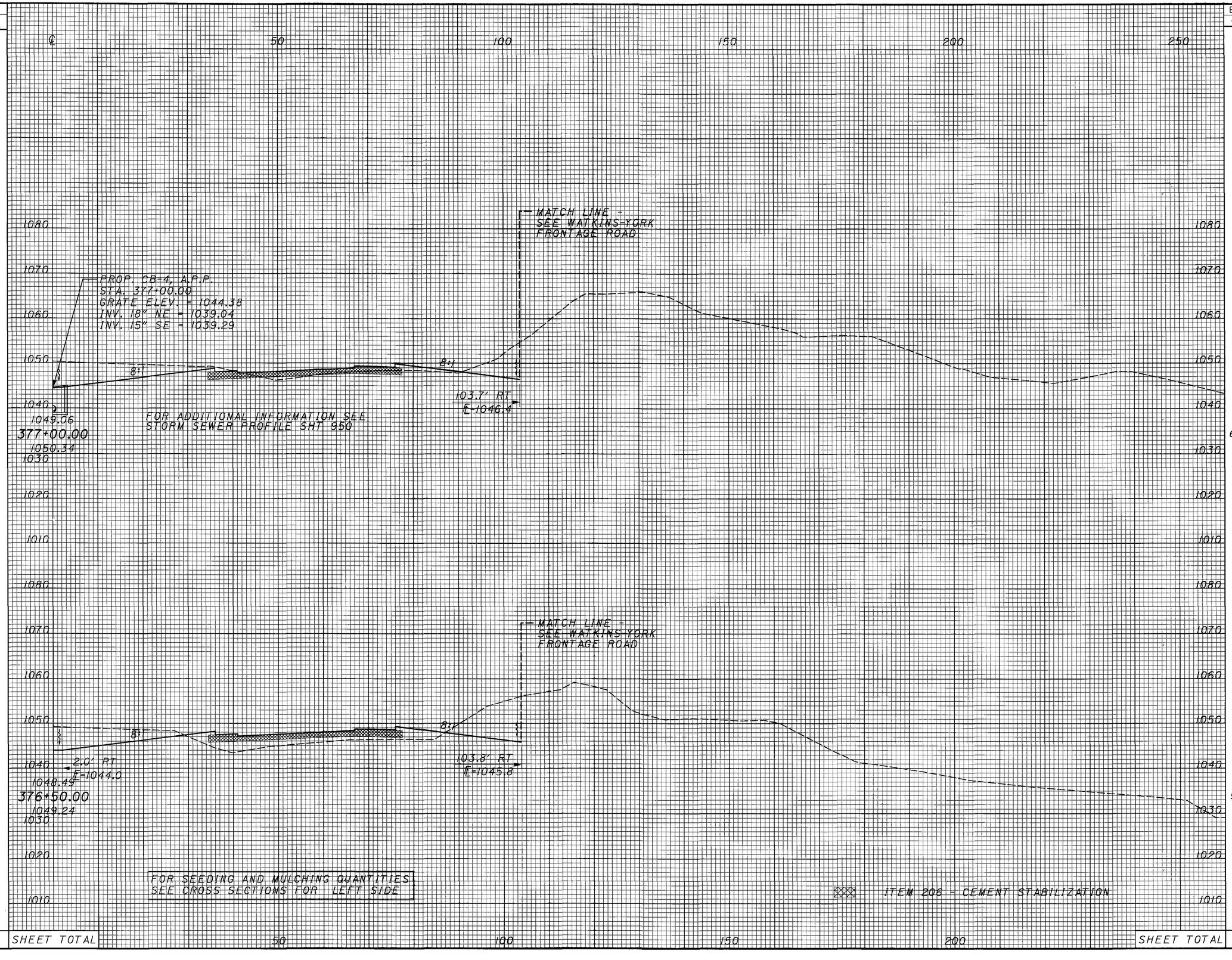
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
648	17		
1145	118		
589	110		
		956	264
		2101	382

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 376+50 TO STA. 377+00 RT.

LIC-161-6.65
LIC-37-10.25



SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
192	
192	
533	
1599	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
SHEET TOTAL			

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 376+50 TO STA. 377+00 LT.

LIC-161-6.65
LIC-37-10.25

218
1349

250 200 150 100 50 ℄

1080 1070 1060 1050 1040 1030 1020 1010

PROP. CB-4, A.P.P.
STA. 377+00.00
GRATE ELEV. = 1044.38
INV. 18" NE = 1039.04
INV. 15" SE = 1039.28

6:1 3:1 8:1

PROP. LA R/W
EX. LA R/W
EX. TEL

℄
1049.06
377+00.00
1050.34

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 950

1048.49
376+50.00
1049.24

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

1080 1070 1060 1050 1040 1030 1020 1010

MATCH LINE - SEE WATKINS YORK FRONTAGE ROAD

PROP. LA R/W

8:1 8:1

2.0' RT
E=1046.0
1050.52
378+00.00
1053.28

103.4' RT
E=1047.9

993 0

2.0' RT
E=1045.2
1049.75
377+50.00
1052.09

103.5' RT
E=1047.1

1550 2

681 2

ITEM 206 - CEMENT STABILIZATION

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL		1230	18
		2780	20

CROSS SECTIONS - S.R. 161
STA. 377+50 TO STA. 378+00 RT.

LIC-161-6.65
LIC-37-10.25

219
1349

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SEEDING	
END WIDTH	SQ. YDS.
191	
181	
2069	SHEET TOTAL

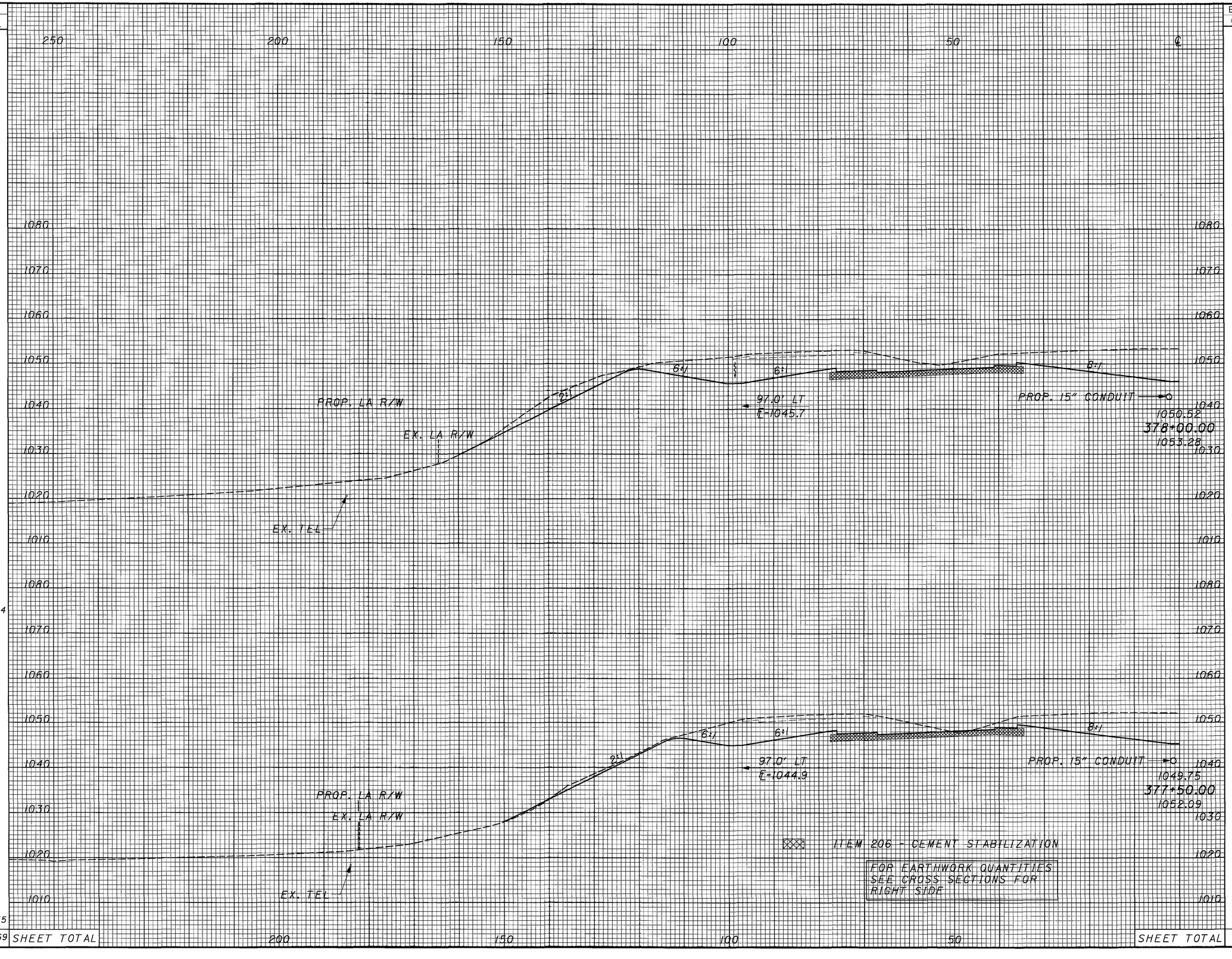
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 377+50 TO STA. 378+00 LT.

LIC-161-6.65
LIC-37-10.25

220
1349



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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

1090 1080 1070 1060 1050 1040 1030 1020 1010 1000

MATCH LINE
SEE WATKINS-YORK
FRONTAGE ROAD

PROP. LA R/W

8:1

8:1

2.0' RT
E-1047.5
1052.05

379+00.00
1058.01

103.2' RT
E-1049.4

1482 1

2459 0

2.0' RT
E-1046.8
1051.28

378+50.00
1055.55

103.3' RT
E-1048.7

1174 0

ITEM 206 - CEMENT STABILIZATION

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL				2007	0
SHEET TOTAL				4466	0

CROSS SECTIONS - S.R. 161
STA. 378+50 TO STA. 379+00 RT.

LIC-161-6.65
LIC-37-10.25

221
1349

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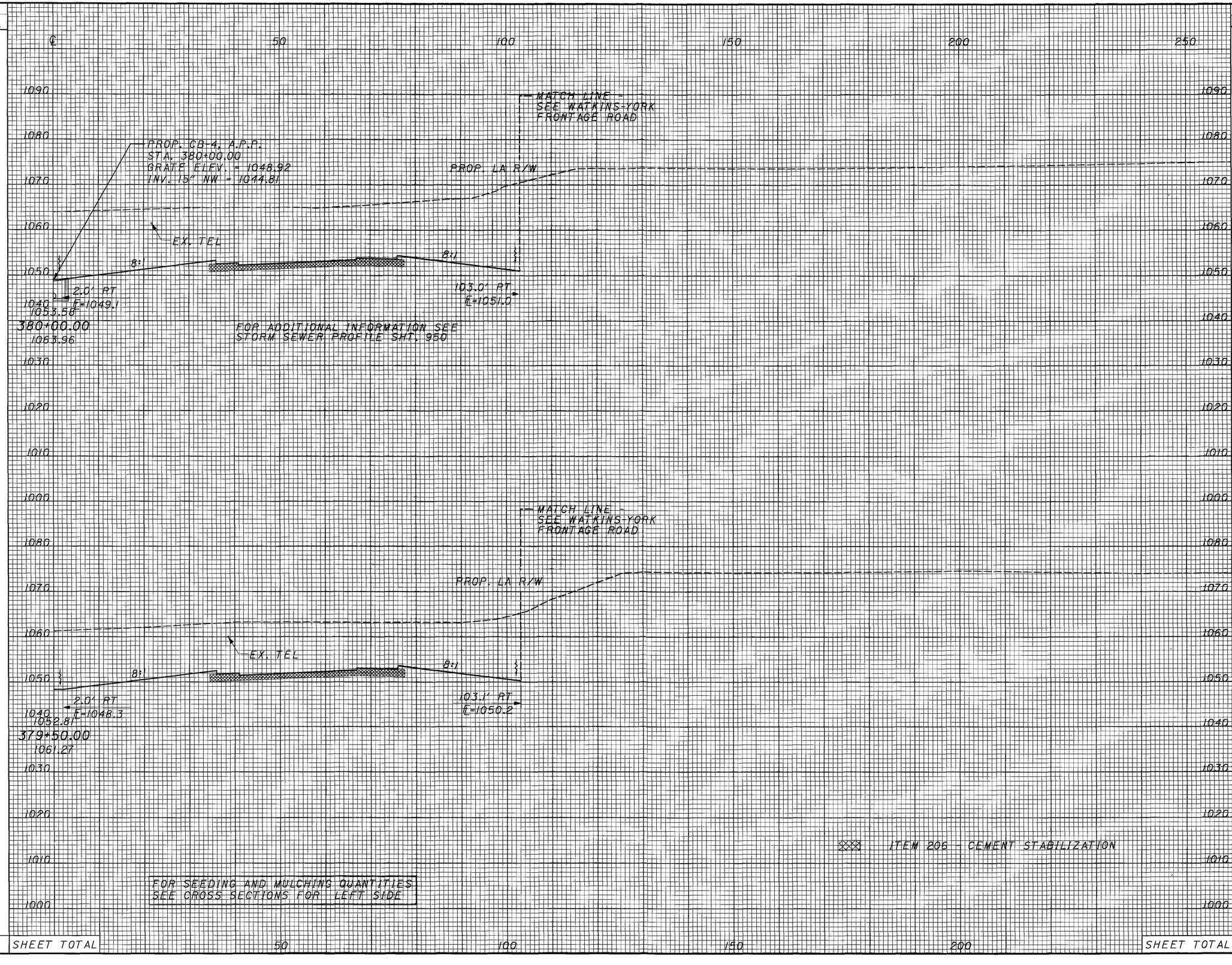
SEEDING	
END WIDTH	SQ. YDS.
144	
	781
137	
	910
1691	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2171	0		
		3746	0
1875	0		
		3108	1
		6854	1

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 379+50 TO STA. 380+00 RT.

LIC-161-6.65
LIC-37-10.25

223
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 380+50 RT.

LIC-161-6.65
LIC-37-10.25

2406	1	
4238	1	
SHEET TOTAL	4238	1

225
1349

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SEEDING	
END WIDTH	SQ. YDS.
152	830
SHEET TOTAL	830

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1100
1090
1080
1070
1060
1050
1040
1030
1020
1010
1000

PROP. LA R/W
EX. LA R/W
EX. TEL
6:1
6:1
6:1
88.0' LT
E=1051.0
EX. TEL
1054.34
380+50.00
1065.40

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 380+50 LT.

LIC-161-6.65
LIC-37-10.25

226
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	2595		5
	4068		7
	1799		3
	3893		4
SHEET TOTAL	7961		11

CALCULATED JMA
CHECKED BER

PROP. LA R/W
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD
EX. LA R/W
8:1
2.0' RT
℄-1051.4
1055.87
381+50.00
1068.03
102.8' RT
℄-1053.3

EX. LA R/W
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD
PROP. LA R/W
8:1
2.0' RT
℄-1050.6
1055.11
381+00.00
1060.47
102.8' RT
℄-1052.8

ITEM 206 - CEMENT STABILIZATION

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

CROSS SECTIONS - S.R. 161
STA. 381+00 TO STA. 381+50 RT.

LIC-161-6.65
LIC-37-10.25

227
1349

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SEEDING	
END WIDTH	SQ. YDS.
160	
157	
1737	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. LA R/W
EX. LA R/W
EX. TEL
6:1
6:1
8:1
88.0' LT
E=1052.5
1055.87
381+50.00
1068.03

PROP. LA R/W
EX. LA R/W
EX. TEL
6:1
6:1
8:1
88.0' LT
E=1051.8
1055.11
381+00.00
1060.47

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1100 1090 1080 1070 1060 1050 1040 1030 1020 1010 1000

880
857

200 150 100 50 SHEET TOTAL

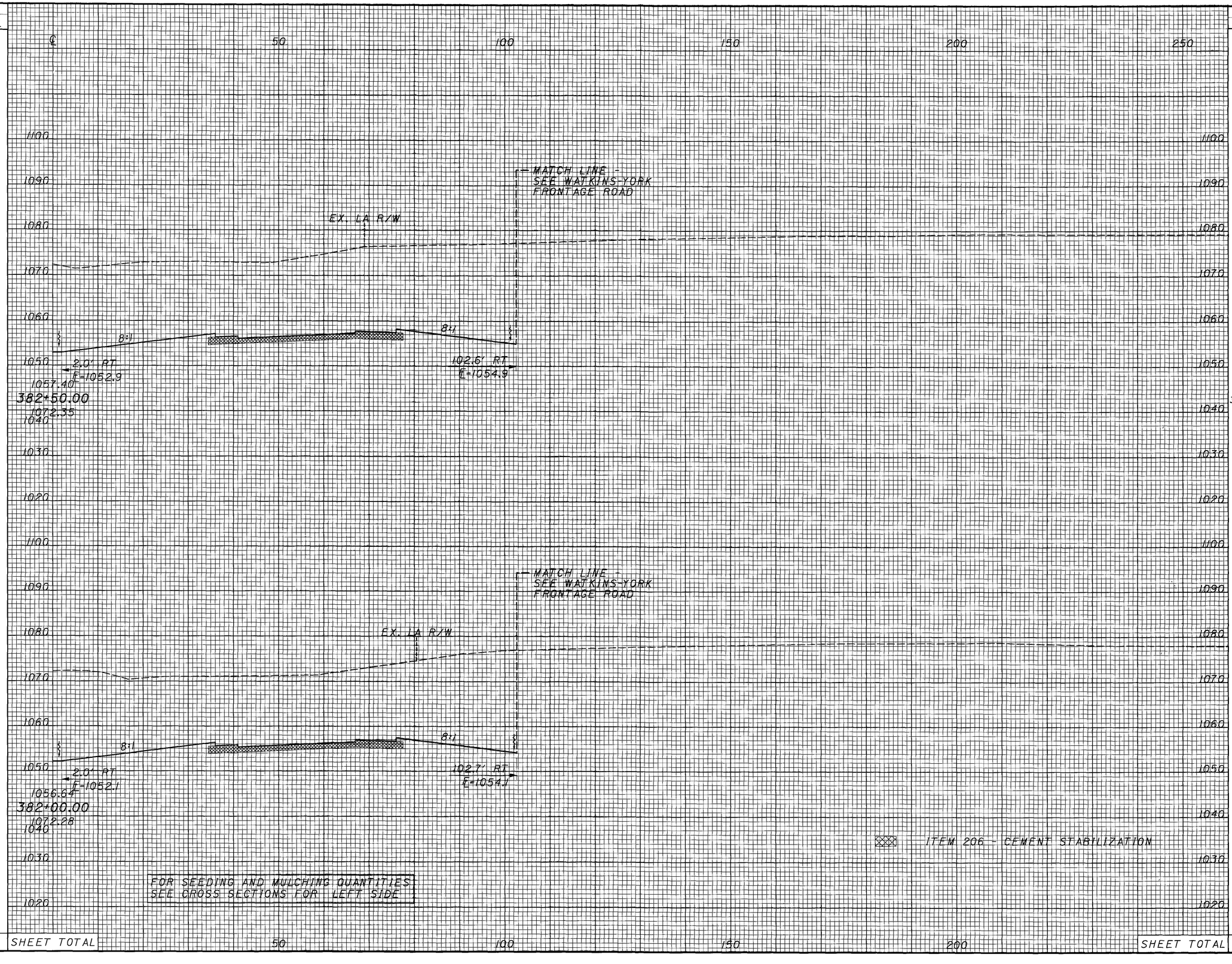
CROSS SECTIONS - S.R. 161
STA. 381+00 TO STA. 381+50 LT.

LIC-161-6.65
LIC-37-10.25

228
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
3326	0		
		5968	0
3119	0		
		5291	4
SHEET TOTAL		11259	4

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 382+00 TO STA. 382+50 RT.

LIC-161-6.65
LIC-37-10.25

229
1349

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SEEDING	
END WIDTH	SQ. YDS.
	155
	855
	153
	869
1724	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1100 1090 1080 1070 1060 1050 1040 1030 1020

PROP. LA R/W
EX. LA R/W
EX. TEL
6:1
6:1
8:1
87.0' LT
℄=1054.1
1057.40
382+50.00
1072.35

PROP. LA R/W
EX. LA R/W
EX. TEL
6:1
6:1
8:1
88.0' LT
℄=1053.3
1056.64
382+00.00
1072.28

ITEM 206 = CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 382+00 TO STA. 382+50 LT.

LIC-161-6.65
LIC-37-10.25

230
1349

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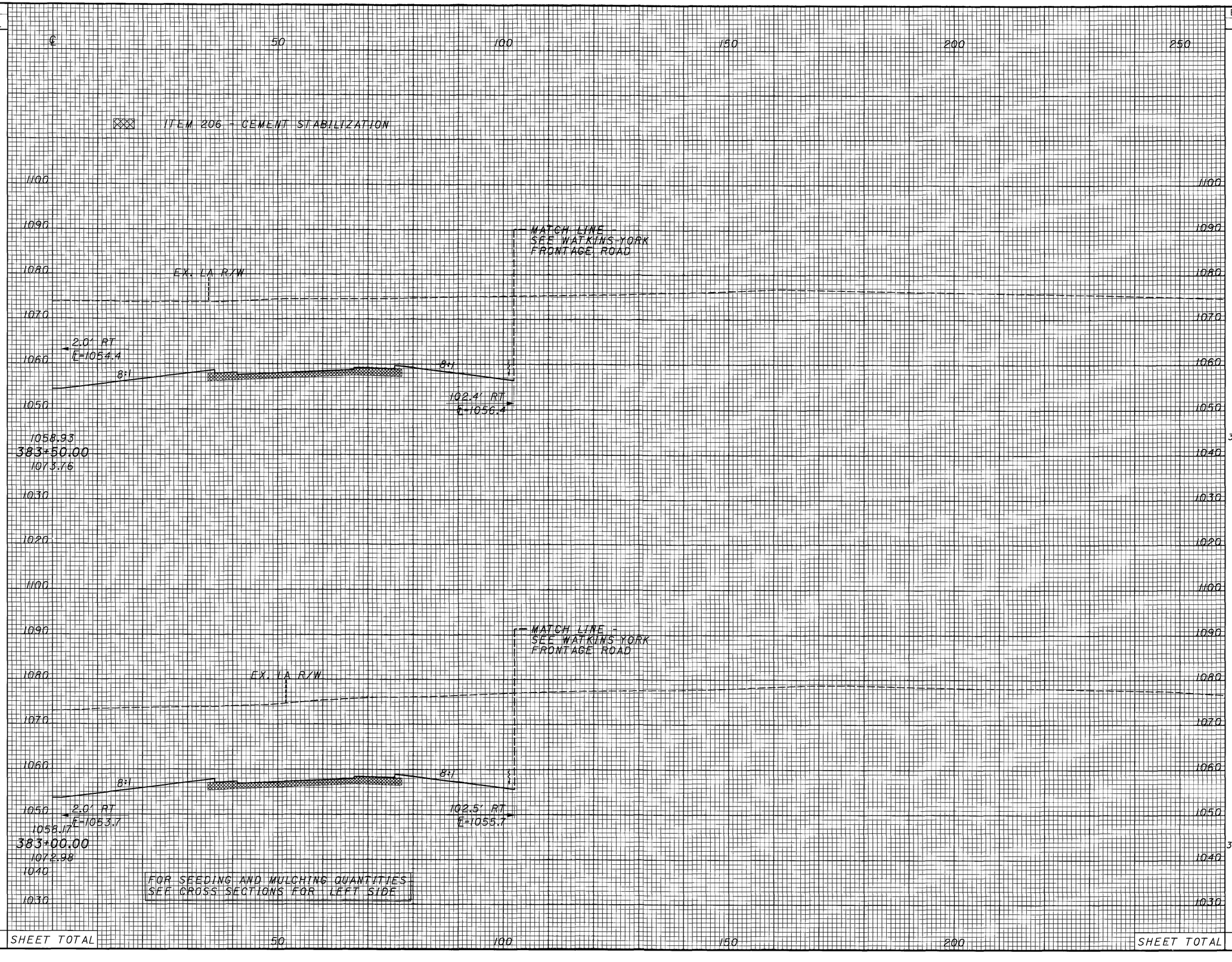
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

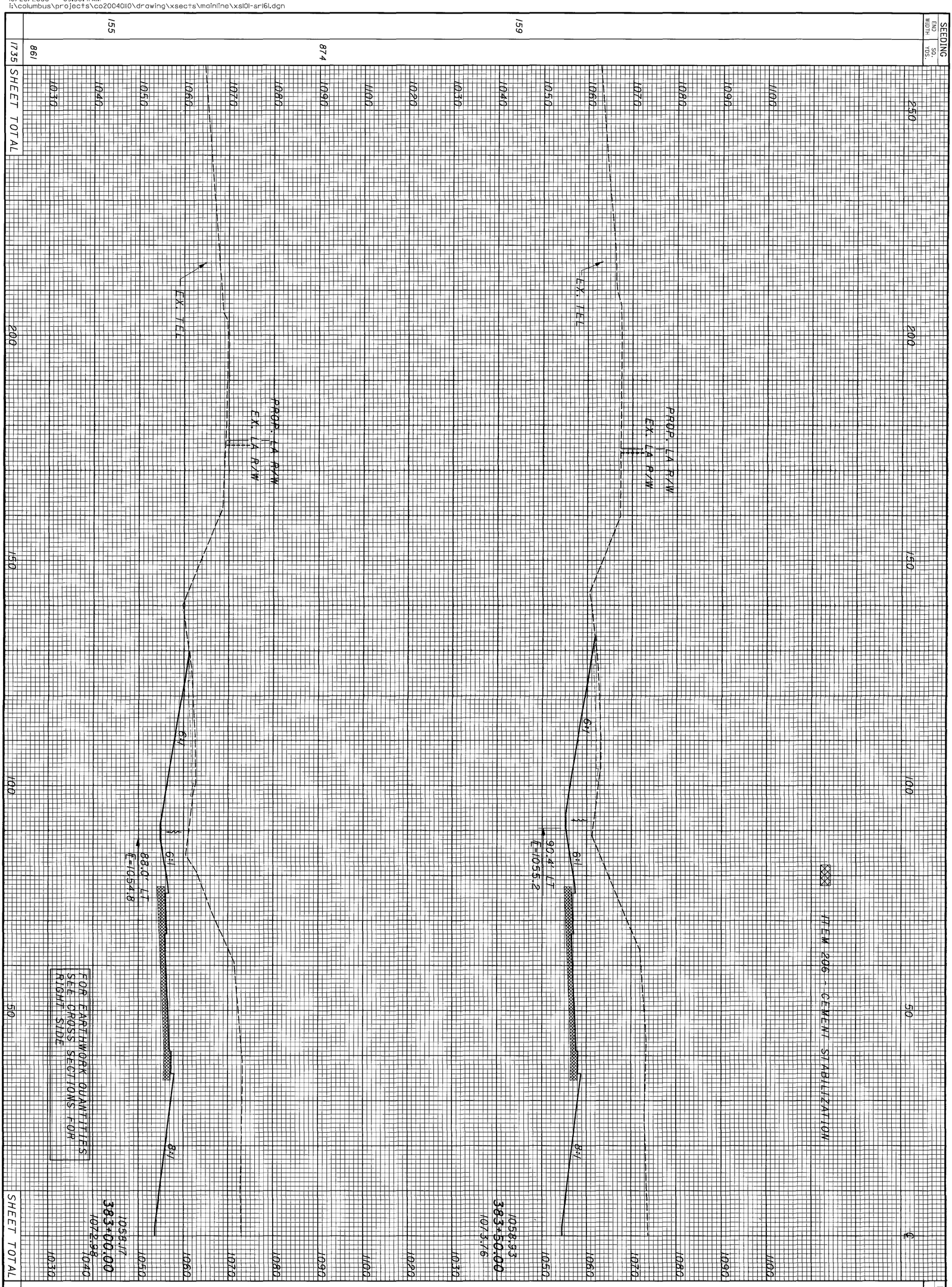
CROSS SECTIONS - S.R. 161
STA. 383+00 TO STA. 383+50 RT.

LIC-161-6.65
LIC-37-10.25



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232 / 349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 383+00 TO STA. 383+50 LT.

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1100 1090 1080 1070 1060 1050 1040 1030 1020 1010

EX. LA R/W

MATCH LINE
SEE WATKINS-YORK
FRONTAGE ROAD

2.0' RT
E=1055.9

8:1

8:1

102.2' RT
E=1058.0

1060.46
384+50.00
1073.47

3052 0

2.0' RT
E=1055.2

8:1

8:1

102.3' RT
E=1057.2

1059.70
384+00.00
1073.79

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

3089 0

SHEET TOTAL 5813 0

SHEET TOTAL 11498 0

CROSS SECTIONS - S.R. 161
STA. 384+00 TO STA. 384+50 RT.

LIC-161-6.65
LIC-37-10.25

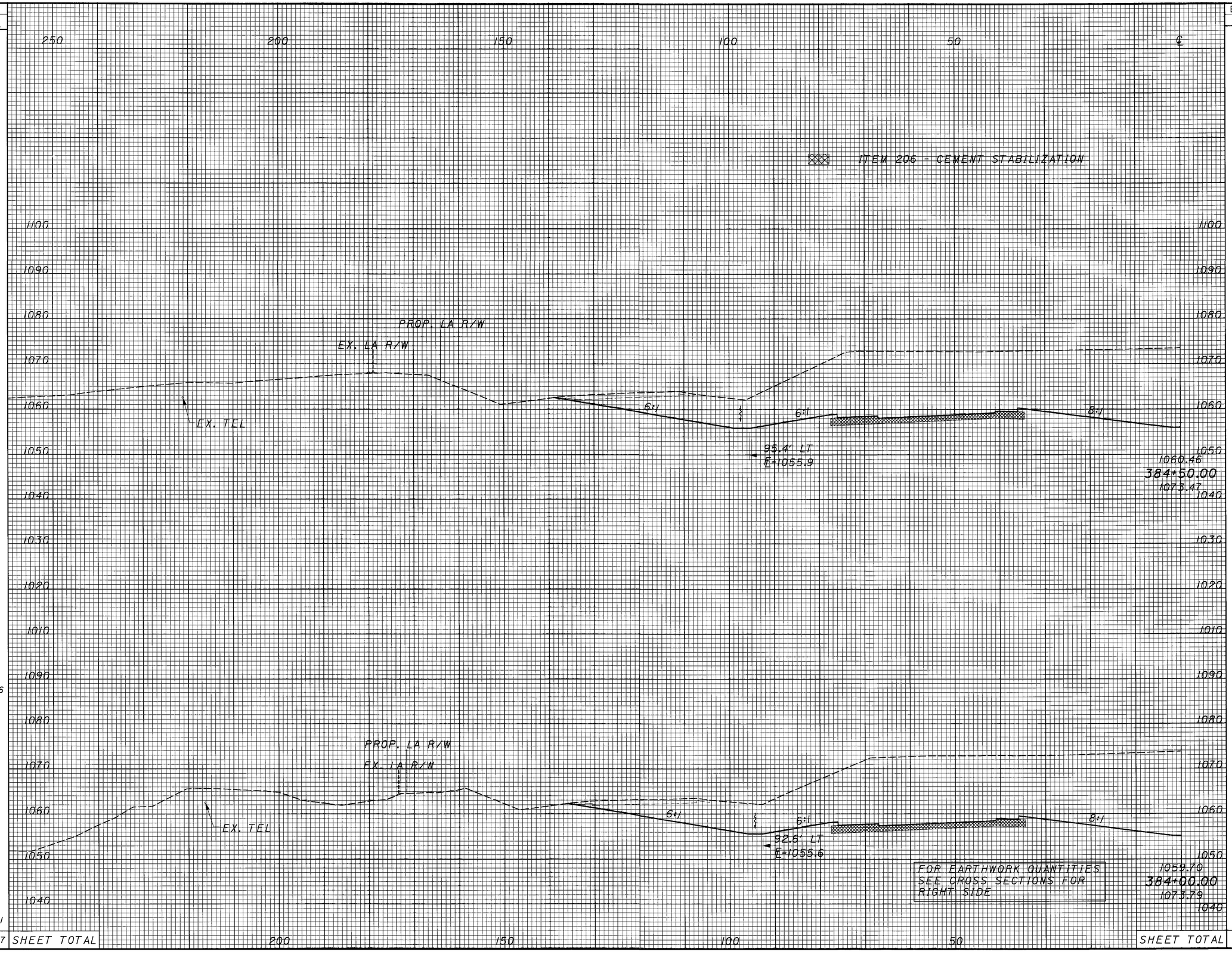
233
1349

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SEEDING	
END WIDTH	SQ. YDS.
165	
	906
162	
	891
	1797

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R.161
STA. 384+00 TO STA. 384+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2867	0		
		5506	0
3079	0		
		5676	0
		11182	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 385+00 TO STA. 385+50 RT.

LIC-161-6.65
LIC-37-10.25

235
1349

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
166	
	923
166	
	919
1842	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1563	0		
		3491	0
2207	0		
		4699	0
		8190	0

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 386+00 TO STA. 386+50 RT.

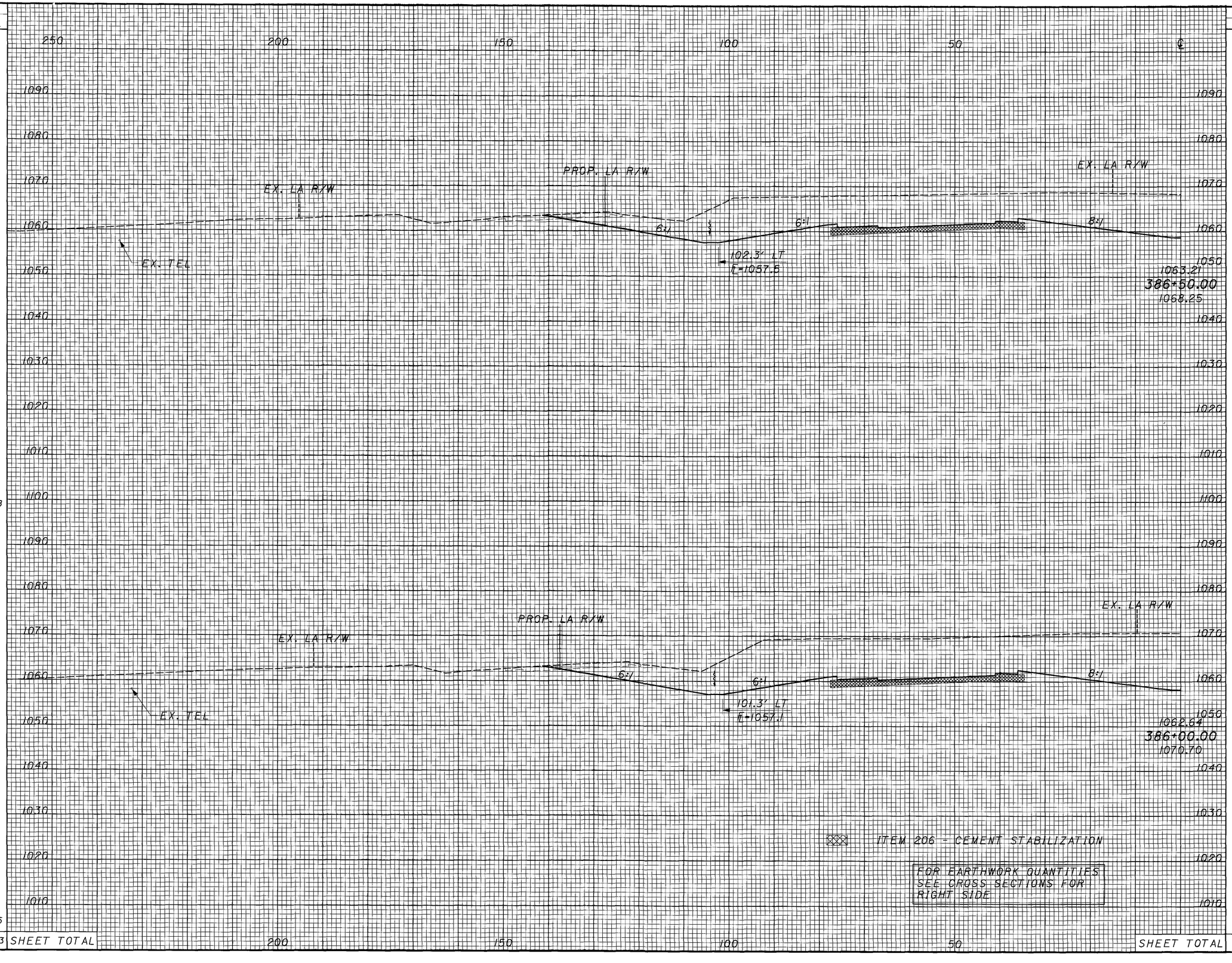
LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
167	928
167	925
1853	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 386+00 TO STA. 386+50 LT.

LIC-161-6.65
LIC-37-10.25

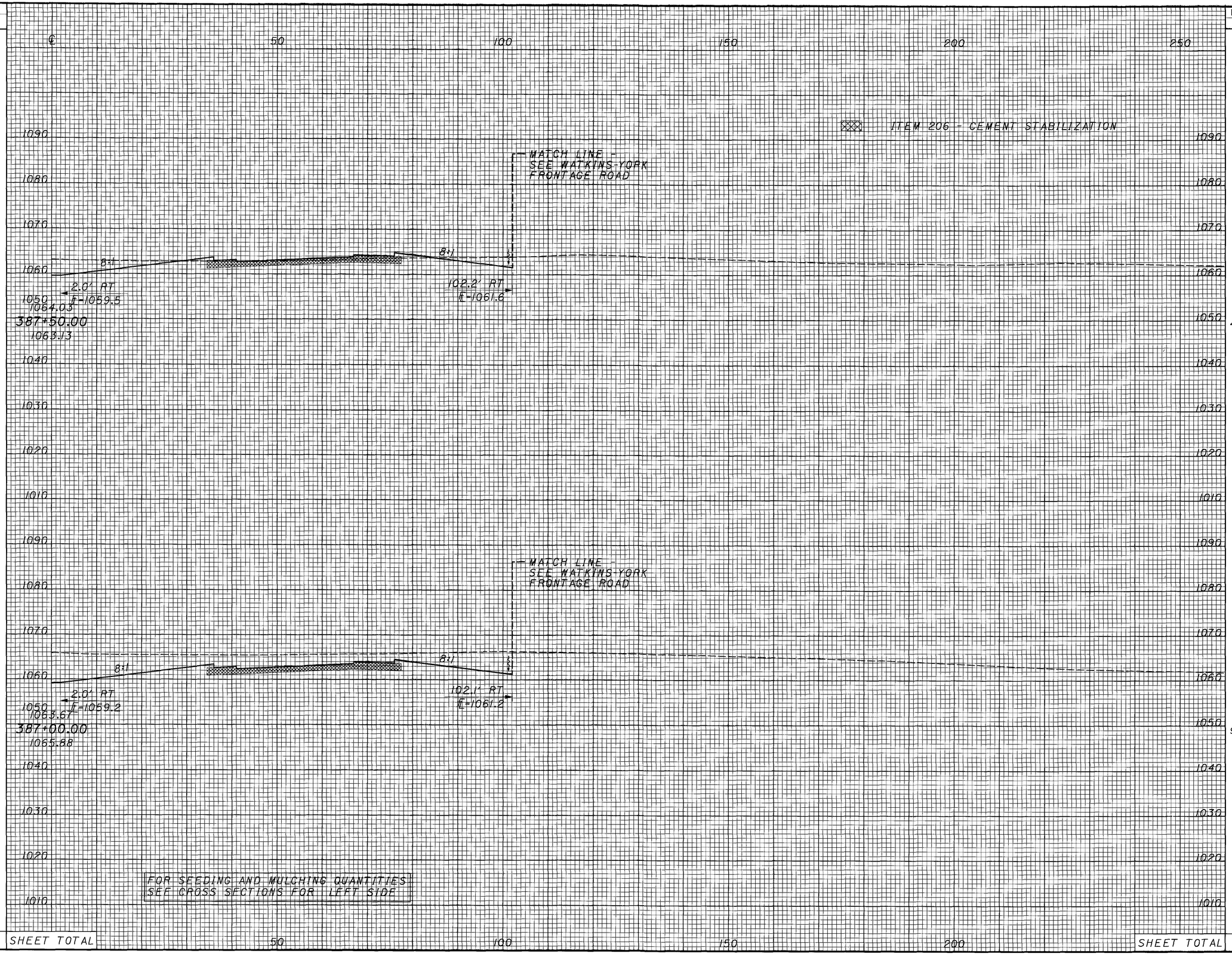
238
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
452	23		
		1288	21
939	0		
		2316	0
		3604	21

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 387+00 TO STA. 387+50 RT.

LIC-161-6.65
LIC-37-10.25

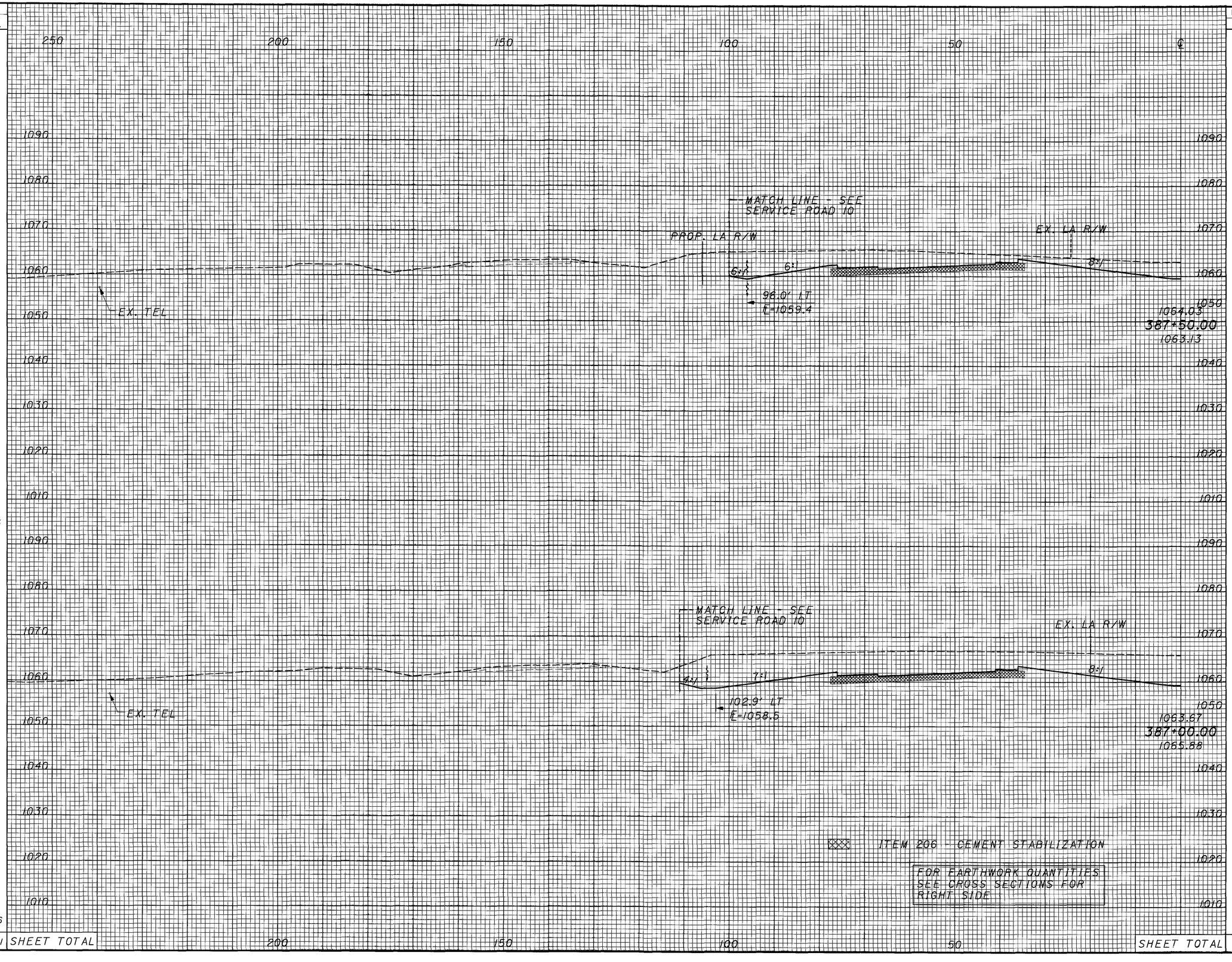
239
1349

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SEEDING	
END WIDTH	SQ. YDS.
	123
	715
	134
	836
1551	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 387+00 TO STA. 387+50 LT.

LIC-161-6.65
LIC-37-10.25

240
1349

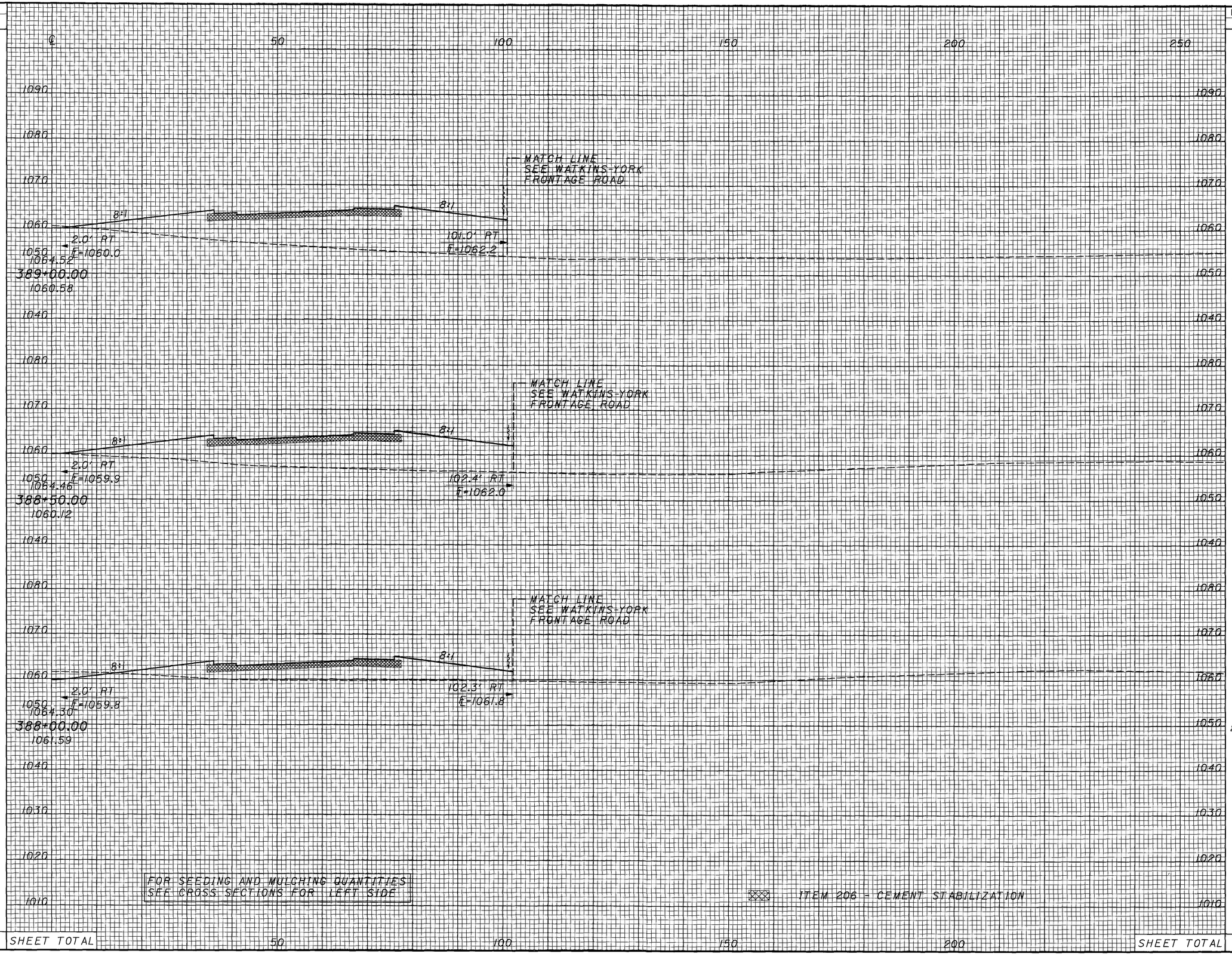
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
117	657		
		211	1154
111	589		
		356	818
274	294		
		672	294
		1239	2266

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 388+00 TO STA. 389+00 RT.



SHEET TOTAL

SHEET TOTAL

LIC-161-6.65
LIC-37-10.25

241
1349

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SEEDING	
END WIDTH	SQ. YDS.
132	
	723
128	
	713
129	
	699
	2135

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1090 1080 1070 1060 1050 1040 1030 1020 1010

MATCH LINE - SEE SERVICE ROAD 10

EX. LA R/W

EX. TEL

6:1 3:1 8:1

108.6' LT
℄-1056.6

1064.52
388+00.00
1060.58

MATCH LINE - SEE SERVICE ROAD 10

EX. LA R/W

EX. TEL

6:1 3:1 8:1

103.2' LT
℄-1057.5

1064.46
388+50.00
1060.12

MATCH LINE - SEE SERVICE ROAD 10

PROP. LA R/W

EX. LA R/W

EX. TEL

6:1 3:1 6:1 8:1

99.4' LT
℄-1058.5

1064.30
388+00.00
1061.59

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL	200	150	100	50	SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 388+00 TO STA. 389+00 LT.

LIC-161-6.65
LIC-37-10.25

242
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		215	605		
				349	1112
		162	596		
				340	1153
		206	650		
				299	1210
SHEET TOTAL				988	3475

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 389+50 TO STA. 390+50 RT.

LIC-161-6.65
LIC-37-10.25

243
1349

℄ 50 100 150 200 250

1090 1080 1070 1060 1050 1040 1030 1020

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1 2.0' RT E=1059.6 1064.11 390+50.00 1059.83 103.1' RT E=1061.5

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1 2.0' RT E=1059.8 1064.35 390+00.00 1060.50 102.9' RT E=1061.8

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1 2.0' RT E=1060.0 1064.49 389+50.00 1061.07 102.7' RT E=1061.9

ITEM 206 - CEMENT STABILIZATION

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

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SEEDING	
END WIDTH	SQ. YDS.
	170
	883
	148
	806
	142
	762
	2451 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EX. LA R/W
PROP. LA R/W
EX. LA R/W
6:1
4:1
6:1
8:1
119.0' LT
E=1053.7
1064.11
390+50.00
1059.83

MATCH LINE SEE SERVICE ROAD 10
EX. LA R/W
6:1
8:1
123.0' LT
E=1055.2
1064.35
390+00.00
1060.50

MATCH LINE - SEE SERVICE ROAD 10
EX. LA R/W
6:1
8:1
117.8' LT
E=1056.2
1064.49
389+50.00
1061.07

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

250 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 389+50 TO STA. 390+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
84	472		
		155	1062
84	674		
		240	1381
175	818		
		362	1318
		757	3761

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 391+00 TO STA. 392+00 RT.

LIC-161-6.65
LIC-37-10.25

245
1349

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1090 1080 1070 1060 1050 1040

— MATCH LINE — SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT E=1058.3
1082.79
392+00.00
1059.70

103.9' RT E=1060.1

8:1 8:1

2.0' RT E=1058.8
1063.33
391+50.00
1058.06

103.6' RT E=1060.7

8:1 8:1

2.0' RT E=1059.3
1063.77
391+00.00
1058.38

103.3' RT E=1061.2

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL 50 100 150 200 SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
165	
924	
167	
944	
173	
952	
2820	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

1090 1080 1070 1060 1050 1040

EX. LA R/W
PROP. LA R/W
EX. TEL
120.4' LT
℄=1050.0
6:1
3:1
3:1
EX. LA R/W
8:1
1062.79
392+00.00
1059.70

EX. LA R/W
PROP. LA R/W
EX. TEL
118.1' LT
℄=1051.3
6:1
3:1
3:1
EX. LA R/W
8:1
1063.33
391+50.00
1058.06

EX. LA R/W
PROP. LA R/W
EX. TEL
115.8' LT
℄=1052.5
6:1
3:1
6:1
EX. LA R/W
8:1
1063.77
391+00.00
1058.38

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 391+00 TO STA. 392+00 LT.

LIC-161-6.65
LIC-37-10.25

246
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		32	1831		
				52	2961
		25	1367		
				77	1817
		58	594		
				132	988
SHEET TOTAL				261	5766

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 392+50 TO STA. 393+50 RT.

LIC-161-6.65
LIC-37-10.25

247
1349

℄ 50 100 150 200 250

ITEM 206 = CEMENT STABILIZATION

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄=1056.1
8:1
1060.58
393+50.00
1050.74
104.9' RT
℄=1057.8

MATCH LINE SEE WATKINS-YORK FRONTAGE ROAD

8:1
2.0' RT
℄=1056.9
1061.42
393+00.00
1053.74
104.5' RT
℄=1058.6

MATCH LINE SEE WATKINS-YORK FRONTAGE ROAD

8:1
2.0' RT
℄=1057.6
1062.16
392+50.00
1058.06
104.2' RT
℄=1059.4

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

1080 1070 1060 1050 1040 1030

SHEET TOTAL 50 100 150 200

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SEEDING	
END WIDTH	SQ. YDS.
174	
	952
169	
	930
166	
	921
	2803

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EX. LA R/W
PROP. LA R/W
EX. LA R/W
6:1
8:1
3:1
3:1
1080.58
393+50.00
1050.74
126.1' LT
℄-1045.9

EX. LA R/W
PROP. LA R/W
EX. LA R/W
6:1
8:1
3:1
3:1
1061.42
393+00.00
1053.74
123.7' LT
℄-1047.5

EX. LA R/W
PROP. LA R/W
EX. LA R/W
6:1
8:1
3:1
3:1
EX. TEL
1062.16
392+50.00
1058.06
122.1' LT
℄-1048.8

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 392+50 TO STA. 393+50 LT.

LIC-161-6.65
LIC-37-10.25

248
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		97	2591		
				135	4732
		49	2520		
				83	4332
		40	2159		
				67	3694
SHEET TOTAL				285	12758

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 394+00 TO STA. 395+00 RT.

LIC-161-6.65
LIC-37-10.25

249
1349

℄ 50 100 150 200 250

2.0' RT
℄-1053.1
8:1
8:1
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD
102.3' RT
℄-1054.4
1057.57
395+00.00
1041.64

2.0' RT
℄-1054.1
8:1
8:1
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD
1058.61
394+50.00
1043.82
103.9' RT
℄-1055.5

2.0' RT
℄-1055.1
8:1
8:1
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD
1059.64
394+00.00
1047.74
105.1' RT
℄-1056.8

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

1080 1070 1060 1050 1040 1030

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
175	
	974
176	
	986
179	
	982
	2942

250 200 150 100 50 ℄

1080 1070 1060 1050 1040 1030

EX. LA R/W

PROP. LA R/W

3:1 3:1 6:1 8:1

125.9' LT
℄=1043.5

1057.57
395+00.00
1041.64

EX. LA R/W

PROP. LA R/W

3:1 3:1 6:1 8:1

127.0' LT
℄=1043.9

1058.61
394+50.00
1043.82

EX. LA R/W

PROP. LA R/W

3:1 3:1 6:1 8:1

128.2' LT
℄=1044.3

1059.64
394+00.00
1047.74

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

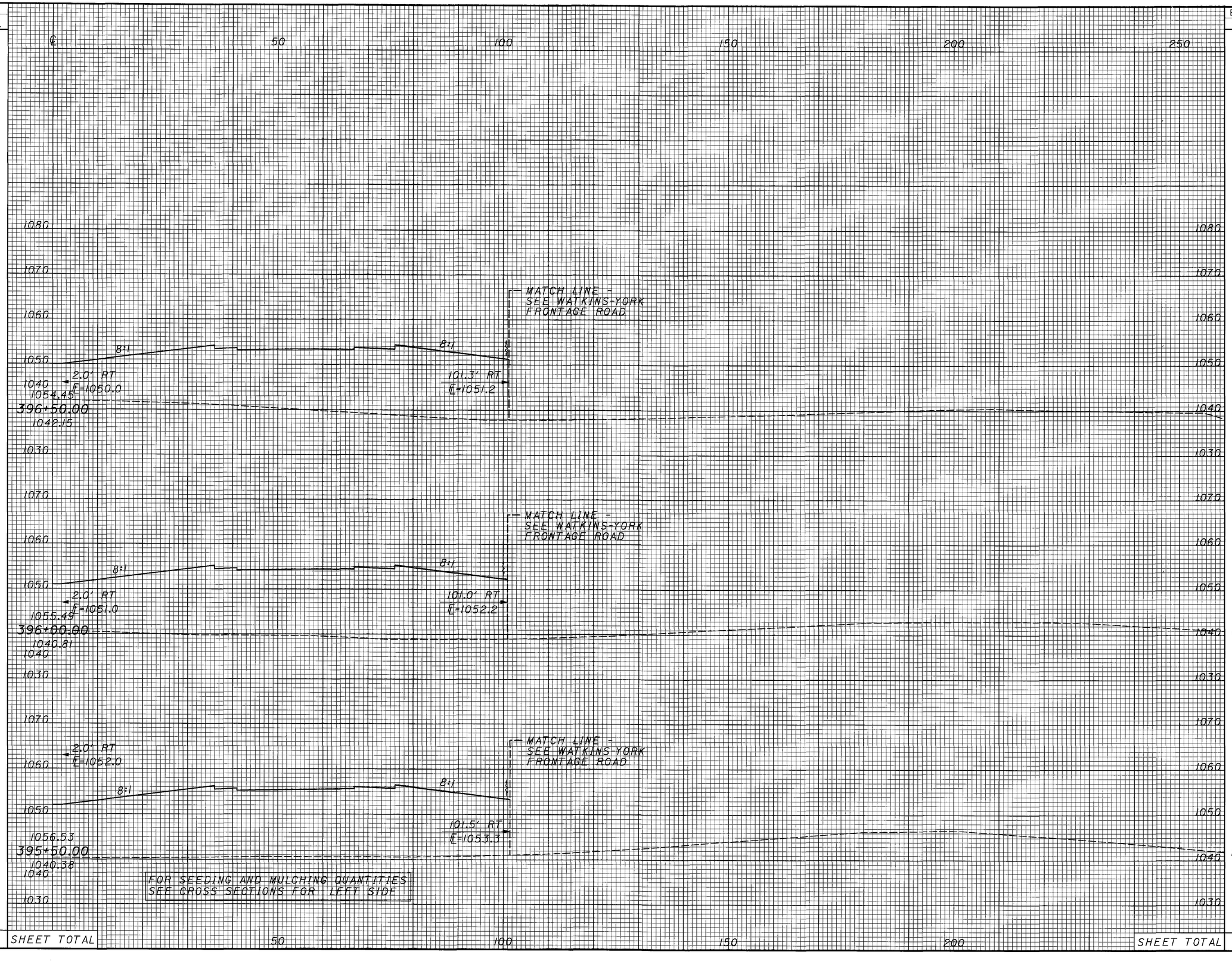
CROSS SECTIONS - S.R. 161
STA. 394+00 TO STA. 395+00 LT.

LIC-161-6.65
LIC-37-10.25

250
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
38	2205		
		96	4340
66	2482		
		169	4687
117	2579		
		198	4787
SHEET TOTAL		463	13814

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 395+50 TO STA. 396+50 RT.

LIC-161-6.65
LIC-37-10.25

251
1349

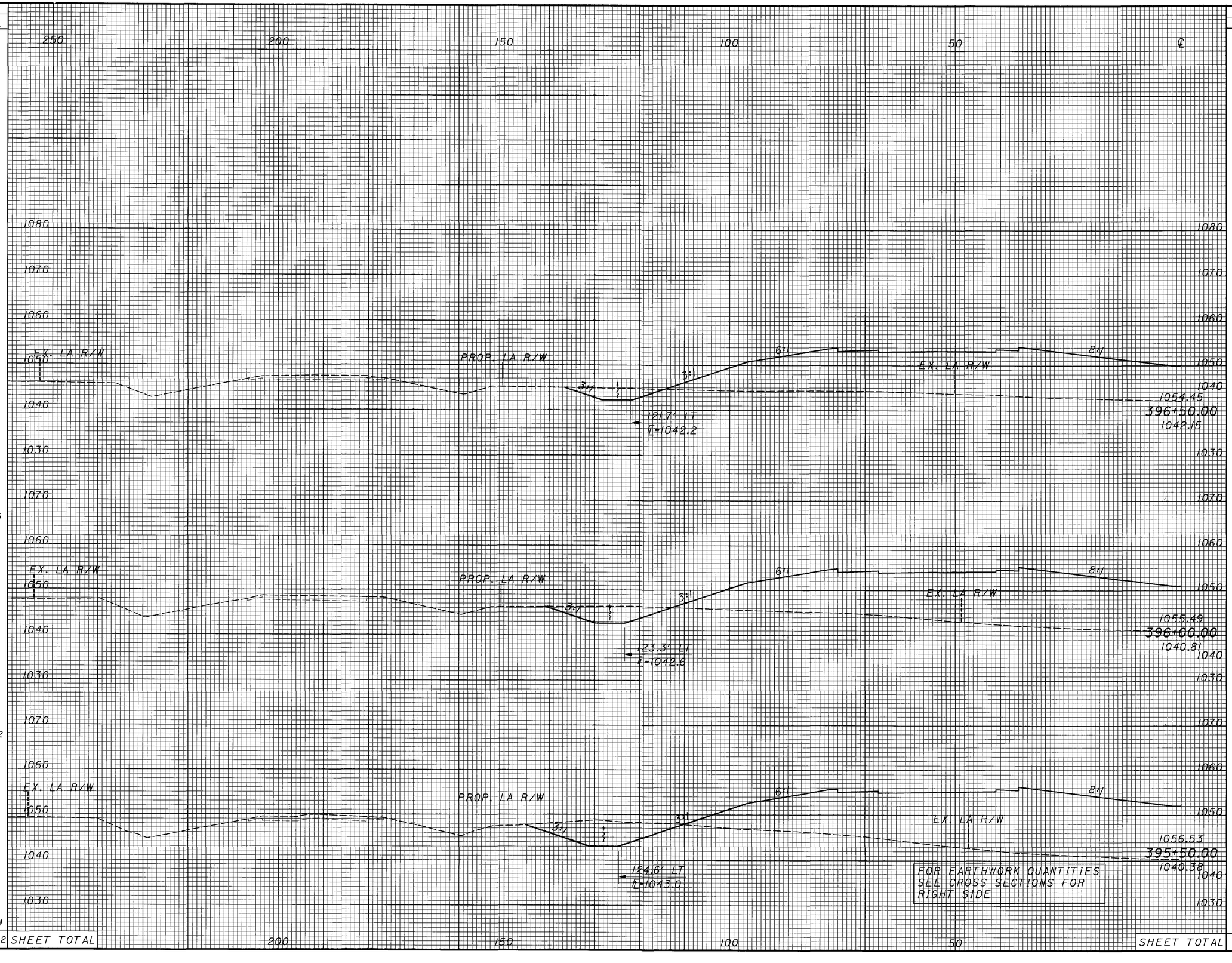
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SEEDING	
END WIDTH	SQ. YDS.
	163
	916
	167
	942
	172
	964
	2822 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 395+50 TO STA. 396+50 LT.



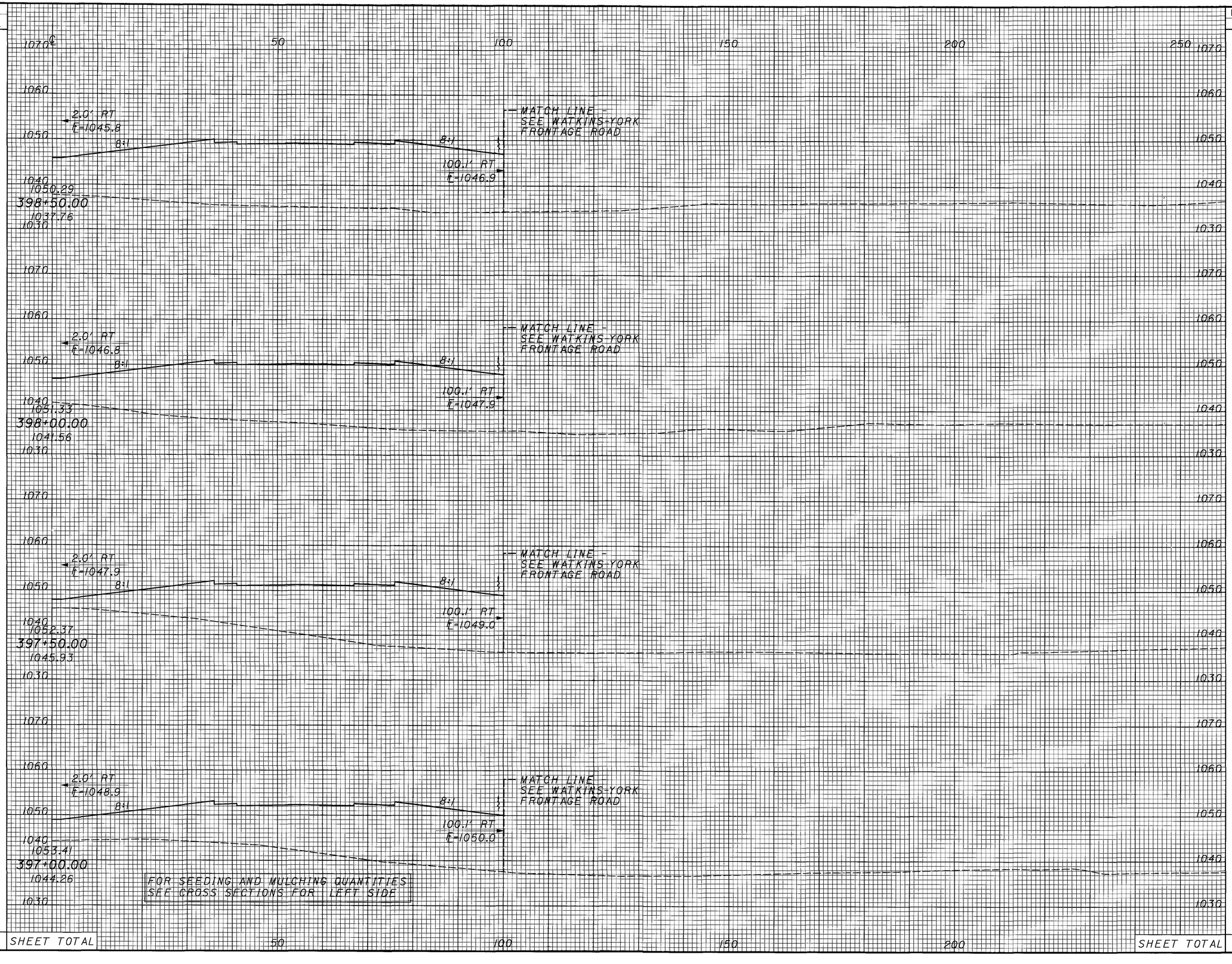
LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
17	2117		
		47	3582
34	1752		
		56	3033
27	1524		
		57	2995
34	1710		
		67	3626
	SHEET TOTAL	227	13236

CALCULATED JMA
CHECKED BER



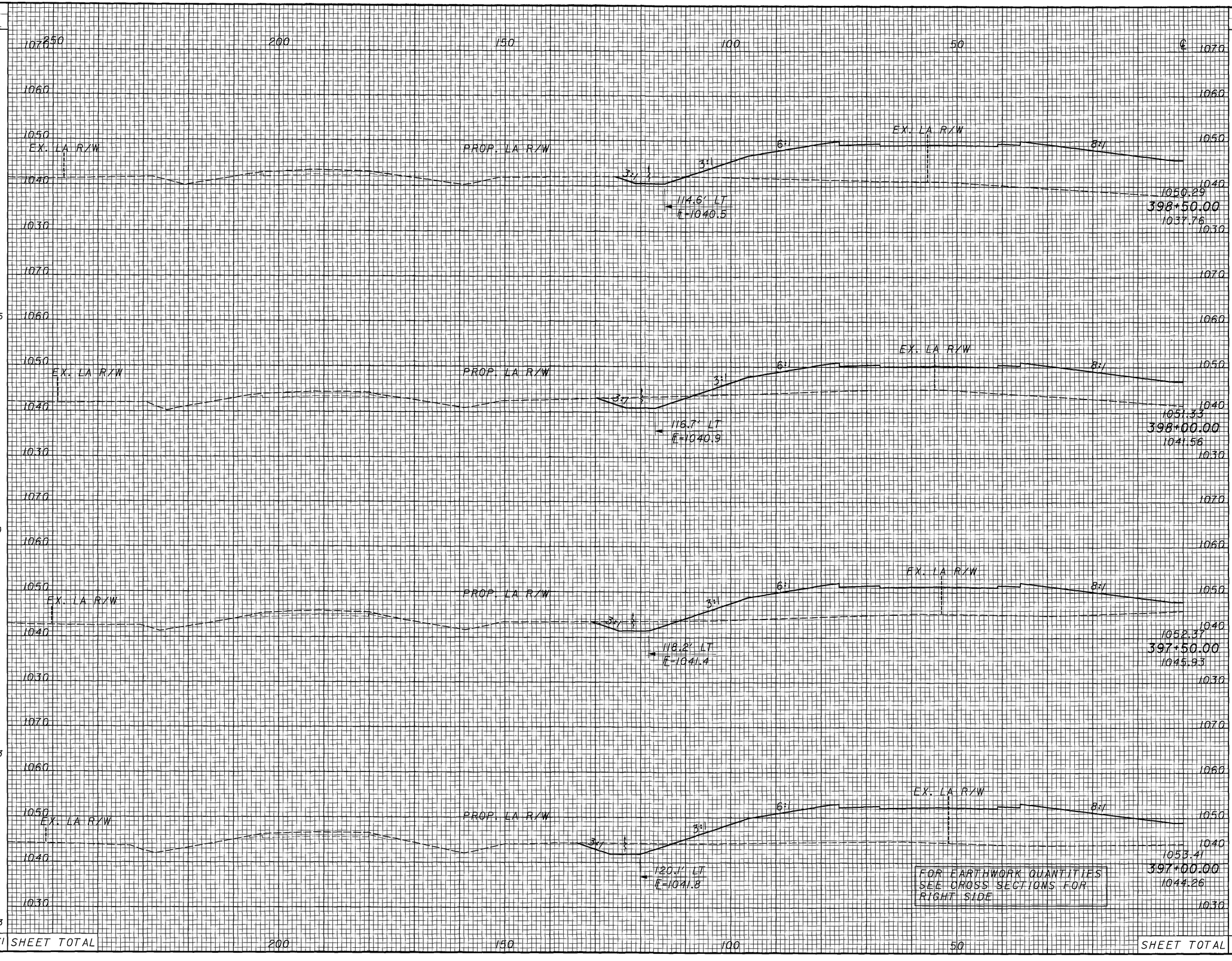
CROSS SECTIONS - S.R. 161
STA. 397+00 TO STA. 398+50 RT.

LIC-161-6.65
LIC-37-10.25

253
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
150	845
154	860
155	873
159	893
	3471



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA

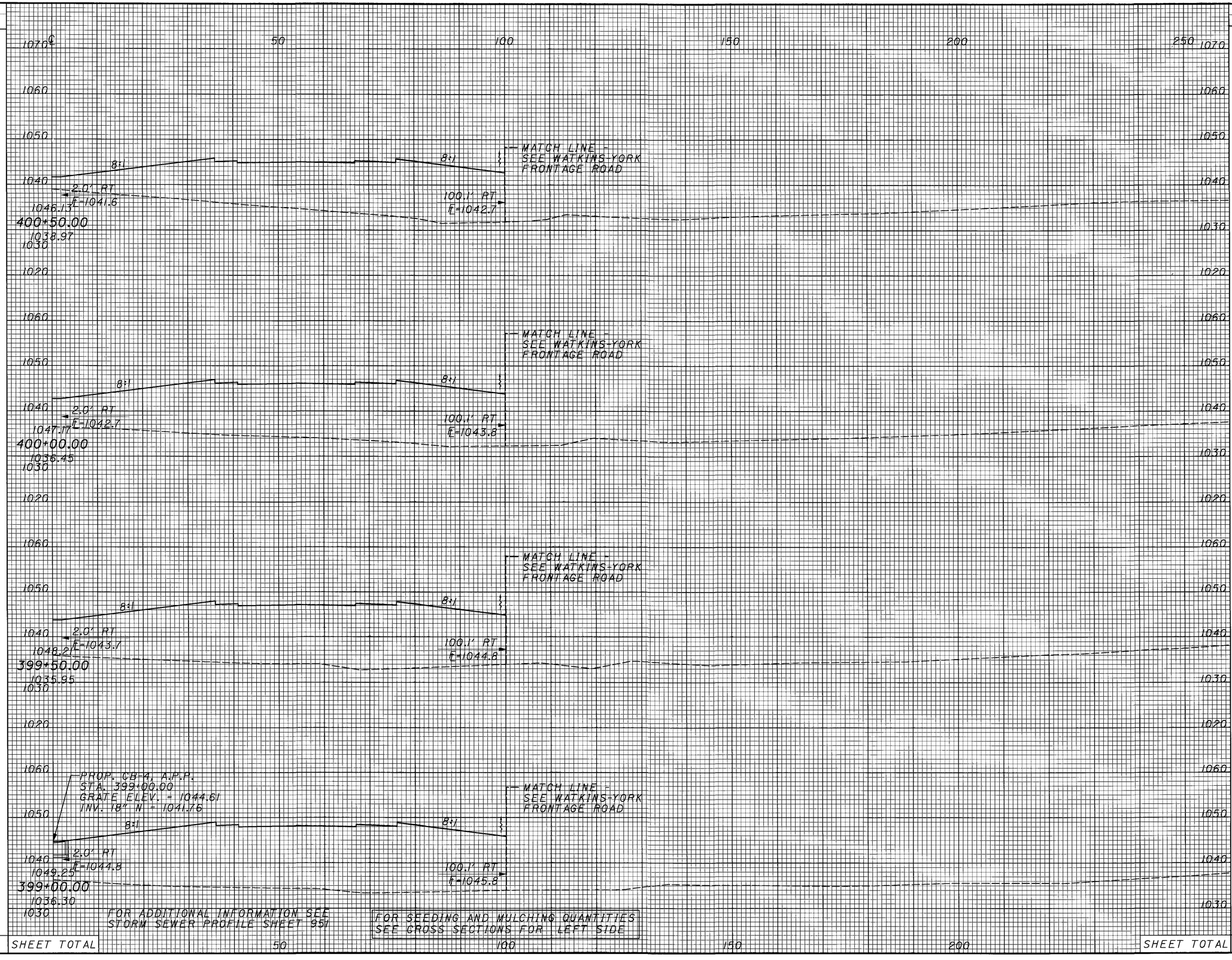
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 397+00 TO STA. 398+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
48	1374		
		64	2981
21	1846		
		42	3569
24	2008		
		41	3850
20	2149		
		34	3951
SHEET TOTAL		181	14351

CALCULATED JMA
CHECKED BER

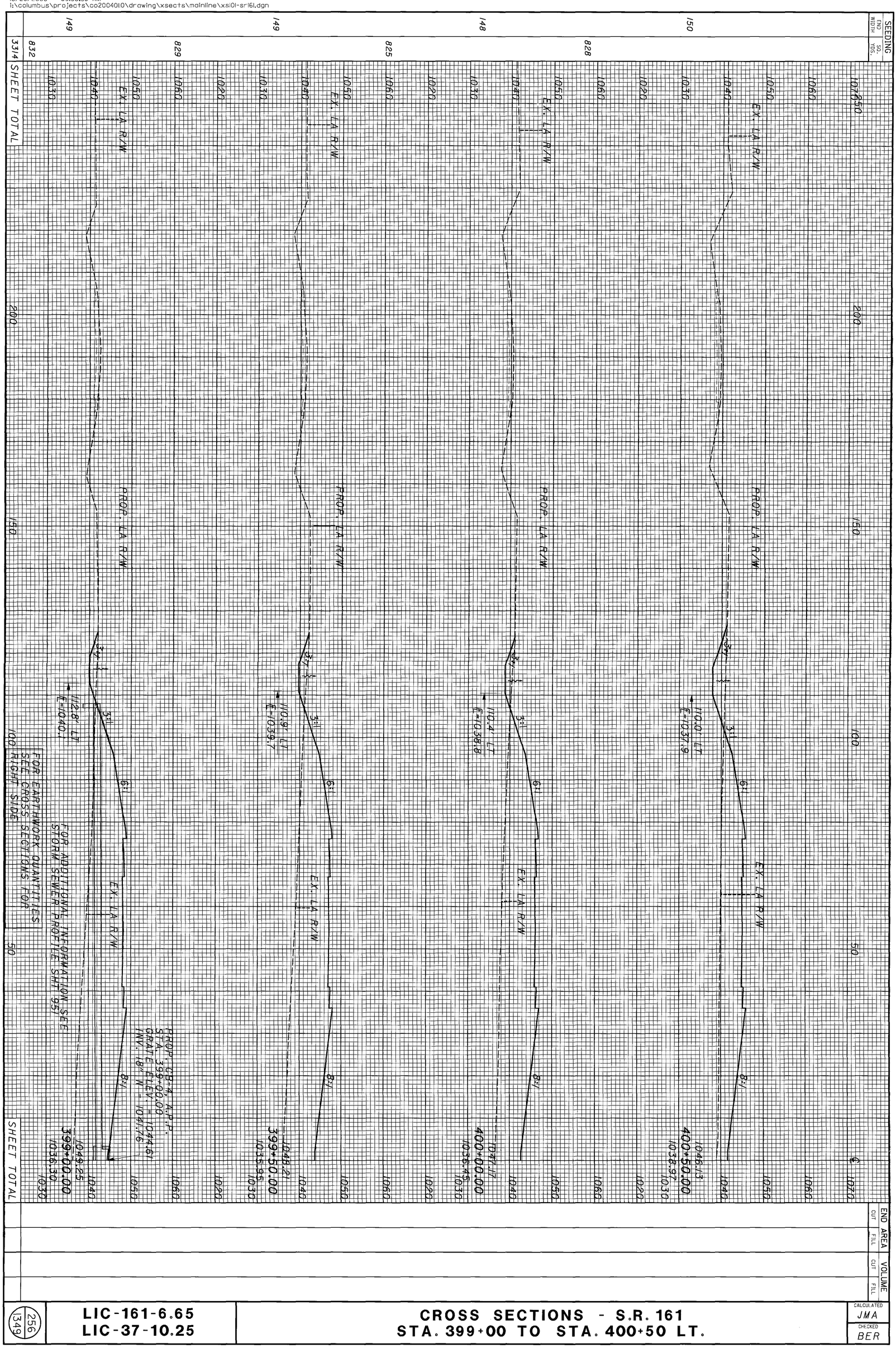
CROSS SECTIONS - S.R. 161
STA. 399+00 TO STA. 400+50 RT.

LIC-161-6.65
LIC-37-10.25

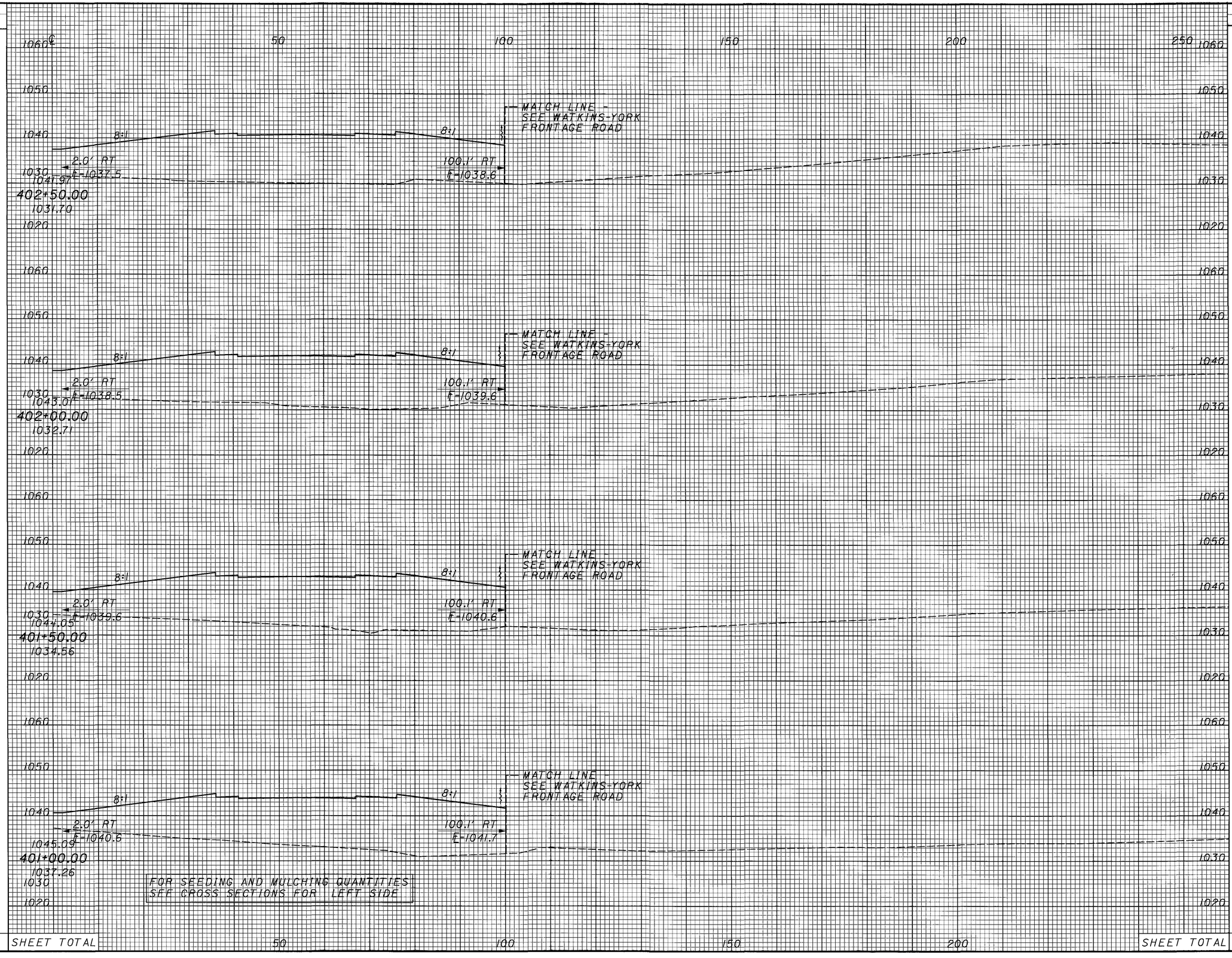
255
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
30	1596		
		75	2922
51	1559		
		132	2768
91	1430		
		185	2434
108	1199		
		145	2382
		537	10506

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 401+00 TO STA. 402+50 RT.

LIC-161-6.65
LIC-37-10.25

257
1349

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SEEDING	
END WIDTH	SQ. YDS.
146	823
150	847
155	865
156	851
	3386 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EX. LA R/W — PROP. LA R/W — EX. LA R/W

3:1 3:1 6:1 8:1

108.6' LT
E=1034.2
1041.97
402+50.00
1031.70

109.0' LT
E=1035.1
1043.01
402+00.00
1032.71

109.5' LT
E=1036.0
1044.05
401+50.00
1034.56

109.9' LT
E=1036.9
1045.09
401+00.00
1037.26

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

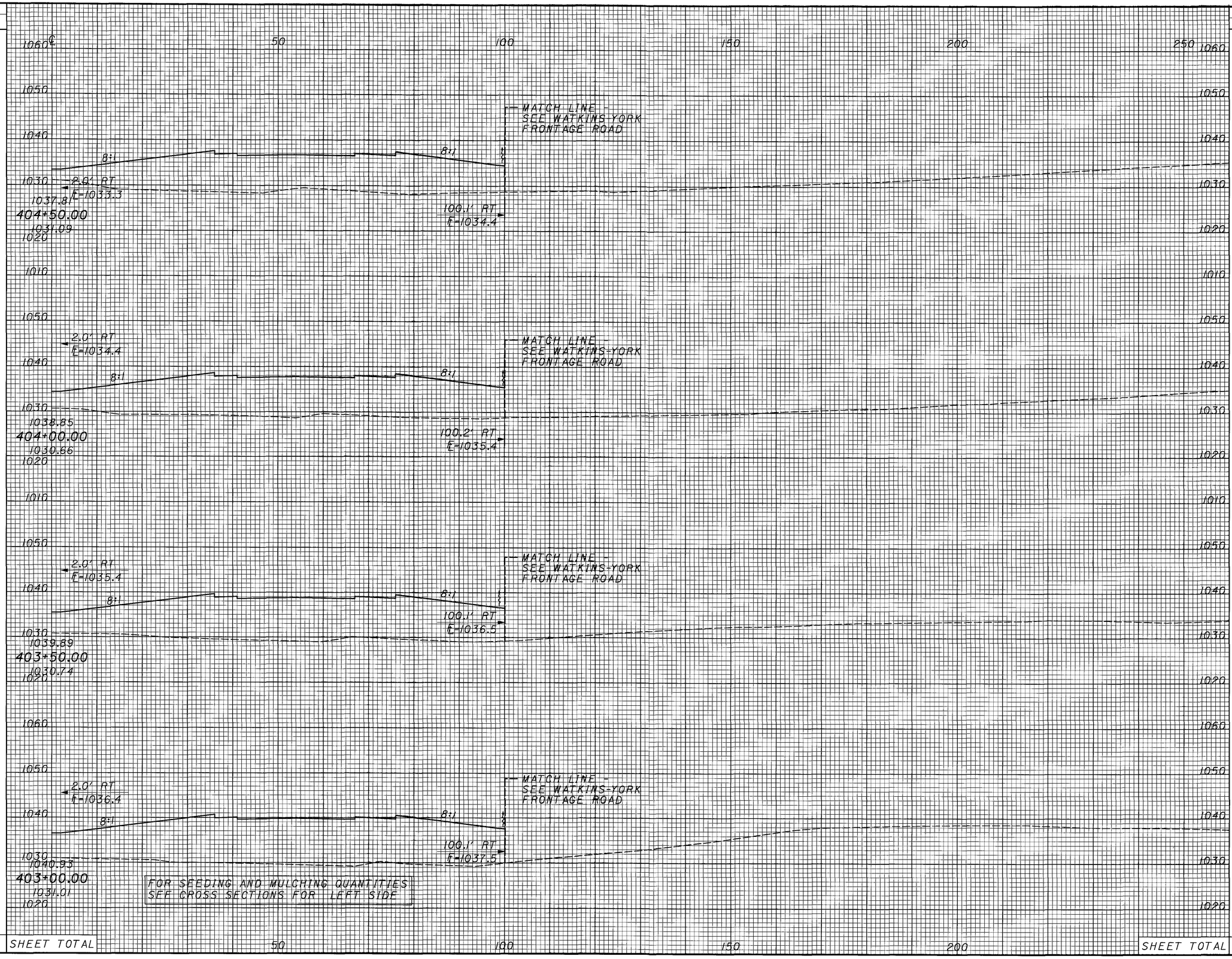
SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 401+00 TO STA. 402+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
171	923		
		268	1959
119	1193		
		145	2411
37	1411		
		47	2788
14	1600		
		40	2959
		500	10117

SHEET TOTAL

CALCULATED JMA

CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 403+00 TO STA. 404+50 RT.

LIC-161-6.65
LIC-37-10.25

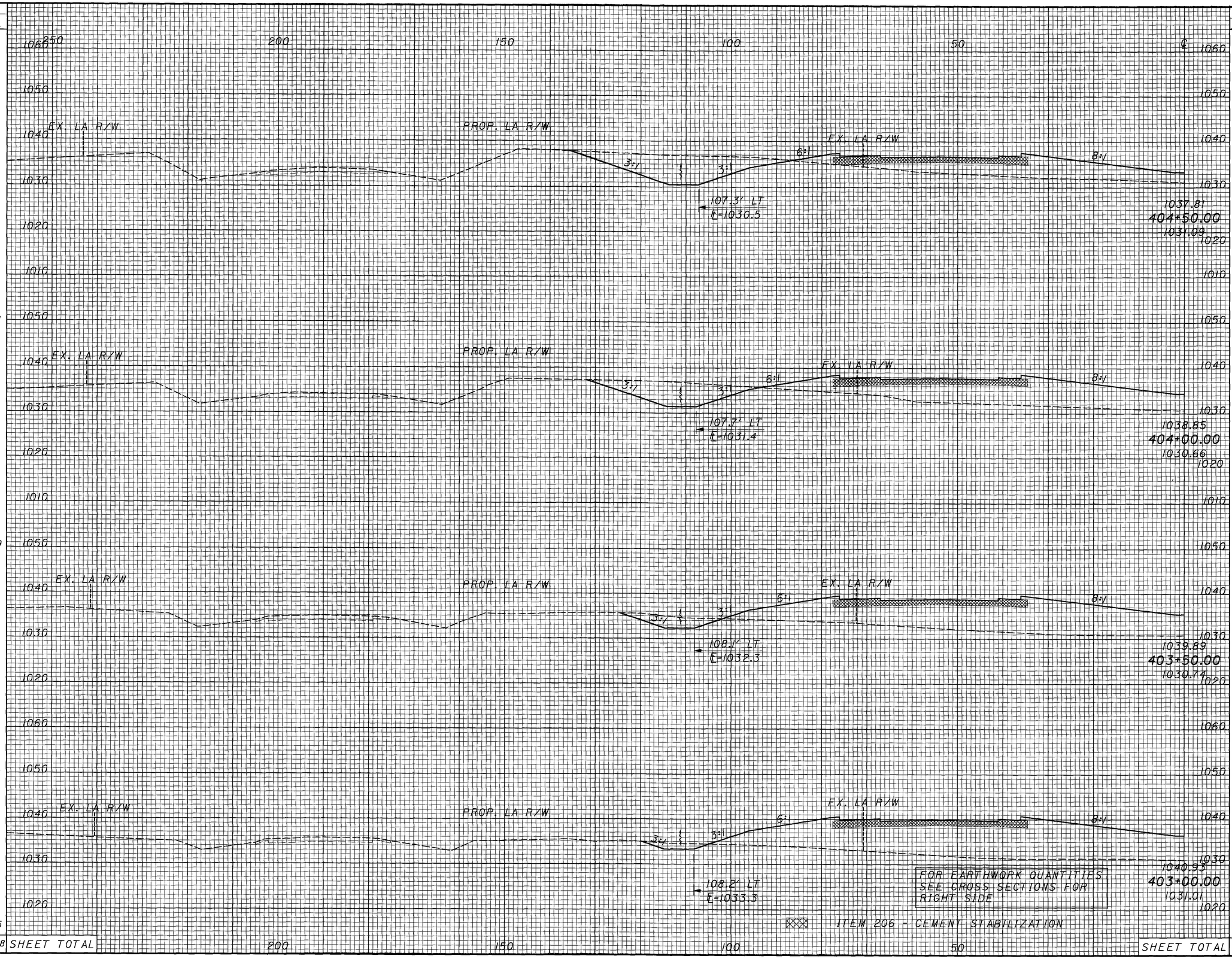
259
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
161	881
157	849
149	813
144	805
	3348

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 403+00 TO STA. 404+50 LT.

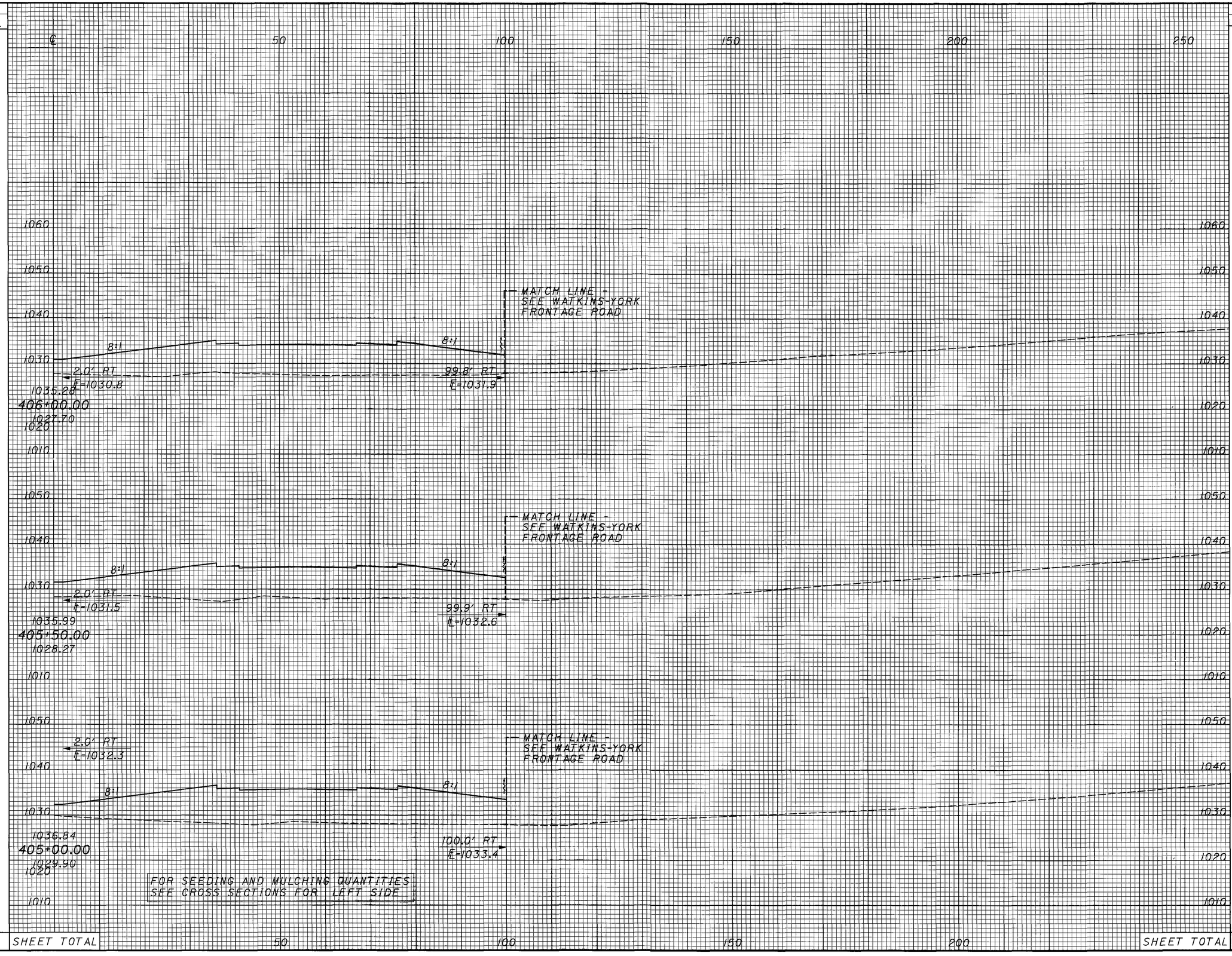
LIC-161-6.65
LIC-37-10.25

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
15	1136		
		52	2103
41	1135		
		114	1999
82	1024		
		234	1803
		400	5905

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 405+00 TO STA. 406+00 RT.

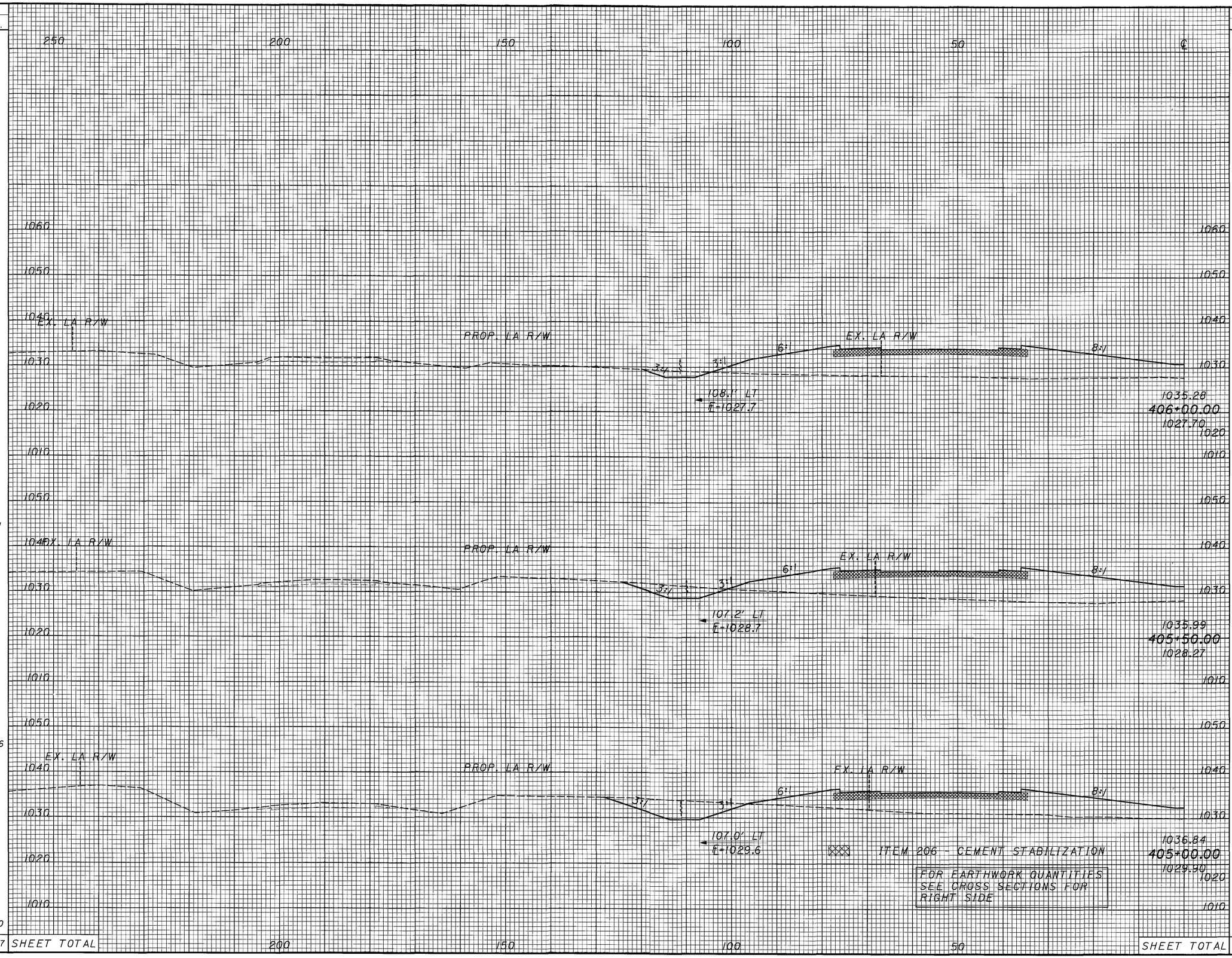
LIC-161-6.65
LIC-37-10.25

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
	143
	811
	148
	836
	153
	870
	2517

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

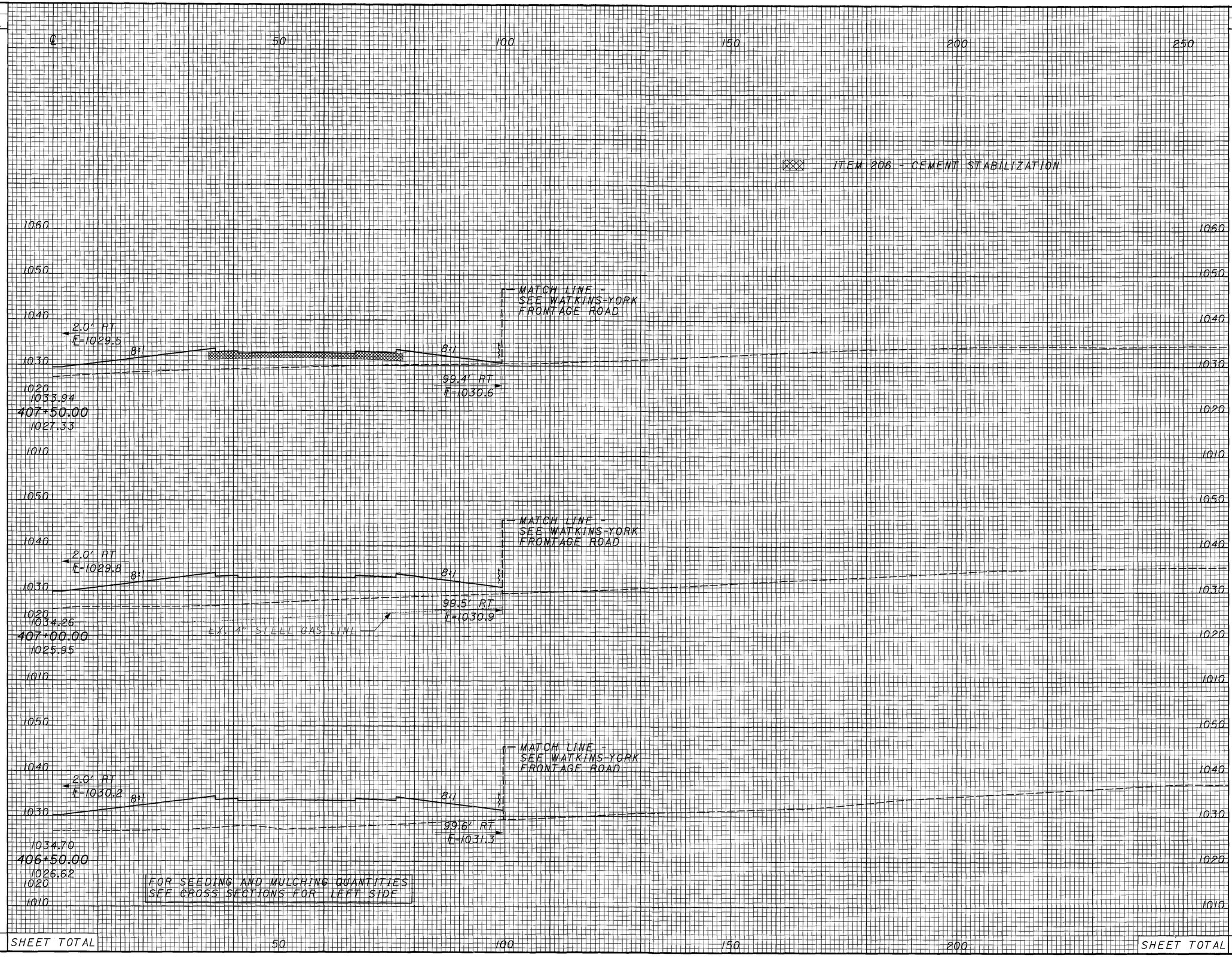


CROSS SECTIONS - S.R. 161
STA. 405+00 TO STA. 406+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
36	777		
		54	1689
22	1047		
		35	1990
16	1102		
		29	2073
SHEET TOTAL		118	5752

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 406+50 TO STA. 407+50 RT.

LIC-161-6.65
LIC-37-10.25

263
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
150	822				
146	807				
144	799				
2428	SHEET TOTAL				

CALCULATED JWA

CHECKED BER

250 200 150 100 50 ℄

1060 1050 1040 1030 1020 1010

EX. LA R/W

PROP. LA R/W

3:1 3:1 6:1 8:1

112.1' LT
℄=1025.0

1035.94
407+50.00
1027.33

110.0' LT
℄=1026.0

1034.26
407+00.00
1025.95

109.0' LT
℄=1026.8

1034.70
406+50.00
1026.62

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

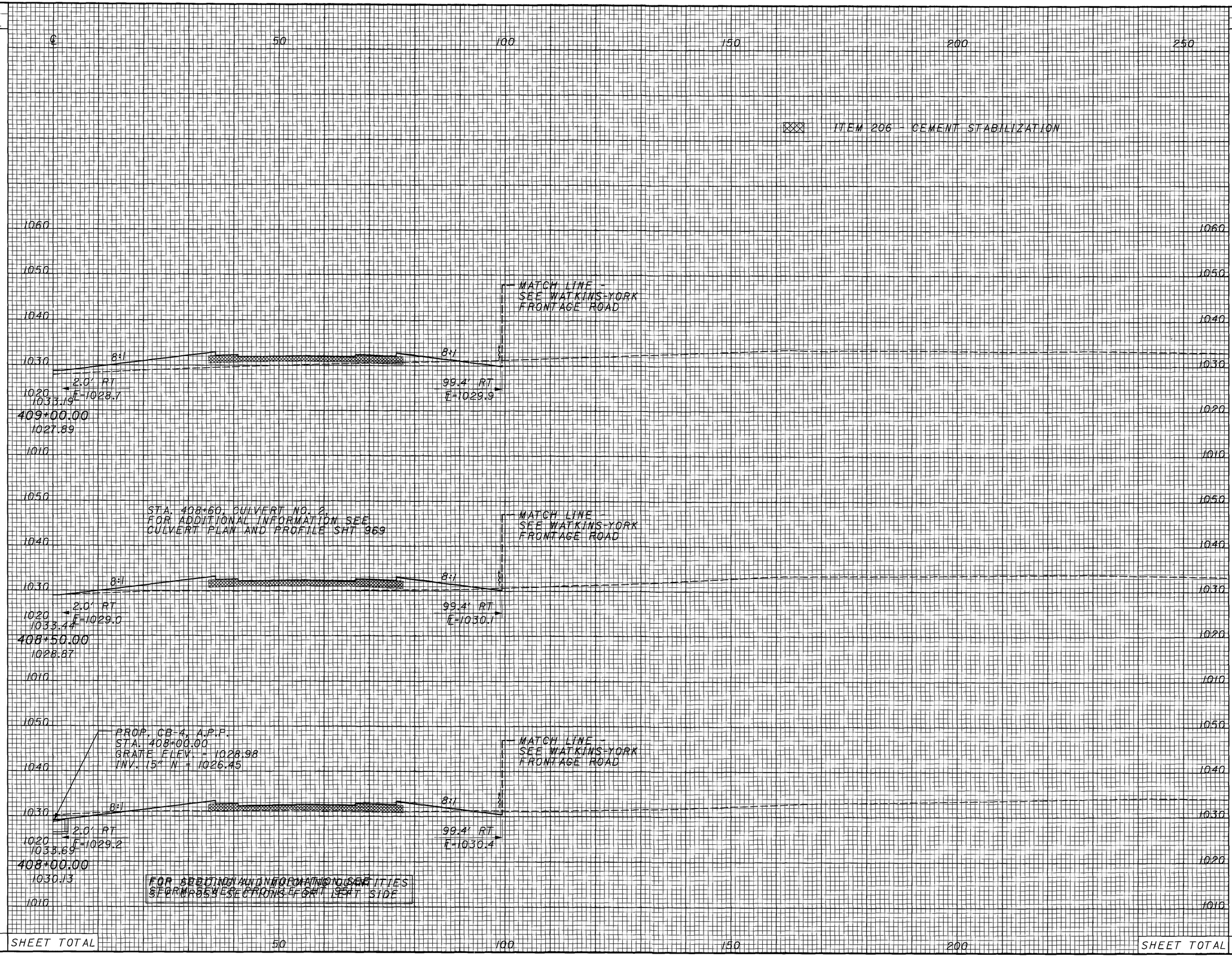
CROSS SECTIONS - S.R. 161
STA. 406+50 TO STA. 407+50 LT.

LIC-161-6.65
LIC-37-10.25

264
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
44	697		
90	1235		
53	636		
114	1074		
70	523		
99	1204		
SHEET TOTAL		303	3513

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 408+00 TO STA. 409+00 RT.

LIC-161-6.65
LIC-37-10.25

265
1349

tauffney
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SEEDING	
END WIDTH	SQ. YDS.
158	
155	
154	
2574	SHEET TOTAL

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
8:1
118.3' LT
E=1022.2
1033.19
409+00.00
1027.89

STA. 408+60, CULVERT NO. 2,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 969

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
8:1
116.3' LT
E=1023.1
1033.44
408+50.00
1028.87

PROP. CB-4, A.P.P.
STA. 408+00.00
GRATE ELEV. = 1028.98
INV. 15" N = 1026.45

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
8:1
114.4' LT
E=1024.0
1033.69
408+00.00
1030.13

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 951

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

250 200 150 100 50 SHEET TOTAL

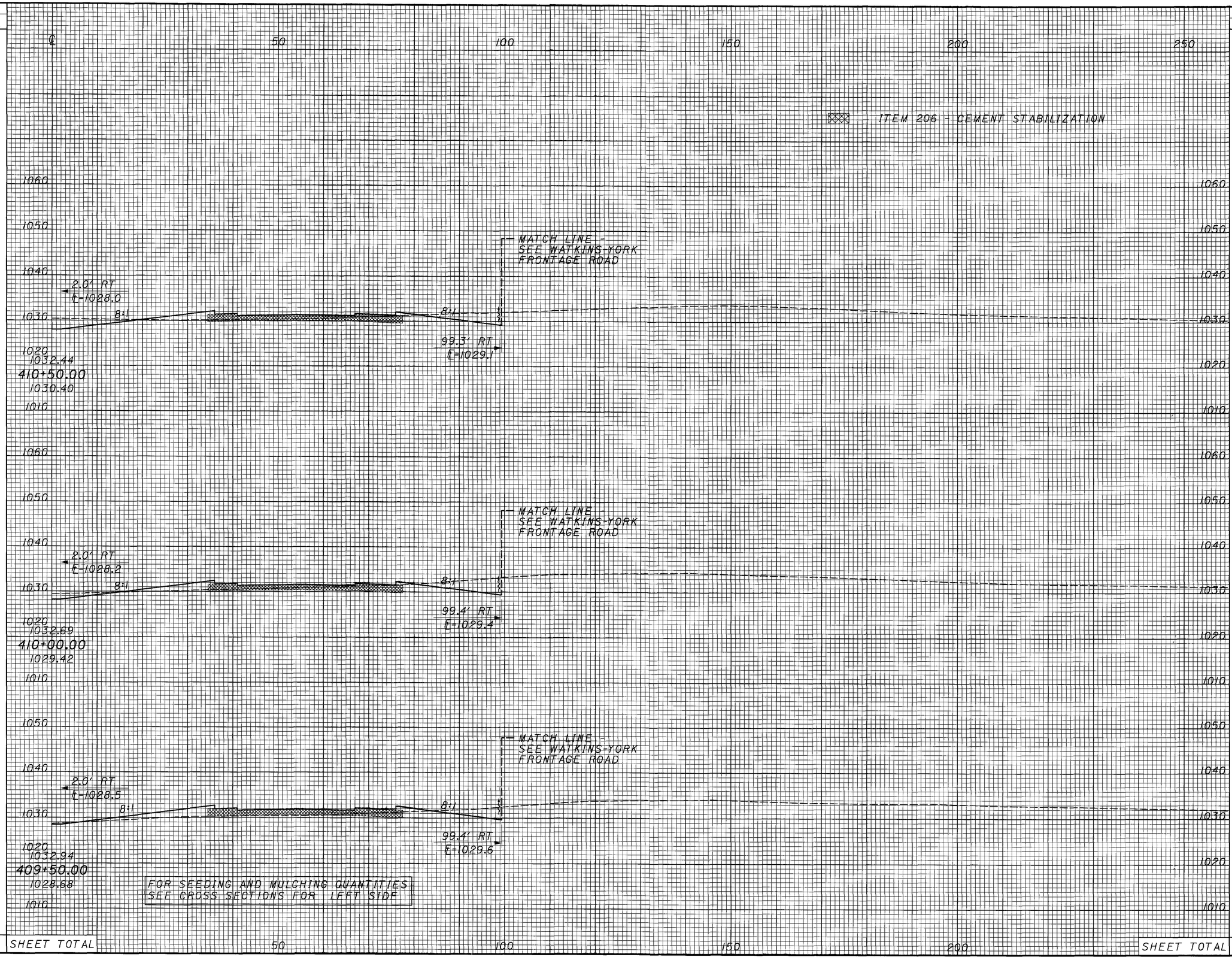
CROSS SECTIONS - S.R. 161
STA. 408+00 TO STA. 409+00 LT.

LIC-161-6.65
LIC-37-10.25

266
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
206	46		
		267	267
83	242		
		138	646
67	456		
		102	1068
SHEET TOTAL		507	1981

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 409+50 TO STA. 410+50 RT.

LIC-161-6.65
LIC-37-10.25

267
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
154	
844	
150	
841	
153	
863	
2548	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1060 1050 1040 1030 1020 1010

LA-R/W
EX. LA R/W
3:1 3:1 6:1 8:1
109.1' LT
℄=1024.5
1032.44
410+50.00
1030.40

LA-R/W
EX. LA R/W
3:1 3:1 6:1 8:1
113.8' LT
℄=1023.2
1032.69
410+00.00
1029.42

LA-R/W
EX. LA R/W
3:1 3:1 6:1 8:1
116.0' LT
℄=1022.7
1032.94
409+50.00
1028.68

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 409+50 TO STA. 410+50 LT.

LIC-161-6.65
LIC-37-10.25

268
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1060 1050 1040 1030 1020 1010

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
E-1027.2
8:1
8:1
99.3' RT
E-1028.4
1031.69
412+00.00
1031.54

547 0

1060 1050 1040 1030 1020 1010

MATCH LINE - SEE WATKINS YORK FRONTAGE ROAD

2.0' RT
E-1027.5
8:1
8:1
99.3' RT
E-1028.6
1031.94
411+50.00
1032.09

820 13

339 14

1060 1050 1040 1030 1020 1010

MATCH LINE - SEE WATKINS YORK FRONTAGE ROAD

2.0' RT
E-1027.7
8:1
8:1
99.3' RT
E-1028.9
1032.19
411+00.00
1032.12

676 13

390 1

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL 50 100 150 200 SHEET TOTAL

552 44

2048 70

CROSS SECTIONS - S.R. 161
STA. 411+00 TO STA. 412+00 RT.

LIC-161-6.65
LIC-37-10.25

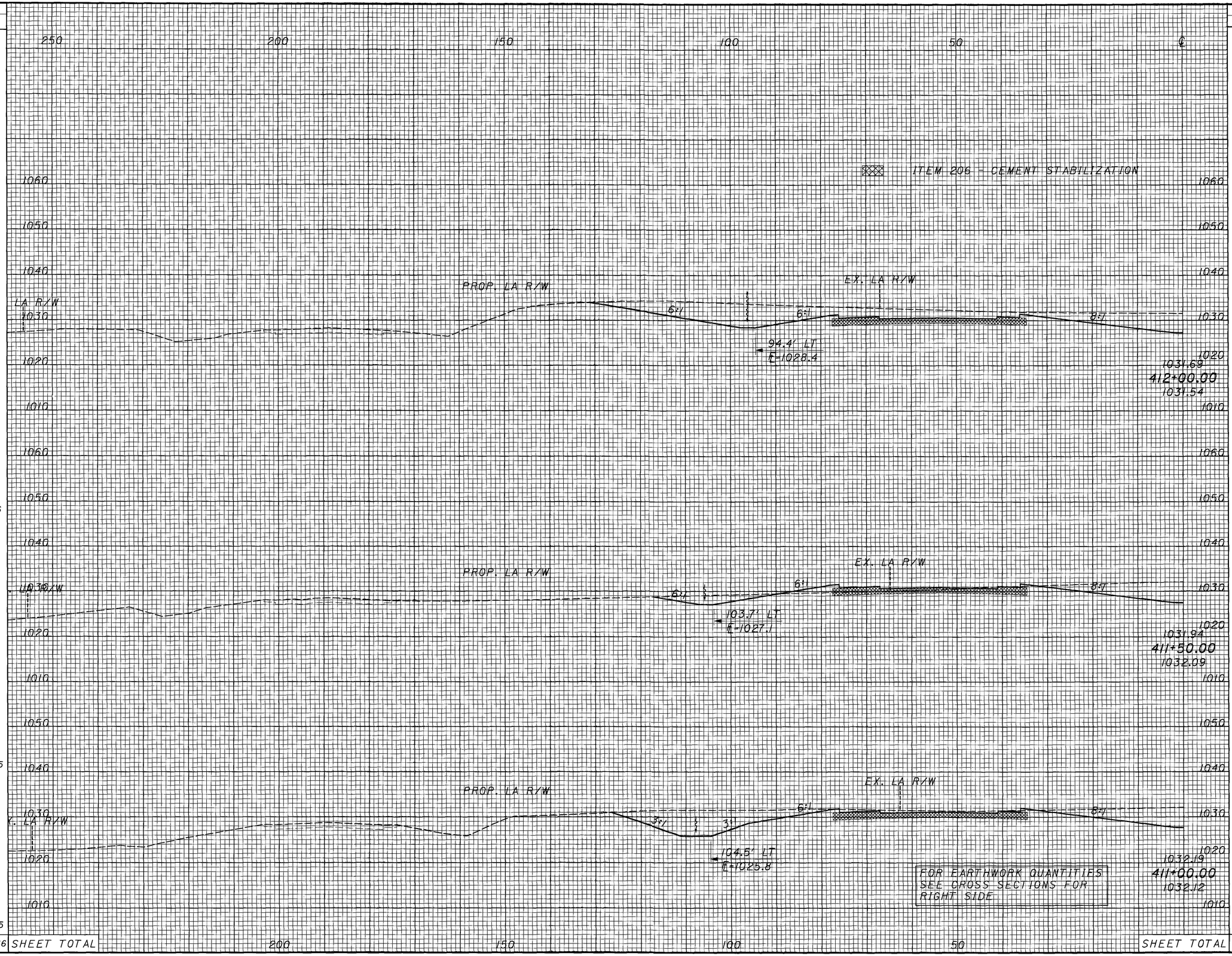
269
1349

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SEEDING	
END WIDTH	SQ. YDS.
	154
	816
	140
	805
	150
	845
2466	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 411+00 TO STA. 412+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
69	230		
		290	250
245	41		
		854	38
678	0		
		1257	0
679	0		
		1135	0
	SHEET TOTAL	3536	288

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 412+50 TO STA. 414+00 RT.

LIC-161-6.65
LIC-37-10.25

271
1349

1050℄ 50 100 150 200 250

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄=1026.2
8:1
8:1
99.3' RT
℄=1027.4
1030.69
414+00.00
1027.57

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄=1026.5
8:1
8:1
99.3' RT
℄=1027.6
1030.94
413+50.00
1029.94

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄=1026.7
8:1
8:1
99.3' RT
℄=1027.9
1031.19
413+00.00
1031.18

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT
℄=1027.0
8:1
8:1
99.3' RT
℄=1028.1
1031.44
412+50.00
1031.53

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

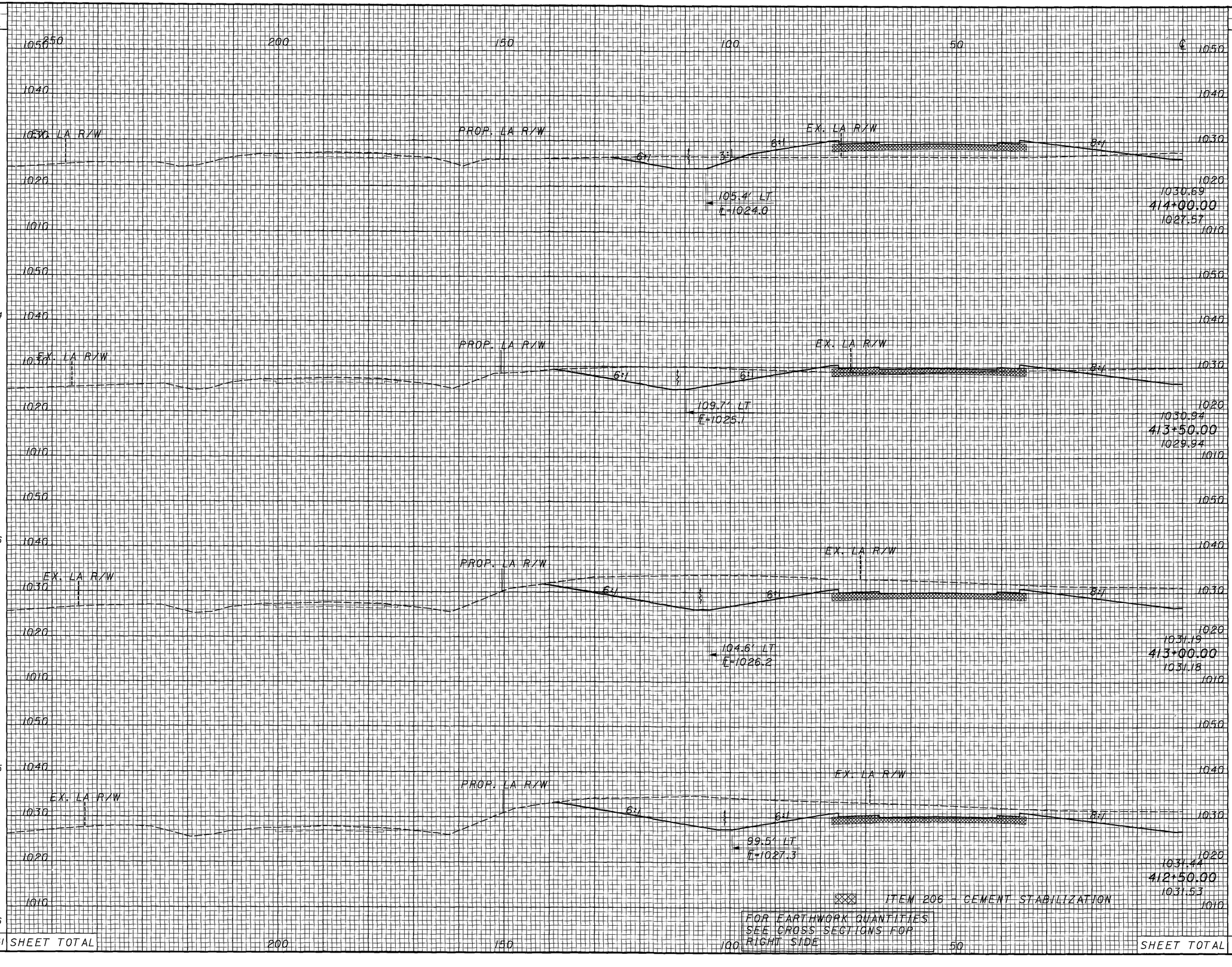
ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 50 100 150 200

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SEEDING	
END WIDTH	SQ. YDS.
149	
	864
162	
	906
164	
	905
161	
	876
	3551

SHEET TOTAL



SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 412+50 TO STA. 414+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
31	540		
		47	1051
19	595		
		34	1087
18	579		
		36	954
21	451		
		83	630
		200	3722

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 414+50 TO STA. 416+00 RT.

LIC-161-6.65
LIC-37-10.25

273
1349

50 100 150 200 250

1050 1040 1030 1020 1010

℄

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT E=1025.2
8:1
8:1
99.3' RT E=1026.4
1029.69
416+00.00
1025.04

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT E=1025.5
8:1
8:1
99.3' RT E=1026.6
1029.94
415+50.00
1024.99

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT E=1025.7
8:1
8:1
99.3' RT E=1026.9
1030.19
415+00.00
1025.89

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

2.0' RT E=1026.0
8:1
8:1
99.3' RT E=1027.1
1030.44
414+50.00
1025.99

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

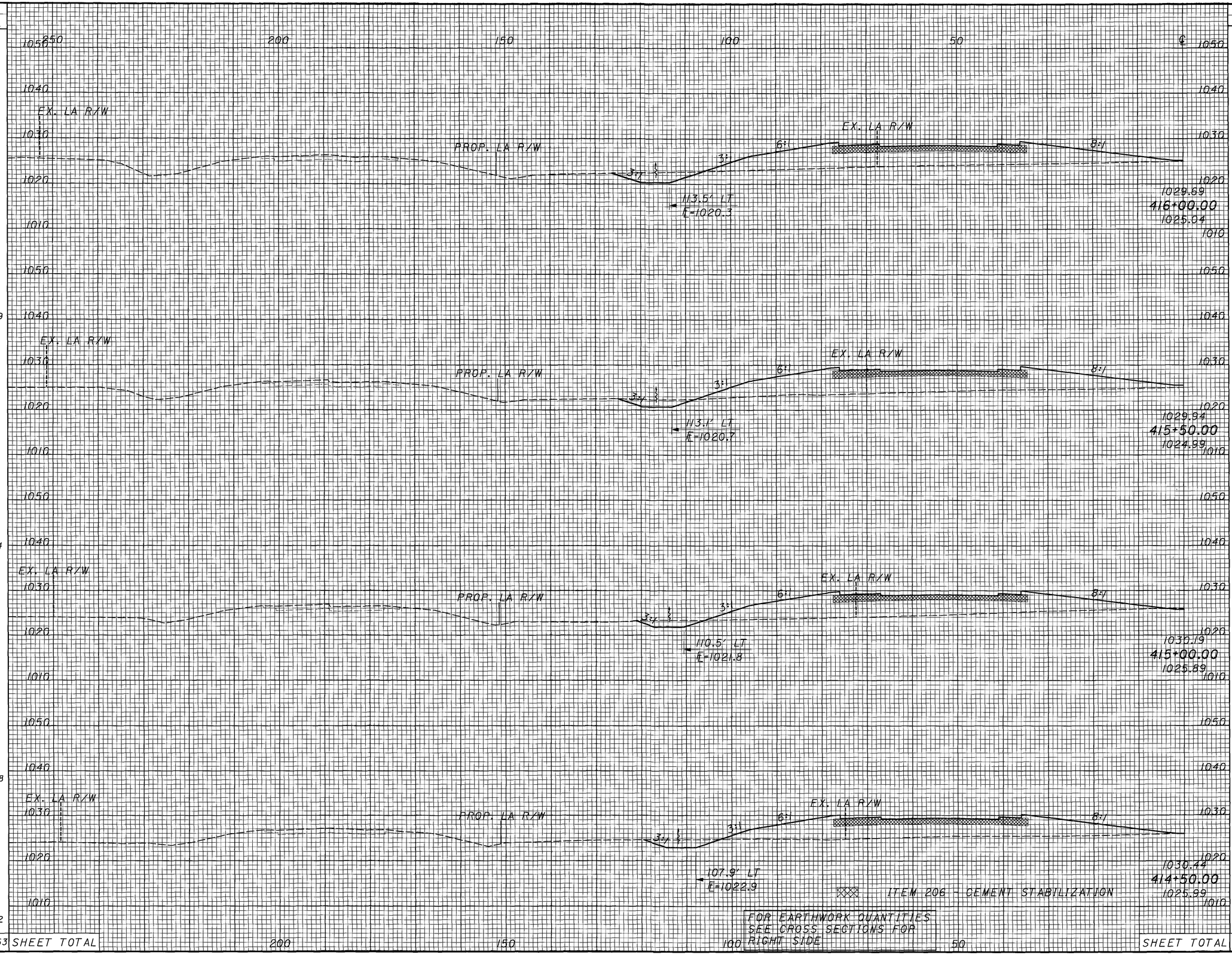
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
150	
	829
149	
	814
144	
	798
143	
	812
	3253

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



3253	SHEET TOTAL	200	150
100	50	SHEET TOTAL	

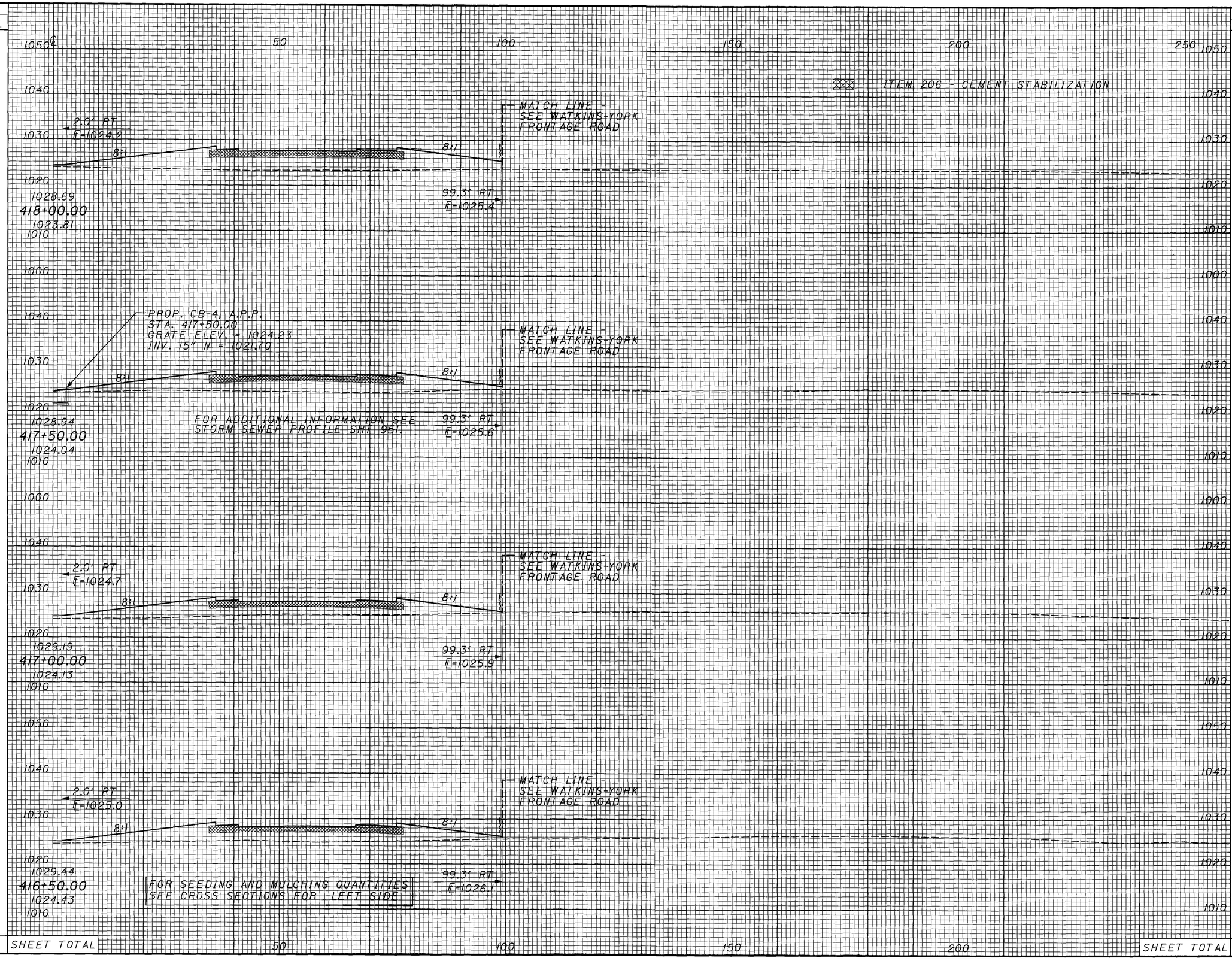
CROSS SECTIONS - S.R. 161
STA. 414+50 TO STA. 416+00 LT.

LIC-161-6.65
LIC-37-10.25

274
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
35	744		
		80	1207
51	559		
		79	1103
34	632		
		65	1145
36	605		
		62	1060
SHEET TOTAL		286	4515

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 416+50 TO STA. 418+00 RT.

LIC-161-6.65
LIC-37-10.25

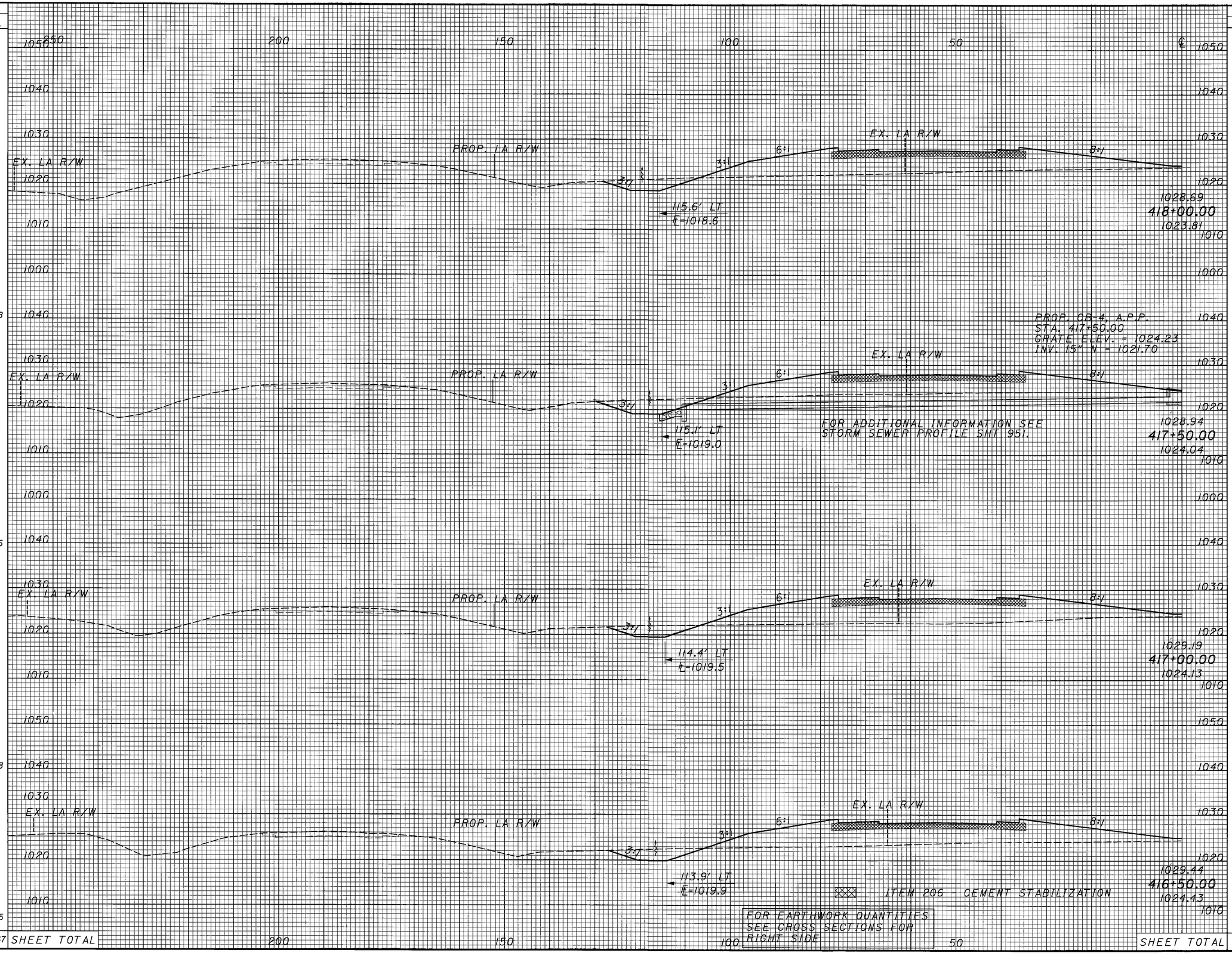
275
349

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SEEDING	
END WIDTH	SQ. YDS.
152	848
153	
151	846
151	838
	835
	3367

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



SHEET TOTAL

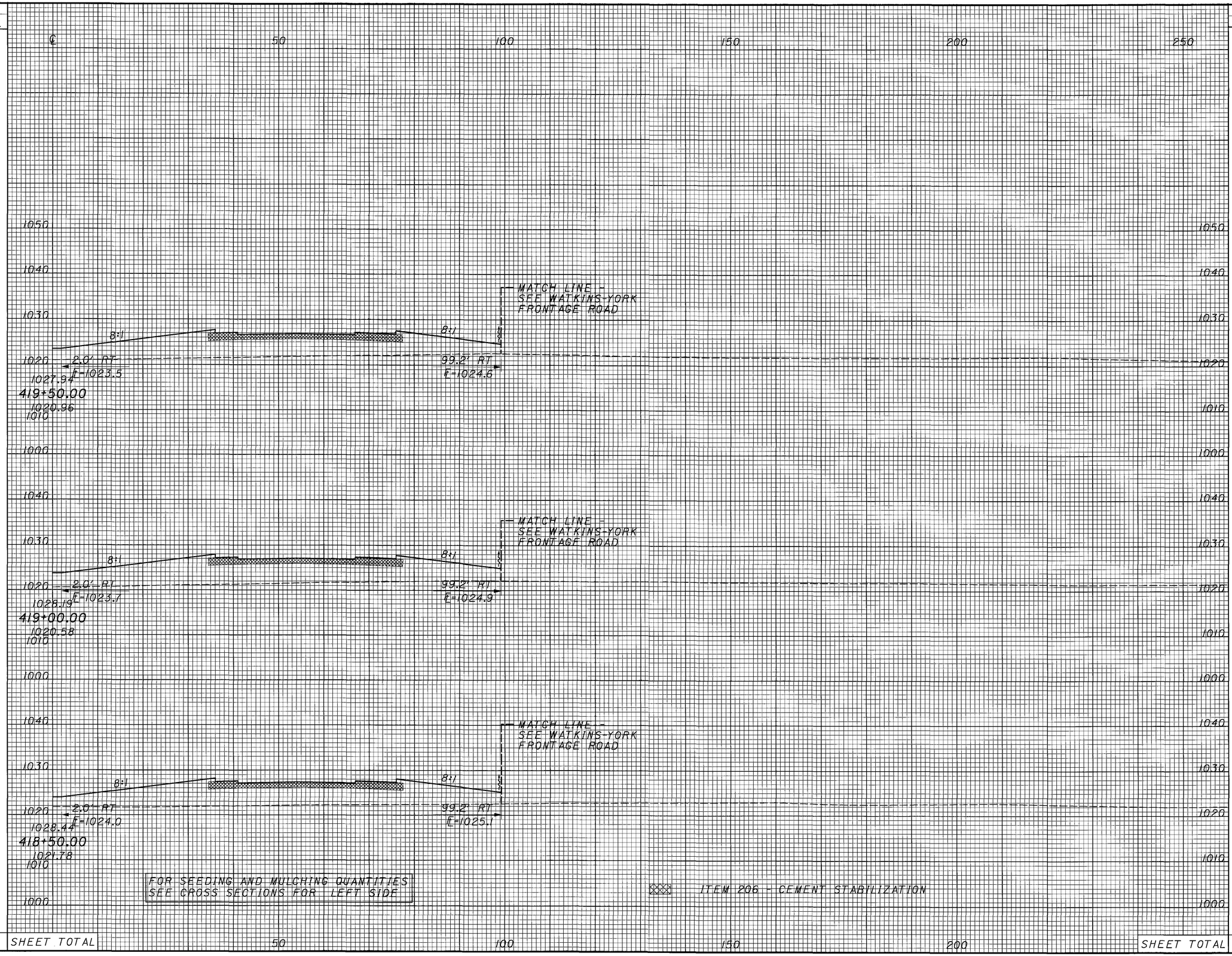
SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 416+50 TO STA. 418+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
36	1075		
20	1140		
17	1024		
SHEET TOTAL		52	2050
		34	2004
		49	1637
		135	5691

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 418+50 TO STA. 419+50 RT.

LIC-161-6.65
LIC-37-10.25

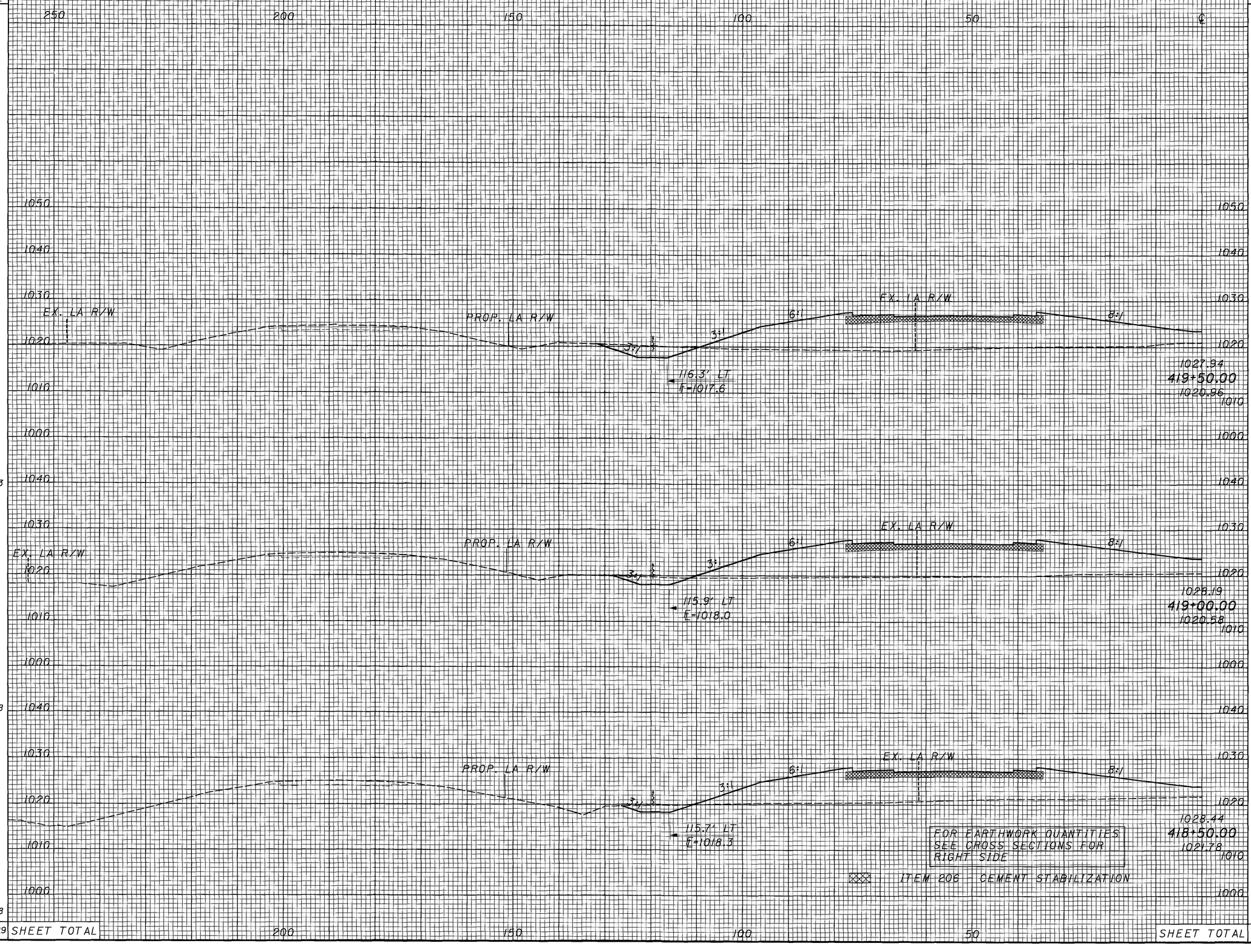
277
1349

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SEEDING	
END WIDTH	SQ. YDS.
155	
	853
152	
	838
150	
	838
	2529

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 418+50 TO STA. 419+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
155	303		
78	473		
53	730		
		421	3502

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 420+00 TO STA. 421+00 RT.

LIC-161-6.65
LIC-37-10.25

279
1349

ITEM 206 - CEMENT STABILIZATION

420+00.00
1022.09
1027.69
2.0' RT
E=1023.2
99.2' RT
E=1024.4
8:1
8:1
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

420+50.00
1023.43
1027.44
2.0' RT
E=1023.0
99.2' RT
E=1024.1
8:1
8:1
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

421+00.00
1024.34
1027.19
2.0' RT
E=1022.1
99.2' RT
E=1023.9
8:1
8:1
MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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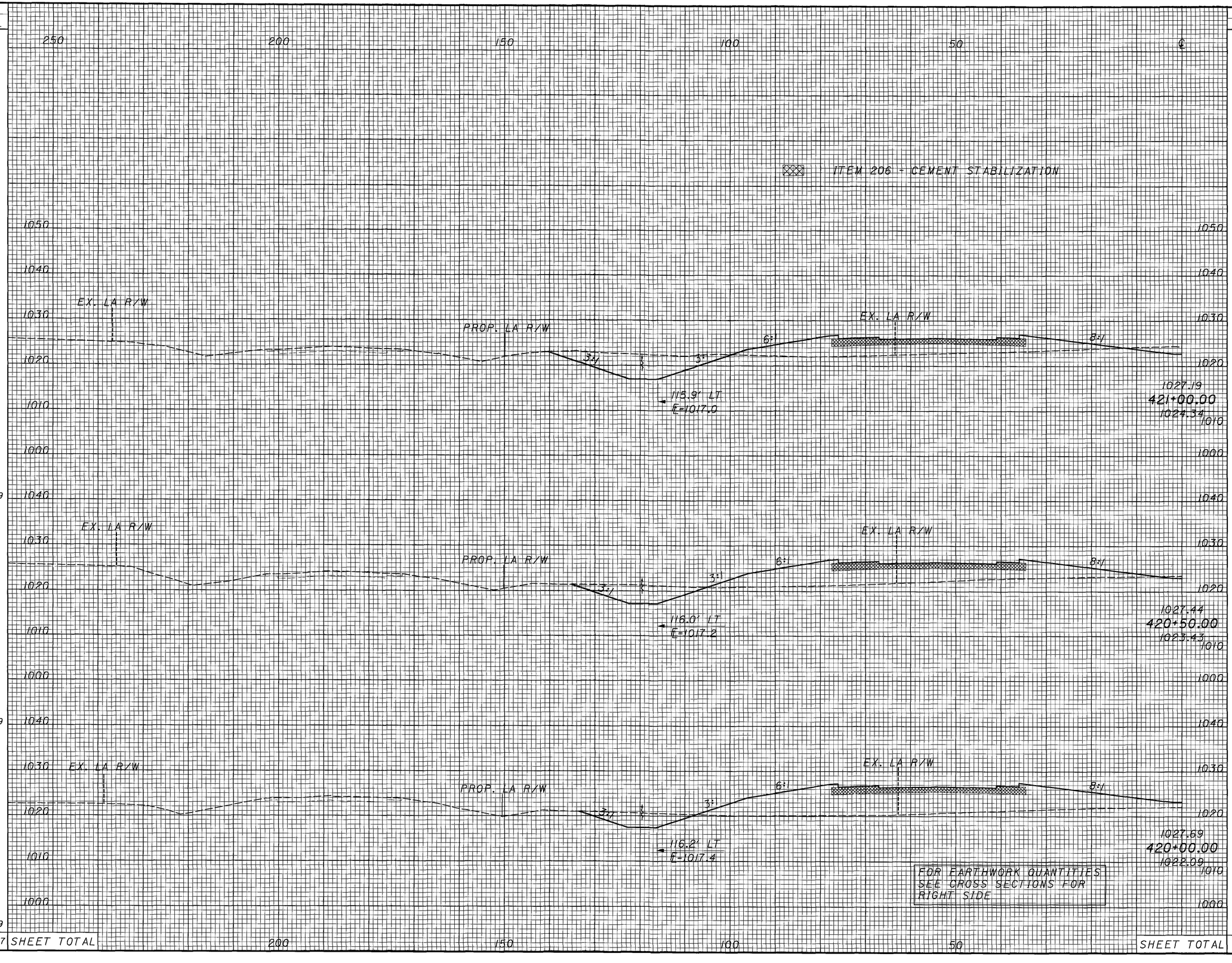
SEEDING	
END WIDTH	SQ. YDS.
164	
	899
159	
	879
157	
	869
2647	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 420+00 TO STA. 421+00 LT.

LIC-161-6.65
LIC-37-10.25



tduffney
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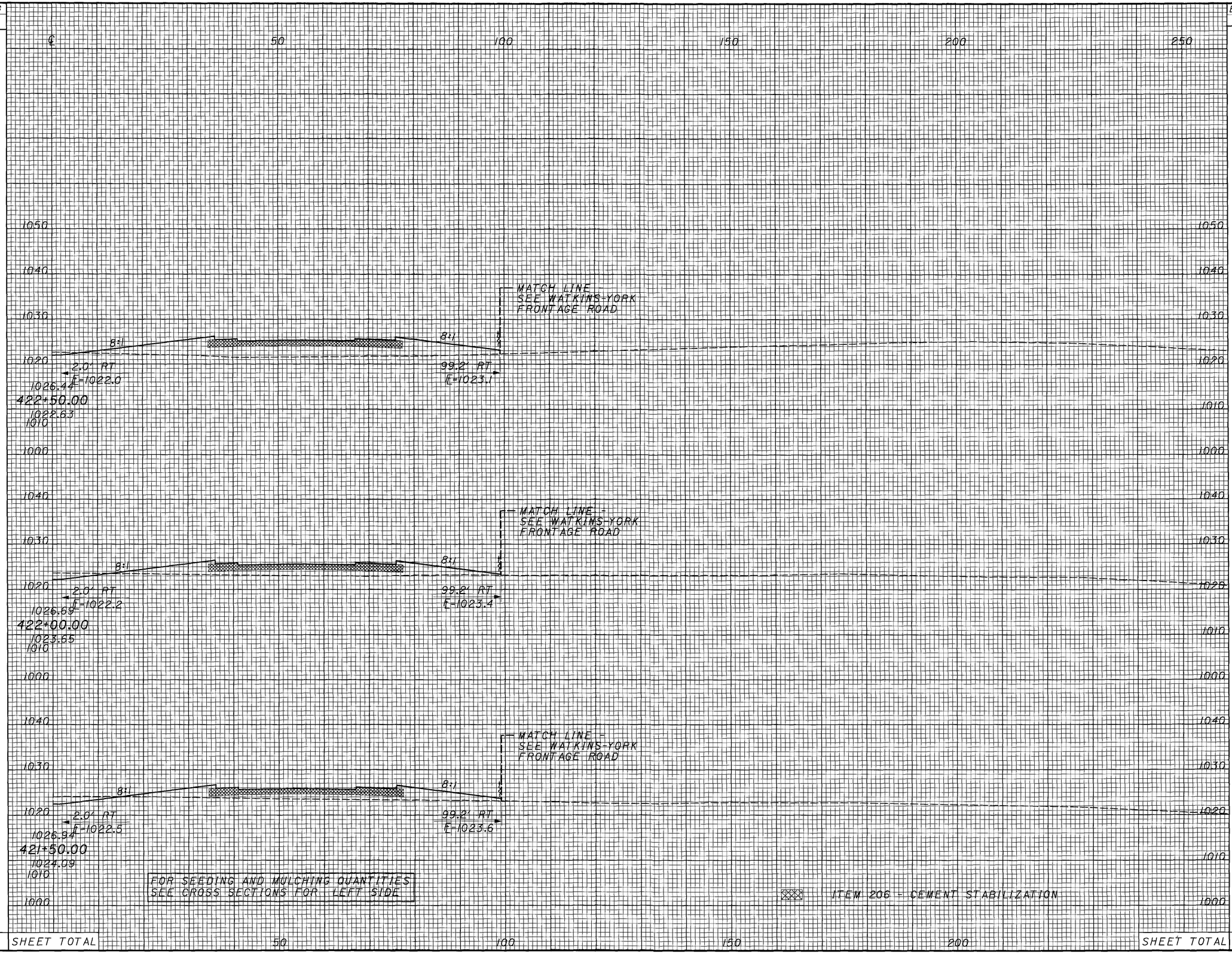
SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		218	348		
		427	479		
		243	169		
		425	375		
		215	235		
		343	498		
SHEET TOTAL		1195	1352		

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 421+50 TO STA. 422+50 RT.

LIC-161-6.65
LIC-37-10.25

281
1349



lduffney
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SEEDING	
END WIDTH	SQ. YDS.
169	
937	
168	
929	
166	
918	
2784	SHEET TOTAL

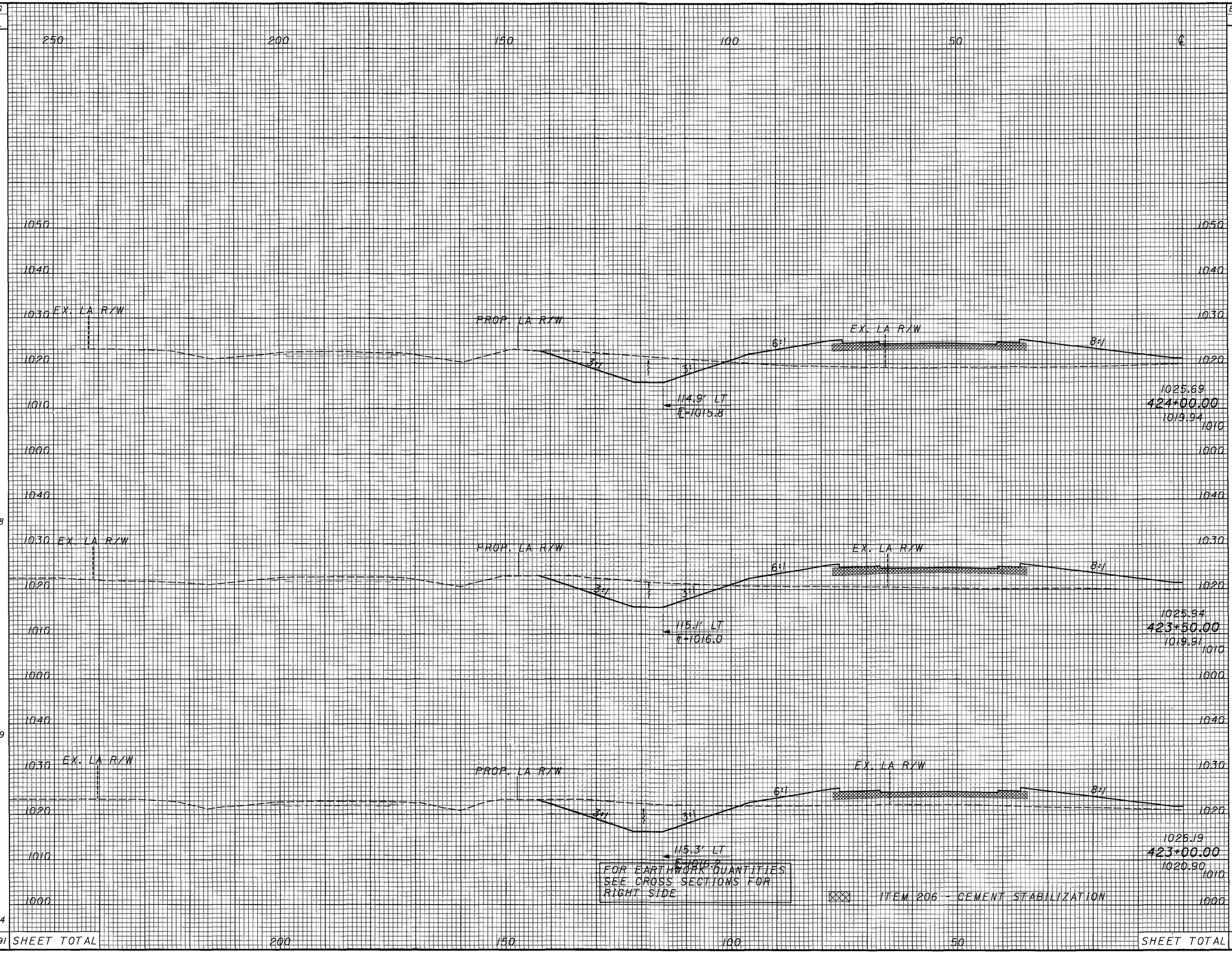
END AREA VOLUME			
CUT	FILL	CUT	FILL

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		141	706		

SEEDING	
END WIDTH	SQ. YDS.
167	
	928
167	
	929
167	
	934
	2791

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



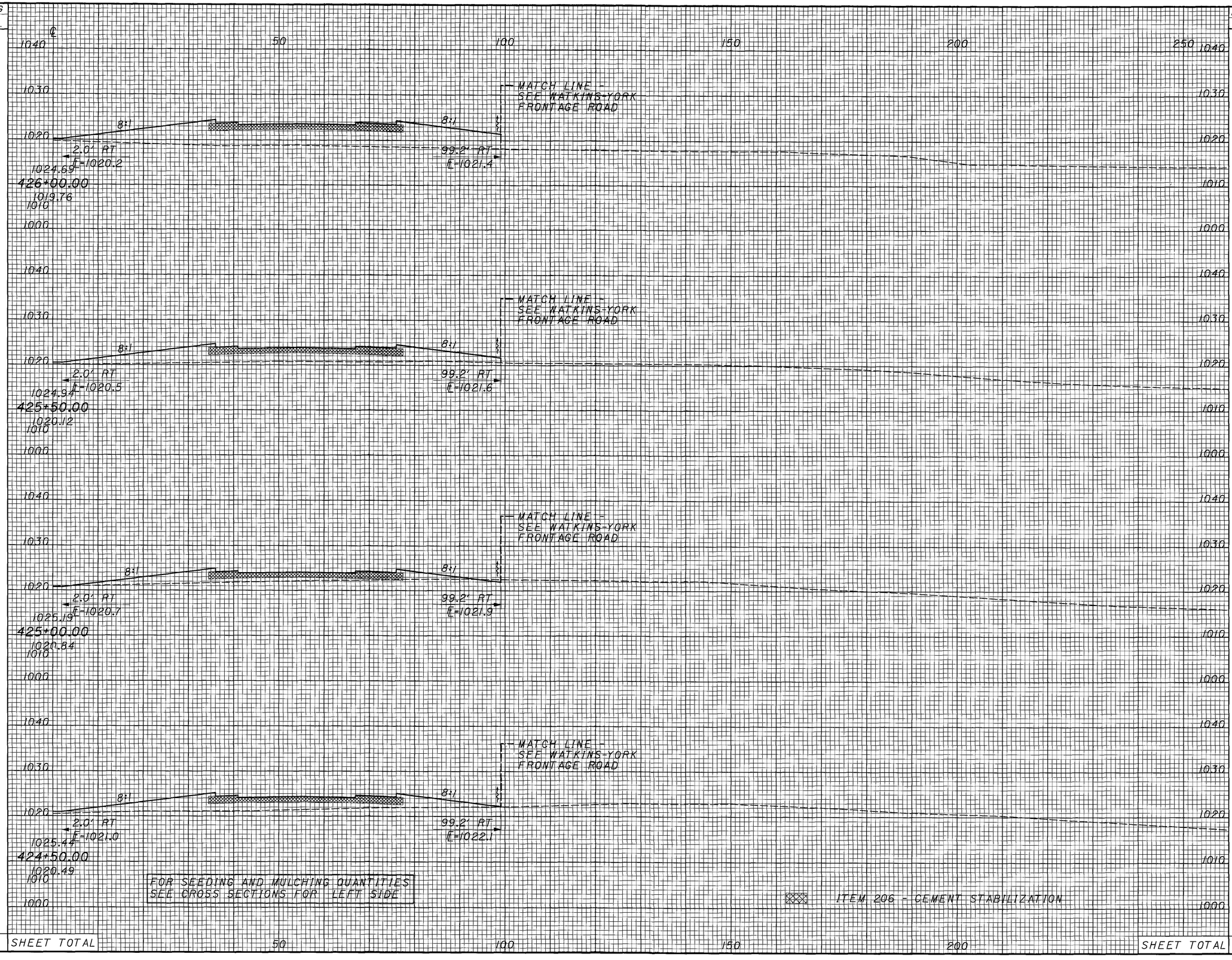
CROSS SECTIONS - S.R. 161
STA. 423+00 TO STA. 424+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		216	579		
				380	936
		195	423		
				343	698
		175	322		
				307	706
		157	441		
				275	1062
SHEET TOTAL				1305	3402

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 424+50 TO STA. 426+00 RT.

LIC-161-6.65
LIC-37-10.25

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SEEDING END WIDTH	SEEDING SQ. YDS.
	170
	942
	169
	942
	170
	942
	169
	933
	3759

250 200 150 100 50 ℄

EX. LA R/W

PROP. LA R/W

EX. LA R/W

1040 1030 1020 1010 1000

3:1 3:1 6:1 8:1

116.5' LT
E=1015.0

1024.69
426+00.00
1019.76

EX. LA R/W

PROP. LA R/W

EX. LA R/W

115.6' LT
E=1015.2

1024.94
425+50.00
1020.12

EX. LA R/W

PROP. LA R/W

EX. LA R/W

115.2' LT
E=1015.4

1025.19
425+00.00
1020.84

EX. LA R/W

PROP. LA R/W

EX. LA R/W

114.1' LT
E=1015.6

1025.44
424+50.00
1020.49

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 424+50 TO STA. 426+00 LT.

LIC-161-6.65
LIC-37-10.25

286
349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA VOLUME			
CUT	FILL	CUT	FILL
264	235		
485	604		
260	417		
499	878		
278	531		
457	1028		
1441	2510		

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 426+50 TO STA. 427+50 RT.

LIC-161-6.65
LIC-37-10.25

287
349

℄

50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1050 1040 1030 1020 1010 1000

WATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1

2.0' RT
E=1019.3
1023.8
427+50.00
1020.69

99.3' RT
E=1020.5

PROP. CB-4, A.P.P.
STA. 427+00.00
GRATE ELEV. = 1019.46
INV. 18" N = 1016.17

2.0' RT
E=1019.7
1024.16
427+00.00
1019.78

99.2' RT
E=1020.9

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT. 952

2.0' RT
E=1020.0
1024.44
426+50.00
1019.97

99.1' RT
E=1021.1

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
165	921
167	931
168	939
2791	SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 426+50 TO STA. 427+50 LT.

LIC-161-6.65
LIC-37-10.25

288
1349

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
8:1
118.6' LT
℄-1014.4
1023.81
427+50.00
1020.69

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
8:1
118.0' LT
℄-1014.6
PROP. CB-4, A.P.P.
STA. 427+00.00
GRATE ELEV. = 1019.46
INV. 18" N = 1016.17
FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 952
1024.16
427+00.00
1019.78

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
8:1
117.3' LT
℄-1014.8
1024.44
426+50.00
1019.97
FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1040 1030 1020 1010 1000

SHEET TOTAL

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		308	44		
				523	147
		256	115		
				479	278
		261	186		
				486	390
SHEET TOTAL				1488	815

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 428+00 TO STA. 429+00 RT.

LIC-161-6.65
LIC-37-10.25

289
1349

ITEM 206 - CEMENT STABILIZATION

℄ 50 100 150 200 250

1050 1040 1030 1020 1010 1000

— MATCH LINE — SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1
2.0' RT E=1017.9
1022.36
429+00.00
1020.27
100.0' RT E=1019.0

— MATCH LINE — SEE WATKINS-YORK FRONTAGE ROAD

8' 8:1
2.0' RT E=1018.4
1022.9
428+50.00
1020.14
99.7' RT E=1019.5

— MATCH LINE — SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1
2.0' RT E=1018.9
1023.39
428+00.00
1020.31
99.4' RT E=1020.1

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

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SEEDING	
END WIDTH	SQ. YDS.
160	
893	
162	
903	
163	
912	
2708	SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

1050 1040 1030 1020 1010 1000

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
EX. LA R/W
8:1
119.0' LT
E=1013.8
1022.36
429+00.00
1020.27

1050 1040 1030 1020 1010 1000

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
EX. LA R/W
8:1
119.0' LT
E=1014.0
1022.91
428+50.00
1020.14

1050 1040 1030 1020 1010 1000

EX. LA R/W
PROP. LA R/W
3:1
3:1
6:1
EX. LA R/W
8:1
118.9' LT
E=1014.2
1023.39
428+00.00
1020.31

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

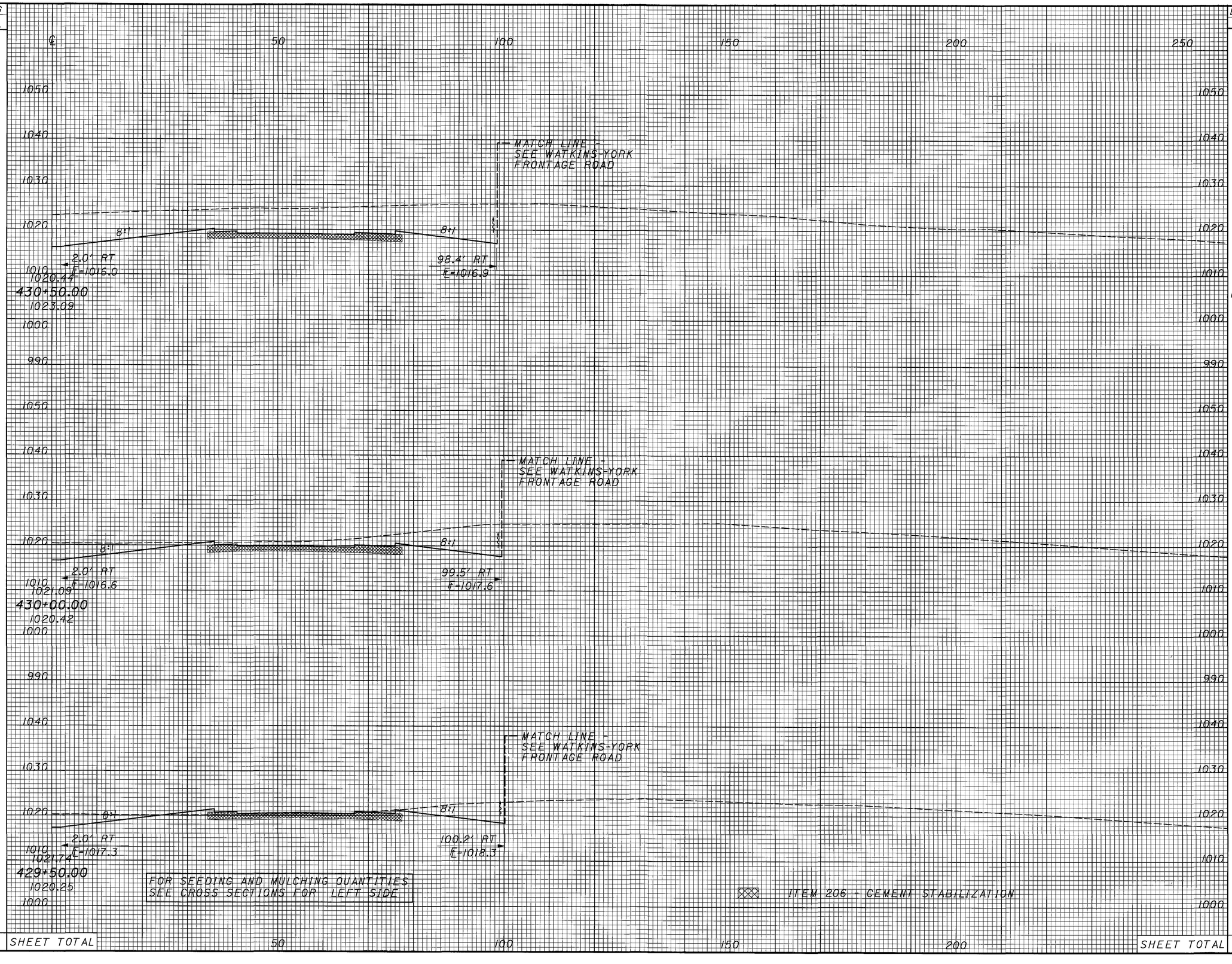
250 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 428+00 TO STA. 429+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	



END AREA VOLUME			
CUT	FILL	CUT	FILL
1003	0		
		1467	0
581	0		
		891	12
381	13		
		638	53
SHEET TOTAL		2996	65

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 429+50 TO STA. 430+50 RT.

LIC-161-6.65
LIC-37-10.25

291
1349

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SEEDING	
END WIDTH	SQ. YDS.
131	
	830
168	
	903
158	
	882
	2615 SHEET TOTAL

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE RELOCATED WORTHINGTON ROAD NORTH

EX. LA R/W

PROP. LA R/W

6:1 3:1 6:1

118.9' LT
E-1013.2

1020.44
430+50.00
1023.09

L 1020

5:1 3:1 6:1

118.8' LT
E-1013.4

1021.09
430+00.00
1020.42

3:1 3:1 6:1

118.8' LT
E-1013.4

1021.74
429+50.00
1020.25

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1050 1040 1030 1020 1010 1000 990

200 150 100 50 SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 429+50 TO STA. 430+50 LT.

LIC-161-6.65
LIC-37-10.25

292
349

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SEEDING		END AREA VOLUME			
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		1606	0		
				2602	0
		1205	0		
				2044	0
SHEET TOTAL				4646	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 431+00 TO STA. 431+50 RT.

LIC-161-6.65
LIC-37-10.25

293
1349

℄ 50 100 150 200 250

1050 1040 1030 1020 1010 1000 990

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT ℄-1014.7 1019.14

96.9' RT ℄-1015.6

431+50.00
1025.38

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT ℄-1015.3 1019.79

97.4' RT ℄-1016.2

431+00.00
1023.96

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

50 100 150 200

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SEEDING	
END WIDTH	SQ. YDS.
126	
708	
129	
723	
1431	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 CEMENT STABILIZATION

1050 1040 1030 1020 1010 1000 990

MATCH LINE - SEE RELOCATED WORTHINGTON ROAD NORTH

EX. LA R/W

6:1 3:1 8:1

120.1' LT
E-1012.8

1019.14
431+50.00
1025.38

MATCH LINE - SEE RELOCATED WORTHINGTON ROAD NORTH

EX. LA R/W

6:1 3:1 8:1

119.3' LT
E-1013.0

1019.79
431+00.00
1023.96

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 431+00 TO STA. 431+50 LT.

LIC-161-6.65
LIC-37-10.25

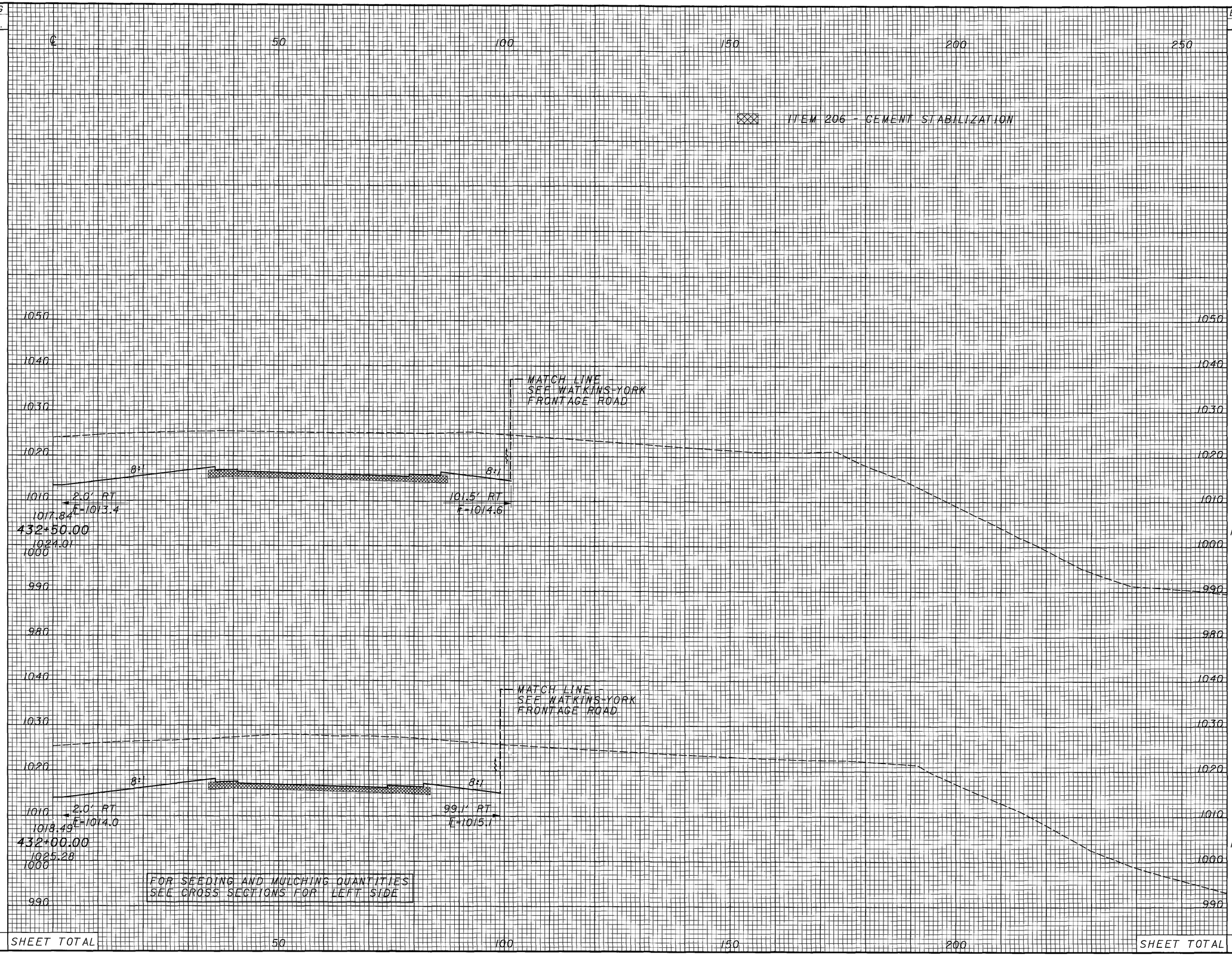
294
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA VOLUME			
CUT	FILL	CUT	FILL
1564	0		
		3076	0
1757	0		
		3114	0
		6190	0

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 432+00 TO STA. 432+50 RT.

LIC-161-6.65
LIC-37-10.25

295
349

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SEEDING	
END WIDTH	SQ. YDS.
118	664
121	684
1348	SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

1050 1040 1030 1020 1010 1000 990 980

MATCH LINE - SEE RELOCATED WORTHINGTON ROAD NORTH

EX. LA R/W

6:1

8:1

120.3' LT
E-1012.4

1017.84
432+50.00
1024.01

3:1

119.8' LT
E-1012.6

1018.49
432+00.00
1025.28

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 432+00 TO STA. 432+50 LT.

LIC-161-6.65
LIC-37-10.25

296
349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		50				
		100				
		150				
		200				
		250				
		SHEET TOTAL				
		50				
		100				
		150				
		200				
		SHEET TOTAL				
			1663	0		
			3337	0		
			1941	0		
			3246	0		
			6583	0		

1050 1040 1030 1020 1010 1000 990 980

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT E=1012.1

1018.54

433+50.00

1021.66

107.3' RT E=1012.6

MATCH LINE - SEE WATKINS-YORK FRONTAGE ROAD

8:1 8:1

2.0' RT E=1012.7

1017.19

433+00.00

1024.52

103.5' RT E=1013.7

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

CALCULATED JWA

CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 433+00 TO STA. 433+50 RT.

LIC-161-6.65
LIC-37-10.25

297
1349

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SEEDING	
END WIDTH	SQ. YDS.
118	661
120	661
	1322

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE RELOCATED WORTHINGTON ROAD NORTH

EX. LA R/W

6:1

8:1

116.8' LT
E=1012.0

1016.54
433+50.00
1021.66

1050 1040 1030 1020 1010 1000 990 980

MATCH LINE - SEE RELOCATED WORTHINGTON ROAD NORTH

EX. LA R/W

6:1

8:1

117.7' LT
E=1012.2

1017.19
433+00.00
1024.52

1050 1040 1030 1020 1010 1000 990 980

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50

SHEET TOTAL

SHEET TOTAL

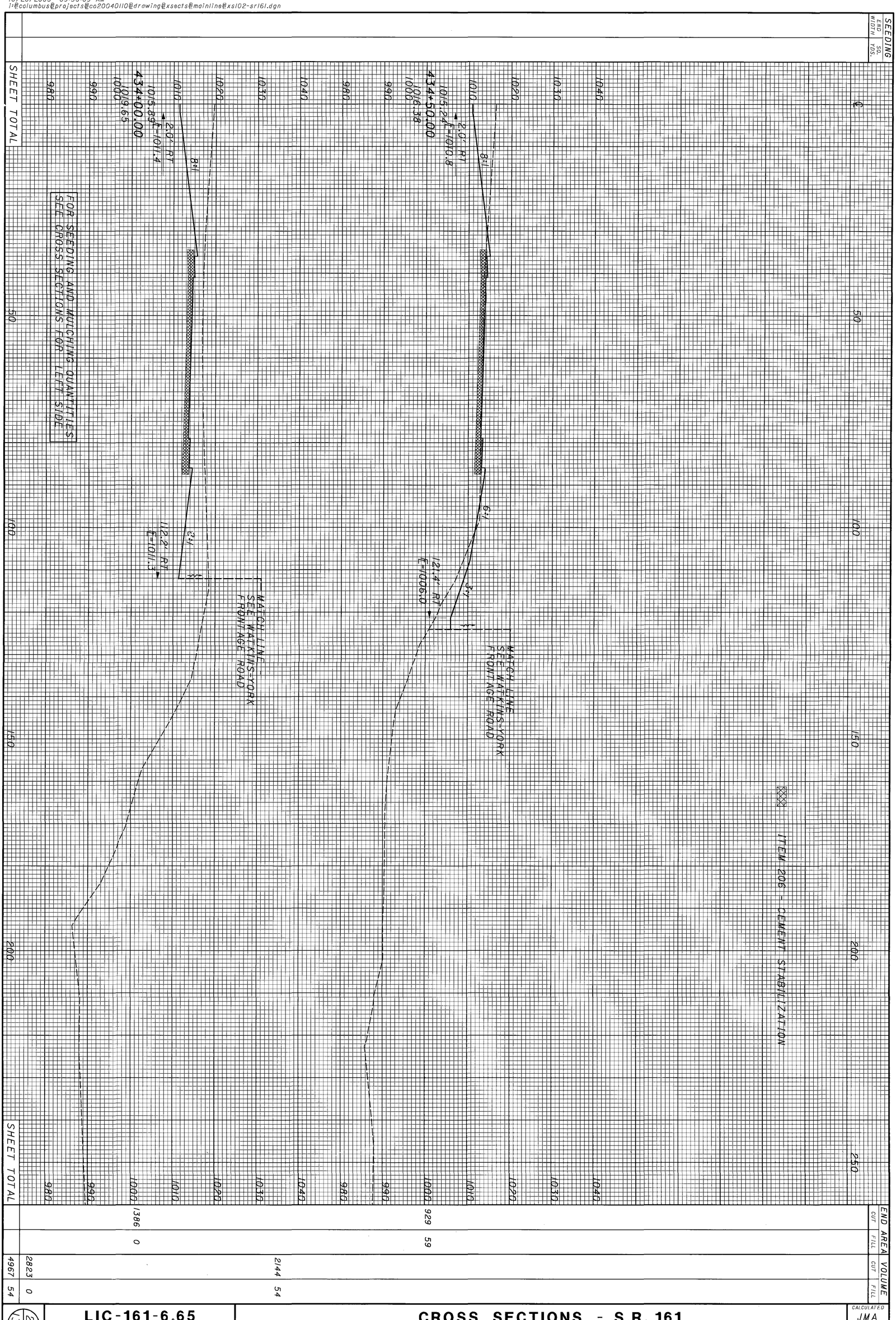
CROSS SECTIONS - S.R. 161
STA. 433+00 TO STA. 433+50 LT.

LIC-161-6.65
LIC-37-10.25

298
1349

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LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 161
STA. 434+00 TO STA. 434+50 RT.

CALCULATED JMA
CHECKED BER

299
349

SEEDING	
END WIDTH	SQ. YDS.
149	
	760
124	
	674
1434	SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL
1			

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		881	3548		
				1124	4630
		333	1452		
				722	1802
		447	494		
				1274	511
SHEET TOTAL				3120	6943

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

8:1 6:1 3:1

2.0' RT
E-1008.8
1013.29
436+00.00
998.93

MATCH LINE -
SEE WATKINS-YORK
FRONTAGE ROAD

147.4' RT
E-995.9

STA 435+88, CULVERT NO. 3,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 970

8:1 6:1 3:1

2.0' RT
E-1009.5
1013.94
435+50.00
1008.19

MATCH LINE -
SEE WATKINS-YORK
FRONTAGE ROAD

137.2' RT
E-999.6

8:1 6:1 3:1

2.0' RT
E-1010.1
1014.59
435+00.00
1012.18

MATCH LINE -
SEE WATKINS-YORK
FRONTAGE ROAD

128.5' RT
E-1002.9

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

1040 1030 1020 1010 1000 990 980

CALCULATED JMA
CHECKED BER

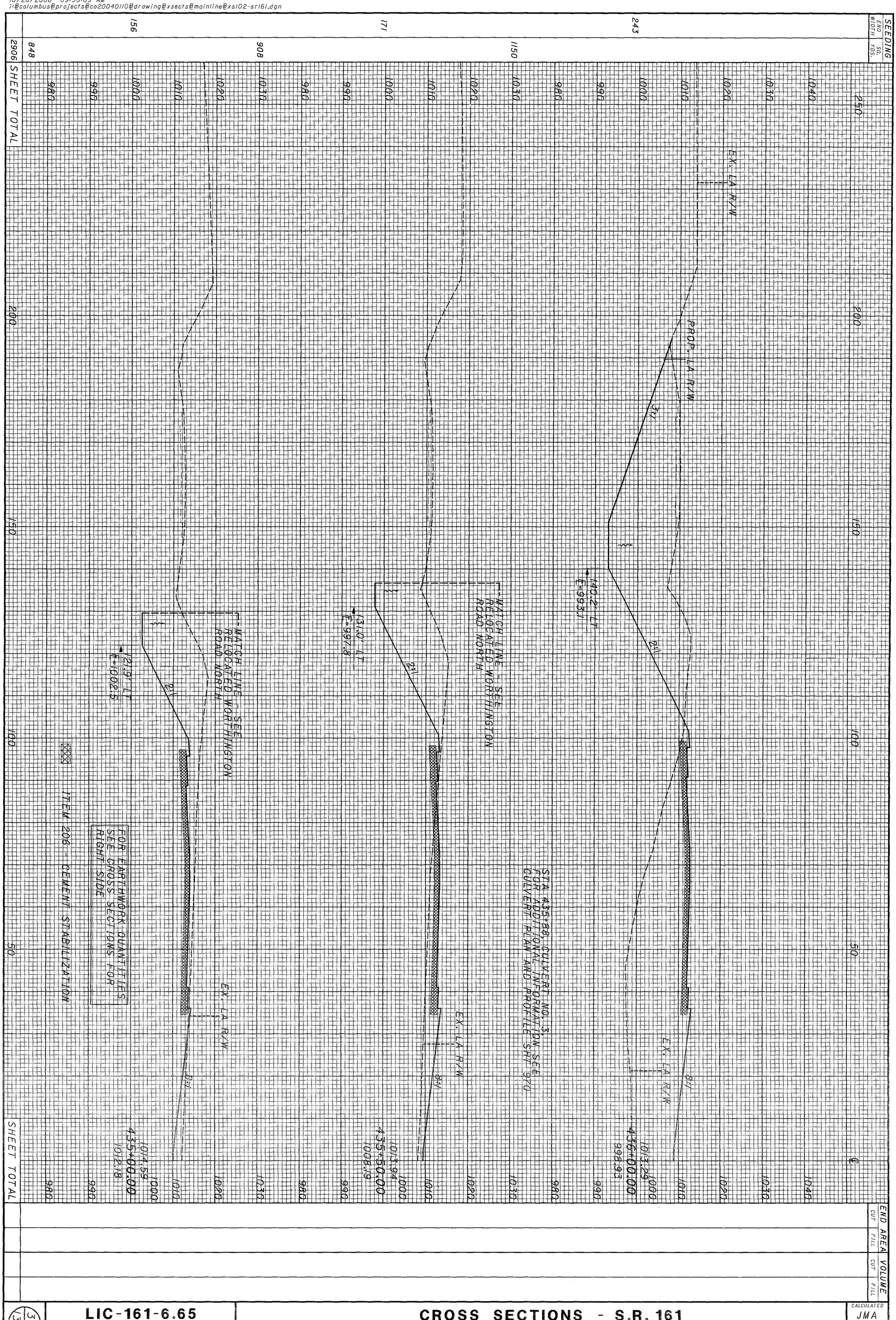
CROSS SECTIONS - S.R. 161
STA. 435+00 TO STA. 436+00 RT.

LIC-161-6.65
LIC-37-10.25

301
1349

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302
349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 161
STA. 435+00 TO STA. 436+00 LT.

CALCULATED JMA
CHECKED BER

SEEDING END WIDTH	SEEDING SQ. YDS.

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1297	6083		
		2271	11300
1156	6121		
		1967	10765
968	5505		
		1712	8382
		5950	30447

CALCULATED JMA
CHECKED BER

ITEM 206 - CEMENT STABILIZATION

8:1 — 2.0' RT E-1006.9 — 1011.34 — 437+50.00 — 983.50 — FW

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 952.

2:1

PROP. CB-4, AP.P
STA. 437+50.00, 157' RT.
GRATE ELEV. = 986.73
INV. 30" N = 982.48

PROP. LA R/W

8:1 — 2.0' RT E-1007.5 — 1011.99 — 437+00.00 — 985.05 — FW

6:1

3:1

MATCH LINE
SEE WATKINS-YORK
FRONTAGE ROAD

172.5' RT
E-987.3

8:1 — 2.0' RT E-1008.2 — 1012.64 — 436+50.00 — 988.52 — FW

6:1

3:1

MATCH LINE
SEE WATKINS-YORK
FRONTAGE ROAD

159.3' RT
E-991.9

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 436+50 TO STA. 437+50 RT.

LIC-161-6.65
LIC-37-10.25

303
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
319	1705
294	1531
257	1388
	4626 SHEET TOTAL

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

EX. LA R/W

2:1 2:1 8:1

166.4' LT
E=979.0

1011.34
437+50.00
983.50
EX. LA R/W

EX. LA R/W PROP. LA R/W

2:1 2:1 8:1

157.7' LT
E=983.7

1011.99
437+00.00
985.05
EX. LA R/W

EX. LA R/W PROP. LA R/W

2:1 2:1 8:1

149.4' LT
E=988.4

1012.64
436+50.00
988.52
EX. LA R/W

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1040 1030 1020 1010 1000 990 980

250 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 436+50 TO STA. 437+50 LT.

LIC-161-6.65
LIC-37-10.25

304
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA VOLUME			
CUT	FILL	CUT	FILL
1170	6345		
		1887	11642
868	6228		
		2004	11398
		3891	23040

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 438+00 TO STA. 438+50 RT.

LIC-161-6.65
LIC-37-10.25

305
349

ITEM 206 - CEMENT STABILIZATION

℄ 50 100 150 200 250

1040 1030 1020 1010 1000 990 980 970

PROP. I A R/W

8:1 6:1 3:1 2:1

2.0' RT
E=1095.6
1010.04
438+50.00
981.58

158.4' RT
E=993.5

PROP. C.B.-4 A.P.P.
STA. 438+00
GRATE ELEV. = 1006.24
INV. 30" N = 981.48
INV. 30" S = 981.48

1010.69
438+00.00
982.81

142.1' RT
E=989.6

154.3' RT
E=988.5

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 952

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
	284
	1502
	257
	1600
	3102

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

1040 1030 1020 1010 1000 990 980 970

← MATCH LINE - SEE STREAM RELOCATION SITE 24

6:1 3:1 8:1

202.5' LT
E=979.6

1010.04
438+50.00
981.58
EX. LA R/W

PROP. C.B.-4 A.P.P.
STA. 438+00.00
GRATE ELEV. = 1006.24
INV. 30" N = 981.48
INV. 30" S = 981.48

← MATCH LINE - SEE STREAM RELOCATION SITE 24

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 952

1010.69
438+00.00
982.81
EX. LA R/W

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50 ℄

SHEET TOTAL SHEET TOTAL

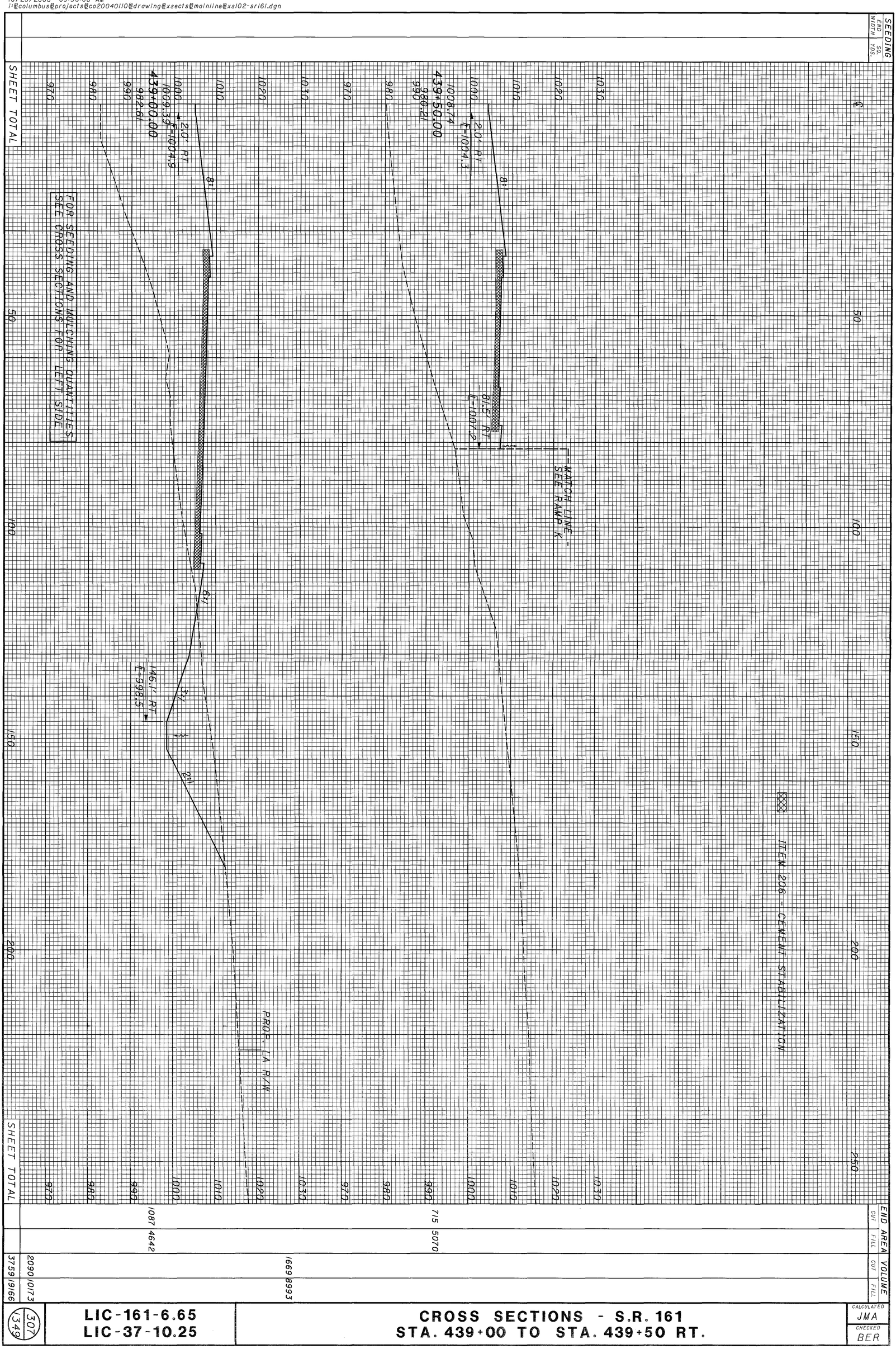
CROSS SECTIONS - S.R. 161
STA. 438+00 TO STA. 438+50 LT.

LIC-161-6.65
LIC-37-10.25

306
1349

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307
349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 161
STA. 439+00 TO STA. 439+50 RT.

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.
184	
	1224
	257
	1502
2726	SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE STREAM RELOCATION SITE 24

1030 1020 1010 1000 990 980 970

6:1 3:1 8:1

1008.74
439+50.00
EX. LA R/W 980.21

206.4' LT
℄=978.1

MATCH LINE - SEE STREAM RELOCATION SITE 24

1009.39
439+00.00
982.61
EX. LA R/W

204.5' LT
℄=978.8

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 439+00 TO STA. 439+50 LT.

LIC-161-6.65
LIC-37-10.25

308
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA VOLUME			
CUT	FILL	CUT	FILL
0	3855		
		627	8325
		677	5136
		1289	9450
		1916	17775

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 440+00 TO STA. 440+50 RT.

LIC-161-6.65
LIC-37-10.25

309
349

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1040 1030 1020 1010 1000 990 980 970

MATCH LINE - SEE RAMP K

8:1 9:1

2.0' RT
E=1003.0
1007.44
440+50.00
979.25

86.6' RT
E=1005.2

83.6' RT
E=1006.5

1008.09
440+00.00
980.21

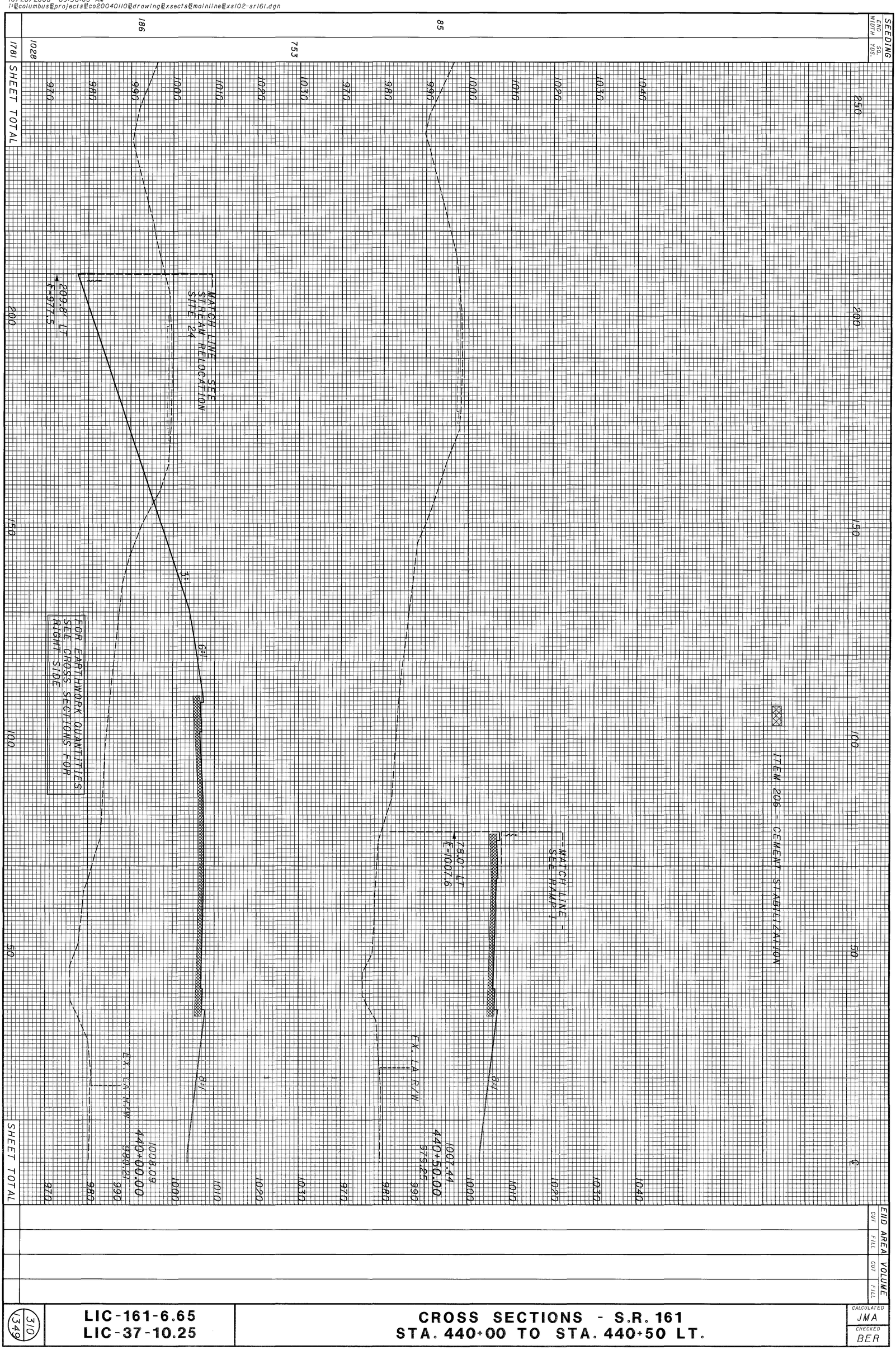
FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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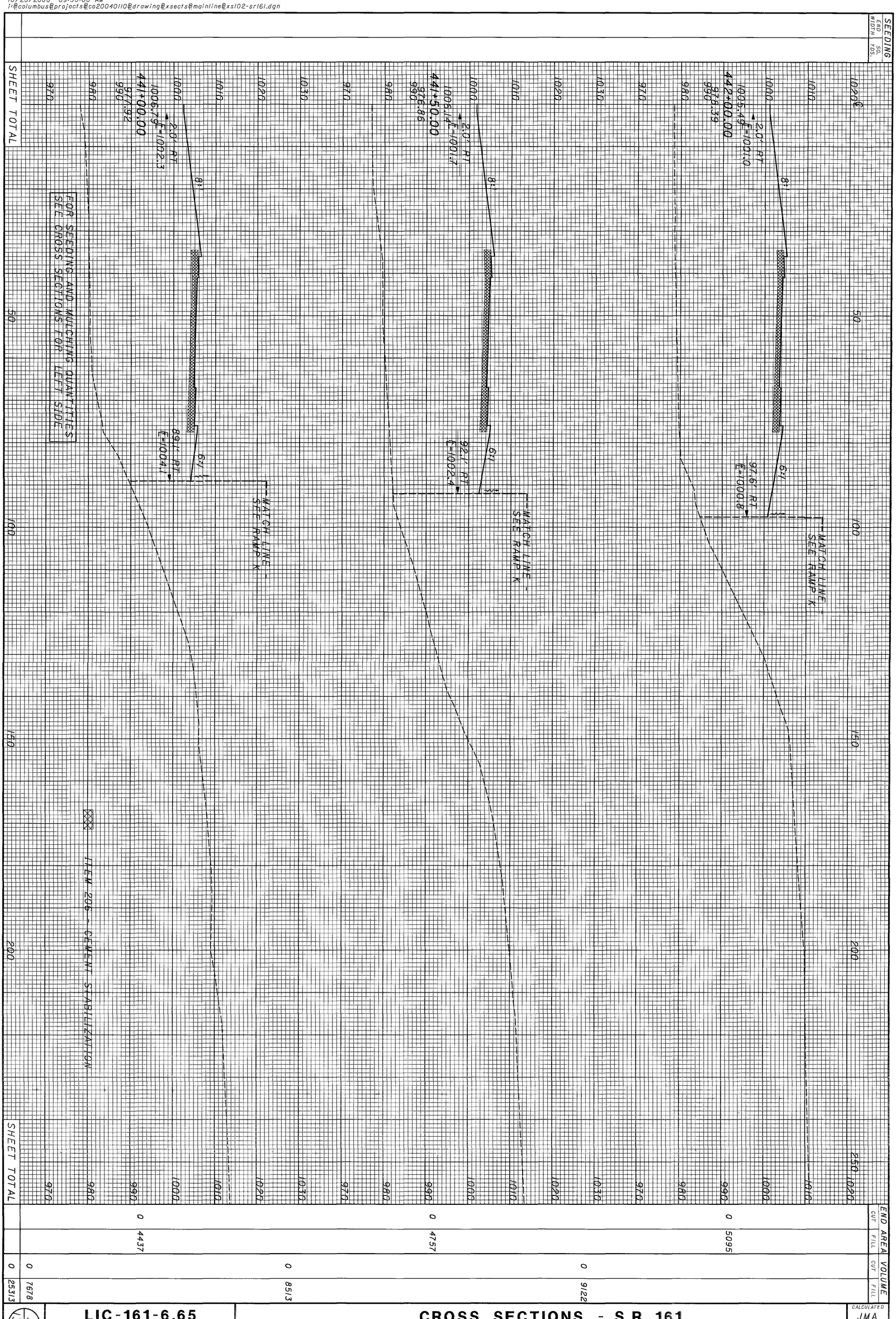
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310 / 349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 440+00 TO STA. 440+50 LT.

CALCULATED JMA
CHECKED BER

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311 / 349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 441+00 TO STA. 442+00 RT.

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.
121	
	623
103	
	546
93	
	496
	1665

250 200 150 100 50 ℄

ITEM 206 CEMENT STABILIZATION

MATCH LINE - SEE RAMP 1

8:1 8:1

101.1' LT
E-1003.0

1005.49
442+00.00
976.39

EX. LA R/W

MATCH LINE - SEE RAMP 1

8:1 8:1

89.6' LT
E-1005.0

1006.14
441+50.00
976.86

EX. LA R/W

MATCH LINE - SEE RAMP 1

8:1 8:1

83.5' LT
E-1006.5

1006.79
441+00.00
977.92

EX. LA R/W

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1020 1010 1000 990 980 970 1030

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 441+00 TO STA. 442+00 LT.

LIC-161-6.65
LIC-37-10.25

312
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
309	3121		
		286	7272
0	4733		
		1	8881
2	4858		
		1	9216
		288	25369

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 442+50 TO STA. 443+50 RT.

LIC-161-6.65
LIC-37-10.25

313
349

℄ 50 100 150 200 250

10.30 1020 1010 1000 990 980 970

8:1 6:1 2.0' RT ℄-999.1 1003.54 443+50.00 993.20

MATCH LINE - SEE RAMP K

133.3' RT ℄-995.3

8:1 6:1 2.0' RT ℄-999.7 1004.19 443+00.00 977.63

MATCH LINE - SEE RAMP K

110.9' RT ℄-997.3

8:1 6:1 2.0' RT ℄-1000.4 1004.84 442+50.00 978.01

MATCH LINE - SEE RAMP K

102.7' RT ℄-999.3

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.
193	
	982
160	
	830
139	
	720
	2532 SHEET TOTAL

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE RAMP 1

6:1 4:1 8:1

136.3' LT
E-993.8

1003.54
443+50.00
993.20

EX. LA R/W

MATCH LINE - SEE RAMP 1

6:1 4:1 8:1

124.7' LT
E-994.0

1004.19
443+00.00
977.63

EX. LA R/W

MATCH LINE - SEE RAMP 1

6:1 8:1

114.0' LT
E-998.9

1004.84
442+50.00
978.01

EX. LA R/W

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1030 1020 1010 1000 990 980 970

250 200 150 100 50 SHEET TOTAL

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 442+50 TO STA. 443+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
997	415		
		1502	864
625	518		
		1093	1476
555	1077		
		1044	2705
573	1845		
		816	4598
		4455	9643

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 444+00 TO STA. 445+50 RT.

LIC-161-6.65
LIC-37-10.25

315
349

℄ 50 100 150 200 250

1010 1000 990 980 970 960

MATCH LINE - SEE RAMP K

8:1 2.0' RT E-996.5 1000.94 445+50.00 997.93 6:1 156.0' RT E-987.7

8:1 2.0' RT E-997.1 1001.59 445+00.00 999.97 6:1 144.7' RT E-989.3

8:1 2.0' RT E-997.8 1002.24 444+50.00 1002.10 6:1 135.2' RT E-991.3

8:1 2.0' RT E-998.4 1002.89 444+00.00 1003.00 6:1 127.1' RT E-993.3

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
253	
	1349
232	
	1250
217	
	1157
199	
	1090
4846	SHEET TOTAL

250 200 150 100 50 ℄

EX. LA R/W

MATCH LINE - SEE RAMP 1

6:1

8:1

173.7' LT
E-984.8

1000.94
445+50.00
997.93

MATCH LINE - SEE RAMP 1

EX. LA R/W

6:1

8:1

163.0' LT
E-987.0

1001.59
445+00.00
999.97

MATCH LINE - SEE RAMP 1

EX. LA R/W

6:1

8:1

157.4' LT
E-989.2

1002.24
444+50.00
1002.10

MATCH LINE - SEE RAMP 1

EX. LA R/W

6:1

8:1

147.7' LT
E-991.5

1002.89
444+00.00
1003.00

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 444+00 TO STA. 445+50 LT.

LIC-161-6.65
LIC-37-10.25

316
1349

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SEEDING		END AREA VOLUME			
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		1156	4		
				2268	91
		1293	95		
				2936	343
		1877	276		
				3294	376
		1680	130		
				2684	285
		1219	178		
				2052	549
SHEET TOTAL				13234	1644

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 446+00 TO STA. 448+00 RT.

LIC-161-6.65
LIC-37-10.25

317
1349

1010 ℄ 50 100 150 200 250 1010

1000 8:1 6:1 2:1 1000

990 2.0' RT E=993.2 990
997.69
448+00.00
997.58
980 980

PROP. 24" CONDUIT

138.2' RT E=987.1

970 970

1000 8:1 6:1 2:1 1000

990 2.0' RT E=993.9 990
998.34
447+50.00
996.39
980 980

149.9' RT E=985.8

PROP. 24" CONDUIT

970 970

1000 8:1 6:1 2:1 1000

990 2.0' RT E=994.5 990
998.99
447+00.00
994.90
980 980

161.6' RT E=984.5

PROP. 24" CONDUIT

970 970

PROP. CB-4, A.P.P.
STA. 446+57.74, 172.79' RT
GRATE ELEV. = 983.10
INV. 24" NE = 978.30

MATCH LINE SEE RAMP K

1000 8:1 6:1 1000

990 2.0' RT E=995.2 990
999.64
446+50.00
995.81
980 980

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 953

171.4' RT E=983.3

1010 1010

MATCH LINE SEE RAMP K

1000 8:1 6:1 1000

990 2.0' RT E=995.8 990
1000.25
446+00.00
996.56
980 980

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

162.5' RT E=985.3

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 50 100 150 200

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SEEDING END WIDTH	SEEDING SQ. YDS.
273	1619
310	1870
363	1854
304	1590
268	1448
8381	SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 446+00 TO STA. 448+00 LT.

LIC-161-6.65
LIC-37-10.25

318
1349

EX. LA R/W

ITEM 206 - CEMENT STABILIZATION

℄ 1010

8:1

6:1

2:1

147.8' LT
℄-985.5

997.69
448+00.00
997.58

PROP. 27" CONDUIT

3:1

155.9' LT
℄-984.8

998.34
447+50.00
996.39

MATCH LINE - SEE RAMP 1

0:1

232.2' LT
℄-982.6

174.0' LT
℄-982.6

998.99
447+00.00
994.90

PROP. CB-4, A.P.P.
STA. 446+59.90, 209.50' LT.
GRATE ELEV. = 980.20
INV. 27" SE = 972.63
INV. 27" NW = 972.63

7:1

209.1' LT
℄-980.4

999.64
446+50.00
995.81

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 953

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

181.8' LT
℄-982.6

1000.29
446+00.00
996.56

250 200 150 100 50

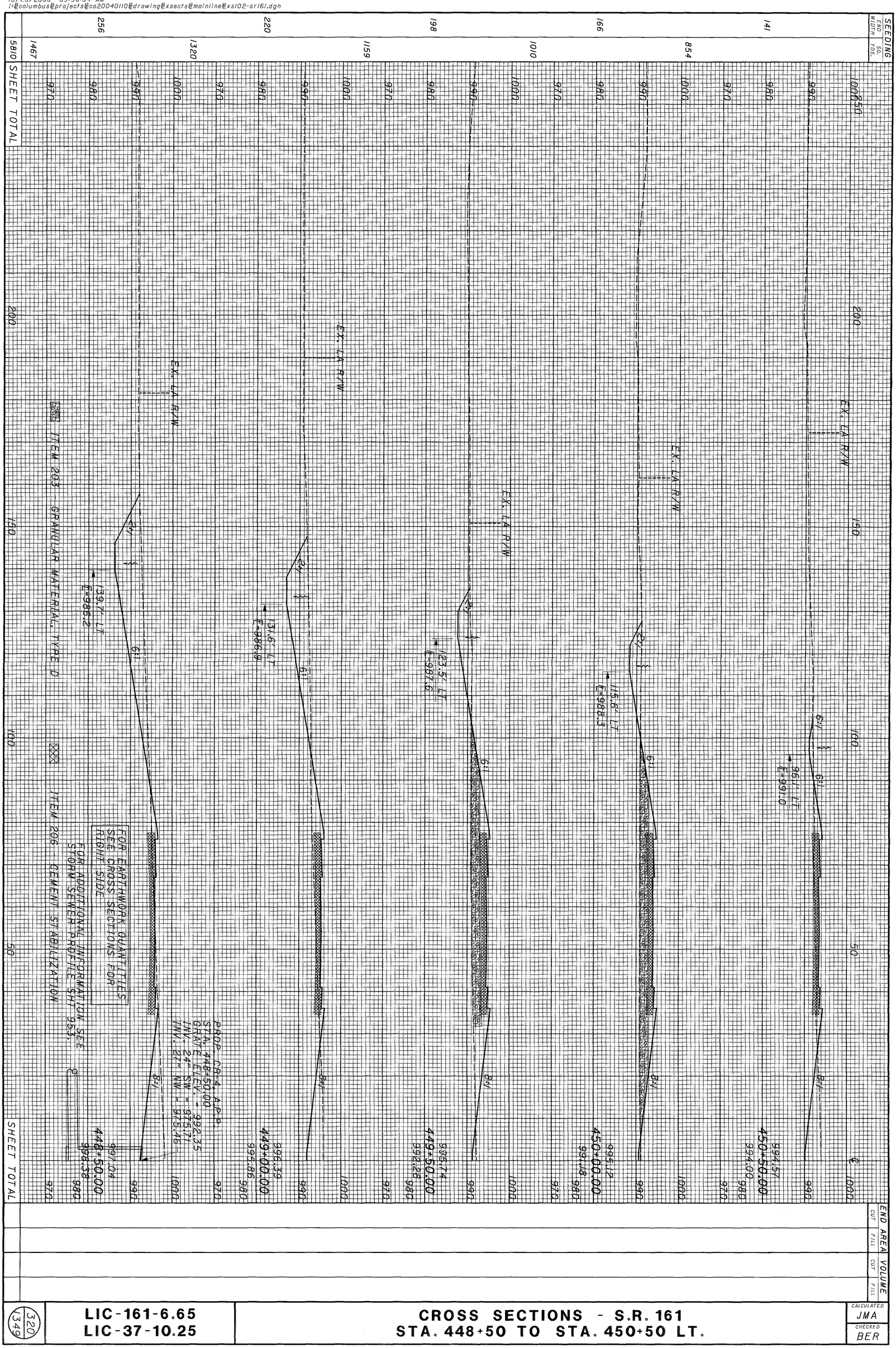
1010 1000 990 980 970

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

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LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 161 STA. 448+50 TO STA. 450+50 LT.	CALCULATED JMA CHECKED BER

320
1349

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1450	0		
		2811	0
1585	0		
		2447	0
1057	0		
		1435	4
493	4		
		482	44
27	43		
		237	60
SHEET TOTAL		7412	108

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 451+00 TO STA. 453+00 RT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
166	928
168	917
162	764
113	626
113	705
	3940

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1000
990
980
970

6:1 6:1 8:1
96.8' LT
E=989.1
992.79
453+00.00
997.99

6:1 6:1 8:1
96.8' LT
E=989.3
993.04
452+50.00
998.62

6:1 6:1 8:1
88.6' LT
E=991.0
993.32
452+00.00
996.86

MATCH LINE
MSE WALL

6:1 6:1 8:1
87.7' LT
E=991.5
13.96' LT
E=991.26
993.67
451+50.00
995.13

MATCH LINE
MSE WALL

6:1 6:1 8:1
90.5' LT
E=992.0
16.8' LT
E=991.9
994.09
451+00.00
992.72

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

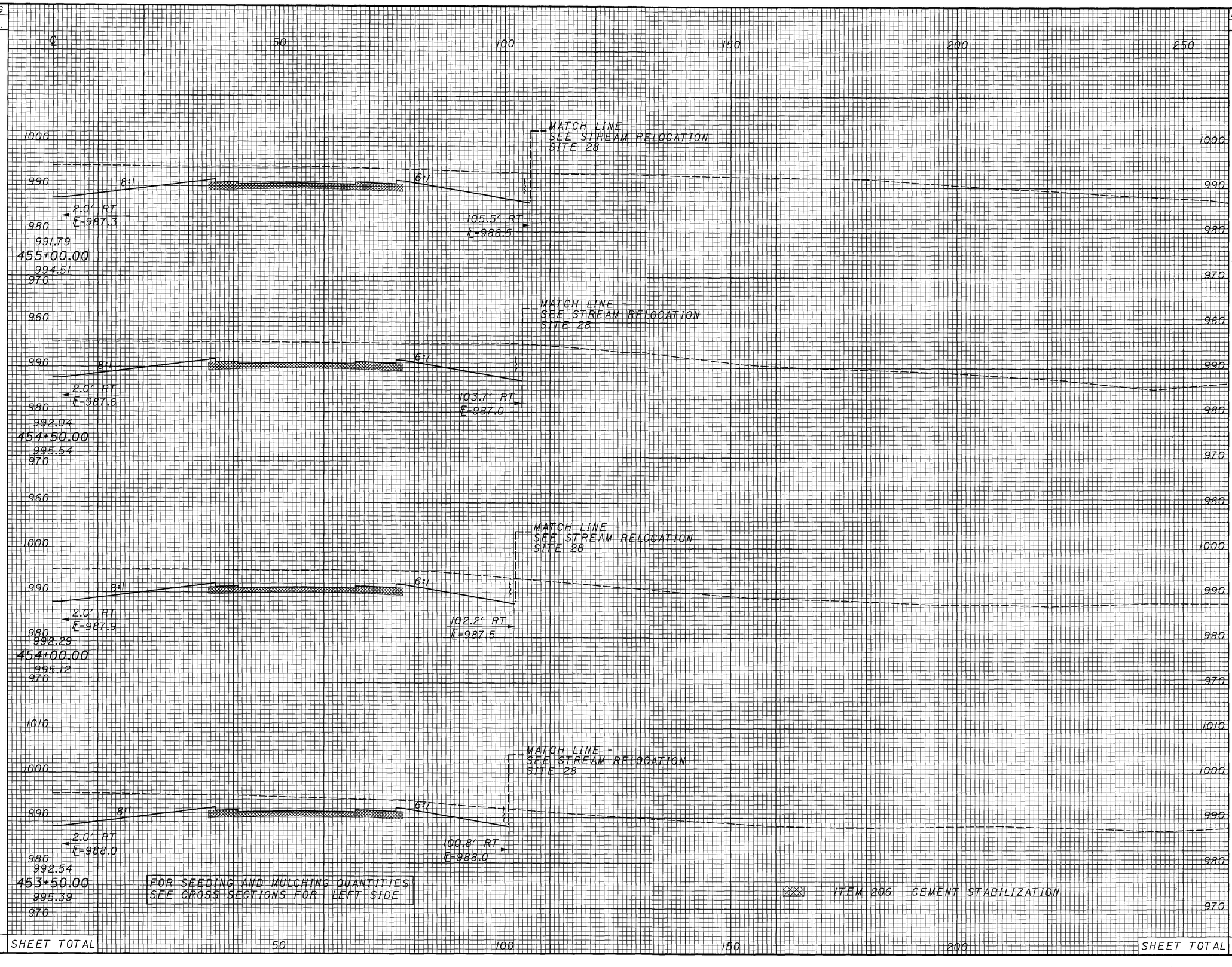
CROSS SECTIONS - S.R. 161
STA. 451+00 TO STA. 453+00 LT.

LIC-161-6.65
LIC-37-10.25

322
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA VOLUME			
CUT	FILL	CUT	FILL
1036	0		
		1967	0
1089	0		
		1887	0
950	0		
		1755	0
946	0		
		2218	0
SHEET TOTAL		7827	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 453+50 TO STA. 455+00 RT.

LIC-161-6.65
LIC-37-10.25

323
1349

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SEEDING	
END WIDTH	SQ. YDS.
162	
	876
153	
	846
152	
	862
159	
	901
	3585

SHEET TOTAL

250 200 150 100 50 ℄

1000 990 980 970 960 1010

6:1 6:1 8:1

97.4' LT
E=988.0

991.79
455+00.00
994.51

96.8' LT
E=988.3

992.04
454+50.00
995.54

96.8' LT
E=988.6

992.29
454+00.00
995.12

96.8' LT
E=988.8

992.54
453+50.00
995.39

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 453+50 TO STA. 455+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

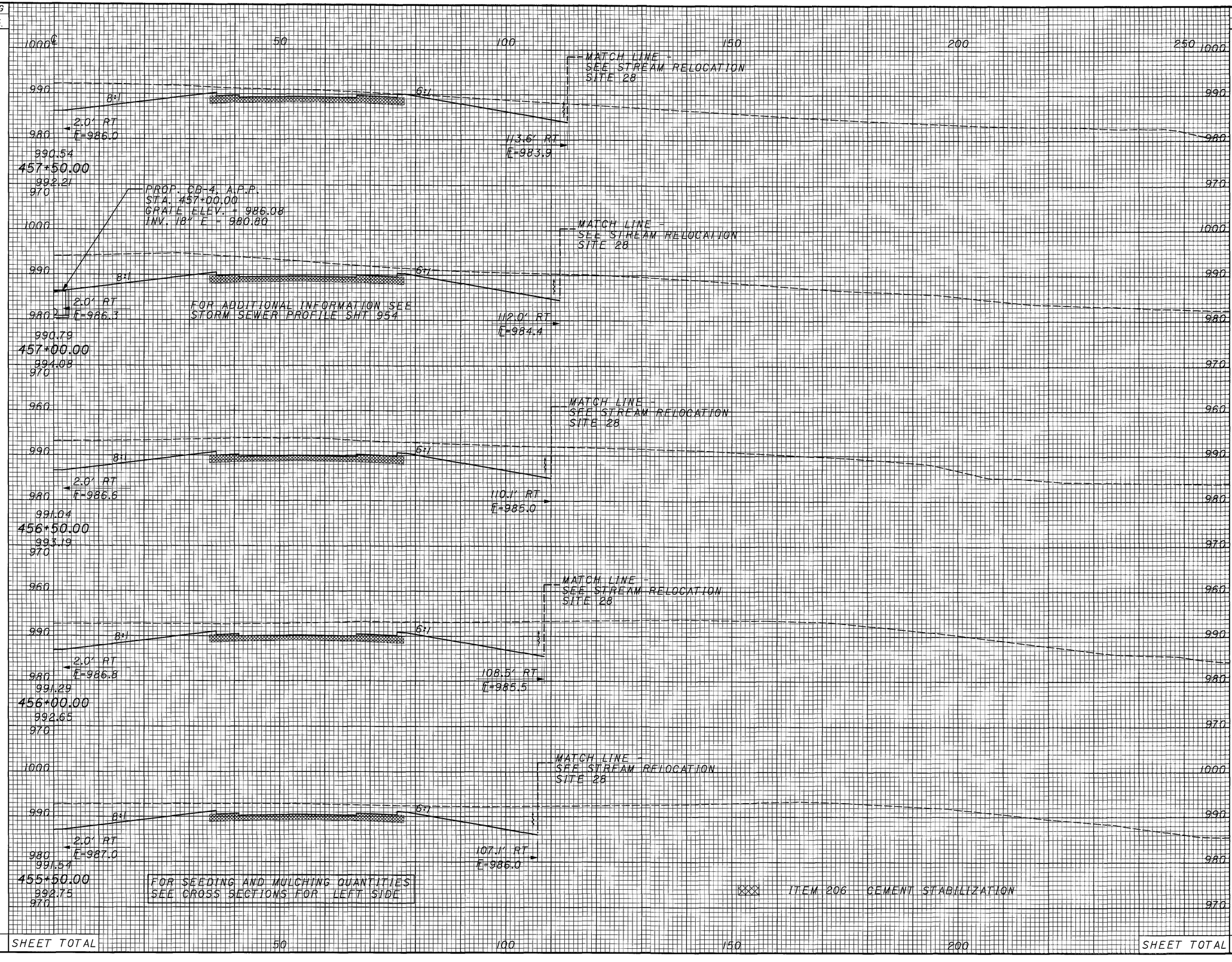
END AREA		VOLUME	
CUT	FILL	CUT	FILL
586	0		
		1332	0
852	0		
		1553	0
825	0		
		1429	0
718	0		
		1369	0
760	0		
		1663	0
		7346	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 455+50 TO STA. 457+50 RT.

LIC-161-6.65
LIC-37-10.25

325
1349



tdurfney
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SEEDING END WIDTH	SEEDING SQ. YDS.
149	835
151	842
152	854
156	883
162	902
	4316

SHEET TOTAL

END AREA VOLUME CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 455+50 TO STA. 457+50 LT.

LIC-161-6.65
LIC-37-10.25

326
1349

200 150 100 50 ℄ 50 100 150 200

1000 990 980 970 960

6:1 6% 6% 8:1

96.8' LT
E=986.8
990.54
457+50.00
992.21

PROP. CB-4, A.P.P.
STA. 457+00.00
GRATE ELEV. = 986.08
INV. 18" E = 980.80

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 954

96.8' LT
E=987.1
990.79
457+00.00
994.08

96.8' LT
E=987.3
991.04
456+50.00
993.19

96.8' LT
E=987.6
991.29
456+00.00
992.65

96.8' LT
E=987.8
991.54
455+50.00
992.76

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

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SEEDING		END AREA VOLUME			
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		10	682		
				89	973
		85	369		
				288	383
		226	45		
				751	42
SHEET TOTAL				1128	1398

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 458+00 TO STA. 459+00 RT.

LIC-161-6.65
LIC-37-10.25

327
349

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SEEDING	
END WIDTH	SQ. YDS.
147	
171	
149	
	2601

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

1010 1000 990 980 970 960

6:1 6:1 8:1

97.4' LT
E=986.0

989.79
459+00.00
983.36

6:1 6:1 8:1

96.8' LT
E=986.3

990.04
458+50.00
986.54

6:1 6:1 8:1

96.8' LT
E=986.6

990.29
458+00.00
989.12

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

END AREA VOLUME			
CUT	FILL	CUT	FILL
884			
888			
829			
SHEET TOTAL			

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 458+00 TO STA. 459+00 LT.

LIC-161-6.65
LIC-37-10.25

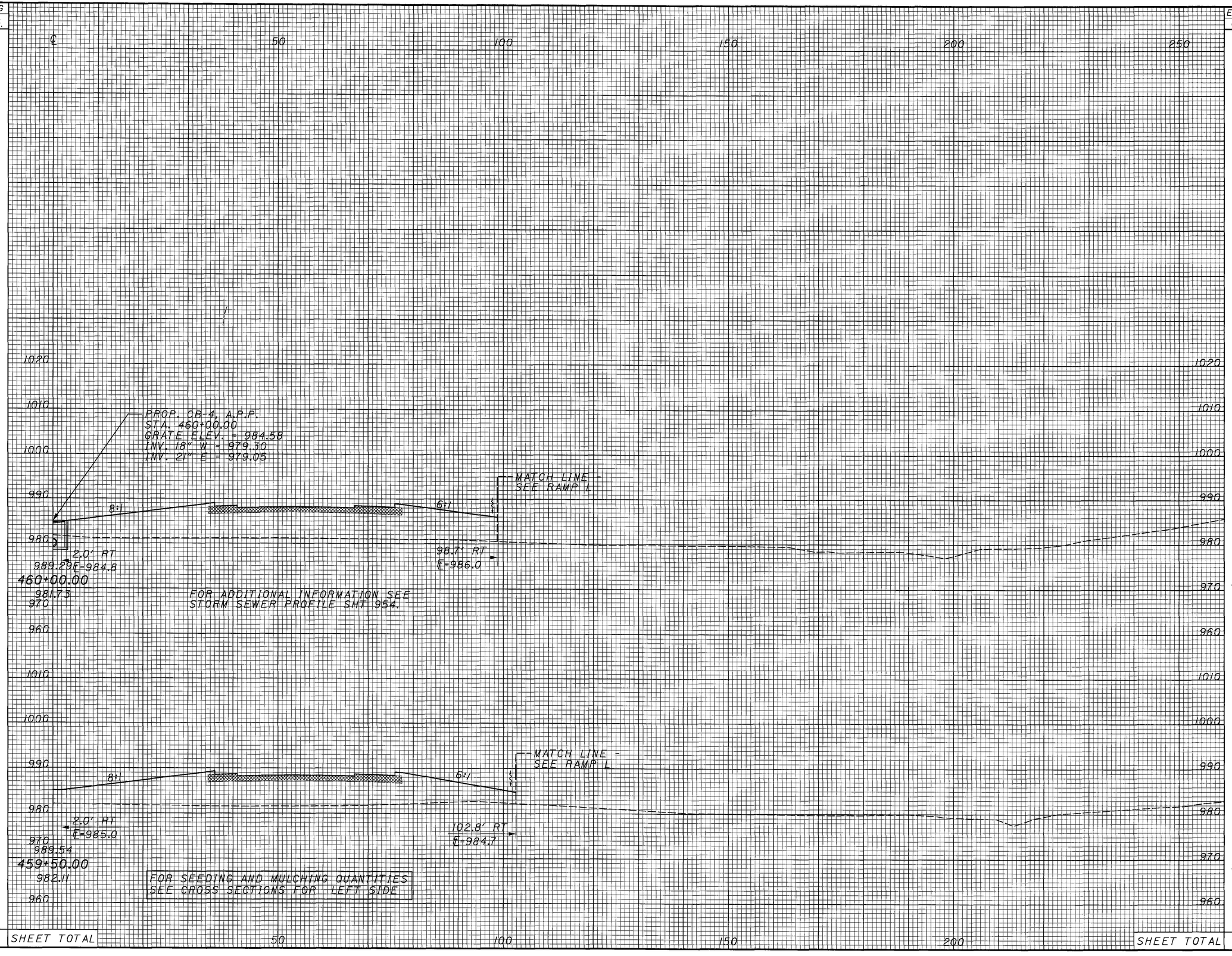
328
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA VOLUME			
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



		151	799
		162	1448
		23	764
		31	1339
SHEET TOTAL		193	2787

CROSS SECTIONS - S.R. 161
STA. 459+50 TO STA. 460+00 RT.

LIC-161-6.65
LIC-37-10.25

329
1349

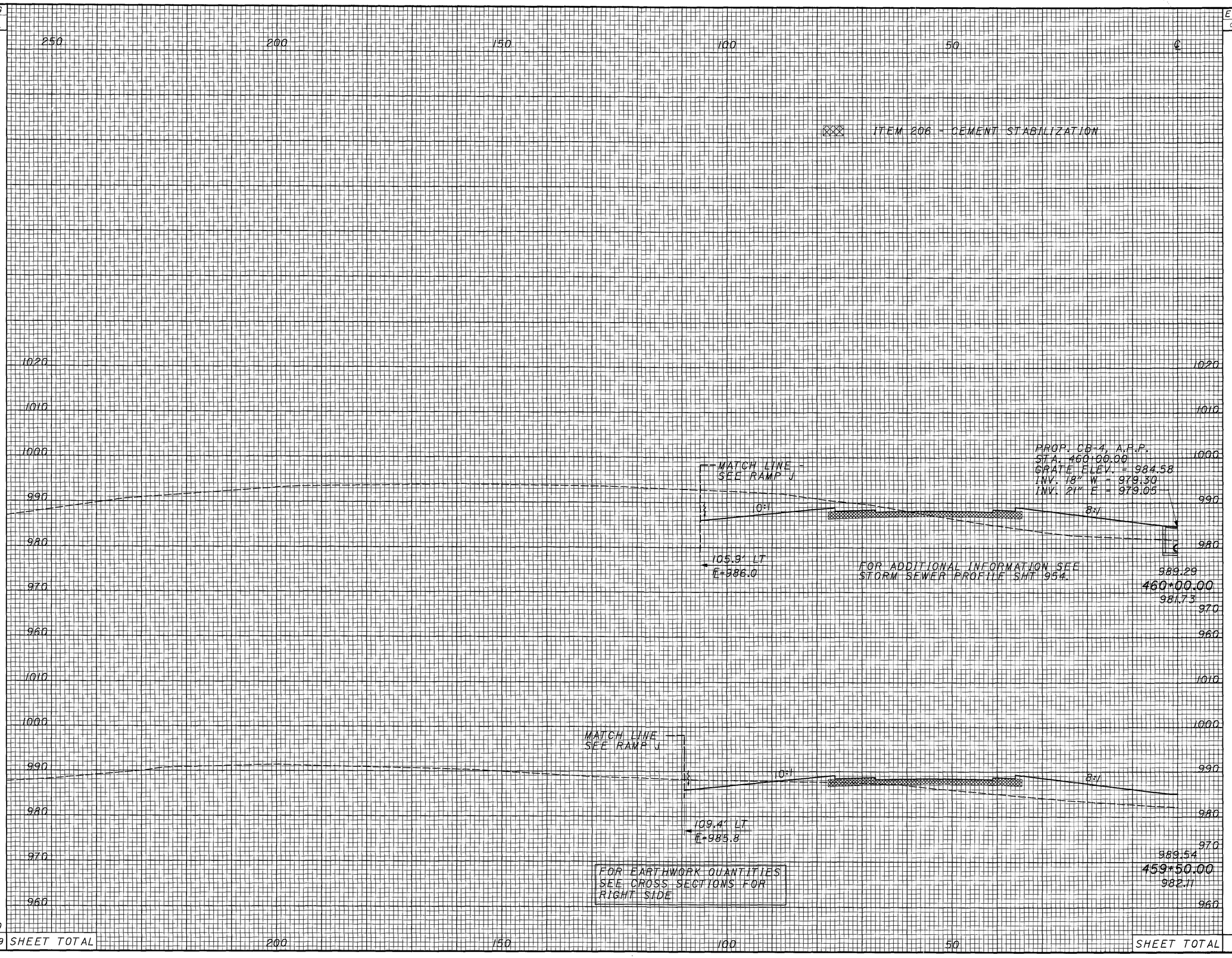
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
125	
719	
133	
780	
1499	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 459+50 TO STA. 460+00 LT.

LIC-161-6.65
LIC-37-10.25

330
1349

jduffney
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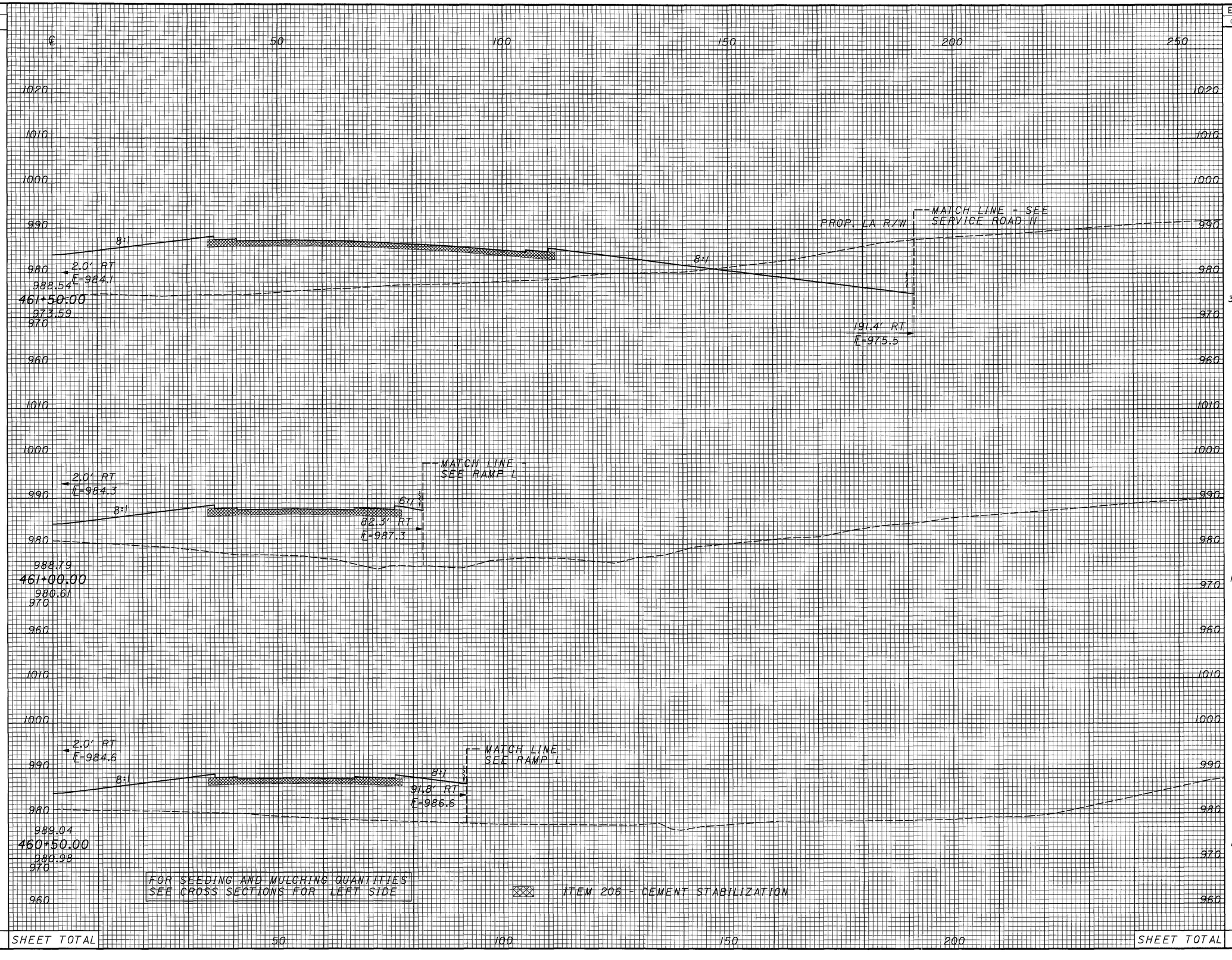
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
307	1479		
		456	2207
186	904		
		324	1647
164	875		
		292	1550
		1072	5404

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 460+50 TO STA. 461+50 RT.

LIC-161-6.65
LIC-37-10.25



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SEEDING	
END WIDTH	SQ. YDS.
164	
	712
93	
	549
105	
	640
1901	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

MATCH LINE SEE RAMP J
6:1
8:1
95.0' LT
E=986.6
988.54
461+50.00
973.59

MATCH LINE SEE RAMP J
6:1
8:1
89.0' LT
E=986.4
988.79
461+00.00
980.61

MATCH LINE SEE RAMP J
6:1
8:1
91.5' LT
E=986.2
989.04
460+50.00
980.98

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 460+50 TO STA. 461+50 LT.

LIC-161-6.65
LIC-37-10.25

332
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1005	2792		
		2211	4330
1383	1884		
		1555	3182
296	1552		
		559	2807
		4325	10319

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 462+00 TO STA. 463+00 RT.

LIC-161-6.65
LIC-37-10.25

333
349

STA. 463+44, CULVERT No. 4,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 971

PROP. CB-4, A.P.R.
STA. 463+00.00
GRATE ELEV. = 983.08
INV. 21" W = 977.55
INV. 21" N = 977.55

8:1
6:1
3:1
2.0' RT
℄-983.3
987.79
463+00.00
971.51

MATCH LINE - SEE SERVICE ROAD 11

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 954.

155.8' RT
℄-973.2

8:1
6:1
2.0' RT
℄-983.6
988.04
462+50.00
974.91

MATCH LINE - SEE SERVICE ROAD 11

170.0' RT
℄-973.8

8:1
7:1
2.0' RT
℄-983.8
988.29
462+00.00
973.03

MATCH LINE - SEE SERVICE ROAD 11

PROP. LA R/W

187.0' RT
℄-974.7

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
	272
	1475
	259
	1169
	161
	903
	3547

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

STA. 463+44, CULVERT No. 4,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 971

PROP. CB-4, A.P.P.
STA. 463+00.00
GRATE ELEV. = 983.08
INV. 21" W = 977.55
INV. 21" N = 977.55

PROP. LA R/W

3:1 3:1 6:1 8:1

163.3' LT
℄-970.3

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 954.

987.79
463+00.00
977.51

PROP. LA R/W

3:1 3:1 6:1 8:1

156.6' LT
℄-974.3

988.04
462+50.00
974.91

MATCH LINE -
SEE RAMP J

3:1 6:1 8:1

82.5' LT
℄-986.8

986.29
462+00.00
973.03

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

1000 990 980 970 960 1010

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 462+00 TO STA. 463+00 LT.

LIC-161-6.65
LIC-37-10.25

334
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
938	131		
		996	1477
138	1424		
		168	4022
43	2919		
		69	5954
31	3512		
		959	5837
		2192	17097

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 463+50 TO STA. 465+00 RT.

LIC-161-6.65
LIC-37-10.25

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1000 990 980 970 960

2.0' RT
℄=982.3
8:1
6:1
4:1
PROP. LA R/W
122.8' RT
℄=981.8
986.79
465+00.00
988.29

2.0' RT
℄=982.6
8:1
6:1
6:1
PROP. LA R/W
130.8' RT
℄=980.8
987.04
464+50.00
978.77

8:1
6:1
3:1
3:1
PROP. LA R/W
2.0' RT
℄=982.8
987.29
464+00.00
972.97
143.5' RT
℄=975.8

8:1
6:1
3:1
MATCH LINE - SEE SERVICE ROAD 11
2.0' RT
℄=983.1
987.54
463+50.00
972.83
154.6' RT
℄=972.7

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.
	203
	1154
	213
	1164
	206
	1174
	216
	1355
	4847 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 463+50 TO STA. 465+00 LT.

LIC-161-6.65
LIC-37-10.25

336
1349

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W
3:1
6:1
10:1
4:1
10:1
7.6:1
140.8' LT
℄-972.6
986.79
465+00.00
988.29

PROP. LA R/W
3:1
6:1
10:1
3:1
10:1
7.8:1
151.5' LT
℄-970.1
987.04
464+50.00
978.77

PROP. LA R/W
3:1
6:1
3:1
8:1
155.6' LT
℄-969.9
987.29
464+00.00
972.97

PROP. LA R/W
3:1
6:1
3:1
8:1
170.7' LT
℄-966.3
987.54
463+50.00
972.83

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1000 990 980 970 960

200 150 100 50 SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1566	0		
		2746	0
1400	0		
		2717	0
1534	0		
		2796	0
1470	0		
		2244	158
		10503	158

CALCULATED JWA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 465+50 TO STA. 467+00 RT.

LIC-161-6.65
LIC-37-10.25

337
1334

50 100 150 200 250

PROP. LA R/W

8:1 6:1 6:1

2.0' RT
E=981.3

118.7' RT
E=980.9

970
985.79
467+00.00
988.77

PROP. LA R/W

8:1 6:1 6:1

2.0' RT
E=981.6

119.7' RT
E=981.1

970
986.04
466+50.00
989.07

PROP. LA R/W

2.0' RT
E=981.8

8:1 6:1 4:1

120.7' RT
E=981.4

970
986.29
466+00.00
989.75

PROP. LA R/W

2.0' RT
E=982.1

8:1 6:1 4:1

121.8' RT
E=981.6

986.54
465+50.00
989.09
970

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

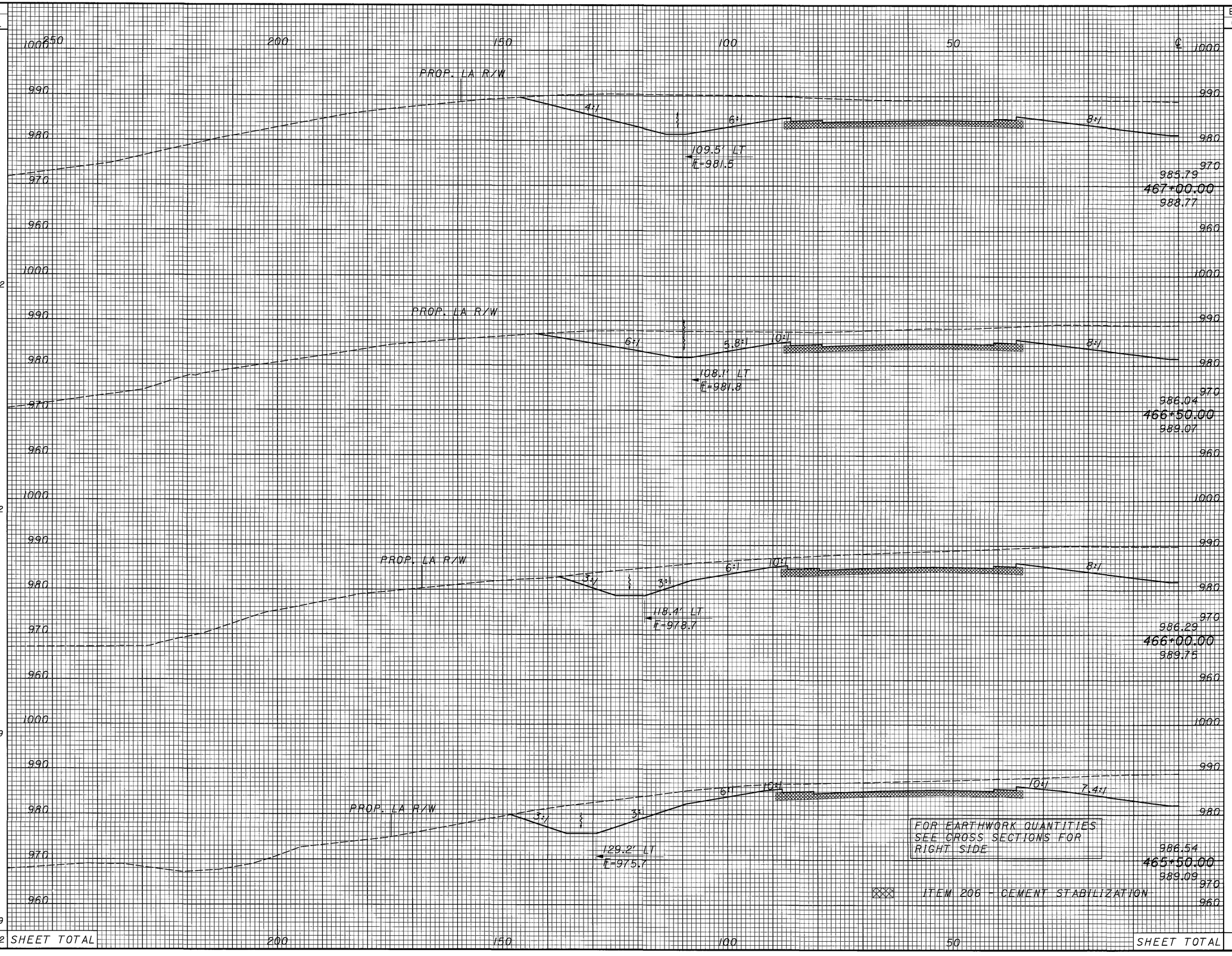
SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
220	
	1202
212	
	1142
199	
	1129
207	
	1139
	4612

END AREA		VOLUME	
CUT	FILL	CUT	FILL



CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 465+50 TO STA. 467+00 LT.

LIC-161-6.65
LIC-37-10.25

338
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2416	0		
		4775	0
2741	0		
		4606	0
2233	0		
		3746	0
1813	0		
		3128	0
		16255	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 467+50 TO STA. 469+00 RT.

LIC-161-6.65
LIC-37-10.25

339
1349

469+00.00
991.30
964.79
2.0' RT
℄-980.3
8:1
6:1
3:1
114.5' RT
℄-980.1
PROP. I.A R/W

468+50.00
992.28
985.04
2.0' RT
℄-980.6
8:1
6:1
3:1
115.5' RT
℄-980.3
PROP. I.A R/W

468+00.00
990.25
985.29
2.0' RT
℄-980.9
8:1
6:1
3:1
116.6' RT
℄-980.5
PROP. I.A R/W

467+50.00
988.72
985.54
2.0' RT
℄-981.1
8:1
6:1
4:1
117.6' RT
℄-980.7
PROP. I.A R/W

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

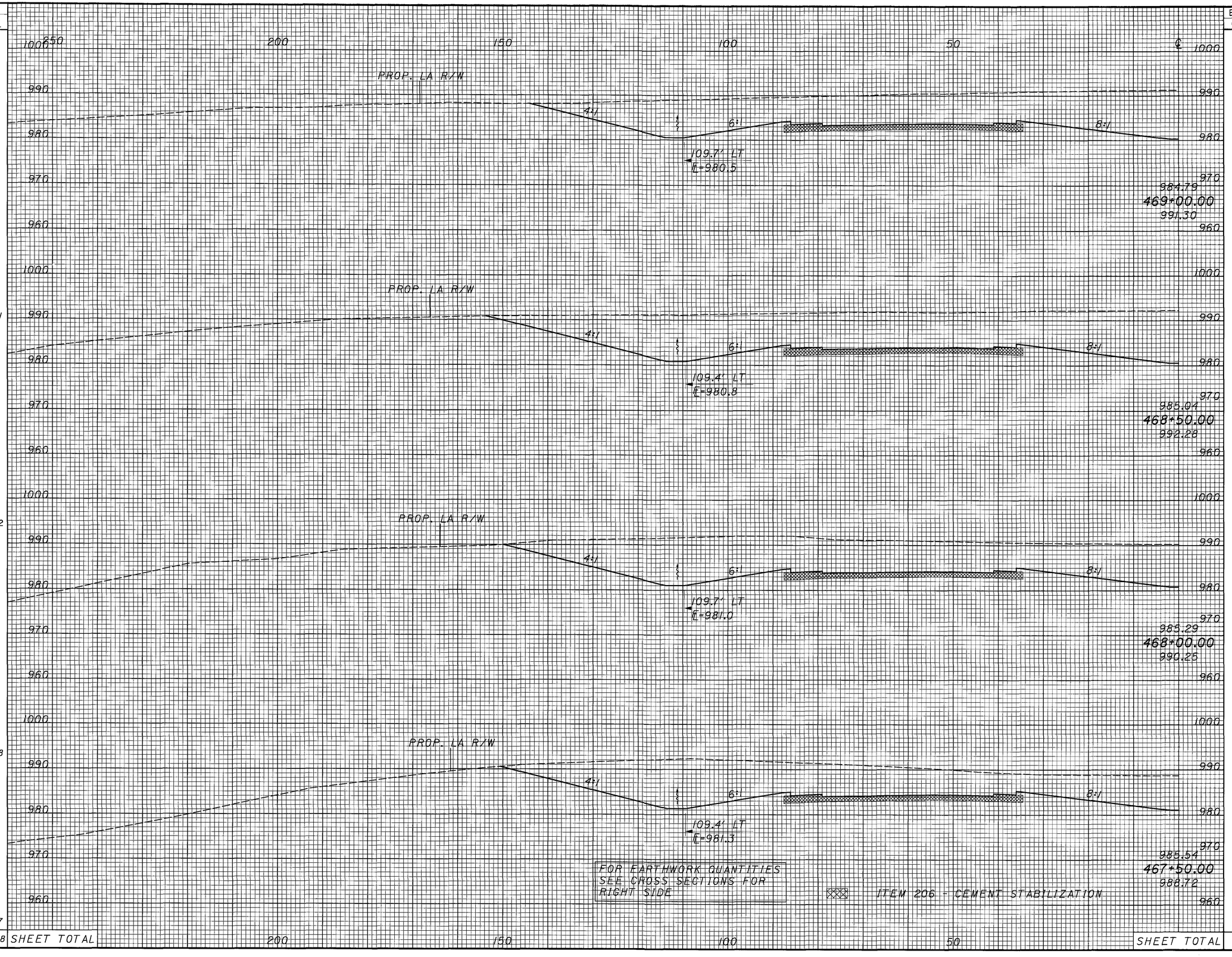
SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.
	650
206	
	1161
212	
	1162
206	
	1158
211	
	1197
	4678

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 161
STA. 467+50 TO STA. 469+00 LT.

LIC-161-6.65
LIC-37-10.25

340
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		1850	0		
				2514	44
		865	47		
				957	1139
		169	1183		
				1008	1124
		920	31		
				3089	29
SHEET TOTAL				7568	2336

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 469+50 TO STA. 471+00 RT.

LIC-161-6.65
LIC-37-10.25

341
1349

℄ 50 100 150 200 250

1000 990 980 970 960 950

PROP. LA R/W

8:1 6:1 3:1

2.0' RT
E=979.3

110.3' RT
E=979.3

983.79
471+00.00
988.67

PROP. LA R/W

8:1 6:1 4:1

2.0' RT
E=979.6

95.7' RT
E=982.1

984.04
470+50.00
986.26

STA 470+00, CULVERT NO. 5.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 972

MATCH LINE - SEE
SERVICE ROAD 11

8:1 6:1 4:1

2.0' RT
E=979.8

136.0' RT
E=975.8

984.29
470+00.00
976.52

PROP. CB-4, A.P.P.
STA. 469+50.00
GRATE ELEV. = 979.85
INV. 15" N = 977.30

PROP. LA R/W

8:1 6:1 4:1

2.0' RT
E=980.1

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 955.

113.5' RT
E=979.9

984.54
469+50.00
985.09

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 50 100 150 200 SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
216	
	1084
174	
	1033
198	
	1115
203	
	1136
	4368

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W

6:1 6:1 8:1

88.7' LT
E-981.5

983.79
471+00.00
988.67

PROP. LA R/W

3:1 3:1 6:1 8:1

108.0' LT
E-976.5

984.04
470+50.00
986.26

STA 470+00, CULVERT No. 5.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 972

PROP. LA R/W

3:1 3:1 6:1 8:1

122.1' LT
E-972.7

984.29
470+00.00
978.52

PROP. CB-4, A.P.P.
STA. 469+50.00
GRATE ELEV. = 979.85
INV. 15" N = 977.30

PROP. LA R/W

3:1 3:1 6:1 8:1

120.7' LT
E-975.2

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 955.

984.54
469+50.00
985.09

SHEET TOTAL

CROSS SECTIONS - S.R. 161
STA. 469+50 TO STA. 471+00 LT.

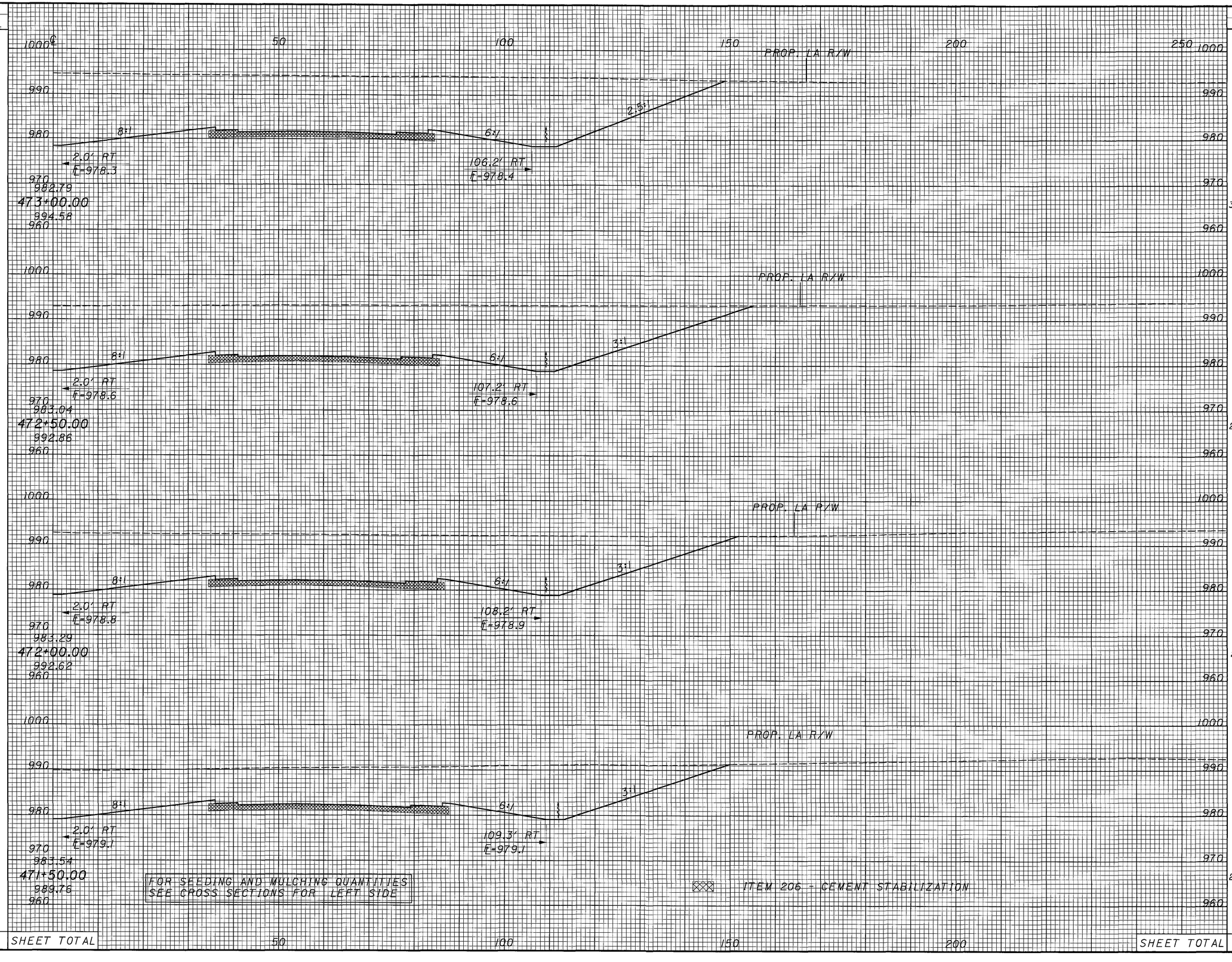
LIC-161-6.65
LIC-37-10.25

342
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
3369	0		
		5893	0
2995	0		
		5358	0
2791	0		
		4678	0
2262	0		
		3807	0
SHEET TOTAL		19736	0



CROSS SECTIONS - S.R. 161
STA. 471+50 TO STA. 473+00 RT.

CALCULATED JMA
CHECKED BER

LIC-161-6.65
LIC-37-10.25

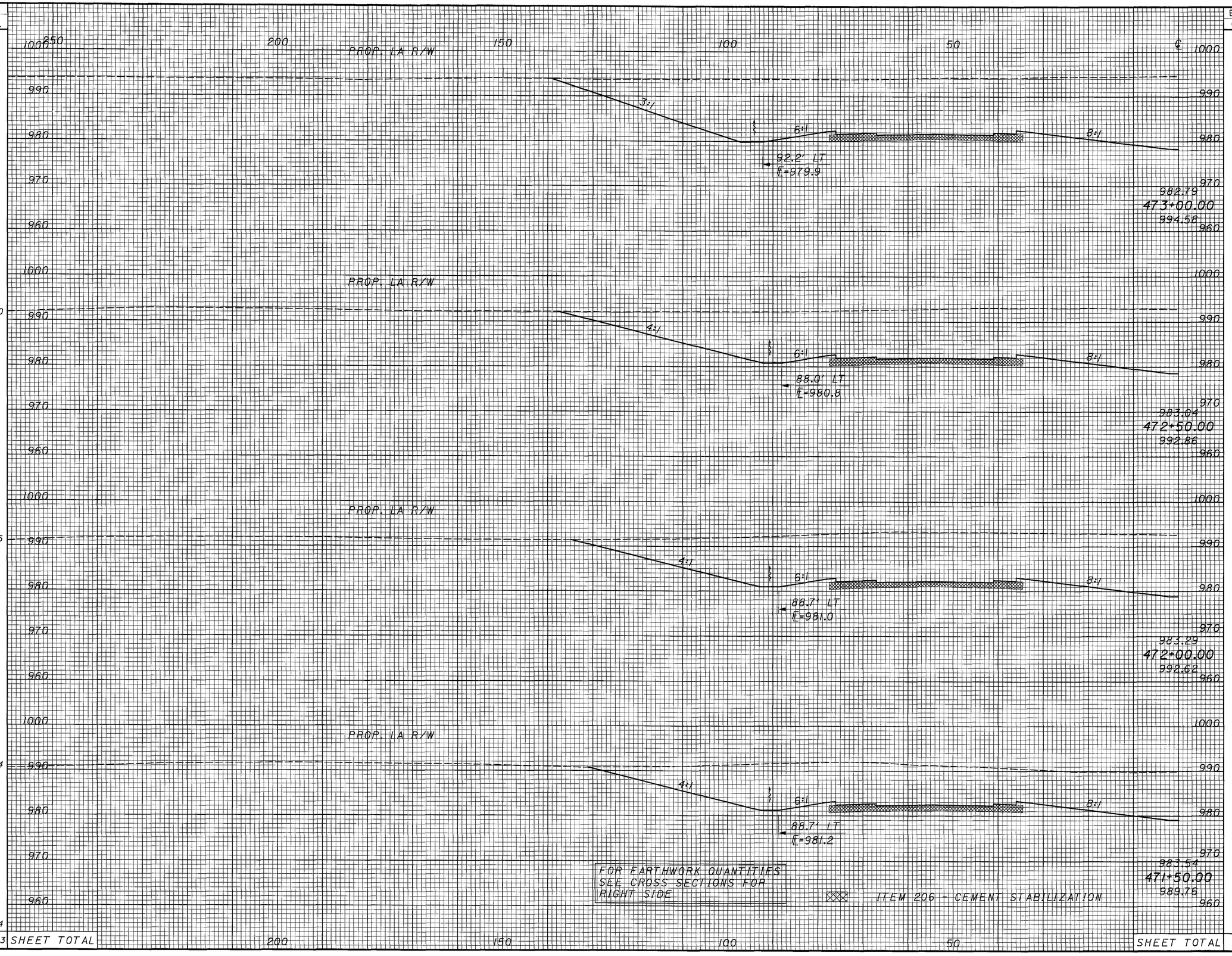
343
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
	211
	1180
	214
	1165
	206
	1124
	199
	1154
	4623

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

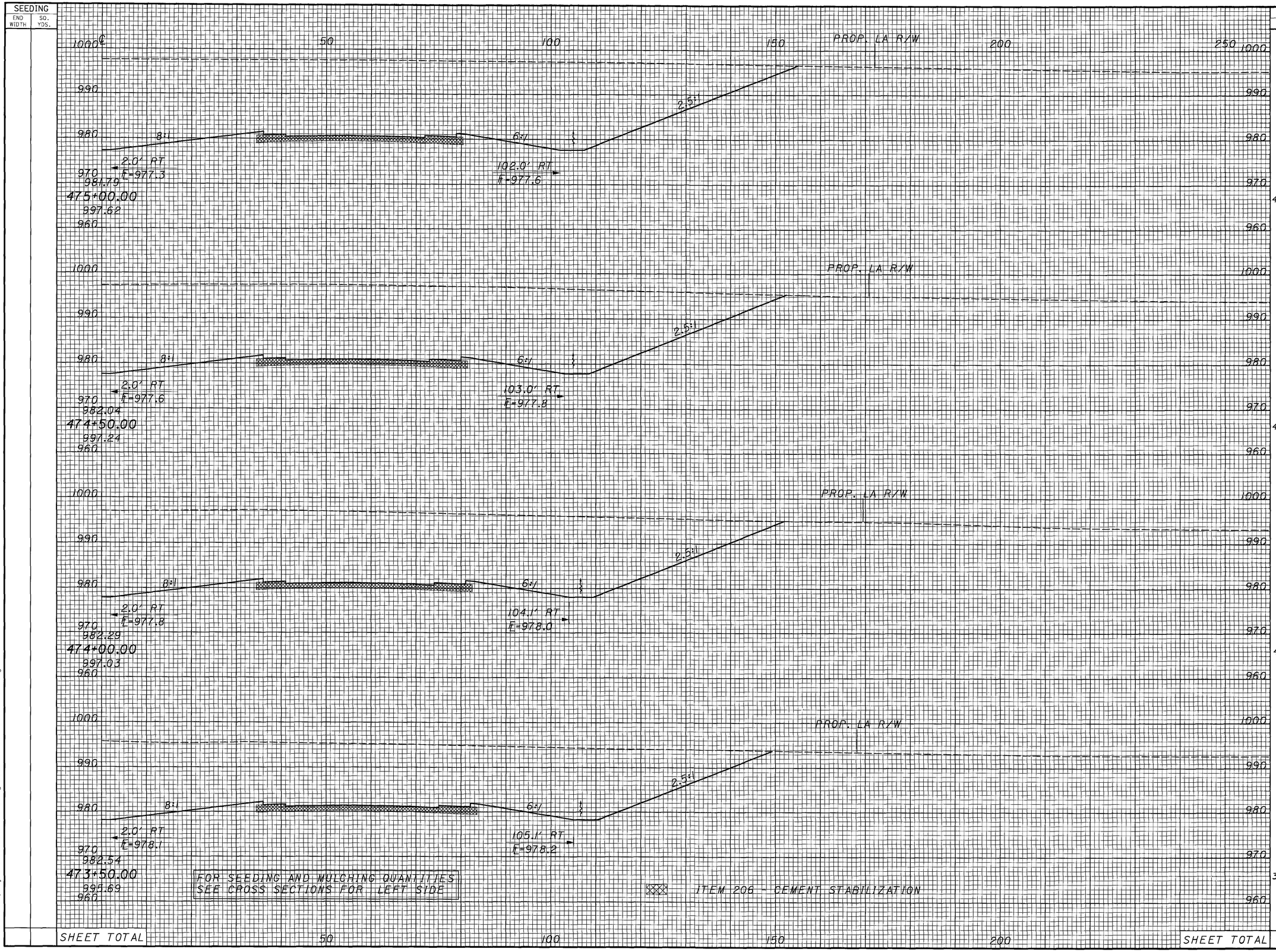


CROSS SECTIONS - S.R. 161
STA. 471+50 TO STA. 473+00 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		4693	0		
				8506	0
		4493	0		
				8159	0
		4319	0		
				7462	0
		3740	0		
				6583	0
SHEET TOTAL				30710	0



CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 473+50 TO STA. 475+00 RT.

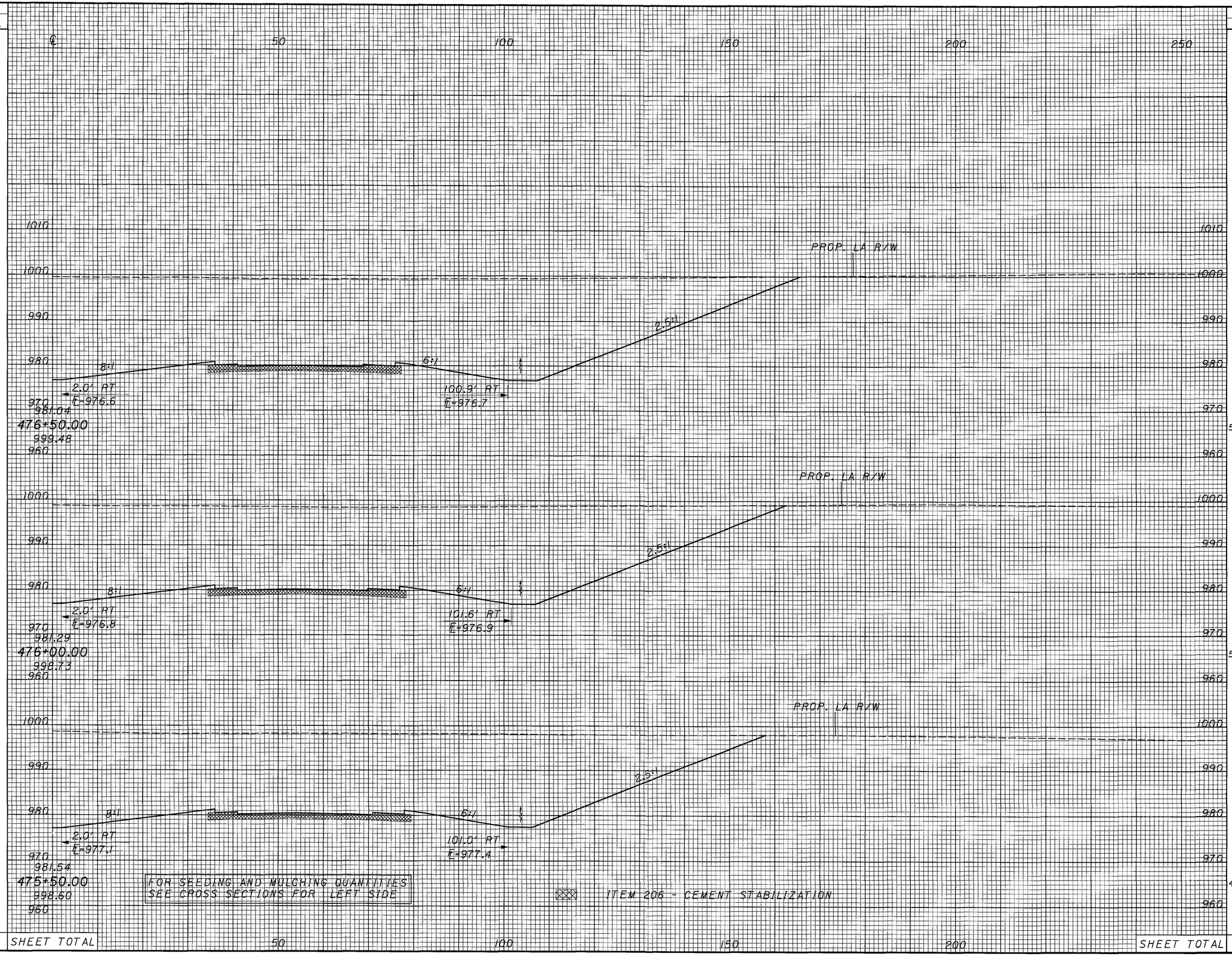
LIC-161-6.65
LIC-37-10.25

345
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
5225	0		
9516	0		
5052	0		
9265	0		
4954	0		
8933	0		
27714	0		

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161
STA. 475+50 TO STA. 476+50 RT.

LIC-161-6.65
LIC-37-10.25

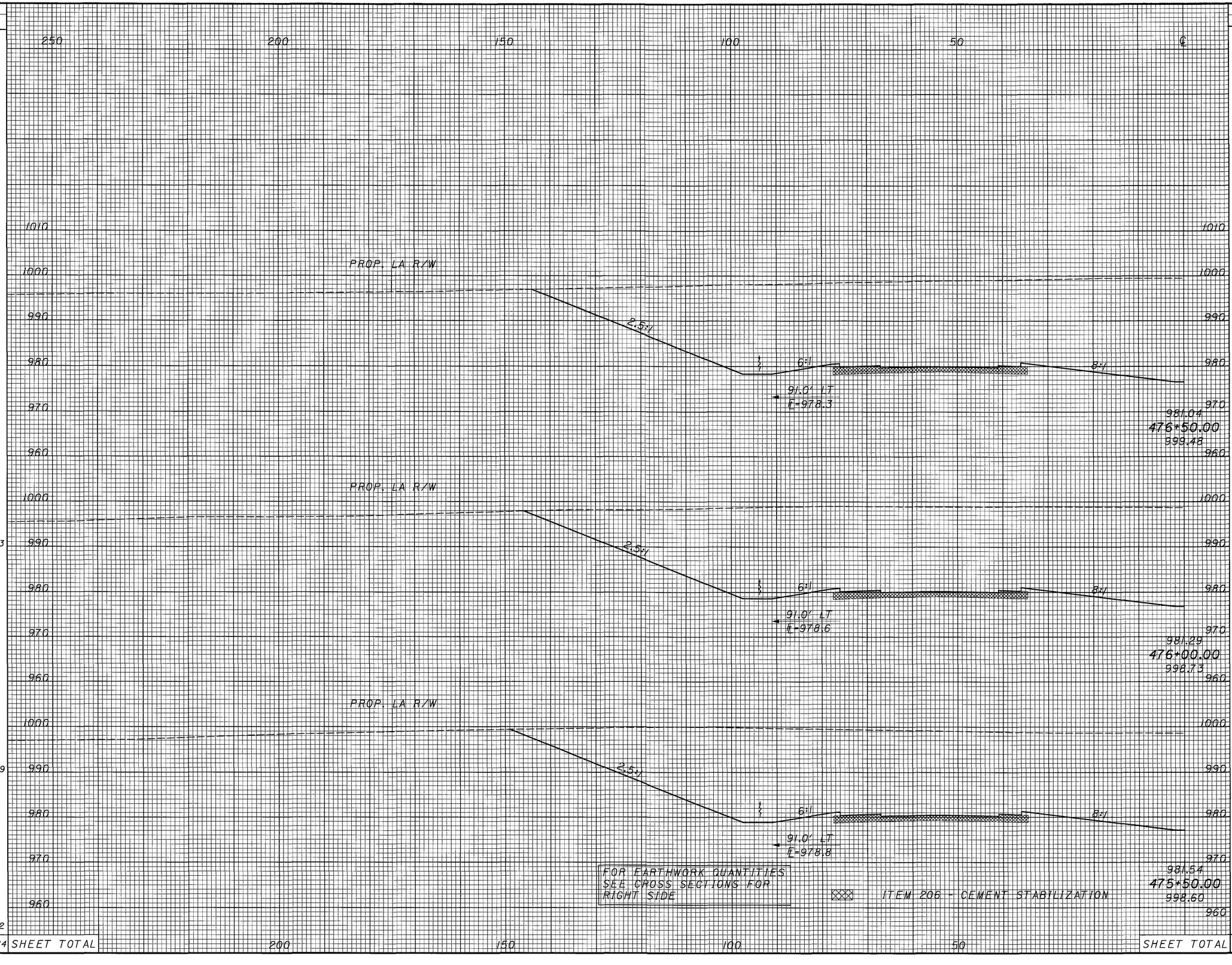
347
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SEEDING	
END WIDTH	SQ. YDS.
243	
241	
238	
1312	3984

END AREA	
CUT	FILL

VOLUME	
CUT	FILL



CALCULATED JMA
CHECKED BER

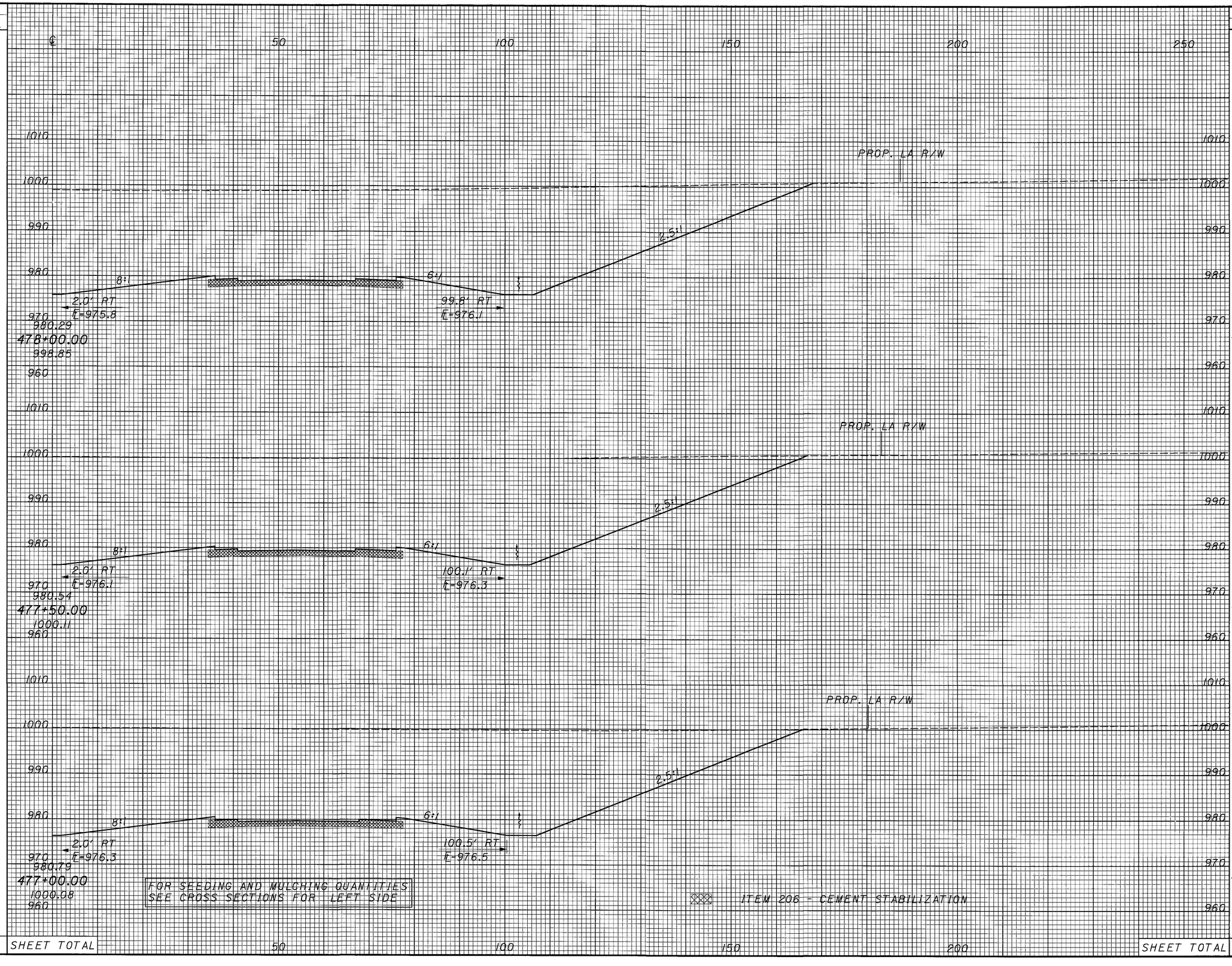
CROSS SECTIONS - S.R. 161
STA. 475+50 TO STA. 476+50 LT.

LIC-161-6.65
LIC-37-10.25

348
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
5566	0		
		10382	0
5647	0		
		10268	0
5443	0		
		9878	0
		30528	0

SHEET TOTAL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 161/S.R. 37
STA. 477+00 TO STA. 478+00 RT.

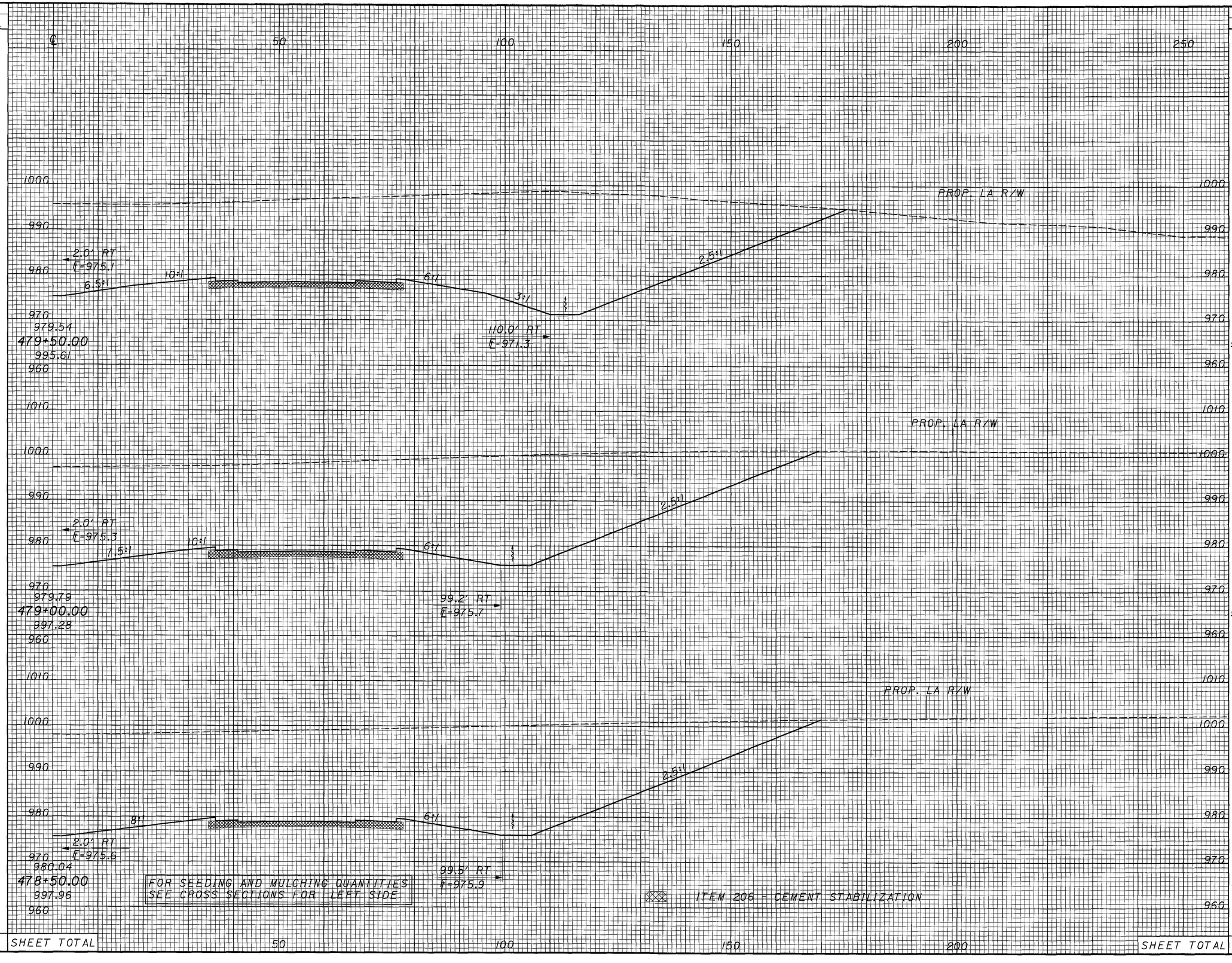
LIC-161-6.65
LIC-37-10.25

349
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		5548	0		
				10189	0
		5456	0		
				10162	0
		5519	0		
				10263	0
SHEET TOTAL				30614	0



CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 478+50 TO STA. 479+50 RT.

LIC-161-6.65
LIC-37-10.25

351
349

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SEEDING	
END WIDTH	SQ. YDS.
262	
1437	
255	
1420	
256	
1417	
4274	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. LA R/W

1000 990 980 970 960 1010

2.5:1 6:1 8:1

91.0' LT
E=976.9

979.54
479+50.00
995.61

PROP. LA R/W

1000 990 980 970 960 1010

2.5:1 6:1 8:1

91.0' LT
E=977.1

979.79
479+00.00
997.28

PROP. LA R/W

1000 990 980 970 960 1010

2.5:1 6:1 8:1

91.0' LT
E=977.3

980.04
478+50.00
997.96

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 478+50 TO STA. 479+50 LT.

LIC-161-6.65
LIC-37-10.25

352
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
449	196		
0 (GMB)	864 (GMB)		
		2303	164
		0 (GMB)	723 (GMB)
2305	0		
0 (GMB)	0 (GMB)		
		447	0
2695	0		
		7187	0
5067	0		
		9829	0
SHEET TOTAL		19766	164

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 480+00 TO STA. 481+00 RT.

LIC-161-6.65
LIC-37-10.25

353
1349

℄ 50 100 150 200 250

1000 990 980 970 960 950 940

2.0' RT
E-974.3
6.7:1 10:1 2:1
ITEM 203, GRANULAR MATERIAL, TYPE B
978.79
481+00.00
979.50
PROP. CB-4, A.P.P.
STA. 481+00.00
GRATE ELEV. = 974.10
INV. 18" S = 969.80
FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 955.
129.7' RT
Elev-953.8
PROP. LA R/W
2:1 6:1
143.1' RT
E-952.2
BEGIN ITEM 203, GRANULAR MATERIAL, TYPE B 480+54.83

2.0' RT
E-974.6
6.2:1 10:1 6:1 3:1 2.5:1
979.04
480+50.00
983.57
PROP. LA R/W
146.6' RT
E-958.6

2.0' RT
E-974.8
4.8:1 10:1 6:1 3:1 2.5:1
979.29
480+00.00
992.66
PROP. LA R/W
FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE
128.5' RT
E-964.9
ITEM 206 - CEMENT STABILIZATION

50 100 150 200
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
481	2055
	259
	1466
	269
1475	4996

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. LA R/W

PROP. CB-4, A.P.P.
STA. 481+00.00
GRATE ELEV. = 974.10
INV. 18" S = 969.80

3:1 6H 8:1

90.8' LT
E=976.1

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 955.

978.79
481+00.00
979.50

PROP. LA R/W

3:1 6:1 8:1

91.0' LT
E=976.3

979.04
480+50.00
983.57

PROP. LA R/W

2.5:1 6:1 8:1

91.0' LT
E=976.6

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

979.29
480+00.00
992.66

ITEM 206 - CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 480+00 TO STA. 481+00 LT.

LIC-161-6.65
LIC-37-10.25

354
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		133	387
		0 (GMB)	6128 (GMB)
89	193		
0 (GMB)	2710 (GMB)		
		11	22
		0 (GMB)	309 (GMB)
94	193		
0 (GMB)	2659 (GMB)		
		502	360
		0 (GMB)	3262 (GMB)
		646	769

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 481+50 TO STA. 481+54.83 RT.

LIC-161-6.65
LIC-37-10.25

355
1349

50 100 150 200 250

S.R. 37 @ MOOTS RUN
STA. 482+32.31

BEGIN STRUCTURE
END APPROACH SLAB
STA. 481+78.11

BEGIN APPROACH SLAB
STA. 481+53.11

1000 990 980 970 960 950 940

8:1

2.0' RT
E=974.1

978.54

481+50.00
50.00

956.37

ITEM 203, GRANULAR MATERIAL, TYPE B

2:1

128.0' RT
Elev=954.4

2% 2%

141.3' RT
E=952.8

PROP. LA R/W

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

$USER
$DATE$
$FILE$

$TIMES$AMP$

SEEDING	
END WIDTH	SQ. YDS.
	35
1000	
990	
980	
970	
960	203
950	
940	
	1900
	1935

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

S.R. 37 @ MOOTS RUN
STA. 482+32.31

BEGIN STRUCTURE
END APPROACH SLAB
STA. 481+78.11

BEGIN APPROACH SLAB
STA. 481+53.11 (BACK ONLY)

BEGIN APPROACH SLAB
STA. 481+53.11

1000

990

PROP. LA R/W

980

6:1 1/2" 6:1

970

91.1' LT
E=975.18

3:1

ITEM 203, GRANULAR MATERIAL, TYPE B 978.54
481+50.00
958.37

960

950

940

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

200 150 100 50

SHEET TOTAL

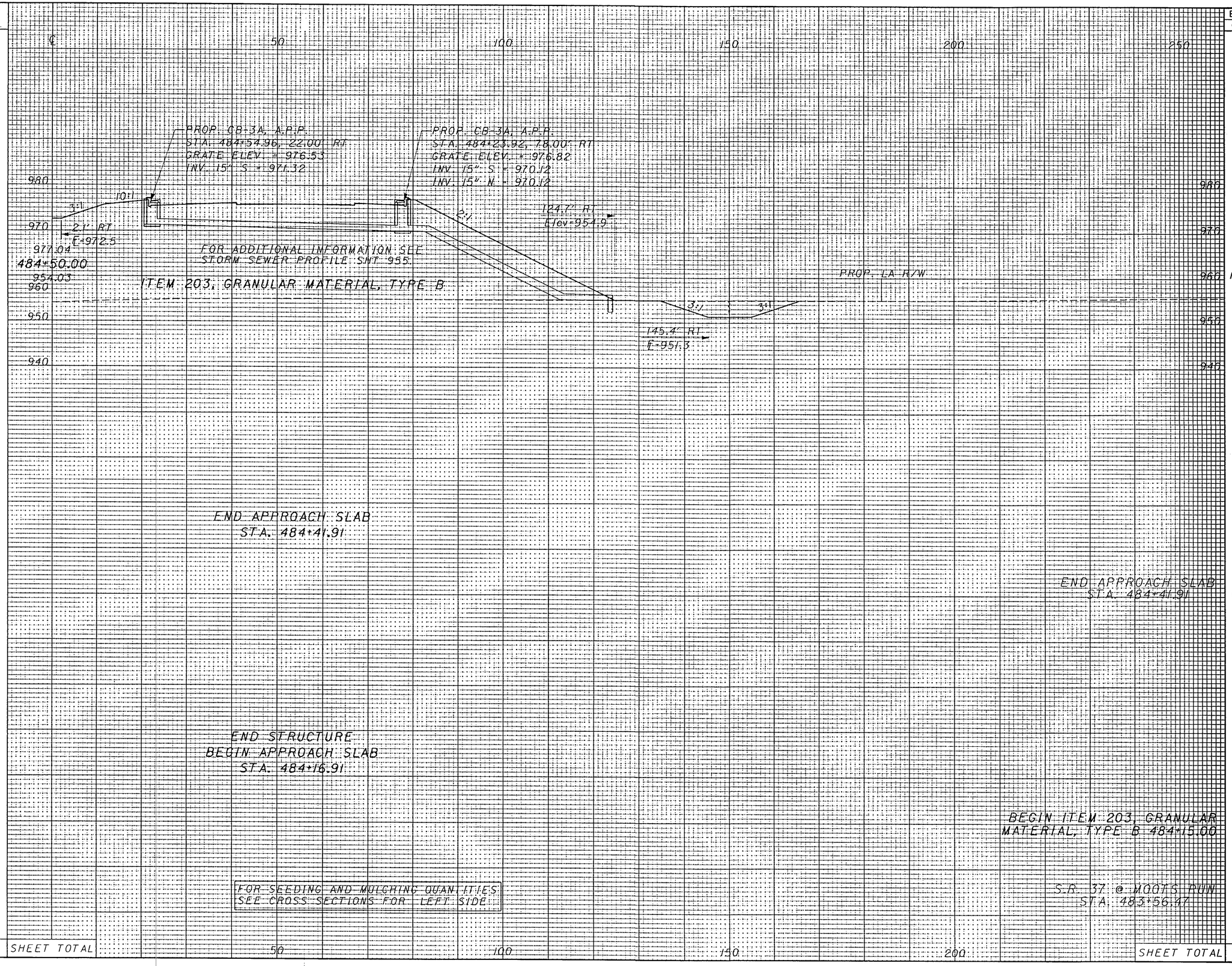
CROSS SECTIONS - S.R. 37
STA. 481+50 TO STA. 482+01.38 LT.

LIC-161-6.65
LIC-37-10.25

356
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
103	232		
	4382 (GMB)		
		26	67
			5702 (GMB)
69	217		
		103	455
			4787 (GMB)
	4416 (GMB)		
0	0		
		129	522

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 483+93.63 TO STA. 484+50 RT.

LIC-161-6.65
LIC-37-10.25

357
1349

SHEET TOTAL

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING	
END WIDTH	SQ. YDS.
	232
	202
	217
	301
	0
	503

250 200 150 100 50 ℄

980 970 960 950 940

END AREA: CUT | FILL — VOLUME: CUT | FILL

CALCULATED JMA CHECKED BER

PROP. LA R/W

3:1 3:1

131.9' LT
Elev=951.3

149.0' LT
Elev=948.7

2:1

10:1 3:1

977.04
484+50.00
954.03

ITEM 203, GRANULAR MATERIAL, TYPE B

END APPROACH SLAB
STA. 484+41.91

END APPROACH SLAB
STA. 484+41.91

END STRUCTURE
BEGIN APPROACH SLAB
STA. 484+16.91

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL

SHEET TOTAL

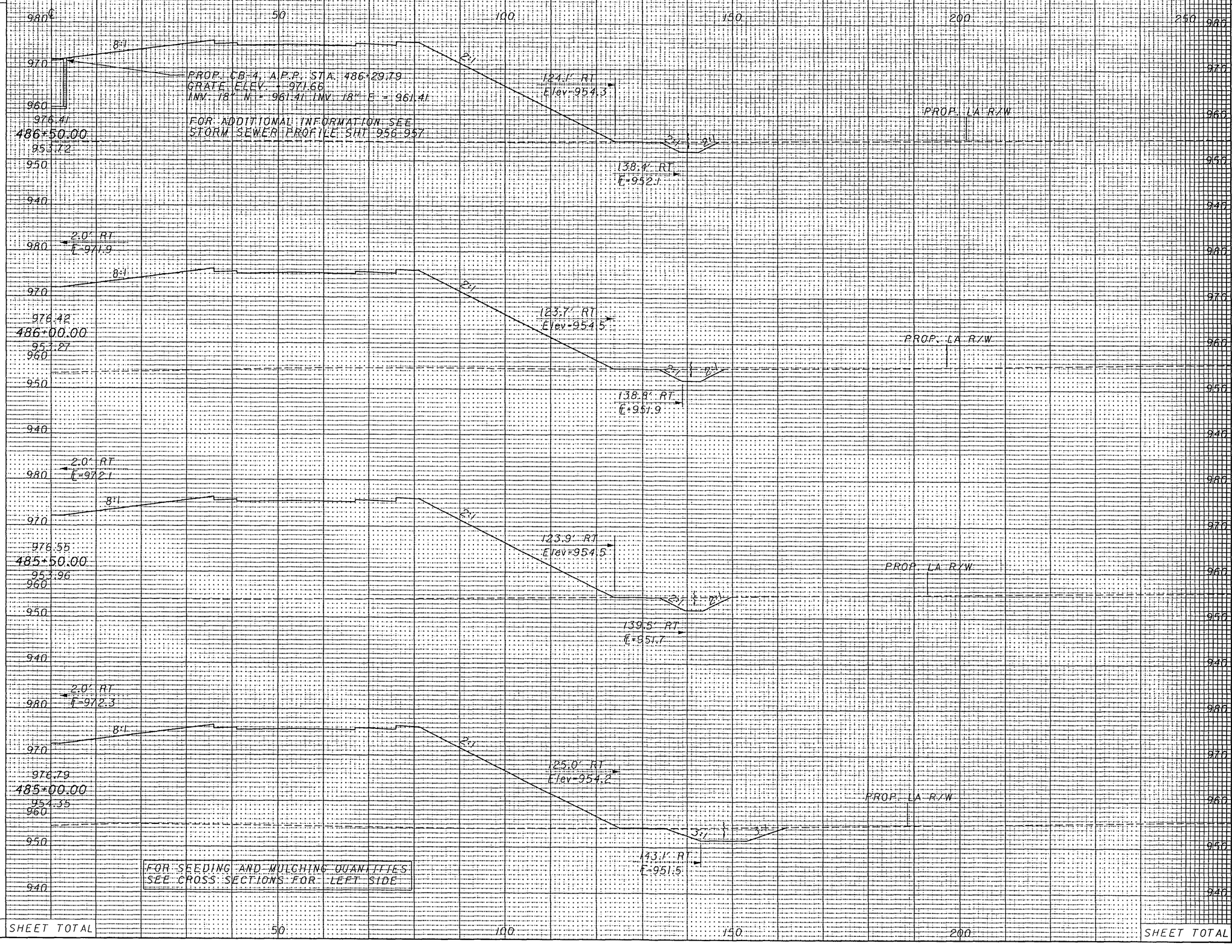
CROSS SECTIONS - S.R. 37
STA. 484+10.18 TO STA. 484+50 LT.

LIC-161-6.65
LIC-37-10.25

358
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
34	0		
	4466 (GMB)		
		67	0
			8307 (GMB)
38	0		
	4505 (GMB)		
		87	0
			8357 (GMB)
56	0		
	4520 (GMB)		
		121	0
			8395 (GMB)
73	0		
	4546 (GMB)		
		163	215
			8267 (GMB)
SHEET TOTAL		438	215

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 485+00 TO STA. 486+50 RT.

LIC-161-6.65
LIC-37-10.25

359
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING	
END WIDTH	SQ. YDS.
236	1314
237	1337
244	1390
256	1356
	5397

250 200 150 100 50 ℄

PROP. CB-4, A.P.P. STA. 486+29.79
GRATE ELEV. = 971.66
INV. 18" N = 961.41 INV. 18" E = 961.41

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 956-957

PROP. LA R/W

129.6' LT
Elev=951.5

143.7' LT
℄-949.5

976.41
486+50.00
953.72

PROP. LA R/W

129.7' LT
Elev=951.5

144.0' LT
℄-949.3

976.42
486+00.00
953.27

PROP. LA R/W

129.4' LT
Elev=951.7

147.3' LT
℄-949.1

976.55
485+50.00
953.96

PROP. CB-3A, A.P.P.
STA. 485+10.39, 78' LT
GRATE ELEV. = 976.38
INV. 15" S = 969.76
INV. 15" N = 969.76

PROP. CB-3A, A.P.P.
STA. 484+79.35, 22.00' LT
GRATE ELEV. = 976.40
INV. 15" N = 970.96

PROP. LA R/W

130.7' LT
Elev=951.6

148.8' LT
℄-948.9

976.79
485+00.00
954.35

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 955.

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CALCULATED JMA
CHECKED BER

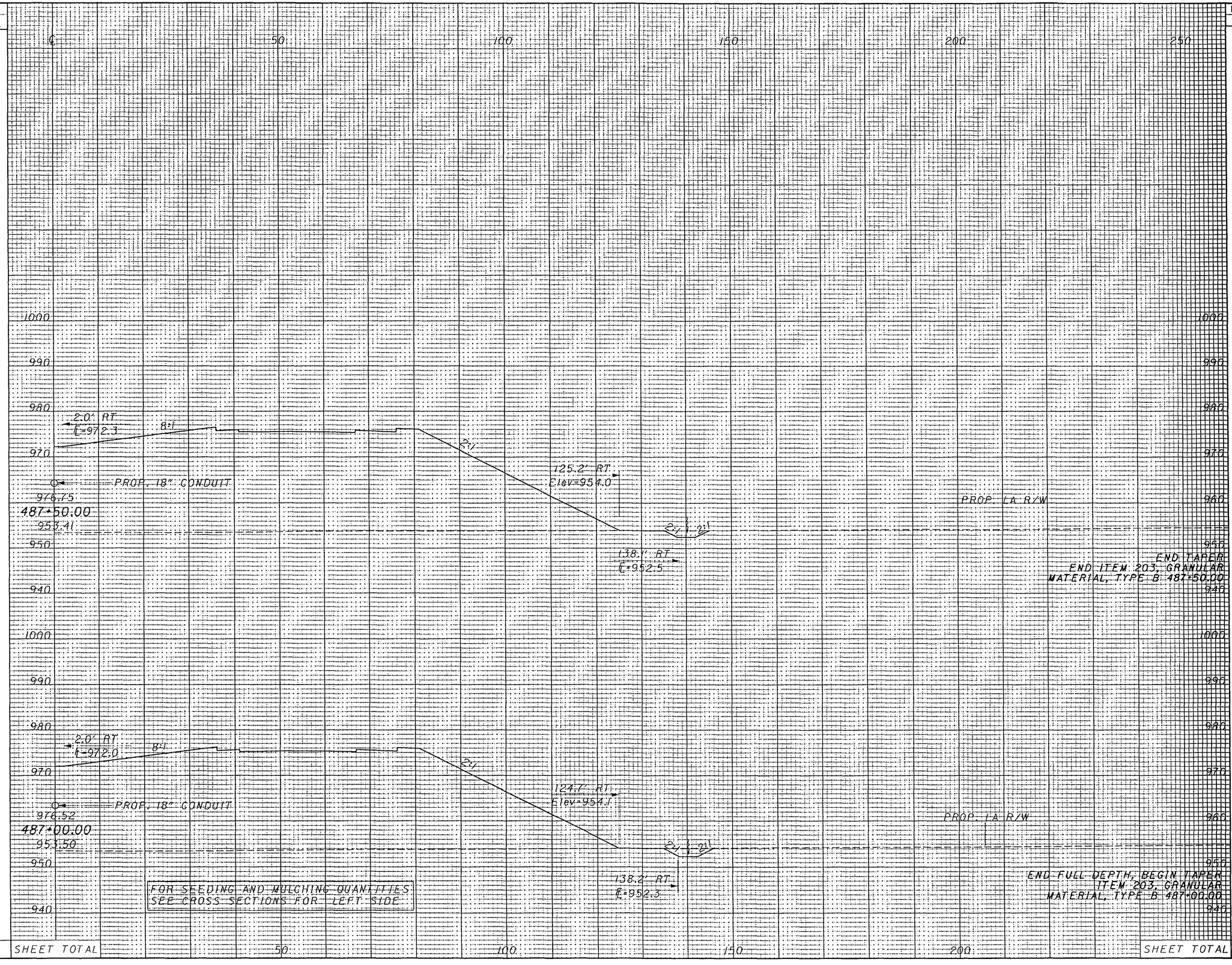
CROSS SECTIONS - S.R. 37
STA. 485+00 TO STA. 486+50 LT.

LIC-161-6.65
LIC-37-10.25

360
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.
303	
1593	
270	
1406	
2999	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. LA R/W
2:1
117.8' LT
E=957.8
2:1
℄ 2:1
8:1
PROP. 18" CONDUIT
976.75
487+50.00
953.41
132.0' LT
E=955.8

PROP. LA R/W
2:1
2:1
128.9' LT
Elev=952.0
2:1
10:1
7.6:1
PROP. 18" CONDUIT
976.52
487+00.00
953.50
143.0' LT
E=949.9

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1000 990 980 970 960 950 940

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 487+00 TO STA. 487+50 LT.

LIC-161-6.65
LIC-37-10.25

362
1349

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SEEDING	
END WIDTH	SQ. YDS.

PROP. CB-4, A.P.I.P.
STA. 489+00.00
GRATE ELEV. = 973.47
INV. 18" W = 966.27
INV. 18" E = 966.27

2.0' RT
E=973.6

8:1

6:1

3:1

3:1

PROP. LA R/W

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 956-957

973.13
489+00.00
968.15

139.7' RT
E=959.4

2.0' RT
E=973.1

8:1

2:1

122.4' RT
Elev=955.8

PROP. 18" CONDUIT

977.56
488+50.00
956.11

PROP. LA R/W

2:1 2:1

135.8' RT
E=954.2

2.0' RT
E=972.6

8:1

2:1

PROP. 18" CONDUIT

977.09
488+00.00
954.12

124.8' RT
Elev=954.3

PROP. LA R/W

2:1 2:1

138.2' RT
E=952.7

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1120	1946		
		1191	5394
166	3880		
		532	7683
409	4418		
		455	8364
SHEET TOTAL		2178	21441

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 488+00 TO STA. 489+00 RT.

LIC-161-6.65
LIC-37-10.25

363
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
	287
	1472
	243
	1480
	290
	1648
	4600

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄ 1010

PROP. LA R/W

2.5:1

3:1

6:1

8:1

PROP. CB-4, A.P.R.
STA. 489+00.00
GRATE ELEV. = 973.41
INV. 18" W = 966.27
INV. 18" E = 966.27

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 956-957

109.4' LT
E=970.7

978.13
489+00.00
968.15

PROP. LA R/W

2:1

2:1

2:1

8:1

100.2' LT
E=967.8

PROP. 18" CONDUIT

977.56
488+50.00
956.11

114.3' LT
E=965.7

PROP. LA R/W

2:1

2:1

2:1

8:1

111.6' LT
E=961.4

PROP. 18" CONDUIT

977.09
488+00.00
954.12

125.8' LT
E=959.4

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 488+00 TO STA. 489+00 LT.

LIC-161-6.65
LIC-37-10.25

364
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
6255	0		
		8434	0
2853	0		
		3679	1801
SHEET TOTAL		12113	1801

℄

50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1010 1000 990 980 970 960 1020

PROP. LA R/W

2.0' RT
E=974.8

8:1 6:1 3:1 2.5:1

℄ PROP. 18" CONDUIT

979.30
490+00.00
997.45

113.0' RT
E=969.4

PROP. LA R/W

2.0' RT
E=974.2

℄ PROP. 18" CONDUIT

978.72
489+50.00
981.59

126.2' RT
E=964.4

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

CALCULATED JMA
CHECKED BER

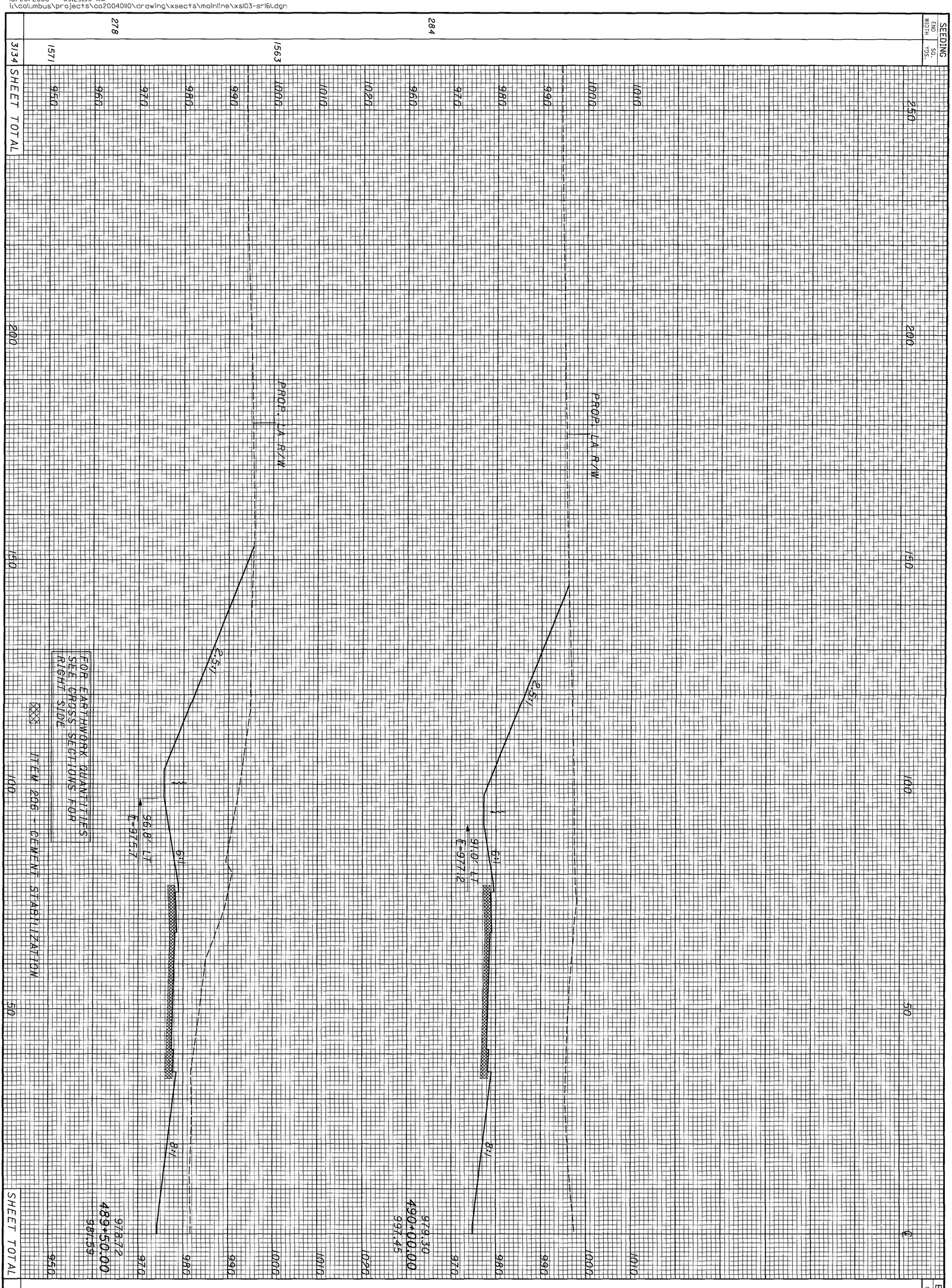
CROSS SECTIONS - S.R. 37
STA. 489+50 TO STA. 490+00 RT.

LIC-161-6.65
LIC-37-10.25

365
1349

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LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 37 STA. 489+50 TO STA. 490+00 LT.	CALCULATED JMA CHECKED BER

366
1349

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	6841	0	
			13014 0
	7213	0	
			12471 0
SHEET TOTAL			25485 0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 490+50 TO STA. 491+00 RT.

LIC-161-6.65
LIC-37-10.25

367
1349

℄ 50 100 150 200 250

1020 1010 1000 990 980 970 960

PROP. LA R/W

2.5:1

2.0' RT
E=976.0

8:1 6:1

88.0' RT
E=977.6

PROP. 18" CONDUIT

980.47
491+00.00
1004.37

PROP. LA R/W

6.5:1

2.0' RT
E=975.4

8:1 6:1

PROP. 18" CONDUIT

979.89
490+50.00
1002.64

103.5' RT
E=974.4

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
263	
284	
1578	
1521	
	3099

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 490+50 TO STA. 491+00 LT.

LIC-161-6.65
LIC-37-10.25

368
1349

250 200 150 100 50 ℄

1020 1010 1000 990 980 970 960

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
E=978.4

980.47
491+00.00
1004.37

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
E=977.8

979.89
490+50.00
1002.64

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

200 150 100 50

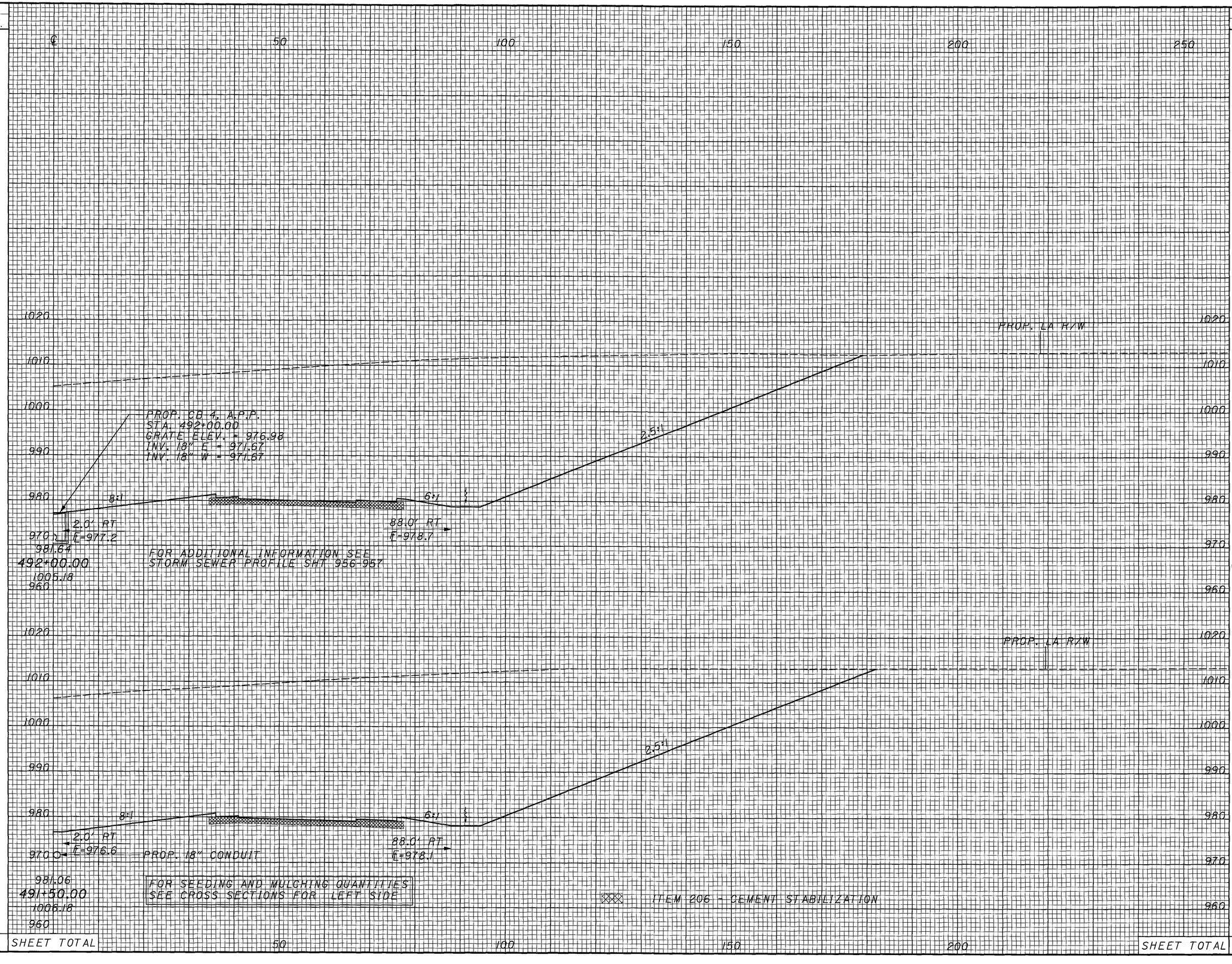
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
6784	0		
		12909	0
7157	0		
		12962	0
SHEET TOTAL		25871	0

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 491+50 TO STA. 492+00 RT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
258	
1450	
263	
1463	
2913	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 491+50 TO STA. 492+00 LT.

LIC-161-6.65
LIC-37-10.25

370
1349

250 200 150 100 50 ℄

1020 1010 1000 990 980 970 960

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
E-979.6

PROP. CB-4, A.P.P.
STA. 492+00.00
GRATE ELEV. = 976.98
INV. 18" E = 971.67
INV. 18" W = 971.67

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 956-957

981.64
492+00.00
1005.16

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
E-979.0

981.06
491+50.00
1006.16

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
5800	0		
		10668	0
5722	0		
		11014	0
6174	0		
		11998	0
		33680	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 492+50 TO STA. 493+50 RT.

LIC-161-6.65
LIC-37-10.25

371
1349

℄ 50 100 150 200 250

1020 1010 1000 990 980 970 960

PROP. LA R/W

2.5:1

8:1 6:1

2.0' RT
℄-978.9

88.0' RT
℄-980.5

970 ○ 983.40
493+50.00
1004.58

PROP. 18" CONDUIT

PROP. LA R/W

2.5:1

8:1 6:1

2.0' RT
℄-978.3

88.0' RT
℄-979.9

970 ○ 982.81
493+00.00
1002.64

PROP. 18" CONDUIT

PROP. LA R/W

2.5:1

8:1 6:1

2.0' RT
℄-977.7

88.0' RT
℄-979.3

970 ○ 982.23
492+50.00
1003.04

PROP. 18" CONDUIT

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
239	
	1353
248	
	1394
254	
	1423
	4170

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. LA R/W

2.5:1 6:1 8:1

91.0' LT
E=981.3

983.40
493+50.00
1004.58

PROP. LA R/W

2.5:1 6:1 8:1

91.0' LT
E=980.8

982.81
493+00.00
1002.64

PROP. LA R/W

2.5:1 6:1 8:1

91.0' LT
E=980.2

982.23
492+50.00
1003.04

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 492+50 TO STA. 493+50 LT.

LIC-161-6.65
LIC-37-10.25

372
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1020 1010 1000 990 980 970 960

PROP. LA R/W

2.5:1

8:1 6:1

2.0' RT
E=980.1
984.57

91.0' RT
E=981.4

494+50.00
1009.03

PROP. 18" CONDUIT

PROP. LA R/W

2.5:1

8:1 6:1

2.0' RT
E=979.5
983.98

88.0' RT
E=981.1

494+00.00
1008.18

PROP. 18" CONDUIT

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

494+50.00	6146	0	
494+00.00	5977	0	
SHEET TOTAL		11225	0
SHEET TOTAL		10904	0
SHEET TOTAL		22129	0

CROSS SECTIONS - S.R. 37
STA. 494+00 TO STA. 494+50 RT.

LIC-161-6.65
LIC-37-10.25

373
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
270	
261	
248	
	1476
	1415
	1362
	4253

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 0

1020 1010 1000 990 980 970 960

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
E=983.6

PROP. MANHOLE NO. 3, A.P.P
STA. 496+00.00, 25' LT.
GRATE ELEV. = 984.74
INV. 15" SW = 977.93
INV. 15" E = 977.93

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 957.

986.32
496+00.00
1006.00

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
E=983.1

PROP. 18" CONDUIT

985.74
495+50.00
1007.91

PROP. LA R/W

2.5:1

6:1

8:1

90.6' LT
E=982.8

PROP. CB-4, A.P.P.
STA. 495+00.000
GRATE ELEV. = 980.49
INV. 18" W = 976.17
INV. 15" NE = 976.12

985.15
495+00.00
1008.60

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 956-957

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 495+00 TO STA. 496+00 LT.

LIC-161-6.65
LIC-37-10.25

376
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
4612	0		
		8298	0
4350	0		
		9693	0
6118	0		
		11396	0
		29387	0

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

1030 1020 1010 1000 990 980 970 960

EX. R/W

PROP. CB-4, A.P.P.
STA. 497+75.000
GRATE ELEV. = 983.83
INV. 15" NW = 980.74

8:1 8:1 6:1 6:1

MATCH LINE - MSE WALL

988.08
497+50.00
1009.98

13.1' RT
℄-985.6

85.3' RT
℄-986.3

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 956-957

MATCH LINE - MSE WALL

8:1 8:1 6:1 6:1

987.49
497+00.00
1007.88

16.8' LT
℄-985.4

84.8' RT
℄-985.8

PROP. LA R/W

2.5:1

8:1 6:1

2.0' RT
℄-982.4

986.91
496+50.00
1005.97

91.0' RT
℄-984.2

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 496+50 TO STA. 497+50 RT.

LIC-161-6.65
LIC-37-10.25

377
1349

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SEEDING	
END WIDTH	SQ. YDS.
	113
	627
	113
	1074
	274
	1511
	3212

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. CB-4, A.P.P.
STA. 497+75.000
GRATE ELEV. = 983.63
INV. 15" NW = 980.74

PROP. MANHOLE NO. 3, A.P.P.
STA. 497+50.00, 25' LT.
GRATE ELEV. = 986.51
INV. 15" W = 980.22
INV. 15" SE = 980.22

MATCH LINE - MSE WALL

6:1 6:1 8:1 8:1

87.1' LT
E=986.0

13.1' LT
E=985.6

988.08
497+50.00
1009.98

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 956-957

MATCH LINE - MSE WALL

16.8' LT
E=985.4

6:1 6:1 8:1 8:1

PROP. 18" CONDUIT

84.8' LT
E=985.8

987.49
497+00.00
1007.88

PROP. LA R/W

2.5:1

6:1 8:1

91.0' LT
E=984.2

PROP. 18" CONDUIT

986.91
496+50.00
1005.97

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 496+50 TO STA. 497+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

1030
1020
1010
1000
990
980
970
960

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

2.0' RT
℄-984.8
8:1
6:1
89.0' RT
℄-986.7
989.25
498+50.00
1010.49

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

2.0' RT
℄-984.2
8:1
6:1
86.9' RT
℄-986.5
988.66
498+00.00
1009.94

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

5377	0		
		9734	0
5136	0		
		9026	0
SHEET TOTAL		18760	0

CROSS SECTIONS - S.R. 37
STA. 498+00 TO STA. 498+50 RT.

LIC-161-6.65
LIC-37-10.25

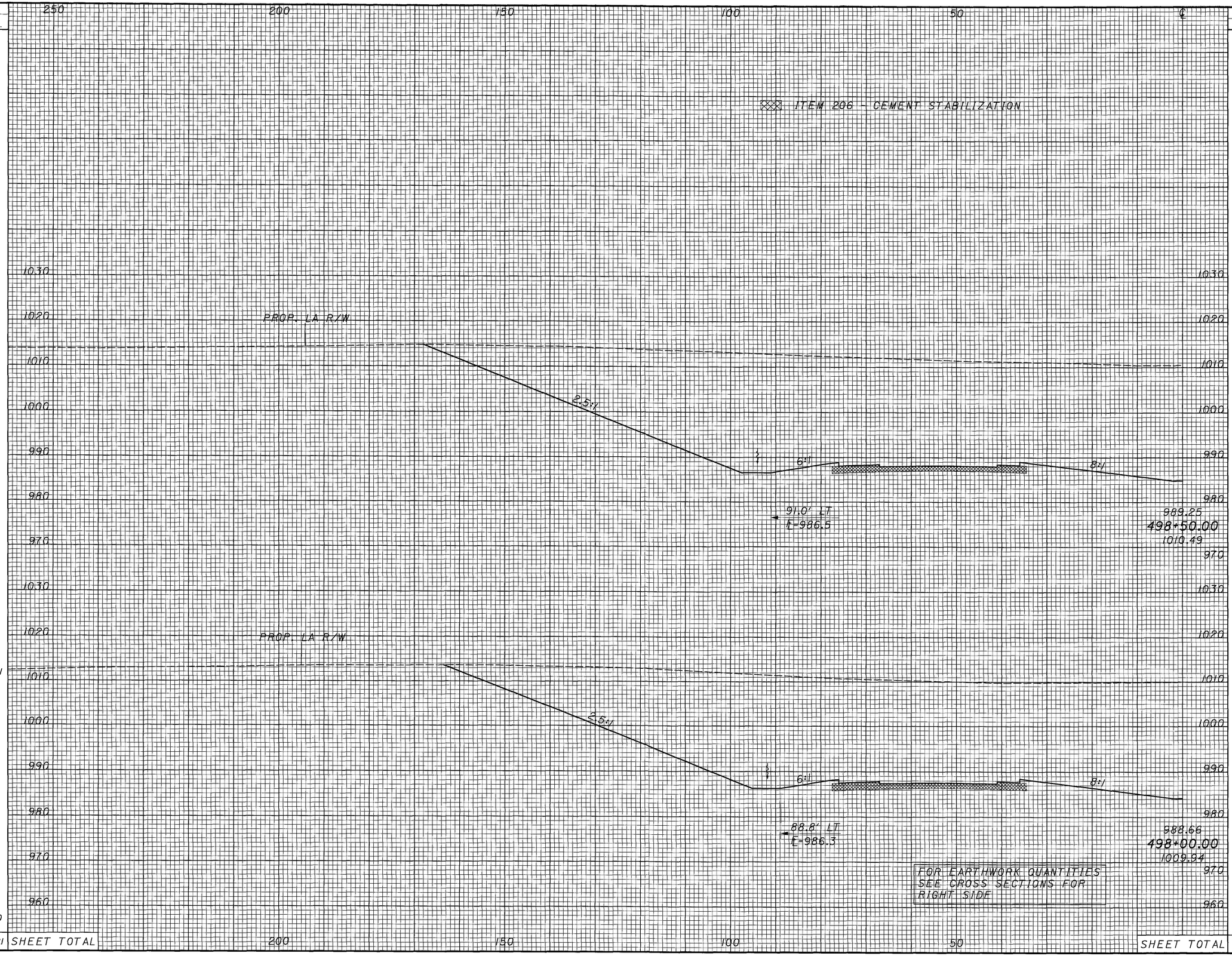
379
1349

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SEEDING	
END WIDTH	SQ. YDS.
185	1011
179	
810	
1821	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 498+00 TO STA. 498+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
6146	142		
		11045	263
5783	142		
		10333	131
		21378	394

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 499+00 TO STA. 499+50 RT.

LIC-161-6.65
LIC-37-10.25

381
1349

℄ 50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1040 1030 1020 1010 1000 990 980 970

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

2.0' RT
E-985.9
8:1
6:1
91.0' RT
E-987.5
990.42
499+50.00
1015.65

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

2.0' RT
E-985.3
8:1
6:1
91.0' RT
E-986.9
989.83
499+00.00
1012.46

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
6837	142		
		12394	263
6549	142		
		11755	263
		24149	526

CALCULATED JMA
CHECKED BER

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1
2.0' RT E=987.1
91.0' RT E=988.7
991.59
500+50.00
1020.57

MATCH LINE SEE OUTVILLE MORSE FRONTAGE ROAD

8:1 6:1
2.0' RT E=986.5
91.0' RT E=988.1
991.00
500+00.00
1018.60

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 500+00 TO STA. 500+50 RT.

LIC-161-6.65
LIC-37-10.25

383
1349

tduffney
10/26/2006 09:29:09 AM
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SEEDING	
END WIDTH	SQ. YDS.
185	
1027	
184	
1023	
2050	SHEET TOTAL

250 200 150 100 50 ℄

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1040 1030 1020 1010 1000 990 980 970

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
℄=988.9

991.59
500+50.00
1020.57

PROP. LA R/W

2.5:1

6:1

8:1

91.0' LT
℄=988.3

991.00
500+00.00
1018.60

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 500+00 TO STA. 500+50 LT.

LIC-161-6.65
LIC-37-10.25

384
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1050 1040 1030 1020 1010 1000 990 980 970

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-988.2
992.65

90.7' RT
℄-989.8

501+50.00
1023.89

7384 142

1040 1030 1020 1010 1000 990 980 970

MATCH LINE - SEE OUTVILLE-WORSE FRONTAGE ROAD

13424 263

8:1 6:1

2.0' RT
℄-987.7
992.14

91.3' RT
℄-989.2

501+00.00
1021.84

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

7114 142

990 980 970

12918 263

SHEET TOTAL 50 100 150 200 SHEET TOTAL

26342 526

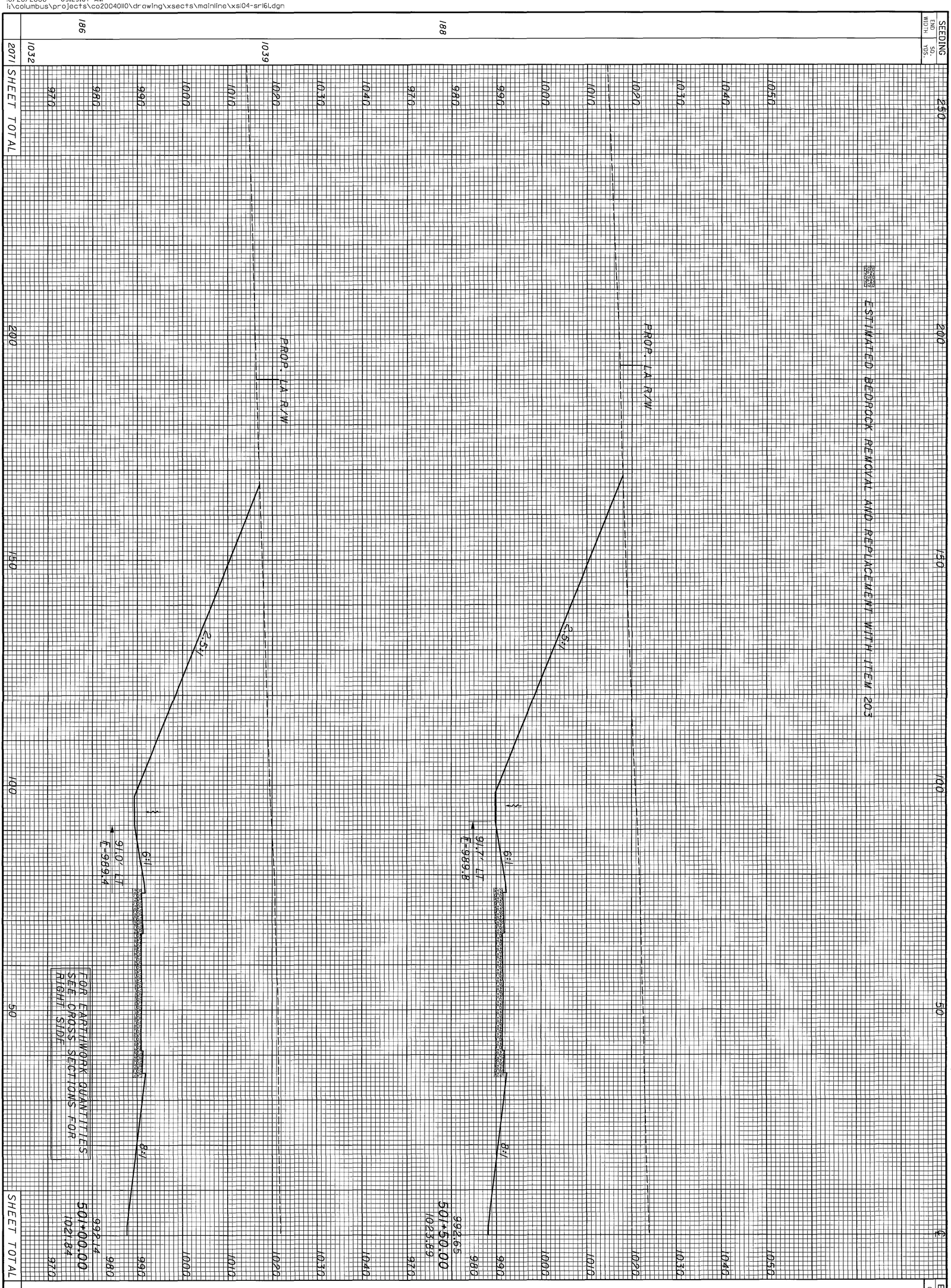
CROSS SECTIONS - S.R. 37
STA. 501+00 TO STA. 501+50 RT.

LIC-161-6.65
LIC-37-10.25

385
1349

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386
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 501+00 TO STA. 501+50 LT.

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
8114	142		
		14679	263
7739	142		
		14003	263
SHEET TOTAL		28682	526

CALCULATED JMA
CHECKED BER

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT E=989.0

993.50

502+50.00

1027.10

92.8' RT E=990.3

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT E=988.6

993.10

502+00.00

1025.51

91.6' RT E=990.1

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

CROSS SECTIONS - S.R. 37
STA. 502+00 TO STA. 502+50 RT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
200	
	1094
	194
	1060
	2154

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

PROP. LA R/W

2.5:1

6:1

8:1

93.9' LT
℄=990.3

993.50
502+50.00
1027.10

PROP. LA R/W

2.5:1

6:1

8:1

93.3' LT
℄=990.0

993.10
502+00.00
1025.51

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 502+00 TO STA. 502+50 LT.

LIC-161-6.65
LIC-37-10.25

388
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-989.7
994.15

94.3' RT
℄-990.7

503+50.00
1030.01

8836 142

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-989.4
993.85

93.7' RT
℄-990.5

503+00.00
1028.68

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

16078 263

8528 142

15409 263

SHEET TOTAL

SHEET TOTAL

31487 526

CROSS SECTIONS - S.R. 37
STA. 503+00 TO STA. 503+50 RT.

LIC-161-6.65
LIC-37-10.25

389
1349

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SEEDING	
END WIDTH	SQ. YDS.
204	
203	
2245	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1050 1040 1030 1020 1010 1000 990 980 970

PROP. LA R/W

2.5:1

6:1

8:1

94.7' LT
℄-990.8

994.15
503+50.00
1030.01

PROP. LA R/W

2.5:1

6:1

8:1

94.8' LT
℄-990.5

993.85
503+00.00
1028.68

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1128

1117

250 200 150 100 50 ℄ SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 503+00 TO STA. 503+50 LT.

LIC-161-6.65
LIC-37-10.25

390
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
9264	142		
		17070	263
9172	142		
		16674	263
		33744	526

CALCULATED JMA
CHECKED BER

1060 1050 1040 1030 1020 1010 1000 990 980 970

50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT E=990.1

994.59

94.5' RT E=991.1

504+50.00

1032.22

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT E=989.9

994.39

94.5' RT E=990.9

504+00.00

1031.10

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 504+00 TO STA. 504+50 RT.

LIC-161-6.65
LIC-37-10.25

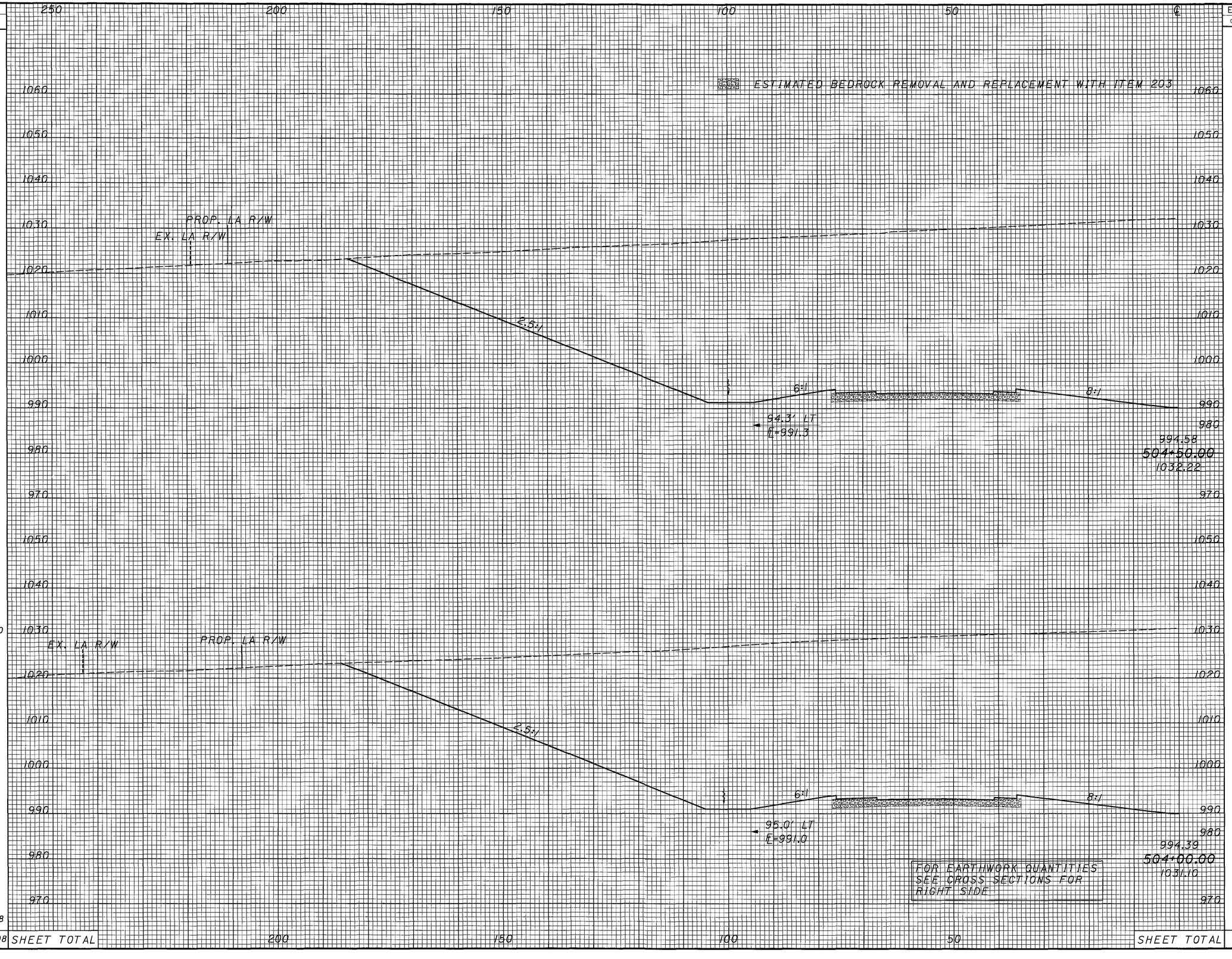
391
1349

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SEEDING	
END WIDTH	SQ. YDS.
208	
1160	
210	
1148	
2308	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



		200	150	100	50
					SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 504+00 TO STA. 504+50 LT.

LIC-161-6.65
LIC-37-10.25

392
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
8813	142		
		16606	263
9122	142		
		17024	263
		33630	526

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

1060 1050 1040 1030 1020 1010 1000 990 980 970

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT ℄=990.3

994.80

505+50.00

1032.44

93.4' RT ℄=991.5

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT ℄=990.2

994.72

505+00.00

1032.51

94.1' RT ℄=991.3

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 505+00 TO STA. 505+50 RT.

LIC-161-6.65
LIC-37-10.25

393
1349

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SEEDING	
END WIDTH	SQ. YDS.
195	
	1102
202	
	1138
	2240

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1060 1050 1040 1030 1020 1010 1000 990 980 970

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

PROP. LA R/W
EX. LA R/W
2.5:1
6:1
8:1
92.7' LT
E=991.8
994.80
505+50.00
1032.44

PROP. LA R/W
R/W
2.5:1
6:1
8:1
93.4' LT
E=991.6
994.72
505+00.00
1032.51

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 505+00 TO STA. 505+50 LT.

LIC-161-6.65
LIC-37-10.25

394
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
8134	142		
		15300	263
8390	142		
		15929	263
		31229	526

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE SEE OUTVILLE MORSE FRONTAGE ROAD

1050 1040 1030 1020 1010 1000 990 980 970

8:1 6:1

2.0' RT
℄-990.3
994.82

506+50.00
1028.31

91.1' RT
℄-991.9

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-990.3
994.84

506+00.00
1030.95

92.4' RT
℄-991.7

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL 50 100 150 200 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 506+00 TO STA. 506+50 RT.

LIC-161-6.65
LIC-37-10.25

395
1349

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SEEDING	
END WIDTH	SQ. YDS.
193	
	1063
190	
	1069
	2132

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1050 1040 1030 1020 1010 1000 990 980 970

PROP. LA R/W
EX. LA R/W
2.5:1
6:1
8:1
92.7' LT
E=991.8
994.82
506+50.00
1028.31

PROP. LA R/W
EX. LA R/W
2.5:1
6:1
8:1
91.0' LT
E=992.1
994.84
506+00.00
1030.95

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 506+00 TO STA. 506+50 LT.

LIC-161-6.65
LIC-37-10.25

396
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	

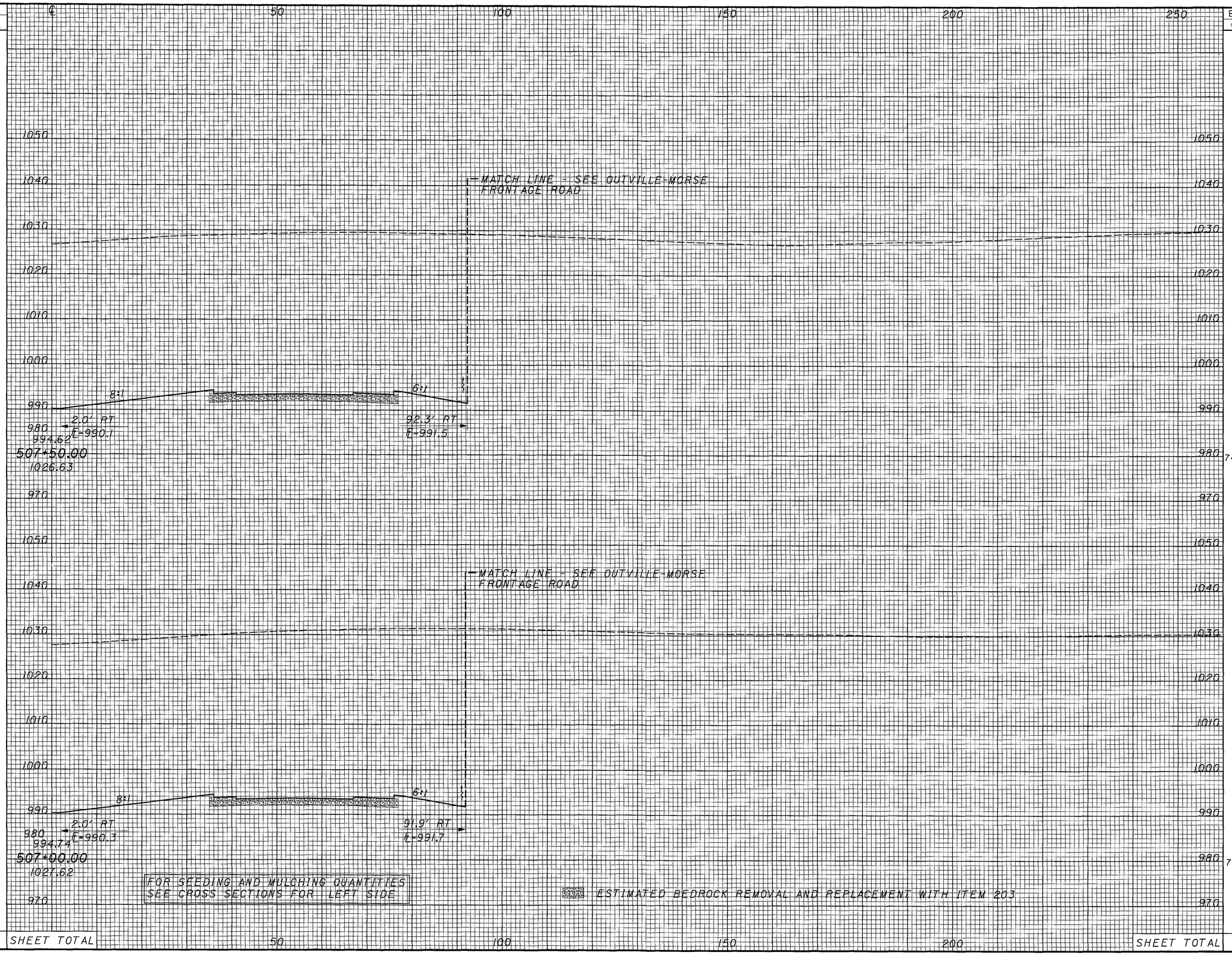
END AREA		VOLUME	
CUT	FILL	CUT	FILL
7422	142		
7961	142	14244	263
		14903	263
		29147	526

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 507+00 TO STA. 507+50 RT.

LIC-161-6.65
LIC-37-10.25

397
1349



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SEEDING	
END WIDTH	SQ. YDS.
191	
193	
2137	SHEET TOTAL

250 200 150 100 50 ℄

END AREA		VOLUME	
CUT	FILL	CUT	FILL
SHEET TOTAL			

CALCULATED JMA CHECKED BER

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

PROP. LA R/W

EX. LA R/W

2.5:1

6:1

8:1

94.5' LT
ℓ-991.3

994.62
507+50.00
1026.63

1050 1040 1030 1020 1010 1000 990 980 970

1066

EX. LA R/W

PROP. LA R/W

2.5:1

6:1

8:1

93.5' LT
ℓ-991.6

994.74
507+00.00
1027.62

1050 1040 1030 1020 1010 1000 990 980 970

1071

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 507+00 TO STA. 507+50 LT.

LIC-161-6.65
LIC-37-10.25

398
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
6448	142		
		12278	263
6812	142		
		13180	263
		25458	526

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 508+00 TO STA. 508+50 RT.

LIC-161-6.65
LIC-37-10.25

399
1349

50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

1040 1030 1020 1010 1000 990 980 970

8:1 6:1

2.0' RT
℄=989.7
994.21

92.2' RT
℄=991.1

508+50.00
1022.26

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄=989.9
994.44

92.4' RT
℄=991.3

508+00.00
1025.22

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
175	
989	
181	
1034	
2023	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

EX. LA R/W
PROP. LA R/W
2.5:1
6:1
8:1
95.1' LT
℄-990.8
994.21
508+50.00
1022.26

PROP. LA R/W
EX. LA R/W
2.5:1
6:1
8:1
95.3' LT
℄-991.0
994.44
508+00.00
1025.22

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 508+00 TO STA. 508+50 LT.

LIC-161-6.65
LIC-37-10.25

400
1349

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SEEDING	
END WIDTH	SQ. YDS.

℄

50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1040 1030 1020 1010 1000 990 980 970

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-989.1
993.59
509+50.00
1016.53

91.0' RT
E-990.7

8:1 6:1

2.0' RT
℄-989.4
993.92
509+00.00
1019.24

91.7' RT
E-990.9

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
	5505	142		
			10603	263
	5946	142		
			11476	263
SHEET TOTAL			22079	526

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 509+00 TO STA. 509+50 RT.

LIC-161-6.65
LIC-37-10.25

401
1349

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SEEDING	
END WIDTH	SQ. YDS.
	174
	177
	978
1955	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1040 1030 1020 1010 1000 990 980 970

EX. LA R/W
PROP. LA R/W
2.5:1
6:1
8:1
94.4' LT
E=990.3
993.59
509+50.00
1016.53

EX. LA R/W
PROP. LA R/W
2.5:1
6:1
8:1
95.2' LT
E=990.5
993.92
509+00.00
1019.24

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 509+00 TO STA. 509+50 LT.

LIC-161-6.65
LIC-37-10.25

402
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1030 1020 1010 1000 990 980 970

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1 1:1

2.0' RT E=988.3
992.76
510+50.00
1008.39

90.0' RT E=990.0

3853 142

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

7802 263

8:1 6:1 1:1

2.0' RT E=988.7
993.20
510+00.00
1011.40

91.0' RT E=990.3

4573 142

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

9331 263

SHEET TOTAL 50 100 150 200 SHEET TOTAL 17133 526

CROSS SECTIONS - S.R. 37
STA. 510+00 TO STA. 510+50 RT.

LIC-161-6.65
LIC-37-10.25

403
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
163	930
172	961
1891	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1030 1020 1010 1000 990 980 970

EX. LA R/W
PROP. LA R/W
2.5:1
½
6:1
8:1
92.4' LT
E=989.8
992.76
510+50.00
1008.39

EX. LA R/W
PROP. LA R/W
2.5:1
½
6:1
8:1
93.8' LT
E=990.0
993.20
510+00.00
1011.40

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 510+00 TO STA. 510+50 LT.

LIC-161-6.65
LIC-37-10.25

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1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1030 1020 1010 1000 990 980 970

← MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
E-987.2
991.72

90.0' RT
E-989.0

511+50.00
1003.81

3196 142

6116 263

← MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
E-987.8
992.26

89.9' RT
E-989.5

511+00.00
1005.86

3409 142

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL				6724	263
SHEET TOTAL				12840	526

CROSS SECTIONS - S.R. 37
STA. 511+00 TO STA. 511+50 RT.

LIC-161-6.65
LIC-37-10.25

405
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
158	
886	
161	
901	
1787	SHEET TOTAL

250 200 150 100 50 ℄

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

1030 1020 1010 1000 990 980 970

PROP. LA R/W

EX. LA R/W

3:1

6:1

8:1

91.0' LT
E-989.0

991.72
511+50.00
1003.81

1030 1020 1010 1000 990 980 970

PROP. LA R/W

EX. LA R/W

3:1

6:1

8:1

91.2' LT
E-988.5

992.26
511+00.00
1005.86

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

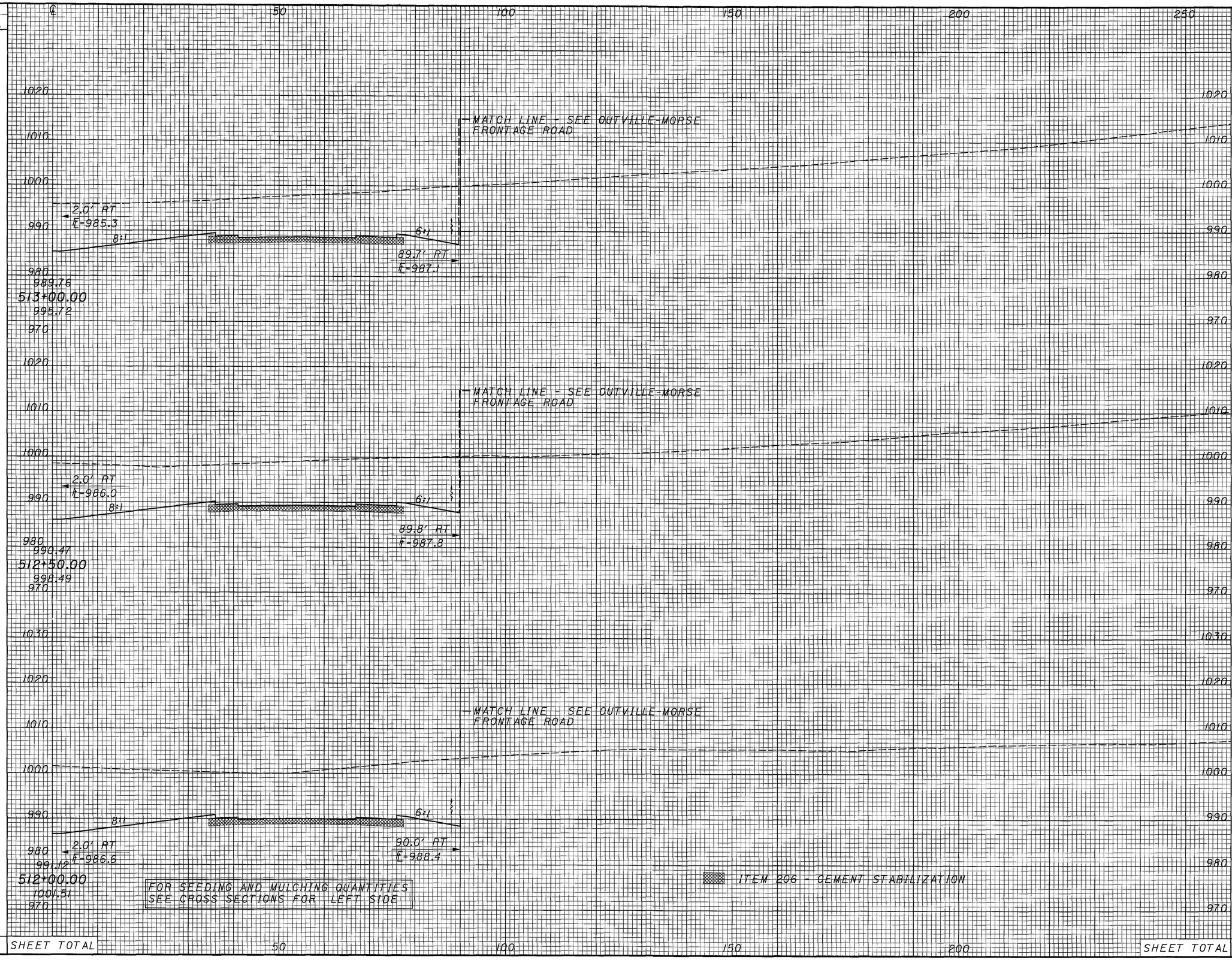
CROSS SECTIONS - S.R. 37
STA. 511+00 TO STA. 511+50 LT.

LIC-161-6.65
LIC-37-10.25

406
349

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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2011	0		
		4056	0
2369	0		
		4756	0
2767	0		
		5521	131
SHEET TOTAL		14333	131

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 512+00 TO STA. 513+00 RT.

LIC-161-6.65
LIC-37-10.25

407
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
153	
	860
156	
	868
156	
	872
	2600

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

PROP. LA R/W
EX. LA R/W
3:1
6:1
8:1
91.0' LT
E=987.0
989.76
513+00.00
995.72

PROP. LA R/W
EX. LA R/W
3:1
6:1
8:1
91.0' LT
E=987.7
990.47
512+50.00
998.49

PROP. LA R/W
EX. LA R/W
3:1
6:1
8:1
91.0' LT
E=988.4
991.12
512+00.00
1001.51

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1020 1010 1000 990 980 970 1030

200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 512+00 TO STA. 513+00 LT.

LIC-161-6.65
LIC-37-10.25

408
1349

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SEEDING	
END WIDTH	SQ. YDS.

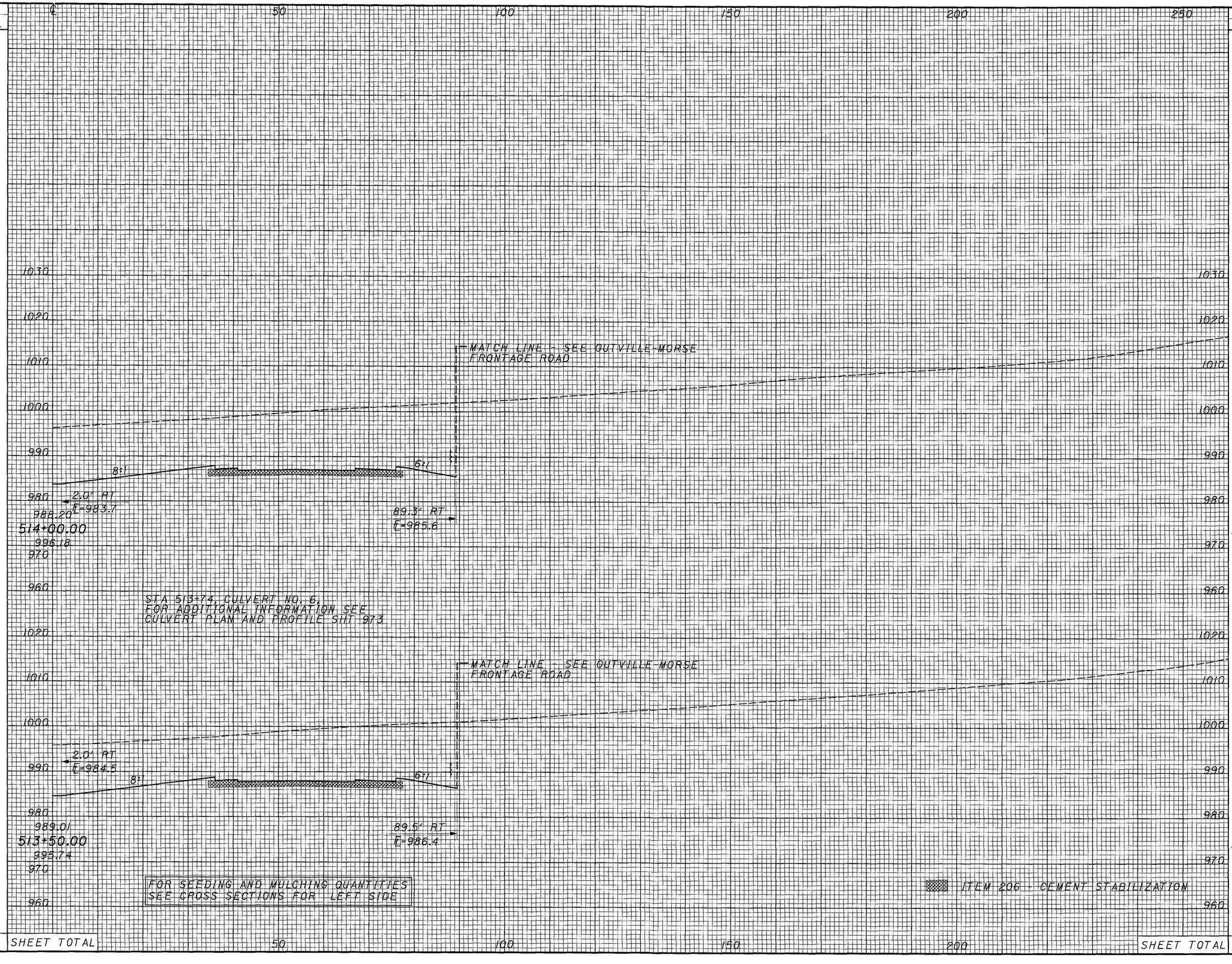
END AREA		VOLUME	
CUT	FILL	CUT	FILL
2162	0		
		3855	0
2001	0		
		3715	0
		7570	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 513+50 TO STA. 514+00 RT.

LIC-161-6.65
LIC-37-10.25

409
349



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SEEDING	
END WIDTH	SQ. YDS.
165	
	898
159	
	867
	1765

SHEET TOTAL

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W

EX. LA R/W

4:1 6:1 8:1

100.4' LT
E=983.9

988.20
514+00.00
996.18

STA 513+74. CULVERT NO. 6.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 973

PROP. LA R/W

EX. LA R/W

4:1 6:1 8:1

88.0' LT
E=986.8

989.01
513+50.00
995.74

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

1030 1020 1010 1000 990 980 970 960

200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 513+50 TO STA. 514+00 LT.

LIC-161-6.65
LIC-37-10.25

410
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
DESIGNED BER

℄ 50 100 150 200 250

1030 1020 1010 1000 990 980 970 960

— MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

PROP. CB-4, A.P.P.
STA. 515+00.00
GRATE ELEV. = 981.81
INV. 15" N = 979.80

2.0' RT
E=981.9

8:1

6:1

88.6' RT
E=983.9

986.42
515+00.00
999.35

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 958.

3127 0

— MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

5725 0

2.0' RT
E=982.8

8:1

6:1

89.0' RT
E=984.8

987.33
514+50.00
999.25

3057 0

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 CEMENT STABILIZATION

4832 0

SHEET TOTAL 50 100 150 200 SHEET TOTAL 10557 0

CROSS SECTIONS - S.R. 37
STA. 514+50 TO STA. 515+00 RT.

LIC-161-6.65
LIC-37-10.25

411
1349

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SEEDING	
END WIDTH	SQ. YDS.
176	
197	
1037	
1005	
2042	SHEET TOTAL

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

PROP. CB-4, A.P.P.
STA. 515+00.00
GRATE ELEV. = 981.81
INV. 15" N = 979.80

PROP. LA R/W

EX. LA R/W

3:1

6:1

8:1

122.8' LT
℄-978.4

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 958.

986.42
515+00.00
999.35

PROP. LA R/W

EX. LA R/W

3:1

6:1

8:1

127.0' LT
℄-978.6

987.33
514+50.00
999.25

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1030 1020 1010 1000 990 980 970 960

250 200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 514+50 TO STA. 515+00 LT.

LIC-161-6.65
LIC-37-10.25

412
1349

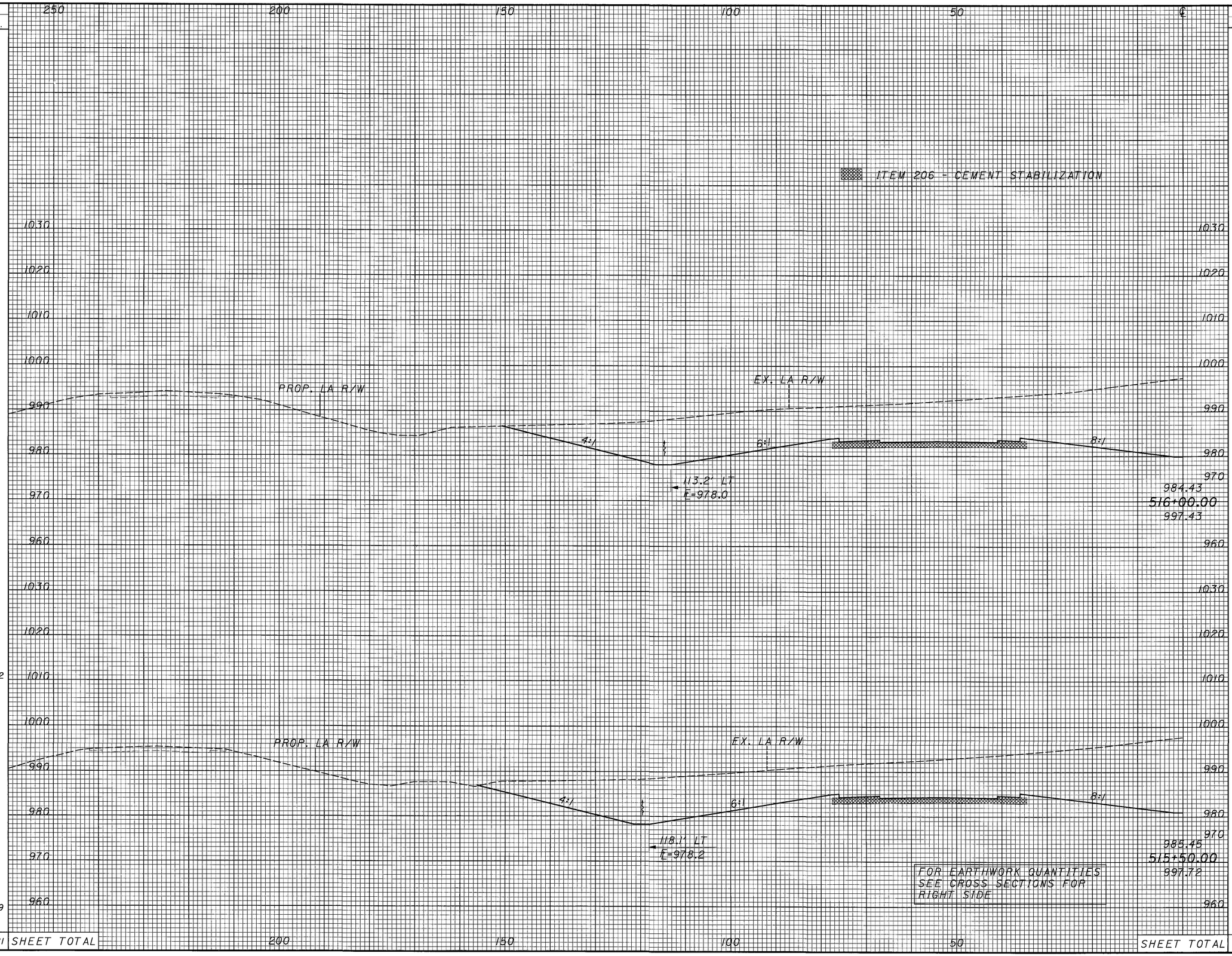
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
163	922
169	959
	1881

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 515+50 TO STA. 516+00 LT.

LIC-161-6.65
LIC-37-10.25

414
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
3226	0		
		5888	0
3133	0		
		5870	0
		11758	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 516+50 TO STA. 517+00 RT.

LIC-161-6.65
LIC-37-10.25

415
1349

℄ 50 100 150 200 250

1030 1020 1010 1000 990 980 970 960

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-977.7
982.23

87.3' RT
℄-980.0

517+00.00
995.01

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-978.9
983.66

87.4' RT
℄-981.1

516+50.00
995.94

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
160	
157	
1769	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
881			
888			
		SHEET TOTAL	

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W

EX. LA R/W

6:1 6:1 8:1

102.4' LT
f-977.6

982.23
517+00.00
995.01

PROP. LA R/W

EX. LA R/W

4:1 6:1 8:1

108.0' LT
f-977.8

983.36
516+50.00
995.24

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

1030 1020 1010 1000 990 980 970 960

200 150 100 50

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 516+50 TO STA. 517+00 LT.

LIC-161-6.65
LIC-37-10.25

416
1349

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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	

℄ 50 100 150 200 250

1020 1010 1000 990 980 970 960 1030 1020 1010 1000 990 980 970 960

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

2.0' RT
℄-975.3
8:1
6:1
87.8' RT
℄-977.5
979.82
518+00.00
995.34

2.0' RT
℄-976.6
8:1
6:1
87.4' RT
℄-978.8
981.05
517+50.00
994.73

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

50 100 150 200

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
3610	0		
		6725	0
3653	0		
		6369	0
		13094	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 517+50 TO STA. 518+00 RT.

LIC-161-6.65
LIC-37-10.25

417
1349

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SEEDING	
END WIDTH	SQ. YDS.
155	
166	
	893
	907
	1800

250 200 150 100 50 ℄

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

ITEM 206 - CEMENT STABILIZATION

1020 1010 1000 990 980 970 960 1030

EX. LA R/W

PROP. LA R/W

3:1

6:1

92.0' LT
℄=976.9

979.82
518+00.00
995.34

EX. LA R/W

PROP. LA R/W

6:1

6:1

8:1

96.6' LT
℄=977.4

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

981.05
517+50.00
994.73

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 517+50 TO STA. 518+00 LT.

LIC-161-6.65
LIC-37-10.25

418
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2767	0		
3120	0	5451	0
3571	0	6195	0
		6649	0
SHEET TOTAL		18295	0

CALCULATED JMA
CHECKED BER

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

2.0' RT
℄=971.3
975.81
519+50.00
960 990.14

8:1
6:1
88.5' RT
F=973.3

2.0' RT
℄=972.7
977.20
519+00.00
960 994.17

8:1
6:1
88.4' RT
F=974.7

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1
6:1
2.0' RT
℄=974.0
978.54
518+50.00
994.78
960

88.2' RT
℄=976.1

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 CEMENT STABILIZATION

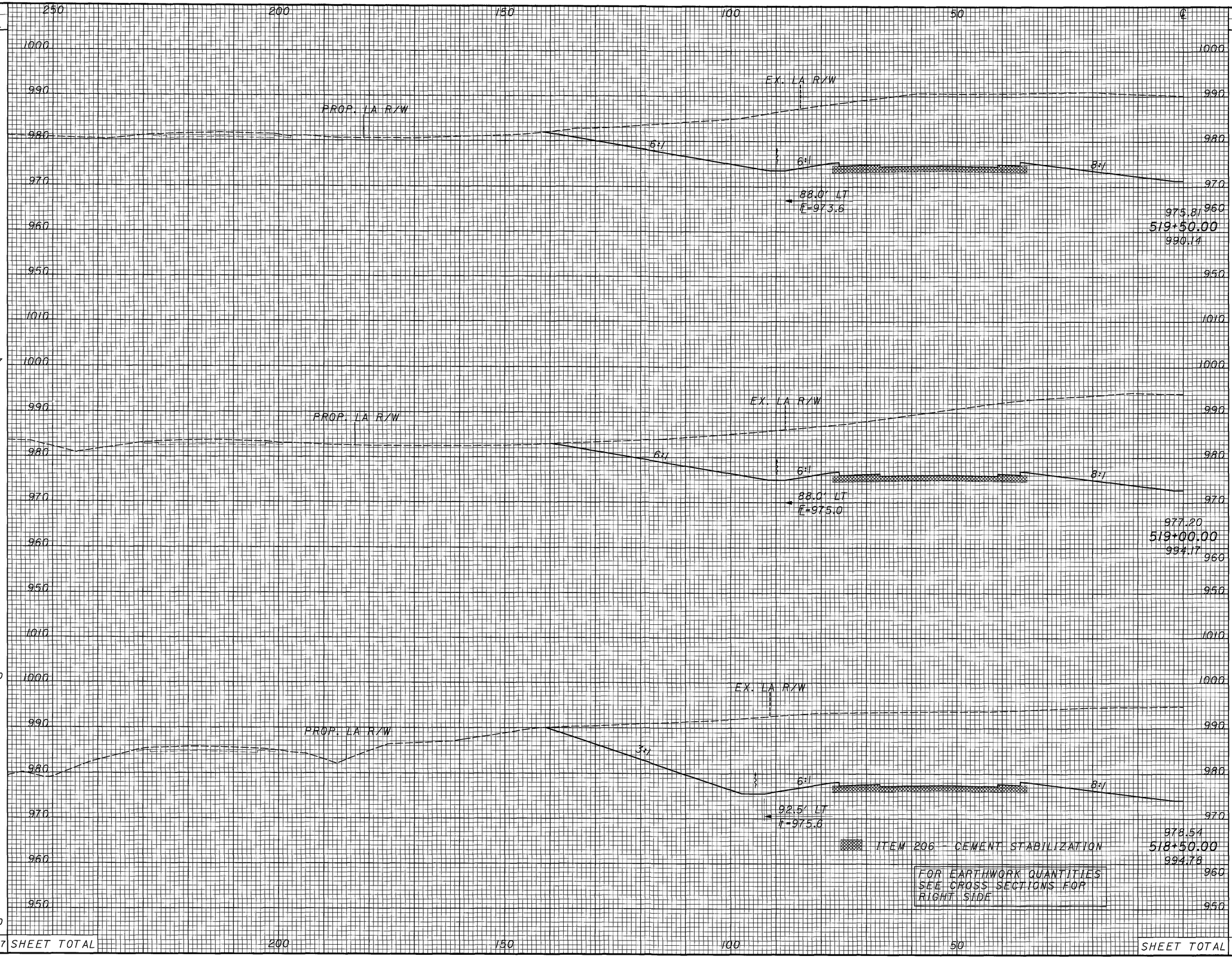
CROSS SECTIONS - S.R. 37
STA. 518+50 TO STA. 519+50 RT.

LIC-161-6.65
LIC-37-10.25

419
1349

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SEEDING	
END WIDTH	SQ. YDS.
153	
	847
152	
	850
154	
	860
	2557



SHEET TOTAL	2557	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 518+50 TO STA. 519+50 LT.

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1528	4		
		3650	3
2415	0		
		4798	0
SHEET TOTAL		8448	3

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 520+00 TO STA. 520+50 RT.

LIC-161-6.65
LIC-37-10.25

421
1349

℄ 50 100 150 200 250

1010 1000 990 980 970 960 950

MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-968.5
972.98

88.5' RT
℄-970.5

520+50.00
978.05

8:1 6:1

2.0' RT
℄-969.9
974.40

88.5' RT
℄-971.9

520+00.00
985.31

MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

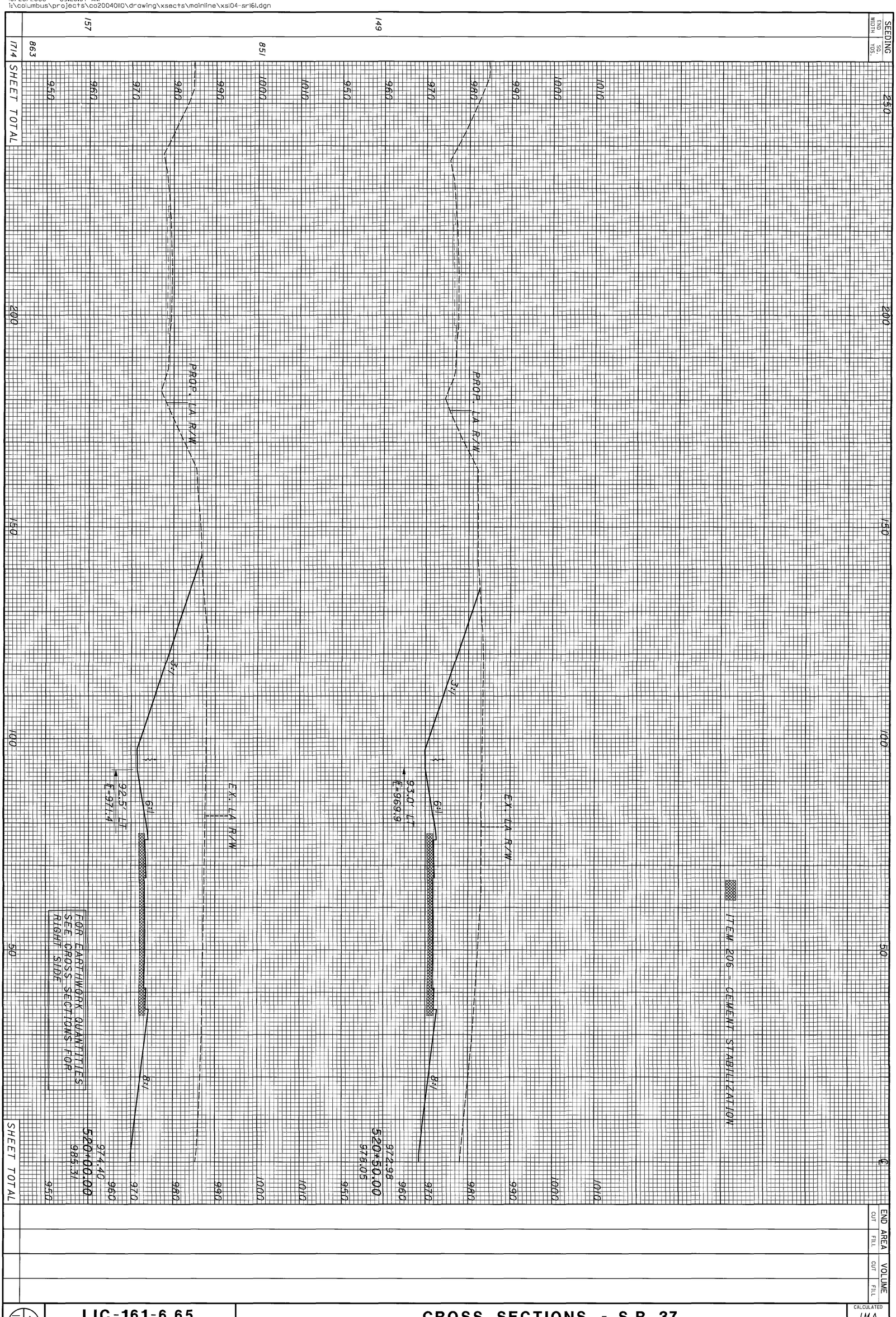
FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 50 100 150 200 SHEET TOTAL

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422 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 37 STA. 520+00 TO STA. 520+50 LT.

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
107	389		
		358	534
280	188		
		1046	238
850	68		
		2201	67
		3605	839

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 521+00 TO STA. 522+00 RT.

LIC-161-6.65
LIC-37-10.25

423
1349

522+00.00
963.49
8:1
6:1
2.0' RT
E=964.3
968.74
88.5' RT
E=966.3
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

521+50.00
966.66
2.0' RT
E=965.7
970.15
88.5' RT
E=967.7
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

521+00.00
971.74
2.0' RT
E=967.1
971.57
88.5' RT
E=969.1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

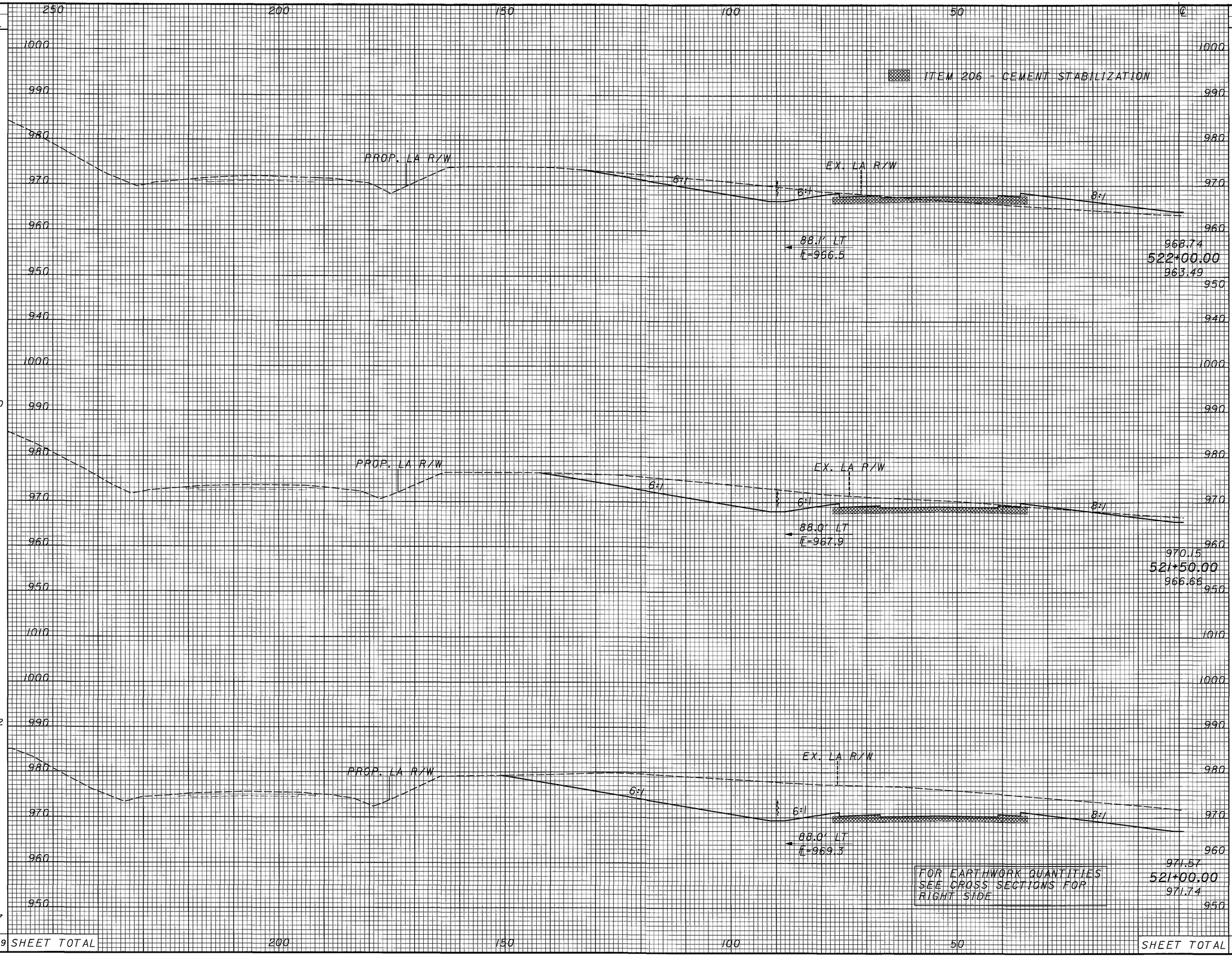
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
144	
	830
154	
	882
163	
	867
2579	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 521+00 TO STA. 522+00 LT.

LIC-161-6.65
LIC-37-10.25

424
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
150	884		
		375	1349
255	573		
		386	960
162	464		
		249	789
		1010	3098

CALCULATED JMA

CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 522+50 TO STA. 523+50 RT

LIC-161-6.65
LIC-37-10.25

425
1349

523+50.00
957.04
964.49
2.0' RT
℄-960.0
88.5' RT
℄-962.0
8:1
6:1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

523+00.00
958.78
965.91
2.0' RT
℄-961.4
88.5' RT
℄-963.4
8:1
6:1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

522+50.00
961.09
967.32
2.0' RT
℄-962.8
88.5' RT
℄-964.8
8:1
6:1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
146	
	837
156	
	829
143	
	798
	2464

250 200 150 100 50 ℄

990 980 970 960 950 940

PROP. LA R/W

EX. LA R/W

3:1 1 1 3:1 6:1 6:1 8:1

108.4' LT
℄-956.8

964.49
523+50.00
957.04

PROP. LA R/W

EX. LA R/W

4:1 6:1 6:1 8:1

110.1' LT
℄-960.0

965.91
523+00.00
958.78

PROP. LA R/W

EX. LA R/W

4:1 6:1 8:1

98.8' LT
℄-963.3

967.32
522+50.00
961.09

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 522+50 TO STA. 523+50 LT

LIC-161-6.65
LIC-37-10.25

426
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		25	836		
				173	1905
		162	1221		
				298	2307
		160	1272		
				288	1996
SHEET TOTAL				759	6208

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 524+00 TO STA. 525+00 RT

LIC-161-6.65
LIC-37-10.25

427
1349

525+00.00
960.25
955.56
2.0' RT
E=955.8
8:1
6:1
88.5' RT
E=957.8
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

524+50.00
961.66
951.62
2.0' RT
E=957.2
8:1
6:1
88.5' RT
E=959.2
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

STA 524+25, CULVERT NO. 7,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 974

524+00.00
963.08
954.89
PROP. CB-4, A.P.P.
STA. 524+00.00
GRATE ELEV. = 958.54
INV. 15" N = 955.50
2.0' RT
E=958.6
8:1
6:1
88.5' RT
E=960.6
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 958.

ITEM 206 - CEMENT STABILIZATION

50 100 150 200 250

990 980 970 960 950 940 930

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
159	
	874
155	
	872
159	
	845
	2591

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

℄

250 200 150 100 50

990 980 970 960 950 940 930

PROP. LA R/W

6:1

3:1

℄

125.0' LT
℄=947.0

EX. LA R/W

6:1

8:1

960.25
525+00.00
955.56

PROP. LA R/W

6:1

3:1

118.9' LT
℄=950.3

EX. LA R/W

6:1

3:1

8:1

961.66
524+50.00
951.62

STA 524+25, CULVERT NO. 7,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 974

PROP. CB-4, A.P.P.
STA. 524+00.00
GRATE ELEV. = 958.54
INV. 15" N = 955.50

PROP. LA R/W

3:1

6:1

EX. LA R/W

3:1

6:1

8:1

117.1' LT
℄=952.3

963.08
524+00.00
954.89

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 958.

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 524+00 TO STA. 525+00 LT

LIC-161-6.65
LIC-37-10.25

428
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
505	282		
		1166	487
755	245		
		1185	373
524	158		
		509	921
		2860	1781

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 525+50 TO STA. 526+50 RT

LIC-161-6.65
LIC-37-10.25

429
1349

℄ 50 100 150 200 250

990 980 970 960 950 940 930

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT
℄-955.5
956.00
526+50.00
952.28
940

88.5' RT
℄-953.5

2.0' RT
℄-952.9
957.42
526+00.00
956.46
940

88.5' RT
℄-954.9

2.0' RT
℄-954.3
958.83
525+50.00
957.29
940

88.5' RT
℄-956.4

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

50 100 150 200

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
154	883
163	925
170	913
	2721

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

EX. LA R/W
PROP. LA R/W
EX. LA R/W
3:1
3:1
6:1
8:1
956.00
526+50.00
952.28
115.0' LT
℄-946.1

EX. LA R/W
PROP. LA R/W
EX. LA R/W
3:1
3:1
6:1
8:1
957.42
526+00.00
958.46
118.4' LT
℄-946.4

EX. LA R/W
PROP. LA R/W
EX. LA R/W
3:1
3:1
6:1
8:1
958.83
525+50.00
957.29
121.7' LT
℄-946.7

ITEM 206 - CEMENT STABILIZATION

970 960 950 940 930 980

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 525+50 TO STA. 526+50 LT

LIC-161-6.65
LIC-37-10.25

430
1349

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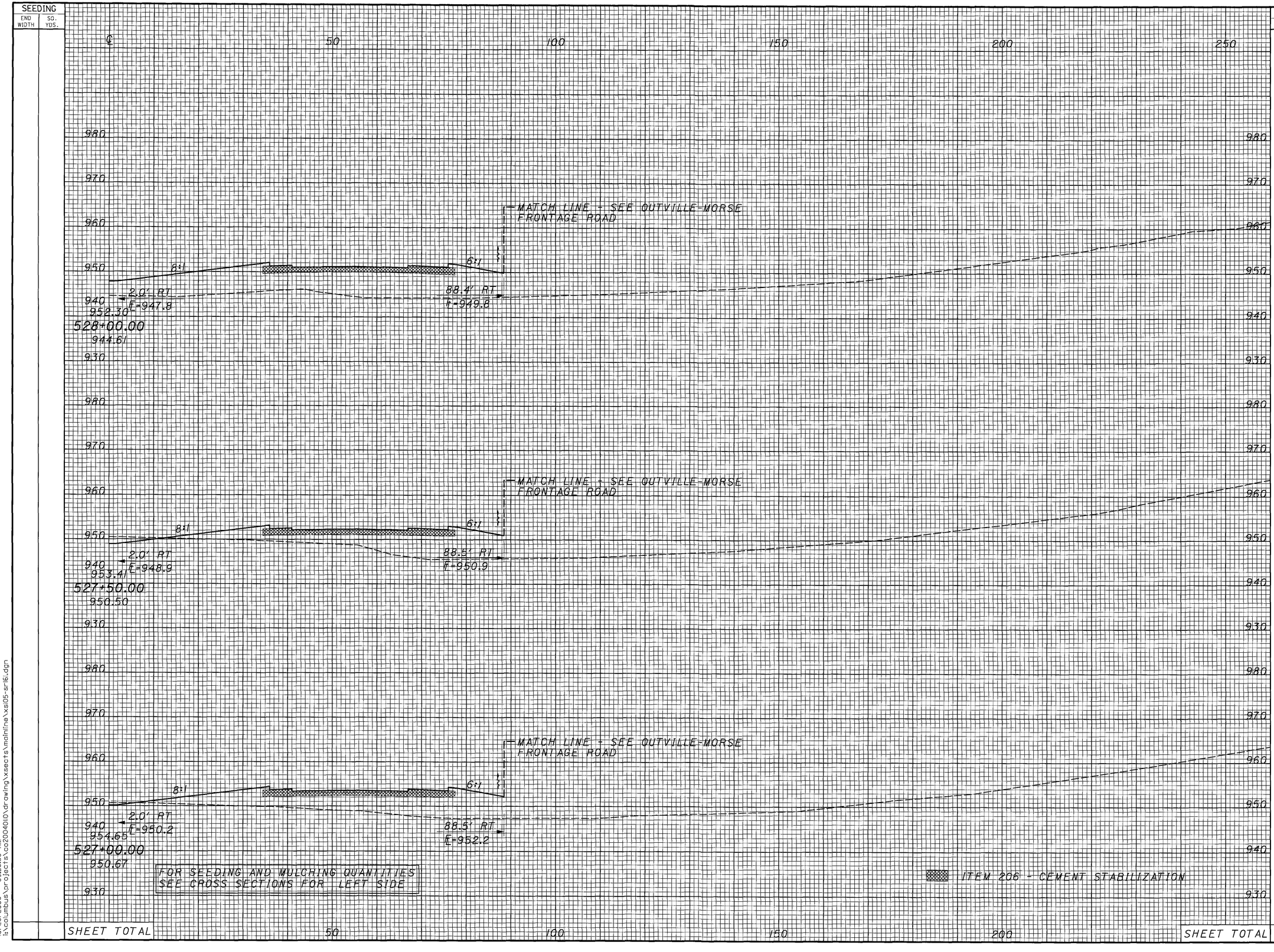
SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		60	998		
				117	1292
		66	397		
				180	773
		128	438		
				586	666
SHEET TOTAL				883	2731

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 527+00 TO STA. 528+00 RT

LIC-161-6.65
LIC-37-10.25

431
1349



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SEEDING END WIDTH	SEEDING SQ. YDS.
	141
	770
	136
	785
	146
	835
	2390

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

980 970 960 950 940 930

EX. LA R/W — PROP. LA R/W — EX. LA R/W

5:1 3:1 6:1 8:1

111.1' LT
E-943.7

952.30
528+00.00
944.61

980 970 960 950 940 930

EX. LA R/W — PROP. LA R/W — EX. LA R/W

3:1 3:1 6:1 8:1

109.1' LT
E-945.5

953.41
527+50.00
950.50

980 970 960 950 940 930

EX. LA R/W — PROP. LA R/W — EX. LA R/W

3:1 4:1 6:1 8:1

111.9' LT
E-945.8

954.65
527+00.00
950.67

980 970 960 950 940 930

ITEM 206 - CEMENT STABILIZATION

250 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 527+00 TO STA. 528+00 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

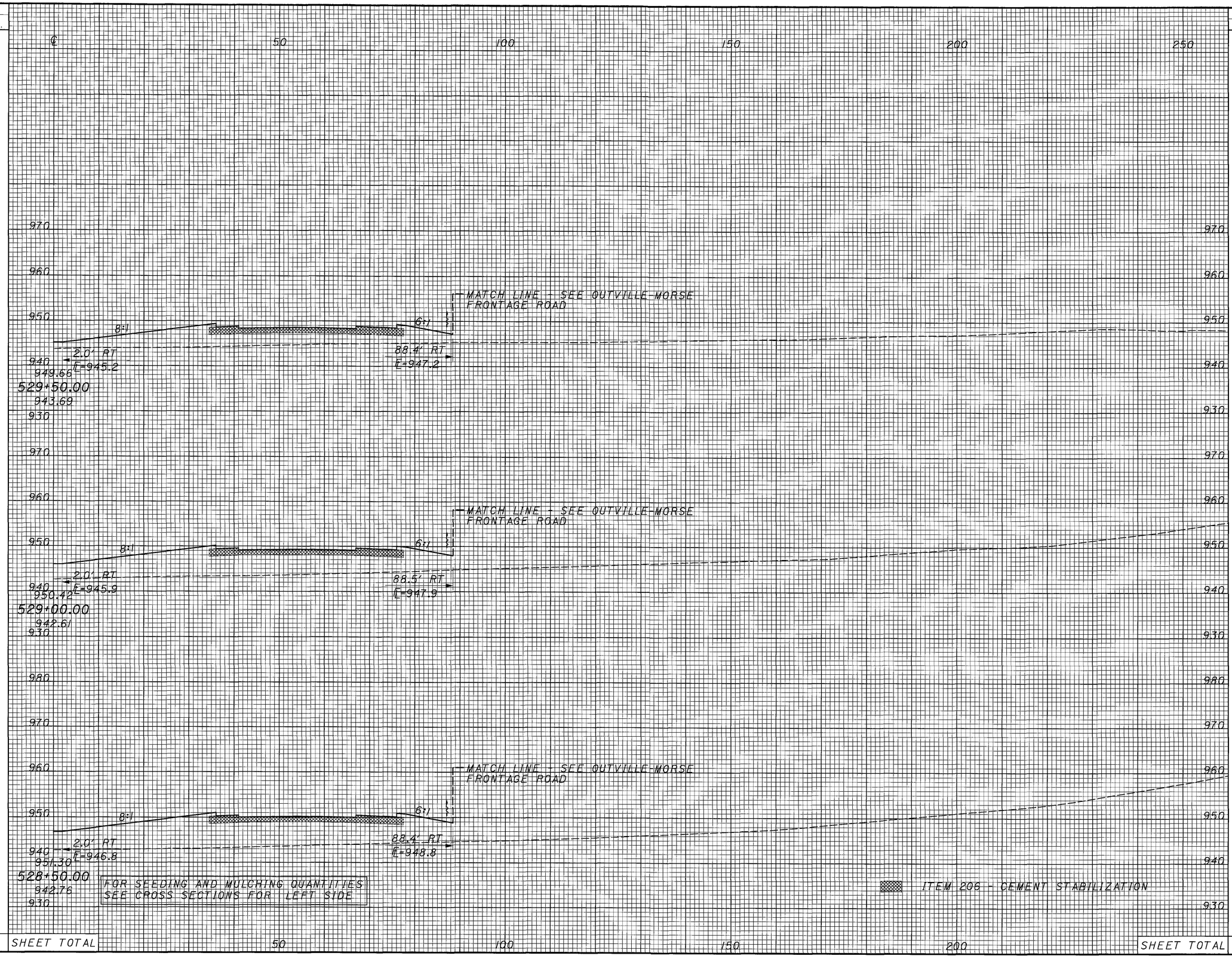
END AREA		VOLUME	
CUT	FILL	CUT	FILL
6	852		
		9	1843
3	1139		
		33	2193
32	1229		
		85	2062
		127	6098

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 528+50 TO STA. 529+50 RT

LIC-161-6.65
LIC-37-10.25

433
1349



SHEET TOTAL

SHEET TOTAL

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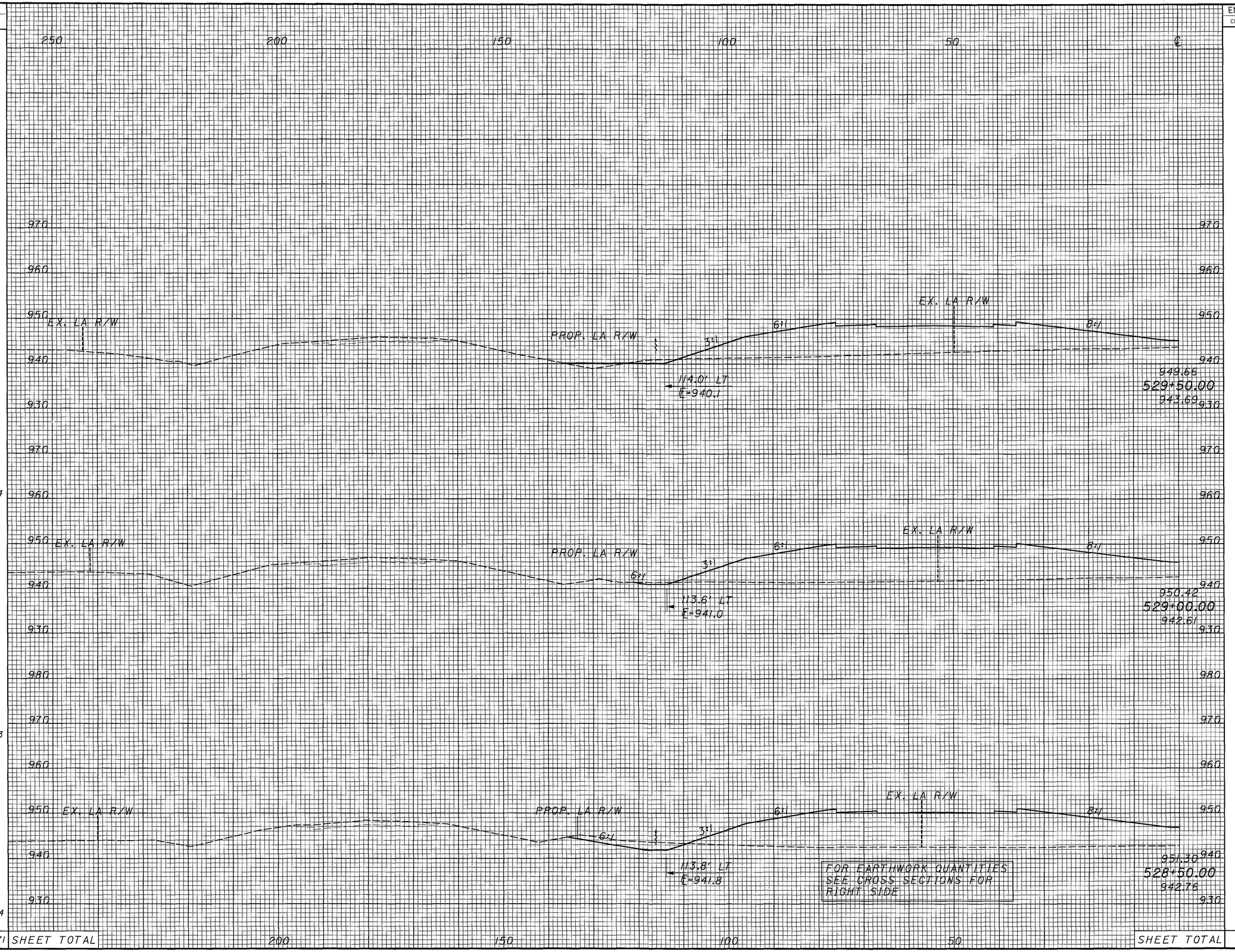
SEEDING	
END WIDTH	SQ. YDS.
149	784
134	783
148	804
	2371

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 528+50 TO STA. 529+50 LT

LIC-161-6.65
LIC-37-10.25



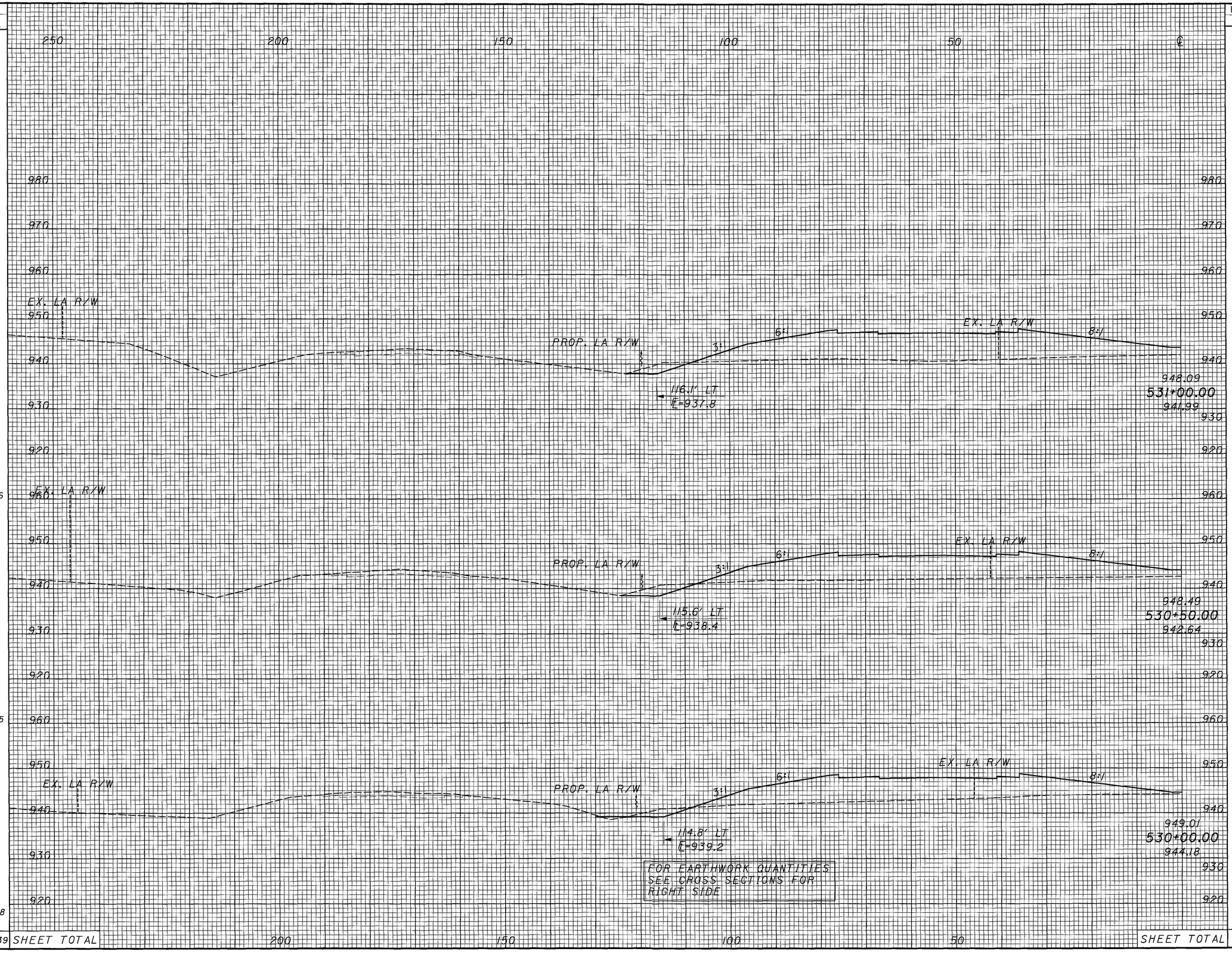
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
136	
756	
137	
775	
142	
808	
2339	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 530+00 TO STA. 531+00 LT

LIC-161-6.65
LIC-37-10.25

436
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.
137	
759	
136	
753	
1512	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EX. LA R/W
PROP. LA R/W
5:1
3:1
6:1
8:1
116.3' LT
E=937.3
947.64
532+00.00
940.92

EX. LA R/W
PROP. LA R/W
3:1
6:1
8:1
116.2' LT
E=937.5
947.80
531+50.00
941.11

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

990 980 970 960 950 940 930 920

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 531+50 TO STA. 532+00 LT

LIC-161-6.65
LIC-37-10.25

438
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	1	1154	
			1 2170
	0	1190	
			1 1932
			2 4102

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 532+50 TO STA. 533+00 RT

LIC-161-6.65
LIC-37-10.25

439
1349

533+00.00
939.18
E=943.2
2.0' RT
947.66
8:1
6:1
88.3' RT
E=945.2
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
STA 532+86, CULVERT NO. 8,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 975

PROP. CB-4, A.P.P.
STA. 532+60.00
GRATE ELEV. = 943.10
INV. 21" S = 936.33
INV. 27" W = 935.83
2.0' RT
E=943.1
8:1
6:1
MATCH LINE - SEE OUTVILLE-WORSE FRONTAGE ROAD
FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 959.
88.3' RT
E=945.1
947.59
532+50.00
940.05
FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL
SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
134	
	759
139	
	767
1526	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 532+50 TO STA. 533+00 LT

LIC-161-6.65
LIC-37-10.25

440
1349

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

PROP. CB-4, A.P.P.
STA. 533+12.00, 120.57' LT
GRATE ELEV. = 936.80
INV. 27" S = 933.05
INV. 36" N = 932.30

EX. LA R/W

PROP. LA R/W

6:1

3:1

5:1

8:1

117.6' LT
E=936.9

947.66
533+00.00
939.18

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 959

STA 532+86. CULVERT No. 8.
FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 975

PROP. CB-4, A.P.P.
STA. 532+60.00
GRATE ELEV. = 943.10
INV. 21" S = 936.33
INV. 27" N = 935.83

116.8' LT
E=937.1

947.59
532+50.00
940.05

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 959.

250 200 150 100 50 ℄

990 980 970 960 950 940 930 920

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
481	493		
512	1262		
72	870		
67	1874		
579	3136		

CALCULATED JWA

CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 533+50 TO STA. 534+00 RT

LIC-161-6.65
LIC-37-10.25

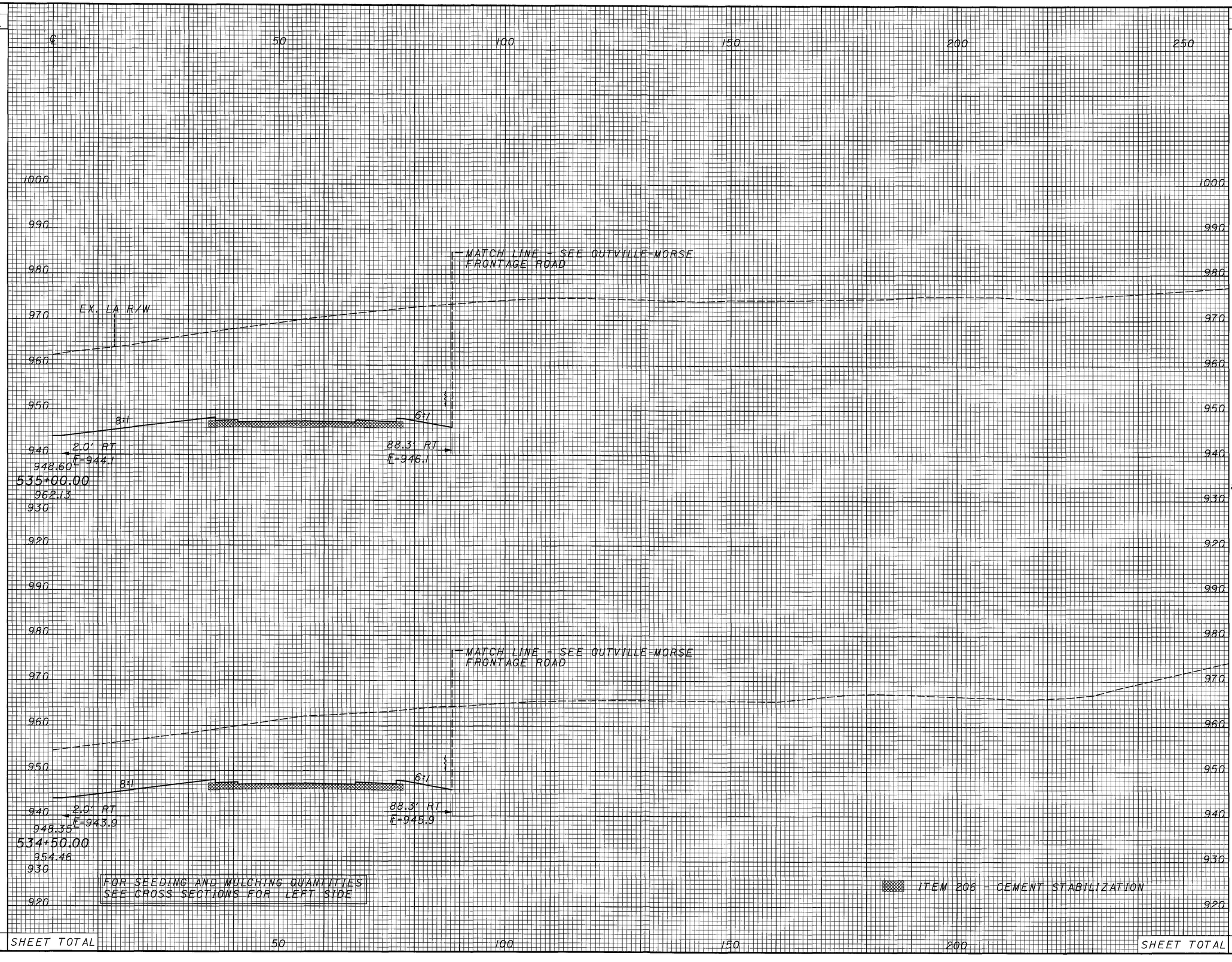
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2542	141		
		3667	327
1418	212		
		1758	652
		5425	979

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 534+50 TO STA. 535+00 RT

LIC-161-6.65
LIC-37-10.25

443
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
132	
737	
133	
756	
1493	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

3:1 6:1 8:1

115.8 LT
938.10

948.60
535+00.00
962.13

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

3:1 6:1 8:1

EX. LA R/W

116.4 LT
938.00

948.35
534+50.00
954.46

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 534+50 TO STA. 535+00 LT

LIC-161-6.65
LIC-37-10.25

444
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

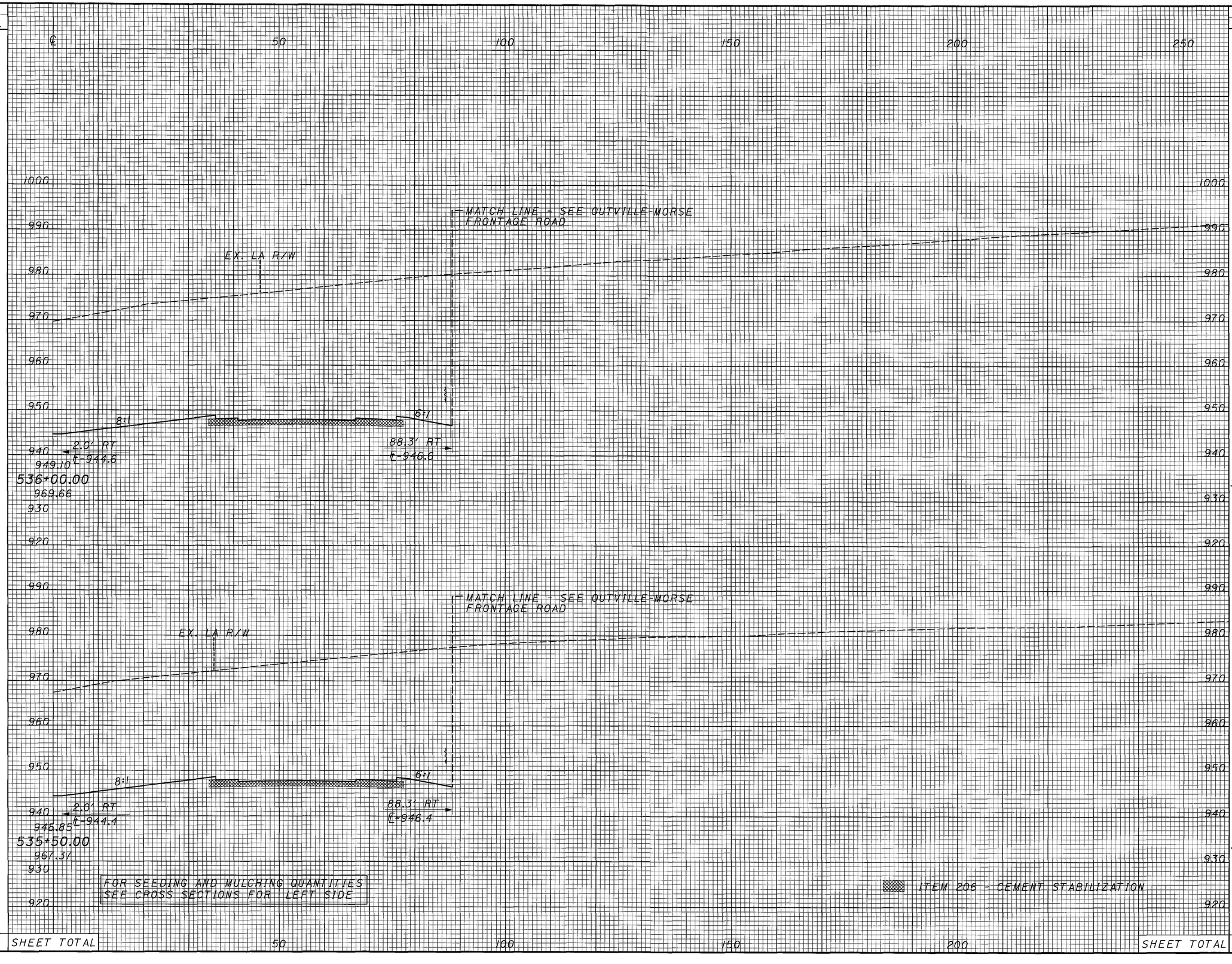
END AREA		VOLUME	
CUT	FILL	CUT	FILL
3934	0		
		6738	0
3343	0		
		5449	131
		12187	131

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 535+50 TO STA. 536+00 RT

LIC-161-6.65
LIC-37-10.25

445
1349



tduffney
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SEEDING	
END WIDTH	SQ. YDS.
132	
734	
1468	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

1000 990 980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

3:1 6:1 8:1

117.4 LT
938.30

949.10
536+00.00
969.66

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

3:1 6:1 8:1

115.8 LT
938.20

948.85
535+50.00
967.31

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 535+50 TO STA. 536+00 LT

LIC-161-6.65
LIC-37-10.25

446
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

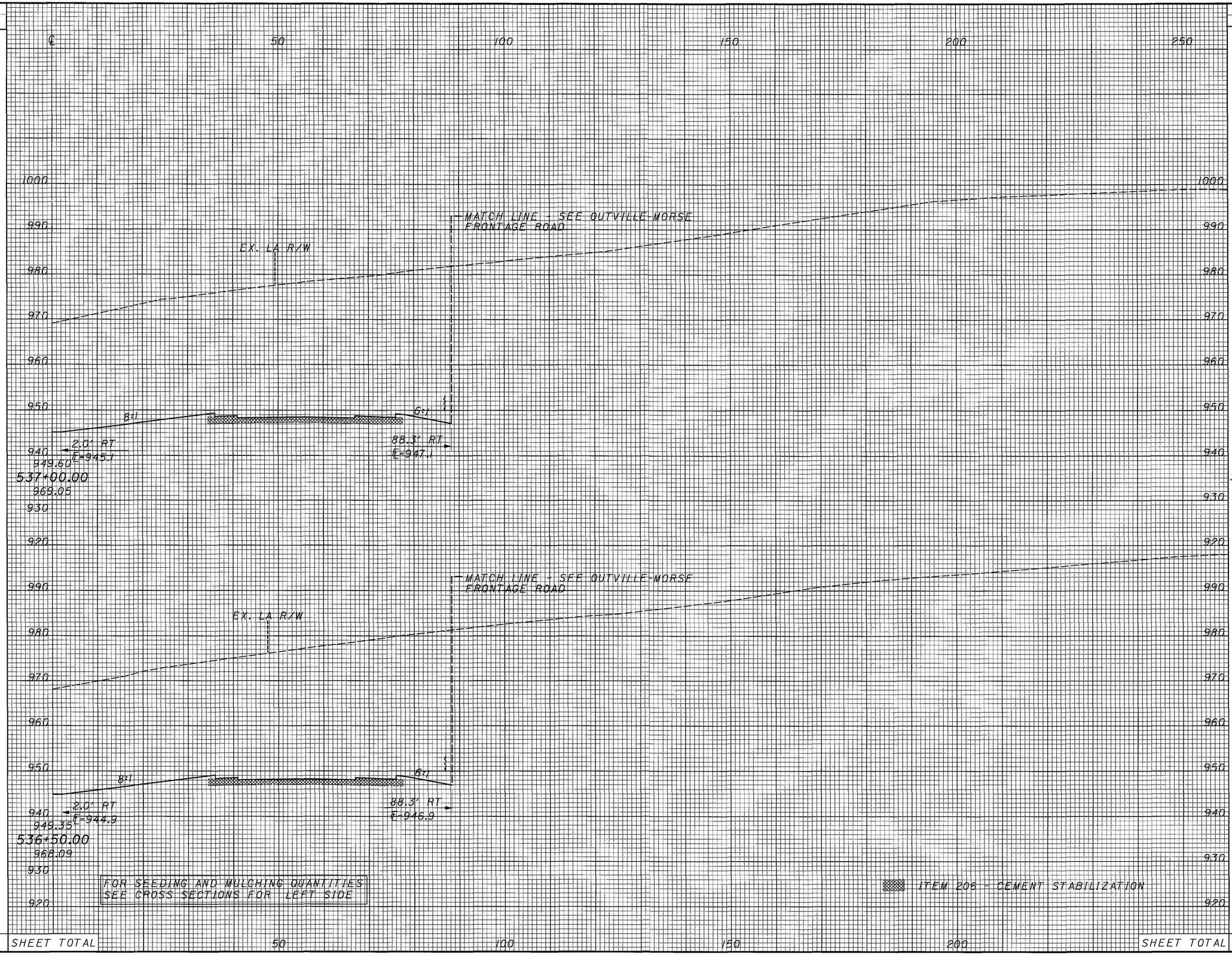
END AREA		VOLUME	
CUT	FILL	CUT	FILL
3689	0		
		6898	0
3761	0		
		7125	0
		14023	0

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 536+50 TO STA. 537+00 RT

LIC-161-6.65
LIC-37-10.25

447
349



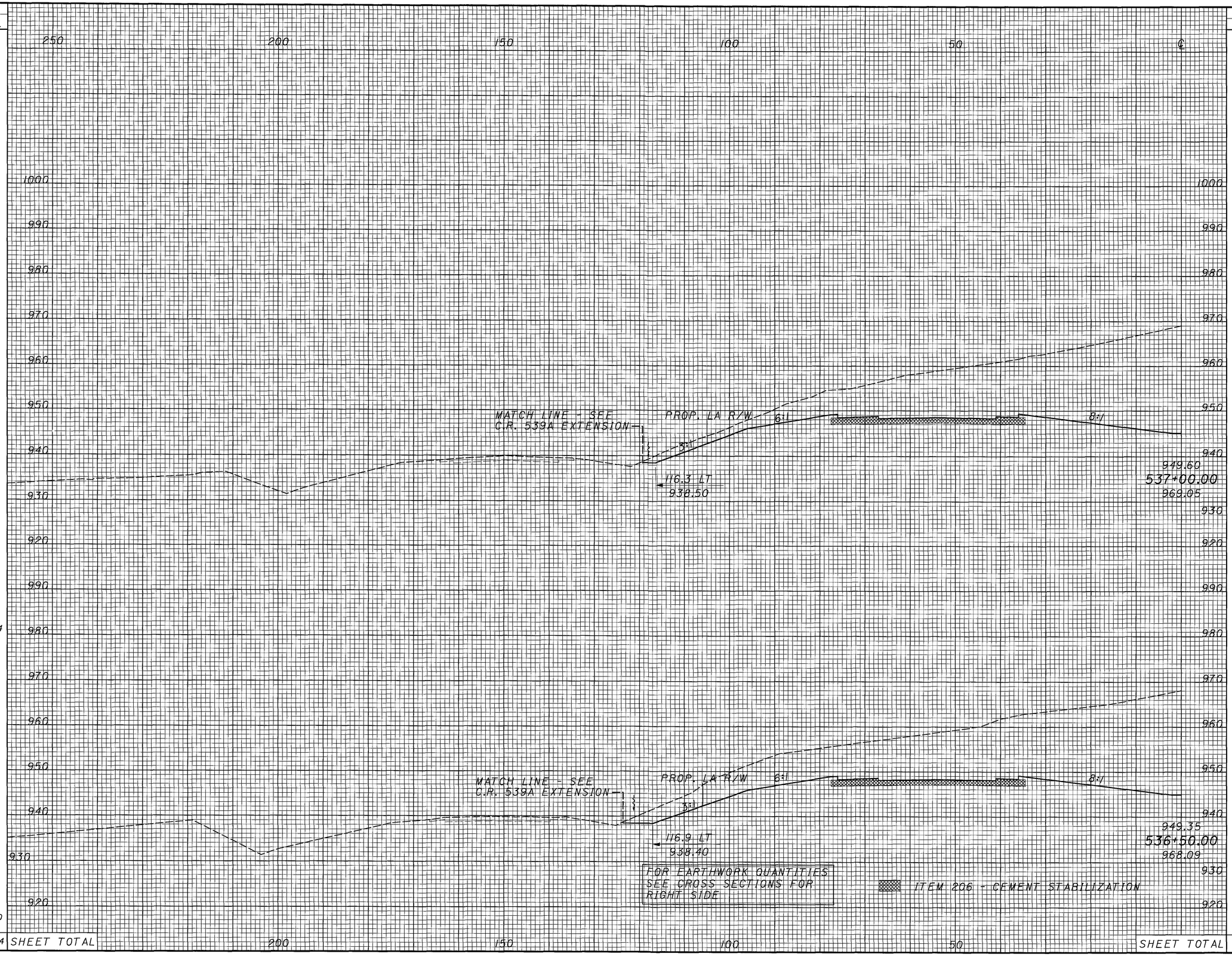
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SEEDING	
END WIDTH	SQ. YDS.
130	
134	
740	
1474	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 536+50 TO STA. 537+00 LT

LIC-161-6.65
LIC-37-10.25

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

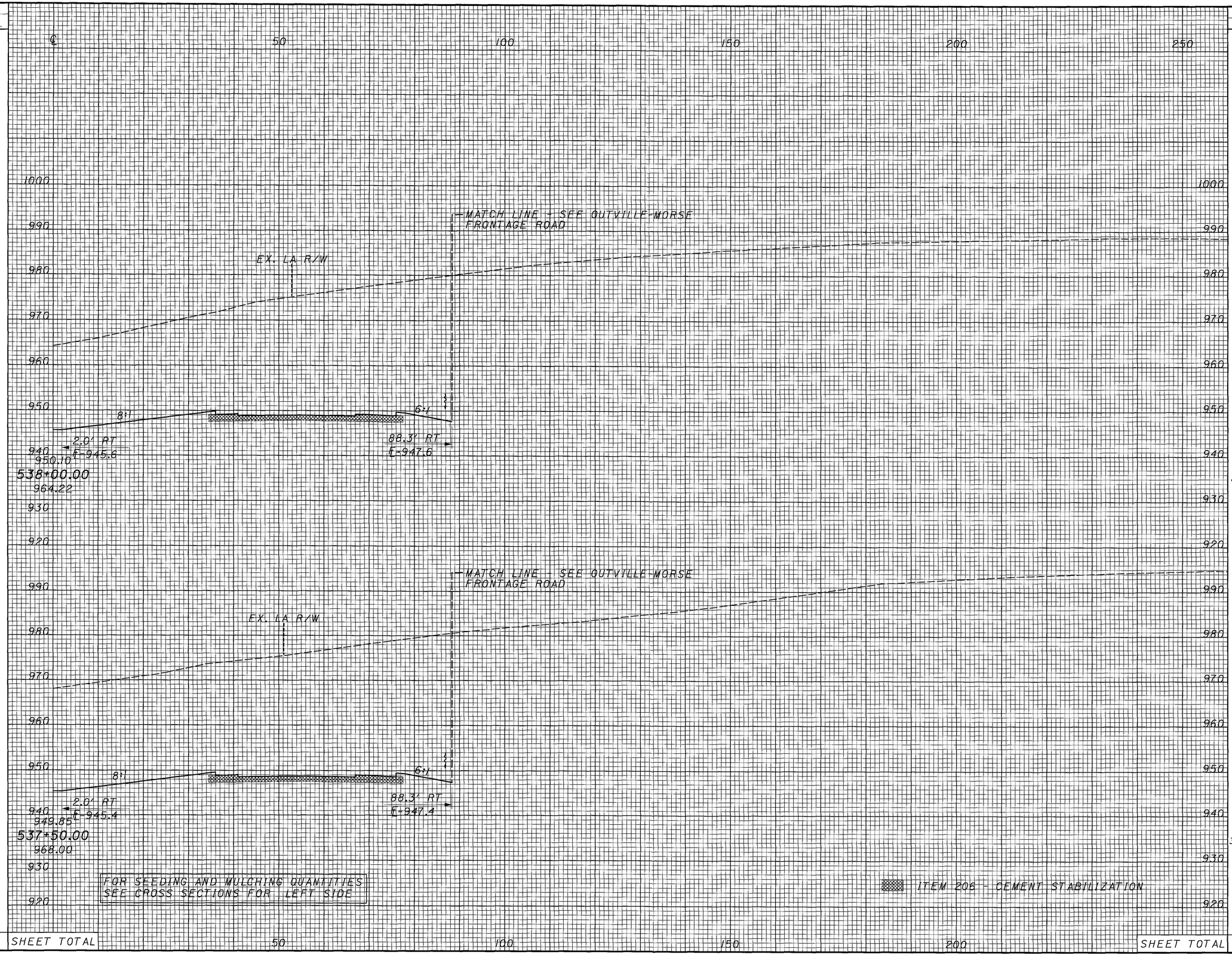
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 537+50 TO STA. 538+00 RT

LIC-161-6.65
LIC-37-10.25

449
1349

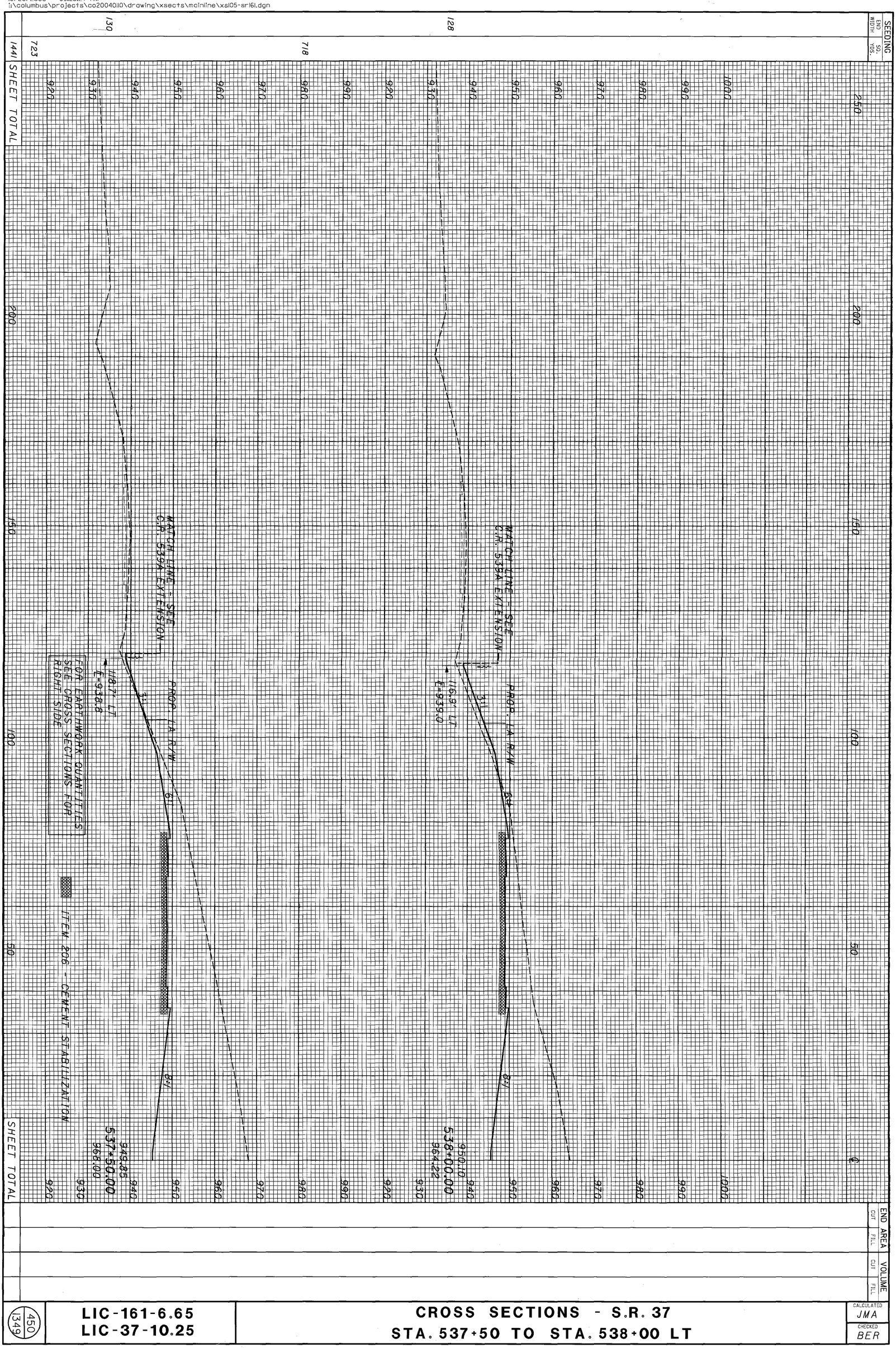


		2817	30
		5744	32
		3387	5
		6551	5
SHEET TOTAL		12295	37

SHEET TOTAL

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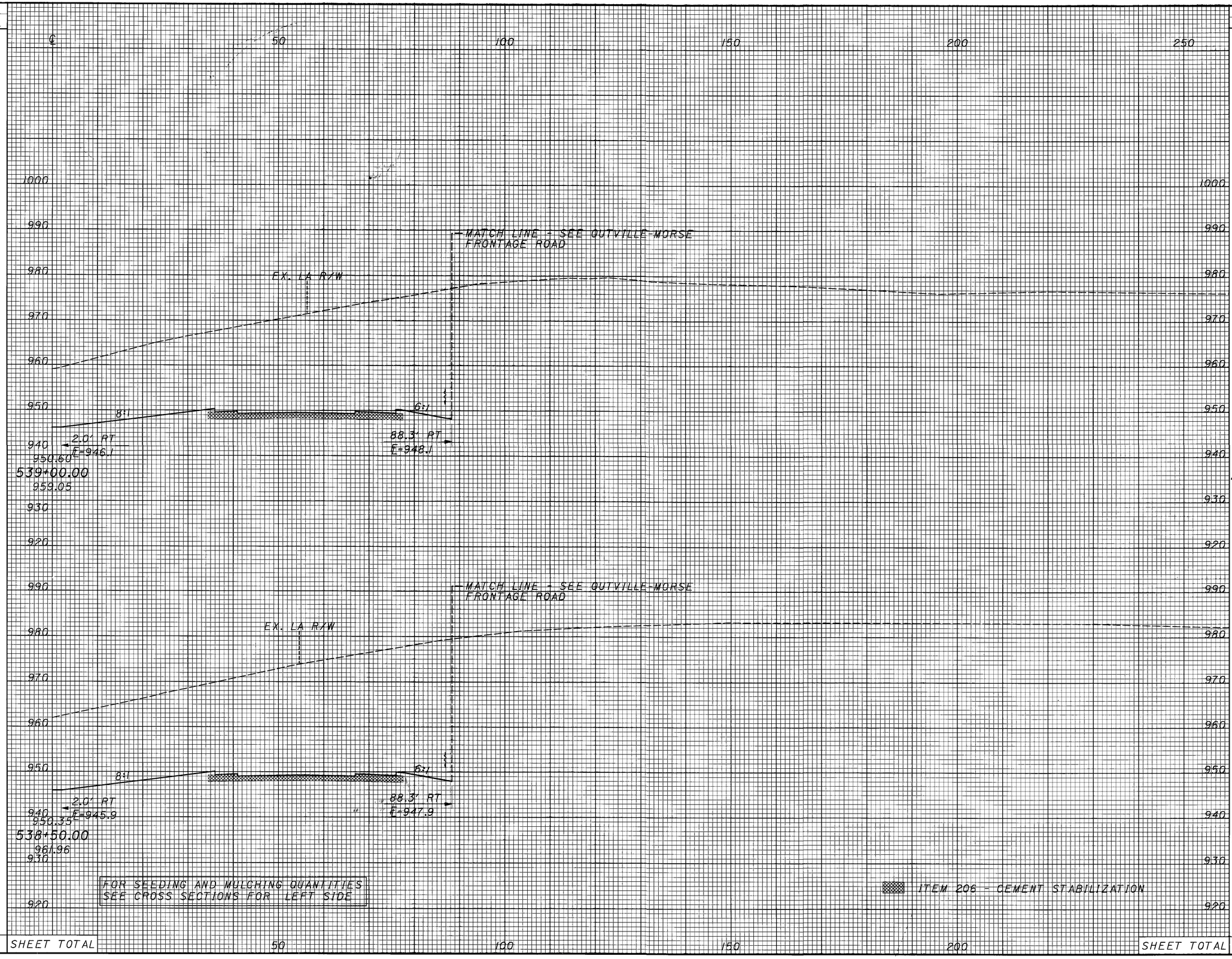
450 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 37 STA. 537+50 TO STA. 538+00 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2033	276		
4143	392		
2441	147		
4869	164		
9012	556		

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 538+50 TO STA. 539+00 RT

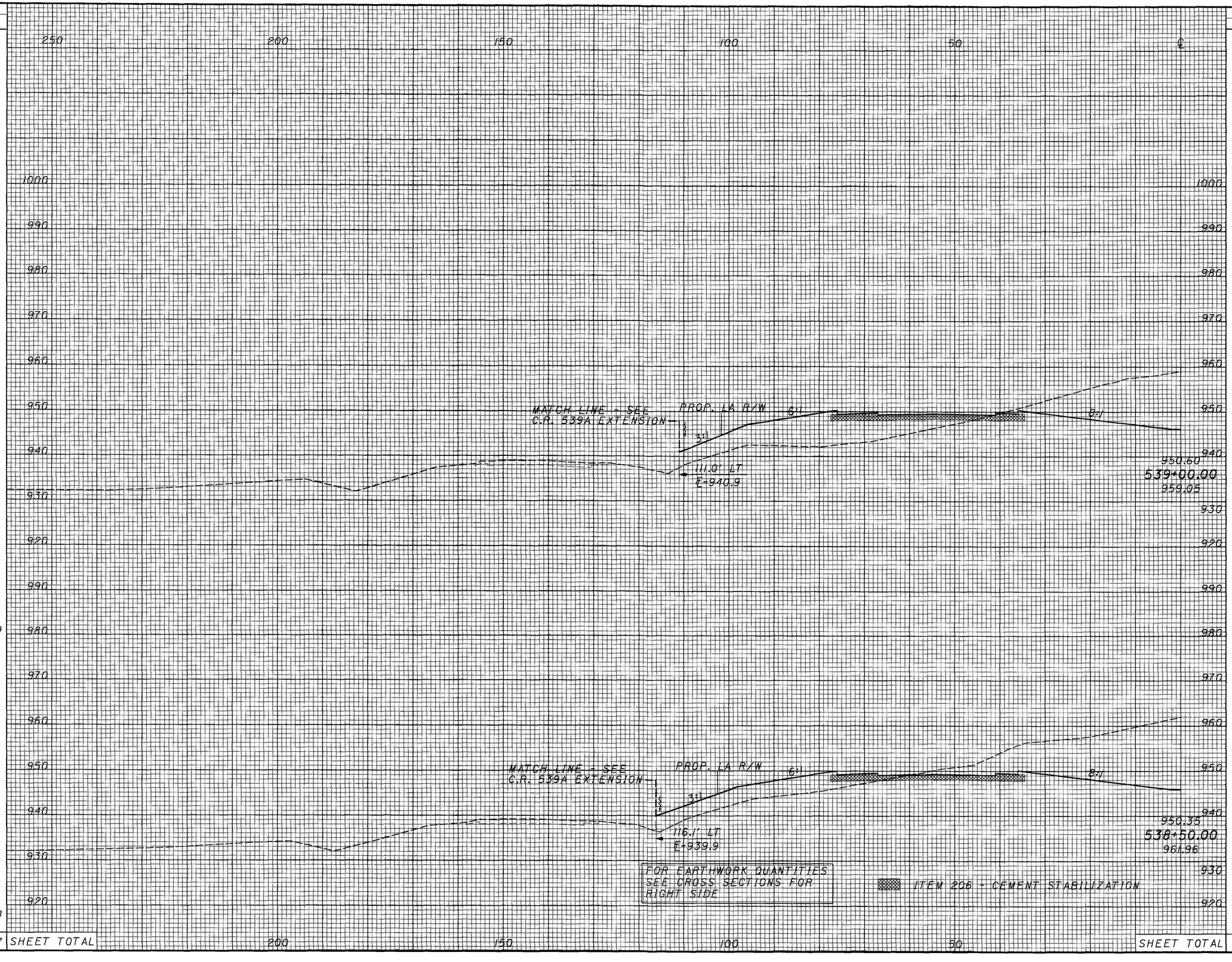
LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
121	
689	
708	
1397	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



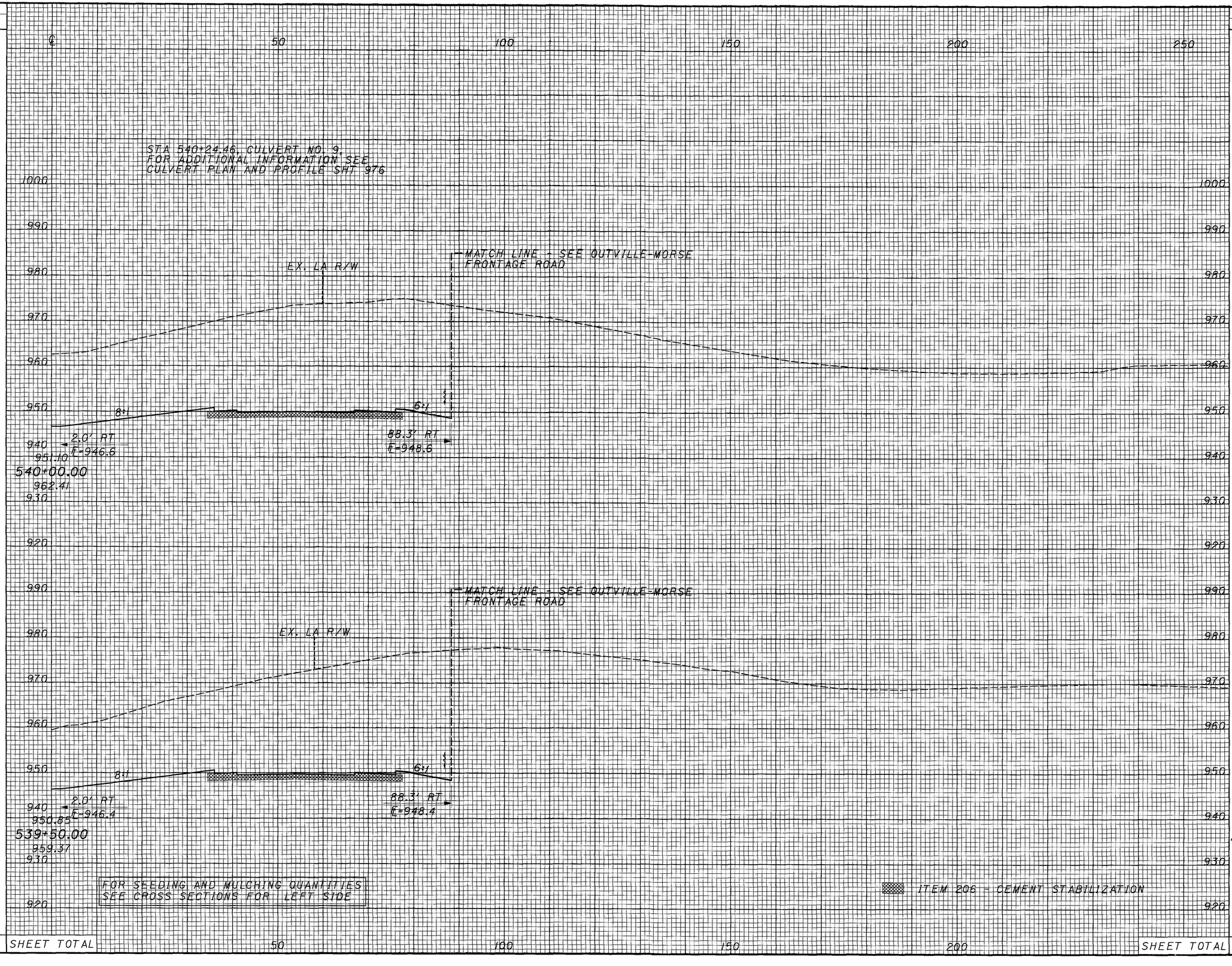
CROSS SECTIONS - S.R. 37
STA. 538+50 TO STA. 539+00 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2216	277		
		3932	565
2030	333		
		3762	563
		7694	1128

CROSS SECTIONS - S.R. 37
STA. 539+50 TO STA. 540+00 RT

LIC-161-6.65
LIC-37-10.25

453
1349

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SEEDING	
END WIDTH	SQ. YDS.
	119
	122
670	
676	
1346	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 539+50 TO STA. 540+00 LT

LIC-161-6.65
LIC-37-10.25

454
1349

250 200 150 100 50 ℄

1000 990 980 970 960 950 940 930 920

STA 540+24.46, CULVERT No. 9,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 976

MATCH LINE - SEE
C.R. 539A EXTENSION - PROP. LA R/W

3:1
6:1
8:1
109.4' LT
E=942.9
951.10
540+00.00
962.41

MATCH LINE - SEE
C.R. 539A EXTENSION - PROP. LA R/W

4:1
6:1
8:1
111.6' LT
E=941.9
950.85
539+50.00
959.37

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

250 200 150 100 50 SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

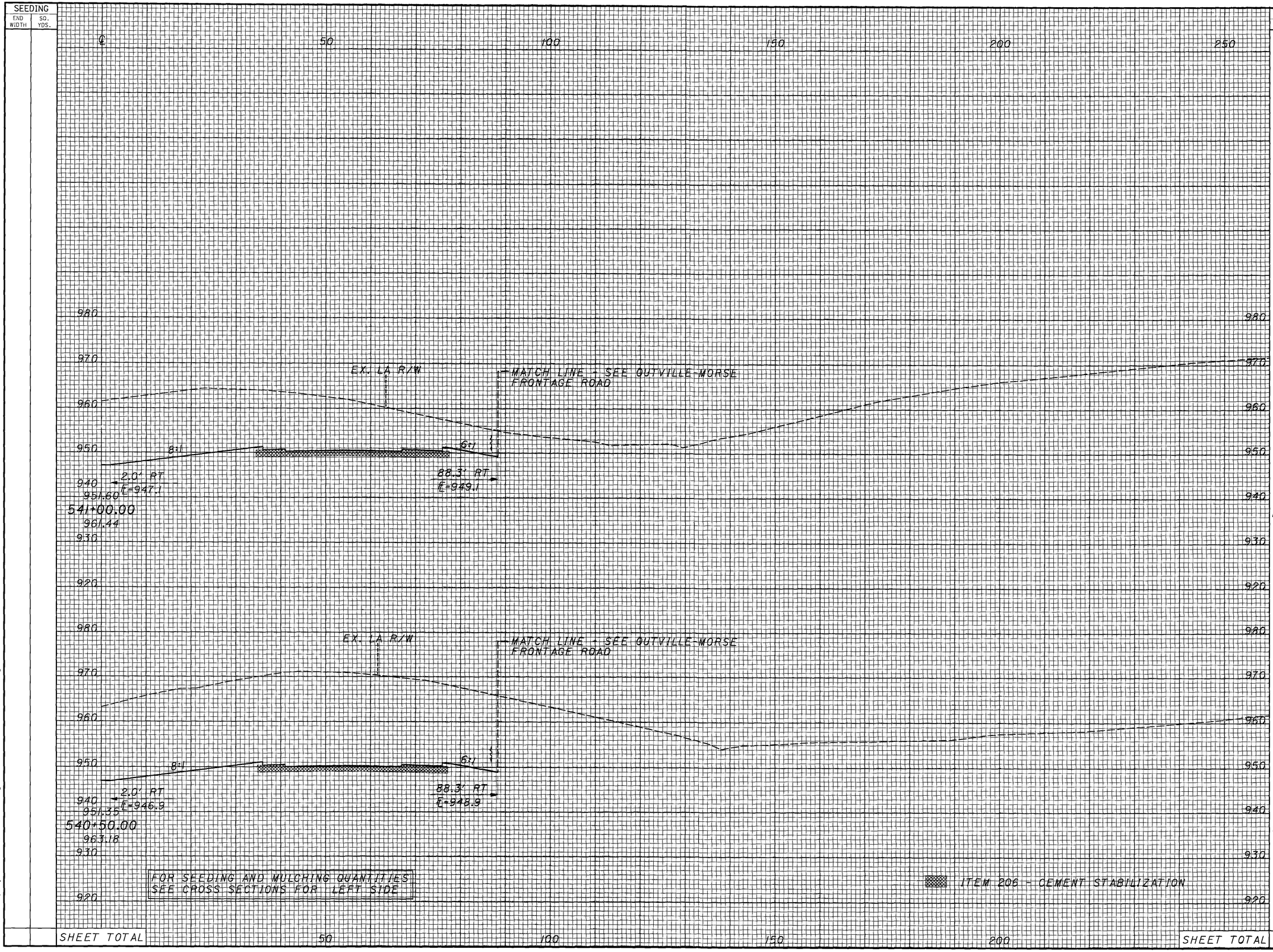
END AREA		VOLUME	
CUT	FILL	CUT	FILL
1335	297		
		3226	466
2149	206		
		4042	448
		7268	914

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 540+50 TO STA. 541+00 RT

LIC-161-6.65
LIC-37-10.25

455
1349



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SEEDING	
END WIDTH	SQ. YDS.
114	642
117	656
	1298

250 200 150 100 50 ℄

980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

3:1

6:1

8:1

104.6' LT
℄-945.0

951.60
541+00.00
961.44

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

3:1

6:1

8:1

106.8' LT
℄-944.0

951.35
540+50.00
963.18

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

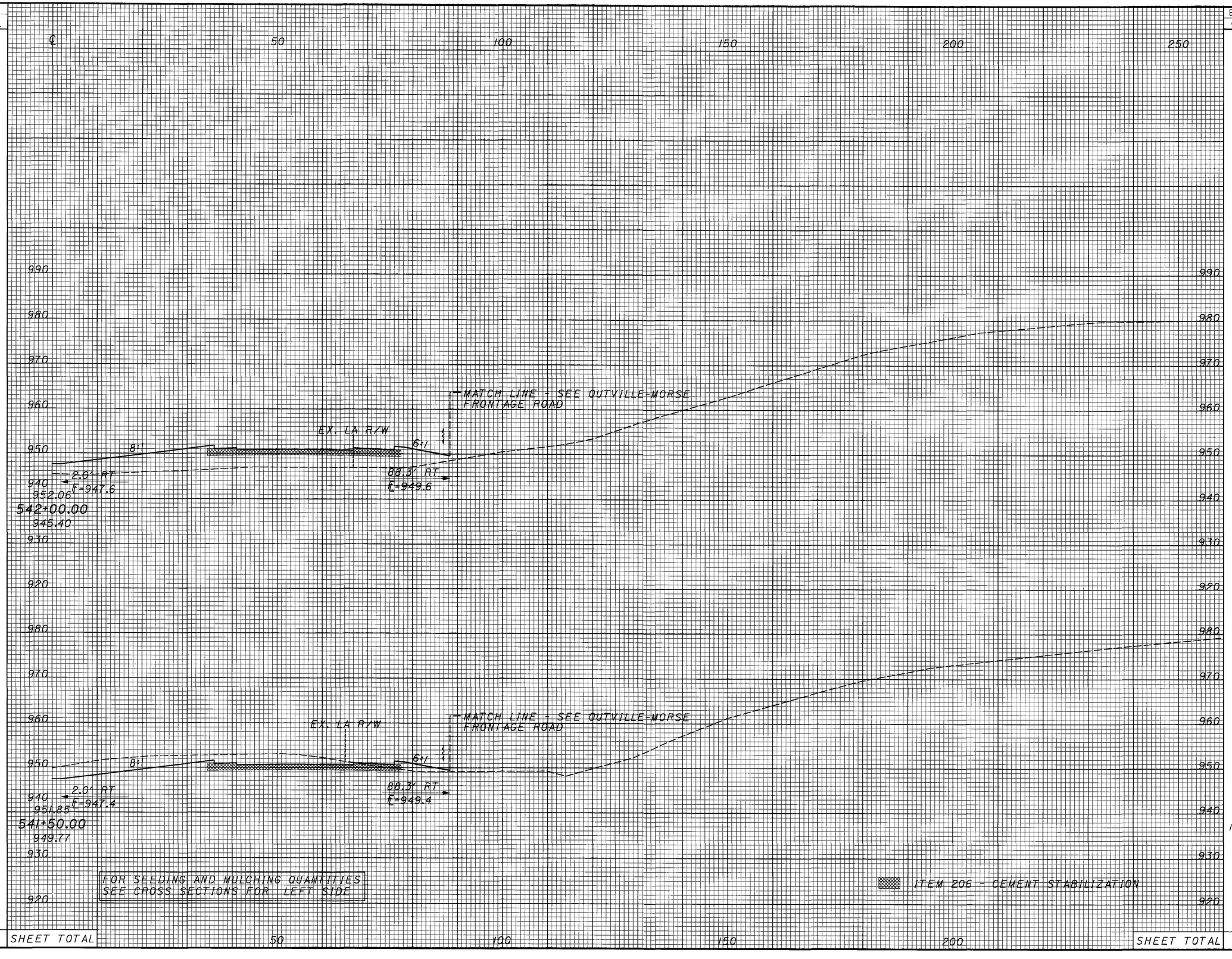
CROSS SECTIONS - S.R. 37
STA. 540+50 TO STA. 541+00 LT

LIC-161-6.65
LIC-37-10.25

456
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	1125		
		151	1793
163	812		
		1387	1027
SHEET TOTAL		1538	2820

CALCULATED JMA
CHECKED BER

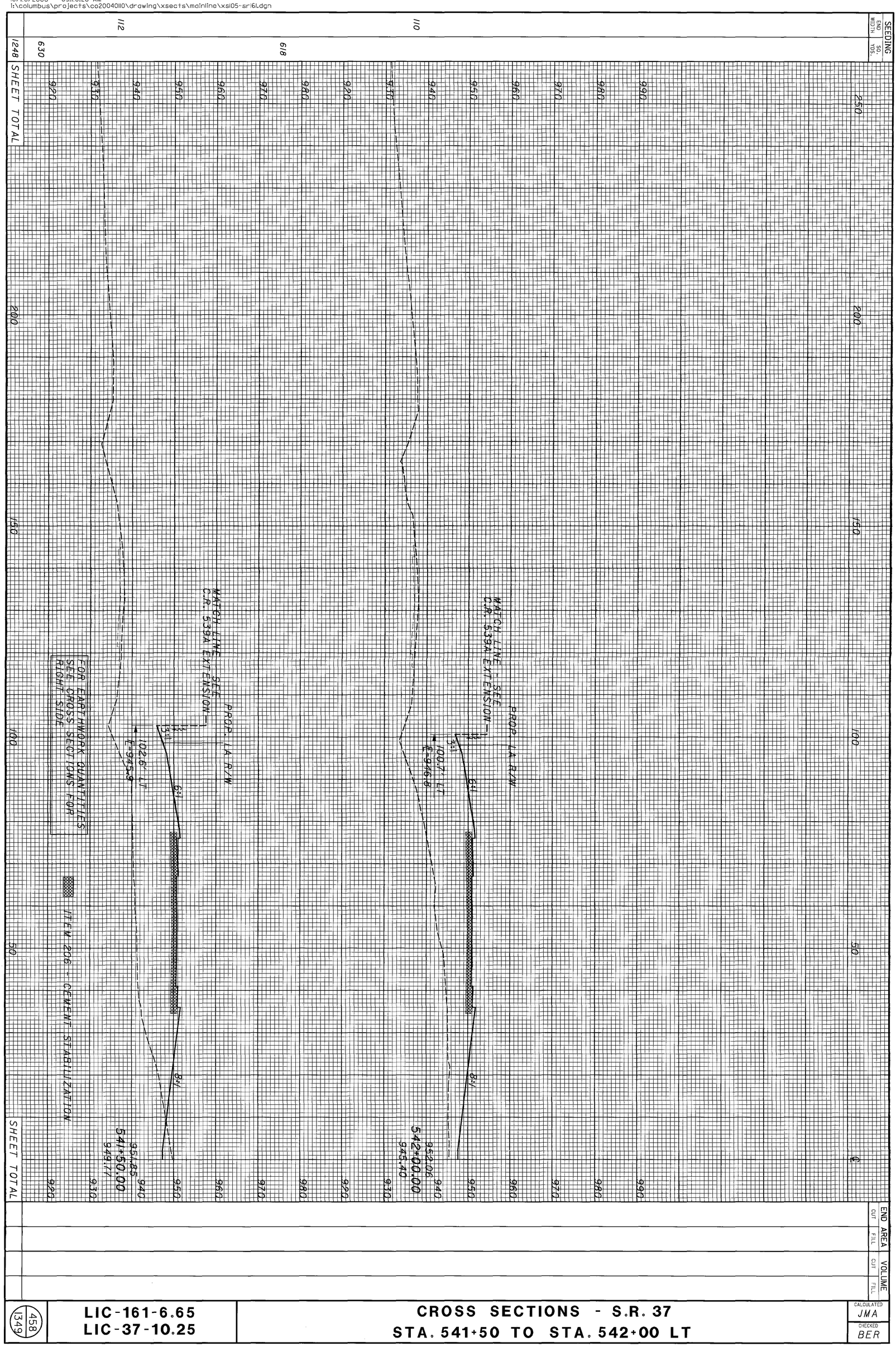
CROSS SECTIONS - S.R. 37
STA. 541+50 TO STA. 542+00 RT

LIC-161-6.65
LIC-37-10.25

457
1349

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458 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 37 STA. 541+50 TO STA. 542+00 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

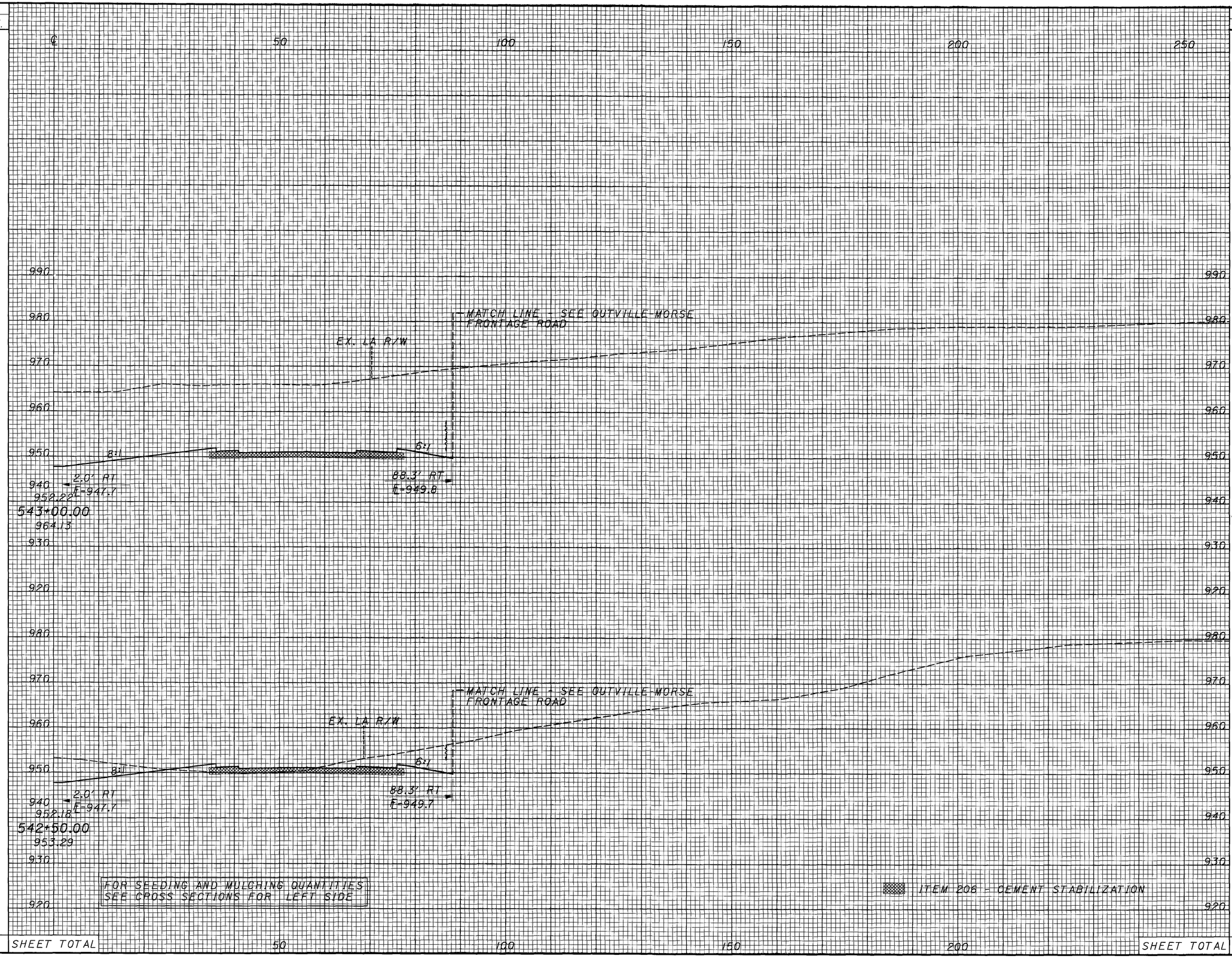
END AREA		VOLUME	
CUT	FILL	CUT	FILL
2008	252		
		2221	443
390	226		
		361	1251
SHEET TOTAL		2582	1694

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 542+50 TO STA. 543+00 RT

LIC-161-6.65
LIC-37-10.25

459
1349



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SEEDING	
END WIDTH	SQ. YDS.
107	
598	
108	
606	
1204	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 542+50 TO STA. 543+00 LT

LIC-161-6.65
LIC-37-10.25

460
1349

250 200 150 100 50 ℄

990 980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

6:1 8:1

97.7' LT
E-948.2

952.22
543+00.00
964.13

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. LA R/W

6:1 8:1

98.7' LT
E-947.8

952.18
542+50.00
953.29

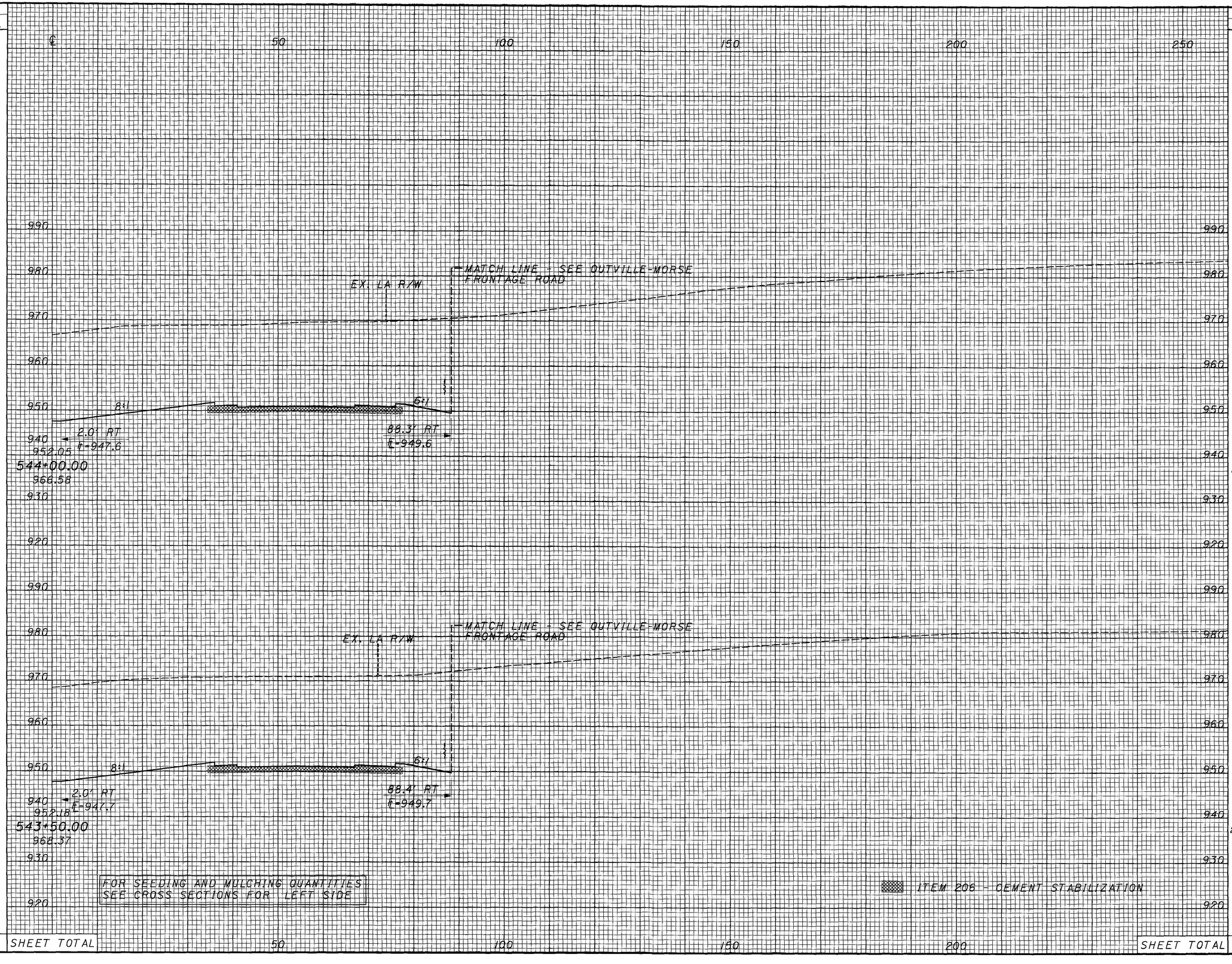
FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

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SEEDING		END AREA		VOLUME		CALCULATED JMA	CHECKED BER
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL		
		2216	242				
				4357	464		
		2489	259				
				4164	474		
SHEET TOTAL				8521	938		



CROSS SECTIONS - S.R. 37
STA. 543+50 TO STA. 544+00 RT

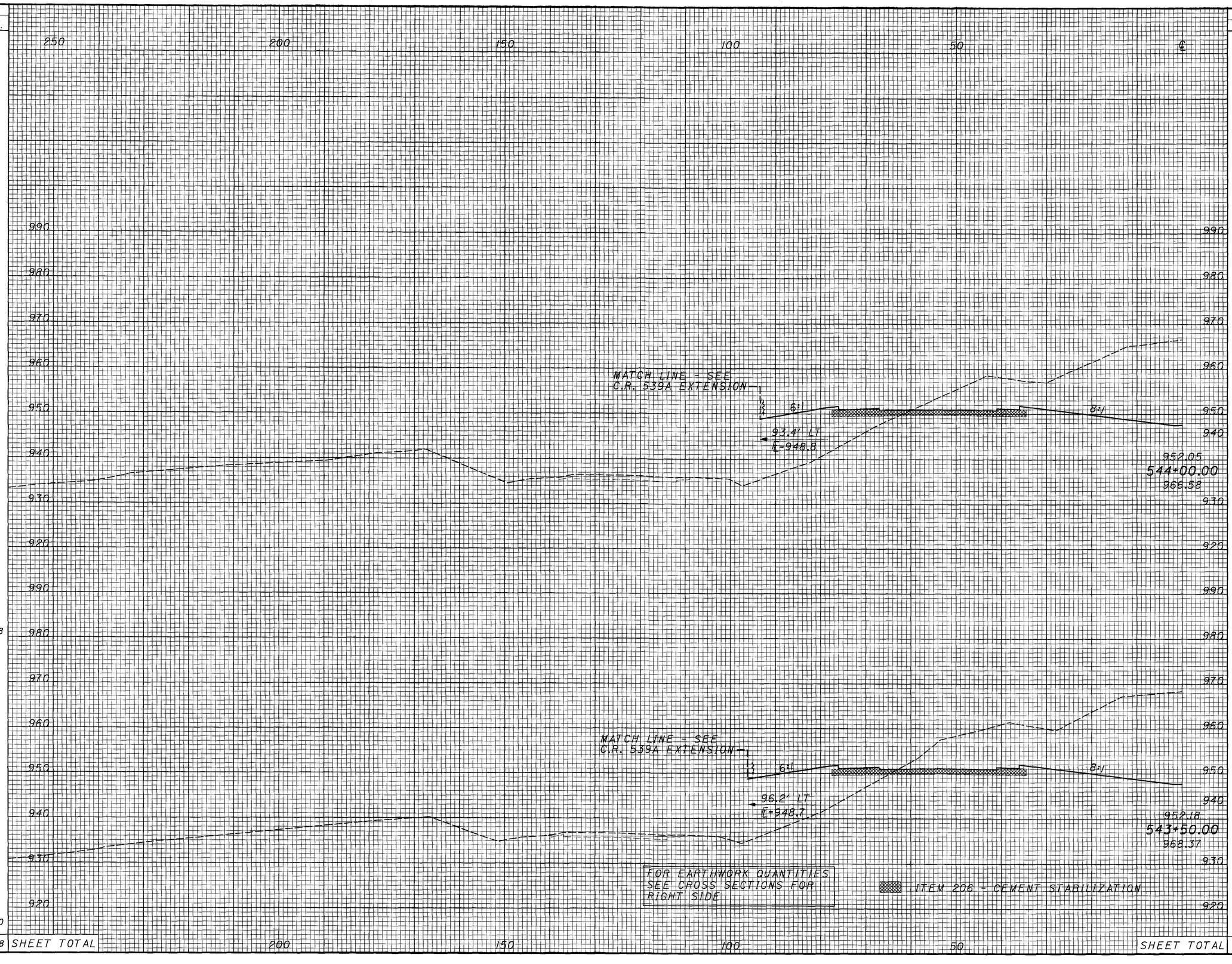
LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
	103
	578
	105
	590
	1168

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 543+50 TO STA. 544+00 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
97	
101	548
	564
1112	SHEET TOTAL

250 200 150 100 50 ℄

990 980 970 960 950 940 930 920

WATCH LINE - SEE C.R. 539A EXTENSION

6:1 6:1

87.4' LT
℄=949.1

951.58
545+00.00
951.79

990 980 970 960 950 940 930 920

WATCH LINE - SEE C.R. 539A EXTENSION

6:1 8:1

91.3' LT
℄=948.9

951.84
544+50.00
959.03

990 980 970 960 950 940 930 920

200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 544+50 TO STA. 545+00 LT

LIC-161-6.65
LIC-37-10.25

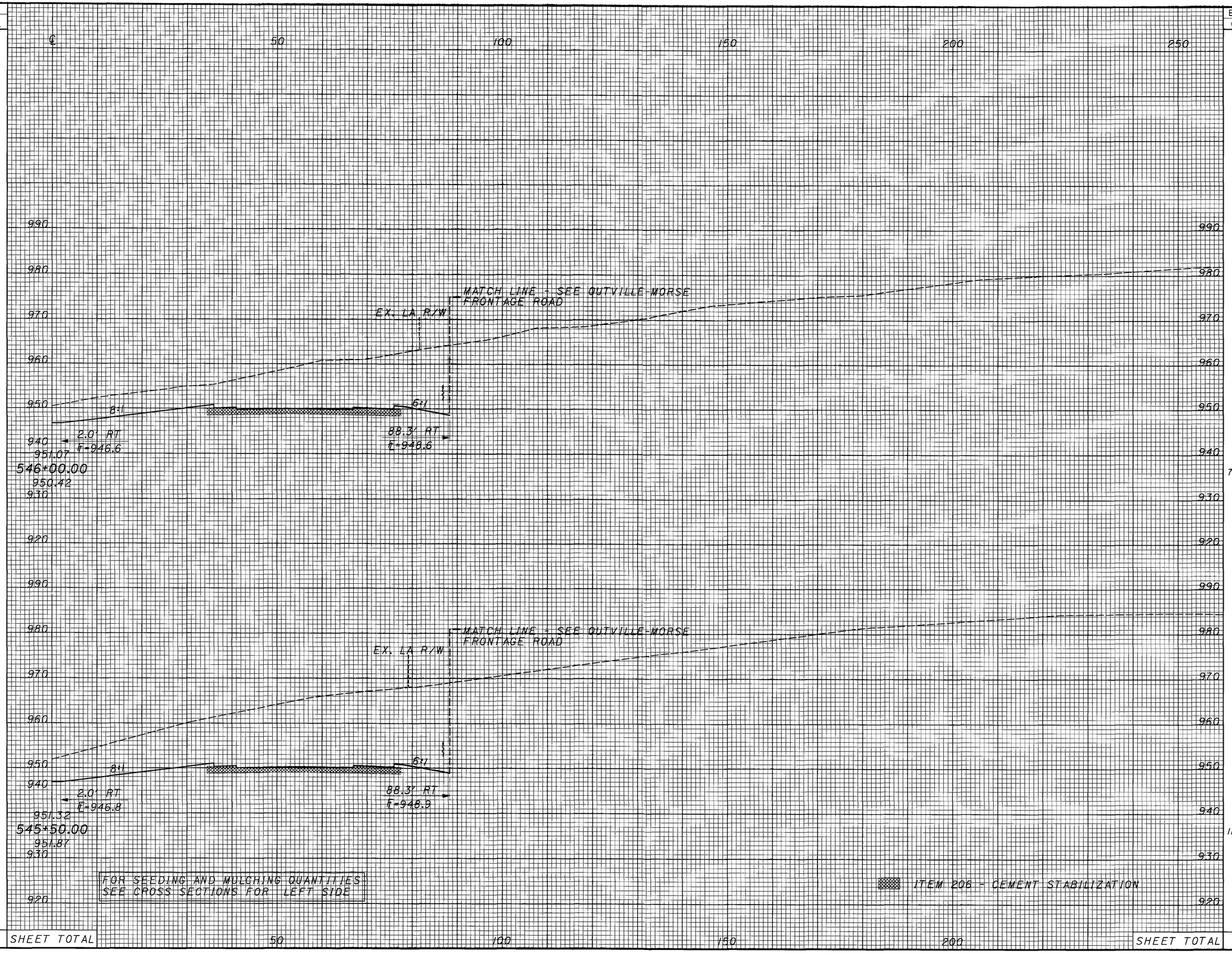
464
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
736	623		
1736	1085		
1139	549		
1875	919		
3611	2004		

CALCULATED JMA
CHECKED BER



SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 545+50 TO STA. 546+00 RT

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
93	523
95	532
	1055

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

990 980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

84.2' LT
E=949.3

8:1

951.07
546+00.00
950.42

MATCH LINE - SEE C.R. 539A EXTENSION

85.5' LT
E=949.2

8:1

951.32
545+50.00
951.87

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 545+50 TO STA. 546+00 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
902	1130		
		1789	1924
1030	948		
		1635	1455
		3424	3379

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

990 980 970 960 950 940 930 920

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT ℄=946.1

88.3' RT ℄=948.1

950.56
547+00.00
945.58

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

8:1 6:1

2.0' RT ℄=946.3

88.3' RT ℄=948.4

950.81
546+50.00
948.68

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

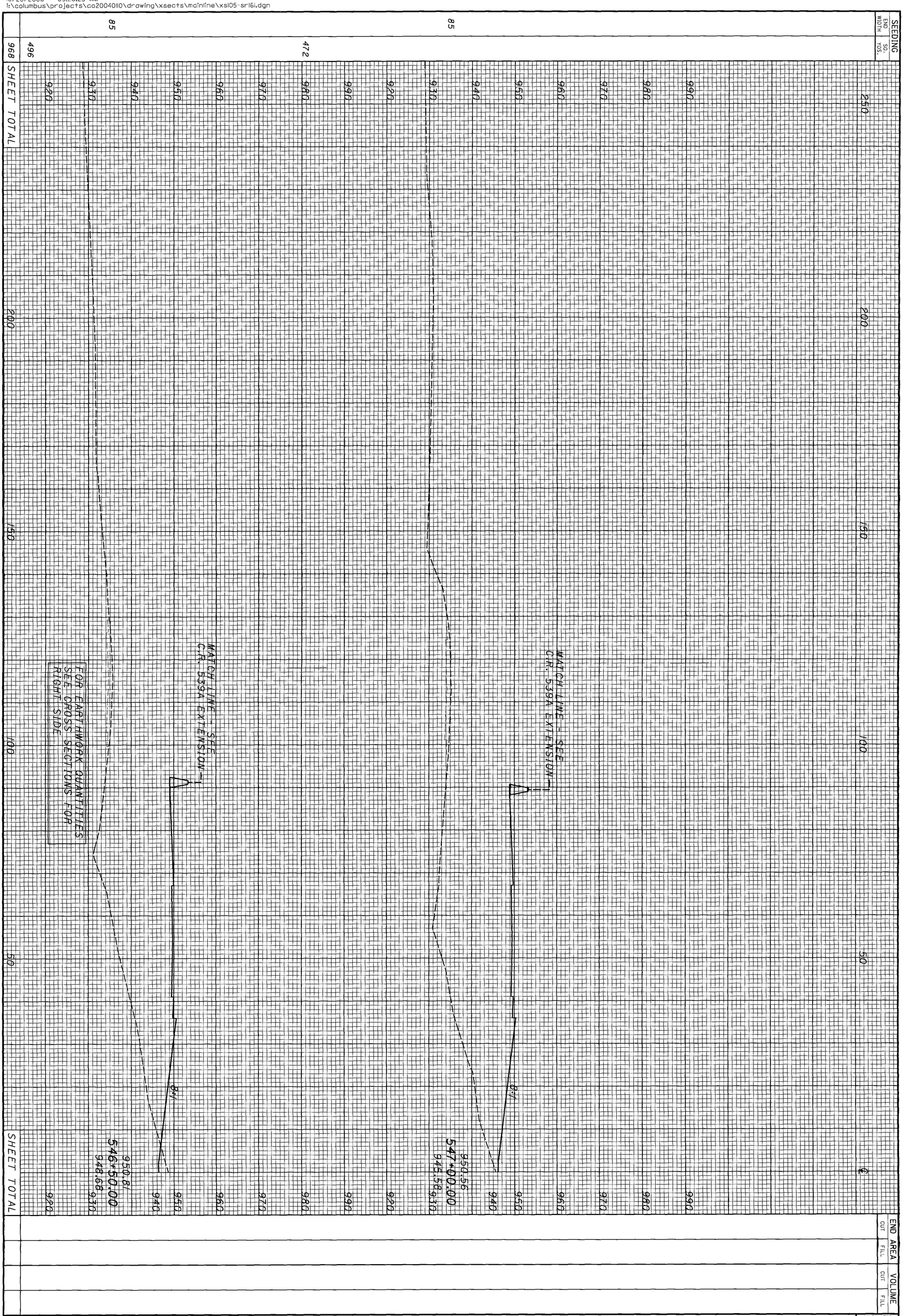
CROSS SECTIONS - S.R. 37
STA. 546+50 TO STA. 547+00 RT

LIC-161-6.65
LIC-37-10.25

467
1349

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468
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 546+50 TO STA. 547+00 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

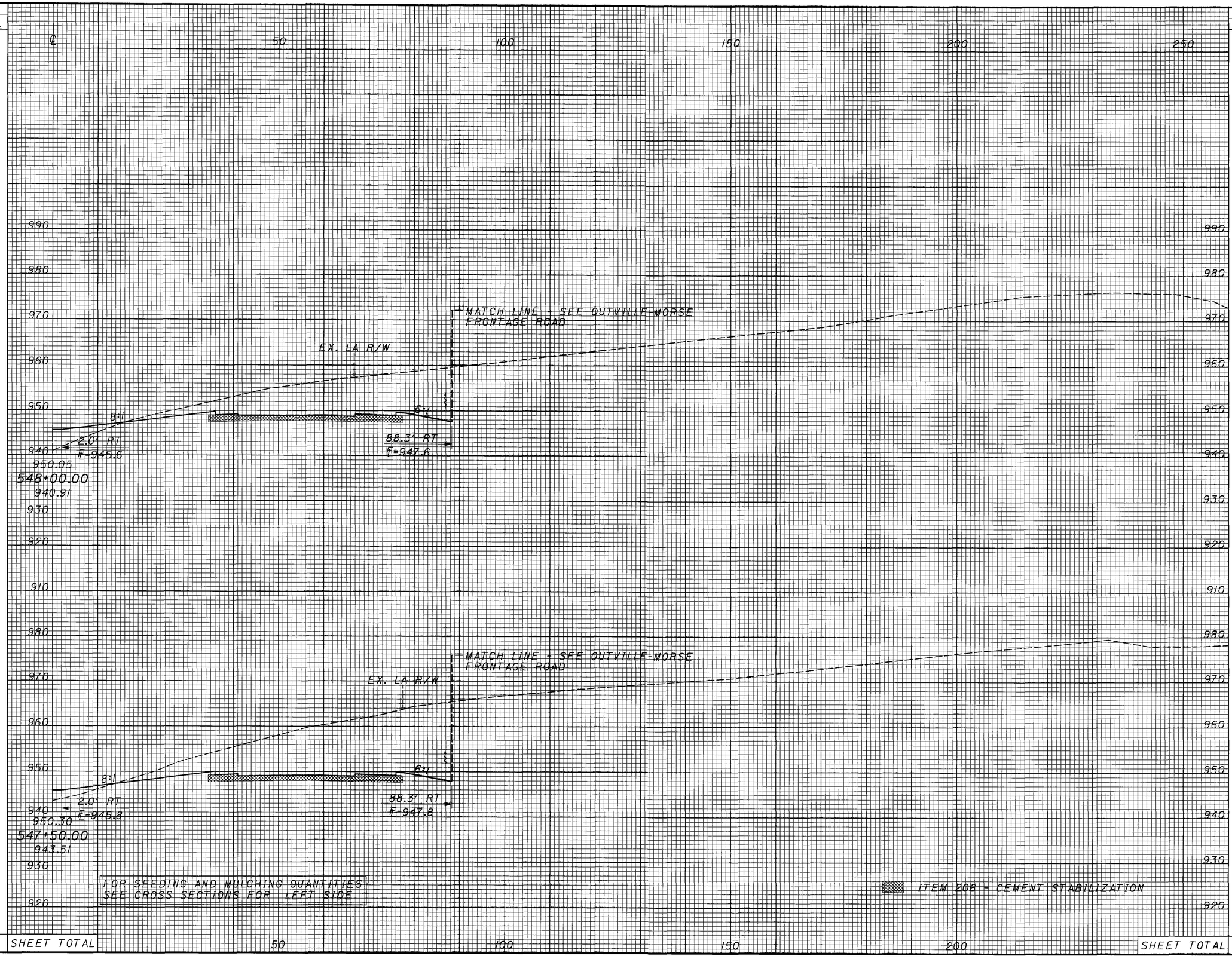
END AREA		VOLUME	
CUT	FILL	CUT	FILL
427	1292		
		993	2312
645	1205		
		1433	2162
		2426	4474

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 547+50 TO STA. 548+00 RT

LIC-161-6.65
LIC-37-10.25

469
1349



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470 / 349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 37 STA. 547+50 TO STA. 548+00 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
83	
84	
935	SHEET TOTAL

250 200 150 100 50 ℄

970 960 950 940 930 920 910 980 970 960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

949.54
549+00.00
932.33

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

949.79
548+50.00
935.07

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
465			
470			

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 548+50 TO STA. 549+00 LT

LIC-161-6.65
LIC-37-10.25

472
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

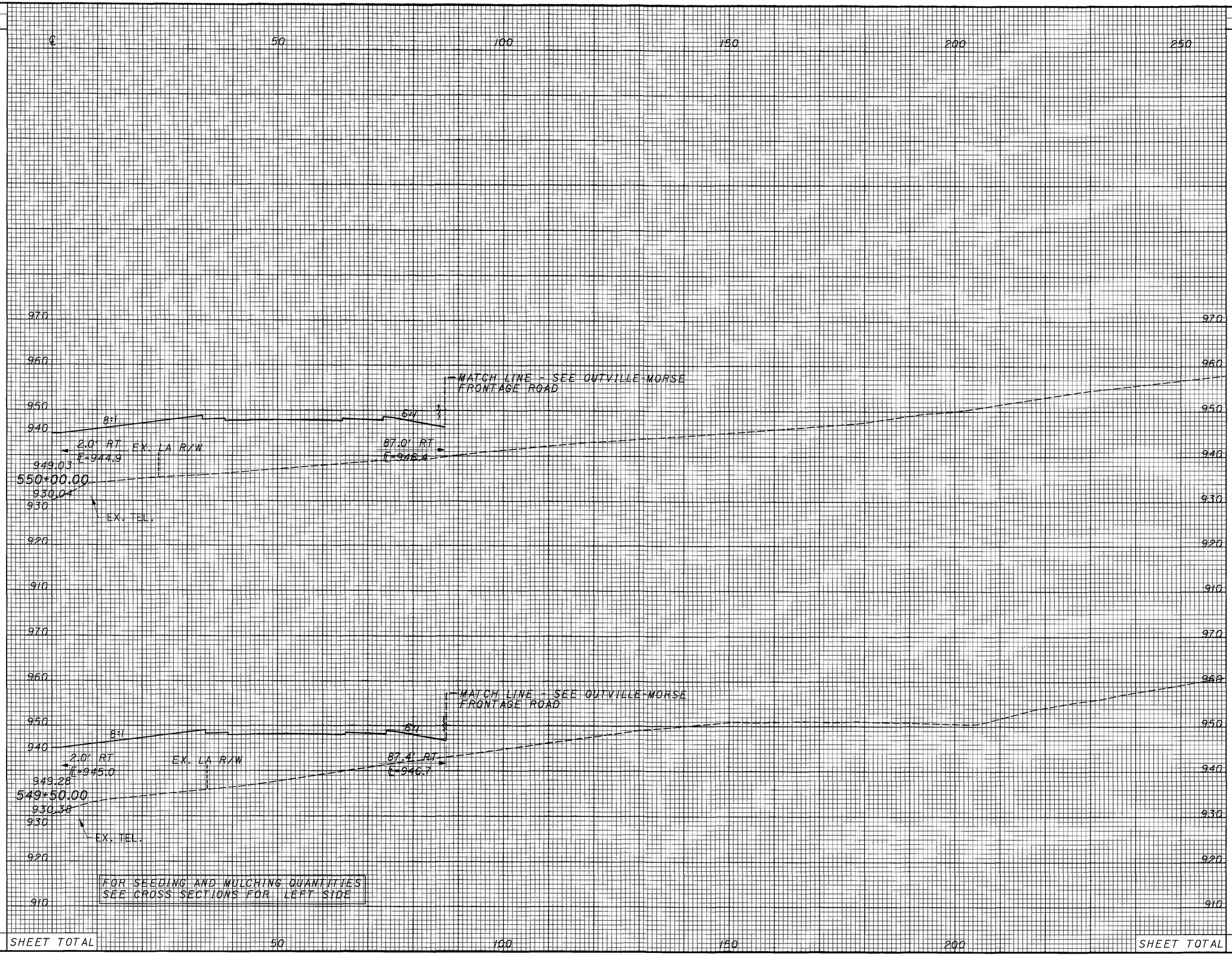
END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	2161		
		0	4013
0	2173		
		0	3780
		0	7793

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 549+50 TO STA. 550+00 RT

LIC-161-6.65
LIC-37-10.25

473
1349



SHEET TOTAL

SHEET TOTAL

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
81	
	453
82	
	459
912	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

970 960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

949.03
550+00.00
930.04

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

949.28
549+50.00
930.38

EX. TEL.

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 549+50 TO STA. 550+00 LT

LIC-161-6.65
LIC-37-10.25

474
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

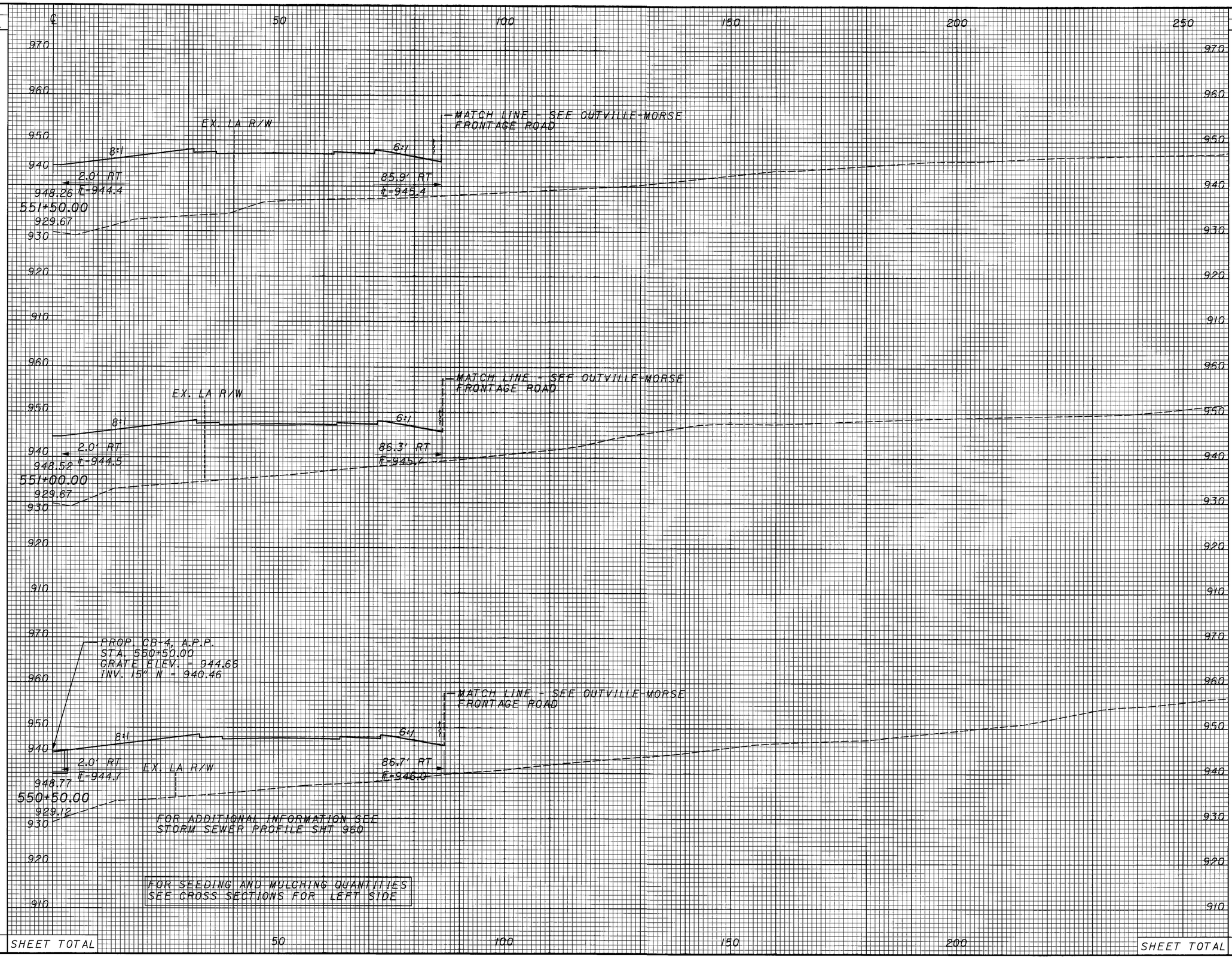
END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	2187		
		0	4048
0	2185		
		0	4022
0	2159		
		0	4000
		0	12070

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 550+50 TO STA. 551+50 RT

LIC-161-6.65
LIC-37-10.25

475
1349



tduffney
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SEEDING	
END WIDTH	SQ. YDS.
78	435
79	441
80	447
	1323

250 200 150 100 50 ℄

970 960 950 940 930 920 910

WATCH LINE - SEE C.R. 539A EXTENSION

8:1

948.26
551+50.00
929.67

WATCH LINE - SEE C.R. 539A EXTENSION

8:1

948.52
551+00.00
929.67

PROP. CB-4, A.P.P.
STA. 550+50.00
GRATE ELEV. = 944.66
INV. 15" N = 940.46

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 960

948.77
550+50.00
929.12

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

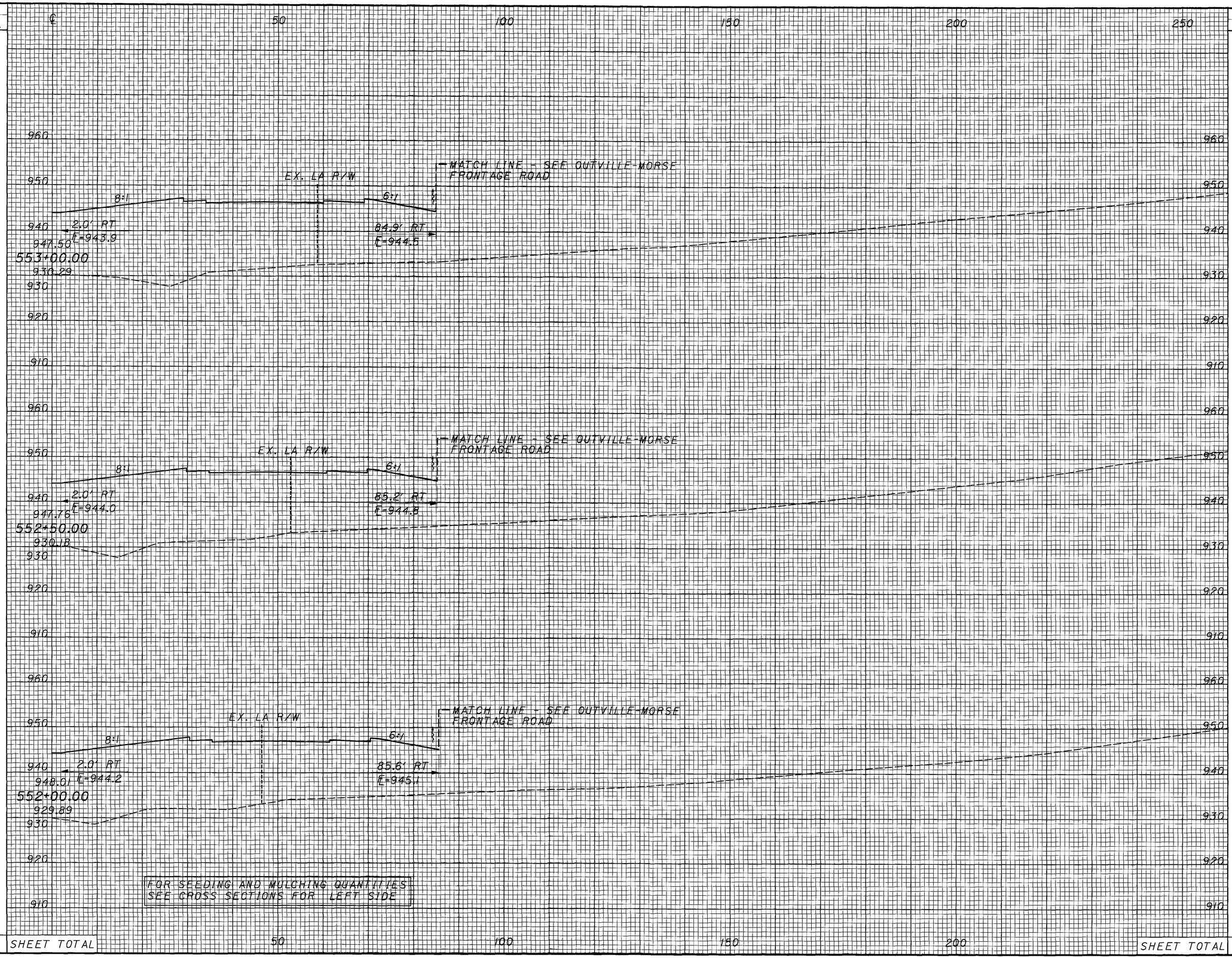
CROSS SECTIONS - S.R. 37
STA. 550+50 TO STA. 551+50 LT

LIC-161-6.65
LIC-37-10.25

476
1349

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SEEDING		END AREA		VOLUME		CALCULATED JMA	CHECKED BER
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL		
		0	2298				
				0	4267		
		0	2310				
				0	4263		
		0	2293				
				0	4148		
SHEET TOTAL				0	12678		



CROSS SECTIONS - S.R. 37
STA. 552+00 TO STA. 553+00 RT

LIC-161-6.65
LIC-37-10.25

477
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
75	417
76	423
77	429
	1269

250 200 150 100 50 ℄

960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

947.50
553+00.00
930.29

960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

947.76
552+50.00
930.18

960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

948.01
552+00.00
929.89

960 950 940 930 920 910

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

200 150 100 50

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 552+00 TO STA. 553+00 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	2065		
		0	3956
0	2207		
		0	4170
0	2296		
		0	4254
		0	12380

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 553+50 TO STA. 554+50 RT

LIC-161-6.65
LIC-37-10.25

℄ 50 100 150 200 250

960 950 940 930 920 910

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

EX. LA R/W

6:1 6:1

2.0' RT E=942.5

946.73

554+50.00

931.84

83.8' RT E=943.5

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

EX. LA R/W

7:1 6:1

2.0' RT E=943.2

946.99

554+00.00

931.60

84.2' RT E=943.8

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

EX. LA R/W

8:1 6:1

2.0' RT E=943.7

947.24

553+50.00

930.66

84.5' RT E=944.1

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.
72	401
73	406
74	412
1219	SHEET TOTAL

250 200 150 100 50 ℄

960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

946.73
554+50.00
931.84

960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

7:1

946.99
554+00.00
931.60

960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

8:1

947.24
553+50.00
930.66

960 950 940 930 920 910

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 553+50 TO STA. 554+50 LT

LIC-161-6.65
LIC-37-10.25

480
1349

tduffney
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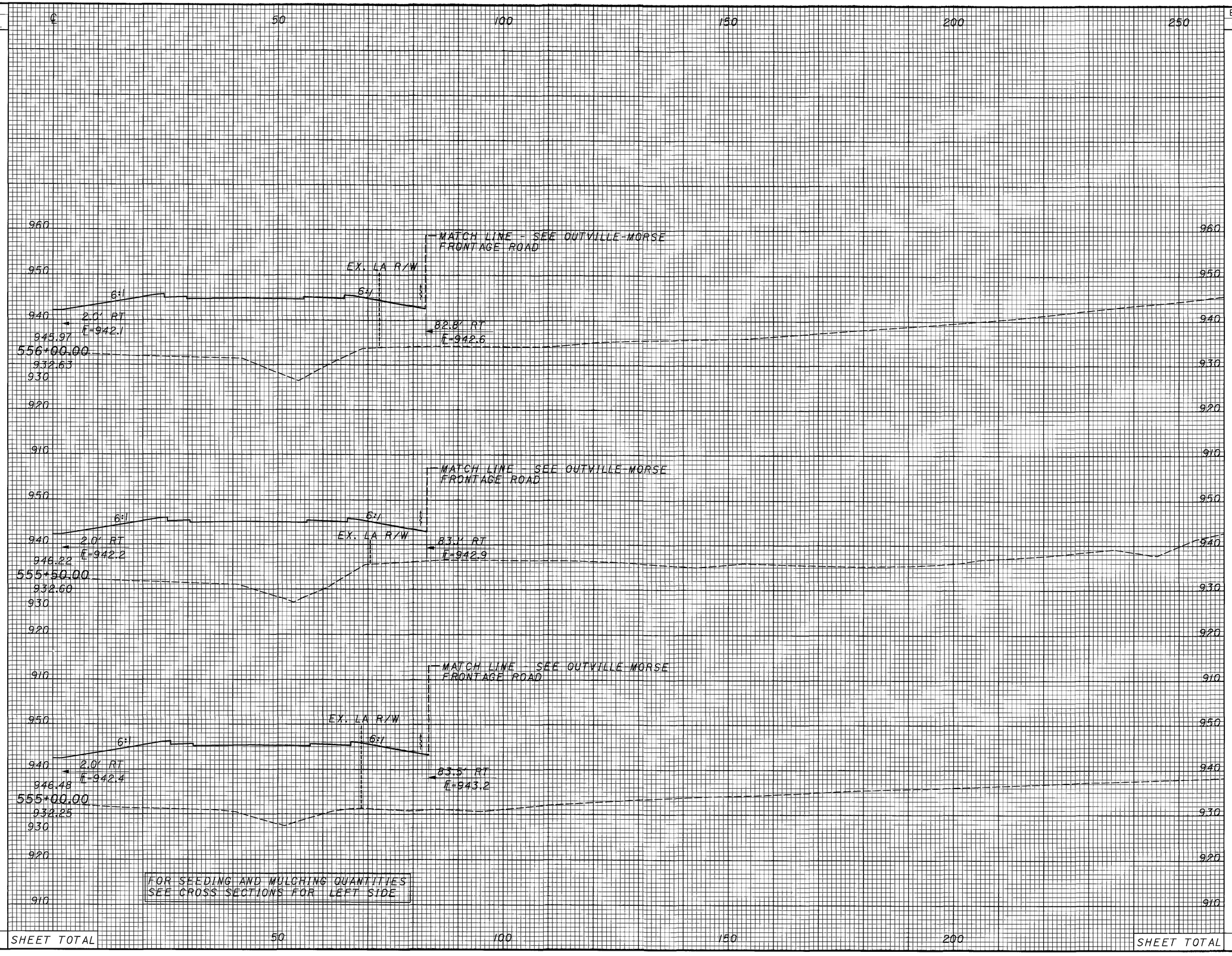
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	1750		
		0	3268
0	1780		
		0	3462
0	1959		
		0	3726
		0	10456

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 555+00 TO STA. 556+00 RT

LIC-161-6.65
LIC-37-10.25



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SEEDING	
END WIDTH	SQ. YDS.
68	
	383
69	
	389
71	
	395
	1167

250 200 150 100 50 ℄

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

960 950 940 930 920 910

945.97
556+00.00
932.63

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

946.22
555+50.00
932.60

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

946.48
555+00.00
932.25

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50 ℄ SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 555+00 TO STA. 556+00 LT

LIC-161-6.65
LIC-37-10.25

482
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING END WIDTH	SEEDING SQ. YDS.
65	365
66	371
67	377
	1113

250 200 150 100 50 ℄

970 960 950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

945.20
557+50.00
933.33

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

945.46
557+00.00
933.20

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

945.71
556+50.00
932.99

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 556+50 TO STA. 557+50 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL

SEEDING	
END WIDTH	SQ. YDS.
62	
	347
63	
	353
64	
	359
	1059

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

944.44
559+00.00
937.89

970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

944.69
558+50.00
936.18

STA 558+19, CULVERT No. 10,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 917

970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

944.95
558+00.00
932.87

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

970 960 950 940 930 920

200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

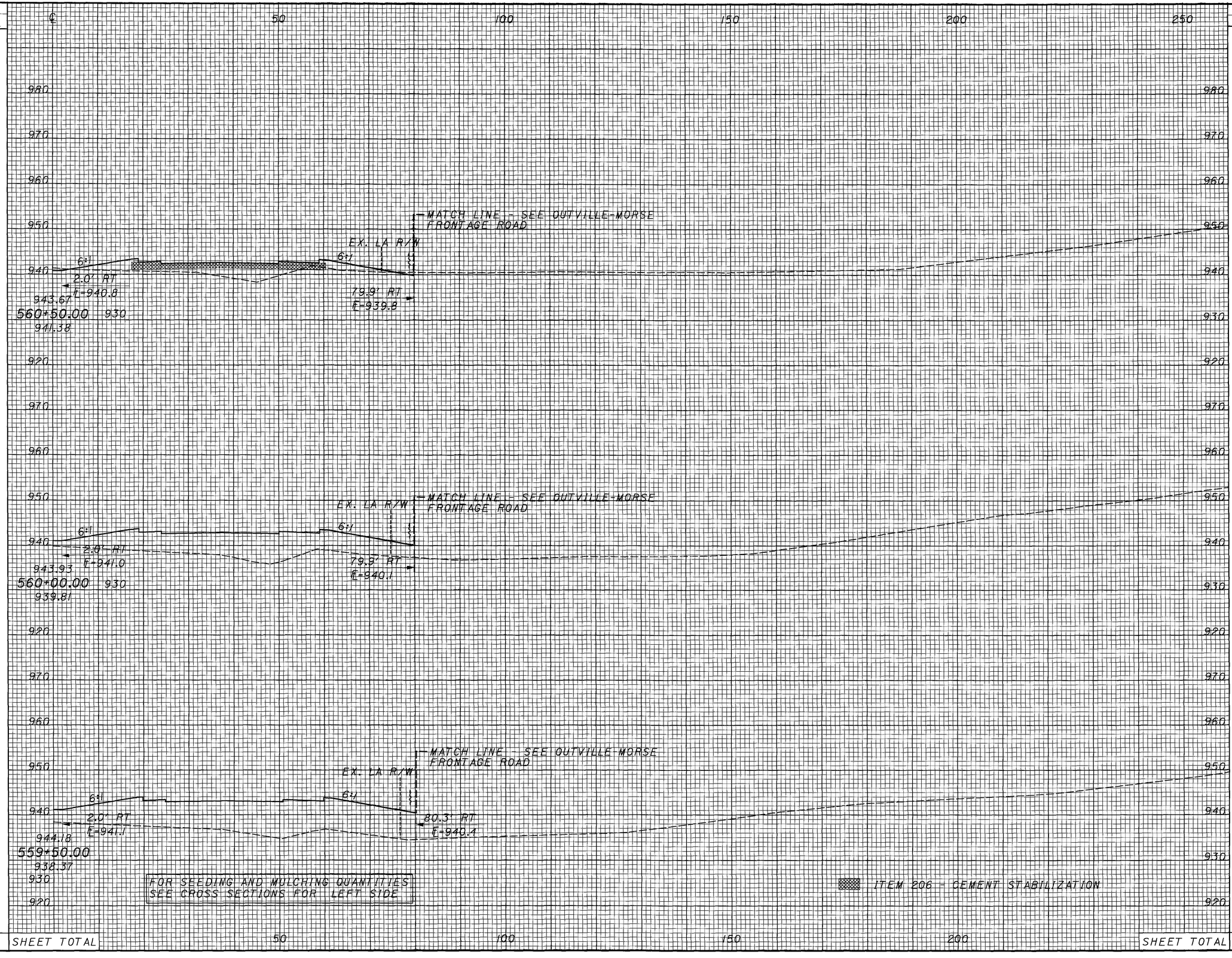
CROSS SECTIONS - S.R. 37
STA. 558+00 TO STA. 559+00 LT

LIC-161-6.65
LIC-37-10.25

486
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
57	92		
26	381	77	439
11	585	35	895
		11	1231
		123	2565

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 559+50 TO STA. 560+50 RT

LIC-161-6.65
LIC-37-10.25

487
1349

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SEEDING	
END WIDTH	SQ. YDS.
60	331
60	335
61	341
	1007

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION

980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

943.67
560+50.00
941.38

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

943.93
560+00.00
939.81

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

944.18
559+50.00
938.37

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 559+50 TO STA. 560+50 LT

LIC-161-6.65
LIC-37-10.25

488
1349

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SEEDING	
END WIDTH	SQ. YDS.

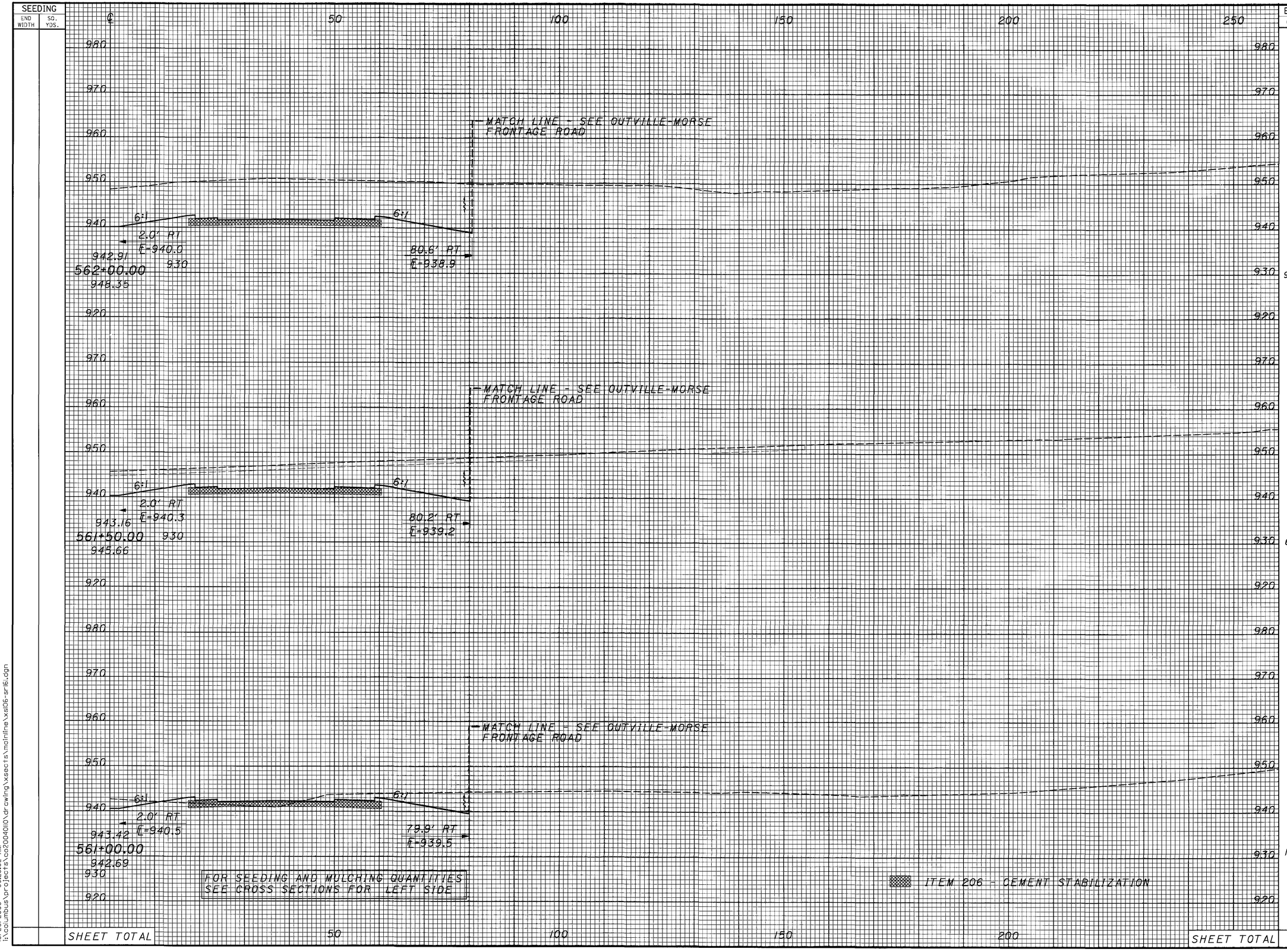
END AREA		VOLUME	
CUT	FILL	CUT	FILL
960	0		
		1510	0
671	0		
		806	6
199	6		
		237	91
		2553	97

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 561+00 TO STA. 562+00 RT

LIC-161-6.65
LIC-37-10.25

489
1349

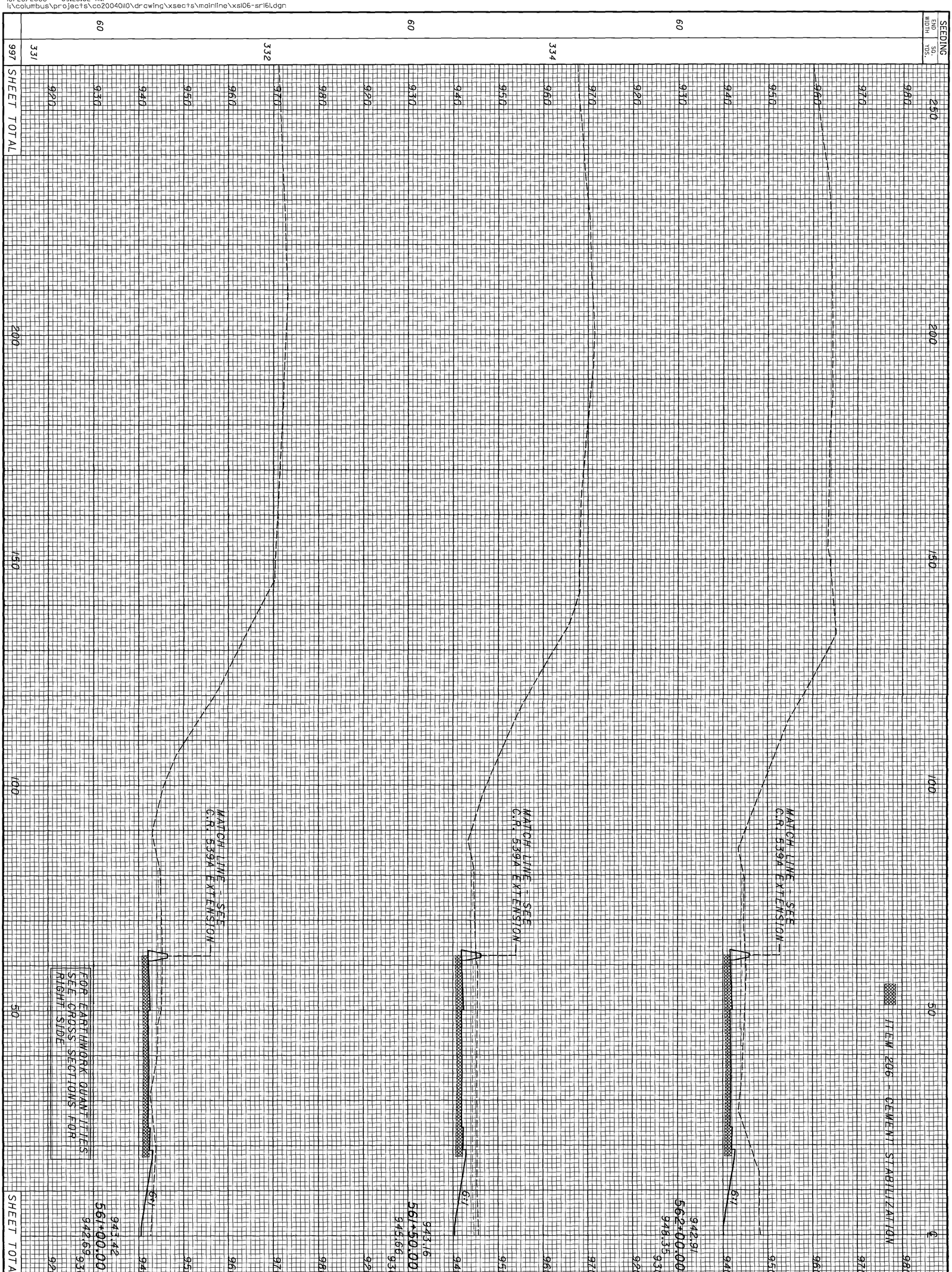


SHEET TOTAL

SHEET TOTAL

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490
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 561+00 TO STA. 562+00 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

ITEM 206 - CEMENT STABILIZATION

980
970
960
950
940
930
920

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

6:1 6:1

1.6' RT
E=939.6
942.40
563+00.00
953.02

81.9' RT
E=938.2

1546 0

2645 0

2.0' RT
E=939.7
942.65
562+50.00
952.43

81.2' RT
E=938.5

1311 0

2103 0

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL 4748 0

CROSS SECTIONS - S.R. 37
STA. 562+50 TO STA. 563+00 RT

LIC-161-6.65
LIC-37-10.25

491
1349

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SEEDING	
END WIDTH	SQ. YDS.
	61
	338
	61
	337
	675

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

ITEM 206 CEMENT STABILIZATION

980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

942.40
563+00.00
953.02

980 970 960 950 940 930 920

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

942.65
562+50.00
952.43

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 562+50 TO STA. 563+00 LT

LIC-161-6.65
LIC-37-10.25

492
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1227	1		
		2551	1
1528	0		
		2982	0
1692	0		
		2998	0
		8531	1

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 563+50 TO STA. 564+50 RT

LIC-161-6.65
LIC-37-10.25

493
1349

℄ 50 100 150 200 250

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

960 950 940 930 920

6:1 6:1
0.1' LT
E=939.1
941.63
564+50.00
948.08
82.6' RT
E=937.3

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

970 960 950 940 930 920

6:1 6:1
0.5' RT
941.89 E=939.2
564+00.00
950.54
83.4' RT
E=937.4

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

980 970 960 950 940 930 920

6:1 6:1
1.1' RT
942.14 E=939.4
563+50.00
952.03
82.7' RT
E=937.8

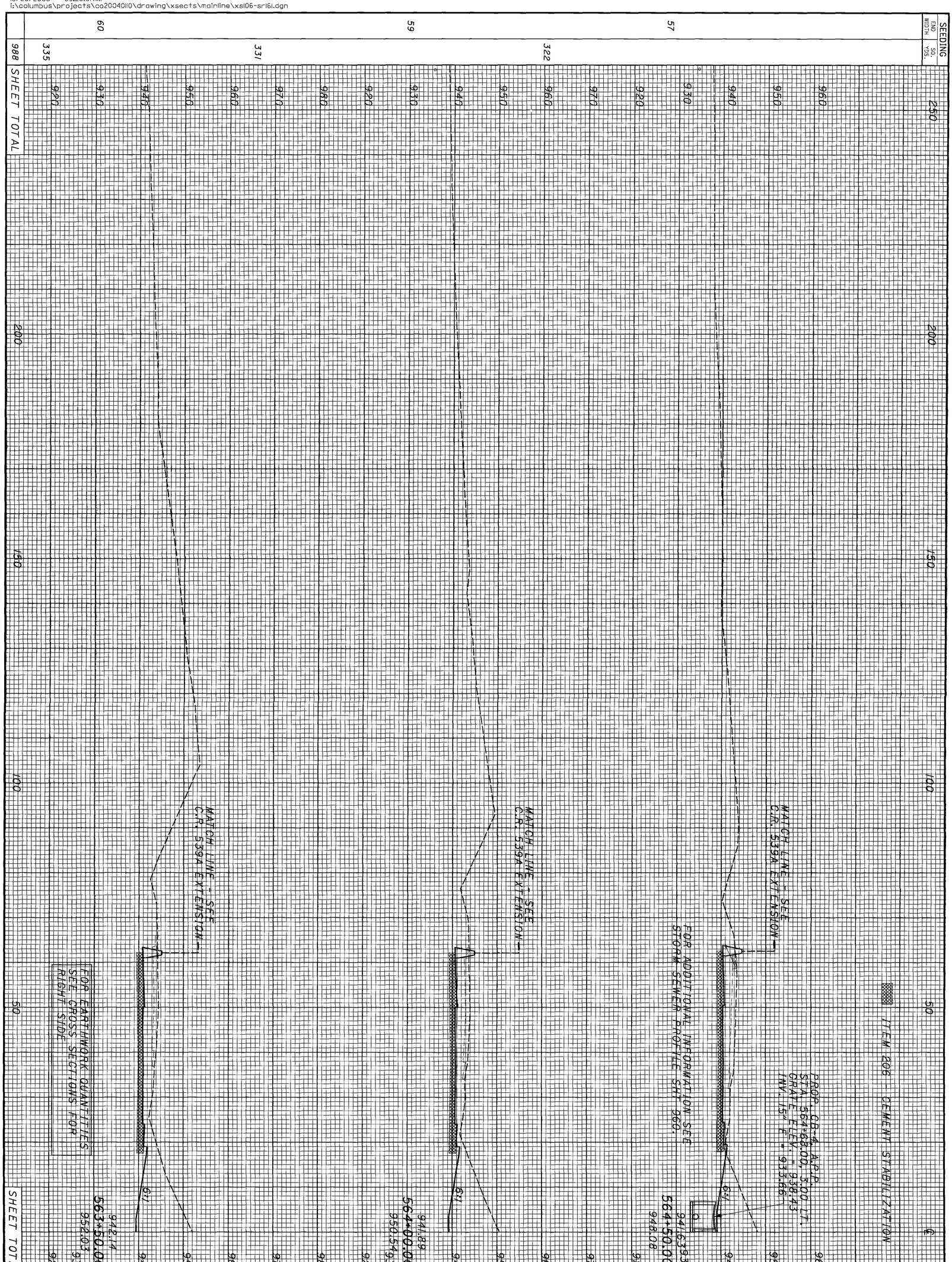
FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 50 100 150 200 SHEET TOTAL

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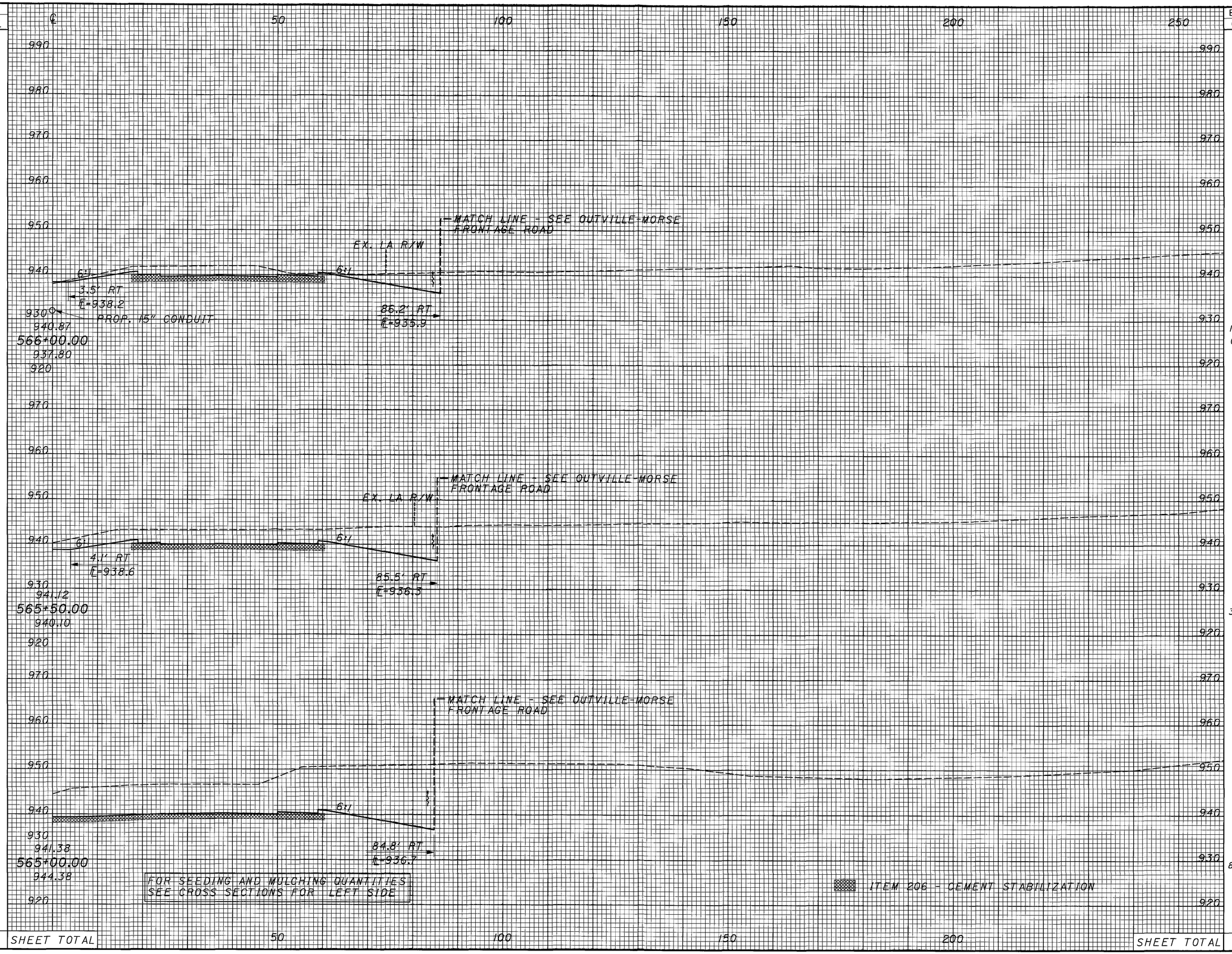
494
349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 563+50 TO STA. 564+50 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
183	18		
(0)	(0)		
		519	26
377	10		
		1126	9
838	0		
		1912	1
SHEET TOTAL		3557	36

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 565+00 TO STA. 566+00 RT

LIC-161-6.65
LIC-37-10.25

495
1349

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SEEDING	
END WIDTH	SQ. YDS.
62	
	338
60	
	239
26	
	230
	807

250 200 150 100 50 ℄

990 980 970 960 950 940 930 920

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

PROP. 15" CONDUIT

940.87
566+00.00
937.80

PROP. 6" GAS BY OTHERS

MATCH LINE - SEE C.R. 539A EXTENSION

5:1

PROP. 15" CONDUIT

941.12
565+50.00
940.10

PROP. 6" GAS BY OTHERS

MATCH LINE - SEE C.R. 539A EXTENSION

PROP. 15" CONDUIT

941.38
565+00.00
944.38

PROP. 6" GAS BY OTHERS

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 565+00 TO STA. 566+00 LT

LIC-161-6.65
LIC-37-10.25

496
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
30	66		
(4)	(0)		
		60	117
		(4)	(0)
34	60		
(0)	(0)		
		97	104
		(4)	(0)
71	52		
(4)	(0)		
		235	65
		(4)	(0)
		392	286
		(12)	(0)

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 566+50 TO STA. 567+50 RT

LIC-161-6.65
LIC-37-10.25

497
1349

℄ 50 100 150 200 250

960 950 940 930 920 910

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

EX. LA R/W

6:1

21.0' RT
E=937.2

940.10
567+50.00
936.47

88.3' RT
E=934.8

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

EX. LA R/W

6:1

2.4' RT
E=937.5

940.36
567+00.00
936.48

87.6' RT
E=935.2

PROP. CB-4, A.P.P.
STA. 566+50.00, 11.24' RT.
GRATE ELEV. = 937.50
INV. 15" W = 930.32
INV. 15" N = 930.32

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

EX. LA R/W

6:1

2.9' RT
E=937.9

940.61
566+50.00
936.57

86.9' RT
E=935.6

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 960.

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

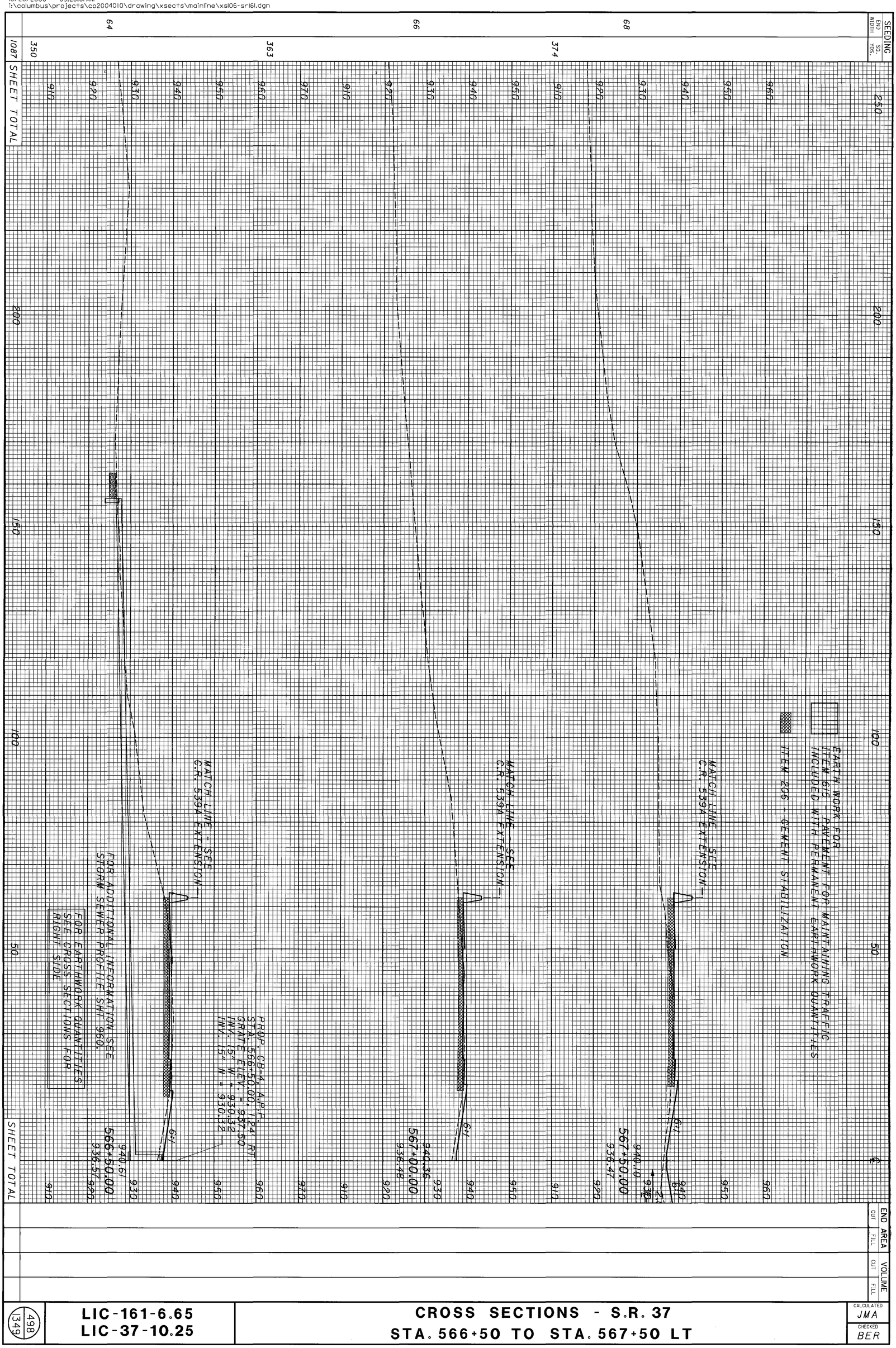
ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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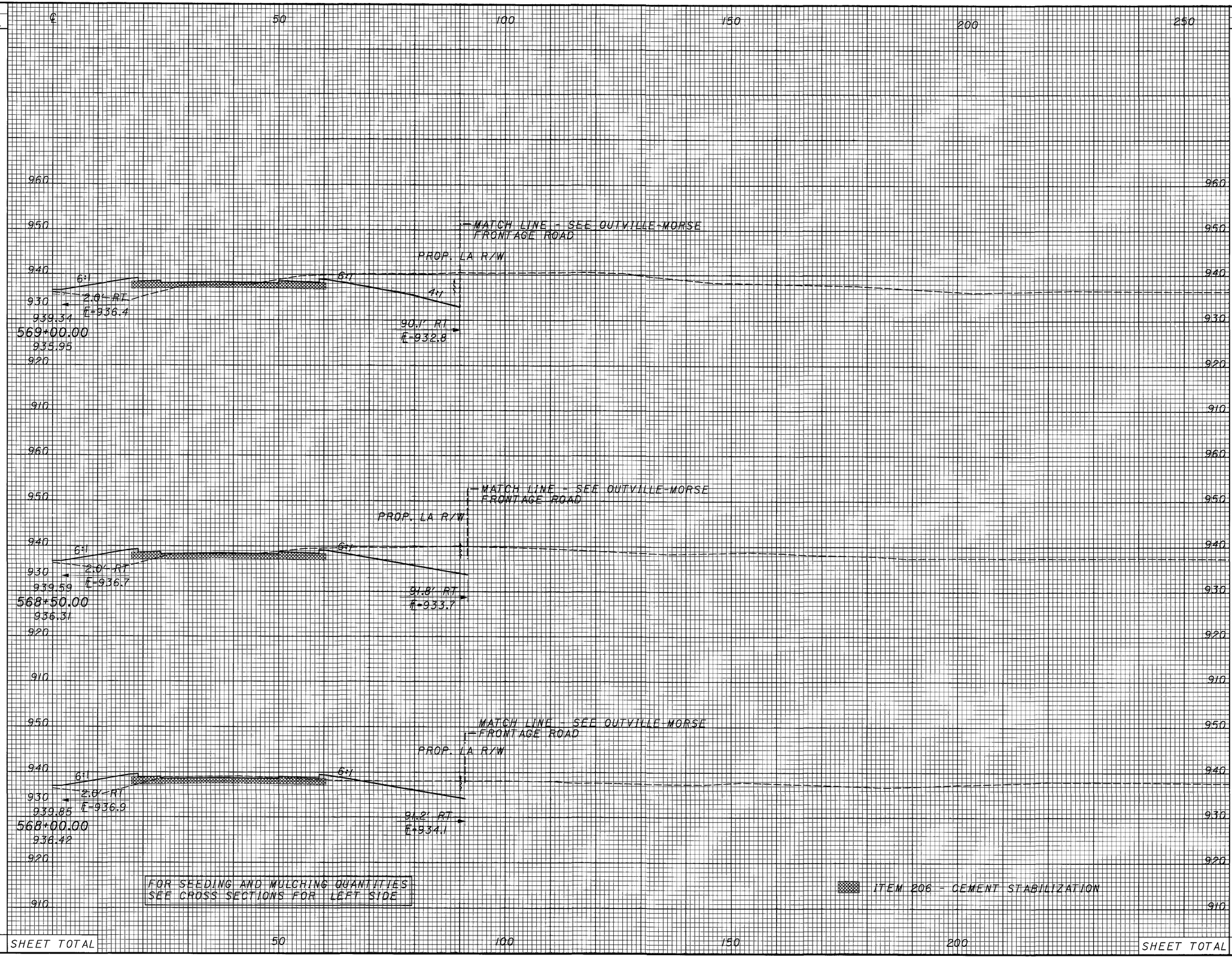
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498 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**CROSS SECTIONS - S.R. 37** **STA. 566+50 TO STA. 567+50 LT**

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
133	310		
(6)	(0)		
		229	483
		(15)	(0)
115	212		
(10)	(0)		
		158	320
		(16)	(0)
55	134		
(7)	(0)		
		79	185
		(11)	(0)
SHEET TOTAL		466	988
		(42)	(0)

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 568+00 TO STA. 569+00 RT

LIC-161-6.65
LIC-37-10.25

499
1349

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SEEDING	
END WIDTH	SQ. YDS.
70	394
72	397
71	387
	1178

250 200 150 100 50 ℄

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

960 950 940 930 920 910

MATCH LINE - SEE
C.R. 539A EXTENSION

6:1

939.31
569+00.00
935.95

960 950 940 930 920 910

MATCH LINE - SEE
C.R. 539A EXTENSION

6:1

939.59
568+50.00
936.31

960 950 940 930 920 910

MATCH LINE - SEE
C.R. 539A EXTENSION

6:1

939.85
568+00.00
936.42

ITEM 206 - CEMENT STABILIZATION

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

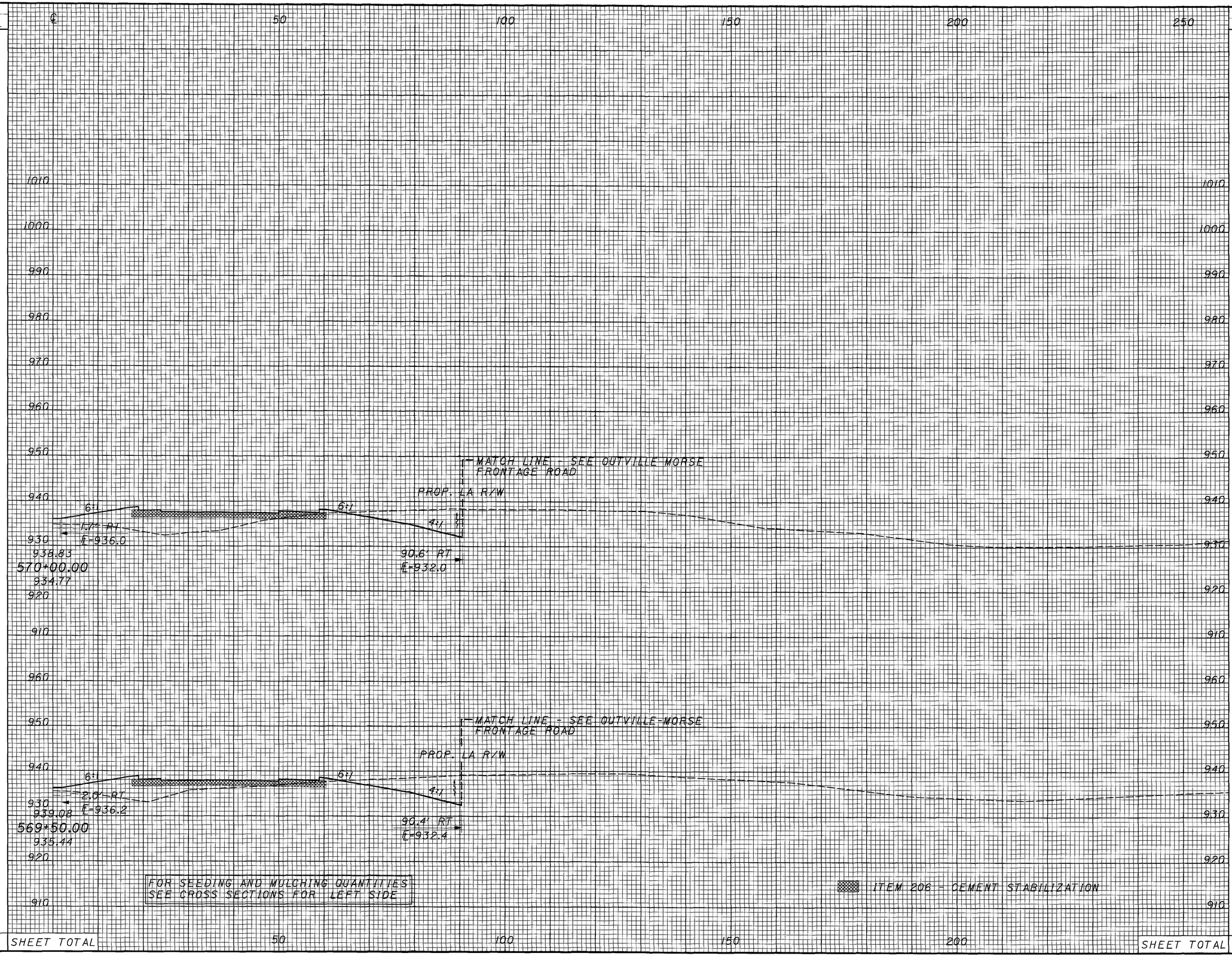
CROSS SECTIONS - S.R. 37
STA. 568+00 TO STA. 569+00 LT

LIC-161-6.65
LIC-37-10.25

500
1349

tduffney
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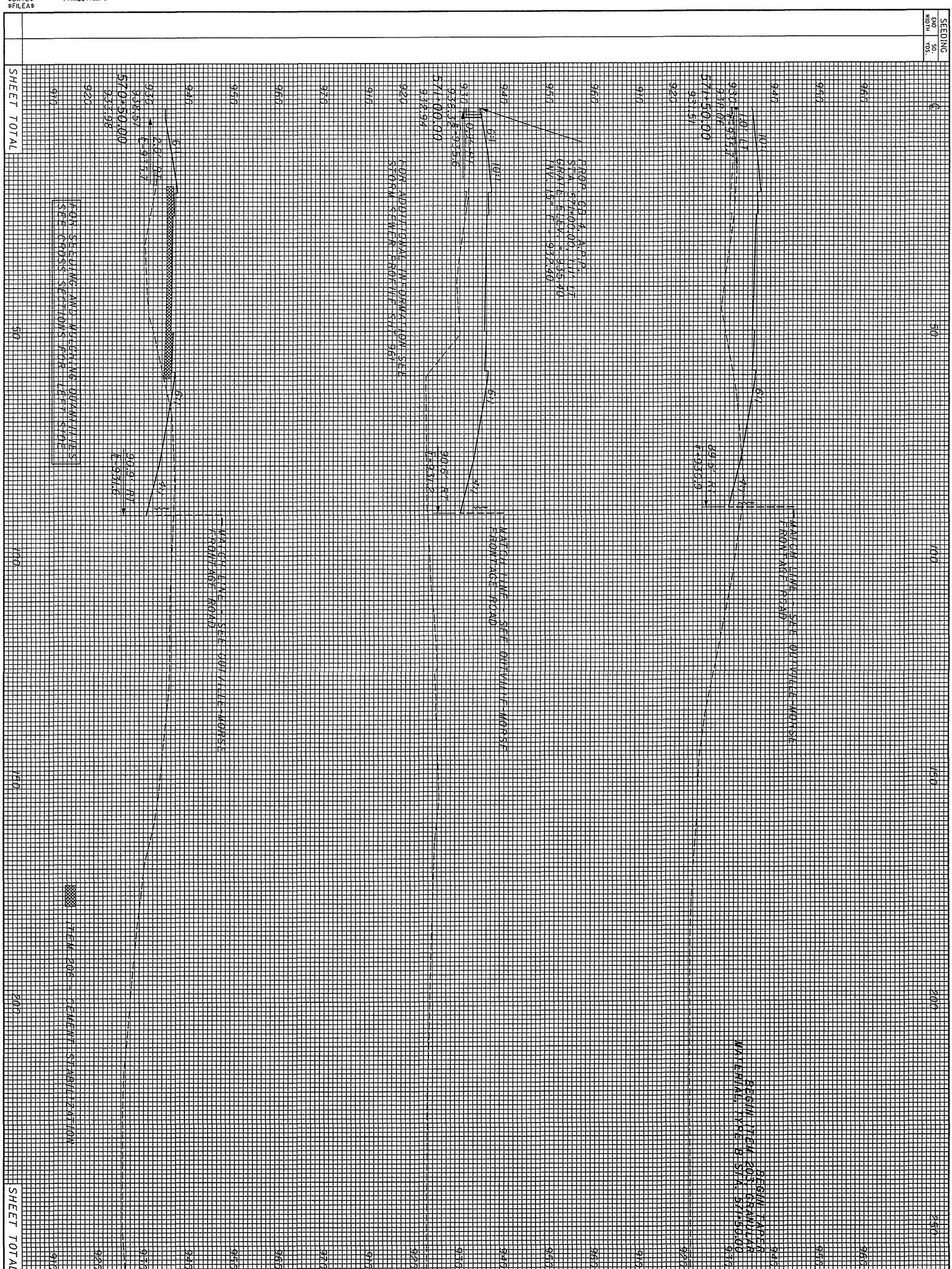
SEEDING		END AREA		VOLUME		CALCULATED JMA	CHECKED BER
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL		



						80	578	
						(0)	(0)	

SEEDING	
END WIDTH	SQ. YDS.

$USER
$DATE$
$FILEA$ $TIMESTAMP$


SEEDING
END WIDTH
SQ. YDS.
SHEET TOTAL
PROP. 24" Ø A.C.P.
STA. 571+00.00, 111.11 LT.
GRATE ELEV. = 935.40
INV. IN = 932.90
PROP. 24" Ø A.C.P.
STA. 571+00.00, 111.11 LT.
GRATE ELEV. = 935.40
INV. IN = 932.90
FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT. 96H
FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
BEGIN ITEM 608 SIDEWALK
BEGIN ITEM 203 - EMBANKMENT
ITEM 206 - EXCAVATION
ITEM 206 - EXCAVATION
ITEM 206 - EXCAVATION

SEEDING	
END WIDTH	SQ. YDS.
69	389
71	393
71	394
	1176

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

6:1

℄

938.06

PROP. 15" CONDUIT

571+50.00

931.51

PROP. 6" GAS BY OTHERS

S

PROP. CB-4, A.P.P.
STA. 571+00.00, 11.11' LT
GRATE ELEV. = 935.40
INV. 15" E = 932.40

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

6:1

938.32

571+00.00

932.94

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 961

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

6:1

938.57

570+50.00

933.98

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

960 950 940 930 920 910 970

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 570+50 TO STA. 571+50 LT

LIC-161-6.65
LIC-37-10.25

504
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
	1033 (GMB)		
0	0		
	1813 (GMB)		
0	0		
(0)	(12)		
	925 (GMB)		
		19	797
		(0)	(11)
			856 (GMB)
		19	797
		(0)	(11)

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 572+00 TO STA. 572+50 RT

LIC-161-6.65
LIC-37-10.25

505
1349

℄ 50 100 150 200 250

970 960 950 940 930 920 910

6:1 10:1 6:1 4:1
1.3' LT ITEM 203, GRANULAR MATERIAL, TYPE B
℄-935.2
937.55
572+50.00
929.00
89.8' RT
℄-930.0
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

990 980 970 960 950 940 930 920 910

6:1 10:1 6:1 4:1
1.2' LT ITEM 203, GRANULAR MATERIAL, TYPE B
℄-935.4
937.81
572+00.00
931.10
89.3' RT
℄-930.4
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL 50 100 150 200 SHEET TOTAL

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING	
END WIDTH	SQ. YDS.
70	
	386
69	
	385
	771

250 200 150 100 50 ℄

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH PERMANENT EARTHWORK QUANTITIES

970 960 950 940 930 920 910 990 980 970 960 950 940 930 920 910

MATCH LINE - SEE
C.R. 539A EXTENSION

EX. LA R/W

6:1

ITEM 203, GRANULAR
MATERIAL, TYPE B

PROP. 15" CONDUIT

937.55
572+50.00
929.00

AS PROP. 6" CAS
BY OTHERS

MATCH LINE - SEE
C.R. 539A EXTENSION

EX. LA R/W

6:1

937.81
572+00.00
931.10

PROP 15" CONDUIT

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

250 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 572+00 TO STA. 572+50 LT

LIC-161-6.65
LIC-37-10.25

506
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	63		
	1096 (GMB)		
		1	58
		2025 (GMB)	
2	0		
	1091 (GMB)		
		2	0
		1967 (GMB)	
SHEET TOTAL		4	58

CALCULATED JMA
CHECKED BER

PROF. CB-4, A.P.P.
STA. 573+50.00, 83.00' RT
GRATE ELEV. = 929.02
INV. 18" N = 925.52

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

6:1 10:1 3:1

ITEM 203, GRANULAR MATERIAL, TYPE B

937.04
573+50.00
926.04

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT. 961.

960 950 940 930 920 910

MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

6:1 10:1 6:1 4:1

ITEM 203, GRANULAR MATERIAL, TYPE B

937.30
573+00.00
920 927.42

90.3' RT
E-929.6

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

950 940 930 920 910

SHEET TOTAL

50 100 150 200

CROSS SECTIONS - S.R. 37
STA. 573+00 TO STA. 573+50 RT

LIC-161-6.65
LIC-37-10.25

507
1349

$USER
$DATE$
$FILE$

$TIMES$AMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
	63
	371
	70
	389
	760

250 200 150 100 50 ℄

960 950 940 930 920 910

960 950 940 930 920 910

PROP. INLET, NO. 3
FOR SINGLE SLOPE
BARRIER, TYPE C
STA. 573+50.00
GRATE ELEV. S = 937.64
GRATE ELEV. N = 936.33
INV. 21" S = 923.74
INV. 21" N = 923.74

PROP. CB-4, A.F.P.
STA. 573+50.00, 3.35' LT
GRATE ELEV. = 934.42
INV. 15" W = 931.42
INV. 18" S = 924.58
INV. 21" N = 924.33

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

6:1

ITEM 203, GRANULAR MATERIAL, TYPE B

1.3' LT.
℄-934.7
937.04
573+50.00
926.04

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT. 961.

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

6:1

ITEM 203, GRANULAR MATERIAL, TYPE B

1.3' LT.
℄-934.9
937.30
573+00.00
927.42

PROP. 15" CONDUIT

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

GAS

PROP. 6" GAS BY OTHERS

200 150 100 50

SHEET TOTAL SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 573+00 TO STA. 573+50 LT

LIC-161-6.65
LIC-37-10.25

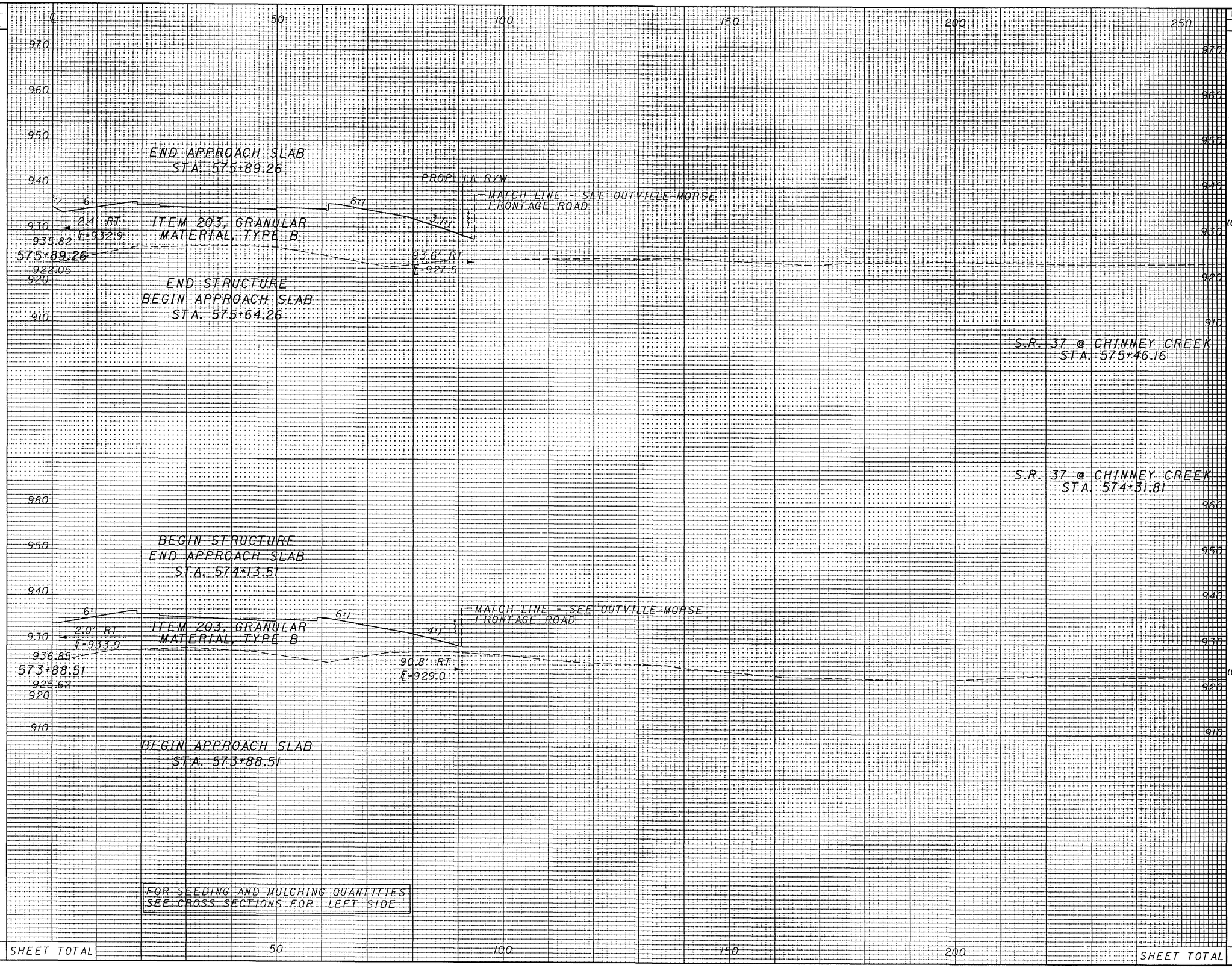
508
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING

END WIDTH	SQ. YDS.



FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	0	57		
	0 (GMB)	1652 (GMB)		
			0	72
			0 (GMB)	2084 (GMB)
S.R. 37 @ CHINNEY CREEK STA. 575+46.16	0	0		
S.R. 37 @ CHINNEY CREEK STA. 574+31.81	0	0		
			0	90
			0 (GMB)	1542 (GMB)
	0	71		
	0 (GMB)	1219 (GMB)		
			0	96
			0 (GMB)	1651 (GMB)
SHEET TOTAL			0	258

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 573+88.51 TO STA. 575+89.86 RT

LIC-161-6.65
LIC-37-10.25

509
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
57	0
0	
0	
71	0
	287
	287

250 200 150 100 50 ℄

970 960 950 940 930 920 910

(AHEAD)

S.R. 37 @ CHINNEY CREEK
STA. 575+46.16

S.R. 37 @ CHINNEY CREEK
STA. 574+31.81

END APPROACH SLAB
STA. 575+89.26

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

ITEM 203, GRANULAR MATERIAL, TYPE B

935.82
575+89.26
922.05

END STRUCTURE
BEGIN APPROACH SLAB
STA. 575+64.26

BEGIN STRUCTURE
END APPROACH SLAB
STA. 574+13.51

MATCH LINE - SEE C.R. 539A EXTENSION

EX. LA R/W

6:1

ITEM 203, GRANULAR MATERIAL, TYPE B

936.85
573+88.51
925.62

BEGIN APPROACH SLAB
STA. 573+88.51

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

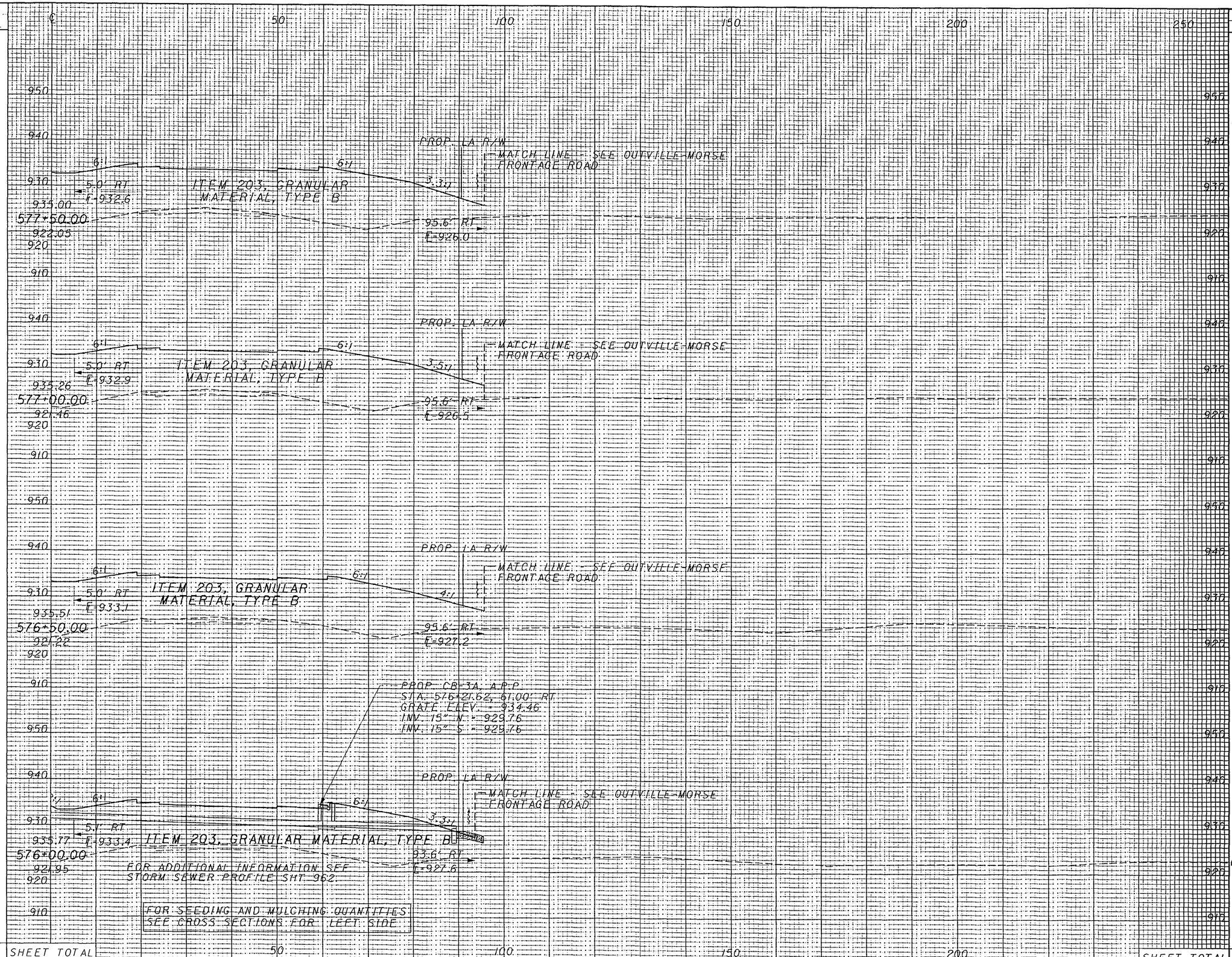
CROSS SECTIONS - S.R. 37
STA. 573+88.51 TO STA. 575+89.26 LT

LIC-161-6.65
LIC-37-10.25

510
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
	1678 (GMB)		
		0	0
			3136 (GMB)
0	0		
	1708 (GMB)		
		0	70
			3109 (GMB)
0	76		
	1650 (GMB)		
		0	123
		0 (GMB)	3065 (GMB)
0	57		
0 (GMB)	1660 (GMB)		
		0	23
		0 (GMB)	659 (GMB)
SHEET TOTAL		0	216

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 576+00 TO STA. 577+50 RT

LIC-161-6.65
LIC-37-10.25

511
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
76	
	422
76	
	421
76	
	369
57	
	68
	1280

250 200 150 100 50 ℄

950 940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

10:1 6:1

ITEM 203, GRANULAR MATERIAL, TYPE B

935.00
577+50.00
922.05

MATCH LINE SEE C.R. 539A EXTENSION

10:1 6:1

ITEM 203, GRANULAR MATERIAL, TYPE B

935.26
577+00.00
921.46

MATCH LINE - SEE C.R. 539A EXTENSION

10:1 6:1

ITEM 203, GRANULAR MATERIAL, TYPE B

935.51
576+50.00
921.22

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 962

PROP. CB-3A, A.R.P.
STA. 576+20.16, 5.00' LT
GRATE ELEV. = 934.88
INV. 15" S = 931.54

MATCH LINE SEE C.R. 539A EXTENSION

ITEM 203, GRANULAR MATERIAL, TYPE B

935.77
576+00.00
921.95

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 576+00 TO STA. 577+50 LT

LIC-161-6.65
LIC-37-10.25

512
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING

END WIDTH	SQ. YDS.

50 100 150 200 250

940 930 920 910

6:1 6:1 PROP. LA R/W 2.6:1 MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

2.0' RT
℄-930.8
933.73
580+00.00
921.86

95.6' RT
℄-923.5

Ex. 6" Gas
TO BE ABANDONED

6:1 6:1 PROP. LA R/W 2.7:1 MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

2.0' RT
℄-931.1
933.98
579+50.00
922.09

95.6' RT
℄-924.0

Ex. 6" Gas
TO BE ABANDONED

STA. 579+05 TO STA. 579+35, CULVERT NO. 11
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 978

6:1 6:1 PROP. LA R/W 2.8:1 MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

2.5' RT
℄-931.4
934.24
579+00.00
922.34

95.6' RT
℄-924.5

6" Gas
TO BE ABANDONED

6:1 6:1 PROP. LA R/W 2.9:1 MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

4.5' RT
℄-932.0
934.49
578+50.00
92.61

95.6' RT
℄-925.0

3" Gas
TO BE ABANDONED

6:1 6:1 6:1 PROP. LA R/W 3:1 MATCH LINE - SEE OUTVILLE MORSE FRONTAGE ROAD

5.4' RT
℄-932.4
934.75
578+00.00
922.02

ITEM 203, GRANULAR MATERIAL, TYPE B

95.6' RT
℄-925.5

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL	
0	1513			
		0	2808	
0	1519			
		0	2859	
0	1569			
		0	2980	
0	1649			
	0 (GMB)			END TAPER END ITEM 203, GRANULAR MATERIAL, TYPE B STA. 578+50.00
		0	1527	
	1554 (GMB)			
0	0			END FULL DEPTH/BEGIN TAPER ITEM 203, GRANULAR MATERIAL, TYPE B STA. 578+00.00
	1678 (GMB)			
		0	0	
			3108 (GMB)	
		0	10174	SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 578+00 TO STA. 580+00 RT

LIC-161-6.65
LIC-37-10.25

513
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
77	425
76	424
76	424
76	423
76	422
	2118

250 200 150 100 50 ℄

940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

933.73
580+00.00
921.86

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

933.98
579+50.00
922.09

STA. 579+05 TO STA. 579+35, CULVERT NO. 11
FOR ADITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT. 97.8

MATCH LINE - SEE C.R. 539A EXTENSION

10:1 6:1

934.24
579+00.00
922.34

MATCH LINE - SEE C.R. 539A EXTENSION

10:1 6:1

934.49
578+50.00
921.61

MATCH LINE - SEE C.R. 539A EXTENSION

10:1

ITEM 203, GRANULAR MATERIAL, TYPE B

934.75
578+00.00
922.02

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 578+00 TO STA. 580+00 LT

LIC-161-6.65
LIC-37-10.25

514
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	1216		
		0	2315
0	1285		
		0	2464
0	1377		
		0	2595
0	1426		
		0	2689
0	1478		
		0	2770
		0	12833

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 580+50 TO STA. 582+50 RT

LIC-161-6.65
LIC-37-10.25

515
1349

℄ 50 100 150 200 250

940 930 920 910

PROP. LA R/W
EX. LA R/W
6:1
2.5:1
2.0' RT
℄-929.5
932.45
582+50.00
923.20
95.6' RT
℄-921.8
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD

PROP. LA R/W
EX. LA R/W
6:1
2.5:1
2.0' RT
℄-929.8
932.71
582+00.00
922.60
95.8' RT
℄-921.9
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
TO BE ABAN

PROP. LA R/W
6:1
2.5:1
2.0' RT
℄-930.1
932.96
581+50.00
921.66
95.6' RT
℄-922.1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
TO BE ABANDONED

PROP. LA R/W
6:1
2.5:1
2.0' RT
℄-930.3
933.22
581+00.00
921.09
95.6' RT
℄-922.6
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
6" Ggs
TO BE ABANDONED

PROP. LA R/W
6:1
2.5:1
2.0' RT
℄-930.6
933.41
580+50.00
921.76
95.6' RT
℄-923.0
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
6" Ggs
TO BE ABANDONED

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
77	
	426
77	
	427
77	
	426
77	
	426
77	
	425
	2130

250 200 150 100 50 ℄

940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

932.45
582+50.00
923.20

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

932.71
582+00.00
922.60

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

932.96
581+50.00
921.66

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

933.22
581+00.00
921.09

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

933.47
580+50.00
921.76

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50

SHEET TOTAL SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 580+50 TO STA. 582+50 LT

LIC-161-6.65
LIC-37-10.25

516
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
28	1151		
		88	2188
67	1212		
		66	2160
4	1121		
		4	2148
0	1199		
		0	2195
0	1172		
		0	2211
		158	10902

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 583+00 TO STA. 585+00 RT

LIC-161-6.65
LIC-37-10.25

517
1349

PROP. LA R/W
EX. LA R/W
6:1
3:1
3:1
2.0' RT
E=928.3
931.48
585+00.00
921.43
89.9' RT
E=924.0

PROP. LA R/W
6:1
EX. LA R/W
3:1
3:1
2.0' RT
E=928.5
931.43
584+50.00
921.83
100.0' RT
E=920.9

PROP. LA R/W
6:1
EX. LA R/W
2.5:1
3:1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
2.0' RT
E=928.8
931.69
584+00.00
922.53
95.0' RT
E=921.2

PROP. LA R/W
6:1
EX. LA R/W
2.5:1
3:1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
2.0' RT
E=929.0
931.94
583+50.00
922.50
96.0' RT
E=921.5

PROP. CB-4, A.P.P.
STA. 583+00.00
GRATE ELEV. = 929.09
INV. 15" N = 923.88

PROP. LA R/W
6:1
EX. LA R/W
2.5:1
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE ROAD
2.0' RT
E=929.3
932.20
583+00.00
923.15
94.7' RT
E=921.7

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 962.

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
89	
	542
106	
	506
76	
	425
77	
	425
76	
	424
	2322

250 200 150 100 50 ℄

940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

6:1

931.18
585+00.00
921.43

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

931.43
584+50.00
921.83

STA 584+50, CULVERT No. 12, FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 979.

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

931.69
584+00.00
922.53

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

931.94
583+50.00
922.50

PROP. CB 4, A.P.P.
STA. 583+00.00
GRATE ELEV. = 929.09
INV. 15" N = 923.88

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

932.20
583+00.00
923.15

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 962.

250 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 583+00 TO STA. 585+00 LT

LIC-161-6.65
LIC-37-10.25

5|8
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
57	433
99	554
101	516
85	492
92	502
	2497

SHEET TOTAL

250 200 150 100 50 ℄

MATCH LINE - SEE C.R. 539A EXTENSION →

940 930 920 910

929.90
587+50.00
921.70

MATCH LINE - SEE C.R. 539A EXTENSION →

930.16
587+00.00
921.83

MATCH LINE - SEE C.R. 539A EXTENSION →

930.41
586+50.00
921.36

MATCH LINE - SEE C.R. 539A EXTENSION →

930.67
586+00.00
922.11

MATCH LINE - SEE C.R. 539A EXTENSION →

930.92
585+50.00
922.14

6:1

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 585+50 TO STA. 587+50 LT

LIC-161-6.65
LIC-37-10.25

520
1349

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SEEDING	
END WIDTH	SQ. YDS.

ITEM 206 - CEMENT STABILIZATION

ITEM 203 - GRANULAR MATERIAL, TYPE D

℄ 50 100 150 200 250

940 930 920 910

6:1 2.0' RT 6:1 3:1 EX. LA R/W PROP. LA R/W

℄ E=925.8 928.71 590+00.00 922.69

6:1 2.0' RT 6:1 3:1 EX. LA R/W PROP. LA R/W

℄ E=926.0 928.91 589+50.00 922.21

STA. 589+29, CULVERT NO. 22.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 989

6:1 2.0' RT 6:1 3:1 EX. LA R/W PROP. LA R/W

℄ E=926.2 929.14 589+00.00 922.01

6:1 2.0' RT 6:1 EX. LA R/W PROP. LA R/W

℄ E=926.5 929.39 588+50.00 921.98

6:1 2.0' RT 6:1 EX. LA R/W PROP. LA R/W

℄ E=926.7 929.65 588+00.00 921.64

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	840		
		0	1635
0	926		
		0	1633
0	837		
		0	1579
0	868		
		0	1678
0	945		
		0	1794
		0	8319

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 588+00 TO STA. 590+00 RT

LIC-161-6.65
LIC-37-10.25

521
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
85	486
90	447
71	363
59	321
56	315
	1932 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

940 930 920 910

MATCH LINE - SEE C.R. 539A EXTENSION—

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

6:1

928.71
590+00.00
922.69

MATCH LINE - SEE C.R. 539A EXTENSION—

6:1

928.91
589+50.00
922.21

STA. 589+29. CULVERT NO. 22. FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 989

MATCH LINE - SEE C.R. 539A EXTENSION—

6:1

929.14
589+00.00
922.01

MATCH LINE - SEE C.R. 539A EXTENSION—

6:1

929.39
588+50.00
921.98

MATCH LINE - SEE C.R. 539A EXTENSION—

6:1

929.65
588+00.00
921.64

250 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 588+00 TO STA. 590+00 LT

LIC-161-6.65
LIC-37-10.25

522
1349

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		50					
		100					
		150					
		200					
		250					
		SHEET TOTAL			0	3951	

CALCULATED JMA
CHECKED BER

ITEM 804 - CEMENT STABILIZATION

940
930
920
910
900

EX. LA R/W
PROP. LA R/W

6:1
2.0' RT
℄=925.3
928.25
591+50.00
923.74
6:1
3:1

0 599

PROP. CB-4, A.P.P.
STA. 591+00.00
GRATE ELEV. = 925.25
INV. 15" N = 920.06
6:1
928.38
591+00.00
923.48
6:1
3:1

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 962

EX. LA R/W
PROP. LA R/W

0 659

0 1309

6:1
2.0' RT
℄=925.6
928.53
590+50.00
922.99
6:1
3:1

EX. LA R/W
PROP. LA R/W

0 755

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

0 1476

CROSS SECTIONS - S.R. 37
STA. 590+50 TO STA. 591+50 RT

LIC-161-6.65
LIC-37-10.25

523
1349

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SEEDING	
END WIDTH	SQ. YDS.
	72
	404
	74
	427
	80
	460
1291	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 590+50 TO STA. 591+50 LT

LIC-161-6.65
LIC-37-10.25

524
1349

250 200 150 100 50 ℄

940 930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

928.25
591+50.00
923.74

PROP. CB-4, A.P.P.
STA. 591+00.00
GRATE ELEV. = 925.25
INV. 15" N = 920.06

PROP. INLET, NO. 3
FOR SINGLE SLOPE
BARRIER, TYPE A
STA. 591+00.00
GRATE ELEV. S = 927.73
GRATE ELEV. N = 927.73
INV. 15" S = 918.50
INV. 18" N = 918.25

MATCH LINE - SEE C.R. 539A EXTENSION

928.38
591+00.00
923.48

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 962

MATCH LINE - SEE C.R. 539A EXTENSION

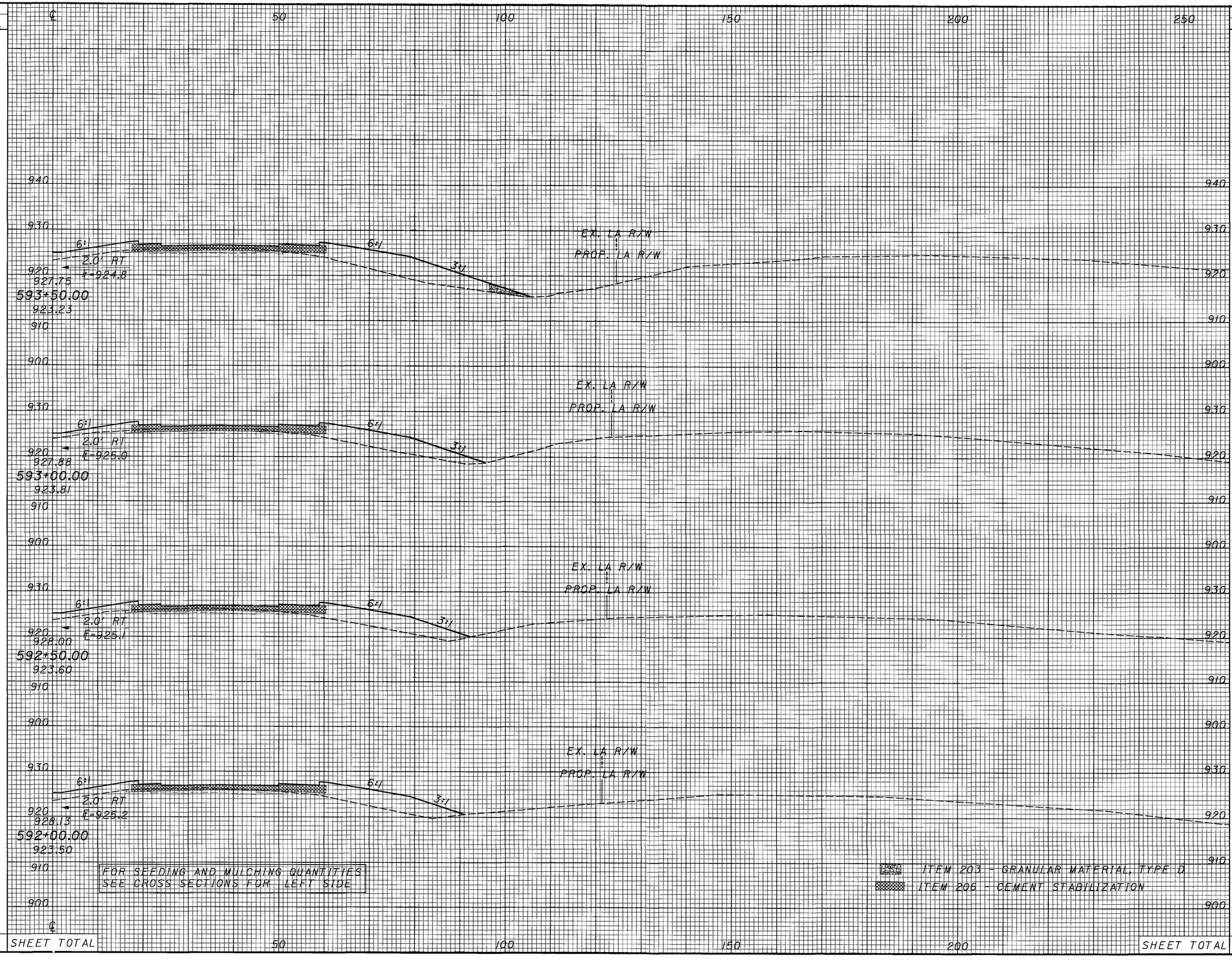
928.53
590+50.00
922.99

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL



		0	583		
				0	1080
		0	583		
				0	1101
		0	606		
				0	1123
		0	607		
				0	1117
SHEET TOTAL				0	4421

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 592+00 TO STA. 593+50 RT

LIC-161-6.65
LIC-37-10.25

525
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
89	
	458
76	
	419
75	
	411
73	
	403
	1691

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

940 930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.75
593+50.00
923.23

EX. 10" GAS

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.88
593+00.00
923.81

EX. 10" GAS

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

928.00
592+50.00
923.60

EX. 10" GAS

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

928.13
592+00.00
923.50

EX. 10" GAS

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

200 150 100 50

SHEET TOTAL

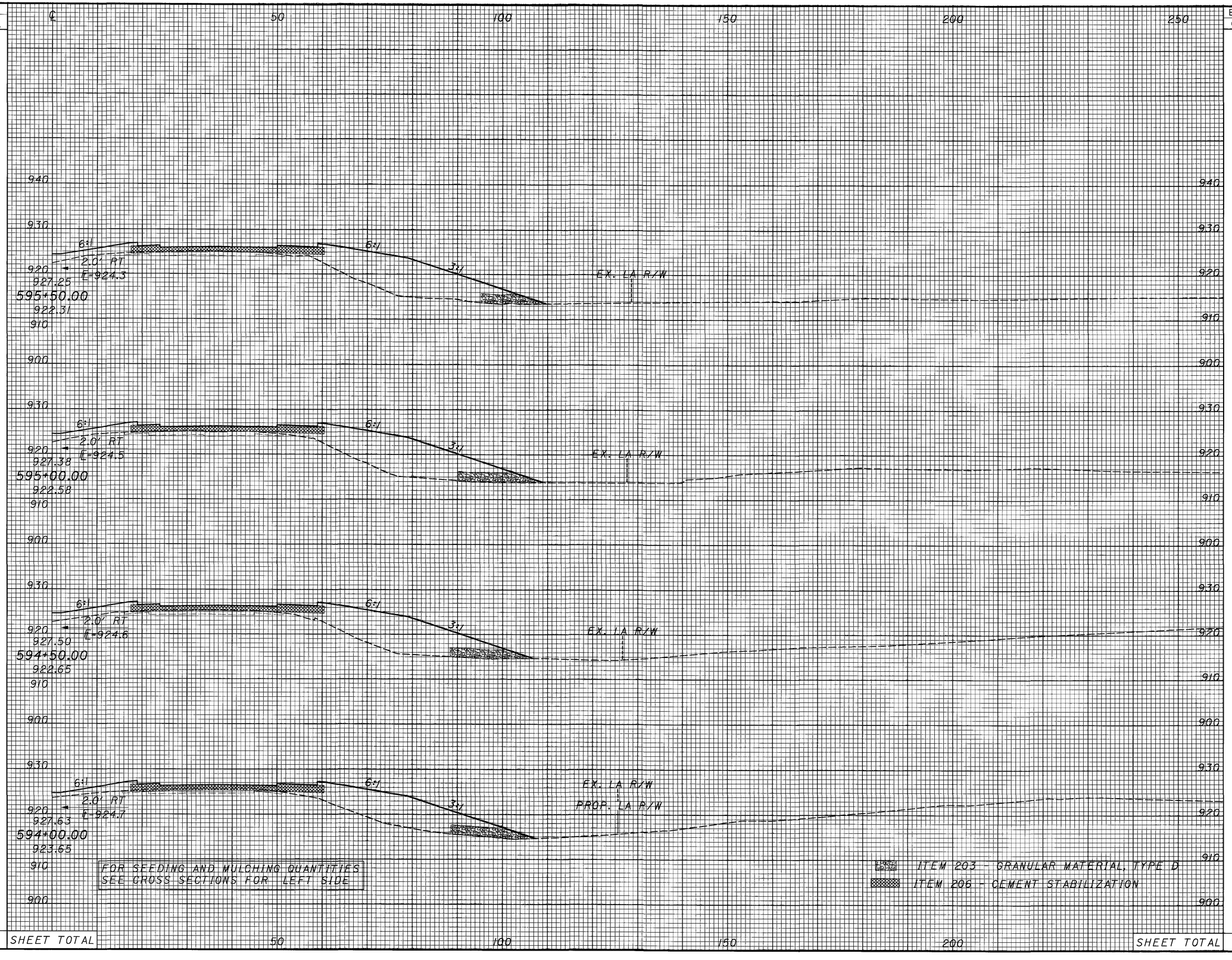
CROSS SECTIONS - S.R. 37
STA. 592+00 TO STA. 593+50 LT

LIC-161-6.65
LIC-37-10.25

526
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	652		
		0	1214
0	659		
		0	1217
0	656		
		0	1180
0	619		
		0	1113
		0	4724

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 594+00 TO STA. 595+50 RT

LIC-161-6.65
LIC-37-10.25

527
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
93	514
92	505
90	501
90	497
	2017 SHEET TOTAL

250 200 150 100 50 ℄

940 930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.25
595+50.00
922.31

EX. 10" GAS

930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.38
595+00.00
922.58

EX. 10" GAS

930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.50
594+50.00
922.65

EX. 10" GAS

930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.63
594+00.00
923.65

EX. 10" GAS

930 920 910 900

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 594+00 TO STA. 595+50 LT

LIC-161-6.65
LIC-37-10.25

528
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	626		
		0	1142
0	607		
		0	1142
0	627		
		0	1163
0	629		
		0	1186
		0	4633

SHEET TOTAL

CALCULATED JMA

CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 596+00 TO STA. 597+50 RT

LIC-161-6.65
LIC-37-10.25

529
1349

50 100 150 200

940 930 920 910 900

6:1 6:1 3:1 2.0' RT

EX. LA R/W

926.75 E=923.8
597+50.00
922.13

926.88 E=924.0
597+00.00
922.13

927.00 E=924.1
596+50.00
922.25

927.13 E=924.2
596+00.00
922.27

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 203 - GRANULAR MATERIAL, TYPE D

ITEM 206 - CEMENT STABILIZATION

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SEEDING	
END WIDTH	SQ. YDS.
117	630
110	563
93	516
93	517
	2226

250 200 150 100 50 ℄

END AREA		VOLUME	
CUT	FILL	CUT	FILL

940 930 920 910 900

MATCH LINE - SEE C.R. 539A EXTENSION

EX. 10" GAS

6:1

82.8' LT
℄-922.8

926.75
597+50.00
922.13

MATCH LINE - SEE C.R. 539A EXTENSION

12:1

6:1

75.4' LT
℄-925.1

926.88
597+00.00
922.13

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.00
596+50.00
922.25

MATCH LINE - SEE C.R. 539A EXTENSION

6:1

927.13
596+00.00
922.27

EX. 10" GAS

EX. 10" GAS

EX. 10" GAS

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

200 150 100 50

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 596+00 TO STA. 597+50 LT

LIC-161-6.65
LIC-37-10.25

530
1349

tduffney
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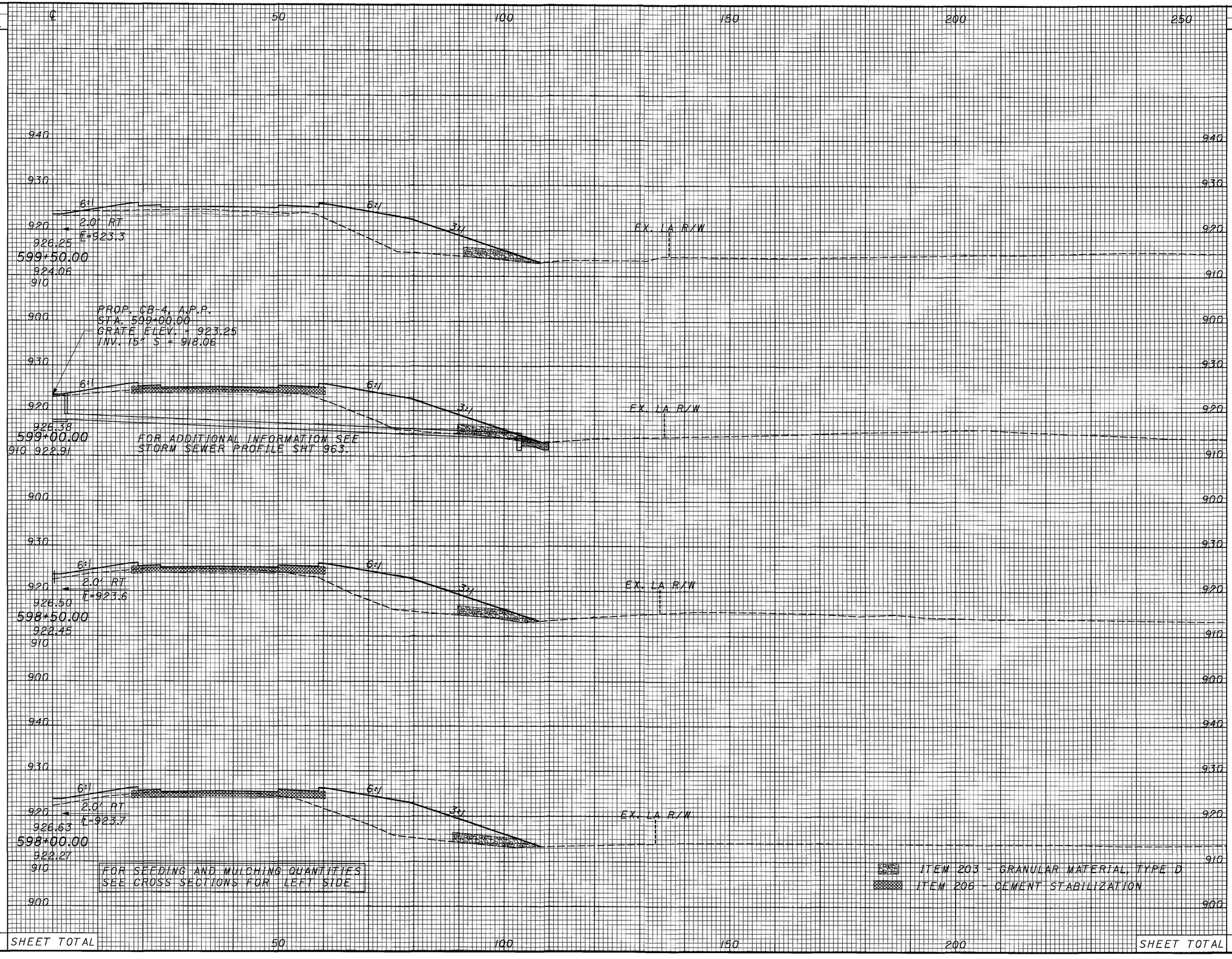
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
46	392		
		49	923
7	605		
		9	1142
2	629		
		2	1174
0	639		
		0	1172
		60	4411

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 598+00 TO STA. 599+50 RT

LIC-161-6.65
LIC-37-10.25



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SEEDING	
END WIDTH	SQ. YDS.
147	
	767
129	
	702
124	
	676
119	
	657
	2802

250 200 150 100 50 ℄

EX. R/W

EX. 10" GAS

95.8' LT
E=917.1

PROP. CB-4, A.P.P.
STA. 599+00.00
GRATE ELEV. = 923.25
INV. 15" S = 918.06

MATCH LINE - SEE C.R. 539A EXTENSION

92.7' LT
E=918.5

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 963.

MATCH LINE - SEE C.R. 539A EXTENSION

91.2' LT
E=919.2

926.25
599+50.00
924.06

926.38
599+00.00
922.91

926.50
598+50.00
922.45

MATCH LINE - SEE C.R. 539A EXTENSION

86.1' LT
E=921.0

926.63
598+00.00
922.27

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

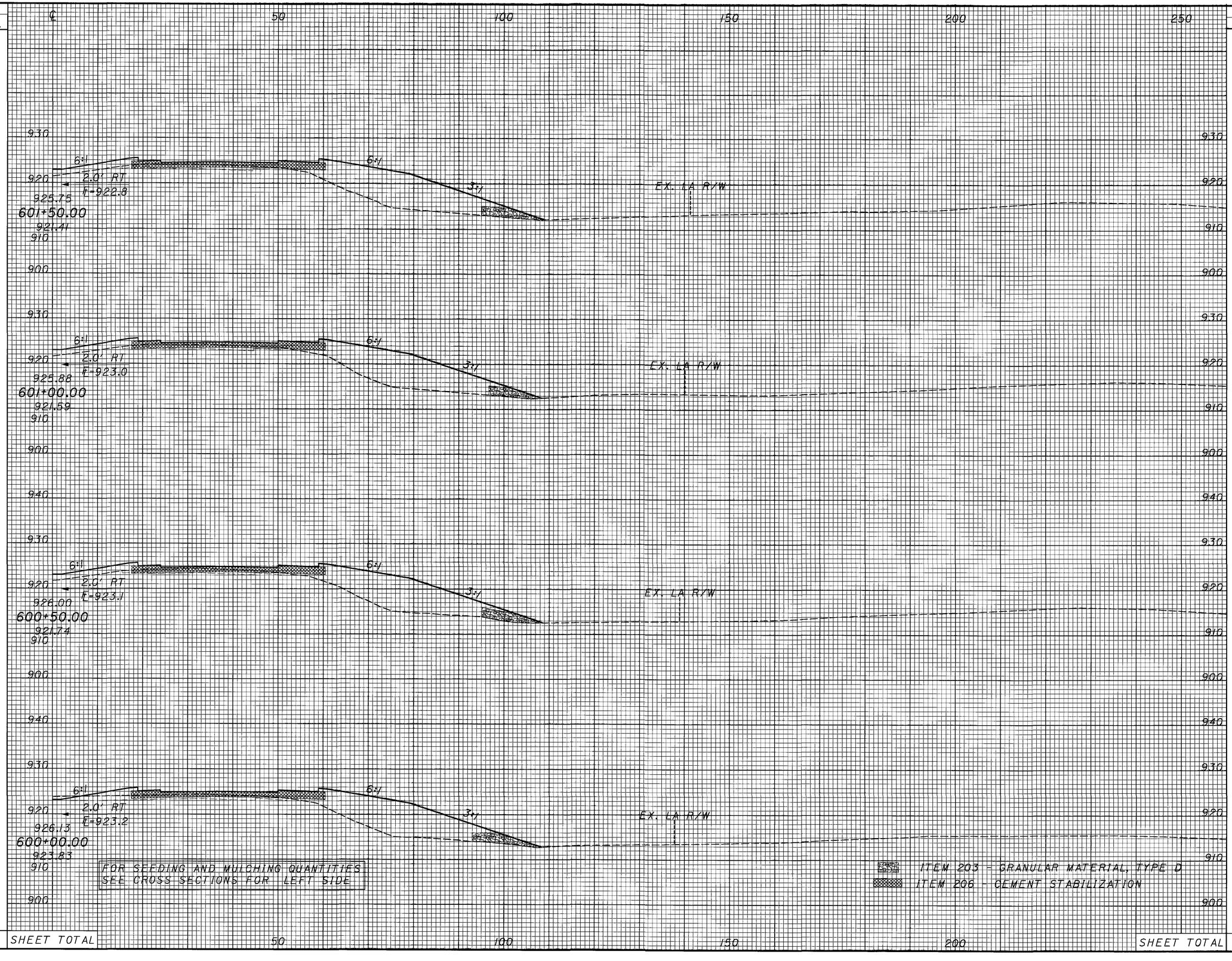
CROSS SECTIONS - S.R. 37
STA. 598+00 TO STA. 599+50 LT

LIC-161-6.65
LIC-37-10.25

532
1349

tduffney
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SEEDING		END AREA		VOLUME		CALCULATED JMA	CHECKED BER
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL		
		19	943				
				67	1700		
		54	892				
				121	1477		
		77	703				
				247	961		
		190	335				
				219	673		
SHEET TOTAL				654	4811		



CROSS SECTIONS - S.R. 37
STA. 600+00 TO STA. 601+50 RT

LIC-161-6.65
LIC-37-10.25

533
1349

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SEEDING	
END WIDTH	SQ. YDS.
159	944
181	953
162	900
162	859
	3656 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EX. LA R/W
6:1
3:1
6:1
925.75
601+50.00
921.41
106.4' LT
E=913.1

EX. LA R/W
6:1
3:1
6:1
925.88
601+00.00
921.59
104.2' LT
E=913.9

EX. R/W
EX. LA R/W
6:1
3:1
3:1
6:1
926.00
600+50.00
921.74
100.1' LT
E=915.4

EX. R/W
EX. LA R/W
6:1
3:1
3:1
6:1
926.13
600+00.00
923.83
98.1' LT
E=916.2

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

200 150 100 50 SHEET TOTAL

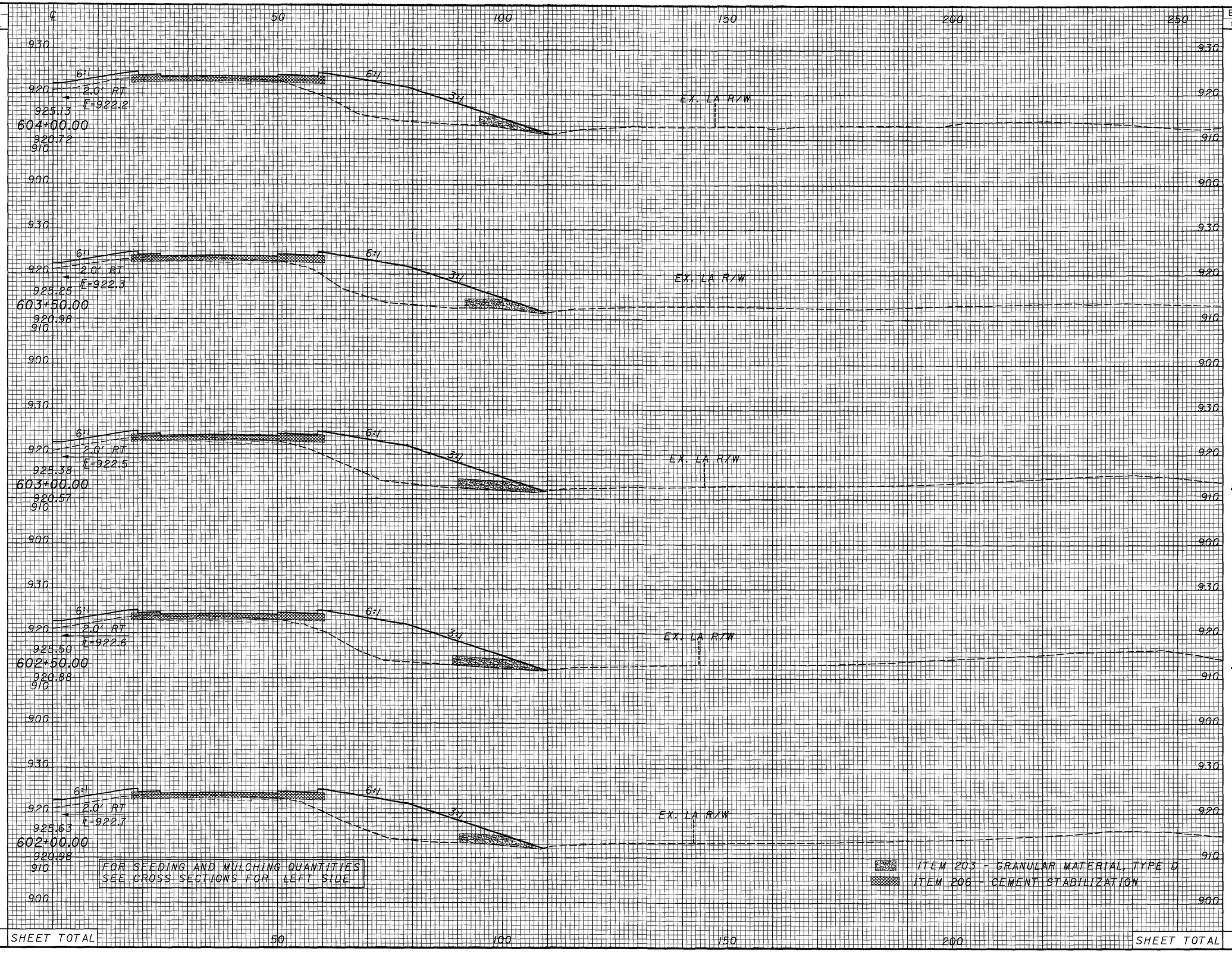
CROSS SECTIONS - S.R. 37
STA. 600+00 TO STA. 601+50 LT

LIC-161-6.65
LIC-37-10.25

534
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		0	751		
				0	1590
		0	966		
				24	1786
		26	963		
				49	1811
		27	993		
				42	1837
		19	991		
				35	1791
SHEET TOTAL				150	8815



CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 602+00 TO STA. 604+00 RT

LIC-161-6.65
LIC-37-10.25

535
349

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SEEDING	
END WIDTH	SQ. YDS.
123	732
141	837
160	898
163	893
159	882
	4242 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EX. LA R/W
925.13
604+00.00
920.72

EX. R/W
EX. LA R/W
925.25
603+50.00
920.98

EX. R/W
EX. R/W EX. LA R/W
107.3' LT
E-912.4
925.38
603+00.00
920.57

EX. R/W
EX. R/W
EX. LA R/W
107.0' LT
E-912.6
925.50
602+50.00
920.88

EX. LA R/W
106.7' LT
E-912.8
925.63
602+00.00
920.98

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL

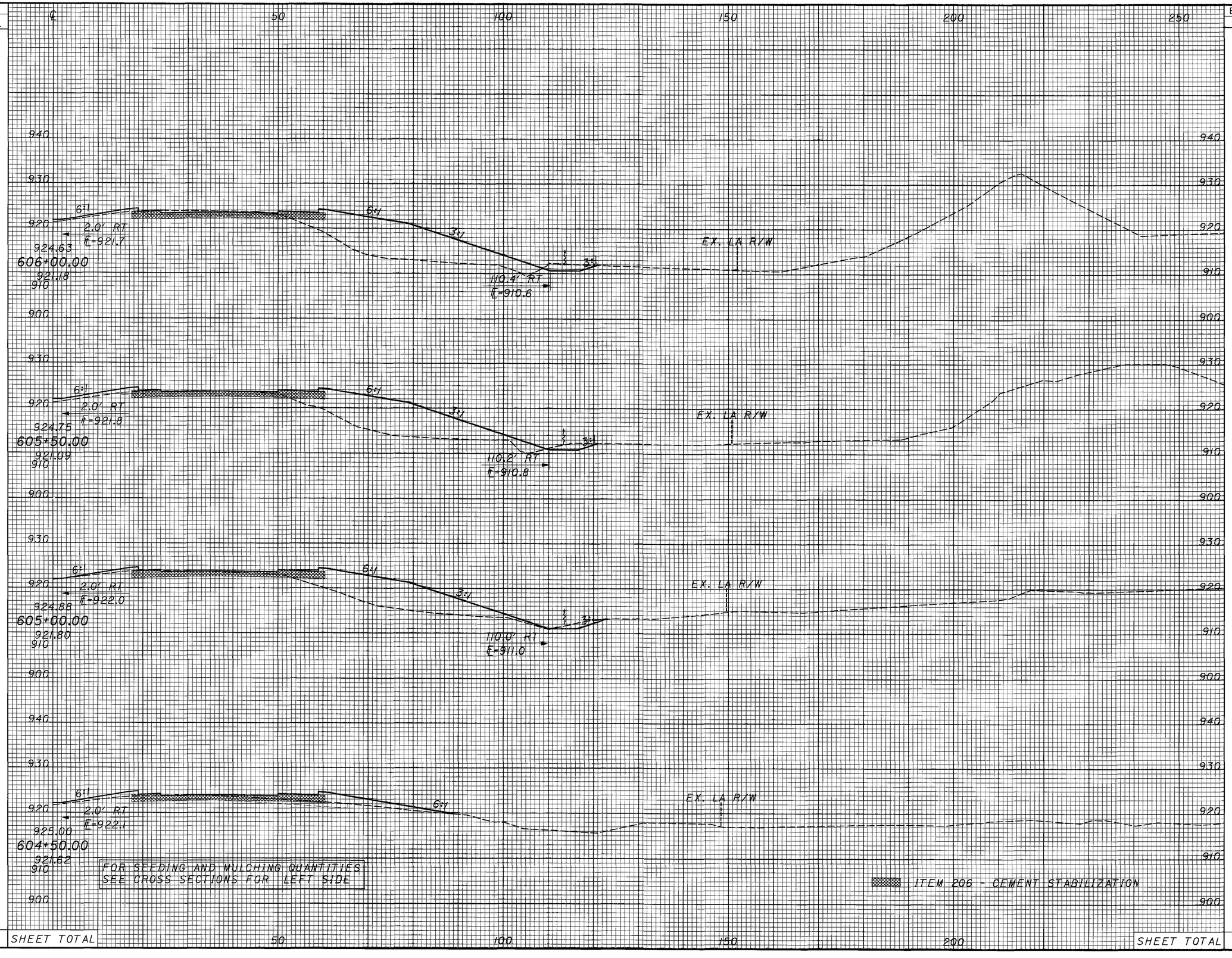
CROSS SECTIONS - S.R. 37
STA. 602+00 TO STA. 604+00 LT

LIC-161-6.65
LIC-37-10.25

536
1349

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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
23	594		
		32	1087
12	580		
		20	1033
10	536		
		10	881
1	416		
		1	1081
		63	4082

SHEET TOTAL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 604+50 TO STA. 606+00 RT

LIC-161-6.65
LIC-37-10.25

537
1349

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SEEDING	
END WIDTH	SQ. YDS.
126	
	703
127	
	716
131	
	632
97	
	610
	2661

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

940 930 920 910 900

EX. 10" GAS

EX. LA R/W 2:1 6:1

924.63
606+00.00
921.18

EX. LA R/W 2:1 6:1

924.75
605+50.00
921.09

EX. LA R/W 2:1 6:1

924.88
605+00.00
921.80

EX. LA R/W 2:1 6:1

925.00
604+50.00
921.62

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 604+50 TO STA. 606+00 LT

LIC-161-6.65
LIC-37-10.25

538
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

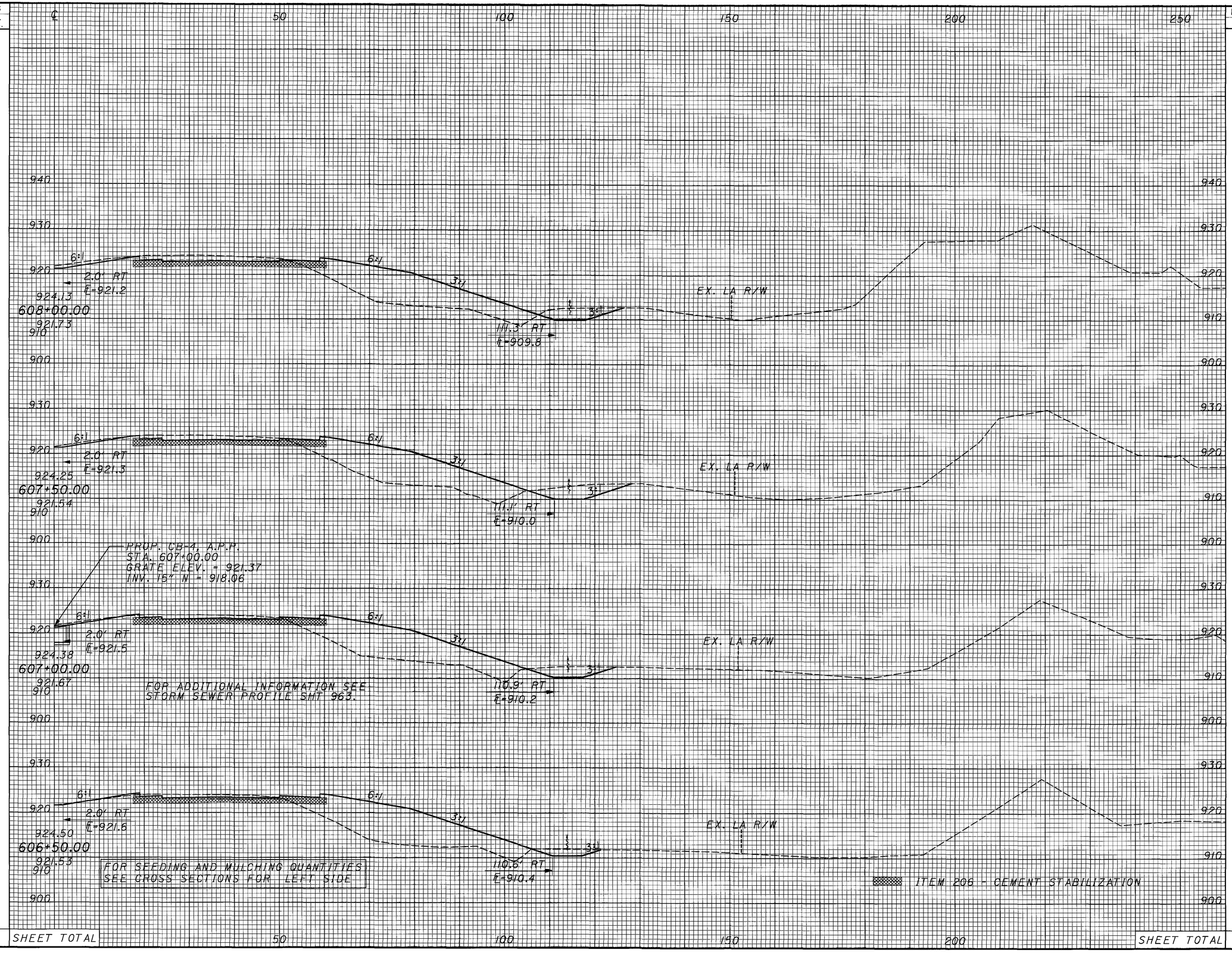
END AREA		VOLUME	
CUT	FILL	CUT	FILL
81	625		
		148	1106
78	570		
		127	1036
60	549		
		86	1038
33	572		
		52	1080
		413	4260

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 606+50 TO STA. 608+00 RT

LIC-161-6.65
LIC-37-10.25

539
1349



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SEEDING	
END WIDTH	SQ. YDS.
148	781
133	729
129	707
125	698
	2915

250 200 150 100 50 ℄

EX. LA R/W

EX. 10" GAS

EX. 10" GAS

EX. 10" GAS

EX. 10" GAS

3:1 6:1

924.13
608+00.00
921.73

2:1 6:1

924.25
607+50.00
921.54

PROP. CB-4, A.P.P.
STA. 607+00.00
GRATE ELEV. = 921.37
INV. 15" N = 918.06

2:1 6:1

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 963.

924.38
607+00.00
921.67

2:1 6:1

924.50
606+50.00
921.53

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 606+50 TO STA. 608+00 LT

LIC-161-6.65
LIC-37-10.25

540
1349

SHEET TOTAL 200 150 100 50 SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
124	496		
		214	940
107	519		
		183	976
91	536		
		140	1002
60	547		
		112	1026
60	562		
		131	1098
		780	5042

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 608+50 TO STA. 610+50 RT

LIC-161-6.65
LIC-37-10.25

541
1349

610+50.00
922.57
923.50
2.0' RT
E=920.6

610+00.00
922.24
923.63
2.0' RT
E=920.7

609+50.00
922.19
923.75
2.0' RT
E=920.8

609+00.00
921.05
923.88
2.0' RT
E=921.0

608+50.00
921.99
924.00
2.0' RT
E=921.1

6:1
3:1
EX. LA R/W

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

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SEEDING END WIDTH	SEEDING SQ. YDS.
119	
	664
120	
	667
120	
	665
119	
	667
121	
	747
	3410

SHEET TOTAL

250 200 150 100 50 ℄

930 920 910 900

EX. LA R/W

3:1 6:1 6:1

923.50
610+50.00
922.57

923.63
610+00.00
922.24

923.75
609+50.00
922.19

923.88
609+00.00
921.05

924.00
608+50.00
921.99

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 608+50 TO STA. 610+50 LT

LIC-161-6.65
LIC-37-10.25

542
1349

tduffney
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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		612+50.00	185	340		
		612+00.00	168	373	327	660
		611+50.00	160	484	304	794
		611+00.00	142	467	279	881
					246	892
		SHEET TOTAL			1156	3227

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 611+00 TO STA. 612+50 RT

LIC-161-6.65
LIC-37-10.25

543
1349

℄ 50 100 150 200 250

940 930 920 910 900

EX. LA R/W

6:1 6:1 3:1

2.0' RT
E=920.1
923.00
612+50.00 910
922.83

2.0' RT
E=920.2
923.13
612+00.00 910
922.87

2.0' RT
E=920.3
923.25
611+50.00 910
922.90

2.0' RT
E=920.5
923.38
611+00.00 910
922.71

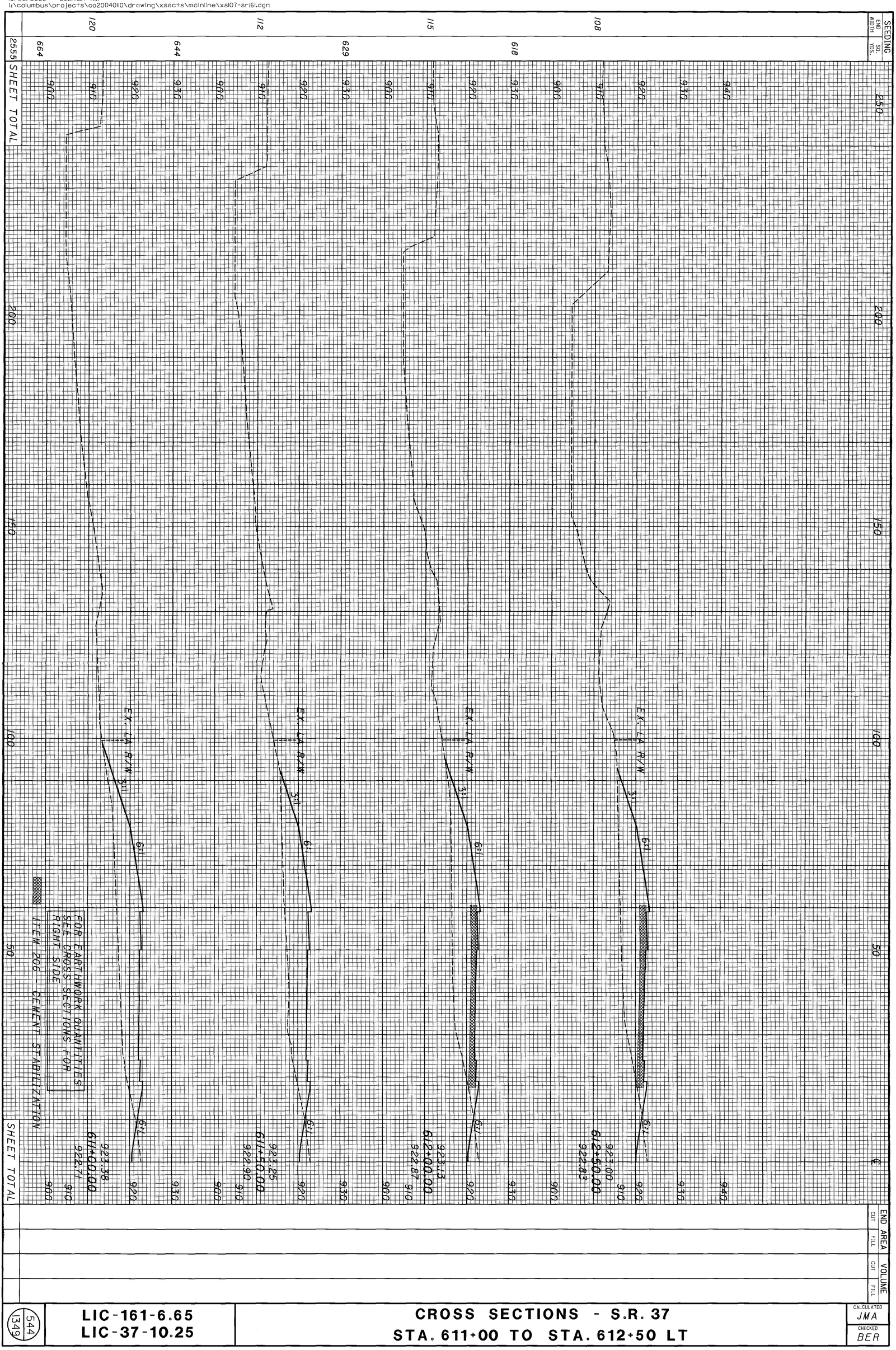
FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

tduffney
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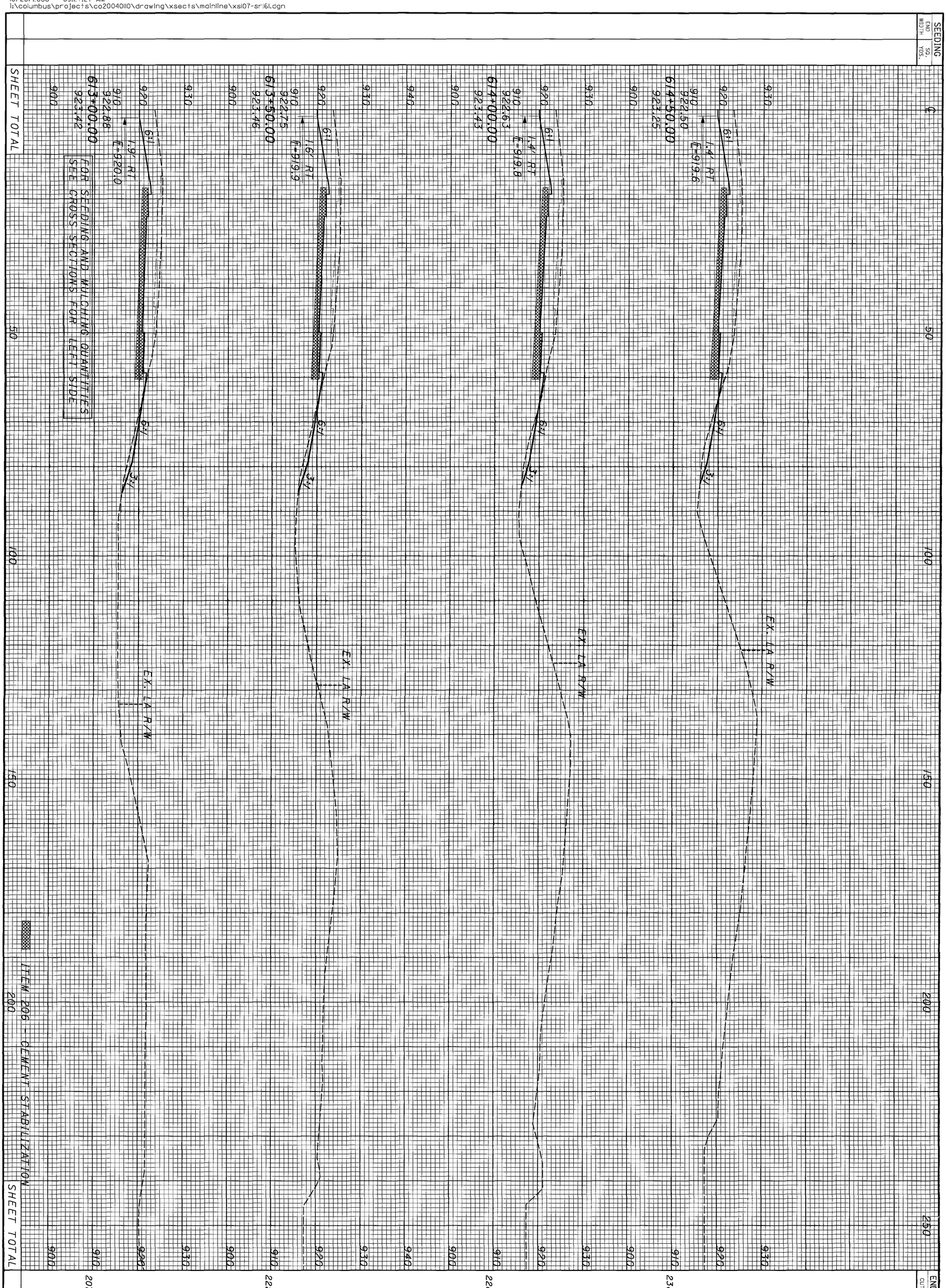
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544 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - S.R. 37 STA. 611+00 TO STA. 612+50 LT

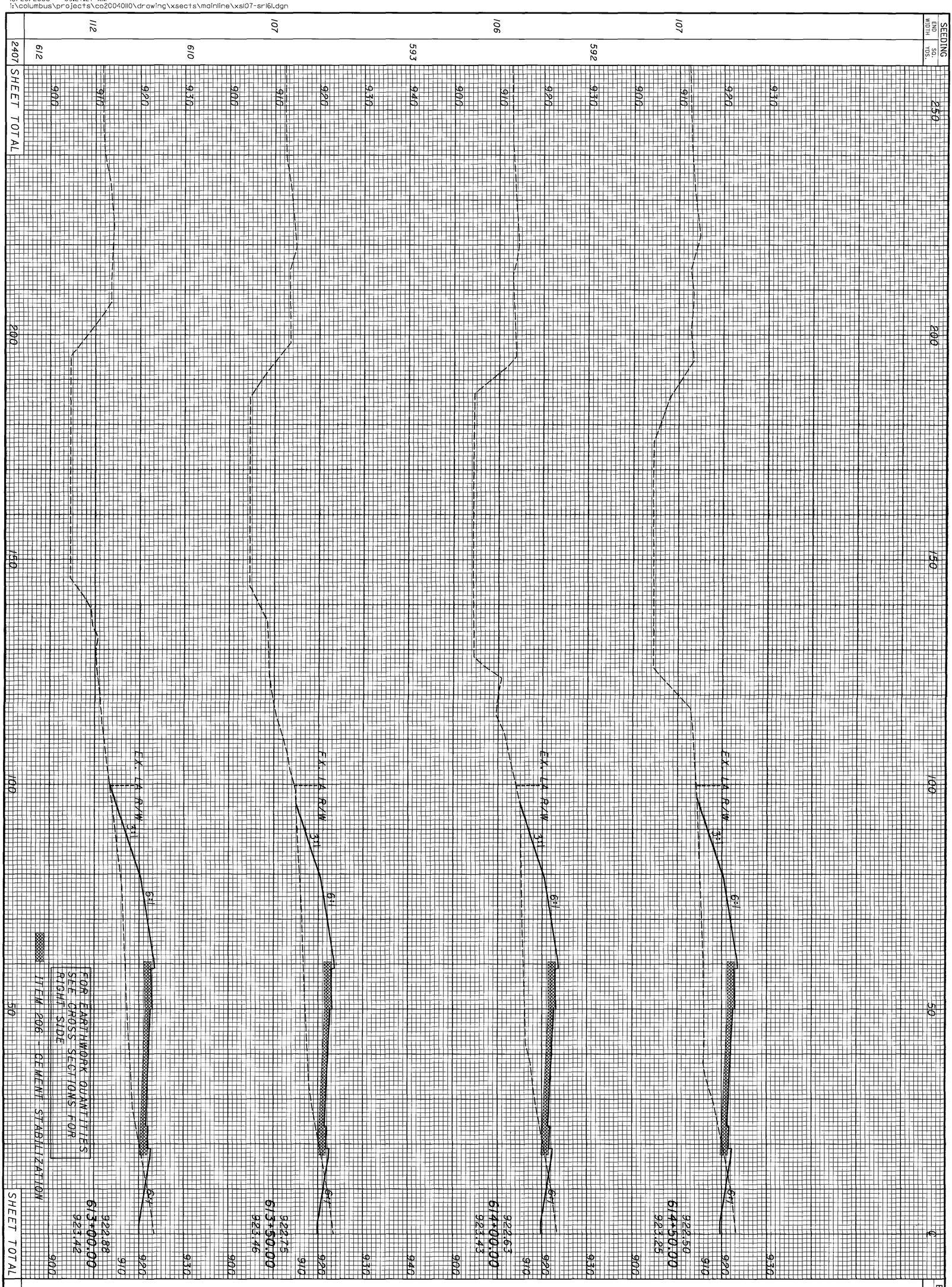
CALCULATED JMA
CHECKED BER

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545 / 1349	LIC-161-6.65 LIC-37-10.25
CROSS SECTIONS - S.R. 37 STA. 613+00 TO STA. 614+50 RT	CALCULATED JMA CHECKED BER

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546
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 613+00 TO STA. 614+50 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

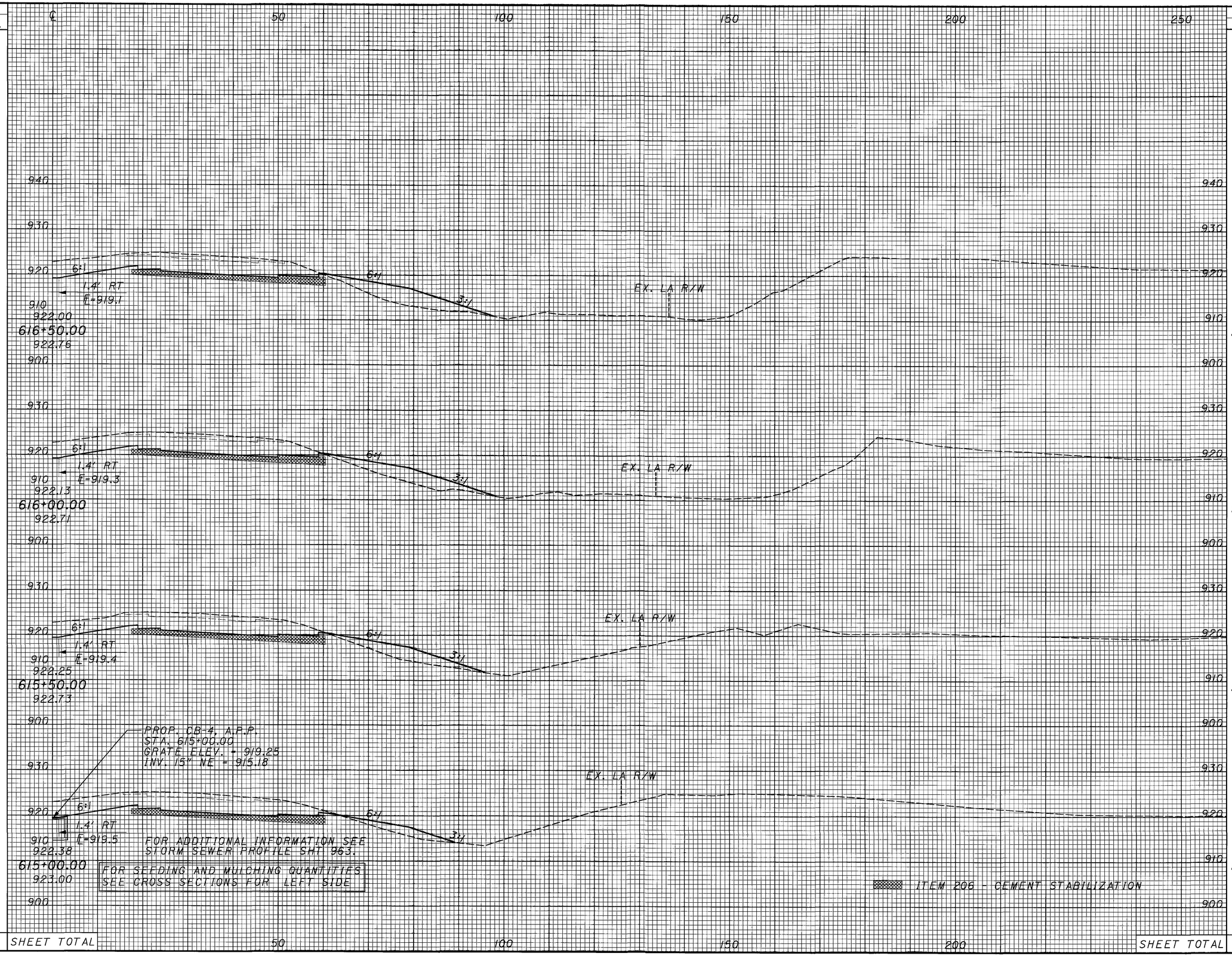
END AREA		VOLUME	
CUT	FILL	CUT	FILL
235	420		
		436	765
236	406		
		433	726
232	378		
		435	670
238	346		
		441	638
		1745	2799

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 615+00 TO STA. 616+50 RT

LIC-161-6.65
LIC-37-10.25

547
1349



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SEEDING	
END WIDTH	SQ. YDS.
121	
	680
124	
	679
120	
	654
115	
	616
	2629

250 200 150 100 50 ℄

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

940 930 920 910 900

EX. LA R/W 3:1 6:1 6:1

922.00
616+50.00
922.76

940 930 920 910 900

EX. LA R/W 3:1 6:1 6:1

922.13
616+00.00
922.71

940 930 920 910 900

EX. LA R/W 3:1 6:1 6:1

922.25
615+50.00
922.73

PROP. CB-4, A.P.P.
STA. 615+00.00
GRATE ELEV. = 919.25
INV. 15" NE = 915.18

940 930 920 910 900

EX. LA R/W 3:1 6:1 6:1

922.38
615+00.00
923.00

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 963.

ITEM 206 CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 615+00 TO STA. 616+50 LT

LIC-161-6.65
LIC-37-10.25

548
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
246	355		
		455	698
245	398		
		450	723
241	383		
		447	715
241	389		
		441	749
		1793	2885

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 617+00 TO STA. 618+50 RT

LIC-161-6.65
LIC-37-10.25

549
1349

618+50.00
922.44
921.50
1.4' RT
E-918.6

618+00.00
922.58
921.63
1.4' RT
E-918.8

617+50.00
922.19
921.75
1.4' RT
E-918.9

617+00.00
922.62
921.88
1.4' RT
E-919.0

FOR SEEDING AND MULCHING QUANTITITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
121	675
122	671
121	675
120	669
	2690 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

940 930 920 910 900

EX. LA R/W 3:1 6:1 6:1

921.50
618+50.00
922.44

EX. LA R/W 3:1 6:1 6:1

921.63
618+00.00
922.58

EX. LA R/W 3:1 6:1 6:1

921.75
617+50.00
922.19

EX. LA R/W 3:1 6:1 6:1

921.88
617+00.00
922.62

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 617+00 TO STA. 618+50 LT

LIC-161-6.65
LIC-37-10.25

550
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		256	428		
				464	779
		245	414		
				453	731
		244	376		
				460	688
		253	366		
				462	668
SHEET TOTAL				1838	2866

℄ 50 100 150 200 250

940 930 920 910 900

6:1 1.4' RT E=918.1 921.00 620+50.00 921.44 6:1 3:1 EX. LA R/W

6:1 1.4' RT E=918.3 921.13 620+00.00 921.66 6:1 3:1 EX. LA R/W

6:1 1.4' RT E=918.4 921.25 619+50.00 922.01 6:1 3:1 EX. LA R/W

6:1 1.4' RT E=918.5 921.38 619+00.00 922.36 6:1 3:1 EX. LA R/W

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

CALCULATED JMA CHECKED BER

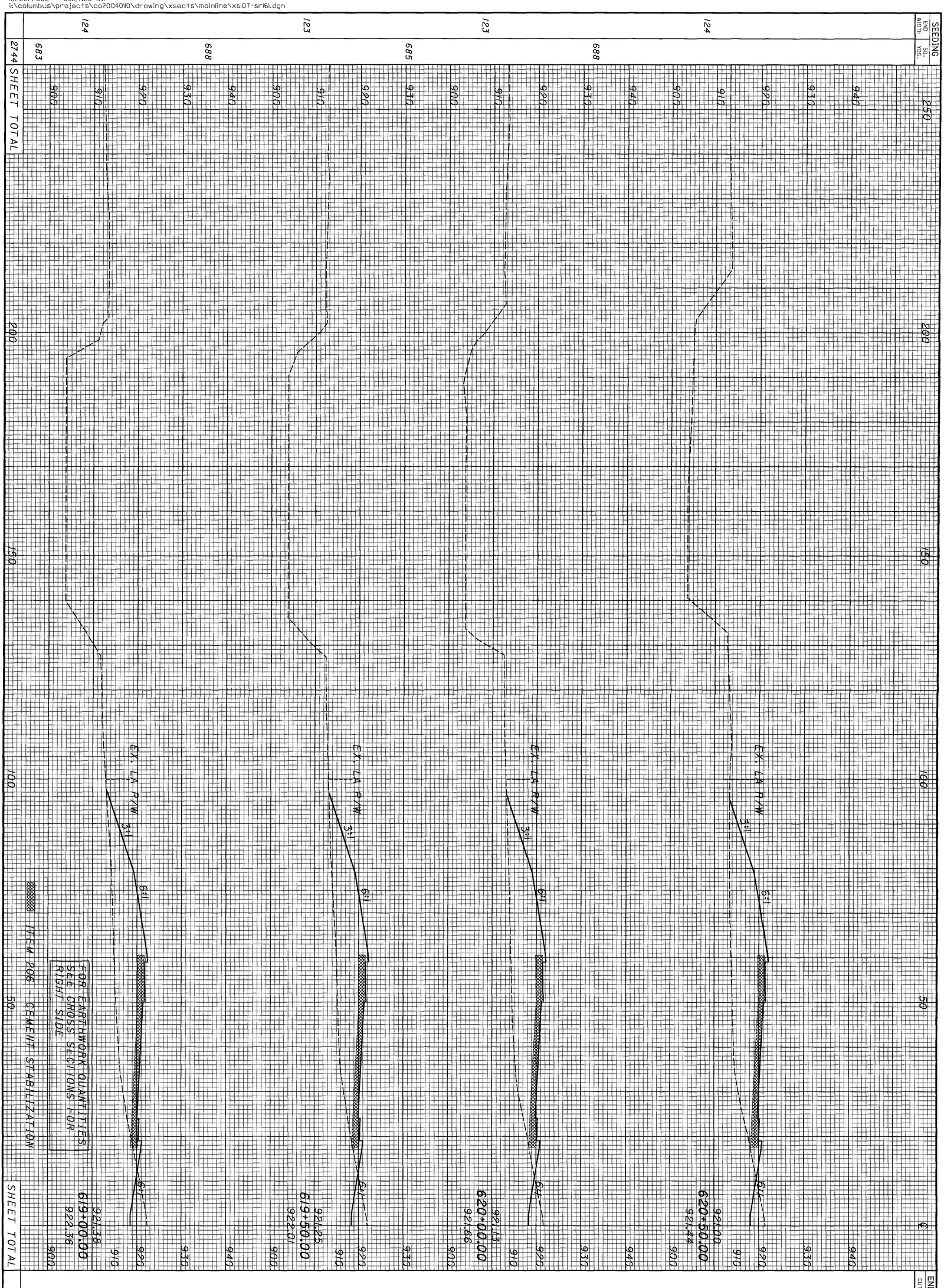
CROSS SECTIONS - S.R. 37
STA. 619+00 TO STA. 620+50 RT

LIC-161-6.65
LIC-37-10.25

551
1349

tduffney
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tduffney
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552
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 619+00 TO STA. 620+50 LT

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
115	
	639
115	
	642
116	
	662
122	
	686
	2629

250 200 150 100 50 ℄

ITEM 206 - CEMENT STABILIZATION
ITEM 203 - (TYPE D GRANULAR MATERIAL)

EX. LA R/W 3:1 6:1 6:1

920.50
622+50.00
920.81

EX. LA R/W 3:1 6:1 6:1

920.63
622+00.00
920.88

EX. LA R/W 3:1 6:1 6:1

920.75
621+50.00
920.96

EX. LA R/W 3:1 6:1 6:1

920.88
621+00.00
921.11

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

930 920 910 900 940

END AREA		VOLUME	
CUT	FILL	CUT	FILL
SHEET TOTAL			

CALCULATED JMA
CHECKED BER

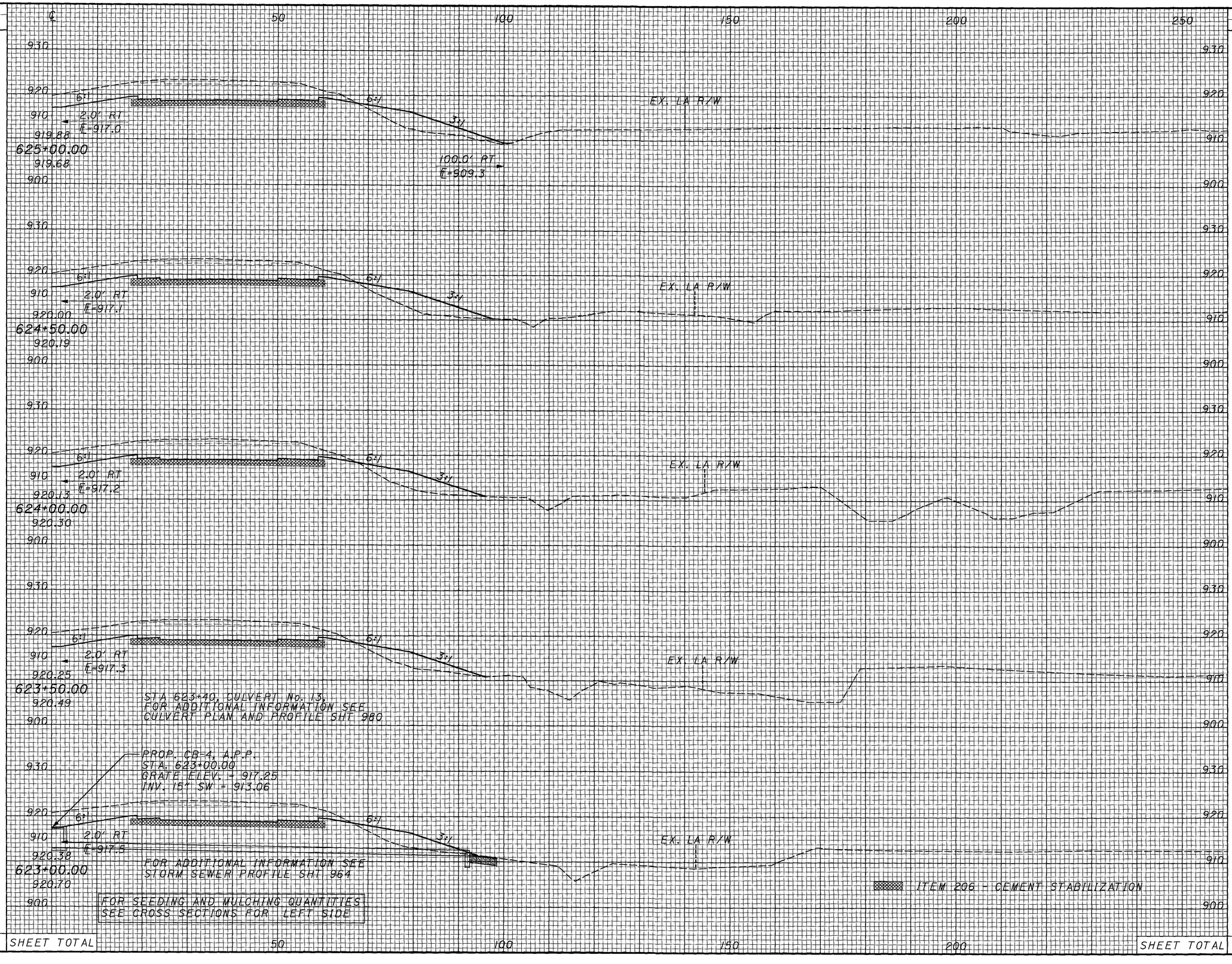
CROSS SECTIONS - S.R. 37
STA. 621+00 TO STA. 622+50 LT

LIC-161-6.65
LIC-37-10.25

554
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
253	324		
		473	582
258	304		
		477	590
257	333		
		472	614
252	331		
		465	583
251	299		
		458	568
SHEET TOTAL		2345	2937

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 623+00 TO STA. 625+00 RT

LIC-161-6.65
LIC-37-10.25

555
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
118	
	644
113	
	629
113	
	630
114	
	624
111	
	627
	3154

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

930 920 910 900

EX. LA R/W 3:1 6:1 6:1

919.88
625+00.00
919.68

EX. LA R/W 3:1 6:1 6:1

920.00
624+50.00
920.19

EX. LA R/W 3:1 6:1 6:1

920.13
624+00.00
920.30

EX. LA R/W 3:1 6:1 6:1

920.25
623+50.00
920.49

STA. 623+40, CULVERT NO.13, FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 980

PROP. CB-4 A.P.P.
STA. 623+00.00
GRATE ELEV. = 917.25
INV. 15" SW = 913.06

EX. LA R/W 3:1 6:1 6:1

920.38
623+00.00
920.70

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 964

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 - CEWENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 623+00 TO STA. 625+00 LT

LIC-161-6.65
LIC-37-10.25

556
1349

tduffrey
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SEEDING	
END WIDTH	SQ. YDS.

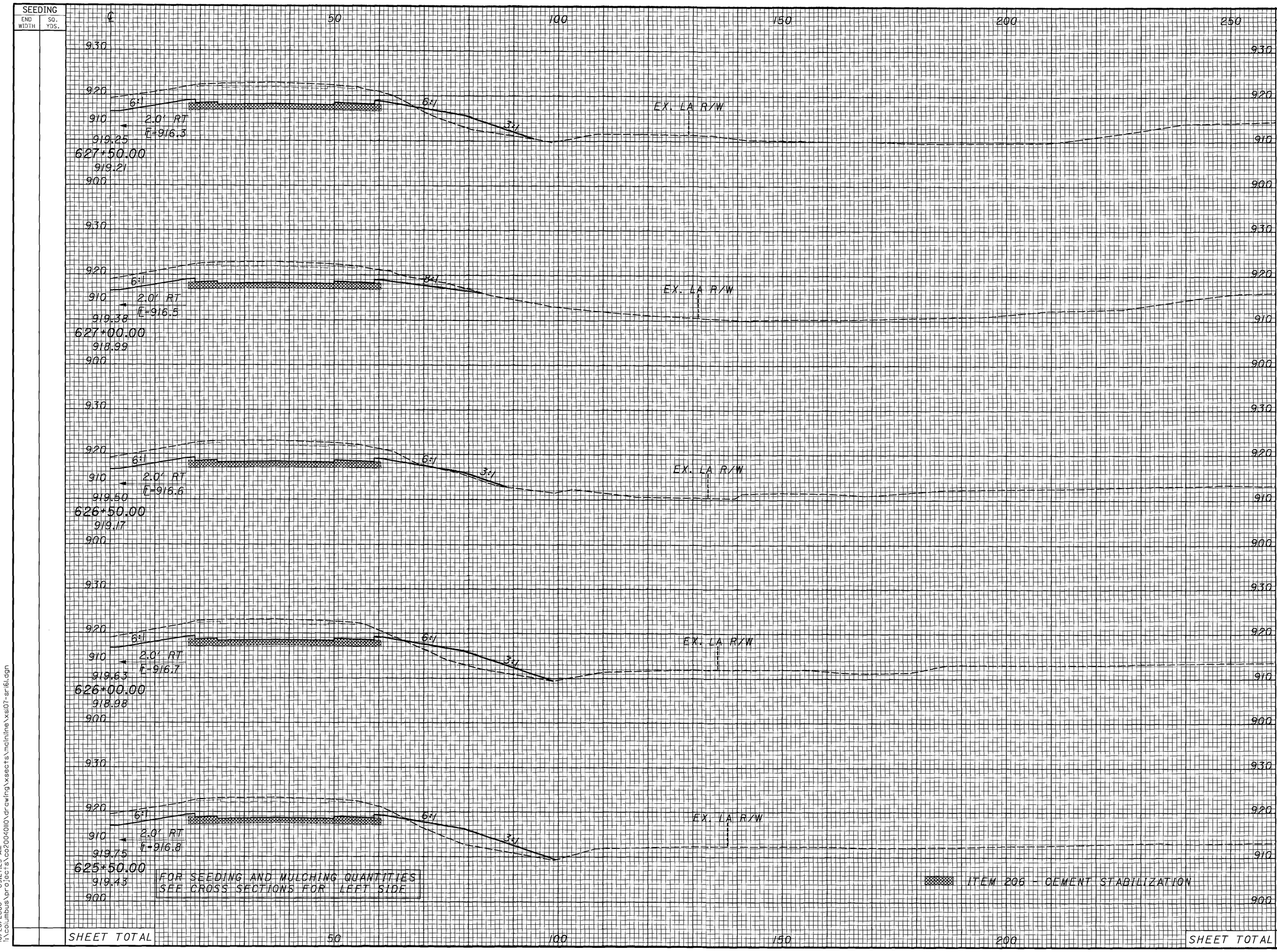
END AREA		VOLUME	
CUT	FILL	CUT	FILL
258	366		
		492	641
274	326		
		493	542
259	260		
		463	521
241	304		
		452	569
247	312		
		463	588
		2363	2861

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 625+50 TO STA. 627+50 RT

LIC-161-6.65
LIC-37-10.25

557
1349



tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.
110	574
97	556
103	604
114	642
117	655
	3031

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

250 200 150 100 50 ℄

EX. LA R/W 3:1 6:1 6:1

919.25
627+50.00
919.21

EX. LA R/W 3:1 6:1 6:1

919.38
627+00.00
918.99

EX. LA R/W 3:1 6:1 6:1

919.50
626+50.00
919.17

EX. LA R/W 3:1 6:1 6:1

919.63
626+00.00
918.98

EX. LA R/W 3:1 6:1 6:1

919.75
625+50.00
919.43

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

ITEM 206 CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 625+50 TO STA. 627+50 LT

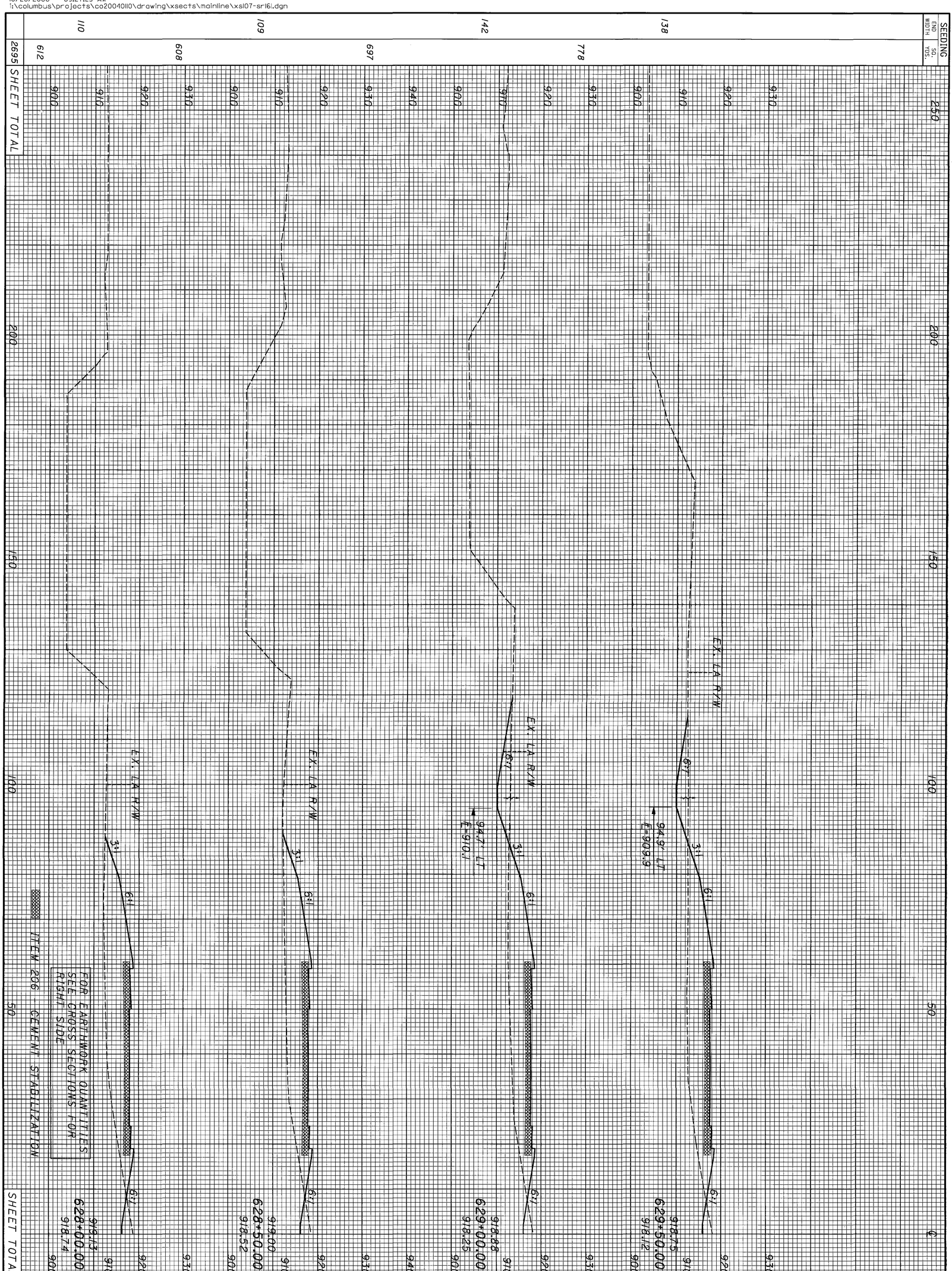
LIC-161-6.65
LIC-37-10.25

558
349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

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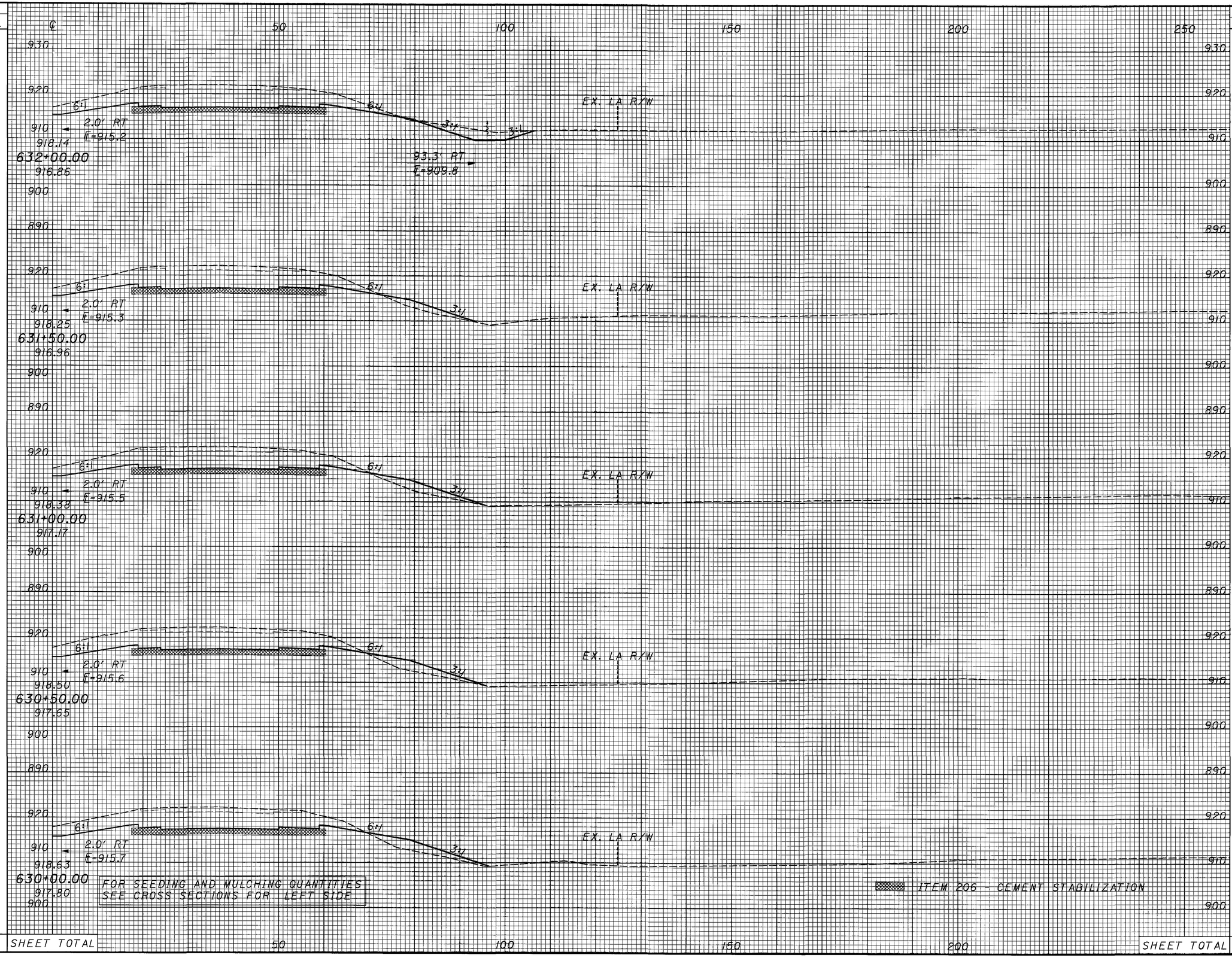
LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - S.R. 37
STA. 628+00 TO STA. 629+50 LT

560
1349

CALCULATED JMA
CHECKED BER

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
344	338		
		585	641
288	354		
		524	665
278	364		
		521	677
285	368		
		527	663
284	348		
		545	628
SHEET TOTAL		2702	3274

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 630+00 TO STA. 632+00 RT

LIC-161-6.65
LIC-37-10.25

561
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
142	749
128	713
129	719
130	726
132	749
	3656

250 200 150 100 50 ℄

EX. LA R/W

101.3' LT
℄-909.3

918.14
632+00.00
916.86

EX. LA R/W

101.4' LT
℄-909.4

918.25
631+50.00
916.96

EX. LA R/W

101.2' LT
℄-909.6

918.38
631+00.00
917.17

EX. LA R/W

101.2' LT
℄-909.7

918.50
630+50.00
917.65

EX. LA R/W

101.3' LT
℄-909.8

918.63
630+00.00
917.80

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

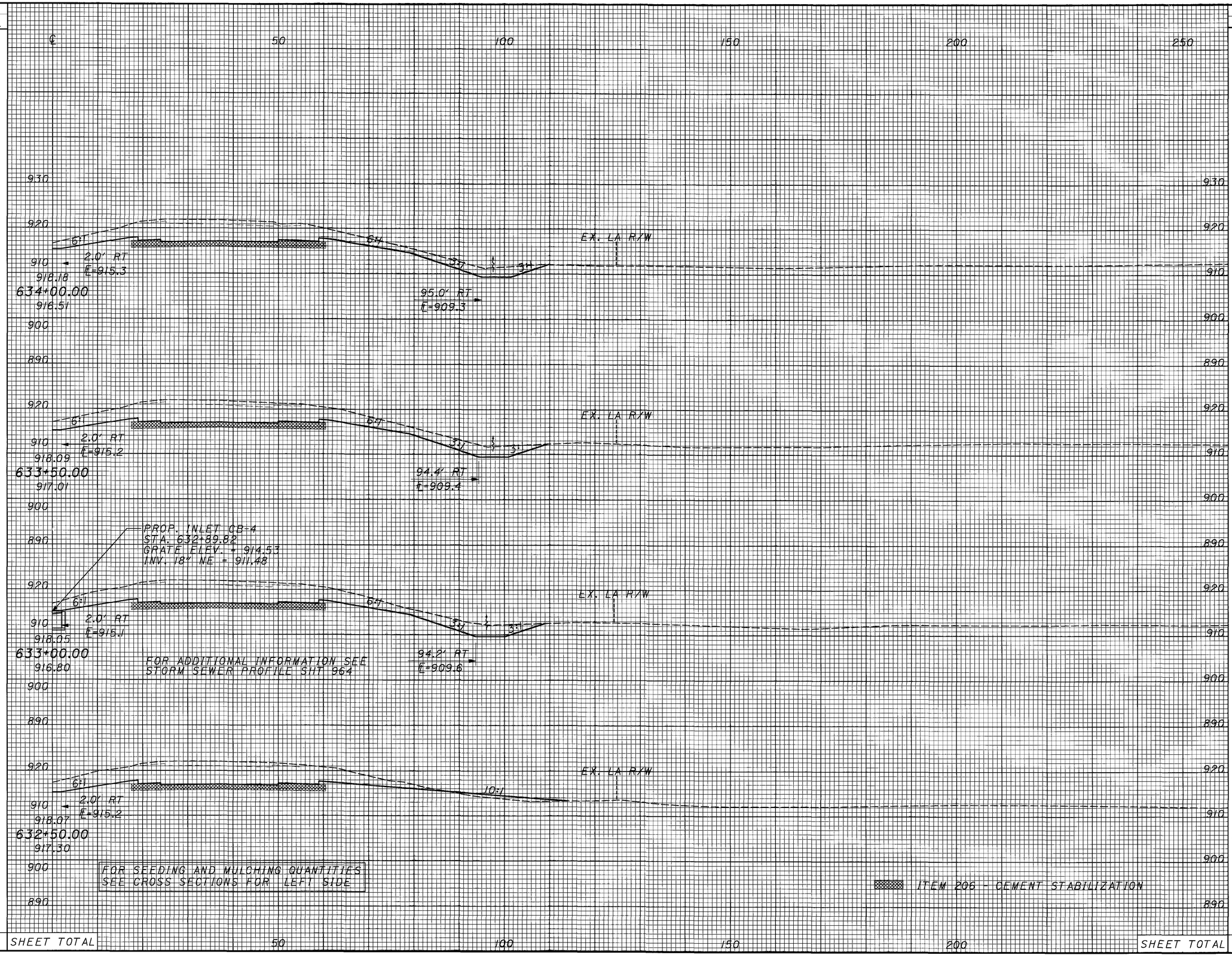
CROSS SECTIONS - S.R. 37
STA. 630+00 TO STA. 632+00 LT

LIC-161-6.65
LIC-37-10.25

562
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
349	351		
		674	635
378	335		
		707	618
386	332		
		676	637
344	356		
		637	643
		2694	2533

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 632+50 TO STA. 634+00 RT

LIC-161-6.65
LIC-37-10.25

563
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
148	817
146	809
145	816
149	807
	3249 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

930 920 910 900 890

EX. LA R/W
3:1 6:1 6:1
96.5' LT
E-908.8
918.18
634+00.00
916.51

EX. LA R/W
3:1 3:1 6:1 6:1
95.9' LT
E-908.9
918.09
633+50.00
917.01

PROP. INLET CB-4
STA. 632+89.82
GRATE ELEV. = 914.53
INV. 18" NE = 911.48

EX. LA R/W
3:1 3:1 6:1 6:1
95.2' LT
E-909.1
918.05
633+00.00
916.80

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 964

EX. LA R/W
10:1 6:1
15", TYPE D
918.07
632+50.00
917.30

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 632+50 TO STA. 634+00 LT

LIC-161-6.65
LIC-37-10.25

564
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
162	891
159	873
155	857
153	837
	3458 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER



CROSS SECTIONS - S.R. 37
STA. 634+50 TO STA. 636+00 LT

LIC-161-6.65
LIC-37-10.25

566
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
265	618		
		483	1111
257	582		
		530	749
315	227		
		539	653
267	479		
		510	836
283	424		
		549	762
		2611	4111

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 636+50 TO STA. 638+50 RT

LIC-161-6.65
LIC-37-10.25

567
1349

℄ 50 100 150 200 250

930 920 910 900

6:1 6:1 3:1 1:1 3:1

EX. LA R/W

638+50.00
919.50
914.26
2.0' RT
℄=916.6
102.2' RT
℄=908.2

638+00.00
919.35
914.37
2.0' RT
℄=916.4
101.5' RT
℄=908.3

637+50.00
919.20
918.53
2.0' RT
℄=916.3
100.7' RT
℄=908.4

637+00.00
919.06
915.11
2.0' RT
℄=916.2
99.7' RT
℄=908.6

636+50.00
918.91
916.00
2.0' RT
℄=916.0
99.0' RT
℄=908.7
Ex. 16" Gas

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL SHEET TOTAL

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
168	925				
165	911				
163	904				
162	901				
162	899				
	4540				

250 200 150 100 50 ℄

EX. LA R/W

3:1 3:1 6:1 6:1

103.7' LT
E-907.7

919.50
638+50.00
914.26

EX. LA R/W

3:1 3:1 6:1 6:1

103.0' LT
E-907.8

919.35
638+00.00
914.37

EX. LA R/W

3:1 3:1 6:1 6:1

102.2' LT
E-907.9

919.20
637+50.00
918.53

EX. LA R/W

3:1 3:1 6:1 6:1

101.2' LT
E-908.1

919.06
637+00.00
915.11

EX. LA R/W

3:1 3:1 6:1 6:1

100.5' LT
E-908.2

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

918.91
636+50.00
916.00

930 920 910 900

250 200 150 100 50 SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 636+50 TO STA. 638+50 LT

LIC-161-6.65
LIC-37-10.25

568
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		269	743		
		264	729	494	1363
		272	696	496	1320
		273	675	504	1270
		274	641	506	1219
SHEET TOTAL				498	1165
				2498	6337

PROP. CB-4, A.P.P.
STA. 641+00.00
GRATE ELEV. = 917.16
INV. 15" NE = 911.91

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 964

640+50.00
640+00.00
639+50.00
639+00.00

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

CROSS SECTIONS - S.R. 37
STA. 639+00 TO STA. 641+00 RT

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED BER

569
349

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SEEDING END WIDTH	SEEDING SQ. YDS.
180	989
176	977
175	968
173	957
171	942
	4833

SHEET TOTAL

250 200 150 100 50 ℄

PROP. CB-4, A.P.P.
STA. 641+00.00
GRATE ELEV. = 917.16
INV. 15" NE = 911.91

EX. LA R/W

3:1 3:1 6:1 6:1

107.0' LT
E=907.1

920.23
641+00.00
915.18

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 964

EX. LA R/W

3:1 3:1 6:1 6:1

106.7' LT
E=907.2

920.09
640+50.00
914.98

EX. LA R/W

3:1 3:1 6:1 6:1

106.2' LT
E=907.3

919.94
640+00.00
914.87

EX. LA R/W

3:1 3:1 6:1 6:1

105.5' LT
E=907.4

919.79
639+50.00
914.65

EX. LA R/W

3:1 3:1 6:1 6:1

104.5' LT
E=907.6

919.65
639+00.00
914.45

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 639+00 TO STA. 641+00 LT

LIC-161-6.65
LIC-37-10.25

570
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
295	809		
		540	1493
288	804		
		538	1470
293	784		
		529	1439
278	770		
		507	1401
2114	5803		

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 641+50 TO STA. 643+00 RT

LIC-161-6.65
LIC-37-10.25

571
1349

℄ 50 100 150 200 250

940 930 920 910 900

643+00.00
918.41
2.0' RT
℄-917.9
920.82
6:1 6:1 3:1 1:1 3:1
EX. LA R/W
110.8' RT
℄-907.1

642+50.00
917.17
2.0' RT
℄-917.8
920.68
6:1 6:1 3:1 1:1 3:1
EX. LA R/W
110.0' RT
℄-907.2

642+00.00
916.42
2.0' RT
℄-917.6
920.53
6:1 6:1 3:1 1:1 3:1
EX. LA R/W
109.2' RT
℄-907.3

641+50.00
915.82
2.0' RT
℄-917.5
920.38
6:1 6:1 3:1 1:1 3:1
EX. LA R/W
108.3' RT
℄-907.4

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL 50 100 150 200 SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.
198	1093
196	1088
196	1071
189	1025
	4277

250 200 150 100 50 ℄

940 930 920 910 900

EX. LA R/W

6:1 3:1 6:1

109.7' LT
℄-906.6

920.82
643+00.00
918.41

109.0' LT
℄-906.7

920.68
642+50.00
917.11

108.2' LT
℄-906.8

920.53
642+00.00
916.42

107.6' LT
℄-906.9

920.38
641+50.00
915.82

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 641+50 TO STA. 643+00 LT

LIC-161-6.65
LIC-37-10.25

572
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
192	
	1071
193	
	1064
190	
	1050
188	
	1072
	4257

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA

CHECKED BER

250 200 150 100 50 ℄

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH EARTHWORK QUANTITIES

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

930 920 910 900

EX. LA R/W

3:1 3:1 6:1 6:1

921.41
645+00.00
922.54

113.0' LT
℄=906.1

921.26
644+50.00
921.89

112.2' LT
℄=906.2

921.12
644+00.00
921.30

111.5' LT
℄=906.3

920.97
643+50.00
920.57

110.7' LT
℄=906.4

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

250 200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 643+50 TO STA. 645+00 LT

LIC-161-6.65
LIC-37-10.25

574
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

STA. 646+34, CULVERT NO. 14, FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 981

647+00.00
922.25
2.0' RT
℄-919.1
921.99
113.1' RT
℄-907.5

646+50.00
922.55
1.9' RT
℄-919.0
921.85
113.6' RT
℄-907.2

646+00.00
922.52
2.0' RT
℄-918.8
921.71
115.8' RT
℄-906.3

645+50.00
922.34
2.0' RT
℄-918.7
921.56
115.4' RT
℄-906.4

6:1 3:1 EX. LA R/W

ITEM 206 - CEMENT STABILIZATION

END AREA		VOLUME	
CUT	FILL	CUT	FILL
240	701		
(3)	(7)		
		475	1348
		(7)	(13)
273	755		
(5)	(8)		
		544	1397
		(7)	(14)
314	754		
(2)	(8)		
		585	1419
		(4)	(14)
317	779		
(2)	(8)		
		576	1480
		(4)	(14)
SHEET TOTAL		2180	5644
		(22)	(55)

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 645+50 TO STA. 647+00 RT

LIC-161-6.65
LIC-37-10.25

575
1349

tduffrey
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SEEDING	
END WIDTH	SQ. YDS.
189	1061
193	1087
198	1098
197	1080
	4326 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH EARTHWORK QUANTITIES

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

940 930 920 910 900

EX. LA R/W
3:1
3:1
6:1
6:1
114.7' LT
℄-906.1
921.99
647+00.00
922.25

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

EX. LA R/W
3:1
3:1
6:1
6:1
114.9' LT
℄-905.9
921.85
646+50.00
922.55

STA. 646+34 CULVERT NO. 14, FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 981

EX. LA R/W
3:1
3:1
6:1
6:1
114.7' LT
℄-905.8
921.71
646+00.00
922.52

EX. LA R/W
3:1
3:1
6:1
6:1
114.0' LT
℄-905.9
921.56
645+50.00
922.34

ITEM 206 - CEMENT STABILIZATION

250 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 645+50 TO STA. 647+00 LT

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
126	522		
(0)	(1)		
		255	1006
		(0)	(2)
150	564		
(0)	(2)		
		314	1081
		(0)	(9)
189	603		
(0)	(8)		
		377	1153
		(2)	(17)
219	642		
(2)	(10)		
		425	1244
		(4)	(15)
		1371	4484
		(6)	(43)

CALCULATED JMA
CHECKED BER

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

℄ 50 100 150 200 250

940 930 920 910 900 890

6:1 2.0' RT ℄-919.1 921.99 649+00.00 919.89 6:1 3:1 EX. LA R/W 3:1 109.5' RT ℄-908.7

6:1 2.0' RT ℄-919.2 922.08 648+50.00 920.77 6:1 3:1 EX. LA R/W 3:1 110.7' RT ℄-908.4

6:1 2.0' RT ℄-919.2 922.11 648+00.00 921.40 6:1 3:1 EX. LA R/W 3:1 111.8' RT ℄-908.1

6:1 2.0' RT ℄-919.2 922.08 647+50.00 921.87 6:1 3:1 EX. LA R/W 3:1 112.5' RT ℄-907.8

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

50 100 150 200

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 647+50 TO STA. 649+00 RT

LIC-161-6.65
LIC-37-10.25

577
1349

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SEEDING	
END WIDTH	SQ. YDS.
177	
	996
182	
186	
	1022
186	
	1035
186	
	1043
	4096

250 200 150 100 50 ℄

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH EARTHWORK QUANTITIES

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

940 930 920 910 900 890

EX. LA R/W
3:1
6:1
3:1
6:1
1113.2' LT
℄-906.6
921.99
649+00.00
919.89

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

940 930 920 910 900 890

EX. LA R/W
3:1
6:1
3:1
6:1
1114.1' LT
℄-906.4
922.08
648+50.00
920.77

940 930 920 910 900 890

EX. LA R/W
3:1
6:1
3:1
6:1
1114.6' LT
℄-906.3
922.11
648+00.00
921.40

940 930 920 910 900 890

EX. LA R/W
3:1
6:1
3:1
6:1
1114.7' LT
℄-906.2
922.08
647+50.00
921.87

ITEM 206 - CEMENT STABILIZATION

4096 SHEET TOTAL 200 150 100 50 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 647+50 TO STA. 649+00 LT

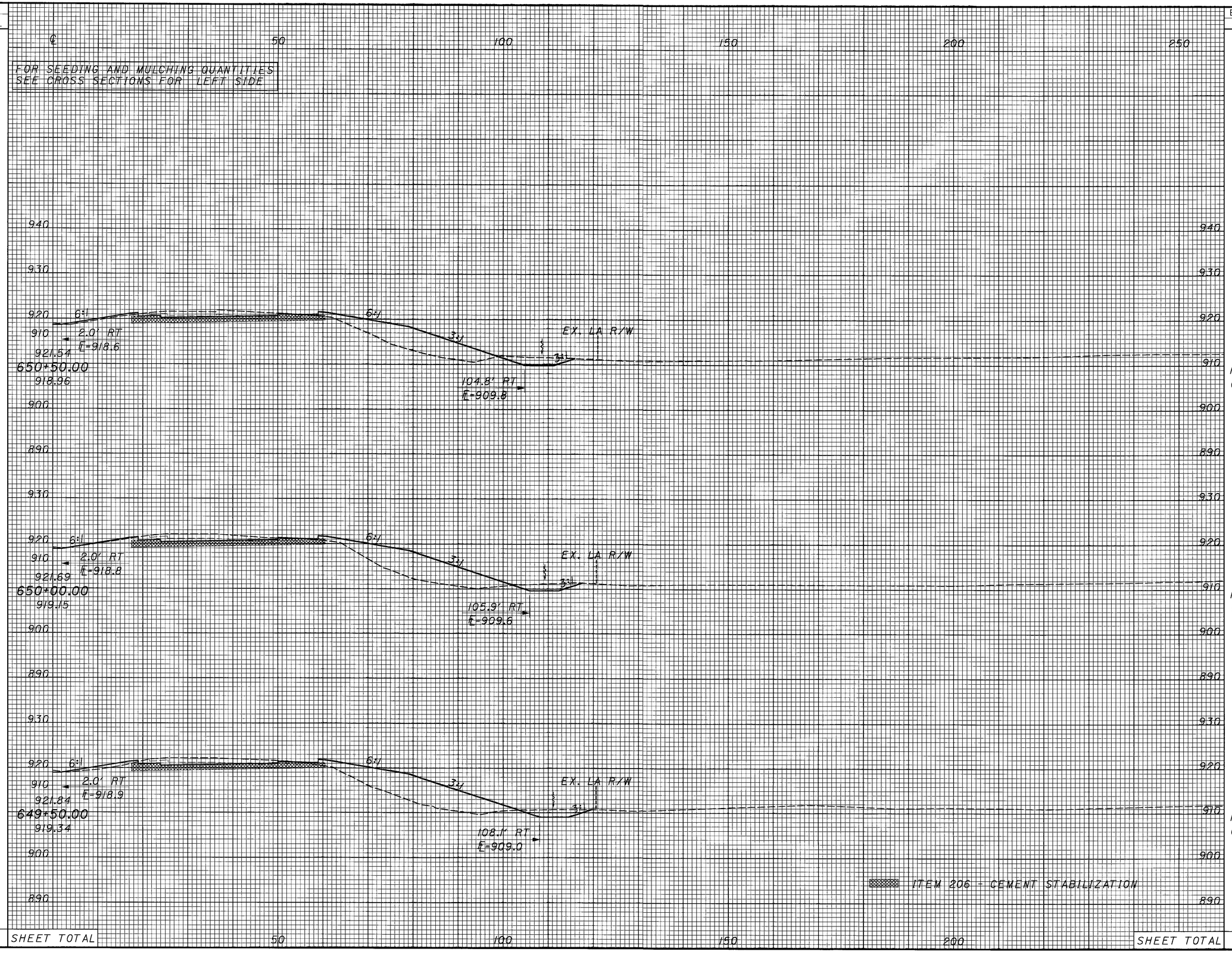
LIC-161-6.65
LIC-37-10.25

578
1349

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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE



END AREA		VOLUME	
CUT	FILL	CUT	FILL
123	320		
(0)	(2)		
109	375		
(1)	(1)		
129	441		
(0)	(0)		
		215	643
		(1)	(2)
		220	755
		(1)	(1)
		236	891
		(0)	(1)
		671	2289
		(2)	(4)

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 649+50 TO STA. 650+50 RT

LIC-161-6.65
LIC-37-10.25

579
1349

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SEEDING	
END WIDTH	SQ. YDS.
170	943
170	958
175	977
	2878 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EARTH WORK FOR ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH EARTHWORK QUANTITIES

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

940 930 920 910 900 890

EX. LA R/W
6:1
3:1
6:1
6:1
109.4' LT
E-907.4
921.54
650+50.00
918.96

EX. LA R/W
6:1
3:1
6:1
6:1
108.7' LT
E-907.8
921.69
650+00.00
919.15

EX. LA R/W
3:1
3:1
6:1
6:1
112.4' LT
E-906.7
921.84
649+50.00
919.34

ITEM 206 = CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 649+50 TO STA. 650+50 LT

LIC-161-6.65
LIC-37-10.25

580
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING	
END WIDTH	SQ. YDS.
175	
	943
165	
	913
164	
	928
	2784

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
INCLUDED WITH EARTHWORK QUANTITIES

FOR EARTHWORK QUANTITIES
SEE CROSS SECTIONS FOR
RIGHT SIDE

950 940 930 920 910 900 890

EX. LA R/W
6:1
3:1
6:1
110.8' LT
℄-906.5
921.09
652+00.00
918.37

EX. LA R/W
4:1
3:1
6:1
6:1
107.3' LT
℄-907.8
921.24
651+50.00
918.43

EX. LA R/W
4:1
3:1
6:1
6:1
107.5' LT
℄-907.9
921.39
651+00.00
918.67

ITEM 206 - CEMENT STABILIZATION

200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 651+00 TO STA. 652+00 LT

LIC-161-6.65
LIC-37-10.25

582
1349

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SEEDING	
END WIDTH	SQ. YDS.

FOR SEEDING AND MULCHING QUANTITIES SEE CROSS SECTIONS FOR LEFT SIDE

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH EARTHWORK QUANTITIES

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

ITEM 206 - CEMENT STABILIZATION

PROP. CB-4, A.P.P.
STA. 653+50.00
GRATE ELEV. = 917.76
INV. 15" NE = 913.04

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 964.

654+00.00
920.49
918.39
2.3' RT
℄-917.4
93.0' RT
℄-912.7

653+50.00
920.64
918.44
2.0' RT
℄-917.7
94.6' RT
℄-912.3

653+00.00
920.79
918.44
2.0' RT
℄-917.9
96.6' RT
℄-911.8

652+50.00
920.94
918.36
2.0' RT
℄-918.0
98.2' RT
℄-911.4

EX. LA R/W

END AREA		VOLUME	
CUT	FILL	CUT	FILL
241	120		
(0)	(27)		
		433	234
		(0)	(38)
226	132		
(0)	(14)		
411	295		
(0)	(17)		
218	187		
(0)	(4)		
		375	363
		(0)	(7)
187	205		
(0)	(3)		
		333	409
		(0)	(5)
		1552	1301
		(0)	(67)

SHEET TOTAL

CALCULATED JMA
CHECKED BER

CROSS SECTIONS - S.R. 37
STA. 652+50 TO STA. 654+00 RT

LIC-161-6.65
LIC-37-10.25

583
349

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SEEDING	
END WIDTH	SQ. YDS.
168	929
167	948
175	972
175	974
	3823 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

EARTH WORK FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC INCLUDED WITH EARTHWORK QUANTITIES

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

250 200 150 100 50 ℄

930 920 910 900 890

EX. LA R/W
6:1
3:1
6:1
111.0' LT
℄=906.1
920.49
654+00.00
918.49

PROP. CB-4, A.P.P.
STA. 653+50.00
GRATE ELEV. = 917.76
INV. 15" NE = 913.04

EX. LA R/W
6:1
3:1
6:1
110.3' LT
℄=906.2
920.64
653+50.00
918.44

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 964.

EX. LA R/W
6:1
3:1
6:1
110.5' LT
℄=906.3
920.79
653+00.00
918.44

EX. LA R/W
6:1
3:1
6:1
110.6' LT
℄=906.4
920.94
652+50.00
918.36

ITEM 206 - CEMENT STABILIZATION

250 200 150 100 50 SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 652+50 TO STA. 654+00 LT

LIC-161-6.65
LIC-37-10.25

584
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

℄ 50 100 150 200 250

EARTH WORK FOR
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC

FOR SEEDING AND MULCHING QUANTITIES
SEE CROSS SECTIONS FOR LEFT SIDE

930
920
910
900

EX. LA R/W

655+00.00
918.00

0	0
(1)	(17)

EX. LA R/W

654+50.00
918.24

0	0
(0)	(17)

0	0
(0)	(32)

223	112
(0)	(41)

SHEET TOTAL

223	112
(0)	(73)

CROSS SECTIONS - S.R. 37
STA. 654+50 TO STA. 655+00 RT

LIC-161-6.65
LIC-37-10.25

585
1349

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SEEDING	
END WIDTH	SQ. YDS.
466	SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED BER

250 200 150 100 50 ℄

EARTH WORK FOR ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC

FOR EARTHWORK QUANTITIES SEE CROSS SECTIONS FOR RIGHT SIDE

930 920 910 900

EX. LA R/W

655+00.00
918.00

654+50.00
918.24

0 0 0 466

200 150 100 50

SHEET TOTAL

CROSS SECTIONS - S.R. 37
STA. 654+50 TO STA. 655+00 LT

LIC-161-6.65
LIC-37-10.25

586
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
22	119
21	122
23	125
22	122
22	
	488

SHEET TOTAL

100 50 ℄ 50 100

PROP. CH. ESMT. PROP. CH. ESMT.

905.22
3+00.00
909.29

PROP. CH. ESMT. PROP. CH. ESMT.

905.39
2+50.00
909.22

PROP. CH. ESMT. PROP. CH. ESMT.

905.56
2+00.00
909.88

PROP. CH. ESMT. PROP. CH. ESMT.

905.73
1+50.00
909.69

OUTLET CULVERT NO.14

OUTLET CULVERT NO. 14
SEE SHEET 979

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
49	0		
		87	0
45	0		
		93	0
55	0		
		94	0
47	0		
		43	0
45	0		
		317	0

SHEET TOTAL

CALCULATED WAA
CHECKED JMA

CROSS SECTIONS - DITCH AT 646+34
STA. 1+50 TO STA. 3+00

LIC-161-6.65
LIC-37-10.25

587
1349

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SEEDING	
END WIDTH	SQ. YDS.
0	
	19
	23
	125
	144

100 50 ℄ 50 100

DITCH OUTLET AT RACOON CREEK

DITCH OUTLET AT RACOON CREEK

920 910 900 920 910 900 920 910 900

3+64.73
905.00

PROP. CH. ESMT. PROP. CH. ESMT.

2:1 2:1

905.05
3+50.00
909.53

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		16	0
57	0		
		98	0
		114	0

SHEET TOTAL

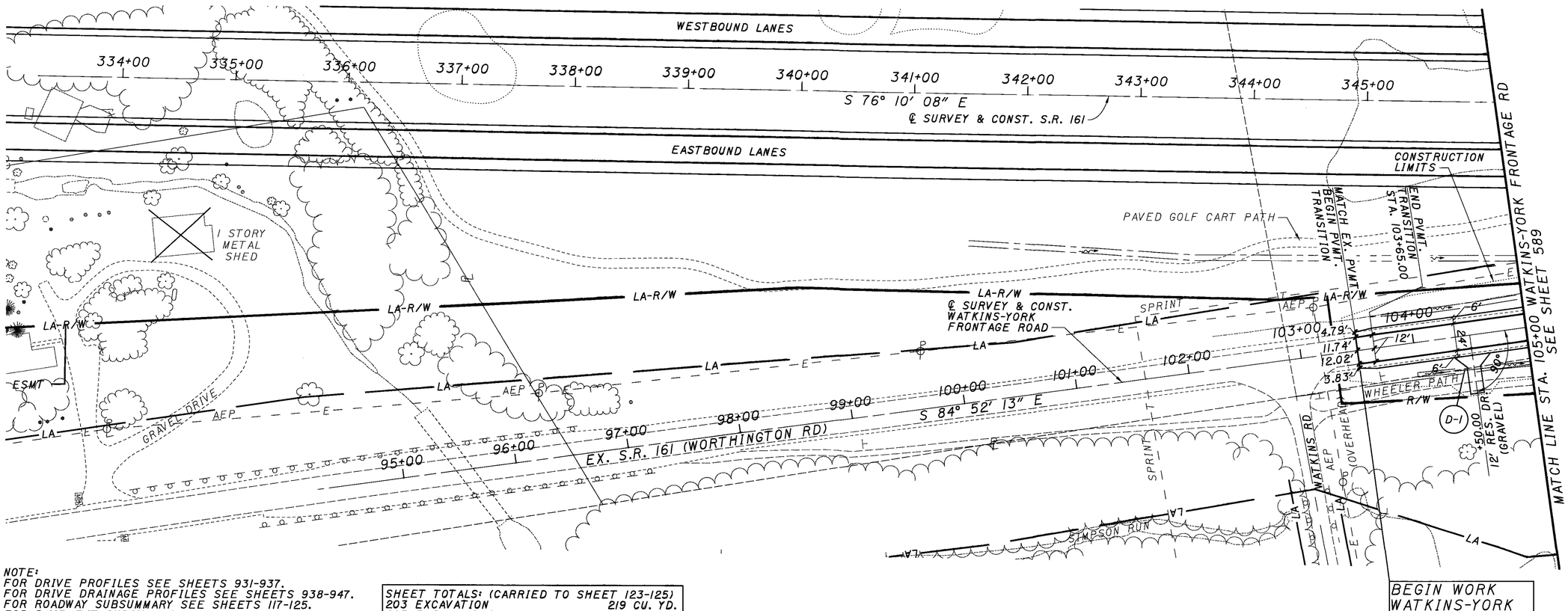
CALCULATED WAA
CHECKED JMA

CROSS SECTIONS - DITCH AT 646+34
STA. 3+50 TO STA. 3+64.73

LIC-161-6.65
LIC-37-10.25

587A
1349

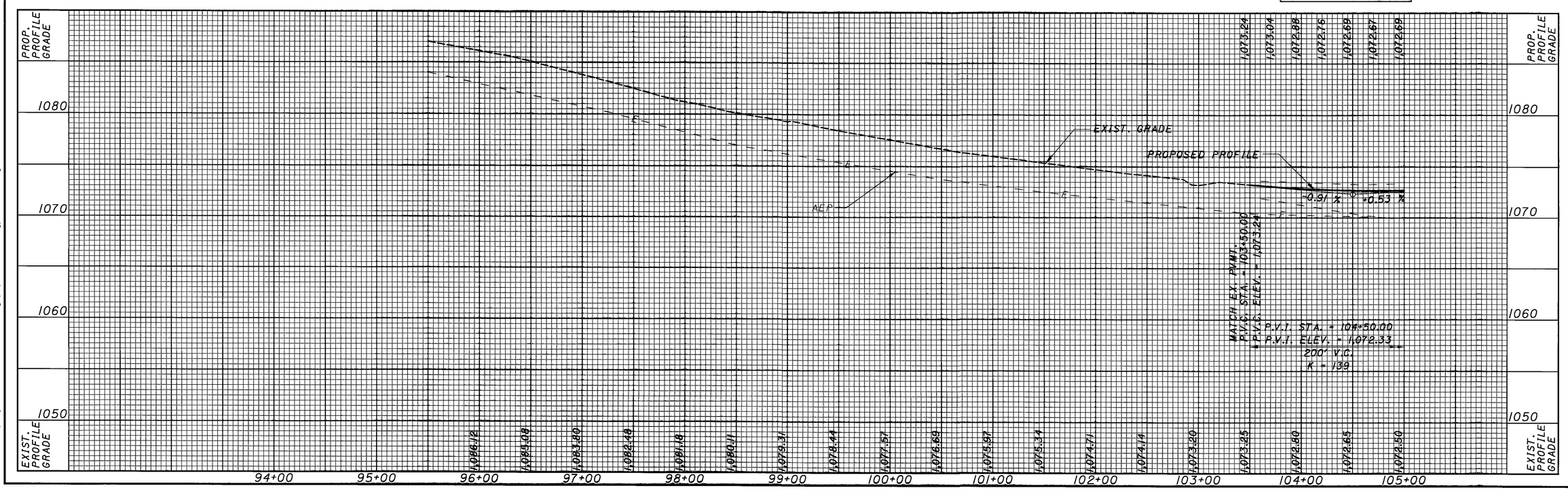
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NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	219 CU. YD.
203 EMBANKMENT	76 CU. YD.
659 SEEDING AND MULCHING	480 SQ. YD.

BEGIN WORK
WATKINS-YORK
FRONTAGE ROAD
STA. 103+50.00



LIC-161-6.65
LIC-37-10.25

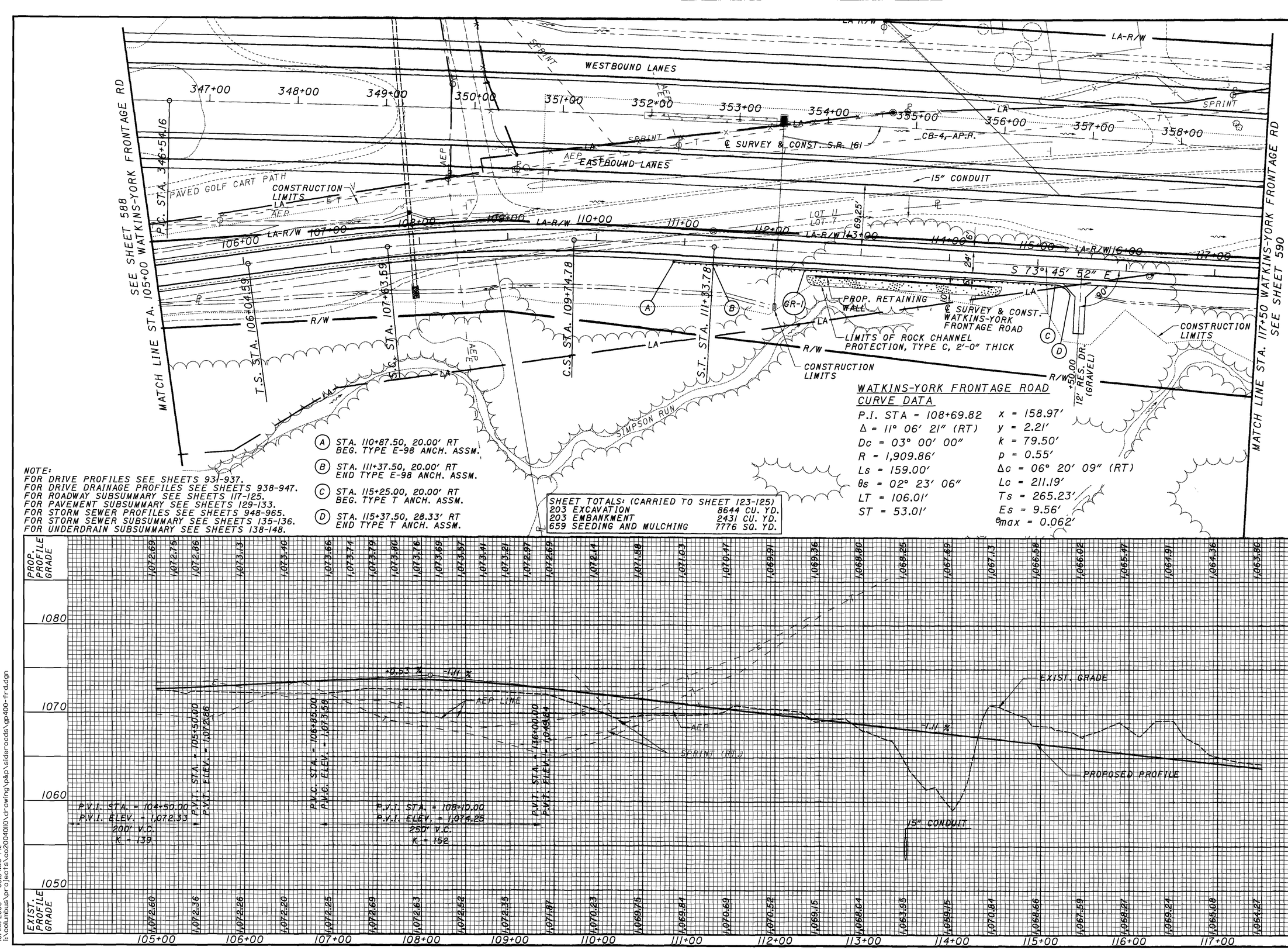
PLAN AND PROFILE - WATKINS-YORK
FRONTAGE ROAD, STA. 95+00 TO STA. 105+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

588
349

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NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

(A) STA. 110+87.50, 20.00' RT
BEG. TYPE E-98 ANCH. ASSM.

(B) STA. 111+37.50, 20.00' RT
END TYPE E-98 ANCH. ASSM.

(C) STA. 115+25.00, 20.00' RT
BEG. TYPE T ANCH. ASSM.

(D) STA. 115+37.50, 28.33' RT
END TYPE T ANCH. ASSM.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	8644 CU. YD.
203 EMBANKMENT	2431 CU. YD.
659 SEEDING AND MULCHING	7776 SQ. YD.

WATKINS-YORK FRONTAGE ROAD
CURVE DATA

P.I. STA = 108+69.82	x = 158.97'
Δ = 11° 06' 21" (RT)	y = 2.21'
Dc = 03° 00' 00"	k = 79.50'
R = 1,909.86'	p = 0.55'
Ls = 159.00'	Δc = 06° 20' 09" (RT)
θs = 02° 23' 06"	Lc = 211.19'
LT = 106.01'	Ts = 265.23'
ST = 53.01'	Es = 9.56'
	emax = 0.062'

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 105+00 TO STA. 117+50

LIC-161-6.65
LIC-37-10.25

589
349

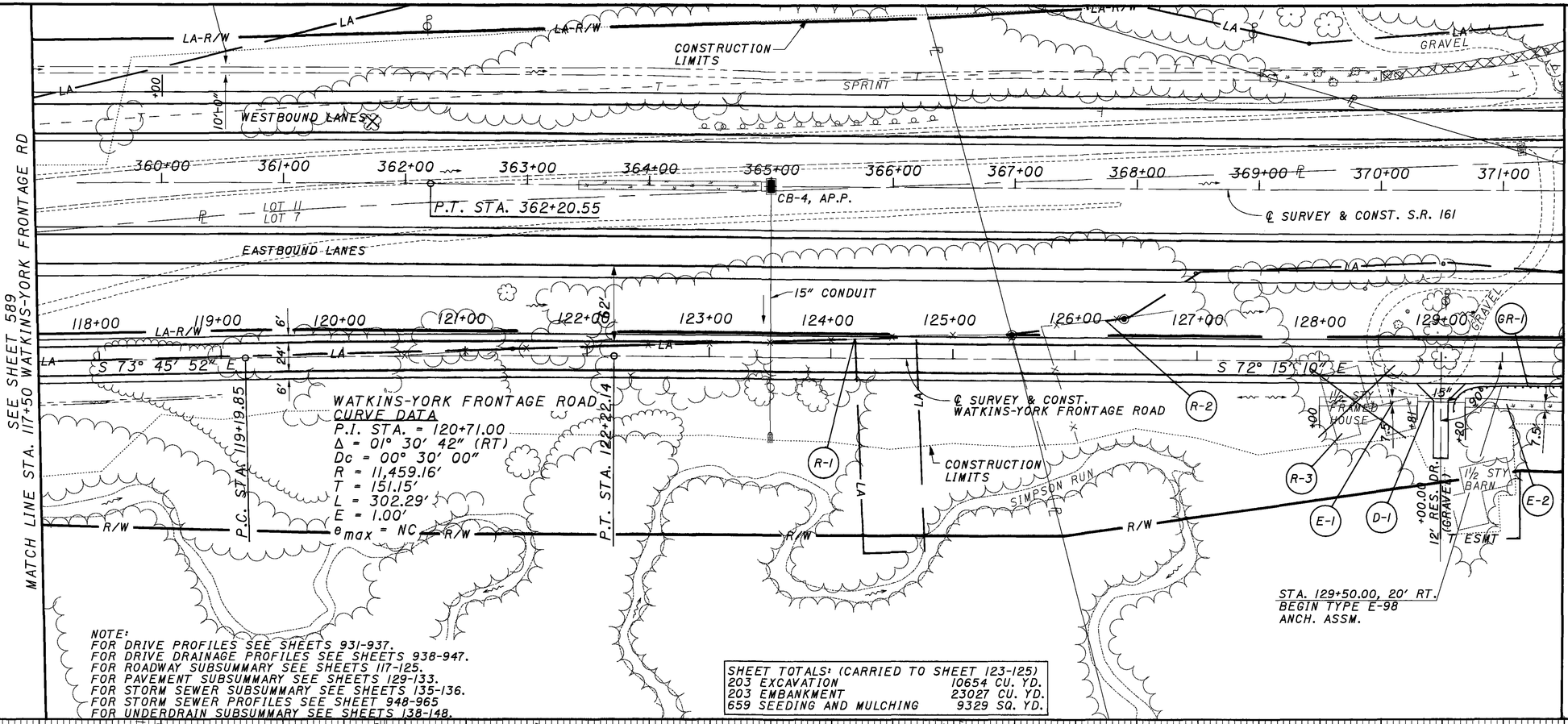
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PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 117+50 TO STA. 130+00

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

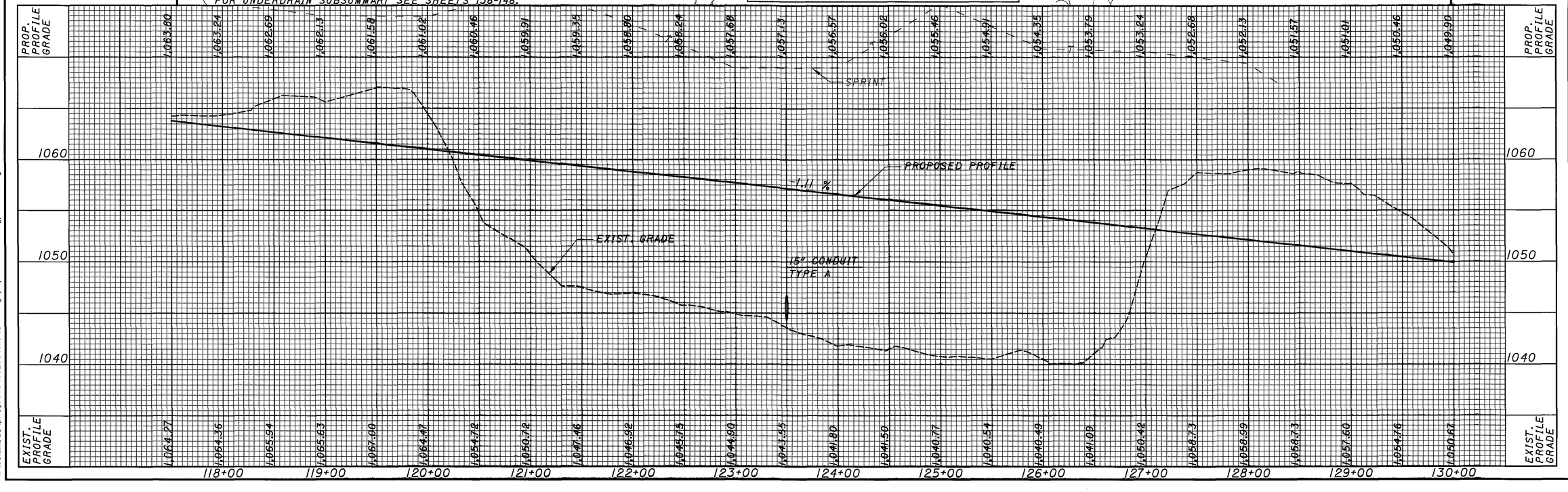
HORIZONTAL SCALE IN FEET
0 25 50 100



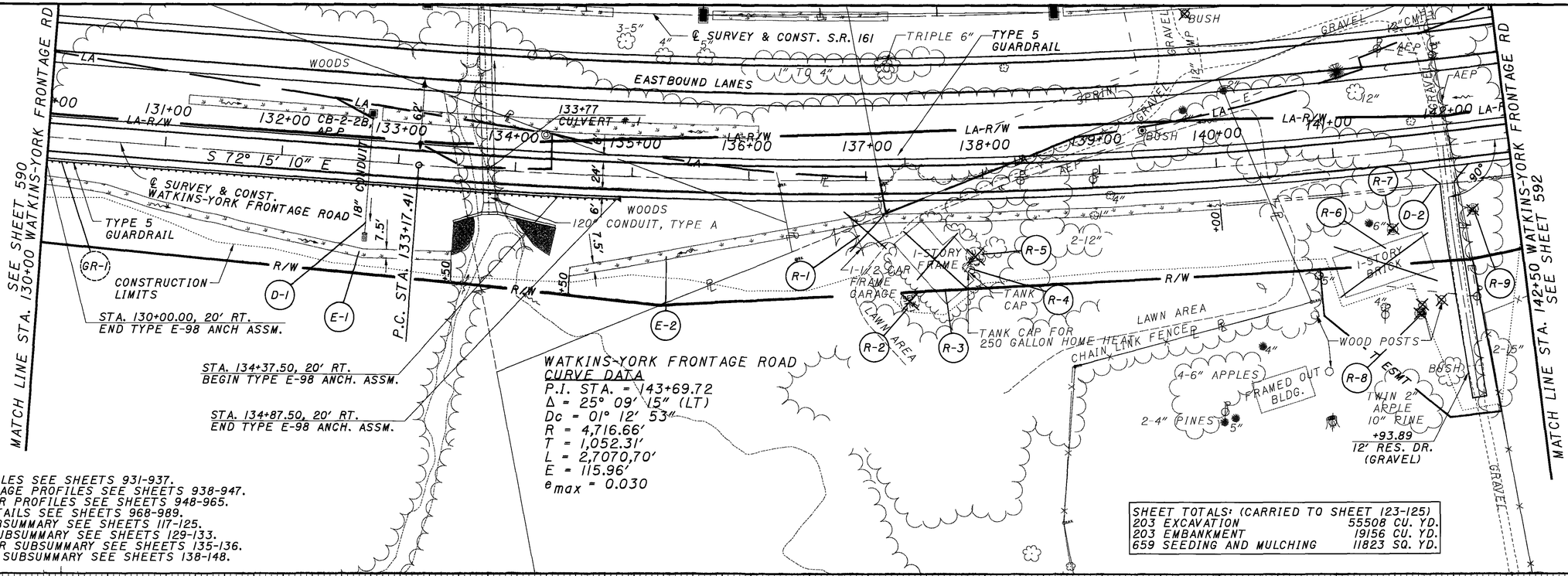
NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR STORM SEWER PROFILES SEE SHEET 948-965
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	10654 CU. YD.
203 EMBANKMENT	23027 CU. YD.
659 SEEDING AND MULCHING	9329 SQ. YD.

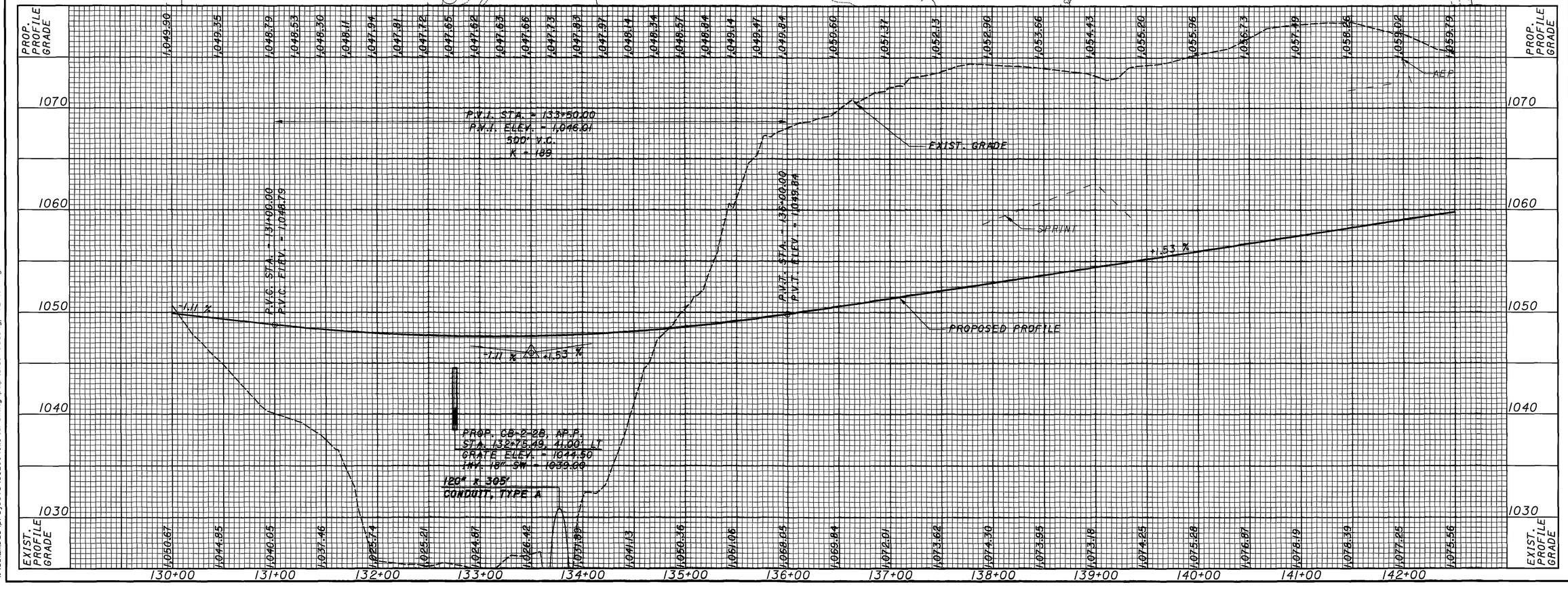


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NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	55508 CU. YD.
203 EMBANKMENT	19156 CU. YD.
659 SEEDING AND MULCHING	11823 SQ. YD.



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HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 130+00 TO STA. 142+50

LIC-161-6.65
LIC-37-10.25

SEE SHEET 591
MATCH LINE STA. 142+50 WATKINS-YORK FRONTAGE RD

MATCH LINE STA. 155+00 WATKINS-YORK FRONTAGE RD
SEE SHEET 593

℄ SURVEY & CONST. SERVICE ROAD 10

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

WESTBOUND LANES

EASTBOUND LANES

P.T. STA. 153+88.11

P.T. STA. 394+77.67

N 82° 35′ 35″ E

CONSTRUCTION LIMITS

+55.02
12′ RES. DR.
(GRAVEL)

+50.00
12′ RES. DR.
(GRAVEL)

WATKINS-YORK FRONTAGE ROAD
CURVE DATA
P.I. STA. = 143+69.72
Δ = 25° 09′ 15″ (LT)
Dc = 01° 12′ 53″
R = 4,716.66′
T = 1,052.31′
L = 2,7070,70′
E = 115.96′
e max= 0.030

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	14191 CU. YD.
203 EMBANKMENT	23510 CU. YD.
659 SEEDING AND MULCHING	10643 SQ. YD.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

EXIST. GRADE
PROPOSED PROFILE
-1.53 %
2.08 %
P.V.C. STA. = 144+09.90
P.V.C. ELEV. = 1,062.08
P.V.I. STA. = 148+50.00
P.V.I. ELEV. = 1,068.37
900′ V.C.
X = 249
SSD = 733′
P.V.T. STA. = 153+90.10
P.V.T. ELEV. = 1,059.60

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
1070
1060
1050
1040
143+00 144+00 145+00 146+00 147+00 148+00 149+00 150+00 151+00 152+00 153+00 154+00 155+00

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 142+50 TO STA. 155+00

LIC-161-6.65
LIC-37-10.25

592
349

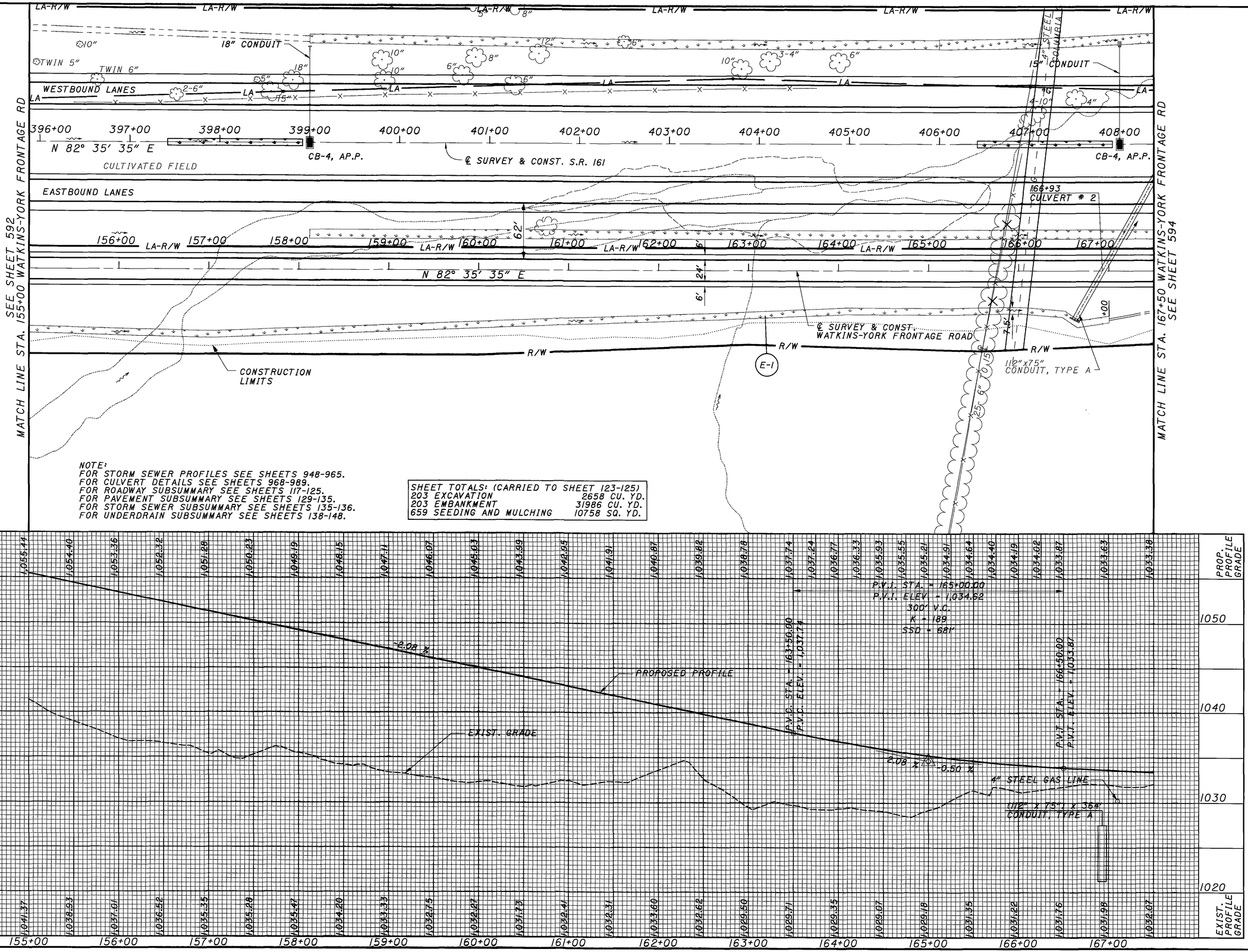
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PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 155+00 TO STA. 167+50

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

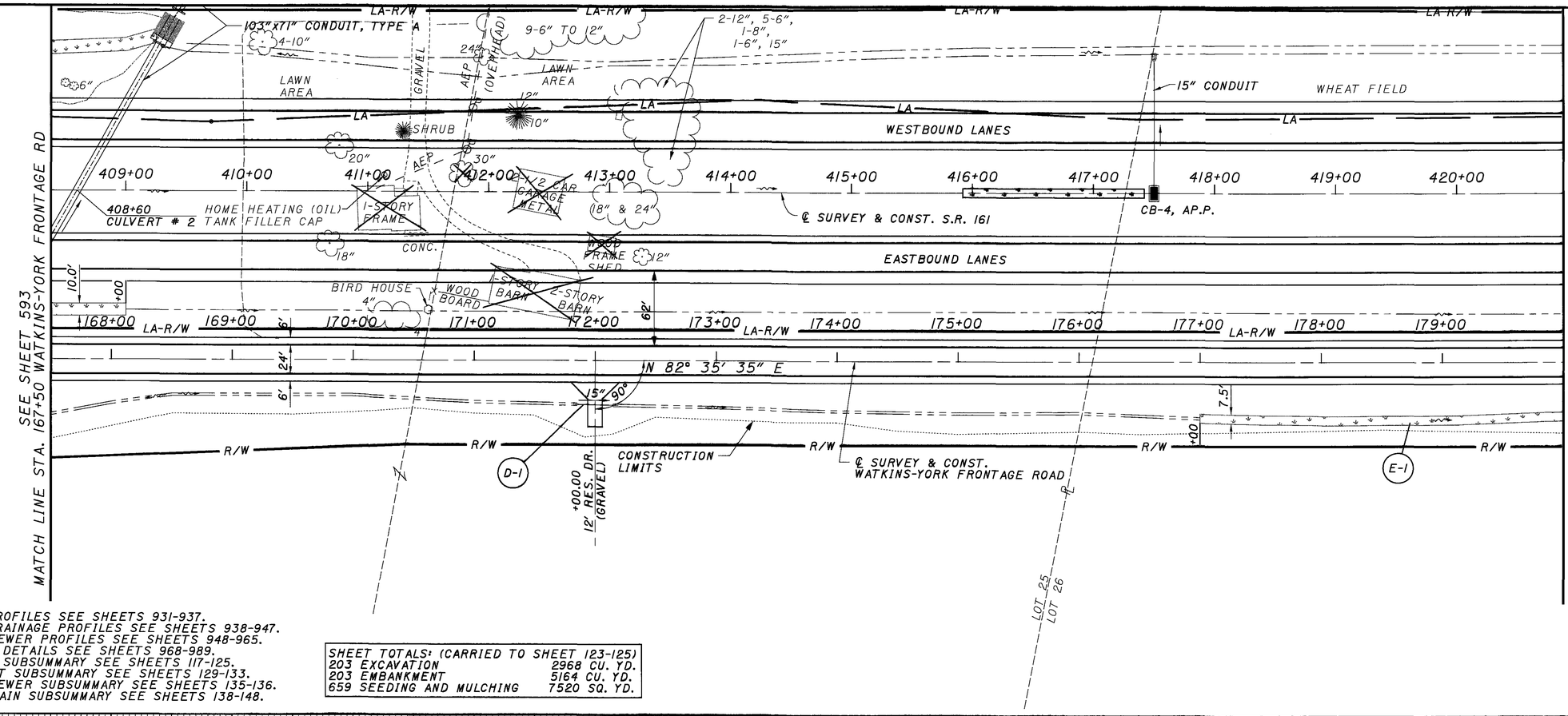


NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-135.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

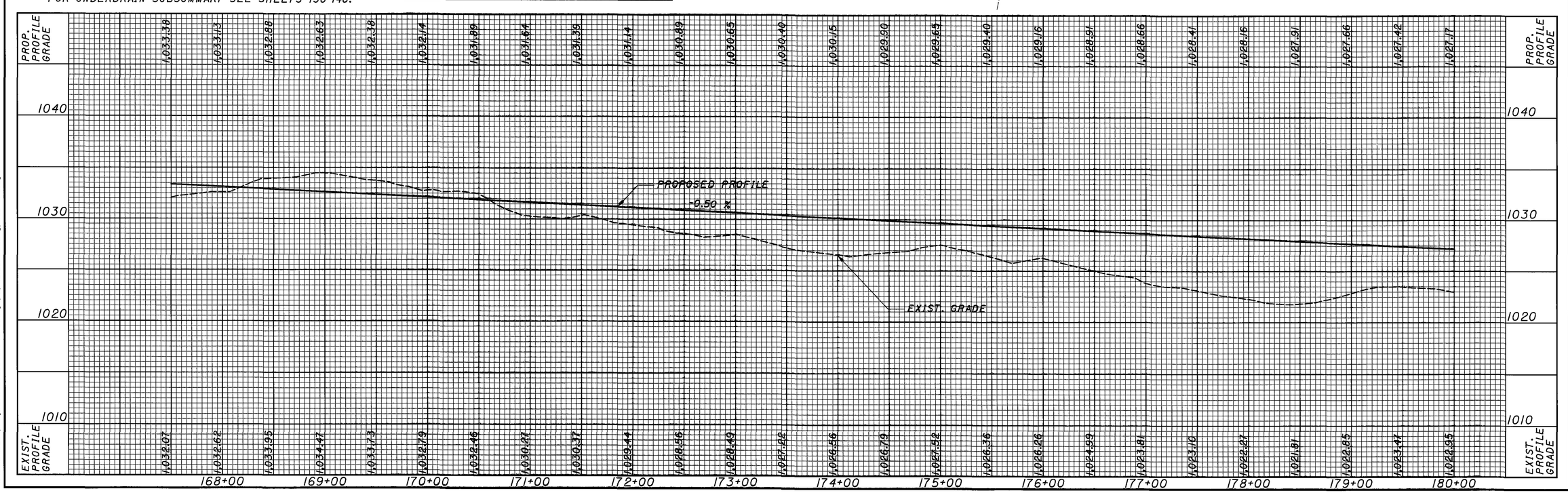
203 EXCAVATION	2658 CU. YD.
203 EMBANKMENT	31986 CU. YD.
659 SEEDING AND MULCHING	10758 SQ. YD.

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NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	2968 CU. YD.
203 EMBANKMENT	5164 CU. YD.
659 SEEDING AND MULCHING	7520 SQ. YD.



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HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 167+50 TO STA. 180+00

LIC-161-6.65
LIC-37-10.25

MATCH LINE STA. 180+00 WATKINS-YORK FRONTAGE RD
SEE SHEET 594

MATCH LINE STA. 192+50 WATKINS-YORK FRONTAGE RD
SEE SHEET 596

P.T. STA. 186+90.36
18" CONDUIT

P.C. STA. 430+93.83
TYPE B GUARDRAIL

WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 161
N 82° 35' 35" E
CB-4, AP.P.
WOOD BOARD FENCE
SMOOTH WIRE FENCE
GRAVEL
RIDING AREA
LAWN AREA
WOOD DECK
COVERED DOG PEN
CAT
2 STORY FRAME & BLOCK RESIDENTIAL
1 STORY FRAME HORSE BARN
BASKETBALL HOOP
SATELLITE DISH
GRASS
BUSH
GARDEN AREA
FILLER CAP
2 STORY FRAME
2 CAR FRAME GARAGE
SEPTIC
METAL SHED
BLDG
WOODS
OVERHEAD
AEP
LA
LA-R/W
R/W
24'
6'
7.5'
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
CONSTRUCTION LIMITS
12' RES. DR. (GRAVEL)
+75.00
+20.00
T ESMT
WOOD GUARD RAIL
LOT 26
LOT 27
BEGIN PAVEMENT WIDENING 12' RT.
T.S. STA. 189+32.18
S.C. STA. 191+97.37
END PAVEMENT WIDENING 12' RT.

STA. 188+63.32, 20' RT.
BEG. TYPE T ANCH. ASSM.

STA. 188+75.82, 20' RT.
END TYPE T ANCH. ASSM.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-947.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	19005 CU. YD.
203 EMBANKMENT	6277 CU. YD.
659 SEEDING AND MULCHING	11744 SQ. YD.

WATKINS-YORK FRONTAGE ROAD CURVE DATA
P.I. STA. = 194+97.02
Δ = 48° 34' 39" (RT)
Dc = 06° 00' 00"
R = 954.93'
Ls = 265.19'
θs = 07° 57' 21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Δc = 32° 39' 57" (RT)
Lc = 544.44'
Ts = 564.83'
Es = 96.10'
emax = 0.083

P.V.I. STA. = 187+00.00
P.V.I. ELEV. = 1,023.68
200' V.C.
K = 215
SSD=681'

P.V.C. STA. = 186+00.00
P.V.C. ELEV. = 1024.19

P.V.T. STA. = 188+00.00
P.V.T. ELEV. = 1,022.26

-0.50 %
-1.43 %
EXIST. GRADE
PROPOSED PROFILE
AEP

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
1040
1030
1020
1010
180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00

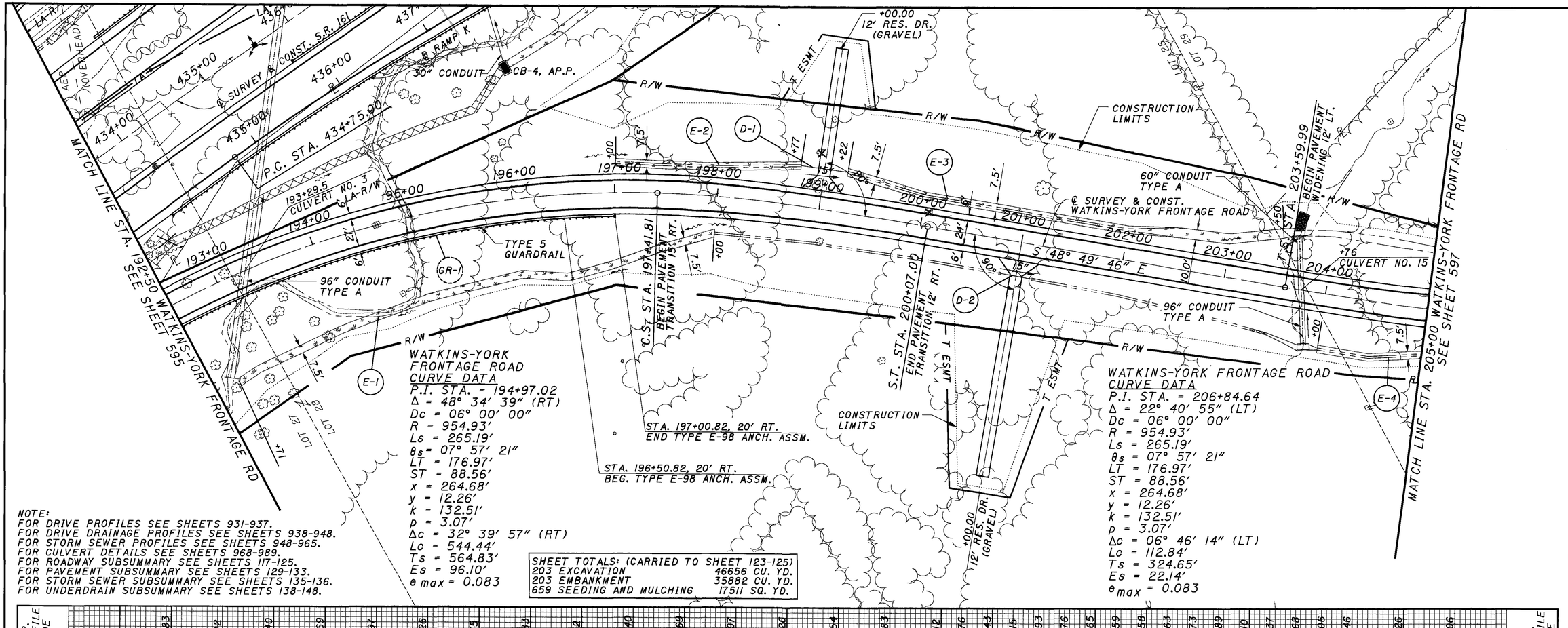
HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 180+00 TO STA. 192+50

LIC-161-6.65
LIC-37-10.25

595
1349

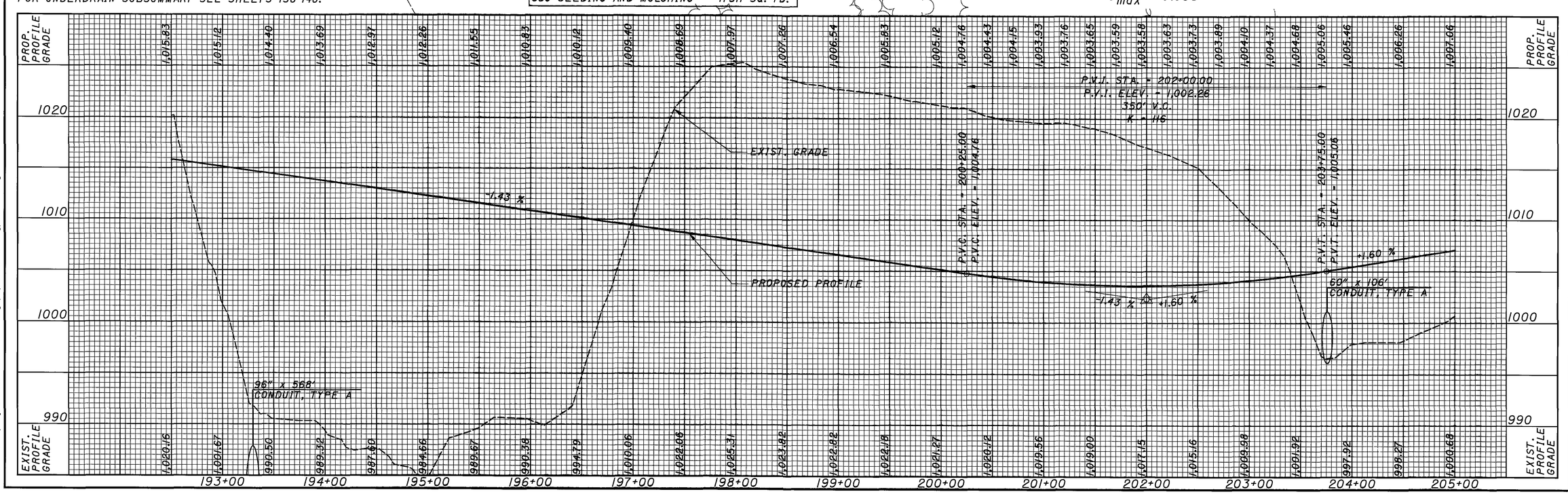
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NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	46656 CU. YD.
203 EMBANKMENT	35882 CU. YD.
659 SEEDING AND MULCHING	17511 SQ. YD.



CALCULATED JMA
CHECKED FJA
HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 192+50 TO STA. 205+00

LIC-161-6.65
LIC-37-10.25

596
349

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MATCH LINE STA. 205+00 SEE SHEET 596
WATKINS-YORK FRONTAGE RD
WOODS
WOOD SHED
GRAVEL
WELL
CLOTHES LINE POST
1-STY FRAME
CONC. PORCH
AEP 8"CMP
SPRINT
WOODS
D-1
E-7
E-1
E-3
R-3
R-2
R-4
E-6
B-2
E-2
E-4
E-5
R-1
50.00' (2' RES. DR. (GRAVEL))
50.00' (2' RES. DR. ASPHALT)
S.C. STA. 206+25.18
END PAVEMENT WIDENING 15' RT.
C.S. STA. 207+38.02
BEGIN PAVEMENT TRANSITION 15' RT.
S.T. STA. 210+03.21
END PAVEMENT TRANSITION 12' RT.
CULVERT NO. 21
30" CONDUIT TYPE A
S 71° 30' 41" E
A/C UNIT
SHRUBS
ASPHALT
WELL
BRICK GARAGE
STA. 211+80.67
58.00' RT.
SEPTIC
CONSTRUCTION LIMITS
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
SEPTIC AREA (EXACT LOCATION PER OWNER)
PROPANE TANKS
GARDENS
METAL POLE BARN
POOL
1-STY FRAME & BRICK
LEACH BED
℄ SURVEY & CONST. YORK ROAD
℄ SURVEY & CONST. S.R. 37
P.C. STA. 216+21.85
P.T. STA. 216+04.76
WATKINS-YORK FRONTAGE ROAD
CURVE DATA
P.I. STA. = 206+84.64
Δ = 22° 40′ 55″ (LT)
Dc = 06° 00′ 00″
R = 954.93′
Ls = 265.19′
θs = 07° 57′ 21″
LT = 176.97′
ST = 88.56′
x = 264.68′
y = 12.26′
k = 132.51′
p = 3.07′
Δc = 06° 46′ 14″ (LT)
Lc = 112.84′
Ts = 324.65′
Es = 22.14′
e max = 0.083
℄ SURVEY & CONST. SERVICE ROAD II
SURVEY & CONST. S.R. 37 STA. 417+63.14 =
SURVEY & CONST. YORK RD. STA. 417+63.14
SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD STA. 212+25.08
SURVEY & CONST. SERVICE ROAD II STA. 212+58.82
CONSTRUCTION LIMITS
P.I. STA. = 419+37.99
Δ = 00° 19′ 13″ (LT.)
NO CURVE
NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	46656 CU. YD.
203 EMBANKMENT	35882 CU. YD.
659 SEEDING AND MULCHING	4725 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
1020
1010
1000
990
1,007.06 1,007.86 1,008.65 1,009.45 1,010.25 1,011.05 1,011.85 1,012.65 1,013.45 1,014.25 1,015.05 1,015.85 1,016.65 1,017.45 1,018.25
1,060.68 1,005.73 1,011.46 1,013.96 1,012.78 1,011.76 1,012.59 1,006.42 1,005.42 1,011.63 1,014.72 1,017.28 1,018.53 1,018.32 1,017.72
205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00
PROPOSED PROFILE
EXIST. GRADE
1.60%
SPRINT
AEP
℄ S.R. 37 STA. 212+25.08 ELEV. 1018.65

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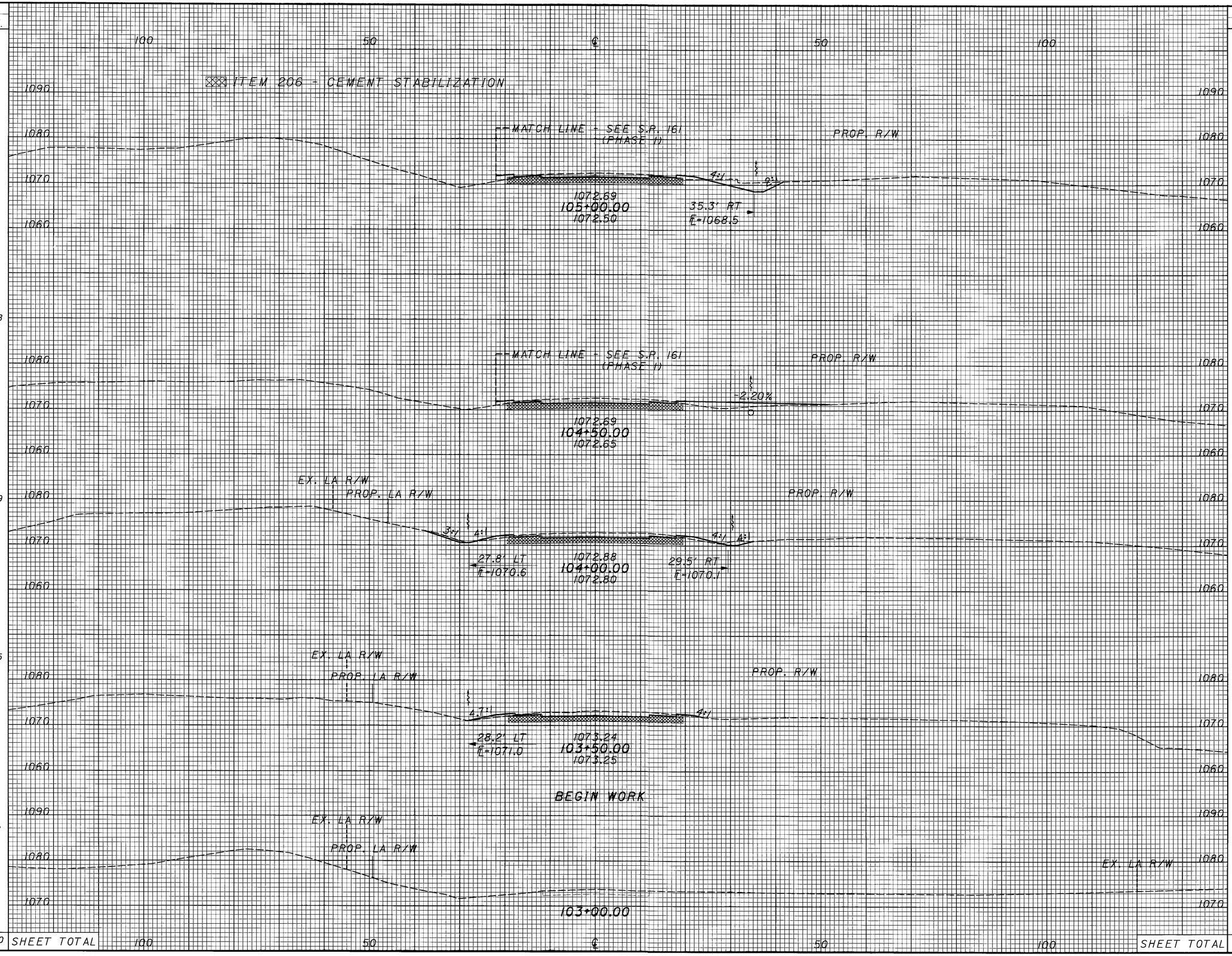
HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

PLAN AND PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 205+00 TO STA. 212+25.08

597
1349

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
31		43	8		
	108			67	31
8		30	26		
	139			63	30
42		38	7		
	175			62	11
21		29	5		
	58			27	4
0		0	0		
	480			219	76



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 103+00 TO STA. 105+00

LIC-161-6.65
LIC-37-10.25

598
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
47	256
45	247
44	236
41	208
34	181
	1128

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24	68		
		53	136
33	79		
		70	134
42	66		
		66	98
30	40		
		53	64
28	29		
		65	34
		307	466

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 105+50 TO STA. 107+50

LIC-161-6.65
LIC-37-10.25

599
349

100 50 ℄ 50 100

ITEM 206 - CEWENT STABILIZATION

1080
1070
1060

MATCH LINE - SEE S.R. 161 (PHASE I)

PROP. R/W

4:1 3:1 2:1

107+50.00
107.79
107.69
50.3' RT
℄-1064.0

107+00.00
107.66
107.25
47.6' RT
℄-1065.0

106+50.00
107.40
107.20
44.5' RT
℄-1066.0

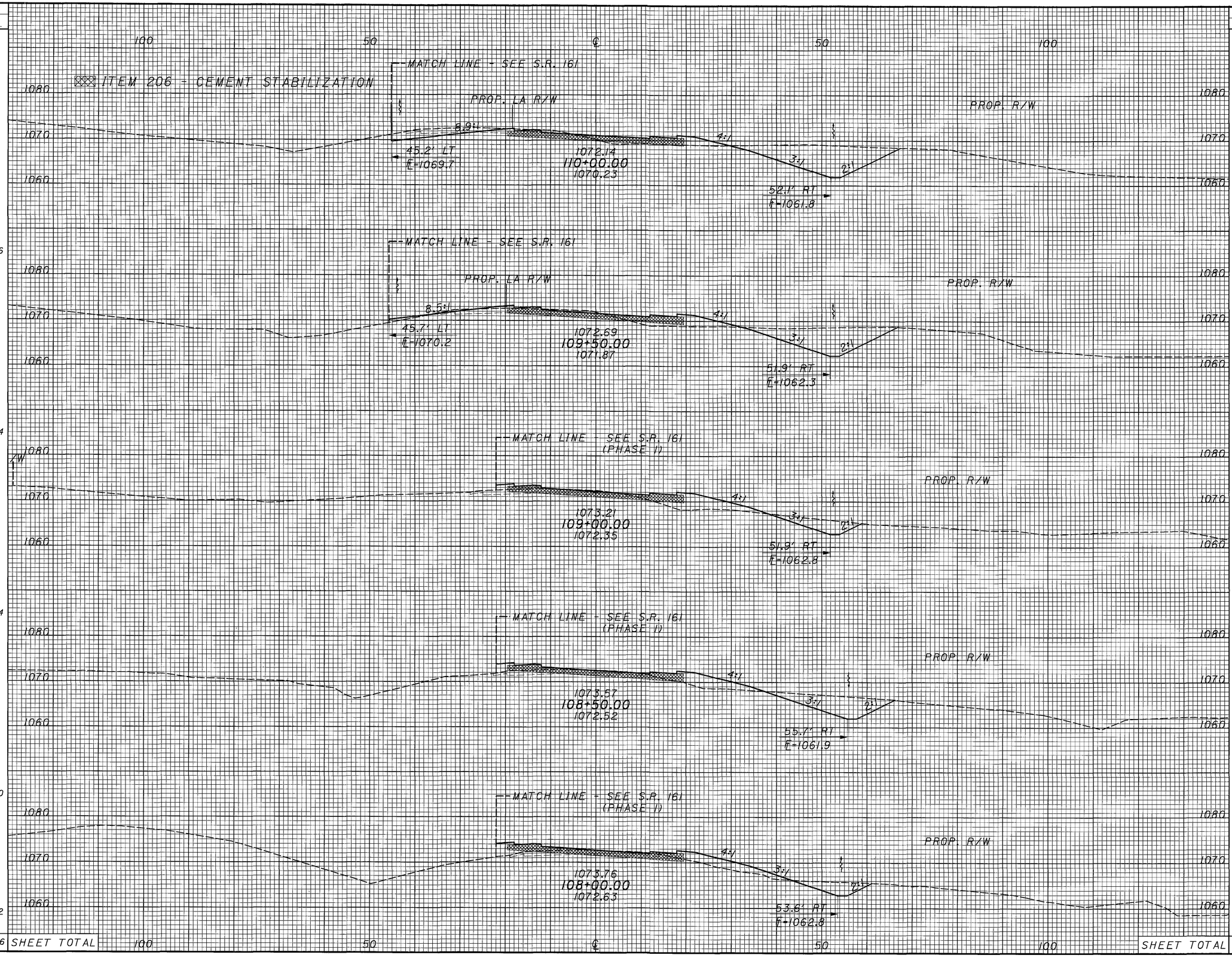
106+00.00
107.13
107.26
43.0' RT
℄-1067.0

105+50.00
107.86
107.36
38.0' RT
℄-1068.0

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	82	179	43		
	456			275	90
	82	118	55		
	364			144	113
	49	37	68		
	294			105	119
	57	77	61		
	300			100	119
	51	30	68		
	272			50	126
1686	SHEET TOTAL			674	567



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 108+00 TO STA. 110+00

LIC-161-6.65
LIC-37-10.25

600
1349

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SEEDING	
END WIDTH	SQ. YDS.
78	
	417
72	
	414
77	
	442
82	
	456
	1729

END AREA	
CUT	FILL
201	0
242	0
238	10
233	27

VOLUME	
CUT	FILL
410	0
445	9
436	35
381	65
1672	109

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 110+50 TO STA. 112+00

LIC-161-6.65
LIC-37-10.25

601
1349

ITEM 206 = CEMENT STABILIZATION

100 50 ℄ 50 100

1090 / 1080 / 1070 / 1060

MATCH LINE - SEE S.R. 161

PROP. LA R/W

7.9:1

41.3' LT
E=1066.6

4:1

3:1

2:1

PROP. R/W

EX. LA R/W

1069.91
112+00.00
1070.52

63.5' RT
E=1056.2

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 948.

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8.8:1

42.3' LT
E=1067.4

1070.41
111+50.00
1070.69

4:1

3:1

2:1

PROP. R/W

EX. LA R/W

53.2' RT
E=1060.2

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8.6:1

43.1' LT
E=1068.2

4:1

3:1

2:1

PROP. R/W

EX. LA R/W

1071.03
111+00.00
1069.84

53.4' RT
E=1060.7

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8.6:1

44.2' LT
E=1068.9

4:1

3:1

2:1

PROP. R/W

EX. LA R/W

1071.58
110+50.00
1069.75

52.6' RT
E=1061.3

1080 / 1070 / 1060 / 1050

100 50 ℄ 50 100

SHEET TOTAL

SHEET TOTAL

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		1100 1090 1080 1070 1060 1050 1040 1090				
		MATCH LINE - SEE S.R. 161				
		PROP. LA R/W				
		10:1				
		47.6' LT ℄-1064.8				
		1068.25 113+50.00 1063.95				
		PROP. RETAINING WALL 2:1				
		PROP. R/W				
		EX. LA R/W				
39			159	194		
		ROCK CHANNEL PROTECTION, TYPE C 2'-0" THICK (TYP.)				
		1100 1090 1080 1070 1060 1050 1040 1090				
		MATCH LINE - SEE S.R. 161				
		PROP. LA R/W				
		10:1				
		47.3' LT ℄-1065.4				
		1068.80 113+00.00 1068.04				
		PROP. RETAINING WALL 2:1				
		PROP. R/W				
		EX. LA R/W				
206					312	225
35			178	49		
		1100 1090 1080 1070 1060 1050 1040 1090				
		MATCH LINE - SEE S.R. 161				
		PROP. LA R/W				
		10:1				
		47.3' LT ℄-1066.0				
		1069.36 112+50.00 1069.15				
		PROP. RETAINING WALL 2:1				
		PROP R/W				
		EX. LA R/W				
194					300	54
35			146	9		
		1100 1090 1080 1070 1060 1050 1040 1090				
314					321	8
714	SHEET TOTAL	100 50 ℄ 50 100 SHEET TOTAL			933	287

CALCULATED JMA
CHECKED PEK

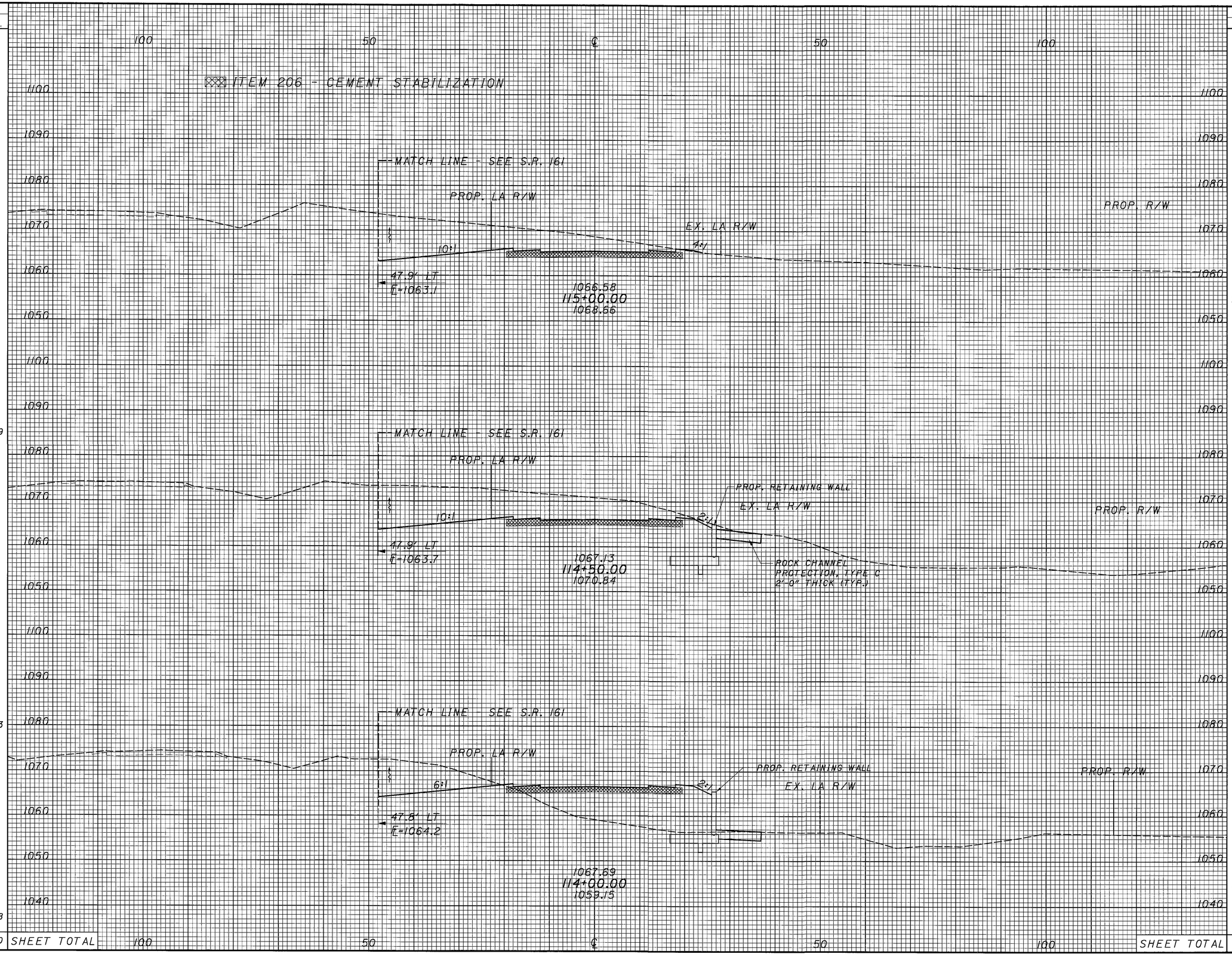
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 112+50 TO STA. 113+50

LIC-161-6.65
LIC-37-10.25

602
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
38		342	0		
				694	2
	239				
48		407	2		
				505	323
	253				
43		138	347		
	228			275	501
	720	SHEET TOTAL		1474	826



CALCULATED JMA
CHECKED PEK

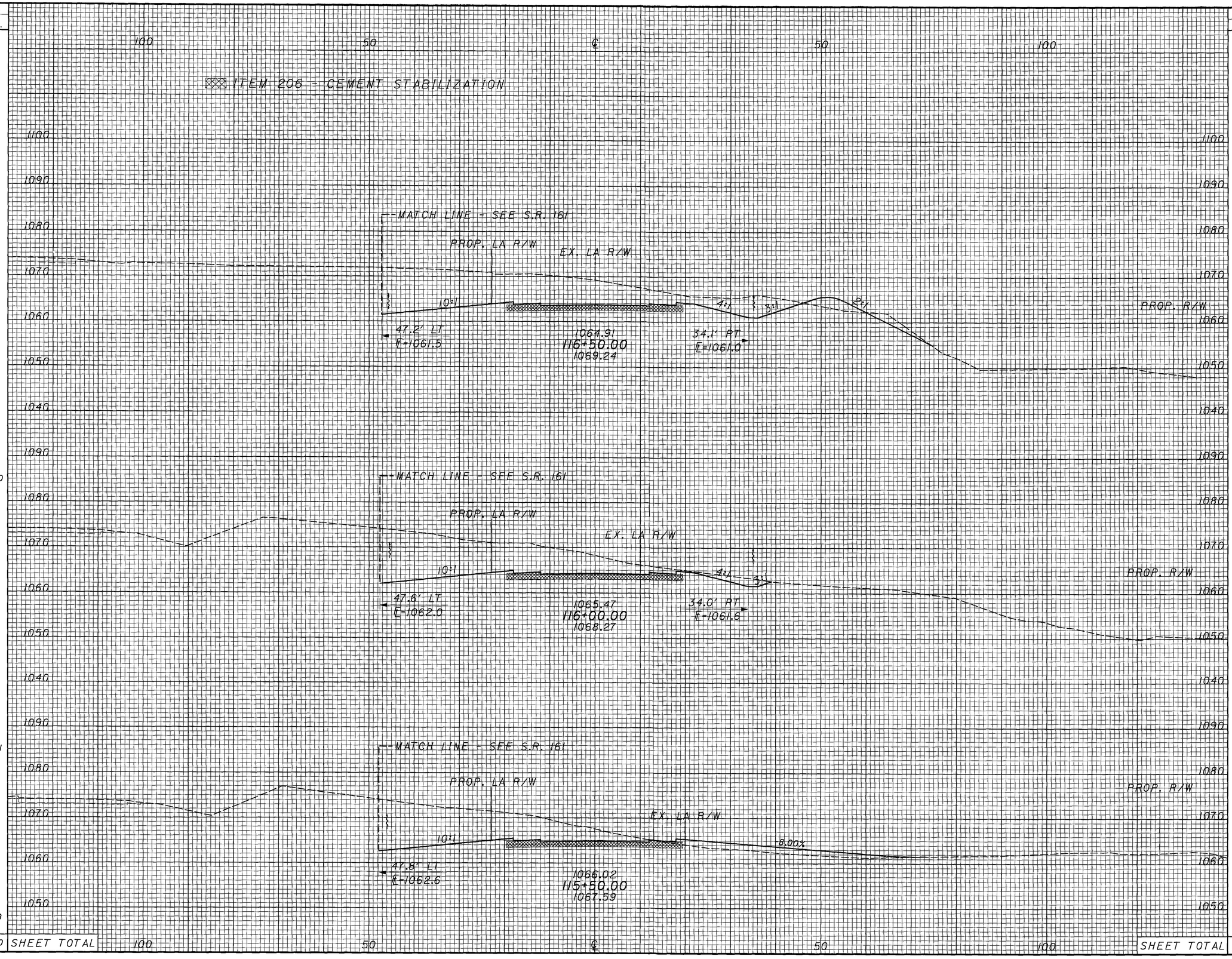
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 114+00 TO STA. 115+00

LIC-161-6.65
LIC-37-10.25

603
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
91		527	21		
	400			881	19
53		424	0		
	231			718	52
30		351	56		
	189			642	52
	820	SHEET TOTAL		2241	123



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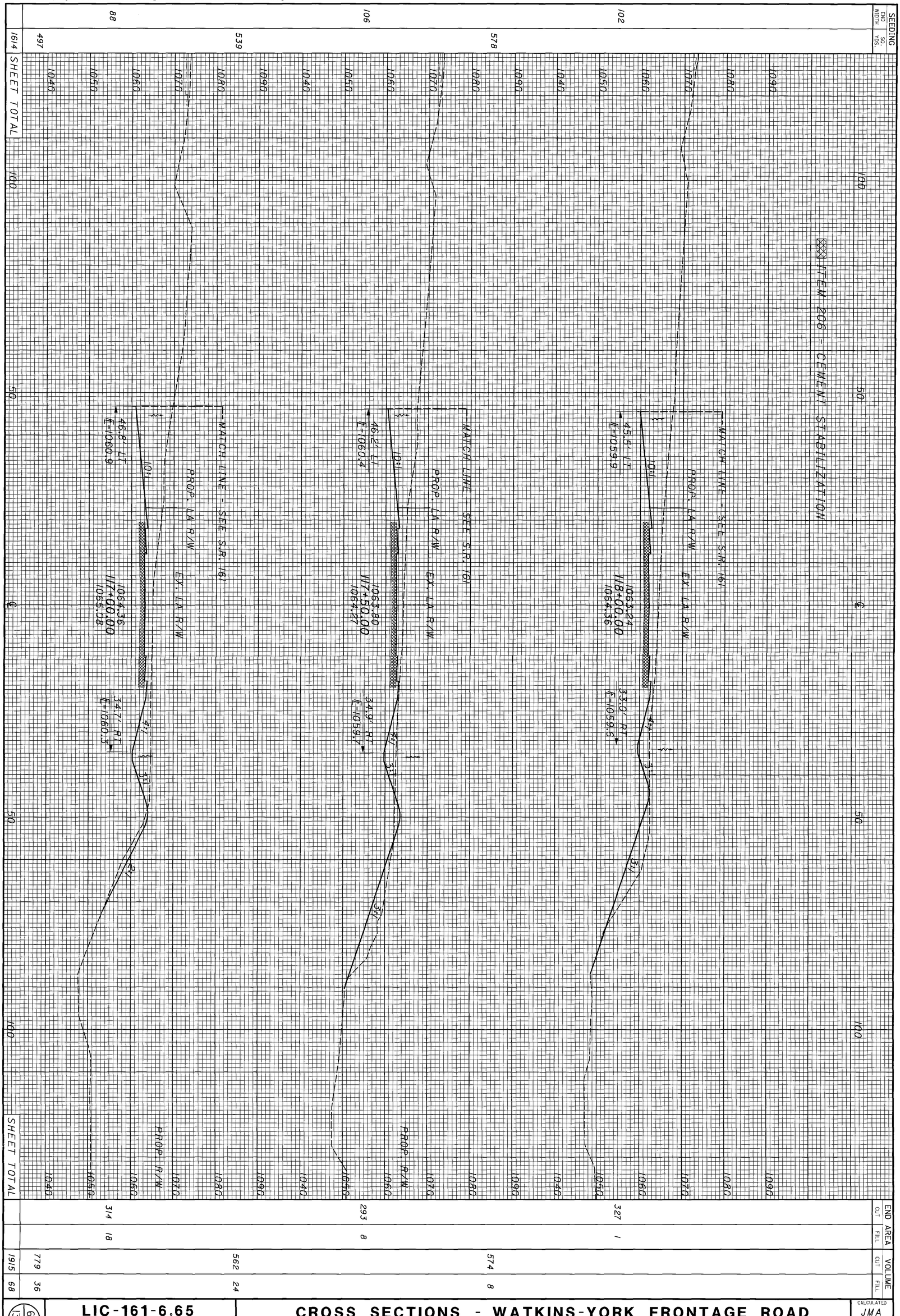
CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 115+50 TO STA. 116+50

LIC-161-6.65
LIC-37-10.25

604
1349

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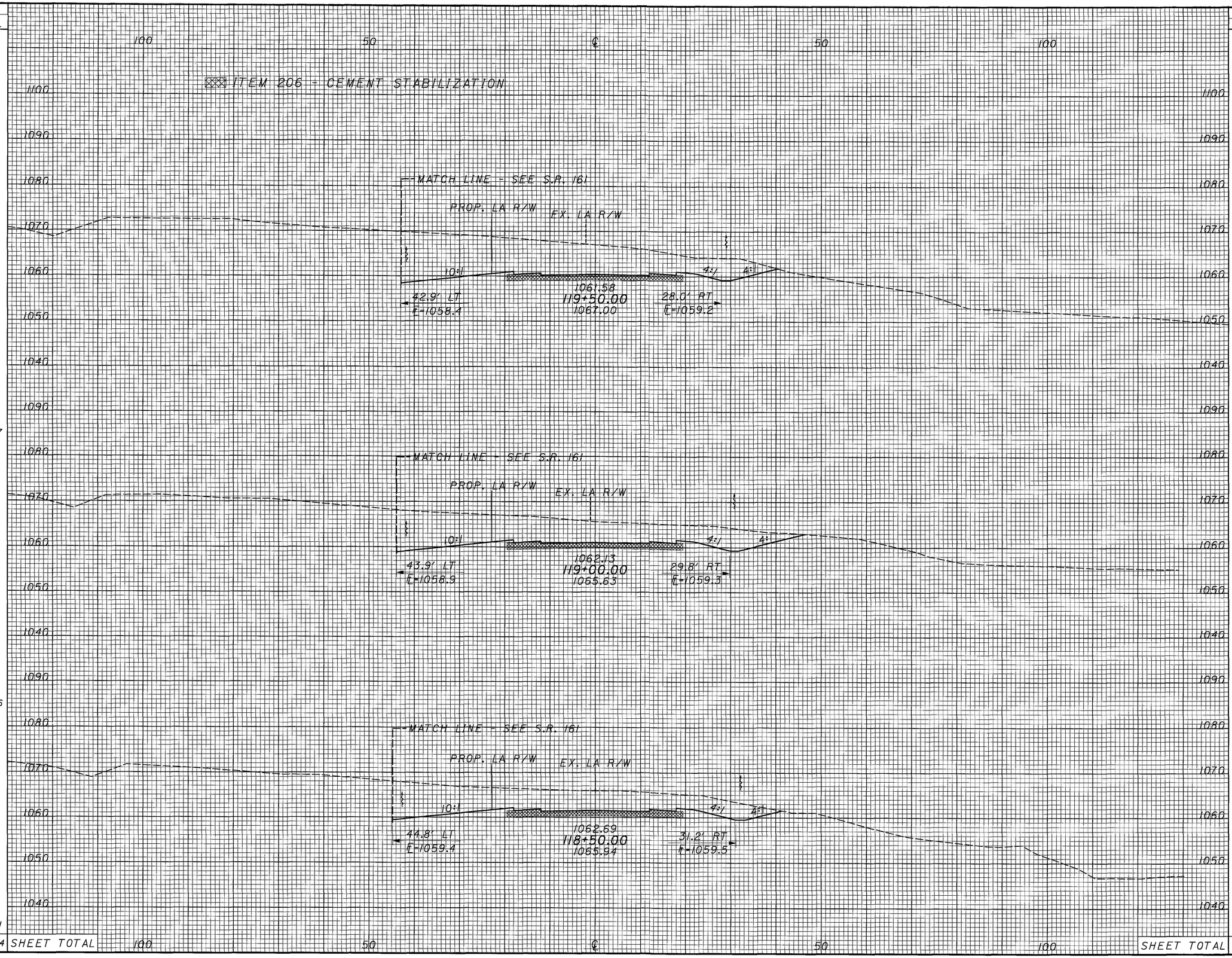
LIC-161-6.65
LIC-37-10.25

605
1349

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 117+00 TO STA. 118+00

CALCULATED JMA
CHECKED PEK

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
50		550	0		
	297			931	0
57		456	0		
	306			790	0
53		397	0		
	431			671	1
	1034	SHEET TOTAL		2392	1



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 118+50 TO STA. 119+50

LIC-161-6.65
LIC-37-10.25

606
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
68		18	578		
	372			111	886
66		102	379		
	322			448	351
50		382	0		
	278			863	0
	972			1422	1237

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

1090 1080 1070 1060 1050 1040

MATCH LINE - SEE S.R. 161

PROP. LA R/W
EX. LA R/W
9:1
4:1
3:1
40.7' LT
ℓ=1056.8
1059.91
121+00.00
1050.72

MATCH LINE - SEE S.R. 161

PROP. LA R/W
EX. LA R/W
9:1
4:1
3:1
41.3' LT
ℓ=1057.3
1060.46
120+50.00
1054.72

MATCH LINE - SEE S.R. 161

PROP. LA R/W
EX. LA R/W
9:1
4:1
3:1
42.0' LT
ℓ=1057.8
1061.02
120+00.00
1064.47

SHEET TOTAL

100 50 ℄ 50 100

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 120+00 TO STA. 121+00

LIC-161-6.65
LIC-37-10.25

607
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	
		ITEM 206 - CEMENT STABILIZATION
70		
	386	
69		
	383	
69		
	381	
	1150	SHEET TOTAL

100 50 ℄ 50 100

--MATCH LINE - SEE S.R. 161
PROP. LA R/W
EX. LA R/W
8:1 4:1 3:1
40.0' LT
℄-1054.9
1058.24
122+50.00
1045.75

--MATCH LINE - SEE S.R. 161
PROP. LA R/W
EX. LA R/W
8:1 4:1 3:1
40.0' LT
℄-1055.5
1058.80
122+00.00
1046.92

--MATCH LINE - SEE S.R. 161
PROP. LA R/W
EX. LA R/W
9:1 4:1 3:1
40.2' LT
℄-1056.3
1059.35
121+50.00
1047.46

1070 1060 1050 1040 1030 1080

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	936		
		0	1671
0	869		
		0	1584
0	841		
		17	1314
		17	4569
	SHEET TOTAL		

CALCULATED JMA
CHECKED PEK

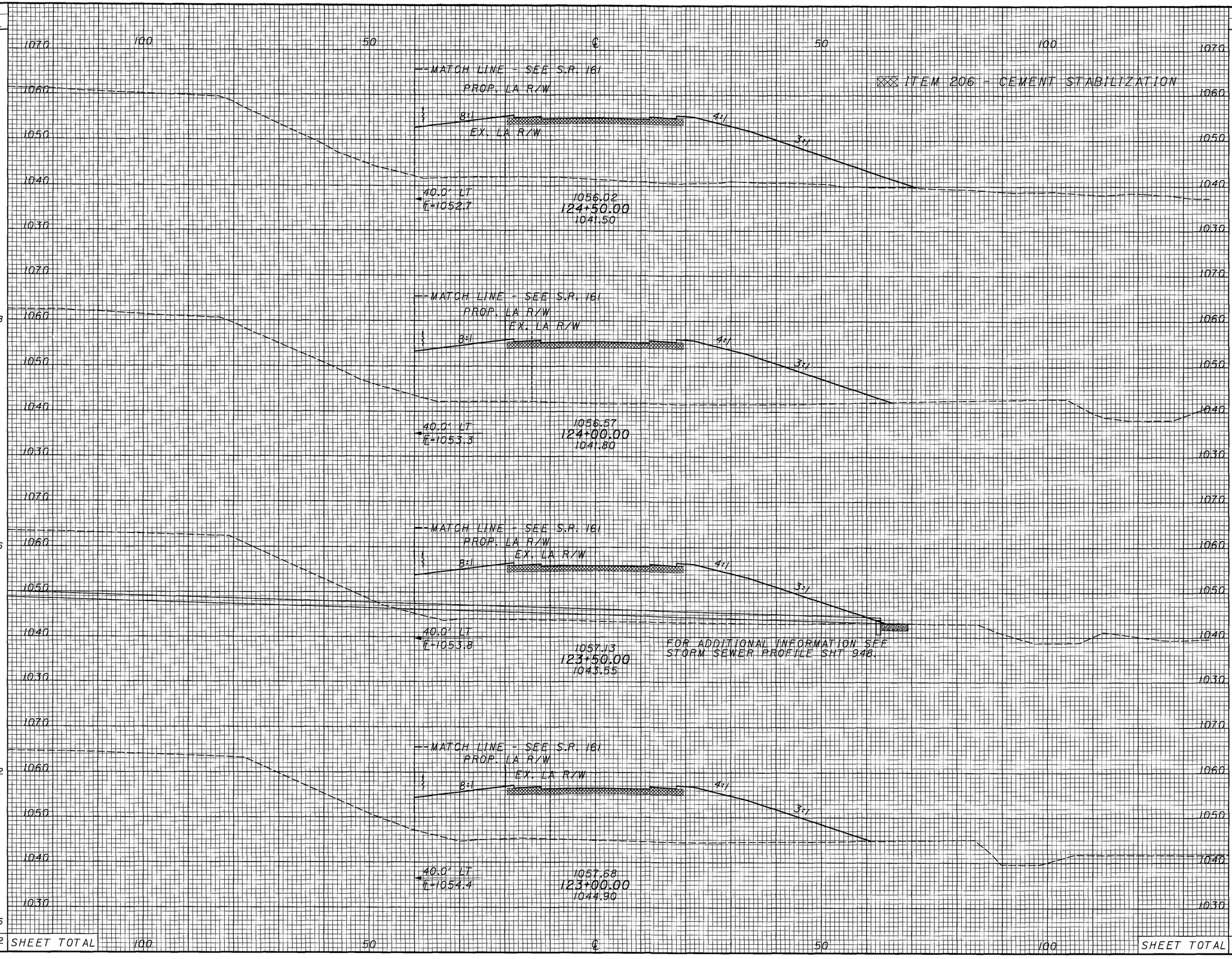
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 121+50 TO STA. 122+50

LIC-161-6.65
LIC-37-10.25

608
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
80	428	0	1172	0	2136
74	406	0	1135	0	2008
72	392	0	1034	0	1839
69	386	0	953	0	1748
1612	SHEET TOTAL			0	7731



CALCULATED JMA
CHECKED PEK

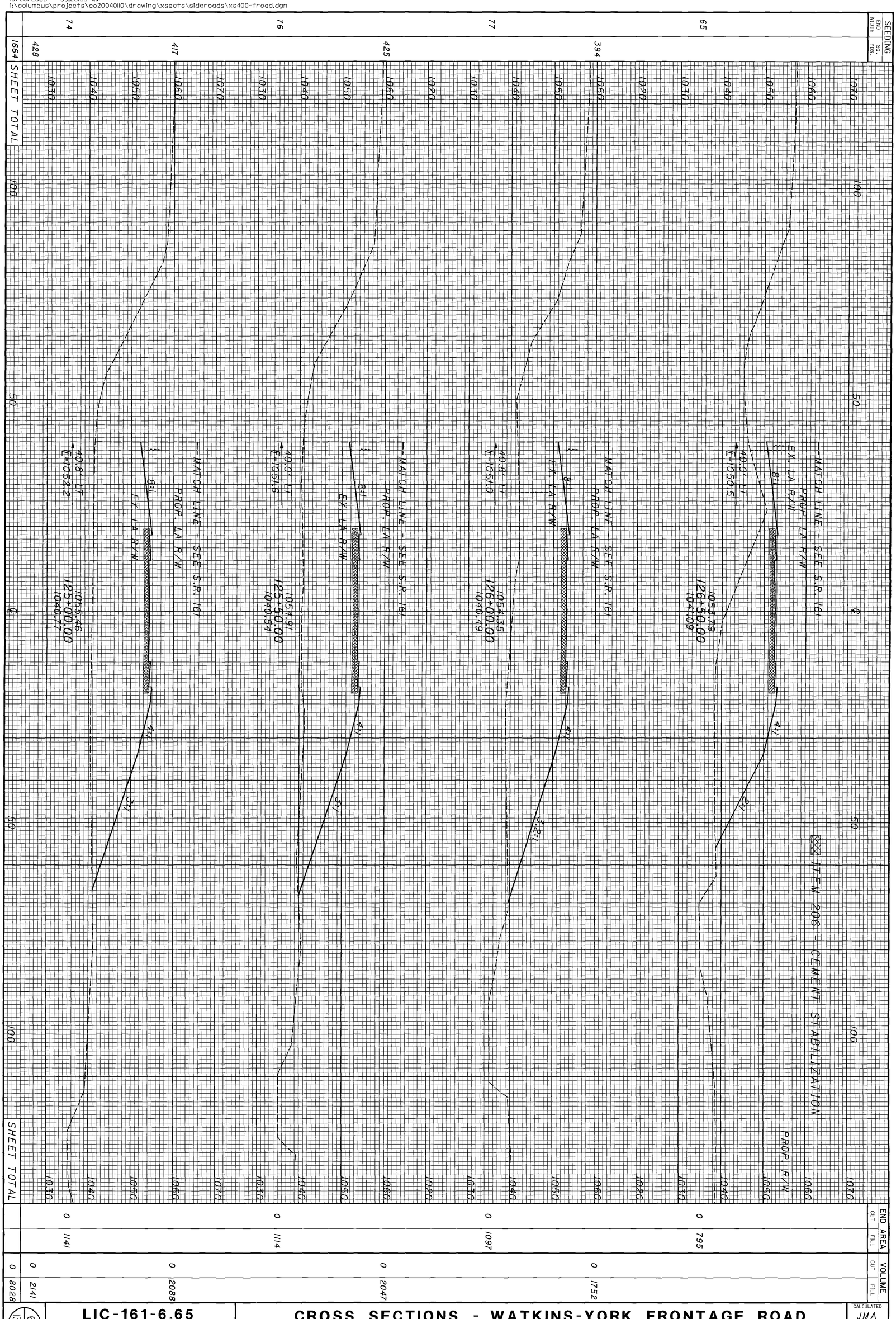
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 123+00 TO STA. 124+50

LIC-161-6.65
LIC-37-10.25

609
1349

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610 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 125+00 TO STA. 126+50

CALCULATED JMA
CHECKED PEK

SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		1080				
		1070				
		—MATCH LINE - SEE S.R. 161				
		PROP. LA R/W				
		1060				
		PROP. R/W				
		8:1 4:1 2:1				
		1050				
63		40.0' LT ℄=1048.8 — 1052.13 128+00.00 1058.99 — 32.0' RT ℄=1048.7	701	0		
		1040				
		1030				
		1080				
	408	1070			1162	4
		—MATCH LINE - SEE S.R. 161				
		PROP. LA R/W				
		1060				
		PROP. R/W				
		8:1 4:1 4:1 3:1				
		1050				
84		40.8' LT ℄=1049.4 — 1052.68 127+50.00 1058.73 — 28.6' RT ℄=1050.3	554	4		
		1040				
		1030				
	425	1070			644	358
		—MATCH LINE - SEE S.R. 161				
		PROP. LA R/W				
		1060				
		PROP. R/W				
		8:1 4:1 3:1				
		1050				
69		40.0' LT ℄=1049.9 — 1053.24 127+00.00 1050.42	142	383		
		1040				
		1030				
	372	1020			131	1091
		100 50 ℄ 50 100				
	1205	SHEET TOTAL			1937	1453

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 127+00 TO STA. 128+00

LIC-161-6.65
LIC-37-10.25

611
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
56		486	0		
22		648	0	1050	0
63		730	0	1276	0
350				1325	0
803	SHEET TOTAL			3651	0

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

1080 1070 1060 1050 1040 1030

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 2:1

40.0' LT
℄=1047.2
1050.46
129+50.00
1054.76
32.0' RT
℄=1047.1

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 +8.00%

40.0' LT
℄=1047.7
1051.01
129+00.00
1057.60
15", TYPE D

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 2:1

40.0' LT
℄=1048.3
1051.57
128+50.00
1058.73
32.0' RT
℄=1048.2

100 50 ℄ 50 100 SHEET TOTAL

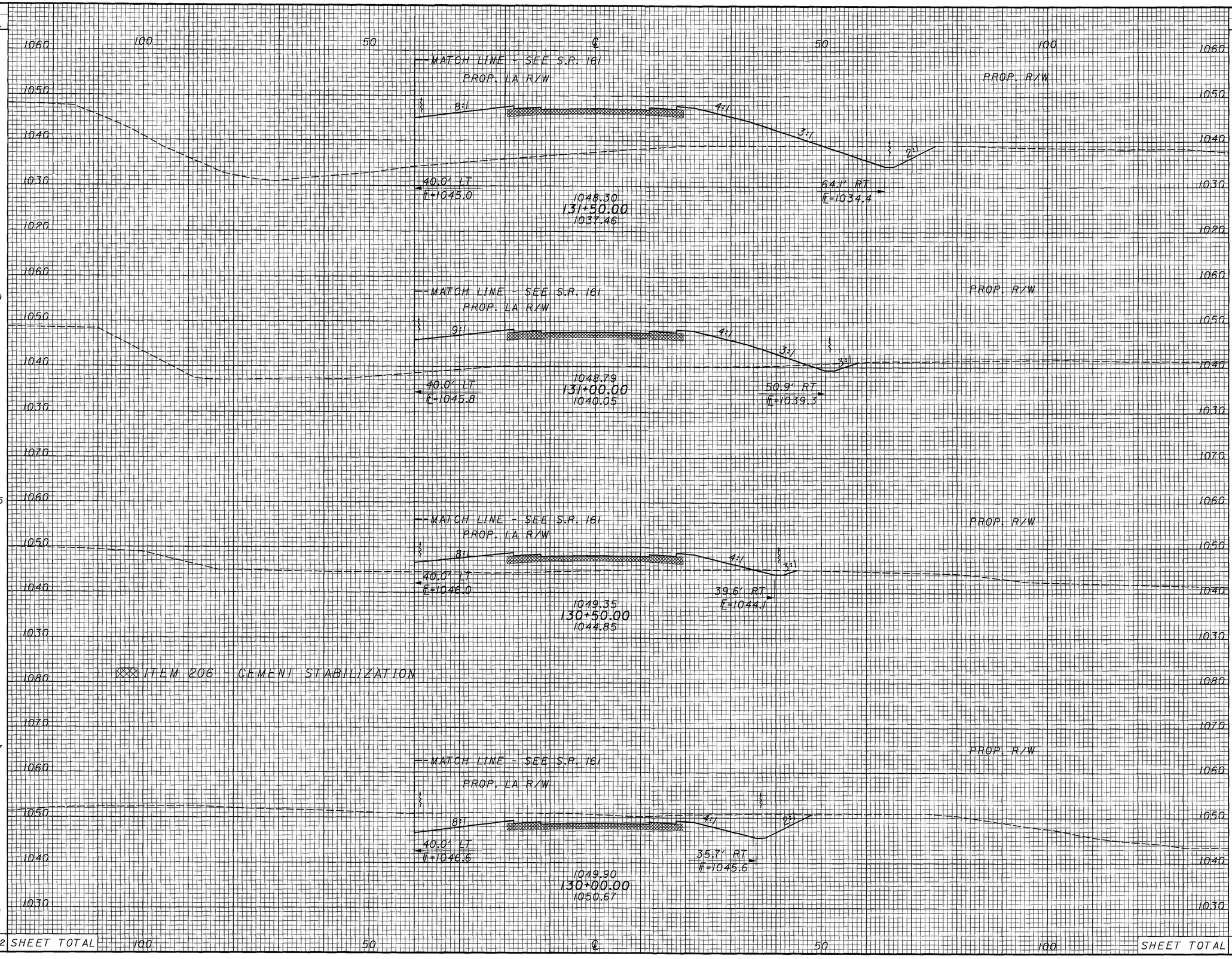
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 128+50 TO STA. 129+50

LIC-161-6.65
LIC-37-10.25

612
349

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SEEDING END WIDTH	SEEDING SQ. YDS.
85	
	419
66	
	325
51	
	297
56	
	311
	1352



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
63	757		
		68	1235
11	577		
		15	744
6	227		
		217	210
228	0		
		661	0
		961	2189

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 130+00 TO STA. 131+50

LIC-161-6.65
LIC-37-10.25

613
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
	102
	558
	99
	547
	98
	519
	89
	483
	2107

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
43	1720		
		60	3226
22	1764		
		38	3278
19	1777		
		52	3164
36	1640		
		92	2220
		242	11888

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 132+00 TO STA. 133+50

LIC-161-6.65
LIC-37-10.25

614
1349

STA 133+77, CULVERT No. 1,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 966.

--MATCH LINE - SEE S.R. 161
PROP. CH. ESMT.
PROP. LA R/W
℄
9:1
2:1
61.8' RT
Elev-1027.6
PROP. R/W
40.0' LT
℄-1044.6
79.6' RT
℄-1023.7
1047.66
133+50.00
1026.42

--MATCH LINE - SEE S.R. 161
PROP. CH. ESMT.
PROP. LA R/W
PROP CB 2-2B, A.P.P.
STA. 132+75.49, 41.00' LT.
GRATE ELEV. - 1044.50
INV. 18" SW - 1039.50
9:1
2:1
40.0' LT
℄-1044.6
63.2' RT
Elev-1026.7
PROP. R/W
FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 949.
78.7' RT
℄-1023.9
1047.62
133+00.00
1024.87

--MATCH LINE - SEE S.R. 161
PROP. LA R/W
8:1
2:1
64.6' RT
Elev-1025.6
PROP. R/W
40.0' LT
℄-1044.4
77.6' RT
℄-1024.1
1047.72
132+50.00
1025.21

--MATCH LINE - SEE S.R. 161
PROP. LA R/W
8:1
2:1
54.1' RT
Elev-1031.0
PROP. R/W
40.0' LT
℄-1044.6
67.1' RT
℄-1029.5
1047.94
132+00.00
1025.74

SHEET TOTAL

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SEEDING		END AREA		VOLUME		
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	
						CALCULATED JMA CHECKED PEK
						CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 134+00 TO STA. 135+00
						LIC-161-6.65 LIC-37-10.25
89		327	87			
	519			327	724	
98		26	695			
	394			24	1663	
44		0	1100			
	406			40	2612	
	1319			391	4999	615 / 1349

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

1080 1070 1060 1050 1040 1030 1020

MATCH LINE - SEE S.R. 161

PROP. LA R/W

EX. LA R/W

11:1

4:1

3:1

PROP R/W

40.1' LT
E=1045.8

1048.57
135+00.00
1050.36

12.2' RT
E=1032.7

MATCH LINE - SEE S.R. 161

EX. LA R/W

PROP. LA R/W

11:1

4:1

3:1

PROP. R/W

40.0' LT
E=1045.4

1048.14
134+50.00
1041.13

82.8' RT
E=1028.7

MATCH LINE SEE S.R. 161

PROP. LA R/W

PROP. CH. ESMT.

EX. LA R/W

10:1

2:1

PROP. R/W

40.0' LT
E=1045.0

1047.83
134+00.00
1031.89

SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
100	
	558
101	
	536
92	
	503
	1597

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1981	0		
		3512	0
1813	0		
		2853	0
1268	0		
		1477	80
		7842	80

CALCULATED JMA

CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 135+50 TO STA. 136+50

LIC-161-6.65
LIC-37-10.25

616
1349

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

1080 1070 1060 1050 1040 1030

MATCH LINE - SEE S.R. 161
EX. LA R/W
PROP. LA R/W
PROP. R/W

1:1 4:1 3:1

1050.50
136+50.00
1069.84
40.1' LT
℄-1047.9
42.3' RT
℄-1044.1

1049.84
136+00.00
1068.05
40.1' LT
℄-1047.1
52.0' RT
℄-1040.7

1049.14
135+50.00
1061.06
40.1' LT
℄-1046.4
61.9' RT
℄-1036.7

SHEET TOTAL

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		1090 1080 1070 1060 1050 1040				
		PROP. R/W				
		MATCH LINE - SEE S.R. 161				
		EX. LA R/W				
		11:1 4:1 2:1				
		40.1' LT E=1050.2				
		1052.90 138+00.00 1074.30				
		32.0' RT E=1050.2				
95			2144	0		
		MATCH LINE - SEE S.R. 161 EX. LA R/W PROP. R/W				
		11:1 4:1 2:1				
506		40.0' LT E=1049.4				
		1052.13 137+50.00 1073.62				
		32.0' RT E=1049.5			3880	0
87			2047	0		
		MATCH LINE SEE S.R. 161 EX. LA R/W PROP. R/W				
		8:1 4:1 2:1				
483		40.0' LT E=1047.9				
		1051.37 137+00.00 1072.01				
		32.0' RT E=1048.7			3602	0
87			1844	0		
519					3541	0
1508	SHEET TOTAL	100 50 ℄ 50 100	SHEET TOTAL		11023	0

CALCULATED JMA
CHECKED PEK

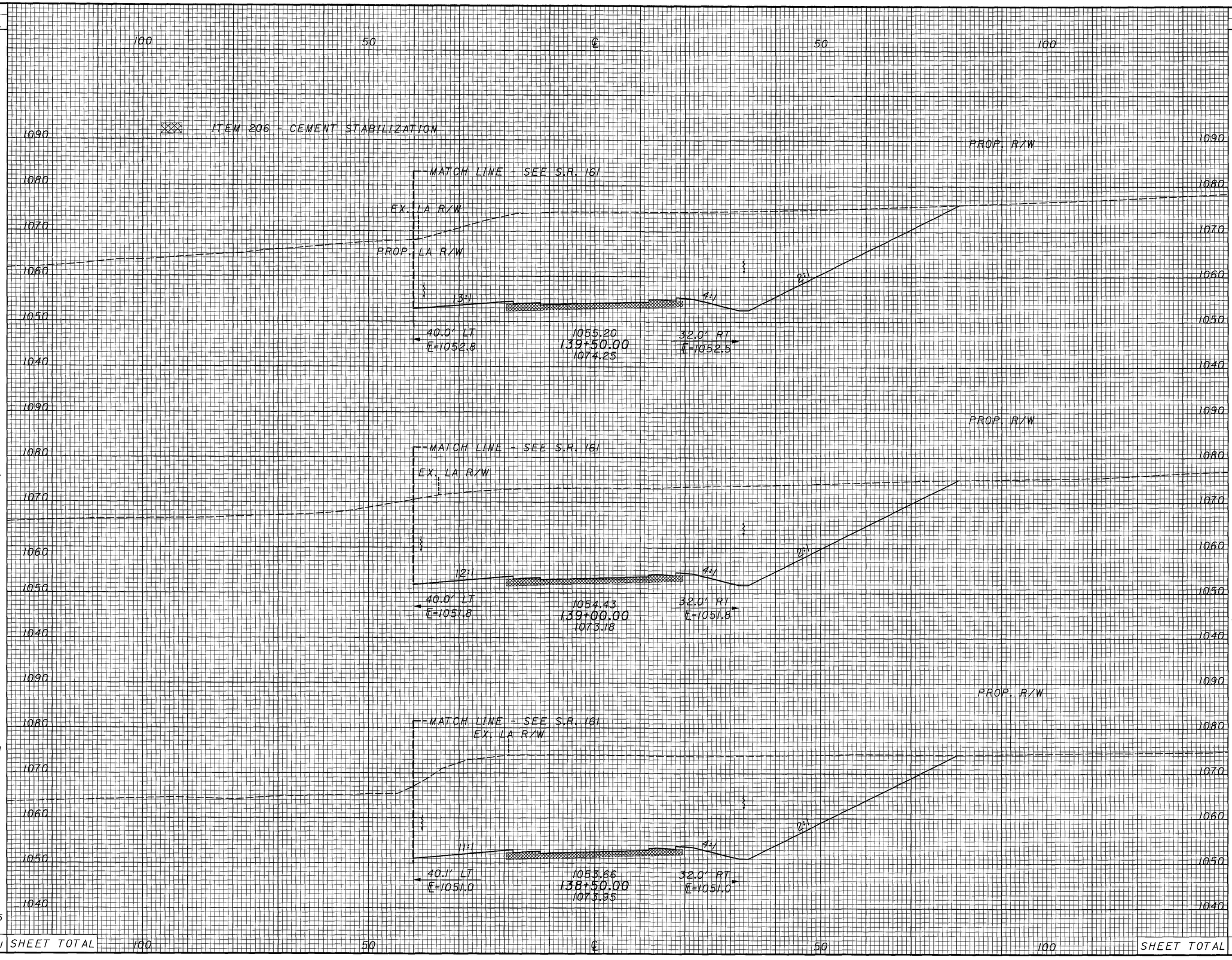
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 137+00 TO STA. 138+00

LIC-161-6.65
LIC-37-10.25

617
1349

tduffney
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SEEDING			END AREA		VOLUME		
STA	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	
139+50	93	517	1941	0	3627	0	
139+00	93	519	1976	0	3692	0	
138+50	94	525	2011	0	3847	0	
	1561	SHEET TOTAL			11166	0	



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 138+50 TO STA. 139+50

LIC-161-6.65
LIC-37-10.25

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SEEDING	
END WIDTH	SQ. YDS.
93	519
94	519
	1038

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

1100 1090 1080 1070 1060 1050 1040

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

2:1

12:1

4:1

40.0' LT
℄-1054.1

32.0' RT
℄-1054.1

1056.73
140+50.00
1076.87

2133 0

MATCH LINE - SEE S.R. 161

PROP. R/W

PROP. LA R/W

11:1

4:1

2:1

40.0' LT
℄-1053.3

32.0' RT
℄-1053.3

1055.96
140+00.00
1075.28

2058 0

3881 0

3703 0

SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL

7584 0

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 140+00 TO STA. 140+50

LIC-161-6.65
LIC-37-10.25

619
1349

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					
		ITEM 206 - CEMENT STABILIZATION					
		1100 1090 1080 1070 1060 1050 1040					
		PROP. R/W					
		MATCH LINE - SEE S.R. 161					
		PROP. LA R/W					
		12:1 4:1 2:1					
		40.0' LT E=1056.7					
		1058.26 141+50.00 1078.39					
		32.0' RT E=1055.8					
93			2125	0			
		1100 1090 1080 1070 1060 1050 1040					
		PROP. R/W					
		MATCH LINE - SEE S.R. 161					
		PROP. LA R/W					
	522				4012	0	
		12:1 4:1 2:1					
		40.0' LT E=1054.9					
		1057.49 141+00.00 1078.19					
		32.0' RT E=1054.8					
95			2208	0			
		1100 1090 1080 1070 1060 1050 1040					
	522				4020	0	
	1044	SHEET TOTAL 100 50 ℄ 50 100	SHEET TOTAL		8032	0	

CALCULATED JMA
CHECKED PEK

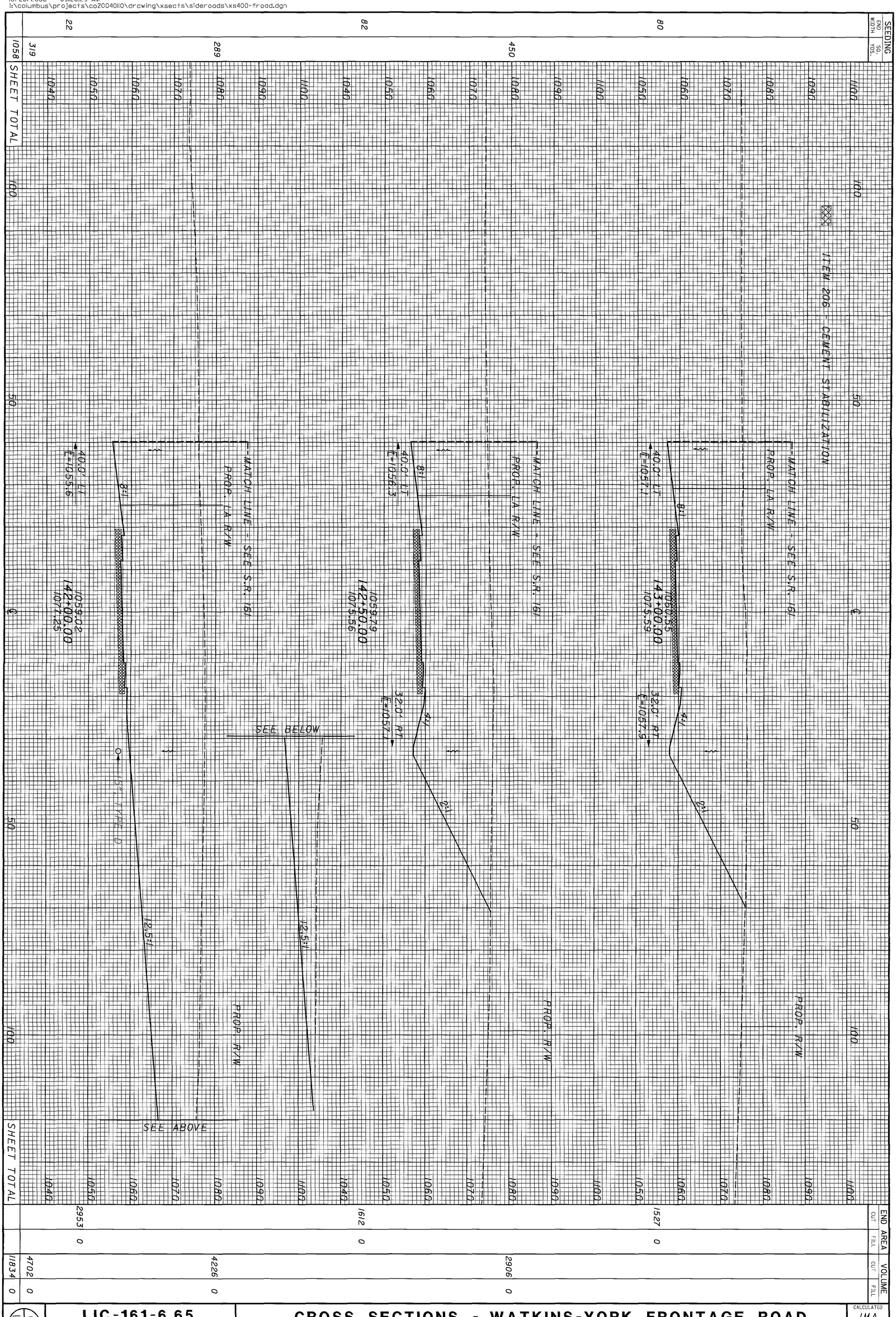
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 141+00 TO STA. 141+50

LIC-161-6.65
LIC-37-10.25

620
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
65	
	381
72	
	417
78	
	439
	1237

100 50 ℄ 50 100

ITEM 206 = CEMENT STABILIZATION

1100 1090 1080 1070 1060 1050

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 2:1

40.0' LT
E-1059.3

1062.80
144+50.00
1073.16

32.0' RT
E-1060.1

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 2:1

40.0' LT
E-1058.6

1062.08
144+00.00
1075.24

32.0' RT
E-1059.4

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 2:1

40.0' LT
E-1058.0

1061.32
143+50.00
1076.18

32.0' RT
E-1058.7

100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1002	0		
		2121	0
1288	0		
		2545	0
1461	0		
		2766	0
		7432	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 143+50 TO STA. 144+50

LIC-161-6.65
LIC-37-10.25

622
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		--MATCH LINE - SEE S.R. 161 PROP. LA R/W				
		PROP. R/W				
		1070 / 1060 / 1050				
		9:1 4:1 3:1				
		40.0' LT ℄=1061.6				
		1064.66 146+50.00 1063.49				
		36.2' RT ℄=1061.0				
49			40	27		
		--MATCH LINE - SEE S.R. 161 PROP. LA R/W				
		PROP. R/W				
		1070 / 1060 / 1050				
		9:1 4:1 3:1				
		40.0' LT ℄=1061.2				
		1064.34 146+00.00 1065.30				
		35.6' RT ℄=1060.8				
54	286		196	0	218	25
		--MATCH LINE - SEE S.R. 161 PROP. LA R/W				
		PROP. R/W				
		1080 / 1070 / 1060 / 1050 / 1090				
		8:1 4.18% 15" TYPE D				
		40.0' LT ℄=1060.5				
		1063.93 145+50.00 1067.10				
22	211		328	0	485	0
		--MATCH LINE - SEE S.R. 161 PROP. LA R/W				
		PROP. R/W				
		1100 / 1090 / 1080 / 1070 / 1060 / 1050				
		9:1 4:1 2:1				
		40.0' LT ℄=1060.2				
		1063.41 145+00.00 1069.77				
		33.8' RT ℄=1060.3				
59	225		642	0	898	0
	344				1522	0
	1066	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL			3123	25

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 145+00 TO STA. 146+50

LIC-161-6.65
LIC-37-10.25

623
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
84	
	442
75	
70	
	403
	367
62	
	308
SHEET TOTAL	1520

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
7	995		
		12	1722
6	864		
		19	1385
15	632		
		33	911
21	351		
		56	350
		120	4368

CALCULATED JMA
CHECKED PEK

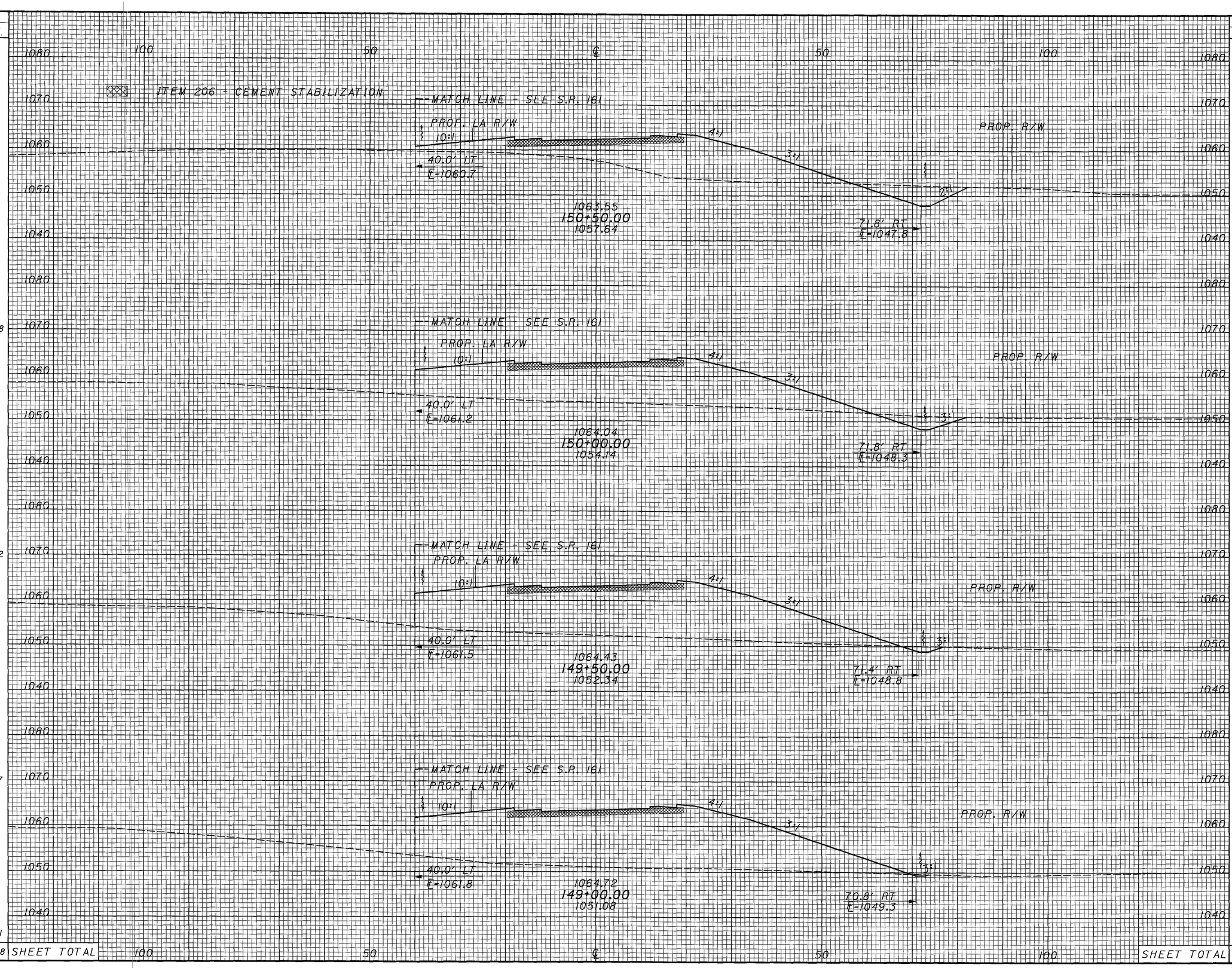
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 147+00 TO STA. 148+50

LIC-161-6.65
LIC-37-10.25

624
1349

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SEEDING		END AREA		VOLUME		
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	
						CALCULATED JMA
						CHECKED PEK
92		62	465			
	508			88	1111	
91		33	735			
492				37	1567	
86		7	957			
467				8	1888	
82		1	1082			
461				7	1923	
1928	SHEET TOTAL			140	6489	



CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 149+00 TO STA. 150+50

LIC-161-6.65
LIC-37-10.25

625
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
82		4	829		
	472			32	1276
88		30	549		
	539			29	1278
106		1	831		
	553			74	1112
93		79	370		
	514			130	774
	2078			265	4440

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 151+00 TO STA. 152+50

LIC-161-6.65
LIC-37-10.25

626
1349

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SEEDING	
END WIDTH	SQ. YDS.
89	
	483
85	
83	
84	
	461
	1875

END AREA		VOLUME	
CUT	FILL	CUT	FILL
68	895		
		79	1620
17	854		
19	1577		
3	849		
6	1612		
4	892		
7	1594		
		111	6403

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 153+00 TO STA. 154+50

LIC-161-6.65
LIC-37-10.25

627
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
84		15	1058		
	469			27	1996
85		15	1098		
	481			32	2076
88		20	1145		
	497			44	2173
91		27	1202		
	500			32	2282
1947	SHEET TOTAL			135	8527

CALCULATED JMA
CHECKED PEK

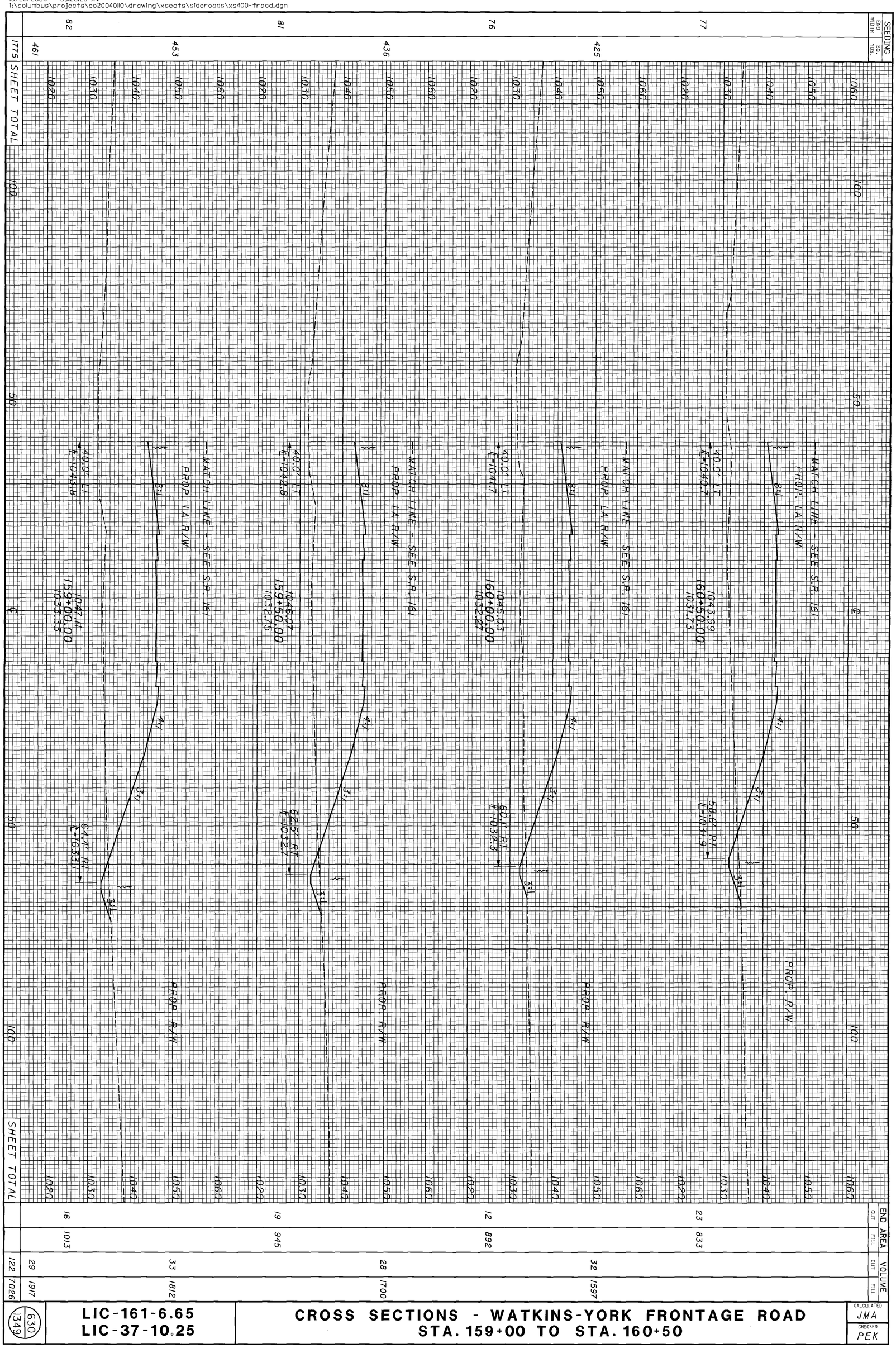
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 157+00 TO STA. 158+50

LIC-161-6.65
LIC-37-10.25

629
1349

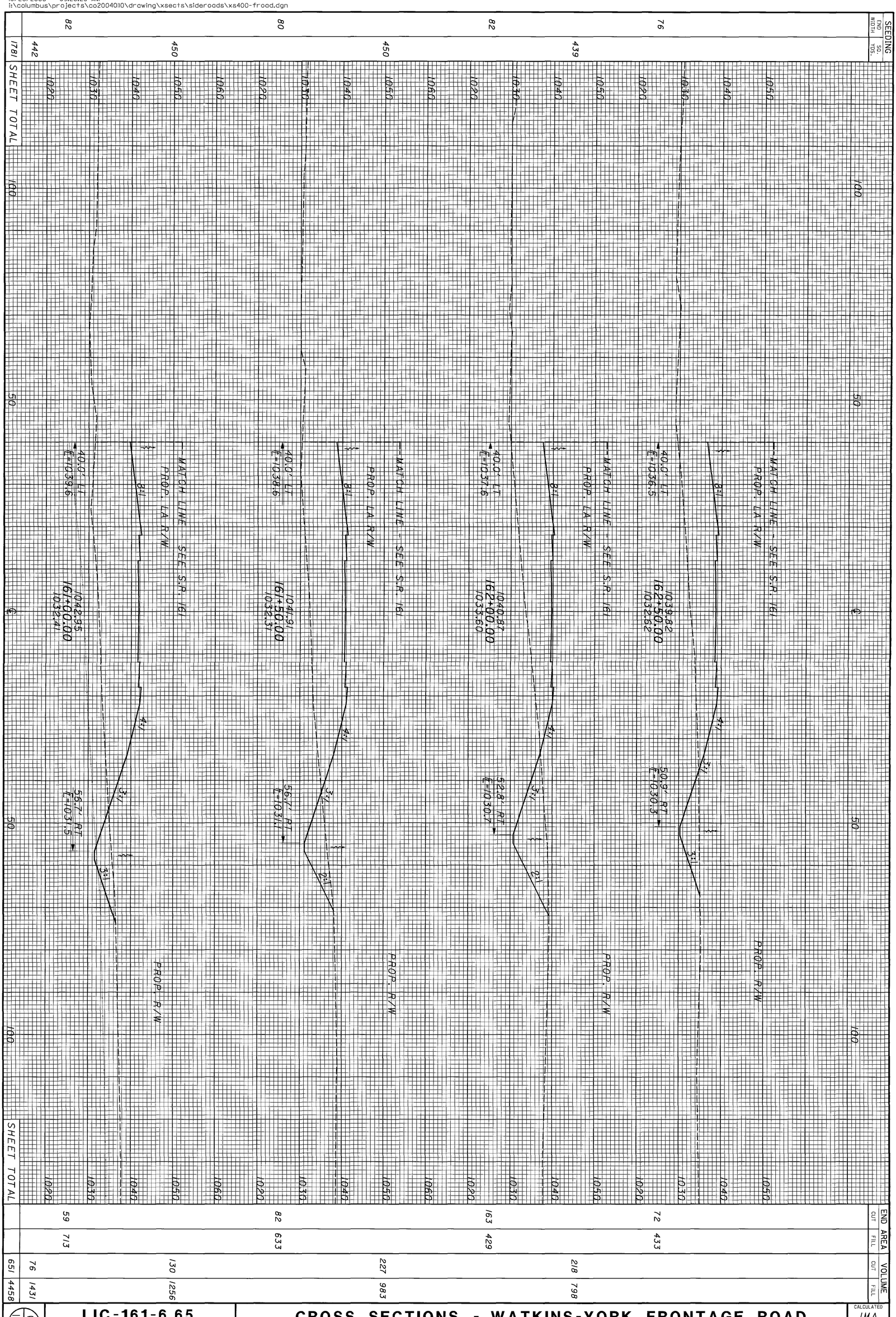
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630 / 1349	LIC-161-6.65 LIC-37-10.25
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 159+00 TO STA. 160+50	CALCULATED JMA CHECKED PEK

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631
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 161+00 TO STA. 162+50

CALCULATED JMA
CHECKED PEK

SEEDING			END AREA		VOLUME	
	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
	100	50				
	1050					
	1040					
	1030					
	1020					
	1010					
	MATCH LINE - SEE S.R. 161 PROP. LA R/W					
	3:1					
	40.0' LT E=1032.6					
	1035.93					
63	164+50.00		29	395		
	1029.07					
	1050					
	1040					
344	1030				41	784
	1020					
	1010					
	MATCH LINE - SEE S.R. 161 PROP. LA R/W					
	3:1					
	40.0' LT E=1033.5					
	1036.77					
61	164+00.00		16	452		
	1029.35					
	1050					
	1040					
344	1030				27	869
	1020					
	1010					
	MATCH LINE - SEE S.R. 161 PROP. LA R/W					
	3:1					
	40.0' LT E=1034.4					
	1037.74					
63	163+50.00		14	487		
	1029.71					
	1050					
	1040					
347	1030				18	996
	1020					
	1010					
	MATCH LINE - SEE S.R. 161 PROP. LA R/W					
	3:1					
	40.0' LT E=1035.5					
	1038.78					
62	163+00.00		6	589		
	1029.50					
	1050					
	1040					
383	1030				72	947
	1020					
	1010					
1418	SHEET TOTAL	100 50 ℄ 50 100			158	3596

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 163+00 TO STA. 164+50

LIC-161-6.65
LIC-37-10.25

632
349

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SEEDING			END AREA		VOLUME	
STA	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
166+93						
166+50	78	397	198	66	261	172
166+00	65		84	119		
165+50	71	378	86	167	157	265
165+00	70	392	65	332	139	462
		369			86	673
		1536			643	1572

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

STA 166+93, CULVERT NO. 2,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 967.

PROP. R/W

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

4:1

3:1

2:1

40.0' LT
E=1030.6

1033.87
166+50.00
1031.76

47.5' RT
E=1025.5

PROP. R/W

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

4:1

3:1

2:1

40.0' LT
E=1030.9

1034.19
166+00.00
1031.22

43.2' RT
E=1028.0

PROP. R/W

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

4:1

3:1

40.0' LT
E=1031.3

1034.84
165+50.00
1031.35

43.8' RT
E=1028.3

PROP. R/W

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

4:1

3:1

40.0' LT
E=1031.9

1035.21
165+00.00
1029.18

44.9' RT
E=1028.6

PROP. R/W

1060
1050
1040
1030
1020
1010

100 50 ℄ 50 100

SHEET TOTAL

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 165+00 TO STA. 166+50

LIC-161-6.65
LIC-37-10.25

633
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	
		100 50 ℄ 50 100
		ITEM 206 - CEMENT STABILIZATION
		1060 1050 1040 1030 1020
		—MATCH LINE - SEE S.R. 161
		PROP. LA R/W
		8:1 4:1 4:1
		40.0' LT ℄=1029.6
		1032.88 168+50.00 1033.95
		28.0' RT ℄=1030.5
		PROP. R/W
47		
	292	—MATCH LINE - SEE S.R. 161
		PROP. LA R/W
		8:1 4:1 3:1
		40.0' LT ℄=1029.8
		1033.13 168+00.00 1032.62
		35.0' RT ℄=1029.0
58		PROP. R/W
	356	—MATCH LINE - SEE S.R. 161
		PROP. LA R/W
		8:1 4:1 3:1 2:1
		40.0' LT ℄=1030.1
		1033.38 167+50.00 1032.07
70		44.5' RT ℄=1026.0
	439	PROP. R/W
		—MATCH LINE - SEE S.R. 161
		PROP. LA R/W
		8:1 4:1 3:1 2:1
		40.0' LT ℄=1030.3
		1033.63 167+00.00 1031.98
88		53.7' RT ℄=1023.0
	461	
		100 50 ℄ 50 100
1548	SHEET TOTAL	SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
156	0		
		250	3
114	3		
		260	23
167	22		
		431	47
298	29		
		459	88
		1400	161

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 167+00 TO STA. 168+50

LIC-161-6.65
LIC-37-10.25

634
1349

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SEEDING				END AREA		VOLUME	
END WIDTH	SQ. YDS.			CUT	FILL	CUT	FILL
		1060	100 50 ℄ 50 100				
		1050	ITEM 206 - CEMENT STABILIZATION				
		1040	←MATCH LINE - SEE S.R. 161		PROP. R/W		
		1030	PROP. LA R/W				
42		1020	8:1 4:1 3:1 40.0' LT ℄-1028.6 1031.89 170+50.00 1032.46 28.0' RT ℄-1029.5	144	0		
		1060					
	244	1050				280	0
		1040	←MATCH LINE - SEE S.R. 161		PROP. R/W		
		1030	PROP. LA R/W				
46		1020	8:1 4:1 4:1 40.0' LT ℄-1028.8 1032.14 170+00.00 1032.79 28.0' RT ℄-1029.8	158	0		
		1060					
	261	1050	←MATCH LINE - SEE S.R. 161 Clear Zone Offset		PROP. R/W	323	0
		1040	PROP. LA R/W				
		1030	8:1 4:1 4:1 40.0' LT ℄-1029.1 1032.38 169+50.00 1033.73 28.0' RT ℄-1030.0	191	0		
48		1020					
		1060					
	267	1050	←MATCH LINE - SEE S.R. 161		PROP. R/W	378	0
		1040	PROP. LA R/W				
		1030	8:1 4:1 4:1 40.0' LT ℄-1029.3 1032.63 169+00.00 1034.47 28.0' RT ℄-1030.2	217	0		
48		1020					
	264					346	0
	1036	SHEET TOTAL	100 50 ℄ 50 100		SHEET TOTAL	1327	0

CALCULATED JMA CHECKED PEK

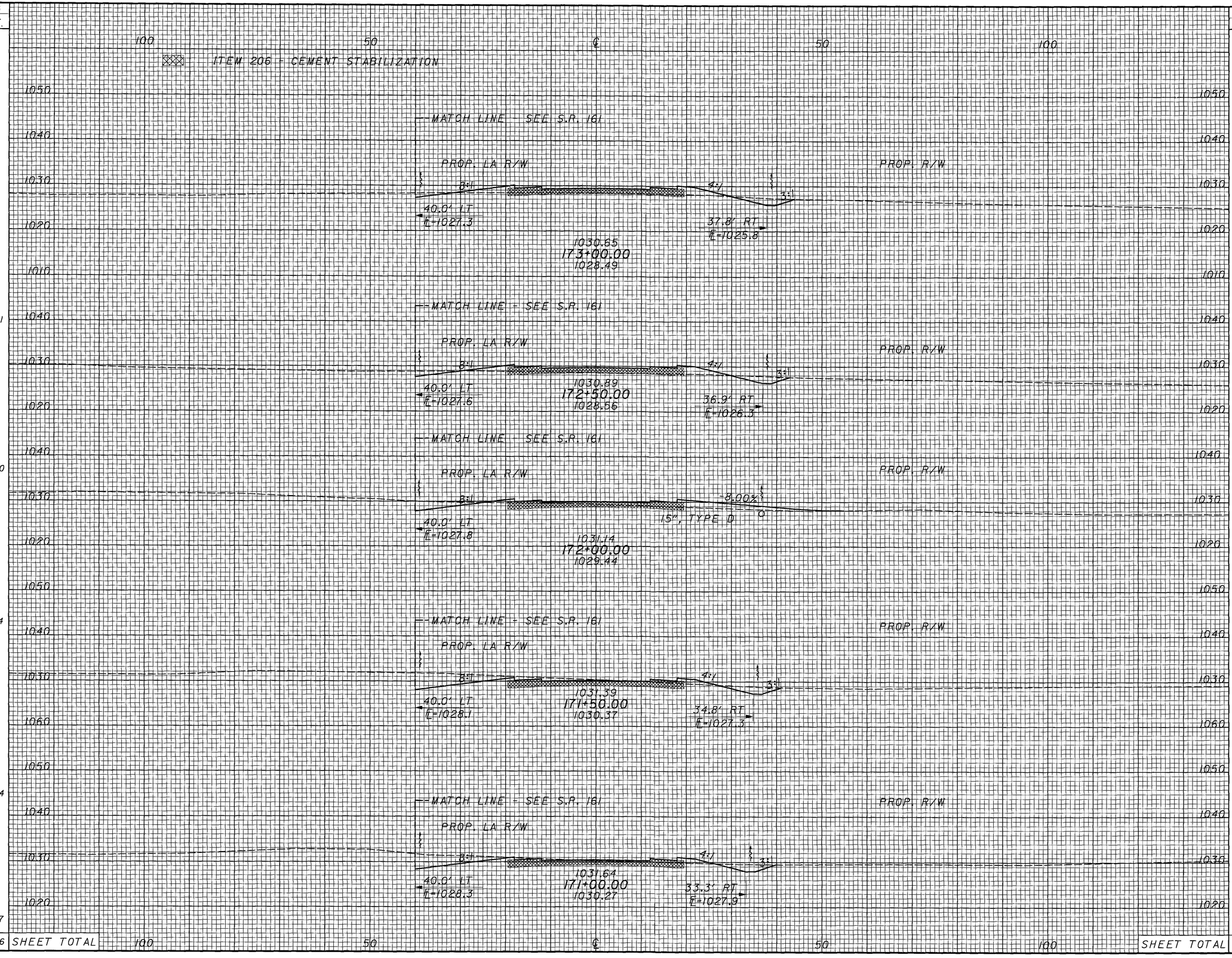
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 169+00 TO STA. 170+50

LIC-161-6.65
LIC-37-10.25

635
349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
51	281	17	62	32	116
50		18	64		
	200			32	109
22		16	53		
	194			77	59
48		67	11		
	264			108	23
47		50	14		
	247			180	13
	1186			429	320



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 171+00 TO STA. 173+00

LIC-161-6.65
LIC-37-10.25

636
1349

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SEEDING	
END WIDTH	SQ. YDS.
64	
	347
61	
	319
54	
	300
54	
	292
	1258

ITEM 206 - CEMENT STABILIZATION

STA. 175+00.00
1029.65
1027.52
40.0' LT
℄=1026.3
12.3' RT
℄=1023.7
PROP. LA R/W
PROP. R/W
8:1
4:1
3:1
MATCH LINE - SEE S.R. 161

STA. 174+50.00
1029.90
1026.79
40.0' LT
℄=1026.6
41.7' RT
℄=1024.1
PROP. LA R/W
PROP. R/W
8:1
4:1
3:1
MATCH LINE - SEE S.R. 161

STA. 174+00.00
1030.15
1026.56
40.0' LT
℄=1026.8
40.6' RT
℄=1024.6
PROP. LA R/W
PROP. R/W
8:1
4:1
3:1
MATCH LINE - SEE S.R. 161

STA. 173+50.00
1030.40
1027.22
40.0' LT
℄=1027.1
40.5' RT
℄=1024.9
PROP. LA R/W
PROP. R/W
8:1
4:1
3:1
MATCH LINE - SEE S.R. 161

100 50 ℄ 50 100

1050 1040 1030 1020 1010

END AREA		VOLUME	
CUT	FILL	CUT	FILL
68	63	108	170
48	121	54	259
11	159	22	258
13	120	27	168
		211	855

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 173+50 TO STA. 175+00

LIC-161-6.65
LIC-37-10.25

637
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
61		20	239		
	344			53	379
63		37	170		
	344			74	264
61		43	115		
	336			78	217
60		41	120		
	344			102	169
1368	SHEET TOTAL			307	1029

CALCULATED JWA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE S.R. 161
PROP. LA R/W
PROP. R/W
3:1
4:1
3:1
40.0' LT
E=1025.4
1028.66
177+00.00
1023.81
45.9' RT
E=1021.8

MATCH LINE SEE S.R. 161
PROP. LA R/W
PROP. R/W
3:1
4:1
3:1
40.0' LT
E=1025.6
1028.91
176+50.00
1024.99
44.9' RT
E=1022.3

MATCH LINE - SEE S.R. 161
PROP. LA R/W
PROP. R/W
3:1
4:1
3:1
3:1
40.0' LT
E=1025.9
1029.16
176+00.00
1026.26
41.7' RT
E=1022.7

MATCH LINE - SEE S.R. 161
PROP. LA R/W
PROP. R/W
3:1
4:1
3:1
3:1
40.0' LT
E=1026.1
1029.40
175+50.00
1026.36
43.0' RT
E=1023.2

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 175+50 TO STA. 177+00

LIC-161-6.65
LIC-37-10.25

638
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
62		28	232		
	336			31	532
59		6	343		
	331			11	634
60		6	342		
	333			13	583
60		9	288		
	336			27	488
	1336			82	2237

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 177+50 TO STA. 179+00

LIC-161-6.65
LIC-37-10.25

639
1349

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

100 50 ℄ 50 100

1050 1040 1030 1020 1010

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1 4:1 3:1

40.0' LT
℄-1024.4

1027.66
179+00.00
1022.85

48.7' RT
℄-1020.1

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1 4:1 3:1

40.0' LT
℄-1024.6

1027.91
178+50.00
1021.81

48.1' RT
℄-1020.5

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1 4:1 3:1

40.0' LT
℄-1024.9

1028.16
178+00.00
1022.27

47.6' RT
℄-1020.9

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1 4:1 3:1

40.0' LT
℄-1025.1

1028.41
177+50.00
1023.10

46.5' RT
℄-1021.4

SHEET TOTAL

100 50 ℄ 50 100

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
62		67	151		
	342			110	317
61		52	192		
62	342	51	180	95	344
62	344	46	171	90	324
	344			69	373
	1372 SHEET TOTAL			364	1358 SHEET TOTAL

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

1050 1040 1030 1020 1010

100 50 ℄ 50 100

—MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 3:1 3:1

40.0' LT
E=1023.4

1026.67
181+00.00
1023.11

47.2' RT
E=1018.4

—MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 3:1 3:1

40.0' LT
E=1023.6

1026.92
180+50.00
1022.59

46.7' RT
E=1018.8

—MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 3:1 3:1

40.0' LT
E=1023.9

1027.17
180+00.00
1022.95

46.0' RT
E=1019.3

—MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

8:1 4:1 3:1 3:1

40.0' LT
E=1024.1

1027.42
179+50.00
1023.47

45.5' RT
E=1019.7

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 179+50 TO STA. 181+00

LIC-161-6.65
LIC-37-10.25

640
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
	22
	244
	66
	367
	66
	361
	64
	350
	1322

ITEM 206 CEMENT STABILIZATION

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1022.4

1025.68
183+00.00
1023.12

4:1

3:1

2:1

15", TYPE D

49.3' RT
E=1016.7

PROP. R/W

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1022.6

1025.93
182+50.00
1024.02

4:1

3:1

2:1

48.8' RT
E=1017.1

PROP. R/W

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1022.9

1026.17
182+00.00
1023.65

4:1

3:1

2:1

48.1' RT
E=1017.6

PROP. R/W

MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1023.1

1026.42
181+50.00
1023.38

4:1

3:1

2:1

47.6' RT
E=1018.0

PROP. R/W

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
174	80	338	120
191	51		
169	88	333	128
118	114	161	188
		171	246
		1108	682

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 181+50 TO STA. 183+00

LIC-161-6.65
LIC-37-10.25

641
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		1040				
		1030				
		1020				
		1010				
65		1000	12	348		
		1050				
	367	1040			39	515
		1030				
		1020				
67		1010	31	208		
		1050				
	369	1040			66	303
		1030				
		1020				
66		1010	41	119		
		1050				
	375	1040			103	193
		1030				
		1020				
69		1010	70	89		
	253				226	157
	1364	SHEET TOTAL			434	1168

ITEM 206 - CEMENT STABILIZATION

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1

4:1

3:1

3:1

40.0' LT
E=1021.4

1024.68
185+00.00
1018.81

51.4' RT
E=1015.0

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1

4:1

3:1

3:1

40.0' LT
E=1021.6

1024.93
184+50.00
1020.74

49.7' RT
E=1015.8

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1

4:1

3:1

3:1

40.0' LT
E=1021.9

1025.18
184+00.00
1022.21

48.1' RT
E=1016.6

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

3:1

4:1

3:1

3:1

40.0' LT
E=1022.1

1025.43
183+50.00
1022.85

46.4' RT
E=1017.4

100 50 ℄ 50 100

CALCULATED JMA

CHECKED PEK

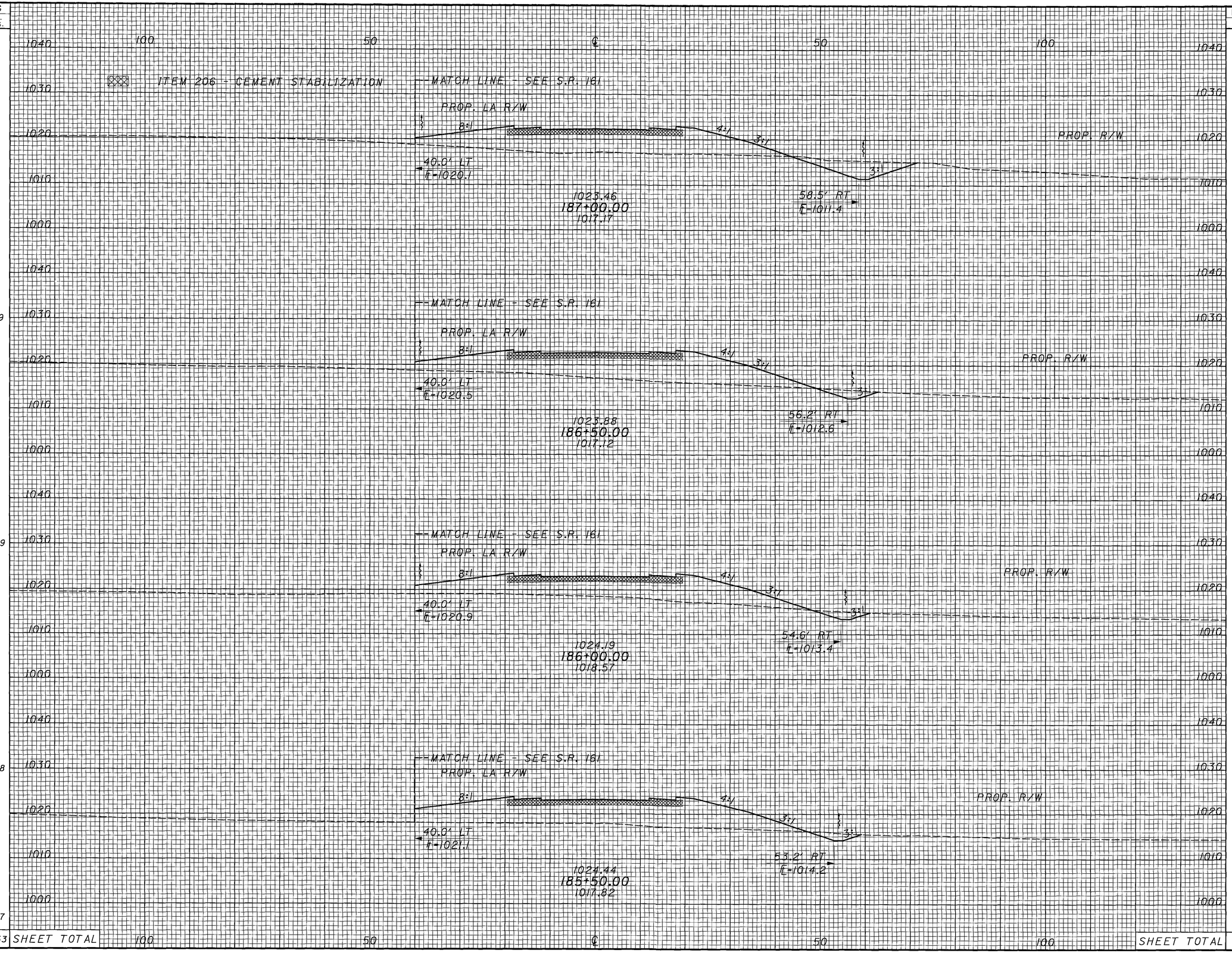
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 183+50 TO STA. 185+00

LIC-161-6.65
LIC-37-10.25

642
1349

tduffney
10/26/2006 09:26:26 AM
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
80	419	58	352	68	699
71	389	15	403	26	688
69	378	13	341	23	702
67	367	11	417	21	708
	1553 SHEET TOTAL			138	2797



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 185+50 O STA. 187+00

LIC-161-6.65
LIC-37-10.25

643
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
102	
	572
104	
	489
72	
	436
85	
	458
	1955

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

1050 1040 1030 1020 1010 1000

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1017.6

1020.85
189+00.00
1024.74

2:1

2:1

53.9' RT
E=1004.0

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1018.2

1021.55
188+50.00
1023.41

3:1

2:1

64.5' RT
E=1006.5

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1018.9

1022.26
188+00.00
1023.01

PROP. R/W

15", TYPE D

--MATCH LINE - SEE S.R. 161

PROP. LA R/W

8:1

40.0' LT
E=1019.5

1022.92
187+50.00
1021.71

4:1

3:1

2:1

60.5' RT
E=1010.2

PROP. R/W

SHEET TOTAL					
				209	355
				281	40
				136	11
				830	10
				761	0
				1636	0
				1006	0
				2956	405

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 187+50 TO STA. 189+00

LIC-161-6.65
LIC-37-10.25

644
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		1050				
		1040				
		1030				
		1020				
		1010				
156		1000	1805	0		
		990				
		1050				
	883	1040			2992	1
		1030				
		1020				
		1010				
162		1000	1426	1		
		990				
		1050				
	750	1040			2408	1
		1030				
		1020				
108		1010	1175	0		
		1000				
	583				2019	0
2216	SHEET TOTAL				7419	2

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE S.R. 161
PROP. LA R/W

8:1
43.3' LT
E=1015.8
1018.69
190+50.00
1023.48
2:1
2:1
2:1
65.2' RT
E=996.5

MATCH LINE - SEE S.R. 161
PROP. LA R/W

8:1
41.7' LT
E=1016.2
1019.40
190+00.00
1023.77
2:1
2:1
2:1
61.1' RT
E=999.0

MATCH LINE - SEE S.R. 161
PROP. LA R/W

8:1
40.0' LT
E=1017.1
1020.12
189+50.00
1024.31
2:1
2:1
57.3' RT
E=1001.5

CALCULATED JMA
CHECKED PEK

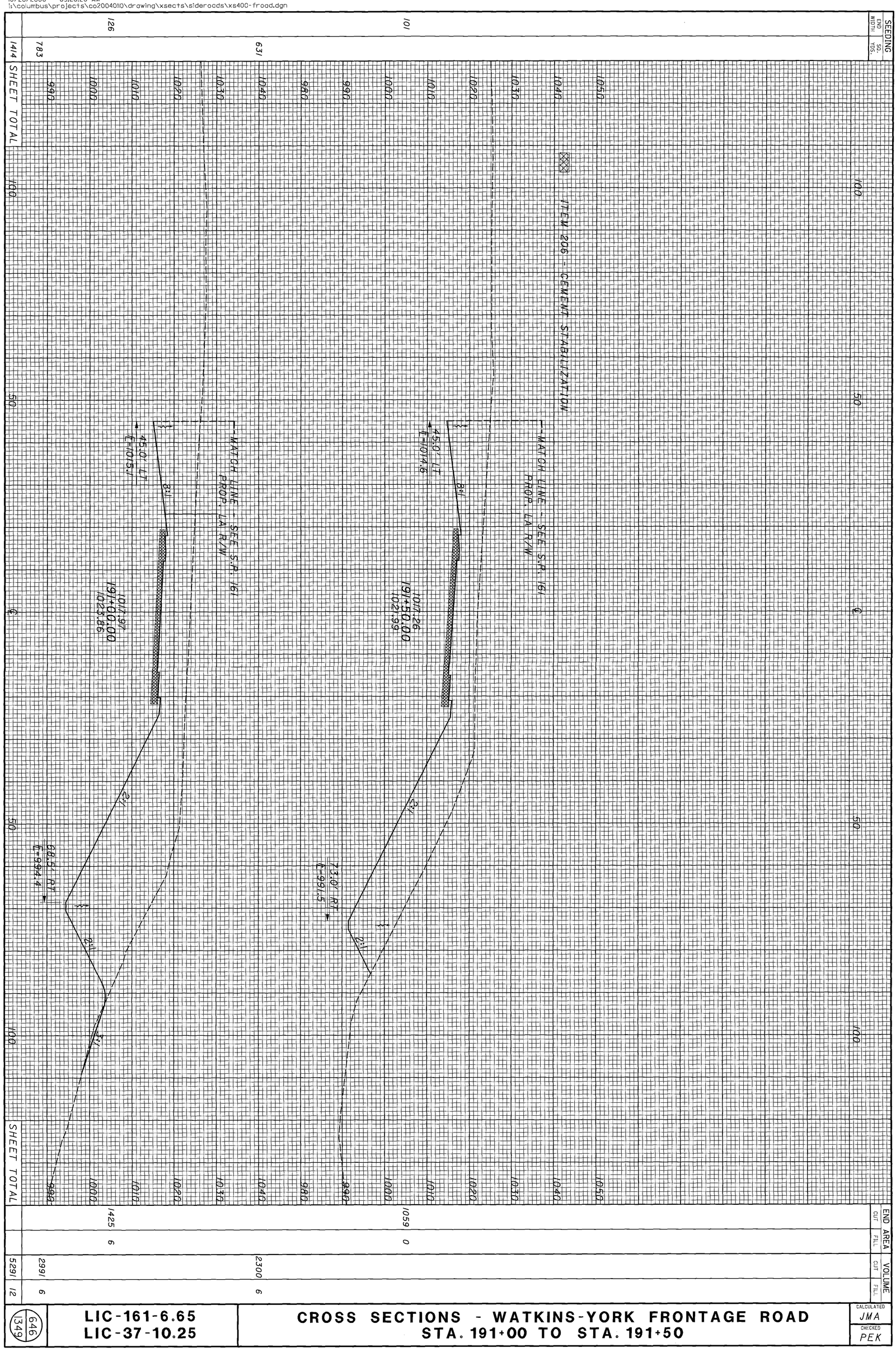
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 189+50 TO STA. 190+50

LIC-161-6.65
LIC-37-10.25

645
1349

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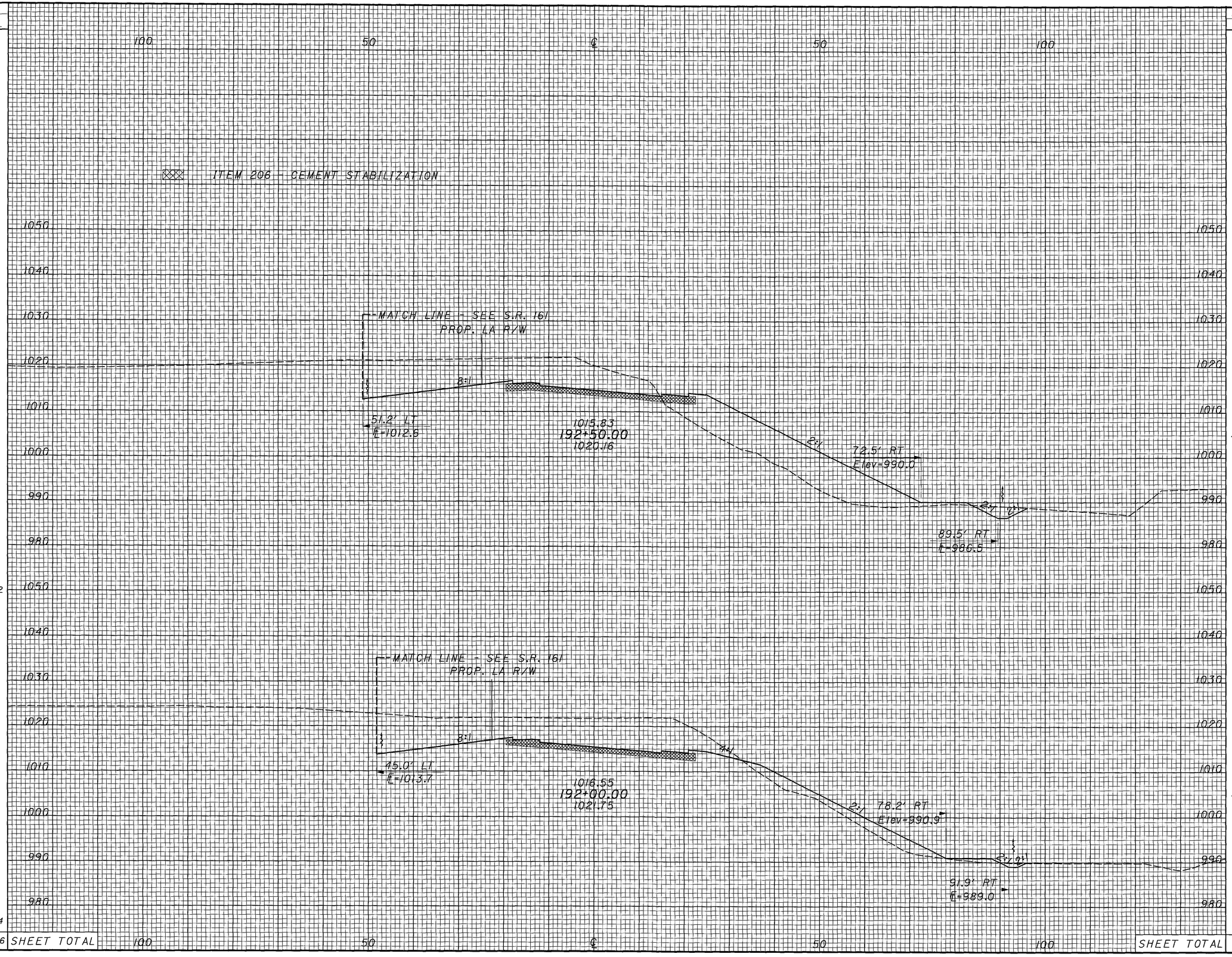
LIC-161-6.65
LIC-37-10.25

646
349

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 191+00 TO STA. 191+50

CALCULATED JMA
CHECKED PEK

SEEDING	
END WIDTH	SQ. YDS.
118	
642	
113	
594	
1236	SHEET TOTAL



END AREA	
CUT	FILL
409	382
477	88
1422	81
2242	516

VOLUME	
CUT	FILL
820	435

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 192+00 TO STA. 192+50

LIC-161-6.65
LIC-37-10.25

647
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
137		11	2380		
	783			72	4296
145		67	2259		
	806			361	3274
145		323	1276		
	731			677	1536
	2320	SHEET TOTAL		1110	9106

100 50 ℄ 50 100

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

4:1 3:1 2:1

69.1' LT
℄-999.6

72.8' RT
Elev-987.1

86.2' RT
℄-986.0

1013.69
194+00.00
989.32

MATCH LINE - SEE S.R. 161

PROP. LA R/W

PROP. R/W

61.3' LT
℄-1002.9

71.4' RT
Elev-989.1

89.7' RT
℄-985.0

1014.40
193+50.00
990.50

ITEM 206 - CEMENT STABILIZATION

STA 193+29.5, CULVERT NO. 3,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 970.

MATCH LINE - SEE S.R. 161

PROP. LA R/W

54.2' LT
℄-1006.0

71.1' RT
Elev-990.0

93.1' RT
℄-984.0

1015.12
193+00.00
1001.67

1020 1010 1000 990 980 970 1030

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 193+00 TO STA. 194+00

LIC-161-6.65
LIC-37-10.25

648
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
160	872	26	2382	47	4986
154	842	25	3003	23	5286
149	794	0	2706	10	4709
	2508 SHEET TOTAL			80	14981

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

1020 1010 1000 990 980 970

PROP. LA R/W 4:1 3:1

MATCH LINE - SEE S.R. 161

99.5' LT
E=987.3

10111.55
195+50.00
989.67

2:1 60.6' RT
E=991.7

2:1 2:1

75.8' RT
E=989.0

PROP. R/W

PROP. LA R/W 4:1 3:1

MATCH LINE - SEE S.R. 161

89.1' LT
E=991.5

10112.26
195+00.00
984.66

2:1 65.4' RT
Elev=990.0

2:1 2:1

79.4' RT
E=988.0

PROP. R/W

PROP. LA R/W 4:1 3:1

MATCH LINE - SEE S.R. 161

78.0' LT
E=995.9

10112.97
194+50.00
987.60

2:1 69.8' RT
Elev=988.5

2:1

82.8' RT
E=987.0

PROP. R/W

100 50 ℄ 50 100 SHEET TOTAL

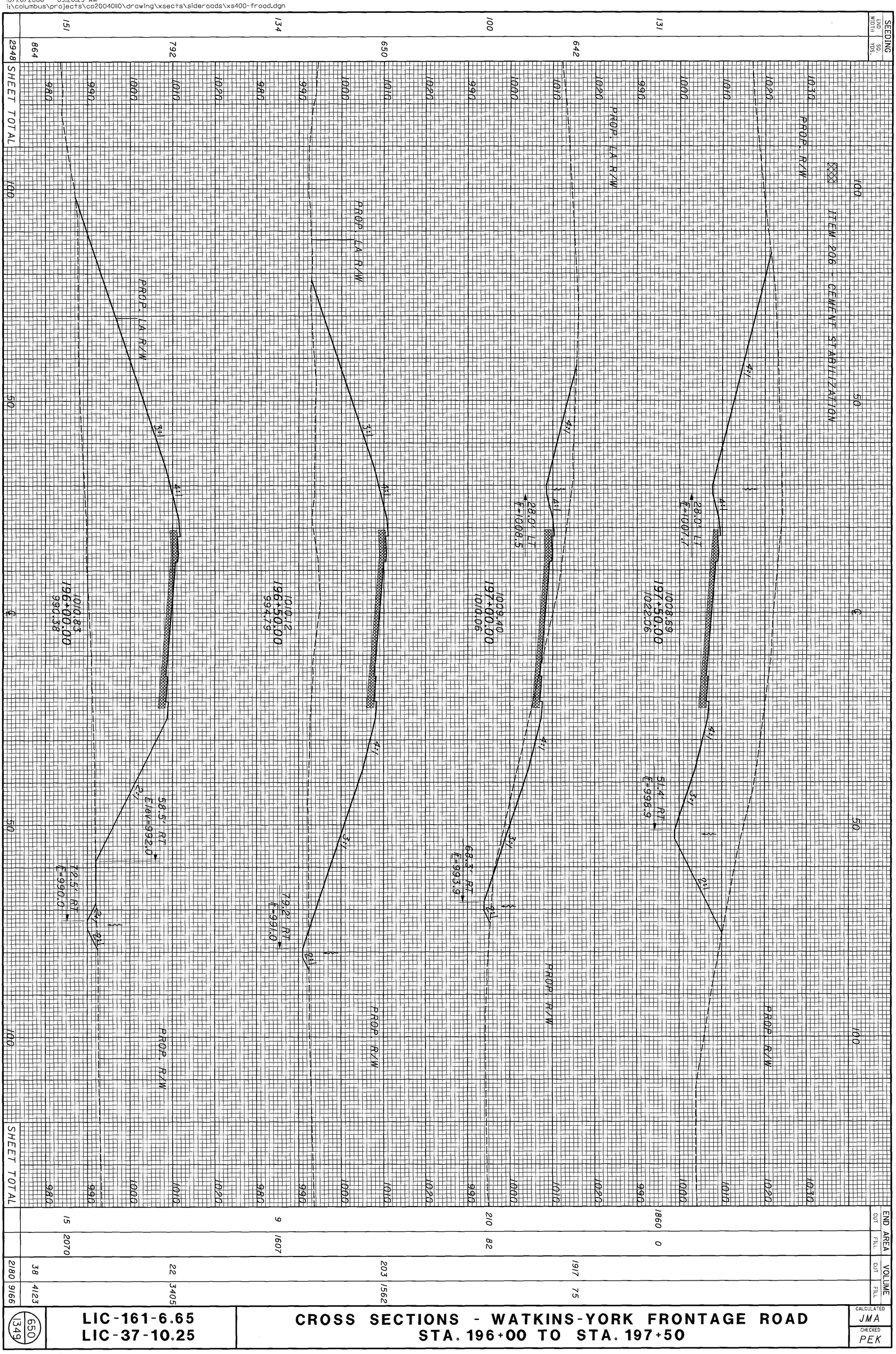
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 194+50 TO STA. 195+50

LIC-161-6.65
LIC-37-10.25

649
1349

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LIC-161-6.65
LIC-37-10.25

650
349

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD
STA. 196+00 TO STA. 197+50

CALCULATED JMA
CHECKED PEK

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
150	606	2188	0	4412	0
68		2577	0		
143	586	2224	0	4446	0
131	761	2178	0	4076	0
	728			3738	0
	2681 SHEET TOTAL			16672	0

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CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 198+00 TO STA. 199+50

LIC-161-6.65
LIC-37-10.25

651
349

SEEDING	
END WIDTH	SQ. YDS.
131	
	592
82	
149	
	642
145	
	817
819	
	2870

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1883	0		
		4403	0
2872	0		
2111	0		
		4614	0
2119	0		
		3917	0
		3988	0
		16922	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 200+00 TO STA. 201+50

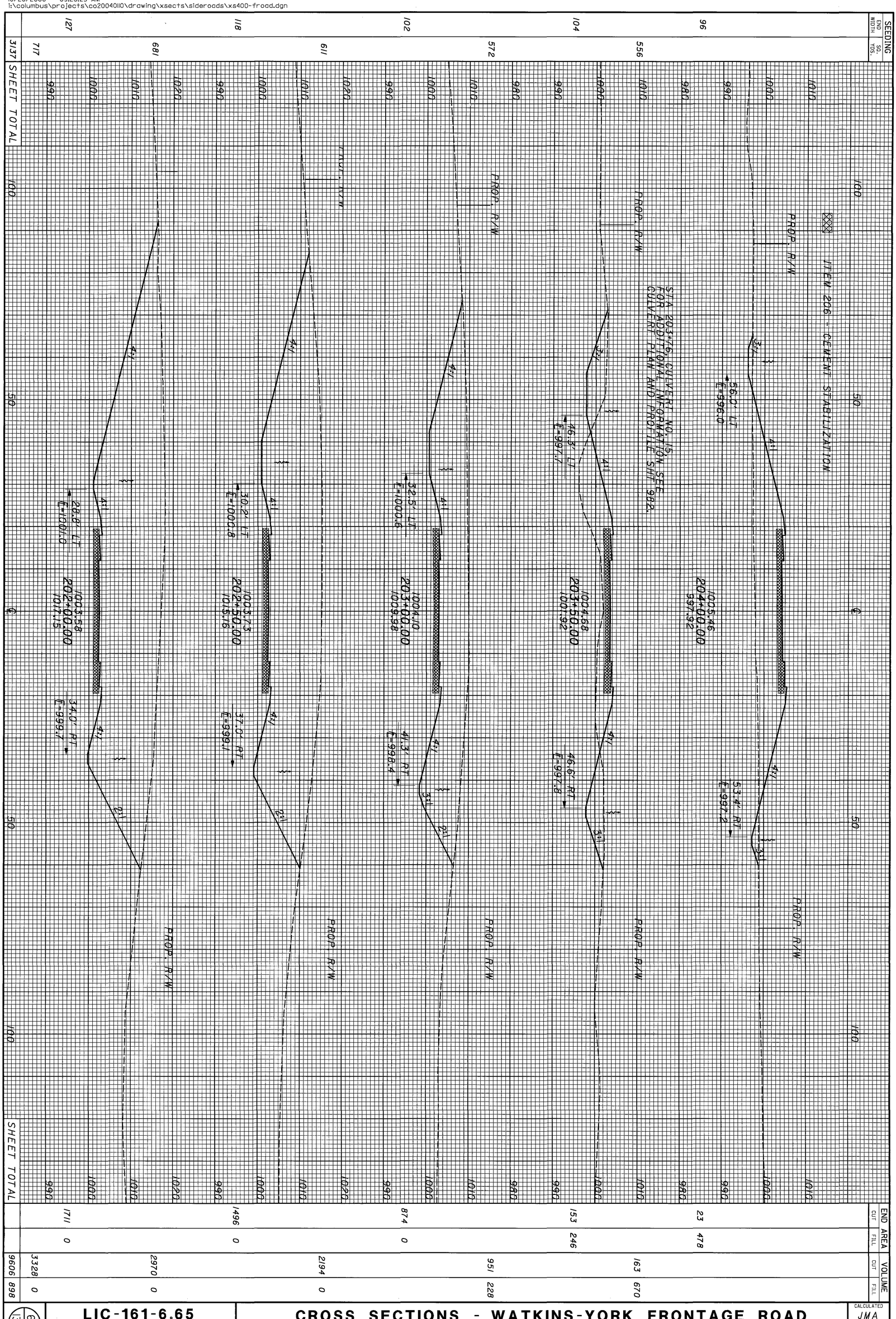
LIC-161-6.65
LIC-37-10.25

652
1349

PROP. R/W
100
50
℄
50
PROP. R/W
100
1020
1010
1000
990
4:1
2:1
28.0' LT
℄=1001.3
1003.65
201+50.00
1019.00
32.0' RT
℄=1000.3
SEE BELOW
SEE ABOVE
+8.00%
15", TYPE D
28.0' LT
℄=1001.6
1003.83
201+00.00
1019.56
1030
28.0' LT
℄=1002.0
1004.43
200+50.00
1020.12
28.0' LT
℄=1003.0
1005.12
200+00.00
1021.27
31.9' RT
℄=1001.7
ITEM 206 - CEMENT STABILIZATION
SHEET TOTAL

tduffney
10/26/2006 09:26:35 AM
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tduffney
10/26/2006 09:26:25 AM
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
77		563	0		
	417			909	0
73		420	0		
	203			415	81
0		29	87		
	236			52	414
85		27	360		
	508			45	811
98		22	515		
539				41	920
1903	SHEET TOTAL			1462	2226

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

4:1 4:1 4:1 3:1 2:1

31.0' LT
℄=1005.9

1009.45
206+50.00
1013.90

37.1' RT
℄=1006.0

PROP. R/W

PROP. R/W

4:1 4:1 4:1 3:1 2:1

31.3' LT
℄=1005.2

1008.65
206+00.00
1011.46

37.3' RT
℄=1004.5

PROP. R/W

PROP. R/W

15", TYPE D

46.6' LT
℄=1000.0

1007.86
205+50.00
1005.73

40.4' RT
℄=1003.0

15", TYPE D

PROP. R/W

PROP. R/W

4:1 4:1 3:1 3:1

54.7' LT
℄=998.0

1007.06
205+00.00
1000.68

44.4' RT
℄=1001.5

PROP. R/W

PROP. R/W

4:1 4:1 3:1 3:1

57.8' LT
℄=996.4

1006.26
204+50.00
998.27

54.1' RT
℄=998.1

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

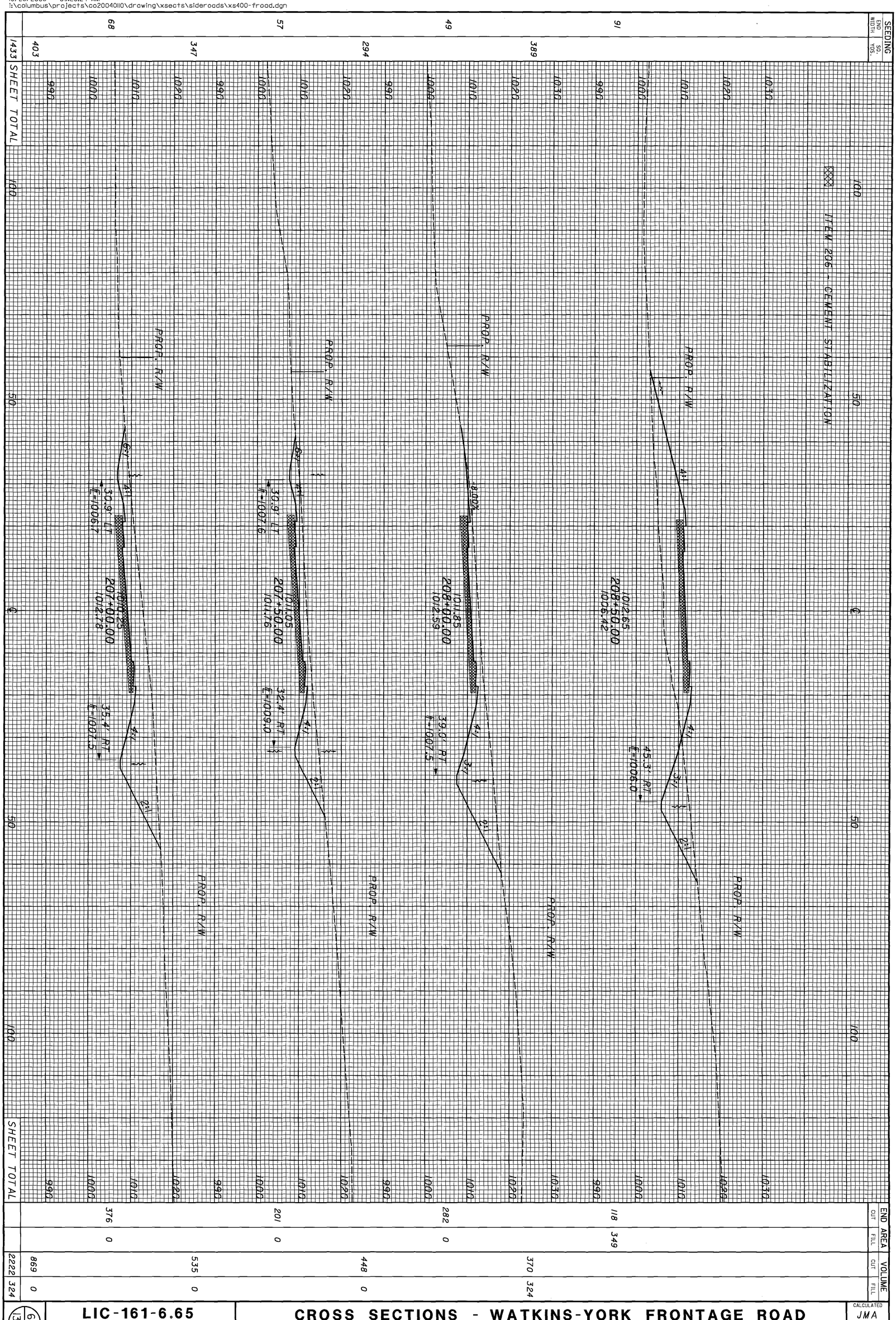
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 204+50 TO STA. 206+50

LIC-161-6.65
LIC-37-10.25

654
1349

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655 / 1349	**LIC-161-6.65** **LIC-37-10.25**
CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD **STA. 207+00 TO STA. 208+50**	CALCULATED JMA CHECKED PEK

SEEDING	
END WIDTH	SQ. YDS.
56	294
50	319
65	381
72	475
99	528
	1997

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

Ex. Tel.

28.0' LT
℄-1014.3

1016.65
211+00.00
1018.53

28.0' RT
℄-1014.3

PROP. R/W

28.0' LT
℄-1013.5

1015.85
210+50.00
1017.28

28.0' RT
℄-1013.5

PROP. R/W

28.0' LT
℄-1012.7

1015.05
210+00.00
1014.72

39.9' RT
℄-1009.9

PROP. R/W

32.9' LT
℄-1010.6

1014.25
209+50.00
1011.03

52.2' RT
℄-1006.4

PROP. R/W

54.0' LT
℄-1003.5

1013.45
209+00.00
1005.42

49.0' RT
℄-1004.5

STA 209+00, CULVERT NO. 21,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 988.

END AREA	
CUT	FILL
234	0
191	0
115	1
21	159
22	559

VOLUME	
CUT	FILL
394	0
283	1
126	148
40	665
129	841
972	1655

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - WATKINS-YORK FRONTAGE ROAD STA. 209+00 TO STA. 211+00

LIC-161-6.65
LIC-37-10.25

656
349

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SEEDING	
END WIDTH	SQ. YDS.

NOTE:
FOR DRIVEWAY PROFILES SEE SHEETS 931-937.
FOR DRIVEWAY DRAINAGE PROFILES SEE SHEETS 938-947.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARIES SEE SHEETS 117-125.

SHEET TOTALS: (CARRIED TO SHEETS 123-125)	
203 EXCAVATION	1668 CU. YD.
299 EMBANKMENT	78 CU. YD.
659 SEEDING AND MULCHING	1891 SQ. YD.

SERVICE ROAD 10
CURVE DATA
P.I. STA. = 145+26.74
Δ = 08° 44' 01" (RT)
Dc = 12° 00' 42"
R = 477.00'
T = 36.43'
L = 72.71'
E = 1.39'
e_{max} = NC

SERVICE ROAD 10
CURVE DATA
P.I. STA. = 146+98.16
Δ = 24° 04' 10" (LT)
Dc = 20° 02' 01"
R = 286.00'
T = 60.97'
L = 120.15'
E = 6.43'
e_{max} = NC

BEGIN WORK
SERVICE ROAD 10
STA. 145+00.00

BEGIN WORK
STA. 150+32.10
RELOCATED
WORTHINGTON RD. NORTH

END WORK
STA. 150+52.34
SERVICE RD. 10

P.O.T. STA. 150+32.10 ℄ RELOCATED STA. 150+52.34 ℄ SERVICE ROAD STA. 150+32.10 ℄ WORTHINGTON ROAD NORTH

P.O.T. STA. 143+00.00

R.C. STA. 146+37.10

STA. 146+12.46
17.10' RT.

STA. 146+83.27
52.70' RT.

STA. 147+87.34
21' RES. DR. (GRAVEL)
+45.29

+64.96
12' RES. DR. (GRAVEL)

END FULL DEPTH PVMT.
BEGIN RESURFACING
STA. 148+50.00, LT. & RT.

℄ SURVEY & CONST.
SERVICE ROAD 10

℄ SURVEY & CONST.
RELOCATED WORTHINGTON
RD NORTH

℄ SURVEY & CONST. S.R. 161

CONSTRUCTION LIMITS

WESTBOUND LANES

EASTBOUND LANES

N 82° 41' 36" E

S 73° 14' 14" E

WOODS
WOOD BOARD FENCE
WOOD FENCE
1-STORY FRAME BARN
2 CAR FRAME GARAGE
SATELLITE DISH
LAWN AREA
PROPANE TANK
1-STORY FRAME
BUSH
GRAVEL
1-1/2 STORY BARN
CONC. SILO
1-STORY FRAME GARAGE
FRAME BARN
SPLIT RAIL FENCE
SCRUB TREES
ASPHALT
CONC. WALK
LAWN AREA
5- 24" TO 36"
30-6" TO 24"
8" TO 12"

PROFILE

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

P.V.I. STA. = 147+50.00
P.V.I. ELEV. = 1,061.35
200' V.C.
K = 476
SSD = 260'
P.V.C. STA. = 146+50.00
P.V.C. ELEV. = 1,062.26
P.V.T. STA. = 148+50.00
P.V.T. ELEV. = 1,060.02
-0.94 %
-1.53 %
PROPOSED PROFILE
EXIST. GRADE
END FULL DEPTH PVMT. MATCH EX. PVMT. BEGIN MILL AND OVERLAY
STA. 150+52.34 ℄ SERVICE RD. 10 = STA. 150+32.10 ℄ RELOCATED WORTHINGTON ROAD NORTH

1080
1070
1060
1050

1,062.71 1,062.26 1,062.02 1,061.78 1,061.52 1,061.24 1,060.96 1,060.66 1,060.35 1,060.02 1,059.20 1,058.37 1,057.44 1,056.48

1,062.5 1,062.8 1,061.1 1,061.8 1,062.25 1,061.79 1,060.49 1,060.02 1,059.20 1,058.37 1,057.41 1,056.48

143+00 144+00 145+00 146+00 147+00 148+00 149+00 150+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

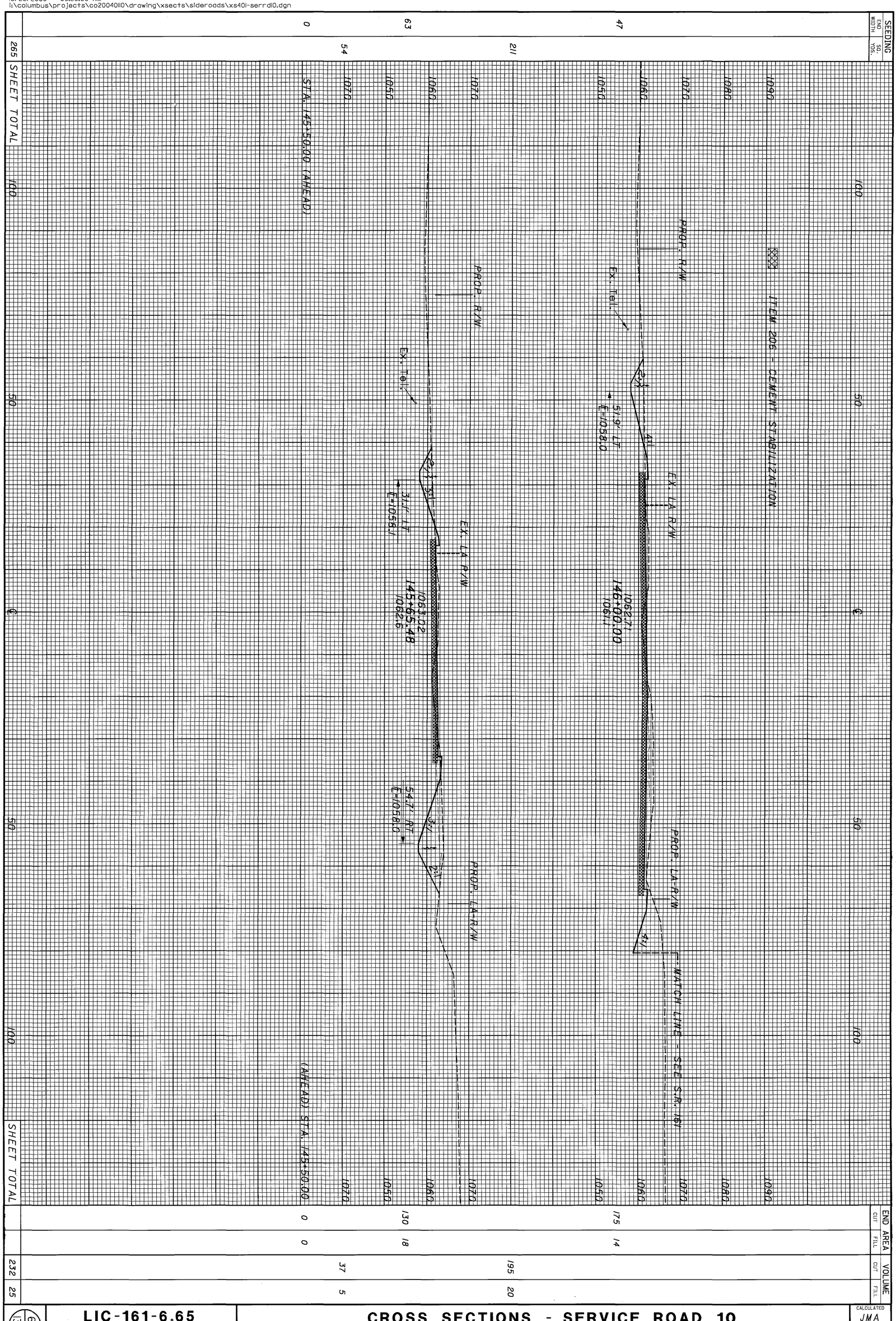
PLAN AND PROFILE SERVICE ROAD 10
STA. 143+00 TO STA. 150+52.34

LIC-161-6.65
LIC-37-10.25

658
1349

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LIC-161-6.65
LIC-37-10.25

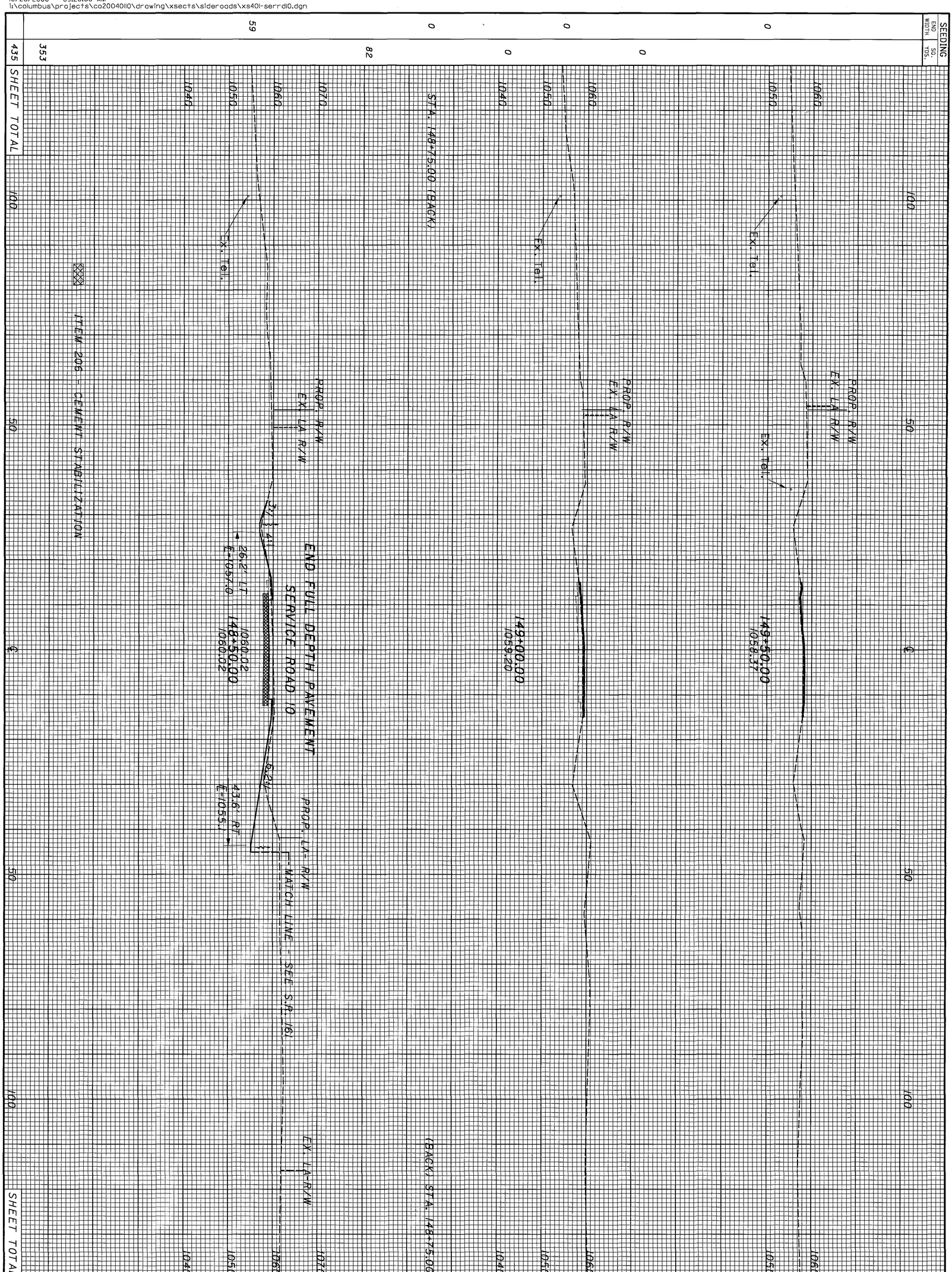
CROSS SECTIONS - SERVICE ROAD 10
STA. 144+50 TO STA. 146+00

CALCULATED JMA
CHECKED PEK

SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					CALCULATED JMA CHECKED PEK
		ITEM 206 - CEMENT STABILIZATION					
68		PROP. R/W EX. LA R/W 3%, 4:1 1060.86 148+00.00 1060.49 27.9' LT E=1057.2 6.5:1 42.5' RT E=1056.1 PROP. LA-R/W MATCH LINE - SEE S.R. 161 EX. LA-R/W Ex. Tel. 1060 1050	116	2			CROSS SECTIONS - SERVICE ROAD 10 STA. 146+50 TO STA. 148+00
34	283	PROP. R/W EX. LA R/W 15" TYPE D 1061.24 147+50.00 1061.79 43.1' RT E=1056.6 PROP. LA-R/W MATCH LINE - SEE S.R. 161 EX. LA-R/W Ex. Tel. 1060 1050 1040	137	0	234	2	
73	297	PROP. R/W EX. LA R/W 3:1 4:1 1061.78 147+00.00 1062.25 35.1' LT E=1057.6 8.7:1 PROP. LA-R/W MATCH LINE - SEE S.R. 161 EX. LA-R/W Ex. Tel. 1070 1060 1050	186	11	299	10	
50	342	PROP. R/W EX. LA R/W 2:1 4:1 1062.26 146+50.00 1061.8 38.1' LT E=1057.8 4.7:1 MATCH LINE - SEE S.R. 161 PROP. LA-R/W Ex. Tel. 1070 1060 1050 1040	176	8	335	18	LIC-161-6.65 LIC-37-10.25
	269				325	20	
	1191	SHEET TOTAL 100 50 ℄ 50 100			1193	50	661 1349

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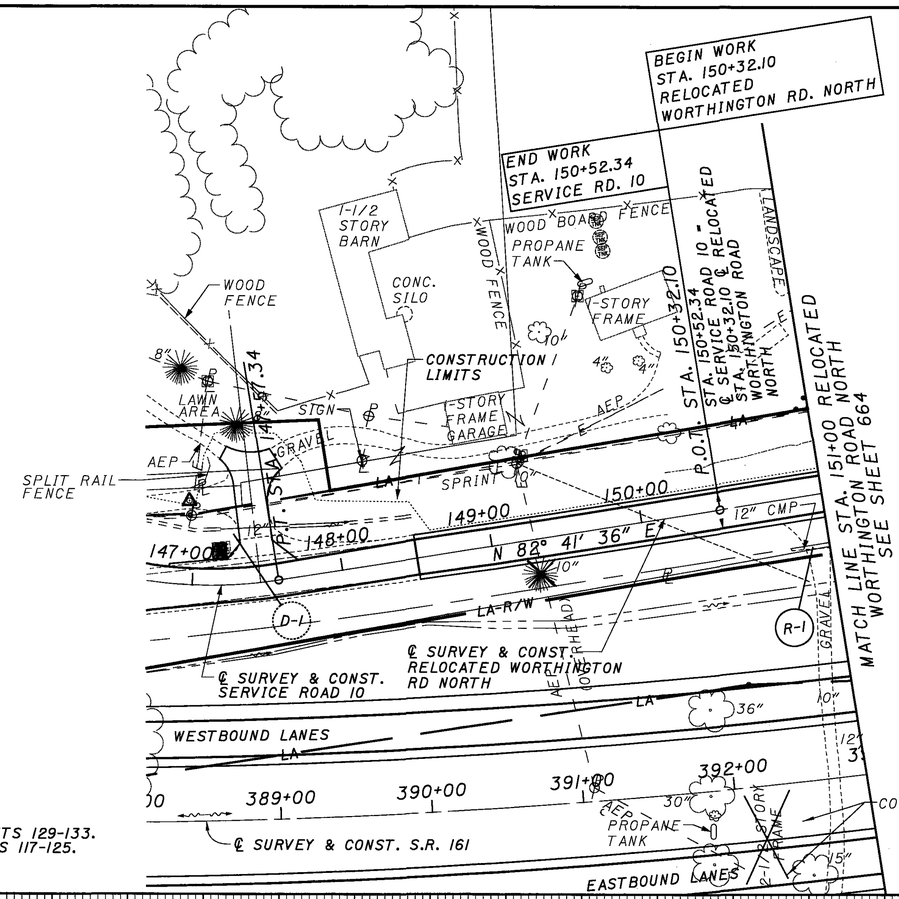
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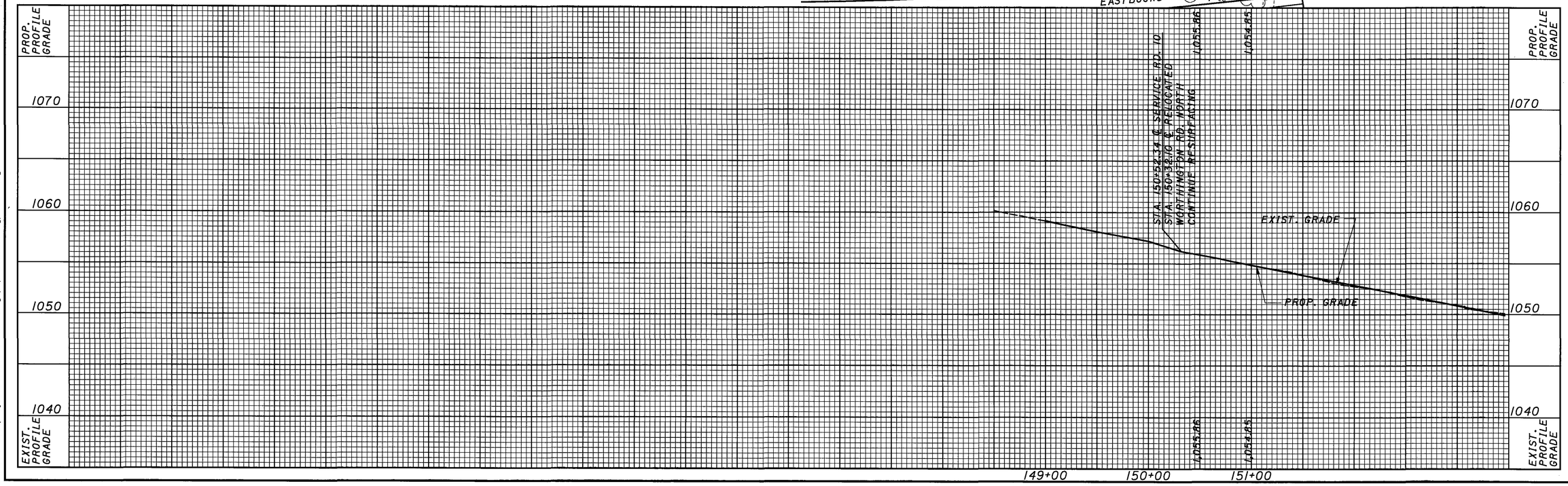
LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - SERVICE ROAD 10
STA. 148+50 TO STA. 149+50

662
1349



NOTE:
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 150+32.10 TO STA. 151+00

LIC-161-6.65
LIC-37-10.25

663
349

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NOTE:
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.

SEE SHEET 663
MATCH LINE STA. 151+00 RELOCATED WORTHINGTON ROAD NORTH

MATCH LINE STA. 163+00 RELOCATED WORTHINGTON ROAD NORTH
SEE SHEET 665

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

R-1

AEP (OVERHEAD)

SPRINT

FUEL

CONSTRUCTION LIMITS

N 82° 41' 36" E

LA-R/W

P.T. STA. 394+77.67

18" CONDUIT

10'-0"

WESTBOUND LANES

N 82° 35' 35" E

CB-4, AP.P.

℄ SURVEY & CONST. S.R. 161

EASTBOUND LANES

P.T. STA. 153+88.11

℄ SURVEY & CONST.
WATCHINS-YORK FRONTAGE ROAD

R/W

PROP. PROFILE GRADE

EXIST. GRADE

PROP. GRADE

EXIST. PROFILE GRADE

1050

1040

1030

1054.85 1053.88 1052.75 1051.76 1050.90 1050.03 1048.75 1047.79 1046.86 1045.99 1044.71 1043.65 1042.70 1041.72 1040.77 1039.86 1039.04 1038.13 1037.31 1036.42 1035.96 1035.13 1034.32 1034.03 1033.26

151+00 152+00 153+00 154+00 155+00 156+00 157+00 158+00 159+00 160+00 161+00 162+00 163+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 151+00 TO STA. 163+00

LIC-161-6.65
LIC-37-10.25

664
349

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STA. 167+43.00
END RESURFACING.
BEGIN FULL DEPTH PVMT.

STA. 168+12.00
END FULL DEPTH PVMT.
BEGIN RESURFACING

SPRINT

CONSTRUCTION LIMITS

167+78
CULVERT NO. 2

AEP (OVERHEAD)

R-1 R-2 R-3 R-4 R-5

164+00 165+00 166+00 167+00 168+00 169+00 170+00 171+00 172+00 173+00 174+00

N 82°41'36" E

LA-R/W

EX. 4'X6' CMP

4" STEEL GAS
COLUMBIA GAS

15" CONDUIT

112"x75" CONDUIT, TYPE A

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

SEE SHEET 664
MATCH LINE STA. 163+00 RELOCATED WORTHINGTON ROAD NORTH

SEE SHEET 666
MATCH LINE STA. 175+00 RELOCATED WORTHINGTON ROAD NORTH

LA

WESTBOUND LANES

406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00

CB-4, AP.P.

N 82° 35' 35" E

℄ SURVEY & CONST. S.R. 161

EASTBOUND LANES

165+00 166+00 167+00 168+00 169+00 170+00 171+00 172+00 173+00 174+00 175+00

N 82° 35' 35" E

CONSTRUCTION LIMITS

112"x75" CONDUIT, TYPE A

R/W

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	119 CU.YD.
203 EMBANKMENT	53 CU.YD.
659 SEEDING AND MULCHING	501 SQ.YD.

NOTE:
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

1033.26 1032.77 1031.98 1031.29 1030.76 1030.33 1030.13 1029.94 1029.75 1029.53 1029.29 1029.05 1028.81 1028.49 1028.30 1028.03 1027.76 1027.48 1027.33 1027.21 1026.56 1026.23 1026.35 1026.20 1025.96

1030
1020
1010
1000

4" STEEL GAS LINE

112" x 75" x 93'
CONDUIT, TYPE A

EXIST. GRADE

PROP. GRADE

163+00 164+00 165+00 166+00 167+00 168+00 169+00 170+00 171+00 172+00 173+00 174+00 175+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 163+00 TO STA. 175+00

LIC-161-6.65
LIC-37-10.25

665
1349

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NOTE:
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.

RELOCATED WORTHINGTON ROAD
NORTH CURVE DATA
P.I. STA. = 184+66.12
Δ = 02° 14′ 34″ (RT)
Dc = 00° 30′ 00″
R = 11,459.19′
T = 224.30′
L = 448.54′
E = 2.19′
emax = NC

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 175+00 TO STA. 187+50

LIC-161-6.65
LIC-37-10.25

666
349

SEE SHEET 665
MATCH LINE STA. 175+00 RELOCATED WORTHINGTON ROAD NORTH

MATCH LINE STA. 187+50 RELOCATED WORTHINGTON ROAD NORTH
SEE SHEET 667

LOT 25
LOT 26
LOT 27

CONSTRUCTION LIMITS

AEP (OVERHEAD)

SPRINT

N 82° 41′ 36″ E

N 84° 56′ 09″ E

N 82° 35′ 35″ E

P.C. STA. 182+41.82

P.T. STA. 186+90.36

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

15″ CONDUIT

18″ CONDUIT

CB-4, AP.P.

WESTBOUND LANES

EASTBOUND LANES

LA

LA-R/W

176+00 177+00 178+00 179+00 180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00

418+00 419+00 420+00 421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00

177+00 178+00 179+00 180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

EXIST. GRADE

PROP. GRADE

1030
1020
1010
1000

1025.96 1025.60 1025.35 1025.11 1024.86 1024.51 1024.24 1024.13 1024.01 1023.76 1023.50 1023.23 1022.96 1022.74 1022.65 1022.56 1022.43 1022.18 1021.93 1021.69 1021.43 1021.22 1021.03 1020.83 1020.40 1020.13

175+00 176+00 177+00 178+00 179+00 180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00

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NOTE:
FOR DRIVEWAY PROFILES SEE SHEETS 931-937.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR DRIVEWAY DRAINAGE PROFILES SEE SHEETS 938-947.
FOR DRAINAGE SUBSUMMARY SEE SHEETS 135-136.
FOR STREAM RELOCATION DETAILS SEE SHEETS 1079-1099.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	19488 CU. YD.
203 EMBANKMENT	706 CU. YD.
659 SEEDING AND MULCHING	10154 SQ. YD.

RELOCATED WORTHINGTON ROAD NORTH CURVE DATA
P.I. STA. = 193+70.21
Δ = 36° 25' 42" (LT)
Dc = 06° 00' 00"
R = 954.93'
Ls = 265.19'
Θs = 07° 57' 21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Δc = 20° 31' 01" (LT)
Lc = 341.95'
Ts = 447.75'
Es = 53.60'
emax = 0.083

SEE SHEET 666 RELOCATED WORTHINGTON ROAD NORTH

MATCH LINE STA. 187+50 RELOCATED WORTHINGTON ROAD NORTH

MATCH LINE STA. 200+00 RELOCATED WORTHINGTON ROAD NORTH SEE SHEET 668

POOL

SPRINT

LOT 27

LOT 28

+32.26 12' RES. DR. (GRAVEL)

15" CONDUIT, TYPE D

BEGIN FULL DEPTH PVMT. AND SHOULDER TRANSITION STA. 188+50 LT. & RT.

END PAVEMENT AND SHOULDER TRANSITION STA. 189+15 LT. & RT.

T.S. STA. 189+22.46 BEGIN PAVEMENT WIDENING 12' LT.

END PAVEMENT WIDENING 15' LT. STA. 191+87.65

C.S. STA. 195+29.60 BEGIN PAVEMENT TRANSITION 15' LT.

ST. STA. 197+94.79 END PAVEMENT TRANSITION 12' LT.

CONSTRUCTION LIMITS

R/W

LA-R/W

LA

AEP OVERHEAD

188+00 AXIS

189+00

190+00

191+00

192+00

193+00

194+00

195+00

196+00

197+00

198+00

199+00

N 48°30'27" E

90°

D-1 D-2 E-1 E-2 R-1 R-2 R-3 R-4

15" CONDUIT TYPE D

+00.00 12' RES. DR. (GRAVEL)

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

CULVERT NO. 3 96" CONDUIT TYPE A

℄ STREAM RELOCATION

EX. CB

EX. 8" CMP

430+00

431+00

P.C. STA. 430+93.83

432+00

433+00

PROPOSED PROFILE

EXIST. GRADE

SPRINT

-0.49 %

-0.37 %

3.10 %

-3.10 %

P.V.I. STA. = 189+50.00
P.V.I. ELEV. = 1,019.67
(NO VERTICAL CURVE)
MATCH EX. PVMT.
END RESURFACING
BEGIN FULL DEPTH PVMT.

P.V.C. STA. = 189+75.00
P.V.C. ELEV. = 1,019.20

P.V.I. STA. = 191+50.00
P.V.I. ELEV. = 1,018.55
350' V.C.
K = 128
SSD = 570'

P.V.I. STA. = 193+25.00
P.V.I. ELEV. = 1,013.13

PROP. PROFILE GRADE: 1020.50 1019.98 1019.67 1019.48 1019.30 1019.20 1019.09 1018.92 1018.70 1018.44 1018.13 1017.77 1017.36 1016.90 1016.39 1015.84 1015.23 1014.58 1013.88 1013.13 1012.35 1010.80 1009.26 1007.71 1006.16 1004.61 1003.06 1001.51 999.96 998.41 996.86 995.31 993.76 992.22

EXIST. PROFILE GRADE: 1020.50 1019.92 1019.67 1019.66 1019.45 1018.76 1018.08 1017.18 1016.15 1015.09 1012.69 1014.38 1019.15 1016.41 1012.94 1010.11 1008.71 1007.28 1005.84 1003.90 1001.16 997.97 997.36 1000.46 993.46

1020 1010 1000 990

188+00 189+00 190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00

HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JMA
CHECKED FJA

RELOCATED WORTHINGTON ROAD NORTH - PLAN AND PROFILE STA. 187+50 TO STA. 200+00

LIC-161-6.65
LIC-37-10.25

667
349

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NOTE:
FOR DRIVEWAY PROFILES SEE SHEETS 931-937.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR DRAINAGE SUBSUMMARY SEE SHEETS 135-136.
FOR DRIVEWAY DRAINAGE PROFILE SEE SHEETS 938-947.
FOR STREAM RELOCATION DETAILS SEE SHEETS 1079-1099.

SEE SHEET 667 RELOCATED WORTHINGTON ROAD NORTH

MATCH LINE STA. 200+00

MATCH LINE STA. 212+00 RELOCATED WORTHINGTON ROAD NORTH SEE SHEET 669

CONSTRUCTION LIMITS

15" CONDUIT, TYPE D

102" CONDUIT, TYPE A

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

12' RES. DR. (GRAVEL)

209+88 CULVERT # 16

WOODS

GRAVEL & DIRT

BEAN FIELD

LOT 28

LOT 29

T ESMT

LA-R/W

R/W

E-1 E-2 E-3 D-1 D-2

T.S. STA. 202+21.66 BEGIN PAVEMENT WIDENING, 12' RT.

S.C. STA. 204+86.85 END PAVEMENT WIDENING, 15' RT.

C.S. STA. 208+83.31 BEGIN PAVEMENT TRANSITION, 15' RT.

S.T. STA. 211+48.50 END PAVEMENT TRANSITION, 14' RT.

℄ STREAM RELOCATION

WETLAND
TOTAL AREA- 0.094 AC.
DISTURBED AREA- 0.046 AC.

RELOCATED WORTHINGTON ROAD NORTH
CURVE DATA

P.I. STA. = 207+00.00
Δ = 39° 41′ 55″ (RT)
Dc = 06° 00′ 00″
R = 954.93′
Ls = 265.19′
Θs = 07° 57′ 21″
LT = 176.97′
ST = 88.56′
x = 264.68′
y = 12.26′
k = 132.51′
p = 3.07′
Δc = 23° 47′ 14″ (RT)
Lc = 396.45′
Ts = 478.34′
Es = 63.58′
e_{max} = 0.083

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	19201 CU. YD.
203 EMBANKMENT	17271 CU. YD.
659 SEEDING AND MULCHING	15784 SQ. YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

PROPOSED PROFILE
EXIST. GRADE

P.V.I. STA. = 205+00.00
P.V.I. ELEV. = 967.43
450' V.C.
K = 117
SSD = 505'

P.V.C. STA. = 205+25.00
P.V.C. ELEV. = 975.95

P.V.T. STA. = 210+75.00
P.V.I. ELEV. 971.83

-3.10 %
+1.60 %

102" x 22" CONDUIT, TYPE A

200+00 201+00 202+00 203+00 204+00 205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00

HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 200+00 TO STA. 212+00

LIC-161-6.65
LIC-37-10.25

668
349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	4601 CU. YD.
203 EMBANKMENT	27952 CU. YD.
659 SEEDING AND MULCHING	11879 SQ. YD.

P.O.T. STA. 393+29.11

℄ SURVEY & CONST. S.R. 37 STA. 395+70.02 = ℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH STA. 212+83.63

WORTHINGTON ROAD NORTH SEE SHEET 668

STA. 212+27.05 61.91′ LT.

STA. 212+16.04 62.09′ LT.

RELOCATED WORTHINGTON ROAD NORTH STA. 212+00

MATCH LINE STA. 212+00

P.C. STA. 394+53.96

STA. 213+51.61 61.97′ LT.

STA. 213+40.48 62.03′ RT.

STA. 214+15.54 62.16′ RT.

STA. 397+09.40

N 88° 12′ 22″ E

955.50′ R

50′ R

84°53′

95°50′

WOOD PLANTERS

WELL

ROCK

ANTENNA

TV

BRICK

DECK

GRAVEL

WOOD TRASH BIN

R-1 R-2 R-3 R-4 R-5 R-6

PROPANE TANK CONC. PAD

6′ CHAINLINK

METAL POLE BARN

YARD

SPRINT (OVERHEAD)

HTEL

CORN FIELD

ASPH.

CONCRETE

GRAVEL

℄ SURVEY & CONST. S.R. 37

CONSTRUCTION LIMITS

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

CONSTRUCTION LIMITS

LOT 30 LOT 31

S.C. STA. 216+80.73 END PAVEMENT WIDENING, 15′ RT.

C.S. STA. 219+06.64 BEGIN PAVEMENT TRANSITION, 15′ RT.

E-1 E-2

D-1 15″ CONDUIT, TYPE D

+00.00 12″ RES. DR. (GRAVEL)

S.T. STA. 221+71.83 END PAVEMENT TRANSITION, 12′ RT.

S.T. STA. 223+23.65 BEGIN PAVEMENT WIDENING, 12′ LT.

223+00 CULVERT # 17

27″ CONDUIT, TYPE A

MATCH LINE STA. 225+00 RELOCATED WORTHINGTON ROAD NORTH SEE SHEET 670

WEEDS

WOODS

RELOCATED WORTHINGTON ROAD NORTH CURVE DATA	
P.I. STA. = 217+99.96	x = 264.68′
Δ = 29° 27′ 57″ (RT)	y = 12.26′
Dc = 06° 00′ 00″	k = 132.51′
R = 954.93′	p = 3.07′
Ls = 265.19′	Δc = 13° 33′ 16″ (RT)
Θs = 07° 57′ 21″	Lc = 225.91′
LT = 176.97′	Ts = 384.42′
ST = 88.56′	Es = 35.63′
	emax = 0.083

NOTE:
FOR DRIVEWAY PROFILES SEE SHEETS 931-937.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR DRAINAGE SUBSUMMARY SEE SHEETS 135-136.
FOR DRIVEWAY DRAINAGE PROFILES SEE SHEETS 938-947.

PROP. PROFILE GRADE: 975.83 974.63 974.91 974.11 973.31 972.51 972.11 971.73 971.38 971.07 970.79 970.54 970.33 970.16 970.01 969.89 969.64 969.39 969.14 968.89 968.64 968.39 968.19 967.89 967.64 967.39 967.15 966.90 966.65 966.40 966.15 965.90

EXIST. PROFILE GRADE: 961.29 971.95 974.30 976.05 976.31 976.33 974.83 972.13 973.20 970.40 963.45 959.63 957.50 955.67 955.15 955.20 955.44 954.58 954.19 954.10 954.25 954.40 956.12 959.49 962.68 962.56 960.97

980 970 960 950

+1.60 X -1.60 X -0.50 X

PROPOSED PROFILE

EXIST. GRADE

℄ S.R. 37 STA. = 212+83.63 ELEV. = 975.17

P.V.C. STA. = 214+75.00 P.V.C. ELEV. = 972.11

P.V.I. STA. = 215+75.00 P.V.I. ELEV. = 970.51 200′ V.C. K = 182

P.V.T. STA. = 216+75.00 P.V.T. ELEV. = 970.01

27″ X 113′ CONDUIT, TYPE A

212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00 224+00 225+00

HORIZONTAL SCALE IN FEET: 0 25 50 100

CALCULATED JMA CHECKED FJA

PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 212+00 TO STA. 225+00

LIC-161-6.65
LIC-37-10.25

669
349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	2061 CU. YD.
203 EMBANKMENT	1753 CU. YD.
659 SEEDING AND MULCHING	5620 SQ. YD.

RELOCATED WORTHINGTON ROAD NORTH
CURVE DATA
P.I. STA. = 227+95.54
Δ = 39° 00′ 54″ (LT)
Dc = 06° 00′ 00″
R = 954.93′
Ls = 265.19′
Θs = 07° 57′ 21″
LT = 176.97′
ST = 88.56′
x = 264.68′
y = 12.26′
k = 132.51′
p = 3.07′
Δc = 23° 06′ 13″ (LT)
Lc = 385.06′
Ts = 471.89′
Es = 61.41′
emax = 0.083

NOTE :
FOR DRIVEWAY PROFILES SEE SHEETS 931-937.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR DRAINAGE SUBSUMMARY SEE SHEETS 135-136.
FOR DRIVEWAY DRAINAGE PROFILES SEE SHEETS 938-947.

MATCH LINE STA. 225+00 SEE SHEET 669 RELOCATED WORTHINGTON ROAD NORTH
S.C. STA. 225+88.84 END PAVEMENT WIDENING, 15′ LT.
+00.00 12′ RES. DR. (GRAVEL)
+82.69 12′ RES. DR. (ASPHALT)
C.S. STA. 229+73.90 BEGIN PAVEMENT TRANSITION, 15′ LT.
S.T. STA. 232+39.09 END PAVEMENT TRANSITION, 12′ LT.
STA. 232+75.00 BEGIN PAVEMENT AND SHOULDER TRANSITION, LT. & RT.
STA. 233+00.00 END PAVEMENT AND SHOULDER TRANSITION, LT. & RT.
℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH
CONSTRUCTION LIMITS
STA. 228+28.99 77.19′ RT
END WORK RELOCATED WORTHINGTON ROAD NORTH STA. 233+00.00
P.O.T. STA. 235+12.00
N 78° 39′ 25″ E
BILLBOARD LOT 31 LOT 32
D-1 D-2 E-1 E-2 R-1 R-2 R-3
2-MB
I.P.S.
50.0′R
FIELD
WEEDS
GRASS
TREES & BRUSH
WIRE FENCE
OLD BROKEN ASPHALT
CONC. PAD
2-STY WOOD BARN
AEP (OVERHEAD)
ELEC. TRANS.
8″PINE
12″PINE
SEPTIC
LEACH AREA
BURIED ELEC
CONC. RAMP
GRASS
4″CRABS
GRAVEL
WOODS
COVERED WALK BRIDGE
30″COTTONWOOD
WOOD POST
TREES
LAWN
SIGN/ FLOWER BED
50′ GRAVEL DR.
BRUSH
24″MAPLE
30″MAPLE
2-12″ MAPLES
2-STY FRAME
LEACH
24″WALNUT
GRAVEL DR.
WOOD BARN
1-STY WOOD BARN
1-STY WOOD GARAGE
1-16″ 1-18″ WALNUT
LOT 32 LOT 33

P.V.I. STA. = 227+40.00
P.V.I. ELEV. = 964.70
200′ V.C.
K = 870
SSD = 479′
P.V.C. STA. = 225+40.00
P.V.C. ELEV. = 965.20
P.V.I. STA. = 229+40.00
P.V.I. ELEV. = 963.37
P.V.I. STA. = 233+00.00
ELEV. = 960.62
(NO VERTICAL CURVE)
MATCH EX. P.I.
-0.50 %
-0.73 %
-0.65 %
0.68 %
PROPOSED PROFILE
EXIST. GRADE
PROP. PROFILE GRADE
EXIST. PROFILE GRADE
980
970
960
950
225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00

HORIZONTAL SCALE IN FEET 0 25 50 100
CALCULATED JMA
CHECKED FJA

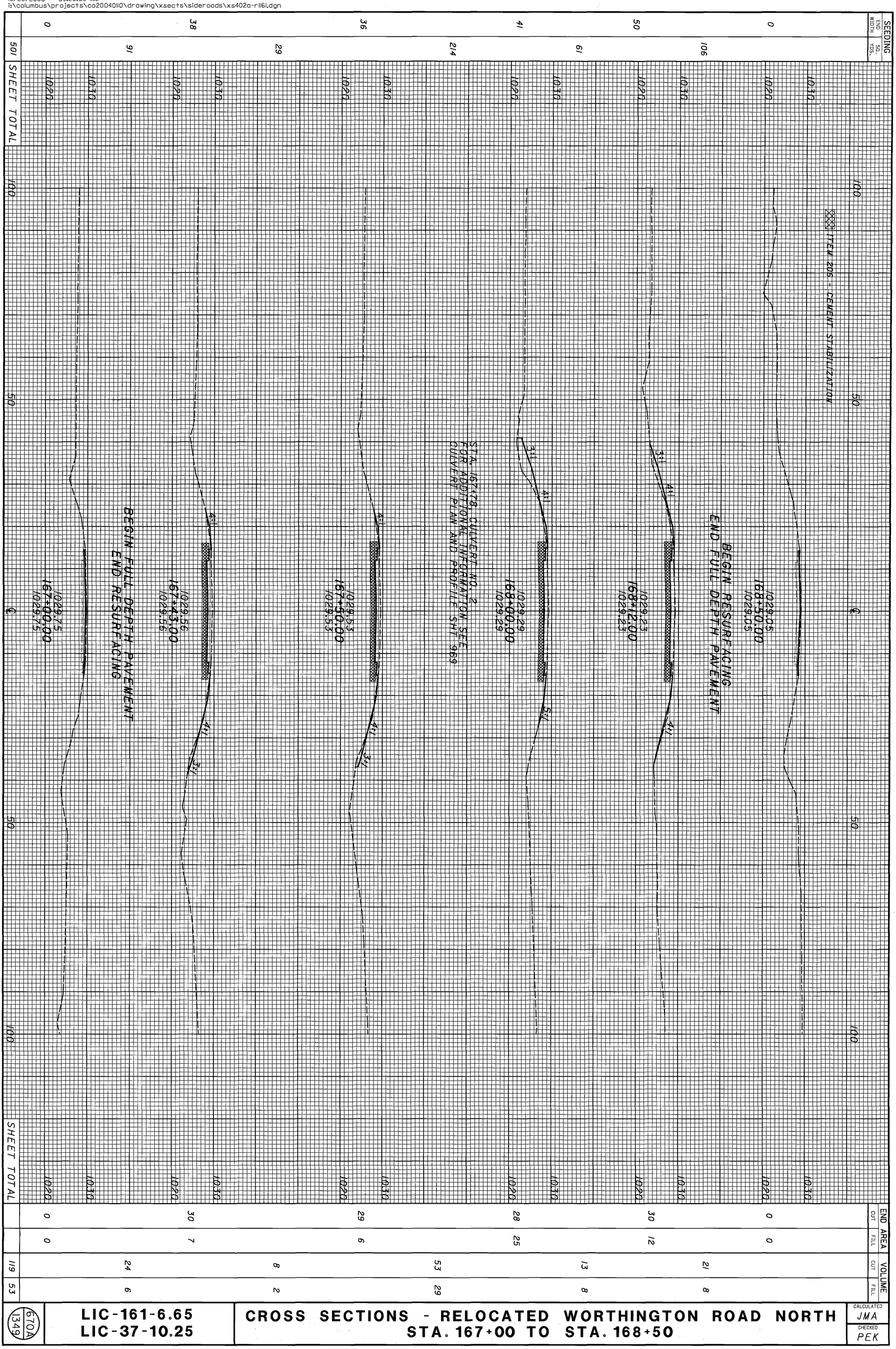
PLAN AND PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 225+00 TO STA. 235+00

LIC-161-6.65
LIC-37-10.25

670
1349

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670A (349)	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 167+00 TO STA. 168+50

CALCULATED JMA
CHECKED PEK

SEEDING	
END WIDTH	SQ. YDS.
76	
425	
77	
410	
71	
197	
0	
	1032

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

EX. LA R/W
EX. TEL.
EX. TEL.
4:1
4:1
15", TYPE D
31.2' LT
E=1016.4
1019.30
189+50.00
1019.15
PROP. LA R/W
4:1
MATCH LINE - SEE S.R. 161
45.4' RT
E=1012.8

EX. LA R/W
EX. TEL.
EX. TEL.
4:1
4:1
28.3' LT
E=1016.6
1019.48
189+00.00
1019.66
PROP. LA R/W
4:1
MATCH LINE - SEE S.R. 161
45.4' RT
E=1013.0

EX. LA R/W
EX. TEL.
4:1
4:1
24.3' LT
E=1017.8
1019.67
188+50.00
1019.67
PROP. LA R/W
4.5:1
MATCH LINE - SEE S.R. 161
45.3' RT
E=1013.2

BEGIN FULL DEPTH PAVEMENT
RELOCATED WORTHINGTON ROAD NORTH

1040 1030 1020 1010 1000

100 50 ℄ 50 100

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
145	4	318	8
199	4	329	5
157	1	145	1
		792	14

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

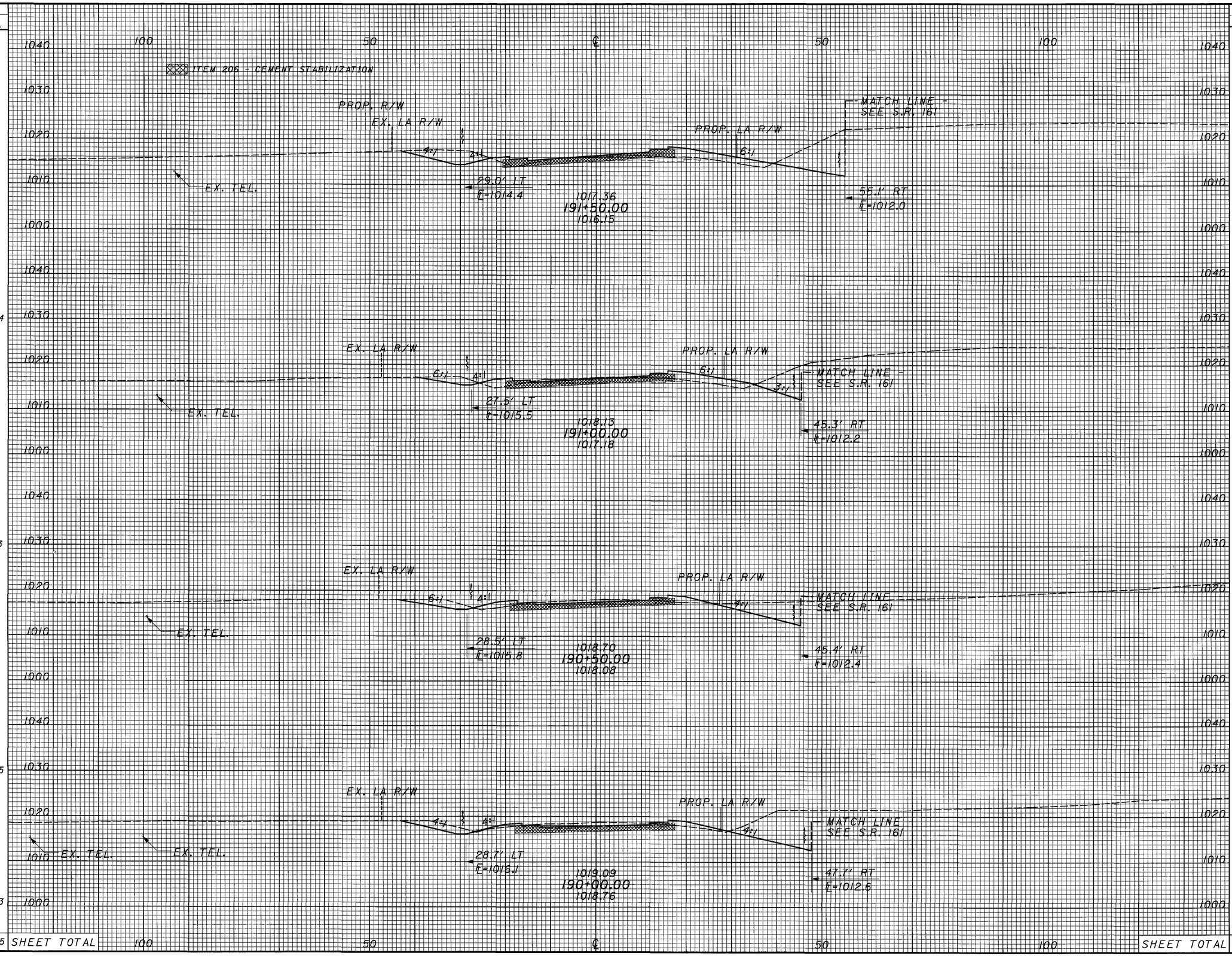
CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 188+00 TO STA. 189+50

LIC-161-6.65
LIC-37-10.25

671
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
66	334
54	313
59	335
62	383
	1365



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
118	59		
		162	95
57	44		
		125	60
79	22		
		194	34
131	15		
		255	18
		737	207

CALCULATED JMA
CHECKED PEK

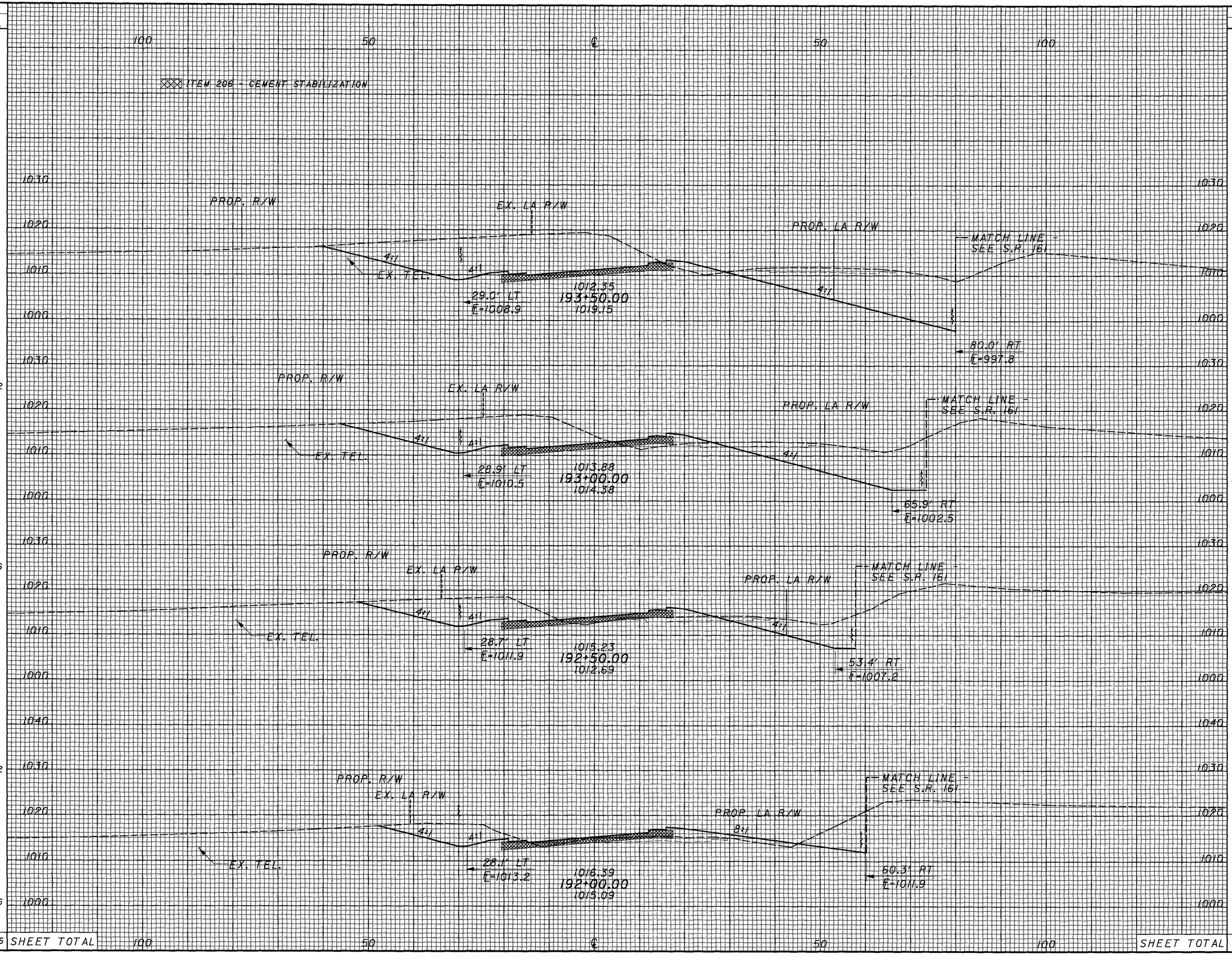
CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 190+00 TO STA. 191+50

LIC-161-6.65
LIC-37-10.25

672
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
110		193+50.00	820	18		
	582				1271	50
99		193+00.00	552	35		
79	496	192+50.00	275	40	766	70
	432				397	87
76	396	192+00.00	153	54	251	104
	1906	SHEET TOTAL			2685	311



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 192+00 TO STA. 193+50

LIC-161-6.65
LIC-37-10.25

673
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
69	378	349	0	609	0
67	383	308	0	602	0
71	421	342	0	755	0
81	404	474	0	925	0
65	486	525	0	1246	17
	2072 SHEET TOTAL			4137	17

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

PROP. LA R/W

EX. LA R/W

EX. TEL.

28.8' LT E=1001.6

1004.61 196+00.00 1007.28

26.0' RT E=1003.5

29.1' LT E=1002.9

1006.16 195+50.00 1008.71

26.0' RT E=1005.3

29.0' LT E=1004.3

1007.71 195+00.00 1010.11

26.0' RT E=1006.9

29.0' LT E=1005.8

1009.26 194+50.00 1012.94

26.0' RT E=1008.5

29.0' LT E=1008.7

1010.80 194+00.00 1016.41

26.0' RT E=1008.7

4:1 6:1 1000 990 1010 1020 1030

SHEET TOTAL

CALCULATED JMA CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 194+00 TO STA. 196+00

LIC-161-6.65
LIC-37-10.25

674
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		PROP. R/W				
80		1010 / 1000 / 990	401	11		
	486	26.0' LT E-994.6 — 996.86 198+50.00 1001.17 — 26.0' RT E-994.6				
		980			695	21
		PROP. R/W				
95		1010 / 1000 / 990	350	12		
	491	26.0' LT E-996.1 — 998.41 198+00.00 997.97 — 26.0' RT E-996.3				
		980			545	22
		PROP. R/W				
82		PROP. R/W 1010 / 1000	238	12		
	479	26.1' LT E-997.7 — 999.96 197+50.00 1001.16 — 26.0' RT E-998.2				
		990 / 980			574	11
		PROP. R/W				
		PROP. LA R/W				
91		1010 / 1000	381	0		
	466	26.7' LT E-999.1 — 1001.51 197+00.00 1003.90 — 26.0' RT E-1000.0				
		990			758	0
		PROP. R/W				
		PROP. LA R/W				
		EX. LA R/W				
77		1010 / 1000	437	0		
	405	27.8' LT E-1000.4 — 1003.06 196+50.00 1005.64 — 26.0' RT E-1001.7				
		990			728	0
		EX. TEL.				
		PROP. LA R/W				
		EX. TEL.				
		990				
	2327	SHEET TOTAL			3300	54

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 196+50 TO STA. 198+50

LIC-161-6.65
LIC-37-10.25

675
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
123	695	483	86	1022	143
127	533	620	68	1164	101
65	436	637	41	1163	40
92	524	618	2	939	28
97	491	395	28	737	37
	2679 SHEET TOTAL			5025	349

CALCULATED JMA CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 199+00 TO STA. 201+00

LIC-161-6.65
LIC-37-10.25

676
1349

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

26.0' LT
℄-986.9

989.12
201+00.00
985.75

26.0' RT
℄-986.9

26.0' LT
℄-988.4

990.67
200+50.00
985.08

33.6' RT
℄-988.4

31.4' LT
℄-988.6

992.22
200+00.00
993.40

+8.00%

15" TYPE D

36.8' LT
℄-988.8

993.76
199+50.00
1000.46

33.4' RT
℄-991.5

26.0' LT
℄-993.0

995.31
199+00.00
997.36

26.0' RT
℄-993.0

4:1 9:1 1000 990 980 970

100 50 ℄ 50 100

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SEEDING	
END WIDTH	SQ. YDS.
134	
	706
120	
119	
124	
	688
	2733

100 50 ℄ 50 100

PROP. R/W

990 980 970 1000

4:1 3.89:1 4:1 2:1

33.3' LT
℄=981.3

982.92
203+00.00
986.31

52.9' RT
℄=973.9

809 10

4:1 4:1 4:1 2:1

26.0' LT
℄=982.5

984.47
202+50.00
989.07

47.0' RT
℄=976.9

755 60

4:1 4:1 4:1 2:1

26.0' LT
℄=983.9

986.02
202+00.00
987.34

38.7' RT
℄=980.6

632 84

4:1 4:1 4:1 4:1

26.0' LT
℄=985.3

987.57
201+50.00
983.10

26.0' RT
℄=985.3

529 90

ITEM 206 - CEMENT STABILIZATION

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
809	10		
		1448	65
755	60		
		1284	134
632	84		
		1076	161
529	90		
		937	163
		4745	523

CALCULATED JMA
CHECKED PEK

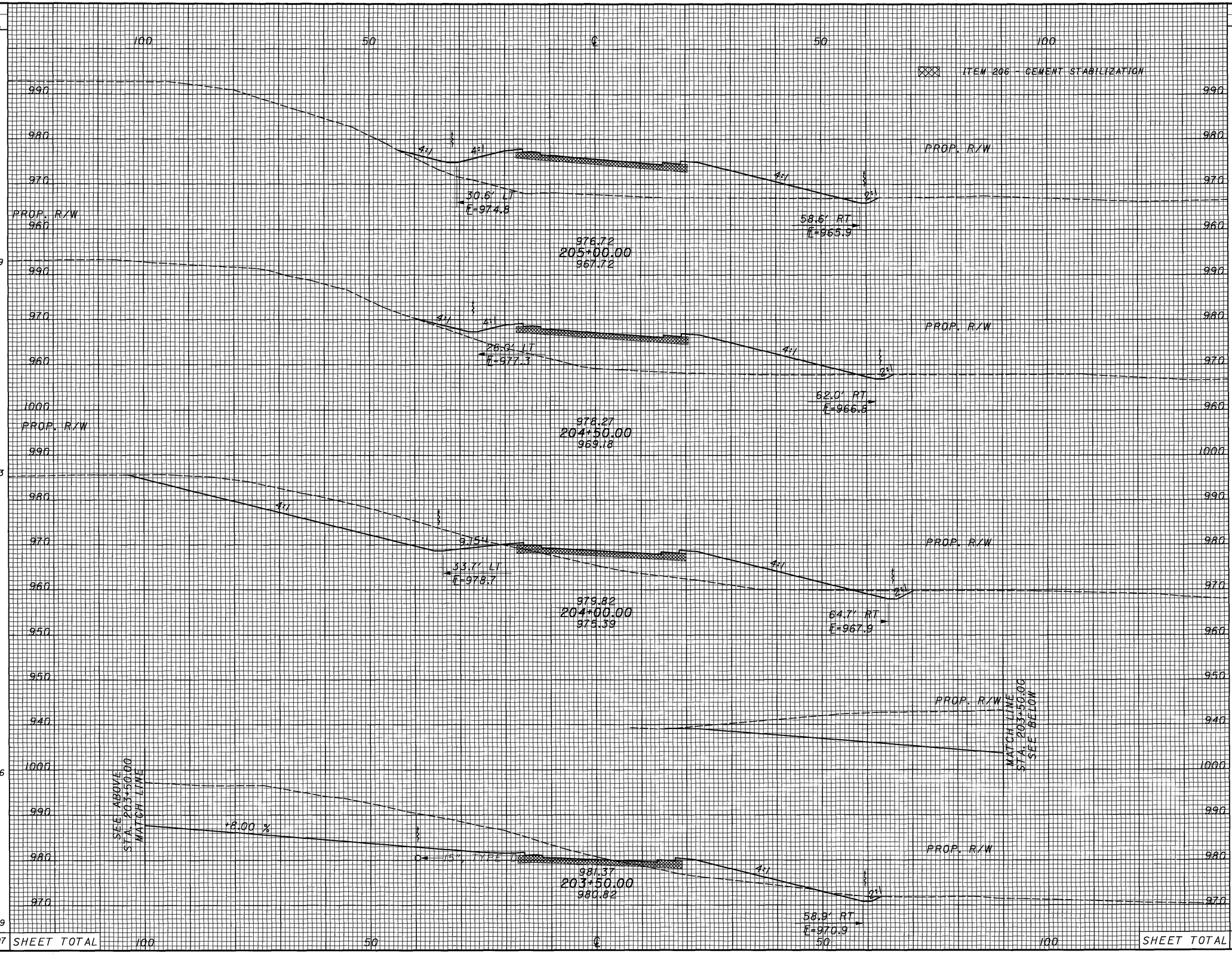
CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 201+50 TO STA. 203+00

LIC-161-6.65
LIC-37-10.25

677
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
77		547	5		
	429			511	469
77		5	501		
	623			345	716
		367	272		
147				1402	326
	546				
49		1147	80		
	509			1811	83
	2107			4069	1594



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 203+50 TO STA. 205+00

LIC-161-6.65
LIC-37-10.25

678
349

tduffney
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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
123		26.0' LT E=971.0 — 971.84 — 207+00.00 — 975.14 — 59.1' RT E=960.9	640	46		
	751				1451	152
148		26.0' LT E=972.0 — 972.74 — 206+50.00 — 971.32 — 57.2' RT E=962.3	927	118		
	816				1702	268
146		26.0' LT E=973.1 — 973.87 — 206+00.00 — 970.58 — 55.7' RT E=963.8	911	172		
	788				1146	504
137		26.0' LT E=974.4 — 975.20 — 205+50.00 — 967.77 — 55.2' RT E=965.2	327	373		
	597				809	350
	2952	SHEET TOTAL			5108	1274

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

CALCULATED JMA
CHECKED PEK

RELOCATED WORTHINGTON ROAD NORTH
CROSS SECTIONS - STA. 205+50 TO STA. 207+00

LIC-161-6.65
LIC-37-10.25

679
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		100 50 ℄ 50 100			
		ITEM 206 CEMENT STABILIZATION			
		PROP. R/W			
134		970.34 209+00.00 959.00	116	867	
		PROP. R/W			
	657	970.39 208+50.00 958.95	177	439	271 1209
		PROP. R/W			
103		970.66 208+00.00 963.41	298	383	440 761
	570	PROP. R/W			
105		971.14 207+50.00 978.61	557	127	792 473
	634	PROP. R/W			1108 161
	2438	SHEET TOTAL 100 50 ℄ 50 100			2611 2604

63.9' LT
℄=960.0

102" CONDUIT
SEE CULVERT NO. 16 DETAILS SHT 983

26.1' LT
℄=969.9

62.2' RT
℄=958.7

26.1' LT
℄=970.1

61.6' RT
℄=959.1

26.1' LT
℄=970.6

61.8' RT
℄=959.5

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 207+50 TO STA. 209+00

LIC-161-6.65
LIC-37-10.25

680
1349

rduffney
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SEEDING	
END WIDTH	SQ. YDS.
127	
	671
114	
	697
136	
	749
133	
	742
	2859

END AREA		VOLUME	
CUT	FILL	CUT	FILL
25	1157		
		33	1933
11	931		
		61	1606
55	804		
		143	1555
99	876		
		199	1614
		436	6708

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 209+50 TO STA. 211+00

LIC-161-6.65
LIC-37-10.25

681
1349

ITEM 203 - GRANULAR MATERIAL, TYPE D

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

980 970 960 950 940

PROP. R/W

4:1 3:1 2% 4:1 2%

70.4' LT
E-956.5

68.8' RT
E-959.3

972.23
211+00.00
958.51

PROP. R/W

4:1 3:1 2% 4:1 2%

69.3' LT
E-956.3

102" CONDUIT
SEE CULVERT NO. 16
DETAILS SHT 983

66.4' RT
E-959.1

971.46
210+50.00
959.21

PROP. R/W

4:1 3:1 3:1 4:1 2%

66.3' LT
E-956.8

65.4' RT
E-958.8

970.87
210+00.00
961.00

STA. 209+88, CULVERT NO. 16
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 983

PROP. R/W

4:1 3:1 3:1 4:1 2%

64.3' LT
E-957.3

64.5' RT
E-958.6

970.50
209+50.00
958.27

SHEET TOTAL

100 50 ℄ 50 100

SHEET TOTAL

rduffney
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SEEDING	
END WIDTH	SQ. YDS.
68	378
68	356
60	181
0	0
120	499
	725
141	745
	2703

END AREA	
CUT	FILL
352	0
331	0
229	0
97	0
0	370
20	1005
4	1255

VOLUME	
CUT	FILL
632	0
519	0
328	0
27	1823
22	2093
26	2233
1554	6149

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 211+50 TO STA. 214+50

LIC-161-6.65
LIC-37-10.25

682
1349

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

6:1 4:1 4:1 4:1

26.0' LT ℄-970.7 | 972.51 214+50.00 976.33 | 25.9' RT ℄-970.2

PROP. R/W

PROP. R/W

6:1 4:1 4:1 4:1

26.0' LT ℄-971.2 | 973.31 214+00.00 976.31 | 26.0' RT ℄-971.1

PROP. R/W

EX. R/W

PROP. LA R/W

6:1 4:1 4:1 4:1

26.0' LT ℄-971.8 | 974.11 213+50.00 976.05 | 26.0' RT ℄-972.3

STA. 212+95.68 (AHEAD)

STA. 212+71.58 (BACK)

PROP. R/W

PROP. LA R/W

4:1

3:1 4:1

2:1

62.8' LT ℄-960.0 | 973.83 212+00.00 961.29 | 69.6' RT ℄-961.2

PROP. R/W

EX. R/W

PROP. R/W

4:1

3:1 4:1

2:1

69.9' LT ℄-957.0 | 973.03 211+50.00 958.70 | 71.5' RT ℄-959.6

SHEET TOTAL SHEET TOTAL

100 50 ℄ 50 100

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		980 970 960 950 PROP. R/W				
		4:1 3:1 4:1 6:1				
81		29.0' RT ℄=966.5	4	428		
		969.89 217+00.00 963.45				
		PROP. R/W				
	450	980 970 960 PROP. R/W			247	459
		4:1 3:1 4:1 4:1				
81		970.16 216+50.00 970.40	263	67		
		29.1' RT ℄=966.9				
		PROP. R/W				
	419	980 970 960 PROP. R/W			555	62
		5:1 4:1 4:1 4:1				
69		35.0' LT ℄=966.2 970.54 216+00.00 973.20 28.6' RT ℄=968.5	337	0		
		PROP. R/W				
	368	980 970 960 950 PROP. R/W			507	0
		6:1 4:1 4:1 4:1				
63		32.5' LT ℄=967.4 971.07 215+50.00 972.13 27.5' RT ℄=969.0	211	0		
		PROP. R/W				
	359	980 970 960 PROP. R/W			494	0
		6:1 4:1 4:1 4:1				
66		26.0' LT ℄=969.7 971.73 215+00.00 974.83 26.5' RT ℄=969.7	323	0		
	372	980 970 960			624	0
	1968	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL			2427	521

CALCULATED JMA
CHECKED PEK

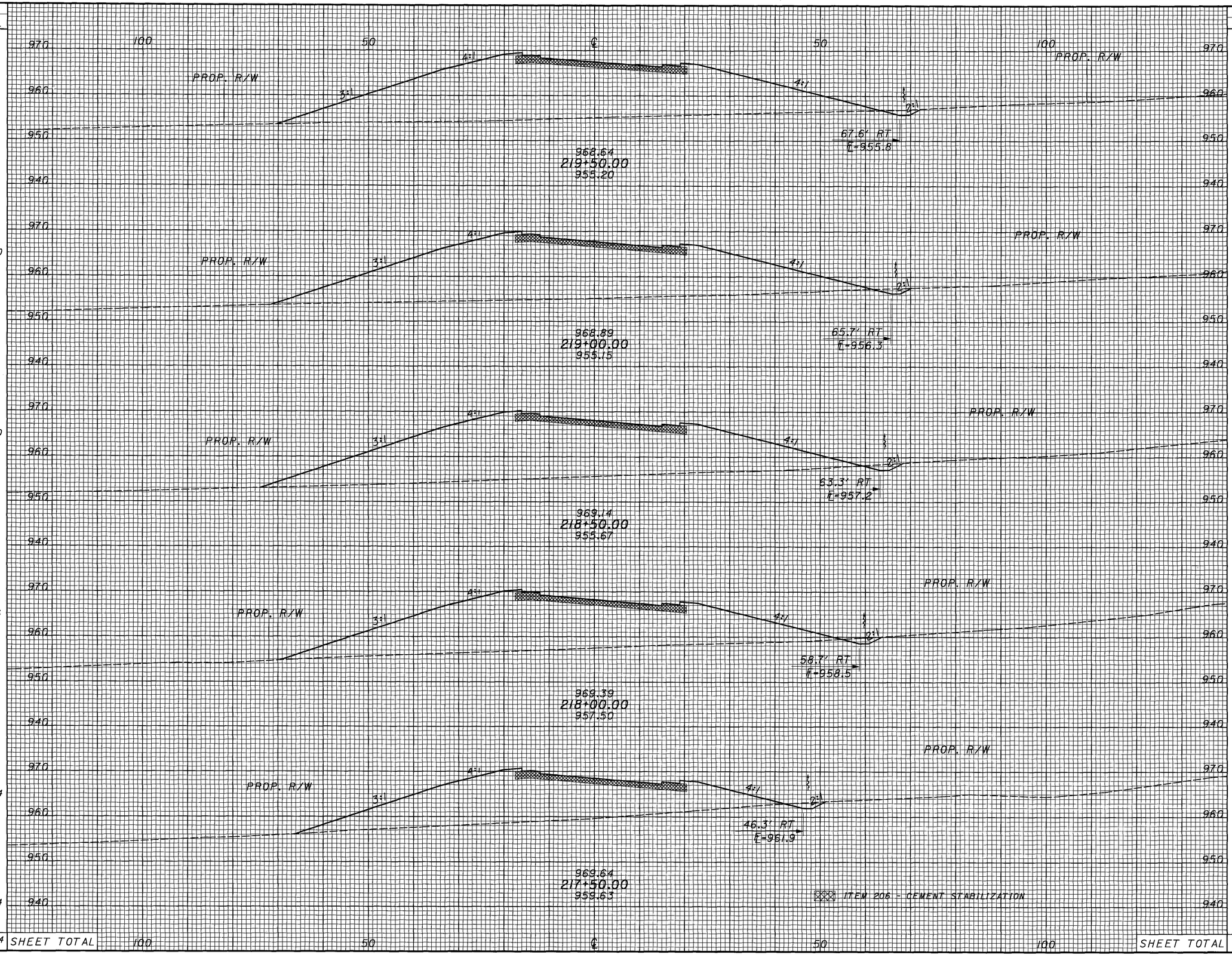
CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH
STA. 215+00 TO STA. 217+00

LIC-161-6.65
LIC-37-10.25

683
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
116		6	1146		
	640			11	2141
115		6	1166		
	640			12	2154
116		7	1160		
	616			13	1961
106		7	958		
	544			13	1556
90		7	723		
	474			10	1066
	2914			59	8878



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 217+50 TO STA. 219+50

LIC-161-6.65
LIC-37-10.25

684
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
126		967.39 222+00.00 954.25	35	1049		
	681	967.64 221+50.00 954.10	14	1105	45	1994
119		967.89 221+00.00 954.19	13	1134	25	2073
120	663	968.14 220+50.00 954.58	15	1131	26	2098
119	491	968.39 220+00.00 955.44	0	1416	14	2359
58	481				6	2373
	2979	SHEET TOTAL			116	10897

PROP. R/W
4:1
3:1
67.7' RT
℄=954.7
67.8' RT
℄=954.9
68.0' RT
℄=955.1
67.9' RT
℄=955.4
-8.00%
15", TYPE D
ITEM 206 - CEMENT STABILIZATION
100 50 ℄ 50 100

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH
STA. 220+00 TO STA. 222+00

LIC-161-6.65
LIC-37-10.25

685
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
55		966.15 224+50.00 962.56 — 45.0' RT E=960.0	17	159		
62	326	966.40 224+00.00 962.68 — 45.9' RT E=959.8	28	174	42	309
76	383	966.65 223+50.00 959.49 — 46.3' RT E=959.6	8	428	34	557
83	441	PROP. 27" CONDUIT 966.90 223+00.00 956.12 — 50.0' RT E=954.2	90	775	91	1113
135	605	967.15 222+50.00 954.40 — 67.5' RT E=954.5	102	970	178	1616
	724				127	1870
	2479	SHEET TOTAL			472	5465

ITEM 206 - CEMENT STABILIZATION

CULVERT NO. 17
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 984

CALCULATED JMA
CHECKED KEP

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 222+50 TO STA. 224+50

LIC-161-6.65
LIC-37-10.25

686
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
74		167	14		
	294			227	31
32		79	20		
	291			121	94
73		52	81		
	373			66	222
61		19	158		
	309			20	347
50		2	216		
	293			7	420
55		6	238		
	307			21	367
	1867			462	1481

SHEET TOTAL

SHEET TOTAL

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

EX. LA R/W

970
960
950

4:1 9:1 4:1 4:1

36.4' LT
E=961.2

964.58
227+50.00
964.86

36.4' RT
E=961.2

PROP. R/W

EX. LA R/W

7.92%

15", TYPE D

4:1 4:1 6:1

964.88
227+00.00
964.52

38.4' RT
E=961.0

PROP. R/W

EX. LA R/W

4:1 9:1 4:1 6:1

36.4' LT
E=961.7

965.15
226+50.00
962.75

40.2' RT
E=960.8

PROP. R/W

EX. LA R/W

4:1 4:1 4:1 6:1

29.0' LT
E=962.0

965.40
226+00.00
961.48

42.0' RT
E=960.6

PROP. R/W

EX. LA R/W

4:1 4:1 2:1

965.65
225+50.00
961.12

43.2' RT
E=960.4

PROP. R/W

4:1 4:1 2:1

965.90
225+00.00
960.97

44.1' RT
E=960.2

CALCULATED JMA

CHECKED PEK

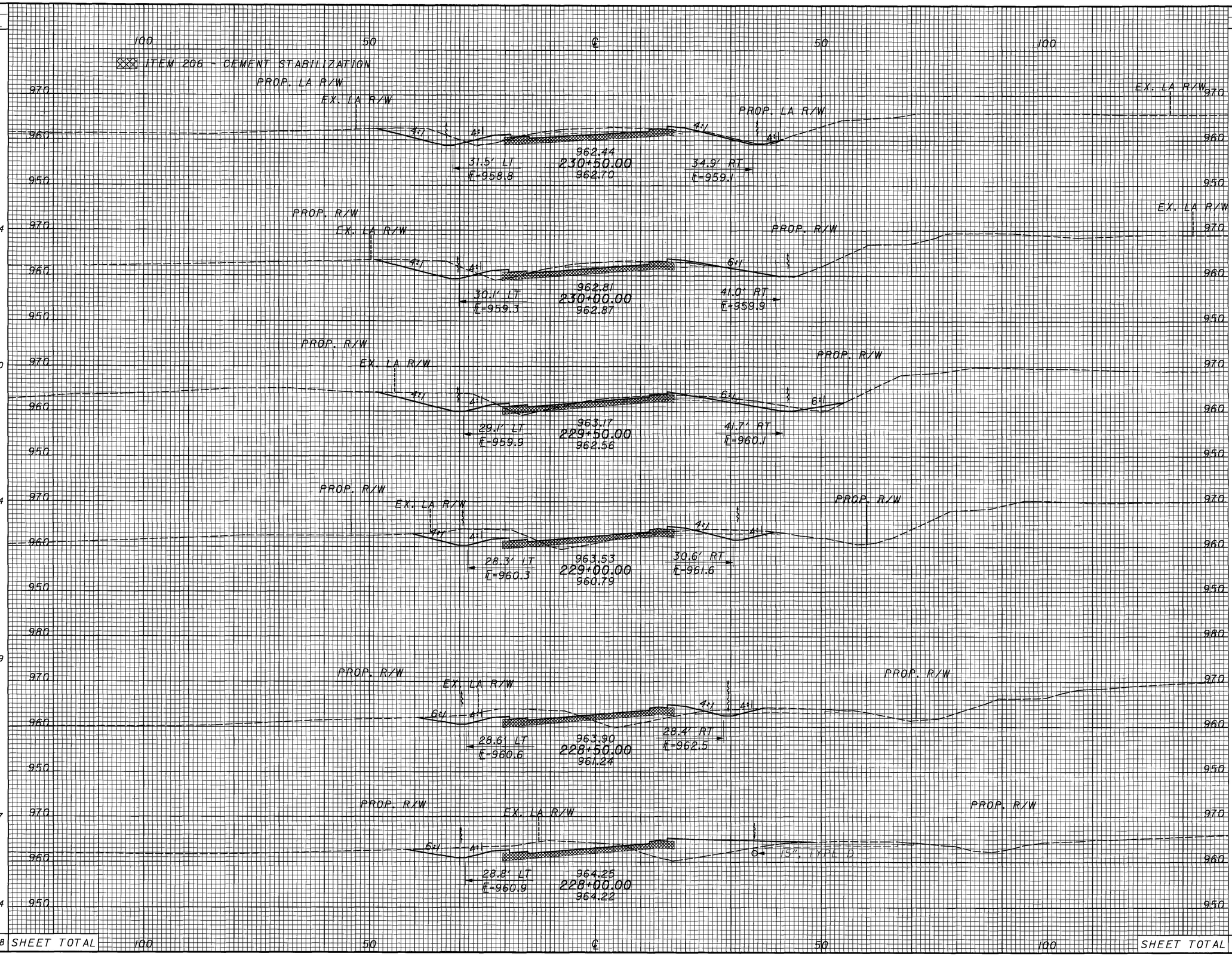
RELOCATED WORTHINGTON ROAD NORTH
CROSS SECTIONS - 225+00 TO STA. 227+50

LIC-161-6.65
LIC-37-10.25

687
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
61		72	18		
	334			133	34
60		71	18		
	370			146	40
74		87	25		
	344			152	58
50		78	37		
	269			132	88
47		65	58		
	277			126	141
53		71	94		
	354			220	100
	1948 SHEET TOTAL			909	461



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RELOCATED WORTHINGTON ROAD NORTH STA. 228+00 TO STA. 230+50

LIC-161-6.65
LIC-37-10.25

688
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0		233+50.00 960.29	0	0		
	171				42	28
62		233+00.00 960.62	45	30		
	344				88	48
62		232+50.00 961.03	50	22		
	360				106	34
67		232+00.00 961.57	65	15		
	402				142	20
78		231+50.00 962.04	89	6		
	441				173	19
81		231+00.00 962.32	98	14		
	394				158	29
2112	SHEET TOTAL				709	178

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. R/W
EX. LA R/W
END WORK STA. 233+00.00
RELOCATED WORTHINGTON ROAD NORTH
3:1 4:1 6:1
960.62
233+00.00
960.62
34.3' LT
℄-956.2
29.7' RT
℄-957.4

PROP. R/W
EX. LA R/W
3:1 4:1
960.98
232+50.00
961.03
34.5' LT
℄-956.6
31.1' RT
℄-957.6

PROP. R/W
EX. LA R/W
3:1 4:1
961.35
232+00.00
961.57
33.8' LT
℄-957.1
33.1' RT
℄-957.8

PROP. R/W
EX. LA R/W
6:1 4:1
961.71
231+50.00
962.04
32.9' LT
℄-957.7
34.6' RT
℄-958.0

PROP. LA R/W
EX. LA R/W
6:1 4:1
962.08
231+00.00
962.32
32.5' LT
℄-958.2
36.1' RT
℄-958.2

CALCULATED JMA
CHECKED PEK

RELOCATED WORTHINGTON ROAD NORTH
CROSS SECTIONS - RELOCATED STA. 231+00 TO STA. 233+50

LIC-161-6.65
LIC-37-10.25

689
1349

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RAMP I CURVE DATA

P.I. STA. = 440+88.24
Δ = 20° 30′ 00″ (LT)
Dc = 07° 30′ 00″
R = 764.49′
T = 138.24′
L = 273.33′
E = 12.40′
e_{max} = 0.083

NOTE:
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR STREAM RELOCATION DETAILS SEE SHEETS 1079-1099.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	3456 CU.YD.
203 EMBANKMENT	1098 CU.YD.
659 SEEDING AND MULCHING	2500 SQ.YD.

SEE SHEET 691 MATCH LINE STA. 443+00 RAMP I

HORIZONTAL SCALE IN FEET

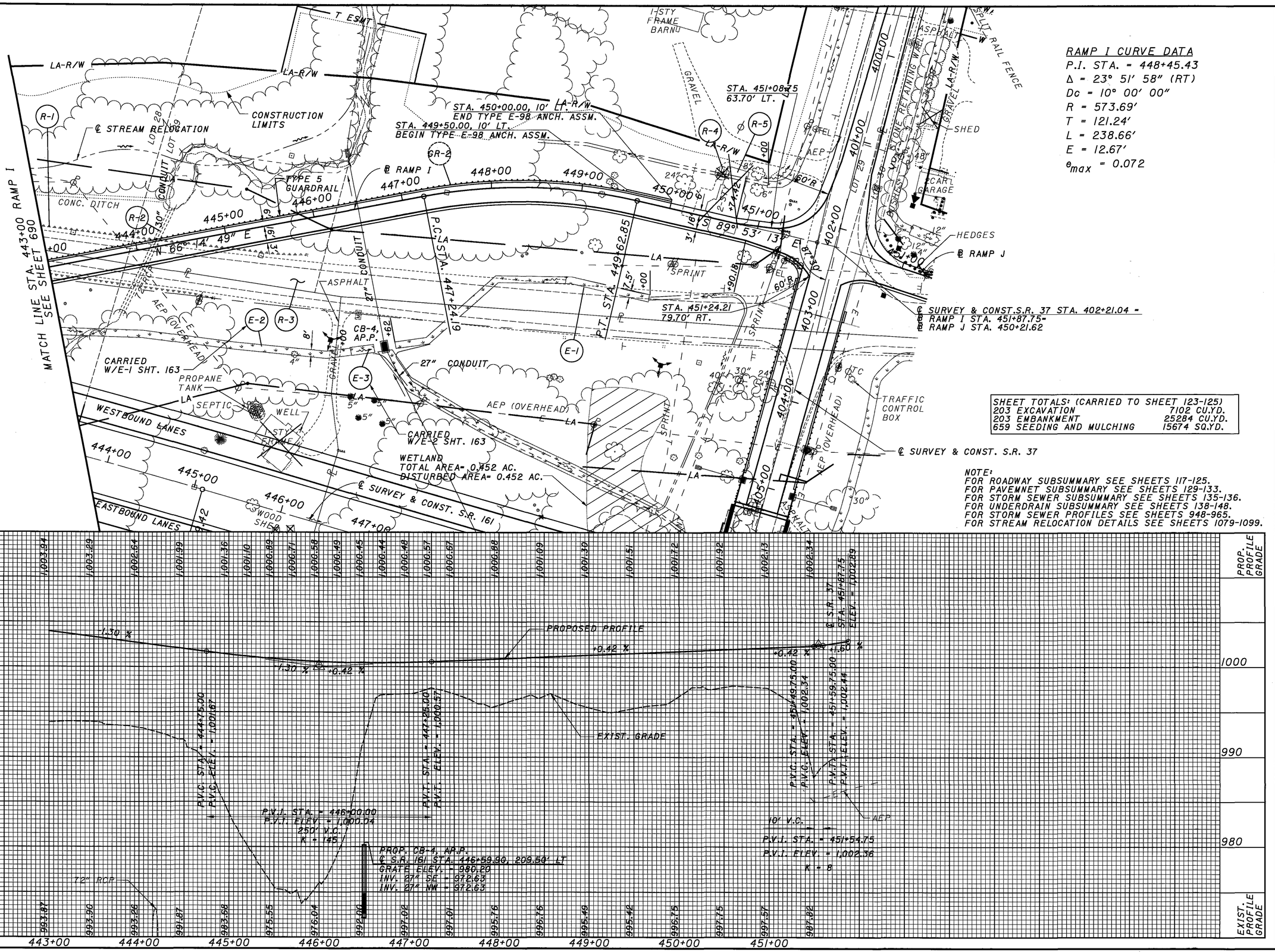
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RAMP I
STA. 440+28.41 TO STA. 443+00.00

LIC-161-6.65
LIC-37-10.25

690
1349

tduffney
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tduffney
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CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE - RAMP I
STA. 443+00 TO STA. 451+87.75

LIC-161-6.65
LIC-37-10.25

SEEDING	
END WIDTH	SQ. YDS.
115	
	547
82	
	547

END AREA		VOLUME	
CUT	FILL	CUT	FILL
624	1453		
		907	2590
356	1344		
		907	2590

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

1030 1020 1010 1000 990 980 970

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1032

3:1

1005.89
441+50.00
983.44

6:1

37.8' RT
E-1004.7

MATCH LINE - SEE S.R. 161

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1032

2:1

1006.54
441+00.00
983.54

6:1

32.4' RT
E-1006.4

MATCH LINE - SEE S.R. 161

STA. 441+00 (AHEAD)

STA. 441+00 (AHEAD)

BEGIN WORK RAMP I

SHEET TOTAL

SHEET TOTAL

CROSS SECTIONS - RAMP I
STA. 441+00.00 TO STA. 441+50.00

LIC-161-6.65
LIC-37-10.25

692
349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
122		308	1391		
	642			631	2728
109		374	1555		
	647			843	2847
124		536	1520		
	664			1074	2753
	1953			2548	8328

SHEET TOTAL

SHEET TOTAL

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1033

MATCH LINE - SEE S.R. 161

5:1

2:1

1003.94
443+00.00
993.87

701.2' RT
E=994.0

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1033

MATCH LINE - SEE S.R. 161

6:1

2:1

1004.59
442+50.00
989.09

58.5' RT
E=998.9

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1033

MATCH LINE - SEE S.R. 161

6:1

3:1

1005.24
442+00.00
984.75

46.1' RT
E=1002.3

1010
1000
990
980
970
1020

CALCULATED JMA
CHECKED PEK

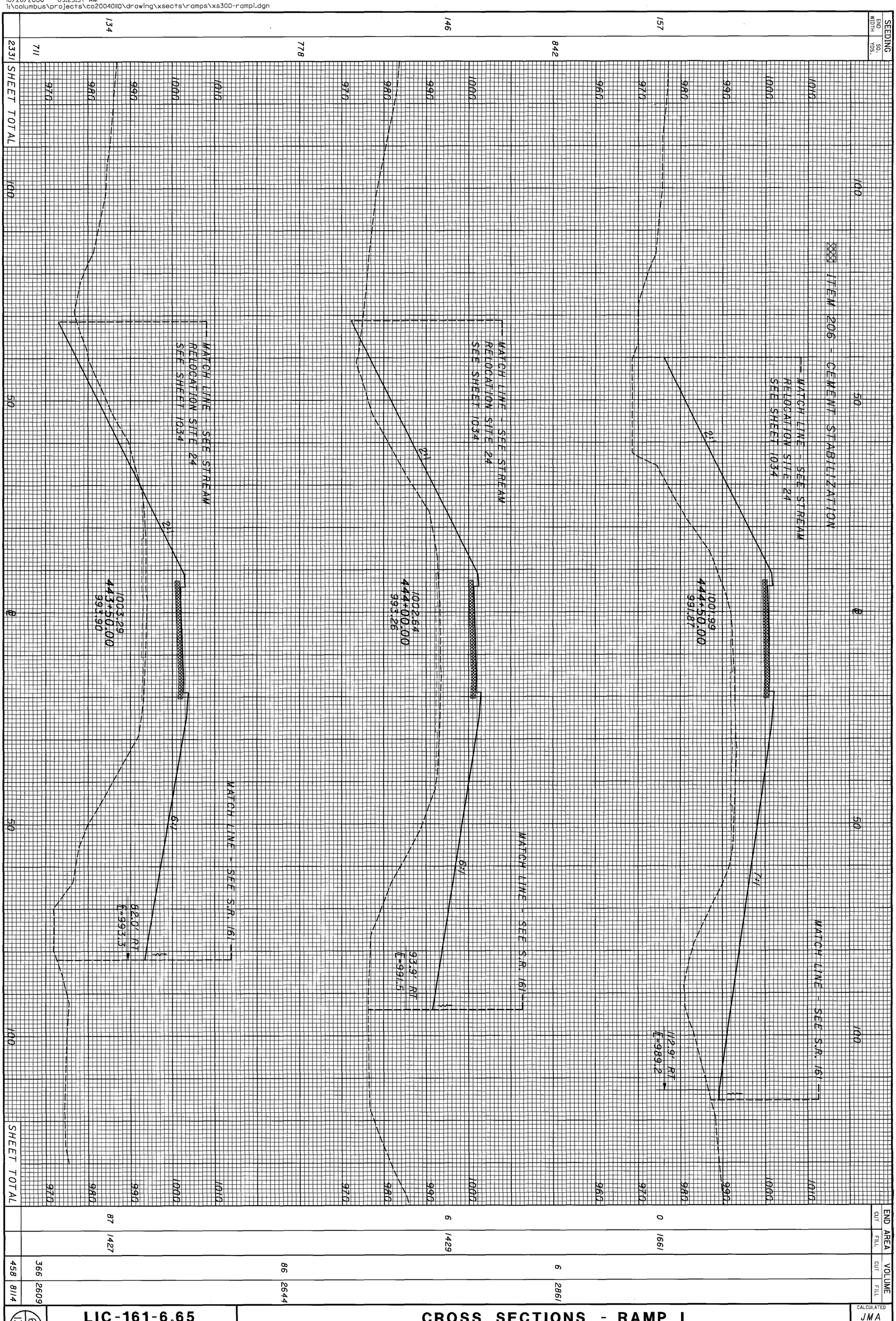
CROSS SECTIONS - RAMP I
STA. 442+00.00 TO STA. 443+00.00

LIC-161-6.65
LIC-37-10.25

693
1349

tcuffney
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| | | |

SEEDING END WIDTH	SEEDING SQ. YDS.
202	1150
212	1125
193	1031
178	931
	4237

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
615	910		
		993	2518
457	1809		
		834	3333
444	1791		
		528	3031
126	1482		
		117	2910
		2472	11792

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP I
STA. 445+00.00 TO STA. 446+50.00

LIC-161-6.65
LIC-37-10.25

695
1349

50 ℄ 50 100 150

EX. LA R/W

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1036

MATCH LINE - SEE S.R. 161
PROF. RR-4, A.P.P.
STA. 446+59.90
209.50' LT (S.R. 161)
GRATE ELEV. = 980.20
INV. 27" SE = 972.63
INV. 27" NW = 972.63

1000.45
446+50.00
992.00

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 953.

7:1

2:1

154.2' RT
℄-980.4

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1035

MATCH LINE - SEE S.R. 161

8:1

2:1

EX. LA R/W

168.1' RT
℄-982.6

1000.58
446+00.00
976.04

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1035

MATCH LINE - SEE S.R. 161

8:1

2:1

EX. LA R/W

150.7' RT
℄-984.8

1000.89
445+50.00
976.55

MATCH LINE - SEE STREAM RELOCATION SITE 24 SEE SHEET 1035

MATCH LINE - SEE S.R. 161

8:1

2:1

EX. LA R/W

135.1' RT
℄-987.10

1001.36
445+00.00
983.68

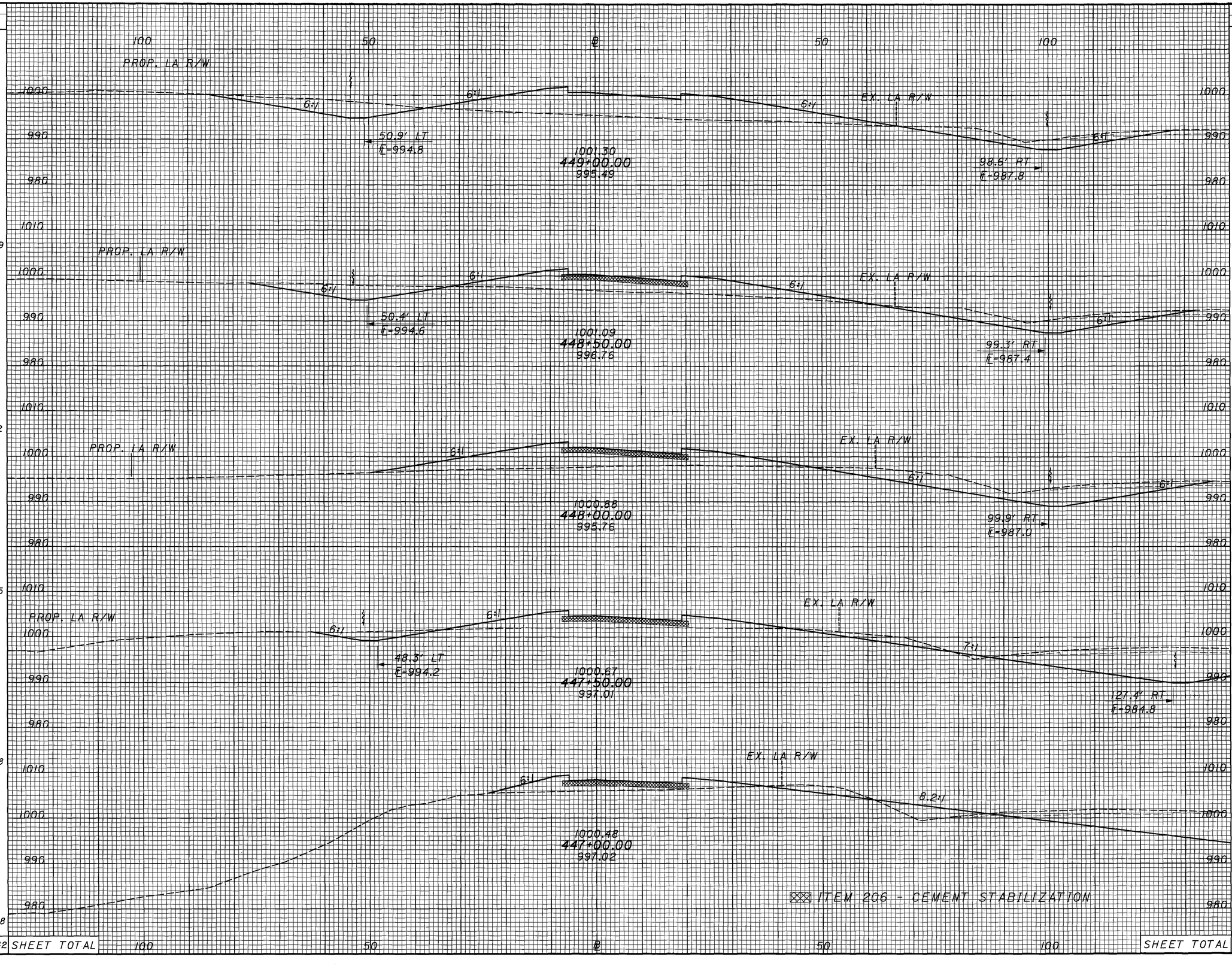
ITEM 206 - CEMENT STABILIZATION

50 ℄ 50 100 150

SHEET TOTAL SHEET TOTAL

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
195		193	367		
	1069			370	551
190		207	228		
	992			385	468
167		209	277		
	1125			630	396
238		471	151		
	1128			931	279
168		534	150		
	1028			1064	981
5342	SHEET TOTAL			3380	2675



CALCULATED JMA
CHECKED PEK

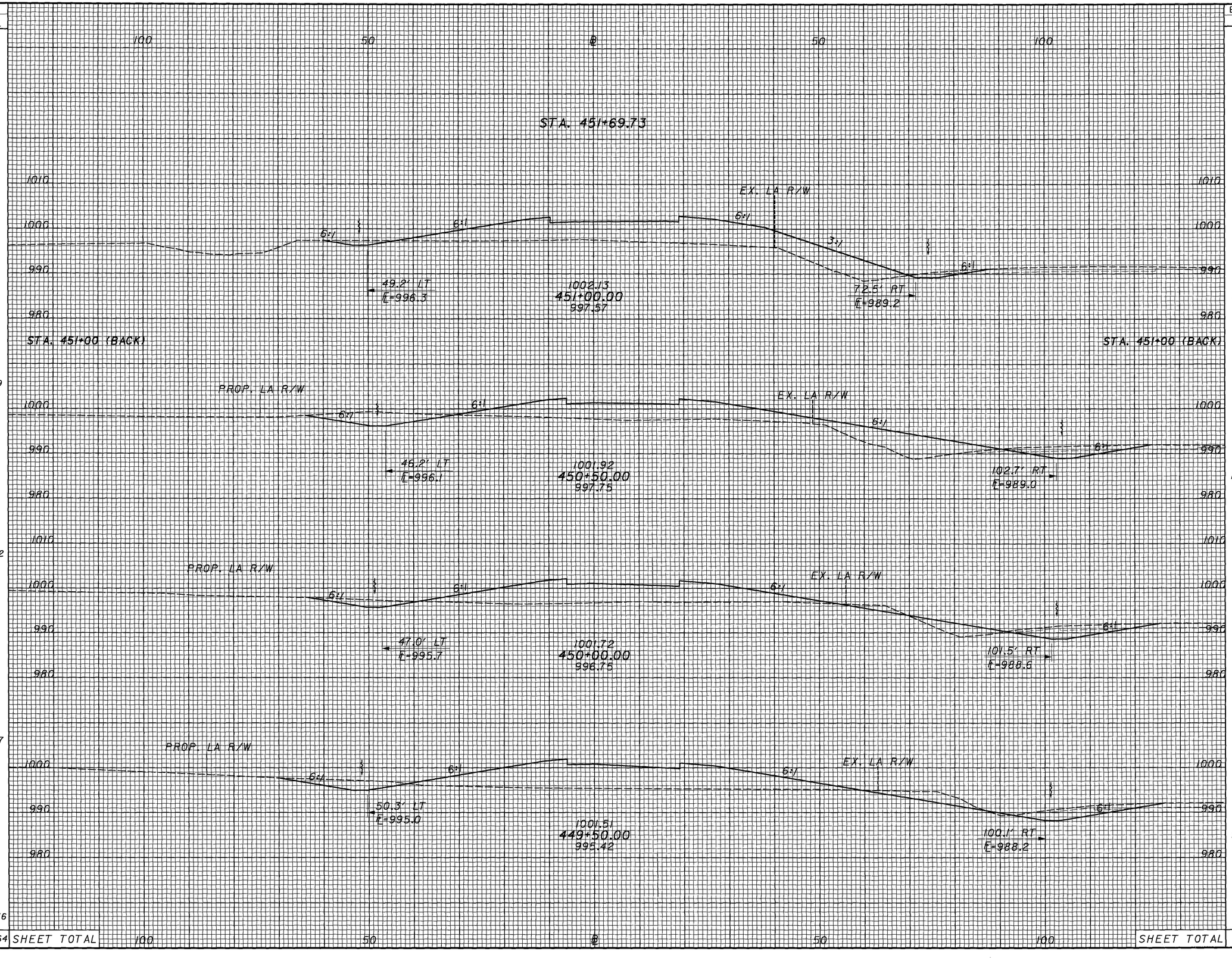
CROSS SECTIONS - RAMP I
STA. 447+00.00 TO STA. 449+00.00

LIC-161-6.65
LIC-37-10.25

696
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
126		24	438		
	819			122	737
169		108	358		
170		90	321		
178		122	378		
				292	690
3764	SHEET TOTAL			793	2703



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP I
STA. 449+50.00 TO STA. 451+00.00

LIC-161-6.65
LIC-37-10.25

697
1349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	12376 CU.YD.
203 EMBANKMENT	7989 CU.YD.
659 SEEDING AND MULCHING	12015 SQ.YD.

NOTE:
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RAMP J
STA. 450+21.62 TO STA. 461+00

LIC-161-6.65
LIC-37-10.25

698
349

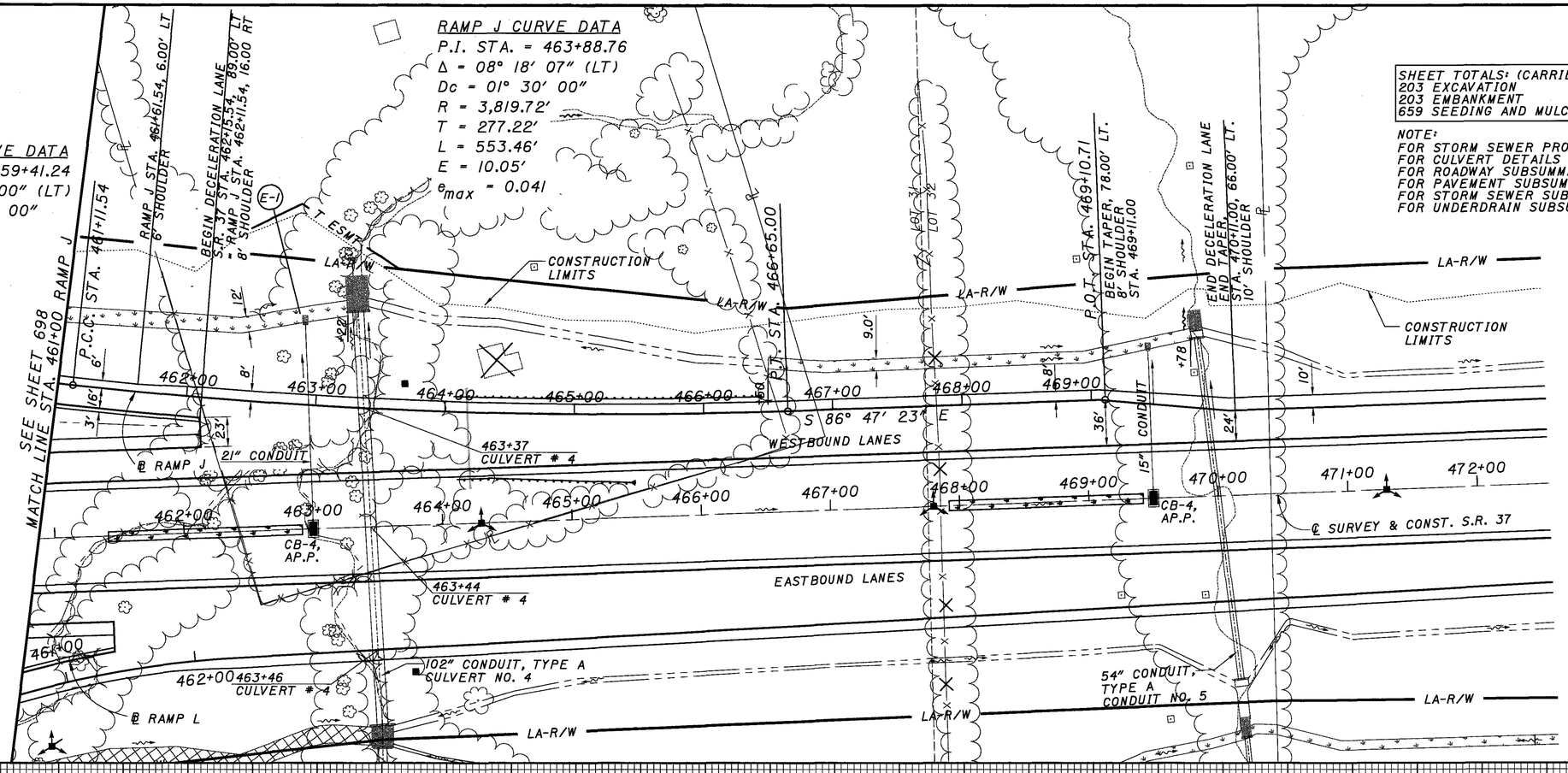
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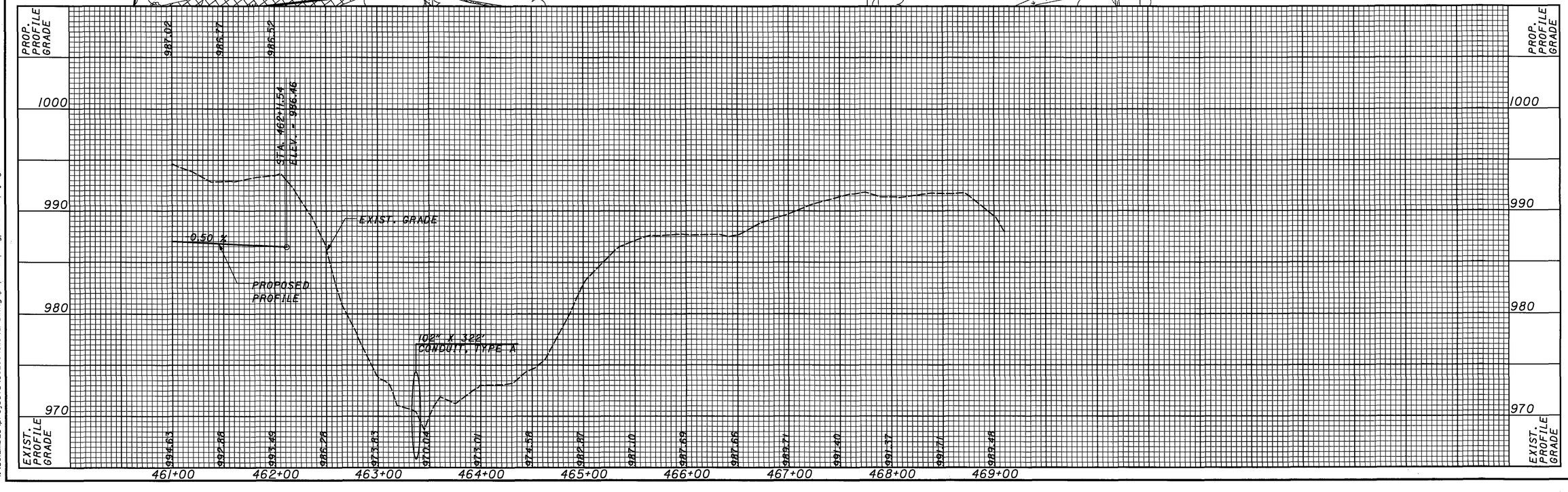
RAMP J CURVE DATA
P.I. STA. = 459+41.24
Δ = 26° 00′ 00″ (LT)
Dc = 07° 30′ 00″
R = 763.94′
T = 176.37′
L = 346.67′
E = 20.09′
e_{max} = 0.083

RAMP J CURVE DATA
P.I. STA. = 463+88.76
Δ = 08° 18′ 07″ (LT)
Dc = 01° 30′ 00″
R = 3,819.72′
T = 277.22′
L = 553.46′
E = 10.05′
e_{max} = 0.041

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	4427 CU.YD.
203 EMBANKMENT	0 CU.YD.
659 SEEDING AND MULCHING	1198 SQ.YD.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.





PLAN AND PROFILE - RAMP J
STA. 461+00+00 TO STA. 462+11.54

CALCULATED JMA
DRAWN FJA

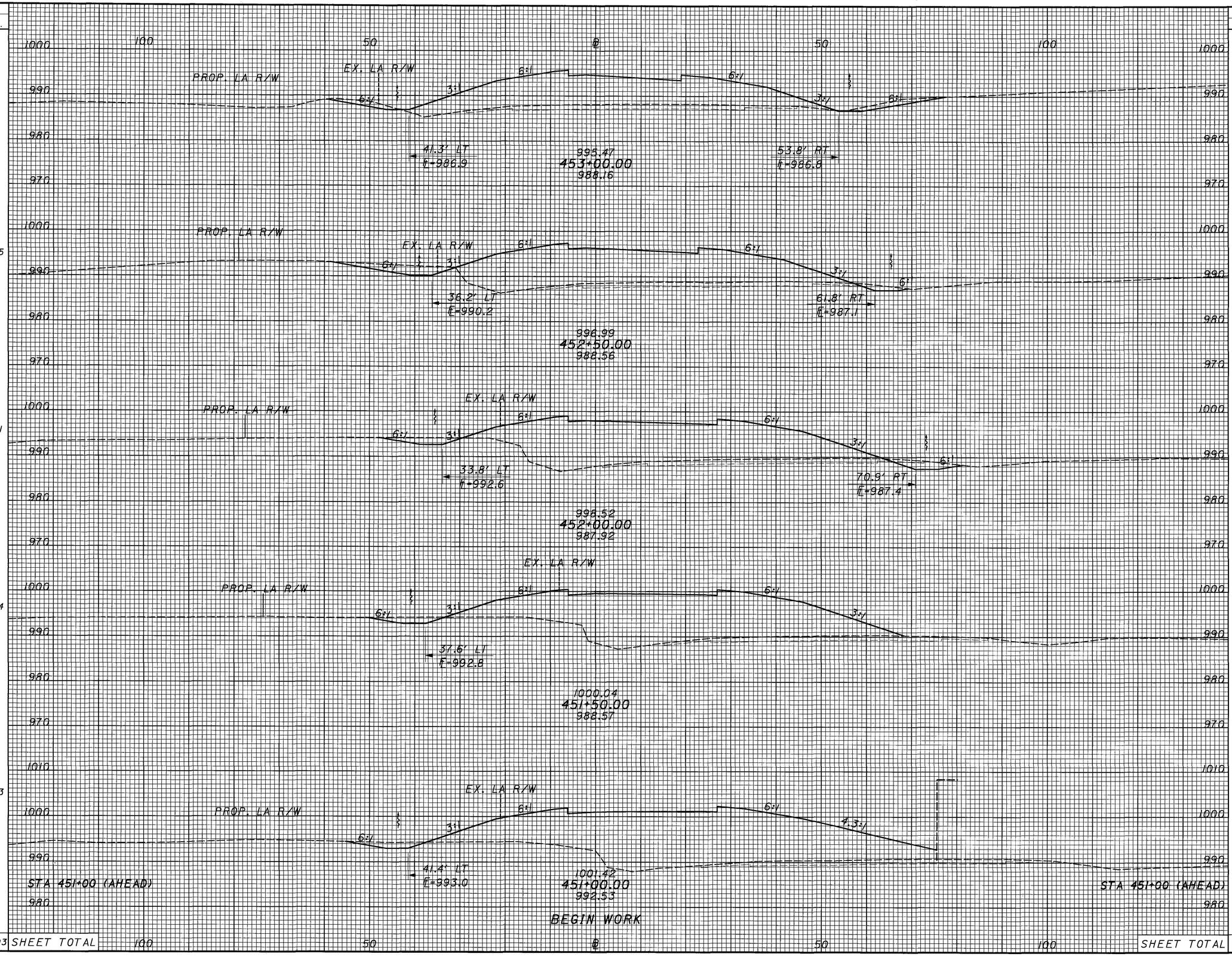
HORIZONTAL SCALE IN FEET
0 25 50 100

LIC-161-6.65
LIC-37-10.25

699
349

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SEEDING END WIDTH	SEEDING SQ. YDS.
119	
	625
106	
	581
103	
	544
93	
	553
106	
	2303



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
28	462		
		66	940
43	553		
		75	1094
38	629		
		50	1240
16	710		
		29	1485
15	894		
		220	4758

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP J
STA. 451+00 TO STA. 453+00

LIC-161-6.65
LIC-37-10.25

700
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
120	656	100 50 ℄ 50 100 ITEM 206 - CEMENT STABILIZATION EX. LA R/W 6:1 3:1 6:1 990.13 455+50.00 992.14 6:1 4:1 30.9' LT ℄-984.6 45.1' RT ℄-985.6 PROP. LA R/W 6:1 3:1 6:1 990.83 455+00.00 993.74 6:1 4:1 32.4' LT ℄-984.9 45.3' RT ℄-986.0 PROP. LA R/W 6:1 3:1 6:1 991.72 454+50.00 990.18 6:1 4:1 34.4' LT ℄-985.2 47.7' RT ℄-986.2 EX. LA R/W PROP. LA R/W 6:1 3:1 6:1 992.79 454+00.00 986.12 6:1 4:1 37.0' LT ℄-985.5 52.9' RT ℄-986.4 EX. LA R/W PROP. LA R/W 6:1 3:1 6:1 994.04 453+50.00 987.73 6:1 3:1 6:1 40.1' LT ℄-985.8 49.2' RT ℄-986.5		572	0		
116	639		672	0	1152	0
114	661		497	100	1082	93
124	703		315	246	752	320
129	689		141	348	422	550
					156	750
	3348	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL			3564	1713

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP J
STA. 453+50 TO STA. 455+50

LIC-161-6.65
LIC-37-10.25

701
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
93			23	236		
	497				34	444
86			14	243		
	517				81	300
100			73	81		
	564				233	75
103			179	0		
	619				695	0
	2197	SHEET TOTAL			1043	819

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

STA. 457+35, CULVERT NO. 18
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 985

PROP. LA R/W
41.7' LT
E-982.7
988.77
457+50.00
984.17
46.9' RT
E-983.8

PROP. LA R/W
12.0' LT
E-982.9
989.02
457+00.00
984.03
45.3' RT
E-984.3

EX. LA R/W
PROP LA R/W
36.3' LT
E-984.1
989.27
456+50.00
986.44
48.1' RT
E-984.8

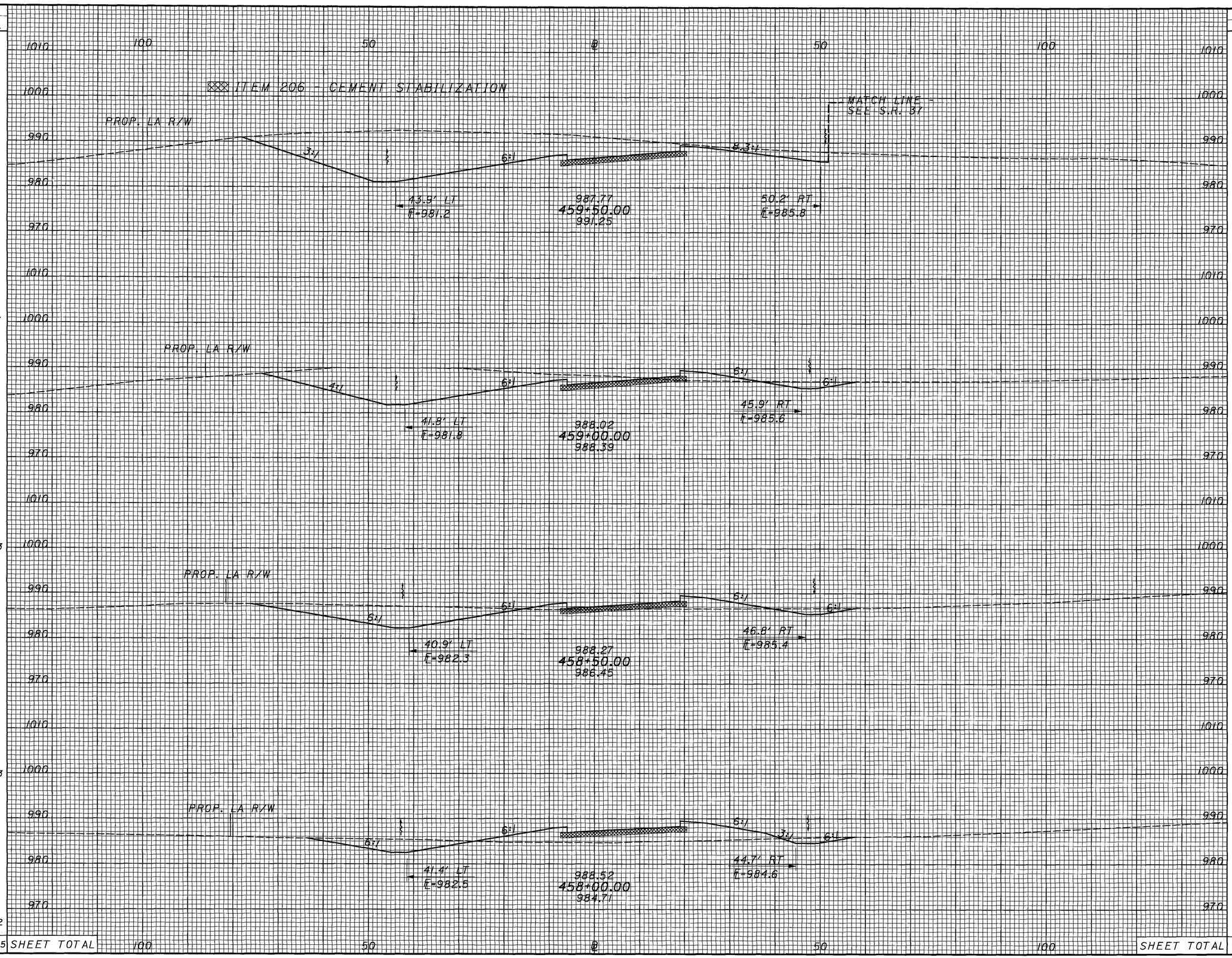
EX. LA R/W
37.5' LT
E-984.4
989.61
456+00.00
989.06
45.5' RT
E-985.3

CROSS SECTIONS - RAMP J
STA. 456+00 TO STA. 457+50

LIC-161-6.65
LIC-37-10.25

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
109		649	0		
	617			938	23
113		364	25		
	633			494	84
115		169	66		
	603			224	217
102		73	168		
	542			89	374
	2395 SHEET TOTAL			1745	698



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP J
STA. 458+00 TO STA. 459+50

LIC-161-6.65
LIC-37-10.25

703
1349

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SEEDING	
END WIDTH	SQ. YDS.
96	581
113	617
109	603
108	583
102	586
2970	SHEET TOTAL

STA. 462+00.00 (BACK)

ITEM 206 CEMENT STABILIZATION

MATCH LINE - SEE S.R. 37

54.9' LT
℄-978.3

986.52
462+00.00
993.49

23.9' RT
℄-986.8

53.2' LT
℄-978.8

986.77
461+50.00
992.88

27.9' RT
℄-986.6

PROP. LA R/W

51.1' LT
℄-979.4

987.02
461+00.00
994.63

30.6' RT
℄-986.4

48.4' LT
℄-980.0

987.27
460+50.00
995.77

38.1' RT
℄-986.2

46.0' LT
℄-980.6

987.52
460+00.00
994.68

38.0' RT
℄-986.0

WATCH LINE - SEE S.R. 37

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1160	0		
		2186	0
1201	0		
		2241	0
1219	0		
		2231	0
1190	0		
		2037	0
1010	0		
		1536	0
SHEET TOTAL		10231	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP J
STA. 460+00 TO STA. 462+00

LIC-161-6.65
LIC-37-10.25

704
1349

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BEGIN DECELERATION LANE
STA. 431+40.00, 66' RT.
BEGIN TAPER, 10' SHOULDER

P.C. STA. 430+93.83

STA. 432+40.00' 78' RT.
END TAPER,
8' SHOULDER

℄ SURVEY & CONST.
RELOCATED
WORTHINGTON ROAD NORTH

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST.
WATKINS-YORK FRONTAGE ROAD

WESTBOUND LANES

EASTBOUND LANES

435+88
CULVERT NO. 3

435+09
CULVERT NO. 3

193+30
CULVERT # 3

P.C. STA. 434+75.00

CB-4, AP.P.

CB-4, AP.P.

30" CONDUIT

96" CONDUIT, TYPE A

AEP (OVERHEAD)

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

T.S. STA. 189+32.18

S.C. STA. 191+97.37

LOT 27

LOT 28

℄ RAMP I

℄ RAMP K

MATCH LINE STA. 441+00 RAMP K
SEE SHEET 706

END DECELERATION LANE
S.R. 161 STA. 439+40.51, 89' RT.
RAMP K STA. 439+29.60, 84' RT.
BEGIN SHOULDER TAPER

RAMP K STA. 439+79.60,
END SHOULDER TAPER, 22' RT
P.C.C. STA. 440+29.60
8' SHOULDER

℄ ESMT

R/W

RAMP K CURVE DATA

P.I. STA. = 437+53.40
Δ = 12° 28′ 42″ (RT)
Dc = 02° 15′ 00″
R = 2,546.48′
T = 278.40′
L = 554.60′
E = 15.17′
e_{max} = 0.056

RAMP K CURVE DATA

P.I. STA. = 441+79.34
Δ = 22° 10′ 47″ (RT)
Dc = 07° 30′ 00″
R = 763.94′
T = 149.74′
L = 295.73′
E = 14.54′
e_{max} = 0.083

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	1681 CU. YD.
203 EMBANKMENT	1116 CU. YD.
659 SEEDING AND MULCHING	1715 SQ. YD.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
1010
1000
990
980

EXIST. GRADE
PROPOSED PROFILE
STA. 439+29.60
ELEV. = 1,007.18
e=1.30 %
P.V.C. STA. = 439+75.00
P.V.C. ELEV. = 1,006.59
450' V.C.
P.V.I. STA. = 442+00.00
P.V.I. ELEV. = 1,003.66
K = 141

1,007.67 1,002.93 988.99 987.07 986.09 985.02 982.96 987.79 1,003.14 1,002.58 1,007.02 1,006.90 1,002.34
1,007.91 1,006.29 1,006.03 1,005.81 1,005.64 1,005.52

435+00 436+00 437+00 438+00 439+00 440+00 441+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RAMP K
STA. 439+29.60 TO STA. 441+00

LIC-161-6.65
LIC-37-10.25

705
1349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	20505 CU. YD.
203 EMBANKMENT	40676 CU. YD.
659 SEEDING AND MULCHING	21589 SQ. YD.

Ⓐ STA. 450+84.98, 21' LT.
BEG. TYPE T ANCH. ASSM.

Ⓑ STA. 450+97.48, 21' LT.
END TYPE T ANCH. ASSM.

SEE SHEET 705
MATCH LINE STA. 441+00

RAMP K CURVE DATA
P.I. STA. = 441+79.34
Δ = 22° 10' 47" (RT)
Dc = 07° 30' 00"
R = 763.94'
T = 149.74'
L = 295.73'
E = 14.54'
emax = 0.083

RAMP K CURVE DATA
P.I. STA. = 447+90.43
Δ = 25° 00' 15" (LT)
Dc = 10° 00' 00"
R = 572.96'
T = 127.04'
L = 250.04'
E = 13.92'
emax = 0.072

℄ SURVEY & CONST. S.R. 161
P.T. STA. 445+03.42
P.C. STA. 446+63.39
P.T. STA. 448+13.43
P.I. STA. 445+25.33
S 159° 51' 13" E
S 84° 51' 28" E
℄ RAMP K
℄ RAMP L
℄ SURVEY & CONST.
S.R. 37 STA. 411+12.78-
℄ RAMP K STA. 451+60.74-
℄ RAMP L STA. 450+41.60
P.C. STA. 411+02.82
P.T. STA. 412+54.54
CB-4, AP.P.
24" CONDUIT
60" CONDUIT, TYPE A
GR-1
GR-2
E-1
E-2
TYPE 5 GUARDRAIL
450+31 CULVERT NO. 19
410+39 CULVERT NO. 19
STA. 450+99.14 66.00' LT.
STA. 450+87.31 50.00' RT.
WOODS
WOOD SHED
GRAPES
WOOD FENCE
GRAVEL DR.
CONC. HEADWALL
7-8" TO 18" I-15"
FLOWER BED
GRAVEL
AEP
SPRINT
CONSTRUCTION LIMITS
LA-R/W
STA. 445+20.00, 8' RT.
END TYPE E-98 ANCH. ASSM.
STA. 444+70.00, 8' RT.
BEGIN TYPE E-98 ANCH. ASSM.
R=25'
R=40'
50'R
LOT 29

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
1020
1010
1000
990
1005.52 1005.46 1005.40 1005.41 1005.46 1005.56 1005.70 1005.88 1006.11 1006.39 1006.70 1007.07 1007.47 1007.93 1008.40 1008.90 1009.35 1010.29 1011.24 1012.19 1013.13 1014.08 1015.03 1015.97 1016.92 1017.87 1018.81 1019.76 1020.22 1020.65 1021.07 1021.48
1002.34 999.30 1006.87 1005.01 1004.84 1006.81 1006.05 1003.94 1002.27 1001.28 999.84 999.27 999.05 999.64 1000.07 996.40 992.62 991.86 991.01 999.68 992.35 995.30
441+00 442+00 443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00 451+00
P.V.I. STA. = 442+00.00
P.V.I. ELEV. = 1,003.66
456' V.C.
K = 1141
P.V.I. STA. = 444+25.00
P.V.I. ELEV. = 1,007.93
EXIST. GRADE
PROPOSED PROFILE
P.M.C. STA. = 450+40.00
P.M.C. ELEV. = 1,019.57
100' V.C.
P.V.I. STA. = 450+90.00
P.V.I. ELEV. = 1,020.56
K = 256
SSD = 281'
P.V.T. STA. = 451+40.00
P.V.T. ELEV. = 1,021.32
STA. 451+60.74, ELEV. = 1,021.65
℄ S.R. 37
-1.30 %
-1.59 %
+1.89 %
+1.60 %

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PLAN AND PROFILE - RAMP K
STA. 441+00 TO STA. 451+60.74

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED F.J.A.

LIC-161-6.65
LIC-37-10.25

706
349

SEEDING	
END WIDTH	SQ. YDS.
92	
	486
83	
	179
75	
	665

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE S.R. 161

16:1

6:1

4:1

34.3' LT
E=1006.3

1006.29
440+00.00
1007.02

29.9' RT
E=1002.2

PROP. LA R/W

MATCH LINE - SEE S.R. 161

9:1

6:1

6:1

29.7' LT
E=1006.5

1006.91
439+50.00
1002.58

22.3' RT
E=1004.1

PROP. LA R/W

MATCH LINE SEE S.R. 161

8:1

6:1

5:1

25.5' LT
E=1007.2

1007.18
439+29.60
1003.89

22.3' RT
E=1004.4

STA. 439+29.60 (AHEAD)

BEGIN WORK
RAMP K

STA. 439+29.60 (AHEAD)

SHEET TOTAL

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
388	73		
		459	274
108	223		
		72	143
82	156		
		531	417

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP K
STA. 439+29.60 TO STA. 440+00

LIC-161-6.65
LIC-37-10.25

707
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
148		477	145		
	772			691	881
130		269	807		
114	678	219	540	452	1247
86	556	318	71	497	566
	494			653	133
	2500 SHEET TOTAL			2293	2827

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP K
STA. 440+50 TO STA. 442+00

LIC-161-6.65
LIC-37-10.25

708
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
204		683	239		
	1103			1297	268
193		718	51		
	1031			1328	62
178		715	16		
	900			1017	74
146		383	64		
	817			676	131
148		347	77		
	822			764	206
	4673 SHEET TOTAL			5082	741

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE S.R. 161

138.6' LT
E=989.3

1008.40
444+50.00
1003.94

56.4' RT
E=1000.1

PROP. LA R/W

MATCH LINE - SEE S.R. 161

124.1' LT
E=991.5

1007.47
444+00.00
1006.03

49.4' RT
E=1000.3

PROP. LA R/W

MATCH LINE - SEE S.R. 161

107.2' LT
E=994.0

1006.70
443+50.00
1005.81

43.5' RT
E=1000.5

PROP. LA R/W

MATCH LINE - SEE S.R. 161

79.3' LT
E=996.0

1006.11
443+00.00
1004.84

38.4' RT
E=1000.7

PROP. LA R/W

MATCH LINE - SEE S.R. 161

75.2' LT
E=998.0

1005.70
442+50.00
1005.81

34.0' RT
E=1000.9

100 50 ℄ 50 100

1010 1000 990

6:1 5:1

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP K
STA. 442+50 TO STA. 444+50

LIC-161-6.65
LIC-37-10.25

709
1349

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SEEDING	
END WIDTH	SQ. YDS.
248	
	1333
232	
	1236
213	
	1139
197	
	1114
	4822

END AREA		VOLUME	
CUT	FILL	CUT	FILL
999	1034		
		1794	1760
939	867		
		1610	1391
800	635		
		1374	1000
684	445		
		1265	633
		6043	4784

CALCULATED JMA
CHECKED PEK

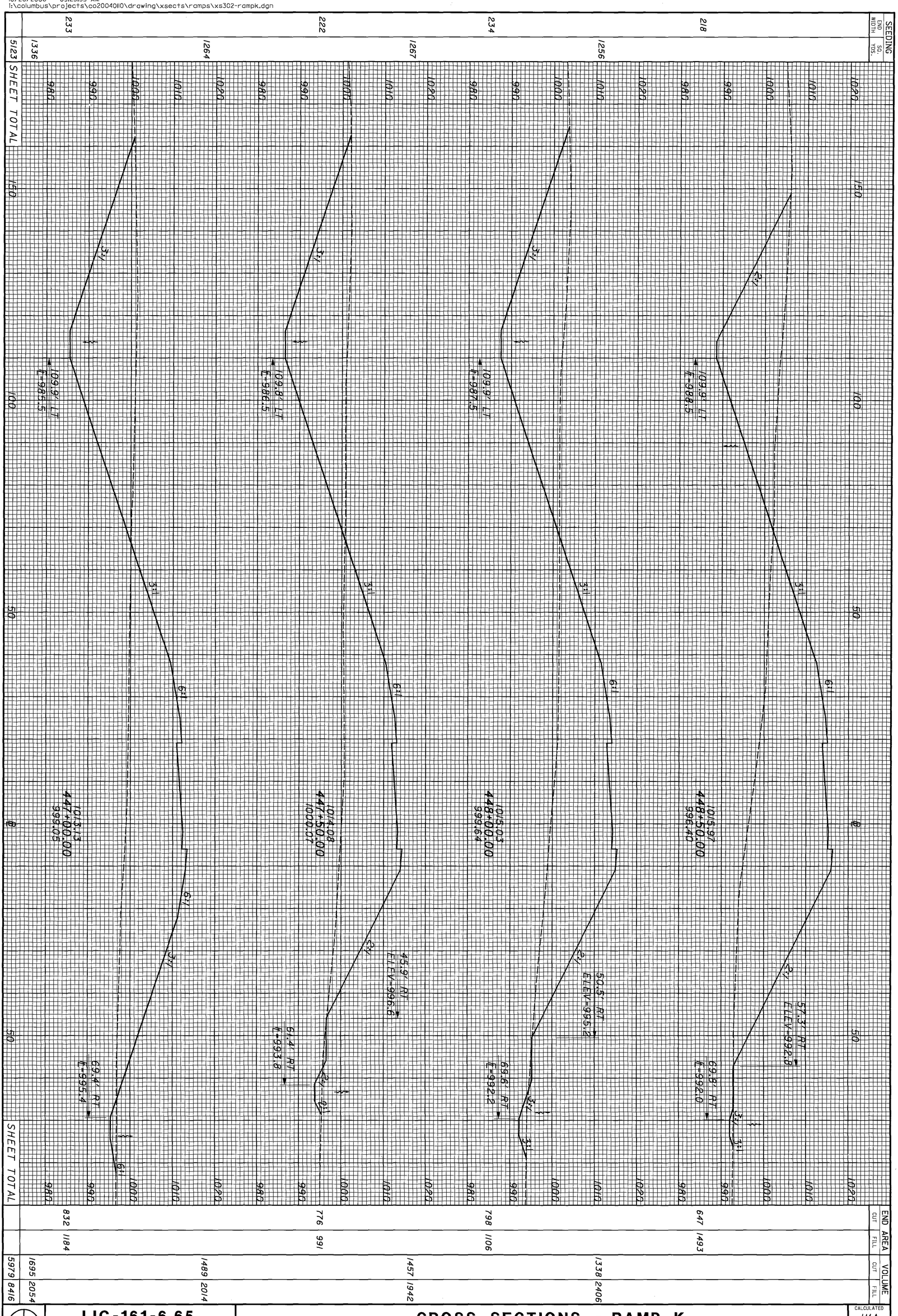
CROSS SECTIONS - RAMP K
STA. 445+00 TO STA. 446+50

LIC-161-6.65
LIC-37-10.25

710
1349

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| | | |

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
206		79	2941		
	1172			330	5128
216		277	2597		
	1283			744	4675
246		526	2452		
	1289			1086	3653
	3744 SHEET TOTAL			2160	13456

STA. 450+31, CULVERT NO. 19,
FOR ADDITIONAL INFORMATION, SEE
CULVERT PLAN AND PROFILE SHT 986

116.2' LT
E-990.8

1018.81
450+00.00
991.01

60.4' RT
ELEV-994.3

74.5' RT
E-992.0

PROP. LA R/W

SEE ABOVE

SEE BELOW

113.2' LT
E-990.5

1017.87
449+50.00
991.86

60.7' RT
ELEV-993.0

73.2' RT
E-991.8

112.4' LT
E-989.5

1016.92
449+00.00
992.62

68.1' RT
ELEV-997.8

96.5' RT
E-991.7

PROP. 60" CULVERT

STA 450+31, CULVERT NO. 19,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 986

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP K
STA. 449+00 TO STA. 450+00

LIC-161-6.65
LIC-37-10.25

712
1349

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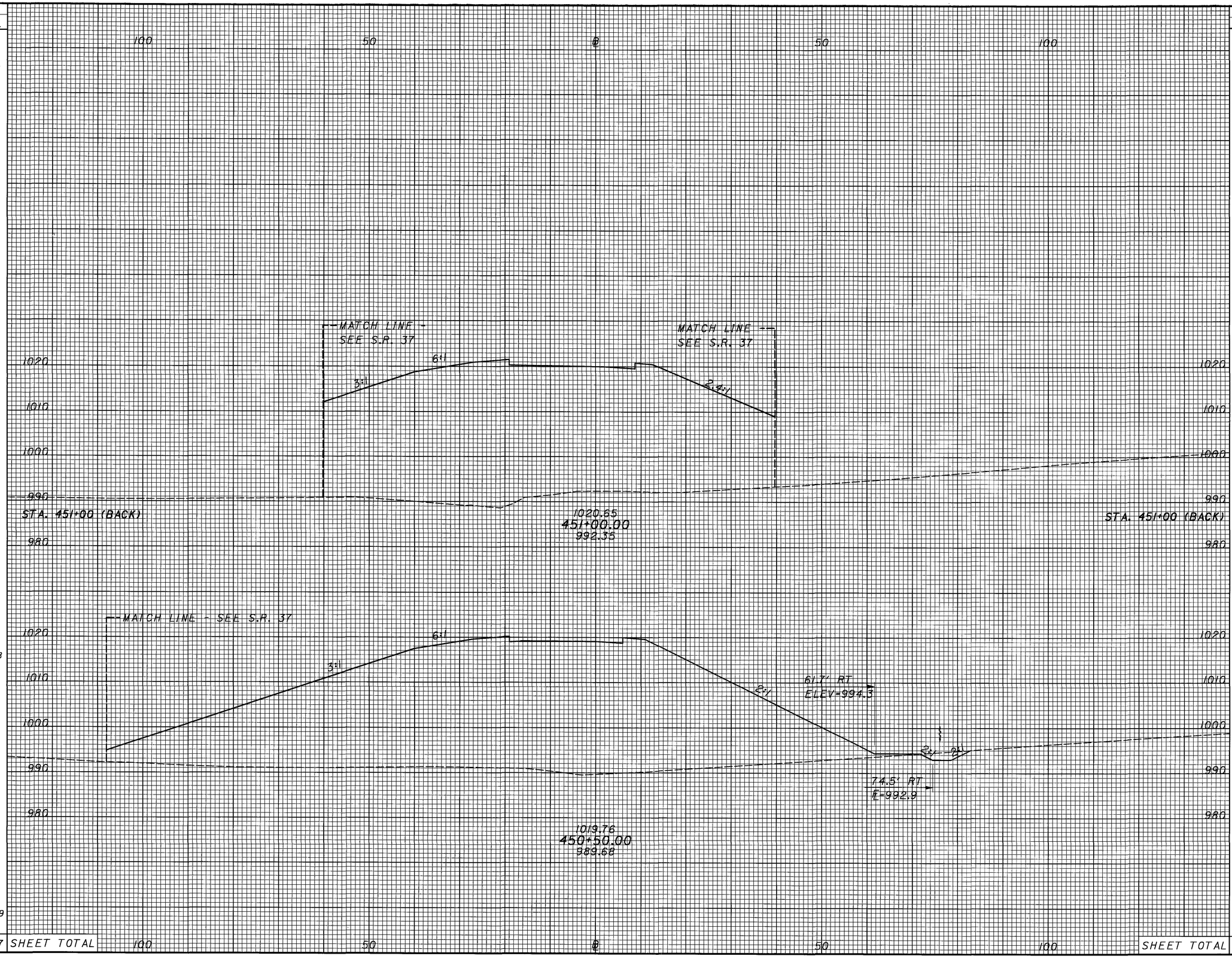
CROSS SECTIONS - RAMP K
STA. 450+50 TO STA. 451+00

CALCULATED JMA
CHECKED PEK

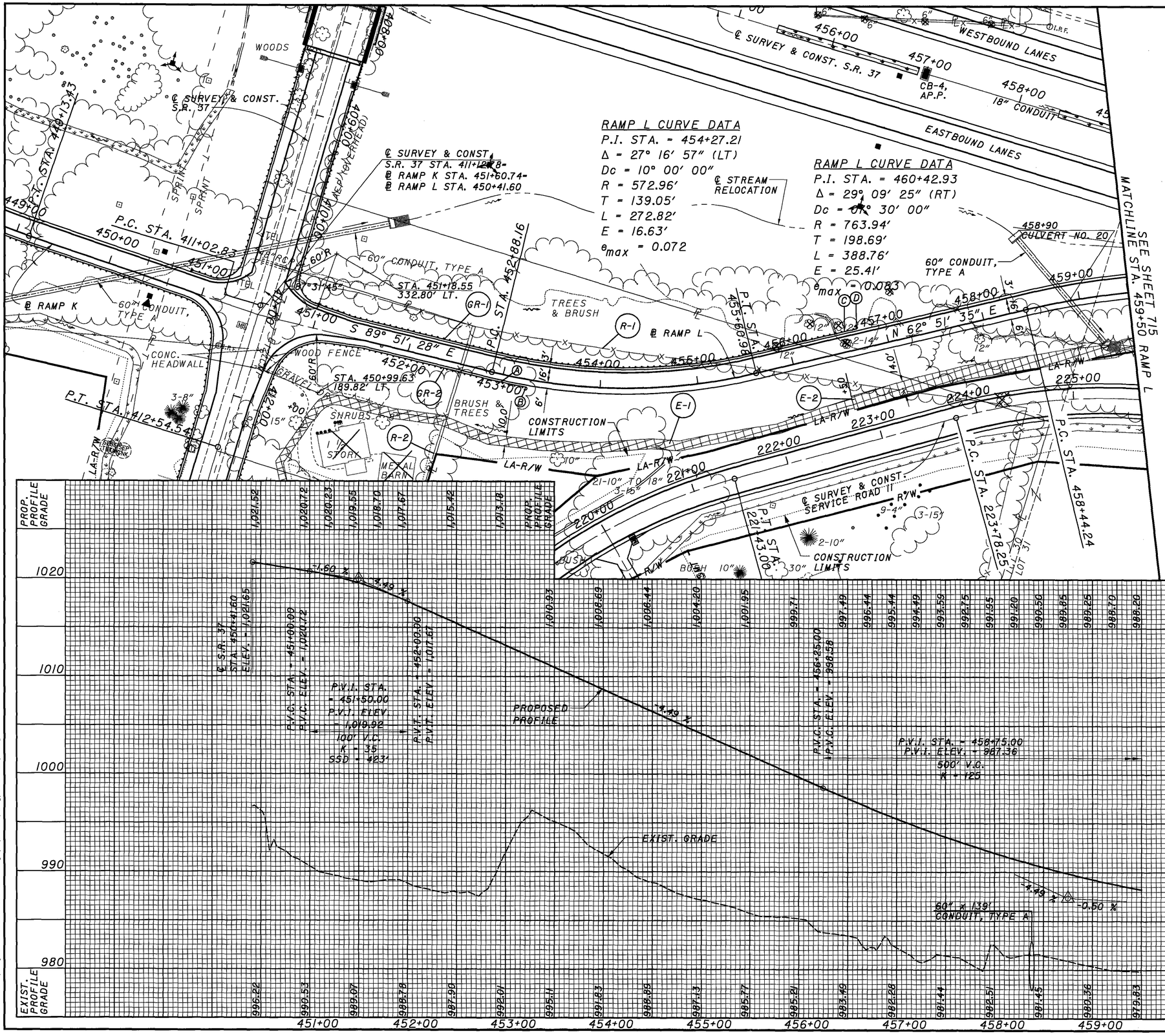
LIC-161-6.65
LIC-37-10.25

713
1349

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
76	708	0	2647	12	5440
179	1069	13	3228	85	5712
1777	SHEET TOTAL			97	11152



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SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	481 CU. YD.
203 EMBANKMENT	49656 CU. YD.
659 SEEDING AND MULCHING	10575 CU. YD.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

HORIZONTAL SCALE IN FEET
0 25 50 100

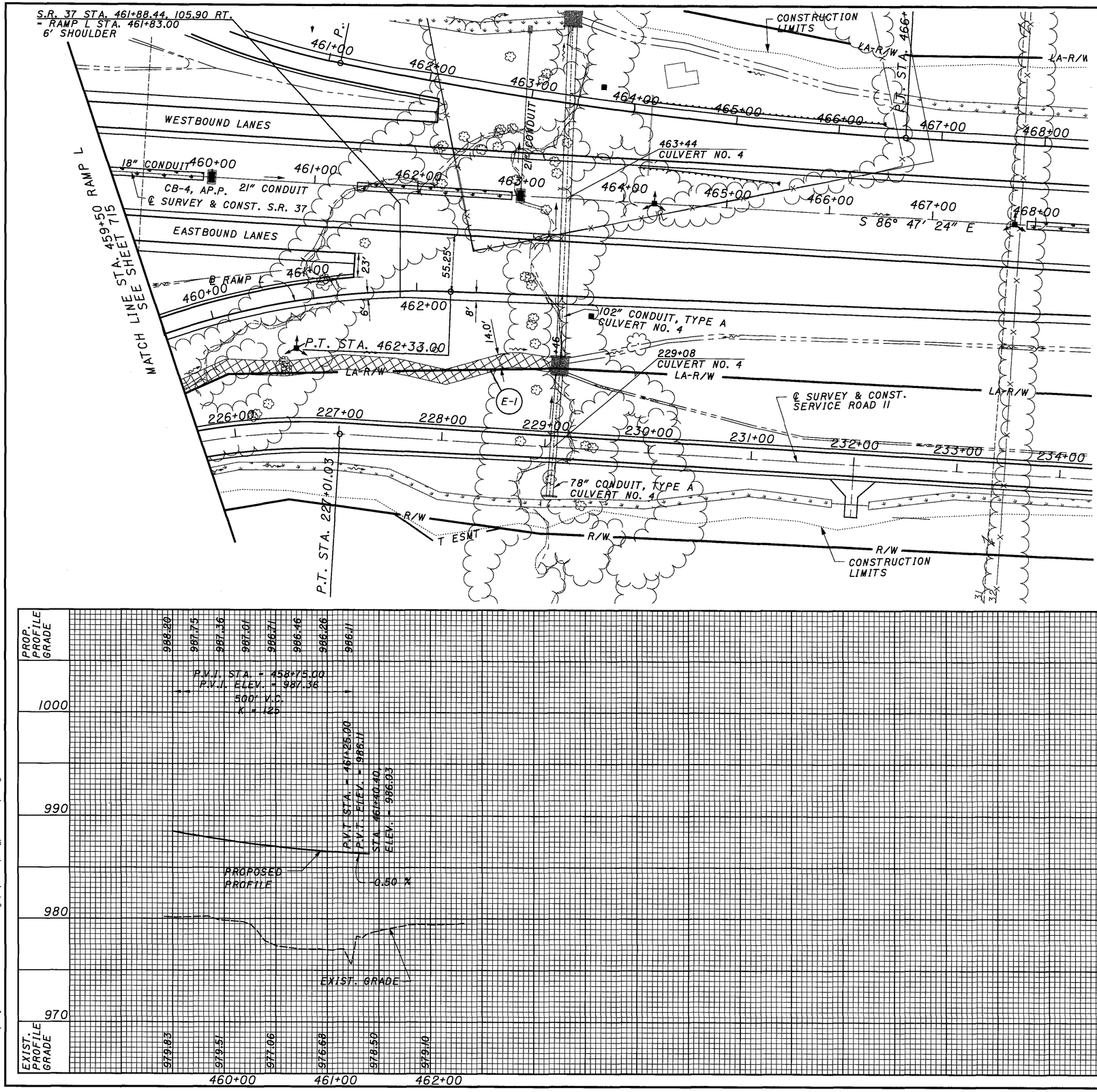
CALCULATED JMA
CHECKED WAA

PLAN AND PROFILE - RAMP L
STA. 450+41.60 TO STA. 459+50

LIC-161-6.65
LIC-37-10.25

714
1349

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SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	252 CU. YD.
203 EMBANKMENT	3722 CU. YD.
659 SEEDING AND MULCHING	1450 CU. YD.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - RAMP L
STA. 459+50 TO STA. 461+40.40

LIC-161-6.65
LIC-37-10.25

715
349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
176		13	3123		
179		9	3424		
681		8	5775		
66		0	2813		
986				20	6062
1667	SHEET TOTAL			28	11837

100 50 ℄ 50 100

1020 1010 1000 990 980 970 1030

6:1 3:1 2:1

2, 47.0' RT
ELEV=999.6

64.5' RT
℄=998.3

1017.67
452+00.00
988.78

49.8' RT
ELEV=1000.2

64.7' RT
℄=998.9

1019.55
451+50.00
989.07

MATCH LINE
SEE S.R. 37

MATCH LINE
SEE S.R. 37

1020.72
451+00.00
990.53

STA. 451+00 (AHEAD)

BEGIN WORK

STA. 451+00 (AHEAD)

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP L
STA. 451+00 TO STA. 452+00

LIC-161-6.65
LIC-37-10.25

716
1349

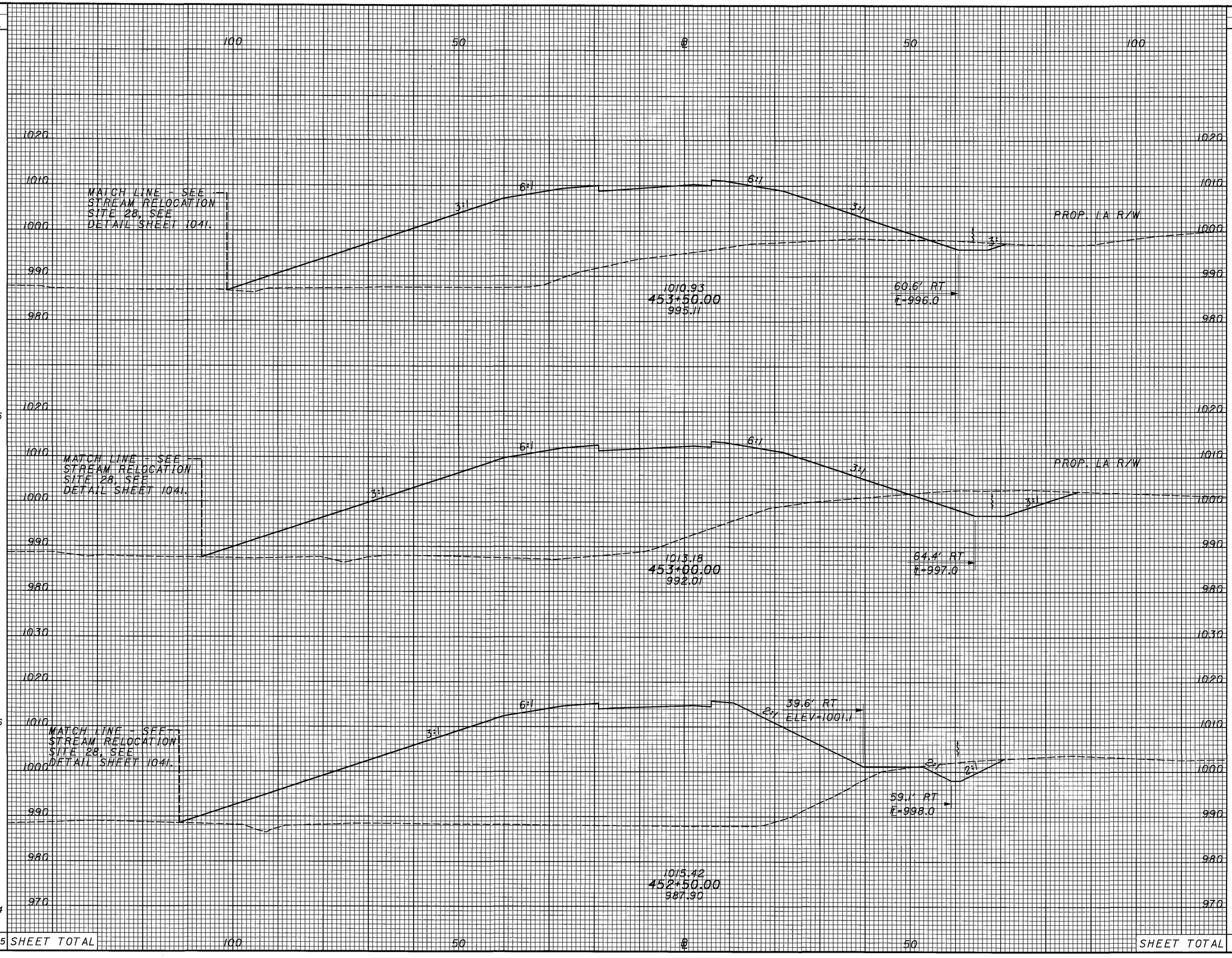
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CROSS SECTIONS - RAMP L
STA. 452+50 TO STA. 453+50

CALCULATED JMA | CHECKED PEK

LIC-161-6.65
LIC-37-10.25

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
124		21	1636		
	775			139	3390
155		129	2025		
	806			158	4219
135		42	2532		
	864			51	5236
	2445 SHEET TOTAL			348	12845 SHEET TOTAL



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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
86		0	1365		
	511			0	2635
98		0	1481		
	567	1	2776		
106		1	1517		
	619			6	2919
117		6	1635		
	669			25	3029
	2366 SHEET TOTAL			32	11359

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - RAMP L
STA. 454+00 TO STA. 455+50

LIC-161-6.65
LIC-37-10.25

718
1349

MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1042.

MATCH LINE - SEE SERVICE ROAD II

PROP. LA R/W

50.0' RT
℄=991.5

MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1042.

MATCH LINE - SEE SERVICE ROAD II

PROP. LA R/W

60.0' RT
℄=993.0

MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1042.

PROP. LA R/W

53.4' RT
℄=994.0

MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1041.

PROP. LA R/W

57.3' RT
℄=995.0

1008.69
454+00.00
991.83

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					CALCULATED JMA CHECKED PEK
		1010 1000 990 980 970 960					
		MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1043.					
		3:1 6:1 6:1 4:1					
		MATCH LINE - SEE SERVICE ROAD II					
		PROP. LA R/W					
97		995.44 457+00.00 982.28					
		53.0' RT E-984.2	0	1066			
	539				0	2069	
		1010 1000 990 980 970 960					
		MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1043.					
		3:1 6:1 6:1 4:1					
		MATCH LINE - SEE SERVICE ROAD II					
		PROP. LA R/W					
97		997.49 456+50.00 983.49					
		49.0' RT E-987.5	0	1169			
	503				0	2204	
		1010 1000 990 980 970 960					
		MATCH LINE - SEE STREAM RELOCATION SITE 28, SEE DETAIL SHEET 1042.					
		3:1 6:1 6:1 4:1					
		MATCH LINE - SEE SERVICE ROAD II					
		PROP. LA R/W					
84		999.71 456+00.00 985.21					
		52.0' RT E-989.5	0	1211			
	472				0	2385	
		1010 1000 990 980 970 960					
	1514	SHEET TOTAL 100 50 ℄ 50 100			0	6658	SHEET TOTAL

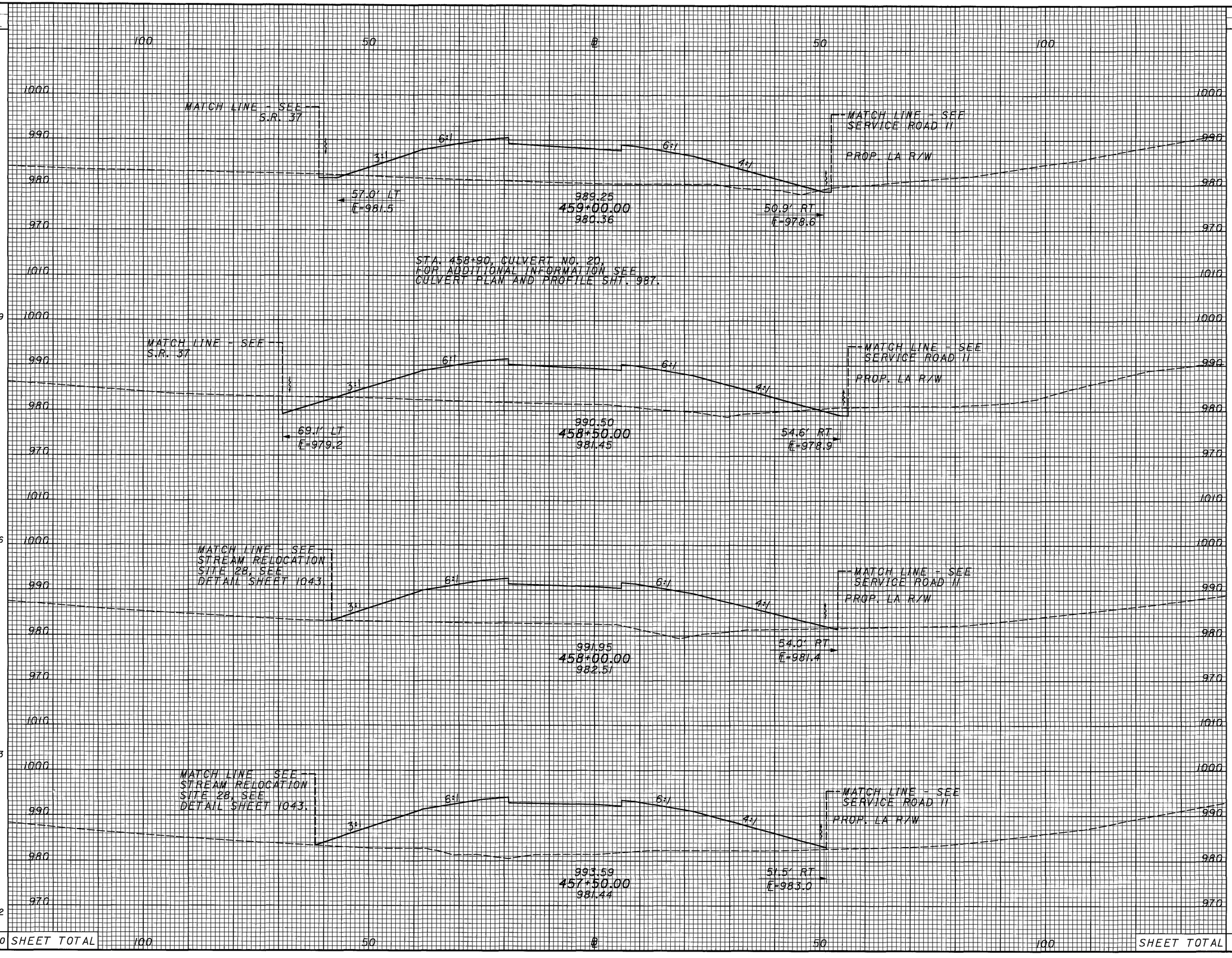
CROSS SECTIONS - RAMP L
STA. 456+00 TO STA. 457+00

LIC-161-6.65
LIC-37-10.25

719
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
91	539	5	621	33	1204
103		31	679		
90	536	0	735	29	1309
91	503	0	896	0	1510
	522			0	1817
	2100	SHEET TOTAL		62	5840



CALCULATED JMA
CHECKED PEK

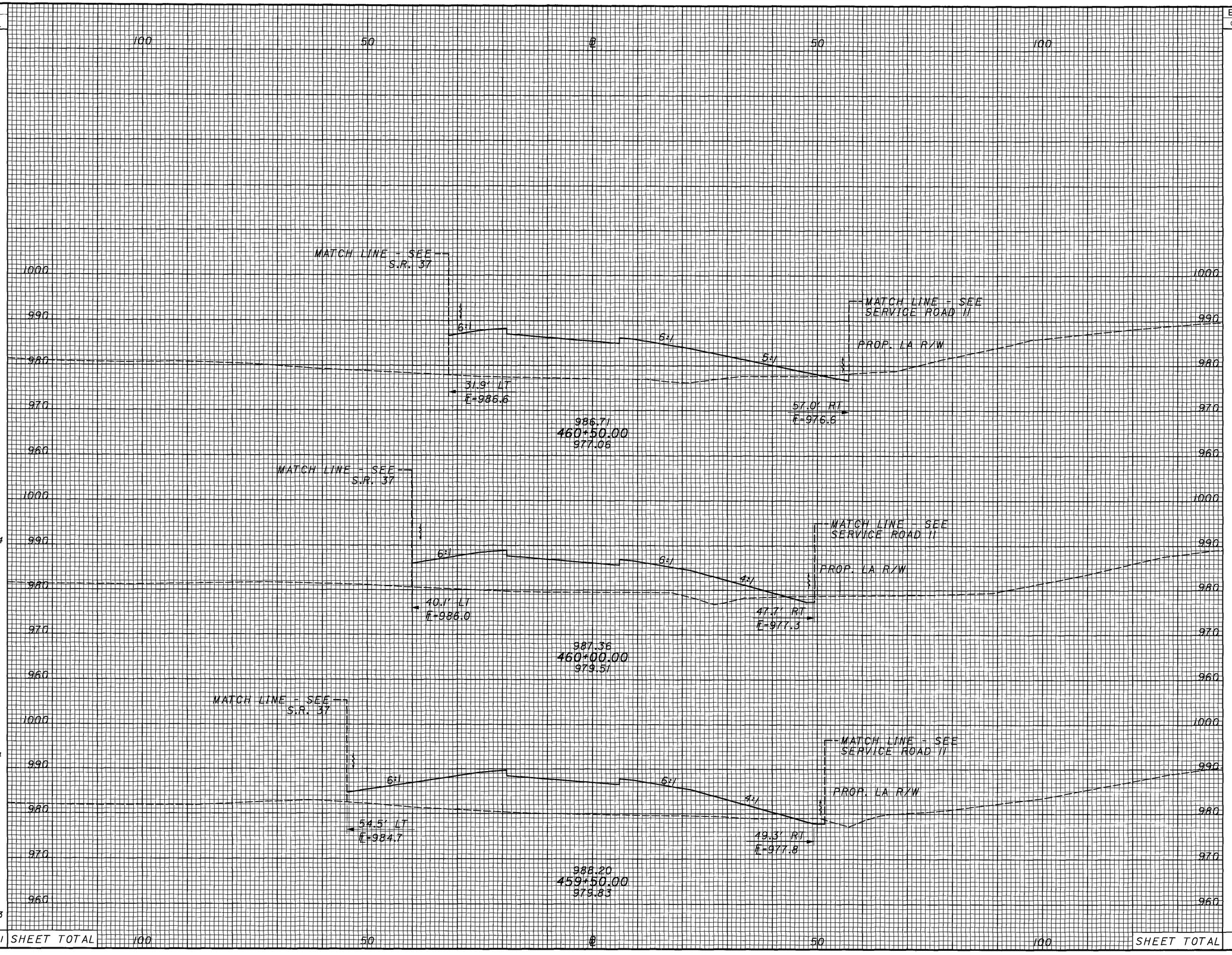
CROSS SECTIONS - RAMP L
STA. 457+50 TO STA. 459+00

LIC-161-6.65
LIC-37-10.25

720
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
65		5	583		
364				10	1017
66		6	515		
414				11	1019
83		6	585		
483				10	1117
1261	SHEET TOTAL			31	3153



CROSS SECTIONS - RAMP L
STA. 459+50 TO STA. 460+50

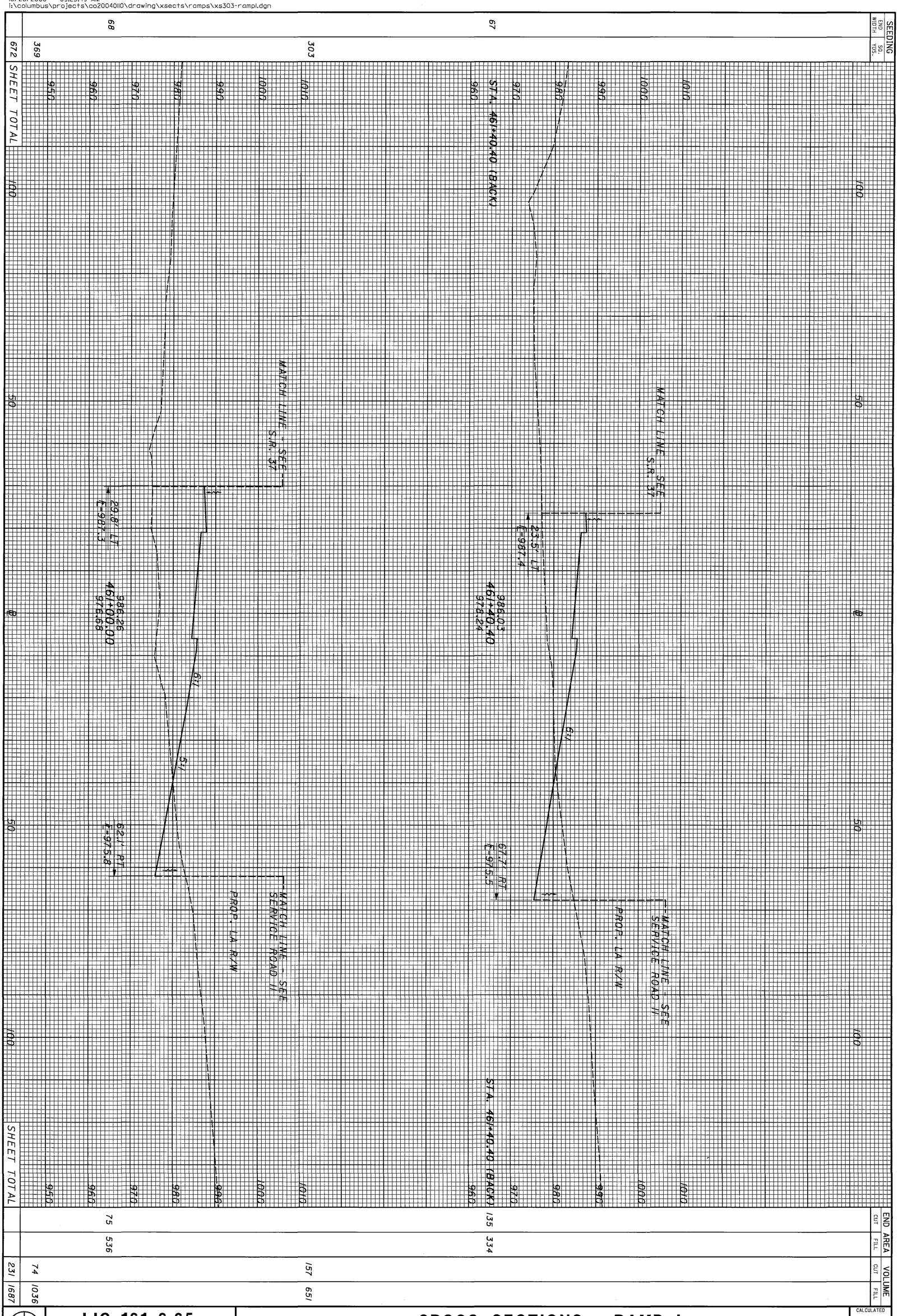
CALCULATED JMA
CHECKED PEK

LIC-161-6.65
LIC-37-10.25

721
1349

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231	1687

722
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - RAMP L
STA. 461+00 TO STA. 461+40.40

CALCULATED JMA
CHECKED PEK

BEGIN WORK S.R. 37 STA. 394+00

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

WOOD SHED

6'CHAINLINK

PROPANE TANK CONC. PAD

ANTENNA

1-STY FRAME GARAGE

WOOD PLANTERS

WOOD TRASH BIN

GRAVEL

DECK

WELL

STA. 394+15.54

AEP

WISHING WELL

BRUSH

BEGIN PAVEMENT & SHOULDER TRANSITION, STA. 394+00.00 LT. & RT.

END PAVEMENT TRANSITION, STA. 394+15.00 12' LT. & RT.

END SHOULDER TRANSITION, STA. 395+22.05, 20.62' LT.

STA. 395+01.88, 62.00' LT.

P.O.T. STA. 393+29.11

P.C. STA. 394+53.96

Ex. R/W

50'R

STA. 396+27.06 62' LT

CORN FIELD

E-1

CONSTRUCTION LIMITS

AEP (OVERHEAD)

STA. 397+09.40

STA. 402+21.04℄ SURVEY & CONST. S.R. 37 = STA. 451+87.75 ℄ RAMP I = STA. 450+21.62 ℄ RAMP J

STA. 400+20.00, LT & RT

END ASPHALT PAVEMENT

BEGIN CONCRETE PAVEMENT

STA. 401+74.28, 75.37' LT.

SEPTIC (SEP TNK)

BUSHES

R-1 R-2 R-3 R-4 R-5 R-6 R-7 R-8 R-9

GR-1 GR-2

STA. 402+97.37 51.86' RT.

STA. 402+87.43, 30' LT. BEG. TYPE T ANCH. ASSM.

STA. 402+99.93, 30' LT. END TYPE T ANCH. ASSM.

STA. 402+52.67, 38.4' RT. END TYPE T ANCH. ASSM.

STA. 402+49.28, 50.4' RT. BEG. TYPE T ANCH. ASSM.

MATCH LINE STA. 403+00 S.R. 37 SEE SHEET 724

S 03° 53' 25" W

S 02° 36' 47" W

S 84° 53' 09" W

S 30° 00' 00" E

STA. 395+69.62' RT. Ex. R/W (OVERHEAD)

END SHOULDER TRANSITION, STA. 395+33.97, 20.75' RT.

STA. 395+70.02 ℄ SURVEY & CONST. S.R. 37 = STA. 212+83.63 ℄ SURVEY & CONST. RELOCATED WORTHINGTON RD NORTH

S.T. STA. 211+48.50

STA. 396+37.51, 62' RT.

BEGIN PAVEMENT TAPER STA. 397+96.81, 12' LT. & RT.

END PAVEMENT TAPER STA. 401+26.81, 18' LT. & RT.

STA. 401+60.84, 81.70' RT.

WOODS

CONSTRUCTION LIMITS

WETLAND
TOTAL AREA= 0.094 AC.
DISTURBED AREA= 0.048 AC.

℄ SURVEY & CONST. S.R. 37

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

102" CONDUIT TYPE A CULVERT NO. 16

R/W

LA-R/W

GRAVEL

1-STY FRAME BARN

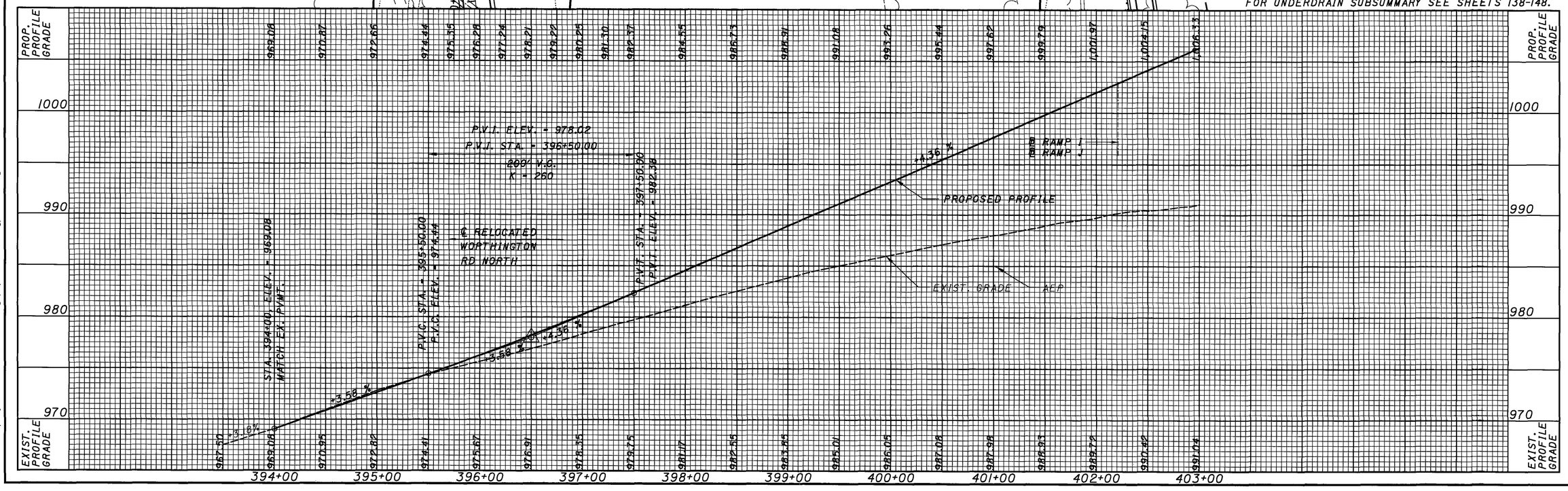
℄ RAMP I

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	1134 CU.YD.
203 EMBANKMENT	16185 CU.YD.
659 SEEDING AND MULCHING	7772 SQ.YD.

NOTE:
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

S.R. 37 CURVE DATA
P.I. STA. = 395+81.69
Δ = 01° 16' 38" (LT)
Dc = 00° 30' 00"
R = 11,459.16'
T = 127.73'
L = 255.44'
E = 0.71'
emax = NC



PLAN AND PROFILE - S.R. 37
STA. 393+29.11 TO STA. 403+00

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED F.J.A.

HORIZONTAL SCALE IN FEET 0 25 50 100

723
349

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(C) STA. 404+99.93, 30' LT.
BEG. TYPE I BRG.
TERM. ASSM.

(D) STA. 405+31.18, 30' LT.
END TYPE I BRG.
TERM. ASSM.

(A) STA. 405+30.65, 30' RT.
END TYPE I BRG.
TERM. ASSM.

(B) STA. 404+99.40, 30' RT.
BEG. TYPE I BRG.
TERM. ASSM.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	541 CU.YD.
203 EMBANKMENT	57975 CU.YD.
203 GRANULAR MATERIAL, TYPE B	19621 CU. YD.
659 SEEDING AND MULCHING	10579 SQ.YD.

(E) STA. 408+31.72, 30' RT.
BEGIN TYPE I BRG.
TERM. ASSM.

(F) STA. 408+62.97, 30' RT.
END TYPE I BRG.
TERM. ASSM.

(G) STA. 408+32.24, 30' LT.
BEGIN TYPE I BRG.
TERM. ASSM.

(H) STA. 408+63.49, 30' LT.
END TYPE I BRG.
TERM. ASSM.

S.R. 37 CURVE DATA
P.I. STA. = 411+78.69
Δ = 00° 45' 31" (RT)
Dc = 00° 30' 00"
R = 11,459.16'
T = 75.85'
L = 151.71'
E = 0.25'
e_{max} = NC

S 03° 22' 18" W

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SEE SHEET 723 MATCH LINE STA. 403+00 S.R. 37

MATCH LINE STA. 413+00 S.R. 37 SEE SHEET 725

PROPOSED STRUCTURE DATA
TYPE: TWO-SPAN PRESTRESSED CONCRETE I-BEAM WITH SEMI-INTEGRAL ABUTMENTS AND CAP AND COLUMN PIER
SPANS: 102'-0", 102'-0"
ROADWAY: 60'-0" TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°35'49" LF
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40°04'25" N
LONGITUDE: 82°36'20" W

PROP. INLET CB-3A
STA. 405+02.33, 30.00' LT
GRATE ELEV. = 1013.81
INV. 15" E = 1007.98

PROP. INLET CB-3A
STA. 404+99.07, 30.00' RT
GRATE ELEV. = 1013.70
INV. 15" W = 1007.19

PROP. INLET CB-3A
STA. 408+58.72, 30.00' RT
GRATE ELEV. = 1021.56
INV. 15" W = 1015.16

PROP. INLET CB-3A
STA. 408+59.34, 30.00' LT
GRATE ELEV. = 1021.56
INV. 15" E = 1014.95

BRIDGE LIMITS = 296'-0"

P.V.C. STA. = 404+06.00
P.V.C. ELEV. = 1,010.88

P.V.I. STA. = 408+00.00
P.V.I. ELEV. = 1,028.10
600' V.C.
SSD = 554' K = 126

P.V.T. STA. = 412+00.00
P.V.T. ELEV. = 1,020.24

P.V.C. STA. = 412+50.00
P.V.C. ELEV. = 1,019.26

P.V.I. STA. = 415+50.00
P.V.I. ELEV. = 1,013.36
600' V.C.
K = 139

60" x 441' CONDUIT, TYPE A

SPRINT, 10.68' RT

SPRINT, 0.62' RT

EXIST. GRADE

PROPOSED PROFILE

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00

PROFILE - S.R. 37
PLAN AND PR
STA. 403+00 TO STA. 413+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

LIC-161-6.65
LIC-37-10.25

724
1349

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Ⓒ STA. 415+16.89, 24.8' LT.
BEG. TYPE E-98
ANCH. ASSM.

Ⓓ STA. 415+66.89, 23.6' LT.
END TYPE E-98
ANCH. ASSM.

Ⓐ STA. 413+74.08, 28.4' RT.
BEG. TYPE T
ANCH. ASSM.

Ⓑ STA. 413+86.58, 28.0' RT.
END TYPE T
ANCH. ASSM.

SEE SHEET 724
MATCH LINE STA. 413+00 S.R. 37

STA. 417+63.14 ℄ SURVEY & CONST. YORK RD. -
STA. 212+25.08 ℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD -
STA. 212+58.82 ℄ SURVEY & CONST. SERVICE ROAD II

CONSTRUCTION LIMITS

℄ SURVEY & CONST. SERVICE ROAD II

STA. 417+14.34, 47.00' LT.

STA. 413+06.00, 18.00' LT & RT
END CONCRETE PAVEMENT
BEGIN ASPHALT PAVEMENT
BEGIN PAVEMENT AND SHOULDER TAPER

℄ SURVEY & CONST. YORK RD.

CONSTRUCTION LIMITS

416+36.00, 12.00' LT. & RT.
END PAVEMENT TAPER

STA. 418+16.88, 58.00' LT.

BEGIN PAVEMENT TAPER
STA. 418+16.88, 12' LT.

P.I. STA. = 419+37.99
Δ = 00° 19' 13" (LT.)
NO CURVE

P.O.T. STA. 421+24.63

S 03° 03' 05" W

FIELD

S 03° 22' 18" W

STA. 417+01.76, 47.00' RT.

BEGIN PAVEMENT TAPER
STA. 418+07.55, 12' RT.

STA. 418+07.55
2" 58.00' RT.

CONSTRUCTION LIMITS

END PAVEMENT TAPER
STA. 419+71.00

END WORK
S.R. 37
STA. 419+71.00

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD.

℄ SURVEY & CONST. YORK ROAD

SPLIT RAIL FENCE

1-STY FRAME

1-STY FRAME & BRICK

1-STY BLOCK GARAGE

WOOD SHED

PROPANE TANK

HEAVY BRUSH

LEACH BED

SEPTIC AREA (EXACT LOCATION PER OWNER)

CLOTHES LINE POST

WELL

FLOWER BED

DECK

STONE/WOOD

GRAVEL DR.

ASPHALT

LAWN

SHRUBS

2-8" APPLES

A/C UNIT

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	1270 CU.YD.
203 EMBANKMENT	10142 CU.YD.
659 SEEDING AND MULCHING	6104 SQ.YD.

NOTE:
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROPOSED PROFILE

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD
℄ SURVEY & CONST. SERVICE RD II

P.V.I. STA. = 415+50.00
P.V.I. ELEV. = 1,013.38
600' V.C.
K = 139

P.V.T. STA. = 418+50.00
P.V.T. ELEV. = 1020.42

STA. 419+71 ELEV. = 1023.25
MATCH EX. PVMT.

EXIST. GRADE

PROP. PROFILE GRADE

EXIST. PROFILE GRADE

1020
1010
1000

413+00 414+00 415+00 416+00 417+00 418+00 419+00 420+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - YORK RD.
STA. 413+00 TO STA. 421+24.63

LIC-161-6.65
LIC-37-10.25

725
1349

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
104	289	100 50 ℄ 50 100 — PROP. R/W, EX. R/W, 4:1, 4:1, 39.2' LT E=973.7, 976.28 396+00.00 975.67, EX. R/W, 4:1, PROP. R/W, ITEM 206 - CEMENT STABILIZATION	57	324			
0	192	MATCH LINE - SEE RELOCATED WORTHINGTON RD NORTH — 974.44 395+50.00 974.41 — MATCH LINE - SEE RELOCATED WORTHINGTON RD NORTH	110	2	155	302	
69	353	PROP. R/W, EX. R/W, 2:1, 4:1, 4:1, 41.1' LT E=967.9, 972.66 395+00.00 972.82, 32.0' RT E=970.1, EX. R/W, PROP. R/W	98	32	192	31	
58	408	EX. R/W, 2:1, 4:1, 4:1, 46.4' LT E=964.7, 970.87 394+50.00 970.96, 31.4' RT E=968.4, EX. R/W	60	45	146	71	
89	247	EX. R/W, 2:1, 4:1, 6:1, 57.5' LT E=960.0, 969.08 394+00.00 969.08, 38.8' RT E=964.7, EX. R/W — BEGIN WORK S.R. 37 STA. 394+00	61	86	112	121	
0	0	393+50.00 967.50	0	0	56	80	
	1489	SHEET TOTAL			662	605	SHEET TOTAL

CALCULATED JMA
CHECKED PEK

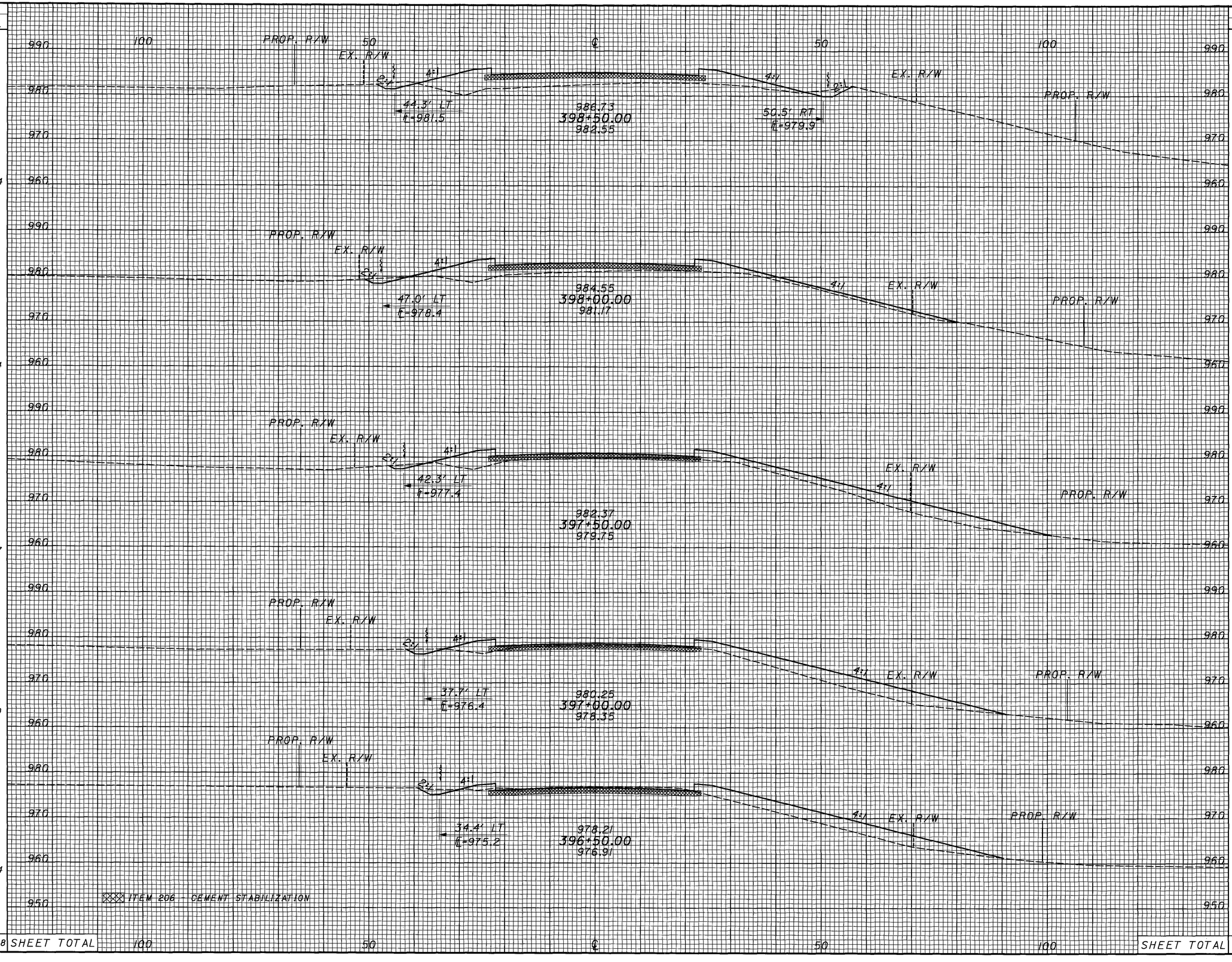
CROSS SECTIONS - S.R. 37
STA. 393+50 TO STA. 396+00

LIC-161-6.65
LIC-37-10.25

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1349

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SEEDING	
END WIDTH	SQ. YDS.
66	444
94	564
109	567
95	519
92	544
	2638



END AREA		VOLUME	
CUT	FILL	CUT	FILL
18	218		
		23	371
6	183		
		10	370
4	217		
		9	372
6	185		
		22	308
18	148		
		69	437
		133	1858

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37
STA. 396+50 TO STA. 398+50

LIC-161-6.65
LIC-37-10.25

727
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
73	417
77	433
79	450
83	439
75	392
	2131

100 50 ℄ 50 100

PROP. R/W — EX. R/W — 2:1 — 4:1 — 4:1 — 2:1

1000 / 990 / 980 / 970

49.2' LT
E-992.2

997.62
401+00.00
987.98

56.4' RT
E-990.4

PROP. R/W — EX. R/W — 2:1 — 4:1 — 4:1 — 2:1

51.6' LT
E-989.2

995.44
400+50.00
987.08

55.6' RT
E-988.2

PROP. R/W — EX. R/W — 2:1 — 4:1 — 4:1 — 2:1

50.1' LT
E-987.2

993.26
400+00.00
986.05

54.9' RT
E-986.0

PROP. R/W — EX. R/W — 2:1 — 4:1 — 4:1 — 2:1

52.5' LT
E-984.2

991.08
399+50.00
985.01

52.9' RT
E-984.1

PROP. R/W — EX. R/W — 2:1 — 4:1 — 4:1 — 2:1

49.2' LT
E-982.6

988.91
399+00.00
983.85

51.7' RT
E-982.0

ITEM 206 - CEMENT STABILIZATION

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
29	736		
		56	1249
31	613		
		61	1034
34	504		
		67	831
39	394		
		59	640
25	297		
		40	477
		283	4231

SHEET TOTAL — SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37
STA. 399+00 TO STA. 401+00

LIC-161-6.65
LIC-37-10.25

728
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
127	622
97	400
47	314
66	392
75	411
	2140 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			1336 (GMB)
10	681		
	925 (GMB)		428 (GMB)
	0 (GMB)		
		9	2148
0	1639		
		0	3126
0	1737		
		5	2812
5	1300		
		14	2039
10	902		
		36	1517
		64	11642

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37
STA. 401+50 TO STA. 403+50

LIC-161-6.65
LIC-37-10.25

729
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
152	
	828
146	
	789
138	
	736
	2354

100 50 ℄ 50 100

PROP. CB-3A A.P.P.
STA. 405+02.33, 30.00' LT
GRATE ELEV. = 1031.81
INV. 15" E = 1007.08

PROP. CB-3A A.P.P.
STA. 404+99.07, 30.00' RT
GRATE ELEV. = 1013.70
INV. 15" W = 1007.19

74.0' LT
ELEV=992.6

87.7' LT
℄-991.7

ITEM 203, GRANULAR MATERIAL, TYPE B

EX. R/W

EX. R/W

EX. R/W

1014.64
405+00.00
991.52

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 965.

78.9' RT
ELEV=990.2

EX. TEL.

EX. TEL.

94.4' RT
℄-988.8

74.5' LT
ELEV=990.5

EX. R/W.

88.5' LT
℄-989.5

ITEM 203, GRANULAR MATERIAL, TYPE B

1012.76
404+50.00
990.89

75.2' RT
ELEV=990.2

EX. TEL.

89.4' RT
℄-989.1

EX. TEL.

73.2' LT
ELEV=989.1

87.6' LT
℄-988.0

ITEM 203, GRANULAR MATERIAL, TYPE B

1010.68
404+00.00
990.68

69.8' RT
ELEV=990.8

EX. TEL

EX. TEL

83.7' RT
℄-989.8

END TAPER BEGIN FULL HEIGHT ITEM 203, GRANULAR MATERIAL, TYPE B 403+75

100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24	152		2280 (GMB)
		34	141
			4257 (GMB)
13	0		2318 (GMB)
		20	0
			3962 (GMB)
11	0		1961 (GMB)
	1961 (GMB)		1816 (GMB)
	1961 (GMB)	19	631
		72	772

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37
STA. 404+00 TO STA. 405+00

LIC-161-6.65
LIC-37-10.25

730
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
174	
	523
0	
0	
	393
157	
	495
	1411

100 50 ℄ 50 100

1030 1020 1010 1000 990

EX. R/W EX. R/W

2:1 2:1

ITEM 203, GRANULAR MATERIAL, TYPE B

81.3' RT
ELEV=998.2

4:1 2:1

EX. TEL. EX. TEL.

97.5' RT
E=996.6

1022.14
408+34.03
993.45

END APPROACH SLAB
STA. 408+34.03

BEGIN APPROACH SLAB
END STRUCTURE
STA. 407+79.95

S.R. 37 @ MSE WALL

END APPROACH SLAB
BEGIN STRUCTURE
STA. 405+73.95

BEGIN APPROACH SLAB
STA. 405+28.86

S.R. 37 @ MSE WALL

1030 1020 1010 1000 990 980

EX. R/W EX. R/W

74.1' LT
ELEV=995.3

2:1 2:1

ITEM 203, GRANULAR MATERIAL, TYPE B

4:1 4:1 2:1

88.0' LT
E=994.3

1015.64
405+28.86
991.84

EX. TEL. EX. TEL.

83.2' RT
ELEV=990.7

106.3' RT
E=987.4

100 50 ℄ 50 100

SHEET TOTAL SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
23	160		
0 (GMB)	3552 (GMB)		
		23	160
		0 (GMB)	5184 (GMB)
0	0		
0	0		
		43	136
		0 (GMB)	3096 (GMB)
52	163		
0 (GMB)	2425 (GMB)		
		40	168
		0 (GMB)	2515 (GMB)
		106	464

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37
STA. 405+48.95 TO STA. 408+04.95

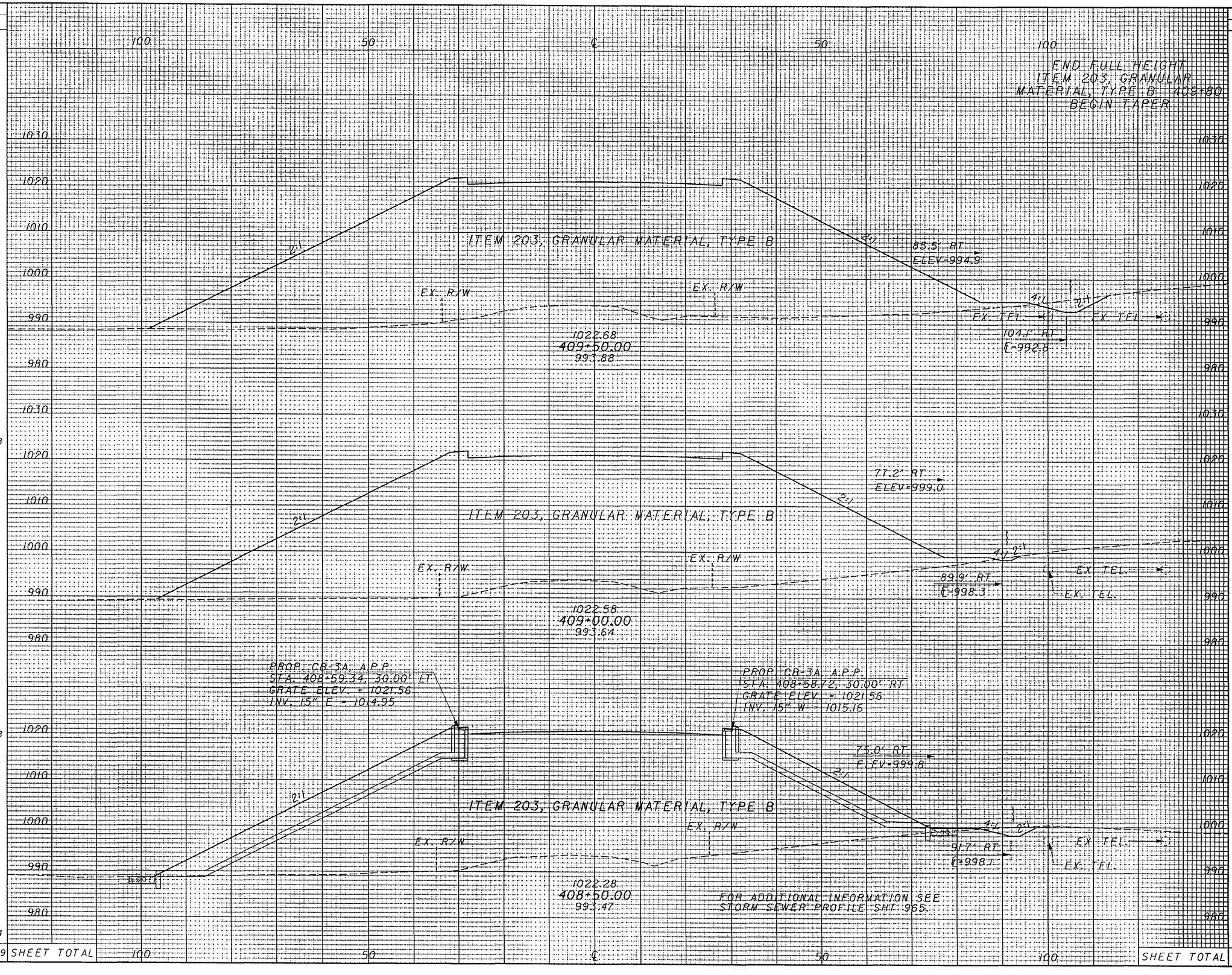
LIC-161-6.65
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731
1349

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SEEDING	
END WIDTH	SQ. YDS.
175	908
152	858
157	294
	2059

SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
	3787 (GMB)		
26	0		4208 (GMB)
	3787 (GMB)		
		26	0
			6817 (GMB)
2	0		
	3575 (GMB)		
		20	154
			6392 (GMB)
52	166		
	3328 (GMB)		
		37	179
			3641 (GMB)
14	157		
		11	94
			2008 (GMB)
		94	427

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37
STA. 408+50 TO STA. 409+50

LIC-161-6.65
LIC-37-10.25

732
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					CALCULATED JMA CHECKED PEK
		MATCH LINE - SEE RAMP L					
		MATCH LINE - SEE RAMP K					
		1030 1020 1010 1000 990 980					
0		EX. R/W EX. R/W					
		1021.81 411+00.00 996.33	0	3218			
	169	MATCH LINE - SEE RAMP L					
		MATCH LINE - SEE RAMP K					
		3:1 2:8:1			0	5941	
		EX. R/W EX. R/W					
61		1022.30 410+50.00 995.18	0	3198			
		STA 410+39 CULVERT No. 19, FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 984.			11	4711	
		END TAPER, END ITEM 203, GRANULAR MATERIAL, TYPE B STA. 410+25	0 (GMB)				
	667	2:1 2:8:1				1114 (GMB)	
		ITEM 203, GRANULAR MATERIAL, TYPE B					
		EX. R/W EX. R/W					
179		1022.59 410+00.00 994.25	12	1690 2407 (GMB)			
		EX. TEL 116.1' RT E-9911 EX. TEL					
	983				35	1675 2294 (GMB)	
$USER $DATE$ $FILE$	1819	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL			46	12327	

$TIMESTAMP$

CROSS SECTIONS - S.R. 37
STA. 410+00 TO STA. 411+00

LIC-161-6.65
LIC-37-10.25

733
1349

SEEDING			END AREA		VOLUME		
END WIDTH	SO. YDS.		CUT	FILL	CUT	FILL	
130	783		57	1624	90	3425	
152	575		40	2075	37	4462	
55	153		0	2744	0	5520	
	15011	SHEET TOTAL			127	13407	

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - S.R. 37 AND YORK ROAD
STA. 411+50 TO STA. 412+50

LIC-161-6.65
LIC-37-10.25

734
1349

100 50 ℄ 50 100

1020
1010
1000
990
980
1030

EX. R/W
PROP. R/W
EX. TEL.
2:1
4:1

63.7' LT
E=1002.4

1019.26
412+50.00
1000.52

66.5' RT
ELEV=1001.0

95.7' RT
E=996.2

65.2' LT
ELEV=1002.9

80.5' LT
E=1001.6

1020.24
412+00.00
999.02

76.7' RT
ELEV=997.1

102.1' RT
E=993.2

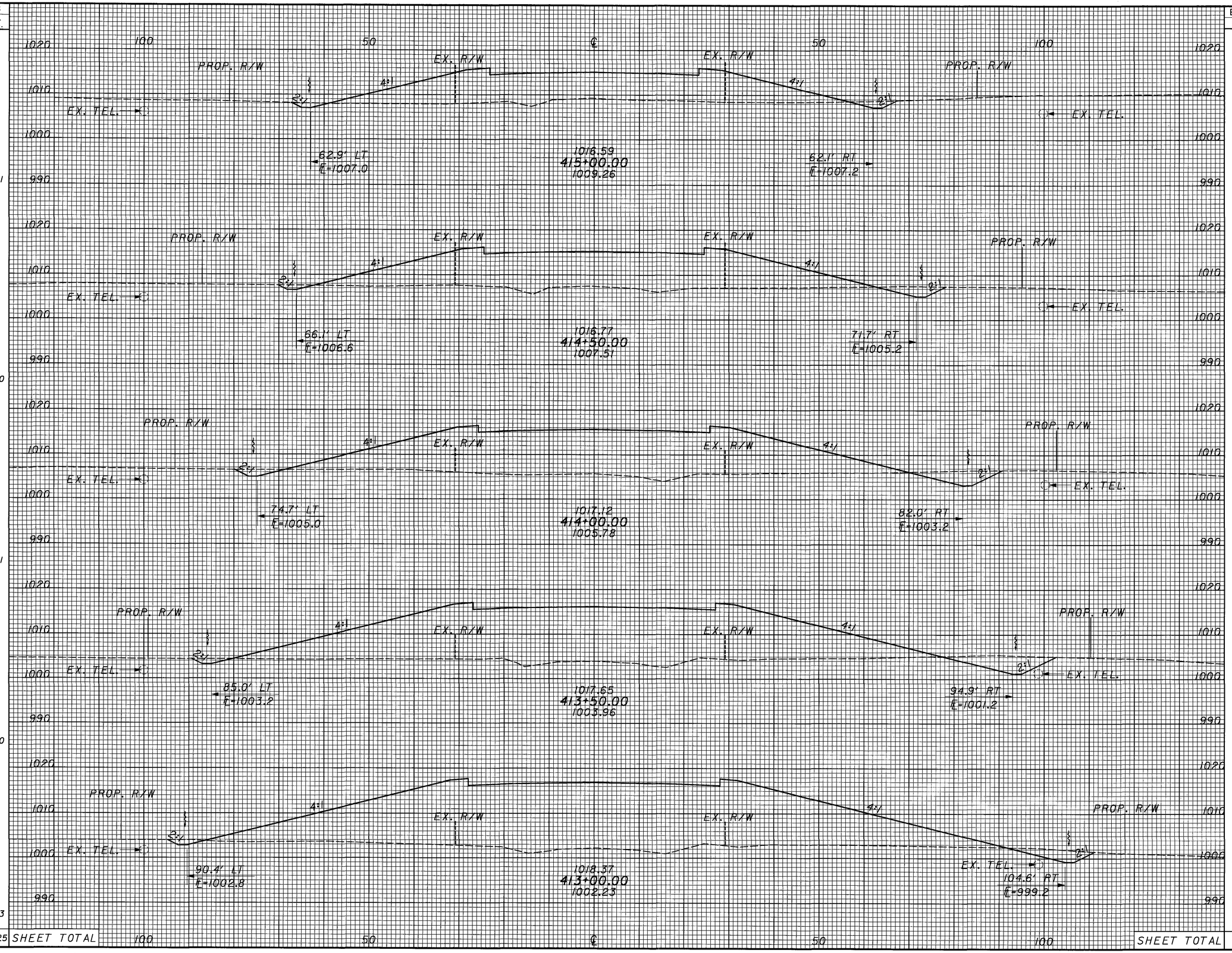
MATCH LINE - SEE RAMP L

MATCH LINE - SEE RAMP K

1021.12
411+50.00
997.62

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
95	561	15	584	38	1244
107	650	26	759	69	1628
127	761	48	1000	104	2173
147	850	64	1347	93	2865
159	803	36	1748	86	3122
	3625 SHEET TOTAL			390	11032



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - YORK ROAD
STA. 413+00 TO STA. 415+00

LIC-161-6.65
LIC-37-10.25

735
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.
62	172
0	161
58	347
67	394
75	444
85	500
	2018

100 50 ℄ 50 100

PROP. R/W — EX. R/W — EX. TEL.

ITEM 206 - CEMENT STABILIZATION

MATCH LINE SEE SERVICE RD 11

MATCH LINE - SEE WATKINS-YORK FRONTAGE RD

6:1 4:1 4:1 6:1

35.2' LT ℄-1016.6 — 1019.33 418+00.00 1018.56 — 33.7' RT ℄-1016.4

1018.42 417+50.00 1017.98

40.3' LT ℄-1013.1 — 1017.70 417+00.00 1016.27 — 32.4' RT ℄-1015.0

46.6' LT ℄-1011.0 — 1017.15 416+50.00 1014.51 — 37.8' RT ℄-1013.2

51.8' LT ℄-1009.5 — 1016.79 416+00.00 1012.76 — 49.6' RT ℄-1010.0

57.0' LT ℄-1008.2 — 1016.60 415+50.00 1011.01 — 56.8' RT ℄-1008.3

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
122	1		
		151	3
41	3		
		53	38
16	38		
		31	162
18	137		
		28	378
13	271		
		24	635
14	414		
		26	924
	SHEET TOTAL	313	2140

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - YORK ROAD
STA. 415+50 TO STA. 418+00

LIC-161-6.65
LIC-37-10.25

736
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
0		0	0		
	55			18	12
34		33	22		
	110			31	16
60		46	18		
	353			120	22
67		84	6		
	386			196	8
72		128	3		
	372			232	4
	1276 SHEET TOTAL			597	62

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

10.30 PROP. R/W PROP. R/W 10.30

0 10.20 EX. TEL. 420+00.00 1023.89 END WORK 10.20

10.10 10.10

55

10.30 PROP. R/W PROP. R/W 10.30

34 EX. TEL. EX. R/W 4:1 EX. R/W 4:1

10.20 1023.26 419+71.00 1023.26 10.20

STA. 419+71.00 (BACK) STA. 419+71.00 (BACK)

10.10 10.10

110

10.30 PROP. R/W PROP. R/W 10.30

60 EX. R/W EX. R/W

6:1 4:1 4:1 2:1

10.20 EX. TEL. 32.0' LT E=1020.0 1022.77 419+50.00 1022.81 36.0' RT E=1019.0 10.20

10.10 10.10

353

PROP. R/W PROP. R/W

67 EX. R/W EX. R/W

6:1 4:1 4:1 2:1

10.20 EX. TEL. 33.1' LT E=1018.6 1021.59 419+00.00 1021.73 40.3' RT E=1016.8 10.20

10.10 10.10

10.00 10.00

386

PROP. R/W PROP. R/W

72 EX. R/W EX. R/W

6:1 4:1 4:1 6:1

10.20 EX. TEL. 31.7' LT E=1017.8 1020.42 418+50.00 1020.79 36.5' RT E=1016.6 10.20

10.10 10.10

372

100 50 ℄ 50 100 SHEET TOTAL

CROSS SECTIONS - YORK ROAD STA. 418+50 TO STA. 420+00

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED PEK

737
1349

tduffney
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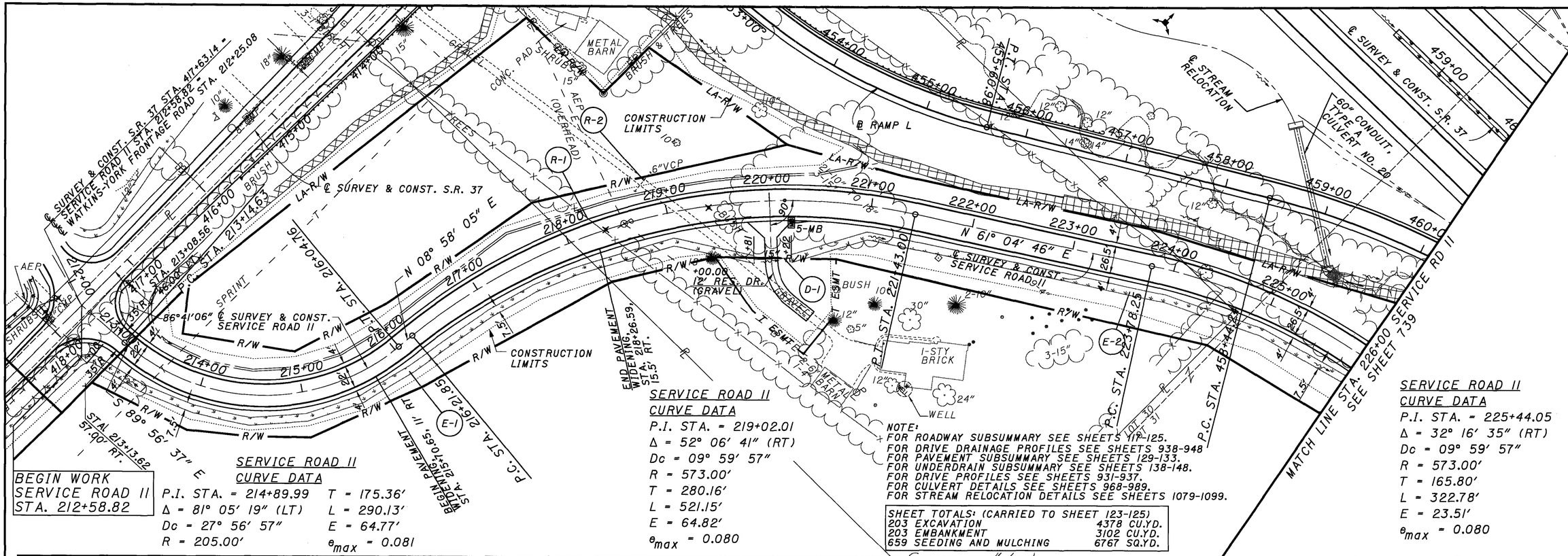
PLAN AND PROFILE SERVICE ROAD 11
STA. 212+58.82 TO STA. 226+00

CALCULATED JMA
CHECKED FJA

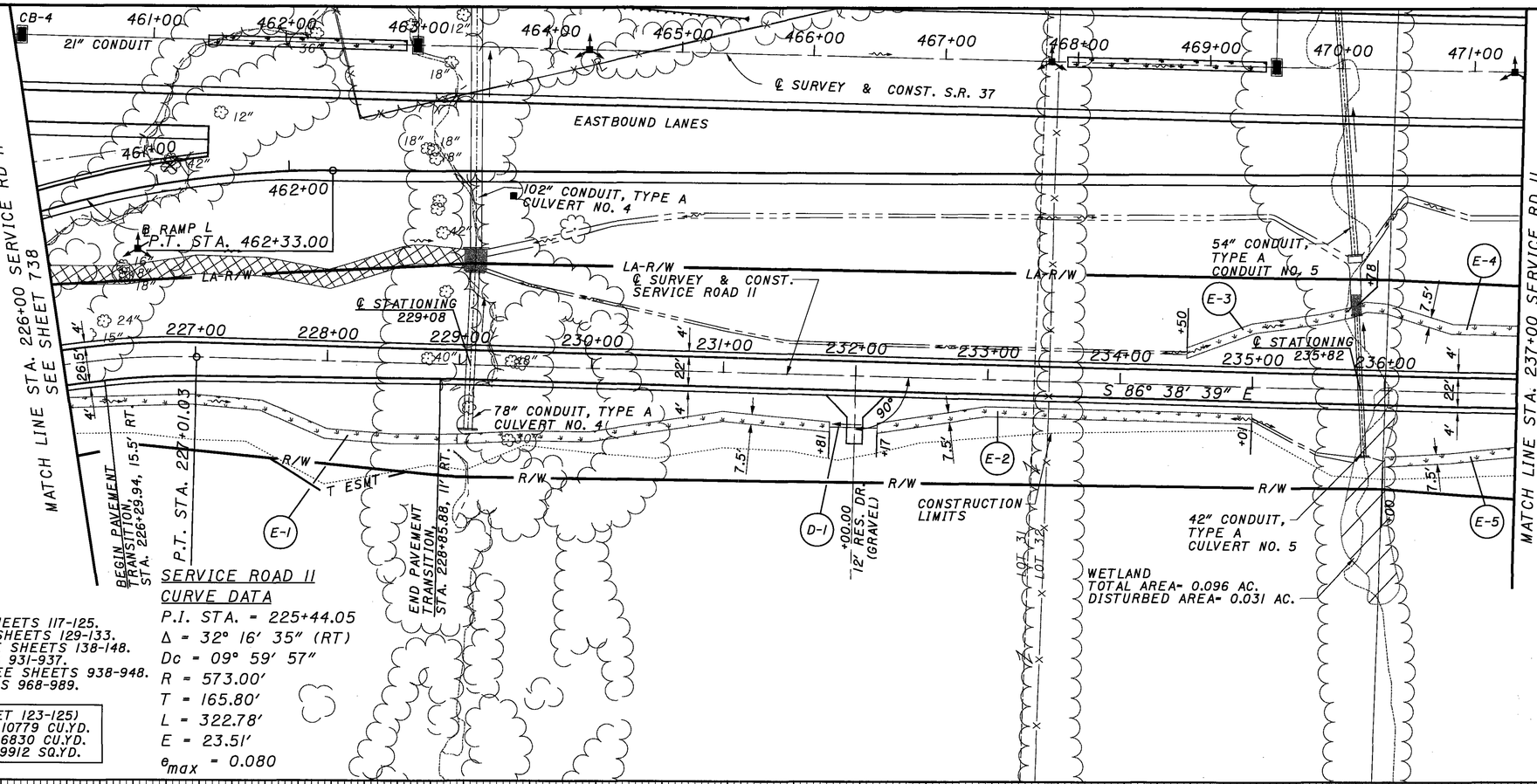
HORIZONTAL SCALE IN FEET
0 25 50 100

LIC-161-6.65
LIC-37-10.25

738
1349



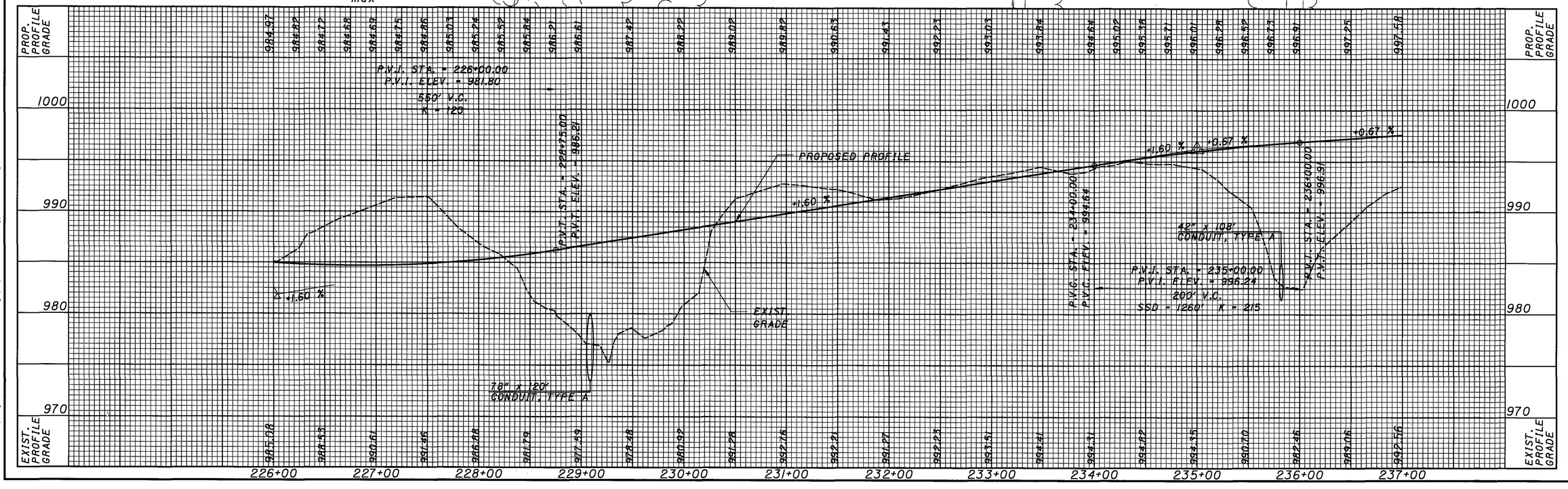
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NOTE:
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR CULVERT DETAINS SEE SHEETS 968-989.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	10779 CU.YD.
203 EMBANKMENT	6830 CU.YD.
659 SEEDING AND MULCHING	9912 SQ.YD.

SERVICE ROAD II
CURVE DATA
P.I. STA. = 225+44.05
Δ = 32° 16' 35" (RT)
Dc = 09° 59' 57"
R = 573.00'
T = 165.80'
L = 322.78'
E = 23.51'
e_{max} = 0.080



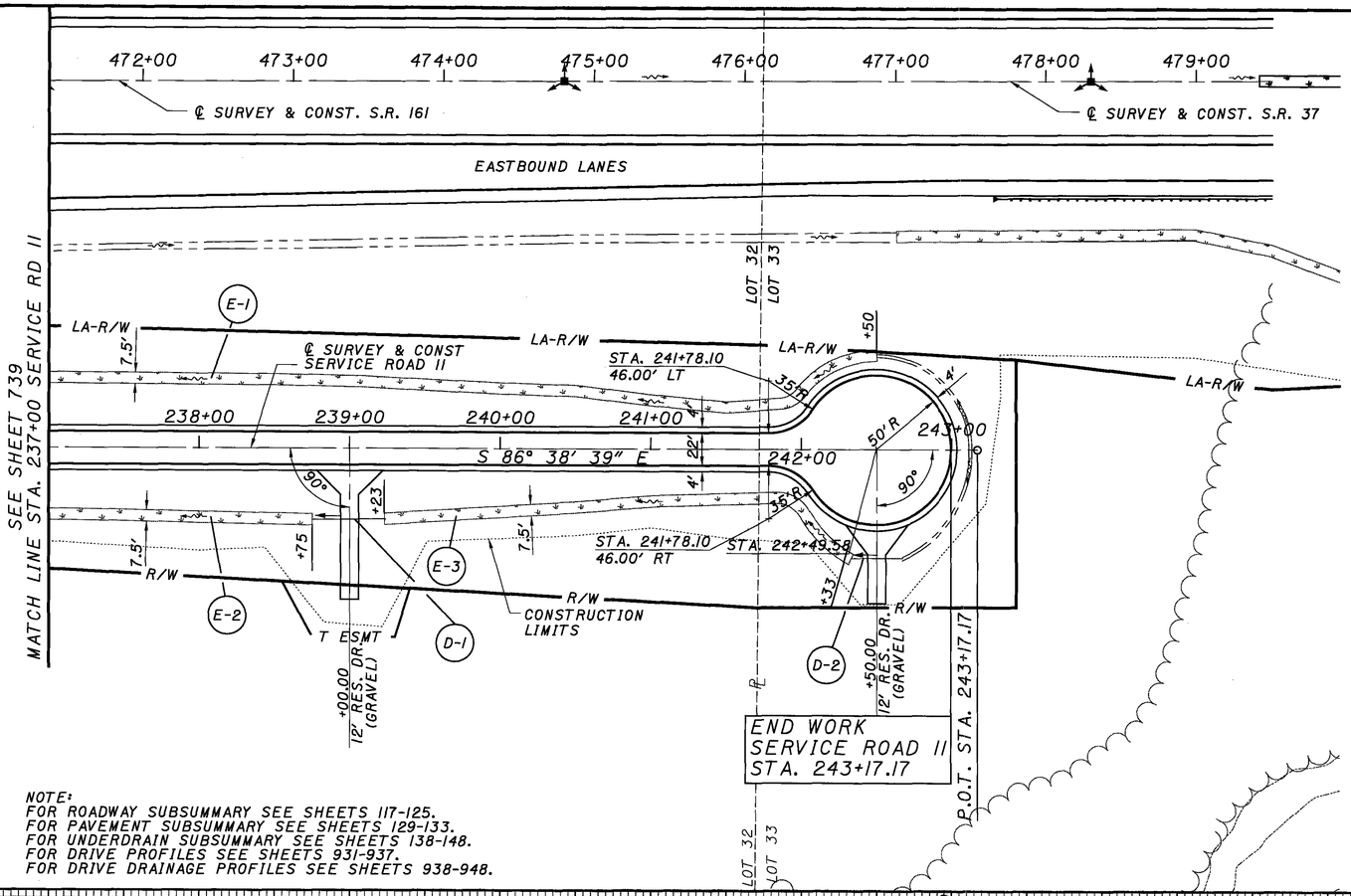
HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE SERVICE ROAD 11
STA. 226+00 TO STA. 237+00

LIC-161-6.65
LIC-37-10.25

739
1349

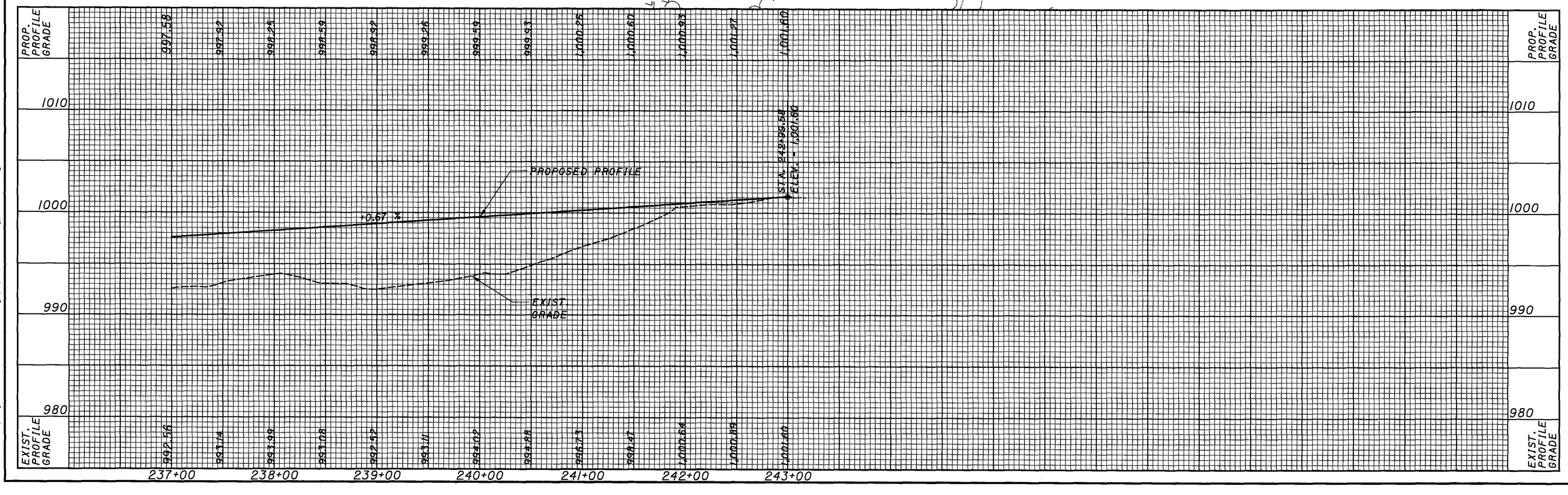
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NOTE:
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	995 CU.YD.
203 EMBANKMENT	4013 CU.YD.
659 SEEDING AND MULCHING	4373 SQ.YD.



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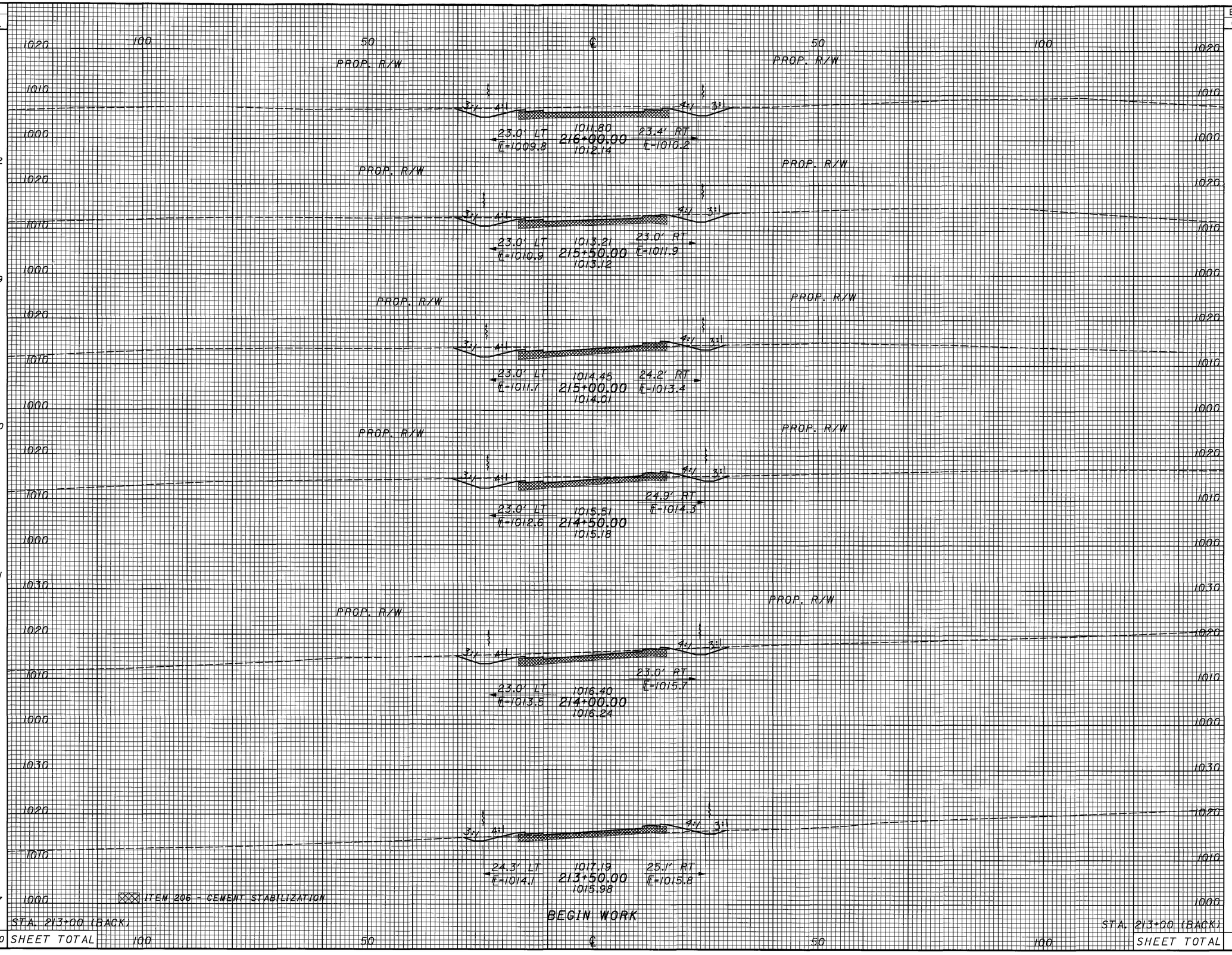
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE SERVICE ROAD 11
STA. 237+00 TO STA. 243+17.17

LIC-161-6.65
LIC-37-10.25

SEEDING END WIDTH	SEEDING SQ. YDS.
36	202
36	199
35	200
37	201
36	191
33	147
20	1140



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
68	0		
		110	0
51	0		
		85	7
40	8		
		80	15
46	8		
		89	9
51	2		
		54	26
8	26		
		7	94
0	75		
		425	151

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 213+50 TO STA. 216+00

LIC-161-6.65
LIC-37-10.25

741
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
39	226	219+00.00	153	0	243	5
42	228	218+50.00	111	6	165	13
40	231	218+00.00	68	8	86	31
43	225	217+50.00	26	26	58	32
38	211	217+00.00	37	8	104	7
38	206	216+50.00	75	0	132	0
	1327	SHEET TOTAL			788	88

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

219+00.00: 1002.80 / 1003.90 — 23.0' LT, ℄=1002.1 — 27.5' RT, ℄=999.6

218+50.00: 1004.30 / 1004.46 — 24.7' LT, ℄=1003.1 — 27.5' RT, ℄=1001.1

218+00.00: 1005.80 / 1005.59 — 26.5' LT, ℄=1004.1 — 27.0' RT, ℄=1002.8

217+50.00: 1007.30 / 1006.07 — 32.8' LT, ℄=1005.1 — 26.2' RT, ℄=1004.7

217+00.00: 1008.80 / 1008.09 — 25.5' LT, ℄=1006.8 — 25.3' RT, ℄=1006.5

216+50.00: 1010.30 / 1010.45 — 23.0' LT, ℄=1008.7 — 24.4' RT, ℄=1006.2

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 216+50 TO STA. 219+00

LIC-161-6.65
LIC-37-10.25

742
1349

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SEEDING	
END WIDTH	SQ. YDS.
54	329
64	
18	227
61	219
	280
	1055

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W

MATCH LINE SEE RAMP L

PROP. R/W

14:1

4:1

3:1

42.0' LT
℄=995.6

996.80
221+00.00
995.39

27.5' RT
℄=993.8

PROP. LA R/W

PROP. R/W

3:1

4:1

17:1

3:1

25.7' LT
℄=996.9

998.30
220+50.00
999.21

46.5' RT
℄=995.1

PROP. R/W

PROP. LA R/W

3:1

4:1

23.0' LT
℄=999.1

999.80
220+00.00
1001.35

15", TYPE D

PROP. R/W

PROP. LA R/W

3:1

4:1

16.67:1

2:1

23.0' LT
℄=1000.6

1001.30
219+50.00
1002.58

46.1' RT
℄=998.1

END AREA		VOLUME	
CUT	FILL	CUT	FILL
66	83		
		239	78
193	1		
		415	4
256	3		
		495	3
279	0		
		399	0
		1548	85

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

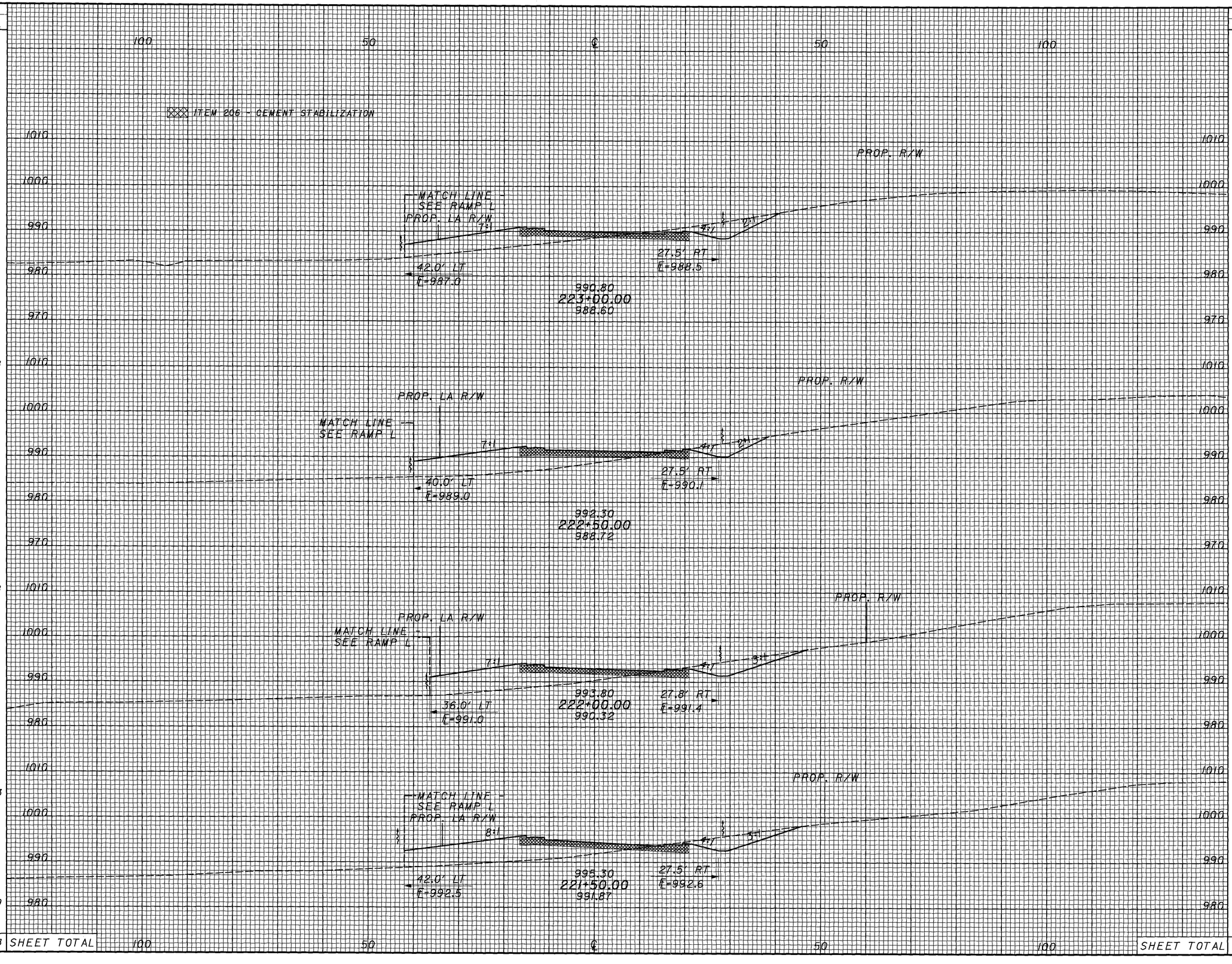
CROSS SECTIONS - SERVICE ROAD 11
STA. 219+50 TO STA. 221+00

LIC-161-6.65
LIC-37-10.25

743
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
53	278
48	278
52	303
57	309
	1168



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
52	139		
		76	313
30	198		
		71	351
46	180		
		86	354
46	202		
		104	264
		337	1282

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 221+50 TO STA. 223+00

LIC-161-6.65
LIC-37-10.25

744
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		234	58		
71				351	171
	378	144	126		
65				171	288
	335	40	185		
55				77	351
	315	43	194		
58				101	274
	315	65	102		
55				109	224
	299				
	1642 SHEET TOTAL			809	1308

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE RAMP L

PROP. LA R/W

PROP. R/W

985.42
225+50.00
985.32
49.1' LT
E=978.0
27.4' RT
E=982.2

986.08
225+00.00
984.06
49.1' LT
E=978.8
27.4' RT
E=982.9

986.95
224+50.00
982.98
43.4' LT
E=981.1
27.4' RT
E=983.7

988.04
224+00.00
984.06
41.5' LT
E=982.7
27.5' RT
E=985.2

989.33
223+50.00
987.41
42.5' LT
E=983.5
27.5' RT
E=986.7

1000 990 980 970

100 50 ℄ 50 100

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 223+50 TO STA. 225+50

LIC-161-6.65
LIC-37-10.25

745
1349

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SEEDING	
END WIDTH	SQ. YDS.
106	574
100	517
86	479
87	437
	2007

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1043	0	1780	0
879	0	1277	0
500	0	668	134
221	145	422	188
		4147	322

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 226+00 TO STA. 227+50

LIC-161-6.65
LIC-37-10.25

746
1349

ITEM 206 - CEMENT STABILIZATION

PROP. R/W

MATCH LINE - SEE RAMP L

PROP. LA R/W

5:1 4:1 2:1

984.86
227+50.00
991.46

69.0' LT
℄-974.9

33.7' RT
℄-980.4

PROP. R/W

MATCH LINE - SEE RAMP L

PROP. LA R/W

6:1 4:1 2:1

984.69
227+00.00
990.61

69.2' LT
℄-975.7

30.7' RT
℄-980.9

PROP. R/W

MATCH LINE - SEE RAMP L

PROP. LA R/W

5:1 4:1 2:1

984.72
226+50.00
988.53

61.9' LT
℄-976.4

28.6' RT
℄-981.3

PROP. R/W

MATCH LINE - SEE RAMP L

PROP. LA R/W

6:1 4:1 2:1

984.97
226+00.00
985.08

68.1' LT
℄-977.2

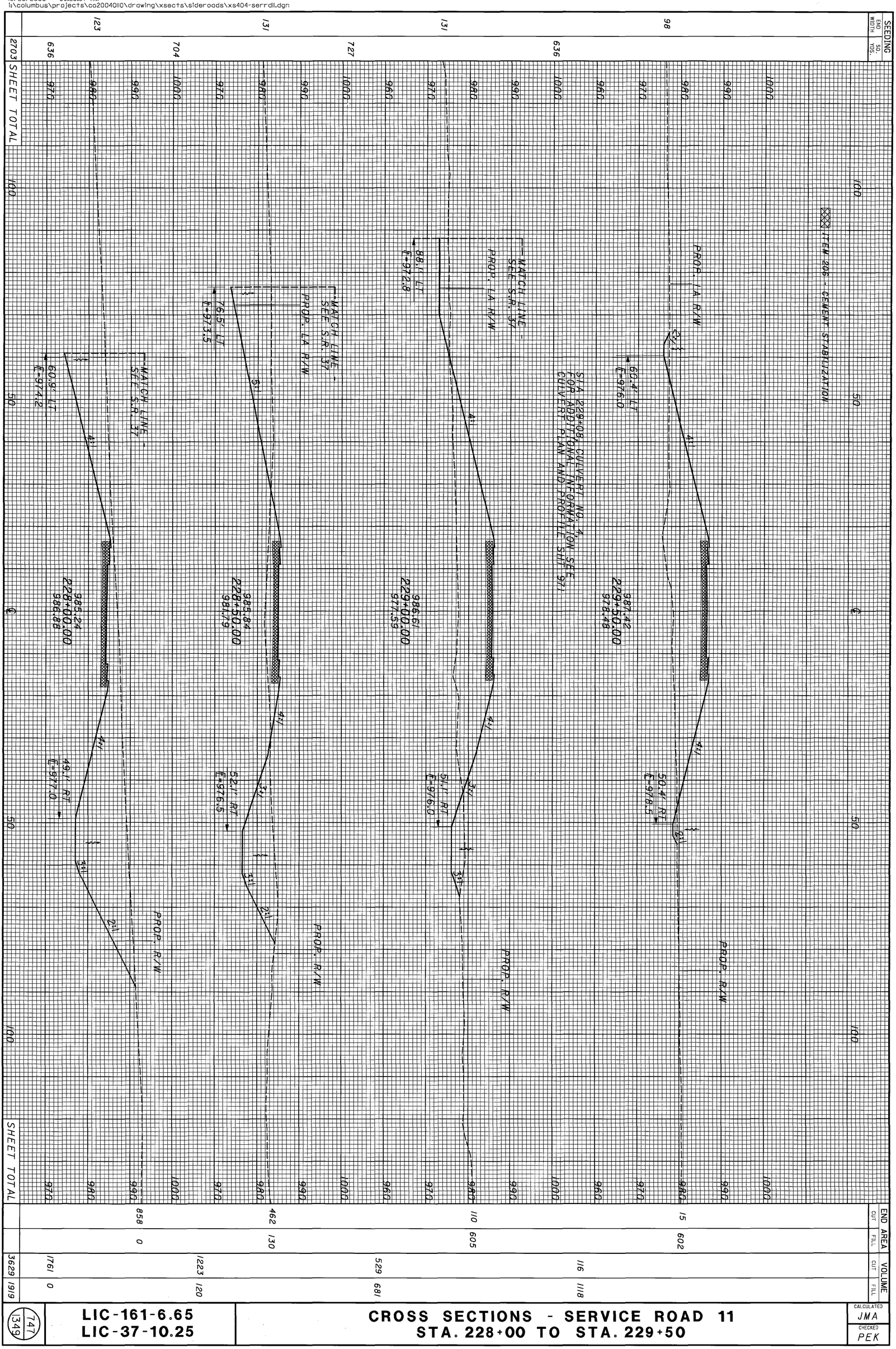
27.4' RT
℄-981.7

100 50 ℄ 50 100

SHEET TOTAL

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| | | |

SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
		1010 / 1000 / 990 / 980				
		PROP. LA R/W — PROP. R/W				
66		3:1, 4:1 — 22.3' LT, E-988.7 — 990.63, 231+50.00, 992.21 — 12.3:1, 3:1 — 33.6' RT, E-988.7	240	0		
	413	1010 / 1000 / 990 / 980			641	0
		PROP. LA R/W — PROP. R/W				
83		3:1, 4:1 — 30.4' LT, E-985.9 — 989.82, 231+00.00, 992.76 — 4:1, 2:1 — 31.6' RT, E-985.6	451	0		
		970 / 1010 / 1000 / 990 / 980			883	0
	505	PROP. LA R/W — PROP. R/W				
99		2:1, 4:1 — 40.4' LT, E-982.6 — 989.02, 230+50.00, 991.28 — 4:1, 2:1 — 40.4' RT, E-982.6	502	0		
	533	970 / 1010 / 1000 / 990 / 980			531	445
		PROP. LA R/W — PROP. R/W				
93		2:1, 4:1 — 50.4' LT, E-979.3 — 988.22, 230+00.00, 990.92 — 4:1, 2:1 — 49.6' RT, E-979.5	72	481		
	530	970			81	1003
	1981	SHEET TOTAL			2136	1448

CALCULATED JMA
CHECKED PEK

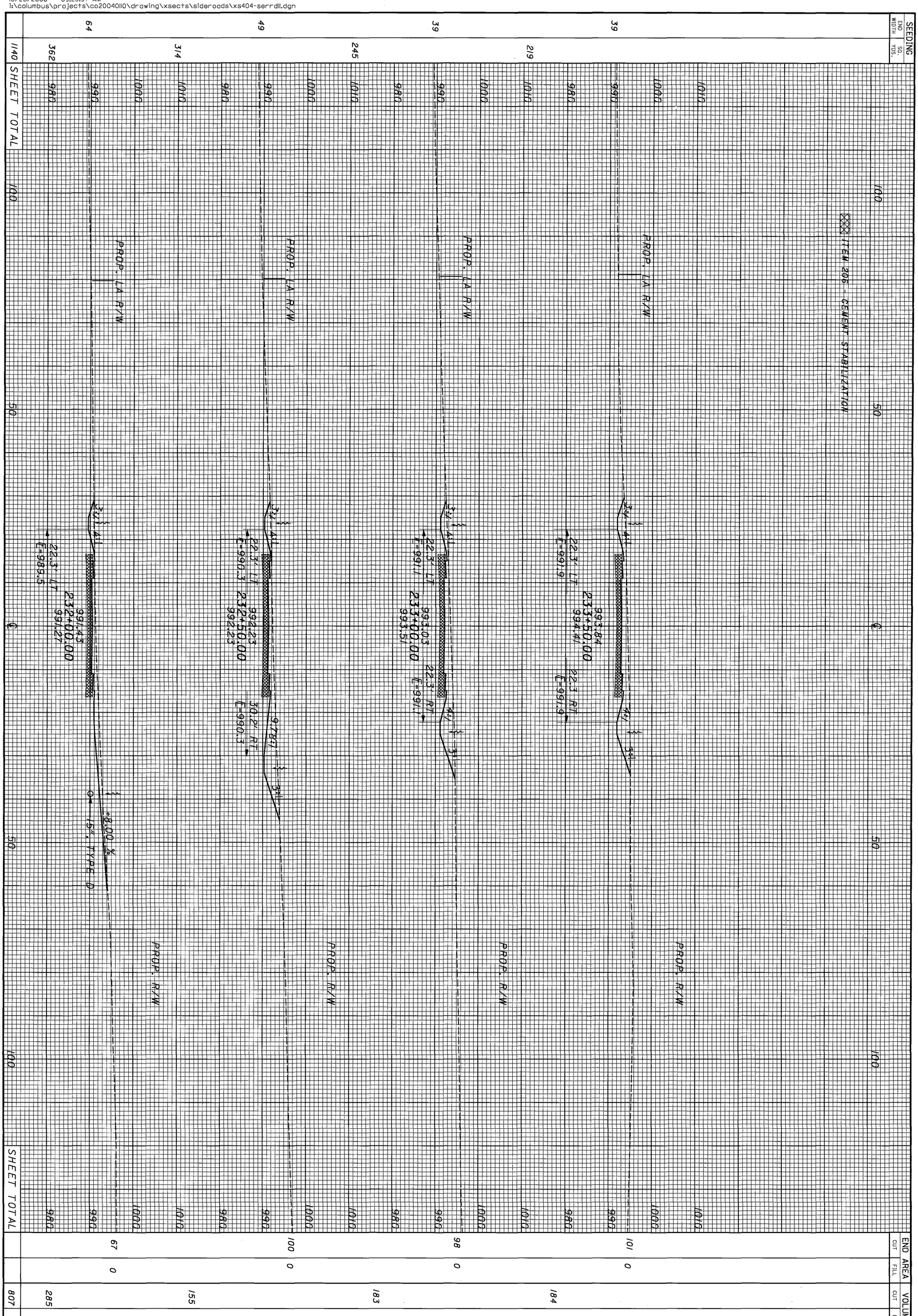
CROSS SECTIONS - SERVICE ROAD 11
STA. 230+00 TO STA. 231+50

LIC-161-6.65
LIC-37-10.25

748
1349

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749 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - SERVICE ROAD 11 STA. 232+00 TO STA. 233+50

CALCULATED JMA
CHECKED PEK

SEEDING END WIDTH	SEEDING SQ. YDS.
88	
	396
55	
	248
34	
	193
35	
	207
	1044

ITEM 206 - CEMENT STABILIZATION

STA 235+82. CULVERT NO. 5.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 972

PROP. R/W
PROP. LA R/W
3:1
2%
4:1
50.4' LT
E-984.8
996.52
235+50.00
990.70
47.6' RT
E-988.3

PROP. R/W
PROP. LA R/W
4:1
2%
4:1
3:1
42.3' LT
E-989.1
996.01
235+00.00
994.35
23.0' RT
E-994.1

PROP. R/W
PROP. LA R/W
3:1
4:1
22.4' LT
E-993.5
995.38
234+50.00
994.82
22.3' RT
E-993.5

PROP. R/W
PROP. LA R/W
3:1
4:1
22.3' LT
E-992.7
994.64
234+00.00
994.31
22.3' RT
E-992.7

		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
29	313				
				74	321
51	33				
				85	32
40	1				
				80	1
46	0				
				137	0
				376	354

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 234+00 TO STA. 235+50

LIC-161-6.65
LIC-37-10.25

750
1349

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SEEDING	
END WIDTH	SQ. YDS.
80	435
77	438
81	509
102	528
	1910

ITEM 203 - GRANULAR MATERIAL, TYPE D

ITEM 206 CEMENT STABILIZATION

100 50 ℄ 50 100

1010 / 1000 / 990 / 980 / 970

PROP. LA R/W — 2:1 — 4:1 — 4:1 — 2:1 — PROP. R/W

44.8' LT
℄-990.4

997.92
237+50.00
993.14

13.6' RT
℄-990.7

PROP. LA R/W — 2:1 — 4:1 — 4:1 — 2:1 — PROP. R/W

45.4' LT
℄-989.9

997.58
237+00.00
992.56

42.6' RT
℄-990.6

PROP. LA R/W — 2:1 — 4:1 — 4:1 — 2:1 — PROP. R/W

45.7' LT
℄-989.5

997.25
236+50.00
989.06

48.5' RT
℄-988.8

PROP. LA R/W — 2:1 — 3:1 — 3:1 — 2:1 — PROP. R/W

60.0' LT
℄-982.0

996.91
236+00.00
982.46

52.9' RT
℄-984.4

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
	47	206		
			72	404
	30	230		
			40	621
	13	441		
			26	1236
	15	894		
			41	1118
SHEET TOTAL			179	3379

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 236+00 TO STA. 237+50

LIC-161-6.65
LIC-37-10.25

751
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	100	50	℄	50	100	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		ITEM 206 - CEMENT STABILIZATION								
67	529	PROP. LA R/W	2:1 4:1	41.1' LT E=992.7	999.26 239+50.00 993.11	43.1' RT E=992.2 4:1 2:1	12	293	17	714
124	561	PROP. LA R/W	2:1 4:1	43.7' LT E=991.7	998.92 239+00.00 992.52	-8.00% 15", TYPE D PROP. R/W	6	478	35	678
78	450	PROP. LA R/W	2:1 4:1	43.8' LT E=991.3	998.59 238+50.00 993.08	44.6' RT E=991.0 4:1 2:1	32	254	100	394
84	454	PROP. LA R/W	2:1 4:1	44.5 LT E=990.8	998.25 238+00.00 993.99	44.1' RT E=990.9 4:1 2:1	76	171	114	349
1994	SHEET TOTAL	100	50	℄	50	100	SHEET TOTAL		266	2135

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 238+00 TO STA. 239+50

LIC-161-6.65
LIC-37-10.25

752
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
52	283	26	53	36	164
50	309	12	124	23	313
61	356	12	215	22	437
67	370	12	257	22	510
	1318 SHEET TOTAL			103	1424

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W

PROP. R/W

26.2' LT
E=997.7

38.1' RT
E=996.5

1000.50
241+50.00
998.47

31.1' LT
E=996.1

33.2' RT
E=995.6

1000.26
241+00.00
996.73

37.2' LT
E=994.3

38.6' RT
E=993.9

999.93
240+50.00
994.88

39.0' LT
E=993.5

41.8' RT
E=992.8

999.59
240+00.00
994.02

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 240+00 TO STA. 241+50

LIC-161-6.65
LIC-37-10.25

753
1349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
0	
	40
41	
158	
16	
164	
43	
264	
	626

100 50 ℄ 50 100

END WORK
STA. 243+17.00
(BACK)

STA. 243+17.00

ITEM 206 - CEMENT STABILIZATION

PROP. LA R/W

1010
1000
990

3:1 4:1
24.1' LT
E=999.5
1001.60
242+99.58
1001.60
4:1 3:1
30.1' RT
E=998.0

PROP. LA R/W

1010
1000
990

3:1 4:1
59.6' LT
E=999.2
1001.27
242+50.00
1000.89
15", TYPE D

PROP. LA R/W

1020
1010
1000
990

3:1 4:1
29.5' LT
E=999.1
1000.93
242+00.00
1000.84
4:1 3:1
35.7' RT
E=997.5

END WORK
STA. 243+17.00
(BACK)

STA. 243+17.00

PROP. R/W

1010
1000
990

PROP. R/W

1010
1000
990

PROP. R/W

1020
1010
1000
990

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		34	0
106	0		
		216	0
127	0		
		199	0
88	0		
		106	49
		555	49

SHEET TOTAL

100 50 ℄ 50 100

SHEET TOTAL

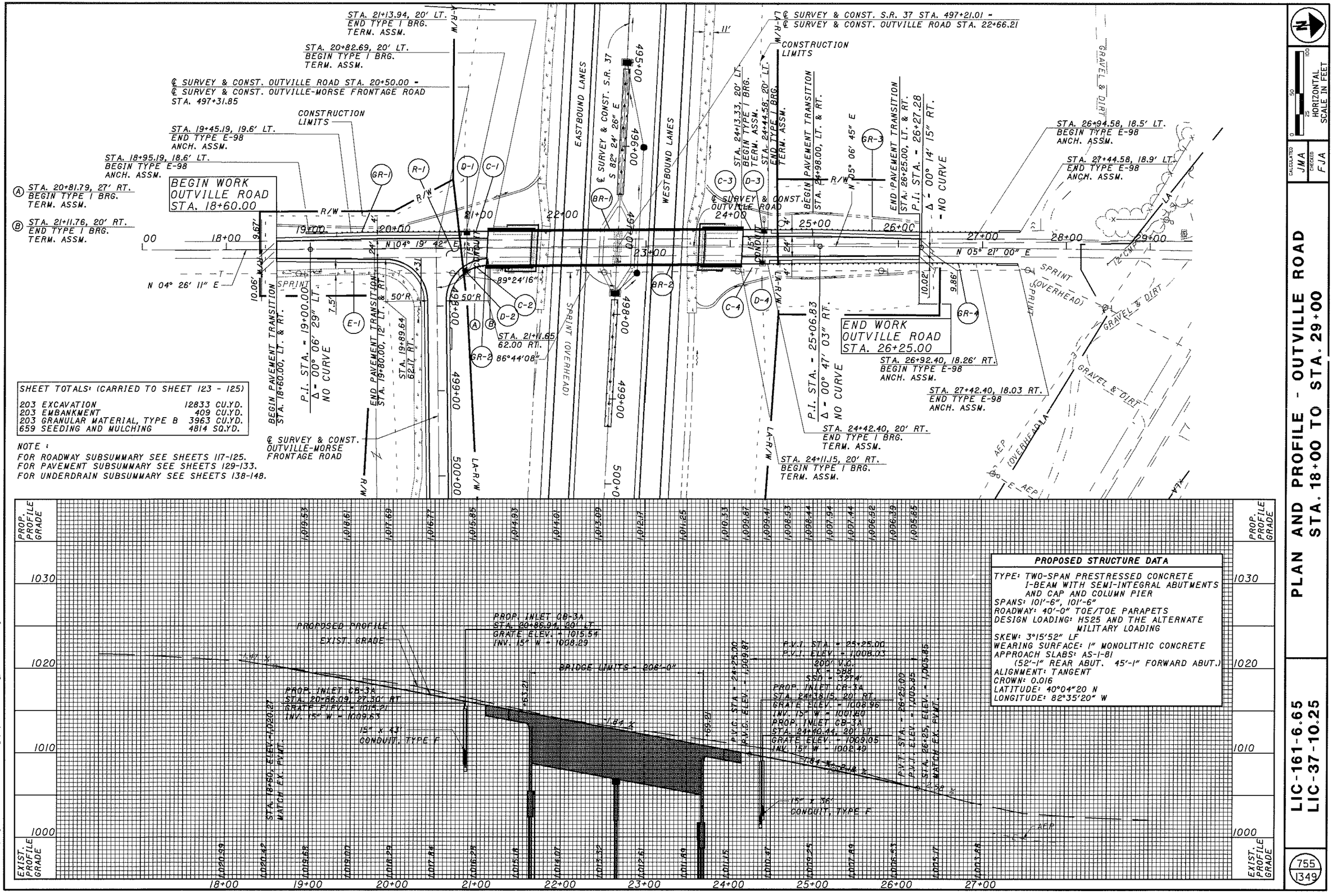
CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - SERVICE ROAD 11
STA. 242+00 TO STA. 243+00

LIC-161-6.65
LIC-37-10.25

754
1349

tduffney
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PROFILE - OUTVILLE ROAD
STA. 18+00 TO STA. 29+00

PLAN AND PRO
STA. 18+0

HORIZONTAL SCALE IN FEET
0 25 50 100

DESIGNED FJA
DETAILED JMA

LIC-161-6.65
LIC-37-10.25

755
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
100	
50	48
℄	
50	41
100	44
100	50
50	57
℄	32
50	0
100	
SHEET TOTAL	1014

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
406	0		
		468	3
99	3		
		171	6
86	4		
		143	8
68	5		
		113	10
84	9		
		16	2
0	0		
SHEET TOTAL		911	29

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE ROAD STA. 18+50 TO STA. 20+50

LIC-161-6.65
LIC-37-10.25

756
1349

PROP. R/W
EX. R/W
℄
MATCH LINE - SEE OUTVILLE-MORSE FRONTAGE RD
4:1
37.3' LT E=1008.2
1016.77 20+50.00 1017.84
23.5' LT E=1016.4
1017.69 20+00.00 1018.29
24.7' RT E=1016.4
24.4' LT E=1017.1
1018.81 19+50.00 1019.00
24.4' RT E=1017.1
26.4' LT E=1017.5
1019.53 19+00.00 1019.68
26.4' RT E=1017.5
28.0' LT E=1017.8
1020.27 18+60.00 1020.27
28.0' RT E=1017.8
BEGIN WORK
18+50.00 1020.42
ITEM 206 - CEMENT STABILIZATION

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
137	
	343
0	
0	
	472
162	
167	
117	
	458
	1440

100 50 ℄ 50 100

1020
1010
1000
990

END APPROACH SLAB
STA. 24+14.29

BEGIN APPROACH SLAB
END STRUCTURE
STA. 23+69.21

OUTVILLE ROAD @ MSE WALL

OUTVILLE ROAD @ MSE WALL

END APPROACH SLAB
BEGIN STRUCTURE
STA. 21+63.21

BEGIN APPROACH SLAB
STA. 21+10.79

MATCH LINE - SEE OUTVILLE MORSE FRONTAGE RD

EX. R/W

EX. R/W

6:1

10:1

4:1

1015.65
21+10.79
1016.04

67.0' RT
E=1003.0

69.5' LT
E=991.8

PROP. CB-3A, A.P.P.
STA. 20+86.94, 20.00' LT
GRATE ELEV. = 1015.54
INV. 15" W = 1008.29

EX. R/W

MATCH LINE - SEE OUTVILLE-MORSE

PROP. CB-3A, A.P.P. FRONTAGE RD
STA. 20+86.09, 21.50' RT
GRATE ELEV. = 1016.21
INV. 15" W = 1009.63

EX. R/W

6:1

10:1

4:1

1015.85
21+00.00
1016.28

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 966

53.5' LT
E=1000.0

67.0' RT
E=1005.7

ITEM 206 CEMENT STABILIZATION

BEGIN ITEM 203, GRANULAR MATERIAL, TYPE B 20+75.00

SHEET TOTAL

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2158	140		
0 (GMB)	1003 (GMB)		
		1937	79
		0 (GMB)	878 (GMB)
2576	54		
0 (GMB)	1144 (GMB)		
3879	51		
0 (GMB)	1404 (GMB)		
		3055	76
		0 (GMB)	1357 (GMB)
3394	130		
0 (GMB)	1826 (GMB)		
		1153	50
		0 (GMB)	660 (GMB)
2375	122		
0 (GMB)	1476 (GMB)		
		1486	58
		0 (GMB)	683 (GMB)
834	4		
0 (GMB)	0 (GMB)		
		574	2
		8205	265

CALCULATED JMA
CHECKED PEK

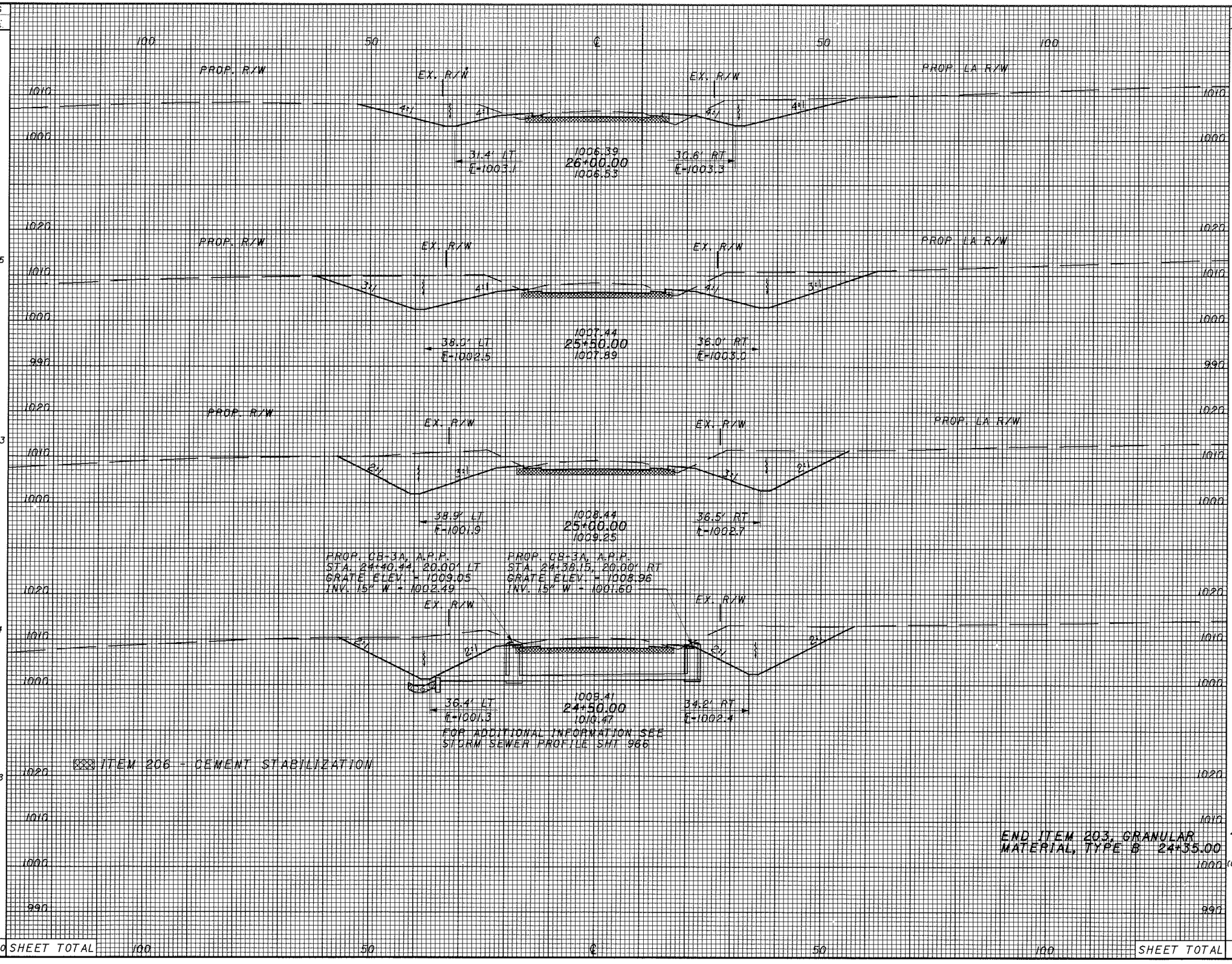
CROSS SECTIONS - OUTVILLE ROAD
STA. 21+00 TO STA. 23+94.21

LIC-161-6.65
LIC-37-10.25

757
1349

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SEEDING	
END WIDTH	SQ. YDS.
88	
	525
101	
	533
91	
	514
94	
	458
	2030



END AREA		VOLUME	
CUT	FILL	CUT	FILL
228	17		
		603	20
423	5		
		782	8
422	4		
		831	6
476	2		
		257	1
450	2		
0 (GMB)	0 (GMB)		
		1000	54
		0 (GMB)	385 (GMB)
		3473	89

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE ROAD
STA. 24+00 TO STA. 26+00

LIC-161-6.65
LIC-37-10.25

758
349

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
0	
104	
75	
226	
330	SHEET TOTAL

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

1010 1000 1020 1010 1000

26+50.00
1005.17

PROP. R/W EX. R/W EX. R/W PROP. LA R/W

4:1 4:1 4:1 4:1

28.0' LT
℄=1003.4

1005.85
26+25.00
1005.85
END WORK

28.0' RT
℄=1003.4

100 50 ℄ 50 100 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		69	9
149	19		
		175	17
		244	26

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE ROAD
STA. 26+25 TO STA. 26+50

LIC-161-6.65
LIC-37-10.25

759
1349

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STA. 497+21.01, S.R. 37 -
STA. 22+66.21, OUTVILLE ROAD

WESTBOUND LANES

493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00

℄ SURVEY & CONST. S.R. 37

93°15'52"

EASTBOUND LANES

SPRINT (OVERHEAD)

CONSTRUCTION LIMITS

℄ SURVEY & CONST. OUTVILLE ROAD STA. 20+50.00 -
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD STA. 497+31.85

P.T. STA. 494+45.94

TYPE 5 GUARDRAIL
TYPE T ANCH. ASSEMBLY

89°24'16" STA. 497+94.49
61.00 LT.

GR-2

℄ SURVEY & CONST.
OUTVILLE-MORSE FRONTAGE ROAD

LA-R/W

BEGIN WORK
OUTVILLE-MORSE
FRONTAGE ROAD
STA. 497+43.92

S 86° 16' 03" E

℄ SURVEY & CONST.
OUTVILLE ROAD

STA. 497+93.39
61.00 RT.

R/W

CONSTRUCTION LIMITS

E-1 E-2 D-1

T ESS T

+00.00
12' RES. DR.
(GRAVEL)

SPRINT

MATCH LINE STA. 503+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 761

Ⓐ STA. 498+01.15, 15' LT.
BEG. TYPE E-98
ANCH. ASSM.

Ⓡ STA. 498+51.15, 15' LT.
END TYPE E-98
ANCH. ASSM.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	49075 CU.YD.
203 EMBANKMENT	240 CU.YD.
659 SEEDING AND MULCHING	8614 SQ.YD.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
1030
1020
1010
1000

℄ OUTVILLE RD.
STA. 497+31.85
1016.48

P.V.I. STA. = 496+25.00
P.V.I. ELEV. = 1,015.28
(NO VERTICAL CURVE)

P.V.C. STA. 499+00.00
P.V.C. ELEV. 1,014.38

P.V.I. STA. = 499+50.00
P.V.I. ELEV. = 1,013.78
100' V.C.
K = 179
SSD = 1977'

P.V.T. STA. 500+00.00
P.V.T. ELEV. 1,012.90

1.20 -1.20 -1.76 -1.76

EXIST. GRADE

PROPOSED PROFILE

1016.48 1015.68 1014.98 1014.38 1014.06 1013.71 1013.32 1012.90 1012.62 1011.14 1010.26 1009.38 1008.49 1007.61 1006.73

1014.24 1016.68 1017.65 1015.18 1013.56 1014.44 1016.11 1018.47 1021.89 1024.19 1026.32 1029.08 1030.24

498+00 499+00 500+00 501+00 502+00 503+00

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CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 497+31.85 TO STA. 503+50

LIC-161-6.65
LIC-37-10.25

760
349

MATCH LINE STA. 503+50 OUTVILLE-MORSE FRONTAGE RD SEE SHEET 760

MATCH LINE STA. 514+50 OUTVILLE-MORSE FRONTAGE RD SEE SHEET 762

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 37

504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00

LA-R/W

R/W

S 86° 16′ 03″ E

P.C. STA. 508+14.13

CONSTRUCTION LIMITS

E-1 E-2 E-3 E-4 E-5 D-1 R-4

LA (OVERHEAD)

OLD WELL

WELL

WOOD FENCE

12″

15″

STA. 513+74
CULVERT NO. 6

36″ CONDUIT
TYPE A

STA. 512+97
CULVERT NO.6

℄ SURVEY & CONST.
OUTVILLE-MORSE FRONTAGE ROAD

36″ CONDUIT,
TYPE A

T ESMT

LOT 36
LOT 37

+00.00
12′ RES. DR.
(GRAVEL)

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	13511 CU.YD.
203 EMBANKMENT	1392 CU.YD.
659 SEEDING AND MULCHING	16259 SQ.YD.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

OUTVILLE-MORSE
FRONTAGE ROAD
CURVE DATA
P.I. STA. = 512+00.30
Δ = 03° 51′ 37″ (RT)
Dc = 00° 30′ 00″
R = 11,459.19′
T = 386.17′
L = 772.05′
E = 6.51′
e_{max} = NC

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
EXIST. GRADE
PROPOSED PROFILE
-1.76 %
1030 1020 1010 1000 990

1006.76 1005.85 1004.97 1004.09 1003.21 1002.33 1001.45 1000.57 999.69 998.81
997.92 997.04 996.16 995.28 994.40 993.52 992.64 991.76 990.88 990.00 989.12 988.24 987.35
1031.56 1032.30 1033.05 1033.89 1034.32 1034.38 1032.87 1030.40 1027.38 1023.57 1020.56 1018.99 1018.29 1016.41 1010.79 1010.32 1009.67 1005.45 1000.93 1001.97 1002.94 1003.18 1005.21

504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 503+50 TO STA. 514+50

LIC-161-6.65
LIC-37-10.25

761
1349

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OUTVILLE-MORSE
FRONTAGE ROAD
CURVE DATA
P.I. STA. = 512+00.30
Δ = 03° 51′ 37″ (RT)
Dc = 00° 30′ 00″
R = 11,459.19′
T = 386.17′
L = 772.05′
E = 6.51′
e_{max} = NC

SEE SHEET 761
MATCH LINE STA. 514+50 OUTVILLE-MORSE FRONTAGE RD

MATCH LINE STA. 525+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 763

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	44321 CU.YD.
203 EMBANKMENT	3714 CU.YD.
659 SEEDING AND MULCHING	9826 SQ.YD.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 514+50 TO STA. 525+50

LIC-161-6.65
LIC-37-10.25

762
349

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PLAN AND PROFILE
FRONTAGE ROAD, STA. 525+50 TO STA. 536+50
LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

763
1349

MATCH LINE STA. 525+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 762

MATCH LINE STA. 536+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 764

WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
S 82° 24' 26" E
CONSTRUCTION LIMITS
532+36 CULVERT NO. 8
WOOD BRIDGE
METAL POLE BARN
2-STY WOOD BARN
2-STY WOOD HOUSE
WOOD GARAGE
SEPTIC
WELL
FENCE
CONC.
GRAVEL DR.
BASKETBALL HOOP
SATELLITE DISH
SEPTIC AREA
BURIED PROPANE TANK
LOT 38
LOT 39
LOT 40
+20.00 12' RES. DR. (GRAVEL)
+50.00, 50'R 98.30 RT
+00.00 12' RES. DR. (ASPHALT)
+18.89, 50'R 201.16' RT
+66.95, 50'R 150.00' RT
+50.00 12' RES. DR. (ASPHALT)
+00.00 50'R 50.00 RT
STONE WALL
BIRD HOUSE
2-STY WOOD BRICK
BRICK
WOOD DECK
SHRUB
T ESMT
U ESMT
LA
LA-R/W
R/W
ASPHALT
CB-4 AP.P.
84" CONDUIT, TYPE A
33" CONDUIT
6-MB
7-MB
E-1
E-2
E-3
E-4
E-5
E-6
D-1
D-2
D-3
R-1

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	35151 CU. YD.
203 EMBANKMENT	6677 CU. YD.
659 SEEDING AND MULCHING	9027 SQ. YD.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
700' V.C.
P.V.I. STA. = 530+00.00
P.V.I. ELEV. = 946.16
K = 210
P.V.C. STA. = 526+50.00
P.V.C. ELEV. = 956.07
P.V.T. STA. = 533+50.00
P.V.T. ELEV. = 947.91
PROPOSED PROFILE
PROP. CB-4, AP.P. ℄ S.R. 37 STA. 532+25.00, 88.50' RT
GRATE ELEV. = 945.10
INV. 21" N = 938.23
EXIST. GRADE
84" x 433' CONDUIT, TYPE A
-0.53 %
+0.50 %
AEP

526+00 527+00 528+00 529+00 530+00 531+00 532+00 533+00 534+00 535+00 536+00

tduffney
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SEE SHEET 763
MATCH LINE STA. 536+50 OUTVILLE-MORSE FRONTAGE RD

MATCH LINE STA. 547+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 765

300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00

℄ SURVEY & CONST.
C.R. 539A EXTENSION

LA-R/W

304+19
CULVERT NO. 9

WESTBOUND LANES

537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+00

541+06
CULVERT NO.9

℄ SURVEY & CONST. S.R. 37

LA

EASTBOUND LANES

LA-R/W

26'
40'

22'

S 82° 24' 26" E

90°

7.5'

E-1

+41

15"

+19

540+51
CULVERT NO 9

42" CONDUIT, TYPE A

7.5'

E-2

+00

℄ SURVEY & CONST.
OUTVILLE-MORSE FRONTAGE ROAD

D-1

CONSTRUCTION
LIMITS

R/W

T ESMT

+75.00
12' RES. DR.
(GRAVEL)

LOT 40

LOT 41

ST. ALBANS TWP

GRANVILLE TWP

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	104735 CU.YD.
203 EMBANKMENT	119 CU.YD.
659 SEEDING AND MULCHING	16091 SQ.YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

980 970 960 950

949.41 949.66 949.91 950.16 950.41 950.66 950.91 951.16 951.41 951.66 951.91 952.02 952.12 952.19 952.24 952.27 952.28 952.27 952.24 952.18 952.11 952.01 951.90 951.64 951.39 951.13 950.88 950.62 950.37

984.28 984.73 983.24 983.22 982.76 979.63 976.81 969.89 959.93 951.08 946.96 952.64 961.47 971.84 974.86 975.45 971.68 973.82 973.28 968.50 974.78 974.67 966.51

P.V.C. STA. = 541+50.00
P.V.C. ELEV. = 951.91

P.V.I. STA. = 543+00.00
P.V.I. ELEV. = 952.66
300' V.C.
SSD = 1218' K = 297

P.V.T. STA. = 544+50.00
P.V.T. ELEV. = 951.90

+0.50 %
-0.51 %
+0.50 %
-0.51 %

EXIST. GRADE
PROPOSED PROFILE

537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+00

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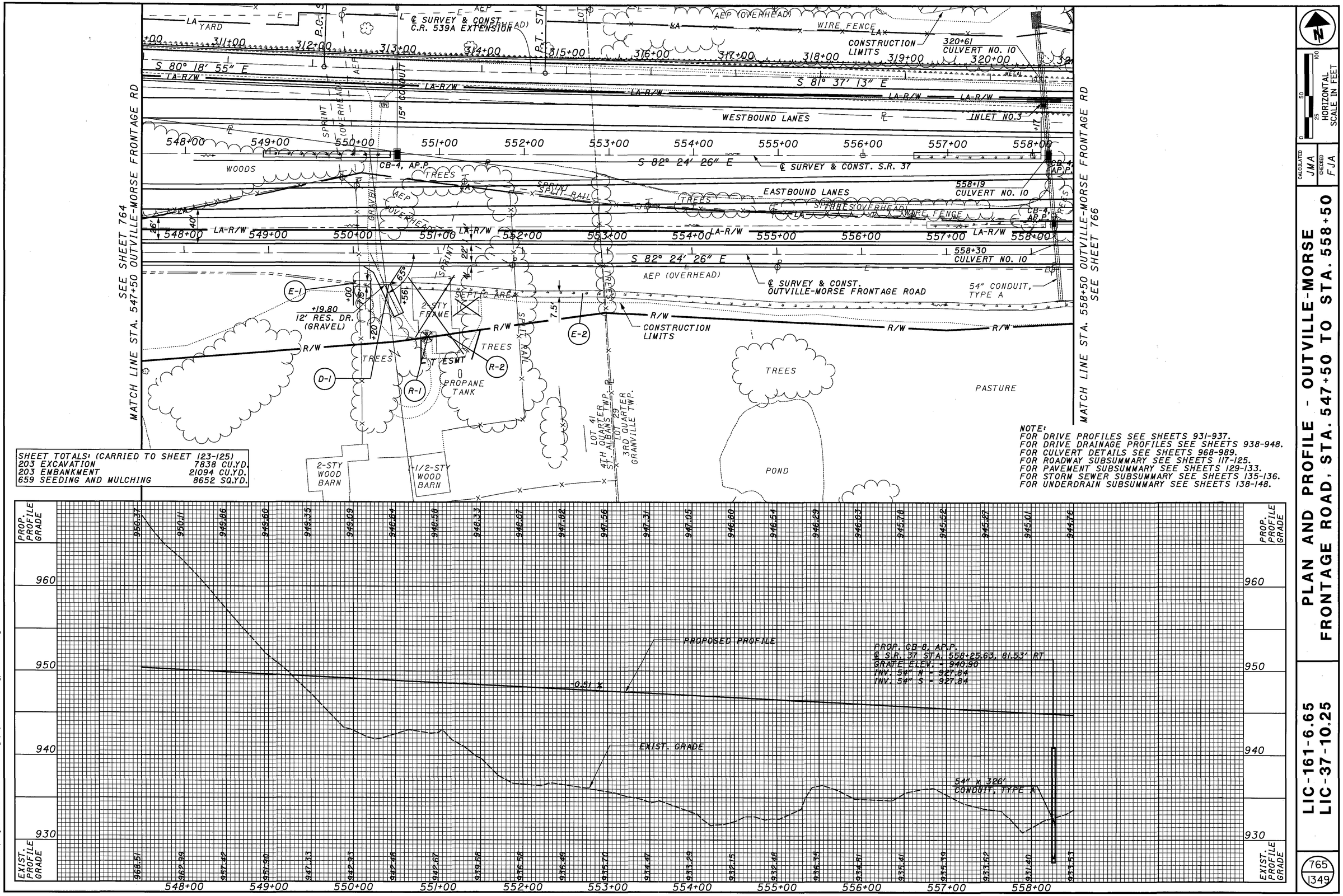
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - OUTVILLE-MORSE
FRONTAGE ROAD, STA. 536+50 TO STA. 547+50

LIC-161-6.65
LIC-37-10.25

764
1349



SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	7838 CU.YD.
203 EMBANKMENT	21094 CU.YD.
659 SEEDING AND MULCHING	8652 SQ.YD.

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 547+50 TO STA. 558+50

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

765
349

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MATCH LINE STA. 558+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 765

MATCH LINE STA. 569+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 767

GATE
LA
P.C. STA.
P.T. STA.
SPRINT (OVERHEAD)
WOODS
WIRE FENCE
CONSTRUCTION LIMITS
R/W
℄ SURVEY & CONST. C.R. 539A EXTENSION
WETLAND
TOTAL AREA- 2.968 AC.
DISTURBED AREA- 0.685 AC.
322+00 323+00 324+00 325+00 326+00 327+00 328+00 329+00 330+00 331+00
S 82° 24' 26" E
LA-R/W
WESTBOUND LANES
559+00 560+00 561+00 562+00 563+00 564+00 565+00 566+00 567+00 568+00 569+00
15" CONDUIT
CB-4, AP.P.
CB-4, A.P.P.
MEDIAN U-TURN OPENING
STA. 565+00
℄ SURVEY & CONST. S.R. 37 EASTBOUND LANES
TREES
88°18'38"
AEP (OVERHEAD)
GR-1
E-1
E-2
E-3
E-4
R-1
R-2
D-1
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
STA. 562+07.01
46.00' RT.
PASTURE
GRASS DRIVE
WELL
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD STA. 561+59.63 - ℄ SURVEY & CONST. MORSE ROAD STA. 18+49.92
STA. 561+14.97
46.00' RT.
S.T. STA. 17+11.60
CONSTRUCTION LIMITS
STA. 566+09.67, 15' LT.
BEG. TYPE E-98
ANCH. ASSM.
STA. 566+59.67, 15' LT
END TYPE E-98
ANCH. ASSM.
TYPE 5 GUARDRAIL
+26.28
12' RES. DR. (GRAVEL)
GRAVEL DR.
WIRE FENCE
N 05° 54' 30" E
14"
LEACH BED (PER OWNER)
BASEMENT DRAIN

NOTE:
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	21704 CU.YD.
203 EMBANKMENT	3387 CU.YD.
659 SEEDING AND MULCHING	7356 SQ.YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
944.76 944.50 944.25 943.99 943.74 943.61 943.47 943.32 943.16 942.93 942.81 942.62 942.48 942.02 941.62 941.21 940.81 940.41 940.00 939.60 939.20 936.79 936.39 937.99 937.59 937.18 936.76
933.53 934.92 935.71 937.44 940.51 944.45 950.37 949.89 951.50 955.96 959.18 959.11 956.92 951.44 946.61 941.09 936.86 937.94 937.90 937.60 939.14 940.61 939.63
960 950 940 930
559+00 560+00 561+00 562+00 563+00 564+00 565+00 566+00 567+00 568+00 569+00
P.V.I. STA. = 561+50.00
P.V.I. ELEV. = 943.23
200' V.C.
K = 667
SD = 35 MPH
P.V.I. STA. = 560+50.00
P.V.I. ELEV. = 943.74
℄ MORSE ROAD
-0.51 %
-0.81 %
P.V.I. STA. = 562+50.00
P.V.I. ELEV. = 942.42
EXIST. GRADE
PROPOSED PROFILE
AEP

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 558+50 TO STA. 569+50

LIC-161-6.65
LIC-37-10.25

766
349

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WETLAND
TOTAL AREA- 2.968 AC.
DISTURBED AREA
- 0.685 AC.

MATCH LINE STA. 569+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 766

MATCH LINE STA. 580+50 OUTVILLE-MORSE FRONTAGE RD
SEE SHEET 768

P.C. STA. 333+88.38
P.T. STA. 338+64.44
P.C. STA. 571+38.22
P.T. STA. 576+05.61
P.C. STA. 571+33.81
P.T. STA. 576+01.28

CONSTRUCTION LIMITS
℄ SURVEY & CONST. C.R. 539A EXTENSION
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
CB-3A, AP.P. WESTBOUND LANES
EASTBOUND LANES
CB-4, AP.P.
CB-3A, AP.P.
21" CONDUIT
15" CONDUIT
12" CONDUIT
18" CONDUIT
15" CONDUIT TYPE 5 GUARDRAIL
6½'x4' CATTLE CROSSING
TREES
DRIVE
ASHLAND OIL PIPE LINE
AEP (OVERHEAD)
EX. UTILITY EASEMENT
36" CONDUIT, TYPE A CULVERT NO. II
TO BE REMOVED
TO BE SET / REMOVED
CONC. PAD
DUSTY WOOD BARN
PASTURE
LOT 28
LOT 27
LOT 27
LOT 26
CHIMNEY CREEK
N 82° 24' 26" E
S 78° 33' 53" E
+0.00
12' RES. DR. (GRAVEL)

OUTVILLE-MORSE FRONTAGE ROAD
CURVE DATA
P.I. STA. = 573+67.71
Δ = 05° 50' 33" (RT)
Dc = 01° 15' 00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'
e_{max} = 0.030

STA. 575+60.07, 15' RT.
BEGIN TYPE TST BRG.
TERM. ASSM.

STA. 575+91.32, 15' RT.
END TYPE TST BRG.
TERM. ASSM.

STA. 576+41.32, 15' RT.
BEGIN TYPE E-98
ANCH. ASSM.

STA. 575+90.81, 15' LT.
END TYPE TST BRG.
TERM. ASSM.

STA. 575+59.56, 15' LT.
BEGIN TYPE TST BRG.
TERM. ASSM.

STA. 576+91.32, 15' RT.
END TYPE E-98
ANCH. ASSM.

(A) STA. 572+13.00 27' RT.
BEGIN TYPE T
ANCH. ASSM.

(B) STA. 572+21.58 18' RT.
END TYPE T
ANCH. ASSM.

(C) STA. 573+71.64, 15' LT.
BEGIN TYPE TST BRG.
TERM. ASSM.

(D) STA. 574+02.89, 15' LT.
END TYPE TST BRG.
TERM. ASSM.

(E) STA. 573+71.64, 15' RT.
BEGIN TYPE TST BRG.
TERM. ASSM.

(F) STA. 574+02.89, 15' RT.
END TYPE TST BRG.
TERM. ASSM.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	1513 CU.YD.
203 EMBANKMENT	6437 CU.YD.
203 GRANULAR MATERIAL, TYPE B	2188 CY.YD.
659 SEEDING AND MULCHING	5126 SQ.YD.

PROP. CB-4, AP.P.
℄ S.R. 37 STA. 573+50.00, 83.00' RT.
GRATE ELEV. = 929.02
INV. 18" N = 925.52

BRIDGE LIMITS
- 150.75'

-0.81 % | -1.25 %

HW100 EL. 926.00
HW50 EL. 925.60

PROPOSED PROFILE

EXIST. GRADE

6" PIPE LINE

36" x 282'
CONDUIT, TYPE A

P.V.I. STA. = 573+00.00
P.V.I. ELEV. = 933.96

P.V.I. STA. = 574+00.00
P.V.I. ELEV. = 933.16
200' V.C.
K=155

P.V.I. STA. = 575+00.00
P.V.I. ELEV. = 937.90

PROP. PROFILE GRADE
EXIST. PROFILE GRADE

936.78 936.36 935.97 935.57 935.17 934.76 934.36 933.96 933.75 933.53 933.29 933.04 932.78 932.50 932.21 931.90 931.27 930.65 930.02 929.40 928.77 928.15 927.52 926.90 926.27 925.65 925.02

939.53 938.17 936.78 936.81 929.42 928.94 928.25 928.69 927.58 924.95 925.27 919.62 923.12 923.21 923.73 924.21 923.82 923.70 923.68 923.41 923.39 923.10 922.81

940 930 920 910

570+00 571+00 572+00 573+00 574+00 575+00 576+00 577+00 578+00 579+00 580+00

PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE ABUTMENTS AND PIERS
SPANS: 46'-0", 57'-6", 46'-0" C/C SUPPORTS ALONG REFERENCE CHORD
ROADWAY: 30'-0" F/F GUARDRAIL
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°00'00" RF TO REFERENCE CHORD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (15' LONG)
ALIGNMENT: CURVE RIGHT
SUPERELEVATION: 0.03 MAX.
LATITUDE: 40°04'10" N
LONGITUDE: 82°35'40" W

HORIZONTAL SCALE IN FEET
0 25 50 100

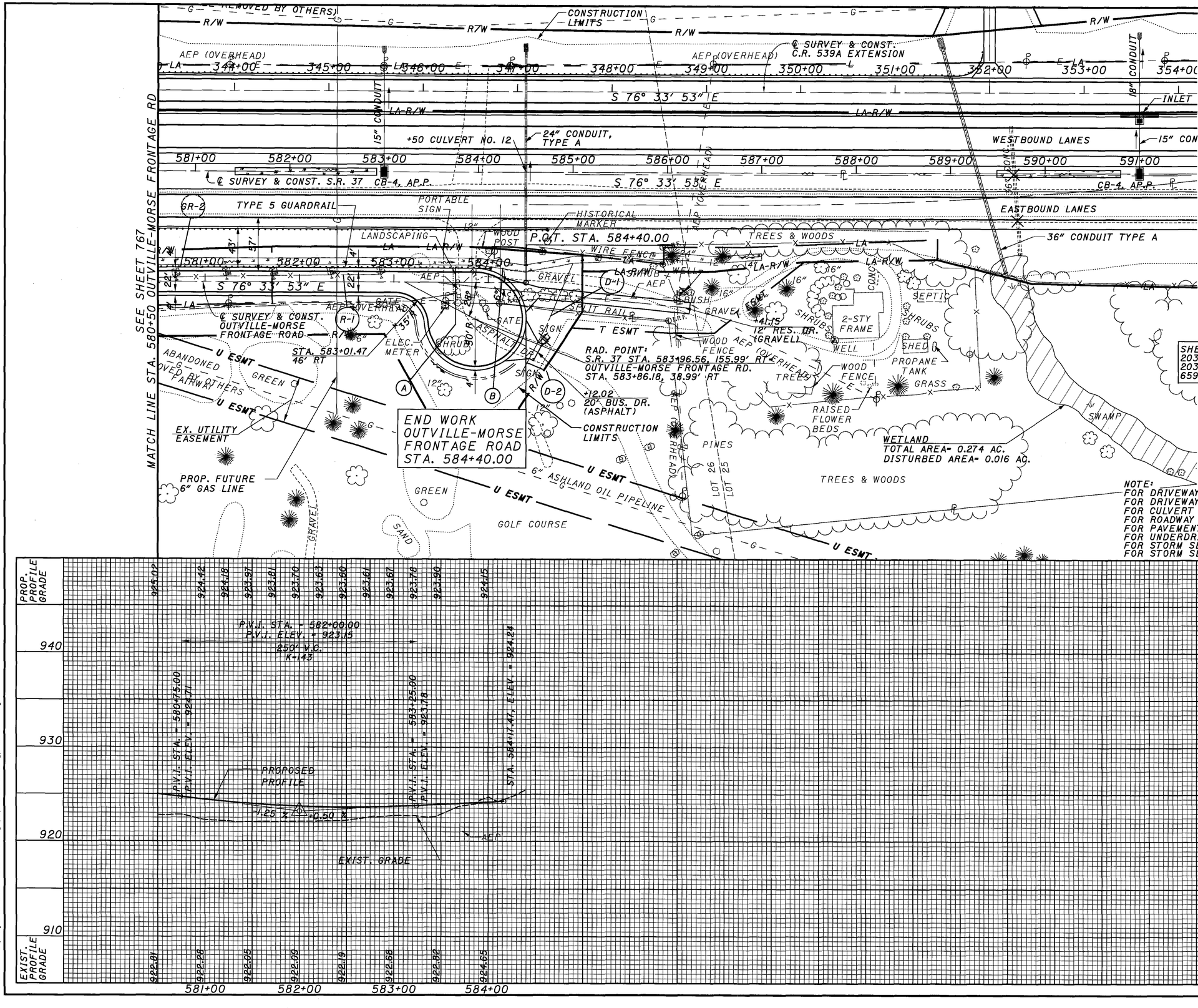
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 569+50 TO STA. 580+50

LIC-161-6.65
LIC-37-10.25

767
1349

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CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE - OUTVILLE-MORSE FRONTAGE RD, STA. 580+50 TO STA. 584+40.00

LIC-161-6.65
LIC-37-10.25

768
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
131	747
138	756
134	417
0	
	1920

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE S.R. 37

PROP. LA R/W

PROP. R/W

113.5' LT
℄=986.9

1014.38
499+00.00
1015.18

22.9' RT
℄=1012.5

117.0' LT
℄=986.7

1014.98
498+50.00
1017.65

21.9' RT
℄=1013.4

120.5' LT
℄=986.5

1015.68
498+00.00
1016.68

21.2' RT
℄=1014.3

BEGIN WORK
OUTVILLE-MORSE
FRONTAGE ROAD
STA. 497+43.92

STA. 497+43.92 (AHEAD)

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1282	0	2606	0
1533	0	2738	0
1425	0	1490	0
12	0		
		6834	0

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

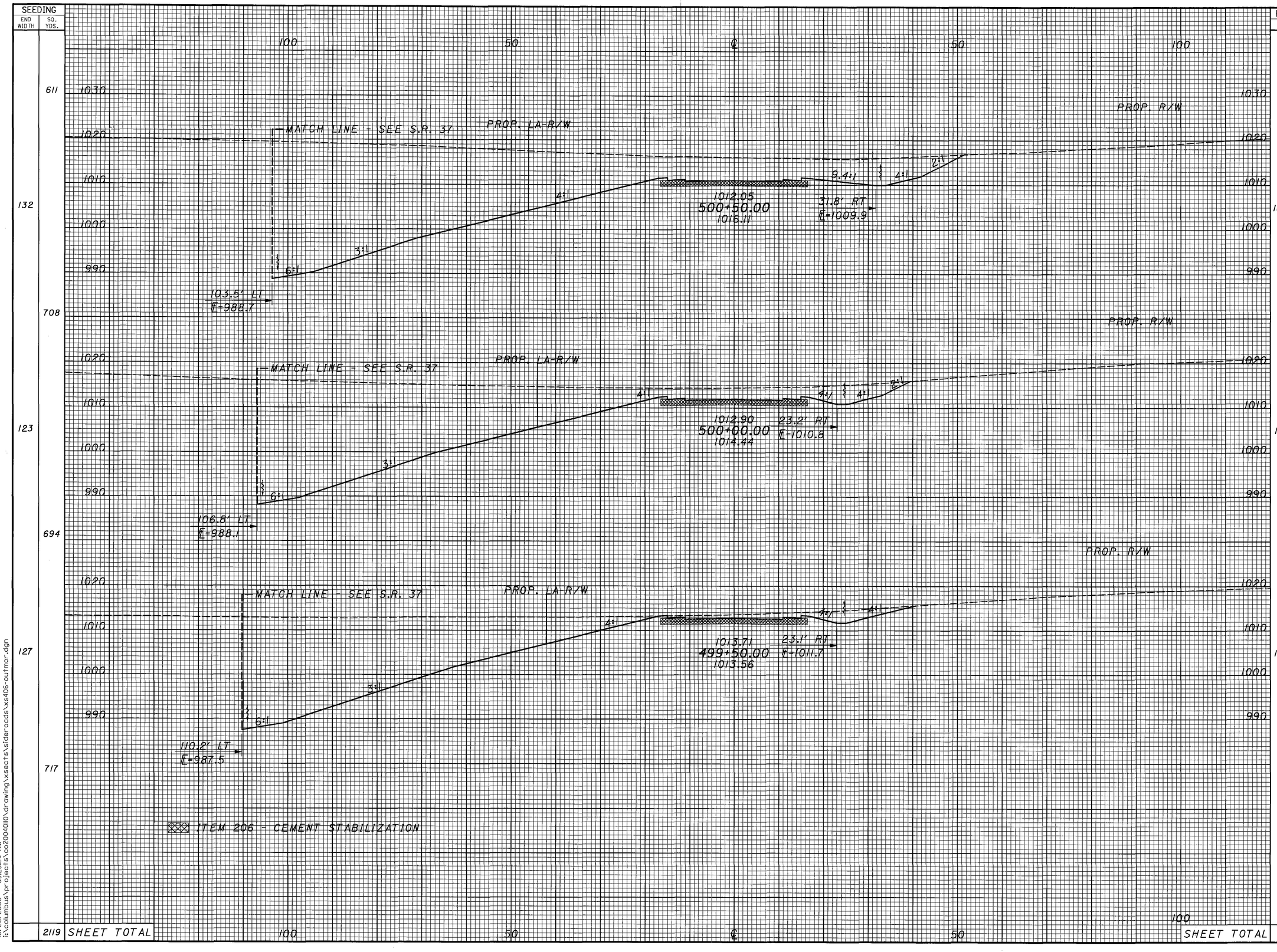
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA.498+00 TO STA. 499+00

LIC-161-6.65
LIC-37-10.25

769
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	611				
132		1862	0		
	708			3077	0
123		1461	0		
	694			2476	0
127		1213	0		
	717			2310	0
	2119			7863	0



CALCULATED JMA
CHECKED PEK

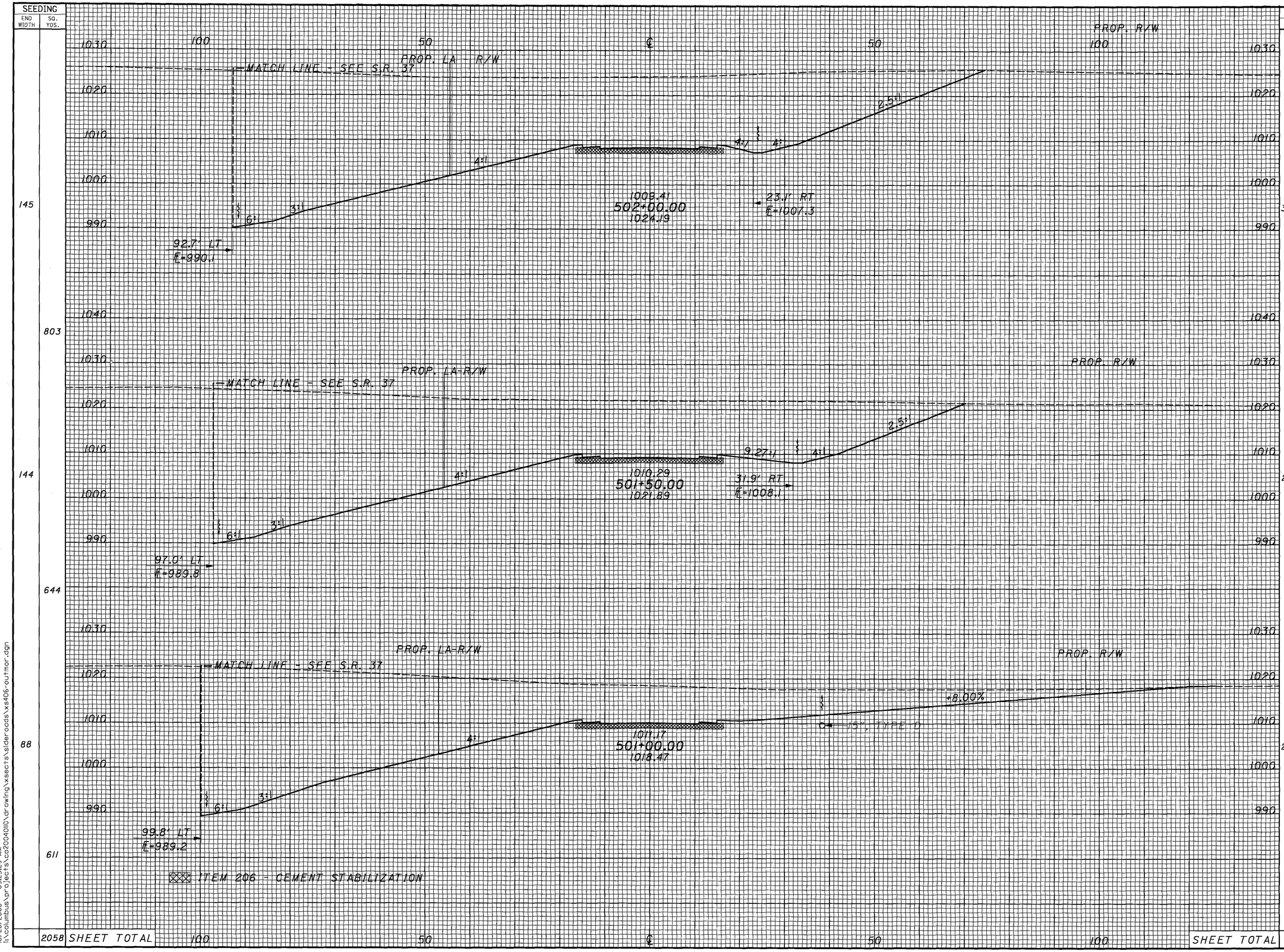
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 499+50 TO STA. 500+50

LIC-161-6.65
LIC-37-10.25

770
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		SHEET TOTAL				
145	803	100 50 ℄ 50 100	3042	0	5400	0
144	644	100 50 ℄ 50 100	2789	0	4773	0
88	611	100 50 ℄ 50 100	2366	0	3914	0
	2058	SHEET TOTAL			14087	0



CALCULATED JMA
CHECKED PEK

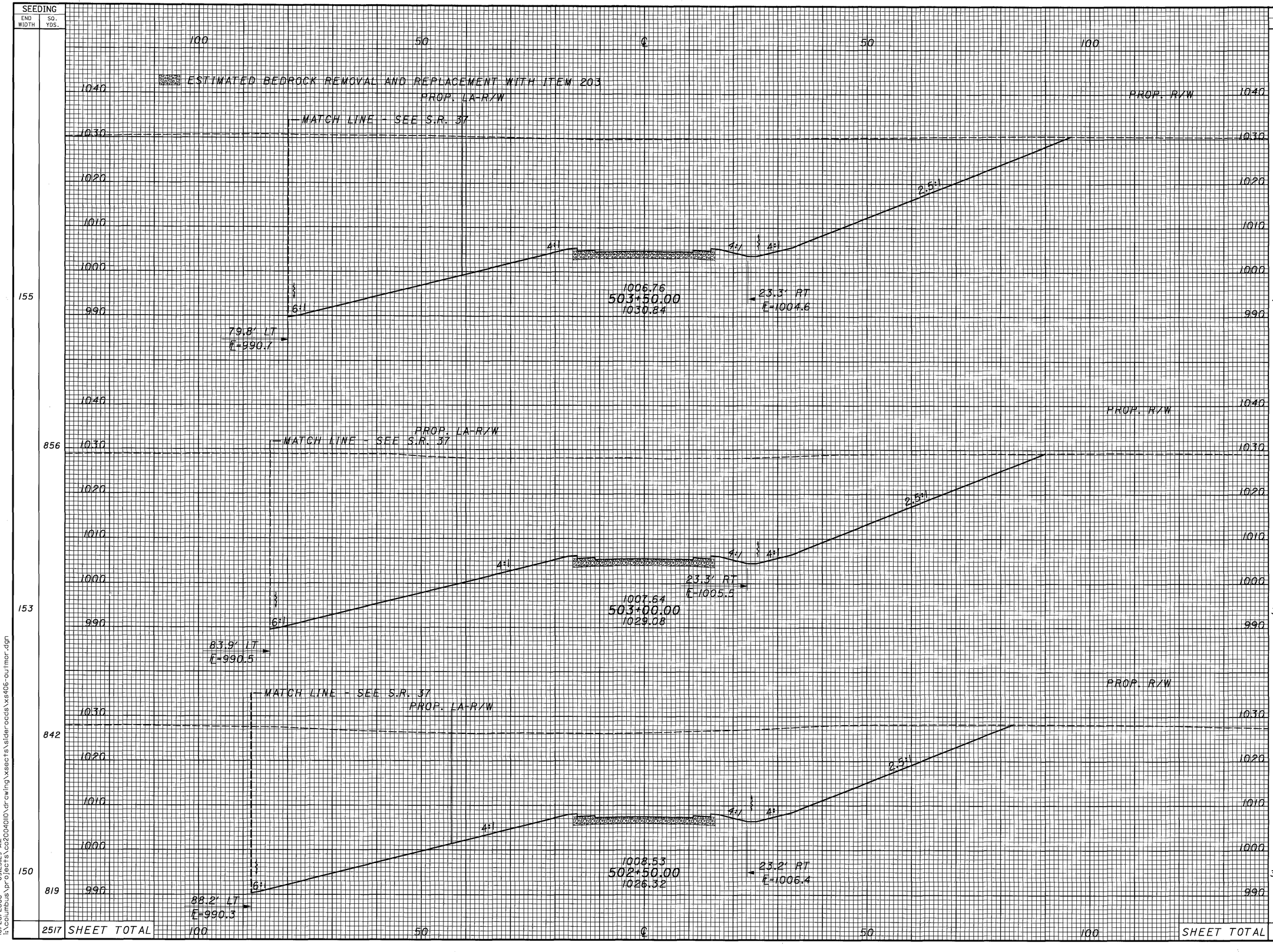
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 501+00 TO STA. 502+00

LIC-161-6.65
LIC-37-10.25

771
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
155		503+50.00	4176	52		
	856				7460	96
153		503+00.00	3881	52		
	842				6804	96
150	819	502+50.00	3467	52	6027	48
	2517	SHEET TOTAL			20291	240



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 502+50 TO STA. 503+50

LIC-161-6.65
LIC-37-10.25

772
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	
155		
	864	
156		
	864	
	1728	SHEET TOTAL

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

100 50 ℄ 50 100

MATCH LINE - SEE S.R. 37
PROP. LA-R/W

PROP. R/W

4:1 4:1 4:1 2.5:1 6:1

1005.00
504+50.00
1033.55

23.1' RT
E=1002.9

73.0' LT
E=991.1

MATCH LINE SEE S.R. 37
PROP. LA-R/W

PROP. R/W

4:1 4:1 4:1 2.5:1 6:1

1005.88
504+00.00
1032.30

23.4' RT
E=1003.7

76.4' LT
E=990.9

100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
4532	52		
		8246	96
4374	52		
		7917	96
		16163	192

CALCULATED JMA
CHECKED PEK

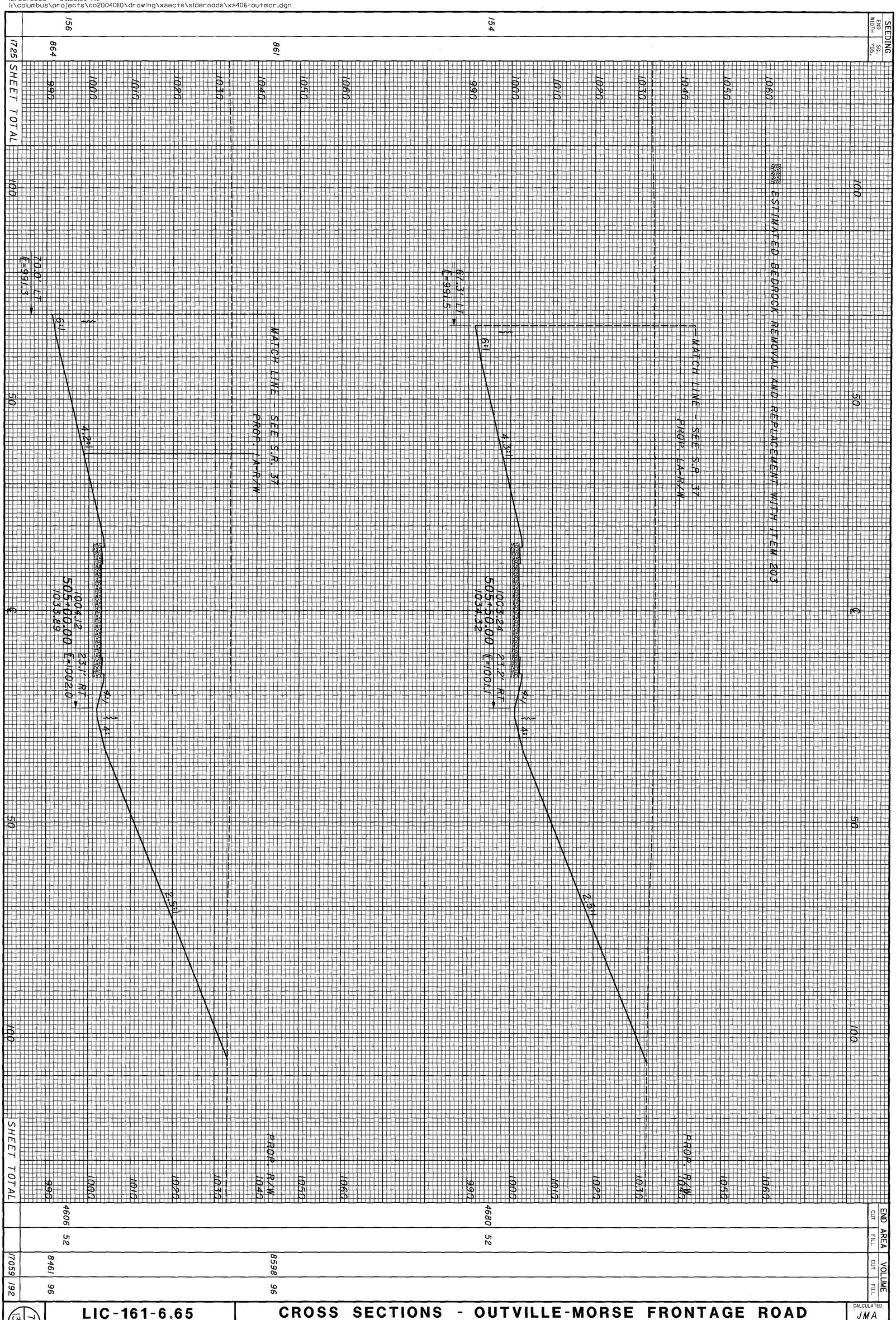
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 504+00 TO STA. 504+50

LIC-161-6.65
LIC-37-10.25

773
1349

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774 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 505+00 TO STA. 505+50

CALCULATED JMA
CHECKED PEK

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
	ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203				
	—MATCH LINE - SEE S.R. 37 PROP. LA-R/W				
142		3783	52		
797	—MATCH LINE - SEE S.R. 37 PROP. LA-R/W	7344	96		
145		4148	52		
822		8029	96		
1619	SHEET TOTAL	15373	192		

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 507+00 TO STA. 507+50

LIC-161-6.65
LIC-37-10.25

776
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
131	
137	
	744
	775
1519	SHEET TOTAL

100 50 ℄ 50 100

1040 1030 1020 1010 1000 990 980

PROP. R/W

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

6:1 4.8:1 4:1 4:1 2.5:1

48.4' LT
E=991.1

997.94
508+50.00
1020.56

23.1' RT
E=996.0

1050 1040 1030 1020 1010 1000 990 980

PROP. R/W

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

6:1 4.8:1 4:1 4:1 2.5:1

51.5' LT
E=991.3

998.83
508+00.00
1025.57

23.1' RT
E=996.9

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

100 50 ℄ 50 100

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2946	52		
3361	52		
6615	96		
12455	192		

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 508+00 TO STA. 508+50

LIC-161-6.65
LIC-37-10.25

777
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		1030				
		1020				
		1010				
		1000				
		990				
119		980	2435	52		
		1040				
		1030				
	664	1020			4743	96
		1010				
		1000				
		990				
120		980	2687	52		
		1040				
		1030				
	686	1020			5062	96
		1010				
		1000				
		990				
127	717	980	2780	52	5302	96
	2067	SHEET TOTAL			15107	288

100 50 ℄ 50 100

PROP. R/W

—MATCH LINE - SEE S.R. 37
PROP. LA-R/W

6:1 5.2:1 4:1 4:1 3:1

41.0' LT
E-990.3

995.30
510+00.00
1016.41

23.1' RT
E-993.2

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

—MATCH LINE - SEE S.R. 37
PROP. LA-R/W

6:1 5.2:1 4:1 4:1 2.5:1

43.6' LT
E-990.7

996.18
509+50.00
1018.29

23.3' RT
E-994.2

—MATCH LINE - SEE S.R. 37
PROP. LA-R/W

6:1 5:1 4:1 4:1 2.5:1

45.8' LT
E-990.9

997.06
509+00.00
1018.99

23.2' RT
E-995.1

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 509+00 TO STA. 510+00

LIC-161-6.65
LIC-37-10.25

778
1349

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SEEDING				END AREA		VOLUME	
STA.	END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
100							
50							
℄							
50							
100							
511+50.00	126			2624	0		
510+50.00	119	661		1993	52	4100	96
510+00.00	114			1972	0		
509+50.00	119	647		1993	48	3671	48
509+00.00	119	667		1993	0	4256	0
508+50.00	126			2624	0		
SHEET TOTAL		1975				12027	144

ITEM 206- CEMENT STABILIZATION

ESTIMATED BEDROCK REMOVAL AND REPLACEMENT WITH ITEM 203

511+50.00 — 992.65 — 1009.67 — 35.2' LT ℄=989.0 — 49.3' RT ℄=984.0

510+50.00 — 994.42 — 1010.79 — 39.5' LT ℄=990.0 — 23.1' RT ℄=992.3

510+00.00 — 993.53 — 1010.32 — 37.4' LT ℄=989.5 — 23.2' RT ℄=991.4

509+50.00 — 994.42 — 1010.79 — 39.5' LT ℄=990.0 — 23.1' RT ℄=992.3

508+50.00 — 992.65 — 1009.67 — 35.2' LT ℄=989.0 — 49.3' RT ℄=984.0

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

PROP. R/W

6:1 4:1 3:1 2:1

CALCULATED JMA

CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 510+50 TO STA. 511+50

LIC-161-6.65
LIC-37-10.25

779
1349

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SEEDING	
END WIDTH	SQ. YDS.
95	
636	
134	
714	
123	
692	
2042	SHEET TOTAL

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

MATCH LINE - SEE S.R. 37
PROP. LA R/W
PROP. R/W
6:1
4:1
3:1
2:1
990.01
513+00.00
1001.97
30.8' LT
℄=987.1
46.6' RT
℄=982.0

STA 512+96.78, CULVERT NO. 6,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 973

MATCH LINE - SEE S.R. 37
PROP. LA R/W
PROP. R/W
6:1
4:1
3:1
2:1
990.89
512+50.00
1000.93
32.1' LT
℄=987.8
54.2' RT
℄=981.0

MATCH LINE - SEE S.R. 37
PROP. LA R/W
PROP. R/W
6:1
4:1
3:1
2:1
991.77
512+00.00
1005.45
33.5' LT
℄=988.4
51.8' RT
℄=982.5

1020
1010
1000
990
980
970

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2108	0		
		3905	0
2110	0		
		3983	0
2192	0		
		4460	0
		12348	0
SHEET TOTAL			

CALCULATED JMA
CHECKED PEK

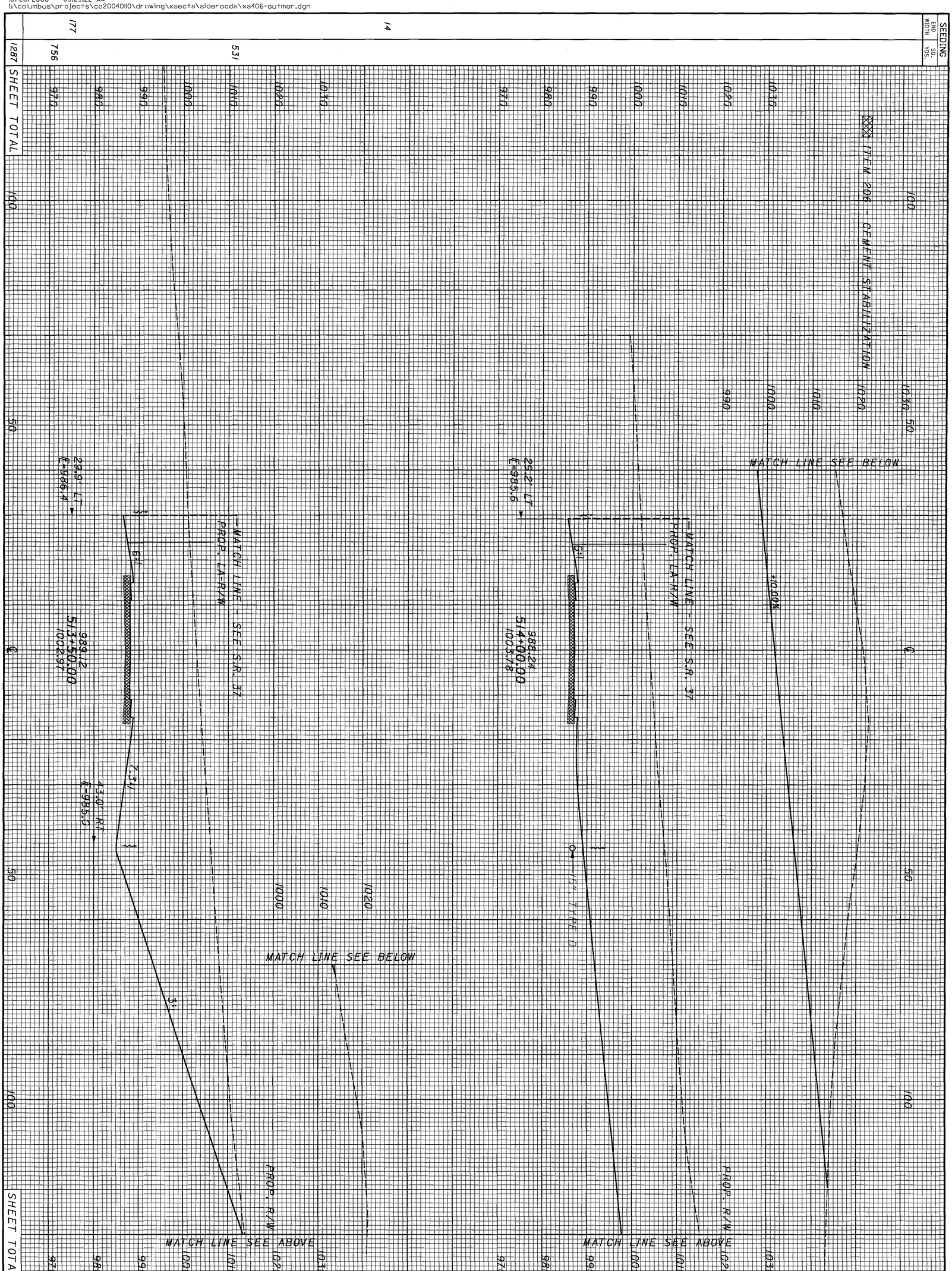
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 512+00 TO STA. 513+00

LIC-161-6.65
LIC-37-10.25

780
1349

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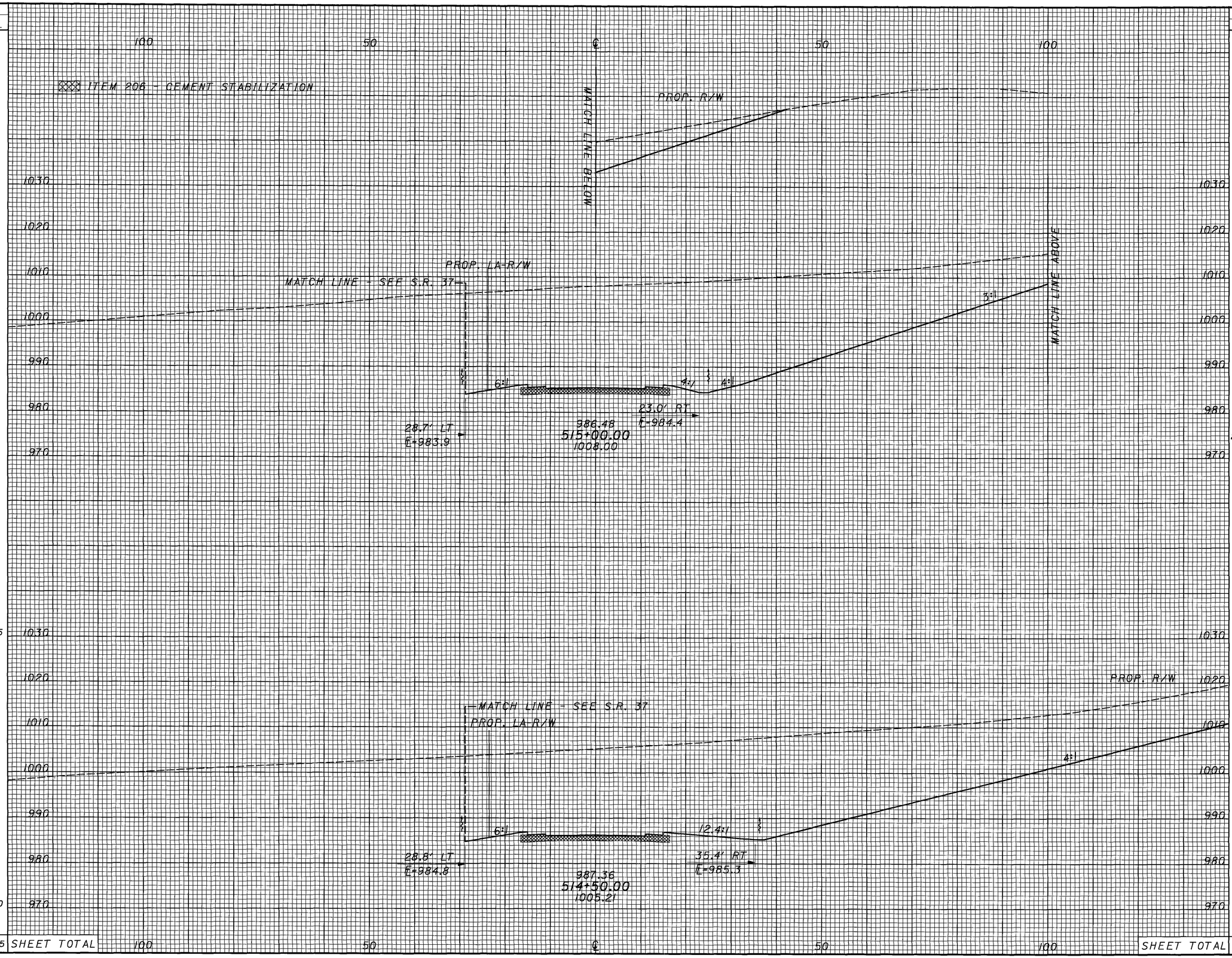
781
1349

LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 513+50 TO STA. 514+00

CALCULATED JMA
CHECKED PEK

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
149		2520	0		
202		3071	0		
				5177	0
				7213	0
1575	SHEET TOTAL			12390	0



LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 514+50 TO STA. 515+00

CALCULATED JMA
CHECKED PEK

782
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
145				3841	0
861				6676	0
165				3369	0
872				5453	0
1733	SHEET TOTAL			12129	0

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. LA-R/W

MATCH LINE - SEE S.R. 37

PROP. R/W

3:1

6:1

4:1

4:1

29.2' LT
E-982.1

984.71
516+00.00
1016.30

23.1' RT
E-982.6

SEE BELOW MATCH LINE

PROP. R/W

MATCH LINE SEE ABOVE

PROP. LA-R/W

MATCH LINE - SEE S.R. 37

3:1

6:1

4:1

4:1

28.3' LT
E-983.1

985.60
515+50.00
1012.90

23.1' RT
E-983.5

1030
1020
1010
1000
990
980
970

CALCULATED JMA
CHECKED PEK

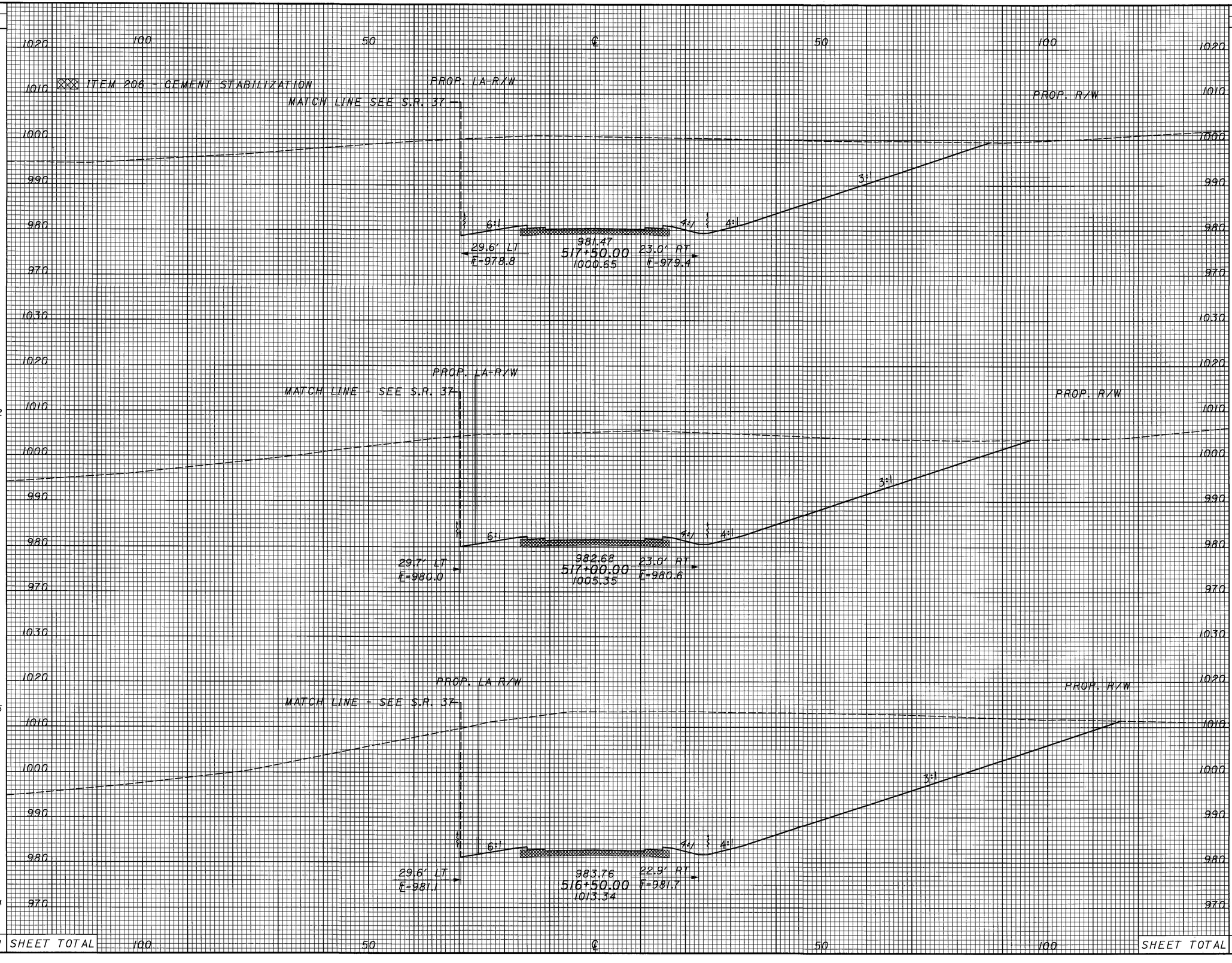
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 515+50 TO STA. 516+00

LIC-161-6.65
LIC-37-10.25

783
1349

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SEEDING	
END WIDTH	SQ. YDS.
93	
	542
102	
	625
123	744
	1911



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1774	0		
		3654	0
2171	0		
		4903	0
3124	0		
		6449	0
SHEET TOTAL		15006	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 516+50 TO STA. 517+50

LIC-161-6.65
LIC-37-10.25

784
1349

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SEEDING	
END WIDTH	SQ. YDS.
72	417
78	453
85	494
	1364

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1177	0		
		2304	0
1312	0		
		2572	0
1466	0		
		3000	0
SHEET TOTAL		7876	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 518+00 TO STA. 519+00

LIC-161-6.65
LIC-37-10.25

785
1349

PROP. LA R/W
PROP. R/W
MATCH LINE SEE S.R. 37
ITEM 206 - CEMENT STABILIZATION
6:1
4:1
4:1
3:1
28.6' LT
E=974.7
977.29
519+00.00
991.89
23.0' RT
E=975.2
PROP. LA-R/W
PROP. R/W
MATCH LINE SEE S.R. 37
28.8' LT
E=976.1
978.71
518+50.00
994.16
23.0' RT
E=976.6
PROP. LA-R/W
PROP. R/W
MATCH LINE SEE S.R. 37
29.2' LT
E=977.5
980.12
518+00.00
996.44
23.0' RT
E=978.0
1010
1000
990
980
970
960
1020
100
50
℄

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SEEDING	
END WIDTH	SQ. YDS.
14	156
42	
	244
46	
	272
52	344
	1016

ITEM 206 CEMENT STABILIZATION

100 50 ℄ 50 100

990 980 970 960 950 990 980 970 960 1000 990 980 970 960 1000 990 980 970 960

PROP. 1A-R/W
MATCH LINE SEE S.R. 37
6:1
28.5' LT
℄=969.1
97+1.63
521+00.00
969.76
13½" TYPE D
PROP. R/W

PROP. 1A-R/W
MATCH LINE SEE S.R. 37
6:1
4:1
4:1
28.5' LT
℄=970.5
973.05
520+50.00
973.20
26.9' RT
℄=970.0
PROP. R/W

PROP. 1A R/W
MATCH LINE SEE S.R. 37
6:1
4:1
4:1
28.5' LT
℄=971.9
974.46
520+00.00
976.33
23.0' RT
℄=972.4
PROP. R/W

PROP. 1A-R/W
MATCH LINE SEE S.R. 37
6:1
4:1
4:1
2:1
28.5' LT
℄=973.3
975.88
519+50.00
984.48
23.0' RT
℄=973.8
PROP. R/W

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	55		
		84	51
91	0		
		286	0
218	0		
		799	0
645	0		
		1687	0
SHEET TOTAL		2856	51

100 50 ℄ 50 100 SHEET TOTAL

CALCULATED JMA
CHECKED PEK

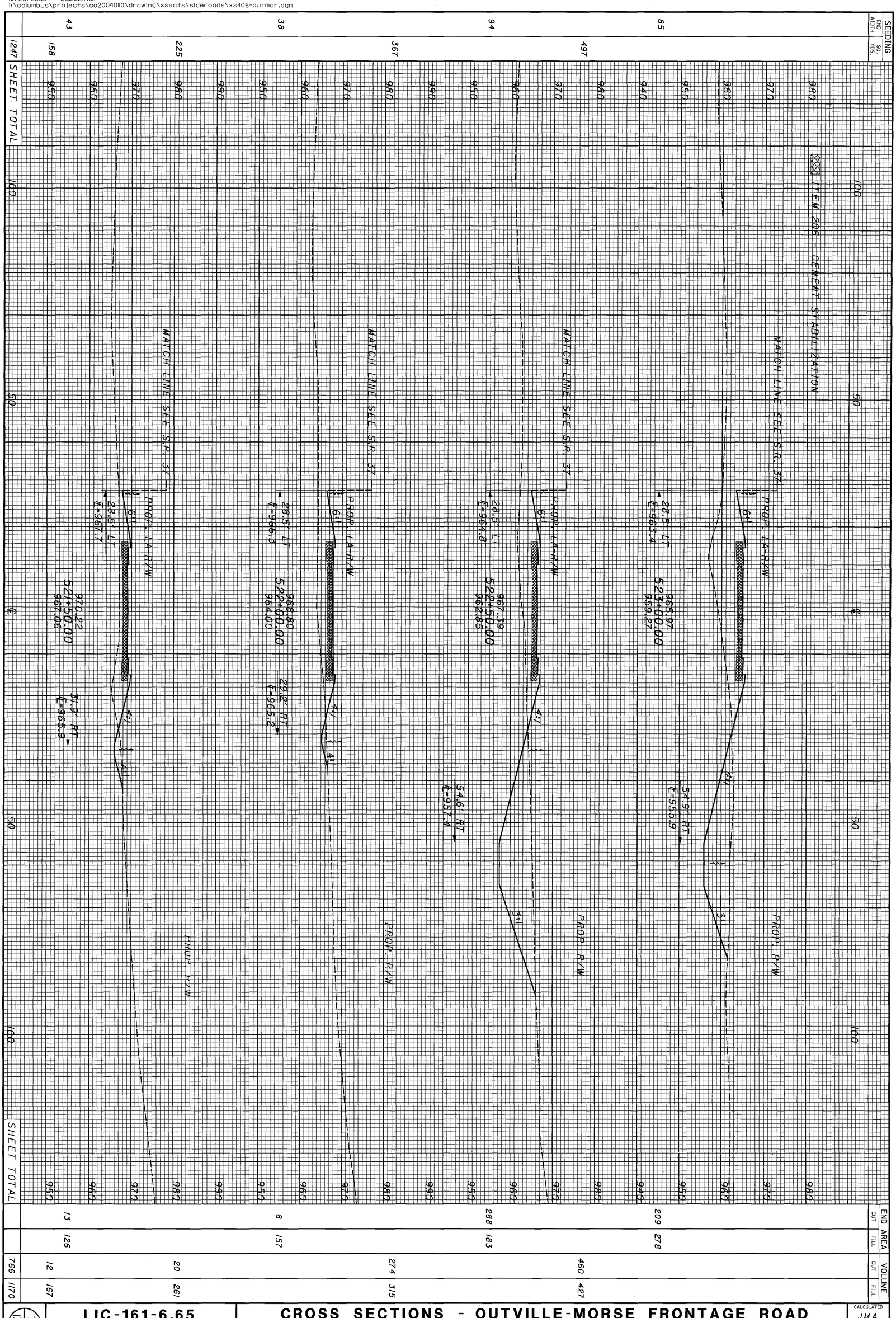
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 519+50 TO STA. 521+00

LIC-161-6.65
LIC-37-10.25

786
1349

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LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 521+50 TO STA. 523+00

CALCULATED JMA
CHECKED PEK

787
1349

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
56	194	48	189	45	349
14		0	188		
65	219	41	301	38	453
85	417	78	405	110	654
	472			266	633
	1302 SHEET TOTAL			458	2089 SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 523+50 TO STA. 525+00

LIC-161-6.65
LIC-37-10.25

788
1349

100 50 ℄ 50 100

980 970 960 950 940

PROP. R/W

WATCH LINE SEE S.R. 37

PROP. LA-R/W

6:1

4:1

2:1

28.5' LT
E=957.8

960.31
525+00.00
955.60

41.9' RT
E=953.5

WATCH LINE SEE S.R. 37

PROP. LA-R/W

6:1

28.5' LT
E=959.2

961.73
524+50.00
957.58

PROP. R/W

WATCH LINE SEE S.R. 37

PROP. LA-R/W

6:1

6:1

2:1

28.5' LT
E=960.6

963.14
524+00.00
957.00

53.3' RT
E=956.5

STA 523+69, CULVERT NO. 7,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 974

PROP. R/W

WATCH LINE SEE S.R. 37

PROP. LA-R/W

6:1

4:1

3:1

28.5' LT
E=962.0

964.56
523+50.00
957.45

55.4' RT
E=954.4

ITEM 206 - CEMENT STABILIZATION

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SEEDING END WIDTH	SEEDING SQ. YDS.	
		100 50 ℄ 50 100
		980 970 960 950 940 930
		MATCH LINE SEE S.R. 37 — PROP. LA-R/W — PROP. R/W
		6:1 4:1 2:1
		28.5' LT E-953.5 — 40.7' RT E-949.6
48		956.07 526+50.00 949.57
		980 970 960 950 940 930
	253	MATCH LINE SEE S.R. 37 — PROP. LA-R/W — PROP. R/W
		6:1 4:1 2:1
		28.5' LT E-954.9 — 39.3' RT E-951.3
43		957.48 526+00.00 951.45
		980 970 960 950 940
	242	MATCH LINE SEE S.R. 37 — PROP. LA-R/W — PROP. R/W
		6:1 4:1 2:1
		28.5' LT E-956.4 — 37.6' RT E-953.2
44	278	958.90 525+50.00 953.27
		ITEM 206 - CEMENT STABILIZATION
	773	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
7	305		
		12	532
6	270		
		12	479
7	247		
		51	404
		75	1415

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 525+50 TO STA. 526+50

LIC-161-6.65
LIC-37-10.25

789
349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 - CEMENT STABILIZATION				
48		WATCH LINE SEE S.R. 37 — PROP. LA R/W — PROP. R/W; 6:1, 4:1, 3:1; 28.6' LT ℄-949.8; 952.36 528+00.00 945.45; 38.9' RT ℄-946.3	9	319		
48	267	WATCH LINE SEE S.R. 37 — PROP. LA-R/W — PROP. R/W; 6:1, 4:1, 3:1; 28.5' LT ℄-950.9; 953.47 527+50.00 946.47; 38.5' RT ℄-947.5	10	321	18	593
53	281	WATCH LINE SEE S.R. 37 — PROP. LA-R/W — PROP. R/W; 6:1, 4:1, 3:1; 28.5' LT ℄-952.2; 954.71 527+00.00 947.92; 41.3' RT ℄-948.1	12	323	20	597
	281				18	581
	829	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL			56	1771

CALCULATED JMA
CHECKED PEK

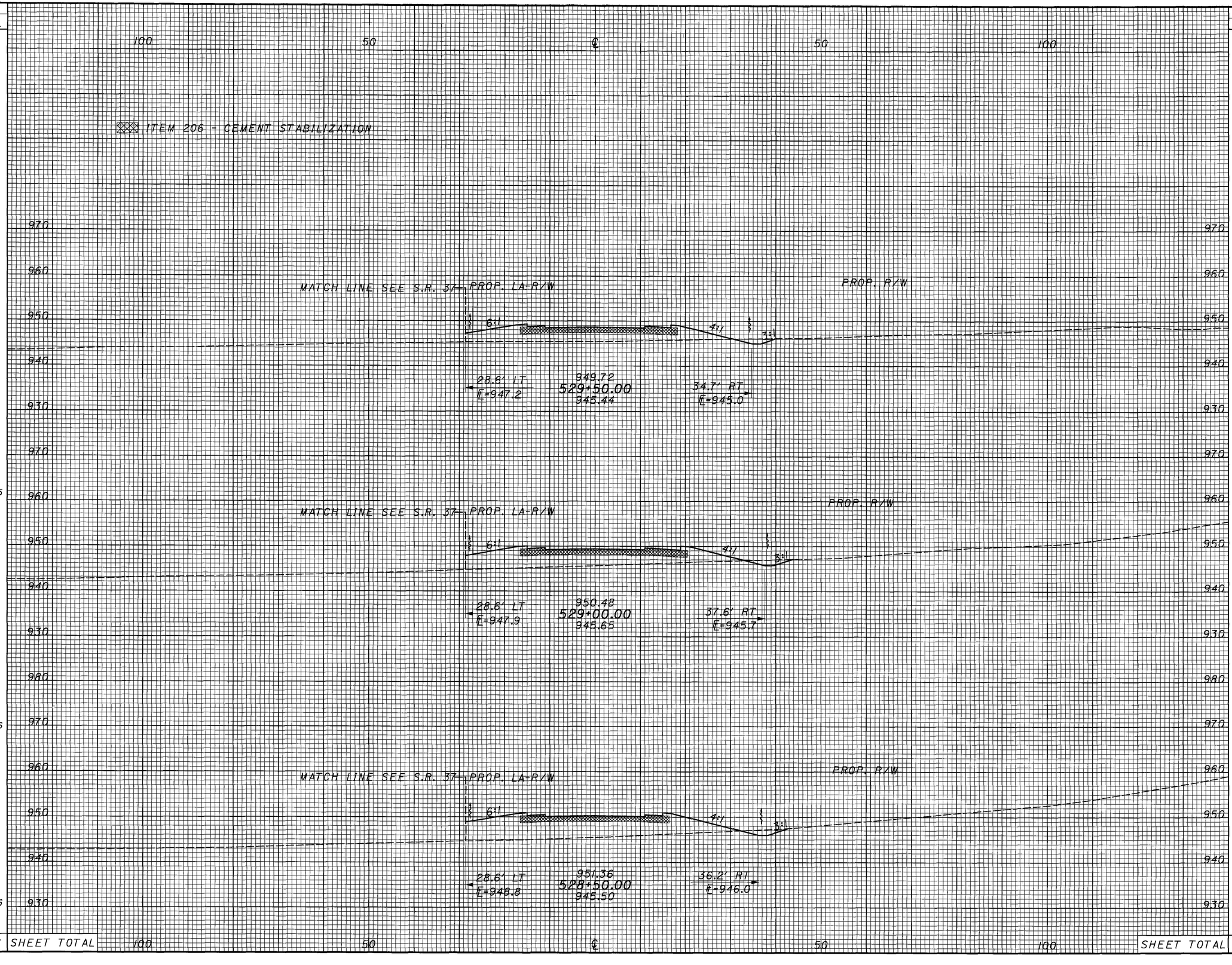
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 527+00 TO STA. 528+00

LIC-161-6.65
LIC-37-10.25

790
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
40	
	225
41	
	236
44	256
	717



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
6	164		
		13	342
8	205		
		14	426
8	255		
		15	532
		42	1300

CALCULATED JMA
CHECKED PEK

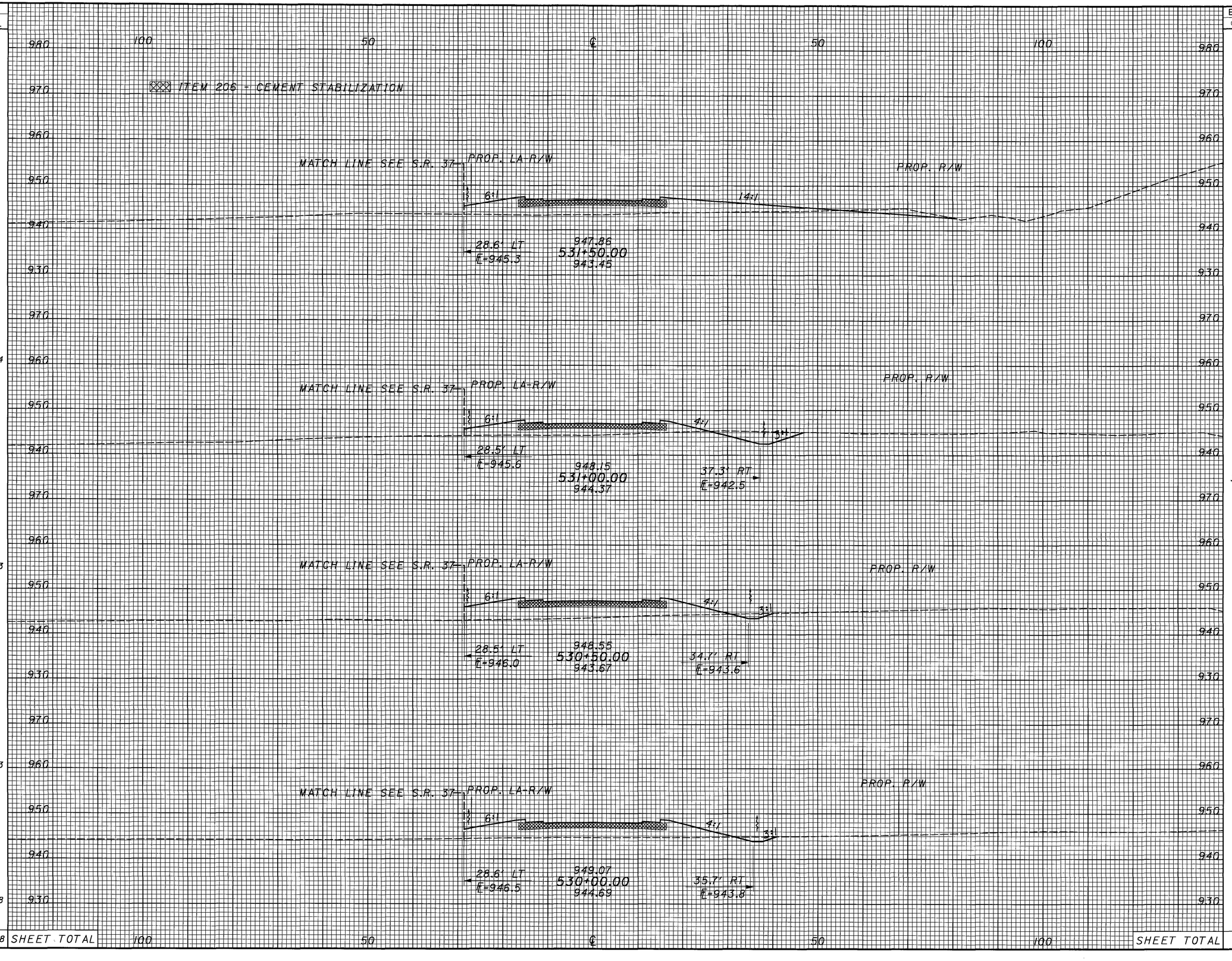
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 528+50 TO STA. 529+50

LIC-161-6.65
LIC-37-10.25

791
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
82	364	18	211	46	311
49		32	125		
42	253	6	197	35	298
42	233	6	176	11	346
	228			11	315
	1078			103	1270



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 530+00 TO STA. 531+50

LIC-161-6.65
LIC-37-10.25

792
1349

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SEEDING	
END WIDTH	SQ. YDS.
52	600
164	619
59	392
	1611

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1016	2	2260	218
1425	233	1319	557
0	369	16	536
		3595	1311

CALCULATED JMA
CHECKED PEK

LIC-161-6.65 LIC-37-10.25 CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 532+00 TO STA. 533+00

793
1349

50 ℄ 50 100 150

ITEM 206 - CEMENT STABILIZATION

980 970 960 950 940 930

PROP. R/W

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1

2.5:1

15" TYPE D

28.7' LT
℄-945.2

947.72
533+00.00
949.49

PROP. R/W

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1

4:1

2.5:1

3:1

28.7' LT
℄-945.1

947.65
532+50.00
941.88

57.3' RT
℄-937.0

STA 532+36, CULVERT NO. 8,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 975

PROP. R/W

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1

4:1

2.5:1

2:1

28.6' LT
℄-945.2

947.70
532+00.00
941.32

63.6' RT
℄-932.0

SHEET TOTAL

SHEET TOTAL

tduffney
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SEEDING	
END WIDTH	SQ. YDS.
91	486
84	381
53	292
	1159

ITEM 206 - CEMENT STABILIZATION

MATCH LINE SEE S.R. 37

PROP. LA-R/W

PROP. R/W

6:1 4:1 4:1 3:1

28.7' LT
℄-945.9

948.41
534+50.00
965.25

23.0' RT
℄-946.3

MATCH LINE SEE S.R. 37

PROP. LA-R/W

PROP. R/W

6:1 8.18:1 4:1

28.7' LT
℄-945.6

948.16
534+00.00
956.78

29.1' RT
℄-946.1

MATCH LINE SEE S.R. 37

PROP. LA-R/W

PROP. R/W

6:1 2.5:1

15', TYPE D

28.5' LT
℄-915.4

947.91
533+50.00
951.25

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1582	0		
		2323	4
927	4		
		1441	4
630	0		
		1524	2
		5288	10

SHEET TOTAL

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

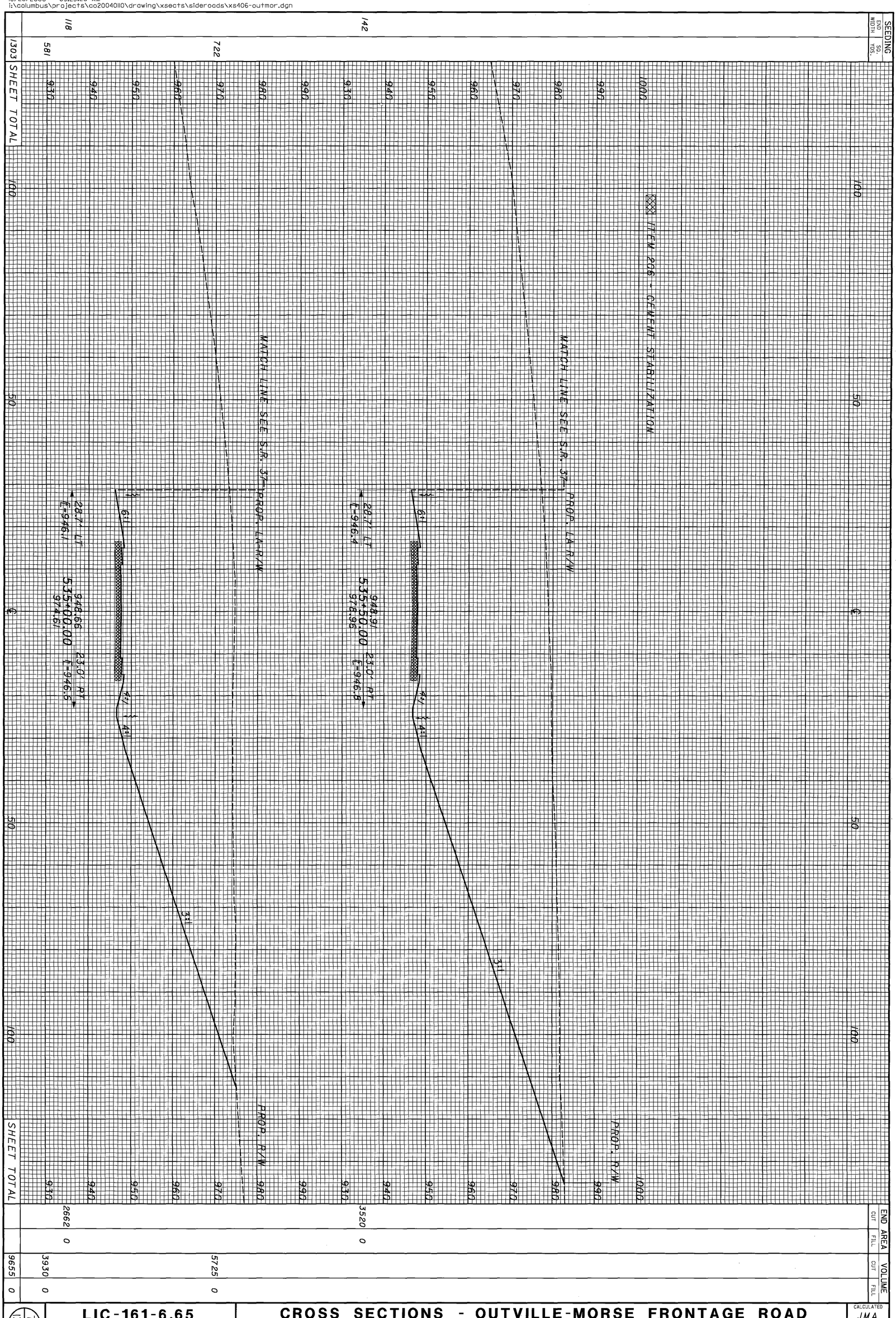
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 533+50 TO STA. 534+50

LIC-161-6.65
LIC-37-10.25

794
1349

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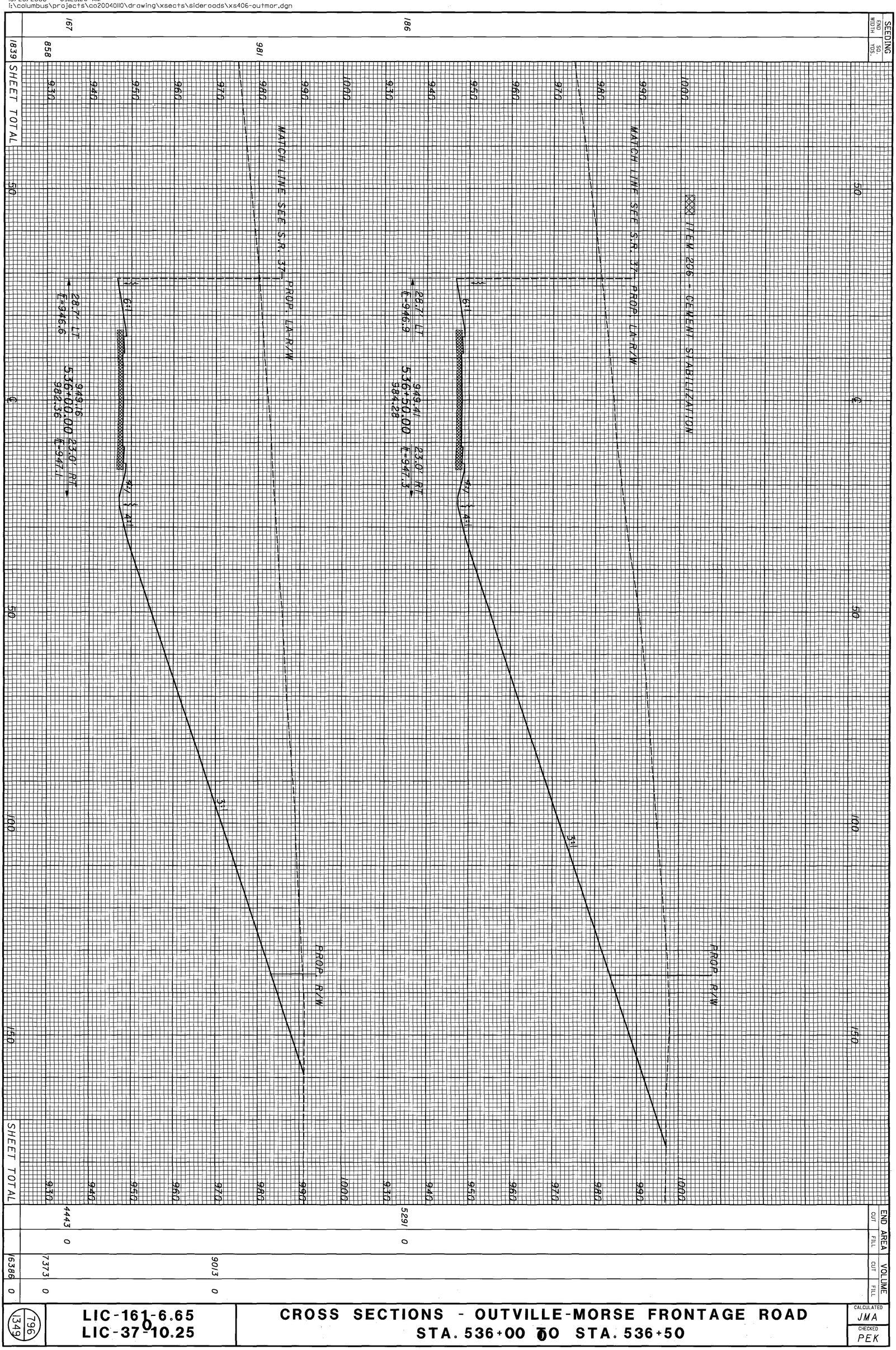
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LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 535+00 TO STA. 535+50	CALCULATED JMA CHECKED PEK

795
1349

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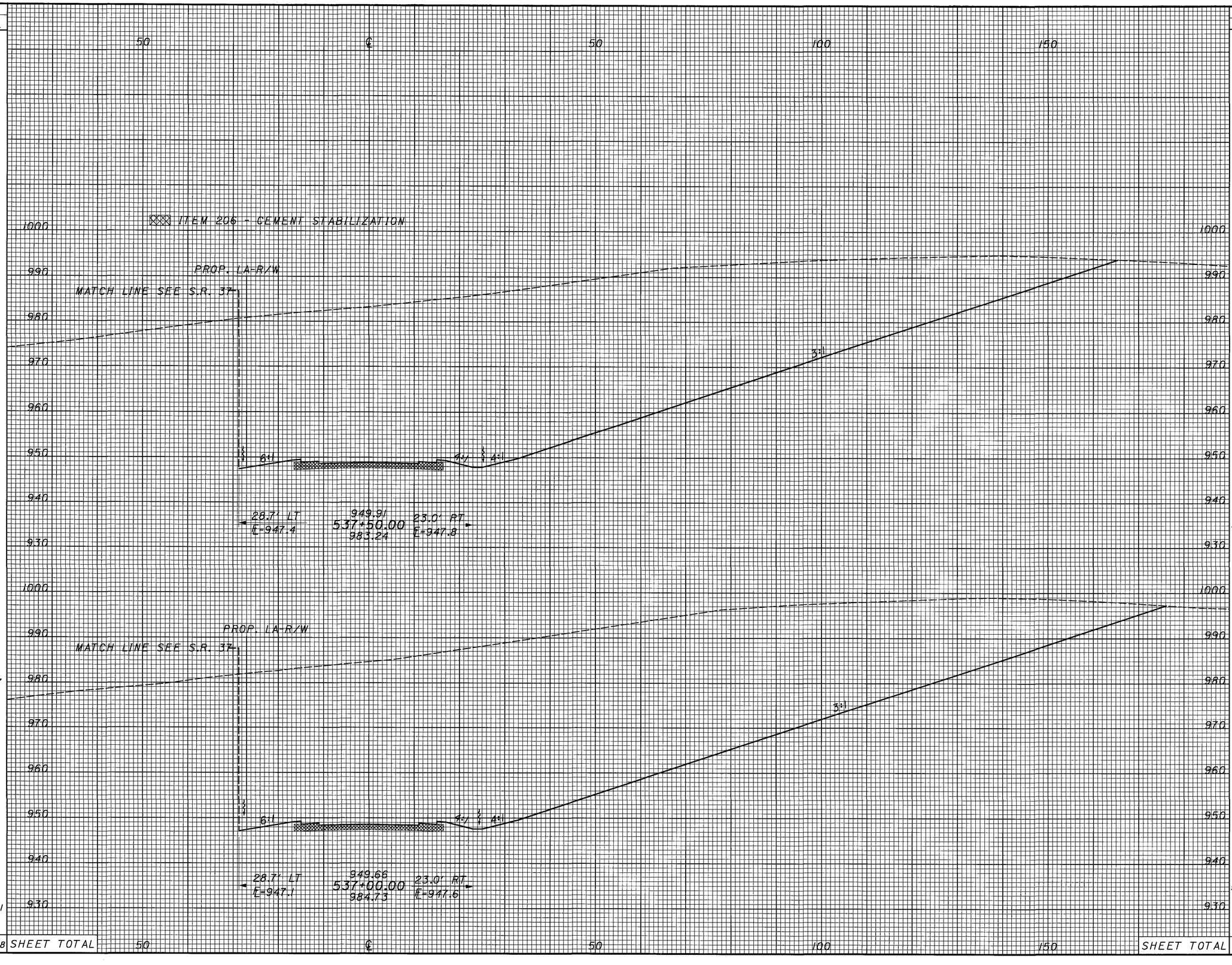


796 / 1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 536+00 TO STA. 536+50

CALCULATED JMA
CHECKED PEK

SEEDING	
END WIDTH	SQ. YDS.
174	
185	
	2028

END AREA		VOLUME	
CUT	FILL	CUT	FILL
4928	0		
		9709	0
5558	0		
		10045	0
		19754	0



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 537+00 TO STA. 537+50

LIC-161-6.65
LIC-37-10.25

797
1349

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SEEDING	
END WIDTH	SQ. YDS.
137	
814	
156	
917	
1731	SHEET TOTAL

50 ℄ 50 100 150

ITEM 206 - CEMENT STABILIZATION

PROP. LA-R/W

MATCH LINE SEE S.R. 37

PROP. LA-R/W

MATCH LINE SEE S.R. 37

1000 990 980 970 960 950 940

3:1 4:1 6:1

28.7' LT E=947.9 950.41 538+50.00 982.02 23.0' RT E=948.3

28.7' LT E=947.6 950.16 538+00.00 983.22 23.0' RT E=948.1

END AREA		VOLUME	
CUT	FILL	CUT	FILL
3638	0		
		7309	0
4256	0		
		8504	0
SHEET TOTAL		15813	0

CALCULATED JMA

CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 538+00 TO STA. 538+50

LIC-161-6.65
LIC-37-10.25

798
1349

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SEEDING	
END WIDTH	SQ. YDS.

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
125		913	0		
	667			2062	0
115		1314	0		
	825			3269	0
182		2216	0		
	1064			5234	0
	2556 SHEET TOTAL			10565	0

50 ℄ 50 100 150

980 970 960 950 940 990

ITEM 206 - CEMENT STABILIZATION

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1 4:1 4:1 5:1

951.66
541+00.00
951.88

28.7' LT
E=949.1

41.3' RT
E=945.0

PROP. LA-R/W

6:1 4:1 3:1 3:1

951.41
540+50.00
959.93

28.7' LT
E=948.9

53.5' RT
E=940.0

STA 540+26, CULVERT No. 9,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 976

MATCH LINE SEE S.R. 37

PROP. LA-R/W

6:1 4:1

951.16
540+00.00
969.89

28.7' LT
E=948.6

15" CONDUIT, TYPE D

50 ℄ 50 100 150 SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 540+00 TO STA. 541+00

LIC-161-6.65
LIC-37-10.25

800
1349

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					CALCULATED JMA CHECKED PEK
		ITEM 206 - CEMENT STABILIZATION					
		990 980 970 960 950 940					
		MATCH LINE SEE S.R. 37-PROP. LA R/W					
		2.5:1 6:1 4:1 4:1 2% 2%					
104		28.7' LT E=949.7 — 952.24 542+50.00 961.47 — 23.0' RT E=950.2	1079	0			
		980 970 960 950 940					
	583	MATCH LINE SEE S.R. 37-			1656	14	
		PROP. LA-R/W 2.5:1 6:1 4:1 4:1 2% 2%					
106		28.7' LT E=949.6 — 952.12 542+00.00 952.64 — 23.5' RT E=949.9	710	15			
		940 930 980 970 960 950					
	594	MATCH LINE SEE S.R. 37-			1175	59	
		PROP. LA-R/W 3:1 6:1 4:1 4:1 2% 2%					
108		28.7' LT E=949.4 — 23.0' RT E=949.8 — 951.91 541+50.00 948.96	559	49			
	647	940 930			1364	45	
	1824	SHEET TOTAL 100 50 ℄ 50 100		SHEET TOTAL	4195	118	

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 541+50 TO STA. 542+50

LIC-161-6.65
LIC-37-10.25

801
1349

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					
		990 980 970 960 950 940 930					
		PROP. LA-R/W MATCH LINE SEE S.R. 37					
		2.5:1 6:1 4:1 4:1 28.7' LT L-949.6 — 952.11 544+00.00 973.43 — 23.5' RT L-949.9					
118			2435	0			
		ITEM 206- CEMENT STABILIZATION					
		990 980 970 960 950 940 930					
	642	PROP. LA-R/W MATCH LINE SEE S.R. 37			4538	0	
		2.5:1 6:1 4:1 4:1 28.6' LT L-949.7 — 952.24 543+50.00 974.82 — 23.6' RT L-950.0					
113			2466	0			
		990 980 970 960 950 940					
	611	MATCH LINE SEE S.R. 37 — PROP. LA-R/W			4250	0	
		2.5:1 6:1 4:1 4:1 28.7' LT L-949.8 — 952.28 543+00.00 971.84 — 23.0' RT L-950.2					
107			2124	0			
	586				2965	0	
	1839	SHEET TOTAL			11753	0	SHEET TOTAL

CALCULATED JMA
CHECKED PEK

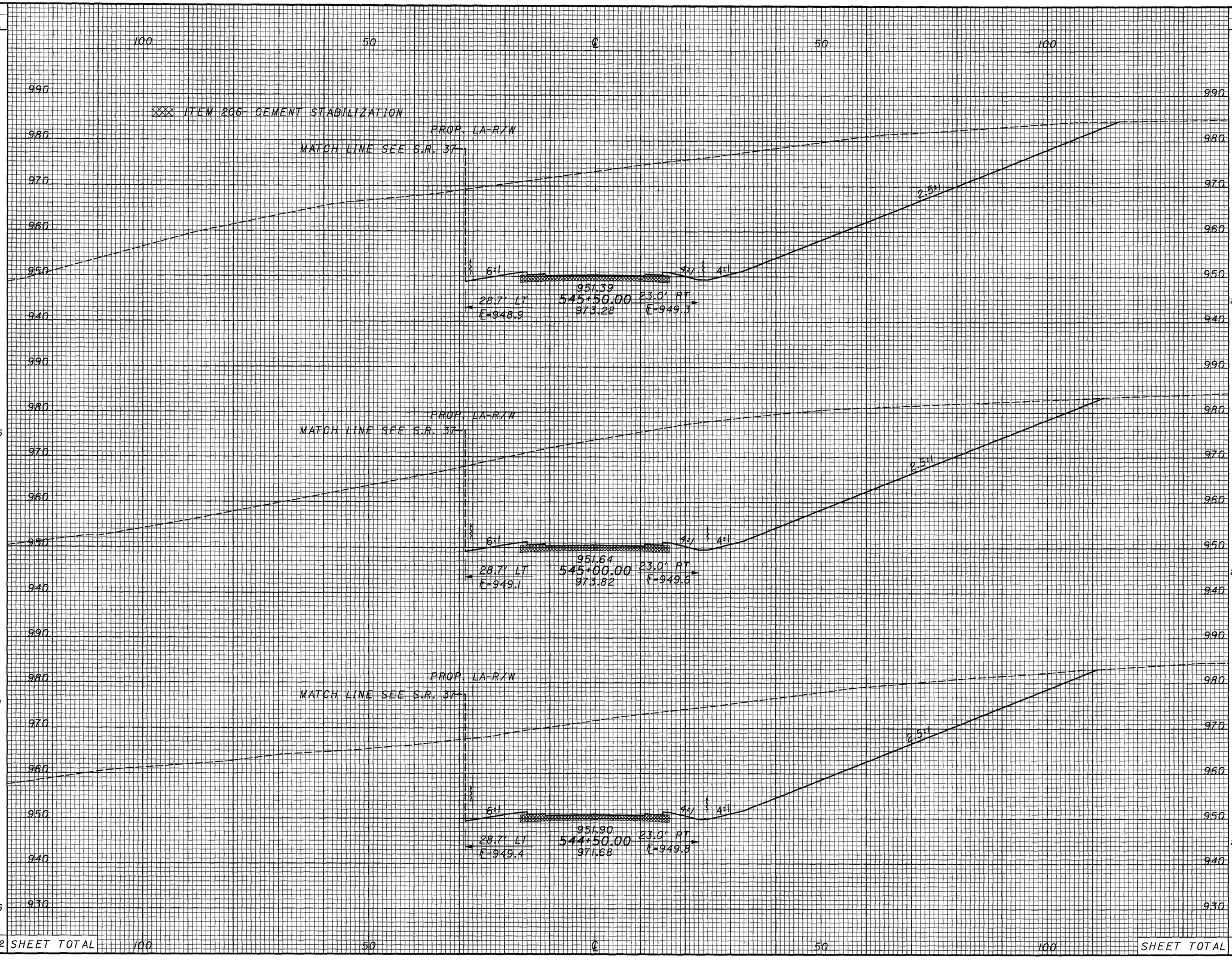
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 543+00 TO STA. 544+00

LIC-161-6.65
LIC-37-10.25

802
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
123	
	675
120	
118	
	656
	1992



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2588	0		
		4774	0
2568	0		
		4488	0
2279	0		
		4364	0
		13626	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 544+50 TO STA. 545+50

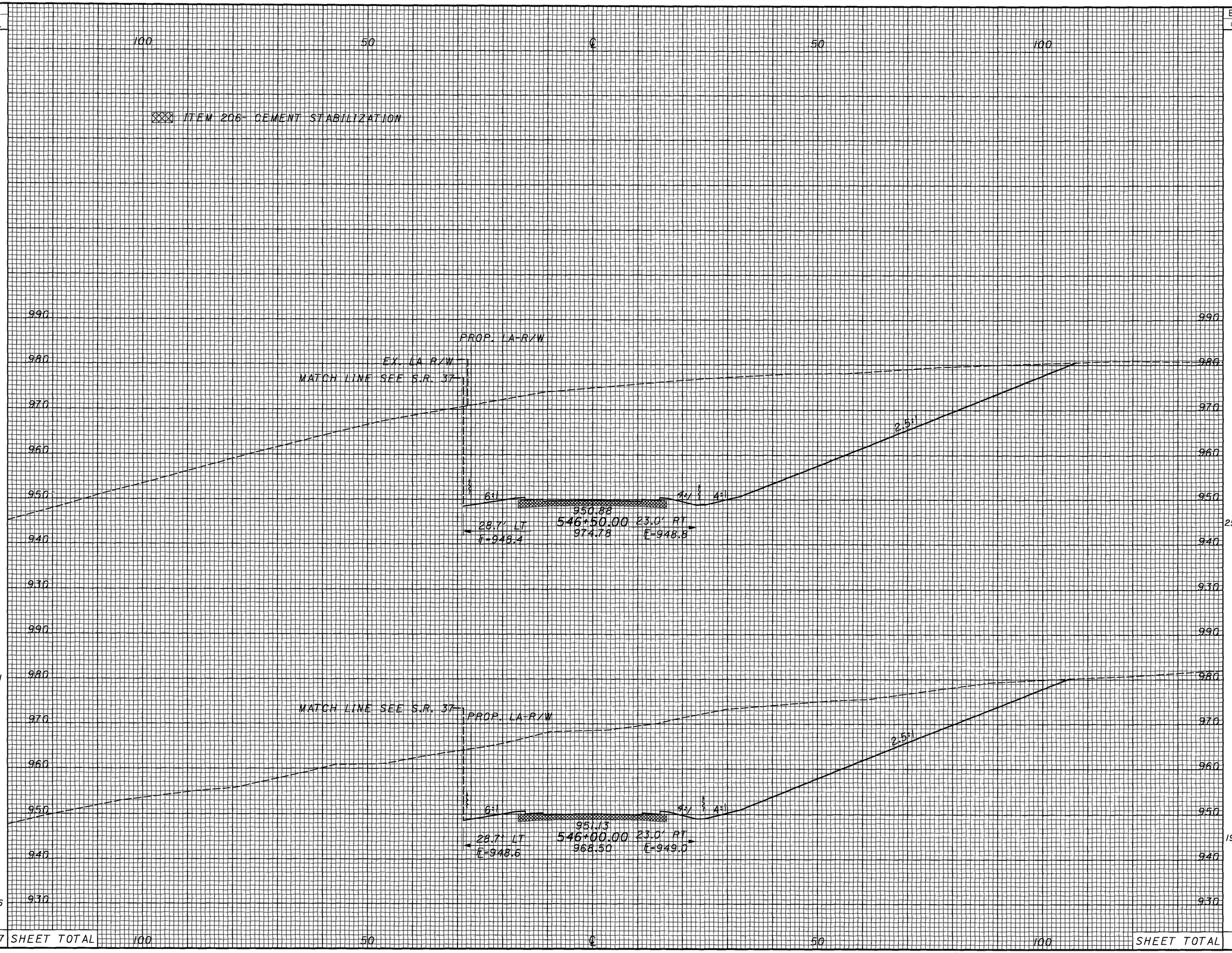
LIC-161-6.65
LIC-37-10.25

803
1349

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SEEDING	
END WIDTH	SQ. YDS.
114	631
113	656
	1287

END AREA		VOLUME	
CUT	FILL	CUT	FILL
2536	0		
		4196	0
1995	0		
		4244	0
		8440	0



CALCULATED JMA
CHECKED PEK

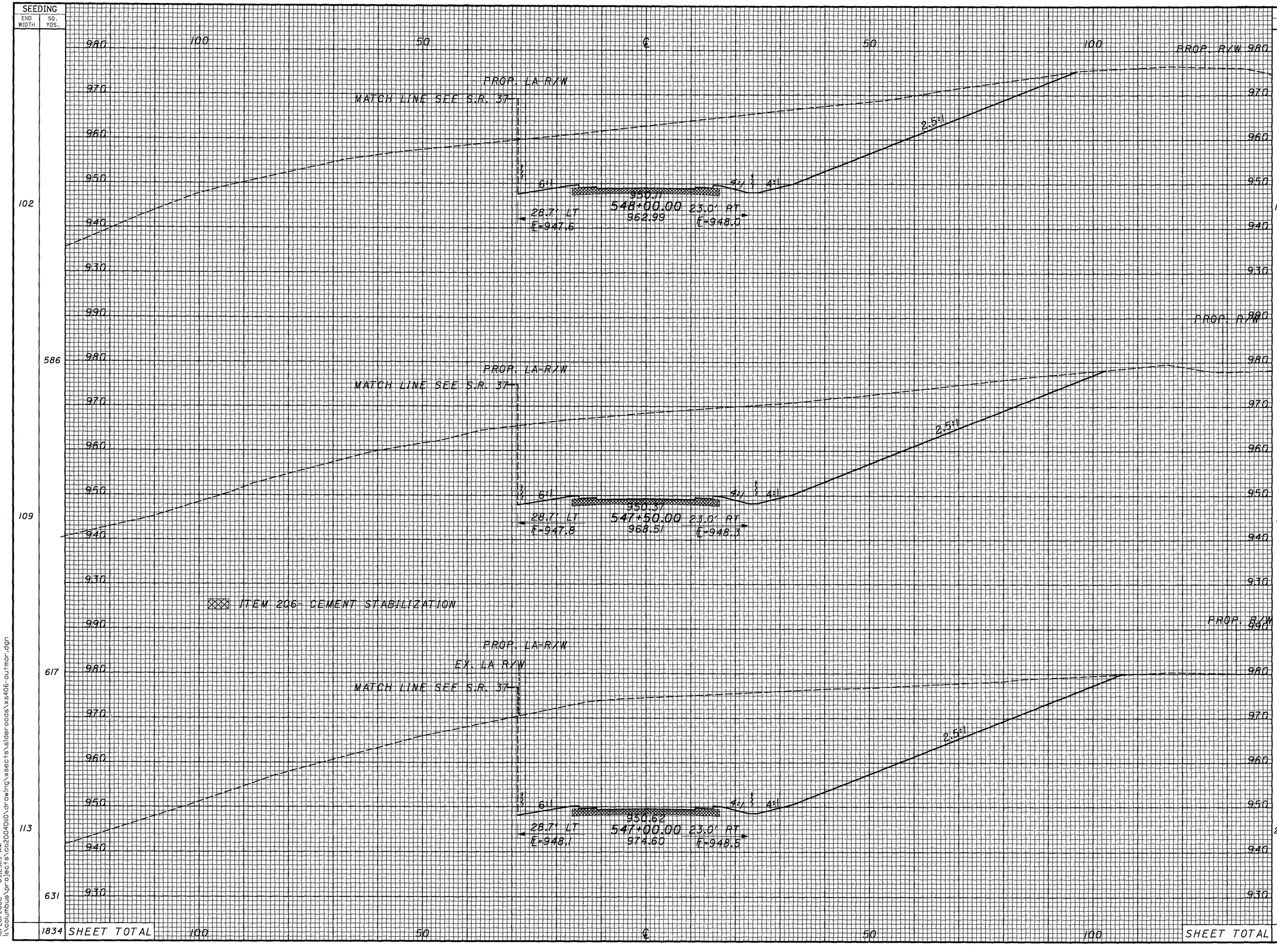
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 546+00 TO STA. 546+50

LIC-161-6.65
LIC-37-10.25

804
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
102	586	1395	0	3068	0
109	617	1918	0	4060	0
113	631	2466	0	4632	0
	1834 SHEET TOTAL			11760	0



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 547+00 TO STA. 548+00

LIC-161-6.65
LIC-37-10.25

805
349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
43		50	86		
	267			310	79
53		284	0		
	372			996	0
81		791	0		
	508			2024	0
	1147 SHEET TOTAL			3330	79

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

970 960 950 940 930 920

PROP. R/W

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1 4:1 4:1

29.6' LT
℄-946.7

949.35
549+50.00
947.33

23.0' RT
℄-947.3

PROP. R/W

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1 4:1 2:1

23.0' RT
℄-947.5

29.3' LT
℄-947.0

949.60
549+00.00
951.90

PROP. R/W

PROP. LA-R/W

MATCH LINE SEE S.R. 37

6:1 4:1 2:1

23.0' RT
℄-947.8

28.9' LT
℄-947.3

949.86
548+50.00
957.42

SHEET TOTAL

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 548+50 TO STA. 549+50

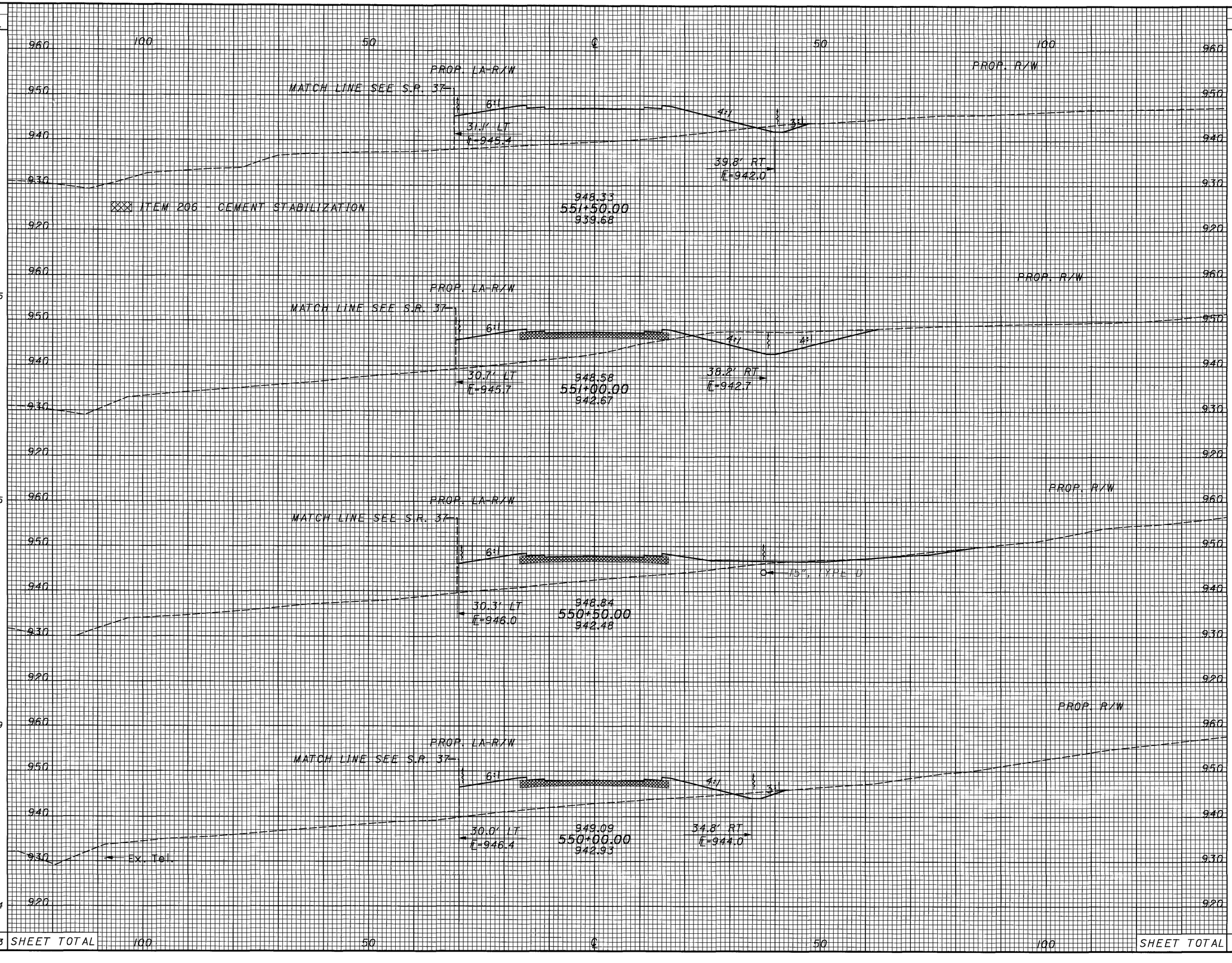
CALCULATED JMA
CHECKED PEK

LIC-161-6.65
LIC-37-10.25

806
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
52	
	325
65	
52	
	325
52	
	269
45	
	244
	1163



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
11	435		
		111	637
109	252		
		109	529
8	319		
		16	570
9	296		
		55	354
		291	2090

CALCULATED JMA
CHECKED PEK

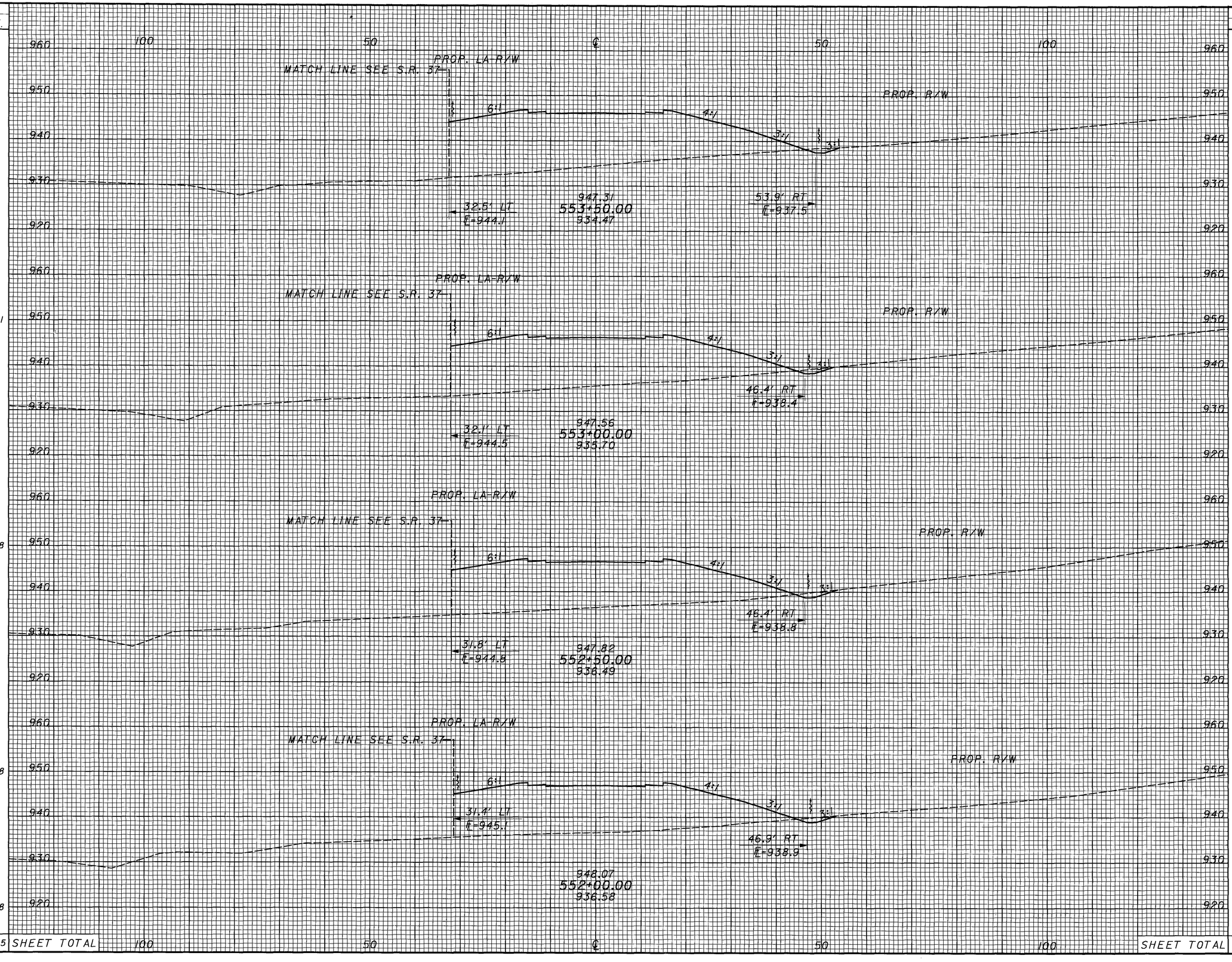
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 550+00 TO STA. 551+50

LIC-161-6.65
LIC-37-10.25

807
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
60		5	768		
	331			9	1357
59		5	697		
	328			10	1256
59		6	660		
	328			11	1215
59		6	652		
	308			15	1007
1295	SHEET TOTAL			45	4835



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 552+00 TO STA. 553+50

LIC-161-6.65
LIC-37-10.25

808
1349

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SEEDING	
END WIDTH	SQ. YDS.
76	
	425
77	
	414
72	
	381
65	
	347
	1567

SHEET TOTAL

100 50 ℄ 50 100

960 950 940 930 920

MATCH LINE SEE S.R. 37
PROP. LA R/W
6:1 4:1 3:1 3:1
PROP. R/W
33.9' LT
℄-942.9
946.29
555+50.00
936.36
59.1' RT
℄-933.0

MATCH LINE SEE S.R. 37
PROP. LA-R/W
6:1 4:1 3:1 3:1
PROP. R/W
33.5' LT
℄-943.2
946.54
555+00.00
932.48
58.3' RT
℄-933.2

MATCH LINE SEE S.R. 37
PROP. LA-R/W
6:1 4:1 3:1 3:1
PROP. R/W
33.2' LT
℄-943.5
946.80
554+50.00
932.15
59.1' RT
℄-933.5

MATCH LINE SEE S.R. 37
PROP. LA-R/W
6:1 4:1 3:1 3:1
PROP. R/W
32.8' LT
℄-943.8
947.05
554+00.00
933.29
52.6' RT
℄-935.9

END AREA		VOLUME	
CUT	FILL	CUT	FILL
19	633		
		34	1437
18	919		
		21	1737
4	958		
		8	1688
4	865		
		9	1513
		71	6375

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

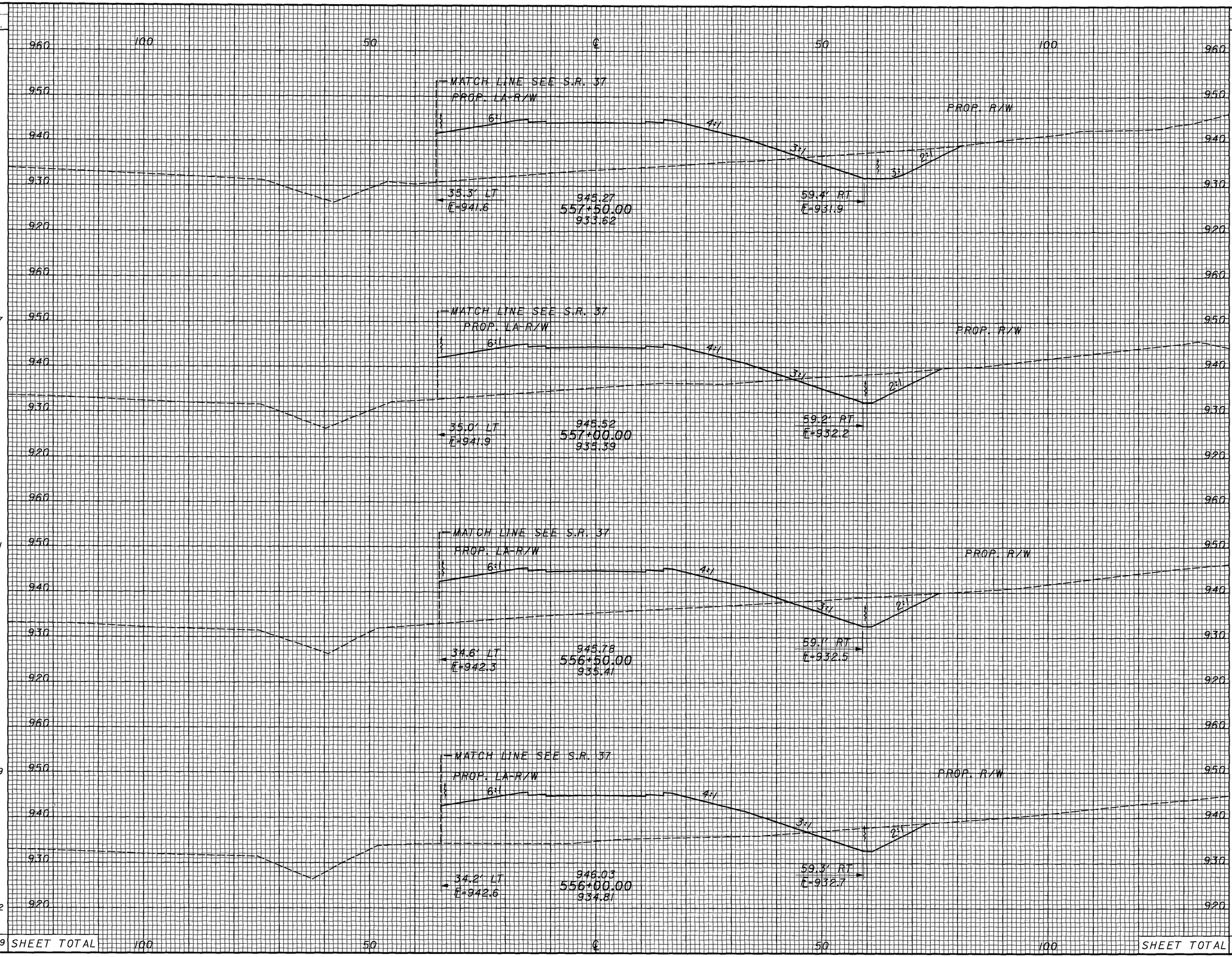
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 554+00 TO STA. 555+50

LIC-161-6.65
LIC-37-10.25

809
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
92	497
87	481
86	469
83	442
	1889



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
123	728		
109	617	215	1245
113	616	205	1142
73	675	172	1195
85	1211	677	4793

CALCULATED JMA
CHECKED PEK

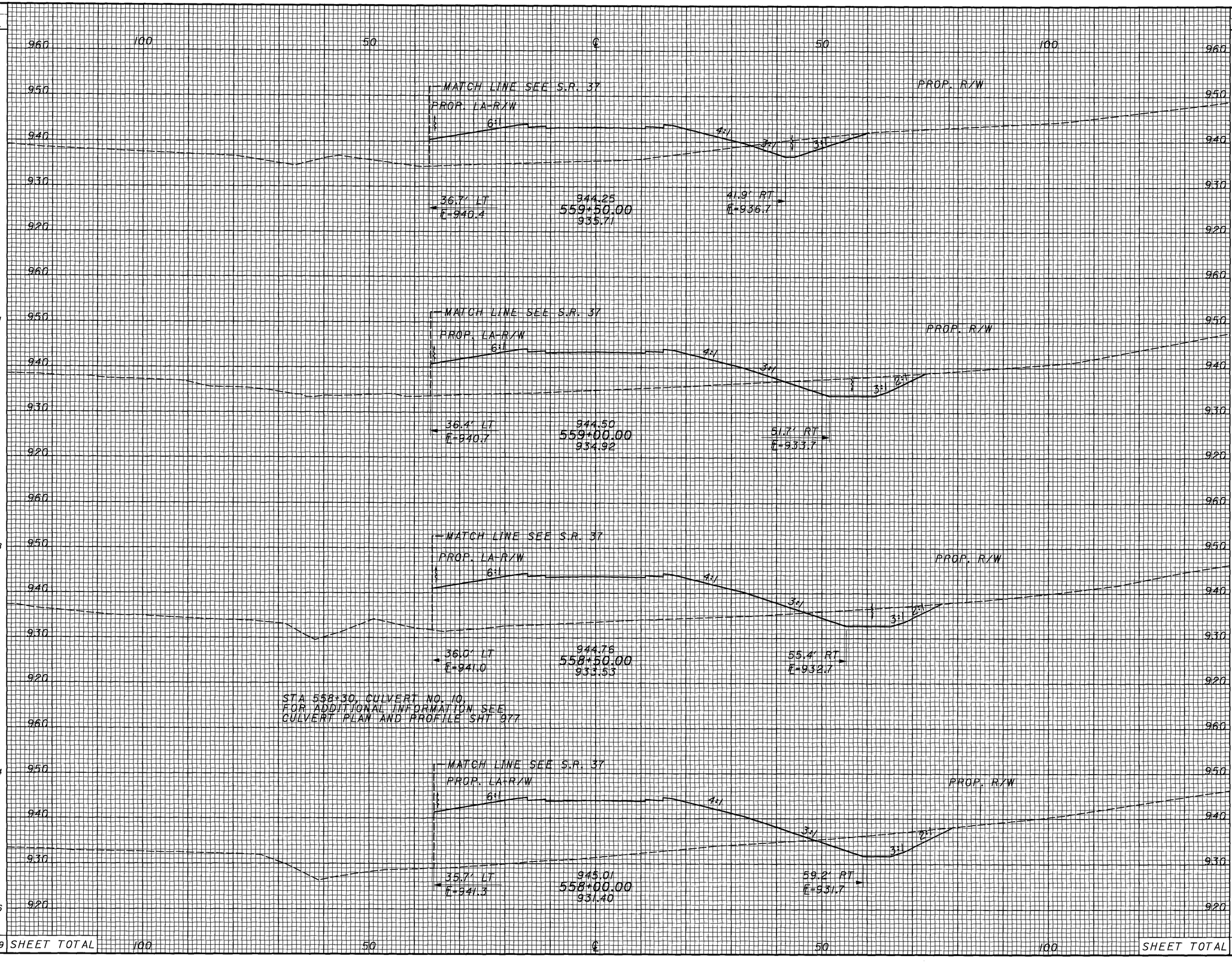
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 556+00 TO STA. 557+50

LIC-161-6.65
LIC-37-10.25

810
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
71	431
84	478
88	494
90	506
	1909



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
53	450		
		128	934
86	560		
80	705	154	1171
		157	1450
90	862		
		197	1471
		636	5026

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 558+00 TO STA. 559+50

LIC-161-6.65
LIC-37-10.25

811
1349

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SEEDING	
END WIDTH	SQ. YDS.
22	
	181
43	
	250
47	
	308
64	
	375
	1114

END AREA		VOLUME	
CUT	FILL	CUT	FILL
718	0		
		815	0
161	0		
		155	105
7	113		
		21	431
16	352		
		63	742
		1054	1278

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 560+00 TO STA. 561+50

LIC-161-6.65
LIC-37-10.25

812
1349

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

970 960 950 940 930 920

MATCH LINE SEE S.R. 37
PROP. LA-R/W
EX. LA R/W
5.8:1
36.8' LT
℄-939.2
943.16
561+50.00
950.37

MATCH LINE SEE WORSE ROAD

MATCH LINE SEE S.R. 37
PROP. LA-R/W
EX. LA R/W
6:1
4:1
3:1
37.1' LT
℄-939.5
943.47
561+00.00
944.45
23.0' RT
℄-941.4

MATCH LINE SEE S.R. 37
PROP. LA-R/W
6:1
4:1
3:1
37.1' LT
℄-939.8
943.74
560+50.00
940.51
31.7' RT
℄-939.5

PROP. R/W

MATCH LINE SEE S.R. 37
PROP. LA-R/W
6:1
4:1
3:1
37.1' LT
℄-940.1
943.99
560+00.00
937.44
41.6' RT
℄-937.3

PROP. R/W

SHEET TOTAL

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		100 50 ℄ 50 100				
		ITEM 206- CEMENT STABILIZATION				
		980 970 960 950 940 930 980				
		MATCH LINE SEE S.R. 37 PROP. LA R/W EX. LA R/W PROP. R/W				
		5.6:1 4:1 2.5:1				
85		942.02 563+00.00 955.96	1425	0		
		35.1' LT ℄-938.2 31.0' RT ℄-937.9				
	450	MATCH LINE SEE S.R. 37			2239	0
		PROP. LA R/W EX. LA R/W				
		5.6:1 4:1 2.5:1				
77		942.42 562+50.00 951.50	993	0		
		35.8' LT ℄-938.5 31.0' RT ℄-938.3				
	408	MATCH LINE SEE S.R. 37			1565	0
		PROP. LA R/W EX. LA R/W				
		5.8:1 4:1 2.5:1				
70		942.81 562+00.00 949.62	697	0		
		36.4' LT ℄-938.9 31.7' RT ℄-938.7				
	256				1311	0
	1114	SHEET TOTAL			5115	0

CALCULATED JMA
CHECKED PEK

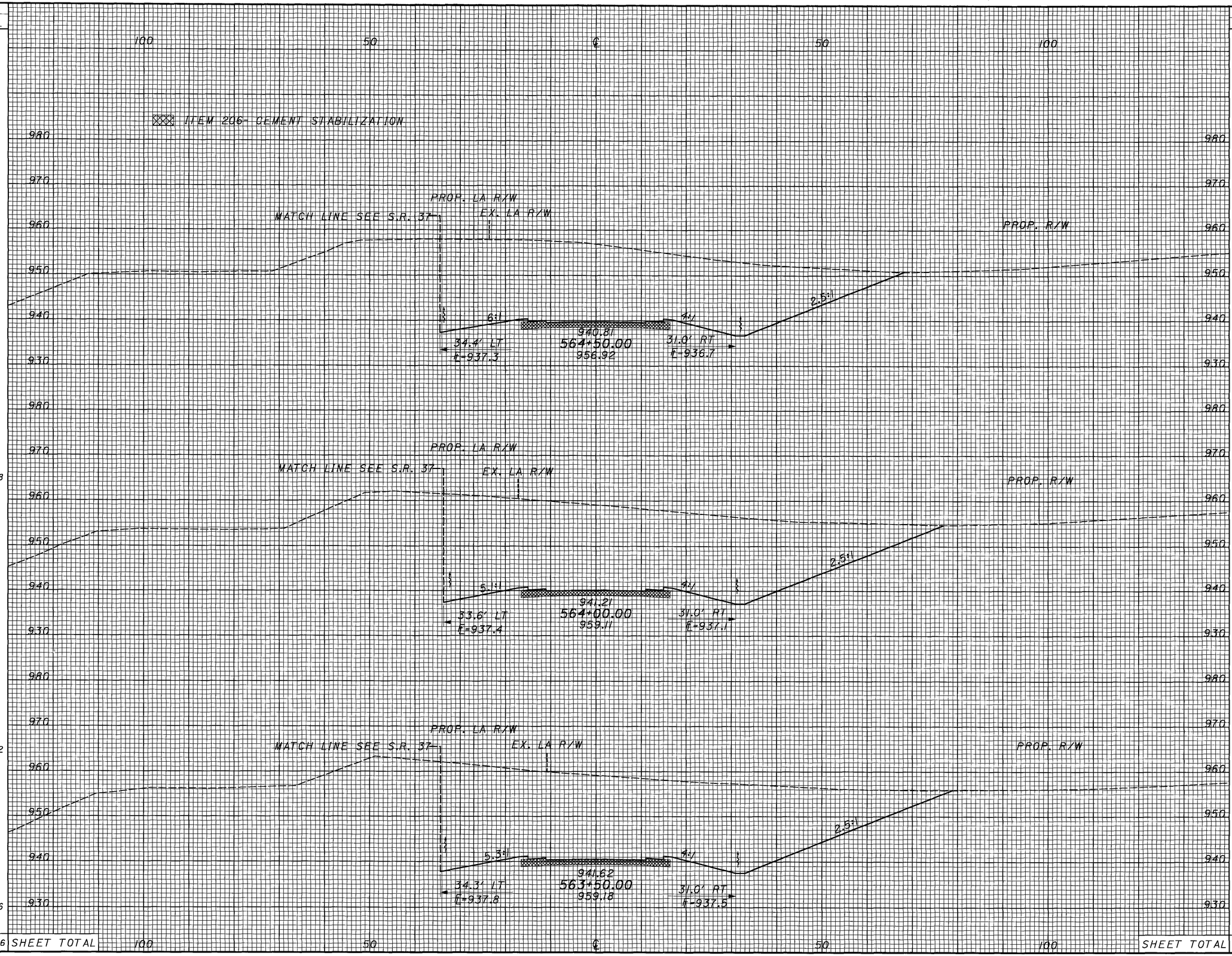
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 562+00 TO STA. 563+00

LIC-161-6.65
LIC-37-10.25

813
1349

tduffney
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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
78		1434	0		
	458			2915	0
87		1715	0		
	492			3205	0
90		1747	0		
	486			2937	0
1436	SHEET TOTAL			9057	0



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 563+50 TO STA. 564+50

LIC-161-6.65
LIC-37-10.25

814
1349

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SEEDING	
END WIDTH	SQ. YDS.
60	325
57	353
70	411
	1089

END AREA		VOLUME	
CUT	FILL	CUT	FILL
278	0	710	0
488	0	1376	0
997	0	2251	0
		4337	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 565+00 TO STA. 566+00

LIC-161-6.65
LIC-37-10.25

815
1349

ITEM 206- CEMENT STABILIZATION

MATCH LINE SEE S.R. 37

PROP. LA R/W

PROP. R/W

EX. LA R/W

939.60
566+00.00
941.09

30.8' LT
℄-935.9

29.5' RT
℄-935.9

940.00
565+50.00
944.61

31.5' LT
℄-936.3

30.3' RT
℄-936.1

940.41
565+00.00
951.44

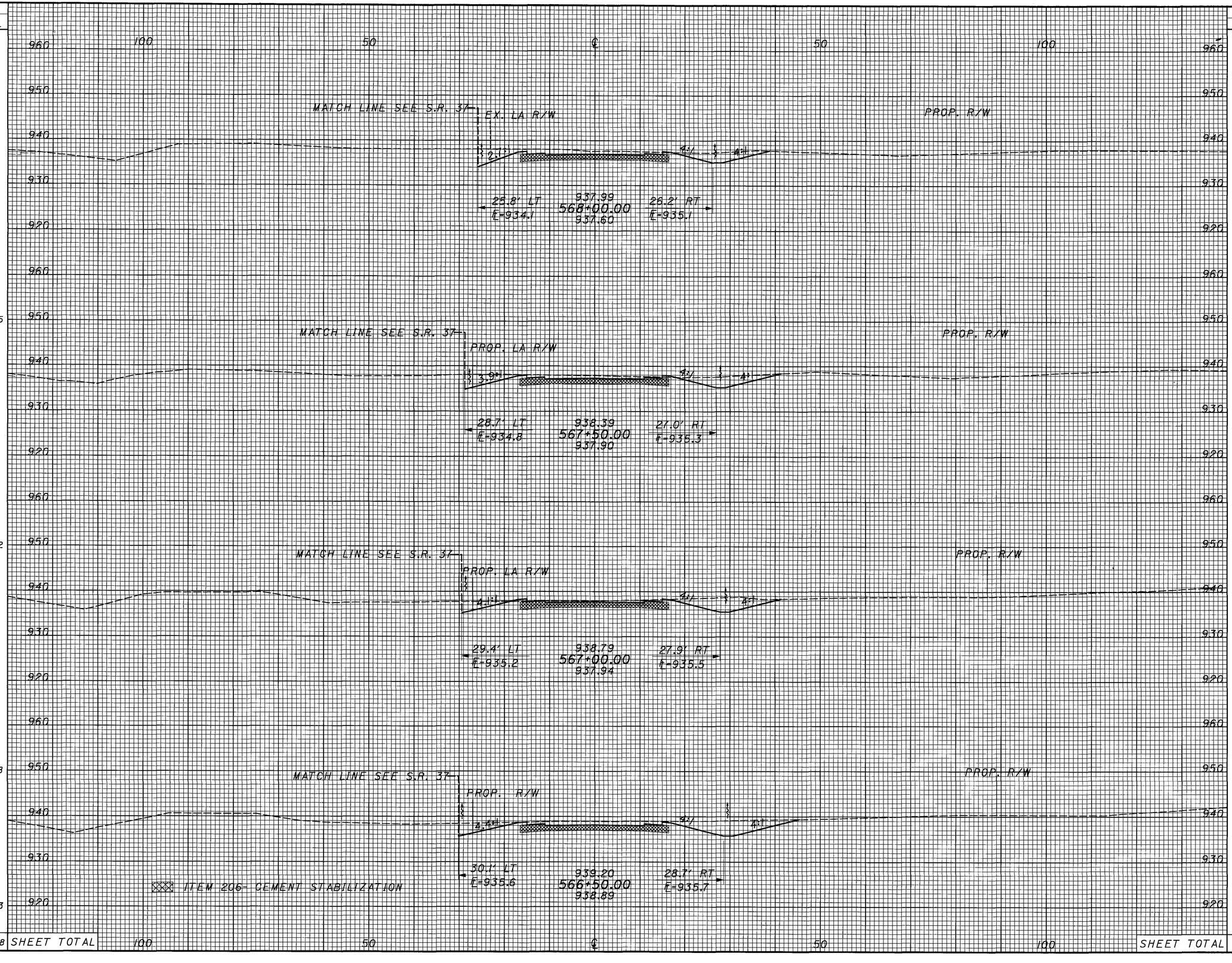
32.2' LT
℄-936.7

31.0' RT
℄-936.3

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
38	225	75	0	134	1
43		69	1		
44	242	66	1	125	2
49	258	97	0	151	1
	303			348	0
	1028 SHEET TOTAL			758	4



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 566+50 TO STA. 568+00

LIC-161-6.65
LIC-37-10.25

816
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
31		166	0		
	197			368	0
40		232	0		
	222			455	0
40		259	0		
	225			408	0
41		182	0		
	219			238	0
	863	SHEET TOTAL		1469	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 568+50 TO STA. 570+00

LIC-161-6.65
LIC-37-10.25

817
1349

100 50 ℄ 50 100

ITEM 206- CEMENT STABILIZATION

960 950 940 930 920 910

MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — 2.5% — 4:1 — 4%

26.4' LT ℄-932.0 — 936.38 570+00.00 938.17 — 23.0' RT ℄-934.3

MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — 2.5% — 4:1 — 4% — EX. WAT.

26.6' LT ℄-932.4 — 936.78 569+50.00 939.53 — 23.8' RT ℄-934.6

MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. LA R/W — EX. WATER — PROP. R/W — 2.6% — 4:1 — 4%

26.9' LT ℄-932.8 — 937.18 569+00.00 940.61 — 24.6' RT ℄-934.7

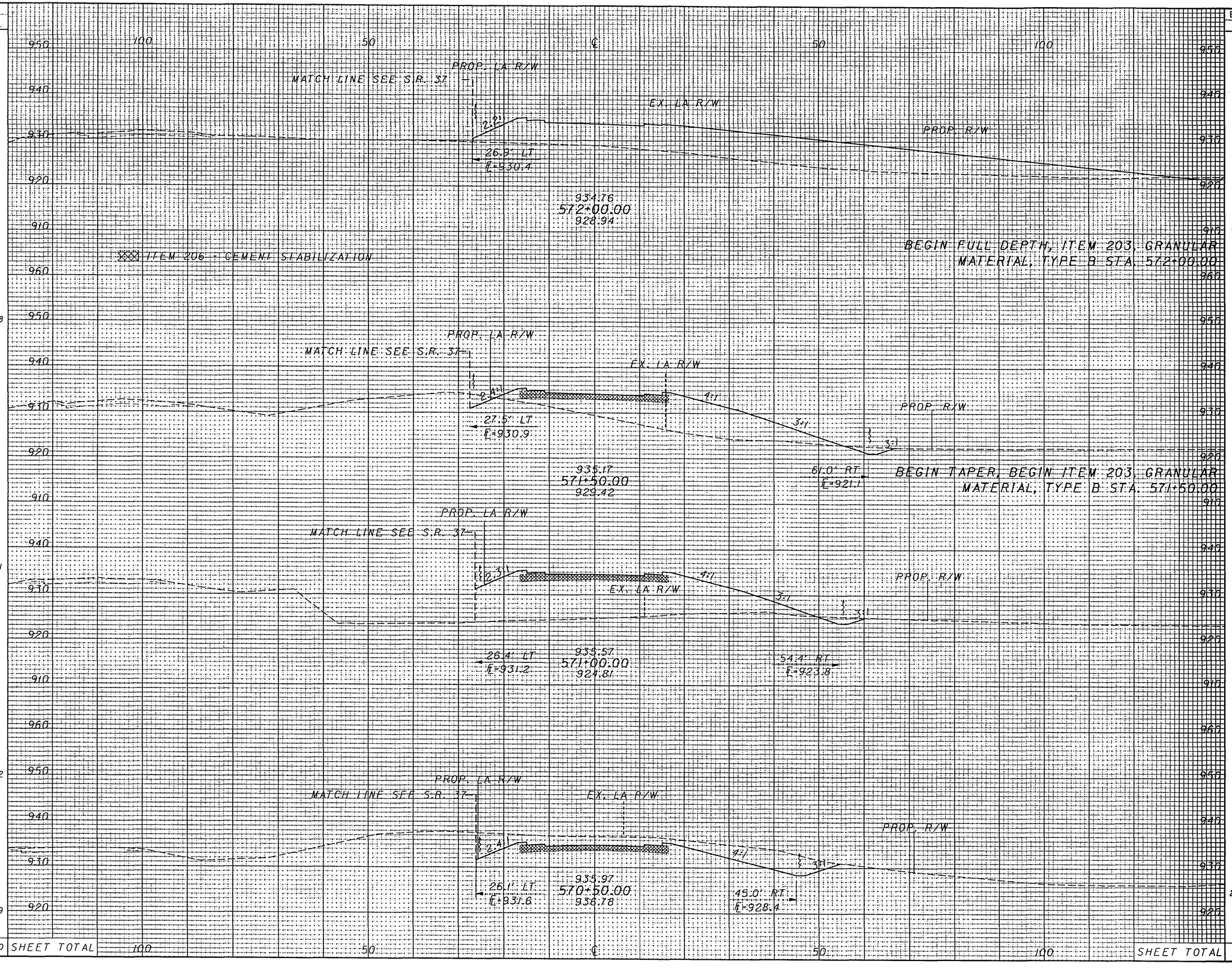
MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — 2.5% — 4:1 — 4%

25.2' LT ℄-933.7 — 937.59 568+50.00 939.14 — 25.4' RT ℄-934.9

SHEET TOTAL

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SEEDING END WIDTH	SEEDING SQ. YDS.
13	
	228
69	
	361
61	
	322
55	
	239
	1150



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	449		
	234 (GMB)		
		17	749
			217 (GMB)
18	360		
	0 (GMB)		
		26	854
10	563		
		200	521
207	0		
		345	0
		587	2124

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 570+50 TO STA. 572+00

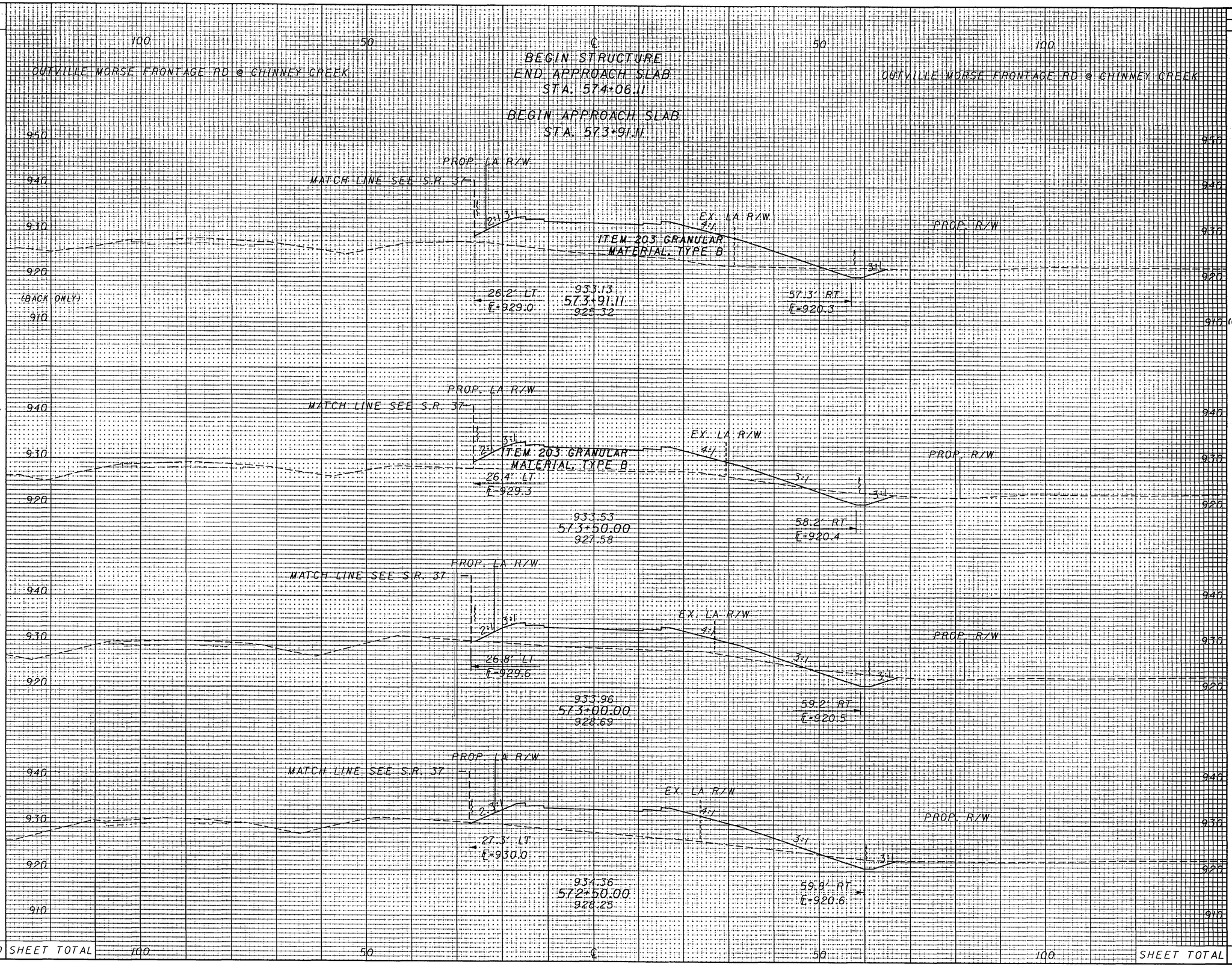
LIC-161-6.65
LIC-37-10.25

818
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
68	(BACK ONLY)
	378
68	
	383
70	
	231
	1370



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		4	15
17	67		
		9	37
		0 (GMB)	293 (GMB)
17	66		
0 (GMB)	366 (GMB)		
		33	102
		0 (GMB)	443 (GMB)
28	68		
	216 (GMB)		
		56	63
			425 (GMB)
32	0		
	243 (GMB)		
		42	0
			522 (GMB)
17	0		
	321 (GMB)	16	416
			514 (GMB)
		160	633

CALCULATED JMA
CHECKED PEK

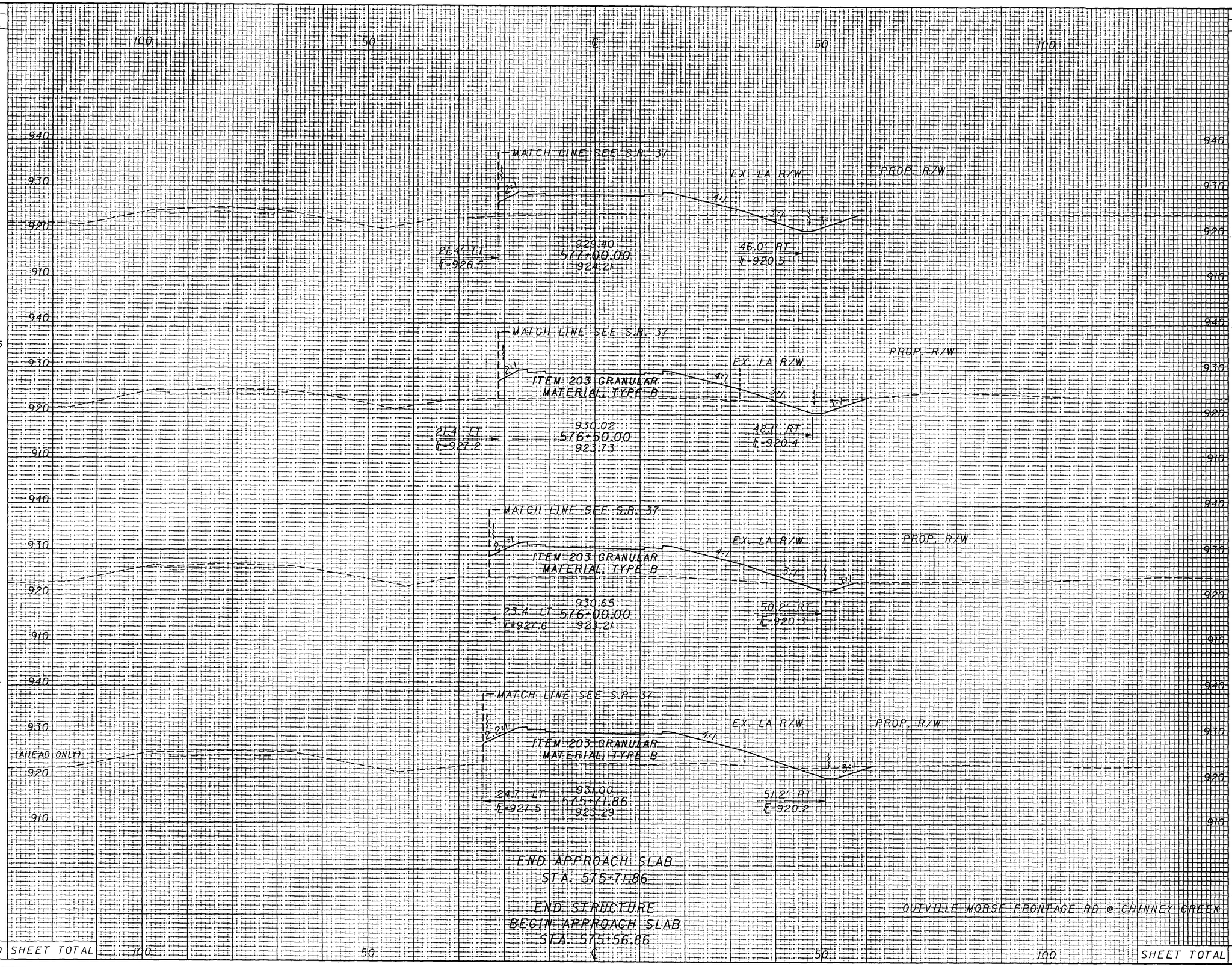
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 572+50 TO STA. 574+06.11

LIC-161-6.65
LIC-37-10.25

819
1349

$USER
$DATE$
$FILE$
$TIMES1AMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
54	306
56	311
56	183
61	(AHEAD ONLY)
	800



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
40	0		
	216 (GMB)		
		66	52
			406 (GMB)
31	56		
	222 (GMB)		
		49	119
			491 (GMB)
13	56		
	308 (GMB)		
		18	61
			326 (GMB)
21	61		
	318 (GMB)		
		11	42
			260 (GMB)
0	0		
		144	274

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 575+56.86 TO STA. 577+00

LIC-161-6.65
LIC-37-10.25

820
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
	36
	214
	41
	236
	44
	250
	46
	267
	50
	289
	1256

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

MATCH LINE SEE S.R. 37

EX. LA R/W PROP. R/W

4:1 3:1

21.4' LT
℄-924.0

926.27
579+50.00
923.30

35.4' RT
℄-921.

EX. 6" GAS

STA 578+95 TO STA. 579+25 CULVERT NO. 11,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT. 978

MATCH LINE SEE S.R. 37

EX. LA R/W PROP. R/W

EX. 6" GAS

4:1 4:1 3:1

21.4' LT
℄-924.5

926.90
579+00.00
923.41

38.3' RT
℄-921.0

MATCH LINE SEE S.R. 37

EX. LA R/W PROP. R/W

4:1 4:1 3:1

21.4' LT
℄-925.0

927.52
578+50.00
923.68

41.2' RT
℄-920.9

END TAPER, END ITEM 203, GRANULAR MATERIAL, TYPE B STA. 578+50.00

MATCH LINE SEE S.R. 37

EX. LA R/W PROP. R/W

4:1 4:1 3:1 3:1

21.4' LT
℄-925.5

928.15
578+00.00
923.70

41.3' RT
℄-920.8

END FULL DEPTH, ITEM 203, GRANULAR MATERIAL, TYPE B STA. 578+00.00

MATCH LINE SEE S.R. 37

EX. LA R/W PROP. R/W

4:1 4:1 3:1 3:1

21.4' LT
℄-926.0

928.77
577+50.00
923.82

43.8' RT
℄-920.6

SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
11	92		
		27	189
19	112		
		38	236
22	143		
	0 (GMB)		
		42	132
			157 (GMB)
23	0		
	170 (GMB)		
		52	0
			339 (GMB)
33	0		
	196 (GMB)	67	0
			398 (GMB)
		226	557

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD
STA. 577+50 TO STA. 579+50

LIC-161-6.65
LIC-37-10.25

821
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.	
		100 50 ℄ 50 100
		ITEM 206 - CEMENT STABILIZATION
21	125	MATCH LINE SEE S.R. 37 — PROP. R/W — Ex. 6" Gas — 3.6' — 4:1 — 4:1 — 21.4' LT E-921.9 — 923.70 582+00.00 922.09 — 22.3' RT E-921.8 — 930 / 920
24		MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — Ex. 6" Gas — 3.4' — 4:1 — 4:1 — 21.4' LT E-922.1 — 923.97 581+50.00 922.05 — 24.2' RT E-921.6 — 930 / 920 / 910
24	133	MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — Ex. 6" Gas — 3.6' — 4:1 — 4:1 — 21.4' LT E-922.6 — 924.42 581+00.00 922.28 — 26.4' RT E-921.5 — 930 / 920 / 910
29	147	MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — Ex. 6" Gas — 3' — 4:1 — 4:1 — 21.4' LT E-923.0 — 925.02 580+50.00 922.81 — 29.2' RT E-921.4 — 930 / 920 / 910
31	167	MATCH LINE SEE S.R. 37 — EX. LA R/W — PROP. R/W — EX. 6" GAS — 2.8' — 4:1 — 3' — 21.4' LT E-923.5 — 925.65 580+00.00 923.10 — 32.1' RT E-921.3 — 930 / 920 / 910
	186	940
	758	SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
3	18		
		8	45
6	31		
7	73		
2	48		
7	90		
6	50		
11	113		
6	73		
16	153		
		49	474

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

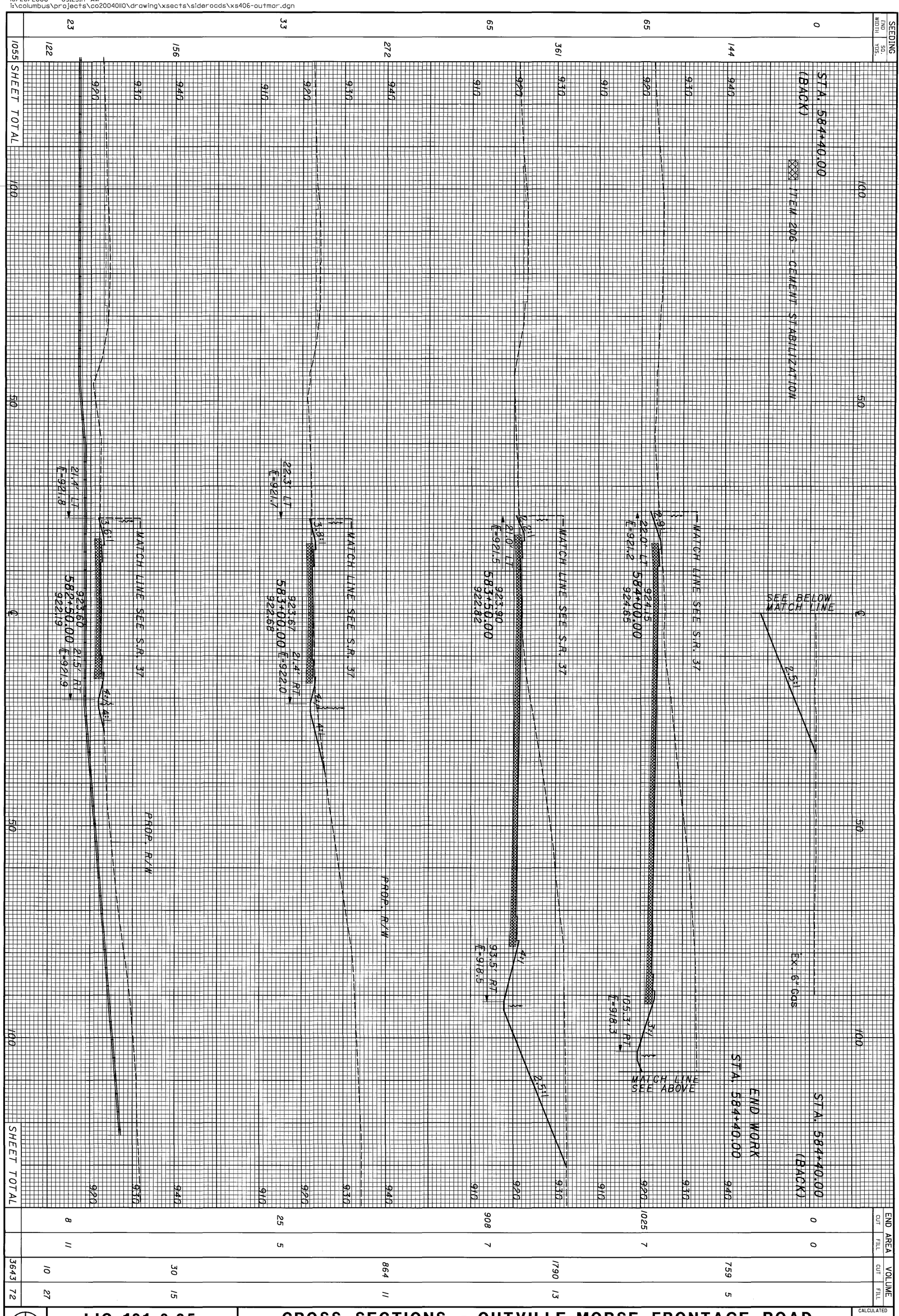
CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 580+00 TO STA. 582+00

LIC-161-6.65
LIC-37-10.25

822
1349

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823/1349	LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - OUTVILLE-MORSE FRONTAGE ROAD STA. 582+50 TO STA. 584+40

CALCULATED JMA
CHECKED PEK

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

BEGIN WORK
C.R. 539A EXTENSION
STA. 295+50.00

STA. 299+99.30, 18.00' LT
BEG. TYPE E-98 ANCH. ASSM.

STA. 300+13.53
LON POINT

STA. 300+49.30, 18.00' LT
END TYPE E-98 ANCH. ASSM.
BEG. TYPE 5 GUARDRAIL

MATCH LINE STA. 302+50 C.R. 539A EXTENSION
SEE SHEET 824

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	1713 CU.YD.
203 EMBANKMENT	2755 CU.YD.
659 SEEDING AND MULCHING	5460 SQ.YD.

PROP. CB-1, A.P.P.
℄ S.R. 37 STA. 533+18.00, 120.57 LT
GRATE ELEV. = 936.80
INV. 27" IN = 933.05
INV. 36" N = 932.30

84" X 433' CONDUIT, TYPE A

P.V.I. STA. = 297+00
P.V.I. ELEV. = 940.89
(NO VERTICAL CURVE)

P.V.C. STA. = 298+50.00
P.V.C. ELEV. = 940.47

P.V.I. STA. = 300+00.00
P.V.I. ELEV. = 940.05
300' V.C.
K = 117

P.V.T. STA. = 301+50.00
P.V.T. ELEV. = 943.47

STA. 295+50, ELEV. = 941.35
MATCH EX. PVMT.
(NO VERTICAL CURVE)

-0.29 %
-0.64 %
-0.28 %
+2.28 %

EXIST. GRADE
PROPOSED PROFILE

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PLAN AND PROFILE - C.R. 539A EXTENSION
STA. 295+50 TO STA. 302+50

LIC-161-6.65
LIC-37-10.25

CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	1281 CU.YD.
203 EMBANKMENT	49669 CU.YD.
659 SEEDING AND MULCHING	9881 SQ.YD.

(S) END TYPE 5 GUARDRAIL
BEG. TYPE T ANCH. ASSM.
STA. 308+49.30, 18.00' LT

(T) STA. 308+61.80, 18.00' LT.
END TYPE T ANCH. ASSM.
BEG. TYPE 5 GUARDRAIL

(U) STA. 308+86.73, 41.23' LT.
END TYPE 5 GUARDRAIL,

(V) STA. 309+32.22, 18' LT.
BEG. TYPE T ANCH. ASSM.

(W) STA. 309+44.72, 18' LT.
END TYPE T ANCH. ASSM.

C.R. 539A EXTENSION
CURVE DATA
P.I. STA. = 313+44.17
Δ = 01° 18' 17" (LT)
Dc = 00° 30' 00"
R = 11,459.16'
T = 130.49'
L = 260.96'
E = 0.74'
emax = NC

MATCH LINE STA. 302+50 C.R. 539A EXTENSION
SEE SHEET 824

MATCH LINE STA. 315+00 C.R. 539A EXTENSION
SEE SHEET 826

+00.00 RES. DR. (GRAVEL)
D-1
T ESMT
1-1/2 STORY METAL POLE BARN
GRAVEL
R-4
R-6
R-7
CONSTRUCTION LIMITS
R-9
FIELD
SEPTIC
PROPANE TANK
R-3
GRASS
T ESMT
1-STY FRAME
1-1/2 STY METAL/BLOCK BARN
CONC PAD
SILO
E-1
CONSTRUCTION LIMITS
GR-1
R/W
LA
T
U
S
TV TOWER
GRAVEL
WELL
R-5
R-8
E-2
SPRINT
TYPE 5 GUARDRAIL
AEP (OVERHEAD)
42" CONDUIT, TYPE A
R-1
R-2
YARD
86°11'53"
R-25'
V
W
R-10
R-11
15" CONDUIT
P.C. STA. 312+13.68
P.T. STA. 314+74.64
END SHOULDER TRANSITION, 23.05' RT.
303+00
304+00
305+00
306+00
307+00
308+00
309+00
310+00
311+00
312+00
313+00
314+00
315
S 80° 18' 55" E
LA-R/W
R-12
19.28'
R-13
CONCRETE BARRIER
℄ SURVEY & CONST. C.R. 539A EXTENSION
302+74
CULVERT NO. 9
WESTBOUND LANES
BEGIN SHOULDER TRANSITION
STA. 309+01.02, 35.26' RT.
IMPACT ATTENUATOR TYPE 3-98
GR-2
CB-4, AP.P.
WOODS
TREES
SPLIT RAIL
541+00
542+00
543+00
544+00
545+00
546+00
547+00
548+00
549+00
550+00
551+00
552+00
℄ SURVEY & CONST. S.R. 37
EASTBOUND LANES
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
2-STY FRAME
SEPTIC AREA

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
960
950
940
930
PROPOSED PROFILE
EXIST. GRADE
+2.28 %
-0.51 %
P.V.I. STA. = 305+50.00
P.V.I. ELEV. = 952.59
P.V.C. STA. = 303+75.00
P.V.C. ELEV. = 948.60
P.V.T. STA. = 307+25.00
P.V.T. ELEV. = 951.70
350' V.C.
K = 125
SSD = 562'
42" X 41'
CONDUIT, TYPE A
29"X18" CMP
SPRINT

946.76 946.89 946.03 949.15 949.15 948.64 950.09 950.48 950.83 951.12 951.37 951.57 951.71 951.81 951.86 951.85 951.80 951.70 951.57 951.51 951.06 950.80 950.55 950.29 950.04 949.78 949.53 949.27 949.02 948.76 948.51 948.25 948.00 947.74
950.59 950.45 950.17 950.15 949.95 949.64 950.16 950.41 950.15 950.07 950.28 950.66 950.21 949.34 949.55 949.16 949.16 948.99 948.79 948.68 948.55 948.31 948.34 948.75

303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00 314+00 315+00

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - C.R. 539A EXTENSION
STA. 302+50 TO STA. 315+00

LIC-161-6.65
LIC-37-10.25

825
349

tduffney
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NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	19056 CU.YD.
203 EMBANKMENT	15107 CU.YD.
659 SEEDING AND MULCHING	8775 SQ.YD.

C.R. 539A EXTENSION
CURVE DATA
P.I. STA. = 322+55.21
Δ = 00° 47' 13" (LT)
Dc = 00° 30' 00"
R = 11,459.16'
T = 78.70'
L = 157.40'
E = 0.27'
e_{max} = NC
P.C. STA. 321+76.51
P.T. STA. 323+33.91

SEE SHEET 825
MATCH LINE STA. 315+00 C.R. 539A EXTENSION
MATCH LINE STA. 327+50 C.R. 539A EXTENSION
SEE SHEET 827

WETLAND
TOTAL AREA= 3.067 AC.
DISTURBED AREA= 0.000 AC.

STA. 320+70.13, 18' LT.
END TYPE T ANCH. ASSM.
STA. 320+57.63, 18' LT.
BEGIN TYPE T ANCH. ASSM.
320+61
CULVERT, NO. 10
+25.00
12' RES.
DR.(GRAVEL)
R=25'
D-1
INLET NO. 3
CONSTRUCTION LIMITS
10" ASHLAND OIL PIPELINE
EX. 50' UTILITY EASEMENT
6" ASHLAND OIL PIPELINE
SPRINT
AEP (OVERHEAD)
GR-2
R-1
R-2
R-3
R-4
R-5
R-6
R-7
℄ SURVEY & CONST. C.R. 539A EXTENSION
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
℄ SURVEY & CONST. MORSE ROAD
WESTBOUND LANES
EASTBOUND LANES
CONCRETE BARRIER
CB-4, AP.P.
CB-8, AP.P.
15" CONDUIT
54" CONDUIT, TYPE A
(BURIED)
CONSTRUCTION LIMITS
R/W
LA-R/W
LA
S 81° 37' 13" E
S 82° 24' 26" E
LOT 29
LOT 28
LOT 4
SOUTH QUARTER TWP. 4 EAST OF GENERAL'S GRANT
3RD QUARTER TWP. GRANVILLE TWP

PROP. NO. 3 FOR SINGLE SLOPE BARRIER, TYPE A
STA. 320+63.80, 29.13' RT
GRATE ELEV. S - 944.23
GRATE ELEV. N - 944.23
INV. 54" S - 926.08
INV. 54" N - 926.08
-0.51 %
54" x 326' CONDUIT, TYPE A
EXIST. GRADE
PROPOSED PROFILE
PROP. PROFILE GRADE
EXIST. PROFILE GRADE
950
940
930
920
315+00 316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - C.R. 539A EXTENSION
STA. 315+00 TO STA. 327+50

LIC-161-6.65
LIC-37-10.25

826
349

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EX. 50' UTILITY EASEMENT

1 STY WOOD BARN

6" ASHLAND OIL PIPELINE

WETLAND
TOTAL AREA= 2.968 AC.
DISTURBED AREA= 0.299 AC.

℄ SURVEY & CONST. C.R. 539A EXTENSION

SEE SHEET 826
MATCH LINE STA. 327+50 C.R. 539A EXTENSION

CONSTRUCTION LIMITS

ESMT

LOT

R-1 R-2 R-3 R-4

GR-1

+50.00 12' RES. DR. (GRAVEL)

TYPE 5 GUARDRAIL

P.C. STA. 333+88.38

24'

CONCRETE INLET NO.3

P.C. STA. 571+38.22

WESTBOUND LANES

EASTBOUND LANES

15" CONDUIT

CONCRETE BARRIER

CB-4, A.P.P.

℄ SURVEY & CONST. S.R. 37

6½'x4' CATTLE CROSSING

18" CONDUIT

WIRE FENCE

TREES

WELL

PASTURE

GRASS DRIVE

WATER LINE

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

GRAVEL DR.

CONC. PAD

AEP

LA

LA-R/W

R/W

STA. 336+16.45, 18' LT. BEG. TYPE I BRG. TERM. ASSM.

STA. 336+47.70, 18' LT. END TYPE I BRG. TERM. ASSM.

STA. 338+43.45, 18' LT. BEGIN TYPE I BRG. TERM. ASSM.

STA. 338+74.70, 18' LT. END TYPE I BRG. TERM. ASSM.

10" ASHLAND OIL PIPELINE

EX. 50' UTILITY EASEMENT

+50.00 12" RES. DR. (GRAVEL)

21" CONDUIT

P.T. STA. 338+64.44

TYPE 5 GUARDRAIL

C-1 D-1 D-2 GR-2 GR-3 BR-1

CB-3A, A.P.P.

INLET NO.3

CONCRETE BARRIER

P.T. STA. 576+05.61

15" CONDUIT

18" CONDUIT

CB-3A, A.P.P.

CB-4, A.P.P.

AEP (OVERHEAD)

CHIMNEY CREEK

P.T. STA. 576+01.20

MATCH LINE STA. 340+00 C.R. 539A EXTENSION
SEE SHEET 828

Ⓐ STA. 329+78.95, 18' LT.
BEG. TYPE E-98
ANCH. ASSM.

Ⓑ STA. 330+28.95, 18' LT.
END TYPE E-98
ANCH. ASSM.

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	69 CU.YD.
203 EMBANKMENT	27127 CU.YD.
203 GRANULAR MATERIAL, TYPE B	6281 CU.YD.
659 SEEDING AND MULCHING	5322 SQ.YD.

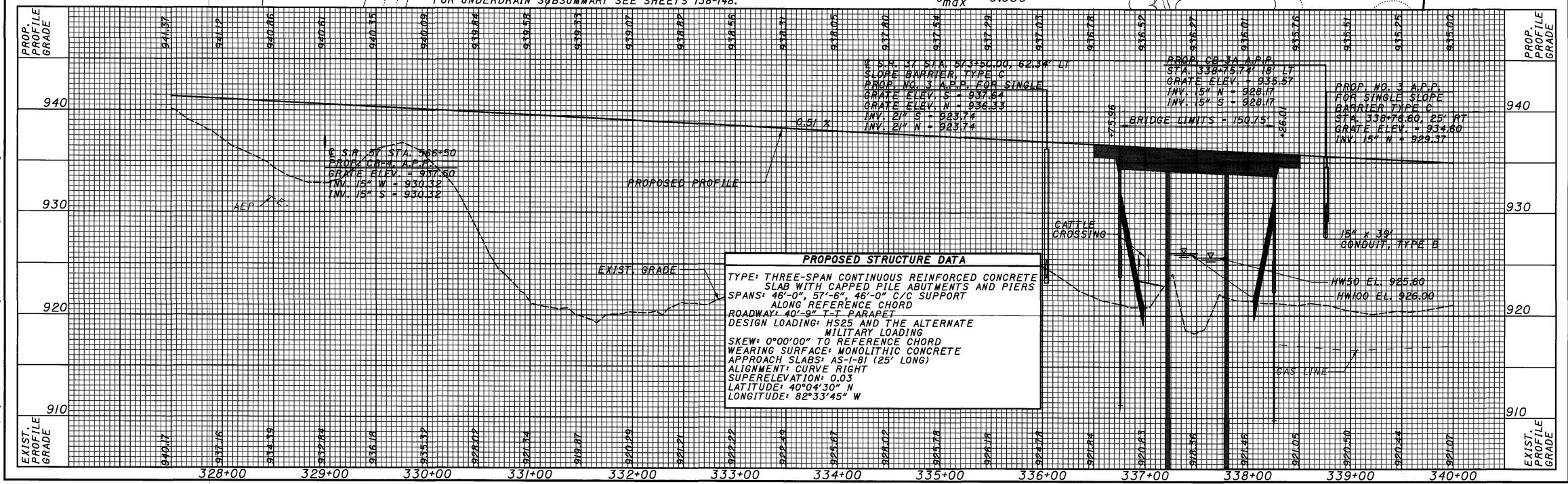
NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

C.R. 539A EXTENSION
CURVE DATA
P.I. STA. = 336+26.62
Δ = 05° 50' 33" (RT)
Dc = 01° 13' 38"
R = 4,668.74'
T = 238.24'
L = 476.07'
E = 6.07'
e_{max} = 0.030

P.C. STA. 571+33.81

ESMT

P.T. STA. 576+01.20



PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE ABUTMENTS AND PIERS
SPANS: 46'-0", 57'-6", 46'-0" C/C SUPPORT ALONG REFERENCE CHORD
ROADWAY: 40'-9" T-T PARAPET
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°00'00" TO REFERENCE CHORD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: CURVE RIGHT
SUPERELEVATION: 0.03
LATITUDE: 40°04'30" N
LONGITUDE: 82°33'45" W

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - C.R. 539A EXTENSION STA. 327+50 TO STA. 340+00

LIC-161-6.65
LIC-37-10.25

827
1349

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PLAN AND PROFILE - C.R. 539A EXTENSION
STA. 340+00 TO STA. 352+50

LIC-161-6.65
LIC-37-10.25

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED JMA
CHECKED FJA

SEE SHEET 827
MATCH LINE STA. 340+00 C.R. 539A EXTENSION

MATCH LINE STA. 352+50 C.R. 539A EXTENSION
SEE SHEET 829

CONSTRUCTION LIMITS
EX. 50' UTILITY EASEMENT
10" ASHLAND OIL PIPELINE (TO BE REMOVED BY OTHERS)
347+09 CULVERT NO. 12
STA. 351+92.10, 12' LT. END TYPE T ANCH. ASSM.
STA. 351+88.73, 12' LT. BEGIN TYPE T ANCH. ASSM.
+00.00 RES. DR. (GRAVEL)
T ESMT
TYPE 5 GUARDRAIL
AEP (OVERHEAD)
℄ SURVEY & CONST. C.R. 539A EXTENSION
90°
R/W
LA-R/W
+63.88
+93.88
CONCRETE BARRIER
WESTBOUND LANES
15" CONDUIT
24" CONDUIT, TYPE A
S 76° 33' 53" E
STA. 351+63.49 CULVERT NO.22
CULVERT NO. 11
℄ SURVEY & CONST. S.R. 37
CB-4, AP.P.
36" CONDUIT, TYPE A
EASTBOUND LANES
HISTORICAL MARKER
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
P.O.T. STA. 584+40.00
WOOD POST
WIRE FENCE
TREES & WOODS
LANDSCAPING
GATE
GRAVEL
GOLF COURSE
ELEC.
SPLIT RAIL
SAND TRAP
SHRUBS
SIGN
T ESMT
WOOD FENCE
1½ STY WOOD BARN
TREES
SHED
WELL
2-STY FRAME
SEPTIC
CONC.
GRASS
PROPANE TANK
WOOD FENCE
RAISED FLOWER BEDS
PINES
TREES & WOODS
GREEN
CONSTRUCTION LIMITS
ASPHALT DR.
TO BE ABANDONED
TO BE REMOVED BY OTHERS
36" CONDUIT, TYPE A
EX. 50' UTILITY EASEMENT
6" ASHLAND OIL PIPELINE

NOTE:
FOR DRIVE PROFILES SEE SHEETS 931-937.
FOR CULVERT DETAILS SEE SHEETS 968-989.
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

SHEET TOTALS: (CARRIED TO SHEET 123-125)

203 EXCAVATION	0 CU.YD.
203 EMBANKMENT	33747 CU.YD.
659 SEEDING AND MULCHING	5134 SQ.YD.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
940
930
920
910
RT -0
P.V.I. STA. = 352+50.00
P.V.I. ELEV. = 928.62
250' V.C.
K = 962
PROPOSED PROFILE
-0.51 %
EXIST. GRADE
15" CONDUIT
24" x 229' CONDUIT, TYPE A
36" x 282' (4) CONDUIT, TYPE A
36" x 250' CONDUIT, TYPE A
6" ASHLAND OIL PIPELINE
P.V.C. STA. = 351+25.00
P.V.C. ELEV. = 929.26
P.V.I. LINE
340+00 341+00 342+00 343+00 344+00 345+00 346+00 347+00 348+00 349+00 350+00 351+00 352+00

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828
349

SHEET TOTALS: (CARRIED TO SHEET 123-125)
203 EXCAVATION 506 CU.YD.
203 EMBANKMENT 20591 CU.YD.
659 SEEDING AND MULCHING 7198 SQ.YD.

C.R. 539A EXTENSION
CURVE DATA
P.I. STA. = 360+04.05 y = 2.21'
Δ = 19° 00' 34" (LT) k = 79.50'
Dc = 03° 00' 00" p = 0.55'
R = 1,909.86' Δc=14° 14' 22" (LT)
Ls = 159.00' Lc = 474.64'
θs = 02° 23' 06" Ts = 399.35'
LT = 106.01' Es = 14.84'
ST = 53.01' emax = 0.062
x = 158.97'

END WORK
C.R. 539A EXTENSION
STA. 364+40.00

MATCH LINE STA. 352+50 C.R. 539A EXTENSION SEE SHEET 828

℄ SURVEY & CONST. C.R. 539A EXTENSION
EX. 50' UTILITY EASEMENT
10" ASHLAND OIL PIPELINE
R/W
18" CONDUIT
E-LA
S 76° 33' 53" E
INLET NO.3
15" CONDUIT
CONCRETE BARRIER
CB-4, AP.P.
CONSTRUCTION LIMITS
T.S. STA. 356+04.70
S.C. STA. 357+63.70
SM ESMT
AEP (OVERHEAD)
12" CONDUIT
D-1
TREES & WOODS
TREES & DENSE BRUSH
C.S. STA. 362+38.34
S.T. STA. 363+97.34
P.O.T. STA. 364+66.85
GRASS FIELD
GRAVEL
ASPHALT
SAND
BRIDGE
LOT 24
LOT 25
WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 37
IMPACT ATTENUATOR TYPE 3-98
℄ SURVEY & CONST. C.R. 539A EXTENSION
END PAVEMENT TRANSITION STA. 364+40.00 N 84° 25' 33" E
BEGIN PAVEMENT TRANSITION STA. 363+90.00, 12' LT. & RT.
4' WIRE FENCE
BEGIN AND END SHOULDER TRANSITION STA. 359+46.33, 10' RT TO 4' RT
15" CONDUIT
SWAMP
TREES & WOODS
WETLAND
TOTAL AREA- 7.085 AC.
DISTURBED AREA- 0.499 AC.

NOTE:
FOR STORM SEWER PROFILES SEE SHEETS 948-965.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR STORM SEWER SUBSUMMARY SEE SHEETS 135-136.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
940
930
920
910
P.V.I. STA. = 352+50.00
P.V.I. ELEV. = 928.62
250' V.C. K = 962
PROP. NO. 3 FOR SINGLE SLOPE BARRIER TYPE A ℄ S.R. 37 STA. 591+00, 56.85' LT
GRATE ELEV. S = 927.73
GRATE ELEV. N = 927.73
INV. 15" S = 918.50
INV. 18" N = 918.25
-0.25 %
P.V.T. STA. = 353+75.00
P.V.T. ELEV. = 928.31
P.V.C. STA. = 356+00.00
P.V.C. ELEV. = 927.75
P.V.I. STA. = 357+00.00
P.V.I. ELEV. = 927.50
200' V.C.
K = 385
SSD = 217.5'
P.V.I. STA. = 358+00.00
P.V.I. ELEV. = 926.73
-0.77 %
PROPOSED PROFILE
P.V.C. STA. = 361+00.00
P.V.C. ELEV. = 924.52
-0.58 %
P.V.T. STA. = 363+00.00
P.V.T. ELEV. = 923.06
P.V.I. STA. = 364+00.00
ELEV. = 922.94
(NO VERTICAL CURVE)
-0.20 %
MATCH EX. PVMT.
EXIST. GRADE
P.V.I. STA. = 362+00.00
P.V.I. ELEV. = 923.64
200' V.C.
K = 1053
STA. 359+46, 23.35' RT
PROP. NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C
GRATE ELEV. S = 925.46
GRATE ELEV. N = 925.78
INV. 12" N = 918.80
353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - C.R. 539A EXTENSION TO STA. 364+40

LIC-161-6.65
LIC-37-10.25

829
1349

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SEEDING	
END WIDTH	SQ. YDS.
73	
	308
	106
0	
	414

END AREA	
CUT	FILL
59	40
39	6
0	0

VOLUME	
CUT	FILL
91	43
36	6
0	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 295+00 TO STA. 296+00

LIC-161-6.65
LIC-37-10.25

830
1349

100 50 ℄ 50 100

ITEM 206- CEMENT STABILIZATION

STA. 296+06, CULVERT NO. 8,
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 975

950
940
930

EX. LA-R/W
PROP. CH. ESMT
EX. TEL.
2:1
4:1
941.53
296+00.00
941.17
5:1
33.7' RT
℄-937.8
MATCH LINE - SEE S.R. 37
55.4' LT
℄-932.0
FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 959

EX. LA-R/W
EX. TEL.
4:1
941.85
295+50.00
941.85
5:1
42.0' RT
℄-936.8
MATCH LINE - SEE S.R. 37
BEGIN WORK

EX. TEL.
295+00.00
942.34

SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL

127 49

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
74		74	18		
	439			197	35
84		139	20		
	344			155	31
40		28	14		
	264			71	30
55		49	18		
	356			100	54
	1403			523	150

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 296+50 TO STA. 298+00

LIC-161-6.65
LIC-37-10.25

831
1349

ITEM 206- CEMENT STABILIZATION

EX. LA R/W
EX. TEL.
3:1
3:1
4:1
5:1
53.0' LT
E=930.1
940.61
298+00.00
940.66
28.6 RT
E=938.2
MATCH LINE - SEE S.R. 37

EX. LA-R/W
EX. TEL.
3:1
3:1
4:1
5:1
53.7' LT
E=930.0
940.75
297+50.00
940.76
29.8 RT
E=938.1
MATCH LINE - SEE S.R. 37

PROP. CH. ESMT
EX. LA-R/W
EX. TEL.
4:1
5:1
940.89
297+00.00
940.89
30.9 RT
E=938.0
MATCH LINE - SEE S.R. 37

PROP. CH. ESMT
EX. LA-R/W
EX. TEL.
4:1
5:1
941.21
296+50.00
940.99
33.1 RT
E=937.9
MATCH LINE - SEE S.R. 37

100 50 ℄ 50 100

980 970 960 950 940 930 920

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.
82	
433	
74	
411	
844	SHEET TOTAL

END AREA	
CUT	FILL
105	17
73	14

VOLUME	
CUT	FILL
165	29
136	30
301	59

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 298+50 TO STA. 299+00

LIC-161-6.65
LIC-37-10.25

832
1349

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100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

980 970 960 950 940 930 920

EX. LA-R/W

EX. TEL.

3:1 3:1 4:1 4:1

51.6' LT
℄-930.4

940.44
299+00.00
939.84

25.4' RT
℄-938.4

MATCH LINE - SEE S.R. 37

EX. LA-R/W

EX. TEL.

3:1 3:1 4:1 4:1

52.0' LT
℄-930.3

940.47
298+50.00
940.22

25.9' RT
℄-938.3

MATCH LINE - SEE S.R. 37

100 50 ℄ 50 100 SHEET TOTAL

SEEDING	
END WIDTH	SQ. YDS.
72	403
73	431
	834

100 50 ℄ 50 100

XXX ITEM 206 CEMENT STABILIZATION

980 970 960 950 940 930 920

EX. LA-R/W

4:1 3:1 3:1 4:1

EX. TEL.

52.7' LT
E=930.6

941.01
300+00.00
939.84

26.1' RT
E=938.8

MATCH LINE - SEE S.R. 37

EX. LA-R/W

4:1 3:1 3:1 4:1

EX. TEL.

51.8' LT
E=930.5

940.62
299+50.00
939.93

26.1' RT
E=938.5

MATCH LINE - SEE S.R. 37

SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
63	68		
		125	94
72	33		
		164	46
		289	139

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 299+50 TO STA. 300+00

LIC-161-6.65
LIC-37-10.25

833
1349

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SEEDING	
END WIDTH	SQ. YDS.
71	394
71	397
	791

END AREA		VOLUME	
CUT	FILL	CUT	FILL
48	216		
		97	320
57	130		
		111	183
		208	503

CALCULATED JMA
CHECKED PEK

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

980 970 960 950 940 930 920

EX. LA-R/W
EX. TEL.
3:1
3:1
4:1
4:1
56.1' LT
E-930.9
942.44
301+00.00
939.22
27.9' RT
E-939.9

MATCH LINE - SEE S.R. 37

EX. LA-R/W
EX. TEL.
3:1
3:1
4:1
4:1
53.9' LT
E-930.8
941.62
300+50.00
939.56
27.7' RT
E-939.0

MATCH LINE - SEE S.R. 37

SHEET TOTAL

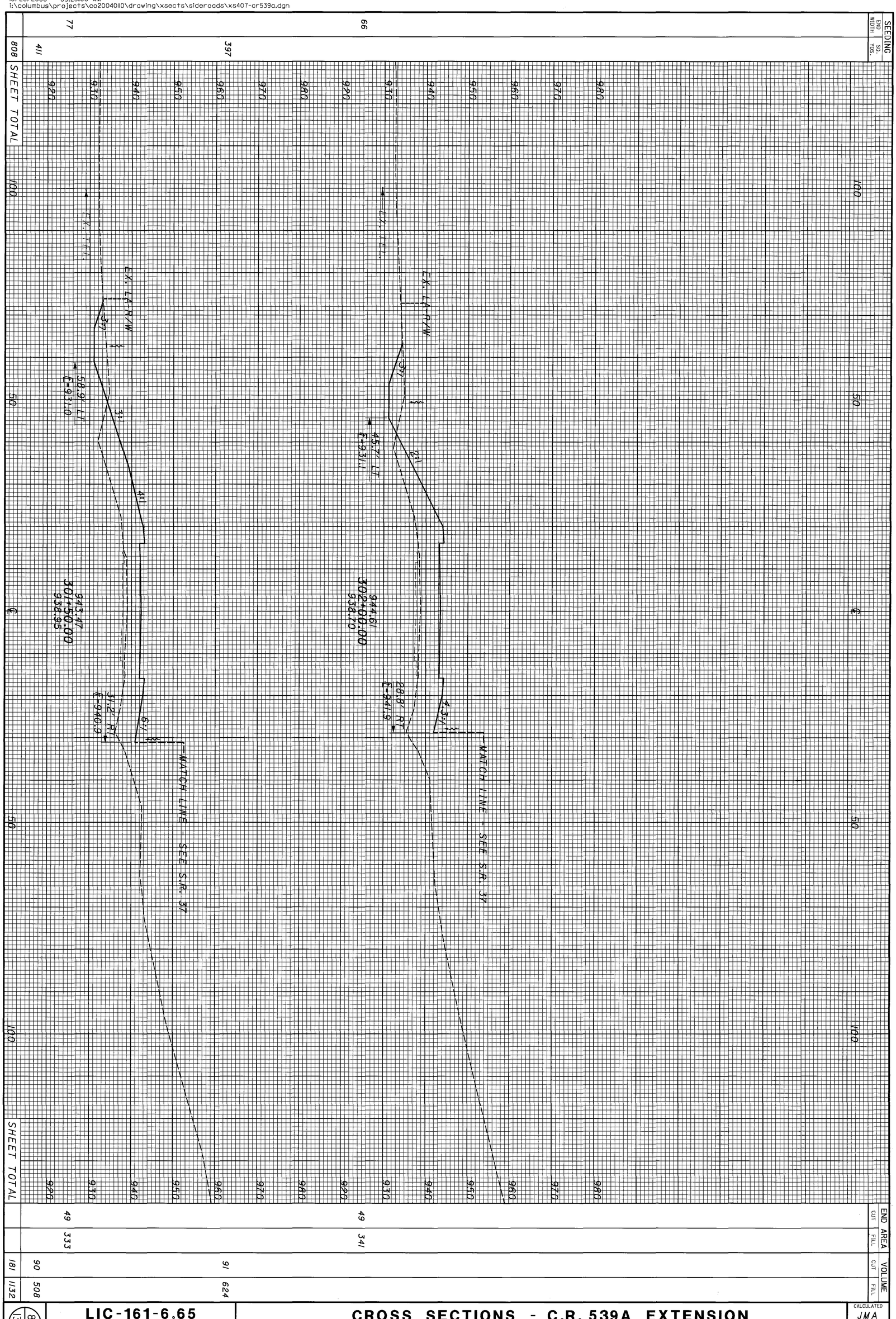
CROSS SECTIONS - C.R. 539A EXTENSION STA. 300+50 TO STA. 301+00

LIC-161-6.65
LIC-37-10.25

834
1349

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LIC-161-6.65 LIC-37-10.25	CROSS SECTIONS - C.R. 539A EXTENSION STA. 301+50 TO STA. 302+00

835
1349

CALCULATED JMA
CHECKED PEK

SEEDING			END AREA		VOLUME		
	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	
100 50 ℄ 50 100	67		32	629			
		381			71	1081	
	70		45	539			
		378			81	906	
	66		42	439			
		367			84	722	
SHEET TOTAL		1126			236	2709	

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 302+50 TO STA. 303+50

LIC-161-6.65
LIC-37-10.25

836
1349

MATCH LINE - SEE S.R. 37

PROP. R/W
EX. LA-R/W
EX. TEL.
4.4%
2%
3%
30.3' RT
℄=945.0
49.1' LT
℄=932.8
948.03
303+50.00
938.17

MATCH LINE - SEE S.R. 37

PROP. R/W
EX. LA-R/W
EX. TEL.
4.5%
2%
3%
29.9' RT
℄=944.0
49.6' LT
℄=931.4
946.89
303+00.00
938.45

STA 302+73.77, CULVERT No. 9.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 976

MATCH LINE - SEE S.R. 37

PROP. R/W
EX. LA-R/W
EX. TEL.
4.2%
2%
3%
29.1' RT
℄=942.9
47.5' LT
℄=931.3
945.75
302+50.00
938.59

970 960 950 940 930 920 980

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		970 960 950 940 930 920				
		PROP. R/W EX. LA-R/W 3:1 2:1 4:1 EX. TEL. 53.1' LT E=933.6 950.83 305+00.00 937.23 30.7' RT E=947.8 MATCH LINE - SEE S.R. 37				
78			174	804		
		970 960 950 940 930 920				
		PROP. R/W EX. LA-R/W 3:1 2:1 4:1 EX. TEL. 52.6' LT E=933.1 950.09 304+50.00 937.95 30.5' RT E=946.8 MATCH LINE - SEE S.R. 37				
74	422		70	787	226	1473
		960 950 940 930 920				
		PROP. R/W EX. LA-R/W 3:1 2:1 4:1 EX. TFL. 50.9' LT E=933.0 949.15 304+00.00 938.13 30.5' RT E=945.9 MATCH LINE - SEE S.R. 37				
69	397		30	733	93	1407
	378	960 950 940 930 920			57	1261
	1197	SHEET TOTAL 100 50 ℄ 50 100 SHEET TOTAL			376	4141

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 304+00 TO STA. 305+00

LIC-161-6.65
LIC-37-10.25

837
1349

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SEEDING	
END WIDTH	SQ. YDS.
66	378
70	397
73	419
1194	SHEET TOTAL

END AREA	
CUT	FILL
66	913
62	885
97	845
SHEET TOTAL	

VOLUME	
CUT	FILL
119	1665
147	1602
251	1527
517	4794

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 305+50 TO STA. 306+50

LIC-161-6.65
LIC-37-10.25

838
1349

100 50 ℄ 50 100

980 970 960 950 940 930 920

PROP. R/W
EX. LA-R/W
EX. TEL
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
3:1
2:1
4:1
49.5' LT
E-936.1
29.6' RT
E-948.8
951.86
306+50.00
936.38

PROP. R/W
EX. LA-R/W
EX. TEL.
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
3:1
2:1
4:1
52.9' LT
E-934.6
29.4' RT
E-948.7
951.71
306+00.00
936.72

PROP. R/W
EX. LA-R/W
EX. TEL.
MATCH LINE - SEE S.R. 37
3:1
2:1
4:1
53.2' LT
E-934.1
29.9' RT
E-948.2
951.37
305+50.00
936.91

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
67	372	5	1057	15	1932
67	344	11	1030	32	1802
57	342	24	916	83	1694
1058	SHEET TOTAL			131	5428

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 307+00 TO STA. 308+00

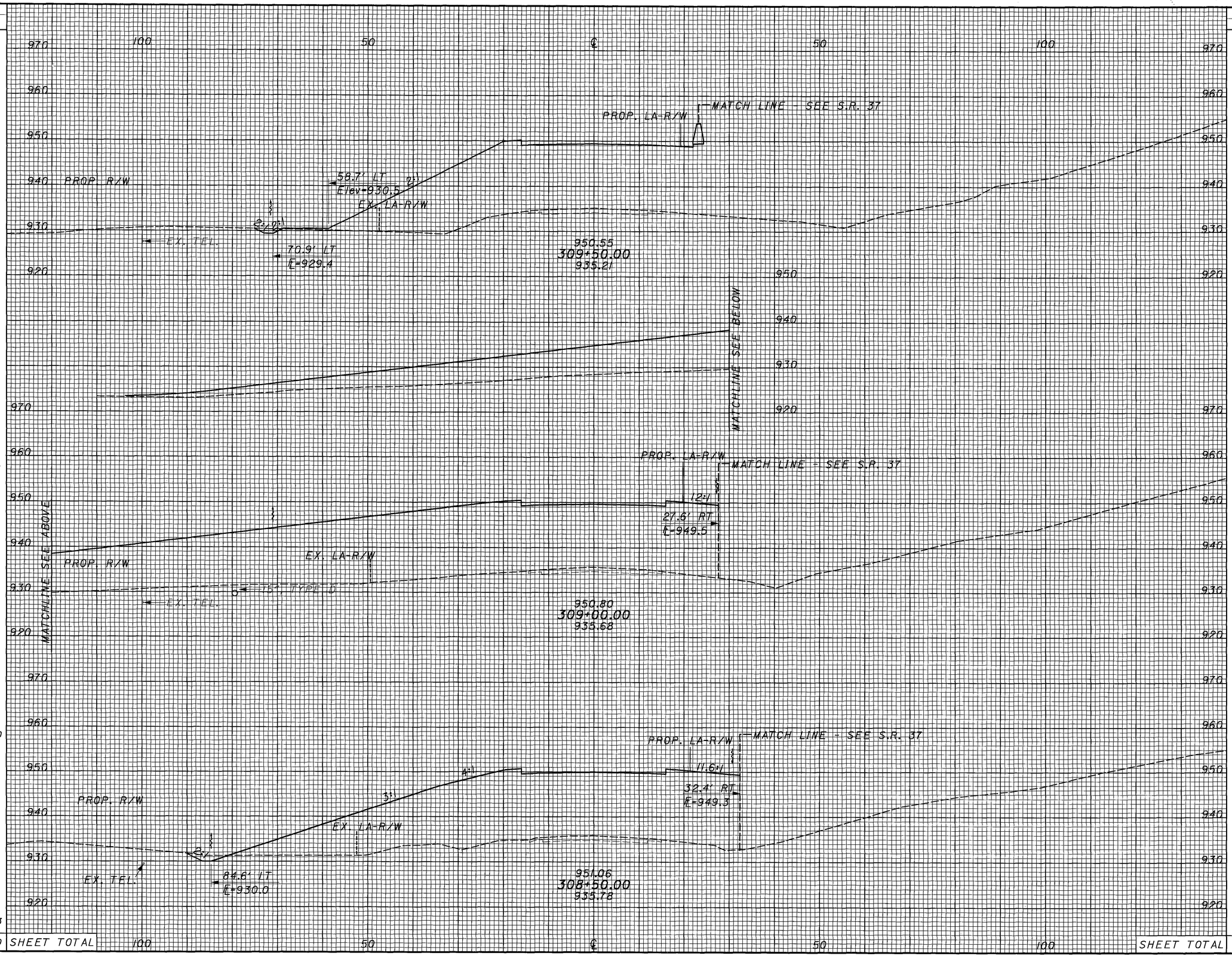
LIC-161-6.65
LIC-37-10.25

839
1349

PROP. LA-R/W
EX. LA-R/W
EX. TEL.
PROP. R/W
MATCH LINE - SEE S.R. 37
9:1
7.2:1
4:1
2:1
3:1
33.0' RT
E=949.2
54.1' LT
E=933.6
95.31
308+00.00
935.87
32.8' RT
E=949.1
53.8' LT
E=934.0
951.57
307+50.00
936.13
28.9' RT
E=948.9
45.0' LT
E=938.6
951.80
307+00.00
936.41
970
960
950
940
930
920
100
50
℄

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SEEDING	
END WIDTH	SQ. YDS.
66	217
12	300
96	453
970	SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
4	1025		
4	3290		
0	2528		
7	3572		
8	1330		
12	2210		
23	9072		

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 308+50 TO STA. 309+50

LIC-161-6.65
LIC-37-10.25

840
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
72	400
72	392
69	375
	1167

100 50 ℄ 50 100

960 950 940 930 920 910

PROP. LA-R/W — MATCH LINE - SEE S.R. 37

PROP. LA-R/W

63.5' LT
Elev-927.3

2%

2%

2%

EX. LA-R/W

EX. TEL.

75.8' LT
℄-926.2

949.78
311+00.00
934.16

PROP. LA-R/W — MATCH LINE - SEE S.R. 37

PROP. R/W

63.7' LT
Elev-927.5

2%

2%

2%

EX. LA-R/W

EX. TEL.

75.7' LT
℄-926.5

950.04
310+50.00
934.55

PROP. LA R/W — MATCH LINE - SEE S.R. 37

PROP. R/W

61.2' LT
Elev-929.0

2%

2%

2%

EX. LA-R/W

EX. TEL.

73.4' LT
℄-927.9

950.29
310+00.00
934.94

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
4	1092		
		9	2009
6	1078		
		9	1981
4	1061		
		7	1931
		25	5921

SHEET TOTAL — SHEET TOTAL

CALCULATED JMA
CHECKED PEK

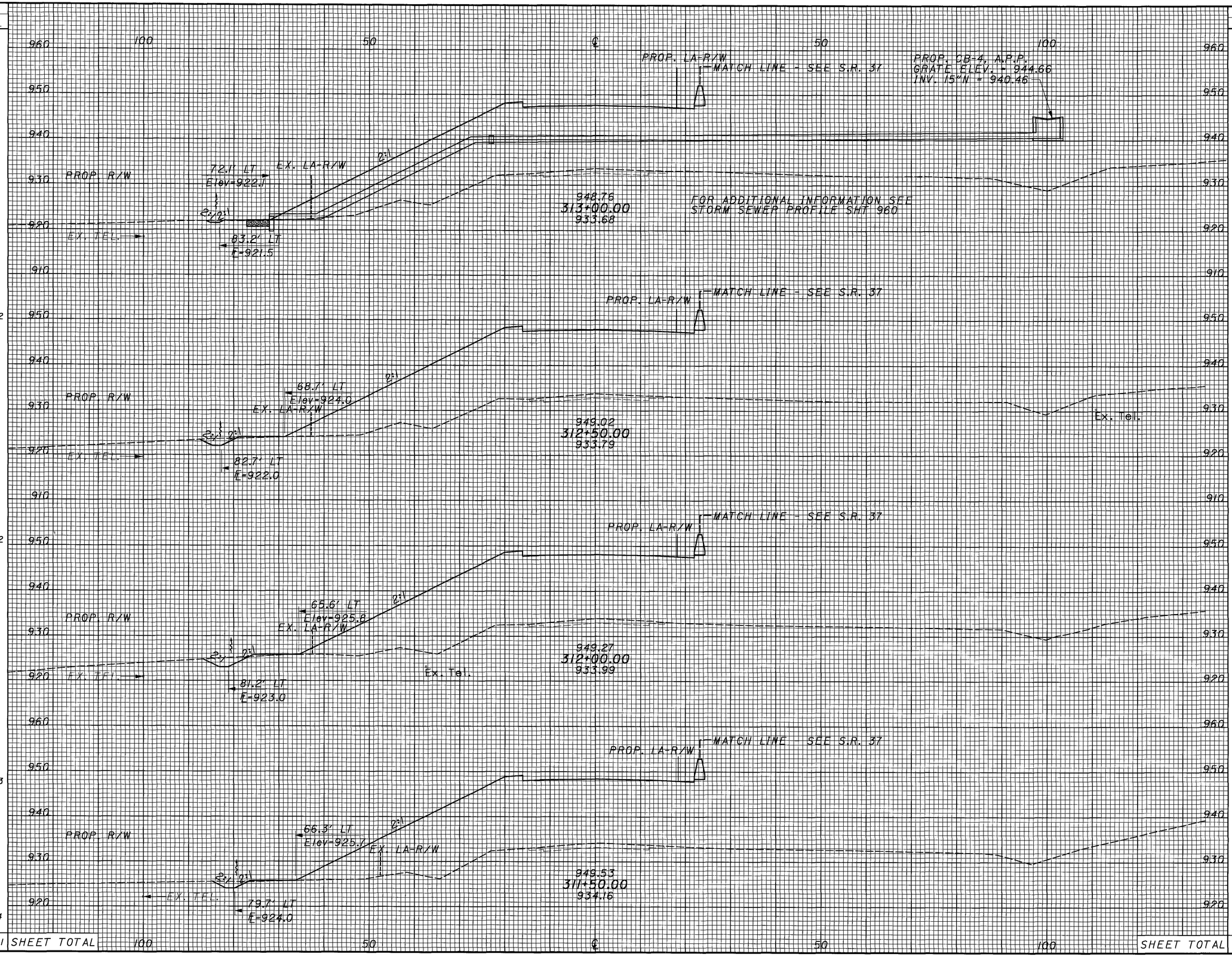
CROSS SECTIONS - C.R. 539A EXTENSION
STA. 310+00 TO STA. 311+00

LIC-161-6.65
LIC-37-10.25

841
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
79		1	1132		
	442			8	2076
80		8	1110		
	442			19	2049
79		13	1103		
	433			19	2045
77		7	1106		
	414			10	2035
	1731 SHEET TOTAL			56	8205 SHEET TOTAL



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 311+50 TO STA. 313+00

LIC-161-6.65
LIC-37-10.25

842
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		MATCH LINE - SEE S.R. 37				
		PROP. LA-R/W				
		950				
		940				
		930 PROP. R/W				
		EX. LA-R/W 2:1				
64		946.00 314+50.00 933.34	0	1099		
		920				
		EX. TEL.				
		910				
		MATCH LINE - SEE S.R. 37				
		PROP. LA-R/W				
358		950			0	2050
		940				
		930 PROP. R/W				
		EX. LA-R/W 2:1				
65		946.25 314+00.00 933.31	0	1115		
		920				
		EX. TEL.				
		910				
		MATCH LINE - SEE S.R. 37				
		PROP. LA-R/W				
361		950			0	2087
		940				
		930 PROP. R/W				
		EX. LA-R/W 2:1				
65		948.51 313+50.00 933.55	0	1139		
		920				
		EX. TEL.				
		910				
400					1	2103
1119		SHEET TOTAL 100 50 ℄ 50 100			1	6240
		SHEET TOTAL				

CALCULATED JWA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 313+50 TO STA. 314+50

LIC-161-6.65
LIC-37-10.25

843
349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
58		960 950 940 930 920 910 PROP. R/W EX. LA-R/W 2:1 PROP. LA-R/W MATCH LINE - SEE S.R. 37 947.23 316+00.00 934.77 EX. TEL.	0	953		
325		960 950 940 930 920 910 PROP R/W EX. LA-R/W 2:1 PROP. LA-R/W MATCH LINE - SEE S.R. 37 947.49 315+50.00 934.35 EX. TEL.	0	1809	0	1001
336		960 950 940 930 920 910 PROP R/W EX. LA-R/W 2:1 PROP. LA-R/W MATCH LINE - SEE S.R. 37 947.74 315+00.00 933.75 EX. TEL.	0	1894	0	1045
62						
350			0	1985	0	1985
1011	SHEET TOTAL	100 50 ℄ 50 100			SHEET TOTAL	
					0	5688

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 315+00 TO STA. 316+00

LIC-161-6.65
LIC-37-10.25

844
349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
56		0	765		
	308			0	1468
55		0	820		
56		0	886		
	306			0	1580
55		0	905		
	308			0	1658
56		0	1005		
	317			0	1720
	1239			0	6426

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 316+50 TO STA. 318+00

LIC-161-6.65
LIC-37-10.25

845
1349

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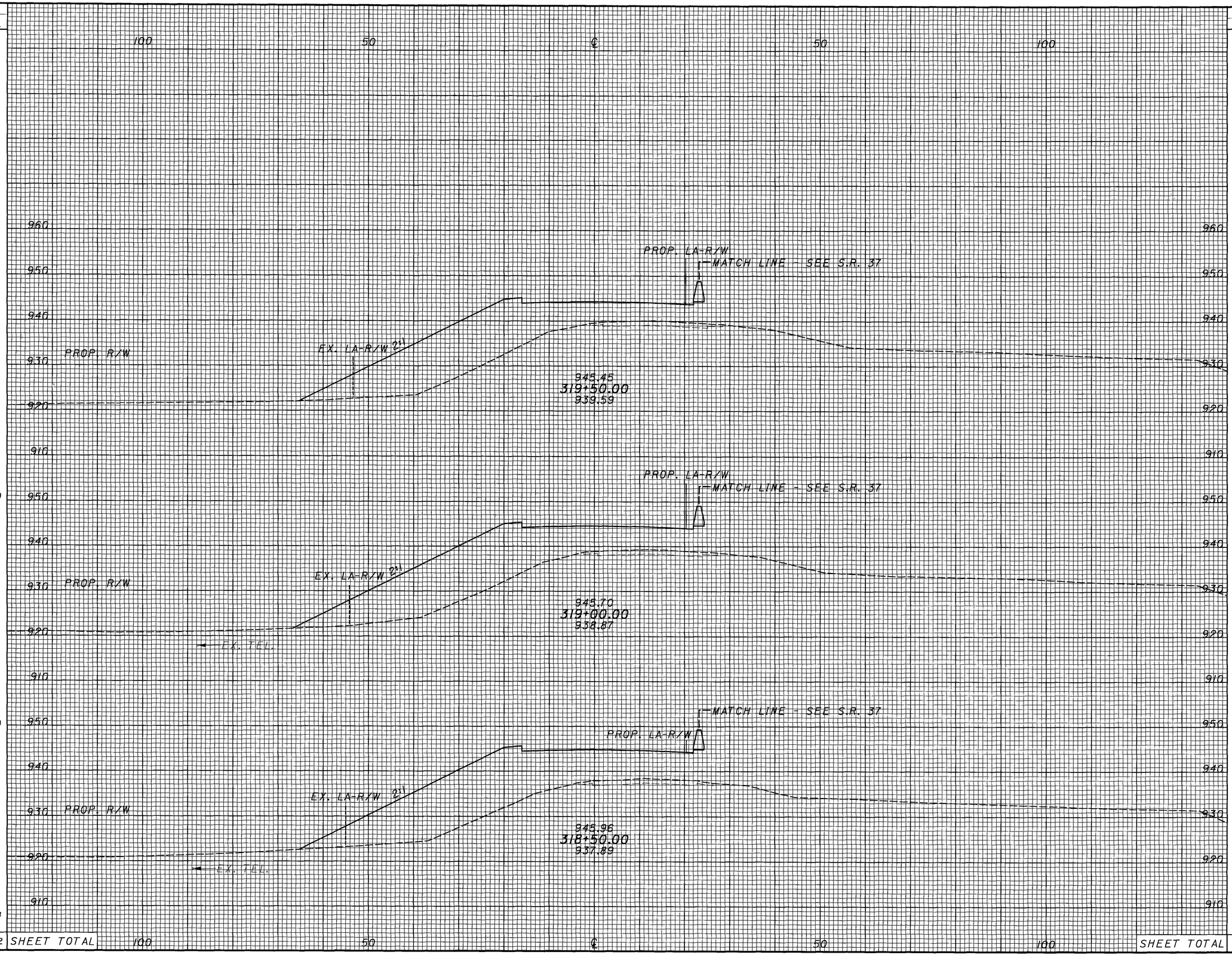
SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
57		0	634		
	319			0	1228
58		0	692		
57		0	734		
	319			0	1320
	314			0	1388
952	SHEET TOTAL			0	3936

CALCULATED JWA
DESIGNED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 318+50 TO STA. 319+50

LIC-161-6.65
LIC-37-10.25

846
1349



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SEEDING END WIDTH	SEEDING SQ. YDS.	
106	517	
80		
64	400	
54	328	
	308	
	1553	SHEET TOTAL

100 50 ℄ 50 100

PROP. R/W — ITEM 206 CEMENT STABILIZATION

EX. LA-R/W — PROP. LA-R/W — MATCH LINE SEE S.R. 37

6:1 — 3:1

944.43
321+50.00
943.11

52.2' LT
E=933.0

PROP. R/W — PROP. LA-R/W — MATCH LINE - SEE S.R. 37

EX. LA-R/W

944.68
321+00.00
942.12

15' TYPE D

STA 320+61, CULVERT No. 10.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 977

PROP. LA-R/W — MATCH LINE - SEE S.R. 37

PROP. R/W — EX. LA-R/W — 2:1

55.9' LT
Elev=926.3

944.94
320+50.00
941.07

2:1

68.5' LT
E=925.0

PROP. LA-R/W — MATCH LINE - SEE S.R. 37

PROP. R/W — EX. LA-R/W — 2:1

945.19
320+00.00
940.45

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1056	9	1034	245
61	256	62	638
6	433	6	915
0	555	0	1101
		1102	2899

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 320+00 TO STA. 321+50

LIC-161-6.65
LIC-37-10.25

847
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
94	
	511
90	
	536
103	
	581
	1628

100 50 ℄ 50 100

ITEM 206 - CEMENT STABILIZATION

PROP. R/W
EX. LA-R/W
2:1
4:1
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
32.0' LT
℄-940.0
943.66
323+00.00
943.29

PROP. R/W
EX. LA-R/W
2:1
4:1
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
32.0' LT
℄-940.2
943.92
322+50.00
943.12

PROP. R/W
EX. LA-R/W
2:1
3:1
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
39.5' LT
℄-937.0
944.17
322+00.00
942.89

980 970 960 950 940 930

100 50 ℄ 50 100

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1026	0		
		1733	1
846	1		
		1831	6
1132	5		
		2026	13
		5590	20

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 322+00 TO STA. 323+00

LIC-161-6.65
LIC-37-10.25

848
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
75	456
89	506
93	519
	1481

ITEM 206- CEMENT STABILIZATION

100 50 ℄ 50 100

PROP. R/W
EX. LA-R/W
2:1
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
4:1
32.0' LT
℄-939.2
942.90
324+50.00
943.56

PROP. R/W
EX. LA-R/W
2:1
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
4:1
32.0' LT
℄-939.5
943.15
324+00.00
943.70

PROP. R/W
EX. LA-R/W
2:1
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
4:1
32.0' LT
℄-939.7
943.41
323+50.00
943.71

970 960 950 940 930 980

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
967	0		
		1871	0
1054	0		
		1978	0
1082	0		
		1952	0
		5801	0

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

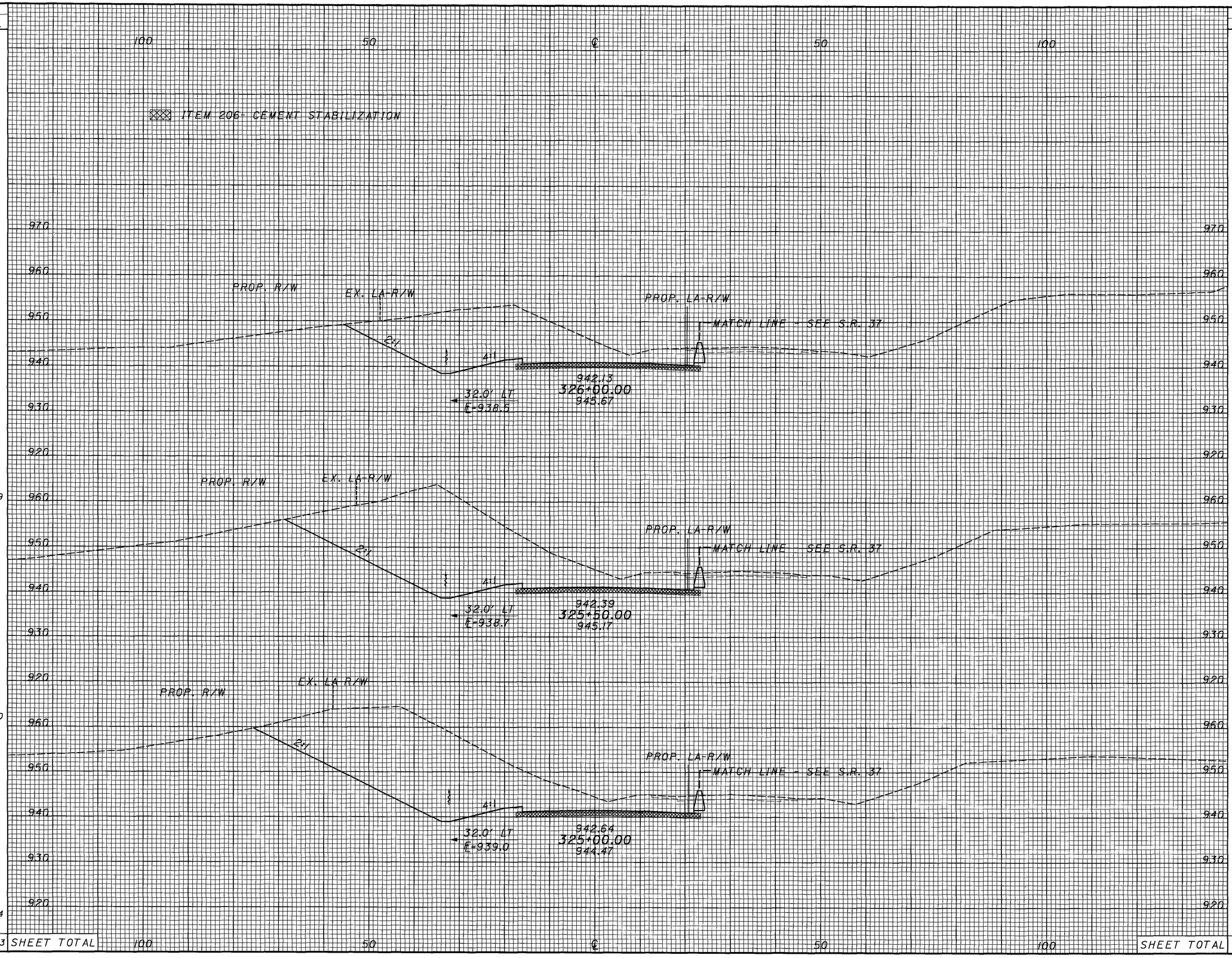
CROSS SECTIONS - C.R. 539A EXTENSION STA. 323+50 TO STA. 324+50

LIC-161-6.65
LIC-37-10.25

849
349

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SEEDING	
END WIDTH	SQ. YDS.
45	
59	
67	
289	
350	
394	
1033	SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
583	0		
		1405	0
934	0		
		1782	0
991	0		
		1813	0
		5000	0

CALCULATED JWA
CHECKED PEK

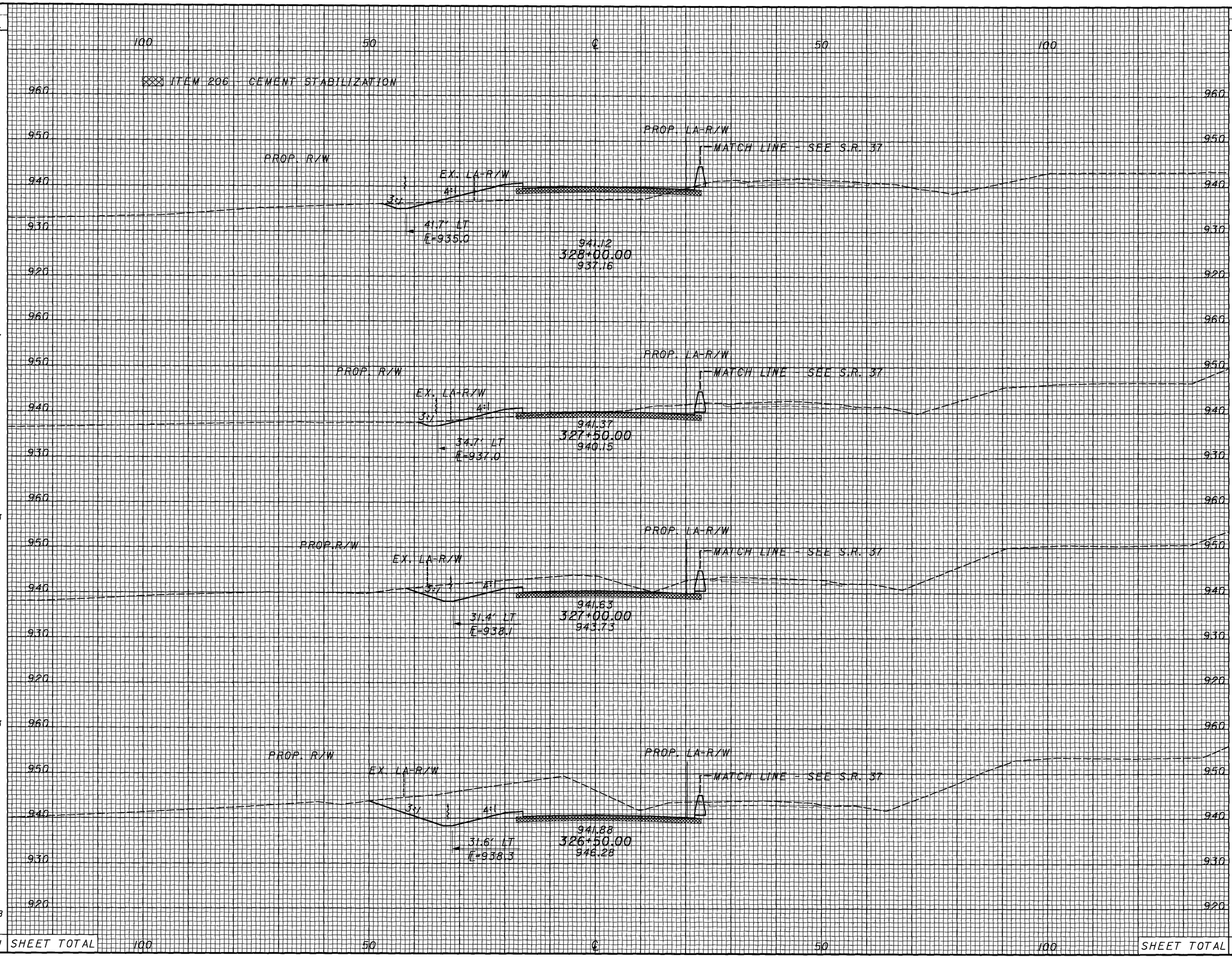
CROSS SECTIONS - C.R. 539A EXTENSION
STA. 325+00 TO STA. 326+00

LIC-161-6.65
LIC-37-10.25

850
349

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SEEDING	
END WIDTH	SQ. YDS.
34	
	167
26	
	153
29	
	183
37	
	228
731	SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
11	126		
		43	134
35	19		
		178	18
157	0		
		495	0
378	0		
		890	0
SHEET TOTAL		1606	152

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 326+50 TO STA. 328+00

LIC-161-6.65
LIC-37-10.25

851
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
37	103
0	169
61	275
38	200
	747

ITEM 206 - CEMENT STABILIZATION

PROP. LA-R/W
MATCH LINE - SEE S.R. 37
EX. LA-R/W
4:1
940.09
330+00.00
935.32

PROP. R/W
MATCHLINE
Ex. 10" Gas
Ex. 6" Gas
EX. LA R/W
PROP. LA-R/W
MATCH LINE SEE S.R. 37
MATCHLINE
940.35
329+50.00
936.18

PROP. CB-4, A.P.P.
S.R. STA. 566+50, 1.24' RT.
GRATE ELEV. = 937.50
INV. 15" W = 930.32
INV. 15" N = 930.32
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
EX. LA-R/W
PROP. R/W
4:1
940.61
329+00.00
932.84
FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 960

PROP. LA-R/W
MATCH LINE - SEE S.R. 37
EX. LA-R/W
PROP. R/W
4:1
940.86
328+50.00
934.39

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	208		
		5	1004
5	876		
		5	1301
0	529		
		0	738
0	268		
		10	365
		20	3408

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 328+50 TO STA. 330+00

LIC-161-6.65
LIC-37-10.25

852
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	
53		
	289	
51		
	328	
67		
	289	
	906	SHEET TOTAL

100 50 ℄ 50 100

ITEM 203 - GRANULAR MATERIAL, TYPE D

PROP. LA-R/W — MATCH LINE - SEE S.R. 37

EX. LA R/W

EX. 6" GAS

939.33
331+50.00
919.87

PROP. LA-R/W — MATCH LINE - SEE S.R. 37

EX. LA-R/W

EX. 6" GAS

939.58
331+00.00
921.34

PROP. LA R/W — MATCH LINE - SEE S.R. 37

EX. LA R/W

EX. 6" GAS

939.84
330+50.00
928.02

940 930 920 910 900 950

2:1 3:1 4:1

100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	1208		
		0	2103
0	1063		
		0	1700
0	773		
		0	908
		0	4711

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 330+50 TO STA. 331+50

LIC-161-6.65
LIC-37-10.25

853
1349

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SEEDING	
END WIDTH	SQ. YDS.
50	281
51	
	286
R/W	
52	
	289
R/W	
52	
	292
	1148

100 50 ℄ 50 100

ITEM 203 - GRANULAR MATERIAL, TYPE D

950 940 930 920 910

PROP. LA-R/W

MATCH LINE - SEE S.R. 37

2:1

938.31
333+50.00
922.49

EX. 6" GAS

950 940 930 920 910

PROP. LA-R/W

MATCH LINE - SEE S.R. 37

2:1

938.56
333+00.00
922.22

EX. 6" GAS

GAS

950 940 930 920 910

PROP. LA-R/W

MATCH LINE - SEE S.R. 37

2:1

EX. LA R/W

938.82
332+50.00
921.21

EX. 6" GAS

950 940 930 920 910

PROP. LA-R/W

MATCH LINE - SEE S.R. 37

2:1

EX. LA R/W

939.07
332+00.00
920.29

EX. 6" GAS

100 50 ℄ 50 100 SHEET TOTAL

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	1000		
		0	1903
0	1055		
		0	2013
0	1119		
		0	2131
0	1183		
		0	2214
		0	8261

CALCULATED JMA
DRAWN PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 332+00 TO STA. 333+50

LIC-161-6.65
LIC-37-10.25

854
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
65	
	181
0	
	122
44	
	261
	564

100 50 ℄ 50 100

950 940 930 920 910

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

4:1

ITEM 203, GRANULAR MATERIAL, TYPE B

3:1

937.54
335+00.00
925.78

EX. 6" GAS

PROP. LA-R/W

MATCHLINE

200 150

EX. 10" GAS

8

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

ITEM 203, GRANULAR MATERIAL, TYPE B

937.80
334+50.00
928.02

MATCHLINE

EX. 6" GAS

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

2:1

938.05
334+00.00
925.67

EX. 6" GAS

END TAPER
BEGIN FULL DEPTH
ITEM 203, GRANULAR
MATERIAL, TYPE B STA. 334+50

STA. 334+25

BEGIN ITEM 203, GRANULAR
MATERIAL, TYPE B STA. 334+00
BEGIN TAPER

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
	851 (GMB)		
		3	0
			2194 (GMB)
3	0		
	1518 (GMB)		
		3	0
			1035 (GMB)
0	358		
	423 (GMB)	0	498
			196 (GMB)
0	718		
	0 (GMB)		
		0	1591
	SHEET TOTAL	6	2089

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 334+00 TO STA. 335+00

LIC-161-6.65
LIC-37-10.25

855
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
	100
41	
	57
0	
0	
	175
43	
	216
43	
	294
63	
	356
	1098

100 50 ℄ 50 100

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

PROP R/W

2:1

EX. LA-R/W

ITEM 203, GRANULAR MATERIAL, TYPE B

END APPROACH SLAB
STA. 338+45.95

935.78
338+45.95
921.05

EX. 10" GAS

EX. 6" GAS

END STRUCTURE
BEGIN APPROACH SLAB
STA. 338+20.95

C.R. 539A @ CHINNEY CREEK

BEGIN STRUCTURE
END APPROACH SLAB
STA. 336+70.19

C.R. 539A @ CHINNEY CREEK

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

BEGIN APPROACH SLAB
STA. 336+45.19

2:1

ITEM 203, GRANULAR MATERIAL, TYPE B

936.80
336+45.19
922.05

EX. 6" GAS

EX. 10" GAS

MATCH LINE - SEE S.R. 37

PROP. INLET NO. 3 FOR
SINGLE SLOPE BARRIER, TYPE C
STA. 336+04.08, 23.7' RT.
GRATE ELEV. S = 937.64
GRATE ELEV. N = 936.33
INV. 21" S = 923.74
INV. 21" N = 923.74

PROP. LA-R/W

2:1

ITEM 203, GRANULAR MATERIAL, TYPE B

FOR ADDITIONAL INFORMATION SEE
STORM SEWER PROFILE SHT 961

937.03
336+00.00
924.78

EX. 6" GAS

EX. 10" GAS

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

4:1

3:1

ITEM 203, GRANULAR MATERIAL, TYPE B

937.29
335+50.00
926.18

EX. 6" GAS

EX. 10" GAS

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	40		
	795 (GMB)		
		0	52
			1045 (GMB)
C.R. 539A @ CHINNEY CREEK 0	0		
C.R. 539A @ CHINNEY CREEK 0	0		
		0	59
			1112 (GMB)
0	43		
	795 (GMB)		
		0	72
			1225 (GMB)
0	43		
	669 (GMB)		
		0	40
			1346 (GMB)
0	0		
	785 (GMB)		
		0	0
			1515 (GMB)
SHEET TOTAL		0	223

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 335+50 TO STA. 338+45.95

LIC-161-6.65
LIC-37-10.25

856
1349

$USER
$DATE$
$FILE$

$TIMESTAMP$

SEEDING END WIDTH	SEEDING SQ. YDS.
38	217
40	225
41	231
42	19
	692

100 50 ℄ 50 100

END FULL DEPTH ITEM 203, GRANULAR MATERIAL, TYPE B STA. 340+25 BEGIN TAPER

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

PROP R/W

2:1

EX. LA-R/W

ITEM 203, GRANULAR MATERIAL, TYPE B

935.00
340+00.00
921.07

EX. 10" GAS

EX. 6" GAS

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

PROP R/W

2:1

EX. LA-R/W

ITEM 203, GRANULAR MATERIAL, TYPE B

935.25
339+50.00
920.44

EX. 10" GAS

EX. 6" GAS

PROP. CB-3A,
STA. 338+75.74, 18' LT.
GRATE ELEV. = 935.57
INV. 15" N = 928.17
INV. 15" S. = 928.17

PROP. LA-R/W

EX. LA-R/W

PROP R/W

2:1

ITEM 203, GRANULAR MATERIAL, TYPE B

935.51
339+00.00
920.50

EX. 10" GAS

EX. 6" GAS

MATCH LINE - SEE S.R. 37

PROP. INLET NO. 3 FOR SINGLE SLOPE BARRIER TYPE C
STA. 338+76.60, 25' RT.
GRATE ELEV. = 934.60
INV. 15" N = 929.37

FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 966

MATCH LINE - SEE S.R. 37

PROP. LA-R/W

PROP R/W

2:1

EX. LA-R/W

ITEM 203, GRANULAR MATERIAL, TYPE B

935.76
338+50.00
921.05

EX. 10" GAS

EX. 6" GAS

100 50 ℄ 50 100 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	763 (GMB)		705 (GMB)
0	0		
	763 (GMB)		
		0	0
			763 (GMB)
0	0		
	805 (GMB)		
		0	37
			878 (GMB)
0	40		
	794 (GMB)		
		0	106
			1487 (GMB)
0	41		
	806 (GMB)		
		0	6
			120 (GMB)
		0	149 SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 338+50 TO STA. 340+00

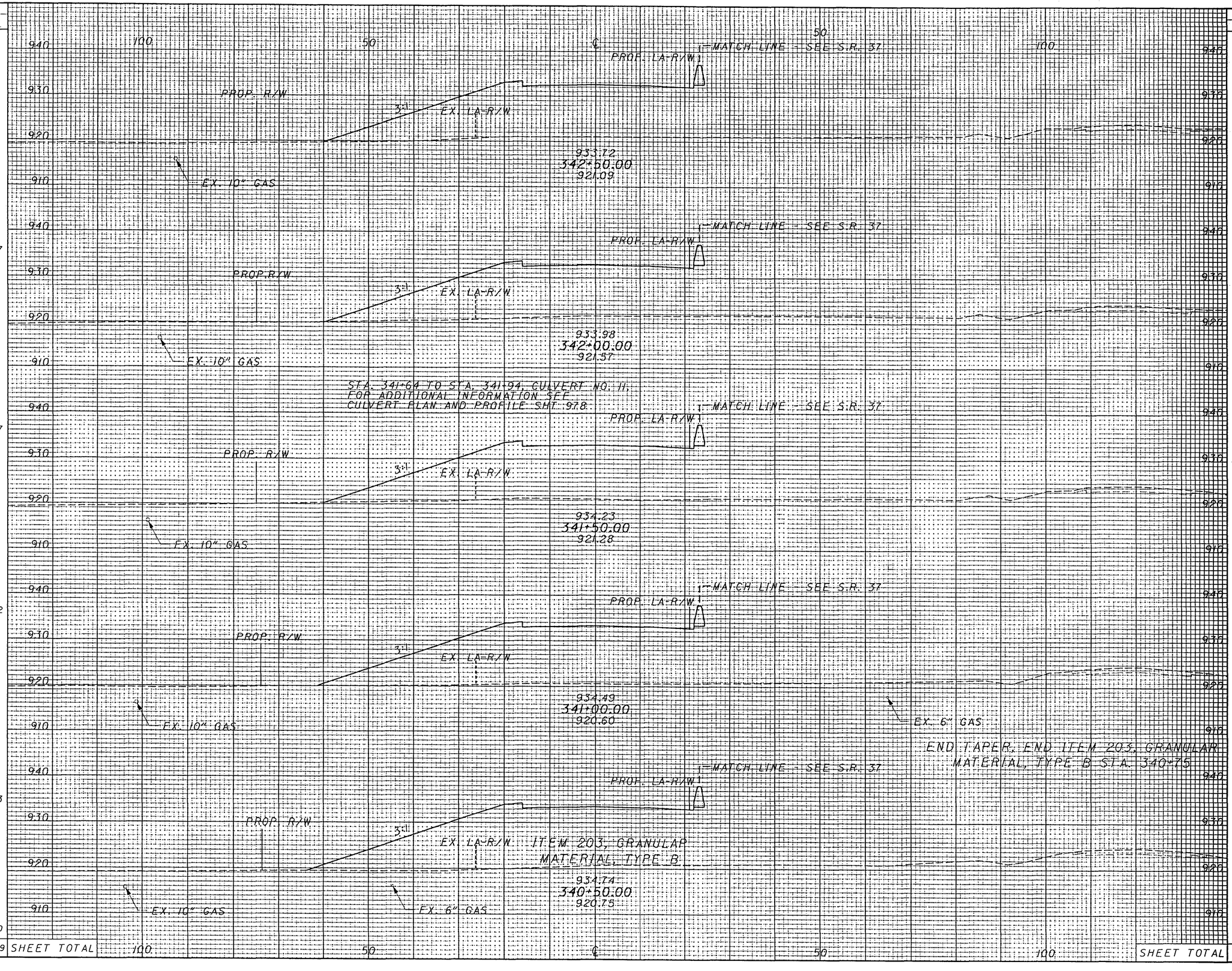
LIC-161-6.65
LIC-37-10.25

857
1349

$USER
$DATE$
$FILE$
$TIMESTAMP$

SEEDING	
END WIDTH	SQ. YDS.
48	267
48	267
48	272
50	283
52	250
	1339

SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	754		
		0	1386
0	743		
		0	1396
0	765		
		0	1483
0	837		
		0	1087
0 (GMB)			248 (GMB)
0	337		
535 (GMB)			
		0	0
			601 (GMB)
		0	5352

SHEET TOTAL

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 340+50 TO STA. 342+50

LIC-161-6.65
LIC-37-10.25

858
1349

$USER$
$FILE$
$FILE$

$TIMESTAMP$

SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		940				
		930				
		920				
33		910	0	576		
		940				
	183	930			0	1081
		920				
33		910	0	591		
		940				
	183	930			0	1131
		920				
33		910	0	630		
		940				
	186	930			0	1158
		920				
34		910	0	621		
		940				
	225	930			0	1244
		920				
47		910	0	723		
	264				0	1368
	1041	SHEET TOTAL			0	5982

100 50 ℄ 50 100

940 930 920 910

EX. LA-R/W

PROP. LA-R/W

PROP. R/W

2:1

EX. 10" GAS

MATCH LINE - SEE S.R. 37

932.45
345+00.00
921.21

932.70
344+50.00
921.19

932.96
344+00.00
920.92

933.21
343+50.00
92.51

933.47
343+00.00
921.28

3:1

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 343+00 TO STA. 345+00

LIC-161-6.65
LIC-37-10.25

859
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		940 930 920 910				
35		931.17 347+50.00 918.34	0	668		
	192	STA 347+09, CULVERT NO. 12 FOR ADDITIONAL INFORMATION SEE CULVERT PLAN AND PROFILE SHT 979			0	1223
34		931.43 347+00.00 918.79	0	653		
	183				0	1118
32		931.68 346+50.00 920.70	0	554		
	175				0	1008
31		931.94 346+00.00 921.18	0	535		
	172				0	990
31		932.19 345+50.00 921.52 FOR ADDITIONAL INFORMATION SEE STORM SEWER PROFILE SHT 962	0	534		
	178				0	1028
	900	SHEET TOTAL			0	5367

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 345+50 TO STA. 347+50

LIC-161-6.65
LIC-37-10.25

860
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
36		930.15 349+50.00 916.21	0	743		
	200				0	1387
36		930.41 349+00.00 916.28	0	755		
	200				0	1380
36		930.66 348+50.00 916.97	0	735		
	200				0	1338
36		930.92 348+00.00 917.45	0	710		
	197				0	1276
	797	SHEET TOTAL			0	5381

CALCULATED JWA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 348+00 TO STA. 349+50

LIC-161-6.65
LIC-37-10.25

861
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
37		0	760		
	206			0	1429
37		0	783		
	206			0	1427
37		0	758		
	206			0	1401
37		0	755		
	203			0	1387
821	SHEET TOTAL			0	5644

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 350+00 TO STA. 351+50

LIC-161-6.65
LIC-37-10.25

862
1349

940 930 920 910 900

100 50 ℄ 50 100

STA. 351+63, CULVERT NO. 22.
FOR ADDITIONAL INFORMATION SEE
CULVERT PLAN AND PROFILE SHT 989

EX. LA-R/W
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
PROP. R/W
2:1
EX. 10" GAS
929.13
351+50.00
916.12

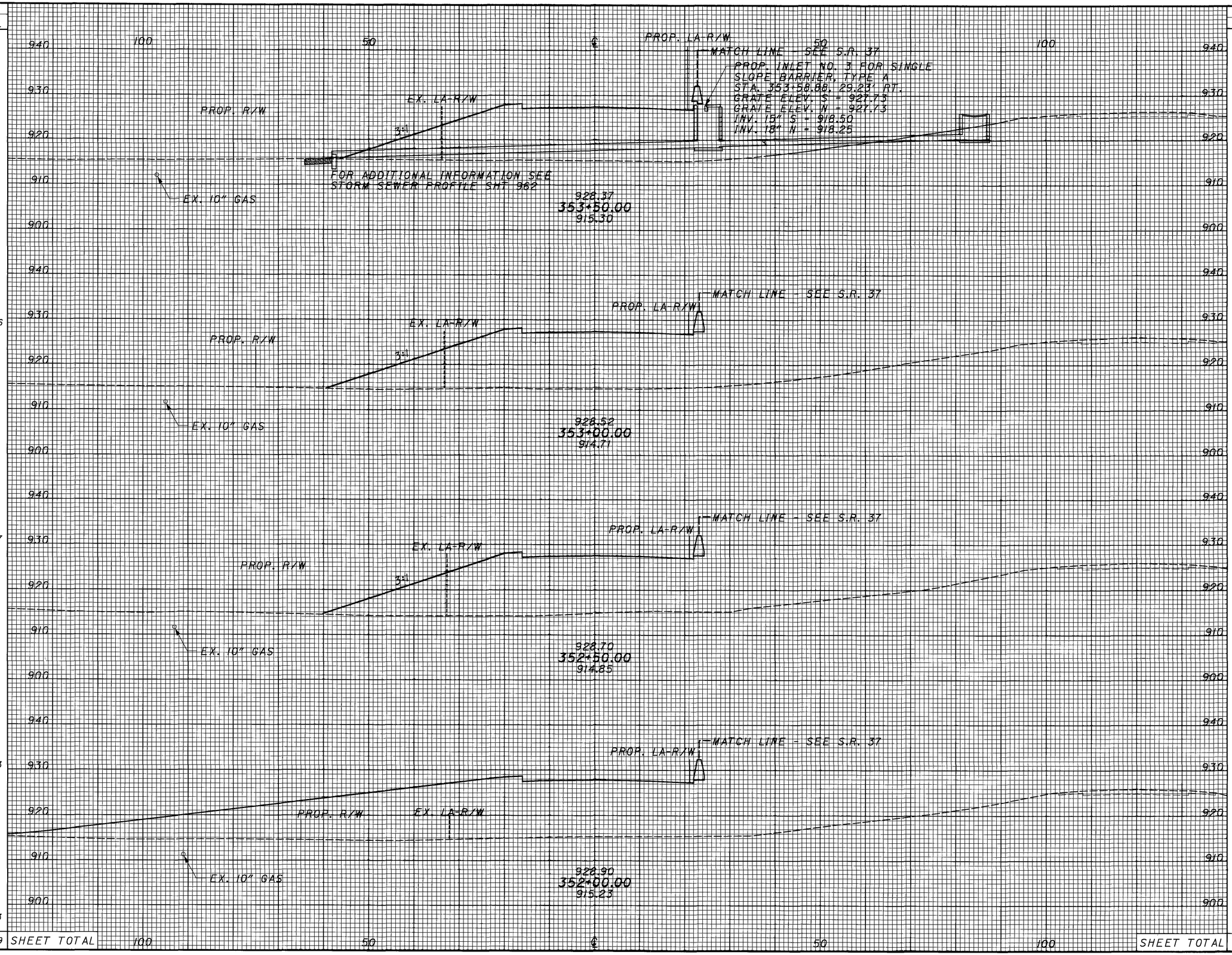
EX. LA-R/W
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
PROP. R/W
2:1
EX. 10" GAS
929.39
351+00.00
914.78

EX. LA-R/W
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
PROP. R/W
2:1
EX. 10" GAS
929.64
350+50.00
915.42

EX. LA-R/W
PROP. LA-R/W
MATCH LINE - SEE S.R. 37
PROP. R/W
2:1
EX. 10" GAS
929.90
350+00.00
915.83

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
44		0	748		
	256			0	1447
48		0	815		
	267			0	1532
48		0	840		
	133			0	2031
0		0	1353		
	103			0	1956
759	SHEET TOTAL			0	6966



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 352+00 TO STA. 353+50

LIC-161-6.65
LIC-37-10.25

863
1349

tlenhart
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
59	331	0	843	0	1569
60		0	852		
48	300	0	801	0	1531
47	264	0	782	0	1466
	253			0	1417
	1148 SHEET TOTAL			0	5983 SHEET TOTAL

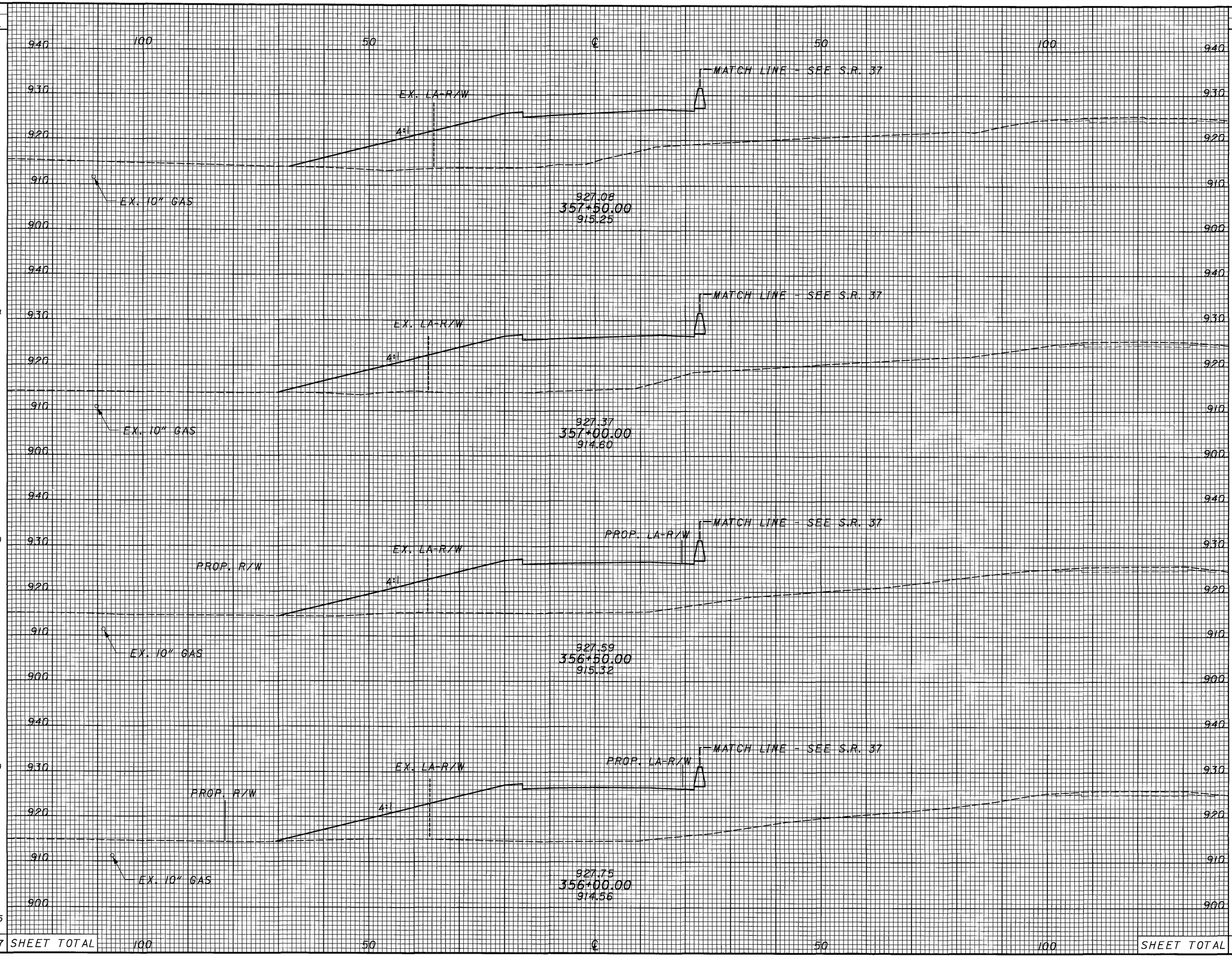
CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 354+00 TO STA. 355+50

LIC-161-6.65
LIC-37-10.25

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
55		0	739		
	314			0	1430
58		0	805		
57	319			0	1459
		0	771		
58	319			0	1471
		0	818		
	325			0	1538
	1277	SHEET TOTAL		0	5898



CALCULATED JMA
CHECKED PEK

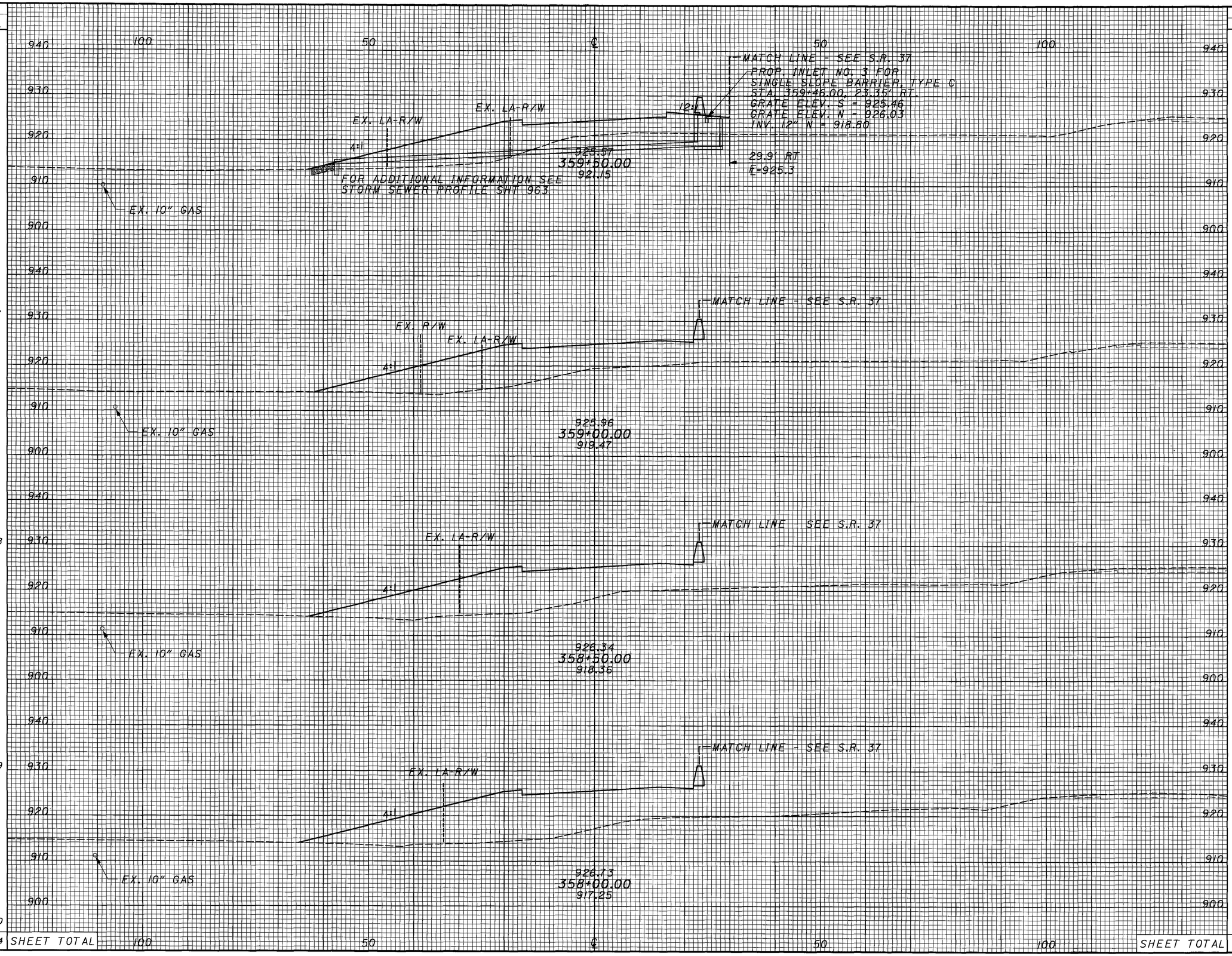
CROSS SECTIONS - C.R. 539A EXTENSION STA. 356+00 TO STA. 357+50

LIC-161-6.65
LIC-37-10.25

865
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		940				
		930				
		920				
65		910	0	417		
		900				
		940				
	317	930			0	838
		920				
		910				
49		900	0	488		
		940				
	278	930			0	961
		920				
		910				
51		900	0	550		
		940				
	289	930			0	1098
		920				
		910				
53		900	0	636		
	300				0	1273
1184	SHEET TOTAL				0	4170



CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 358+00 TO STA. 359+50

LIC-161-6.65
LIC-37-10.25

866
1349

tduffney
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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
58	303	100 50 ℄ 50 100	39	22	48	77
51			13	61		
48	275		8	117	19	165
60	300		9	197	16	291
	347				8	569
	1225	SHEET TOTAL			91	1102

ITEM 206 - CEMENT STABILIZATION

EX. R/W
EX. LA-R/W
6:1
4:1
26.1' LT
℄-921.2
924.04
361+50.00
922.82
43.9' RT
℄-918.6
MATCH LINE - SEE S.R. 37

EX. R/W
EX. LA-R/W
6:1
4:1
26.4' LT
℄-921.5
924.42
361+00.00
922.85
42.8' RT
℄-919.2
MATCH LINE - SEE S.R. 37

PROP. R/W
EX. R/W
EX. LA-R/W
3:1
4:1
33.9' LT
℄-920.0
924.80
360+50.00
922.09
37.2' RT
℄-921.0
MATCH LINE - SEE S.R. 37
EX. 10" GAS

EX. R/W
EX. LA-R/W
3:1
4:1
51.4' LT
℄-916.0
925.19
360+00.00
921.72
37.3' RT
℄-922.9
MATCH LINE - SEE S.R. 37
EX. 10" GAS

940 930 920 910 900

CALCULATED JMA
CHECKED PEK

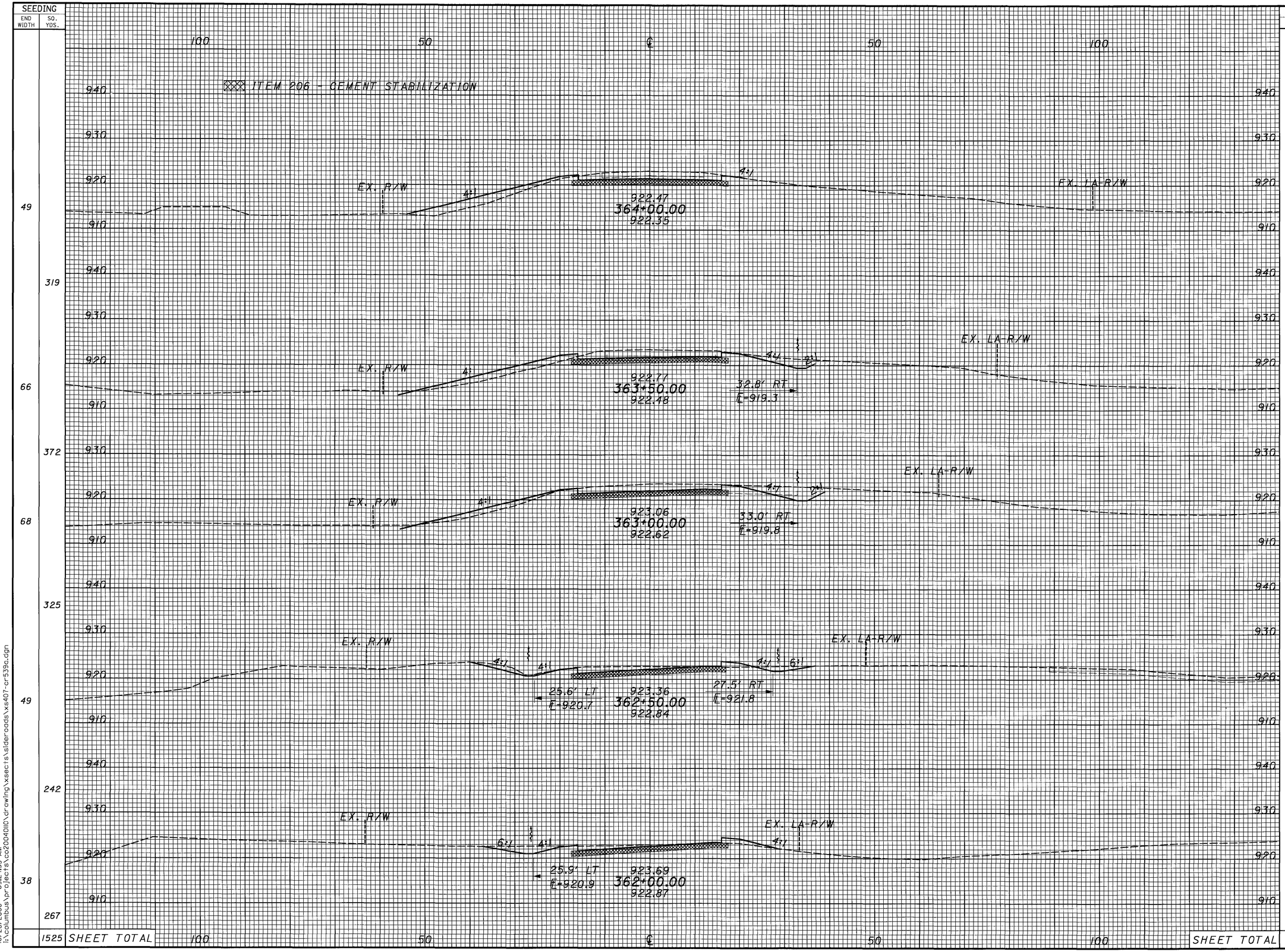
CROSS SECTIONS - C.R. 539A EXTENSION
STA. 360+00 TO STA. 361+50

LIC-161-6.65
LIC-37-10.25

867
349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
49		364+00.00	50	48		
	319				73	119
66		363+50.00	29	81		
	372				61	131
68		363+00.00	37	61		
	325				69	62
49		362+50.00	38	6		
	242				62	14
38		362+00.00	29	9		
	267				63	29
	1525	SHEET TOTAL			328	355



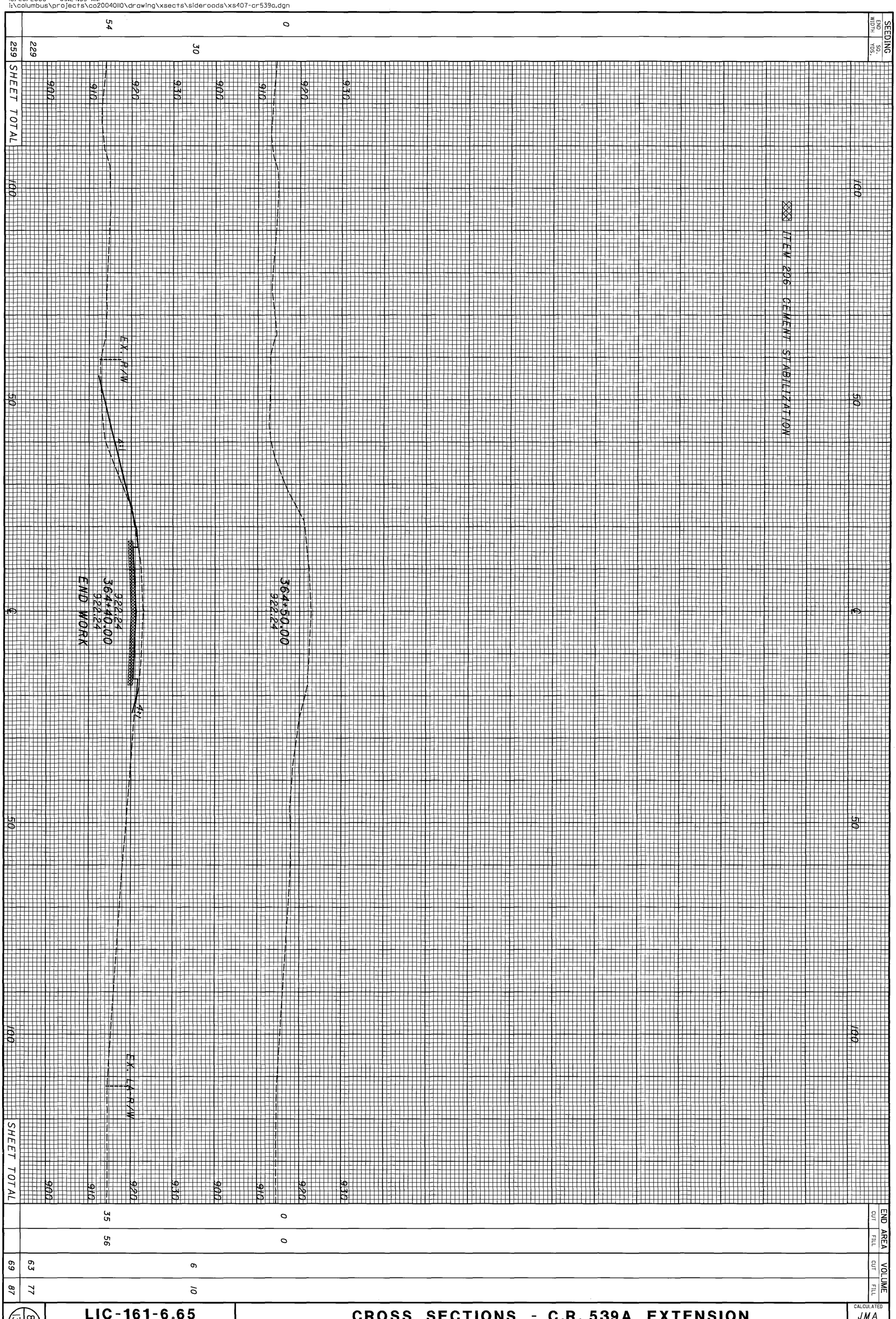
CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - C.R. 539A EXTENSION STA. 362+00 TO STA. 364+00

LIC-161-6.65
LIC-37-10.25

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LIC-161-6.65
LIC-37-10.25

CROSS SECTIONS - C.R. 539A EXTENSION
STA. 364+40 TO STA. 364+50

CALCULATED JMA
CHECKED PEK

869
1349

SHEET TOTALS: (CARRIED TO SHEET 123-125)	
203 EXCAVATION	23477 CU. YD.
203 EMBANKMENT	2515 CU. YD.
659 SEEDING AND MULCHING	10554 SQ. YD.

NOTE:
FOR DRIVE PROFILE SEE SHEETS 931-937
FOR DRIVE DRAINAGE PROFILES SEE SHEETS 938-948.
FOR ROADWAY SUBSUMMARY SEE SHEETS 117-125.
FOR PAVEMENT SUBSUMMARY SEE SHEETS 129-133.
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-148.

MORSE ROAD CURVE DATA

P.I. STA. = 13+47.39
Δ = 29° 02′ 33″ (LT)
Dc = 06° 00′ 00″
R = 954.93′
Ls = 256.35′
θs = 07° 41′ 26″
LT = 171.06′
ST = 85.60′
x = 255.89′
y = 11.45′
k = 128.10′
p = 2.87′
Δc = 13° 39′ 42″ (LT)
Lc = 227.69′
Ts = 376.18′
Es = 34.47′
emax = 0.083

BEGIN PAVEMENT TRANSITION STA. 7+75.00, LT. & RT.
BEGIN WORK MORSE ROAD STA. 7+75.00
P.O.T. STA. 7+53.65
END PAVEMENT TRANSITION, 11′ LT. & RT. STA. 8+90.00
T.S. STA. 9+71.21 BEGIN PAVEMENT WIDENING, LT.
S.C. STA. 12+27.56 END PAVEMENT WIDENING, 14.5′ LT.
C.S. STA. 14+55.25 BEGIN PAVEMENT TRANSITION, 14.5′ LT.
S.T. STA. 17+11.60 END PAVEMENT TRANSITION, 11′ LT.
STA. 18+05.26 46.00′ LT. ℄ SURVEY & CONST. ROAD CONSTRUCTION RD. ℄ SURVEY MORSE ROAD AND CONSTRUCTION FRONTAGE ℄ SURVEY MORSE - OUTVILLE STA. 561+59.63
STA. 18+02.55 46.00′ RT. 88°18′38″
END WORK MORSE ROAD STA. 18+49.92
CONSTRUCTION LIMITS
℄ SURVEY & CONST. MORSE ROAD
OUTVILLE-MORSE FRONTAGE ROAD
WESTBOUND
EASTBOUND
N 34° 56′ 45″ E
N 05° 54′ 12″ E
+01.27 12′ RES. DR. (GRAVEL)
+14.65 12′ RES. DR. (ASPHALT)
+00.00 12′ RES. DR. (GRAVEL)
2″ PIPE SOUTHEASTERN NATURAL GAS
SPRINT (BURIED)
SPRINT (OVERHEAD)
TREES
WIRE FENCE
YARD
GAS LINE
SAN LINE
SEPTIC
LEACH BED PER OWNER
EX. 12″
PASTURE
EX. R/W
LA-R/W
R/W
℄ SURVEY & CONST. S.R. 56 (OVERHEAD)
E-1 E-2 E-3 E-4 E-5 D-1 D-2 D-3 R-1 R-2 R-3 R-4 R-5 R-6

PROP. PROFILE GRADE
EXIST. PROFILE GRADE
STA. 7+75, ELEV. = 991.39 MATCH EX. PVMT.
P.V.C. STA. = 8+00.00
P.V.C. ELEV. = 990.69
300′ V.C.
P.V.I. STA. = 9+50.00
P.V.I. ELEV. = 987.63
SSD=571′ K = 117
P.V.I. STA. = 11+00.00
P.V.I. ELEV. = 979.53
EXIST. GRADE
PROPOSED PROFILE
P.V.I. STA. = 18+33.92
P.V.I. ELEV. = 942.83
K = 12
P.V.C. STA. = 18+26.92
P.V.C. ELEV. = 943.08
P.V.T. STA. = 18+39.92
P.V.T. ELEV. = 942.91
STA. 18+49.92 ELEV. = 943.09 ℄ OUTVILLE-MORSE FRONTAGE ROAD
10′ V.C.
+1.60
980 970 960 950
990.66 987.91 984.77 981.64 979.22 977.10 975.61 974.27 973.14 971.96 972.39 972.59 971.78 969.82 966.72 963.42 960.50 957.67 954.82 952.71 950.79
979.03 969.53 967.03 964.53 962.03 959.53 957.03 954.53 952.03 949.53 947.03 944.53 943.09
8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00

HORIZONTAL SCALE IN FEET 0 25 50 100
CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE - MORSE ROAD STA. 7+75 TO STA. 18+49.92

LIC-161-6.65
LIC-37-10.25

870
349

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SEEDING END WIDTH	SEEDING SQ. YDS.	STA.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		7+65.00 BEGIN WORK	0	0	25	9
0	67	7+75.00	55	20		
48	100	8+00.00	45	4	46	11
24	231	8+50.00	93	44	128	44
59	286	9+00.00	34	111	118	144
44	258	9+50.00	23	171	53	261
49	314	10+00.00	18	250	38	390
64						
	1256	SHEET TOTAL			408	859

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - MORSE ROAD STA. 7+75 TO STA. 10+00

LIC-161-6.65
LIC-37-10.25

871
1349

ITEM 206 - CEMENT STABILIZATION

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
60		98	7		
	322			116	63
56		27	61		
	331			41	207
63		17	163		
	378			31	387
73		17	255		
	394			32	498
69		18	283		
	369			33	494
1794	SHEET TOTAL			253	1649

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - MORSE ROAD
STA. 10+50 TO STA. 12+50

LIC-161-6.65
LIC-37-10.25

872
1349

ITEM 206 - CEMENT STABILIZATION

100 50 ℄ 50 100

980 / 970 / 960

PROP. R/W — EX. R/W — 4:1 — 3:1 — 2%

12+50.00 — 972.03 — 973.14 — EX. TEL. — 45.2' LT E=967.2 — 2" EX. GAS — 31.1' RT E=969.3

11+00.00 — 974.53 — 974.02 — 39.2' LT E=967.6 — 2" EX. GAS — EX. TEL. 35.3' RT E=970.6

11+50.00 — 977.03 — 974.77 — 44.5' LT E=968.5 — 2" EX. GAS — EX. TEL. 36.4' RT E=971.9

11+00.00 — 979.53 — 975.61 — 46.5' LT E=970.5 — 2" EX. GAS — EX. TEL. 42.5' RT E=972.1

10+50.00 — 981.92 — 977.10 — 41.0' LT E=974.3 — 2" EX. GAS — EX. TEL. 41.5' RT E=974.7

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
166		1926	0		
1017				3481	0
200		1833	0		
864				2433	0
111		795	0		
386				959	0
28		241	0		
244				314	6
2511	SHEET TOTAL			7187	6

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - MORSE ROAD
STA. 13+00 TO STA. 14+50

LIC-161-6.65
LIC-37-10.25

873
349

ITEM 206 CEMENT STABILIZATION

100 50 ℄ 50 100

PROP. R/W
EX. R/W
EX. TEL.
980
970
960
950
4:1
11:1
9:1
12.5:1
9.7:1
4:1
3:1

26.9' LT
E-958.7
962.03
14+50.00
971.78
35.1' RT
E-961.2

26.8' LT
E-961.2
964.53
14+00.00
972.59
38.8' RT
E-963.8
15", TYPE D

39.7' LT
E-963.8
967.03
13+50.00
972.39
31.8' RT
E-966.3

15", TYPE D
26.3' RT
E-968.0
969.53
13+00.00
971.96

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		100 50 ℄ 50 100				
		ITEM 206 CEMENT STABILIZATION				
98		23.8' LT E=949.8 — 952.03 16+50.00 960.50 — 23.5' RT E=950.4	777	0		
	636				1782	0
131		24.8' LT E=952.1 — 954.53 16+00.00 963.42 — 23.5' RT E=953.1	1148	0		
	803				2587	0
158		26.0' LT E=954.3 — 957.03 15+50.00 966.72 — 23.4' RT E=955.8	1646	0		
	883				3250	0
160		26.8' LT E=956.5 — 959.53 15+00.00 969.82 — 23.4' RT E=958.5	1864	0		
	906				3509	0
	3228	SHEET TOTAL			11128	0

CALCULATED JMA
CHECKED PEK

CROSS SECTIONS - MORSE ROAD STA. 15+00 TO STA. 16+50

LIC-161-6.65
LIC-37-10.25

874
1349

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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		100 50 ℄ 50 100					CALCULATED JMA CHECKED PEK
		ITEM 206- CEMENT STABILIZATION					
103		18+38.92 951.34 — END WORK STA. 18+38.92 (BACK)	773	0			
	445	EX. R/W, EX. TEL., 3:1, 4:1, 34.8' LT E-939.5, 944.53 18+00.00 952.71, 38.0' RT E-938.7, STA. 18+00.00 (BACK)	773	0	1114	0	
63	461	PROP. R/W, EX. R/W, EX. TEL., 6:1, 4:1, 23.6' LT E-944.8, 947.03 17+50.00 954.82, 23.6' RT E-944.8	489	0	1169	0	
74	381	PROP. R/W, EX. R/W, EX. TEL., 4:1, 23.6' LT E-947.3, 949.53 17+00.00 957.67, 23.5' RT E-947.5	564	0	975	0	
	478				1242	0	
	1765	SHEET TOTAL			4500	0	

CROSS SECTIONS - MORSE ROAD
STA. 17+00 TO STA. 18+38.92

LIC-161-6.65
LIC-37-10.25

875
1349

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PI STA. = 384+88.00
Dc = 01°15'00" (LT)
emax = 0.044

S.R. 161 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
372+41.36	1048.65	6.00	-0.042	1048.90	12.00	0.016	1049.10	12.00	-0.016	1048.90	-0.042	10.00	1048.48	END NORMAL CROWN
372+50.00	1048.55	6.00	-0.042	1048.80	12.00	0.016	1049.00	12.00	-0.014	1048.82	-0.042	10.00	1048.40	
372+75.00	1048.28	6.00	-0.042	1048.53	12.00	0.016	1048.73	12.00	-0.010	1048.61	-0.042	10.00	1048.19	
373+00.00	1048.04	6.00	-0.042	1048.30	12.00	0.016	1048.49	12.00	-0.005	1048.43	-0.042	10.00	1048.01	
373+25.00	1047.84	6.00	-0.042	1048.09	12.00	0.016	1048.28	12.00	0.000	1048.29	-0.042	10.00	1047.87	
373+50.00	1047.67	6.00	-0.042	1047.92	12.00	0.016	1048.11	12.00	0.005	1048.17	-0.042	10.00	1047.75	
373+75.00	1047.53	6.00	-0.042	1047.79	12.00	0.016	1047.98	12.00	0.010	1048.09	-0.042	10.00	1047.67	
374+00.00	1047.43	6.00	-0.042	1047.68	12.00	0.016	1047.87	12.00	0.015	1048.05	-0.042	10.00	1047.63	
374+25.00	1047.36	6.00	-0.042	1047.61	12.00	0.019	1047.84	12.00	0.019	1048.08	-0.042	10.00	1047.66	
374+50.00	1047.32	6.00	-0.042	1047.58	12.00	0.024	1047.87	12.00	0.024	1048.16	-0.042	10.00	1047.74	
374+65.36	1047.32	6.00	-0.042	1047.57	12.00	0.027	1047.90	12.00	0.027	1048.22	-0.042	10.00	1047.80	PC
374+75.00	1047.32	6.00	-0.042	1047.57	12.00	0.029	1047.92	12.00	0.029	1048.27	-0.041	10.00	1047.86	
375+00.00	1047.35	6.00	-0.042	1047.60	12.00	0.034	1048.01	12.00	0.034	1048.41	-0.036	10.00	1048.05	
375+25.00	1047.42	6.00	-0.042	1047.67	12.00	0.039	1048.13	12.00	0.039	1048.59	-0.031	10.00	1048.28	
375+50.00	1047.51	6.00	-0.043	1047.77	12.00	0.043	1048.29	12.00	0.043	1048.81	-0.027	10.00	1048.54	
375+53.36	1047.52	6.00	-0.044	1047.78	12.00	0.044	1048.31	12.00	0.044	1048.84	-0.026	10.00	1048.58	BEGIN FULL SUPERELEVATION
375+75.00	1047.63	6.00	-0.044	1047.90	12.00	0.044	1048.43	12.00	0.044	1048.95	-0.026	10.00	1048.69	
376+00.00	1047.80	6.00	-0.044	1048.06	12.00	0.044	1048.59	12.00	0.044	1049.12	-0.026	10.00	1048.86	
376+25.00	1048.00	6.00	-0.044	1048.26	12.00	0.044	1048.79	12.00	0.044	1049.32	-0.026	10.00	1049.06	
376+50.00	1048.23	6.00	-0.044	1048.49	12.00	0.044	1049.02	12.00	0.044	1049.55	-0.026	10.00	1049.29	
376+75.00	1048.49	6.00	-0.044	1048.76	12.00	0.044	1049.29	12.00	0.044	1049.81	-0.026	10.00	1049.55	
377+00.00	1048.79	6.00	-0.044	1049.06	12.00	0.044	1049.58	12.00	0.044	1050.11	-0.026	10.00	1049.85	
377+25.00	1049.12	6.00	-0.044	1049.39	12.00	0.044	1049.92	12.00	0.044	1050.44	-0.026	10.00	1050.18	
377+50.00	1049.49	6.00	-0.044	1049.75	12.00	0.044	1050.28	12.00	0.044	1050.81	-0.026	10.00	1050.55	
377+75.00	1049.87	6.00	-0.044	1050.14	12.00	0.044	1050.66	12.00	0.044	1051.19	-0.026	10.00	1050.93	
378+00.00	1050.25	6.00	-0.044	1050.52	12.00	0.044	1051.05	12.00	0.044	1051.57	-0.026	10.00	1051.31	
378+25.00	1050.64	6.00	-0.044	1050.90	12.00	0.044	1051.43	12.00	0.044	1051.96	-0.026	10.00	1051.70	
378+50.00	1051.02	6.00	-0.044	1051.28	12.00	0.044	1051.81	12.00	0.044	1052.34	-0.026	10.00	1052.08	
378+75.00	1051.40	6.00	-0.044	1051.67	12.00	0.044	1052.19	12.00	0.044	1052.72	-0.026	10.00	1052.46	
379+00.00	1051.78	6.00	-0.044	1052.05	12.00	0.044	1052.58	12.00	0.044	1053.10	-0.026	10.00	1052.84	
379+25.00	1052.17	6.00	-0.044	1052.43	12.00	0.044	1052.96	12.00	0.044	1053.49	-0.026	10.00	1053.23	
379+50.00	1052.55	6.00	-0.044	1052.81	12.00	0.044	1053.34	12.00	0.044	1053.87	-0.026	10.00	1053.61	
379+75.00	1052.93	6.00	-0.044	1053.20	12.00	0.044	1053.72	12.00	0.044	1054.25	-0.026	10.00	1053.99	
380+00.00	1053.31	6.00	-0.044	1053.58	12.00	0.044	1054.11	12.00	0.044	1054.63	-0.026	10.00	1054.37	
380+25.00	1053.70	6.00	-0.044	1053.96	12.00	0.044	1054.49	12.00	0.044	1055.02	-0.026	10.00	1054.76	
380+50.00	1054.08	6.00	-0.044	1054.34	12.00	0.044	1054.87	12.00	0.044	1055.40	-0.026	10.00	1055.14	
380+75.00	1054.46	6.00	-0.044	1054.72	12.00	0.044	1055.25	12.00	0.044	1055.78	-0.026	10.00	1055.52	
381+00.00	1054.84	6.00	-0.044	1055.11	12.00	0.044	1055.63	12.00	0.044	1056.16	-0.026	10.00	1055.90	
381+25.00	1055.23	6.00	-0.044	1055.49	12.00	0.044	1056.02	12.00	0.044	1056.55	-0.026	10.00	1056.29	
381+50.00	1055.61	6.00	-0.044	1055.87	12.00	0.044	1056.40	12.00	0.044	1056.93	-0.026	10.00	1056.67	
381+75.00	1055.99	6.00	-0.044	1056.25	12.00	0.044	1056.78	12.00	0.044	1057.31	-0.026	10.00	1057.05	
382+00.00	1056.37	6.00	-0.044	1056.64	12.00	0.044	1057.16	12.00	0.044	1057.69	-0.026	10.00	1057.43	
382+25.00	1056.75	6.00	-0.044	1057.02	12.00	0.044	1057.55	12.00	0.044	1058.07	-0.026	10.00	1057.81	
382+50.00	1057.14	6.00	-0.044	1057.40	12.00	0.044	1057.93	12.00	0.044	1058.46	-0.026	10.00	1058.20	
382+75.00	1057.52	6.00	-0.044	1057.78	12.00	0.044	1058.31	12.00	0.044	1058.84	-0.026	10.00	1058.58	
383+00.00	1057.90	6.00	-0.044	1058.17	12.00	0.044	1058.69	12.00	0.044	1059.22	-0.026	10.00	1058.96	
383+25.00	1058.28	6.00	-0.044	1058.55	12.00	0.044	1059.08	12.00	0.044	1059.60	-0.026	10.00	1059.34	
383+50.00	1058.67	6.00	-0.044	1058.93	12.00	0.044	1059.46	12.00	0.044	1059.99	-0.026	10.00	1059.73	
383+75.00	1059.05	6.00	-0.044	1059.31	12.00	0.044	1059.84	12.00	0.044	1060.37	-0.026	10.00	1060.11	
384+00.00	1059.43	6.00	-0.044	1059.70	12.00	0.044	1060.22	12.00	0.044	1060.75	-0.026	10.00	1060.49	
384+25.00	1059.81	6.00	-0.044	1060.08	12.00	0.044	1060.61	12.00	0.044	1061.13	-0.026	10.00	1060.87	
384+50.00	1060.20	6.00	-0.044	1060.46	12.00	0.044	1060.99	12.00	0.044	1061.52	-0.026	10.00	1061.26	
384+75.00	1060.58	6.00	-0.044	1060.84	12.00	0.044	1061.37	12.00	0.044	1061.90	-0.026	10.00	1061.64	
385+00.00	1060.96	6.00	-0.044	1061.22	12.00	0.044	1061.75	12.00	0.044	1062.28	-0.026	10.00	1062.02	
385+25.00	1061.34	6.00	-0.044	1061.61	12.00	0.044	1062.14	12.00	0.044	1062.66	-0.026	10.00	1062.40	
385+50.00	1061.71	6.00	-0.044	1061.98	12.00	0.044	1062.51	12.00	0.044	1063.03	-0.026	10.00	1062.77	
385+75.00	1062.06	6.00	-0.044	1062.32	12.00	0.044	1062.85	12.00	0.044	1063.38	-0.026	10.00	1063.12	
386+00.00	1062.38	6.00	-0.044	1062.64	12.00	0.044	1063.17	12.00	0.044	1063.70	-0.026	10.00	1063.44	
386+25.00	1062.67	6.00	-0.044	1062.94	12.00	0.044	1063.46	12.00	0.044	1063.99	-0.026	10.00	1063.73	
386+50.00	1062.94	6.00	-0.044	1063.21	12.00	0.044	1063.73	12.00	0.044	1064.26	-0.026	10.00	1064.00	
386+75.00	1063.19	6.00	-0.044	1063.45	12.00	0.044	1063.98	12.00	0.044	1064.51	-0.026	10.00	1064.25	
387+00.00	1063.41	6.00	-0.044	1063.67	12.00	0.044	1064.20	12.00	0.044	1064.73	-0.026	10.00	1064.47	
387+25.00	1063.60	6.00	-0.044	1063.86	12.00	0.044	1064.39	12.00	0.044	1064.92	-0.026	10.00	1064.66	
387+50.00	1063.77	6.00	-0.044	1064.03	12.00	0.044	1064.56	12.00	0.044	1065.09	-0.026	10.00	1064.83	
387+75.00	1063.91	6.00	-0.044	1064.18	12.00	0.044	1064.71	12.00	0.044	1065.23	-0.026	10.00	1064.97	
388+00.00	1064.03	6.00	-0.044	1064.30	12.00	0.044	1064.82	12.00	0.044	1065.35	-0.026	10.00	1065.09	
388+25.00	1064.13	6.00	-0.044	1064.39	12.00	0.044	1064.92	12.00	0.044	1065.45	-0.026	10.00	1065.19	
388+50.00	1064.20	6.00	-0.044	1064.46	12.00	0.044	1064.99	12.00	0.044	1065.52	-0.026	10.00	1065.26	
388+75.00	1064.24	6.00	-0.044	1064.50	12.00	0.044	1065.03	12.00	0.044	1065.56	-0.026	10.00	1065.30	
389+00.00	1064.26	6.00	-0.044	1064.52	12.00	0.044	1065.05	12.00	0.044	1065.58	-0.026	10.00	1065.32	
389+25.00	1064.25	6.00	-0.044	1064.52	12.00	0.044	1065.04	12.00	0.044	1065.57	-0.026	10.00	1065.31	
389+50.00	1064.22	6.00	-0.044	1064.49	12.00	0.044	1065.01	12.00	0.044	1065.54	-0.026	10.00	1065.28	
389+75.00	1064.17	6.00	-0.044	1064.43	12.00	0.044	1064.96	12.00	0.044	1065.49	-0.026	10.00	1065.23	
390+00.00	1064.08	6.00	-0.044	1064.35	12.00	0.044	1064.88	12.00	0.044	1065.40	-0.026	10.00	1065.14	

SEE NEXT SHEET FOR CONTINUATION OF SUPERELEVATION TABLE

CALCULATED JMA CHECKED FJA

SUPERELEVATION TABLE - S.R. 161

LIC-161-6.65
LIC-37-10.25

876
1349

tduffney
10/25/2006 04:31:00 PM
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PI STA. = 384+87.99
Dc = 01°15'00"
emax = 0.044

S.R. 161 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
390+00.00	1064.08	6.00	-0.044	1064.35	12.00	0.044	1064.88	12.00	0.044	1065.40	-0.026	10.00	1065.14	
390+25.00	1063.98	6.00	-0.044	1064.24	12.00	0.044	1064.77	12.00	0.044	1065.30	-0.026	10.00	1065.04	
390+50.00	1063.85	6.00	-0.044	1064.11	12.00	0.044	1064.64	12.00	0.044	1065.17	-0.026	10.00	1064.91	
390+75.00	1063.69	6.00	-0.044	1063.95	12.00	0.044	1064.48	12.00	0.044	1065.01	-0.026	10.00	1064.75	
391+00.00	1063.51	6.00	-0.044	1063.77	12.00	0.044	1064.30	12.00	0.044	1064.83	-0.026	10.00	1064.57	
391+25.00	1063.30	6.00	-0.044	1063.57	12.00	0.044	1064.09	12.00	0.044	1064.62	-0.026	10.00	1064.36	
391+50.00	1063.07	6.00	-0.044	1063.33	12.00	0.044	1063.86	12.00	0.044	1064.39	-0.026	10.00	1064.13	
391+75.00	1062.81	6.00	-0.044	1063.08	12.00	0.044	1063.60	12.00	0.044	1064.13	-0.026	10.00	1063.87	
392+00.00	1062.53	6.00	-0.044	1062.79	12.00	0.044	1063.32	12.00	0.044	1063.85	-0.026	10.00	1063.59	
392+25.00	1062.22	6.00	-0.044	1062.49	12.00	0.044	1063.02	12.00	0.044	1063.54	-0.026	10.00	1063.28	
392+50.00	1061.89	6.00	-0.044	1062.16	12.00	0.044	1062.68	12.00	0.044	1063.21	-0.026	10.00	1062.95	
392+75.00	1061.53	6.00	-0.044	1061.80	12.00	0.044	1062.33	12.00	0.044	1062.85	-0.026	10.00	1062.59	
393+00.00	1061.15	6.00	-0.044	1061.42	12.00	0.044	1061.94	12.00	0.044	1062.47	-0.026	10.00	1062.21	
393+25.00	1060.75	6.00	-0.044	1061.01	12.00	0.044	1061.54	12.00	0.044	1062.07	-0.026	10.00	1061.81	
393+50.00	1060.31	6.00	-0.044	1060.58	12.00	0.044	1061.11	12.00	0.044	1061.63	-0.026	10.00	1061.37	
393+75.00	1059.86	6.00	-0.044	1060.12	12.00	0.044	1060.65	12.00	0.044	1061.18	-0.026	10.00	1060.92	
393+89.67	1059.58	6.00	-0.044	1059.84	12.00	0.044	1060.37	12.00	0.044	1060.90	-0.026	10.00	1060.64	END FULL SUPERELEVATION
394+00.00	1059.39	6.00	-0.042	1059.64	12.00	0.042	1060.14	12.00	0.042	1060.65	-0.028	10.00	1060.37	
394+25.00	1058.88	6.00	-0.042	1059.13	12.00	0.037	1059.58	12.00	0.037	1060.02	-0.033	10.00	1059.69	
394+50.00	1058.36	6.00	-0.042	1058.61	12.00	0.032	1059.00	12.00	0.032	1059.39	-0.038	10.00	1059.01	
394+75.00	1057.84	6.00	-0.042	1058.09	12.00	0.028	1058.42	12.00	0.028	1058.75	-0.042	10.00	1058.33	
394+77.67	1057.78	6.00	-0.042	1058.03	12.00	0.027	1058.36	12.00	0.027	1058.68	-0.042	10.00	1058.26	PT
395+00.00	1057.32	6.00	-0.042	1057.57	12.00	0.023	1057.84	12.00	0.023	1058.12	-0.042	10.00	1057.70	
395+25.00	1056.80	6.00	-0.042	1057.05	12.00	0.018	1057.27	12.00	0.018	1057.48	-0.042	10.00	1057.06	
395+50.00	1056.28	6.00	-0.042	1056.53	12.00	0.016	1056.72	12.00	0.013	1056.88	-0.042	10.00	1056.46	
395+75.00	1055.76	6.00	-0.042	1056.01	12.00	0.016	1056.20	12.00	0.008	1056.30	-0.042	10.00	1055.88	
396+00.00	1055.24	6.00	-0.042	1055.49	12.00	0.016	1055.68	12.00	0.004	1055.72	-0.042	10.00	1055.30	
396+25.00	1054.72	6.00	-0.042	1054.97	12.00	0.016	1055.16	12.00	-0.001	1055.15	-0.042	10.00	1054.73	
396+50.00	1054.20	6.00	-0.042	1054.45	12.00	0.016	1054.64	12.00	-0.006	1054.57	-0.042	10.00	1054.15	
396+75.00	1053.68	6.00	-0.042	1053.93	12.00	0.016	1054.12	12.00	-0.011	1053.99	-0.042	10.00	1053.57	
397+00.00	1053.16	6.00	-0.042	1053.41	12.00	0.016	1053.60	12.00	-0.0157	1053.41	-0.042	10.00	1052.99	
397+01.67	1053.12	6.00	-0.042	1053.38	12.00	0.016	1053.57	12.00	-0.016	1053.38	-0.042	10.00	1052.96	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 161

LIC-161-6.65
LIC-37-10.25

877
1349

tduffney
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PI STA. = 438+03.66
Dc = 00°45'00" (RT)
emax = 0.028

S.R. 161 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
429+33.83	1021.69	6.00	-0.042	1021.95	12.00	0.016	1022.14	12.00	-0.016	1021.95	-0.042	10.00	1021.53	END NORMAL CROWN
429+50.00	1021.49	6.00	-0.042	1021.74	12.00	0.013	1021.89	12.00	-0.016	1021.70	-0.042	10.00	1021.28	
429+75.00	1021.16	6.00	-0.042	1021.42	12.00	0.008	1021.51	12.00	-0.016	1021.31	-0.042	10.00	1020.89	
430+00.00	1020.84	6.00	-0.042	1021.09	12.00	0.003	1021.12	12.00	-0.016	1020.93	-0.042	10.00	1020.51	
430+25.00	1020.51	6.00	-0.042	1020.77	12.00	-0.003	1020.73	12.00	-0.016	1020.54	-0.042	10.00	1020.12	
430+50.00	1020.19	6.00	-0.042	1020.44	12.00	-0.008	1020.35	12.00	-0.016	1020.16	-0.042	10.00	1019.74	
430+75.00	1019.86	6.00	-0.042	1020.12	12.00	-0.013	1019.96	12.00	-0.016	1019.77	-0.042	10.00	1019.35	
430+93.83	1019.62	6.00	-0.042	1019.87	12.00	-0.017	1019.67	12.00	-0.017	1019.47	-0.042	10.00	1019.05	PC
431+00.00	1019.54	6.00	-0.042	1019.79	12.00	-0.018	1019.58	12.00	-0.018	1019.36	-0.042	10.00	1018.94	
431+25.00	1019.21	6.00	-0.042	1019.47	12.00	-0.023	1019.19	12.00	-0.023	1018.91	-0.042	10.00	1018.49	
431+49.83	1018.89	6.00	-0.042	1019.14	12.00	-0.028	1018.81	13.24	-0.028	1018.44	-0.042	9.80	1018.02	BEGIN FULL SUPERELEVATION
431+50.00	1018.89	6.00	-0.042	1019.14	12.00	-0.028	1018.80	13.26	-0.028	1018.43	-0.042	9.80	1018.02	
431+75.00	1018.56	6.00	-0.042	1018.82	12.00	-0.028	1018.48	16.38	-0.028	1018.02	-0.042	9.30	1017.63	
432+00.00	1018.24	6.00	-0.042	1018.49	12.00	-0.028	1018.15	19.36	-0.028	1017.61	-0.042	8.80	1017.24	
432+25.00	1017.91	6.00	-0.042	1018.17	12.00	-0.028	1017.83	22.31	-0.028	1017.20	-0.042	8.30	1016.86	
432+50.00	1017.59	6.00	-0.042	1017.84	12.00	-0.028	1017.50	24.00	-0.028	1016.83	-0.042	8.00	1016.50	
432+75.00	1017.26	6.00	-0.042	1017.52	12.00	-0.028	1017.18	24.00	-0.028	1016.51	-0.042	8.00	1016.17	
433+00.00	1016.94	6.00	-0.042	1017.19	12.00	-0.028	1016.85	24.00	-0.028	1016.18	-0.042	8.00	1015.85	
433+25.00	1016.61	6.00	-0.042	1016.87	12.00	-0.028	1016.53	24.00	-0.028	1015.86	-0.042	8.00	1015.52	
433+50.00	1016.29	6.00	-0.042	1016.54	12.00	-0.028	1016.20	24.00	-0.028	1015.53	-0.042	8.00	1015.20	
433+75.00	1015.96	6.00	-0.042	1016.22	12.00	-0.028	1015.88	24.00	-0.028	1015.21	-0.042	8.00	1014.87	
434+00.00	1015.64	6.00	-0.042	1015.89	12.00	-0.028	1015.55	24.00	-0.028	1014.88	-0.042	8.00	1014.55	
434+25.00	1015.31	6.00	-0.042	1015.57	12.00	-0.028	1015.23	24.00	-0.028	1014.56	-0.042	8.00	1014.22	
434+50.00	1014.99	6.00	-0.042	1015.24	12.00	-0.028	1014.90	24.00	-0.028	1014.23	-0.042	8.00	1013.90	
434+75.00	1014.66	6.00	-0.042	1014.92	12.00	-0.028	1014.58	24.00	-0.028	1013.91	-0.042	8.00	1013.57	
435+00.00	1014.34	6.00	-0.042	1014.59	12.00	-0.028	1014.25	24.05	-0.028	1013.58	-0.042	8.00	1013.24	
435+25.00	1014.01	6.00	-0.042	1014.27	12.00	-0.028	1013.93	24.26	-0.028	1013.25	-0.042	8.00	1012.91	
435+50.00	1013.69	6.00	-0.042	1013.94	12.00	-0.028	1013.60	24.63	-0.028	1012.91	-0.042	8.00	1012.58	
435+75.00	1013.36	6.00	-0.042	1013.62	12.00	-0.028	1013.28	25.16	-0.028	1012.57	-0.042	8.00	1012.24	
436+00.00	1013.04	6.00	-0.042	1013.29	12.00	-0.028	1012.95	25.84	-0.028	1012.23	-0.042	8.00	1011.89	
436+25.00	1012.71	6.00	-0.042	1012.97	12.00	-0.028	1012.63	26.70	-0.028	1011.88	-0.042	8.00	1011.55	
436+50.00	1012.39	6.00	-0.042	1012.64	12.00	-0.028	1012.30	27.69	-0.028	1011.53	-0.042	8.00	1011.19	
436+75.00	1012.06	6.00	-0.042	1012.32	12.00	-0.028	1011.98							
437+00.00	1011.74	6.00	-0.042	1011.99	12.00	-0.028	1011.65							
437+25.00	1011.41	6.00	-0.042	1011.67	12.00	-0.028	1011.33							
437+50.00	1011.09	6.00	-0.042	1011.34	12.00	-0.028	1011.00							
437+75.00	1010.76	6.00	-0.042	1011.02	12.00	-0.028	1010.68							
438+00.00	1010.44	6.00	-0.042	1010.69	12.00	-0.028	1010.35							
438+25.00	1010.11	6.00	-0.042	1010.37	12.00	-0.028	1010.03							
438+50.00	1009.79	6.00	-0.042	1010.04	12.00	-0.028	1009.70							
438+75.00	1009.46	6.00	-0.042	1009.72	12.00	-0.028	1009.38							
439+00.00	1009.14	6.00	-0.042	1009.39	12.00	-0.028	1009.05							
439+25.00	1008.81	6.00	-0.042	1009.07	12.00	-0.028	1008.73							
439+50.00	1008.49	6.00	-0.042	1008.74	12.00	-0.028	1008.40	12.00	-0.028	1008.07	-0.042	10.00	1007.65	
439+75.00	1008.16	6.00	-0.042	1008.42	12.00	-0.028	1008.08	12.00	-0.028	1007.74	-0.042	10.00	1007.32	
440+00.00	1007.84	6.00	-0.042	1008.09	12.00	-0.028	1007.75	12.00	-0.028	1007.42	-0.042	10.00	1007.00	
440+25.00	1007.51	6.00	-0.042	1007.77	12.00	-0.028	1007.43	12.00	-0.028	1007.09	-0.042	10.00	1006.67	
440+50.00	1007.19	6.00	-0.042	1007.44	12.00	-0.028	1007.10	12.00	-0.028	1006.77	-0.042	10.00	1006.35	
440+75.00	1006.86	6.00	-0.042	1007.12	12.00	-0.028	1006.78	12.00	-0.028	1006.44	-0.042	10.00	1006.02	
441+00.00	1006.54	6.00	-0.042	1006.79	12.00	-0.028	1006.45	12.00	-0.028	1006.12	-0.042	10.00	1005.70	
441+25.00	1006.21	6.00	-0.042	1006.47	12.00	-0.028	1006.13	12.00	-0.028	1005.79	-0.042	10.00	1005.37	
441+50.00	1005.89	6.00	-0.042	1006.14	12.00	-0.028	1005.80	12.00	-0.028	1005.47	-0.042	10.00	1005.05	
441+75.00	1005.56	6.00	-0.042	1005.82	12.00	-0.028	1005.48	12.00	-0.028	1005.14	-0.042	10.00	1004.72	
442+00.00	1005.24	6.00	-0.042	1005.49	12.00	-0.028	1005.15	12.00	-0.028	1004.82	-0.042	10.00	1004.40	
442+25.00	1004.91	6.00	-0.042	1005.17	12.00	-0.028	1004.83	12.00	-0.028	1004.49	-0.042	10.00	1004.07	
442+50.00	1004.59	6.00	-0.042	1004.84	12.00	-0.028	1004.50	12.00	-0.028	1004.17	-0.042	10.00	1003.75	
442+75.00	1004.26	6.00	-0.042	1004.52	12.00	-0.028	1004.18	12.00	-0.028	1003.84	-0.042	10.00	1003.42	
443+00.00	1003.94	6.00	-0.042	1004.19	12.00	-0.028	1003.85	12.00	-0.028	1003.52	-0.042	10.00	1003.10	
443+25.00	1003.61	6.00	-0.042	1003.87	12.00	-0.028	1003.53	12.00	-0.028	1003.19	-0.042	10.00	1002.77	
443+50.00	1003.29	6.00	-0.042	1003.54	12.00	-0.028	1003.20	12.00	-0.028	1002.87	-0.042	10.00	1002.45	
443+75.00	1002.96	6.00	-0.042	1003.22	12.00	-0.028	1002.88	12.00	-0.028	1002.54	-0.042	10.00	1002.12	
444+00.00	1002.64	6.00	-0.042	1002.89	12.00	-0.028	1002.55	12.00	-0.028	1002.22	-0.042	10.00	1001.80	
444+25.00	1002.31	6.00	-0.042	1002.57	12.00	-0.028	1002.23	12.00	-0.028	1001.89	-0.042	10.00	1001.47	
444+50.00	1001.99	6.00	-0.042	1002.24	12.00	-0.028	1001.90	12.00	-0.028	1001.57	-0.042	10.00	1001.15	
444+53.42	1001.94	6.00	-0.042	1002.20	12.00	-0.028	1001.86	12.00	-0.028	1001.52	-0.042	10.00	1001.10	END FULL SUPERELEVATION
444+75.00	1001.66	6.00	-0.042	1001.92	12.00	-0.024	1001.63	12.00	-0.024	1001.35	-0.042	10.00	1000.93	
445+00.00	1001.34	6.00	-0.042	1001.59	12.00	-0.019	1001.37	12.00	-0.019	1001.15	-0.042	10.00	1000.73	
445+09.42	1001.22	6.00	-0.042	1001.47	12.00	-0.017	1001.27	12.00	-0.017	1001.07	-0.042	10.00	1000.65	PT
445+25.00	1001.01	6.00	-0.042	1001.27	12.00	-0.013	1001.10	12.00	-0.016	1000.91	-0.042	10.00	1000.49	
445+50.00	1000.69	6.00	-0.042	1000.94	12.00	-0.008	1000.84	12.00	-0.016	1000.65	-0.042	10.00	1000.23	
445+75.00	1000.36	6.00	-0.042	1000.62	12.00	-0.003	1000.58	12.00	-0.016	1000.38	-0.042	10.00	999.96	
446+00.00	1000.04	6.00	-0.042	1000.29	12.00	0.002	1000.31	12.00	-0.016	1000.12	-0.042	10.00	999.70	
446+25.00	999.71	6.00	-0.042	999.97	12.00	0.007	1000.05	12.00	-0.016	999.86	-0.042	10.00	999.44	
446+50.00	999.39	6.00	-0.042	999.64	12.00	0.012	999.78	12.00	-0.016	999.59	-0.042	10.00	999.17	
446+69.42	999.14	6.00	-0.042	999.39	12.00	0.016	999.58	12.00	-0.016	999.39	-0.042	10.00	998.97	BEGIN NORMAL CROWN

SEE RAMP TERMINAL DETAILS

SHEETS 911-912

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 161

LIC-161-6.65
LIC-37-10.25

878
1349

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PI STA. = 491+53.90
Dc = 00°45'00" (RT)
emax = 0.028

S.R. 37 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
487+01.58	976.27	6.00	-0.042	976.53	12.00	0.016	976.72	12.00	-0.016	976.53	-0.042	10.00	976.11	END NORMAL CROWN
487+25.00	976.37	6.00	-0.042	976.62	12.00	0.011	976.75	12.00	-0.016	976.56	-0.042	10.00	976.14	
487+50.00	976.50	6.00	-0.042	976.75	12.00	0.006	976.82	12.00	-0.016	976.63	-0.042	10.00	976.21	
487+75.00	976.65	6.00	-0.042	976.91	12.00	0.001	976.92	12.00	-0.016	976.73	-0.042	10.00	976.31	
488+00.00	976.84	6.00	-0.042	977.09	12.00	-0.004	977.05	12.00	-0.016	976.85	-0.042	10.00	976.43	
488+25.00	977.06	6.00	-0.042	977.31	12.00	-0.009	977.20	12.00	-0.016	977.01	-0.042	10.00	976.59	
488+50.00	977.31	6.00	-0.042	977.56	12.00	-0.014	977.39	12.00	-0.016	977.20	-0.042	10.00	976.78	
488+61.58	977.43	6.00	-0.042	977.68	12.00	-0.017	977.49	12.00	-0.017	977.29	-0.042	10.00	976.87	PC
488+75.00	977.59	6.00	-0.042	977.84	12.00	-0.019	977.61	12.00	-0.019	977.37	-0.042	10.00	976.95	
489+00.00	977.88	6.00	-0.042	978.13	12.00	-0.024	977.84	12.00	-0.024	977.54	-0.042	10.00	977.12	
489+17.58	978.08	6.00	-0.042	978.34	12.00	-0.028	978.00	12.00	-0.028	977.66	-0.042	10.00	977.24	BEGIN FULL SUPERELEVATION
489+25.00	978.17	6.00	-0.042	978.42	12.00	-0.028	978.09	12.00	-0.028	977.75	-0.042	10.00	977.33	
489+50.00	978.46	6.00	-0.042	978.72	12.00	-0.028	978.38	12.00	-0.028	978.04	-0.042	10.00	977.62	
489+75.00	978.76	6.00	-0.042	979.01	12.00	-0.028	978.67	12.00	-0.028	978.34	-0.042	10.00	977.92	
490+00.00	979.05	6.00	-0.042	979.30	12.00	-0.028	978.96	12.00	-0.028	978.63	-0.042	10.00	978.21	
490+25.00	979.34	6.00	-0.042	979.59	12.00	-0.028	979.26	12.00	-0.028	978.92	-0.042	10.00	978.50	
490+50.00	979.63	6.00	-0.042	979.89	12.00	-0.028	979.55	12.00	-0.028	979.21	-0.042	10.00	978.79	
490+75.00	979.93	6.00	-0.042	980.18	12.00	-0.028	979.84	12.00	-0.028	979.51	-0.042	10.00	979.09	
491+00.00	980.22	6.00	-0.042	980.47	12.00	-0.028	980.13	12.00	-0.028	979.80	-0.042	10.00	979.38	
491+25.00	980.51	6.00	-0.042	980.76	12.00	-0.028	980.43	12.00	-0.028	980.09	-0.042	10.00	979.67	
491+50.00	980.80	6.00	-0.042	981.06	12.00	-0.028	980.72	12.00	-0.028	980.38	-0.042	10.00	979.96	
491+75.00	981.10	6.00	-0.042	981.35	12.00	-0.028	981.01	12.00	-0.028	980.68	-0.042	10.00	980.26	
492+00.00	981.39	6.00	-0.042	981.64	12.00	-0.028	981.30	12.00	-0.028	980.97	-0.042	10.00	980.55	
492+25.00	981.68	6.00	-0.042	981.93	12.00	-0.028	981.60	12.00	-0.028	981.26	-0.042	10.00	980.84	
492+50.00	981.97	6.00	-0.042	982.23	12.00	-0.028	981.89	12.00	-0.028	981.55	-0.042	10.00	981.13	
492+75.00	982.27	6.00	-0.042	982.52	12.00	-0.028	982.18	12.00	-0.028	981.85	-0.042	10.00	981.43	
493+00.00	982.56	6.00	-0.042	982.81	12.00	-0.028	982.47	12.00	-0.028	982.14	-0.042	10.00	981.72	
493+25.00	982.85	6.00	-0.042	983.10	12.00	-0.028	982.77	12.00	-0.028	982.43	-0.042	10.00	982.01	
493+50.00	983.14	6.00	-0.042	983.40	12.00	-0.028	983.06	12.00	-0.028	982.72	-0.042	10.00	982.30	
493+75.00	983.44	6.00	-0.042	983.69	12.00	-0.028	983.35	12.00	-0.028	983.02	-0.042	10.00	982.60	
493+89.94	983.61	6.00	-0.042	983.86	12.00	-0.028	983.53	12.00	-0.028	983.19	-0.042	10.00	982.77	END FULL SUPERELEVATION
494+00.00	983.73	6.00	-0.042	983.98	12.00	-0.026	983.67	12.00	-0.026	983.36	-0.042	10.00	982.94	
494+25.00	984.02	6.00	-0.042	984.27	12.00	-0.021	984.02	12.00	-0.021	983.77	-0.042	10.00	983.35	
494+45.94	984.27	6.00	-0.042	984.52	12.00	-0.017	984.32	12.00	-0.017	984.12	-0.042	10.00	983.70	PT
494+50.00	984.31	6.00	-0.042	984.57	12.00	-0.016	984.38	12.00	-0.016	984.18	-0.042	10.00	983.76	
494+75.00	984.61	6.00	-0.042	984.86	12.00	-0.011	984.73	12.00	-0.016	984.54	-0.042	10.00	984.12	
495+00.00	984.90	6.00	-0.042	985.15	12.00	-0.006	985.08	12.00	-0.016	984.89	-0.042	10.00	984.47	
495+25.00	985.19	6.00	-0.042	985.44	12.00	0.000	985.44	12.00	-0.016	985.24	-0.042	10.00	984.82	
495+50.00	985.48	6.00	-0.042	985.74	12.00	0.005	985.79	12.00	-0.016	985.60	-0.042	10.00	985.18	
495+75.00	985.78	6.00	-0.042	986.03	12.00	0.010	986.14	12.00	-0.016	985.95	-0.042	10.00	985.53	
496+00.00	986.07	6.00	-0.042	986.32	12.00	0.015	986.50	12.00	-0.016	986.31	-0.042	10.00	985.89	
496+05.94	986.14	6.00	-0.042	986.39	12.00	0.016	986.58	12.00	-0.016	986.39	-0.042	10.00	985.97	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

879
1349

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PI STA. = 573+72.12
Dc = 01°15'00" (RT)
emax = 0.044

S.R. 37 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
569+14.22	939.02	6.00	-0.042	939.27	12.00	0.016	939.46	12.00	-0.016	939.27	-0.042	10.00	938.85	END NORMAL CROWN
569+25.00	938.96	6.00	-0.042	939.21	12.00	0.014	939.38	12.00	-0.016	939.19	-0.042	10.00	938.77	
569+50.00	938.83	6.00	-0.042	939.09	12.00	0.009	939.19	12.00	-0.016	939.00	-0.042	10.00	938.58	
569+75.00	938.71	6.00	-0.042	938.96	12.00	0.004	939.01	12.00	-0.016	938.82	-0.042	10.00	938.40	
570+00.00	938.58	6.00	-0.042	938.83	12.00	0.000	938.82	12.00	-0.016	938.63	-0.042	10.00	938.21	
570+25.00	938.45	6.00	-0.042	938.70	12.00	-0.005	938.64	12.00	-0.016	938.45	-0.042	10.00	938.03	
570+50.00	938.32	6.00	-0.042	938.58	12.00	-0.010	938.45	12.00	-0.016	938.26	-0.042	10.00	937.84	
570+75.00	938.20	6.00	-0.042	938.45	12.00	-0.015	938.27	12.00	-0.016	938.08	-0.042	10.00	937.66	
571+00.00	938.07	6.00	-0.042	938.32	12.00	-0.020	938.08	12.00	-0.020	937.85	-0.042	10.00	937.43	
571+25.00	937.94	6.00	-0.042	938.19	12.00	-0.025	937.90	12.00	-0.025	937.60	-0.042	10.00	937.18	
571+38.22	937.87	6.00	-0.042	938.13	12.00	-0.027	937.80	12.00	-0.027	937.48	-0.042	10.00	937.06	PC
571+50.00	937.82	6.00	-0.041	938.07	12.00	-0.029	937.71	12.00	-0.029	937.36	-0.042	10.00	936.94	
571+75.00	937.72	6.00	-0.036	937.94	12.00	-0.034	937.53	12.00	-0.034	937.12	-0.042	10.00	936.70	
572+00.00	937.62	6.00	-0.031	937.81	12.00	-0.039	937.34	12.00	-0.039	936.88	-0.042	10.00	936.46	
572+25.00	937.53	6.00	-0.026	937.68	12.00	-0.044	937.16	12.00	-0.044	936.63	-0.044	10.00	936.19	
572+26.22	937.52	6.00	-0.026	937.68	12.00	-0.044	937.15	12.00	-0.044	936.62	-0.044	10.00	936.18	BEGIN FULL SUPERELEVATION
572+50.00	937.40	6.00	-0.026	937.56	12.00	-0.044	937.03	12.00	-0.044	936.50	-0.044	10.00	936.06	
572+75.00	937.27	6.00	-0.026	937.43	12.00	-0.044	936.90	12.00	-0.044	936.37	-0.044	10.00	935.93	
573+00.00	937.14	6.00	-0.026	937.30	12.00	-0.044	936.77	12.00	-0.044	936.24	-0.044	10.00	935.80	
573+25.00	937.02	6.00	-0.026	937.17	12.00	-0.044	936.64	12.00	-0.044	936.12	-0.044	10.00	935.68	
573+50.00	936.89	6.00	-0.026	937.05	12.00	-0.044	936.52	12.00	-0.044	935.99	-0.044	10.00	935.55	
573+75.00	936.76	6.00	-0.026	936.92	12.00	-0.044	936.39	12.00	-0.044	935.86	-0.044	10.00	935.42	
574+00.00	936.27	20.00	-0.026	936.79	12.00	-0.044	936.26	12.00	-0.044	935.73	-0.044	12.00	935.21	
574+25.00	936.14	20.00	-0.026	936.66	12.00	-0.044	936.13	12.00	-0.044	935.61	-0.044	12.00	935.08	
574+29.61	936.12	20.00	-0.026	936.64	12.00	-0.044	936.11	12.00	-0.044	935.58	-0.044	12.00	935.05	
574+50.00	935.98	20.00	-0.028	936.54	12.00	-0.042	936.03	12.00	-0.042	935.53	-0.042	12.00	935.02	
574+75.00	935.80	20.00	-0.030	936.41	12.00	-0.040	935.93	12.00	-0.040	935.46	-0.042	12.00	934.95	END FULL SUPERELEVATION
575+00.00	935.62	20.00	-0.033	936.28	12.00	-0.037	935.83	12.00	-0.037	935.39	-0.042	12.00	934.88	
575+25.00	935.45	20.00	-0.035	936.15	12.00	-0.035	935.73	12.00	-0.035	935.32	-0.042	12.00	934.81	
575+50.00	935.27	20.00	-0.038	936.03	12.00	-0.032	935.64	12.00	-0.032	935.25	-0.042	12.00	934.74	
575+75.00	935.10	20.00	-0.040	935.90	12.00	-0.030	935.54	12.00	-0.030	935.18	-0.042	12.00	934.67	
576+00.00	935.52	6.00	-0.042	935.77	12.00	-0.028	935.44	12.00	-0.028	935.11	-0.042	12.00	934.60	
576+05.61	935.49	6.00	-0.042	935.74	12.00	-0.027	935.42	12.00	-0.027	935.09	-0.042	12.00	934.59	PT
576+25.00	935.39	6.00	-0.042	935.64	12.00	-0.025	935.34	12.00	-0.025	935.04	-0.042	12.00	934.53	
576+50.00	935.26	6.00	-0.042	935.52	12.00	-0.023	935.24	12.00	-0.023	934.97	-0.042	12.00	934.46	
576+75.00	935.14	6.00	-0.042	935.39	12.00	-0.020	935.14	12.00	-0.020	934.90	-0.042	10.00	934.48	
577+00.00	935.01	6.00	-0.042	935.26	12.00	-0.018	935.04	12.00	-0.018	934.83	-0.042	10.00	934.41	
577+25.00	934.88	6.00	-0.042	935.13	12.00	-0.016	934.95	12.00	-0.016	934.75	-0.042	10.00	934.33	
577+50.00	934.75	6.00	-0.042	935.01	12.00	-0.013	934.85	12.00	-0.016	934.65	-0.042	10.00	934.23	
577+75.00	934.63	6.00	-0.042	934.88	12.00	-0.011	934.75	12.00	-0.016	934.56	-0.042	10.00	934.14	
578+00.00	934.50	6.00	-0.042	934.75	12.00	-0.008	934.65	12.00	-0.016	934.46	-0.042	10.00	934.04	
578+25.00	934.37	6.00	-0.042	934.62	12.00	-0.006	934.55	12.00	-0.016	934.36	-0.042	10.00	933.94	
578+50.00	934.24	6.00	-0.042	934.50	12.00	-0.004	934.45	12.00	-0.016	934.26	-0.042	10.00	933.84	
578+75.00	934.12	6.00	-0.042	934.37	12.00	-0.001	934.35	12.00	-0.016	934.16	-0.042	10.00	933.74	
579+00.00	933.99	6.00	-0.042	934.24	12.00	0.001	934.25	12.00	-0.016	934.06	-0.042	10.00	933.64	
579+25.00	933.86	6.00	-0.042	934.11	12.00	0.004	934.16	12.00	-0.016	933.96	-0.042	10.00	933.54	
579+50.00	933.73	6.00	-0.042	933.99	12.00	0.006	934.06	12.00	-0.016	933.87	-0.042	10.00	933.45	
579+75.00	933.61	6.00	-0.042	933.86	12.00	0.008	933.96	12.00	-0.016	933.77	-0.042	10.00	933.35	
580+00.00	933.48	6.00	-0.042	933.73	12.00	0.011	933.86	12.00	-0.016	933.67	-0.042	10.00	933.25	
580+25.00	933.35	6.00	-0.042	933.60	12.00	0.013	933.76	12.00	-0.016	933.57	-0.042	10.00	933.15	
580+50.00	933.22	6.00	-0.042	933.48	12.00	0.016	933.66	12.00	-0.016	933.47	-0.042	10.00	933.05	
580+53.61	933.20	6.00	-0.042	933.46	12.00	0.016	933.65	12.00	-0.016	933.46	-0.042	10.00	933.04	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

880
1349

tduffney
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PI STA. = 617+41.76
Dc = 01°28'00" (RT)
emax = 0.051

S.R. 37 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
610+19.61	923.33	6.00	-0.042	923.58	12.00	0.016	923.77	12.00	-0.016	923.58	-0.042	10.00	923.16	END NORMAL CROWN
610+25.00	923.32	6.00	-0.042	923.57	12.00	0.015	923.75	12.00	-0.016	923.56	-0.042	10.00	923.14	
610+50.00	923.25	6.00	-0.042	923.51	12.00	0.010	923.63	12.00	-0.016	923.44	-0.042	10.00	923.02	
610+75.00	923.19	6.00	-0.042	923.44	12.00	0.006	923.51	12.00	-0.016	923.32	-0.042	10.00	922.90	
611+00.00	923.13	6.00	-0.042	923.38	12.00	0.001	923.39	12.00	-0.016	923.20	-0.042	10.00	922.78	
611+25.00	923.07	6.00	-0.042	923.32	12.00	-0.004	923.27	12.00	-0.016	923.08	-0.042	10.00	922.66	
611+50.00	923.00	6.00	-0.042	923.26	12.00	-0.009	923.15	12.00	-0.016	922.96	-0.042	10.00	922.54	
611+75.00	922.94	6.00	-0.042	923.19	12.00	-0.013	923.03	12.00	-0.016	922.84	-0.042	10.00	922.42	
612+00.00	922.88	6.00	-0.042	923.13	12.00	-0.018	922.91	12.00	-0.018	922.69	-0.042	10.00	922.27	
612+25.00	922.82	6.00	-0.042	923.07	12.00	-0.023	922.79	12.00	-0.023	922.52	-0.042	10.00	922.10	
612+50.00	922.75	6.00	-0.042	923.01	12.00	-0.028	922.67	12.00	-0.028	922.34	-0.042	10.00	921.92	
612+71.61	922.72	6.00	-0.038	922.95	12.00	-0.032	922.57	12.00	-0.032	922.19	-0.042	10.00	921.77	PC
612+75.00	922.72	6.00	-0.038	922.94	12.00	-0.032	922.55	12.00	-0.032	922.17	-0.042	10.00	921.75	
613+00.00	922.68	6.00	-0.033	922.88	12.00	-0.037	922.44	12.00	-0.037	921.99	-0.042	10.00	921.57	
613+25.00	922.65	6.00	-0.028	922.82	12.00	-0.042	922.32	12.00	-0.042	921.81	-0.042	10.00	921.39	
613+50.00	922.61	6.00	-0.023	922.76	12.00	-0.047	922.20	12.00	-0.047	921.64	-0.047	10.00	921.17	
613+73.61	922.58	6.00	-0.019	922.70	12.00	-0.051	922.08	12.00	-0.051	921.47	-0.051	10.00	920.96	BEGIN FULL SUPERELEVATION
613+75.00	922.58	6.00	-0.019	922.69	12.00	-0.051	922.08	12.00	-0.051	921.47	-0.051	10.00	920.96	
614+00.00	922.52	6.00	-0.019	922.63	12.00	-0.051	922.02	12.00	-0.051	921.41	-0.051	10.00	920.90	
614+25.00	922.45	6.00	-0.019	922.57	12.00	-0.051	921.96	12.00	-0.051	921.34	-0.051	10.00	920.83	
614+50.00	922.39	6.00	-0.019	922.51	12.00	-0.051	921.89	12.00	-0.051	921.28	-0.051	10.00	920.77	
614+75.00	922.33	6.00	-0.019	922.44	12.00	-0.051	921.83	12.00	-0.051	921.22	-0.051	10.00	920.71	
615+00.00	922.27	6.00	-0.019	922.38	12.00	-0.051	921.77	12.00	-0.051	921.16	-0.051	10.00	920.65	
615+25.00	922.20	6.00	-0.019	922.32	12.00	-0.051	921.71	12.00	-0.051	921.09	-0.051	10.00	920.58	
615+50.00	922.14	6.00	-0.019	922.26	12.00	-0.051	921.64	12.00	-0.051	921.03	-0.051	10.00	920.52	
615+75.00	922.08	6.00	-0.019	922.19	12.00	-0.051	921.58	12.00	-0.051	920.97	-0.051	10.00	920.46	
616+00.00	922.02	6.00	-0.019	922.13	12.00	-0.051	921.52	12.00	-0.051	920.91	-0.051	10.00	920.40	
616+25.00	921.95	6.00	-0.019	922.07	12.00	-0.051	921.46	12.00	-0.051	920.84	-0.051	10.00	920.33	
616+50.00	921.89	6.00	-0.019	922.01	12.00	-0.051	921.39	12.00	-0.051	920.78	-0.051	10.00	920.27	
616+75.00	921.83	6.00	-0.019	921.94	12.00	-0.051	921.33	12.00	-0.051	920.72	-0.051	10.00	920.21	
617+00.00	921.77	6.00	-0.019	921.88	12.00	-0.051	921.27	12.00	-0.051	920.66	-0.051	10.00	920.15	
617+25.00	921.70	6.00	-0.019	921.82	12.00	-0.051	921.21	12.00	-0.051	920.59	-0.051	10.00	920.08	
617+50.00	921.64	6.00	-0.019	921.76	12.00	-0.051	921.14	12.00	-0.051	920.53	-0.051	10.00	920.02	
617+75.00	921.58	6.00	-0.019	921.69	12.00	-0.051	921.08	12.00	-0.051	920.47	-0.051	10.00	919.96	
618+00.00	921.52	6.00	-0.019	921.63	12.00	-0.051	921.02	12.00	-0.051	920.41	-0.051	10.00	919.90	
618+25.00	921.45	6.00	-0.019	921.57	12.00	-0.051	920.96	12.00	-0.051	920.34	-0.051	10.00	919.83	
618+50.00	921.39	6.00	-0.019	921.51	12.00	-0.051	920.89	12.00	-0.051	920.28	-0.051	10.00	919.77	
618+75.00	921.33	6.00	-0.019	921.44	12.00	-0.051	920.83	12.00	-0.051	920.22	-0.051	10.00	919.71	
619+00.00	921.27	6.00	-0.019	921.38	12.00	-0.051	920.77	12.00	-0.051	920.16	-0.051	10.00	919.65	
619+25.00	921.20	6.00	-0.019	921.32	12.00	-0.051	920.71	12.00	-0.051	920.09	-0.051	10.00	919.58	
619+50.00	921.14	6.00	-0.019	921.26	12.00	-0.051	920.64	12.00	-0.051	920.03	-0.051	10.00	919.52	
619+75.00	921.08	6.00	-0.019	921.19	12.00	-0.051	920.58	12.00	-0.051	919.97	-0.051	10.00	919.46	
620+00.00	921.02	6.00	-0.019	921.13	12.00	-0.051	920.52	12.00	-0.051	919.91	-0.051	10.00	919.40	
620+25.00	920.95	6.00	-0.019	921.07	12.00	-0.051	920.46	12.00	-0.051	919.84	-0.051	10.00	919.33	
620+50.00	920.89	6.00	-0.019	921.01	12.00	-0.051	920.39	12.00	-0.051	919.78	-0.051	10.00	919.27	
620+75.00	920.83	6.00	-0.019	920.94	12.00	-0.051	920.33	12.00	-0.051	919.72	-0.051	10.00	919.21	
621+00.00	920.77	6.00	-0.019	920.88	12.00	-0.051	920.27	12.00	-0.051	919.66	-0.051	10.00	919.15	
621+05.41	920.75	6.00	-0.019	920.87	12.00	-0.051	920.25	12.00	-0.051	919.64	-0.051	10.00	919.13	END FULL SUPERELEVATION
621+25.00	920.68	6.00	-0.023	920.82	12.00	-0.047	920.25	12.00	-0.047	919.68	-0.047	10.00	919.21	
621+50.00	920.59	6.00	-0.027	920.76	12.00	-0.043	920.24	12.00	-0.043	919.73	-0.043	10.00	919.31	
621+75.00	920.50	6.00	-0.032	920.69	12.00	-0.038	920.24	12.00	-0.038	919.78	-0.042	10.00	919.36	
622+00.00	920.41	6.00	-0.037	920.63	12.00	-0.033	920.23	12.00	-0.033	919.84	-0.042	10.00	919.42	
622+07.41	920.38	6.00	-0.038	920.61	12.00	-0.032	920.23	12.00	-0.032	919.85	-0.042	10.00	919.43	PT
622+25.00	920.32	6.00	-0.042	920.57	12.00	-0.028	920.23	12.00	-0.028	919.89	-0.042	10.00	919.47	
622+50.00	920.25	6.00	-0.042	920.51	12.00	-0.024	920.22	12.00	-0.024	919.94	-0.042	10.00	919.52	
622+75.00	920.19	6.00	-0.042	920.44	12.00	-0.019	920.22	12.00	-0.019	919.99	-0.042	10.00	919.57	
623+00.00	920.13	6.00	-0.042	920.38	12.00	-0.014	920.21	12.00	-0.016	920.02	-0.042	10.00	919.60	
623+25.00	920.07	6.00	-0.042	920.32	12.00	-0.009	920.20	12.00	-0.016	920.01	-0.042	10.00	919.59	
623+50.00	920.00	6.00	-0.042	920.26	12.00	-0.005	920.20	12.00	-0.016	920.01	-0.042	10.00	919.59	
623+75.00	919.94	6.00	-0.042	920.19	12.00	0.000	920.19	12.00	-0.016	920.00	-0.042	10.00	919.58	
624+00.00	919.88	6.00	-0.042	920.13	12.00	0.005	920.19	12.00	-0.016	920.00	-0.042	10.00	919.58	
624+25.00	919.82	6.00	-0.042	920.07	12.00	0.009	920.18	12.00	-0.016	919.99	-0.042	10.00	919.57	
624+50.00	919.75	6.00	-0.042	920.01	12.00	0.014	920.18	12.00	-0.016	919.98	-0.042	10.00	919.56	
624+59.41	919.73	6.00	-0.042	919.98	12.00	0.016	920.17	12.00	-0.016	919.98	-0.042	10.00	919.56	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

881
1349

tduffney
10/25/2006 04:29:36 PM
I:\columbus\projects\co2004011\0\drawing\setable\gel05sri61.dgn

PI STA. = 648+36.87
Dc = 00°28'00" (LT)
emax = 0.018

S.R. 37 - EASTBOUND LANES

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
640+08.50	919.71	6.00	-0.042	919.97	12.00	0.016	920.16	12.00	-0.016	919.97	-0.042	10.00	919.55	END NORMAL CROWN
640+25.00	919.76	6.00	-0.042	920.01	12.00	0.016	920.21	12.00	-0.012	920.06	-0.042	10.00	919.64	
640+50.00	919.84	6.00	-0.042	920.09	12.00	0.016	920.28	12.00	-0.007	920.20	-0.042	10.00	919.78	
640+75.00	919.91	6.00	-0.042	920.16	12.00	0.016	920.35	12.00	-0.002	920.34	-0.042	10.00	919.92	
641+00.00	919.98	6.00	-0.042	920.23	12.00	0.016	920.43	12.00	0.004	920.47	-0.042	10.00	920.05	
641+25.00	920.06	6.00	-0.042	920.31	12.00	0.016	920.50	12.00	0.009	920.61	-0.042	10.00	920.19	
641+28.50	920.07	6.00	-0.042	920.32	12.00	0.016	920.51	12.00	0.010	920.63	-0.042	10.00	920.21	PC
641+50.00	920.13	6.00	-0.042	920.38	12.00	0.016	920.57	12.00	0.015	920.75	-0.042	10.00	920.33	
641+64.50	920.17	6.00	-0.042	920.42	12.00	0.018	920.64	12.00	0.018	920.86	-0.042	10.00	920.44	BEGIN FULL SUPERELEVATION
641+75.00	920.20	6.00	-0.042	920.46	12.00	0.018	920.67	12.00	0.018	920.89	-0.042	10.00	920.47	
642+00.00	920.28	6.00	-0.042	920.53	12.00	0.018	920.75	12.00	0.018	920.96	-0.042	10.00	920.54	
642+25.00	920.35	6.00	-0.042	920.60	12.00	0.018	920.82	12.00	0.018	921.03	-0.042	10.00	920.61	
642+50.00	920.42	6.00	-0.042	920.68	12.00	0.018	920.89	12.00	0.018	921.11	-0.042	10.00	920.69	
642+75.00	920.50	6.00	-0.042	920.75	12.00	0.018	920.97	12.00	0.018	921.18	-0.042	10.00	920.76	
643+00.00	920.57	6.00	-0.042	920.82	12.00	0.018	921.04	12.00	0.018	921.26	-0.042	10.00	920.84	
643+25.00	920.64	6.00	-0.042	920.90	12.00	0.018	921.11	12.00	0.018	921.33	-0.042	10.00	920.91	
643+50.00	920.72	6.00	-0.042	920.97	12.00	0.018	921.19	12.00	0.018	921.40	-0.042	10.00	920.98	
643+75.00	920.79	6.00	-0.042	921.04	12.00	0.018	921.26	12.00	0.018	921.48	-0.042	10.00	921.06	
644+00.00	920.87	6.00	-0.042	921.12	12.00	0.018	921.33	12.00	0.018	921.55	-0.042	10.00	921.13	
644+25.00	920.94	6.00	-0.042	921.19	12.00	0.018	921.41	12.00	0.018	921.62	-0.042	10.00	921.20	
644+50.00	921.01	6.00	-0.042	921.26	12.00	0.018	921.48	12.00	0.018	921.70	-0.042	10.00	921.28	
644+75.00	921.09	6.00	-0.042	921.34	12.00	0.018	921.55	12.00	0.018	921.77	-0.042	10.00	921.35	
645+00.00	921.16	6.00	-0.042	921.41	12.00	0.018	921.63	12.00	0.018	921.84	-0.042	10.00	921.42	
645+25.00	921.23	6.00	-0.042	921.49	12.00	0.018	921.70	12.00	0.018	921.92	-0.042	10.00	921.50	
645+50.00	921.31	6.00	-0.042	921.56	12.00	0.018	921.78	12.00	0.018	921.99	-0.042	10.00	921.57	
645+75.00	921.38	6.00	-0.042	921.63	12.00	0.018	921.85	12.00	0.018	922.06	-0.042	10.00	921.64	
646+00.00	921.45	6.00	-0.042	921.71	12.00	0.018	921.92	12.00	0.018	922.14	-0.042	10.00	921.72	
646+25.00	921.53	6.00	-0.042	921.78	12.00	0.018	922.00	12.00	0.018	922.21	-0.042	10.00	921.79	
646+50.00	921.60	6.00	-0.042	921.85	12.00	0.018	922.07	12.00	0.018	922.29	-0.042	10.00	921.87	
646+75.00	921.68	6.00	-0.042	921.93	12.00	0.018	922.14	12.00	0.018	922.36	-0.042	10.00	921.94	
647+00.00	921.74	6.00	-0.042	921.99	12.00	0.018	922.21	12.00	0.018	922.43	-0.042	10.00	922.01	
647+25.00	921.79	6.00	-0.042	922.04	12.00	0.018	922.26	12.00	0.018	922.48	-0.042	10.00	922.06	
647+50.00	921.83	6.00	-0.042	922.08	12.00	0.018	922.30	12.00	0.018	922.51	-0.042	10.00	922.09	
647+75.00	921.85	6.00	-0.042	922.10	12.00	0.018	922.32	12.00	0.018	922.53	-0.042	10.00	922.11	
648+00.00	921.86	6.00	-0.042	922.11	12.00	0.018	922.33	12.00	0.018	922.54	-0.042	10.00	922.12	
648+25.00	921.85	6.00	-0.042	922.10	12.00	0.018	922.32	12.00	0.018	922.53	-0.042	10.00	922.11	
648+50.00	921.83	6.00	-0.042	922.08	12.00	0.018	922.29	12.00	0.018	922.51	-0.042	10.00	922.09	
648+75.00	921.79	6.00	-0.042	922.04	12.00	0.018	922.26	12.00	0.018	922.47	-0.042	10.00	922.05	
649+00.00	921.73	6.00	-0.042	921.99	12.00	0.018	922.20	12.00	0.018	922.42	-0.042	10.00	922.00	
649+25.00	921.67	6.00	-0.042	921.92	12.00	0.018	922.13	12.00	0.018	922.35	-0.042	10.00	921.93	
649+50.00	921.59	6.00	-0.042	921.84	12.00	0.018	922.06	12.00	0.018	922.28	-0.042	10.00	921.86	
649+75.00	921.52	6.00	-0.042	921.77	12.00	0.018	921.98	12.00	0.018	922.20	-0.042	10.00	921.78	
650+00.00	921.44	6.00	-0.042	921.69	12.00	0.018	921.91	12.00	0.018	922.13	-0.042	10.00	921.71	
650+25.00	921.37	6.00	-0.042	921.62	12.00	0.018	921.83	12.00	0.018	922.05	-0.042	10.00	921.63	
650+50.00	921.29	6.00	-0.042	921.54	12.00	0.018	921.76	12.00	0.018	921.97	-0.042	10.00	921.55	
650+75.00	921.22	6.00	-0.042	921.47	12.00	0.018	921.68	12.00	0.018	921.90	-0.042	10.00	921.48	
651+00.00	921.14	6.00	-0.042	921.39	12.00	0.018	921.61	12.00	0.018	921.82	-0.042	10.00	921.40	
651+25.00	921.07	6.00	-0.042	921.32	12.00	0.018	921.53	12.00	0.018	921.75	-0.042	10.00	921.33	
651+50.00	920.99	6.00	-0.042	921.24	12.00	0.018	921.46	12.00	0.018	921.67	-0.042	10.00	921.25	
651+75.00	920.91	6.00	-0.042	921.17	12.00	0.018	921.38	12.00	0.018	921.60	-0.042	10.00	921.18	
652+00.00	920.84	6.00	-0.042	921.09	12.00	0.018	921.31	12.00	0.018	921.52	-0.042	10.00	921.10	
652+25.00	920.76	6.00	-0.042	921.02	12.00	0.018	921.23	12.00	0.018	921.45	-0.042	10.00	921.03	
652+50.00	920.69	6.00	-0.042	920.94	12.00	0.018	921.16	12.00	0.018	921.37	-0.042	10.00	920.95	
652+75.00	920.61	6.00	-0.042	920.87	12.00	0.018	921.08	12.00	0.018	921.30	-0.042	10.00	920.88	
653+00.00	920.54	6.00	-0.042	920.79	12.00	0.018	921.01	12.00	0.018	921.22	-0.042	10.00	920.80	
653+25.00	920.46	6.00	-0.042	920.72	12.00	0.018	920.93	12.00	0.018	921.15	-0.042	10.00	920.73	
653+50.00	920.42	5.34	-0.042	920.64	12.00	0.018	920.86	12.00	0.018	921.07	-0.042	9.94	920.65	
653+75.00	920.37	4.67	-0.042	920.57	12.00	0.018	920.78	12.00	0.018	921.00	-0.042	9.88	920.58	
654+00.00	920.32	4.00	-0.042	920.49	12.00	0.015	920.67	12.00	0.014	920.84	-0.042	9.82	920.43	TIE INTO EXISTING SECTION

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

882
1349

tduffney
10/25/2006 04:29:19 PM
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PI STA. = 384+88.00
Dc = 01°15'00" (LT)
emax = 0.044

S.R. 161 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
1048.48	10.00	-0.042	1048.90	12.00	-0.016	1049.10	12.00	0.016	1048.90	-0.042	6.00	1048.65	372+41.36	END NORMAL CROWN
1048.36	10.00	-0.042	1048.78	12.00	-0.016	1048.98	12.00	0.014	1048.80	-0.042	6.00	1048.55	372+50.00	
1048.04	10.00	-0.042	1048.46	12.00	-0.016	1048.65	12.00	0.010	1048.53	-0.042	6.00	1048.28	372+75.00	
1047.74	10.00	-0.042	1048.16	12.00	-0.016	1048.35	12.00	0.005	1048.30	-0.042	6.00	1048.04	373+00.00	
1047.48	10.00	-0.042	1047.90	12.00	-0.016	1048.09	12.00	0.000	1048.09	-0.042	6.00	1047.84	373+25.00	
1047.25	10.00	-0.042	1047.67	12.00	-0.016	1047.86	12.00	-0.005	1047.92	-0.042	6.00	1047.67	373+50.00	
1047.06	10.00	-0.042	1047.48	12.00	-0.016	1047.67	12.00	-0.010	1047.79	-0.042	6.00	1047.53	373+75.00	
1046.90	10.00	-0.042	1047.32	12.00	-0.016	1047.51	12.00	-0.015	1047.68	-0.042	6.00	1047.43	374+00.00	
1046.73	10.00	-0.042	1047.15	12.00	-0.019	1047.38	12.00	-0.019	1047.61	-0.042	6.00	1047.36	374+25.00	
1046.58	10.00	-0.042	1047.00	12.00	-0.024	1047.29	12.00	-0.024	1047.58	-0.042	6.00	1047.32	374+50.00	
1046.50	10.00	-0.042	1046.92	12.00	-0.027	1047.25	12.00	-0.027	1047.57	-0.042	6.00	1047.32	374+65.36	PC
1046.46	10.00	-0.042	1046.88	12.00	-0.029	1047.23	12.00	-0.029	1047.57	-0.041	6.00	1047.33	374+75.00	
1046.37	10.00	-0.042	1046.79	12.00	-0.034	1047.20	12.00	-0.034	1047.60	-0.036	6.00	1047.39	375+00.00	
1046.32	10.00	-0.042	1046.74	12.00	-0.039	1047.21	12.00	-0.039	1047.67	-0.031	6.00	1047.48	375+25.00	
1046.29	10.00	-0.043	1046.73	12.00	-0.043	1047.25	12.00	-0.043	1047.77	-0.027	6.00	1047.61	375+50.00	
1046.29	10.00	-0.044	1046.73	12.00	-0.044	1047.25	12.00	-0.044	1047.78	-0.026	6.00	1047.63	375+53.36	BEGIN FULL SUPERELEVATION
1046.40	10.00	-0.044	1046.84	12.00	-0.044	1047.37	12.00	-0.044	1047.90	-0.026	6.00	1047.74	375+75.00	
1046.57	10.00	-0.044	1047.01	12.00	-0.044	1047.53	12.00	-0.044	1048.06	-0.026	6.00	1047.91	376+00.00	
1046.76	10.00	-0.044	1047.20	12.00	-0.044	1047.73	12.00	-0.044	1048.26	-0.026	6.00	1048.10	376+25.00	
1047.00	10.00	-0.044	1047.44	12.00	-0.044	1047.96	12.00	-0.044	1048.49	-0.026	6.00	1048.34	376+50.00	
1047.26	10.00	-0.044	1047.70	12.00	-0.044	1048.23	12.00	-0.044	1048.76	-0.026	6.00	1048.60	376+75.00	
1047.56	10.00	-0.044	1048.00	12.00	-0.044	1048.53	12.00	-0.044	1049.06	-0.026	6.00	1048.90	377+00.00	
1047.89	10.00	-0.044	1048.33	12.00	-0.044	1048.86	12.00	-0.044	1049.39	-0.026	6.00	1049.23	377+25.00	
1048.26	10.00	-0.044	1048.70	12.00	-0.044	1049.23	12.00	-0.044	1049.75	-0.026	6.00	1049.60	377+50.00	
1048.64	10.00	-0.044	1049.08	12.00	-0.044	1049.61	12.00	-0.044	1050.14	-0.026	6.00	1049.98	377+75.00	
1049.02	10.00	-0.044	1049.46	12.00	-0.044	1049.99	12.00	-0.044	1050.52	-0.026	6.00	1050.36	378+00.00	
1049.40	10.00	-0.044	1049.84	12.00	-0.044	1050.37	12.00	-0.044	1050.90	-0.026	6.00	1050.74	378+25.00	
1049.79	10.00	-0.044	1050.23	12.00	-0.044	1050.76	12.00	-0.044	1051.28	-0.026	6.00	1051.13	378+50.00	
1050.17	10.00	-0.044	1050.61	12.00	-0.044	1051.14	12.00	-0.044	1051.67	-0.026	6.00	1051.51	378+75.00	
1050.55	10.00	-0.044	1050.99	12.00	-0.044	1051.52	12.00	-0.044	1052.05	-0.026	6.00	1051.89	379+00.00	
1050.93	10.00	-0.044	1051.37	12.00	-0.044	1051.90	12.00	-0.044	1052.43	-0.026	6.00	1052.27	379+25.00	
1051.32	10.00	-0.044	1051.76	12.00	-0.044	1052.28	12.00	-0.044	1052.81	-0.026	6.00	1052.66	379+50.00	
1051.70	10.00	-0.044	1052.14	12.00	-0.044	1052.67	12.00	-0.044	1053.20	-0.026	6.00	1053.04	379+75.00	
1052.08	10.00	-0.044	1052.52	12.00	-0.044	1053.05	12.00	-0.044	1053.58	-0.026	6.00	1053.42	380+00.00	
1052.46	10.00	-0.044	1052.90	12.00	-0.044	1053.43	12.00	-0.044	1053.96	-0.026	6.00	1053.80	380+25.00	
1052.85	10.00	-0.044	1053.29	12.00	-0.044	1053.81	12.00	-0.044	1054.34	-0.026	6.00	1054.19	380+50.00	
1053.23	10.00	-0.044	1053.67	12.00	-0.044	1054.20	12.00	-0.044	1054.72	-0.026	6.00	1054.57	380+75.00	
1053.61	10.00	-0.044	1054.05	12.00	-0.044	1054.58	12.00	-0.044	1055.11	-0.026	6.00	1054.95	381+00.00	
1053.99	10.00	-0.044	1054.43	12.00	-0.044	1054.96	12.00	-0.044	1055.49	-0.026	6.00	1055.33	381+25.00	
1054.38	10.00	-0.044	1054.82	12.00	-0.044	1055.34	12.00	-0.044	1055.87	-0.026	6.00	1055.72	381+50.00	
1054.76	10.00	-0.044	1055.20	12.00	-0.044	1055.73	12.00	-0.044	1056.25	-0.026	6.00	1056.10	381+75.00	
1055.14	10.00	-0.044	1055.58	12.00	-0.044	1056.11	12.00	-0.044	1056.64	-0.026	6.00	1056.48	382+00.00	
1055.52	10.00	-0.044	1055.96	12.00	-0.044	1056.49	12.00	-0.044	1057.02	-0.026	6.00	1056.86	382+25.00	
1055.91	10.00	-0.044	1056.35	12.00	-0.044	1056.87	12.00	-0.044	1057.40	-0.026	6.00	1057.25	382+50.00	
1056.29	10.00	-0.044	1056.73	12.00	-0.044	1057.26	12.00	-0.044	1057.78	-0.026	6.00	1057.63	382+75.00	
1056.67	10.00	-0.044	1057.11	12.00	-0.044	1057.64	12.00	-0.044	1058.17	-0.026	6.00	1058.01	383+00.00	
1057.05	10.00	-0.044	1057.49	12.00	-0.044	1058.02	12.00	-0.044	1058.55	-0.026	6.00	1058.39	383+25.00	
1057.43	10.00	-0.044	1057.87	12.00	-0.044	1058.40	12.00	-0.044	1058.93	-0.026	6.00	1058.77	383+50.00	
1057.82	10.00	-0.044	1058.26	12.00	-0.044	1058.79	12.00	-0.044	1059.31	-0.026	6.00	1059.16	383+75.00	
1058.20	10.00	-0.044	1058.64	12.00	-0.044	1059.17	12.00	-0.044	1059.70	-0.026	6.00	1059.54	384+00.00	
1058.58	10.00	-0.044	1059.02	12.00	-0.044	1059.55	12.00	-0.044	1060.08	-0.026	6.00	1059.92	384+25.00	
1058.96	10.00	-0.044	1059.40	12.00	-0.044	1059.93	12.00	-0.044	1060.46	-0.026	6.00	1060.30	384+50.00	
1059.35	10.00	-0.044	1059.79	12.00	-0.044	1060.31	12.00	-0.044	1060.84	-0.026	6.00	1060.69	384+75.00	
1059.73	10.00	-0.044	1060.17	12.00	-0.044	1060.70	12.00	-0.044	1061.22	-0.026	6.00	1061.07	385+00.00	
1060.11	10.00	-0.044	1060.55	12.00	-0.044	1061.08	12.00	-0.044	1061.61	-0.026	6.00	1061.45	385+25.00	
1060.48	10.00	-0.044	1060.92	12.00	-0.044	1061.45	12.00	-0.044	1061.98	-0.026	6.00	1061.82	385+50.00	
1060.83	10.00	-0.044	1061.27	12.00	-0.044	1061.79	12.00	-0.044	1062.32	-0.026	6.00	1062.17	385+75.00	
1061.15	10.00	-0.044	1061.59	12.00	-0.044	1062.11	12.00	-0.044	1062.64	-0.026	6.00	1062.49	386+00.00	
1061.44	10.00	-0.044	1061.88	12.00	-0.044	1062.41	12.00	-0.044	1062.94	-0.026	6.00	1062.78	386+25.00	
1061.71	10.00	-0.044	1062.15	12.00	-0.044	1062.68	12.00	-0.044	1063.21	-0.026	6.00	1063.05	386+50.00	
1061.95	10.00	-0.044	1062.39	12.00	-0.044	1062.92	12.00	-0.044	1063.45	-0.026	6.00	1063.29	386+75.00	
1062.17	10.00	-0.044	1062.61	12.00	-0.044	1063.14	12.00	-0.044	1063.67	-0.026	6.00	1063.51	387+00.00	
1062.37	10.00	-0.044	1062.81	12.00	-0.044	1063.34	12.00	-0.044	1063.86	-0.026	6.00	1063.71	387+25.00	
1062.54	10.00	-0.044	1062.98	12.00	-0.044	1063.51	12.00	-0.044	1064.03	-0.026	6.00	1063.88	387+50.00	
1062.68	10.00	-0.044	1063.12	12.00	-0.044	1063.65	12.00	-0.044	1064.18	-0.026	6.00	1064.02	387+75.00	
1062.80	10.00	-0.044	1063.24	12.00	-0.044	1063.77	12.00	-0.044	1064.30	-0.026	6.00	1064.14	388+00.00	
1062.90	10.00	-0.044	1063.34	12.00	-0.044	1063.86	12.00	-0.044	1064.39	-0.026	6.00	1064.24	388+25.00	
1062.96	10.00	-0.044	1063.40	12.00	-0.044	1063.93	12.00	-0.044	1064.46	-0.026	6.00	1064.30	388+50.00	
1063.01	10.00	-0.044	1063.45	12.00	-0.044	1063.98	12.00	-0.044	1064.50	-0.026	6.00	1064.35	388+75.00	
1063.03	10.00	-0.044	1063.47	12.00	-0.044	1063.99	12.00	-0.044	1064.52	-0.026	6.00	1064.37	389+00.00	
1063.02	10.00	-0.044	1063.46	12.00	-0.044	1063.99	12.00	-0.044	1064.52	-0.026	6.00	1064.36	389+25.00	
1062.99	10.00	-0.044	1063.43	12.00	-0.044	1063.96	12.00	-0.044	1064.49	-0.026	6.00	1064.33	389+50.00	
1062.93	10.00	-0.044	1063.37	12.00	-0.044	1063.90	12.00	-0.044	1064.43	-0.026	6.00	1064.27	389+75.00	
1062.85	10.00	-0.044	1063.29	12.00	-0.044	1063.82	12.00	-0.044	1064.35	-0.026	6.00	1064.19	390+00.00	

SEE NEXT SHEET FOR CONTINUATION OF SUPERELEVATION TABLE

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 161

LIC-161-6.65
LIC-37-10.25

tduffney
10/25/2006 04:29:01 PM
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PI STA. = 384+88.00
Dc = 01°15'00" (LT)
emax = 0.044

S.R. 161 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
1062.85	10.00	-0.044	1063.29	12.00	-0.044	1063.82	12.00	-0.044	1064.35	-0.026	6.00	1064.19	390+00.00	
1062.75	10.00	-0.044	1063.19	12.00	-0.044	1063.71	12.00	-0.044	1064.24	-0.026	6.00	1064.09	390+25.00	
1062.61	10.00	-0.044	1063.05	12.00	-0.044	1063.58	12.00	-0.044	1064.11	-0.026	6.00	1063.95	390+50.00	
1062.46	10.00	-0.044	1062.90	12.00	-0.044	1063.43	12.00	-0.044	1063.95	-0.026	6.00	1063.80	390+75.00	
1062.28	10.00	-0.044	1062.72	12.00	-0.044	1063.24	12.00	-0.044	1063.77	-0.026	6.00	1063.62	391+00.00	
1062.07	10.00	-0.044	1062.51	12.00	-0.044	1063.04	12.00	-0.044	1063.57	-0.026	6.00	1063.41	391+25.00	
1061.84	10.00	-0.044	1062.28	12.00	-0.044	1062.81	12.00	-0.044	1063.33	-0.026	6.00	1063.18	391+50.00	
1061.58	10.00	-0.044	1062.02	12.00	-0.044	1062.55	12.00	-0.044	1063.08	-0.026	6.00	1062.92	391+75.00	
1061.30	10.00	-0.044	1061.74	12.00	-0.044	1062.27	12.00	-0.044	1062.79	-0.026	6.00	1062.64	392+00.00	
1060.99	10.00	-0.044	1061.43	12.00	-0.044	1061.96	12.00	-0.044	1062.49	-0.026	6.00	1062.33	392+25.00	
1060.66	10.00	-0.044	1061.10	12.00	-0.044	1061.63	12.00	-0.044	1062.16	-0.026	6.00	1062.00	392+50.00	
1060.30	10.00	-0.044	1060.74	12.00	-0.044	1061.27	12.00	-0.044	1061.80	-0.026	6.00	1061.64	392+75.00	
1059.92	10.00	-0.044	1060.36	12.00	-0.044	1060.89	12.00	-0.044	1061.42	-0.026	6.00	1061.26	393+00.00	
1059.51	10.00	-0.044	1059.95	12.00	-0.044	1060.48	12.00	-0.044	1061.01	-0.026	6.00	1060.85	393+25.00	
1059.08	10.00	-0.044	1059.52	12.00	-0.044	1060.05	12.00	-0.044	1060.58	-0.026	6.00	1060.42	393+50.00	
1058.62	10.00	-0.044	1059.06	12.00	-0.044	1059.59	12.00	-0.044	1060.12	-0.026	6.00	1059.96	393+75.00	
1058.34	10.00	-0.044	1058.78	12.00	-0.044	1059.31	12.00	-0.044	1059.84	-0.026	6.00	1059.68	393+89.67	END FULL SUPERELEVATION
1058.21	10.00	-0.042	1058.63	12.00	-0.042	1059.13	12.00	-0.042	1059.64	-0.028	6.00	1059.47	394+00.00	
1057.82	10.00	-0.042	1058.24	12.00	-0.037	1058.68	12.00	-0.037	1059.13	-0.033	6.00	1058.93	394+25.00	
1057.41	10.00	-0.042	1057.83	12.00	-0.032	1058.22	12.00	-0.032	1058.61	-0.038	6.00	1058.38	394+50.00	
1057.01	10.00	-0.042	1057.43	12.00	-0.028	1057.76	12.00	-0.028	1058.09	-0.042	6.00	1057.84	394+75.00	
1056.96	10.00	-0.042	1057.38	12.00	-0.027	1057.71	12.00	-0.027	1058.03	-0.042	6.00	1057.78	394+77.67	PT
1056.60	10.00	-0.042	1057.02	12.00	-0.023	1057.30	12.00	-0.023	1057.57	-0.042	6.00	1057.32	395+00.00	
1056.20	10.00	-0.042	1056.62	12.00	-0.018	1056.83	12.00	-0.018	1057.05	-0.042	6.00	1056.80	395+25.00	
1055.76	10.00	-0.042	1056.18	12.00	-0.016	1056.37	12.00	-0.013	1056.53	-0.042	6.00	1056.28	395+50.00	
1055.30	10.00	-0.042	1055.72	12.00	-0.016	1055.91	12.00	-0.008	1056.01	-0.042	6.00	1055.76	395+75.00	
1054.84	10.00	-0.042	1055.26	12.00	-0.016	1055.45	12.00	-0.004	1055.49	-0.042	6.00	1055.24	396+00.00	
1054.37	10.00	-0.042	1054.79	12.00	-0.016	1054.99	12.00	0.001	1054.97	-0.042	6.00	1054.72	396+25.00	
1053.91	10.00	-0.042	1054.33	12.00	-0.016	1054.52	12.00	0.006	1054.45	-0.042	6.00	1054.20	396+50.00	
1053.45	10.00	-0.042	1053.87	12.00	-0.016	1054.06	12.00	0.011	1053.93	-0.042	6.00	1053.68	396+75.00	
1052.99	10.00	-0.042	1053.41	12.00	-0.016	1053.60	12.00	0.016	1053.41	-0.042	6.00	1053.16	397+00.00	
1052.96	10.00	-0.042	1053.38	12.00	-0.016	1053.57	12.00	0.016	1053.38	-0.042	6.00	1053.12	397+01.67	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 161

LIC-161-6.65
LIC-37-10.25

884
1349

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PI STA. = 438+03.66
Dc = 00°45'00" (RT)
emax = 0.028

S.R. 161 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
1021.45	8.00	-0.042	1021.79	22.00	-0.016	1022.14	12.00	0.016	1021.95	-0.042	6.00	1021.69	429+33.83	END NORMAL CROWN
1021.27	8.00	-0.042	1021.61	25.33	-0.013	1021.93	12.00	0.016	1021.74	-0.042	6.00	1021.49	429+50.00	
1021.10	8.00	-0.042	1021.43	22.85	-0.008	1021.61	12.00	0.016	1021.42	-0.042	6.00	1021.16	429+75.00	
1020.89	8.00	-0.042	1021.22	23.38	-0.003	1021.28	12.00	0.016	1021.09	-0.042	6.00	1020.84	430+00.00	
1020.68	8.00	-0.042	1021.02	23.90	0.003	1020.96	12.00	0.016	1020.77	-0.042	6.00	1020.51	430+25.00	
1020.48	8.00	-0.042	1020.82	24.42	0.008	1020.63	12.00	0.016	1020.44	-0.042	6.00	1020.19	430+50.00	
1020.29	8.00	-0.042	1020.63	24.94	0.013	1020.31	12.00	0.016	1020.12	-0.042	6.00	1019.86	430+75.00	
1020.15	8.00	-0.042	1020.49	25.33	0.017	1020.07	12.00	0.017	1019.87	-0.042	6.00	1019.62	430+93.83	PC
1020.12	8.00	-0.042	1020.46	25.46	0.018	1020.00	12.00	0.018	1019.79	-0.042	6.00	1019.54	431+00.00	
1020.00	8.00	-0.042	1020.34	25.98	0.023	1019.74	12.00	0.023	1019.47	-0.042	6.00	1019.21	431+25.00	
1019.88	8.00	-0.042	1020.22	26.50	0.028	1019.48	12.00	0.028	1019.14	-0.042	6.00	1018.89	431+49.83	BEGIN FULL SUPERELEVATION
1019.88	8.00	-0.042	1020.22	26.50	0.028	1019.48	12.00	0.028	1019.14	-0.042	6.00	1018.89	431+50.00	
1019.57	8.00	-0.042	1019.90	26.92	0.028	1019.15	12.00	0.028	1018.82	-0.042	6.00	1018.56	431+75.00	
1019.26	8.00	-0.042	1019.59	27.44	0.028	1018.83	12.00	0.028	1018.49	-0.042	6.00	1018.24	432+00.00	
1018.95	8.00	-0.042	1019.28	27.96	0.028	1018.50	12.00	0.028	1018.17	-0.042	6.00	1017.91	432+25.00	
1018.64	8.00	-0.042	1018.97	28.48	0.028	1018.18	12.00	0.028	1017.84	-0.042	6.00	1017.59	432+50.00	
1018.33	8.00	-0.042	1018.66	29.00	0.028	1017.85	12.00	0.028	1017.52	-0.042	6.00	1017.26	432+75.00	
1018.02	8.00	-0.042	1018.35	29.53	0.028	1017.53	12.00	0.028	1017.19	-0.042	6.00	1016.94	433+00.00	
1017.71	8.00	-0.042	1018.04	30.04	0.028	1017.20	12.00	0.028	1016.87	-0.042	6.00	1016.61	433+25.00	
1017.40	8.00	-0.042	1017.73	30.57	0.028	1016.88	12.00	0.028	1016.54	-0.042	6.00	1016.29	433+50.00	
1017.09	8.00	-0.042	1017.42	31.08	0.028	1016.55	12.00	0.028	1016.22	-0.042	6.00	1015.96	433+75.00	
1016.78	8.00	-0.042	1017.11	31.61	0.028	1016.23	12.00	0.028	1015.89	-0.042	6.00	1015.64	434+00.00	
1016.46	8.00	-0.042	1016.80	32.12	0.028	1015.90	12.00	0.028	1015.57	-0.042	6.00	1015.31	434+25.00	
1016.15	8.00	-0.042	1016.49	32.65	0.028	1015.58	12.00	0.028	1015.24	-0.042	6.00	1014.99	434+50.00	
1015.85	8.00	-0.042	1016.18	33.27	0.028	1015.25	12.00	0.028	1014.92	-0.042	6.00	1014.66	434+75.00	
1015.54	8.00	-0.042	1015.87	33.79	0.028	1014.93	12.00	0.028	1014.59	-0.042	6.00	1014.34	435+00.00	
1015.23	8.00	-0.042	1015.56	34.31	0.028	1014.60	12.00	0.028	1014.27	-0.042	6.00	1014.01	435+25.00	
1014.92	8.00	-0.042	1015.25	34.83	0.028	1014.28	12.00	0.028	1013.94	-0.042	6.00	1013.69	435+50.00	
1014.60	8.00	-0.042	1014.94	35.35	0.028	1013.95	12.00	0.028	1013.62	-0.042	6.00	1013.36	435+75.00	
1014.29	8.00	-0.042	1014.63	35.88	0.028	1013.63	12.00	0.028	1013.29	-0.042	6.00	1013.04	436+00.00	
1013.98	8.00	-0.042	1014.32	36.40	0.028	1013.30	12.00	0.028	1012.97	-0.042	6.00	1012.71	436+25.00	
1013.67	8.00	-0.042	1014.01	36.92	0.028	1012.98	12.00	0.028	1012.64	-0.042	6.00	1012.39	436+50.00	
					0.028	1012.65	12.00	0.028	1012.32	-0.042	6.00	1012.06	436+75.00	
					0.028	1012.33	12.00	0.028	1011.99	-0.042	6.00	1011.74	437+00.00	
					0.028	1012.00	12.00	0.028	1011.67	-0.042	6.00	1011.41	437+25.00	
					0.028	1011.68	12.00	0.028	1011.34	-0.042	6.00	1011.09	437+50.00	
					0.028	1011.35	12.00	0.028	1011.02	-0.042	6.00	1010.76	437+75.00	
					0.028	1011.03	12.00	0.028	1010.69	-0.042	6.00	1010.44	438+00.00	
					0.028	1010.70	12.00	0.028	1010.37	-0.042	6.00	1010.11	438+25.00	
					0.028	1010.38	12.00	0.028	1010.04	-0.042	6.00	1009.79	438+50.00	
					0.028	1010.05	12.00	0.028	1009.72	-0.042	6.00	1009.46	438+75.00	
					0.028	1009.73	12.00	0.028	1009.39	-0.042	6.00	1009.14	439+00.00	
					0.028	1009.40	12.00	0.028	1009.07	-0.042	6.00	1008.81	439+25.00	
					0.028	1009.08	12.00	0.028	1008.74	-0.042	6.00	1008.49	439+50.00	
					0.028	1008.75	12.00	0.028	1008.42	-0.042	6.00	1008.16	439+75.00	
					0.028	1008.43	12.00	0.028	1008.09	-0.042	6.00	1007.84	440+00.00	
					0.028	1008.10	12.00	0.028	1007.77	-0.042	6.00	1007.51	440+25.00	
1007.69	10.00	-0.042	1008.11	12.00	0.028	1007.78	12.00	0.028	1007.44	-0.042	6.00	1007.19	440+50.00	
1007.37	10.00	-0.042	1007.79	12.00	0.028	1007.45	12.00	0.028	1007.12	-0.042	6.00	1006.86	440+75.00	
1007.04	10.00	-0.042	1007.46	12.00	0.028	1007.13	12.00	0.028	1006.79	-0.042	6.00	1006.54	441+00.00	
1006.72	10.00	-0.042	1007.14	12.00	0.028	1006.80	12.00	0.028	1006.47	-0.042	6.00	1006.21	441+25.00	
1006.39	10.00	-0.042	1006.81	12.00	0.028	1006.48	12.00	0.028	1006.14	-0.042	6.00	1005.89	441+50.00	
1006.07	10.00	-0.042	1006.49	12.00	0.028	1006.15	12.00	0.028	1005.82	-0.042	6.00	1005.56	441+75.00	
1005.74	10.00	-0.042	1006.16	12.00	0.028	1005.83	12.00	0.028	1005.49	-0.042	6.00	1005.24	442+00.00	
1005.42	10.00	-0.042	1005.84	12.00	0.028	1005.50	12.00	0.028	1005.17	-0.042	6.00	1004.91	442+25.00	
1005.09	10.00	-0.042	1005.51	12.00	0.028	1005.18	12.00	0.028	1004.84	-0.042	6.00	1004.59	442+50.00	
1004.77	10.00	-0.042	1005.19	12.00	0.028	1004.85	12.00	0.028	1004.52	-0.042	6.00	1004.26	442+75.00	
1004.44	10.00	-0.042	1004.86	12.00	0.028	1004.53	12.00	0.028	1004.19	-0.042	6.00	1003.94	443+00.00	
1004.12	10.00	-0.042	1004.54	12.00	0.028	1004.20	12.00	0.028	1003.87	-0.042	6.00	1003.61	443+25.00	
1003.79	10.00	-0.042	1004.21	12.00	0.028	1003.88	12.00	0.028	1003.54	-0.042	6.00	1003.29	443+50.00	
1003.47	10.00	-0.042	1003.89	12.00	0.028	1003.55	12.00	0.028	1003.22	-0.042	6.00	1002.96	443+75.00	
1003.14	10.00	-0.042	1003.56	12.00	0.028	1003.23	12.00	0.028	1002.89	-0.042	6.00	1002.64	444+00.00	
1002.82	10.00	-0.042	1003.24	12.00	0.028	1002.90	12.00	0.028	1002.57	-0.042	6.00	1002.31	444+25.00	
1002.49	10.00	-0.042	1002.91	12.00	0.028	1002.58	12.00	0.028	1002.24	-0.042	6.00	1001.99	444+50.00	
1002.45	10.00	-0.042	1002.87	12.00	0.028	1002.53	12.00	0.028	1002.20	-0.042	6.00	1001.94	444+53.42	END FULL SUPERELEVATION
1002.06	10.00	-0.042	1002.48	12.00	0.024	1002.20	12.00	0.024	1001.92	-0.042	6.00	1001.66	444+75.00	
1001.61	10.00	-0.042	1002.03	12.00	0.019	1001.81	12.00	0.019	1001.59	-0.042	6.00	1001.34	445+00.00	
1001.45	10.00	-0.042	1001.87	12.00	0.017	1001.67	12.00	0.017	1001.47	-0.042	6.00	1001.22	445+09.42	PT
1001.20	10.00	-0.042	1001.62	12.00	0.013	1001.46	12.00	0.016	1001.27	-0.042	6.00	1001.01	445+25.00	
1000.81	10.00	-0.042	1001.23	12.00	0.008	1001.13	12.00	0.016	1000.94	-0.042	6.00	1000.69	445+50.00	
1000.43	10.00	-0.042	1000.85	12.00	0.003	1000.81	12.00	0.016	1000.62	-0.042	6.00	1000.36	445+75.00	
1000.04	10.00	-0.042	1000.46	12.00	-0.002	1000.48	12.00	0.016	1000.29	-0.042	6.00	1000.04	446+00.00	
999.65	10.00	-0.042	1000.07	12.00	-0.007	1000.16	12.00	0.016	999.97	-0.042	6.00	999.71	446+25.00	
999.27	10.00	-0.042	999.69	12.00	-0.012	999.83	12.00	0.016	999.64	-0.042	6.00	999.39	446+50.00	
998.97	10.00	-0.042	999.39	12.00	-0.016	999.58	12.00	0.016	999.39	-0.042	6.00	999.14	446+69.42	BEGIN NORMAL CROWN

SEE RAMP TERMINAL DETAILS

SHEETS 911-912

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 161

LIC-161-6.65
LIC-37-10.25

tduffney
10/25/2005 04:28:24 PM
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PI STA. = 491+53.90
Dc = 00°45'00" (RT)
emax = 0.028

S.R. 37 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
976.11	10.00	-0.042	976.53	12.00	-0.016	976.72	12.00	0.016	976.53	-0.042	6.00	976.27	487+01.58	END NORMAL CROWN
976.26	10.00	-0.042	976.68	12.00	-0.011	976.81	12.00	0.016	976.62	-0.042	6.00	976.37	487+25.00	
976.45	10.00	-0.042	976.87	12.00	-0.006	976.94	12.00	0.016	976.75	-0.042	6.00	976.50	487+50.00	
976.67	10.00	-0.042	977.09	12.00	-0.001	977.10	12.00	0.016	976.91	-0.042	6.00	976.65	487+75.00	
976.91	10.00	-0.042	977.33	12.00	0.004	977.29	12.00	0.016	977.09	-0.042	6.00	976.84	488+00.00	
977.19	10.00	-0.042	977.61	12.00	0.009	977.50	12.00	0.016	977.31	-0.042	6.00	977.06	488+25.00	
977.50	10.00	-0.042	977.92	12.00	0.014	977.75	12.00	0.016	977.56	-0.042	6.00	977.31	488+50.00	
977.66	10.00	-0.042	978.08	12.00	0.017	977.88	12.00	0.017	977.68	-0.042	6.00	977.43	488+61.58	PC
977.88	10.00	-0.042	978.30	12.00	0.019	978.07	12.00	0.019	977.84	-0.042	6.00	977.59	488+75.00	
978.30	10.00	-0.042	978.72	12.00	0.024	978.42	12.00	0.024	978.13	-0.042	6.00	977.88	489+00.00	
978.59	10.00	-0.042	979.01	12.00	0.028	978.67	12.00	0.028	978.34	-0.042	6.00	978.08	489+17.58	BEGIN FULL SUPERELEVATION
978.67	10.00	-0.042	979.09	12.00	0.028	978.76	12.00	0.028	978.42	-0.042	6.00	978.17	489+25.00	
978.97	10.00	-0.042	979.39	12.00	0.028	979.05	12.00	0.028	978.72	-0.042	6.00	978.46	489+50.00	
979.26	10.00	-0.042	979.68	12.00	0.028	979.34	12.00	0.028	979.01	-0.042	6.00	978.76	489+75.00	
979.55	10.00	-0.042	979.97	12.00	0.028	979.64	12.00	0.028	979.30	-0.042	6.00	979.05	490+00.00	
979.84	10.00	-0.042	980.26	12.00	0.028	979.93	12.00	0.028	979.59	-0.042	6.00	979.34	490+25.00	
980.14	10.00	-0.042	980.56	12.00	0.028	980.22	12.00	0.028	979.89	-0.042	6.00	979.63	490+50.00	
980.43	10.00	-0.042	980.85	12.00	0.028	980.51	12.00	0.028	980.18	-0.042	6.00	979.93	490+75.00	
980.72	10.00	-0.042	981.14	12.00	0.028	980.81	12.00	0.028	980.47	-0.042	6.00	980.22	491+00.00	
981.01	10.00	-0.042	981.43	12.00	0.028	981.10	12.00	0.028	980.76	-0.042	6.00	980.51	491+25.00	
981.31	10.00	-0.042	981.73	12.00	0.028	981.39	12.00	0.028	981.06	-0.042	6.00	980.80	491+50.00	
981.60	10.00	-0.042	982.02	12.00	0.028	981.68	12.00	0.028	981.35	-0.042	6.00	981.10	491+75.00	
981.89	10.00	-0.042	982.31	12.00	0.028	981.98	12.00	0.028	981.64	-0.042	6.00	981.39	492+00.00	
982.18	10.00	-0.042	982.60	12.00	0.028	982.27	12.00	0.028	981.93	-0.042	6.00	981.68	492+25.00	
982.48	10.00	-0.042	982.90	12.00	0.028	982.56	12.00	0.028	982.23	-0.042	6.00	981.97	492+50.00	
982.77	10.00	-0.042	983.19	12.00	0.028	982.85	12.00	0.028	982.52	-0.042	6.00	982.27	492+75.00	
983.06	10.00	-0.042	983.48	12.00	0.028	983.15	12.00	0.028	982.81	-0.042	6.00	982.56	493+00.00	
983.35	10.00	-0.042	983.77	12.00	0.028	983.44	12.00	0.028	983.10	-0.042	6.00	982.85	493+25.00	
983.65	10.00	-0.042	984.07	12.00	0.028	983.73	12.00	0.028	983.40	-0.042	6.00	983.14	493+50.00	
983.94	10.00	-0.042	984.36	12.00	0.028	984.02	12.00	0.028	983.69	-0.042	6.00	983.44	493+75.00	
984.11	10.00	-0.042	984.53	12.00	0.028	984.20	12.00	0.028	983.86	-0.042	6.00	983.61	493+89.94	END FULL SUPERELEVATION
984.18	10.00	-0.042	984.60	12.00	0.026	984.29	12.00	0.026	983.98	-0.042	6.00	983.73	494+00.00	
984.35	10.00	-0.042	984.77	12.00	0.021	984.52	12.00	0.021	984.27	-0.042	6.00	984.02	494+25.00	
984.50	10.00	-0.042	984.92	12.00	0.017	984.72	12.00	0.017	984.52	-0.042	6.00	984.27	494+45.94	PT
984.53	10.00	-0.042	984.95	12.00	0.016	984.76	12.00	0.016	984.57	-0.042	6.00	984.31	494+50.00	
984.76	10.00	-0.042	985.18	12.00	0.011	985.05	12.00	0.016	984.86	-0.042	6.00	984.61	494+75.00	
984.99	10.00	-0.042	985.41	12.00	0.006	985.34	12.00	0.016	985.15	-0.042	6.00	984.90	495+00.00	
985.22	10.00	-0.042	985.64	12.00	0.000	985.63	12.00	0.016	985.44	-0.042	6.00	985.19	495+25.00	
985.45	10.00	-0.042	985.87	12.00	-0.005	985.93	12.00	0.016	985.74	-0.042	6.00	985.48	495+50.00	
985.68	10.00	-0.042	986.10	12.00	-0.010	986.22	12.00	0.016	986.03	-0.042	6.00	985.78	495+75.00	
985.91	10.00	-0.042	986.33	12.00	-0.015	986.51	12.00	0.016	986.32	-0.042	6.00	986.07	496+00.00	
985.97	10.00	-0.042	986.39	12.00	-0.016	986.58	12.00	0.016	986.39	-0.042	6.00	986.14	496+05.94	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

886
1349

tduffney
10/25/2006 04:28:05 PM
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PI STA. = 573+72.12
Dc = 01°15'00" (RT)
emax = 0.044

S.R. 37 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
938.76	12.00	-0.042	939.27	12.00	-0.016	939.46	12.00	0.016	939.27	-0.042	6.00	939.02	569+14.22	END NORMAL CROWN
938.73	12.00	-0.042	939.24	12.00	-0.014	939.40	12.00	0.016	939.21	-0.042	6.00	938.96	569+25.00	
938.66	12.00	-0.042	939.17	12.00	-0.009	939.28	12.00	0.016	939.09	-0.042	6.00	938.83	569+50.00	
938.59	12.00	-0.042	939.10	12.00	-0.004	939.15	12.00	0.016	938.96	-0.042	6.00	938.71	569+75.00	
938.52	12.00	-0.042	939.03	12.00	0.000	939.02	12.00	0.016	938.83	-0.042	6.00	938.58	570+00.00	
938.45	12.00	-0.042	938.96	12.00	0.005	938.89	12.00	0.016	938.70	-0.042	6.00	938.45	570+25.00	
938.38	12.00	-0.042	938.89	12.00	0.010	938.77	12.00	0.016	938.58	-0.042	6.00	938.32	570+50.00	
938.31	12.00	-0.042	938.82	12.00	0.015	938.64	12.00	0.016	938.45	-0.042	6.00	938.20	570+75.00	
938.29	12.00	-0.042	938.79	12.00	0.020	938.56	12.00	0.020	938.32	-0.042	6.00	938.07	571+00.00	
938.28	12.00	-0.042	938.78	12.00	0.025	938.49	12.00	0.025	938.19	-0.042	6.00	937.94	571+25.00	
938.27	12.00	-0.042	938.77	12.00	0.027	938.45	12.00	0.027	938.13	-0.042	6.00	937.87	571+38.22	PC
938.28	12.00	-0.041	938.77	12.00	0.029	938.42	12.00	0.029	938.07	-0.042	6.00	937.81	571+50.00	
938.33	12.00	-0.036	938.76	12.00	0.034	938.35	12.00	0.034	937.94	-0.042	6.00	937.69	571+75.00	
938.37	12.00	-0.031	938.74	12.00	0.039	938.28	12.00	0.039	937.81	-0.042	6.00	937.56	572+00.00	
938.42	12.00	-0.026	938.73	12.00	0.044	938.21	12.00	0.044	937.68	-0.044	6.00	937.42	572+25.00	
938.42	12.00	-0.026	938.73	12.00	0.044	938.20	12.00	0.044	937.68	-0.044	6.00	937.41	572+26.22	BEGIN FULL SUPERELEVATION
938.30	12.00	-0.026	938.61	12.00	0.044	938.08	12.00	0.044	937.56	-0.044	6.00	937.29	572+50.00	
938.17	12.00	-0.026	938.48	12.00	0.044	937.96	12.00	0.044	937.43	-0.044	6.00	937.16	572+75.00	
938.04	12.00	-0.026	938.36	12.00	0.044	937.83	12.00	0.044	937.30	-0.044	6.00	937.04	573+00.00	
937.92	12.00	-0.026	938.23	12.00	0.044	937.70	12.00	0.044	937.17	-0.044	6.00	936.91	573+25.00	
937.79	12.00	-0.026	938.10	12.00	0.044	937.57	12.00	0.044	937.05	-0.044	6.00	936.78	573+50.00	
937.66	12.00	-0.026	937.97	12.00	0.044	937.45	12.00	0.044	936.92	-0.044	6.00	936.65	573+75.00	
937.53	12.00	-0.026	937.85	12.00	0.044	937.32	12.00	0.044	936.79	-0.044	20.00	935.91	574+00.00	
937.41	12.00	-0.026	937.72	12.00	0.044	937.19	12.00	0.044	936.66	-0.044	20.00	935.78	574+25.00	
937.28	12.00	-0.026	937.59	12.00	0.044	937.06	12.00	0.044	936.54	-0.044	20.00	935.66	574+50.00	
937.15	12.00	-0.026	937.46	12.00	0.044	936.94	12.00	0.044	936.41	-0.044	20.00	935.53	574+75.00	
937.02	12.00	-0.026	937.34	12.00	0.044	936.81	12.00	0.044	936.28	-0.044	20.00	935.40	575+00.00	
936.90	12.00	-0.026	937.21	12.00	0.044	936.68	12.00	0.044	936.15	-0.044	20.00	935.27	575+25.00	
936.89	12.00	-0.026	937.20	12.00	0.044	936.67	12.00	0.044	936.15	-0.044	20.00	935.27	575+26.41	END FULL SUPERELEVATION
936.61	12.00	-0.031	936.97	12.00	0.039	936.50	12.00	0.039	936.03	-0.042	20.00	935.19	575+50.00	
936.31	12.00	-0.035	936.73	12.00	0.035	936.31	12.00	0.035	935.90	-0.042	20.00	935.06	575+75.00	
936.00	12.00	-0.040	936.49	12.00	0.030	936.13	12.00	0.030	935.77	-0.042	20.00	934.93	576+00.00	
935.94	12.00	-0.041	936.43	12.00	0.029	936.09	12.00	0.029	935.74	-0.042	20.00	934.90	576+05.61	PT
935.74	12.00	-0.042	936.24	12.00	0.025	935.94	12.00	0.025	935.64	-0.042	6.00	935.39	576+25.00	
935.50	12.00	-0.042	936.00	12.00	0.020	935.76	12.00	0.020	935.52	-0.042	6.00	935.26	576+50.00	
935.26	12.00	-0.042	935.76	12.00	0.015	935.58	12.00	0.016	935.39	-0.042	6.00	935.14	576+75.00	
935.08	12.00	-0.042	935.58	12.00	0.011	935.45	12.00	0.016	935.26	-0.042	6.00	935.01	577+00.00	
934.89	12.00	-0.042	935.39	12.00	0.006	935.32	12.00	0.016	935.13	-0.042	6.00	934.88	577+25.00	
934.71	12.00	-0.042	935.21	12.00	0.001	935.20	12.00	0.016	935.01	-0.042	6.00	934.75	577+50.00	
934.52	12.00	-0.042	935.02	12.00	-0.004	935.07	12.00	0.016	934.88	-0.042	6.00	934.63	577+75.00	
934.33	12.00	-0.042	934.84	12.00	-0.009	934.94	12.00	0.016	934.75	-0.042	6.00	934.50	578+00.00	
934.15	12.00	-0.042	934.65	12.00	-0.013	934.81	12.00	0.016	934.62	-0.042	6.00	934.37	578+25.00	
934.05	12.00	-0.042	934.55	12.00	-0.016	934.75	12.00	0.016	934.55	-0.042	6.00	934.30	578+38.41	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

887
1349

tduffney
10/25/2006 04:27:49 PM
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PI STA. = 617+41.76
Dc = 01°28'00" (RT)
emax = 0.051

S.R. 37 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
923.16	10.00	-0.042	923.58	12.00	-0.016	923.77	12.00	0.016	923.58	-0.042	6.00	923.33	610+19.61	END NORMAL CROWN
923.16	10.00	-0.042	923.58	12.00	-0.015	923.76	12.00	0.016	923.57	-0.042	6.00	923.32	610+25.00	
923.15	10.00	-0.042	923.57	12.00	-0.010	923.70	12.00	0.016	923.51	-0.042	6.00	923.25	610+50.00	
923.15	10.00	-0.042	923.57	12.00	-0.006	923.63	12.00	0.016	923.44	-0.042	6.00	923.19	610+75.00	
923.14	10.00	-0.042	923.56	12.00	-0.001	923.57	12.00	0.016	923.38	-0.042	6.00	923.13	611+00.00	
923.14	10.00	-0.042	923.56	12.00	0.004	923.51	12.00	0.016	923.32	-0.042	6.00	923.07	611+25.00	
923.13	10.00	-0.042	923.55	12.00	0.009	923.45	12.00	0.016	923.26	-0.042	6.00	923.00	611+50.00	
923.13	10.00	-0.042	923.55	12.00	0.013	923.38	12.00	0.016	923.19	-0.042	6.00	922.94	611+75.00	
923.15	10.00	-0.042	923.57	12.00	0.018	923.35	12.00	0.018	923.13	-0.042	6.00	922.88	612+00.00	
923.20	10.00	-0.042	923.62	12.00	0.023	923.34	12.00	0.023	923.07	-0.042	6.00	922.82	612+25.00	
923.25	10.00	-0.042	923.67	12.00	0.028	923.34	12.00	0.028	923.01	-0.042	6.00	922.75	612+50.00	
923.33	10.00	-0.038	923.71	12.00	0.032	923.33	12.00	0.032	922.95	-0.042	6.00	922.70	612+71.61	PC
923.34	10.00	-0.038	923.72	12.00	0.032	923.33	12.00	0.032	922.94	-0.042	6.00	922.69	612+75.00	
923.44	10.00	-0.033	923.77	12.00	0.037	923.32	12.00	0.037	922.88	-0.042	6.00	922.63	613+00.00	
923.54	10.00	-0.028	923.82	12.00	0.042	923.32	12.00	0.042	922.82	-0.042	6.00	922.57	613+25.00	
923.64	10.00	-0.023	923.87	12.00	0.047	923.31	12.00	0.047	922.76	-0.047	6.00	922.48	613+50.00	
923.73	10.00	-0.019	923.92	12.00	0.051	923.31	12.00	0.051	922.70	-0.051	6.00	922.39	613+73.61	BEGIN FULL SUPERELEVATION
923.73	10.00	-0.019	923.92	12.00	0.051	923.30	12.00	0.051	922.69	-0.051	6.00	922.39	613+75.00	
923.66	10.00	-0.019	923.85	12.00	0.051	923.24	12.00	0.051	922.63	-0.051	6.00	922.32	614+00.00	
923.60	10.00	-0.019	923.79	12.00	0.051	923.18	12.00	0.051	922.57	-0.051	6.00	922.26	614+25.00	
923.54	10.00	-0.019	923.73	12.00	0.051	923.12	12.00	0.051	922.51	-0.051	6.00	922.20	614+50.00	
923.48	10.00	-0.019	923.67	12.00	0.051	923.05	12.00	0.051	922.44	-0.051	6.00	922.14	614+75.00	
923.41	10.00	-0.019	923.60	12.00	0.051	922.99	12.00	0.051	922.38	-0.051	6.00	922.07	615+00.00	
923.35	10.00	-0.019	923.54	12.00	0.051	922.93	12.00	0.051	922.32	-0.051	6.00	922.01	615+25.00	
923.29	10.00	-0.019	923.48	12.00	0.051	922.87	12.00	0.051	922.26	-0.051	6.00	921.95	615+50.00	
923.23	10.00	-0.019	923.42	12.00	0.051	922.80	12.00	0.051	922.19	-0.051	6.00	921.89	615+75.00	
923.16	10.00	-0.019	923.35	12.00	0.051	922.74	12.00	0.051	922.13	-0.051	6.00	921.82	616+00.00	
923.10	10.00	-0.019	923.29	12.00	0.051	922.68	12.00	0.051	922.07	-0.051	6.00	921.76	616+25.00	
923.04	10.00	-0.019	923.23	12.00	0.051	922.62	12.00	0.051	922.01	-0.051	6.00	921.70	616+50.00	
922.98	10.00	-0.019	923.17	12.00	0.051	922.55	12.00	0.051	921.94	-0.051	6.00	921.64	616+75.00	
922.91	10.00	-0.019	923.10	12.00	0.051	922.49	12.00	0.051	921.88	-0.051	6.00	921.57	617+00.00	
922.85	10.00	-0.019	923.04	12.00	0.051	922.43	12.00	0.051	921.82	-0.051	6.00	921.51	617+25.00	
922.79	10.00	-0.019	922.98	12.00	0.051	922.37	12.00	0.051	921.76	-0.051	6.00	921.45	617+50.00	
922.73	10.00	-0.019	922.92	12.00	0.051	922.30	12.00	0.051	921.69	-0.051	6.00	921.39	617+75.00	
922.66	10.00	-0.019	922.85	12.00	0.051	922.24	12.00	0.051	921.63	-0.051	6.00	921.32	618+00.00	
922.60	10.00	-0.019	922.79	12.00	0.051	922.18	12.00	0.051	921.57	-0.051	6.00	921.26	618+25.00	
922.54	10.00	-0.019	922.73	12.00	0.051	922.12	12.00	0.051	921.51	-0.051	6.00	921.20	618+50.00	
922.48	10.00	-0.019	922.67	12.00	0.051	922.05	12.00	0.051	921.44	-0.051	6.00	921.14	618+75.00	
922.41	10.00	-0.019	922.60	12.00	0.051	921.99	12.00	0.051	921.38	-0.051	6.00	921.07	619+00.00	
922.35	10.00	-0.019	922.54	12.00	0.051	921.93	12.00	0.051	921.32	-0.051	6.00	921.01	619+25.00	
922.29	10.00	-0.019	922.48	12.00	0.051	921.87	12.00	0.051	921.26	-0.051	6.00	920.95	619+50.00	
922.23	10.00	-0.019	922.42	12.00	0.051	921.80	12.00	0.051	921.19	-0.051	6.00	920.89	619+75.00	
922.16	10.00	-0.019	922.35	12.00	0.051	921.74	12.00	0.051	921.13	-0.051	6.00	920.82	620+00.00	
922.10	10.00	-0.019	922.29	12.00	0.051	921.68	12.00	0.051	921.07	-0.051	6.00	920.76	620+25.00	
922.04	10.00	-0.019	922.23	12.00	0.051	921.62	12.00	0.051	921.01	-0.051	6.00	920.70	620+50.00	
921.98	10.00	-0.019	922.17	12.00	0.051	921.55	12.00	0.051	920.94	-0.051	6.00	920.64	620+75.00	
921.91	10.00	-0.019	922.10	12.00	0.051	921.49	12.00	0.051	920.88	-0.051	6.00	920.57	621+00.00	
921.90	10.00	-0.019	922.09	12.00	0.051	921.48	12.00	0.051	920.87	-0.051	6.00	920.56	621+05.41	END FULL SUPERELEVATION
921.73	10.00	-0.023	921.95	12.00	0.047	921.39	12.00	0.047	920.82	-0.047	6.00	920.53	621+25.00	
921.50	10.00	-0.027	921.78	12.00	0.043	921.27	12.00	0.043	920.76	-0.043	6.00	920.50	621+50.00	
921.28	10.00	-0.032	921.60	12.00	0.038	921.15	12.00	0.038	920.69	-0.042	6.00	920.44	621+75.00	
921.06	10.00	-0.037	921.42	12.00	0.033	921.03	12.00	0.033	920.63	-0.042	6.00	920.38	622+00.00	
920.99	10.00	-0.038	921.37	12.00	0.032	920.99	12.00	0.032	920.61	-0.042	6.00	920.36	622+07.41	PT
920.83	10.00	-0.042	921.25	12.00	0.028	920.91	12.00	0.028	920.57	-0.042	6.00	920.32	622+25.00	
920.65	10.00	-0.042	921.07	12.00	0.024	920.79	12.00	0.024	920.51	-0.042	6.00	920.25	622+50.00	
920.48	10.00	-0.042	920.90	12.00	0.019	920.67	12.00	0.019	920.44	-0.042	6.00	920.19	622+75.00	
920.32	10.00	-0.042	920.74	12.00	0.014	920.57	12.00	0.016	920.38	-0.042	6.00	920.13	623+00.00	
920.20	10.00	-0.042	920.62	12.00	0.009	920.51	12.00	0.016	920.32	-0.042	6.00	920.07	623+25.00	
920.08	10.00	-0.042	920.50	12.00	0.005	920.45	12.00	0.016	920.26	-0.042	6.00	920.00	623+50.00	
919.96	10.00	-0.042	920.38	12.00	0.000	920.38	12.00	0.016	920.19	-0.042	6.00	919.94	623+75.00	
919.84	10.00	-0.042	920.26	12.00	-0.005	920.32	12.00	0.016	920.13	-0.042	6.00	919.88	624+00.00	
919.73	10.00	-0.042	920.15	12.00	-0.009	920.26	12.00	0.016	920.07	-0.042	6.00	919.82	624+25.00	
919.61	10.00	-0.042	920.03	12.00	-0.014	920.20	12.00	0.016	920.01	-0.042	6.00	919.75	624+50.00	
919.56	10.00	-0.042	919.98	12.00	-0.016	920.17	12.00	0.016	919.98	-0.042	6.00	919.73	624+59.41	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

888
1349

tduffney
10/25/2006 04:27:39 PM
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PI STA. = 648+36.87
Dc = 00°28'00" (LT)
emax = 0.018

S.R. 37 - WESTBOUND LANES

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	CENTER OF LANES	PAVEMENT WIDTH	PAVEMENT SLOPE	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	BASELINE SURVEY & CONSTRUCTION	COMMENTS
919.55	10.00	-0.042	919.97	12.00	-0.016	920.16	12.00	0.016	919.97	-0.042	6.00	919.71	640+08.50	END NORMAL CROWN
919.55	10.00	-0.042	919.97	12.00	-0.016	920.16	12.00	0.012	920.01	-0.042	6.00	919.76	640+25.00	
919.56	10.00	-0.042	919.98	12.00	-0.016	920.17	12.00	0.007	920.09	-0.042	6.00	919.84	640+50.00	
919.57	10.00	-0.042	919.99	12.00	-0.016	920.18	12.00	0.002	920.16	-0.042	6.00	919.91	640+75.00	
919.58	10.00	-0.042	920.00	12.00	-0.016	920.19	12.00	-0.004	920.23	-0.042	6.00	919.98	641+00.00	
919.58	10.00	-0.042	920.00	12.00	-0.016	920.20	12.00	-0.009	920.31	-0.042	6.00	920.06	641+25.00	
919.58	10.00	-0.042	920.00	12.00	-0.016	920.20	12.00	-0.010	920.32	-0.042	6.00	920.07	641+28.50	PC
919.59	10.00	-0.042	920.01	12.00	-0.016	920.20	12.00	-0.015	920.38	-0.042	6.00	920.13	641+50.00	
919.57	10.00	-0.042	919.99	12.00	-0.018	920.21	12.00	-0.018	920.42	-0.042	6.00	920.17	641+64.50	BEGIN FULL SUPERELEVATION
919.60	10.00	-0.042	920.02	12.00	-0.018	920.24	12.00	-0.018	920.46	-0.042	6.00	920.20	641+75.00	
919.68	10.00	-0.042	920.10	12.00	-0.018	920.31	12.00	-0.018	920.53	-0.042	6.00	920.28	642+00.00	
919.75	10.00	-0.042	920.17	12.00	-0.018	920.39	12.00	-0.018	920.60	-0.042	6.00	920.35	642+25.00	
919.82	10.00	-0.042	920.24	12.00	-0.018	920.46	12.00	-0.018	920.68	-0.042	6.00	920.42	642+50.00	
919.90	10.00	-0.042	920.32	12.00	-0.018	920.53	12.00	-0.018	920.75	-0.042	6.00	920.50	642+75.00	
919.97	10.00	-0.042	920.39	12.00	-0.018	920.61	12.00	-0.018	920.82	-0.042	6.00	920.57	643+00.00	
920.04	10.00	-0.042	920.46	12.00	-0.018	920.68	12.00	-0.018	920.90	-0.042	6.00	920.64	643+25.00	
920.12	10.00	-0.042	920.54	12.00	-0.018	920.75	12.00	-0.018	920.97	-0.042	6.00	920.72	643+50.00	
920.19	10.00	-0.042	920.61	12.00	-0.018	920.83	12.00	-0.018	921.04	-0.042	6.00	920.79	643+75.00	
920.27	10.00	-0.042	920.69	12.00	-0.018	920.90	12.00	-0.018	921.12	-0.042	6.00	920.87	644+00.00	
920.34	10.00	-0.042	920.76	12.00	-0.018	920.98	12.00	-0.018	921.19	-0.042	6.00	920.94	644+25.00	
920.41	10.00	-0.042	920.83	12.00	-0.018	921.05	12.00	-0.018	921.26	-0.042	6.00	921.01	644+50.00	
920.49	10.00	-0.042	920.91	12.00	-0.018	921.12	12.00	-0.018	921.34	-0.042	6.00	921.09	644+75.00	
920.56	10.00	-0.042	920.98	12.00	-0.018	921.20	12.00	-0.018	921.41	-0.042	6.00	921.16	645+00.00	
920.63	10.00	-0.042	921.05	12.00	-0.018	921.27	12.00	-0.018	921.49	-0.042	6.00	921.23	645+25.00	
920.71	10.00	-0.042	921.13	12.00	-0.018	921.34	12.00	-0.018	921.56	-0.042	6.00	921.31	645+50.00	
920.78	10.00	-0.042	921.20	12.00	-0.018	921.42	12.00	-0.018	921.63	-0.042	6.00	921.38	645+75.00	
920.85	10.00	-0.042	921.27	12.00	-0.018	921.49	12.00	-0.018	921.71	-0.042	6.00	921.45	646+00.00	
920.93	10.00	-0.042	921.35	12.00	-0.018	921.56	12.00	-0.018	921.78	-0.042	6.00	921.53	646+25.00	
921.00	10.00	-0.042	921.42	12.00	-0.018	921.64	12.00	-0.018	921.85	-0.042	6.00	921.60	646+50.00	
921.08	10.00	-0.042	921.50	12.00	-0.018	921.71	12.00	-0.018	921.93	-0.042	6.00	921.68	646+75.00	
921.14	10.00	-0.042	921.56	12.00	-0.018	921.78	12.00	-0.018	921.99	-0.042	6.00	921.74	647+00.00	
921.19	10.00	-0.042	921.61	12.00	-0.018	921.83	12.00	-0.018	922.04	-0.042	6.00	921.79	647+25.00	
921.23	10.00	-0.042	921.65	12.00	-0.018	921.86	12.00	-0.018	922.08	-0.042	6.00	921.83	647+50.00	
921.25	10.00	-0.042	921.67	12.00	-0.018	921.89	12.00	-0.018	922.10	-0.042	6.00	921.85	647+75.00	
921.26	10.00	-0.042	921.68	12.00	-0.018	921.89	12.00	-0.018	922.11	-0.042	6.00	921.86	648+00.00	
921.25	10.00	-0.042	921.67	12.00	-0.018	921.88	12.00	-0.018	922.10	-0.042	6.00	921.85	648+25.00	
921.23	10.00	-0.042	921.65	12.00	-0.018	921.86	12.00	-0.018	922.08	-0.042	6.00	921.83	648+50.00	
921.19	10.00	-0.042	921.61	12.00	-0.018	921.82	12.00	-0.018	922.04	-0.042	6.00	921.79	648+75.00	
921.13	10.00	-0.042	921.55	12.00	-0.018	921.77	12.00	-0.018	921.99	-0.042	6.00	921.73	649+00.00	
921.07	10.00	-0.042	921.49	12.00	-0.018	921.70	12.00	-0.018	921.92	-0.042	6.00	921.67	649+25.00	
920.99	10.00	-0.042	921.41	12.00	-0.018	921.63	12.00	-0.018	921.84	-0.042	6.00	921.59	649+50.00	
920.92	10.00	-0.042	921.34	12.00	-0.018	921.55	12.00	-0.018	921.77	-0.042	6.00	921.52	649+75.00	
920.84	10.00	-0.042	921.26	12.00	-0.018	921.48	12.00	-0.018	921.69	-0.042	6.00	921.44	650+00.00	
920.77	10.00	-0.042	921.19	12.00	-0.018	921.40	12.00	-0.018	921.62	-0.042	6.00	921.37	650+25.00	
920.69	10.00	-0.042	921.11	12.00	-0.018	921.33	12.00	-0.018	921.54	-0.042	6.00	921.29	650+50.00	
920.62	10.00	-0.042	921.04	12.00	-0.018	921.25	12.00	-0.018	921.47	-0.042	6.00	921.22	650+75.00	
920.54	10.00	-0.042	920.96	12.00	-0.018	921.18	12.00	-0.018	921.39	-0.042	6.00	921.14	651+00.00	
920.47	10.00	-0.042	920.89	12.00	-0.018	921.10	12.00	-0.018	921.32	-0.042	6.00	921.07	651+25.00	
920.39	10.00	-0.042	920.81	12.00	-0.018	921.03	12.00	-0.018	921.24	-0.042	6.00	920.99	651+50.00	
920.31	10.00	-0.042	920.73	12.00	-0.018	920.95	12.00	-0.018	921.17	-0.042	6.00	920.91	651+75.00	
920.24	10.00	-0.042	920.66	12.00	-0.018	920.88	12.00	-0.018	921.09	-0.042	6.00	920.84	652+00.00	
920.16	10.00	-0.042	920.58	12.00	-0.018	920.80	12.00	-0.018	921.02	-0.042	6.00	920.76	652+25.00	
920.09	10.00	-0.042	920.51	12.00	-0.018	920.73	12.00	-0.018	920.94	-0.042	6.00	920.69	652+50.00	
920.01	10.00	-0.042	920.43	12.00	-0.018	920.65	12.00	-0.018	920.87	-0.042	6.00	920.61	652+75.00	
919.94	10.00	-0.042	920.36	12.00	-0.018	920.57	12.00	-0.018	920.79	-0.042	6.00	920.54	653+00.00	
919.86	10.00	-0.042	920.28	12.00	-0.018	920.50	12.00	-0.018	920.72	-0.042	6.00	920.46	653+25.00	
919.79	10.00	-0.042	920.21	12.00	-0.018	920.42	12.00	-0.018	920.64	-0.042	5.34	920.42	653+50.00	
919.71	10.00	-0.042	920.13	12.00	-0.018	920.35	12.00	-0.018	920.57	-0.042	4.67	920.37	653+75.00	
919.64	10.00	-0.042	920.06	12.00	-0.018	920.27	12.00	-0.018	920.49	-0.042	4.00	920.32	654+00.00	TIE INTO EXISTING SECTION

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - S.R. 37

LIC-161-6.65
LIC-37-10.25

889
1349

tduffney
10/25/2006 04:27:19 PM
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PI STA. = 440+88.24
Dc = 07°30'00" (LT)
emax = 0.083

RAMP I

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
440+28.41	1006.99	6.00	-0.080	1007.47	16.00	0.080	1008.75	0.080	3.00	1008.99	
440+50.00	1006.69	6.00	-0.083	1007.19	16.00	0.083	1008.52	0.083	3.00	1008.77	
440+75.00	1006.37	6.00	-0.083	1006.86	16.00	0.083	1008.19	0.083	3.00	1008.44	
441+00.00	1006.04	6.00	-0.083	1006.54	16.00	0.083	1007.87	0.083	3.00	1008.12	
441+25.00	1005.72	6.00	-0.083	1006.21	16.00	0.083	1007.54	0.083	3.00	1007.79	
441+34.80	1005.59	6.00	-0.083	1006.09	16.00	0.083	1007.42	0.083	3.00	1007.66	END FULL SUPERELEVATION
441+50.00	1005.42	6.00	-0.078	1005.89	16.00	0.078	1007.14	0.078	3.00	1007.38	
441+75.00	1005.14	6.00	-0.070	1005.57	16.00	0.070	1006.69	0.070	3.00	1006.90	
442+00.00	1004.86	6.00	-0.063	1005.24	16.00	0.063	1006.24	-0.007	3.00	1006.22	
442+23.33	1004.61	6.00	-0.055	1004.94	16.00	0.055	1005.82	-0.015	3.00	1005.78	PT
442+50.00	1004.31	6.00	-0.047	1004.59	16.00	0.047	1005.34	-0.023	3.00	1005.27	
442+75.00	1004.01	6.00	-0.042	1004.27	16.00	0.039	1004.89	-0.031	3.00	1004.80	
443+00.00	1003.69	6.00	-0.042	1003.94	16.00	0.031	1004.44	-0.039	3.00	1004.33	
443+25.00	1003.36	6.00	-0.042	1003.62	16.00	0.024	1003.99	-0.042	3.00	1003.87	
443+50.00	1003.04	6.00	-0.042	1003.29	16.00	0.016	1003.54	-0.042	3.00	1003.42	
443+75.00	1002.71	6.00	-0.042	1002.97	16.00	0.008	1003.09	-0.042	3.00	1002.97	
444+00.00	1002.39	6.00	-0.042	1002.64	16.00	0.000	1002.64	-0.042	3.00	1002.52	
444+25.00	1002.06	6.00	-0.042	1002.32	16.00	-0.008	1002.19	-0.042	3.00	1002.07	
444+51.60	1001.72	6.00	-0.042	1001.97	16.00	-0.016	1001.72	-0.042	3.00	1001.59	

PI STA. = 448+45.43
Dc = 10°00'00" (RT)
emax = 0.072

RAMP I

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
445+59.32	1000.56	6.00	-0.042	1000.82	16.00	0.016	1001.07	-0.042	3.00	1000.95	END NORMAL CROWN
445+75.00	1000.46	6.00	-0.042	1000.71	16.00	0.010	1000.87	-0.042	3.00	1000.74	
446+00.00	1000.33	6.00	-0.042	1000.58	16.00	0.000	1000.58	-0.042	3.00	1000.46	
446+25.00	1000.24	6.00	-0.042	1000.49	16.00	-0.009	1000.34	-0.042	3.00	1000.21	
446+50.00	1000.19	6.00	-0.042	1000.45	16.00	-0.019	1000.14	-0.042	3.00	1000.01	
446+75.00	1000.46	6.00	4' RNDG	1000.44	16.00	-0.029	999.98	-0.042	3.00	999.85	
447+00.00	1000.52	6.00	4' RNDG	1000.48	16.00	-0.039	999.86	-0.042	3.00	999.74	
447+24.19	1000.62	6.00	4' RNDG	1000.56	16.00	-0.048	999.79	-0.048	3.00	999.65	PC
447+25.00	1000.62	6.00	4' RNDG	1000.57	16.00	-0.048	999.79	-0.048	3.00	999.65	
447+50.00	1000.75	6.00	4' RNDG	1000.67	16.00	-0.058	999.74	-0.058	3.00	999.57	
447+75.00	1000.87	6.00	4' RNDG	1000.77	16.00	-0.068	999.69	-0.068	3.00	999.49	
447+86.01	1000.92	6.00	4' RNDG	1000.82	16.00	-0.072	999.67	-0.072	3.00	999.45	BEGIN FULL SUPERELEVATION
448+00.00	1000.98	6.00	4' RNDG	1000.88	16.00	-0.072	999.73	-0.072	3.00	999.51	
448+25.00	1001.09	6.00	4' RNDG	1000.98	16.00	-0.072	999.83	-0.072	3.00	999.62	
448+50.00	1001.19	6.00	4' RNDG	1001.09	16.00	-0.072	999.94	-0.072	3.00	999.72	
448+75.00	1001.30	6.00	4' RNDG	1001.19	16.00	-0.072	1000.04	-0.072	3.00	999.82	
449+00.00	1001.40	6.00	4' RNDG	1001.30	16.00	-0.072	1000.15	-0.072	3.00	999.93	
449+01.03	1001.41	6.00	4' RNDG	1001.30	16.00	-0.072	1000.15	-0.072	3.00	999.93	END FULL SUPERELEVATION
449+25.00	1001.49	6.00	4' RNDG	1001.40	16.00	-0.063	1000.40	-0.063	3.00	1000.21	
449+50.00	1001.57	6.00	4' RNDG	1001.51	16.00	-0.053	1000.66	-0.053	3.00	1000.50	
449+62.85	1001.62	6.00	4' RNDG	1001.56	16.00	-0.048	1000.79	-0.048	3.00	1000.65	PT
449+75.00	1001.66	6.00	4' RNDG	1001.61	16.00	-0.043	1000.92	-0.043	3.00	1000.79	
450+00.00	1001.74	6.00	4' RNDG	1001.72	16.00	-0.034	1001.18	-0.042	3.00	1001.05	
450+25.00	1001.57	6.00	-0.042	1001.82	16.00	-0.024	1001.44	-0.042	3.00	1001.31	
450+50.00	1001.67	6.00	-0.042	1001.92	16.00	-0.014	1001.70	-0.042	3.00	1001.57	
450+75.00	1001.78	6.00	-0.042	1002.03	16.00	-0.004	1001.96	-0.042	3.00	1001.83	
451+00.00	1001.88	6.00	-0.042	1002.13	16.00	0.005	1002.22	-0.042	3.00	1002.09	
451+25.00	1001.99	6.00	-0.042	1002.24	16.00	0.015	1002.48	-0.042	3.00	1002.35	
451+27.72	1002.00	6.00	-0.042	1002.25	16.00	0.016	1002.51	-0.042	3.00	1002.38	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - RAMP I

LIC-161-6.65
LIC-37-10.25

890
1349

tduffney
10/25/2006 04:25:15 PM
i:\columbus\projects\c020040110\drawing\setable\ge300rampi.dgn

PI STA. = 454+18.04
Dc = 11°30'00" (RT)
emax = 0.076

RAMP J

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
450+80.10	1001.61	6.00	-0.042	1001.87	24.00	0.016	1002.25	-0.042	3.00	1002.12	BEGIN TRANSITION
451+00.00	1001.17	6.00	-0.042	1001.42	24.00	0.009	1001.64	-0.042	3.00	1001.51	
451+25.00	1000.52	6.00	-0.042	1000.77	24.00	0.001	1000.79	-0.042	3.00	1000.66	
451+50.00	999.79	6.00	-0.042	1000.04	24.00	-0.008	999.85	-0.042	3.00	999.72	
451+75.00	999.03	6.00	-0.042	999.28	24.00	-0.017	998.88	-0.042	3.00	998.75	
452+00.00	998.27	6.00	-0.042	998.52	23.67	-0.025	997.92	-0.042	3.00	997.79	
452+25.00	997.50	6.00	-0.042	997.76	19.70	-0.034	997.09	-0.042	3.00	996.96	
452+50.00	996.83	6.00	-0.027	996.99	16.00	-0.043	996.31	-0.043	3.00	996.18	
452+73.30	996.17	6.00	-0.019	996.28	16.00	-0.051	995.47	-0.051	3.00	995.32	PC
453+00.00	995.41	6.00	-0.010	995.47	16.00	-0.060	994.51	-0.060	3.00	994.33	
453+25.00	994.83	6.00	4' RNDG	994.73	16.00	-0.069	993.64	-0.069	3.00	993.43	
453+46.72	994.24	6.00	4' RNDG	994.13	16.00	-0.076	992.91	-0.076	3.00	992.68	BEGIN FULL SUPERELEVATION
453+50.00	994.15	6.00	4' RNDG	994.04	16.00	-0.076	992.82	-0.076	3.00	992.59	
453+75.00	993.50	6.00	4' RNDG	993.39	16.00	-0.076	992.17	-0.076	3.00	991.95	
454+00.00	992.90	6.00	4' RNDG	992.79	16.00	-0.076	991.57	-0.076	3.00	991.34	
454+25.00	992.34	6.00	4' RNDG	992.23	16.00	-0.076	991.02	-0.076	3.00	990.79	
454+40.63	992.02	6.00	4' RNDG	991.91	16.00	-0.076	990.69	-0.076	3.00	990.46	END FULL SUPERELEVATION
454+50.00	991.82	6.00	4' RNDG	991.72	16.00	-0.072	990.56	-0.072	3.00	990.35	
454+75.00	991.21	6.00	-0.007	991.25	16.00	-0.063	990.25	-0.063	3.00	990.06	
455+00.00	990.73	6.00	-0.017	990.83	16.00	-0.053	989.99	-0.053	3.00	989.83	
455+25.00	990.30	6.00	-0.027	990.46	16.00	-0.043	989.77	-0.043	3.00	989.64	
455+50.00	989.88	6.00	-0.042	990.13	16.00	-0.034	989.59	-0.042	3.00	989.47	
455+55.03	989.82	6.00	-0.042	990.07	16.00	-0.032	989.56	-0.042	3.00	989.44	PT
455+75.00	989.59	6.00	-0.042	989.85	16.00	-0.024	989.46	-0.042	3.00	989.34	
456+00.00	989.35	6.00	-0.042	989.61	16.00	-0.014	989.38	-0.042	3.00	989.25	
456+25.00	989.16	6.00	-0.042	989.41	16.00	-0.004	989.34	-0.042	3.00	989.22	
456+36.41	989.09	6.00	-0.042	989.34	16.00		989.34	-0.042	3.00	989.21	FLAT

PI STA. = 459+41.24
Dc = 7°30'00" (LT)
emax = 0.083

RAMP J

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
456+36.41	989.09	6.00	-0.042	989.34	16.00	0.000	989.34	-0.042	3.00	989.21	FLAT
456+50.00	989.01	6.00	-0.042	989.27	16.00	0.004	989.33	-0.042	3.00	989.21	
456+75.00	988.89	6.00	-0.042	989.14	16.00	0.012	989.33	-0.042	3.00	989.21	
457+00.00	988.76	6.00	-0.042	989.02	16.00	0.020	989.33	-0.042	3.00	989.21	
457+25.00	988.64	6.00	-0.042	988.89	16.00	0.028	989.33	-0.042	3.00	989.21	
457+50.00	988.51	6.00	-0.042	988.77	16.00	0.035	989.33	0.035	3.00	989.44	
457+64.87	988.44	6.00	-0.042	988.69	16.00	0.040	989.33	0.040	3.00	989.45	PC
457+75.00	988.38	6.00	-0.043	988.64	16.00	0.043	989.33	0.043	3.00	989.46	
458+00.00	988.21	6.00	-0.051	988.52	16.00	0.051	989.33	0.051	3.00	989.49	
458+25.00	988.04	6.00	-0.059	988.39	16.00	0.059	989.33	0.059	3.00	989.51	
458+50.00	987.87	6.00	-0.067	988.27	16.00	0.067	989.33	0.067	3.00	989.53	
458+75.00	987.69	6.00	-0.075	988.14	16.00	0.075	989.33	0.075	3.00	989.56	
459+00.00	987.52	6.00	-0.082	988.02	16.00	0.082	989.33	0.082	3.00	989.58	
459+02.01	987.51	6.00	-0.083	988.01	16.00	0.083	989.33	0.083	3.00	989.58	BEGIN FULL SUPERELEVATION
459+25.00	987.39	6.00	-0.083	987.89	16.00	0.083	989.22	0.083	3.00	989.47	
459+50.00	987.27	6.00	-0.083	987.77	16.00	0.083	989.09	0.083	3.00	989.34	
459+75.00	987.14	6.00	-0.083	987.64	16.00	0.083	988.97	0.083	3.00	989.22	
460+00.00	987.02	6.00	-0.083	987.52	16.00	0.083	988.84	0.083	3.00	989.09	
460+17.57	986.93	6.00	-0.083	987.43	16.00	0.083	988.76	0.083	3.00	989.01	END FULL SUPERELEVATION
460+25.00	986.91	6.00	-0.081	987.39	16.00	0.081	988.69	0.081	3.00	988.93	
460+50.00	986.82	6.00	-0.074	987.27	16.00	0.074	988.45	0.074	3.00	988.67	
460+75.00	986.74	6.00	-0.067	987.14	16.00	0.067	988.21	0.067	3.00	988.41	
461+00.00	986.66	6.00	-0.060	987.02	16.00	0.060	987.97	0.060	3.00	988.15	
461+11.54	986.62	6.00	-0.057	986.96	16.00	0.057	987.86	0.057	3.00	988.03	PT
461+25.00	986.58	6.00	-0.053	986.89	16.00	0.053	987.74	0.053	3.00	987.89	
461+50.00	986.49	6.00	-0.046	986.77	16.00	0.046	987.50	0.046	3.00	987.64	
461+66.75	986.42	6.21	-0.042	986.68	16.00	0.041	987.34	0.041	3.00	987.46	BEGIN FULL SUPERELEVATION
461+75.00	986.37	6.54	-0.042	986.64	16.00	0.041	987.30	0.041	3.00	987.42	
462+00.00	986.20	7.54	-0.042	986.52	16.00	0.041	987.17	0.041	3.00	987.30	
462+11.54	986.12	8.00	-0.042	986.46	16.00	0.041	987.12	0.041	3.00	987.24	

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - RAMP J

LIC-161-6.65
LIC-37-10.25

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1349

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PI STA. = 441+79.34
Dc = 07°30'00" (RT)
emax = 0.083

RAMP K

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT SLOPE	PAVEMENT WIDTH	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
439+29.60	1008.24	3.00	0.056	1008.08	-0.056	16.00	1007.18	-0.056	8.00	1006.73	
439+50.00	1007.98	3.00	0.056	1007.81	-0.056	16.00	1006.91	-0.056	7.18	1006.51	
439+75.00	1007.65	3.00	0.056	1007.49	-0.056	16.00	1006.59	-0.056	6.18	1006.24	
439+81.65	1007.57	3.00	0.056	1007.40	-0.056	16.00	1006.50	-0.056	6.00	1006.17	BEGIN TRANSITION
440+00.00	1007.45	3.00	0.061	1007.27	-0.061	16.00	1006.29	-0.061	6.00	1005.92	
440+29.60	1007.31	3.00	0.069	1007.10	-0.069	16.00	1005.99	-0.069	6.00	1005.57	PCC
440+50.00	1007.24	3.00	0.075	1007.02	-0.075	16.00	1005.81	-0.075	6.00	1005.36	
440+77.55	1007.21	3.00	0.083	1006.96	-0.083	16.00	1005.63	-0.083	6.00	1005.13	BEGIN FULL SUPERELEVATION
441+00.00	1007.10	3.00	0.083	1006.85	-0.083	16.00	1005.52	-0.083	6.00	1005.02	
441+25.00	1007.02	3.00	0.083	1006.77	-0.083	16.00	1005.44	-0.083	6.00	1004.94	
441+50.00	1006.98	3.00	0.083	1006.73	-0.083	16.00	1005.40	-0.083	6.00	1004.90	
441+75.00	1006.99	3.00	0.083	1006.74	-0.083	16.00	1005.41	-0.083	6.00	1004.91	
442+00.00	1007.04	3.00	0.083	1006.79	-0.083	16.00	1005.46	-0.083	6.00	1004.96	
442+25.00	1007.13	3.00	0.083	1006.89	-0.083	16.00	1005.56	-0.083	6.00	1005.06	
442+28.76	1007.15	3.00	0.083	1006.90	-0.083	16.00	1005.58	-0.083	6.00	1005.08	END FULL SUPERELEVATION
442+50.00	1007.15	3.00	0.076	1006.92	-0.076	16.00	1005.70	-0.076	6.00	1005.24	
442+75.00	1007.19	3.00	0.069	1006.98	-0.069	16.00	1005.88	-0.069	6.00	1005.47	
443+00.00	1007.27	3.00	0.061	1007.08	-0.061	16.00	1006.11	-0.061	6.00	1005.75	
443+25.33	1007.18	3.00	-0.017	1007.24	-0.053	16.00	1006.39	-0.053	6.00	1006.07	PT
443+50.00	1007.35	3.00	-0.025	1007.43	-0.045	16.00	1006.70	-0.045	6.00	1006.43	
443+75.00	1007.57	3.00	-0.033	1007.66	-0.037	16.00	1007.07	-0.042	6.00	1006.82	
444+00.00	1007.82	3.00	-0.042	1007.95	-0.029	16.00	1007.47	-0.042	6.00	1007.22	
444+25.00	1008.15	3.00	-0.042	1008.27	-0.022	16.00	1007.93	-0.042	6.00	1007.67	
444+50.00	1008.49	3.00	-0.042	1008.62	-0.014	16.00	1008.40	-0.042	6.00	1008.15	
444+75.00	1008.84	3.00	-0.042	1008.97	-0.006	16.00	1008.87	-0.042	6.00	1008.62	
444+94.36	1009.11	3.00	-0.042	1009.24	0.000	16.00	1009.24	-0.042	6.00	1008.99	FLAT

PI STA. = 447+90.43
Dc = 10°00'00" (LT)
emax = 0.072

RAMP K

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT SLOPE	PAVEMENT WIDTH	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
444+94.36	1009.11	3.00	-0.042	1009.24	0.000	16.00	1009.24	-0.042	6.00	1008.99	FLAT
445+00.00	1009.18	3.00	-0.042	1009.31	0.002	16.00	1009.35	-0.042	6.00	1009.09	
445+25.00	1009.50	3.00	-0.042	1009.63	0.012	16.00	1009.82	-0.042	6.00	1009.57	
445+50.00	1009.82	3.00	-0.042	1009.95	0.022	16.00	1010.29	-0.042	6.00	1010.04	
445+75.00	1010.14	3.00	-0.042	1010.26	0.031	16.00	1010.77	0.031	6.00	1010.95	
446+00.00	1010.46	3.00	-0.042	1010.58	0.041	16.00	1011.24	0.041	6.00	1011.49	
446+25.00	1010.75	3.00	-0.051	1010.90	0.051	16.00	1011.71	4' RNDG	6.00	1011.77	
446+50.00	1011.04	3.00	-0.060	1011.22	0.060	16.00	1012.19	4' RNDG	6.00	1012.27	
446+63.39	1011.19	3.00	-0.066	1011.39	0.066	16.00	1012.44	4' RNDG	6.00	1012.53	PC
446+75.00	1011.33	3.00	-0.070	1011.54	0.070	16.00	1012.66	4' RNDG	6.00	1012.76	
446+79.83	1011.38	3.00	-0.072	1011.60	0.072	16.00	1012.75	4' RNDG	6.00	1012.85	BEGIN FULL SUPERELEVATION
447+00.00	1011.76	3.00	-0.072	1011.98	0.072	16.00	1013.13	4' RNDG	6.00	1013.24	
447+25.00	1012.24	3.00	-0.072	1012.45	0.072	16.00	1013.61	4' RNDG	6.00	1013.71	
447+50.00	1012.71	3.00	-0.072	1012.93	0.072	16.00	1014.08	4' RNDG	6.00	1014.18	
447+75.00	1013.19	3.00	-0.072	1013.40	0.072	16.00	1014.55	4' RNDG	6.00	1014.66	
448+00.00	1013.66	3.00	-0.072	1013.87	0.072	16.00	1015.03	4' RNDG	6.00	1015.13	
448+25.00	1014.13	3.00	-0.072	1014.35	0.072	16.00	1015.50	4' RNDG	6.00	1015.60	
448+50.00	1014.61	3.00	-0.072	1014.82	0.072	16.00	1015.97	4' RNDG	6.00	1016.08	
448+51.61	1014.64	3.00	-0.072	1014.85	0.072	16.00	1016.00	4' RNDG	6.00	1016.11	END FULL SUPERELEVATION
448+75.00	1015.25	3.00	-0.063	1015.44	0.063	16.00	1016.45	4' RNDG	6.00	1016.53	
449+00.00	1015.91	3.00	-0.053	1016.07	0.053	16.00	1016.92	4' RNDG	6.00	1016.99	
449+13.43	1016.26	3.00	-0.048	1016.41	0.048	16.00	1017.17	4' RNDG	6.00	1017.23	PT
449+25.00	1016.57	3.00	-0.044	1016.70	0.044	16.00	1017.39	4' RNDG	6.00	1017.44	
449+50.00	1017.20	3.00	-0.042	1017.33	0.034	16.00	1017.87	0.034	6.00	1018.07	
449+75.00	1017.83	3.00	-0.042	1017.95	0.024	16.00	1018.34	-0.042	6.00	1018.09	
450+00.00	1018.46	3.00	-0.042	1018.58	0.014	16.00	1018.81	-0.042	6.00	1018.56	
450+25.00	1019.09	3.00	-0.042	1019.21	0.005	16.00	1019.29	-0.042	6.00	1019.04	
450+50.00	1019.71	3.00	-0.042	1019.84	-0.005	16.00	1019.76	-0.042	6.00	1019.51	
450+78.30	1020.40	3.00	-0.042	1020.53	-0.016	16.00	1020.27	-0.042	6.00	1020.02	BEGIN NORMAL CROWN

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - RAMP K

LIC-161-6.65
LIC-37-10.25

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1349

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PI STA. = 454+27.21
Dc = 10°00'00" (LT)
emax = 0.072

RAMP L

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT SLOPE	PAVEMENT WIDTH	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
451+23.27	1019.88	3.00	-0.042	1020.01	-0.016	16.00	1020.27	-0.054	6.00	1019.94	BEGIN TRANSITION
451+50.00	1019.07	3.00	-0.042	1019.19	-0.023	16.00	1019.55	-0.047	6.00	1019.27	
451+75.00	1018.12	3.00	-0.042	1018.24	-0.029	16.00	1018.70	-0.041	6.00	1018.46	
452+00.00	1016.98	3.00	-0.042	1017.11	-0.035	16.00	1017.67	-0.035	6.00	1017.46	
452+25.00	1015.76	3.00	-0.042	1015.89	-0.041	16.00	1016.55	-0.029	6.00	1016.37	
452+50.00	1014.53	3.00	-0.047	1014.67	-0.047	16.00	1015.42	-0.023	6.00	1015.29	
452+75.00	1013.29	3.00	-0.053	1013.45	-0.053	16.00	1014.30	-0.017	6.00	1014.20	
452+88.16	1012.63	3.00	-0.057	1012.80	-0.057	16.00	1013.71	-0.013	6.00	1013.63	PC
453+00.00	1012.05	3.00	-0.060	1012.22	-0.060	16.00	1013.18	-0.010	6.00	1013.12	
453+25.00	1010.81	3.00	-0.066	1011.00	-0.066	16.00	1012.06	4' RNDG	6.00	1011.88	
453+49.99	1009.57	3.00	-0.072	1009.78	-0.072	16.00	1010.93	4' RNDG	6.00	1010.75	BEGIN FULL SUPERELEVATION
453+50.00	1009.57	3.00	-0.072	1009.78	-0.072	16.00	1010.93	4' RNDG	6.00	1010.75	
453+75.00	1008.44	3.00	-0.072	1008.66	-0.072	16.00	1009.81	4' RNDG	6.00	1009.63	
454+00.00	1007.32	3.00	-0.072	1007.54	-0.072	16.00	1008.69	4' RNDG	6.00	1008.50	
454+25.00	1006.20	3.00	-0.072	1006.41	-0.072	16.00	1007.57	4' RNDG	6.00	1007.38	
454+50.00	1005.08	3.00	-0.072	1005.29	-0.072	16.00	1006.44	4' RNDG	6.00	1006.26	
454+75.00	1003.95	3.00	-0.072	1004.17	-0.072	16.00	1005.32	4' RNDG	6.00	1005.14	
455+00.00	1002.83	3.00	-0.072	1003.05	-0.072	16.00	1004.20	4' RNDG	6.00	1004.01	
455+17.11	1002.06	3.00	-0.072	1002.28	-0.072	16.00	1003.43	4' RNDG	6.00	1003.25	END FULL SUPERELEVATION
455+25.00	1001.77	3.00	-0.069	1001.97	-0.069	16.00	1003.07	4' RNDG	6.00	1002.90	
455+50.00	1000.83	3.00	-0.059	1001.00	-0.059	16.00	1001.95	-0.011	6.00	1001.89	
455+60.98	1000.41	3.00	-0.055	1000.58	-0.055	16.00	1001.46	-0.015	6.00	1001.37	PT
455+75.00	999.89	3.00	-0.050	1000.04	-0.050	16.00	1000.83	-0.020	6.00	1000.71	
456+00.00	998.94	3.00	-0.042	999.07	-0.040	16.00	999.71	-0.030	6.00	999.53	
456+25.00	997.98	3.00	-0.042	998.10	-0.030	16.00	998.58	-0.040	6.00	998.34	
456+50.00	997.03	3.00	-0.042	997.16	-0.020	16.00	997.49	-0.050	6.00	997.19	
456+75.00	996.14	3.00	-0.042	996.27	-0.011	16.00	996.44	-0.059	6.00	996.08	
457+00.00	995.30	3.00	-0.042	995.42	-0.001	16.00	995.44	-0.069	6.00	995.03	
457+02.61	995.21	3.00	-0.042	995.34		16.00	995.34	-0.070	6.00	994.92	FLAT

PI STA. = 460+42.93
Dc = 07°30'00" (RT)
emax = 0.083

RAMP L

BASELINE SURVEY & CONSTRUCTION	LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT SLOPE	PAVEMENT WIDTH	PROFILE GRADE	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
457+02.61	995.21	3.00	-0.042	995.34		16.00	995.34	-0.042	6.00	995.09	FLAT
457+25.00	994.48	3.00	-0.042	994.60	0.007	16.00	994.49	-0.042	6.00	994.24	
457+50.00	993.71	3.00	-0.042	993.83	0.015	16.00	993.59	-0.042	6.00	993.34	
457+75.00	992.98	3.00	-0.042	993.11	0.023	16.00	992.75	-0.042	6.00	992.49	
458+00.00	992.31	3.00	-0.042	992.43	0.030	16.00	991.95	-0.040	6.00	991.71	
458+25.00	991.68	3.00	-0.042	991.81	0.038	16.00	991.20	-0.032	6.00	991.01	
458+44.24	991.50	3.00	0.044	991.36	0.044	16.00	990.66	-0.026	6.00	990.50	PC
458+50.00	991.38	3.00	0.046	991.24	0.046	16.00	990.50	-0.024	6.00	990.36	
458+75.00	990.87	3.00	0.054	990.71	0.054	16.00	989.85	-0.016	6.00	989.75	
459+00.00	990.42	3.00	0.062	990.24	0.062	16.00	989.25	-0.008	6.00	989.20	
459+25.00	989.61	3.00	-0.069	989.82	0.069	16.00	988.70	-0.069	6.00	988.29	
459+50.00	989.21	3.00	-0.077	989.44	0.077	16.00	988.20	-0.077	6.00	987.74	
459+68.21	988.95	3.00	-0.083	989.20	0.083	16.00	987.87	-0.083	6.00	987.37	BEGIN FULL SUPERELEVATION
459+75.00	988.83	3.00	-0.083	989.08	0.083	16.00	987.75	-0.083	6.00	987.26	
460+00.00	988.43	3.00	-0.083	988.68	0.083	16.00	987.36	-0.083	6.00	986.86	
460+25.00	988.09	3.00	-0.083	988.33	0.083	16.00	987.01	-0.083	6.00	986.51	
460+50.00	987.79	3.00	-0.083	988.03	0.083	16.00	986.71	-0.083	6.00	986.21	
460+75.00	987.54	3.00	-0.083	987.78	0.083	16.00	986.46	-0.083	6.00	985.96	
461+00.00	987.34	3.00	-0.083	987.58	0.083	16.00	986.26	-0.083	6.00	985.76	
461+25.00	987.19	3.00	-0.083	987.44	0.083	16.00	986.11	-0.083	6.00	985.61	
464+61.27	986.16	3.00	-0.042	986.29	0.016	16.00	986.03	-0.042	6.00	985.78	

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - RAMP L

LIC-161-6.65
LIC-37-10.25

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PI STA. = 108+69.82
Dc = 03°00'00" (RT)
emax = 0.062

WATKINS-YORK FRONTAGE ROAD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1072.37	6.00	-0.063	1072.74	12.00	-0.016	105+63.56	1072.94	-0.016	12.00	1072.74	-0.063	6.00	1072.37	END NORMAL CROWN
1072.48	6.00	-0.063	1072.86	12.00	-0.012	105+75.00	1073.00	-0.016	12.00	1072.80	-0.063	6.00	1072.43	
1072.73	6.00	-0.063	1073.11	12.00	-0.002	106+00.00	1073.13	-0.016	12.00	1072.94	-0.063	6.00	1072.56	
1072.78	6.00	-0.063	1073.15	12.00	0.000	106+04.59	1073.15	-0.016	12.00	1072.96	-0.063	6.00	1072.58	TS
1072.98	6.00	-0.063	1073.36	12.00	0.008	106+25.00	1073.26	-0.016	12.00	1073.07	-0.063	6.00	1072.69	
1073.39	6.00	4' RNDG*	1073.61	12.00	0.018	106+50.00	1073.40	-0.018	12.00	1073.18	-0.063	6.00	1072.81	
1073.66	6.00	4' RNDG*	1073.86	12.00	0.027	106+75.00	1073.53	-0.027	12.00	1073.20	-0.063	6.00	1072.82	
1073.92	6.00	4' RNDG*	1074.10	12.00	0.037	107+00.00	1073.66	-0.037	12.00	1073.21	-0.063	6.00	1072.83	
1074.15	6.00	4' RNDG*	1074.31	12.00	0.047	107+25.00	1073.74	-0.047	12.00	1073.18	-0.063	6.00	1072.80	
1074.33	6.00	4' RNDG*	1074.47	12.00	0.057	107+50.00	1073.79	-0.057	12.00	1073.11	-0.063	6.00	1072.73	
1074.42	6.00	4' RNDG*	1074.54	12.00	0.062	107+63.59	1073.80	-0.062	12.00	1073.06	-0.063	6.00	1072.68	SC/BEGIN FULL SUPER
1074.41	6.00	4' RNDG*	1074.54	12.00	0.062	107+75.00	1073.80	-0.062	12.00	1073.05	-0.063	6.00	1072.67	
1074.38	6.00	4' RNDG*	1074.51	12.00	0.062	108+00.00	1073.76	-0.062	12.00	1073.02	-0.063	6.00	1072.64	
1074.30	6.00	4' RNDG*	1074.43	12.00	0.062	108+25.00	1073.69	-0.062	12.00	1072.94	-0.063	6.00	1072.56	
1074.18	6.00	4' RNDG*	1074.31	12.00	0.062	108+50.00	1073.57	-0.062	12.00	1072.82	-0.063	6.00	1072.45	
1074.02	6.00	4' RNDG*	1074.15	12.00	0.062	108+75.00	1073.41	-0.062	12.00	1072.66	-0.063	6.00	1072.29	
1073.83	6.00	4' RNDG*	1073.95	12.00	0.062	109+00.00	1073.21	-0.062	12.00	1072.47	-0.063	6.00	1072.09	
1073.58	6.00	4' RNDG*	1073.71	12.00	0.062	109+25.00	1072.97	-0.062	12.00	1072.22	-0.063	6.00	1071.85	
1073.31	6.00	4' RNDG*	1073.44	12.00	0.062	109+50.00	1072.69	-0.062	12.00	1071.95	-0.063	6.00	1071.57	
1073.03	6.00	4' RNDG*	1073.16	12.00	0.062	109+74.78	1072.42	-0.062	12.00	1071.67	-0.063	6.00	1071.30	CS/END FULL SUPER
1073.03	6.00	4' RNDG*	1073.16	12.00	0.0619	109+75.00	1072.42	-0.062	12.00	1071.67	-0.063	6.00	1071.29	
1072.62	6.00	4' RNDG*	1072.76	12.00	0.052	110+00.00	1072.14	-0.052	12.00	1071.51	-0.063	6.00	1071.13	
1072.20	6.00	4' RNDG*	1072.37	12.00	0.042	110+25.00	1071.86	-0.042	12.00	1071.35	-0.063	6.00	1070.97	
1071.79	6.00	4' RNDG*	1071.97	12.00	0.033	110+50.00	1071.58	-0.033	12.00	1071.19	-0.063	6.00	1070.81	
1071.37	6.00	4' RNDG*	1071.58	12.00	0.023	110+75.00	1071.30	-0.023	12.00	1071.03	-0.063	6.00	1070.65	
1070.96	6.00	4' RNDG*	1071.18	12.00	0.013	111+00.00	1071.03	-0.016	12.00	1070.83	-0.063	6.00	1070.46	
1070.41	6.00	-0.063	1070.79	12.00	0.003	111+25.00	1070.75	-0.016	12.00	1070.56	-0.063	6.00	1070.18	
1070.27	6.00	-0.063	1070.65	12.00	0.000	111+33.78	1070.65	-0.016	12.00	1070.46	-0.063	6.00	1070.08	ST
1070.02	6.00	-0.063	1070.39	12.00	-0.006	111+50.00	1070.47	-0.016	12.00	1070.28	-0.063	6.00	1069.90	
1069.62	6.00	-0.063	1070.00	12.00	-0.016	111+74.81	1070.19	-0.016	12.00	1070.00	-0.063	6.00	1069.62	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.063 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - WATKINS-YORK FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

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PI STA. = 143+69.72
Dc = 01°12'53" (LT)
emax = 0.030

WATKINS-YORK FRONTAGE ROAD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1047.24	6.00	-0.063	1047.62	12.00	-0.016	132+25.39	1047.81	-0.016	12.00	1047.62	-0.063	6.00	1047.24	END NORMAL CROWN
1047.15	6.00	-0.063	1047.53	12.00	-0.016	132+50.00	1047.72	-0.006	12.00	1047.64	-0.063	6.00	1047.26	
1047.08	6.00	-0.063	1047.46	12.00	-0.016	132+75.00	1047.65	0.003	12.00	1047.70	-0.063	6.00	1047.32	
1047.05	6.00	-0.063	1047.43	12.00	-0.016	133+00.00	1047.62	0.013	12.00	1047.78	4' RNDG	6.00	1047.56	
1047.00	6.00	-0.063	1047.38	12.00	-0.020	133+17.41	1047.62	0.020	12.00	1047.86	4' RNDG	6.00	1047.65	PC
1046.97	6.00	-0.063	1047.35	12.00	-0.023	133+25.00	1047.63	0.023	12.00	1047.90	4' RNDG	6.00	1047.70	
1046.91	6.00	-0.063	1047.29	12.00	-0.030	133+42.97	1047.65	0.030	12.00	1048.01	4' RNDG	6.00	1047.82	BEGIN FULL SUPERELEVATION
1046.92	6.00	-0.063	1047.30	12.00	-0.030	133+50.00	1047.66	0.030	12.00	1048.02	4' RNDG	6.00	1047.83	
1046.99	6.00	-0.063	1047.37	12.00	-0.030	133+75.00	1047.73	0.030	12.00	1048.09	4' RNDG	6.00	1047.90	
1047.10	6.00	-0.063	1047.47	12.00	-0.030	134+00.00	1047.83	0.030	12.00	1048.19	4' RNDG	6.00	1048.00	
1047.23	6.00	-0.063	1047.61	12.00	-0.030	134+25.00	1047.97	0.030	12.00	1048.33	4' RNDG	6.00	1048.14	
1047.40	6.00	-0.063	1047.78	12.00	-0.030	134+50.00	1048.14	0.030	12.00	1048.50	4' RNDG	6.00	1048.30	
1047.60	6.00	-0.063	1047.98	12.00	-0.030	134+75.00	1048.34	0.030	12.00	1048.70	4' RNDG	6.00	1048.51	
1047.83	6.00	-0.063	1048.21	12.00	-0.030	135+00.00	1048.57	0.030	12.00	1048.93	4' RNDG	6.00	1048.74	
1048.10	6.00	-0.063	1048.48	12.00	-0.030	135+25.00	1048.84	0.030	12.00	1049.20	4' RNDG	6.00	1049.01	
1048.40	6.00	-0.063	1048.78	12.00	-0.030	135+50.00	1049.14	0.030	12.00	1049.50	4' RNDG	6.00	1049.31	
1048.73	6.00	-0.063	1049.11	12.00	-0.030	135+75.00	1049.47	0.030	12.00	1049.83	4' RNDG	6.00	1049.64	
1049.10	6.00	-0.063	1049.48	12.00	-0.030	136+00.00	1049.84	0.030	12.00	1050.20	4' RNDG	6.00	1050.01	
1049.48	6.00	-0.063	1049.86	12.00	-0.030	136+25.00	1050.22	0.030	12.00	1050.58	4' RNDG	6.00	1050.39	
1049.87	6.00	-0.063	1050.24	12.00	-0.030	136+50.00	1050.60	0.030	12.00	1050.96	4' RNDG	6.00	1050.77	
1050.25	6.00	-0.063	1050.63	12.00	-0.030	136+75.00	1050.99	0.030	12.00	1051.35	4' RNDG	6.00	1051.15	
1050.63	6.00	-0.063	1051.01	12.00	-0.030	137+00.00	1051.37	0.030	12.00	1051.73	4' RNDG	6.00	1051.54	
1051.01	6.00	-0.063	1051.39	12.00	-0.030	137+25.00	1051.75	0.030	12.00	1052.11	4' RNDG	6.00	1051.92	
1051.40	6.00	-0.063	1051.77	12.00	-0.030	137+50.00	1052.13	0.030	12.00	1052.49	4' RNDG	6.00	1052.30	
1051.78	6.00	-0.063	1052.16	12.00	-0.030	137+75.00	1052.52	0.030	12.00	1052.88	4' RNDG	6.00	1052.68	
1052.16	6.00	-0.063	1052.54	12.00	-0.030	138+00.00	1052.90	0.030	12.00	1053.26	4' RNDG	6.00	1053.07	
1052.54	6.00	-0.063	1052.92	12.00	-0.030	138+25.00	1053.28	0.030	12.00	1053.64	4' RNDG	6.00	1053.45	
1052.93	6.00	-0.063	1053.30	12.00	-0.030	138+50.00	1053.66	0.030	12.00	1054.02	4' RNDG	6.00	1053.83	
1053.31	6.00	-0.063	1053.69	12.00	-0.030	138+75.00	1054.05	0.030	12.00	1054.41	4' RNDG	6.00	1054.22	
1053.69	6.00	-0.063	1054.07	12.00	-0.030	139+00.00	1054.43	0.030	12.00	1054.79	4' RNDG	6.00	1054.60	
1054.07	6.00	-0.063	1054.45	12.00	-0.030	139+25.00	1054.81	0.030	12.00	1055.17	4' RNDG	6.00	1054.98	
1054.46	6.00	-0.063	1054.84	12.00	-0.030	139+50.00	1055.20	0.030	12.00	1055.56	4' RNDG	6.00	1055.36	
1054.84	6.00	-0.063	1055.22	12.00	-0.030	139+75.00	1055.58	0.030	12.00	1055.94	4' RNDG	6.00	1055.75	
1055.22	6.00	-0.063	1055.60	12.00	-0.030	140+00.00	1055.96	0.030	12.00	1056.32	4' RNDG	6.00	1056.13	
1055.61	6.00	-0.063	1055.98	12.00	-0.030	140+25.00	1056.34	0.030	12.00	1056.70	4' RNDG	6.00	1056.51	
1055.99	6.00	-0.063	1056.37	12.00	-0.030	140+50.00	1056.73	0.030	12.00	1057.09	4' RNDG	6.00	1056.89	
1056.37	6.00	-0.063	1056.75	12.00	-0.030	140+75.00	1057.11	0.030	12.00	1057.47	4' RNDG	6.00	1057.28	
1056.75	6.00	-0.063	1057.13	12.00	-0.030	141+00.00	1057.49	0.030	12.00	1057.85	4' RNDG	6.00	1057.66	
1057.14	6.00	-0.063	1057.51	12.00	-0.030	141+25.00	1057.87	0.030	12.00	1058.23	4' RNDG	6.00	1058.04	
1057.52	6.00	-0.063	1057.90	12.00	-0.030	141+50.00	1058.26	0.030	12.00	1058.62	4' RNDG	6.00	1058.42	
1057.90	6.00	-0.063	1058.28	12.00	-0.030	141+75.00	1058.64	0.030	12.00	1059.00	4' RNDG	6.00	1058.81	
1058.28	6.00	-0.063	1058.66	12.00	-0.030	142+00.00	1059.02	0.030	12.00	1059.38	4' RNDG	6.00	1059.19	
1058.67	6.00	-0.063	1059.04	12.00	-0.030	142+25.00	1059.40	0.030	12.00	1059.76	4' RNDG	6.00	1059.57	
1059.05	6.00	-0.063	1059.43	12.00	-0.030	142+50.00	1059.79	0.030	12.00	1060.15	4' RNDG	6.00	1059.96	
1059.43	6.00	-0.063	1059.81	12.00	-0.030	142+75.00	1060.17	0.030	12.00	1060.53	4' RNDG	6.00	1060.34	
1059.81	6.00	-0.063	1060.19	12.00	-0.030	143+00.00	1060.55	0.030	12.00	1060.91	4' RNDG	6.00	1060.72	
1060.20	6.00	-0.063	1060.58	12.00	-0.030	143+25.00	1060.94	0.030	12.00	1061.30	4' RNDG	6.00	1061.10	
1060.58	6.00	-0.063	1060.96	12.00	-0.030	143+50.00	1061.32	0.030	12.00	1061.68	4' RNDG	6.00	1061.49	
1060.96	6.00	-0.063	1061.34	12.00	-0.030	143+75.00	1061.70	0.030	12.00	1062.06	4' RNDG	6.00	1061.87	
1061.35	6.00	-0.063	1061.72	12.00	-0.030	144+00.00	1062.08	0.030	12.00	1062.44	4' RNDG	6.00	1062.25	
1061.72	6.00	-0.063	1062.09	12.00	-0.030	144+25.00	1062.45	0.030	12.00	1062.81	4' RNDG	6.00	1062.62	
1062.06	6.00	-0.063	1062.44	12.00	-0.030	144+50.00	1062.80	0.030	12.00	1063.16	4' RNDG	6.00	1062.97	
1062.38	6.00	-0.063	1062.76	12.00	-0.030	144+75.00	1063.12	0.030	12.00	1063.48	4' RNDG	6.00	1063.29	
1062.68	6.00	-0.063	1063.05	12.00	-0.030	145+00.00	1063.41	0.030	12.00	1063.77	4' RNDG	6.00	1063.58	
1062.95	6.00	-0.063	1063.32	12.00	-0.030	145+25.00	1063.68	0.030	12.00	1064.04	4' RNDG	6.00	1063.85	
1063.19	6.00	-0.063	1063.57	12.00	-0.030	145+50.00	1063.93	0.030	12.00	1064.29	4' RNDG	6.00	1064.10	
1063.41	6.00	-0.063	1063.79	12.00	-0.030	145+75.00	1064.15	0.030	12.00	1064.51	4' RNDG	6.00	1064.32	
1063.60	6.00	-0.063	1063.98	12.00	-0.030	146+00.00	1064.34	0.030	12.00	1064.70	4' RNDG	6.00	1064.51	
1063.77	6.00	-0.063	1064.15	12.00	-0.030	146+25.00	1064.51	0.030	12.00	1064.87	4' RNDG	6.00	1064.68	
1063.92	6.00	-0.063	1064.30	12.00	-0.030	146+50.00	1064.66	0.030	12.00	1065.02	4' RNDG	6.00	1064.82	
1064.04	6.00	-0.063	1064.42	12.00	-0.030	146+75.00	1064.78	0.030	12.00	1065.14	4' RNDG	6.00	1064.94	
1064.13	6.00	-0.063	1064.51	12.00	-0.030	147+00.00	1064.87	0.030	12.00	1065.23	4' RNDG	6.00	1065.04	
1064.20	6.00	-0.063	1064.58	12.00	-0.030	147+25.00	1064.94	0.030	12.00	1065.30	4' RNDG	6.00	1065.11	
1064.24	6.00	-0.063	1064.62	12.00	-0.030	147+50.00	1064.98	0.030	12.00	1065.34	4' RNDG	6.00	1065.15	
1064.26	6.00	-0.063	1064.64	12.00	-0.030	147+75.00	1065.00	0.030	12.00	1065.36	4' RNDG	6.00	1065.17	
1064.26	6.00	-0.063	1064.64	12.00	-0.030	148+00.00	1065.00	0.030	12.00	1065.36	4' RNDG	6.00	1065.16	
1064.23	6.00	-0.063	1064.60	12.00	-0.030	148+25.00	1064.96	0.030	12.00	1065.32	4' RNDG	6.00	1065.13	
1064.17	6.00	-0.063	1064.55	12.00	-0.030	148+50.00	1064.91	0.030	12.00	1065.27	4' RNDG	6.00	1065.08	
1064.09	6.00	-0.063	1064.47	12.00	-0.030	148+75.00	1064.83	0.030	12.00	1065.19	4' RNDG	6.00	1064.99	
1063.98	6.00	-0.063	1064.36	12.00	-0.030	149+00.00	1064.72	0.030	12.00	1065.08	4' RNDG	6.00	1064.89	
1063.85	6.00	-0.063	1064.23	12.00	-0.030	149+25.00	1064.59	0.030	12.00	1064.95	4' RNDG	6.00	1064.76	
1063.69	6.00	-0.063	1064.07	12.00	-0.030	149+50.00	1064.43	0.030	12.00	1064.79	4' RNDG	6.00	1064.60	
1063.51	6.00	-0.063	1063.89	12.00	-0.030	149+75.00	1064.25	0.030	12.00	1064.61	4' RNDG	6.00	1064.42	
1063.30	6.00	-0.063	1063.68	12.00	-0.030	150+00.00	1064.04	0.030	12.00	1064.40	4' RNDG	6.00	1064.21	

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.063 TO EDGE OF SHOULDER

SEE NEXT SHEET FOR CONTINUATION OF SUPERELEVATION TABLE

CALCULATED JMA CHECKED FJA

WATKINS-YORK FRONTAGE ROAD - SUPERELEVATION TABLE

LIC-161-6.65
LIC-37-10.25

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PI STA. = 143+69.72
Dc = 01°12'53" (LT)
emax = 0.030

WATKINS-YORK FRONTAGE ROAD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1063.30	6.00	-0.063	1063.68	12.00	-0.030	150+00.00	1064.04	0.030	12.00	1064.40	4' RNDG	6.00	1064.21	
1063.07	6.00	-0.063	1063.45	12.00	-0.030	150+25.00	1063.81	0.030	12.00	1064.17	4' RNDG	6.00	1063.98	
1062.82	6.00	-0.063	1063.19	12.00	-0.030	150+50.00	1063.55	0.030	12.00	1063.91	4' RNDG	6.00	1063.72	
1062.53	6.00	-0.063	1062.91	12.00	-0.030	150+75.00	1063.27	0.030	12.00	1063.63	4' RNDG	6.00	1063.44	
1062.23	6.00	-0.063	1062.60	12.00	-0.030	151+00.00	1062.96	0.030	12.00	1063.32	4' RNDG	6.00	1063.13	
1061.89	6.00	-0.063	1062.27	12.00	-0.030	151+25.00	1062.63	0.030	12.00	1062.99	4' RNDG	6.00	1062.80	
1061.54	6.00	-0.063	1061.91	12.00	-0.030	151+50.00	1062.27	0.030	12.00	1062.63	4' RNDG	6.00	1062.44	
1061.15	6.00	-0.063	1061.53	12.00	-0.030	151+75.00	1061.89	0.030	12.00	1062.25	4' RNDG	6.00	1062.06	
1060.75	6.00	-0.063	1061.12	12.00	-0.030	152+00.00	1061.48	0.030	12.00	1061.84	4' RNDG	6.00	1061.65	
1060.31	6.00	-0.063	1060.69	12.00	-0.030	152+25.00	1061.05	0.030	12.00	1061.41	4' RNDG	6.00	1061.22	
1059.86	6.00	-0.063	1060.23	12.00	-0.030	152+50.00	1060.59	0.030	12.00	1060.95	4' RNDG	6.00	1060.76	
1059.37	6.00	-0.063	1059.75	12.00	-0.030	152+75.00	1060.11	0.030	12.00	1060.47	4' RNDG	6.00	1060.28	
1058.87	6.00	-0.063	1059.24	12.00	-0.030	153+00.00	1059.60	0.030	12.00	1059.96	4' RNDG	6.00	1059.77	
1058.34	6.00	-0.063	1058.72	12.00	-0.030	153+25.00	1059.08	0.030	12.00	1059.44	4' RNDG	6.00	1059.25	
1057.82	6.00	-0.063	1058.20	12.00	-0.030	153+50.00	1058.56	0.030	12.00	1058.92	4' RNDG	6.00	1058.73	
1057.56	6.00	-0.063	1057.94	12.00	-0.030	153+62.55	1058.30	0.030	12.00	1058.66	4' RNDG	6.00	1058.47	END FULL SUPERELEVATION
1057.36	6.00	-0.063	1057.74	12.00	-0.025	153+75.00	1058.04	0.025	12.00	1058.34	4' RNDG	6.00	1058.14	
1057.15	6.00	-0.063	1057.53	12.00	-0.020	153+88.11	1057.77	0.020	12.00	1058.01	4' RNDG	6.00	1057.80	PT
1056.95	6.00	-0.063	1057.33	12.00	-0.016	154+00.00	1057.52	0.015	12.00	1057.71	4' RNDG	6.00	1057.48	
1056.43	6.00	-0.063	1056.81	12.00	-0.016	154+25.00	1057.00	0.006	12.00	1057.07	-0.063	6.00	1056.69	
1055.91	6.00	-0.063	1056.29	12.00	-0.016	154+50.00	1056.48	-0.004	12.00	1056.43	-0.063	6.00	1056.05	
1055.39	6.00	-0.063	1055.77	12.00	-0.016	154+75.00	1055.96	-0.014	12.00	1055.79	-0.063	6.00	1055.41	
1055.28	6.00	-0.063	1055.66	12.00	-0.016	154+80.13	1055.85	-0.016	12.00	1055.66	-0.063	6.00	1055.28	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.063 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - WATKINS-YORK FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

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PI STA. = 194+97.02
Dc = 06°00'00" (RT)
emax = 0.083

WATKINS-YORK FRONTAGE ROAD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1020.53	6.00	-0.063	1020.91	12.00	-0.016	188+81.06	1021.10	-0.016	12.00	1020.91	-0.063	6.00	1020.53	END NORMAL CROWN
1020.33	6.00	-0.063	1020.71	12.00	-0.010	189+00.00	1020.83	-0.016	12.00	1020.64	-0.063	6.00	1020.26	
1020.07	6.00	-0.063	1020.45	12.00	-0.002	189+25.00	1020.48	-0.016	12.00	1020.28	-0.063	6.00	1019.91	
1019.99	6.00	-0.063	1020.37	12.00	0.000	189+32.18	1020.37	-0.016	12.00	1020.18	-0.063	6.00	1019.80	TS
1019.81	6.00	-0.063	1020.19	12.00	0.006	189+50.00	1020.12	-0.016	12.20	1019.92	-0.063	6.00	1019.54	
1019.71	6.00	4' RNDG*	1019.92	12.00	0.013	189+75.00	1019.76	-0.016	12.48	1019.56	-0.063	6.00	1019.18	
1019.46	6.00	4' RNDG*	1019.66	12.00	0.021	190+00.00	1019.40	-0.021	12.77	1019.13	-0.063	6.00	1018.75	
1019.21	6.00	4' RNDG*	1019.40	12.00	0.029	190+25.00	1019.05	-0.029	13.05	1018.67	-0.063	6.00	1018.29	
1018.97	6.00	4' RNDG*	1019.13	12.00	0.037	190+50.00	1018.69	-0.037	13.33	1018.20	-0.063	6.00	1017.82	
1018.72	6.00	4' RNDG*	1018.87	12.00	0.045	190+75.00	1018.33	-0.045	13.62	1017.72	-0.063	6.00	1017.35	
1018.47	6.00	4' RNDG*	1018.61	12.00	0.053	191+00.00	1017.97	-0.053	13.90	1017.24	-0.063	6.00	1016.87	
1018.22	6.00	4' RNDG*	1018.34	12.00	0.060	191+25.00	1017.62	-0.060	14.18	1016.76	-0.063	6.00	1016.38	
1017.98	6.00	4' RNDG*	1018.08	12.00	0.068	191+50.00	1017.26	-0.068	14.46	1016.27	-0.068	6.00	1015.87	
1017.73	6.00	4' RNDG*	1017.82	12.00	0.076	191+75.00	1016.90	-0.076	14.75	1015.78	-0.076	6.00	1015.33	
1017.51	6.00	4' RNDG*	1017.58	12.00	0.083	191+97.37	1016.58	-0.083	15.00	1015.34	-0.083	6.00	1014.84	SC/BEGIN FULL SUPER
1017.47	6.00	4' RNDG*	1017.54	12.00	0.083	192+00.00	1016.55	-0.083	15.00	1015.30	-0.083	6.00	1014.80	
1017.11	6.00	4' RNDG*	1017.19	12.00	0.083	192+25.00	1016.19	-0.083	15.00	1014.94	-0.083	6.00	1014.45	
1016.75	6.00	4' RNDG*	1016.83	12.00	0.083	192+50.00	1015.83	-0.083	15.00	1014.59	-0.083	6.00	1014.09	
1016.40	6.00	4' RNDG*	1016.47	12.00	0.083	192+75.00	1015.47	-0.083	15.00	1014.23	-0.083	6.00	1013.73	
1016.04	6.00	4' RNDG*	1016.11	12.00	0.083	193+00.00	1015.12	-0.083	15.00	1013.87	-0.083	6.00	1013.37	
1015.68	6.00	4' RNDG*	1015.76	12.00	0.083	193+25.00	1014.76	-0.083	15.00	1013.52	-0.083	6.00	1013.02	
1015.33	6.00	4' RNDG*	1015.40	12.00	0.083	193+50.00	1014.40	-0.083	15.00	1013.16	-0.083	6.00	1012.66	
1014.97	6.00	4' RNDG*	1015.04	12.00	0.083	193+75.00	1014.05	-0.083	15.00	1012.80	-0.083	6.00	1012.30	
1014.61	6.00	4' RNDG*	1014.68	12.00	0.083	194+00.00	1013.69	-0.083	15.00	1012.44	-0.083	6.00	1011.95	
1014.25	6.00	4' RNDG*	1014.33	12.00	0.083	194+25.00	1013.33	-0.083	15.00	1012.09	-0.083	6.00	1011.59	
1013.90	6.00	4' RNDG*	1013.97	12.00	0.083	194+50.00	1012.97	-0.083	15.00	1011.73	-0.083	6.00	1011.23	
1013.54	6.00	4' RNDG*	1013.61	12.00	0.083	194+75.00	1012.62	-0.083	15.00	1011.37	-0.083	6.00	1010.87	
1013.18	6.00	4' RNDG*	1013.26	12.00	0.083	195+00.00	1012.26	-0.083	15.00	1011.01	-0.083	6.00	1010.52	
1012.82	6.00	4' RNDG*	1012.90	12.00	0.083	195+25.00	1011.90	-0.083	15.00	1010.66	-0.083	6.00	1010.16	
1012.47	6.00	4' RNDG*	1012.54	12.00	0.083	195+50.00	1011.55	-0.083	15.00	1010.30	-0.083	6.00	1009.80	
1012.11	6.00	4' RNDG*	1012.18	12.00	0.083	195+75.00	1011.19	-0.083	15.00	1009.94	-0.083	6.00	1009.45	
1011.75	6.00	4' RNDG*	1011.83	12.00	0.083	196+00.00	1010.83	-0.083	15.00	1009.59	-0.083	6.00	1009.09	
1011.40	6.00	4' RNDG*	1011.47	12.00	0.083	196+25.00	1010.47	-0.083	15.00	1009.23	-0.083	6.00	1008.73	
1011.04	6.00	4' RNDG*	1011.11	12.00	0.083	196+50.00	1010.12	-0.083	15.00	1008.87	-0.083	6.00	1008.37	
1010.68	6.00	4' RNDG*	1010.76	12.00	0.083	196+75.00	1009.76	-0.083	15.00	1008.51	-0.083	6.00	1008.02	
1010.32	6.00	4' RNDG*	1010.40	12.00	0.083	197+00.00	1009.40	-0.083	15.00	1008.16	-0.083	6.00	1007.66	
1009.97	6.00	4' RNDG*	1010.04	12.00	0.083	197+25.00	1009.05	-0.083	15.00	1007.80	-0.083	6.00	1007.30	
1009.73	6.00	4' RNDG*	1009.80	12.00	0.083	197+41.81	1008.81	-0.083	15.00	1007.56	-0.083	6.00	1007.06	CS/END FULL SUPER
1009.57	6.00	4' RNDG*	1009.65	12.00	0.080	197+50.00	1008.69	-0.080	14.91	1007.49	-0.080	6.00	1007.01	
1009.11	6.00	4' RNDG*	1009.20	12.00	0.073	197+75.00	1008.33	-0.073	14.62	1007.27	-0.073	6.00	1006.83	
1008.64	6.00	4' RNDG*	1008.75	12.00	0.065	198+00.00	1007.97	-0.065	14.34	1007.04	-0.065	6.00	1006.66	
1008.17	6.00	4' RNDG*	1008.30	12.00	0.057	198+25.00	1007.62	-0.057	14.06	1006.82	-0.063	6.00	1006.44	
1007.71	6.00	4' RNDG*	1007.85	12.00	0.049	198+50.00	1007.26	-0.049	13.78	1006.58	-0.063	6.00	1006.20	
1007.24	6.00	4' RNDG*	1007.40	12.00	0.041	198+75.00	1006.90	-0.041	13.49	1006.34	-0.063	6.00	1005.97	
1006.77	6.00	4' RNDG*	1006.95	12.00	0.033	199+00.00	1006.54	-0.033	13.21	1006.10	-0.063	6.00	1005.72	
1006.31	6.00	4' RNDG*	1006.50	12.00	0.026	199+25.00	1006.19	-0.026	12.93	1005.86	-0.063	6.00	1005.48	
1005.84	6.00	4' RNDG*	1006.04	12.00	0.018	199+50.00	1005.83	-0.018	12.64	1005.61	-0.063	6.00	1005.23	
1005.37	6.00	4' RNDG*	1005.59	12.00	0.010	199+75.00	1005.47	-0.016	12.36	1005.28	-0.063	6.00	1004.90	
1004.76	6.00	-0.063	1005.14	12.00	0.002	200+00.00	1005.12	-0.016	12.08	1004.92	-0.063	6.00	1004.54	
1004.64	6.00	-0.063	1005.02	12.00	0.000	200+07.00	1005.02	-0.016	12.00	1004.82	-0.063	6.00	1004.45	ST
1004.31	6.00	-0.063	1004.69	12.00	-0.006	200+25.00	1004.76	-0.016	12.00	1004.57	-0.063	6.00	1004.19	
1003.89	6.00	-0.063	1004.27	12.00	-0.013	200+50.00	1004.43	-0.016	12.00	1004.24	-0.063	6.00	1003.86	
1003.76	6.00	-0.063	1004.14	12.00	-0.016	200+58.12	1004.33	-0.016	12.00	1004.14	-0.063	6.00	1003.76	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.063 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - WATKINS-YORK FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

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PI STA. = 206+84.64
Dc = 06°00'00" (LT)
emax = 0.083

WATKINS-YORK FRONTAGE ROAD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1003.62	6.00	-0.063	1004.00	12.00	-0.016	203+08.87	1004.19	-0.016	12.00	1004.00	-0.063	6.00	1003.62	END NORMAL CROWN
1003.80	6.00	-0.063	1004.17	12.00	-0.016	203+25.00	1004.37	-0.011	12.00	1004.23	-0.063	6.00	1003.86	
1004.11	6.00	-0.063	1004.49	12.00	-0.016	203+50.00	1004.68	-0.003	12.00	1004.65	-0.063	6.00	1004.27	
1004.26	6.00	-0.063	1004.63	12.00	-0.016	203+59.99	1004.83	0.000	12.00	1004.83	-0.063	6.00	1004.45	TS
1004.48	6.00	-0.063	1004.86	12.14	-0.016	203+75.00	1005.06	0.005	12.00	1005.11	-0.063	6.00	1004.74	
1004.88	6.00	-0.063	1005.26	12.38	-0.016	204+00.00	1005.46	0.013	12.00	1005.61	4' RNDG	6.00	1005.38	
1005.22	6.00	-0.063	1005.60	12.62	-0.020	204+25.00	1005.86	0.020	12.00	1006.10	4' RNDG	6.00	1005.89	
1005.52	6.00	-0.063	1005.89	12.85	-0.028	204+50.00	1006.26	0.028	12.00	1006.59	4' RNDG	6.00	1006.40	
1005.81	6.00	-0.063	1006.18	13.09	-0.036	204+75.00	1006.66	0.036	12.00	1007.09	4' RNDG	6.00	1006.91	
1006.09	6.00	-0.063	1006.47	13.33	-0.044	205+00.00	1007.06	0.044	12.00	1007.58	4' RNDG	6.00	1007.42	
1006.38	6.00	-0.063	1006.75	13.57	-0.052	205+25.00	1007.46	0.052	12.00	1008.08	4' RNDG	6.00	1007.93	
1006.66	6.00	-0.063	1007.03	13.80	-0.059	205+50.00	1007.86	0.059	12.00	1008.57	4' RNDG	6.00	1008.44	
1006.91	6.00	-0.067	1007.31	14.04	-0.067	205+75.00	1008.26	0.067	12.00	1009.06	4' RNDG	6.00	1008.95	
1007.13	6.00	-0.075	1007.58	14.28	-0.075	206+00.00	1008.65	0.075	12.00	1009.56	4' RNDG	6.00	1009.45	
1007.35	6.00	-0.083	1007.85	14.51	-0.0829	206+25.00	1009.05	0.0829	12.00	1010.05	4' RNDG	6.00	1009.96	
1007.31	6.00	-0.083	1007.81	15.00	-0.083	206+25.18	1009.06	0.083	12.00	1010.05	4' RNDG	6.00	1009.97	SC/PC/BEGIN FULL SUPER
1007.71	6.00	-0.083	1008.21	15.00	-0.083	206+50.00	1009.45	0.083	12.00	1010.45	4' RNDG	6.00	1010.36	
1008.11	6.00	-0.083	1008.61	15.00	-0.083	206+75.00	1009.85	0.083	12.00	1010.85	4' RNDG	6.00	1010.76	
1008.51	6.00	-0.083	1009.01	15.00	-0.083	207+00.00	1010.25	0.083	12.00	1011.25	4' RNDG	6.00	1011.16	
1008.91	6.00	-0.083	1009.41	15.00	-0.083	207+25.00	1010.65	0.083	12.00	1011.65	4' RNDG	6.00	1011.56	
1009.12	6.00	-0.083	1009.62	15.00	-0.083	207+38.02	1010.86	0.083	12.00	1011.86	4' RNDG	6.00	1011.77	CS/PT/END FULL SUPER
1009.40	6.00	-0.079	1009.88	14.86	-0.079	207+50.00	1011.05	0.079	12.00	1012.00	4' RNDG	6.00	1011.91	
1009.98	6.00	-0.071	1010.41	14.58	-0.071	207+75.00	1011.45	0.071	12.00	1012.31	4' RNDG	6.00	1012.20	
1010.56	6.00	-0.064	1010.94	14.30	-0.064	208+00.00	1011.85	0.064	12.00	1012.62	4' RNDG	6.00	1012.49	
1011.09	6.00	-0.063	1011.47	14.02	-0.056	208+25.00	1012.25	0.056	12.00	1012.92	4' RNDG	6.00	1012.78	
1011.62	6.00	-0.063	1011.99	13.73	-0.048	208+50.00	1012.65	0.048	12.00	1013.23	4' RNDG	6.00	1013.07	
1012.13	6.00	-0.063	1012.51	13.45	-0.040	208+75.00	1013.05	0.040	12.00	1013.53	4' RNDG	6.00	1013.36	
1012.65	6.00	-0.063	1013.03	13.17	-0.032	209+00.00	1013.45	0.032	12.00	1013.84	4' RNDG	6.00	1013.65	
1013.16	6.00	-0.063	1013.54	12.88	-0.024	209+25.00	1013.85	0.024	12.00	1014.15	4' RNDG	6.00	1013.94	
1013.66	6.00	-0.063	1014.04	12.60	-0.017	209+50.00	1014.25	0.017	12.00	1014.45	4' RNDG	6.00	1014.23	
1014.08	6.00	-0.063	1014.45	12.32	-0.016	209+75.00	1014.65	0.009	12.00	1014.76	-0.063	6.00	1014.38	
1014.48	6.00	-0.063	1014.86	12.04	-0.016	210+00.00	1015.05	0.001	12.00	1015.06	-0.063	6.00	1014.68	
1014.53	6.00	-0.063	1014.91	12.00	-0.016	210+03.21	1015.10	0.000	12.00	1015.10	-0.063	6.00	1014.72	ST
1014.88	6.00	-0.063	1015.26	12.00	-0.016	210+25.00	1015.45	-0.007	12.00	1015.37	-0.063	6.00	1014.99	
1015.28	6.00	-0.063	1015.66	12.00	-0.016	210+50.00	1015.85	-0.015	12.00	1015.67	-0.063	6.00	1015.30	
1015.35	6.00	-0.063	1015.73	12.00	-0.016	210+54.33	1015.92	-0.016	12.00	1015.73	-0.063	6.00	1015.35	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.063 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - WATKINS-YORK FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

898
349

tduffney
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PI STA. = 193+70.21
Dc = 06°00'00" (LT)
emax = 0.083

RELOCATED WORTHINGTON ROAD NORTH

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1019.15	4.00	-0.063	1019.40	12.00	-0.016	188+71.34	1019.59	-0.016	12.00	1019.40	-0.063	4.00	1019.15	END NORMAL CROWN
1019.13	4.00	-0.063	1019.38	12.00	-0.016	188+75.00	1019.58	-0.015	12.00	1019.40	-0.063	4.00	1019.15	
1019.04	4.00	-0.063	1019.29	12.00	-0.016	189+00.00	1019.48	-0.007	12.00	1019.40	-0.063	4.00	1019.15	
1018.96	4.00	-0.063	1019.21	12.00	-0.016	189+22.46	1019.40	0.000	12.00	1019.40	-0.063	4.00	1019.15	TS
1018.95	4.00	-0.063	1019.20	12.03	-0.016	189+25.00	1019.39	0.001	12.00	1019.40	-0.063	4.00	1019.15	
1018.85	4.00	-0.063	1019.10	12.31	-0.016	189+50.00	1019.30	0.009	12.00	1019.40	-0.063	4.00	1019.15	
1018.74	4.00	-0.063	1019.00	12.59	-0.016	189+75.00	1019.20	0.016	12.00	1019.40	0.016	4.00	1019.47	
1018.52	4.00	-0.063	1018.77	12.88	-0.024	190+00.00	1019.09	0.024	12.00	1019.38	0.024	4.00	1019.47	
1018.24	4.00	-0.063	1018.50	13.16	-0.032	190+25.00	1018.92	0.032	12.00	1019.30	0.032	4.00	1019.43	
1017.92	4.00	-0.063	1018.17	13.44	-0.040	190+50.00	1018.70	0.040	12.00	1019.18	0.040	4.00	1019.34	
1017.53	4.00	-0.063	1017.79	13.73	-0.048	190+75.00	1018.44	0.048	12.00	1019.01	0.048	4.00	1019.20	
1017.10	4.00	-0.063	1017.35	14.01	-0.056	191+00.00	1018.13	0.056	12.00	1018.80	0.056	4.00	1019.02	
1016.61	4.00	-0.063	1016.86	14.29	-0.063	191+25.00	1017.77	0.063	12.00	1018.53	4' RNDG	4.00	1018.63	
1016.04	4.00	-0.071	1016.32	14.57	-0.071	191+50.00	1017.36	0.071	12.00	1018.21	4' RNDG	4.00	1018.33	
1015.41	4.00	-0.079	1015.73	14.86	-0.079	191+75.00	1016.90	0.079	12.00	1017.85	4' RNDG	4.00	1017.99	
1015.07	4.00	-0.083	1015.40	15.00	-0.083	191+87.65	1016.65	0.083	12.00	1017.65	4' RNDG	4.00	1017.79	SC/PC/BEGIN FULL SUPER
1014.82	4.00	-0.083	1015.15	15.00	-0.083	192+00.00	1016.39	0.083	12.00	1017.39	4' RNDG	4.00	1017.53	
1014.26	4.00	-0.083	1014.59	15.00	-0.083	192+25.00	1015.84	0.083	12.00	1016.83	4' RNDG	4.00	1016.98	
1013.66	4.00	-0.083	1013.99	15.00	-0.083	192+50.00	1015.23	0.083	12.00	1016.23	4' RNDG	4.00	1016.37	
1013.00	4.00	-0.083	1013.33	15.00	-0.083	192+75.00	1014.58	0.083	12.00	1015.58	4' RNDG	4.00	1015.72	
1012.30	4.00	-0.083	1012.63	15.00	-0.083	193+00.00	1013.88	0.083	12.00	1014.87	4' RNDG	4.00	1015.02	
1011.55	4.00	-0.083	1011.88	15.00	-0.083	193+25.00	1013.13	0.083	12.00	1014.12	4' RNDG	4.00	1014.27	
1010.78	4.00	-0.083	1011.11	15.00	-0.083	193+50.00	1012.35	0.083	12.00	1013.35	4' RNDG	4.00	1013.50	
1010.00	4.00	-0.083	1010.33	15.00	-0.083	193+75.00	1011.58	0.083	12.00	1012.58	4' RNDG	4.00	1012.72	
1009.23	4.00	-0.083	1009.56	15.00	-0.083	194+00.00	1010.80	0.083	12.00	1011.80	4' RNDG	4.00	1011.95	
1008.45	4.00	-0.083	1008.79	15.00	-0.083	194+25.00	1010.03	0.083	12.00	1011.03	4' RNDG	4.00	1011.17	
1007.68	4.00	-0.083	1008.01	15.00	-0.083	194+50.00	1009.26	0.083	12.00	1010.25	4' RNDG	4.00	1010.40	
1006.90	4.00	-0.083	1007.24	15.00	-0.083	194+75.00	1008.48	0.083	12.00	1009.48	4' RNDG	4.00	1009.62	
1006.13	4.00	-0.083	1006.46	15.00	-0.083	195+00.00	1007.71	0.083	12.00	1008.70	4' RNDG	4.00	1008.85	
1005.35	4.00	-0.083	1005.69	15.00	-0.083	195+25.00	1006.93	0.083	12.00	1007.93	4' RNDG	4.00	1008.07	
1005.21	4.00	-0.083	1005.54	15.00	-0.083	195+29.60	1006.79	0.083	12.00	1007.79	4' RNDG	4.00	1007.93	CS/PT/END FULL SUPER
1004.72	4.00	-0.077	1005.03	14.77	-0.077	195+50.00	1006.16	0.077	12.00	1007.08	4' RNDG	4.00	1007.21	
1004.11	4.00	-0.069	1004.39	14.49	-0.069	195+75.00	1005.38	0.069	12.00	1006.21	4' RNDG	4.00	1006.33	
1003.49	4.00	-0.063	1003.74	14.21	-0.061	196+00.00	1004.61	0.061	12.00	1005.34	0.061	4.00	1005.58	
1002.84	4.00	-0.063	1003.09	13.92	-0.053	196+25.00	1003.83	0.053	12.00	1004.47	0.053	4.00	1004.68	
1002.19	4.00	-0.063	1002.44	13.64	-0.045	196+50.00	1003.06	0.045	12.00	1003.60	0.045	4.00	1003.78	
1001.53	4.00	-0.063	1001.78	13.36	-0.037	196+75.00	1002.28	0.037	12.00	1002.73	0.037	4.00	1002.88	
1000.87	4.00	-0.063	1001.12	13.08	-0.030	197+00.00	1001.51	0.030	12.00	1001.87	0.030	4.00	1001.98	
1000.20	4.00	-0.063	1000.46	12.79	-0.022	197+25.00	1000.74	0.022	12.00	1001.00	0.022	4.00	1001.08	
999.51	4.00	-0.063	999.76	12.51	-0.016	197+50.00	999.96	0.014	12.00	1000.13	0.014	4.00	1000.19	
998.74	4.00	-0.063	998.99	12.21	-0.016	197+75.00	999.19	0.006	12.00	999.26	-0.063	4.00	999.01	
998.13	4.00	-0.063	998.38	12.00	-0.016	197+94.79	998.57	0.000	12.00	998.57	-0.063	4.00	998.32	ST
997.97	4.00	-0.063	998.22	12.00	-0.016	198+00.00	998.41	-0.002	12.00	998.39	-0.063	4.00	998.14	
997.19	4.00	-0.063	997.45	12.00	-0.016	198+25.00	997.64	-0.009	12.00	997.52	-0.063	4.00	997.27	
996.55	4.00	-0.063	996.80	12.00	-0.016	198+45.91	996.99	-0.016	12.00	996.80	-0.063	4.00	996.55	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE
RELOCATED WORTHINGTON ROAD NORTH

LIC-161-6.65
LIC-37-10.25

900
1349

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PI STA. = 207+00.00
Dc = 06°00'00" (RT)
emax = 0.083

RELOCATED WORTHINGTON ROAD NORTH

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
986.49	4.00	-0.063	986.74	12.00	-0.016	201+70.54	986.93	-0.016	12.00	986.74	-0.063	4.00	986.49	END NORMAL CROWN
986.37	4.00	-0.063	986.62	12.00	-0.015	201+75.00	986.79	-0.016	12.00	986.60	-0.063	4.00	986.35	
985.69	4.00	-0.063	985.94	12.00	-0.007	202+00.00	986.02	-0.016	12.00	985.83	-0.063	4.00	985.58	
985.10	4.00	-0.063	985.35	12.00	0.000	202+21.66	985.35	-0.016	12.00	985.16	-0.063	4.00	984.90	TS
985.01	4.00	-0.063	985.26	12.00	0.001	202+25.00	985.24	-0.016	12.04	985.05	-0.063	4.00	984.80	
984.32	4.00	-0.063	984.58	12.00	0.009	202+50.00	984.47	-0.016	12.32	984.27	-0.063	4.00	984.02	
983.96	4.00	0.017	983.90	12.00	0.017	202+75.00	983.70	-0.017	12.60	983.49	-0.063	4.00	983.23	
983.31	4.00	0.025	983.22	12.00	0.025	203+00.00	982.92	-0.025	12.89	982.60	-0.063	4.00	982.35	
982.66	4.00	0.032	982.53	12.00	0.032	203+25.00	982.15	-0.032	13.17	981.72	-0.063	4.00	981.47	
982.01	4.00	0.040	981.85	12.00	0.040	203+50.00	981.37	-0.040	13.45	980.83	-0.063	4.00	980.58	
981.37	4.00	0.048	981.17	12.00	0.048	203+75.00	980.60	-0.048	13.73	979.94	-0.063	4.00	979.69	
980.72	4.00	0.056	980.49	12.00	0.056	204+00.00	979.82	-0.056	14.02	979.04	-0.063	4.00	978.79	
979.92	4.00	4' RNDG*	979.81	12.00	0.064	204+25.00	979.05	-0.064	14.30	978.14	-0.064	4.00	977.88	
979.25	4.00	4' RNDG*	979.13	12.00	0.071	204+50.00	978.27	-0.071	14.58	977.23	-0.071	4.00	976.95	
978.59	4.00	4' RNDG*	978.45	12.00	0.079	204+75.00	977.50	-0.079	14.86	976.32	-0.079	4.00	976.00	
978.27	4.00	4' RNDG*	978.13	12.00	0.083	204+86.85	977.13	-0.083	15.00	975.89	-0.083	4.00	975.55	SC/PC/BEGIN FULL SUPER
977.87	4.00	4' RNDG*	977.72	12.00	0.083	205+00.00	976.72	-0.083	15.00	975.48	-0.083	4.00	975.15	
977.09	4.00	4' RNDG*	976.95	12.00	0.083	205+25.00	975.95	-0.083	15.00	974.71	-0.083	4.00	974.37	
976.34	4.00	4' RNDG*	976.20	12.00	0.083	205+50.00	975.20	-0.083	15.00	973.96	-0.083	4.00	973.63	
975.65	4.00	4' RNDG*	975.50	12.00	0.083	205+75.00	974.51	-0.083	15.00	973.26	-0.083	4.00	972.93	
975.01	4.00	4' RNDG*	974.86	12.00	0.083	206+00.00	973.87	-0.083	15.00	972.62	-0.083	4.00	972.29	
974.42	4.00	4' RNDG*	974.27	12.00	0.083	206+25.00	973.28	-0.083	15.00	972.03	-0.083	4.00	971.70	
973.89	4.00	4' RNDG*	973.74	12.00	0.083	206+50.00	972.74	-0.083	15.00	971.50	-0.083	4.00	971.17	
973.41	4.00	4' RNDG*	973.26	12.00	0.083	206+75.00	972.26	-0.083	15.00	971.02	-0.083	4.00	970.69	
972.98	4.00	4' RNDG*	972.83	12.00	0.083	207+00.00	971.84	-0.083	15.00	970.59	-0.083	4.00	970.26	
972.60	4.00	4' RNDG*	972.46	12.00	0.083	207+25.00	971.46	-0.083	15.00	970.22	-0.083	4.00	969.89	
972.28	4.00	4' RNDG*	972.14	12.00	0.083	207+50.00	971.14	-0.083	15.00	969.90	-0.083	4.00	969.56	
972.02	4.00	4' RNDG*	971.87	12.00	0.083	207+75.00	970.87	-0.083	15.00	969.63	-0.083	4.00	969.30	
971.80	4.00	4' RNDG*	971.66	12.00	0.083	208+00.00	970.66	-0.083	15.00	969.42	-0.083	4.00	969.08	
971.64	4.00	4' RNDG*	971.50	12.00	0.083	208+25.00	970.50	-0.083	15.00	969.25	-0.083	4.00	968.92	
971.53	4.00	4' RNDG*	971.39	12.00	0.083	208+50.00	970.39	-0.083	15.00	969.15	-0.083	4.00	968.82	
971.48	4.00	4' RNDG*	971.33	12.00	0.083	208+75.00	970.34	-0.083	15.00	969.09	-0.083	4.00	968.76	
971.47	4.00	4' RNDG*	971.33	12.00	0.083	208+83.31	970.33	-0.083	15.00	969.09	-0.083	4.00	968.76	CS/PT/END FULL SUPER
971.41	4.00	4' RNDG*	971.27	12.00	0.078	209+00.00	970.34	-0.078	14.81	969.19	-0.078	4.00	968.88	
971.35	4.00	4' RNDG*	971.23	12.00	0.070	209+25.00	970.39	-0.070	14.53	969.38	-0.070	4.00	969.10	
971.49	4.00	0.062	971.24	12.00	0.062	209+50.00	970.50	-0.062	14.25	969.61	-0.063	4.00	969.36	
971.53	4.00	0.054	971.31	12.00	0.054	209+75.00	970.66	-0.054	13.96	969.90	-0.063	4.00	969.65	
971.61	4.00	0.046	971.43	12.00	0.046	210+00.00	970.87	-0.046	13.68	970.24	-0.063	4.00	969.98	
971.76	4.00	0.039	971.60	12.00	0.039	210+25.00	971.14	-0.039	13.40	970.62	-0.063	4.00	970.37	
971.95	4.00	0.031	971.83	12.00	0.031	210+50.00	971.46	-0.031	13.11	971.05	-0.063	4.00	970.80	
972.20	4.00	0.023	972.11	12.00	0.023	210+75.00	971.83	-0.023	12.83	971.54	-0.063	4.00	971.28	
972.47	4.00	0.015	972.41	12.00	0.015	211+00.00	972.23	-0.016	12.55	972.03	-0.063	4.00	971.78	
972.47	4.00	-0.063	972.72	12.00	0.007	211+25.00	972.63	-0.016	12.27	972.43	-0.063	4.00	972.18	
972.76	4.00	-0.063	973.01	12.00	0.000	211+48.50	973.01	-0.016	12.00	972.82	-0.063	4.00	972.56	ST
972.77	4.00	-0.063	973.03	12.00	0.000	211+50.00	973.03	-0.016	12.00	972.84	-0.063	4.00	972.59	
973.08	4.00	-0.063	973.33	12.00	-0.008	211+75.00	973.43	-0.016	12.00	973.24	-0.063	4.00	972.99	
973.38	4.00	-0.063	973.63	12.00	-0.016	211+99.62	973.83	-0.016	12.00	973.63	-0.063	4.00	973.38	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED F.JA

SUPERELEVATION TABLE
RELOCATED WORTHINGTON ROAD NORTH

LIC-161-6.65
LIC-37-10.25

901
1349

tduffney
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PI STA. = 217+99.96
Dc = 06°00'00" (RT)
emax = 0.083

RELOCATED WORTHINGTON ROAD NORTH

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
973.43	4.00	-0.063	973.69	12.00	-0.016	213+64.42	973.88	-0.016	12.00	973.69	-0.063	4.00	973.43	END NORMAL CROWN
973.31	4.00	-0.063	973.56	12.00	-0.013	213+75.00	973.71	-0.016	12.00	973.52	-0.063	4.00	973.27	
973.00	4.00	-0.063	973.25	12.00	-0.005	214+00.00	973.31	-0.016	12.00	973.12	-0.063	4.00	972.87	
972.81	4.00	-0.063	973.06	12.00	0.000	214+15.54	973.06	-0.016	12.00	972.87	-0.063	4.00	972.62	TS
972.69	4.00	-0.063	972.95	12.00	0.003	214+25.00	972.91	-0.016	12.11	972.72	-0.063	4.00	972.46	
972.68	4.00	0.011	972.64	12.00	0.011	214+50.00	972.51	-0.016	12.39	972.31	-0.063	4.00	972.06	
972.41	4.00	0.019	972.33	12.00	0.019	214+75.00	972.11	-0.019	12.67	971.88	-0.063	4.00	971.62	
972.15	4.00	0.026	972.05	12.00	0.026	215+00.00	971.73	-0.026	12.96	971.39	-0.063	4.00	971.13	
971.93	4.00	0.034	971.79	12.00	0.034	215+25.00	971.38	-0.034	13.24	970.93	-0.063	4.00	970.68	
971.74	4.00	0.042	971.57	12.00	0.042	215+50.00	971.07	-0.042	13.52	970.50	-0.063	4.00	970.25	
971.59	4.00	0.050	971.39	12.00	0.050	215+75.00	970.79	-0.050	13.80	970.10	-0.063	4.00	969.85	
971.47	4.00	0.058	971.24	12.00	0.058	216+00.00	970.54	-0.058	14.09	969.73	-0.063	4.00	969.48	
971.23	4.00	4' RNDG*	971.12	12.00	0.066	216+25.00	970.33	-0.066	14.37	969.39	-0.066	4.00	969.13	
971.16	4.00	4' RNDG*	971.04	12.00	0.073	216+50.00	970.16	-0.073	14.65	969.08	-0.073	4.00	968.79	
971.13	4.00	4' RNDG*	970.99	12.00	0.081	216+75.00	970.01	-0.081	14.94	968.80	-0.081	4.00	968.48	
971.13	4.00	4' RNDG*	970.98	12.00	0.083	216+80.73	969.99	-0.083	15.00	968.74	-0.083	4.00	968.41	SC/PC/BEGIN FULL SUPER
971.03	4.00	4' RNDG*	970.89	12.00	0.083	217+00.00	969.89	-0.083	15.00	968.64	-0.083	4.00	968.31	
970.91	4.00	4' RNDG*	970.76	12.00	0.083	217+25.00	969.76	-0.083	15.00	968.52	-0.083	4.00	968.19	
970.78	4.00	4' RNDG*	970.64	12.00	0.083	217+50.00	969.64	-0.083	15.00	968.39	-0.083	4.00	968.06	
970.66	4.00	4' RNDG*	970.51	12.00	0.083	217+75.00	969.52	-0.083	15.00	968.27	-0.083	4.00	967.94	
970.53	4.00	4' RNDG*	970.39	12.00	0.083	218+00.00	969.39	-0.083	15.00	968.15	-0.083	4.00	967.81	
970.41	4.00	4' RNDG*	970.26	12.00	0.083	218+25.00	969.27	-0.083	15.00	968.02	-0.083	4.00	967.69	
970.28	4.00	4' RNDG*	970.14	12.00	0.083	218+50.00	969.14	-0.083	15.00	967.90	-0.083	4.00	967.56	
970.16	4.00	4' RNDG*	970.01	12.00	0.083	218+75.00	969.02	-0.083	15.00	967.77	-0.083	4.00	967.44	
970.03	4.00	4' RNDG*	969.89	12.00	0.083	219+00.00	968.89	-0.083	15.00	967.65	-0.083	4.00	967.31	
970.00	4.00	4' RNDG*	969.85	12.00	0.083	219+06.64	968.86	-0.083	15.00	967.61	-0.083	4.00	967.28	CS/PT/END FULL SUPER
969.83	4.00	4' RNDG*	969.69	12.00	0.077	219+25.00	968.77	-0.077	14.79	967.62	-0.077	4.00	967.32	
969.59	4.00	4' RNDG*	969.48	12.00	0.069	219+50.00	968.64	-0.069	14.51	967.63	-0.069	4.00	967.36	
969.50	4.00	0.062	969.26	12.00	0.062	219+75.00	968.52	-0.062	14.23	967.64	-0.063	4.00	967.39	
969.25	4.00	0.054	969.04	12.00	0.054	220+00.00	968.39	-0.054	13.94	967.64	-0.063	4.00	967.39	
969.00	4.00	0.046	968.82	12.00	0.046	220+25.00	968.27	-0.046	13.66	967.64	-0.063	4.00	967.39	
968.75	4.00	0.038	968.60	12.00	0.038	220+50.00	968.14	-0.038	13.38	967.63	-0.063	4.00	967.38	
968.50	4.00	0.030	968.38	12.00	0.030	220+75.00	968.02	-0.030	13.10	967.62	-0.063	4.00	967.37	
968.25	4.00	0.022	968.16	12.00	0.022	221+00.00	967.89	-0.022	12.81	967.61	-0.063	4.00	967.35	
968.00	4.00	0.015	967.94	12.00	0.015	221+25.00	967.77	-0.016	12.53	967.57	-0.063	4.00	967.32	
967.47	4.00	-0.063	967.73	12.00	0.007	221+50.00	967.64	-0.016	12.25	967.45	-0.063	4.00	967.20	
967.28	4.00	-0.063	967.54	12.00	0.000	221+71.83	967.54	-0.016	12.00	967.34	-0.063	4.00	967.09	ST
967.26	4.00	-0.063	967.51	12.00	-0.001	221+75.00	967.52	-0.016	12.00	967.33	-0.063	4.00	967.08	
967.04	4.00	-0.063	967.29	12.00	-0.009	222+00.00	967.39	-0.016	12.00	967.20	-0.063	4.00	966.95	
966.84	4.00	-0.063	967.09	12.00	-0.016	222+22.95	967.28	-0.016	12.00	967.09	-0.063	4.00	966.84	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE
RELOCATED WORTHINGTON ROAD NORTH

LIC-161-6.65
LIC-37-10.25

902
1349

tduffney
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PI STA. = 227+95.54
Dc = 06°00'00" (LT)
emax = 0.083

RELOCATED WORTHINGTON ROAD NORTH

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
966.59	4.00	-0.063	966.84	12.00	-0.016	222+72.53	967.03	-0.016	12.00	966.84	-0.063	4.00	966.59	END NORMAL CROWN
966.58	4.00	-0.063	966.83	12.00	-0.016	222+75.00	967.02	-0.015	12.00	966.84	-0.063	4.00	966.59	
966.45	4.00	-0.063	966.70	12.00	-0.016	223+00.00	966.90	-0.007	12.00	966.81	-0.063	4.00	966.55	
966.33	4.00	-0.063	966.59	12.00	-0.016	223+23.65	966.78	0.000	12.00	966.78	-0.063	4.00	966.53	TS
966.33	4.00	-0.063	966.58	12.02	-0.016	223+25.00	966.77	0.000	12.00	966.78	-0.063	4.00	966.52	
966.20	4.00	-0.063	966.45	12.30	-0.016	223+50.00	966.65	0.008	12.00	966.74	-0.063	4.00	966.49	
966.07	4.00	-0.063	966.32	12.58	-0.016	223+75.00	966.52	0.016	12.00	966.71	0.016	4.00	966.78	
965.84	4.00	-0.063	966.09	12.86	-0.024	224+00.00	966.40	0.024	12.00	966.68	0.024	4.00	966.78	
965.60	4.00	-0.063	965.85	13.15	-0.032	224+25.00	966.27	0.032	12.00	966.65	0.032	4.00	966.78	
965.36	4.00	-0.063	965.62	13.43	-0.040	224+50.00	966.15	0.040	12.00	966.62	0.040	4.00	966.78	
965.12	4.00	-0.063	965.37	13.71	-0.047	224+75.00	966.02	0.047	12.00	966.59	0.047	4.00	966.78	
964.87	4.00	-0.063	965.13	13.99	-0.055	225+00.00	965.90	0.055	12.00	966.56	0.055	4.00	966.78	
964.62	4.00	-0.063	964.87	14.28	-0.063	225+25.00	965.77	0.063	12.00	966.53	4' RNDG	4.00	966.64	
964.33	4.00	-0.071	964.62	14.56	-0.071	225+50.00	965.65	0.071	12.00	966.50	4' RNDG	4.00	966.62	
964.04	4.00	-0.079	964.36	14.84	-0.079	225+75.00	965.52	0.079	12.00	966.47	4' RNDG	4.00	966.60	
963.88	4.00	-0.083	964.21	15.00	-0.083	225+88.84	965.45	0.083	12.00	966.45	4' RNDG	4.00	966.60	SC/PC/BEGIN FULL SUPER
963.82	4.00	-0.083	964.15	15.00	-0.083	226+00.00	965.40	0.083	12.00	966.39	4' RNDG	4.00	966.54	
963.70	4.00	-0.083	964.03	15.00	-0.083	226+25.00	965.27	0.083	12.00	966.27	4' RNDG	4.00	966.42	
963.57	4.00	-0.083	963.90	15.00	-0.083	226+50.00	965.15	0.083	12.00	966.15	4' RNDG	4.00	966.29	
963.45	4.00	-0.083	963.78	15.00	-0.083	226+75.00	965.02	0.083	12.00	966.02	4' RNDG	4.00	966.17	
963.30	4.00	-0.083	963.63	15.00	-0.083	227+00.00	964.88	0.083	12.00	965.87	4' RNDG	4.00	966.02	
963.16	4.00	-0.083	963.49	15.00	-0.083	227+25.00	964.73	0.083	12.00	965.73	4' RNDG	4.00	965.88	
963.00	4.00	-0.083	963.34	15.00	-0.083	227+50.00	964.58	0.083	12.00	965.58	4' RNDG	4.00	965.72	
962.84	4.00	-0.083	963.18	15.00	-0.083	227+75.00	964.42	0.083	12.00	965.42	4' RNDG	4.00	965.56	
962.68	4.00	-0.083	963.01	15.00	-0.083	228+00.00	964.25	0.083	12.00	965.25	4' RNDG	4.00	965.40	
962.50	4.00	-0.083	962.83	15.00	-0.083	228+25.00	964.08	0.083	12.00	965.08	4' RNDG	4.00	965.22	
962.32	4.00	-0.083	962.65	15.00	-0.083	228+50.00	963.90	0.083	12.00	964.89	4' RNDG	4.00	965.04	
962.14	4.00	-0.083	962.47	15.00	-0.083	228+75.00	963.72	0.083	12.00	964.71	4' RNDG	4.00	964.86	
961.96	4.00	-0.083	962.29	15.00	-0.083	229+00.00	963.53	0.083	12.00	964.53	4' RNDG	4.00	964.68	
961.78	4.00	-0.083	962.11	15.00	-0.083	229+25.00	963.35	0.083	12.00	964.35	4' RNDG	4.00	964.49	
961.59	4.00	-0.083	961.93	15.00	-0.083	229+50.00	963.17	0.083	12.00	964.17	4' RNDG	4.00	964.31	
961.42	4.00	-0.083	961.75	15.00	-0.083	229+73.90	963.00	0.083	12.00	963.99	4' RNDG	4.00	964.14	CS/PT/END FULL SUPER
961.42	4.00	-0.083	961.75	14.99	-0.0827	229+75.00	962.99	0.0827	12.00	963.98	4' RNDG	4.00	964.13	
961.41	4.00	-0.075	961.71	14.70	-0.075	230+00.00	962.81	0.075	12.00	963.70	4' RNDG	4.00	963.83	
961.39	4.00	-0.067	961.66	14.42	-0.067	230+25.00	962.62	0.067	12.00	963.43	4' RNDG	4.00	963.54	
961.35	4.00	-0.063	961.60	14.14	-0.059	230+50.00	962.44	0.059	12.00	963.15	0.059	4.00	963.39	
961.29	4.00	-0.063	961.55	13.86	-0.051	230+75.00	962.26	0.051	12.00	962.88	0.051	4.00	963.08	
961.23	4.00	-0.063	961.48	13.58	-0.044	231+00.00	962.08	0.044	12.00	962.60	0.044	4.00	962.77	
961.17	4.00	-0.063	961.42	13.30	-0.036	231+25.00	961.90	0.036	12.00	962.32	0.036	4.00	962.47	
961.10	4.00	-0.063	961.35	13.02	-0.028	231+50.00	961.71	0.028	12.00	962.05	0.028	4.00	962.16	
960.92	4.00	-0.063	961.17	12.74	-0.028	231+75.00	961.53	0.020	12.00	961.77	0.020	4.00	961.85	
960.75	4.00	-0.063	961.00	12.46	-0.028	232+00.00	961.35	0.012	12.00	961.50	0.012	4.00	961.54	
960.57	4.00	-0.063	960.83	12.18	-0.028	232+25.00	961.17	0.004	12.00	961.22	-0.063	4.00	960.97	
960.48	4.00	-0.063	960.73	12.00	-0.028	232+39.09	961.06	0.000	12.00	961.06	-0.063	4.00	960.81	ST
960.42	3.67	-0.063	960.65	11.97	-0.028	232+50.00	960.98	-0.003	11.90	960.94	-0.063	3.85	960.70	END TRANSITION
960.28	2.97	-0.063	960.47	11.90	-0.028	232+75.00	960.80	-0.003	11.68	960.76	-0.063	3.52	960.54	
960.15	2.25	-0.063	960.29	11.83	-0.028	233+00.00	960.62	-0.003	11.45	960.59	-0.063	3.19	960.38	MATCH EX. CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED F.JA

SUPERELEVATION TABLE
RELOCATED WORTHINGTON ROAD NORTH

LIC-161-6.65
LIC-37-10.25

903
1349

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PI STA. = 214+89.99
Dc = 27°56'57" (LT)
emax = 0.081

PI STA. = 219+02.01
Dc = 09°59'57" (RT)
emax = 0.080

PI STA. = 225+44.05
Dc = 09°59'57" (RT)
emax = 0.080

SERVICE ROAD 11

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1018.01	4.00	-0.063	1018.26	11.00	-0.018	212+70.82	1018.46	0.019	11.00	1018.67	0.019	4.00	1018.74	BEGIN TRANSITION
1017.91	4.00	-0.063	1018.16	11.00	-0.021	212+75.00	1018.39	0.022	11.00	1018.63	0.022	4.00	1018.72	
1017.33	4.00	-0.063	1017.58	11.00	-0.037	213+00.00	1017.99	0.038	11.00	1018.41	0.038	4.00	1018.56	
1016.99	4.00	-0.063	1017.24	11.00	-0.047	213+14.63	1017.76	0.048	11.00	1018.28	0.048	4.00	1018.47	PC
1016.75	4.00	-0.063	1017.00	11.00	-0.054	213+25.00	1017.59	0.054	11.00	1018.19	0.054	4.00	1018.41	
1016.14	4.00	-0.070	1016.42	11.00	-0.070	213+50.00	1017.19	0.071	11.00	1017.97	4' RNDG	4.00	1018.09	
1015.72	4.00	-0.081	1016.05	11.00	-0.081	213+66.06	1016.94	0.081	11.00	1017.83	4' RNDG	4.00	1017.97	BEGIN FULL SUPERELEVATION
1015.58	4.00	-0.081	1015.90	11.00	-0.081	213+75.00	1016.80	0.081	11.00	1017.69	4' RNDG	4.00	1017.83	
1015.18	4.00	-0.081	1015.51	11.00	-0.081	214+00.00	1016.40	0.081	11.00	1017.29	4' RNDG	4.00	1017.43	
1014.76	4.00	-0.081	1015.08	11.00	-0.081	214+25.00	1015.98	0.081	11.00	1016.87	4' RNDG	4.00	1017.01	
1014.30	4.00	-0.081	1014.62	11.00	-0.081	214+50.00	1015.51	0.081	11.00	1016.40	4' RNDG	4.00	1016.54	
1013.79	4.00	-0.081	1014.11	11.00	-0.081	214+75.00	1015.00	0.081	11.00	1015.89	4' RNDG	4.00	1016.03	
1013.55	4.00	-0.081	1013.88	11.00	-0.081	214+85.90	1014.77	0.081	11.00	1015.66	4' RNDG	4.00	1015.80	END FULL SUPERELEVATION
1013.37	4.00	-0.072	1013.66	11.00	-0.072	215+00.00	1014.45	0.072	11.00	1015.24	4' RNDG	4.00	1015.37	
1012.98	4.00	-0.063	1013.24	11.00	-0.056	215+25.00	1013.85	0.056	11.00	1014.47	0.056	4.00	1014.69	
1012.52	4.00	-0.063	1012.77	11.00	-0.040	215+50.00	1013.21	0.040	11.00	1013.66	0.040	4.00	1013.82	
1012.01	4.00	-0.063	1012.26	11.00	-0.024	215+75.00	1012.53	0.024	11.00	1012.80	0.024	4.00	1012.89	
1011.45	4.00	-0.063	1011.71	11.00	-0.008	216+00.00	1011.80	0.008	11.40	1011.90	-0.063	4.00	1011.64	
1011.35	4.00	-0.063	1011.60	11.00	-0.005	216+04.76	1011.66	0.005	11.60	1011.72	-0.063	4.00	1011.47	PT
1011.15	4.00	-0.063	1011.40	11.00	0.000	216+13.31	1011.40	0.000	11.86	1011.40	-0.063	4.00	1011.15	FLAT
1010.93	4.00	-0.063	1011.18	11.00	0.003	216+21.85	1011.14	-0.003	11.90	1011.11	-0.063	4.00	1010.85	PC
1010.85	4.00	-0.063	1011.10	11.00	0.004	216+25.00	1011.05	-0.004	11.96	1011.00	-0.063	4.00	1010.75	
1010.51	4.00	0.014	1010.45	11.00	0.014	216+50.00	1010.30	-0.014	12.40	1010.13	-0.063	4.00	1009.88	
1009.90	4.00	0.023	1009.80	11.00	0.023	216+75.00	1009.55	-0.023	12.84	1009.25	-0.063	4.00	1009.00	
1009.29	4.00	0.033	1009.16	11.00	0.033	217+00.00	1008.80	-0.033	13.27	1008.37	-0.063	4.00	1008.12	
1008.68	4.00	0.042	1008.51	11.00	0.042	217+25.00	1008.05	-0.042	13.71	1007.48	-0.063	4.00	1007.22	
1008.07	4.00	0.051	1007.86	11.00	0.051	217+50.00	1007.30	-0.051	14.15	1006.57	-0.063	4.00	1006.32	
1007.46	4.00	0.061	1007.22	11.00	0.061	217+75.00	1006.55	-0.061	14.59	1005.67	-0.063	4.00	1005.41	
1006.69	4.00	4' RNDG*	1006.57	11.00	0.070	218+00.00	1005.80	-0.070	15.03	1004.75	-0.070	4.00	1004.47	
1006.06	4.00	4' RNDG*	1005.92	11.00	0.079	218+25.00	1005.05	-0.079	15.47	1003.82	-0.079	4.00	1003.50	
1006.02	4.00	4' RNDG*	1005.88	11.00	0.080	218+26.59	1005.00	-0.080	15.50	1003.76	-0.080	4.00	1003.44	BEGIN FULL SUPERELEVATION
1005.32	4.00	4' RNDG*	1005.18	11.00	0.080	218+50.00	1004.30	-0.080	15.50	1003.06	-0.080	4.00	1002.74	
1004.57	4.00	4' RNDG*	1004.43	11.00	0.080	218+75.00	1003.55	-0.080	15.50	1002.31	-0.080	4.00	1001.99	
1003.82	4.00	4' RNDG*	1003.68	11.00	0.080	219+00.00	1002.80	-0.080	15.50	1001.56	-0.080	4.00	1001.24	
1003.07	4.00	4' RNDG*	1002.93	11.00	0.080	219+25.00	1002.05	-0.080	15.50	1000.81	-0.080	4.00	1000.49	
1002.32	4.00	4' RNDG*	1002.18	11.00	0.080	219+50.00	1001.30	-0.080	15.50	1000.06	-0.080	4.00	999.74	
1001.57	4.00	4' RNDG*	1001.43	11.00	0.080	219+75.00	1000.55	-0.080	15.50	999.31	-0.080	4.00	998.99	
1000.82	4.00	4' RNDG*	1000.68	11.00	0.080	220+00.00	999.80	-0.080	15.50	998.56	-0.080	4.00	998.24	
1000.07	4.00	4' RNDG*	999.93	11.00	0.080	220+25.00	999.05	-0.080	15.50	997.81	-0.080	4.00	997.49	
999.32	4.00	4' RNDG*	999.18	11.00	0.080	220+50.00	998.30	-0.080	15.50	997.06	-0.080	4.00	996.74	
998.66	4.00	4' RNDG*	998.52	11.00	0.080	220+71.91	997.64	-0.080	15.50	996.40	-0.080	4.00	996.08	END FULL SUPERELEVATION
998.56	4.00	4' RNDG*	998.42	11.00	0.079	220+75.00	997.55	-0.079	15.50	996.33	-0.079	4.00	996.01	
997.69	4.00	4' RNDG*	997.57	11.00	0.070	221+00.00	996.80	-0.070	15.50	995.72	-0.070	4.00	995.44	
996.96	4.00	0.061	996.72	11.00	0.061	221+25.00	996.05	-0.061	15.50	995.11	-0.063	4.00	994.86	
996.32	4.00	0.054	996.10	11.00	0.054	221+43.00	995.51	-0.054	15.50	994.67	-0.063	4.00	994.42	PT
996.07	4.00	0.051	995.87	11.00	0.051	221+50.00	995.30	-0.051	15.50	994.50	-0.063	4.00	994.25	
995.18	4.00	0.042	995.02	11.00	0.042	221+75.00	994.55	-0.042	15.50	993.89	-0.063	4.00	993.64	
994.30	4.00	0.033	994.16	11.00	0.033	222+00.00	993.80	-0.033	15.50	993.29	-0.063	4.00	993.03	
993.41	4.00	0.024	993.31	11.00	0.024	222+25.00	993.05	-0.024	15.50	992.68	-0.063	4.00	992.43	
992.52	4.00	0.015	992.46	11.00	0.015	222+50.00	992.30	-0.016	15.50	992.05	-0.063	4.00	991.80	
992.15	4.00	0.011	992.10	11.00	0.011	222+60.63	991.98	-0.016	15.50	991.73	-0.063	4.00	991.48	RESUME SUPER TRANSITION
991.79	4.00	0.016	991.73	11.00	0.016	222+75.00	991.55	-0.016	15.50	991.30	-0.063	4.00	991.05	
991.18	4.00	0.025	991.08	11.00	0.025	223+00.00	990.80	-0.025	15.50	990.41	-0.063	4.00	990.15	
990.57	4.00	0.035	990.43	11.00	0.035	223+25.00	990.05	-0.035	15.50	989.51	-0.063	4.00	989.26	
989.98	4.00	0.044	989.81	11.00	0.044	223+50.00	989.33	-0.044	15.50	988.65	-0.063	4.00	988.40	
989.45	4.00	0.053	989.24	11.00	0.053	223+75.00	988.65	-0.053	15.50	987.84	-0.063	4.00	987.58	
989.38	4.00	0.054	989.17	11.00	0.054	223+78.25	988.57	-0.054	15.50	987.73	-0.063	4.00	987.48	PC
988.96	4.00	0.062	988.72	11.00	0.062	224+00.00	988.04	-0.062	15.50	987.08	-0.063	4.00	986.82	
988.37	4.00	4' RNDG*	988.25	11.00	0.071	224+25.00	987.47	-0.071	15.50	986.37	-0.071	4.00	986.08	
987.99	4.00	4' RNDG*	987.85	11.00	0.080	224+49.34	986.97	-0.080	15.50	985.73	-0.080	4.00	985.41	BEGIN FULL SUPERELEVATION
987.97	4.00	4' RNDG*	987.83	11.00	0.080	224+50.00	986.95	-0.080	15.50	985.71	-0.080	4.00	985.39	
987.51	4.00	4' RNDG*	987.37	11.00	0.080	224+75.00	986.49	-0.080	15.50	985.25	-0.080	4.00	984.93	
987.10	4.00	4' RNDG*	986.96	11.00	0.080	225+00.00	986.08	-0.080	15.50	984.84	-0.080	4.00	984.52	
986.74	4.00	4' RNDG*	986.60	11.00	0.080	225+25.00	985.72	-0.080	15.50	984.48	-0.080	4.00	984.16	
986.44	4.00	4' RNDG*	986.30	11.00	0.080	225+50.00	985.42	-0.080	15.50	984.18	-0.080	4.00	983.86	
986.19	4.00	4' RNDG*	986.05	11.00	0.080	225+75.00	985.17	-0.080	15.50	983.93	-0.080	4.00	983.61	
985.99	4.00	4' RNDG*	985.85	11.00	0.080	226+00.00	984.97	-0.080	15.50	983.73	-0.080	4.00	983.41	
985.84	4.00	4' RNDG*	985.70	11.00	0.080	226+25.00	984.82	-0.080	15.50	983.58	-0.080	4.00	983.26	
985.81	4.00	4' RNDG*	985.67	11.00	0.080	226+29.94	984.79	-0.080	15.50	983.55	-0.080	4.00	983.23	END FULL SUPERELEVATION
985.64	4.00	4' RNDG*	985.52	11.00	0.072	226+50.00	984.72	-0.072	15.15	983.62	-0.072	4.00	983.33	
985.48	4.00	4' RNDG*	985.37	11.00	0.063	226+75.00	984.68	-0.063	14.71	983.75	-0.063	4.00	983.50	
985.49	4.00	0.054	985.28	11.00	0.054	227+00.00	984.69	-0.054	14.27	983.92	-0.063	4.00	983.67	
985.49	4.00	0.053	985.27	11.00	0.053	227+01.03	984.69	-0.053	14.25	983.93	-0.063	4.00	983.68	PT
985.41	4.00	0.044	985.24	11.00	0.044	227+25.00	984.75	-0.044	13.83	984.13	-0.063	4.00	983.88	

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.01 TO EDGE OF SHOULDER

SEE NEXT SHEET FOR CONTINUATION OF SUPERELEVATION TABLE

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - SERVICE ROAD 11

LIC-161-6.65
LIC-37-10.25

tduffney
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PI STA. = 214+89.99
Dc = 27°56'57" (LT)
emax = 0.081

PI STA. = 219+02.01
Dc = 09°59'57" (RT)
emax = 0.080

PI STA. = 225+44.05
Dc = 09°59'57" (RT)
emax = 0.080

SERVICE ROAD 11

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
985.41	4.00	0.044	985.24	11.00	0.044	227+25.00	984.75	-0.044	13.83	984.13	-0.063	4.00	983.88	
985.39	4.00	0.035	985.25	11.00	0.035	227+50.00	984.86	-0.035	13.39	984.39	-0.063	4.00	984.14	
985.41	4.00	0.026	985.31	11.00	0.026	227+75.00	985.03	-0.026	12.95	984.70	-0.063	4.00	984.44	
985.49	4.00	0.016	985.42	11.00	0.016	228+00.00	985.24	-0.016	12.51	985.04	-0.063	4.00	984.79	
985.34	4.00	-0.063	985.59	11.00	0.007	228+25.00	985.52	-0.016	12.07	985.32	-0.063	4.00	985.07	
985.56	4.00	-0.063	985.81	11.00	-0.003	228+50.00	985.84	-0.016	11.63	985.65	-0.063	4.00	985.40	
985.83	4.00	-0.063	986.08	11.00	-0.012	228+75.00	986.21	-0.016	11.19	986.03	-0.063	4.00	985.78	
985.96	4.00	-0.063	986.21	11.00	-0.016	228+85.88	986.39	-0.016	11.00	986.21	-0.063	4.00	985.96	BEGIN NORMAL CROWN

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - SERVICE ROAD 11

LIC-161-6.65
LIC-37-10.25

905
1349

tduffney
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PI STA. = 571+67.71
Dc = 01°15'00" (RT)
emax = 0.030

OUTVILLE-MORSE FRONTAGE RD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
935.55	4.00	-0.063	935.80	11.00	-0.016	570+49.46	935.98	-0.016	11.00	935.80	-0.063	4.00	935.55	BEGIN TRANSITION
935.55	4.00	-0.063	935.80	11.00	-0.016	570+50.00	935.97	-0.016	11.00	935.80	-0.063	4.00	935.54	
935.46	4.00	-0.063	935.71	11.00	-0.005	570+75.00	935.77	-0.016	11.00	935.59	-0.063	4.00	935.34	
935.38	4.00	-0.063	935.63	11.00	0.006	571+00.00	935.57	-0.016	11.00	935.39	-0.063	4.00	935.14	
935.46	4.00	4' RNDG*	935.55	11.00	0.016	571+24.44	935.37	-0.016	11.00	935.20	-0.063	4.00	934.94	
935.46	4.00	4' RNDG*	935.55	11.00	0.016	571+25.00	935.37	-0.016	11.00	935.19	-0.063	4.00	934.94	
935.44	4.00	4' RNDG*	935.52	11.00	0.020	571+33.81	935.30	-0.020	11.00	935.08	-0.063	4.00	934.82	PC
935.40	4.00	4' RNDG*	935.46	11.00	0.027	571+50.00	935.17	-0.027	11.00	934.87	-0.063	4.00	934.62	
935.38	4.00	4' RNDG*	935.44	11.00	0.030	571+57.24	935.11	-0.030	11.00	934.78	-0.063	4.00	934.53	BEGIN FULL SUPERELEVATION
935.23	4.00	4' RNDG*	935.29	11.00	0.030	571+75.00	934.96	-0.030	11.00	934.63	-0.063	4.00	934.38	
935.03	4.00	4' RNDG*	935.09	11.00	0.030	572+00.00	934.76	-0.030	11.00	934.43	-0.063	4.00	934.18	
934.83	4.00	4' RNDG*	934.89	11.00	0.030	572+25.00	934.56	-0.030	11.00	934.23	-0.063	4.00	933.98	
934.63	4.00	4' RNDG*	934.69	11.00	0.030	572+50.00	934.36	-0.030	11.00	934.03	-0.063	4.00	933.78	
934.43	4.00	4' RNDG*	934.49	11.00	0.030	572+75.00	934.16	-0.030	11.00	933.83	-0.063	4.00	933.58	
934.23	4.00	4' RNDG*	934.29	11.00	0.030	573+00.00	933.96	-0.030	11.00	933.63	-0.063	4.00	933.37	
934.02	4.00	4' RNDG*	934.08	11.00	0.030	573+25.00	933.75	-0.030	11.00	933.42	-0.063	4.00	933.17	
933.80	4.00	4' RNDG*	933.86	11.00	0.030	573+50.00	933.53	-0.030	11.00	933.20	-0.063	4.00	932.94	
933.56	4.00	4' RNDG*	933.62	11.00	0.030	573+75.00	933.29	-0.030	11.00	932.96	-0.063	4.00	932.71	
933.31	4.00	4' RNDG*	933.37	11.00	0.030	574+00.00	933.04	-0.030	11.00	932.71	-0.063	4.00	932.46	
933.05	4.00	4' RNDG*	933.11	11.00	0.030	574+25.00	932.78	-0.030	11.00	932.45	-0.063	4.00	932.19	
932.77	4.00	4' RNDG*	932.83	11.00	0.030	574+50.00	932.50	-0.030	11.00	932.17	-0.063	4.00	931.92	
932.48	4.00	4' RNDG*	932.54	11.00	0.030	574+75.00	932.21	-0.030	11.00	931.88	-0.063	4.00	931.62	
932.17	4.00	4' RNDG*	932.23	11.00	0.030	575+00.00	931.90	-0.030	11.00	931.57	-0.063	4.00	931.32	
931.86	4.00	4' RNDG*	931.92	11.00	0.030	575+25.00	931.59	-0.030	11.00	931.26	-0.063	4.00	931.01	
931.55	4.00	4' RNDG*	931.61	11.00	0.030	575+50.00	931.28	-0.030	11.00	930.95	-0.063	4.00	930.69	
931.23	4.00	4' RNDG*	931.29	11.00	0.030	575+75.00	930.96	-0.030	11.00	930.63	-0.063	4.00	930.38	
931.20	4.00	4' RNDG*	931.26	11.00	0.030	575+77.77	930.93	-0.030	11.00	930.60	-0.063	4.00	930.35	END FULL SUPERELEVATION
930.80	4.00	4' RNDG*	930.88	11.00	0.021	576+00.00	930.65	-0.021	11.00	930.42	-0.063	4.00	930.17	
930.78	4.00	4' RNDG*	930.86	11.00	0.020	576+01.20	930.64	-0.020	11.00	930.42	-0.063	4.00	930.16	PT
930.61	4.00	4' RNDG*	930.69	11.00	0.016	576+10.57	930.52	-0.016	11.00	930.34	-0.063	4.00	930.09	
930.19	4.00	-0.063	930.45	11.00	0.010	576+25.00	930.34	-0.016	11.00	930.16	-0.063	4.00	929.91	
929.76	4.00	-0.063	930.02	11.00	-0.001	576+50.00	930.03	-0.016	11.00	929.85	-0.063	4.00	929.60	
929.33	4.00	-0.063	929.59	11.00	-0.011	576+75.00	929.71	-0.016	11.00	929.54	-0.063	4.00	929.28	
929.15	4.00	-0.063	929.40	11.00	-0.016	576+85.55	929.58	-0.016	11.00	929.40	-0.063	4.00	929.15	END TRANSITION

*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.063 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - OUTVILLE MORSE FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

906
1349

tduffney
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PI STA. = 336+26.60
Dc = 01°13'38" (LT)
emax = 0.030

PI STA. = 360+02.55
Dc = 03°00'00" (RT)
emax = 0.062

C.R. 539A EXTENSION

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
938.23	4.00	-0.042	938.40	12.00	-0.016	332+96.36	938.59	-0.016	12.00	938.40	-0.042	10.00	937.98	BEGIN TRANSITION
938.23	4.00	-0.042	938.39	12.00	-0.015	333+00.00	938.57	-0.016	12.00	938.38	-0.042	10.00	937.96	
938.22	4.00	-0.042	938.38	12.00	-0.005	333+25.00	938.44	-0.016	12.00	938.25	-0.042	10.00	937.83	
938.21	4.00	-0.042	938.37	12.00	0.005	333+50.00	938.31	-0.016	12.00	938.12	-0.042	10.00	937.70	
938.20	4.00	-0.042	938.36	12.00	0.015	333+75.00	938.19	-0.016	12.00	938.00	-0.042	10.00	937.58	
938.19	4.00	-0.042	938.36	12.00	0.016	333+78.16	938.17	-0.016	12.00	937.98	-0.042	10.00	937.56	
938.19	4.00	-0.042	938.36	12.00	0.020	333+88.33	938.12	-0.020	12.00	937.88	-0.042	10.00	937.46	PC
938.19	4.00	-0.042	938.35	12.00	0.025	334+00.00	938.06	-0.025	12.00	937.76	-0.042	10.00	937.34	
938.29	4.00	4' RNDG*	938.35	12.00	0.030	334+13.94	937.99	-0.030	12.00	937.63	-0.042	10.00	937.21	BEGIN FULL SUPERELEVATION
938.23	4.00	4' RNDG*	938.29	12.00	0.030	334+25.00	937.93	-0.030	12.00	937.57	-0.042	10.00	937.15	
938.10	4.00	4' RNDG*	938.16	12.00	0.030	334+50.00	937.80	-0.030	12.00	937.44	-0.042	10.00	937.02	
937.98	4.00	4' RNDG*	938.04	12.00	0.030	334+75.00	937.68	-0.030	12.00	937.32	-0.042	10.00	936.90	
937.85	4.00	4' RNDG*	937.91	12.00	0.030	335+00.00	937.55	-0.030	12.00	937.19	-0.042	10.00	936.77	
937.72	4.00	4' RNDG*	937.78	12.00	0.030	335+25.00	937.42	-0.030	12.00	937.06	-0.042	10.00	936.64	
937.59	4.00	4' RNDG*	937.65	12.00	0.030	335+50.00	937.29	-0.030	12.00	936.93	-0.042	10.00	936.51	
937.47	4.00	4' RNDG*	937.53	12.00	0.030	335+75.00	937.17	-0.030	12.00	936.81	-0.042	10.00	936.39	
937.34	4.00	4' RNDG*	937.40	12.00	0.030	336+00.00	937.04	-0.030	12.00	936.68	-0.042	10.00	936.26	
937.21	4.00	4' RNDG*	937.27	12.00	0.030	336+25.00	936.91	-0.030	12.00	936.55	-0.042	10.00	936.13	
937.08	4.00	4' RNDG*	937.14	12.00	0.030	336+50.00	936.78	-0.030	12.00	936.42	-0.042	10.00	936.00	
936.96	4.00	4' RNDG*	937.02	12.00	0.030	336+75.00	936.66	-0.030	12.00	936.30	-0.042	10.00	935.88	
936.83	4.00	4' RNDG*	936.89	12.00	0.030	337+00.00	936.53	-0.030	12.00	936.17	-0.042	10.00	935.75	
936.70	4.00	4' RNDG*	936.76	12.00	0.030	337+25.00	936.40	-0.030	12.00	936.04	-0.042	10.00	935.62	
936.57	4.00	4' RNDG*	936.63	12.00	0.030	337+50.00	936.27	-0.030	12.00	935.91	-0.042	10.00	935.49	
936.45	4.00	4' RNDG*	936.51	12.00	0.030	337+75.00	936.15	-0.030	12.00	935.79	-0.042	10.00	935.37	
936.32	4.00	4' RNDG*	936.38	12.00	0.030	338+00.00	936.02	-0.030	12.00	935.66	-0.042	10.00	935.24	
936.19	4.00	4' RNDG*	936.25	12.00	0.030	338+25.00	935.89	-0.030	12.00	935.53	-0.042	10.00	935.11	
936.12	4.00	4' RNDG*	936.18	12.00	0.030	338+38.88	935.82	-0.030	12.00	935.46	-0.042	10.00	935.04	END FULL SUPERELEVATION
935.90	4.00	-0.042	936.07	12.00	0.026	338+50.00	935.76	-0.026	12.00	935.46	-0.042	10.00	935.04	
935.76	4.00	-0.042	935.93	12.00	0.020	338+64.45	935.69	-0.020	12.00	935.45	-0.042	10.00	935.03	PT
935.66	4.00	-0.042	935.83	12.00	0.016	338+74.66	935.64	-0.016	12.00	935.45	-0.042	10.00	935.03	
935.66	4.00	-0.042	935.83	12.00	0.016	338+75.00	935.64	-0.016	12.00	935.44	-0.042	10.00	935.02	
935.41	4.00	-0.042	935.58	12.00	0.006	339+00.00	935.51	-0.016	12.00	935.32	-0.042	10.00	934.90	
935.17	4.00	-0.042	935.34	12.00	-0.004	339+25.00	935.38	-0.016	12.00	935.19	-0.042	10.00	934.77	
934.92	4.00	-0.042	935.09	12.00	-0.013	339+50.00	935.25	-0.016	12.00	935.06	-0.042	10.00	934.64	
934.86	4.00	-0.042	935.03	12.00	-0.016	339+56.46	935.22	-0.016	12.00	935.03	-0.042	10.00	934.61	END TRANSITION
*IF RNDG, SLOPE = PVMT SLOPE FOR 2', THEN -0.042 TO EDGE OF SHOULDER														
927.48	4.00	-0.042	927.65	12.00	-0.016	355+63.67	927.84	-0.016	12.00	927.65	-0.042	10.00	927.23	BEGIN TRANSITION
927.45	4.00	-0.042	927.62	12.00	-0.016	355+75.00	927.81	-0.012	12.00	927.67	-0.042	10.00	927.25	
927.39	4.00	-0.042	927.56	12.00	-0.016	356+00.00	927.75	-0.002	12.00	927.73	-0.042	10.00	927.31	
927.38	4.00	-0.042	927.55	12.00	-0.016	356+03.20	927.74	-0.001	12.00	927.73	-0.042	10.00	927.31	TS
927.32	4.00	-0.042	927.49	12.00	-0.016	356+25.00	927.68	0.008	12.00	927.77	-0.042	10.00	927.35	
927.25	4.00	-0.042	927.42	12.00	-0.016	356+45.73	927.61	0.016	12.00	927.80	-0.042	10.00	927.38	
927.21	4.00	-0.042	927.38	12.00	-0.018	356+50.00	927.59	0.018	12.00	927.80	-0.042	10.00	927.38	
926.99	4.00	-0.042	927.16	12.00	-0.027	356+75.00	927.49	0.027	12.00	927.82	-0.042	10.00	927.40	
926.76	4.00	-0.042	926.92	12.00	-0.037	357+00.00	927.37	0.037	12.00	927.82	5' RNDG	10.00	927.83	
926.48	4.00	-0.047	926.67	12.00	-0.047	357+25.00	927.23	0.047	12.00	927.80	5' RNDG	10.00	927.84	
926.18	4.00	-0.057	926.40	12.00	-0.057	357+50.00	927.08	0.057	12.00	927.76	5' RNDG	10.00	927.83	
926.00	4.00	-0.062	926.25	12.00	-0.062	357+63.70	926.99	0.062	12.00	927.74	5' RNDG	10.00	927.82	
925.92	4.00	-0.062	926.17	12.00	-0.062	357+75.00	926.91	0.062	12.00	927.66	5' RNDG	10.00	927.74	SC/BEGIN FULL SUPER
925.74	4.00	-0.062	925.98	12.00	-0.062	358+00.00	926.73	0.062	12.00	927.47	5' RNDG	10.00	927.55	
925.54	4.00	-0.062	925.79	12.00	-0.062	358+25.00	926.54	0.062	12.00	927.28	5' RNDG	10.00	927.36	
925.35	4.00	-0.062	925.60	12.00	-0.062	358+50.00	926.34	0.062	12.00	927.09	5' RNDG	10.00	927.17	
925.16	4.00	-0.062	925.41	12.00	-0.062	358+75.00	926.15	0.062	12.00	926.89	5' RNDG	10.00	926.97	
924.97	4.00	-0.062	925.21	12.00	-0.062	359+00.00	925.96	0.062	12.00	926.70	5' RNDG	10.00	926.78	
924.77	4.00	-0.062	925.02	12.00	-0.062	359+25.00	925.76	0.062	12.00	926.51	5' RNDG	10.00	926.59	
924.58	4.00	-0.062	924.83	12.00	-0.062	359+50.00	925.57	0.062	12.00	926.32	4' RNDG*	4.00	#VALUE!	
924.39	4.00	-0.062	924.64	12.00	-0.062	359+75.00	925.38	0.062	12.00	926.12	4' RNDG*	4.00	#VALUE!	
924.19	4.00	-0.062	924.44	12.00	-0.062	360+00.00	925.19	0.062	12.00	925.93	4' RNDG*	4.00	#VALUE!	
924.00	4.00	-0.062	924.25	12.00	-0.062	360+25.00	924.99	0.062	12.00	925.74	4' RNDG*	4.00	#VALUE!	
923.81	4.00	-0.062	924.06	12.00	-0.062	360+50.00	924.80	0.062	12.00	925.54	4' RNDG*	4.00	#VALUE!	
923.62	4.00	-0.062	923.86	12.00	-0.062	360+75.00	924.61	0.062	12.00	925.35	4' RNDG*	4.00	#VALUE!	
923.42	4.00	-0.062	923.67	12.00	-0.062	361+00.00	924.42	0.062	12.00	925.16	4' RNDG*	4.00	#VALUE!	
923.23	4.00	-0.062	923.48	12.00	-0.062	361+25.00	924.23	0.062	12.00	924.97	4' RNDG*	4.00	#VALUE!	
923.05	4.00	-0.062	923.30	12.00	-0.062	361+50.00	924.04	0.062	12.00	924.79	4' RNDG*	4.00	#VALUE!	
922.87	4.00	-0.062	923.12	12.00	-0.062	361+75.00	923.86	0.062	12.00	924.61	4' RNDG*	4.00	#VALUE!	
922.70	4.00	-0.062	922.95	12.00	-0.062	362+00.00	923.69	0.062	12.00	924.43	4' RNDG*	4.00	#VALUE!	
922.53	4.00	-0.062	922.78	12.00	-0.062	362+25.00	923.52	0.062	12.00	924.27	4' RNDG*	4.00	#VALUE!	
922.45	4.00	-0.062	922.69	12.00	-0.062	362+38.37	923.44	0.062	12.00	924.18	4' RNDG*	4.00	#VALUE!	CS/END FULL SUPER
922.44	4.00	-0.057	922.67	12.00	-0.057	362+50.00	923.36	0.057	12.00	924.05	4' RNDG*	4.00	#VALUE!	
922.44	4.00	-0.048	922.64	12.00	-0.048	362+75.00	923.21	0.048	12.00	923.78	4' RNDG*	4.00	#VALUE!	
922.44	4.00	-0.042	922.60	12.00	-0.038	363+00.00	923.06	0.038	12.00	923.51	4' RNDG*	4.00	#VALUE!	
922.40	4.00	-0.042	922.57	12.00	-0.028	363+25.00	922.91	0.028	12.00	923.25	4' RNDG*	4.00	#VALUE!	
922.38	4.00	-0.042	922.55	12.00	-0.018	363+50.00	922.77	0.018	12.00	922.99	-0.042	4.00	922.82	
922.37	4.00	-0.042	922.54	12.00	-0.016	363+56.31	922.73	0.016	12.00	922.92	-0.042	4.00	922.75	
922.26	4.00	-0.042	922.43	12.00	-0.016	363+75.00	922.62	0.009	12.00	922.72	-0.042	4.00	922.56	
922.11	4.00	-0.042	922.28	11.83	-0.016	364+00.00	922.47	-0.001	12.00	922.46	-0.042	4.00	922.29	
921.98	4.00	-0.042	922.15	11.39	-0.016	364+25.00	922.33	-0.011	12.00	922.20	-0.042	4.00	922.03	
921.90	4.00	-0.042	922.07	11.18	-0.016	364+38.34	922.25	-0.016	12.00	922.06	-0.042	4.00	921.89	END TRANSITION

*IF RNDG, SLOPE = PVMT SLOPE FOR 2.5', THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED FJA

SUPERELEVATION TABLE - C.R. 539A EXTENSION

LIC-161-6.65
LIC-37-10.25

907
1349

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PI STA. = 13+47.39
Dc = 6°00'00" (LT)
emax = 0.083

MORSE ROAD

LEFT EDGE OF SHOULDER	SHOULDER WIDTH	SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT SLOPE	PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SHOULDER SLOPE	SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
986.66	4.00	-0.063	986.91	11.00	-0.016	9+21.79	987.09	-0.016	11.00	986.91	-0.063	4.00	986.66	END NORMAL CROWN
986.55	4.00	-0.063	986.80	11.00	-0.016	9+25.00	986.97	-0.015	11.00	986.81	-0.063	4.00	986.56	
985.64	4.00	-0.063	985.89	11.00	-0.016	9+50.00	986.07	-0.007	11.00	985.99	-0.063	4.00	985.74	
984.83	4.00	-0.063	985.09	11.00	-0.016	9+71.21	985.26	0.000	11.00	985.26	-0.063	4.00	985.01	TS
984.68	4.00	-0.063	984.94	11.06	-0.016	9+75.00	985.11	0.001	11.00	985.13	-0.063	4.00	984.87	
983.67	4.00	-0.063	983.92	11.40	-0.016	10+00.00	984.10	0.009	11.00	984.21	-0.063	4.00	983.95	
982.79	4.00	-0.063	983.04	11.68	-0.016	10+20.63	983.23	0.016	11.00	983.41	4' RNDG	4.00	983.42	RC
982.58	4.00	-0.063	982.84	11.74	-0.017	10+25.00	983.04	0.017	11.00	983.23	4' RNDG	4.00	983.25	
981.36	4.00	-0.063	981.62	12.08	-0.026	10+50.00	981.92	0.026	11.00	982.20	4' RNDG	4.00	982.23	
980.08	4.00	-0.063	980.34	12.42	-0.034	10+75.00	980.75	0.034	11.00	981.12	4' RNDG	4.00	981.17	
978.75	4.00	-0.063	979.00	12.76	-0.042	11+00.00	979.53	0.042	11.00	979.99	4' RNDG	4.00	980.05	
977.38	4.00	-0.063	977.63	13.10	-0.050	11+25.00	978.28	0.050	11.00	978.83	4' RNDG	4.00	978.91	
976.00	4.00	-0.063	976.25	13.45	-0.058	11+50.00	977.03	0.058	11.00	977.67	4' RNDG	4.00	977.76	
974.61	4.00	-0.066	974.87	13.79	-0.066	11+75.00	975.78	0.066	11.00	976.51	4' RNDG	4.00	976.62	
973.19	4.00	-0.074	973.48	14.13	-0.074	12+00.00	974.53	0.074	11.00	975.34	4' RNDG	4.00	975.47	
971.76	4.00	-0.082	972.09	14.47	-0.082	12+25.00	973.28	0.082	11.00	974.18	4' RNDG	4.00	974.33	
971.62	4.00	-0.083	971.95	14.50	-0.083	12+27.56	973.15	0.083	11.00	974.07	4' RNDG	4.00	974.21	SC/PC/BEGIN FULL SUPER
970.49	4.00	-0.083	970.83	14.50	-0.083	12+50.00	972.03	0.083	11.00	972.94	4' RNDG	4.00	973.09	
969.24	4.00	-0.083	969.58	14.50	-0.083	12+75.00	970.78	0.083	11.00	971.69	4' RNDG	4.00	971.84	
967.99	4.00	-0.083	968.33	14.50	-0.083	13+00.00	969.53	0.083	11.00	970.44	4' RNDG	4.00	970.59	
966.74	4.00	-0.083	967.08	14.50	-0.083	13+25.00	968.28	0.083	11.00	969.19	4' RNDG	4.00	969.34	
965.49	4.00	-0.083	965.83	14.50	-0.083	13+50.00	967.03	0.083	11.00	967.94	4' RNDG	4.00	968.09	
964.24	4.00	-0.083	964.58	14.50	-0.083	13+75.00	965.78	0.083	11.00	966.69	4' RNDG	4.00	966.84	
962.99	4.00	-0.083	963.33	14.50	-0.083	14+00.00	964.53	0.083	11.00	965.44	4' RNDG	4.00	965.59	
961.74	4.00	-0.083	962.08	14.50	-0.083	14+25.00	963.28	0.083	11.00	964.19	4' RNDG	4.00	964.34	
960.49	4.00	-0.083	960.83	14.50	-0.083	14+50.00	962.03	0.083	11.00	962.94	4' RNDG	4.00	963.09	
960.23	4.00	-0.083	960.56	14.50	-0.083	14+55.25	961.77	0.083	11.00	962.68	4' RNDG	4.00	962.83	CS/PT/END FULL SUPER
959.38	4.00	-0.077	959.69	14.23	-0.077	14+75.00	960.78	0.077	11.00	961.62	4' RNDG	4.00	961.76	
958.30	4.00	-0.069	958.58	13.89	-0.069	15+00.00	959.53	0.069	11.00	960.28	4' RNDG	4.00	960.40	
957.21	4.00	-0.063	957.46	13.55	-0.060	15+25.00	958.28	0.060	11.00	958.94	4' RNDG	4.00	959.05	
956.09	4.00	-0.063	956.34	13.21	-0.052	15+50.00	957.03	0.052	11.00	957.61	4' RNDG	4.00	957.69	
954.96	4.00	-0.063	955.21	12.87	-0.044	15+75.00	955.78	0.044	11.00	956.27	4' RNDG	4.00	956.33	
953.83	4.00	-0.063	954.08	12.52	-0.036	16+00.00	954.53	0.036	11.00	954.93	4' RNDG	4.00	954.98	
952.69	4.00	-0.063	952.94	12.18	-0.028	16+25.00	953.28	0.028	11.00	953.59	4' RNDG	4.00	953.62	
951.54	4.00	-0.063	951.79	11.84	-0.020	16+50.00	952.03	0.020	11.00	952.25	4' RNDG	4.00	952.27	
950.98	4.00	-0.063	951.23	11.67	-0.016	16+62.18	951.42	0.016	11.00	951.60	4' RNDG	4.00	951.61	RC
950.34	4.00	-0.063	950.60	11.49	-0.016	16+75.00	950.78	0.012	11.00	950.91	4' RNDG	4.00	950.91	
949.10	4.00	-0.063	949.35	11.15	-0.016	17+00.00	949.53	0.004	11.00	949.57	-0.063	4.00	949.32	
948.52	4.00	-0.063	948.77	11.00	-0.016	17+11.60	948.95	0.000	11.00	948.95	-0.063	4.00	948.70	ST
947.85	4.00	-0.063	948.10	11.00	-0.016	17+25.00	948.28	-0.004	11.00	948.23	-0.063	4.00	947.98	
946.60	4.00	-0.063	946.85	11.00	-0.016	17+50.00	947.03	-0.012	11.00	946.89	-0.063	4.00	946.64	
946.05	4.00	-0.063	946.30	11.00	-0.016	17+61.02	946.48	-0.016	11.00	946.30	-0.063	4.00	946.05	BEGIN NORMAL CROWN

* IF RNDG, SLOPE= PVMT FOR 2' THEN -0.01 TO EDGE OF SHOULDER

CALCULATED JMA
CHECKED F.J.A

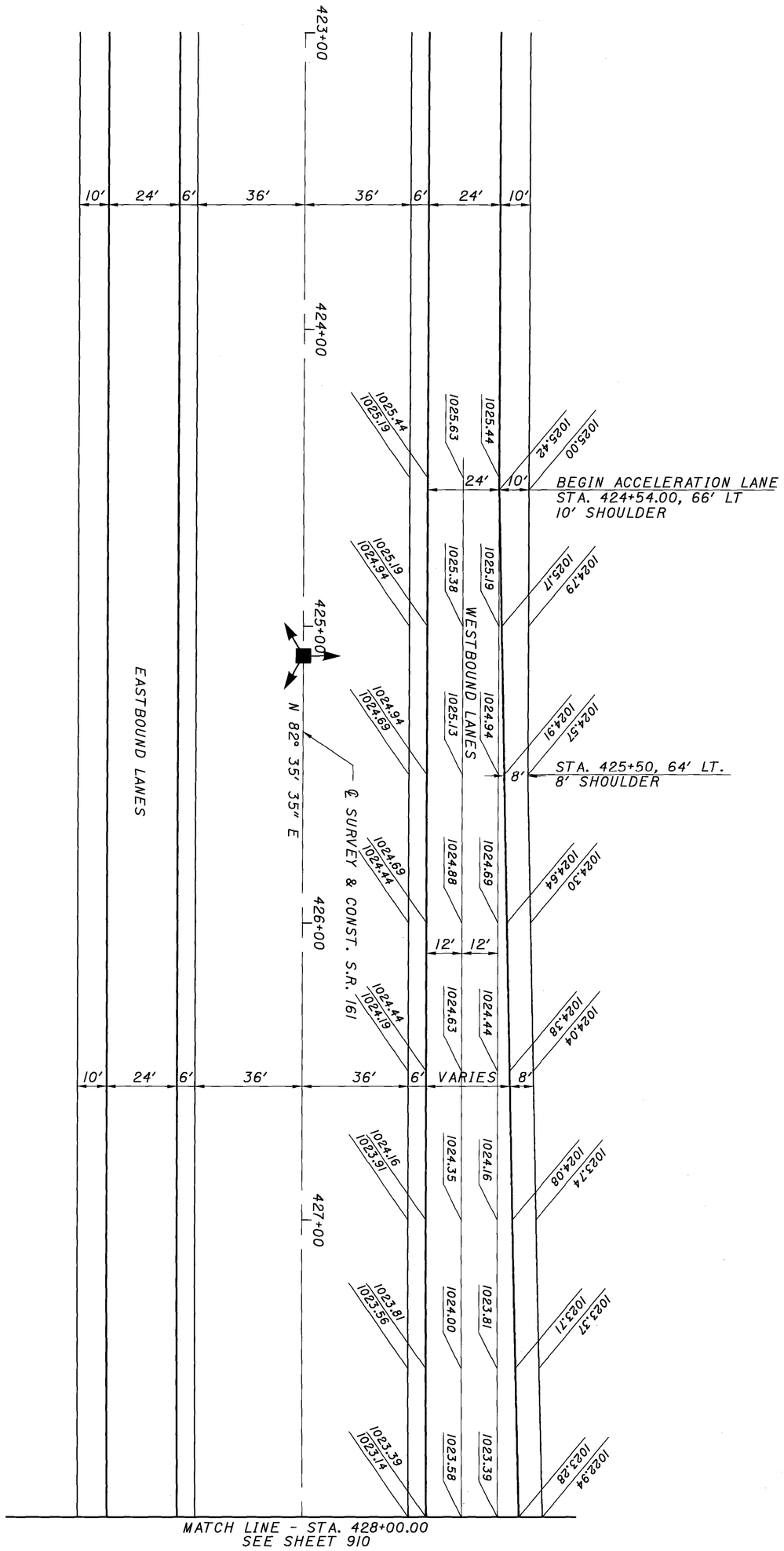
SUPERELEVATION TABLE - MORSE ROAD

LIC-161-6.65
LIC-37-10.25

908
349

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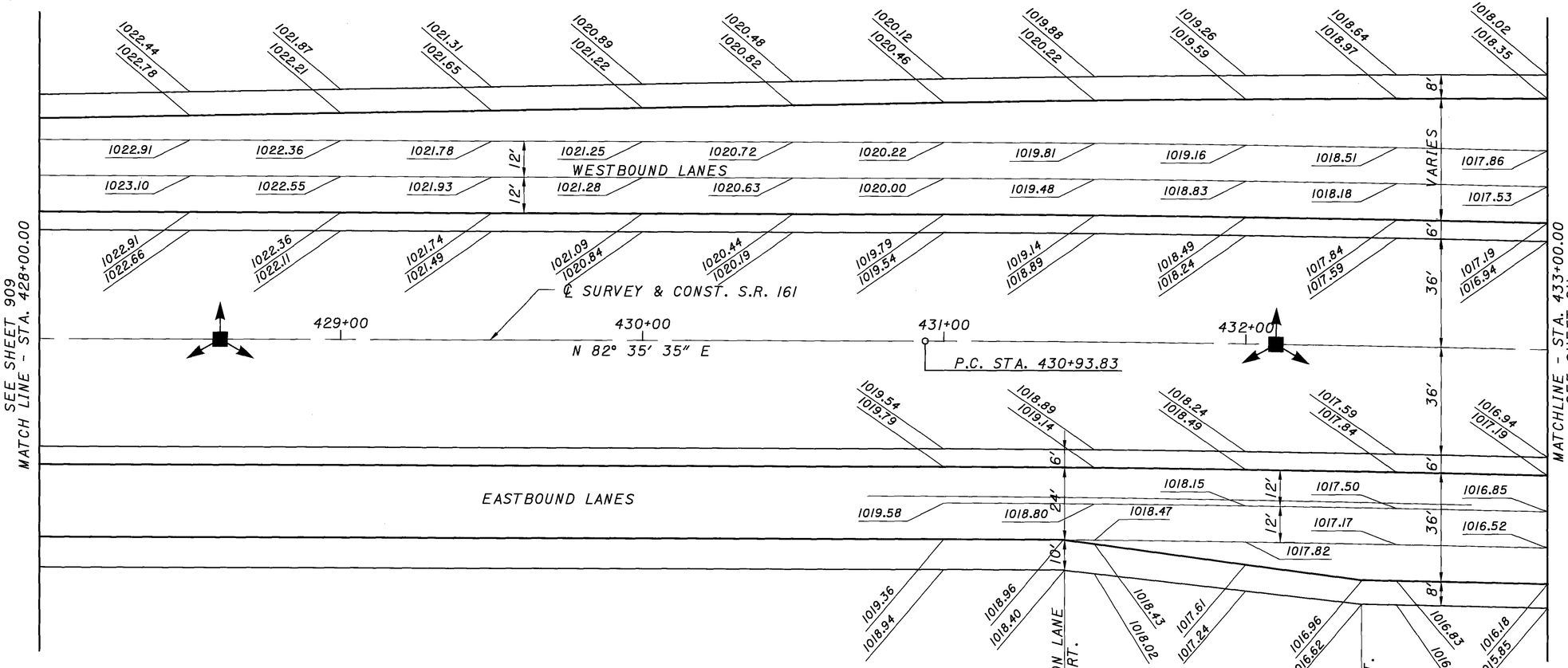
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MATCH LINE - STA. 428+00.00
SEE SHEET 910

909 / 1349	LIC-161-6.65 LIC-37-10.25	RAMP TERMINAL DETAIL - S.R. 161 & S.R. 37 STA. 423+00.00 TO STA. 428+00.00	CALCULATED JMA CHECKED BER	0 20 10 40 HORIZONTAL SCALE IN FEET

S.R. 161 CURVE DATA
P.I. STA. = 438+03.66
Δ = 10° 37′ 01″ (RT)
Dc = 00° 45′ 00″
R = 7,639.44′
T = 709.83′
L = 1,415.59′
E = 32.91′
e_{max} = 0.028



HORIZONTAL SCALE IN FEET
0 10 20 40

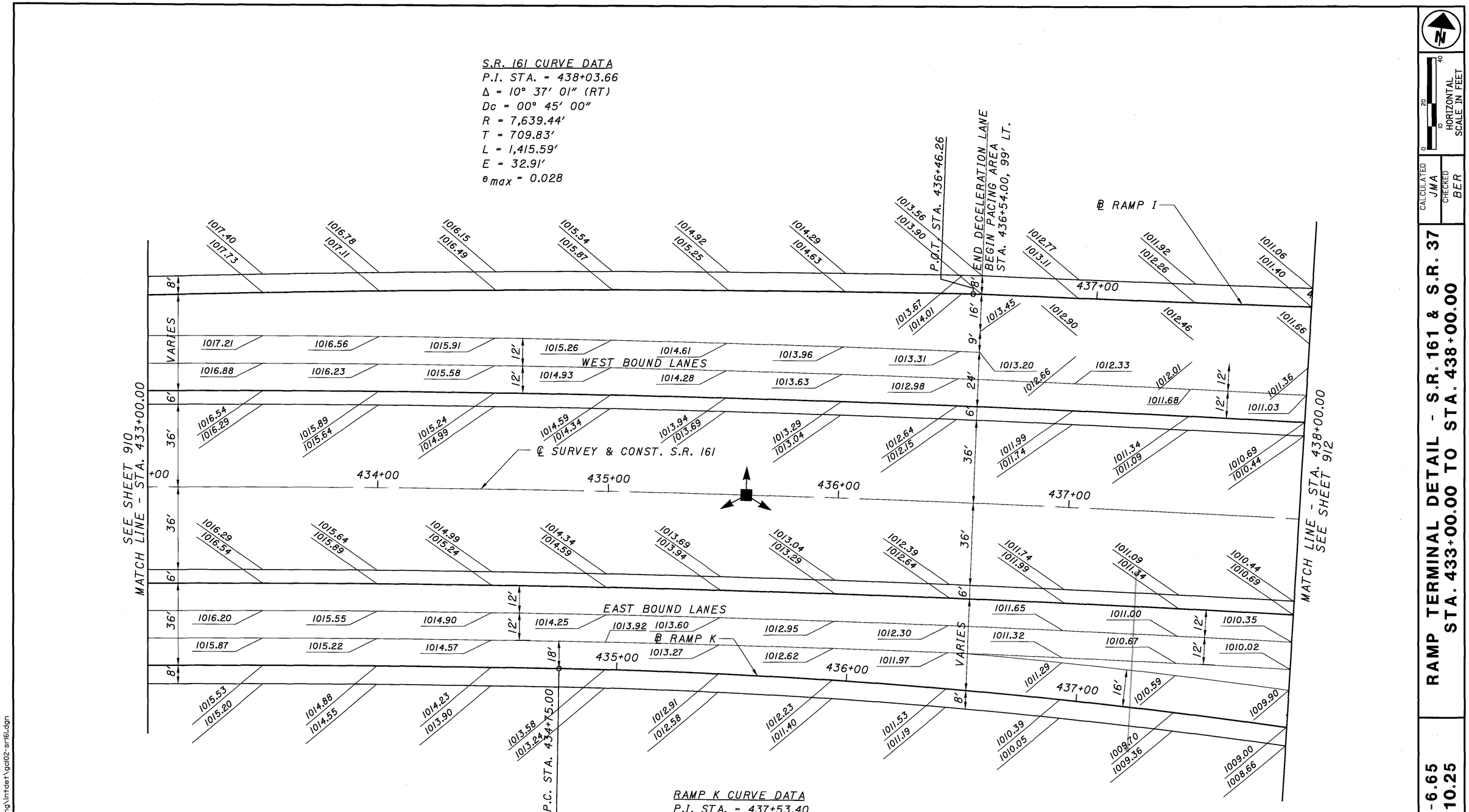
CALCULATED JMA
CHECKED BER

RAMP TERMINAL DETAIL - S.R. 161 & S.R.37
STA. 428+00.00 TO STA. 433+00.00

LIC-161-6.65
LIC-37-10.25

910
1349

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RAMP K CURVE DATA
P.I. STA. = 437+53.40
Δ = 12° 28′ 42″ (RT)
Dc = 2° 15′ 00″
R = 2,546.48′
T = 278.40′
L = 554.60′
E = 15.17′
emax = 0.056

CALCULATED JMA
CHECKED BER

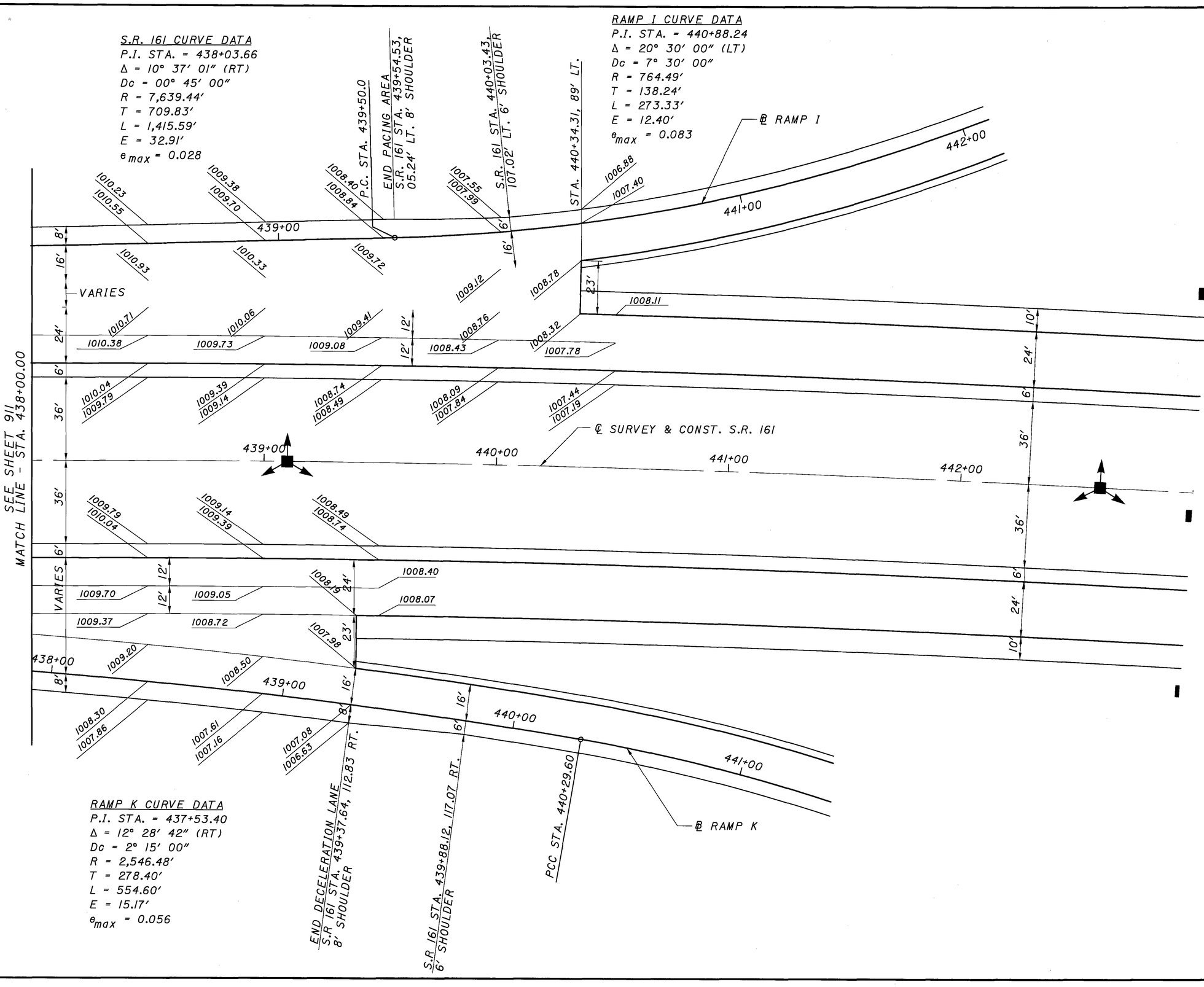
HORIZONTAL SCALE IN FEET
0 10 20 40

RAMP TERMINAL DETAIL - S.R. 161 & S.R. 37
STA. 433+00.00 TO STA. 438+00.00

LIC-161-6.65
LIC-37-10.25

911
1349

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N

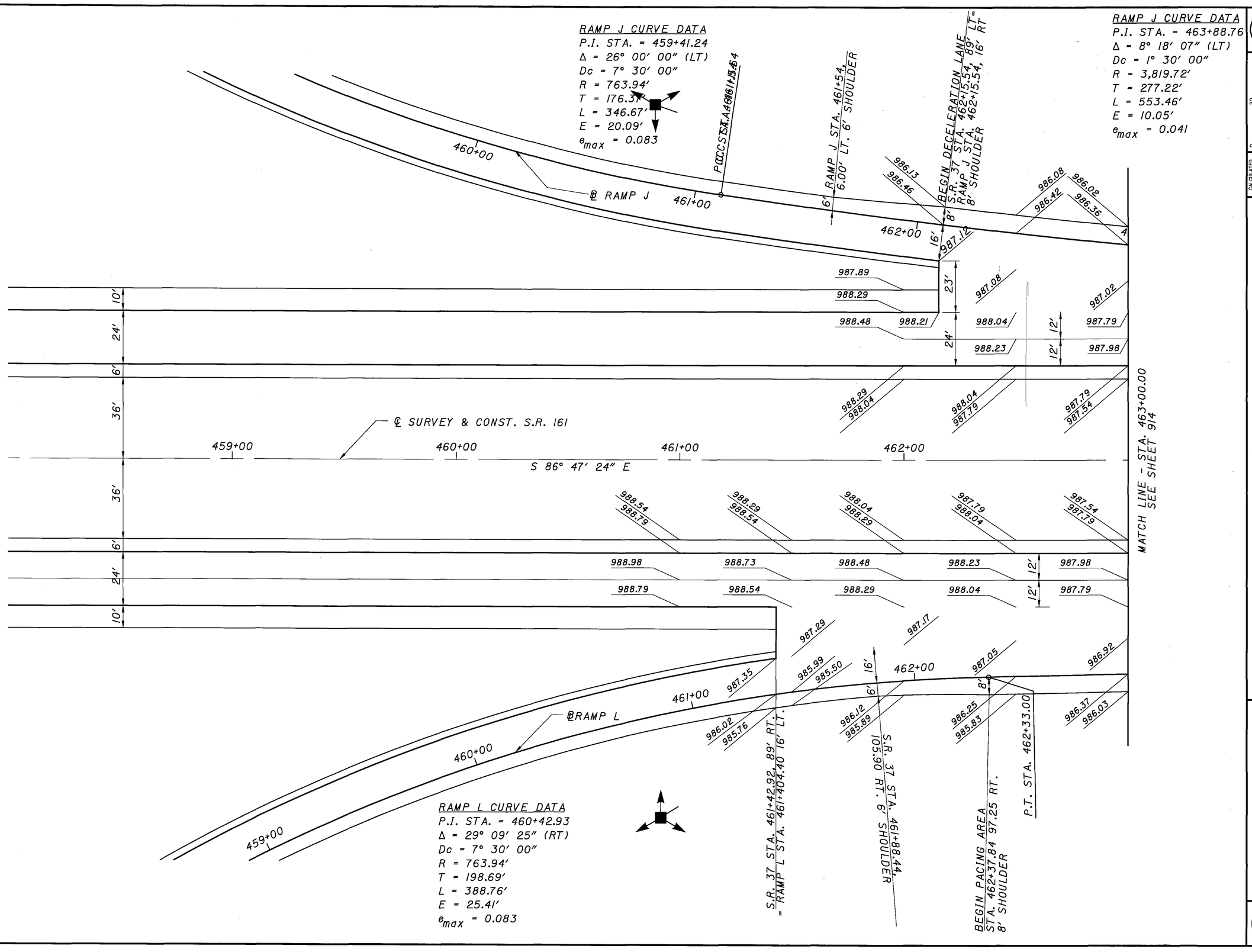
0 10 20 40
HORIZONTAL SCALE IN FEET

CALCULATED JMA
CHECKED BER

RAMP TERMINAL DETAIL - S.R. 161 & S.R. 37
STA. 438+00.00 TO STA. 443+00.00

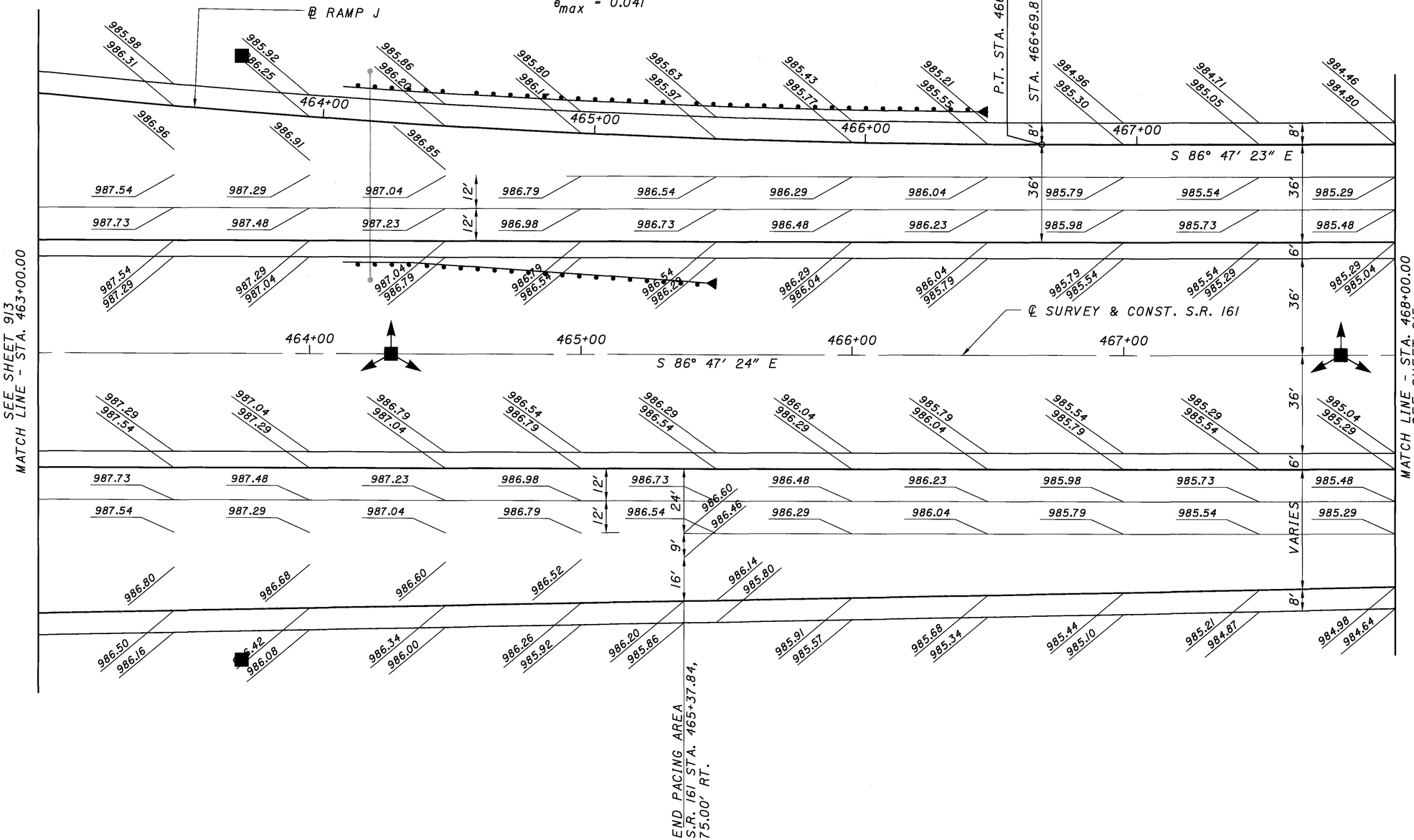
LIC-161-6.65
LIC-37-10.25

912
1349



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RAMP J CURVE DATA
P.I. STA. = 463+88.76
Δ = 8° 18′ 07″ (LT)
Dc = 1° 30′ 00″
R = 3,819.72′
T = 277.22′
L = 553.46′
E = 10.05′
e_{max} = 0.041



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JMA
CHECKED BER

RAMP TERMINAL DETAIL - S.R. 37 INTERCHANGE
STA. 463+00.00 TO STA. 468+00.00

LIC-161-6.65
LIC-37-10.25

914
1349

tduffney
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℄ RAMP J

S 86° 47′ 23″ E

STA. 469+11.00 BEGIN
TAPER 78.00′ LT
8′. SHOULDER

END DECELERATION LANE
STA. 470+11.00, 66.00′ LT
END TAPER
10′ SHOULDER

℄ SURVEY & CONST. S.R. 161

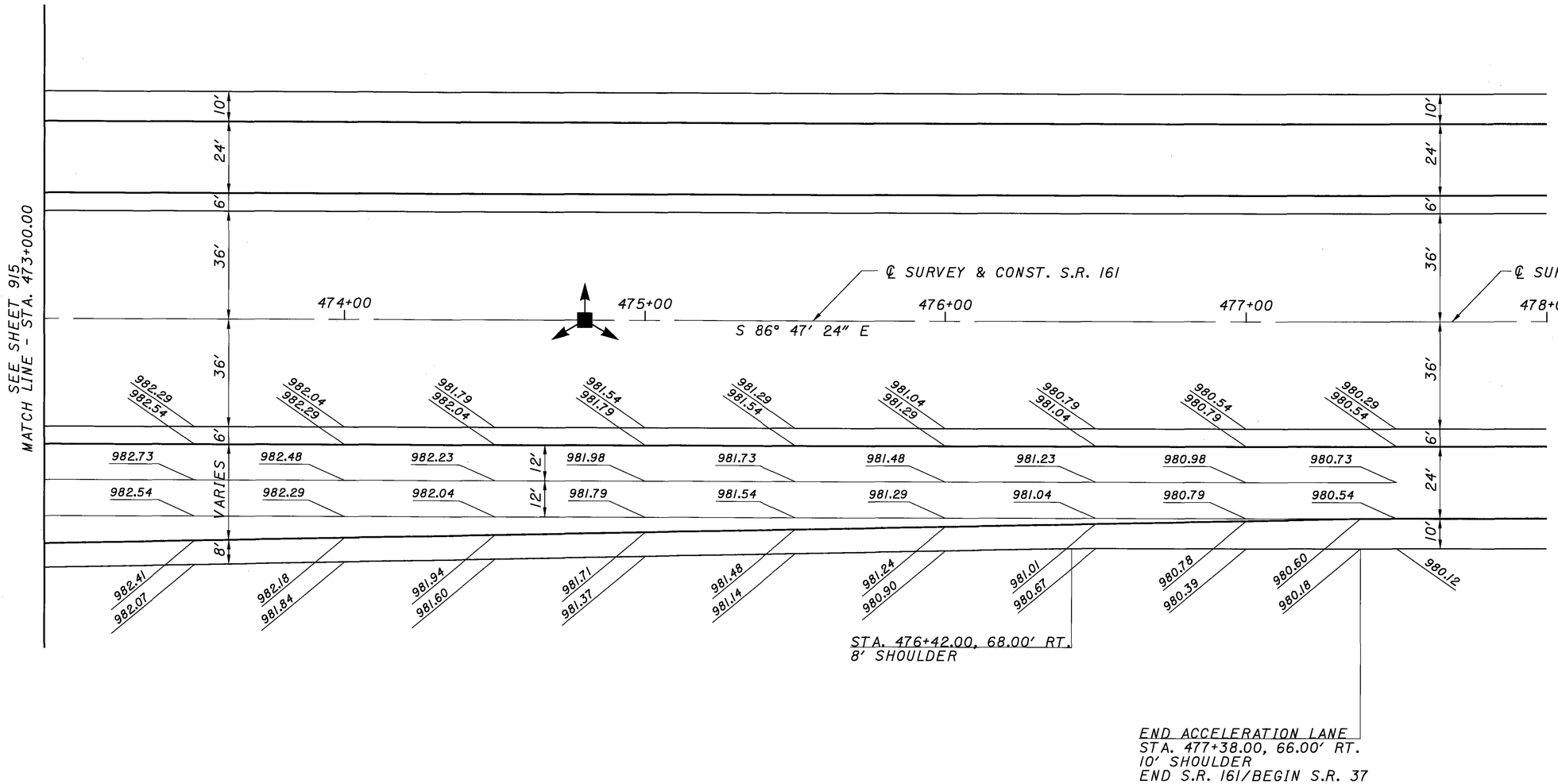
S 86° 47′ 24″ E

469+00 | 470+00 | 471+00 | 472+00

SEE SHEET 914
MATCH LINE - STA. 468+00.00

MATCH LINE - STA. 473+00.00
SEE SHEET 916

| | | |



CALCULATED JMA
CHECKED BER

0 10 20 40
HORIZONTAL SCALE IN FEET

RAMP TERMINAL DETAIL - S.R. 37 INTERCHANGE STA. 473+00.00 TO STA. 478+00.00

LIC-161-6.65
LIC-37-10.25

916
1349

tduffney
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S.R. 37 STA. 401+26.81, 18.00 RT.
BEGIN 10:1 TAPER

S.R. 37 STA. 401+66.81, 22.00 RT.
END 10:1 TAPER

S.R. 37 STA. 401+69.92, 32.36 RT.
BEGIN SHOULDER TAPER
10' SHOULDER

S.R. 37 STA. 401+60.84, 81.70 RT.
RAMP I STA. 451+08.75, 63.70' LT.
Δ = 76°8'54"
R = 60'
L = 79.74'

RAMP I STA. 450+74.72
BEGIN 10:1 TAPER

RAMP I STA. 451+14.72, 4.00 LT.
END 10:1 TAPER

401+00

℄ SURVEY & CONST. S.R. 37

S 2°36'49" W

997.34 998.42 999.50 1000.17 1000.59 1001.01 1001.44 1001.58 1001.72 1001.87 1002.01 1002.15

997.62 998.71 999.79 1000.59 1000.88 1000.59

10' 9.74'

S.R. 37 STA. 401+32.18, 18.00 LT.
BEGIN 6.25:1 TAPER

S.R. 37 STA. 401+82.18, 26.00 LT.
END 6.25:1 TAPER

S.R. 37 STA. 401+76.58, 35.23 LT.
BEGIN SHOULDER TAPER
10' SHOULDER

997.34 998.42 999.50 1000.59

S.R. 37 STA. 401+74.28, 75.37 LT.
RAMP J STA. 450+94.88, 50.00' LT.
Δ = 78°24'34"
R = 50'
L = 68.43'

S.R. 37 STA. 402+18.63, 82.42 LT.
END SHOULDER TAPER
6' SHOULDER

1000.78 1000.89 1001.00 1001.11 1001.22 1001.34 1001.45 1001.54

10' (TYP)

S.R. 37 STA. 402+14.43, 74.97 RT.
END SHOULDER TAPER
6' SHOULDER

402+00

1001.97 1001.68 1002.63 1002.89 1002.63 1001.97

6' 8.43'

1002.13 1001.51 1001.61 1001.72 1001.82 1001.92 1002.03

451+00 1001.42

1000.77 1000.04 999.28 998.52 997.76 996.99 996.23

452+00

S 84°53'13"

10' (TYP) 1002.24 1002.34

S 89°53'13" E ℄ RAMP I 450+00

℄ RAMP J

DETAIL A

1002.22 1002.48 1002.58 1003.33

6' 16' 3' 24'

1001.64 1000.79 999.85 998.88 997.91 996.95 996.16 995.41

1000.66 1000.92 1001.18 1001.44 1001.70 1001.97

3.16'

1003.86 1004.15 1003.68

10' (TYP)

1003.86 9.39'

■ RAMP J STA. 452+22.95, 24.00' RT
BEGIN 6.25:1 TAPER

RAMP J STA. 452+72.95, 16.00' RT
END 6.25:1 TAPER

1002.71 1003.11 1003.51 1003.92 1004.32 1002.58

1002.83 1003.34 1003.84 1004.32 1002.32

1004.95 1005.24 1004.95

403+00

1006.04 1006.33 1006.04

S.R. 37 STA. 402+97.37, 51.86 LT.
RAMP J STA. 450+76.76, 74.00' RT.
Δ = 45°7'55"
R = 50'
L = 39.39'

1007.12 1007.41 1007.12

10' 18' 18' 10'

S.R. 37 STA. 403+03.44, 60.00 RT.
RAMP I STA. 451+24.21, 79.70' RT.
Δ = 41°12'59"
R = 60'
L = 43.16'

1008.21 1008.50 1008.21

℄ SURVEY & CONST. S.R.37

℄ SURVEY & CONST. S.R.37 STA 402+21.04=
℄ RAMP I STA. 451+87.75=
℄ RAMP J STA. 450+21.62

92°30'00" 92°30'00"

℄ RAMP I ℄ RAMP J

87°30'00" 87°30'00"

DETAIL A

N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JMA
CHECKED BER

RAMPS I & J AND S.R.37 INTERSECTION DETAIL

LIC-161-6.65
LIC-37-10.25

917
1349

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℄ SURVEY & CONST. S.R.37

CURVE
D_c =0°30'00"

℄ SURVEY & CONST. S.R.37 STA 411+12.78=
℄ RAMP K STA. 451+60.74=
℄ RAMP L STA. 450+41.60=
℄ SURVEY & CONST. YORK RD. STA 411+12.78

87°28'15"
87°31'45"
℄ RAMP K
℄ RAMP L
92°31'45"
92°28'15"
℄ SURVEY & CONST. YORK RD.

DETAIL A

10' 18' 18' 10'

℄ SURVEY & CONST. S.R. 37 410+00
S 2°36'47" W

1022.40 1022.68 1022.40
1022.30 1022.59 1022.30
1022.18 1022.47 1022.18
1022.01 1022.30 1022.01
1022.08

S.R. 37 STA. 410+44.12, 58.63 RT.
RAMP K STA. 450+99.14, 66.00' LT.
Δ = 56°53'3"
R = 50'
L = 49.64'

S.R. 37 STA. 410+30.41 60.00 LT.
RAMP L STA. 451+05.10, 79.70' LT.
Δ = 41°11'14"
R = 60'
L = 43.13'

RAMP L STA. 450+99.13, 20.00 LT.
BEGIN 10:1 TAPER

RAMP L STA. 451+39.13, 16.00 LT.
END 10:1 TAPER

1021.81 1021.63 1021.45 1021.27 1021.10 1021.04
1021.89 1021.08 1021.26 1021.45 1021.63 1021.81
9.64'
10' (TYP)
1021.57 1021.36 3.13'
1021.32 1021.59
10' (TYP) DETAIL A
P.T. STA. 411+02.83
411+00
451+00
1020.72
10' (TYP)

1016.70 1017.33 1017.95 3' 1018.58 1019.21 1019.84 1020.45
1020.52 1019.15 1018.24 1017.11 3' 1015.89 1014.67
S 89°51'28" E

S 84°51'28" E
16'
450+00 ℄ RAMP K
451+00
452+00
℄ RAMP L
16'
1016.55 1015.42
1017.39 1017.87 1018.34 6' 1018.81 1019.29 1019.76 1020.22
1021.07 1021.65 1021.37 451+00 1021.12
1020.65 1021.37 1021.20 1021.49 1021.20
1020.23
1018.70 1017.67
1019.55
6'
6'

RAMP L STA. 451+54.50
END 10:1 TAPER

RAMP L STA. 451+14.50, 4.00' RT.
BEGIN 10:1 TAPER

YORK ROAD STA. 411+19.11, 76.32 LT.
BEGIN SHOULDER TAPER
6' SHOULDER

YORK ROAD STA. 411+15.62, 73.43 RT
BEGIN SHOULDER TAPER
6' SHOULDER

1020.44 1020.54 1020.65 1020.76 1020.87 1020.80 1020.74
1020.83 1020.83 1021.12
10' (TYP)
10'
1020.67
1020.35
1020.42
1020.71
1020.42
1020.37
1019.95
1020.24
1019.95
9.38'
10'
1020.50
1020.86 1020.74 1020.62 1020.51 1020.39
1020.77 1020.68 1020.59

YORK ROAD STA. 411+59.87, 75.42 RT.
RAMP K STA. 450+87.31, 50.00' RT.
Δ = 79°3'35"
R = 50'
L = 69.00'

YORK ROAD STA. 411+53.95, 35.89 RT.
BEGIN SHOULDER TAPER
10' SHOULDER

YORK ROAD STA. 411+72.54, 81.66 LT.
RAMP L STA. 451+20.38, 63.71' RT.
Δ = 75°48'9"
R = 60'
L = 79.38'

YORK ROAD STA. 411+52.47, 25.97 RT.
END 6.25:1 TAPER

YORK ROAD STA. 411+67.54, 31.92 LT.
END SHOULDER TAPER 10' SHOULDER

YORK ROAD STA. 412+02.25, 18.00 RT.
END 6.25:1 TAPER

YORK ROAD STA. 411+66.53, 21.97 LT.
BEGIN 10:1 TAPER

℄ SURVEY & CONST. YORK ROAD 412+00
S 3°22'18" W

1018.97 1019.26
P.T. STA. 412+54.54
YORK ROAD STA. 412+06.31, 18.00 LT.
1018.97 END 10:1 TAPER

18' 18'

N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JMA
CHECKED BER

RAMPS K & L AND S.R. 37 & YORK ROAD INTERSECTION DETAIL

LIC-161-6.65
LIC-37-10.25

Jolford
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℄ SURVEY & CONST. YORK ROAD

YORK ROAD STA. 416+36.00, 12.00 LT+RT
END TAPER

YORK ROAD STA. 417+05.38 18.23' RT.
END SHOULDER TAPER

YORK ROAD STA. 417+01.76, 47' RT.
WATKINS-YORK FRONTAGE ROAD
STA. 211+63.70, 47' LT.
Δ = 105°7'2"
R = 35'
L = 64.21'

YORK ROAD STA. 417+24.79, 17.81' LT.
END 45:1 SHOULDER TAPER

YORK ROAD STA. 417+14.34, 47' LT.
SERVICE ROAD II
STA. 213+08.56, 46' LT.
Δ = 93°18'54"
R = 35'
L = 57.00'

S 71°30'41" E

S.T. STA. 210+03.21

℄ SURVEY & CONST.
WATKINS-YORK FRONTAGE ROAD

℄ SURVEY & CONST.
SERVICE ROAD II

YORK ROAD STA. 418+07.55, 58' RT.
WATKINS-YORK FRONTAGE ROAD STA. 211+80.67, 58' RT.
Δ = 74°52'58"
R = 46'
L = 60.12'

YORK ROAD STA. 418+07.55, 12' RT.
BEGIN 52:1 TAPER

P.I. STA. 419+37.99
Δ = 00°19'13"
NO CURVE

YORK ROAD STA. 418+16.88, 12' LT.
BEGIN 46:1 TAPER

YORK ROAD STA. 418+16.88, 58' LT.
SERVICE ROAD II STA. 213+13.62, 57' RT.
Δ = 86°41'6"
R = 46'
L = 69.60'

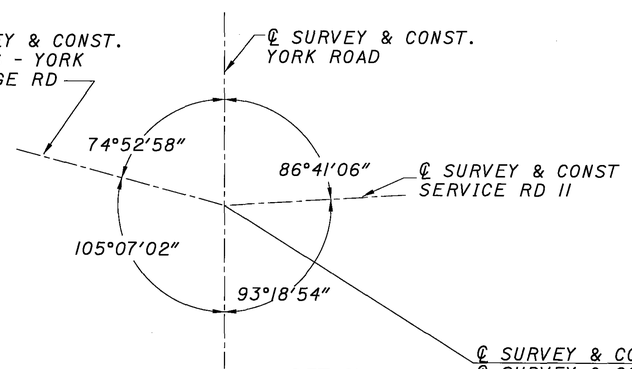
P.C. STA. 213+14.63

S 89°56'37" E

S 03°22'18" W

S 03°03'05" W

DETAIL A



DETAIL A

℄ SURVEY & CONST. YORK RD STA 417+63.14=
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE RD STA. 212+25.08=
℄ SURVEY & CONST. SERVICE RD II STA. 212+58.82

HORIZONTAL SCALE IN FEET
0 20 40

CALCULATED JMA
CHECKED BER

YORK RD, WATKINS-YORK FRONTAGE ROAD, AND SERVICE ROAD 11 INTERSECTION DETAIL

LIC-161-6.65
LIC-37-10.25

919
1349

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℄ SURVEY & CONST. S.R.37

℄ SURVEY & CONST. S.R.37 STA 395+70.02=
℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH STA 212+83.63

95°06'14"

84°53'46"

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

84°53'46"

95°06'14"

℄ SURVEY & CONST. YORK RD.

CURVE
D_C =0°30'00"

DETAIL A

S.R. 37 CURVE DATA

P.I. STA. 395+81.69
Δ = 01°16'38"(LT)
D_C = 00°30'00"
R = 11,459.16'
T = 127.73
L = 255.44'
E = 0.71'

S 3°53'25" W

394+00

12' ℄ 12'

969.78 | 969.78

970.68 | 970.68

P.C. STA. 394+53.96

971.57 | 971.57

972.66 | 971.76 | 970.87 | 969.97

972.46

7.91' | 7.91'

395+00

10' (TYP.)

S.R. 37 STA. 395+13.69, 62' RT.
RELOCATED WORTHINGTON ROAD NORTH STA. 212+27.05, 61.91' LT.

Δ = 84° 35' 19"
R = 50.00'
L = 73.82'

S.T. STA. 211+48.50

972.95 | 973.31 | 973.63 | 973.88 | 974.05 | 974.14 | 974.05 | 973.99

973.03 | 973.33 | 973.64 | 973.96 | 974.58

℄ SURVEY & CONST.
RELOCATED WORTHINGTON ROAD NORTH

972.41

4' | 12' | 12' | 4'

VARIES

211+00 | 210+00

973.03 | 972.23 | 4' 972.03

973.43 | 212+00 | 3.82' N 88°12'22" E | 974.23 | 974.63 | DETAIL A

973.83

N 88° 12' 22" E

975.17 | 974.44 | 213+00 | 974.51

973.64 | 973.24 | 972.84

975.46 | 975.38

2.72' | 974.05 | 974.16 | 974.59 | 975.00 | 975.43 | 975.85 | 976.27 | 976.69 | 977.11

396+00

976.28

10' (TYP.)

977.53 | 978.02 | 977.24 | 978.02

S.R. 37 STA. 396+37.51, 62' RT.
RELOCATED WORTHINGTON ROAD NORTH STA. 212+16.04, 62.09' RT.

Δ = 94° 47' 32"
R = 50.00'
L = 82.72'

979.03 | 978.21 | 979.03

980.05 | 979.22 | 980.05

397+00

P.T. STA. 397+09.40

980.25

℄ SURVEY & CONST. S.R. 37

10' | 12' | 12' | 10'

S 2°36'47" W

S.R. 37 STA. 395+01.88, 62' LT.
RELOCATED WORTHINGTON ROAD NORTH STA. 213+51.61, 61.97' LT.

Δ = 95° 28' 14"
R = 50.00'
L = 83.31'

T. S. STA. 214+15.54

972.53 | 972.89 | 973.25 | 973.78 | 974.12 | 974.29 | 974.30 | 974.16 | 973.89 | 973.85

973.56 | 973.25

4' | 12' | 4'

972.95 | 972.64 | 972.05

℄ SURVEY & CONST.
RELOCATED WORTHINGTON ROAD NORTH

214+00 | 215+00

VARIES

973.31 | 971.73

3.31' | 974.50

974.11 | 973.71 | 972.91 | 972.51

4.31' | 974.10 | 973.52 | 973.12 | 972.72 | 972.31 | 971.39

975.38 | 974.48 | 974.86 | 975.24 | 975.61 | 975.99 | 976.37 | 976.74 | 977.12 | 974.32

S.R. 37 STA. 396+27.06, 62' LT.
RELOCATED WORTHINGTON ROAD NORTH STA. 213+40.48, 62.03' RT.

Δ = 85° 09' 19"
R = 50.00'
L = 74.31'

HORIZONTAL SCALE IN FEET
0 10 20 40

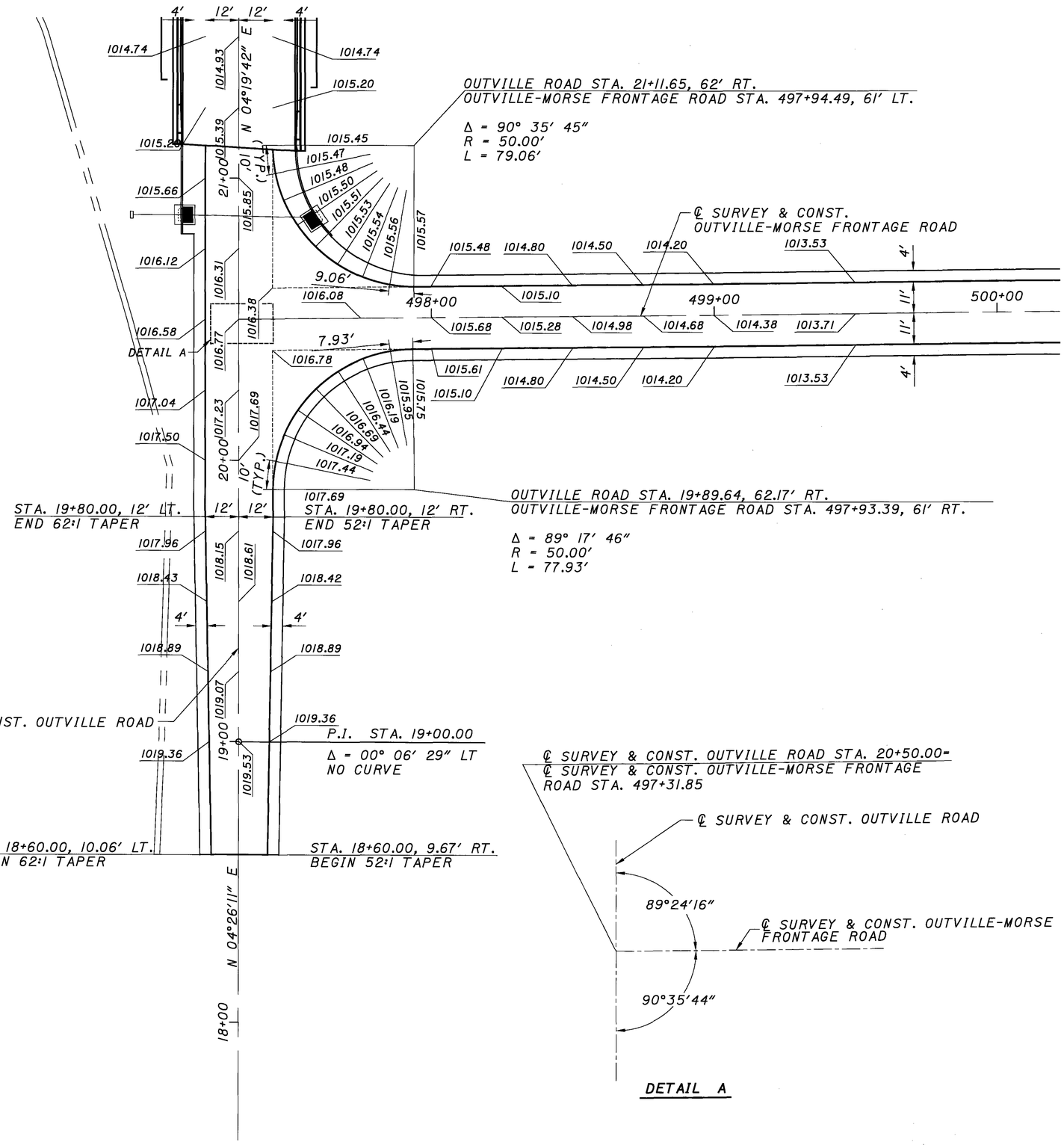
CALCULATED JMA
CHECKED BER

S.R. 37 AND RELOCATED WORTHINGTON ROAD NORTH INTERSECTION DETAIL

LIC-161-6.65
LIC-37-10.25

920
1349

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OUTVILLE ROAD AND OUTVILLE-MORSE FRONTAGE ROAD INTERSECTION DETAIL

CALCULATED JMA
CHECKED BER

HORIZONTAL SCALE IN FEET
0 10 20 40

LIC-161-6.65
LIC-37-10.25

921
1349

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559+00 560+00 561+00 562+00 563+00 564+00

℄ SURVEY & CONST. S.R. 37

EASTBOUND LANES

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

943.82 943.69 943.56 943.43 943.29 943.14 942.98 942.81 942.63 942.44 942.25 942.05 941.84

943.99 943.87 943.74 943.61 943.47 943.32 943.16 942.99 942.81 942.62 942.42 942.22 942.02 941.62 941.44

943.82 943.69 943.56 943.43 943.29 943.09 942.81 942.44 942.25 942.05 941.84 941.44

4' 11' 11' 4'

3.95' DETAIL A 6.01'

S 82° 24' 26" E

943.20 943.18 943.18 943.25 943.41 943.68 944.09 944.35 944.53 945.78 945.60 946.85 947.03 948.10 948.28 949.35 949.53

943.28 942.64 942.80 943.04 943.36 943.75 944.22 944.35 945.60 946.90 948.24 949.57 942.58

10' (TYP.) 10' (TYP.)

18+00

17+00

16+00

N 5° 54' 12" E

S.T. STA 17+11.60

MORSE ROAD STA. 18+05.26, 46' LT.
OUTVILLE-MORSE FRONTAGE ROAD STA. 561+14.97, 46' RT.

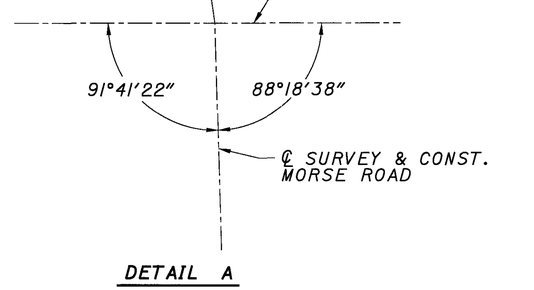
Δ = 88° 18' 38"
R = 35.00'
L = 53.95'

MORSE ROAD STA. 18+02.55, 46' RT.
OUTVILLE-MORSE FRONTAGE ROAD STA. 562+07.01, 46' RT.

Δ = 91° 41' 22"
R = 35.00'
L = 56.01'

℄ SURVEY & CONST. MORSE ROAD STA. 18+49.42=
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD STA. 561+59.63

℄ SURVEY & CONST. MORSE ROAD



DETAIL A

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JMA
CHECKED BER

MORSE ROAD AND OUTVILLE-MORSE FRONTAGE ROAD INTERSECTION DETAIL

LIC-161-6.65
LIC-37-10.25

922
1349

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SERVICE ROAD 10
CURVE DATA
P.I. STA. = 146+98.16
Δ = 24° 04′ 10″ (LT)
Dc = 20° 02′ 01″
R = 286.00′
T = 60.97′
L = 120.15′
E = 6.43′

STA. 146+73.10, 46.00′ LT.
Δ = 47° 19′ 27″
R = 35.00′
L = 28.91′

SERVICE ROAD 10
CURVE DATA
P.I. STA. = 145+26.74
Δ = 08° 44′ 01″ (RT)
Dc = 12° 00′ 42″
R = 477.00′
T = 36.43′
L = 72.71′
E = 1.39′

STA. 146+83.27, 52.70′ RT.
Δ = 312° 22′ 13″
R = 35.00′
L = 29.10′

S 81° 58′ 16″ E
S 73° 14′ 14″ E
N 82° 41′ 36″ E
PT STA. 145+63.03
PC STA. 146+37.10
PT STA. 147+57.34
STA. 146+12.46
17.10′ RT.
R=50′
146+00
147+00
℄ SURVEY & CONST. SERVICE ROAD 10
16′
11′
10′ TYP.
8.88
9.07′

1062.86 1062.84 1062.48 1062.29 1062.19 1062.07 1061.99 1061.94 1061.82 1061.70 1061.74 1061.76 1061.86 1061.84 1061.60 1061.34 1061.06 1061.24 1061.52 1061.78 1061.60 1061.93 1061.56 1061.34 1061.06 1061.79 1061.83 1061.84 1061.80 1061.77 1061.72 1061.81 1061.77 1061.80 1061.98 1062.04 1062.23 1062.42 1062.62 1062.87 1063.08 1063.32 1063.46 1063.33 1063.17 1063.02 1062.94 1062.53 1062.71 1062.30 1062.08 1062.26 1062.02 1062.31 1062.06 1062.23 1062.49 1062.66 1062.48 1062.98 1063.12 1063.38 1062.94 1062.68 1062.43 1062.05 1062.28 1062.76

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CALCULATED AE
CHECKED JMA

0 5 10 20
HORIZONTAL SCALE IN FEET

CUL-DE-SAC PAVEMENT DETAILS
SERVICE ROAD 10

LIC-161-6.65
LIC-37-10.25

922A
1349

STA. 241+78.10, 46.00' LT.
△ = 57°14'10"
R = 35.00'
L = 34.96'

℄ SURVEY & CONST.
SERVICE ROAD 11

4.96'

10' TYP.

R 50.0'

16.0'

16.0'

11.0'

11.0'

16.0'

16.0'

241+00

242+00

243+00

STA. 241+78.10, 46.00' RT.
△ = 57°14'10"
R = 35.00'
L = 34.96'

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED AE
CHECKED JMA

CUL-DE-SAC PAVEMENT DETAILS
SERVICE ROAD 11

LIC-161-6.65
LIC-37-10.25

923
1349

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℄ SURVEY & CONST.
OUTVILLE - MORSE
FRONTAGE RD.

583+00

S 76°33'53"E

584+00

POT STA. 584+40.00

923.45 | 923.42 | 923.44 | 923.50 | 923.67 | 923.78 | 924.03 | 923.90 | 923.60 | 923.73 | 923.85 | 923.83 | 923.82 | 923.84 | 923.91 | 923.83 | 923.97 | 923.69

923.63 | 923.60 | 923.61

11'

11'

923.45 | 923.42 | 923.44 | 923.50

923.50 | 923.51 | 923.49 | 923.42 | 923.31 | 923.17 | 923.14

10' TYP.

2.09'

R = 50.0'

11.0'

16.0'

16.0'

16.0'

923.79 | 923.73 | 923.53 | 923.54 | 923.48 | 923.37 | 923.38 | 923.28 | 923.22 | 923.21 | 923.05 | 923.03 | 922.97 | 922.92 | 922.77 | 922.79 | 922.70

923.47 | 923.60 | 923.22 | 923.34 | 922.96 | 923.09 | 922.86 | 922.76 | 922.83 | 922.68 | 922.64 | 922.62 | 922.59 | 922.57 | 922.58 | 922.62

STA. 583+01.47, 46.00' RT.
Δ = 85°16'18"
R = 35.00'
L = 52.09'

RAD. POINT
STA. 583+86.18, 38.99' RT

HORIZONTAL
SCALE IN FEET
0 5 10 20

CALCULATED AE
CHECKED BER

CUL-DE-SAC PAVEMENT DETAILS
OUTVILLE MORSE FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

924
1349

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LEGEND

(L) STANDARD LONGITUDINAL JOINT
(S) LONGITUDINAL JOINT WITHOUT TIE BARS
(C) TRANSVERSE CONTRACTION JOINT
(E) EXPANSION JOINT

400+00
401+00
402+00
403+00
STA. 400+20.00, LT. & RT.
END ASPHALT PAVEMENT
BEGIN CONCRETE PAVEMENT
℄ SURVEY & CONST. S.R 37
℄ RAMP I
℄ RAMP J
450+00
451+00
452+00
453+00
6'
16'
13'
3'
15' TYP.
12'
10'
P.T. STA. 449+62.85
P.C. STA. 452+73.30

CALCULATED FJA
CHECKED JMA

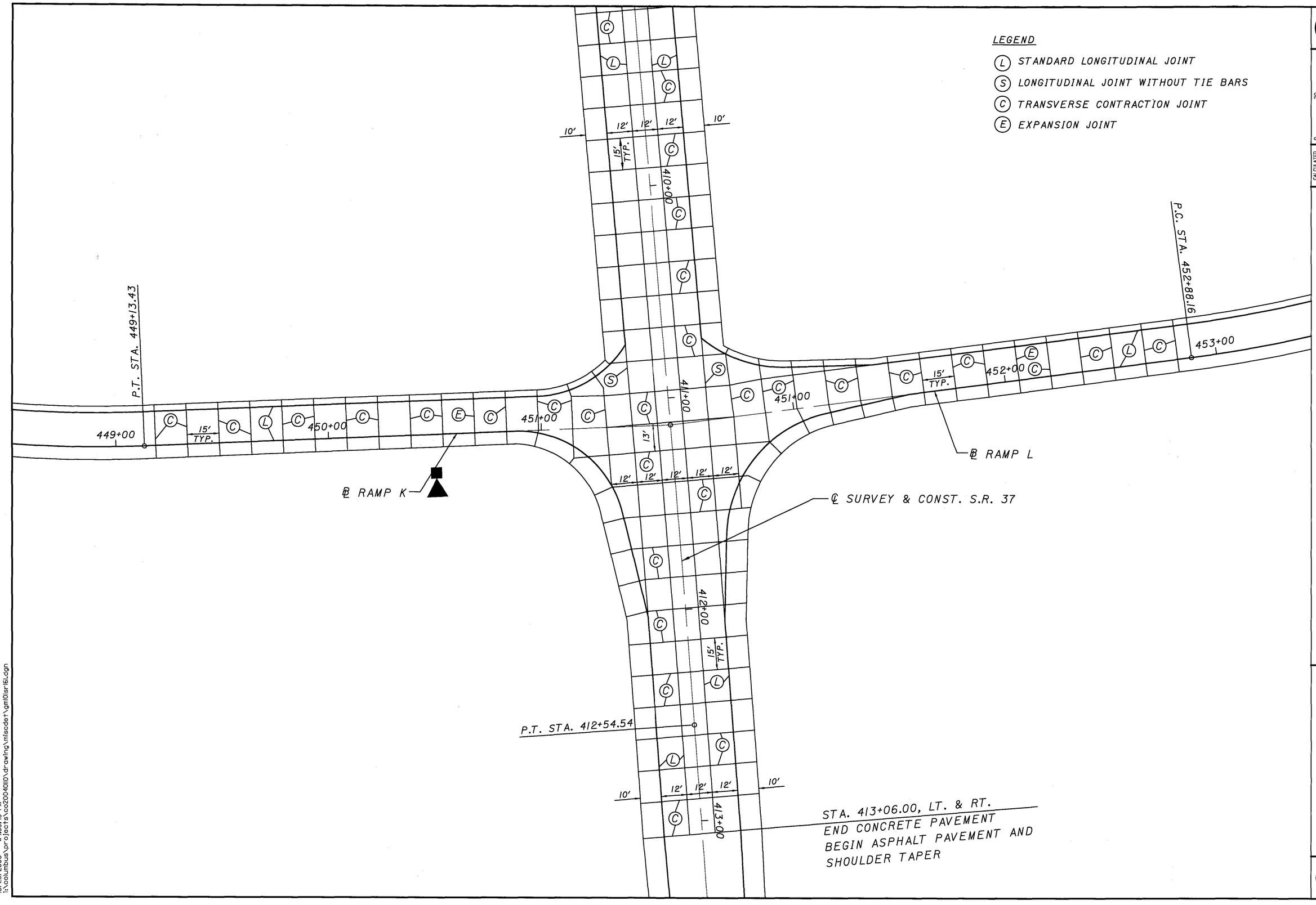
HORIZONTAL SCALE IN FEET
0 10 20 40

RAMPS I & J PAVEMENT JOINT DETAILS

LIC-161-6.65
LIC-37-10.25

925
1349

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HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED FJA
CHECKED JMA

PAVEMENT JOINT DETAIL

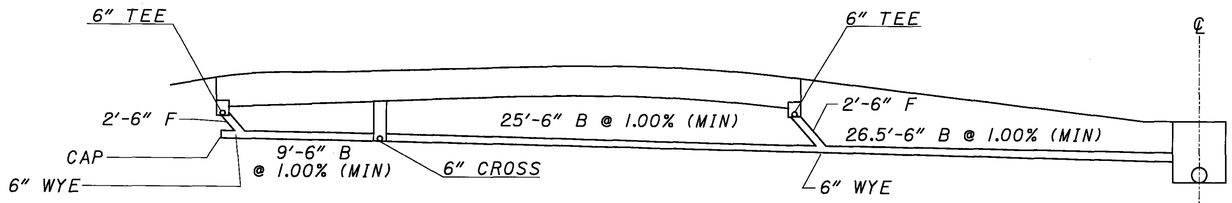
RAMPS K & L

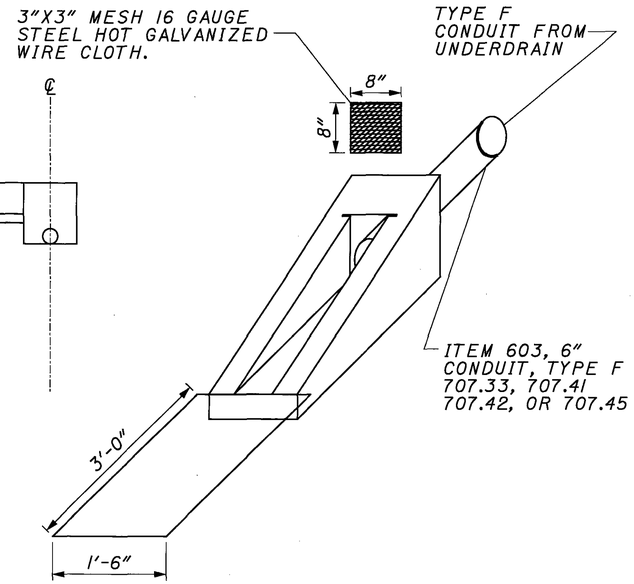
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LIC-37-10.25

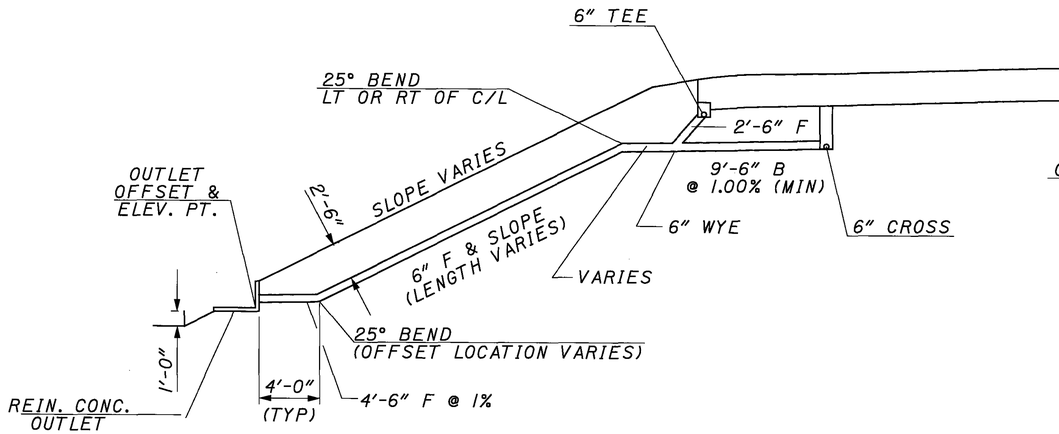
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1349

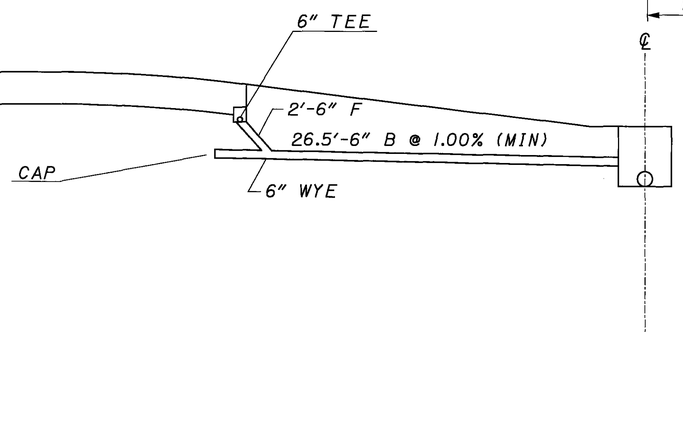
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FOR DETAILED ELEVATIONS OF UNDERDRAINS SEE SHEETS 138-148.

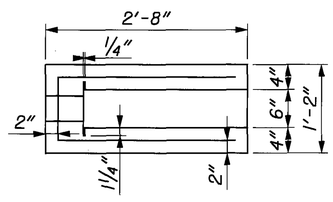




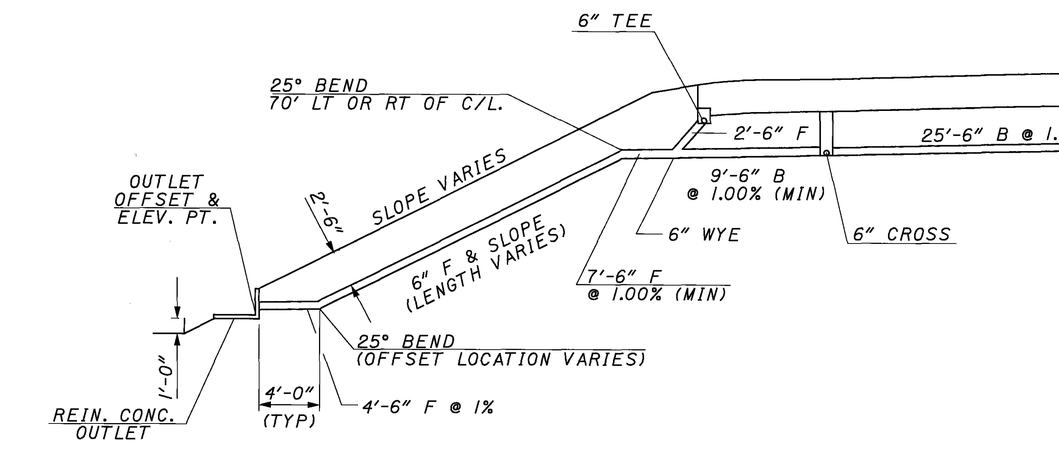


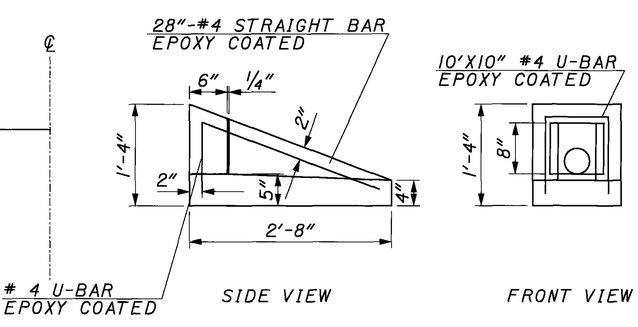


NOTE: THE SOD SHALL BE IN ACCORDANCE WITH ITEM 660 AND STAKED AT EACH CORNER APPROXIMATELY 3 INCHES IN FROM THE EDGE.



TOP VIEW





ITEM 604- PRECAST REINFORCED CONCRETE OUTLET

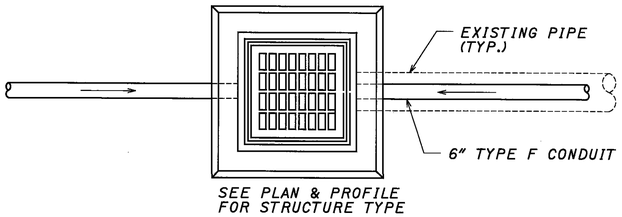
CALCULATED CLB
CHECKED FJA

UNDERDRAIN TYPICAL PROFILE DETAILS

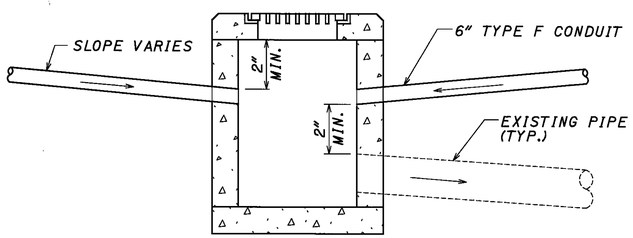
LIC-161-6.65
LIC-37-10.25

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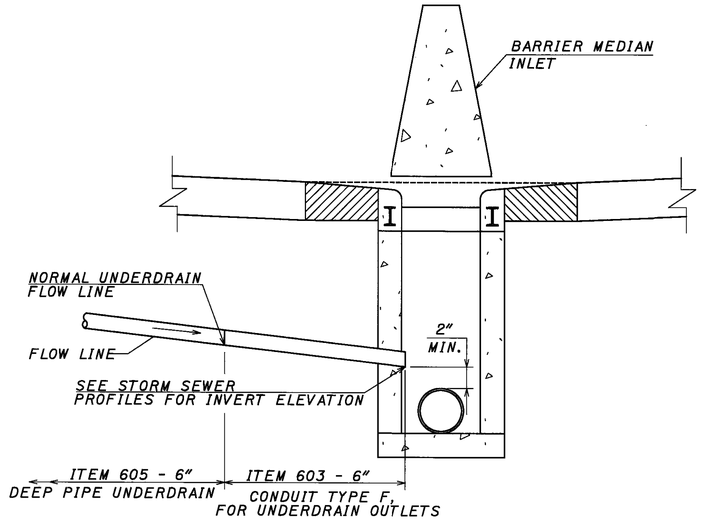


TOP VIEW

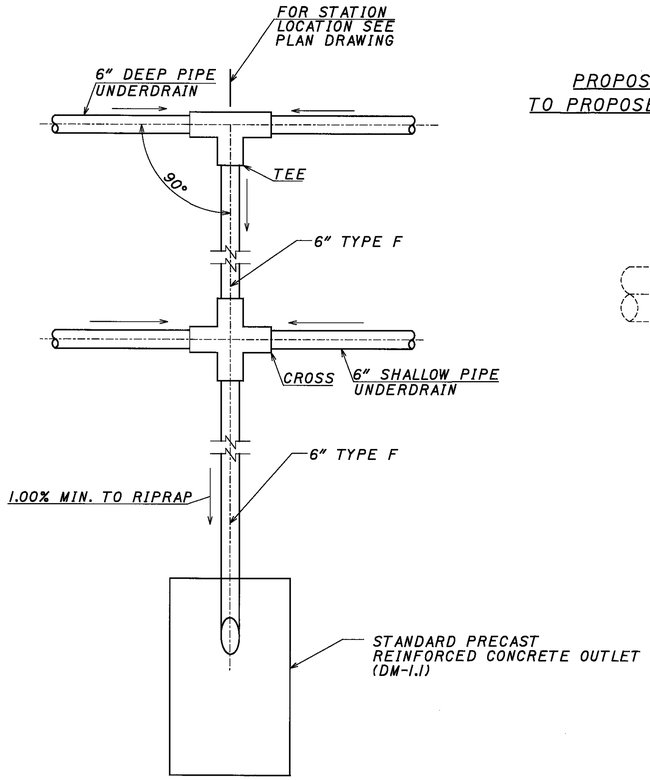


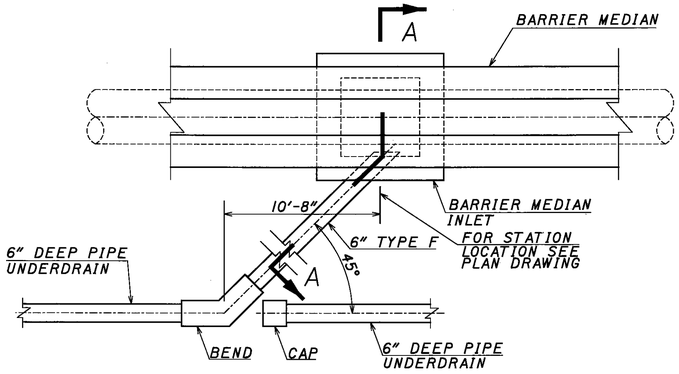
CROSS-SECTION

OUTLET DETAIL TO CATCH BASIN OR MANHOLE

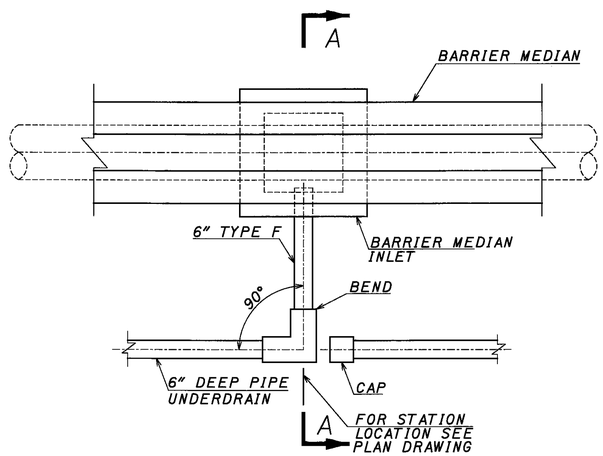


SECTION A-A





PROPOSED UNDERDRAIN OUTLET
TO PROPOSED BARRIER MEDIAN OUTLET



PROPOSED UNDERDRAIN OUTLET
TO PROPOSED BARRIER MEDIAN OUTLET

CALCULATED CLB
CHECKED FJA

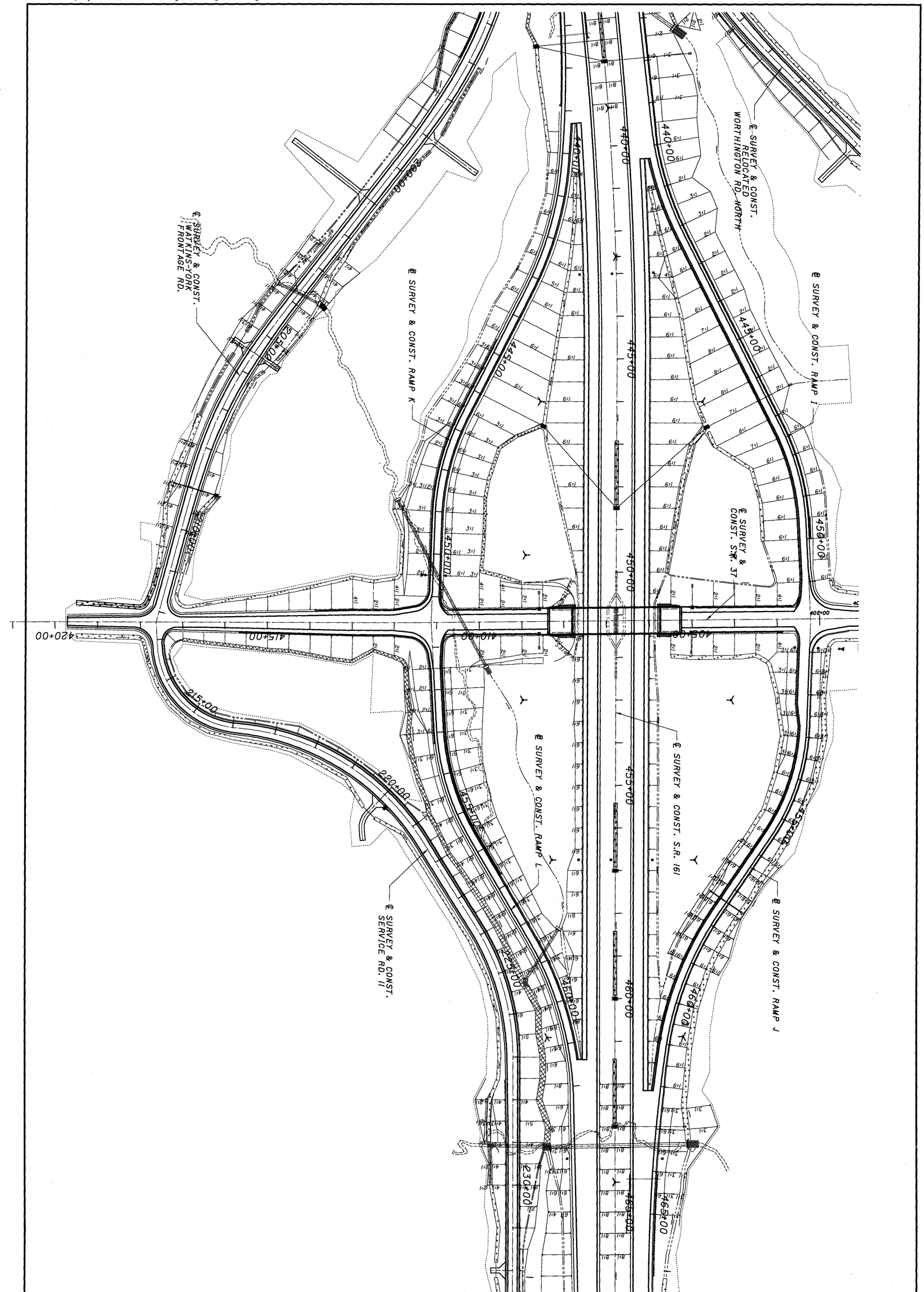
UNDERDRAIN DETAILS

LIC-161-6.65
LIC-37-10.25

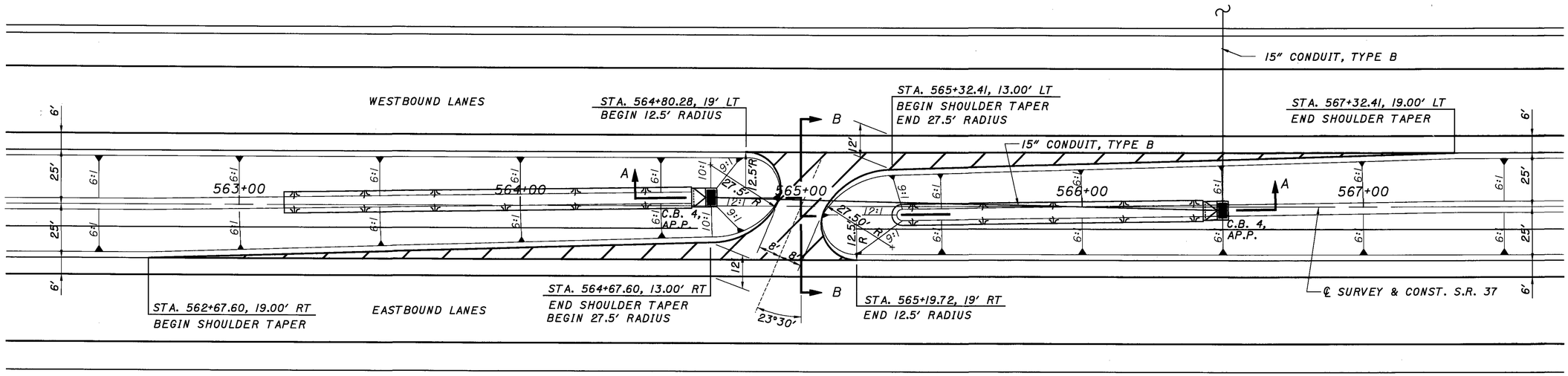
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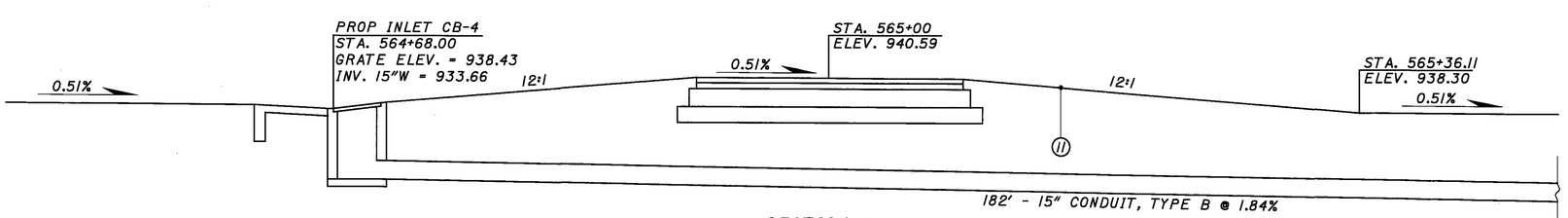
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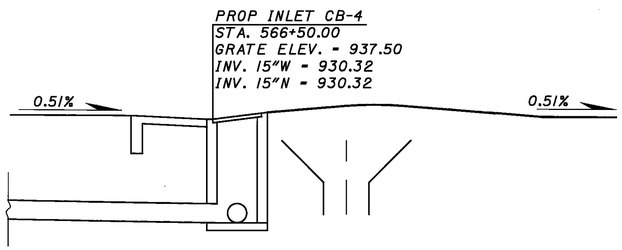
929 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**GRADING PLAN** **INTERCHANGE DETAIL**	CALCULATED TDF CHECKED CSR	0 100 50 200 HORIZONTAL SCALE IN FEET

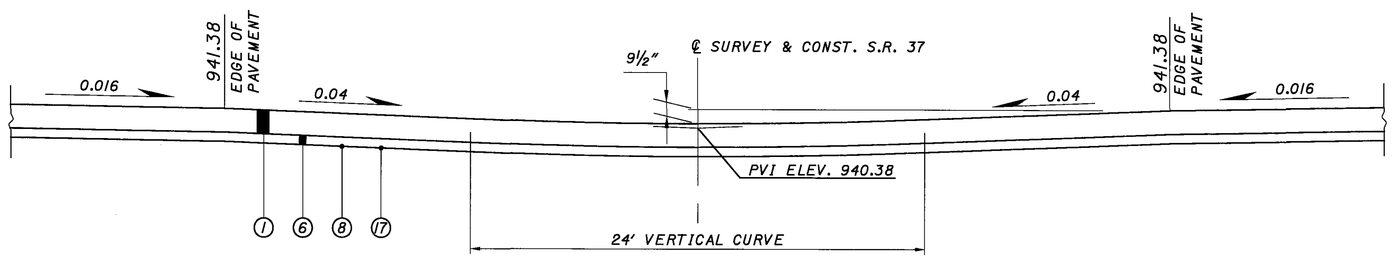


MEDIAN CROSSOVER PAVEMENT



SECTION A-A
(NOT TO SCALE)





SECTION B-B
(NOT TO SCALE)

LEGEND

(1) ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)
(6) ITEM 304 - 6" AGGREGATE BASE
(8) ITEM 204 - SUBGRADE COMPACTION
(11) ITEM 659 - SEEDING AND MULCHING
(17) ITEM 204 - PROOF ROLLING

MEDIAN CROSSOVER QUANTITIES

	203	204	204	304	659	880
	EXCAVATION	SUBGRADE COMPACTION	PROOF ROLLING	6" AGGREGATE BASE	SEEDING AND MULCHING	ASPHALT CONCRETE (7 YEAR WARRANTY)
	CU YD	SQ YD	HOUR	CU YD	SQ YD	SQ YD
STA. 562+67.60 TO STA. 565+19.72 E.B. SHOULDER	145	130	0.04	19	361	27
STA. 564+80.28 TO STA. 567+32.41 W.B. SHOULDER	145	130	0.04	19	361	27
STA. 564+67.60 TO STA. 565+32.41 MEDIAN CROSSOVER	103	82	0.02	13	69	19
SUB-TOTALS	393	342	0.10	51	791	73
TOTALS CARRIED TO GENERAL SUMMARY	393	342	0.10	51	791	73

HORIZONTAL SCALE IN FEET
0 10 20 40

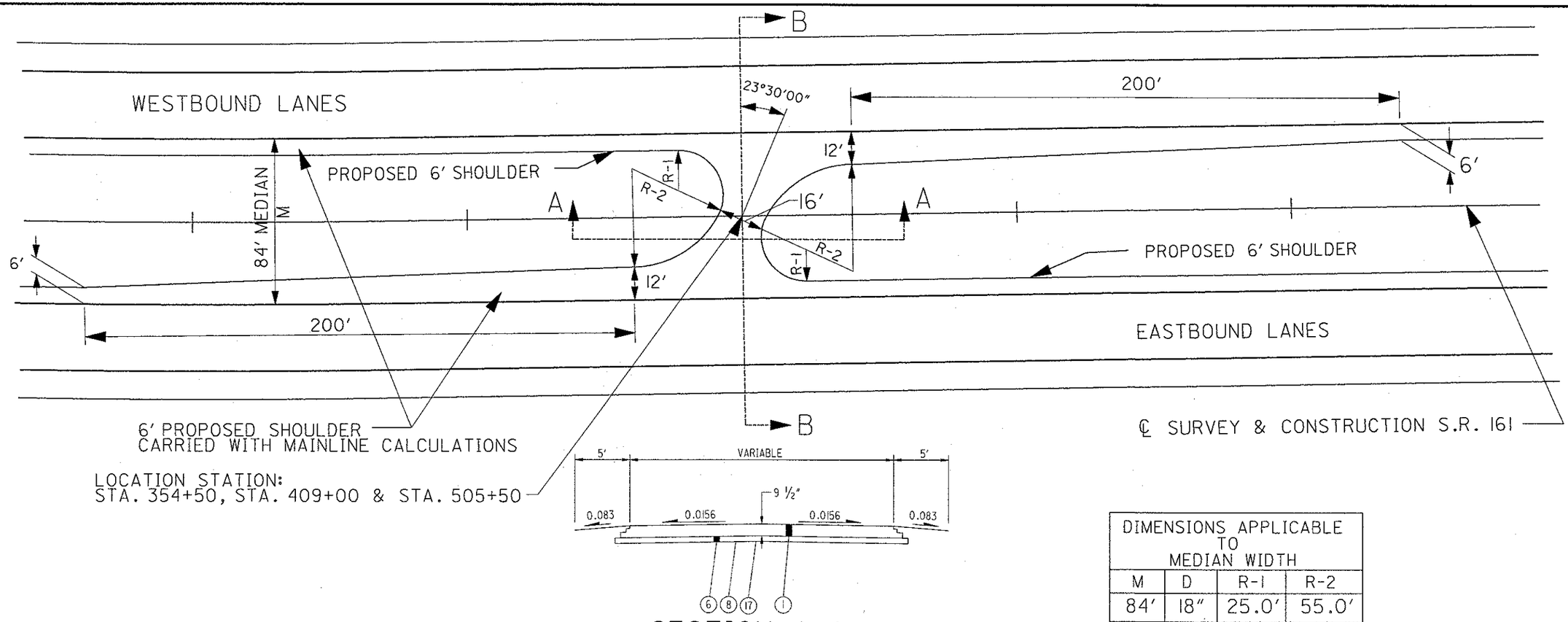
CALCULATED FJA
CHECKED JMA

U-TURN MEDIAN OPENINGS - STA. 565+00

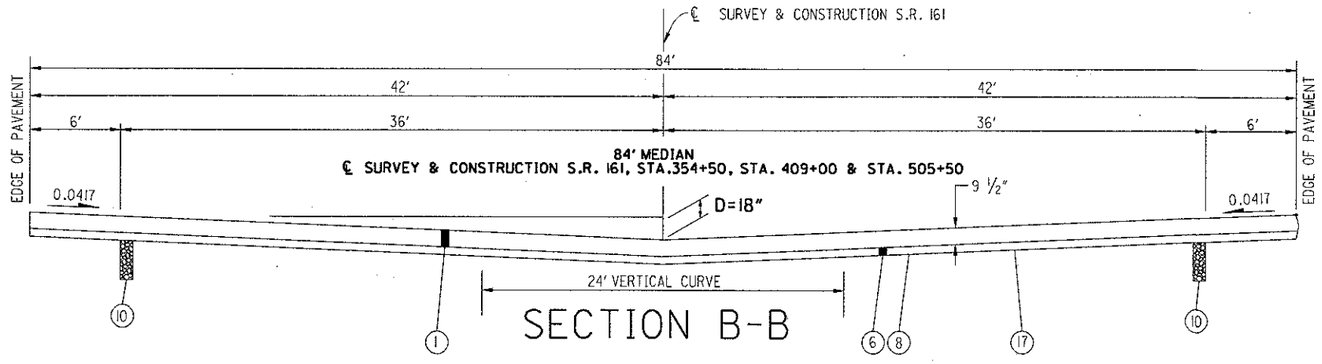
LIC-161-6.65
LIC-37-10.25

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1349

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SECTION A-A



SECTION B-B

DIMENSIONS APPLICABLE TO MEDIAN WIDTH			
M	D	R-1	R-2
84'	18"	25.0'	55.0'

LEGEND

1. *ITEM 880 - ASPHALT CONCRETE (7 YEAR WARRANTY)*
2. *ITEM 448 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22*
3. *ITEM 302 - 8" ASPHALT CONCRETE BASE, PG64-22*
4. *ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE*
5. *ITEM 448 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M*
6. *ITEM 304 - 6" AGGREGATE BASE*
7. *ITEM 407 - TACK COAT*
8. *ITEM 204 - SUBGRADE COMPACTION*
9. *ITEM 605 - 6" BASE PIPE UNDERDRAINS (18" DEPTH), 707.31*
10. *ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS (30" DEPTH), 707.31*
11. *ITEM 659 - SEEDING AND MULCHING*
12. *ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22*
13. *ITEM 606 - GUARDRAIL, TYPE 5*
14. *ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT*
15. *STANDARD LONGITUDINAL JOINT*
16. *ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T= 15"*
17. *ITEM 204 - PROOF ROLLING*
18. *ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22*
19. *ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22*
20. *ITEM 304 - 8" AGGREGATE BASE*
21. *ITEM 304 - AGGREGATE BASE (THICKNESS VARIABLE)*
22. *ITEM 622 - CONCRETE BARRIER, TYPE A*
23. *ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE*
24. *ITEM 301 - 3¾" ASPHALT CONCRETE BASE, TYPE 1, PG64-22 (DRIVEWAYS)*
25. *ITEM 448 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)*
26. *ITEM 622 - CONCRETE BARRIER, TYPE C*
27. *ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=12"*
28. *ITEM 605 - 12" AGGREGATE DRAIN (8" DEPTH)*
29. *ITEM 609 - CURB, TYPE 6*
30. *ITEM 606 - GUARDRAIL MISC.: TENSIONED CABLE WITH CONCRETE FOUNDATION LINE POST (SOCKETED)*
31. *ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP*
32. *ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, T=17"*
33. *ITEM 203 - GRANULAR MATERIAL, TYPE B*

MEDUTURN.DGN

CALCULATED

CHECKED

PROPOSED TYPICAL SECTION MEDIAN U-TURN OPENING STA. 354+50, STA. 409+00 & STA. 505+50

LIC-161-6.65
LIC-37-10.25

930A
1349

CALCULATED BER
CHECKED FJA

DRIVEWAY PROFILES

172+00.00 RT (WATKINS-YORK FRONTAGE ROAD)

151+55.00 RT (WATKINS-YORK FRONTAGE ROAD)

145+50.00 RT (WATKINS-YORK FRONTAGE ROAD)

141+94.00 RT (WATKINS-YORK FRONTAGE ROAD)

129+00.00 RT (WATKINS-YORK FRONTAGE ROAD)

115+50.00 RT (WATKINS-YORK FRONTAGE ROAD)

104+50.00 RT (WATKINS-YORK FRONTAGE ROAD)

632+50.00 LT (S.R. 37)

632+50.00 RT (S.R. 37)

LIC-161-6.65
LIC-37-10.25

931
1349

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CALCULATED BER
CHECKED FJA

DRIVEWAY PROFILES

205+50.00 RT (WATKINS-YORK FRONTAGE ROAD)

205+50.00 LT (WATKINS-YORK FRONTAGE ROAD)

201+00.00 RT (WATKINS-YORK FRONTAGE ROAD)

199+00.00 LT (WATKINS-YORK FRONTAGE ROAD)

188+20.00 RT (WATKINS-YORK FRONTAGE ROAD)

184+75.00 RT (WATKINS-YORK FRONTAGE ROAD)

LEFT EDGE OF PAVEMENT

RIGHT EDGE OF PAVEMENT

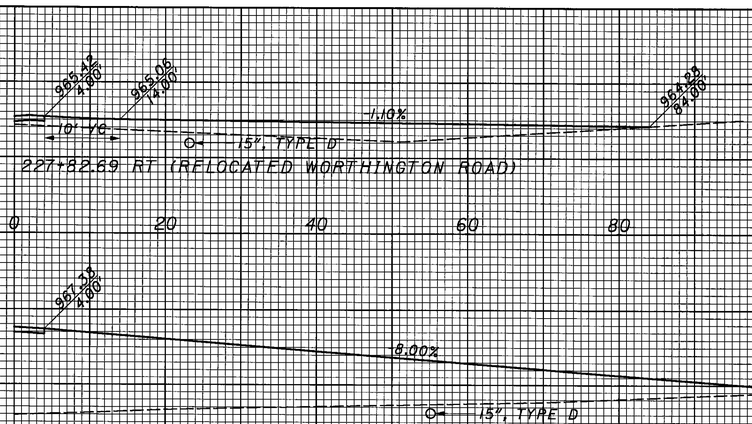
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LIC-37-10.25

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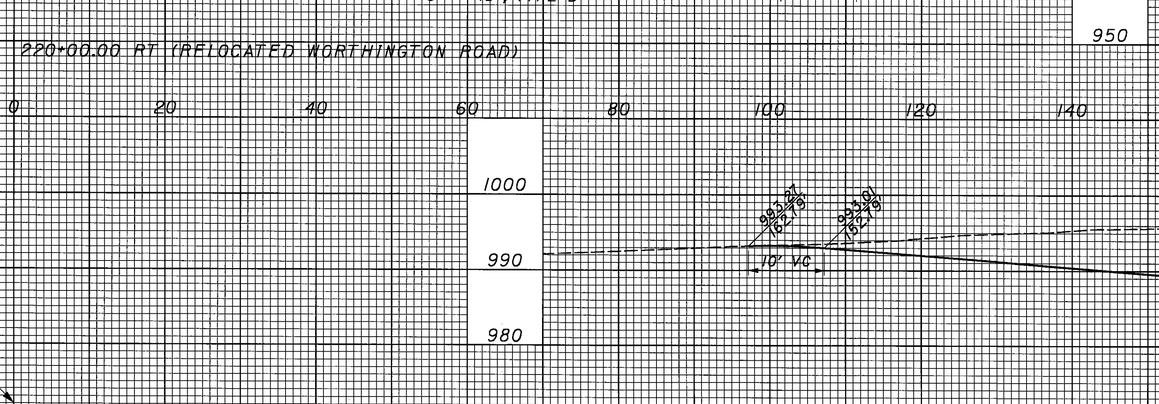
CALCULATED BER
CHECKED FJA

DRIVEWAY PROFILES

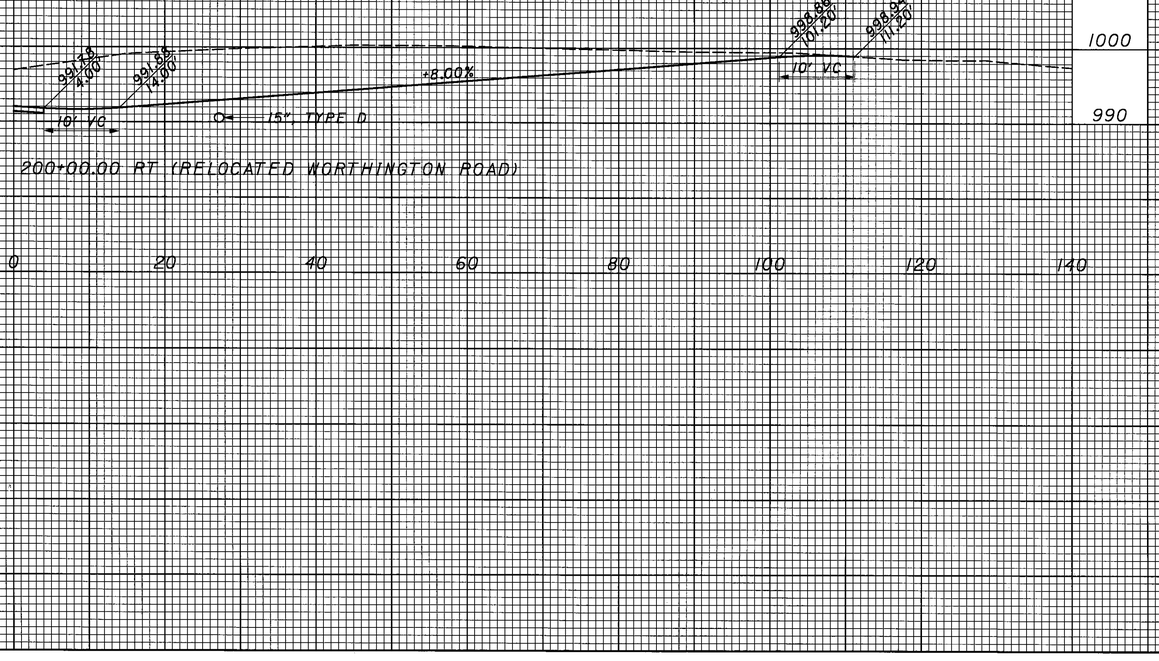
227+82.69 RT (RELOCATED WORTHINGTON ROAD)



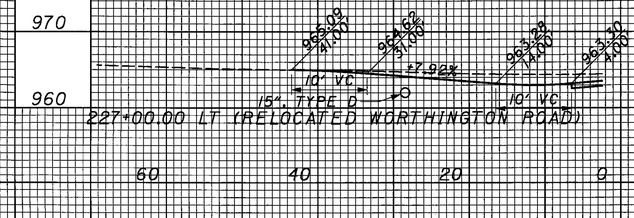
220+00.00 RT (RELOCATED WORTHINGTON ROAD)



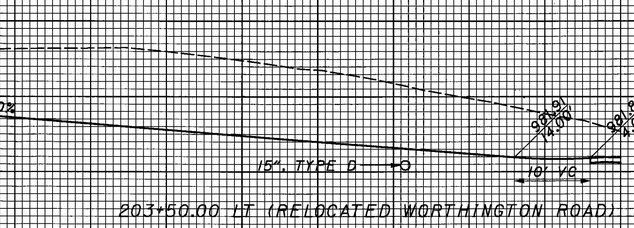
200+00.00 RT (RELOCATED WORTHINGTON ROAD)



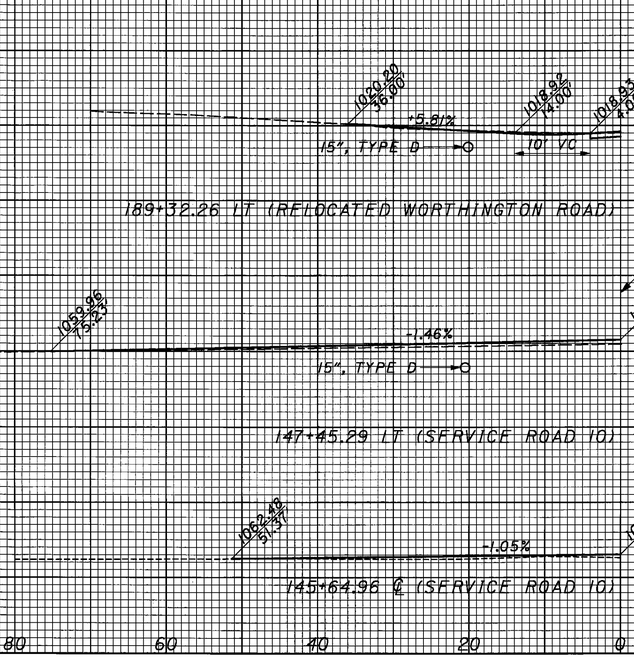
227+00.00 LT (RELOCATED WORTHINGTON ROAD)



203+50.00 LT (RELOCATED WORTHINGTON ROAD)



189+32.26 LT (RELOCATED WORTHINGTON ROAD)



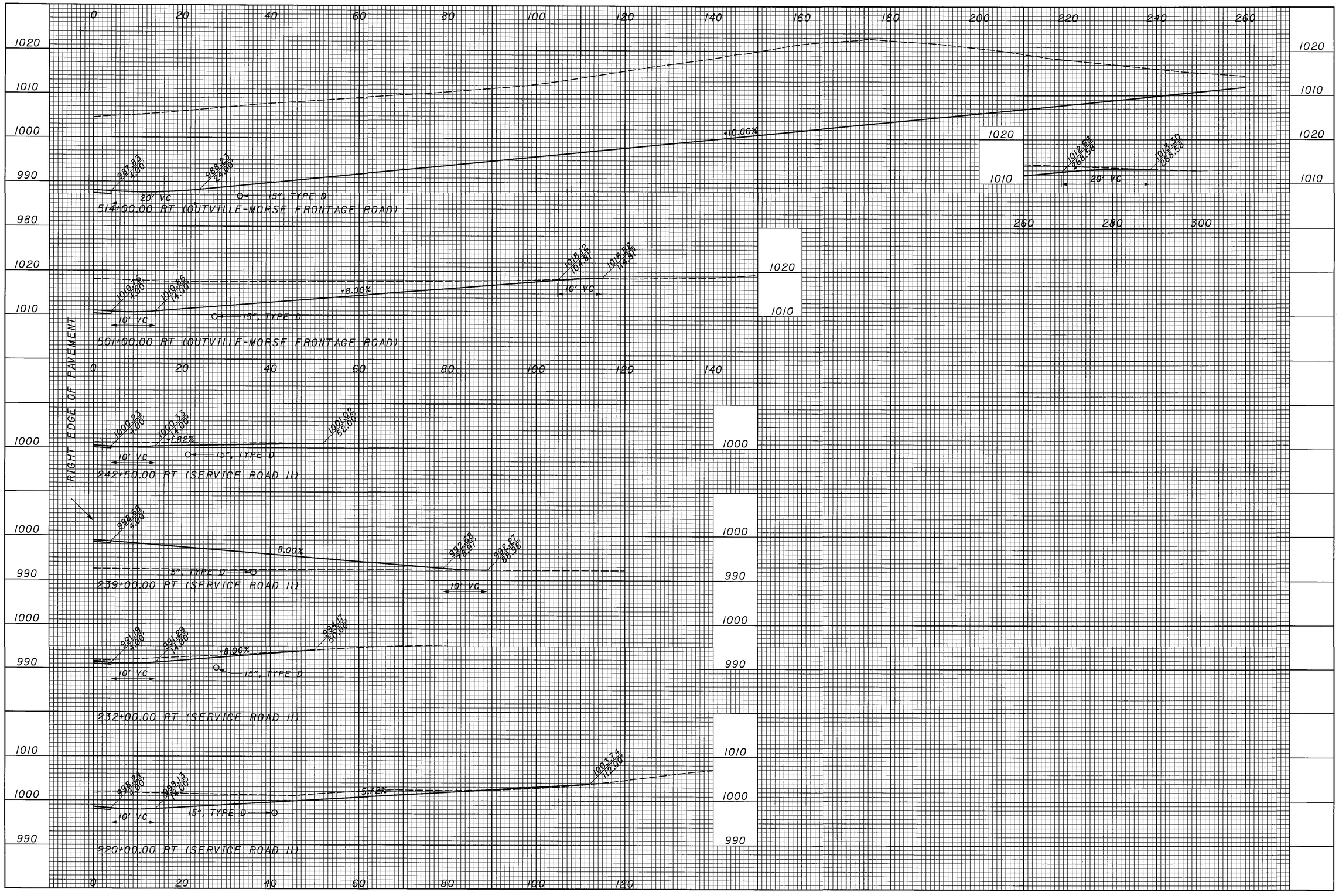
147+45.29 LT (SERVICE ROAD 10)

145+64.96 ℄ (SERVICE ROAD 10)

LIC-161-6.65
LIC-37-10.25

933
1349

tduffney
10/26/2006 02:59:21 PM
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CALCULATED BER
CHECKED FJA

DRIVEWAY PROFILES

LIC-161-6.65
LIC-37-10.25

934
1349

tduffney
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CALCULATED BER
CHECKED FJA

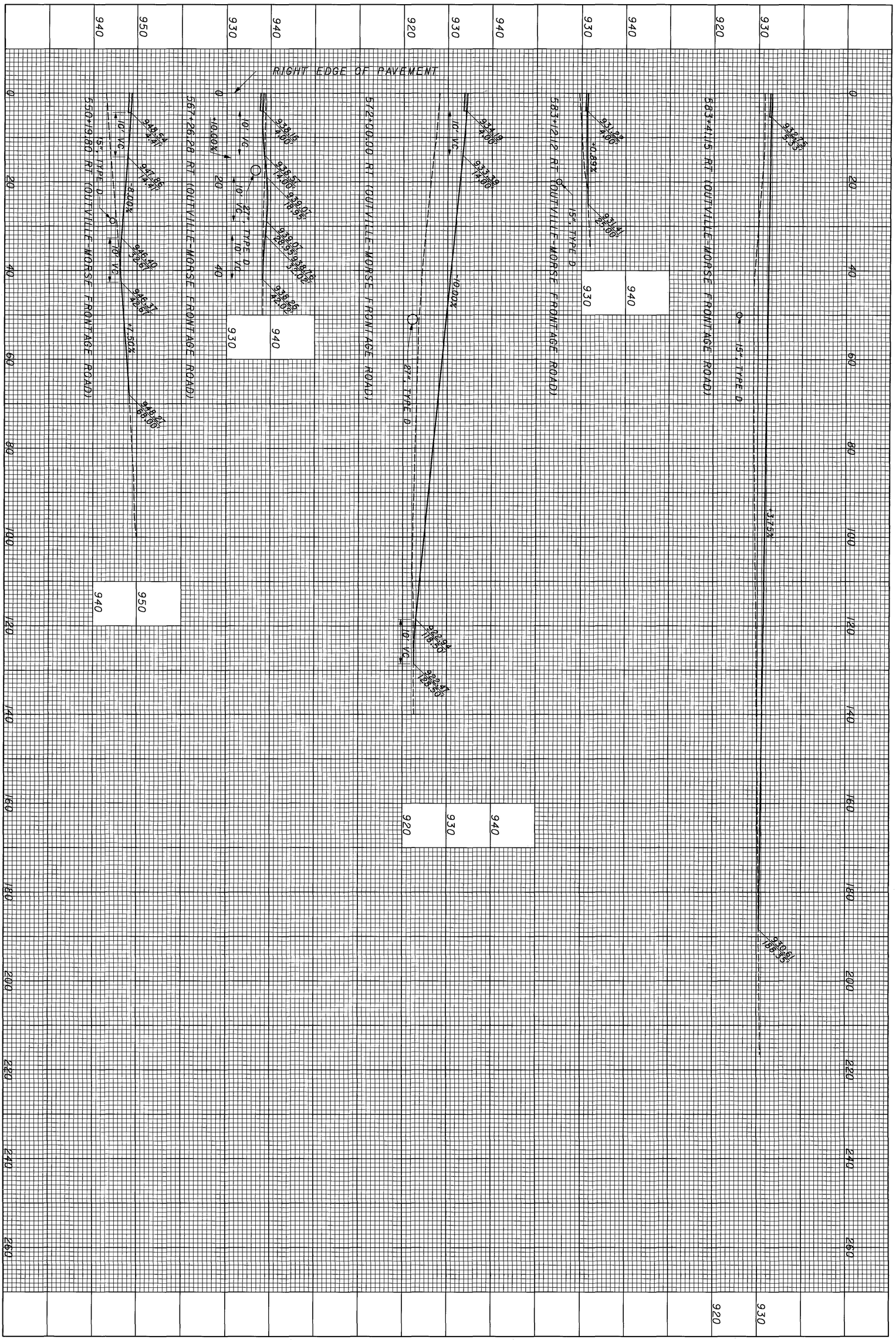
DRIVEWAY PROFILES

LIC-161-6.65
LIC-37-10.25

935
1349

tduffney
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tduffney
10/26/2006 02:59:21 PM
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936 / 1349	LIC-161-6.65 LIC-37-10.25	DRIVEWAY PROFILES	CALCULATED BER CHECKED FJA

DRIVEWAY PROFILES

CALCULATED BER
CHECKED FJA

LEFT EDGE OF PAVEMENT

334+50.00 LT (C.R. 539A)

329+50.00 LT (C.R. 539A)

321+25.00 LT (C.R. 539A)

309+00.00 LT (C.R. 539A)

+12.00%

+6.91%

10' VC

20' VC

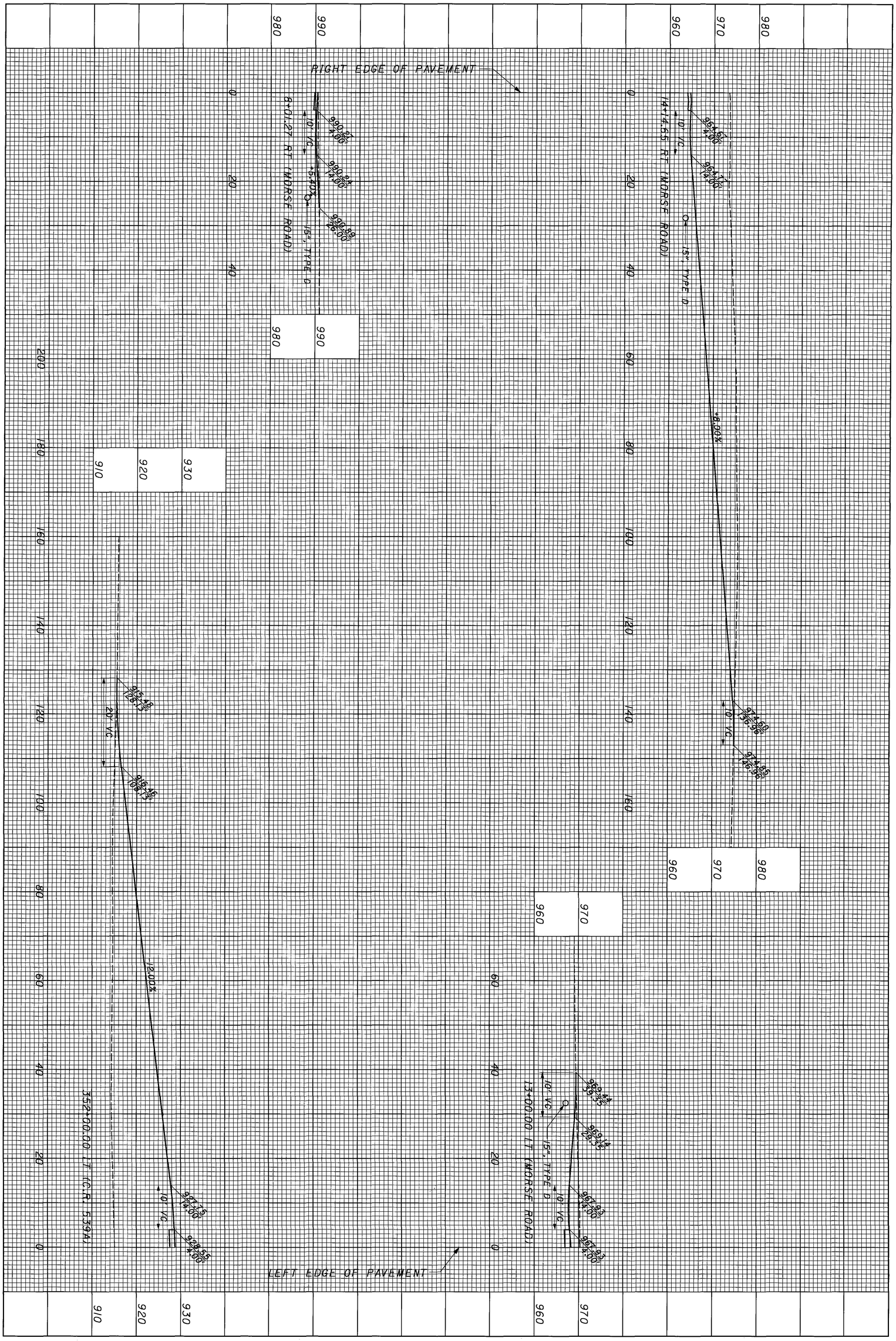
15", TYPE D

LIC-161-6.65
LIC-37-10.25

937
1349

tduffney
10/25/2006 04:33:15 PM
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938 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**DRIVEWAY PROFILES**	CALCULATED BER CHECKED FJA

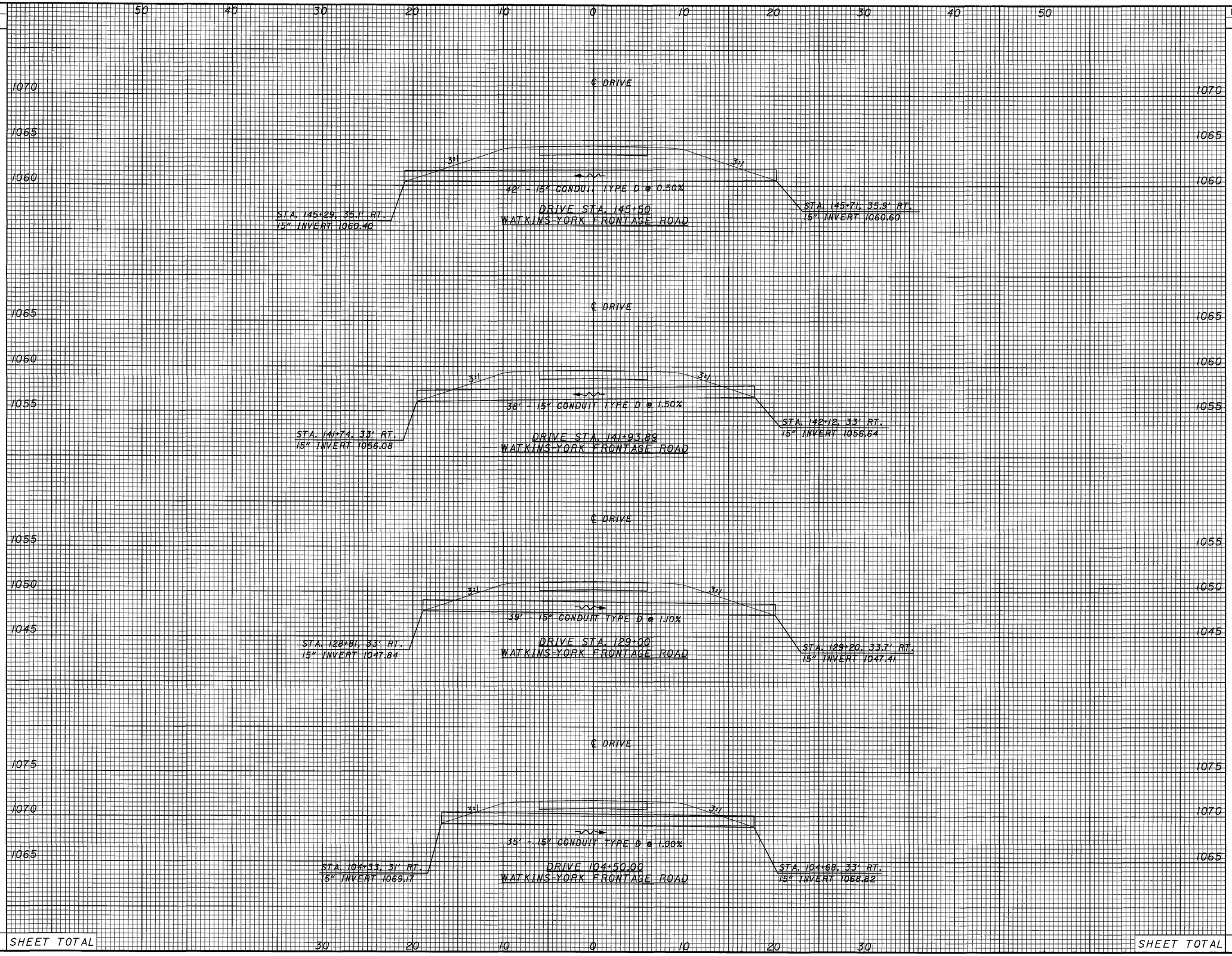
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW
CHECKED FJA

DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25



SHEET TOTAL

SHEET TOTAL

938A
1349

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SEEDING	
END WIDTH	SQ. YDS.

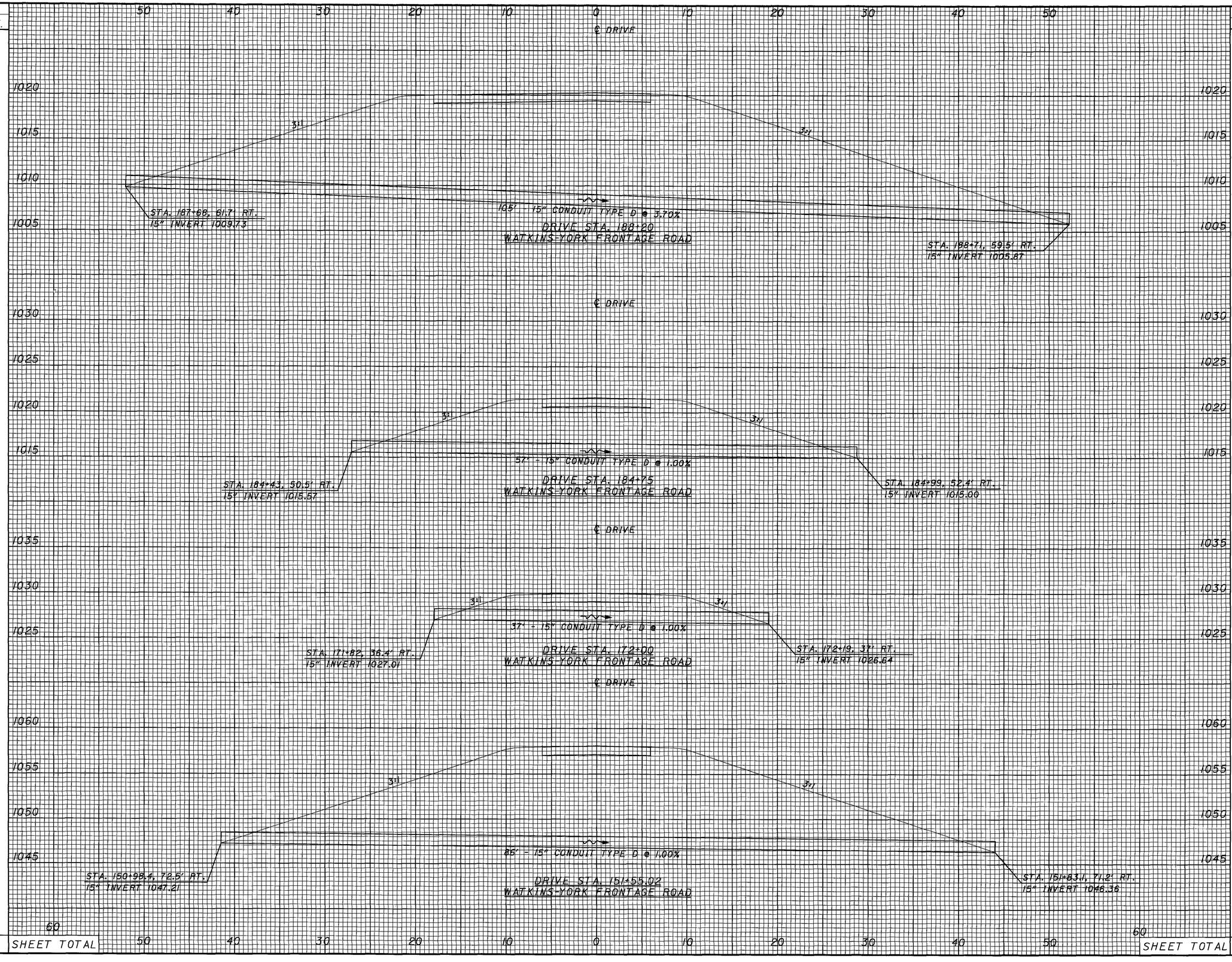
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW
CHECKED FJA

DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

939
1349



SHEET TOTAL

SHEET TOTAL

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SEEDING	
END WIDTH	SQ. YDS.

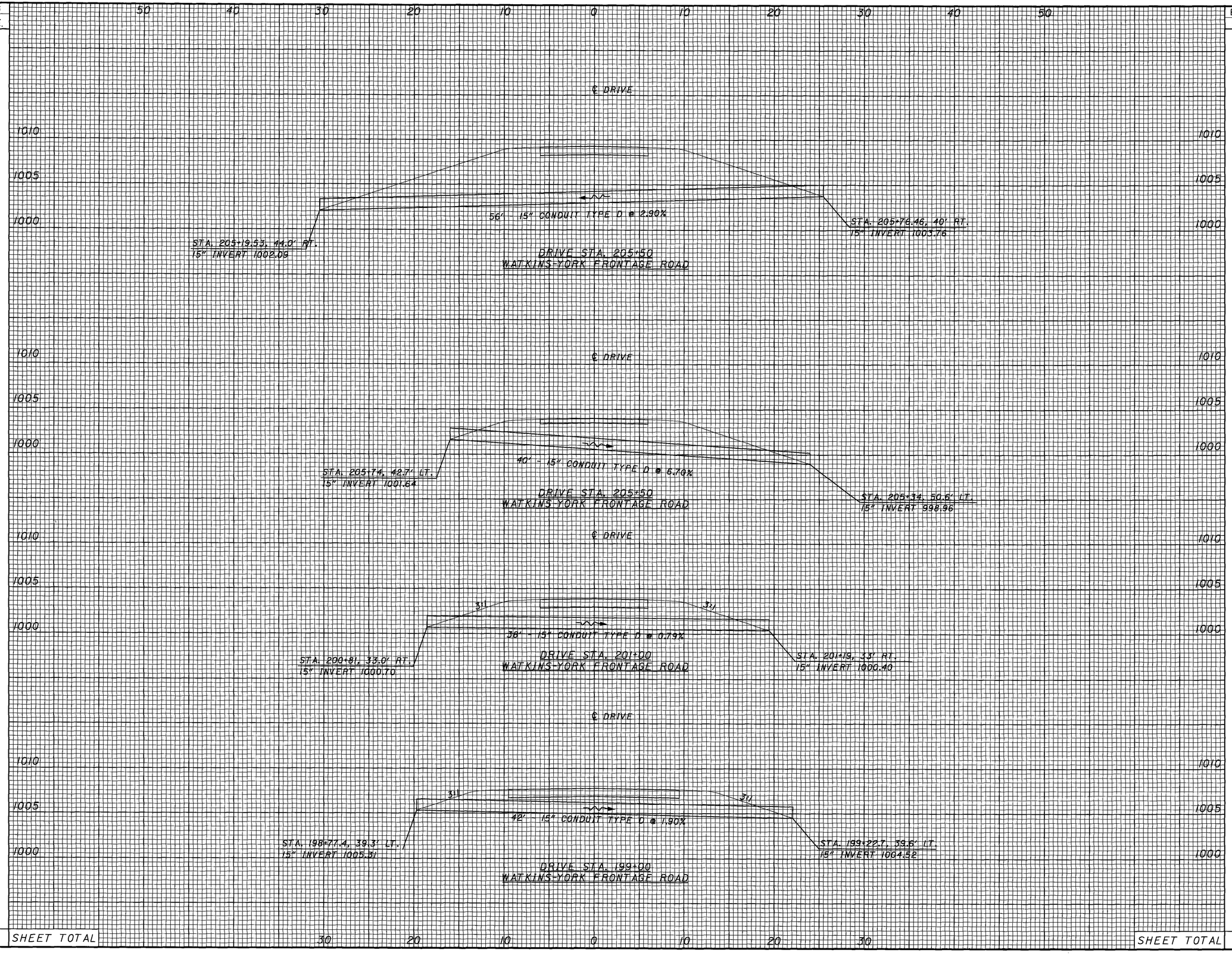
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW
CHECKED FJA

DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

940
1349



SHEET TOTAL

SHEET TOTAL

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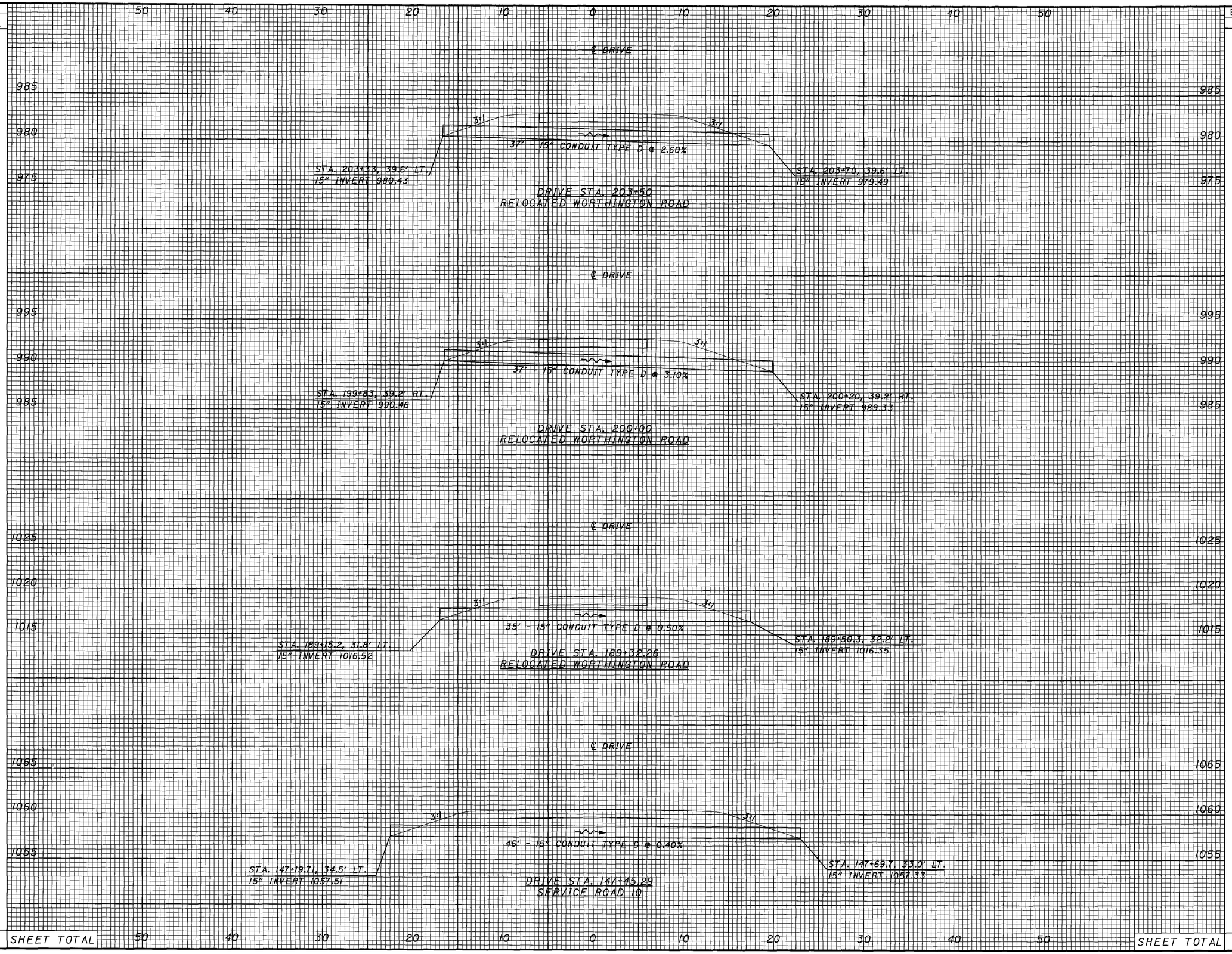
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW
CHECKED FJA

DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25



941
1349

+duffney
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SEEDING		END AREA		VOLUME		CALCULATED	CHECKED
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	ZTW	FJA

50 40 30 20 10 0 10 20 30 40 50

1000 995 990 970 965 960 970 965 960 955 950

℄ DRIVE

3:1 3:1

37' - 15" CONDUIT TYPE D @ 3.00%

STA. 219+81.2, 56.1' RT.
15" INVERT 997.10

DRIVE STA. 220+00
SERVICE ROAD II

STA. 220+22.2, 56' RT.
15" INVERT 996.00

℄ DRIVE

3:1 3:1

44' - 15" CONDUIT TYPE D @ 0.40%

STA. 227+61.5, 35.5' RT.
15" INVERT 961.21

DRIVE STA. 227+82.69
RELOCATED WORTHINGTON ROAD

STA. 228+03.9, 35.3' RT.
15" INVERT 961.38

℄ DRIVE

3:1 3:1

35' - 15" CONDUIT TYPE D @ 0.50%

STA. 226+82.2, 40.9' LT.
15" INVERT 961.58

DRIVE STA. 227+00
RELOCATED WORTHINGTON ROAD

STA. 227+18.8, 40.8' LT.
15" INVERT 961.41

℄ DRIVE

3:1 3:1

64' - 15" CONDUIT TYPE D @ 0.45%

STA. 219+66.3, 68.9' RT.
15" INVERT 955.74

DRIVE STA. 220+00
RELOCATED WORTHINGTON ROAD

STA. 220+33.4, 69.3' RT.
15" INVERT 955.45

SHEET TOTAL 50 40 30 20 10 0 10 20 30 40 50 SHEET TOTAL

DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

942
1349

tduffney
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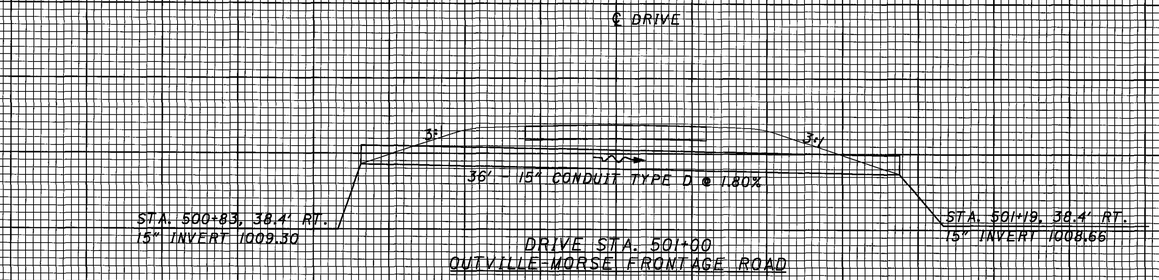
SEEDING	
END WIDTH	SQ. YDS.

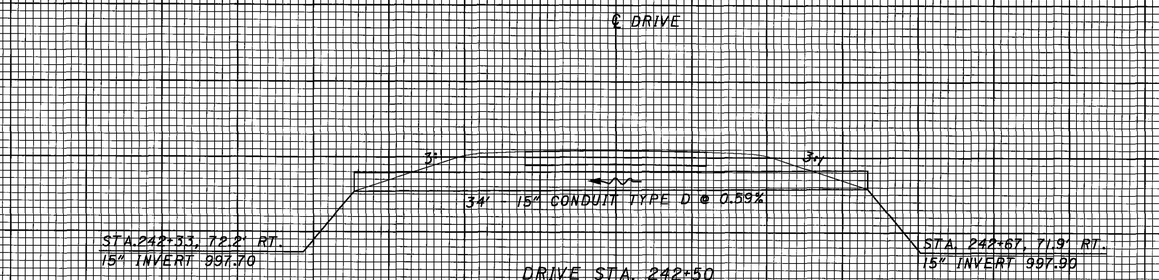
END AREA		VOLUME	
CUT	FILL	CUT	FILL

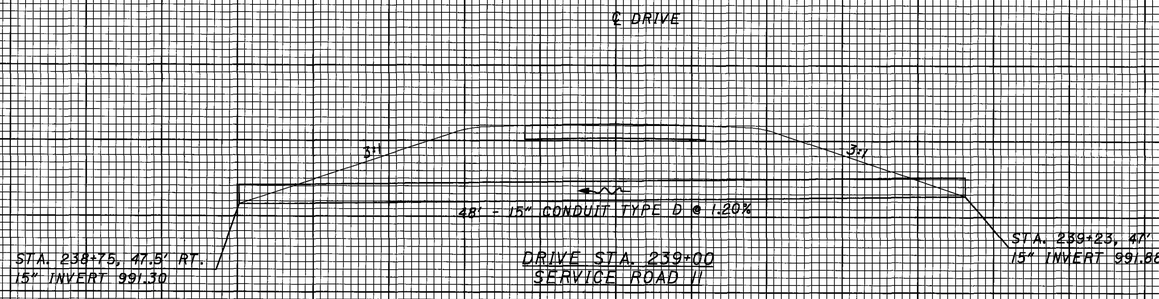
CALCULATED ZTW
CHECKED FJA

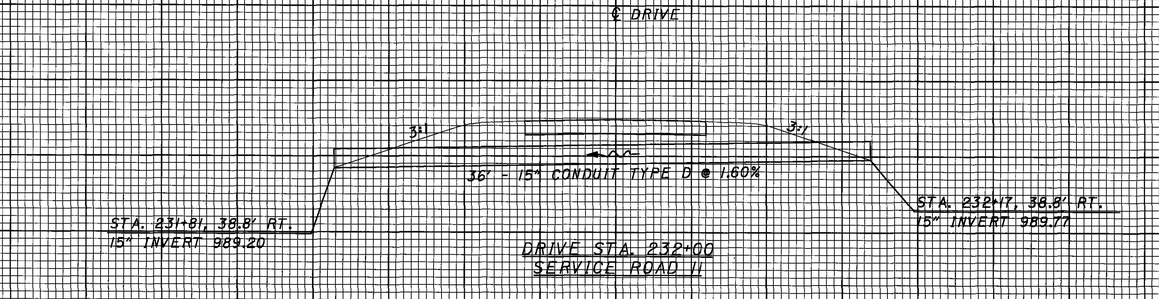
50 40 30 20 10 0 10 20 30 40 50

1015
1010
1005
1000
995
990
985









SHEET TOTAL

SHEET TOTAL

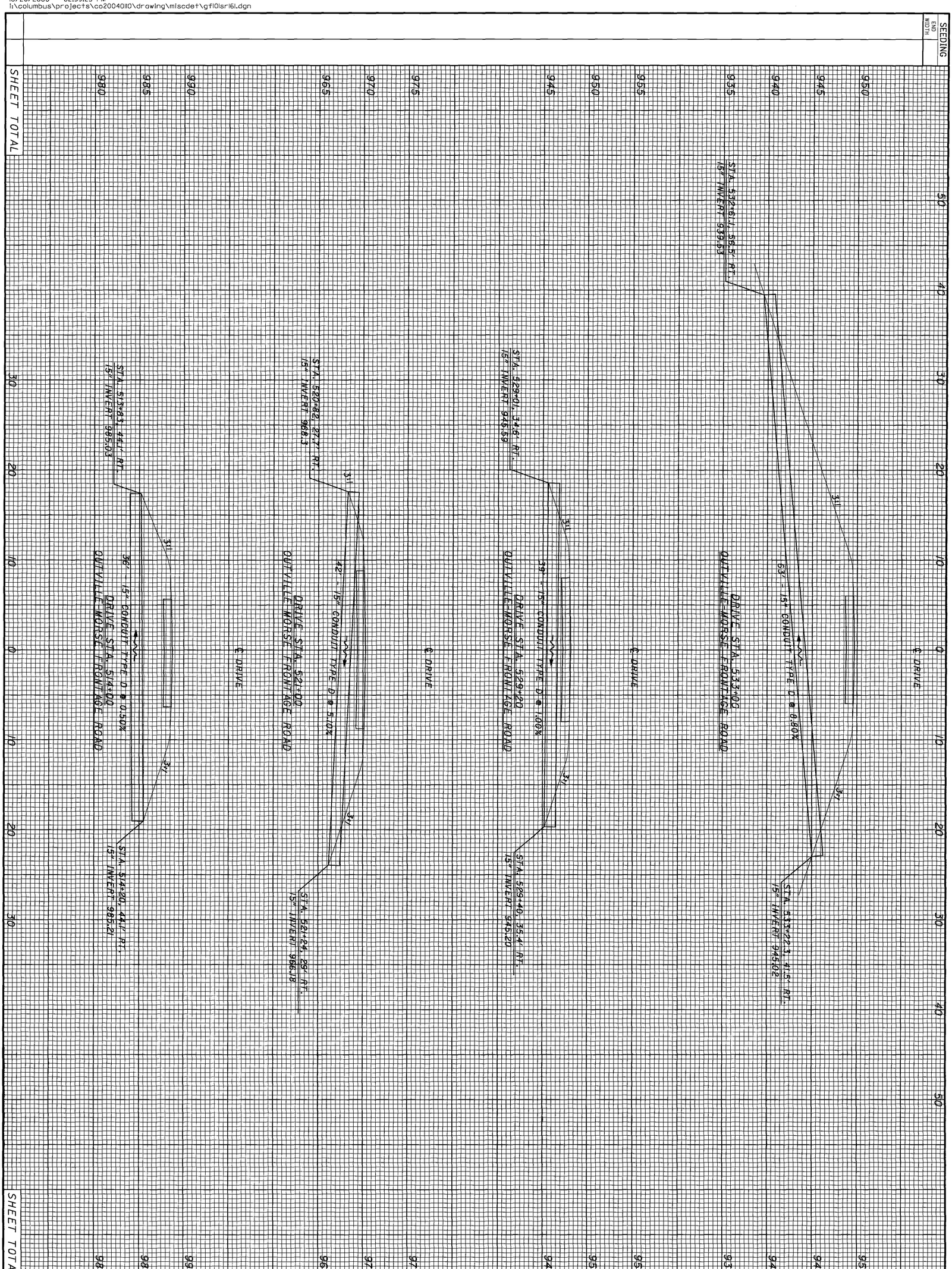
DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

943
1349

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10/26/2006 02:59:25 PM
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944
1349

LIC-161-6.65
LIC-37-10.25

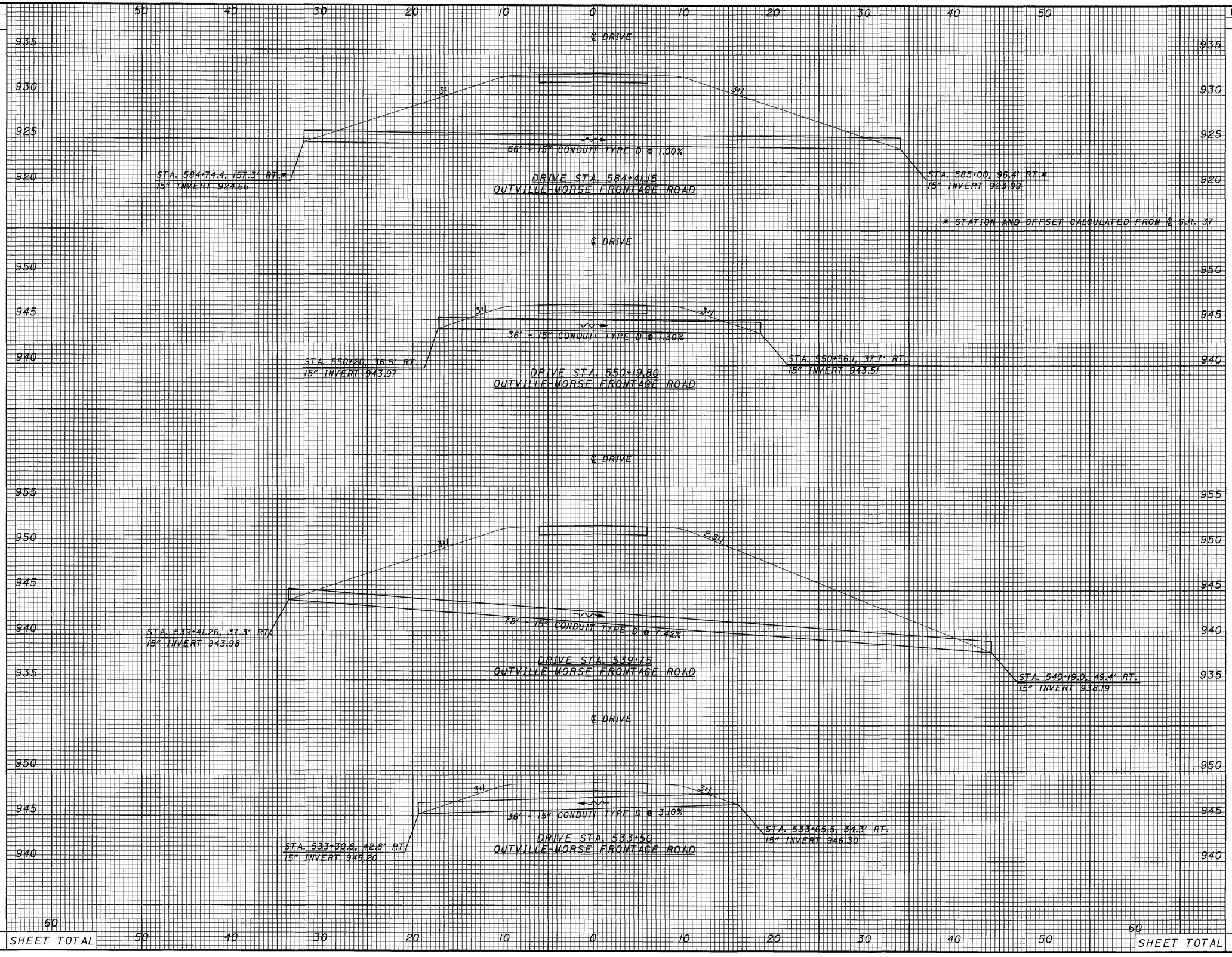
DRIVEWAY DRAINAGE PROFILES

CALCULATED ZTW
CHECKED FJA

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW
CHECKED FJA



DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

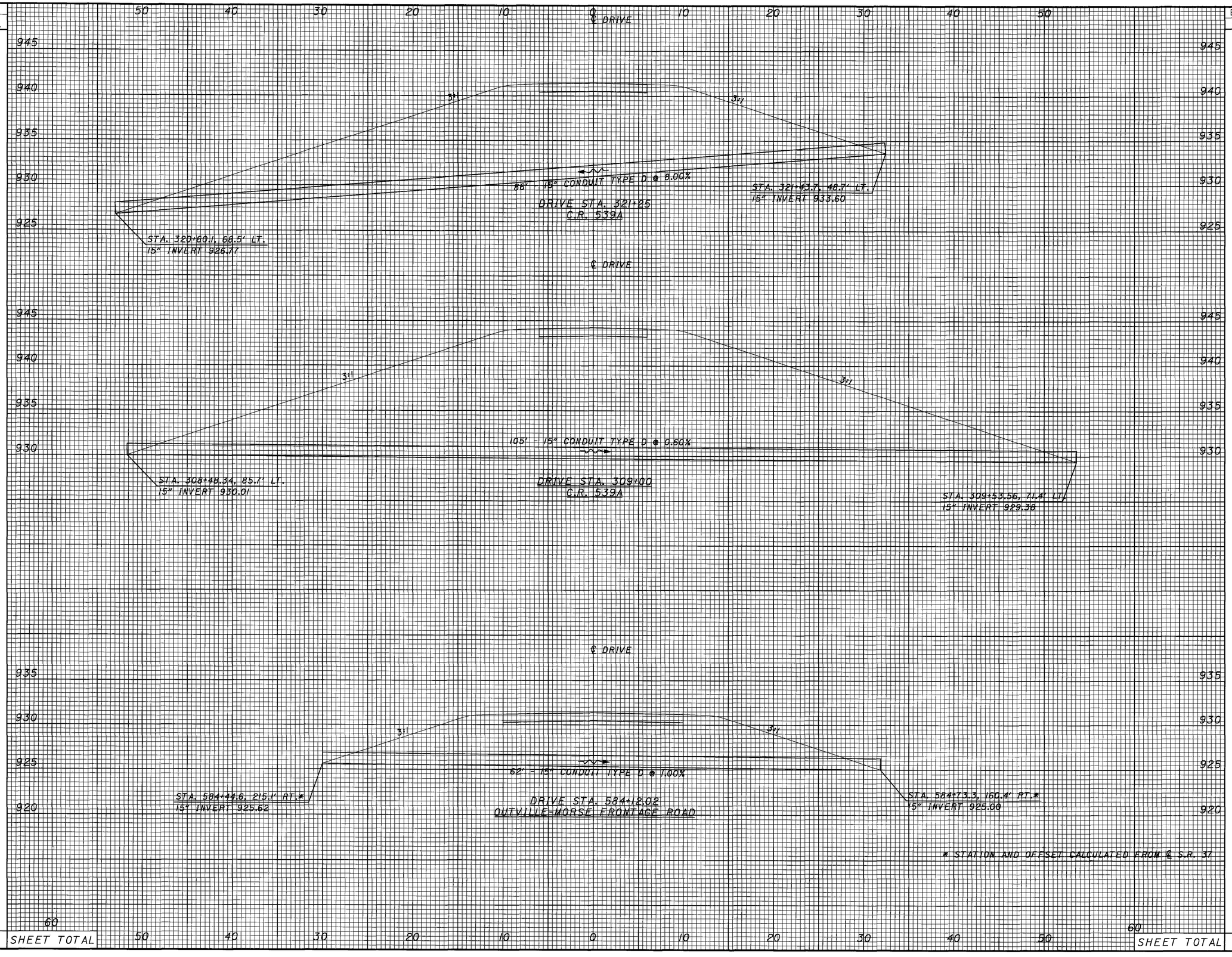
945
1349

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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW
CHECKED FJA



DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

DRIVE

946
1349

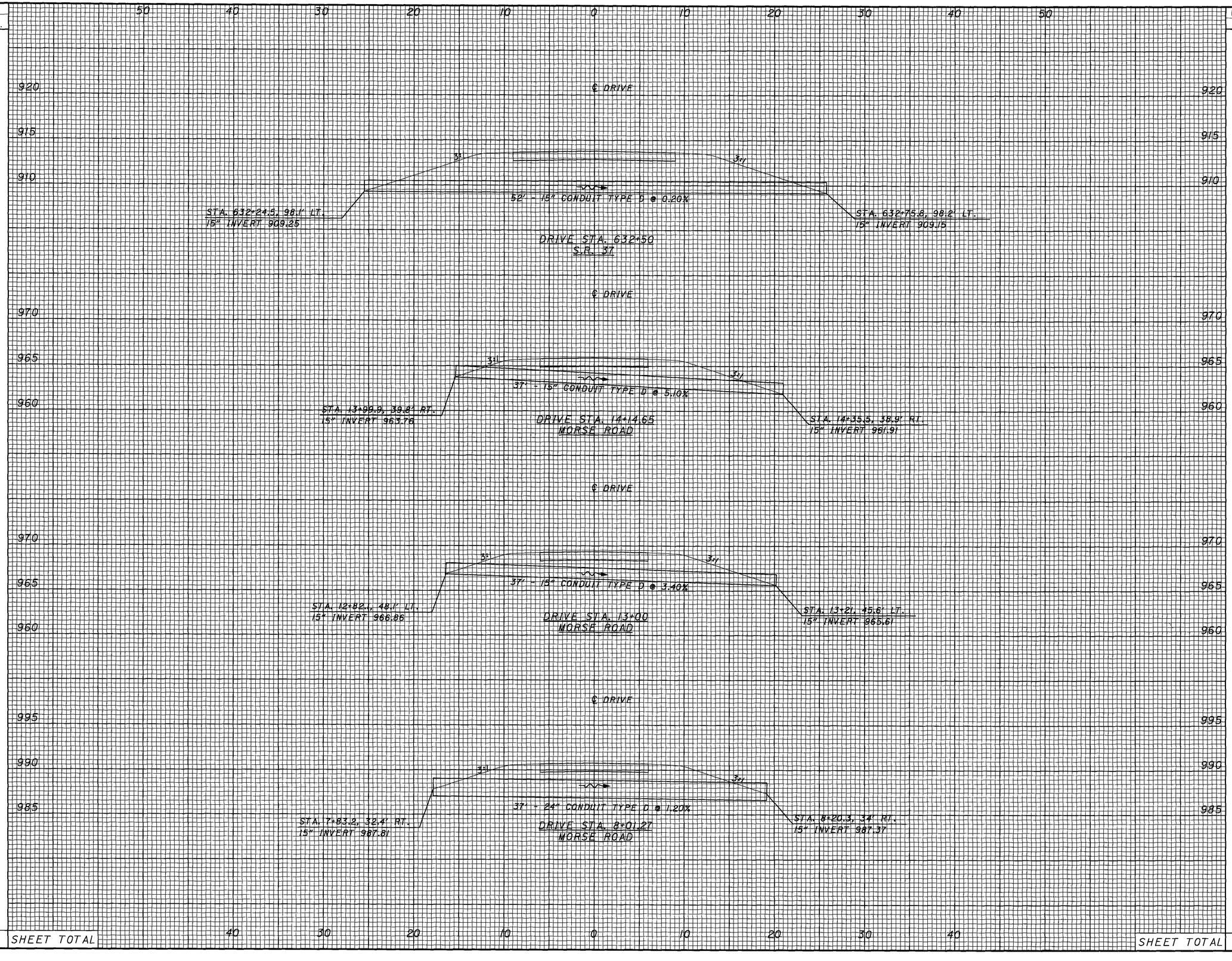
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED ZTW

CHECKED FJA



SHEET TOTAL

SHEET TOTAL

DRIVEWAY DRAINAGE PROFILES

LIC-161-6.65
LIC-37-10.25

947
1349

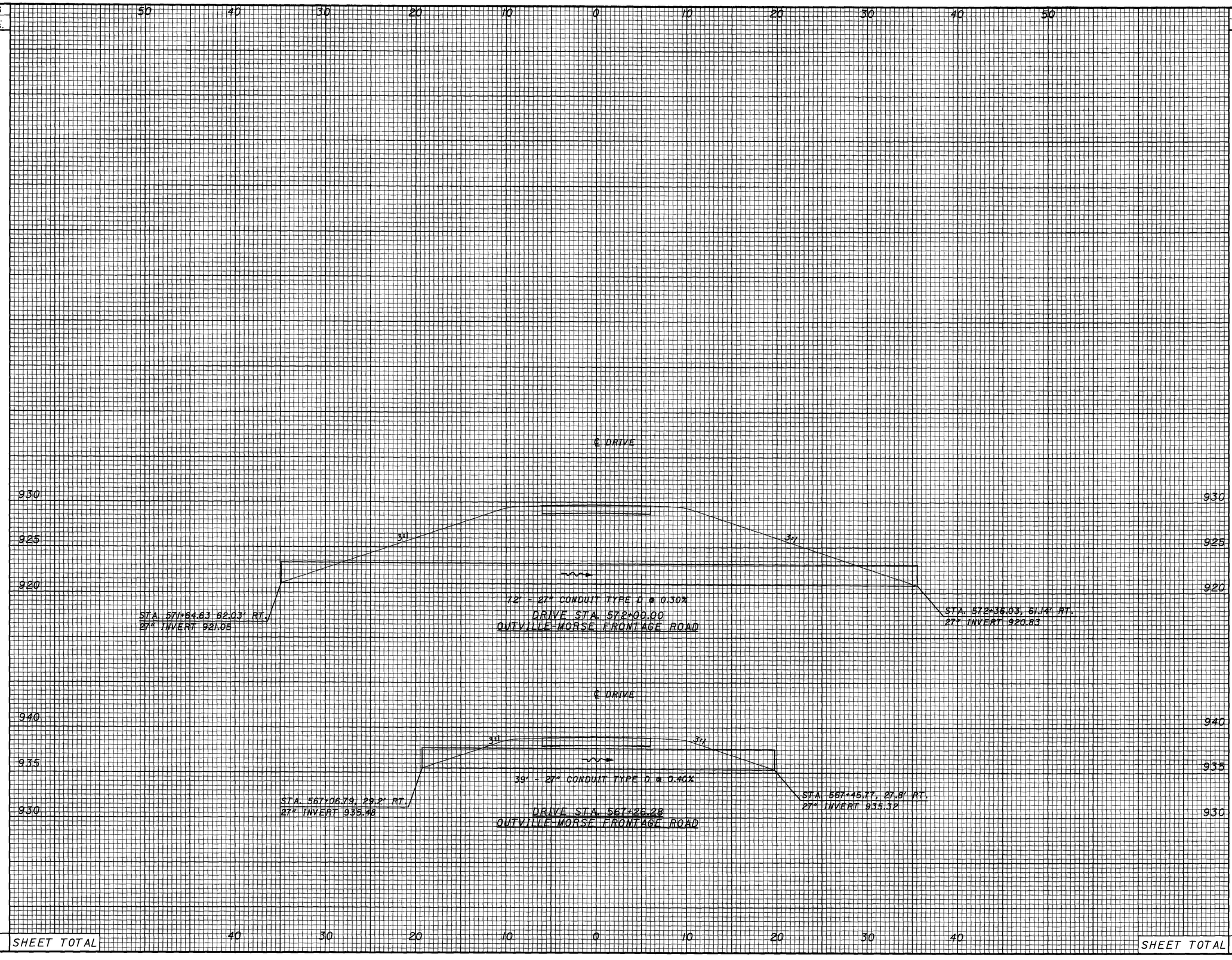
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SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED AVP

CHECKED JMA



SHEET TOTAL

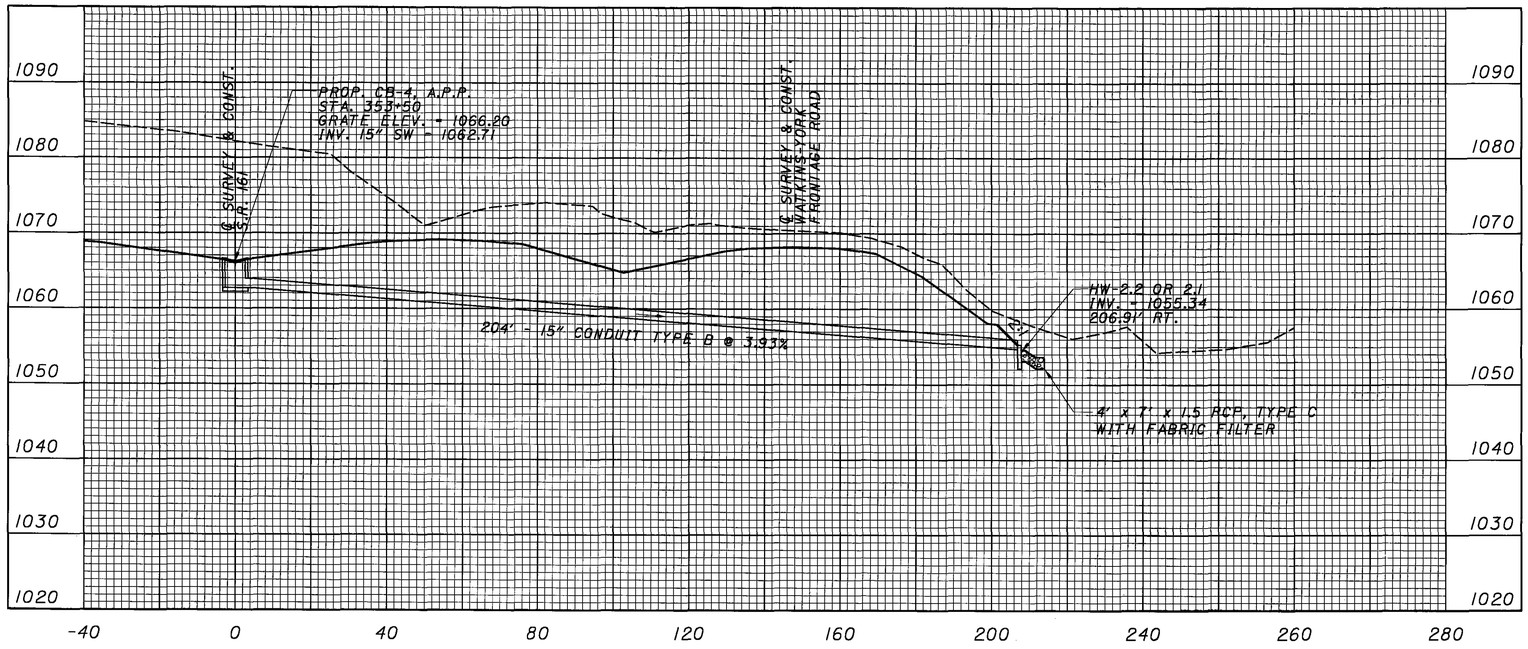
SHEET TOTAL

DRIVEWAY DRAINAGE PROFILES

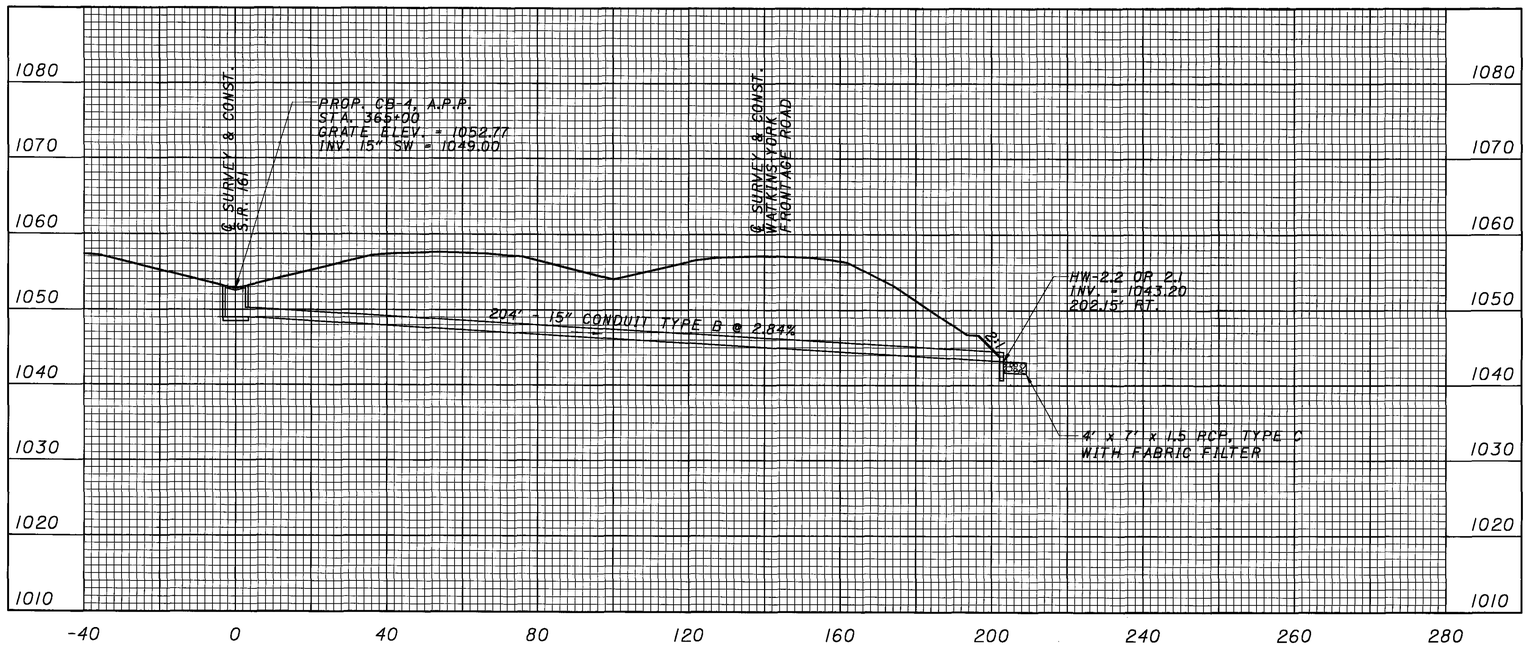
LIC-161-6.65
LIC-37-10.25

947A
1349

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S.R. 161 STA. 353+50.00
WATKINS-YORK FRONTAGE ROAD STA. 112+05.02



S.R. 161 STA. 365+00.00
WATKINS-YORK FRONTAGE ROAD STA. 123+50.49

CALCULATED BER
CHECKED AE

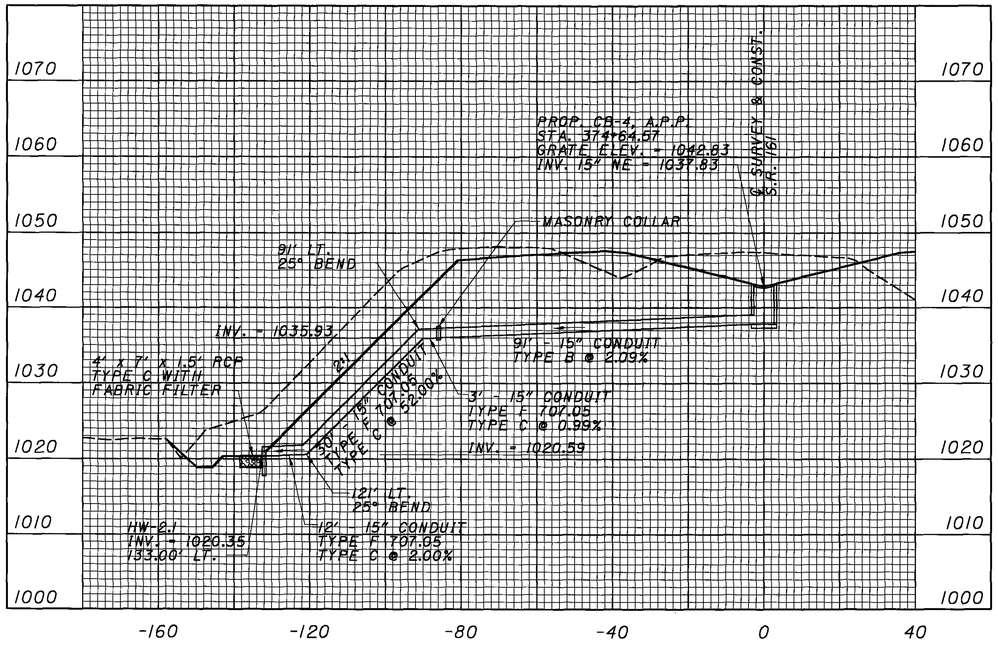
SEWER PROFILE - S.R. 161

STORM SEWER

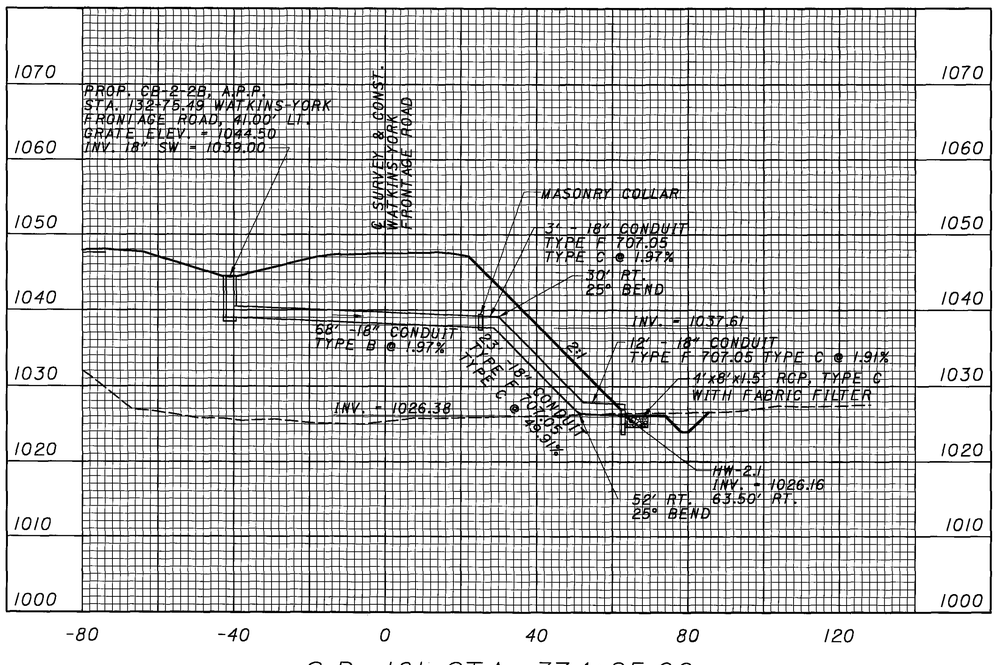
LIC-161-6.65
LIC-37-10.25

948
1349

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STA. 374+64.57



S.R. 161 STA. 374+25.00

WATKINS-YORK FRONTAGE ROAD STA. 132+75.49

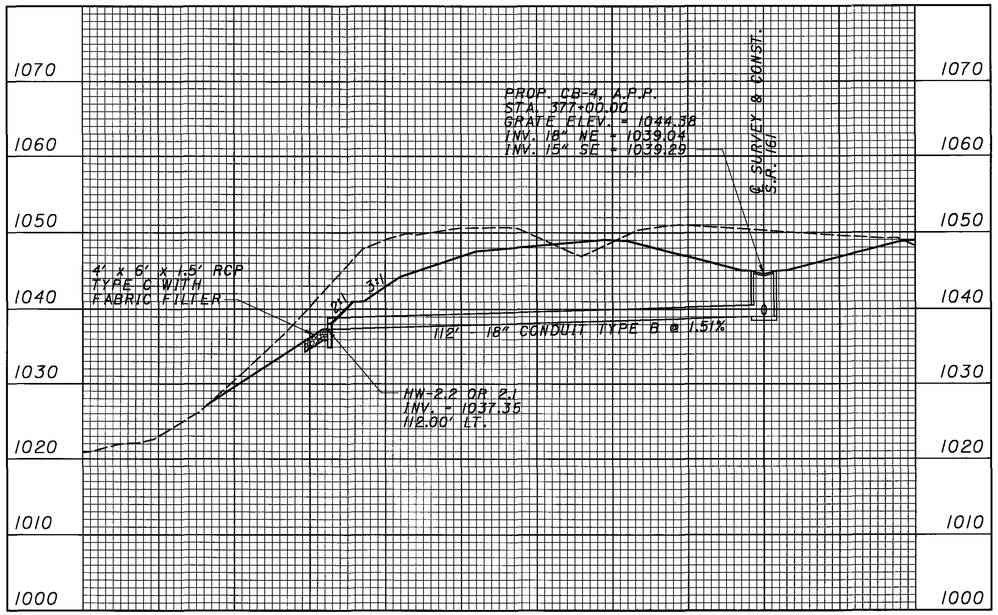
CALCULATED BER
CHECKED AE

STORM SEWER PROFILE - S.R. 161

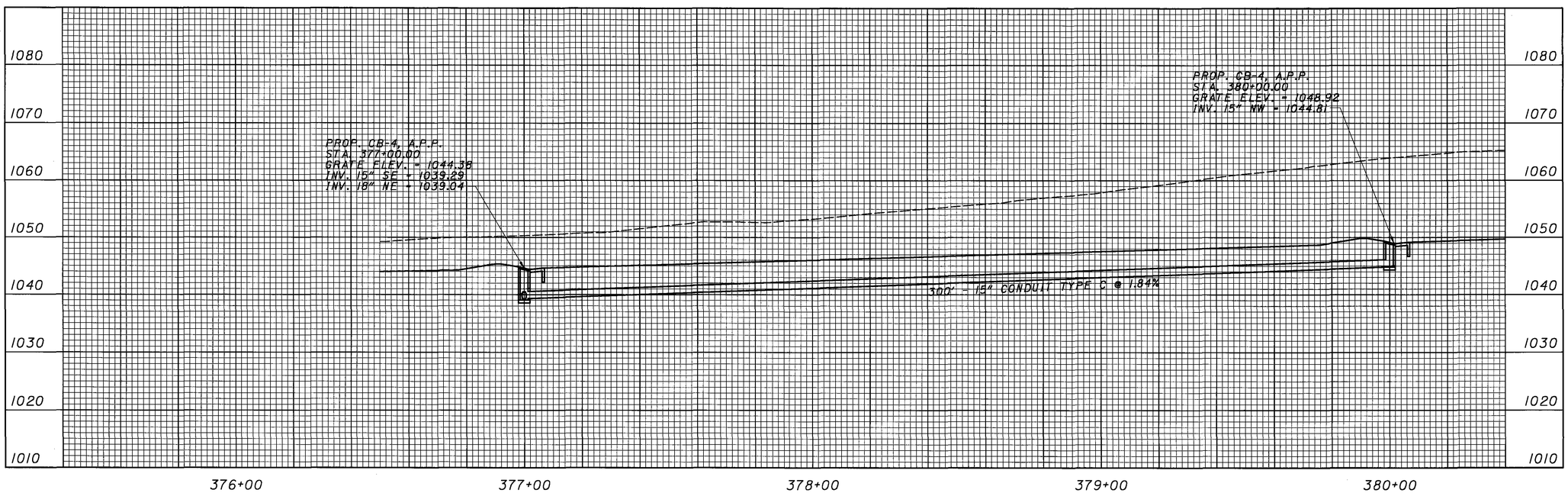
LIC-161-6.65
LIC-37-10.25

949
1349

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STA. 377+00.00



STA. 377+00.00 TO STA. 380+00.00

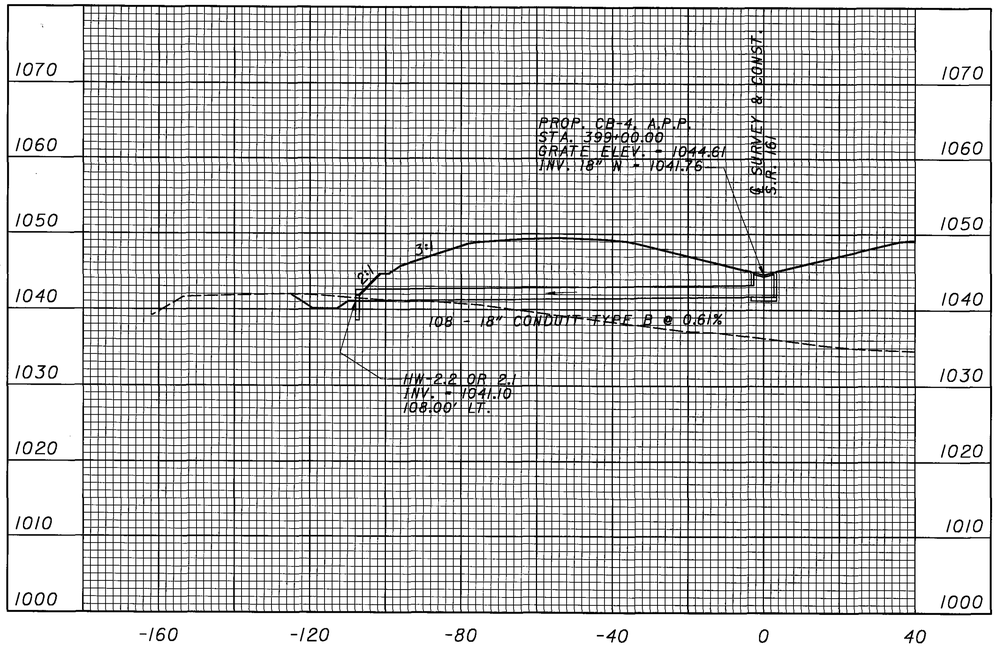
CALCULATED BER
CHECKED AE

STORM SEWER PROFILE - S.R. 161

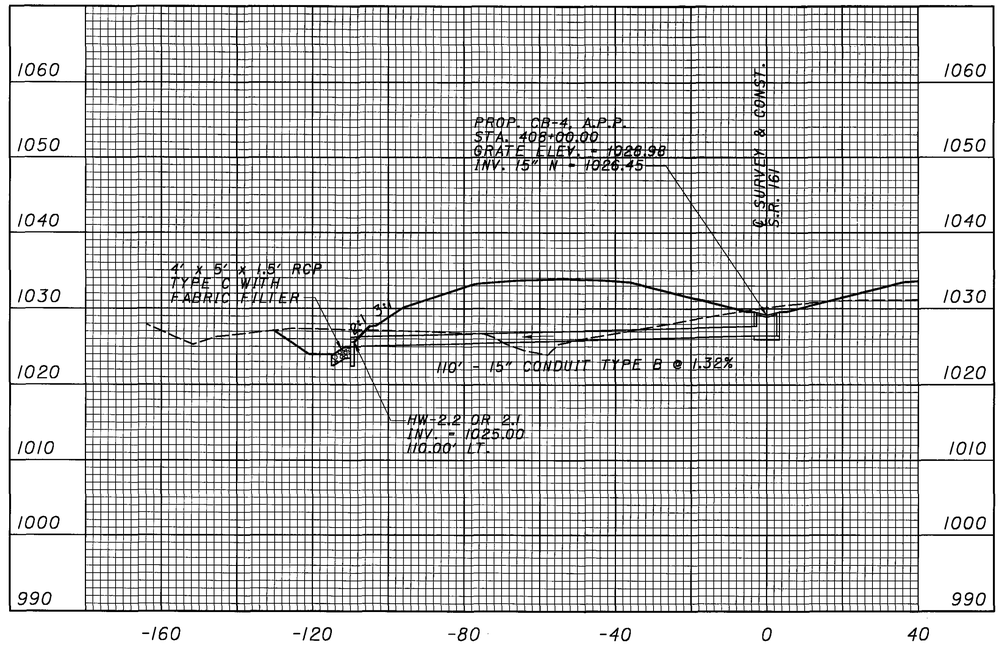
LIC-161-6.65
LIC-37-10.25

950
349

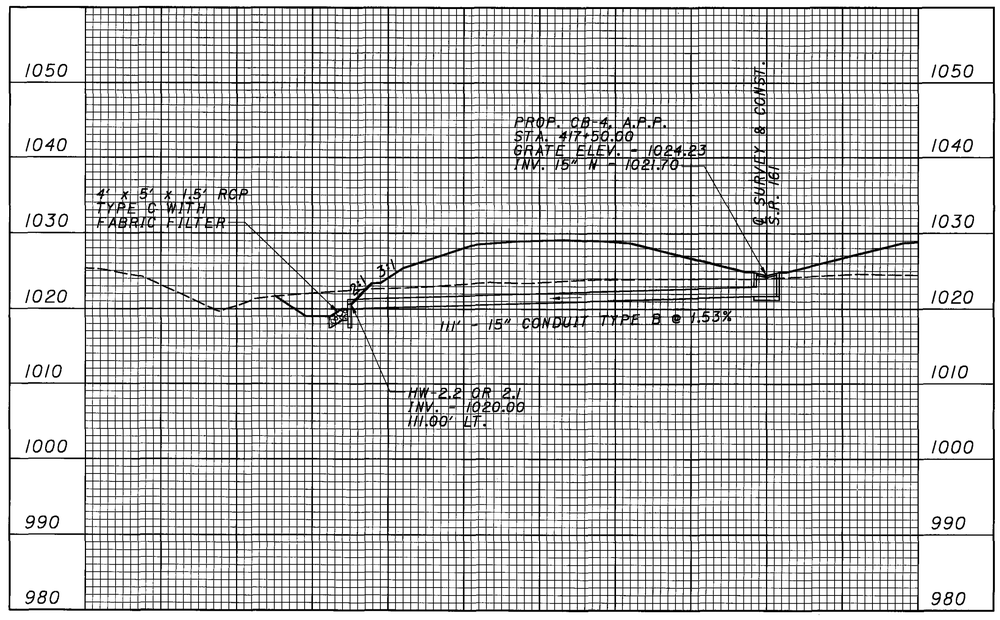
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STA. 399+00.00



STA. 408+00.00



STA. 417+50.00

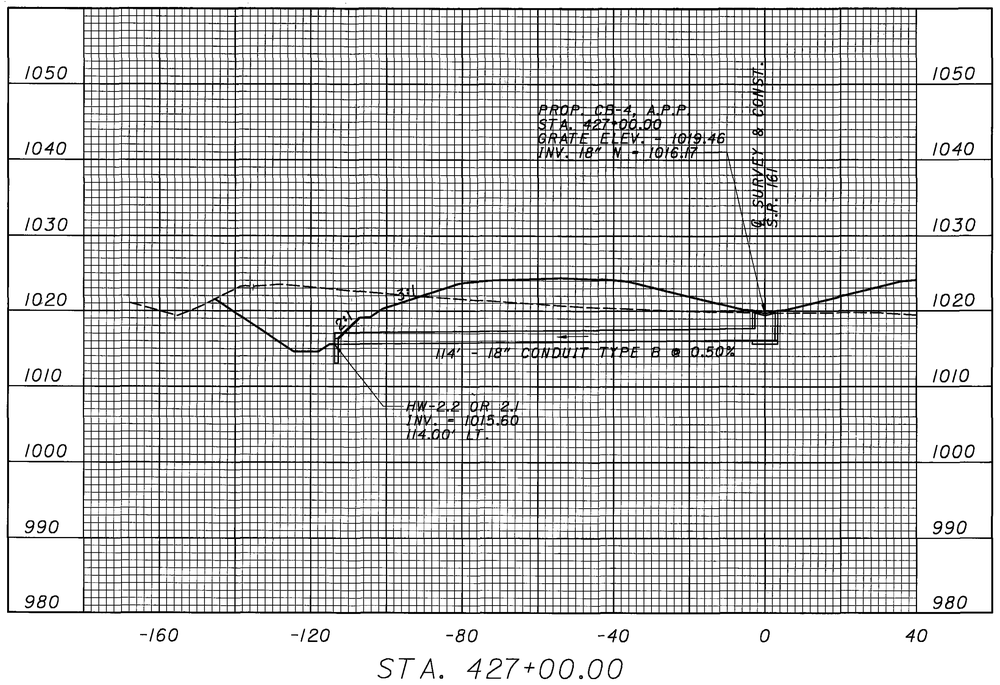
CALCULATED BER
CHECKED AE

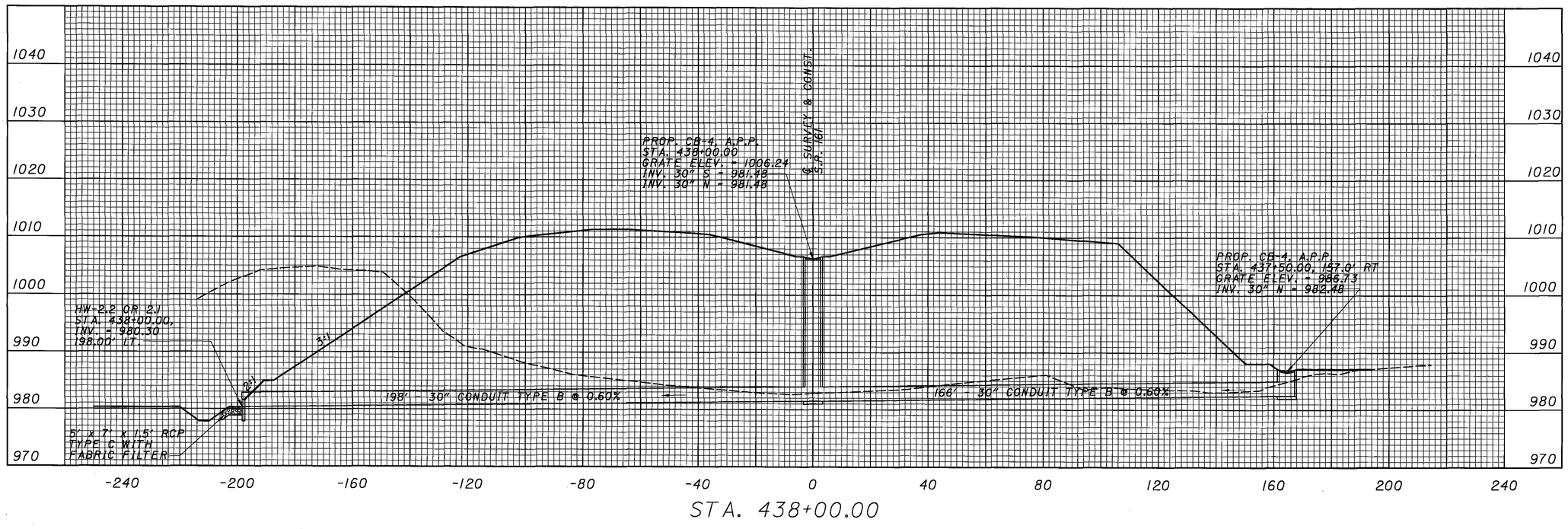
STORM SEWER PROFILE - S.R. 161

LIC-161-6.65
LIC-37-10.25

951
1349

tduffney
10/26/2006 3:26:51 PM
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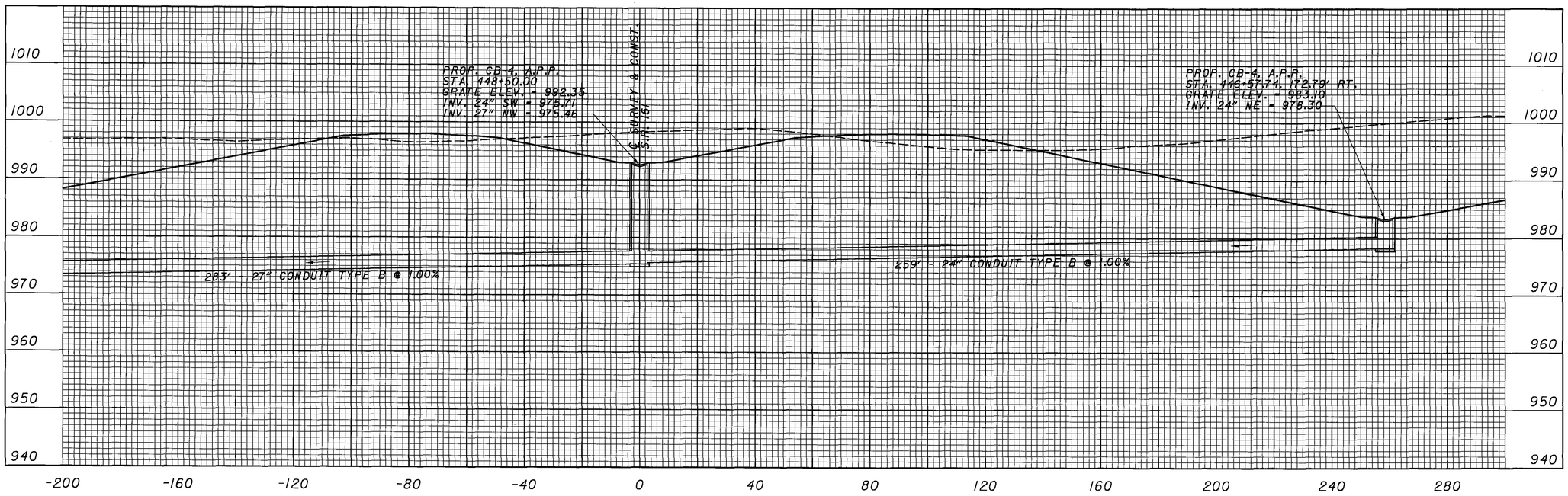
CALCULATED BER
CHECKED AE

STORM SEWER PROFILE - S.R. 161

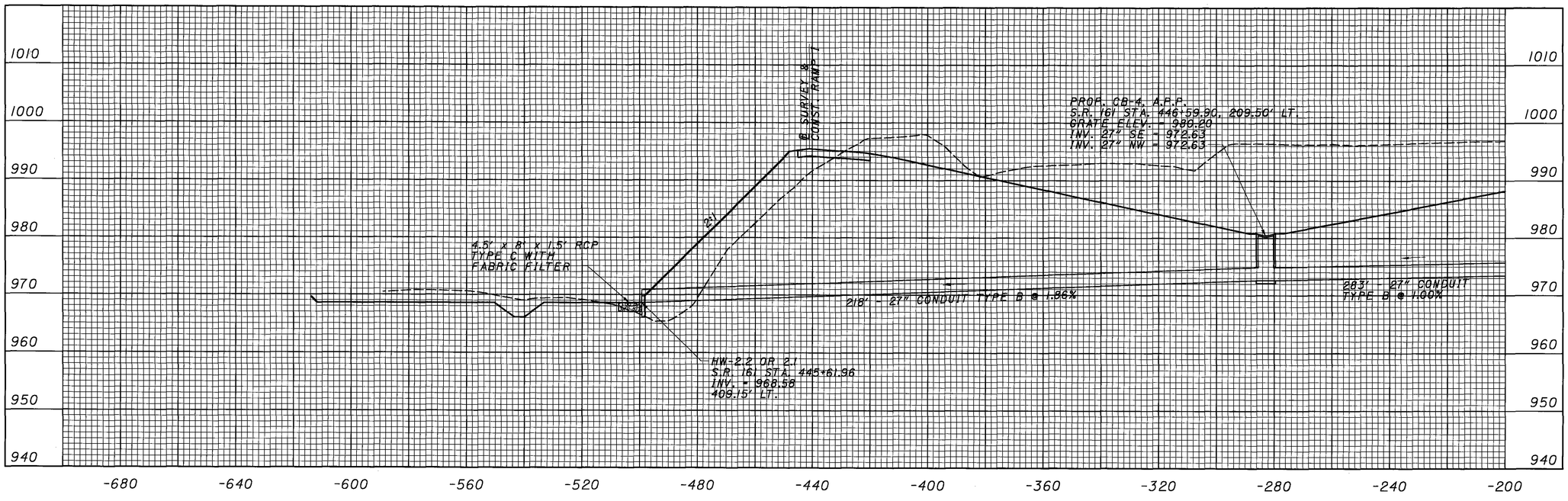
LIC-161-6.65
LIC-37-10.25

952
1349

tduffrey
10/26/2006 3:26:39 PM
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STA. 446+57.74 TO STA. 448+50.00



S.R. 161 STA. 445+61.96 TO STA. 446+59.90
RAMP I STA. 446+50.00

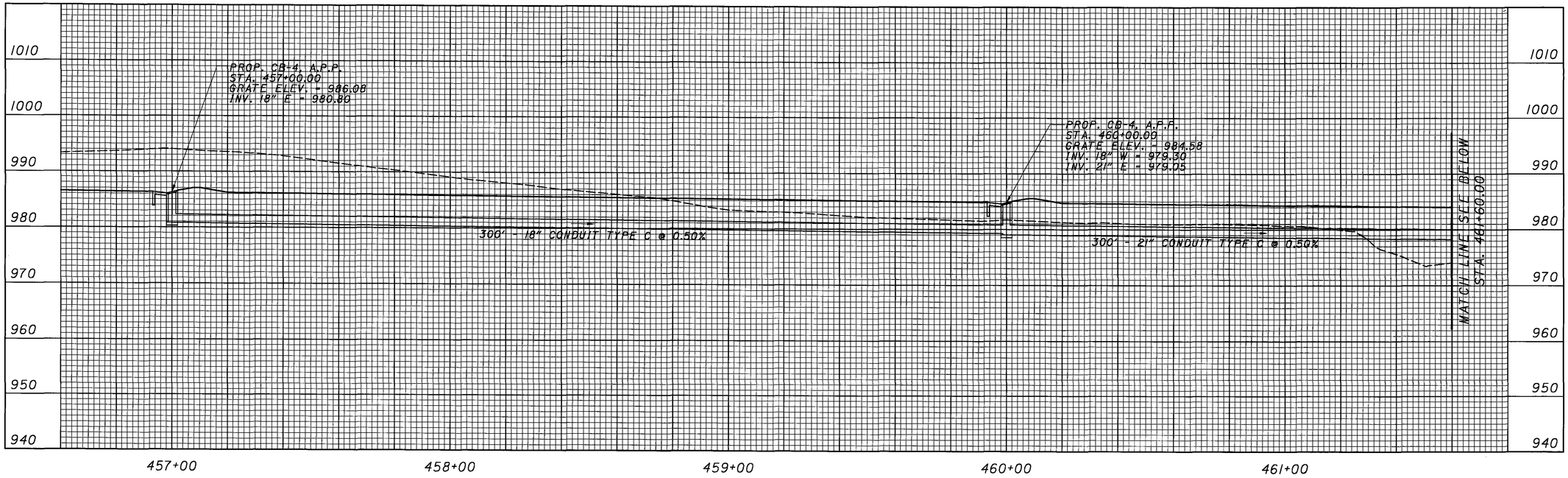
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CHECKED AE

STORM SEWER PROFILE - S.R. 161

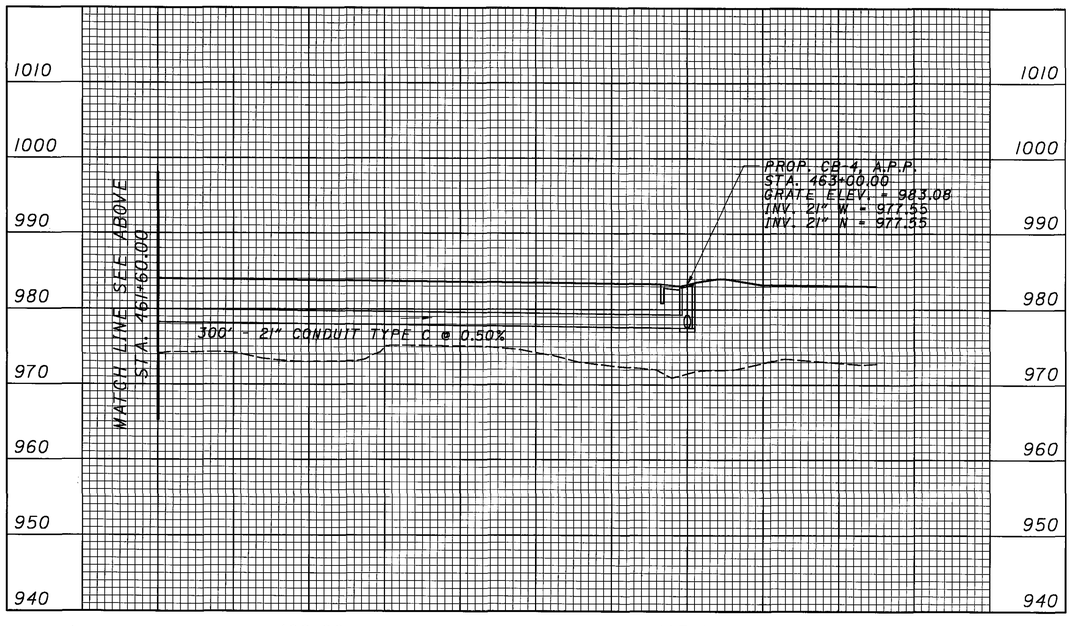
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LIC-37-10.25

953
1349

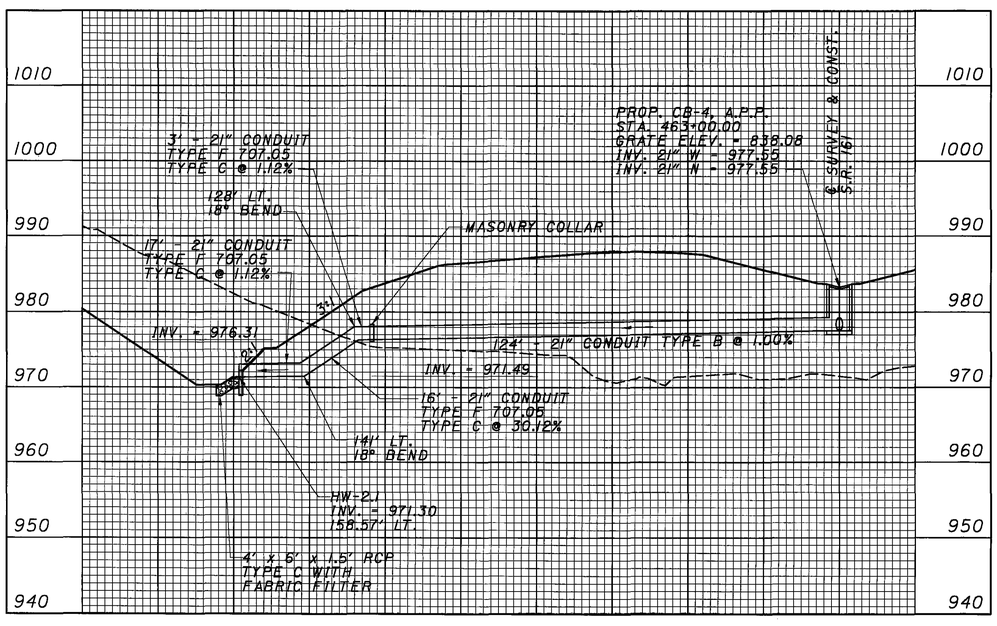
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STA. 457+00.00 TO STA. 461+60.00



STA. 461+60.00 TO 463+00.00



STA. 463+00.00

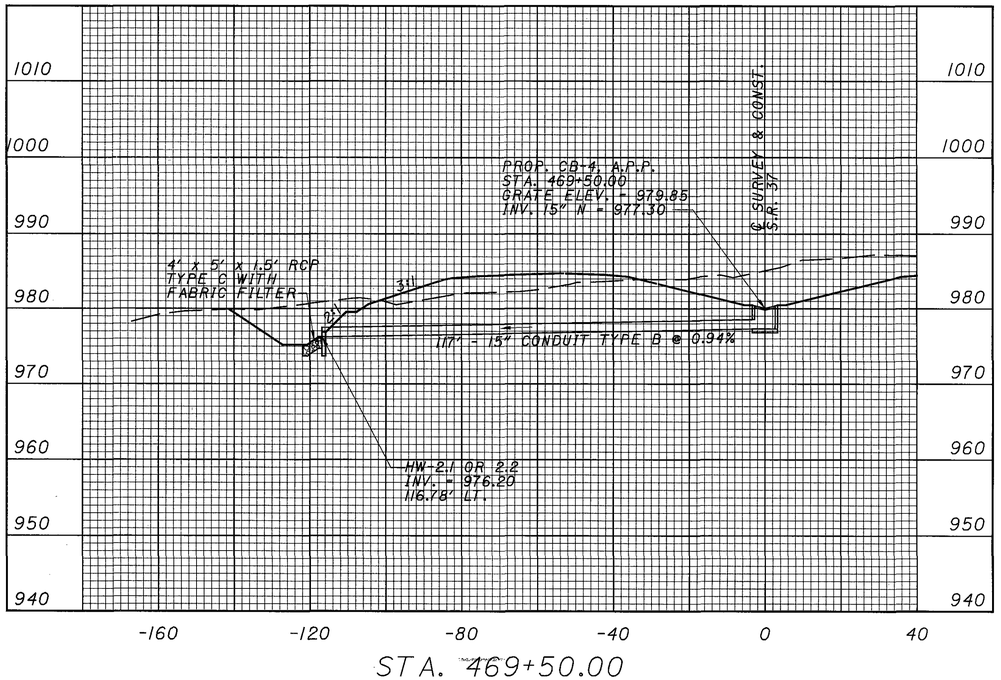
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STORM SEWER PROFILE - S.R. 161

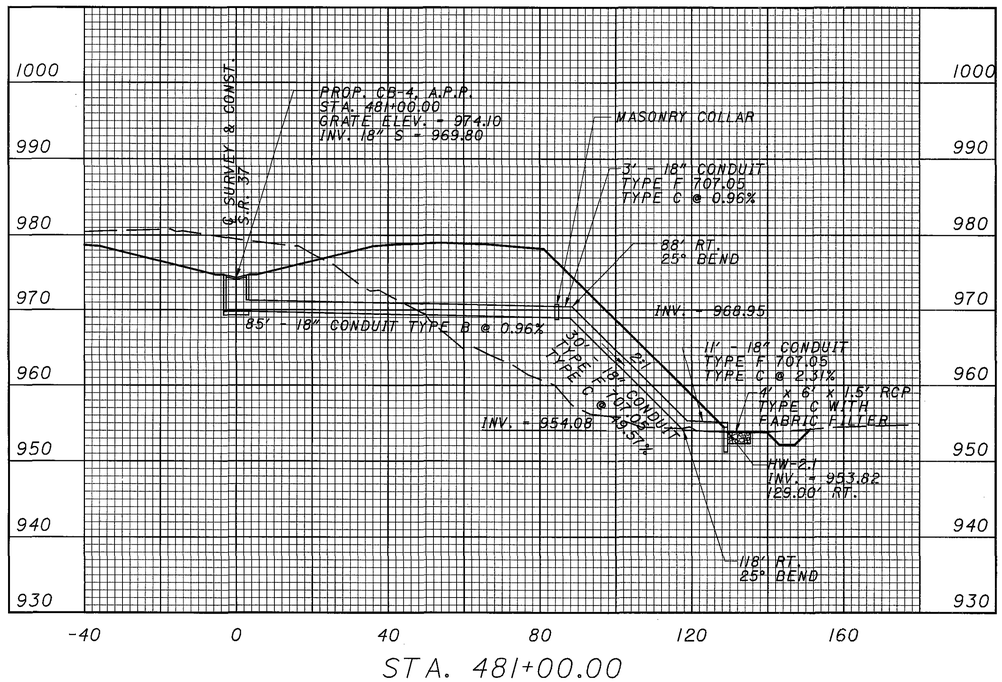
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LIC-37-10.25

954
1349

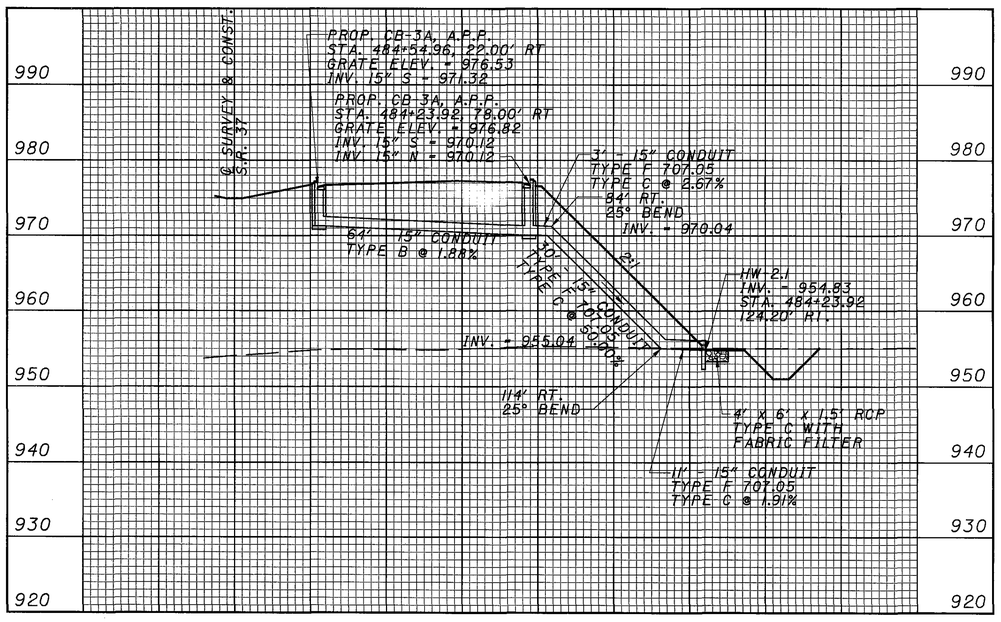
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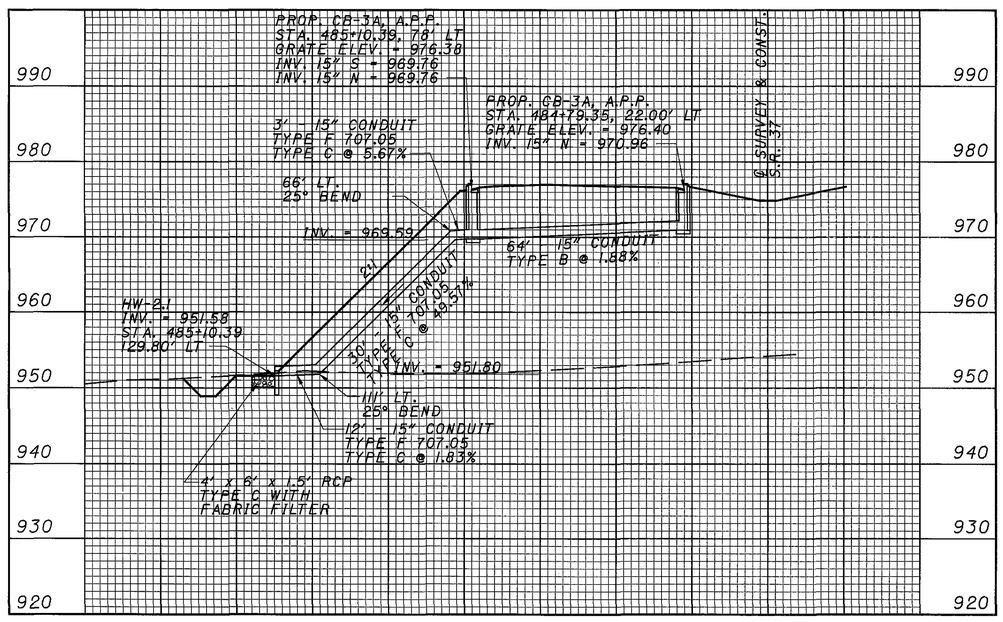
STA. 469+50.00



STA. 481+00.00



STA. 484+54.96



STA. 484+79.35

CALCULATED BER
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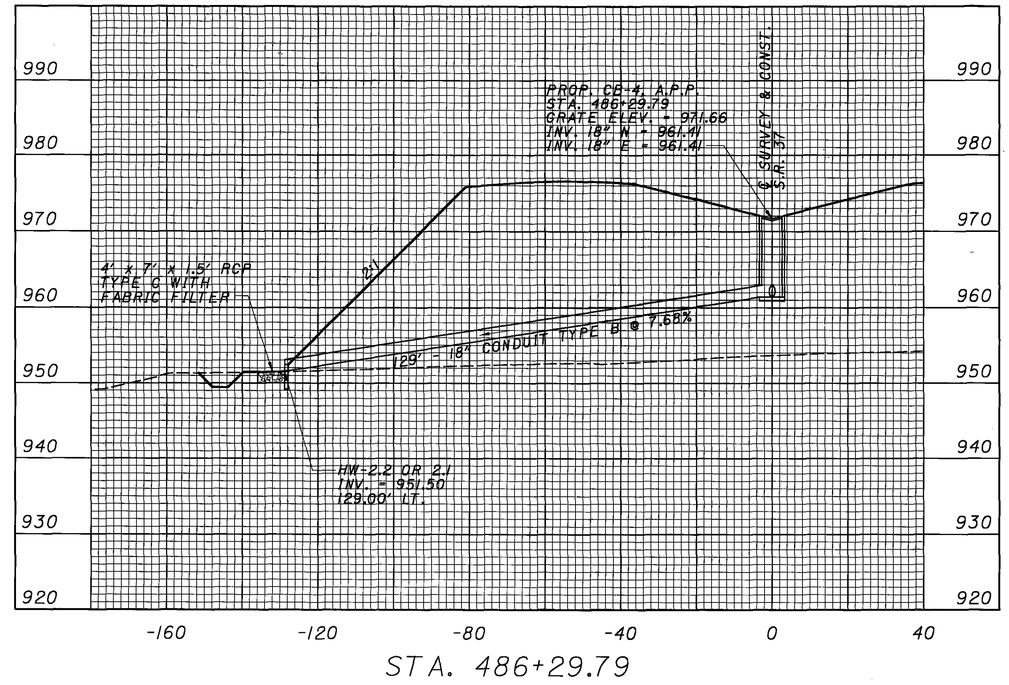
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STORM SEWER

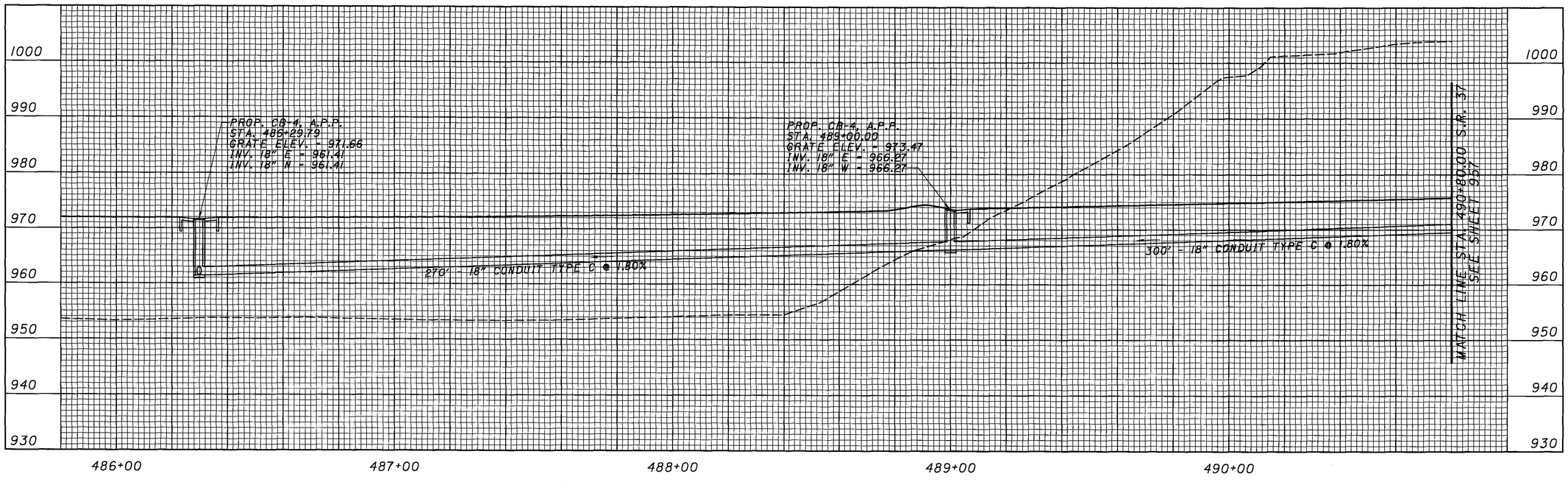
LIC-161-6.65
LIC-37-10.25

955
349

jalford
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STA. 486+29.79



STA. 486+29.79 TO STA. 490+80.00

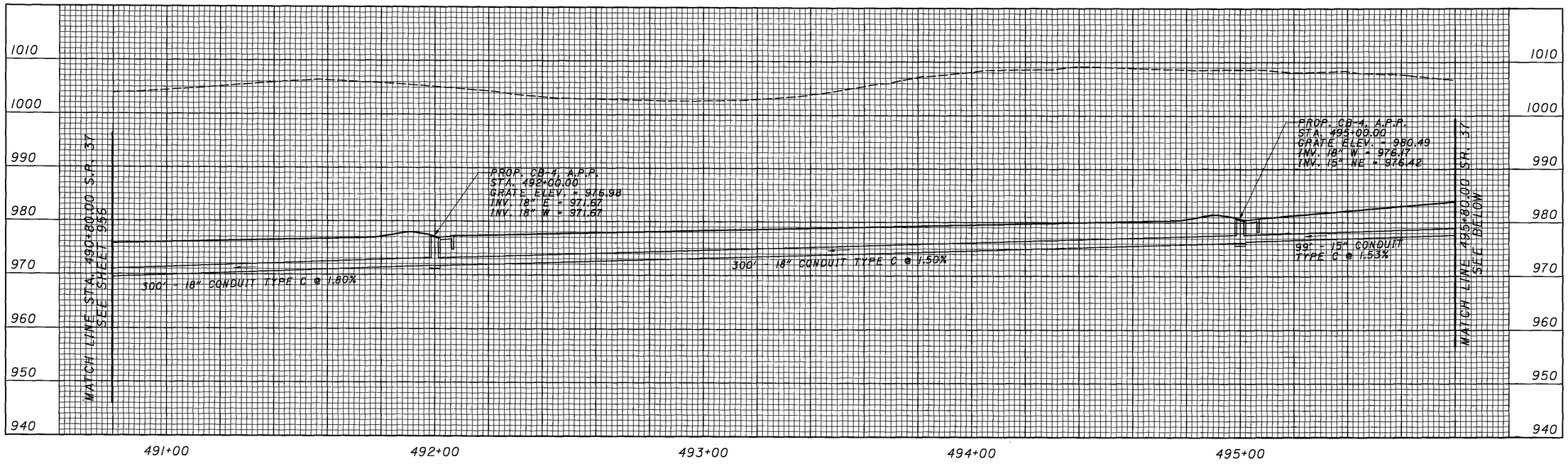
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STORM SEWER PROFILE - S.R. 37

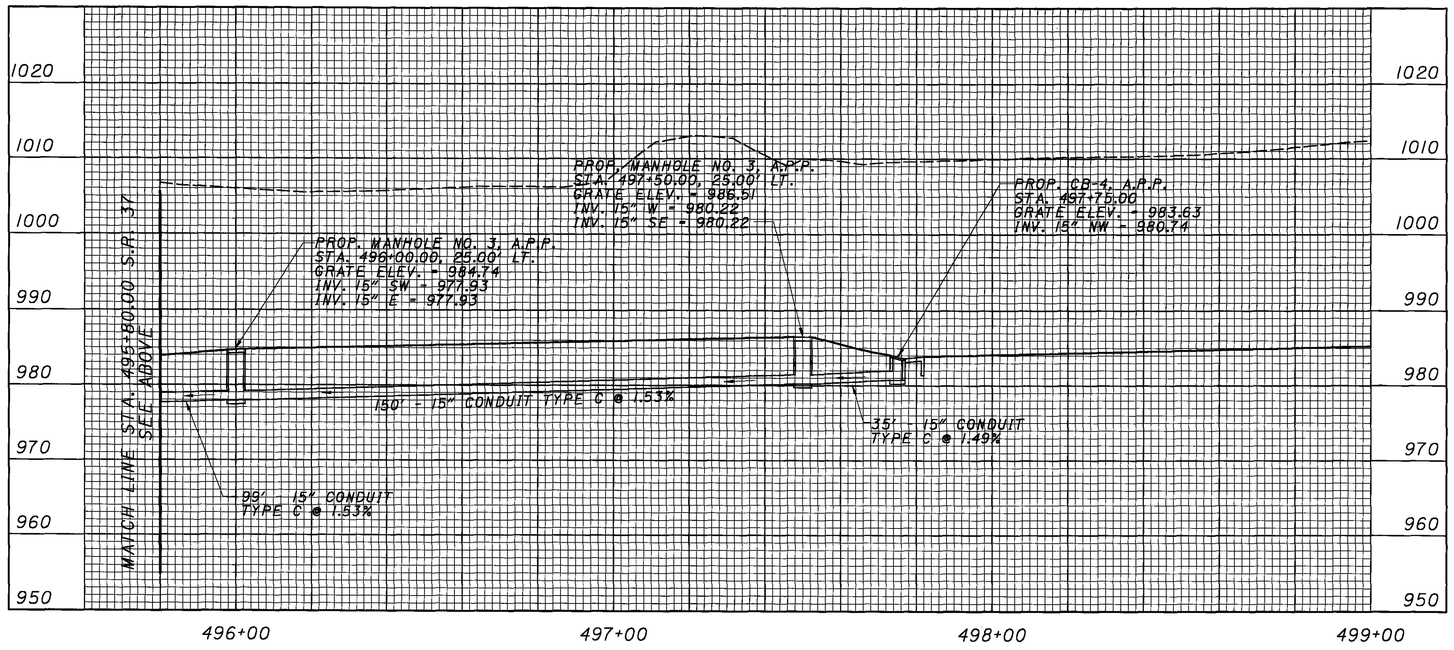
LIC-161-6.65
LIC-37-10.25

956
1349

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STA. 490+80.00 TO STA. 495+80.00



STA. 495+80.00 TO STA. 497+75.00

CALCULATED BER
CHECKED AE

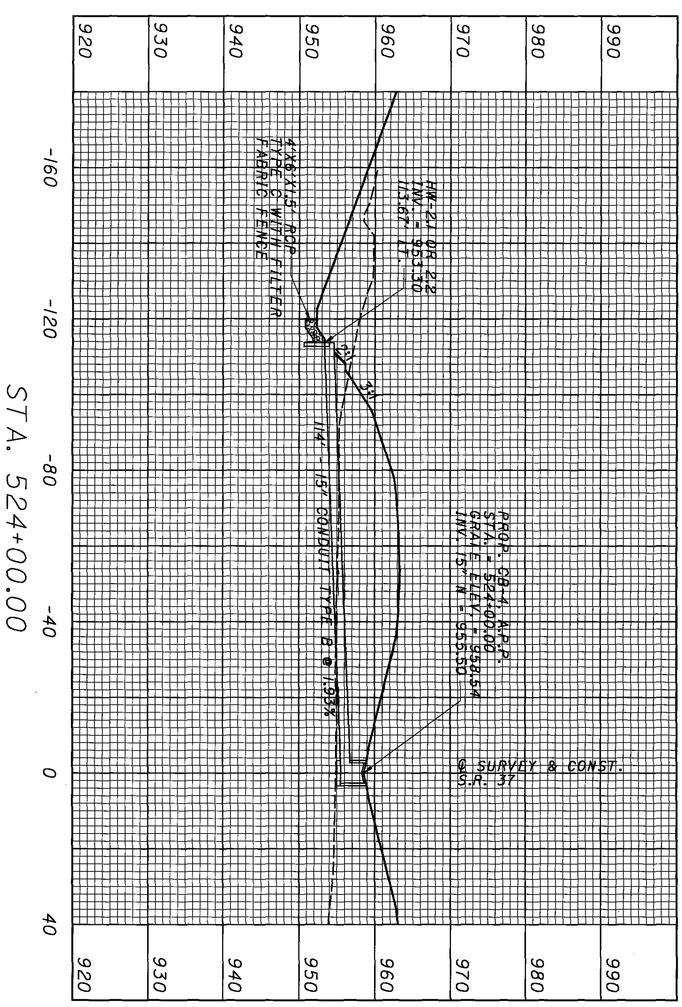
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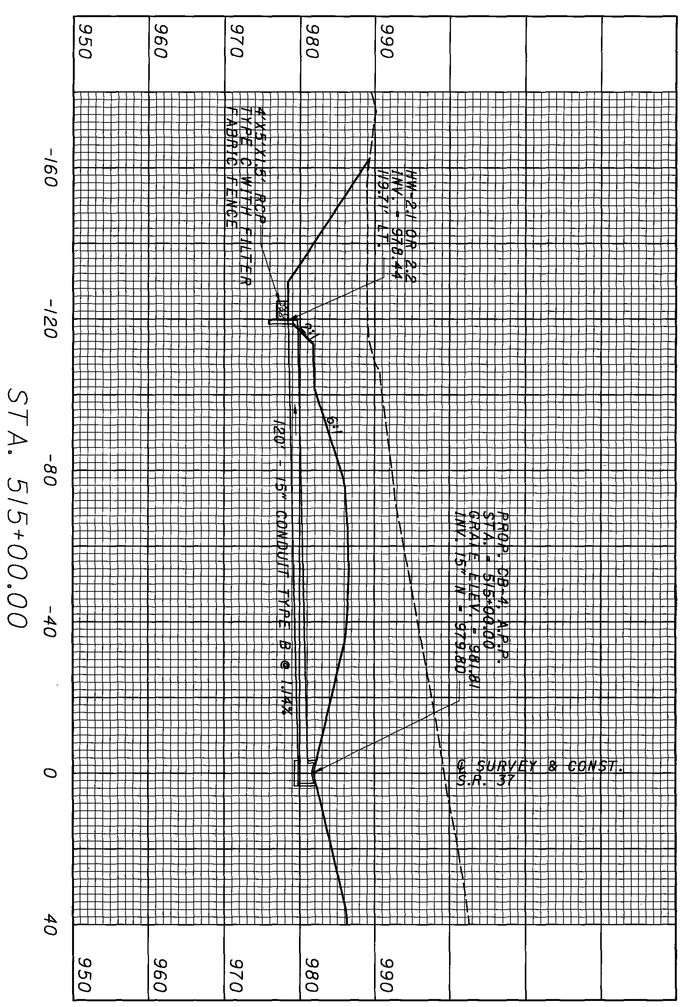
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LIC-37-10.25

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1349

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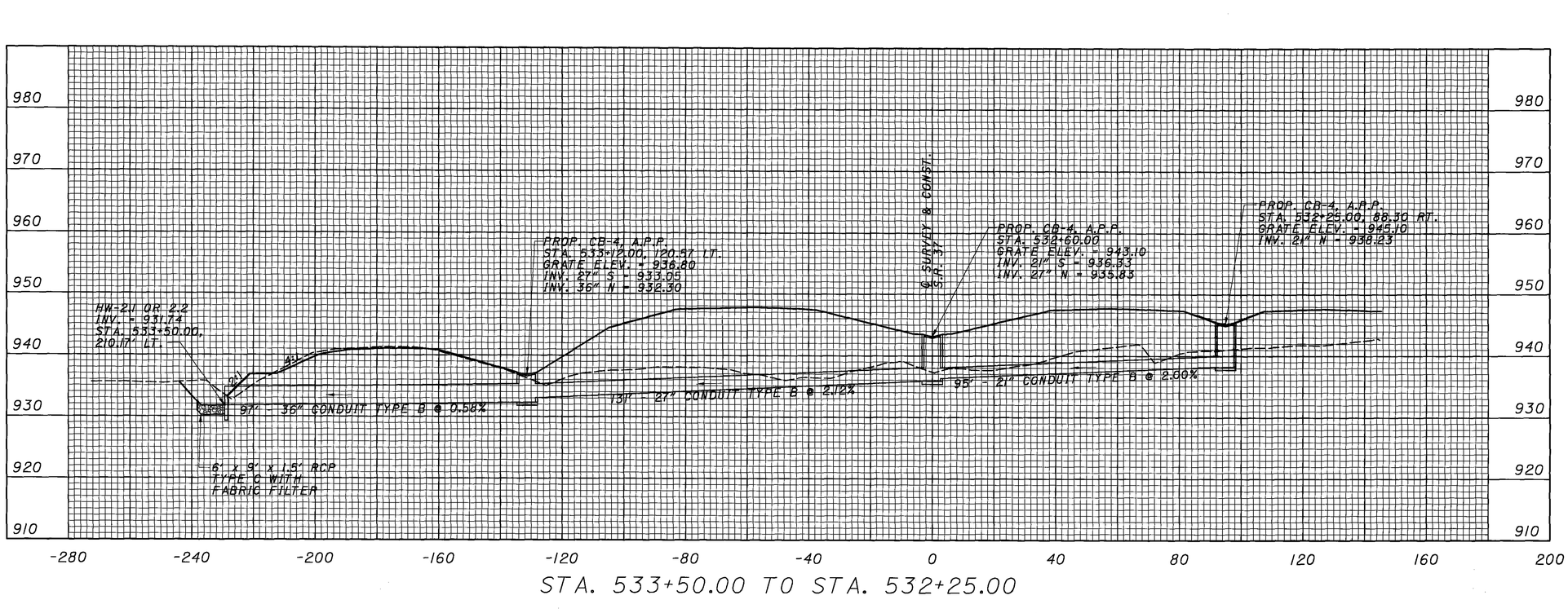
958 / 1349	LIC-161-6.65 LIC-37-10.25	STORM SEWER PROFILE - S.R. 37	CALCULATED BER CHECKED AE

STORM SEWER PROFILE - S.R. 37

CALCULATED BER
CHECKED AE

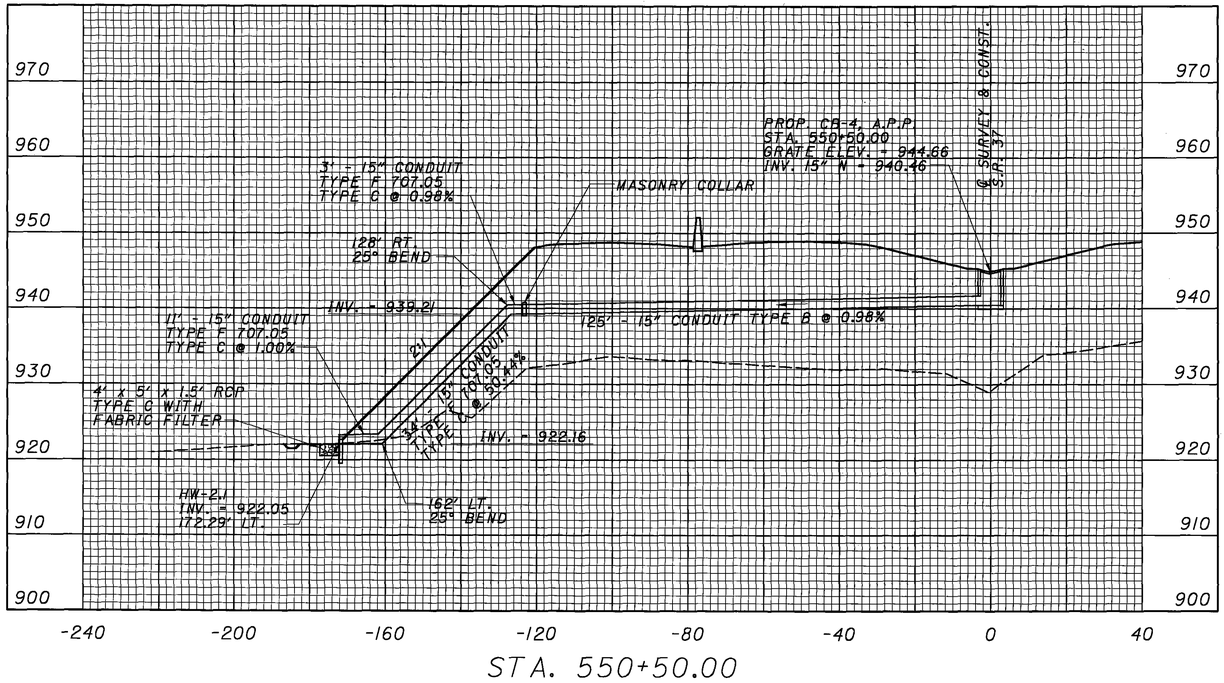
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LIC-37-10.25

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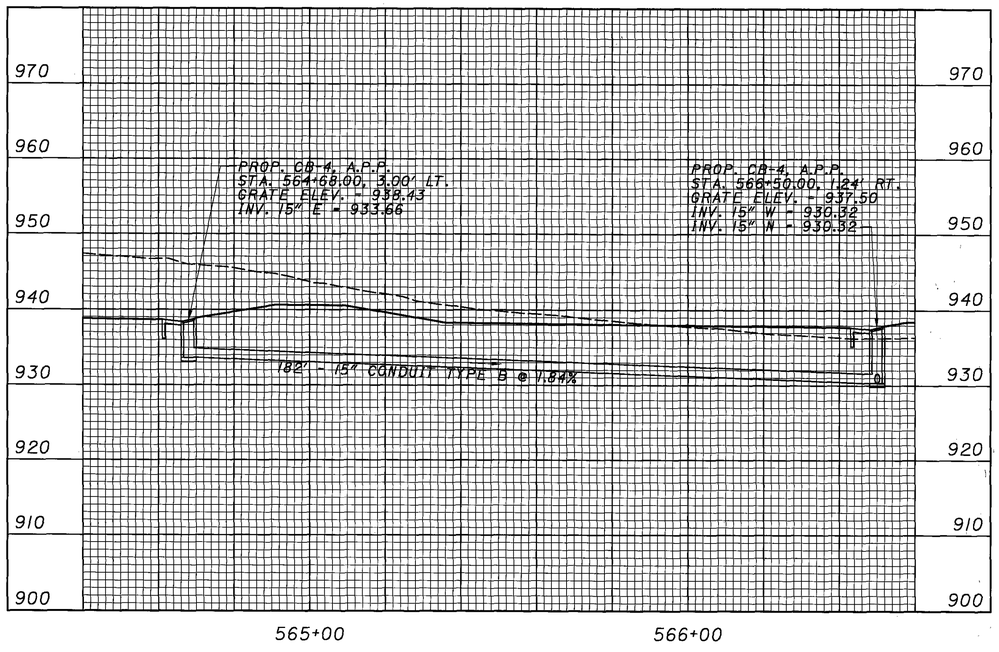


STA. 533+50.00 TO STA. 532+25.00

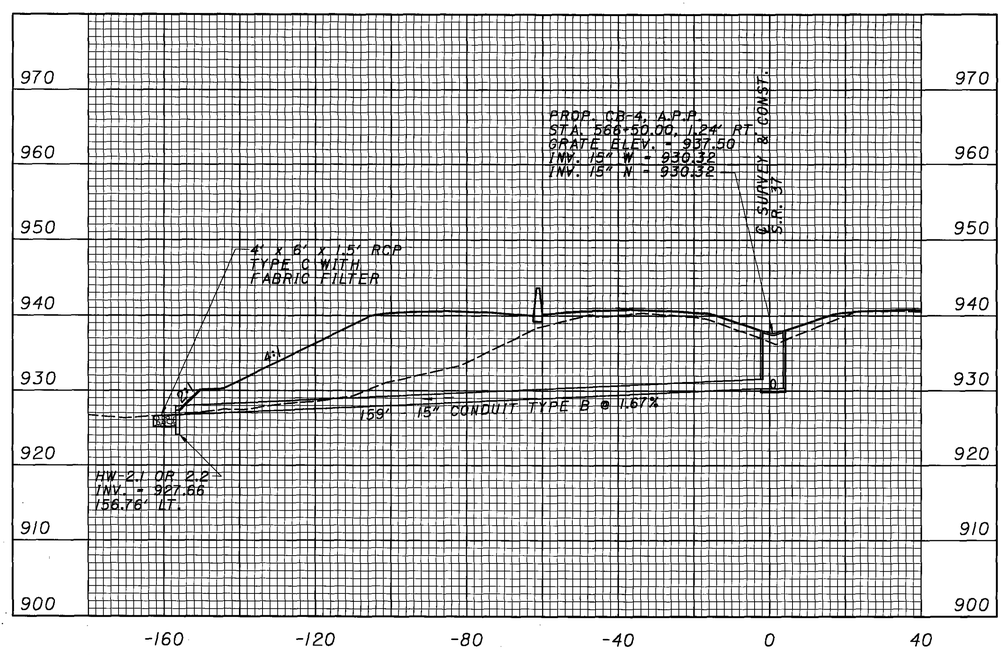
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STA. 550+50.00



STA. 564+68.00 TO STA. 566+50.00



STA. 566+50.00

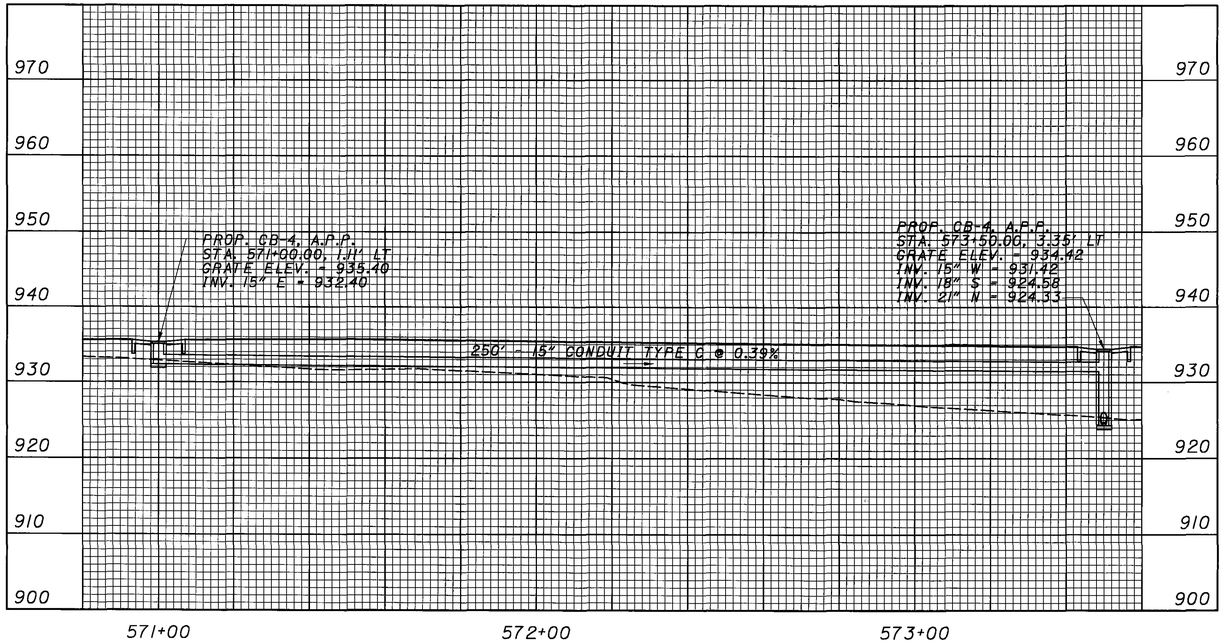
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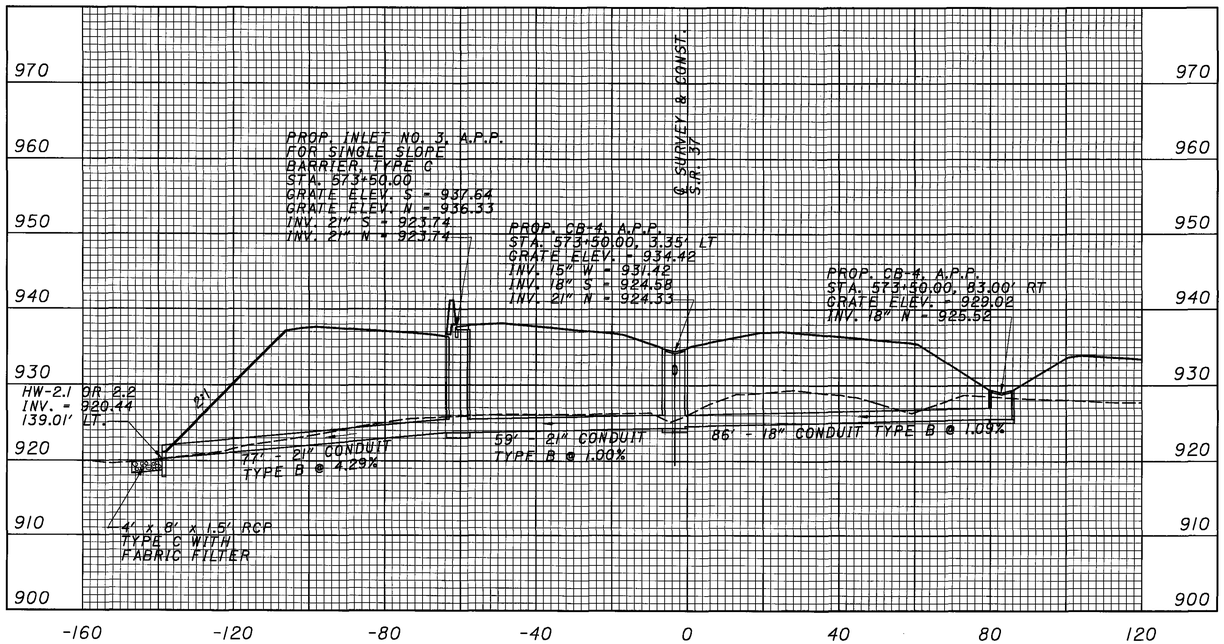
LIC-161-6.65
LIC-37-10.25

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1349

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STA. 571+00.00 TO STA. 573+50.00



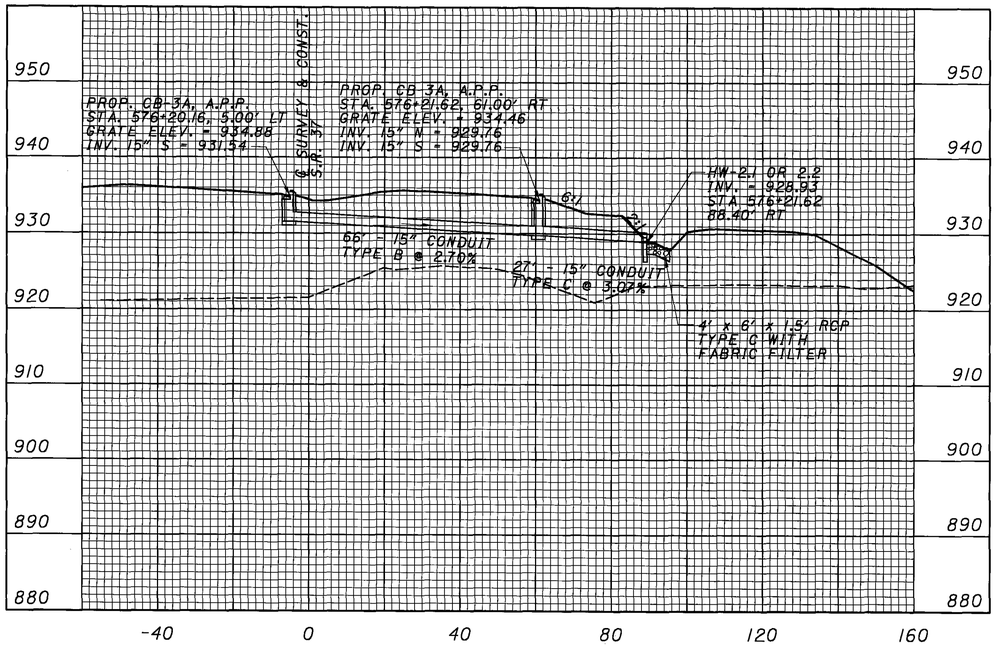
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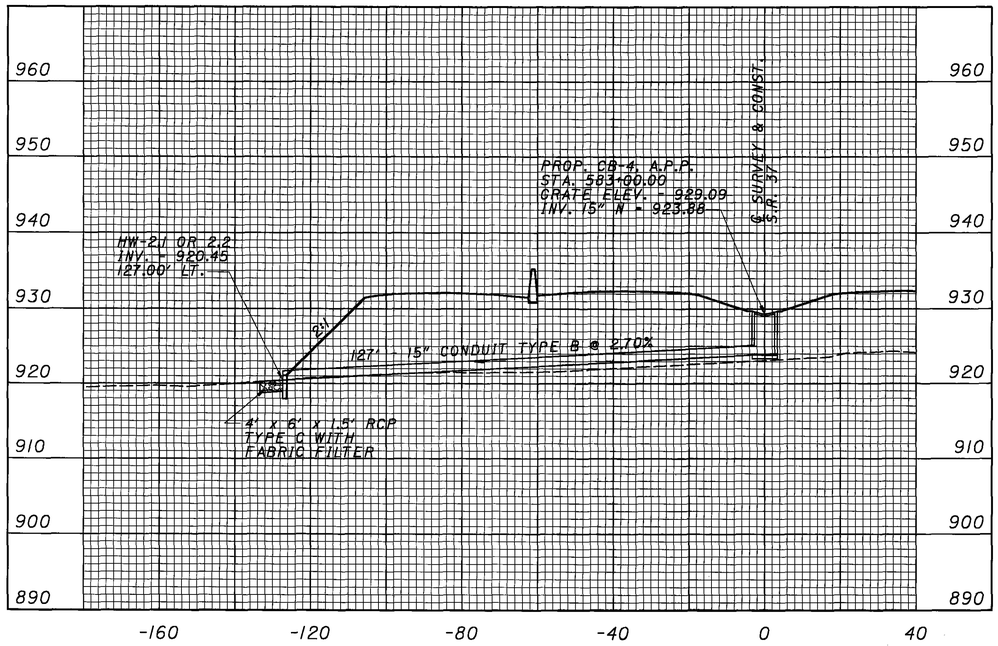
STORM SEWER PROFILE - S.R. 37

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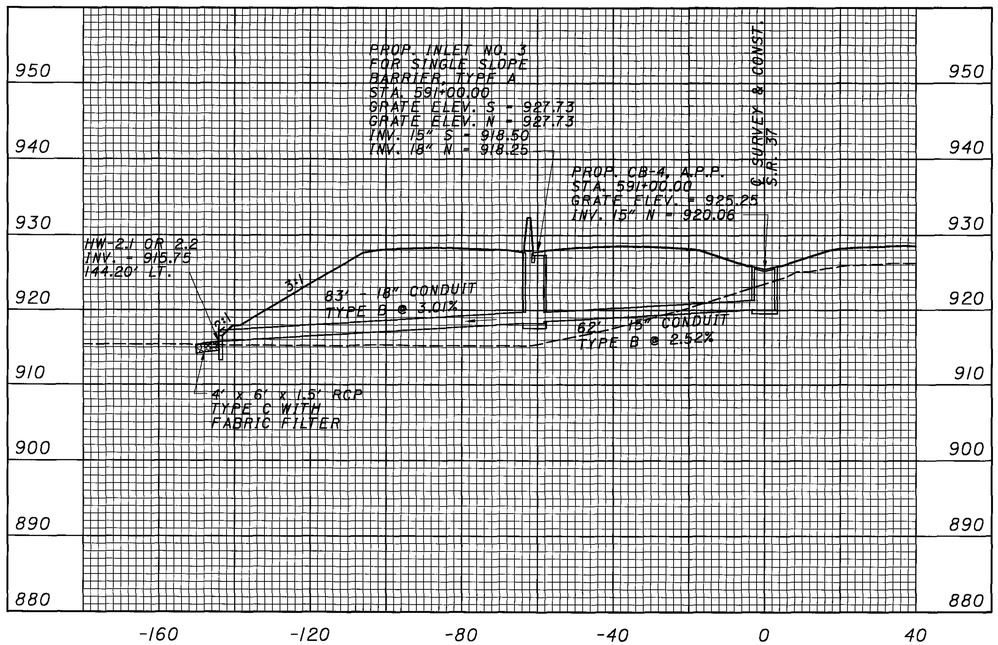
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STA. 576+20.16



STA. 583+00.00



STA. 591+00.00

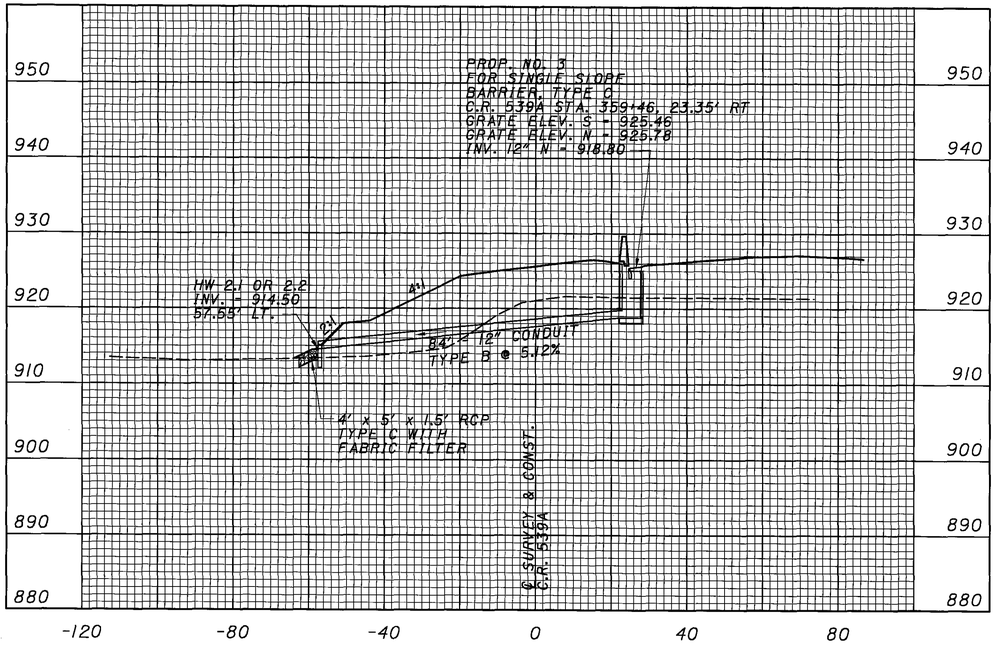
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STORM SEWER PROFILE - S.R. 37

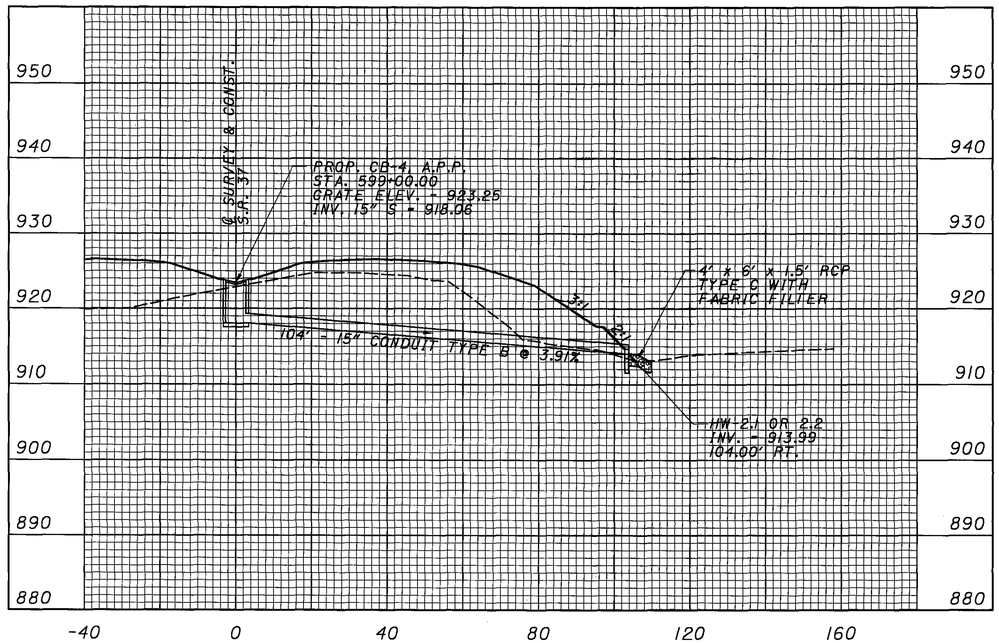
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LIC-37-10.25

962
1349

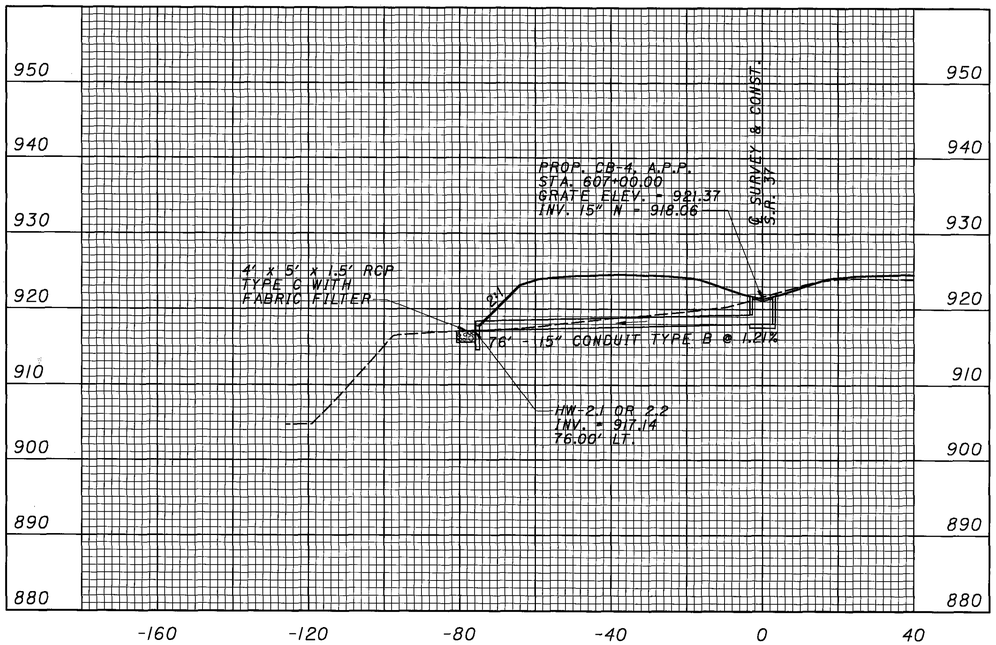
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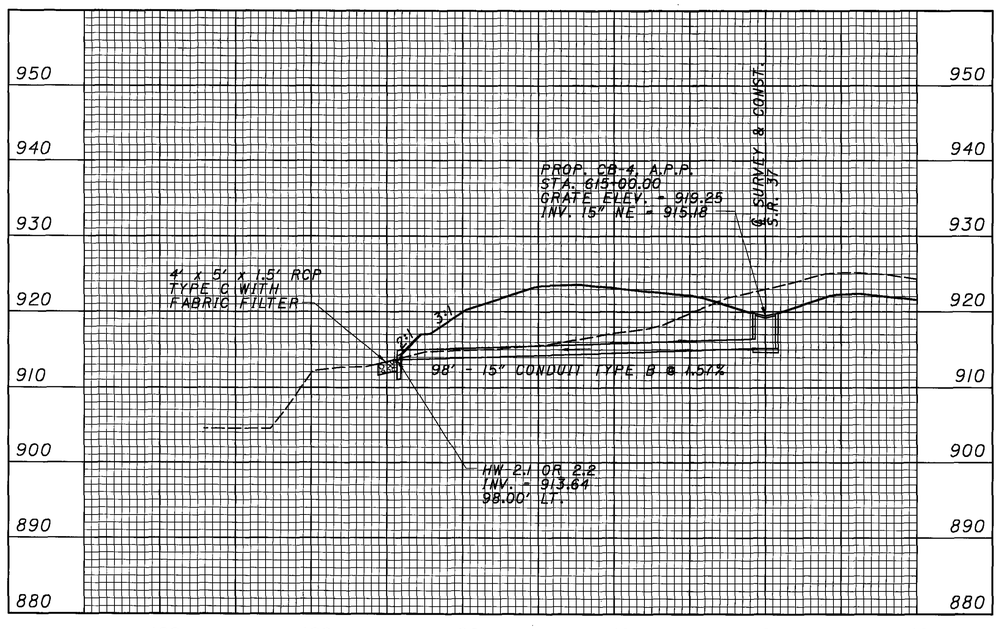
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S.R. 37 STA. 596+90.00



STA. 599+00.00



STA. 607+00.00



STA. 615+00.00

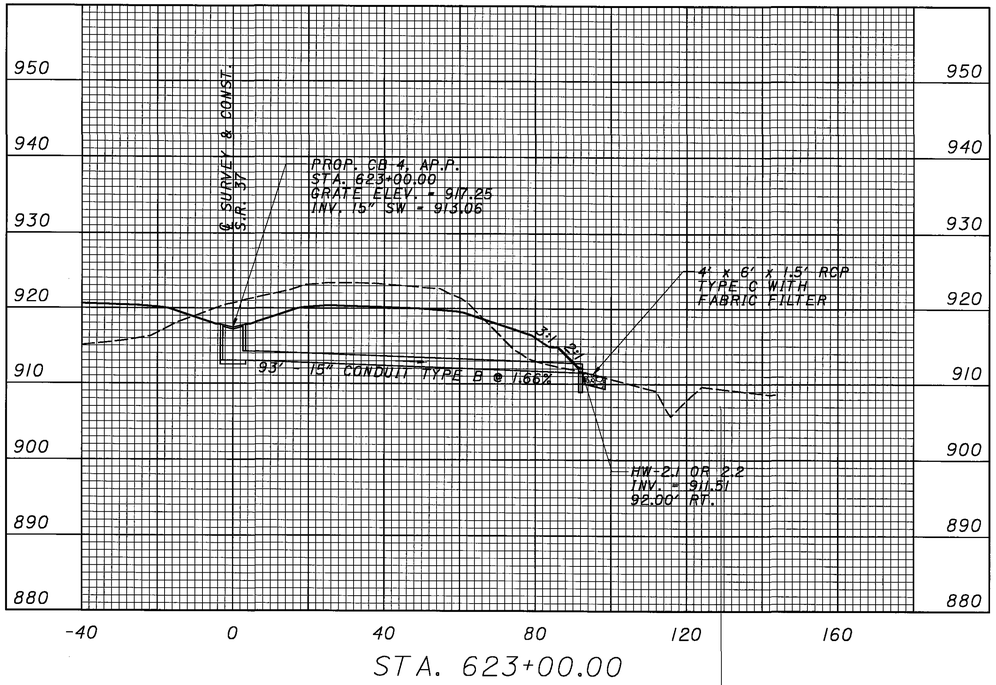
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CHECKED AE

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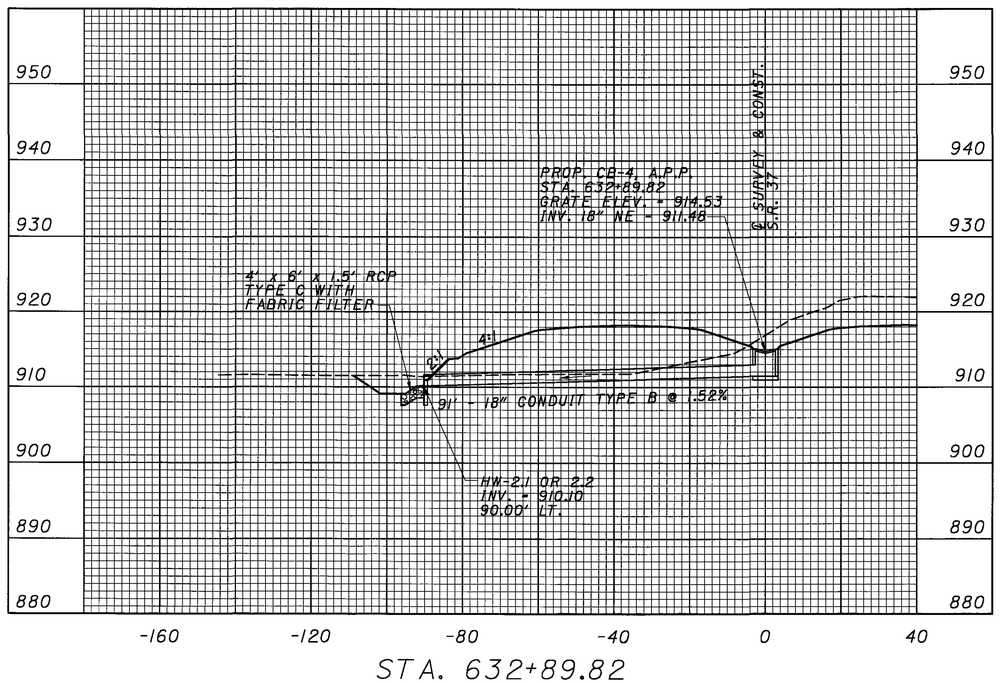
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LIC-37-10.25

963
1349

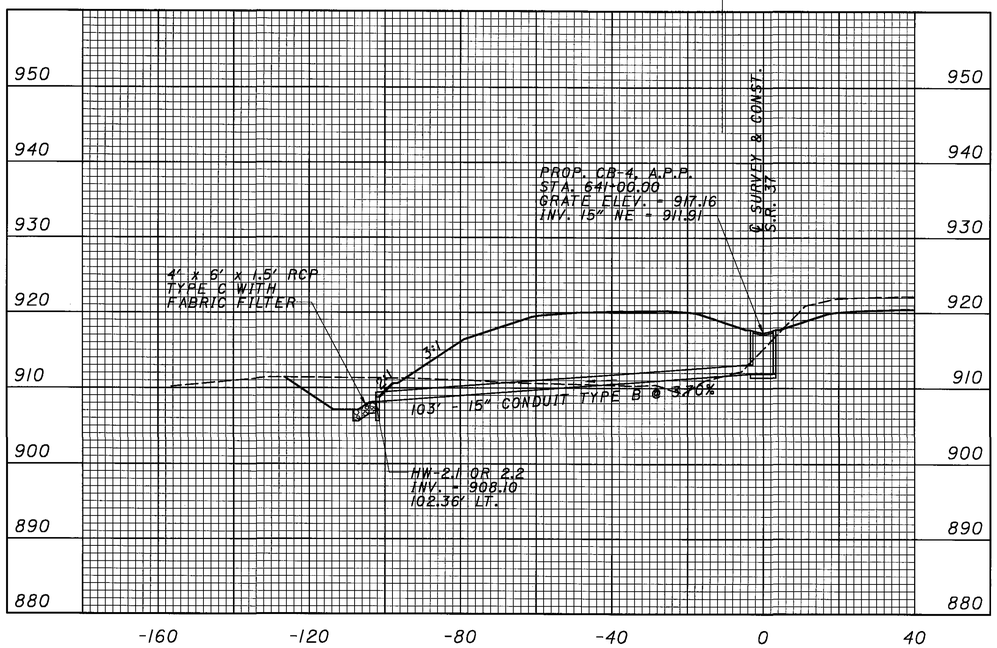
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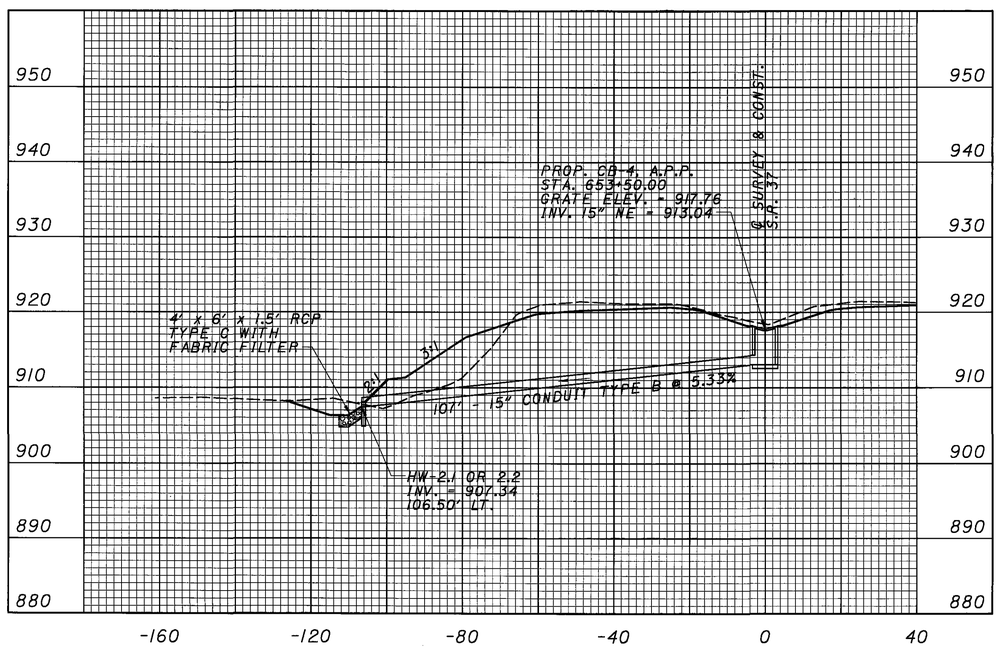
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STA. 632+89.82



STA. 641+00.00



STA. 653+50.00

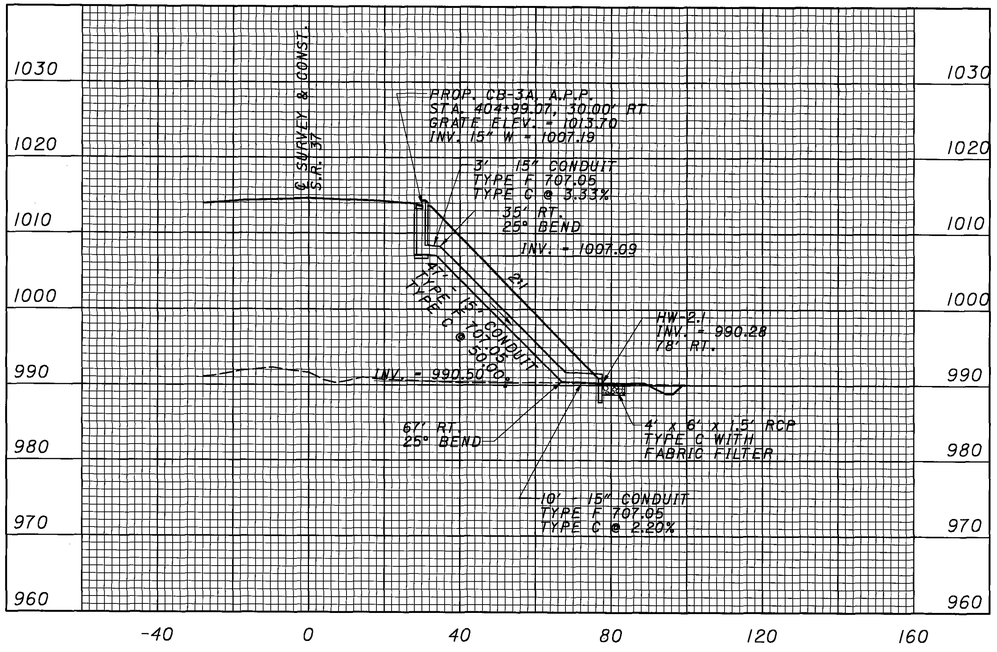
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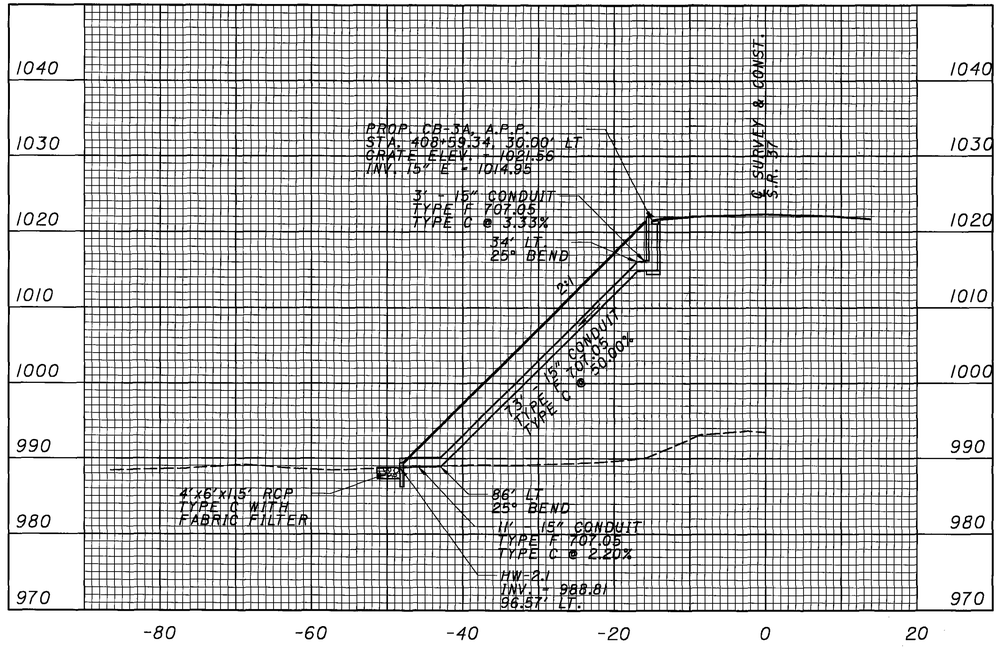
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LIC-37-10.25

964
1349

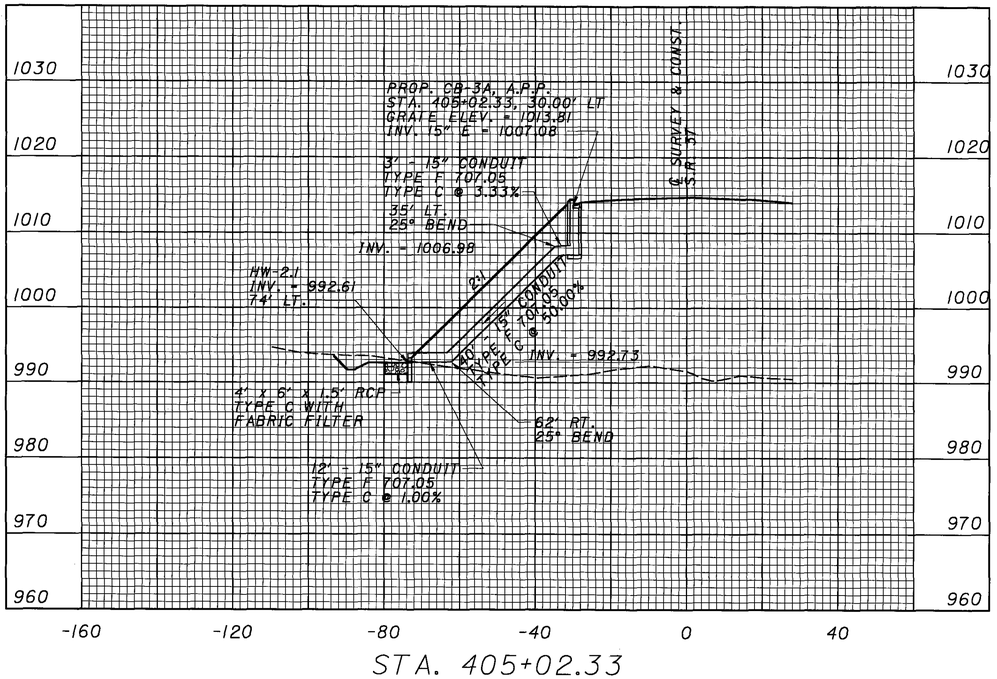
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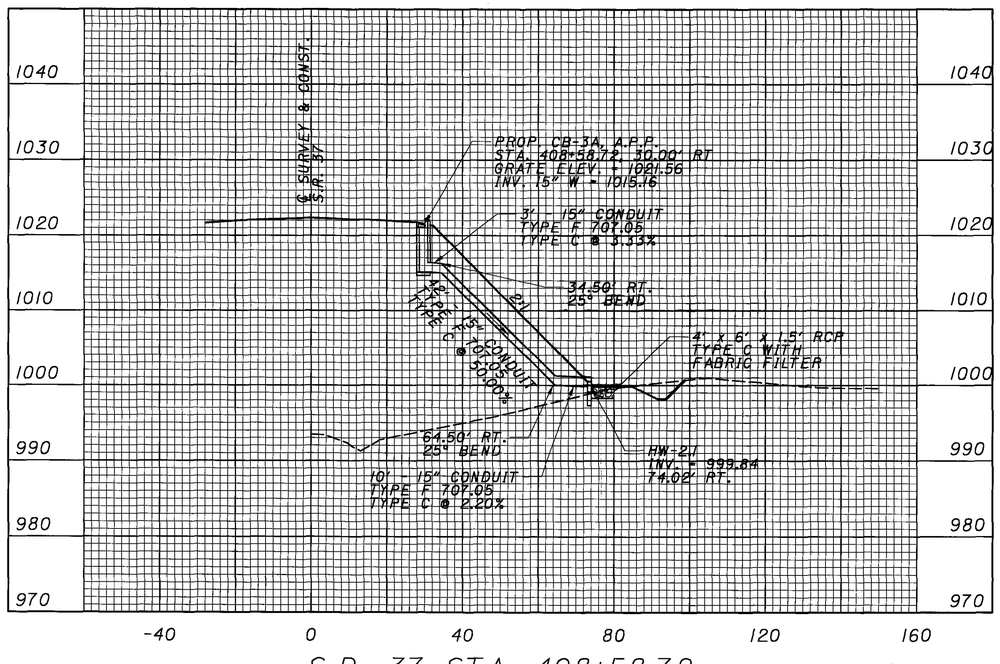
STA. 404+99.07



S.R. 37 STA. 408+59.34



STA. 405+02.33



S.R. 37 STA. 408+58.72

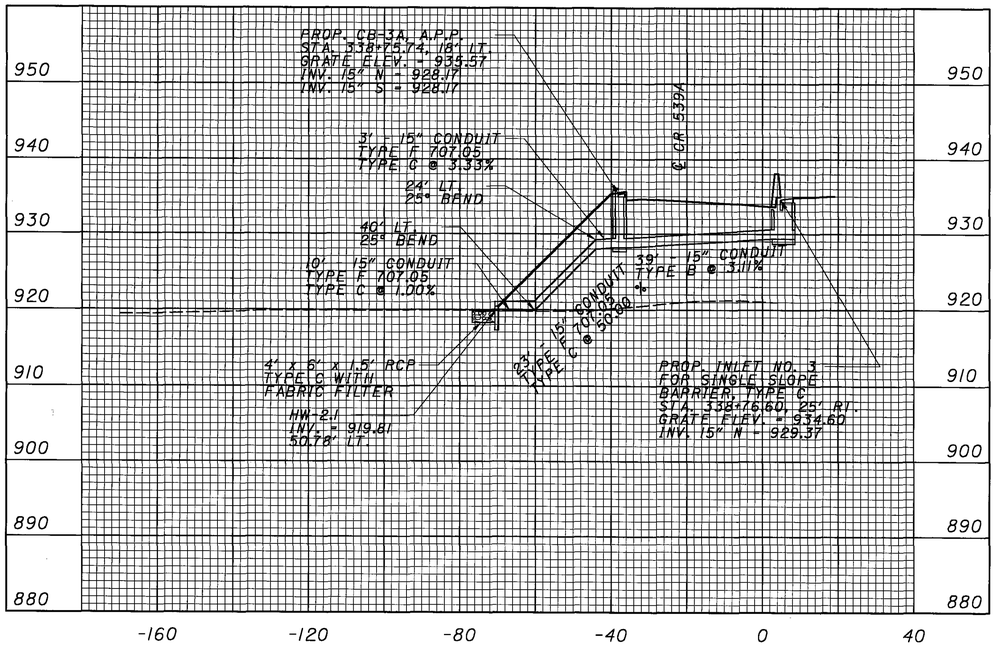
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CHECKED AE

STORM SEWER PROFILE - S.R. 37

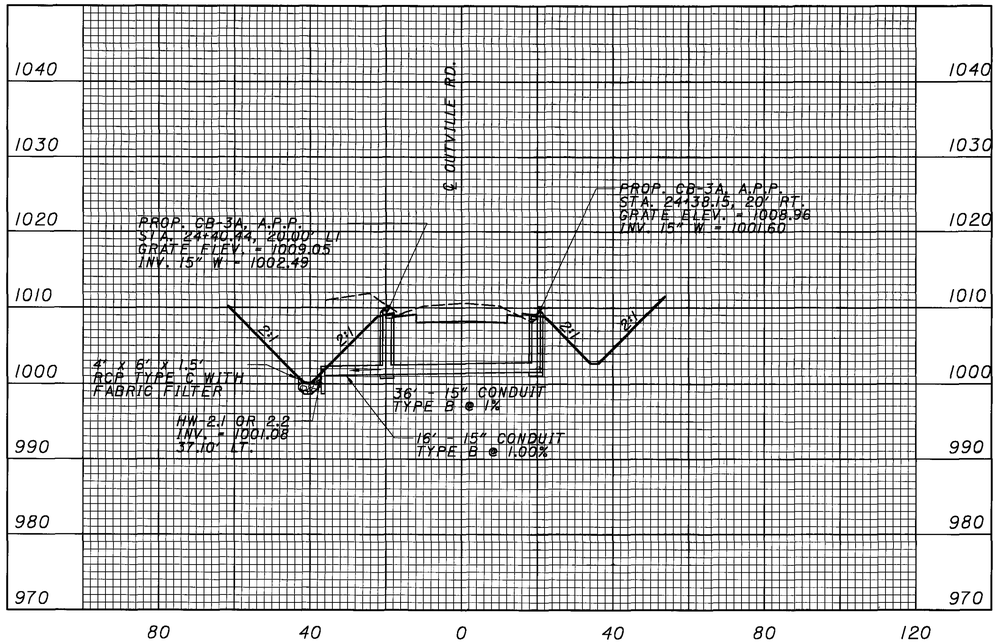
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LIC-37-10.25

965
1349

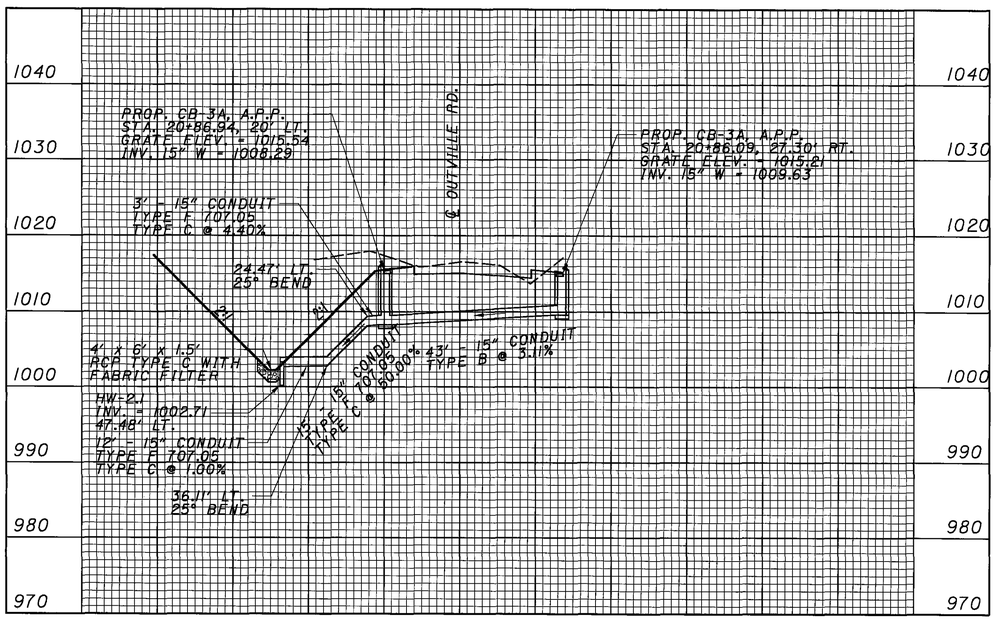
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C.R. 539A EXTENSION STA. 338+75.74



OUTVILLE RD STA. 24+38.15



OUTVILLE RD STA. 20+86.09

STORM SEWER PROFILES

LIC-161-6.65
LIC-37-10.25

966
1349

CALCULATED AE
CHECKED CSR

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 2.13 SQ MI
Q_{50}	= 940 CFS
Q_{100}	= 1150 CFS
HW_{50}	= 1034.7 FT
HW_{100}	= 1036.5 FT
V_{50}	= 5.0 FPS
V_{100}	= 5.3 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	141	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
601	21	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
603	305	FT	120" CONDUIT, TYPE A, 706.02 1500 D-LOAD AS PER PLAN OR 120" CONDUIT, TYPE A, AS PER PLAN (A)

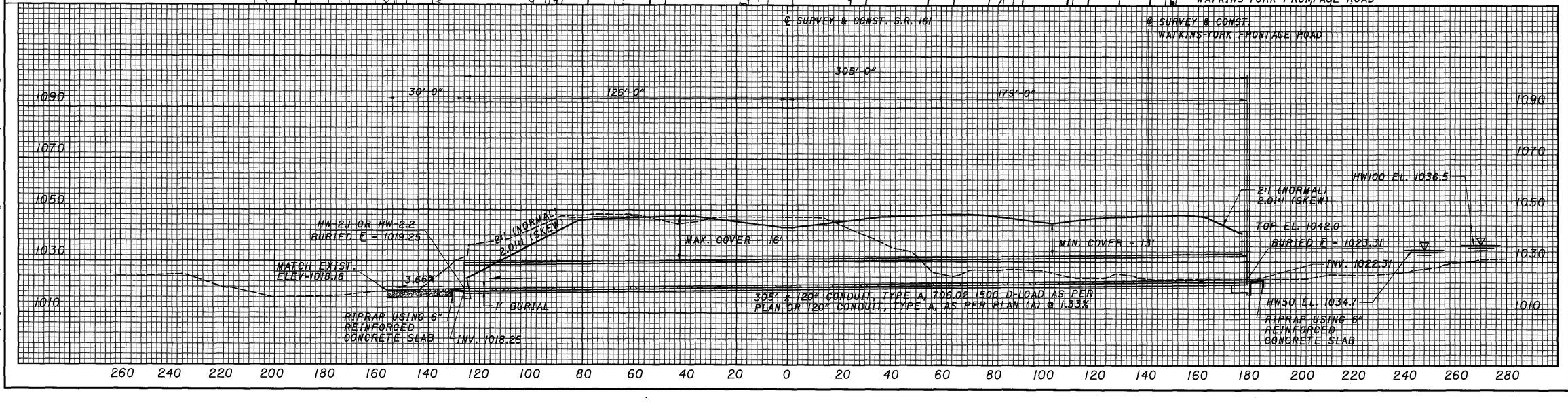
EXISTING STRUCTURE

TYPE: 11'-7"x7'-5" CORRUGATED METAL PIPE ARCH STRUCTURE
LENGTH: 202'
SKEW: 60°
WEARING SURFACE: ASPHALT CONCRETE
STRUCTURAL FILE NUMBER: 45056II

PROPOSED STRUCTURE

TYPE: 120" CONDUIT, TYPE A
LENGTH: 305'
SKEW: 85°
WEARING SURFACE: ASPHALT CONCRETE

CONSTRUCTION LIMITS
2.5' THICK RCP TYPE B
HW-2.1 OR HW-2.2
15" CONDUIT, TYPE B
EXIST. STRUCTURE
EXIST. CB
P.C. STA. 374+65.36
CB-4, A.P.P.
WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 161
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
120" CONDUIT, TYPE A
10' PAVED SHOULDER
6' PAVED SHOULDER
LA-R/W
LA
375+00
374+00
134+00
133+00
135+00
+13
+77
85°
75°
23'
25'
5'
14'
10'
24'
6'
2:1
3:1
6:1
8:1
P.C. STA. 133+17.41
CB-2-2B, A.P.P.
18" CONDUIT, TYPE B
FOR HEADWALL DETAILS SEE SHEET 966A-C.
2.5' THICK RCP, TYPE B
CONSTRUCTION LIMITS
R/W
SIMPSON RUN
ROCK CHANNEL PROTECTION TYPE B, WITH FILTER THICKNESS = 2.5' (TYP.)
S 72°15'10" E



CALCULATED CSR
CHECKED AE

HORIZONTAL SCALE IN FEET
0 10 20 40

CULVERT NO. 1
S.R. 161- STA. 375+13.00

LIC-161-6.65
LIC-37-10.25

968
1349

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GENERAL NOTES

DESIGN SPECIFICATIONS:
CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) 2002, AND THE ODOT SUPPLEMENT TO THESE SPECIFICATIONS.

DESIGN STRESSES:
ALL ALLOWABLE STRESSES ARE IN ACCORDANCE WITH CURRENT AASHTO STANDARD SPECIFICATIONS.

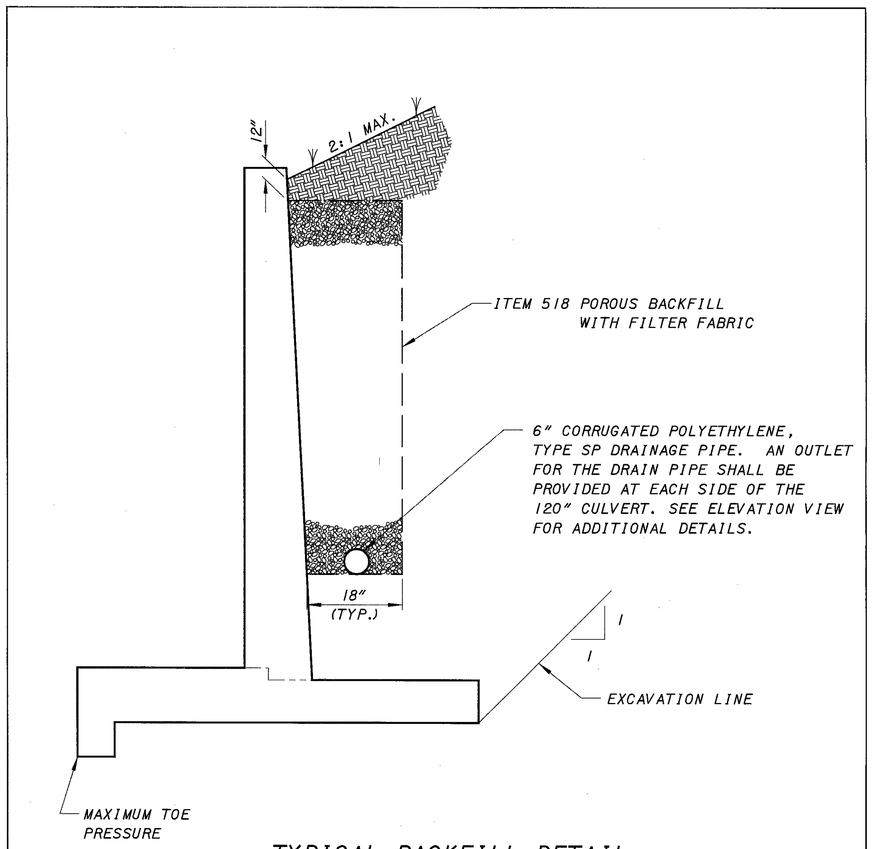
CONCRETE: CLASS C FOR FOOTING AND WALL, (MINIMUM 28 DAY COMPRESSIVE STRENGTH = 4000 psi).

REINFORCING STEEL: ALL REINFORCING STEEL IN ACCORDANCE WITH ASTM A616M, A616M OR A617M, DEFORMED, EPOXY COATED, GRADE 420 (Fy = 60,000 psi)

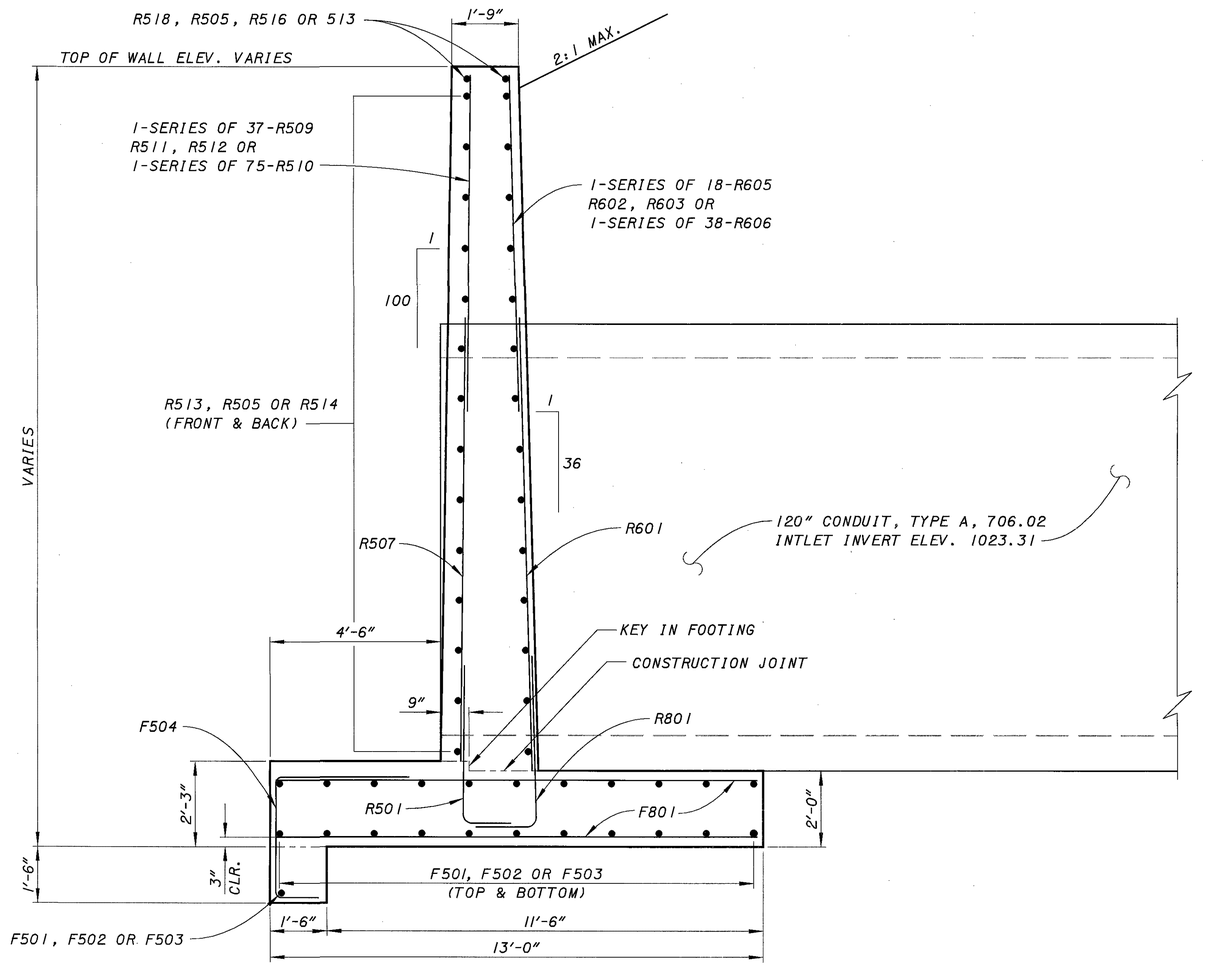
QUANTITIES

ITEM 503	UNCLASSIFIED EXCAVATION	LUMP
ITEM 509	EPOXY COATED REINFORCING STEEL	12,955 POUND
ITEM 512	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	136 SQ.YD.
ITEM 516	1" PREFORMED EXPANSION JOINT FILLER	37 SQ.FT.
ITEM 518	POROUS BACKFILL WITH FILTER FABRIC	LUMP
ITEM 518	6" PERFORATED CORRUGATED PLASTIC PIPE	73 FT.
ITEM 518	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	8 FT.
ITEM 602	CONCRETE MASONRY	198 CU.YD.

QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY - SHEET 137



TYPICAL BACKFILL DETAIL



CAST-IN-PLACE CANTILEVER RETAINING WALL DETAIL
PROFILE VIEW

(2 ksf ALLOWABLE BEARING PRESSURE)

HORIZONTAL SCALE IN FEET
0 2 4

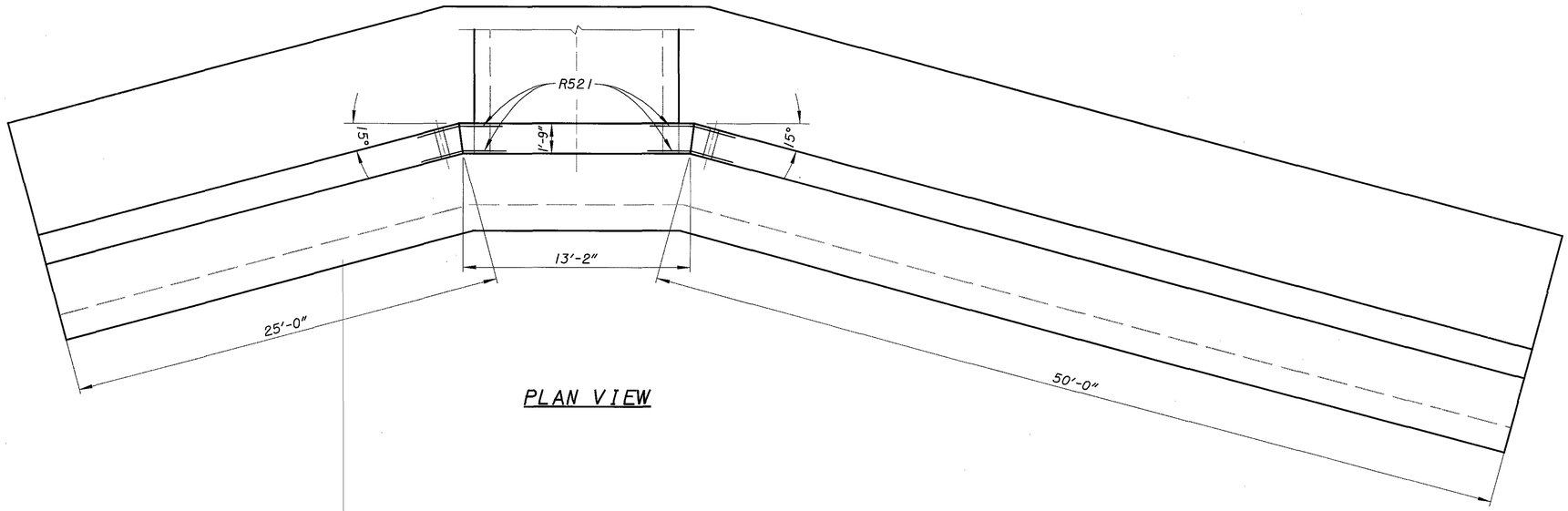
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CAST-IN-PLACE CANTILEVER RETAINING WALL DETAILS

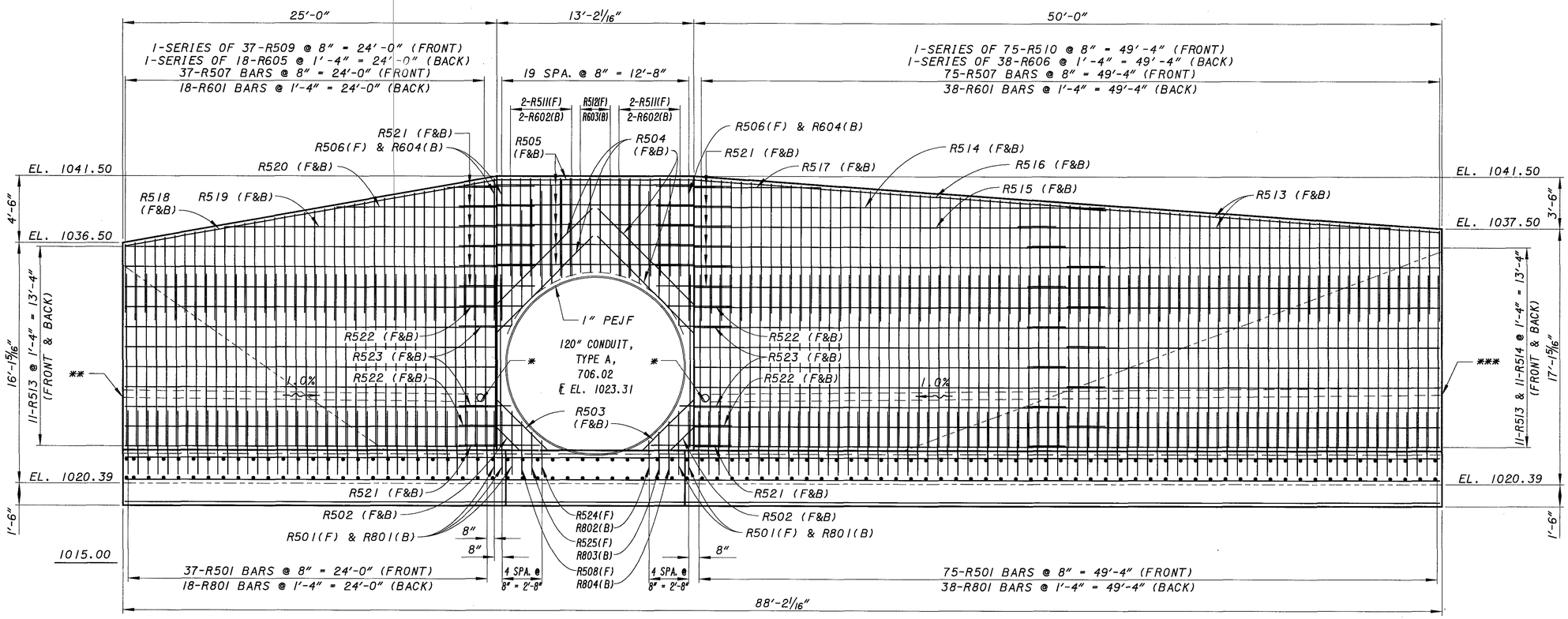
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PLAN VIEW



ELEVATION VIEW

NOTE: HEADWALL SHOWN AS IF IT WAS STRIAGHT

* - ℄ EL. 1026.00
** - ℄ EL. 1026.24
*** - ℄ EL. 1026.49

NOTES:
LAP No.5 BARS @ NO LESS THAN 2'-6"
LAP No.6 BARS @ NO LESS THAN 3'-0"

HORIZONTAL SCALE IN FEET
0 4 8

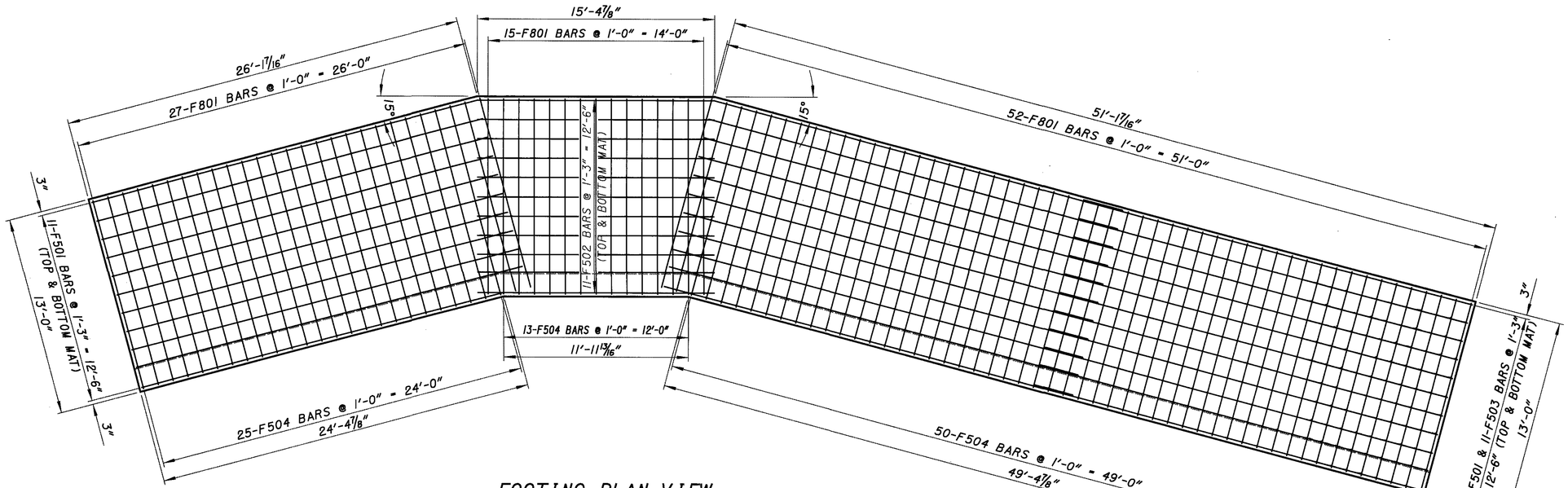
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CAST-IN-PLACE CANTILEVER RETAINING WALL DETAILS

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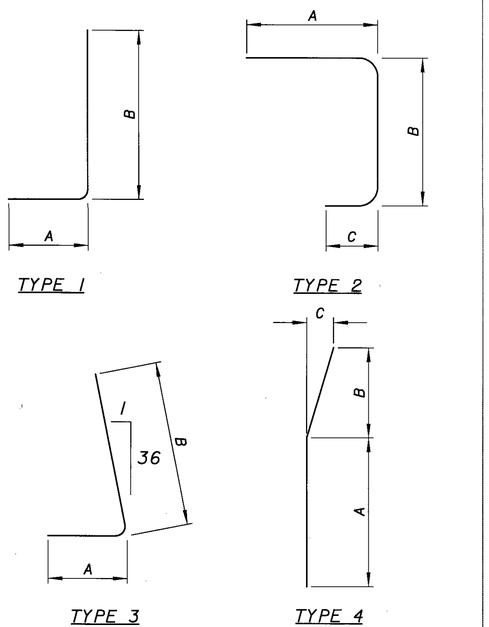
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FOOTING PLAN VIEW

BAR BENDING DIAGRAM



NOTE: ALL DIMENSIONS ARE OUT TO OUT

MARK	NUMBER	LENGTH	SHAPE	WEIGHT	TYPE	A	B	C	D	E
F501	22	26'-0"	STR.	597						
F502	11	15'-4"	STR.	176						
F503	11	27'-6"	STR.	316						
F504	88	6'-5"	BT.	589	2	3'-6"	3'-2"	1'-0"		
F801	94	12'-8"	STR.	3179						
R501	117	6'-5"	BT.	783	3	2'-0"	4'-6"			
R502	4	2'-2"	STR.	9						
R503	4	4'-9"	STR.	20						
R504	8	9'-0"	STR.	75						
R505	12	13'-2"	STR.	165						
R506	3	9'-0"	STR.	28						
R507	112	11'-6"	STR.	1343						
R508	2	5'-10"	BT.	12	1	2'-0"	3'-11"			
R509	1 SERIES OF 37	4'-6" TO 8'-10"	STR.	257						
R510	1 SERIES OF 75	5'-6" TO 9'-0"	STR.	567						
R511	28	6'-6"	STR.	190						
R512	4	6'-3"	STR.	26						
R513	26	24'-10"	STR.	673						
R514	13	27'-6"	STR.	373						
R515	2	24'-3"	STR.	51						
R516	2	27'-8"	STR.	58						
R517	2	8'-5"	STR.	18						

MARK	NUMBER	LENGTH	SHAPE	WEIGHT	TYPE	A	B	C	D	E
R518	2	25'-3"	STR.	53						
R519	2	18'-0"	STR.	38						
R520	2	10'-8"	STR.	22						
R521	28	4'-11"	BT.	144	4	2'-6"	2'-4"	8"		
R522	8	4'-2"	BT.	35	4	2'-6"	1'-8"	6"		
R523	8	3'-6"	BT.	29	4	2'-6"	1'-0"	3"		
R524	2	4'-5"	BT.	9	1	2'-0"	2'-6"			
R525	2	5'-1"	BT.	11	1	2'-0"	3'-2"			
R601	56	11'-6"	STR.	967						
R602	28	6'-6"	STR.	273						
R603	4	6'-3"	STR.	38						
R604	3	9'-5"	STR.	42						
R605	1 SERIES OF 18	5'-0" TO 9'-4"	STR.	194						
R606	1 SERIES OF 38	6'-0" TO 9'-6"	STR.	442						
R801	61	6'-7"	BT.	1072	1	2'-0"	4'-9"			
R802	2	4'-4"	BT.	23	1	2'-0"	2'-6"			
R803	2	5'-0"	BT.	27	1	2'-0"	3'-2"			
R804	2	5'-9"	BT.	31	1	2'-0"	3'-11"			
SUBTOTAL				12955						

HORIZONTAL SCALE IN FEET
0 4 8

CALCULATED TAG
CHECKED HAG

CAST-IN-PLACE CANTILEVER RETAINING WALL DETAILS

LIC-161-6.65
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HYDRAULIC DESIGN DATA S/N	
DRAINAGE AREA	= 76/93 Ac
Q_{50}	= 100/112 CFS
Q_{100}	= 118/131 CFS
HW 50	= 1026.4/1025.2 FT
HW 100	= 1027.0/1025.5 FT
V 50	= 3.8/4.4 FPS
V 100	= 4.1/5.1 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	84	CU YD	ROCK CHANNEL PROTECTION,
			TYPE B, WITH FILTER
601	20	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	15.84	CU YD	CONCRETE MASONRY
603	457	FT	103"x71" CONDUIT, TYPE A 707.22

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

EXISTING STRUCTURE

TYPE: 72" x 44" CORRUGATED METAL PIPE ARCH STRUCTURE
LENGTH: 80'
ROADWAY: 40'
SKEW: 60°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE

TYPE: 103"x71" CONDUIT, TYPE A
LENGTH: 364' & 93'
SKEW: 61°
WEARING SURFACE: ASPHALT CONCRETE

CULVERT NO. 2
S.R. 161 - STA. 408+60

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 440 AC
Q_{50}	= 374 CFS
Q_{100}	= 439 CFS
HW_{50}	= 991.5 FT
HW_{100}	= 992.6 FT
V_{50}	= 11.1 FPS
V_{100}	= 11.6 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	80	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
601	10	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	10.62	CU YD	CONCRETE MASONRY
603	568	FT	96" CONDUIT, TYPE A, 706.02 2250 D-LOAD, AS PER PLAN OR 102" CONDUIT, TYPE A, AS PER PLAN (B)

EXISTING STRUCTURE
TYPE: 72" CONCRETE PIPE
LENGTH: 128'
ROADWAY: 40'
SKEW: 18°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE
TYPE: 96" CONDUIT, TYPE A
LENGTH: 568'
SKEW: 47°
WEARING SURFACE: ASPHALT CONCRETE

HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

CALCULATED CSR
CHECKED AE

CULVERT NO. 3
S.R. 161 - STA. 435+88

LIC-161-6.65
LIC-37-10.25

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HYDRAULIC DESIGN DATA S/N	
DRAINAGE AREA	= 223/441 Ac
Q_{50}	= 210/397 CFS
Q_{100}	= 246/467 CFS
HW 50	= 979.7/975.9 FT
HW 100	= 980.7/976.8 FT
V 50	= 10.3/11.6 FPS
V 100	= 11.1/12.4 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	78	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
602	19.14	CU YD	CONCRETE MASONRY
603	322	FT	102" CONDUIT, TYPE A, 706.02, 1250 D-LOAD, AS PER PLAN OR 108" CONDUIT TYPE A, AS PER PLAN (C)
603	120	FT	78" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 84" CONDUIT, TYPE A, AS PER PLAN (U)

EXISTING STRUCTURE FOR CULVERT 4&5 (TO REMAIN)
TYPE: 14'x4' BRIDGE
LENGTH: 44'
SKEW: 25°
WEARING SURFACE: ASPHALT CONCRETE
STRUCTURAL FILE NUMBER: 4501683
YEAR BUILT: 1957

PROPOSED STRUCTURE S/N
TYPE: 78"/102" CONDUIT, TYPE A
LENGTH: 120'/322'
SKEW: 89°/89°
WEARING SURFACE: ASPHALT CONCRETE

CALCULATED CSR
CHECKED AE

HORIZONTAL SCALE IN FEET
0 10 20 40

CULVERT NO. 4
S.R. 161- STA. 463+44

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LIC-37-10.25

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HYDRAULIC DESIGN DATA S/N	
DRAINAGE AREA	= 44/48 Ac
Q_{50}	= 66/69 CFS
Q_{100}	= 78/81 CFS
HW_{50}	= 987.4/982.1 FT
HW_{100}	= 988.3/982.1 FT
V_{50}	= 11.1/7.8 FPS
V_{100}	= 11.8/8.3 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	23	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
601	6	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	4.32	CU YD	CONCRETE MASONRY
603	267	FT	54" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 60" CONDUIT, TYPE A, AS PER PLAN (D)
603	108	FT	42" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 48" CONDUIT, TYPE A, AS PER PLAN (V)

EXISTING STRUCTURE FOR CULVERT 4&5 (TO REMAIN)
TYPE: 14'x4' BRIDGE
LENGTH: 44'
SKEW: 25°
WEARING SURFACE: ASPHALT CONCRETE
STRUCTURAL FILE NUMBER: 4501683
YEAR BUILT: 1957

PROPOSED STRUCTURE S/N
TYPE: 42"/54" CONDUIT, TYPE A
LENGTH: 108'/267'
SKEW: 86°/85°
WEARING SURFACE: ASPHALT CONCRETE

CALCULATED CSR CHECKED AE

HORIZONTAL SCALE IN FEET 0 10 20 40

CULVERT NO. 5
S.R. 161 - STA. 470+00

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LIC-37-10.25

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 9 AC
Q_{50}	= 29 CFS
Q_{100}	= 33 CFS
HW_{50}	= 983.8 FT
HW_{100}	= 984.0 FT
V_{50}	= 7.9 FPS
V_{100}	= 8.1 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	3	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
602	1.38	CU YD	CONCRETE MASONRY
603	344	FT	36" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT, TYPE A, AS PER PLAN (E)

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 6
S.R. 37 - STA. 513+74

LIC-161-6.65
LIC-37-10.25

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EXISTING STRUCTURE
TYPE: 30" CONCRETE PIPE
LENGTH: 96'
SKEW: 7°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE
TYPE: 36" CONDUIT, TYPE A
LENGTH: 344'
SKEW: 57°
WEARING SURFACE: ASPHALT CONCRETE

CB-4, A.P.P.
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
36" CONDUIT, TYPE A
HW-2.1 OR HW2.2
CONSTRUCTION LIMITS
1.5' THICK RCP, TYPE C
WESTBOUND LANES
EASTBOUND LANES
6' PAVED SHOULDER
10' PAVED SHOULDER
4' PAVED SHOULDER
L-A-R/W
T ESMT
R/W
514+00
513+00
512+00
+74
+97
57°
S82°24'26"E

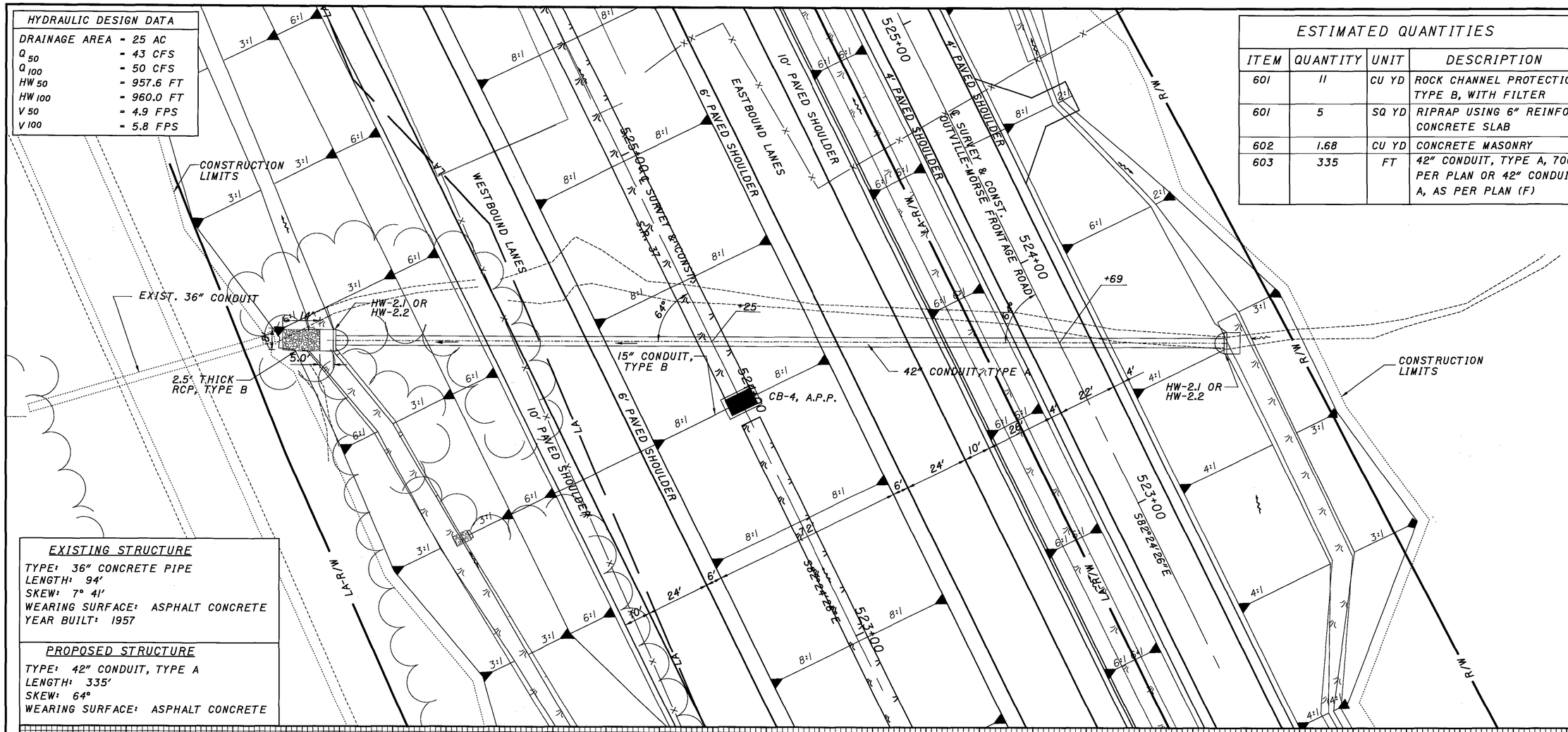
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
344' x 36" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT, TYPE A, AS PER PLAN (E) @ 0.58%
℄ = 979.0
℄ = 981.0
6" NORMAL 7.15% SKEW
4:1 NORMAL 8.71% SKEW
MIN COVER 1.4'
MAX COVER 6'
HW50 EL. 983.8
HW100 EL. 984.0
1.5' THICK RCP, TYPE C
HW 2.1 OR HW-2.2
149'
195'
1040
1020
1000
980
960
260 240 220 200 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 25 AC
Q_{50}	= 43 CFS
Q_{100}	= 50 CFS
HW_{50}	= 957.6 FT
HW_{100}	= 960.0 FT
V_{50}	= 4.9 FPS
V_{100}	= 5.8 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	11	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
601	5	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	1.68	CU YD	CONCRETE MASONRY
603	335	FT	42" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 42" CONDUIT TYPE A, AS PER PLAN (F)

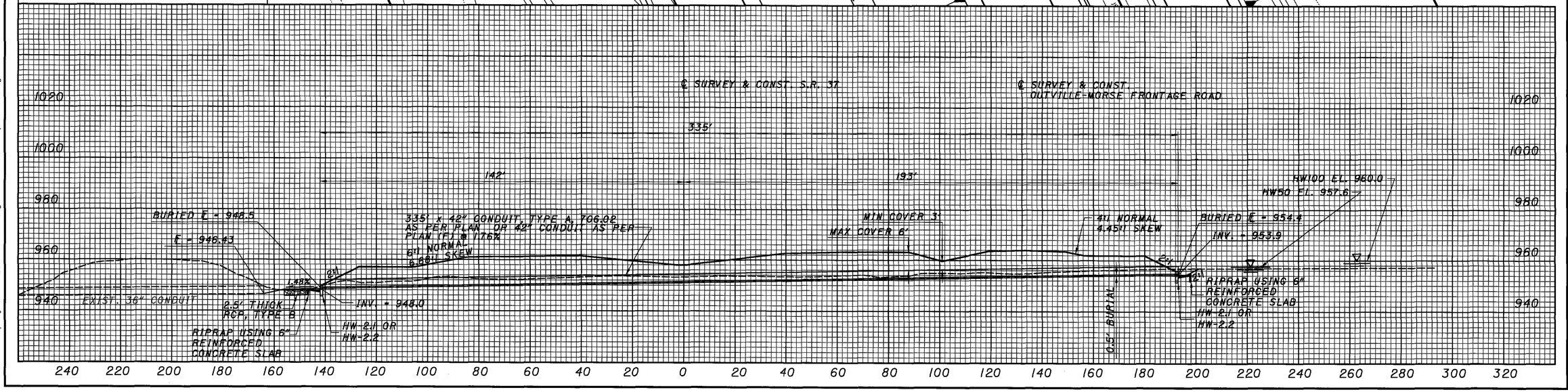


EXISTING STRUCTURE

TYPE: 36" CONCRETE PIPE
LENGTH: 94'
SKEW: 7° 41'
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE

TYPE: 42" CONDUIT, TYPE A
LENGTH: 335'
SKEW: 64°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 7
S.R. 37 - STA. 524+25

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LIC-37-10.25

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 162 AC
Q_{50}	= 186 CFS
Q_{100}	= 219 CFS
HW_{50}	= 936.7 FT
HW_{100}	= 937.1 FT
V_{50}	= 6.6 FPS
V_{100}	= 7.5 FPS

ESTIMATED QUANTITIES

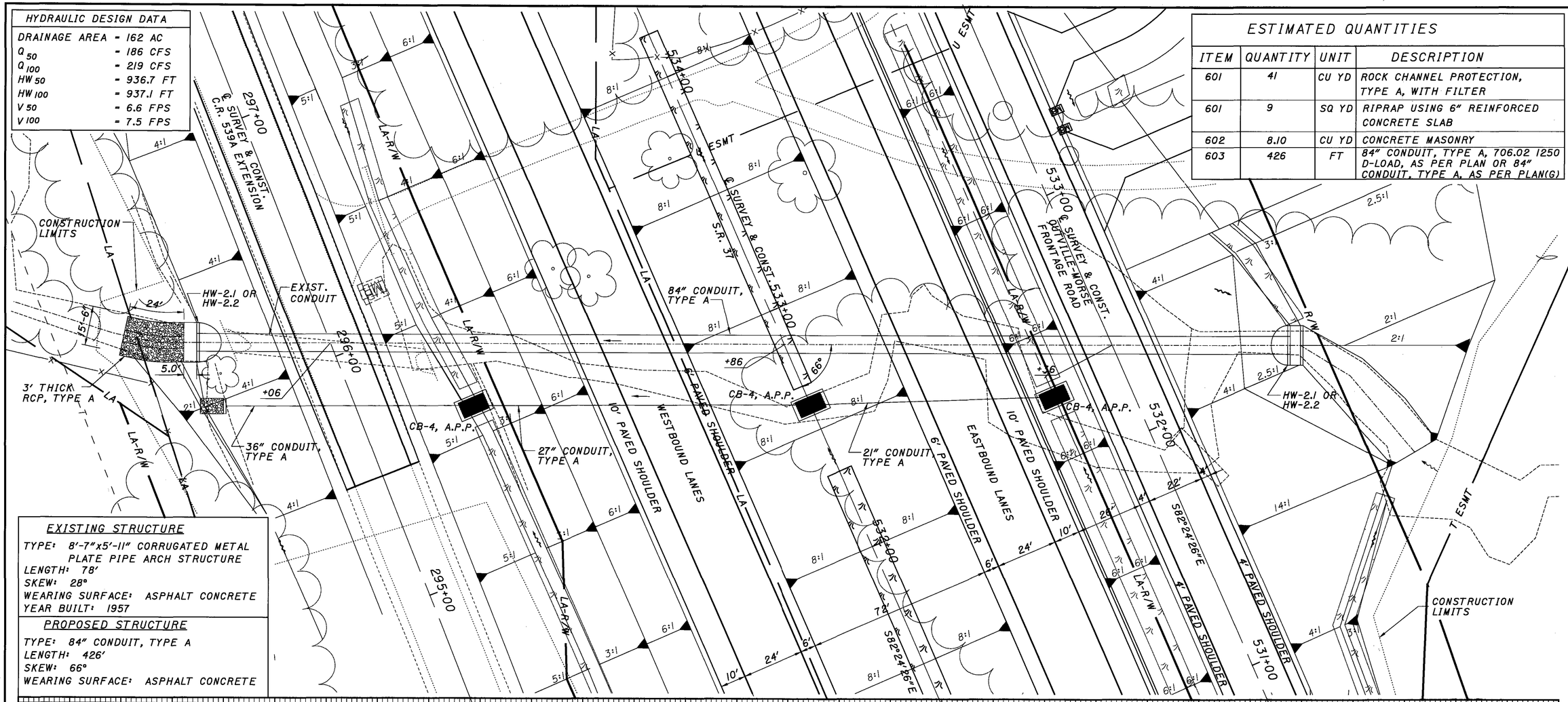
ITEM	QUANTITY	UNIT	DESCRIPTION
601	41	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
601	9	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	8.10	CU YD	CONCRETE MASONRY
603	426	FT	84" CONDUIT, TYPE A, 706.02 1250 D-LOAD, AS PER PLAN OR 84" CONDUIT, TYPE A, AS PER PLAN(G)

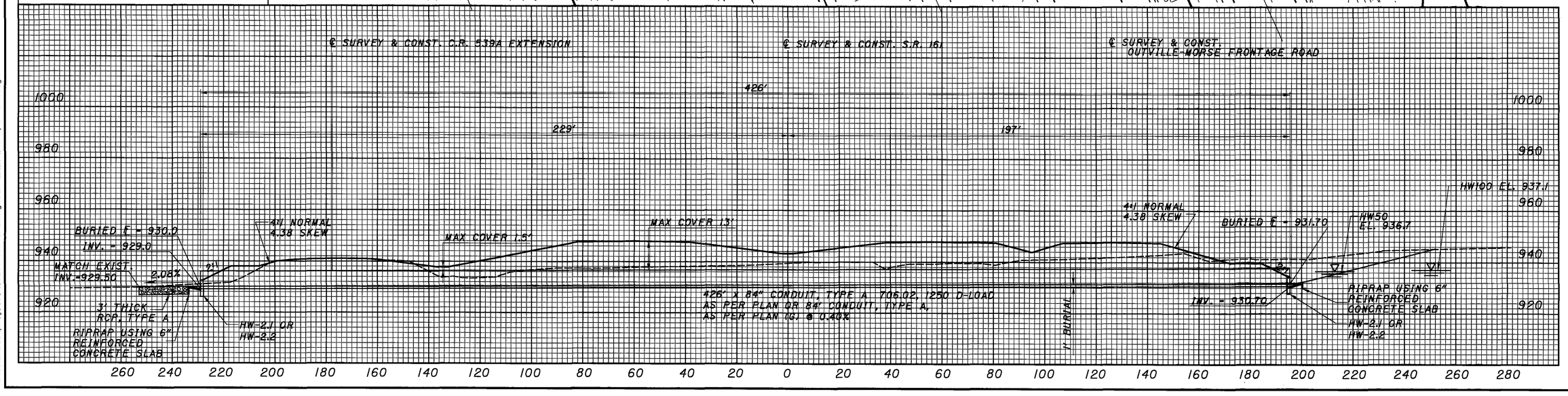
EXISTING STRUCTURE

TYPE: 8'-7"x5'-11" CORRUGATED METAL PLATE PIPE ARCH STRUCTURE
LENGTH: 78'
SKEW: 28°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE

TYPE: 84" CONDUIT, TYPE A
LENGTH: 426'
SKEW: 66°
WEARING SURFACE: ASPHALT CONCRETE





HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
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CULVERT NO. 8
S.R. 37 - STA. 532+86

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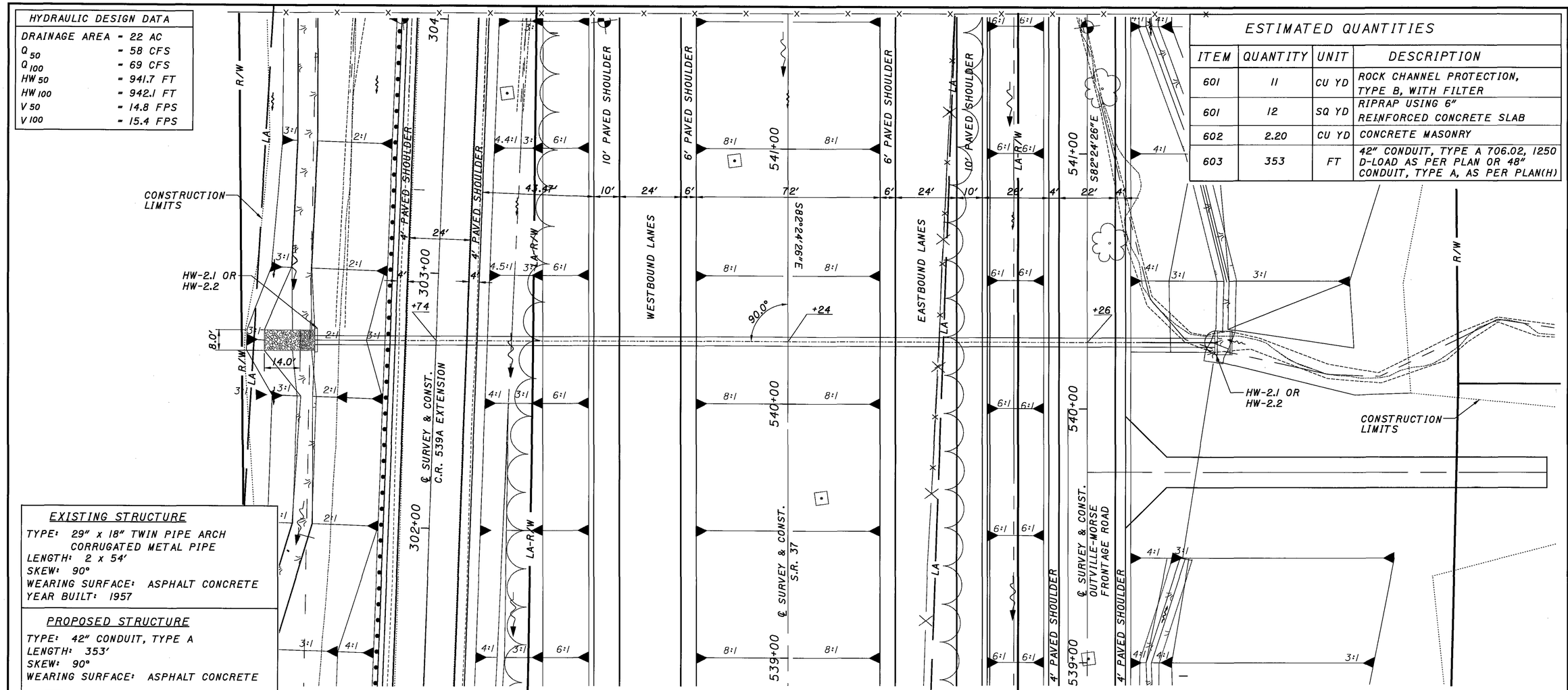
HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 22 AC
Q_{50}	= 58 CFS
Q_{100}	= 69 CFS
HW_{50}	= 941.7 FT
HW_{100}	= 942.1 FT
V_{50}	= 14.8 FPS
V_{100}	= 15.4 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	11	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
601	12	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	2.20	CU YD	CONCRETE MASONRY
603	353	FT	42" CONDUIT, TYPE A 706.02, 1250 D-LOAD AS PER PLAN OR 48" CONDUIT, TYPE A, AS PER PLAN(H)

HORIZONTAL SCALE IN FEET
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CALCULATED CSR
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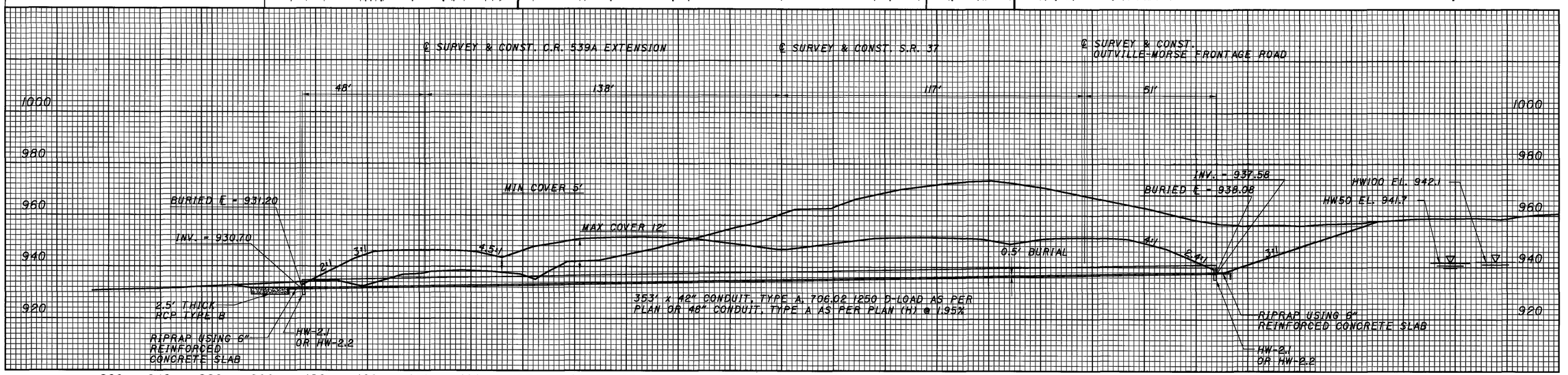


EXISTING STRUCTURE

TYPE: 29" x 18" TWIN PIPE ARCH CORRUGATED METAL PIPE
LENGTH: 2 x 54'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE

TYPE: 42" CONDUIT, TYPE A
LENGTH: 353'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE



CULVERT NO. 9
S.R. 37 - STA. 540+24

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LIC-37-10.25

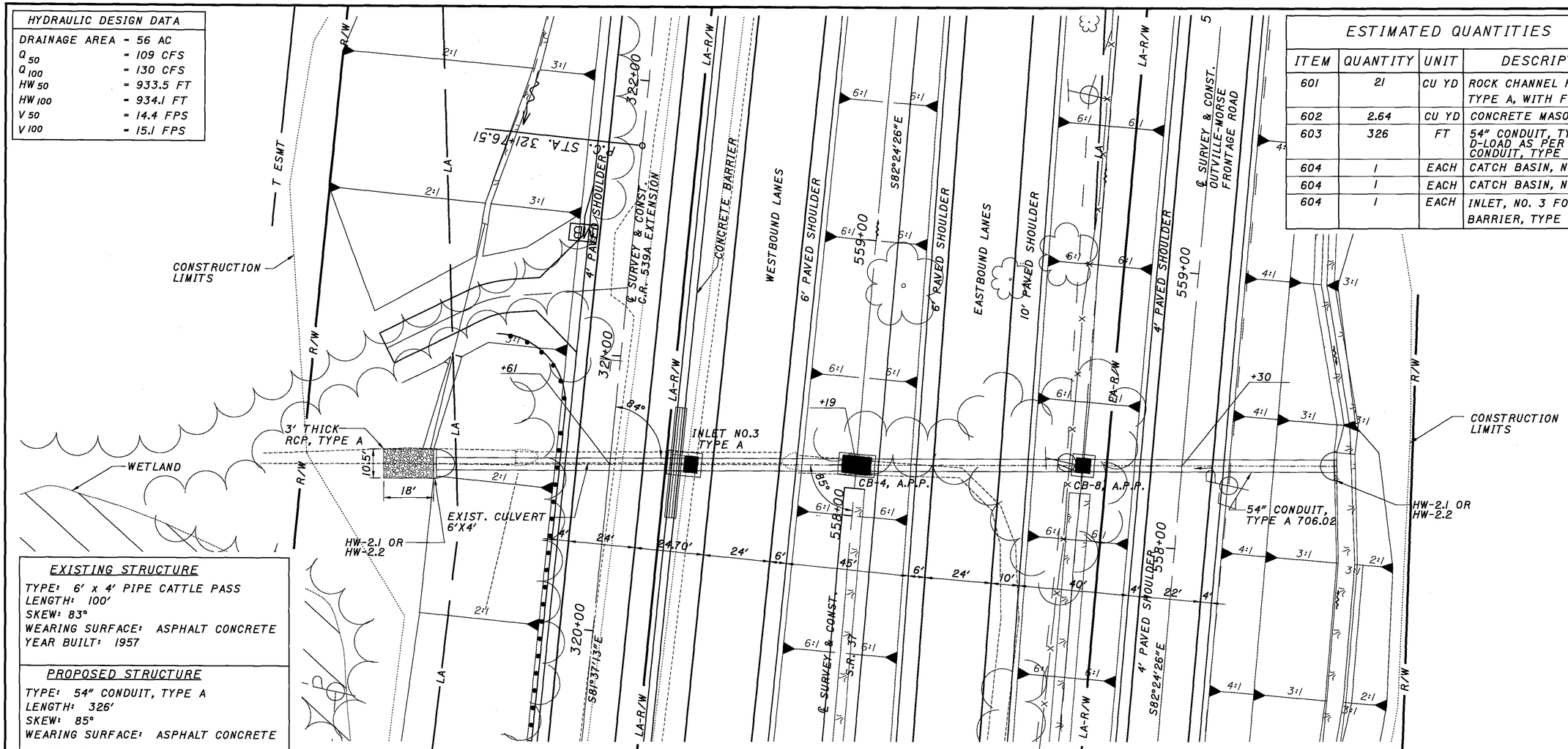
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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 56 AC
Q_{50}	= 109 CFS
Q_{100}	= 130 CFS
HW_{50}	= 933.5 FT
HW_{100}	= 934.1 FT
V_{50}	= 14.4 FPS
V_{100}	= 15.1 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	21	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
602	2.64	CU YD	CONCRETE MASONRY
603	326	FT	54" CONDUIT, TYPE A, 706.02, 1250 D-LOAD AS PER PLAN OR 60" CONDUIT, TYPE A, AS PER PLAN (1)
604	1	EACH	CATCH BASIN, NO. 4, AS PER PLAN
604	1	EACH	CATCH BASIN, NO. 8, AS PER PLAN
604	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE A

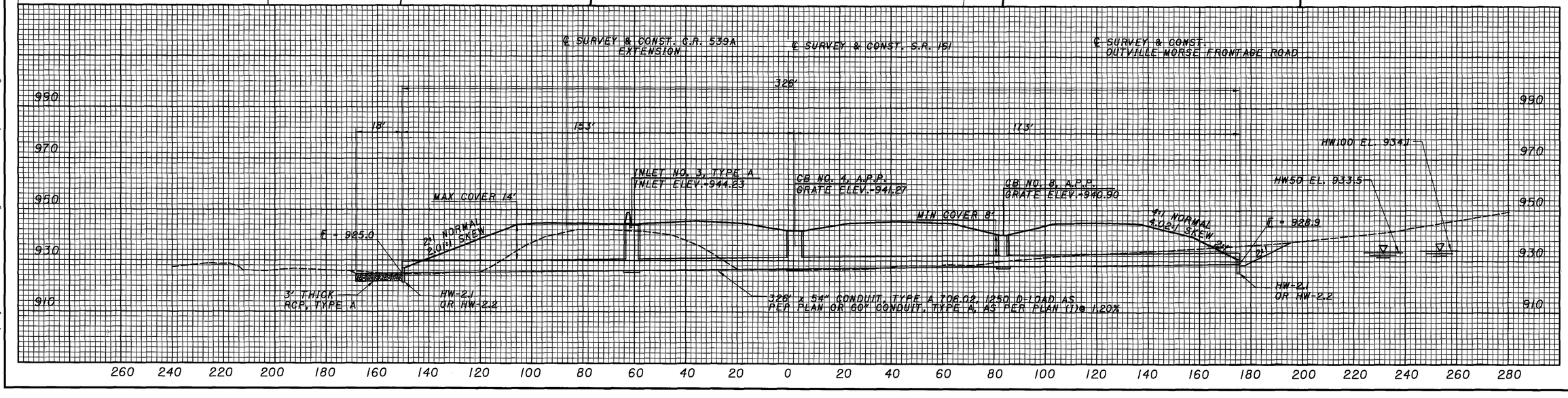


EXISTING STRUCTURE

TYPE: 6' x 4' PIPE CATTLE PASS
LENGTH: 100'
SKEW: 83°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1957

PROPOSED STRUCTURE

TYPE: 54" CONDUIT, TYPE A
LENGTH: 326'
SKEW: 85°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 10
S.R. 37 - STA. 558+19

LIC-161-6.65
LIC-37-10.25

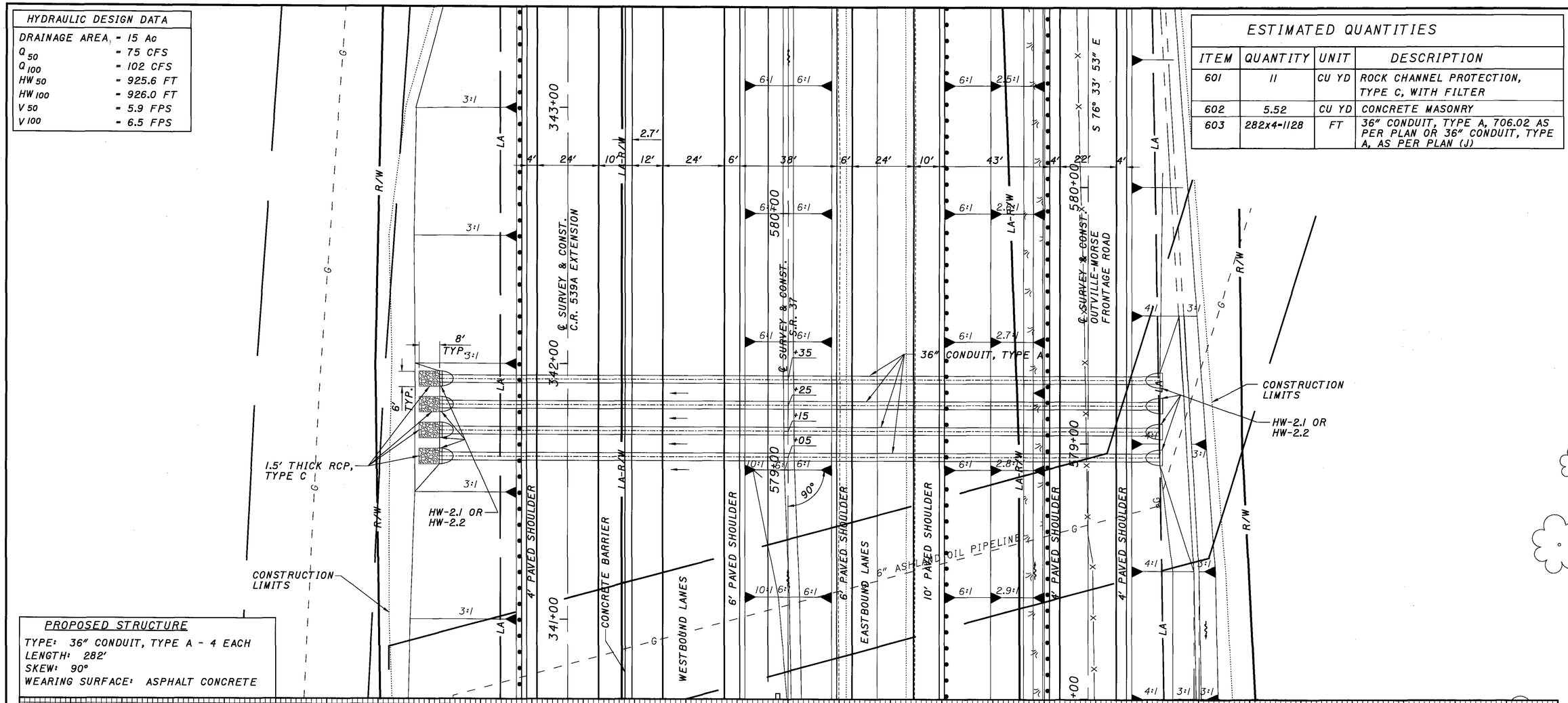
977
1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 15 Ac
Q_{50}	= 75 CFS
Q_{100}	= 102 CFS
HW_{50}	= 925.6 FT
HW_{100}	= 926.0 FT
V_{50}	= 5.9 FPS
V_{100}	= 6.5 FPS

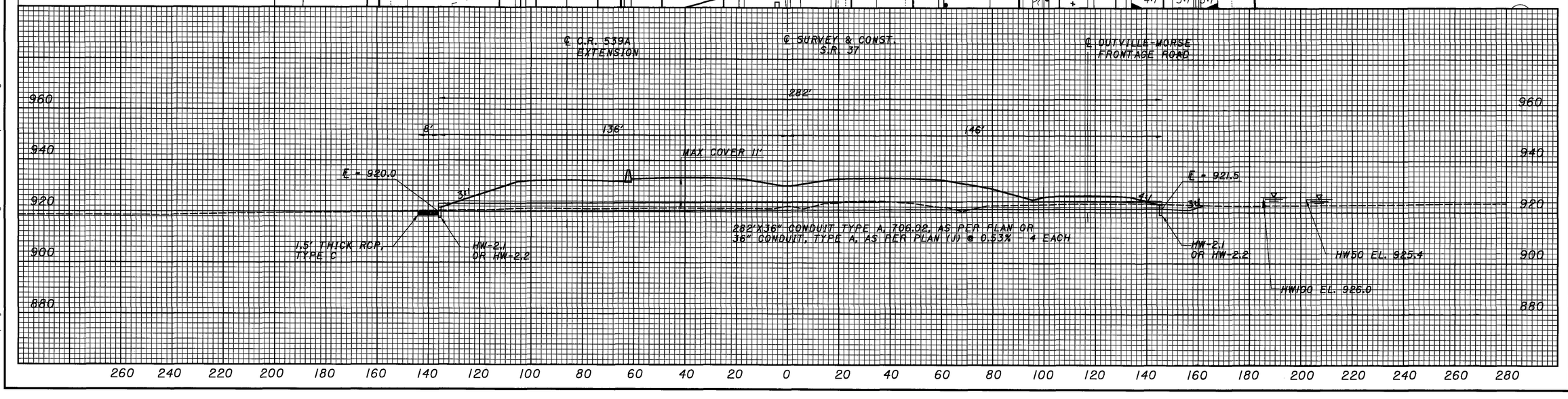
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	11	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
602	5.52	CU YD	CONCRETE MASONRY
603	282x4=1128	FT	36" CONDUIT, TYPE A, 706.02 AS PER PLAN OR 36" CONDUIT, TYPE A, AS PER PLAN (J)



PROPOSED STRUCTURE

TYPE: 36" CONDUIT, TYPE A - 4 EACH
LENGTH: 282'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERTS NO. 11
S.R. 37 - STA. 579+05 TO 579+35

LIC-161-6.65
LIC-37-10.25

978
1349

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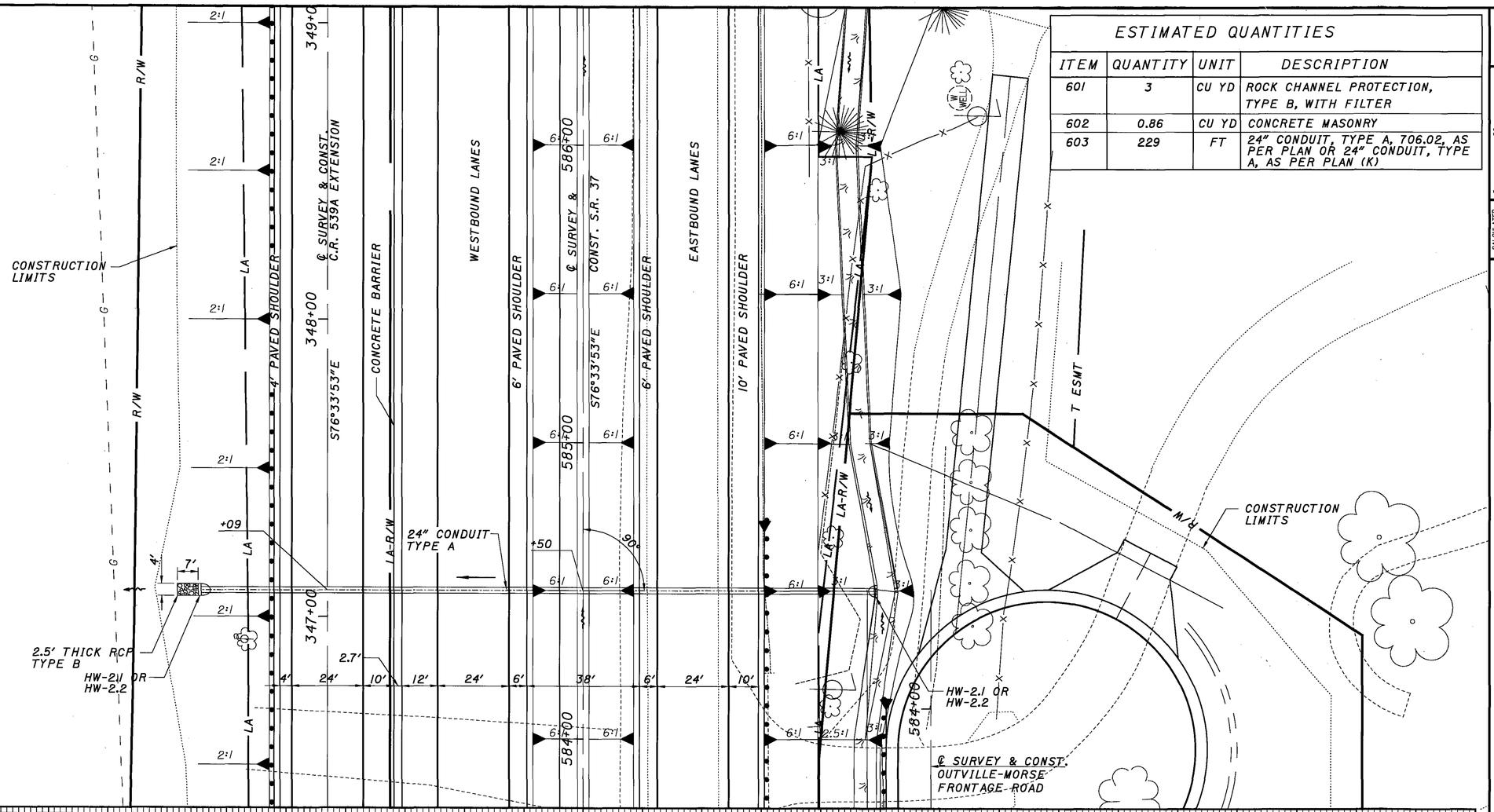
HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 3 Ac
Q_{50}	= 11 CFS
Q_{100}	= 13 CFS
HW_{50}	= 923.0 FT
HW_{100}	= 923.2 FT
V_{50}	= 8.0 FPS
V_{100}	= 8.4 FPS

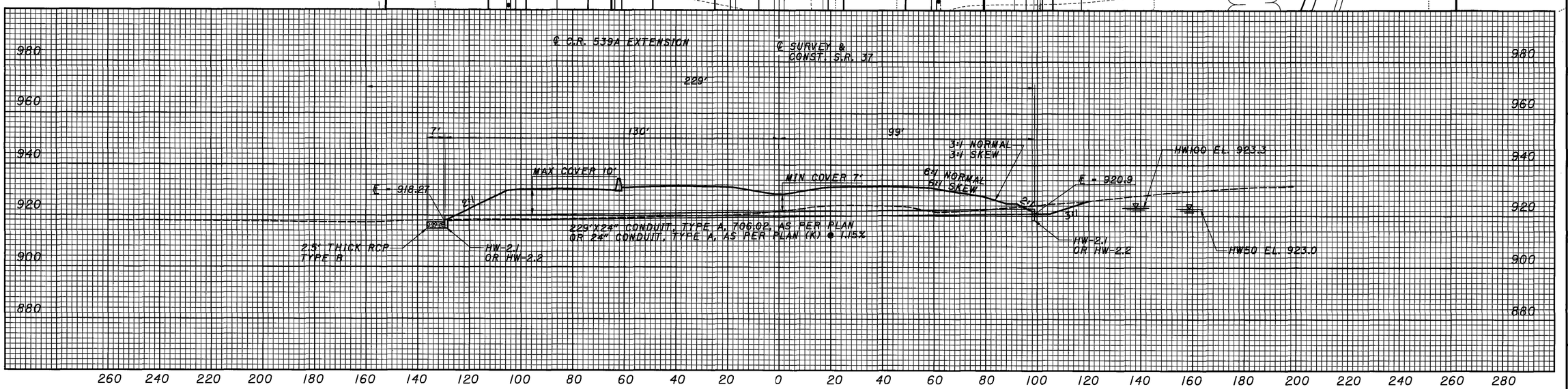
PROPOSED STRUCTURE

TYPE: 24" CONDUIT, TYPE A
LENGTH: 229'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	3	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
602	0.86	CU YD	CONCRETE MASONRY
603	229	FT	24" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 24" CONDUIT, TYPE A, AS PER PLAN (K)





HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 12
S.R. 37 - STA. 584+50

LIC-161-6.65
LIC-37-10.25

979
1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 847 AC
Q_{50}	= 408 CFS
Q_{100}	= 479 CFS
HW_{50}	= 912.1 FT
HW_{100}	= 913.9 FT
V_{50}	= 12.7 FPS
V_{100}	= 13.8 FPS

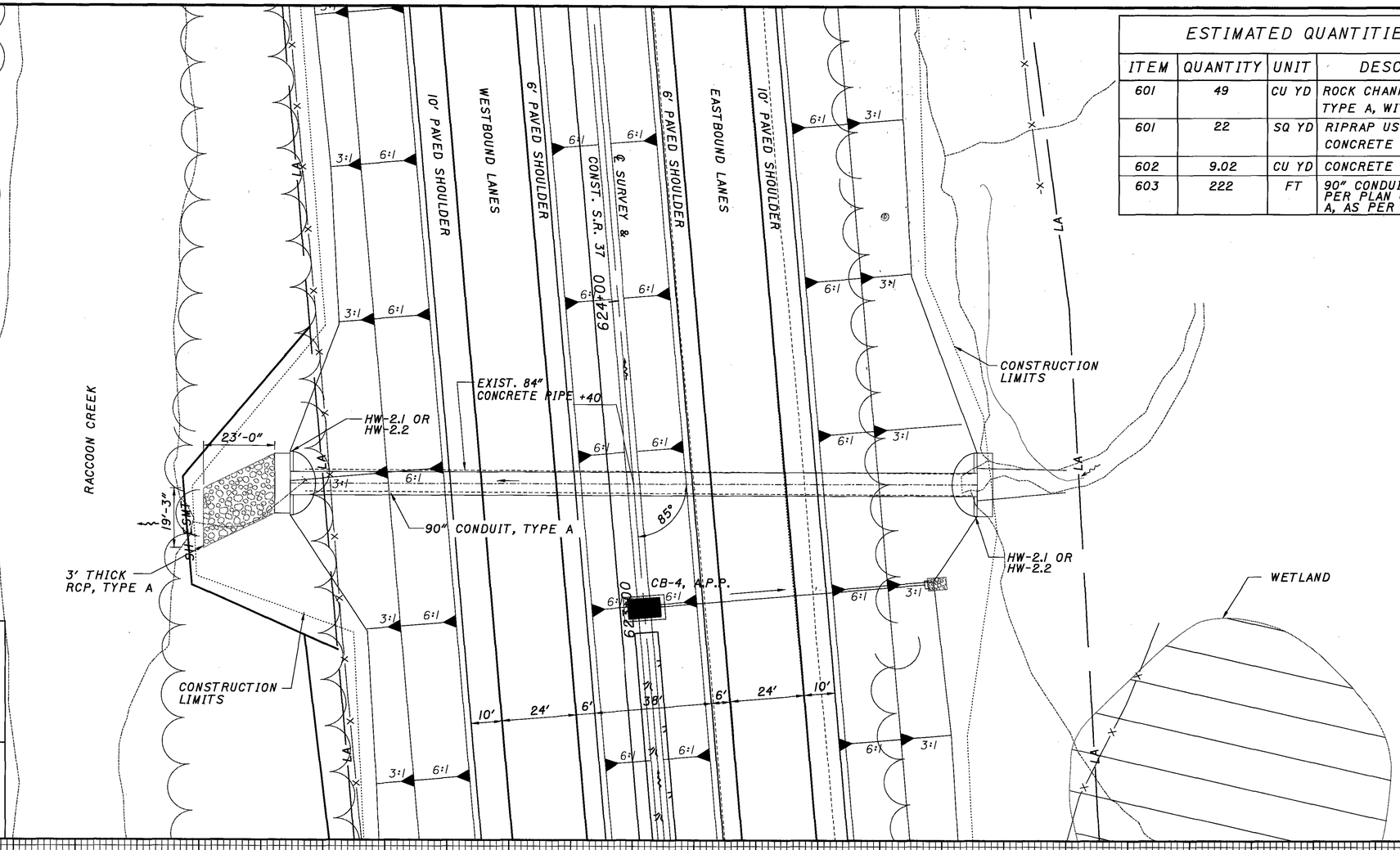
EXISTING STRUCTURE

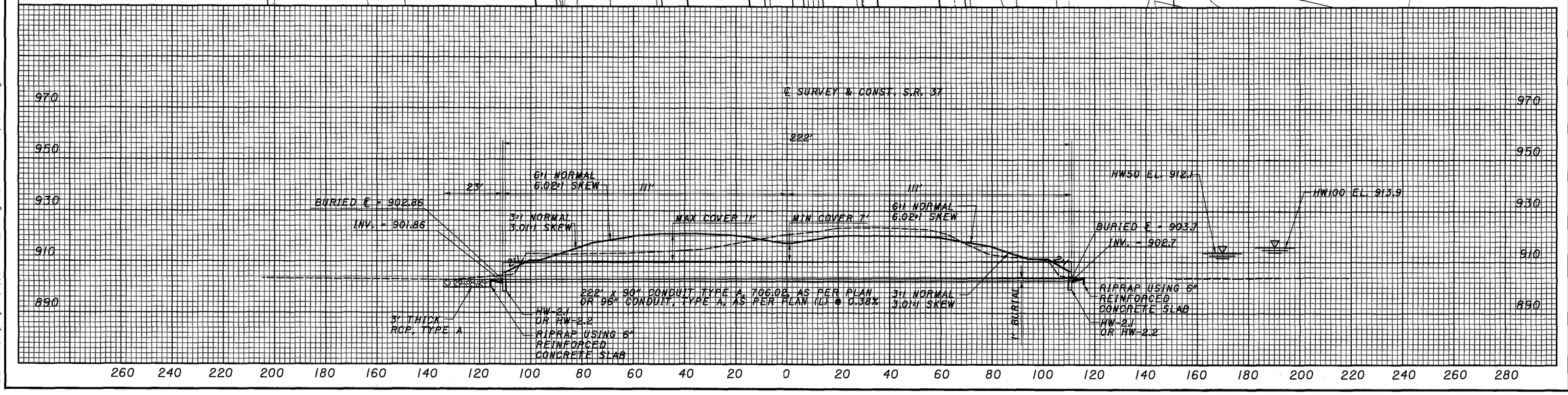
TYPE: 84" REINFORCED CONCRETE PIPE
LENGTH: 220'
SKEW: 0°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1962

PROPOSED STRUCTURE

TYPE: 90" CONDUIT, TYPE A
LENGTH: 222'
SKEW: 85°
WEARING SURFACE: ASPHALT CONCRETE

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
601	49	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
601	22	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	9.02	CU YD	CONCRETE MASONRY
603	222	FT	90" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 96" CONDUIT, TYPE A, AS PER PLAN (L)





CALCULATED CSR
CHECKED AE

HORIZONTAL SCALE IN FEET
0 10 20 40

CULVERT NO. 13
S.R. 37 - STA. 623+40

LIC-161-6.65
LIC-37-10.25

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1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 53 Ac
Q_{50}	= 111 CFS
Q_{100}	= 133 CFS
HW_{50}	= 911.5 FT
HW_{100}	= 912.1 FT
V_{50}	= 9.5 FPS
V_{100}	= 10.3 FPS

FOR DITCH CROSS SECTIONS SEE SHEET 587 - 587A

EXISTING STRUCTURE

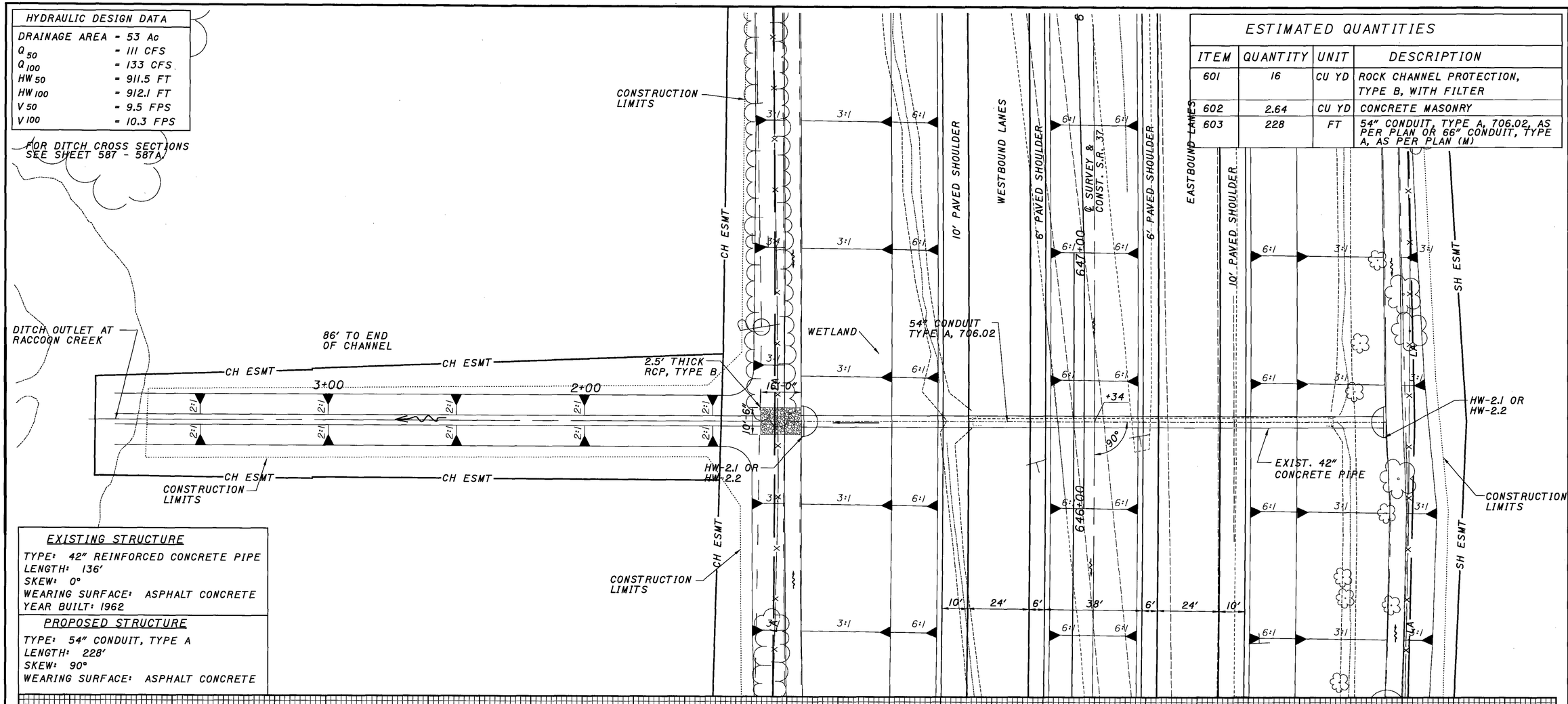
TYPE: 42" REINFORCED CONCRETE PIPE
LENGTH: 136'
SKEW: 0°
WEARING SURFACE: ASPHALT CONCRETE
YEAR BUILT: 1962

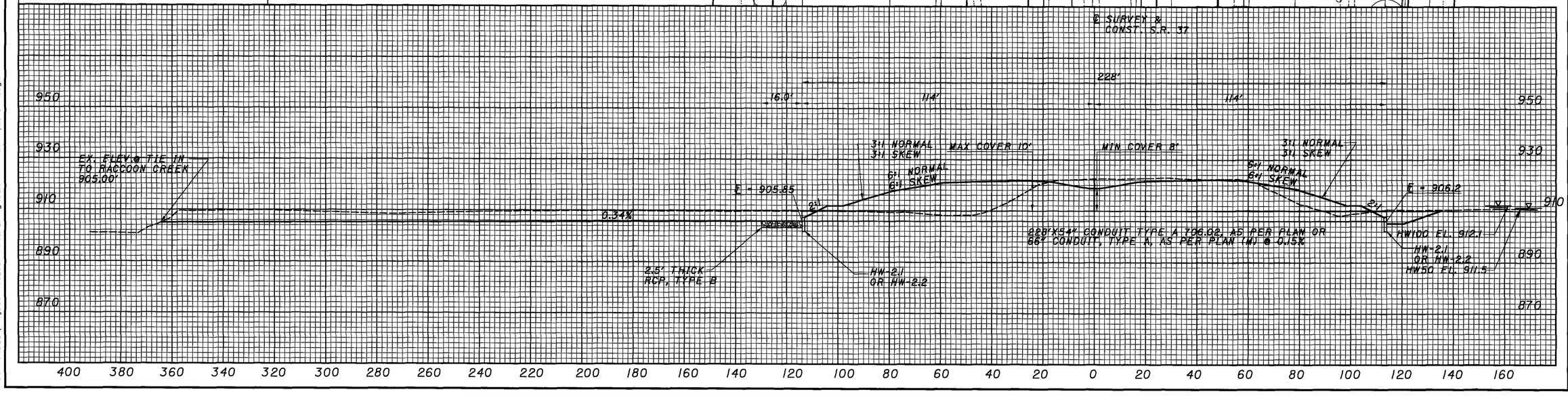
PROPOSED STRUCTURE

TYPE: 54" CONDUIT, TYPE A
LENGTH: 228'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	16	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
602	2.64	CU YD	CONCRETE MASONRY
603	228	FT	54" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (M)





HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 14
S.R. 37 - STA. 646+34

LIC-161-6.65
LIC-37-10.25

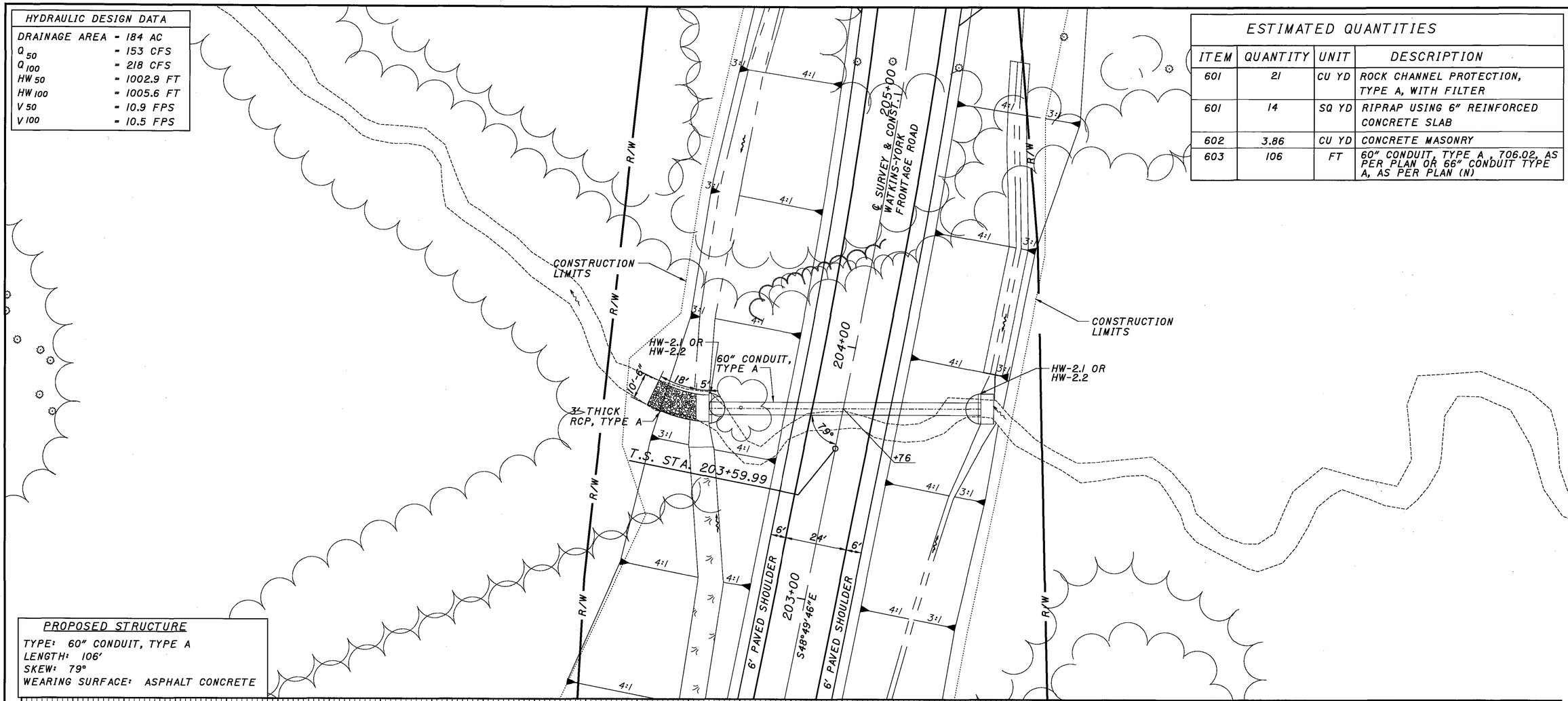
981
1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 184 AC
Q_{50}	= 153 CFS
Q_{100}	= 218 CFS
HW_{50}	= 1002.9 FT
HW_{100}	= 1005.6 FT
V_{50}	= 10.9 FPS
V_{100}	= 10.5 FPS

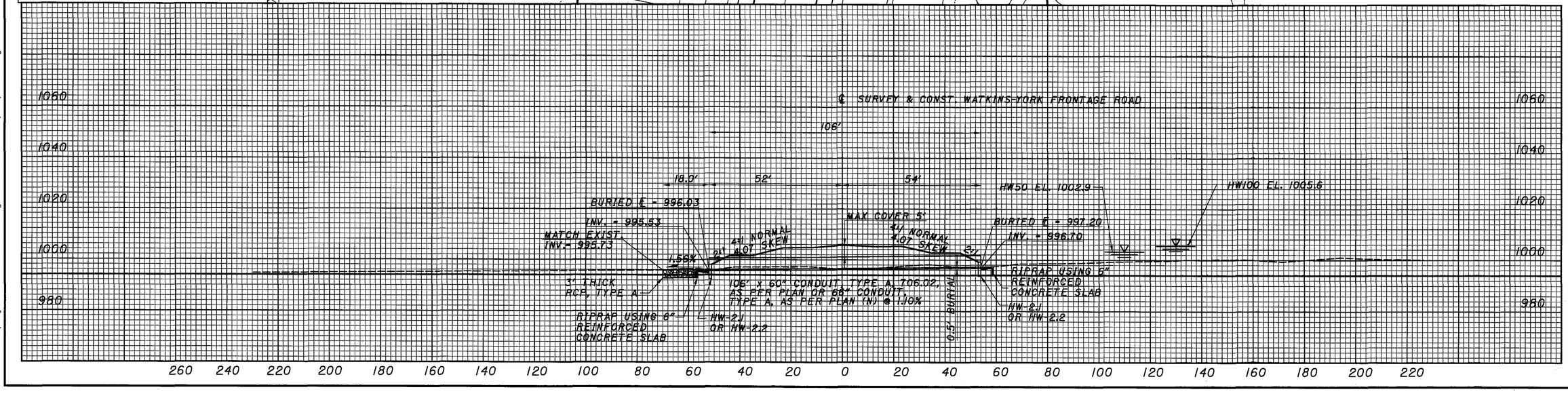
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	21	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
601	14	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	3.86	CU YD	CONCRETE MASONRY
603	106	FT	60" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT TYPE A, AS PER PLAN (N)



PROPOSED STRUCTURE

TYPE: 60" CONDUIT, TYPE A
LENGTH: 106'
SKEW: 79°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 15
WATKINS-YORK FRONTAGE RD. - STA. 203+76

LIC-161-6.65
LIC-37-10.25

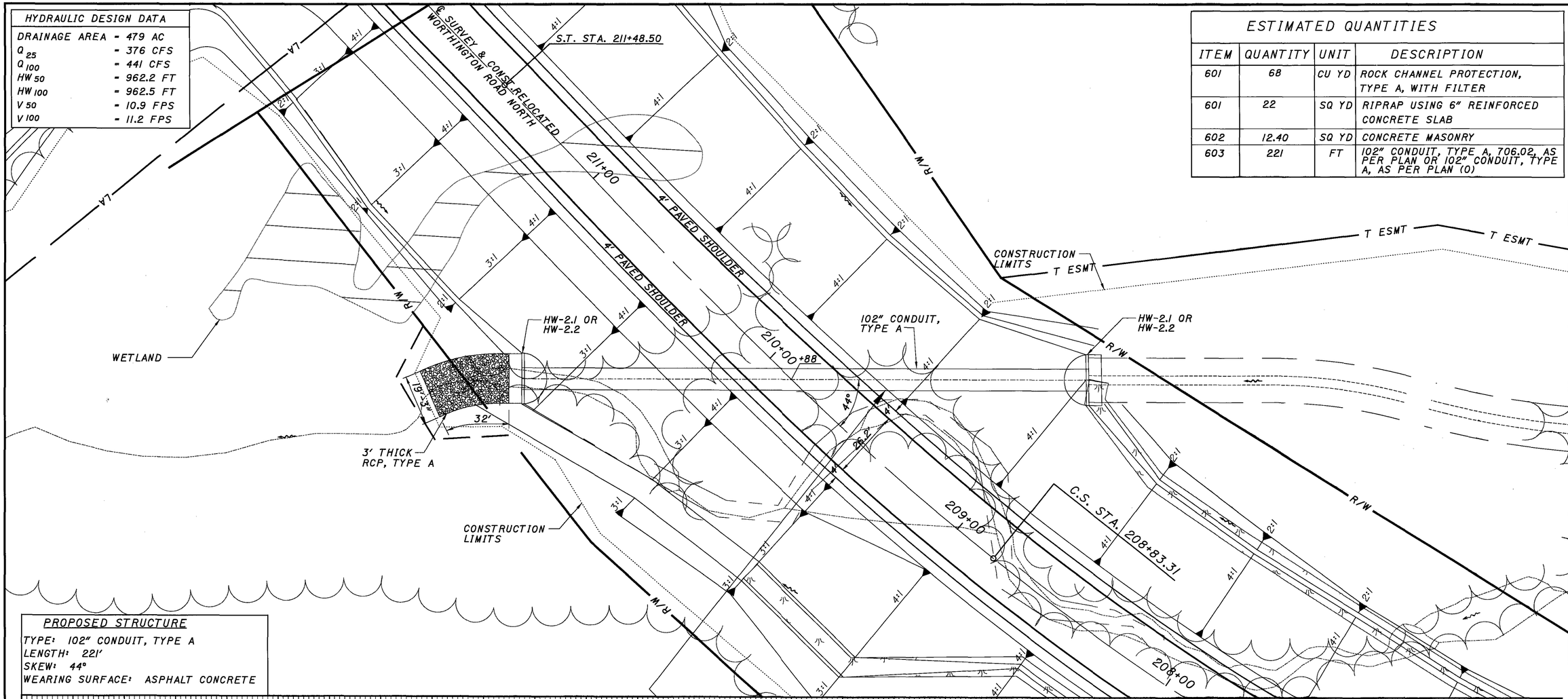
982
1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 479 AC
Q_{25}	= 376 CFS
Q_{100}	= 441 CFS
HW_{50}	= 962.2 FT
HW_{100}	= 962.5 FT
V_{50}	= 10.9 FPS
V_{100}	= 11.2 FPS

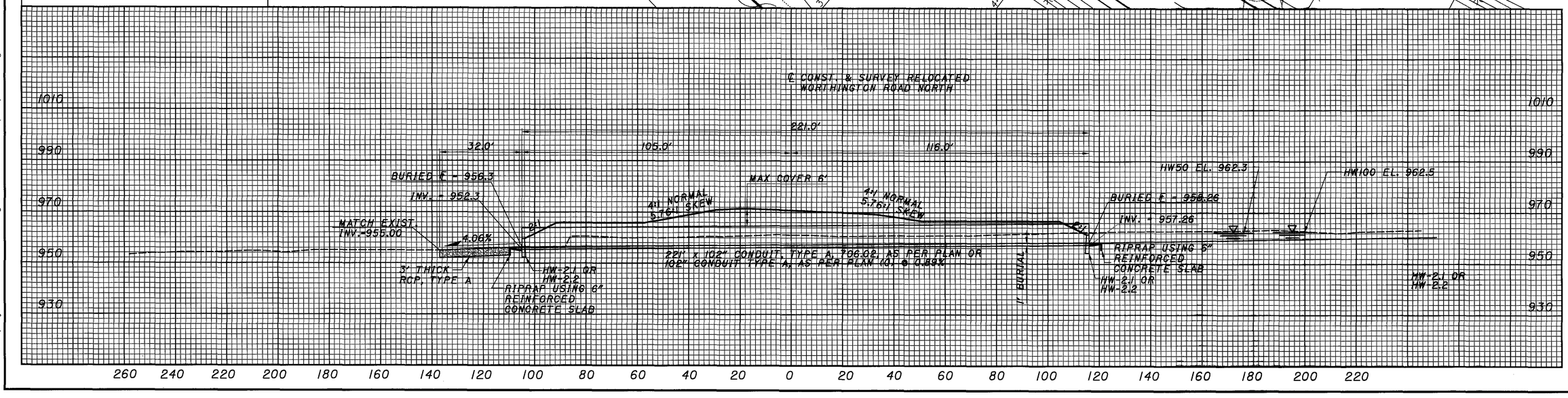
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	68	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
601	22	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	12.40	SQ YD	CONCRETE MASONRY
603	221	FT	102" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 102" CONDUIT, TYPE A, AS PER PLAN (0)



PROPOSED STRUCTURE

TYPE: 102" CONDUIT, TYPE A
LENGTH: 221'
SKEW: 44°
WEARING SURFACE: ASPHALT CONCRETE



CALCULATED CSR
CHECKED AE

CULVERT NO. 16 - RELOCATED
WORTHINGTON ROAD NORTH - STA. 209+88

LIC-161-6.65
LIC-37-10.25

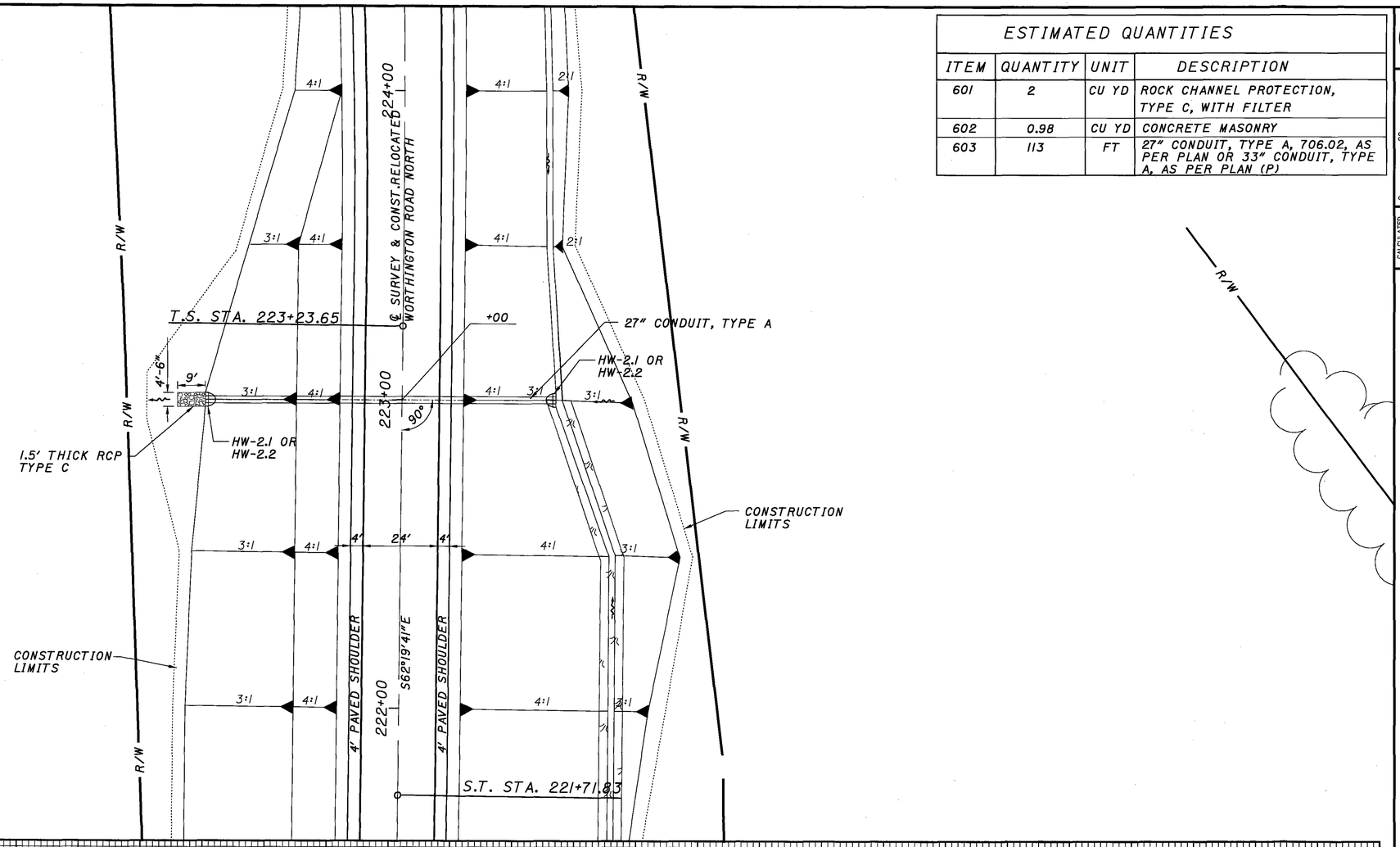
983
1349

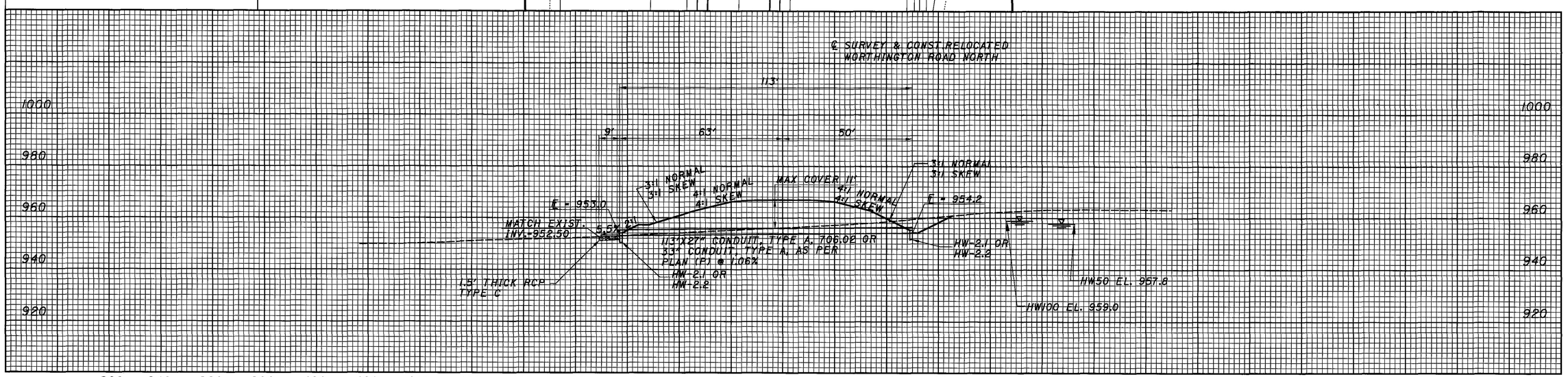
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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 15 Ac
Q_{25}	= 32 CFS
Q_{100}	= 40 CFS
HW_{25}	= 957.8 FT
HW_{100}	= 959.0 FT
V_{25}	= 9.9 FPS
V_{100}	= 10.1 FPS

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	2	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
602	0.98	CU YD	CONCRETE MASONRY
603	113	FT	27" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 33" CONDUIT, TYPE A, AS PER PLAN (P)





PROPOSED STRUCTURE

TYPE: 27" CONDUIT, TYPE A
LENGTH: 113'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE

R/W

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 17 - RELOCATED
WORTHINGTON ROAD NORTH. - STA. 223+00.00

LIC-161-6.65
LIC-37-10.25

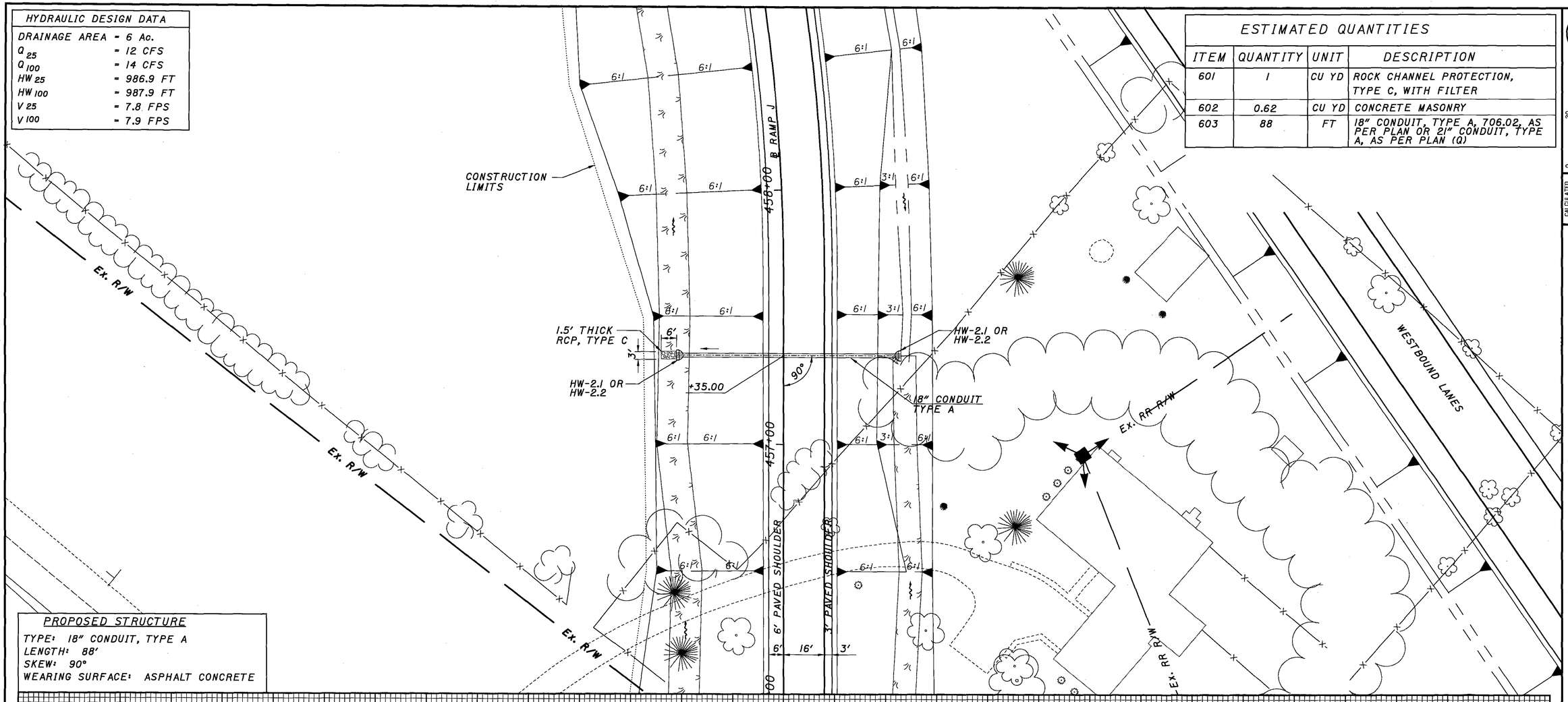
984
1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 6 Ac.
Q_{25}	= 12 CFS
Q_{100}	= 14 CFS
HW_{25}	= 986.9 FT
HW_{100}	= 987.9 FT
V_{25}	= 7.8 FPS
V_{100}	= 7.9 FPS

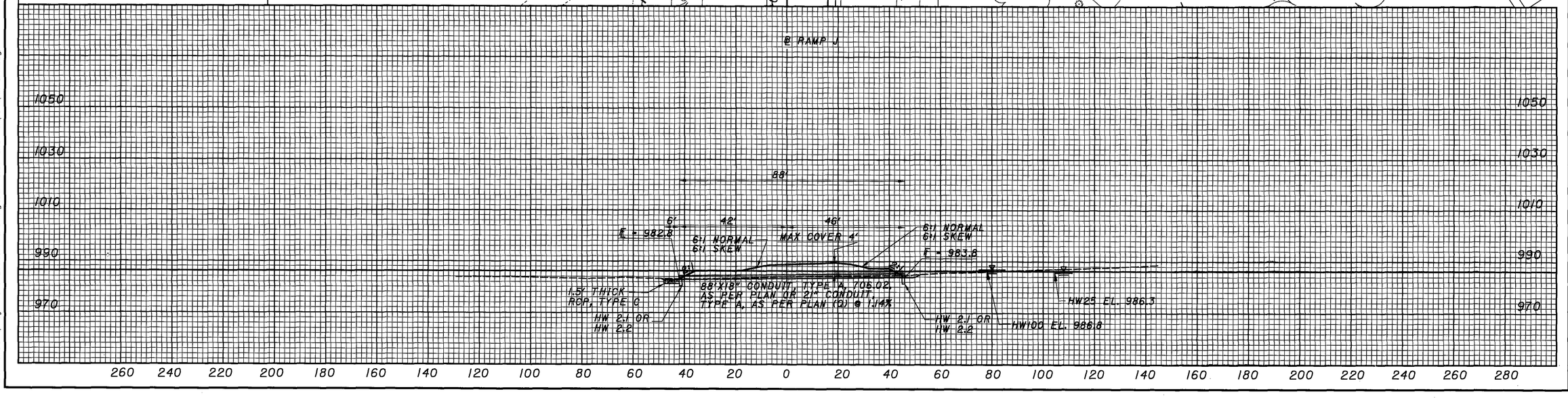
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	1	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
602	0.62	CU YD	CONCRETE MASONRY
603	88	FT	18" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 21" CONDUIT, TYPE A, AS PER PLAN (Q)



PROPOSED STRUCTURE

TYPE: 18" CONDUIT, TYPE A
LENGTH: 88'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 18
RAMP J - STA. 457+35

LIC-161-6.65
LIC-37-10.25

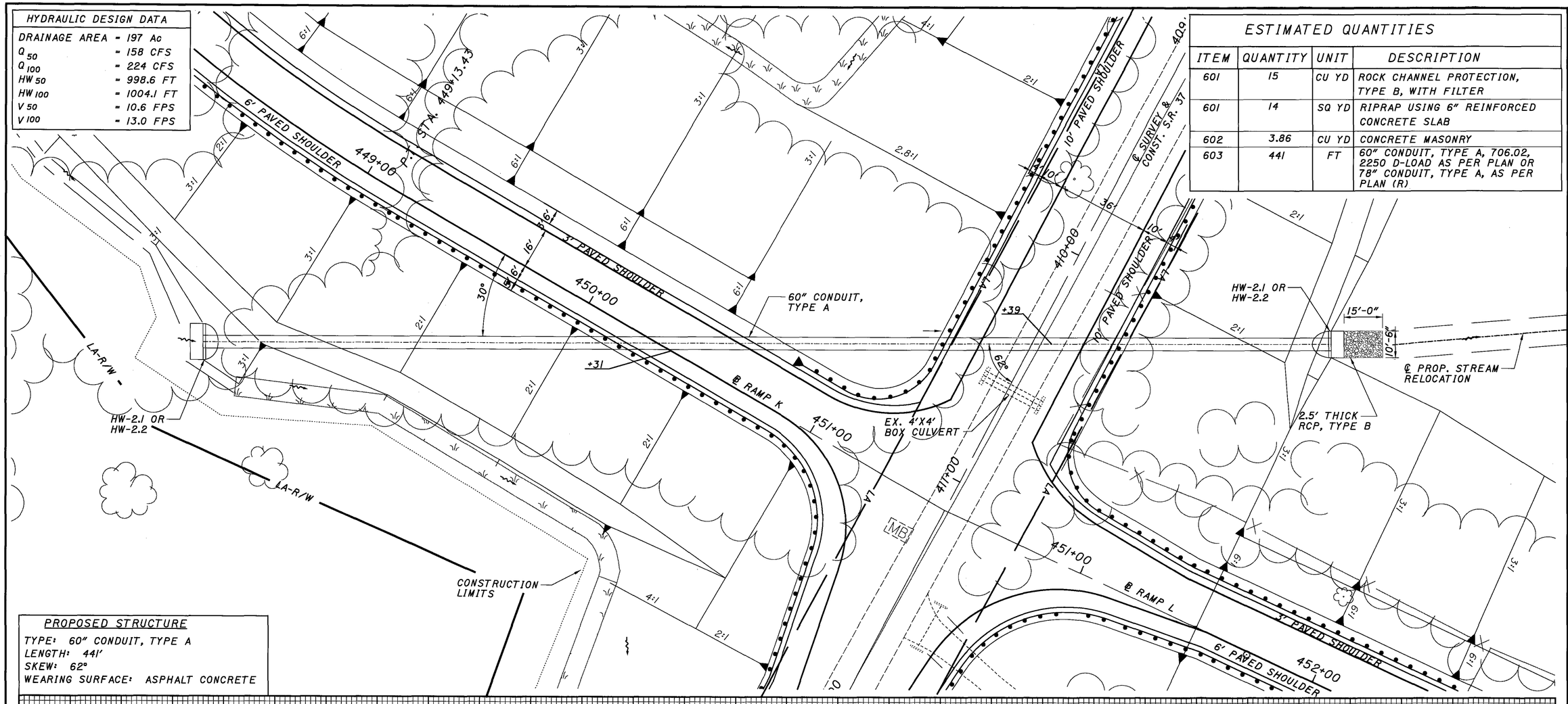
985
349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 197 Ac
Q_{50}	= 158 CFS
Q_{100}	= 224 CFS
HW_{50}	= 998.6 FT
HW_{100}	= 1004.1 FT
V_{50}	= 10.6 FPS
V_{100}	= 13.0 FPS

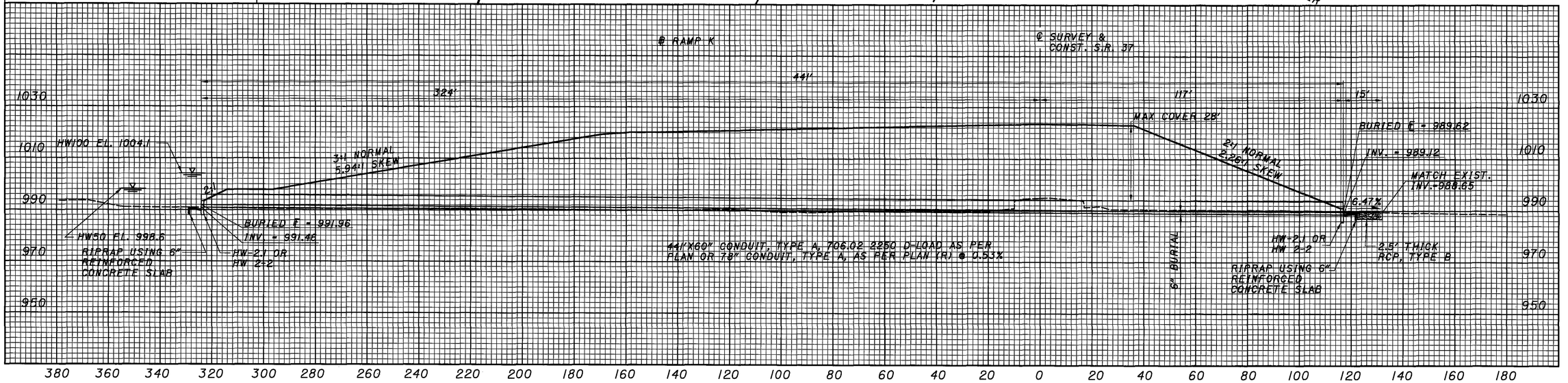
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	15	CU YD	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
601	14	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	3.86	CU YD	CONCRETE MASONRY
603	441	FT	60" CONDUIT, TYPE A, 706.02, 2250 D-LOAD AS PER PLAN OR 78" CONDUIT, TYPE A, AS PER PLAN (R)



PROPOSED STRUCTURE

TYPE: 60" CONDUIT, TYPE A
LENGTH: 441'
SKEW: 62°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 19
INTERSECTION OF S.R.37 AND RAMP K

LIC-161-6.65
LIC-37-10.25

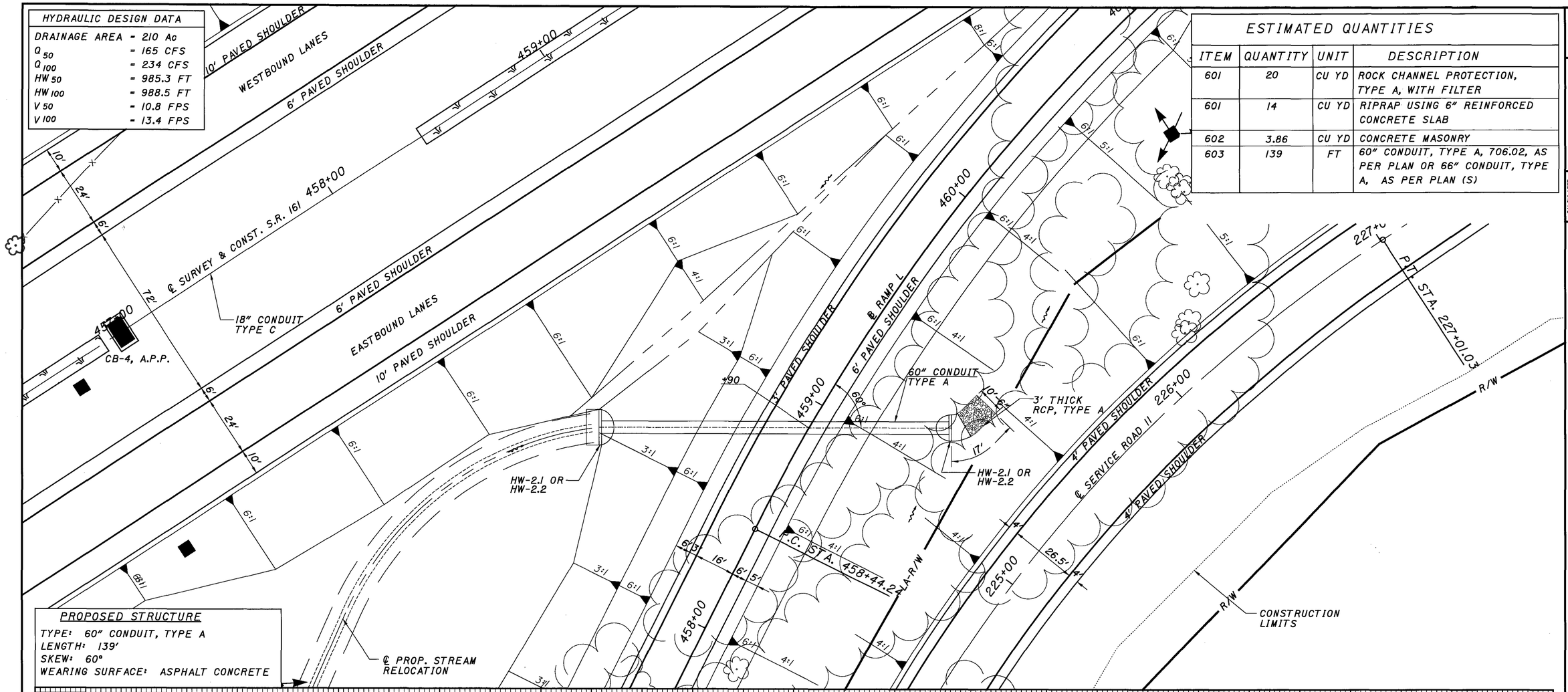
986
1349

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HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 210 Ac
Q_{50}	= 165 CFS
Q_{100}	= 234 CFS
HW_{50}	= 985.3 FT
HW_{100}	= 988.5 FT
V_{50}	= 10.8 FPS
V_{100}	= 13.4 FPS

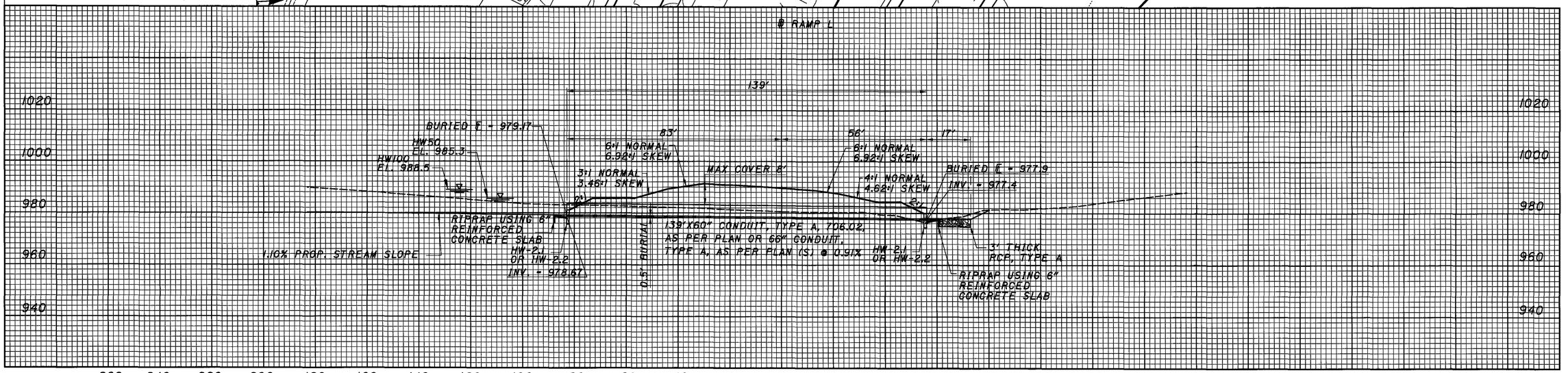
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	20	CU YD	ROCK CHANNEL PROTECTION, TYPE A, WITH FILTER
601	14	CU YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB
602	3.86	CU YD	CONCRETE MASONRY
603	139	FT	60" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 66" CONDUIT, TYPE A, AS PER PLAN (S)



PROPOSED STRUCTURE

TYPE: 60" CONDUIT, TYPE A
LENGTH: 139'
SKEW: 60°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 20
RAMP L - STA. 458+90

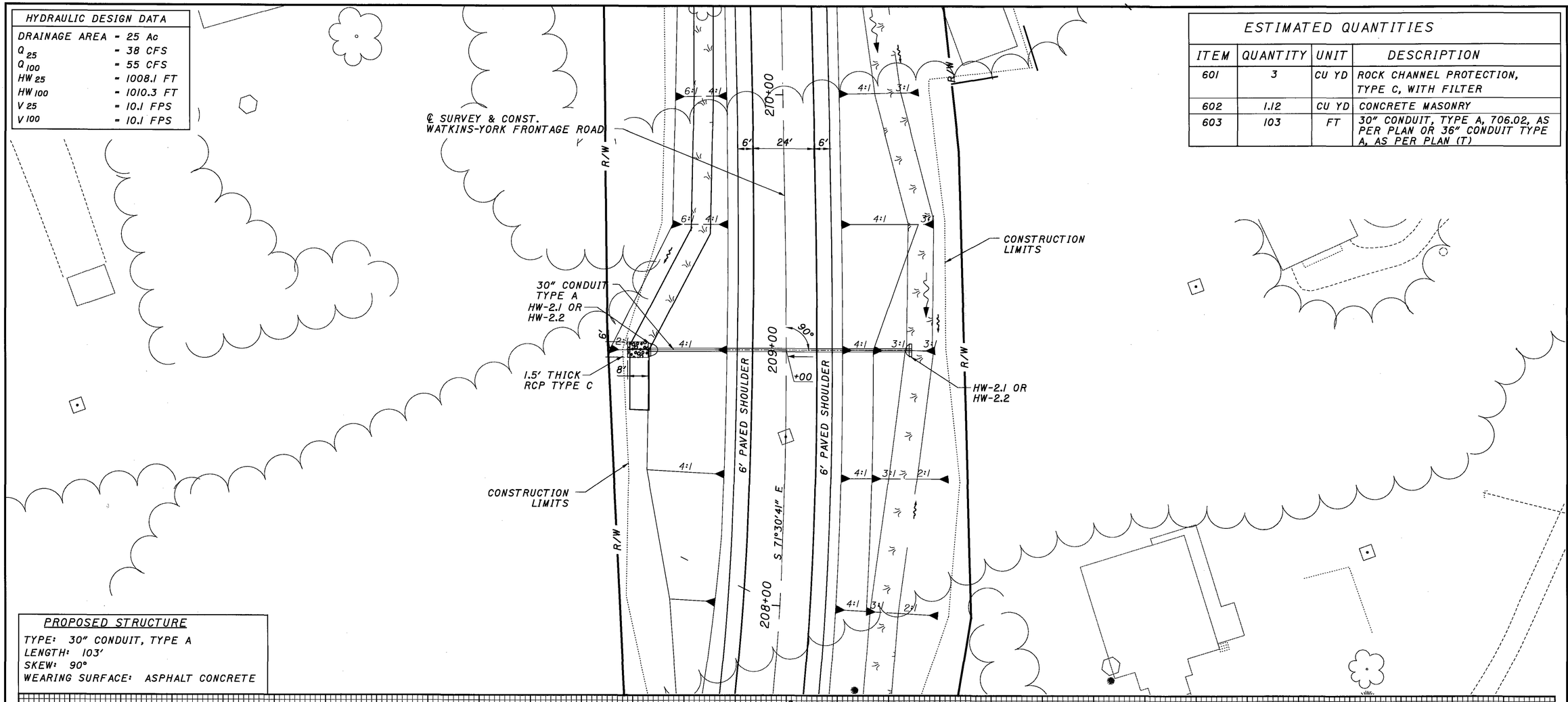
LIC-161-6.65
LIC-37-10.25

987
1349

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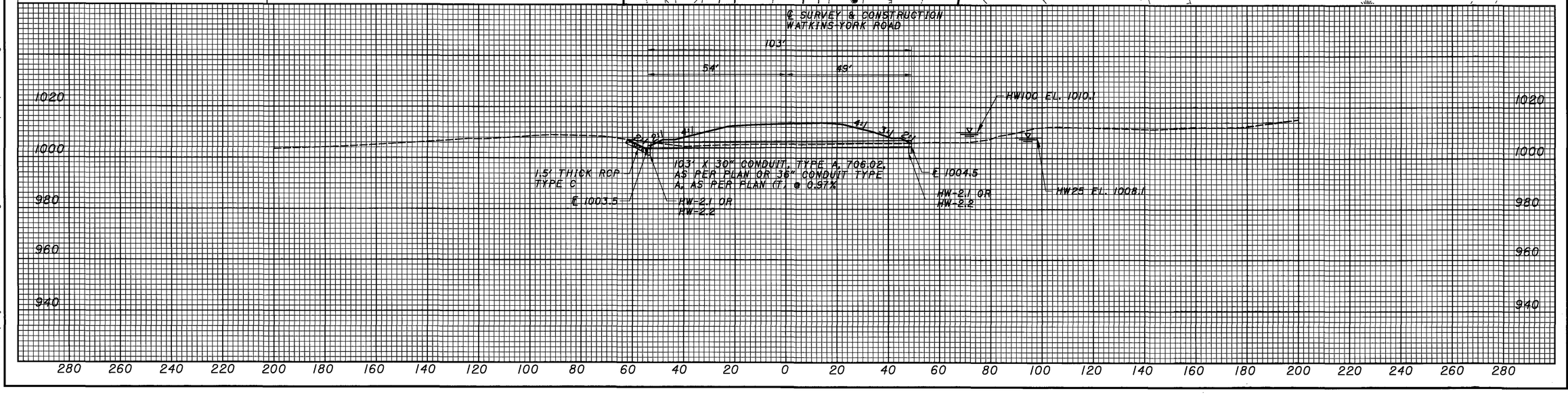
HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 25 Ac
Q_{25}	= 38 CFS
Q_{100}	= 55 CFS
HW_{25}	= 1008.1 FT
HW_{100}	= 1010.3 FT
V_{25}	= 10.1 FPS
V_{100}	= 10.1 FPS

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
601	3	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
602	1.12	CU YD	CONCRETE MASONRY
603	103	FT	30" CONDUIT, TYPE A, 706.02, AS PER PLAN OR 36" CONDUIT TYPE A, AS PER PLAN (T)



PROPOSED STRUCTURE

TYPE: 30" CONDUIT, TYPE A
LENGTH: 103'
SKEW: 90°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CSR
CHECKED AE

CULVERT NO. 21
WATKINS YORK FRONTAGE RD - STA. 209+00

LIC-161-6.65
LIC-37-10.25

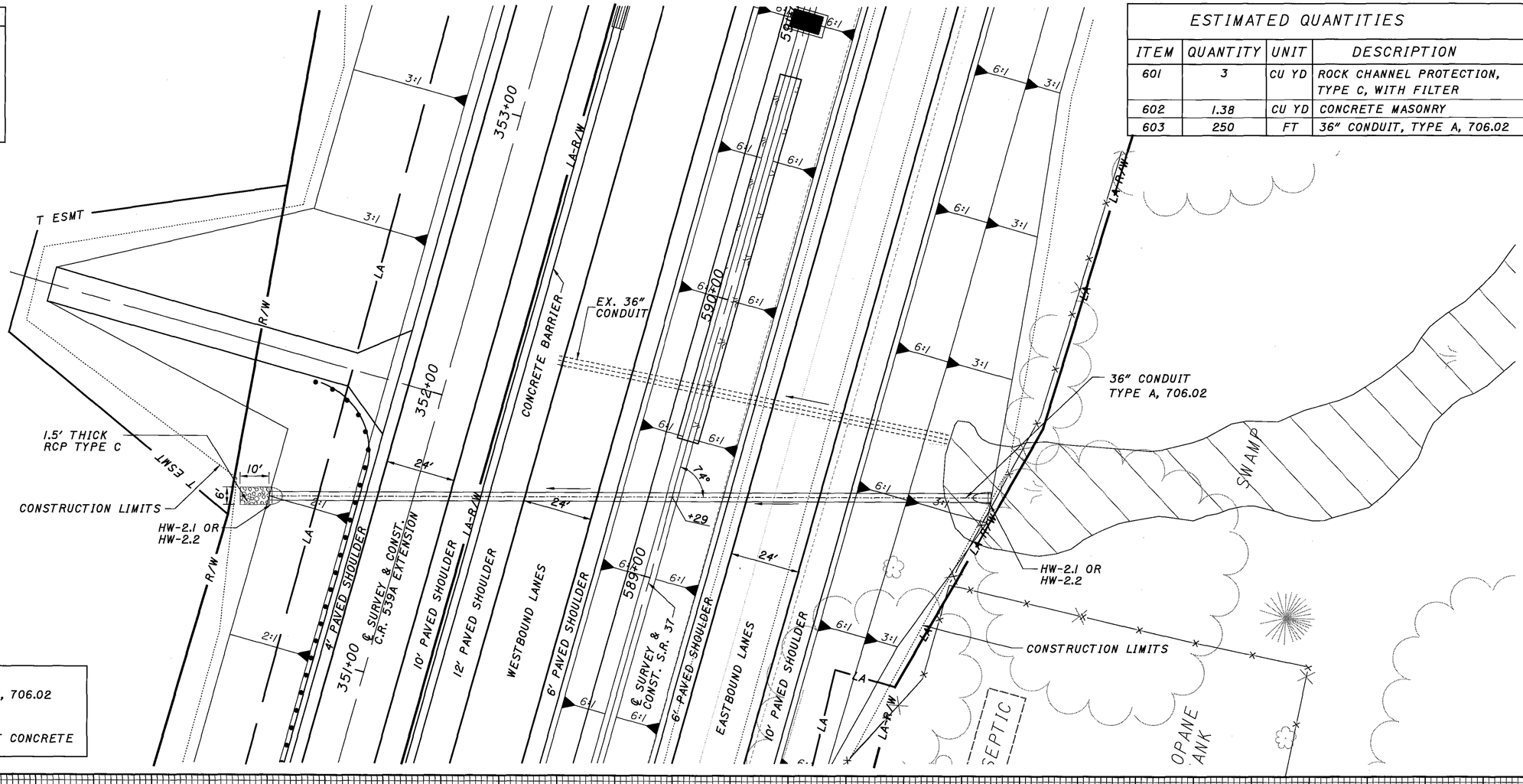
988
1349

tduffney
10/25/2006 04:36:09 PM
I:\columbus\projects\co2004011\drawing\culv\side and ramps\dpi20-sr161.dgn

HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 32 Ac
Q_{50}	= 61 CFS
Q_{100}	= 73 CFS
HW_{50}	= 920.5 FT
HW_{100}	= 921.9 FT
V_{50}	= 9.6 FPS
V_{100}	= 10.8 FPS

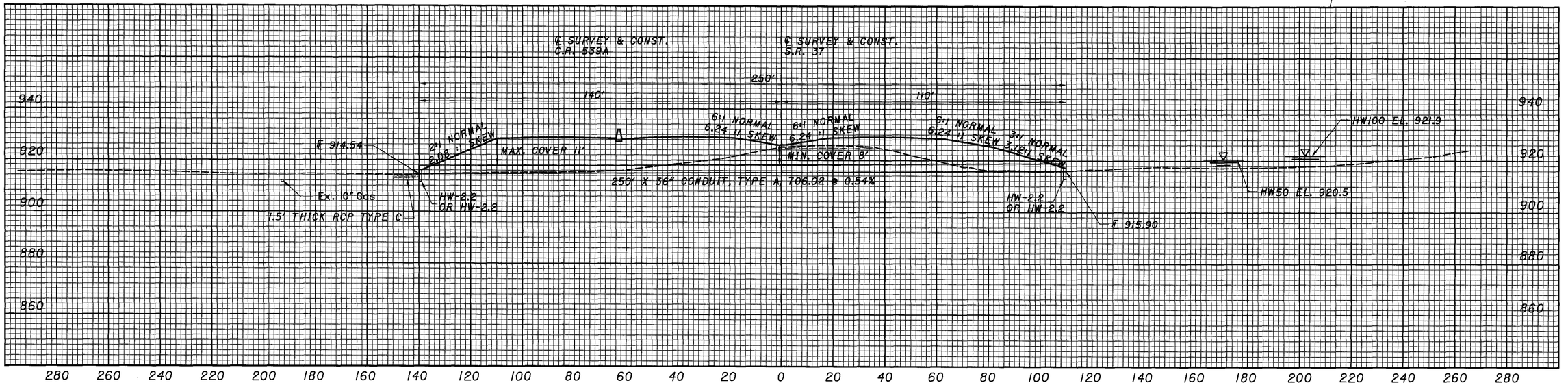
ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
601	3	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
602	1.38	CU YD	CONCRETE MASONRY
603	250	FT	36" CONDUIT, TYPE A, 706.02



PROPOSED STRUCTURE

TYPE: 36" CONDUIT, TYPE A, 706.02
LENGTH: 250'
SKEW: 74°
WEARING SURFACE: ASPHALT CONCRETE



HORIZONTAL SCALE IN FEET
0 10 20 40

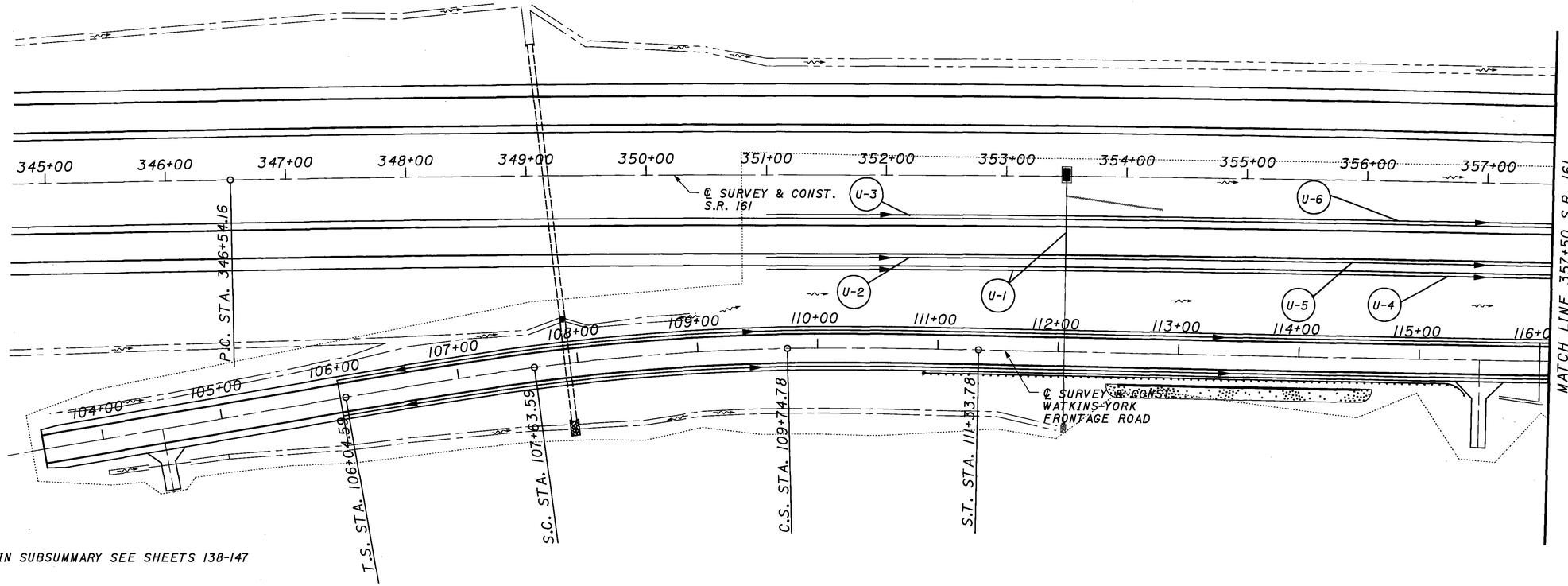
CALCULATED CSR
CHECKED AE

CULVERT REPORT NO. 22
S. R. 37 - STA. 589+29

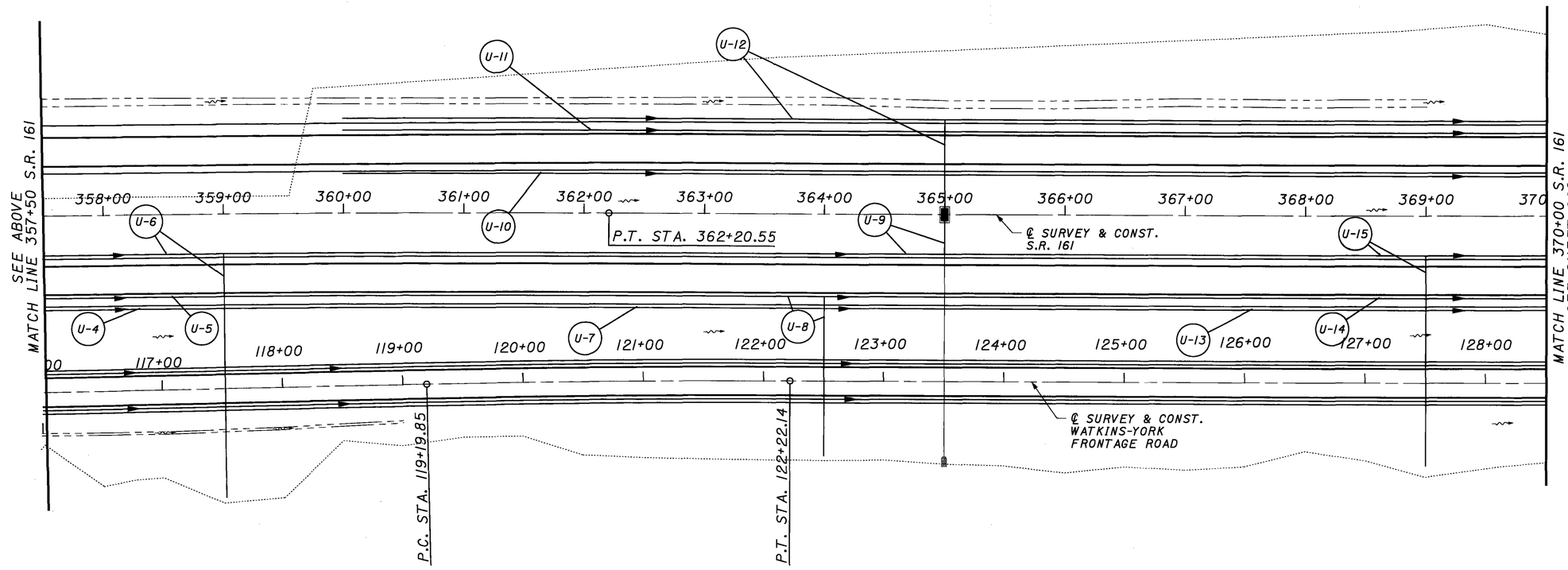
LIC-161-6.65
LIC-37-10.25

989
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

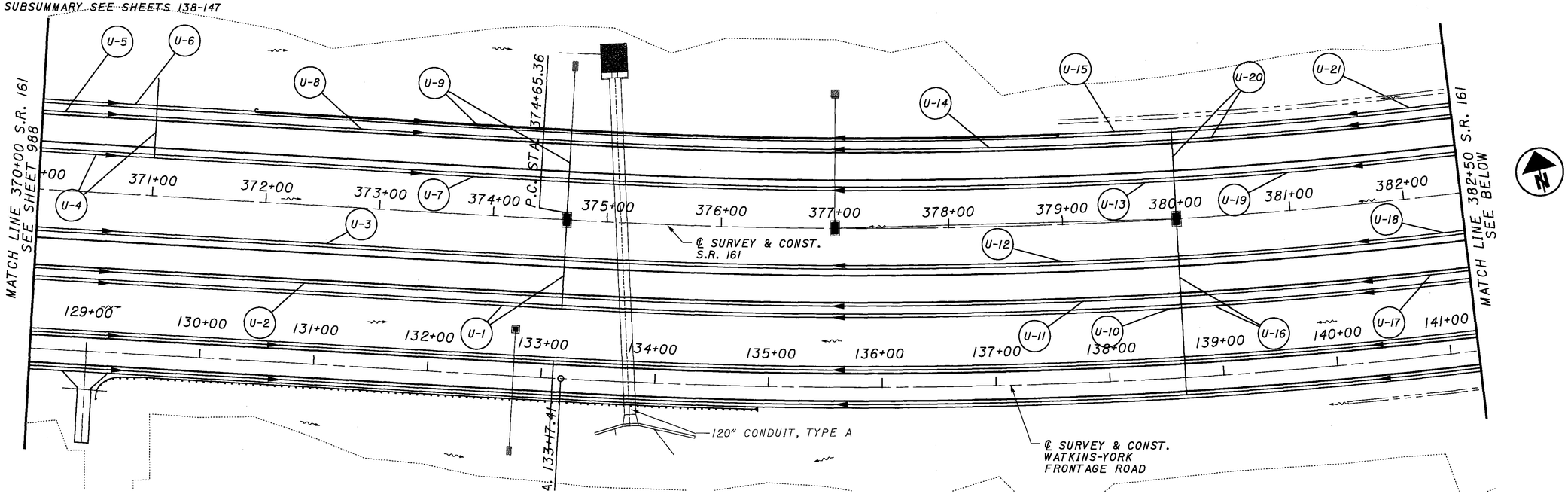
UNDERDRAIN PLAN - S.R. 161
STA. 345+00 TO STA. 370+00

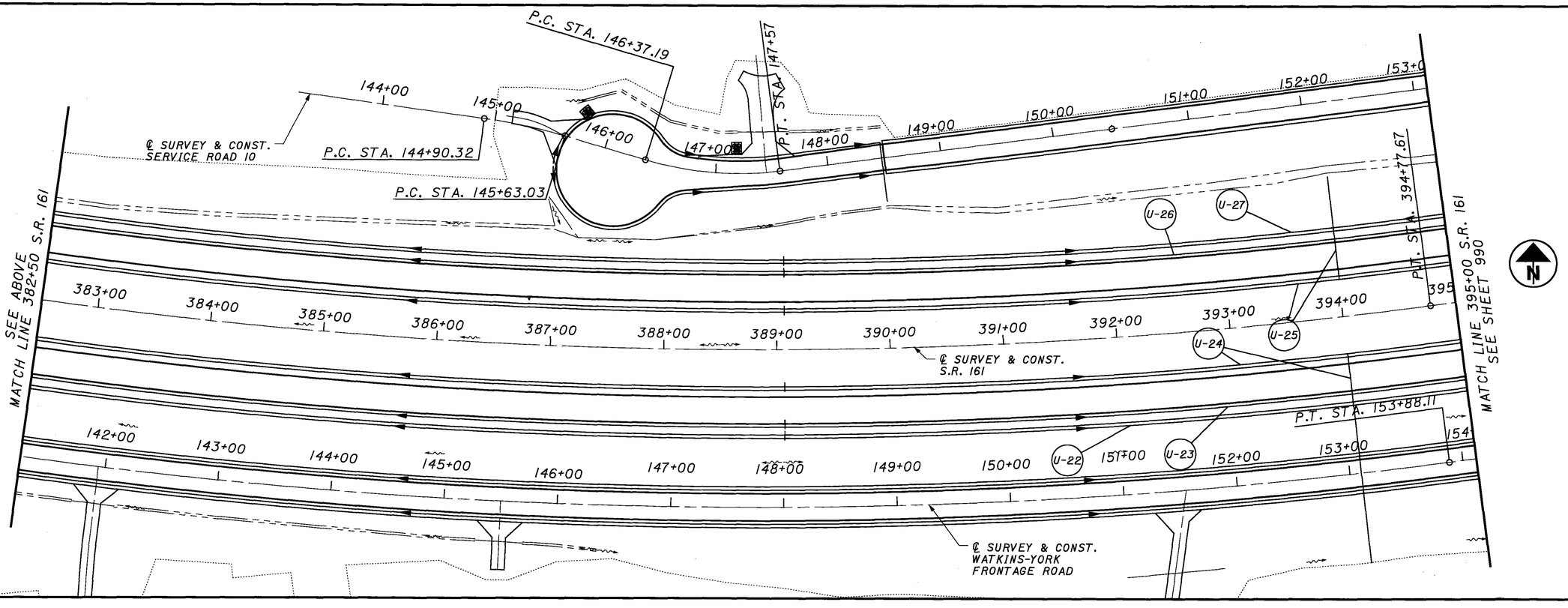
LIC-161-6.65
LIC-37-10.25

990
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

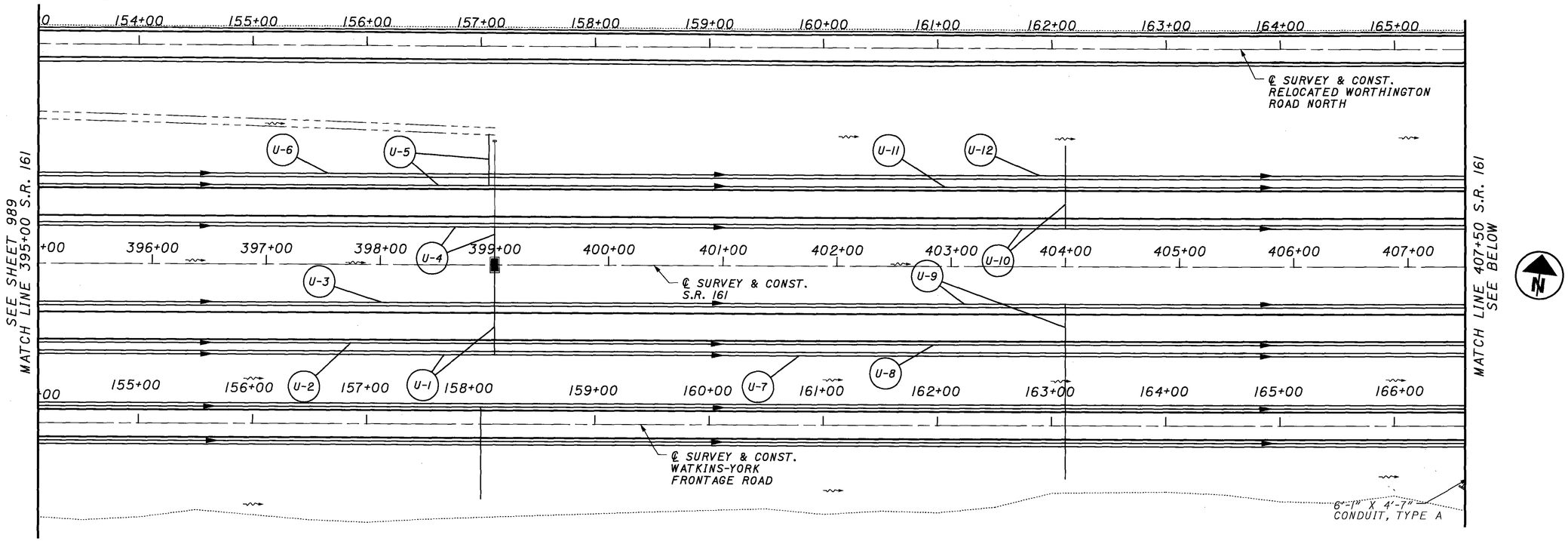
UNDERDRAIN PLAN - S.R. 161
STA. 370+00 TO STA. 395+00

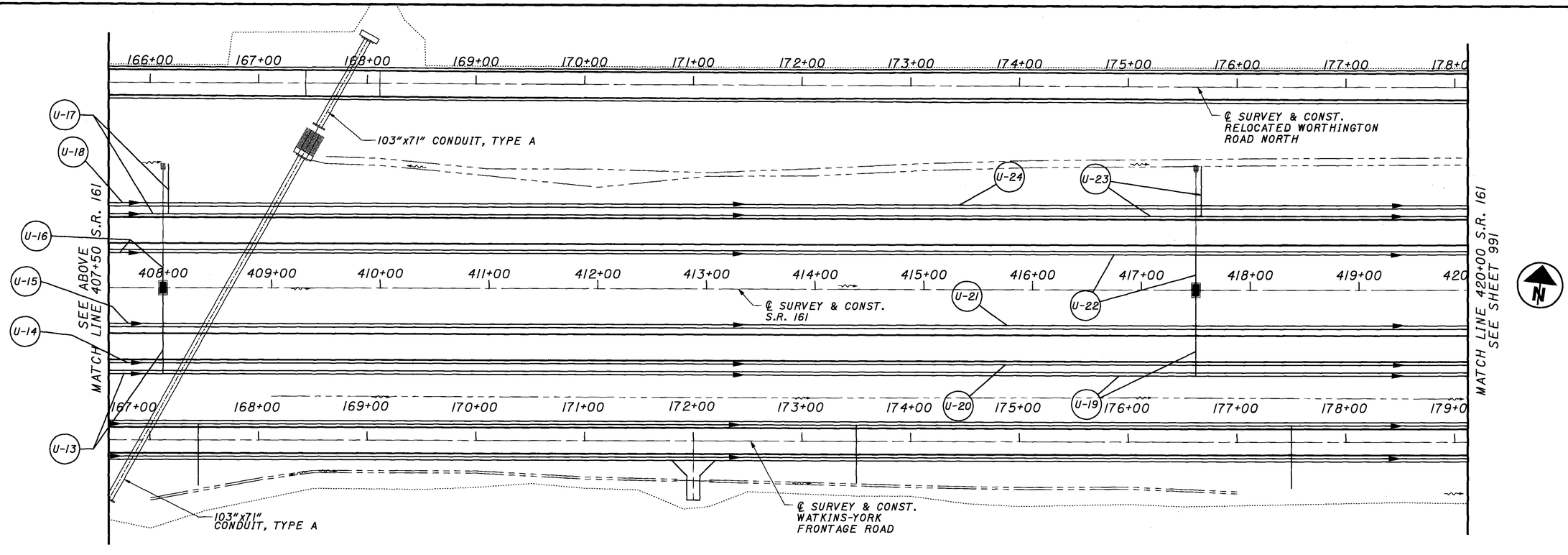
LIC-161-6.65
LIC-37-10.25

991
1349

tduffney
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

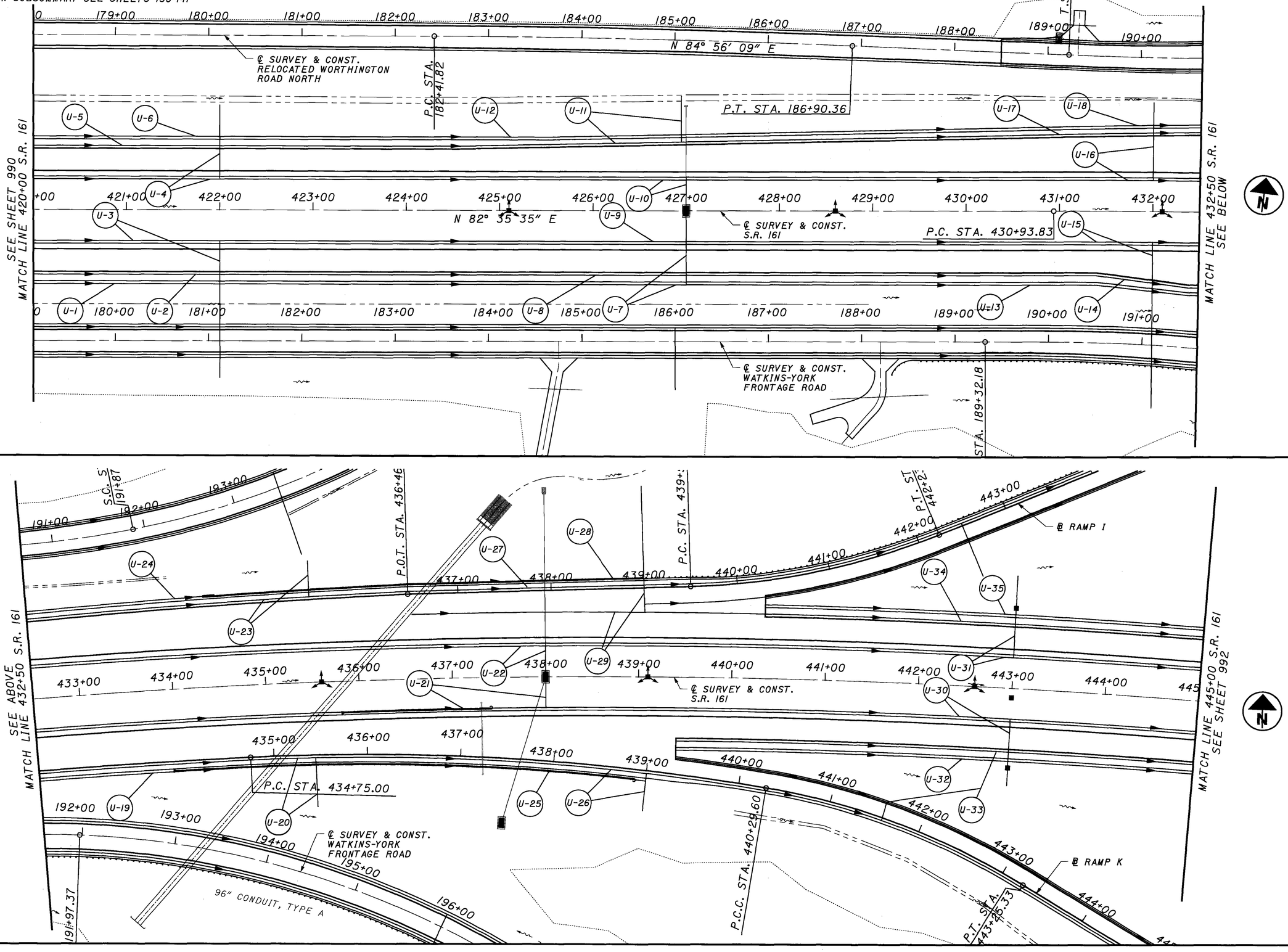
UNDERDRAIN PLAN - S.R. 161
STA. 395+00 TO STA. 420+00

LIC-161-6.65
LIC-37-10.25

992
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - S.R. 161
STA. 420+00 TO STA. 445+00

LIC-161-6.65
LIC-37-10.25

993
1349

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10/26/2006 07:00:50 AM
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

SEE SHEET 991
MATCH LINE 445+00 S.R. 161

P.T. STA. 445+09.42

446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+00 454+00 455+00 456+00 457+00

U-1 U-2 U-3 U-4 U-5 U-6 U-7 U-8 U-9 U-10 U-11 U-12

℄ SURVEY & CONST.
S.R. 161

℄ SURVEY & CONST.
S.R. 37

404+00 405+00 406+00 407+00 408+00 409+00

MATCH LINE 457+50 S.R. 161
SEE BELOW

SEE ABOVE
MATCH LINE 457+50 S.R. 161

458+00 459+00 460+00 461+00 462+00 463+00 464+00 465+00 466+00 467+00

U-13 U-14 U-15 U-16 U-17 U-18 U-19 U-20 U-21 U-22 U-23 U-24 U-25

P.C.C. STA. 461+00.4

P.T. STA. 462+33.00

℄ RAMP J

℄ RAMP L

℄ STREAM
RELOCATION

60" CONDUIT,
TYPE A
CULVERT NO. 20

102" CONDUIT, TYPE A
CULVERT NO. 4

P.T. STA. 466+65.0

℄ SURVEY & CONST.
S.R. 161

℄ SURVEY & CONST.
SERVICE ROAD II

225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00

MATCH LINE 467+50 S.R. 161
SEE SHEET 993

HORIZONTAL
SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - S.R. 161
STA. 445+00 TO STA. 467+50

LIC-161-6.65
LIC-37-10.25

994
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

HORIZONTAL SCALE IN FEET
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CALCULATED CLB
CHECKED CSR

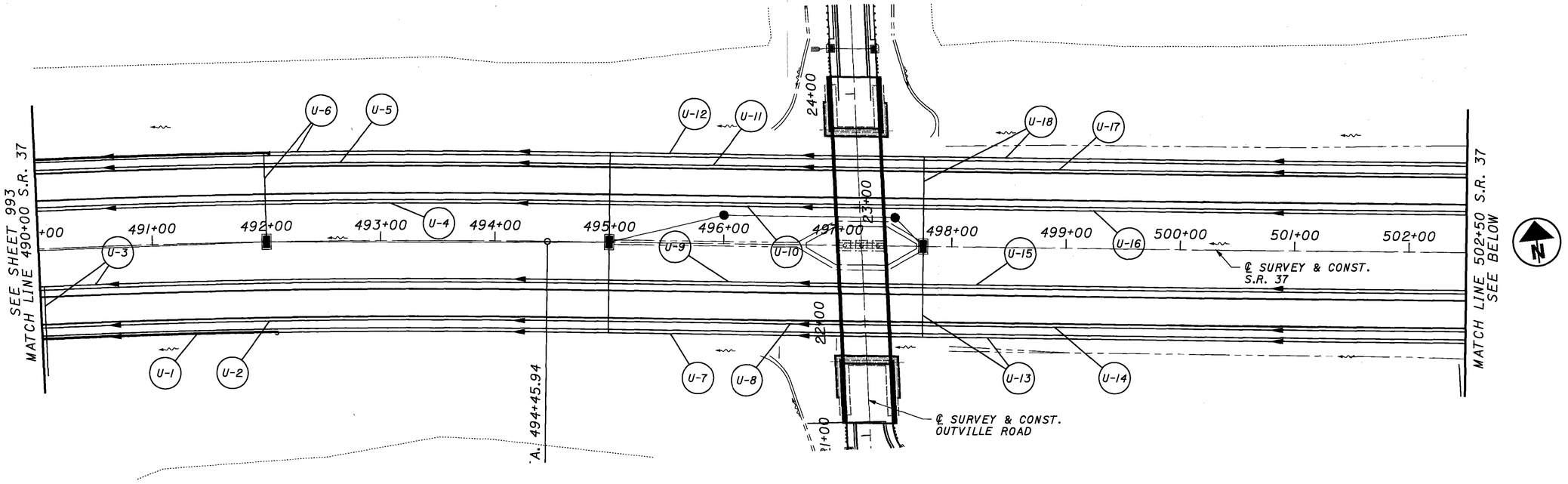
UNDERDRAIN PLAN - S.R. 161/37
STA. 467+50 TO STA. 490+00

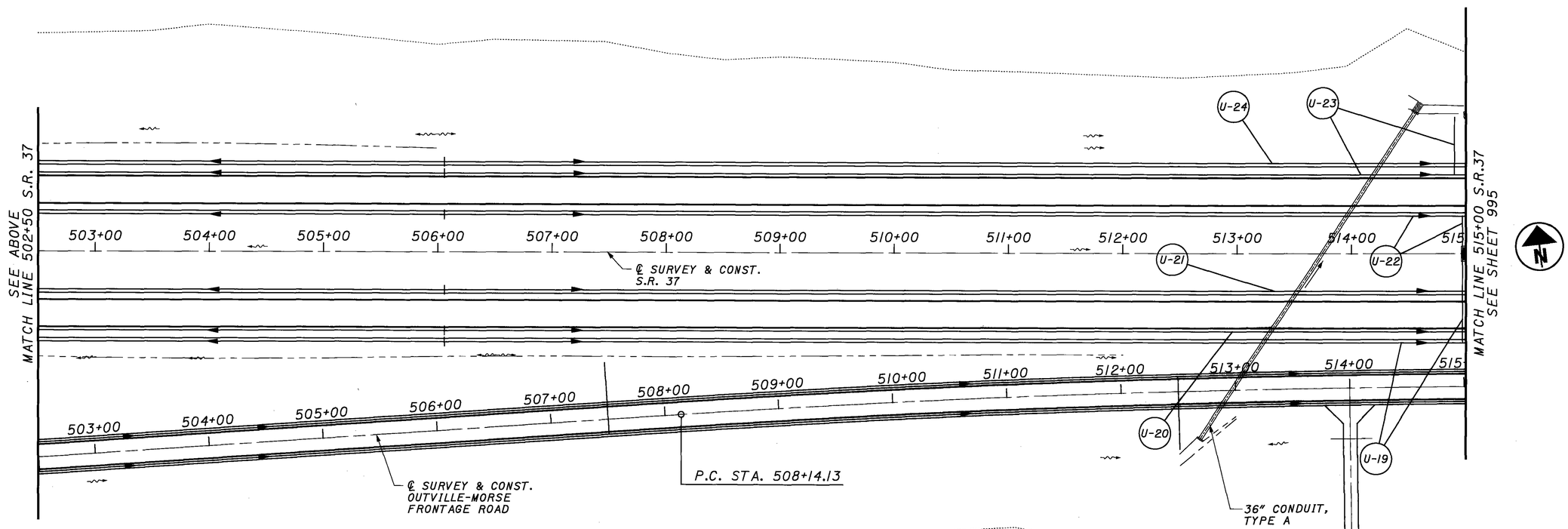
LIC-161-6.65
LIC-37-10.25

995
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
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CALCULATED CLB
CHECKED CSR

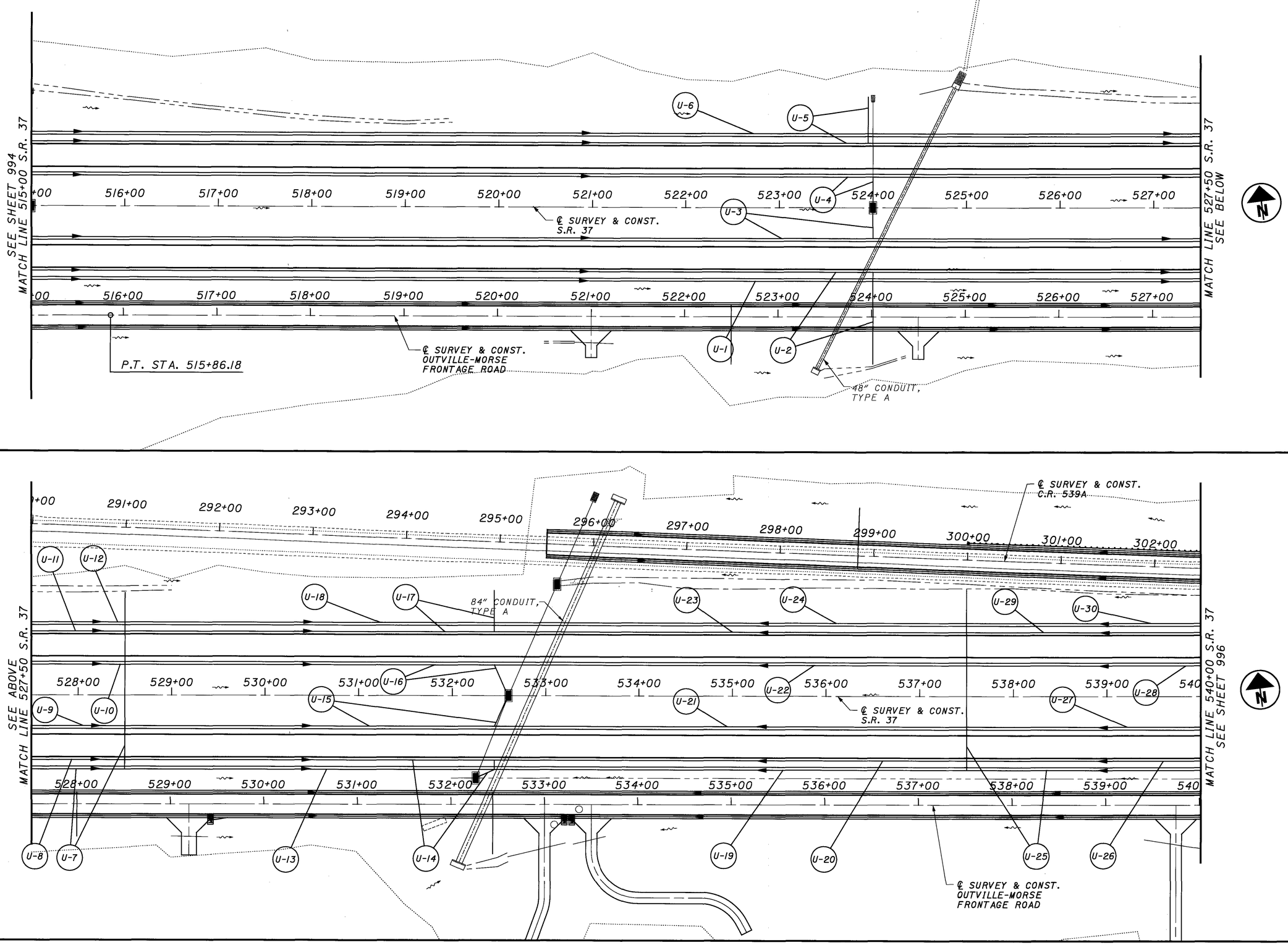
UNDERDRAIN PLAN - S.R. 37
STA. 490+00 TO STA. 515+00

LIC-161-6.65
LIC-37-10.25

996
1349

tduffney
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

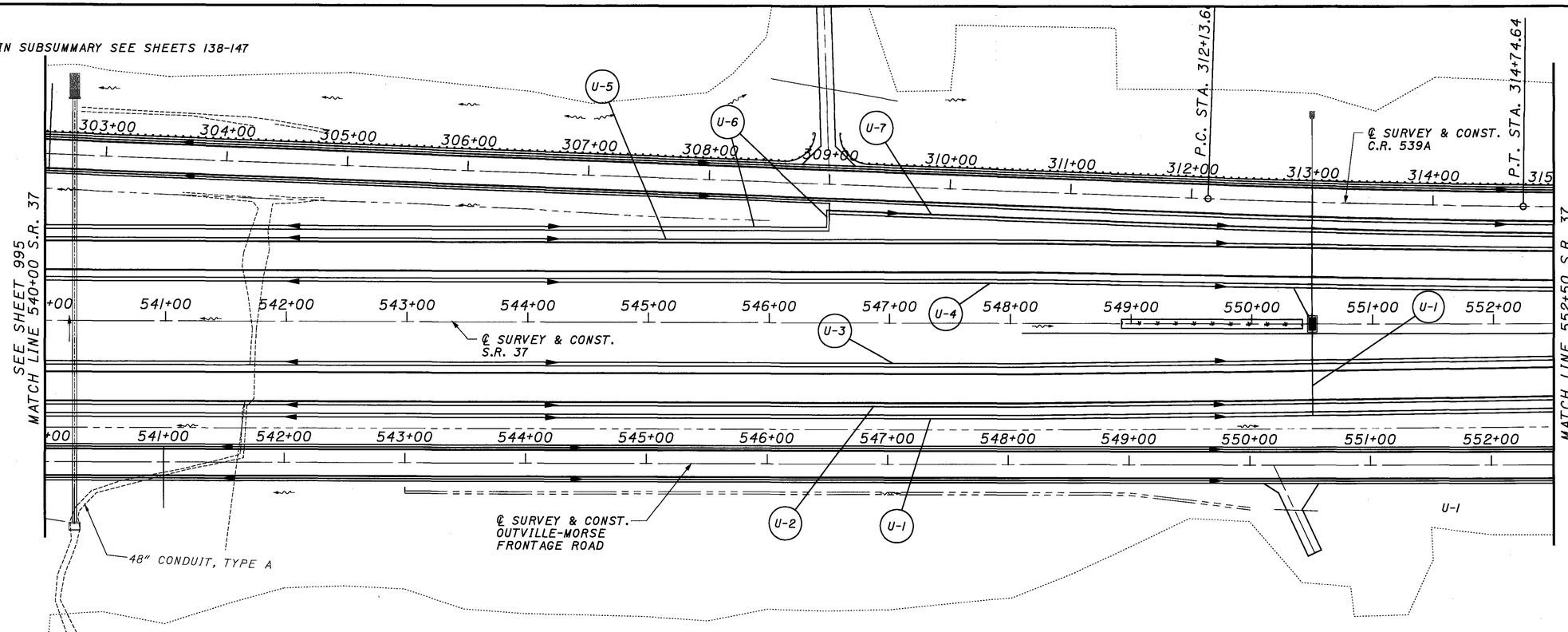
UNDERDRAIN PLAN - S.R. 37
STA. 515+00 TO STA. 540+00

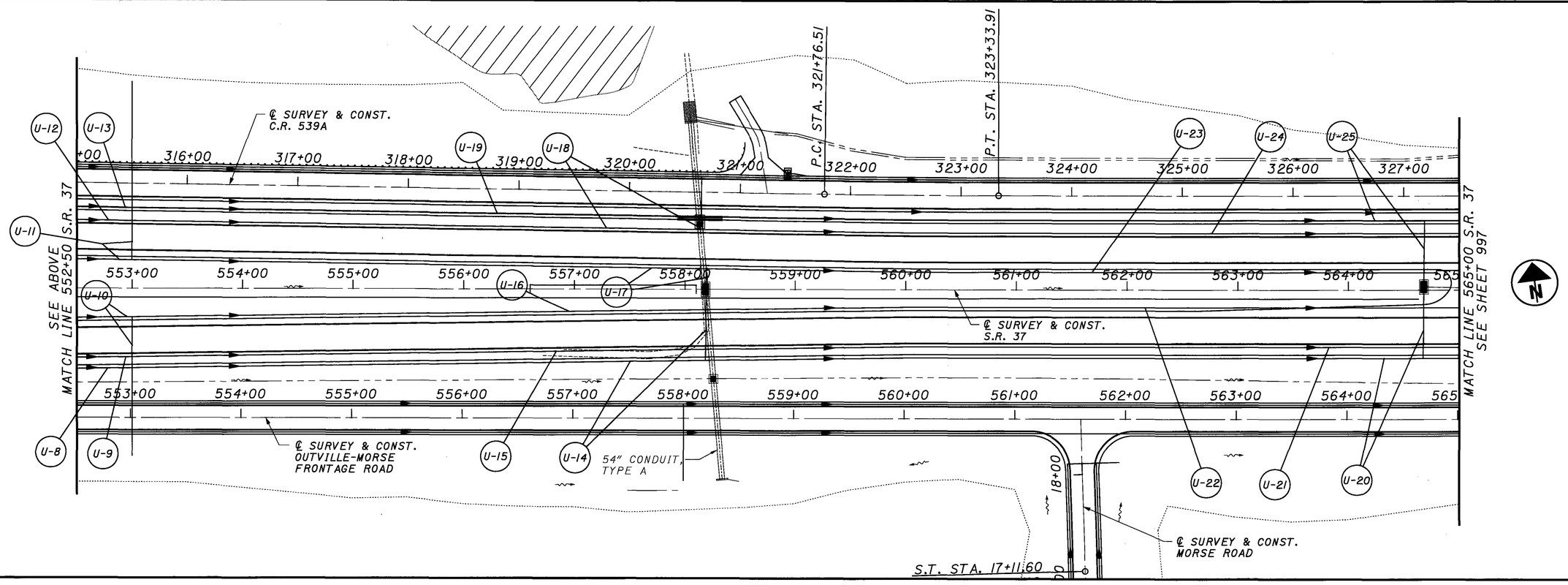
LIC-161-6.65
LIC-37-10.25

997
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - S.R. 37
STA. 540+00 TO STA. 565+00

LIC-161-6.65
LIC-37-10.25

998
1349

tduffney
10/26/2006 07:00:04 AM
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

℄ SURVEY & CONST.
C.R. 539A

SEE SHEET 996
MATCH LINE 565+00 S.R. 37

U-1 U-2 U-3 U-4 U-5 U-6 U-7 U-8 U-9 U-10 U-11 U-12 U-13

328+00 329+00 330+00 331+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00 340+

+00 566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00 574+00 575+00 576+00 577+00

P.C. STA. 333+88.38

P.C. STA. 571+38.22

℄ SURVEY & CONST.
S.R. 37

P.C. STA. 571+33.81

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

P.T. STA. 338+64.44

P.T. STA. 576+05.61

P.T. STA. 576+01.20

MATCH LINE 577+50 S.R. 37
SEE BELOW

℄ SURVEY & CONST.
C.R. 539A

U-14 U-15 U-16 U-17 U-18 U-19 U-20 U-21 U-22 U-23 U-24 U-25

341+00 342+00 343+00 344+00 345+00 346+00 347+00 348+00 349+00 350+00 351+00 352+00

578+00 579+00 580+00 581+00 582+00 583+00 584+00 585+00 586+00 587+00 588+00 589+00 590

SEE ABOVE
MATCH LINE 577+50 S.R. 37

℄ SURVEY & CONST.
S.R. 37

36" CONDUIT, TYPE A

24" CONDUIT, TYPE A

P.O.T. STA. 584+40.00

36" CONDUIT,
TYPE A

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

MATCH LINE 590+00 S.R. 37
SEE SHEET 998

HORIZONTAL
SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

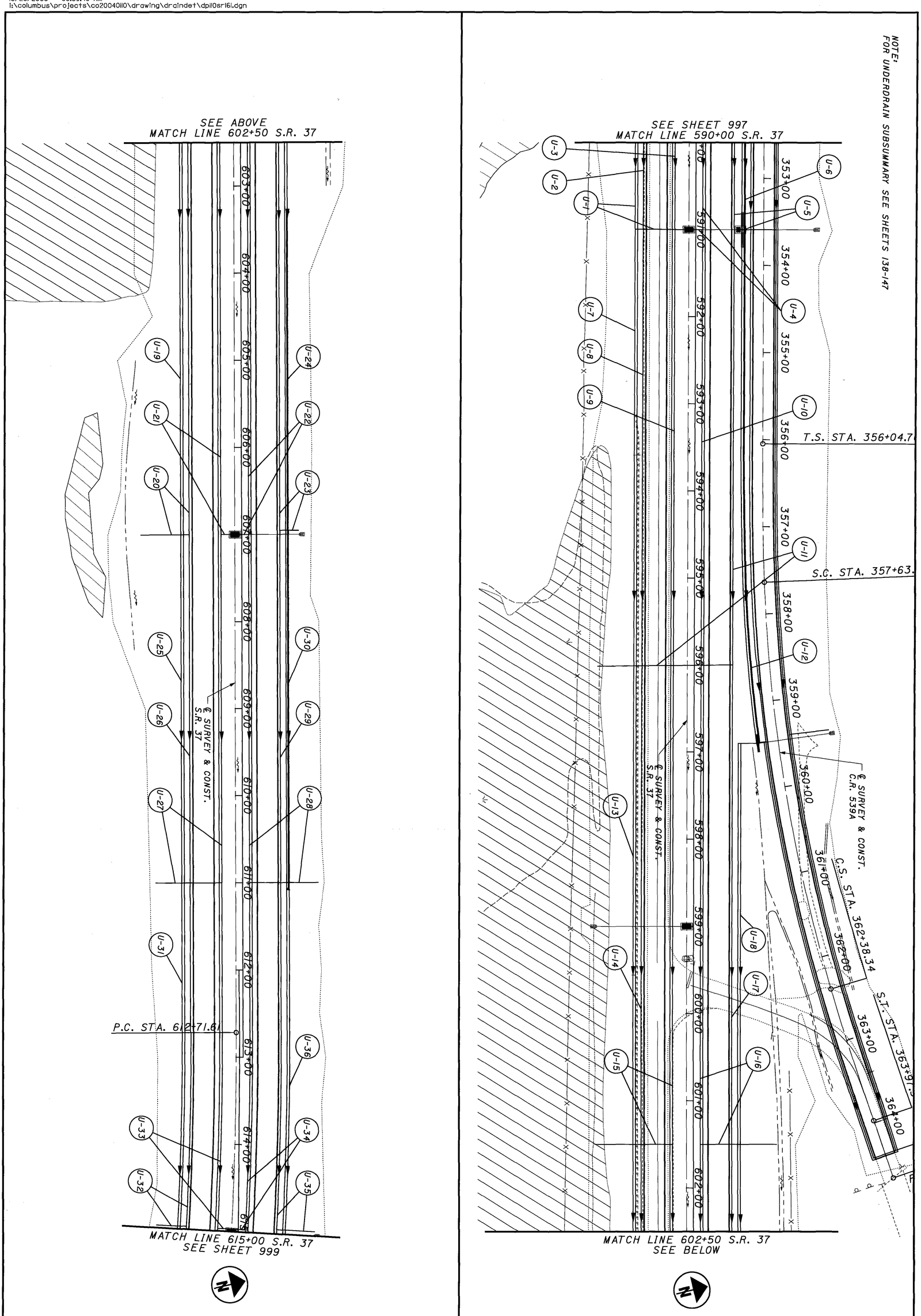
UNDERDRAIN PLAN - S.R. 37
STA. 565+00 TO STA. 590+00

LIC-161-6.65
LIC-37-10.25

999
1349

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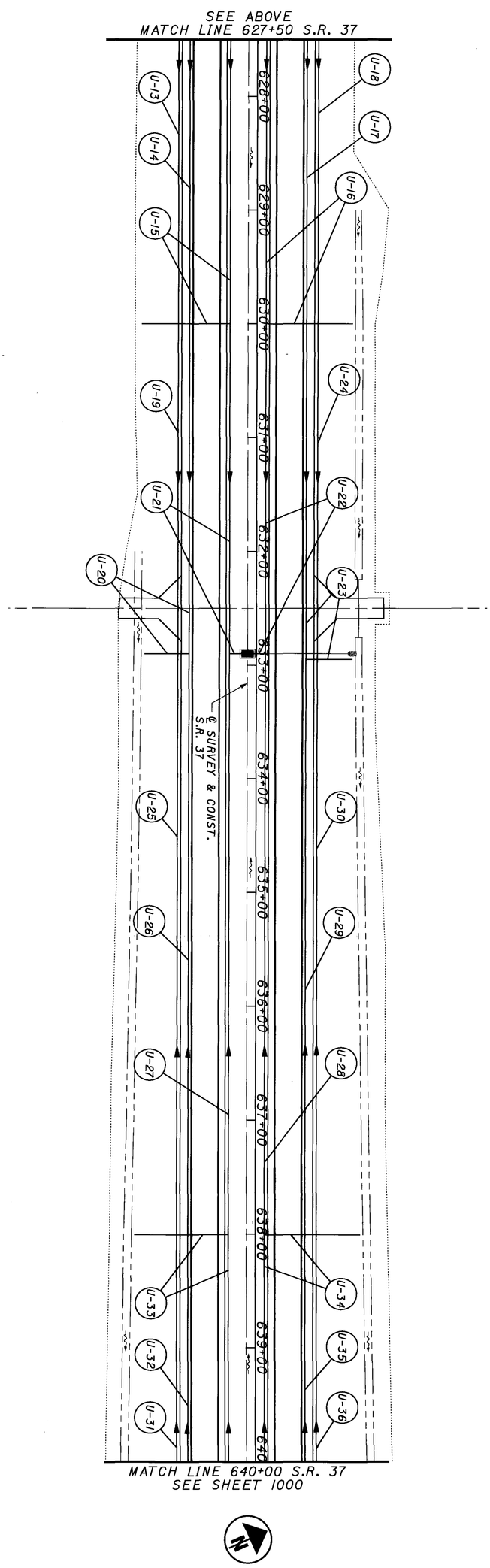
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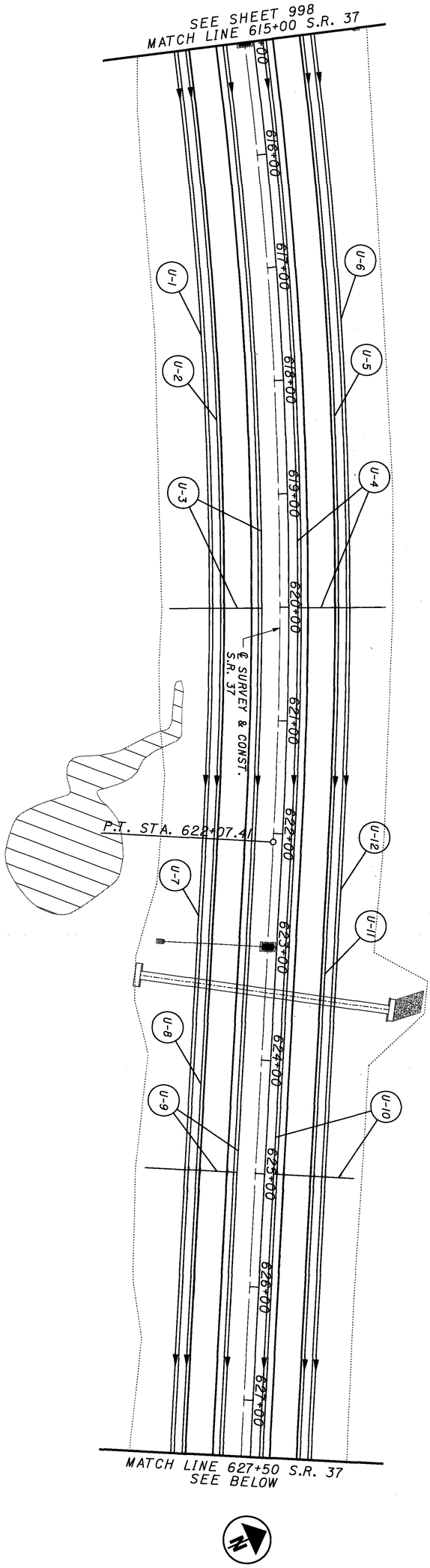


1000 / 1349	LIC-161-6.65 LIC-37-10.25	UNDERDRAIN PLAN - S.R. 37 STA. 590+00 TO STA. 615+00	CALCULATED CLB CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

tduffney
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

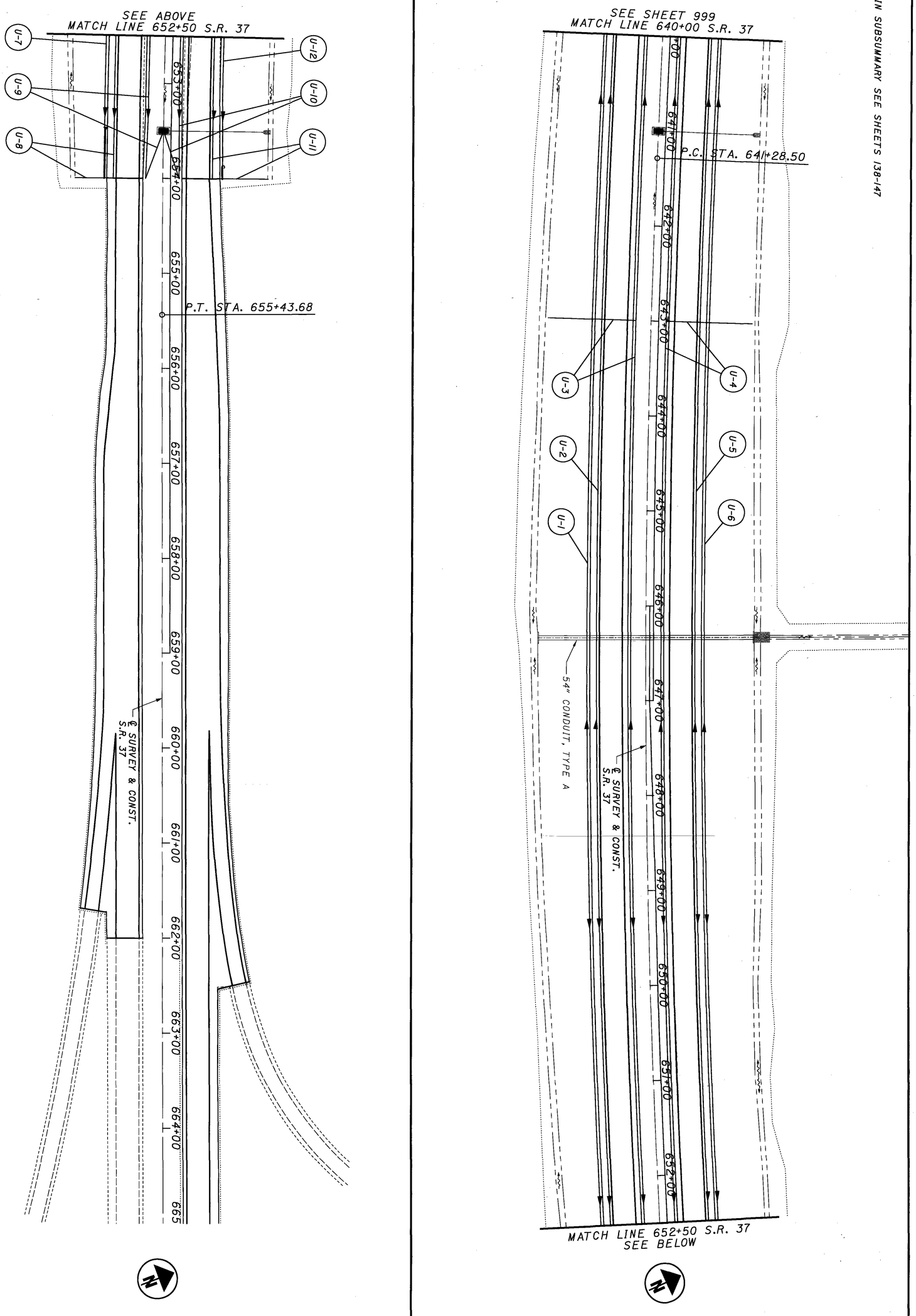




1001 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**UNDERDRAIN PLAN - S.R. 37** **STA. 615+00 TO STA. 640+00**	CALCULATED CLB CHECKED CSR 0 50 25 100 HORIZONTAL SCALE IN FEET

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



1002 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**UNDERDRAIN PLAN - S.R. 37** **STA. 640+00 TO STA. 665+00**	CALCULATED CLB CHECKED CSR 0 50 25 100 HORIZONTAL SCALE IN FEET

NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

334+00 335+00 336+00 337+00 338+00 339+00 340+00 341+00 342+00 343+00 344+00 345+00 346+

℄ SURVEY & CONST.
S.R. 161

℄ WATKINS-YORK FRONTAGE RD

95+00 96+00 97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00 105

℄ SURVEY & CONST.
WATKINS-YORK
FRONTAGE ROAD

MATCH LINE 105+00 WATKINS-YORK FRONTAGE RD
SEE SHEET 1002

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

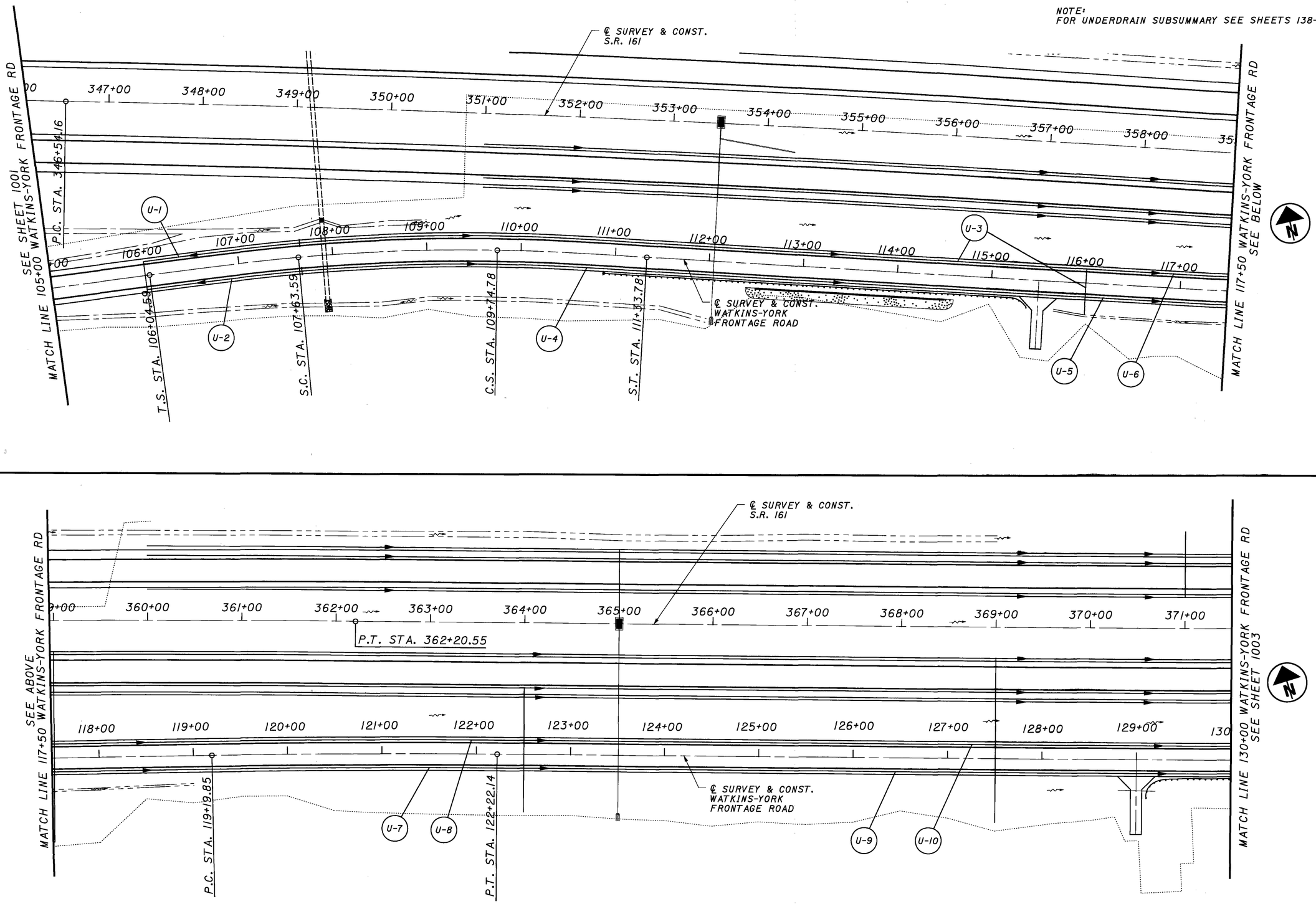
UNDERDRAIN PLAN - WATKINS-YORK FRONTAGE ROAD, STA. 103+50 TO STA. 105+00

LIC-161-6.65
LIC-37-10.25

1003
1349

tduffney
10/26/2006 06:58:55 AM
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

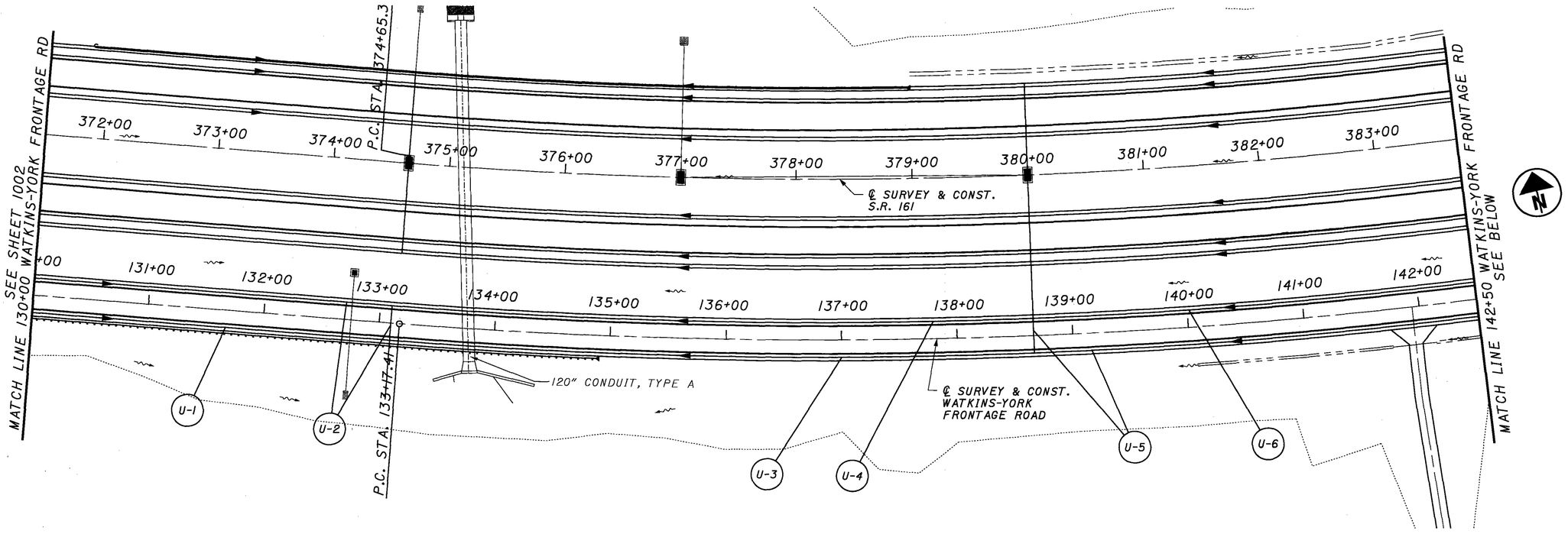
UNDERDRAIN PLAN - WATKINS-YORK FRONTAGE ROAD, STA. 105+00 TO STA. 130+00

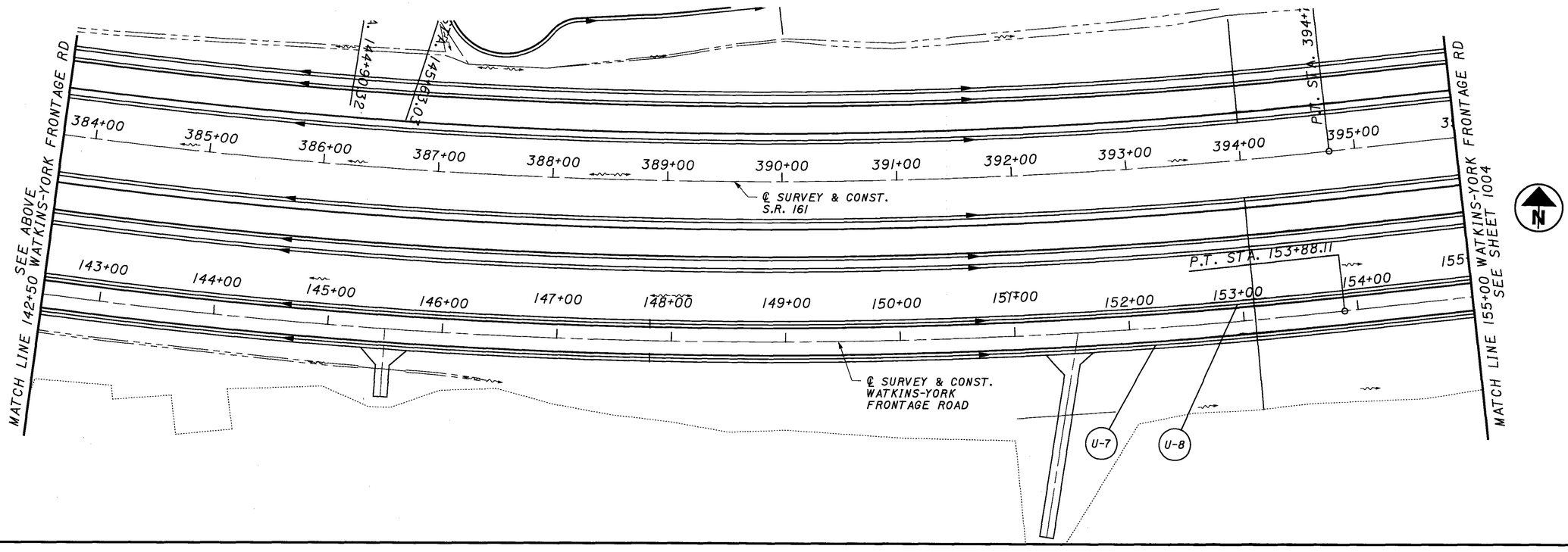
LIC-161-6.65
LIC-37-10.25

1004
1349

tduffney
10/26/2006 06:58:45 AM
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
0 25 50 100

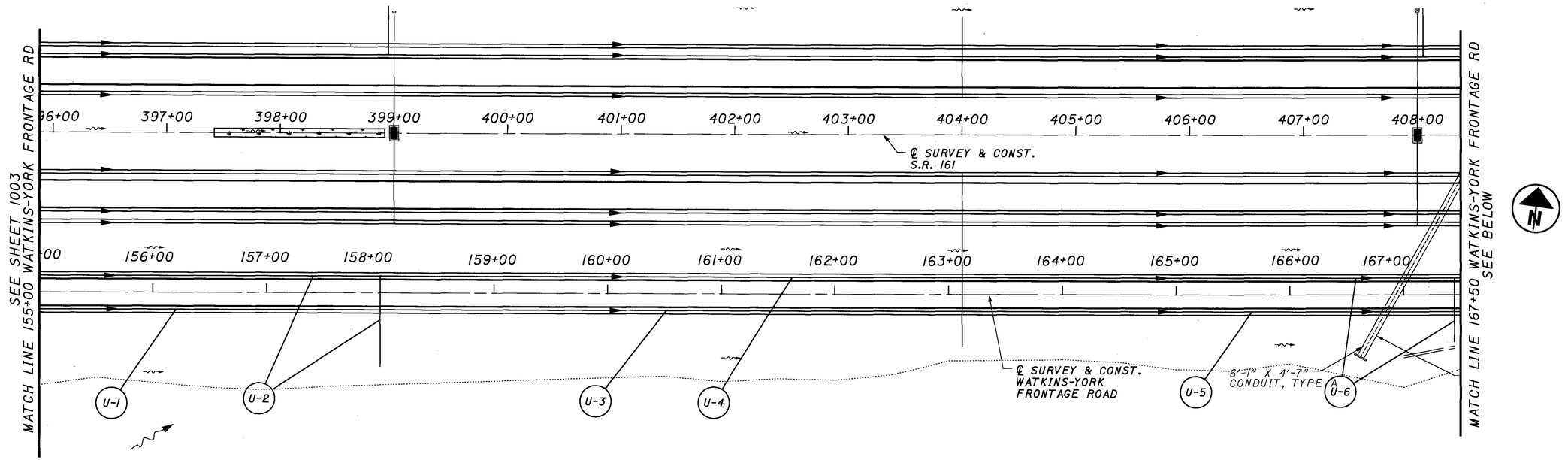
CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - WATKINS-YORK FRONTAGE ROAD, STA. 130+00 TO STA. 155+00

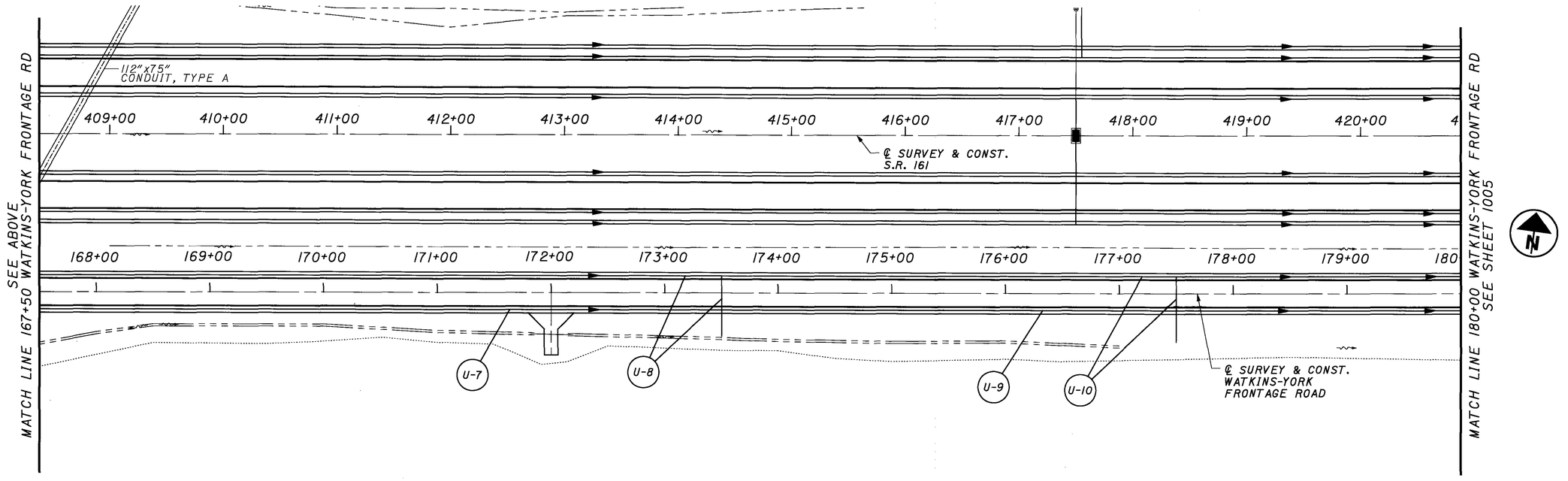
LIC-161-6.65
LIC-37-10.25

1005
1349

tduffney
10/26/2006 06:58:40 AM
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - WATKINS-YORK FRONTAGE ROAD, STA. 155+00 TO STA. 180+00

LIC-161-6.65
LIC-37-10.25

1006
1349

tduffney
10/26/2006 06:58:34 AM
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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

SEE SHEET 1004
MATCH LINE 180+00 WATKINS-YORK FRONTAGE RD

421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00

N 82° 35' 35" E

℄ SURVEY & CONST.
S.R. 161

P.C. STA. 430+93.83

180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00

℄ SURVEY & CONST.
WATKINS-YORK
FRONTAGE ROAD

T.S. STA. 189+32.18

S.C. STA. 191+97.37

MATCH LINE 192+50 WATKINS-YORK FRONTAGE RD
SEE BELOW

U-1 U-2 U-3 U-4 U-5 U-6

N

SEE ABOVE WATKINS-YORK FRONTAGE RD
MATCH LINE 192+50

434+00 435+00 436+00 435+00

P.C. STA. 434+75.00

193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00 201+00 202+00 203+00 204+00 205

96" CONDUIT, TYPE A

℄ SURVEY & CONST.
WATKINS-YORK
FRONTAGE ROAD

C.S. STA. 197+41.81

S.T. STA. 200+07.00

60" CONDUIT, TYPE A

T.S. STA. 203+59.99

U-7 U-8 U-9 U-10 U-11 U-12

MATCH LINE 205+00 WATKINS-YORK FRONTAGE RD
SEE SHEET 1006

N

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

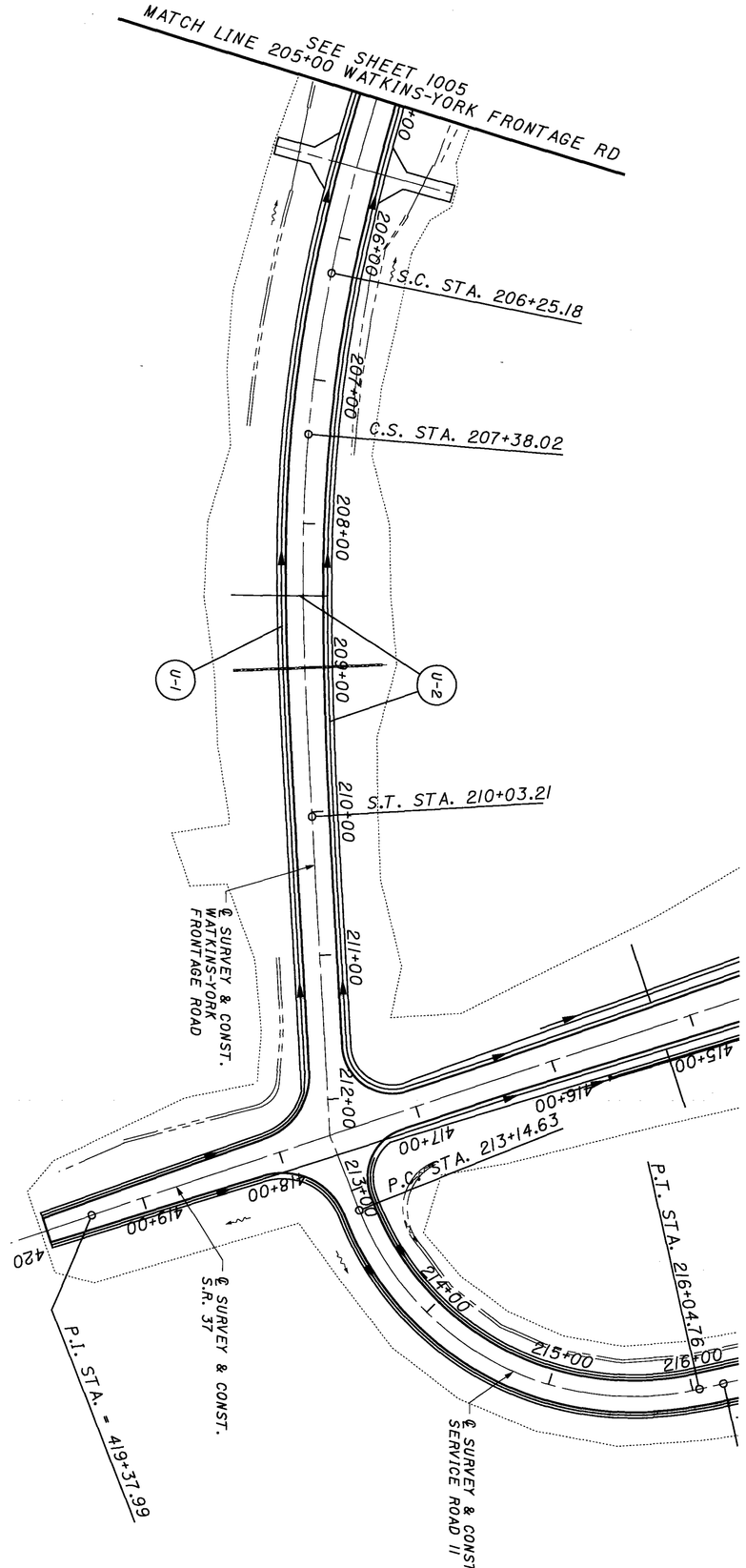
UNDERDRAIN PLAN - WATKINS-YORK FRONTAGE ROAD, STA. 180+00 TO STA. 205+00

LIC-161-6.65
LIC-37-10.25

1007
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

1008 / 1349	LIC-161-6.65 LIC-37-10.25	UNDERDRAIN PLAN - WATKINS-YORK FRONTAGE ROAD, STA. 205+00 TO STA. 212+25	CALCULATED CLB CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

P.O.T. STA. 143+00.00
143+00
144+00
145+00
146+00
147+00
P.C. STA. 146+37.19
P.T. STA. 147+57.34
148+00
149+00
150+00
P.O.T. STA. 150+32.10
STA. 150+52.34
℄ SERVICE ROAD 10
℄ RELOCATED
STA. 150+32.10
WORTHINGTON ROAD
NORTH
151+00
152+00
153+00
℄ SURVEY & CONST.
RELOCATED WORTHINGTON
ROAD NORTH
U-2
℄ SURVEY & CONST.
SERVICE RD. 10
U-1
PC STA. 144+90.32
PT STA. 145+63.03
P.T. STA. 394+77.67
395+00
383+00
384+00
385+00
386+00
387+00
388+00
389+00
390+00
391+00
392+00
393+00
394+00
℄ SURVEY & CONST.
S.R. 161

N

HORIZONTAL
SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - SERVICE ROAD 10
STA. 143+00 TO STA. 150+32.10

LIC-161-6.65
LIC-37-10.25

1009
1349

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HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

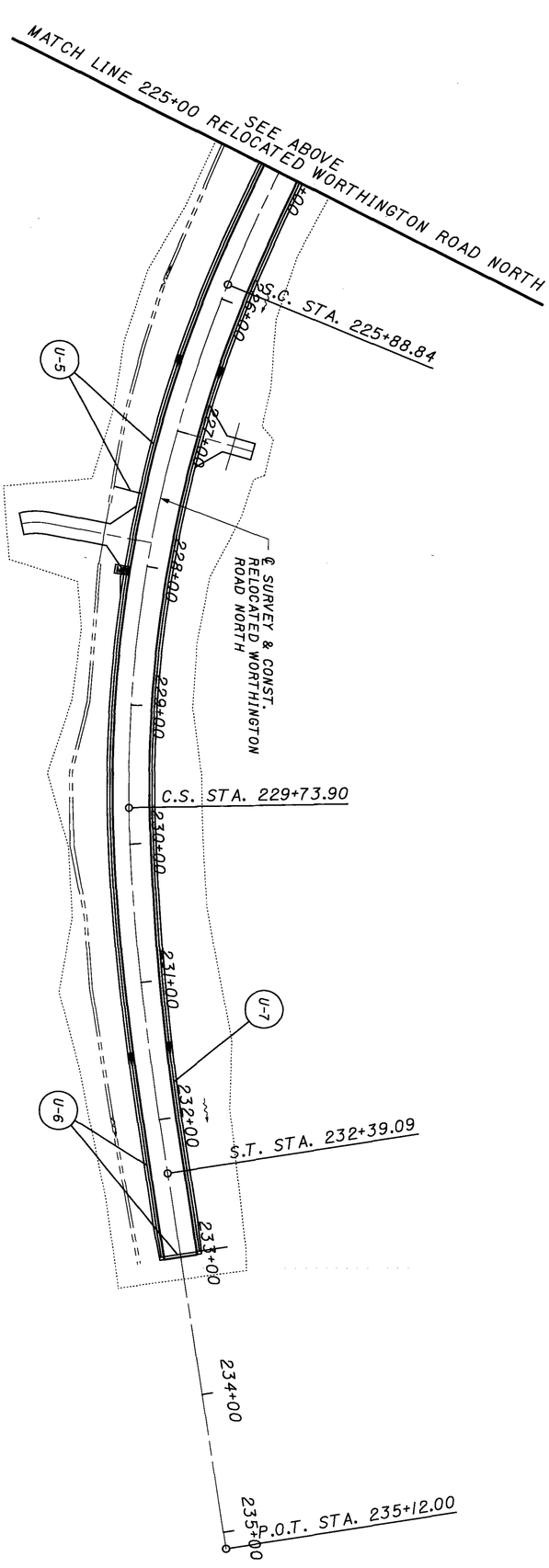
UNDERDRAIN PLAN - RELOCATED WORTHINGTON ROAD NORTH, STA. 187+50 TO STA. 212+00

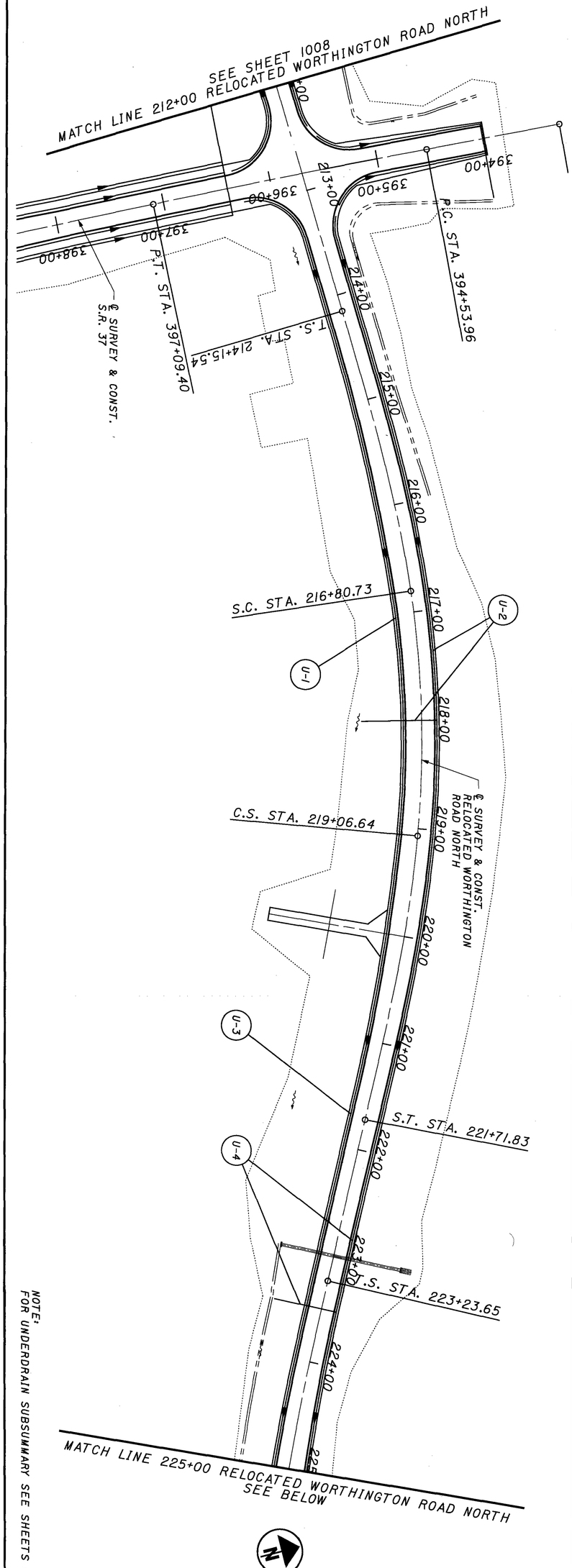
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LIC-37-10.25

1010
1349

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NOTE: FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

1011 / 1349	LIC-161-6.65 LIC-37-10.25	UNDERDRAIN PLAN - RELOCATED WORTHINGTON ROAD NORTH, STA. 212+00 TO STA. 235+12	CALCULATED CLB CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

T.S. STA. 189+22.46
S.C. STA. 191+87.65
C.S. STA. 196+19
P.O.T. STA. 436+46.26
℄ SURVEY & CONST.
RELOCATED WORTHINGTON
RAOD NORTH
℄ RAMP I
P.C. STA. 439+50.00
P.T. STA. 442+23.33
U-1
U-2
MATCH LINE 443+00 RAMP I
SEE BELOW
89+00
190+00
191+00
192+00
193+00
194+00
195+00
196+00
437+00
438+00
439+00
440+00
441+00
442+00
443+00
431+00
432+00
433+00
434+00
435+00
436+00
93.83
℄ SURVEY & CONST.
S.R. 161
℄ RAMP K
P.C. STA.

SEE ABOVE
MATCH LINE 443+00 RAMP I
+00
444+00
445+00
446+00
447+00
448+00
449+00
450+00
451+00
U-3
U-4
U-5
U-6
P.C. STA. 447+24.19
P.T. STA. 449+62.85
℄ RAMP I
℄ RAMP J
401+00
402+00
403+00
404+00
405+00
P.C. STA. 452+73.30
℄ SURVEY & CONST.
S.R. 37
452+00
453+00

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED CLB
CHECKED CSR

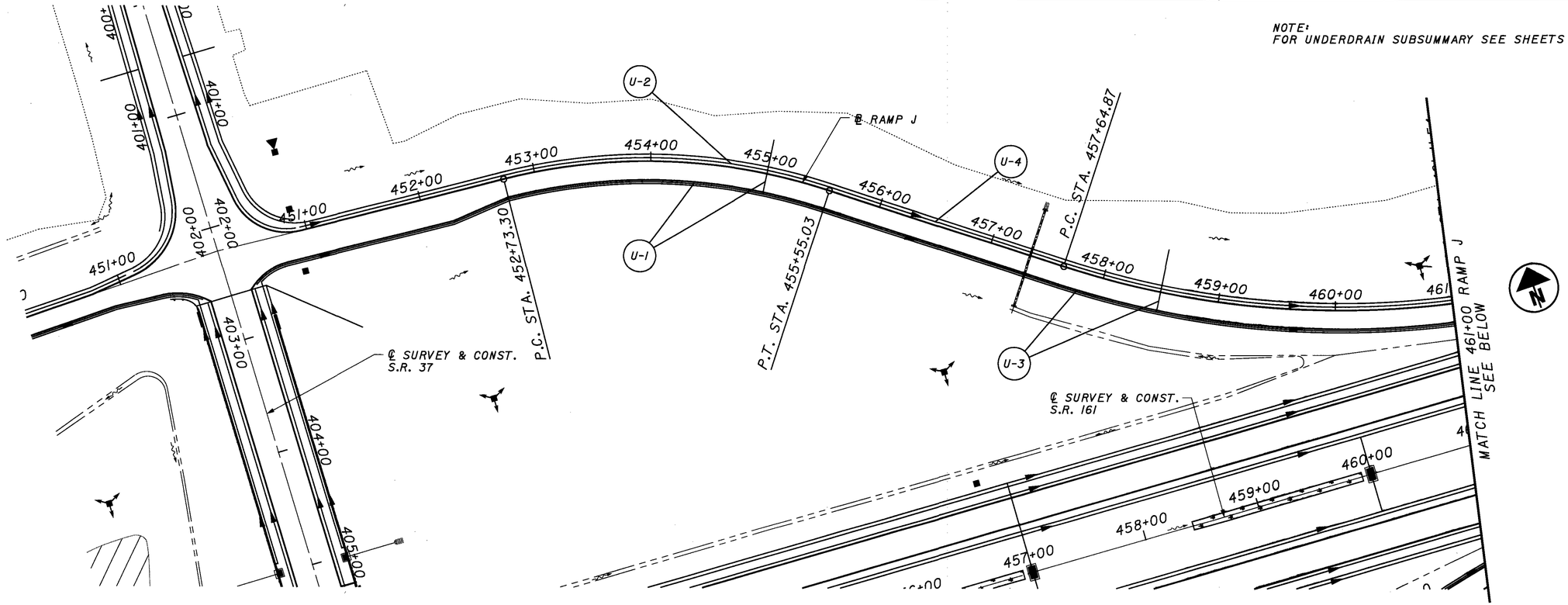
UNDERDRAIN PLAN - RAMP I
STA. 436+46 TO STA. 451+88

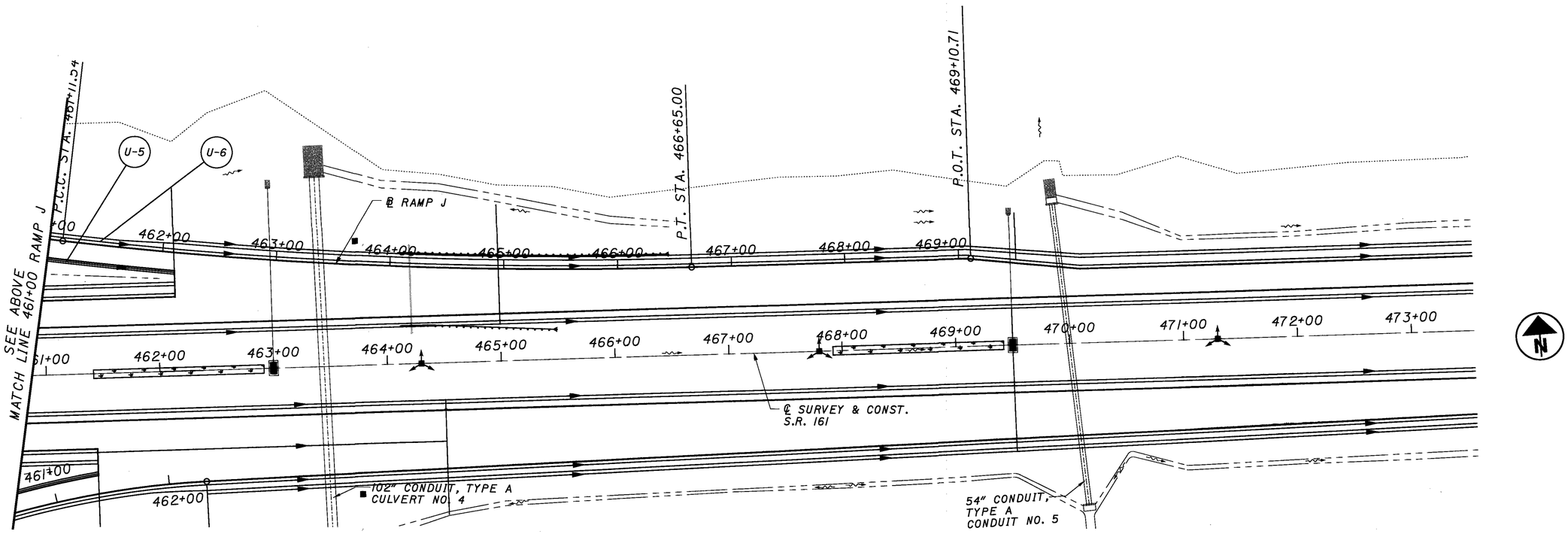
LIC-161-6.65
LIC-37-10.25

1012
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
0 25 50 100

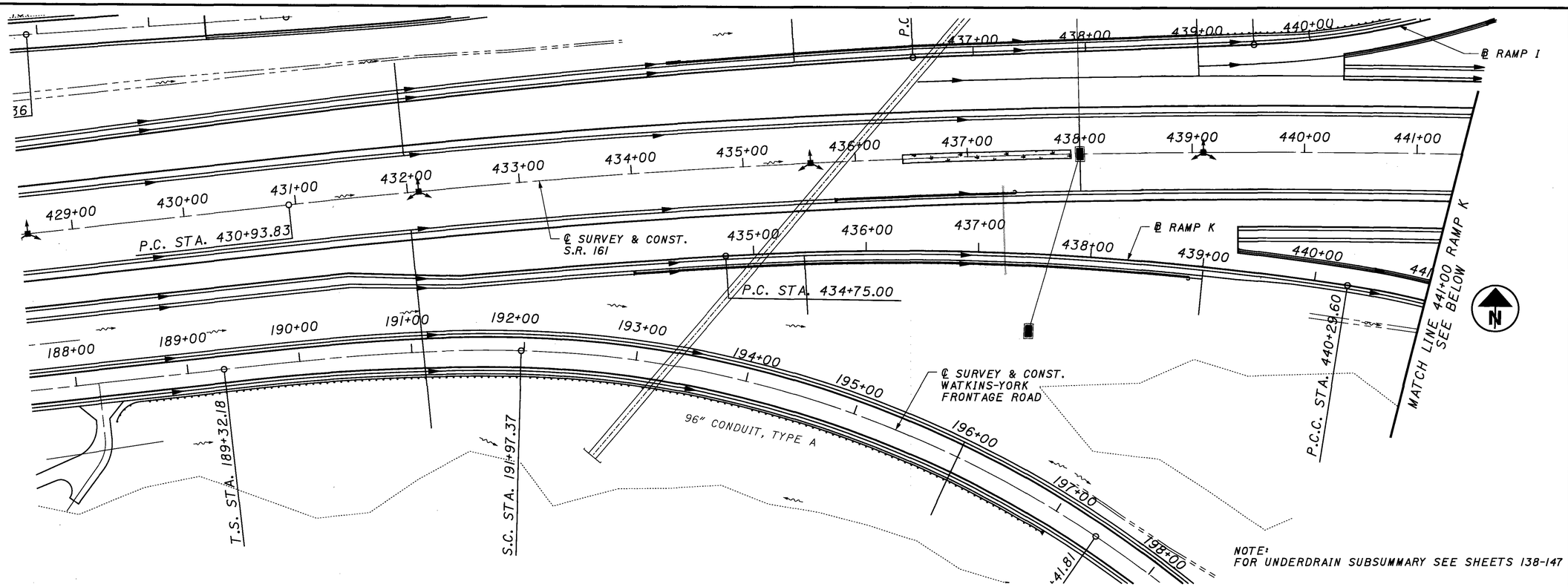
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CHECKED CSR

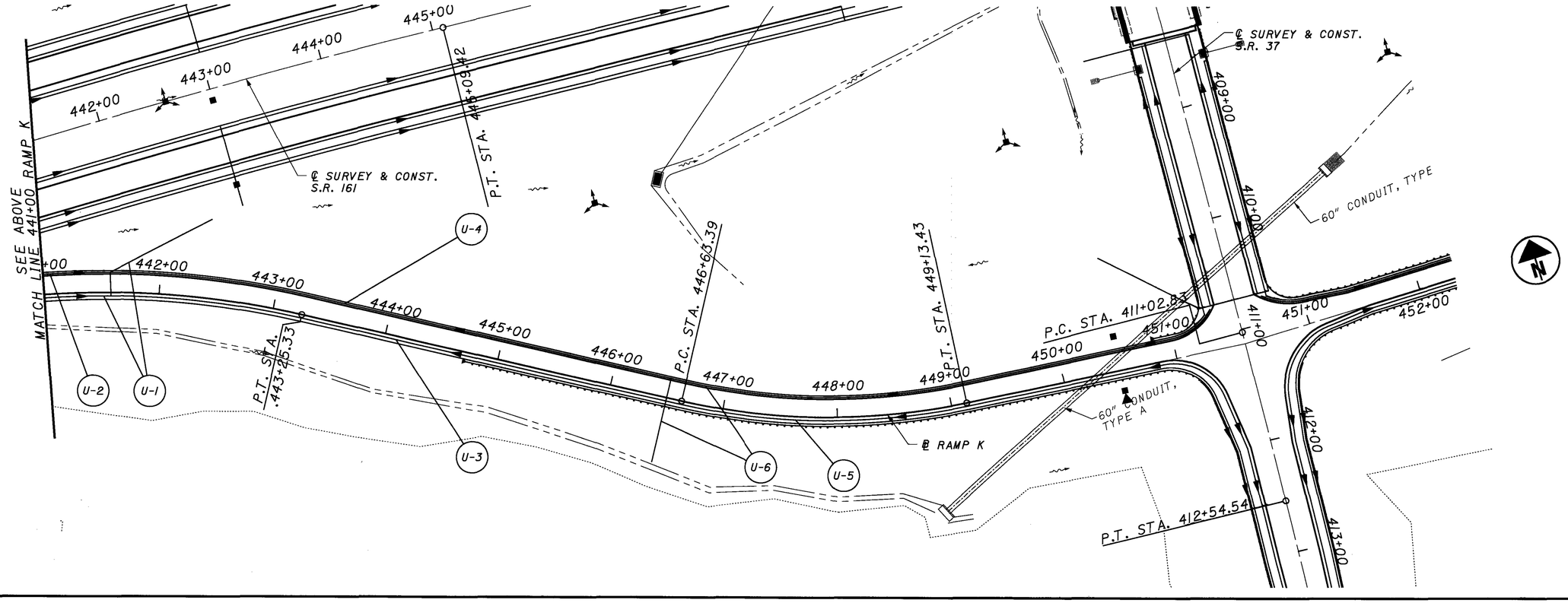
UNDERDRAIN PLAN - RAMP J
STA. 450+21.62 TO STA. 462+11.54

LIC-161-6.65
LIC-37-10.25

1013
1349

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HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED CLB
CHECKED CSR

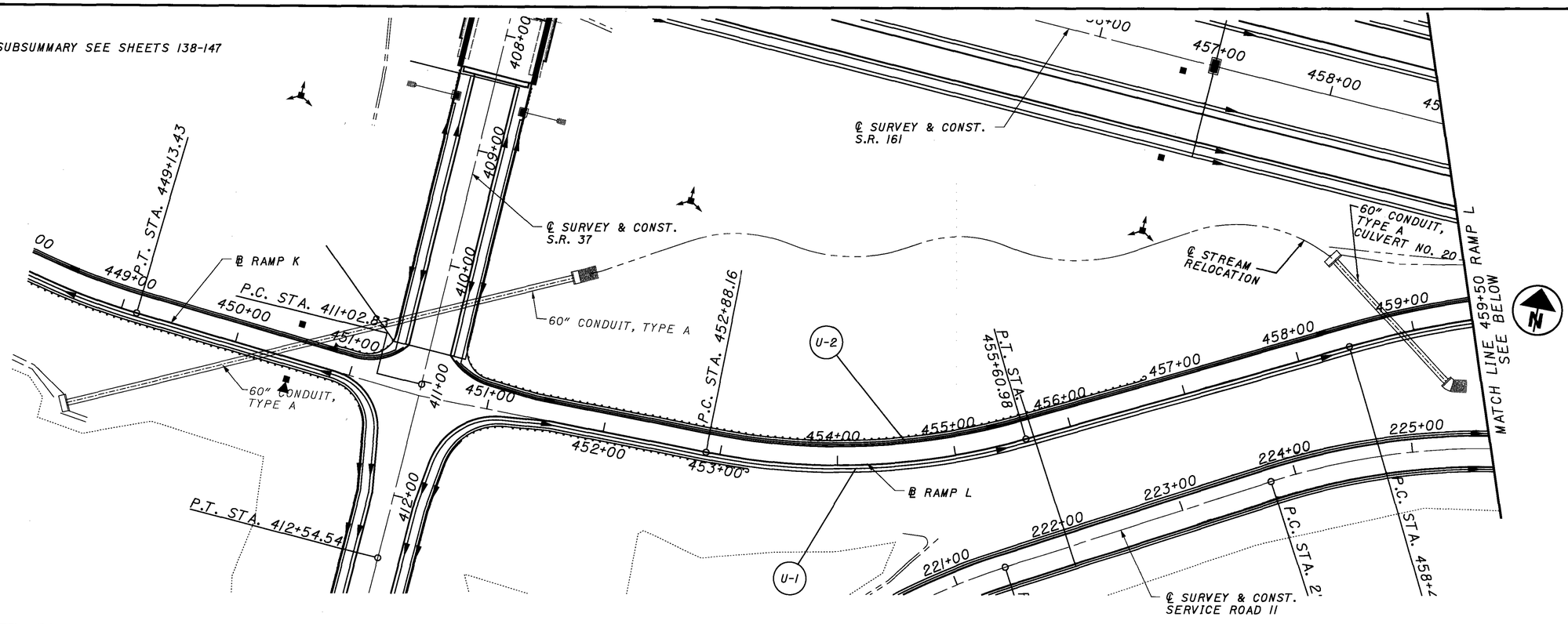
UNDERDRAIN PLAN - RAMP K STA. 434+75 TO STA. 451+61

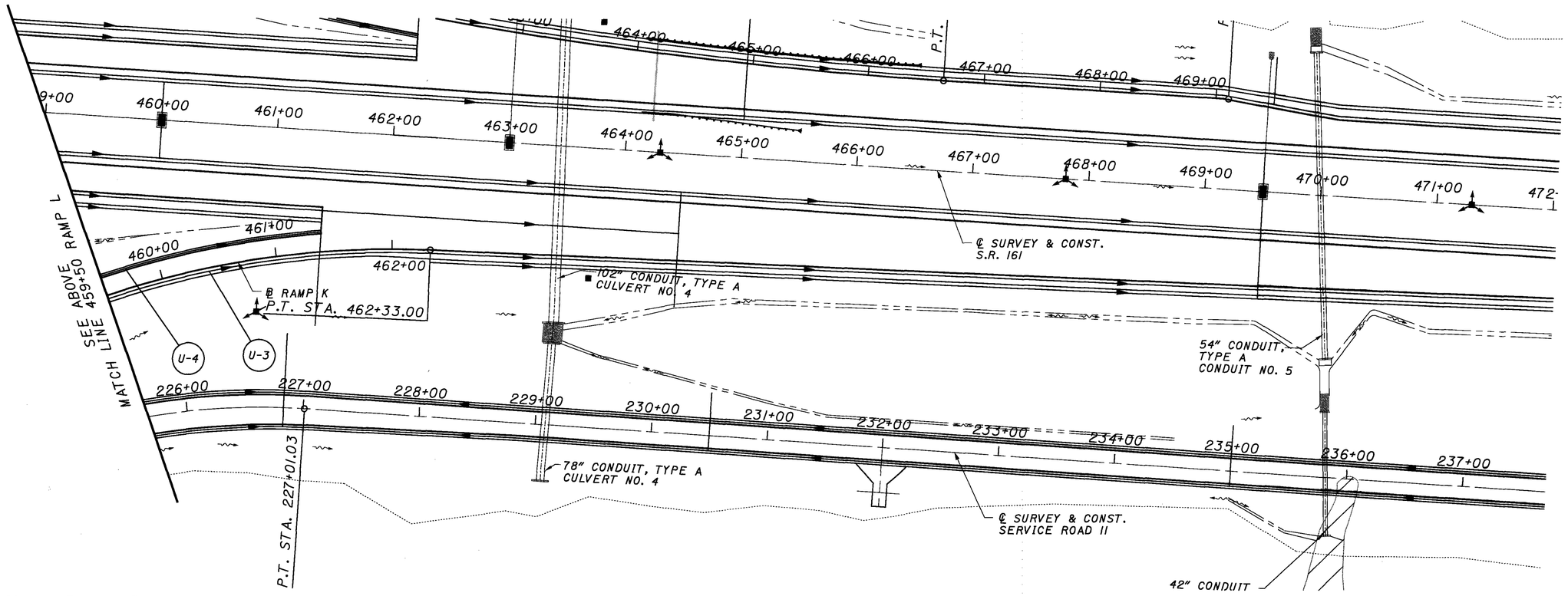
LIC-161-6.65
LIC-37-10.25

1014
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147





HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

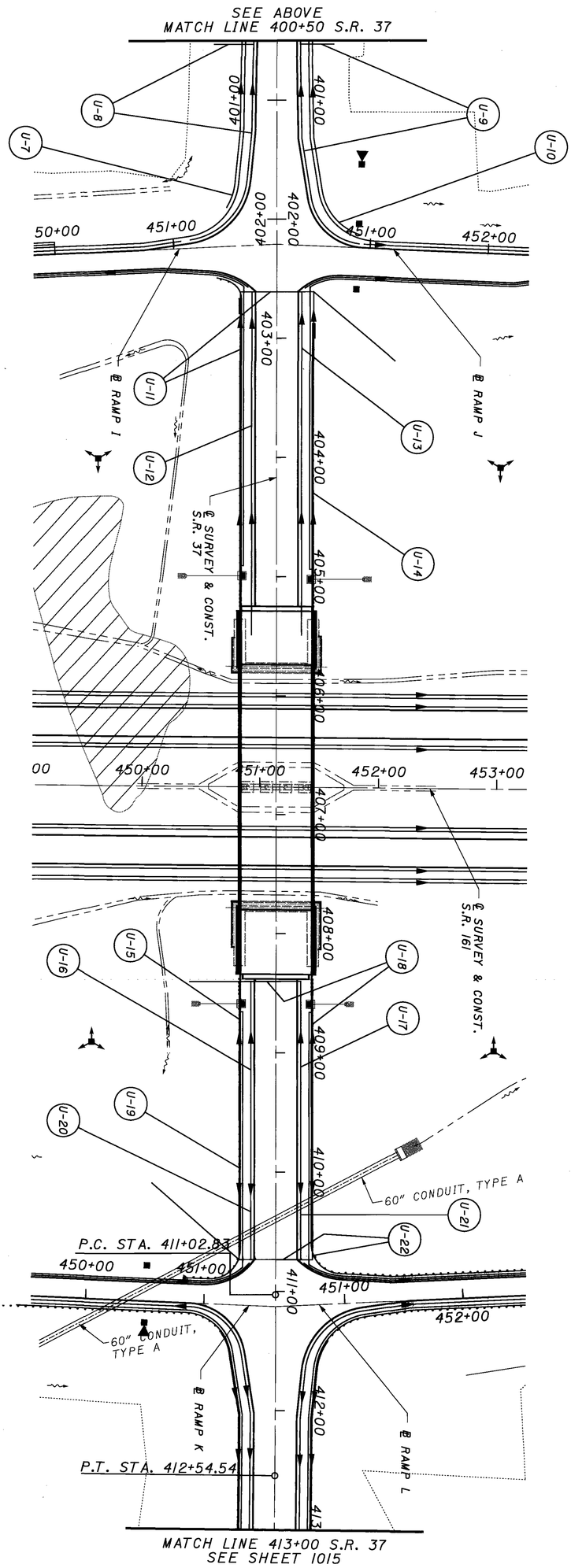
UNDERDRAIN PLAN - RAMP L
STA. 450+42 TO STA. 462+33

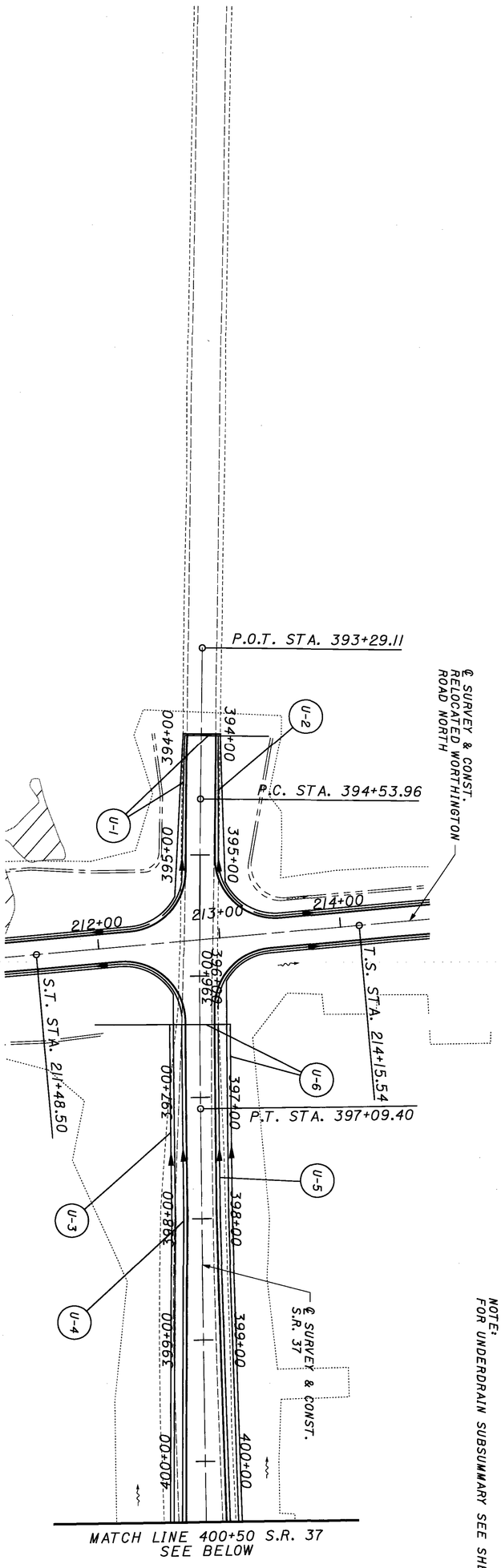
LIC-161-6.65
LIC-37-10.25

1015
1349

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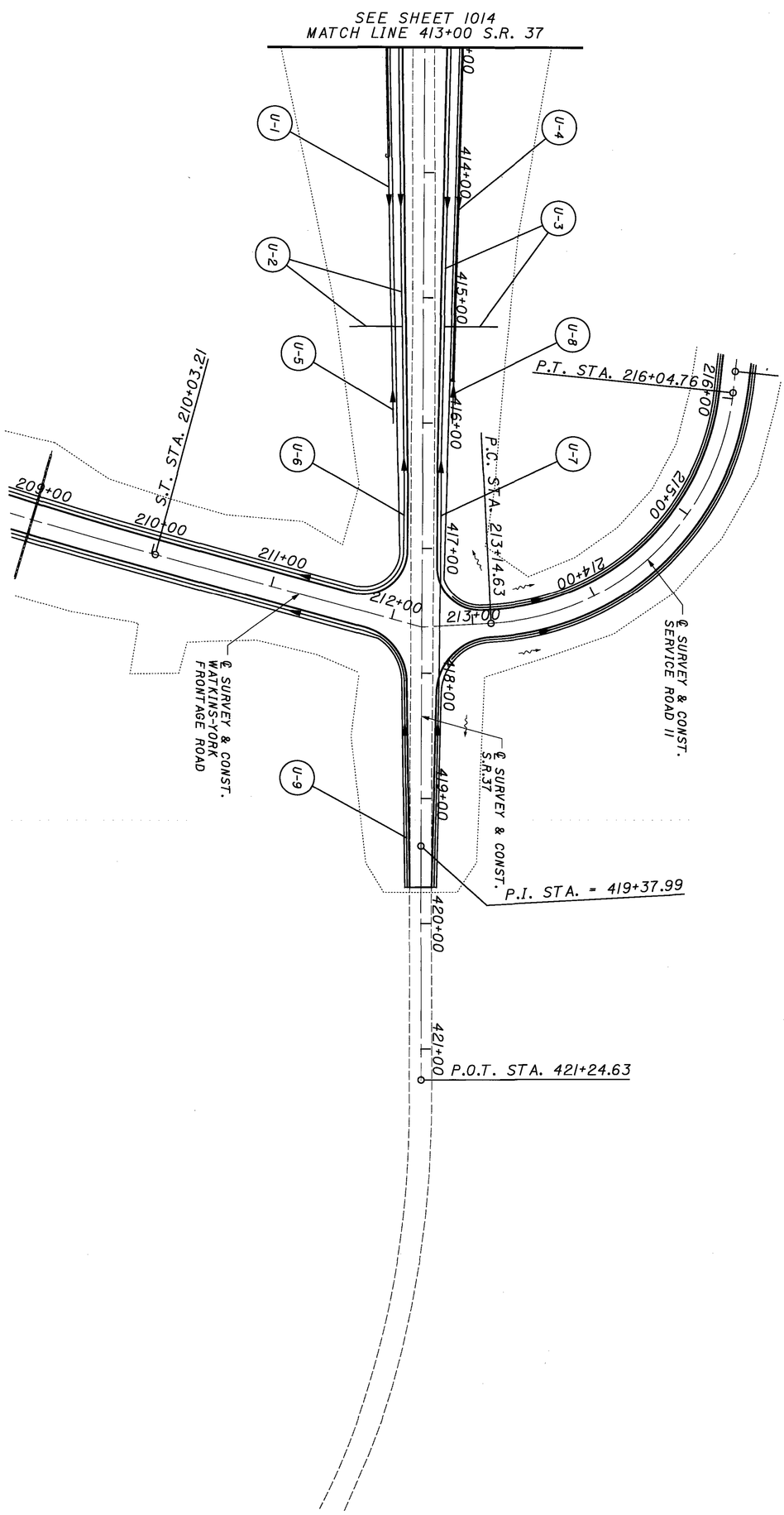




NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

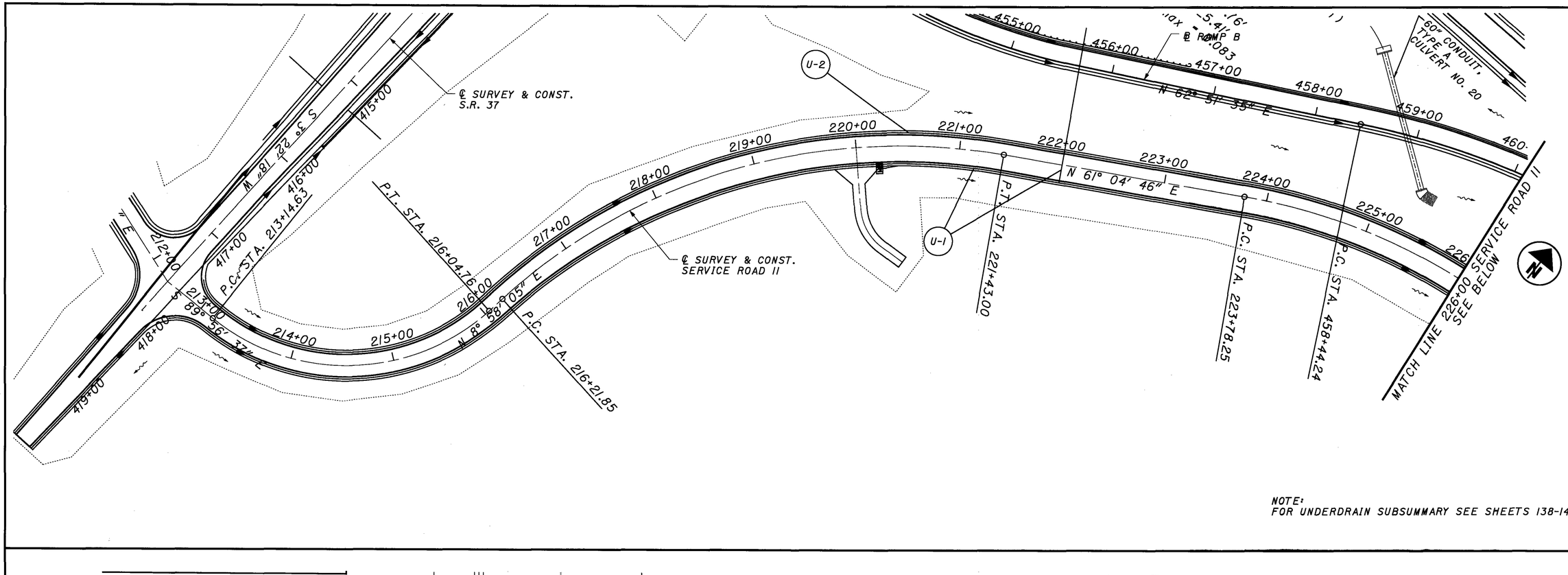
1016 / 1349	LIC-161-6.65 LIC-37-10.25	UNDERDRAIN PLAN - S.R. 37 STA. 393+29 TO STA. 413+00	CALCULATED CLB CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

1017 / 1349	LIC-161-6.65 LIC-37-10.25	UNDERDRAIN PLAN - S.R. 37 STA. 413+00 TO STA. 421+25	CALCULATED CLB CHECKED CSR 0 50 25 100 HORIZONTAL SCALE IN FEET N



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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - SERVICE ROAD 11
STA. 237+00 TO STA. 243+17.17

LIC-161-6.65
LIC-37-10.25

1019
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

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N

0 25 50 100
HORIZONTAL
SCALE IN FEET

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - OUTVILLE ROAD
STA. 18+00 TO STA. 29+00

LIC-161-6.65
LIC-37-10.25

1020
1349

NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

HORIZONTAL SCALE IN FEET
0 25 50 100

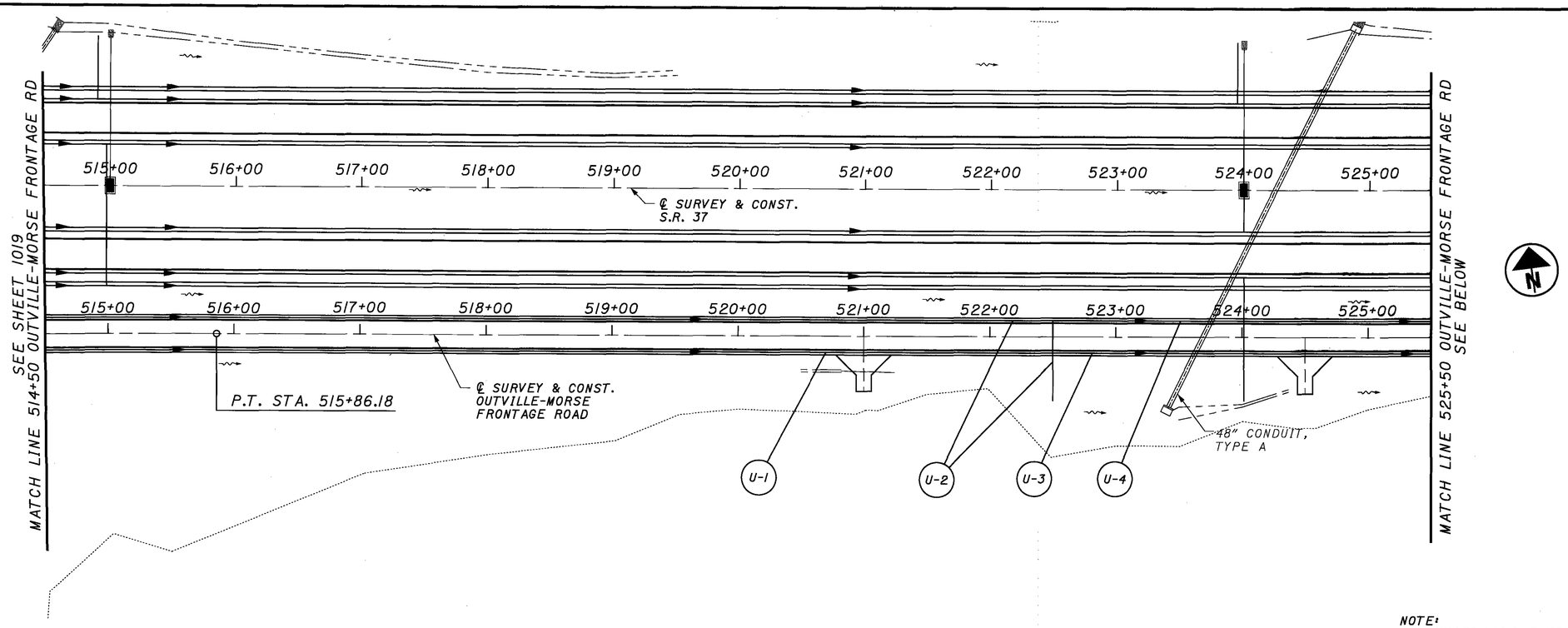
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CHECKED CSR

UNDERDRAIN PLAN - OUTVILLE-MORSE FRONTAGE ROAD, STA. 497+32 TO STA. 514+50

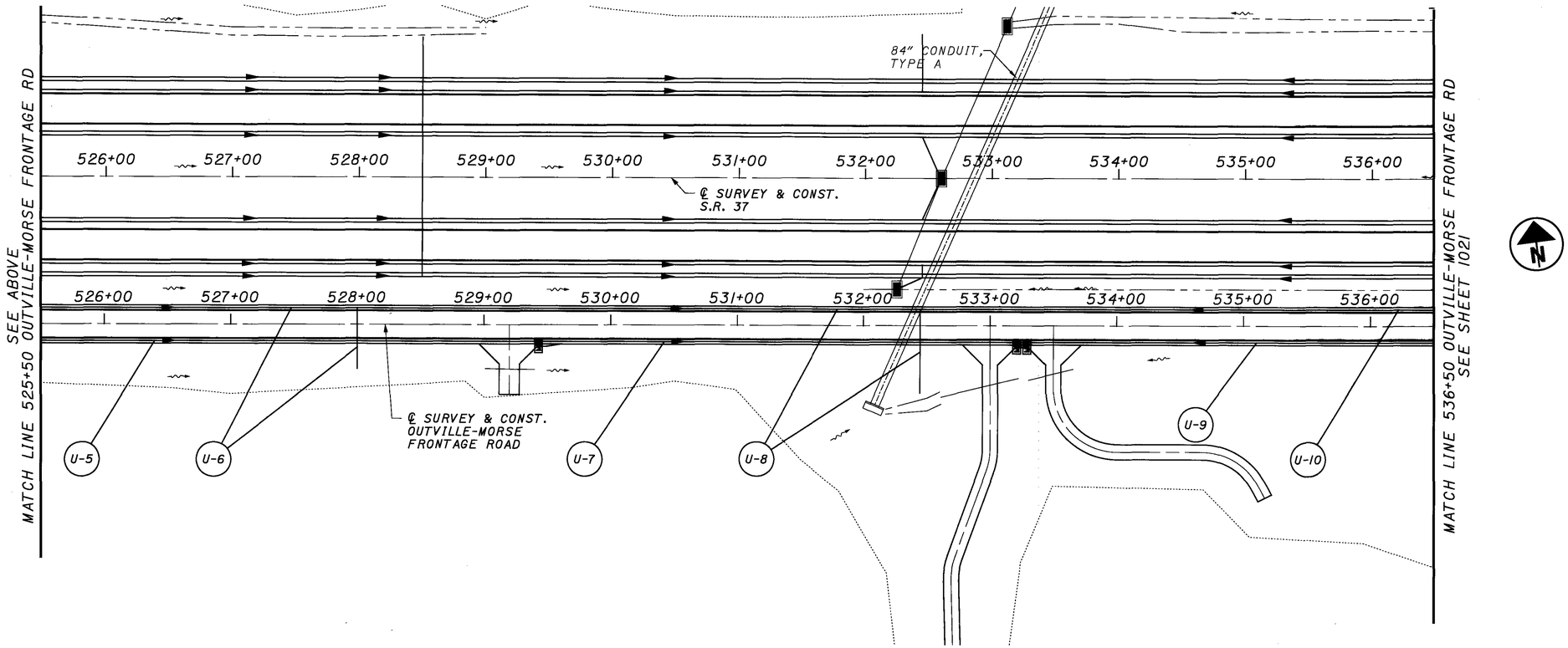
LIC-161-6.65
LIC-37-10.25

1021
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

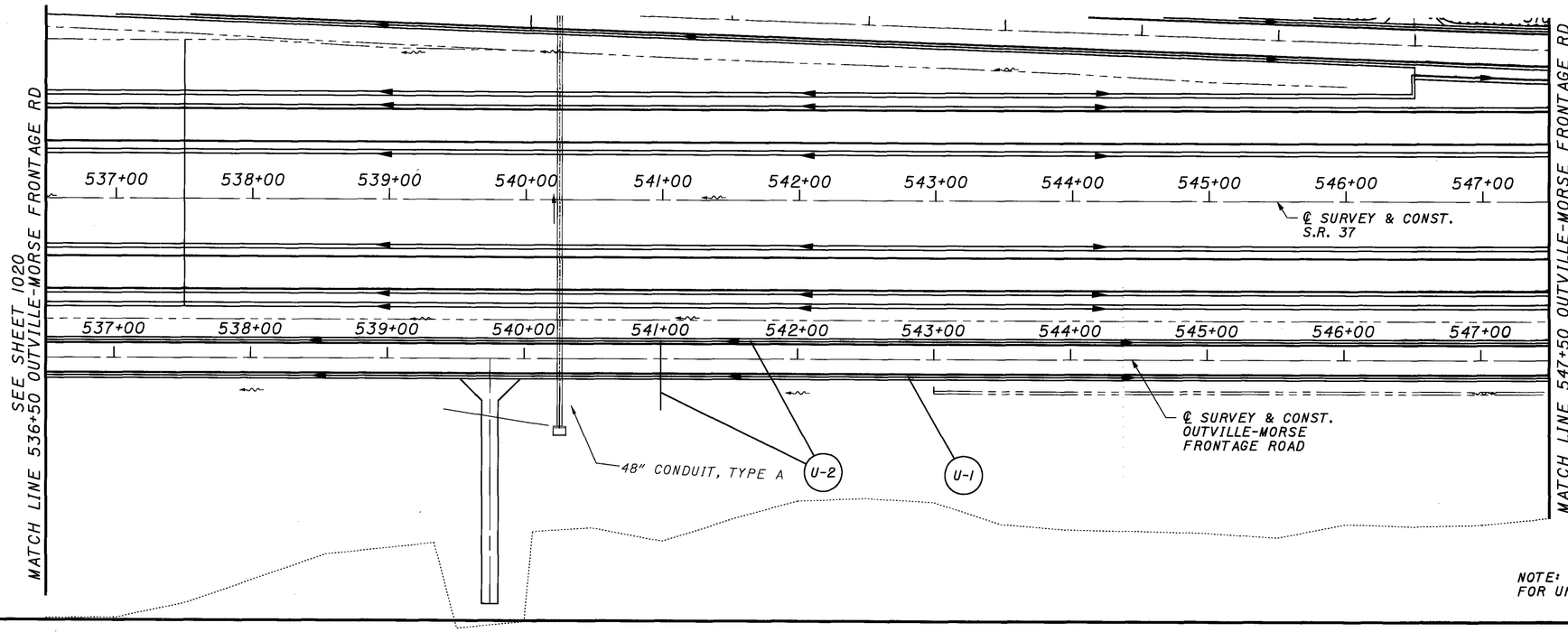
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CHECKED CSR

UNDERDRAIN PLAN - OUTVILLE-MORSE FRONTAGE ROAD, STA. 514+50 TO STA. 536+50

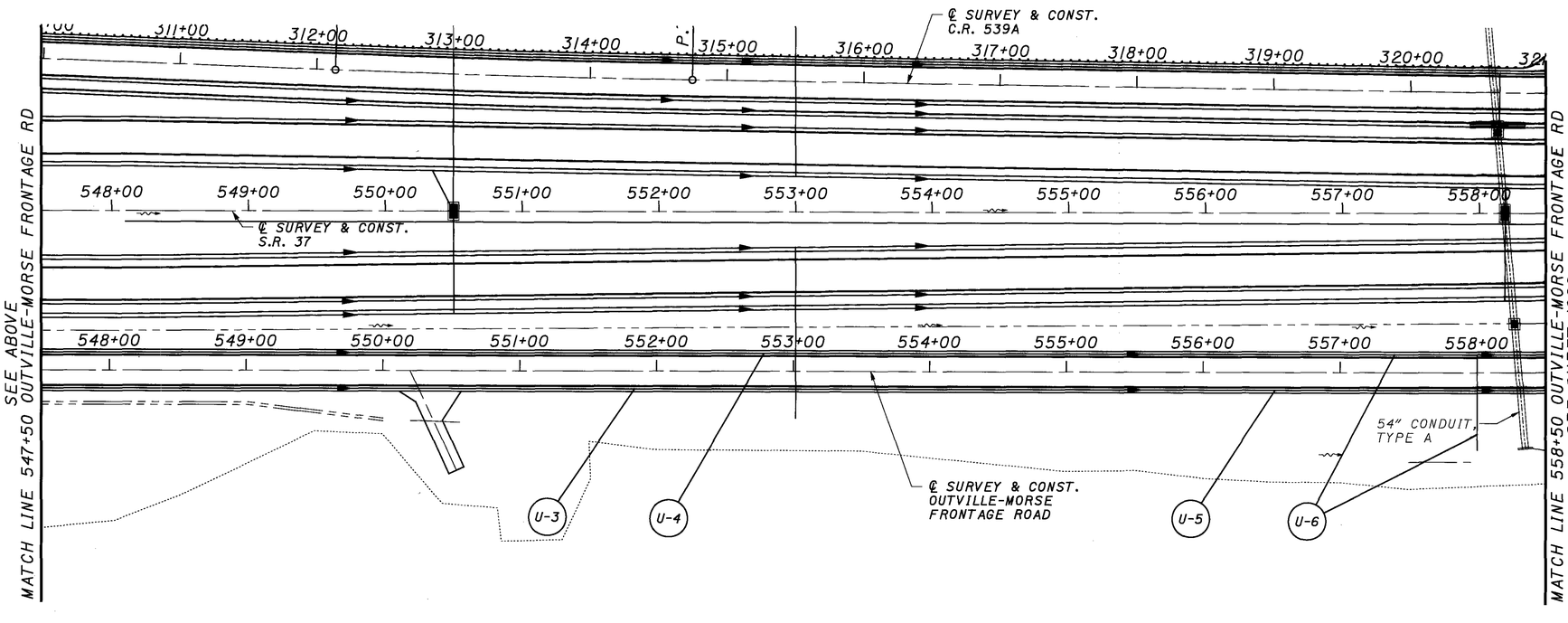
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LIC-37-10.25

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1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - OUTVILLE-MORSE FRONTAGE ROAD, STA. 536+50 TO STA. 558+50

LIC-161-6.65
LIC-37-10.25

1023
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
CHECKED CSR

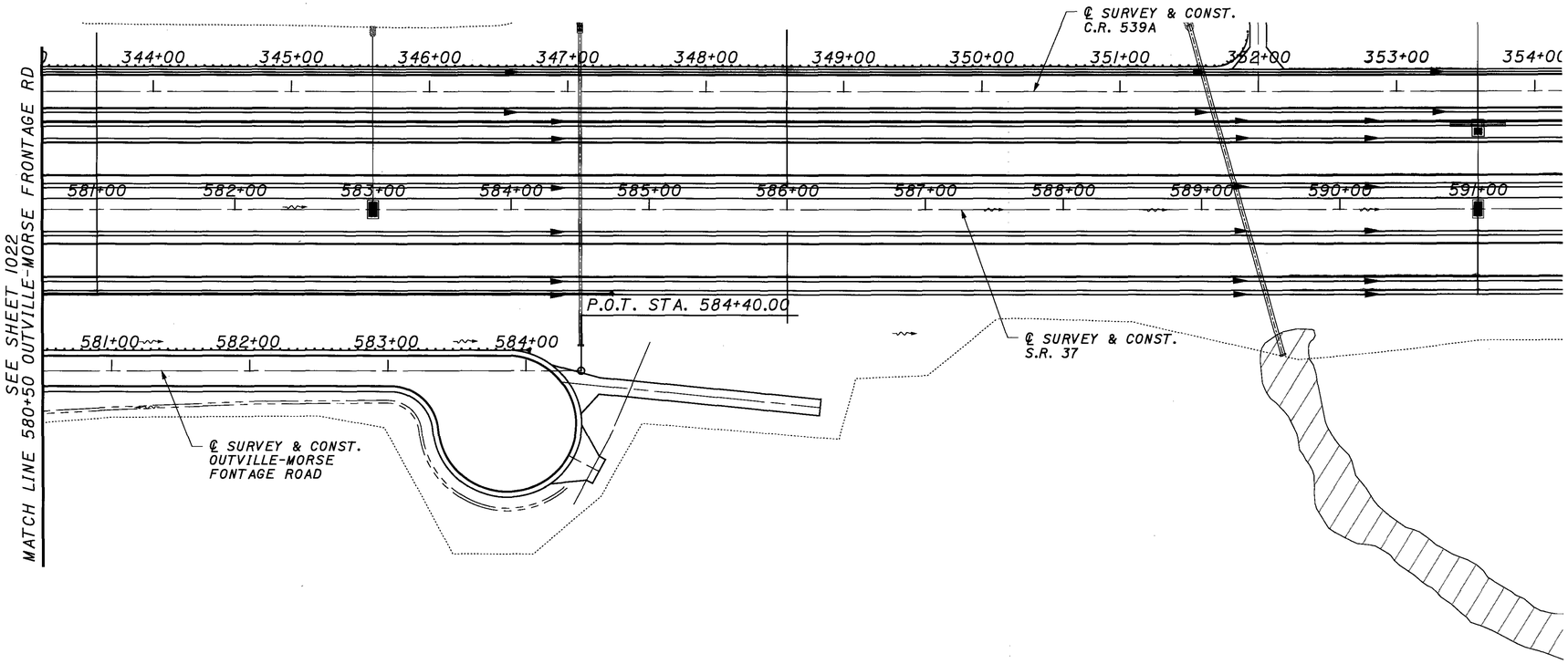
UNDERDRAIN PLAN - OUTVILLE-MORSE FRONTAGE ROAD, STA. 558+50 TO STA. 580+50

LIC-161-6.65
LIC-37-10.25

1024
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



0 25 50 100
HORIZONTAL
SCALE IN FEET

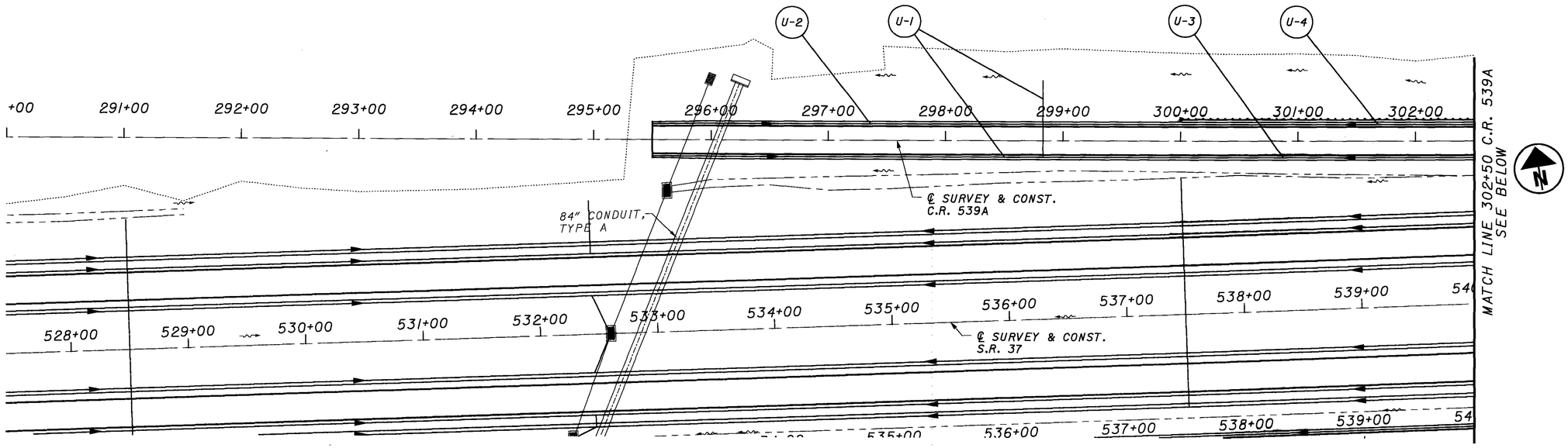
CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - OUTVILLE-MORSE FRONTAGE ROAD, STA. 580+50 TO STA. 584+40

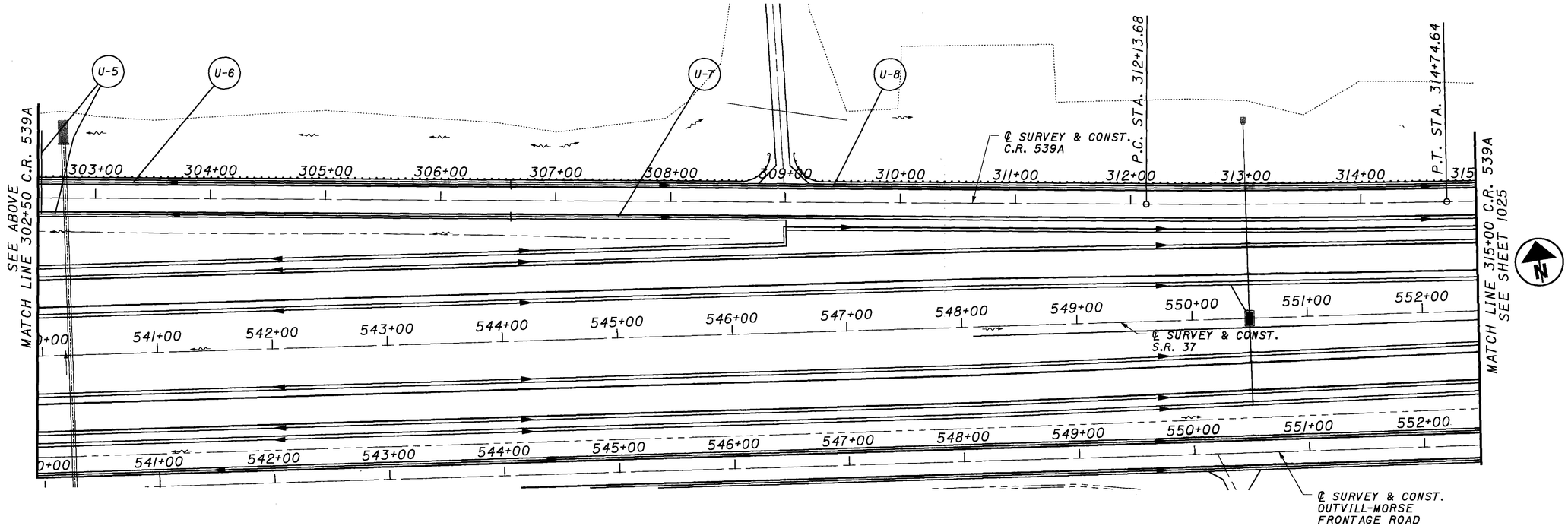
LIC-161-6.65
LIC-37-10.25

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1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
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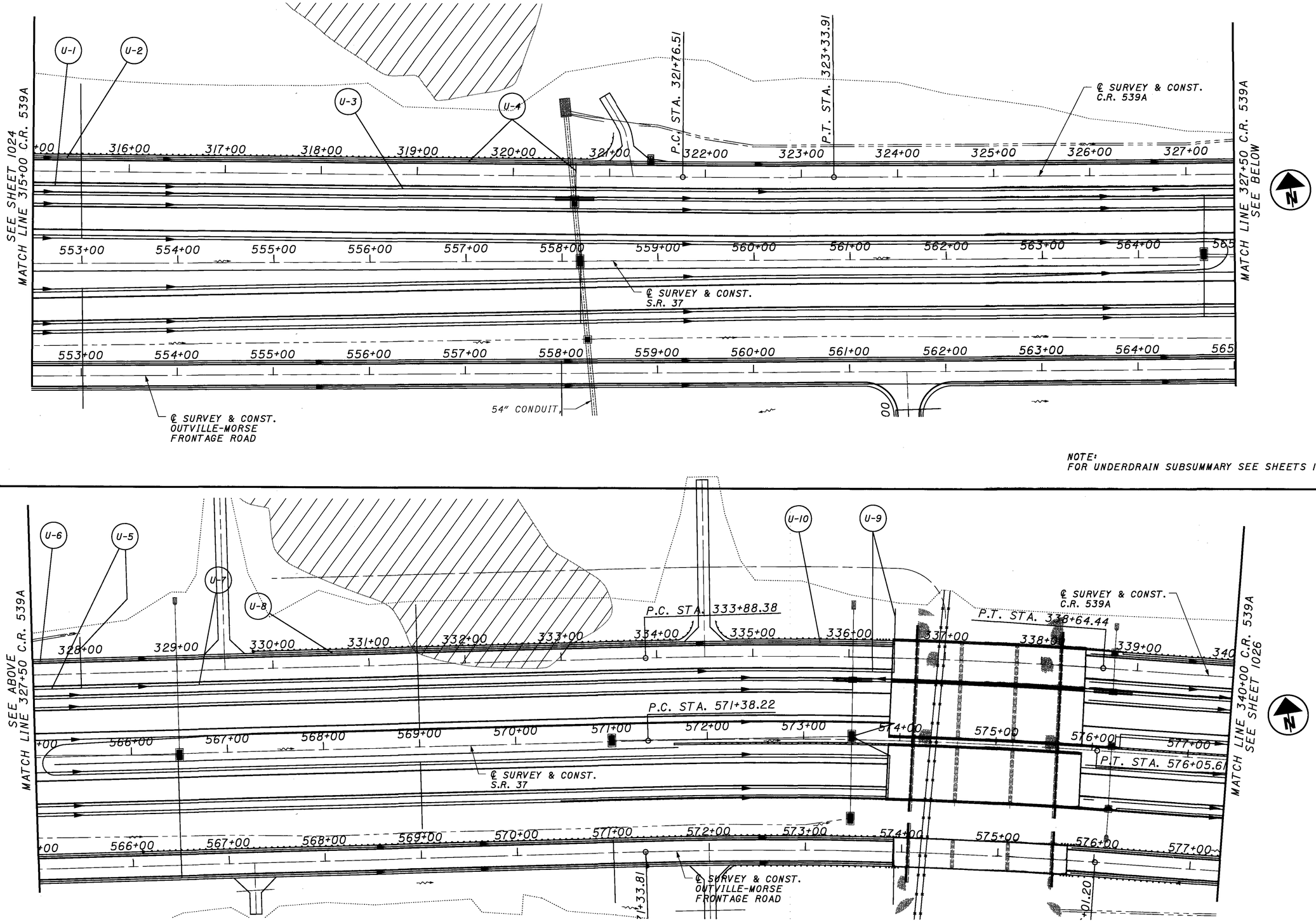
CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - C.R. 539A EXTENSION
STA. 295+50 TO STA. 315+00

LIC-161-6.65
LIC-37-10.25

1026
1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

HORIZONTAL SCALE IN FEET
0 25 50 100

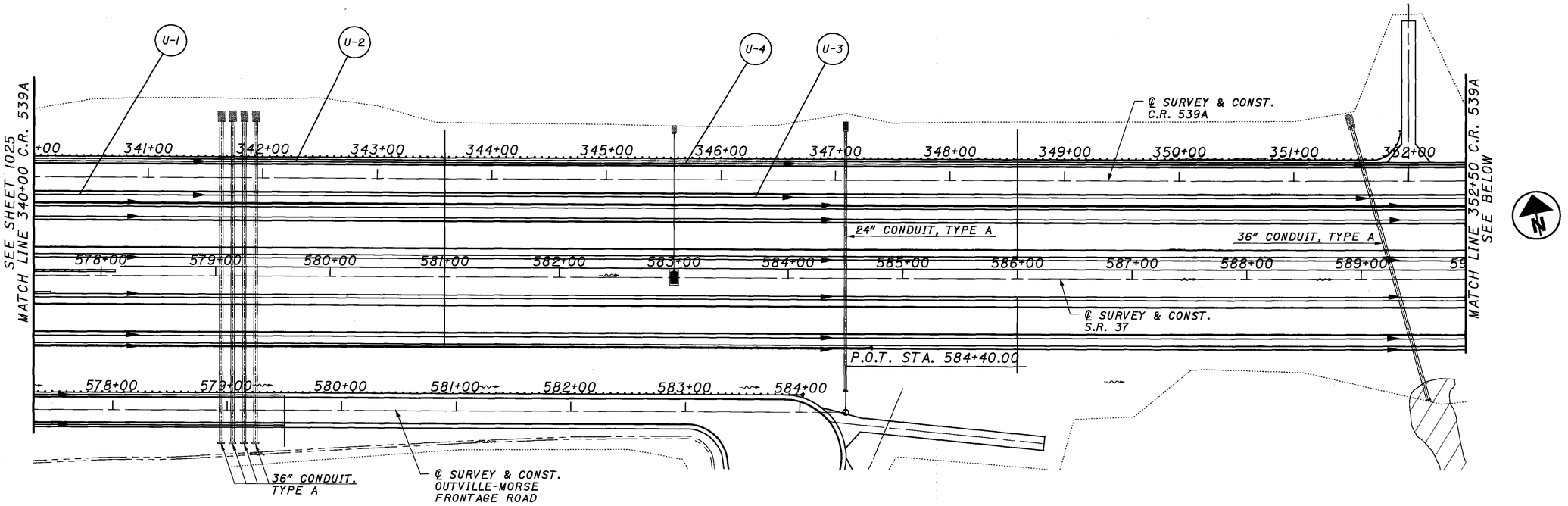
CALCULATED CLB
CHECKED CSR

UNDERDRAIN PLAN - C.R. 539A EXTENSION STA. 315+00 TO STA. 340+00

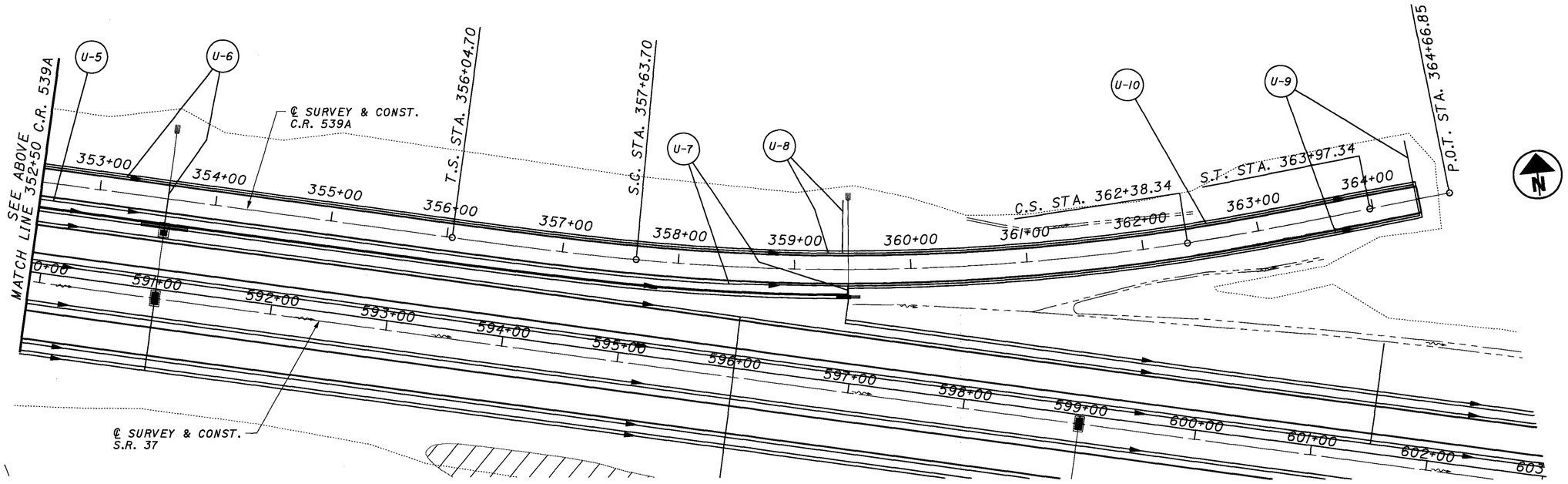
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LIC-37-10.25

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED CLB
DRAWN CSR

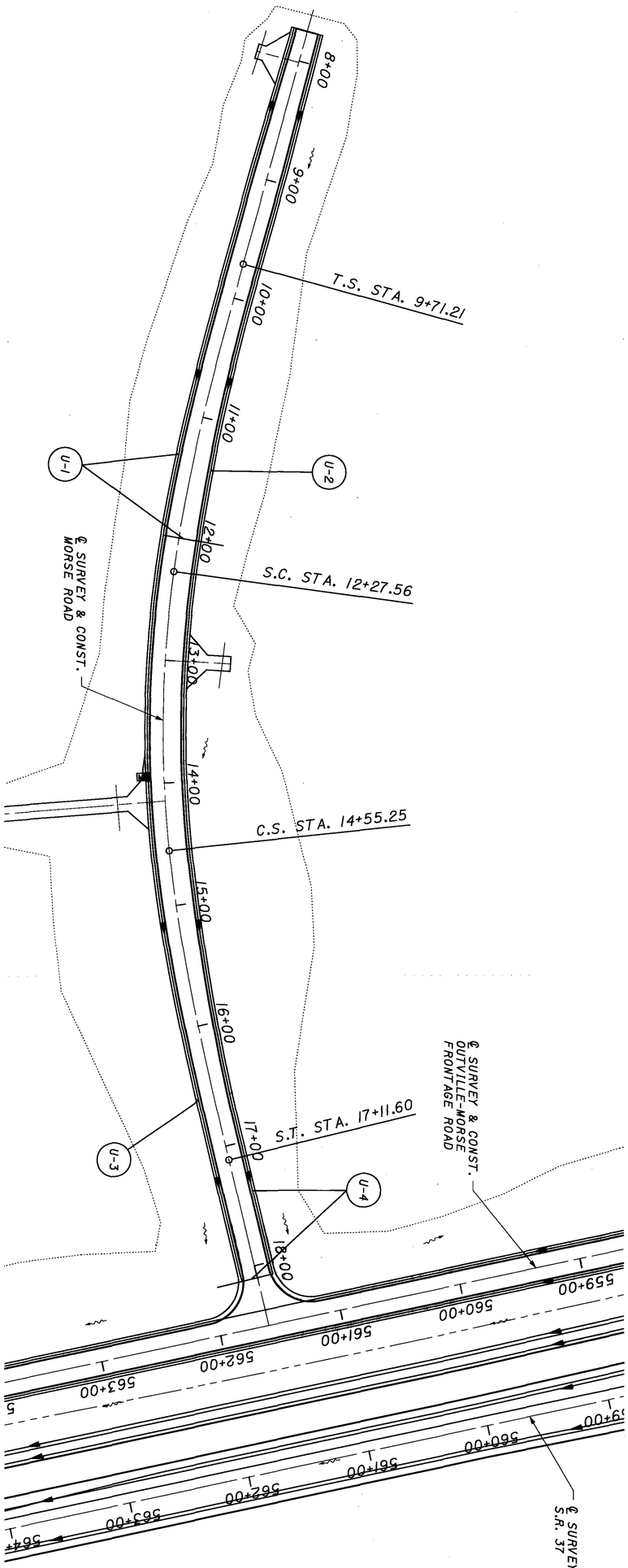
UNDERDRAIN PLAN - C.R. 539A EXTENSION
STA. 340+00 TO STA. 364+67

LIC-161-6.65
LIC-37-10.25

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1349

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NOTE:
FOR UNDERDRAIN SUBSUMMARY SEE SHEETS 138-147

10226 / 349	LIC-161-6.65 LIC-37-10.25	UNDERDRAIN PLAN - MORSE ROAD STA. 7+54 TO STA. 19+95	CALCULATED CLB CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

ESTIMATED RETAINING WALL QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
503	11101	LUMP	LUMP	COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN
503	21100	364	CU. YD.	UNCLASSIFIED EXCAVATION
509	25000	20358	POUND	REINFORCING STEEL
511	46000	62	CU. YD.	CLASS C CONCRETE, RETAINING WALL
511	46500	184	CU. YD.	CLASS C CONCRETE, FOOTING
512	10100	197	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	33000	4	SQ. YD.	TYPE 2 WATERPROOFING
516	13200	10	SQ. FT.	½" PREFORMED EXPANSION JOINT FILLER
518	21200	86	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC
601	32204	163	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER

CALCULATED BY: DZ DATE: 6/28/06
CHECKED BY: CB DATE: 6/29/06

TOTALS CARRIED TO GENERAL SUMMARY FOR PAYMENT.

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE OHIO DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL.

DESIGN DATA (LOAD FACTOR DESIGN)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.

REINFORCING STEEL - ASTM A615 OR A996
GRADE 60, MINIMUM YIELD STRENGTH 60,000 P.S.I.

FOUNDATION BEARING PRESSURE

FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM BEARING PRESSURE OF 1.3 TONS PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 1.5 TONS PER SQUARE FOOT.

POROUS BACKFILL WITH FILTER FABRIC

POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE RETAINING WALLS. PLACE TWO CUBIC FEET OF BAGGED NO. 3 AGGREGATE AT EACH WEEPHOLE. THE DEPARTMENT WILL INCLUDE BAGGED AGGREGATE WITH POROUS BACKFILL FOR PAYMENT.

COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES INTO SIMPSON RUN ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FOR THE PROPOSED RETAINING WALL. THIS PERTAINS TO THE FOUNDATION EXCAVATION, PLACEMENT OF ROCK CHANNEL PROTECTION, AND ANY TEMPORARY SHEETING.

DESIGN AGENCY
AMERICAN CONSULTING, INC.
2550 CORPORATE EXCHANGE DRIVE SUITE 300
COLUMBUS, OHIO 43231
Architecture Engineering Construction Management (614) 901-2235 FAX (614) 901-2236

DESIGNED	DRAWN	REVIEWED	DATE
DZ	DSH	CLB	6/30/06
CHECKED	REVISED	STRUCTURE FILE NUMBER	
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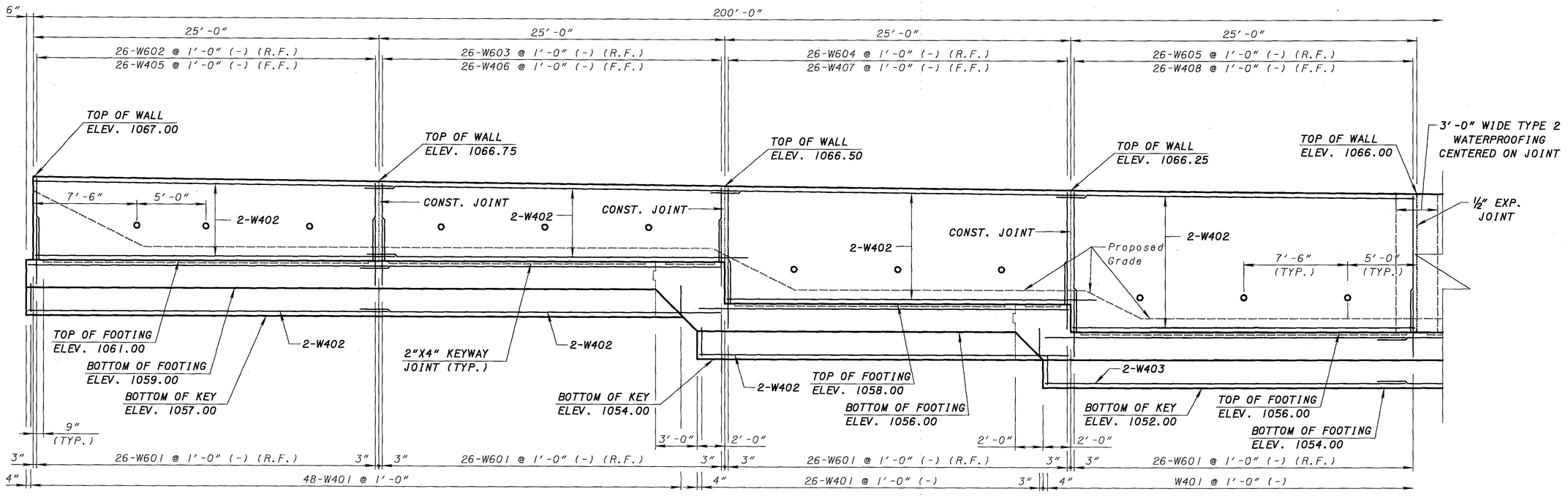
RETAINING WALL DETAILS
WATKINS-YORK FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

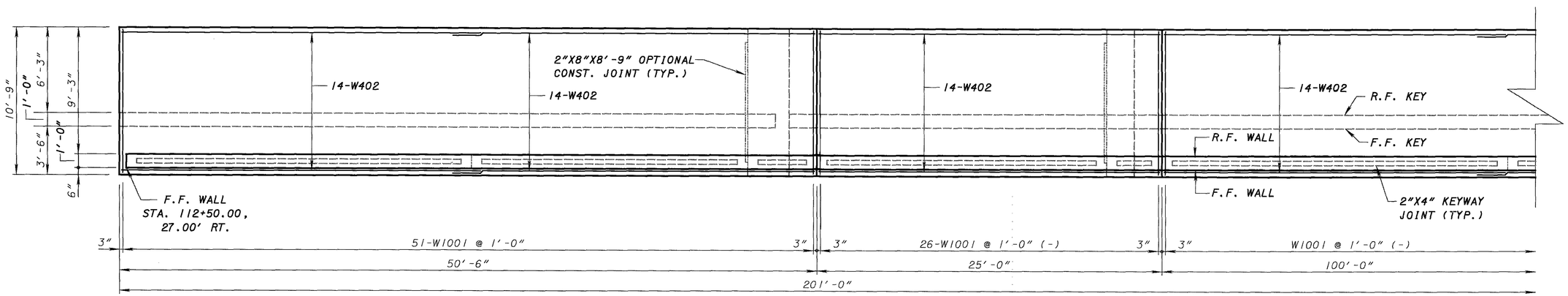
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PARTIAL ELEVATION



PARTIAL PLAN

DESIGN AGENCY
AMERON CONSULTING, INC.
2550 CORPORATE EXCHANGE DRIVE
SUITE 300
COLUMBUS, OHIO 43231
(614) 901-2550 FAX (614) 901-2556
Architects Engineers Consultants
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DESIGNED	DRAWN	REVIEWED	DATE
DZ	DSH	CLB	6/30/06
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPD			

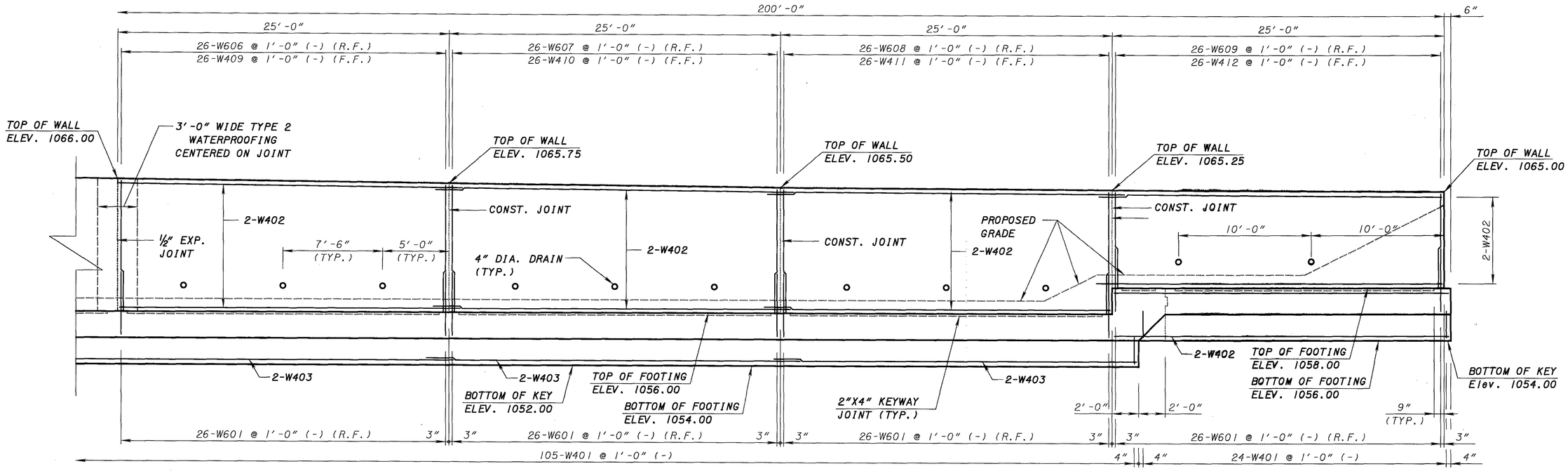
RETAINING WALL DETAILS
WATKINS-YORK FRONTAGE ROAD

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LIC-37-10.25

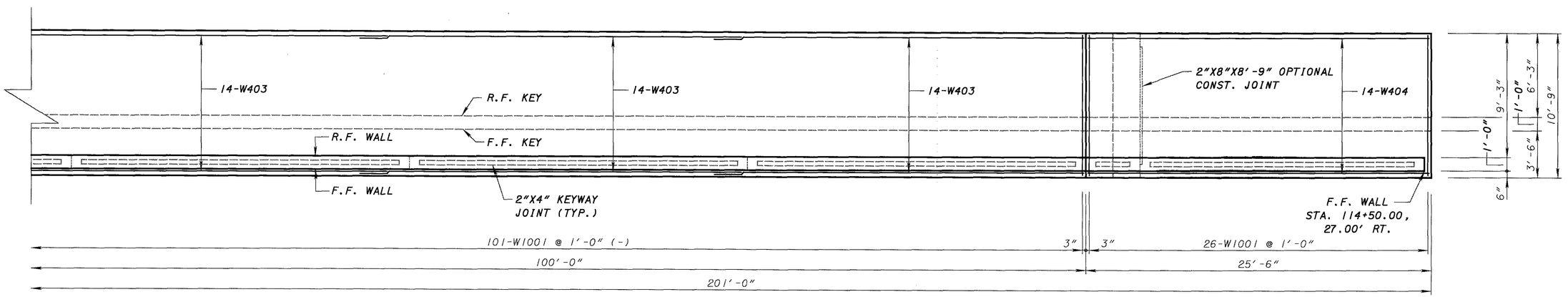
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PARTIAL ELEVATION



PARTIAL PLAN

DESIGN AGENCY
AMERICAN CONSULTING, INC.
2550 CORPORATE EXCHANGE DRIVE SUITE 300
COLUMBUS, OHIO 43231
(614) 901-2235 FAX (614) 901-2236

DESIGNED	DRAWN	REVIEWED	DATE
DZ	DSH	CLB	6/30/06
CHECKED	REVISED		STRUCTURE FILE NUMBER
JPD			

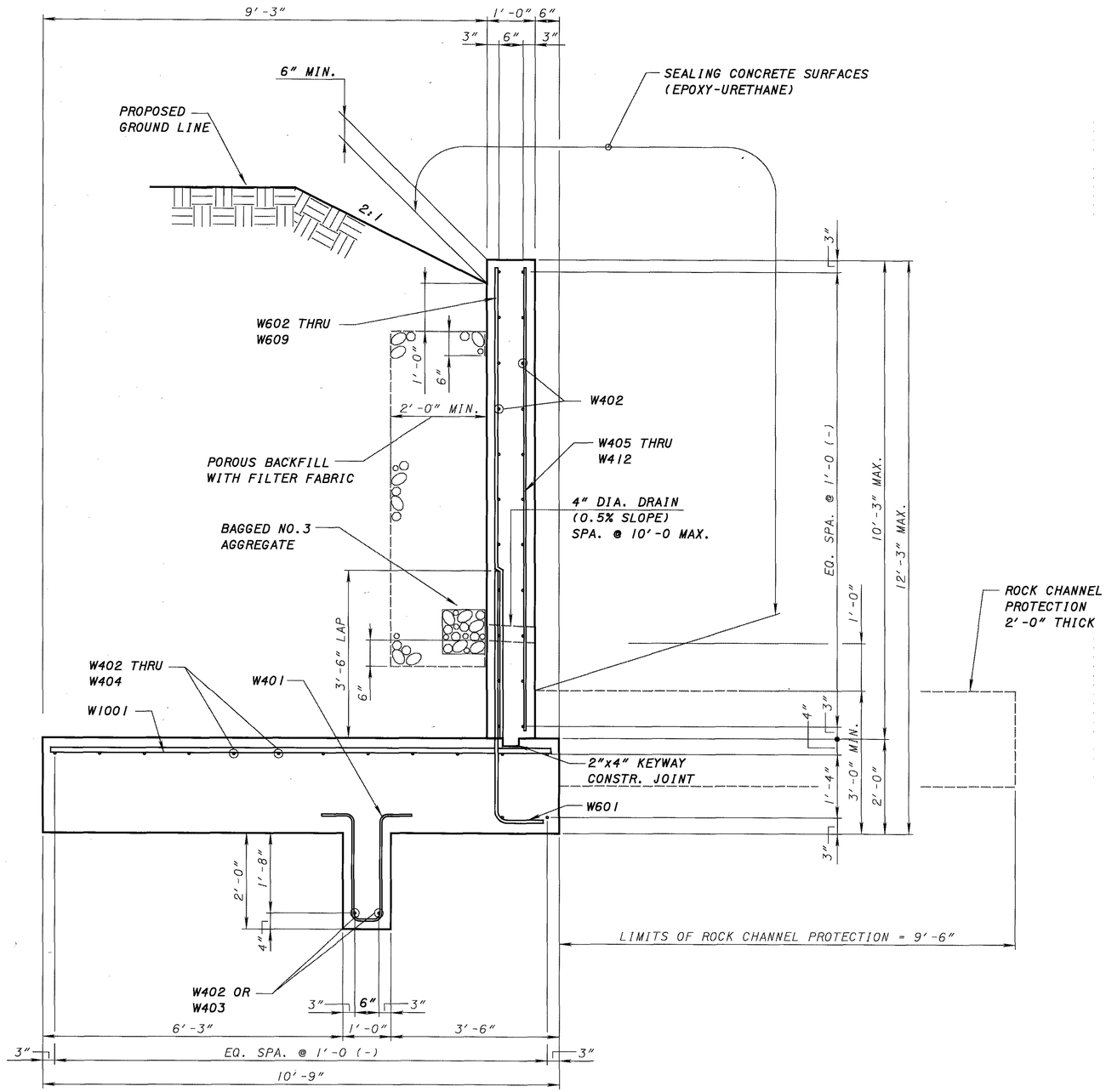
RETAINING WALL DETAILS
WATKINS-YORK FRONTAGE ROAD

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LIC-37-10.25

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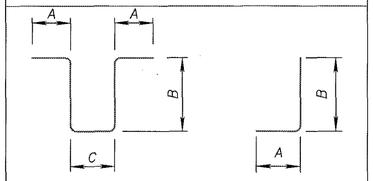
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SECTION A-A

BENDING DIAGRAMS



RETAINING WALL

MARK	TOTAL	LENGTH	WEIGHT	TYPE	A	B	C	INCR.
W401	203	5'-6"	746	1	8"	2'-0"	6"	
W402	203	26'-6"	3594	STR.				
W403	63	27'-6"	1157	STR.				
W404	14	25'-0"	234	STR.				
	1	5'-9"						
W405	S.O.	TO	98	STR.				1/8" (-)
	26	5'-6"						
	1	5'-6"						
W406	S.O.	TO	93	STR.				1/8" (-)
	26	5'-3"						
	1	8'-3"						
W407	S.O.	TO	141	STR.				1/8" (-)
	26	8'-0"						
	1	10'-0"						
W408	S.O.	TO	172	STR.				1/8" (-)
	26	9'-9"						
	1	9'-9"						
W409	S.O.	TO	167	STR.				1/8" (-)
	26	9'-6"						
	1	9'-6"						
W410	S.O.	TO	163	STR.				1/8" (-)
	26	9'-3"						
W411	26	9'-3"	161	STR.				
W412	26	7'-5"	129	STR.				
W601	208	6'-4"	1979	2	1'-0"	5'-6"		
	1	5'-9"						
W602	S.O.	TO	220	STR.				1/8" (-)
	26	5'-6"						
	1	5'-6"						
W603	S.O.	TO	210	STR.				1/8" (-)
	26	5'-3"						
	1	8'-3"						
W604	S.O.	TO	317	STR.				1/8" (-)
	26	8'-0"						
	1	10'-0"						
W605	S.O.	TO	386	STR.				1/8" (-)
	26	9'-9"						
	1	9'-9"						
W606	S.O.	TO	376	STR.				1/8" (-)
	26	9'-6"						
	1	9'-6"						
W607	S.O.	TO	366	STR.				1/8" (-)
	26	9'-3"						
W608	26	9'-3"	361	STR.				
W609	26	7'-5"	290	STR.				
W1001	204	10'-3"	8998	STR.				
		TOTAL =	20,358					

NOTES

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR THESE BARS SHALL BE UNDER ITEM 509 "EPOXY COATED REINFORCING STEEL, GRADE 60".

"STR." IN THE TYPE COLUMN INDICATED STRAIGHT BARS.

REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

DESIGN AGENCY
AMERICAN CONSULTING, INC.
2550 CORPORATE EXCHANGE DRIVE
SUITE 300
COLUMBUS, OHIO 43231
(614) 901-2235 FAX (614) 901-2236

DESIGNED	DRAWN	REVIEWED	DATE
DZ	AF	CLB	6/30/06
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPD			

RETAINING WALL DETAILS
WATKINS-YORK FRONTAGE ROAD

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LIC-37-10.25

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SHEET NUMBER												ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1036		1042		1043		1044											
																TRAFFIC CONTROL	
				2660								621	00100	2660	EACH	RAISED PAVEMENT MARKER	
4												625	32000	4	EACH	GROUND ROD	
818												630	02100	818	FT.	GROUND MOUNTED SUPPORT, NO. 2 POST	
1150												630	03100	1150	FT.	GROUND MOUNTED SUPPORT, NO. 3 POST	
81												630	04100	81	FT.	GROUND MOUNTED SUPPORT, NO. 4 POST	
168												630	06400	168	FT.	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	
115												630	07000	115	FT.	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	
202												630	07500	202	FT.	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	
47												630	07600	47	FT.	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	
124												630	08000	124	FT.	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	
16												630	09000	16	EACH	BREAKAWAY BEAM CONNECTION	
2												630	45500	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 8	
3												630	79610	3	EACH	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED	
996.0												630	80100	996.0	SF	SIGN, FLAT SHEET	
1178.5												630	80200	1178.5	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
492.5												630	80224	492.5	SF	SIGN, OVERHEAD EXTRUSHEET	
8												630	82000	8	EACH	SIGN BACKING ASSEMBLY	
28												630	84500	28	EACH	GROUND MOUNTED BEAM SUPPORT FOUNDATION	
4												630	84510	4	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
						63						630	84901	63	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, AS PER PLAN	1060
						5						630	85401	5	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL, AS PER PLAN	1060
		43.80										644	00100	43.80	MILE	EDGE LINE	
		13.38										644	00200	13.38	MILE	LANE LINE	
		7.82										644	00300	7.82	MILE	CENTER LINE	
		3445.5										644	00400	3446	FT	CHANNELIZING LINE	
		237.0										644	00500	237	FT	STOP LINE	
		1814.0										644	00700	1814	FT	TRANSVERSE/DIAGONAL LINE	
		114										644	00900	114	SF	ISLAND MARKING	
		6										644	01300	6	EACH	LANE ARROW	
												644	01410		EACH	WORD ON PAVEMENT, 96"	
		0.68										646	10000	0.68	MILE	EDGE LINE	
		0.18										646	10100	0.18	MILE	LANE LINE	
		0.19										646	10200	0.19	MILE	CENTER LINE	

CALCULATED ZTW
CHECKED CSR

TRAFFIC CONTROL GENERAL SUMMARY

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LOCATION	REF.	SIDE	STATION	SHT. NO.	CODE	SIZE (FEET)	ELEVATION (SHEET NO.)	625 GROUND ROD EACH	630 GROUND MOUNTED SUPPORT, NO. 2 POST FT.	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT.	630 GROUND MOUNTED SUPPORT, NO. 4 POST FT.	630 GROUND MOUNTED SUPPORT, S4X7.7 BEAM FT.	630 GROUND MOUNTED SUPPORT, W8X18 BEAM FT.	630 GROUND MOUNTED SUPPORT, W10X22 BEAM FT.	630 GROUND MOUNTED SUPPORT, W10X12 BEAM FT.	630 GROUND MOUNTED SUPPORT, W12X30 BEAM FT.	630 BREAKAWAY BEAM CONNECTION EACH	630 OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 8 EACH	630 SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED EACH	630 SIGN, FLAT SHEET S.F.	630 SIGN, GROUND MOUNTED EXTRUSHEET S.F.	630 SIGN, OVERHEAD EXTRUSHEET S.F.	630 SIGN BACKING ASSEMBLY EACH	630 GROUND MOUNTED BEAM SUPPORT FOUNDATION EACH	630 RIGID OVERHEAD SIGN SUPPORT FOUNDATION EACH
WATKINS-YORK	S1	RT.	114+00.00	1046	R2-1-24	2 x 2.5			12.5											5.0					
S.R. 161	S2	LT.	369+80.00	1046	D10-H8-12	1 x 1			12.9											1.0					
S.R. 161	S3	RT.	369+80.00	1046	D10-H8-12	1 x 1			12.8											1.0					
S.R. 161	S4	RT.	377+60.00	1046	E1-1	12 x 10	1067							49.1			2				120.0			2	
SERVICE ROAD 10	S1	RT.	149+00.00	1047	R2-1-24	2 x 2.5			12.9											5.0					
S.R. 161	S2	LT.	401+50.00	1047	E7	14 x 7	1067						43.3								98.0				
S.R. 161	S3	RT.	404+00.00	1047	E1-1	12.5 x 10	1067							49.3							125.0				
S.R. 161	S1A	LT.	409+54.00	1048	R2-1-36	3 x 4			30.2											12.0					
S.R. 161	S1B	LT.	409+54.00	1048	R2-H2A-36	3 x 4				32.7										12.0					
S.R. 161	S2A	LT.	419+54.00	1048	M3-4-36	3 x 1.5				31.8										4.5					
S.R. 161	S2B	LT.	419+54.00	1048	M1-5-36	3 x 3														9.0					
S.R. 161	S3	LT.	422+60.00	1048	D10-H8-12	1 x 1			11.7											1.0					
S.R. 161	S4	RT.	422+60.00	1048	D10-H8-12	1 x 1			11.7											1.0					
S.R. 161	S1A	RT.	437+30.73	1049	E1-H1	6 x 7	1068	2										1				42.0			2
S.R. 161	S1B	RT.	437+30.73	1049	E1-H3	11.5 x 7.5	1068															86.3			
S.R. 161	S1C	RT.	437+30.73	1049	E1-H3	15 x 8.5	1068															127.5			
S.R. 161	S2	RT.	440+00.00	1049	E5-H1-72	6 x 5	1067					32.3					2				30.0			2	
S.R. 161	S3	LT.	440+75.00	1049	W4-1R-48	4 x 4				27.3										16.0					
S.R. 161	S1	RT.	461+00.00	1050	W4-1R-48	4 x 4				26.6										16.0					
S.R. 161	S2	LT.	461+50.00	1050	E5-H1-72	6 x 5	1067					33.2					2				30.0			2	
S.R. 161	S3A	LT.	464+22.26	1050	E1-H3	11.5 x 9.5	1068	2										1				109.3			2
S.R. 161	S3B	LT.	464+22.26	1050	E1-H3	15 x 8.5	1068															127.5			
S.R. 161	S4	LT.	475+40.00	1050	D10-H8-12	1 x 1			11.7											1.0					
S.R. 161	S5	RT.	475+40.00	1050	D10-H8-12	1 x 1			12.1											1.0					
S.R. 37	S6	RT.	477+00.00	1050	W8-H22-48	4 x 4				30.8										16.0					
S.R. 37	S1A	RT.	485+00.00	1051	M3-3-36	3 x 1.5					15.3									4.5					
S.R. 37	S1B	RT.	485+00.00	1051	M1-5-2-36	3 x 3														9.0					
S.R. 37	S2A	RT.	490+00.00	1051	R2-1-36	3 x 4				29.1										12.0					
S.R. 37	S2B	RT.	490+00.00	1051	R2-H2A-36	3 x 4				32.5										12.0					
S.R. 37	S3	LT.	491+00.00	1051	W8-H22-48	4 x 4				30.4										16.0					
S.R. 37	S4	LT.	498+00.00	1051	E1-1	12 x 10	1067							50.6							120.0			2	
OUTVILLE-MORSE	S5	LT.	497+75.00	1051	R1-1-30	2.5 x 2.5			13.2											6.3					
OUTVILLE-MORSE	S6	RT.	500+50.00	1051	R2-1-24	2 x 2.5			12.2											5.0					
OUTVILLE-MORSE	S7	LT.	503+00.00	1051	W3-1A-30	2.5 x 2.5				14.4										6.3					
OUTVILLE-MORSE	S1A	LT.	506+00.00	1052	W2-4-30	2.5 x 2.5				14.9										6.3					
OUTVILLE-MORSE	S1B	LT.	506+00.00	1052	W16-8-30	0.67 x 2.5														1.7					
S.R. 37	S2	LT.	522+91.00	1052	E1-1	12 x 10	1067							52.3							120.0			2	
S.R. 37	S3	LT.	528+20.00	1052	D10-H8-12	1 x 1			11.7											1.0					
S.R. 37	S4	RT.	528+20.00	1052	D10-H8-12	1 x 1			11.8											1.0					
C.R. 539A	S1	RT.	298+00.00	1053	R2-1-24	2 x 2.5			12.5											5.0					
S.R. 37	S2A	LT.	546+00.00	1053	R2-1-36	3 x 4				27.9										12.0					
S.R. 37	S2B	LT.	546+00.00	1053	R2-H2A-36	3 x 4				27.4										12.0					
OUTVILLE-MORSE	S1	LT.	560+00.00	1054	R2-1-24	2 x 2.5			12.6											5.0					
OUTVILLE-MORSE	S2	RT.	562+00.00	1054	W14-2-30	2 x 2			13.6											4.0					
OUTVILLE-MORSE	S3	RT.	564+00.00	1054	R2-1-24	2 x 2.5			13.2											5.0					
S.R. 37	S4A	MED.	564+65.00	1054	R3-4-36	3 x 3				27.6										9.0					
S.R. 37	S4B	MED.	564+65.00	1054	R3-H4A-24	2 x 2.5														5.0					
S.R. 37	S5A	MED.	565+35.00	1054	R3-H4A-24	2 x 2.5				27.6										5.0					
S.R. 37	S5B	MED.	565+35.00	1054	R3-4-36	3 x 3														9.0					
C.R. 539A	S6	RT.	329+50.00	1054	W8-H22-30	2.5 x 2.5			6.1										1	6.3					
S.R. 161	S7	RT.	567+00.00	1054	W8-H22-36	3 x 3			29											9.0					
OUTVILLE-MORSE	S8	RT.	567+00.00	1054	W8-H22-30	2.5 x 2.5				14.4										6.3					
S.R. 37	S1	LT.	581+00.00	1055	D10-H8-12	1 x 1			3.5										1	1.0					
S.R. 37	S2	RT.	581+00.00	1055	D10-H8-12	1 x 1			11.9											1.0					
OUTVILLE-MORSE	S3	LT.	582+00.00	1055	W8-H22-30	2.5 x 2.5			13											6.3					
C.R. 539A	S4	LT.	345+50.00	1055	W8-H22-30	2.5 x 2.5				15.4										6.3					
S.R. 37	S5	LT.	583+00.00	1055	W8-H22-36	3 x 3			6.7										1	9.0					
OUTVILLE-MORSE	S6	LT.	583+00.00	1055	R2-1-24	2 x 2.5			12.3											5.0					
S.R. 37	S7A	RT.	583+50.00	1055	R2-1-36	3 x 4			30.2											12.0					
S.R. 37	S7B	RT.	583+50.00	1055	R2-H2A-36	3 x 4				32.9										12.0					
C.R. 539A	S8	LT.	364+00.00	1055	R2-1-24	2 x 2.5			12.7											5.0					
S.R. 37	S1	LT.	627+50.00	1056	E7	14 x 7	1067						47.6								98.0			2	
S.R. 37	S2	RT.	629+00.00	1056	D9-H18	11.5 x 7	1067								46.9						80.5			2	
S.R. 37	S1	LT.	633+80.00	1057	D10-H8-12	1 x 1			11.7											1.0					
S.R. 37	S2	RT.	633+80.00	1057	D10-H8-12	1 x 1			11.7											1.0					
TOTALS THIS SHEET								4	378.1	443.7	15.3	65.5	90.9	201.3	46.9	0	6	2	3	334.4	821.5	492.5	0	14	4
TOTALS CARRIED TO SHEET 1036								4	378.1	443.7	15.3	65.5	90.9	201.3	46.9	0	6	2	3	334.4	821.5	492.5	0	14	4

CALCULATED ZTW
CHECKED CSR

SIGNING SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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LOCATION	REF.	SIDE	STATION	SHT. NO.	CODE	SIZE (FEET)	ELEVATION (SHEET NO.)	625 GROUND ROD EACH	630 GROUND MOUNTED SUPPORT. NO. 2 POST FT.	630 GROUND MOUNTED SUPPORT. NO. 3 POST FT.	630 GROUND MOUNTED SUPPORT. NO. 4 POST FT.	630 GROUND MOUNTED SUPPORT. S4X7.7 BEAM FT.	630 GROUND MOUNTED SUPPORT. W8X18 BEAM FT.	630 GROUND MOUNTED SUPPORT. W10X22 BEAM FT.	630 GROUND MOUNTED SUPPORT. W10X12 BEAM FT.	630 GROUND MOUNTED SUPPORT. W12X30 BEAM FT.	630 BREAKAWAY BEAM CONNECTION EACH	630 OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 8 EACH	630 SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED EACH	630 SIGN. FLAT SHEET S.F.	630 SIGN. GROUND MOUNTED EXTRUSHEET S.F.	630 SIGN. OVERHEAD EXTRUSHEET S.F.	630 SIGN BACKING ASSEMBLY EACH	630 GROUND MOUNTED BEAM SUPPORT FOUNDATION EACH	630 RIGID OVERHEAD SIGN SUPPORT FOUNDATION EACH
S.R. 37	S3	RT.	636+50.00	1057	E1-1	12 x 12	1083									61.7					144.0			2	
S.R. 37	S4A	LT.	639+00.00	1057	R2-1-36	3 x 4			26.6											12.0					
S.R. 37	S4B	LT.	639+00.00	1057	R2-H2A-36	3 x 4				25.1										12.0					
S.R. 37	S5	RT.	648+50.00	1057	E1-1	12 x 12	1083									61.7					144.0			2	
S.R. 37	S6A	LT.	649+00.00	1057	M3-1-36	1.5 x 3				29.1										4.5					
S.R. 37	S6B	LT.	649+00.00	1057	M1-5-2-36	3 x 3														9.0					
REL. WORTHINGTON RD N	S1	RT.	206+00.00	1059	M2-H7-66	5.5 x 2				25.5										11.0					
REL. WORTHINGTON RD N	S2	RT.	207+30.00	1059	W3-1A-36	3 x 3				14.9										9.0					
REL. WORTHINGTON RD N	S3	LT.	210+00.00	1059	R2-1-24	2 x 2.5			12.6											5.0					
REL. WORTHINGTON RD N	S4	RT.	210+00.00	1059	D1-H4A-96	8 x 1.5	1083					26.4					2.00				12.0			2	
REL. WORTHINGTON RD N	S5	LT.	212+00.00	1059	W14-2-30	2.5 x 2.5				14.0										6.3					
REL. WORTHINGTON RD N	S6	LT.	212+45.00	1059	M2-H7-66	5.5 x 2			26.3											11.0					
REL. WORTHINGTON RD N	S7	RT.	212+45.00	1059	R1-1-30	2.5 x 2.5			12.7											6.3					
REL. WORTHINGTON RD N	S8	LT.	213+20.00	1059	R1-1-30	2.5 x 2.5			12.7											6.3					
REL. WORTHINGTON RD N	S9	RT.	213+15.00	1059	M2-H7-66	5.5 x 2			23.5											11.0					
REL. WORTHINGTON RD N	S10	RT.	214+00.00	1059	R2-1-24	2 x 2.5			12.8											5.0					
REL. WORTHINGTON RD N	S11	LT.	215+75.00	1059	D1-H4A-96	8 x 1.5	1084					26.4					2.00				12.0			2	
REL. WORTHINGTON RD N	S12	LT.	218+30.00	1059	W3-1A-36	3 x 3				14.5										9.0					
REL. WORTHINGTON RD N	S13	LT.	221+00.00	1059	M2-H7-66	5.5 x 2			25.2											11.0					
REL. WORTHINGTON RD N	S14	LT.	232+00.00	1059	R2-1-24	2 x 2.5			12.8											5.0					
S.R. 37	S1A	LT.	394+50.00	1060	M3-1-24	2 x 1			12.4											2.0					
S.R. 37	S1B	LT.	394+50.00	1060	M1-5-2-24	2 x 2														4.0					
S.R. 37	S2A	RT.	395+25.00	1060	W14-2PR-36	0.67 x 3			10.0											2.0					
S.R. 37	S2B	RT.	395+25.00	1060	W14-2PL-36	0.67 x 3														2.0					
S.R. 37	S3	RT.	396+50.00	1060	M2-H3-48	4 x 5				30.4										20.0					
S.R. 37	S4	LT.	398+00.00	1060	W6-3-30	2.5 x 2.5			13.7											6.3					
S.R. 37	S5	RT.	398+00.00	1060	R2-1-24	2 x 2.5			12.2											5.0					
S.R. 37	S6A	LT.	400+00.00	1060	W2-1-30	2.5 x 2.5				13.0										6.3					
S.R. 37	S6B	LT.	400+00.00	1060	W16-8-30	0.67 x 2.5														1.7					
S.R. 37	S7A	LT.	401+00.00	1060	M3-1-24	2 x 1			13.1											2.0					
S.R. 37	S7B	LT.	401+00.00	1060	M1-5-2-24	2 x 2														4.0					
S.R. 37	S8	RT.	401+00.00	1060	M2-H3-48	4 x 5				30.4										20.0					
S.R. 37	S9	LT.	402+00.00	1060	M2-H3-48	4 x 5				29.2										20.0					
S.R. 37	S10	RT.	402+60.00	1060	M2-H3-48	4 x 5				28.8										20.0					
S.R. 37	S11	LT.	402+75.00	1060	R3-H8BA-3	2.5 x 2.5			12.0											6.3					
S.R. 37	S12	RT.	404+10.00	1060	M2-H3-48	4 x 5				32.5										20.0					
S.R. 37	S13	LT.	405+70.00	1060	R3-H8BA-3	2.5 x 2.5			12.7											6.3					
S.R. 37	S14	RT.	408+40.00	1060	R3-H8BA-3	2.5 x 2.5			12.7											6.3					
S.R. 37	S15	LT.	408+50.00	1060	M2-H3-48	4 x 5					32.5									20.0					
S.R. 37	S16	RT.	410+25.00	1060	R3-H8BA-3	2.5 x 2.5			12.7											6.3					
S.R. 37	S17	LT.	410+70.00	1060	M2-H7-66	5.5 x 2			25.6											11.0					
S.R. 37	S18	RT.	411+40.00	1060	M2-H3-48	4 x 5					32.5									20.0					
S.R. 37	S19A	RT.	414+00.00	1060	W2-1-30	2.5 x 2.5				13										6.25					
S.R. 37	S19B	RT.	414+00.00	1060	W16-8-30	0.67 x 2.5														1.68					
S.R. 37	S20	LT.	416+00.00	1060	M2-H7-66	5.5 x 2			24.9											11.00					
S.R. 37	S21	RT.	416+00.00	1060	W6-3-30	2.5 x 2.5			13.3											6.25					
S.R. 37	S22A	LT.	418+00.00	1060	W14-2PL-36	0.67 x 3			20											2.01					
S.R. 37	S22B	LT.	418+00.00	1060	W14-2PR-36	0.67 x 3														2.01					
YORK RD	S23	LT.	419+00.00	1060	R2-1-24	2 x 2.5			11.9											5.00					
YORK RD	S24	RT.	419+00.00	1060	R2-1-24	2 x 2.5			11.9											5.00					
WATKINS-YORK	S1A	RT.	205+00.00	1061	M1-5-2-24	2 x 2				26.3										4.00			2		
WATKINS-YORK	S1B	RT.	205+00.00	1061	M6-1-21	1.75 x 1.25														2.19					
WATKINS-YORK	S1C	RT.	205+00.00	1061	D1-H4A-96	8 x 1.5															12.00				
WATKINS-YORK	S2	RT.	207+00.00	1061	W3-1A-36	3 x 3				14.1										9.00					
WATKINS-YORK	S3A	RT.	209+00.00	1061	W2-1-30	2.5 x 2.5				13.1										6.25					
WATKINS-YORK	S3B	RT.	209+00.00	1061	W16-8-30	0.67 x 2.5														1.68					
WATKINS-YORK	S4	LT.	210+50.00	1061	R2-1-24	2 x 2.5			13.7											5.00					
WATKINS-YORK	S5A	LT.	211+80.00	1061	M1-5-2-24	2 x 2			12.3											4.00					
WATKINS-YORK	S5B	LT.	211+80.00	1061	M6-1-21	1.75 x 1.25														2.19					
WATKINS-YORK	S6	RT.	211+95.00	1061	R1-1-30	2.5 x 2.5			12.1											6.25					
TOTALS THIS SHEET								0	302.3	287.4	65.0	52.8	0.0	0.0	0.0	123.4	4	0	0	344.4	312.0	0.0	0	8	0
TOTALS CARRIED TO SHEET 1036								0	302.3	287.4	65.0	52.8	0.0	0.0	0.0	123.4	4	0	0	344.4	312.0	0.0	0	8	0

CALCULATED ZTW
CHECKED CSR

SIGNING SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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LOCATION	REF.	SIDE	STATION	SHT. NO.	CODE	SIZE (FEET)	ELEVATION (SHEET NO.)	625 GROUND ROD EACH	630 GROUND MOUNTED SUPPORT, NO. 2 POST FT.	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT.	630 GROUND MOUNTED SUPPORT, NO. 4 POST FT.	630 GROUND MOUNTED SUPPORT, S4X7.7 BEAM FT.	630 GROUND MOUNTED SUPPORT, W8X18 BEAM FT.	630 GROUND MOUNTED SUPPORT, W10X22 BEAM FT.	630 GROUND MOUNTED SUPPORT, W10X12 BEAM FT.	630 GROUND MOUNTED SUPPORT, W12X30 BEAM FT.	630 BREAKAWAY BEAM CONNECTION EACH	630 OVERHEAD SIGN SUPPORT, TYPE TC-7.65. DESIGN 8 EACH	630 SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED EACH	630 SIGN, FLAT SHEET S.F.	630 SIGN, GROUND MOUNTED EXTRUSHEET S.F.	630 SIGN, OVERHEAD EXTRUSHEET S.F.	630 SIGN BACKING ASSEMBLY EACH	630 GROUND MOUNTED BEAM SUPPORT FOUNDATION EACH	630 RIGID OVERHEAD SIGN SUPPORT FOUNDATION EACH
SERVICE ROAD II	S1	LT.	212+90.00	1062	R1-1-24	2 x 2				26.0										4.0					
SERVICE ROAD II	S2A	LT.	212+90.00	1062	M1-5-2-24	2 x 2														4.0					
SERVICE ROAD II	S2B	LT.	212+90.00	1062	M6-1-21	1.75 x 1.25														2.2					
SERVICE ROAD II	S3	RT.	213+00.00	1062	W14-2-30	2.5 x 2.5				14.1										6.3					
SERVICE ROAD II	S4A	RT.	214+50.00	1062	W1-5-30	2.5 x 2.5				15.2										6.3					
SERVICE ROAD II	S4B	RT.	214+50.00	1062	W13-1-24	2 x 2														4.0					
SERVICE ROAD II	S5A	LT.	215+50.00	1062	W2-1-30	2.5 x 2.5				31.8										6.3			1		
SERVICE ROAD II	S5B	LT.	215+50.00	1062	D3-H2A-18	6 x 1.5															9.0				
SERVICE ROAD II	S6	LT.	217+00.00	1062	W3-1A-30	2.5 x 2.5				14.2										6.3					
SERVICE ROAD II	S7A	LT.	219+00.00	1062	M1-5-2-24	2 x 2	1068			4.9			23.3				2			4.0			2	2	
SERVICE ROAD II	S7B	LT.	219+00.00	1062	M5-1R-21	1.75 x 1.25														2.2					
SERVICE ROAD II	S7C	LT.	219+00.00	1062	D1-H4A-96	8 x 1.5															12.0				
SERVICE ROAD II	S8	RT.	222+00.00	1062	R2-1-24	2 x 2.5			12.2											5.0					
SERVICE ROAD II	S9A	LT.	228+00.00	1062	W1-5-30	2.5 x 2.5				14.9										6.3					
SERVICE ROAD II	S9B	LT.	228+00.00	1062	W13-1-24	2 x 2														4.0					
SERVICE ROAD II	S10	LT.	241+00.00	1062	R2-1-24	2 x 2.5			13.2											5.0					
RAMP I	S1	LT.	450+50.00	1063	R5-H10D-36	3 x 3			13.0											9.0					
RAMP J	S2A	LT.	450+60.00	1063	R5-1-36	3 x 3				27.0										9.0					
RAMP J	S2B	LT.	450+60.00	1063	R1-1-36	3 x 3														9.0					
RAMP J	S3A	RT.	450+60.00	1063	R5-1-36	3 x 3				27.2										9.0					
RAMP J	S3B	RT.	450+60.00	1063	R1-1-36	3 x 3														9.0					
RAMP J	S4	LT.	452+57.00	1063	R5-1A-36	3 x 2				12.3										6.0					
RAMP J	S5	RT.	452+57.00	1063	R5-1A-36	3 x 2				12.6										6.0					
RAMP J	S6	LT.	453+00.00	1063	R3-H8BD-36	3 x 2.5				13.3										7.5					
RAMP J	S7A	LT.	454+50.00	1063	M1-5-2-24	2 x 2	1068			4.9		23.5					2.00			4.0			2	2	
RAMP J	S7B	LT.	454+50.00	1063	M6-1-21	1.75 x 1.25														2.2					
RAMP J	S7C	LT.	454+50.00	1063	D1-H4A-96	8 x 1.5															12.0				
RAMP J	S8	LT.	455+77.00	1063	W3-1A-36	3 x 3				14.7										9.0					
RAMP K	S1	RT.	446+05.00	1064	W3-1A-36	3 x 3				14.2										9.0					
RAMP K	S2A	RT.	449+25.00	1064	M3-1-24	2 x 1				12.0		26.1					2.00			2.0			3	2	
RAMP K	S2B	RT.	449+25.00	1064	M1-5-2-24	2 x 2														4.0					
RAMP K	S2C	RT.	449+25.00	1064	M6-1-21	1.75 x 1.25														2.2					
RAMP K	S2D	RT.	449+25.00	1064	D1-H4A-96	8 x 1.5															12.0				
RAMP K	S2E	RT.	449+25.00	1064	R5-1A-36	3 x 3														9.0					
RAMP K	S3	RT.	449+25.00	1064	R5-1A-36	3 x 3			12.2											9.0					
RAMP K	S4A	RT.	451+05.00	1064	R5-1-36	3 x 3				27.4										9.0					
RAMP K	S4B	RT.	451+05.00	1064	R1-1-36	3 x 3														9.0					
RAMP K	S5A	LT.	451+20.00	1064	R5-1-36	3 x 3				25.8										9.0					
RAMP K	S5B	LT.	451+20.00	1064	R1-1-36	3 x 3														9.0					
RAMP L	S6A	LT.	450+90.00	1064	M3-1-24	2 x 1				12.5										2.0					
RAMP L	S6B	LT.	450+90.00	1064	M1-5-2-24	2 x 2														2.0					
RAMP L	S6C	LT.	450+90.00	1064	M6-1-21	1.25 x 1.75														2.2					
RAMP L	S7	RT.	452+00.00	1064	R5-H10D-36	3 x 3				12.6										9.0					
OUTVILLE ROAD	S1A	RT.	15+50.00	1065	W2-2R-30	2.5 x 2.5				12.6										6.3					
OUTVILLE ROAD	S1B	RT.	15+50.00	1065	W16-8-30	0.67 x 2.5														1.7					
OUTVILLE ROAD	S2A	LT.	19+00.00	1065	W1-2R-30	2.5 x 2.5				14.4										6.3					
OUTVILLE ROAD	S2B	LT.	19+00.00	1065	W13-1-24	2 x 2														4.0					
OUTVILLE ROAD	S3	RT.	19+00.00	1065	R2-1-24	2 x 2.5			12.5											5.0					
OUTVILLE ROAD	S4	RT.	21+00.00	1065	W3-1A-36	2.5 x 2.5			13.1											6.3					
OUTVILLE ROAD	S5A	LT.	25+00.00	1065	W2-2L-30	2.5 x 2.5				12.8										6.3					
OUTVILLE ROAD	S5B	LT.	25+00.00	1065	W16-8-30	0.67 x 2.5														1.7					
OUTVILLE ROAD	S6A	RT.	25+50.00	1065	W2-4-30	2.5 x 2.5				12.8										6.3					
OUTVILLE ROAD	S6B	RT.	25+50.00	1065	W16-8-30	0.67 x 2.5														1.7					
OUTVILLE ROAD	S7	LT.	26+00.00	1065	R2-1-24	2 x 2.5			12.0											5.0					
MORSE ROAD	S1	RT.	8+50.00	1066	R2-1-24	2 x 2.5			12.1											5.0					
MORSE ROAD	S2A	RT.	11+00.00	1066	W2-4-30	2.5 x 2.5				13.8										6.3					
MORSE ROAD	S2B	RT.	11+00.00	1066	W16-8-30	0.67 x 2.5														1.7					
MORSE ROAD	S3	RT.	12+91.00	1066	W3-1A-36	3 x 3				14.1										9.0					
MORSE ROAD	S4	LT.	17+00.00	1066	R2-1-24	2 x 2.5			12.7											5.0					
MORSE ROAD	S5	RT.	17+00.00	1066	W14-2PR-36	0.67 x 3			10.8											2.0					
MORSE ROAD	S6	RT.	18+25.00	1066	R1-1-30	2.5 x 2.5			13.2											6.3					
TOTALS THIS SHEET								0	137.0	418.1	0.0	49.6	23.3	0.0	0.0	0.0	6	0	0	317.2	45.0	0.0	8	6	0
TOTALS CARRIED FROM SHEET 1034								4	378.1	443.7	15.3	65.5	90.9	201.3	46.9	0.0	6	2	3	334.4	821.5	492.5	0	14	4
TOTALS CARRIED FROM SHEET 1035								0	302.3	287.4	65.0	52.8	0.0	0.0	0.0	123.4	4	0	0	344.4	312.0	0.0	0	8	0
TOTALS CARRIED TO TRAFFIC CONTROL								4	818	1150	81	168	115	202	47	124	16	2	3	996.0	1178.5	492.5	8	28	4
GENERAL SUMMARY																									

CALCULATED ZTW
CHECKED CSR

SIGNING SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	644 EDGE LINE (WHITE)	644 EDGE LINE (YELLOW)	644 LANE LINE	644 CENTER LINE (SOLID DOUBLE)	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE (WHITE)	644 TRANSVERSE LINE (YELLOW)	644 LANE ARROW	644 WORD ON PAVEMENT, 96" ONLY	644 ISLAND MARKING (YELLOW)
						MI	MI	MI	MI	FT	FT	FT	FT	EA	EA	SQ FT
1061	W-1	S.R. 161	332+00.00	355+00.00	WB	0.44										
1061	W-2	S.R. 161	309+20.00	355+00.00	EB	0.87										
1061	W-3	WATKINS-YORK	103+50.00	113+50.00	RT	0.19										
1061	W-4	WATKINS-YORK	103+50.00	113+50.00	LT	0.19										
1061	Y-1	S.R. 161	332+00.00	355+00.00	WB		0.44									
1061	Y-2	S.R. 161	309+20.00	355+00.00	EB		0.87									
1061	L-1	S.R. 161	332+00.00	355+00.00	WB			0.44								
1061	L-2	S.R. 161	309+20.00	355+00.00	EB			0.87								
1061	TD-1	WATKINS-YORK	103+50.00	113+50.00	℄				0.19							
1062	W-1	S.R. 161	355+00.00	380+00.00	WB	0.47										
1062	W-2	S.R. 161	355+00.00	380+00.00	EB	0.47										
1062	W-3	WATKINS-YORK	113+50.00	138+50.00	RT	0.47										
1062	W-4	WATKINS-YORK	113+50.00	138+50.00	LT	0.47										
1062	Y-1	S.R. 161	355+00.00	380+00.00	WB		0.47									
1062	Y-2	S.R. 161	355+00.00	380+00.00	EB		0.47									
1062	L-1	S.R. 161	355+00.00	380+00.00	WB			0.47								
1062	L-2	S.R. 161	355+00.00	380+00.00	EB			0.47								
1062	TD-1	WATKINS-YORK	113+50.00	138+50.00	℄				0.47							
1063	W-1	S.R. 161	380+00.00	405+00.00	WB	0.47										
1063	W-2	S.R. 161	380+00.00	405+00.00	EB	0.47										
1063	W-3	WATKINS-YORK	138+50.00	164+00.00	RT	0.48										
1063	W-4	WATKINS-YORK	138+50.00	164+00.00	LT	0.48										
1063	W-5	SERVICE RD 10	146+26.55	150+52.34	LT	0.08										
1063	W-6	SERVICE RD 10	146+26.55	150+52.34	RT	0.08										
1063	W-7	REL. WORTHINGTON RD N	150+32.10	163+00.00	LT	0.24										
1063	W-8	REL. WORTHINGTON RD N	150+32.10	163+00.00	RT	0.24										
1063	Y-1	S.R. 161	380+00.00	405+00.00	WB		0.47									
1063	Y-2	S.R. 161	380+00.00	405+00.00	EB		0.47									
1063	L-1	S.R. 161	380+00.00	405+00.00	WB			0.47								
1063	L-2	S.R. 161	380+00.00	405+00.00	EB			0.47								
1063	TD-1	WATKINS-YORK	138+50.00	164+00.00	℄				0.48							
1063	TD-2	SERVICE RD 10	147+75.00	150+52.34	℄				0.05							
1063	TD-3	REL. WORTHINGTON RD N	150+32.10	163+00.00	℄				0.24							
1064	W-1	S.R. 161	405+00.00	430+00.00	WB	0.47										
1064	W-2	S.R. 161	405+00.00	430+00.00	EB	0.47										
1064	W-3	WATKINS-YORK	164+00.00	189+00.00	RT	0.47										
1064	W-4	WATKINS-YORK	164+00.00	189+00.00	LT	0.47										
1064	W-5	REL. WORTHINGTON RD N	163+00.00	188+00.00	LT	0.47										
1064	W-6	REL. WORTHINGTON RD N	163+00.00	188+00.00	RT	0.47										
1064	Y-1	S.R. 161	405+00.00	430+00.00	WB		0.47									
1064	Y-2	S.R. 161	405+00.00	430+00.00	EB		0.47									
1064	L-1	S.R. 161	405+00.00	430+00.00	WB			0.47								
1064	L-2	S.R. 161	405+00.00	430+00.00	EB			0.47								
1064	TD-1	WATKINS-YORK	164+00.00	189+00.00	℄				0.47							
1064	TD-2	REL. WORTHINGTON RD N	163+00.00	188+00.00	℄				0.47							
1065	W-1	S.R. 161	430+00.00	440+34.31	WB	0.20										
1065	W-2	S.R. 161	430+00.00	439+40.51	EB	0.18										
1065	W-3	S.R. 161	439+40.51	455+00.00	EB	0.30										
1065	W-4	S.R. 161	434+94.14	455+00.00	WB	0.38										
1065	W-5	REL. WORTHINGTON RD N	188+00.00	193+00.00	LT	0.09										
1065	W-6	REL. WORTHINGTON RD N	188+00.00	193+00.00	RT	0.09										
1065	W-7	RAMP K	439+29.60	443+00.00	RT	0.07										
1065	W-8	RAMP I	440+28.41	443+00.00	LT	0.05										
1065	W-9	WATKINS-YORK	189+00.00	195+00.00	LT	0.11										
1065	W-10	WATKINS-YORK	189+00.00	195+00.00	RT	0.11										
1065	Y-1	S.R. 161	430+00.00	455+00.00	WB		0.47									
1065	Y-2	S.R. 161	430+00.00	455+00.00	EB		0.47									
1065	Y-3	RAMP K	439+29.60	443+00.00	LT		0.07									
1065	Y-4	S.R. 161	438+18.58	440+34.31	WB		0.04									
1065	Y-5	RAMP I	440+28.41	443+00.00	RT		0.05									
1065	L-1	S.R. 161	430+00.00	455+00.00	WB			0.47								
1065	L-2	S.R. 161	432+27.00	435+94.14	WB			0.07								
1065	L-3	S.R. 161	430+00.00	455+00.00	EB			0.47								
1065	L-4	S.R. 161	434+00.00	436+57.26	EB			0.05								
1065	TD-1	REL. WORTHINGTON RD N	188+00.00	193+00.00	RT				0.09							
TOTALS THIS SHEET						10.51	5.23	5.19	2.46	0	0	0	0	0	0	0
TOTALS CARRIED TO SHEET 1058						15.74		5.19	2.46	0	0	0	0	0	0	0

CALCULATED ZTW
CHECKED CSR

PAVEMENT MARKING SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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PAVEMENT MARKING SUBSUMMARY

CALCULATED ZTW
CHECKED CSR

LIC-161-6.65
LIC-37-10.25

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	644 EDGE LINE (WHITE) MI	644 EDGE LINE (YELLOW) MI	644 LANE LINE MI	644 CENTER LINE (SOLID DOUBLE) MI	644 CHANNELIZING LINE FT	644 STOP LINE FT	644 TRANSVERSE LINE (WHITE) FT	644 TRANSVERSE LINE (YELLOW) FT	644 LANE ARROW EA	644 WORD ON PAVEMENT, 96" ONLY EA	644 ISLAND MARKING (YELLOW) SQ FT
1049	TD-2	WATKINS-YORK	189+00.00	195+00.00	℄				0.11							
1049	CH-1	S.R. 161	436+57.26	439+40.51	EB					566						
1049	CH-2	S.R. 161	434+94.14	438+18.59	WB					324						
1049	WT-1	S.R. 161	436+57.26	439+40.51	EB							277				
1050	W-1	S.R. 161	455+00.00	462+15.54	WB	0.14										
1050	W-2	S.R. 161/ S.R. 37	465+00.00	480+00.00	WB	0.28										
1050	W-3	S.R. 161	455+00.00	466+81.74	EB	0.22										
1050	W-4	S.R. 161/ S.R. 37	462+37.84	480+00.00	EB	0.33										
1050	W-5	RAMP J	457+00.00	465+00.00	LT	0.15										
1050	W-6	RAMP L	457+00.00	462+33.00	RT	0.10										
1050	Y-1	S.R. 161/ S.R. 37	455+00.00	480+00.00	WB		0.47									
1050	Y-2	S.R. 161/ S.R. 37	455+00.00	480+00.00	EB		0.47									
1050	Y-3	RAMP J	457+00.00	462+15.54	WB		0.10									
1050	Y-4	RAMP L	457+00.00	463+77.84	LT		0.13									
1050	L-1	S.R. 161/ S.R. 37	455+00.00	480+00.00	WB			0.47								
1050	L-2	S.R. 161/ S.R. 37	455+00.00	480+00.00	EB			0.47								
1050	L-3	S.R. 161	464+94.74	467+00.00	WB			0.04								
1050	L-4	S.R. 161	466+81.74	469+69.75	EB			0.05								
1050	CH-1	S.R. 161	462+15.54	464+94.74	WB					558						
1050	CH-2	S.R. 161	463+77.84	466+81.74	EB					304						
1050	WT-1	S.R. 161	462+15.54	464+94.74	WB							273				
1051	W-1	S.R. 37	480+00.00	481+76.39	WB	0.03										
1051	W-4	S.R. 37	480+00.00	481+29.83	EB	0.02										
1051	W-7	OUTVILLE-MORSE	497+55.00	505+00.00	LT	0.14										
1051	W-8	OUTVILLE-MORSE	497+55.00	505+00.00	RT	0.14										
1051	Y-1	S.R. 37	480+00.00	481+76.39	WB		0.03									
1051	Y-4	S.R. 37	480+00.00	481+29.83	EB		0.02									
1051	L-1	S.R. 37	480+00.00	481+76.39	WB			0.03								
1051	L-4	S.R. 37	480+00.00	481+29.83	EB			0.02								
1051	SL-1	OUTVILLE-MORSE	497+55.00	497+55.00	LT						30.5					
1051	TD-1	OUTVILLE-MORSE	497+55.00	505+00.00	℄				0.14							
1052	W-1	S.R. 37	505+00.00	530+00.00	WB	0.47										
1052	W-2	S.R. 37	505+00.00	530+00.00	EB	0.47										
1052	W-3	OUTVILLE-MORSE	505+00.00	530+00.00	LT	0.47										
1052	W-4	OUTVILLE-MORSE	505+00.00	530+00.00	RT	0.47										
1052	Y-1	S.R. 37	505+00.00	530+00.00	WB		0.47									
1052	Y-2	S.R. 37	505+00.00	530+00.00	EB		0.47									
1052	L-1	S.R. 37	505+00.00	530+00.00	WB			0.47								
1052	L-2	S.R. 37	505+00.00	530+00.00	EB			0.47								
1052	TD-1	OUTVILLE-MORSE	505+00.00	530+00.00	℄				0.47							
1053	W-1	S.R. 37	530+00.00	555+00.00	WB	0.47										
1053	W-2	S.R. 37	530+00.00	555+00.00	EB	0.47										
1053	W-3	OUTVILLE-MORSE	530+00.00	555+00.00	LT	0.47										
1053	W-4	OUTVILLE-MORSE	530+00.00	555+00.00	RT	0.47										
1053	W-5	C.R. 539A EXTENSION	295+50.00	317+50.00	LT	0.42										
1053	W-6	C.R. 539A EXTENSION	295+50.00	317+50.00	RT	0.42										
1053	Y-1	S.R. 37	530+00.00	555+00.00	WB		0.47									
1053	Y-2	S.R. 37	530+00.00	555+00.00	EB		0.47									
1053	L-1	S.R. 37	530+00.00	555+00.00	WB			0.47								
1053	L-2	S.R. 37	530+00.00	555+00.00	EB			0.47								
1053	TD-1	OUTVILLE-MORSE	530+00.00	555+00.00	℄				0.47							
1053	TD-2	C.R. 539A EXTENSION	295+50.00	317+50.00	℄				0.42							
1054	W-1	S.R. 37	555+00.00	573+94.05	WB	0.36										
1054	W-2	S.R. 37	555+00.00	573+92.95	EB	0.36										
1054	W-7	C.R. 539A EXTENSION	317+50.00	336+50.26	LT	0.36										
1054	W-8	C.R. 539A EXTENSION	317+50.00	336+50.26	RT	0.36										
1054	W-13	OUTVILLE-MORSE	555+00.00	561+20.00	LT	0.12										
1054	W-17	OUTVILLE-MORSE	555+00.00	573+95.98	RT	0.36										
1054	Y-1	S.R. 37	555+00.00	593+94.05	WB		0.36									
1054	Y-2	S.R. 37	555+00.00	573+92.95	EB		0.36									
1054	L-1	S.R. 37	555+00.00	573+94.05	WB			0.36								
1054	L-2	S.R. 37	555+00.00	573+92.95	EB			0.36								
1054	TD-1	C.R. 539A EXTENSION	317+50.00	336+50.26	℄				0.36							
		TOTALS THIS SHEET				8.10	3.84	3.70	1.86	1752	30.5	550	0	0	0	0
		TOTALS CARRIED TO SHEET 1042				11.94		3.70	1.86	1752	30.5	550	0	0	0	0

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PAVEMENT MARKING SUBSUMMARY

CALCULATED ZTW
CHECKED CSR

SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	644 EDGE LINE (WHITE)	644 EDGE LINE (YELLOW)	644 LANE LINE	644 CENTER LINE (SOLID DOUBLE)	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE (WHITE)	644 TRANSVERSE LINE (YELLOW)	644 LANE ARROW	644 WORD ON PAVEMENT, 96" ONLY	644 ISLAND MARKING (YELLOW)
						MI	MI	MI	MI	FT	FT	FT	FT	EA	EA	SQ FT
1054	TD-4	OUTVILLE-MORSE	555+00.00	561+20.00	℄				0.12							
1055	W-1	S.R. 37	580+00.00	605+00.00	WB	0.47										
1055	W-2	S.R. 37	580+00.00	605+00.00	EB	0.47										
1055	W-3	C.R. 539A EXTENSION	342+50.00	364+40.00	LT	0.41										
1055	W-4	C.R. 539A EXTENSION	342+50.00	364+40.00	RT	0.41										
1055	W-5	OUTVILLE-MORSE	580+00.00	584+40.00	RT	0.08										
1055	W-6	OUTVILLE-MORSE	580+00.00	584+40.00	LT	0.08										
1055	Y-1	S.R. 37	580+00.00	605+00.00	WB		0.47									
1055	Y-2	S.R. 37	580+00.00	605+00.00	EB		0.47									
1055	L-1	S.R. 37	580+00.00	605+00.00	WB			0.47								
1055	L-2	S.R. 37	580+00.00	605+00.00	EB			0.47								
1055	TD-1	C.R. 539A EXTENSION	342+50.00	364+40.00	℄				0.41							
1055	TD-2	OUTVILLE-MORSE	580+00.00	583+21.00	℄				0.06							
1056	W-1	S.R. 37	605+00.00	630+00.00	WB	0.47										
1056	W-2	S.R. 37	605+00.00	630+00.00	EB	0.47										
1056	Y-1	S.R. 37	605+00.00	630+00.00	WB		0.47									
1056	Y-2	S.R. 37	605+00.00	630+00.00	EB		0.47									
1056	L-1	S.R. 37	605+00.00	630+00.00	WB			0.47								
1056	L-2	S.R. 37	605+00.00	630+00.00	EB			0.47								
1057	W-1	S.R. 37	630+00.00	655+00.00	WB	0.47										
1057	W-2	S.R. 37	630+00.00	655+00.00	EB	0.47										
1057	Y-1	S.R. 37	630+00.00	655+00.00	WB		0.47									
1057	Y-2	S.R. 37	630+00.00	655+00.00	EB		0.47									
1057	L-1	S.R. 37	630+00.00	655+00.00	WB			0.47								
1057	L-2	S.R. 37	630+00.00	655+00.00	EB			0.47								
1058	W-1	S.R. 37	655+00.00	662+51.00	WB	0.14										
1058	W-2	S.R. 37	659+81.50	668+76.00	WB	0.17										
1058	W-3	S.R. 37	655+00.00	661+72.00	EB	0.13										
1058	W-4	S.R. 37	661+72.00	662+00.00	EB	0.01										
1058	W-5	S.R. 37	668+76.00	679+00.00	WB	0.19										
1058	Y-1	S.R. 37	655+00.00	679+00.00	WB		0.45									
1058	Y-2	S.R. 37	655+00.00	662+00.00	EB		0.13									
1058	L-1	S.R. 37	655+00.00	679+00.00	WB			0.45								
1058	L-2	S.R. 37	657+81.50	659+81.50	WB			0.04								
1058	L-3	S.R. 37	655+00.00	662+00.00	EB			0.13								
1058	L-4	S.R. 37	657+84.00	659+84.00	EB			0.04								
1058	L-5	S.R. 37	670+62.00	672+62.00	WB			0.04								
1058	CH-1	S.R. 37	659+81.50	662+51.00	WB					270						
1058	CH-2	S.R. 37	659+84.00	661+72.00	EB					376						
1058	CH-3	S.R. 37	668+76.00	670+62.00	WB					372						
1058	WT-1	S.R. 37	659+84.00	661+72.00	EB							158				
1058	WT-2	S.R. 37	668+76.00	670+62.00	WB							132				
1060	W-1	REL. WORTHINGTON RD N	193+00.00	212+50.00	LT	0.37										
1060	W-2	REL. WORTHINGTON RD N	193+00.00	212+50.00	RT	0.37										
1060	W-3	REL. WORTHINGTON RD N	213+10.00	233+00.00	LT	0.38										
1060	W-4	REL. WORTHINGTON RD N	213+10.00	233+00.00	RT	0.38										
1060	TD-1	REL. WORTHINGTON RD N	193+00.00	212+50.00	℄				0.37							
1060	TD-2	REL. WORTHINGTON RD N	213+10.00	233+00.00	℄				0.38							
1060	SL-1	REL. WORTHINGTON RD N	212+50.00	212+50.00	RT						28.0					
1060	SL-2	REL. WORTHINGTON RD N	213+10.00	213+10.00	LT						31.0					
1061	W-1	S.R. 37	394+00.00	395+20.00	LT	0.02										
1061	W-2	S.R. 37	394+00.00	395+20.00	RT	0.02										
1061	W-3	S.R. 37	396+05.00	402+00.00	LT	0.11										
1061	W-4	S.R. 37	396+05.00	402+00.00	RT	0.11										
1061	W-5	S.R. 37	402+65.00	405+48.95	LT	0.05										
1061	W-6	S.R. 37	402+65.00	405+48.95	RT	0.05										
1061	W-7	S.R. 37	411+45.00	417+50.00	LT	0.11										
1061	W-8	S.R. 37	411+45.00	417+50.00	RT	0.11										
1061	W-9	YORK RD	417+90.00	419+71.00	LT	0.03										
1061	W-10	YORK RD	417+90.00	419+71.00	RT	0.03										
1061	TD-1	S.R. 37	394+00.00	395+20.00	℄				0.02							
1061	TD-2	S.R. 37	396+05.00	397+97.00	℄				0.04							
1061	TD-3	S.R. 37	397+97.00	401+82.00	LT				0.07							
1061	TD-4	S.R. 37	397+97.00	401+82.00	RT				0.07							
TOTALS THIS SHEET						6.64	3.43	3.54	1.43	1017.50	59.0	290	0	0	0	0
TOTALS CARRIED TO SHEET 1042						10.07		3.54	1.43	1017.50	59.0	290	0	0	0	0

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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	644 EDGE LINE (WHITE)	644 EDGE LINE (YELLOW)	644 LANE LINE	644 CENTER LINE (SOLID DOUBLE)	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE (WHITE)	644 TRANSVERSE LINE (YELLOW)	644 LANE ARROW	644 WORD ON PAVEMENT, 96" ONLY	644 ISLAND MARKING (YELLOW)	646 EDGE LINE (WHITE)	646 EDGE LINE (YELLOW)	646 LANE LINE	646 CENTER LINE (SOLID DOUBLE)
						MI	MI	MI	MI	FT	FT	FT	FT	EA	EA	SQ FT	MI	MI	MI	MI
1051	W-2	S.R. 37	481+76.39	484+65.19	WB												0.05			
1051	L-2	S.R. 37	481+76.39	484+65.19	WB														0.05	
1051	Y-2	S.R. 37	481+76.39	484+65.19	WB													0.05		
1051	W-3	S.R. 37	484+65.19	505+00.00	WB	0.39														
1051	L-3	S.R. 37	484+65.19	505+00.00	WB			0.39												
1051	Y-3	S.R. 37	484+65.19	505+00.00	WB		0.39													
1051	W-5	S.R. 37	481+29.83	484+18.63	EB												0.05			
1051	L-5	S.R. 37	481+29.83	484+18.63	EB														0.05	
1051	Y-5	S.R. 37	481+29.83	484+18.63	EB													0.05		
1051	W-6	S.R. 37	484+18.63	505+00.00	EB	0.39														
1051	L-6	S.R. 37	484+18.63	505+00.00	EB			0.39												
1051	Y-6	S.R. 37	484+18.63	505+00.00	EB		0.39													
1054	Y-3	S.R. 37	573+94.05	575+93.72	WB													0.04		
1054	L-3	S.R. 37	573+94.05	575+93.72	WB														0.04	
1054	W-3	S.R. 37	573+94.05	575+93.72	WB												0.04			
1054	Y-4	S.R. 37	575+93.72	580+00.00	WB		0.08													
1054	L-4	S.R. 37	575+93.72	580+00.00	WB			0.08												
1054	W-4	S.R. 37	575+93.72	580+00.00	WB	0.08														
1054	Y-5	S.R. 37	573+92.95	575+94.82	EB													0.04		
1054	L-5	S.R. 37	573+92.95	575+94.82	EB														0.04	
1054	W-5	S.R. 37	573+92.95	575+94.82	EB												0.04			
1054	Y-6	S.R. 37	575+94.82	580+00.00	EB		0.08													
1054	L-6	S.R. 37	575+94.82	580+00.00	EB			0.08												
1054	W-6	S.R. 37	575+94.82	580+00.00	EB	0.08														
1054	W-9	C.R. 539A EXTENSION	336+50.26	338+51.01	LT												0.04			
1054	W-10	C.R. 539A EXTENSION	336+50.26	338+51.01	RT												0.04			
1054	TD-2	C.R. 539A EXTENSION	336+50.26	338+51.01	℄															0.04
1054	W-11	C.R. 539A EXTENSION	338+51.01	342+50.00	LT	0.08														
1054	W-12	C.R. 539A EXTENSION	338+51.01	342+50.00	RT	0.08														
1054	TD-3	C.R. 539A EXTENSION	338+51.01	342+50.00	℄				0.08											
1054	TD-5	OUTVILLE-MORSE ROAD	561+90.00	573+95.98	℄				0.23											
1054	TD-6	OUTVILLE-MORSE ROAD	573+95.98	575+94.82	℄															0.04
1054	TD-7	OUTVILLE-MORSE ROAD	575+94.82	580+00.00	℄				0.08											
1054	W-14	OUTVILLE-MORSE ROAD	561+90.00	573+95.98	RT	0.23														
1054	W-15	OUTVILLE-MORSE ROAD	573+95.98	575+94.82	RT												0.04			
1054	W-16	OUTVILLE-MORSE ROAD	575+94.82	580+00.00	RT	0.08														
1054	W-18	OUTVILLE-MORSE ROAD	573+92.95	575+76.73	LT	0.03														
1054	W-19	OUTVILLE-MORSE ROAD	575+76.73	580+00.00	LT	0.08														
1061	W-11	S.R. 37	405+48.95	408+04.95	LT												0.05			
1061	W-12	S.R. 37	405+48.95	408+04.95	RT												0.05			
1061	W-13	S.R. 37	408+04.95	410+75.00	LT	0.05														
1061	W-14	S.R. 37	408+04.95	410+75.00	RT	0.05														
1061	TD-11	S.R. 37	408+15.00	410+70.00	LT				0.05											
1061	TD-12	S.R. 37	405+20.00	408+15.00	RT				0.08											
1066	W-2	OUTVILLE ROAD	21+38.21	23+94.21	LT	0.04											0.05			
1066	W-3	OUTVILLE ROAD	23+94.21	26+25.00	LT	0.01														
1066	W-5	OUTVILLE ROAD	20+90.00	21+38.21	RT															
1066	W-6	OUTVILLE ROAD	21+38.21	23+94.21	RT												0.05			
1066	TD-2	OUTVILLE ROAD	21+38.21	23+94.21	℄															0.05
1066	TD-3	OUTVILLE ROAD	23+94.21	26+25.00	℄				0.04											
TOTALS THIS SHEET						1.67	0.94	0.94	0.56	0	0	0	0	0	0	0	0.50	0.18	0.18	0.13
TOTALS CARRIED TO SHEET 1042						2.61		0.94	0.56	0	0	0	0	0	0	0	0.68		0.18	0.13

CALCULATED ZTW
CHECKED CSR

PAVEMENT MARKING SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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SHT. NO.	REF. NO.	ROADWAY	LOCATION FROM	LOCATION TO	SIDE	644 EDGE LINE (WHITE)	644 EDGE LINE (YELLOW)	644 LANE LINE	644 CENTER LINE (SOLID DOUBLE)	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE (WHITE)	644 TRANSVERSE LINE (YELLOW)	644 LANE ARROW	644 WORD ON PAVEMENT, 96" ONLY	644 ISLAND MARKING (YELLOW)	646 EDGE LINE (WHITE)	646 EDGE LINE (YELLOW)	646 LANE LINE	646 CENTER LINE (SOLID DOUBLE)
						MI	MI	MI	MI	FT	FT	FT	FT	EA	EA	SQ FT	MI	MI	MI	MI
1045	TD-5	S.R. 37	402+65.00	405+20.00	RT				0.05											
1045	TD-6	S.R. 37	405+20.00	408+15.00	LT				0.06											0.06
1045	TD-7	S.R. 37	411+55.00	415+90.00	LT				0.08											
1045	TD-8	S.R. 37	411+55.00	415+90.00	RT				0.08											
1045	TD-9	S.R. 37	415+90.00	417+25.00	℄				0.03											
1045	TD-10	YORK ROAD	417+85.00	419+71.00	℄				0.04											
1061	TD-11	S.R. 37	405+20.00	408+15.00					0.06											
1045	CH-1	S.R. 37	402+65.00	405+20.00	LT					255										
1045	CH-2	S.R. 37	408+15.00	410+70.00	RT					255										
1045	T-1	S.R. 37	397+97.00	401+82.00	℄								312							
1045	T-2	S.R. 37	405+20.00	408+15.00	℄								347							
1045	T-3	S.R. 37	411+61.00	415+90.00	℄								315							
1045	IM-1	S.R. 37	401+82.00	401+86.00	℄											57				
1045	IM-2	S.R. 37	411+55.00	411+61.00	℄											57				
1045		S.R. 37	402+95.00		℄									1						
1045		S.R. 37	404+00.00		℄										1					
1045		S.R. 37	404+95.00		℄									1						
1045		S.R. 37	409+40.00		℄									1						
1045		S.R. 37	409+90.00		℄										1					
1045		S.R. 37	410+40.00		℄									1						
1062	W-1	WATKINS-YORK	195+00.00	212+00.00	LT	0.32														
1062	W-2	WATKINS-YORK	195+00.00	212+00.00	RT	0.32														
1062	TD-1	WATKINS-YORK	195+00.00	212+00.00	℄				0.32											
1062	SL-1	WATKINS-YORK	212+00.00	212+00.00	RT						16.5									
1063	W-1	SERVICE ROAD 11	212+65.00	243+00.00	LT	0.57														
1063	W-2	SERVICE ROAD 11	212+65.00	243+00.00	RT	0.57														
1063	TD-1	SERVICE ROAD 11	212+85.00	242+00.00	℄				0.55											
1063	SL-1	SERVICE ROAD 11	212+85.00	212+85.00	LT						20.5									
1064	W-1	RAMP I	443+00.00	451+50.00	℄	0.16														
1064	W-2	RAMP J	450+57.00	457+00.00	℄	0.12														
1064	Y-1	RAMP I	443+00.00	451+50.00	RT		0.16													
1064	Y-2	RAMP J	450+57.00	457+00.00	RT		0.12													
1064	CH-1	RAMP J	450+57.00	452+23.00	RT					166										
1064	SL-1	RAMP J	450+57.00	450+57.00	RT						45.5									
1064		RAMP J	450+87.00		RT									2						
1064		RAMP J	451+37.00		RT										2					
1065	W-1	RAMP K	443+00.00	451+25.00	℄	0.16														
1065	W-2	RAMP L	450+61.00	457+00.00	℄	0.12														
1065	Y-1	RAMP K	443+00.00	451+25.00	℄		0.16													
1065	Y-2	RAMP L	450+61.00	457+00.00	℄		0.12													
1065	SL-1	RAMP K	451+25.00	451+25.00	LT						40.5									
1066	W-1	OUTVILLE ROAD	18+60.00	21+38.21	LT	0.05														
1066	W-4	OUTVILLE ROAD	18+60.00	20+10.00	RT	0.03														
1066	W-7	OUTVILLE ROAD	23+94.21	26+25.00	RT	0.04														
1066	TD-1	OUTVILLE ROAD	18+60.00	21+38.21	℄				0.05											
1067	W-1	MORSE ROAD	7+75.00	18+30.00	LT	0.20														
1067	W-2	MORSE ROAD	7+75.00	18+30.00	RT	0.20														
1067	TD-1	MORSE ROAD	7+75.00	18+30.00	℄				0.20											
1067	SL-1	MORSE ROAD	18+30.00	18+30.00	RT						24.5									
1061	TD-11	S.R. 37	405+20.00	408+15.00																
		TOTALS THIS SHEET				2.88	0.56	0.00	1.51	676.0	147.5	0.0	974.0	6	4	114.00	0.00	0.00	0.00	0.06
		TOTALS SHEET 1038				15.74	0.00	5.19	2.46	0.0	0.0	0.0	0.0	0	0	0.00	0.00	0.00	0.00	0.00
		TOTALS SHEET 1039				11.94	0.00	3.70	1.86	1752.0	30.5	550.0	0.0	0	0	0.00	0.00	0.00	0.00	0.00
		TOTALS SHEET 1040				10.07	0.00	3.54	1.43	1017.5	59.0	290.0	0.0	0	0	0.00	0.00	0.00	0.00	0.00
		TOTALS SHEET 1041				2.61	0.00	0.94	0.56	0.0	0.0	0.0	0.0	0	0	0.00	0.00	0.00	0.18	0.13
		TOTALS CARRIED TO TRAFFIC CONTROL GENERAL SUMMARY				43.80		13.38	7.82	3445.5	237.0	840.0	974.0	6	4	114.00	0.68		0.18	0.19

CALCULATED ZTW
CHECKED CSR

PAVEMENT MARKING SUBSUMMARY

LIC-161-6.65
LIC-37-10.25

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RAISED PAVEMENT MARKING SUBSUMMARY

CALCULATED ZTW
CHECKED CSR

ROADWAY	SHEET NO.	STATION FROM	STATION TO	SIDE	INTERVAL	ITEM 621 RAISED PAVEMENT MARKERS 1-WAY WHITE	1-WAY YELLOW	2-WAY WHITE/RED	2-WAY YELLOW/RED	2-WAY YELLOW/YELLOW
S.R. 161	1045	309+20.00	355+00.00	EB	120	39				
S.R. 161	1045	309+20.00	355+00.00	EB	80	58	58			
S.R. 161	1045	332+00.00	360+00.00	WB	120	24				
S.R. 161	1045	332+00.00	360+00.00	WB	80	35	35			
S.R. 161	1046	355+00.00	380+00.00	EB	120	21				
S.R. 161	1046	355+00.00	380+00.00	EB	80	31	31			
S.R. 161	1046	360+00.00	380+00.00	WB	120	17				
S.R. 161	1046	360+00.00	380+00.00	WB	80	26	26			
S.R. 161	1047	380+00.00	405+00.00	EB	120	21				
S.R. 161	1047	380+00.00	405+00.00	EB	80	31	31			
S.R. 161	1047	380+00.00	405+00.00	WB	120	21				
S.R. 161	1047	380+00.00	405+00.00	WB	80	31	31			
S.R. 161	1048	405+00.00	430+00.00	EB	120	20				
S.R. 161	1048	405+00.00	430+00.00	EB	80	31	31			
S.R. 161	1048	405+00.00	430+00.00	WB	120	21				
S.R. 161	1048	405+00.00	430+00.00	WB	80	31	31			
S.R. 161	1049	430+00.00	455+00.00	EB	120	21				
S.R. 161	1049	430+00.00	455+00.00	EB	80		32			
S.R. 161	1049	430+00.00	435+00.00	EB	80	7				
S.R. 161	1049	434+50.00	436+57.26	EB	120		3			
S.R. 161	1049	436+57.26	439+40.51	EB	40			15		
S.R. 161	1049	439+40.51	455+00.00	EB	80	20				
S.R. 161	1049	430+00.00	455+00.00	WB	120	21				
S.R. 161	1049	430+00.00	455+00.00	WB	80	32	31			
S.R. 161	1049	432+26.95	434+94.14	WB	120	3				
S.R. 161	1049	434+94.14	436+58.57	WB	40			10		
S.R. 161/ S.R. 37	1050	455+00.00	480+00.00	EB	120	21				
S.R. 161/ S.R. 37	1050	455+00.00	480+00.00	EB	80	31	31			
S.R. 161	1050	461+42.92	465+94.74	EB	80			7		
S.R. 161/ S.R. 37	1050	455+00.00	480+00.00	WB	120	21				
S.R. 161/ S.R. 37	1050	455+00.00	480+00.00	WB	80		34			
S.R. 161	1050	455+00.00	462+15.54	WB	80	9				
S.R. 161	1050	462+15.54	464+97.74	WB	40			15		
S.R. 161/ S.R. 37	1050	466+81.74	480+00.00	WB	80	17				
S.R. 37	1051	480+00.00	505+00.00	EB	120	21				
S.R. 37	1051	480+00.00	505+00.00	EB	80	31	31			
S.R. 37	1051	480+00.00	505+00.00	WB	120	20				
S.R. 37	1051	480+00.00	505+00.00	WB	80	31	31			
S.R. 37	1052	505+00.00	530+00.00	EB	120	21				
S.R. 37	1052	505+00.00	530+00.00	EB	80	31	31			
S.R. 37	1052	505+00.00	530+00.00	WB	120	21				
S.R. 37	1052	505+00.00	530+00.00	WB	80	31	31			
S.R. 37	1053	530+00.00	555+00.00	EB	120	21				
S.R. 37	1053	530+00.00	555+00.00	EB	80	32	32			
S.R. 37	1053	530+00.00	555+00.00	WB	120	21				
S.R. 37	1053	530+00.00	555+00.00	WB	80	31	31			
S.R. 37	1054	555+00.00	580+00.00	EB	120	20				
S.R. 37	1054	555+00.00	580+00.00	EB	80	31	31			
S.R. 37	1054	555+00.00	580+00.00	WB	120	21				
S.R. 37	1054	555+00.00	580+00.00	WB	80	32	32			
S.R. 37	1055	580+00.00	605+00.00	EB	120	21				
S.R. 37	1055	580+00.00	605+00.00	EB	80	31	31			
S.R. 37	1055	580+00.00	605+00.00	WB	120	21				
S.R. 37	1055	580+00.00	605+00.00	WB	80	31	31			
S.R. 37	1056	605+00.00	630+00.00	EB	120	21				
S.R. 37	1056	605+00.00	630+00.00	EB	80	31	31			
S.R. 37	1056	605+00.00	630+00.00	WB	120	21				
S.R. 37	1057	605+00.00	630+00.00	WB	80	31	31			
S.R. 37	1057	630+00.00	654+00.00	EB	120	21				
S.R. 37	1057	630+00.00	654+00.00	EB	80	31	31			
S.R. 37	1057	630+00.00	654+00.00	WB	120	20				
S.R. 37	1057	630+00.00	654+00.00	WB	80	31	31			
RAMP I	1049	436+58.57	440+28.41	RT	80	4				
RAMP I	1049	439+50.00	442+23.33	RT	40	7				
RAMP I	1049/1063	442+23.33	447+24.19	RT	80	7				
TOTALS ON THE LEFT SIDE						1406	841	47	0	0

ROADWAY	SHEET NO.	STATION FROM	STATION TO	SIDE	INTERVAL	ITEM 621 RAISED PAVEMENT MARKERS 1-WAY WHITE	1-WAY YELLOW	2-WAY WHITE/RED	2-WAY YELLOW/RED	2-WAY YELLOW/YELLOW
RAMP I	1063	447+24.19	449+62.85	RT	20	12				
RAMP I	1063	449+62.85	451+20.00	RT	80	2				
RAMP I	1049	436+58.87	439+50.00	LT	80				4	
RAMP I	1049	439+50.00	442+23.33	LT	40				7	
RAMP I	1049/1063	442+23.33	447+24.19	LT	80				6	
RAMP I	1063	447+24.19	449+62.85	LT	20				12	
RAMP I	1063	449+62.85	451+20.00	LT	80				2	
RAMP J	1063	450+60.00	452+73.30	LT	80	3				
RAMP J	1063	452+73.30	455+55.03	LT	20	15				
RAMP J	1050/1063	455+55.03	457+64.87	LT	80	3				
RAMP J	1050	457+64.87	461+11.54	LT	40	9				
RAMP J	1050	461+11.54	466+35.00	LT	80	6				
RAMP J	1063	450+60.00	464+94.74	RT	80				3	
RAMP J	1063	452+73.30	455+55.03	RT	20				15	
RAMP J	1050/1063	455+55.03	457+64.87	RT	80				3	
RAMP J	1050	457+64.87	461+11.54	RT	40				9	
RAMP J	1050	461+11.54	462+15.54	RT	80				1	
RAMP J	1063	450+60.00	452+23.00	RT	20			10		
RAMP K	1049	439+29.60	440+29.60	RT	80	3				
RAMP K	1049/1064	440+29.60	443+25.33	RT	40	8				
RAMP K	1064	443+25.33	446+63.39	RT	80	5				
RAMP K	1064	446+63.39	449+13.43	RT	20	13				
RAMP K	1064	449+13.43	450+73.43	RT	80	2				
RAMP K	1049	439+29.60	440+29.60	LT	80				3	
RAMP K	1049/1064	440+29.60	443+25.33	LT	40				8	
RAMP K	1064	443+25.33	446+63.39	LT	80				5	
RAMP K	1064	446+63.39	449+13.43	LT	20				13	
RAMP K	1064	449+13.43	450+73.43	LT	80				2	
RAMP L	1064	451+28.00	452+88.16	LT	80				2	
RAMP L	1064	452+88.16	455+60.98	LT	20				15	
RAMP L	1050/1064	455+60.98	458+44.24	LT	80				5	
RAMP L	1050	458+44.24	461+40.40	LT	40				9	
RAMP L	1064	451+28.00	452+88.16	RT	80	2				
RAMP L	1064	452+88.16	455+60.98	RT	20	15				
RAMP L	1050/1064	455+60.98	458+44.24	RT	80	5				
RAMP L	1050	458+44.24	461+40.40	RT	40	9				
S.R. 37	1060	396+05.00	397+96.92	℄	80					3
S.R. 37	1060	397+96.62	401+88.00	℄	80					11
S.R. 37	1060	402+65.00	405+20.00	RT	80					4
S.R. 37	1060	405+20.00	408+15.00	LT/RT	80					11
S.R. 37	1060	408+15.00	410+70.00	LT	80					4
S.R. 37	1060	411+55.00	415+89.78	LT/RT	80					13
S.R. 37	1060	415+89.78	417+25.00	℄	80					2
S.R. 37	1060	402+65.00	405+20.00	LT	40			8		
S.R. 37	1060	408+15.00	410+70.00	RT	40			8		
S.R. 37	1060	396+30.00	401+66.74	LT/RT	80	16				
S.R. 37	1060	402+60.59	410+73.26	LT/RT	80	24				
S.R. 37	1060	412+06.31	417+16.37	LT/RT	80	16				
TOTALS ON THE RIGHT SIDE						168	0	26	124	48
TOTALS LEFT SIDE						1406	841	47	0	0
TOTALS RIGHT SIDE						168	0	26	124	48
TOTALS THIS SHEET						1574	841	73	124	48
TOTAL CARRIED TO GENERAL SUMMARY						2660				

LIC-161-6.65
LIC-37-10.25

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LAYOUT OF WORK

PRIOR TO REMOVING OR ERECTING SIGN SUPPORTS, THE CONTRACTOR SHALL FIELD LAYOUT AND IDENTIFY, BY TYPE OF WORK, SIGNS AND SIGN SUPPORTS TO BE ERECTED OR REMOVED. THIS LAYOUT MAY BE ACCOMPLISHED BY STAKING, OR BY PLACING CLEARLY DISCERNIBLE PAINTED MARKINGS ON THE EDGE OF PAVEMENT OR BY OTHER METHODS APPROVED BY THE ENGINEER. IN NO CASE SHALL THE CONTRACTOR PLACE ANY PERMANENT MARKINGS ON ANY EXISTING SIGN OR SIGN SUPPORT. COST FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 623 CONSTRUCTION LAYOUT STAKES.

SIGN PLACEMENT

THE EXACT LOCATION OF SIGNS ARE TO BE STAKED AND CHECKED BY THE ENGINEER PRIOR TO PLACEMENT TO INSURE CLEARANCE OF DRIVES, ROADWAYS AND OTHER OBSTACLES. IF THERE ARE ANY CONFLICTS, THEY ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS IS INCIDENTAL TO ALL 630 ITEMS.

ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF SIGNS AND SIGN SUPPORTS WITHIN THE LIMITS OF THE WORK AREA OR THOSE WITHIN WHICH MAYBE OUTSIDE THE WORK AREA BUT ARE CONFLICTING. ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO REMOVE AND DISPOSE GROUND MOUNTED SIGNS AND SIGN SUPPORTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, AS PER PLAN.

ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, AS PER PLAN 63 EACH

ITEM 630 REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF MAJOR SIGNS, SIGN SUPPORTS AND FOUNDATIONS WITHIN THE WORK AREA OF THOSE WHICH MAY BE OUTSIDE THE WORK AREA BUT ARE CONFLICTING. ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO REMOVE AND DISPOSE GROUND MOUNTED MAJOR SIGNS, SUPPORT BEAMS AND FOUNDATIONS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 630 REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL, AS PER PLAN.

ITEM 630 REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL, AS PER PLAN 5 EACH

CALCULATED JMA
CHECKED CSR

TRAFFIC CONTROL GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

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STA. 309+20 (EASTBOUND)
BEGIN EDGE LINES
BEGIN LANE LINE
MATCH EXISTING STRIPING

STA. 332+00 (WESTBOUND)
BEGIN EDGE LINES
BEGIN LANE LINE
MATCH EXISTING STRIPING

WESTBOUND S.R. 161

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 161

309+00 310+00 311+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00 340+00 341+00 342+00

W-1 L-1 Y-1 Y-2 L-2 W-2

12' 12' 12' 12' 12' 12'12 12'12 12'12

SEE BELOW
MATCH LINE STA. 342+50

LEGEND

- W-1 - EDGE LINE (WHITE)
- Y-1 - EDGE LINE (YELLOW)
- L-1 - LANE LINE
- TD-1 - CENTER LINE (DOUBLE SOLID)
- STOP - EXISTING SIGN
- EAST - EXISTING SIGN TO BE REMOVED

SEE ABOVE
MATCH LINE STA. 342+50

BEGIN PROJECT
STA. 351+00.00
S.L.M. 6.65

WESTBOUND S.R. 161

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 161

343+00 344+00 345+00 346+00 347+00 348+00 349+00 350+00 351+00 352+00 353+00 354+00

W-1 L-1 Y-1 Y-2 L-2 W-2 W-4 TD-1 W-3

12' 12' 12' 12' 12' 12'12 12'12 12'12

P.C. STA. 346+54.16

STA. 103+50
BEGIN EDGE LINES
BEGIN CENTER LINE
MATCH EXISTING STRIPING

102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00 113+00

T.S. STA. 106+04.59

S.C. STA. 107+63.59

C.S. STA. 109+74.78

S.T. STA. 111+33.78

℄ SURVEY & CONST.
WATKINS-YORK FRONTAGE ROAD

STOP EAST

SEE SHEET 1062
MATCH LINE STA. 355+00 S.R. 161

SEE SHEET 1062
MATCH LINE STA. 113+50
WATKINS-YORK
FRONTAGE ROAD

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

SIGNING AND PAVEMENT MARKING PLAN
STA. 318+55 TO STA. 355+00

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SIGNING AND PAVEMENT MARKING PLAN
STA. 355+00 TO STA. 380+00

LIC-161-6.65
LIC-37-10.25

1046
1349

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

SEE SHEET 1061
MATCH LINE
STA. 355+00
S.R. 161

SEE SHEET 1061
MATCH LINE
STA. 113+50
WATKINS-YORK
FRONTAGE ROAD

WESTBOUND S.R. 161

EASTBOUND S.R. 161

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST.
WATKINS-YORK FRONTAGE ROAD

P.T. STA. 362+20.55

P.C. STA. 119+19.85

P.T. STA. 122+22.14

356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00

114+00 115+00 116+00 117+00 118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00

W-1 L-1 Y-1 W-2 L-2 Y-2 W-3 TD-1 W-4

12'-12'

1 MILE

DO NOT PASS

STA. 114+00, RT
R2-1-24
SPEED LIMIT 55
(S1)

SEE BELOW
MATCH LINE
STA. 367+50
S.R. 161

SEE BELOW
MATCH LINE
STA. 126+00
WATKINS-YORK
FRONTAGE ROAD

LEGEND

- W-1 - EDGE LINE (WHITE)
- Y-1 - EDGE LINE (YELLOW)
- L-1 - LANE LINE
- TD-1 - CENTER LINE (DOUBLE SOLID)

DO NOT PASS - EXISTING SIGN TO BE REMOVED

SPEED LIMIT 55 - PROPOSED SIGN

- ONE POST
- TWO BEAMS

SIMPSON RUN

(S2) 7 D10-H8-12
STA. 369+80 LT

SEE ABOVE
MATCH LINE
STA. 367+50
S.R. 161

SEE ABOVE
MATCH LINE
STA. 126+00
WATKINS-YORK
FRONTAGE ROAD

P.C. STA. 374+65.36

368+00 369+00 370+00 371+00 372+00 373+00 374+00 375+00 376+00 377+00 378+00 379+00

127+00 128+00 129+00 130+00 131+00 132+00 133+00 134+00 135+00 136+00 137+00 138+00

7 (S3) D10-H8-12
STA. 369+80 RT

P.C. STA. 133+17.41

37 NORTH
Johnstown
EXIT 1 MILE

E1-1 12'x10'
STA.
377+60, RT

(S4)

SEE SHEET 1063
MATCH LINE
STA. 380+00
S.R. 161

SEE SHEET 1063
MATCH LINE
STA. 138+50
WATKINS-YORK
FRONTAGE ROAD

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SIGNING AND PAVEMENT MARKING PLAN
STA. 380+00 TO STA. 405+00

LIC-161-6.65
LIC-37-10.25

1047
1349

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

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LEGEND

SPEED LIMIT 55 - PROPOSED SIGN
- ONE POST
- TWO BEAMS
W-1 - EDGE LINE (WHITE)
Y-1 - EDGE LINE (YELLOW)
L-1 - LANE LINE
TD-1 - CENTER LINE (DOUBLE SOLID)

BEGIN WORK SERVICE ROAD 10 STA. 145+00.00
STA. 145+65.48 BEGIN EDGE LINES
P.C. STA. 146+37.19
P.T. STA. 147+87.34
STA. 147+75.00 BEGIN CENTER LINE
BEGIN WORK STA. 150+32.10 RELOCATED WORTHINGTON RD. NORTH
END WORK STA. 150+52.34 SERVICE RD. 10
STA. 150+52.34 ℄ SERVICE ROAD 10 = STA. 150+32.10 ℄ RELOCATED WORTHINGTON ROAD NORTH
℄ SURVEY & CONST. SERVICE ROAD 10
PC STA. 144+90.32
PT STA. 145+93.73
STA. RT 149+00 R2-1-24 SPEED LIMIT 55 S1

SEE SHEET 1062 MATCH LINE STA. 380+00 S.R. 161
SEE BELOW MATCH LINE STA. 392+50 S.R. 161
SEE BELOW MATCH LINE STA. 151+00 RELOCATED WORTHINGTON ROAD NORTH
SEE SHEET 1062 MATCH LINE STA. 138+50 WATKINS-YORK FRONTAGE ROAD
SEE BELOW MATCH LINE STA. 151+50 WATKINS-YORK FRONTAGE ROAD

WESTBOUND S.R. 161
℄ SURVEY & CONST. S.R. 161
EASTBOUND S.R. 161
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

SEE ABOVE MATCH LINE STA. 151+00 RELOCATED WORTHINGTON ROAD NORTH
SEE SHEET 1064 MATCH LINE STA. 163+00 RELOCATED WORTHINGTON ROAD NORTH
SEE ABOVE MATCH LINE STA. 392+50 S.R.161
SEE SHEET 1064 MATCH LINE STA. 405+00 S.R.161
SEE ABOVE MATCH LINE STA. 151+50 WATKINS-YORK FRONTAGE ROAD
SEE SHEET 1064 MATCH LINE STA. 164+00 WATKINS-YORK FRONTAGE ROAD

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

P.T. STA. 394+77.67
P.T. STA. 153+88.11

Johnstown 6 New Albany 18 Columbus 22 S2
E7 7'x14' STA. 401+50, LT
E1-1 12.5'x10' STA. 404+00, RT
EXIT 1/2 MILE Johnstown NORTH 37 S3

SEE SHEET 1063 MATCH LINE STA. 163+00 RELOCATED WORTHINGTON ROAD NORTH

SEE SHEET 1063 MATCH LINE STA. 405+00 S.R. 161

SEE SHEET 1063 MATCH LINE STA. 164+00 WATKINS-YORK FRONTAGE ROAD

164+00 165+00 166+00 167+00 168+00 169+00 170+00 171+00 172+00 173+00 174+00 175+00

VEHICLES OVER 4 TONS EMPTY NOW COM RUSES 55 MPH — SIB — R2-H2A-36 — SPEED LIMIT 65 — SIA — R2-1-36 STA. 409+54 LT

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

W-6 TD-2 W-5

SEE BELOW MATCH LINE STA. 175+50 RELOCATED WORTHINGTON ROAD NORTH

W-1 L-1 Y-1

WESTBOUND S.R. 161

406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00 417+00

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 161

W-2 L-2 Y-2

SEE BELOW MATCH LINE STA. 417+50 S.R.161

165+00 166+00 167+00 168+00 169+00 170+00 171+00 172+00 173+00 174+00 175+00 176+00

W-3 TD-1 W-4 ℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

SEE BELOW MATCH LINE STA. 176+50 WATKINS-YORK FRONTAGE ROAD

LEGEND

SPEED LIMIT 55 - PROPOSED SIGN

⊢ - ONE POST

⊨ - TWO POSTS

NILF - EXISTING SIGN TO BE REMOVED

W-1 - EDGE LINE (WHITE)

Y-1 - EDGE LINE (YELLOW)

L-1 - LANE LINE

TD-1 - CENTER LINE (DOUBLE SOLID)

ADOPT A HIGHWAY LITTER CONTROL NEXT 2 MILES NEWARK LETTER CARRIERS M.A.L.C./BRANCH 281

RELOCATED ℄ SURVEY & CONST. WORTHINGTON ROAD NORTH

176+00 177+00 178+00 179+00 180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00

SEE ABOVE MATCH LINE STA. 175+50 RELOCATED WORTHINGTON ROAD NORTH

W-6 TD-2 W-5

S2A S2B WEST 161 M3-4-36 M1-5-36 STA. 419+54 LT

S3 8 DIO-H8-12 STA. 422+60 LT

P.C. STA. 182+41.82

STA. 424+54.00, LT BEGIN EDGE LINE TAPER

P.T. STA. 186+90.36

SEE SHEET 1065 MATCH LINE STA. 188+00 RELOCATED WORTHINGTON ROAD NORTH

SEE ABOVE MATCH LINE STA. 417+50 S.R. 161

W-1 L-1 Y-1

WESTBOUND S.R. 161

418+00 419+00 420+00 421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 161

W-2 L-2 Y-2

SEE SHEET 1065 MATCH LINE STA. 430+00 S.R.161

177+00 178+00 179+00 180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00

SEE ABOVE MATCH LINE STA. 176+50 WATKINS-YORK FRONTAGE ROAD

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD W-3 TD-1 W-4

DIO-H8-12 STA. 422+60 RT

8 S4

SEE SHEET 1065 MATCH LINE STA. 189+00 WATKINS-YORK FRONTAGE ROAD

N

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED MMR CHECKED CSR

SIGNING AND PAVEMENT MARKING PLAN STA. 405+00 TO STA. 430+00

LIC-161-6.65 LIC-37-10.25

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SIGNING AND PAVEMENT MARKING PLAN
STA. 430+00 TO STA. 455+00

BEGIN WORK RELOCATED WORTHINGTON ROAD NORTH STA. 188+50.00

T.S. STA. 189+22.46 BEGIN CENTER LINE TRANSITION

S.C. STA. 191+87.6 END CENTER LINE TRANSITION

SEE SHEET 1064 MATCH LINE STA. 188+00 RELOCATED WORTHINGTON ROAD NORTH

SEE SHEET 1064 MATCH LINE STA. 430+00 S.R. 161

SEE SHEET 1064 MATCH LINE STA. 189+00 WATKINS-YORK FRONTAGE ROAD

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

SEE SHEET 1075 MATCH LINE WORTHINGTON RELOCATED ROAD NORTH

END LANE LINE BEGIN CHANNELIZING LINE RT.

END CHANNELIZING LINE BEGIN EDGE LINE, YELLOW RT.

P.O.T. STA. 436+46.26

P.C. STA. 439+50.00

W4-1R-48 STA. 440+75, LT.

℄ SURVEY & CONST. RAMP I

P.T. STA. 442+23.33

SEE SHEET 1079 MATCH LINE STA. 443+00 RAMP I

WESTBOUND S.R. 161

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 161

P.C. STA. 430+93.83

P.C. STA. 434+75.00

S.R. 161 STA. 440+34.31, 89' LT. RAMP I STA. 440+28.41, 16' RT.

END CHANNELIZING LINE BEGIN EDGE LINE

END DECELERATION LANE S.R. 161 STA. 439+40.51, 89' RT. -RAMP K STA. 439+29.60, 16' RT.

SEE BELOW MATCH LINE STA. 443+00 S.R. 161

SEE SHEET 1077 MATCH LINE STA. 195+00 WATKINS-YORK FRONTAGE ROAD

END LANE LINE BEGIN CHANNELIZING LINE

E5-1-I-72 STA. 440+00, RT

EXIT

P.C.C. STA. 440+29.60

℄ SURVEY & CONST. RAMP K

SEE SHEET 1080 MATCH LINE STA. 443+00 RAMP K

T.S. STA. 189+32.18 BEGIN CENTER LINE TRANSITION

S.C. STA. 191+97.37 END CENTER LINE TRANSITION

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

SIA — END 161 — EI-H1 6'x7' STA. 437+30, RT

SIB — 37 SOUTH — EI-H3 11.5'x7.5' STA. 437+30, RT

SIC — 37 NORTH Johnstown — EI-H3 15'x8.5' STA. 437+30, RT

LEGEND

- SPEED LIMIT 55 — PROPOSED SIGN
- ⊢ — ONE POST
- ⊨ — TWO POSTS
- ⊫ — TWO BEAMS
- EXISTING SIGN TO BE REMOVED

- W-1 — EDGE LINE (WHITE)
- Y-1 — EDGE LINE (YELLOW)
- L-1 — LANE LINE
- TD-1 — CENTER LINE (DOUBLE SOLID)
- CH-1 — CHANNELIZING LINE
- WT-1 — TRANSVERSE LINE, WHITE, SPACED 12' O.C.

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED MMR — CHECKED CSR

SEE ABOVE MATCH LINE STA. 443+00 S.R.161

WESTBOUND S.R. 161

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 161

P.T. STA. 445+09.42

℄ SURVEY & CONST. S.R. 37

SEE SHEET 1066 MATCH LINE STA. 455+00 S.R. 161

LIC-161-6.65
LIC-37-10.25

1049
1349

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PAVEMENT MARKING PLAN
STA. 455+00 TO STA. 480+00
SIGNING AND PAVEMENT MARKING PLAN
STA. 455+00 TO STA. 480+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

LIC-161-6.65
LIC-37-10.25

1050
1349

SEE SHEET 1079 MATCH LINE STA. 457+00 RAMP J

P.C. STA. 457+64.87

458+00 459+00 460+00 461+00 462+00 463+00 464+00 465+00 466+00 467+00

P.C.C. STA. 461+11.54

℄ SURVEY & CONST. RAMP J

S.R. 161 STA. 462+15.54, 89' LT. RAMP J, STA. 462+15.54 16' RT.

END EDGE LINE, YELLOW
BEGIN CHANNELIZING LINE RT

S3A

161 WEST
Columbus

S3B

37 NORTH
Johnstown

EI-H3 11.5'x9.5'
STA. 464+22, LT

EI-H3 15'x8.5'
STA. 464+22, LT

S2 EXIT

E5-HI-72
STA. 461+50, LT

END CHANNELIZING LINE
BEGIN LANE LINE

+94.74

P.T. STA. 466+65.00

+00

467+00

SEE SHEET 1065 MATCH LINE STA. 455+00 S.R. 161

W-1 Y-1 L-1 W-2 L-3

12' 12'

WESTBOUND S.R. 161

CH-1 WT-1

℄ SURVEY & CONST. S.R. 161

S.R. 161 STA. 461+42.92, 89' RT. - RAMP L STA. 461+40.40, 16' LT.

EASTBOUND S.R. 161

W-3 Y-2 L-2 Y-4 L-4

9' 16' 16'

CH-2 W-4

MATCH LINE STA. 467+50 S.R. 161 SEE BELOW

461+00 462+00 459+00 460+00

℄ SURVEY & CONST. RAMP L

458+00

P.C. STA. 458+44.24

W-6

SEE SHEET 1080 MATCH LINE STA. 457+00 RAMP L

S.R. 161 STA. 462+37.84 - BEGIN CHANNELIZING LINE
P.T. STA. 462+33.00 ℄ RAMP L

+77.44

+81.74

END CHANNELIZING LINE
BEGIN LANE LINE LT.

W4-1R-48
STA. 461+00, RT

S1

SPEED LIMIT 55

LEGEND

- PROPOSED SIGN
- ONE POST
- TWO POSTS
- TWO BEAMS

(W-1) - EDGE LINE (WHITE)
(Y-1) - EDGE LINE (YELLOW)
(L-1) - LANE LINE
(TD-1) - CENTER LINE (DOUBLE SOLID)
(CH-1) - CHANNELIZING LINE
(CH-1) - TRANSVERSE LINE, WHITE, SPACED 12' O.C.

P.O.T. STA. 469+10.71

+11

SEE ABOVE MATCH LINE STA. 467+50 S.R. 161

468+00 469+00

W-2 Y-1 L-1

12'

WESTBOUND S.R. 37

S4 9 D10-H8-12 STA. 475+40 LT

W8-H22-48
STA. 477+00 RT

S6 WATCH FOR ICE ON BRIDGE

12'

468+00 469+00 470+00 471+00 472+00 473+00 474+00 475+00 476+00 477+00 478+00 479+00

℄ SURVEY & CONST. S.R. 161

EASTBOUND S.R. 37

12' 16'

L-4

+69.75

W-4 Y-2 L-2

D10-H8-12 STA. 475+40 RT

S5 9

END S.R. 161
BEGIN S.R. 37

+38

MATCH LINE STA. 480+00 S.R. 37 SEE SHEET 1067

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SIGNING AND PAVEMENT MARKING PLAN
STA. 480+00 TO STA. 505+00

CALCULATED MMR
CHECKED CSR

HORIZONTAL SCALE IN FEET
0 25 50 100

LIC-161-6.65
LIC-37-10.25

105
349

SEE SHEET 1060
MATCH LINE STA. 480+00 S.R. 37

STA. 481+76.39
END 644 PAVEMENT MARKING
BEGIN 646 PAVEMENT MARKING

STA 484+65.19
END 646 PAVEMENT MARKING
BEGIN 644 PAVEMENT MARKING

S3 WATCH FOR ICE ON BRIDGE
W8-H22-48
STA. 491+00 LT

W-1 Y-1 L-1 W-2 Y-2 L-2 W-3 Y-3 L-3

481+00 482+00 483+00 484+00 485+00 486+00 487+00 488+00 489+00 490+00 491+00 492+00

WESTBOUND S.R. 37

℄ SURVEY & CONST. S.R. 37

EASTBOUND S.R. 37

12'/12'

Y-4 L-4 W-4 Y-5 L-5 W-5 Y-6 L-6 W-6

STA. 481+29.83
END 644 PAVEMENT MARKING
BEGIN 646 PAVEMENT MARKING

MOOTS RUN

M3-3-36
M1-5-2-36
STA. 485+00 RT

S1B 37 SOUTH S1A

STA 484+18.63
END 646 PAVEMENT MARKING
BEGIN 644 PAVEMENT MARKING

P.C. STA. 488+61.58

R2-1-36
STA. 490+00 RT

S2A SPEED LIMIT 65

S2B 55 MPH VEHICLES OVER 4 TONS GVW ARE NOT ALLOWED IN THE TUNNEL

R2-H2A-36

SEE BELOW
MATCH LINE STA. 492+50

LEGEND

SPEED LIMIT 55 - PROPOSED SIGN
⊢ - ONE POST
⊨ - TWO POSTS
⊨ - TWO BEAMS

W-1 - EDGE LINE (WHITE)
Y-1 - EDGE LINE (YELLOW)
L-1 - LANE LINE
TD-1 - CENTER LINE (DOUBLE SOLID)
SL-1 - STOP LINE

S4 37 NORTH Johnstown EXIT ½ MILE

E1-1 12'x10'
STA. 498+00 LT

24+00 23+00 22+00 21+00 20+00

SEE ABOVE
MATCH LINE STA. 492+50

W-3 Y-3 L-3

WESTBOUND S.R. 37

493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504+00

℄ SURVEY & CONST. S.R. 37

EASTBOUND S.R. 37

W-6 Y-6 L-6

℄ SURVEY & CONST. OUTVILLE ROAD

P.T. STA. 494+45.94

S5 STOP R1-1-30
STA. 497+75 LT

STA. 497+55
BEGIN CENTER LINE
+75

BEGIN WORK
OUTVILLE-MORSE
FRONTAGE ROAD
STA. 497+43.92

SL-1

S6 SPEED LIMIT 55
R2-1-24
STA. 500+50 RT

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

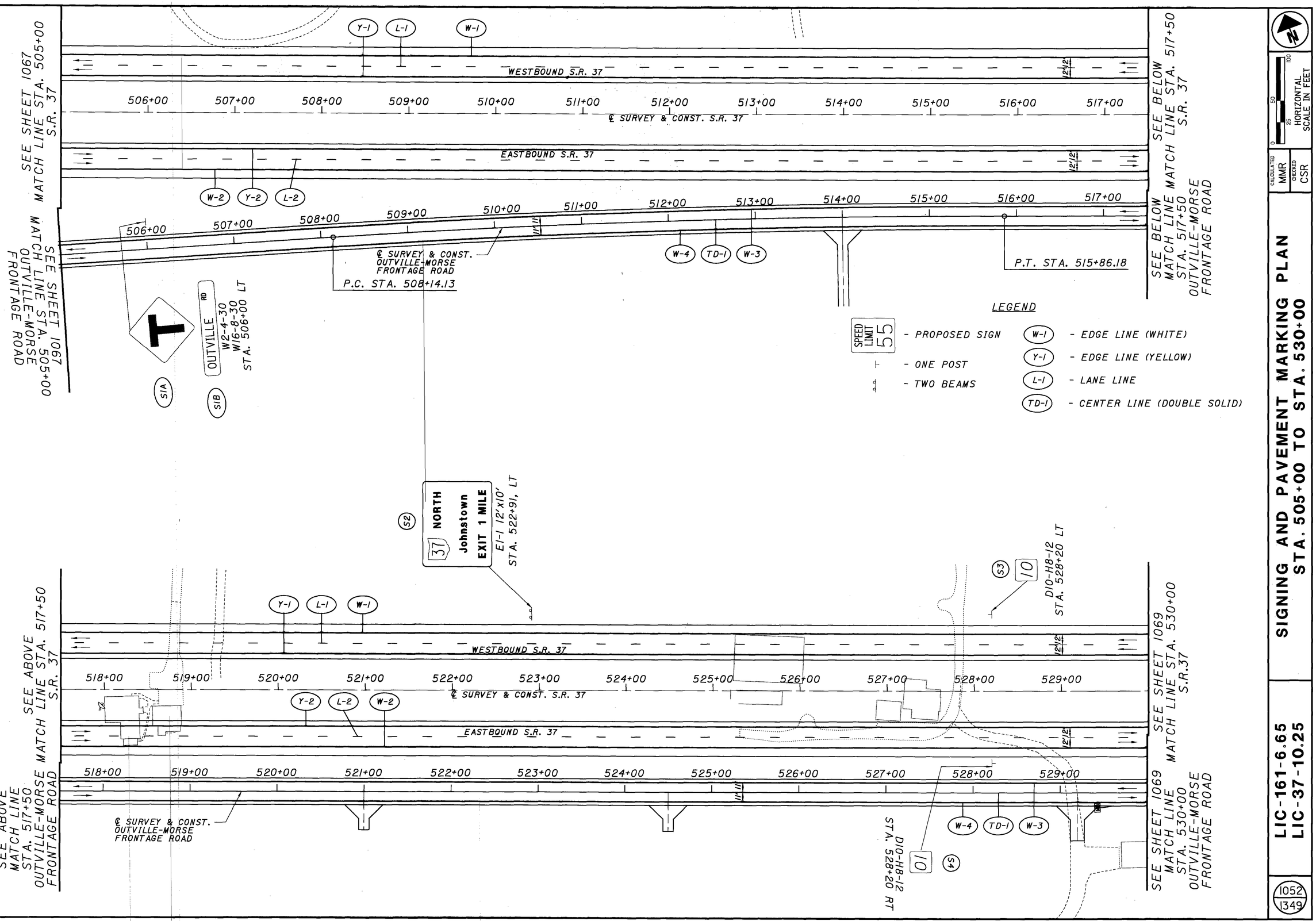
S7 W3-1A-30
STA. 503+00 LT

W-8 TD-1 W-7

SEE SHEET 1068
MATCH LINE STA. 505+00
S.R. 37

SEE SHEET 1068
MATCH LINE STA. 505+00
OUTVILLE-MORSE FRONTAGE ROAD

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SIGNING AND PAVEMENT MARKING PLAN
STA. 505+00 TO STA. 530+00

LIC-161-6.65
LIC-37-10.25

1052
1349

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BEGIN WORK
C.R. 539A EXTENSION
STA. 295+50.00

STA. 295+50
BEGIN EDGE LINES
BEGIN CENTER LINE
MATCH EXISTING
STRIPING

292+00 293+00 294+00 295+00 296+00 297+00 298+00 299+00 300+00 301+00 302+00 303+00 304+00

℄ SURVEY & CONST.
C.R. 539A EXTENSION

SEE BELOW
MATCH LINE
STA.305+00
C.R. 539A
EXTENSION

SEE SHEET 1068
MATCH LINE
STA. 530+00
S.R. 37

R2-1-24
STA.
298+00 RT

SPEED LIMIT 55 (S1)

Y-1 L-1 W-1

W-6 TD-2 W-5

WESTBOUND S.R. 37

531+00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00 541+00 542+00

℄ SURVEY & CONST. S.R. 37

W-2 L-2 Y-2

EASTBOUND S.R. 37

12'12'

SEE BELOW
MATCH LINE
STA. 542+50
S.R. 37

SEE SHEET 1068
MATCH LINE
STA. 530+00
OUTVILLE-MORSE
FRONTAGE ROAD

531+00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00 541+00 542+00

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

W-4 TD-1 W-3

SEE BELOW
MATCH LINE
STA. 542+50
OUTVILLE-MORSE
FRONTAGE ROAD

LEGEND

SPEED LIMIT 55 - PROPOSED SIGN
\- ONE POST
TD-1 - CENTER LINE (DOUBLE SOLID)
W-1 - EDGE LINE (WHITE)
Y-1 - EDGE LINE (YELLOW)
L-1 - LANE LINE

S2B VEHICLES OVER 4 TONS EMPTY NON CDM BUSES 55 MPH

S2A SPEED LIMIT 65

R2-1-36 R2-H2A-36 LT
STA. 546+00 LT

SEE ABOVE
MATCH LINE
STA.305+00
C.R. 539A
EXTENSION

306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00 314+00 315+00 316+00 317+00

℄ SURVEY & CONST.
C.R. 539A EXTENSION

P.C. STA. 312+13.68

P.T. STA. 314+74.64

SEE SHEET 1070
MATCH LINE
STA.317+50
C.R. 539A
EXTENSION

W-6 TD-2 W-5 Y-1 L-1 W-1

SEE ABOVE
MATCH LINE
STA. 542+50
S.R. 37

WESTBOUND S.R. 37

12'12'

543+00 544+00 545+00 546+00 547+00 548+00 549+00 550+00 551+00 552+00 553+00 554+00

℄ SURVEY & CONST. S.R. 37

W-2 L-2 Y-2

EASTBOUND S.R. 37

12'12'

SEE SHEET 1070
MATCH LINE
S.R. 37
STA. 555+00

SEE ABOVE
MATCH LINE
STA. 542+50
OUTVILLE-MORSE
FRONTAGE ROAD

543+00 544+00 545+00 546+00 547+00 548+00 549+00 550+00 551+00 552+00 553+00 554+00

11'11'

W-4 TD-1 W-3

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

SEE SHEET 1070
MATCH LINE
STA. 555+00
OUTVILLE-MORSE
FRONTAGE ROAD

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

SIGNING AND PAVEMENT MARKING PLAN
STA. 530+00 TO STA. 555+00

LIC-161-6.65
LIC-37-10.25

1053
1349

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SIGNING AND PAVEMENT MARKING PLAN
STA. 555+00 TO STA. 580+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

LIC-161-6.65
LIC-37-10.25

1054
1349

SEE SHEET 1069 MATCH LINE STA. 555+00 OUTVILLE-MORSE FRONTAGE ROAD

SEE SHEET 1069 MATCH LINE S.R. 37 STA. 555+00

SEE SHEET 1069 MATCH LINE STA.317+50 C.R. 539A EXTENSION

℄ SURVEY & CONST. C.R. 539A EXTENSION

℄ SURVEY & CONST. S.R. 37

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

WESTBOUND S.R. 37

EASTBOUND S.R. 37

P.C. STA. 321+76.51

P.T. STA. 323+33.91

STA. 564+65 R3-4-36

STA. 565+35 R3-4-36

R3-H4A-24

R3-H4A-24

STA. 329+50 RT W8-H22-30

SEE BELOW MATCH LINE STA.330+00 C.R. 539A EXTENSION

SEE BELOW MATCH LINE S.R. 37 STA. 567+50

SEE BELOW MATCH LINE STA. 567+50 OUTVILLE-MORSE FRONTAGE ROAD

WATCH FOR ICE ON BRIDGE

MORSE ROAD

EMERGENCY OR AUTHORIZED VEHICLES ONLY

EMERGENCY VEHICLES AUTHORIZED ONLY

ONLY

LEGEND

- PROPOSED SIGN
- ONE POST
- TWO POSTS
- BACK TO BACK SIGNS
- EXISTING SIGN TO BE REMOVED
- W-1 EDGE LINE (WHITE)
- Y-1 EDGE LINE (YELLOW)
- L-1 LANE LINE
- TD-1 CENTER LINE (DOUBLE SOLID)
- SIGN MOUNTED ON BARRIER

SPEED LIMIT 55

R2-1-24 STA. 560+00 LT

W14-2-24 STA. 562+00 RT

NO OUTLET

LICKING COUNTY MORSE ROAD

STOP

R2-1-24 STA. 564+00 RT

W8-H22-36 STA. 567+00 RT

STA. 336+50.26 C.R. 539 A END 644 PAVEMENT MARKING BEGIN 646 PAVEMENT MARKING

℄ SURVEY & CONST. MORSE ROAD

STA. 573+94.05 END 644 PAVEMENT MARKING BEGIN 646 PAVEMENT MARKING

STA. 338+51.01 C.R. 539 A END 646 PAVEMENT MARKING BEGIN 644 PAVEMENT MARKING

STA. 575+93.72 END 646 PAVEMENT MARKING BEGIN 644 PAVEMENT MARKING

P.C. STA. 333+88.38

P.T. STA. 338+64.44

P.C. STA. 571+38.22

P.T. STA. 576+05.61

SEE ABOVE MATCH LINE STA.330+00 C.R. 539A EXTENSION

SEE ABOVE MATCH LINE S.R. 37 STA. 567+50

SEE ABOVE MATCH LINE STA. 567+50 OUTVILLE-MORSE FRONTAGE ROAD

SEE SHEET 1071 MATCH LINE STA.342+50 C.R. 539A EXTENSION

SEE SHEET 1071 MATCH LINE S.R. 37 STA. 580+00

SEE SHEET 1071 MATCH LINE STA. 580+00 OUTVILLE-MORSE FRONTAGE ROAD

℄ SURVEY & CONST. S.R. 37

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

P.C. STA. 571+33.81

STA. 573+92.95 END 644 PAVEMENT MARKING BEGIN 646 PAVEMENT MARKING

STA. 573+95.98 OUTVILLE-MORSE FRONTAGE ROAD END 644 PAVEMENT MARKING BEGIN 646 PAVEMENT MARKING

CHINNEY CREEK

P.T. STA. 576+01.20

BUSINESS ENTRANCE

STA. 575+94.82 END 646 PAVEMENT MARKING BEGIN 644 PAVEMENT MARKING

STA. 575+76.73 OUTVILLE-MORSE FRONTAGE ROAD END 646 PAVEMENT MARKING BEGIN 644 PAVEMENT MARKING

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SIGNING AND PAVEMENT MARKING PLAN
STA. 580+00 TO STA. 605+00

CALCULATED MMR
CHECKED CSR

0 25 50 100
HORIZONTAL SCALE IN FEET

LIC-161-6.65
LIC-37-10.25

1055
1349

SEE SHEET 1070 MATCH LINE STA.342+50 C.R. 539A EXTENSION

SEE SHEET 1070 MATCH LINE S.R. 37 STA. 580+00

SEE SHEET 1070 MATCH LINE STA. 580+00 OUTVILLE-MORSE FRONTAGE ROAD

SEE ABOVE MATCH LINE STA.355+00 C.R. 539A EXTENSION

SEE ABOVE MATCH LINE S.R. 37 STA. 592+50

SEE SHEET 1072 MATCH LINE STA. 605+00 S.R. 37

WESTBOUND S.R. 37

℄ SURVEY & CONST. S.R. 37

EASTBOUND S.R. 37

℄ SURVEY & CONST. C.R. 539A EXTENSION

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

343+00 344+00 345+00 346+00 347+00 348+00 349+00 350+00 351+00 352+00 353+00 354+00

581+00 582+00 583+00 584+00 585+00 586+00 587+00 588+00 589+00 590+00 591+00 592+00

593+00 594+00 595+00 596+00 597+00 598+00 599+00 600+00 601+00 602+00 603+00 604+00

356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00

D10-H8-12 STA. 581+00 LT

D10-H8-12 STA. 581+00 RT

W8-H22-30 STA. 345+50 LT

W8-H22-36 STA. 583+00 LT

W8-H22-30 STA. 582+00 LT

R2-I-24 STA. 583+00 LT

R2-I-36 R2-H2A-36 STA. 583+50 LT

R2-I-24 STA. 364+00 LT

WATCH FOR ICE ON BRIDGE

SPEED LIMIT 55

SPEED LIMIT 65

VEHICLES OVER 4 TONS GAPTY MAY USE RIGHT LANE

HIGH WIND WHEN FLASHING

STA. 583+21 END CENTER LINE

P.O.T. STA. 584+40.00

END WORK OUTVILLE-MORSE FRONTAGE ROAD STA. 584+40.00

P.O.T. STA. 364+66.85

T.S. STA. 356+04.70

S.C. STA. 357+63.70

C.S. STA. 362+38.34

S.T. STA. 363+97.34

STA. 364+40 END EDGE LINES END CENTER LINE MATCH EXISTING STRIPING

END WORK C.R. 539A EXTENSION STA. 364+40.00

STOP

WASHINGTON ROAD S.R. 37

C.R. 539A

W6-3-36

W6-3-36

Y-1 W-1 L-1 TD-1 W-3 W-4 Y-2 L-2 W-2

W-5 TD-2 W-6

S1 S2 S3 S4 S5 S6 S7A S7B S8

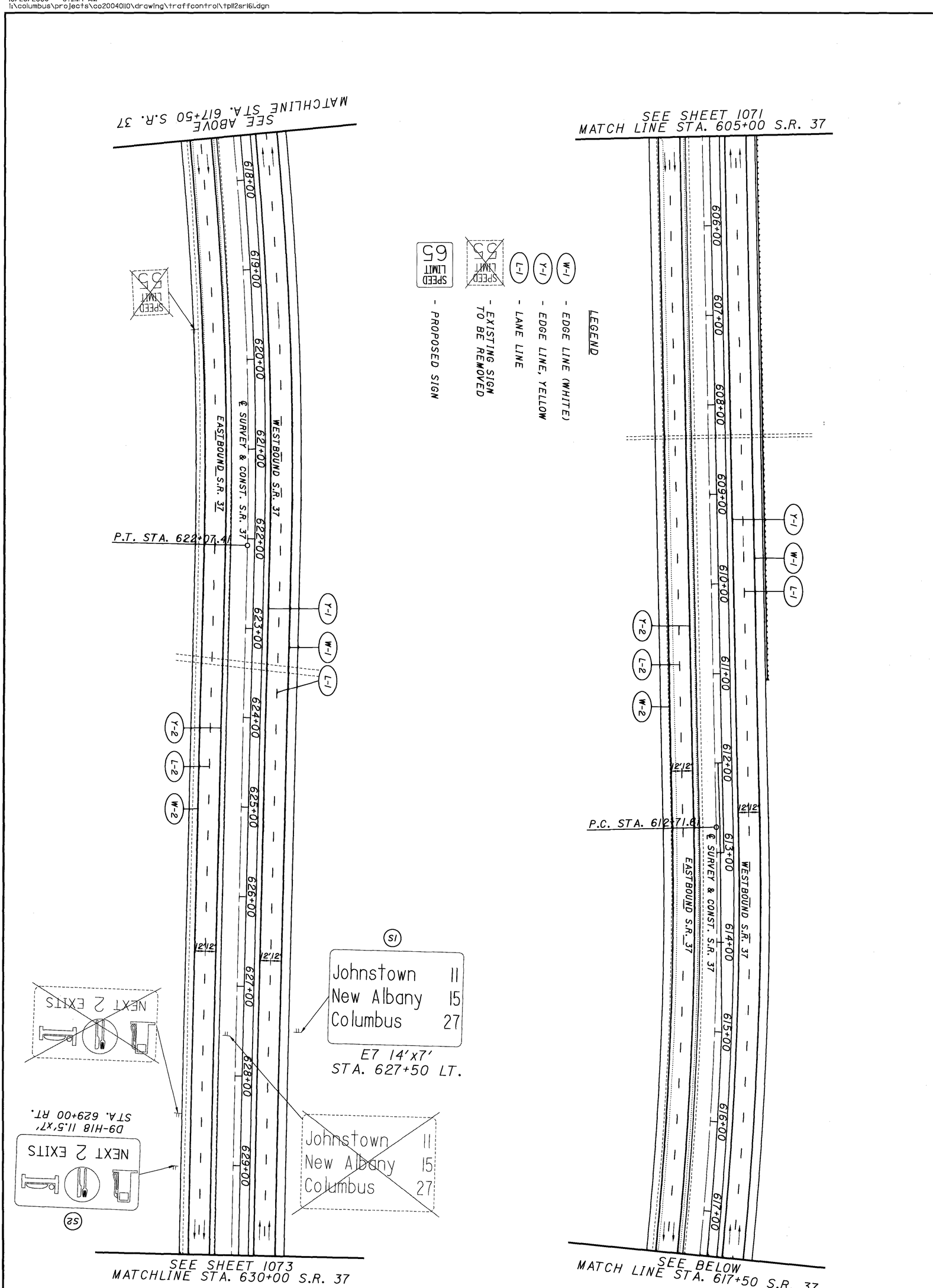
LEGEND

- SPEED LIMIT 55 — PROPOSED SIGN
- ⊢ — ONE POST
- ⊢⊢ — TWO POSTS
- ⊥ — SIGN MONTED ON BARRIER
- EXISTING SIGN TO BE REMOVED
- W-1 — EDGE LINE (WHITE)
- Y-1 — EDGE LINE (YELLOW)
- L-1 — LANE LINE
- TD-1 — CENTER LINE (DOUBLE SOLID)
- EXISTING SIGN TO REMAIN

12'/12'

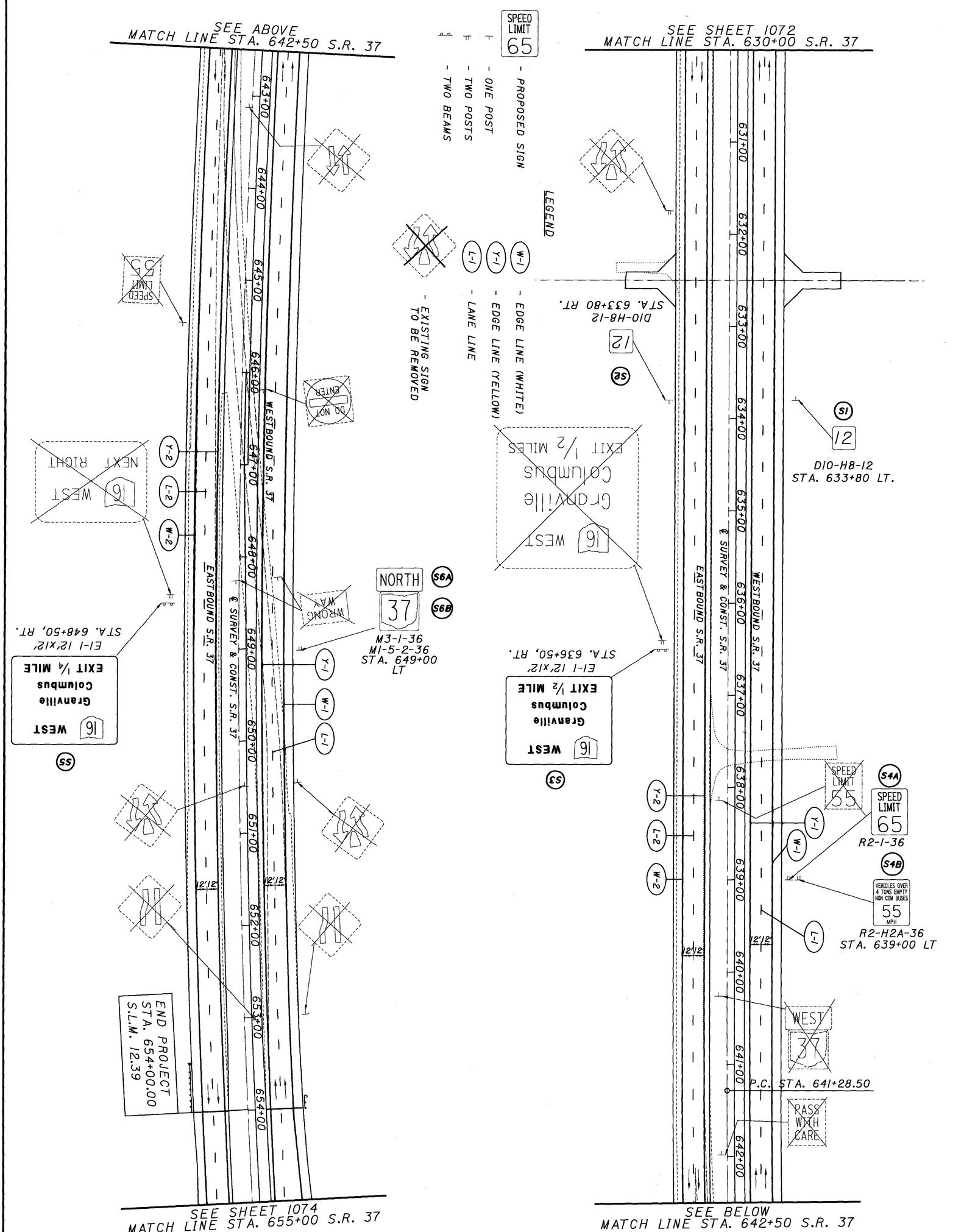
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1056 / 1349	LIC-161-6.65 LIC-37-10.25	SIGNING AND PAVEMENT MARKING PLAN STA. 605+00 TO STA. 630+00	CALCULATED MMR CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

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1057 / 1349	LIC-161-6.65 LIC-37-10.25	SIGNING AND PAVEMENT MARKING PLAN STA. 630+00 TO STA. 655+00	CALCULATED MMR CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET

SEE SHEET 1073
MATCH LINE STA. 655+00 S.R. 37

P.T. STA. 655+43.68

L-1 Y-1 W-1 +81.50 LEFT LANE ENDS MERGE RIGHT L-2 +81.5

STA. 662+51
END EDGE LINE
END CHANNELIZING LINE
MATCH EXISTING STRIPING

YIELD CH-1 W-2

12'/12' WESTBOUND LANES

656+00 657+00 658+00 659+00 660+00 661+00 662+00 663+00 664+00 665+00 666+00 667+00

℄ SURVEY & CONST. S.R. 37

12'/12' EASTBOUND LANES

L-3 +76 Y-2 +76 LEFT LANE ENDS W-3 +84 L-4 WT-1 CH-2 W-4

SEE BELOW
MATCH LINE STA. 667+50 S.R. 37

16 EAST Newark

16 EAST 661 Granville Lancaster EXIT 1/2 MILES

16 WEST Granville Columbus

STA. 659+84
BEGIN CHANNELIZING LINE

STA. 662+00
END EDGE LINES
END LANE LINE
MATCH EXISTING STRIPING

STA. 661+72
END EDGE LINE
END CHANNELIZING LINE
MATCH EXISTING STRIPING

EXIT

STA. 670+62
END CHANNELIZING LINE
BEGIN LANE LINE

STA. 668+76
BEGIN EDGE LINE
BEGIN CHANNELIZING LINE
MATCH EXISTING STRIPING

L-1 Y-1 W-2 WT-2 CH-3 L-5 +62 +74 +74 W-5

STA. 679+00
END EDGE LINES
END LANE LINE
MATCH EXISTING STRIPING

SEE ABOVE
MATCH LINE STA. 667+50 S.R. 37

12'/12' WESTBOUND LANES

668+00 669+00 670+00 671+00 672+00 673+00 674+00 675+00 676+00 677+00 678+00 679+00 680+00

℄ SURVEY & CONST. S.R. 37

12'/12' EASTBOUND LANES

LEGEND

- LEFT LANE ENDS — EXISTING SIGN TO BE REMOVED
- EXISTING SIGN TO BE REMAIN IN PLACE
- TWO BEAMS

W-1 - EDGE LINE (WHITE)
Y-1 - EDGE LINE (YELLOW)
L-1 - LANE LINE
CH-1 - CHANNELIZING LINE
WT-1 - TRANSVERSE LINE, WHITE, SPACED 12' O.C.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
DRAWN CSR

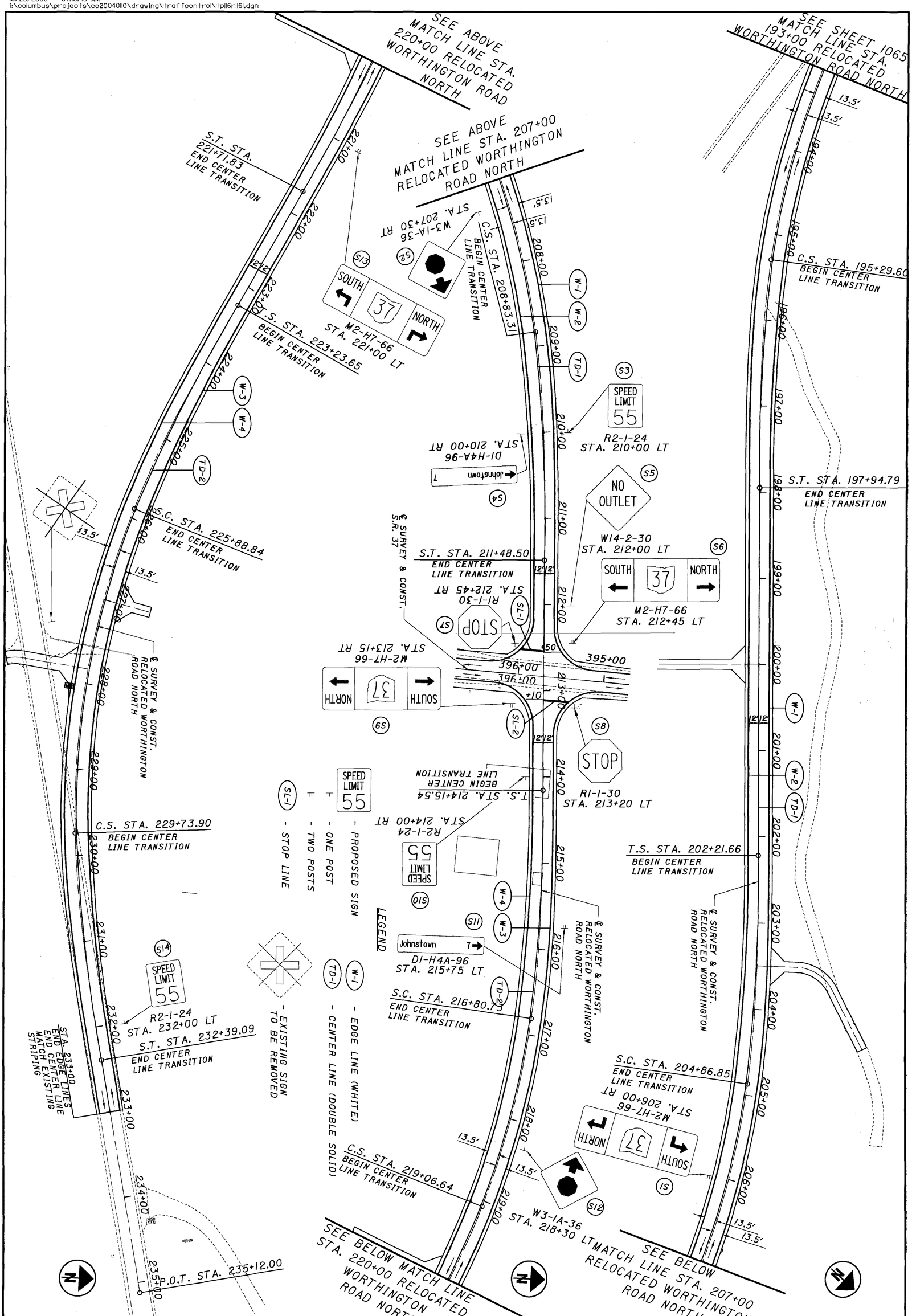
SIGNING AND PAVEMENT MARKING PLAN
STA. 655+00 TO STA. 680+00

LIC-161-6.65
LIC-37-10.25

1058
1349

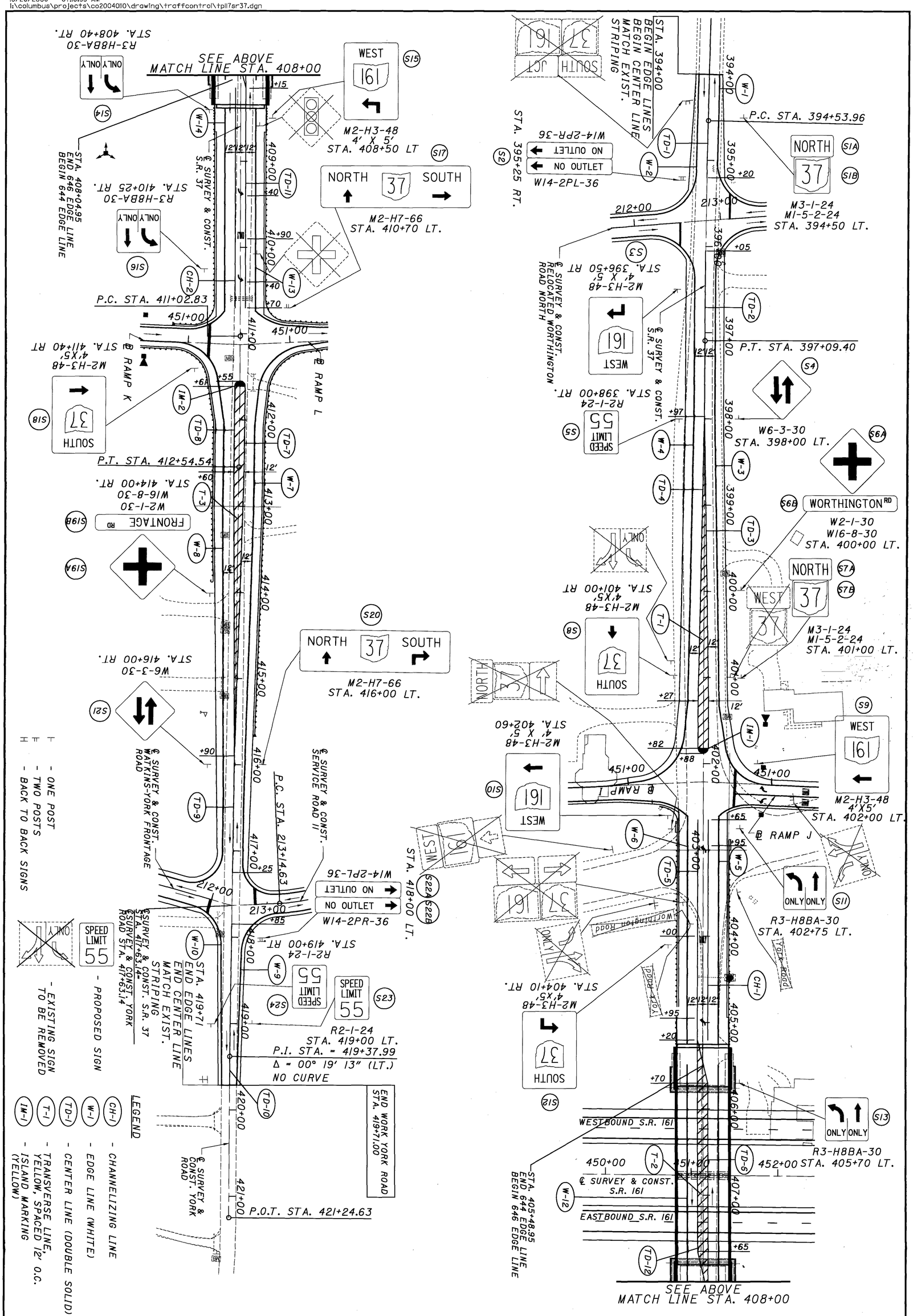
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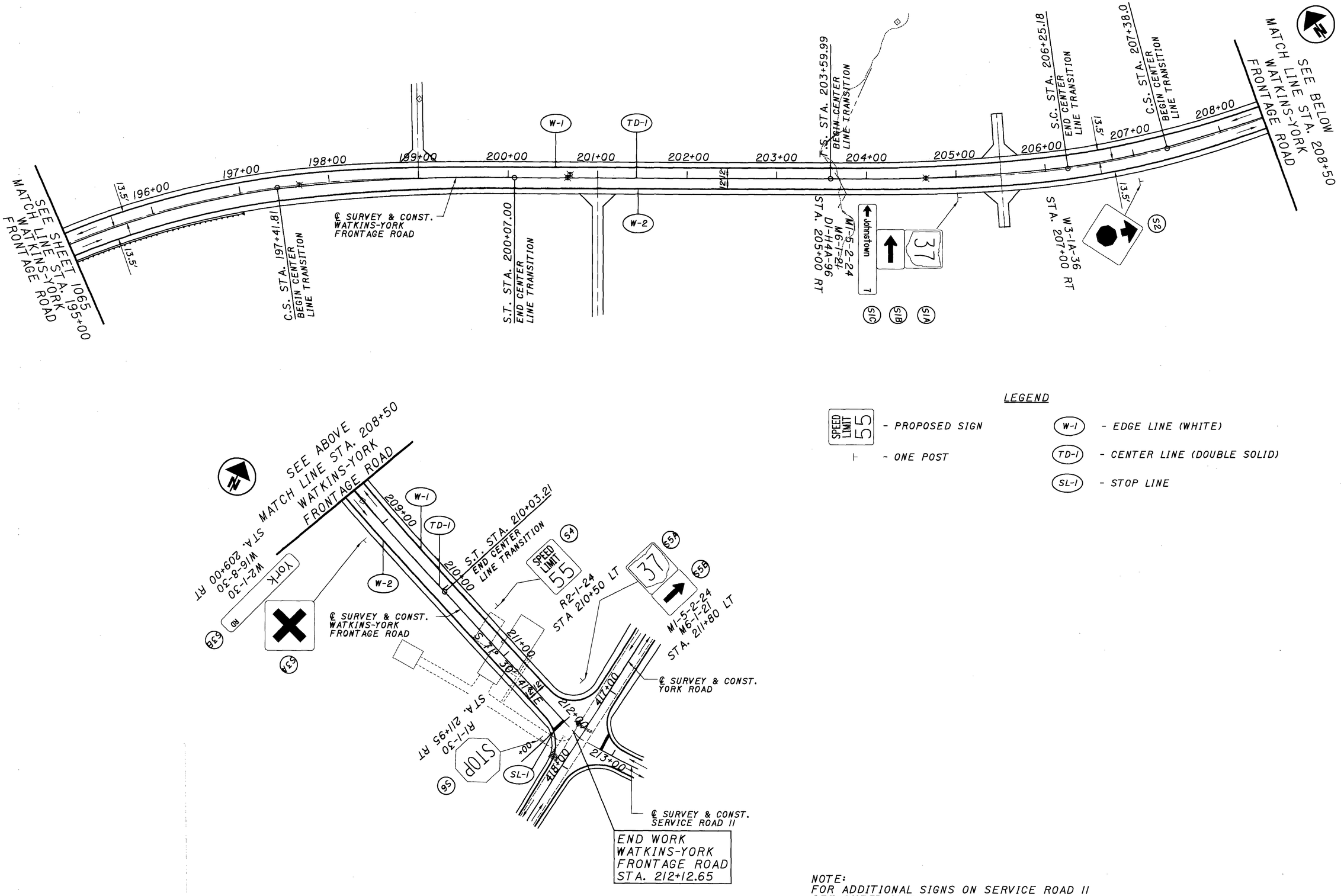


1059 / 1349	LIC-161-6.65 LIC-37-10.25	SIGNING AND PAVEMENT MARKING PLAN RELOCATED WORTHINGTON ROAD NORTH	CALCULATED MMR CHECKED CSR 0 50 25 100 HORIZONTAL SCALE IN FEET

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1060 / 1349	LIC-161-6.65 LIC-37-10.25	SIGNING AND PAVEMENT MARKING PLAN S.R. 37 / YORK ROAD	CALCULATED MMR CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET



LEGEND

- SPEED LIMIT 55 - PROPOSED SIGN
- ⊢ - ONE POST
- (W-1) - EDGE LINE (WHITE)
- (TD-1) - CENTER LINE (DOUBLE SOLID)
- (SL-1) - STOP LINE

NOTE:
FOR ADDITIONAL SIGNS ON SERVICE ROAD II
SEE SHEET 1078.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

SIGNING AND PAVEMENT MARKING PLAN
WATKINS-YORK FRONTAGE ROAD

LIC-161-6.65
LIC-37-10.25

1061
1349

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NOTE:
FOR ADDITIONAL SIGNS ON WATKINS-YORK FRONTAGE ROAD SEE SHEET 1077.

BEGIN WORK
SERVICE ROAD 11
STA. 212+70.82

℄ SURVEY & CONST.
WATKINS-YORK
FRONTAGE ROAD

STA. M1-5-2-24 M6-1-21 212+90 LT

STOP

R1-1-24 STA. 212+90 LT

P.T. STA. 216+04.76

P.C. STA. 213+14.63

STA. 215+70.65 ℄ BEGIN CENTER LINE TRANSITION

STA. 216+85.59, 2.25' RT. END CENTER LINE TRANSITION

P.C. STA. 216+21.85

STA. W3-1A-30 217+00 LT

STA. D7-H2A-18 215+50 LT

W2-1-30 VONK RD

W4-2-30 213+00 RT

NO OUTLET

STA. 212+85 BEGIN CENTER LINE

STA. 212+65 BEGIN EDGE LINES

W13-5-30 W13-1-24 244+50 RT

25 M.P.H.

STA. M1-5-2-24 M1-5-2-96 LT D1-H4A-00 219+00

Lombardy

STA. 219+00

13.25'

P.T. STA. 221+43.00

STA. R2-1-24 222+00 RT

SPEED LIMIT 55

P.C. STA. 223+78.25

MATCH LINE STA. 224+00
SERVICE ROAD 11
SEE BELOW

℄ SURVEY & CONST.
SERVICE ROAD 11

SEE ABOVE
MATCH LINE STA. 224+00
SERVICE ROAD 11

STA. 226+29.94, 2.25' RT. BEGIN CENTER LINE TRANSITION

P.T. STA. 227+01.03

STA. 228+85.88 ℄ END CENTER LINE TRANSITION

STA. W1-5-30 W13-1-24 228+00 LT

25 M.P.H.

SEE ABOVE
MATCH LINE STA. 237+00
SERVICE ROAD 11

STA. R2-1-24 241+00 LT

SPEED LIMIT 55

STA. 242+00
END CENTER LINE

STA. 243+00
END EDGE LINES

END WORK
SERVICE ROAD 11
STA. 242+99.58

℄ SURVEY & CONST.
SERVICE ROAD 11

SEE BELOW
MATCH LINE STA. 237+00
SERVICE ROAD 11

LEGEND

SPEED LIMIT 55 - PROPOSED SIGN

H - ONE POST

H - BACK TO BACK SIGNS

W-1 - EDGE LINE (WHITE)

TD-1 - CENTER LINE (DOUBLE SOLID)

SL-1 - STOP LINE

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

SIGNING AND PAVEMENT MARKING PLAN
SERVICE ROAD 11

LIC-161-6.65
LIC-37-10.25

1062
1349

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NOTE:
FOR EXISTING SIGNS ON S.R. 37 SEE SHEET 1076.

LEGEND

- SPEED LIMIT 55 - PROPOSED SIGN
- T - ONE POST
- T T - TWO POSTS
- H - BACK TO BACK SIGNS
- W-1 - EDGE LINE (WHITE)
- Y-1 - EDGE LINE (YELLOW)
- SL-1 - STOP LINE
- CH-1 - CHANNELIZING LINE (WHITE)
- SPEED LIMIT 55 - EXISTING SIGN TO BE REMOVED

SEE SHEET 1065
MATCH LINE 443+00
RAMP I

P.C. STA. 447+24.19
℄ SURVEY & CONST. RAMP I
P.T. STA. 449+62.85
BEGIN WORK RAMP J STA. 450+21.62
END WORK RAMP I STA. 451+87.75
℄ SURVEY & CONST. S.R. 37
R5-H10D-36 STA. 450+50 LT
R5-1-36 STA. 450+60 RT
R5-1-36 STA. 450+60 LT
R1-1-36
R5-1A-36 STA. 452+57 LT & RT
P.C. STA. 452+73.30
℄ SURVEY & CONST. RAMP J
P.T. STA. 455+55.03
R3-H8BD-36 STA. 453+00 LT
W3-1A-36 STA. 455+77 LT
SEE SHEET 1066
MATCH LINE STA. 457+00
RAMP J

LIC-161-6.65
LIC-37-10.25

SIGNING AND PAVEMENT MARKING PLAN RAMPS I AND J

CALCULATED MMR
CHECKED CSR

0 50 25 100
HORIZONTAL SCALE IN FEET

SEE SHEET 1065
MATCH LINE STA. 443+00
RAMP K

P.T. STA.
443+25.33

444+00

445+00

446+00

P.C. STA. 446+63.39

447+00

448+00

449+00

P.T. STA. 449+13.43

450+00

451+00

451+41.60

452+00

453+00

454+00

455+00

456+00

P.T. STA.
455+60.98

SEE SHEET 1066
MATCH LINE STA. 457+00
RAMP L

W3-1A-36
STA. 446+05 RT

@ SURVEY & CONST. RAMP K

WRONG WAY
R5-1A-36
STA. 449+25, LT

STOP
R1-1-36

DO NOT ENTER
R5-1-36
STA. 451+20 LT

END WORK
RAMP K
STA. 451+60.74

W3-1-24
M1-5-2-24
M6-1-21
STA. 450+90 LT

NORTH

410+00

412+00

P.C. STA. 452+88.16

STOP
R1-1-36

DO NOT ENTER
R5-1-36
STA. 451+05 RT

WRONG WAY

W3-1-24
M1-5-2-24
M6-1-21
01-H4A-96
STA. 449+25

Johnstown

NORTH

@ SURVEY & CONST.
S.R. 37

BEGIN WORK
RAMP L
STA. 450+41.60

R5-H10D-36
STA. 452+00 RT

PROHIBITED
FOR MOTOR VEHICLES
EXCEPT TAXI & BUSES
WITH PERMIT

@ SURVEY & CONST. RAMP L

W-1 W-2 Y-1 Y-2 SL-1

LEGEND

STOP - PROPOSED SIGN

⊢ - ONE POST

⊨ - TWO POSTS

H - BACK TO BACK SIGNS

(W-1) - EDGE LINE (WHITE)

(Y-1) - EDGE LINE (YELLOW)

(SL-1) - STOP LINE

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MMR
CHECKED CSR

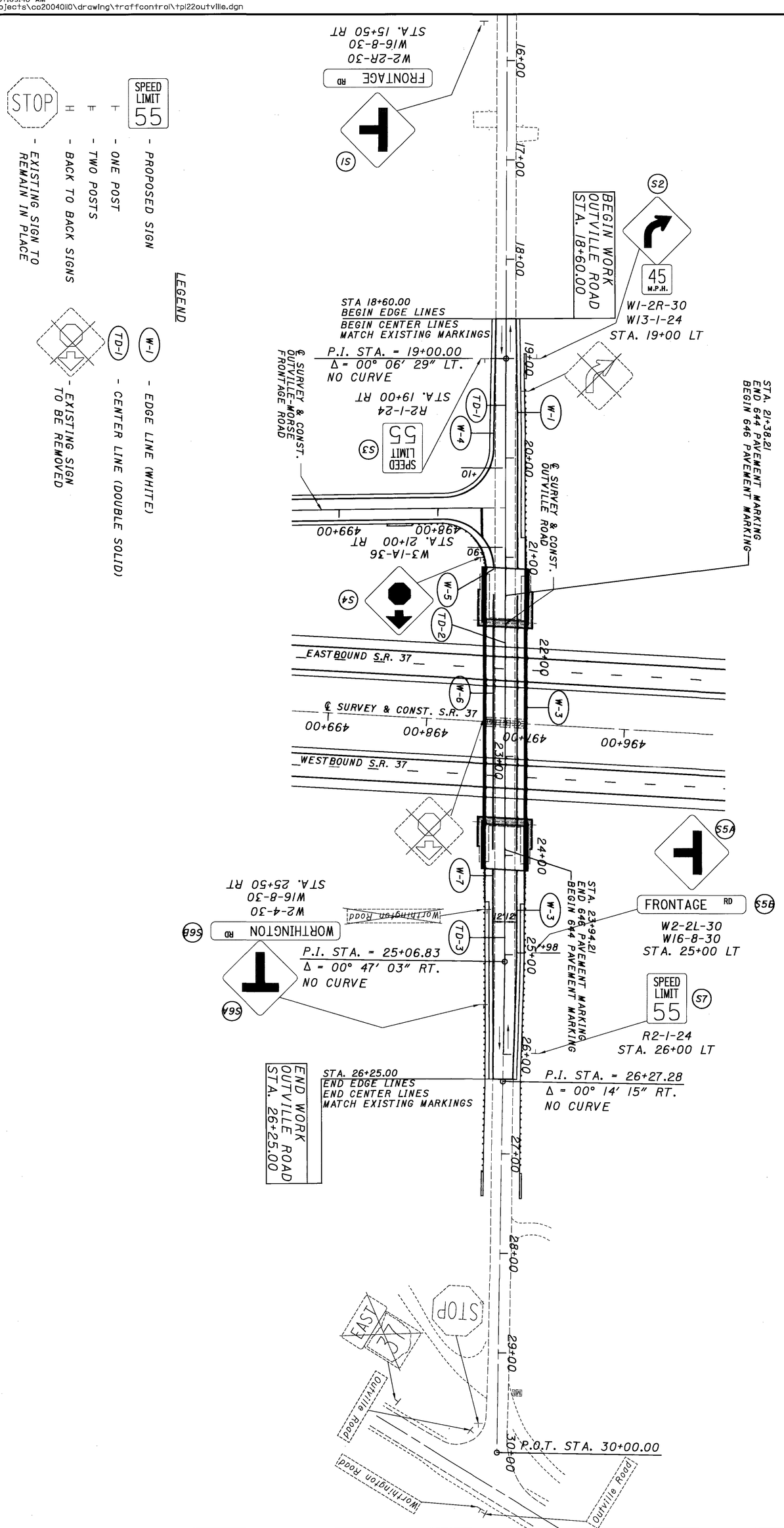
SIGNING AND PAVEMENT MARKING PLAN
RAMPS K AND L

LIC-161-6.65
LIC-37-10.25

1064
1349

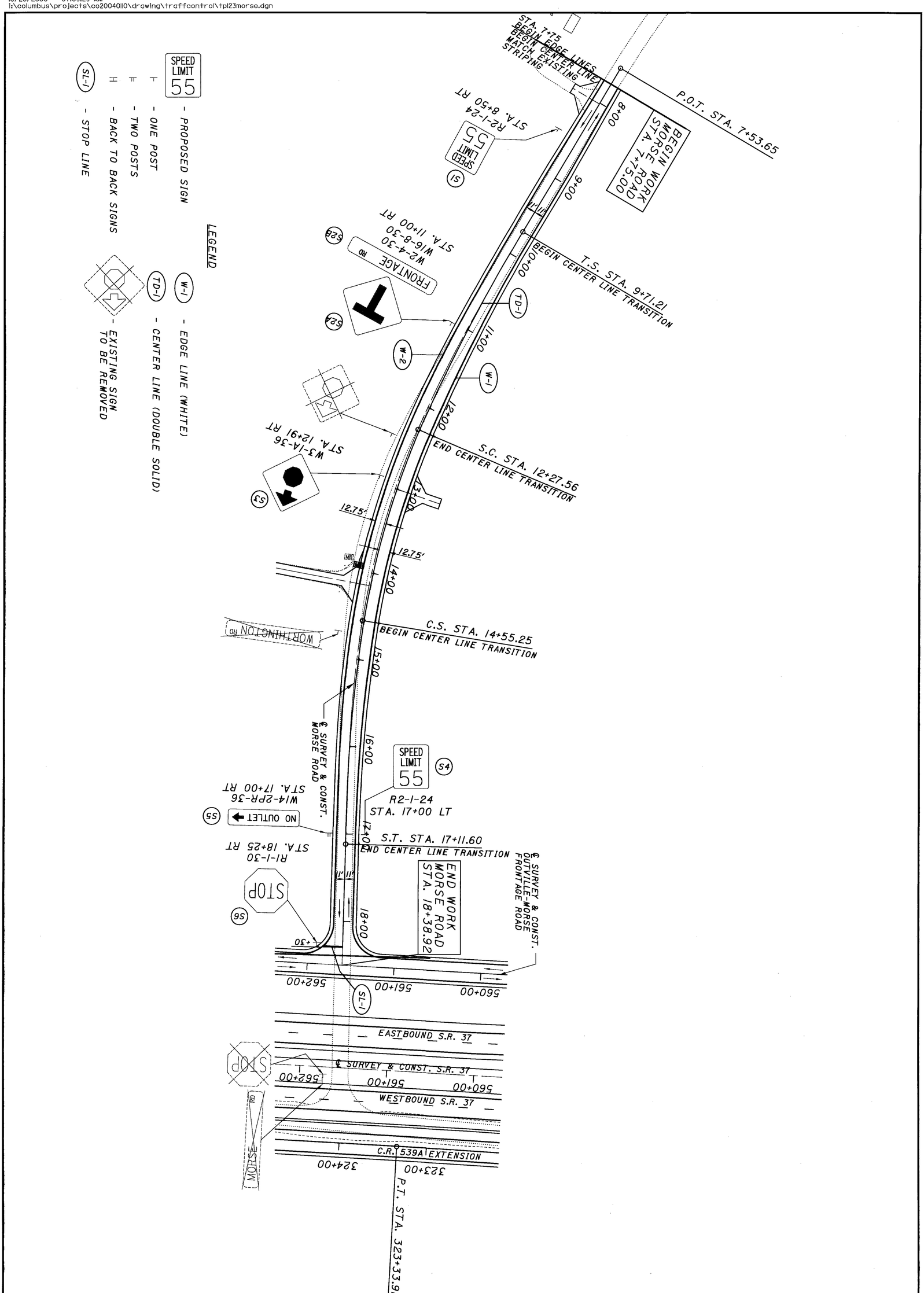
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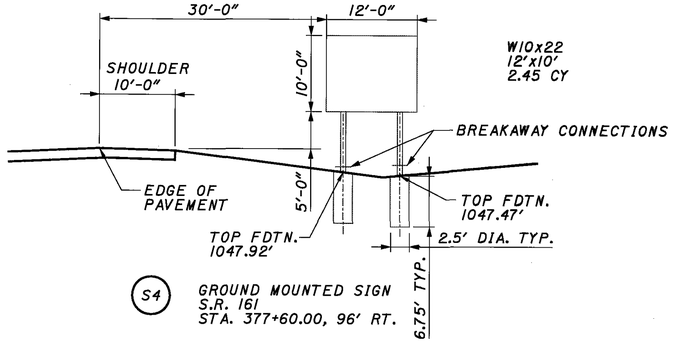


1065 / 1349	**LIC-161-6.65** **LIC-37-10.25**	**SIGNING AND PAVEMENT MARKING PLAN** **OUTVILLE ROAD**	CALCULATED MMR CHECKED CSR 0 50 25 100 HORIZONTAL SCALE IN FEET

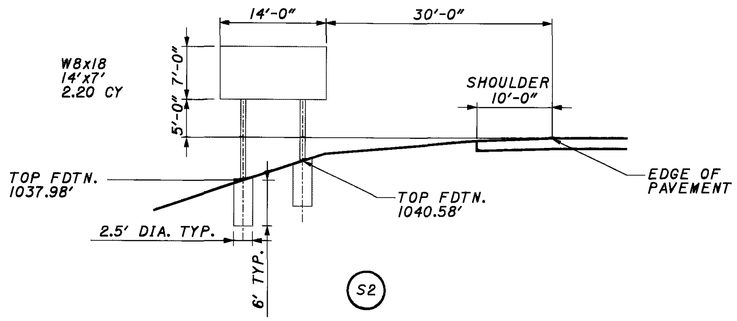
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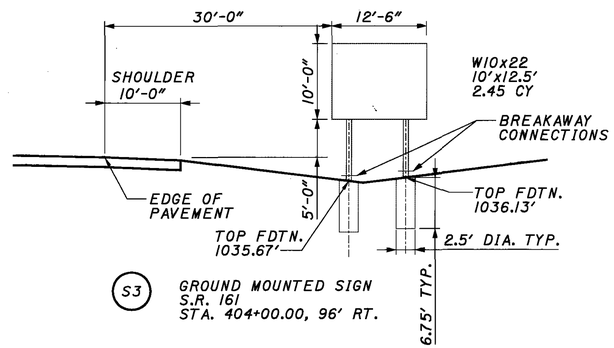
1349 / 9901	**LIC-161-6.65** **LIC-37-10.25**	**SIGNING AND PAVEMENT MARKING PLAN** **MORSE ROAD**	CALCULATED MMR CHECKED CSR	0 50 25 100 HORIZONTAL SCALE IN FEET



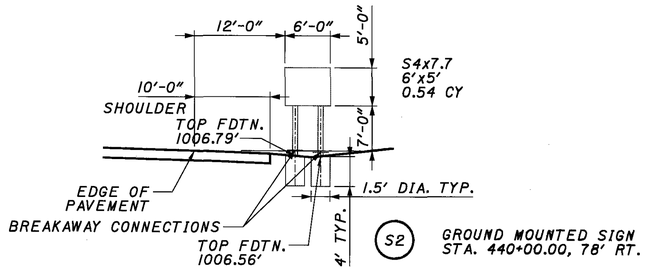
S4 GROUND MOUNTED SIGN
S.R. 161
STA. 377+60.00, 96' RT.



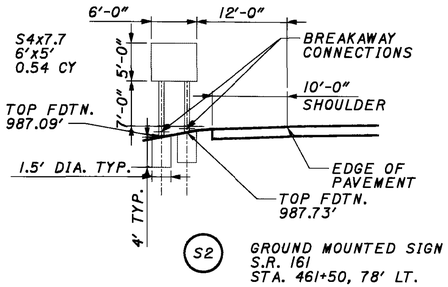
S2 GROUND MOUNTED SIGN
S.R. 161
STA. 401+50, 96' LT.



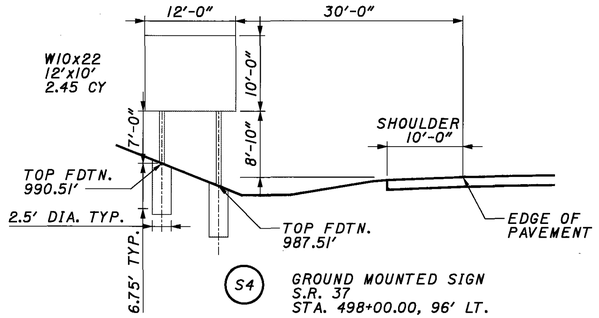
S3 GROUND MOUNTED SIGN
S.R. 161
STA. 404+00.00, 96' RT.



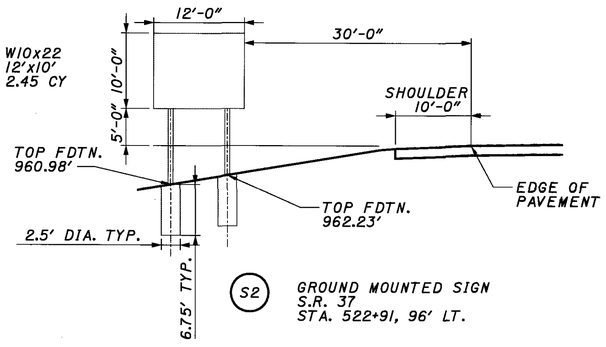
S2 GROUND MOUNTED SIGN
STA. 440+00.00, 78' RT.



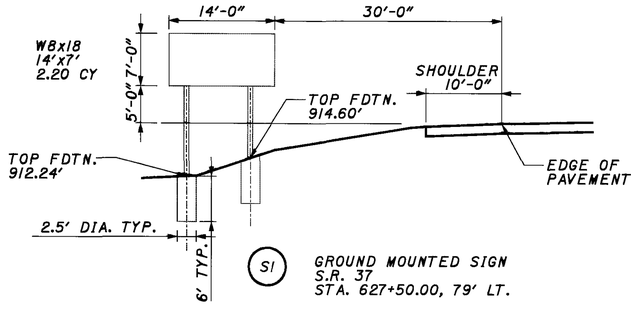
S2 GROUND MOUNTED SIGN
S.R. 161
STA. 461+50, 78' LT.



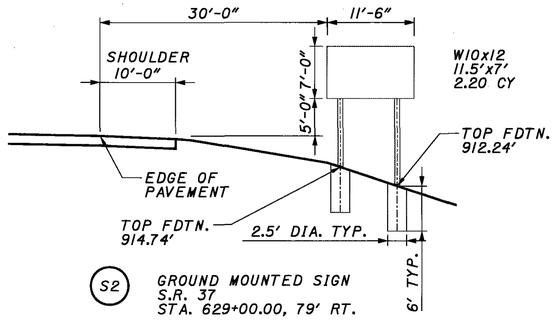
S4 GROUND MOUNTED SIGN
S.R. 37
STA. 498+00.00, 96' LT.



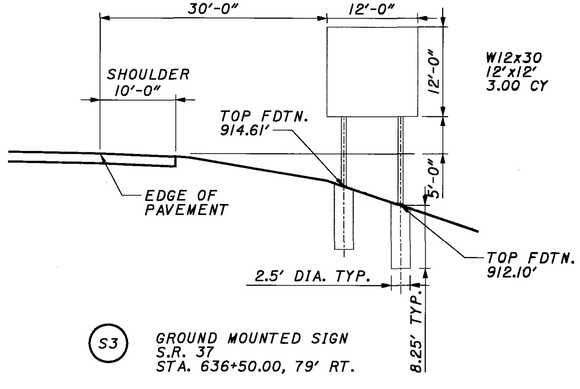
S2 GROUND MOUNTED SIGN
S.R. 37
STA. 522+91, 96' LT.



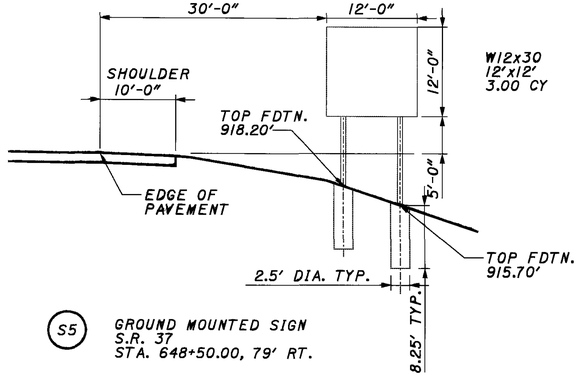
S1 GROUND MOUNTED SIGN
S.R. 37
STA. 627+50.00, 79' LT.



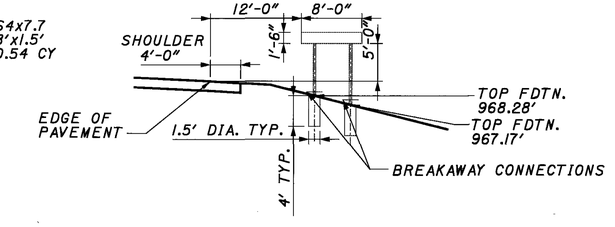
S2 GROUND MOUNTED SIGN
S.R. 37
STA. 629+00.00, 79' RT.



S3 GROUND MOUNTED SIGN
S.R. 37
STA. 636+50.00, 79' RT.



S5 GROUND MOUNTED SIGN
S.R. 37
STA. 648+50.00, 79' RT.



S4 GROUND MOUNTED SIGN
REL. WORTHINGTON RD.
STA. 210+00, 26' RT.

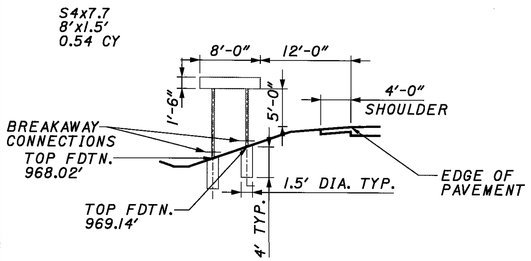
CALCULATED JMA
CHECKED CSR

GUIDE SIGN ELEVATION VIEWS

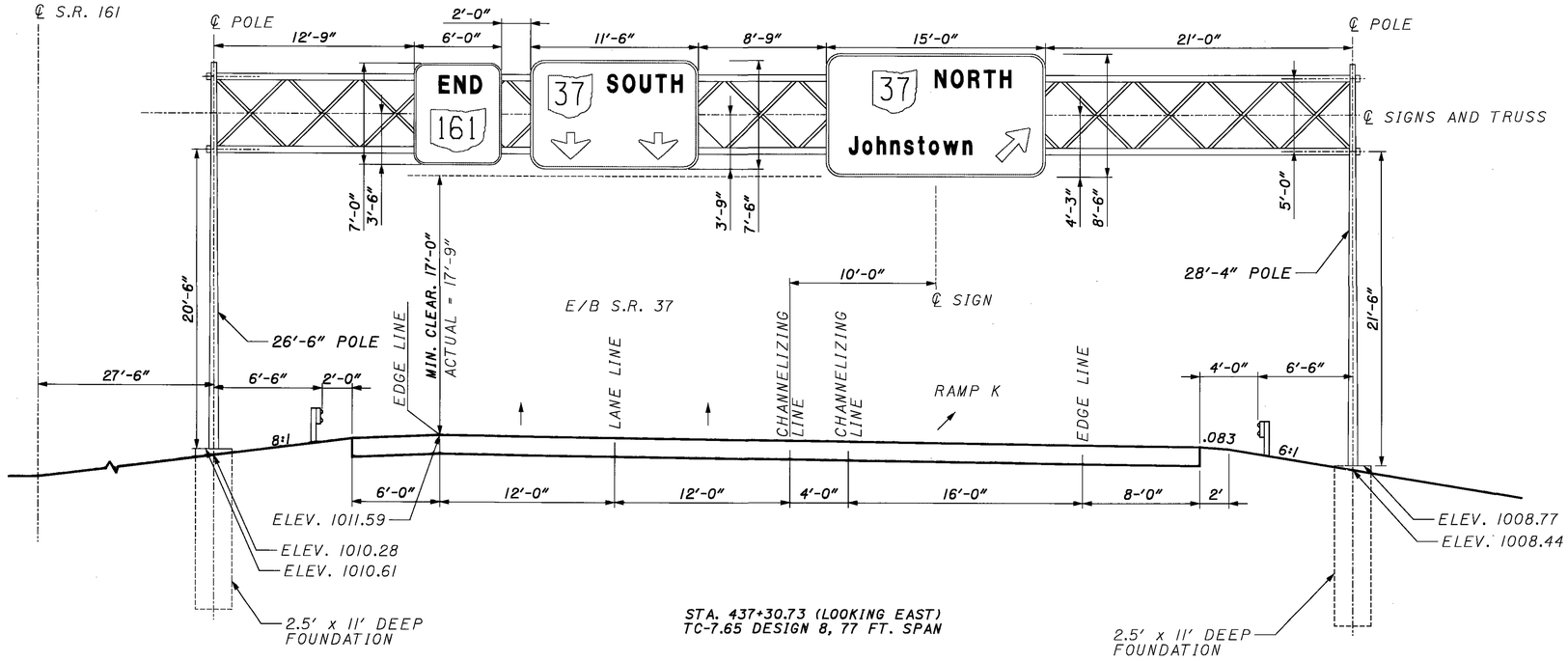
LIC-161-6.65
LIC-37-10.25

1067
1349

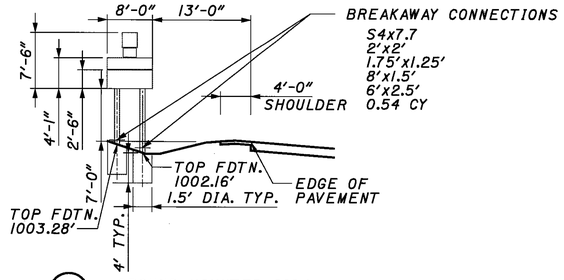
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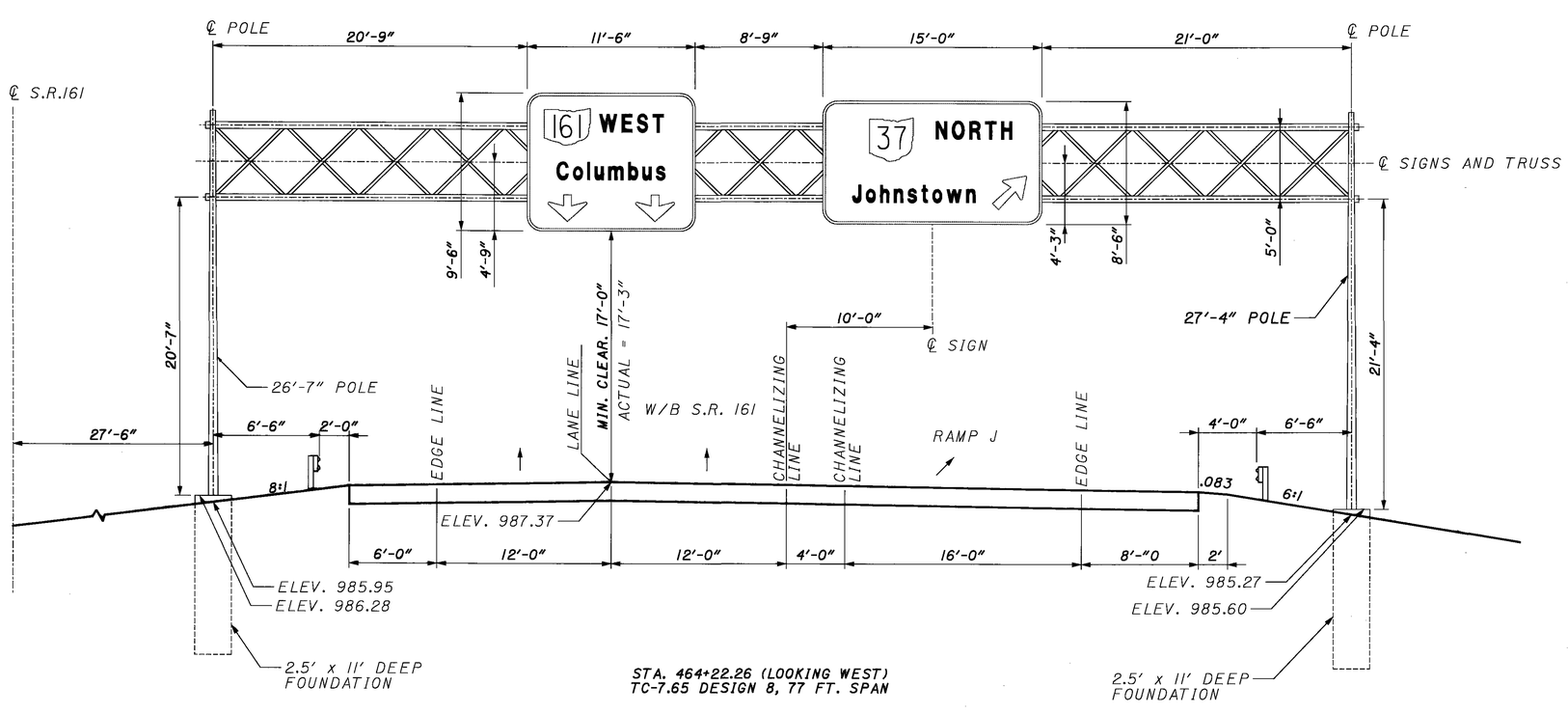
S11 GROUND MOUNTED SIGN
REL. WORTHINGTON RD.
STA. 215+75, 24' LT.



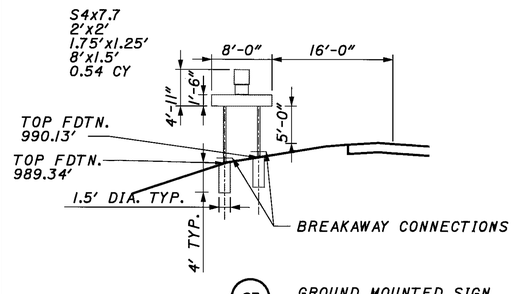
STA. 437+30.73 (LOOKING EAST)
TC-7.65 DESIGN 8, 77 FT. SPAN



S7 GROUND MOUNTED SIGN
SERVICE ROAD II
STA. 219+00.00, 24' LT.



STA. 464+22.26 (LOOKING WEST)
TC-7.65 DESIGN 8, 77 FT. SPAN



S7 GROUND MOUNTED SIGN
RAMP J
STA. 454+50, 14' LT.

CALCULATED JMA
CHECKED CSR

GUIDE SIGN ELEVATION VIEWS

LIC-161-6.65
LIC-37-10.25

1068
1349

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ITEM 625, POWER SERVICE

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

S.R. 37 INTERCHANGE

AMERICAN ELECTRIC POWER CO.
SOLUTION CENTER
PHONE #: 1-800-672-2231

POWER SERVICE EQUIPMENT SHALL BE INSTALLED AS SPECIFIED IN THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS AND ON STANDARD CONSTRUCTION DRAWING HL-40.10. THE CONTRACTOR SHALL PAY ANY POWER COMPANY FEES ASSOCIATED WITH THE INSTALLATION AND CONNECTION OF THE POWER SERVICE. PAYMENT TO THE CONTRACTOR IS INCIDENTAL TO ITEM 625 POWER SERVICE. ELECTRICAL ENERGY FROM EXISTING POWER SERVICES SHALL CONTINUE TO BE CHARGED TO THE MAINTAINING AGENCY. THE CONTRACTOR SHALL PAY ELECTRICAL ENERGY CHARGES FOR NEW POWER SERVICES ESTABLISHED BY THIS PROJECT. UPON ACCEPTANCE OF THIS LIGHTING, POWER SERVICE ELECTRICAL ENERGY ACCOUNTS SHALL BE TRANSFERRED TO THE MAINTAINING AGENCIES NOTED IN THE PLANS. THIS SHALL INCLUDE NEW POWER SERVICE ESTABLISHED BY THIS PROJECT AS WELL AS REASSIGNMENT OF EXISTING SERVICE DUE TO WORK PERFORMED BY THIS PROJECT.

LAMPS

HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX," OSRAM SYLVANIA "LUMALUX," PHILIPS "CERAMALUX," OR EQUAL APPROVED BY THE ENGINEER.

PADLOCKS AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH CMS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

UNDERDRAINS FOR PULL BOXES

REFERENCE IS MADE TO THE STANDARD DRAWINGS FOR DETAILS OF DRAINING PULL BOXES. UNDERDRAINS FOR PULL BOXES SHALL BE USED AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED APPROXIMATELY 20 FEET. AN ANIMAL GUARD SHALL BE INCLUDED AT THE OUTLET END OF THE DRAIN.

ITEM 625, LUMINAIRE, HIGH MAST, SYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN

ITEM 625, LUMINAIRE, HIGH MAST, ASYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN

LUMINAIRES FOR HIGH-MAST LIGHTING UNITS WITH SYMMETRIC DISTRIBUTION SHALL BE HOLOPHANE "HMST" WITH PHOTOMETRIC DISTRIBUTION 36383, GENERAL ELECTRIC "HM" WITH PHOTOMETRIC DISTRIBUTION 6312, OR COOPER "HMX" WITH PHOTOMETRIC DISTRIBUTION HMX4SDW, OR EQUAL AS APPROVED BY THE ENGINEER.

LUMINAIRES FOR HIGH-MAST LIGHTING UNITS WITH ASYMMETRIC DISTRIBUTION SHALL BE HOLOPHANE "HMST" WITH PHOTOMETRIC DISTRIBUTION 46973, GENERAL ELECTRIC "HM" WITH PHOTOMETRIC DISTRIBUTION 7349, OR COOPER "HMC" WITH PHOTOMETRIC DISTRIBUTION HMC4S3D, OR EQUAL AS APPROVED BY THE ENGINEER.

IN ADDITION, OTHER LUMINAIRES WILL BE CONSIDERED IF THE DESIGNED INTENSITY AND UNIFORMITY ARE PROVIDED USING THE DESIGNED POLE LOCATIONS AND THE DESIGNED NUMBER AND TYPE OF FIXTURES PER POLE.

CALCULATED M.M.
CHECKED J.C.

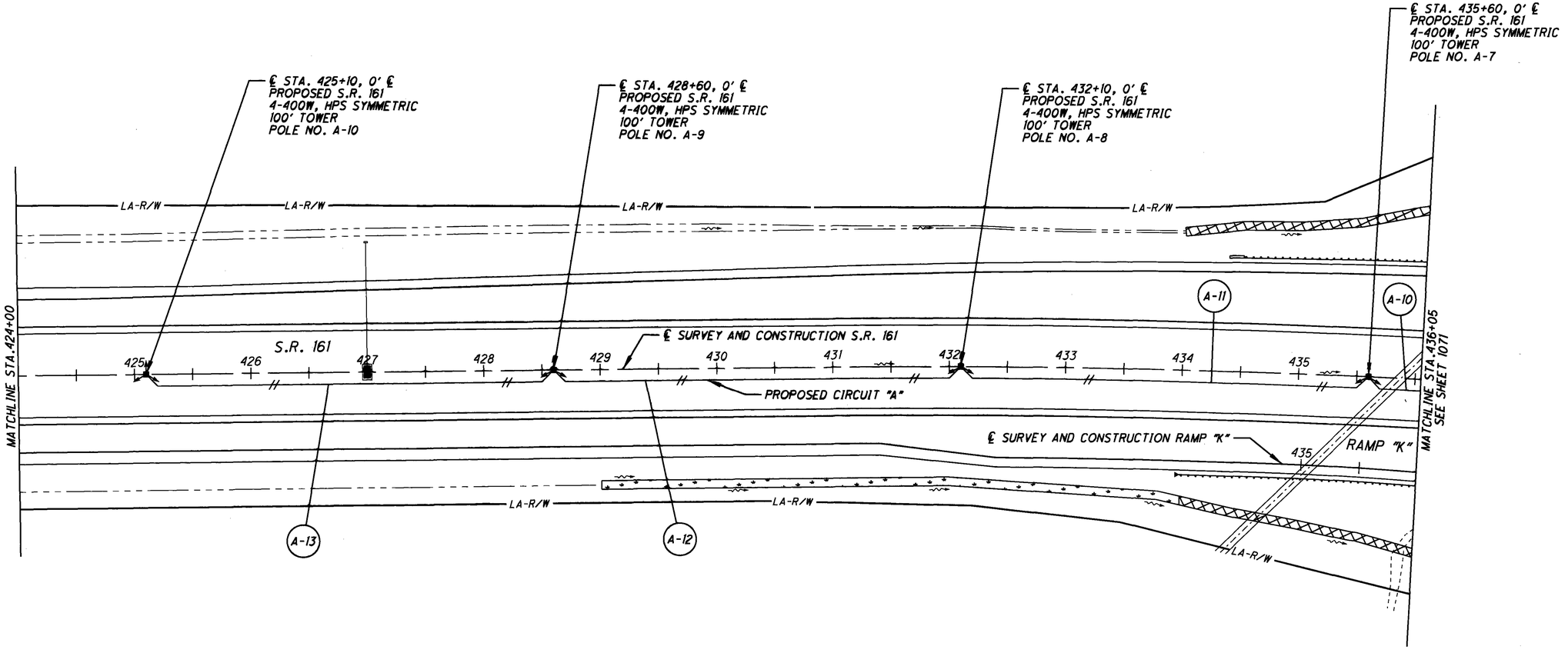
GENERAL NOTES

LIC-161-6.65
LIC-37-10.25

1069
1349

L161SR37LGN001.DGN 06/06/06

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LEGEND

- LIGHT TOWER
- 1½" DUCT-CABLE WITH 3 NO. 2 AWG
- CONDUIT
- PULL BOX
- POWER SERVICE

NOTE:

FOR TOWER LIGHTING QUANTITIES SEE SHEET 1075

L161SR37LPS001.DGN 06/06/2006

N

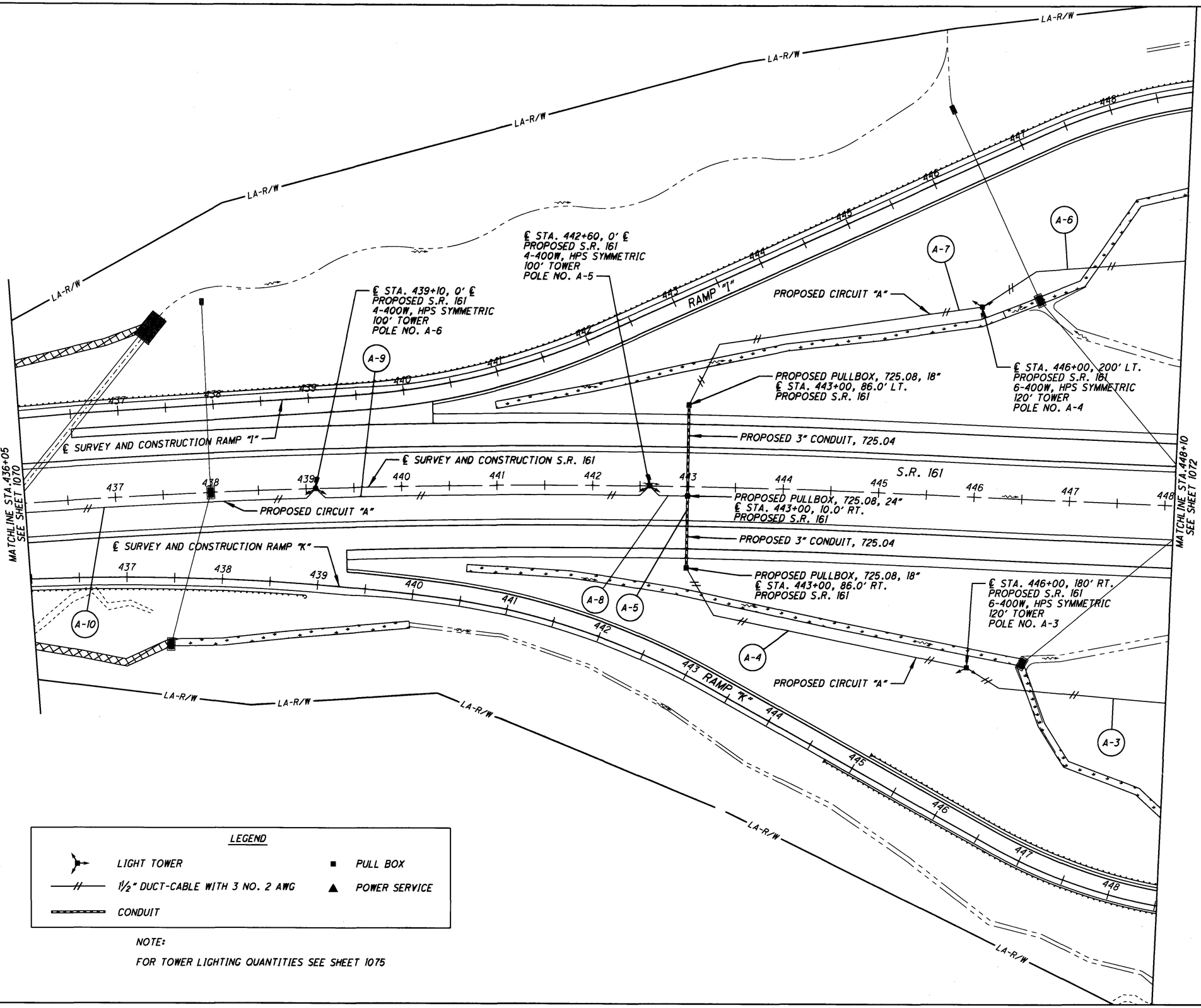
HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED M.M
CHECKED J.C

LIGHTING PLAN SHEET - CIRCUIT "A"
S.R.161 - STA. 424+00 TO STA. 436+05

LIC-161-6.65
LIC-37-10.25

1070
1349



LEGEND

- LIGHT TOWER
- PULL BOX
- 1½" DUCT-CABLE WITH 3 NO. 2 AWG
- POWER SERVICE
- CONDUIT

NOTE:

FOR TOWER LIGHTING QUANTITIES SEE SHEET 1075

L161SR37LPS002.DGN 06/06/2006

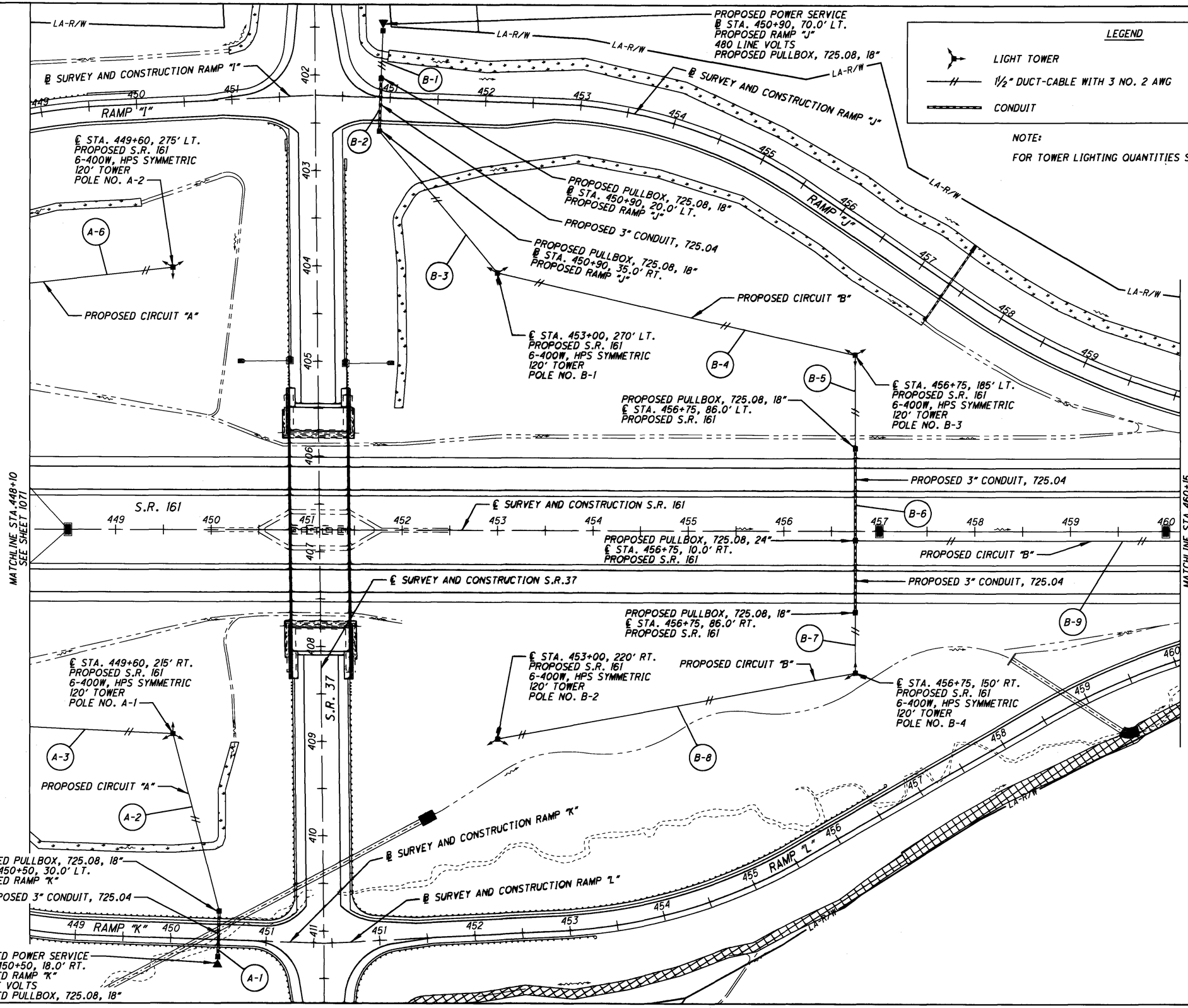
HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED M.M
CHECKED J.C

LIGHTING PLAN SHEET - CIRCUIT "A"
S.R.161 - STA. 436+05 TO STA. 448+10

LIC-161-6.65
LIC-37-10.25

1071
1349


LEGEND
LIGHT TOWER
1½" DUCT-CABLE WITH 3 NO. 2 AWG
CONDUIT
PULL BOX
POWER SERVICE
NOTE:
FOR TOWER LIGHTING QUANTITIES SEE SHEETS 1075-1076
LA-R/W
℄ SURVEY AND CONSTRUCTION RAMP "I"
RAMP "I"
℄ STA. 449+60, 275' LT.
PROPOSED S.R. 161
6-400W, HPS SYMMETRIC
120' TOWER
POLE NO. A-2
A-6
PROPOSED CIRCUIT "A"
PROPOSED POWER SERVICE
℄ STA. 450+90, 70.0' LT.
PROPOSED RAMP "J"
480 LINE VOLTS
PROPOSED PULLBOX, 725.08, 18"
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
℄ SURVEY AND CONSTRUCTION RAMP "J"
RAMP "J"
PROPOSED PULLBOX, 725.08, 18"
℄ STA. 450+90, 20.0' LT.
PROPOSED RAMP "J"
PROPOSED 3" CONDUIT, 725.04
PROPOSED PULLBOX, 725.08, 18"
℄ STA. 450+90, 35.0' RT.
PROPOSED RAMP "J"
PROPOSED CIRCUIT "B"
℄ STA. 453+00, 270' LT.
PROPOSED S.R. 161
6-400W, HPS SYMMETRIC
120' TOWER
POLE NO. B-1
PROPOSED PULLBOX, 725.08, 18"
℄ STA. 456+75, 86.0' LT.
PROPOSED S.R. 161
℄ STA. 456+75, 185' LT.
PROPOSED S.R. 161
6-400W, HPS SYMMETRIC
120' TOWER
POLE NO. B-3
PROPOSED 3" CONDUIT, 725.04
℄ SURVEY AND CONSTRUCTION S.R. 161
PROPOSED PULLBOX, 725.08, 24"
℄ STA. 456+75, 10.0' RT.
PROPOSED S.R. 161
PROPOSED CIRCUIT "B"
℄ SURVEY AND CONSTRUCTION S.R.37
PROPOSED PULLBOX, 725.08, 18"
℄ STA. 456+75, 86.0' RT.
PROPOSED S.R. 161
℄ STA. 453+00, 220' RT.
PROPOSED S.R. 161
6-400W, HPS SYMMETRIC
120' TOWER
POLE NO. B-2
PROPOSED CIRCUIT "B"
℄ STA. 456+75, 150' RT.
PROPOSED S.R. 161
6-400W, HPS SYMMETRIC
120' TOWER
POLE NO. B-4
℄ STA. 449+60, 215' RT.
PROPOSED S.R. 161
6-400W, HPS SYMMETRIC
120' TOWER
POLE NO. A-1
A-3
A-2
A-1
PROPOSED CIRCUIT "A"
℄ SURVEY AND CONSTRUCTION RAMP "K"
℄ SURVEY AND CONSTRUCTION RAMP "L"
RAMP "K"
RAMP "L"
PROPOSED PULLBOX, 725.08, 18"
℄ STA. 450+50, 30.0' LT.
PROPOSED RAMP "K"
PROPOSED 3" CONDUIT, 725.04
PROPOSED POWER SERVICE
℄ STA. 450+50, 18.0' RT.
PROPOSED RAMP "K"
480 LINE VOLTS
PROPOSED PULLBOX, 725.08, 18"
S.R. 161
S.R. 37
MATCHLINE STA.448+10
SEE SHEET 1071
MATCHLINE STA.460+15
SEE SHEET 1073
HORIZONTAL
SCALE IN FEET
0
50
100
CALCULATED
M.M.
CHECKED
J.C.
LIGHTING PLAN SHEET - CIRCUIT "A" AND "B"
S.R.161 - STA. 448+10 TO STA. 460+15
LIC-161-6.65
LIC-37-10.25
1072
1349
L161SR37LPS003.DGN 06/06/2006

℄ SURVEY AND CONSTRUCTION RAMP "J"

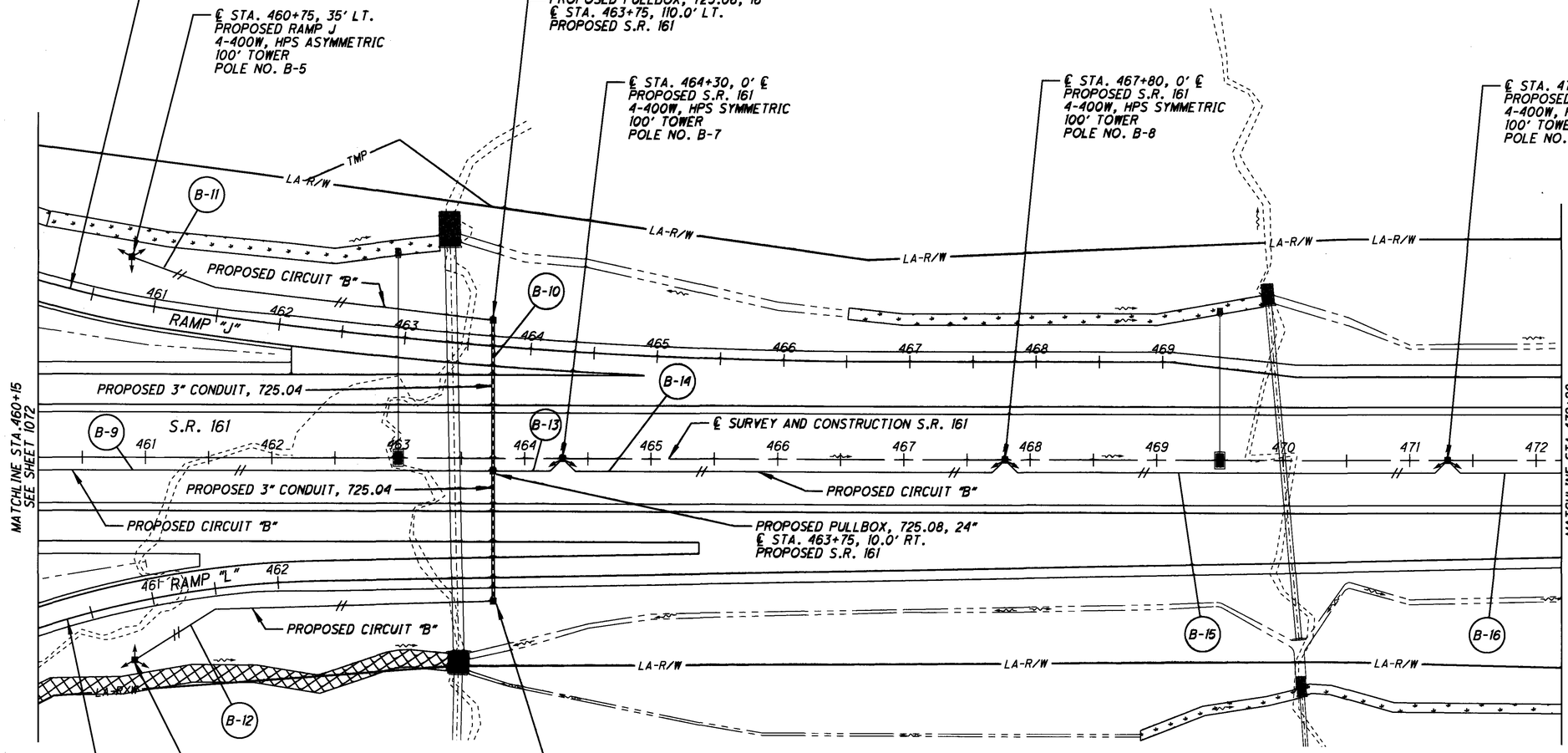
℄ STA. 460+75, 35' LT.
PROPOSED RAMP J
4-400W, HPS ASYMMETRIC
100' TOWER
POLE NO. B-5

PROPOSED PULLBOX, 725.08, 18"
℄ STA. 463+75, 110.0' LT.
PROPOSED S.R. 161

℄ STA. 464+30, 0' ℄
PROPOSED S.R. 161
4-400W, HPS SYMMETRIC
100' TOWER
POLE NO. B-7

℄ STA. 467+80, 0' ℄
PROPOSED S.R. 161
4-400W, HPS SYMMETRIC
100' TOWER
POLE NO. B-8

℄ STA. 471+30, 0' ℄
PROPOSED S.R. 161
4-400W, HPS SYMMETRIC
100' TOWER
POLE NO. B-9



℄ STA. 460+75, 45' RT.
PROPOSED RAMP L
4-400W, HPS ASYMMETRIC
100' TOWER
POLE NO. B-6

PROPOSED PULLBOX, 725.08, 18"
℄ STA. 463+75, 113.0' RT.
PROPOSED S.R. 161

℄ SURVEY AND CONSTRUCTION RAMP "L"

LEGEND

- LIGHT TOWER
- 1½" DUCT-CABLE WITH 3 NO. 2 AWG
- CONDUIT
- PULL BOX
- POWER SERVICE

NOTE:

FOR TOWER LIGHTING QUANTITIES SEE SHEET 1076

HORIZONTAL SCALE IN FEET
0 50 100

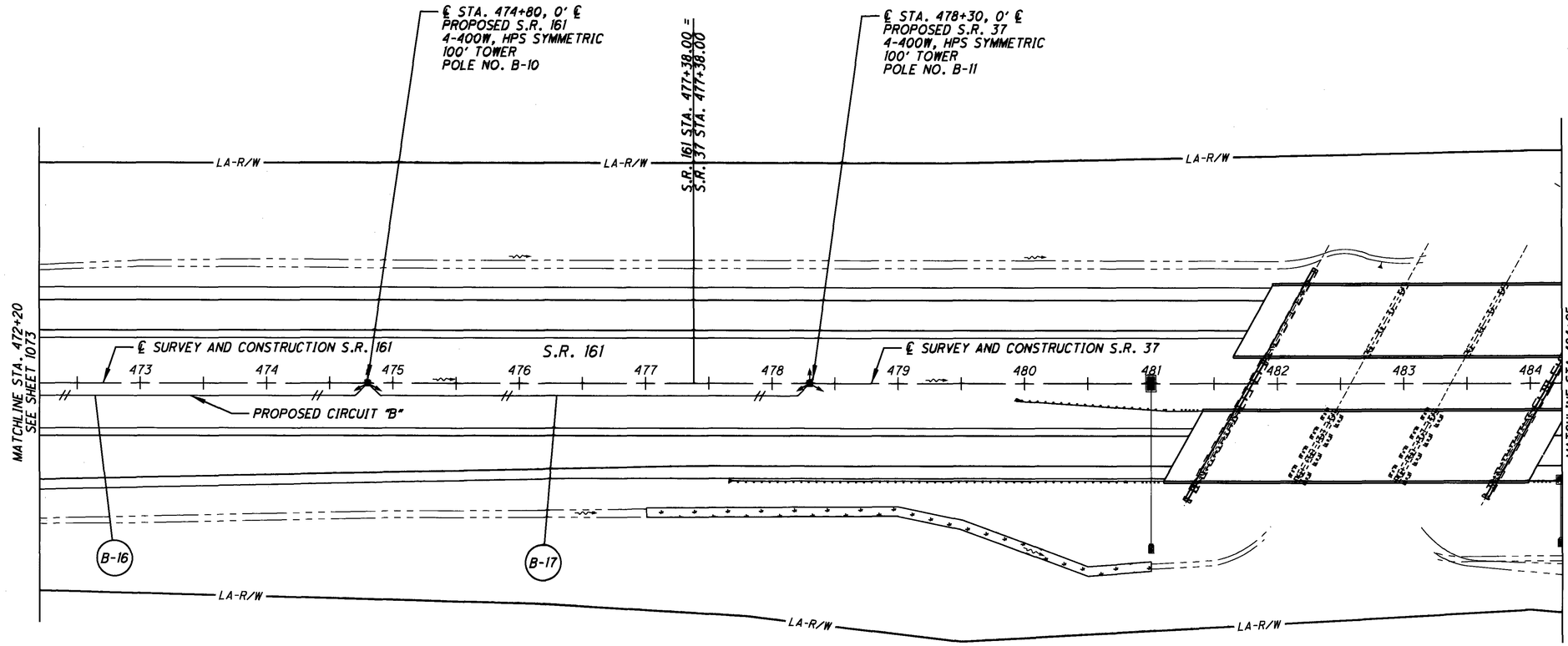
CALCULATED M.M.
CHECKED J.C.

LIGHTING PLAN SHEET - CIRCUIT "B"
S.R.161 - STA. 460+15 TO STA. 472+20

LIC-161-6.65
LIC-37-10.25

1073
1349

L161SR37LPS004.DGN 06/06/2006



LEGEND

- LIGHT TOWER
- 1½" DUCT-CABLE WITH 3 NO. 2 AWG
- CONDUIT
- PULL BOX
- POWER SERVICE

NOTE:

FOR TOWER LIGHTING QUANTITIES SEE SHEET 1076

L161SR37LPS005.DGN 06/06/2006

HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED M.M.
CHECKED J.C.

LIGHTING PLAN SHEET - CIRCUIT "B"
S.R.161/37 - STA. 472+20 TO STA. 484+25

LIC-161-6.65
LIC-37-10.25

1074
1349

REFERENCE NO.	SHEET No.	SIDE	ROADWAY	STATION TO STATION	ITEM 625																	
									LUMINAIRE, HIGH MAST, ASYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN	LUMINAIRE, HIGH MAST, SYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN	LIGHT TOWER, BBBB100	LIGHT TOWER, BBBBBB120	LIGHT TOWER FOUNDATION, 36" X 25' DEEP	PULLBOX, 725.08, 18"	PULLBOX, 725.08, 24"	1 1/2" DUCT CABLE WITH THREE NO. 2 AWG 5,000 VOLT CABLES	TRENCH, 24" DEEP	CABLE SPLICING KIT	CONDUIT, 3", 725.04	GROUND ROD	POWER SERVICE
									EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT.	FT.	EACH	FT.	EACH	EACH
A-1	1072	RT. & LT.	RAMP K	STA. 450+50										2		80	50		50	1	1
A-2	1072	RT. & LT.	SR 161 & RAMP K	STA.449+60 (SR 161) TO STA. 450+50 (RAMP K)												210	200				
A-3	1071 & 1072	RT.	SR 161	STA. 446+00 TO STA. 449+60						12		2	2			380	360			4	
A-4	1071	RT.	SR 161	STA. 443+00 TO STA. 446+00												350	340				
A-5	1071	RT. & LT.	SR 161	STA. 443+00										2	1	190	170		170		
A-6	1071 & 1072	LT.	SR 161	STA. 446+00 TO STA. 449+60						6		1	1			390	370			2	
A-7	1071	LT.	SR 161	STA. 443+00 TO STA. 446+00						6		1	1			370	350			2	
A-8	1071	MED.	SR 161	STA. 442+60 TO STA. 443+00						4	1		1			70	50	3		2	
A-9	1071	MED.	SR 161	STA. 439+10 TO STA. 442+60						4	1		1			380	360			2	
A-10	1070 & 1071	MED.	SR 161	STA. 435+60 TO STA. 439+10						4	1		1			390	370			2	
A-11	1070	MED.	SR 161	STA. 432+10 TO STA. 435+60						4	1		1			380	360			2	
A-12	1070	MED.	SR 161	STA. 428+60 TO STA. 432+10						4	1		1			390	370			2	
A-13	1070	MED.	SR 161	STA. 425+10 TO STA. 428+60						4	1		1			390	370			2	
TOTALS CARRIED TO GENERAL SUMMARY SHEET 1077										48	6	4	10	4	1	3,970	3,720	3	220	21	1

CALCULATED M.M.
CHECKED J.C.

LIGHTING SUBSUMMARY
CIRCUIT "A" S.R.161 AT S.R.37

LIC-161-6.65
LIC-37-10.25

1075
1349

L161SR37LSS001.DGN 06/06/06

LIGHTING SUBSUMMARY
CIRCUIT "B" S.R.161 AT S.R.37

CALCULATED M.M.
CHECKED J.C.

LIC-161-6.65
LIC-37-10.25

1076
1349

REFERENCE NO.	SHEET No.	SIDE	ROADWAY	STATION TO STATION	ITEM 625				LUMINAIRE, HIGH MAST, ASYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN	LUMINAIRE, HIGH MAST, SYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN	LIGHT TOWER, BBBB100	LIGHT TOWER, BBBBBB120	LIGHT TOWER FOUNDATION, 36" X 25' DEEP	PULLBOX, 725.08, 18"	PULLBOX, 725.08, 24"	1 1/2" DUCT CABLE WITH THREE NO. 2 AWG 5,000 VOLT CABLES	TRENCH, 24" DEEP	CABLE SPLICING KIT	CONDUIT, 3", 725.04	GROUND ROD	POWER SERVICE
									EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT.	FT.	EACH	FT.	EACH	EACH
B-1	1072	LT.	RAMP J	STA. 450+90										1		90	50			1	1
B-2	1072	LT. & RT.	RAMP J	STA. 450+90										2		80	60		60		
B-3	1072	RT. & LT.	RAMP J & SR 161	STA. 450+90 (RAMP J) TO STA. 453+00 (SR 161)						6		1	1			220	200			2	
B-4	1072	LT.	SR 161	STA. 453+00 TO STA. 456+75						6		1	1			410	390			2	
B-5	1072	LT.	SR 161	STA. 456+75												120	100				
B-6	1072	LT. & RT.	SR 161	STA. 456+75										2	1	190	170		170		
B-7	1072	RT.	SR 161	STA. 456+75						6		1	1			90	70			2	
B-8	1072	RT.	SR 161	STA. 453+00 TO STA. 456+75						6		1	1			400	380			2	
B-9	1072 &1073	MED.	SR 161	STA. 456+75 TO STA. 463+75												720	700	6			
B-10	1073	LT. & RT.	SR 161	STA. 463+75										2	1	260	230		230		
B-11	1073	LT.	RAMP J	STA. 460+90 TO STA. 463+75					4		1		1			310	290			2	
B-12	1073	RT.	RAMP L	STA. 460+90 TO STA. 463+75					4		1		1			320	300			2	
B-13	1073	MED.	SR 161	STA. 463+75 TO STA. 464+30						4	1		1			80	60			2	
B-14	1073	MED.	SR 161	STA. 464+30 TO STA. 467+80						4	1		1			390	370			2	
B-15	1073	MED.	SR 161	STA. 467+80 TO STA. 471+30						4	1		1			390	370			2	
B-16	1073 & 1074	MED.	SR 161	STA. 471+30 TO STA. 474+80						4	1		1			390	370			2	
B-17	1074	MED.	SR 161/37	STA. 474+80 TO STA. 478+30						4	1		1			390	370			2	
TOTALS CARRIED TO GENERAL SUMMARY SHEET 1077									8	44	7	4	11	7	2	4,850	4,480	6	460	23	1

L161SR37LSS002.DGN 06/06/06

SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
						1075	1076												
																		LIGHTING	
						3	6							625	01500	9	EACH	CABLE SPLICING KIT	
						6	7							625	13200	13	EACH	LIGHT TOWER, BBBB100	
						4	4							625	13406	8	EACH	LIGHT TOWER, BBBBBB120	
						10	11							625	15200	21	EACH	LIGHT TOWER FOUNDATION, 36" X 25' DEEP	
						3,970	4,850							625	24330	8820	FT	1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 5000 VOLT CABLES	
						220	460							625	25500	680	FT	CONDUIT, 3", 725.04	
							8							625	26261	8	EACH	LUMINAIRE, HIGH MAST, ASYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN	1069
						48	44							625	26261	92	EACH	LUMINAIRE, HIGH MAST, SYMMETRIC, TYPE V, 400 WATT H.P.S., 480 VOLT, AS PER PLAN	1069
						3,720	4,480							625	29002	8200	FT	TRENCH, 24" DEEP	
						4	7							625	30700	11	EACH	PULL BOX, 725.08, 18"	
						1	2							625	30706	3	EACH	PULL BOX, 725.08, 24"	
						21	23							625	32000	44	EACH	GROUND ROD	
						1	1							625	34000	2	EACH	POWER SERVICE	1069

* CARRIED TO GENERAL SUMMARY SHT No. 114-115

CALCULATED M.M. CHECKED J.C.

GENERAL SUMMARY

LIC-161-6.65
LIC-37-10.25

1077
1349

L161SR37LGS001.DGN 06/06/2006

SEE SHEET	℄ SURVEY AND CONSTRUCTION (STATION TO STATION)	SIDE	203 EXCAVATION	203 EMBANKMENT	601 ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER	601 ROCK CHANNEL PROTECTION - MISC., NO. 2 OVERSIZE RIVER ROCK	ROCK CHANNEL PROTECTION - MISC., NO. 57 ROUNDS RIVER ROCK	659 SEEDING & MULCHING, CLASS 2	661 DECIDUOUS SHRUB, 3' HEIGHT, CORNUS AMMONMUM- SILKY DOGWOOD	661 DECIDUOUS SHRUB, 3' HEIGHT, SAMBUCUS CANADENSIS- ELDERBERRY	661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM DENTATUM- ARROWOOD	661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM PRUNIFOLIUM- BLACKHAW	661 DECIDUOUS SHADE TREE, 2", ACER RUBRUM- RED MAPLE	661 DECIDUOUS SHADE TREE, 2", NYSSA SYLVATICA- BLACK GUM	661 DECIDUOUS SHADE TREE, 2", PLATANUS OCCIDENTALIS- SYCAMORE	661 DECIDUOUS SHADE TREE, 2", SALIX NIGRA- BLACK WILLOW	662 LANDSCAPE WATERING	670 SLOPE EROSION PROTECTION MAT, TYPE F
			CU YD	CU YD	CU YD	CU YD	CU YD	SQ YD	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	GAL.	SY
1078A						24	24											
1078B																	11165.00	2950.00
	RAMP I																	
1079	STA. 437+50.49 - STA. 446+81.82	LT							180	177	145	201	6	6	7	7	5571.00	
1080			7768	0				1172										
1081			14248	0				2358										
1082			18701	0				2792										
1083			15818	0				2694										
1084			7928	24				2181										
1085			1121	145				1380										
1086			452	27				673										
	RELOCATED WORTHINGTON ROAD NORTH																	
1087	STA. 206+30.00 - STA. 208+99.10	RT							25	36	32	39	2	2	2	3	1149.00	
1088			477	77				2089										
1089			420	133				1659										
	S.R. 161																	
1090	STA. 452+36.36 - STA. 458+38.01	RT							51	116	182	136	3	5	5	2	3770.00	
1091			1030	119				3750										
1092			4607	130				4059										
1093			2673	10				1985										
1094	STA. 605+00.00 - STA. 608+31.81	RT							42		33		2	1	1	2	675.00	
1095			11	26				214										
1096			195	27				743										
1097	RIFFLE DETAIL SITE 24				81.7	143.6	143.6											
1098	RIFFLE DETAIL SITE 28				29.9	42.6	42.6											
1099	RIFFLE DETAIL SITE 42				3.3	4.4	4.4											
	TOTALS (THIS SHEET)		75449	718	114.9	214.6	214.6	27749	298	329	392	376	13	14	15	14	22330.00	2950.00
	TOTALS (CARRIED TO GENERAL SUMMARY)		75449	718	115	215	215	27749	298	329	392	376	13	14	15	14	22330	2950

CALCULATED JMA
CHECKED FJA

STREAM RELOCATION QUANTITIES

LIC-161-6.65
LIC-37-10.25

1078
1349

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$FILE$
$TIMESTAMP$

FIELD MEETING

AN ON-SITE MEETING WITH THE CONTRACTOR, PROJECT ENGINEER, DISTRICT 5 PLANNING AND ODOT'S OFFICE OF ENVIRONMENTAL SERVICES SHALL BE HELD PRIOR TO INITIATING CONSTRUCTION OF ANY STREAM RELOCATION WORK. THE PURPOSE OF THE MEETING IS TO DISCUSS THE STREAM RELOCATION PLAN OBJECTIVES, ON-SITE CONDITIONS AND GRADING PRACTICES. A MINIMUM OF 7 DAYS NOTICE SHALL BE PROVIDED TO MEETING ATTENDEES. THE DISTRICT 5 PLANNING DEPARTMENT MAY BE REACHED AT (740) 323-5193 AND ODOT'S OFFICE OF ENVIRONMENTAL SERVICES MAY BE REACHED AT (614) 387-3057.

INSTREAM WORK

TO THE EXTENT POSSIBLE ALL STREAM CHANNEL EXCAVATION, RIFFLE CONSTRUCTION AND CULVERT INSTALLATION SHALL BE COMPLETED PRIOR TO DIVERTING THE STREAM FLOWS INTO THE NEW CHANNEL. TO MINIMIZE STREAM CHANNEL DISRUPTIONS, STREAM RELOCATION AND FLOODPLAIN CONSTRUCTION SHALL OCCUR CONCURRENTLY.

RIFFLE CONSTRUCTION

RIFFLE CONSTRUCTION SHALL BEGIN AT THE DOWNSTREAM RIFFLE AND PROCEED UPSTREAM WITH THE CONSTRUCTION OF EACH CONSECUTIVE RIFFLE.

ITEM 601 ROCK CHANNEL PROTECTION - MISC #57 ROUNDS AND ROCK CHANNEL PROTECTION - MISC - OVERSIZE RIVER ROCK

AS NOTED ON THE RIFFLE DETAIL SHEETS, THE RIFFLES SHALL BE CONSTRUCTED OF A 50/50 MIXTURE OF #2 OVERSIZE RIVER ROCK AND #57 ROUNDS RIVER ROCK. IN ADDITION, AND AT THE DIRECTION OF THE PROJECT ENGINEER, A 50/50 MIX OF #2 OVERSIZE RIVER ROCK AND #57 ROUND RIVER ROCK SHALL BE PLACED IN THE BOTTOM OF THE RELOCATED STREAM * CHANNELS, SPREAD EVENLY AND TAMPED.

(16 TOTAL SITES) X 3 CY = 48 CY (24 CY #57 ROUND RIVER ROCK & 24 CY #2 OVERSIZE RIVER ROCK)

SEEDING AND MULCHING

ALL FLOODPLAIN AREAS IDENTIFIED IN THE PLANS SHALL HAVE A MINIMUM OF 6 INCHES OF TOPSOIL. WITHIN SEVEN DAYS OF COMPLETION OF TOPSOIL REPLACEMENT ON THE FLOODPLAIN AREAS, THE FLOODPLAINS AND RECONSTRUCTED STREAMBANKS SHALL BE SEEDED WITH ODOT'S CLASS 2 ROADSIDE MIXTURE AS PER SUPPLEMENTAL SPECIFICATION 870.

STORAGE AREAS

THE CONTRACTOR MAY STORE PLANT MATERIALS AND EQUIPMENT 30 FEET FROM THE PAVEMENT, BEHIND GUARDRAIL AND WITHIN OR ADJACENT TO THE PROJECT LIMITS BY OBTAINING OFFICIAL PERMISSION OF THE ENGINEER. NO PEDESTRIAN OR VEHICULAR TRAFFIC MAY BE IMPEDED NOR HAZARDOUS CONDITION CREATED AS A RESULT OF SUCH STORAGE.

THE STORAGE OF ALL DUG PLANTS SHALL CONFORM TO 661.07 WHETHER WITHIN THE PROJECT LIMITS, ADJACENT THERE TO, OR AT SOME OTHER LOCATION. THESE AREAS SHALL BE DESIGNATED PRIOR TO ACTUAL PLANT STORAGE AND SHALL BE OPEN TO INSPECTION UPON REQUEST OF THE ENGINEER.

SCHEDULING

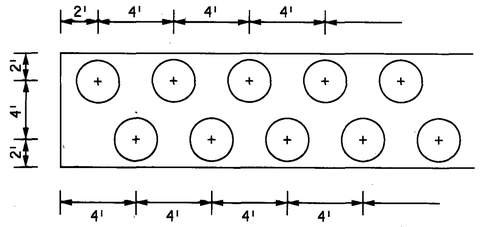
ALL DIGGING AND PLANTING OF DECIDUOUS PLANTS SHALL BE DONE AFTER OCTOBER 1, AND BEFORE JUNE 1.

ITEMS 661

ALL TREES AND SHRUBS SHALL BE SPECIMEN (NO. 1 GRADE) PLANTS WITH GROWTH AND BRANCHING HABIT TYPICAL OF THE SPECIES SPECIFIED. NO PARK GRADE (NO. 2 OR 3 GRADE) PLANTS WILL BE ACCEPTED.

ITEM 661 DECIDUOUS SHRUB, (SIZE), (SPECIES)

ALL DECIDUOUS SHRUBS WILL BE PLANTED APPROXIMATELY FOUR FEET ON CENTER IN STAGGERED ROWS WITHIN EIGHT FOOT WIDE BEDS.



THE ENTIRE BEDS WILL BE MULCHED AS SPECIFIED IN THE LANDSCAPE GENERAL NOTES. PAYMENT WILL BE MADE UNDER ITEM 661 DECIDUOUS SHRUB, (SIZE), (SPECIES).

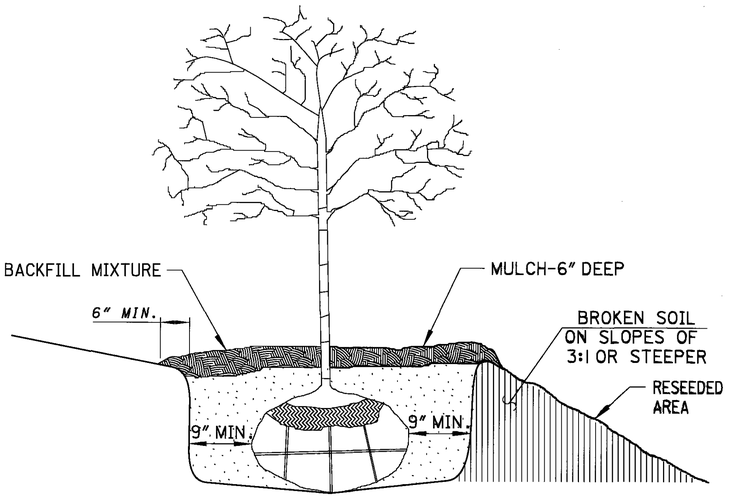
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GENERAL NOTES
STREAM RELOCATION

LIC-161-6.65
LIC-37-10.25

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THE TOP OF THE ROOT BALL SHALL BE SET AT THE NORMAL GROUND LINE.

ON SLOPES WHERE HEAVY CLAY AND IMPERMEABLE SOILS ARE PRESENT, THE DOWN HILL SIDE OF THE POCKET HOLE SHALL BE BROKEN OR LOOSENED AND RETURNED TO ITS NATURAL GRADE TO PROVIDE DRAINAGE FOR THE HOLE.

PLANTING HOLE AND BED PREPARATION

AFTER THE LAYOUT IS APPROVED BY THE ENGINEER, SHRUB AND GROUND COVER BEDS SHALL BE CULTIVATED TO A MINIMUM DEPTH OF SIX (6) INCHES BY A PLOW, HARROW, OR DISC, OR OTHER METHOD APPROVED BY THE ENGINEER. THE CULTIVATION SHALL TAKE PLACE AS FAR IN ADVANCE OF THE PLANTING OPERATION AS POSSIBLE. WHERE SHRUBS ARE SHOWN, INDIVIDUAL HOLES SHALL BE DUG ON CENTERS AS STATED IN THE NOTE. THESE HOLES SHALL ALLOW FOR A MINIMUM OF NINE (9) INCHES OF BACKFILL MIXTURE AROUND THE SIDES OF THE BALLS. THE BOTTOM OF THE HOLE SHALL BE NO DEEPER THAN THE BALL TO BE PLANTED. THE MATERIAL REMOVED FROM THE HOLES SHALL BE TAKEN FROM THE PROJECT IF IT IS FOUND TO BE UNACCEPTABLE FOR USE AS BACKFILL AS DETERMINED BY TH ENGINEER. THE PLANT SHALL THEN BE SET AND THE HOLE FILLED WITH BACKFILL MIXTURE, AND THE PLANTING OPERATION PERFORMED AS SPECIFIED IN ITEMS 661.11 AND 661.12. ALL EXCESS DIRT SHALL BE REMOVED FROM THE SITE.

EXISTING TREES AND SHRUBS SHALL TAKE PRIORITY OVER PROPOSED PLANTINGS. THE LOCATIONS OF THE PROPOSED TREES AND SHRUBS ARE APPROXIMATE AND MAY BE REARRANGED AT THE DIRECTION OF THE ENGINEER WHEN OBSTRUCTIONS ARE ENCOUNTERED.

IF AN AUGER IS USED IN DIGGING POCKET HOLES AND POLISHED (SHINY) SIDES OCCUR IN CLAY OR HEAVY SOIL, THE USE OF SUCH AN AUGER SHALL BE DISCONTINUED AND THE HOLES SHALL BE DUG WITH A BACKHOE OR ANOTHER APPROVED METHOD.

BACKFILL NO. 1 - THE BACKFILL MIXTURE USED TO FILL POCKET HOLES IN LIGHT AND MEDIUM SOILS (SAND AND AVERAGE) SHALL CONSIST BY VOLUME OF 2 PARTS "SOIL CONDITIONER," 2 PARTS COMPRESSED SPHAGNUM PEAT OR 3 PARTS SEDGE PEAT, AND 2 PARTS APPROVED TOPSOIL.

BACKFILL NO. 2 - THE BACKFILL MIXTURE USED TO FILL POCKET HOLES IN HEAVY SOILS (CLAY AND SHALE) SHALL CONSIST BY VOLUME OF 1 PART "SOIL CONDITIONER," 1 PART COMPRESSED SPHAGNUM PEAT OR 2 PARTS SEDGE PEAT AND 2 PARTS APPROVED TOPSOIL.

INCORPORATE THOROUGHLY INTO THE BACKFILL MIXTURE 5 LBS. OF COMMERCIAL FERTILIZER (10-20-20) PER CUBIC YARD. THE ENGINEER, AFTER CONSULTATION WITH THE LANDSCAPE ARCHITECT, SHALL DETERMINE THE LOCATIONS WHERE THE BACKFILL MIXTURES SHALL BE USED.

SOIL CONDITIONER

A SOIL CONDITIONER SUCH AS "HAYDITE," "PERLITE" OR AN APPROVED EQUAL SHALL BE USED. THE PARTICLE SIZE GRADATION OF THE SOIL CONDITIONER SHALL BE AT LEAST 80% PASSING A NO. 6 SIEVE AN NOT MORE THAN 5% PASSING A NO. 50 SIEVE.

TOPSOIL TESTING

TOPSOIL FAILING CURRENT TEST STANDARDS MAY BE ALTERED, UPON APPROVAL OF THE ENGINEER. BY ADDING APPROVED CONDITIONERS TO CORRECT THE DEFICIENCIES, TOPSOIL SHALL BE FREE OF JOHNSON GRASS AN CONFORM TO ITEM 653 AS DETERMINED BY THE ENGINEER.

PLANTING PERIOD OF ESTABLISHMENT

BEFORE FINAL INSPECTION, ALL PLANTINGS SHALL BE IN PLACE AND UNDER THE CARE OF THE CONTRACTOR FOR A PERIOD OF ESTABLISHMENT. THIS PERIOD SHALL BEGIN IMMEDIATELY UPON COMPLETION OF THE PLANTING OPERATION FOR ANY PLANT OR SPECIES GROUP AND CONTINUE UNTIL OCTOBER 1. IN NO CASE SHALL IT BE LESS THAN ONE GROWING SEASON, JUNE 1 TO OCTOBER 1.

DURING THIS PERIOD OF ESTABLISHMENT, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW SUCH HORTICULTURAL PRACTICES AS REQUIRED TO ASSURE THE VIGOR AND GROWTH OF THE TRANSPLANTED MATERIAL. THIS CARE SHALL INCLUDE WATERING, REMULCHING, RESTAKING, GUYING AND CULTIVATING. THERE SHALL BE A MINIMUM OF TWO WEEDING AND MOWING (BED EDGES, AROUND TREES AND GUY STAKES) PROGRAMS OF SUCH INTENSITY AS TO COMPLETELY RID THE PLANTED AND MULCHED AREAS OF WEEDS AND GRASSES. THE FIRST PROGRAM SHALL BEGIN ON OR ABOUT JUNE 15 AND THE OTHER APPROXIMATELY 8 WEEKS LATER.

EACH PLANT SHALL HAVE SUFFICIENT WATER TO KEEP IT IN A HEALTHY, GROWING CONDITION. IF LOCAL WEATHER CONDITIONS WARRANT, THE ENGINEER MAY REQUIRE WEEKLY WATERING. A SCHEDULE FOR WATERING EACH PLANT AND MAINTENANCE AS DESCRIBED IN THE PROCEEDING PARAGRAPH SHALL BE SUPPLIED TO AND APPROVED BY THE ENGINEER BEFORE PLANTING BEGINS. SOIL MIXTURE SHALL BE MEASURED IN EACH BY A SOIL MOISTURE METER APPROVED BY THE ENGINEER. WATERING SHALL BE DONE ACCORDING TO THE WATERING TABLE WHEN INDICATED BY THE METER READINGS. THE WATER SHALL BE APPLIED IN SUCH A MANNER AS TO SATURATE THE ROOT AND MULCHED AREA OF EACH PLANT WITHOUT CAUSING RUNOFF (SEE WATERING TABLE). IN CASE OF FALL PLANTINGS, THEIR WATERINGS SHALL CONTINUE UNTIL SOIL FREEZES UP AND RECOMMENCE AFTER THE SPRING THAW UNLESS OTHERWISE DIRECTED.

ON OR ABOUT SEPTEMBER 15, THE ENGINEER SHALL INSPECT THE PLANTING AND SUPPLY THE CONTRACTOR WITH A LISTING OF THOSE PLANTS HAVING DIED, DIED BACK BEYOND NORMAL PRUNING LINES OR ARE MISSING FROM THE PLANTING. THE CONTRACTOR SHALL MAKE THE REPLANTING AS REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE ORIGINAL MATERIAL. THESE REPLACEMENTS ARE NOT SUBJECT TO THE PERIOD OF ESTABLISHMENT. HOWEVER, PLANTS PLANTED INITIALLY IN THE FALL WHICH HAVE DIED BEFORE THE SPRING PLANTING SEASON SHALL BE REPLACED IMMEDIATELY AND ARE SUBJECT TO THE ESTABLISHMENT PERIOD.

AFTER REPLACEMENTS HAVE BEEN PLANTED, THE FINAL INSPECTION SHALL BE MADE AND THE ACTUAL COUNT OF LIVE PLANTS OF EACH VARIETY AND SPECIES LISTED FOR PAYMENT.

ITEM 662 LANDSCAPE WATERING

WATER SHALL BE FURNISHED BY THE CONTRACTOR AND ALL PLANT MATERIAL SHALL BE WATERED THOROUGHLY AT THE TIME OF PLANTING REGARDLESS OF AMPLE MOISTURE CONTENT OF THE SURROUNDING SOIL. SUSPENSION OF WATERING OPERATIONS BECAUSE OF RAINFALL WILL BE DETERMINED BY THE ENGINEER IN CONSULTATION WITH THE LANDSCAPE ARCHITECT. AN AVERAGE OF ONE INCH OF RAINFALL PER WEEK SHALL BE CONSIDERED ADEQUATE. DETERMINATION OF RAINFALL SHALL BE BASED UPON THE USE OF A RAIN GAUGE APPROVED BY THE PROJECT ENGINEER.

WATERING TABLE

SHRUBS 1'-3' SIZE	4 GAL. PER PLANT
SHRUBS 3'-5' SIZE	7 GAL. PER PLANT
TREES 5'-8' SIZE	15 GAL. PER PLANT
TREES 2"-3" CAL.	25 GAL. PER PLANT
TREES 3"-4" CAL.	30 GAL. PER PLANT

THE METHOD OF MEASUREMENT FOR SUMMER WATERING SHALL BE BY APPROVED METERING FROM TANKS OR BY INDIVIDUALLY MEASURED CONTAINERS TO EACH PLANT TO BE WATERED. PAYMENT FOR PLANTING PERIOD OF ESTABLISHMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 662.

(1395 SHRUBS X 7) + (56 TREES X 25) = 11,165 GAL.

ITEM 662 LANDSCAPE WATERING 11,165 GAL.

MULCH

MULCH SHALL BE AS PER ITEM 661.13 WITH THE FOLLOWING EXCEPTIONS, WOOD SHAVINGS OR PEAT MOSS OR CORN COBS SHALL NOT BE USED AS A TOP MULCH. WOOD CHIPS SHALL BE AGED (STOCKPILED) AT LEAST SIX MONTHS PRIOR TO PLACEMENT AROUND PLANTS. MULCH SHALL BE SIX INCHES LOOSE MEASUREMENT AFTER MULCHING, COMMERCIAL FERTILIZER (12-12-12) SHALL BE APPLIED AS SPECIFIED IN ITEM 661.13

STAKING MATERIALS

ALL TREES SHALL BE STAKED AS SHOWN IN THE STANDARD DRAWING LA-1.2. STAKING OF SMALL ORNAMENTAL TREES SHALL BE SIMILAR TO THAT OF EVERGREENS.

FERTILIZER

TWO OUNCE (3-YEAR) COMMERCIAL FERTILIZED PACKETS USED IN PLANTING OPERATION SHALL BE DELIVERED DRY IN ORIGINAL, UNOPENED CONTAINERS. FERTILIZER ANALYSIS SHALL BE 16% NITROGEN, 8% PHOSPHORIC ACID AND POTASH. FERTILIZER SHALL BE OF A SLOW RELEASE TYPE IN A POLYETHYLENE PERFORATED PACKET WITH MICROPORE HOLES.

THE PACKETS SHALL BE PLACED 6 TO 8 INCHES DEEP AND EVENLY SPACED AROUND THE PERIMETER OF THE PLANTING HOLE, ADJACENT TO THE BALL OR ROOT MASS BUT NOT IN DIRECT CONTACT WITH THE ROOTS. THE PACKETS SHALL NOT BE CUT, RIPPED OR DAMAGED.

EACH SHRUB OR TREE SHALL BE FERTILIZED ACCORDING TO THE FOLLOWING SCHEDULE:

SHRUBS 2'-3'	2 PACKETS
TREES 2"-2-1/2" CAL.	3 PACKETS

IF IT BECOMES NECESSARY TO REMOVE AND REPLACE MISSING, DEAD OR UNHEALTHY PLANTS, ALL OLD PACKETS SHALL BE REPLACED WITH NEW PACKETS.

THE TWO OUNCE 16-8 FERTILIZER PACKETS SHALL BE DESIGNATED BY THE MANUFACTURER TO BE EFFECTIVE FOR THREE YEARS. PACKETS SUCH AS "NUTRI-PAK" (HORT ENTERPRISES, P.O.BOX 2448, POMPANO BEACH, FL 33061, 1-800-966-4678) OR APPROVED EQUAL.

ITEM 670 SLOPE EROSION PROTECTION MAT, TYPE F

THE FOLLOWING QUANTITY OF ITEM 670 SLOPE EROSION PROTECTION MAT, TYPE F IS PROVIDED IN THE PLANS TO BE USED IN THE AREAS OF THE STREAM RELOCATIONS, AS DIRECTED BY THE PROJECT ENGINEER.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE AS PER ITEM 670.

STREAM SITE 24 978 SY
STREAM SITE 28 578 SY
STREAM SITE 42 311 SY

ITEM 670 SLOPE EROSION PROTECTION MAT, TYPE F 2,950 SQ.YD.

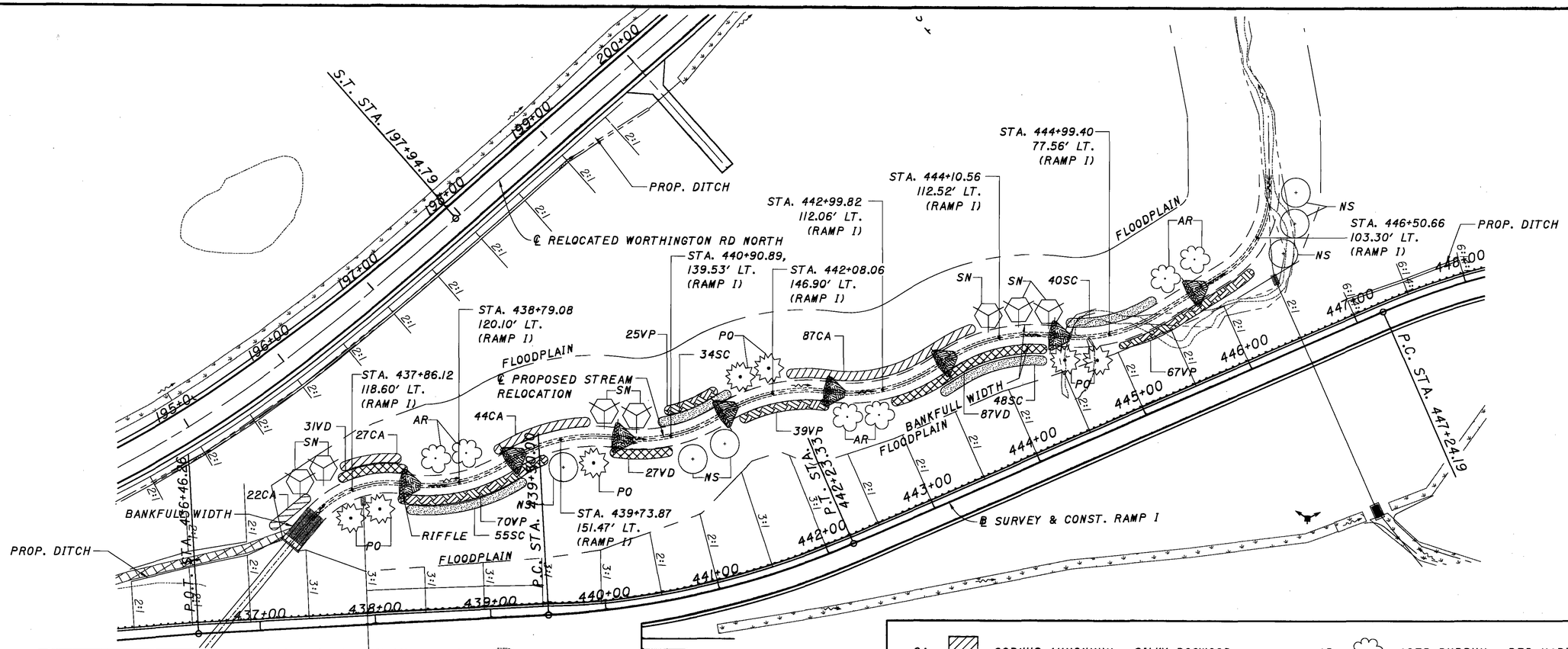
CALCULATED JMA
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GENERAL NOTES STREAM RELOCATION

LIC-161-6.65 LIC-37-10.25

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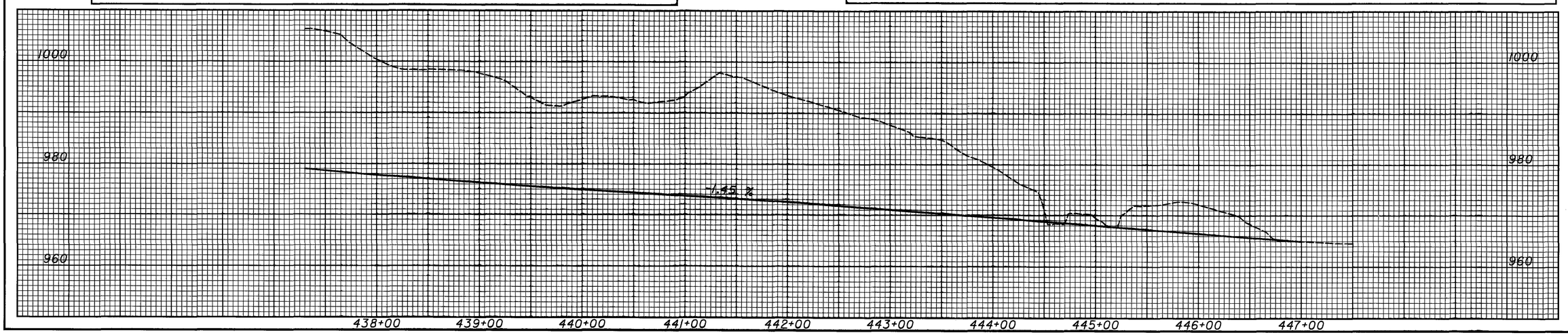


QUANTITIES

ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, CORNUS AMMONMUM - SILKY DOGWOOD	180 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, SAMBUCUS CANADENSIS - ELDERBERRY	177 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM DENTATUM - ARROWWOOD	145 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM PRUNIFOLIUM - BLACKHAW	201 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", ACER RUBRUM - RED MAPLE	6 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", NYSSA SYLVATICA - BLACK GUM	6 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", PLATANUS OCCIDENTALIS - SYCAMORE	7 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", SALIX NIGRA - BLACK WILLOW	7 EACH
ITEM 662 LANDSCAPE WATERING	5571 GALLON

TOTAL CARRIED TO SHEET 1078

CA	CORNUS AMMONMUM - SILKY DOGWOOD	AR	ACER RUBRUM - RED MAPLE
SC	SAMBUCUS CANADENSIS - ELDERBERRY	NS	NYSSA SYLVATICA - BLACK GUM
VD	VIBURNUM DENTATUM - ARROWWOOD	PO	PLATANUS OCCIDENTALIS - SYCAMORE
VP	VIBURNUM PRUNIFOLIUM - BLACKHAW	SN	SALIX NIGRA - BLACK WILLOW



CALCULATED JMA
CHECKED FJA

HORIZONTAL SCALE IN FEET
0 25 50 100

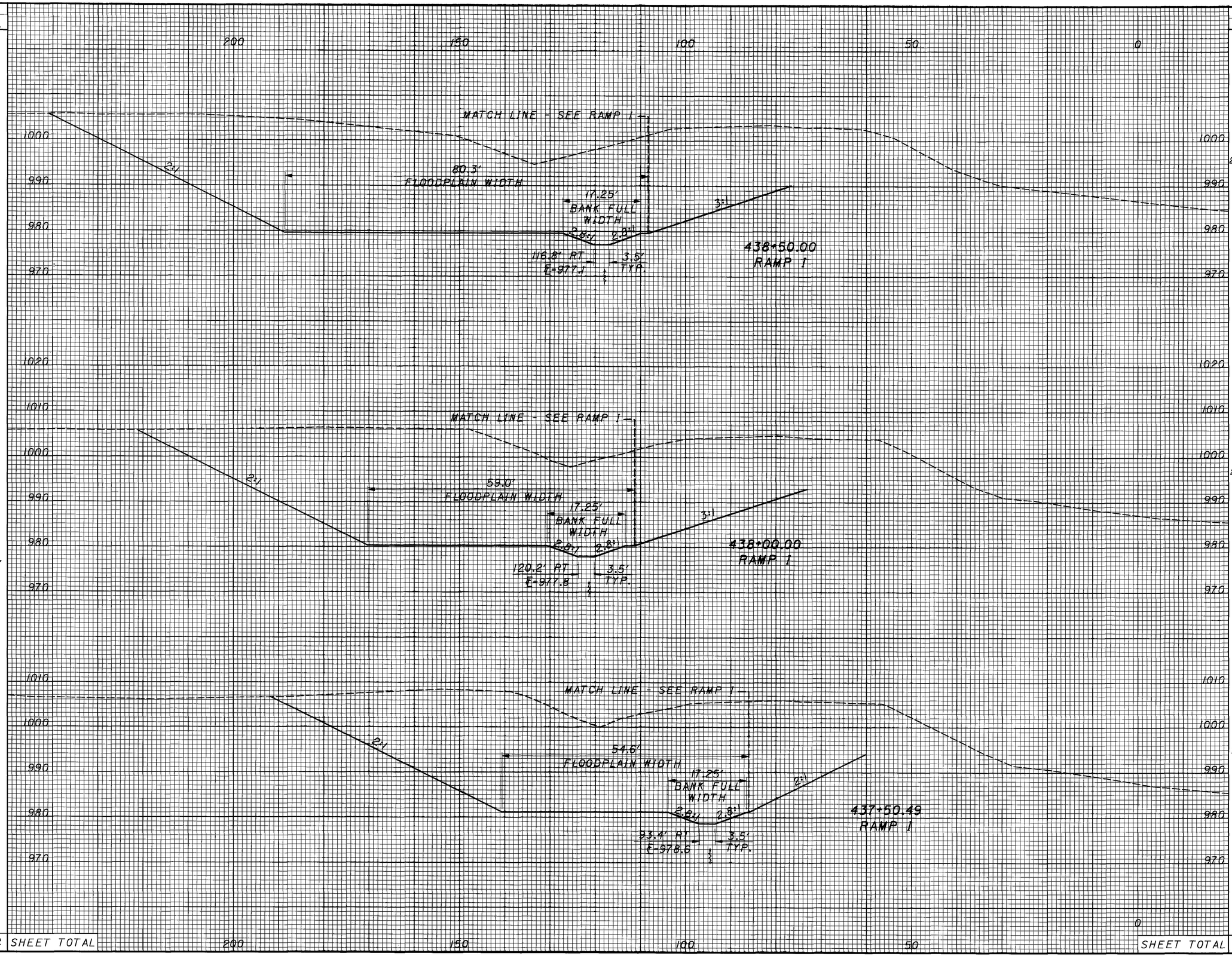
PLAN AND PROFILE- STREAM RELOCATION
SITE 24 - UNNAMED TRIBUTARY TO RACCOON CREEK
WEST AT THE S.R.37 INTERCHANGE

LIC-161-6.65
LIC-37-10.25

1079
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SEEDING	
END WIDTH	SQ. YDS.
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	625
101	
	547
96	
	1172



END AREA		VOLUME	
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		4076	0
2037	0		
		3692	0
1990	0		
		7768	0

CALCULATED JMA
CHECKED FJA

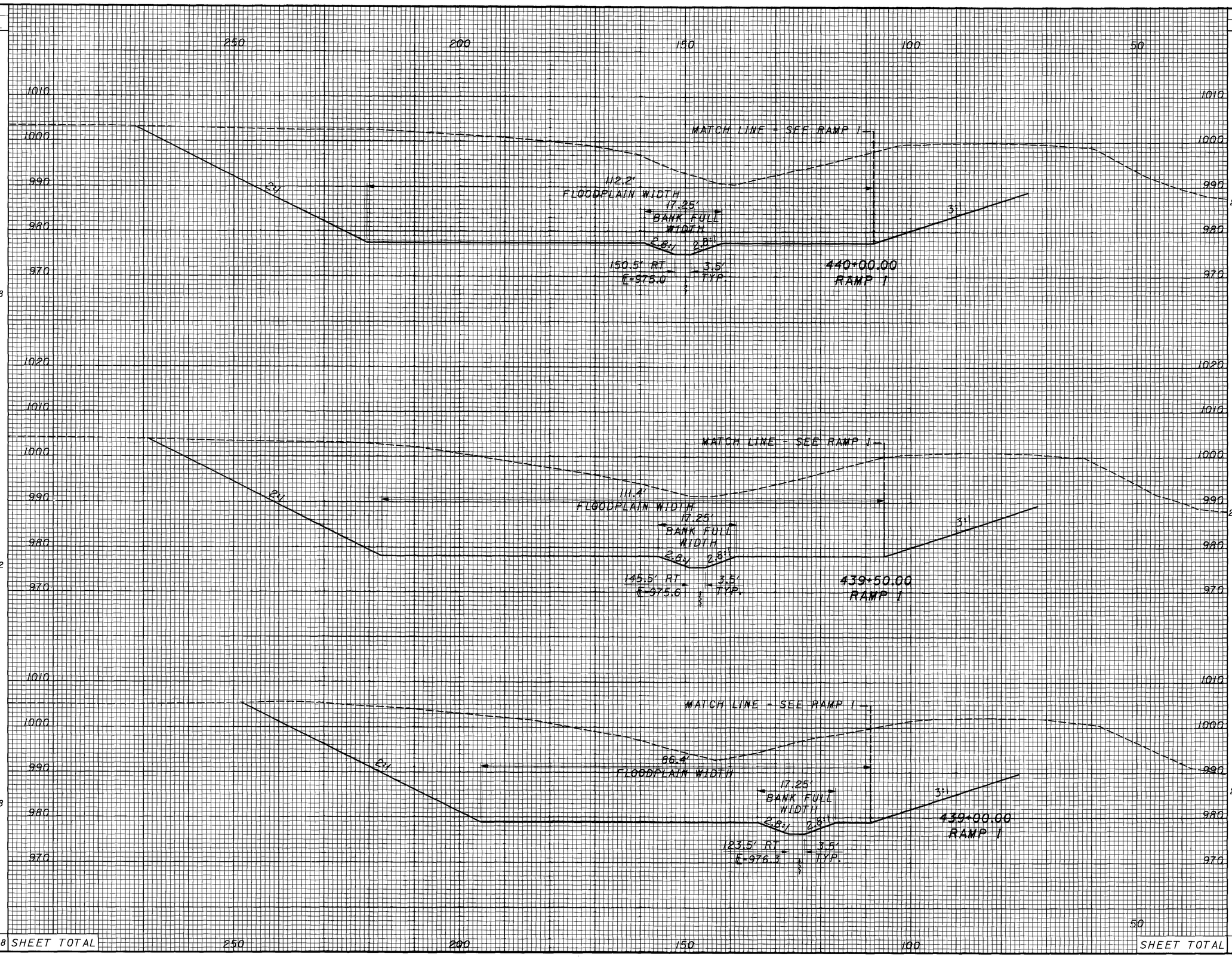
CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 437+50 TO STA. 438+50

LIC-161-6.65
LIC-37-10.25

1080
1349

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SEEDING	
END WIDTH	SQ. YDS.
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	858
153	
	792
131	
	708
	2358



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2907	0		
		5232	0
2744	0		
		4683	0
2314	0		
		4333	0
		14248	0

CALCULATED JMA
CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 439+00 TO STA. 440+00

LIC-161-6.65
LIC-37-10.25

1081
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
160	956	3210	0		
184	958	3813	0	6503	0
				6518	0
161	878	3226	0		
				5679	0
	2792 SHEET TOTAL			18701	0

250 200 150 100 50

1000 990 980 970 1010

MATCH LINE - SEE RAMP 1

117.7' FLOODPLAIN WIDTH
17.25' BANK FULL WIDTH
2:1 2.8:1 2.8:1 3:1
143.5' RT ℄-973.2 — 3.5' TYP.
441+50.00 RAMP 1

MATCH LINE - SEE RAMP 1

141.6' FLOODPLAIN WIDTH
17.25' BANK FULL WIDTH
2:1 2.8:1 2.8:1 2:1
137.8' RT ℄-973.8 — 3.5' TYP.
441+00.00 RAMP 1

MATCH LINE - SEE RAMP 1

118.9' FLOODPLAIN WIDTH
17.25' BANK FULL WIDTH
2:1 2.8:1 2.8:1 3:1
141.9' RT ℄-974.4 — 3.5' TYP.
440+50.00 RAMP 1

CALCULATED JMA
CHECKED WAA

CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 440+50 TO STA. 441+50

LIC-161-6.65
LIC-37-10.25

1082
1349

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SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		250				
		200				
		150				
		100				
		50				
142	869	1000 / 990 / 980 / 970 — 113.5' FLOODPLAIN WIDTH; 17.25' BANK FULL WIDTH; 2:1; 2.8:1; 110.3' RT @ E-971.2; 3.5' TYP.; MATCH LINE - SEE RAMP 1; 443+00.00 RAMP 1	2017	0	4498	0
171	928	1000 / 990 / 980 / 970 — 134.5' FLOODPLAIN WIDTH; 17.25' BANK FULL WIDTH; 2:1; 2.8:1; 130.9' RT @ E-972.0; 3.5' TYP.; MATCH LINE - SEE RAMP 1; 442+50.00 RAMP 1	2841	0	5489	0
163	897	1000 / 990 / 980 / 970 — 120.5' FLOODPLAIN WIDTH; 17.25' BANK FULL WIDTH; 3:1; 2.8:1; 146.1' RT @ E-972.7; 3.5' TYP.; MATCH LINE - SEE RAMP 1; 442+00.00 RAMP 1	3087	0	5831	0
	2694	SHEET TOTAL			15818	0

CALCULATED JMA
CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 442+00 TO STA. 443+00

LIC-161-6.65
LIC-37-10.25

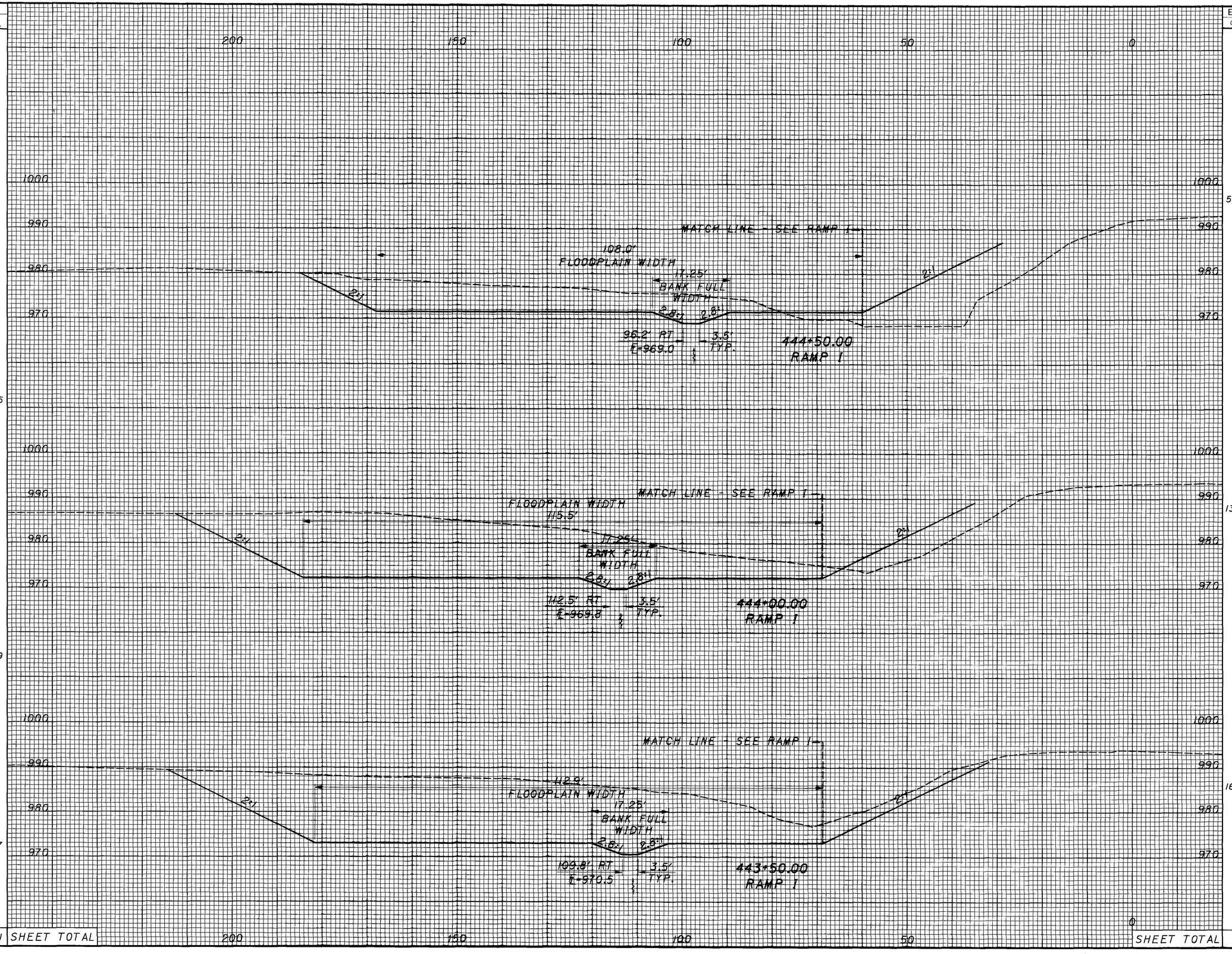
1083
1349

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SEEDING		END AREA		VOLUME		
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	
						CALCULATED JMA
						CHECKED FJA
						CROSS SECTIONS - STREAM RELOCATION SITE 24
						UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
						S.R. 37 INTERCHANGE, STA. 443+50 TO STA. 444+50
111		524	26			
	675			1745	24	
132		1361	0			
	739			2788	0	
134		1650	0			
	767			3395	0	
	2181 SHEET TOTAL			7928	24	

LIC-161-6.65
LIC-37-10.25

1084
1349



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SEEDING			END AREA		VOLUME		
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL	
		200 150 100 50 0					CALCULATED JMA CHECKED FJA
82	436	MATCH LINE - SEE RAMP 1 — 94.8' FLOODPLAIN WIDTH; 17.25' BANK FULL WIDTH; 2% 2% 2.5:1 2.5:1; 83.0' RT E-966.8; 3.5' TYP.; 446+00.00 RAMP 1; 990 980 970 960	217	15	304	24	
75	422	MATCH LINE - SEE RAMP 1 — 87.9' FLOODPLAIN WIDTH; 17.25' BANK FULL WIDTH; 2% 2% 2.5:1 2.5:1; 75.3' RT E-967.6; 3.5' TYP.; 445+50.00 RAMP 1; 990 980 970 960	111	11	218	53	
77	522	MATCH LINE - SEE RAMP 1 — 68.1' FLOODPLAIN WIDTH; 17.25' BANK FULL WIDTH; 2% 2% 2.5:1 2.5:1; 75.7' RT E-966.3; 3.5' TYP.; 445+00.00 RAMP 1; 990 980 970 960	124	46	600	67	
	1380	SHEET TOTAL			1121	145	

CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 445+00 TO STA. 446+00

LIC-161-6.65
LIC-37-10.25

1085
1349

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SEEDING	
END WIDTH	SQ. YDS.
0	
	173
98	
	500
	673

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
166	9	97	5
		355	22
		452	27

CALCULATED JMA
CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 446+50

LIC-161-6.65
LIC-37-10.25

1086
1349

200 150 100 50 0

446+81.82 (BACK)

990
980
970
960

MATCH LINE - SEE RAMP 1

111.1'
FLOODPLAIN WIDTH

17.25'
BANK FULL
WIDTH

2:1
2:1
2:1

101.1' RT
℄-956.1

3.5'
TYP.

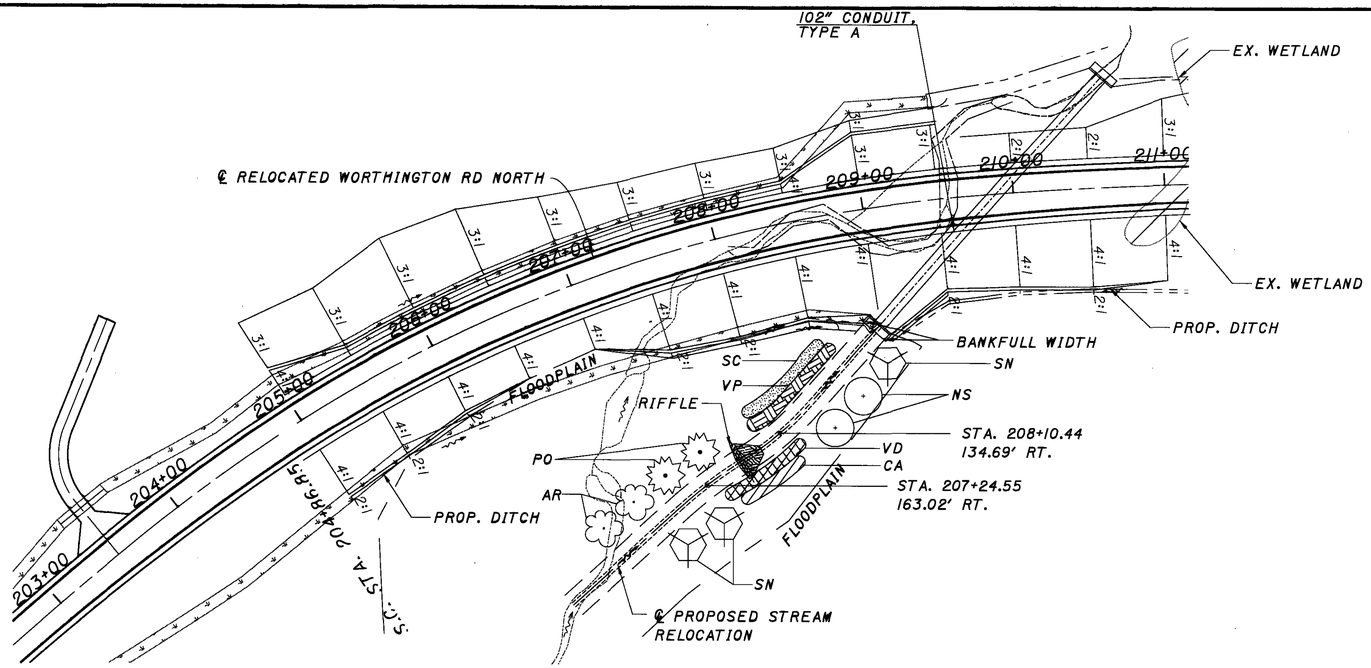
446+50.00
RAMP 1

446+81.82 (BACK)

SHEET TOTAL

SHEET TOTAL

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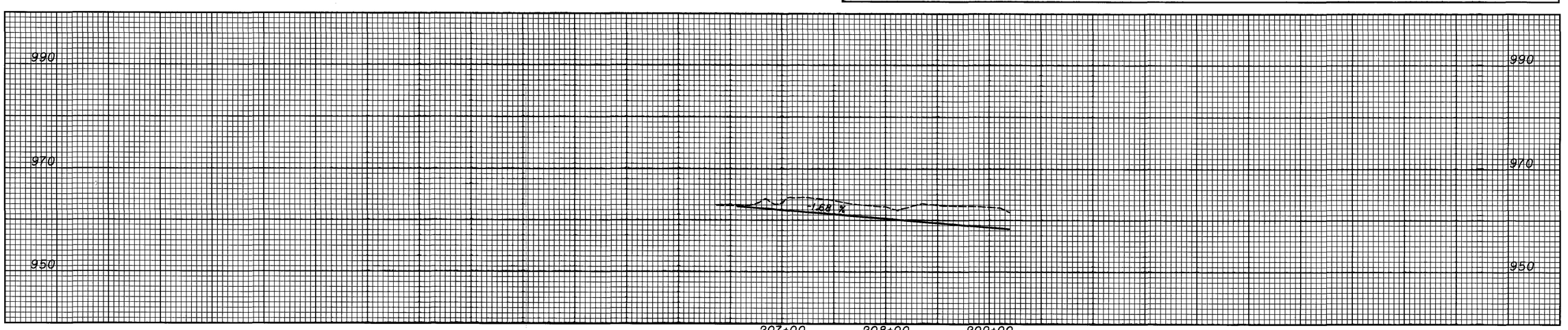


QUANTITIES

ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, CORNUS AMMONMUM - SILKY DOGWOOD	25 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, SAMBUCUS CANADENSIS - ELDERBERRY	36 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM DENTATUM - ARROWWOOD	32 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM PRUNIFOLIUM - BLACKHAW	39 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", ACER RUBRUM - RED MAPLE	2 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", NYSSA SYLVATICA - BLACK GUM	2 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", PLATANUS OCCIDENTALIS - SYCAMORE	2 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", SALIX NIGRA - BLACK WILLOW	3 EACH
ITEM 662 LANDSCAPE WATERING	1149 GALLON

TOTALS CARRIED TO SHEET 1078

CA	CORNUS AMMONMUM - SILKY DOGWOOD	AR	ACER RUBRUM - RED MAPLE
SC	SAMBUCUS CANADENSIS - ELDERBERRY	NS	NYSSA SYLVATICA - BLACK GUM
VD	VIBURNUM DENTATUM - ARROWWOOD	PO	PLATANUS OCCIDENTALIS - SYCAMORE
VP	VIBURNUM PRUNIFOLIUM - BLACKHAW	SN	SALIX NIGRA - BLACK WILLOW



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

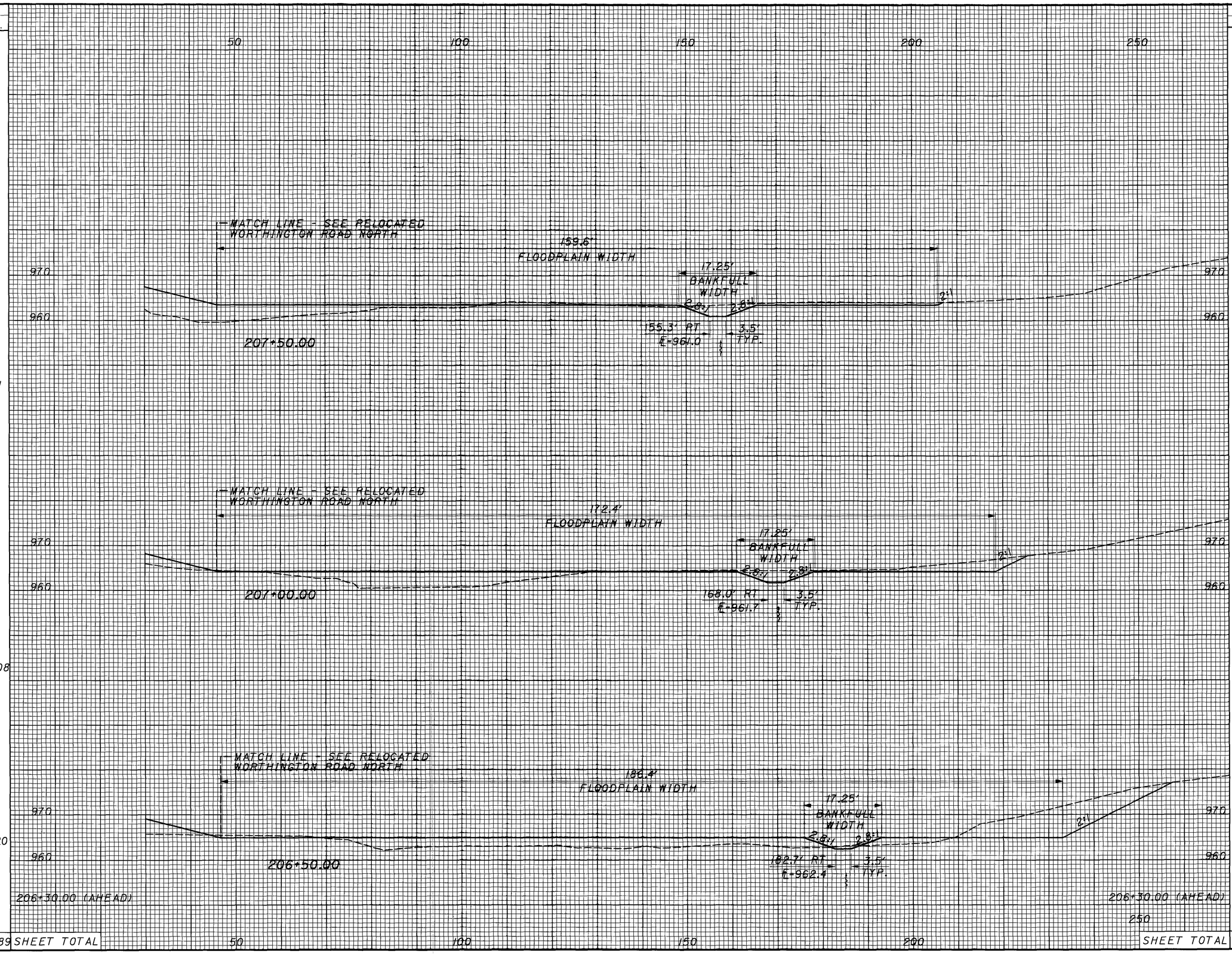
PLAN AND PROFILE- STREAM RELOCATION
SITE 24 - UNNAMED TRIBUTARY TO RACCOON CREEK
WEST AT THE S.R. 37 INTERCHANGE

LIC-161-6.65
LIC-37-10.25

1087
1349

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
145		62	103		
	861			137	246
165		86	163		
	1008			266	359
198		201	225		
	220			74	83
0		0	0		
	2089 SHEET TOTAL			477	77



CALCULATED JMA
CHECKED FJA

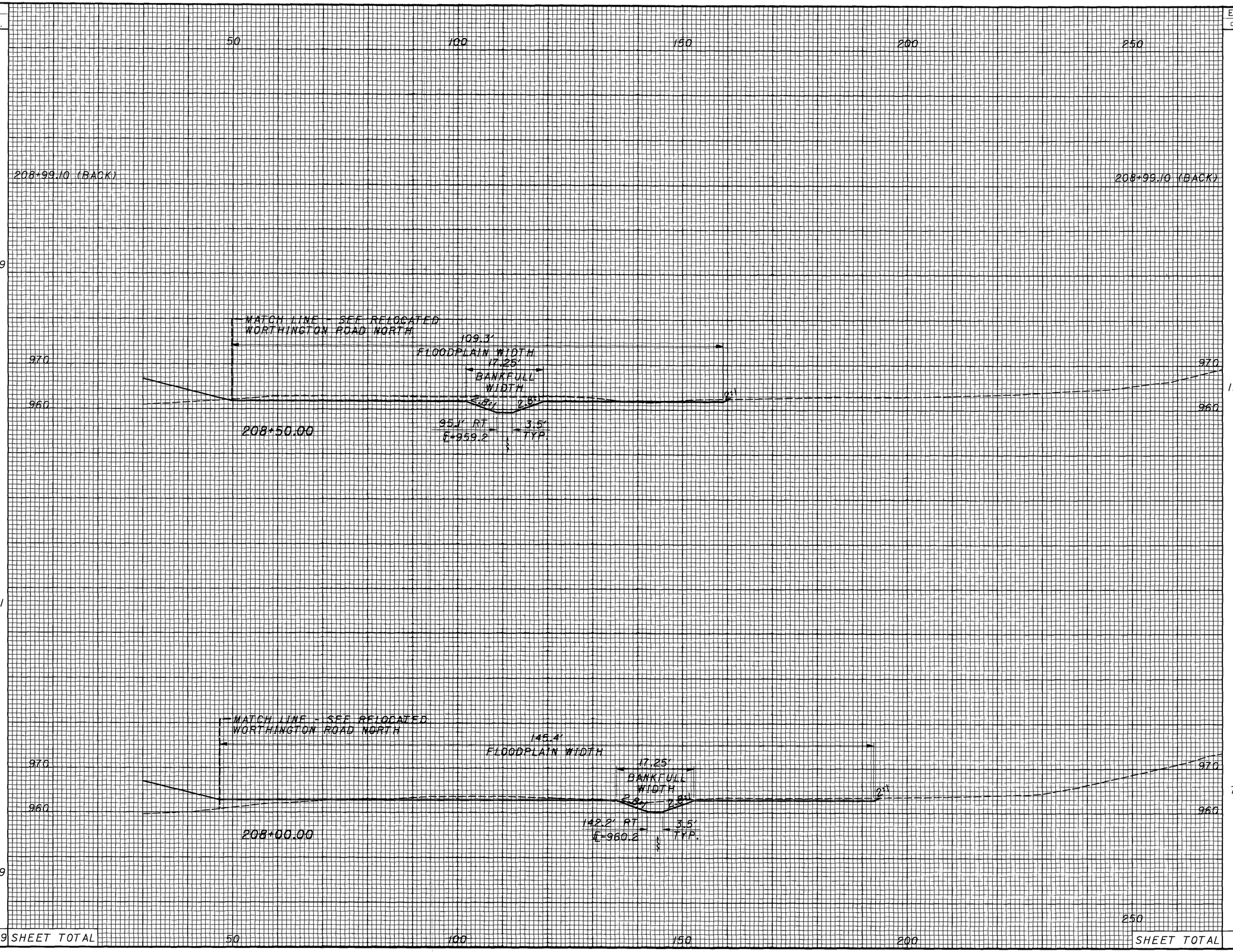
CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE
S.R. 37 INTERCHANGE, STA. 206+50 TO STA. 207+50

LIC-161-6.65
LIC-37-10.25

1088
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0		208+99.10 (BACK)	0	0		
	259				108	0
95		208+50.00	119	0		
	631				182	19
132		208+00.00	78	20		
	769				130	114
	1659	SHEET TOTAL			420	133



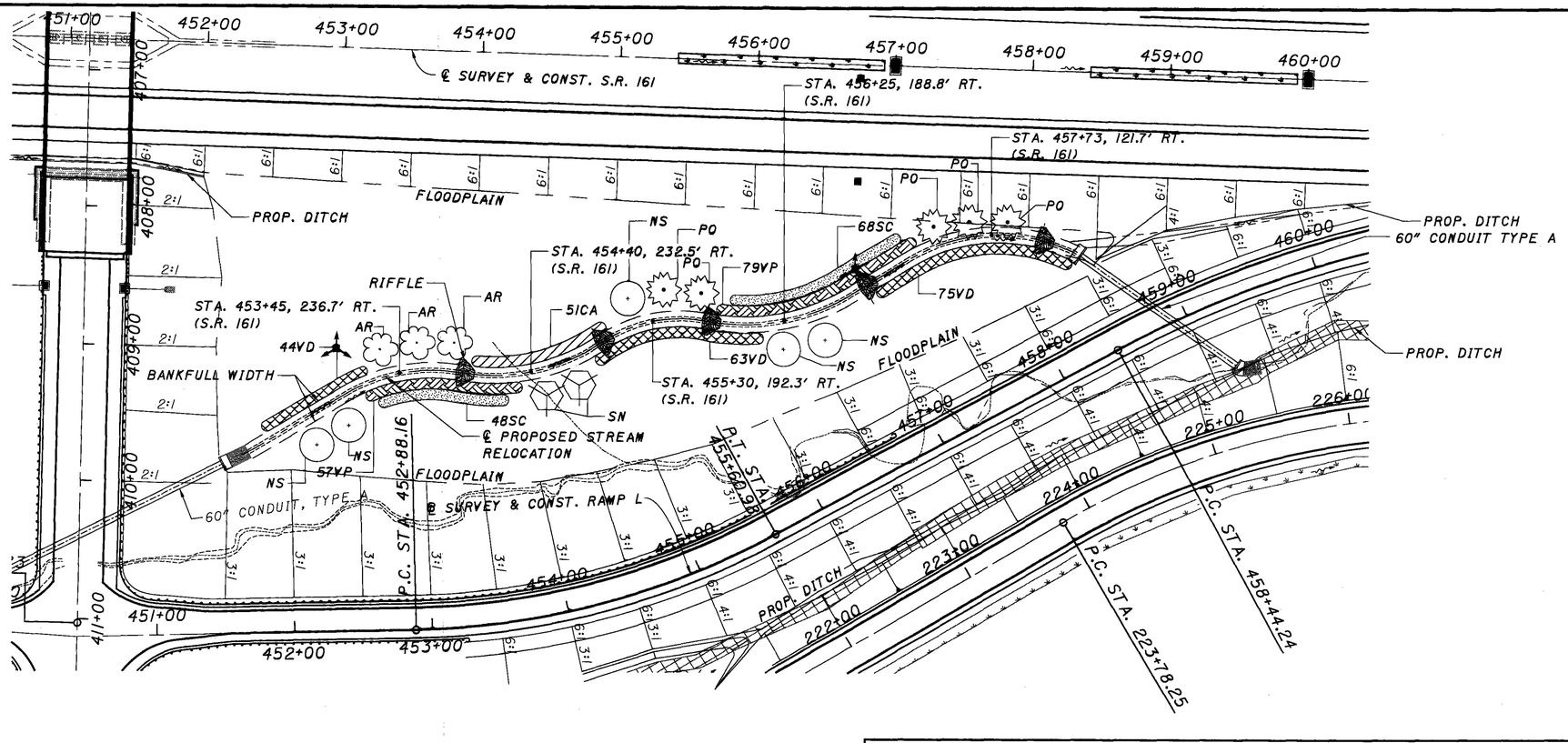
CALCULATED JMA
CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 24
UNNAMED TRIBUTARY TO RACCOON CREEK WEST AT THE S.R. 37 INTERCHANGE, STA. 208+00 TO STA. 208+50

LIC-161-6.65
LIC-37-10.25

1089
1349

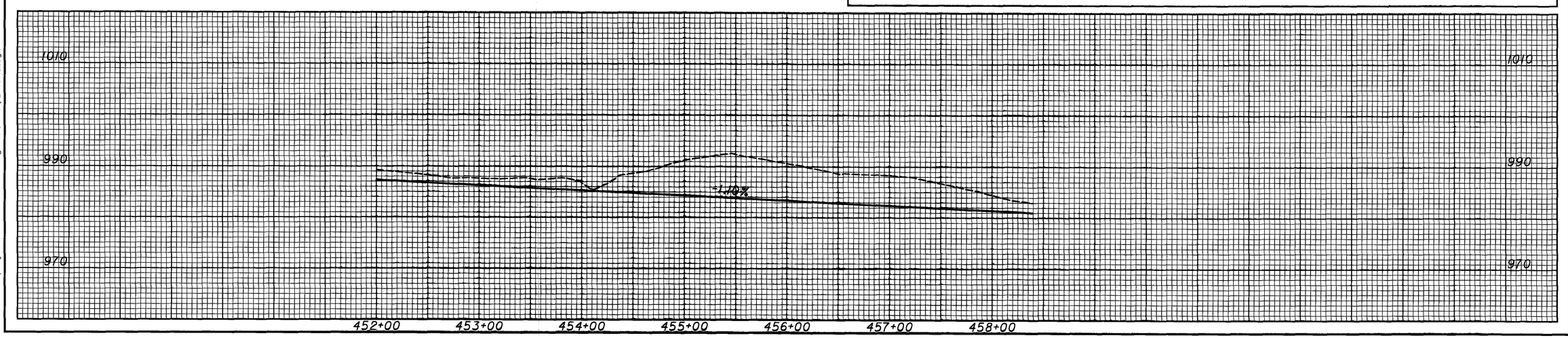
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QUANTITIES	
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, CORNUS AMMONMUM - SILKY DOGWOOD	51 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, SAMBUCUS CANADENSIS - ELDERBERRY	116 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM DENTATUM - ARROWWOOD	182 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM PRUNIFOLIUM - BLACKHAW	136 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", ACER RUBRUM - RED MAPLE	3 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", NYSSA SYLVATICA - BLACK GUM	5 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", PLATANUS OCCIDENTALIS - SYCAMORE	5 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", SALIX NIGRA - BLACK WILLOW	2 EACH
ITEM 662 LANDSCAPE WATERING	3770 GALLON

TOTALS CARRIED TO SHEET 1078

CA	CORNUS AMMONMUM - SILKY DOGWOOD	AR	ACER RUBRUM - RED MAPLE
SC	SAMBUCUS CANADENSIS - ELDERBERRY	NS	NYSSA SYLVATICA - BLACK GUM
VD	VIBURNUM DENTATUM - ARROWWOOD	PO	PLATANUS OCCIDENTALIS - SYCAMORE
VP	VIBURNUM PRUNIFOLIUM - BLACKHAW	SN	SALIX NIGRA - BLACK WILLOW



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

PLAN AND PROFILE- STREAM RELOCATION
SITE 28 - UNNAMED TRIBUTARY OF MOOTS RUN
SOUTHEAST OF S.R. 37 INTERCHANGE

LIC-161-6.65
LIC-37-10.25

1090
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
211	1186	241	23	362	34
216	1200	150	14	292	29
216	1200	165	17	328	47
216	164	189	34	48	9
0	0	0	0		
	3750 SHEET TOTAL			1030	119

MATCH LINE - SEE S.R. 161

209.9' FLOODPLAIN WIDTH

MATCH LINE - SEE RAMP L

11.5' BANKFULL WIDTH

3:1

233.9' RT. ℄-985.5

3.0' TYP.

454+00.00 S.R. 161

MATCH LINE - SEE S.R. 161

214.9' FLOODPLAIN WIDTH

MATCH LINE SEE RAMP L

11.5' BANKFULL WIDTH

3:1

234.1' RT. ℄-986.0

3.0' TYP.

453+50.00 S.R. 161

MATCH LINE - SEE S.R. 161

215.3' FLOODPLAIN WIDTH

MATCH LINE - SEE RAMP L

11.5' BANKFULL WIDTH

3:1

256.5' RT. ℄-986.6

3.0' TYP.

453+00.00 S.R. 161

MATCH LINE - SEE S.R. 161

215.8' FLOODPLAIN WIDTH

MATCH LINE - SEE RAMP L

11.5' BANKFULL WIDTH

3:1

289.1' RT. ℄-987.1

3.0' TYP.

452+50.00 S.R. 161

452+36.36 (AHEAD)

452+36.36 (AHEAD)

100 150 200 250 300 350

1010 1000 990 980 970 1020

CALCULATED JMA

CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 28
UNNAMED TRIBUTARY OF MOOTS RUN SOUTHEAST OF
S.R. 37 INTERCHANGE, STA. 452+50 TO STA. 454+00

LIC-161-6.65
LIC-37-10.25

1091
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
138	836
163	964
184	1092
209	1167
	4059

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
799	7		
		1479	18
798	12		
		1382	22
695	12		
		1083	40
475	31		
		663	50
		4607	130

SHEET TOTAL

SHEET TOTAL

CALCULATED JMA
CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 28
UNNAMED TRIBUTARY OF MOOTS RUN SOUTHEAST OF S.R. 37 INTERCHANGE, STA. 454+50 TO STA. 456+00

LIC-161-6.65
LIC-37-10.25

1092
1349

456+00.00
S.R. 161
MATCH LINE - SEE S.R. 161
MATCH LINE - SEE RAMP L
137.4' FLOODPLAIN WIDTH
11.5' BANKFULL WIDTH
2:1
2:1
3:1
199.0' RT. ℄-983.5
3.0' TYP.

455+50.00
S.R. 161
MATCH LINE - SEE S.R. 161
MATCH LINE - SEE RAMP L
161.8' FLOODPLAIN WIDTH
11.5' BANKFULL WIDTH
2:1
2:1
3:1
188.2' RT ℄-984.0
3.0' TYP.

455+00.00
S.R. 161
MATCH LINE - SEE S.R. 161
MATCH LINE - SEE RAMP L
183.1' FLOODPLAIN WIDTH
11.5' BANKFULL WIDTH
2:1
2:1
3:1
202.8' RT ℄-984.5
3.0' TYP.

454+50.00
S.R. 161
MATCH LINE - SEE S.R. 161
MATCH LINE - SEE RAMP L
208.2' FLOODPLAIN WIDTH
11.5' BANKFULL WIDTH
2:1
2:1
3:1
226.5' RT ℄-985.0
3.0' TYP.

1010
1000
990
980
970

100
150
200
250
300
350

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SEEDING	
END WIDTH	SQ. YDS.
0	
	68
32	
	256
60	
	408
87	
	556
113	
	697
	1985

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		40	0
57	0		
		200	0
159	0		
		452	0
329	0		
		773	2
506	2		
		1208	8
		2673	10

CALCULATED JMA
CHECKED FJA

SECTIONS - STREAM RELOCATION SITE 28
TRIBUTARY OF MOOTS RUN SOUTHEAST OF
INTERCHANGE, STA. 456+50 TO STA. 458+00

CROSS SECTIONS
UNNAMED TRIBUTARY
S.R. 37 INTERCHANGE

LIC-161-6.65
LIC-37-10.25

1093
1349

458+38.01 (BACK)

MATCH LINE - SEE S.R. 161
MATCH LINE - SEE RAMP L
FLOODPLAIN WIDTH 31.3'
11.5' BANKFULL WIDTH
2.1% 2.1% 3:1
132.8' RT. ℄-981.4
3.0' TYP.
458+00.00 S.R. 161

MATCH LINE - SEE RAMP L
MATCH LINE - SEE S.R. 161
58.6' FLOODPLAIN WIDTH
11.5' BANKFULL WIDTH
2.1% 2.1% 3:1
132.2' RT. ℄-981.9
3.0' TYP.
457+50.00 S.R. 161

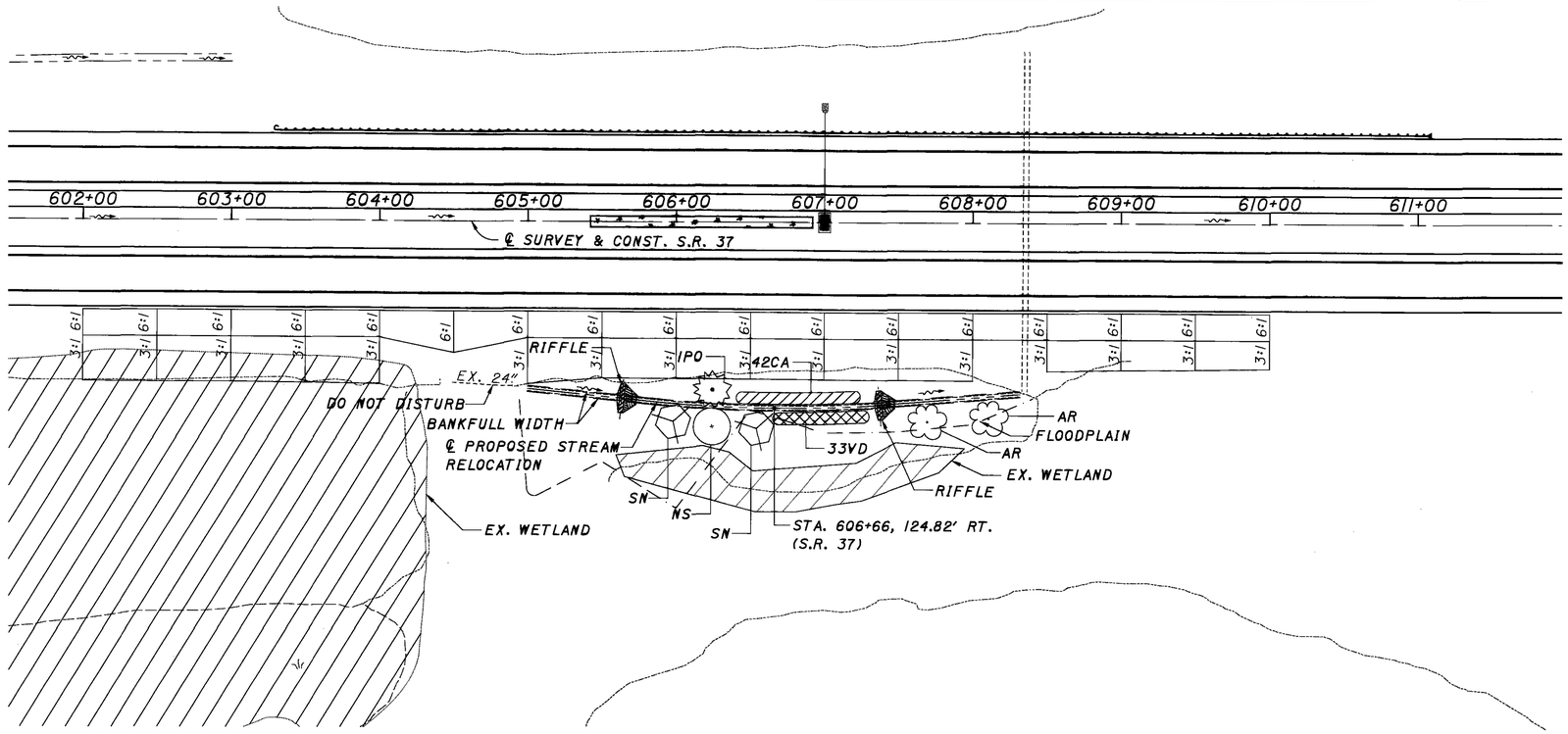
MATCH LINE - SEE S.R. 161
MATCH LINE - SEE RAMP L
86.4' FLOODPLAIN WIDTH
BANKFULL WIDTH 11.5'
2.1% 2.1% 3:1
119.5' RT. ℄-982.4
3.0' TYP.
457+00.00 S.R. 161

MATCH LINE - SEE S.R. 161
112.1' FLOODPLAIN WIDTH
MATCH LINE - SEE RAMP L
BANKFULL WIDTH 11.5'
2.1% 2.1% 3:1
179.1' RT. ℄-983.0
3.0' TYP.
456+50.00 S.R. 161

50 100 150 200 250 300

SHEET TOTAL

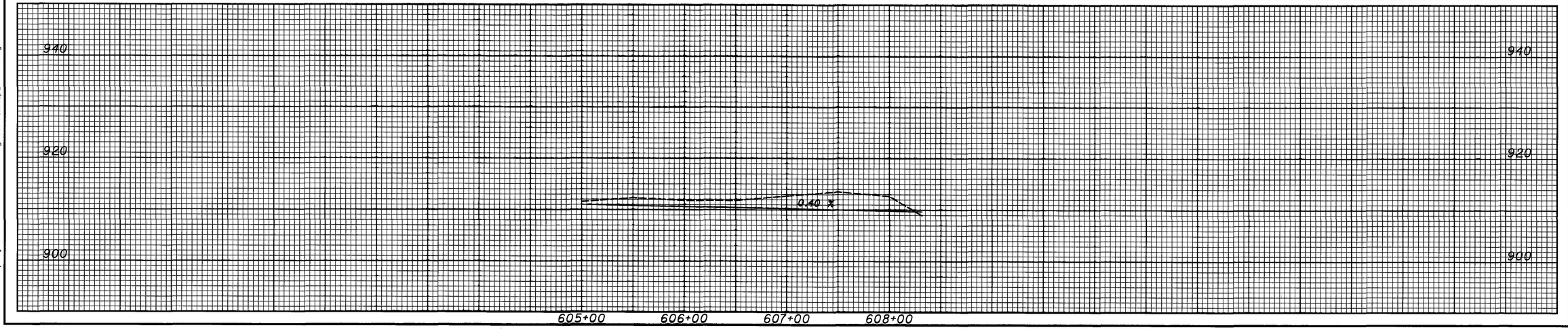
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QUANTITIES	
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, CORNUS AMMONMUM - SILKY DOGWOOD	42 EACH
ITEM 661 DECIDUOUS SHRUB, 3' HEIGHT, VIBURNUM DENTATUM - ARROWWOOD	33 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", ACER RUBRUM - RED MAPLE	2 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", NYSSA SYLVATICA - BLACK GUM	1 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", PLATANUS OCCIDENTALIS - SYCAMORE	1 EACH
ITEM 661 DECIDUOUS SHADE TREE, 2", SALIX NIGRA - BLACK WILLOW	2 EACH
ITEM 662 LANDSCAPE WATERING	675 GALLON

TOTALS CARRIED TO SHEET 1078

CA	CORNUS AMMONMUM - SILKY DOGWOOD	AR	ACER RUBRUM - RED MAPLE
		NS	NYSSA SYLVATICA - BLACK GUM
VD	VIBURNUM DENTATUM - ARROWWOOD	PO	PLATANUS OCCIDENTALIS - SYCAMORE
		SN	SALIX NIGRA - BLACK WILLOW



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JMA
CHECKED FJA

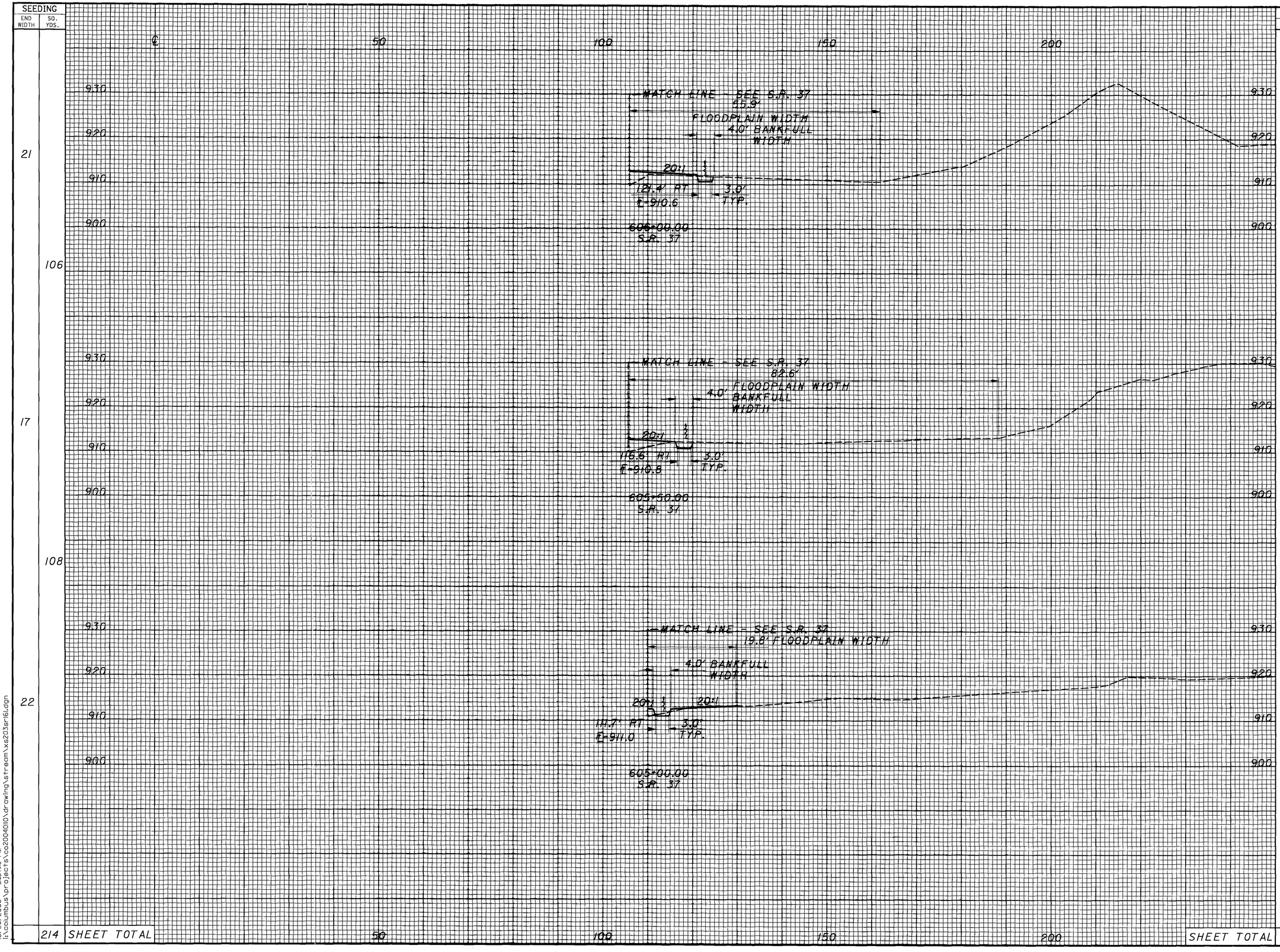
PLAN AND PROFILE - STREAM RELOCATION SITE 42
S.R. 37 STA. 605+00 TO STA. 608+31.81

LIC-161-6.65
LIC-37-10.25

1094
1349

tduffney
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SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
21		4	11		
	106			8	11
17		5	13		
				3	15
	108				
22		4	3		
	214	SHEET TOTAL		11	26



CALCULATED JMA
CHECKED FJA

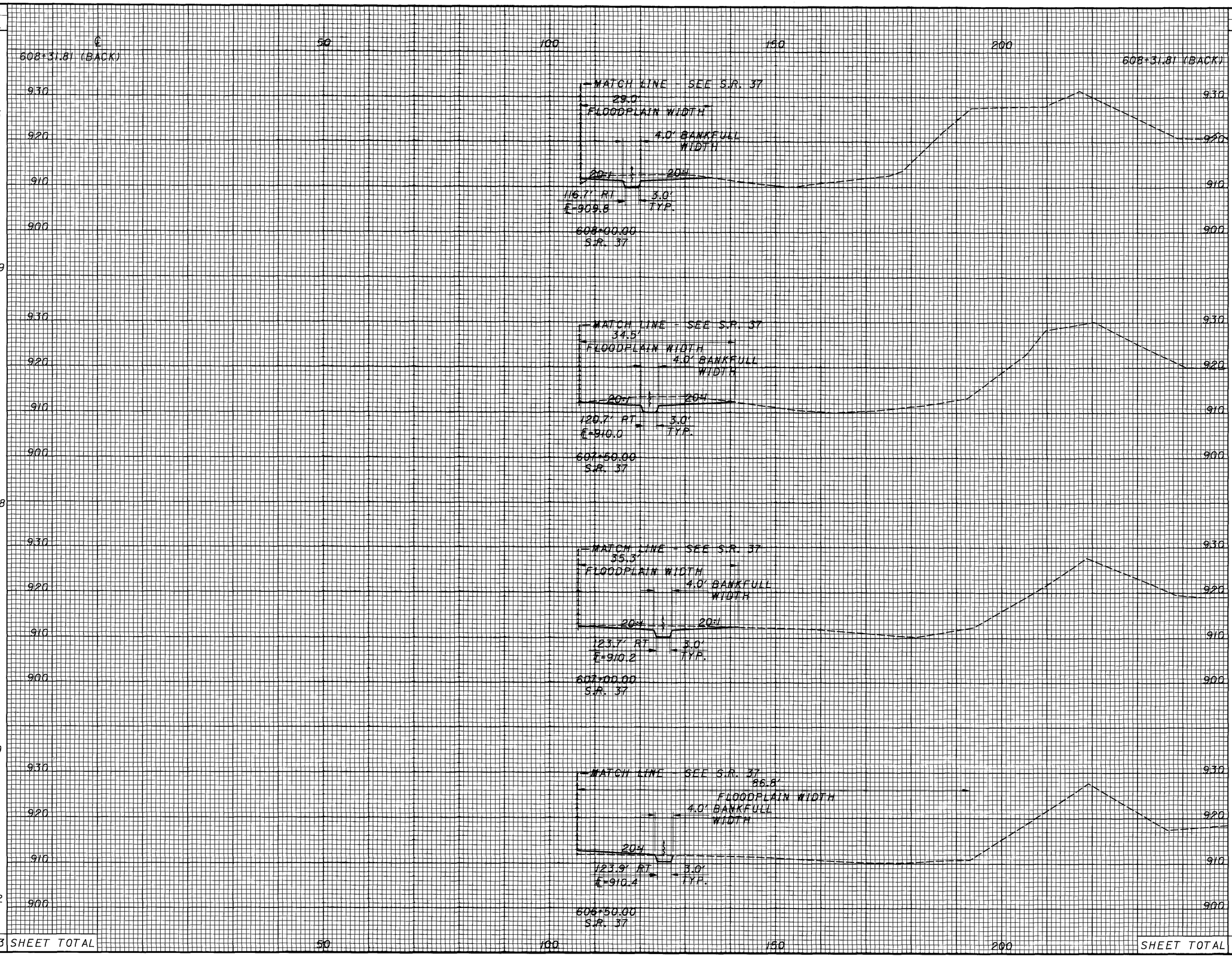
CROSS SECTIONS - STREAM RELOCATION SITE 42
S.R. 37 STA. 605+00 TO STA. 606+00

LIC-161-6.65
LIC-37-10.25

1095
1349

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SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	55
31	
	189
37	
	208
38	
	169
23	
	122
	743 SHEET TOTAL



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
		18	1
31	1		
		73	1
48	0		
		68	0
25	0		
		28	7
5	8		
		8	18
		195	27 SHEET TOTAL

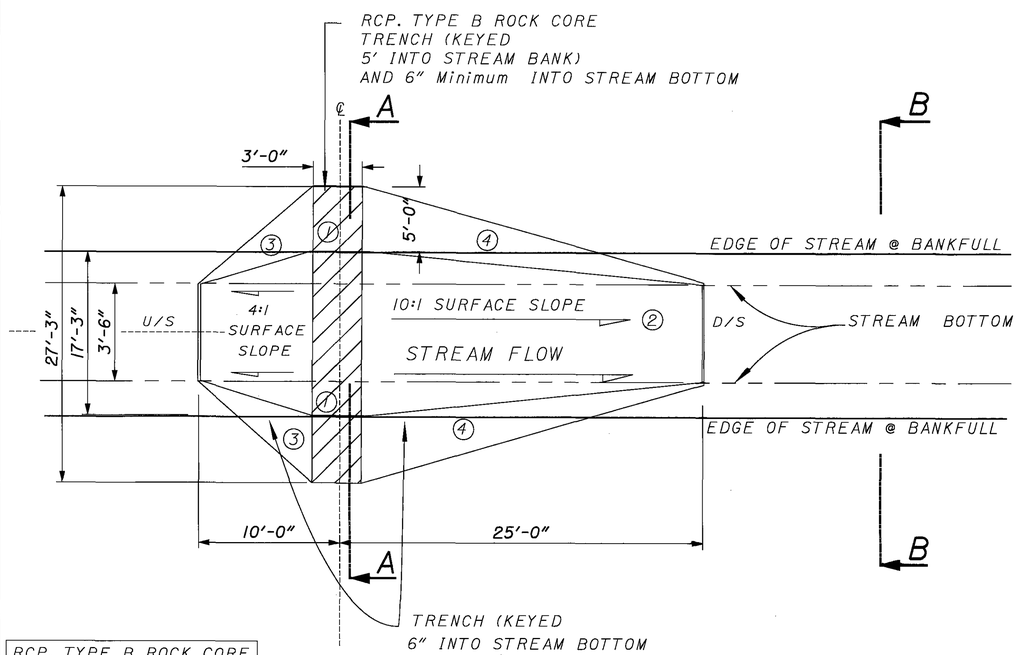
CALCULATED JMA
CHECKED FJA

CROSS SECTIONS - STREAM RELOCATION SITE 42
S.R. 37 STA. 606+50 TO STA. 608+31.81

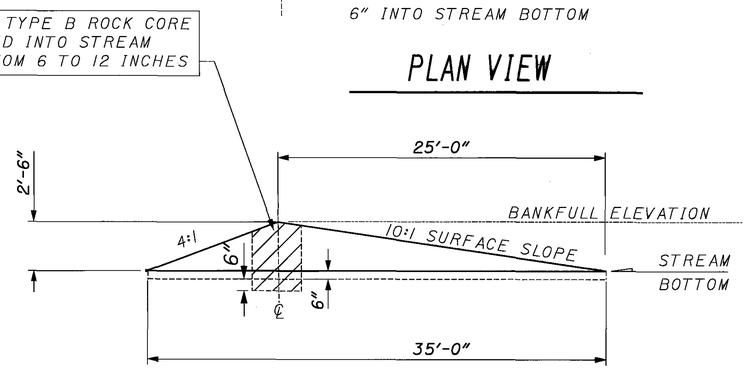
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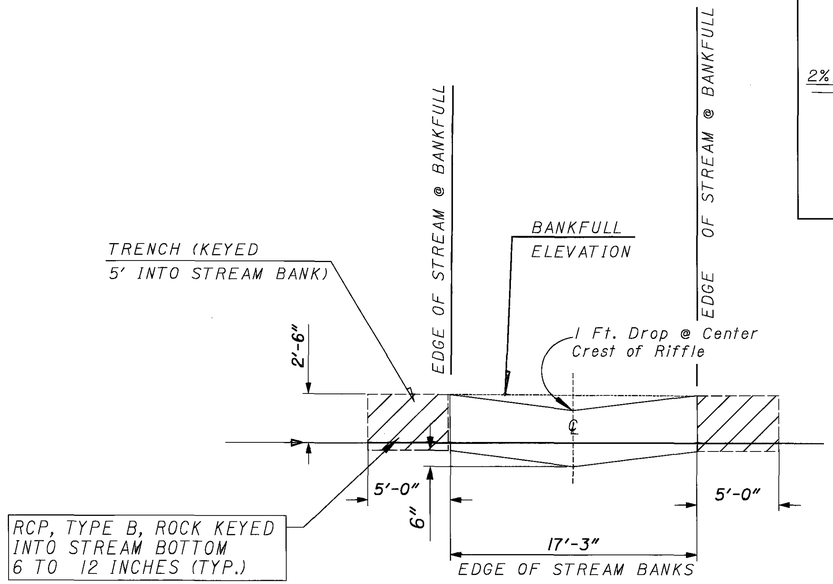
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PLAN VIEW

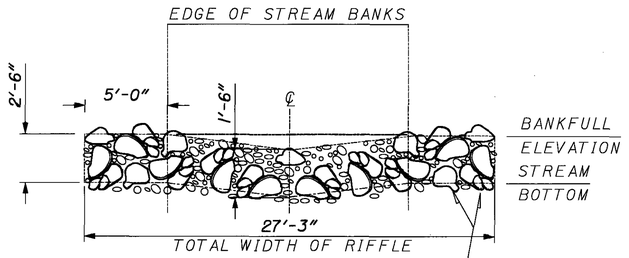


PROFILE VIEW

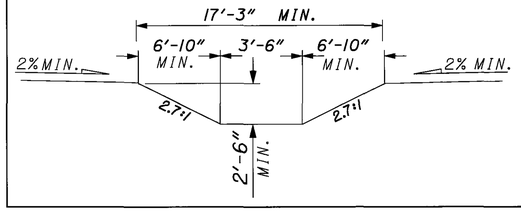


SECTION A-A

DETAILED ILLUSTRATION OF RIFFLE CROSS SECTION:



TYPICAL CHANNEL SECTION
(BANKFULL WIDTH)



SECTION B-B

NOTES:

1. ROCK RIFFLES ARE TO BE CONSTRUCTED WITH ROCK CHANNEL PROTECTION, TYPE B, #2 OVERSIZE RIVER ROCK, AND #57 ROUNDS RIVER ROCK.

2. ROCK CHANNEL PROTECTION, TYPE B, WILL BE USED TO CREATE THE RIFFLE CORE AS DETAILED.

3. A 50/50 MIX OF #2 OVERSIZE RIVER ROCK AND #57 ROUNDS RIVER ROCK WILL BE USED TO CREATE THE RIFFLE EXCEPT FOR THE CORE.

4. THE CONTRACTOR WILL CONSTRUCT THE RIFFLE FURTHEST DOWNSTREAM FIRST, THEN CONSTRUCT EACH RIFFLE THEREAFTER STARTING AT THE RIFFLE FURTHEST UPSTREAM AND WORKING TOWARD THE RIFFLE FURTHEST DOWNSTREAM.

5. PAYMENT FOR ALL THE MATERIALS AND LABOR FOR THE CONSTRUCTION OF THE RIFFLES WILL BE DONE ACCORDING TO 601 AT THE UNIT PRICE OF CUBIC YARD.

ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER (CU.YD. PER RIFFLE)
(AREA 1 WITH APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 (27.25 X 3 X 3) = 9.08 C.Y.

ROCK CHANNEL PROTECTION- MISC.: #2 OVERSIZE RIVER ROCK (CU.YD. PER RIFFLE)
(AREA 2, 3, AND 4 WITH HALF THE APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 [(17.25 + 3.5) X 0.5 X 23.5 + (17.25 + 3.5) X 0.5 X 8.5 + 2 X (11.875 X 8.5 X 0.5 - 6.875 X 8.5 X 0.5) + 2 X (11.875 X 23.5 X 0.5 - 23.5 X 6.875 X 0.5)] X 3.5 X 0.5 X 0.5 = 15.95 C.Y.

ROCK CHANNEL PROTECTION- MISC.: #57 ROUNDS RIVER ROCK (CU.YD. PER RIFFLE)
(AREA 2, 3, AND 4 WITH HALF THE APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 [(17.25 + 3.5) X 0.5 X 23.5 + (17.25 + 3.5) X 0.5 X 8.5 + 2 X (11.875 X 8.5 X 0.5 - 6.875 X 8.5 X 0.5) + 2 X (11.875 X 23.5 X 0.5 - 23.5 X 6.875 X 0.5)] X 3.5 X 0.5 X 0.5 = 15.95 C.Y.

ITEM	DESCRIPTION	QUANTITIES
601	ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER (9.08 CU.YD. PER RIFFLE) X 9 EACH	81.7 CU.YD.
601	ROCK CHANNEL PROTECTION- MISC.: #2 OVERSIZE RIVER ROCK (15.95 CU.YD. PER RIFFLE) X 9 EACH	143.6 CU.YD.
601	ROCK CHANNEL PROTECTION- MISC.: #57 ROUNDS RIVER ROCK (15.95 CU.YD. PER RIFFLE) X 9 EACH	143.6 CU.YD.

THE CMS STANDARD FOR THESE TYPES OF ROCK INCLUDES FINES.
QUANTITIES CARRIED TO SHEET 1078.

CALCULATED JMA
CHECKED FJA

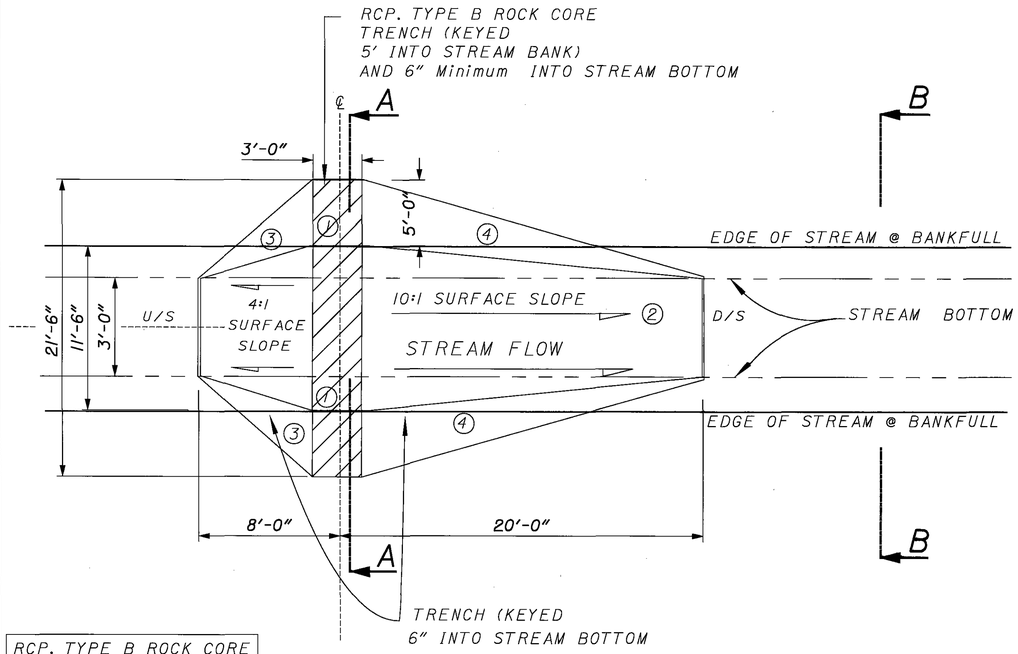
RIFFLE DETAIL SITE 24

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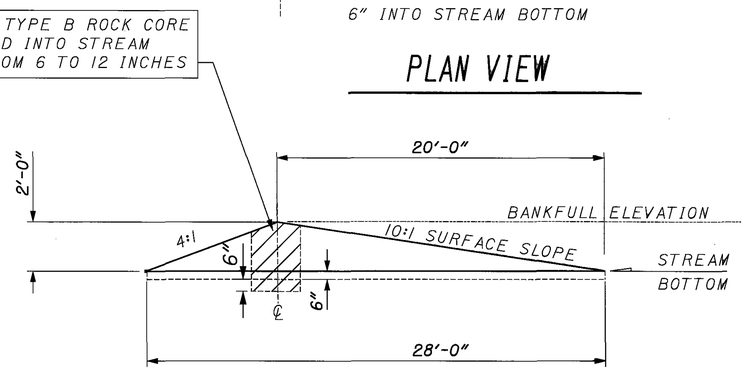
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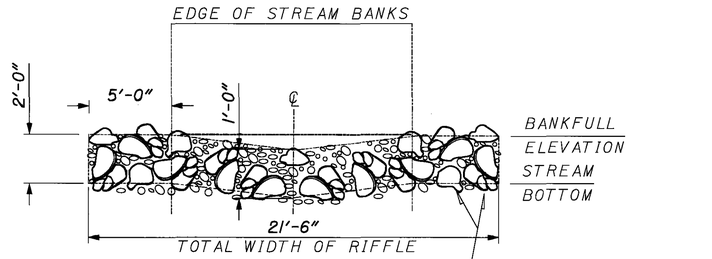


PLAN VIEW

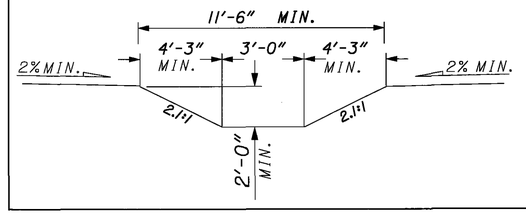


PROFILE VIEW

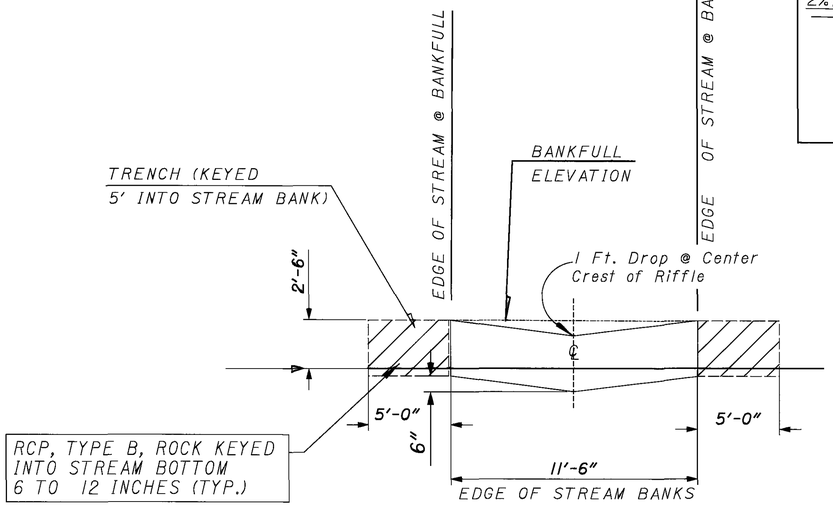
DETAILED ILLUSTRATION OF RIFFLE CROSS SECTION:



TYPICAL CHANNEL SECTION
(BANKFULL WIDTH)



SECTION B-B



SECTION A-A

ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER (CU.YD. PER RIFFLE)
(AREA 1 WITH APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 (21.5 X 3 X 2.5) = 5.97 C.Y.

ROCK CHANNEL PROTECTION- MISC.: #2 OVERSIZE RIVER ROCK (CU.YD. PER RIFFLE)
(AREA 2, 3, AND 4 WITH HALF THE APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 [(11.5 + 3) X 0.5 X 18.5 + (11.5 + 3) X 0.5 X 6.5 + 2 X (9.25 X 6.5 X 0.5 - 4.25 X 6.5 X 0.5) +
2 X (18.5 X 9.25 X 0.5 - 18.5 X 4.25 X 0.5)] X 3/2 X 0.5 = 8.51 C.Y.

ROCK CHANNEL PROTECTION- MISC.: #57 ROUNDS RIVER ROCK (CU.YD. PER RIFFLE)
(AREA 2, 3, AND 4 WITH HALF THE APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 [(11.5 + 3) X 0.5 X 18.5 + (11.5 + 3) X 0.5 X 6.5 + 2 X (9.25 X 6.5 X 0.5 - 4.25 X 6.5 X 0.5) +
2 X (18.5 X 9.25 X 0.5 - 18.5 X 4.25 X 0.5)] X 3/2 X 0.5 = 8.51 C.Y.

ITEM	DESCRIPTION	QUANTITIES
601	ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER (5.97 CU.YD. PER RIFFLE) X 5 EACH	29.9 CU.YD.
601	ROCK CHANNEL PROTECTION- MISC.: #2 OVERSIZE RIVER ROCK (8.51 CU.YD. PER RIFFLE) X 5 EACH	42.6 CU.YD.
601	ROCK CHANNEL PROTECTION- MISC.: #57 ROUNDS RIVER ROCK (8.51 CU.YD. PER RIFFLE) X 5 EACH	42.6 CU.YD.

THE CMS STANDARD FOR THESE TYPES OF ROCK INCLUDES FINES.
QUANTITIES CARRIED TO SHEET 1078.

NOTES:

1. ROCK RIFFLES ARE TO BE CONSTRUCTED WITH ROCK CHANNEL PROTECTION, TYPE B, #2 OVERSIZE RIVER ROCK, AND #57 ROUNDS RIVER ROCK.

2. ROCK CHANNEL PROTECTION, TYPE B, WILL BE USED TO CREATE THE RIFFLE CORE AS DETAILED.

3. A 50/50 MIX OF #2 OVERSIZE RIVER ROCK AND #57 ROUNDS RIVER ROCK WILL BE USED TO CREATE THE RIFFLE EXCEPT FOR THE CORE.

4. THE CONTRACTOR WILL CONSTRUCT THE RIFFLE FURTHEST DOWNSTREAM FIRST, THEN CONSTRUCT EACH RIFFLE THEREAFTER STARTING AT THE RIFFLE FURTHEST UPSTREAM AND WORKING TOWARD THE RIFFLE FURTHEST DOWNSTREAM.

5. PAYMENT FOR ALL THE MATERIALS AND LABOR FOR THE CONSTRUCTION OF THE RIFFLES WILL BE DONE ACCORDING TO 601 AT THE UNIT PRICE OF CUBIC YARD.

CALCULATED JMA
CHECKED FJA

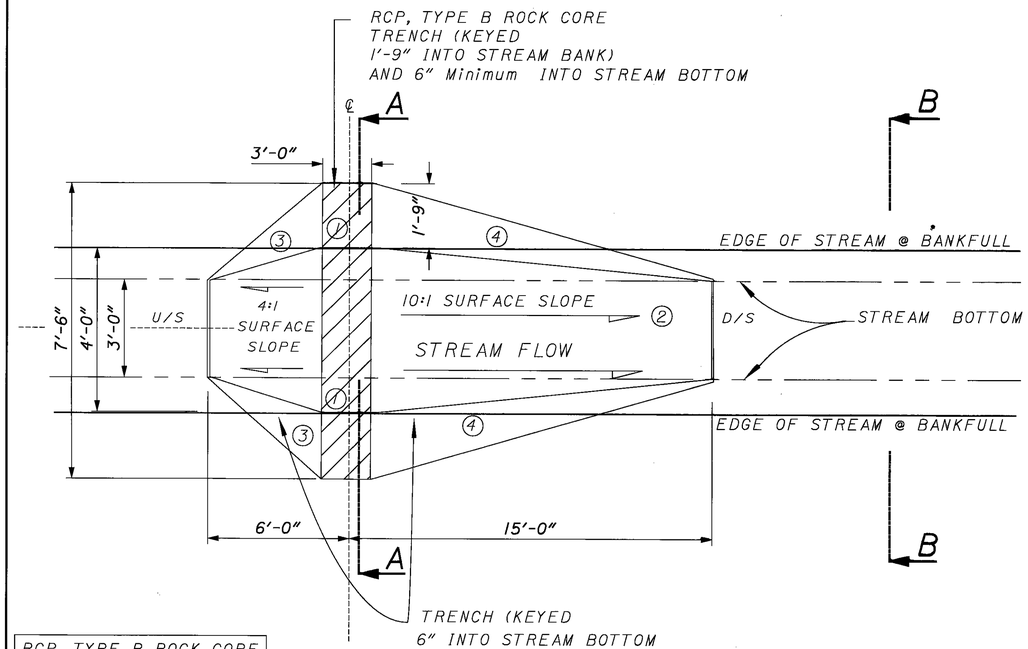
RIFFLE DETAIL SITE 28

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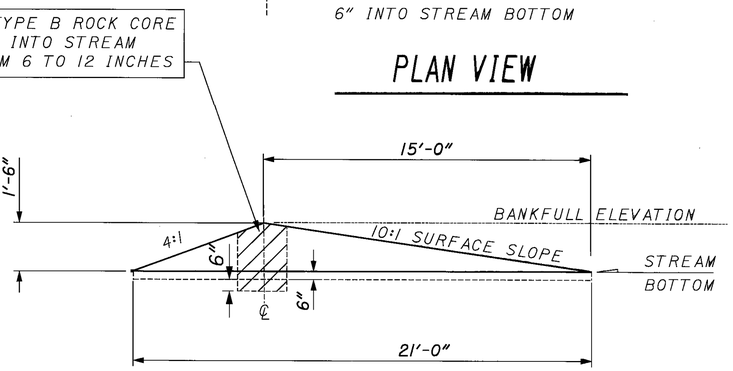
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PLAN VIEW



PROFILE VIEW

ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER (CU.YD. PER RIFFLE)
(AREA 1 WITH APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 (7.5 X 3 X 2.5) = 1.67 C.Y.

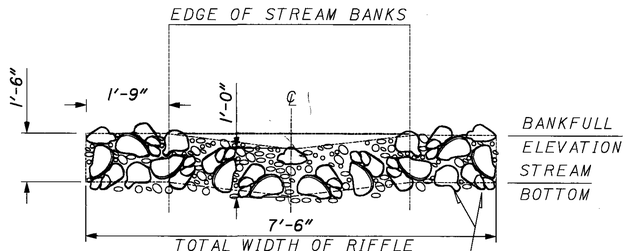
ROCK CHANNEL PROTECTION- MISC.: #2 OVERSIZE RIVER ROCK (CU.YD. PER RIFFLE)
(AREA 2, 3, AND 4 WITH HALF THE APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 [(4 + 3) X 0.5 X 13.5 + (4 + 3) X 0.5 X 4.5 + 2 X (2.75 X 4.5 X 0.5 - 1 X 4.5 X 0.5) +
2 X (2.75 X 13.5 X 0.5 - 1 X 13.5 X 0.5)] X 2.5 X 0.5 X 0.5 = 2.19 C.Y.

ROCK CHANNEL PROTECTION- MISC.: #57 ROUNDS RIVER ROCK (CU.YD. PER RIFFLE)
(AREA 2, 3, AND 4 WITH HALF THE APPROPRIATE AVERAGE THICKNESS OF RCP)
1/27 [(4 + 3) X 0.5 X 13.5 + (4 + 3) X 0.5 X 4.5 + 2 X (2.75 X 4.5 X 0.5 - 1 X 4.5 X 0.5) +
2 X (2.75 X 13.5 X 0.5 - 1 X 13.5 X 0.5)] X 2.5 X 0.5 X 0.5 = 2.19 C.Y.

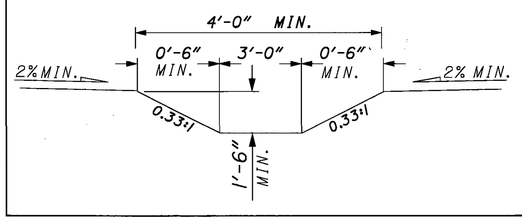
ITEM	DESCRIPTION	QUANTITIES
601	ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER (1.67 CU.YD. PER RIFFLE) X 2 EACH	3.3 CU.YD.
601	ROCK CHANNEL PROTECTION- MISC.: #2 OVERSIZE RIVER ROCK (2.19 CU.YD. PER RIFFLE) X 2 EACH	4.4 CU.YD.
601	ROCK CHANNEL PROTECTION- MISC.: #57 ROUNDS RIVER ROCK (2.19 CU.YD. PER RIFFLE) X 2 EACH	4.4 CU.YD.

THE CMS STANDARD FOR THESE TYPES OF ROCK INCLUDES FINES.
QUANTITIES CARRIED TO SHEET 1078.

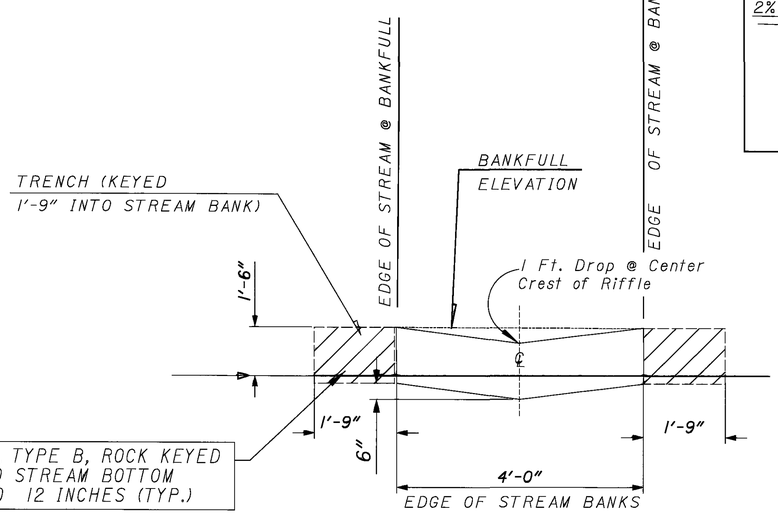
DETAILED ILLUSTRATION OF RIFFLE CROSS SECTION:



TYPICAL CHANNEL SECTION
(BANKFULL WIDTH)



SECTION B-B



SECTION A-A

NOTES:

1. ROCK RIFFLES ARE TO BE CONSTRUCTED WITH ROCK CHANNEL PROTECTION, TYPE B, #2 OVERSIZE RIVER ROCK, AND #57 ROUNDS RIVER ROCK.

2. ROCK CHANNEL PROTECTION, TYPE B, WILL BE USED TO CREATE THE RIFFLE CORE AS DETAILED.

3. A 50/50 MIX OF #2 OVERSIZE RIVER ROCK AND #57 ROUNDS RIVER ROCK WILL BE USED TO CREATE THE RIFFLE EXCEPT FOR THE CORE.

4. THE CONTRACTOR WILL CONSTRUCT THE RIFFLE FURTHEST DOWNSTREAM FIRST, THEN CONSTRUCT EACH RIFFLE THEREAFTER STARTING AT THE RIFFLE FURTHEST UPSTREAM AND WORKING TOWARD THE RIFFLE FURTHEST DOWNSTREAM.

5. PAYMENT FOR ALL THE MATERIALS AND LABOR FOR THE CONSTRUCTION OF THE RIFFLES WILL BE DONE ACCORDING TO 601 AT THE UNIT PRICE OF CUBIC YARD.

CALCULATED JMA
CHECKED FJA

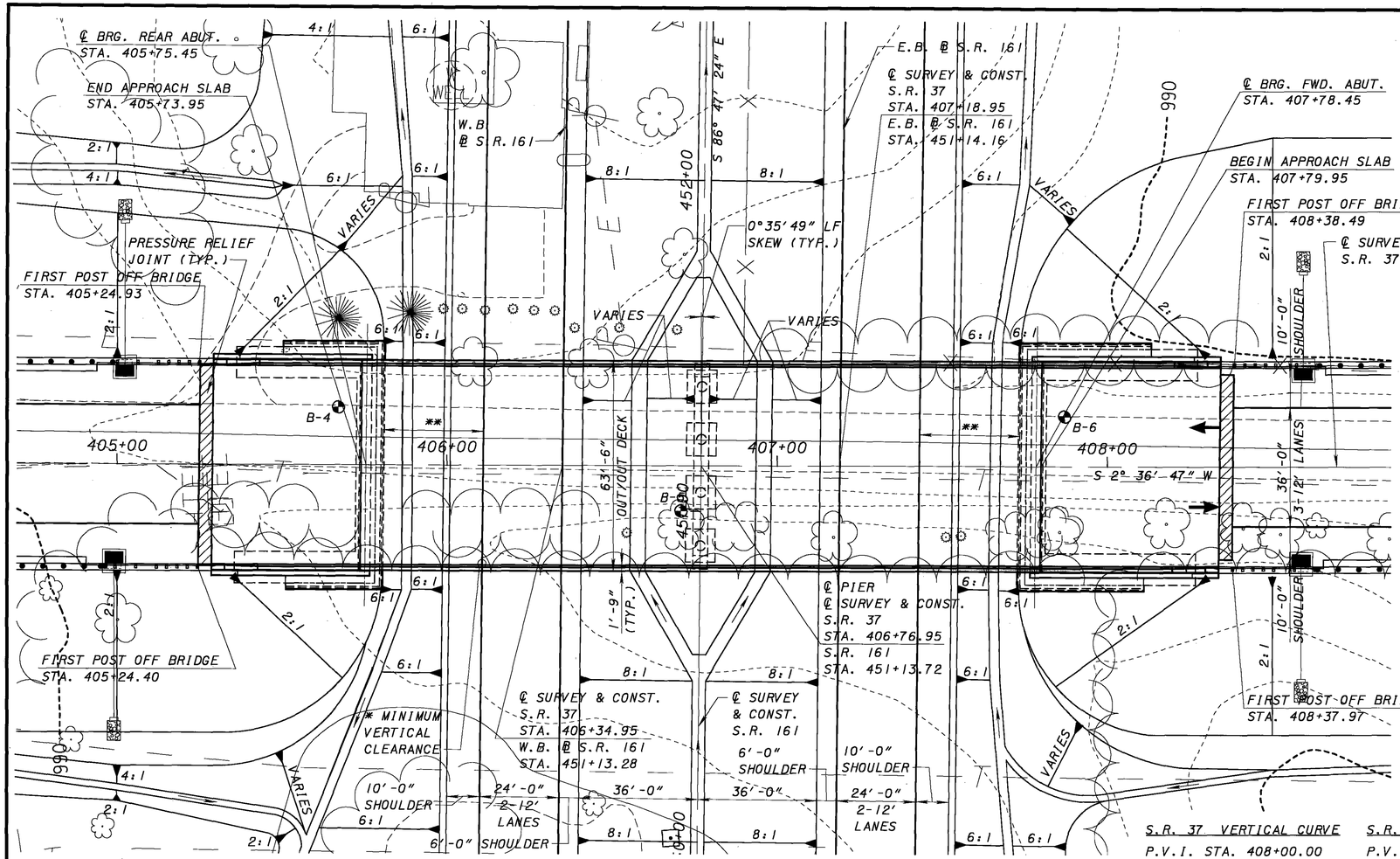
RIFFLE DETAIL SITE 42

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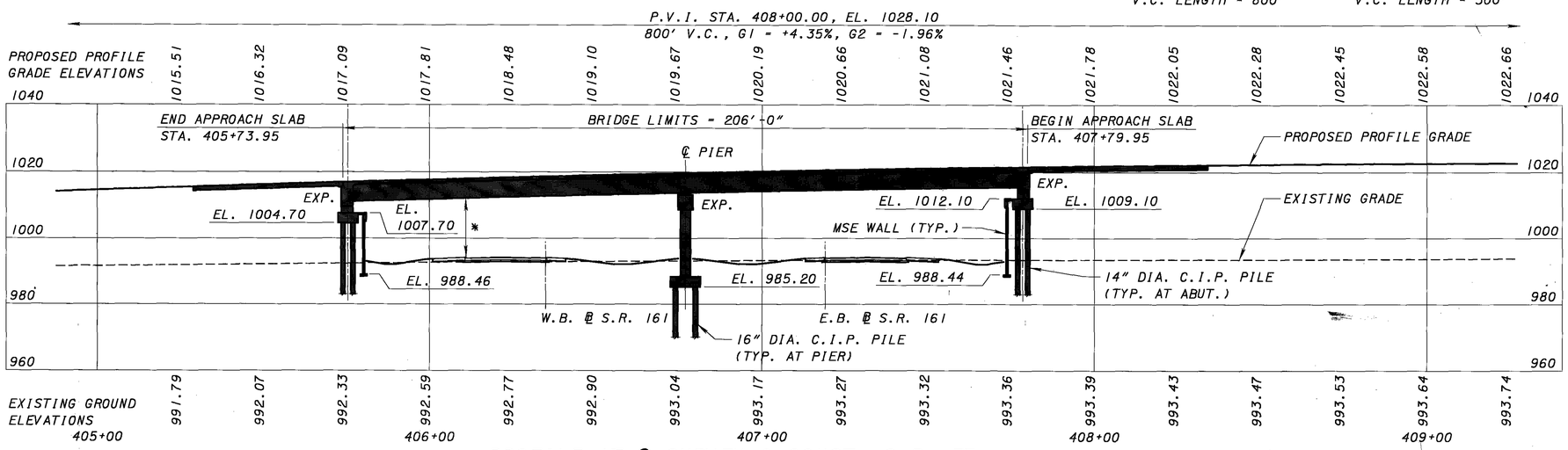
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PLAN



PROFILE AT ℄ SURVEY & CONST. S.R. 37

S.R. 37 VERTICAL CURVE

P.V.I. STA. 408+00.00
EL. 1028.10
G1 = +4.35%
G2 = -1.96%
V.C. LENGTH = 800'

S.R. 161 VERTICAL CURVE

P.V.I. STA. 451+00.00
EL. 993.79
G1 = -1.30%
G2 = -0.50%
V.C. LENGTH = 300'

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

LEGEND:

⊕	- BORING LOCATION
ABUT.	- ABUTMENT
℄	- BASELINE
BRG.	- BEARING
℄	- CENTERLINE
C.I.P.	- CAST-IN-PLACE
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
E.B.	- EASTBOUND
EL.	- ELEVATION
EXP.	- EXPANSION
FWD.	- FORWARD
LF	- LEFT FORWARD
MSE	- MECHANICALLY STABILIZED EARTH
P.V.I.	- POINT OF VERTICAL INTERSECTION
S.R.	- STATE ROUTE
STA.	- STATION
TYP.	- TYPICAL
V.C.	- VERTICAL CURVE
W.B.	- WESTBOUND

PILE TYPES AND ESTIMATED LENGTHS		
LOCATION	PILE TYPE	PILE LENGTH
REAR ABUT.	14" DIA. C.I.P.	70'
PIER	16" DIA. C.I.P.	50'
FWD. ABUT.	14" DIA. C.I.P.	80'

* MINIMUM VERTICAL CLEARANCE
17'-4⅛" ACTUAL
16'-6" REQUIRED

** MINIMUM LATERAL CLEARANCE
30'-5⅞" ACTUAL
30'-0" REQUIRED

BENCHMARK

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCHMARKS AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC

S.R. 37:
CURRENT ADT (2010) = 6,840
CURRENT ADTT (2010) = 752
DESIGN ADT (2030) = 8,300
DESIGN ADTT (2030) = 913

S.R. 161:
CURRENT ADT (2010) = 38,880
CURRENT ADTT (2010) = 1,944
DESIGN ADT (2030) = 61,670
DESIGN ADTT (2030) = 3,084

PROPOSED STRUCTURE DATA

TYPE: TWO-SPAN COMPOSITE PRESTRESSED CONCRETE I-BEAM WITH REINFORCED CONCRETE CAP AND COLUMN PIER AND REINFORCED CONCRETE SEMI-INTEGRAL ABUTMENTS SUPPORTED ON MSE WALLS
SPANS: 101'-6", 101'-6"
ROADWAY: 60'-0" TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°35'49" LF
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (45'-1" REAR ABUT.) (54'-1" FORWARD ABUT.)
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40°04'25" N
LONGITUDE: 82°36'20" W

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	DOR	11-12-04
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JN		4501667	

LICKING COUNTY
STA. 405+73.95
STA. 407+79.95

SITE PLAN
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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BRIDGE NOTES

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	DATED (REVISED)	07-19-02
PSID-1-99	DATED (REVISED)	07-18-03
SBR-1-99	DATED (REVISED)	07-19-02
SICD-1-96	DATED (REVISED)	07-19-02

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17th EDITION, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

HS25 AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT

DESIGN DATA:

CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI
SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7000 PSI
COMPRESSIVE STRENGTH (RELEASE) - 5000 PSI

PRESTRESSING STRAND:
AREA = 0.153 SQUARE INCHES
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2-½" CONCRETE COVER AT TOP OF DECK
HP CONCRETE

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING PILES AND CONSTRUCTING THE MSE EMBANKMENT, BRIDGE APPROACH EMBANKMENT SHALL BE CONSTRUCTED ON A 1.5:1 SLOPE FROM STA. 405+50.34 AT THE REAR ABUTMENT AND STA. 408+13.33 AT THE FORWARD ABUTMENT UP TO THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. AFTER A MINIMUM WAITING PERIOD OF 45 DAYS HAS ELAPSED, EXCAVATION FOR CONSTRUCTION OF THE MSE EMBANKMENT CAN BEGIN.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 130 TONS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 180 TONS PER PILE FOR THE PIER PILES.

ABUTMENT PILES:
40-14" DIA. C.I.P. PILES, 75 FEET LONG, ORDER LENGTH (REAR)
42-14" DIA. C.I.P. PILES, 85 FEET LONG, ORDER LENGTH (FORWARD)
1 DYNAMIC LOAD TESTING ITEM

PIER PILES:
24-16" DIA. C.I.P. PILES, 55 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

UTILITY LINES:

THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:

INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼" X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE, WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS, SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094 ± 0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM (LONG. X TRANS.)	D751	700 X 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS MINIMUM	D751	9
BURST STRENGTH, PSI MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 °F, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40 °F, BEND AROUND ¼" MANDREL	D2136	NO CRACKING OF COATING

METHOD OF MEASUREMENT:

THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT:

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

ITEM 526 REINFORCED CONCRETE APPROACH SLAB (T=17"), AS PER PLAN

CONCRETE FOR APPROACH SLABS SHALL BE CLASS S, CMS 499. THE PARAPET ON THE APPROACH SLAB SHALL BE INCLUDED WITH ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN FOR PAYMENT.

ITEM 516 2" DEEP JOINT SEAL, AS PER PLAN

A 2" DEEP X ½" WIDE STRIP SHALL BE SAWCUT OUT OF ALL ROADWAY SURFACE ASPHALT ABUTTING THE ENDS OF APPROACH SLAB AFTER THE FINAL SURFACE COURSE HAS BEEN CONSTRUCTED. THE VOID SHALL BE SEALED WITH A JOINT SEALER AS PER 705.04. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

GENERAL NOTES 1
BRIDGE NO. LIC-37-1.75
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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BRIDGE NOTES (CONTINUED)

ITEM 511 CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN;
ITEM 894 HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

GENERAL REQUIREMENTS:

THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS:

ALL SUPERSTRUCTURE, BRIDGE DECK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN).

SEE THE CONCRETE TABLE ON THIS SHEET FOR THE PROPORTIONS TO BE USED AS A STARTING MIX DESIGN.

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

PARAPET CONSTRUCTION (FORMED AND POURED):

FORMS SHALL NOT BE REMOVED UNTIL AT LEAST 2 HOURS AFTER THE FINAL SET. DETERMINATION OF THE FINAL SET SHALL BE AS PER ASTM C266 (GILLMORE NEEDLE). TESTING SHALL BE PERFORMED BY THE CONTRACTOR AT NO COST TO THE STATE.

THE MINIMUM CONCRETE SLUMP DURING PLACEMENT OF FORMED CONCRETE PARAPETS SHALL BE 6 INCHES, WITH A MAXIMUM SLUMP OF 8 INCHES.

CRACK CONTROL JOINTS:

FOR BOTH SLIP FORMED AND FORMED AND POURED PARAPETS, THE CONTRACTOR SHALL CONSTRUCT 1½" DEEP AND ¼" WIDE CRACK CONTROL JOINTS WITH SPACING AS DETAILED ON SHEET 22 OF 33. THE CRACK CONTROL JOINTS SHALL BE MADE IN THE COMPLETE CIRCUMFERENCE OF THE PARAPET, STARTING AND ENDING AT THE ELEVATION OF THE TOP OF THE CONCRETE DECK. THE CONTRACTOR MAY EITHER FORM THE CRACK CONTROL JOINTS WITH FORM LINERS, OR, WITHIN 24 HOURS OF PLACEMENT, SAW CUT THE CRACK CONTROL JOINTS WITH THE USE OF AN EDGE GUIDE, FENCE, OR JIG WHICH IS REQUIRED TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE ENTIRE LENGTH OF EACH CONTROL JOINT SHALL BE SEALED TO A MINIMUM DEPTH OF 1½" WITH POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S.

BASIS OF PAYMENT:

PAYMENT FOR THE ABOVE COMPLETED AND ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	EXTEN.	UNIT	DESCRIPTION
511	50101	CU. YD.	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN
894	10001	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

ITEM 512 SEALING OF CONCRETE SURFACES (NON-EPOXY (CLEAR));

SURFACES OF THE FORMLINED PORTION OF THE PARAPETS ON AND OFF THE BRIDGE, AS DETAILED IN THE PLANS, SHALL BE SEALED WITH A NON-EPOXY CLEAR SEALER.

ITEM 512 SEALING OF CONCRETE SURFACES (EPOXY-URETHANE);

CONCRETE SURFACES SHALL BE SEALED, AS DETAILED IN THE PLANS, WITH LIGHT NEUTRAL FEDERAL COLOR NO. 17778. THE EXTERIOR BEAMS SHALL BE SEALED WITH BROWN FS-595B-10324 AS SHOWN ON SHEET 15/33.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)
HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	#8 COARSE AGGRE.* (LB)	#57 COARSE AGGRE.* (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	GGBF SLAG (LB)	MICRO-SILICA (LB)	WATER TO CEMENT. RATIO ±.01	AIR CONTENT ±2%
GRAVEL	1245	360	1315	2920	400	170	30	0.43	7
LIMESTONE	1245	360	1335	2940	400	170	30	0.43	7
SLAG	1245	315	1155	2715	400	170	30	0.43	7

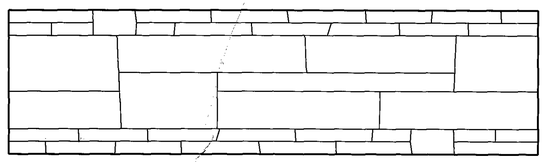
* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER, AS DEFINED PER ASTM C127.

ARCHITECTURAL FINISH (BRIDGE):

THE SURFACE FINISH SHALL BE THE PATTERN DESCRIBED BELOW IN THE ARCHITECTURAL WALL ELEVATION FROM FOSTER GEOTECHNICAL OR AN APPROVED EQUAL MEETING THE DETAILS SHOWN ON THIS SHEET. THE INTEGRALLY COLORED CONCRETE USING CHROMIX ADMIXTURES SHALL BE AS PROVIDED BY L. M. SCOFIELD COMPANY, DOUGLASVILLE, GEORGIA (800) 800-9900 OR AN APPROVED EQUAL SHALL BE C-21 ADOBE TAN AS PROVIDED.

ONE PRECONSTRUCTION TEST SAMPLE SHALL BE PROVIDED FOR APPROVAL BY THE DIRECTOR. IF THE TEST SAMPLE DOES NOT MEET THE APPROVAL OF THE DIRECTOR, THE RESULTS MAY BE GROUNDS TO REJECT THE PROPOSED PARAPET PANEL OR INTEGRALLY COLORED CONCRETE. THE TEST SAMPLE MUST PASS APPROVAL. FAILURE WILL CONSTITUTE PLACEMENT OF ANOTHER TEST SAMPLE. A FIVE FOOT BY FIVE FOOT TEST SAMPLE SHOULD BE MADE (OR THE SIZE OF THE MSE WALL PANELS). THE MOCK-UP SHALL HAVE THE SAME ARCHITECTURAL RELIEF, THICKNESS, AND PATTERN TO BE USED ON THE PROJECT. THE SAMPLE SHOULD BE OF THE SAME CEMENT, AGGREGATE SOURCE, AND INTEGRALLY COLORED CONCRETE THAT WILL BE USED TO MAKE THE PARAPET PANEL. AFTER APPROVAL, THE CONCRETE TEST SAMPLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

ALL AESTHETIC TREATMENT INCLUDING THE INTEGRALLY COLORED CONCRETE, SURFACE FINISH, TEST SAMPLES, AND ALL OTHER MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED WITH ITEM 840, MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN.



ARCHITECTURAL
PANEL ELEVATION

THE FOLLOWING SHALL BE USED:

COMPANY NAME	PANEL SURFACE TREATMENT	SPECIFICATIONS
SPEC FORMLINERS, INC.	COLORADO RED FLAGSTONE # 1537	MAX RELIEF 2" LINER THICKNESS ⅛"± STONE SIZE 2" TO 1'-4"
CUSTOM ROCK INTERNATIONAL	MINNEHAHA BLEND #12010	MAX RELIEF ⅝" LINER THICKNESS 1⅜" STONE SIZE 4" TO 30"
APPROVED EQUAL	APPROVED EQUAL	APPROVED EQUAL

NOTE: THE ARCHITECTURAL PATTERN & CONCRETE COLOR SHALL BE THE SAME FOR THE ENTIRE PROJECT.

ABUTMENT DIAPHRAGM, PRESTRESSED I-BEAM SUPERSTRUCTURE:

PLACE THE CONCRETE ENCASING THE PRESTRESSED I-BEAM STRUCTURAL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.

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REVISED
REVIEWED GWM DATE 07-20-05

STRUCTURE FILE NUMBER
4501667

GENERAL NOTES 2
BRIDGE NO. LIC-37-1.175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

$DATE$
$TIME$
$FILE$

ESTIMATED QUANTITIES

CALC. BY: JAM DATE: 07/20/05
CHKD. BY: CMC DATE: 07/21/05

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIER	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
203	35110	5,547	CU YD	GRANULAR MATERIAL, TYPE B	2,281	3,266				32
203	35120	1,820	CU YD	GRANULAR MATERIAL, TYPE C	923	897				32
503	21100	171	CU YD	UNCLASSIFIED EXCAVATION			171			
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP	
507	00600	6,160	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	2,800	3,360				
507	00650	6,570	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	3,000	3,570				
507	00700	1,200	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN			1,200			
507	00750	1,320	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED			1,320			
509	10000	206,227	POUND	EPOXY COATED REINFORCING STEEL	12,415	13,991	25,762	154,059		26, 27
511	41000	65	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS			65			
511	43501	408	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	187	221				11, 12
511	46500	40	CU YD	CLASS C CONCRETE, FOOTING			40			
511	50101	99	CU YD	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN				68	31	2, 3
512	10050	514	SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)	135	200		123	56	3
512	10100	1,643	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	243	293	150	820	137	3
515	15030	16	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MOD. (60 IN.)				16		
515	20000	42	EACH	INTERMEDIATE DIAPHRAGMS				42		
516	13600	75	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	28	28			19	
516	13900	412	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	188	224				
516	14021	198	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	98	100				2
516	31011	120	FT	2" DEEP JOINT SEALER, AS PER PLAN	60	60				2
516	44200	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 3.96"x1'-3"x1'-3") (LOAD PLATE 2"x1'-4"x1'-4")	8	8				
516	44200	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 3.96"x1'-3"x1'-3") (LOAD PLATE 2"x1'-4"x2'-2")			8			
516	44200	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 3.96"x1'-3"x1'-3") (LOAD PLATE 2.625"x1'-4"x2'-2")			8			
518	21200	301	CU YD	POROUS BACKFILL WITH FILTER FABRIC	143	158				
518	40000	284	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	133	151				
518	40010	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	39	41				
523	20000	2	EACH	DYNAMIC LOAD TESTING					2	
526	30001	700	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN					700	2, 23-25
601	20000	6	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION	3	3				
840	20001	5,548	SQ FT	MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN	2,343	3,205				29
840	21000	3,996	CU YD	WALL EXCAVATION	1,808	2,188				
840	22000	524	SQ YD	FOUNDATION PREPARATION	235	289				
840	23000	2,699	CU YD	SELECT GRANULAR BACKFILL	1073	1,626				
840	24000	21	CU YD	POROUS BACKFILL WITH FILTER FABRIC	10	11				
840	25010	566	FT	6" DRAINAGE PIPE, PERFORATED	262	304				
840	25020	164	FT	6" DRAINAGE PIPE, NON-PERFORATED	82	82				
840	26000	286	FT	CONCRETE COPING	134	152				
840	27000	5	DAY	ON-SITE ASSISTANCE					5	
840	28000	LUMP		SGB INSPECTION AND COMPACTION TESTING					LUMP	
894	10001	493	CU YD	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN				493		3

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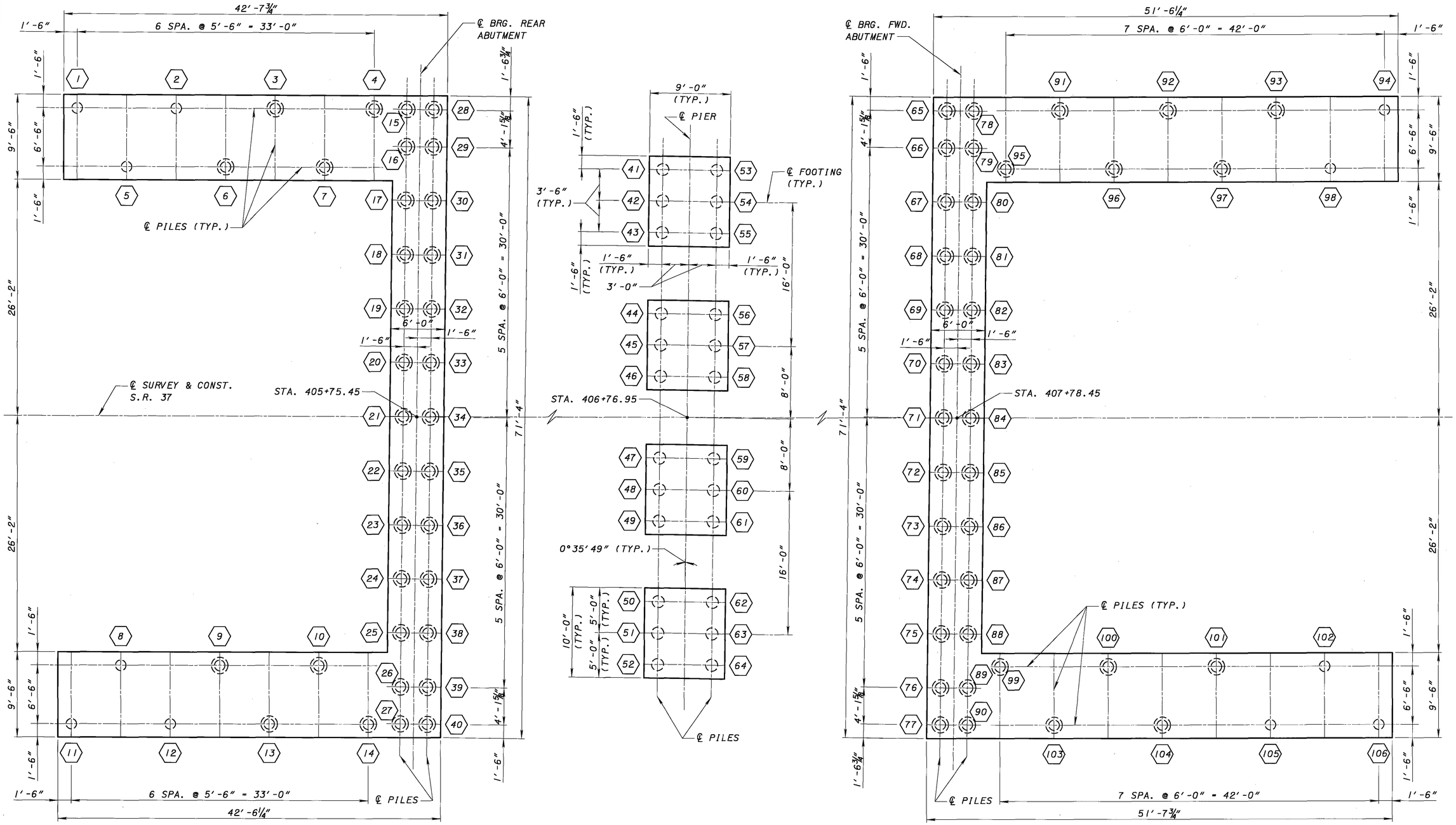
ESTIMATED QUANTITIES
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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LEGEND:

ABUT.	= ABUTMENT	(23)	= PILE NUMBER
BRG.	= BEARING	◯	= 14" DIA. CAST-IN-PLACE PILE (ABUT.)
℄	= CENTERLINE	◯	= 14" DIA. CAST-IN-PLACE PILE INSIDE SLEEVE (ABUT.)
CONST.	= CONSTRUCTION		
FWD.	= FORWARD		
MSE	= MECHANICALLY STABILIZED EARTH	◯	= 16" DIA. CAST-IN-PLACE PILE (PIER)
SPA.	= SPACED		
STA.	= STATION		
TYP.	= TYPICAL		

FOUNDATION PLAN

N

NOTES:

1. PILE SLEEVES ARE REQUIRED WHEN PILES ARE LOCATED INSIDE THE REINFORCED SOIL MASS. INSTALL PILES THROUGH SLEEVES AFTER THE WALL CONSTRUCTION HAS BEEN COMPLETED. THE SLEEVE MATERIAL SHALL BE CORRUGATED SMOOTH LINED PIPE, 707.33 OR 707.42. MAINTAIN ALIGNMENT OF THE PILE SLEEVE DURING CONSTRUCTION OF THE EMBANKMENT. PLACE A BENTONITE SLURRY IN THE VOID LOCATED BETWEEN THE PILE AND THE SLEEVE, AS DESCRIBED IN THE MSE WALL SPECIAL PROVISIONS. PILE SLEEVES SHALL BE INCLUDED WITH MSE WALL QUANTITIES FOR PAYMENT.

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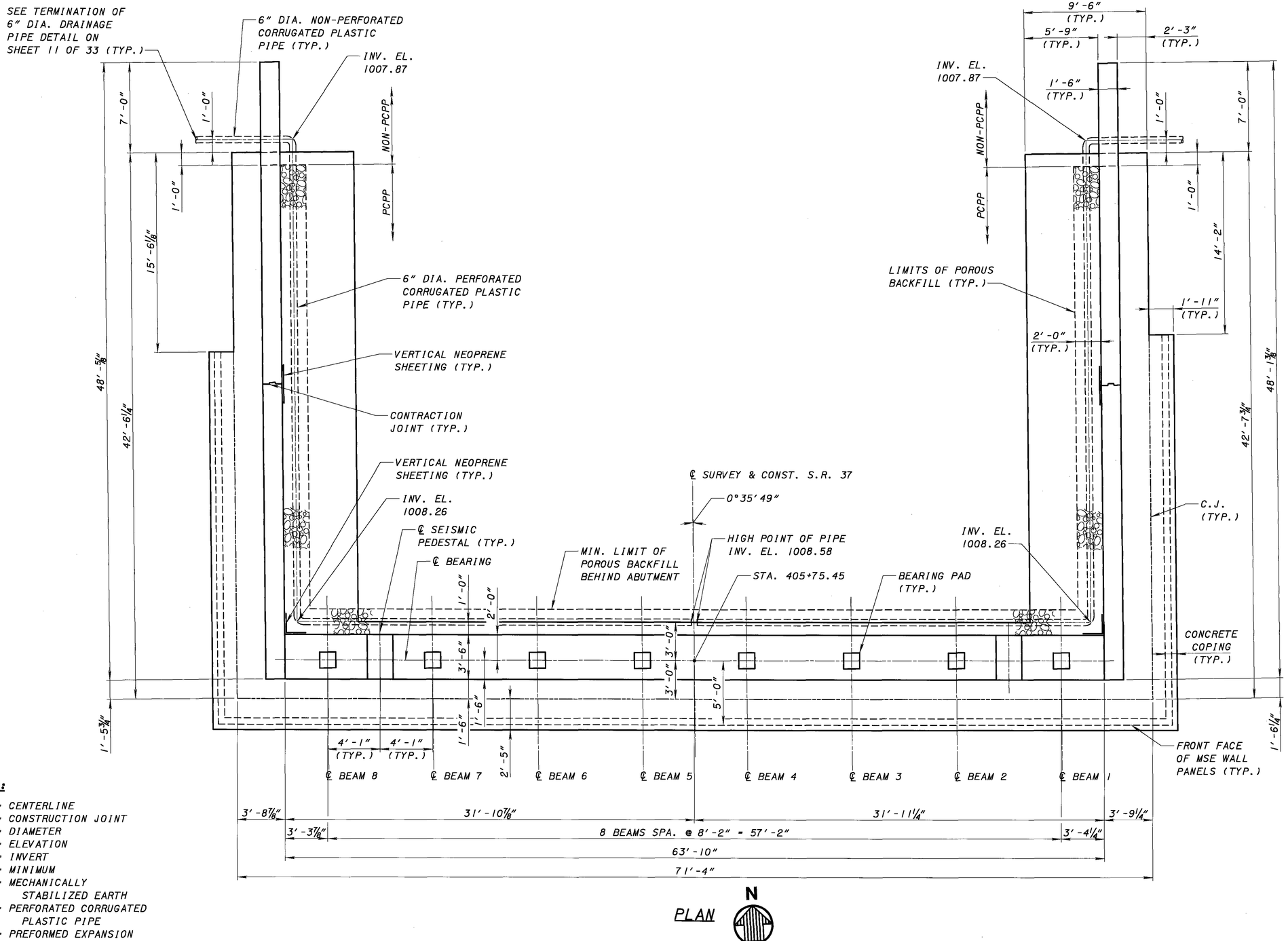
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FOUNDATION PLAN
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
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PLAN

LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
DIA.	- DIAMETER
EL.	- ELEVATION
INV.	- INVERT
MIN.	- MINIMUM
MSE	- MECHANICALLY STABILIZED EARTH
PCPP	- PERFORATED CORRUGATED PLASTIC PIPE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SPA.	- SPACED
STA.	- STATION
TYP.	- TYPICAL

NOTES:

1. CAST-IN-PLACE PILES NOT SHOWN FOR CLARITY. FOR FOUNDATION PLAN, SEE SHEET 5 OF 33.

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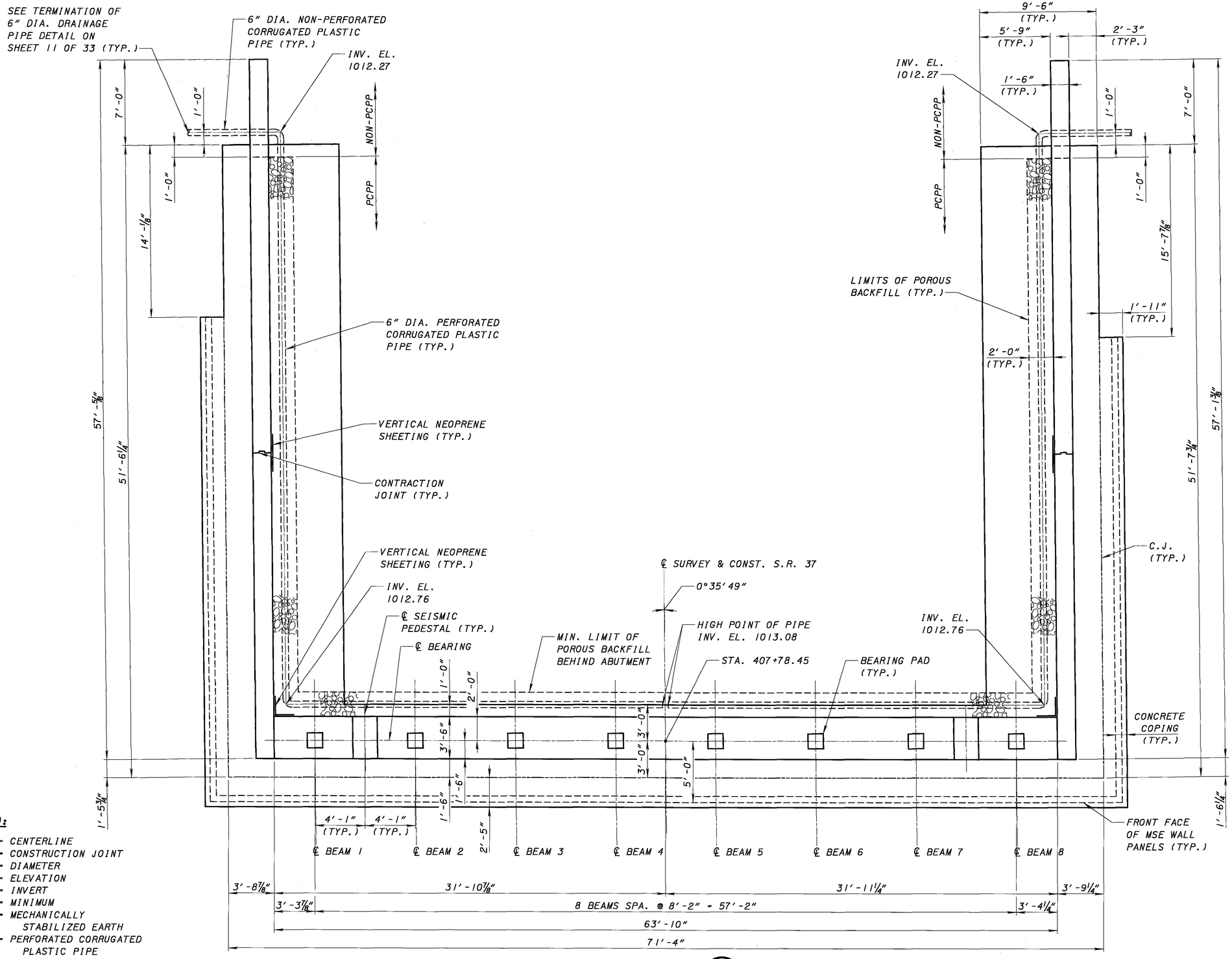
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REAR ABUTMENT PLAN
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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PLAN

N

LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
DIA.	- DIAMETER
EL.	- ELEVATION
INV.	- INVERT
MIN.	- MINIMUM
MSE	- MECHANICALLY STABILIZED EARTH
PCPP	- PERFORATED CORRUGATED PLASTIC PIPE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SPA.	- SPACE
STA.	- STATION
TYP.	- TYPICAL

NOTES:

1. CAST-IN-PLACE PILES NOT SHOWN FOR CLARITY. FOR FOUNDATION PLAN, SEE SHEET 5 OF 33.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
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FORWARD ABUTMENT PLAN

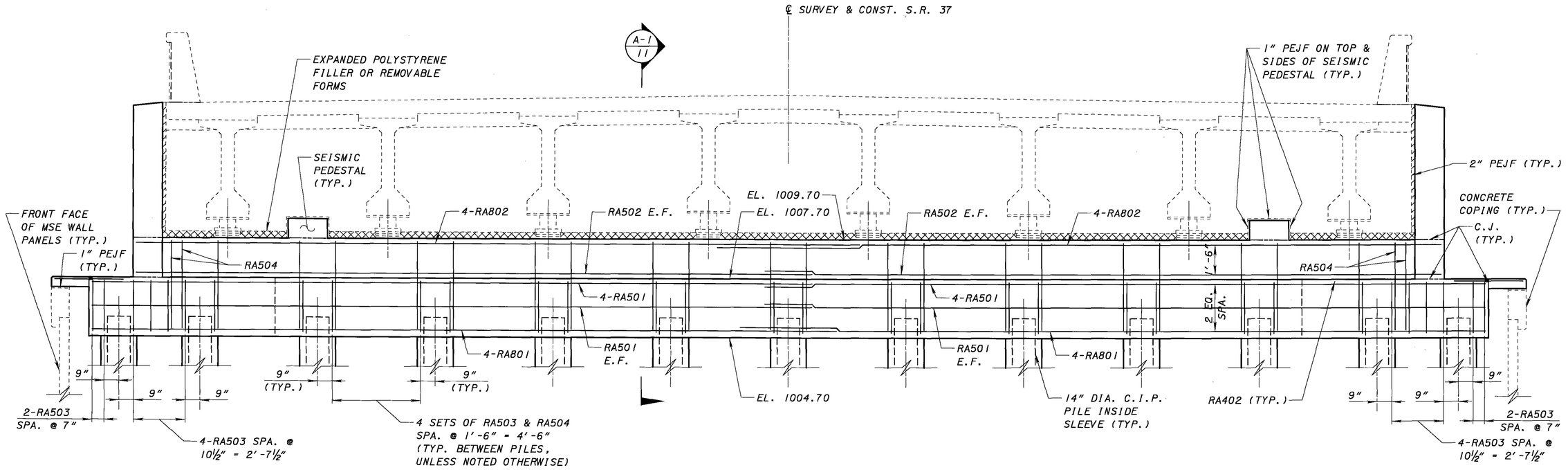
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S.R. 37 OVER S.R. 161

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REAR ABUTMENT ELEVATION

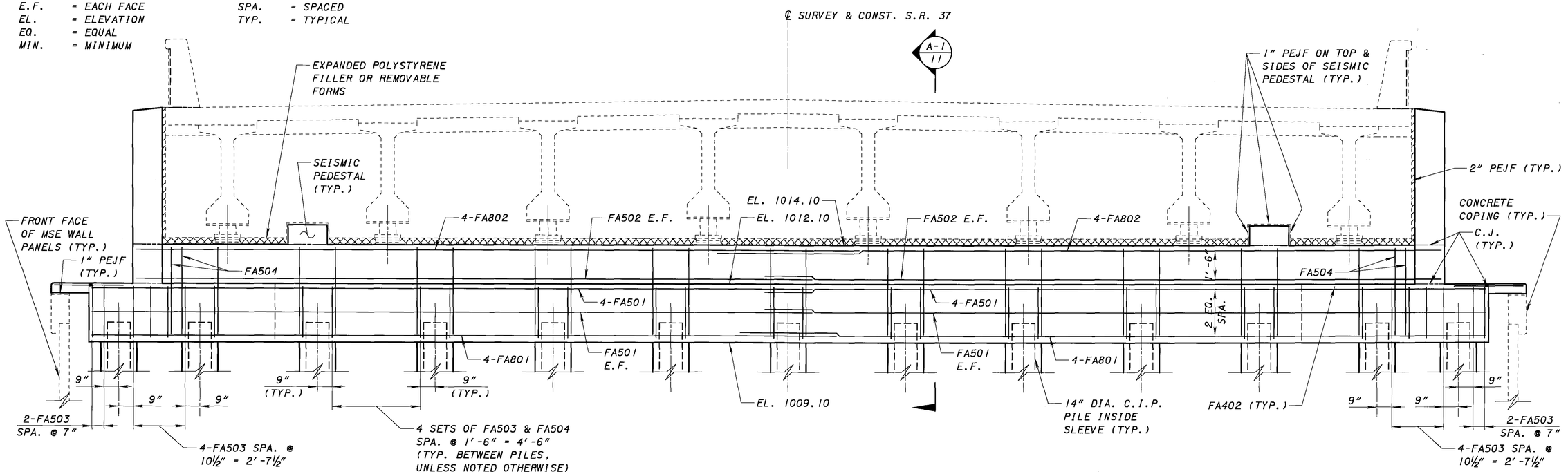
(FRONT MSE WALL NOT SHOWN FOR CLARITY)

LEGEND:

℄	= CENTERLINE	MSE	= MECHANICALLY STABILIZED EARTH
C.I.P.	= CAST IN PLACE		
C.J.	= CONSTRUCTION JOINT	PEJF	= PREFORMED EXPANSION JOINT FILLER
DIA.	= DIAMETER		
E.F.	= EACH FACE	SPA.	= SPACED
EL.	= ELEVATION	TYP.	= TYPICAL
EQ.	= EQUAL		
MIN.	= MINIMUM		

NOTES:

1. FOR THE ABUTMENT REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS (TOP) = 7'-3"; #8 BARS (OTHER) = 4'-11"; #5 BARS = 2'-5".



FORWARD ABUTMENT ELEVATION

(FRONT MSE WALL NOT SHOWN FOR CLARITY)

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DESIGNED TAH | DRAWN JAM | CHECKED AJM | REVISED | REVIEWED GWM | DATE 07-20-05 | STRUCTURE FILE NUMBER 4501667

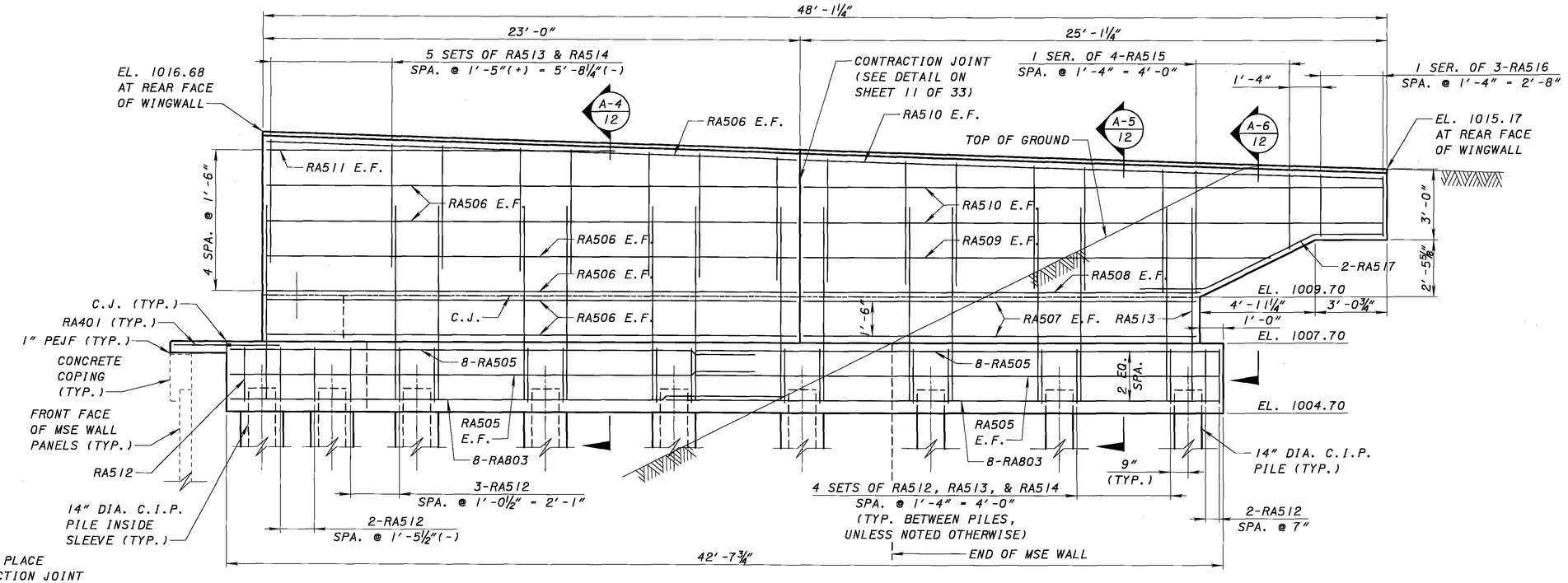
REAR & FORWARD ABUTMENT ELEVATIONS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
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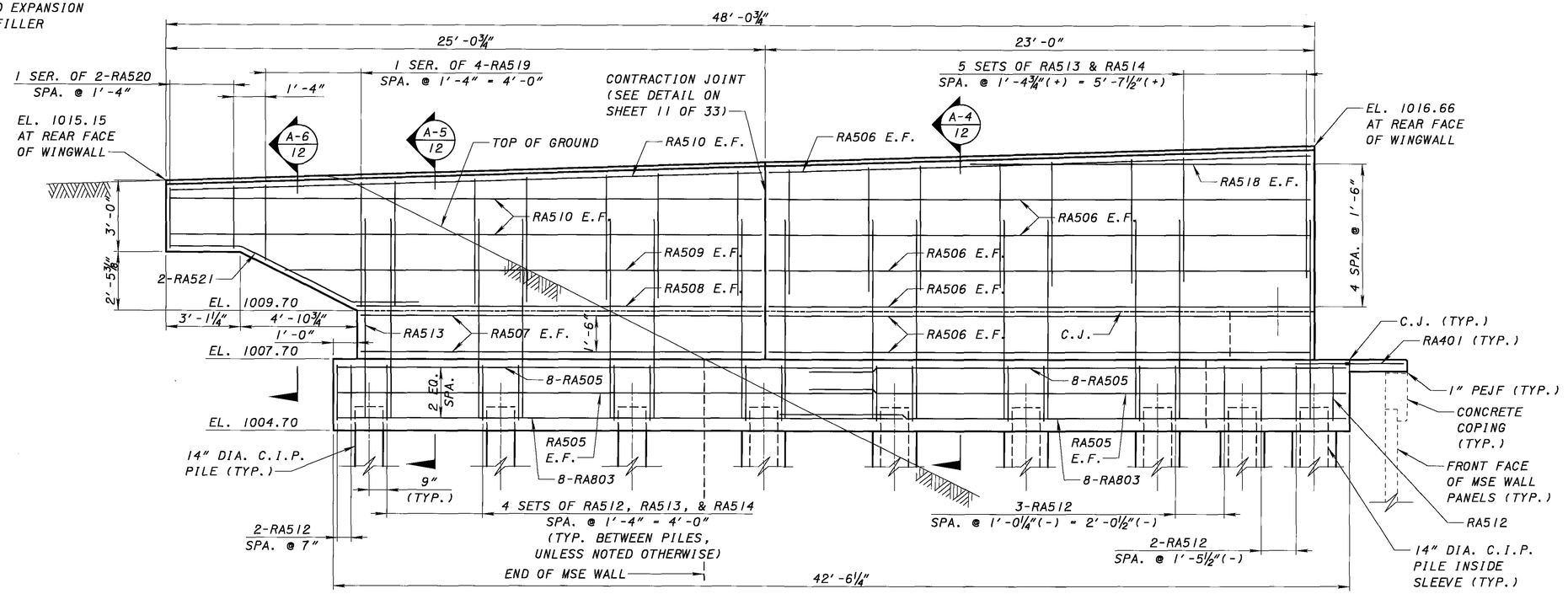
LEFT WINGWALL ELEVATION

LEGEND:

C.I.P.	=	CAST IN PLACE
C.J.	=	CONSTRUCTION JOINT
DIA.	=	DIAMETER
E.F.	=	EACH FACE
EL.	=	ELEVATION
EQ.	=	EQUAL
MIN.	=	MINIMUM
PEJF	=	PREFORMED EXPANSION JOINT FILLER
SER.	=	SERIES
SPA.	=	SPACED
TYP.	=	TYPICAL

NOTES:

1. FOR THE WINGWALL REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS = 4'-11"; #5 BARS (TOP) = 3'-5"; #5 BARS (OTHER) = 2'-5".



RIGHT WINGWALL ELEVATION

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

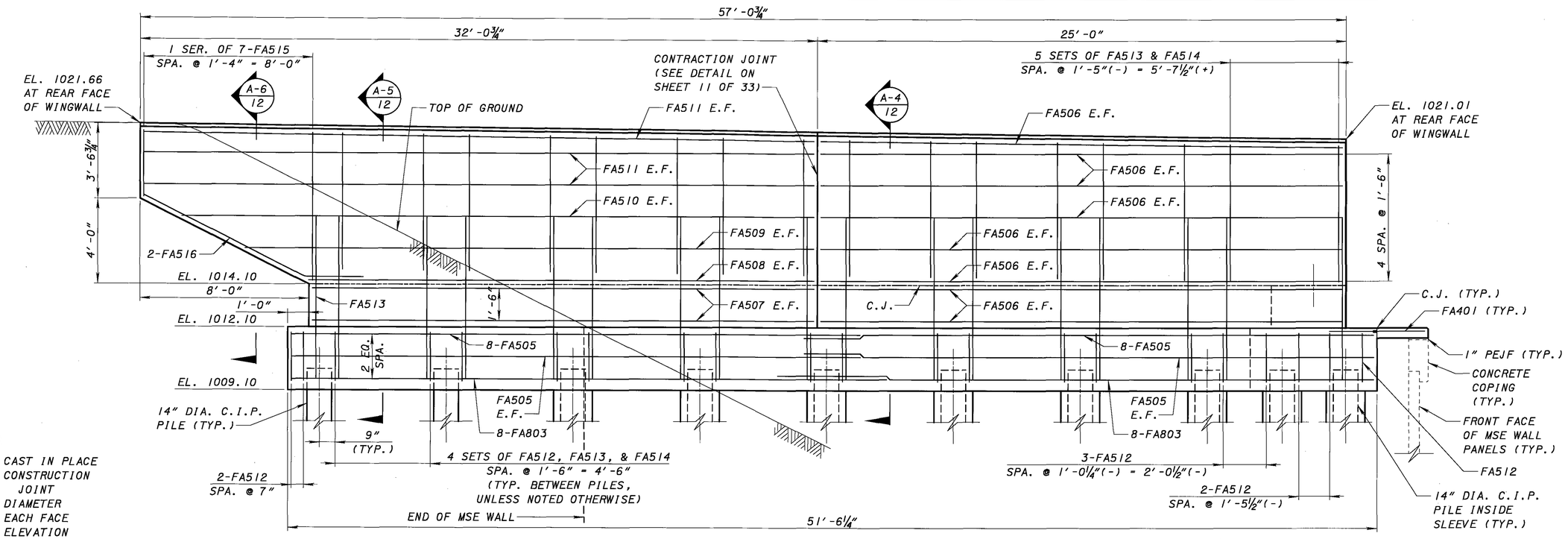
REAR ABUTMENT WINGWALL ELEVATIONS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

9 / 33

1108
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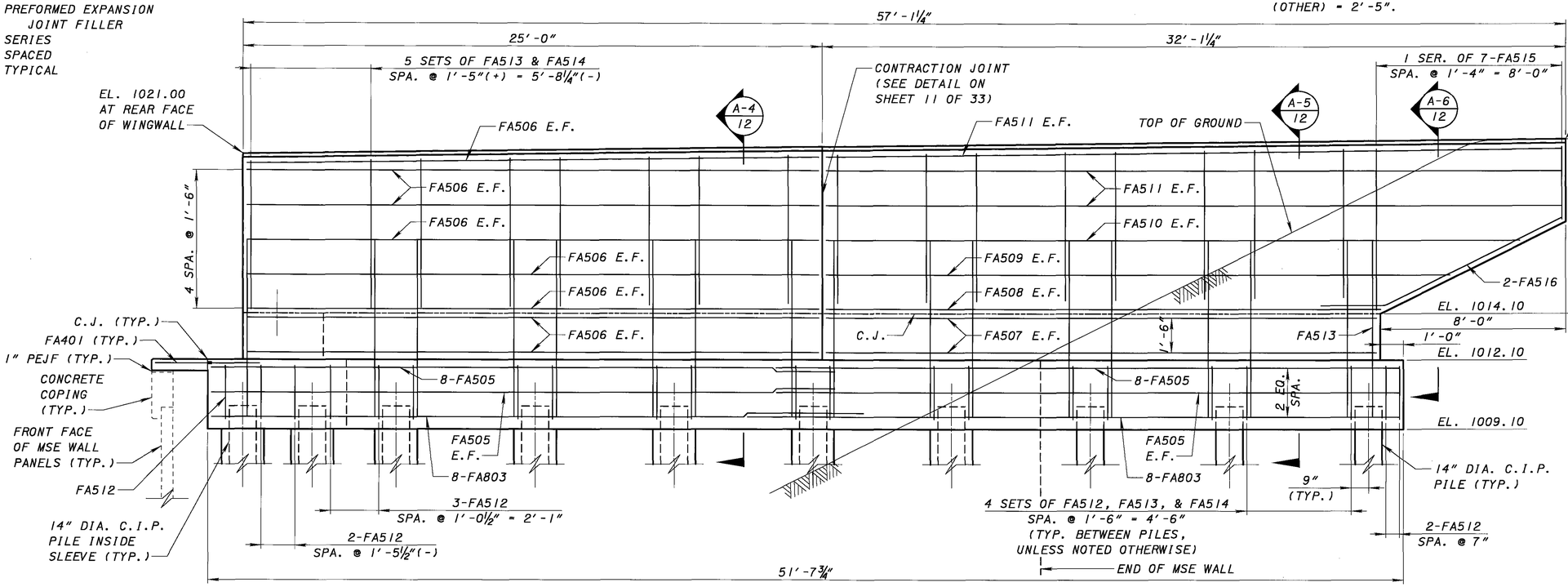
LEFT WINGWALL ELEVATION

LEGEND:

C.I.P.	=	CAST IN PLACE
C.J.	=	CONSTRUCTION JOINT
DIA.	=	DIAMETER
E.F.	=	EACH FACE
EL.	=	ELEVATION
EQ.	=	EQUAL
MIN.	=	MINIMUM
MSE	=	MECHANICALLY STABILIZED EARTH
PEJF	=	PREFORMED EXPANSION JOINT FILLER
SER.	=	SERIES
SPA.	=	SPACED
TYP.	=	TYPICAL

NOTES:

1. FOR THE WINGWALL REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS = 4'-11"; #5 BARS (TOP) = 3'-5"; #5 BARS (OTHER) = 2'-5".



RIGHT WINGWALL ELEVATION

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DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
JAM	JAM	AJM	GWM	07-20-05

REVISED

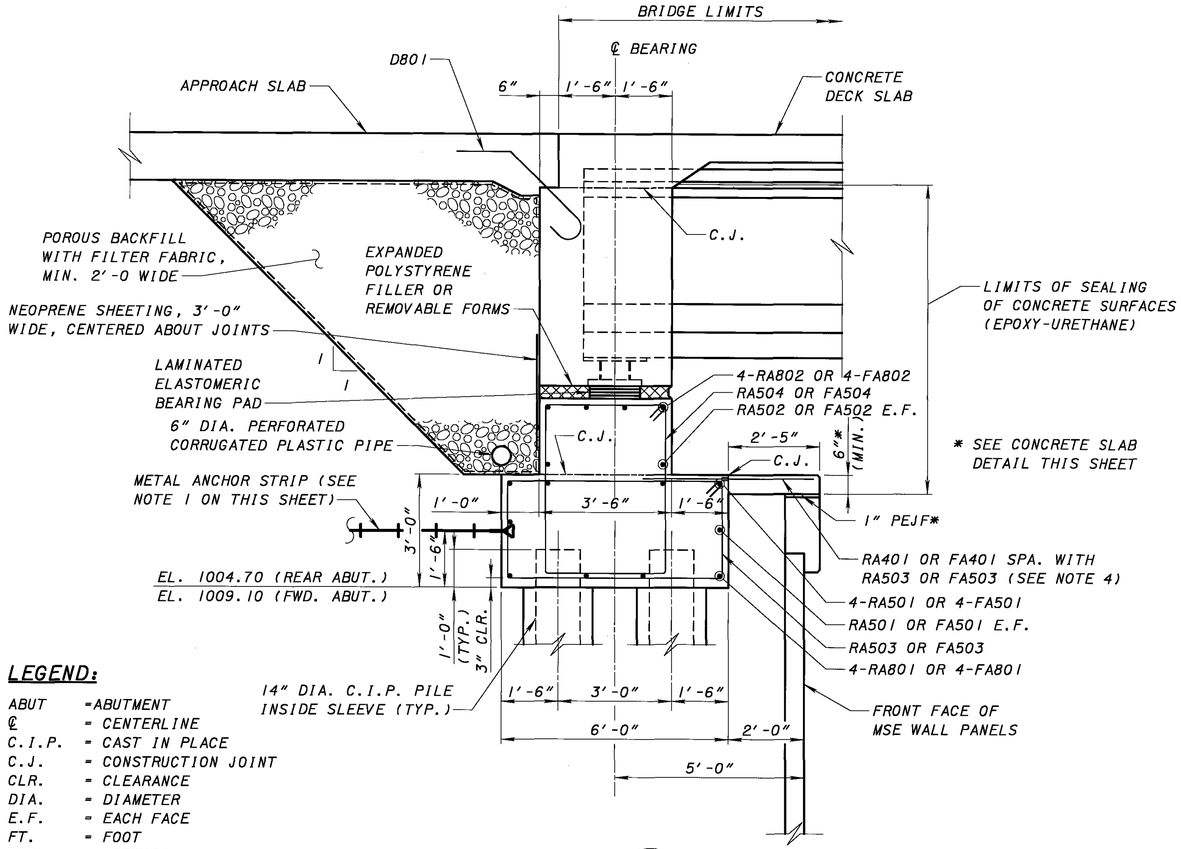
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450/667

FORWARD ABUTMENT WINGWALL ELEVATIONS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

10/33

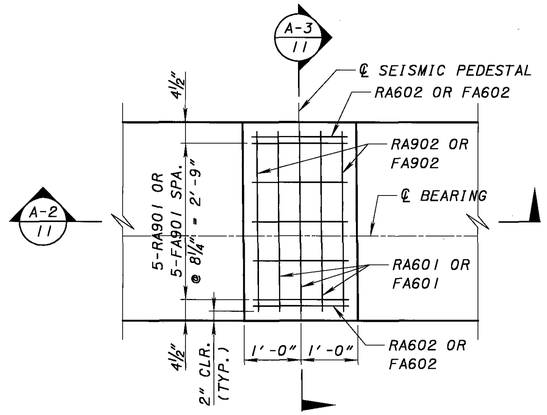
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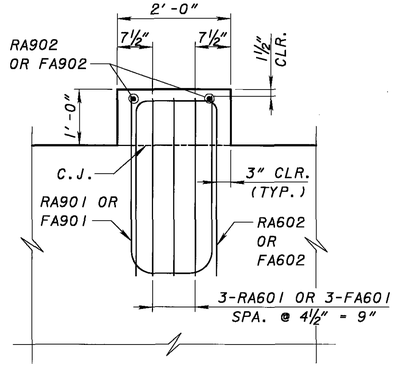
SECTION A-1 / 8

LEGEND:

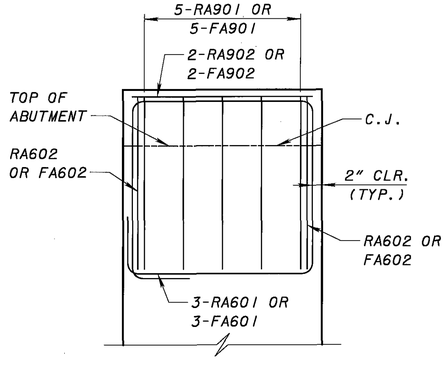
ABUT	= ABUTMENT
℄	= CENTERLINE
C.I.P.	= CAST IN PLACE
C.J.	= CONSTRUCTION JOINT
CLR.	= CLEARANCE
DIA.	= DIAMETER
E.F.	= EACH FACE
FT.	= FOOT
FWD.	= FORWARD
IN.	= INCH
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
PEJF	= PREFORMED EXPANSION JOINT FILLER
SPA.	= SPACED
TYP.	= TYPICAL



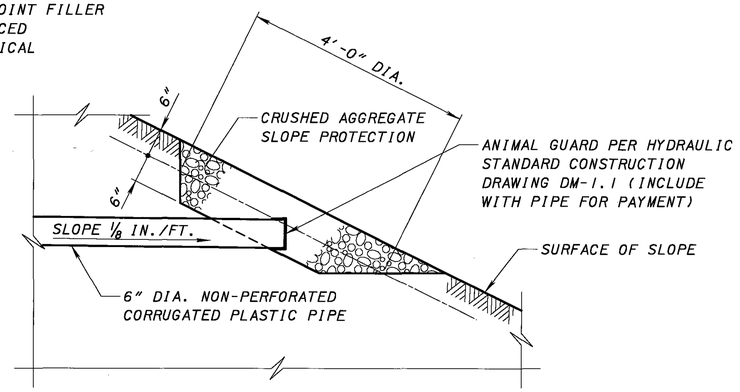
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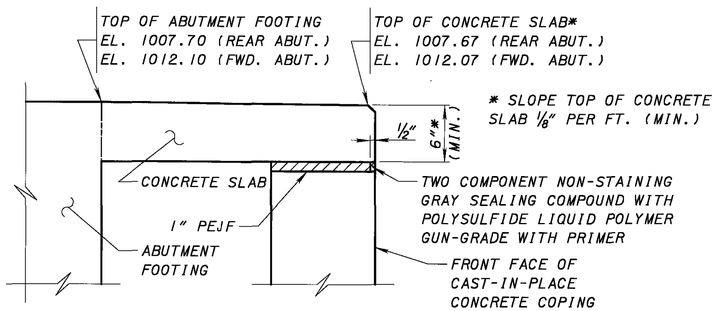
SECTION A-2 / 11



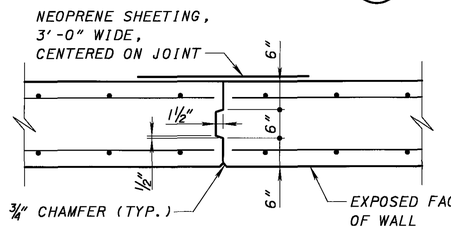
SECTION A-3 / 11



TERMINATION OF 6″ DIA. DRAINAGE PIPE DETAIL



CONCRETE SLAB DETAIL
(REINFORCEMENT NOT SHOWN)



CONTRACTION JOINT DETAIL

NOTES:

1. THE CONTRACTOR SHALL DESIGN THE MECHANICAL ANCHOR STRIP FOR THE RESISTANCE OF 9 KIPS PER FOOT OF WALL.

   PAYMENT FOR THE METAL ANCHOR STRIPS SHALL BE INCLUDED WITH ITEM 511, CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING.

2. POROUS BACKFILL WITH FILTER FABRIC, MIN. 2 FEET THICK, SHALL EXTEND UP TO THE BOTTOM OF THE APPROACH SLAB AND TO THE LIMITS SHOWN.

3. FOR SELECT GRANULAR EMBANKMENT LIMITS, SEE SHEETS 28 AND 32 OF 33.

4. RA401 AND FA401 BARS SHALL BE THREADED MECHANICAL CONNECTORS SUCH AS RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL.

DLZ
4121 HARTLEY ROAD • COLUMBUS, OHIO 43220

DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

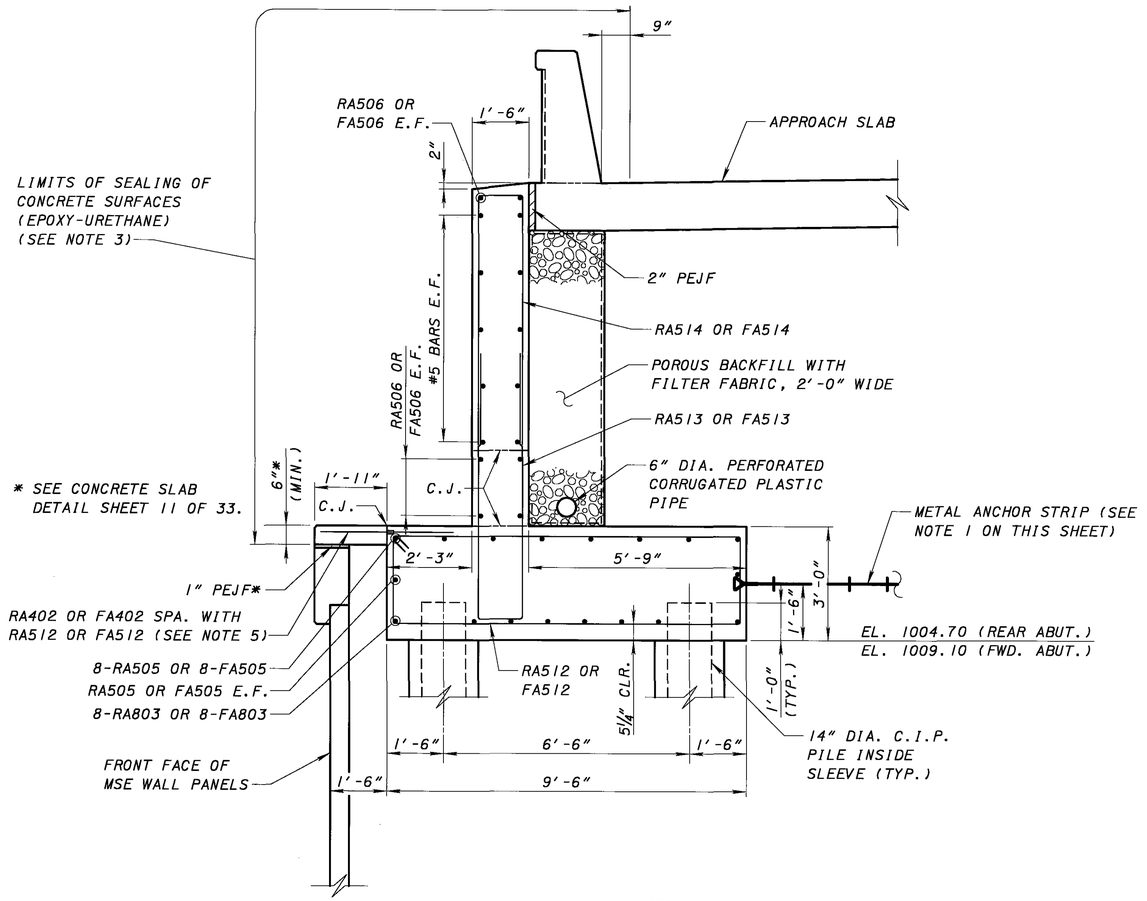
ABUTMENT TYPICAL SECTION & DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

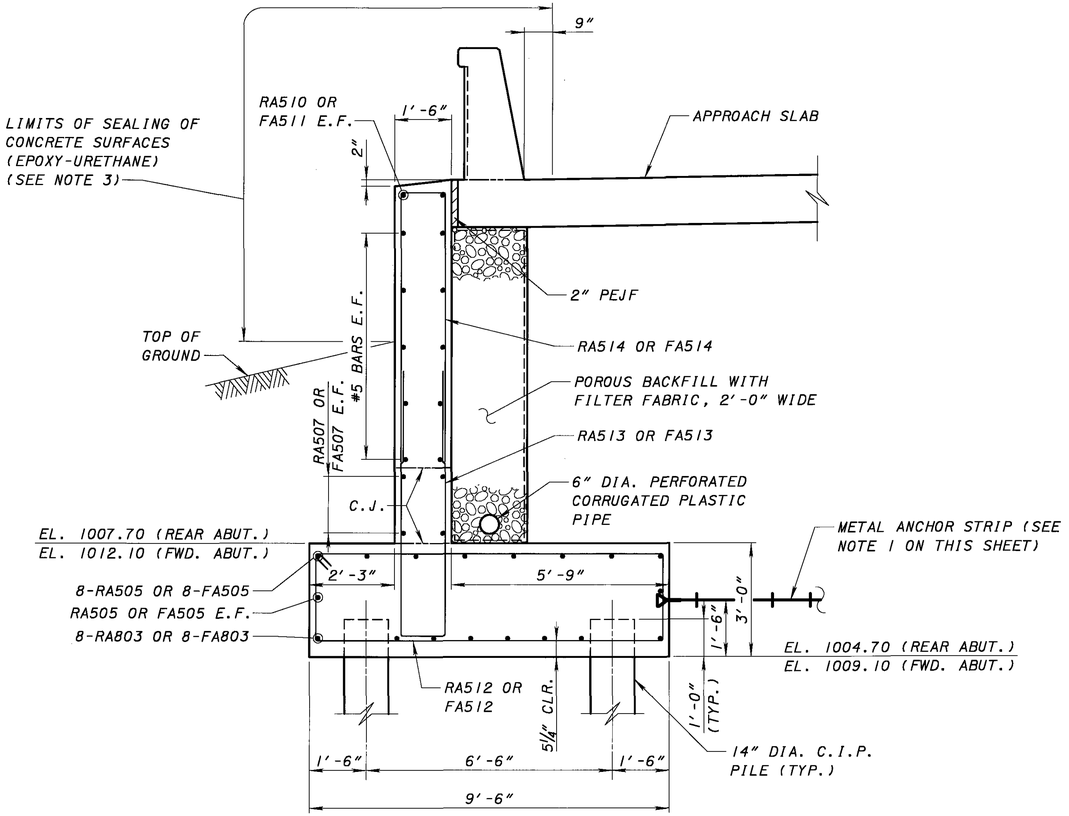
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1110/1349

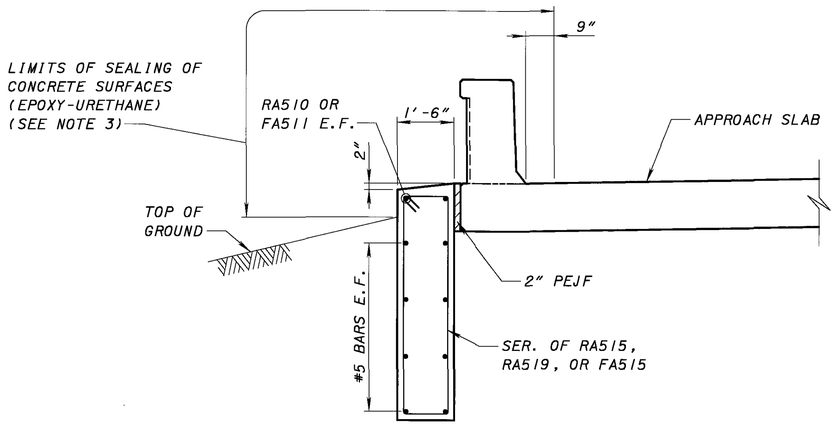
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SECTION A-4 9,10



SECTION A-5 9,10



SECTION A-6 9,10

LEGEND:

ABUT.	- ABUTMENT	PEJF	- PREFORMED EXPANSION JOINT FILLER
℄	- CENTERLINE	SER.	- SERIES
C.I.P.	- CAST IN PLACE	TYP.	- TYPICAL
C.J.	- CONSTRUCTION JOINT		
CLR.	- CLEARANCE		
DIA.	- DIAMETER		
E.F.	- EACH FACE		
EL.	- ELEVATION		
FWD.	- FORWARD		
MSE	- MECHANICALLY STABILIZED EARTH		

NOTES:

1. THE CONTRACTOR SHALL DESIGN THE MECHANICAL ANCHOR STRIP FOR THE RESISTANCE OF 9 KIPS PER FOOT OF WALL.

   PAYMENT FOR THE METAL ANCHOR STRIPS SHALL BE INCLUDED WITH ITEM 511, CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING.

2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK, SHALL EXTEND UP TO THE BOTTOM OF THE APPROACH SLAB OR SLEEPER SLAB AND LATERALLY TO THE LIMITS SHOWN ON SHEETS 6 AND 7 OF 33.

3. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.

4. FOR SELECT GRANULAR EMBANKMENT LIMITS, SEE SHEETS 28 AND 32 OF 33.

5. RA402 AND FA402 BARS SHALL BE THREADED MECHANICAL CONNECTORS SUCH AS RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL.

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

WINGWALL TYPICAL SECTIONS

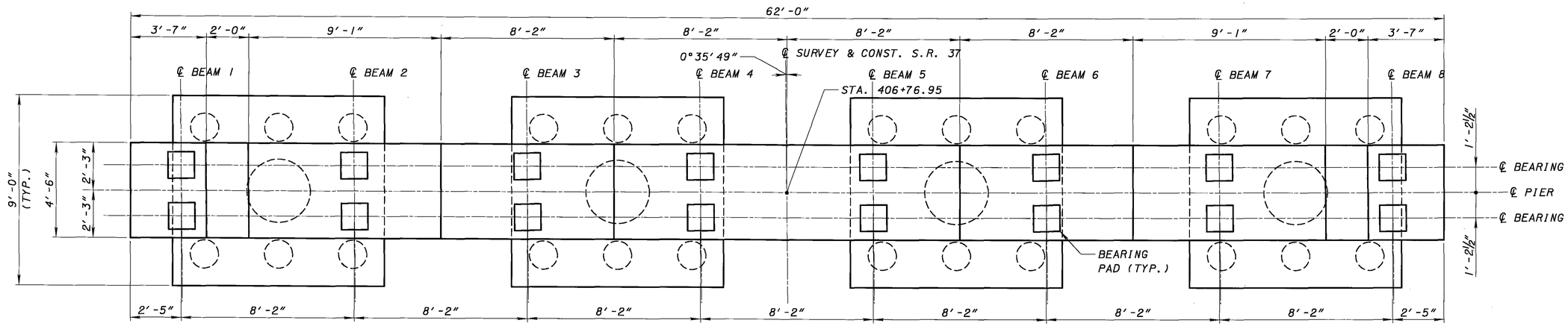
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

12/33

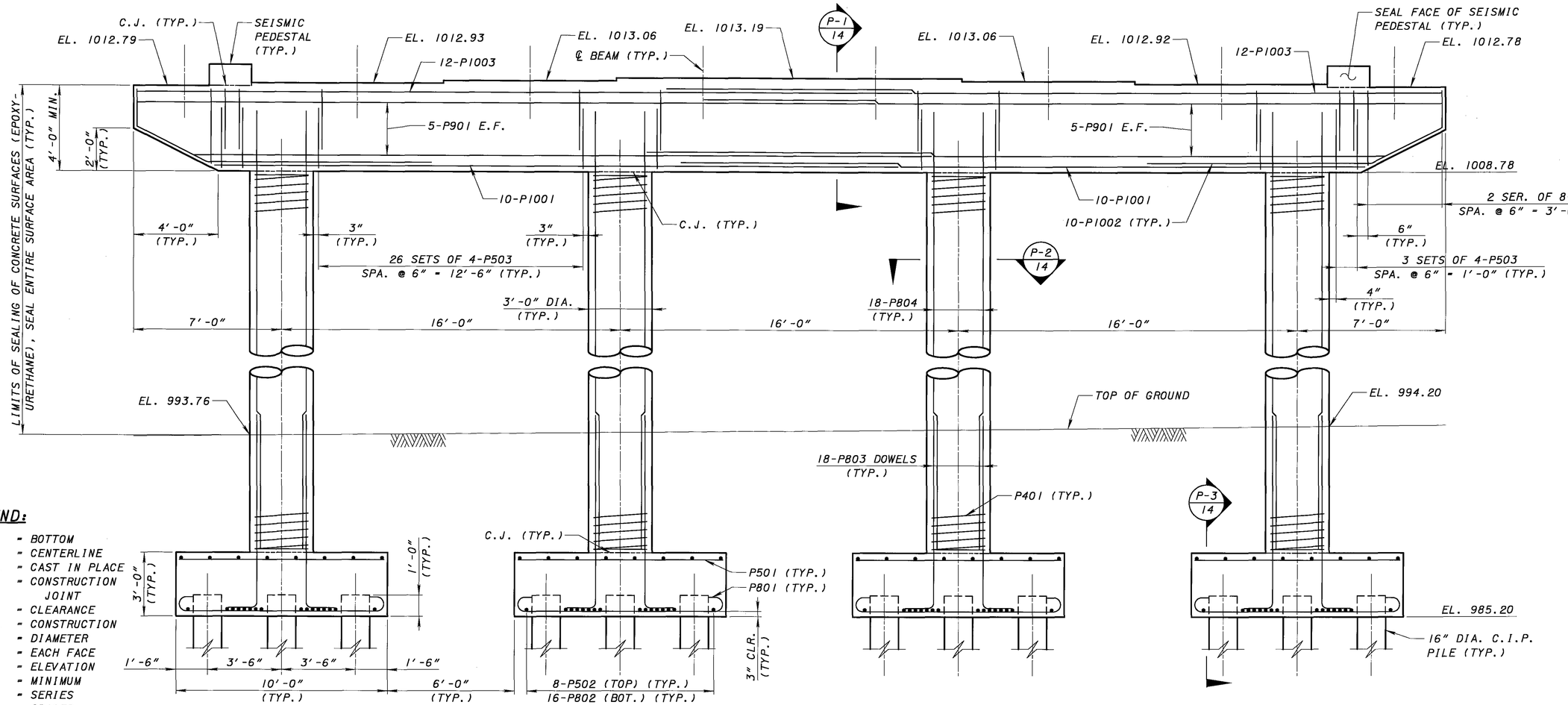
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PLAN

N



ELEVATION

LEGEND:

BOT.	= BOTTOM
℄	= CENTERLINE
C.I.P.	= CAST IN PLACE
C.J.	= CONSTRUCTION JOINT
CLR.	= CLEARANCE
CONST.	= CONSTRUCTION
DIA.	= DIAMETER
E.F.	= EACH FACE
EL.	= ELEVATION
MIN.	= MINIMUM
SER.	= SERIES
SPA.	= SPACED
STA.	= STATION
TYP.	= TYPICAL

NOTES:

1. FOR PIER NOTES, SEE SHEET 14 OF 33.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

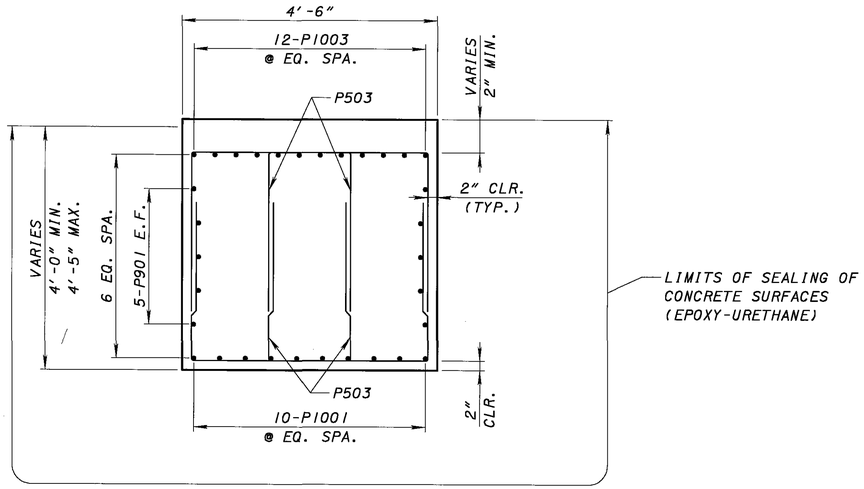
PIER PLAN & ELEVATION
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

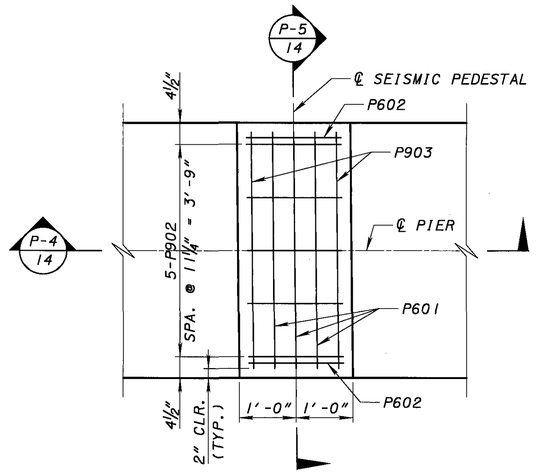
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1112/1349

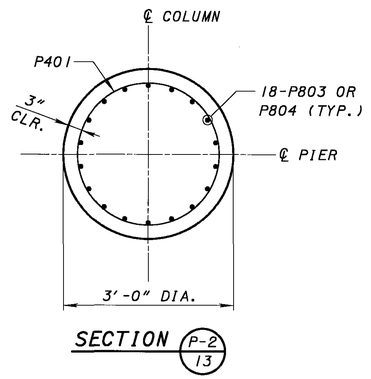
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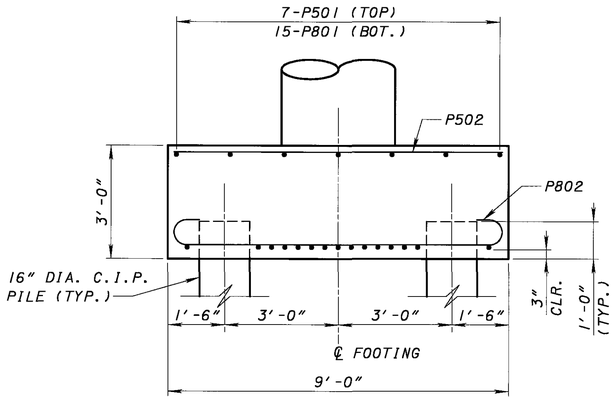
SECTION (P-1 / 13)



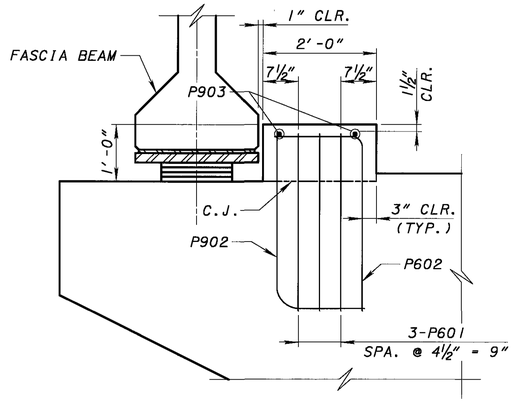
SEISMIC PEDESTAL DETAIL



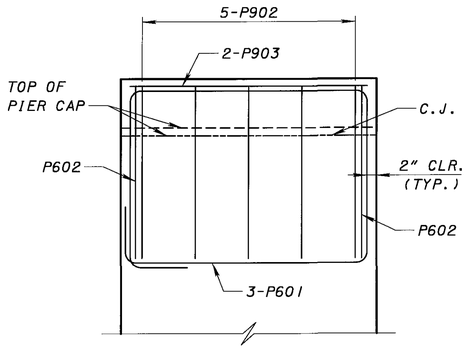
SECTION (P-2 / 13)



SECTION (P-3 / 13)



SECTION (P-4 / 14)



SECTION (P-5 / 14)

LEGEND:

BOT.	- BOTTOM
℄	- CENTERLINE
C.I.P.	- CAST IN PLACE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEARANCE
DIA.	- DIAMETER
EQ.	- EQUAL
MAX.	- MAXIMUM
MIN.	- MINIMUM
SPA.	- SPACED
TYP.	- TYPICAL

NOTES:

1. FOR THE PIER REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #10 BARS (TOP) = 11'-7"; #10 BARS (OTHER) = 10'-3"; #9 BARS = 8'-1"; #8 BARS = 6'-4"; #5 BARS = 2'-5".

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

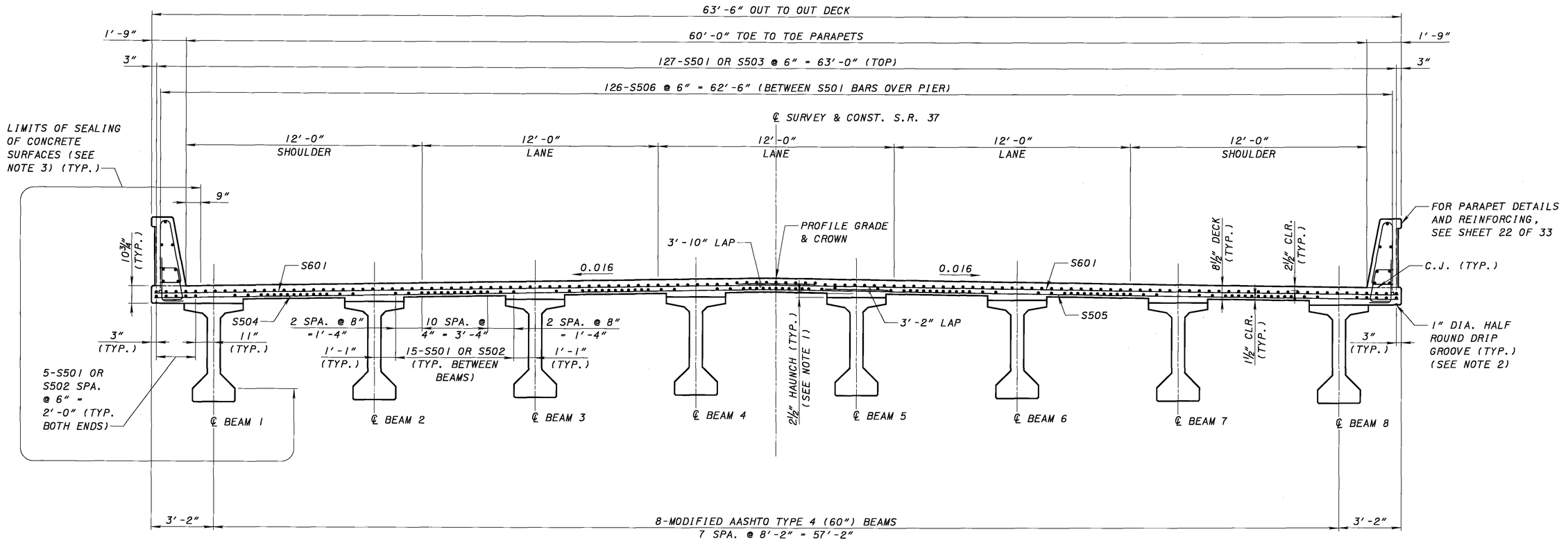
PIER DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

14/33

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TRANSVERSE SECTION

LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEARANCE
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
SPA.	- SPACED
TYP.	- TYPICAL

NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE TOPPING THICKNESS SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING, EVEN THOUGH DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
2. DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENT.
3. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.
4. STAGGER THE BOTTOM TRANSVERSE BARS BY ALTERNATING S504 AND S505 OVER THE MIDDLE TWO BEAMS.

DLZ
621 HEATLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED TAH | DRAWN JAM | CHECKED AJM | REVISED | REVIEWED GWM | DATE 07-20-05 | STRUCTURE FILE NUMBER 4501667

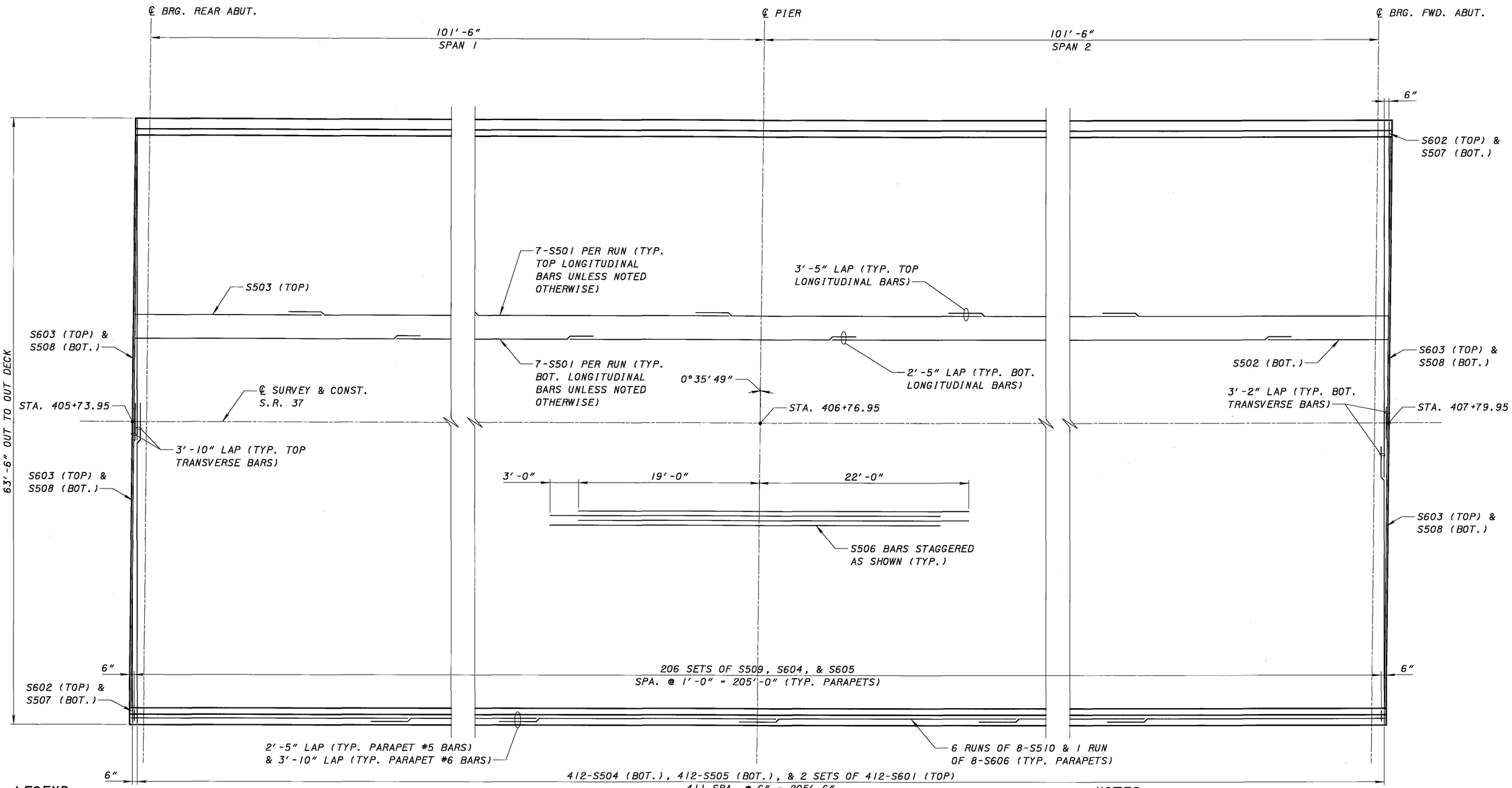
TRANSVERSE SECTION
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

15/33

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DECK PLAN

LEGEND:

ABUT. - ABUTMENT
BOT. - BOTTOM
BRG. - BEARING
℄ - CENTERLINE
CONSTR. - CONSTRUCTION
FWD - FORWARD
SER. - SERIES
SPA. - SPACED
STA. - STATION
TYP. - TYPICAL

NOTES:

1. FOR PARAPET REINFORCING SECTIONS, SEE SHEET 22 OF 33.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

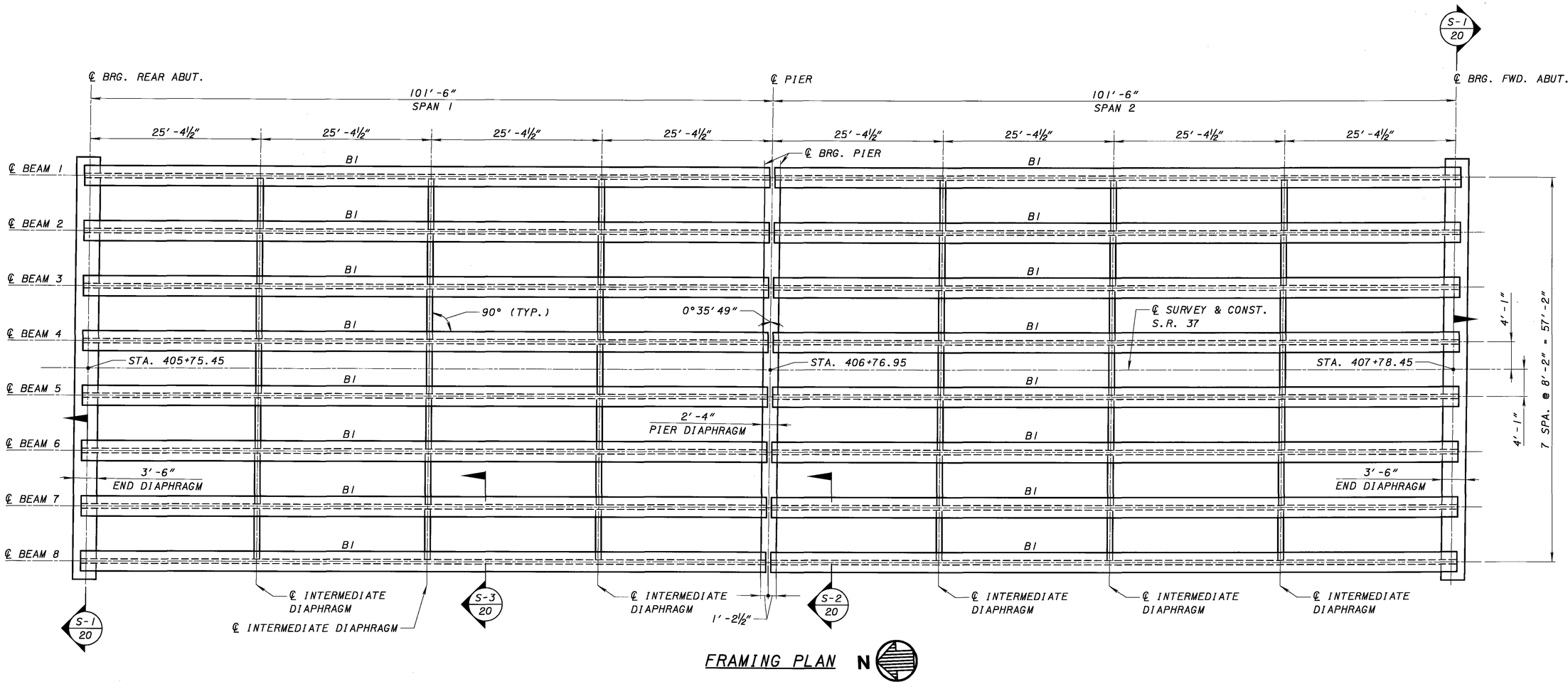
DECK PLAN
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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FRAMING PLAN

LEGEND:

ABUT. - ABUTMENT
BRG. - BEARING
℄ - CENTERLINE
CONST. - CONSTRUCTION
FWD. - FORWARD
SPA. - SPACED
STA. - STATION
TYP. - TYPICAL

NOTES:

1. FOR PRESTRESSED CONCRETE I-BEAM DETAILS, SEE SHEET 18 OF 33.
2. FOR DIAPHRAGM DETAILS, SEE SHEET 20 OF 33.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

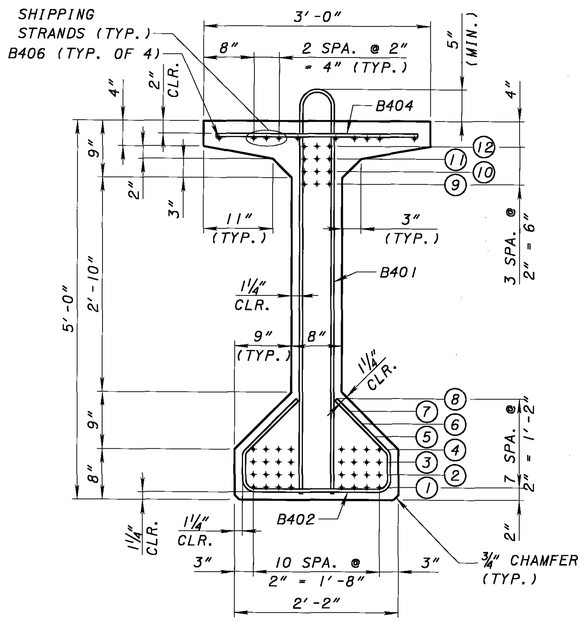
REVIEWED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 4501667
DRAWN JAM REVISED
DESIGNED TAH CHECKED AJM

FRAMING PLAN
BRIDGE NO. LIC-37-1.75
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

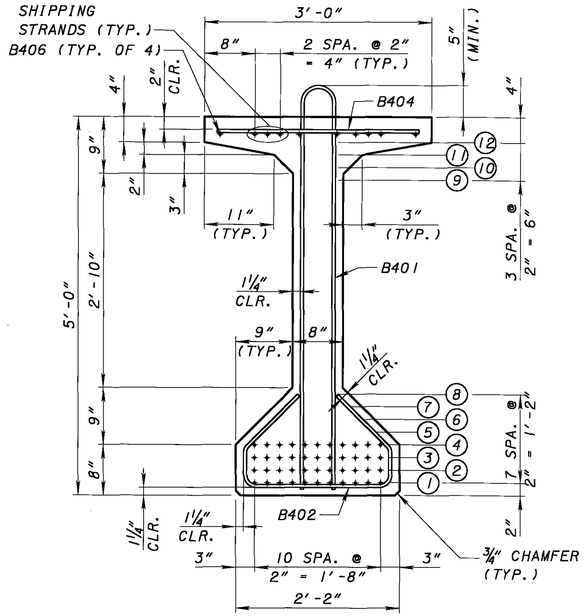
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1116/1349

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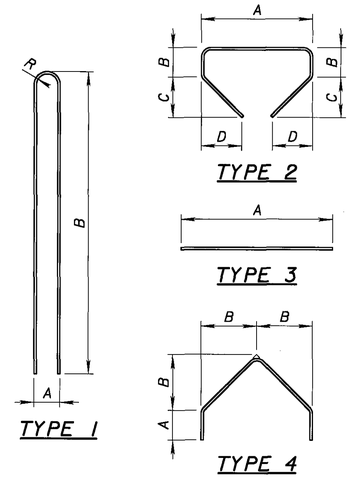
TYPICAL BEAM END SECTION

MODIFIED AASHTO TYPE 4 (60")



TYPICAL BEAM MID SECTION

MODIFIED AASHTO TYPE 4 (60")



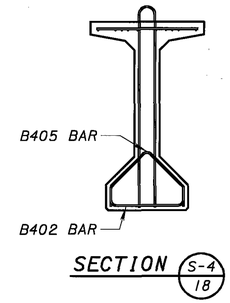
BENDING DIAGRAMS

(ALL DIMENSIONS ARE OUT-TO-OUT)

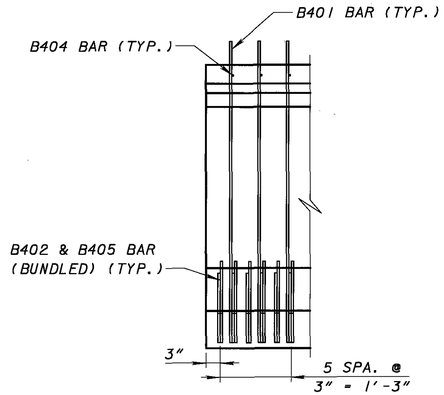
MARK	TYPE	DIMENSIONS				
		A	B	C	D	R
MODIFIED AASHTO TYPE 4 (60")						
B401	1	5½"	5'-4"			2¼"
B402	2	1'-11½"	6¼"	8½"	8½"	
B404	3	2'-8"				
B405	4	6¼"	11¾"			
B406	3	101'-7½"				

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES THE BAR LOCATION, THE NEXT DIGIT INDICATES THE INCH-POUND BAR SIZE AND THE REMAINING DIGITS ITS SEQUENCE NUMBER. ALL STEEL SHALL BE EPOXY COATED.

BEAM MARK	NUMBER OF STRANDS PER ROW: END SECTION - ROW NUMBER (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	MID SECTION - ROW NUMBER (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	TOTAL STRANDS	CONCRETE STRENGTHS f'ci	f'c	B401 BARS REQ'D	B402 BARS REQ'D	B404 BARS REQ'D	B405 BARS REQ'D
B1	8	8	8	8					3	3	3	3	11	11	11	11									44	5,000	7,000	121	127	121	12

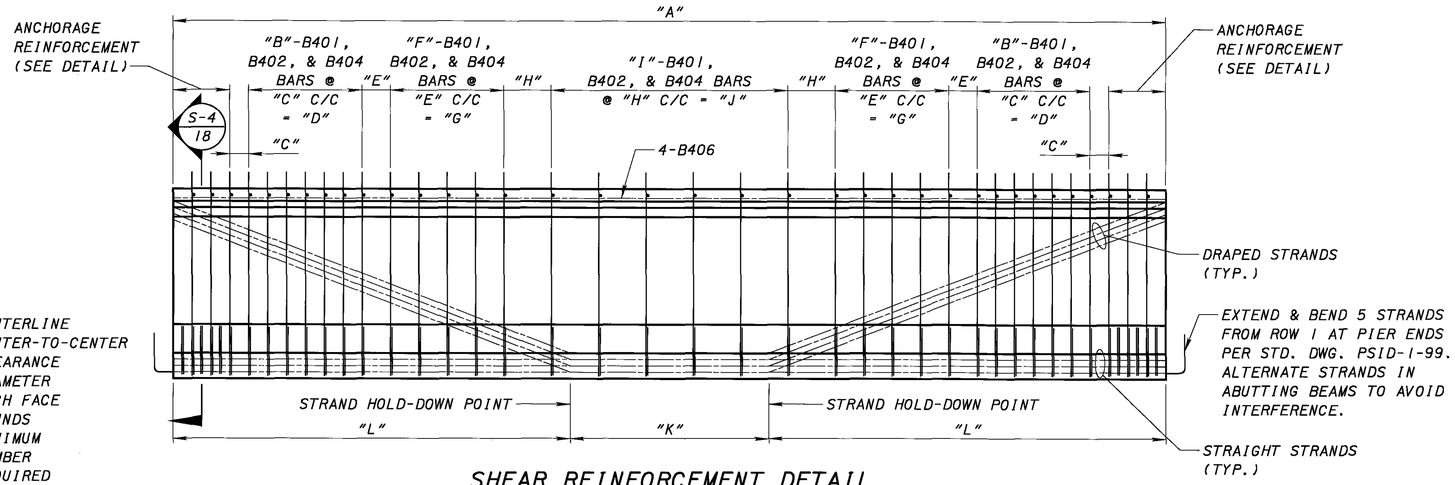


SECTION (S-4 / 18)



ANCHORAGE REINFORCEMENT DETAIL

BEAM MARK	NO. REQ'D.	DIMENSIONS A	B	C	D	E	F	G	H	I	J	K	L	APPROXIMATE WEIGHT (LBS.)
B1	16	101'-11½"	17	6"	8'-0"	1'-0"	33	32'-0"	1'-0"(-)	15	13'-11½"	20'-0"	40'-11¾"	91,355



SHEAR REINFORCEMENT DETAIL

LEGEND:

℄	- CENTERLINE
C/C	- CENTER-TO-CENTER
CLR.	- CLEARANCE
DIA.	- DIAMETER
E.F.	- EACH FACE
LBS.	- POUNDS
MIN.	- MINIMUM
NO.	- NUMBER
REQ'D.	- REQUIRED
SPA.	- SPACED
TYP.	- TYPICAL

NOTES:

1. FOR ADDITIONAL DETAILS AND NOTES, SEE BRIDGE STANDARD DRAWINGS PSID-1-99.

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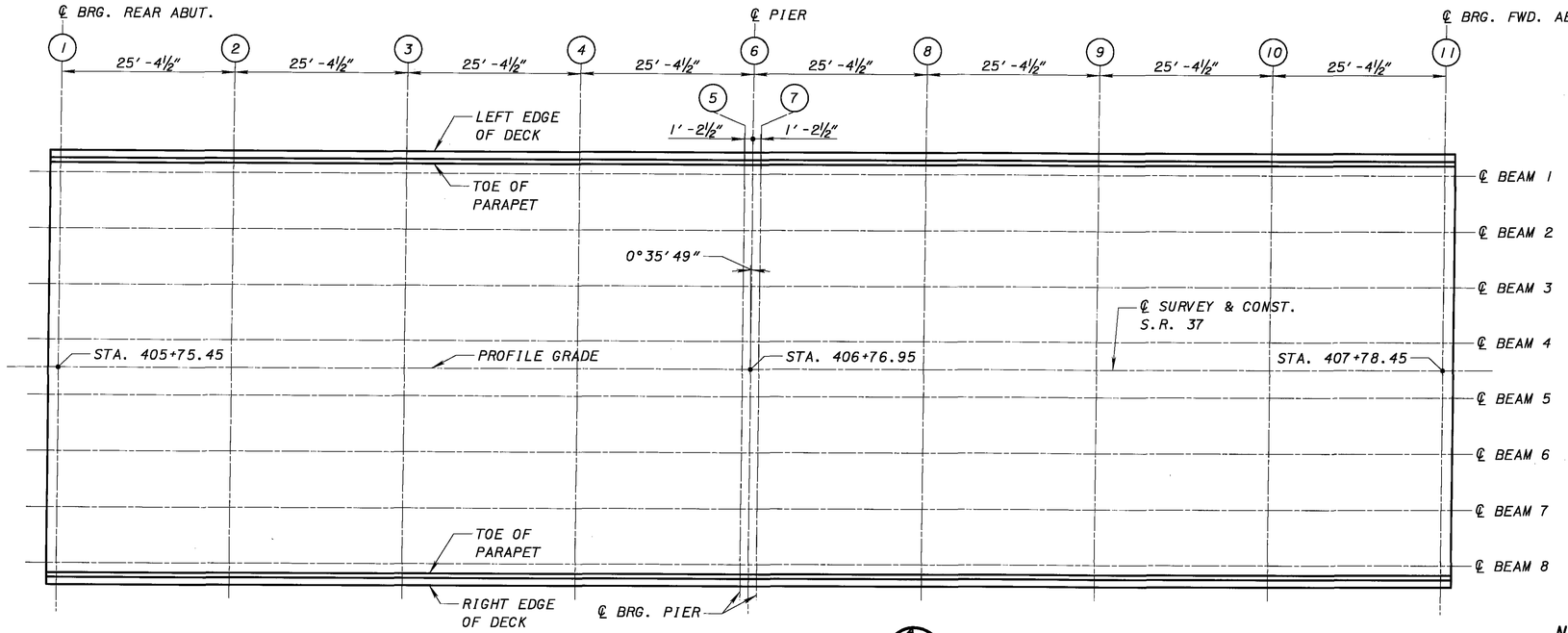
DESIGNED TAH | DRAWN JAM | REVIEWED GWW | DATE 07-20-05
CHECKED AJM | REVISED | STRUCTURE FILE NUMBER 4501667

PRESTRESSED CONCRETE I-BEAM DETAILS
BRIDGE NO. LIC-37-11.75
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

18/33

1117/1349



SCREED PLAN

LEGEND:

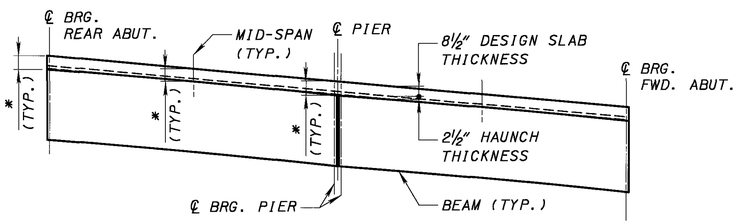
ABUT.	- ABUTMENT
BRG.	- BEARING
℄	- CENTERLINE
CONST.	- CONSTRUCTION
F.A.	- FORWARD ABUTMENT
FWD.	- FORWARD
LT.	- LEFT
R.A.	- REAR ABUTMENT
RT.	- RIGHT
STA.	- STATION
TYP.	- TYPICAL

NOTES:

1. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED, CALCULATED DEAD LOAD DEFLECTIONS.
2. CALCULATED CAMBER AT THE TIME OF RELEASE IS 1.63 INCHES. CALCULATED CAMBER AT THE TIME OF ERECTION IS 2.87 INCHES. CALCULATED LONG-TERM CAMBER IS 4.06 INCHES.

SCREED ELEVATIONS (FEET)

LOCATION	OFFSET	① ℄ BRG. R.A.	② ¼ SPAN 1	③ ½ SPAN 1	④ ¾ SPAN 1	⑤ ℄ BRG.	⑥ ℄ PIER	⑦ ℄ BRG.	⑧ ¼ SPAN 2	⑨ ½ SPAN 2	⑩ ¾ SPAN 2	⑪ ℄ BRG. F.A.
LEFT EDGE OF DECK	31.75 LT.	405+75.78	406+01.16	406+26.53	406+51.91	406+76.07	406+77.28	406+78.49	407+02.66	407+28.03	407+53.41	407+78.78
		1016.63	1017.44	1018.14	1018.74	1019.21	1019.24	1019.26	1019.84	1020.34	1020.73	1021.03
TOE OF PARAPET	30.00 LT.	405+75.76	406+01.14	406+26.51	406+51.89	406+76.05	406+77.26	406+78.47	407+02.64	407+28.01	407+53.39	407+78.76
		1016.63	1017.44	1018.14	1018.74	1019.21	1019.24	1019.26	1019.84	1020.34	1020.73	1021.03
BEAM 1	28.58 LT.	405+75.75	406+01.12	406+26.50	406+51.87	406+76.04	406+77.25	406+78.46	407+02.62	407+28.00	407+53.37	407+78.75
		1016.66	1017.46	1018.16	1018.76	1019.23	1019.26	1019.29	1019.86	1020.36	1020.75	1021.05
BEAM 2	20.42 LT.	405+75.66	406+01.04	406+26.41	406+51.79	406+75.95	406+77.16	406+78.37	407+02.54	407+27.91	407+53.29	407+78.66
		1016.78	1017.59	1018.30	1018.90	1019.36	1019.39	1019.42	1020.00	1020.50	1020.89	1021.18
BEAM 3	12.25 LT.	405+75.58	406+00.95	406+26.33	406+51.70	406+75.87	406+77.08	406+78.29	407+02.45	407+27.83	407+53.20	407+78.58
		1016.91	1017.72	1018.43	1019.03	1019.49	1019.52	1019.54	1020.12	1020.63	1021.02	1021.31
BEAM 4	4.08 LT.	405+75.49	406+00.87	406+26.24	406+51.62	406+75.78	406+76.99	406+78.20	407+02.37	407+27.74	407+53.12	407+78.49
		1017.04	1017.85	1018.56	1019.15	1019.62	1019.65	1019.67	1020.25	1020.76	1021.15	1021.44
PROFILE GRADE	0.00	405+75.45	406+00.83	406+26.20	406+51.58	406+75.74	406+76.95	406+78.16	407+02.33	407+27.70	407+53.08	407+78.45
		1017.10	1017.92	1018.63	1019.22	1019.69	1019.71	1019.74	1020.32	1020.83	1021.21	1021.50
BEAM 5	4.08 RT.	405+75.41	406+00.78	406+26.16	406+51.53	406+75.70	406+76.91	406+78.12	407+02.28	407+27.66	407+53.03	407+78.41
		1017.04	1017.85	1018.56	1019.15	1019.62	1019.65	1019.67	1020.25	1020.76	1021.15	1021.44
BEAM 6	12.25 RT.	405+75.32	406+00.70	406+26.07	406+51.45	406+75.61	406+76.82	406+78.03	407+02.20	407+27.57	407+52.95	407+78.32
		1016.91	1017.72	1018.43	1019.02	1019.49	1019.51	1019.54	1020.12	1020.63	1021.02	1021.31
BEAM 7	20.42 RT.	405+75.24	406+00.61	406+25.99	406+51.36	406+75.53	406+76.74	406+77.95	407+02.11	407+27.49	407+52.86	407+78.24
		1016.77	1017.58	1018.29	1018.89	1019.35	1019.38	1019.41	1019.99	1020.49	1020.88	1021.17
BEAM 8	28.58 RT.	405+75.15	406+00.53	406+25.90	406+51.28	406+75.44	406+76.65	406+77.86	407+02.03	407+27.40	407+52.78	407+78.15
		1016.64	1017.44	1018.15	1018.75	1019.22	1019.25	1019.27	1019.85	1020.35	1020.74	1021.04
TOE OF PARAPET	30.00 RT.	405+75.14	406+00.51	406+25.89	406+51.26	406+75.43	406+76.64	406+77.85	407+02.01	407+27.39	407+52.76	407+78.14
		1016.62	1017.42	1018.13	1018.72	1019.20	1019.22	1019.25	1019.82	1020.33	1020.72	1021.02
RIGHT EDGE OF DECK	31.75 RT.	405+75.12	406+00.49	406+25.87	406+51.24	406+75.41	406+76.62	406+77.83	407+01.99	407+27.37	407+52.74	407+78.12
		1016.62	1017.42	1018.13	1018.72	1019.20	1019.22	1019.25	1019.82	1020.33	1020.72	1021.02



DECK THICKNESS DETAIL

* ANTICIPATED DECK THICKNESSES (INCHES)

LOCATION	① ℄ BRG. R.A.	③ ½ SPAN 1	⑤ ℄ BRG.	⑦ ℄ BRG.	⑨ ½ SPAN 2	⑪ ℄ BRG. F.A.
BEAM 1	11.40	11.00	11.40	11.40	11.00	11.40
BEAM 2	11.26	11.00	11.26	11.26	11.00	11.26
BEAM 3	11.26	11.00	11.26	11.26	11.00	11.26
BEAM 4	11.26	11.00	11.26	11.26	11.00	11.26
BEAM 5	11.26	11.00	11.26	11.26	11.00	11.26
BEAM 6	11.26	11.00	11.26	11.26	11.00	11.26
BEAM 7	11.26	11.00	11.26	11.26	11.00	11.26
BEAM 8	11.40	11.00	11.40	11.40	11.00	11.40

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DESIGNED TAH	DRAWN JAM	REVIEWED GWM	DATE 07-20-05
CHECKED AJM	REVISED	STRUCTURE FILE NUMBER 4501667	

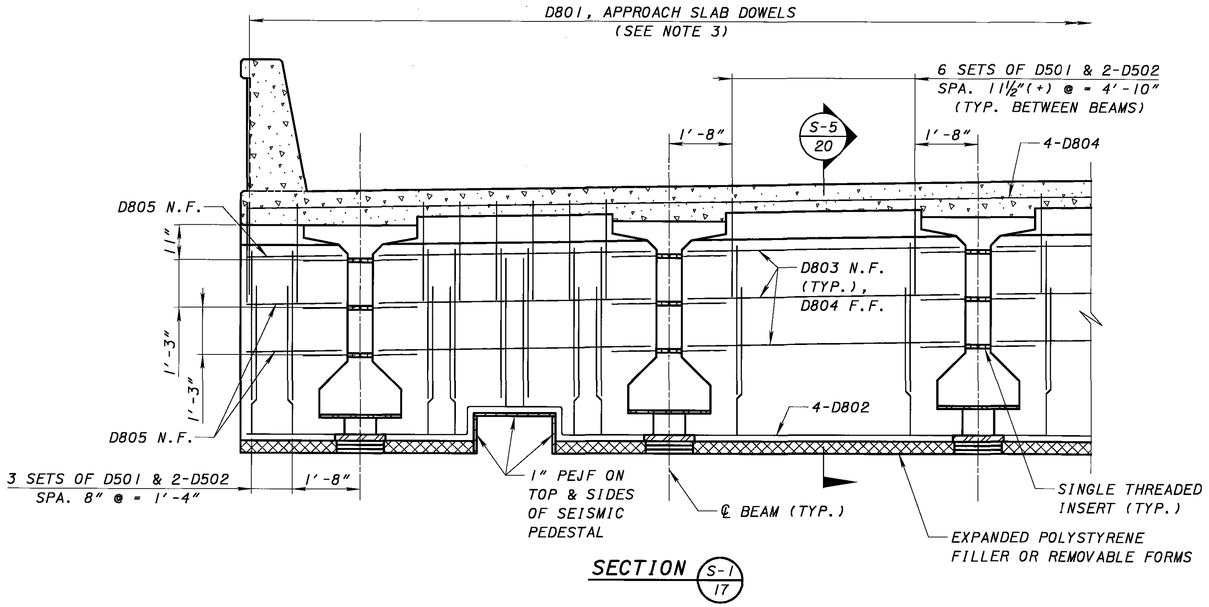
SCREED ELEVATION DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

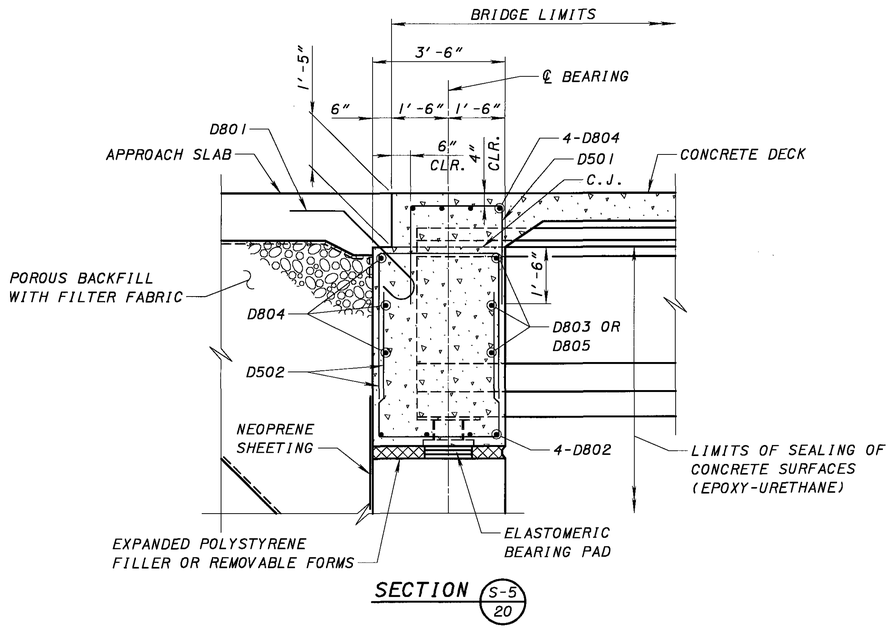
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1118/1349

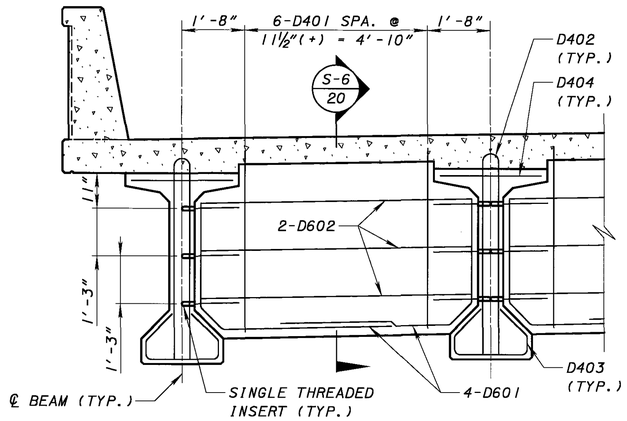
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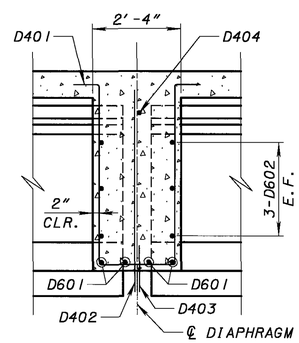
SECTION S-1 / 17



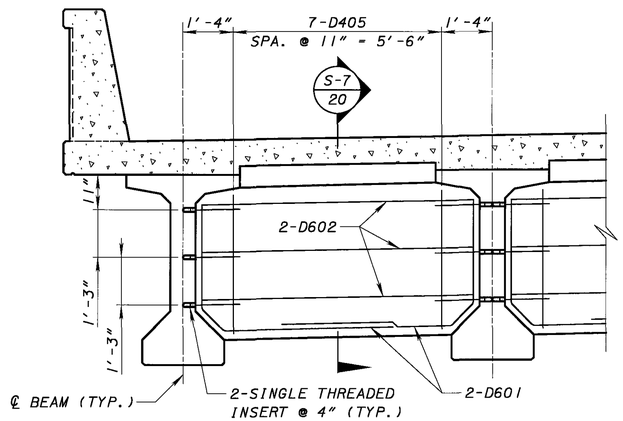
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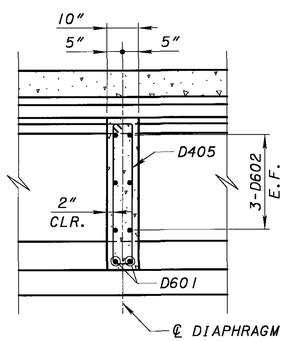
SECTION S-2 / 17



SECTION S-6 / 20



SECTION S-3 / 17



SECTION S-7 / 20

LEGEND:

℄	= CENTERLINE
C.J.	= CONSTRUCTION JOINT
CLR.	= CLEARANCE
E.F.	= EACH FACE
F.F.	= FAR FACE
MIN.	= MINIMUM
N.F.	= NEAR FACE
PEJF	= PREFORMED EXPANSION JOINT FILLER
SPA.	= SPACED
TYP.	= TYPICAL

NOTES:

1. VERTICAL BARS SHALL BE PLACED PARALLEL TO ℄ BEAMS.
2. FOR ADDITIONAL DETAILS AND NOTES, SEE STANDARD BRIDGE DRAWINGS PSID-1-99 AND SICD-1-96.
3. FOR APPROACH SLAB DOWEL DETAILS, SEE SHEET 25 OF 33.
4. ABUTMENT DIAPHRAGM, PRESTRESSED I-BEAM SUPERSTRUCTURE: PLACE THE CONCRETE ENCASING THE PRESTRESSED I-BEAM STRUCTURAL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.
5. FOR THE DIAPHRAGM REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS = 4'-11"; #6 BARS = 2'-11"; #5 BARS = 2'-5".

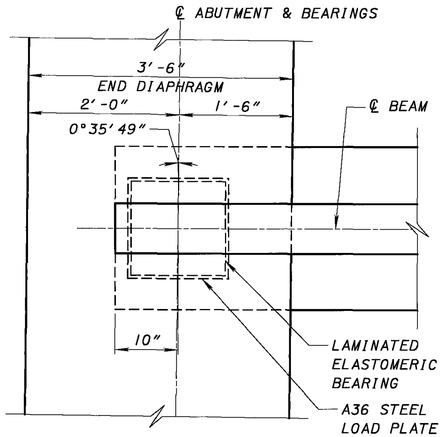
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DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

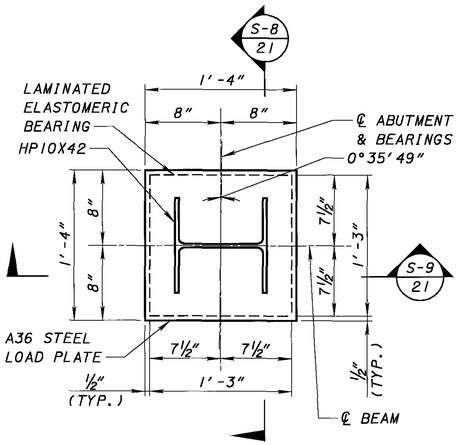
DIAPHRAGM DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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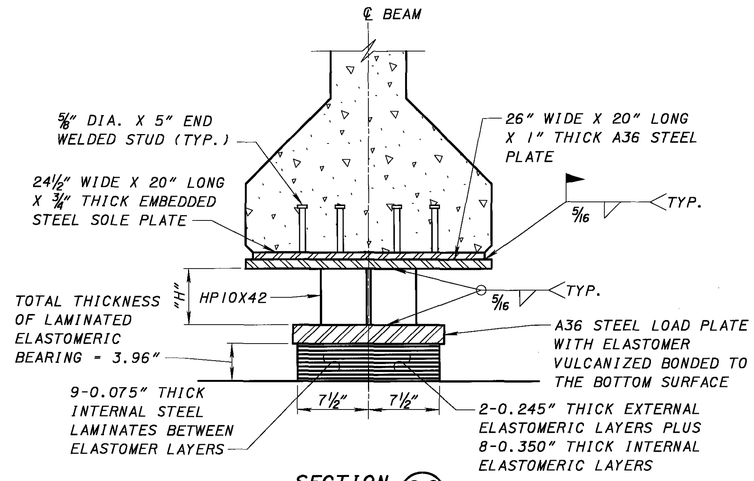


ABUTMENT BEARING PLAN

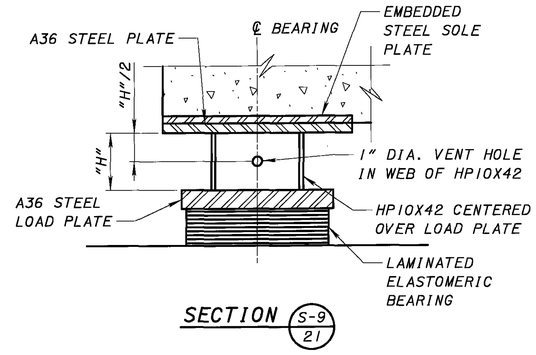


ABUTMENT BEARING DETAIL

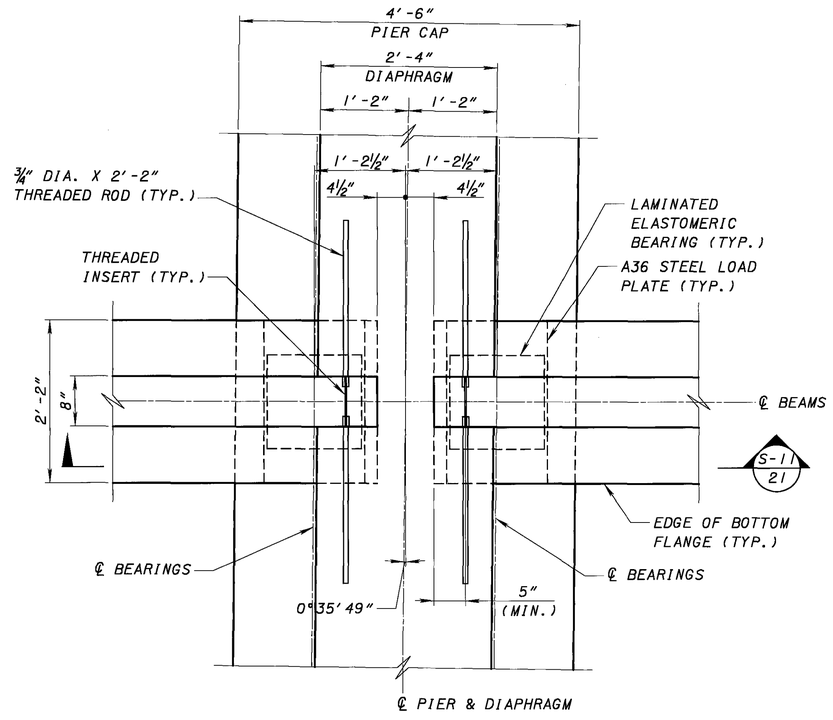
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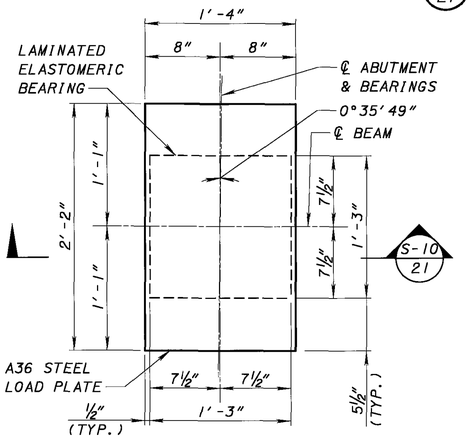
SECTION S-8 / 21



SECTION S-9 / 21

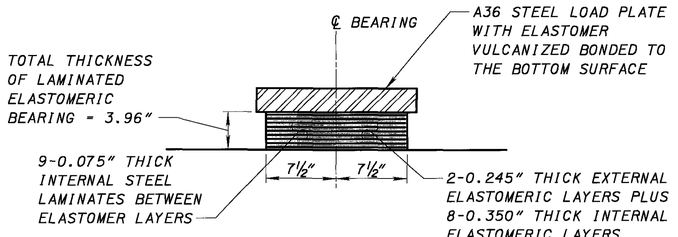


PIER BEARING PLAN

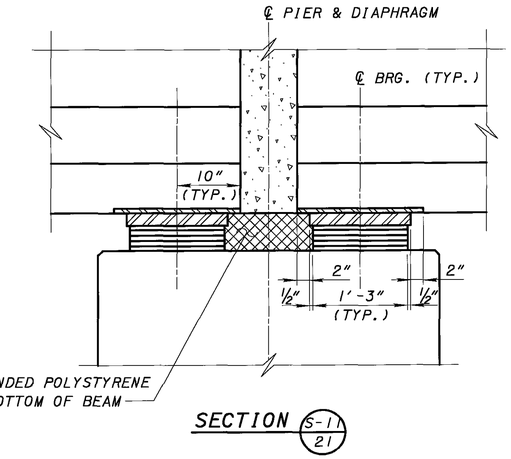


PIER BEARING DETAIL

(16 REQUIRED)



SECTION S-10 / 21



SECTION S-11 / 21

TABLE OF HP10X42 HEIGHTS (DIMENSION "H") (INCHES)								
ABUTMENT	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6	BEAM 7	BEAM 8
REAR	5 3/16	6 7/8	8 3/8	9 15/16	9 15/16	8 5/16	6 11/16	5
FORWARD	5 1/8	6 13/16	8 3/8	9 15/16	9 15/16	8 5/16	6 3/4	5

LEGEND:

ABUT.	-	ABUTMENT
BRG.	-	BEARING
℄	-	CENTERLINE
C/C	-	CENTER-TO-CENTER
DIA.	-	DIAMETER
EXP.	-	EXPANSION
FWD.	-	FORWARD
IN.	-	INCH
MIN.	-	MINIMUM
SPA.	-	SPACED
TYP.	-	TYPICAL

BEARING PROPERTIES				
SPAN	1	1	2	2
LOCATION	REAR ABUT.	PIER	PIER	FWD. ABUT.
BEARING TYPE	EXP.	EXP.	EXP.	EXP.
NUMBER OF BEARINGS REQUIRED	8	8	8	8
DESIGN DEAD LOAD (KIPS)	154.0	149.0	149.0	154.0
DESIGN LIVE LOAD* (KIPS)	60.0	62.0	62.0	60.0
DESIGN TOTAL LOAD (KIPS)	213.0	211.0	211.0	213.0
LOAD PLATE THICKNESS (IN.)	2	2	2 5/8	2

*EXCLUDING IMPACT

NOTES:

1. A36 STEEL LOAD PLATES SHALL BE USED FOR ABUTMENT AND PIER BEARINGS. THE LOAD PLATE SHALL BE VULCANIZED BONDED TO THE LAMINATED ELASTOMERIC PAD DURING THE MOLDING PROCESS.
2. WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F, AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
3. BASIS OF PAYMENT: THE UNIT PRICE BID SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS, STEEL PLATES, AND HP SHAPES. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).
4. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
5. FOR ADDITIONAL DETAILS, SEE STANDARD BRIDGE DRAWING PSID-1-99.

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DESIGNED TAH | DRAWN JAM | CHECKED AJM | REVISED

REVIEWED GWM | DATE 07-20-05

STRUCTURE FILE NUMBER 4501667

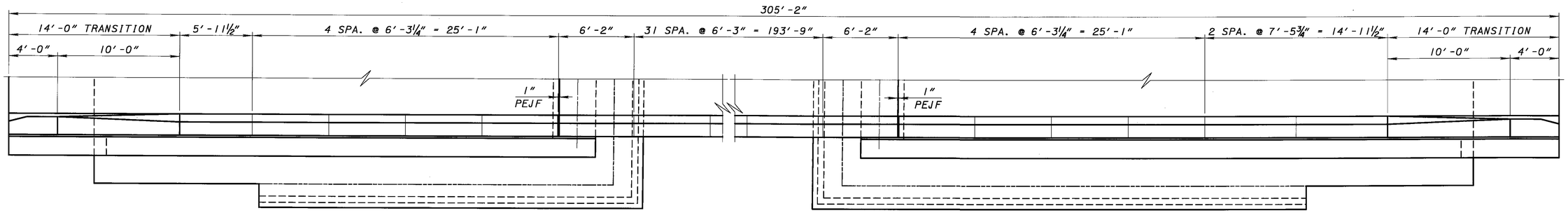
BEARING DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

21/33

1120
1349

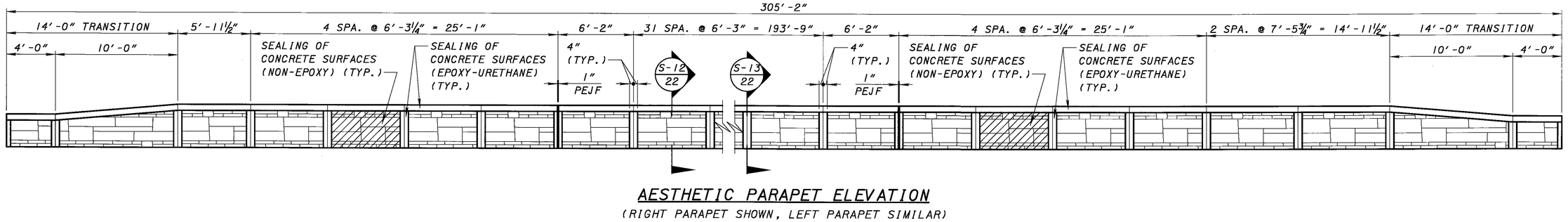
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AESTHETIC PARAPET PLAN

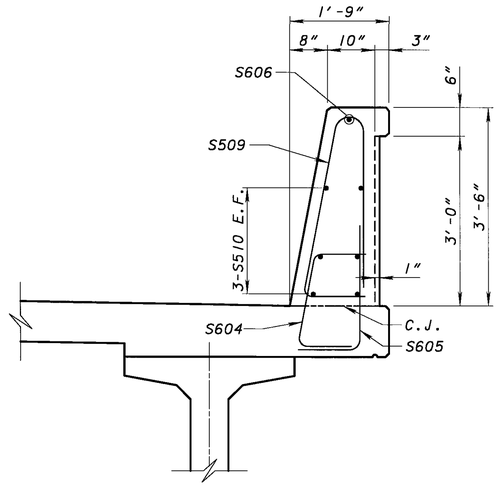
(RIGHT PARAPET SHOWN, LEFT PARAPET SIMILAR)

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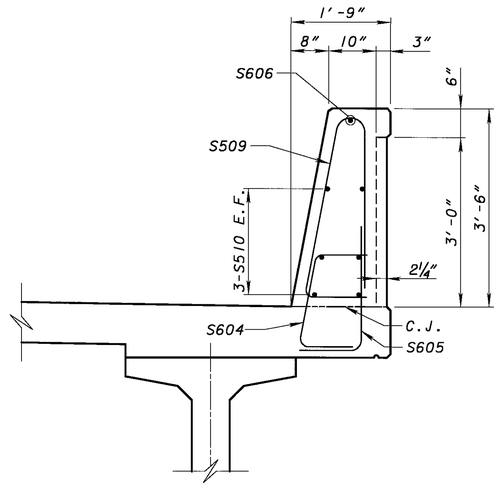


AESTHETIC PARAPET ELEVATION

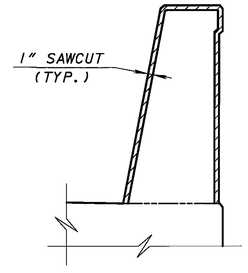
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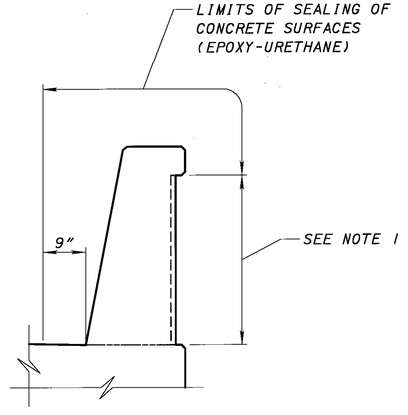
SECTION S-12 / 22



SECTION S-13 / 22



CONTROL JOINT DETAIL



PARAPET SEALING DETAIL

LEGEND:

- C.J. - CONSTRUCTION JOINT
- E.F. - EACH FACE
- F.F. - FAR FACE
- N.F. - NEAR FACE
- PEJF - PREFORMED EXPANSION JOINT FILLER
- SPA. - SPACED
- TYP. - TYPICAL

NOTES:

1. RECESSED PANELS TO BE SEALED WITH NON-EPOXY SEALER. VERTICALS TO BE SEALED WITH EPOXY-URETHANE SEALER.

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DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVIEWED GWM
DATE 07-20-05
REVISED
STRUCTURE FILE NUMBER 4501667

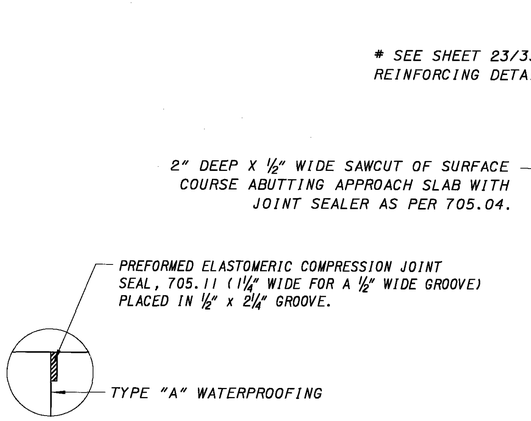
PARAPET DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

22/33

1121/1349

10/26/2006
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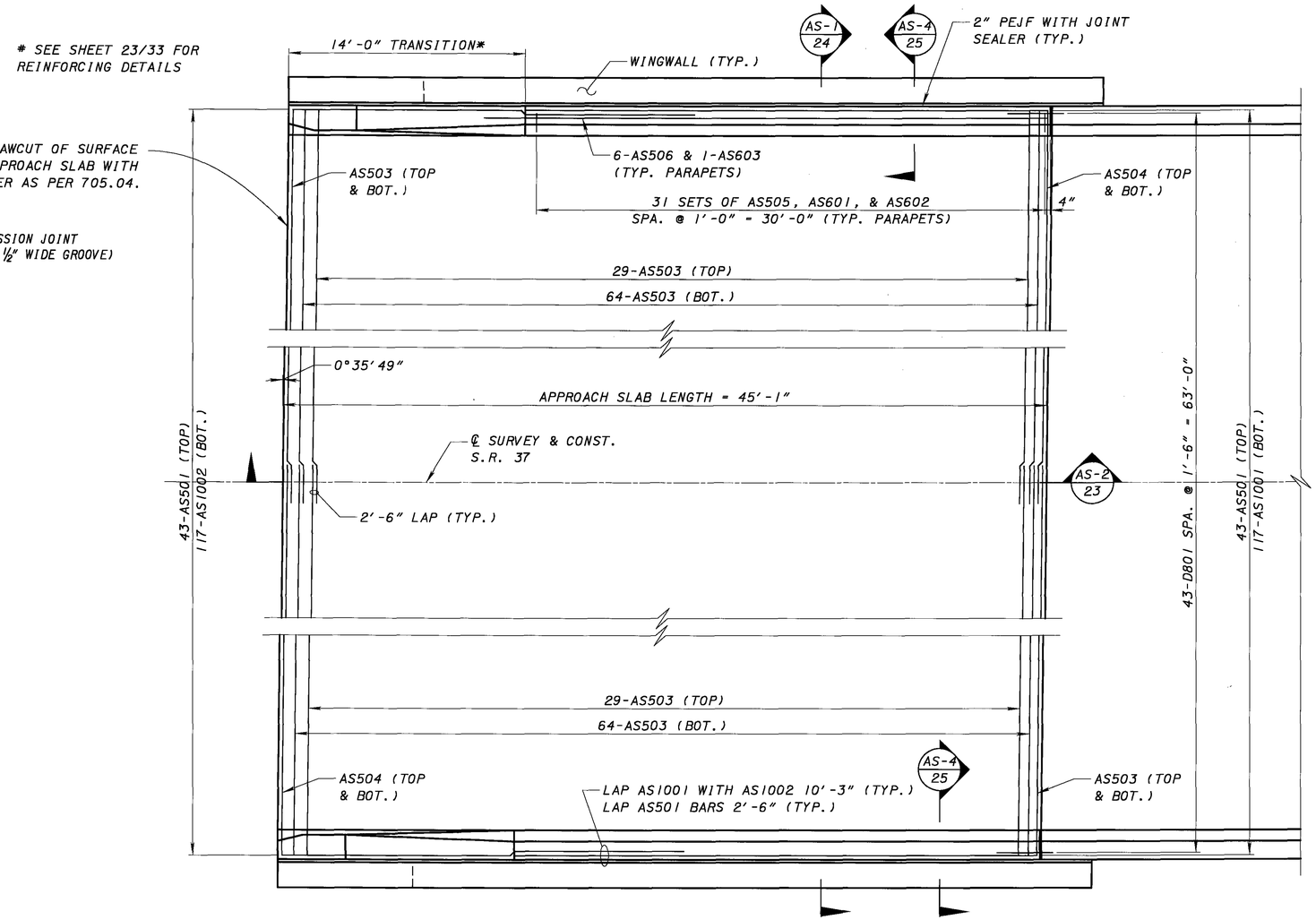
DETAIL B

NOTES:

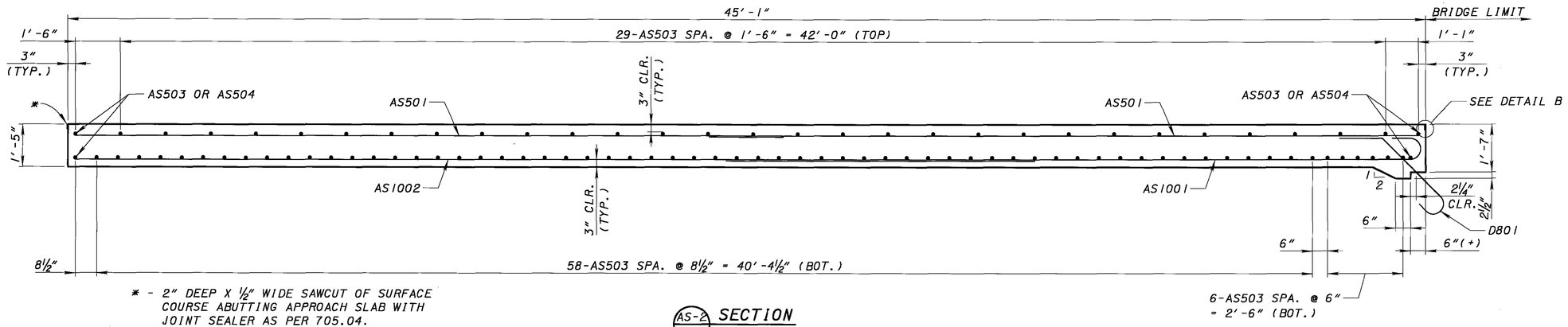
1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.
2. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.

LEGEND:

BOT.	= BOTTOM
℄	= CENTERLINE
C.J.	= CONSTRUCTION JOINT
CLR.	= CLEARANCE
CONST.	= CONSTRUCTION
E.F.	= EACH FACE
PEJF	= PREFORMED EXPANSION JOINT FILLER
SPA.	= SPACED
TYP.	= TYPICAL



PLAN



* - 2" DEEP X ½" WIDE SAWCUT OF SURFACE COURSE ABUTTING APPROACH SLAB WITH JOINT SEALER AS PER 705.04.

AS-2 23 SECTION

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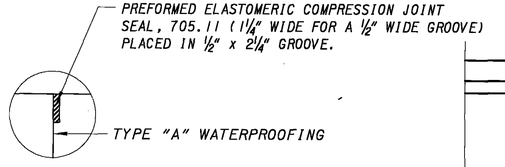
DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	GWW	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

REAR APPROACH SLAB
BRIDGE NO. LIC-37-1.175
S.R. 37 OVER S.R. 161

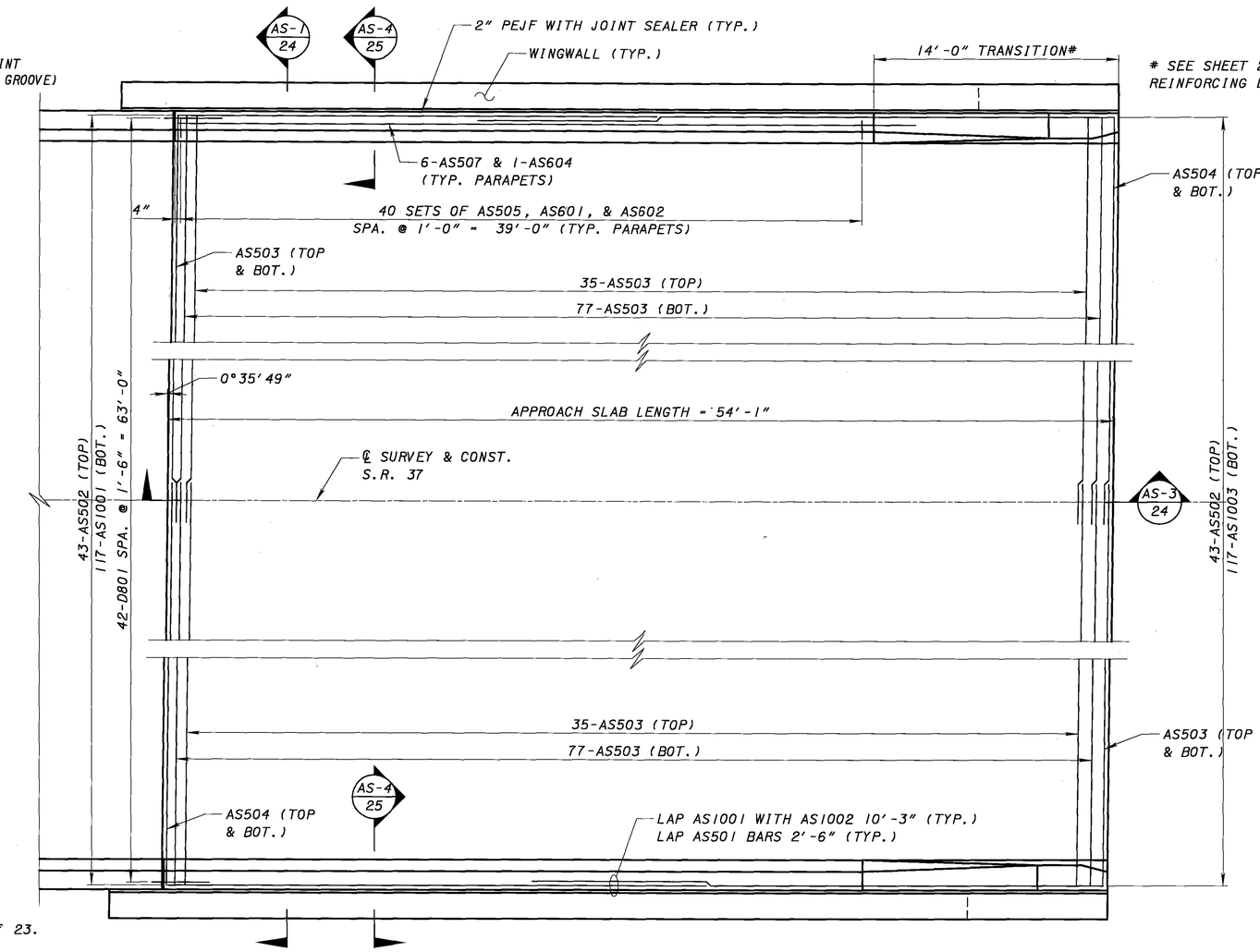
LIC-161-6.65
LIC-37-10.25
PID 77221

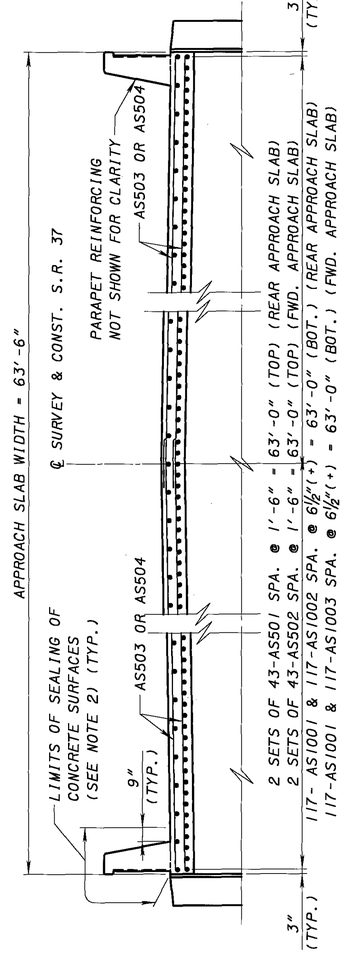
23/33

1122
1349



DETAIL B





SECTION AS-1 25

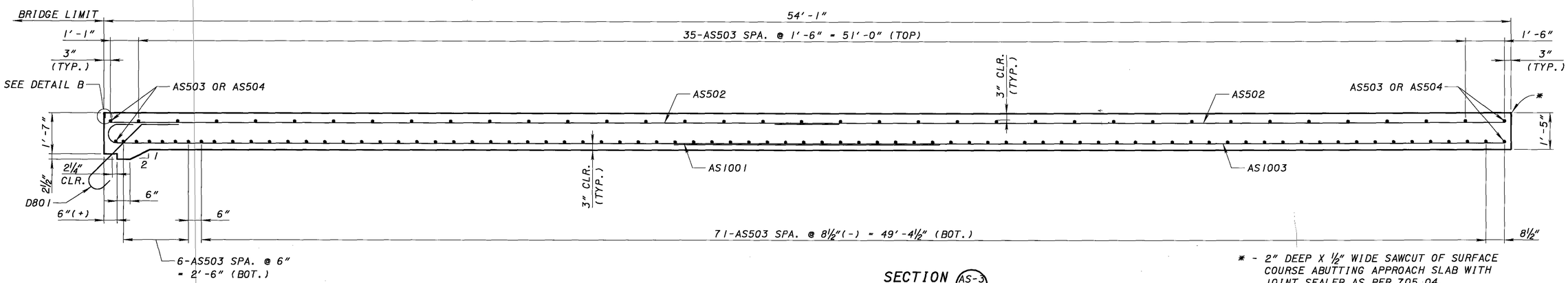
LEGEND:

BOT.	=	BOTTOM
℄	=	CENTERLINE
C.J.	=	CONSTRUCTION JOINT
CLR.	=	CLEARANCE
CONST.	=	CONSTRUCTION
E.F.	=	EACH FACE
PEJF	=	PREFORMED EXPANSION JOINT FILLER
SPA.	=	SPACED
TYP.	=	TYPICAL

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.
2. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 of 23.

PLAN



SECTION AS-3 24

* - 2" DEEP X ½" WIDE SAWCUT OF SURFACE COURSE ABUTTING APPROACH SLAB WITH JOINT SEALER AS PER 705.04.

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	GWW	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

FORWARD APPROACH SLAB

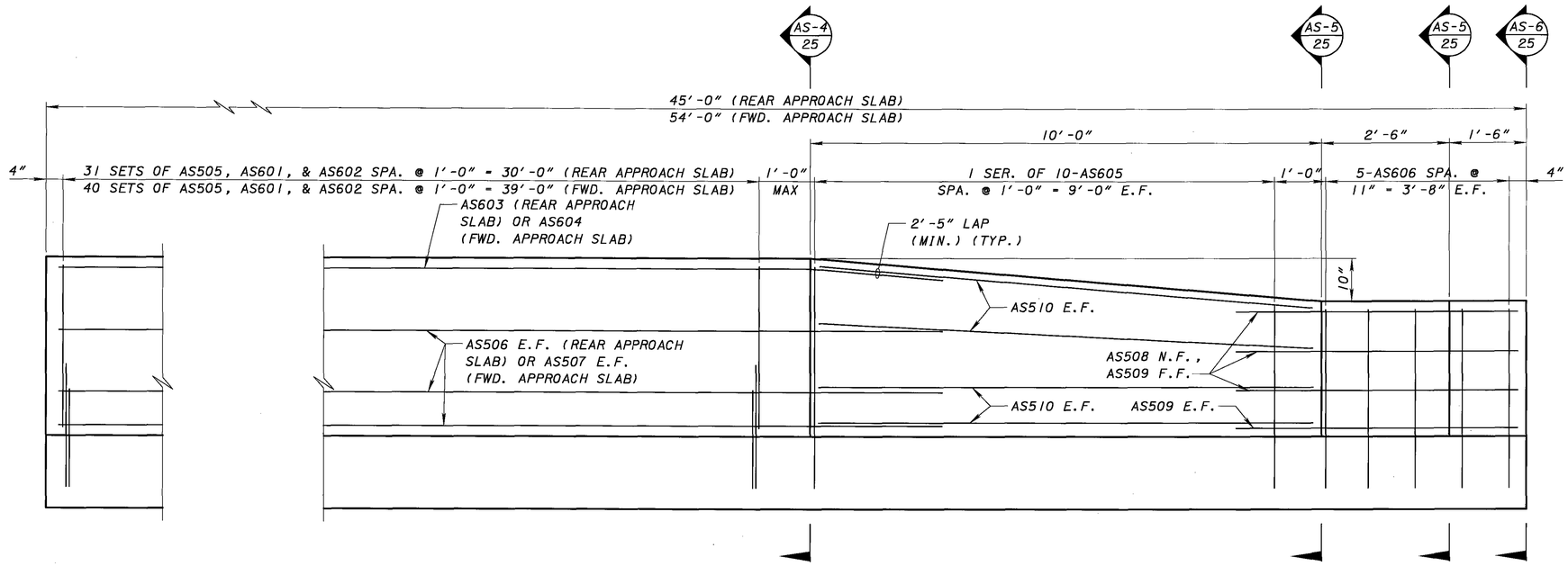
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

24/33

1123/1349

10/26/2006
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APPROACH SLAB PARAPET ELEVATION

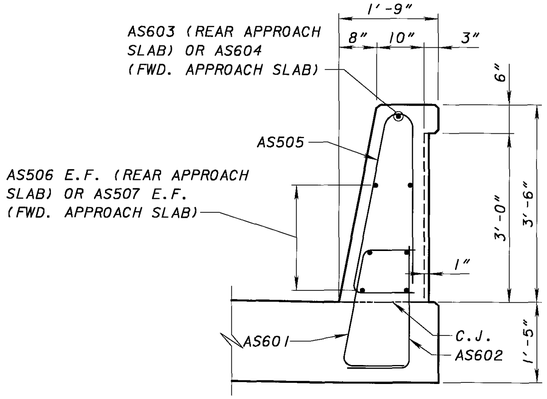
(LEFT FORWARD PARAPET SHOWN, OTHER PARAPETS SIMILAR)
(APPROACH SLAB REINFORCEMENT NOT SHOWN)

LEGEND:

BOT.	- BOTTOM
℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEARANCE
CONST.	- CONSTRUCTION
E.F.	- EACH FACE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SPA.	- SPACED
TYP.	- TYPICAL

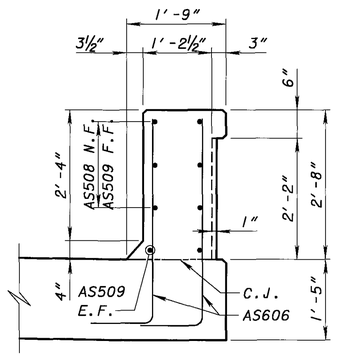
NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.
2. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.

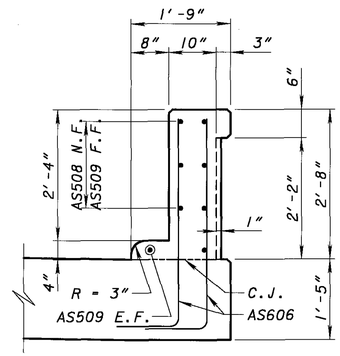


SECTION AS-4 / 23

ALSO SHEETS 24&25 OF 33.



SECTION AS-5 / 25



SECTION AS-6 / 25

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DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501667	

APPROACH SLAB DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

25/33

1124/1349

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STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
REAR ABUTMENT										
RA401	52	4'-6"	156	1	4'-6"					
RA402	64	3'-6"	150	1	3'-6"					
RA501	12	36'-9"	460	1	36'-9"					
RA502	4	34'-6"	144	1	34'-6"					
RA503	52	17'-0"	923	J5J	5'-8"	2'-7"				
RA504	44	15'-8"	720	J5J	3'-2"	4'-5"				
RA505	40	22'-5"	935	1	22'-5"					
RA506	28	22'-7"	660	1	22'-7"					
RA507	8	16'-8"	139	1	16'-8"					
RA508	4	16'-10"	70	1	16'-10"					
RA509	4	19'-10"	83	1	19'-10"					
RA510	12	24'-8"	309	1	24'-8"					
RA511	2	14'-10"	31	1	14'-10"					
RA512	64	23'-6"	1570	J5J	9'-2"	2'-4"				
RA513	60	17'-7"	1100	3	8'-4"	1'-2"				
RA514	58	11'-3"	680	3	5'-2"	1'-2"				
RA515	1 SER. OF 4	9'-2" TO 13'-3"	46	J5J	1'-2"	3'-2" TO 5'-2 1/2"				1
RA516	1 SER. OF 3	7'-10" TO 8'-0"	25	J5J	1'-2"	2'-6" TO 2'-7"				1
RA517	2	10'-12"	23	10	2'-11 1/4"	5'-0 1/2"	2'-5"	2'-6 1/4"		
RA518	2	14'-2"	30	1	14'-2"					
RA519	1 SER. OF 4	9'-2" TO 13'-3"	46	J5J	1'-2"	3'-1 3/4" TO 5'-2 1/4"				1
RA520	1 SER. OF 2	7'-10" TO 8'-0"	16	J5J	1'-2"	2'-6" TO 2'-7"				1
RA521	2	10'-11"	23	10	2'-11 3/4"	5'-0"	2'-5"	2'-6"		
RA601	6	13'-10"	125	R5R	3'-2"	3'-2"				
RA602	4	7'-4"	44	3	3'-1"	1'-6"				
RA801	8	38'-0"	812	1	38'-0"					
RA802	8	36'-11"	789	1	36'-11"					
RA803	32	23'-8"	2022	1	23'-8"					
RA901	10	7'-1"	241	3	3'-1"	1'-6"				
RA902	4	3'-2"	43	1	3'-2"					
		TOTAL =	12415							
FORWARD ABUTMENT										
FA401	52	4'-6"	156	1	4'-6"					
FA402	72	3'-6"	168	1	3'-6"					
FA501	12	36'-9"	460	1	36'-9"					
FA502	4	34'-6"	144	1	34'-6"					
FA503	52	17'-0"	923	J5J	5'-8"	2'-7"				
FA504	44	15'-8"	720	J5J	3'-2"	4'-5"				
FA505	40	26'-11"	1123	1	26'-11"					
FA506	32	24'-7"	820	1	24'-7"					
FA507	8	23'-8"	197	1	23'-8"					
FA508	4	23'-10"	99	1	23'-10"					
FA509	4	26'-10"	112	1	26'-10"					
FA510	4	29'-10"	124	1	29'-10"					
FA511	12	31'-8"	396	1	31'-8"					
FA512	72	23'-6"	1767	J5J	9'-2"	2'-4"				
FA513	68	16'-3"	1152	3	7'-8"	1'-2"				
FA514	66	13'-7"	934	3	6'-4"	1'-2"				
FA515	2 SER. OF 7	9'-1" TO 16'-9"	188	J5J	1'-2"	3'-1 1/4" TO 6'-11 1/2"				1
FA516	4	11'-4"	47	9	2'-5"	7'-11 1/2"	3'-11 3/4"			
FA601	6	13'-10"	125	R5R	3'-2"	3'-2"				
FA602	4	7'-4"	44	3	3'-1"	1'-6"				
FA801	8	38'-0"	812	1	38'-0"					

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
FA802	8	36'-11"	789	1	36'-11"					
FA803	32	28'-2"	2407	1	28'-2"					
FA901	10	7'-1"	241	3	3'-1"	1'-6"				
FA902	4	3'-2"	43	1	3'-2"					
		TOTAL =	13991							
PIER										
P401	4	441'-5"	1179	50	2'-6"	0'-4 1/2"	20'-2 3/4"			
P501	28	9'-8"	282	1	9'-8"					
P502	32	8'-8"	289	1	8'-8"					
P503	336	8'-7"	3019	3	3'-0 1/2"	2'-9 1/2"				
P504	4 SER. OF 8	9'-7" TO 13'-1"	378	J5J	2'-9 1/2"	1'-8 3/4" TO 3'-5 3/4"				1
P601	6	15'-10"	143	R5R	3'-2"	4'-2"				
P602	4	4'-5"	27	2	3'-1"	1'-6"				
P801	60	11'-6"	1842	H1H	9'-8"					
P802	64	10'-6"	1794	H1H	8'-8"					
P803	72	10'-2"	1962	2	9'-1"	1'-4"				
P804	72	23'-3"	4470	1	23'-3"					
P901	20	34'-11"	2372	1	34'-10 1/2"					
P902	10	4'-4"	146	2	3'-1"	1'-6"				
P903	4	4'-2"	57	1	4'-2"					
P1001	20	32'-4"	2783	1	32'-4"					
P1002	20	14'-4"	1232	9	10'-3"	3'-8"	1'-10"			
P1003	24	36'-8"	3787	1	36'-8"					
		TOTAL =	25762							
SUPERSTRUCTURE										
S501	1694	30'-0"	53005	1	30'-0"					
S502	115	12'-8"	1519	1	12'-8"					
S503	127	19'-8"	2605	1	19'-8"					
S504	412	37'-4"	16043	1	37'-4"					
S505	412	29'-2"	12533	1	29'-2"					
S506	126	41'-0"	5388	1	41'-0"					
S507	2	15'-7"	33	1	15'-7"					
S508	4	32'-0"	134	1	32'-0"					
S509	412	7'-5"	3173	21	3'-0"	3'-2"	0'-2 1/4"	1'-1"	0'-2 3/4"	
S510	96	27'-10"	2787	1	27'-10"					
S601	824	33'-7"	41564	1	33'-7"					
S602	2	15'-7"	47	1	15'-7"					
S603	4	32'-0"	192	1	32'-0"					
S604	412	3'-7"	2192	12	1'-0 3/4"	1'-8 1/2"	0'-2 1/2"			
S605	412	2'-7"	1618	2	1'-8 1/4"	1'-1"				
S606	16	29'-1"	699	1	29'-1"					
		TOTAL =	143532							
END DIAPHRAGMS										
D401	42	12'-3"	345	R3R	4'-8"	2'-0"				
D402	8	11'-4"	61	22	0'-5 1/2"	5'-4"	5'-4"	0'-2 1/4"		
D403	8	4'-9"	25	27	1'-11 1/2"	0'-6 1/4"	0'-8 1/2"	0'-8 1/2"		
D404	8	2'-8"	14	1	2'-8"					
D501	96	7'-3"	725	3	2'-7"	2'-4"				
D502	192	10'-9"	2151	3	3'-11"	3'-2"				
D601	56	7'-11"	663	17	1'-10 3/4"	1'-10 3/4"	0'-9 3/4"	3'-1"	3'-2 3/4"	
D602	42	7'-2"	452	1	7'-2"					
D801	86	5'-1"	1175	7H	1'-0"	2'-10"				
D802	16	34'-9"	1484	6	25'-9"	0'-9"	2'-6"	0'-9"	5'-10"	

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
D803	42	7'-2"	804	1	7'-2"					
D804	28	34'-1"	2548	1	34'-1"					
D805	12	2'-6"	80	1	2'-6"					
		TOTAL =	10527							
APPROACH SLABS										
AS501	86	23'-8"	2123	1	23'-8"					
AS502	86	28'-2"	2526	1	28'-2"					
AS503	418	32'-11"	14351	1	32'-11"					
AS504	8	33'-0"	275	9	31'-6"	1'-6"	0'-1"			
AS505	142	7'-5"	1094	21	3'-0"	3'-2"	0'-2 1/4"	1'-1"	0'-2 3/4"	
AS506	12	33'-5"	418	1	33'-5"					
AS507	12	42'-5"	531	1	42'-5"					
AS508	12	5'-6"	69	17	0'-1"	1'-8"	2'-5"	1'-4 1/2"	0'-4 1/4"	
AS509	20	5'-6"	115	1	5'-6"					
AS510	32	10'-0"	334	1	10'-0"					
AS601	142	3'-10"	822	12	1'-0 3/4"	2'-0 1/4"	0'-2 1/2"			
AS602	142	2'-11"	624	2	2'-0"	1'-1"				
AS603	2	33'-5"	100	1	33'-5"					
AS604	2	42'-5"	127	1	42'-5"					
AS605	8 SER. OF 10	4'-4" TO 5'-2"	572	2	3'-5" TO 4'-3"					1
AS606	40	4'-4"	261	2	3'-5"	1'-1"				
AS1001	234	33'-6"	33731	1H	32'-1"					
AS1002	117	23'-1"	11621	1	23'-1"					
AS1003	117	32'-1"	16152	1	32'-1"					
		TOTAL =	85846							
INTERMEDIATE DIAPHRAGMS										
D405	294	8'-9"	1722	J5J	0'-6"	3'-8"				
D601	168	7'-11"	1990	17	1'-10 3/4"	1'-10 3/4"	0'-9 3/4"	3'-1"	3'-2 3/4"	
D602	252	7'-2"	2713	1	7'-2"					
		TOTAL =	6425							

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVISED GWM 07-20-05
DATE
STRUCTURE FILE NUMBER 4501667

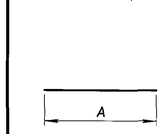
REINFORCING STEEL LIST 1
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

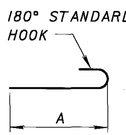
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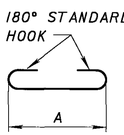
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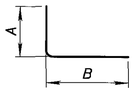
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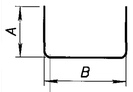
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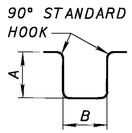
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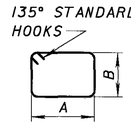
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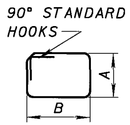
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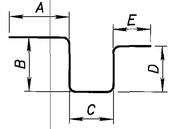
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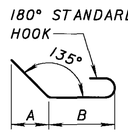
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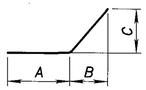
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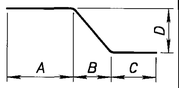
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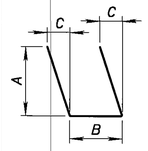
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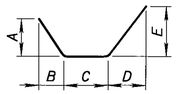
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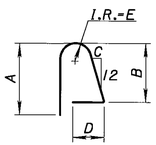
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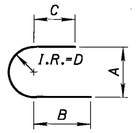
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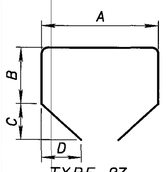
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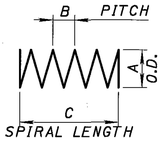
TYPE 21



TYPE 22



TYPE 27



TYPE 50

NOTES:

1. SERIES BARS WITH EQUAL INCREMENTS.
2. ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED OTHERWISE.
3. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
4. THE BAR SIZE NUMBER IS SPECIFIED IN THE 'MARK' COLUMN. THE FIRST TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER.
5. TYPE '50' IS SPIRAL BAR.
6. FIELD CUT AND BENDING OF REINFORCING STEEL TO FIT MAY BE REQUIRED.

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6121 HANTLEY ROAD • COLUMBUS, OHIO 43229

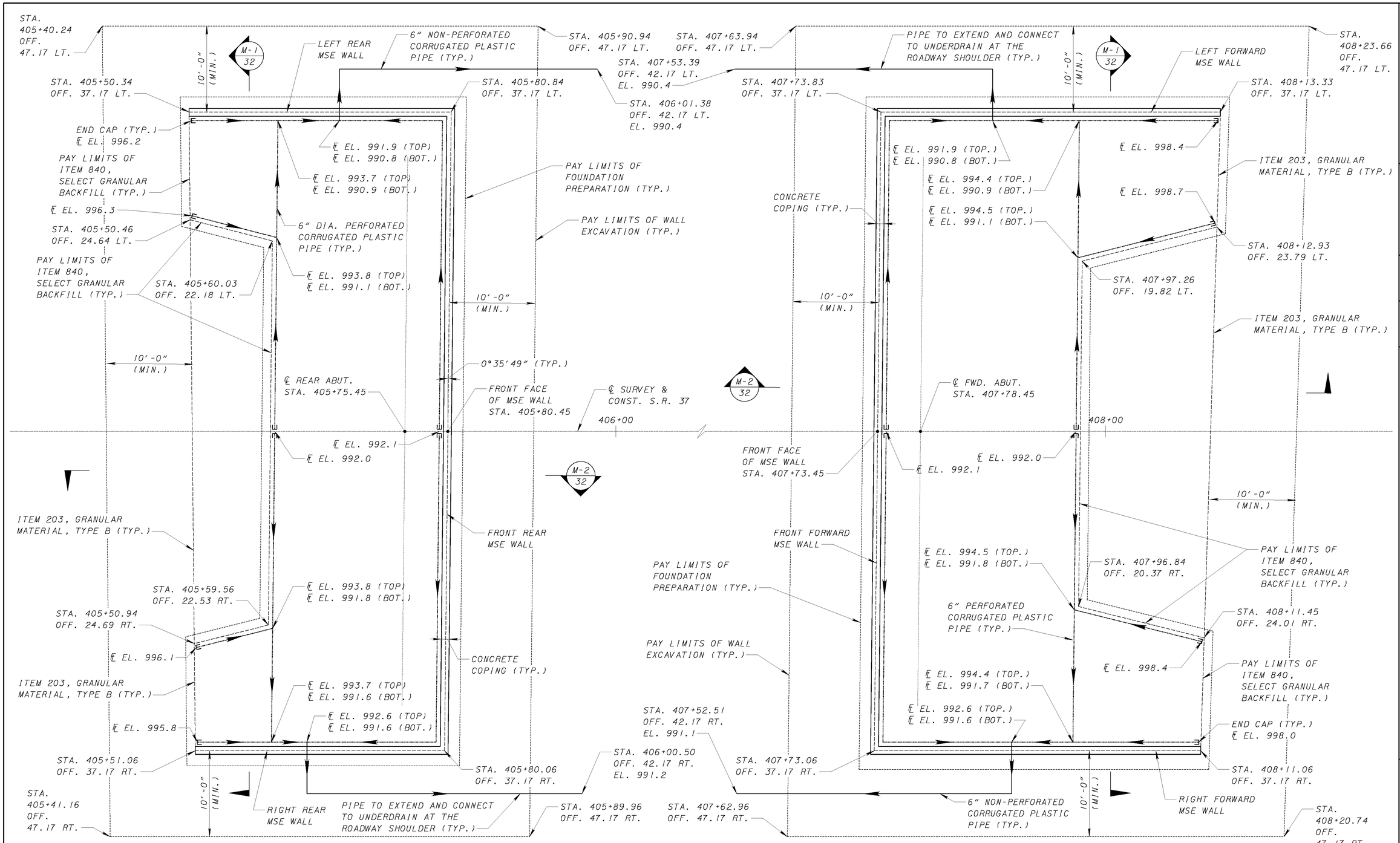
DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVIEWED GWM
DATE 07-20-05
STRUCTURE FILE NUMBER 4501667

REINFORCING STEEL LIST
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

27/33

1126
1349



LEGEND:

ABUT	= ABUTMENT	INV.	= INVERT
℄	= CENTERLINE	LT.	= LEFT
CMS	= CONSTRUCTION AND MATERIALS SPECIFICATION	MIN.	= MINIMUM
		MSE	= MECHANICALLY STABILIZED EARTH
DIA.	= DIAMETER		
EL.	= ELEVATION	OFF.	= OFFSET
FT.	= FOOT	RT.	= RIGHT
FWD.	= FORWARD	STA.	= STATION
IN.	= INCH	TYP.	= TYPICAL

PLAN N

NOTES:

1. ALL PLASTIC PIPE FOR MSE WALL EMBANKMENT DRAINAGE SHALL MAINTAIN A MINIMUM SLOPE OF 1/8 IN./FT.
2. PAY LIMITS OF PROPRIETARY WALL EMBANKMENT ARE ESTIMATED. EXACT LENGTHS ARE TO BE DETERMINED BY THE MSE WALL DESIGNER.

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DESIGNED	DRAWN	REVISED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450167	

MSE WALL PLAN

BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

28 / 33

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1349

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MSE WALL NOTES

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS INCLUDING THE ODOT BRIDGE DESIGN MANUAL.

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SUPPLEMENT SPECIFICATION 840 DATED 7/21/2006

DESIGN LOADING:

HS25 AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT

DESIGN DATA:

CLASS C CONCRETE, MISC: COPING - COMPRESSIVE STRENGTH 4000 PSI

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60
MINIMUM YIELD STRENGTH 60,000 PSI

DESIGN SUBMITTALS:

THE CONTRACTOR IS HEREBY NOTIFIED THAT THE MSE RETAINING WALL SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS PROVIDED IN SUPPLEMENTAL SPECIFICATION 840. AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT MSE RETAINING WALL DETAIL DESIGN PLANS (4 SETS), DESIGN CALCULATIONS (2 SETS), AND SHOP DRAWINGS PER 501.04 TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL BY THE DIRECTOR. THE PLANS FOR RETAINING WALLS SHALL BE PREPARED BY EITHER THE REINFORCED EARTH COMPANY (RETAINED EARTH AND REINFORCED EARTH WALLS), TENSAR EARTH TECHNOLOGIES, INC. (ARES RETAINING WALL SYSTEM), OR TRICON PRECAST, LTD. (TRICON RETAINED SOIL WALL SYSTEM). THE PLANS SHALL BE SUBMITTED EIGHT WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OF THE WALLS AND THE CONTRACTOR SHALL ALLOW FOUR WEEKS FOR THE REVIEW BY ODOT.

PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE AN UNFACTORED HORIZONTAL STRIP LOAD FROM THE SUPERSTRUCTURE OF 9 K/FT APPLIED PERPENDICULAR TO THE FACE OF WALL AT A POINT HALF THE HEIGHT OF THE CONCRETE FOOTING.

ALLOWABLE BEARING PRESSURE FOR THE DESIGN OF THE MSE WALLS:

THE ALLOWABLE BEARING PRESSURE FOR THE DESIGN OF THE MSE WALLS IS 5.2 KSF.

UNDERCUT AND BACKFILL:

PRIOR TO CONSTRUCTION OF THE MSE WALLS, THE EXISTING IN-SITU SOILS, WHERE SPECIFIED IN THE PLANS, SHALL BE REMOVED AND THE RESULTING EXCAVATION SHALL BE BACKFILLED WITH SELECT GRANULAR EMBANKMENT TO THE ELEVATION OF THE TOP OF THE MSE WALL LEVELING PAD. THE SOIL SHOULD BE OVEREXCAVATED TO AT LEAST ELEVATION 981.70 AT THE REAR MSE WALL AND TO AT LEAST 982.60 AT THE FORWARD MSE WALL. IF SOFT OR LOOSE SOILS ARE ENCOUNTERED BELOW THESE ELEVATIONS, THE OVEREXCAVATION MAY NEED TO EXTEND DEEPER. HORIZONTAL OVEREXCAVATION LIMITS SHOULD EXTEND TO AT LEAST 10'-0" BEYOND THE LIMITS OF THE MSE FILL, AS SHOWN ON SHEET 28 OF 33. THE ESTIMATED LIMITS OF UNDERCUT AND BACKFILL ARE SHOWN IN CROSS SECTION ON SHEET 32 OF 33. THE LIMITS SHOULD BE VERIFIED AND ADJUSTED AFTER RECEIVING THE FINAL MSE WALL DRAWINGS.

SEALING OF CONCRETE SURFACES (NON-EPOXY (CLEAR)):

SURFACES OF THE MSE WALL PANELS, AS DETAILED IN THE PLANS, SHALL BE SEALED WITH A NON-EPOXY CLEAR SEALER AS PER CMS 512.

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

CONCRETE SURFACES OF THE COPING SHALL BE SEALED, AS DETAILED IN THE PLANS, WITH LIGHT NEUTRAL FEDERAL COLOR NO. 17778.

REINFORCING STEEL:

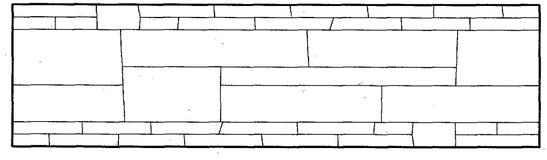
FURNISH AND INSTALL EPOXY COATED REINFORCING STEEL ACCORDING TO CMS 509.

ARCHITECTURAL FINISH: (MSE WALL):

THE SURFACE FINISH SHALL BE THE PATTERN DESCRIBED BELOW IN THE ARCHITECTURAL WALL ELEVATION FROM FOSTER GEOTECHNICAL OR AN APPROVED EQUAL MEETING THE DETAILS SHOWN ON THIS SHEET. THE INTEGRALLY COLORED CONCRETE USING CHROMIX ADMIXTURES SHALL BE AS PROVIDED BY L. M. SCOFIELD COMPANY, DOUGLASVILLE, GEORGIA (800) 800-9900 OR AN APPROVED EQUAL SHALL BE C-21 ADOBE TAN AS PROVIDED.

ONE PRECONSTRUCTION TEST SAMPLE SHALL BE PROVIDED FOR APPROVAL BY THE DIRECTOR. IF THE TEST SAMPLE DOES NOT MEET THE APPROVAL OF THE DIRECTOR, THE RESULTS MAY BE GROUNDS TO REJECT THE PROPOSED MSE WALL PANELS OR INTEGRALLY COLORED CONCRETE. THE TEST SAMPLE MUST PASS APPROVAL. FAILURE WILL CONSTITUTE PLACEMENT OF ANOTHER TEST SAMPLE. A FIVE FOOT BY FIVE FOOT TEST SAMPLE SHOULD BE MADE (OR THE SIZE OF THE MSE WALL PANELS). THE MOCK-UP SHALL HAVE THE SAME ARCHITECTURAL RELIEF, THICKNESS, AND PATTERN TO BE USED ON THE PROJECT. THE SAMPLE SHOULD BE OF THE SAME CEMENT, AGGREGATE SOURCE, AND INTEGRALLY COLORED CONCRETE THAT WILL BE USED TO MAKE THE MSE WALL PANELS. AFTER APPROVAL, THE CONCRETE TEST SAMPLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

ALL AESTHETIC TREATMENT INCLUDING THE INTEGRALLY COLORED CONCRETE, SURFACE FINISH, TEST SAMPLES, AND ALL OTHER MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED WITH ITEM 840, MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN.



ARCHITECTURAL
PANEL ELEVATION

THE FOLLOWING SHALL BE USED:

COMPANY NAME	PANEL SURFACE TREATMENT	SPECIFICATIONS
SPEC FORMLINERS, INC.	COLORADO RED FLAGSTONE # 1537	MAX RELIEF 2" LINER THICKNESS 1/8" ± STONE SIZE 2" TO 1'-4"
CUSTOM ROCK INTERNATIONAL	MINNEHAHA BLEND #12010	MAX RELIEF 5/8" LINER THICKNESS 1 3/8" STONE SIZE 4" TO 30"
APPROVED EQUAL	APPROVED EQUAL	APPROVED EQUAL

NOTE: THE ARCHITECTURAL PATTERN & CONCRETE COLOR SHALL BE THE SAME FOR THE ENTIRE PROJECT.

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DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVIEWED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 4501667

MSE WALL NOTES
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

29/33

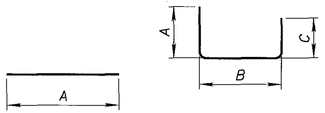
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STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
MSE WALL CONCRETE COPING										
C401	88	9'- 8"	568	1	9'- 8"					
C402	16	6'- 3"	67	1	6'- 3"					
C403	8	5'- 1"	27	1	5'- 1"					
C404	4	9'- 0"	24	1	9'- 0"					
C405	4	9'- 6"	25	1	9'- 6"					
C406	4	8'- 0"	21	1	8'- 0"					
C407	170	3'- 2"	364	4	1'- 8"	0'- 7"	1'- 2"			
C408	170	2'- 2"	246	1	2'- 2"					
		TOTAL =	1342							

BENDING DIAGRAM



NOTES:

1. ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED OTHERWISE.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. THE BAR SIZE NUMBER IS SPECIFIED IN THE 'MARK' COLUMN. THE FIRST TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER.
4. WEIGHTS SHOWN IN THIS REINFORCING STEEL LIST ARE FOR INFORMATION ONLY. IF THE REINFORCING STEEL LIST PROVIDED IN THE PLANS IS USED IT SHALL BE VERIFIED BY THE CONTRACTOR. ANY REVISIONS IN THE REINFORCING STEEL LIST AS SHOWN IN THE PLANS WILL NOT BE REASON FOR ADJUSTMENT IN THE BID PRICE FOR REINFORCING STEEL.
5. FIELD CUT AND BENDING OF REINFORCING STEEL TO FIT MAY BE REQUIRED.

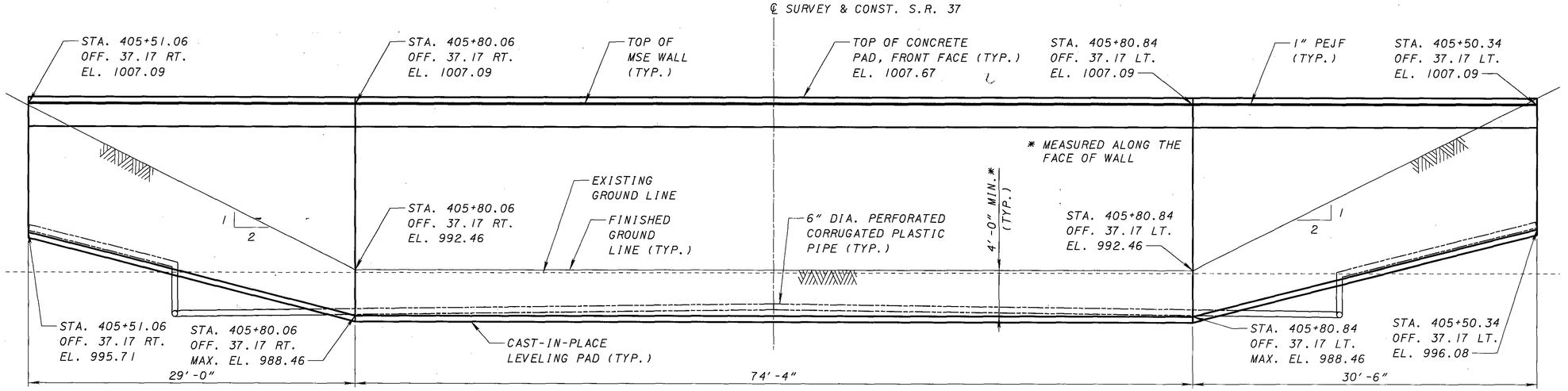
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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
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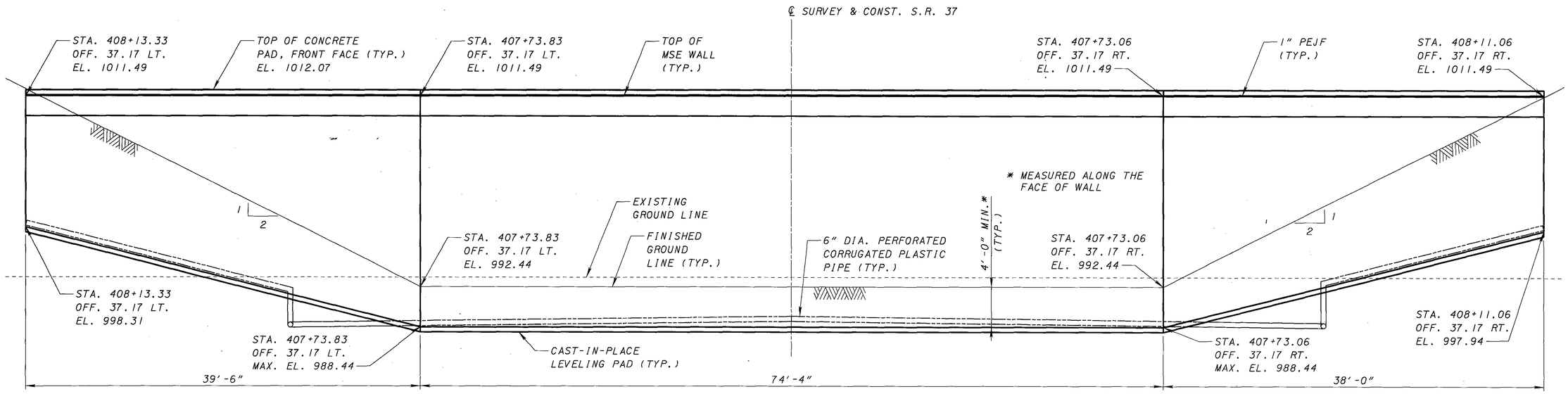
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BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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REAR MSE WALL ELEVATION



FORWARD MSE WALL ELEVATION

LEGEND:

℄	= CENTERLINE
CONST.	= CONSTRUCTION
EL.	= ELEVATION
INV.	= INVERT
LT.	= LEFT
MAX.	= MAXIMUM
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
OFF.	= OFFSET
PEJF	= PREFORMED EXPANSION JOINT FILLER
RT.	= RIGHT
STA.	= STATION
TYP.	= TYPICAL

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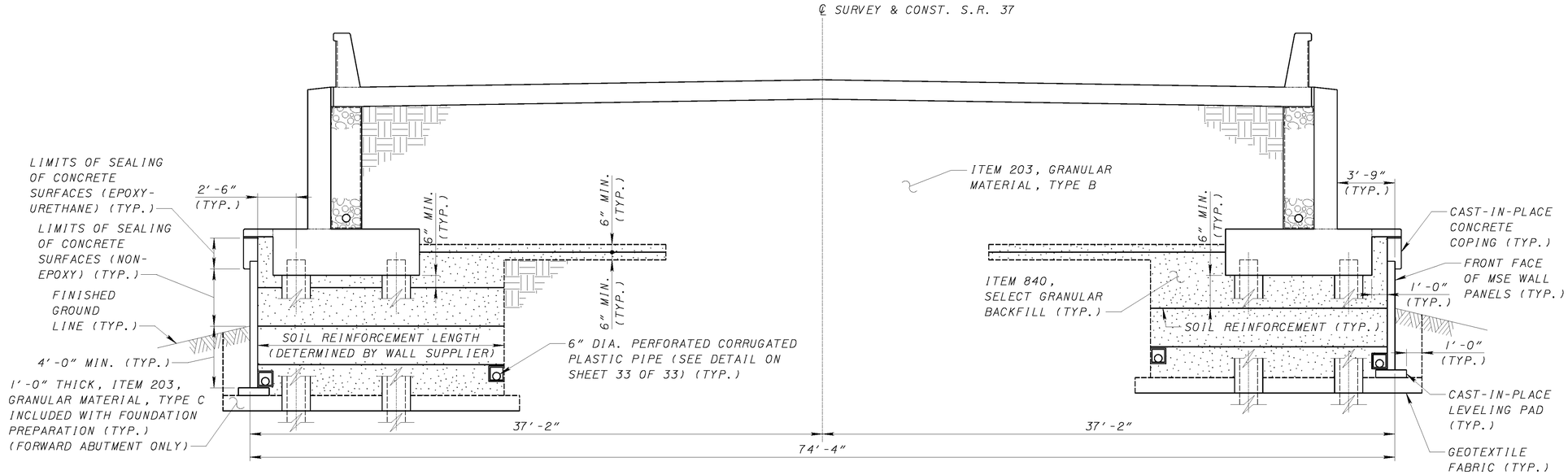
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GWM	07-20-05
DRAWN	STRUCTURE FILE NUMBER
JAM	4501667
DESIGNED	REVISED
JAM	
CHECKED	
AJM	

MSE WALL ELEVATIONS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

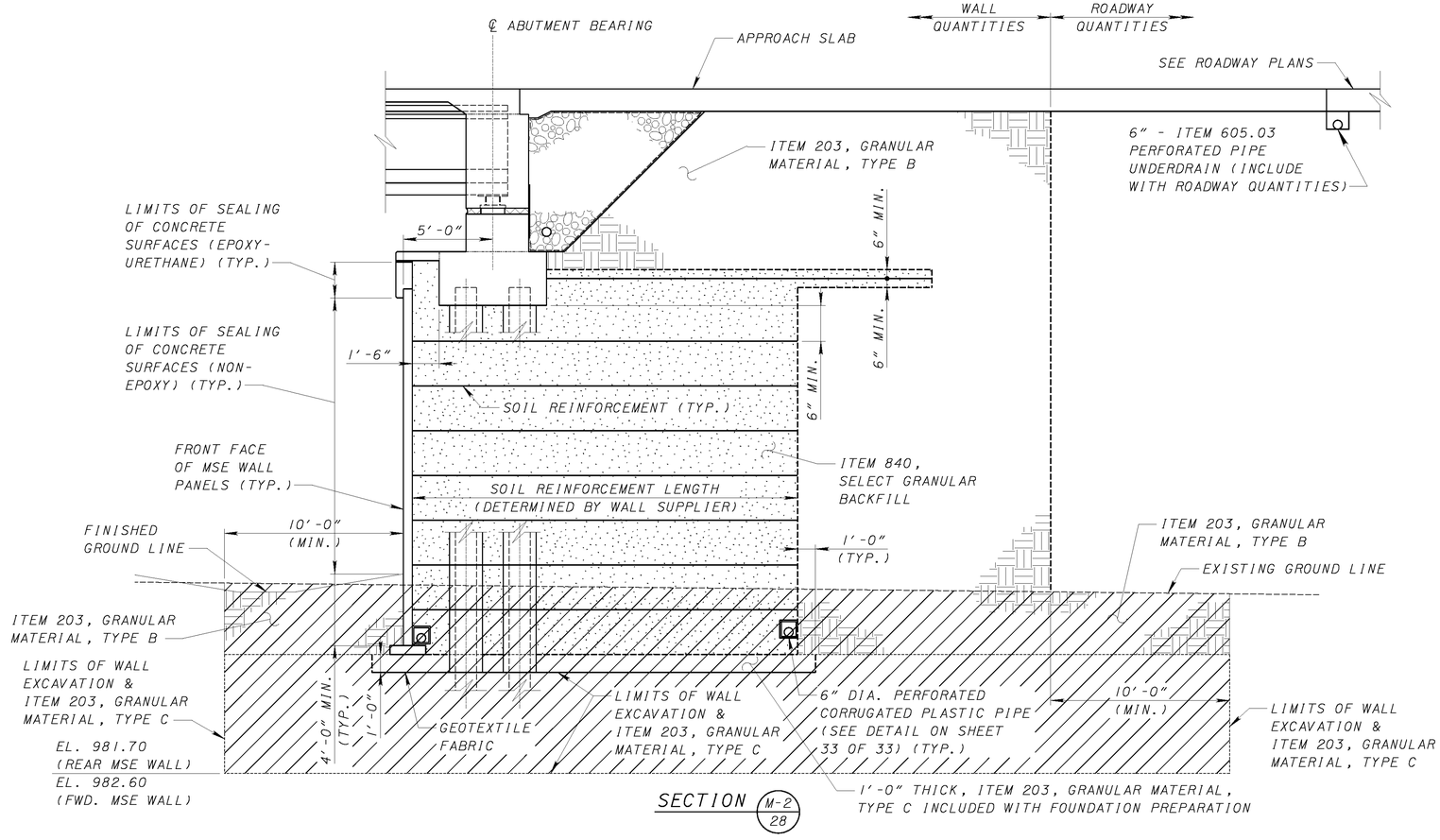
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LIC-37-10.25
PID 77221

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SECTION M-1 / 28



SECTION M-2 / 28

LEGEND:

℄	= CENTERLINE
CMS	= CONSTRUCTION MATERIALS AND SPECIFICATIONS
CONST.	= CONSTRUCTION
DIA.	= DIAMETER
EL.	= ELEVATION
FWD.	= FORWARD
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
TYP.	= TYPICAL
▨	= WALL EXCAVATION INCLUDED WITH MSE WALL QUANTITIES FOR PAYMENT

NOTES:

1. ONE ROW OF STEEL REINFORCEMENTS SHALL BE ATTACHED TO THE BACK OF THE ABUTMENT FOOTING.
2. ITEM 203, GRANULAR MATERIAL, TYPE B SHALL BE COMPACTED IN 6″ LIFTS.

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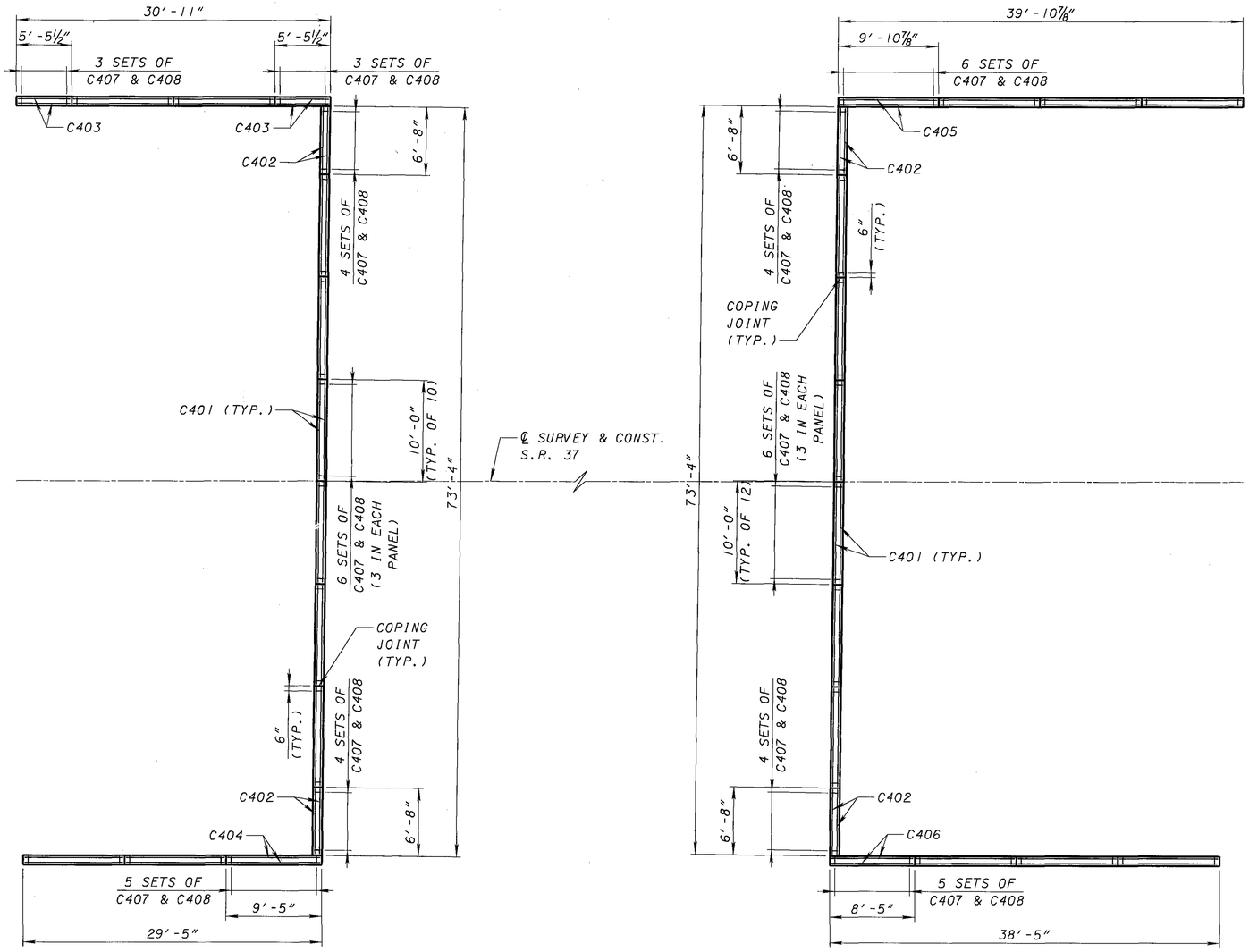
MSE WALL SECTIONS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

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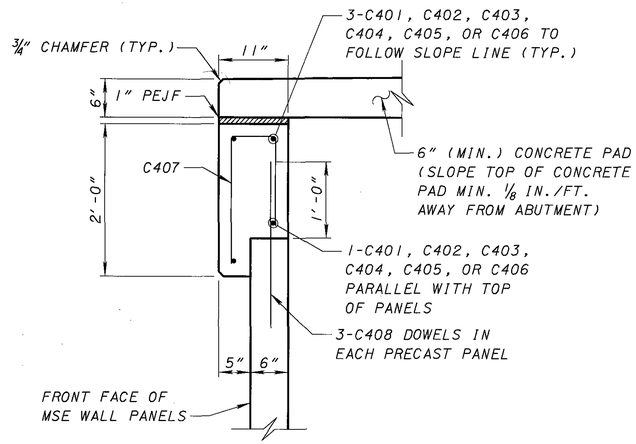
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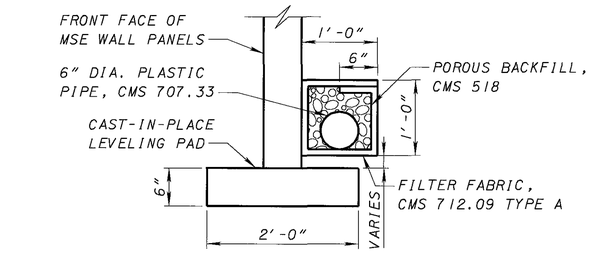


MSE WALL COPING SCHEMATIC PLAN

N



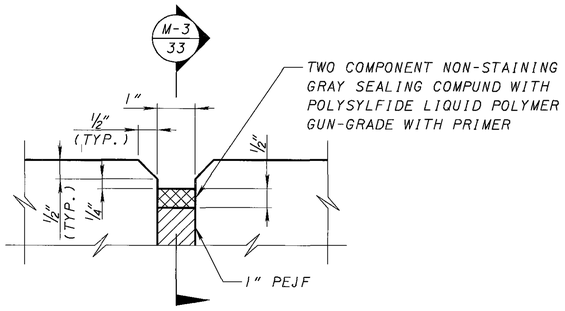
MSE WALL COPING DETAIL



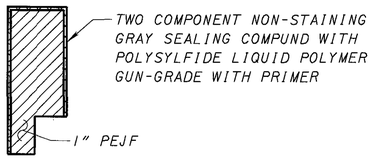
BOTTOM OF MSE WALL DETAIL

LEGEND:

℄	=	CENTERLINE
CMS	=	CONSTRUCTION MATERIALS AND SPECIFICAITONS
CONST.	=	CONSTRUCTION
CLR.	=	CLEARANCE
DIA.	=	DIAMETER
MAX.	=	MAXIMUM
MIN.	=	MINIMUM
MSE	=	MECHANICALLY STABILIZED EARTH
PEJF	=	PREFORMED EXPANSION JOINT FILLER
TYP.	=	TYPICAL



COPING JOINT DETAIL



SECTION M-3/33

NOTES:

1. PROVIDE 1" EXPANSION JOINTS EVERY 10'-0" OR LESS TO COINCIDE WITH COPING JOINTS. FILL JOINT WITH 1" PREFORMED EXPANSION JOINT FILLER OVER THE ENTIRE INTERFACE AREA.

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DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVIEWED GWM
DATE 07-20-05
STRUCTURE FILE NUMBER 4501667

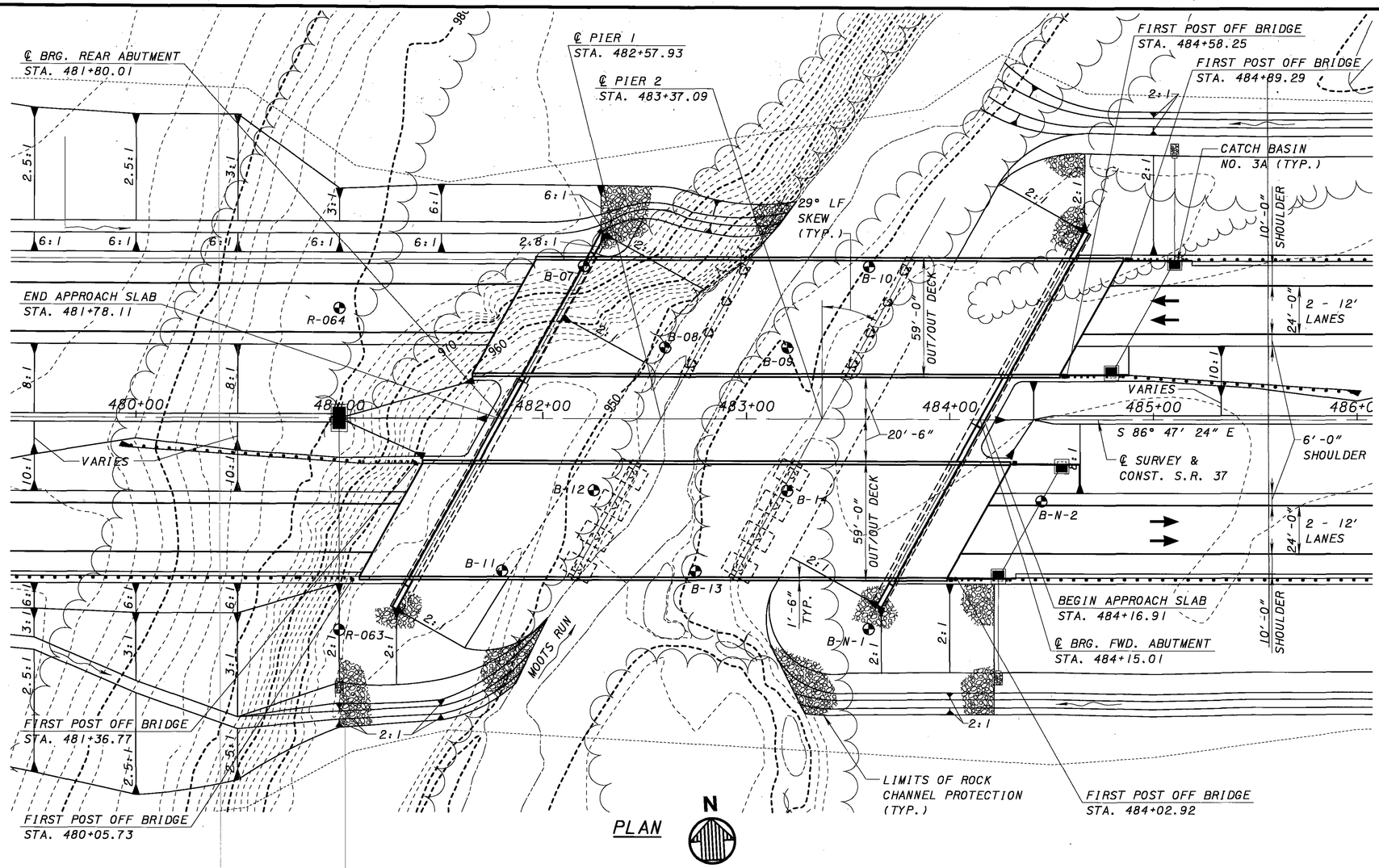
MSE WALL DETAILS
BRIDGE NO. LIC-37-1175
S.R. 37 OVER S.R. 161

LIC-161-6.65
LIC-37-10.25
PID 77221

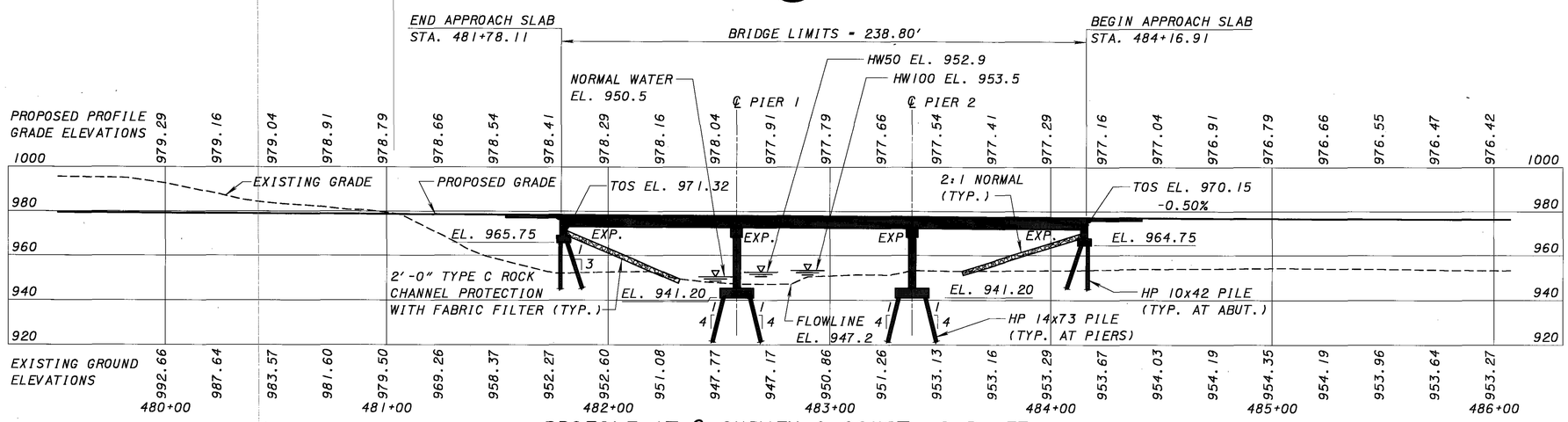
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PLAN



PROFILE AT ℄ SURVEY & CONST. S.R. 37

RIGHT BRIDGE SHOWN

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

PILE TYPES AND ESTIMATED LENGTHS			
BRIDGE	LOCATION	PILE TYPE	PILE LENGTH
LEFT	REAR ABUT.	DRILLED SHAFT	-
LEFT	PIER 1	DRILLED SHAFT	-
LEFT	PIER 2	DRILLED SHAFT	-
LEFT	FWD. ABUT.	HP 10x42	55'
RIGHT	REAR ABUT.	HP 10x42	45'
RIGHT	PIER 1	HP 14x73	25'
RIGHT	PIER 2	HP 14x73	40'
RIGHT	FWD. ABUT.	HP 10x42	50'

LEGEND:

ABUT.	- ABUTMENT
BRG.	- BEARING
℄	- CENTERLINE
C/C	- CENTER-TO-CENTER
CONST.	- CONSTRUCTION
EL.	- ELEVATION
EXP.	- EXPANSION
FWD.	- FORWARD
LF	- LEFT FORWARD
NO.	- NUMBER
S.R.	- STATE ROUTE
STA.	- STATION
TOS	- TOP OF SLOPE
TYP.	- TYPICAL
◐	- BORING LOCATIONS
▨	- 2'-0" TYPE C ROCK CHANNEL PROTECTION WITH FABRIC FILTER.

BENCHMARK

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCHMARKS AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC

2010 ADT - 37,000 ADTT - 1850
2030 ADT (DESIGN) - 59,100 ADTT (DESIGN) - 2955

HYDRAULIC DATA

DRAINAGE AREA - 10.28 SQ.MI.
Q50 (DESIGN) - 2460 CFS
HW50 (DESIGN) - 952.9 FT.
V50 (DESIGN) - 7.1 FPS
CLEARANCE ABOVE HW50 - 18.6 FT.
Q100 - 3070 CFS
HW100 - 953.5 FT.
V100 - 7.7 FPS

PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN COMPOSITE PRESTRESSED CONCRETE I-BEAM WITH CAP AND COLUMN PIERS AND SEMI-INTEGRAL ABUTMENTS
SPANS: 77'-11", 79'-2", 77'-11" C/C SUPPORTS
ROADWAY: 56'-0" TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 29°00'00" LF
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40°04'20" N
LONGITUDE: 82°35'40" W

DLZ
582 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DATE 11-12-04
REVIEWED DDR
DRAWN RTP
DESIGNED TAH
CHECKED JN
REVISED
STRUCTURE FILE NUMBER 450169 IL 4501705R

LICKING COUNTY
STA. 481+78.11
STA. 484+16.91

SITE PLAN
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

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REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	DATED (REVISED)	07-19-02
PSID-1-99	DATED (REVISED)	07-18-03
SBR-1-99	DATED (REVISED)	07-19-02
SICD-1-96	DATED (REVISED)	07-19-02

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17th EDITION, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

HS25 AND THE ALTERNATE MILITARY LOADING.
FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT.

DESIGN DATA

CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

CONCRETE CLASS S MODIFIED - COMPRESSIVE STRENGTH 4000 PSI (DRILLED SHAFT)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI
SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7000 PSI
COMPRESSIVE STRENGTH (RELEASE) - 5000 PSI

PRESTRESSING STRAND:
AREA = 0.153 SQUARE INCHES
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2-1/2" CONCRETE COVER
HP CONCRETE

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILE DRIVING AND DRILLED SHAFT CONSTRAINTS

PRIOR TO DRIVING PILES OR INSTALLING DRILLED SHAFTS, THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES OR DRILLED SHAFTS SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND A MINIMUM WAITING PERIOD OF 45 DAYS HAS ELAPSED.

PILES TO BEDROCK

DRIVE PIER 1 - RIGHT PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES TO A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR BY CONTACTING HARD BEDROCK AND THE PILE RECEIVING AT LEAST 20 BLOWS. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

ULTIMATE BEARING VALUE IS 137 TONS PER PILE FOR THE PIER 1 - RIGHT PILES.

PIER 1 - RIGHT PILES:
24-HP14x73 PILES 30 FEET LONG, ORDER LENGTH

PILE DESIGN LOADS (ULTIMATE BEARING VALUE)

THE ULTIMATE BEARING VALUE IS 81 TONS PER PILE FOR ALL ABUTMENT PILES.

RIGHT-REAR ABUTMENT PILES:
49-HP10x42 PILES, 50 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

RIGHT-FORWARD ABUTMENT PILES:
38-HP10x42 PILES, 55 FEET LONG, ORDER LENGTH
NO ADDITIONAL DYNAMIC LOAD TESTING ITEMS ARE REQUIRED

LEFT-FORWARD ABUTMENT PILES:
41-HP10x42 PILES, 60 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

THE ULTIMATE BEARING VALUE IS 137 TONS PER PILE FOR THE PIER 2 - RIGHT PILES.

PIER 2 - RIGHT PILES:
24-HP14x73 PILES, 45 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

BATTERED PILES

THE BLOW COUNT FOR BATTERED PILES SHALL BE THE BLOW COUNT DETERMINED FOR VERTICAL PILES OF THE SAME ULTIMATE BEARING VALUE DIVIDED AN EFFICIENCY FACTOR (D). COMPUTE THE EFFICIENCY FACTOR (D) AS FOLLOWS:

$$D = \frac{1 - UG}{\sqrt{(1 + G^2)}}$$

U = COEFFICIENT OF FRICTION, WHICH IS ESTIMATED AT 0.05 FOR DOUBLE-ACTING AIR OPERATED OR DIESEL HAMMERS; 0.1 FOR SINGLE-ACTING AIR OPERATED OR DIESEL HAMMERS; AND 0.2 FOR DROP HAMMERS.

G = RATE OF BATTER (1/3, 1/4, ETC.)

ITEM 507, STEEL POINTS OR SHOES, AS PER PLAN

USE STEEL PILE POINTS TO PROTECT THE TIPS OF THE PROPOSED STEEL "H" PILING. FURNISH STEEL POINTS FROM THE FOLLOWING MANUFACTURERS/SUPPLIERS:
ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BLVD., CLIFTON, NEW JERSEY 07014; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL INC., 1618 N.E. FIRST AVE., PORTLAND, OREGON 97232; PILING ACCESSORIES, INC., 3467 GRIBBLE ROAD, MATHEWS, NORTH CAROLINA 28105; OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO DIRECTOR. THE MATERIAL USED FOR THE MANUFACTURING OF PILE POINTS SHALL CONFORM TO ASTM A27 65/35 - CLASS 2 - HEAT TREATED OR AASHTO M103 65/35 - HEAT TREATED. WELD THE PILE POINTS TO THE PILE IN ACCORDANCE WITH AWS D1.5 OR THE MANUFACTURER'S WRITTEN WELDING PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED. SUBMIT A NOTARIZED COPY OF THE MILL TEST REPORT TO THE ENGINEER.

DRILLED SHAFTS

THE DESIGN VERTICAL LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 220 TONS AT THE REAR-LEFT ABUTMENT AND 205 TONS AT THE LEFT PIERS. THIS LOAD IS RESISTED BY SHAFT ADHESION WITHIN A PORTION OF THE BEDROCK SOCKET AND ALSO BY SHAFT END BEARING. THE ALLOWABLE BEDROCK SOCKET ADHESION IS 1 TON PER SQUARE FOOT, ASSUMED TO ACT ALONG THE BOTTOM 6 FEET OF THE BEDROCK SOCKET FOR THE ABUTMENT AND 5 FEET OF THE BEDROCK SOCKET FOR THE PIERS. THE ALLOWABLE END BEARING PRESSURE IS 25 TONS PER SQUARE FOOT. THE REINFORCING STEEL SHALL BE EPOXY COATED ACCORDING TO 709.00.

IN ADDITION TO THE VERTICAL DESIGN LOADS, THE DRILLED SHAFT CROSS-SECTIONS ARE DESIGNED TO RESIST A BENDING MOMENT OF 1340 KIP-FEET AND A SHEAR FORCE OF 365 KIPS AT THE REAR-LEFT ABUTMENT AND A BENDING MOMENT OF 1040 KIP-FEET AND A SHEAR FORCE OF 340 KIPS AT THE LEFT PIERS.

PROOF BORINGS

DEPTH TO BEDROCK VARIES SIGNIFICANTLY ACROSS THE SITE. THEREFORE, THE CONTRACTOR SHALL DRILL CONFIRMATION OR "PROOF" BORINGS AT EACH DRILLED SHAFT LOCATION, OR AT LOCATIONS DIRECTED BY THE ENGINEER, IN ORDER TO ESTABLISH THE ACTUAL BEDROCK ELEVATION AT EACH OF THE DRILLED SHAFT LOCATIONS. SOIL NEED NOT BE SAMPLED OR OTHERWISE PRESERVED DURING DRILLING. HOWEVER, ROCK CORES SHALL BE CUT WITH AN APPROVED DOUBLE OR TRIPLE TUBE CORE BARREL. THE PROOF BORING SHALL BE DRILLED WITHIN THE FOOTPRINT OF THE RESPECTIVE DRILLED SHAFT. PROOF BORINGS SHALL NOT BE DRILLED OUTSIDE THE FOOTPRINT OF THE DRILLED SHAFT UNLESS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING UNDERGROUND AND OVERHEAD UTILITIES AT THE PROOF BORING LOCATIONS, DETERMINING THE LOCATIONS OF THE PROOF BORINGS, AND DETERMINING THE GROUND SURFACE ELEVATIONS AT THE PROOF BORINGS. DRILLING THROUGH SOIL SHALL BE PERFORMED UNTIL AUGER REFUSAL IS ENCOUNTERED, THEN ROCK CORE SHALL BE COLLECTED. ROCK CORING SHOULD EXTEND AT LEAST 10 FEET BELOW THE ANTICIPATED DRILLED SHAFT TIP ELEVATION. HOWEVER, THE ENGINEER MAY REQUIRE THE DEPTH OF CORING TO BE EXTENDED AT THE TIME OF DRILLING. THE ENGINEER OR THE ENGINEER'S INSPECTOR SHALL BE PRESENT DURING THE CORING OPERATIONS. ROCK CORE SHALL BE MEASURED, VISUALLY IDENTIFIED, AND DESCRIBED ON THE CONTRACTOR'S LOG. THE SAMPLES SHALL BE PLACED IN SUITABLE CONTAINERS, IDENTIFIED BY SHAFT LOCATION, ELEVATION, AND PROJECT NUMBER, AND DELIVERED WITH THE CONTRACTOR'S LEGIBLY WRITTEN OR TYPED FIELD LOG TO THE ENGINEER WITHIN 24 HOURS AFTER THE EXPLORATION IS COMPLETED. IF THE ENGINEER DETERMINES THE FIELD LOG IS NOT LEGIBLE, A TYPED LOG SHALL BE PREPARED. THE ENGINEER WILL INSPECT THE CORES AND DETERMINE THE FINAL DEPTH OF REQUIRED EXCAVATION FOR THE DRILLED SHAFT BASED ON THE ENGINEER'S EVALUATION OF THE MATERIALS' SUITABILITY.

ALL PROOF BORINGS SHALL BE DRILLED IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS FOR SUBSURFACE INVESTIGATIONS, INCLUDING THE POLICY FOR SEALING OF GEOTECHNICAL EXPLORATORY BOREHOLES.

PROOF BORINGS SHALL BE MEASURED PER LINEAR FOOT FOR ITEM 524, DRILLED SHAFT, MISC.: PROOF BORINGS.

PROOF BORINGS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR ITEM 524, DRILLED SHAFT, MISC.: PROOF BORINGS.

UTILITY LINES

THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN

INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1-1/4" X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE, WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

GENERAL NOTES
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

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ESTIMATED QUANTITIES - LEFT BRIDGE

CALCULATED BY: JAM 05/13/05
CHECKED BY: CMC 07/11/05

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIER	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING					LUMP	
503	21100	81	CU YD	UNCLASSIFIED EXCAVATION	81					
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP	
507	00100	2,460	FT	STEEL PILES HP10X42, FURNISHED		2,460				
507	00150	2,255	FT	STEEL PILES HP10X42, DRIVEN		2,255				
507	93301	41	EACH	STEEL POINTS, OR SHOES, AS PER PLAN		41				2
509	10000	188,407	POUND	EPOXY COATED REINFORCING STEEL	4,042	7,790	34,287	142,288		
511	41000	145	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS			145			
511	43500	219	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	81	138				
512	10100	1,283	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	47	75		1,067	94	
515	15020	21	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4				21		
515	20000	18	EACH	INTERMEDIATE DIAPHRAMS				18		
516	13600	129	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	63	66				
516	13900	68	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	34	34				
516	14021	168	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	84	84				2
516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 2.69"x1'-3"x1'-3") (LOAD PLATE 2"x1'-4"x1'-4")	7	7				
516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 2.69"x1'-3"x1'-3") (LOAD PLATE 2"x1'-4"x2'-2")			14			
516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 2.69"x1'-3"x1'-3") (LOAD PLATE 2.125"x1'-4"x2'-2")			14			
518	21200	107	CU YD	POROUS BACKFILL WITH FILTER FABRIC	47	60				
518	40000	193	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	83	110				
518	40010	40	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	23	17				
523	20000	1	EACH	DYNAMIC LOAD TESTING					1	
524	94902	281	FT	DRILLED SHAFTS, 48" DIAMETER, ABOVE BEDROCK	281					
524	94904	80	FT	DRILLED SHAFTS, 48" DIAMETER, INTO BEDROCK	80					
524	94906	57	FT	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK			57			
524	94908	56	FT	DRILLED SHAFTS, 54" DIAMETER, INTO BEDROCK			56			
524	95000	654	FT	DRILLED SHAFTS, MISC.: PROOF BORINGS	461		193			2
526	25001	328	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN					328	28, 29
894	10001	606	CU YD	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN				606		4, 18

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN (CONTINUED)

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E. I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094 +/- 0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM (LONG. X TRANS.)	D751	700 X 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS MINIMUM	D751	9
BURST STRENGTH, PSI MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 DEGREES F, 180 DEGREES BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40 DEGREES F, BEND AROUND 1/4" MANDREL	D2136	NO CRACKING OF COATING

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

$DATE$
$TIME$
$FILE$

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM | DRAWN JAM | CHECKED CMC | REVISED
REVIEWED GWM 07-20-05 | DATE
STRUCTURE FILE NUMBER 4501691L/4501705R

ESTIMATED QUANTITIES - LEFT BRIDGE
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

1135
1349

ESTIMATED QUANTITIES - RIGHT BRIDGE

CALCULATED BY: JAM 05/13/05
CHECKED BY: CMC 07/11/05

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIER	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING					LUMP	
503	21100	549	CU YD	UNCLASSIFIED EXCAVATION			549			
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP	
507	00100	4,540	FT	STEEL PILES HP10X42, FURNISHED	2,450	2,090				
507	00150	4,105	FT	STEEL PILES HP10X42, DRIVEN	2,205	1,900				
507	00300	1,800	FT	STEEL PILES HP14X73, FURNISHED			1,800			
507	00350	1,560	FT	STEEL PILES HP14X73, DRIVEN			1,560			
507	93301	135	EACH	STEEL POINTS, OR SHOES, AS PER PLAN	49	38	48			2
509	10000	217,608	POUND	EPOXY COATED REINFORCING STEEL	7,971	7,045	60,184	142,408		
511	41000	163	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS			163			
511	43500	294	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	168	126				
511	46500	178	CU YD	CLASS C CONCRETE, FOOTING			178			
512	10100	1,328	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	96	71		1,067	94	
515	15020	21	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4				21		
515	20000	18	EACH	INTERMEDIATE DIAPHRAMS				18		
516	13600	129	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	63	66				
516	13900	75	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	36	39				
516	14021	170	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	84	86				2
516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 2.69"x1'-3"x1'-3") (LOAD PLATE 2"x1'-4"x1'-4")	7	7				
516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 2.69"x1'-3"x1'-3") (LOAD PLATE 2"x1'-4"x2'-2")			14			
516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 2.69"x1'-3"x1'-3") (LOAD PLATE 2.125"x1'-4"x2'-2")			14			
518	21200	133	CU YD	POROUS BACKFILL WITH FILTER FABRIC	74	59				
518	40000	229	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	128	101				
518	40010	26	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	18	8				
523	20000	2	EACH	DYNAMIC LOAD TESTING					2	
526	25001	328	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN					328	28, 29
894	10001	613	CU YD	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN				613		4, 18

ITEM 894 HIGH PEFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

GENERAL REQUIREMENTS:
THE PROVISIONS OF ITEM 894 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS:
ALL SUPERSTRUCTURE, BRIDGE DECK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN).

THE FOLLOWING PROPORTIONS WILL BE USED AS A STARTING MIX DESIGN:

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	#8 COARSE AGGRE. (LB)	#57 COARSE AGGRE. (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	GGBF SLAG (LB)	MICRO-SILICA (LB)	WATER TO CEMENTITIOUS RATIO ±.01
GRAVEL	1245	360	1315	2920	400	170	30	0.43
LIMESTONE	1245	360	1335	2940	400	170	30	0.43
SLAG	1245	315	1155	2715	400	170	30	0.43

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127
THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

DLZ
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DESIGNED JAM
DRAWN JAM
CHECKED CMC
REVISED
REVIEWED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 450/691/L/4501705R

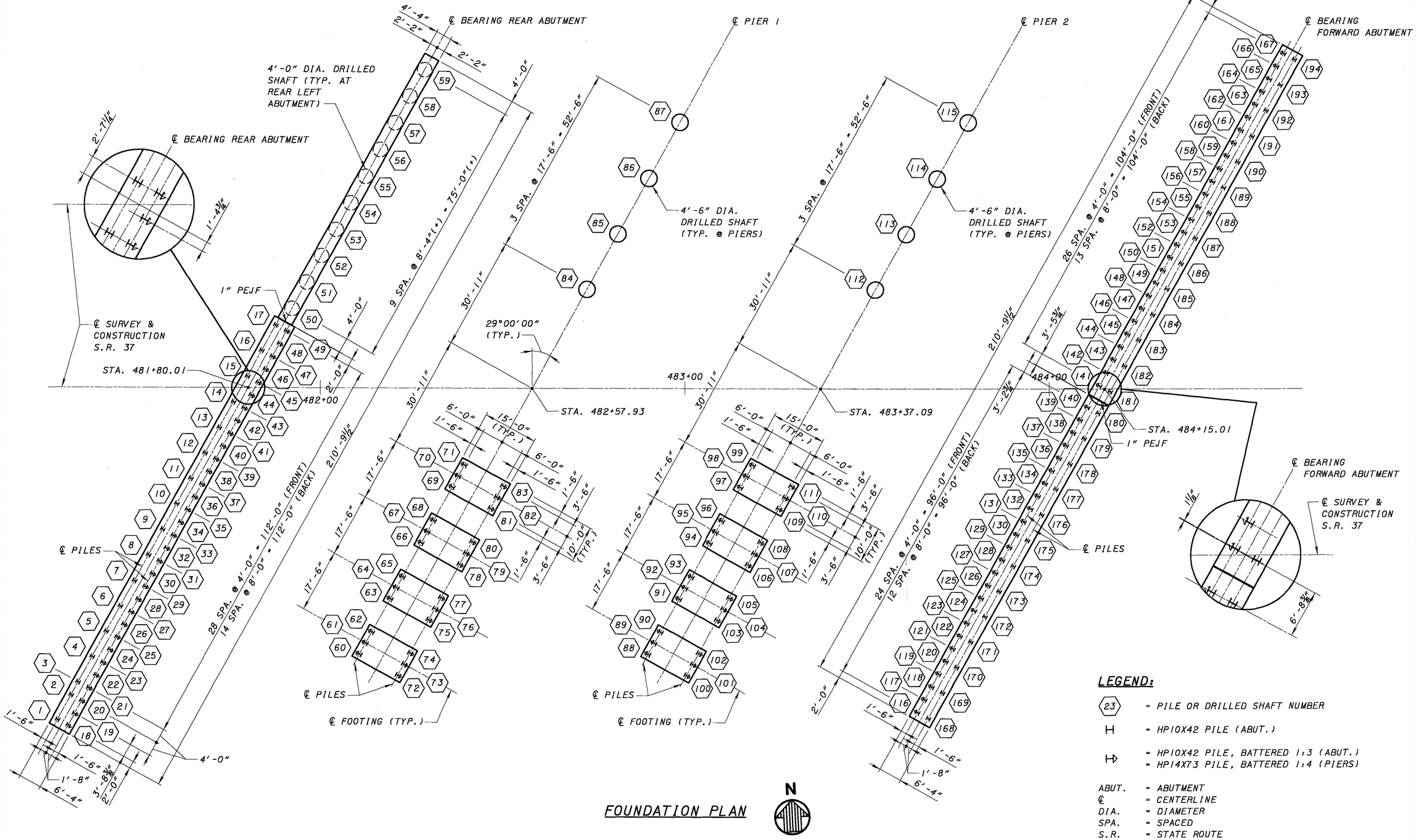
ESTIMATED QUANTITIES - RIGHT BRIDGE
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

4 / 32

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FOUNDATION PLAN

N

LEGEND:

(23)	= PILE OR DRILLED SHAFT NUMBER
H	= HP10X42 PILE (ABUT.)
H	= HP10X42 PILE, BATTERED 1:3 (ABUT.) = HP14X73 PILE, BATTERED 1:4 (PIERS)

ABUT. = ABUTMENT
℄ = CENTERLINE
DIA. = DIAMETER
SPA. = SPACED
S.R. = STATE ROUTE
STA. = STATION
TYP. = TYPICAL

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DESIGNED TAH
DRAWN JAM
CHECKED AJM
REVISED
REVIEWED GWM
DATE 07-20-05
STRUCTURE FILE NUMBER 4501691L/4501705R

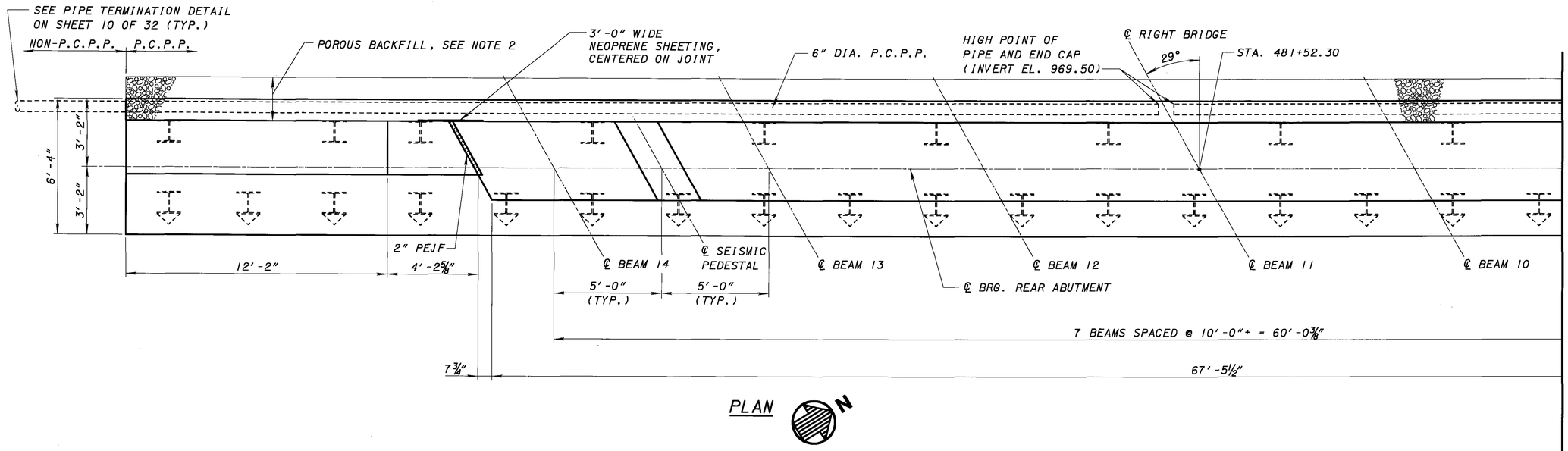
FOUNDATION PLAN
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

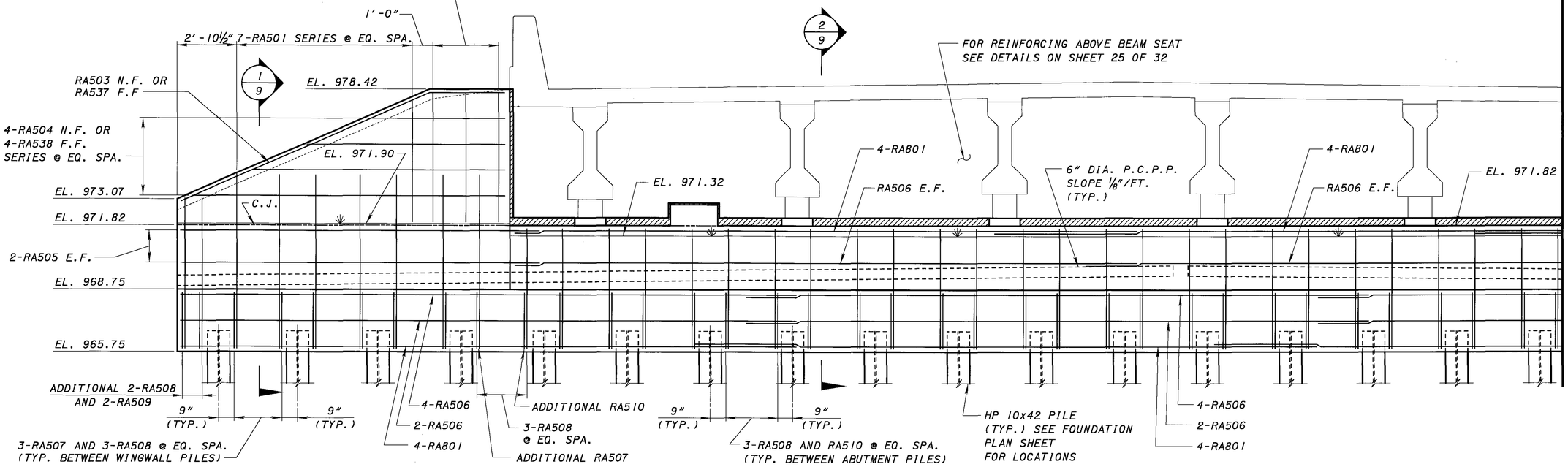
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LIC-37-10.25
PID 77221

5 / 32

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ELEVATION

BAR SPLICE LENGTHS

#5	2'-5"
#8	4'-11"

NOTES:

1. FOR LEGEND, SEE SHEET 10 OF 32.
2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

REAR ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER WOOTS RUN

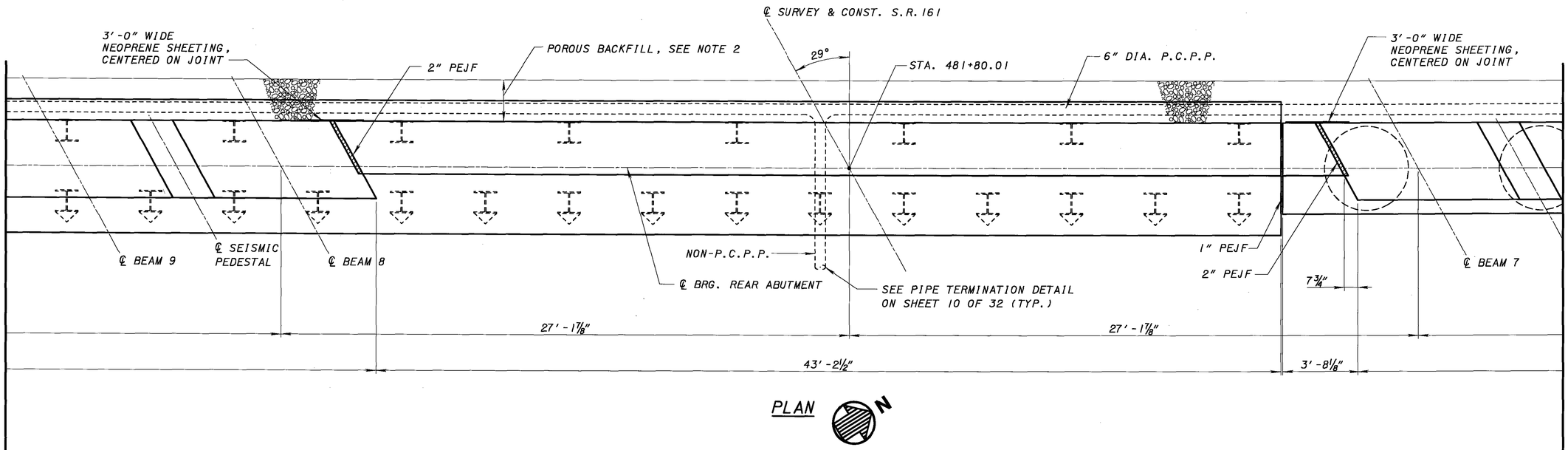
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LIC-37-10.25
PID 77221

6 / 32

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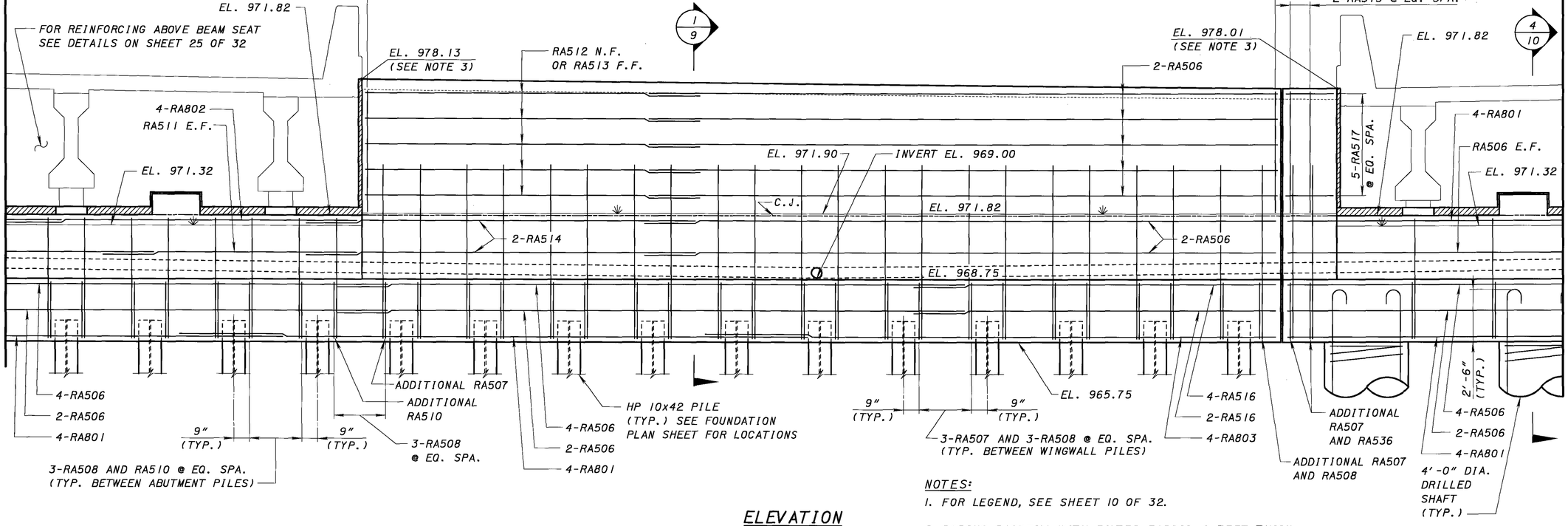
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MATCHLINE A-A - SEE SHEET 6 OF 32



PLAN

MATCHLINE B-B - SEE SHEET 8 OF 32



ELEVATION

BAR SPLICE LENGTHS

#5	2'-5"
#8	4'-11"

NOTES:

1. FOR LEGEND, SEE SHEET 10 OF 32.
2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
3. ELEVATIONS AT THE ENDS OF THE WINGWALLS ARE GIVEN AT THE CENTERLINE OF BEARING.

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

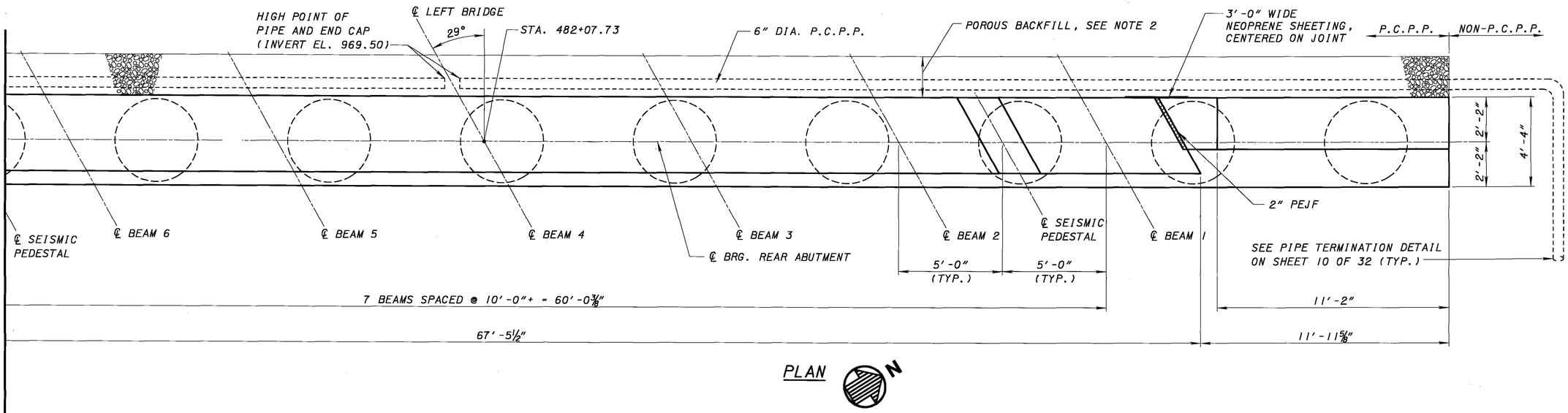
REAR ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER WOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

7 / 32

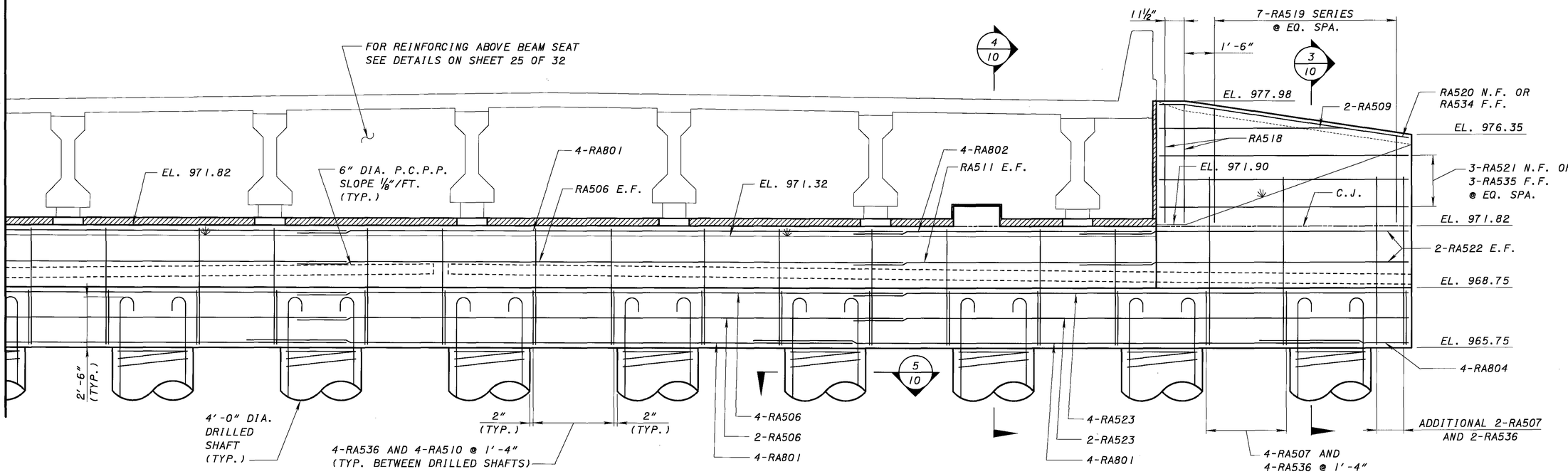
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PLAN

MATCHLINE B-B - SEE SHEET 7 OF 32



ELEVATION

BAR SPLICE LENGTHS

#5	2'-5"
#8	4'-11"

NOTES:

1. FOR LEGEND, SEE SHEET 10 OF 32.
2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

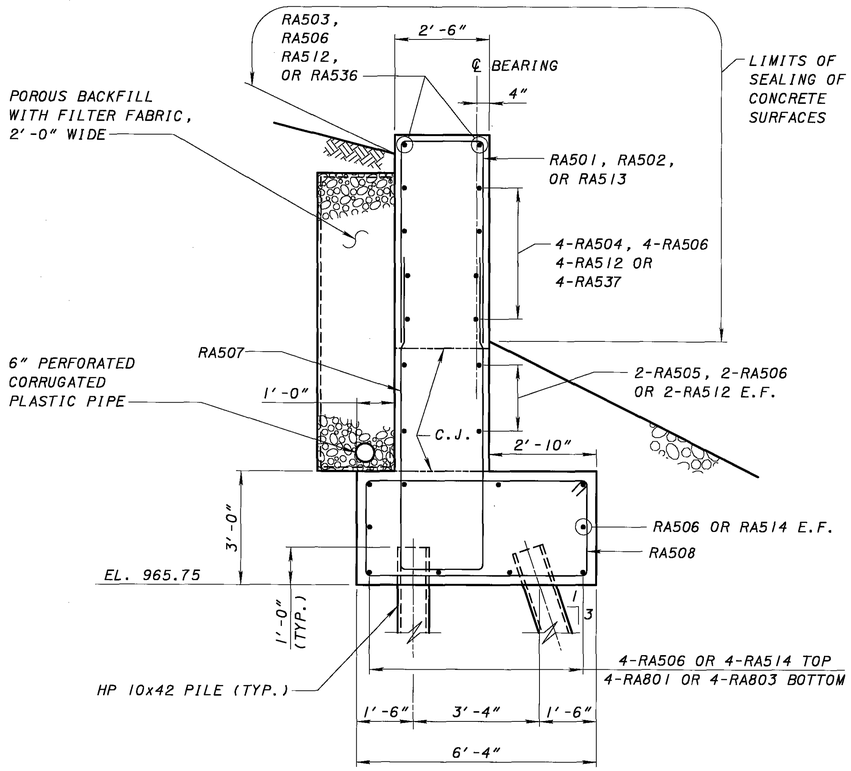
REAR ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

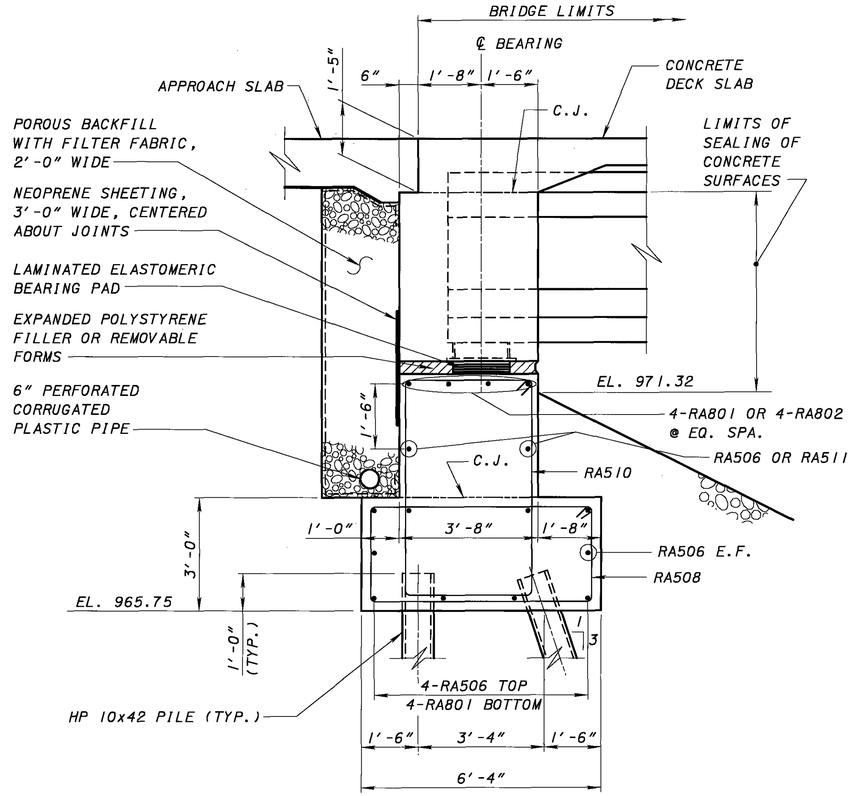
8 / 32

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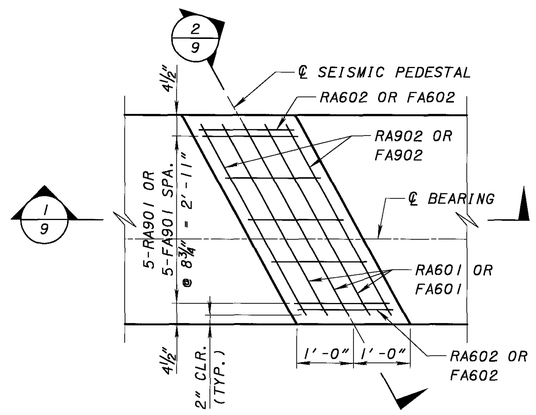
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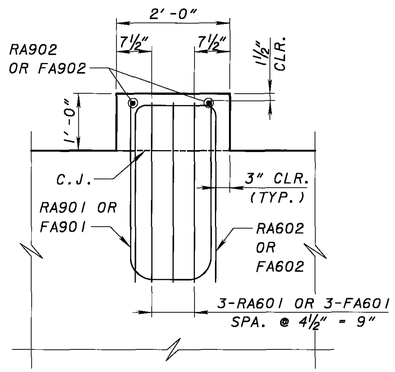
SECTION 1/6,7



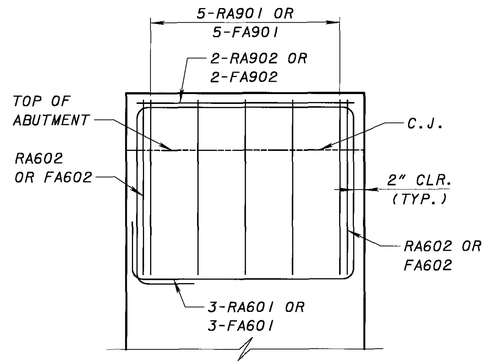
SECTION 2/6



SEISMIC PEDESTAL DETAIL



SECTION 1/9



SECTION 2/9

NOTE:
1. FOR LEGEND, SEE SHEET 10 OF 32.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

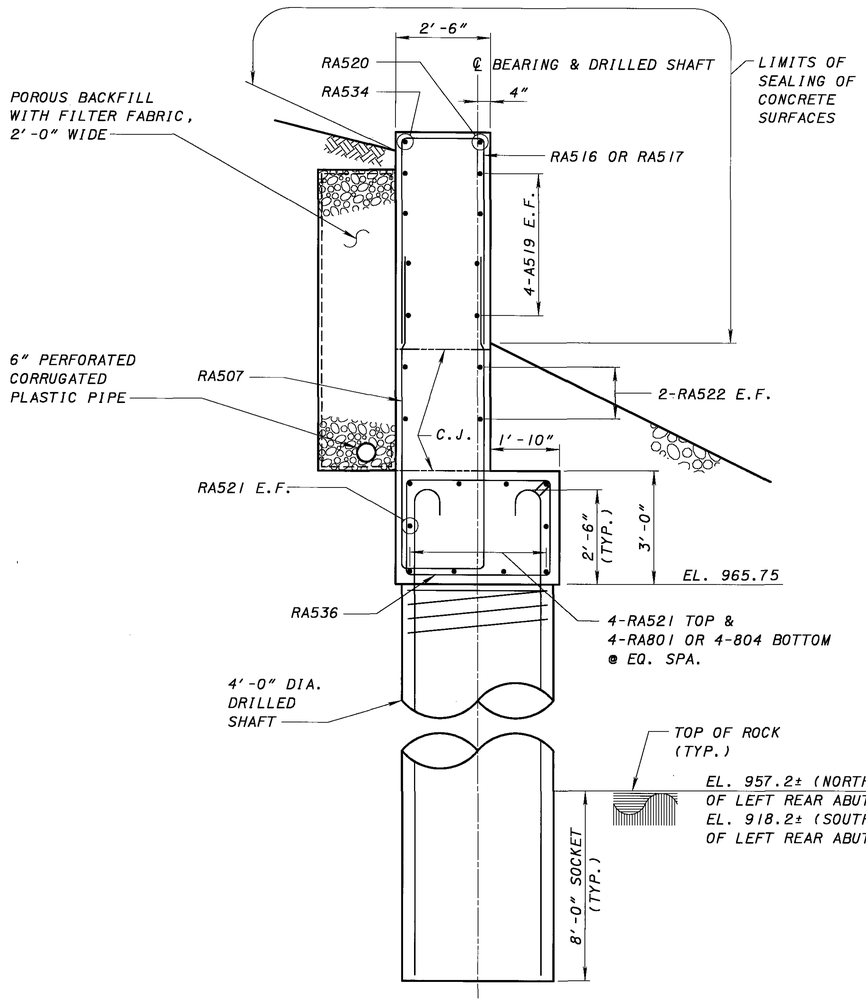
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BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

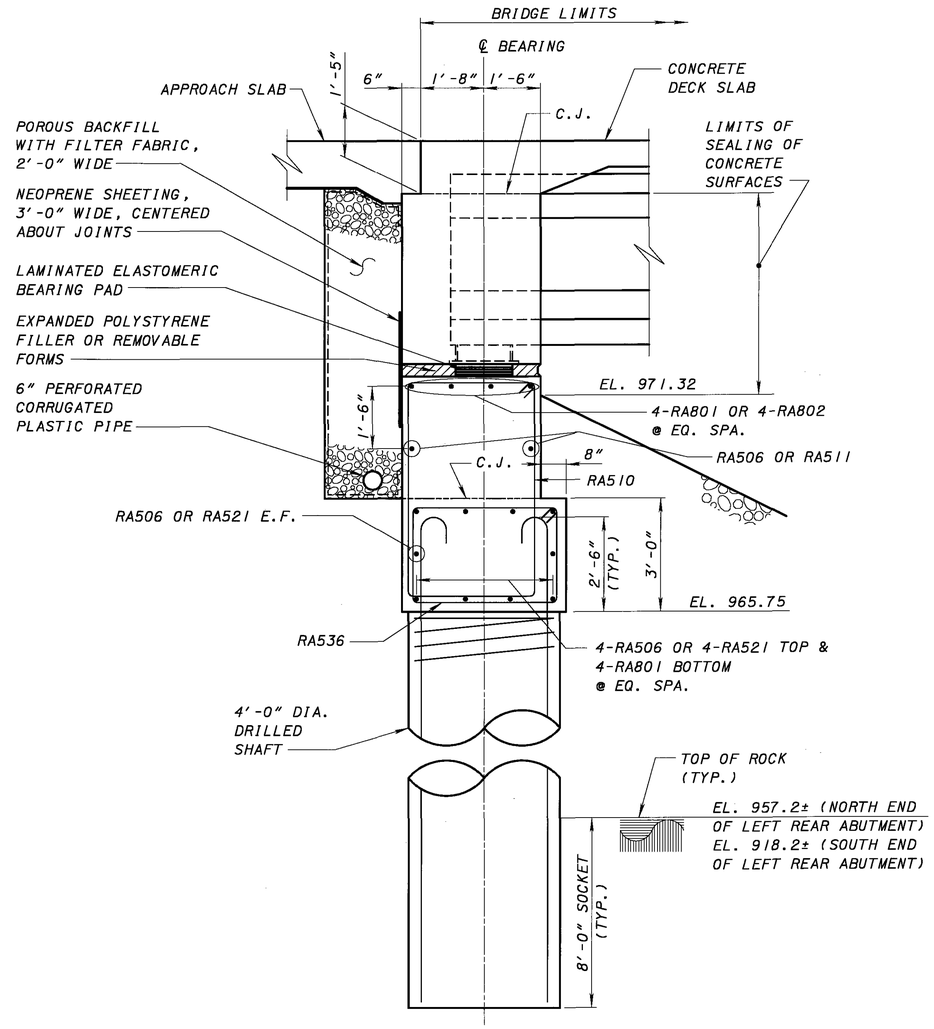
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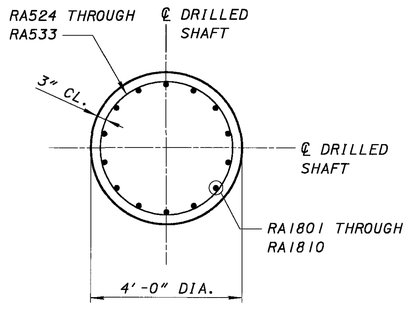
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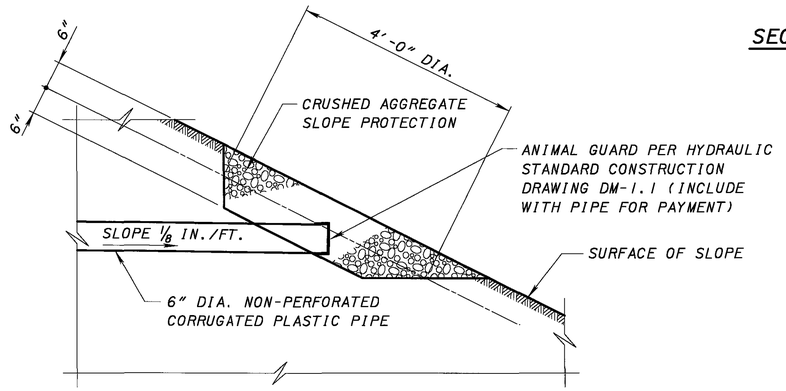
SECTION 3/7



SECTION 4/6,7



SECTION 5/8



TERMINATION OF 6" DIA. DRAINAGE PIPE

LEGEND

BRG.	- BEARING
℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CL.	- CLEAR
DIA.	- DIAMETER
E.F.	- EACH FACE
EL.	- ELEVATION
EQ.	- EQUAL
F.F.	- FAR FACE
N.F.	- NEAR FACE
P.E.J.F.	- PREFORMED EXPANSION JOINT FILLER
P.C.P.P.	- PERFORATED CORRUGATED PLASTIC PIPE
SIM.	- SIMILAR
SPA.	- SPACES
TYP.	- TYPICAL

DLZ
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DESIGNED TAH | DRAWN RTP | CHECKED AJM | REVISED
REVIEWED GWM | DATE 07-20-05
STRUCTURE FILE NUMBER 450169IL/4501705R

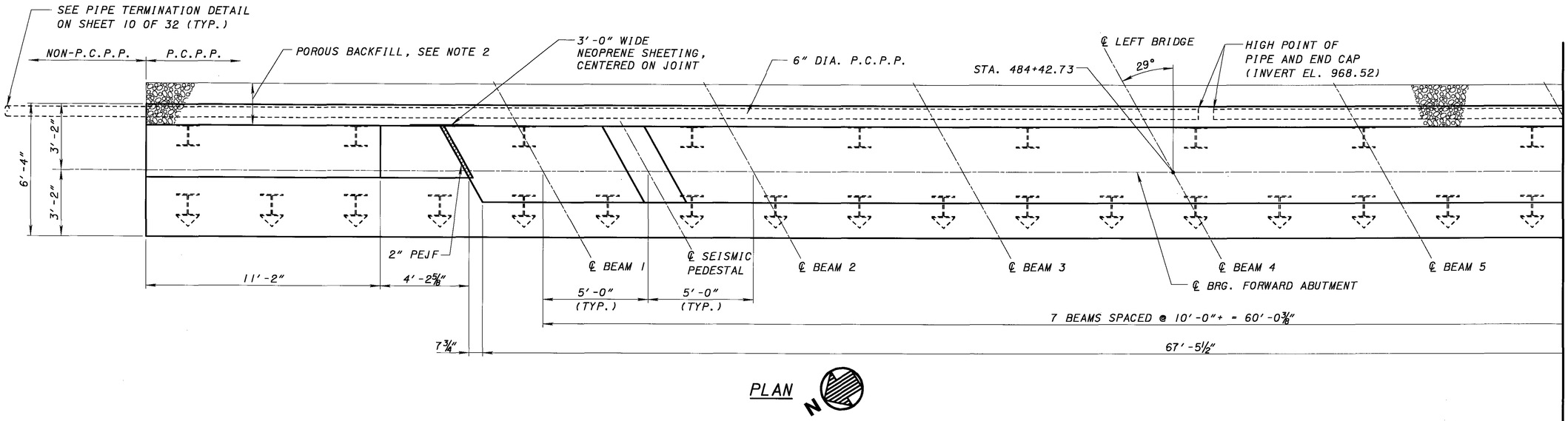
REAR ABUTMENT SECTIONS & DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

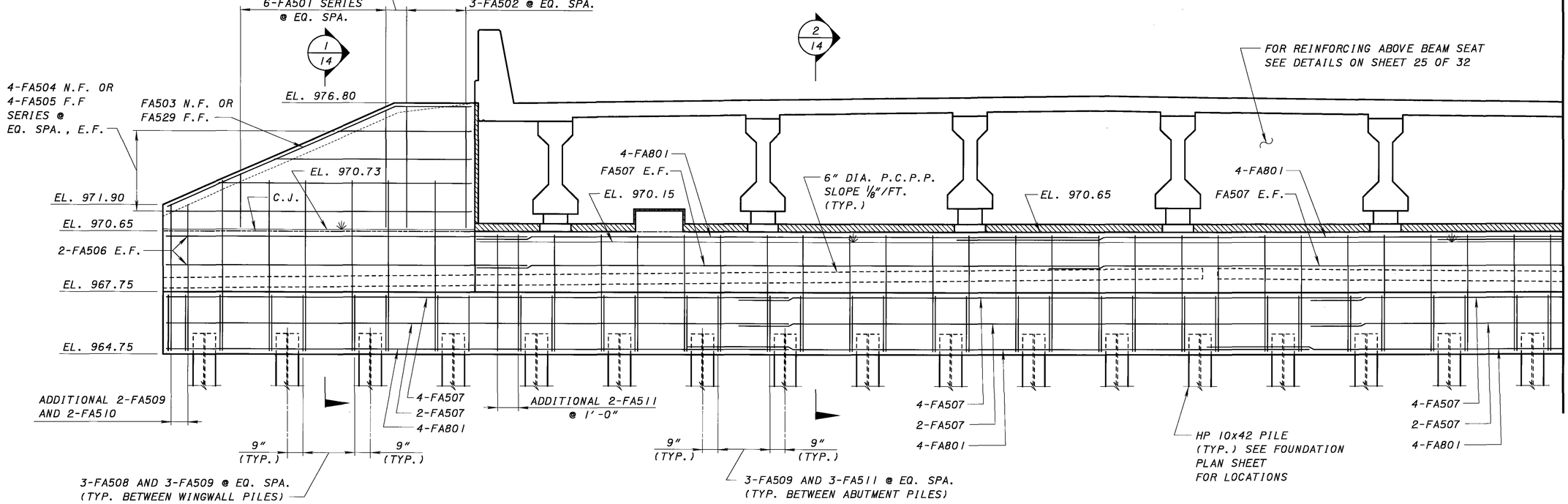
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PLAN



ELEVATION

BAR SPLICE LENGTHS

#5	2'-5"
#8	4'-11"

NOTES:

1. FOR LEGEND, SEE SHEET 14 OF 32.
2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

MATCHLINE A-A - SEE SHEET 12 OF 32

FORWARD ABUTMENT PLAN & ELEVATION

BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

LIC-161-6.65
LIC-37-10.25
PID 77221

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MATCHLINE A-A - SEE SHEET 11 OF 32

MATCHLINE B-B - SEE SHEET 13 OF 32

℄ SURVEY & CONST. S.R. 161

3'-0" WIDE NEOPRENE SHEETING, CENTERED ON JOINT

6" DIA. P.C.P.P.

29°

STA. 484+15.01

POROUS BACKFILL SEE NOTE 2

3'-0" WIDE NEOPRENE SHEETING, CENTERED ON JOINT

2" PEJF

℄ BEAM 6

℄ SEISMIC PEDESTAL

℄ BEAM 7

2" PEJF

NON-P.C.P.P.

SEE PIPE TERMINATION DETAIL ON SHEET 10 OF 32 (TYP.)

1" JOINT W/ PEJF

℄ BRG. FORWARD ABUTMENT

℄ BEAM 8

℄ SEISMIC PEDESTAL

27'-1 7/8"

25'-11 7/8"

27'-1 7/8"

20'-9 3/4"

PLAN

N

2/14

19-FA515 @ EQ. SPA.

14-FA530 @ EQ. SPA.

1/14 SIM.

EL. 970.65

EL. 976.84 (SEE NOTE 3)

FA513 N.F. OR FA514 F.F.

FA516 N.F. OR FA517 F.F.

EL. 978.13 (SEE NOTE 3)

EL. 970.65

FOR REINFORCING ABOVE BEAM SEAT SEE DETAILS ON SHEET 25 OF 32

4-FA802

FA512 E.F.

EL. 970.15

INVERT EL. 968.00

C.J.

EL. 970.65

2-FA518

EL. 967.75

EL. 970.73

2-FA519

4-FA805

FA522 E.F.

EL. 970.15

HP 10x42 PILE (TYP.) SEE FOUNDATION PLAN SHEET FOR LOCATIONS

ADDITIONAL 2-FA508 @ 1'-0"

4-FA520

2-FA520

4-FA803

9" (TYP.)

9" (TYP.)

3-FA508 AND 3-FA509 @ EQ. SPA. (TYP. BETWEEN WINGWALL PILES)

EL. 964.75

ADDITIONAL 2-FA508 AND 2-FA509 @ EQ. SPA.

4-FA521

2-FA521

4-FA804

ADDITIONAL 2-F511 @ 1'-0"

9" (TYP.)

9" (TYP.)

3-FA509 AND FA511 @ EQ. SPA. (TYP. BETWEEN ABUTMENT PILES)

ELEVATION

BAR SPLICE LENGTHS

#5	2'-5"
#8	4'-11"

NOTES:

1. FOR LEGEND, SEE SHEET 14 OF 32.
2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
3. ELEVATIONS AT THE ENDS OF THE WINGWALLS ARE GIVEN AT THE CENTERLINE OF BEARING.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWW	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

FORWARD ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

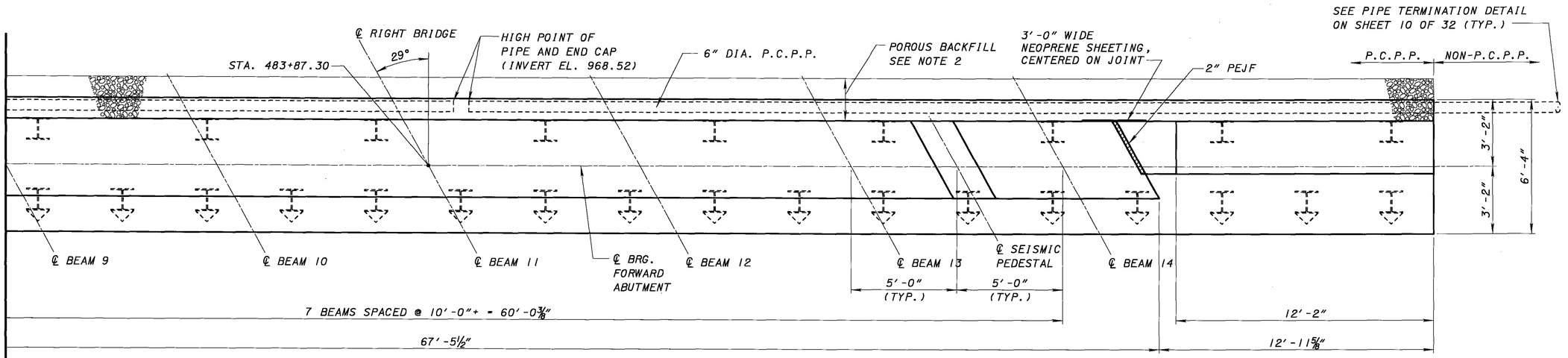
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LIC-37-10.25
PID 77221

12/32

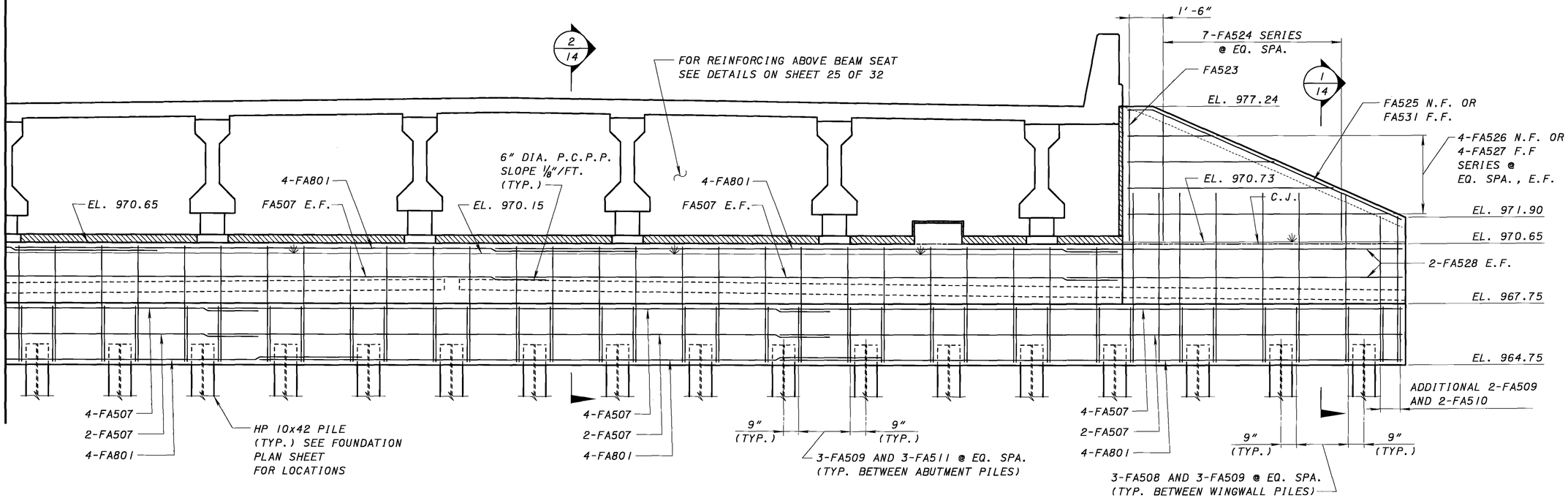
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MATCHLINE B-B - SEE SHEET 12 OF 32



PLAN



ELEVATION

BAR SPLICE LENGTHS

#5	2'-5"
#8	4'-11"

NOTES:

1. FOR LEGEND, SEE SHEET 14 OF 32.
2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

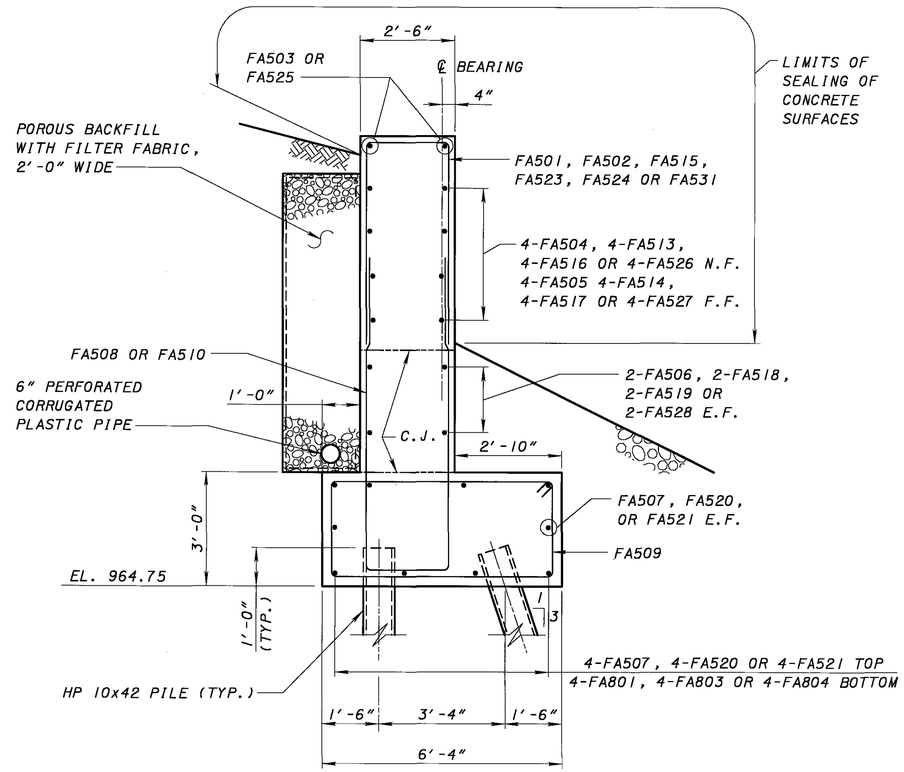
FORWARD ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

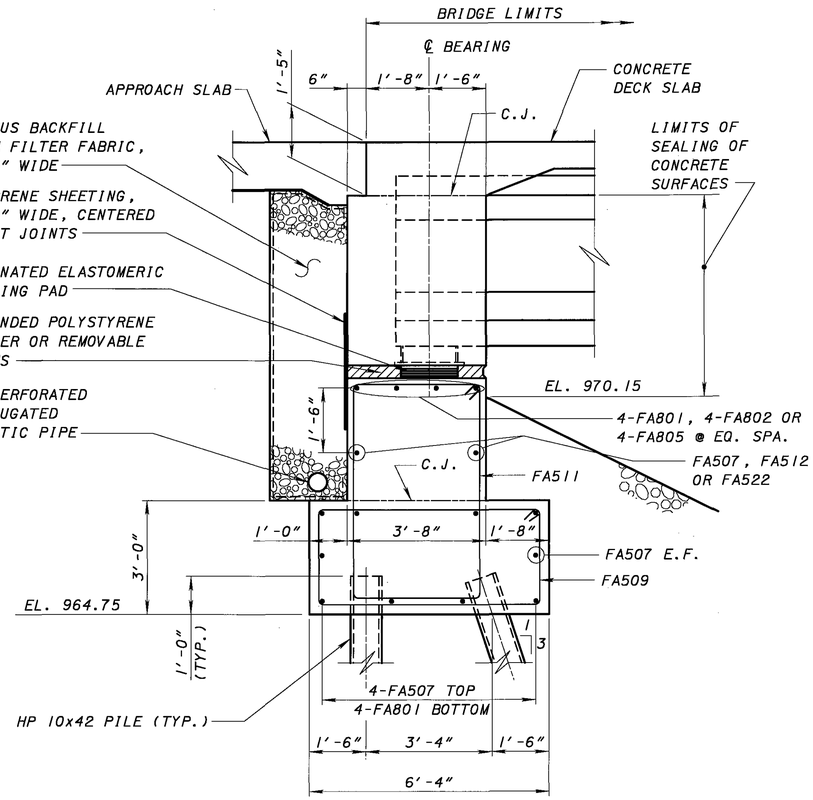
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1145/1349

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SECTION 1 — 10,11,12



SECTION 2 — 10,11,12

LEGEND

BRG.	- BEARING
℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CL.	- CLEAR
DIA.	- DIAMETER
E.F.	- EACH FACE
EL.	- ELEVATION
EQ.	- EQUAL
F.F.	- FAR FACE
N.F.	- NEAR FACE
P.E.J.F.	- PREFORMED EXPANSION JOINT FILLER
P.C.P.P.	- PERFORATED CORRUGATED PLASTIC PIPE
SIM.	- SIMILAR
SPA.	- SPACES
TYP.	- TYPICAL

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

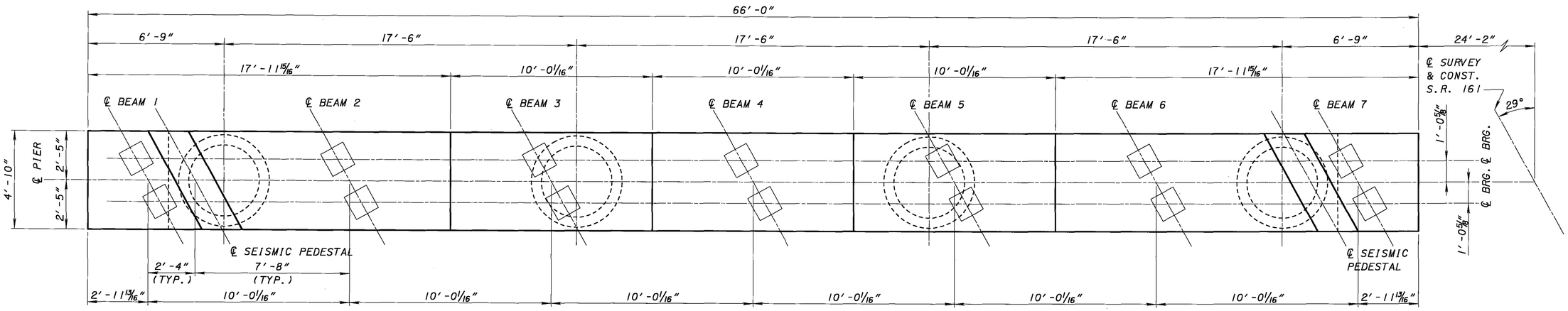
FORWARD ABUTMENT SECTIONS AND DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

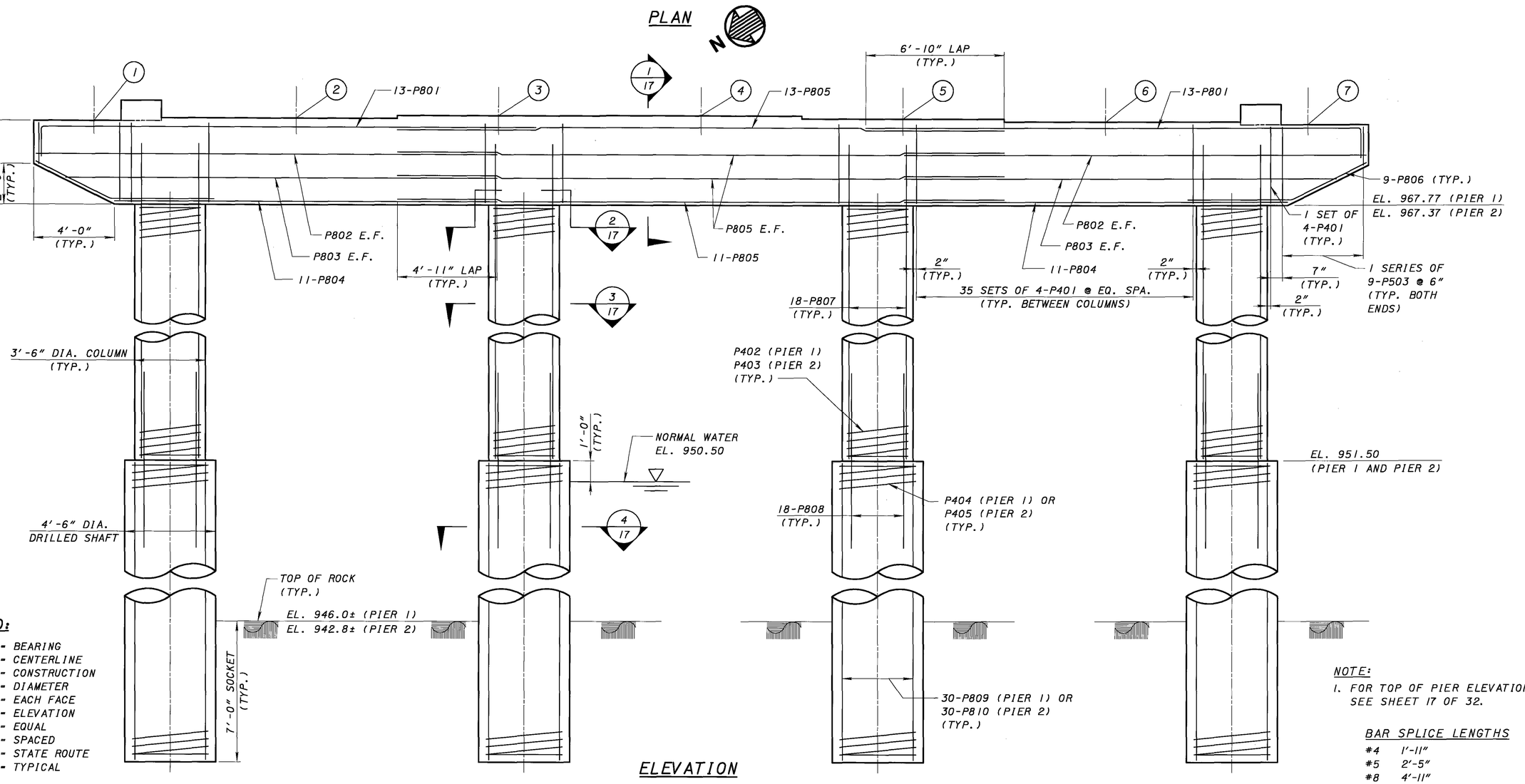
14/32

1146/1349

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PLAN



ELEVATION

LEGEND:

BRG.	-	BEARING
℄	-	CENTERLINE
CONST.	-	CONSTRUCTION
DIA.	-	DIAMETER
E.F.	-	EACH FACE
EL.	-	ELEVATION
EQ.	-	EQUAL
SPA.	-	SPACED
S.R.	-	STATE ROUTE
TYP.	-	TYPICAL

NOTE:

1. FOR TOP OF PIER ELEVATIONS, SEE SHEET 17 OF 32.

BAR SPLICE LENGTHS

#4	1'-11"
#5	2'-5"
#8	4'-11"

PIER 1 & 2 LEFT SIDE DETAILS

BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

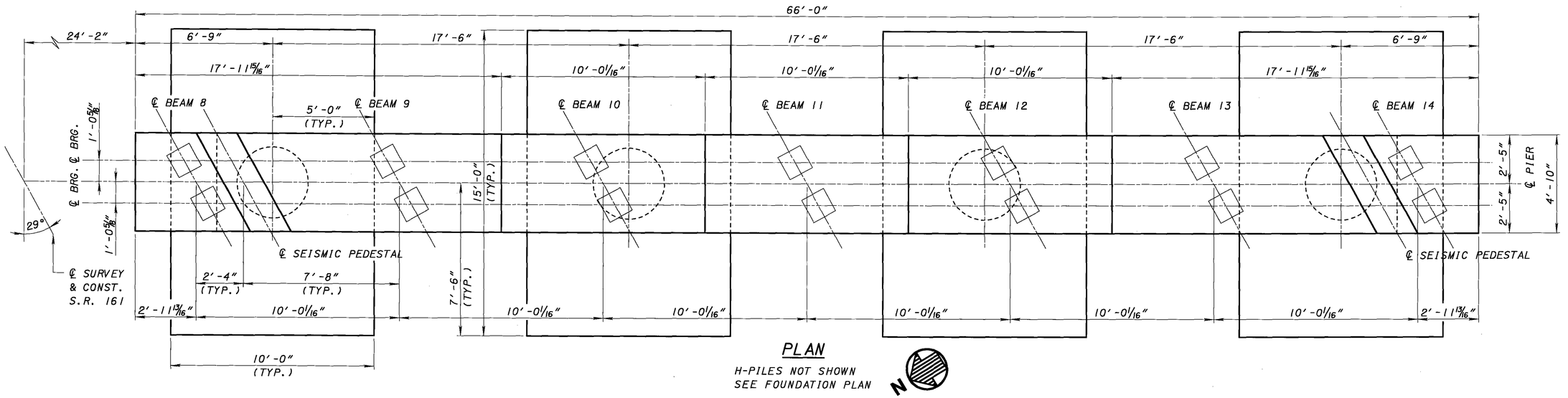
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TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

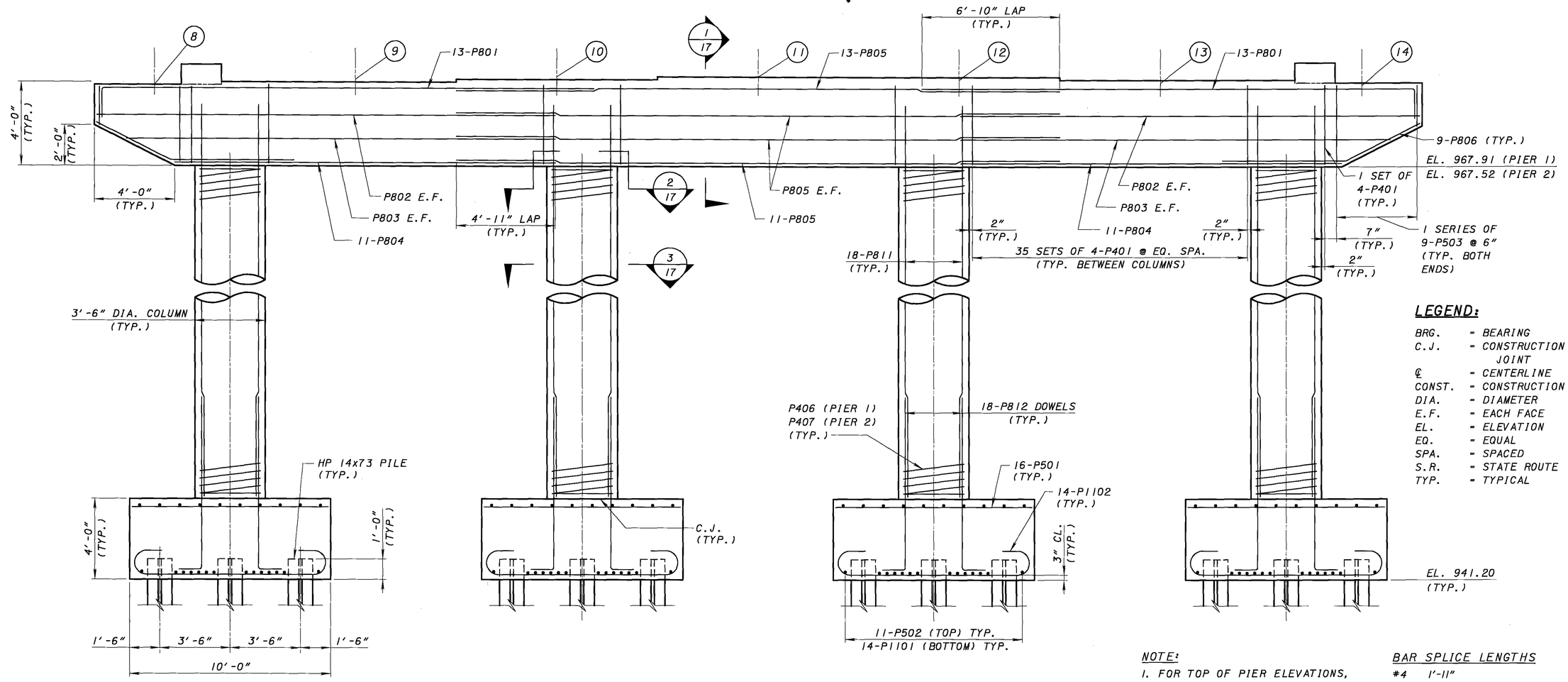
LIC-161-6.65
LIC-37-10.25
PID 77221

15/32

1147/1349

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ELEVATION

NOTE:

1. FOR TOP OF PIER ELEVATIONS, SEE SHEET 17 OF 32.

LEGEND:

BRG.	- BEARING
C.J.	- CONSTRUCTION JOINT
℄	- CENTERLINE
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
E.F.	- EACH FACE
EL.	- ELEVATION
EQ.	- EQUAL
SPA.	- SPACED
S.R.	- STATE ROUTE
TYP.	- TYPICAL

BAR SPLICE LENGTHS

#4	1'-11"
#5	2'-5"
#8	4'-11"

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

PIER 1 & 2 RIGHT SIDE DETAILS

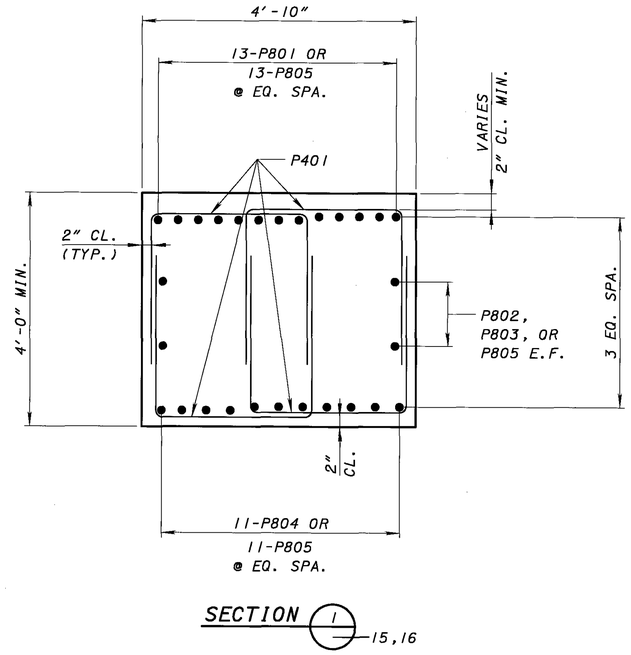
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER WOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

16/32

1148/1349

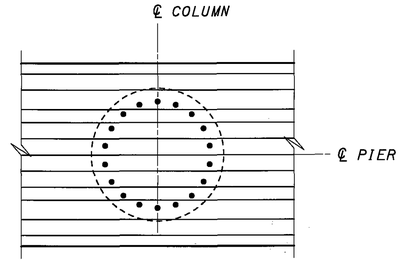
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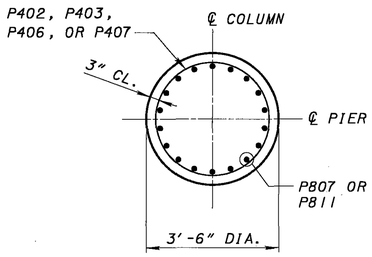
SECTION 1 — 15,16

LEGEND

℄	= CENTERLINE
CL.	= CLEARANCE
DIA.	= DIAMETER
EQ.	= EQUAL
MIN.	= MINIMUM
SPA.	= SPACES
STA.	= STATION
TYP.	= TYPICAL



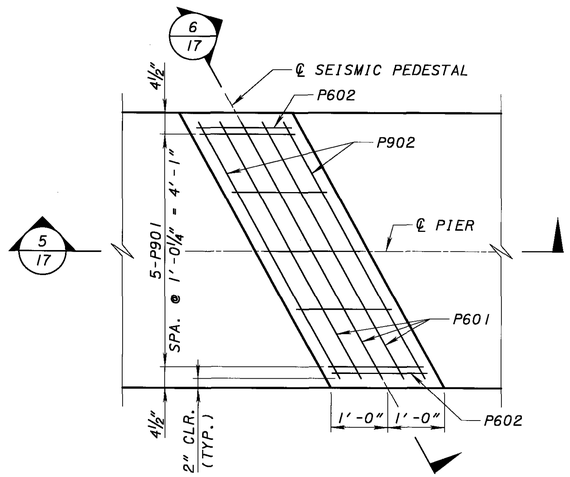
SECTION 2 — 15,16



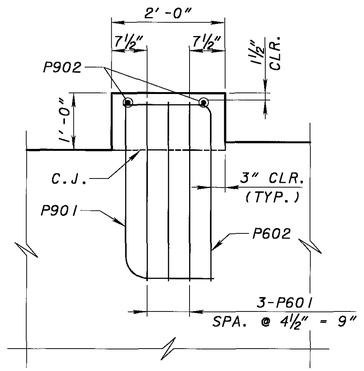
SECTION 3 — 15,16

PIER ELEVATIONS

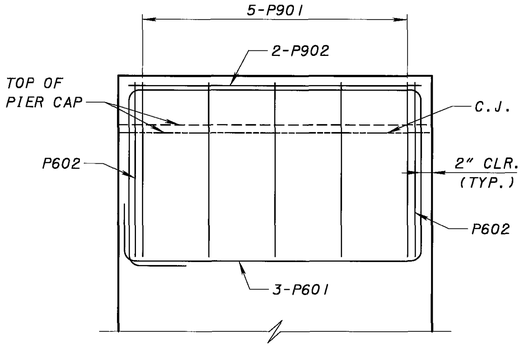
LOCATION	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PIER 1	971.77	971.93	972.09	972.13	972.01	971.90	971.79	971.92	972.08	972.24	972.41	972.42	972.30	972.19
PIER 2	971.37	971.53	971.70	971.73	971.62	971.50	971.39	971.52	971.68	971.85	972.01	972.02	971.91	971.80



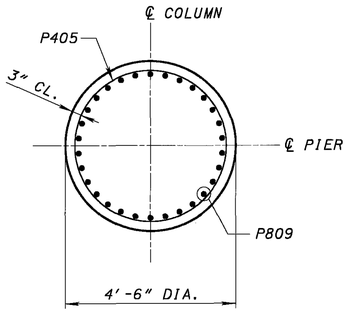
SEISMIC PEDESTAL DETAIL



SECTION 5 — 17



SECTION 6 — 17



SECTION 4 — 16

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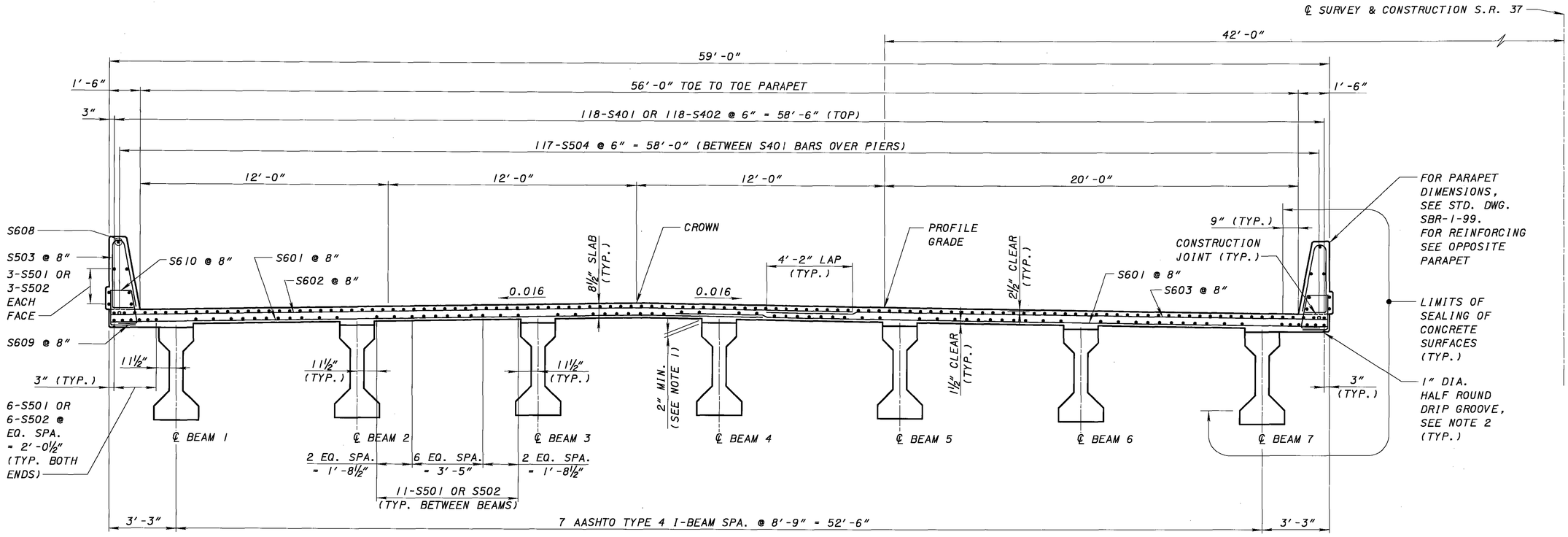
DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

PIER SECTIONS AND DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

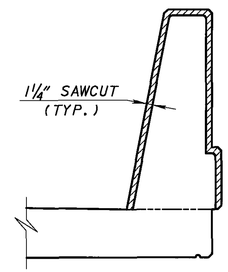
LIC-161-6.65
LIC-37-10.25
PID 77221

17 / 32

1149
1349



TRANSVERSE SECTION - LEFT SIDE
RIGHT SIDE SYMMETRICAL ABOUT ℄ SURVEY & CONST. S.R. 37



CONTROL JOINT DETAIL

LEGEND:

℄	- CENTERLINE
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
DWG.	- DRAWING
EQ.	- EQUAL
MIN.	- MINIMUM
SPA.	- SPACED
S.R.	- STATE ROUTE
STD.	- STANDARD
TYP.	- TYPICAL

NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE TOPPING THICKNESS SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING EVEN THOUGH DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP IF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
2. DRIP GROOVES SHALL TERMINATE 2′-0″ FROM THE FACE OF THE ABUTMENT.

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DESIGNED TAH | DRAWN RTP | CHECKED AJM | REVISED

DATE 07-20-05 | REVIEWED GWW | STRUCTURE FILE NUMBER 450169/L/4501705R

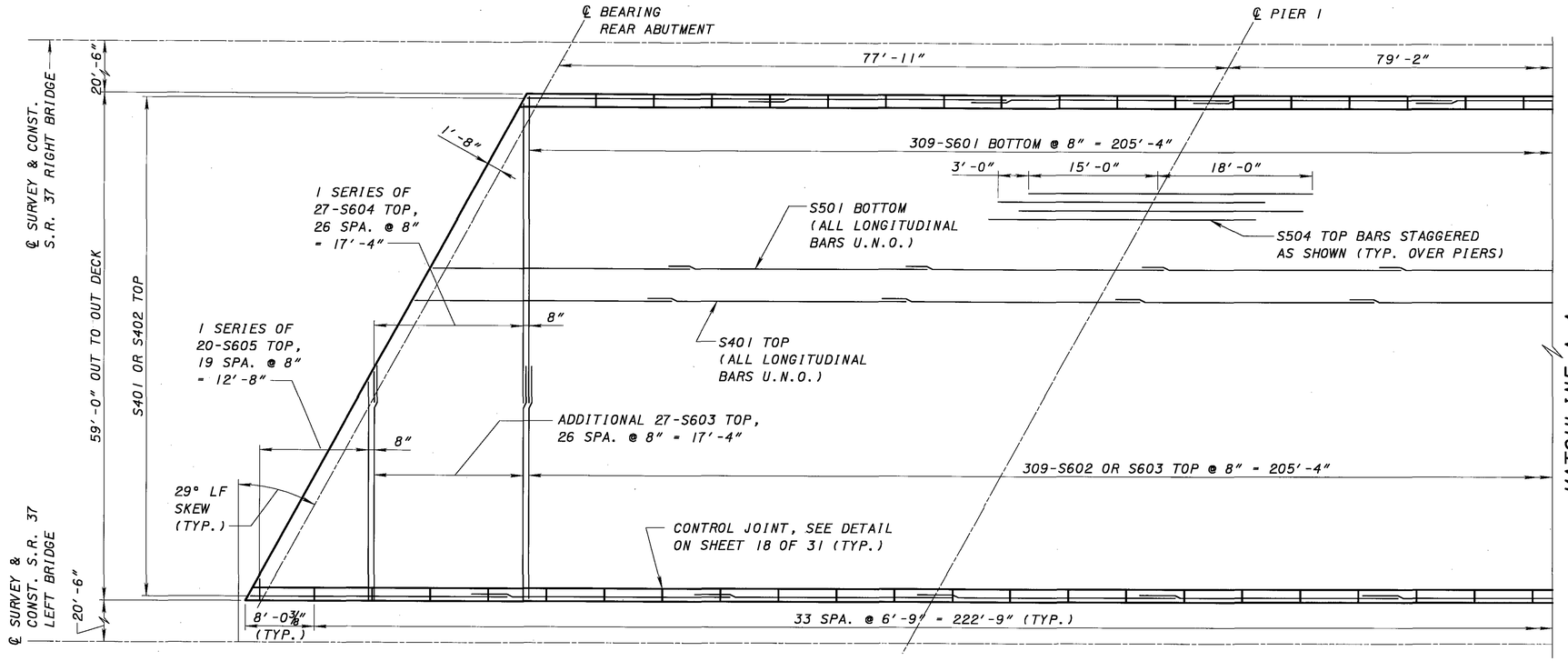
TRANSVERSE SECTION
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER WOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

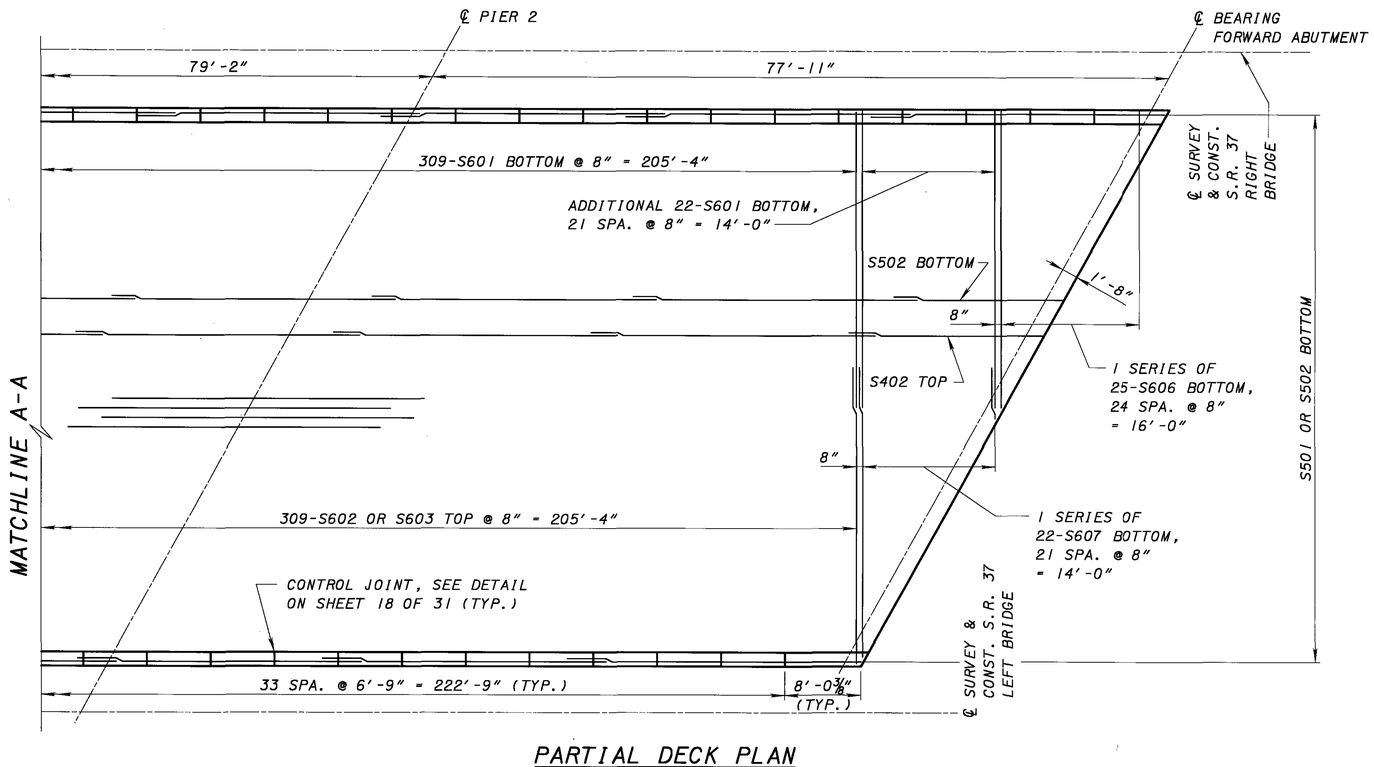
18/32

1150/1349

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PARTIAL DECK PLAN



PARTIAL DECK PLAN

LEGEND:

℄	= CENTERLINE
CONST.	= CONSTRUCTION
LF	= LEFT FORWARD
SPA.	= SPACED
S.R.	= STATE ROUTE
TYP.	= TYPICAL
U.N.O.	= UNLESS NOTED OTHERWISE

N

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWW	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

DECK REINFORCING DETAILS

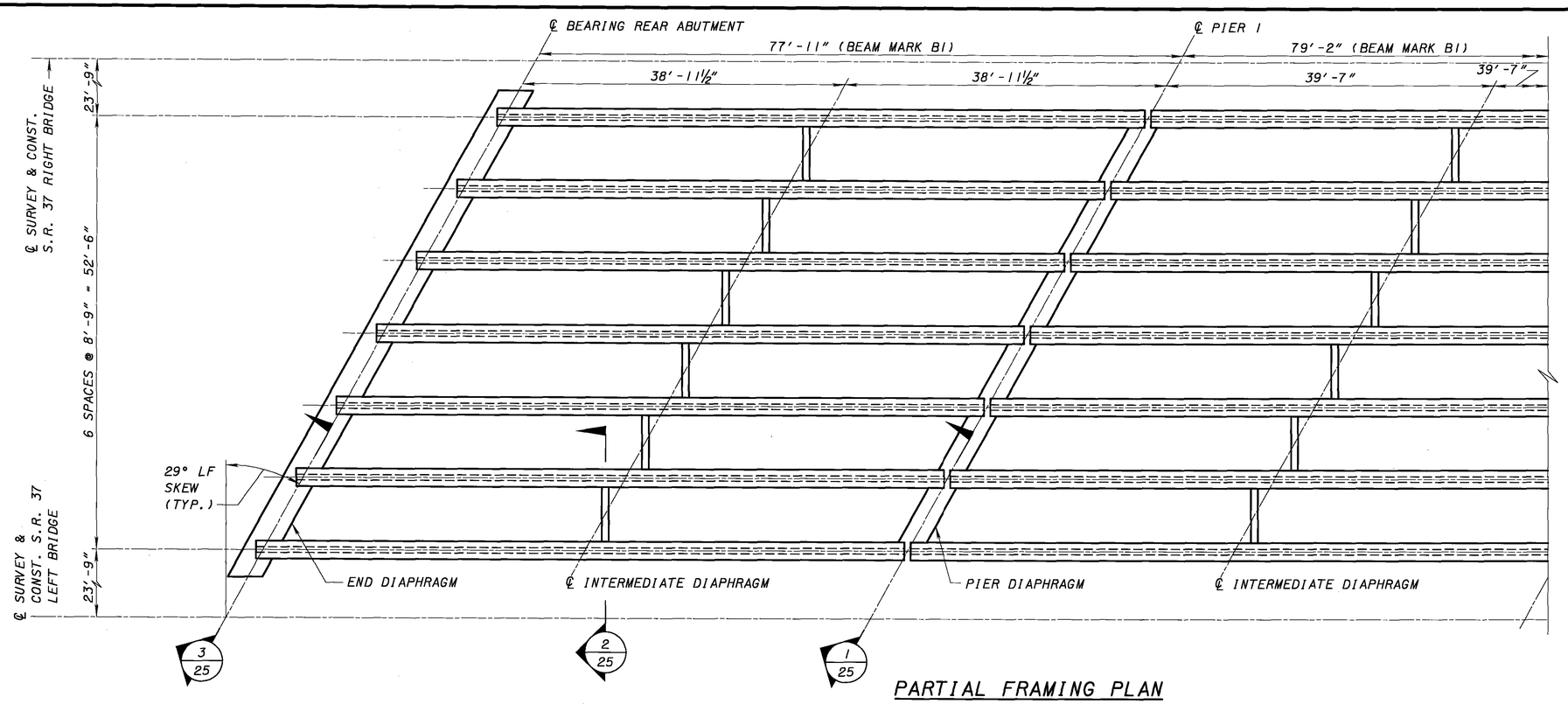
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

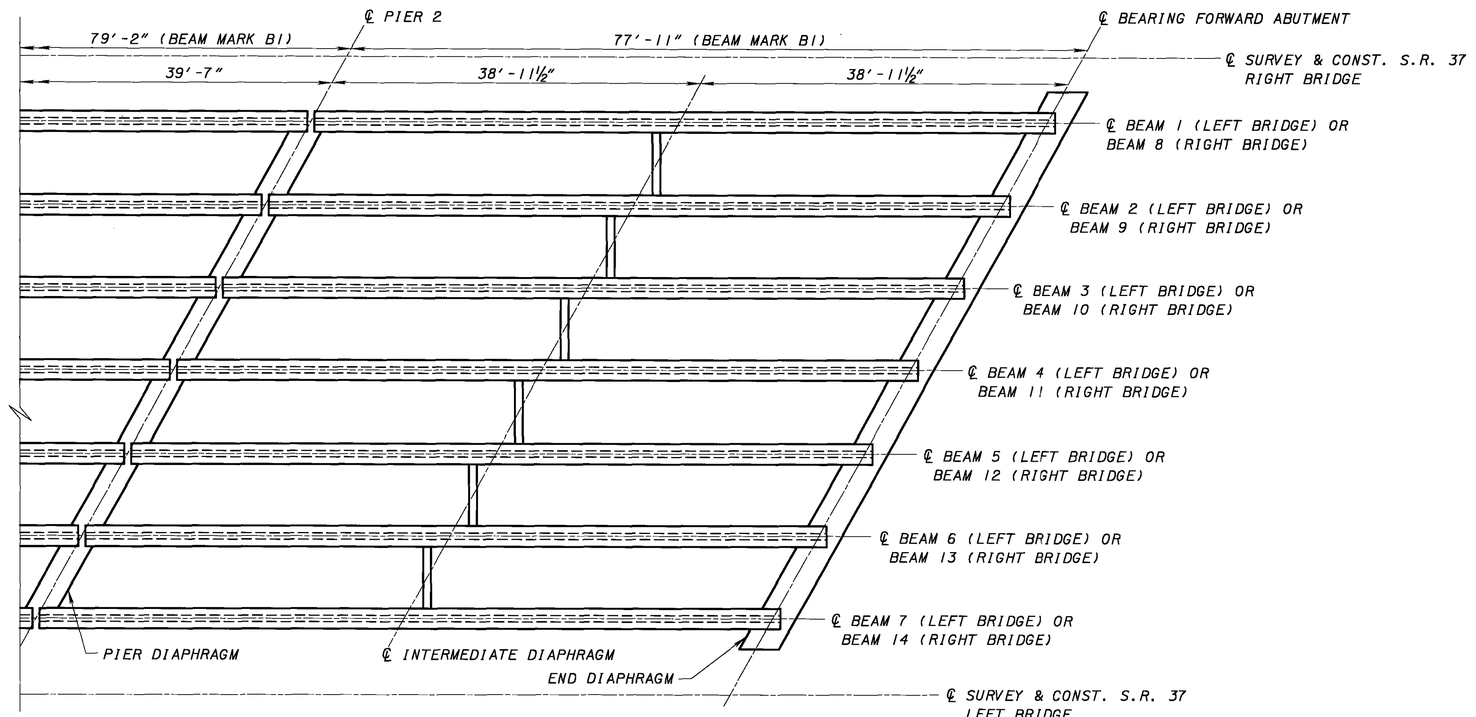
19/32

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PARTIAL FRAMING PLAN



PARTIAL FRAMING PLAN

LEGEND:

℄	= CENTERLINE
CONST.	= CONSTRUCTION
LF	= LEFT FORWARD
S.R.	= STATE ROUTE
TYP.	= TYPICAL

N

DLZ
1621 KINTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
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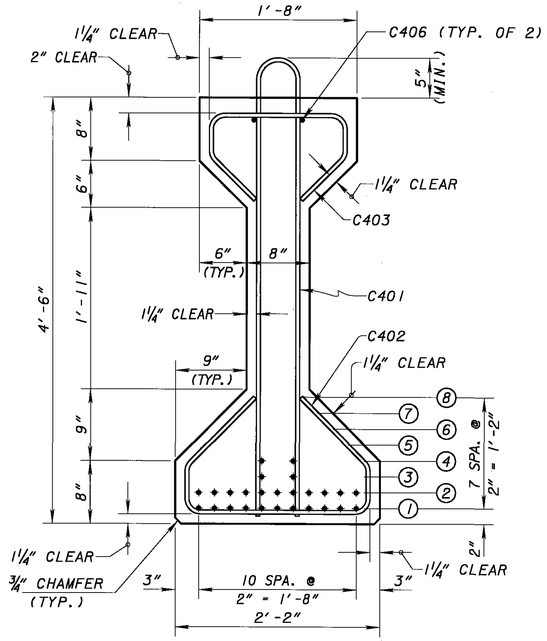
FRAMING PLAN
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER WOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

20/32

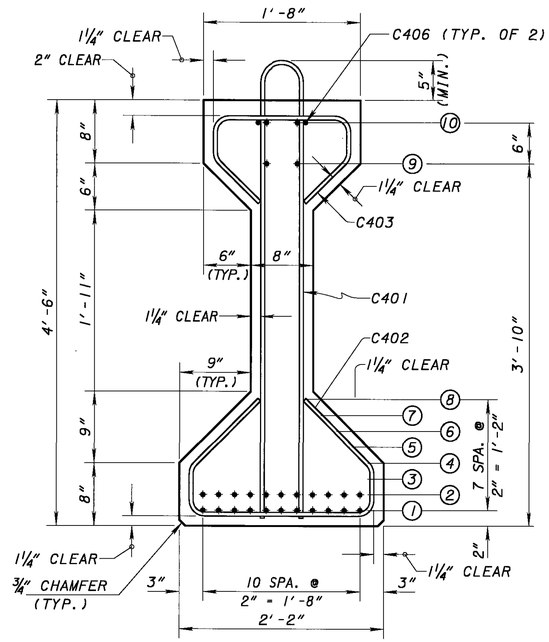
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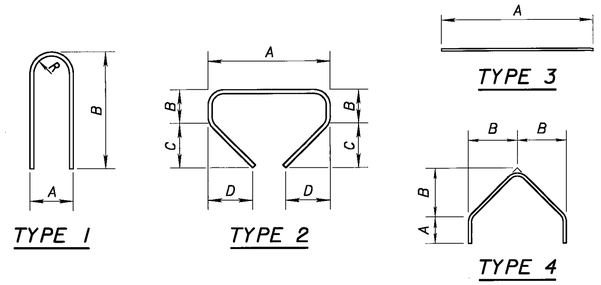
AASHTO TYPE 4

(MID SECTION)



AASHTO TYPE 4

(END SECTION)



BENDING DIAGRAMS

(ALL DIMENSIONS ARE OUT-TO-OUT)

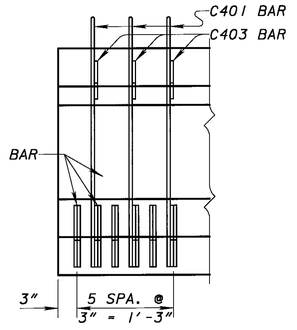
MARK	TYPE	DIMENSIONS				
		A	B	C	D	R
		AASHTO TYPE 4				
C401	1	5½"	4'-10"			2¼"
C402	2	1'-11½"	6¼"	8½"	8½"	
C403	2	1'-5½"	5½"	5½"	5½"	
C405	4	6¼"	11¾"			
C406	3	78'-1"				

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES THE BAR LOCATION, THE NEXT DIGIT INDICATES THE INCH-POUND BAR SIZE AND THE REMAINING DIGITS ITS SEQUENCE NUMBER. ALL STEEL SHALL BE EPOXY COATED.

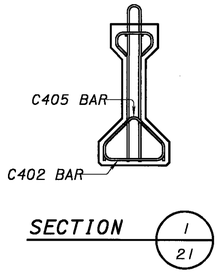
SECTION PROPERTIES

SECTION	AREA (in^2)	WEIGHT (lb/ft)	Yb (in)	Yt (in)	I (in^4)	Sb (in^3)	St (in^3)	Vol/Sur (in)
AASHTO TYPE 4	789	822	24.73	29.27	260,741	10,542	8,909	4.741

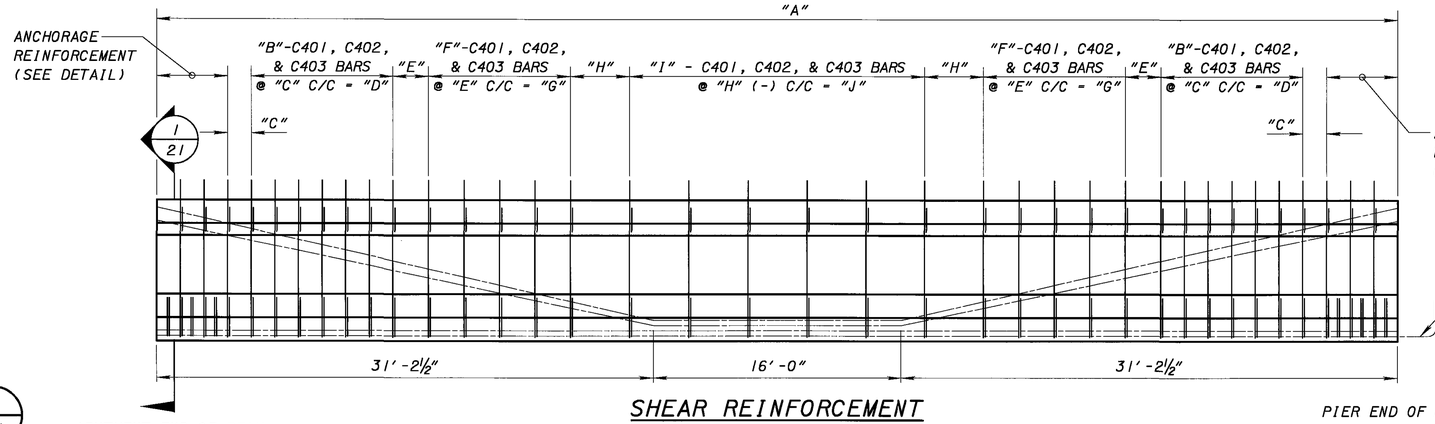
BEAM MARK	NUMBER OF STRANDS PER ROW: END SECTION - ROW NUMBER (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	MID SECTION - ROW NUMBER (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	TOTAL STRANDS	CONCRETE STRENGTHS f'ci	f'c	C401 BARS REQ'D	C402 BARS REQ'D	C403 BARS REQ'D	C405 BARS REQ'D
B1	11	11	0	0	0	0	0	0	2	2	11	11	2	2	0	0	0	0	0	0	26	5000	7000	103	109	103	12



ANCHORAGE REINFORCEMENT



SECTION 1/21



SHEAR REINFORCEMENT

LEGEND:

in	= INCHES
lb	= POUND
LBS.	= POUNDS
MIN.	= MINIMUM
NO.	= NUMBER
REQ'D	= REQUIRED
SPA.	= SPACED
TYP.	= TYPICAL

BEAM DIMENSIONS

BEAM MARK	NO. REQ'D	DIMENSIONS A	B	C	D	E	F	G	H	I	J	APPROXIMATE WEIGHT (LBS.)
B1	42	78'-5"	17	6"	8'-0"	11"	13	11'-0"	11"	37	32'-9"	64,459

NOTES:

1. FOR ADDITIONAL DETAILS AND NOTES, SEE BRIDGE STANDARD DRAWINGS PSID-1-99.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

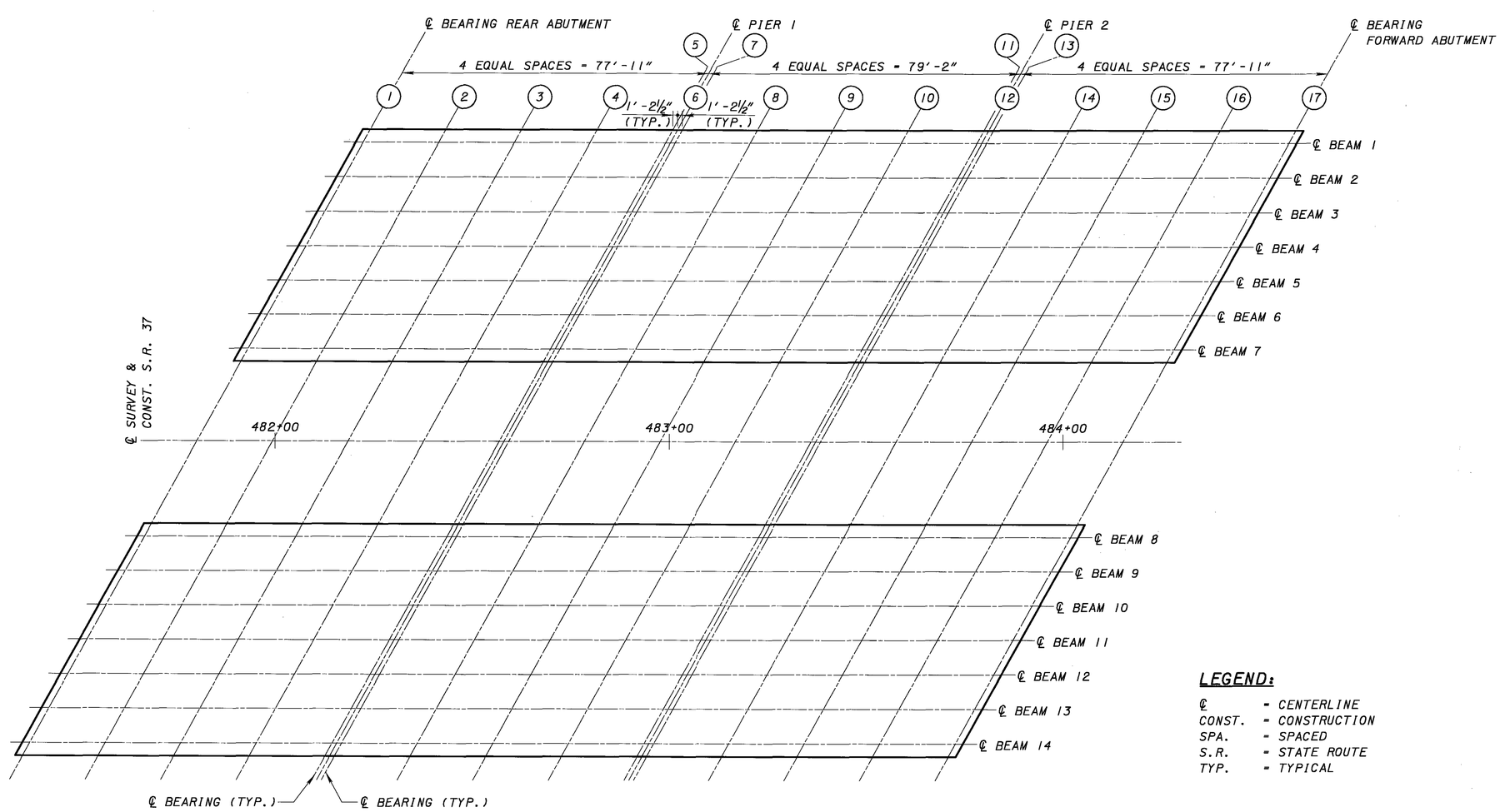
PRESTRESSED CONCRETE I-BEAM DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

21/32

1153/1349

10/26/2006
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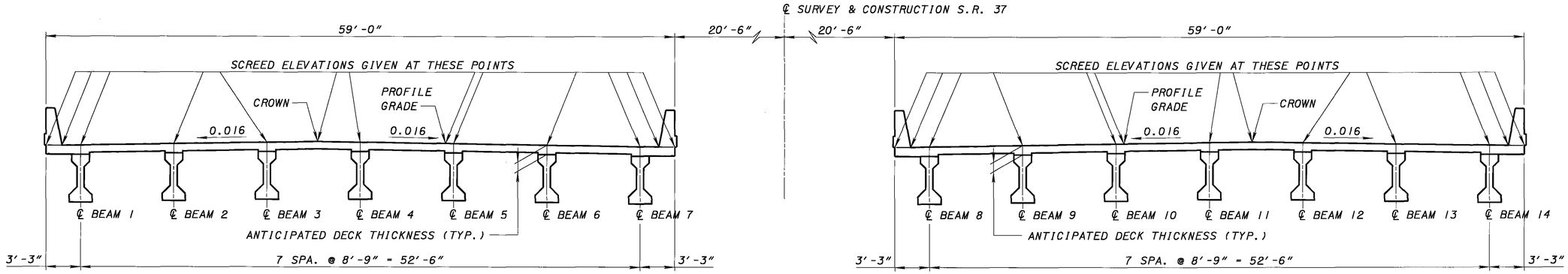
SCREED PLAN

LEGEND:

℄	- CENTERLINE
CONST.	- CONSTRUCTION
SPA.	- SPACED
S.R.	- STATE ROUTE
TYP.	- TYPICAL

NOTE:

FOR NOTES AND TABLES, SEE SHEETS 23 AND 24 OF 32.



SCREED TRANSVERSE SECTION

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

SUPERSTRUCTURE DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

22/32

1154/1349

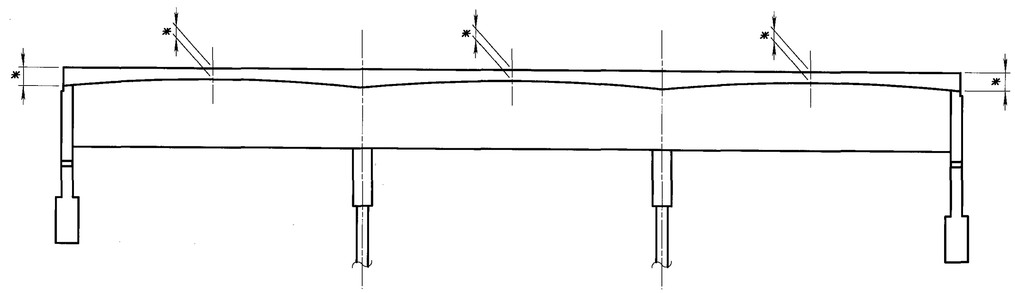
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SCREED ELEVATIONS (FEET) - LEFT BRIDGE

LOCATION	OFFSET	(1) ℄ BRG. R.A.	(2) 1/4 SPAN 1	(3) 1/2 SPAN 1	(4) 3/4 SPAN 1	(5) ℄ BRG.	(6) ℄ PIER 1	(7) ℄ BRG.	(8) 1/4 SPAN 2	(9) 1/2 SPAN 2	(10) 3/4 SPAN 2	(11) ℄ BRG.	(12) ℄ PIER 2	(13) ℄ BRG.	(14) 1/4 SPAN 3	(15) 1/2 SPAN 3	(16) 3/4 SPAN 3	(17) ℄ BRG. F.A.
LEFT EDGE OF DECK	37.50 LT.	482+24.08	482+43.56	482+63.04	482+82.52	483+00.79	483+02.00	483+03.21	483+21.79	483+41.58	483+61.37	483+79.96	483+81.16	483+82.37	484+00.64	484+20.12	484+39.60	484+59.08
		977.98	977.92	977.84	977.73	977.59	977.59	977.58	977.53	977.45	977.33	977.20	977.19	977.19	977.13	977.05	976.94	976.80
TOE OF PARAPET	36.00 LT.	482+23.25	482+42.73	482+62.21	482+81.69	482+99.96	483+01.17	483+02.37	483+20.96	483+40.75	483+60.54	483+79.12	483+80.33	483+81.54	483+99.81	484+19.29	484+38.77	484+58.25
		977.98	977.92	977.84	977.73	977.60	977.59	977.59	977.54	977.45	977.34	977.20	977.20	977.19	977.14	977.06	976.94	976.81
BEAM 1	34.25 LT.	482+22.28	482+41.76	482+61.24	482+80.72	482+98.99	483+00.20	483+01.40	483+19.99	483+39.78	483+59.57	483+78.15	483+79.36	483+80.57	483+98.84	484+18.32	484+37.80	484+57.28
		978.01	977.96	977.88	977.76	977.63	977.63	977.62	977.57	977.49	977.37	977.24	977.23	977.22	977.17	977.09	976.98	976.84
BEAM 2	25.50 LT.	482+17.43	482+36.91	482+56.39	482+75.87	482+94.14	482+95.35	482+96.55	483+15.14	483+34.93	483+54.72	483+73.30	483+74.51	483+75.72	483+93.99	484+13.47	484+32.95	484+52.43
		978.18	978.12	978.04	977.92	977.80	977.79	977.78	977.73	977.65	977.53	977.40	977.39	977.39	977.33	977.25	977.14	977.00
BEAM 3	16.75 LT.	482+12.58	482+32.06	482+51.54	482+71.02	482+89.29	482+90.50	482+91.70	483+10.29	483+30.08	483+49.87	483+68.45	483+69.66	483+70.87	483+89.14	484+08.62	484+28.10	484+47.58
		978.34	978.28	978.20	978.09	977.96	977.95	977.95	977.89	977.81	977.70	977.56	977.56	977.55	977.50	977.41	977.30	977.17
CROWN	12.00 LT.	482+09.95	482+29.42	482+48.90	482+68.38	482+86.65	482+87.86	482+89.07	483+07.65	483+27.45	483+47.24	483+65.82	483+67.03	483+68.24	483+86.51	484+05.99	484+25.47	484+44.95
		978.43	978.37	978.29	978.18	978.05	978.04	978.04	977.98	977.90	977.79	977.65	977.65	977.64	977.59	977.50	977.39	977.26
BEAM 4	8.00 LT.	482+07.73	482+27.21	482+46.69	482+66.17	482+84.44	482+85.65	482+86.85	483+05.44	483+25.23	483+45.02	483+63.60	483+64.81	483+66.02	483+84.29	484+03.77	484+23.25	484+42.73
		978.38	978.32	978.24	978.12	978.00	977.99	977.98	977.93	977.85	977.73	977.60	977.59	977.59	977.53	977.45	977.34	977.20
PROFILE GRADE	0.00	482+03.29	482+22.77	482+42.25	482+61.73	482+80.00	482+81.21	482+82.42	483+01.00	483+20.79	483+40.59	483+59.17	483+60.38	483+61.59	483+79.86	483+99.34	484+18.81	484+38.29
		978.27	978.21	978.13	978.02	977.89	977.88	977.88	977.82	977.74	977.63	977.49	977.49	977.48	977.43	977.35	977.23	977.10
BEAM 5	0.75 RT.	482+02.88	482+22.36	482+41.84	482+61.32	482+79.59	482+80.79	482+82.00	483+00.59	483+20.38	483+40.17	483+58.75	483+59.96	483+61.17	483+79.44	483+98.92	484+18.40	484+37.88
		978.26	978.20	978.12	978.01	977.88	977.87	977.87	977.81	977.73	977.62	977.48	977.48	977.47	977.42	977.34	977.22	977.09
BEAM 6	9.50 RT.	481+98.03	482+17.51	482+36.99	482+56.47	482+74.74	482+75.94	482+77.15	482+95.74	483+15.53	483+35.32	483+53.90	483+55.11	483+56.32	483+74.59	483+94.07	484+13.55	484+33.03
		978.15	978.09	978.01	977.89	977.76	977.75	977.75	977.62	977.50	977.37	977.36	977.36	977.36	977.30	977.22	977.11	976.97
BEAM 7	18.25 RT.	481+93.18	482+12.66	482+32.14	482+51.62	482+69.89	482+71.09	482+72.30	482+90.89	483+10.68	483+30.47	483+49.05	483+50.26	483+51.47	483+69.74	483+89.22	484+08.70	484+28.18
		978.03	977.97	977.89	977.78	977.65	977.64	977.64	977.59	977.50	977.39	977.25	977.25	977.24	977.19	977.11	976.99	976.86
TOE OF PARAPET	20.00 RT.	481+92.21	482+11.69	482+31.17	482+50.65	482+68.92	482+70.12	482+71.33	482+89.92	483+09.71	483+29.50	483+48.08	483+49.29	483+50.50	483+68.77	483+88.25	484+07.73	484+27.21
		978.01	977.95	977.87	977.76	977.63	977.62	977.61	977.56	977.48	977.36	977.23	977.22	977.22	977.17	977.08	976.97	976.83
RIGHT EDGE OF DECK	21.50 RT.	481+91.38	482+10.86	482+30.33	482+49.81	482+68.08	482+69.29	482+70.50	482+89.08	483+08.88	483+28.67	483+47.25	483+48.46	483+49.67	483+67.94	483+87.42	484+06.90	484+26.38
		978.01	977.96	977.87	977.76	977.63	977.62	977.62	977.57	977.48	977.37	977.23	977.23	977.22	977.17	977.09	976.98	976.84

* ANTICIPATED DECK THICKNESSES (INCHES) - LEFT BRIDGE

LOCATION	(1) ℄ BRG. R.A.	(3) 1/2 SPAN 1	(5) ℄ BRG.	(7) ℄ BRG.	(9) 1/2 SPAN 2	(11) ℄ BRG.	(13) ℄ BRG.	(15) 1/2 SPAN 3	(17) ℄ BRG. F.A.
BEAM 1	11.58	10.75	11.58	11.54	10.75	11.54	11.58	10.75	11.58
BEAM 2	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 3	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 4	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 5	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 6	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 7	11.58	10.75	11.58	11.54	10.75	11.54	11.58	10.75	11.58



DECK THICKNESS DIAGRAM

LEGEND:

℄	- CENTERLINE
BRG.	- BEARING
F.A.	- FORWARD ABUTMENT
LT.	- LEFT
R.A.	- REAR ABUTMENT
RT.	- RIGHT

NOTES:

1. FOR SCREED PLAN AND SECTION, SEE SHEET 22 OF 32.
2. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED, CALCULATED DEAD LOAD DEFLECTIONS.
3. CALCULATED CAMBER AT THE TIME OF RELEASE IS 0.85 INCHES. CALCULATED CAMBER AT THE TIME OF ERECTION IS 1.50 INCHES. CALCULATED LONG-TERM CAMBER IS 2.11 INCHES.

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DESIGNED TAH | DRAWN RTP | REVIEWED GWM | DATE 07-20-05
CHECKED AJM | REVISED | STRUCTURE FILE NUMBER 4501691L/4501705R

SUPERSTRUCTURE DETAILS

BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

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SCREED ELEVATIONS (FEET) - RIGHT BRIDGE

LOCATION	OFFSET	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
		℄ BRG. R.A.	1/4 SPAN 1	1/2 SPAN 1	3/4 SPAN 1	℄ BRG.	℄ PIER 1	℄ BRG.	1/4 SPAN 2	1/2 SPAN 2	3/4 SPAN 2	℄ BRG.	℄ PIER 2	℄ BRG.	1/4 SPAN 3	1/2 SPAN 3	3/4 SPAN 3	℄ BRG. F.A.
LEFT EDGE OF DECK	21.50 LT.	481+68.65	481+88.13	482+07.61	482+27.09	482+45.36	482+46.57	482+47.77	482+66.36	482+86.15	483+05.94	483+24.52	483+25.73	483+26.94	483+45.21	483+64.69	483+84.17	484+03.65
		978.13	978.07	977.99	977.87	977.74	977.74	977.73	977.68	977.60	977.48	977.35	977.34	977.34	977.28	977.20	977.09	976.95
TOE OF PARAPET	20.00 LT.	481+67.82	481+87.30	482+06.78	482+26.26	482+44.53	482+45.73	482+46.94	482+65.53	482+85.32	483+05.11	483+23.69	483+24.90	483+26.11	483+44.38	483+63.86	483+83.34	484+02.82
		978.13	978.07	977.99	977.88	977.75	977.74	977.74	977.68	977.60	977.49	977.35	977.35	977.34	977.29	977.21	977.09	976.96
BEAM 8	18.25 LT.	481+66.85	481+86.33	482+05.81	482+25.29	482+43.56	482+44.76	482+45.97	482+64.56	482+84.35	483+04.14	483+22.72	483+23.93	483+25.14	483+43.41	483+62.89	483+82.37	484+01.85
		978.16	978.11	978.02	977.91	977.78	977.77	977.77	977.72	977.64	977.52	977.38	977.38	977.37	977.32	977.24	977.13	976.99
BEAM 9	9.50 LT.	481+62.00	481+81.48	482+00.96	482+20.44	482+38.71	482+39.91	482+41.12	482+59.71	482+79.50	482+99.29	483+17.87	483+19.08	483+20.29	483+38.56	483+58.04	483+77.52	483+97.00
		978.33	978.27	978.19	978.07	977.94	977.94	977.93	977.88	977.80	977.68	977.55	977.54	977.54	977.48	977.40	977.29	977.15
BEAM 10	0.75 LT.	481+57.15	481+76.63	481+96.11	482+15.59	482+33.86	482+35.06	482+36.27	482+54.86	482+74.65	482+94.44	483+13.02	483+14.23	483+15.44	483+33.71	483+53.19	483+72.67	483+92.15
		978.49	978.43	978.35	978.24	978.11	978.10	978.10	978.04	977.96	977.85	977.71	977.71	977.70	977.65	977.56	977.45	977.32
PROFILE GRADE	0.00	481+56.73	481+76.21	481+95.69	482+15.17	482+33.44	482+34.65	482+35.86	482+54.44	482+74.23	482+94.02	483+12.61	483+13.82	483+15.02	483+33.29	483+52.77	483+72.25	483+91.73
		978.51	978.45	978.36	978.25	978.12	978.12	978.11	978.06	977.97	977.86	977.73	977.72	977.71	977.66	977.58	977.47	977.33
BEAM 11	8.00 RT.	481+52.30	481+71.78	481+91.26	482+10.74	482+29.01	482+30.21	482+31.42	482+50.01	482+69.80	482+89.59	483+08.17	483+09.38	483+10.59	483+28.86	483+48.34	483+67.82	483+87.30
		978.66	978.60	978.51	978.40	978.27	978.27	978.26	978.21	978.12	978.01	977.88	977.87	977.87	977.81	977.73	977.62	977.48
CROWN	12.00 RT.	481+50.08	481+69.56	481+89.04	482+08.52	482+26.79	482+28.00	482+29.21	482+47.79	482+67.58	482+87.37	483+05.96	483+07.16	483+08.37	483+26.64	483+46.12	483+65.60	483+85.08
		978.73	978.67	978.59	978.48	978.35	978.34	978.34	978.28	978.20	978.08	977.95	977.95	977.94	977.89	977.80	977.69	977.56
BEAM 12	16.75 RT.	481+47.45	481+66.93	481+86.41	482+05.88	482+24.16	482+25.36	482+26.57	482+45.16	482+64.95	482+84.74	483+03.32	483+04.53	483+05.74	483+24.01	483+43.49	483+62.97	483+82.45
		978.67	978.61	978.53	978.41	978.29	978.28	978.27	978.22	978.14	978.02	977.89	977.88	977.88	977.82	977.74	977.63	977.49
BEAM 13	25.50 RT.	481+42.60	481+62.08	481+81.56	482+01.03	482+19.31	482+20.51	482+21.72	482+40.31	482+60.10	482+79.89	482+98.47	482+99.68	483+00.89	483+19.16	483+38.64	483+58.12	483+77.60
		978.55	978.49	978.41	978.30	978.17	978.16	978.16	978.10	978.02	977.91	977.77	977.77	977.76	977.71	977.62	977.51	977.38
BEAM 14	34.25 RT.	481+37.75	481+57.23	481+76.71	481+96.18	482+14.46	482+15.66	482+16.87	482+35.46	482+55.25	482+75.04	482+93.62	482+94.83	482+96.04	483+14.31	483+33.79	483+53.27	483+72.75
		978.44	978.38	978.30	978.18	978.05	978.05	978.04	977.99	977.91	977.79	977.66	977.65	977.65	977.59	977.51	977.40	977.26
TOE OF PARAPET	36.00 RT.	481+36.78	481+56.26	481+75.74	481+95.21	482+13.49	482+14.69	482+15.90	482+34.49	482+54.28	482+74.07	482+92.65	482+93.86	482+95.07	483+13.34	483+32.82	483+52.30	483+71.78
		978.41	978.36	978.28	978.16	978.03	978.02	978.02	977.97	977.89	977.77	977.63	977.63	977.62	977.57	977.49	977.38	977.24
RIGHT EDGE OF DECK	37.50 RT.	481+35.95	481+55.42	481+74.90	481+94.38	482+12.65	482+13.86	482+15.07	482+33.65	482+53.45	482+73.24	482+91.82	482+93.03	482+94.24	483+12.51	483+31.99	483+51.47	483+70.95
		978.42	978.36	978.28	978.17	978.03	978.03	978.02	977.97	977.89	977.77	977.64	977.63	977.63	977.58	977.49	977.38	977.24

ANTICIPATED DECK THICKNESSES (INCHES) - RIGHT BRIDGE

LOCATION	(1)	(3)	(5)	(7)	(9)	(11)	(13)	(15)	(17)
	℄ BRG. R.A.	1/2 SPAN 1	℄ BRG.	℄ BRG.	1/2 SPAN 2	℄ BRG.	℄ BRG.	1/2 SPAN 3	℄ BRG. F.A.
BEAM 8	11.58	10.75	11.58	11.54	10.75	11.54	11.58	10.75	11.58
BEAM 9	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 10	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 11	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 12	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 13	11.62	10.75	11.62	11.58	10.75	11.58	11.62	10.75	11.62
BEAM 14	11.58	10.75	11.58	11.54	10.75	11.54	11.58	10.75	11.58

LEGEND:

BRG. - BEARING
℄ - CENTERLINE
F.A. - FORWARD ABUTMENT
LT. - LEFT
R.A. - REAR ABUTMENT
RT. - RIGHT

NOTES:

1. FOR SCREED PLAN AND SECTION, SEE SHEET 22 OF 32.
2. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED, CALCULATED DEAD LOAD DEFLECTIONS.
3. CALCULATED CAMBER AT THE TIME OF RELEASE IS 0.85 INCHES. CALCULATED CAMBER AT THE TIME OF ERECTION IS 1.50 INCHES. CALCULATED LONG-TERM CAMBER IS 2.11 INCHES.

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DESIGNED TAH | DRAWN RTP | CHECKED AJM | REVISED

REVIEWED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 4501691L/4501705R

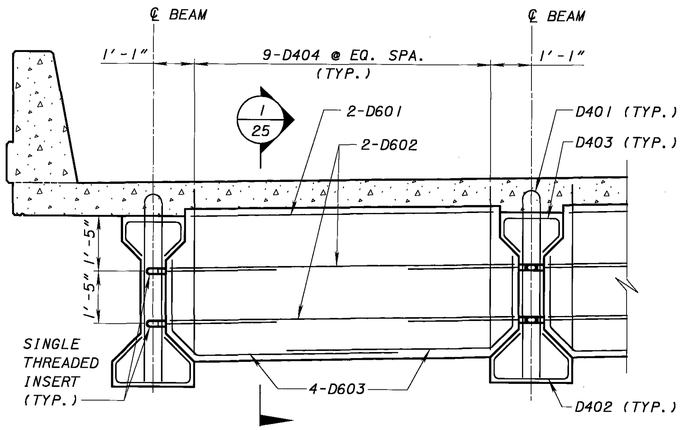
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S.R. 37 OVER MOOTS RUN

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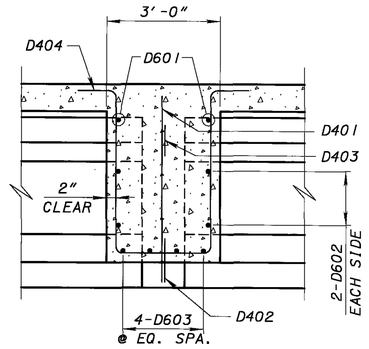
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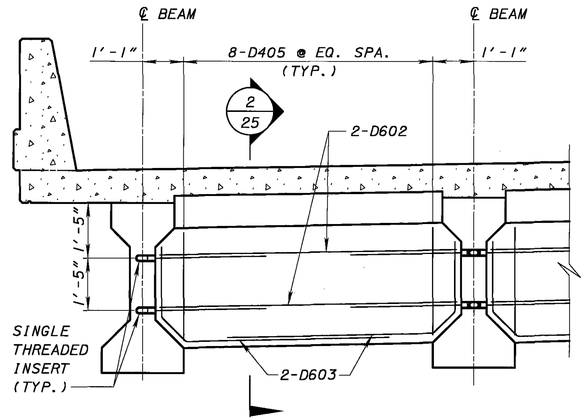
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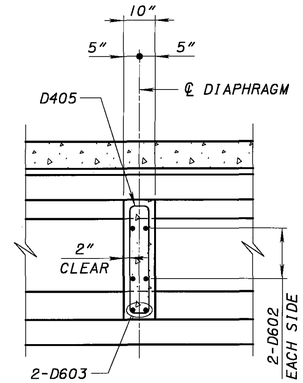
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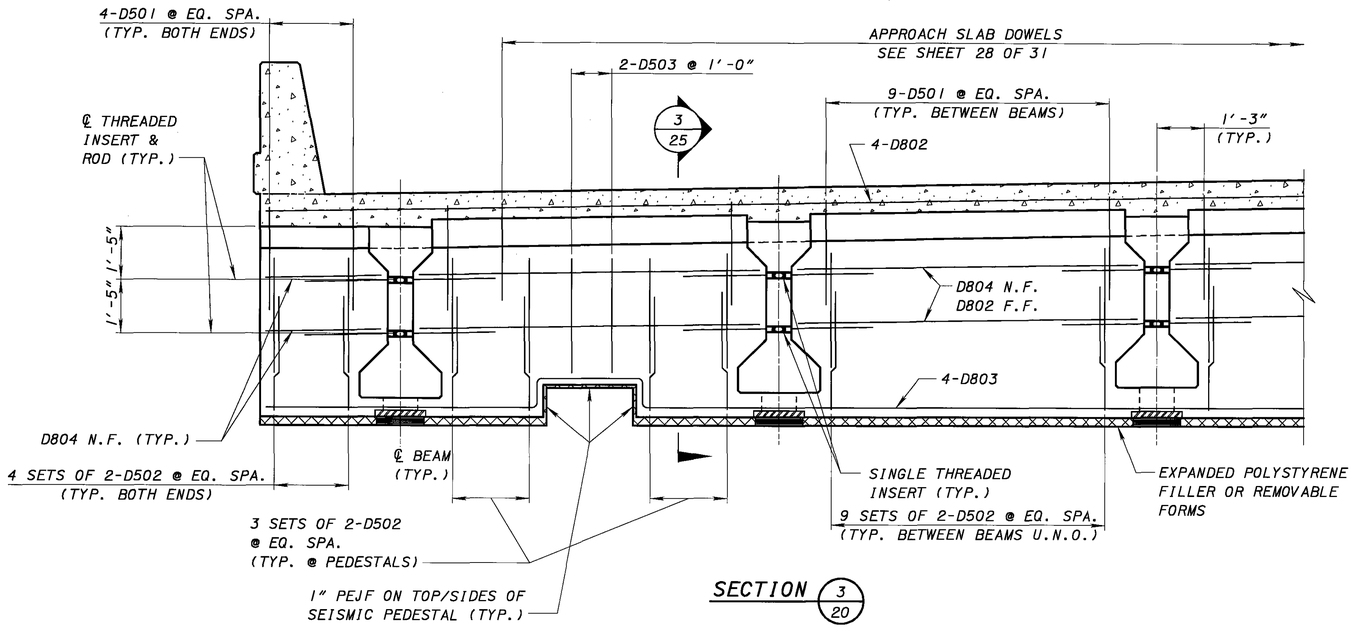
SECTION 1/25



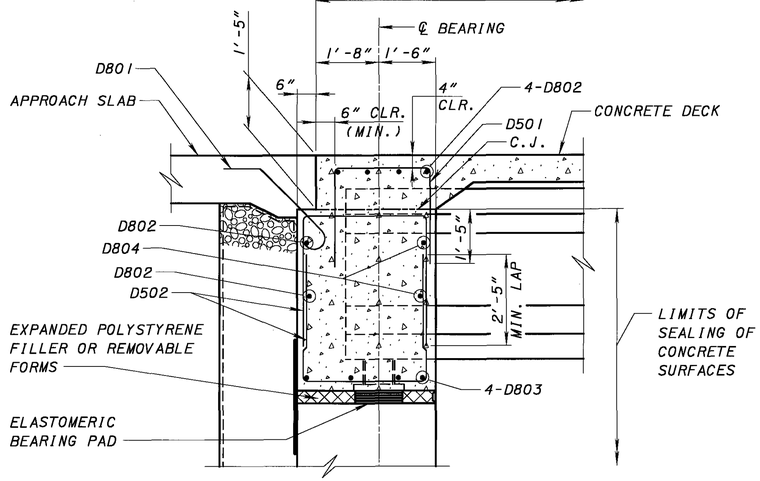
SECTION 2/20



SECTION 2/25



SECTION 3/20



SECTION 3/25

LEGEND:

℄	- CENTERLINE	U.N.O.	- UNLESS NOTED OTHERWISE
C.J.	- CONSTRUCTION JOINT		
CLR.	- CLEARANCE		
EQ.	- EQUAL		
F.F.	- FAR FACE		
MIN.	- MINIMUM		
N.F.	- NEAR FACE		
PEJF	- PREFORMED EXPANSION JOINT FILLER		
SPA.	- SPACED		
TYP.	- TYPICAL		

NOTES:

1. ABUTMENT DIAPHRAGM, PRESTRESSED I-BEAM SUPERSTRUCTURE: PLACE THE CONCRETE ENCASING THE PRESTRESSED I-BEAM STRUCTURAL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.

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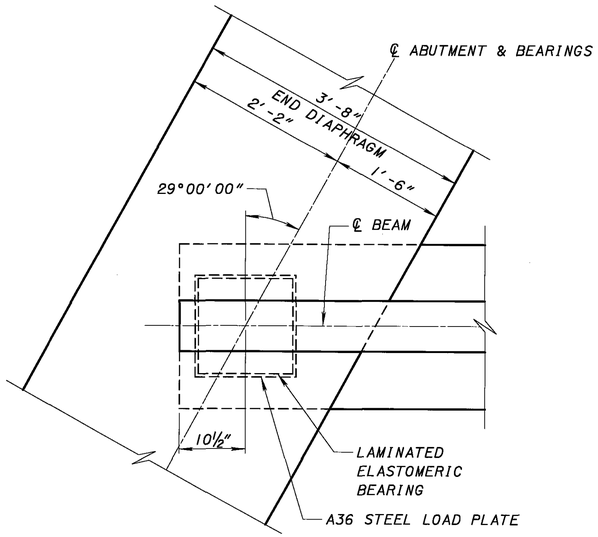
DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

SUPERSTRUCTURE DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER WOOTS RUN

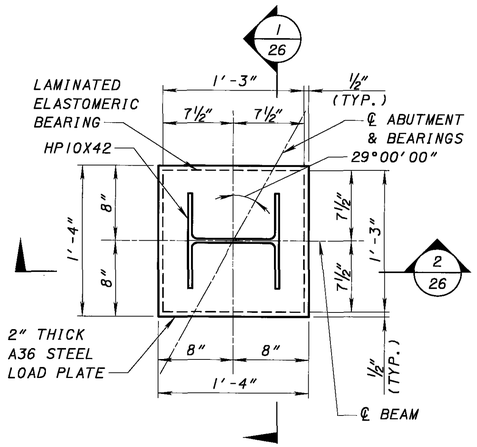
LIC-161-6.65
LIC-37-10.25
PID 77221

25/32

1157/1349

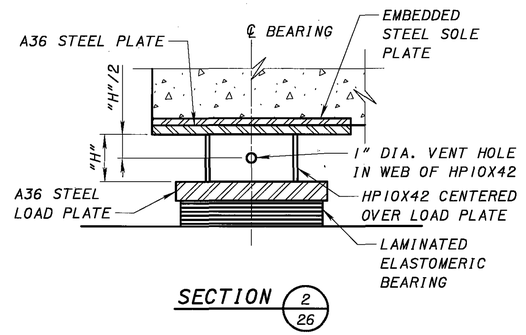


ABUTMENT BEARING PLAN

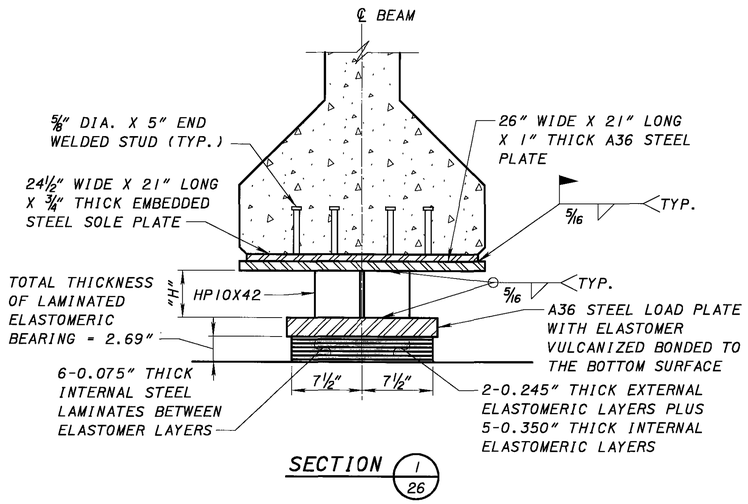


ABUTMENT BEARING DETAIL

(28 REQUIRED)



SECTION 2/26



SECTION 1/26

TABLE OF HP10X42 HEIGHTS (DIMENSION "H") LEFT BRIDGE (INCHES)

ABUTMENT	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6	BEAM 7
REAR	3 1/8	5 1/16	7	7 7/16	6 1/16	4 11/16	3 5/16
FORWARD	3 1/16	5	6 15/16	7 3/8	6	4 5/8	3 1/4

TABLE OF HP10X42 HEIGHTS (DIMENSION "H") RIGHT BRIDGE (INCHES)

ABUTMENT	BEAM 8	BEAM 9	BEAM 10	BEAM 11	BEAM 12	BEAM 13	BEAM 14
REAR	4 1/8	6 13/16	8 13/16	10 3/4	10 15/16	9 1/2	8 3/16
FORWARD	4 13/16	6 3/4	8 3/4	10 11/16	10 7/8	9 1/2	8 1/8

BEARING PROPERTIES

SPAN	1	1	2	2	3	3
LOCATION	REAR ABUT.	PIER 1	PIER 1	PIER 2	PIER 2	FWD. ABUT.
BEARING TYPE	EXP.	EXP.	EXP.	EXP.	EXP.	EXP.
NUMBER OF BEARINGS REQUIRED	14	14	14	14	14	14
DESIGN DEAD LOAD (KIPS)	124	114	109	109	114	124
DESIGN LIVE LOAD* (KIPS)	61	65	63	63	65	61
DESIGN TOTAL LOAD (KIPS)	185	178	171	171	178	185
LOAD PLATE THICKNESS (IN.)	2	2 1/8	2	2 1/8	2	2

*EXCLUDING IMPACT

LEGEND:

ABUT.	- ABUTMENT
℄	- CENTERLINE
DIA.	- DIAMETER
EXP.	- EXPANSION
FWD.	- FORWARD
IN.	- INCH
TYP.	- TYPICAL

NOTES:

1. A36 STEEL LOAD PLATES SHALL BE USED FOR ABUTMENT AND PIER BEARINGS. THE LOAD PLATE SHALL BE VULCANIZED BONDED TO THE LAMINATED ELASTOMERIC PAD DURING THE MOLDING PROCESS.
2. WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F, AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
3. BASIS OF PAYMENT: THE UNIT PRICE BID SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS, STEEL PLATES, AND HP SHAPES. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).
4. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
5. FOR ADDITIONAL DETAILS, SEE STANDARD BRIDGE DRAWING PSID-1-99.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

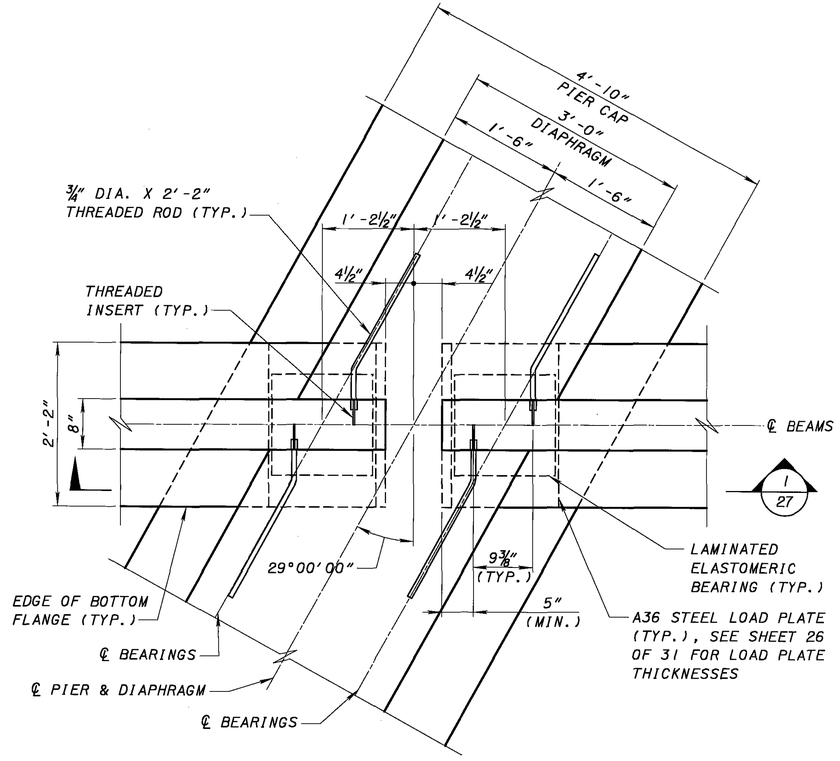
BEARING DETAILS 1
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

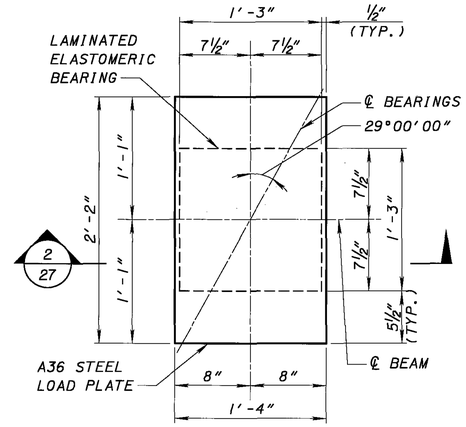
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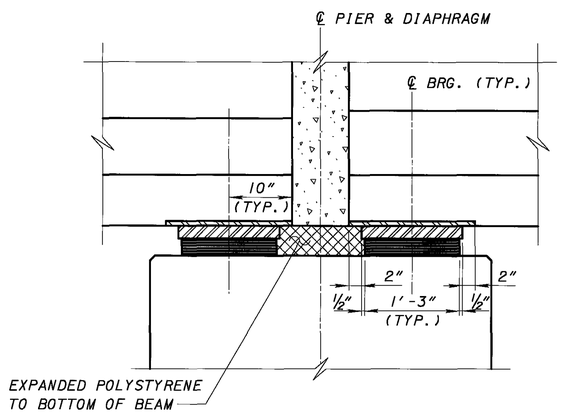


PIER BEARING PLAN

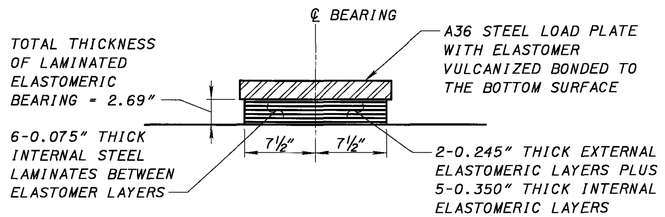


PIER BEARING DETAIL

(56 REQUIRED)



SECTION 1/27



SECTION 2/27

LEGEND:

BRG.	- BEARING
℄	- CENTERLINE
C/C	- CENTER-TO-CENTER
DIA.	- DIAMETER
MIN.	- MINIMUM
SPA.	- SPACED
TYP.	- TYPICAL

NOTES:

1. FOR BEARING PROPERTIES AND NOTES, SEE SHEET 26 OF 32.

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DESIGNED	DRAWN	REVIEWED	DATE
TAH	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

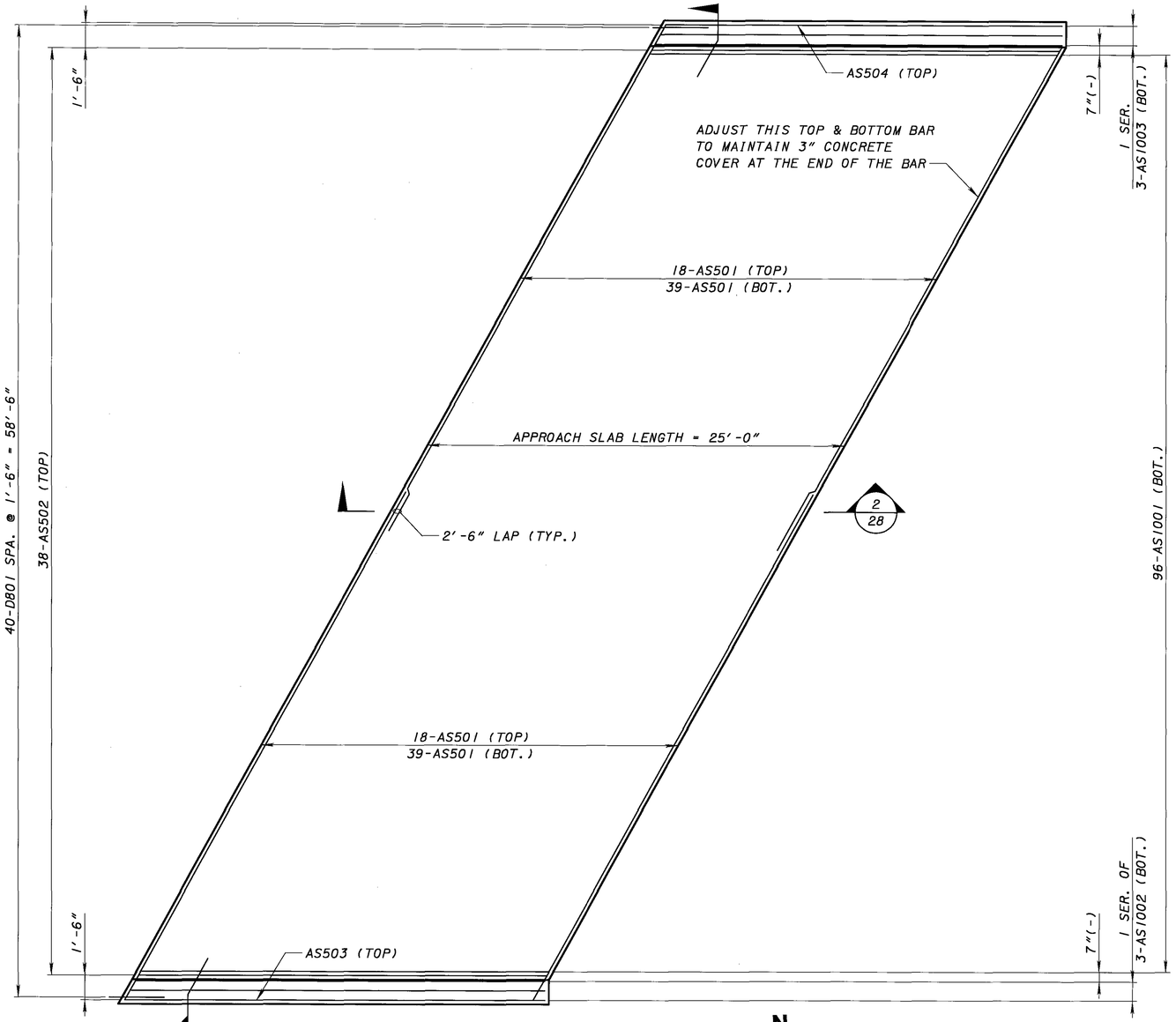
BEARING DETAILS 2
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

27/32

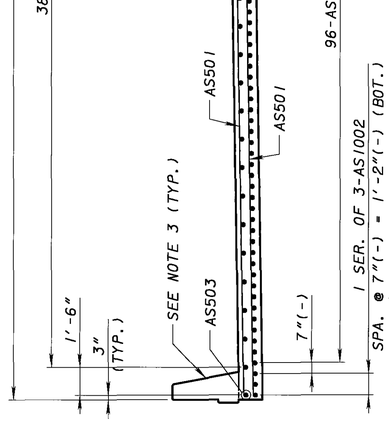
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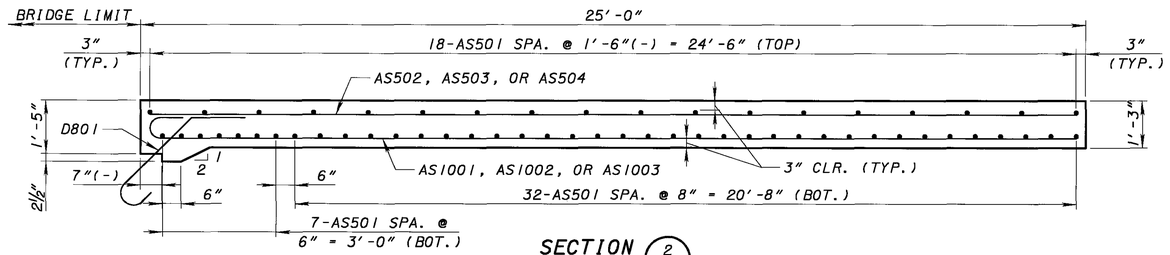


PLAN

(FORWARD APPROACH SLAB SHOWN, REAR APPROACH SLAB SIMILAR)



SECTION 1/28



SECTION 2/28

LEGEND:

BOT.	= BOTTOM
CLR.	= CLEARANCE
SER.	= SERIES
SPA.	= SPACED
TYP.	= TYPICAL

NOTES:

1. FIELD CUT AND BENDING OF REINFORCING STEEL TO FIT MAY BE REQUIRED.
2. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.
3. FOR APPROACH SLAB PARAPET DETAILS, SEE SHEET 29 OF 32.

DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVIEWED GWM 07-20-05
STRUCTURE FILE NUMBER 450169IL/4501705R

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APPROACH SLAB DETAILS

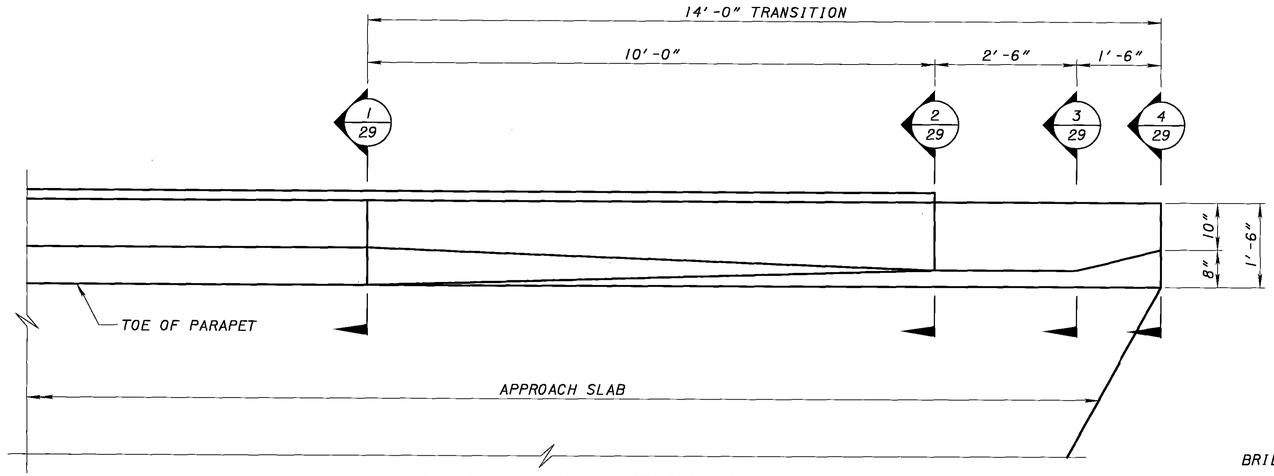
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

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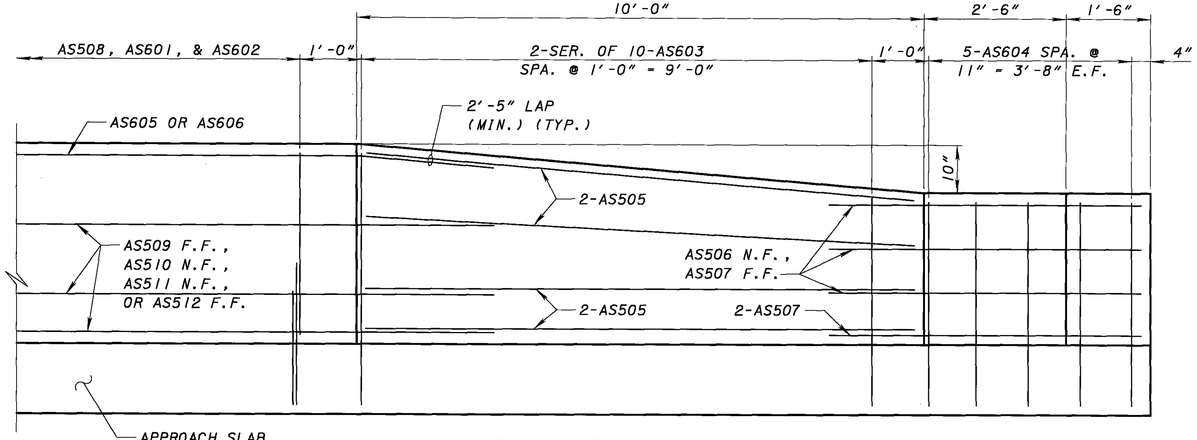
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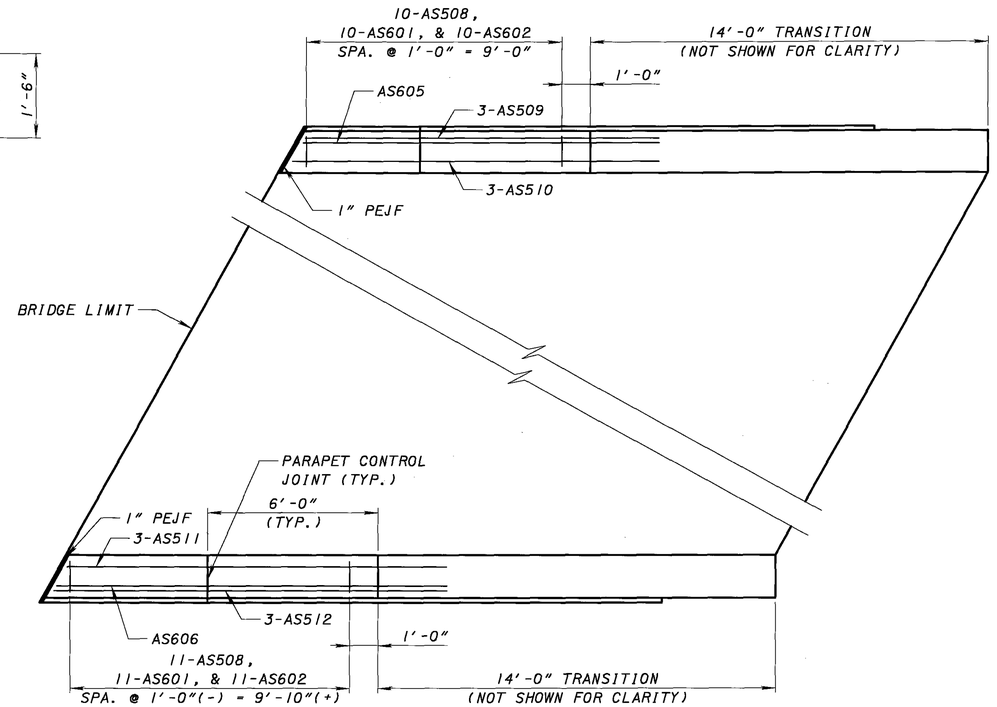
PARAPET TRANSITION PLAN

(LEFT FORWARD PARAPET SHOWN, OTHER PARAPETS SIMILAR)



PARAPET TRANSITION ELEVATION

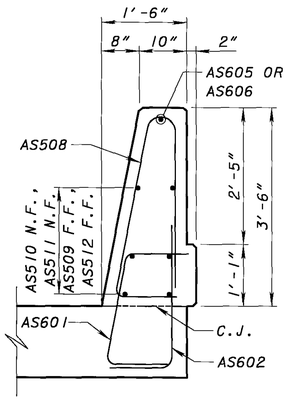
(LEFT FORWARD PARAPET SHOWN, OTHER PARAPETS SIMILAR)



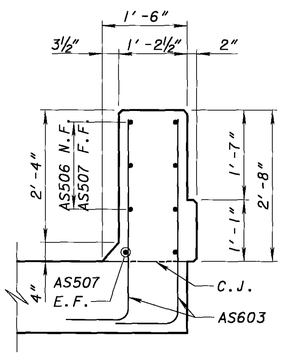
APPROACH SLAB PARAPET PLAN

(FORWARD APPROACH SLAB SHOWN, REAR APPROACH SLAB SIMILAR)

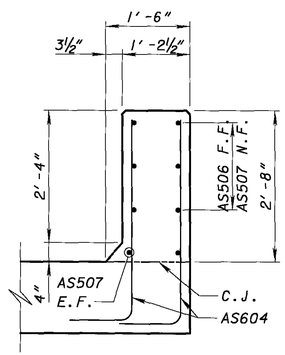
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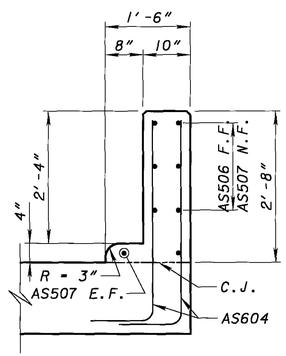
SECTION 1/29



SECTION 2/29



SECTION 3/29



SECTION 4/29

LEGEND:

C.J.	-	CONSTRUCTION JOINT
E.F.	-	EACH FACE
F.F.	-	FAR FACE
MIN.	-	MINIMUM
N.F.	-	NEAR FACE
PEJF	-	PREFORMED EXPANSION JOINT FILLER
R	-	RADIUS
SER.	-	SERIES
SPA.	-	SPACED
TYP.	-	TYPICAL

NOTES:

1. FIELD CUT AND BENDING OF REINFORCING STEEL TO FIT MAY BE REQUIRED.
2. FOR APPROACH SLAB DETAILS, SEE SHEET 28 OF 32.
3. FOR PARAPET CONTROL JOINT DETAILS, SEE SHEET 18 OF 32.

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DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/450170SR	

APPROACH SLAB PARAPET DETAILS
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

29 / 32

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STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
LEFT BRIDGE REAR ABUTMENT										
RA506	16	30'- 0"	501	1	30'- 0"					
RA507	8	18'- 5"	154	3	8'- 3"	2'- 2"				
RA509	2	9'- 2"	19	1	9'- 2"					
RA510	32	18'- 3"	609	J5J	3'- 4"	5'- 6¼"				
RA511	2	11'- 9"	25	1	11'- 9"					
RA515	2	13'- 5"	28	3	5'- 9"	2'- 2"				
RA517	5	8'- 4"	44	60	2'- 4"	2'- 2"	1'- 2"			
RA518	2	13'- 7"	28	3	5'-10"	2'- 2"				
RA519	1 SER. OF 7	10'- 5" TO 13'- 1"	86	3	4'- 3" TO 5'- 7"	2'- 2"				1
RA520	1	12'- 6"	13	9	11'- 2"	1'- 3¾"	0'- 2⅜"			
RA521	3	12'- 4"	39	1	12'- 4"					
RA522	4	16'- 9"	70	1	16'- 9¼"					
RA523	6	27'- 7"	173	1	27'- 7¼"					
RA534	1	13'- 5"	14	9	11'- 2"	2'- 3"	0'- 4"			
RA535	3	13'- 6"	42	1	13'- 6"					
RA536	40	13'- 8"	571	J5J	4'- 0"	2'- 7"				
RA601	3	15'- 0"	68	R5R	3'- 1"	3'-10"				
RA602	2	7'- 4"	22	3	3'- 1"	1'- 6"				
RA801	20	30'- 0"	1602	1	30'- 0"					
RA802	4	20'- 9"	222	1	20'- 9"					
RA804	4	7'- 4"	78	1	7'- 4"					
RA901	5	7'- 1"	121	3	3'- 1"	1'- 6"				
RA902	2	3'-10"	26	1	3'-10"					
		TOTAL =	4555							
LEFT BRIDGE REAR ABUTMENT DRILLED SHAFTS										
RA524	1	563'-11"	588	50	3'- 6"	0'- 4"	16'- 1½"			6,7
RA525	1	704'-10"	735	50	3'- 6"	0'- 4"	20'- 5½"			6,7
RA526	1	845'-10"	882	50	3'- 6"	0'- 4"	24'- 9½"			6,7
RA527	1	986'-10"	1029	50	3'- 6"	0'- 4"	29'- 1½"			6,7
RA528	1	1127'-10"	1176	50	3'- 6"	0'- 4"	33'- 5½"			6,7
RA529	1	1268'- 9"	1323	50	3'- 6"	0'- 4"	37'- 9½"			6,7
RA530	1	1409'- 9"	1470	50	3'- 6"	0'- 4"	42'- 1½"			6,7
RA531	1	1550'- 9"	1617	50	3'- 6"	0'- 4"	46'- 5½"			6,7
RA532	1	1691'- 9"	1764	50	3'- 6"	0'- 4"	50'- 9½"			6,7
RA533	1	1832'- 8"	1912	50	3'- 6"	0'- 4"	55'- 1½"			6,7
RAI801	14	21'-10"	4149	IH	18'- 9½"					6,7
RAI802	14	26'- 2"	4974	IH	23'- 1½"					6,7
RAI803	14	30'- 6"	5799	IH	27'- 5½"					6,7
RAI804	14	34'-10"	6624	IH	31'- 9½"					6,7
RAI805	14	39'- 2"	7449	IH	36'- 1½"					6,7
RAI806	14	43'- 6"	8274	IH	40'- 5½"					6,7
RAI807	14	47'-10"	9100	IH	44'- 9½"					6,7
RAI808	14	52'- 2"	9925	IH	49'- 1½"					6,7
RAI809	14	56'- 6"	10750	IH	53'- 5½"					6,7
RAI810	14	60'-10"	11575	IH	57'- 9½"					6,7
		TOTAL =	91115							
RIGHT BRIDGE REAR ABUTMENT										
RA501	1 SER. OF 7	4'- 5" TO 13'- 9"	66	3	1'- 3" TO 5'-11"	2'- 2"				1
RA502	3	14'- 5"	45	3	6'- 3"	2'- 2"				
RA503	1	17'- 1"	18	9	13'- 2"	3'- 7"	1'- 7"			
RA504	1 SER. OF 4	6'-11" TO 15'- 4"	46	1	6'-11" TO 15'- 4"					1
RA505	4	17'- 9"	74	1	17'- 9"					
RA506	42	30'- 0"	1314	1	30'- 0"					
RA507	42	18'- 5"	806	3	8'- 3"	2'- 2"				
RA508	96	17'- 8"	1772	J5J	6'- 0"	2'- 7"				
RA509	2	16'- 3"	34	3	7'- 2"	2'- 2"				
RA510	50	18'- 2"	949	J5J	3'- 4"	5'- 6"				
RA511	2	12'- 1"	25	1	12'- 1"					

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
RA512	5	15'-11"	83	1	15'-11"					
RA513	5	16'-11"	88	1	16'-11"					
RA514	4	19'-12"	83	1	19'-11½"					
RA515	28	13'- 5"	392	3	5'- 9"	2'- 2"				
RA516	6	17'- 3"	108	1	17'- 3"					
RA537	1	15'-11"	17	9	13'- 2"	2'- 6"	1'- 1"			
RA538	1 SER. OF 4	5'- 8" TO 14'- 2"	42	1	5'- 8" TO 14'- 2"					1
RA601	6	15'- 0"	135	R5R	3'- 1"	3'-10"				
RA602	4	7'- 4"	44	3	3'- 1"	1'- 6"				
RA801	24	30'- 0"	1922	1	30'- 0"					
RA802	4	20'- 9"	222	1	20'- 9"					
RA803	4	27'- 3"	291	1	27'- 3"					
RA901	10	7'- 1"	241	3	3'- 1"	1'- 6"				
RA902	4	3'-10"	52	1	3'-10"					
		TOTAL =	8894							
LEFT BRIDGE FORWARD ABUTMENT										
FA501	1 SER. OF 6	6'-11" TO 13'- 1"	62	3	2'- 6" TO 5'- 7"	2'- 2"				1
FA502	3	13'- 7"	42	3	5'-10"	2'- 2"				
FA503	1	16'- 5"	17	9	11'-11"	4'- 2"	1'-10"			
FA504	1 SER. OF 4	6'- 7" TO 15'- 1"	45	1	6'- 7" TO 15'- 0½"					1
FA505	1 SER. OF 4	5'- 5" TO 13'- 8"	40	1	5'- 5" TO 13'- 8"					1
FA506	4	17'- 4"	72	1	17'- 4"					
FA507	22	30'- 0"	688	1	30'- 0"					
FA508	28	18'- 5"	538	3	8'- 3"	2'- 2"				
FA509	82	17'- 8"	1513	J5J	6'- 0"	2'- 7"				
FA510	2	15'- 9"	33	3	6'-11"	2'- 2"				
FA511	50	18'- 2"	949	J5J	3'- 4"	5'- 6"				
FA512	2	12'- 3"	26	1	12'- 3"					
FA513	5	26'- 1"	136	1	26'- 1"					
FA514	5	27'- 6"	143	1	27'- 6"					
FA515	19	13'- 5"	266	3	5'- 9"	2'- 2"				
FA518	4	29'- 0"	121	1	29'- 0"					
FA520	6	26'- 3"	164	1	26'- 3"					
FA529	1	15'- 1"	16	9	11'-11"	2'-11"	1'- 3"			
FA601	6	15'- 0"	135	R5R	3'- 1"	3'-10"				
FA602	4	7'- 4"	44	3	3'- 1"	1'- 6"				
FA801	20	30'- 0"	1602	1	30'- 0"					
FA802	4	21'- 1"	225	1	21'- 1"					
FA803	4	33'- 9"	360	1	33'- 9"					
FA901	10	7'- 1"	241	3	3'- 1"	1'- 6"				
FA902	4	3'-10"	52	1	3'-10"					
		TOTAL =	7530							
RIGHT BRIDGE FORWARD ABUTMENT										
FA507	22	30'- 0"	688	1	30'- 0"					
FA508	23	18'- 5"	442	3	8'- 3"	2'- 2"				
FA509	76	17'- 8"	1402	J5J	6'- 0"	2'- 7"				
FA510	2	15'- 9"	33	3	6'-11"	2'- 2"				
FA511	50	18'- 0"	940	J5J	3'- 4"	5'- 5"				
FA516	5	19'- 7"	102	1	19'- 7"					
FA517	5	18'- 5"	96	1	18'- 5"					
FA519	4	22'- 2"	92	1	22'- 2"					
FA521	6	18'- 0"	113	1	18'- 0"					
FA522	2	12'- 1"	25	1	12'- 1"					
FA523	1	14'- 5"	15	3	6'- 3"	2'- 2"				
FA524	1 SER. OF 7	6'- 5" TO 13'-11"	74	3	2'- 3" TO 6'- 0"	2'- 2"				1

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
FA525	1	14'- 1"	15	9	13'- 0"	1'- 0"	0'- 6"			
FA526	1 SER. OF 4	4'- 1" TO 12'- 7"	34	1	4'- 1" TO 12'- 7"					1
FA527	1 SER. OF 4	5'- 2" TO 13'- 9"	40	1	5'- 2" TO 13'- 9"					1
FA528	4	16'- 1"	67	1	16'- 1"					
FA530	14	13'- 9"	201	3	5'-11"	2'- 2"				
FA531	1	15'- 5"	16	9	13'- 0"	2'- 3"	1'- 0"			
FA601	6	15'- 0"	135	R5R	3'- 1"	3'-10"				
FA602	4	7'- 4"	44	3	3'- 1"	1'- 6"				
FA801	20	30'- 0"	1602	1	30'- 0"					
FA804	4	25'- 6"	272	1	25'- 6"					
FA805	4	20'-11"	223	1	20'-11"					
FA901	10	7'- 1"	241	3	3'- 1"	1'- 6"				
FA902	4	3'-10"	52	1	3'-10"					
		TOTAL =	7038							
LEFT BRIDGE PIERS										
P401	856	8'- 5"	4836	3	2'-10"	3'- 0"				
P402	8	428'- 4"	2289	50	3'- 0"	0'- 4½"	15'-10½"			
P403	8	419'- 0"	2239	50	3'- 0"	0'- 4½"	15'- 5½"			
P503	4 SER. OF 9	13'- 1" TO 16'-10"	562	J5J	4'- 6"	1'- 9¼" TO 3'- 8"				1
P601	12	17'- 8"	319	R5R	3'- 1"	5'- 2"				
P602	8	4'- 5"	53	2	3'- 1"	1'- 6"				
P801	52	25'-10"	3581	IR	24'- 8"					
P802	8	22'- 9"	486	1	22'- 9"					
P803	8	21'- 4"	456	1	21'- 4"					
P804	44	18'-11"	2222	1	18'-11"					
P805	56	30'- 0"	4486	1	30'- 0"					
P806	36	8'-12"	865	9	4'-11"	3'- 8"	1'-10"			
P807	144	22'-11"	8811	1	22'-11"					
P808	144	7'- 9"	2980	1	7'- 9"					
P901	20	4'- 4"	292	2	3'- 1"	1'- 6"				
P902	8	5'- 2"	141	1	5'- 2"					
		TOTAL =	34618							
LEFT BRIDGE PIERS DRILLED SHAFTS										
P404	4	448'- 2"	1197	50	4'- 0"	0'- 4½"	12'- 1"			6,7
P405	4	547'- 9"	1464	50	4'- 0"	0'- 4½"	15'- 3½"			6,7
P809	120	12'- 1"	3872	1	12'- 1"					6,7
P810	120	15'- 4"	4899	1	15'- 3½"					6,7
		TOTAL =	11432							

NOTE:

1. FOR REINFORCING BAR BENDING DIAGRAMS AND NOTES, SEE SHEET 32 OF 32.

DLZ
620 HENTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501691L/4501705R	

REINFORCING STEEL LIST
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

30/32

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STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
RIGHT BRIDGE PIERS										
P401	856	8'- 5"	4836	3	2'-10"	3'- 0"				
P406	8	614'- 7"	3284	50	3'- 0"	0'- 4½"	23'- 4½"			
P407	8	605'- 3"	3235	50	3'- 0"	0'- 4½"	23'- 0"			
P501	128	9'- 8"	1291	1	9'- 8"					
P502	88	14'- 8"	1346	1	14'- 8"					
P503	4 SER. OF 9	13'- 1" TO 16'-10"	562	J5J	4'- 6"	1'- 9¼" TO 3'- 8"				1
P601	12	17'- 8"	319	R5R	3'- 1"	5'- 2"				
P602	8	4'- 5"	53	2	3'- 1"	1'- 6"				
P801	52	25'-10"	3581	1R	24'- 8"					
P802	8	22'- 9"	486	1	22'- 9"					
P803	8	21'- 4"	456	1	21'- 4"					
P804	44	18'-11"	2222	1	18'-11"					
P805	56	30'- 0"	4486	1	30'- 0"					
P806	36	8'-12"	865	9	4'-11"	3'- 8"	1'-10"			
P811	144	27'- 6"	10573	1	27'- 6"					
P812	144	9'- 7"	3669	1R	8'- 5"					
P901	20	4'- 4"	292	2	3'- 1"	1'- 6"				
P902	8	5'- 2"	141	1	5'- 2"					
P1101	112	17'-10"	10612	H1H	14'- 8"					
P1102	112	12'-10"	7637	H1H	9'- 8"					
		TOTAL =	59946							
LEFT BRIDGE SUPERSTRUCTURE										
S401	944	30'- 0"	18918	1	30'- 0"					
S402	118	21'-10"	1719	1	21'- 9¾"					
S501	720	30'- 0"	22529	1	30'- 0"					
S502	90	23'-10"	2235	1	23'- 9¾"					
S503	718	7'- 5"	5530	21	3'- 0"	3'- 2"	0'- 2¼"	1'- 1"	0'- 2¾"	
S504	234	33'- 0"	8054	1	33'- 0"					
S601	640	31'- 6"	30280	1	31'- 6"					
S602	309	35'-10"	16631	1	35'-10"					
S603	336	27'- 1"	13668	1	27'- 1"					
S604	1 SER. OF 27	3'- 8" TO 34'-11"	782	1	3'- 8" TO 34'-11"					1
S605	1 SER. OF 20	2'- 6" TO 25'- 4"	418	1	2'- 6" TO 25'- 4"					1
S606	1 SER. OF 25	2'- 5" TO 31'- 5"	636	1	2'- 5" TO 31'- 5"					1
S607	1 SER. OF 22	5'- 3" TO 30'- 7"	592	1	5'- 3" TO 30'- 7"					1
S608	18	30'- 0"	811	1	30'- 0"					
S609	718	2'- 7"	2797	2	1'- 8"	1'- 1"				
S610	718	3'- 5"	3721	19	1'- 1"	1'- 7"	0'- 4"	1'- 1"		
D401	14	10'- 4"	97	22	0'- 5½"	4'-10"	4'-10"	0'- 2¼"		
D402	14	4'- 9"	44	27	1'-11½"	0'- 6¼"	0'- 8½"	0'- 8½"		
D403	14	3'- 5"	32	27	1'- 5½"	0'- 5½"	0'- 5½"	0'- 5½"		
		TOTAL =	129494							
RIGHT BRIDGE SUPERSTRUCTURE										
S401	944	30'- 0"	18918	1	30'- 0"					
S402	118	20'- 6"	1616	1	20'- 6"					
S501	720	30'- 0"	22529	1	30'- 0"					
S502	90	17'- 9"	1666	1	17'- 9"					
S503	718	7'- 5"	5530	21	3'- 0"	3'- 2"	0'- 2¼"	1'- 1"	0'- 2¾"	
S504	234	33'- 0"	8054	1	33'- 0"					

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
S601	640	31'- 6"	30280	1	31'- 6"					
S602	309	35'-10"	16631	1	35'-10"					
S603	336	27'- 1"	13668	1	27'- 1"					
S604	1 SER. OF 27	3'- 8" TO 34'-11"	782	1	3'- 8" TO 34'-11"					1
S605	1 SER. OF 20	2'- 6" TO 25'- 4"	418	1	2'- 6" TO 25'- 4"					1
S606	1 SER. OF 25	2'- 5" TO 31'- 5"	636	1	2'- 5" TO 31'- 5"					1
S607	1 SER. OF 22	5'- 3" TO 30'- 7"	592	1	5'- 3" TO 30'- 7"					1 1
S608	18	30'- 0"	811	1	30'- 0"					
S609	718	2'- 7"	2797	2	1'- 8"	1'- 1"				
S610	718	3'- 5"	3721	19	1'- 1"	1'- 7"	0'- 4"	1'- 1"		
D401	14	10'- 4"	97	22	0'- 5½"	4'-10"	4'-10"	0'- 2¼"		
D402	14	4'- 9"	44	27	1'-11½"	0'- 6¼"	0'- 8½"	0'- 8½"		
D403	14	3'- 5"	32	27	1'- 5½"	0'- 5½"	0'- 5½"	0'- 5½"		
		TOTAL =	129414							
LEFT BRIDGE END DIAPHRAGMS										
D404	108	12'- 1"	875	R3R	4'- 3"	2'- 8"				
D501	124	7'- 5"	958	3	2'- 7"	2'- 6"				
D502	224	9'- 8"	2256	3	3'- 4"	3'- 3"				
D503	8	13'- 2"	110	J5J	3'- 4"	3'- 0"				
D601	24	7'-11"	285	1	7'-11"					
D602	48	8'- 10"	637	1	8'- 10"					
D603	96	7'- 8"	1108	15	0'- 0"	5'- 4"	0'- 7"	0'- 7"	1'- 9"	
D801	80	5'- 6"	1182	7H	1'- 0"	3'- 3"				
D802	8	37'- 0"	790	1	37'- 0"					
D803	12	37'-10"	1212	6	7'- 1"	0'-10"	2'- 6"	0'-10"	27'- 5"	
D804	12	8'-11"	286	1	8'-11"					
D805	12	3'- 0"	96	1	3'- 0"					
		TOTAL =	9795							
RIGHT BRIDGE END DIAPHRAGMS										
D404	108	12'- 1"	875	R3R	4'- 3"	2'- 8"				
D501	124	7'- 5"	958	3	2'- 7"	2'- 6"				
D502	224	9'- 8"	2256	3	3'- 4"	3'- 3"				
D503	8	13'- 2"	110	J5J	3'- 4"	3'- 0"				
D601	24	7'-11"	285	1	7'-11"					
D602	48	8'- 10"	637	1	8'- 10"					
D603	96	7'- 8"	1108	15	0'- 0"	5'- 4"	0'- 7"	0'- 7"	1'- 9"	
D801	80	5'- 6"	1182	7H	1'- 0"	3'- 3"				
D802	8	37'- 0"	790	1	37'- 0"					
D803	12	37'-10"	1212	6	7'- 1"	0'-10"	2'- 6"	0'-10"	27'- 5"	
D804	12	8'-11"	286	1	8'-11"					
D805	12	3'- 0"	96	1	3'- 0"					
		TOTAL =	9795							
LEFT BRIDGE APPROACH SLAB										
AS501	228	34'-10"	8284	1	34'-10"					
AS502	76	24'- 6"	1942	1	24'- 6"					
AS503	2	25'- 2"	52	1	25'- 2"					
AS504	2	23'- 9"	50	1	23'- 9"					
AS505	32	10'- 0"	334	1	10'- 0"					
AS506	12	5'- 6"	69	17	0'- 1"	1'- 8"	2'- 5"	1'- 4½"	0'- 4⅛"	
AS507	20	5'- 6"	115	1	5'- 6"					
AS508	42	7'- 5"	323	21	3'- 0"	3'- 2"	0'- 2¼"	1'- 1"	0'- 2¾"	
AS509	6	12'- 6"	78	1	12'- 6"					

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
AS510	6	12'-11"	81	1	12'-11"					
AS511	6	13'- 5"	84	1	13'- 5"					
AS512	6	13'-10"	87	1	13'-10"					
AS601	42	3'-10"	240	12	1'- 0¾"	1'-11⅝"	0'- 2⅜"			
AS602	42	3'- 5"	216	2	2'- 6"	1'- 1"				
AS603	8 SER. OF 10	4'- 6" TO 5'- 4"	592	2	3'- 7" TO 4'- 5"	1'- 1"				1
AS604	40	4'- 6"	271	2	3'- 7"	1'- 1"				
AS605	2	12'- 7"	38	1	12'- 7"					
AS606	2	13'- 9"	41	1	13'- 9"					
AS1001	192	25'-11"	21412	1H	24'- 6"					
AS1002	2 SER. OF 3	25'-11" TO 26'- 7"	678	1H	24'- 6" TO 25'- 2"					1
AS1003	2 SER. OF 3	25'- 2" TO 25'-10"	658	1H	23'- 9" TO 24'- 5"					1
		TOTAL =	35683							
RIGHT BRIDGE APPROACH SLAB										
AS501	228	34'-10"	8284	1	34'-10"					
AS502	76	24'- 6"	1942	1	24'- 6"					
AS503	2	25'- 2"	52	1	25'- 2"					
AS504	2	23'- 9"	50	1	23'- 9"					
AS505	32	10'- 0"	334	1	10'- 0"					
AS506	12	5'- 6"	69	17	0'- 1"	1'- 8"	2'- 5"	1'- 4½"	0'- 4⅛"	
AS507	20	5'- 6"	115	1	5'- 6"					
AS508	42	7'- 5"	323	21	3'- 0"	3'- 2"	0'- 2¼"	1'- 1"	0'- 2¾"	
AS509	6	12'- 6"	78	1	12'- 6"					
AS510	6	12'-11"	81	1	12'-11"					
AS511	6	13'- 5"	84	1	13'- 5"					
AS512	6	13'-10"	87	1	13'-10"					
AS601	42	3'-10"	240	12	1'- 0¾"	1'-11⅝"	0'- 2⅜"			
AS602	42	3'- 5"	216	2	2'- 6"	1'- 1"				
AS603	8 SER. OF 10	4'- 6" TO 5'- 4"	592	2	3'- 7" TO 4'- 5"	1'- 1"				1
AS604	40	4'- 6"	271	2	3'- 7"	1'- 1"				
AS605	2	12'- 7"	38	1	12'- 7"					
AS606	2	13'- 9"	41	1	13'- 9"					
AS1001	192	25'-11"	21412	1H	24'- 6"					
AS1002	2 SER. OF 3	25'-11" TO 26'- 7"	678	1H	24'- 6" TO 25'- 2"					1
AS1003	2 SER. OF 3	25'- 2" TO 25'-10"	658	1H	23'- 9" TO 24'- 5"					1
		TOTAL =	35645							
LEFT BRIDGE INTERMEDIATE DIAPHRAGMS										
D405	144	6'-11"	667	J5J	0'- 6"	2'- 9"				
D602	72	7'- 9"	838	1	7'- 9"					
D603	72	7'- 1"	768	15	0'- 0"	4'- 9"	0'- 7"	0'- 7"	1'- 9"	
		TOTAL =	2273							
RIGHT BRIDGE INTERMEDIATE DIAPHRAGMS										
D405	144	6'-11"	667	J5J	0'- 6"	2'- 9"				
D602	72	7'- 9"	838	1	7'- 9"					
D603	72	7'- 1"	768	15	0'- 0"	4'- 9"	0'- 7"	0'- 7"	1'- 9"	
		TOTAL =	2273							

NOTE:

1. FOR REINFORCING BAR BENDING DIAGRAMS AND NOTES, SEE SHEET 32 OF 32.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVISED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

REINFORCING STEEL LIST
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

31 / 32

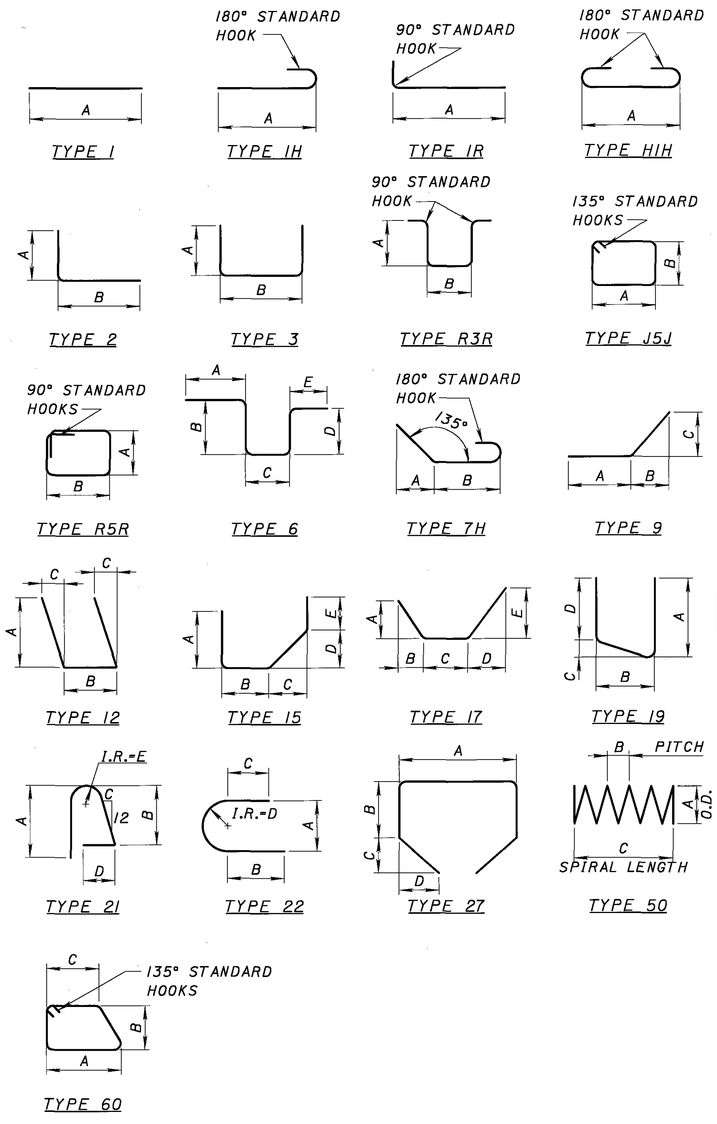
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NOTES:

1. SERIES BARS WITH EQUAL INCREMENTS.
2. ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED OTHERWISE.
3. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
4. THE BAR SIZE NUMBER IS SPECIFIED IN THE 'MARK' COLUMN. THE FIRST TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER.
5. TYPE '50' IS SPIRAL BAR.
6. LENGTH IS APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY PREBORING AT DRILLED SHAFT LOCATION.
7. FOR DRILLED SHAFTS, CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES SHALL BE USED AT SUFFICIENT INTERVALS (NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 10'-0") TO INSURE CONCENTRIC SPACING FOR THE ENTIRE CAGE LENGTH. SPACERS SHALL BE CONSTRUCTED OF APPROVED MATERIAL EQUAL IN QUALITY AND DURABILITY TO THE CONCRETE SPECIFIED FOR THE SHAFT. THE SPACERS SHALL HAVE ADEQUATE DIMENSIONS TO ENSURE A MINIMUM 3 INCHES CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE DESIGN DIMENSION OF THE DRILLED SHAFT OR COLUMN. CYLINDRICAL CONCRETE FEET (BOTTOM SUPPORTS) SHALL BE PROVIDED TO ENSURE THAT THE BOTTOM OF THE CAGE IS MAINTAINED AT THE PROPER DISTANCE ABOVE THE BASE.

BENDING DIAGRAM



DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
TAH	RTP	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450169IL/4501705R	

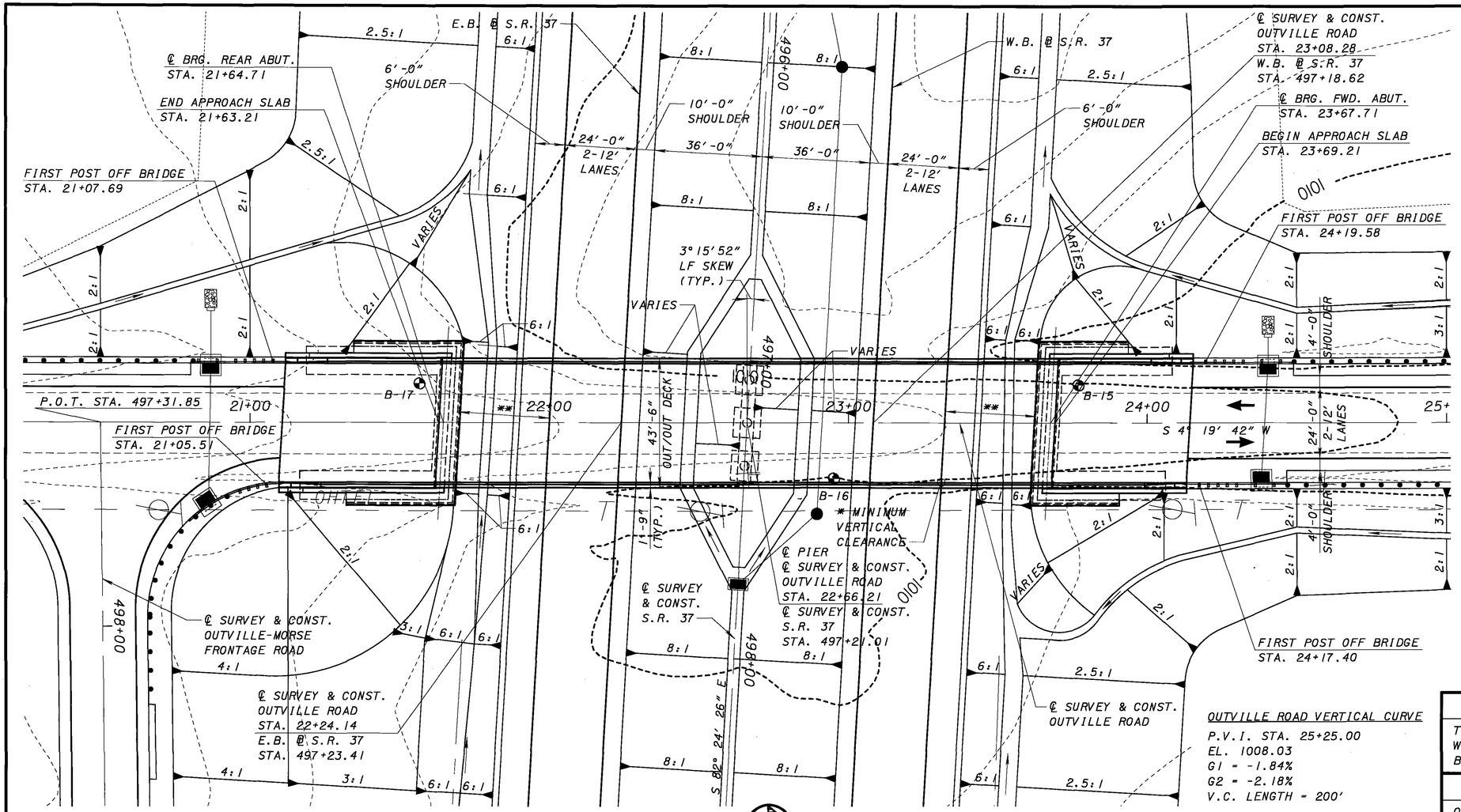
REINFORCING STEEL LIST
BRIDGE NO. LIC-37-1225 L & R
S.R. 37 OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25
PID 77221

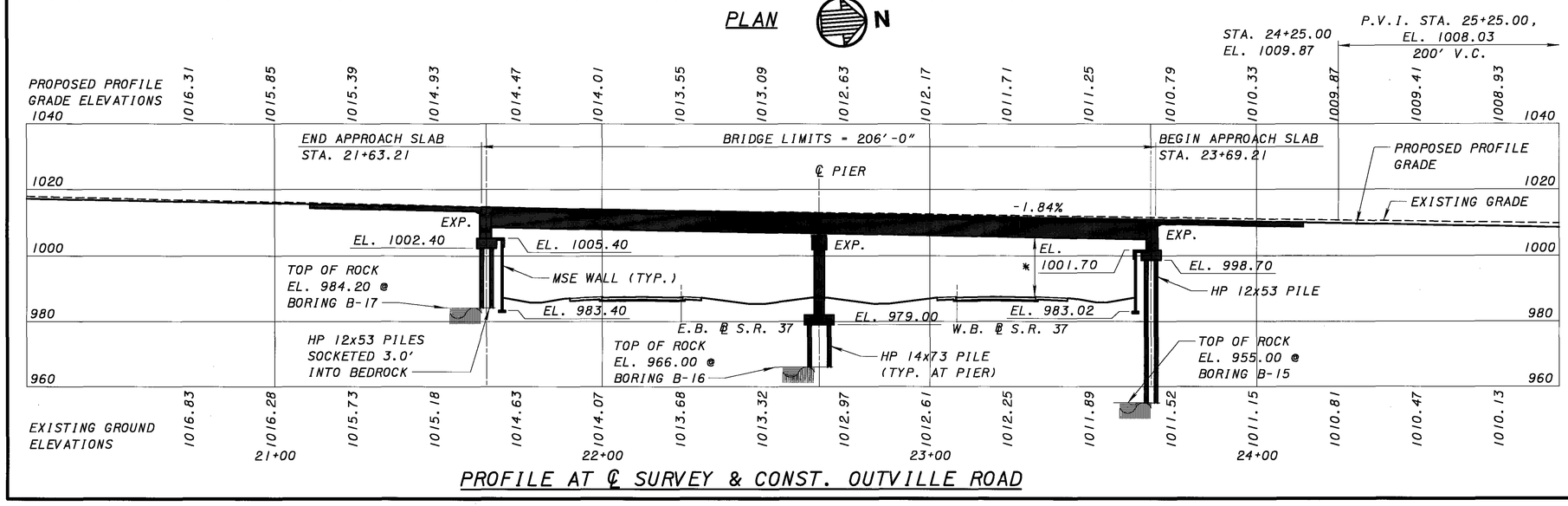
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PLAN



PROFILE AT ℄ SURVEY & CONST. OUTVILLE ROAD

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

LEGEND:

⊕	- BORING LOCATION
ABUT.	- ABUTMENT
℄	- BASELINE
BRG.	- BEARING
℄	- CENTERLINE
CONST.	- CONSTRUCTION
E.B.	- EASTBOUND
EL.	- ELEVATION
EXP.	- EXPANSION
FWD.	- FORWARD
LF	- LEFT FORWARD
MSE	- MECHANICALLY STABILIZED EARTH
P.V.I.	- POINT OF VERTICAL INTERSECTION
S.R.	- STATE ROUTE
STA.	- STATION
TYP.	- TYPICAL
V.C.	- VERTICAL CURVE
W.B.	- WESTBOUND

PILE TYPES AND ESTIMATED LENGTHS		
LOCATION	PILE TYPE	PILE LENGTH
REAR ABUT.	HP 12x53	25'
PIER	HP 14x73	15'
FWD. ABUT.	HP 12x53	50'

* MINIMUM VERTICAL CLEARANCE
17'-4⅜" ACTUAL
16'-6" REQUIRED

** MINIMUM LATERAL CLEARANCE
30'-4" ACTUAL
30'-0" REQUIRED

OUTVILLE ROAD VERTICAL CURVE
P.V.I. STA. 25+25.00
EL. 1008.03
G1 = -1.84%
G2 = -2.18%
V.C. LENGTH = 200'

BENCHMARK

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCHMARKS AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC

OUTVILLE ROAD:
CURRENT ADT (2010) = 1,920
CURRENT ADTT (2010) = 77
DESIGN ADT (2030) = 2,410
DESIGN ADTT (2030) = 96

S.R. 37:
CURRENT ADT (2010) = 44,060
CURRENT ADTT (2010) = 2,203
DESIGN ADT (2030) = 66,800
DESIGN ADTT (2030) = 3,340

PROPOSED STRUCTURE DATA

TYPE: TWO-SPAN COMPOSITE PRESTRESSED CONCRETE I-BEAM WITH REINFORCED CONCRETE CAP AND COLUMN PIER AND REINFORCED CONCRETE SEMI-INTEGRAL ABUTMENTS SUPPORTED ON MSE WALLS
SPANS: 101'-6", 101'-6"
ROADWAY: 40'-0" TOE/TOE PARAPETS
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 3°15'52" LF
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (52'-5" REAR ABUT.) (45'-1" FWD. ABUT.)
ALIGNMENT: TANGENT
CROWN: 0.016
LATITUDE: 40°04"20 N
LONGITUDE: 82°35'20" W

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM | DRAWN JAM | REVIEWED DOR | DATE 11-12-04
CHECKED JN | REVISED | STRUCTURE FILE NUMBER 4501721

LICKING COUNTY
STA. 21+63.21
STA. 23+69.21

SITE PLAN
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

1/33

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BRIDGE NOTES

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	DATED (REVISED)	07-19-02
PSID-1-99	DATED (REVISED)	07-18-03
SBR-1-99	DATED (REVISED)	07-19-02
SICD-1-96	DATED (REVISED)	07-19-02

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17th EDITION, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

HS25 AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT

DESIGN DATA:

CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI
SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7000 PSI
COMPRESSIVE STRENGTH (RELEASE) - 5000 PSI

PRESTRESSING STRAND:
AREA = 0.153 SQUARE INCHES
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2-½" CONCRETE COVER AT TOP OF DECK

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILES TO BEDROCK:

DRIVE FORWARD ABUTMENT AND PIER PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES TO A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR BY CONTACTING HARD BEDROCK AND THE PILE RECEIVING AT LEAST 20 BLOWS. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

REAR ABUTMENT PILES SHALL BE SEATED IN PREBORED HOLES.

THE ULTIMATE BEARING VALUE IS 129 TONS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 188 TONS PER PILE FOR THE PIER PILES.

ABUTMENT PILES:
30-HP12X53 PILES, 30 FEET LONG, ORDER LENGTH (REAR)
28-HP12X53 PILES, 55 FEET LONG, ORDER LENGTH (FORWARD)

PIER PILES:
18-HP14X73 PILES, 20 FEET LONG, ORDER LENGTH

ITEM 507, STEEL PILES HP12X53, FURNISHED, AS PER PLAN
ITEM 507, STEEL PILES, MISC., HP12X53 INSTALLED IN PREBORED HOLES
ITEM 507, PREBORED HOLES, AS PER PLAN

REAR ABUTMENT PILES SHALL BE INSTALLED IN 24 INCH DIAMETER HOLES PREBORED A MINIMUM OF THREE FEET DEEP INTO BEDROCK. THE PILES SHALL BE SUPPORTED BY TEMPORARY BRACING TO ASSURE MAINTENANCE OF THE PROPER LOCATION WHILE THE HOLES ARE FILLED WITH THE GROUT. PILE SUPPORT SHALL REMAIN IN PLACE UNTIL THE GROUT HAS CURED. AFTER THE PILE INSTALLATION HAS BEEN APPROVED BY THE ENGINEER, CONSTRUCTION OF THE MSE EMBANKMENT CAN PROCEED. FOR PILES EMBEDDED IN THE BEDROCK, PILE SLEEVES ARE NOT REQUIRED.

ITEM 507, STEEL POINTS, OR SHOES, AS PER PLAN:

USE STEEL PILE POINTS TO PROTECT THE TIPS OF THE PROPOSED STEEL "H" PILING. FURNISH STEEL POINTS FROM THE FOLLOWING MANUFACTURERS/SUPPLIERS: ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BLVD., CLIFTON, NEW JERSEY 07014; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL INC., 1618 N.E. FIRST AVE., PORTLAND, OREGON 97232; PILING ACCESSORIES, INC., 3467 GRIBBLE ROAD, MATTHEWS, NORTH CAROLINA 28105; OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO DIRECTOR. THE MATERIAL USED FOR THE MANUFACTURING OF PILE POINTS SHALL CONFORM TO ASTM A27 65/35 - CLASS 2 - HEAT TREATED OR AASHTO M103 65/35 - HEAT TREATED. WELD THE PILE POINTS TO THE PILE IN ACCORDANCE WITH AWS D1.5 OR THE MANUFACTURER'S WRITTEN WELDING PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED. SUBMIT A NOTARIZED COPY OF THE MILL TEST REPORT TO THE ENGINEER.

UTILITY LINES:

THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 516 SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:

INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼" X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE, WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS, SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY-DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E. I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094 ± 0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM (LONG. X TRANS.)	D751	700 X 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS MINIMUM	D751	9
BURST STRENGTH, PSI MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 °F, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40 °F, BEND AROUND ¼" MANDREL	D2136	NO CRACKING OF COATING

METHOD OF MEASUREMENT:

THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT:

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

ITEM 526 REINFORCED CONCRETE APPROACH SLAB (T=17"), AS PER PLAN

CONCRETE FOR APPROACH SLABS SHALL BE CLASS S, CMS 499. THE PARAPET ON THE APPROACH SLAB SHALL BE INCLUDED WITH ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN FOR PAYMENT.

ITEM 516 2" DEEP JOINT SEAL, AS PER PLAN

A 2" DEEP X ½" WIDE STRIP SHALL BE SAWCUT OUT OF ALL ROADWAY SURFACE ASPHALT ABUTTING THE ENDS OF APPROACH SLAB AFTER THE FINAL SURFACE COURSE HAS BEEN CONSTRUCTED. THE VOID SHALL BE SEALED WITH A JOINT SEALER AS PER 705.04. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN.

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DESIGNED	DRAWN	REVISED	REVIEWED	DATE
JAM	JAM		GWM	07-20-05
CHECKED			STRUCTURE FILE NUMBER	
AJM			4501721	

GENERAL NOTES 1
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

2 / 33

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BRIDGE NOTES (CONTINUED)

ITEM 511 CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN:
ITEM 894 HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

GENERAL REQUIREMENTS:

THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS:

ALL SUPERSTRUCTURE, BRIDGE DECK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN).

SEE THE CONCRETE TABLE ON THIS SHEET FOR THE PROPORTIONS TO BE USED AS A STARTING MIX DESIGN.

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

PARAPET CONSTRUCTION (FORMED AND POURED):

FORMS SHALL NOT BE REMOVED UNTIL AT LEAST 2 HOURS AFTER THE FINAL SET. DETERMINATION OF THE FINAL SET SHALL BE AS PER ASTM C266 (GILLMORE NEEDLE). TESTING SHALL BE PERFORMED BY THE CONTRACTOR AT NO COST TO THE STATE.

THE MINIMUM CONCRETE SLUMP DURING PLACEMENT OF FORMED CONCRETE PARAPETS SHALL BE 6 INCHES, WITH A MAXIMUM SLUMP OF 8 INCHES.

CRACK CONTROL JOINTS:

FOR BOTH SLIP FORMED AND FORMED AND POURED PARAPETS, THE CONTRACTOR SHALL CONSTRUCT 1½" DEEP AND ¼" WIDE CRACK CONTROL JOINTS WITH SPACING AS DETAILED ON SHEET 22 OF 33. THE CRACK CONTROL JOINTS SHALL BE MADE IN THE COMPLETE CIRCUMFERENCE OF THE PARAPET, STARTING AND ENDING AT THE ELEVATION OF THE TOP OF THE CONCRETE DECK. THE CONTRACTOR MAY EITHER FORM THE CRACK CONTROL JOINTS WITH FORM LINERS, OR, WITHIN 24 HOURS OF PLACEMENT, SAW CUT THE CRACK CONTROL JOINTS WITH THE USE OF AN EDGE GUIDE, FENCE, OR JIG WHICH IS REQUIRED TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE ENTIRE LENGTH OF EACH CONTROL JOINT SHALL BE SEALED TO A MINIMUM DEPTH OF 1½" WITH POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S.

BASIS OF PAYMENT:

PAYMENT FOR THE ABOVE COMPLETED AND ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	EXTEN.	UNIT	DESCRIPTION
511	50101	CU. YD.	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN
894	10001	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

ITEM 512 SEALING OF CONCRETE SURFACES (NON-EPOXY (CLEAR)):

SURFACES OF THE FORMLINED PORTION OF THE PARAPETS ON AND OFF THE BRIDGE, AS DETAILED IN THE PLANS, SHALL BE SEALED WITH A NON-EPOXY CLEAR SEALER.

ITEM 512 SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

CONCRETE SURFACES SHALL BE SEALED, AS DETAILED IN THE PLANS, WITH LIGHT NEUTRAL FEDERAL COLOR NO. 17778. THE EXTERIOR BEAMS SHALL BE SEALED WITH BROWN FS-595B-10324 AS SHOWN ON SHEET 15/33.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)
HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	#8 COARSE AGGRE.* (LB)	#57 COARSE AGGRE.* (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	GGBF SLAG (LB)	MICRO-SILICA (LB)	WATER TO CEMENT. RATIO ±.01	AIR CONTENT ±2%
GRAVEL	1245	360	1315	2920	400	170	30	0.43	7
LIMESTONE	1245	360	1335	2940	400	170	30	0.43	7
SLAG	1245	315	1155	2715	400	170	30	0.43	7

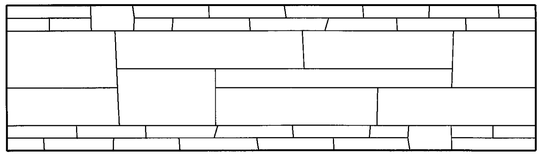
* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER, AS DEFINED PER ASTM C127.

ARCHITECTURAL FINISH:

THE SURFACE FINISH SHALL BE THE PATTERN DESCRIBED BELOW IN THE ARCHITECTURAL WALL ELEVATION FROM FOSTER GEOTECHNICAL OR AN APPROVED EQUAL MEETING THE DETAILS SHOWN ON THIS SHEET. THE INTEGRALLY COLORED CONCRETE USING CHROMIX ADMIXTURES SHALL BE AS PROVIDED BY L. M. SCOFIELD COMPANY, DOUGLASVILLE, GEORGIA (800) 800-9900 OR AN APPROVED EQUAL SHALL BE C-21 ADOBE TAN AS PROVIDED.

ONE PRECONSTRUCTION TEST SAMPLE SHALL BE PROVIDED FOR APPROVAL BY THE DIRECTOR. IF THE TEST SAMPLE DOES NOT MEET THE APPROVAL OF THE DIRECTOR, THE RESULTS MAY BE GROUNDS TO REJECT THE PROPOSED PARAPET PANEL OR INTEGRALLY COLORED CONCRETE. THE TEST SAMPLE MUST PASS APPROVAL. FAILURE WILL CONSTITUTE PLACEMENT OF ANOTHER TEST SAMPLE. A FIVE FOOT BY FIVE FOOT TEST SAMPLE SHOULD BE MADE (OR THE SIZE OF THE MSE WALL PANELS). THE MOCK-UP SHALL HAVE THE SAME ARCHITECTURAL RELIEF, THICKNESS, AND PATTERN TO BE USED ON THE PROJECT. THE SAMPLE SHOULD BE OF THE SAME CEMENT, AGGREGATE SOURCE, AND INTEGRALLY COLORED CONCRETE THAT WILL BE USED TO MAKE THE PARAPET PANEL. AFTER APPROVAL, THE CONCRETE TEST SAMPLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

ALL AESTHETIC TREATMENT INCLUDING THE INTEGRALLY COLORED CONCRETE, SURFACE FINISH, TEST SAMPLES, AND ALL OTHER MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED WITH ITEM 840, MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN.



ARCHITECTURAL
PANEL ELEVATION

THE FOLLOWING SHALL BE USED:

COMPANY NAME	PANEL SURFACE TREATMENT	SPECIFICATIONS
SPEC FORMLINERS, INC.	COLORADO RED FLAGSTONE # 1537	MAX RELIEF 2" LINER THICKNESS 1/8" ± STONE SIZE 2" TO 1'-4"
CUSTOM ROCK INTERNATIONAL	MINNEHAHA BLEND #12010	MAX RELIEF 5/8" LINER THICKNESS 1 3/8" STONE SIZE 4" TO 30"
APPROVED EQUAL	APPROVED EQUAL	APPROVED EQUAL

NOTE: THE ARCHITECTURAL PATTERN & CONCRETE COLOR SHALL BE THE SAME FOR THE ENTIRE PROJECT.

ABUTMENT DIAPHRAGM, PRESTRESSED I-BEAM SUPERSTRUCTURE:

PLACE THE CONCRETE ENCASING THE PRESTRESSED I-BEAM STRUCTURAL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.

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DESIGNED JAM | DRAWN JAM | CHECKED AJM | REVISED | REVIEWED GWM | DATE 07-20-05 | STRUCTURE FILE NUMBER 4501721

GENERAL NOTES 2
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

1167
1349

$DATE$
$TIME$
$FILE$

ESTIMATED QUANTITIES

CALC. BY: JAM DATE: 07/20/05
CHKD. BY: CMC DATE: 07/21/05

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIER	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
203	35110	2,257	CU YD	GRANULAR MATERIAL, TYPE B	1,321	936				33
503	21100	122	CU YD	UNCLASSIFIED EXCAVATION			122			
503	31100	41	CU YD	ROCK EXCAVATION	41					
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP	
507	00200	1,540	FT	STEEL PILES HP12X53, FURNISHED		1,540				
507	00201	900	FT	STEEL PILES HP12X53, FURNISHED, AS PER PLAN	900					2
507	00250	1,400	FT	STEEL PILES HP12X53, DRIVEN		1,400				
507	00300	360	FT	STEEL PILES HP14X73, FURNISHED			360			
507	00350	270	FT	STEEL PILES HP14X73, DRIVEN			270			
507	00400	750	FT	STEEL PILES, MISC.: HP12X53 INSTALLED IN PREBORED HOLES	750					2
507	92200	270	FT	PREBORED HOLES			270			
507	92201	90	FT	PREBORED HOLES, AS PER PLAN	90					2
507	93301	46	EACH	STEEL POINTS, OR SHOES, AS PER PLAN		28	18			2
509	10000	150,996	POUND	EPOXY COATED REINFORCING STEEL	13,154	11,631	18,973	107,238		26, 27
511	41000	44	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS			44			
511	43501	369	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	199	170				11, 12
511	46500	30	CU YD	CLASS C CONCRETE, FOOTING			30			
511	50101	98	CU YD	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN				68	30	3
512	10050	430	SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)	146	106		123	55	3
512	10100	1,511	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	248	212	103	813	135	3
515	15030	12	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MOD. (60 IN.)				12		
515	20000	30	EACH	INTERMEDIATE DIAPHRAGMS				30		
516	13600	77	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	29	29			19	
516	13900	405	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	217	188				
516	14021	159	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	80	79				2
516	31011	80	FT	2" DEEP JOINT SEALER, AS PER PLAN	40	40				2
516	44200	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 3.96"x1'-4"x1'-4") (LOAD PLATE 2"x1'-5"x1'-5")	6	6				
516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 3.96"x1'-4"x1'-4") (LOAD PLATE 2"x1'-5"x2'-2")			6			
516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE 3.96"x1'-4"x1'-4") (LOAD PLATE 2.5"x1'-5"x2'-2")			6			
518	21200	224	CU YD	POROUS BACKFILL WITH FILTER FABRIC	119	105				
518	40000	240	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	127	113				
518	40010	84	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	43	41				
526	30001	471	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN					471	2, 23-25
601	20000	6	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION	3	3				
840	20001	4,375	SQ FT	MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN	2,483	1,892				29
840	21000	865	CU YD	WALL EXCAVATION	224	302				
840	22000	178	SQ YD	FOUNDATION PREPARATION		178				
840	23000	1,823	CU YD	SELECT GRANULAR BACKFILL	1076	747				
840	24000	18	CU YD	POROUS BACKFILL WITH FILTER FABRIC	10	8				
840	25010	481	FT	6" DRAINAGE PIPE, PERFORATED	257	224				
840	25020	157	FT	6" DRAINAGE PIPE, NON-PERFORATED	78	79				
840	26000	240	FT	CONCRETE COPING	127	113				
840	27000	5	DAY	ON-SITE ASSISTANCE					5	
840	28000	LUMP		SGB INSPECTION AND COMPACTION TESTING					LUMP	
894	10001	339	CU YD	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN				339		3

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DESIGNED JAM
DRAWN JAM
CHECKED CMC
REVISED
REVISED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 4501721

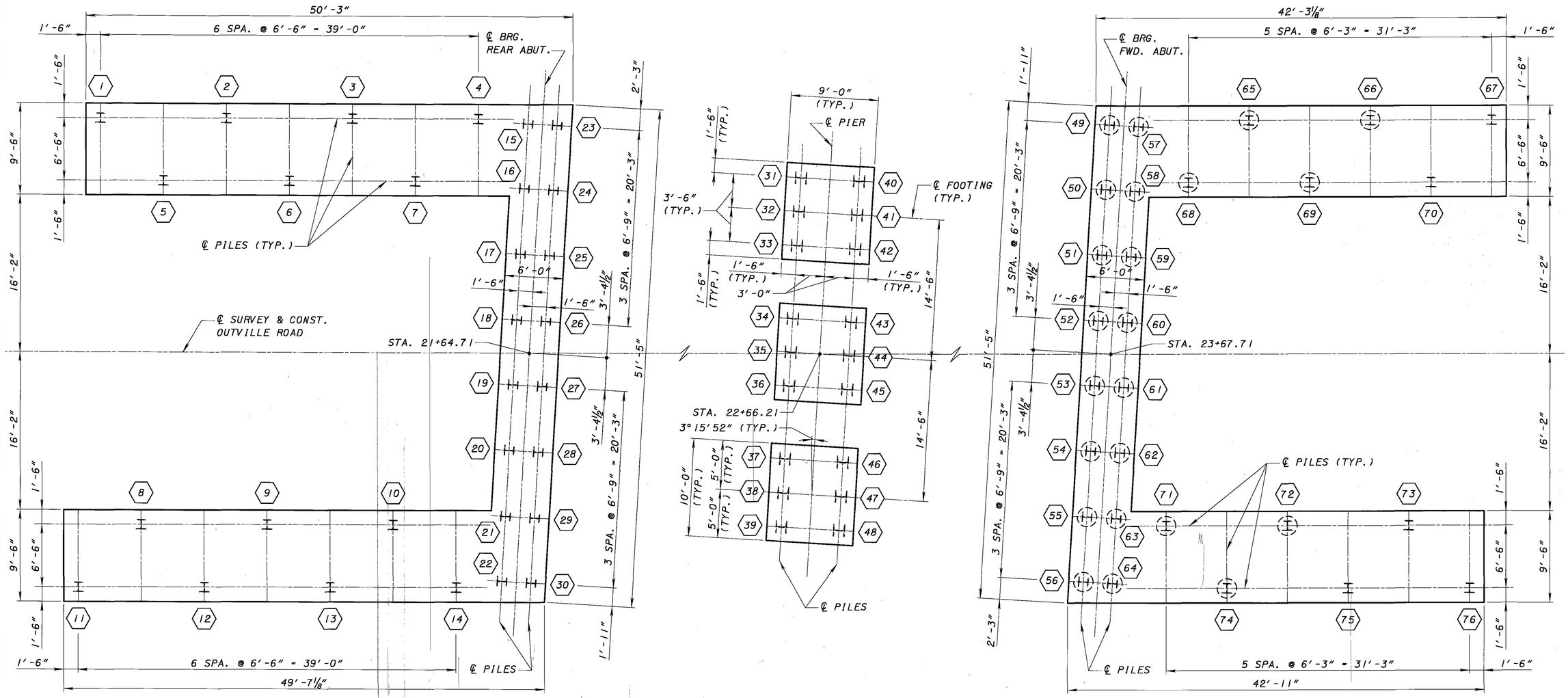
ESTIMATED QUANTITIES
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

4 / 33

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FOUNDATION PLAN

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LEGEND:

ABUT.	- ABUTMENT	(23)	- PILE NUMBER
BRG.	- BEARING	H	- HP12X53 PILE (ABUT.)
℄	- CENTERLINE	(H)	- HP12X53 PILE INSIDE SLEEVE (FWD. ABUT.)
CONST.	- CONSTRUCTION		
FWD.	- FORWARD	H	- HP14X73 PILE (PIER)
MSE	- MECHANICALLY STABILIZED EARTH		
SPA.	- SPACED		
STA.	- STATION		
TYP.	- TYPICAL		

NOTES:

1. FOR THE FORWARD ABUTMENT PILES:
PILE SLEEVES ARE REQUIRED WHEN PILES ARE LOCATED INSIDE THE REINFORCED SOIL MASS. INSTALL PILES THROUGH SLEEVES AFTER THE WALL CONSTRUCTION HAS BEEN COMPLETED. THE SLEEVE MATERIAL SHALL BE CORRUGATED SMOOTH LINED PIPE, 707.33 OR 707.42. MAINTAIN ALIGNMENT OF THE PILE SLEEVE DURING CONSTRUCTION OF THE EMBANKMENT. PLACE A BENTONITE SLURRY IN THE VOID LOCATED BETWEEN THE PILE AND THE SLEEVE, AS DESCRIBED IN THE MSE WALL SPECIAL PROVISIONS. PILE SLEEVES SHALL BE INCLUDED WITH MSE WALL QUANTITIES FOR PAYMENT.

2. FOR THE REAR ABUTMENT PILES:
PILE SLEEVES ARE NOT REQUIRED FOR THE REAR ABUTMENT PILES. REAR ABUTMENT PILES WILL BE GROUTED IN PLACE. FOR DETAILS SEE GENERAL NOTE ON SHEET 2 OF 33.

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DESIGNED JAM | DRAWN JAM | CHECKED AJM | REVISED | REVIEWED GWM | DATE 07-20-05 | STRUCTURE FILE NUMBER 4501721

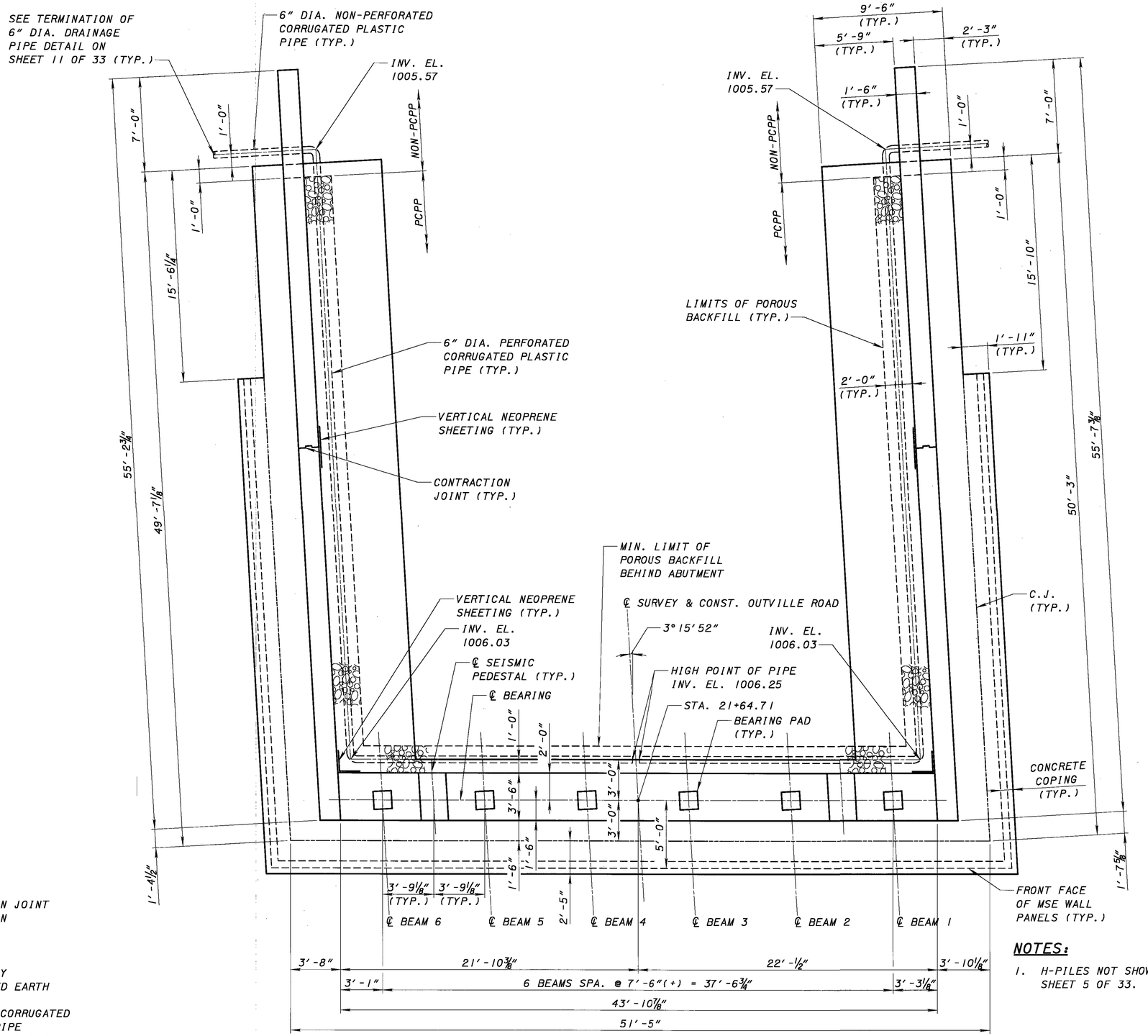
FOUNDATION PLAN
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

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PLAN

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LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
EL.	- ELEVATION
INV.	- INVERT
MIN.	- MECHANICALLY STABILIZED EARTH
MSE	- MINIMUM
PCPP	- PERFORATED CORRUGATED PLASTIC PIPE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SPA.	- SPACED
STA.	- STATION
TYP.	- TYPICAL

NOTES:

1. H-PILES NOT SHOWN FOR CLARITY. FOR FOUNDATION PLAN, SEE SHEET 5 OF 33.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

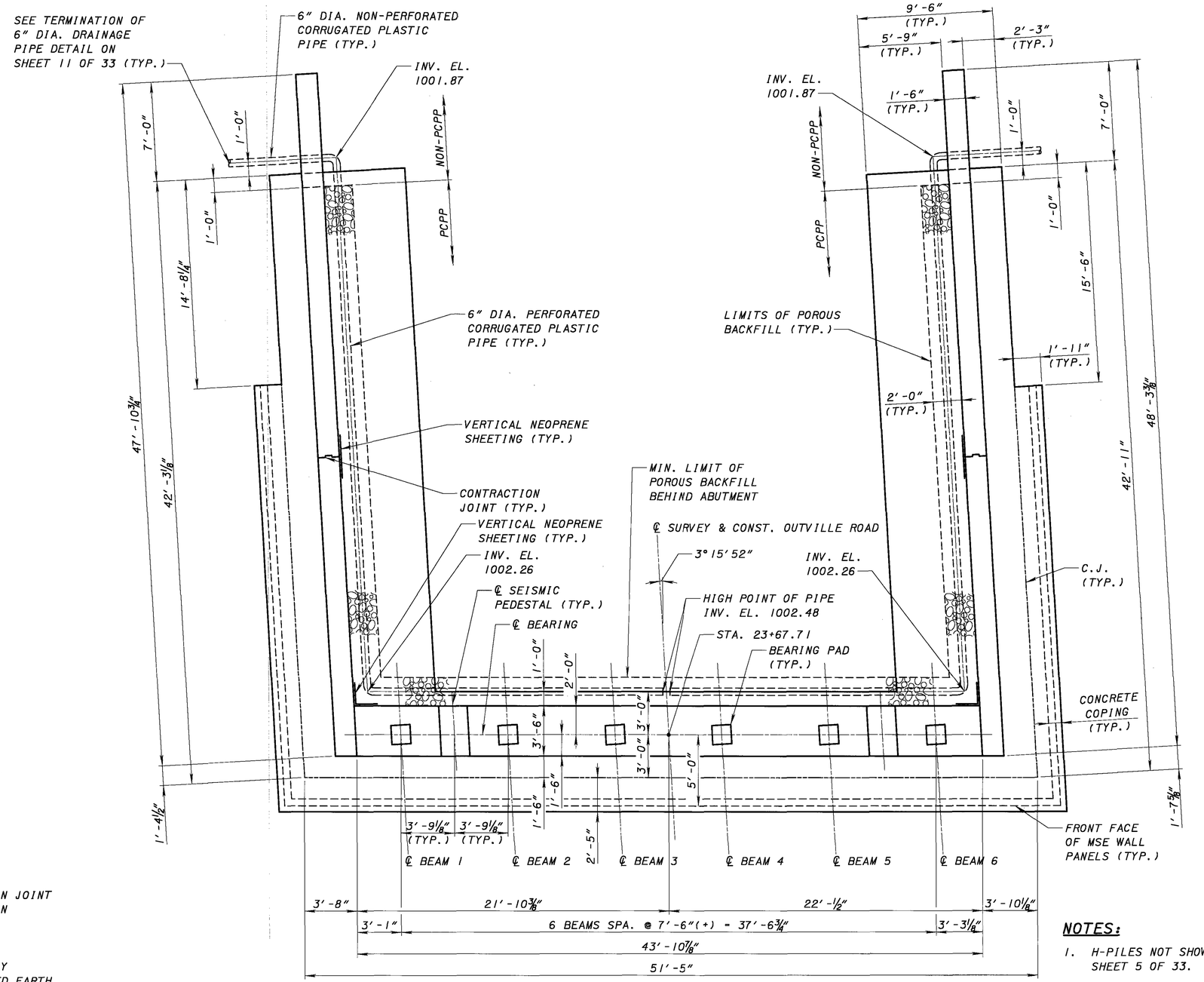
REAR ABUTMENT PLAN
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

6 / 33

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PLAN

LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
EL.	- ELEVATION
INV.	- INVERT
MSE	- MECHANICALLY STABILIZED EARTH
PCPP	- PERFORATED CORRUGATED PLASTIC PIPE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SPA.	- SPACED
STA.	- STATION
TYP.	- TYPICAL

NOTES:

1. H-PILES NOT SHOWN FOR CLARITY. FOR FOUNDATION PLAN, SEE SHEET 5 OF 33.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVISED	CHECKED	REVIEWED	DATE
JAM	JAM		AJM	GWM	07-20-05

STRUCTURE FILE NUMBER 4501721

FORWARD ABUTMENT PLAN

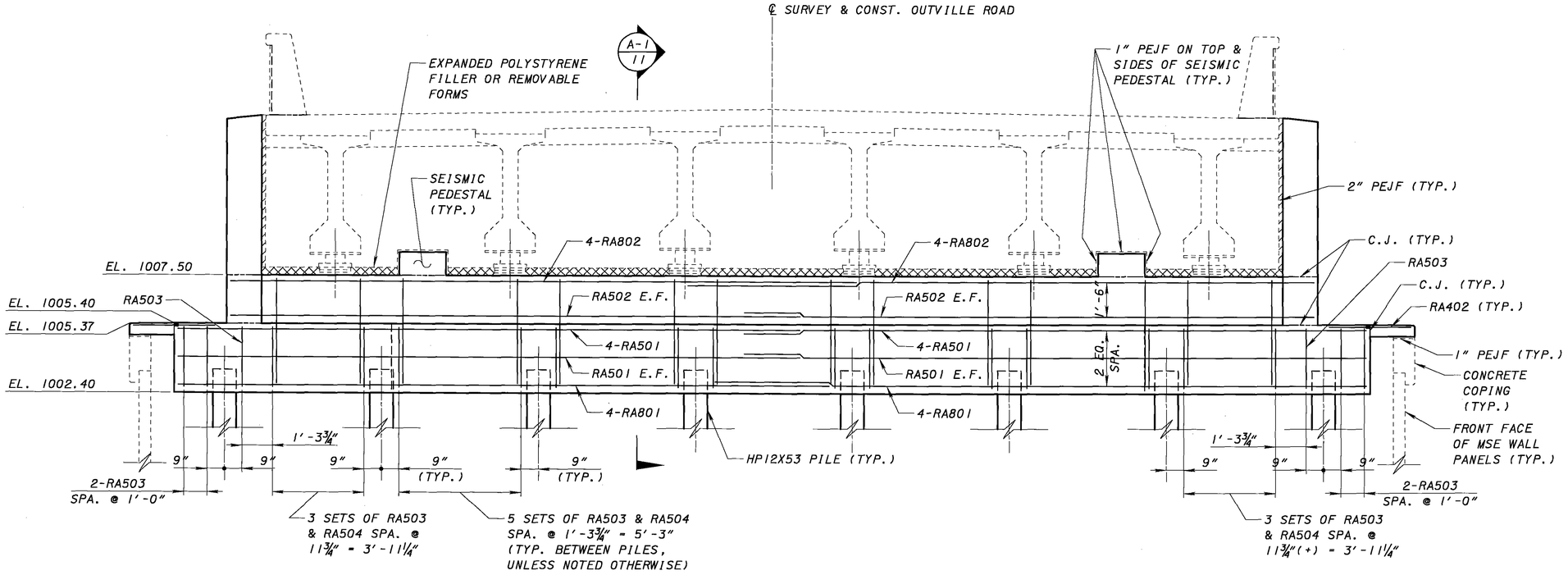
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

7 / 33

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REAR ABUTMENT ELEVATION

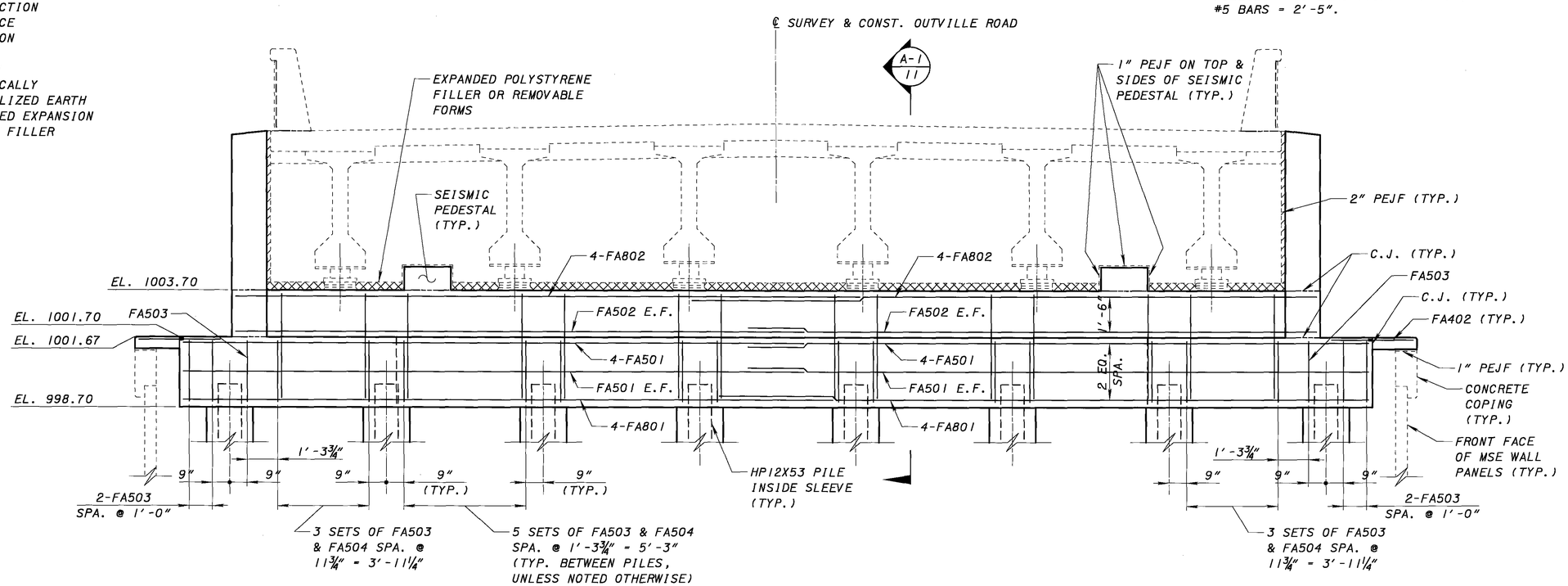
(FRONT MSE WALL NOT SHOWN FOR CLARITY)

LEGEND:

℄	= CENTERLINE
C.J.	= CONSTRUCTION JOINT
CONST.	= CONSTRUCTION
E.F.	= EACH FACE
EL.	= ELEVATION
EQ.	= EQUAL
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
PEJF	= PREFORMED EXPANSION JOINT FILLER
SPA.	= SPACED
TYP.	= TYPICAL

NOTES:

1. FOR THE ABUTMENT REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS (TOP) = 7'-3"; #8 BARS (OTHER) = 4'-11"; #5 BARS = 2'-5".



FORWARD ABUTMENT ELEVATION

(FRONT MSE WALL NOT SHOWN FOR CLARITY)

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

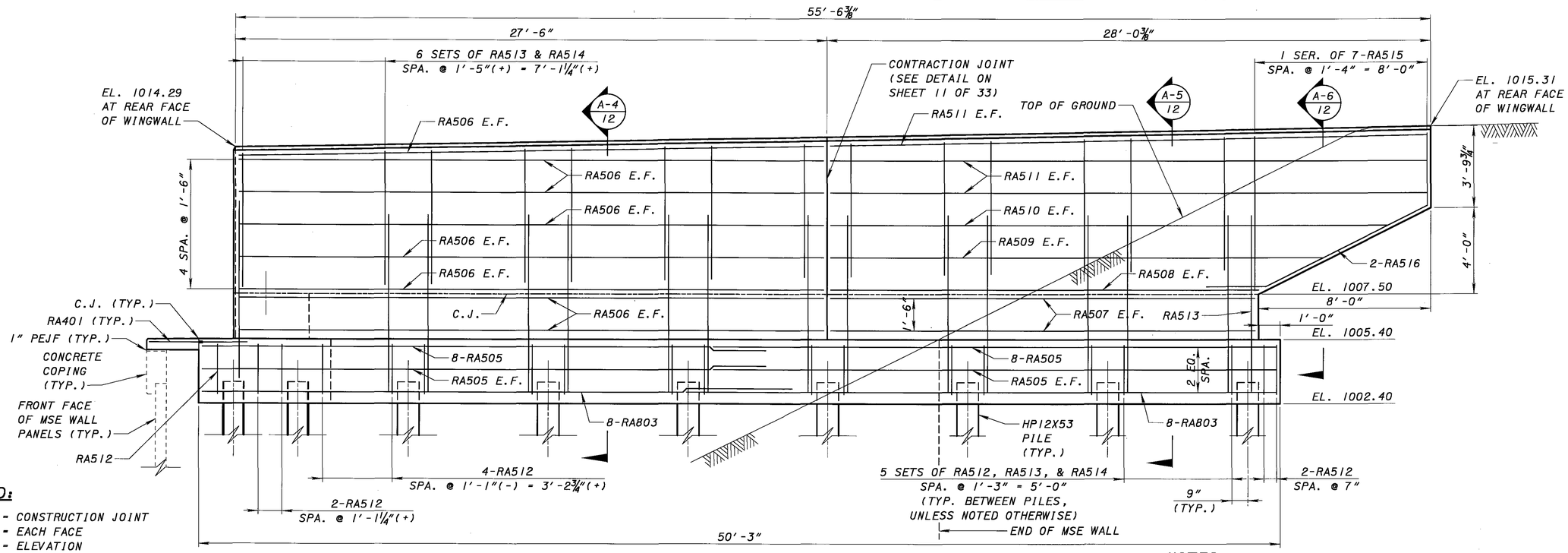
REAR & FORWARD ABUTMENT ELEVATIONS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

8 / 33

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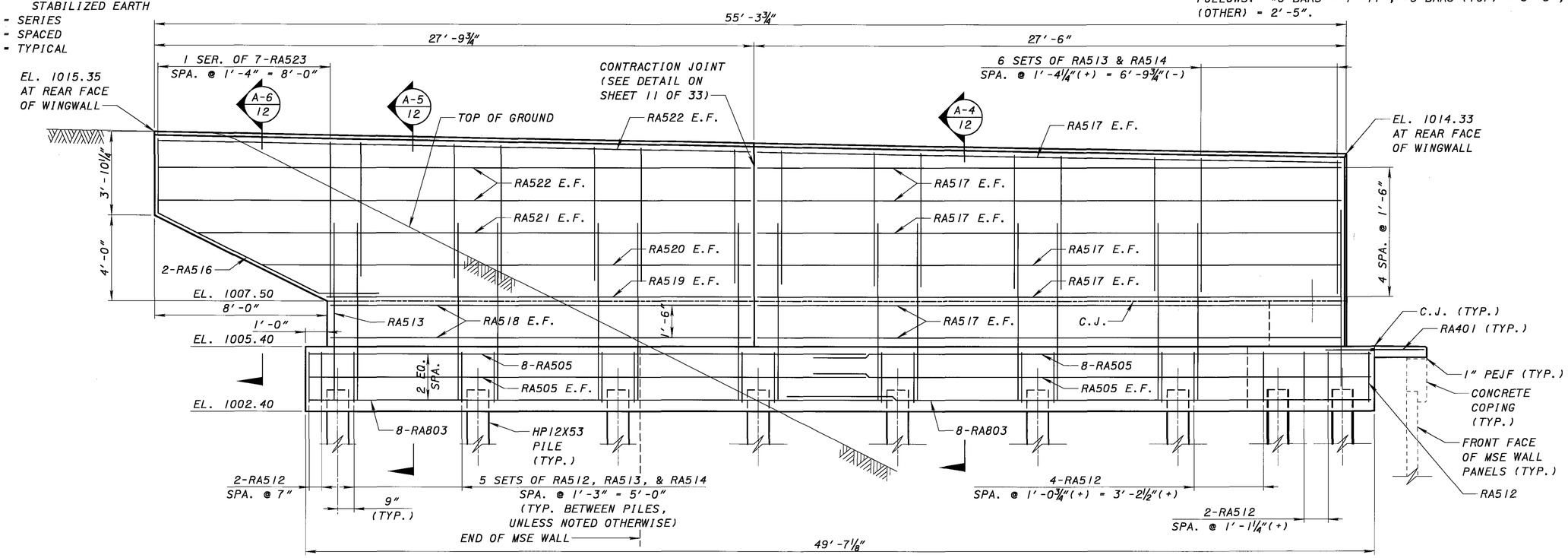
LEFT WINGWALL ELEVATION

LEGEND:

C.J.	-	CONSTRUCTION JOINT
E.F.	-	EACH FACE
EL.	-	ELEVATION
EQ.	-	EQUAL
MIN.	-	MINIMUM
MSE	-	MECHANICALLY STABILIZED EARTH
SER.	-	SERIES
SPA.	-	SPACED
TYP.	-	TYPICAL

NOTES:

1. FOR THE WINGWALL REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS = 4'-11"; #5 BARS (TOP) = 3'-5"; #5 BARS (OTHER) = 2'-5".



RIGHT WINGWALL ELEVATION

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM | DRAWN JAM | CHECKED AJM | REVISED | REVIEWED GWM | DATE 07-20-05 | STRUCTURE FILE NUMBER 4501721

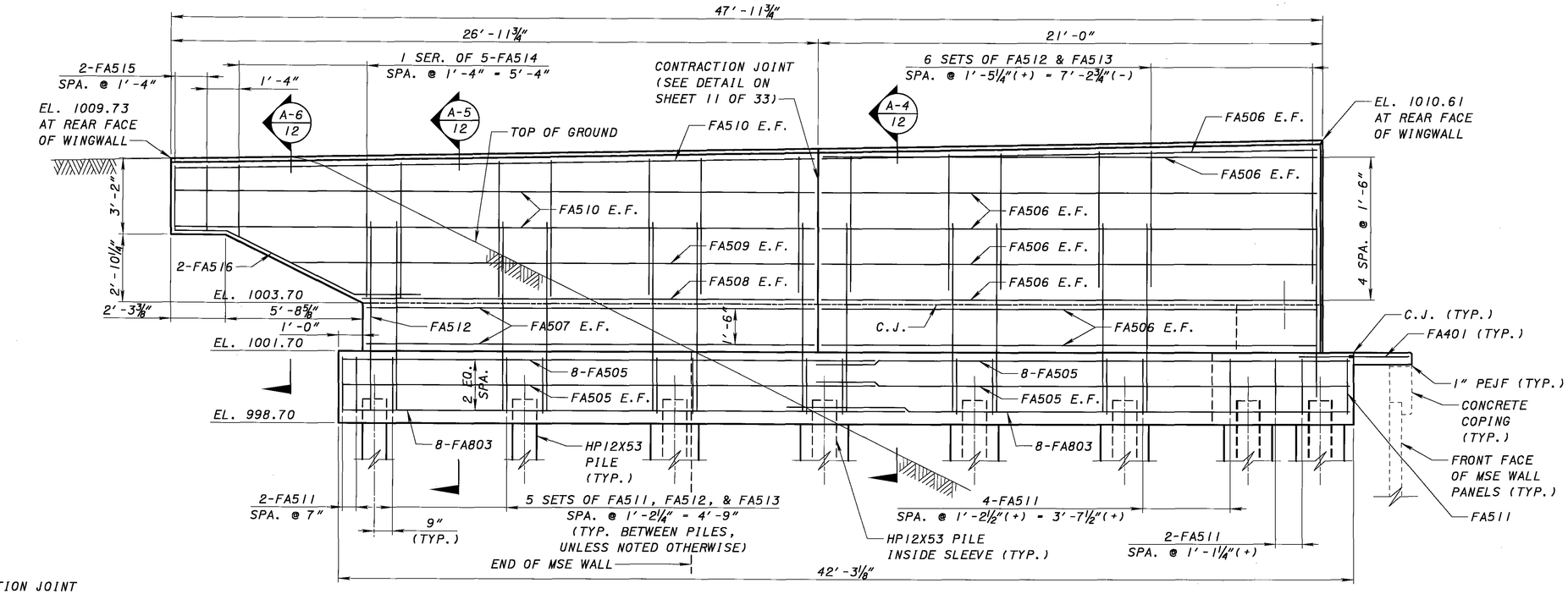
REAR ABUTMENT WINGWALL ELEVATIONS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

9 / 33

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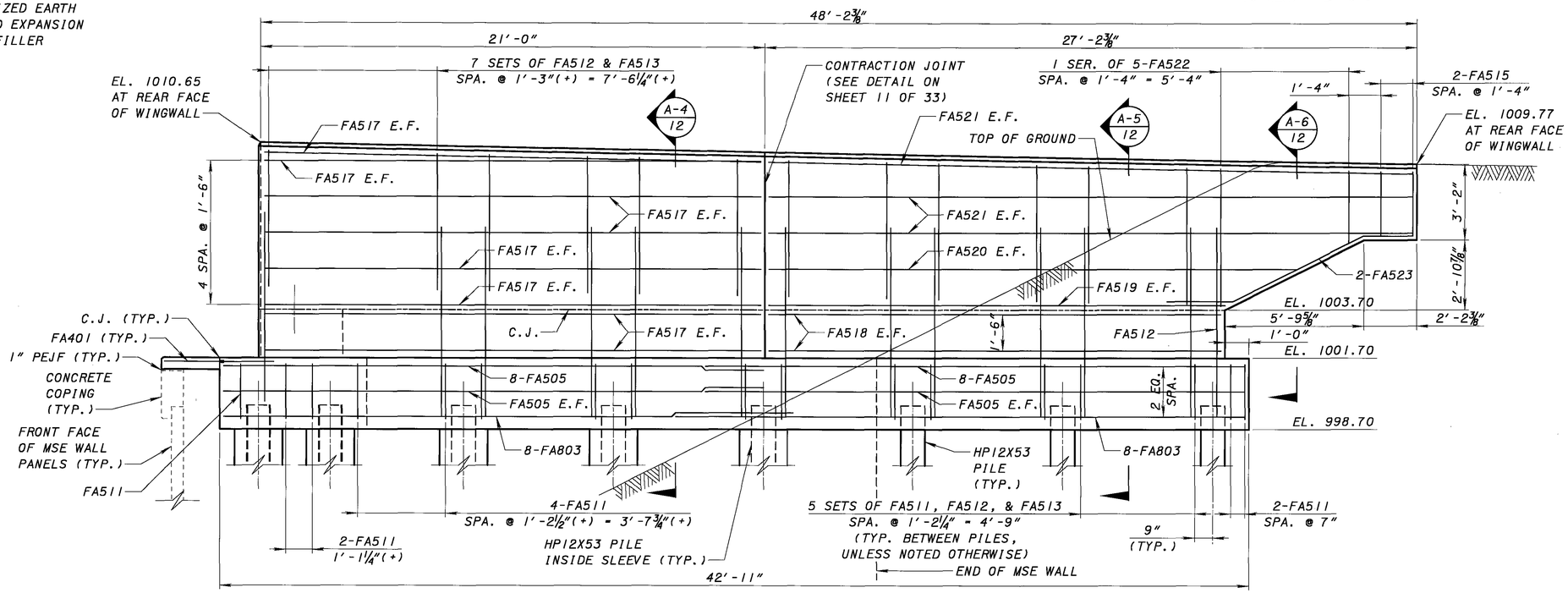
LEFT WINGWALL ELEVATION

LEGEND:

C.J.	-	CONSTRUCTION JOINT
E.F.	-	EACH FACE
EL.	-	ELEVATION
EQ.	-	EQUAL
MIN.	-	MINIMUM
MSE	-	MECHANICALLY STABILIZED EARTH
PEJF	-	PREFORMED EXPANSION JOINT FILLER
SER.	-	SERIES
SPA.	-	SPACED
TYP.	-	TYPICAL

NOTES:

1. FOR THE WINGWALL REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS = 4'-11"; #5 BARS (TOP) = 3'-5"; #5 BARS (OTHER) = 2'-5".



RIGHT WINGWALL ELEVATION

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

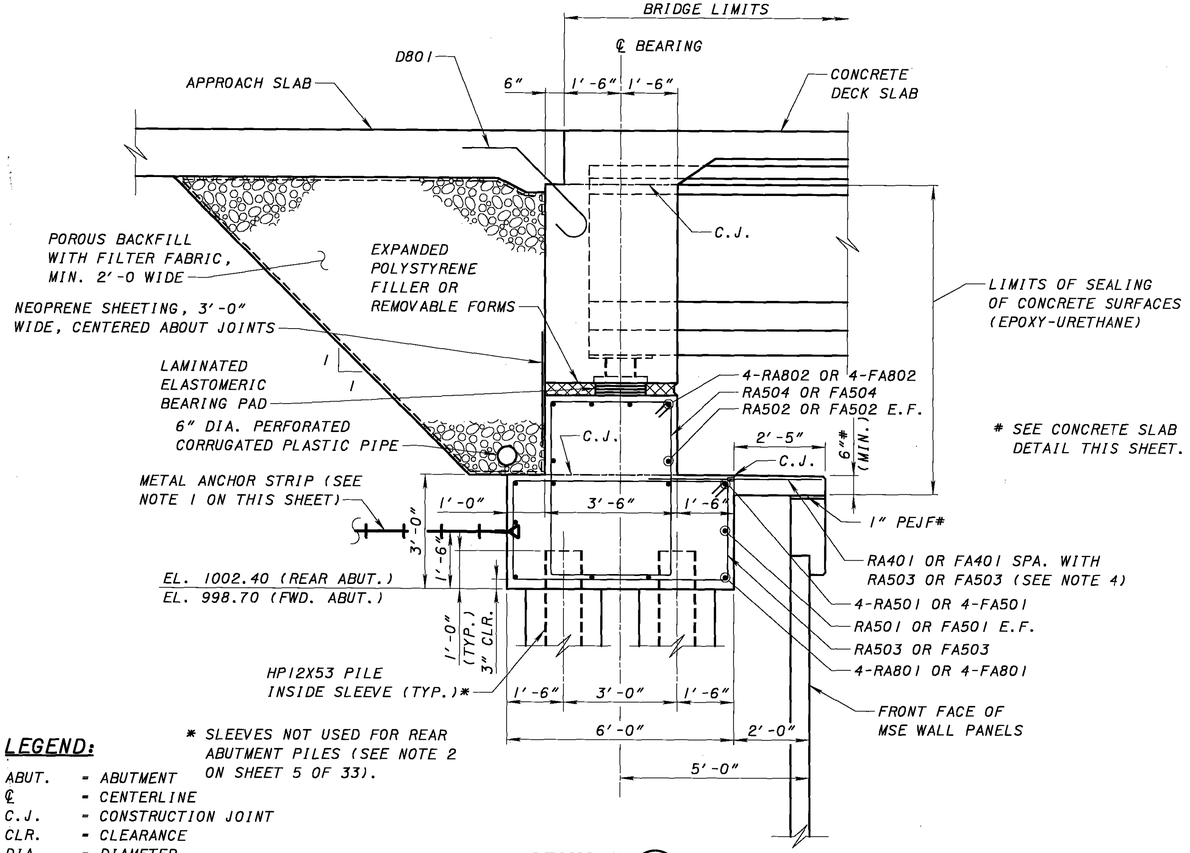
FORWARD ABUTMENT WINGWALL ELEVATIONS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

10/33

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10/26/2006
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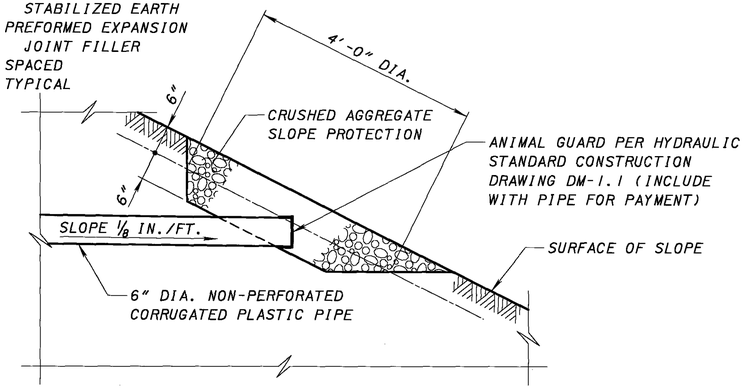


* SLEEVES NOT USED FOR REAR ABUTMENT PILES (SEE NOTE 2 ON SHEET 5 OF 33).

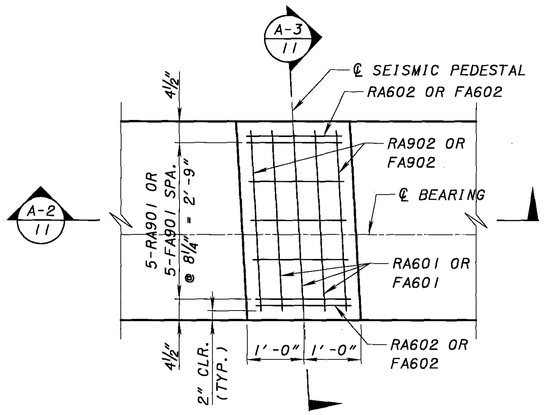
SECTION A-1 / 8

LEGEND:

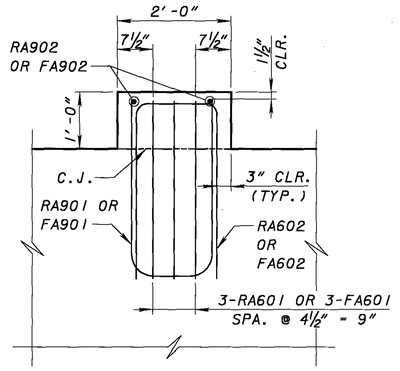
ABUT.	-	ABUTMENT
℄	-	CENTERLINE
C.J.	-	CONSTRUCTION JOINT
CLR.	-	CLEARANCE
DIA.	-	DIAMETER
E.F.	-	EACH FACE
FT.	-	FOOT
FWD.	-	FORWARD
IN.	-	INCH
MSE	-	MECHANICALLY STABILIZED EARTH
PEJF	-	PREFORMED EXPANSION JOINT FILLER
SPA.	-	SPACED
TYP.	-	TYPICAL



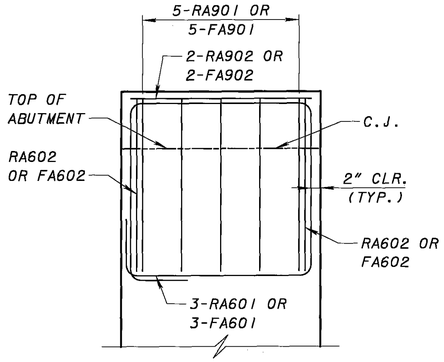
TERMINATION OF 6" DIA. DRAINAGE PIPE DETAIL



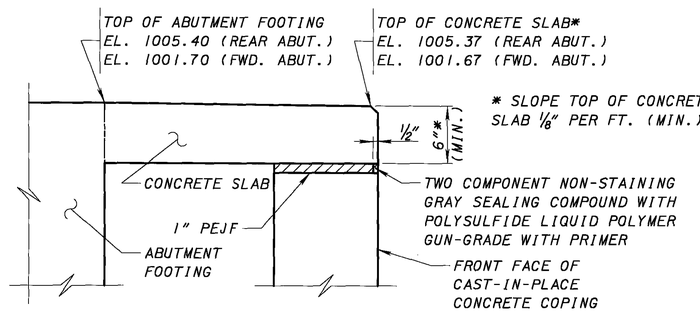
SEISMIC PEDESTAL DETAIL



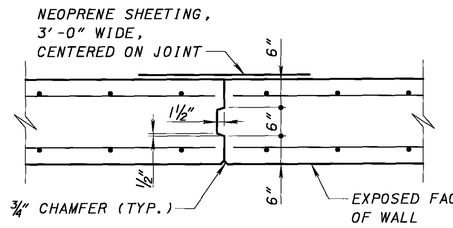
SECTION A-2 / 11



SECTION A-3 / 11



CONCRETE SLAB DETAIL
(REINFORCEMENT NOT SHOWN)



CONTRACTION JOINT DETAIL

NOTES:

1. THE CONTRACTOR SHALL DESIGN THE MECHANICAL ANCHOR STRIP FOR THE RESISTANCE OF 9 KIPS PER FOOT OF WALL.

   PAYMENT FOR THE METAL ANCHOR STRIPS SHALL BE INCLUDED WITH ITEM 511, CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING.

2. POROUS BACKFILL WITH FILTER FABRIC, MIN. 2 FEET THICK, SHALL EXTEND UP TO THE BOTTOM OF THE APPROACH SLAB AND TO THE LIMITS SHOWN.

3. FOR SELECT GRANULAR EMBANKMENT LIMITS, SEE SHEETS 28 AND 32 OF 33.

4. RA401 AND FA401 BARS SHALL BE THREADED MECHANICAL CONNECTORS SUCH AS RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL.

DLZ
4181 HARTLEY ROAD • COLUMBUS, OHIO 43220

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

ABUTMENT TYPICAL SECTION & DETAILS

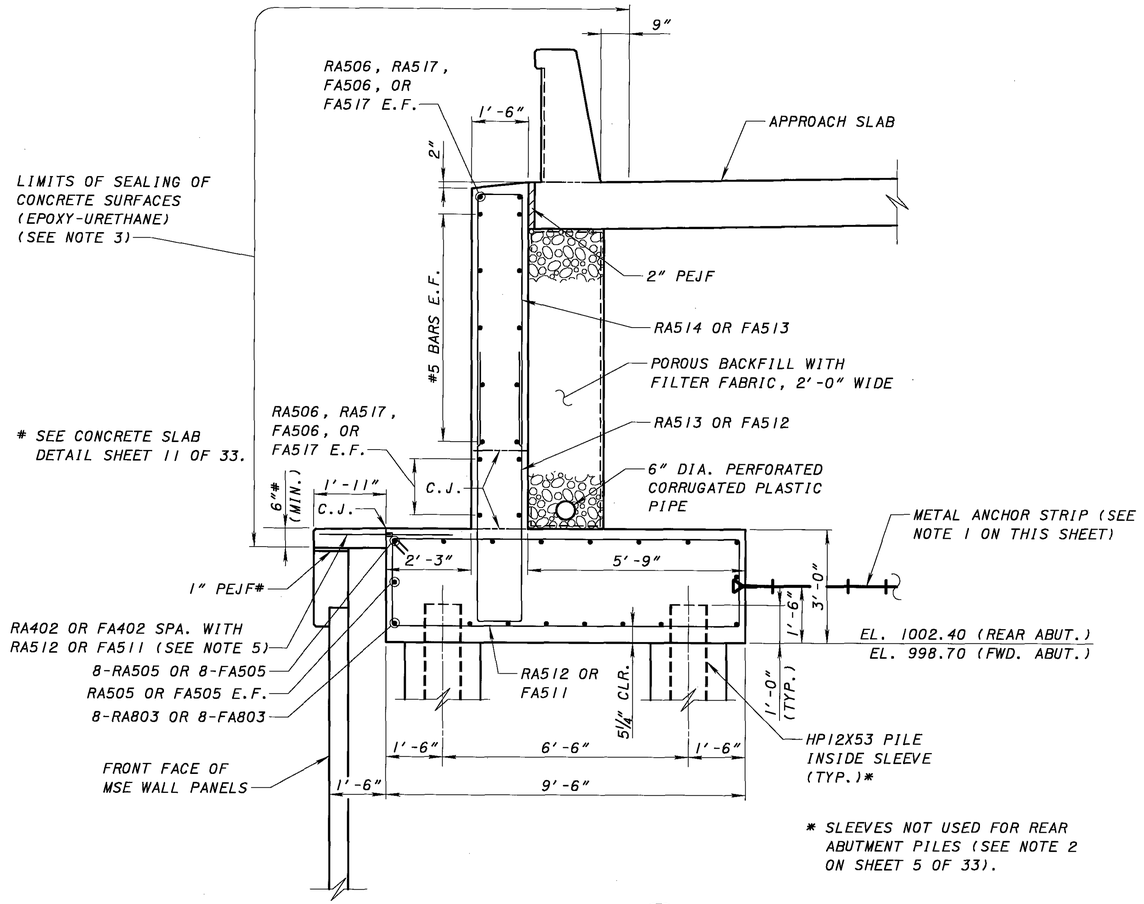
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

11/33

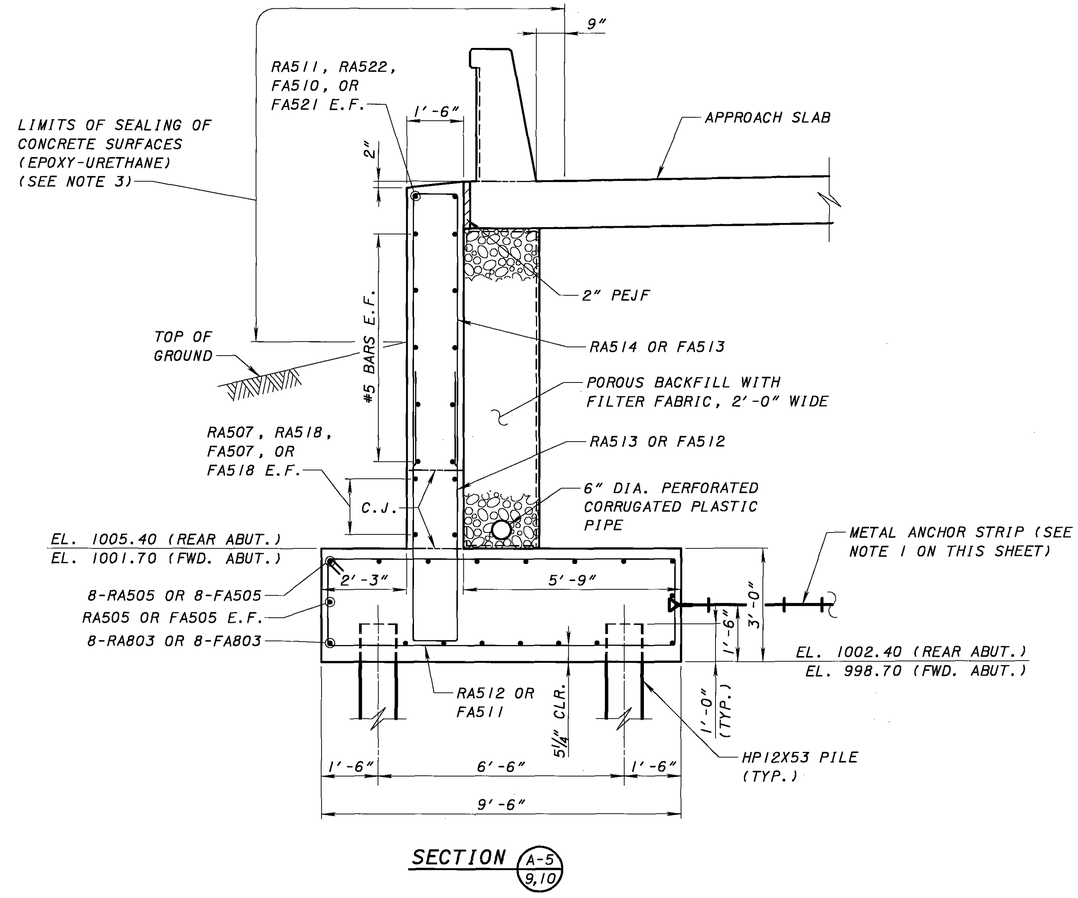
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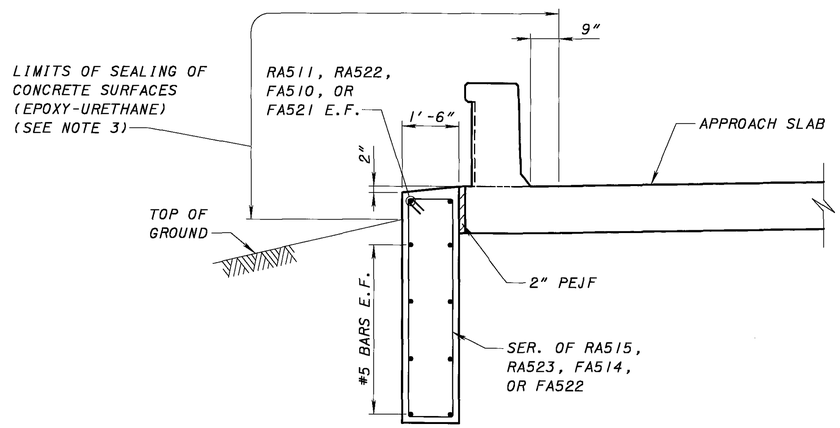


* SLEEVES NOT USED FOR REAR ABUTMENT PILES (SEE NOTE 2 ON SHEET 5 OF 33).

SECTION A-4 9,10



SECTION A-5 9,10



SECTION A-6 9,10

LEGEND:

ABUT.	- ABUTMENT	PEJF	- PREFORMED EXPANSION JOINT FILLER
℄	- CENTERLINE	SER.	- SERIES
C.J.	- CONSTRUCTION JOINT	TYP.	- TYPICAL
CLR.	- CLEARANCE		
DIA.	- DIAMETER		
E.F.	- EACH FACE		
EL.	- ELEVATION		
FWD.	- FORWARD		
MSE	- MECHANICALLY STABILIZED EARTH		

NOTES:

1. THE CONTRACTOR SHALL DESIGN THE MECHANICAL ANCHOR STRIP FOR THE RESISTANCE OF 9 KIPS PER FOOT OF WALL.

   PAYMENT FOR THE METAL ANCHOR STRIPS SHALL BE INCLUDED WITH ITEM 511, CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING.

2. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK, SHALL EXTEND UP TO THE BOTTOM OF THE APPROACH SLAB OR SLEEPER SLAB AND LATERALLY TO THE LIMITS SHOWN ON SHEETS 6 AND 7 OF 33.

3. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.

4. FOR SELECT GRANULAR EMBANKMENT LIMITS, SEE SHEETS 28 AND 32 OF 33.

5. RA402 AND FA402 BARS SHALL BE THREADED MECHANICAL CONNECTORS SUCH AS RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL.

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DLZ
620 HUNTLEY ROAD • COLUMBUS, OHIO 43229

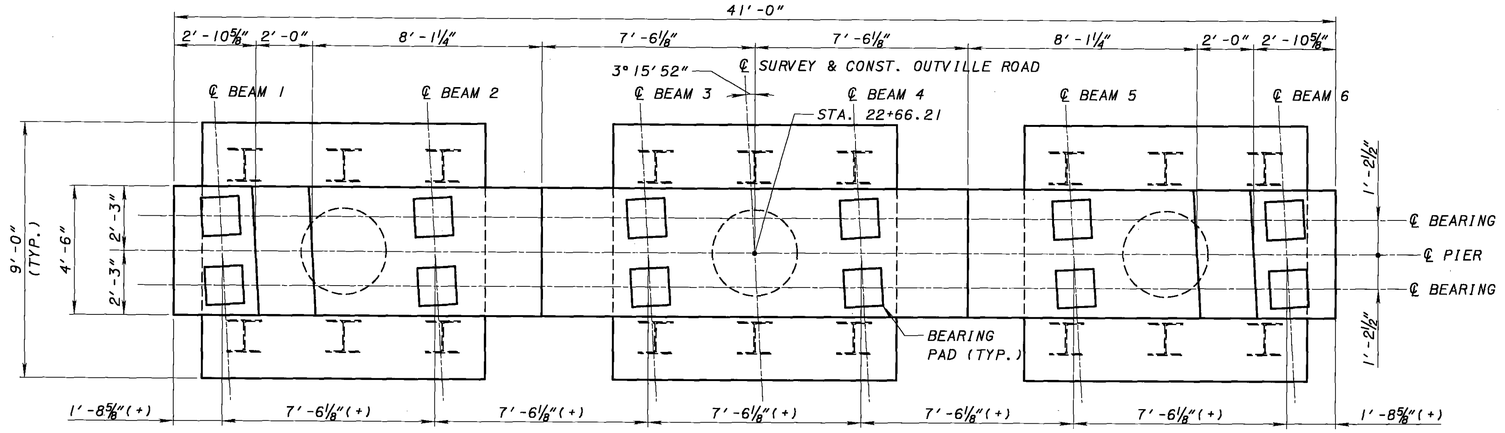
DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

WINGWALL TYPICAL SECTIONS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

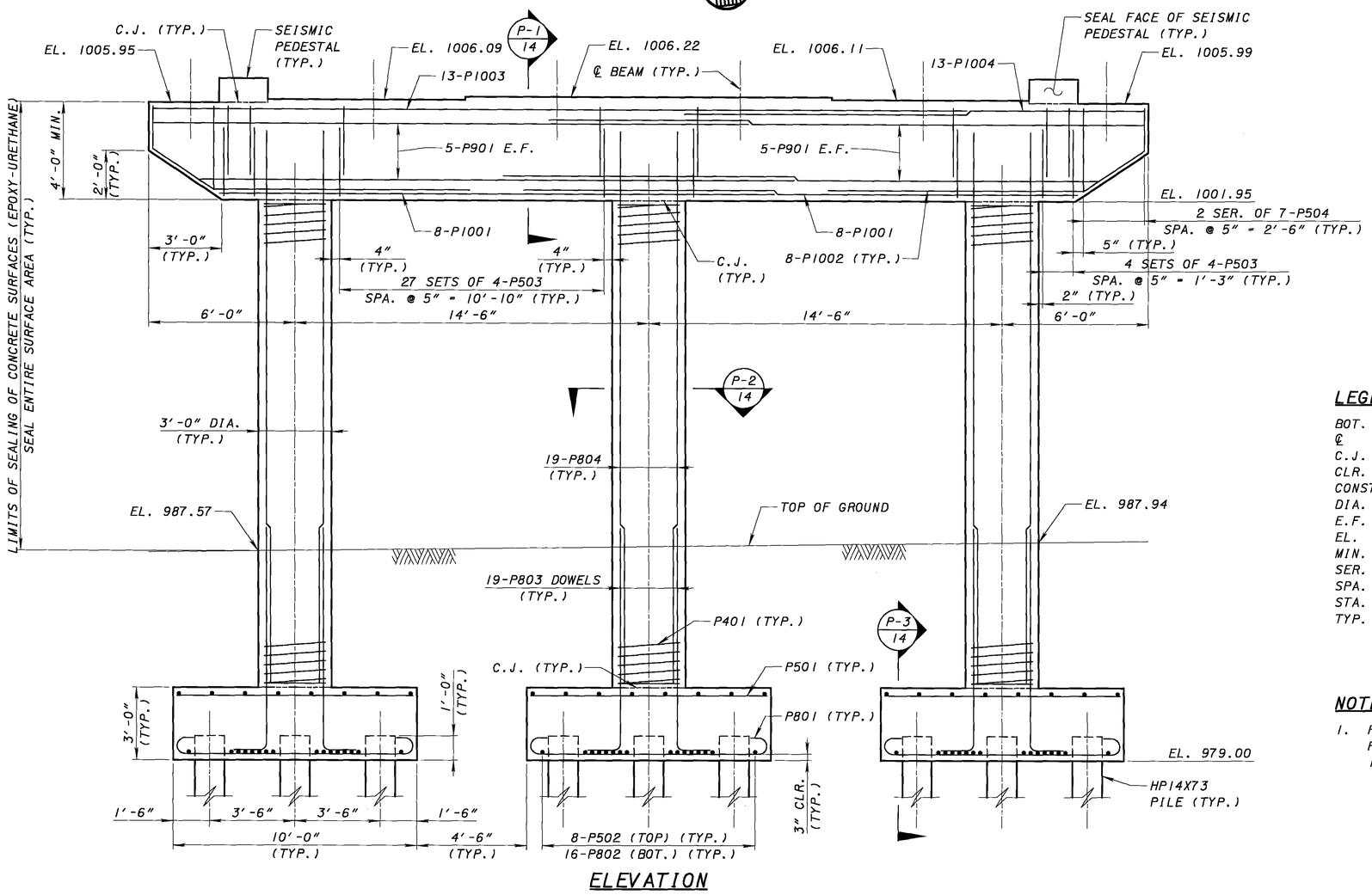
LIC-161-6.65
LIC-37-10.25
PID 77221

12/33

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1349



PLAN



ELEVATION

LEGEND:

BOT.	= BOTTOM
℄	= CENTERLINE
C.J.	= CONSTRUCTION JOINT
CLR.	= CLEARANCE
CONST.	= CONSTRUCTION
DIA.	= DIAMETER
E.F.	= EACH FACE
EL.	= ELEVATION
MIN.	= MINIMUM
SER.	= SERIES
SPA.	= SPACED
STA.	= STATION
TYP.	= TYPICAL

NOTES:

1. FOR THE PIER REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #10 BARS (TOP) = 11'-7"; #10 BARS (OTHER) = 10'-3"; #9 BARS = 8'-1"; #8 BARS = 6'-4"; #5 BARS = 2'-5".

DLZ
1801 WATERMARK ROAD • COLUMBUS, OHIO 43215

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450/1721	

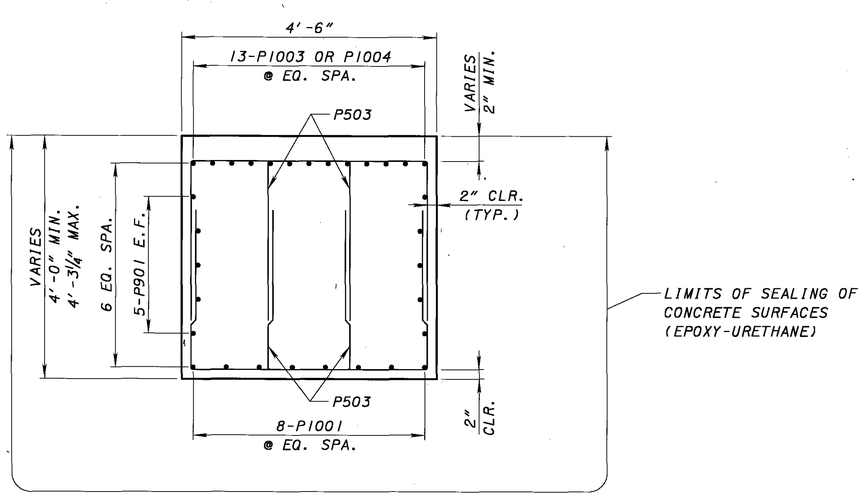
PIER PLAN & ELEVATION
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

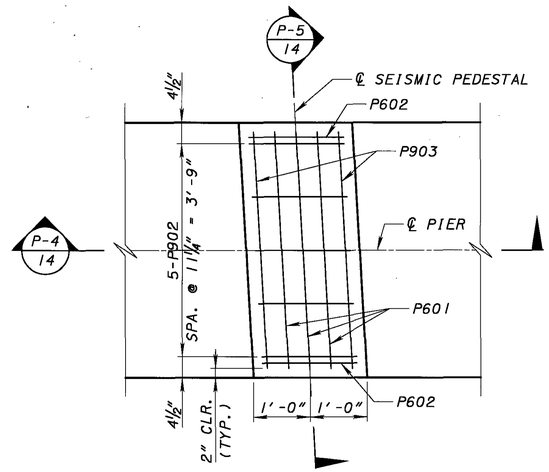
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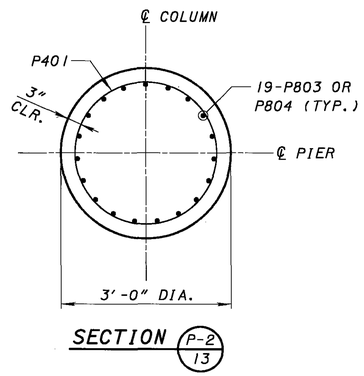
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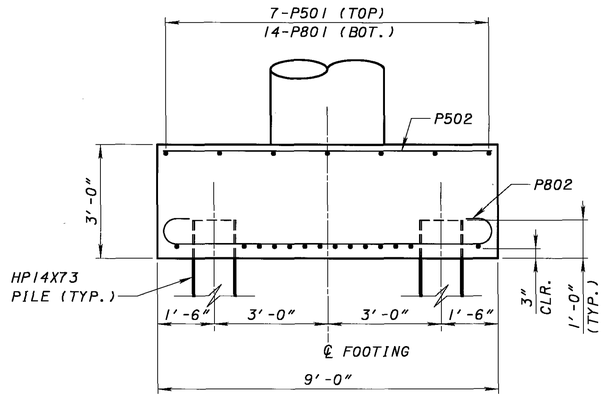
SECTION (P-1 / 13)



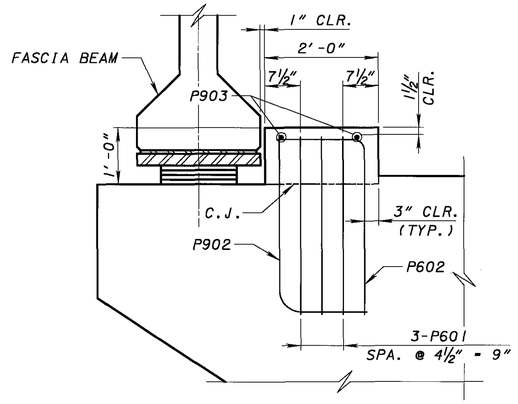
SEISMIC PEDESTAL DETAIL



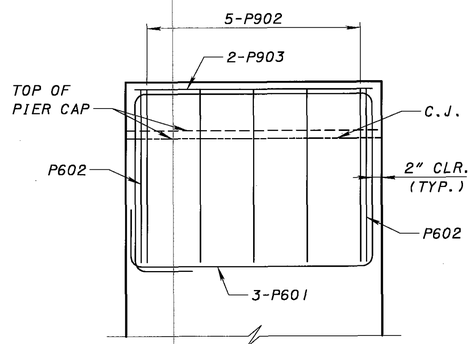
SECTION (P-2 / 13)



SECTION (P-3 / 13)



SECTION (P-4 / 14)



SECTION (P-5 / 14)

LEGEND:

BOT.	-	BOTTOM
℄	-	CENTERLINE
C.J.	-	CONSTRUCTION JOINT
CLR.	-	CLEARANCE
DIA.	-	DIAMETER
EQ.	-	EQUAL
MAX.	-	MAXIMUM
MIN.	-	MINIMUM
SPA.	-	SPACED
TYP.	-	TYPICAL

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

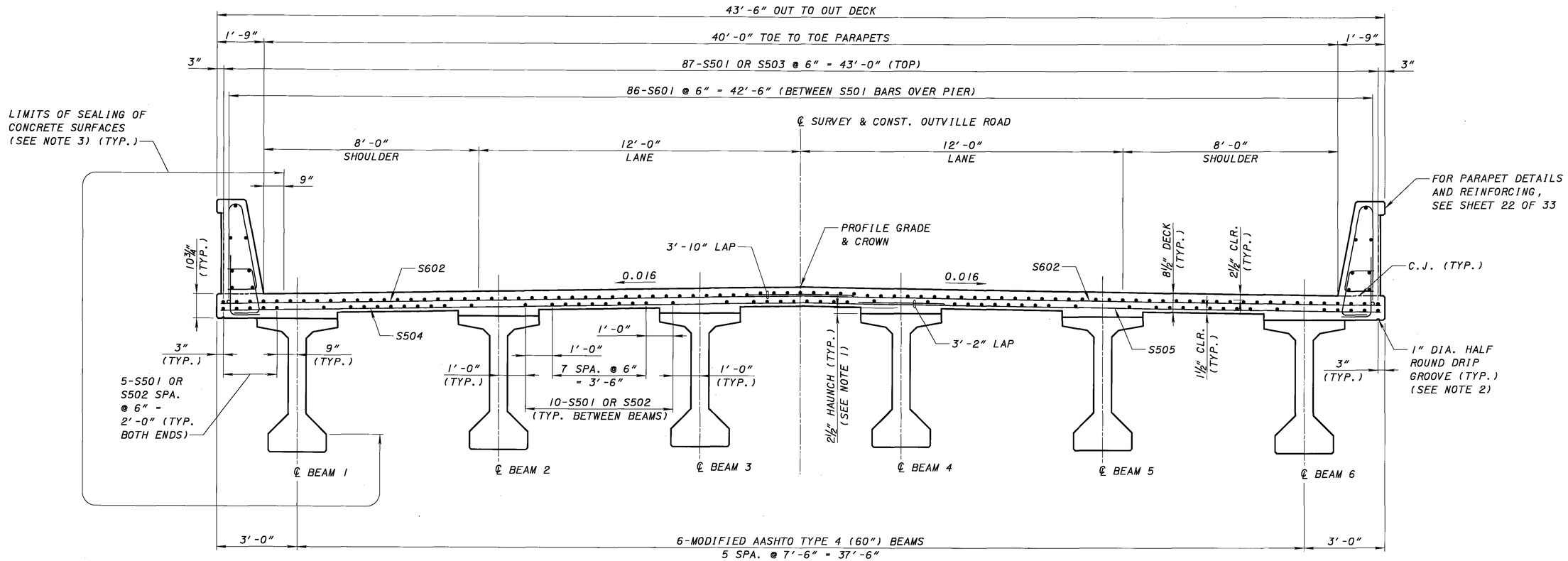
DESIGNED JAM | DRAWN JAM | REVIEWED GWM | DATE 07-20-05
CHECKED AJM | REVISED | STRUCTURE FILE NUMBER 4501721

PIER DETAILS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

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TRANSVERSE SECTION

LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEARANCE
CONST.	- CONSTRUCTION
DIA.	- DIAMETER
SPA.	- SPACED
TYP.	- TYPICAL

NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE TOPPING THICKNESS SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING, EVEN THOUGH DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
2. DRIP GROOVES SHALL TERMINATE 2′-0″ FROM THE FACE OF THE ABUTMENT.
3. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.
4. STAGGER THE BOTTOM TRANSVERSE BARS BY ALTERNATING S504 AND S505 OVER THE MIDDLE TWO BEAMS.

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DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

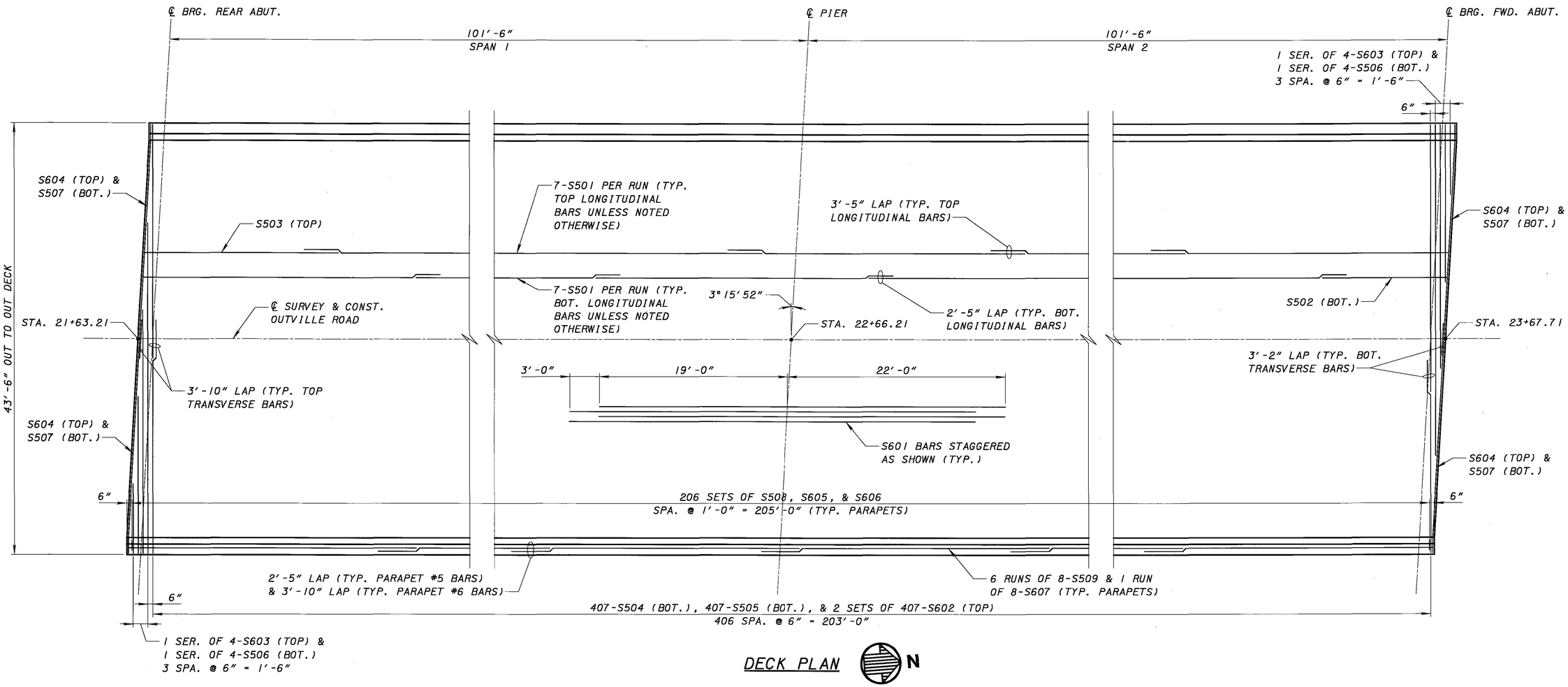
TRANSVERSE SECTION
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

15/33

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DECK PLAN

N

LEGEND:

ABUT.	- ABUTMENT
BOT.	- BOTTOM
BRG.	- BEARING
℄	- CENTERLINE
CONST.	- CONSTRUCTION
FWD.	- FORWARD
SER.	- SERIES
SPA.	- SPACED
STA.	- STATION
TYP.	- TYPICAL

NOTES:

1. FOR PARAPET REINFORCING SECTIONS, SEE SHEET 22 OF 33.

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AJM		4501721	

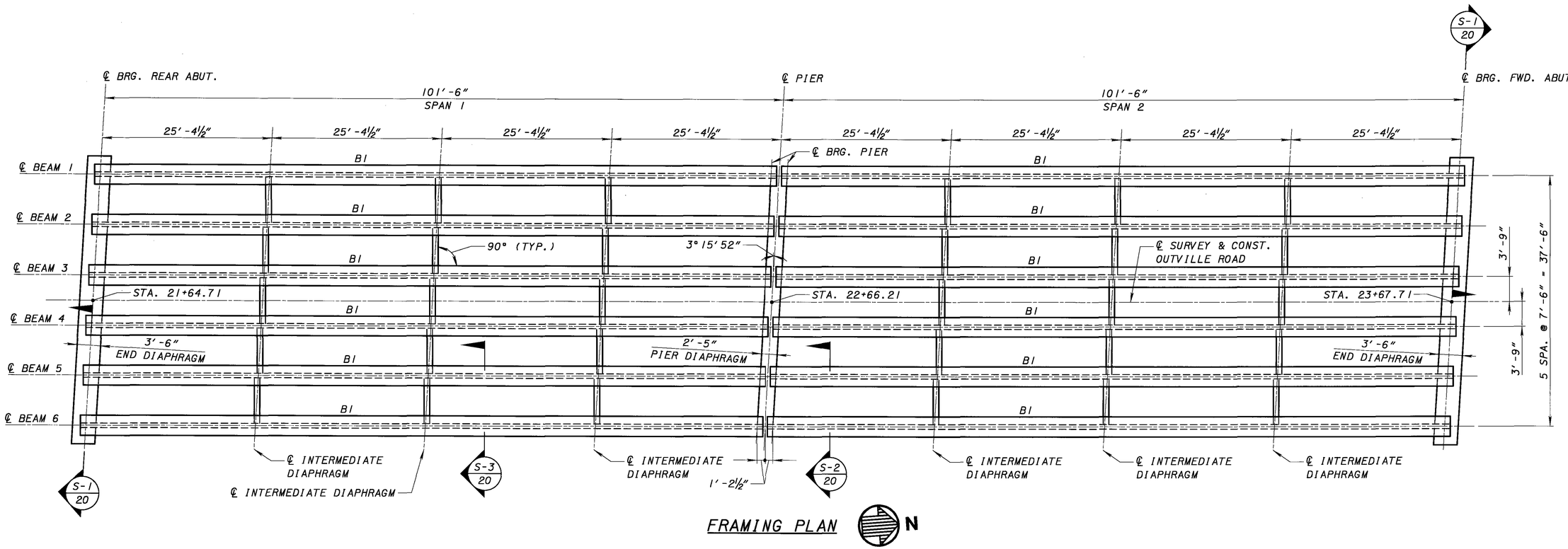
DECK PLAN
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

16/33

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FRAMING PLAN

N

LEGEND:

ABUT. = ABUTMENT
BRG. = BEARING
℄ = CENTERLINE
CONST. = CONSTRUCTION
FWD. = FORWARD
SPA. = SPACED
STA. = STATION
TYP. = TYPICAL

NOTES:

1. FOR PRESTRESSED CONCRETE I-BEAM DETAILS, SEE SHEET 18 OF 33.
2. FOR DIAPHRAGM DETAILS, SEE SHEET 20 OF 33.

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DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
JAM	JAM	AJM	GWM	07-20-05

REVISED

STRUCTURE FILE NUMBER 4501721

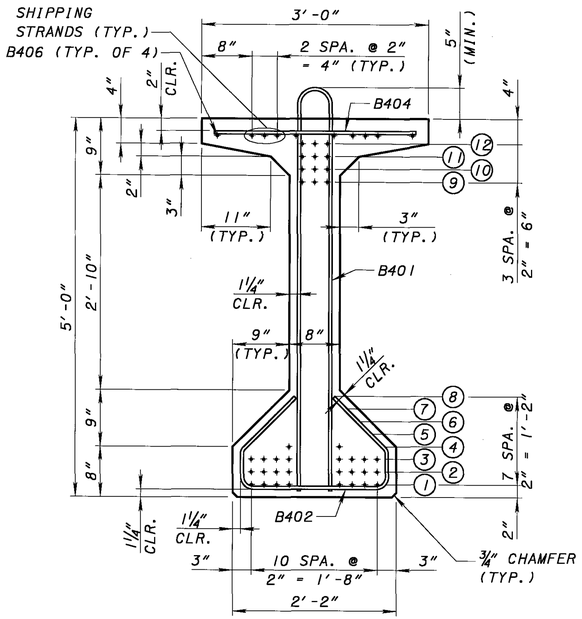
FRAMING PLAN
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

17 / 33

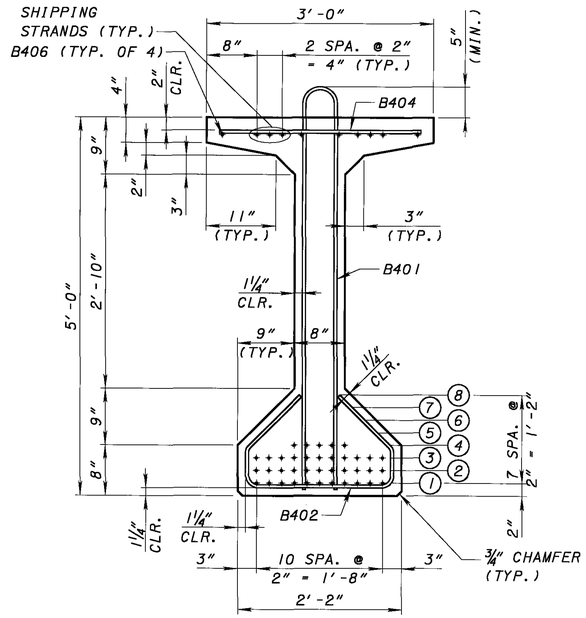
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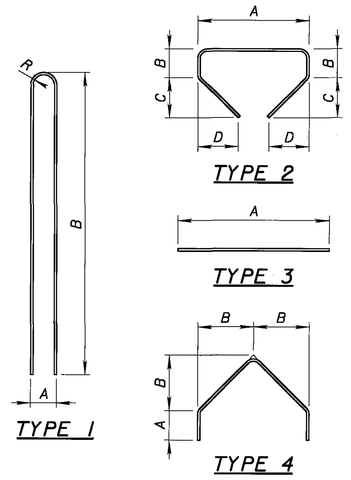
TYPICAL BEAM END SECTION

MODIFIED AASHTO TYPE 4 (60")



TYPICAL BEAM MID SECTION

MODIFIED AASHTO TYPE 4 (60")

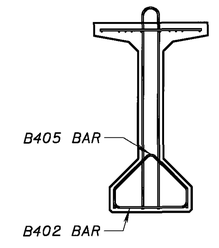


BENDING DIAGRAMS

(ALL DIMENSIONS ARE OUT-TO-OUT)

MARK	TYPE	DIMENSIONS				
		A	B	C	D	R
MODIFIED AASHTO TYPE 4 (60")						
B401	1	5½"	5'-4"			2¼"
B402	2	1'-11½"	6¼"	8½"	8½"	
B404	3	2'-8"				
B405	4	6¼"	11¾"			
B406	3	101'-7½"				

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES THE BAR LOCATION, THE NEXT DIGIT INDICATES THE INCH-POUND BAR SIZE AND THE REMAINING DIGITS ITS SEQUENCE NUMBER. ALL STEEL SHALL BE EPOXY COATED.

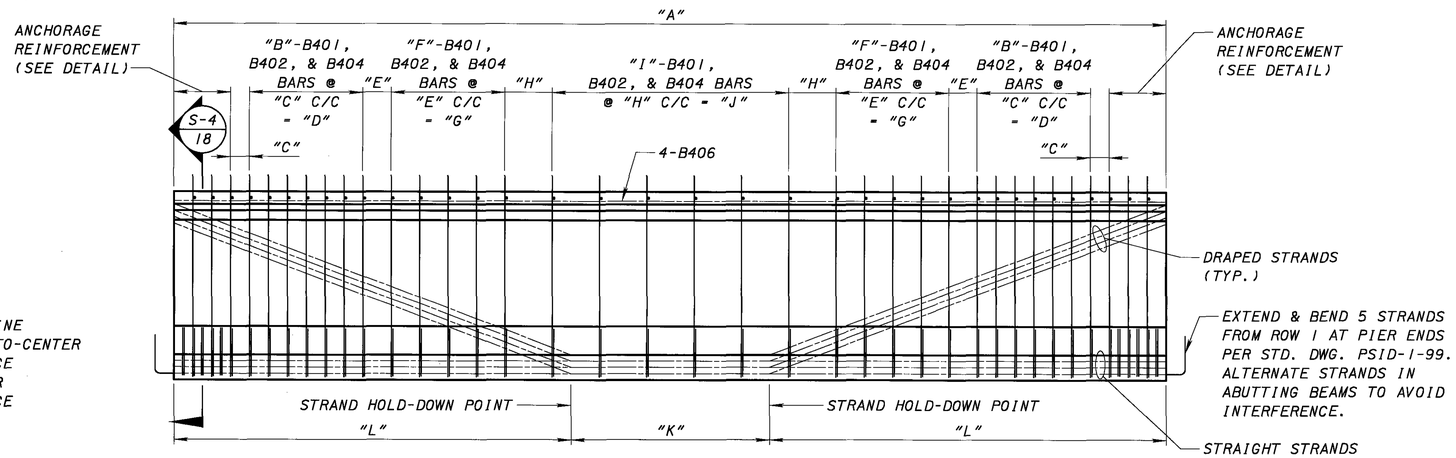


SECTION (S-4 / 18)

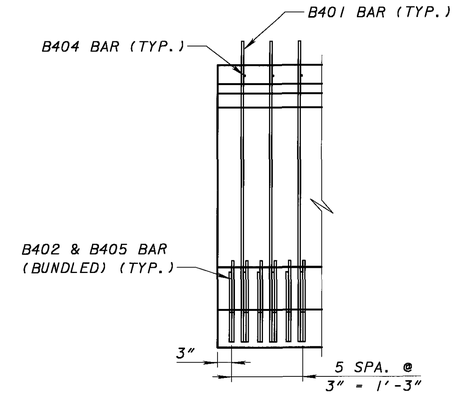
BEAM MARK	NUMBER OF STRANDS PER ROW: END SECTION - ROW NUMBER (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	MID SECTION - ROW NUMBER (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	TOTAL STRANDS	CONCRETE STRENGTHS f'ci	f'c	B401 BARS REQ'D	B402 BARS REQ'D	B404 BARS REQ'D	B405 BARS REQ'D
B1	8	8	8	2					3	3	3	3	11	11	11	5									38	5,000	7,000	113	119	113	12

BEAM DIMENSIONS

BEAM MARK	NO. REQ'D.	DIMENSIONS A	B	C	D	E	F	G	H	I	J	K	L	APPROXIMATE WEIGHT (LBS.)
B1	12	101'-11½"	15	6"	7'-0"	1'-0"	33	32'-0"	1'-6"(-)	11	14'-11½"	20'-0"	40'-11¾"	91,355



SHEAR REINFORCEMENT DETAIL



ANCHORAGE REINFORCEMENT DETAIL

NOTES:

1. FOR ADDITIONAL DETAILS AND NOTES, SEE BRIDGE STANDARD DRAWINGS PSID-1-99.

LEGEND:

℄	- CENTERLINE
C/C	- CENTER-TO-CENTER
CLR.	- CLEARANCE
DIA.	- DIAMETER
E.F.	- EACH FACE
LBS.	- POUNDS
MIN.	- MINIMUM
NO.	- NUMBER
REQ'D.	- REQUIRED
SPA.	- SPACED
TYP.	- TYPICAL

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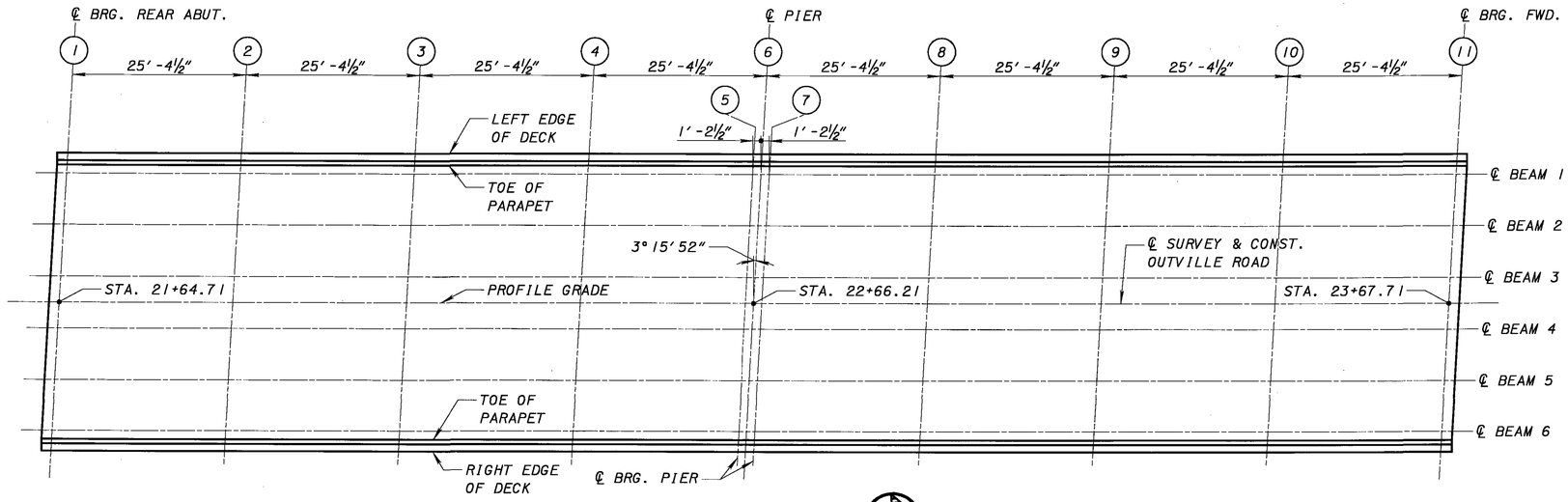
DESIGNED JAM | DRAWN JAM | CHECKED AJM | REVISED | REVIEWED GWM | DATE 07-20-05 | STRUCTURE FILE NUMBER 4501721

PRESTRESSED CONCRETE I-BEAM DETAILS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

18 / 33

1182
1349



SCREED PLAN

N

SCREED ELEVATIONS (FEET)

LOCATION	OFFSET	(1) ℄ BRG. R.A.	(2) ¼ SPAN 1	(3) ½ SPAN 1	(4) ¾ SPAN 1	(5) ℄ BRG.	(6) ℄ PIER	(7) ℄ BRG.	(8) ¼ SPAN 2	(9) ½ SPAN 2	(10) ¾ SPAN 2	(11) ℄ BRG. F.A.
LEFT EDGE OF DECK	21.75 LT.	21+65.95	21+91.33	22+16.70	22+42.08	22+66.24	22+67.45	22+68.66	22+92.83	23+18.20	23+43.58	23+68.95
		1014.32	1013.92	1013.48	1012.99	1012.47	1012.45	1012.43	1012.05	1011.61	1011.12	1010.58
TOE OF PARAPET	20.00 LT.	21+65.85	21+91.23	22+16.60	22+41.98	22+66.14	22+67.35	22+68.56	22+92.73	23+18.10	23+43.48	23+68.85
		1014.32	1013.92	1013.48	1012.99	1012.47	1012.45	1012.43	1012.05	1011.62	1011.12	1010.58
BEAM 1	18.75 LT.	21+65.78	21+91.16	22+16.53	22+41.91	22+66.07	22+67.28	22+68.49	22+92.66	23+18.03	23+43.41	23+68.78
		1014.34	1013.94	1013.50	1013.01	1012.49	1012.47	1012.45	1012.08	1011.64	1011.14	1010.60
BEAM 2	11.25 LT.	21+65.35	21+90.73	22+16.10	22+41.48	22+65.65	22+66.85	22+68.06	22+92.23	23+17.60	23+42.98	23+68.35
		1014.47	1014.08	1013.64	1013.14	1012.62	1012.60	1012.58	1012.21	1011.77	1011.28	1010.73
BEAM 3	3.75 LT.	21+64.93	21+90.30	22+15.68	22+41.05	22+65.22	22+66.43	22+67.63	22+91.80	23+17.18	23+42.55	23+67.93
		1014.60	1014.21	1013.77	1013.27	1012.75	1012.73	1012.71	1012.34	1011.90	1011.40	1010.86
PROFILE GRADE	0.00	21+64.71	21+90.09	22+15.46	22+40.84	22+65.00	22+66.21	22+67.42	22+91.59	23+16.96	23+42.34	23+67.71
		1014.66	1014.27	1013.83	1013.34	1012.81	1012.79	1012.77	1012.40	1011.97	1011.47	1010.92
BEAM 4	3.75 RT.	21+64.50	21+89.87	22+15.25	22+40.62	22+64.79	22+66.00	22+67.21	22+91.37	23+16.75	23+42.12	23+67.50
		1014.60	1014.21	1013.78	1013.28	1012.76	1012.74	1012.71	1012.35	1011.91	1011.41	1010.87
BEAM 5	11.25 RT.	21+64.07	21+89.45	22+14.82	22+40.20	22+64.36	22+65.57	22+66.78	22+90.95	23+16.32	23+41.70	23+67.07
		1014.49	1014.10	1013.67	1013.17	1012.65	1012.62	1012.60	1012.23	1011.80	1011.30	1010.76
BEAM 6	18.75 RT.	21+63.64	21+89.02	22+14.39	22+39.77	22+63.93	22+65.14	22+66.35	22+90.52	23+15.89	23+41.27	23+66.64
		1014.38	1013.98	1013.54	1013.05	1012.53	1012.51	1012.49	1012.11	1011.68	1011.18	1010.64
TOE OF PARAPET	20.00 RT.	21+63.57	21+88.95	22+14.32	22+39.70	22+63.86	22+65.07	22+66.28	22+90.45	23+15.82	23+41.20	23+66.57
		1014.36	1013.96	1013.53	1013.03	1012.51	1012.49	1012.47	1012.10	1011.66	1011.16	1010.63
RIGHT EDGE OF DECK	21.75 RT.	21+63.47	21+88.85	22+14.22	22+39.60	22+63.76	22+64.97	22+66.18	22+90.35	23+15.72	23+41.10	23+66.47
		1014.36	1013.97	1013.53	1013.03	1012.52	1012.49	1012.47	1012.10	1011.66	1011.16	1010.63

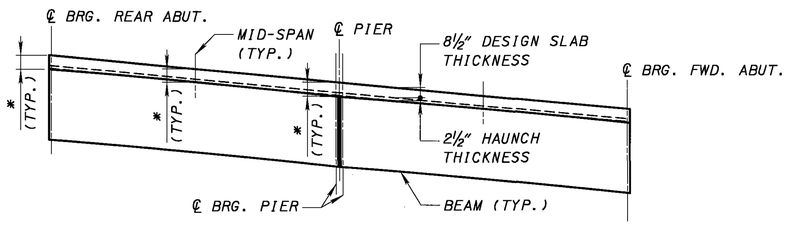
LEGEND:

ABUT.	= ABUTMENT
BRG.	= BEARING
℄	= CENTERLINE
CONST.	= CONSTRUCTION
F.A.	= FORWARD ABUTMENT
FWD.	= FORWARD
LT.	= LEFT
R.A.	= REAR ABUTMENT
RT.	= RIGHT
STA.	= STATION
TYP.	= TYPICAL

NOTES:

1. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED, CALCULATED DEAD LOAD DEFLECTIONS.

2. CALCULATED CAMBER AT THE TIME OF RELEASE IS 1.27 INCHES. CALCULATED CAMBER AT THE TIME OF ERECTION IS 2.21 INCHES. CALCULATED LONG-TERM CAMBER IS 3.17 INCHES.



DECK THICKNESS DETAIL

* ANTICIPATED DECK THICKNESSES (INCHES)

LOCATION	(1) ℄ BRG. R.A.	(3) ½ SPAN 1	(5) ℄ BRG.	(7) ℄ BRG.	(9) ½ SPAN 2	(11) ℄ BRG. F.A.
BEAM 1	12.02	11.00	12.02	12.02	11.00	12.02
BEAM 2	11.91	11.00	11.91	11.91	11.00	11.91
BEAM 3	11.91	11.00	11.91	11.91	11.00	11.91
BEAM 4	11.91	11.00	11.91	11.91	11.00	11.91
BEAM 5	11.91	11.00	11.91	11.91	11.00	11.91
BEAM 6	12.02	11.00	12.02	12.02	11.00	12.02

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DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVISED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 4501721

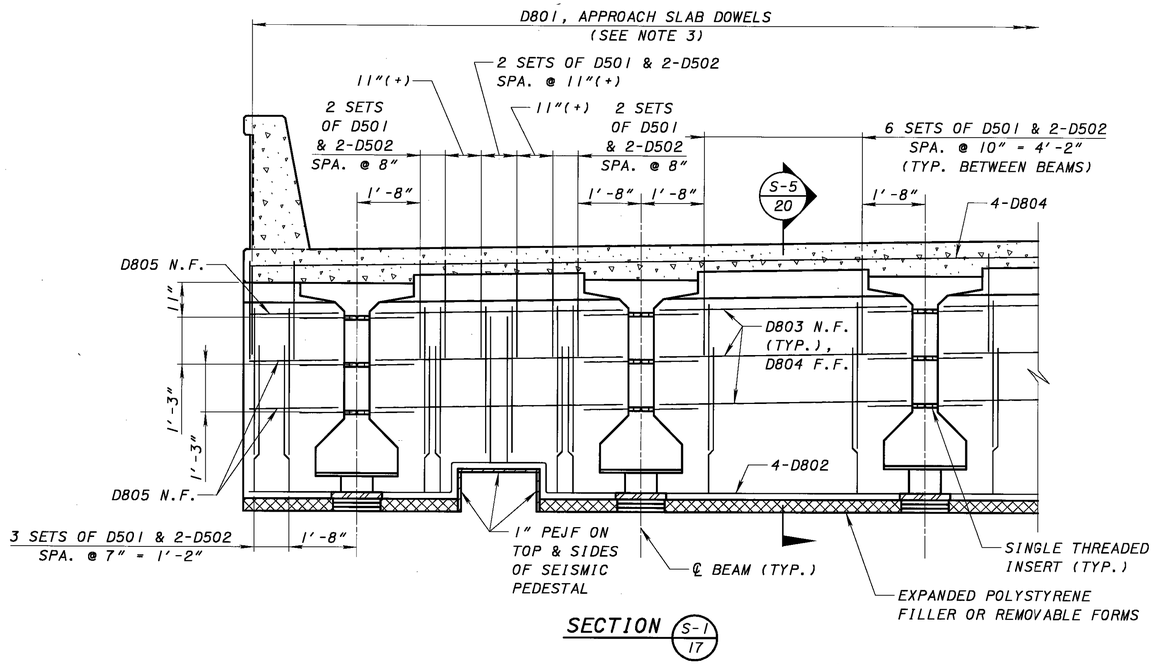
SCREED ELEVATION DETAILS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

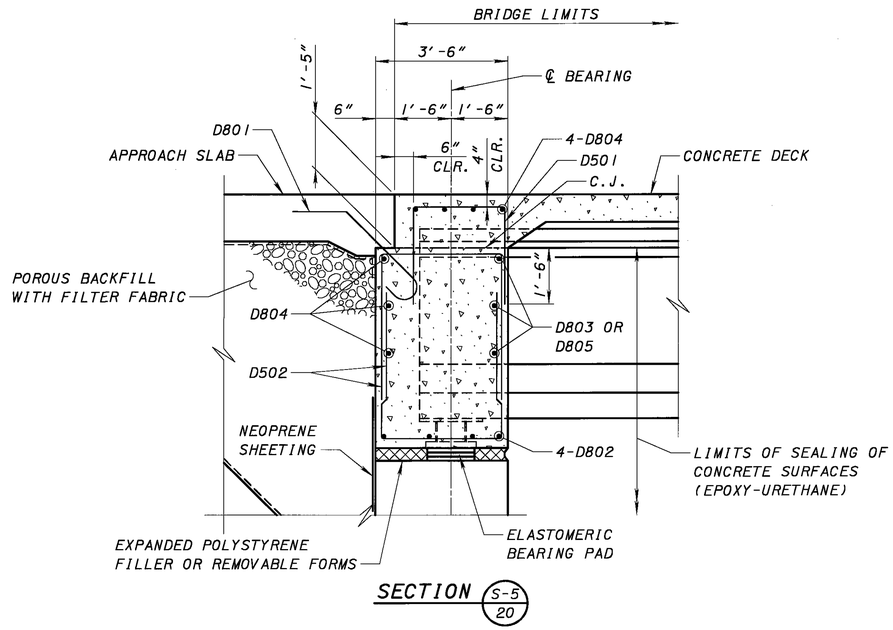
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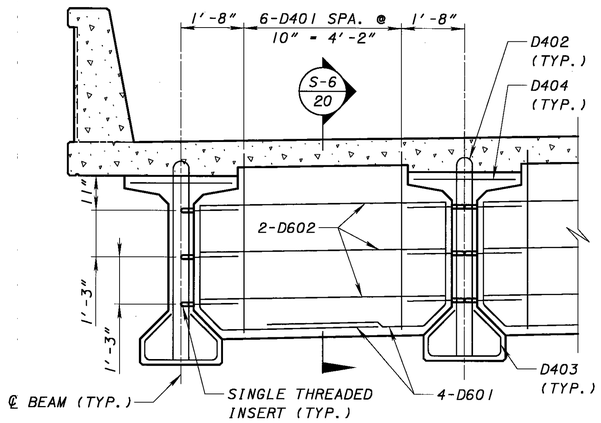
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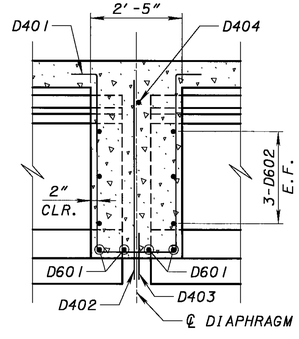
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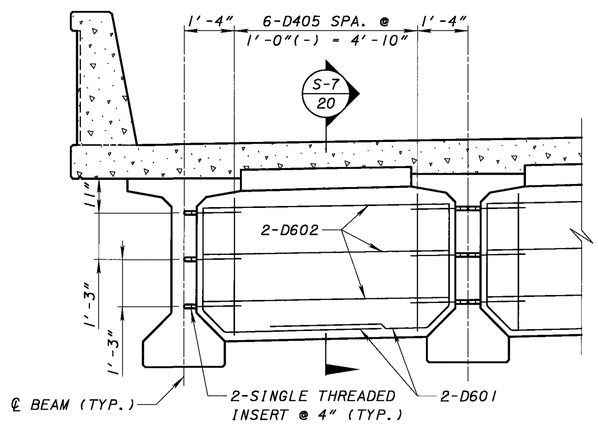
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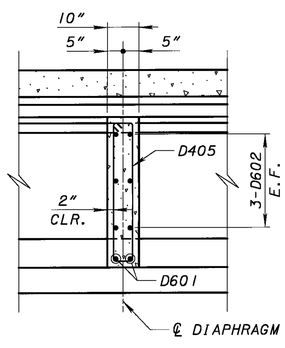
SECTION S-2 / 17



SECTION S-6 / 20



SECTION S-3 / 17



SECTION S-7 / 20

LEGEND:

℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEARANCE
E.F.	- EACH FACE
F.F.	- FAR FACE
MIN.	- MINIMUM
N.F.	- NEAR FACE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SPA.	- SPACED
TYP.	- TYPICAL

NOTES:

1. VERTICAL BARS SHALL BE PLACED PARALLEL TO ℄ BEAMS.
2. FOR ADDITIONAL DETAILS AND NOTES, SEE STANDARD BRIDGE DRAWINGS PSID-1-99 AND SICD-1-96.
3. FOR APPROACH SLAB DOWEL DETAILS, SEE SHEET 25 OF 33.
4. ABUTMENT DIAPHRAGM, PRESTRESSED I-BEAM SUPERSTRUCTURE: PLACE THE CONCRETE ENCASING THE PRESTRESSED I-BEAM STRUCTURAL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.
5. FOR THE DIAPHRAGM REINFORCEMENT, THE MIN. LAP LENGTHS ARE AS FOLLOWS: #8 BARS = 4'-11"; #6 BARS = 2'-11"; #5 BARS = 2'-5".

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DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
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AJM		4501721	

DIAPHRAGM DETAILS

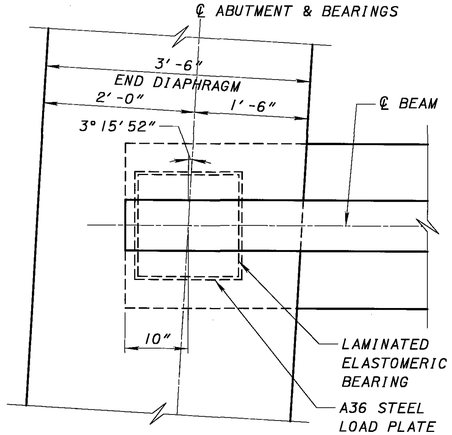
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
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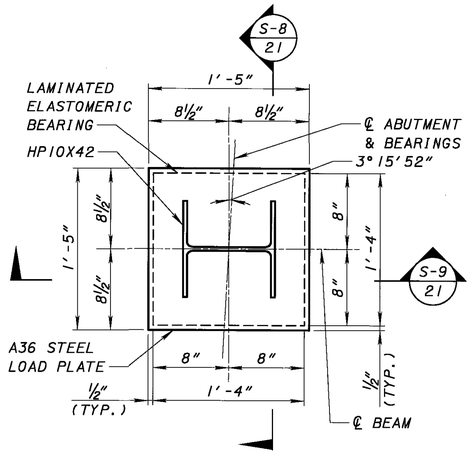
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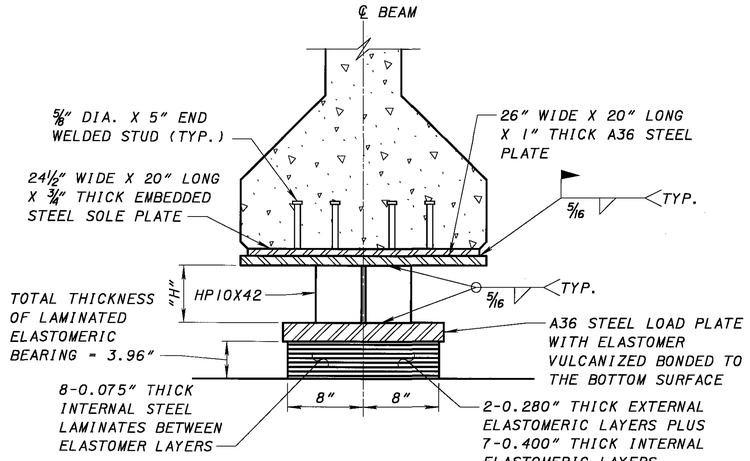


ABUTMENT BEARING PLAN

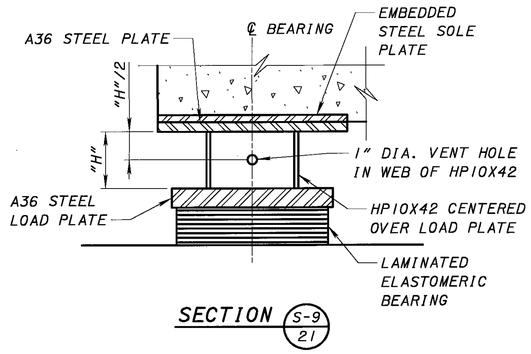


ABUTMENT BEARING DETAIL

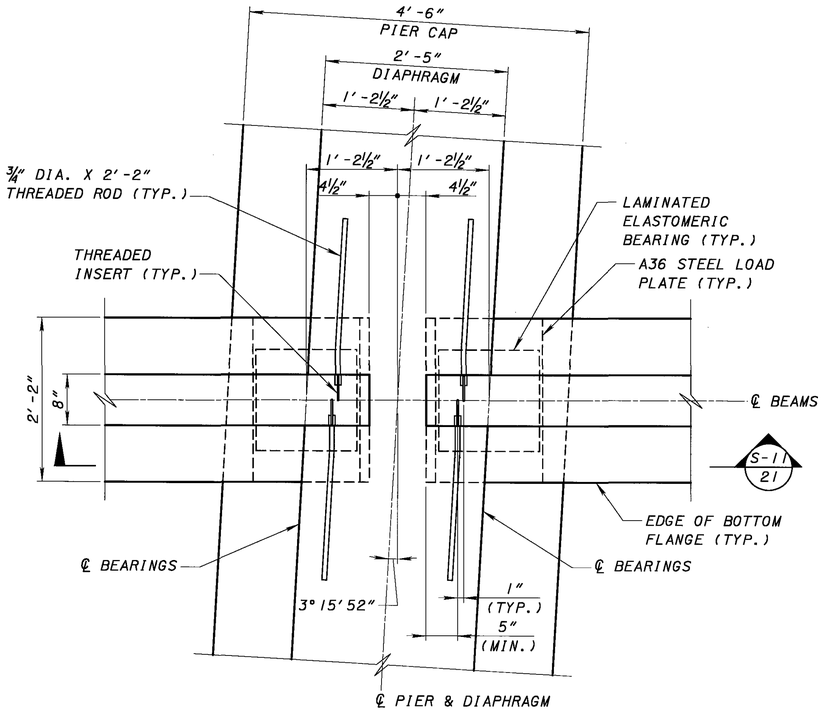
(12 REQUIRED)



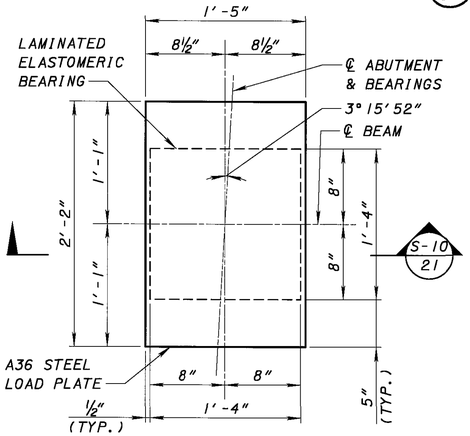
SECTION S-8 / 21



SECTION S-9 / 21

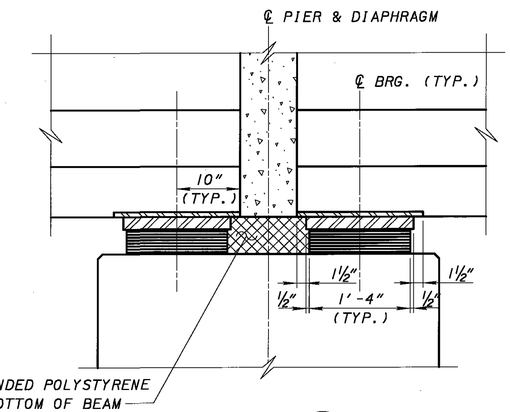


PIER BEARING PLAN

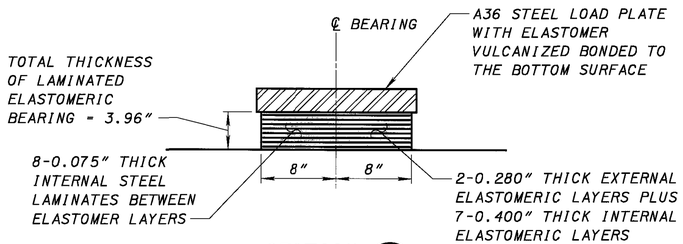


PIER BEARING DETAIL

(12 REQUIRED)



SECTION S-11 / 21



SECTION S-10 / 21

LEGEND:

ABUT.	= ABUTMENT
BRG.	= BEARING
℄	= CENTERLINE
C/C	= CENTER-TO-CENTER
DIA.	= DIAMETER
EXP.	= EXPANSION
FWD.	= FORWARD
IN.	= INCH
MIN.	= MINIMUM
SPA.	= SPACED
TYP.	= TYPICAL

TABLE OF HP10X42 HEIGHTS (DIM. "H") (IN.)

ABUTMENT	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6
REAR	3 1/8	4 3/4	6 1/4	6 3/8	5	3 9/16
FORWARD	3 7/8	5 1/2	7 1/16	7 1/8	5 13/16	4 5/16

BEARING PROPERTIES

SPAN	1	1	2	2
LOCATION	REAR ABUT.	PIER	PIER	FWD. ABUT.
BEARING TYPE	EXP.	EXP.	EXP.	EXP.
NUMBER OF BEARINGS REQUIRED	6	6	6	6
DESIGN DEAD LOAD (KIPS)	148.0	146.0	146.0	148.0
DESIGN LIVE LOAD* (KIPS)	54.0	57.0	57.0	54.0
DESIGN TOTAL LOAD (KIPS)	202.0	203.0	203.0	202.0
LOAD PLATE THICKNESS (IN.)	2	2½	2	2

*EXCLUDING IMPACT

NOTES:

1. A36 STEEL LOAD PLATES SHALL BE USED FOR ABUTMENT AND PIER BEARINGS. THE LOAD PLATE SHALL BE VULCANIZED BONDED TO THE LAMINATED ELASTOMERIC PAD DURING THE MOLDING PROCESS.
2. WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F, AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
3. BASIS OF PAYMENT: THE UNIT PRICE BID SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS, STEEL PLATES, AND HP SHAPES. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).
4. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
5. FOR ADDITIONAL DETAILS, SEE STANDARD BRIDGE DRAWING PSID-1-99.

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601 LAKESIDE PARK DRIVE • COLUMBUS, OHIO 43229

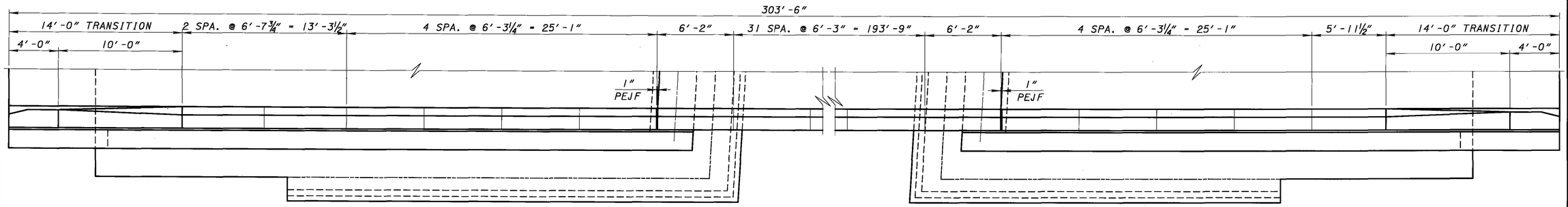
DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVIEWED GWM
DATE 07-20-05
STRUCTURE FILE NUMBER 4501721

BEARING DETAILS

BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

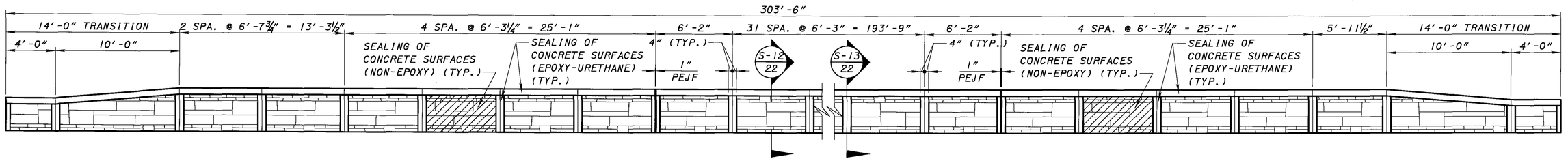
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AESTHETIC PARAPET PLAN

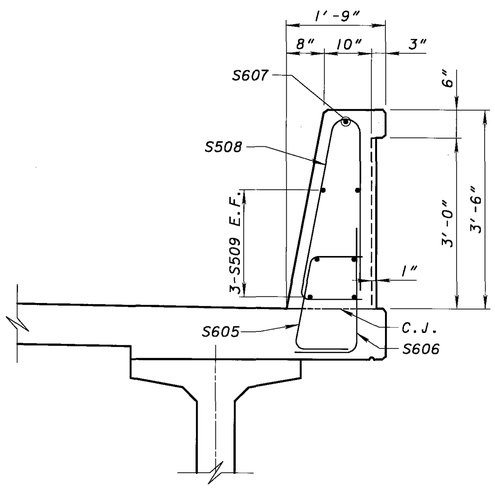
(RIGHT PARAPET SHOWN, LEFT PARAPET SIMILAR)

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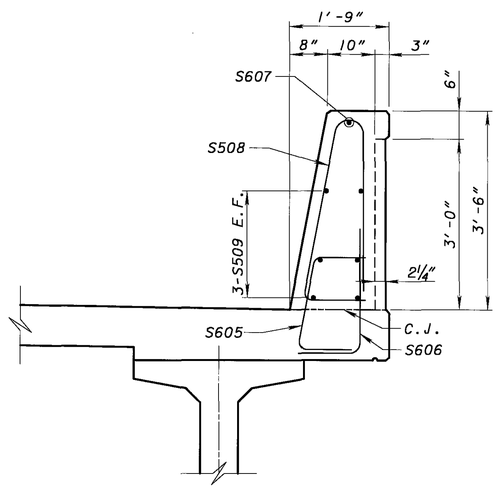


AESTHETIC PARAPET ELEVATION

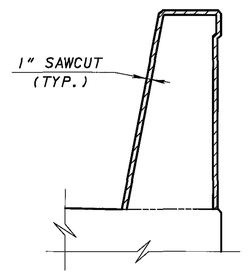
(RIGHT PARAPET SHOWN, LEFT PARAPET SIMILAR)



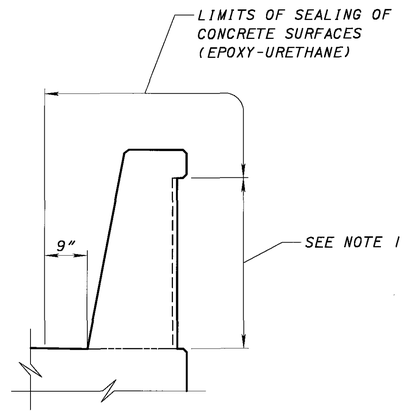
SECTION S-12 / 22



SECTION S-13 / 22



CONTROL JOINT DETAIL



PARAPET SEALING DETAIL

LEGEND:

- C.J. - CONSTRUCTION JOINT
- E.F. - EACH FACE
- F.F. - FAR FACE
- N.F. - NEAR FACE
- PEJF - PREFORMED EXPANSION JOINT FILLER
- SPA. - SPACED
- TYP. - TYPICAL

NOTES:

1. RECESSED PANELS TO BE SEALED WITH NON-EPOXY SEALER. VERTICALS TO BE SEALED WITH EPOXY-URETHANE SEALER.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM | DRAWN JAM | REVIEWED GWM | DATE 07-20-05
CHECKED AJM | REVISED | STRUCTURE FILE NUMBER 4501721

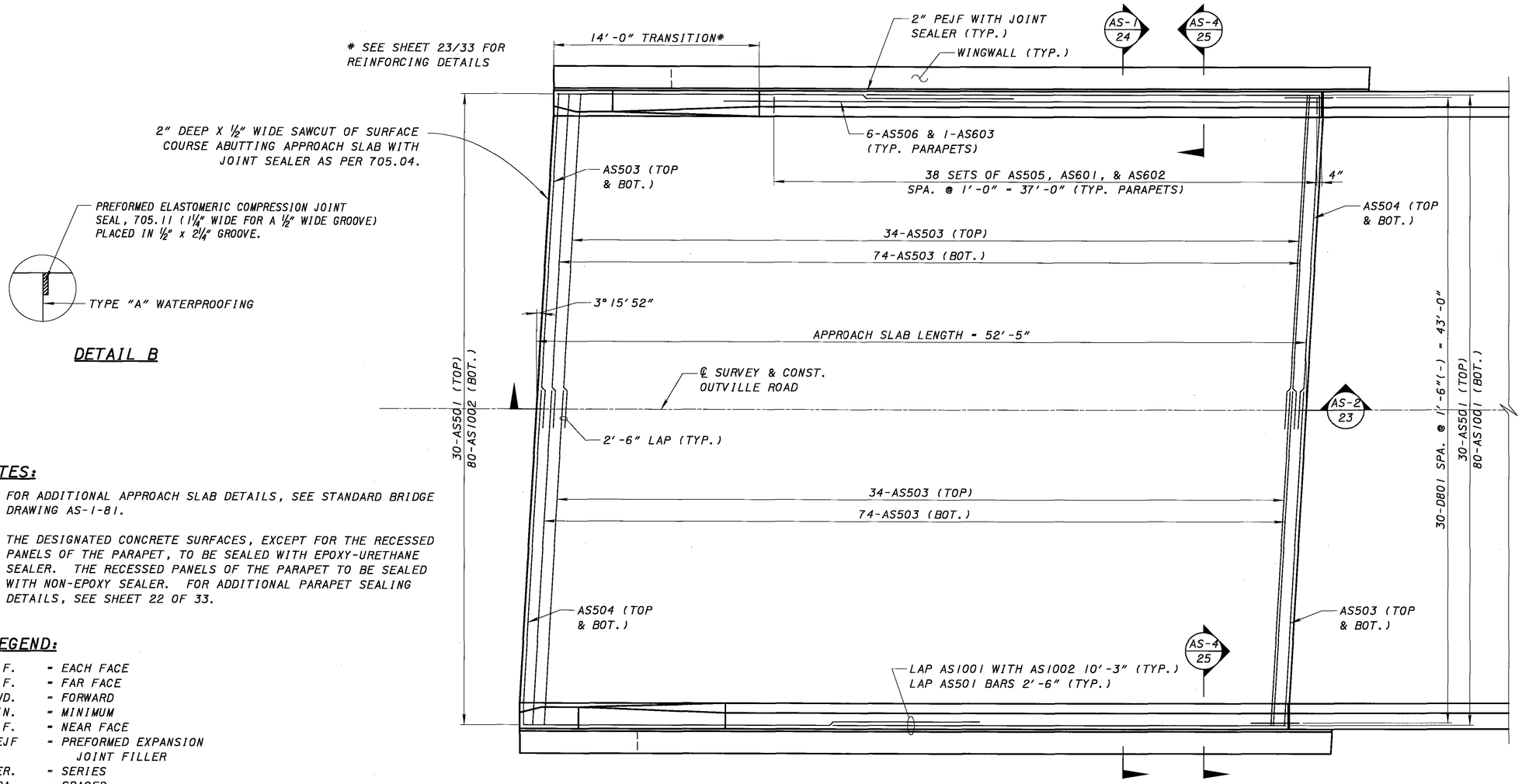
PARAPET DETAILS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

22/33

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PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL, 705.11 (1¼" WIDE FOR A ½" WIDE GROOVE) PLACED IN ½" x 2¼" GROOVE.

TYPE "A" WATERPROOFING

DETAIL B

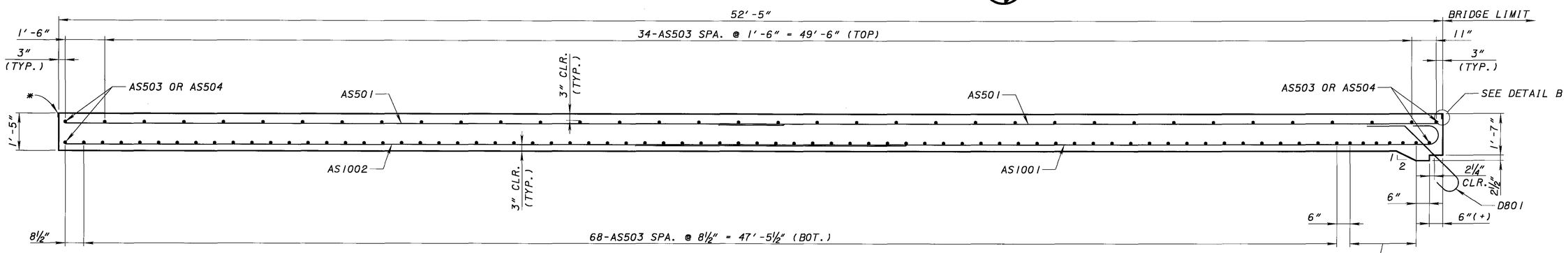
PLAN

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.
2. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.

LEGEND:

E.F.	- EACH FACE
F.F.	- FAR FACE
FWD.	- FORWARD
MIN.	- MINIMUM
N.F.	- NEAR FACE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SER.	- SERIES
SPA.	- SPACED
TYP.	- TYPICAL



* - 2" DEEP X ½" WIDE SAWCUT OF SURFACE COURSE ABUTTING APPROACH SLAB WITH JOINT SEALER AS PER 705.04.

AS-2 23 SECTION

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

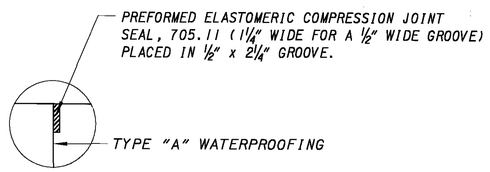
REAR APPROACH SLAB
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

23/33

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10/26/2006
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DETAIL B

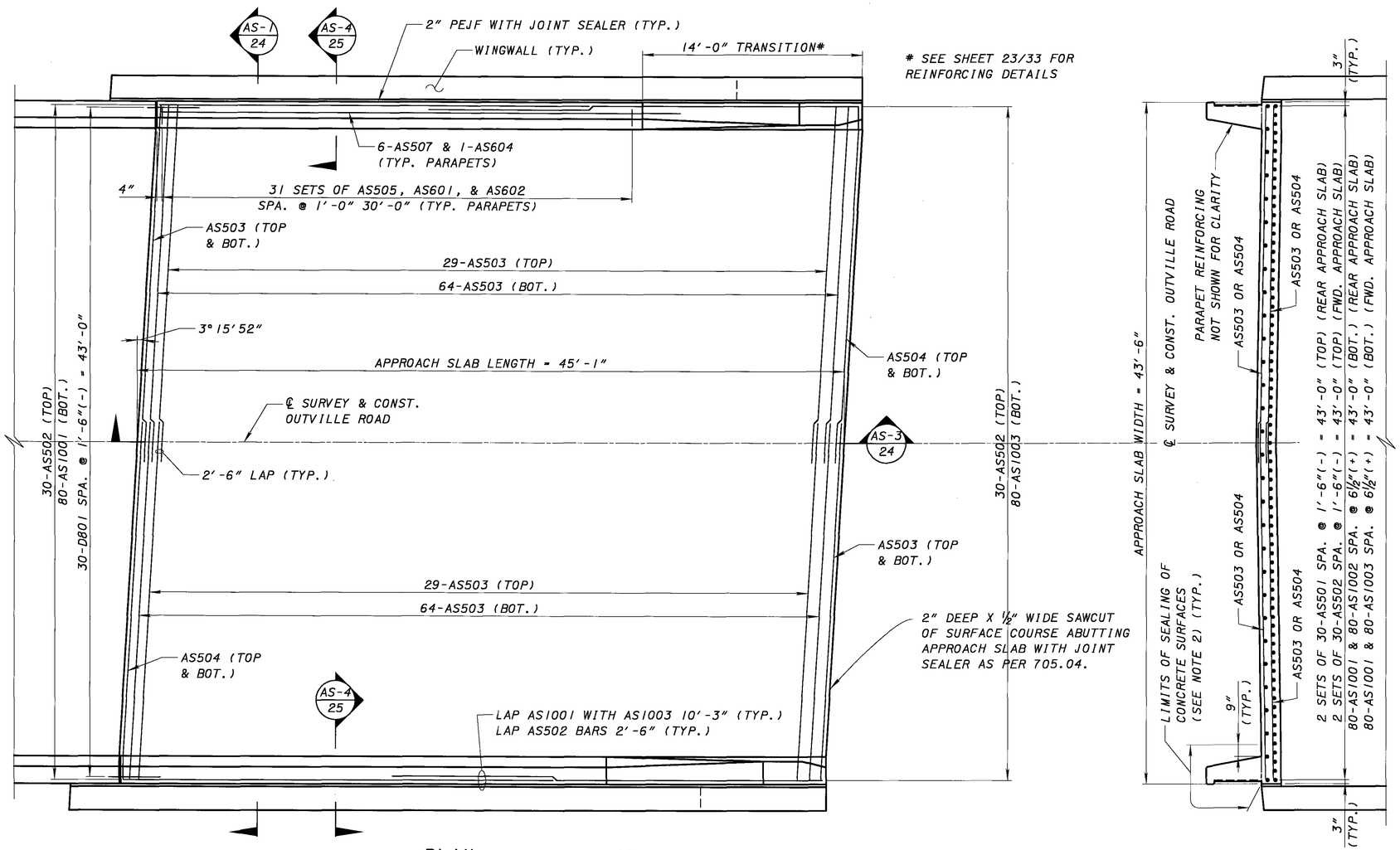
LEGEND:

BOT.	= BOTTOM
℄	= CENTERLINE
C.J.	= CONSTRUCITON JIONT
CLR.	= CLEARANCE
CONST.	= CONSTRUCTION
E.F.	= EACH FACE
PEJF	= PREFORMED EXPANSION JOINT FILLER
SPA.	= SPACED
TYP.	= TYPICAL

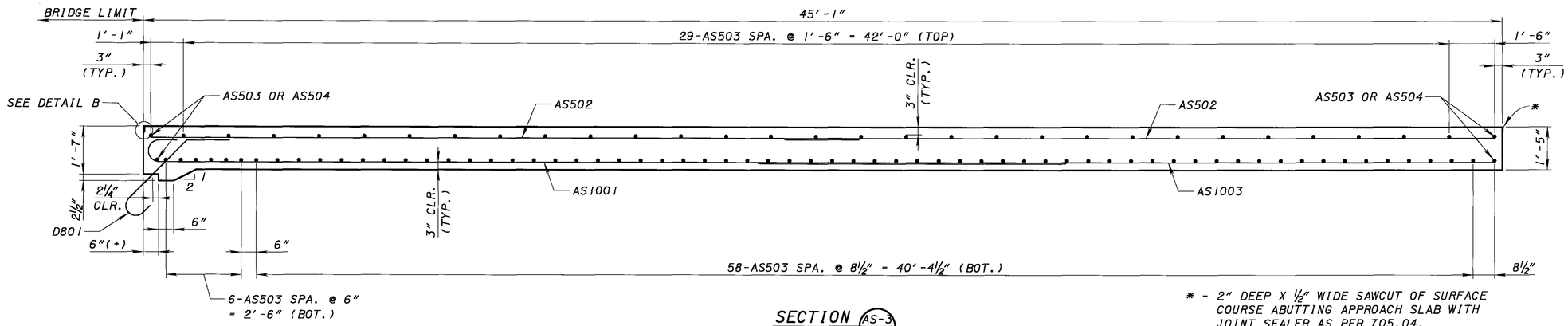
NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.

2. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.



PLAN



SECTION AS-3 24

* - 2" DEEP X ⅛" WIDE SAWCUT OF SURFACE COURSE ABUTTING APPROACH SLAB WITH JOINT SEALER AS PER 705.04.

SECTION AS-1 23

DLZ
622 HARTLEY ROAD • COLUMBUS, OHIO 43329

DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

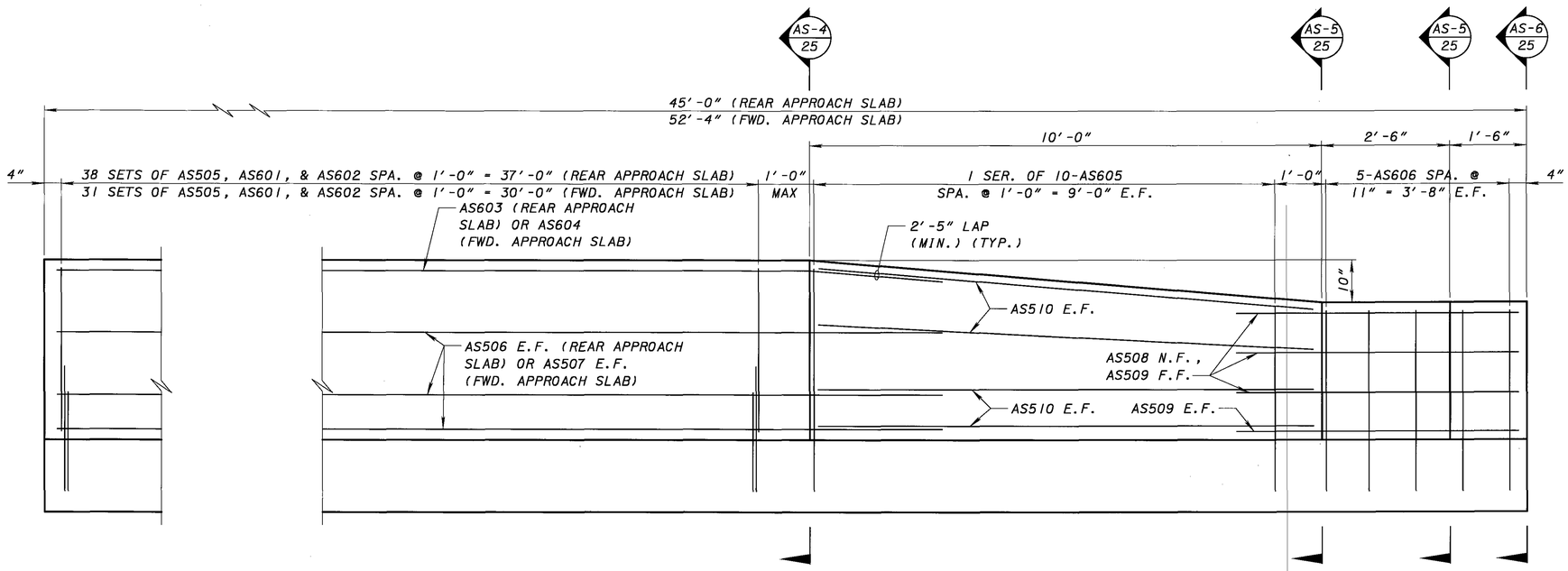
FORWARD APPROACH SLAB
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

24/33

1188/1349

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APPROACH SLAB PARAPET ELEVATION

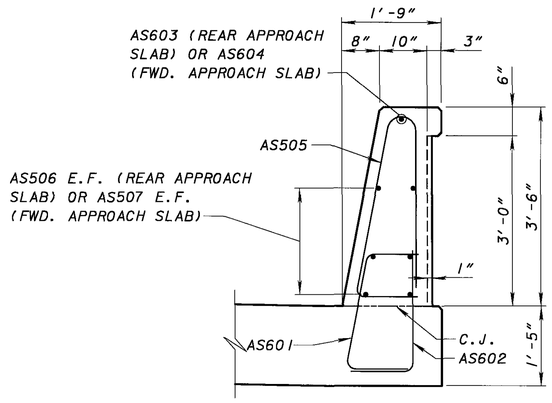
(LEFT FORWARD PARAPET SHOWN, OTHER PARAPETS SIMILAR)
(APPROACH SLAB REINFORCEMENT NOT SHOWN)

LEGEND:

E.F.	- EACH FACE
F.F.	- FAR FACE
FWD.	- FORWARD
MIN.	- MINIMUM
N.F.	- NEAR FACE
PEJF	- PREFORMED EXPANSION JOINT FILLER
SER.	- SERIES
SPA.	- SPACED
TYP.	- TYPICAL

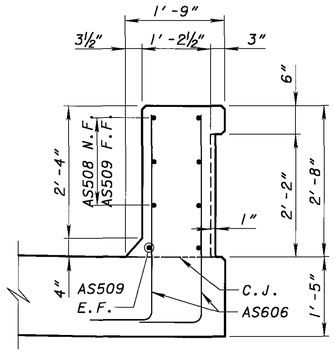
NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD BRIDGE DRAWING AS-1-81.
2. THE DESIGNATED CONCRETE SURFACES, EXCEPT FOR THE RECESSED PANELS OF THE PARAPET, TO BE SEALED WITH EPOXY-URETHANE SEALER. THE RECESSED PANELS OF THE PARAPET TO BE SEALED WITH NON-EPOXY SEALER. FOR ADDITIONAL PARAPET SEALING DETAILS, SEE SHEET 22 OF 33.

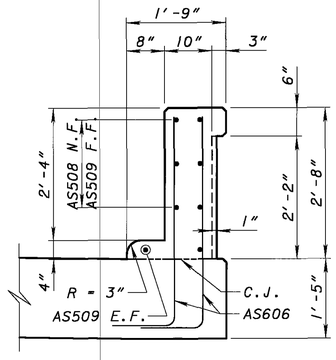


SECTION AS-4 23

ALSO SHEETS 24&25 OF 33.



SECTION AS-5 25



SECTION AS-6 25

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
KMR	KMR	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

APPROACH SLAB DETAILS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

25/33

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1349

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STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
REAR ABUTMENT										
RA401	37	4'-6"	111	1	4'-6"					
RA402	78	3'-6"	182	1	3'-6"					
RA501	12	26'-10"	336	1	26'-10"					
RA502	4	24'-6"	102	1	24'-6"					
RA503	37	17'-0"	657	J5J	5'-8"	2'-7"				
RA504	31	15'-11"	515	J5J	3'-2"	4'-6½"				
RA505	40	26'-2"	1092	1	26'-2"					
RA506	16	27'-2"	453	1	27'-2"					
RA507	4	19'-8"	82	1	19'-8"					
RA508	2	19'-10"	41	1	19'-10"					
RA509	2	22'-10"	48	1	22'-10"					
RA510	2	25'-10"	54	1	25'-10"					
RA511	6	27'-8"	173	1	27'-8"					
RA512	78	23'-6"	1914	J5J	9'-2"	2'-4"				
RA513	74	17'-5"	1343	3	8'-3"	1'-2"				
RA514	72	13'-3"	994	3	6'-2"	1'-2"				
RA515	1 SER. OF 7	9'-7" TO 17'-2"	98	J5J	1'-2"	3'-4¼" TO 7'-1¾"				1
RA516	4	11'-2"	46	9	2'-5"	7'-9¾"	3'-11"			
RA517	16	27'-0"	451	1	27'-0"					
RA518	4	19'-5"	81	1	19'-5"					
RA519	2	19'-7"	41	1	19'-7"					
RA520	2	22'-7"	47	1	22'-7"					
RA521	2	25'-7"	53	1	25'-7"					
RA522	6	27'-5"	172	1	27'-5"					
RA523	1 SER. OF 7	9'-8" TO 17'-3"	98	J5J	1'-2"	3'-4¾" TO 7'-2¼"				1
RA601	6	13'-10"	125	R5R	3'-2"	3'-2"				
RA602	4	7'-4"	44	3	3'-1"	1'-6"				
RA801	8	28'-1"	600	1	28'-1"					
RA802	8	26'-11"	575	1	26'-11"					
RA803	32	27'-5"	2342	1	27'-5"					
RA901	10	7'-1"	241	3	3'-1"	1'-6"				
RA902	4	3'-2"	43	1	3'-2"					
		TOTAL =	13154							
FORWARD ABUTMENT										
FA401	37	4'-6"	111	1	4'-6"					
FA402	68	3'-6"	159	1	3'-6"					
FA501	12	26'-10"	336	1	26'-10"					
FA502	4	24'-6"	102	1	24'-6"					
FA503	37	17'-0"	657	J5J	5'-8"	2'-7"				
FA504	31	15'-8"	507	J5J	3'-2"	4'-5"				
FA505	40	22'-6"	939	1	22'-6"					
FA506	16	20'-6"	342	1	20'-6"					
FA507	4	18'-7"	78	1	18'-7"					
FA508	2	18'-9"	39	1	18'-9"					
FA509	2	21'-9"	45	1	21'-9"					
FA510	6	26'-7"	166	1	26'-7"					
FA511	68	23'-6"	1669	J5J	9'-2"	2'-4"				
FA512	65	16'-9"	1135	3	7'-11"	1'-2"				
FA513	63	12'-3"	804	3	5'-8"	1'-2"				
FA514	1 SER. OF 5	8'-9" TO 13'-12"	60	J5J	1'-2"	2'-11½" TO 5'-6¾"				1
FA515	4	8'-2"	34	J5J	1'-2"	2'-8"				
FA516	2	10'-11"	23	10	2'-1¾"	5'-8"	2'-5"	3'-0"		
FA517	16	20'-8"	345	1	20'-8"					
FA518	4	18'-10"	79	1	18'-10"					
FA519	2	19'-0"	40	1	19'-0"					
FA520	2	22'-0"	46	1	22'-0"					
FA521	6	26'-10"	168	1	26'-10"					

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
FA522	1 SER. OF 5	8'-10" TO 14'-3"	60	J5J	1'-2"	3'-0" TO 5'-8½"				1
FA523	2	10'-11"	23	10	2'-0¾"	5'-9¼"	2'-5"	2'-10½"		
FA601	6	13'-10"	125	R5R	3'-2"	3'-2"				
FA602	4	7'-4"	44	3	3'-1"	1'-6"				
FA801	8	28'-1"	600	1	28'-1"					
FA802	8	26'-11"	575	1	26'-11"					
FA803	32	23'-10"	2036	1	23'-10"					
FA901	10	7'-1"	241	3	3'-1"	1'-6"				
FA902	4	3'-2"	43	1	3'-2"					
		TOTAL =	11631							
PIER										
P401	3	433'-8"	869	50	2'-6"	0'-4½"	19'-7"			
P501	21	9'-8"	212	1	9'-8"					
P502	24	8'-8"	217	1	8'-8"					
P503	248	8'-8"	2250	3	3'-1"	2'-9½"				
P504	4 SER. OF 7	9'-7" TO 12'-11"	330	J5J	2'-9½"	1'-9" TO 3'-5"				1
P601	6	15'-10"	143	R5R	3'-2"	4'-2"				
P602	4	4'-5"	27	2	3'-1"	1'-6"				
P801	42	11'-6"	1290	H1H	9'-8"					
P802	48	10'-6"	1346	H1H	8'-8"					
P803	57	10'-2"	1554	2	9'-1"	1'-4"				
P804	57	22'-8"	3450	1	22'-8"					
P901	20	24'-5"	1660	1	24'-5"					
P902	10	4'-4"	146	2	3'-1"	1'-6"				
P903	4	4'-2"	57	1	4'-2"					
P1001	16	22'-9"	1566	1	22'-9"					
P1002	16	13'-6"	929	9	10'-3"	2'-8¾"	1'-10"			
P1003	13	33'-5"	1869	1	33'-5"					
P1004	13	18'-11"	1058	1	18'-11"					
		TOTAL =	18973							
SUPERSTRUCTURE										
S501	1029	30'-0"	32197	1	30'-0"					
S502	60	12'-8"	793	1	12'-8"					
S503	87	19'-8"	1785	1	19'-8"					
S504	407	27'-0"	11462	1	27'-0"					
S505	407	19'-6"	8278	1	19'-6"					
S506	2 SER. OF 4	7'-0" TO 33'-4"	168	1	7'-0" TO 33'-3½"					1
S507	4	23'-3"	97	9	21'-8"	1'-7"	0'-1"			
S508	412	7'-5"	3173	21	3'-0"	3'-2"	0'-2¼"	1'-1"	0'-2¾"	
S509	96	27'-10"	2787	1	27'-10"					
S601	86	41'-0"	5296	1	41'-0"					
S602	814	23'-7"	28834	1	23'-7"					
S603	2 SER. OF 4	7'-0" TO 33'-4"	242	1	7'-0" TO 33'-3½"					1
S604	4	23'-7"	142	9	22'-0"	1'-7"	0'-1"			
S605	412	3'-7"	2192	12	1'-0¾"	1'-8½"	0'-2½"			
S606	412	2'-7"	1618	2	1'-8¼"	1'-1"				
S607	16	29'-1"	699	1	29'-1"					
		TOTAL =	99763							

STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
END DIAPHRAGMS										
D401	30	12'-4"	248	R3R	4'-8"	2'-1"				
D402	6	11'-4"	45	22	0'-5½"	5'-4"	5'-4"	0'-2¼"		
D403	6	4'-9"	19	27	1'-11½"	0'-6¼"	0'-8½"	0'-8½"		
D404	6	2'-8"	11	1	2'-8"					
D501	72	7'-3"	544	3	2'-7"	2'-4"				
D502	144	10'-7"	1588	3	3'-10"	3'-2"				
D601	40	7'-6"	453	17	1'-10¾"	1'-10¾"	0'-9¾"	2'-10"	2'-11¾"	
D602	30	6'-6"	293	1	6'-6"					
D801	60	5'-1"	820	7H	1'-0"	2'-10"				
D802	16	24'-9"	1058	6	16'-3"	0'-9"	2'-6¼"	0'-9"	5'-4"	
D803	30	6'-6"	521	1	6'-6"					
D804	28	24'-1"	1800	1	24'-1"					
D805	12	2'-4"	75	1	2'-4"					
		TOTAL =	7475							
APPROACH SLABS										
AS501	60	27'-4"	1711	1	27'-4"					
AS502	60	23'-8"	1481	1	23'-8"					
AS503	410	22'-11"	9800	1	22'-11"					
AS504	8	22'-10"	191	9	21'-4"	1'-6"	0'-1"			
AS505	138	7'-5"	1063	21	3'-0"	3'-2"	0'-2¼"	1'-1"	0'-2¾"	
AS506	12	40'-9"	510	1	40'-9"					
AS507	12	33'-5"	418	1	33'-5"					
AS508	12	5'-6"	69	17	0'-1"	1'-8"	2'-5"	1'-4½"	0'-4¼"	
AS509	20	5'-6"	115	1	5'-6"					
AS510	32	10'-0"	334	1	10'-0"					
AS601	138	3'-10"	799	12	1'-0¾"	2'-0¼"	0'-2½"			
AS602	138	2'-11"	607	2	2'-0"	1'-1"				
AS603	2	40'-9"	122	1	40'-9"					
AS604	2	33'-5"	100	1	33'-5"					
	8	4'-4"			3'-5"					
AS605	SER. OF 10	TO 5'-2"	572	2	TO 4'-3"					
AS606	40	4'-4"	261	2	3'-5"	1'-1"				
AS1001	160	32'-7"	22433	1H	31'-2"					
AS1002	80	31'-2"	10729	1	31'-2"					
AS1003	80	23'-11"	8233	1	23'-11"					
		TOTAL =	59548							
INTERMEDIATE DIAPHRAGMS										
D405	180	8'-9"	1055	J5J	0'-6"	3'-8"				
D601	120	7'-6"	1358	17	1'-10¾"	1'-10¾"	0'-9¾"	2'-10"	2'-11¾"	
D602	180	6'-6"	1757	1	6'-6"					
		TOTAL =	4170							

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM
DRAWN JAM
CHECKED AJM
REVISED
REVISED
REVIEWED GWM
DATE 07-20-05
STRUCTURE FILE NUMBER 4501721

REINFORCING STEEL LIST 1
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

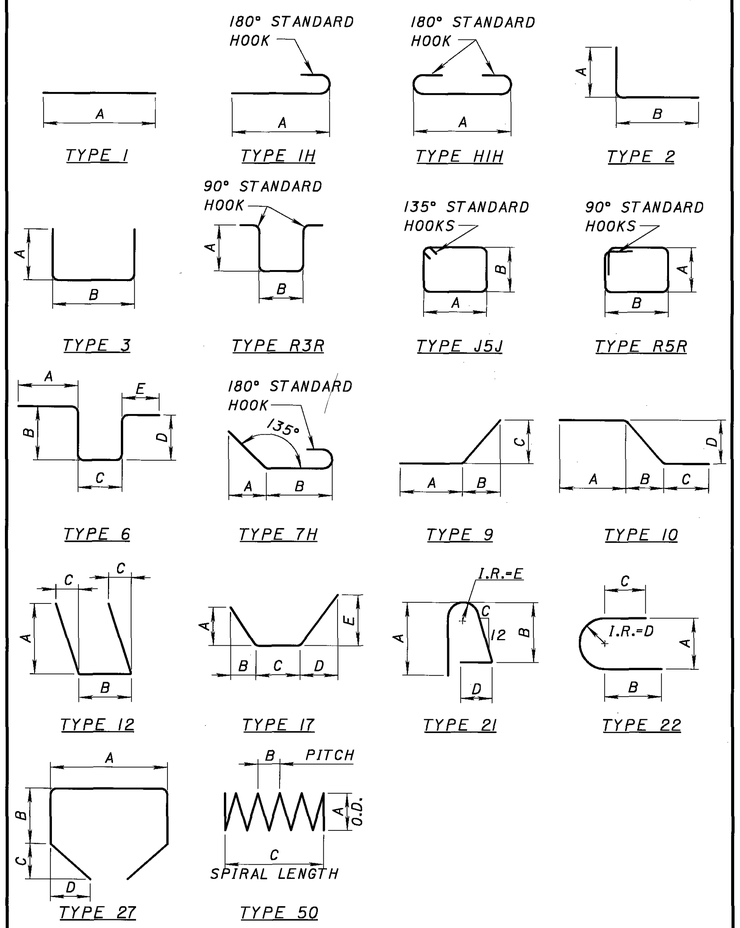
LIC-161-6.65
LIC-37-10.25
PID 77221

26/33

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BENDING DIAGRAM



NOTES:

1. SERIES BARS WITH EQUAL INCREMENTS.
2. ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED OTHERWISE.
3. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
4. THE BAR SIZE NUMBER IS SPECIFIED IN THE 'MARK' COLUMN. THE FIRST TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER.
5. TYPE '50' IS SPIRAL BAR.
6. FIELD CUT AND BENDING OF REINFORCING STEEL TO FIT MAY BE REQUIRED.

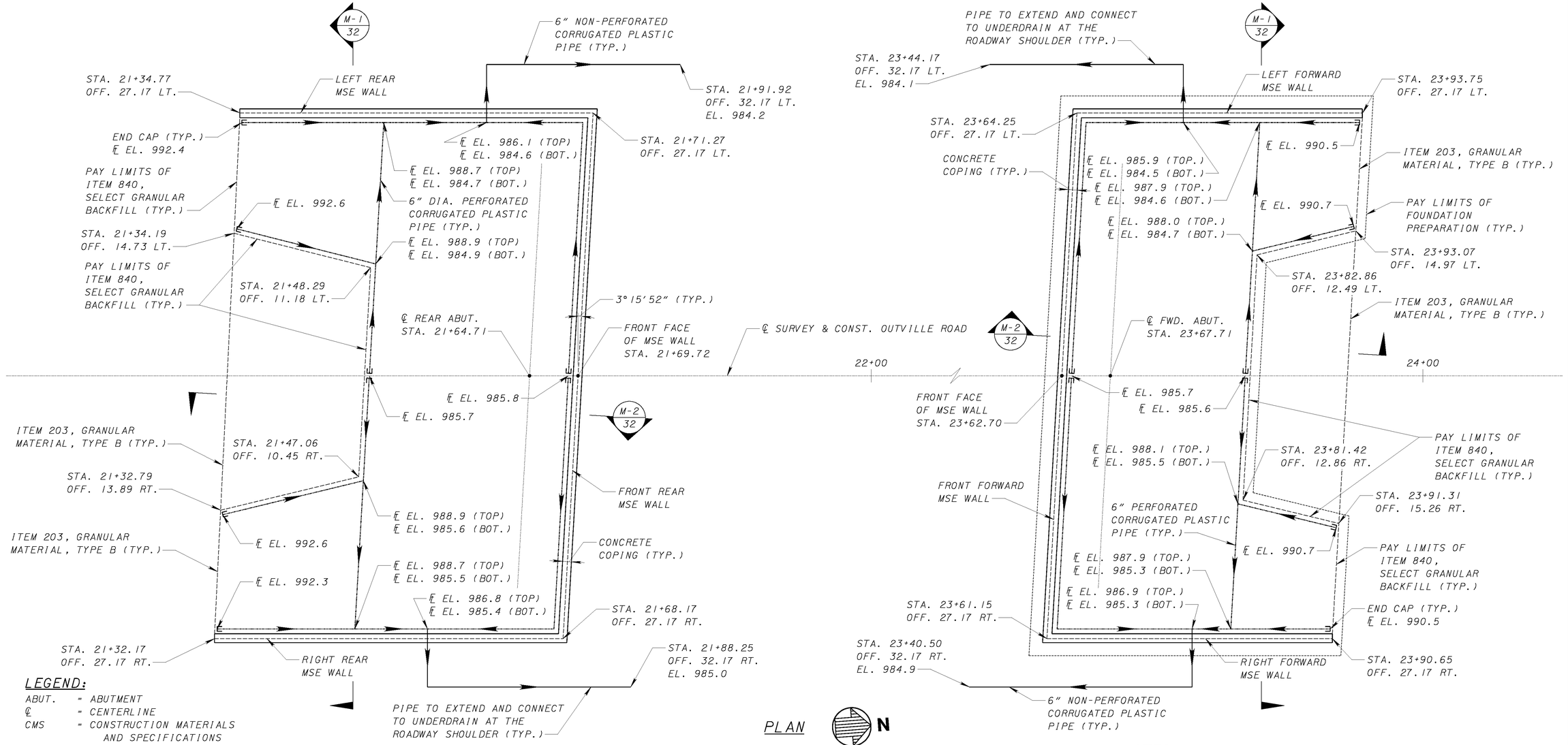
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DLZ
8501 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVISED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

REINFORCING STEEL LIST 2
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221



LEGEND:

ABUT.	= ABUTMENT
℄	= CENTERLINE
CMS	= CONSTRUCTION MATERIALS AND SPECIFICATIONS
DIA.	= DIAMETER
EL.	= ELEVATION
FT.	= FOOT
FWD.	= FORWARD
IN.	= INCH
INV.	= INVERT
LT.	= LEFT
MSE	= MECHANICALLY STABILIZED EARTH
OFF.	= OFFSET
RT.	= RIGHT
STA.	= STATION
TYP.	= TYPICAL

NOTES:

1. ALL PLASTIC PIPE FOR MSE WALL EMBANKMENT DRAINAGE SHALL MAINTAIN A MINIMUM SLOPE OF 1/8 IN./FT.
2. PAY LIMITS OF PROPRIETARY WALL EMBANKMENT ARE ESTIMATED. EXACT LENGTHS ARE TO BE DETERMINED BY THE MSE WALL DESIGNER.

DLZ
1621 HARTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVISED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450172 1	

MSE WALL PLAN
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

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MSE WALL NOTES

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS INCLUDING THE ODOT BRIDGE DESIGN MANUAL.

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SUPPLEMENTAL SPECIFICATION 840 DATED 7/21/2006

DESIGN LOADING:

HS25 AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 POUNDS PER SQUARE FOOT

DESIGN DATA:

CLASS C CONCRETE, MISC: COPING - COMPRESSIVE STRENGTH 4000 PSI

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60
MINIMUM YIELD STRENGTH 60,000 PSI

DESIGN SUBMITTALS:

THE CONTRACTOR IS HEREBY NOTIFIED THAT THE MSE RETAINING WALL SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS PROVIDED IN SUPPLEMENTAL SPECIFICATION 840. AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT MSE RETAINING WALL DETAIL DESIGN PLANS (4 SETS), DESIGN CALCULATIONS (2 SETS), AND SHOP DRAWINGS PER 501.04 TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL BY THE DIRECTOR. THE PLANS FOR RETAINING WALLS SHALL BE PREPARED BY EITHER THE REINFORCED EARTH COMPANY (RETAINED EARTH AND REINFORCED EARTH WALLS), TENSAR EARTH TECHNOLOGIES, INC. (ARES RETAINING WALL SYSTEM), OR TRICON PRECAST, LTD. (TRICON RETAINED SOIL WALL SYSTEM). THE PLANS SHALL BE SUBMITTED EIGHT WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OF THE WALLS AND THE CONTRACTOR SHALL ALLOW FOUR WEEKS FOR THE REVIEW BY ODOT.

PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE AN UNFACTORED HORIZONTAL STRIP LOAD FROM THE SUPERSTRUCTURE OF 9 K/FT APPLIED PERPENDICULAR TO THE FACE OF WALL AT A POINT HALF THE HEIGHT OF THE CONCRETE FOOTING.

ALLOWABLE BEARING PRESSURE FOR THE DESIGN OF THE MSE WALLS:

THE ALLOWABLE BEARING PRESSURES FOR THE DESIGN OF THE MSE WALLS ARE 20 KSF FOR THE REAR MSE WALL AND 5 KSF FOR THE FORWARD MSE WALL.

SEALING OF CONCRETE SURFACES (NON-EPOXY (CLEAR)):

SURFACES OF THE MSE WALL PANELS, AS DETAILED IN THE PLANS, SHALL BE SEALED WITH A NON-EPOXY CLEAR SEALER AS PER CMS 512.

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

CONCRETE SURFACES OF THE COPING SHALL BE SEALED, AS DETAILED IN THE PLANS, WITH LIGHT NEUTRAL FEDERAL COLOR NO. 17778.

REINFORCING STEEL:

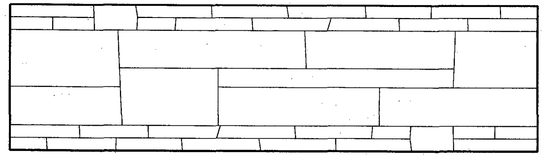
FURNISH AND INSTALL EPOXY COATED REINFORCING STEEL ACCORDING TO CMS 509.

ARCHITECTURAL FINISH:

THE SURFACE FINISH SHALL BE THE PATTERN DESCRIBED BELOW IN THE ARCHITECTURAL WALL ELEVATION FROM FOSTER GEOTECHNICAL OR AN APPROVED EQUAL MEETING THE DETAILS SHOWN ON THIS SHEET. THE INTEGRALLY COLORED CONCRETE USING CHROMIX ADMIXTURES SHALL BE AS PROVIDED BY L. M. SCOFIELD COMPANY, DOUGLASVILLE, GEORGIA (800) 800-9900 OR AN APPROVED EQUAL SHALL BE C-21 ADOBE TAN AS PROVIDED.

ONE PRECONSTRUCTION TEST SAMPLE SHALL BE PROVIDED FOR APPROVAL BY THE DIRECTOR. IF THE TEST SAMPLE DOES NOT MEET THE APPROVAL OF THE DIRECTOR, THE RESULTS MAY BE GROUNDS TO REJECT THE PROPOSED MSE WALL PANELS OR INTEGRALLY COLORED CONCRETE. THE TEST SAMPLE MUST PASS APPROVAL. FAILURE WILL CONSTITUTE PLACEMENT OF ANOTHER TEST SAMPLE. A FIVE FOOT BY FIVE FOOT TEST SAMPLE SHOULD BE MADE (OR THE SIZE OF THE MSE WALL PANELS). THE MOCK-UP SHALL HAVE THE SAME ARCHITECTURAL RELIEF, THICKNESS, AND PATTERN TO BE USED ON THE PROJECT. THE SAMPLE SHOULD BE OF THE SAME CEMENT, AGGREGATE SOURCE, AND INTEGRALLY COLORED CONCRETE THAT WILL BE USED TO MAKE THE MSE WALL PANELS. AFTER APPROVAL, THE CONCRETE TEST SAMPLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

ALL AESTHETIC TREATMENT INCLUDING THE INTEGRALLY COLORED CONCRETE, SURFACE FINISH, TEST SAMPLES, AND ALL OTHER MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED WITH ITEM 840, MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN.



ARCHITECTURAL
PANEL ELEVATION

THE FOLLOWING SHALL BE USED:

COMPANY NAME	PANEL SURFACE TREATMENT	SPECIFICATIONS
SPEC FORMLINERS, INC.	COLORADO RED FLAGSTONE # 1537	MAX RELIEF 2" LINER THICKNESS 1/8"± STONE SIZE 2" TO 1'-4"
CUSTOM ROCK INTERNATIONAL	MINNEHAHA BLEND #12010	MAX RELIEF 5/8" LINER THICKNESS 1 3/8" STONE SIZE 4" TO 30"
APPROVED EQUAL	APPROVED EQUAL	APPROVED EQUAL

NOTE: THE ARCHITECTURAL PATTERN & CONCRETE COLOR SHALL BE THE SAME FOR THE ENTIRE PROJECT.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

MSE WALL NOTES
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

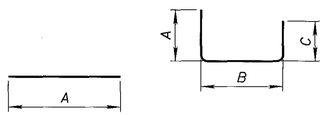
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STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	NOTE
MSE WALL CONCRETE COPING										
C401	72	9'-8"	465	1	9'-8"					
C402	16	6'-4"	68	1	6'-4"					
C403	4	6'-6"	17	1	6'-6"					
C404	4	6'-0"	16	1	6'-0"					
C405	8	9'-6"	51	1	9'-6"					
C406	144	3'-2"	309	4	1'-8"	0'-7"	1'-2"			
C407	144	2'-2"	208	1	2'-2"					
		TOTAL =	1134							

BENDING DIAGRAM



TYPE 1

TYPE 4

NOTES:

1. ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED OTHERWISE.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. THE BAR SIZE NUMBER IS SPECIFIED IN THE 'MARK' COLUMN. THE FIRST TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER.
4. WEIGHTS SHOWN IN THIS REINFORCING STEEL LIST ARE FOR INFORMATION ONLY. IF THE REINFORCING STEEL LIST PROVIDED IN THE PLANS IS USED IT SHALL BE VERIFIED BY THE CONTRACTOR. ANY REVISIONS IN THE REINFORCING STEEL LIST AS SHOWN IN THE PLANS WILL NOT BE REASON FOR ADJUSTMENT IN THE BID PRICE FOR REINFORCING STEEL.
5. FIELD CUT AND BENDING OF REINFORCING STEEL TO FIT MAY BE REQUIRED.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED JAM
DRAWN JAM
CHECKED CMC
REVISED
REVISED GWM DATE 07-20-05
STRUCTURE FILE NUMBER 450172 1

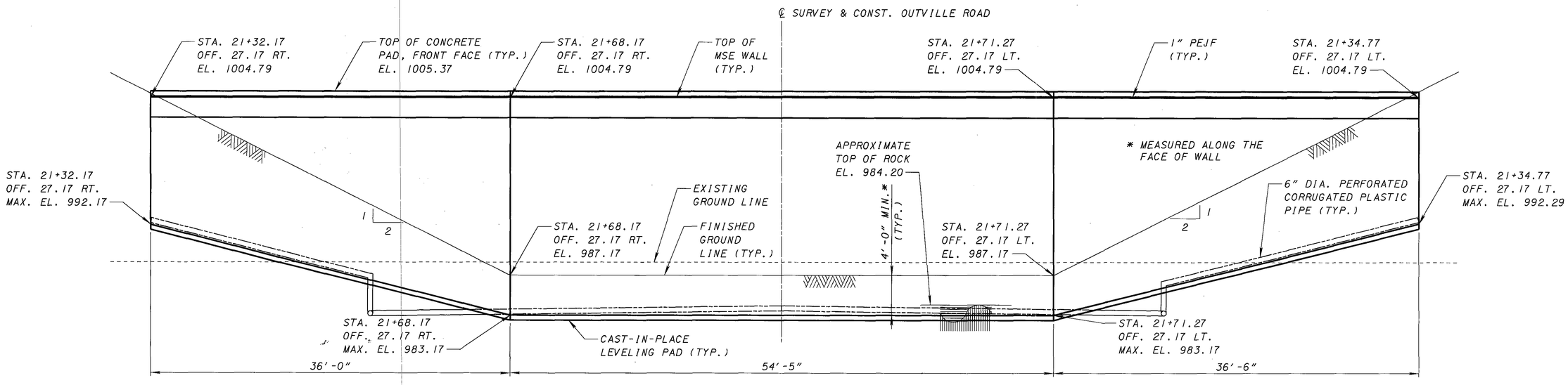
MSE WALL REINFORCING STEEL LIST
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

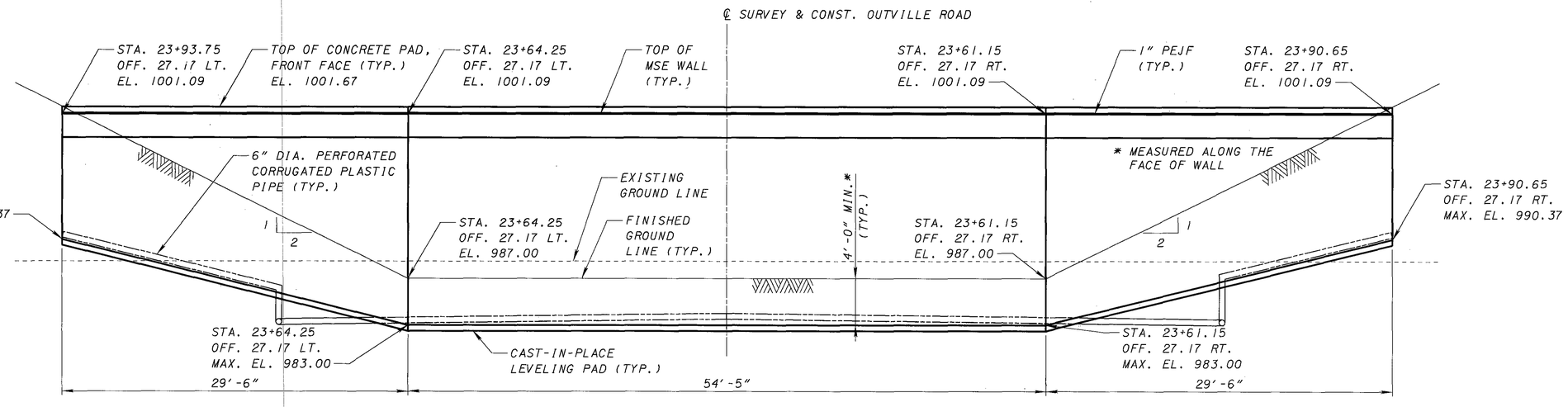
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REAR MSE WALL ELEVATION



FORWARD MSE WALL ELEVATION

LEGEND:

℄	= CENTERLINE
CONST.	= CONSTRUCTION
EL.	= ELEVATION
INV.	= INVERT
LT.	= LEFT
MAX.	= MAXIMUM
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
OFF.	= OFFSET
PEJF	= PREFORMED EXPANSION JOINT FILLER
RT.	= RIGHT
STA.	= STATION
TYP.	= TYPICAL

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

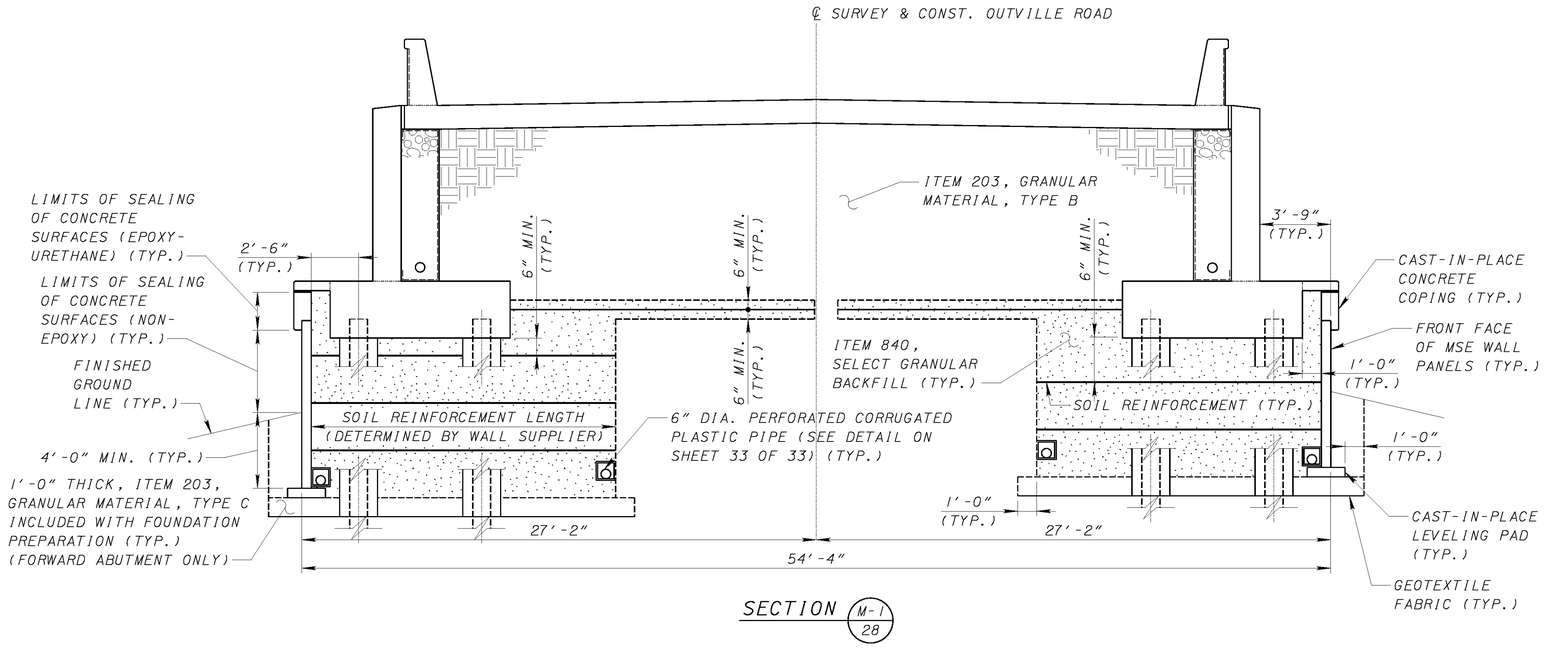
DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

MSE WALL ELEVATIONS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

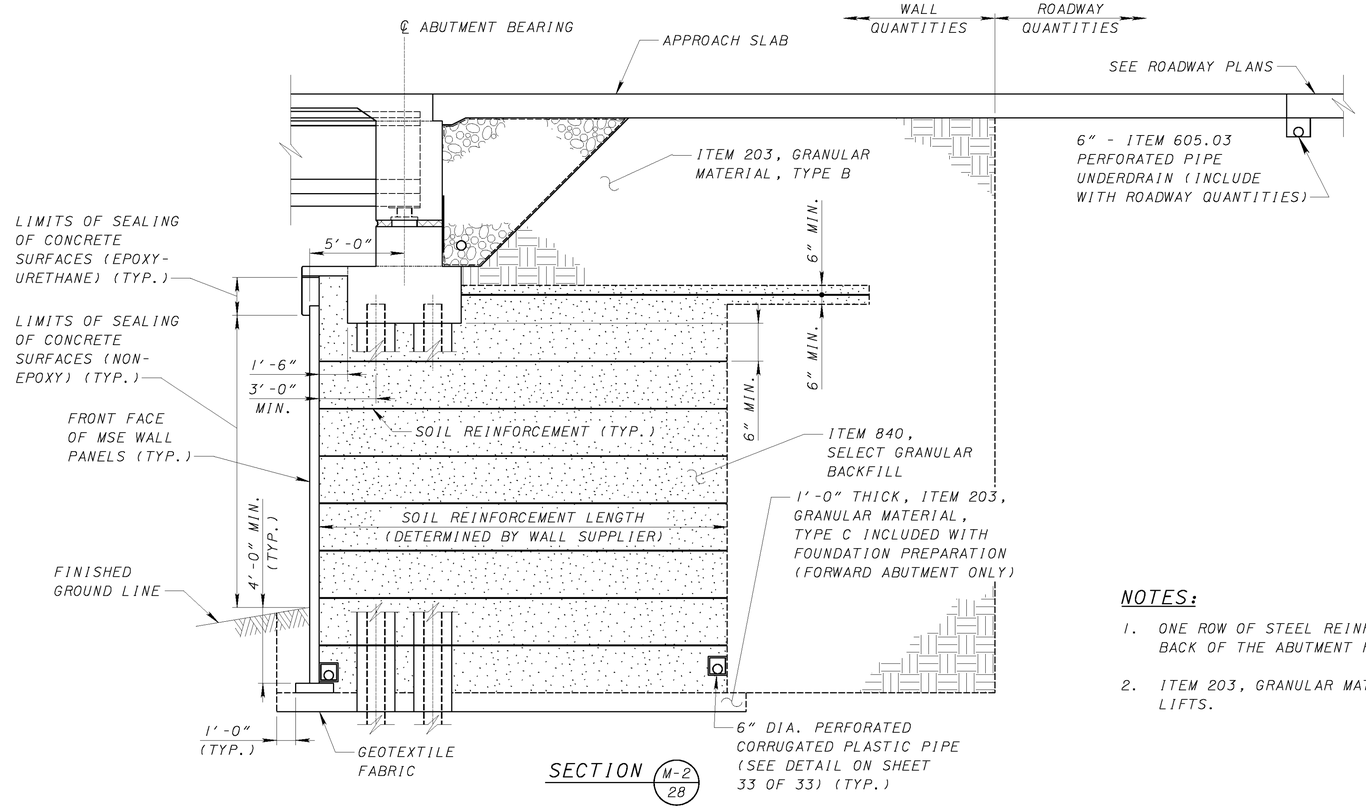
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LIC-37-10.25
PID 77221

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SECTION M-1 / 28



SECTION M-2 / 28

LEGEND:

℄	= CENTERLINE
CMS	= CONSTRUCTION MATERIALS AND SPECIFICATIONS
CONST.	= CONSTRUCTION
DIA.	= DIAMETER
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
TYP.	= TYPICAL

NOTES:

1. ONE ROW OF STEEL REINFORCEMENTS SHALL BE ATTACHED TO THE BACK OF THE ABUTMENT FOOTING.
2. ITEM 203, GRANULAR MATERIAL, TYPE B SHALL BE COMPACTED IN 6" LIFTS.

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DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		4501721	

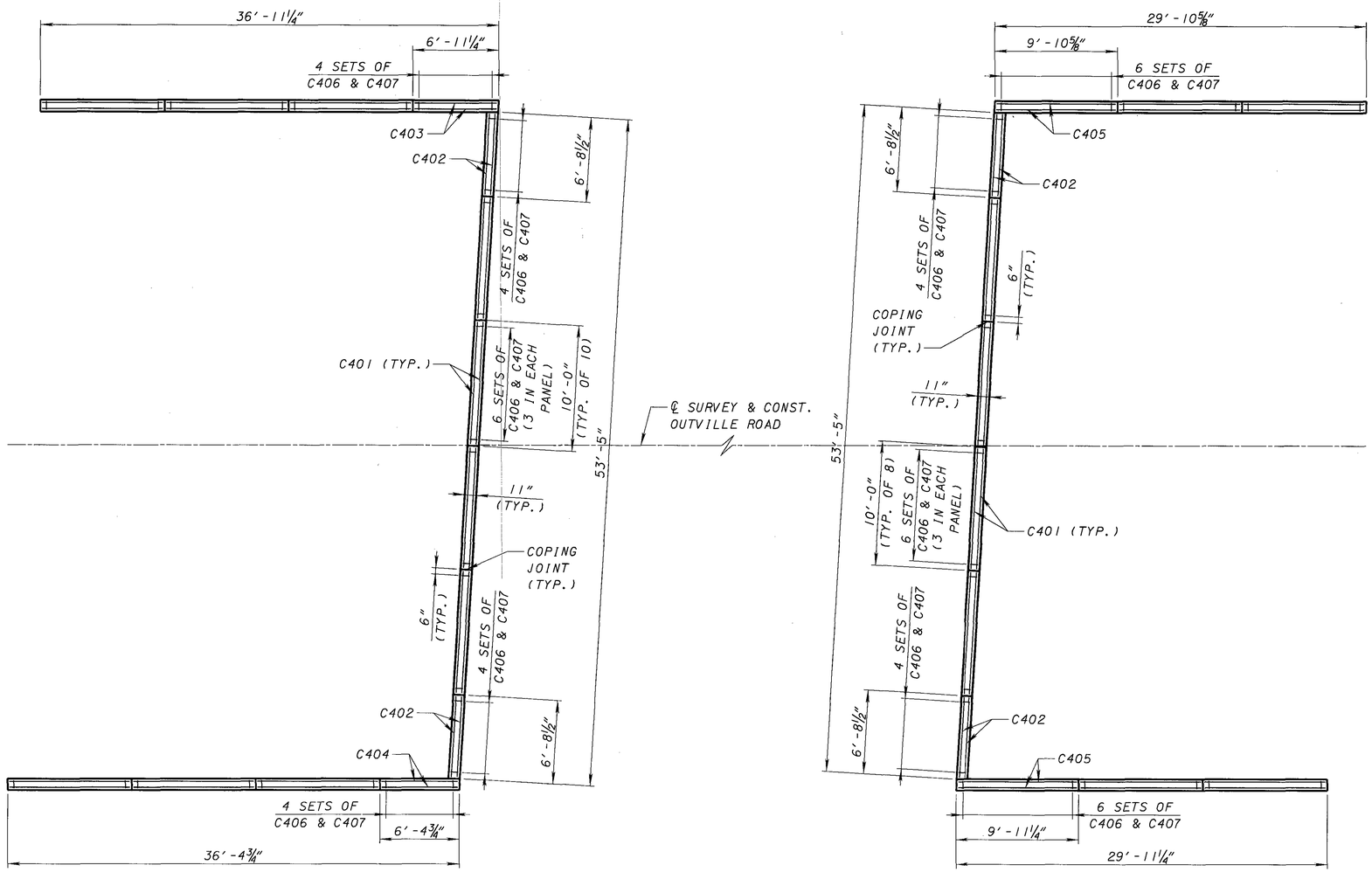
MSE WALL SECTIONS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

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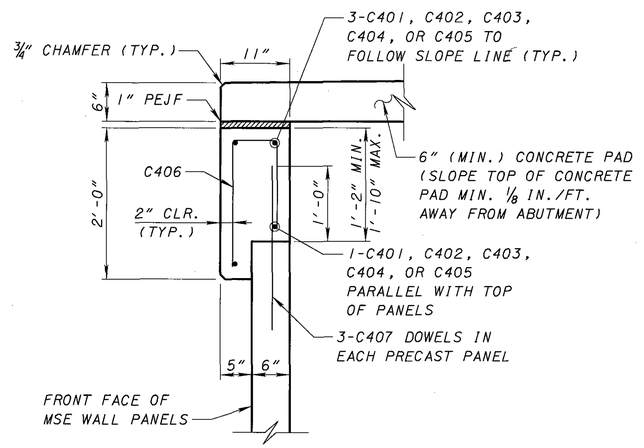
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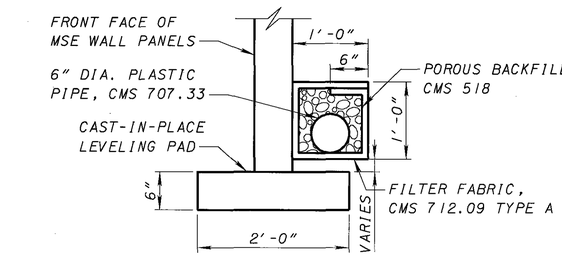


MSE WALL COPING SCHEMATIC PLAN

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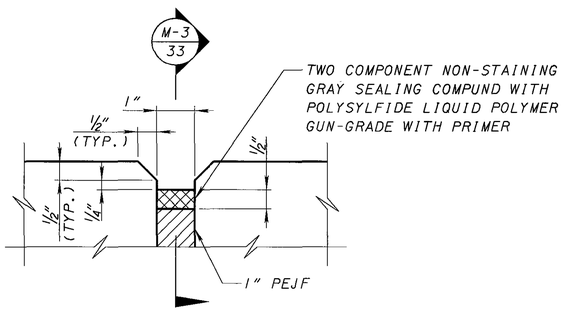
MSE WALL COPING DETAIL



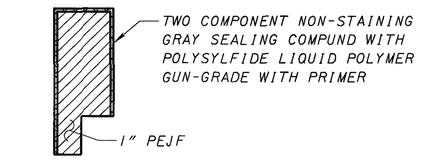
BOTTOM OF MSE WALL DETAIL

LEGEND:

℄	=CENTERLINE
CLR.	= CLEARANCE
CMS	= CONSTRUCTION MATERIALS AND SPECIFICATIONS
CONST.	= CONSTRUCTION
DIA.	= DIAMETER
MAX.	= MAXIMUM
MIN.	= MINIMUM
MSE	= MECHANICALLY STABILIZED EARTH
PEJF	= PREFORMED EXPANSION JOINT FILLER
TYP.	= TYPICAL



COPING JOINT DETAIL



SECTION M-3 / 33

NOTES:

1. PROVIDE 1" EXPANSION JOINTS EVERY 10'-0" OR LESS TO COINCIDE WITH COPING JOINTS. FILL JOINT WITH 1" PREFORMED EXPANSION JOINT FILLER OVER THE ENTIRE INTERFACE AREA.

DLZ
1621 NAITLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
JAM	JAM	GWM	07-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AJM		450I721	

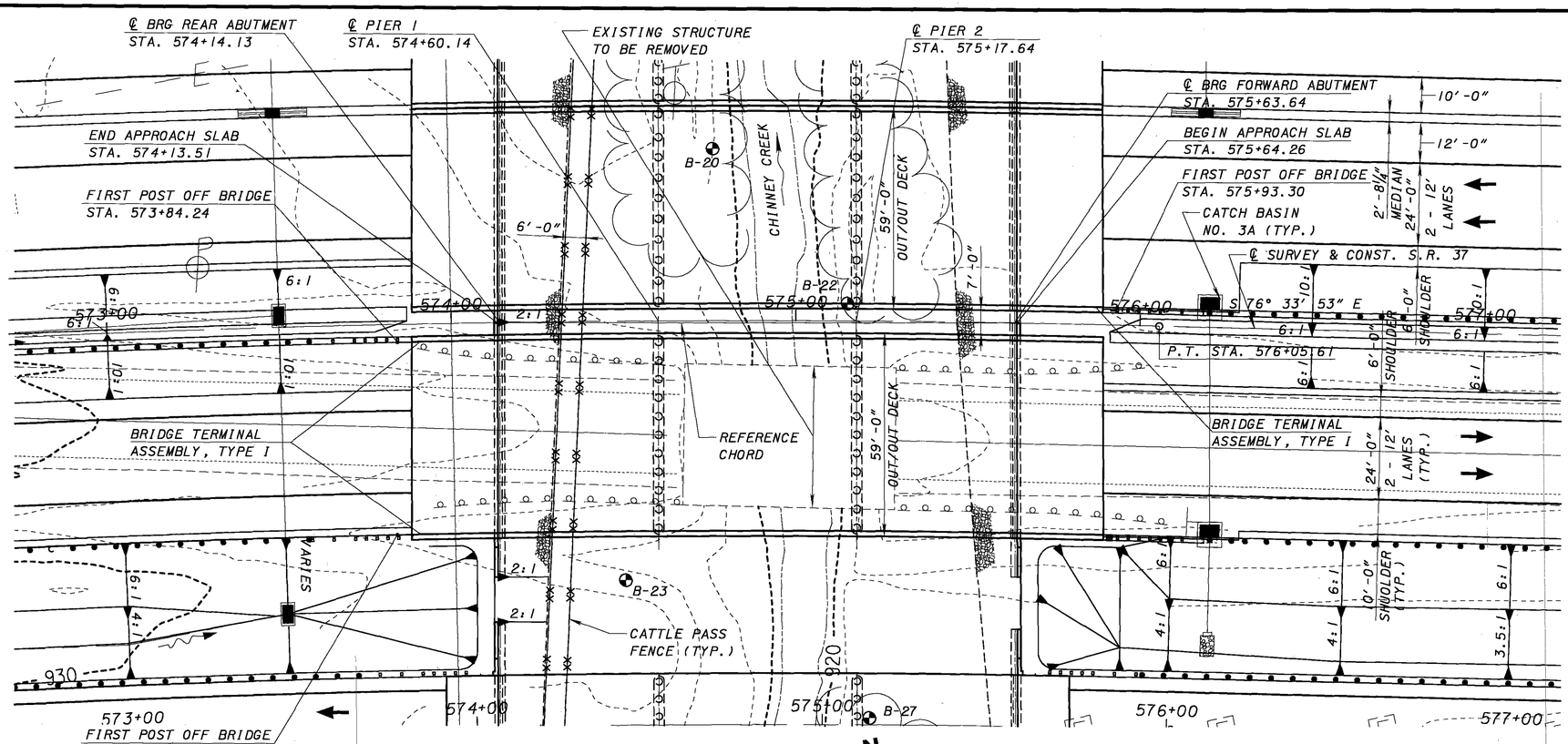
MSE WALL DETAILS
BRIDGE NO. LIC-37-1255
OUTVILLE ROAD OVER S.R. 37

LIC-161-6.65
LIC-37-10.25
PID 77221

33/33

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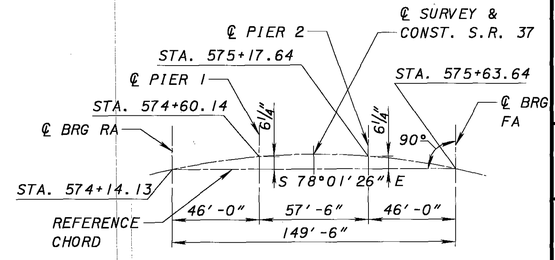
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PLAN

NOTES:

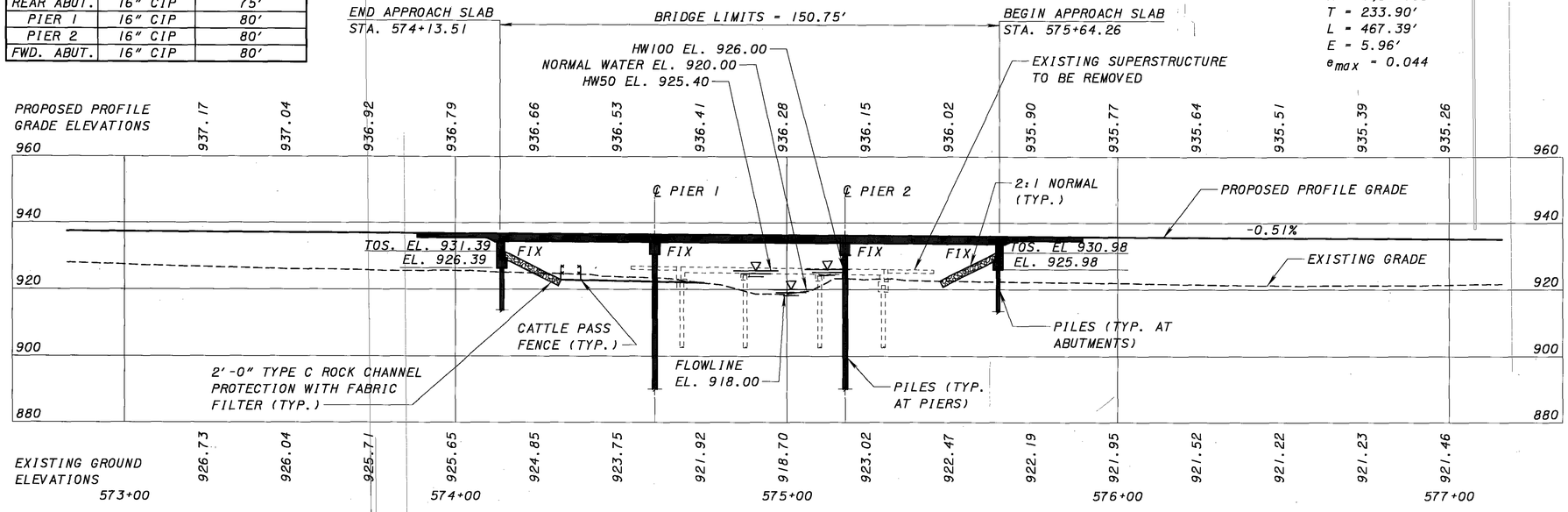
1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.
2. ⊕ BORING LOCATIONS
3. ▨ = 2'-0" TYPE C ROCK CHANNEL PROTECTION WITH FABRIC FILTER. ITEM IS INCLUDED WITH ROADWAY QUANTITIES.
4. FOR CATTLE PASS, SEE SHEET 173 OF 1349.



REFERENCE CHORD DIAGRAM

PILE TYPES AND ESTIMATED LENGTHS		
LOCATION	PILE TYPE	PILE LENGTH
REAR ABUT.	16" CIP	75'
PIER 1	16" CIP	80'
PIER 2	16" CIP	80'
FWD. ABUT.	16" CIP	80'

S.R. 37 CURVE DATA
P.I. STA. = 573+72.12
△ = 5° 50' 33" (RT)
Dc = 1° 15' 00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'
e_{max} = 0.044



PROFILE AT ℄ SURVEY & CONST. S.R. 37

BENCHMARK

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCHMARKS AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC

2010 ADT = 37,000 ADTT = 1850
2030 ADT = 59,100 ADTT = 2955

HYDRAULIC DATA

DRAINAGE AREA = 3.12 SQ.MI.
Q50 = 1370 CFS
HW50 = 925.4 FT.
V50 = 3.8 FPS
CLEARANCE ABOVE HW50 = 6.7 FT.
Q100 = 1695 CFS
HW100 = 926.0 FT.
V100 = 4.0 FPS

EXISTING STRUCTURE DATA

TYPE: CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE SUBSTRUCTURE
SPANS: 18'-0", 22'-6", 18'-0" C/C BEARINGS
ROADWAY: 40'-0" F/F GUARDRAIL
DESIGN LOADING: C.F.-400(51)
SKEW: 0°
WEARING SURFACE: BITUMINOUS CONCRETE
APPROACH SLABS: AS-1-54 (15' LONG)
ALIGNMENT: TANGENT
SUPERELEVATION: NONE
YEAR BUILT: 1957
SFN: 4501748

PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE ABUTMENTS AND PIERS
SPANS: 46'-0", 57'-6", 46'-0" C/C SUPPORT ALONG REFERENCE CHORD
ROADWAY: 56'-0" LEFT/56'-0" RIGHT
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°00'00" TO REFERENCE CHORD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: CURVE RIGHT
SUPERELEVATION: 0.044 MAX.
LATITUDE: 40°04'20" N
LONGITUDE: 82°33'45" W

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DESIGNED RTP | DRAWN RTP | CHECKED JN | REVIEWED DOR | DATE 11-12-04
REVISED | STRUCTURE FILE NUMBER 4501780L/4501799R

LICKING COUNTY
STA. 574+13.51
STA. 575+64.26

SITE PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

1 / 28

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GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	REVISED 07-19-02
CPA-5-94	REVISED 07-19-02
CPP-2-94	REVISED 07-19-02
CS-1-03	DATED 04-18-03
SBR-1-99	REVISED 07-19-02

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE O.D.O.T BRIDGE DESIGN MANUAL.

DESIGN LOADING:
HS25-44 AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 LBS/SQ FT

DESIGN DATA:
CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
HP CONCRETE

MONOLITHIC WEARING SURFACE:
MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

ITEM 894 HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

GENERAL REQUIREMENTS
THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS
ALL SUPERSTRUCTURE, BRIDGE DECK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN).

THE FOLLOWING PROPORTIONS WILL BE USED AS A STARTING MIX DESIGN:

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	**#8 COARSE AGGRE. (LB)	**57 COARSE AGGRE. (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	GGBF SLAG (LB)	MICRO-SILICA (LB)	WATER TO CEMENTITIOUS RATIO ±.01
GRAVEL	1245	360	1315	2920	400	170	30	0.43
LIMESTONE	1245	360	1335	2940	400	170	30	0.43
SLAG	1245	315	1155	2715	400	170	30	0.43

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

SUGGESTED CONSTRUCTION PROCEDURE:

PHASE ONE CONSTRUCTION
1. MAINTAIN TRAFFIC ON EXISTING STRUCTURE

2. CONSTRUCT APPROACH EMBANKMENT FOR CR539A, LEFT BRIDGE, AND OUTVILLE-MORSE FRONTAGE ROAD.

3. CONSTRUCT CR539A, LEFT, AND OUTVILLE-MORSE FRONTAGE ROAD BRIDGES.

PHASE TWO CONSTRUCTION
1. TRANSFER TRAFFIC TO LEFT BRIDGE.

2. REMOVE EXISTING BRIDGE.

3. CONSTRUCT APPROACH EMBANKMENT FOR RIGHT BRIDGE.

4. CONSTRUCT RIGHT BRIDGE.

THE ABOVE IS A SUGGESTED CONSTRUCTION PROCEDURE. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED CONSTRUCTION PROCEDURE AND SCHEDULE TO THE DIRECTOR FOR APPROVAL BEFORE BEGINNING CONSTRUCTION. NO CONSTRUCTION OPERATIONS WILL BE PERMITTED WITHOUT PRIOR APPROVAL.

PILE DRIVING CONSTRAINTS:
PRIOR TO DRIVING PILES, CONSTRUCT THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND A MINIMUM WAITING PERIOD OF 45 DAYS HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):
THE ULTIMATE BEARING VALUE IS 160 TONS PER PILE FOR THE 16" CAST-IN-PLACE REINFORCED CONCRETE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 167 TONS PER PILE FOR THE 16" CAST-IN-PLACE REINFORCED CONCRETE PIER PILES.

REAR ABUTMENT PILES:
19 PILES 80 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEMS

FORWARD ABUTMENT PILES:
19 PILES 85 FEET LONG, ORDER LENGTH
0 DYNAMIC LOAD TESTING ITEMS

PIER PILES
48 PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEMS

UTILITY LINES:
THE UTILITY(IES) SHALL BARE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MIMINUM.

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DESIGNED BMW | DRAWN DLW | CHECKED GLC | REVISED

REVIEWED GWM | DATE 7-20-05

STRUCTURE FILE NUMBER 4501780L/4501799R

GENERAL NOTES
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

2/28

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COMPUTED BY : BMW — DATE : 7/11/05
CHECKED BY : CMC — DATE : 08/09/05

ESTIMATED QUANTITIES - LEFT BRIDGE

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
503	21300	LUMP		UNCLASSIFIED EXCAVATION	LUMP				
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00700	3315	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1395	1920			
507	00750	1485	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1485				
507	00751	2040	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN		2040			11, 27
509	10000	160989	POUND	EPOXY COATED REINFORCING STEEL	9605	7261	144123		
511	42500	40	CU YD	CLASS C CONCRETE, PIER CAP		40			
511	43500	94	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	94				
512	10100	450	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	49	11	298	92	
516	13600	108	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	108				
518	21200	74	CU YD	POROUS BACKFILL WITH FILTER FABRIC	74				
518	40000	125	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	125				
518	40010	28	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	28				
523	20000	2	EACH	DYNAMIC LOAD TESTING				2	
523	20500	2	EACH	RESTRIKING				2	
526	25001	328	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T= 15"), AS PER PLAN				328	23, 24
894	10001	793	CU YD	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN			793		2

COMPUTED BY : BMW — DATE : 7/11/05
CHECKED BY : CMC — DATE : 08/09/05

ESTIMATED QUANTITIES - RIGHT BRIDGE

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
202	11002	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN				LUMP	
503	21300	LUMP		UNCLASSIFIED EXCAVATION	LUMP				
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00700	3470	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1550	1920			
507	00750	1650	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1650				
507	00751	2040	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN		2040			12,28
509	10000	161858	POUND	EPOXY COATED REINFORCING STEEL	10415	7701	143742		
511	42500	42	CU YD	CLASS C CONCRETE, PIER CAP		42			
511	43500	99	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	99				
512	10100	576	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	48	12	393	123	
516	13600	63	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	63				
518	21200	81	CU YD	POROUS BACKFILL WITH FILTER FABRIC	81				
518	40000	147	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	147				
518	40010	28	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	28				
523	20000	2	EACH	DYNAMIC LOAD TESTING				2	
523	20500	2	EACH	RESTRIKING				2	
526	25001	328	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T= 15"), AS PER PLAN				328	25, 26
894	10001	789	CU YD	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN			789		2

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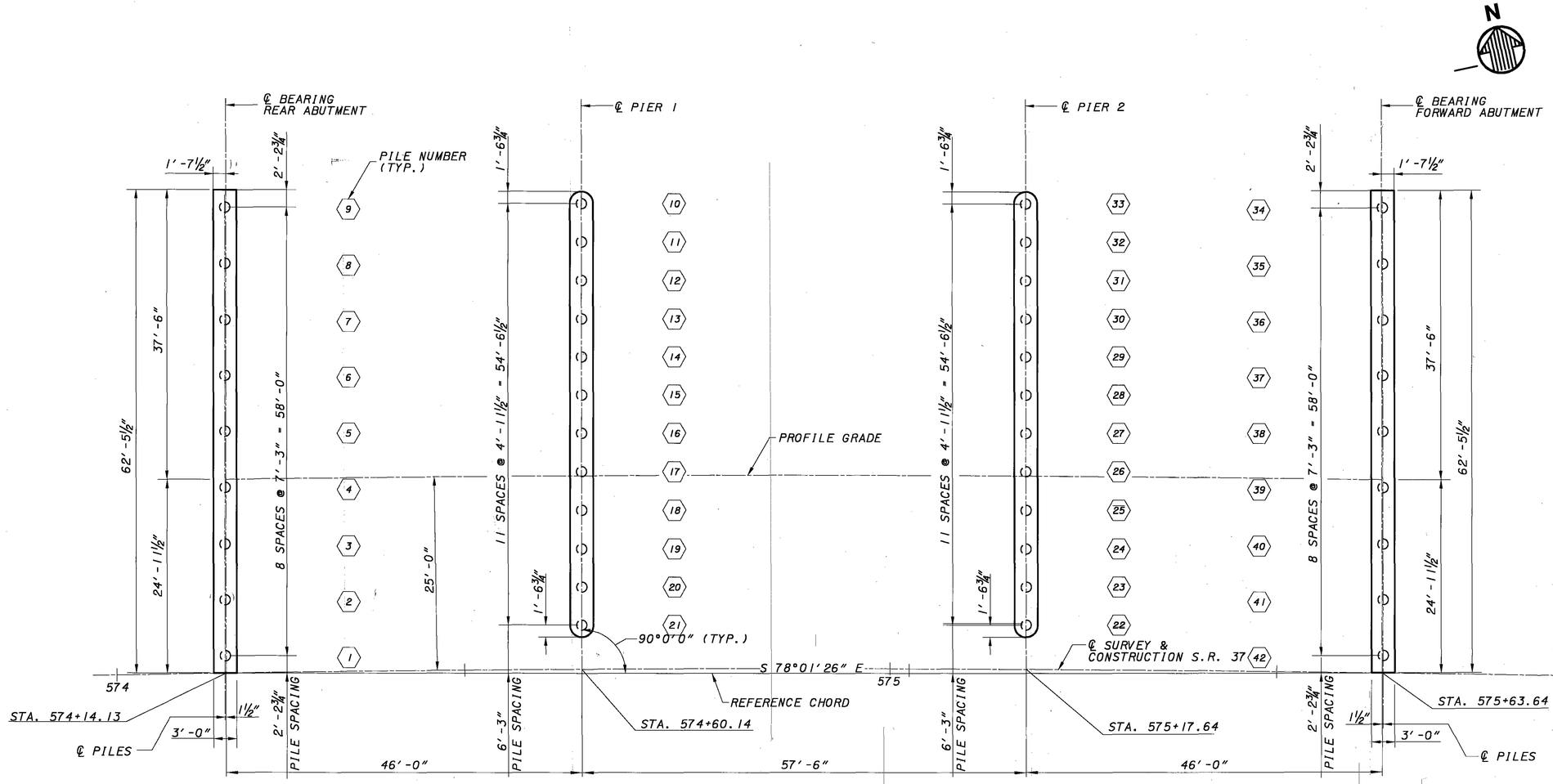
DESIGNED BMW | DRAWN DLW | REVIEWED GWM | DATE 7-20-05
CHECKED GLC | REVISED | STRUCTURE FILE NUMBER 4501780L/4501799R

ESTIMATED QUANTITIES
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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PILE LAYOUT

REAR ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
1 THRU 9	16" CIP	EL.928.39	75	VERTICAL

FORWARD ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
34 THRU 42	16" CIP	EL.927.98	80	VERTICAL

PIER PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
10 THRU 21	16" CIP	EL.932.86	80	VERTICAL
22 THRU 33	16" CIP	EL.932.56	80	VERTICAL

NOTE:

1. FOR REAR ABUTMENT DETAILS SEE SHEET 6/28 AND 10/28.
2. FOR FORWARD ABUTMENT DETAILS SEE SHEET 8/28 AND 10/28.
3. FOR PIER DETAILS SEE SHEET 11/28.

PILE SYMBOL:

○ VERTICAL PILES 16" CAST-IN-PLACE REINFORCED CONCRETE PILES

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		450I780L/450I799R	

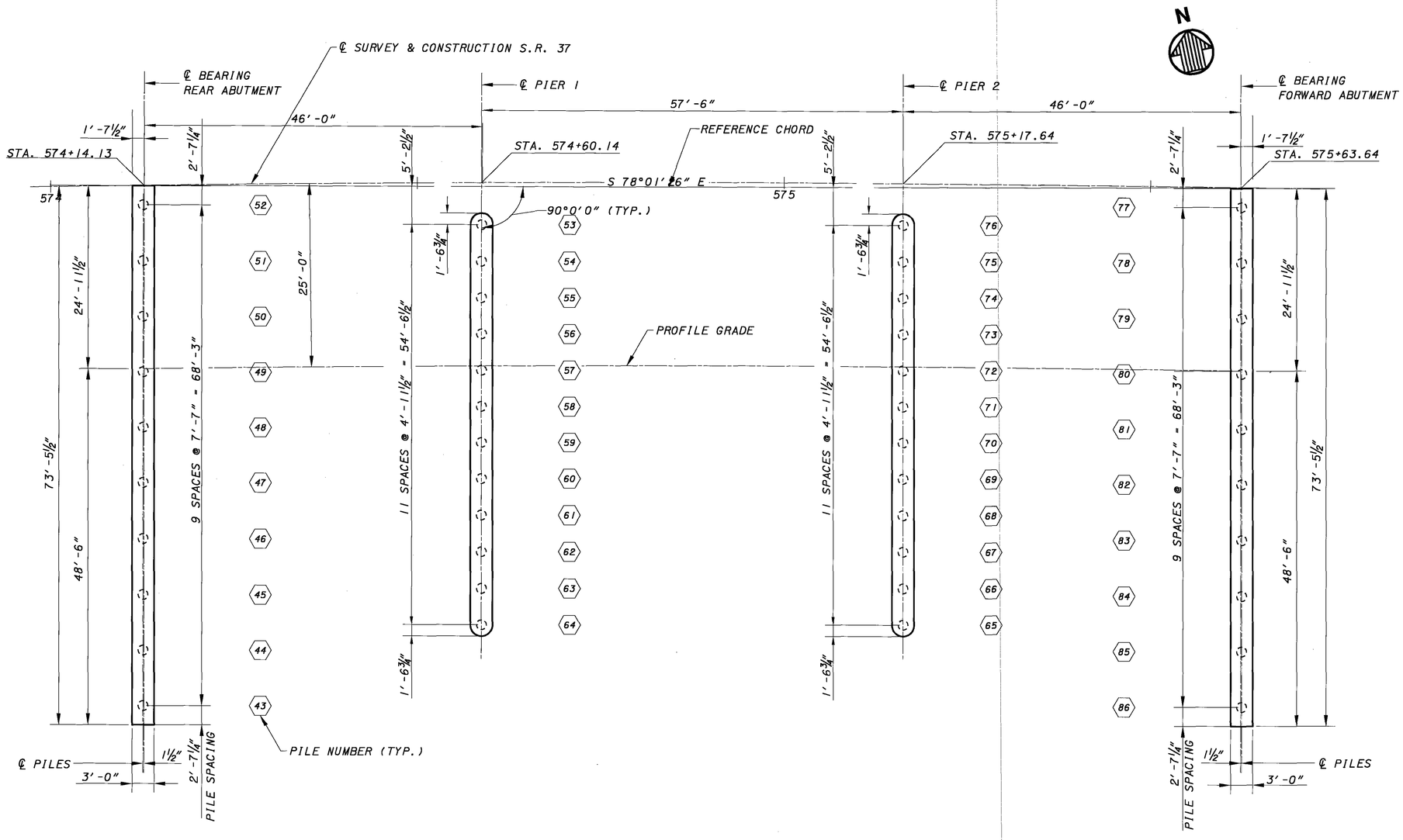
LEFT FOUNDATION PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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PILE LAYOUT

REAR ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
43 THRU 52	16" CIP	EL.928.39	75	VERTICAL

FORWARD ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
77 THRU 86	16" CIP	EL.927.98	80	VERTICAL

PIER PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
53 THRU 64	16" CIP	EL.927.98	80	VERTICAL
65 THRU 76	16" CIP	EL.927.98	80	VERTICAL

PILE SYMBOL:

○ VERTICAL PILES 16" CAST-IN-PLACE REINFORCED CONCRETE PILES

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

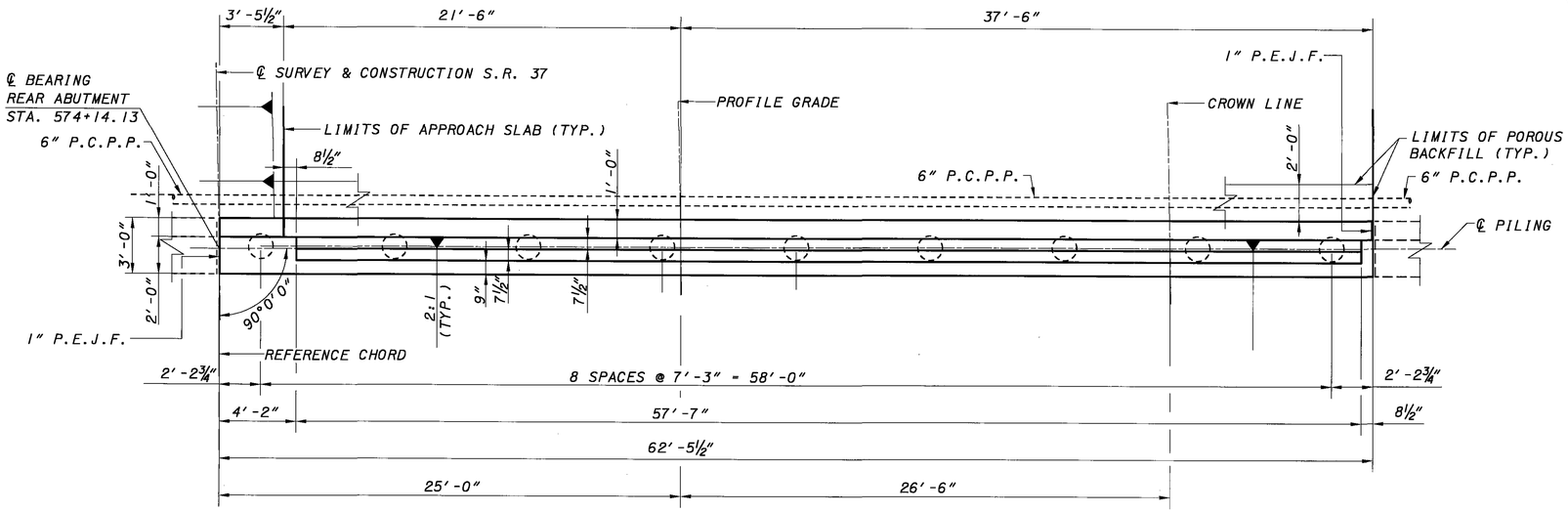
RIGHT FOUNDATION PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

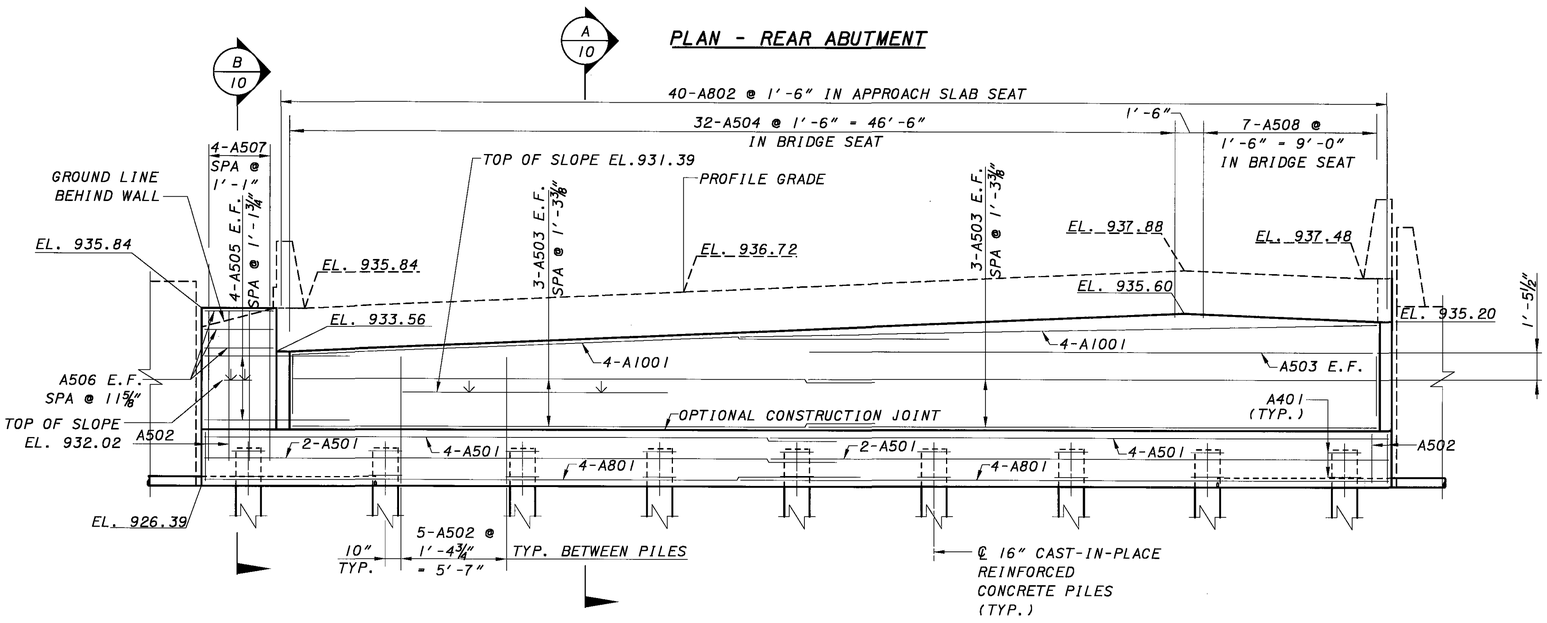
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PLAN - REAR ABUTMENT



ELEVATION - REAR ABUTMENT

N

LEGEND:
B.F. = BACK FACE
℄ = CENTERLINE
P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
E.F. = EACH FACE
EL. = ELEVATION
F.F. = FRONT FACE
N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
TYP. = TYPICAL

(◌) VERTICAL PILES
16" CAST-IN-PLACE REINFORCED CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 4/28.

2. MINIMUM BAR LAPS:
LAP NO.5 BARS 3'-7".
LAP NO.8 BARS 6'-5".
LAP NO.10 BARS 11'-1".

3. FOR APPROACH SLAB DETAILS, SEE SHEETS 23/28 AND 24/28.

4. FOR TERMINATION OF PIPE DETAIL, SEE SHEET 10/28.

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

LEFT REAR ABUTMENT PLAN & ELEVATION

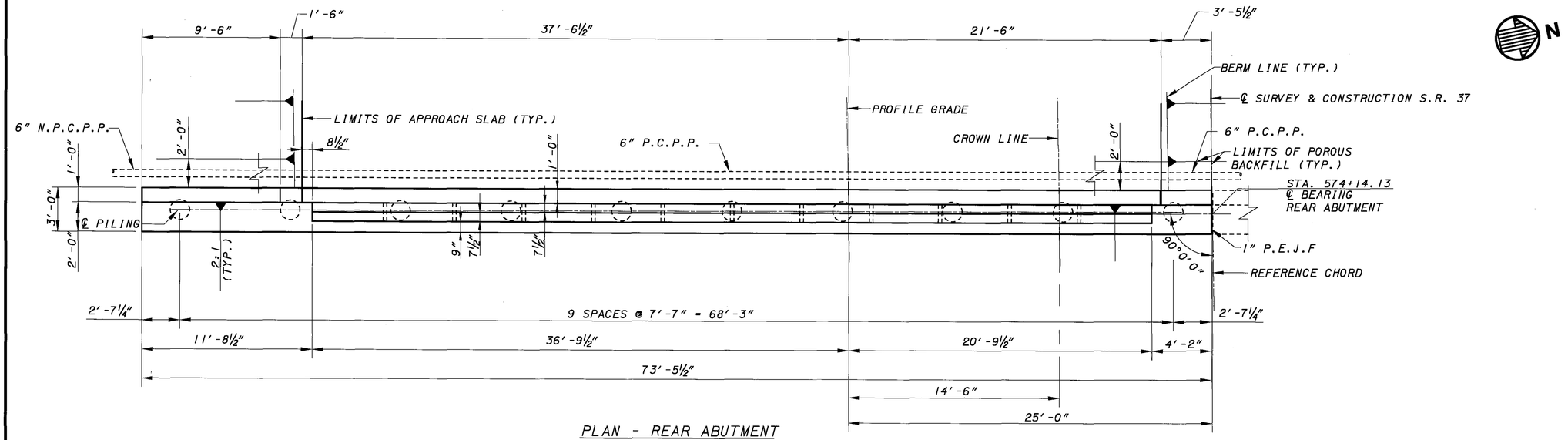
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

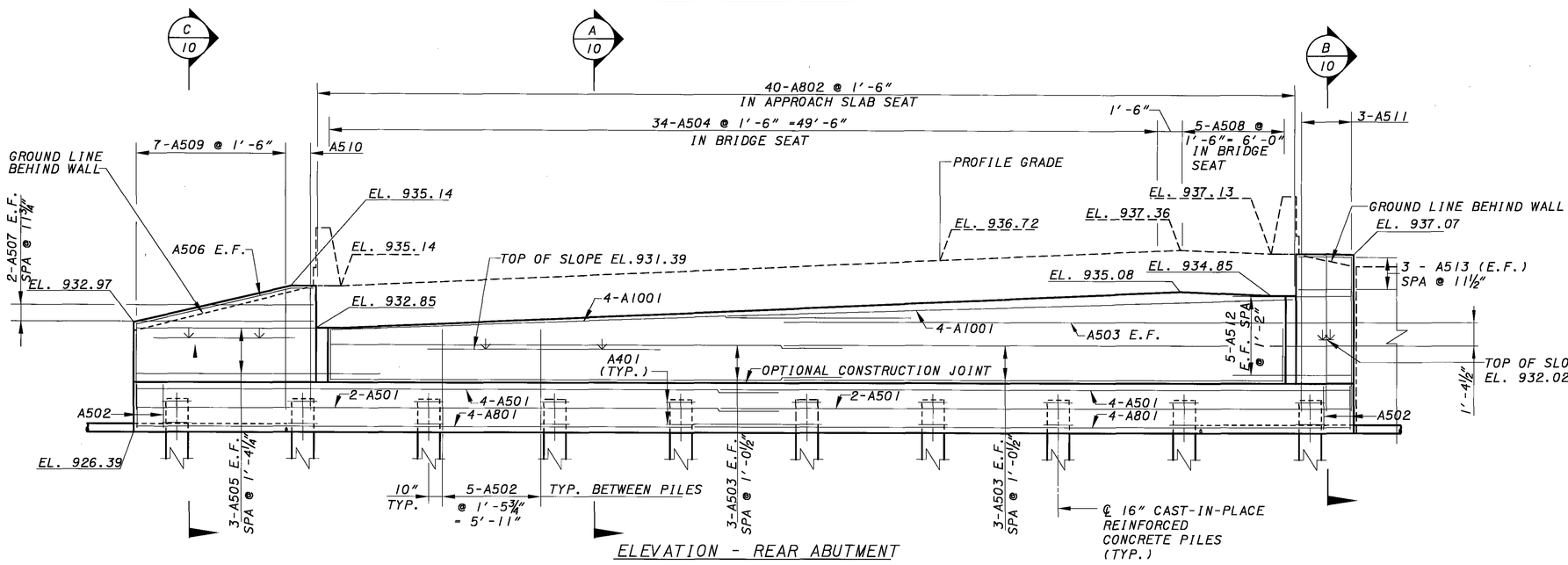
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PLAN - REAR ABUTMENT



ELEVATION - REAR ABUTMENT

LEGEND:
B.F. = BACK FACE
℄ = CENTERLINE
P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
E.F. = EACH FACE
EL. = ELEVATION
F.F. = FRONT FACE
N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
TYP. = TYPICAL

◌ VERTICAL PILES 16″ CAST-IN-PLACE REINFORCED CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 5/28.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3′-7″.
   LAP NO.8 BARS 6′-5″.
   LAP NO.10 BARS 11′-1″.
3. FOR APPROACH SLAB DETAILS, SEE SHEETS 25/28 AND 26/28.

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

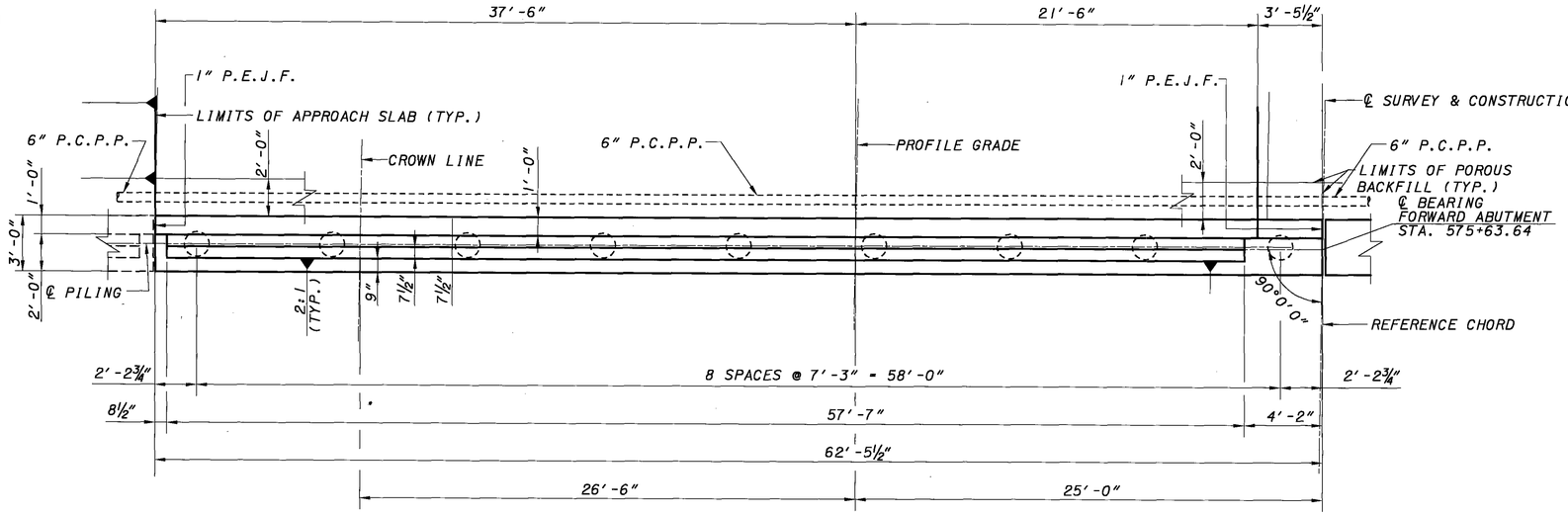
RIGHT REAR ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

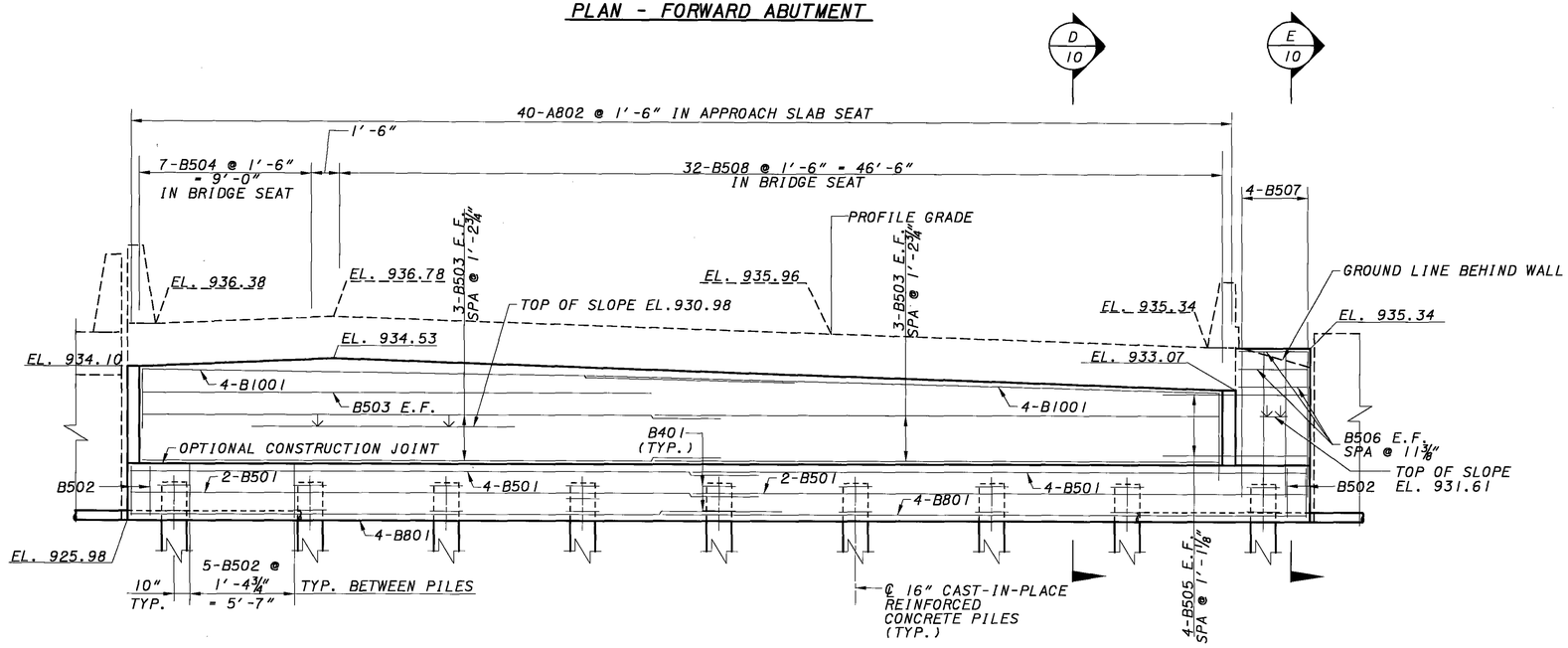
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PLAN - FORWARD ABUTMENT



ELEVATION - FORWARD ABUTMENT

LEGEND:
- B.F. = BACK FACE
- ℄ = CENTERLINE
- P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
- E.F. = EACH FACE
- EL. = ELEVATION
- F.F. = FRONT FACE
- N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
- P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
- TYP. = TYPICAL

( ) VERTICAL PILES 16" CAST-IN-PLACE REINFORCED CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 4/28.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3'-7".
   LAP NO.8 BARS 6'-5".
   LAP NO.10 BARS 11'-1".
3. FOR APPROACH SLAB DETAILS, SEE SHEET 23/28 AND 24/28.

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
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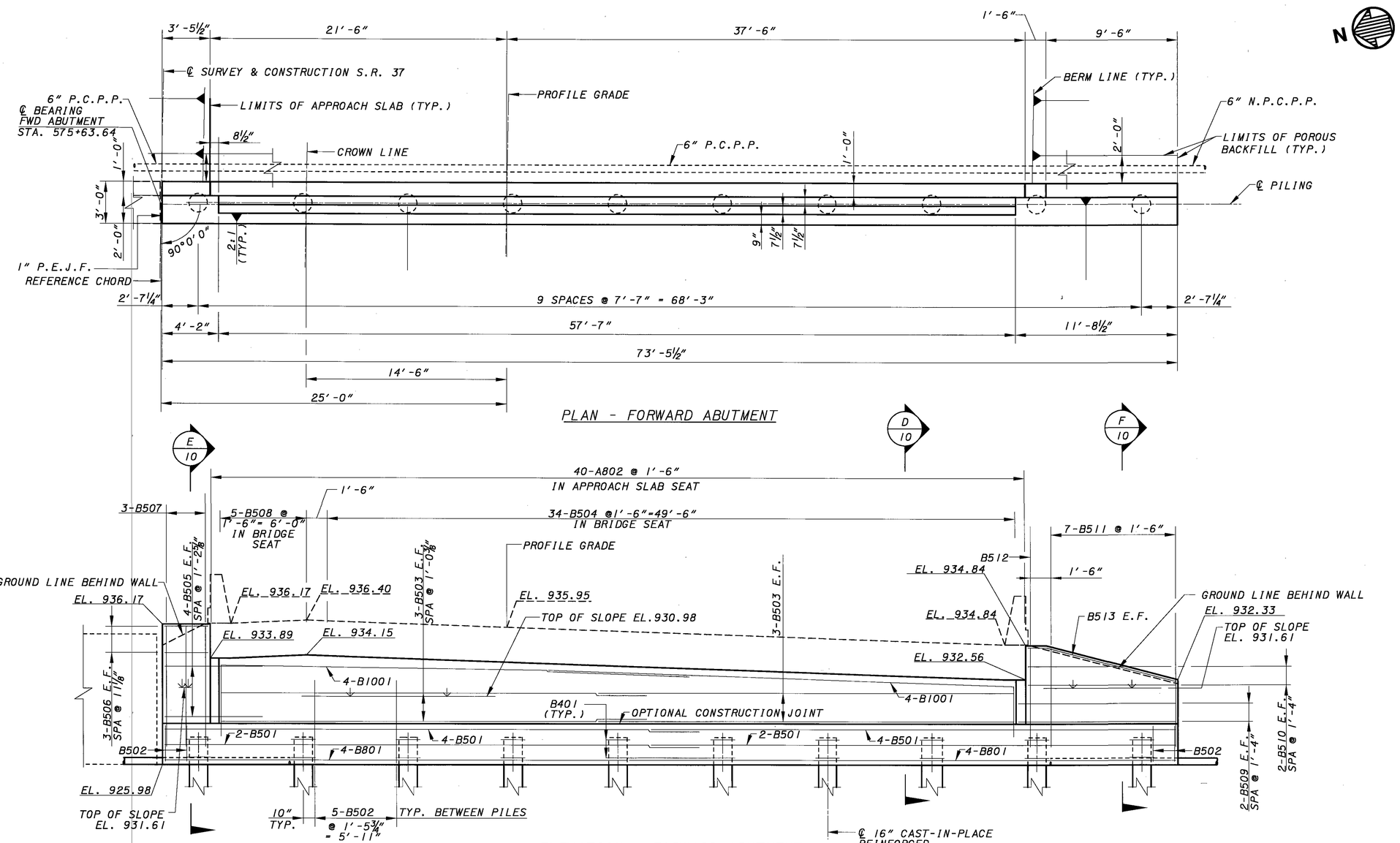
LEFT FORWARD ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

8/28

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ELEVATION - FORWARD ABUTMENT

LEGEND
B.F. = BACK FACE
℄ = CENTERLINE
P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
E.F. = EACH FACE
EL. = ELEVATION
F.F. = FRONT FACE
N.P.C.P.P. = NON-PEFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
TYP. = TYPICAL

( ) VERTICAL PILES
16" CAST-IN-PLACE
REINFORCED
CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 5/28.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3'-7".
   LAP NO.8 BARS 6'-5".
   LAP NO.10 BARS 11'-1".
3. FOR APPROACH SLAB DETAILS, SEE SHEETS 25/28 AND 26/28.
4. FOR TERMINATION OF PIPE DETAIL, SEE SHEET 10/28.

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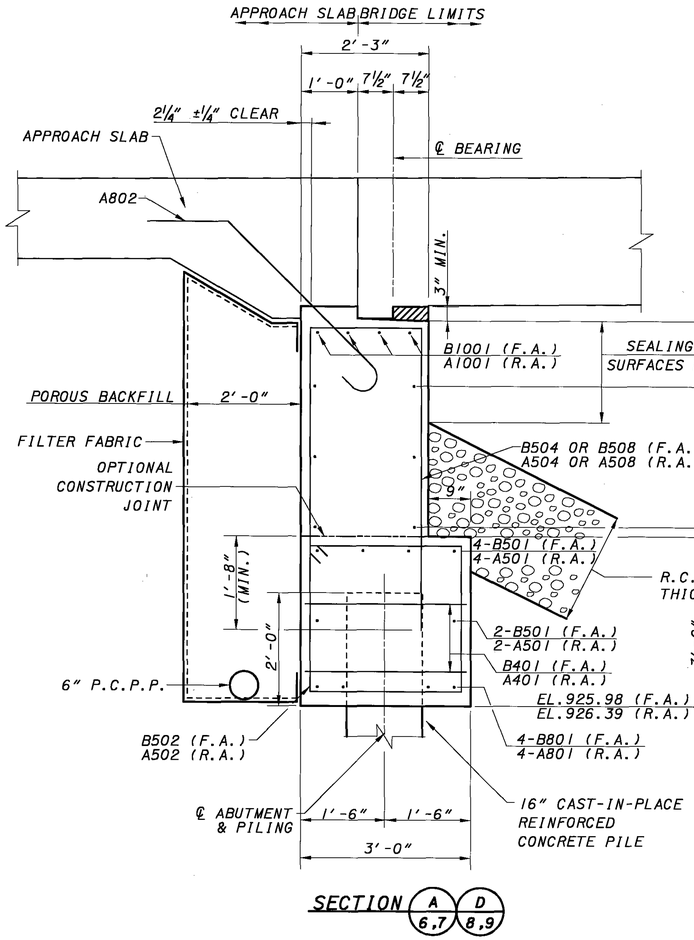
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BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

RIGHT FORWARD ABUTMENT PLAN & ELEVATION
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

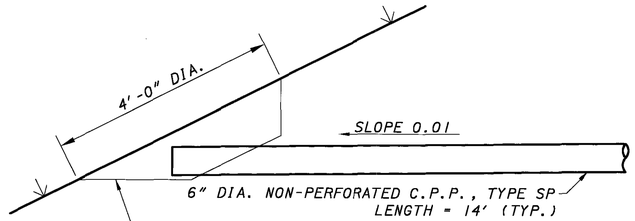
LIC-161-6.65
LIC-37-10.25
PID 77221

9/28

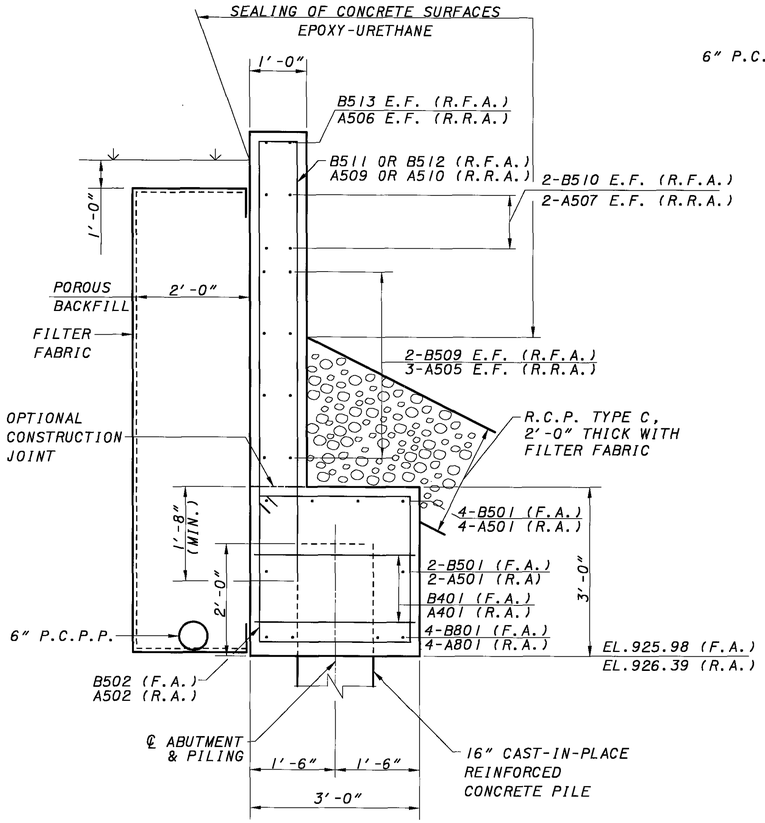
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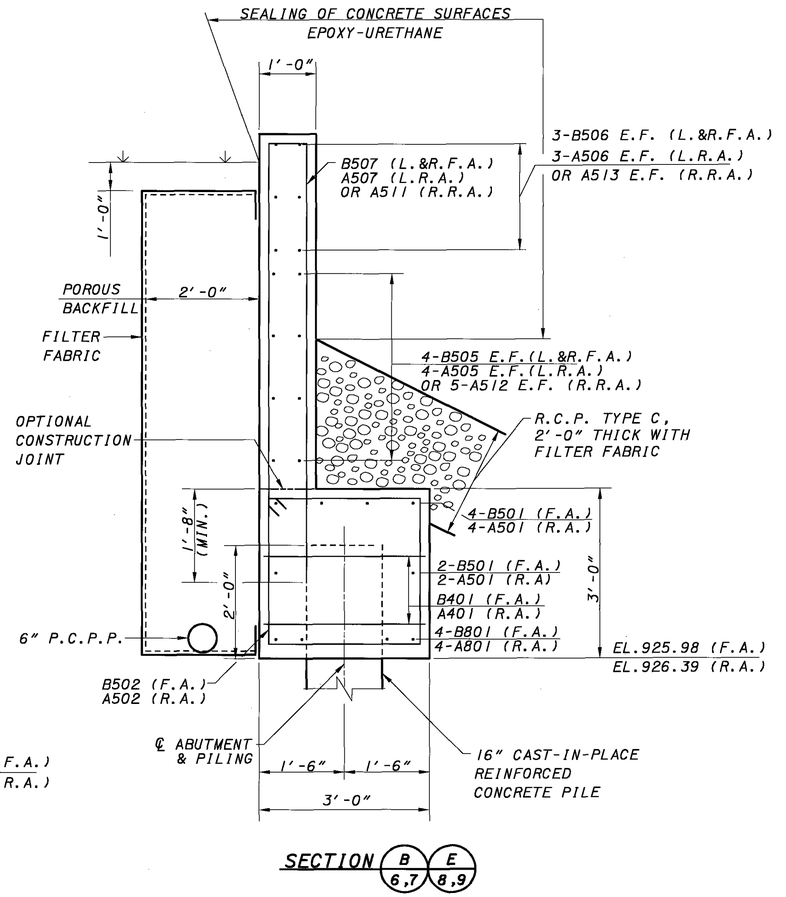
SECTION A 6,7 / D 8,9



TERMINATION OF 6" N.P.C.P.P. DETAIL



SECTION C 7 / F 9



SECTION B 6,7 / E 8,9

NOTES:

1. REFER STANDARD DRAWING CPA-5-94 FOR OTHER DETAILS AND NOTES.
2. POROUS BACKFILL:
   POROUS BACKFILL WITH FILTER FABRIC, 2'-0" THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1'-0" BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

ABBREVIATIONS:

- B.F. = BACK FACE
- P.C.P.P. = PERFORATED CORRUGATED POLYETHLENE PIPE
- E.F. = EACH FACE
- L.F.A. = LEFT FORWARD ABUTMENT
- L.R.A. = LEFT REAR ABUTMENT
- F.F. = FRONT FACE
- N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE
- R.F.A. = RIGHT FORWARD ABUTMENT
- R.R.A. = RIGHT REAR ABUTMENT
- R.C.P. = ROCK CHANNEL PROTECTION

▨ 3" WIDE DRAIN REFER TO STD. DWG. CPA-5-94 FOR LOCATION

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GLC		450178OL/450179OR	

ABUTMENT DETAILS

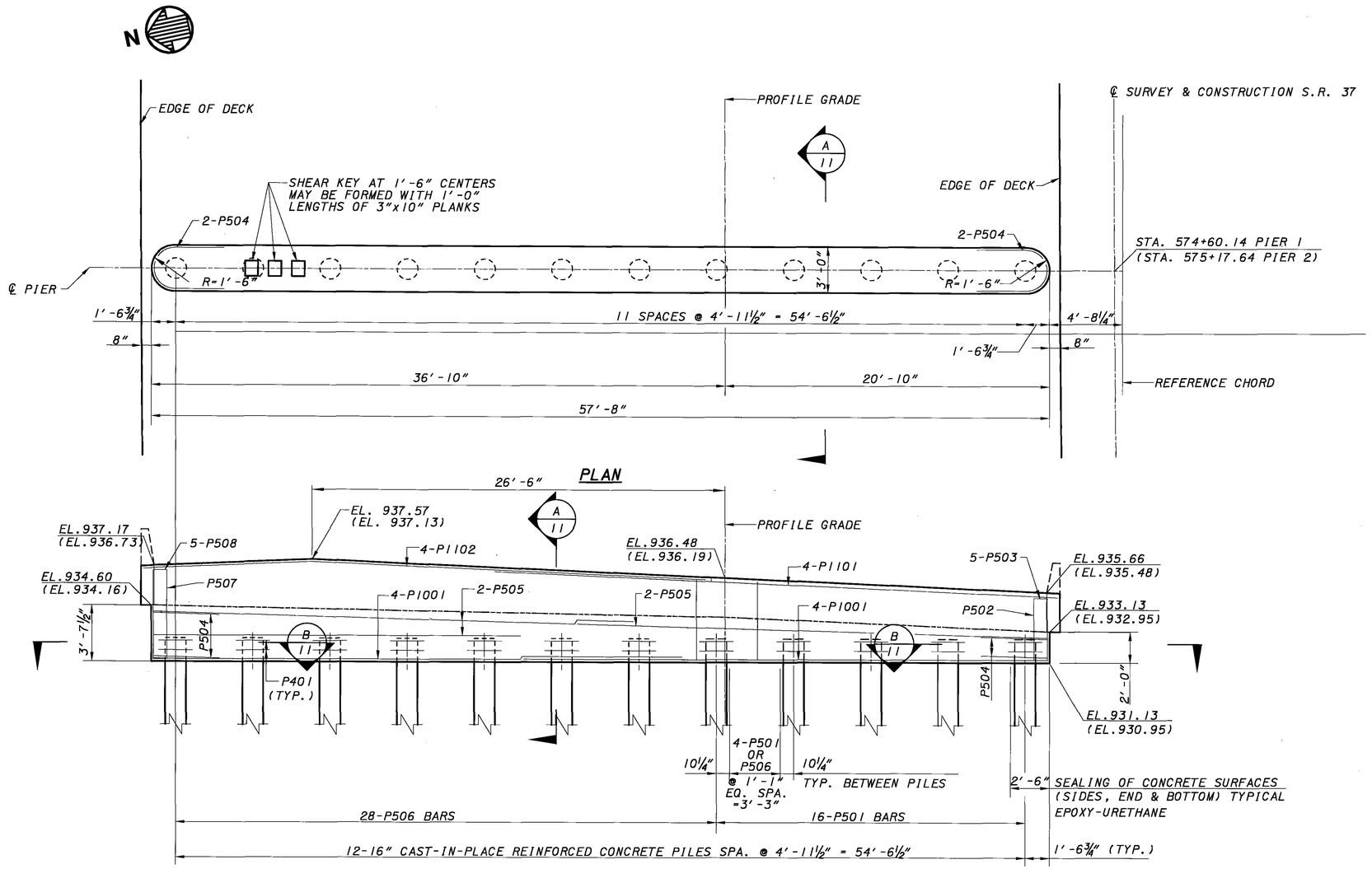
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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NOTES:

1. MINIMUM BAR LAPS:
   LAP No.5 BARS 3'-7".
   LAP NO.10 BARS 10'-3".
   LAP NO.11 BARS 13'-6".
2. ELEVATIONS AND STATIONS IN ( ) ARE FOR PIER 2 ONLY.
3. FOR SLAB REINFORCEMENT, SEE SHTS 13,14,&16/28.
4. REFER TO STANDARD DRAWING CPP-2-94 FOR ADDITIONAL DETAILS AND NOTES.

PILE SYMBOL

◌ VERTICAL PILES 16" CAST-IN-PLACE REINFORCED CONCRETE PILES

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

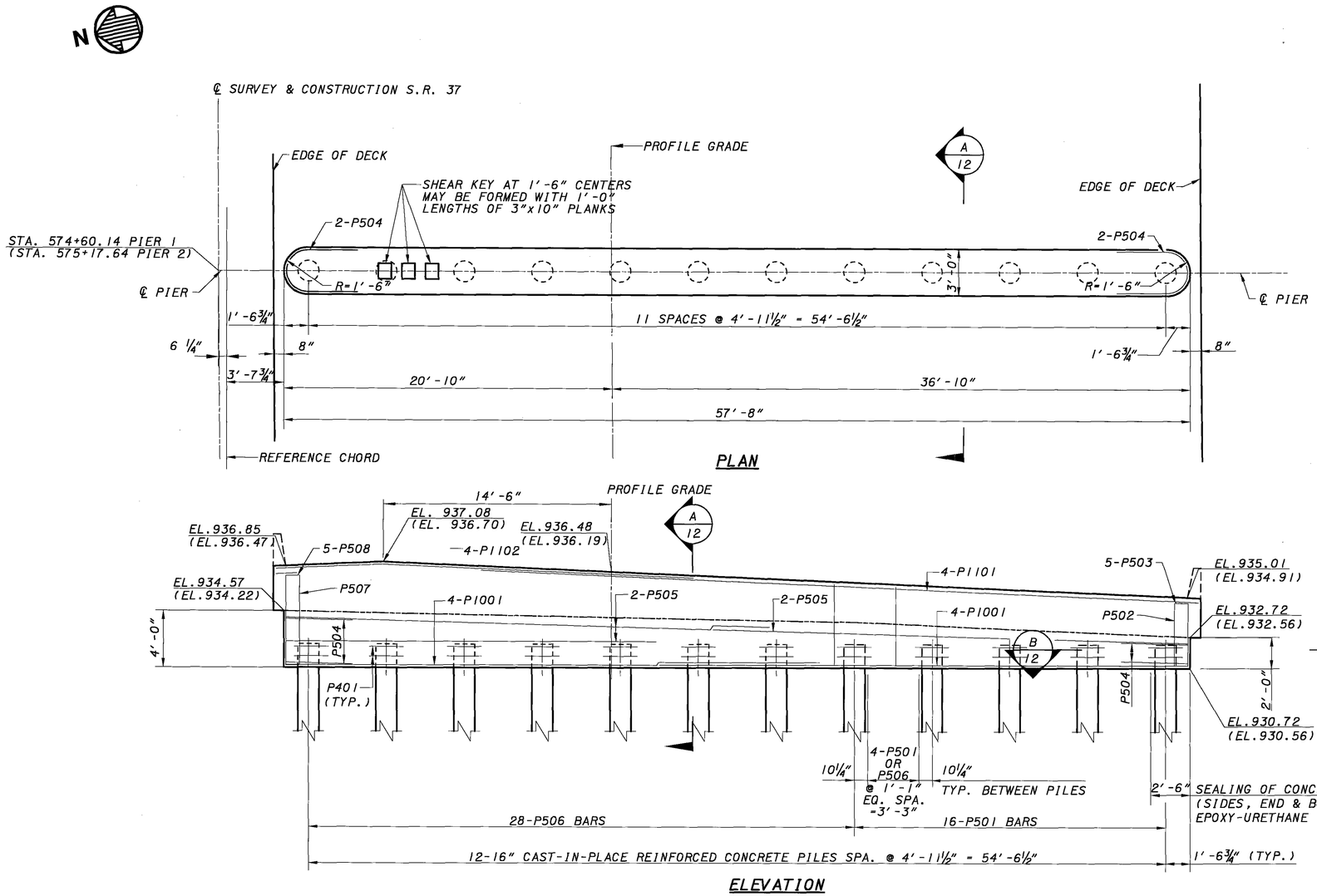
LEFT PIERS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

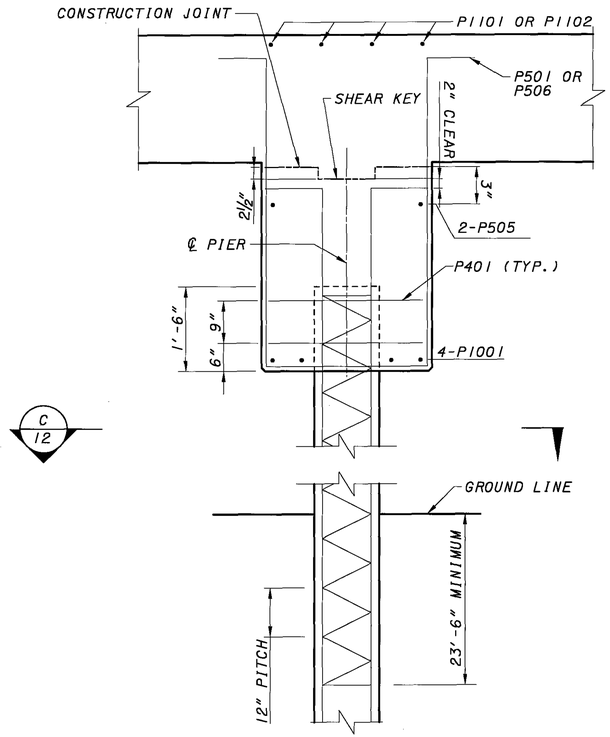
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LIC-37-10.25
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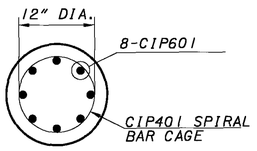
11/28

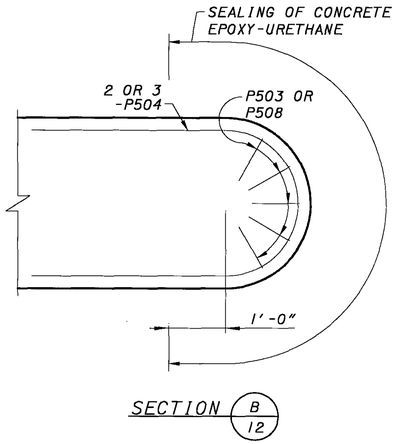
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NOTES:

1. MINIMUM BAR LAPS:
   LAP No.5 BARS 3'-7".
   LAP NO.10 BARS 10'-3".
   LAP NO.11 BARS 13'-6".
2. ELEVATIONS AND STATIONS IN ( ) ARE FOR PIER 2 ONLY.
3. FOR SLAB REINFORCEMENT, SEE SHTS 18,19, & 21/28.
4. REFER TO STANDARD DRAWING CPP-2-94 FOR ADDITIONAL DETAILS AND NOTES.

PILE SYMBOL

VERTICAL PILES 16" CAST-IN-PLACE REINFORCED CONCRETE PILES

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DESIGNED	DRAWN	REVISED	REVISED	DATE
BMW	DLW		GWM	7-20-05
CHECKED			STRUCTURE FILE NUMBER	
GLC			4501780L/4501799R	

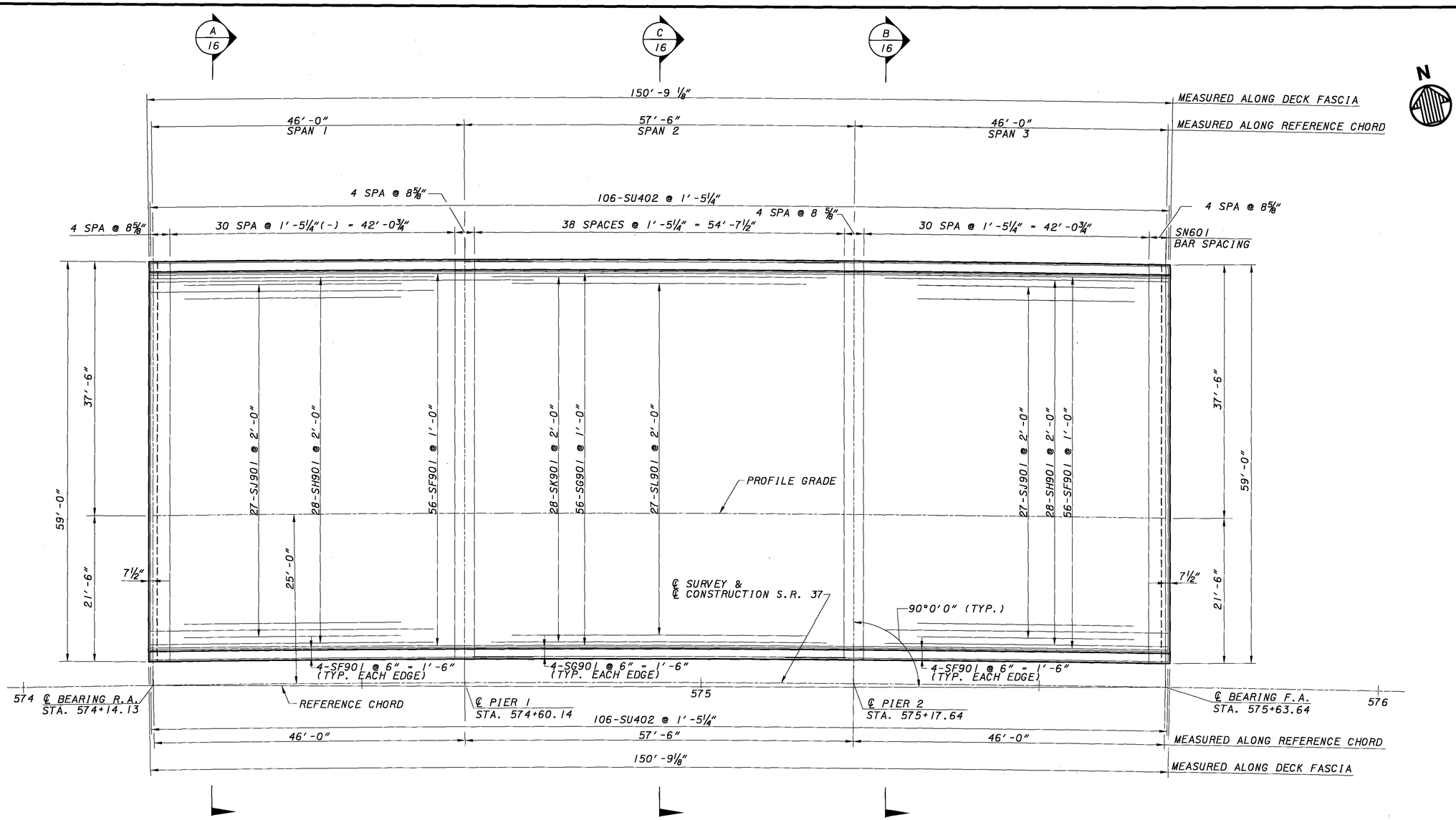
RIGHT PIERS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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BOTTOM REINFORCEMENT PLAN

NOTES:

1. SEE STANDARD DRAWING CS-1-03 FOR ADDITIONAL SLAB DETAILS AND NOTES.
2. FOR TOP OF DECK ELEVATIONS SEE SHEET 17/28.

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWW	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

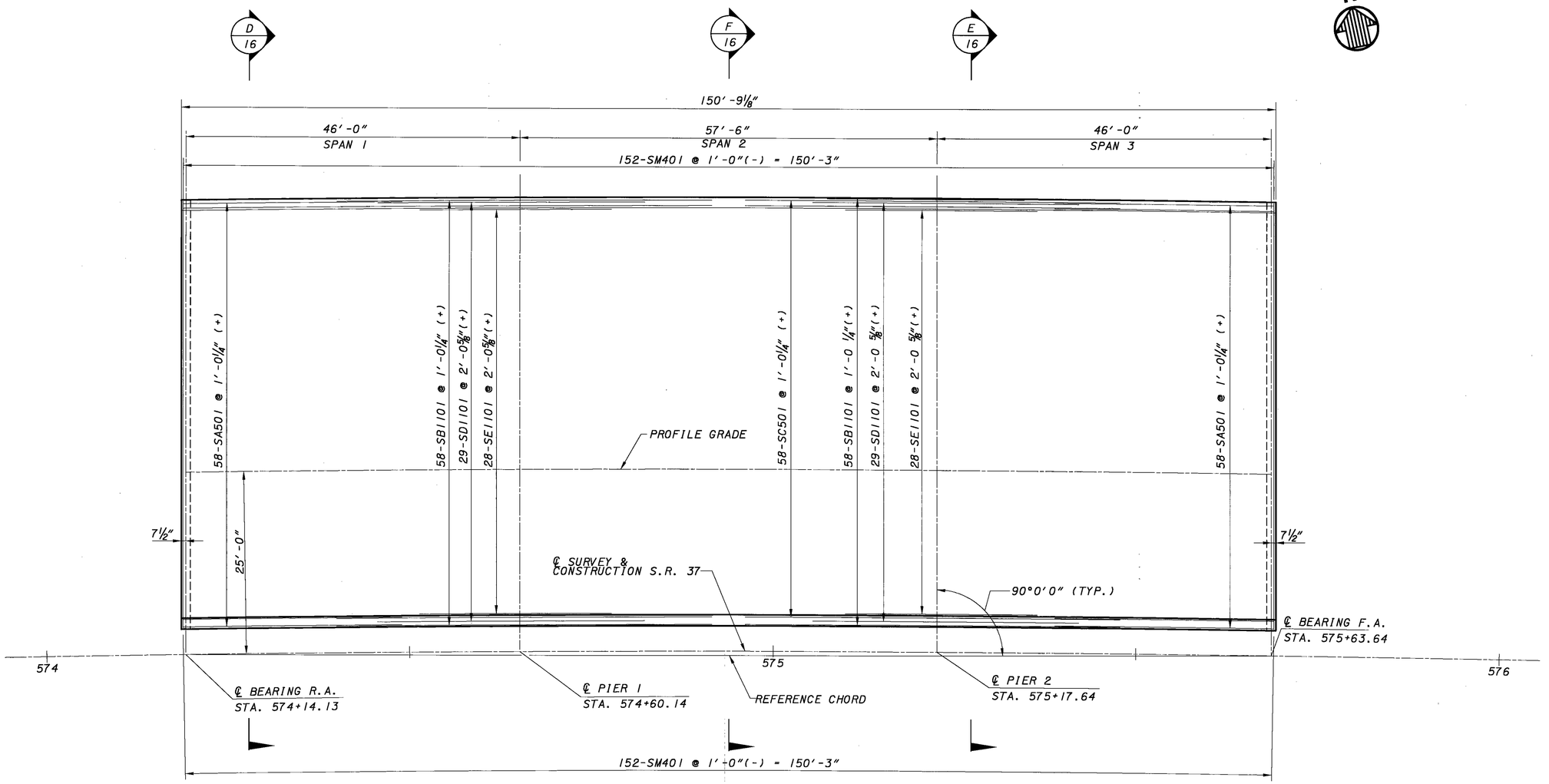
LEFT DECK PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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TOP REINFORCEMENT PLAN

NOTES:

1. FOR OTHER NOTES SEE SHEET 13/28.
2. LONGITUDINAL BAR SPACING IS MEASURED PERPENDICULAR TO THE CENTERLINE SURVEY.
3. TRANSVERSE BAR SPACING IS MEASURED ALONG THE REFERENCE CHORD.

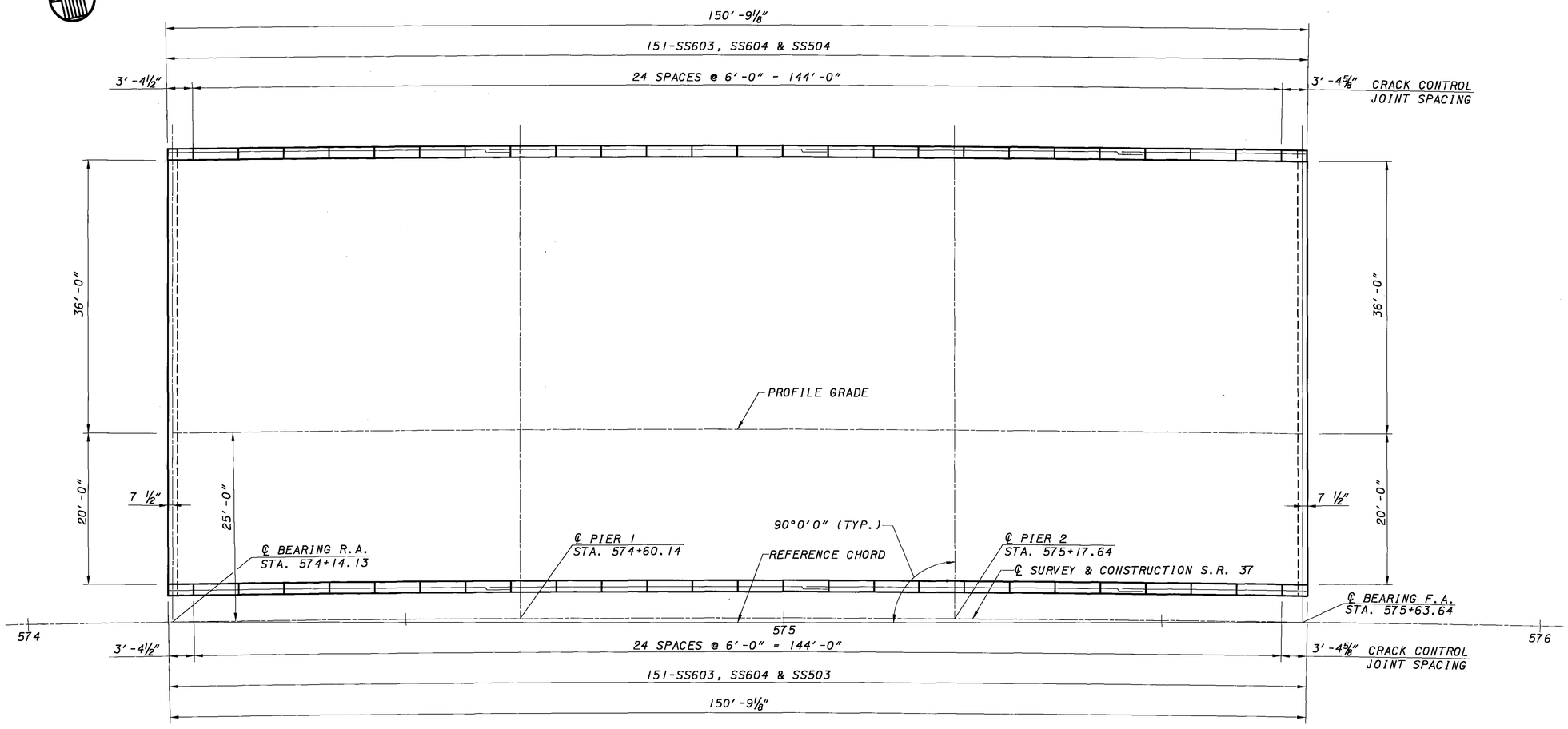
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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
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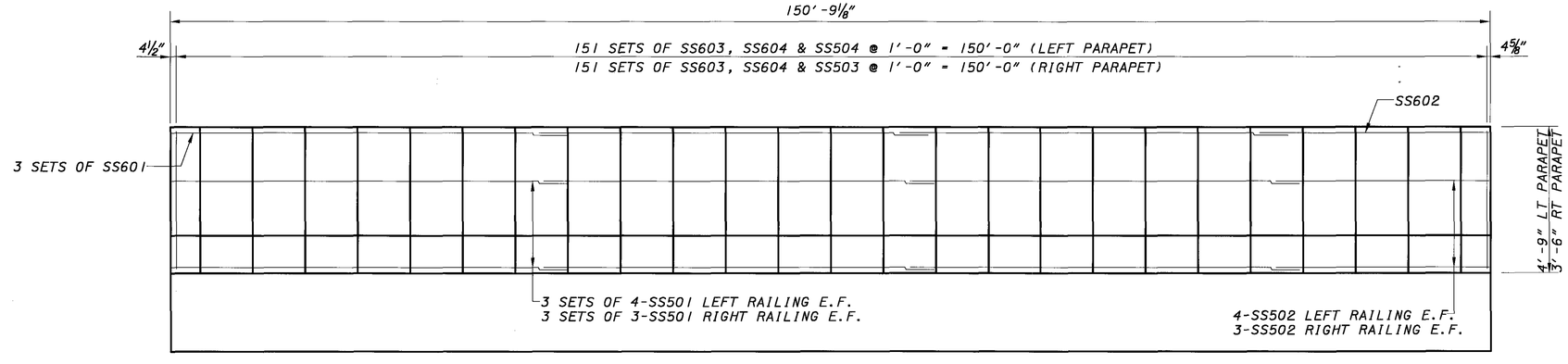
LEFT DECK PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
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PARAPET REINFORCING PLAN



PARAPET REINFORCING DETAIL

FOR PARARET DETAILS SEE SHEET 16/28

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWW	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
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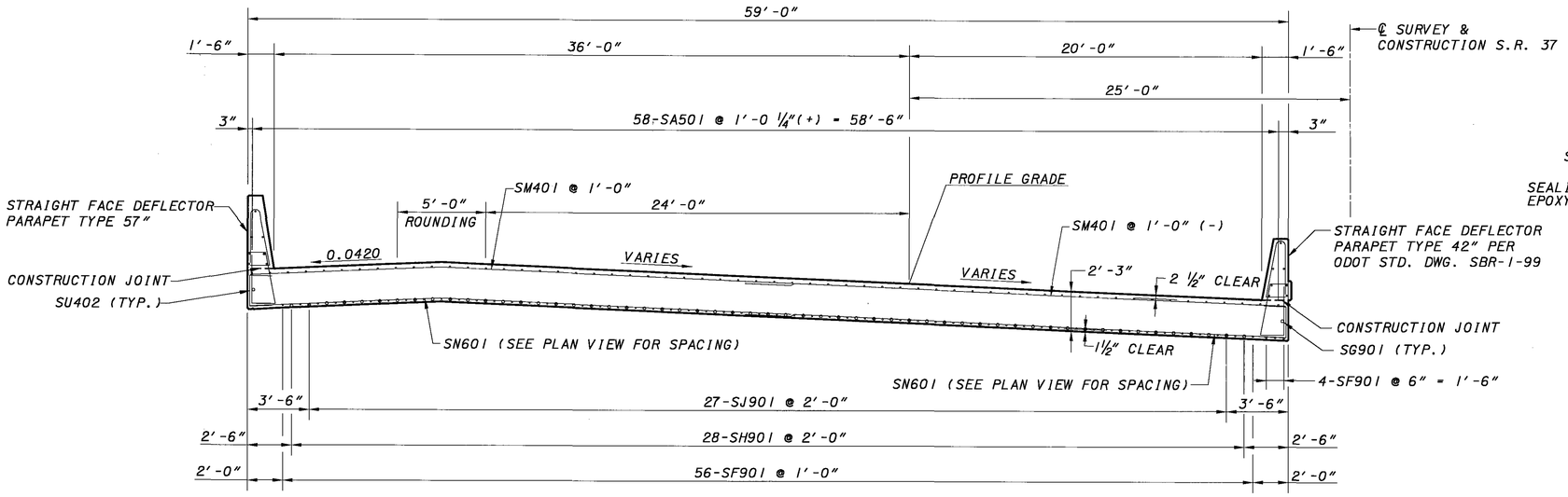
LEFT RAILING DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

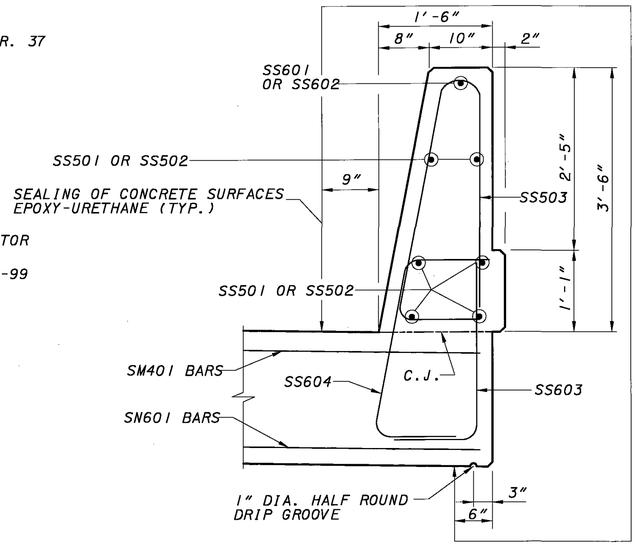
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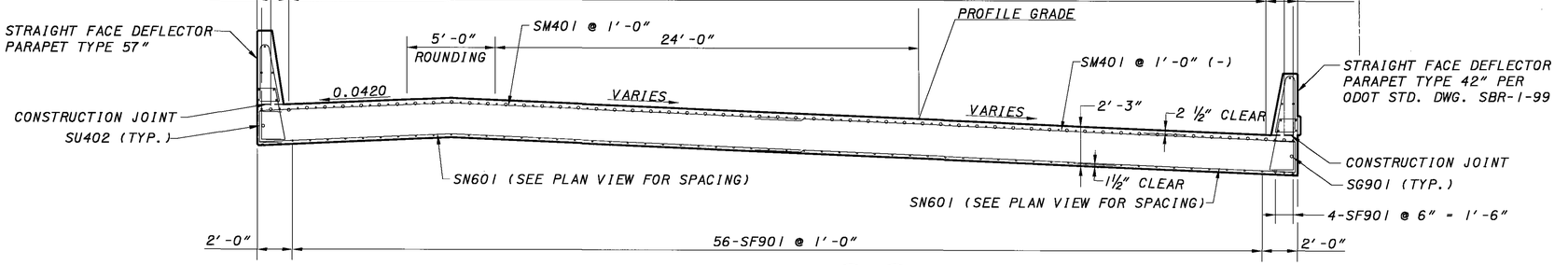


SECTION (END SPANS) A/13 D/14

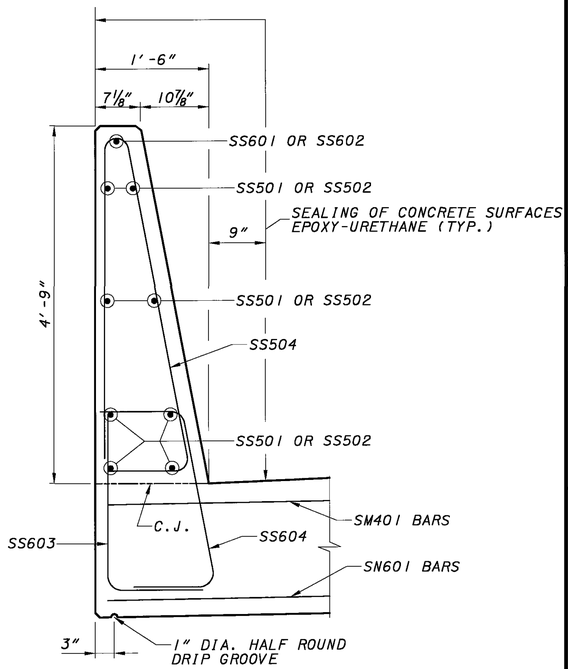


TYPICAL RIGHT PARAPET DETAIL

NOTE: LONGITUDINAL SLAB REINFORCING & EDGE BEAM REINFORCING NOT SHOWN FOR CLARITY. SEE DETAIL THIS SHEET.

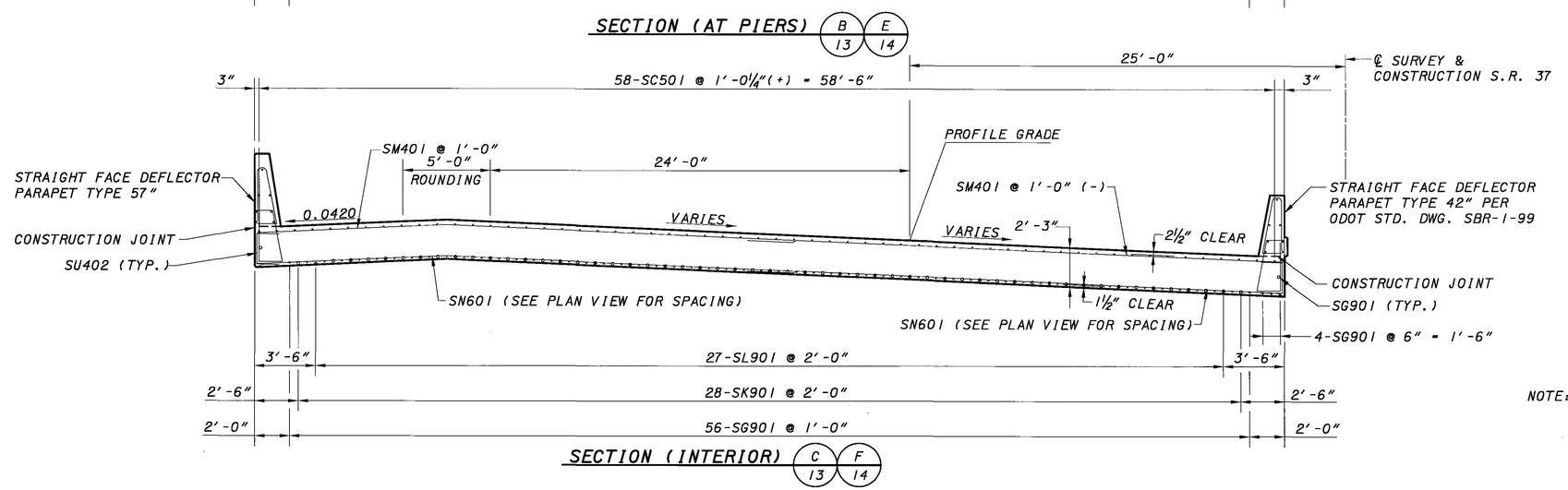


SECTION (AT PIERS) B/13 E/14



TYPICAL LEFT PARAPET DETAIL

NOTE: LONGITUDINAL SLAB REINFORCING & EDGE BEAM REINFORCING NOT SHOWN FOR CLARITY. SEE DETAIL THIS SHEET.



SECTION (INTERIOR) C/13 F/14

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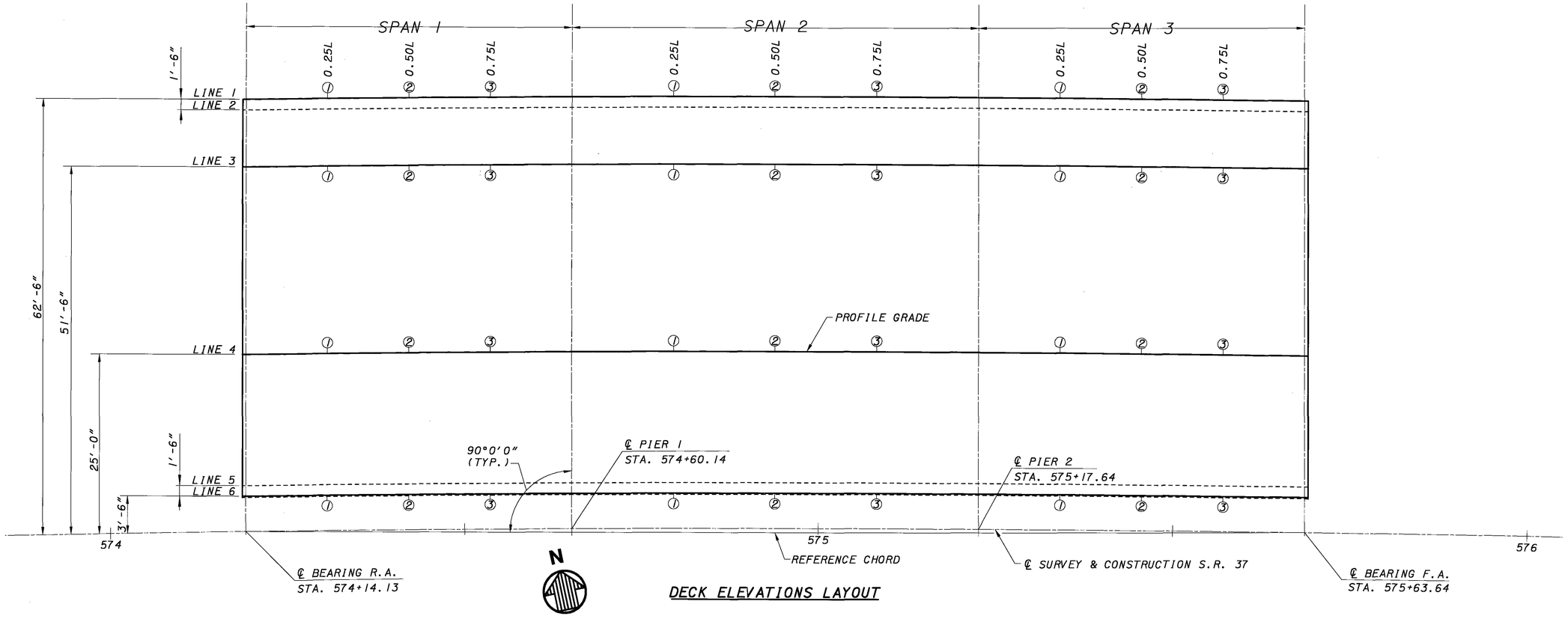
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BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

LEFT SUPERSTRUCTURE DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

16/28

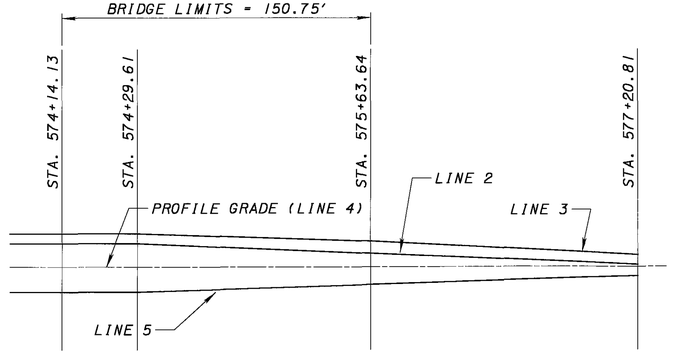
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DECK ELEVATIONS LAYOUT

TOP OF DECK ELEVATIONS TABLE

		LINE 1		LINE 2		LINE 3		LINE 4		LINE 5		LINE 6	
SPAN NO.	LOCATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
SPAN NO. 1	℄ BRG. R.A.	574+15.14	937.48	574+15.12	937.48	574+14.97	937.88	574+14.54	936.72	574+14.21	935.84	574+14.19	935.84
	0.25 L	574+26.49	937.42	574+26.47	937.42	574+26.34	937.82	574+25.98	936.66	574+25.70	935.78	574+25.68	935.78
	0.50 L	574+37.83	937.34	574+37.82	937.34	574+37.71	937.74	574+37.42	936.60	574+37.19	935.74	574+37.17	935.73
	0.75 L	574+49.18	937.26	574+49.16	937.26	574+49.08	937.66	574+48.85	936.54	574+48.68	935.70	574+48.66	935.69
SPAN NO.2	℄ PIER 1	574+60.52	937.17	574+60.51	937.17	574+60.45	937.57	574+60.29	936.48	574+60.16	935.66	574+60.16	935.66
	0.25 L	574+74.70	937.06	574+74.70	937.06	574+74.67	937.46	574+74.59	936.41	574+74.52	935.62	574+75.52	935.61
	0.50 L	574+88.89	936.95	574+88.89	936.95	574+88.89	937.35	574+88.89	936.34	574+88.89	935.57	574+88.89	935.56
	0.75 L	575+03.07	936.84	575+03.07	936.84	575+03.10	937.24	575+03.18	936.26	575+03.25	935.53	575+03.25	935.53
SPAN NO.3	℄ PIER 2	575+17.25	936.73	575+17.26	936.73	575+17.32	937.13	575+17.48	936.19	575+17.61	935.48	575+17.61	935.48
	0.25 L	575+28.59	936.64	575+28.61	936.64	575+28.69	937.04	575+28.92	936.13	575+29.09	935.45	575+29.11	935.44
	0.50 L	575+39.94	936.56	575+39.95	936.56	575+40.06	936.96	575+40.36	936.07	575+40.58	935.41	575+40.60	935.41
	0.75 L	575+51.28	936.47	575+51.30	936.47	575+51.43	936.87	575+51.79	936.02	575+52.07	935.37	575+52.09	935.37
	℄ BRG. R.A.	575+62.63	936.38	575+62.65	936.38	575+62.80	936.78	575+63.23	935.96	575+63.56	935.34	575+63.58	935.33



LEFT PAVEMENT TRANSITION DETAIL

NOTES:

1. TOP OF DECK ELEVATIONS:
ELEVATIONS SHOWN ARE FOR THE FINISHED TOP OF DECK ELEVATIONS. ALLOWANCE HAS NOT BEEN MADE FOR THE ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

L = SPAN LENGTH

2. SEE SHEET 22/28 FOR PAVEMENT TRANSITION TABLE

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
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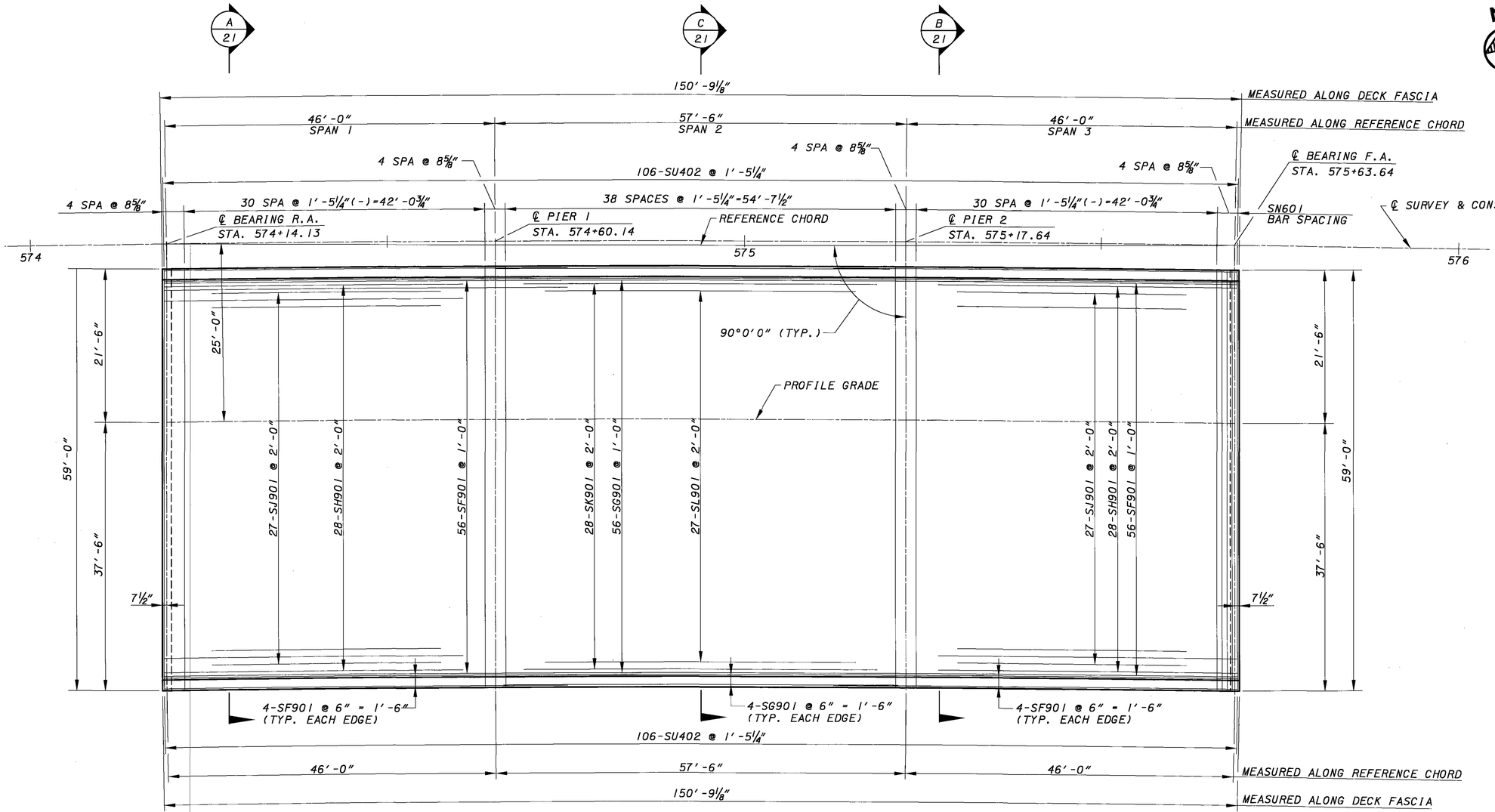
LEFT SUPERSTRUCTURE DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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BOTTOM REINFORCEMENT PLAN

NOTES:

1. SEE STANDARD DRAWING CS-1-03 FOR ADDITIONAL SLAB DETAILS AND NOTES.
2. FOR TOP OF DECK ELEVATIONS SEE SHEET 22/28.

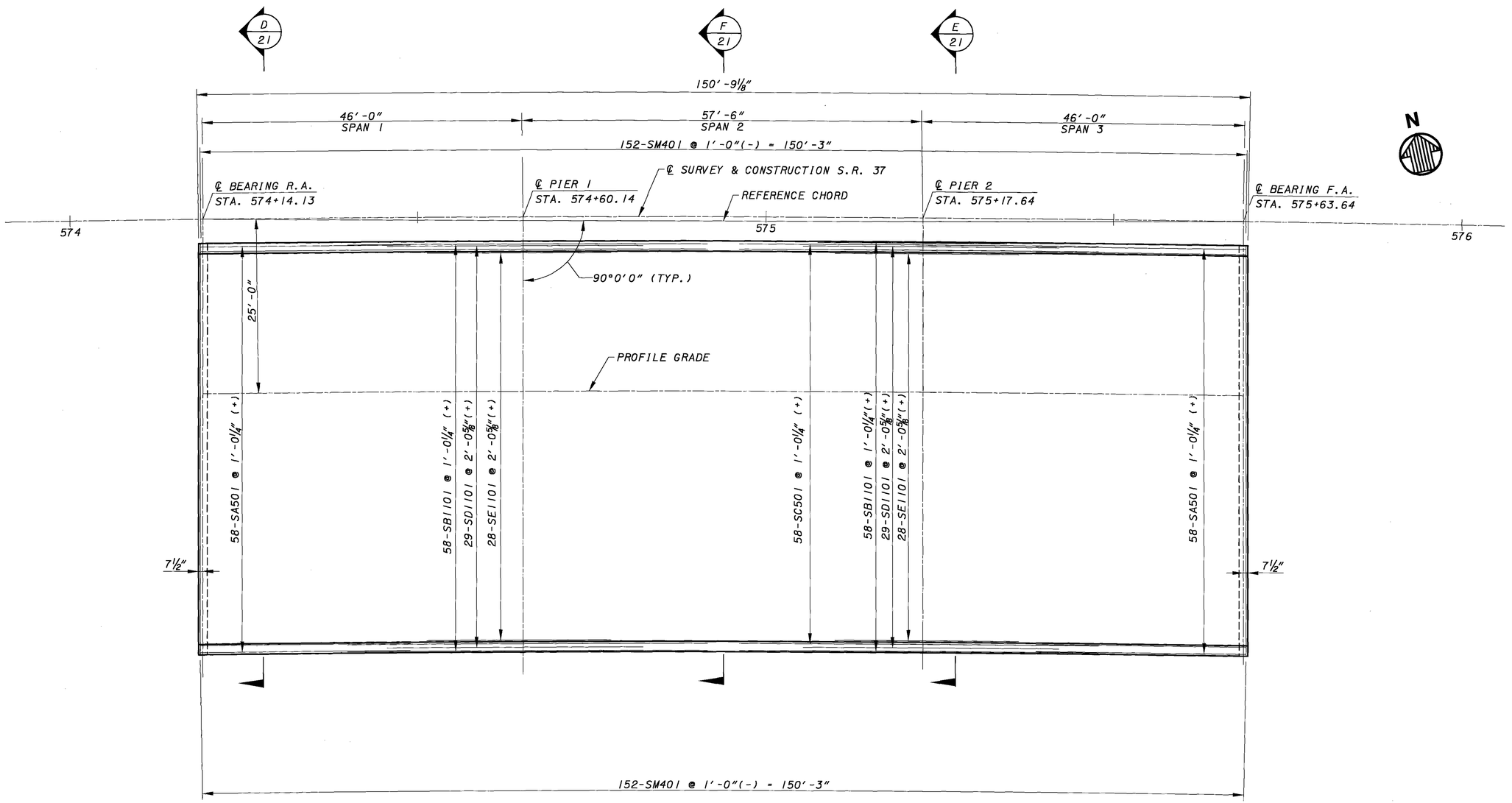
DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		450178OL/4501799R	

RIGHT DECK PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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TOP REINFORCEMENT PLAN

NOTES:

1. FOR OTHER NOTES SEE SHEET 18/28
2. LONGITUDINAL BAR SPACING IS MEASURED PERPENDICULAR TO THE CENTERLINE SURVEY.
3. TRANSVERSE BAR SPACING IS MEASURED ALONG THE REFERENCE CHORD.

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
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GLC		4501780L/4501799R	

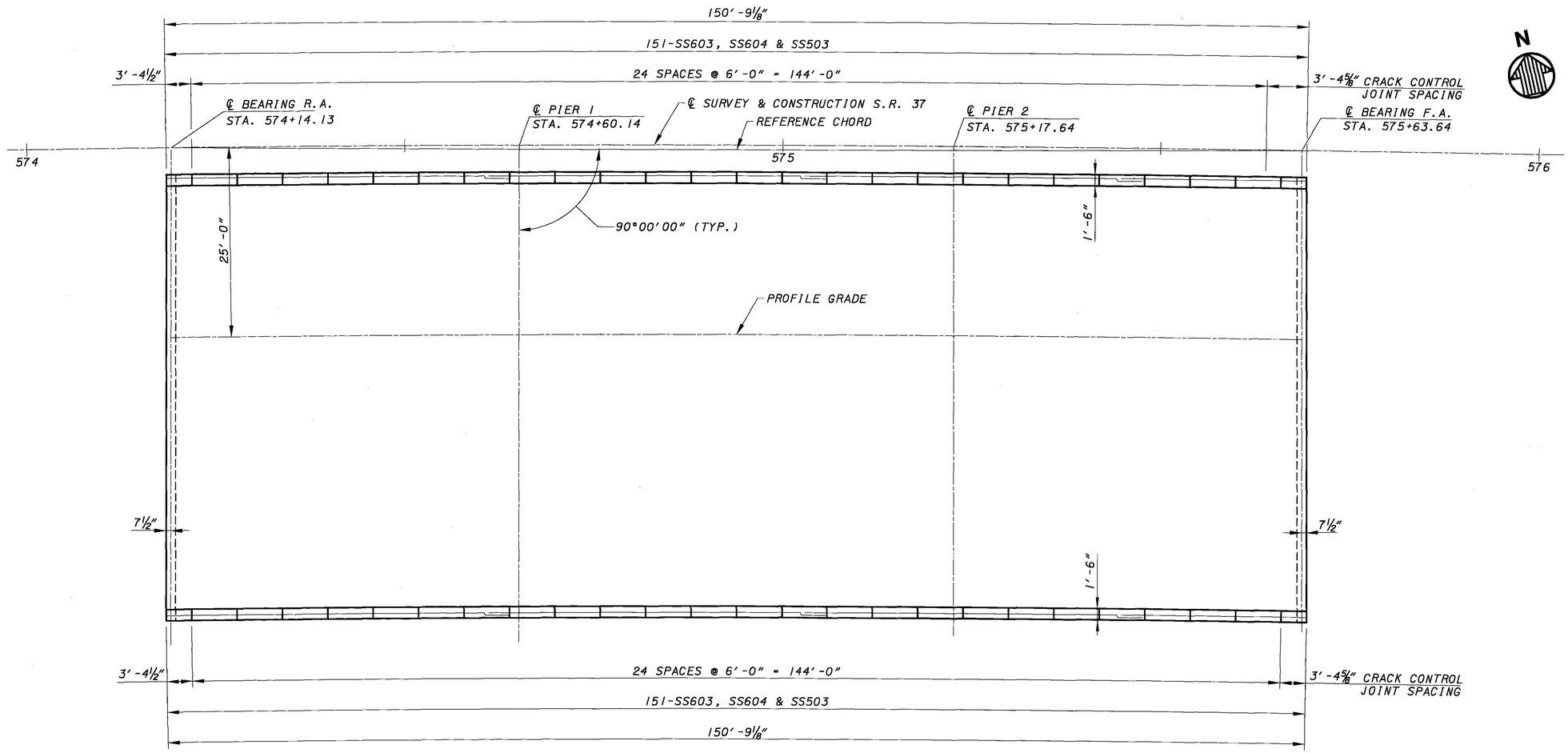
RIGHT DECK PLAN
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

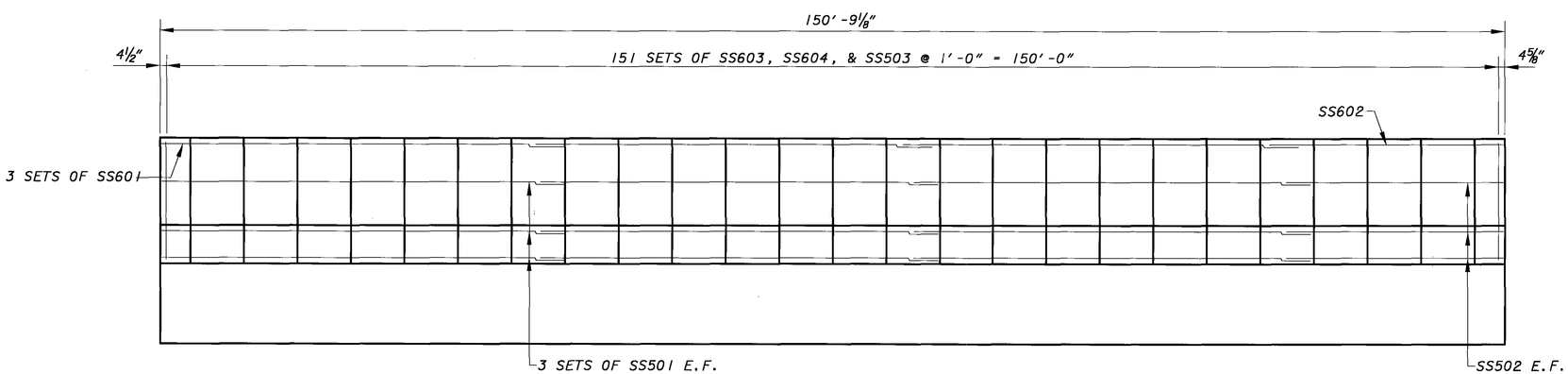
19/28

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PARAPET REINFORCING PLAN



LEFT PARAPET REINFORCING DETAIL

LEFT PARAPET SHOWN, RIGHT PARAPET SIMILAR

NOTES:

1. FOR PARAPET DETAILS, SEE SHT 21/28

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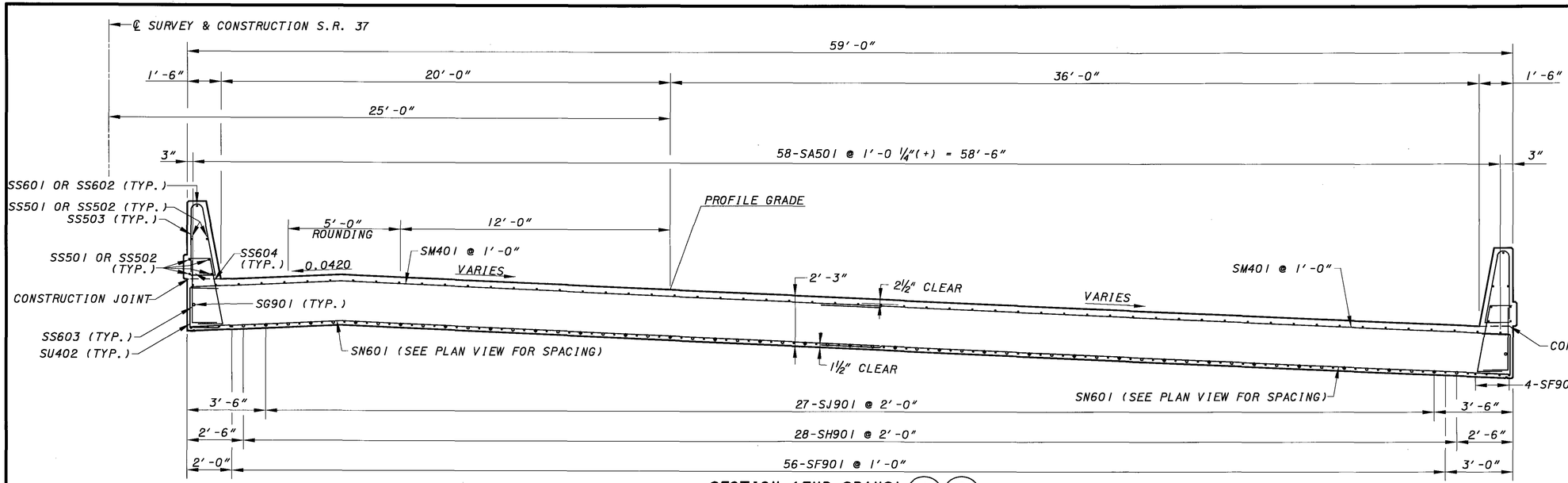
DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

RIGHT RAILING DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

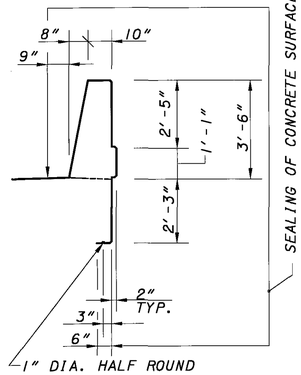
LIC-161-6.65
LIC-37-10.25
PID 77221

20/28

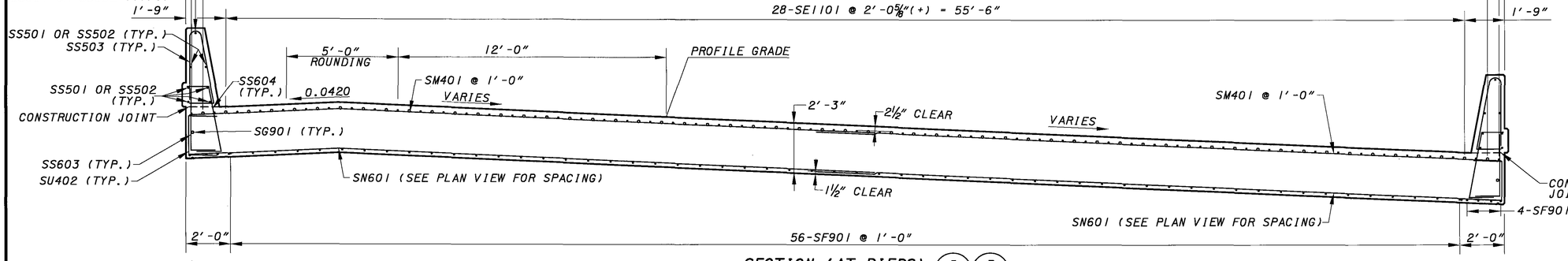
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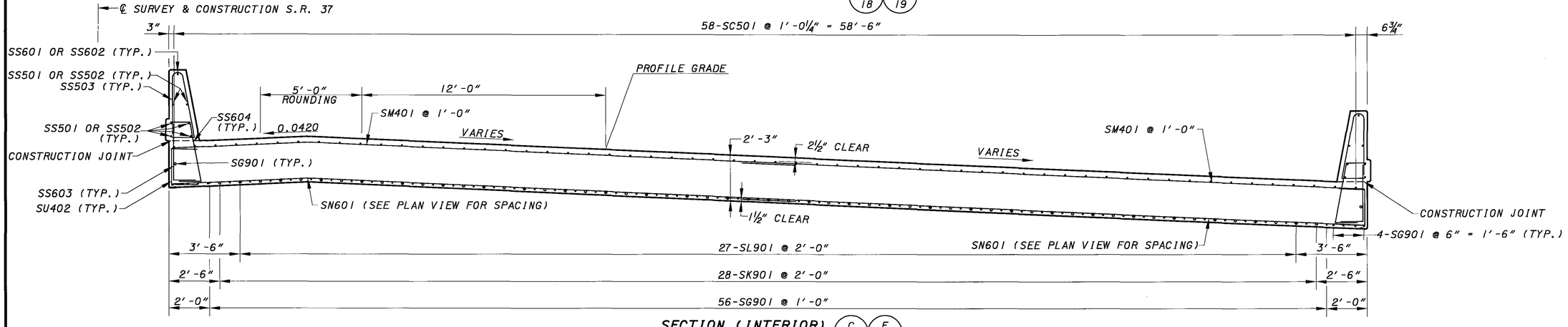
SECTION (END SPANS) A 18 / D 19



PARAPET DETAIL



SECTION (AT PIERS) B 18 / E 19



SECTION (INTERIOR) C 18 / F 19

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DESIGNED	DRAWN	CHECKED	REVISED
BMW	DLW	GLC	

REVIEWED	DATE
GWM	7-20-05

STRUCTURE FILE NUMBER 4501780L/4501799R

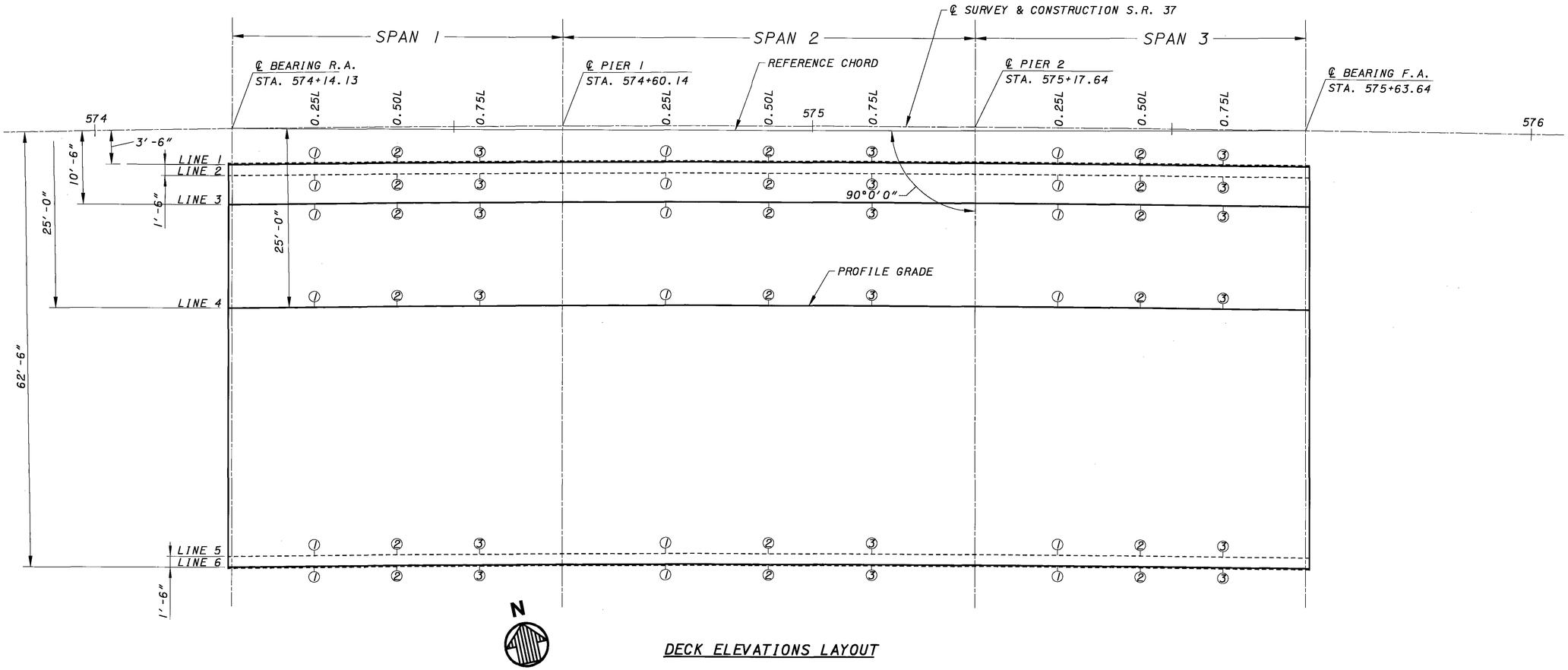
RIGHT SUPERSTRUCTURE DETAILS

BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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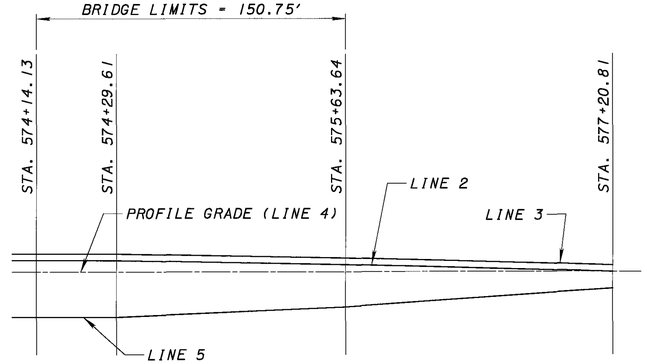
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DECK ELEVATIONS LAYOUT

TOP OF DECK ELEVATIONS TABLE

		LINE 1		LINE 2		LINE 3		LINE 4		LINE 5		LINE 6	
SPAN NO.	LOCATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
SPAN NO.1	℄ BRG. R.A.	574+14.07	937.13	574+14.05	937.13	574+13.96	937.36	574+13.72	936.72	574+13.12	935.14	574+13.10	935.14
	0.25 L	574+25.58	937.07	574+25.56	937.07	574+25.49	937.30	574+25.29	936.66	574+24.78	935.08	574+24.76	935.08
	0.50 L	574+37.09	937.00	574+37.08	937.00	574+37.01	937.23	574+36.85	936.60	574+36.44	935.04	574+36.42	935.04
	0.75 L	574+48.60	936.92	574+48.59	936.92	574+48.54	937.15	574+48.42	936.54	574+48.09	935.03	574+48.08	935.03
SPAN NO.2	℄ PIER 1	574+60.10	936.85	574+60.11	936.85	574+60.07	937.08	574+59.98	936.48	574+59.75	935.01	574+59.74	935.01
	0.25 L	574+74.49	936.75	574+74.50	936.75	574+74.48	936.98	574+74.43	936.41	574+74.32	934.98	574+74.31	934.98
	0.50 L	574+88.89	936.66	574+88.89	936.66	574+89.89	936.89	574+88.89	936.34	574+88.89	934.96	574+88.89	934.96
	0.75 L	575+03.28	936.57	575+03.27	936.57	575+03.29	936.80	575+03.34	936.26	575+03.45	934.94	575+03.46	934.94
SPAN NO.3	℄ PIER 2	575+17.67	936.47	575+17.66	936.47	575+17.70	936.70	575+17.79	936.19	575+18.02	934.91	575+18.03	934.91
	0.25 L	575+29.16	936.40	575+29.18	936.40	575+29.24	936.63	575+29.35	936.13	575+29.69	934.89	575+29.71	934.89
	0.50 L	575+40.67	936.32	575+40.69	936.32	575+40.75	936.55	575+40.92	936.07	575+41.33	934.88	575+41.35	934.88
	0.75 L	575+52.18	936.25	575+52.20	936.25	575+52.28	936.48	575+52.48	936.01	575+52.99	934.86	575+53.01	934.86
	℄ BRG. F.A.	575+63.69	936.17	575+63.72	936.17	575+63.81	936.40	575+64.05	935.95	575+64.64	934.84	575+64.67	934.84



RIGHT PAVEMENT TRANSITION DETAIL

PAVEMENT TRANSITION TABLE

BRIDGE	LOCATION	STATION 574+14.13	STATION 574+29.61	STATION 575+63.64	STATION 577+20.81
	LINE 2	0.77 FT	0.77 FT	0.43 FT	0.03 FT
1405L	LINE 3	1.17 FT	1.17 FT	0.82 FT	0.42 FT
	LINE 5	-0.88 FT	-0.88 FT	-0.62 FT	-0.32 FT
	LINE 2	0.41 FT	0.41 FT	0.22 FT	0.00 FT
1405R	LINE 3	0.64 FT	0.64 FT	0.45 FT	0.23 FT
	LINE 5	-1.58 FT	-1.58 FT	-1.12 FT	-0.58 FT

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DESIGNED	DRAWN	REVIEWED	DATE
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GLC		4501780L/4501799R	

RIGHT SUPERSTRUCTURE DETAILS

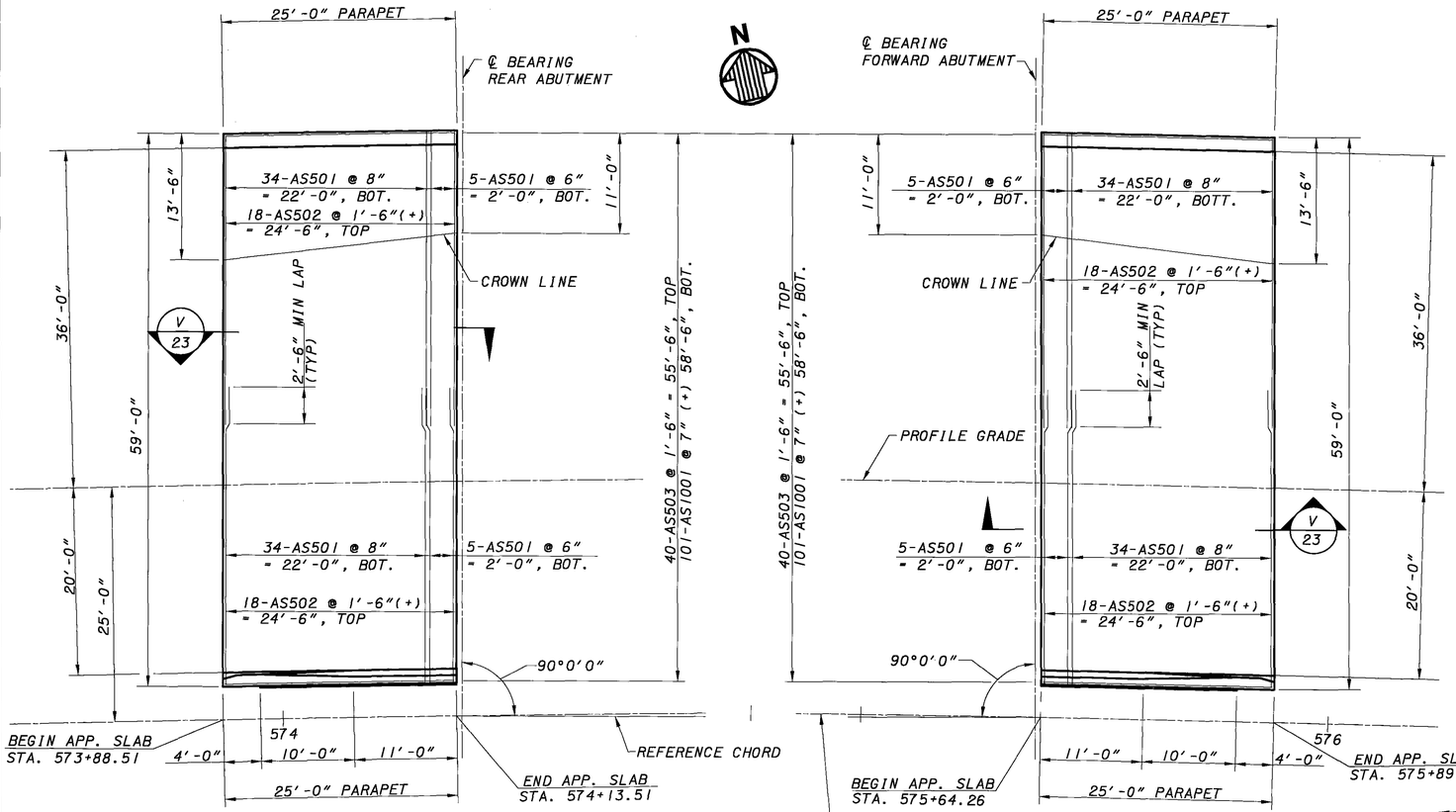
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

22/28

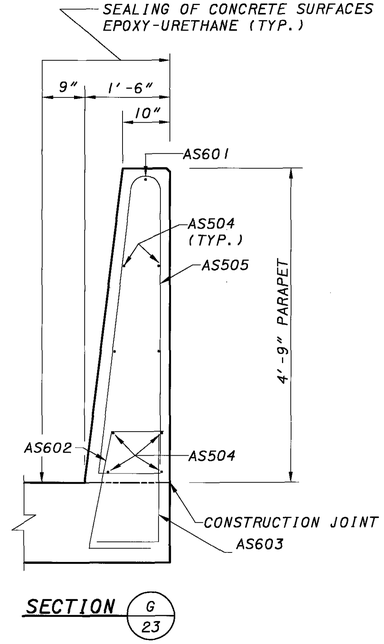
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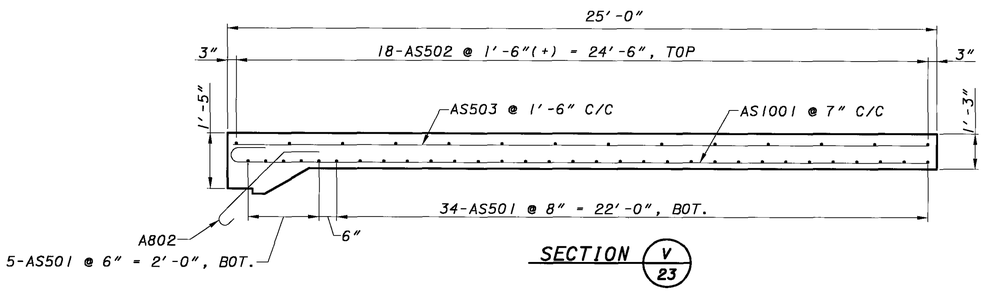


REAR APPROACH SLAB PLAN

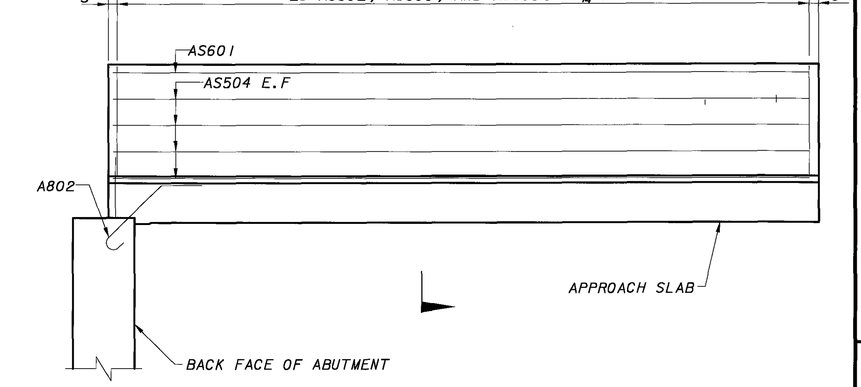
FORWARD APPROACH SLAB PLAN



SECTION G 23



SECTION V 23



APPROACH PARAPET ELEVATION
LEFT PARAPET ONLY

TOP OF APPROACH SLAB ELEVATIONS

APPROACH SLAB	LOCATION	LEFT TOE OF PARAPET		CROWN POINT		PROFILE GRADE		RIGHT TOE OF PARAPET	
		STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
REAR	0.0 L	573+89.51	937.59	573+89.35	937.90	573+88.92	936.85	573+88.59	935.97
	0.5 L	574+02.01	937.53	574+01.85	937.89	574+01.42	936.78	574+01.09	935.90
	1.0 L	574+14.51	937.48	574+14.35	937.88	574+13.92	936.72	574+13.59	935.84
FORWARD	0.00 L	575+63.27	936.38	575+63.43	936.78	575+63.86	935.95	575+64.19	935.33
	0.5 L	575+75.77	936.19	575+75.93	936.64	575+76.36	935.89	575+76.69	935.16
	1.0 L	575+88.27	936.11	575+88.43	936.51	575+88.86	935.83	575+89.19	934.99

NOTES:

1. FOR ADDITIONAL DETAILS NOTES & APPROACH SLAB REINFORCING, REFERENCE IS MADE TO STD. DRAWING AS-1-81.
2. FOR SUPERELEVATION TRANSITION DIAGRAM, SEE SHEET 17/28.
3. FOR ADDITIONAL DETAILS OF THE APPROACH SLAB, SEE TYPICAL SECTIONS ON SHEET 24/28.

LEGEND:

B.F. - BACK FACE
BOT. - BOTTOM
E.F. - EACH FACE
F.F. - FRONT FACE

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4501780L/4501799R	

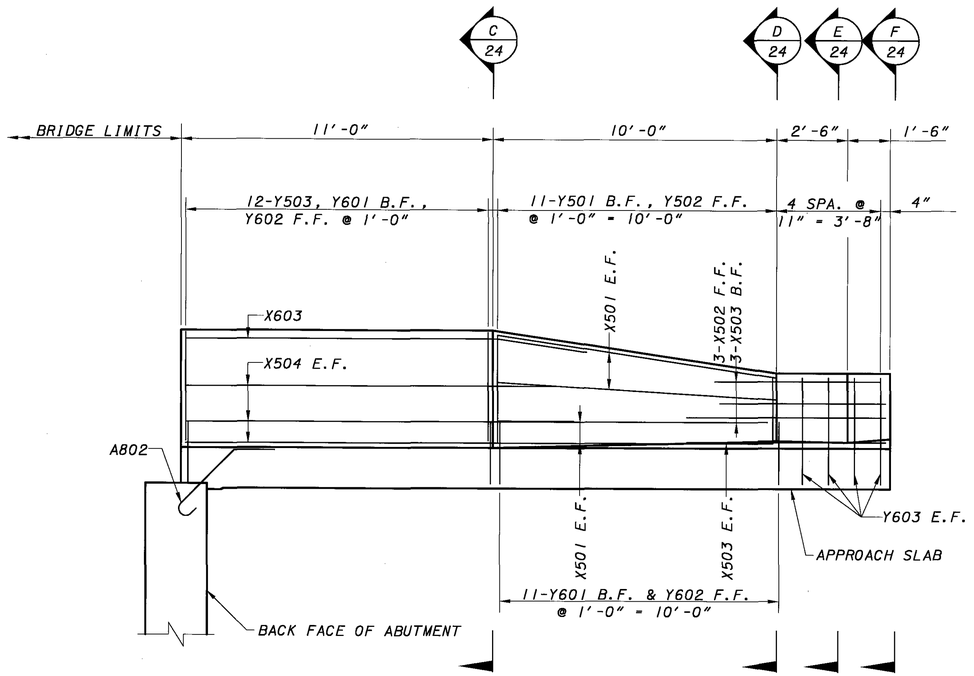
LEFT APPROACH DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

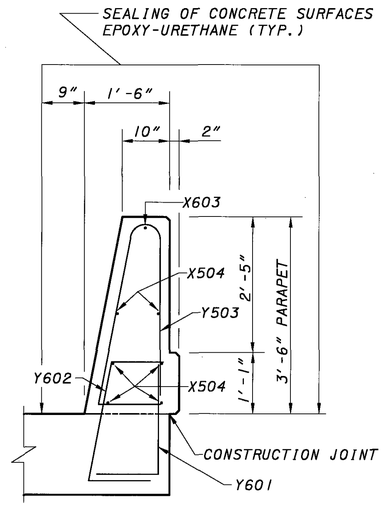
23/28

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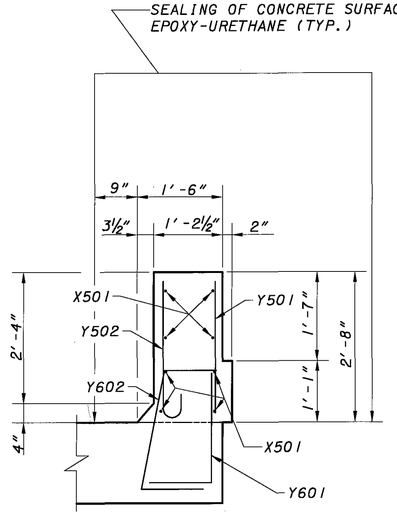
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APPROACH PARAPET ELEVATION
RIGHT PARAPET ONLY



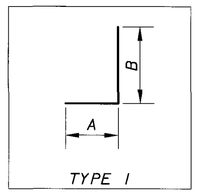
SECTION C 24

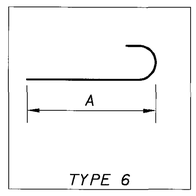


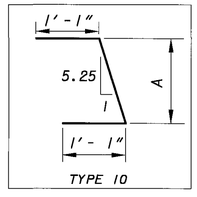
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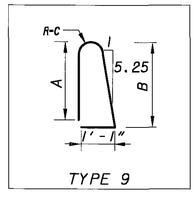
APPROACH SLAB REINFORCING STEEL LIST TABLE

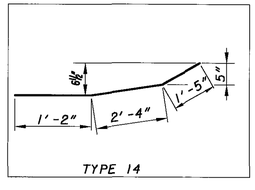
MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
X501	16	10'-0"	167	STR					
X502	6	5'-6"	34	14					
X503	10	5'-6"	57	STR					
X504	12	14'-0"	175	STR					
X603	2	14'-0"	42	STR					
	2	2'-4"							
Y501	S.O.	TO	63	STR					1"
	11	3'-2"							
	2	2'-11"			2'-4"				
Y502	S.O.	TO	77	6	TO				1"
	11	3'-9"			3'-2"				
Y503	24	7'-5"	186	9	3'-0"	3'-2"	0'-2¾"		
Y601	46	3'-1"	213	1	1'-1"	2'-2"			
Y602	46	4'-2"	288	10	2'-2"				
Y603	16	4'-7"	110	1	3'-9"	1'-0"			
AS501	156	30'-8"	4990	STR					
AS502	72	30'-8"	2303	STR					
AS503	80	24'-6"	2044	STR					
AS504	16	24'-6"	409	STR					
AS505	52	9'-10"	533	9	4'-3"	4'-5"			
AS601	2	24'-6"	74	STR					
AS602	52	4'-6"	351	10	2'-8"				
AS603	52	3'-11"	306	1	1'-1"	3'-0"			
AS1001	202	25'-6"	22165	6	24'-6"				
			34,587	lbs.					



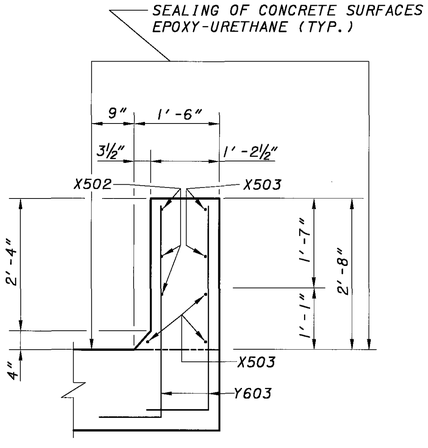




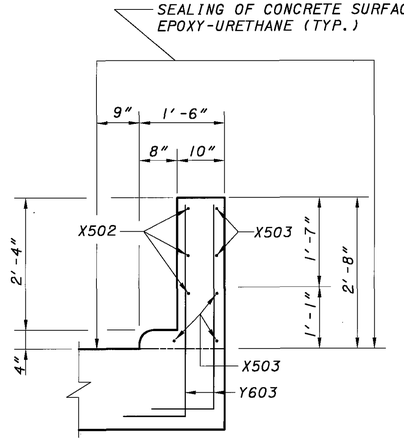




NOTE:
REINFORCING STEEL LISTED ON THIS SHEET IS INCLUDED FOR PAYMENT UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN.



SECTION E 24



SECTION F 24

ABBREVIATIONS:
B.F. = BACK FACE
BOT. = BOTTOM
E.F. = EACH FACE
F.F. = FRONT FACE

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GLC		4501780L/4501799R	

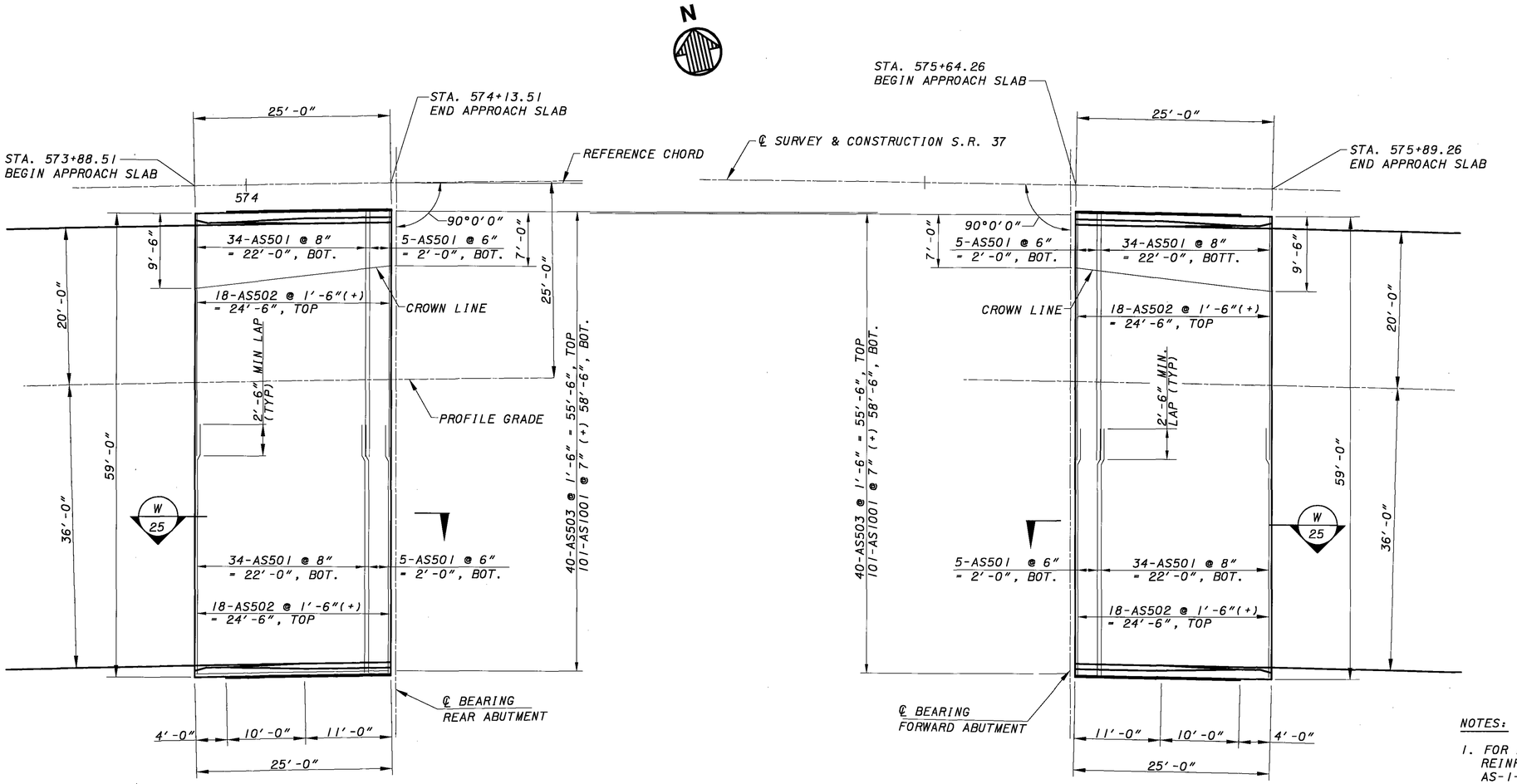
LEFT APPROACH DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

24/28

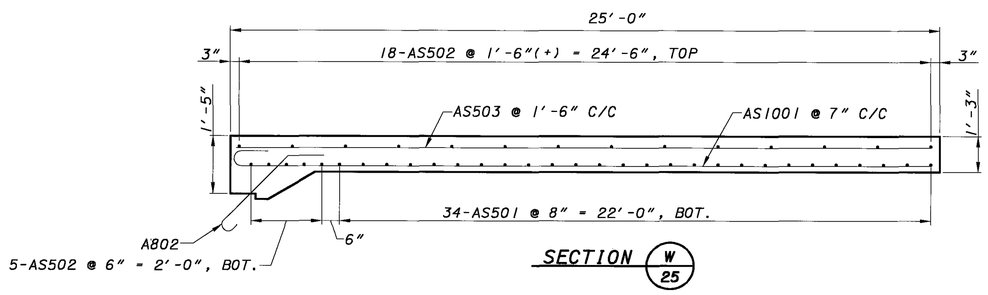
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REAR APPROACH SLAB PLAN

FORWARD APPROACH SLAB PLAN



SECTION W 25

NOTES:

1. FOR ADDITIONAL DETAILS NOTES & APPROACH SLAB REINFORCING, REFERENCE IS MADE TO STD. DRAWING AS-1-81.
2. FOR SUPERELEVATION TRANSITION DIAGRAM, SEE SHEET 22/28.
3. FOR ADDITIONAL DETAILS OF THE APPROACH SLAB, SEE TYPICAL SECTIONS ON SHEET 26/28.

LEGEND:

B.F. - BACK FACE
BOT. - BOTTOM
E.F. - EACH FACE
F.F. - FRONT FACE

TOP OF APPROACH SLAB ELEVATIONS

APPROACH SLAB	LOCATION	LEFT TOE OF PARAPET		CROWN LINE		PROFILE GRADE		RIGHT TOE OF PARAPET	
		STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
REAR	0.0 L	573+88.39	937.17	573+88.30	937.38	573+88.06	936.85	573+87.46	935.27
	0.5 L	574+00.89	937.14	574+00.80	937.37	574+00.56	936.79	574+99.96	935.21
	1.0 L	574+13.39	937.13	574+13.30	937.36	574+13.06	936.72	574+12.46	935.14
FORWARD	0.00 L	575+64.45	936.17	575+64.54	936.40	575+64.78	935.95	575+65.38	934.84
	0.5 L	575+76.95	936.00	575+77.04	936.28	575+77.28	935.89	575+77.88	934.57
	1.0 L	575+89.45	935.93	575+89.54	936.16	575+89.78	935.82	575+90.38	934.31

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GLC		4501780L/4501799R	

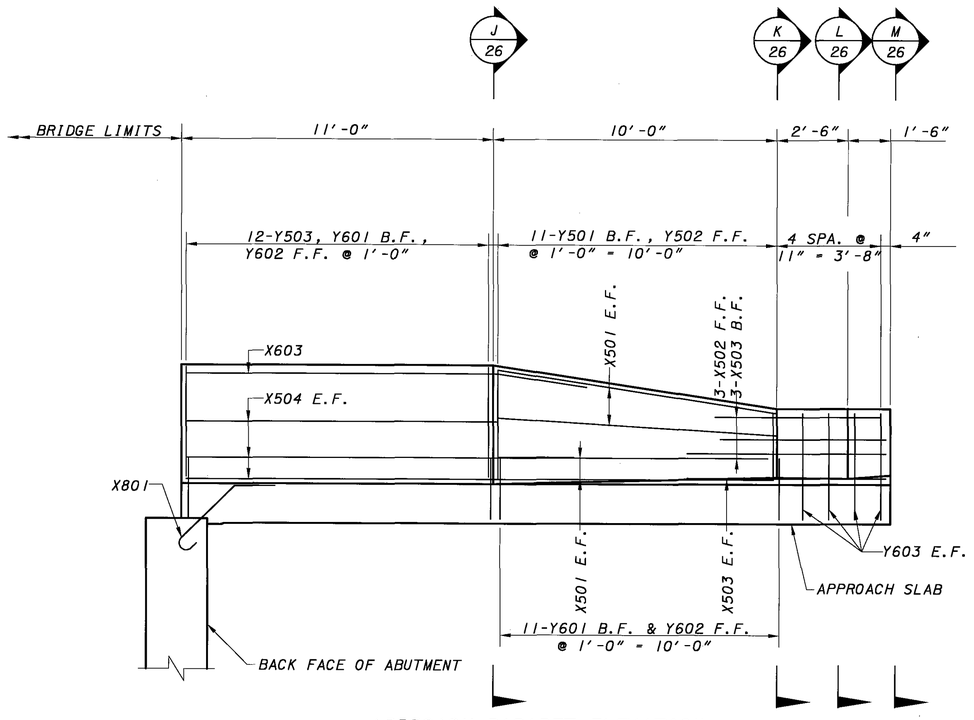
RIGHT APPROACH DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

25/28

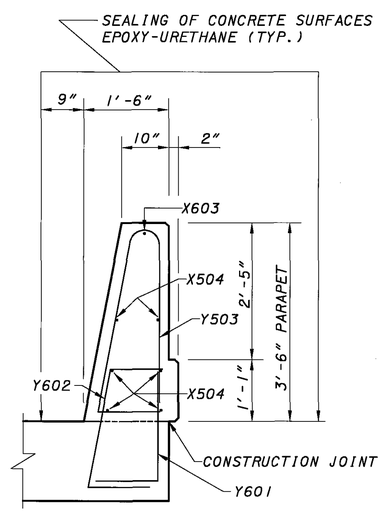
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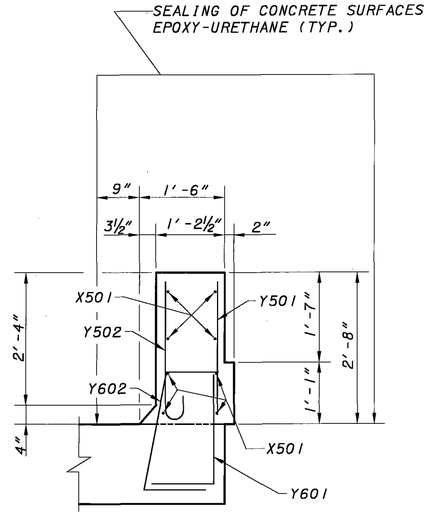


APPROACH PARAPET ELEVATION

RIGHT PARAPET SHOWN, LEFT PARAPET SIMILAR

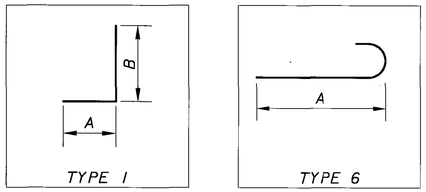


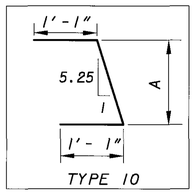
SECTION J 26

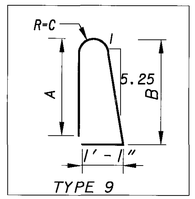


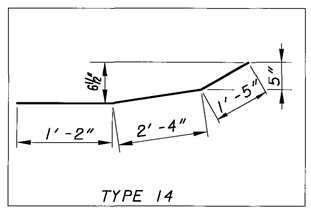
SECTION K 26

REINFORCING STEEL LIST TABLE									
MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
Y601	92	3'-1"	426	1	1'-1"	2'-2"			
Y602	92	4'-2"	576	10	2'-2"				
Y603	32	4'-7"	220	1	3'-9"	1'-0"			
X501	32	10'-0"	334	STR					
X502	12	5'-6"	69	14					
X503	20	5'-6"	115	STR					
	4	2'-4"							
Y501	S.O.	TO	126	STR					1"
	11	3'-2"							
	4	2'-11"			2'-4"				
Y502	S.O.	TO	153	6	TO				1"
	11	3'-9"			3'-2"				
Y503	48	7'-5"	372	9	3'-0"	3'-2"	0'-2¾"		
X603	4	14'-0"	84	STR					
X504	24	14'-0"	350	STR					
AS501	56	30'-8"	4990	STR					
AS502	72	30'-8"	2303	STR					
AS503	80	24'-6"	2044	STR					
AS1001	202	25'-6"	22165	6	24'-6"				
			34,327	lbs.					

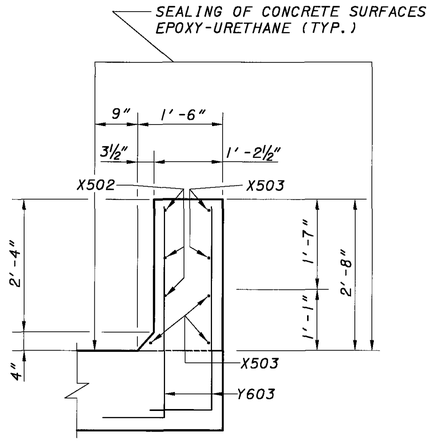




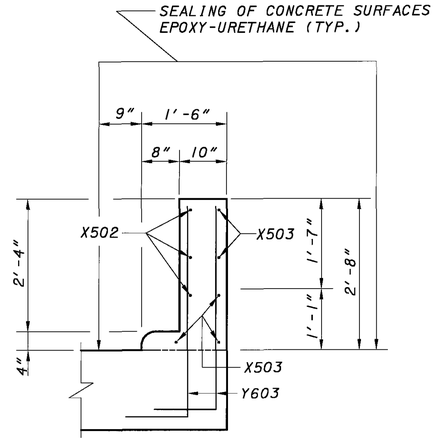




NOTE:
REINFORCING STEEL LISTED ON THIS SHEET IS INCLUDED FOR PAYMENT UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN.



SECTION L 26



SECTION M 26

ABBREVIATIONS:
B.F. = BACK FACE
BOT. = BOTTOM
E.F. = EACH FACE
F.F. = FRONT FACE

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	DLW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		450178OL/4501799R	

RIGHT APPROACH DETAILS
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

26 | 28

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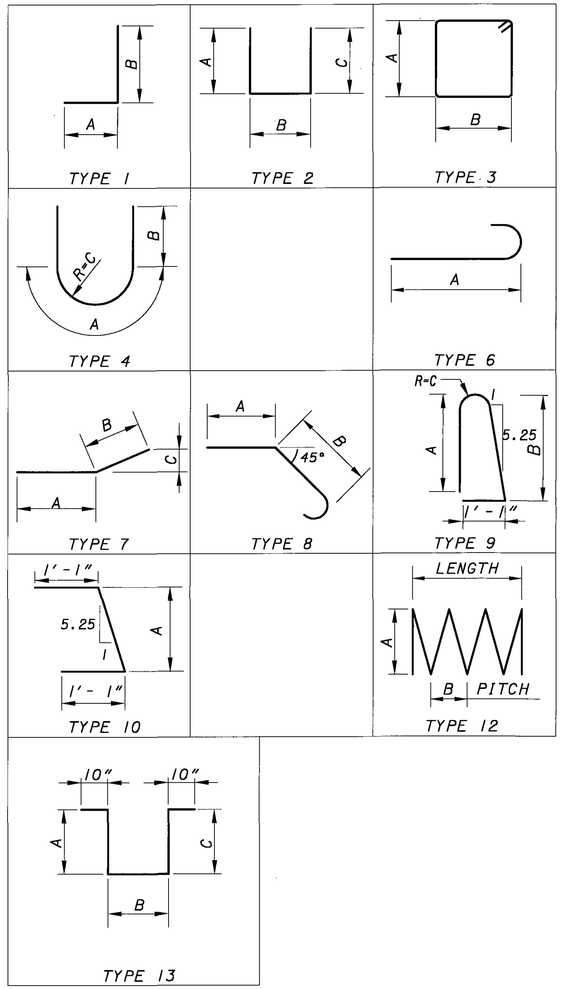
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REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
REAR ABUTMENT									
A401	18	9'-0"	108	3	1'-9"	2'-6"			
A501	12	33'-2"	415	STR					
A502	44	11'-0"	505	3	2'-7"	2'-8"			
A503	14	30'-6"	445	STR					
	1	12'-8"			5'-6"	1'-11"	5'-6"		
A504	S.O.		489	2					3/4"(+)
	32	16'-8"			7'-6"	1'-11"	7'-6"		
A505	8	6'-9"	57	STR					
A506	6	3'-1"	20	STR					
A507	4	16'-4"	69	2	7'-11"	8"	7'-11"		
	1	15'-10"			7'-1"	1'-11"	7'-1"		
A508	S.O.		119	2					3/4"(+)
	7	16'-8"			7'-6"	1'-11"	7'-6"		
A801	8	34'-7"	739	STR					
A802	40	6'-4"	676	8	1'-5"	4'-0"			
A1001	8	34'-3"	1179	STR					
			4821	lbs.					
FORWARD ABUTMENT									
B401	18	9'-0"	108	3	1'-9"	2'-6"			
B501	12	33'-2"	415	STR					
B502	44	11'-0"	505	3	2'-7"	2'-8"			
B503	14	30'-6"	445	STR					
	1	14'-8"			6'-6"	1'-11"	6'-6"		
B504	S.O.		110	2					1/2"(+)
	7	15'-4"			6'-10"	1'-11"	6'-10"		
B505	8	6'-9"	57	STR					
B506	6	3'-1"	20	STR					
B507	4	15'-11"	66	2	7'-9"	8"	7'-9"		
	1	12'-4"			5'-4"	1'-11"	5'-4"		
B508	S.O.		464	2					1/2"(+)
	32	15'-6"			6'-11"	1'-11"	6'-11"		
B801	8	34'-7"	739	STR					
A802	40	6'-4"	676	8	1'-5"	4'-0"			
B1001	8	34'-3"	1179	STR					
			4784	lbs.					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
PIERS									
P401	48	9'-6"	305	3	2'-6"	2'-0"			
P501	32	11'-3"	376	13	3'-7"	2'-8"	3'-7"		
P502	2	11'-1"	24	13	3'-7"	2'-6"	3'-7"		
P503	10	5'-8"	60	2	3'-7"				
P504	10	10'-7"	110	4	3'-9"	3'-5"	1'-2 3/8"		
P505	12	30'-7"	383	STR					
P506	56	12'-8"	891	13	4'-3 1/2"	2'-8"	4'-3 1/2"		
P507	2	12'-6"	27	13	4'-3 1/2"	2'-6"	4'-3 1/2"		
P508	10	5'-8"	60	2	4'-3"				
P1001	16	31'-10"	2192	STR					
P1101	8	36'-2"	1537	STR					
P1102	8	36'-6"	1552	7	25'-8"	10'-10"	11 1/4"		
			7261	lbs.					
SUPERSTRUCTURE									
SM401	304	30'-8"	6228	STR					
SU402	212	4'-1"	579	2	1'-3"	1'-9"	1'-3"		
SA501	116	30'-2"	3650	STR					
SC501	58	27'-2"	1644	STR					
SS501	42	45'-0"	1972	STR					
SS502	14	25'-3"	369	STR					
SS503	151	7'-5"	1169	9	3'-0"	3'-2"	2 3/4"		
SS504	151	9'-10"	1549	9	4'-3"	4'-5"	1 1/4"		
SN601	230	31'-3"	10796	STR					
SS601	6	45'-0"	406	STR					
SS602	2	27'-3"	82	STR					
SS603	302	3'-11"	1777	1	1'-1"	3'-0"			
SS604	302	4'-6"	2042	10	2'-8"				
SF901	128	57'-9"	25133	6	56'-6"				
SG901	70	55'-3"	13150	STR					
SH901	56	41'-10"	7966	STR					
SJ901	54	32'-0"	5876	STR					
SK901	28	49'-6"	4713	STR					
SL901	27	43'-6"	3994	STR					
SB1101	116	51'-8"	31843	STR					
SD1101	58	36'-9"	11325	STR					
SE1101	56	26'-5"	7860	STR					
			144123	lbs.					
FOR INFORMATION ONLY - PIER CIP PILE REINFORCING									
CIP401	24	38'-4"	5693	12	1'-0"	1'-0"			
CIP601	192	39'-6"	11392	1	1'-0"	38'-8"			

BENDING DIAGRAMS



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

3. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS.

4. S.O. DENOTES SERIES OF.

5. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

6. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED BMW | DRAWN DLW | CHECKED GLC | REVISED | REVIEWED GWM | DATE 7-20-05

STRUCTURE FILE NUMBER 4501780L/4501799R

LEFT REINFORCING STEEL
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

1224
1349

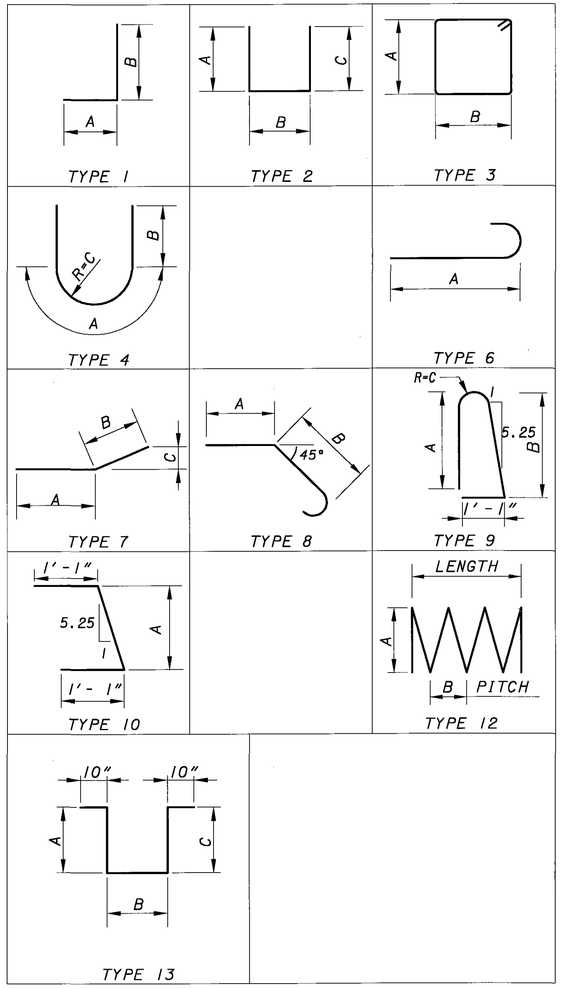
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REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
REAR ABUTMENT									
A401	20	9'-0"	120	3	1'-9"	2'-6"			
A501	12	38'-5"	481	STR					
A502	49	11'-0"	563	3	2'-7"	2'-8"			
A503	14	30'-6"	445	STR					
	1	10'-8"			4'-6"	1'-11"	4'-6"		
A504	S.O.		455	2					3/4"(+)
	34	15'-0"			6'-8"	1'-11"	6'-8"		
A505	6	14'-2"	89	STR					
A506	2	10'-8"	23	7	1'-3"	9'-5"	2'-2"		
	2	6'-0"							
A507	S.O.	TO	33	STR					3'-9"
	2	9'-9"							
	1	14'-8"			6'-6"	1'-11"	6'-6"		
A508	S.O.		78						3/4"
	5	15"-2"			6'-9"	1'-11"	6'-9"		
	1	10'-7"			5'-1"	8"	5'-1"		
A509	S.O.	TO	94	2	TO	TO	TO		8 5/8"
	7	14'-11"			7'-3"	8"	7'-3"		
A510	1	14'-11"	16	2	7'-3"	8"	7'-3"		
A511	3	18'-11"	60	2	9'-3"	8"	9'-3"		
A512	10	6'-8"	70	STR					
A513	6	3'-2"	20	STR					
A801	8	39'-10"	851	STR					
A802	40	6'-4"	676	8	1'-5"	4'-0"			
A1001	8	34'-7"	1190	STR					
			5264	lbs.					
FORWARD ABUTMENT									
B401	20	9'-0"	120	3	1'-9"	2'-6"			
B501	12	38'-5"	481	STR					
B502	49	11'-0"	563	3	2'-7"	2'-8"			
B503	12	30'-6"	382	STR					
	1	10'-8"			4'-6"	1'-11"	4'-6"		
B504	S.O.		437	2					1/2"
	34	14'-0"			6'-2"	1'-11"	6'-2"		
B505	8	6'-8"	56	STR					
B506	6	3'-2"	20	STR					
B507	3	17'-9"	56	2	8'-8"	8"	8'-8"		
	1	13'-8"			6'-0"	1'-11"	6'-0"		
B508	S.O.		72	2					3/4"
	5	14'-2"			6'-3"	1'-11"	6'-3"		
B509	4	14'-2"	60	STR					
	2	13'-0"							
B510	S.O.	TO	57	STR					3'-0 5/8"
	2	14'-2"							
	1	9'-11"			4'-9"	8"	4'-9"		
B511	S.O.	TO	91	2	TO	TO	TO		9 7/8"
	7	14'-9"			7'-2"	8"	7'-2"		
B512	1	14'-9"	16	2	7'-2"	8"	7'-2"		
B513	2	10'-9"	23	7	1'-3"	9'-6"	2'-6"		
B801	8	39'-10"	851	STR					
A802	40	6'-4"	676	8	1'-5"	4'-0"			
B1001	8	34'-7"	1190	STR					
			5151	lbs.					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
PIERS									
P401	48	9'-6"	305	3	2'-6"	2'-0"			
P501	32	11'-3"	376	13	3'-7"	2'-8"	3'-7"		
P502	2	11'-1"	24	13	3'-7"	2'-6"	3'-7"		
P503	10	5'-8"	60	2	3'-2"	3'-4"	3'-2"		
P504	10	10'-7"	110	4	3'-9"	3'-5"	1'-2 3/8"		
P505	12	30'-7"	383	STR					
P506	56	15'-3"	891	13	5'-7"	2'-8"	5'-7"		
P507	2	15'-1"	32	13	5'-7"	2'-6"	5'-7"		
P508	10	9'-8"	101	2	5'-2"	3'-4"	5'-2"		
P1001	16	33'-10"	2330	STR					
P1101	8	36'-2"	1537	STR					
P1102	8	36'-6"	1552	7	29'-8"	6'-10"	7 1/4"		
			7701	lbs.					
SUPERSTRUCTURE									
SM401	304	30'-8"	6228	STR					
SU402	212	4'-1"	579	2	1'-3"	1'-9"	1'-3"		
SA501	116	30'-2"	3650	STR					
SC501	58	27'-2"	1644	STR					
SS501	36	45'-0"	1972	STR					
SS502	12	25'-3"	369	STR					
SS503	302	7'-5"	2337	9	3'-0"	3'-2"			
SN601	230	31'-3"	10796	STR					
SS601	6	45'-0"	406	STR					
SS602	2	27'-3"	82	STR					
SS603	302	3'-11"	1777	1	1'-1"	3'-0"			
SS604	302	4'-6"	2042	10	2'-8"				
SF901	128	57'-9"	25133	6	56'-6"				
SG901	70	55'-3"	13150	STR					
SH901	56	41'-10"	7966	STR					
SJ901	54	32'-0"	5876	STR					
SK901	28	49'-6"	4713	STR					
SL901	27	43'-6"	3994	STR					
SB1101	116	51'-8"	31843	STR					
SD1101	58	36'-9"	11325	STR					
SE1101	56	26'-5"	7860	STR					
			143742	lbs.					
FOR INFORMATION ONLY - PIER CIP PILE REINFORCING									
CIP401	24	38'-4"	5693	12	1'-0"	1'-0"			
CIP601	192	39'-6"	11392	1	1'-0"	38'-8"			

BENDING DIAGRAMS



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

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4. S.O. DENOTES SERIES OF.

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6. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED BMW
DRAWN DLW
CHECKED GLC
REVISED
REVISED GWM DATE 7-20-05
STRUCTURE FILE NUMBER 4501780L/4501799R

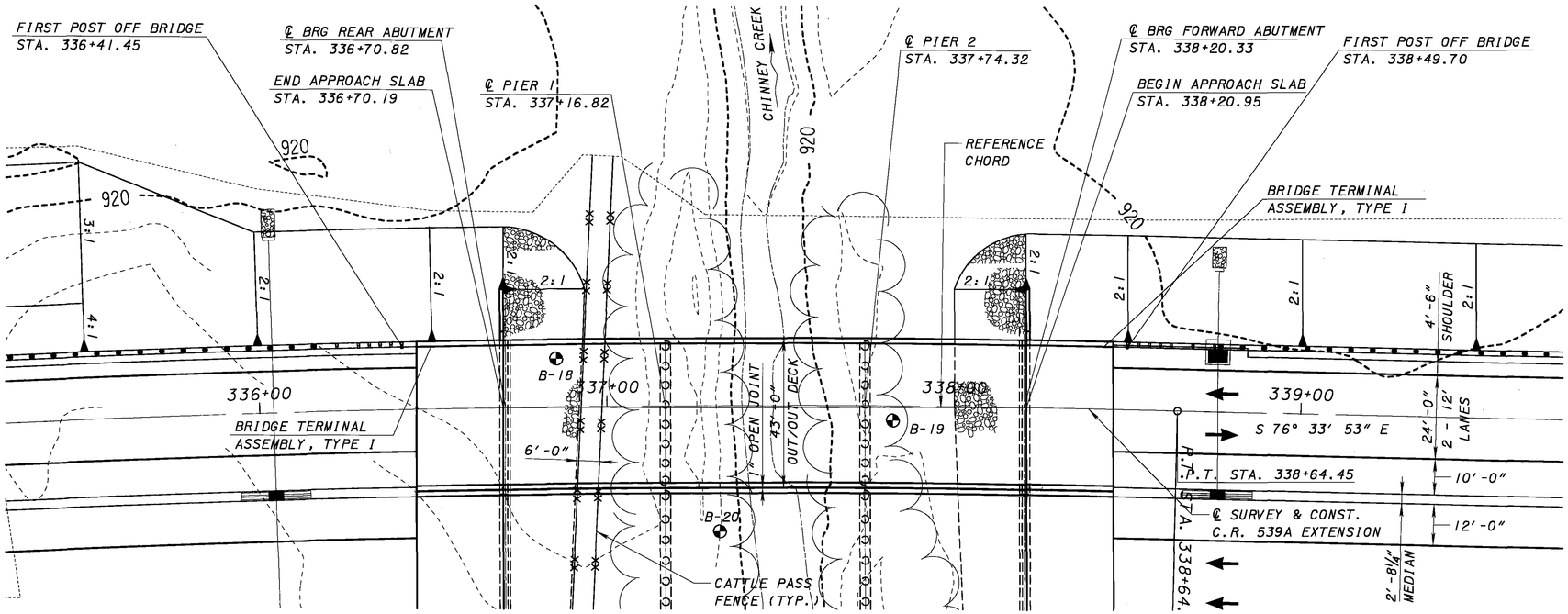
RIGHT REINFORCING STEEL
BRIDGE NO. LIC-37-1405 L & R
S.R. 37 OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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PLAN

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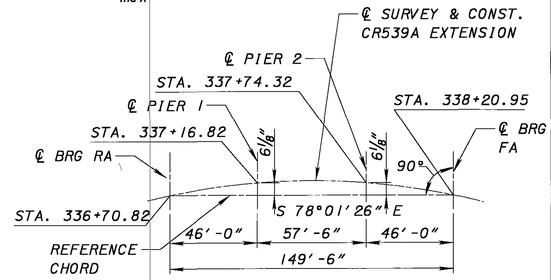
PILE TYPES AND ESTIMATED LENGTHS		
LOCATION	PILE TYPE	PILE LENGTH
REAR ABUT.	16" CIP	80'
PIER 1	16" CIP	85'
PIER 2	16" CIP	85'
FWD. ABUT.	16" CIP	80'

NOTES:

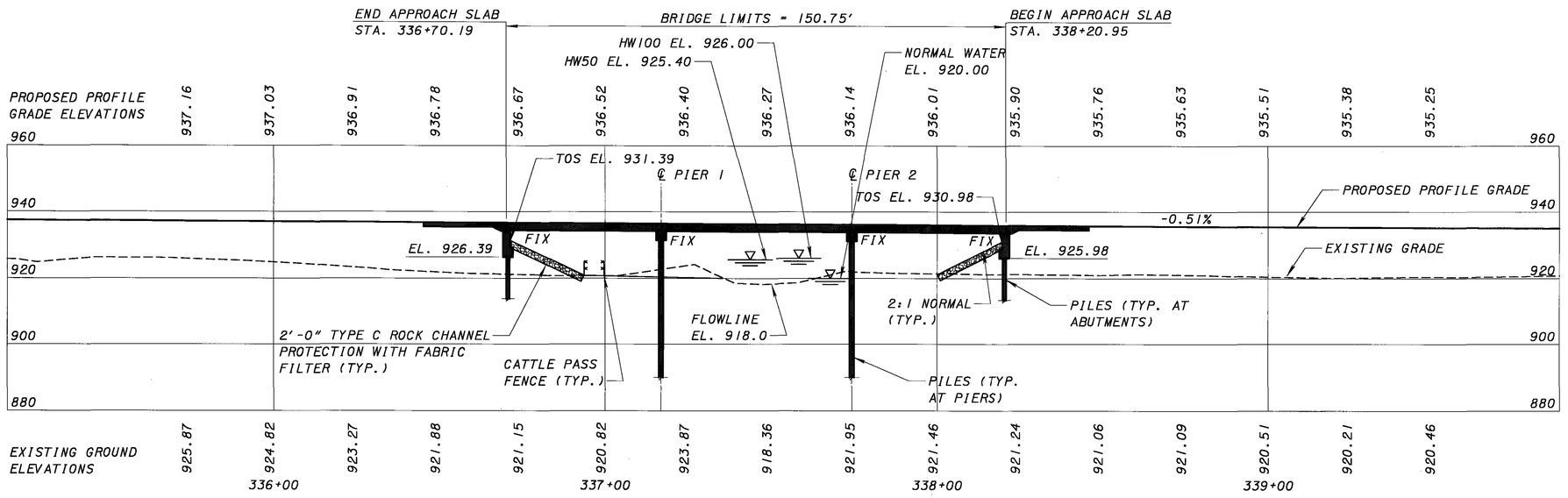
1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.
2. ⊕ BORING LOCATIONS
3. ▒▒▒ = 2'-0" TYPE C ROCK CHANNEL PROTECTION WITH FABRIC FILTER. ITEM IS INCLUDED IN ROADWAY QUANTITIES.
4. FOR CATTLE PASS, SEE SHEET 173 OF 1349.

C.R. 539A EXTENSION
CURVE DATA

P.I. STA. = 336+26.60
△ = 5° 50' 33" (RT)
Dc = 1° 13' 38"
R = 4,668.74'
T = 238.24'
L = 476.07'
E = 6.07'
e_{max} = 0.030



REFERENCE CHORD DIAGRAM



PROFILE AT C.R. 539A EXTENSION

BENCHMARK

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCHMARKS AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC

C.R. 539A:
2010 ADT = 1060 ADTT = 43
2030 ADT = 1250 ADTT = 50

HYDRAULIC DATA

DRAINAGE AREA = 3.12 SQ.MI.
Q50 = 1370 CFS
HW50 = 925.4 FT.
V50 = 3.8 FPS
CLEARANCE ABOVE HW50 = 7.5 FT.
Q100 = 1695 CFS
HW100 = 926.0 FT.
V100 = 4.0 FPS

PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE ABUTMENTS AND PIERS
SPANS: 46'-0", 57'-6", 46'-0" C/C SUPPORT ALONG REFERENCE CHORD
ROADWAY: 40'-0" T/T PARAPET
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°00'00" TO REFERENCE CHORD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: CURVE RIGHT
SUPERELEVATION: 0.03
LATITUDE: 40°04'30" N
LONGITUDE: 82°33'45" W

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED RTP | DRAWN RTP | REVIEWED DOR | DATE 11-12-04 | REVISED | CHECKED JN | STRUCTURE FILE NUMBER 4536307

LICKING COUNTY
STA. 336+70.19
STA. 338+20.95

SITE PLAN
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-16I-6.65
LIC-37-10.25
PID 77221

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GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	REVISED 07-19-02
CPA-5-94	REVISED 07-19-02
CPP-2-94	REVISED 07-19-02
CS-1-03	DATED 04-18-03
SBR-1-99	REVISED 07-19-02

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE O.D.O.T BRIDGE DESIGN MANUAL.

DESIGN LOADING:
HS25 AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 LBS/FT^2

DESIGN DATA:
CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
HP CONCRETE

MONOLITHIC WEARING SURFACE:
MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

ITEM 511 CLASS HP CONCRETE, SUPERSTRUCTURE, AS PER PLAN

GENERAL REQUIREMENTS
THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS
ALL SUPERSTRUCTURE, BRIDGE DECK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN).

THE FOLLOWING PROPORTIONS WILL BE USED AS A STARTING MIX DESIGN:

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	#8 COARSE AGGRE. (LB)	#57 COARSE AGGRE. (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	GGBF SLAG (LB)	MICRO-SILICA (LB)	WATER TO CEMENTITIOUS RATIO ±.01
GRAVEL	1245	360	1315	2920	400	170	30	0.43
LIMESTONE	1245	360	1335	2940	400	170	30	0.43
SLAG	1245	315	1155	2715	400	170	30	0.43

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

SUGGESTED CONSTRUCTION PROCEDURE:

PHASE ONE CONSTRUCTION
1. MAINTAIN TRAFFIC ON EXISTING STRUCTURE.
2. CONSTRUCT APPROACH EMBANKMENT FOR CR 539A, LEFT BRIDGE AND OUTVILLE-MORSE FRONTAGE ROAD.
3. CONSTRUCT CR539A, LEFT AND OUTVILLE-MORSE FRONTAGE ROAD BRIDGES.

PHASE TWO CONSTRUCTION
1. TRANSFER TRAFFC TO LEFT BRIDGE.
2. REMOVE EXISTING BRIDGE.
3. CONSTRUCT APPROACH EMBANKMENT FOR RIGHT BRIDGE.
4. CONSTRUCT RIGHT BRIDGE.

THE ABOVE IS A SUGGESTED CONSTRUCTION PROCEDURE. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED CONSTRUCTION PROCEDURE AND SCHEDULE TO THE DIRECTOR FOR APPROVAL BEFORE BEGINNING CONSTRUCTION. NO CONSTRUCTION OPERATIONS WILL BE PERMITTED WITHOUT PRIOR APPROVAL.

PILE DRIVING CONSTRAINTS:
PRIOR TO DRIVING PILES, CONSTRUCT THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND A MINIMUM WAITING PERIOD OF 45 DAYS HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):
THE ULTIMATE BEARING VALUE IS 155 TONS PER PILE FOR THE 16" CAST-IN-PLACE REINFORCED CONCRETE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 164 TONS PER PILE FOR THE 16" CAST-IN-PLACE REINFORCED CONCRETE PIER PILES.

REAR ABUTMENT PILES:
7 PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEMS

FORWARD ABUTMENT PILES:
7 PILES 85 FEET LONG, ORDER LENGTH
0 DYNAMIC LOAD TESTING ITEMS

PIER PILES
18 PILES 90 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEMS

UTILITY LINES:
THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MIMINUM.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED BMW
DRAWN ACB
CHECKED GLC
REVIEWED GWM
DATE 7-20-05
REVISED
STRUCTURE FILE NUMBER 4538366

GENERAL NOTES
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

2/15

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COMPUTED BY : BMW DATE : 7/11/05
CHECKED BY : CMC DATE : 08/09/05

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
503	21300	LUMP		UNCLASSIFIED EXCAVATION	LUMP				
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00700	2650	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1120	1530			
507	00750	1180	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1190				
507	00751	1620	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN		1620			8, 15
509	10000	119,067	POUND	EPOXY COATED REINFORCING STEEL	7273	4623	107171		
511	42500	23	CU YD	CLASS C CONCRETE, PIER CAP		23			
511	43500	72	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	72				
511	51001	592	CU YD	CLASS HP CONCRETE, SUPERSTRUCTURE, AS PER PLAN			592		2
512	10100	430	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	37	9	300	84	
518	21200	60	CU YD	POROUS BACKFILL WITH FILTER FABRIC	60				
518	40000	104	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	104				
518	40010	28	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	28				
523	20000	2	EACH	DYNAMIC LOAD TESTING				2	
523	20500	2	EACH	RESTRIKING				2	
526	25001	239	SQ YD	REINFORCED CONCRETE APPROACH SLAB (T= 15"), AS PER PLAN				239	13, 14

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DESIGNED BMW
DRAWN ACB
CHECKED GLC
REVISED
REVIEWED GWW DATE 7-20-05
STRUCTURE FILE NUMBER 4538366

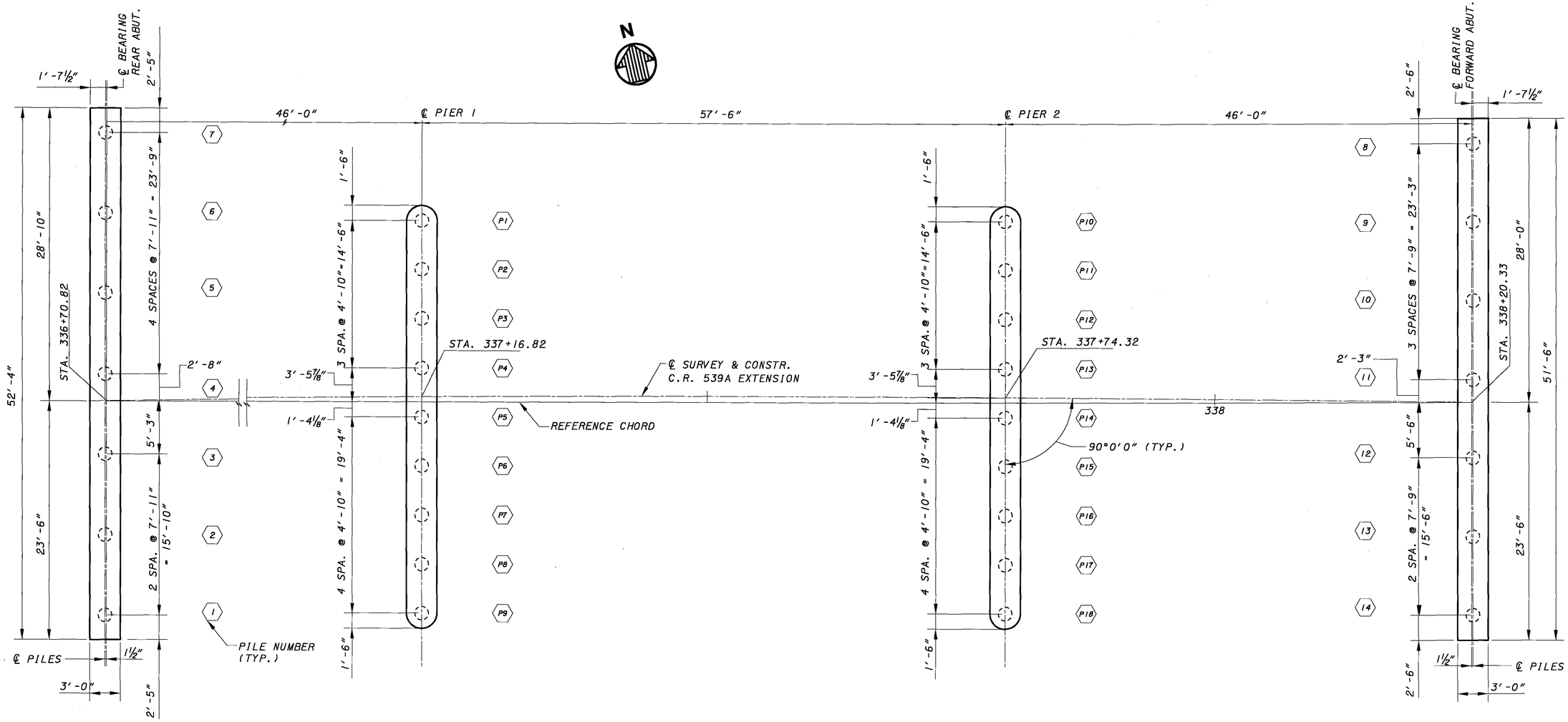
ESTIMATED QUANTITIES
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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PILE LAYOUT

REAR ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
1 THRU 7	16" CIP	EL.928.39	80'	VERTICAL

FORWARD ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
8 THRU 14	16" CIP	EL.927.98	80'	VERTICAL

PIER PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
P1 THRU P9	16" CIP	EL.933.03	85'	VERTICAL
P10 THRU P18	16" CIP	EL.932.71	85'	VERTICAL

PILE SYMBOL:

VERTICAL PILES
16" CAST-IN-PLACE
REINFORCED
CONCRETE PILES

NOTES:

1. FOR REAR ABUTMENT DETAILS SEE SHEETS 5 & 7/15
2. FOR FORWARD ABUTMENT DETAILS SEE SHEETS 6 & 7/15
3. FOR PIER DETAILS SEE SHEET 8/15

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	ACB	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

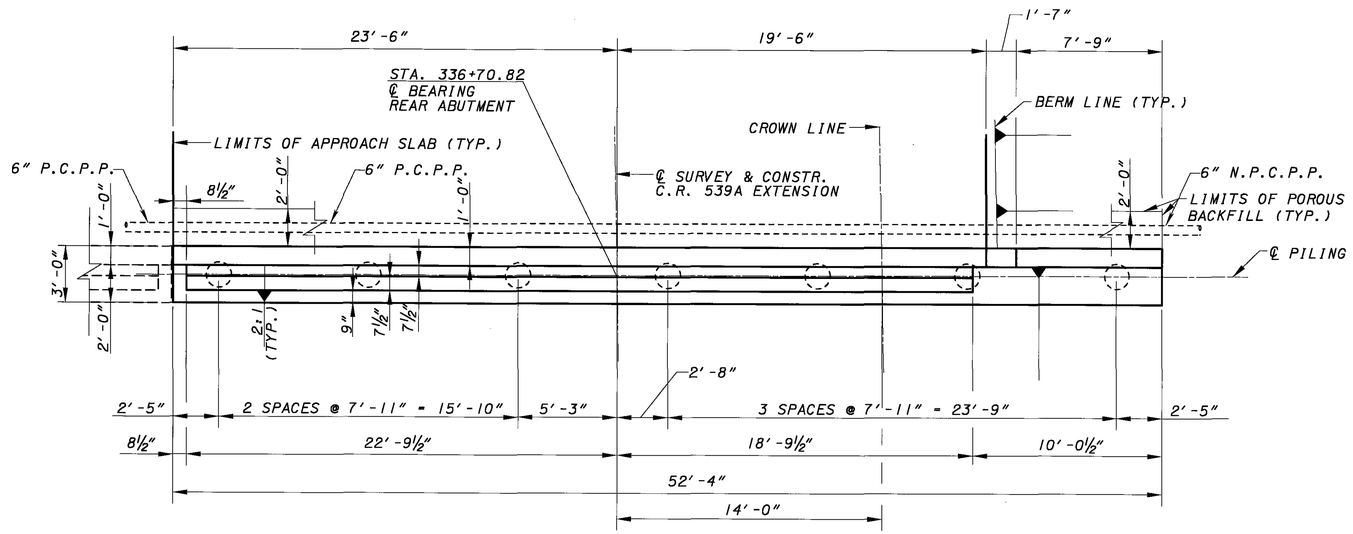
FOUNDATION PLAN
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

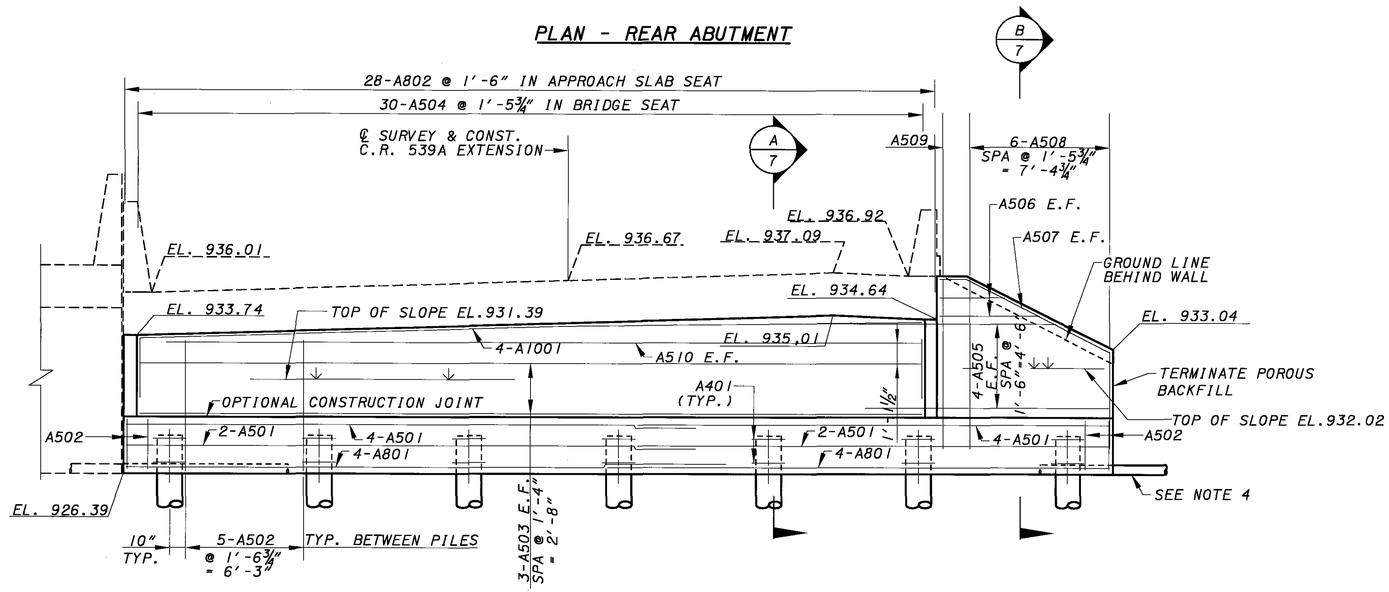
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PLAN - REAR ABUTMENT



ELEVATION - REAR ABUTMENT



LEGEND:

B.F. - BACK FACE
℄ - CENTERLINE
CONST. - CONSTRUCTION
P.C.P.P. - PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
E.F. - EACH FACE
EL. - ELEVATION
F.F. - FRONT FACE
N.P.C.P.P. - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
TYP. - TYPICAL

◌ VERTICAL PILES
16″ CAST-IN-PLACE
REINFORCED
CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 4/15.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3′-7″.
   LAP NO.8 BARS 6′-5″.
   LAP NO.10 BARS 11′-1″.
3. FOR APPROACH SLAB DETAILS, SEE SHEET 13/15 AND 14/15.
4. FOR TERMINATION OF PIPE DETAIL, SEE SHEET 7/15.

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DESIGNED	DRAWN	REVIEWED	DATE
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
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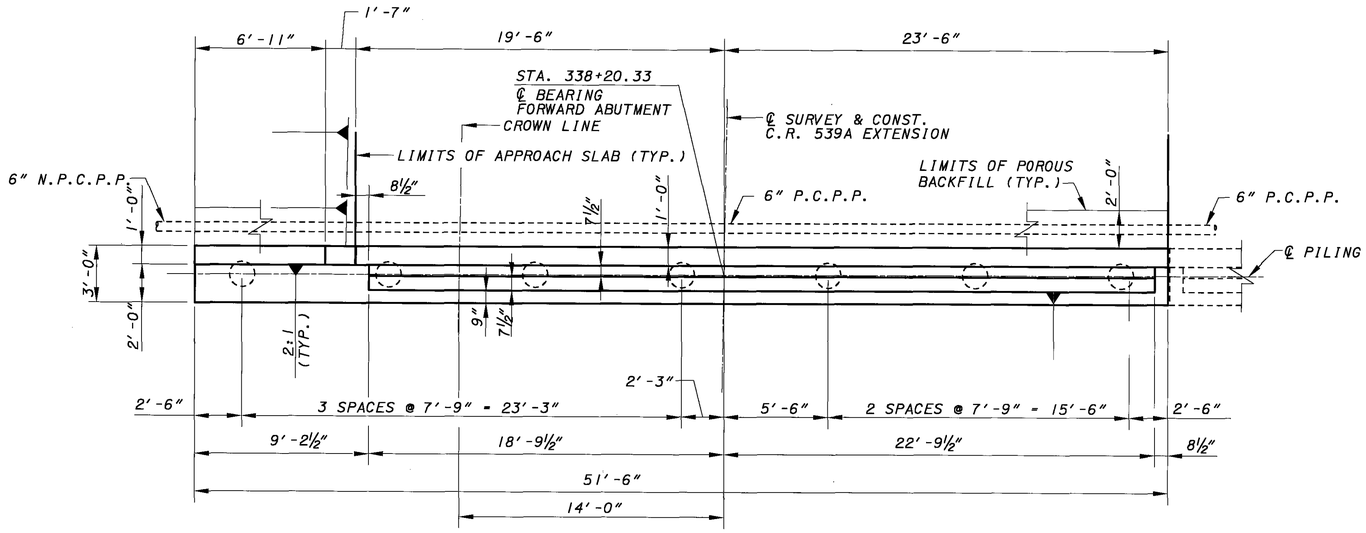
REAR ABUTMENT PLAN & ELEVATION
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

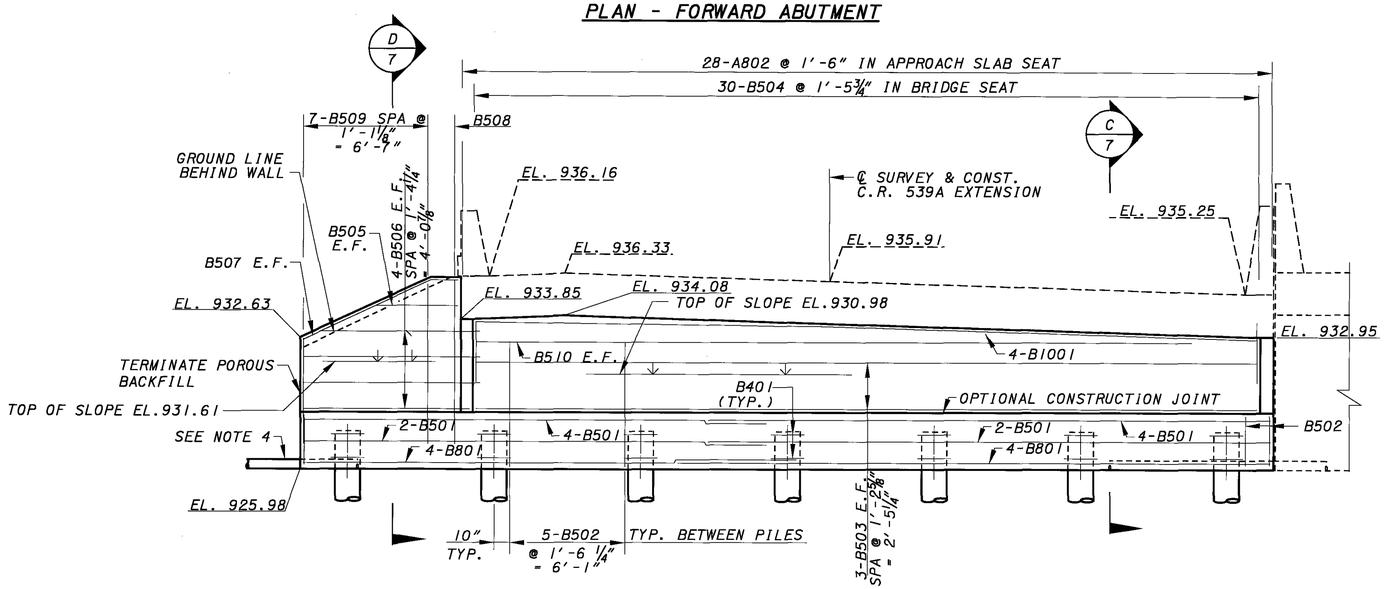
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PLAN - FORWARD ABUTMENT



ELEVATION - FORWARD ABUTMENT

LEGEND:
B.F. - BACK FACE
℄ - CENTERLINE
CONST. - CONSTRUCTION
P.C.P.P. - PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
E.F. - EACH FACE
EL. - ELEVATION
F.F. - FRONT FACE
N.P.C.P.P. - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
TYP. - TYPICAL

(-) VERTICAL PILES
16" CAST-IN-PLACE
REINFORCED
CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 4/15.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3'-7".
   LAP NO.8 BARS 6'-5".
   LAP NO.10 BARS 11'-1".
3. FOR APPROACH SLAB DETAILS, SEE SHEET 13/15 AND 14/15.
4. FOR TERMINATION OF PIPE DETAIL, SEE SHEET 7/15.

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DESIGNED	DRAWN	REVIEWED	DATE
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
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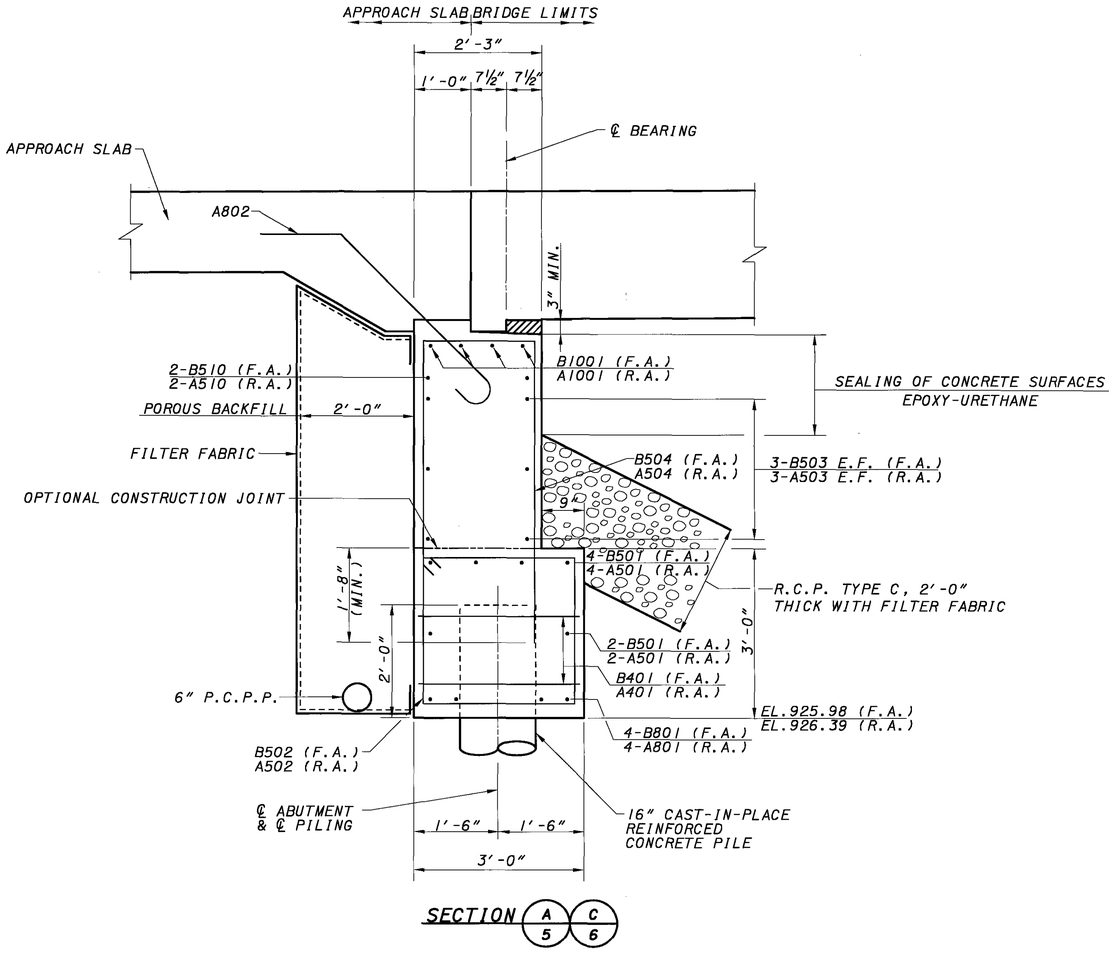
FORWARD ABUTMENT PLAN & ELEVATION
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

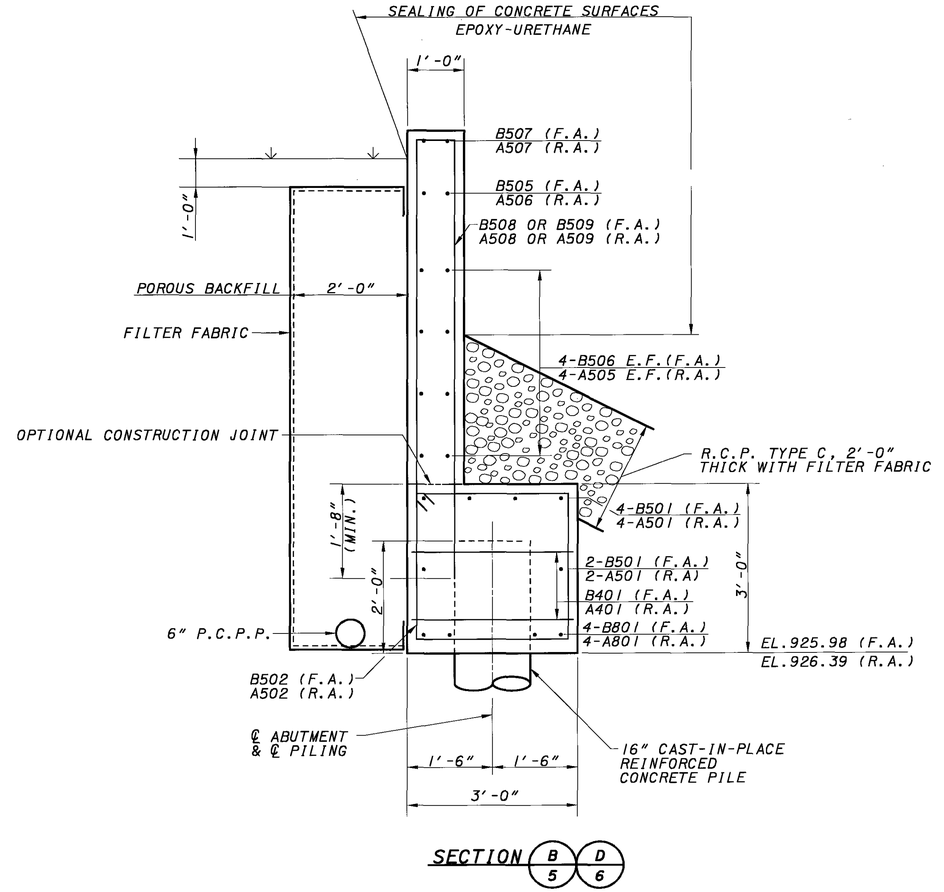
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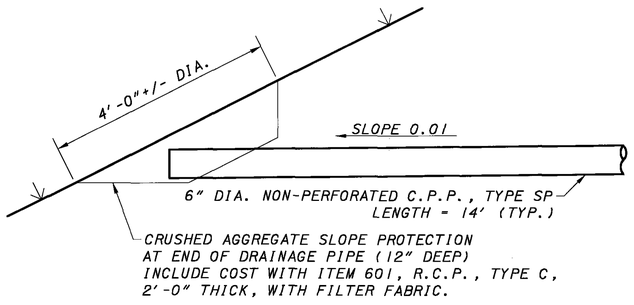
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SECTION A5 C6



SECTION B5 D6



TERMINATION OF 6" N.P.C.P.P. DETAIL

NOTES:

1. REFER STANDARD DRAWING CPA-5-94 FOR OTHER DETAILS AND NOTES.
2. POROUS BACKFILL:
   POROUS BACKFILL WITH FILTER FABRIC, 2'-0" THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1'-0" BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

LEGEND:
- B.F. = BACK FACE
- ℄ = CENTERLINE
- P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
- E.F. = EACH FACE
- EL. = ELEVATION
- F.A. = FORWARD ABUTMENT
- F.F. = FRONT FACE
- N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
- R.A. = REAR ABUTMENT
- R.C.P. = ROCK CHANNEL PROTECTION
- TYP. = TYPICAL
- ▨ 3" WIDE DRAIN REFER TO STD. DWG. CPA-5-94 FOR LOCATION

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	ACB	GWM	7-20-05
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GLC		4538366	

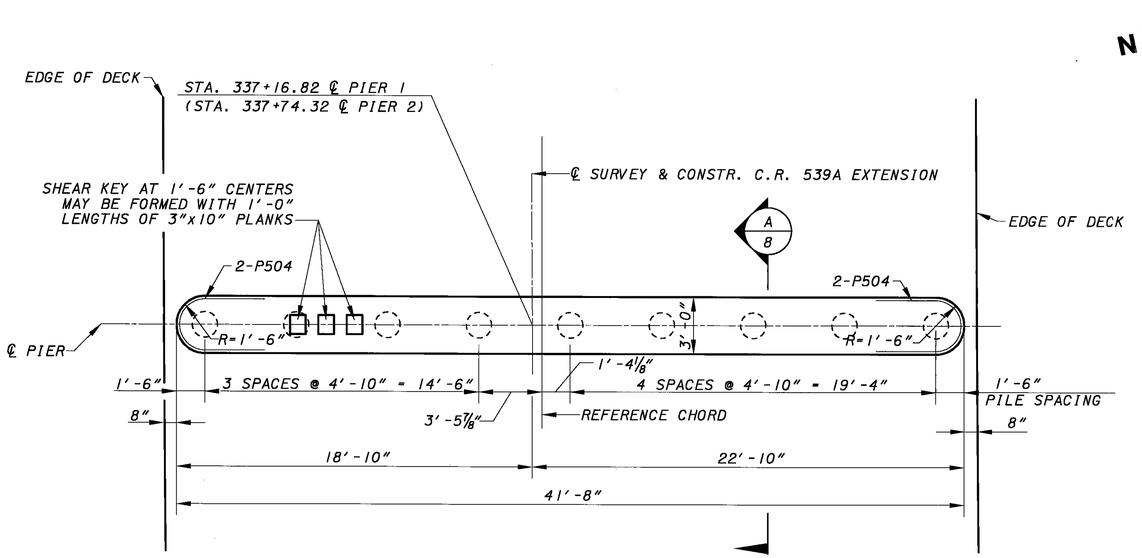
ABUTMENT DETAILS
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

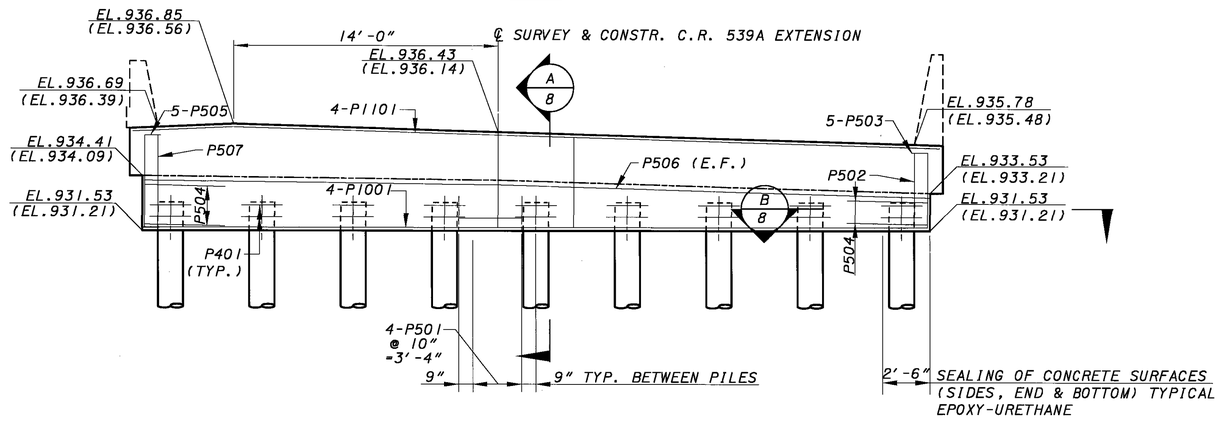
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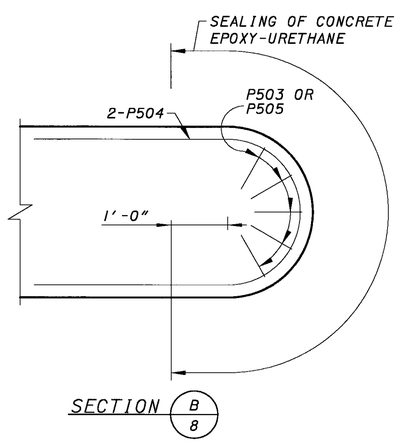


PLAN

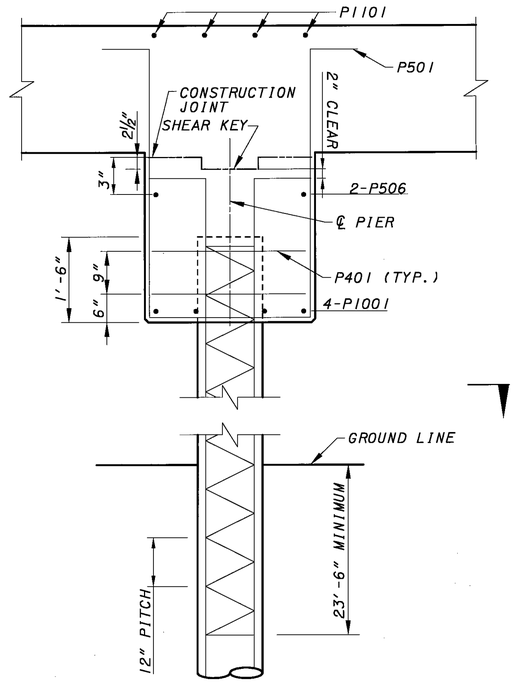


ELEVATION

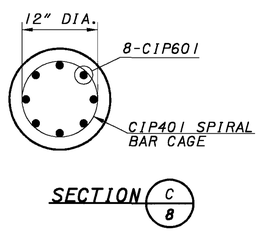
PILE ENCASEMENT NOT SHOWN



SECTION B/8



SECTION A/8



SECTION C/8

NOTES:

1. FOR SLAB REINFORCEMENT, SEE SHTS 9 & 11/15
2. MINIMUM BAR LAPS:
   LAP No.5 BARS 3'-7".
   LAP NO.10 BARS 10'-3".
   LAP NO.11 BARS 13'-6".
3. ELEVATIONS AND STATIONS IN ( ) ARE FOR PIER 2 ONLY.
4. REFER TO STANDARD DRAWING CPP-2-94 FOR ADDITIONAL DETAILS AND NOTES.

PILE SYMBOL

VERTICAL PILES
16" CAST-IN-PLACE
REINFORCED
CONCRETE PILES

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	ACB	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

PIER DETAILS

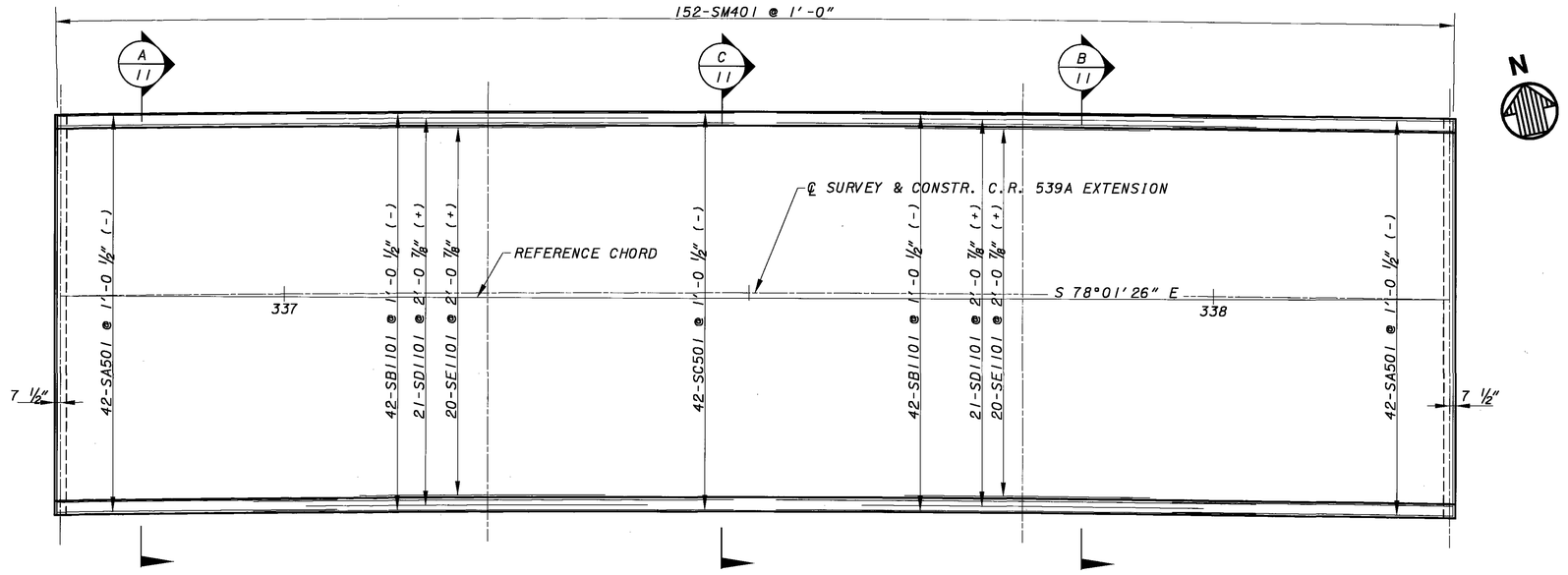
BRIDGE NO. C.R. 539A EXTENSION
OVER CHINNEY CREEK
C.R. 539A EXTENSION

LIC-161-6.65
LIC-37-10.25
PID 77221

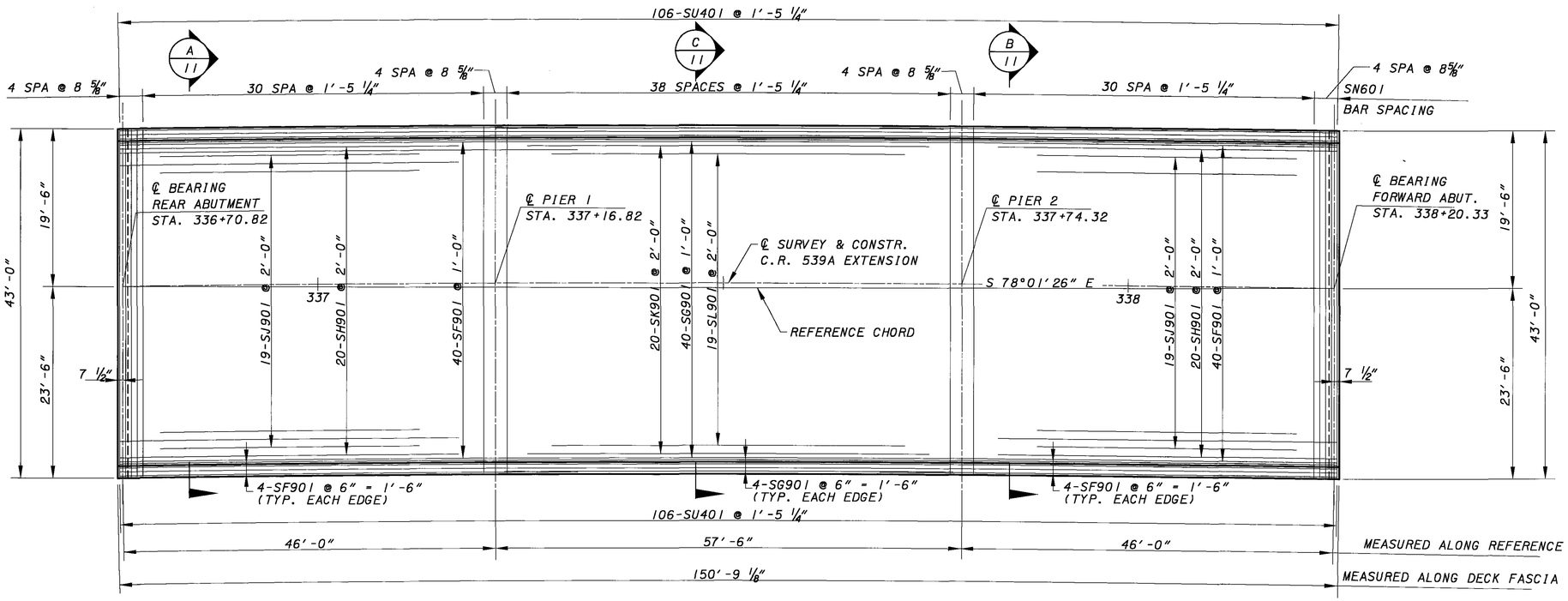
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TOP REINFORCEMENT PLAN



BOTTOM REINFORCEMENT PLAN

NOTES:

1. SEE STANDARD DRAWING CS-1-03 FOR ADDITIONAL SLAB DETAILS AND NOTES.
2. FOR TOP OF DECK ELEVATIONS SEE SHEET 12/15.

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	ACB	GWM	7-20-05
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GLC		4538366	

DECK PLAN

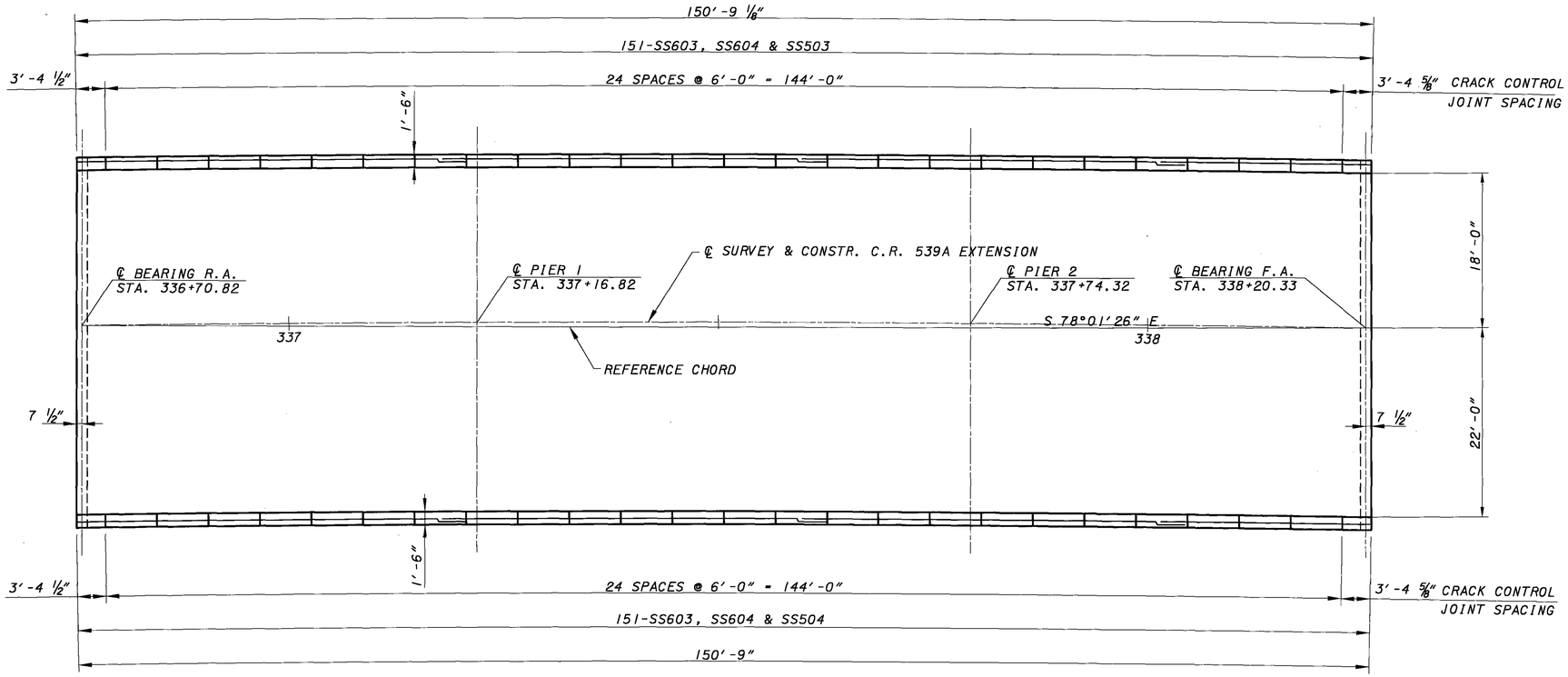
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

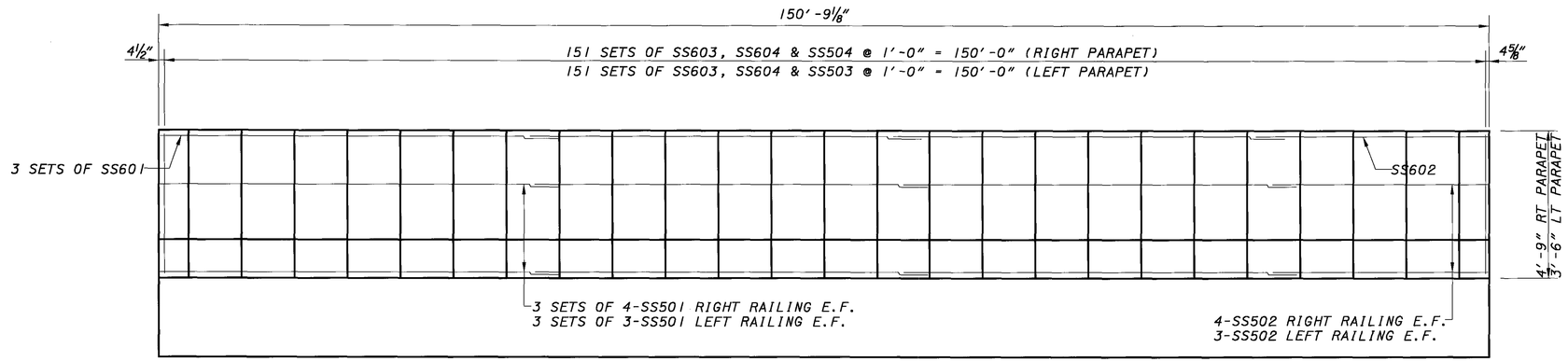
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PARAPET REINFORCING PLAN



PARAPET REINFORCING DETAIL

FOR PARARET DETAILS SEE SHEET 11/15

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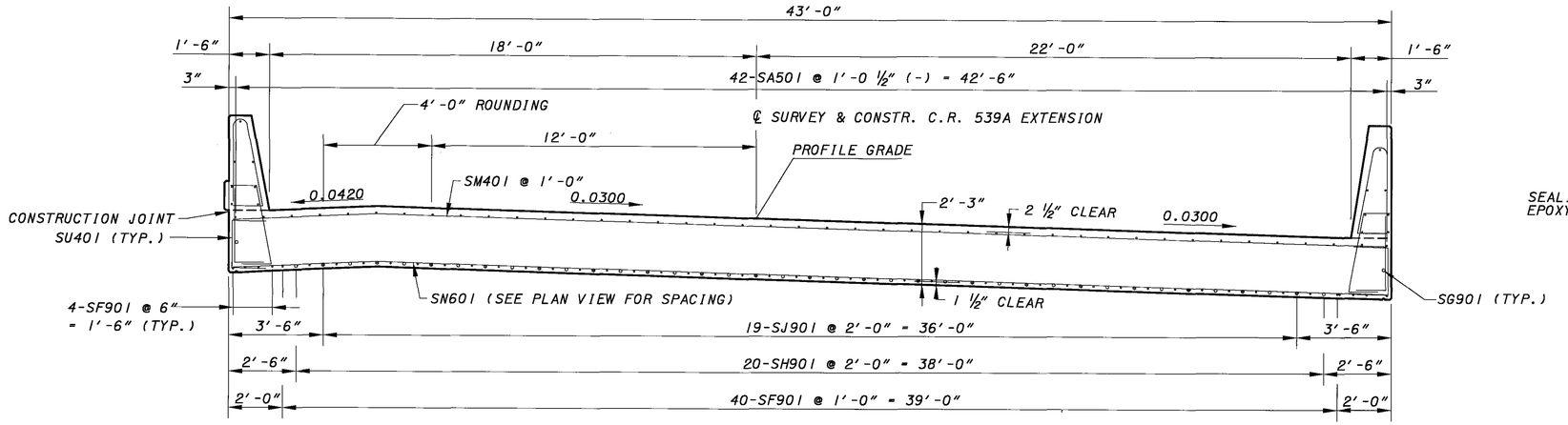
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

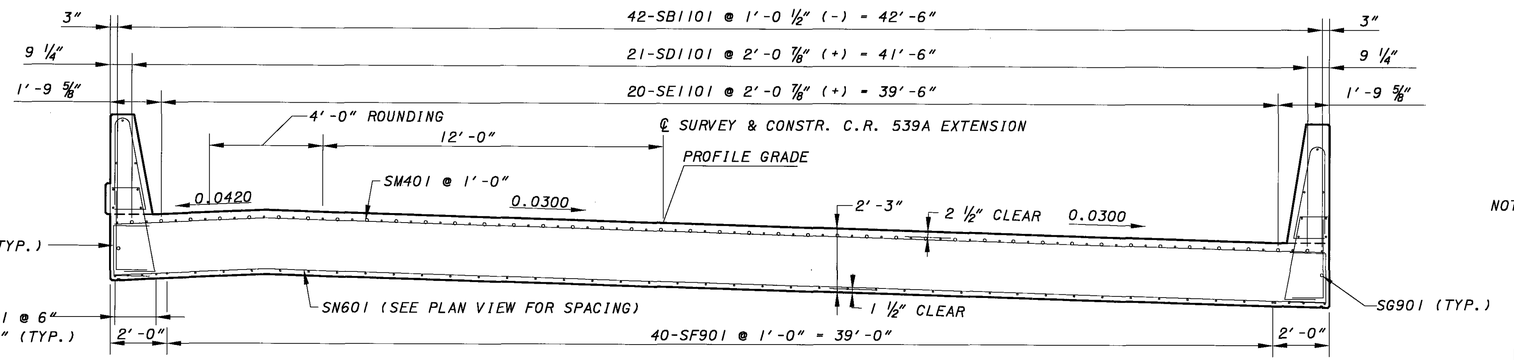
PARAPET DETAILS

BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

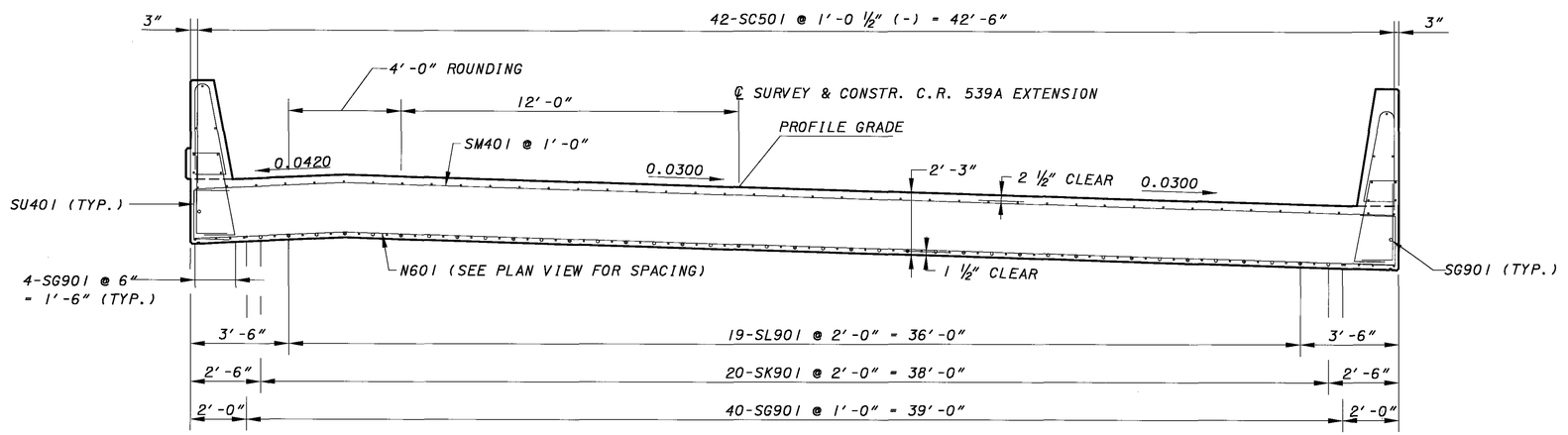
LIC-161-6.65
LIC-37-10.25
PID 77221



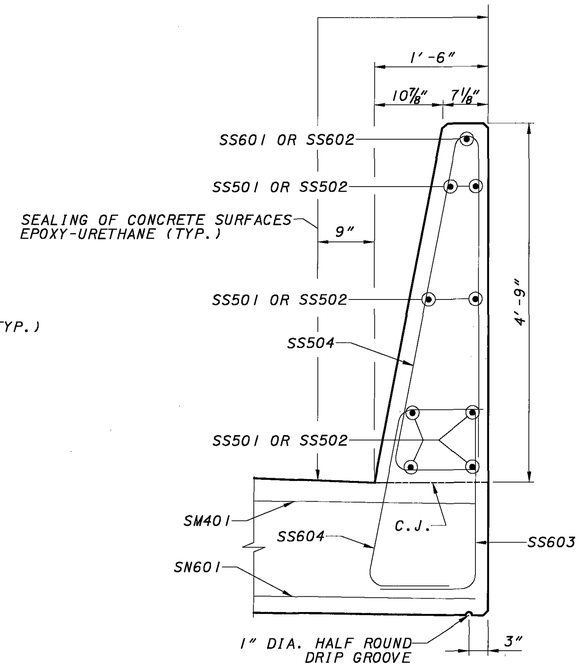
SECTION (END SPANS) A/9



SECTION (AT PIERS) B/9

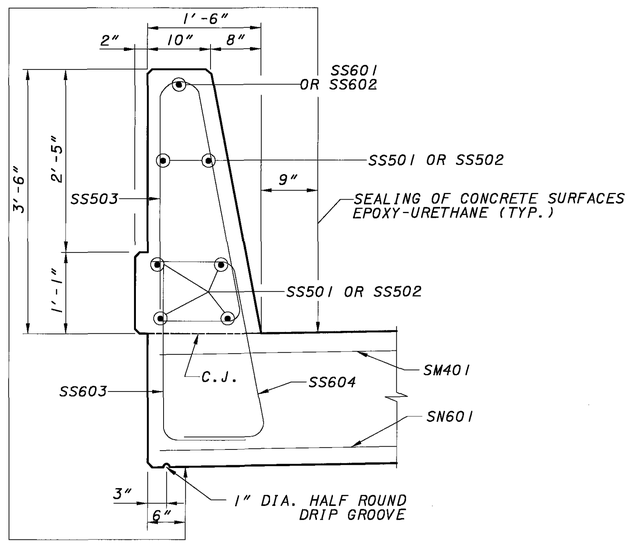


SECTION (INTERIOR) C/9



TYPICAL RIGHT PARAPET DETAIL

NOTE: LONGITUDINAL SLAB REINFORCING & EDGE BEAM REINFORCING NOT SHOWN FOR CLARITY. SEE DETAIL THIS SHEET.



TYPICAL LEFT PARAPET DETAIL

NOTE: LONGITUDINAL SLAB REINFORCING & EDGE BEAM REINFORCING NOT SHOWN FOR CLARITY. SEE DETAIL THIS SHEET.

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GLC		4538366	

SUPERSTRUCTURE DETAILS

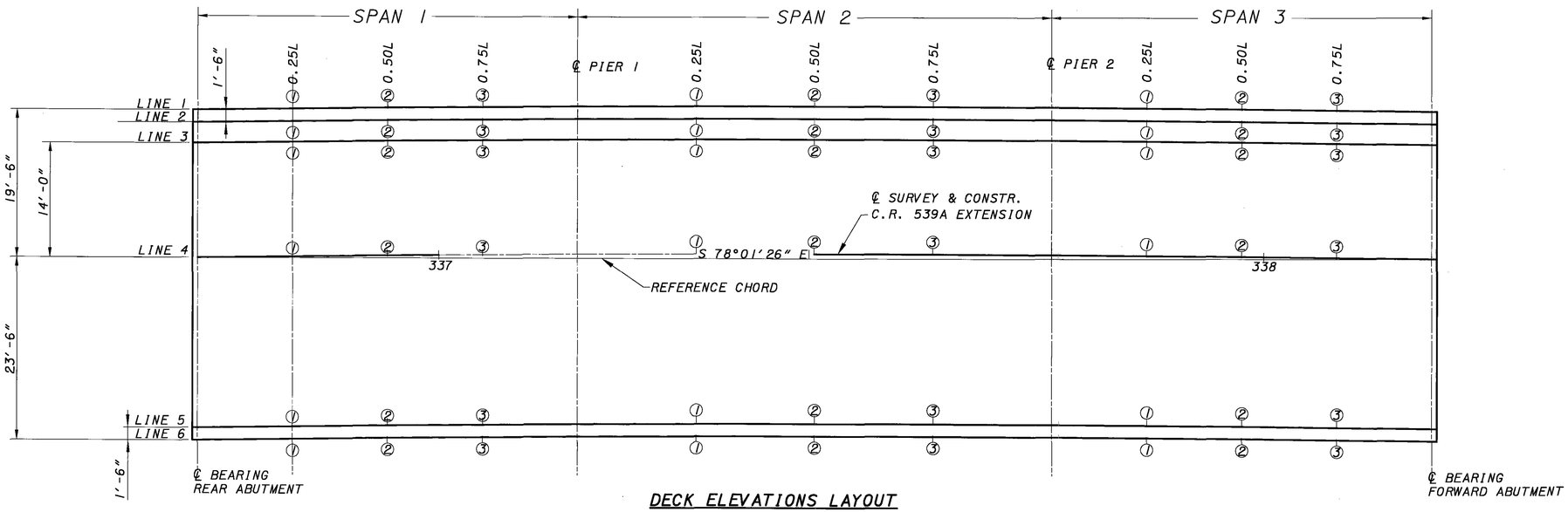
BRIDGE NO. C.R. 539A EXTENSION OVER CHINNEY CREEK
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

11/15

1236/1349

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DECK ELEVATIONS LAYOUT

N

TOP OF DECK ELEVATIONS TABLE

		LINE 1		LINE 2		LINE 3		LINE 4		LINE 5		LINE 6	
SPAN NO.	LOCATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
SPAN NO.1	℄ BRG. R.A.	336+71.13	936.92	336+71.11	936.92	336+71.04	937.09	336+70.82	936.67	336+70.44	936.01	336+70.44	936.01
	0.25 L	336+82.58	936.86	336+82.56	936.86	336+82.51	937.03	336+82.32	936.61	336+82.02	935.95	336+82.00	935.95
	0.50 L	336+94.04	936.80	336+94.02	936.80	336+93.97	936.97	336+93.82	936.55	336+93.58	935.89	336+93.58	935.89
	0.75 L	337+05.49	936.74	337+05.47	936.74	337+05.45	936.91	337+05.32	936.49	337+05.13	935.83	337+05.11	935.83
SPAN NO.2	℄ PIER 1	337+16.94	936.69	337+16.92	936.69	337+16.91	936.85	337+16.82	936.43	337+16.67	935.77	337+16.67	935.77
	0.25 L	337+31.25	936.61	337+31.23	936.61	337+31.22	936.78	337+31.20	936.36	337+31.13	935.70	337+31.12	935.70
	0.50 L	337+45.57	936.54	337+45.57	936.54	337+45.57	936.71	337+45.57	936.29	337+45.57	935.63	337+45.57	935.63
	0.75 L	337+59.89	936.47	337+59.91	936.47	337+59.93	936.63	337+59.95	936.21	337+60.01	935.55	337+60.02	935.55
SPAN NO.3	℄ PIER 2	337+74.20	936.39	337+74.22	936.39	337+74.23	936.56	337+74.32	936.14	337+74.47	935.48	337+74.47	935.48
	0.25 L	337+85.65	936.33	337+85.67	936.33	337+85.69	936.50	337+85.82	936.08	337+86.01	935.42	337+86.03	935.42
	0.50 L	338+97.10	936.28	338+97.12	936.28	337+97.17	936.44	338+97.32	936.02	338+97.56	935.36	337+97.56	935.36
	0.75 L	338+08.56	936.22	338+08.58	936.22	338+08.63	936.39	338+08.82	935.97	338+09.12	935.30	338+09.14	935.30
	℄ BRG. F.A.	338+20.01	936.16	338+20.03	936.16	338+20.10	936.33	338+20.32	935.91	338+20.70	935.24	338+20.70	935.24

NOTES:

1. TOP OF DECK ELEVATIONS:
ELEVATIONS SHOWN ARE FOR THE FINISHED TOP OF DECK ELEVATIONS. ALLOWANCE HAS NOT BEEN MADE FOR THE ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

L = SPAN LENGTH

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BMW	ACB	GWM	7-20-05
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GLC		4538366	

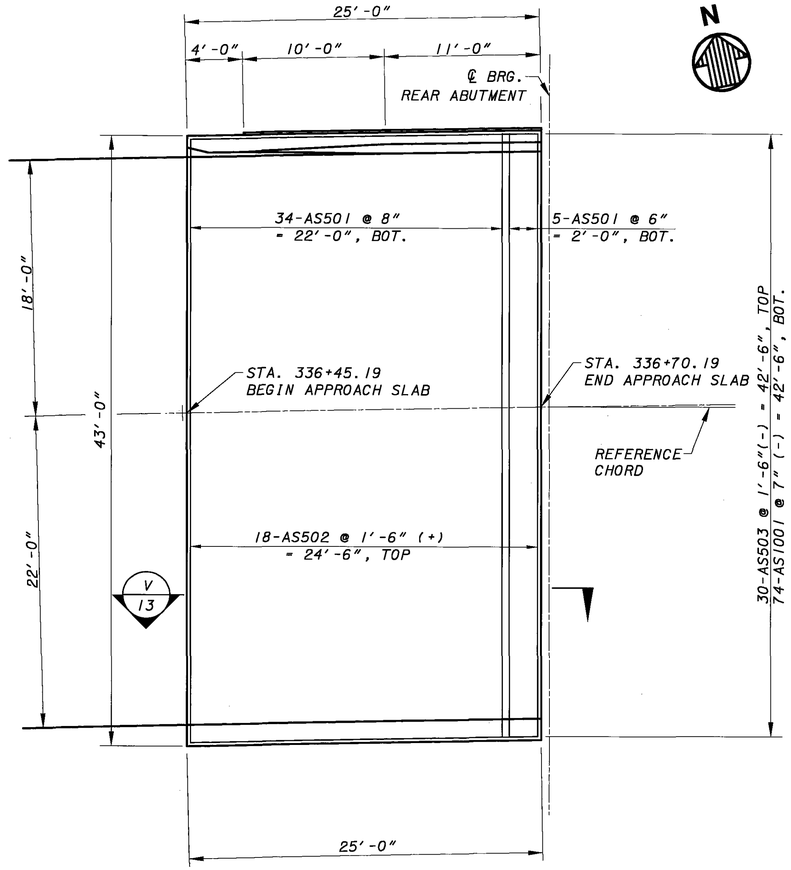
SUPERSTRUCTURE DETAILS
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

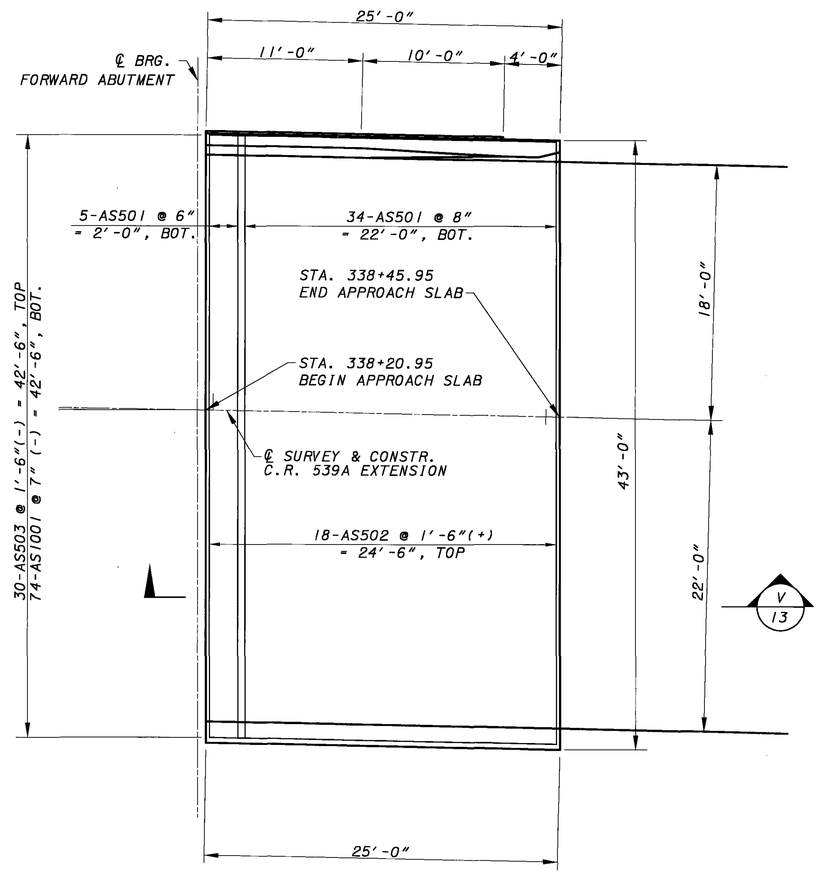
12/15

1237
1349

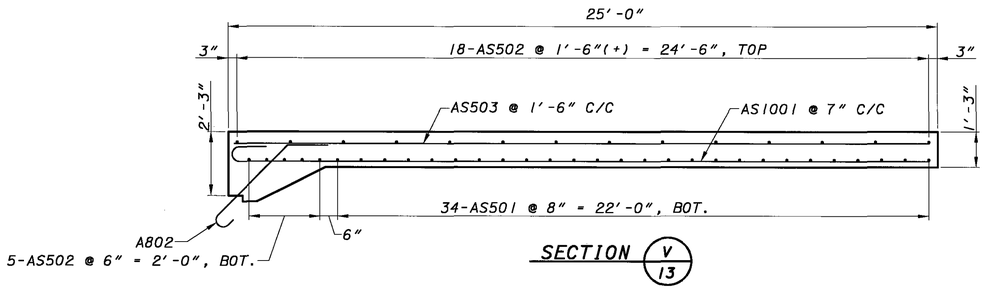
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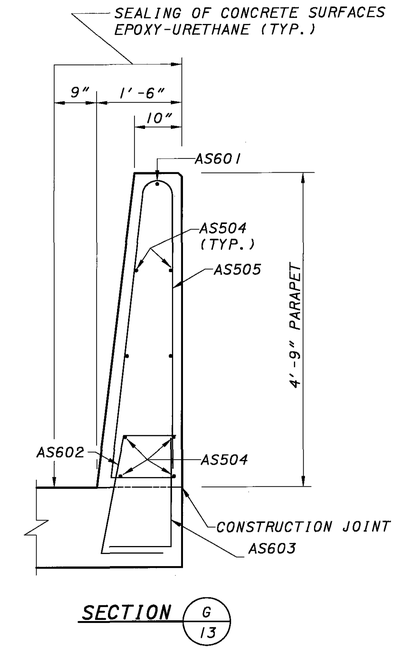
REAR APPROACH SLAB PLAN



FORWARD APPROACH SLAB PLAN



SECTION V/13

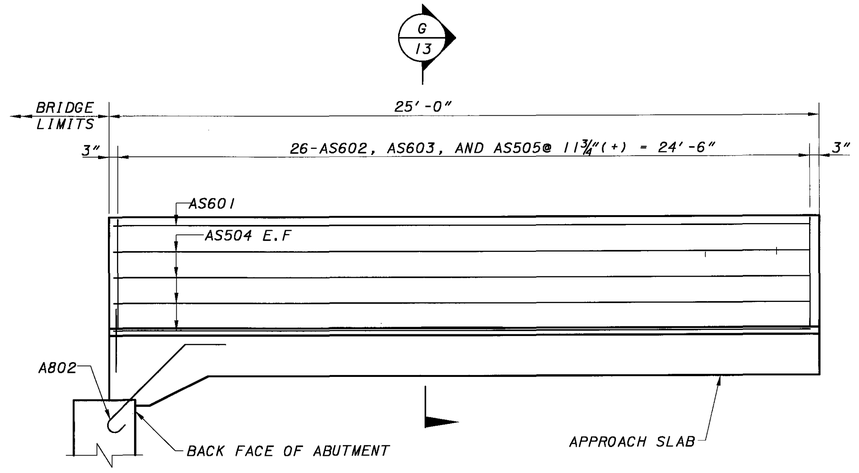


SECTION G/13

NOTES:

1. FOR ADDITIONAL DETAILS NOTES & APPROACH SLAB REINFORCING, REFERENCE IS MADE TO STD. DRAWING AS-1-81.
2. FOR ADDITIONAL DETAILS OF THE APPROACH SLAB, SEE TYPICAL SECTIONS ON SHEET 14/15.

LEGEND:
B.F. = BACK FACE
BOT. = BOTTOM
E.F. = EACH FACE
F.F. = FRONT FACE



APPROACH PARAPET ELEVATION
RIGHT PARAPET ONLY

TOP OF APPROACH SLAB ELEVATIONS

APPROACH SLAB	LOCATION	LEFT TOE OF PARAPET		CROWN POINT		PROFILE GRADE		RIGHT TOE OF PARAPET	
		STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
REAR	0.0 L	336+45.48	937.05	336+45.42	937.22	336+45.19	936.80	336+44.80	936.14
	0.5 L	336+57.98	936.99	336+57.92	937.15	336+57.69	936.74	336+57.30	936.08
	1.0 L	336+70.48	936.92	336+70.42	937.09	336+70.19	936.67	336+69.80	936.01
FORWARD	0.00 L	338+20.66	936.16	338+20.72	936.32	338+20.95	935.90	338+21.34	935.24
	0.5 L	338+33.16	936.09	338+33.22	936.26	338+33.45	935.84	338+33.84	935.18
	1.0 L	338+45.66	935.99	338+46.72	936.16	338+45.95	935.78	338+46.34	935.17

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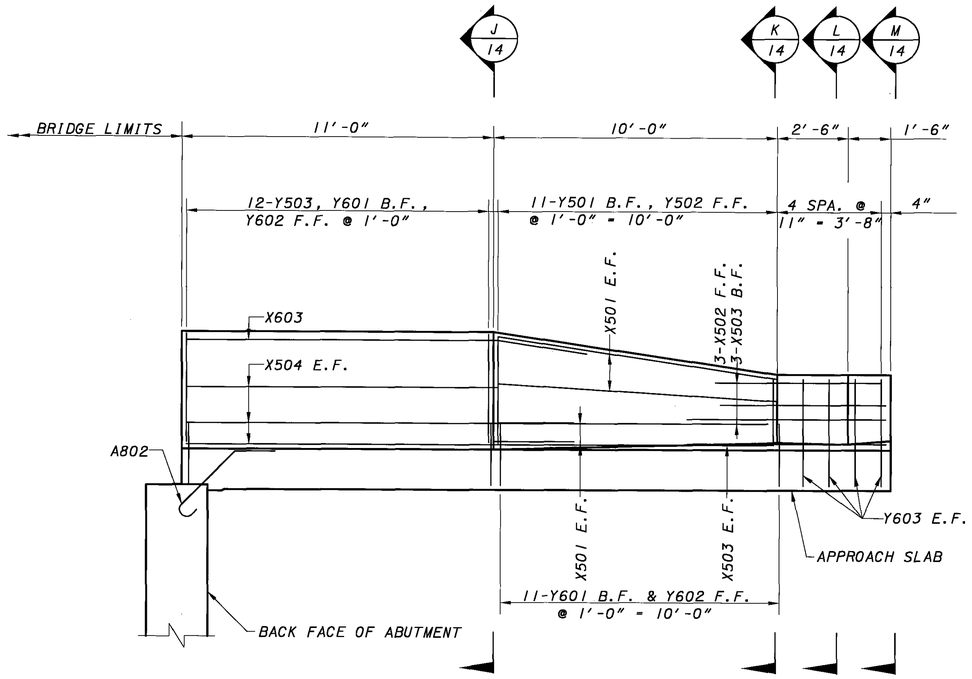
APPROACH DETAILS
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

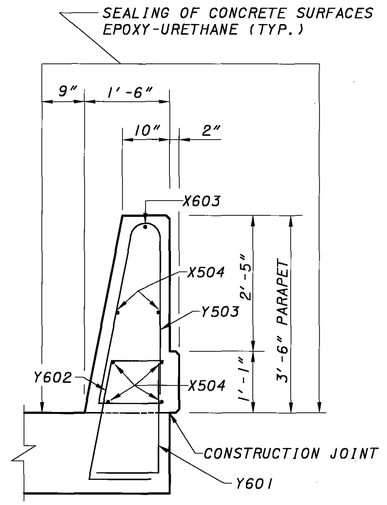
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1238
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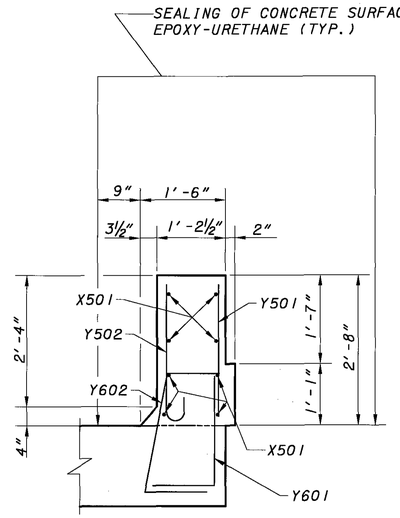
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APPROACH PARAPET ELEVATION
LEFT PARAPET ONLY



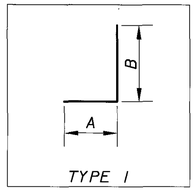
SECTION J 14



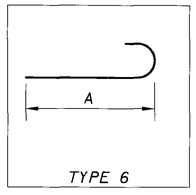
SECTION K 14

APPROACH SLAB REINFORCING STEEL LIST TABLE

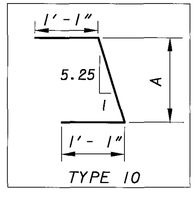
MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
X501	16	10'-0"	167	STR					
X502	6	5'-6"	34	14					
X503	10	5'-6"	57	STR					
X504	12	14'-0"	175	STR					
X603	2	14'-0"	42	STR					
	2	2'-4"							
Y501	S.O.	TO	63	STR					1"
	11	3'-2"							
	2	2'-11"			2'-4"				
Y502	S.O.	TO	77	6	TO				1"
	11	3'-9"			3'-2"				
Y503	24	7'-5"	186	9	3'-0"	3'-2"	0'-2¾"		
Y601	46	3'-1"	213	1	1'-1"	2'-2"			
Y602	46	4'-2"	288	10	2'-2"				
Y603	16	4'-7"	110	1	3'-9"	1'-0"			
AS501	78	42'-8"	3471	STR					
AS502	36	42'-8"	1602	STR					
AS503	60	24'-6"	1533	STR					
AS504	16	24'-6"	409	STR					
AS505	52	9'-10"	533	9	4'-3"	4'-5"			
AS601	2	24'-6"	74	STR					
AS602	52	4'-6"	351	10	2'-8"				
AS603	52	3'-11"	306	1	1'-1"	3'-0"			
AS1001	148	25'-6"	16240	6	24'-6"				
			25,931	lbs.					



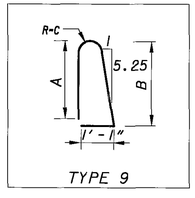
TYPE 1



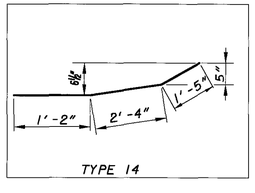
TYPE 6



TYPE 10

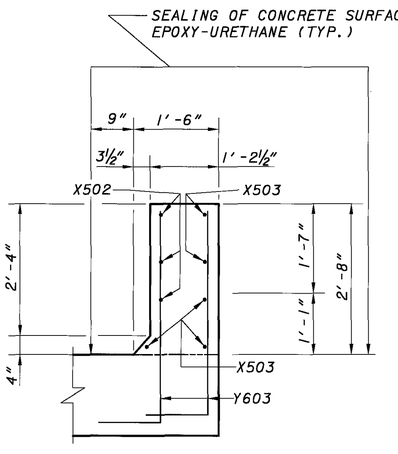


TYPE 9

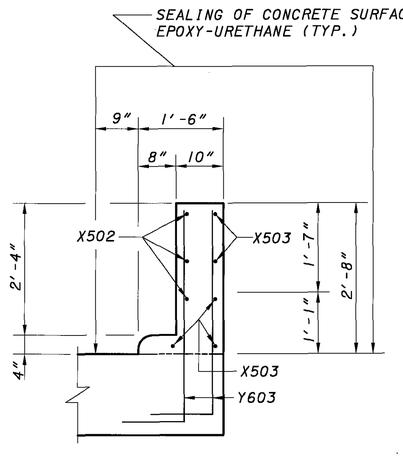


TYPE 14

NOTE:
REINFORCING STEEL LISTED ABOVE IS INCLUDED FOR PAYMENT UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN.



SECTION L 14



SECTION M 14

LEGEND:
B.F. = BACK FACE
BOT. = BOTTOM
E.F. = EACH FACE
F.F. = FRONT FACE

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DESIGNED	DRAWN	REVIEWED	DATE
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APPROACH DETAILS
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

14 / 15

1239
1349

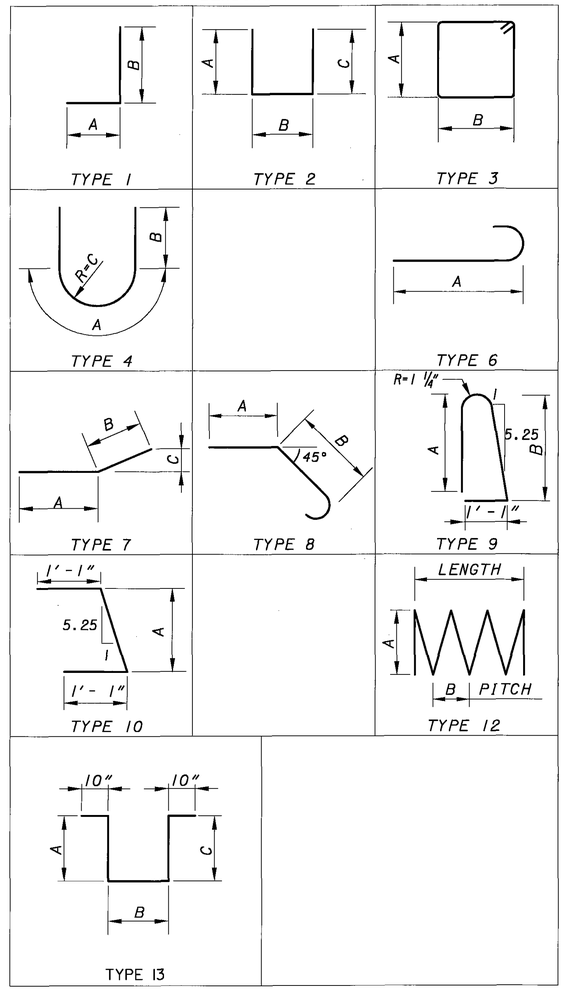
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REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
REAR ABUTMENT									
A401	14	9'-0"	84	3	1'-9"	2'-6"			
A501	12	27'-8"	347	STR					
A502	34	11'-0"	391	3	2'-7"	2'-8"			
A503	6	41'-2"	257	STR					
A504	30	15'-0"	469	2	6'-8"	1'-11"	6'-8"		
A505	8	12'-6"	105	STR					
	2	3'-5"							
A506	S.O.		19	STR					
	2	5'-3"							
A507	2	9'-11"	21	7	8'-6"	1'-5"	7 3/4"		
	1	10'-9"			5'-2"	8"	5'-2"		
A508	S.O.	TO	92	2	TO	TO	TO		
	6	18'-5"			9'-0"	8"	9'-0"		
A509	1	18'-5"	20	2	9'-0"	8"	9'-0"		
A510	2	39'-11"	42	STR					
A801	8	29'-3"	625	STR					
A802	28	6'-4"	474	8	1'-5"	4'-0"			
A1001	4	41'-3"	711	STR					
			3657	lbs.					
FORWARD ABUTMENT									
B401	14	9'-0"	84	3	1'-9"	2'-6"			
B501	12	27'-5"	344	STR					
B502	34	11'-0"	391	3	2'-7"	2'-8"			
B503	6	41'-2"	257	STR					
B504	30	14'-4"	449	2	6'-4"	1'-11"	6'-4"		
B505	2	4'-3"	9	STR					
B506	8	11'-8"	98	STR					
B507	2	8'-10"	18	7	7'-5"	1'-5"	7 1/4"		
B508	1	17'-8"	18	2	8'-7"	8"	8'-7"		
	1	10'-9"	19		5'-2"	8"	5'-2"		
B509	S.O.	TO	89	2	TO	TO	TO		1'-3 3/8"
	6	17'-8"			8'-7"	8"	8'-7"		
B510	2	37'-10"	39	STR					
B801	8	28'-10"	616	STR					
A802	28	6'-4"	474	8	1'-5"	4'-0"			
B1001	4	41'-3"	711	STR					
			3616	lbs.					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
PIERS									
P401	36	9'-6"	229	3	2'-6"	2'-0"			
	2	10'-9"			3'-7"	2'-8"	3'-7"		
P501	S.O.	TO	779	13	TO	TO	TO		
	32	12'-7"			4'-6"	2'-8"	4'-6"		
P502	4	11'-6"	48	13	3'-11"	2'-6"	3'-11"		
P503	10	5'-0"	53	2	10"	3'-7"	10"		
P504	8	10'-11"	91	4	4'-0 1/4"	3'-5"	1'-3 3/8"		
P505	10	5'-11"	62	2	10"	4'-6"	10"		
P506	4	38'-8"	161	STR					
P507	4	13'-2"	55	13	4'-9"	2'-6"	4'-9"		
P1001	8	38'-8"	1331	STR					
P1101	8	42'-8"	1814	7	37'-4"	5'-4"	0'-4 3/4"		
			4623	lbs.					
SUPERSTRUCTURE									
SM401	152	42'-7"	4324	STR					
SU401	212	4'-1"	579	2	1'-3"	1'-9"	1'-3"		
SA501	84	30'-2"	2643	STR					
SC501	42	27'-2"	1191	6	61'-9"				
SS501	42	45'-0"	1972	STR					
SS502	14	25'-3"	369	STR					
SS503	151	7'-5"	1169	9	3'-0"	3'-2"	2 3/4"		
SS504	151	9'-10"	1549	9	4'-3"	4'-5"	1 1/4"		
SN601	113	42'-7"	7228	STR					
SS601	6	45'-0"	406	STR					
SS602	2	27'-3"	82	STR					
SS603	302	3'-11"	1777	1	1'-1"	3'-0"			
SS604	302	4'-6"	2041	10	2'-8"				
SF901	96	57'-9"	18850	6	56'-6"				
SG901	54	55'-3"	10144	STR					
SH901	40	41'-10"	5690	STR					
SJ901	38	32'-0"	4135	STR					
SK901	20	49'-6"	3366	STR					
SL901	19	43'-6"	2811	STR					
SB1101	84	51'-8"	23059	STR					
SD1101	42	36'-9"	8201	STR					
SE1101	40	26'-5"	5615	STR					
			107171	lbs.					
FOR INFORMATION ONLY - PIER CIP PILE REINFORCING									
CIP401	18	38'-4"	4270	12	1'-0"	1'-0"			
CIP601	144	39'-6"	8544	1	1'-0"	38'-8"			

BENDING DIAGRAMS



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

3. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS.

4. S.O. DENOTES SERIES OF.

5. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

6. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED BMW | DRAWN ACB | CHECKED GLC | REVIEWED GWM | DATE 7-20-05 | REVISED | STRUCTURE FILE NUMBER 4538366

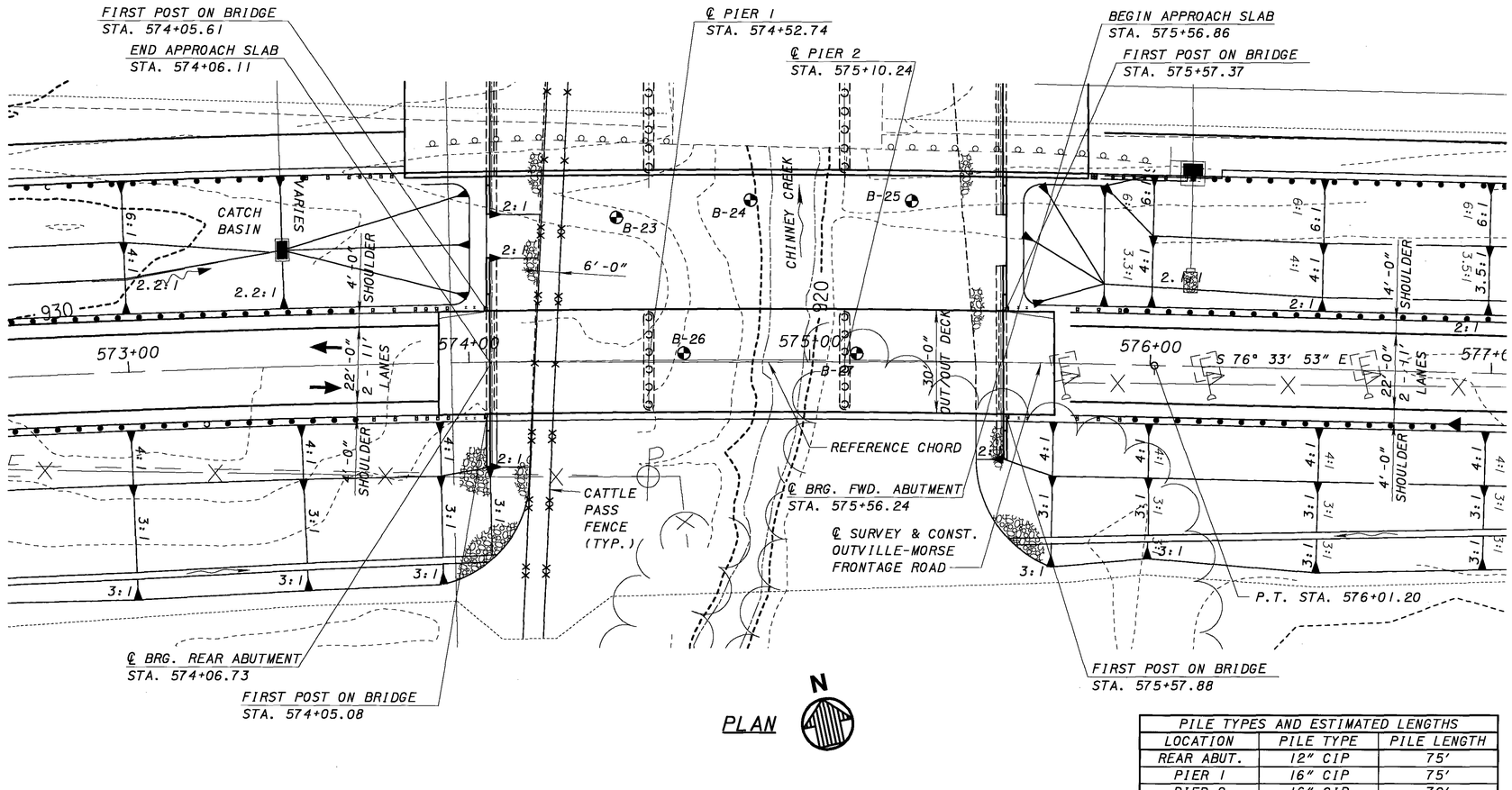
REINFORCING STEEL LIST
BRIDGE NO. C.R. 539A EXTENSION
C.R. 539A EXTENSION OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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PLAN

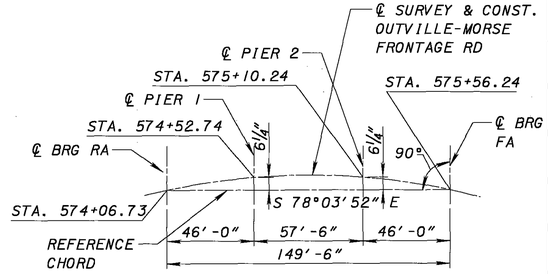
PILE TYPES AND ESTIMATED LENGTHS		
LOCATION	PILE TYPE	PILE LENGTH
REAR ABUT.	12" CIP	75'
PIER 1	16" CIP	75'
PIER 2	16" CIP	70'
FWD. ABUT.	12" CIP	75'

NOTES:

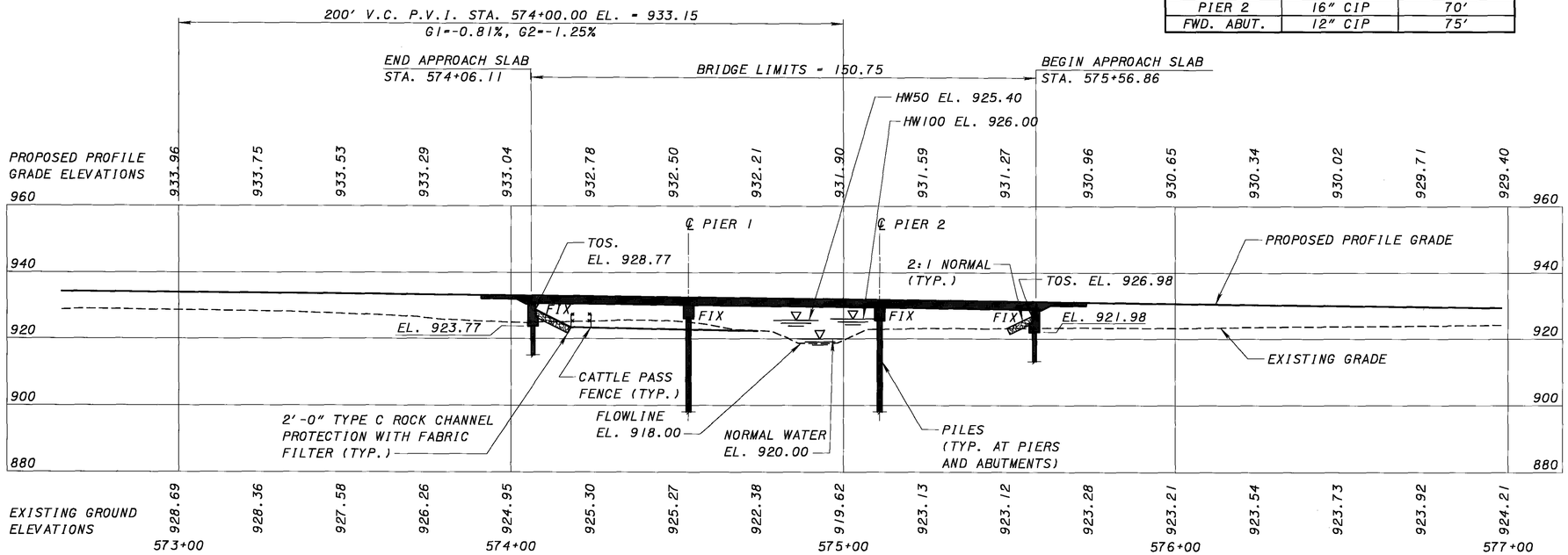
1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.
2. ⊕ BORING LOCATIONS
3. ▨ = 2'-0" TYPE C ROCK CHANNEL PROTECTION WITH FABRIC FILTER. THIS ITEM IS INCLUDED IN ROADWAY QUANTITIES.
4. FOR CATTLE PASS, SEE SHEET 173 OF 1349.

OUTVILLE-MORSE FRONTAGE ROAD
CURVE DATA

P.I. STA. = 573+67.71
△ = 5° 50' 33" (RT)
Dc = 1° 15' 00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'
e_{max} = 0.030



REFERENCE CHORD DIAGRAM



PROFILE

BENCHMARK

THE PROJECT ENGINEER SHALL SUPPLY THE CONTRACTOR WITH A LIST OF THE REFERENCE POINTS AND BENCHMARKS AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC

2010 ADT = 630 ADTT = 26
2030 ADT = 750 ADTT = 30

HYDRAULIC DATA

DRAINAGE AREA = 3.12 SQ.MI.
Q50 = 1370 CFS
HW50 = 925.4 FT.
V50 = 3.8 FPS
CLEARANCE ABOVE HW50 = 3.0 FT.
Q100 = 1695 CFS
HW100 = 926.0 FT.
V100 = 4.0 FPS

PROPOSED STRUCTURE DATA

TYPE: THREE-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE ABUTMENTS AND PIERS
SPANS: 46'-0", 57'-6", 46'-0" C/C SUPPORTS ALONG REFERENCE CHORD
ROADWAY: 30'-0" F/F GUARDRAIL
DESIGN LOADING: HS25 AND THE ALTERNATE MILITARY LOADING
SKEW: 0°00'00" RF TO REFERENCE CHORD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (15' LONG)
ALIGNMENT: CURVE RIGHT
SUPERELEVATION: 0.03
LATITUDE: 40°04'10" N
LONGITUDE: 82°35'40" W

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED RTP | DRAWN RTP | REVIEWED DOR | DATE 11-12-04
CHECKED JN | REVISED | STRUCTURE FILE NUMBER 4538366

LICKING COUNTY
STA. 574+06.11
STA. 575+56.86

SITE PLAN
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	REVISED 07-19-02
CPA-5-94	REVISED 07-19-02
CPP-2-94	REVISED 07-19-02
CS-1-03	DATED 04-18-03
SBR-1-99	REVISED 07-19-02
TST-1-99	REVISED 10-17-03
DS-1-92	REVISED 07-18-03

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE O.D.O.T BRIDGE DESIGN MANUAL.

DESIGN LOADING:
HS25-44 AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 LBS/SQ FT

DESIGN DATA:
CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE:
MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

ITEM 511 CLASS HP CONCRETE, SUPERSTRUCTURE, AS PER PLAN

GENERAL REQUIREMENTS
THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS
ALL SUPERSTRUCTURE, BRIDGE DECK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN).

THE FOLLOWING PROPORTIONS WILL BE USED AS A STARTING MIX DESIGN:

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	#8 COARSE AGGRE. (LB)	#57 COARSE AGGRE. (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	GGBF SLAG (LB)	MICRO-SILICA (LB)	WATER TO CEMENTITIOUS RATIO ±.01
GRAVEL	1245	360	1315	2920	400	170	30	0.43
LIMESTONE	1245	360	1335	2940	400	170	30	0.43
SLAG	1245	315	1155	2715	400	170	30	0.43

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

SUGGESTED CONSTRUCTION PROCEDURE:
PHASE ONE CONSTRUCTION
1. MAINTAIN TRAFFIC ON EXISTING STRUCTURE

2. CONSTRUCT APPROACH EMBANKMENT FOR CR539A, LEFT BRIDGE, AND OUTVILLE-MORSE FRONTAGE ROAD.

3. CONSTRUCT CR539A, LEFT, AND OUTVILLE-MORSE FRONTAGE ROAD BRIIDGES.

PHASE TWO CONSTRUCTION
1. TRANSFER TRAFFIC TO LEFT BRIDGE.

2. REMOVE EXISTING BRIDGE.

3. CONSTRUCT APPROACH EMBANKMENT FOR RIGHT BRIDGE.

4. CONSTRUCT RIGHT BRIDGE.

THE ABOVE IS A SUGGESTED CONSTRUCTION PROCEDURE. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED CONSTRUCTION PROCEDURE AND SCHEDULE TO THE DIRECTOR FOR APPROVAL BEFORE BEGINNING CONSTRUCTION. NO CONSTRUCTION OPERATIONS WILL BE PERMITTED WITHOUT PRIOR APPROVAL.

PILE DRIVING CONSTRAINTS:
PRIOR TO DRIVING PILES, CONSTRUCT THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND A MINIMUM WAITING PERIOD OF 45 DAYS HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):
THE ULTIMATE BEARING VALUE IS 75 TONS PER PILE FOR THE 12" CAST-IN-PLACE REINFORCED CONCRETE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 161 TONS PER PILE FOR THE 16" CAST-IN-PLACE REINFORCED CONCRETE PIER PILES.

REAR ABUTMENT PILES:
8 PILES 80 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEMS

FORWARD ABUTMENT PILES:
8 PILES 80 FEET LONG, ORDER LENGTH
0 DYNAMIC LOAD TESTING ITEMS

PIER PILES
6 PILES 80 FEET LONG, ORDER LENGTH
6 PILES 75 FEET LONG, ORDER LENGTH
0 DYNAMIC LOAD TESTING ITEMS

UTILITY LINES:
THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MIMINUM.

DLZ
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DESIGNED	DRAWN	REVIEWED	DATE
BMW	BMW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

GENERAL NOTES
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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COMPUTED BY : BMW DATE : 7/12/05
CHECKED BY : CMC DATE : 08/09/05

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
503	21300	LUMP		UNCLASSIFIED EXCAVATION	LUMP				
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00500	1200	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1200				
507	00550	1280	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1280				
507	00700	870	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		870			
507	00751	930	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN		930			8,13
509	10000	79273	POUND	EPOXY COATED REINFORCING STEEL	7190	3210	68873		
511	42500	16	CU YD	CLASS C CONCRETE, PIER CAP		16			
511	43500	78	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	78				
511	51001	377	CU YD	CLASS HP CONCRETE, SUPERSTRUCTURE, AS PER PLAN			377		2
512	10100	164	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	38	9	117		
517	70000	315	FT	RAILING, (TWIN STEEL TUBE)			315		
518	21200	61	CU YD	POROUS BACKFILL WITH FILTER FABRIC	61				
518	22300	354	FT	STEEL DRIP STRIP			354		
518	40000	117	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	117				
518	40010	56	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	56				
523	20000	1	EACH	DYNAMIC LOAD TESTING				1	
523	20500	1	EACH	RESTRIKING				1	
526	10001	100	SQ YD	REINFORCED CONCRETE APPROACH SLAB (T=12"), AS PER PLAN				100	2

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DESIGNED BMW | DRAWN BMW | REVIEWED GWM | DATE 7-20-05
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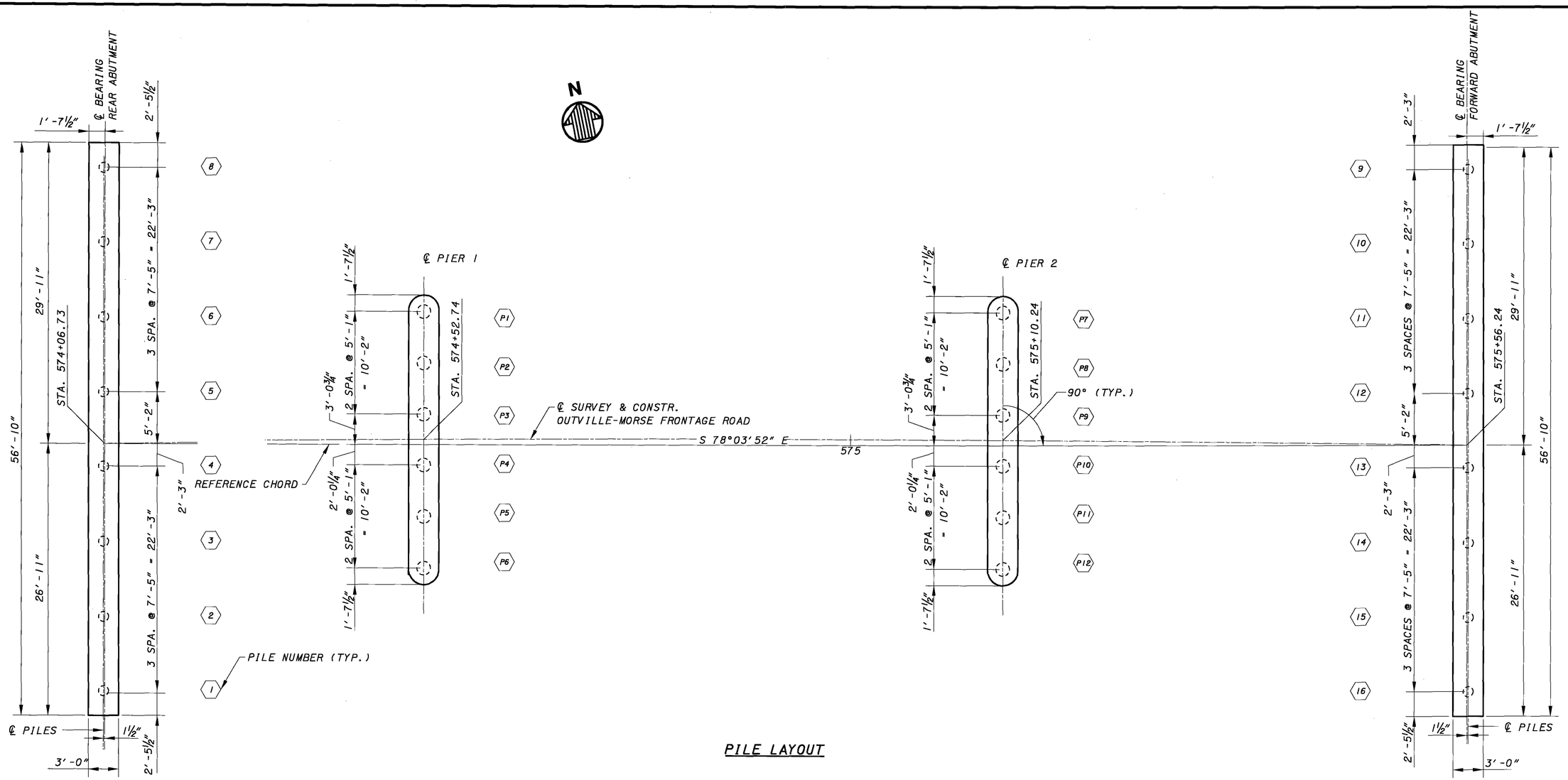
ESTIMATED QUANTITIES
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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PILE LAYOUT

REAR ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
1 THRU 8	12" CIP	EL.925.75	75'	VERTICAL

FORWARD ABUTMENT PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
9 THRU 16	12" CIP	EL.923.96	75'	VERTICAL

PIER PILING TABLE				
PILE NO.	PILE SIZE	TOP OF PILE ELEVATION	ESTIMATED LENGTH	REMARK
P1 THRU P6	16" CIP	EL.929.29	75'	VERTICAL
P7 THRU P12	16" CIP	EL.928.59	70'	VERTICAL

PILE SYMBOL:

- ○ VERTICAL PILES 12" CAST-IN-PLACE REINFORCED CONCRETE PILES
- ○ VERTICAL PILES 16" CAST-IN-PLACE REINFORCED CONCRETE PILES

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	BMW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

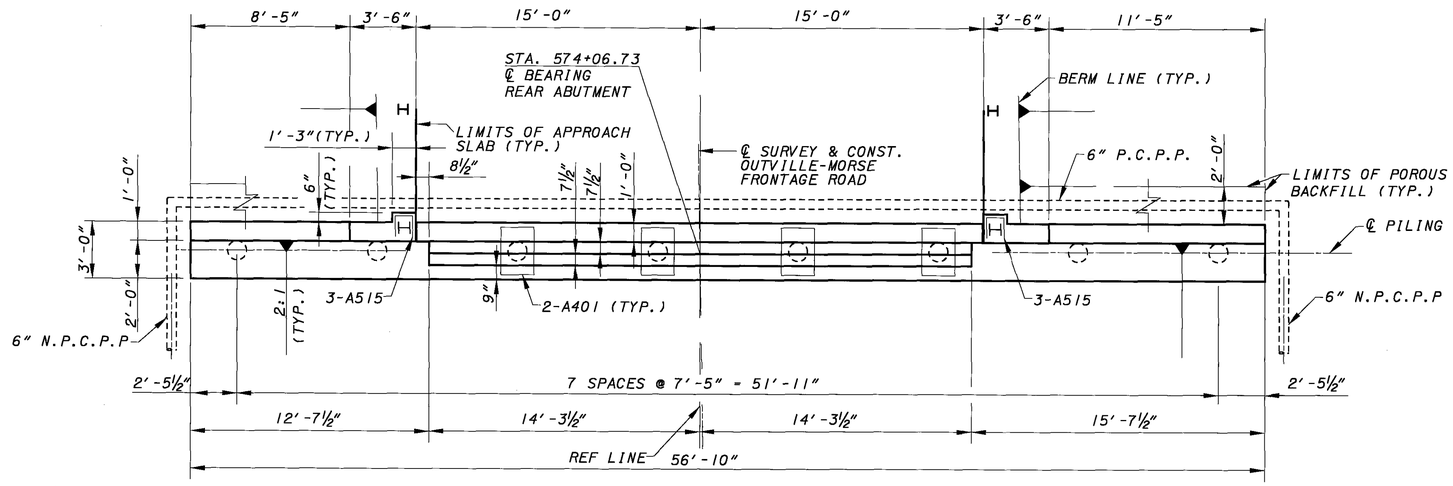
FOUNDATION PLAN
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

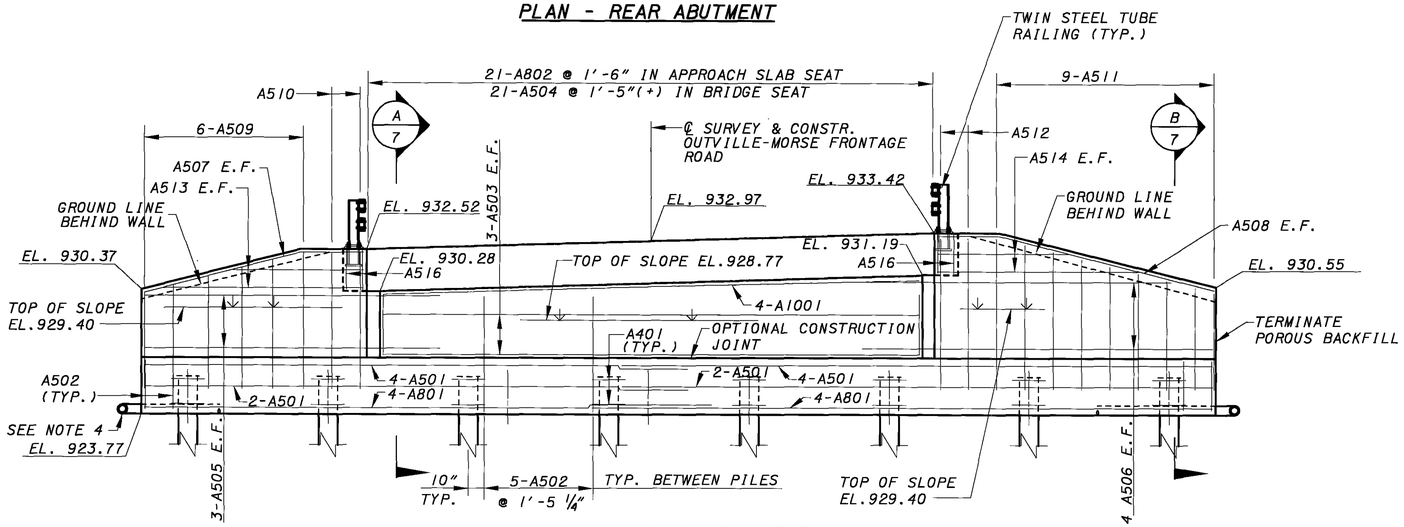
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PLAN - REAR ABUTMENT



ELEVATION - REAR ABUTMENT

LEGEND:

B.F. = BACK FACE
℄ = CENTERLINE
CONST. = CONSTRUCTION
P.C.P.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
E.F. = EACH FACE
EL. = ELEVATION
F.F. = FRONT FACE
N.P.C.P.P. = NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
TYP. = TYPICAL

◌ VERTICAL PILES
12" CAST-IN-PLACE
REINFORCED
CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 4/13.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3'-7".
   LAP NO.8 BARS 6'-5".
   LAP NO.10 BARS 11'-1".
3. FOR APPROACH SLAB DETAILS, SEE SHEET 12/13.
4. FOR TERMINATION OF PIPE DETAIL, SEE SHEET 7/13.

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DESIGNED BMW | DRAWN BMW | CHECKED GLC | REVISED | REVIEWED GWM | DATE 7-20-05 | STRUCTURE FILE NUMBER 4538366

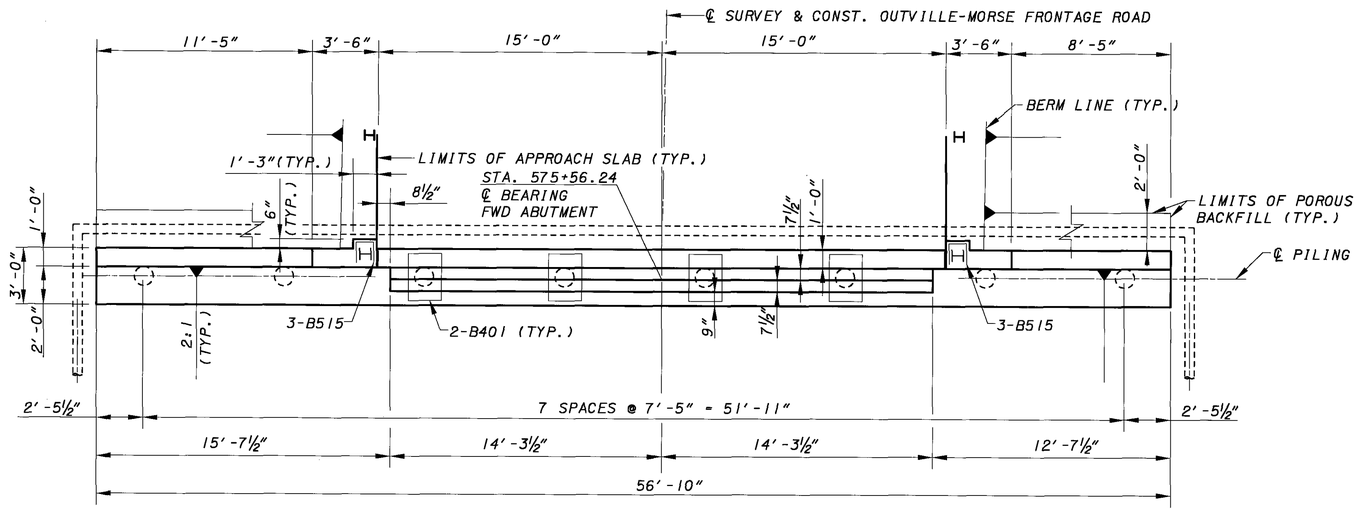
REAR ABUTMENT PLAN & ELEVATION
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

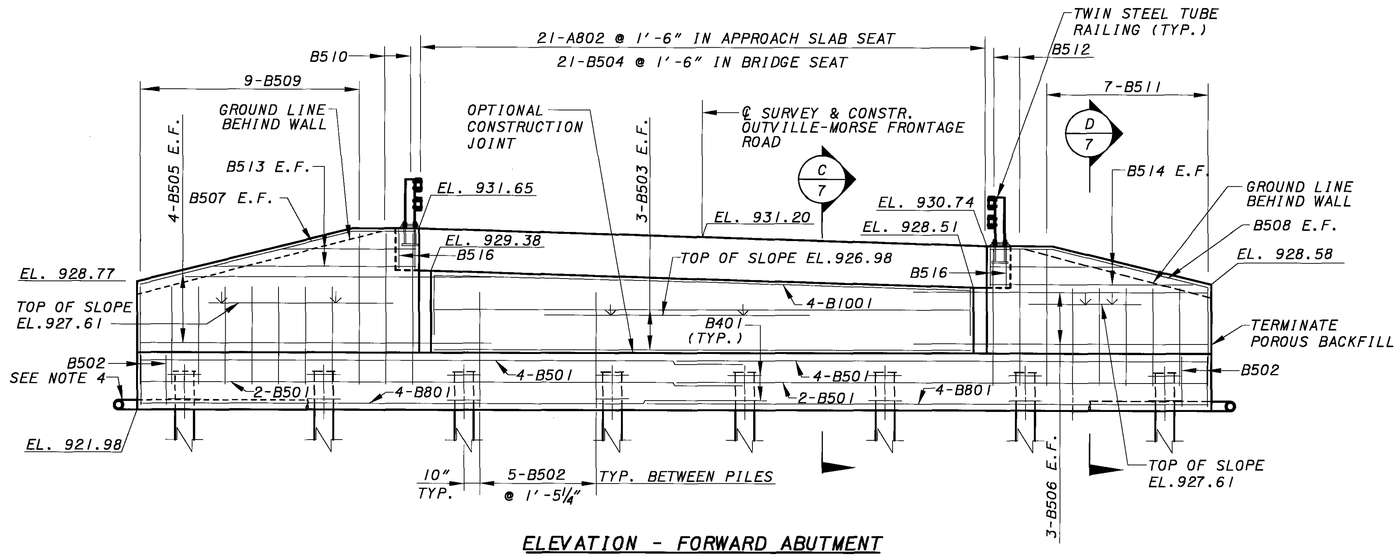
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PLAN - FORWARD ABUTMENT



ELEVATION - FORWARD ABUTMENT

LEGEND:
- B.F. - BACK FACE
- ℄ - CENTERLINE
- CONST. - CONSTRUCTION
- P.C.P.P. - PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
- E.F. - EACH FACE
- EL. - ELEVATION
- F.F. - FRONT FACE
- N.P.C.P.P. - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
- TYP. - TYPICAL

◌ VERTICAL PILES 12″ CAST-IN-PLACE REINFORCED CONCRETE PILES

NOTES

1. FOR PILE LAYOUT, SEE SHEET 4/13.
2. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3′-7″.
   LAP NO.8 BARS 6′-5″.
   LAP NO.10 BARS 11′-1″.
3. FOR APPROACH SLAB DETAILS, SEE SHEET 12/13.
4. FOR TERMINATION OF PIPE DETAIL, SEE SHEET 7/13.

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6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	BMW	GWM	7-20-05
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GLC		4538366	

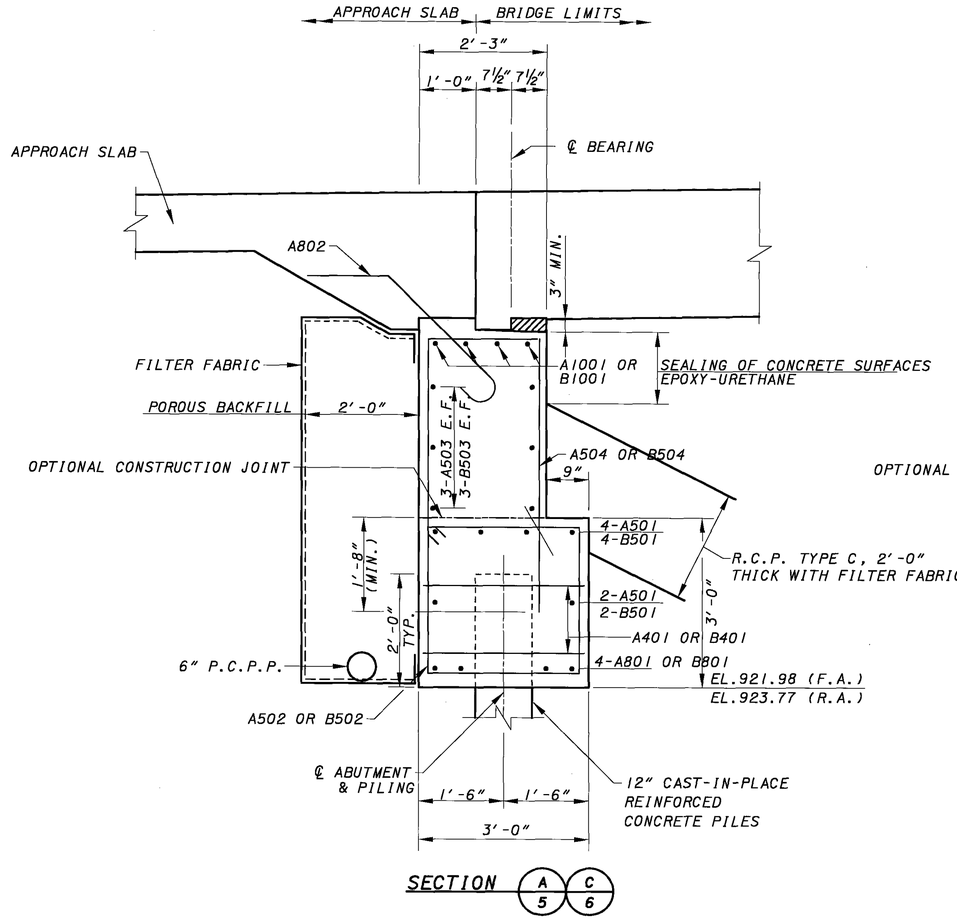
FORWARD ABUTMENT PLAN & ELEVATION
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHIMNEY CREEK

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LIC-37-10.25
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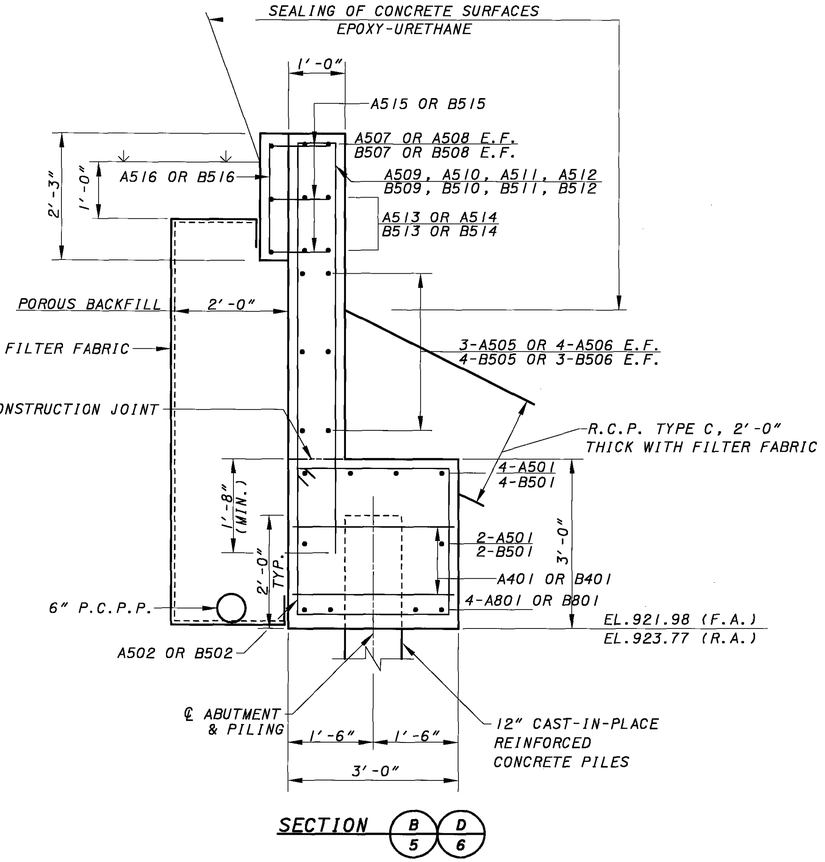
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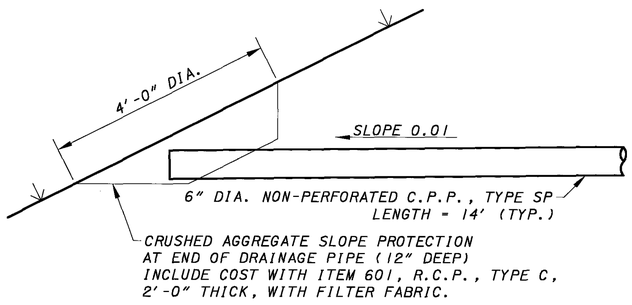
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SECTION A5 C6



SECTION B5 D6



TERMINATION OF 6" N.P.C.P.P. DETAIL

NOTES:

1. REFER STANDARD DRAWING CPA-5-94 FOR OTHER DETAILS AND NOTES.
2. POROUS BACKFILL:
   POROUS BACKFILL WITH FILTER FABRIC, 2'-0" THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1'-0" BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

ABBREVIATIONS:
- ℄ - CENTERLINE
- P.C.P.P. - CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE SP
- E.F. - EACH FACE
- F.A. - FORWARD ABUTMENT
- N.P.C.P.P. - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE, 707.33, TYPE S
- R.A. - REAR ABUTMENT
- R.C.P. - ROCK CHANNEL PROTECTION
- TYP. - TYPICAL

▨ 3" WIDE DRAIN REFER TO STD. DWG. CPA-5-94 FOR LOCATION

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GLC		4538366	

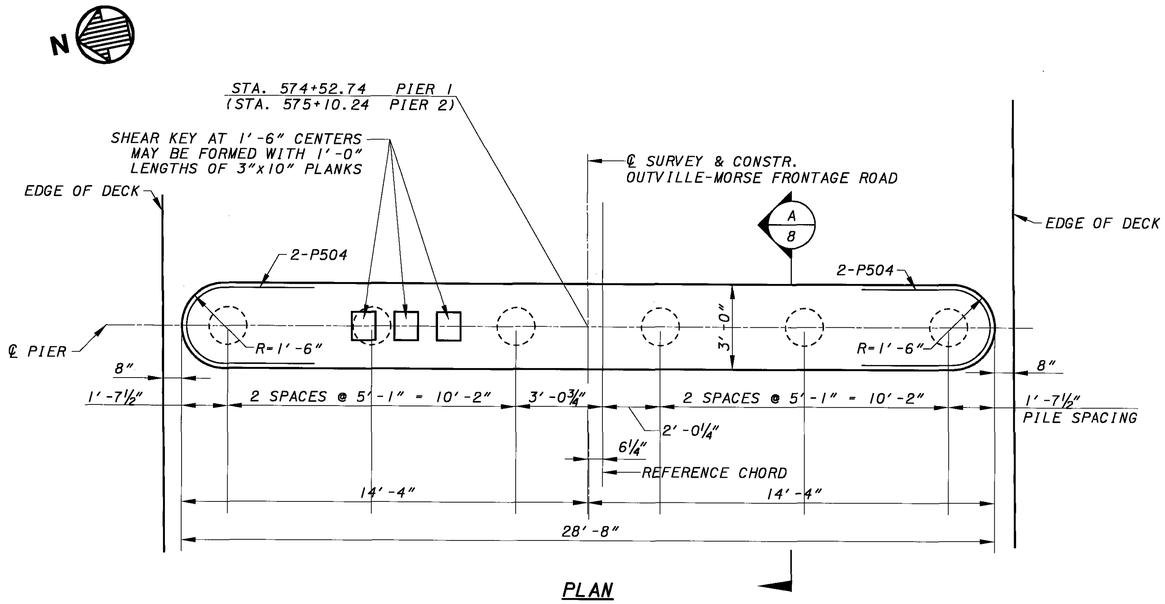
ABUTMENT DETAILS
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
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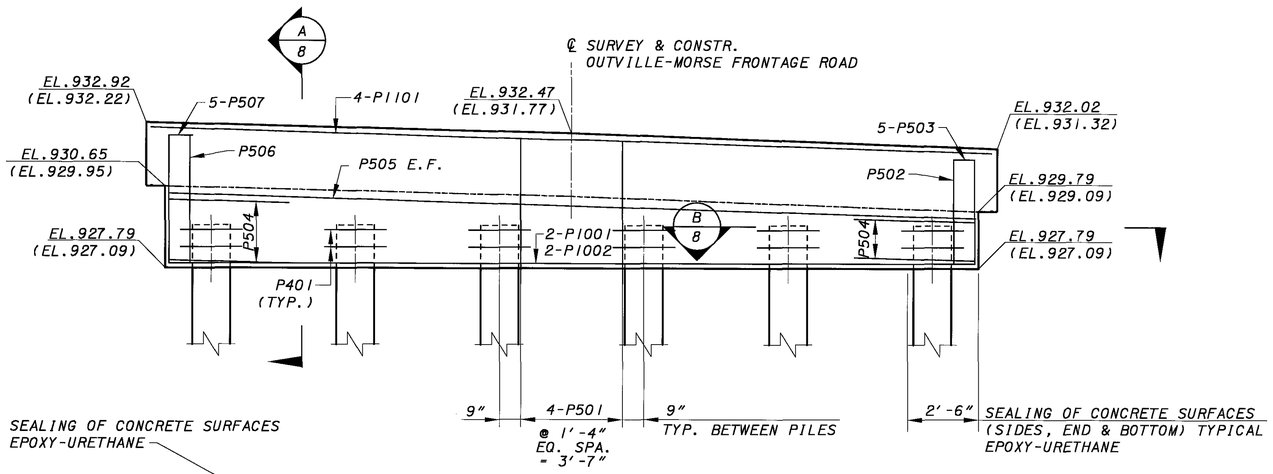
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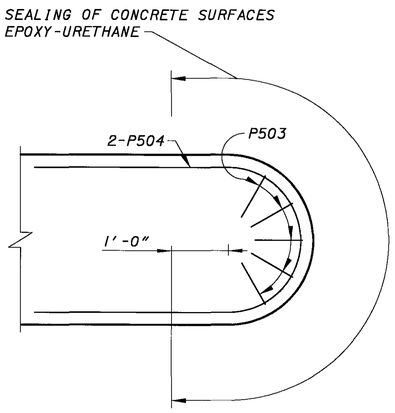
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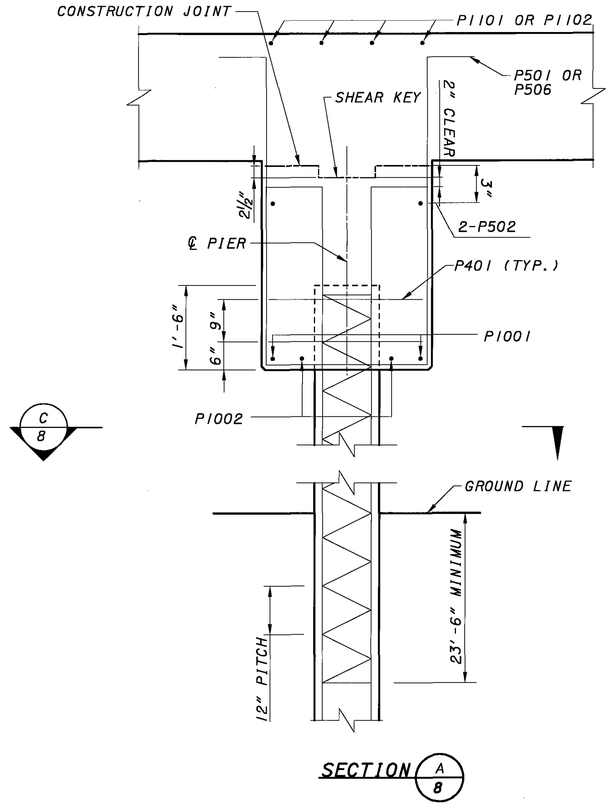
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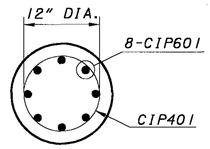
ELEVATION



SECTION B 8



SECTION A 8



SECTION C 8

NOTES:

1. MINIMUM BAR LAPS:
   LAP NO.5 BARS 3'-7".
   LAP NO.10 BARS 10'-3".
   LAP NO.11 BARS 13'-6".
2. ELEVATIONS AND STATIONS IN ( ) ARE FOR PIER 2 ONLY.
3. FOR SLAB REINFORCEMENT, SEE SHTS 9 & 10/13
4. REFER TO STANDARD DRAWING CPP-2-94 FOR ADDITIONAL DETAILS AND NOTES.

PILE SYMBOL

VERTICAL PILES
16" CAST-IN-PLACE
REINFORCED
CONCRETE PILES

DLZ
6121 HUNTLEY ROAD • COLUMBUS, OHIO 43229

DESIGNED	DRAWN	REVIEWED	DATE
BMW	BMW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

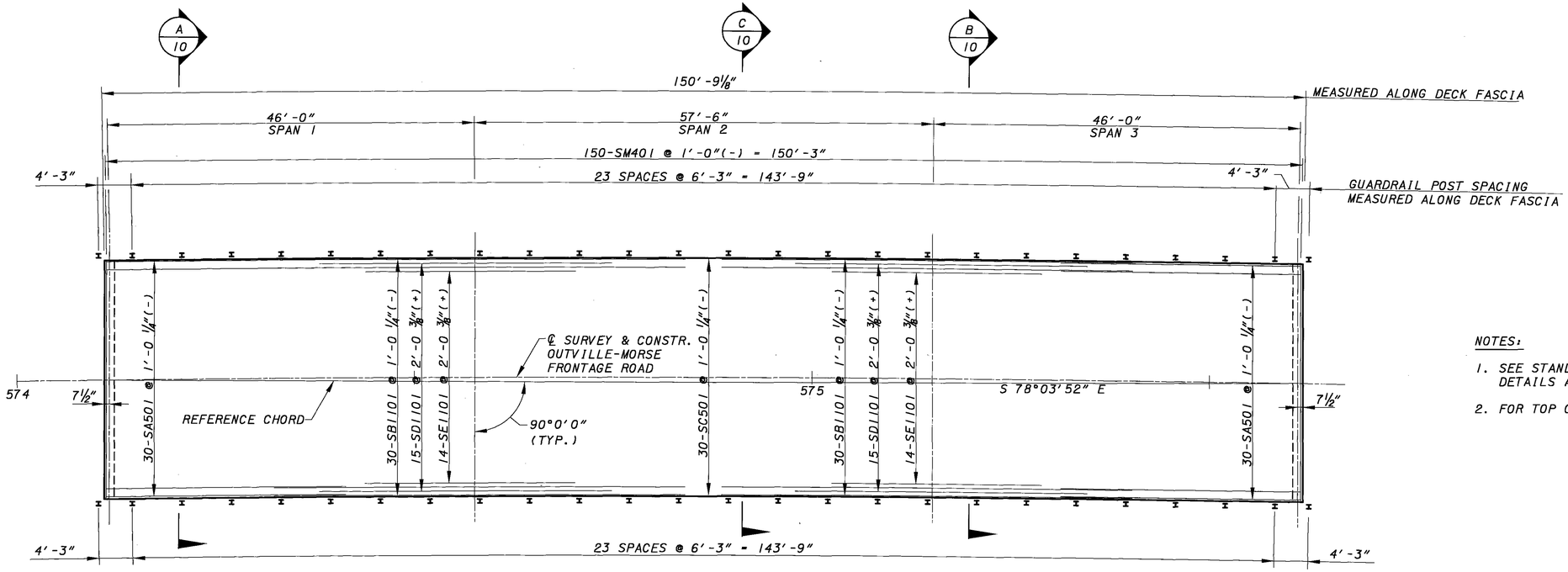
PIERS
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

8 / 13

1248
1349

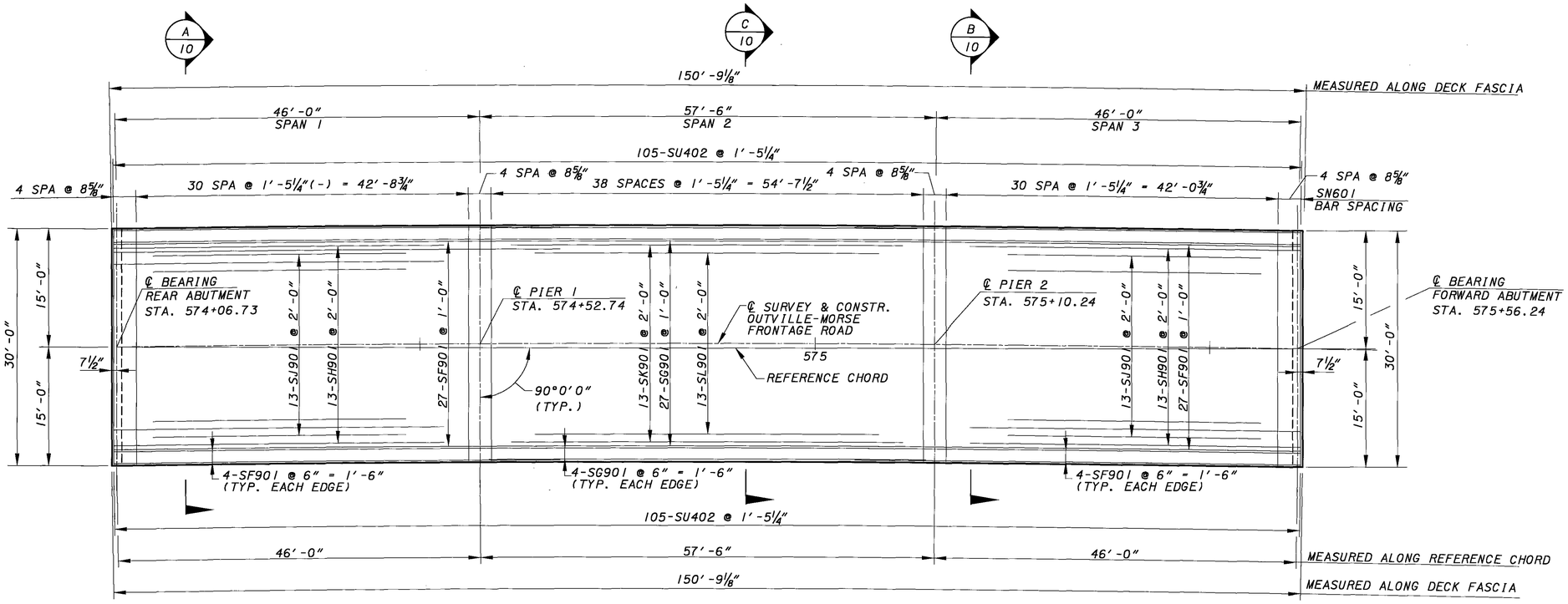
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TOP REINFORCEMENT PLAN

NOTES:

1. SEE STANDARD DRAWING CS-1-03 FOR ADDITIONAL SLAB DETAILS AND NOTES.
2. FOR TOP OF DECK ELEVATIONS SEE SHEET 11/13.



BOTTOM REINFORCEMENT PLAN

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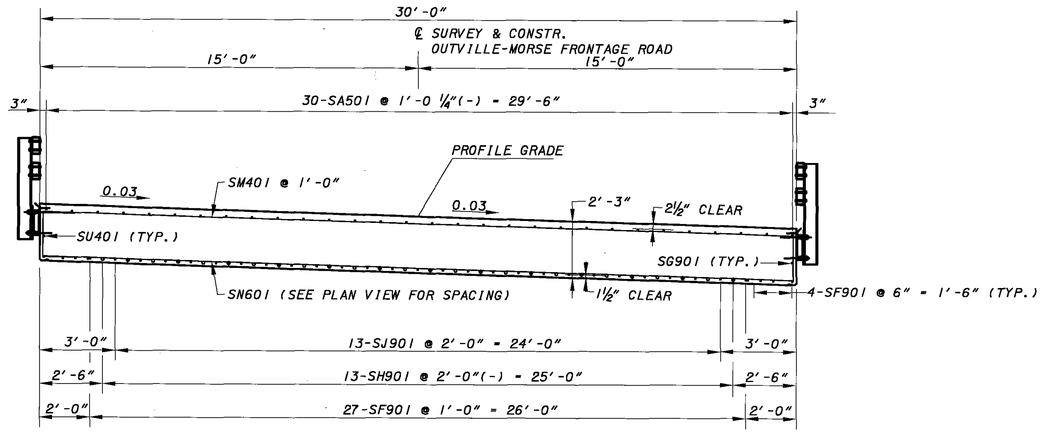
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BMW	BMW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

DECK PLAN
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

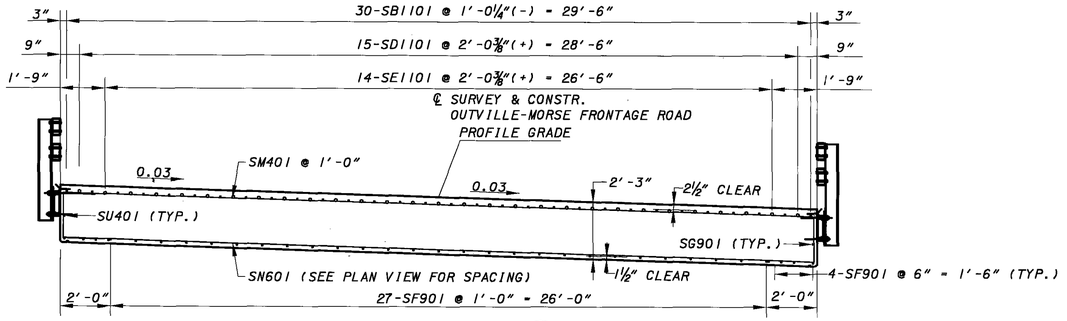
LIC-161-6.65
LIC-37-10.25
PID 77221

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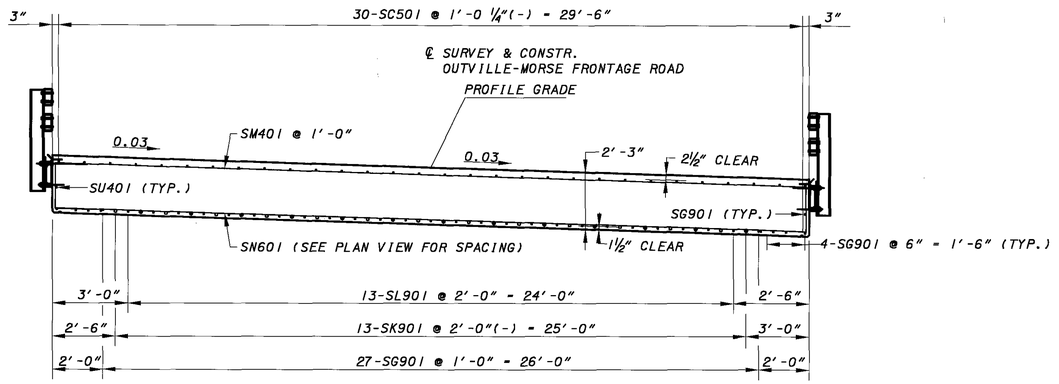
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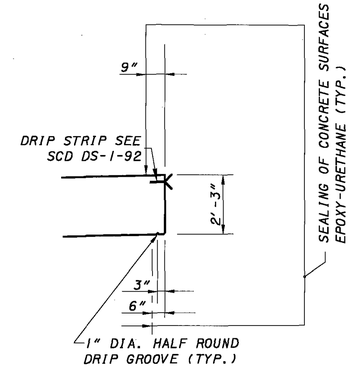
SECTION (END SPANS) A/9



SECTION (AT PIERS) B/9



SECTION (INTERIOR) C/9



FASCIA DETAIL

SLAB REINFORCING NOT SHOWN

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DESIGNED	DRAWN	REVIEWED	DATE
BMW	BMW	GWM	7-20-05
CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4538366	

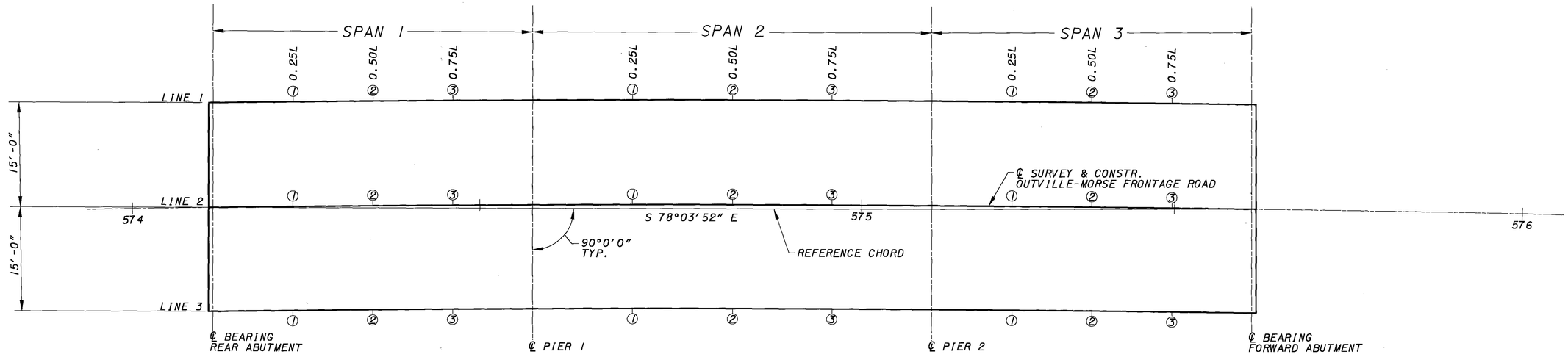
SUPERSTRUCTURE DETAILS
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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DECK ELEVATIONS LAYOUT



TOP OF DECK ELEVATIONS TABLE

		LINE 1		LINE 2		LINE 3	
SPAN NO.	LOCATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
SPAN NO.1	℄ BRG. R.A.	574+06.97	933.42	574+06.73	932.97	574+06.49	932.52
	0.25 L	574+18.44	933.30	574+18.23	932.85	574+18.03	932.40
	0.50 L	574+29.90	933.17	574+29.74	932.72	574+29.56	932.28
	0.75 L	574+41.37	933.05	574+41.24	932.60	574+41.10	932.15
SPAN NO.2	℄ PIER 1	574+52.83	932.92	574+52.74	932.47	574+52.64	932.02
	0.25 L	574+67.16	932.75	574+67.12	932.30	574+67.07	931.85
	0.50 L	574+81.49	932.58	574+81.49	932.13	574+81.49	931.68
	0.75 L	574+95.82	932.40	574+95.87	931.95	574+95.91	931.50
SPAN NO.3	℄ PIER 2	575+10.15	932.22	575+10.24	931.77	575+10.34	931.32
	0.25 L	575+21.61	932.08	575+21.74	931.63	575+21.87	931.18
	0.50 L	575+33.07	931.94	575+33.24	931.48	575+33.41	931.03
	0.75 L	575+44.53	931.79	575+44.74	931.34	575+44.95	930.89
	℄ BRG. F.A.	575+56.00	931.65	575+56.24	931.20	575+56.49	930.74

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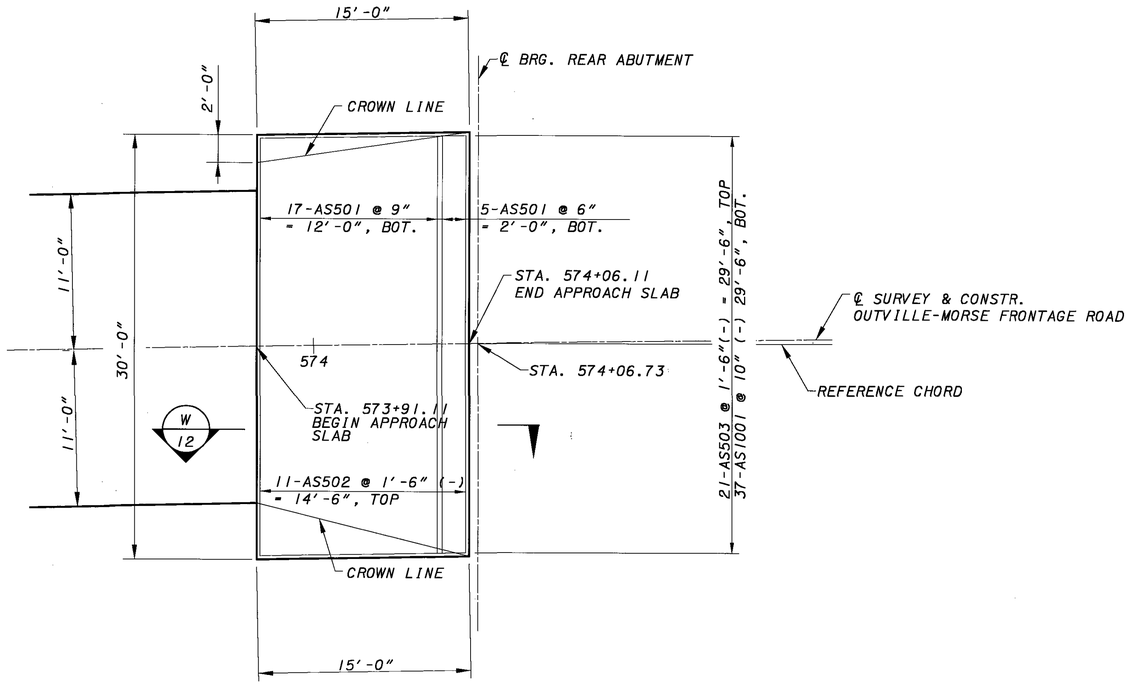
SUPERSTRUCTURE DETAILS
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

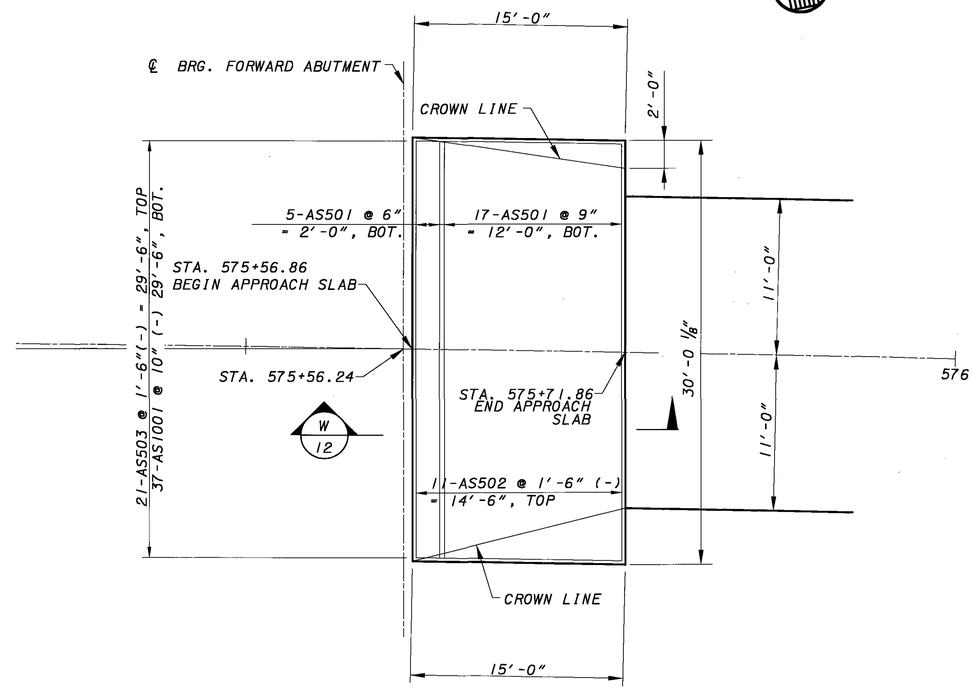
11/13

125/1349

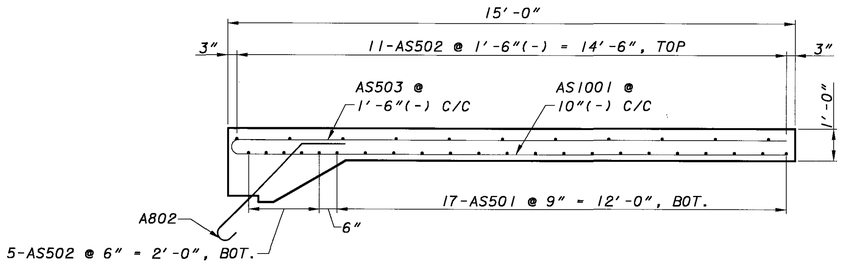
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REAR APPROACH SLAB PLAN



FORWARD APPROACH SLAB PLAN



SECTION W/12

TOP OF APPROACH SLAB ELEVATIONS

APPROACH SLAB	LOCATION	LEFT TOE		CROWN POINT		PROFILE GRADE		RIGHT TOE	
		STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
REAR	0.0 L	573+91.40	933.39	573+91.36	933.52	573+91.11	933.13	573+90.81	932.55
	0.5 L	573+98.88	933.41	573+98.87	933.47	573+98.61	933.05	573+98.33	932.54
	1.0 L	574+06.36	933.42	574+06.36	933.42	574+06.11	932.98	574+05.86	932.53
FORWARD	0.00 L	575+56.61	931.64	575+56.61	931.64	575+56.86	931.19	575+57.11	930.74
	0.5 L	575+64.09	931.46	575+64.10	931.52	575+64.36	931.10	575+64.62	930.58
	1.0 L	575+71.57	931.27	575+71.61	931.40	575+71.86	931.00	575+72.16	930.42

NOTES:

1. FOR ADDITIONAL DETAILS NOTES & APPROACH SLAB REINFORCING, REFERENCE IS MADE TO STD. DRAWING AS-1-81.

LEGEND:
B.F. = BACK FACE
BOT. = BOTTOM
BRG. = BEARING
℄ = CENTERLINE
E.F. = EACH FACE
F.F. = FRONT FACE
STA. = STATION

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
GLC		4536366	

APPROACH DETAILS
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

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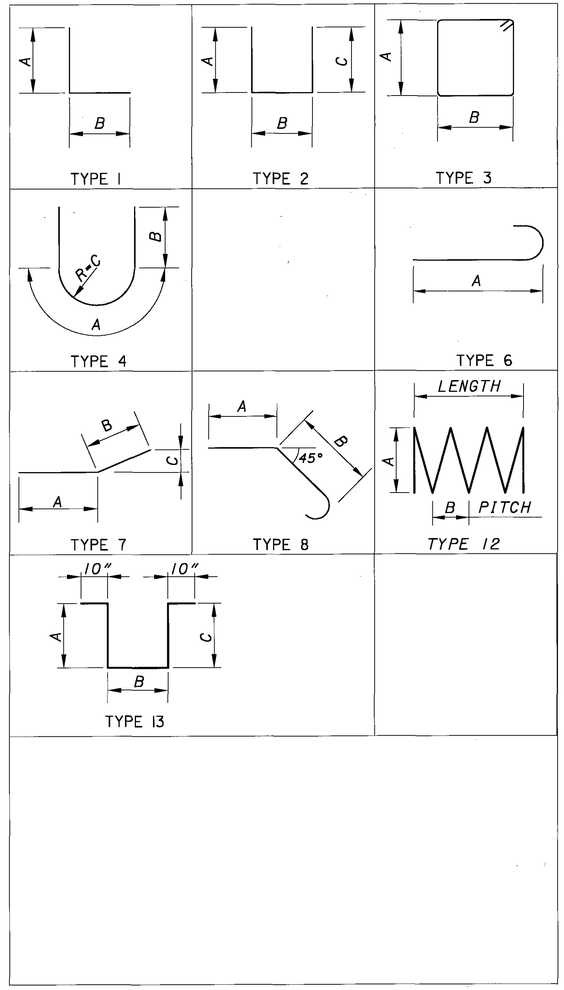
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REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
REAR ABUTMENT									
A401	16	8'-11"	96	3	1'-9"	2'-6"			
A501	12	30'-1"	377	STR					
A502	39	11'-0"	447	3	2'-7"	2'-8"			
A503	6	28'-3"	177	STR					
A504	21	13'-4"	292	2	5'-10"	1'-11"	5'-10"		
A505	6	15'-8"	98	STR					
A506	8	18'-7"	155	STR					
A507	2	11'-5"	24	7	8'-4"	3'-2"	9 1/4"		
A508	2	14'-6"	30	7	11'-5"	3'-2"	10 1/8"		
	1	10'-9"			5'-2"	8"	5'-2"		
A509	S.O.		80	2					
	6	14'-11"			7'-3"	8"	7'-3"		
A510	2	14'-11"	31	2	7'-3"	8"	7'-3"		
	1	11'-1"			5'-3"	8"	5'-3"		
A511	S.O.		131	2					
	9	16'-9"			8'-2"	8"	8'-2"		
A512	2	16'-9"	35	2	8'-2"	8"	8'-2"		
	2	7'-2"							
A513	S.O.		38	STR					3'-9"
	2	10'-11"							
	2	7'-1"							
A514	S.O.		38	STR					3'-8"
	2	10'-9"							
A515	6	2'-10"	18	2	1'-1"	11"	1'-1"		
A516	4	1'-11"	8	STR					
A801	8	31'-6"	673	STR					
A802	21	6'-4"	355	8	1'-5"	4'-0"			
A1001	4	28'-3"	486	STR					
			3589	lbs.					
FORWARD ABUTMENT									
B401	16	8'-11"	96	3	2'-6"	1'-9"			
B501	12	30'-1"	377	STR					
B502	39	11'-0"	447	3	2'-7"	2'-8"			
B503	6	28'-3"	177	STR					
B504	21	13'-4"	292	2	5'-10"	1'-11"	5'-10"		
B505	8	18'-7"	155	STR					
B506	6	15'-8"	98	STR					
B507	2	14'-6"	30	2	11'-5"	3'-2"	10 1/8"		
B508	2	11'-5"	24	2	8'-4"	3'-2"	9 1/4"		
	1	10'-9"			5'-2"	8"	5'-2"		
B509	S.O.		129	2					
	9	16'-9"			8'-2"	8"	8'-2"		
B510	2	16'-9"	35	2	8'-2"	8"	8'-2"		
	1	10'-9"			5'-2"	8"	5'-2"		
B511	S.O.		94	2					
	7	14'-11"			7'-3"	8"	7'-3"		
B512	2	14'-11"	31	2	7'-3"	8"	7'-3"		
	2	7'-1"							
B513	S.O.		38	STR					3'-8"
	2	10'-9"							

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	2	7'-2"							
B514	S.O.		38	STR					3'-9"
	2	10'-11"							
B515	6	2'-10"	18	2	1'-1"	11"	1'-1"		
B516	4	1'-11"	8	STR					
B801	8	31'-6"	673	STR					
B802	21	6'-4"	355	8	1'-5"	4'-0"			
B1001	4	28'-3"	486	STR					
			3601	lbs.					
PIERS									
P401	24	9'-6"	152	3	2'-6"	2'-0"			
P501	40	11'-6"	480	13	3'-10"	2'-8"	3'-10"		
P502	4	11'-4"	47	13	3'-10"	2'-6"	3'-10"		
P503	10	5'-3"	55	2	10"	3'-10"	10"		
P504	8	10'-11"	91	4	4'-0"	3'-5"	1'-3 3/8"		
P505	4	28'-4"	118	STR					
P506	2	13'-0"	27	13	4'-8"	2'-6"	4'-8"		
P507	10	6'-1"	63	2	10"	4'-8"	10"		
P1001	4	25'-8"	442	STR					
P1002	4	27'-9"	478	STR					
P1101	8	29'-7"	1257	STR					
			3210	lbs.					
SUPERSTRUCTURE									
SM401	150	29'-7"	2964	STR					
SU401	210	4'-0"	567	2	1'-3"	1'-9"	1'-3"		
SA501	60	30'-2"	1888	STR					
SC501	30	27'-2"	850	STR					
SN601	115	29'-7"	5110	STR					
SF901	70	57'-9"	13745	6	56'-6"				
SG901	41	55'-3"	7702	STR					
SH901	26	41'-10"	3698	STR					
SJ901	26	32'-0"	2829	STR					
SK901	13	49'-6"	2188	STR					
SL901	13	43'-6"	1923	STR					
SB1101	60	51'-8"	16471	STR					
SD1101	30	36'-9"	5858	STR					
SE1101	28	26'-5"	3930	STR					
			68873	lbs.					
FOR INFORMATION ONLY - PIER CIP PILE REINFORCING									
CIP401	12	38'-4"	2847	12	1'-0"	1'-0"			
CIP601	96	39'-6"	5696	1	1'-0"	38'-8"			

BENDING DIAGRAMS



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

3. "STR" IN THE TYPE COLUMN INDICATES STRAIGHT BARS.

4. S.O. DENOTES SERIES OF.

5. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

6. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.

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DESIGNED BMW | DRAWN BMW | CHECKED GLC | REVISED | REVIEWED GWM | DATE 7-20-05 | STRUCTURE FILE NUMBER 4536366

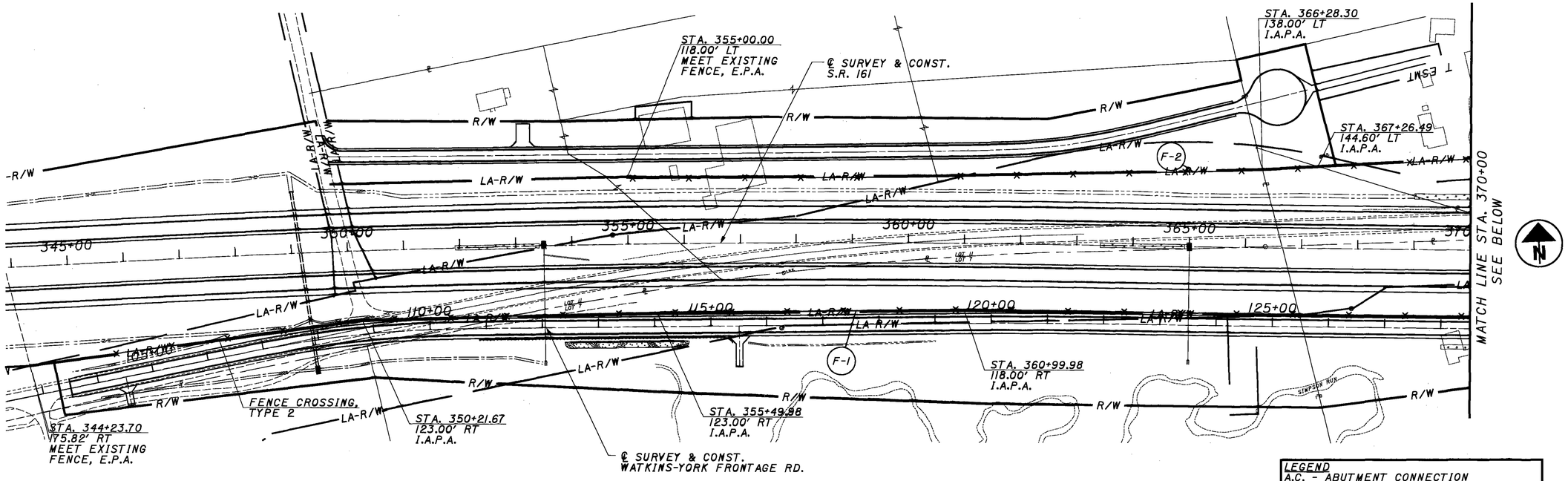
REINFORCING STEEL LIST
BRIDGE OUTVILLE-MORSE FRONTAGE ROAD
OUTVILLE-MORSE FRONTAGE ROAD OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25
PID 77221

13 / 13

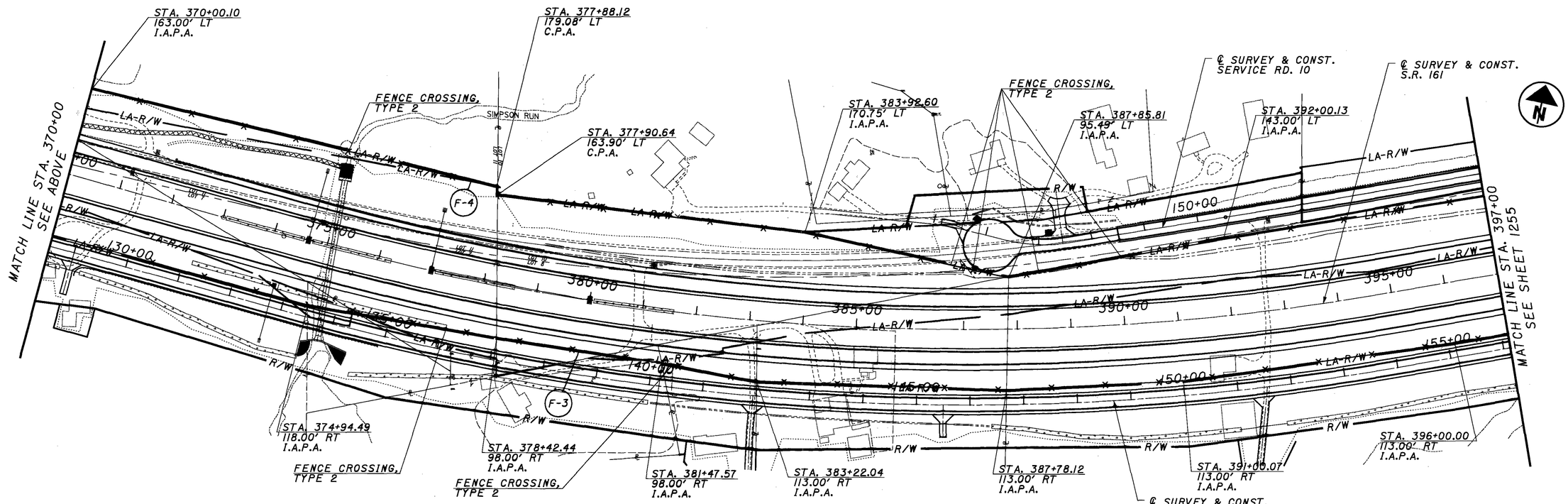
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LEGEND
A.C. - ABUTMENT CONNECTION
C.P.A. - CORNER POST ASSEMBLY
E.P.A. - END POST ASSEMBLY
I.A.P.A. - INTERMEDATE POST ASSEMBLY

NOTE: FOR QUANTITIES SEE SHEET 128



HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED BER
CHECKED JMA

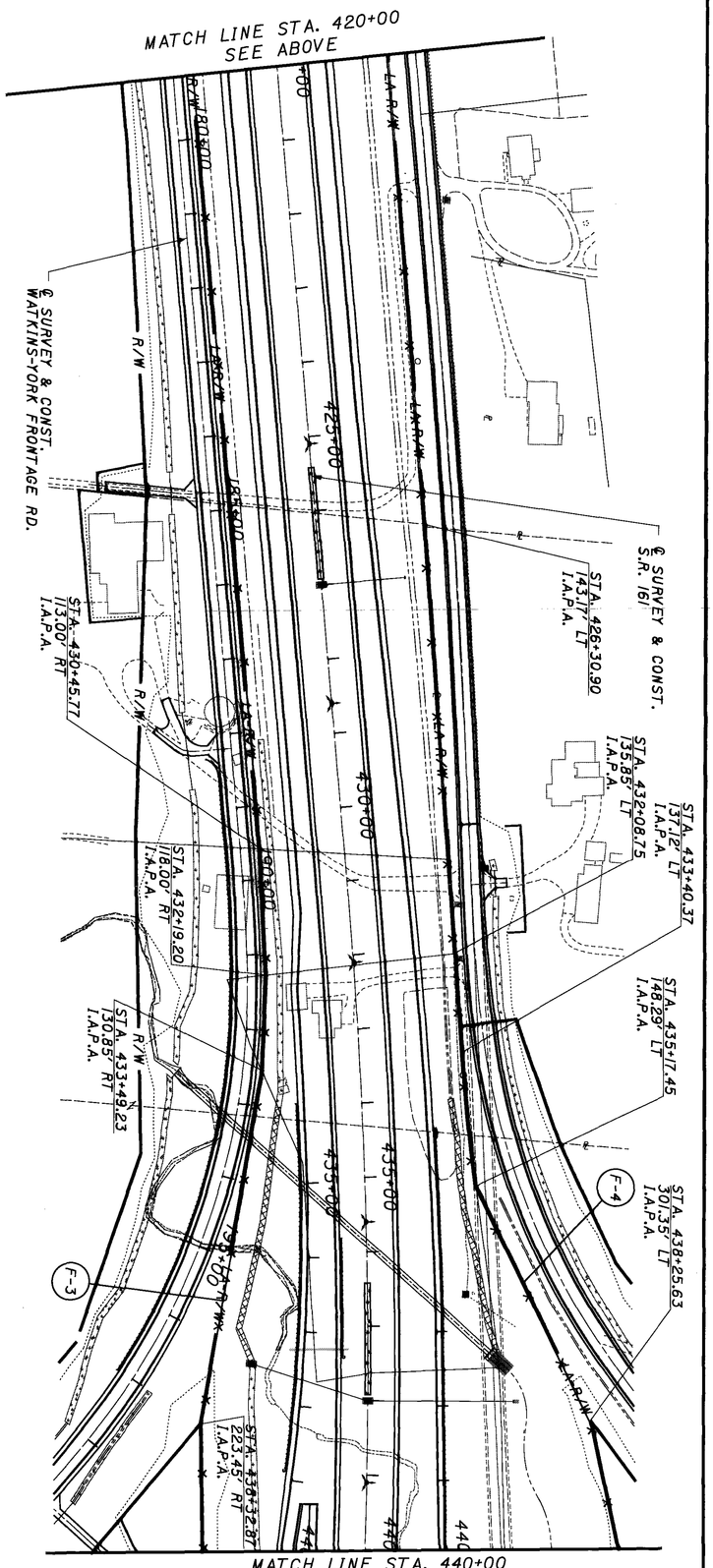
FENCE PLAN - S.R. 161
STA. 344+00 TO STA. 397+00

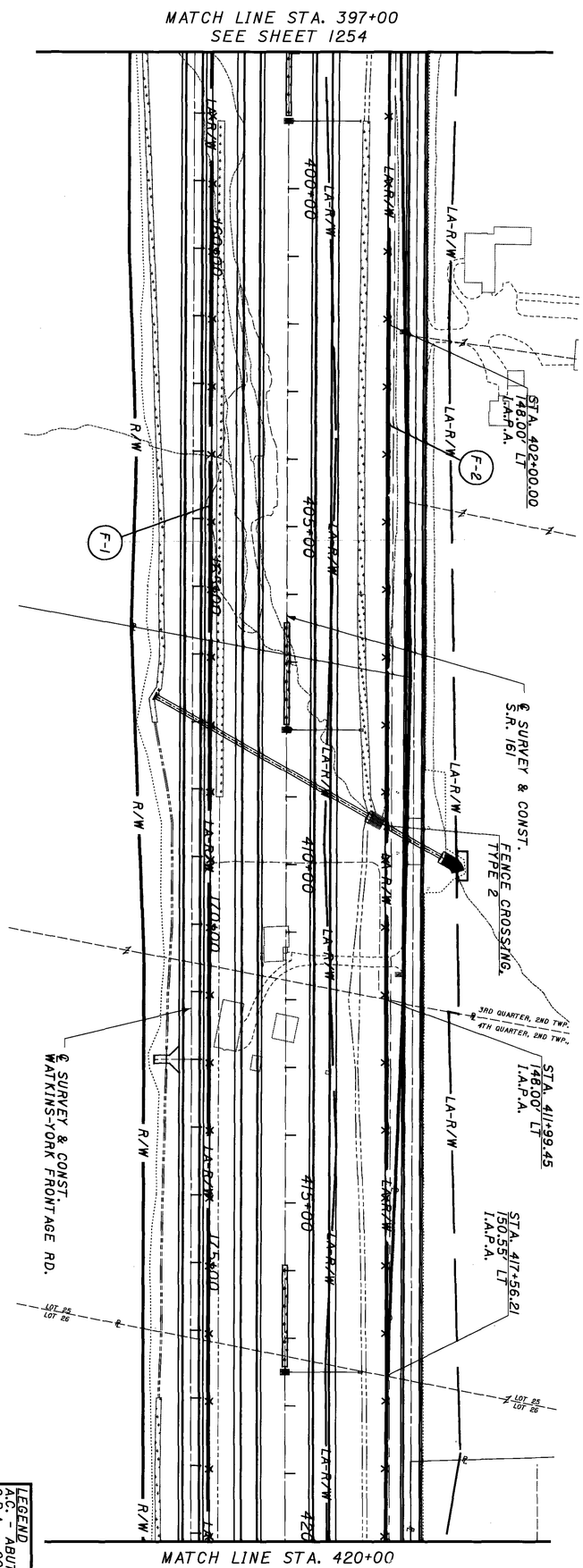
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LIC-37-10.25

1254
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LEGEND
A.C. - ABUTMENT CONNECTION
C.P.A. - CORNER POST ASSEMBLY
E.P.A. - END POST ASSEMBLY
I.A.P.A. - INTERMEDIATE POST ASSEMBLY

NOTE: FOR QUANTITIES SEE SHEET 128

(1255) 1349	LIC-161-6.65 LIC-37-10.25	FENCE PLAN - S.R. 161 STA. 397+00 TO STA. 440+00	CALCULATED BER CHECKED JMA	0 100 50 200 HORIZONTAL SCALE IN FEET

FENCE PLAN - S.R. 161
STA. 440+00 TO STA. 460+00

LIC-161-6.65
LIC-37-10.25

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED BER
CHECKED JMA

MATCH LINE STA. 440+00 SEE SHEET 1255

MATCH LINE STA. 460+00 SEE SHEET 1257

℄ RAMP I

RAMP I STA. 444+67.81
198.03' LT
I.A.P.A.

FENCE CROSSING, TYPE 2

RAMP I STA. 448+99.83
93.00' LT
I.A.P.A.

S.R. 37 STA. 395+13.24
82.97' RT
E.P.A.

S.R. 37 STA. 394+61.77
78.17' RT
C.P.A.

S.R. 37 STA. 394+61.90
33.52' RT
E.P.A.

S.R. 37 STA. 394+62.14
49.35' LT
E.P.A.

S.R. 37 STA. 394+62.21
72.91' LT
C.P.A.

S.R. 37 STA. 396+49.29
96.80' RT
E.P.A.

S.R. 37 STA. 397+50.07
108.00' RT
I.A.P.A.

S.R. 37 STA. 401+52.07
92.98' RT
C.P.A.

S.R. 37 STA. 395+35.48
69.57' LT
E.P.A.

S.R. 37 STA. 395+92.85
62.58' LT
E.P.A.

S.R. 37 STA. 398+17.18
63.00' LT
I.A.P.A.

S.R. 37 STA. 401+51.87
78.08' LT
C.P.A.

RAMP J STA. 452+99.94
68.00' LT
I.A.P.A.

RAMP J STA. 455+01.55
94.26' LT
I.A.P.A.

RAMP J STA. 455+47.40
148.53' LT
C.P.A.

RAMP J STA. 456+29.33
74.68' LT
I.A.P.A.

℄ RAMP J

RAMP J STA. 459+00.22
82.97' LT
I.A.P.A.

RAMP K STA. 440+40.56
98.06' RT
I.A.P.A.

RAMP K STA. 444+07.06
103.02' RT
I.A.P.A.

℄ RAMP K

℄ SURVEY & CONST.
S.R. 161

℄ SURVEY & CONST.
S.R. 37

℄ SURVEY & CONST.
S.R. 161

℄ SURVEY & CONST.
SERVICE RD. 11

FENCE CROSSING, TYPE 2

RAMP K STA. 448+84.16
126.82' RT
I.A.P.A.

S.R. 37 STA. 412+17.85
128.29' RT
C.P.A.

S.R. 37 STA. 414+50.60
93.03' RT
I.A.P.A.

S.R. 37 STA. 416+00.24
63.00' RT
I.A.P.A.

S.R. 37 STA. 416+74.96
63.00' RT
I.A.P.A.

S.R. 37 STA. 417+14.53
61.42' RT
E.P.A.

S.R. 37 STA. 417+81.91
58.00' RT
E.P.A.

S.R. 37 STA. 418+51.34
58.00' RT
C.P.A.

S.R. 37 STA. 418+51.08
39.08' RT
E.P.A.

S.R. 37 STA. 418+50.07
36.15' LT
E.P.A.

S.R. 37 STA. 418+49.77
58.00' LT
C.P.A.

S.R. 37 STA. 417+90.26
58.00' LT
E.P.A.

S.R. 37 STA. 417+24.35
58.00' LT
E.P.A.

S.R. 37 STA. 416+74.88
58.00' LT
I.A.P.A.

S.R. 37 STA. 412+56.79
108.25' LT
C.P.A.

RAMP L STA. 452+47.22
155.97' RT
C.P.A.

RAMP L STA. 452+50.85
93.19' RT
C.P.A.

RAMP L STA. 453+99.85
87.28' RT
I.A.P.A.

FENCE CROSSING, TYPE 2

RAMP L STA. 454+99.79
68.01' RT
I.A.P.A.

℄ RAMP L

RAMP L STA. 457+38.54
55.12' RT
I.A.P.A.

F-1 F-2 F-3 F-4 F-5 F-6 F-7 F-8

R/W

LA-R/W

Ex. R/W

205+00 210+00 215+00 220+00 225+00

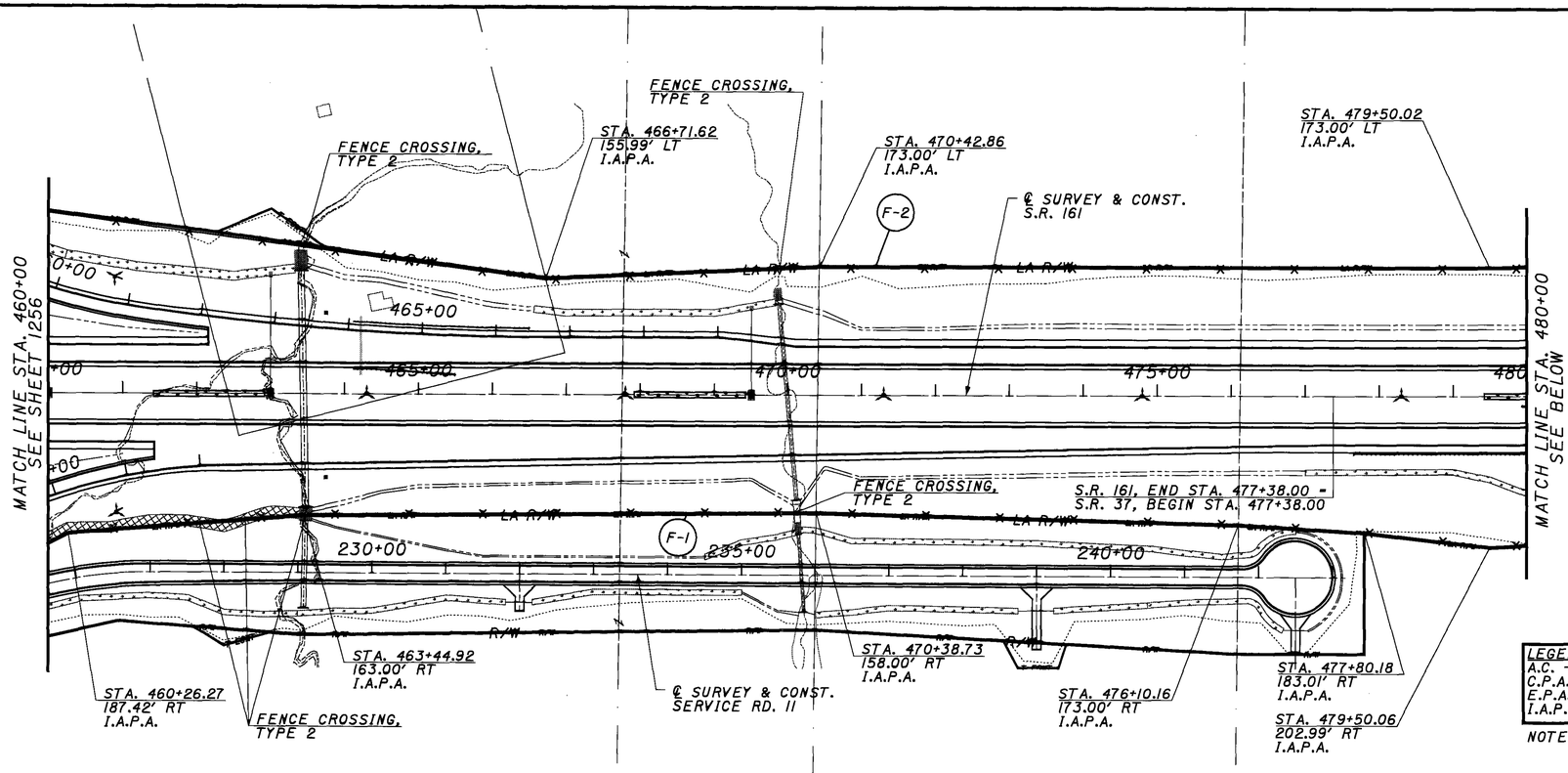
440+00 445+00 450+00 455+00 460+00

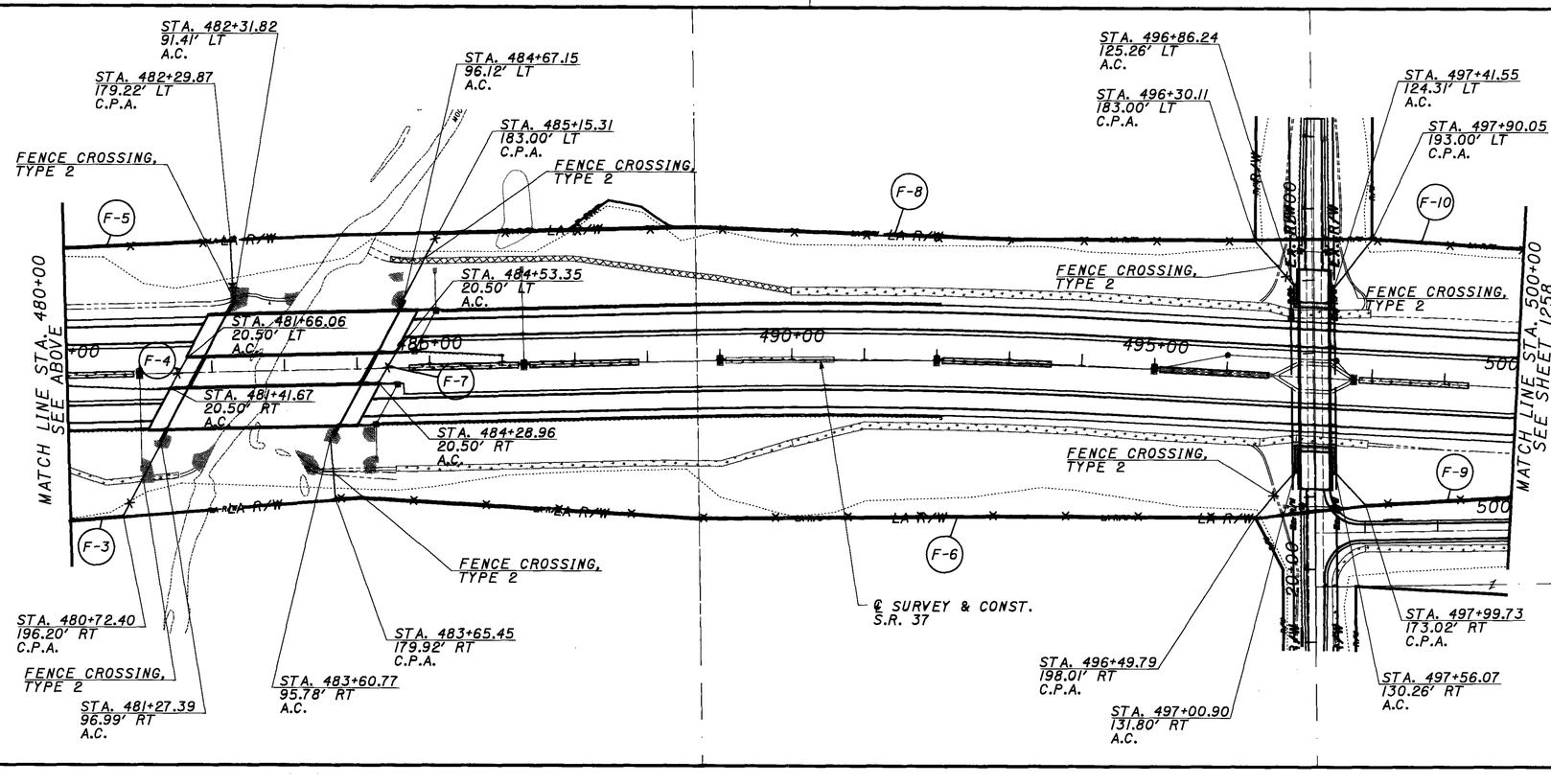
395+00 400+00

LEGEND
A.C. - ABUTMENT CONNECTION
C.P.A. - CORNER POST ASSEMBLY
E.P.A. - END POST ASSEMBLY
I.A.P.A. - INTERMEDIATE POST ASSEMBLY

NOTE: FOR QUANTITIES SEE SHEET 128

tduffney
10/26/2006
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HORIZONTAL SCALE IN FEET
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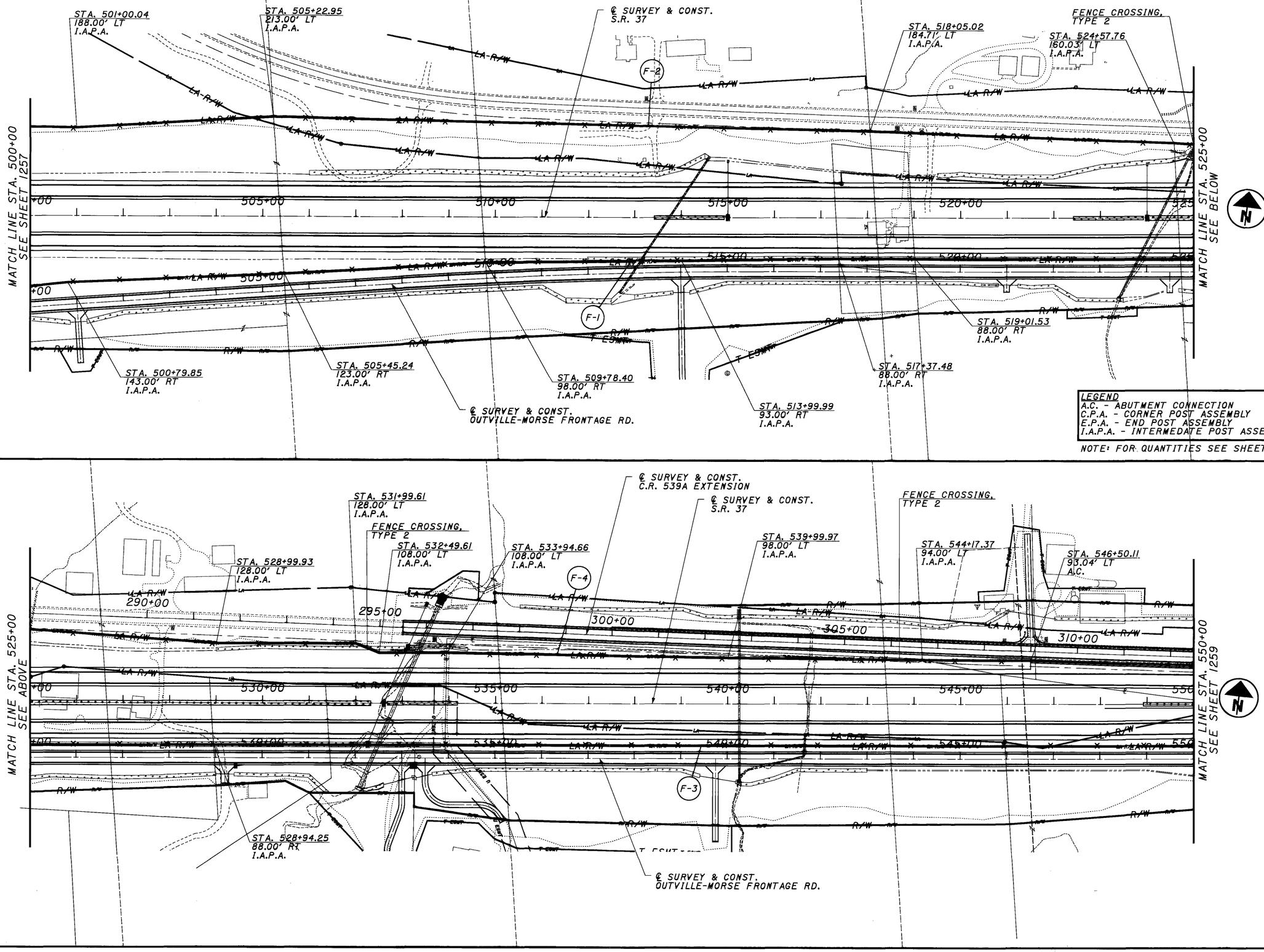
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CHECKED JMA

FENCE PLAN - S.R. 161/S.R. 37
STA. 460+00 TO STA. 500+00

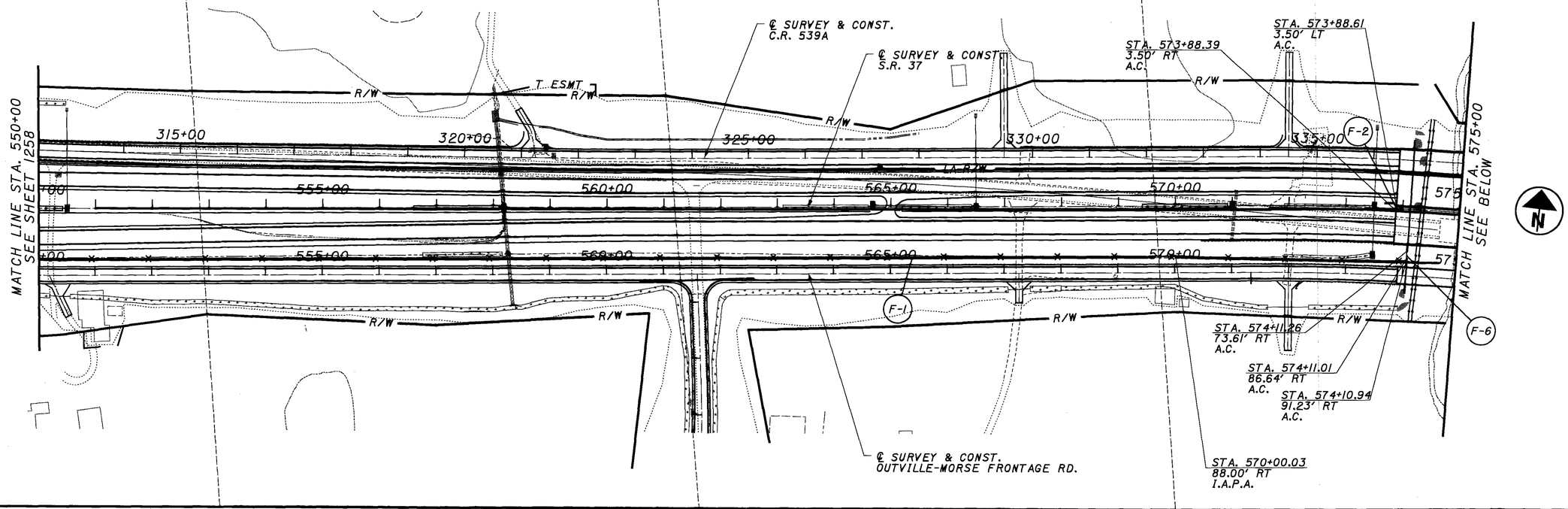
LIC-161-6.65
LIC-37-10.25

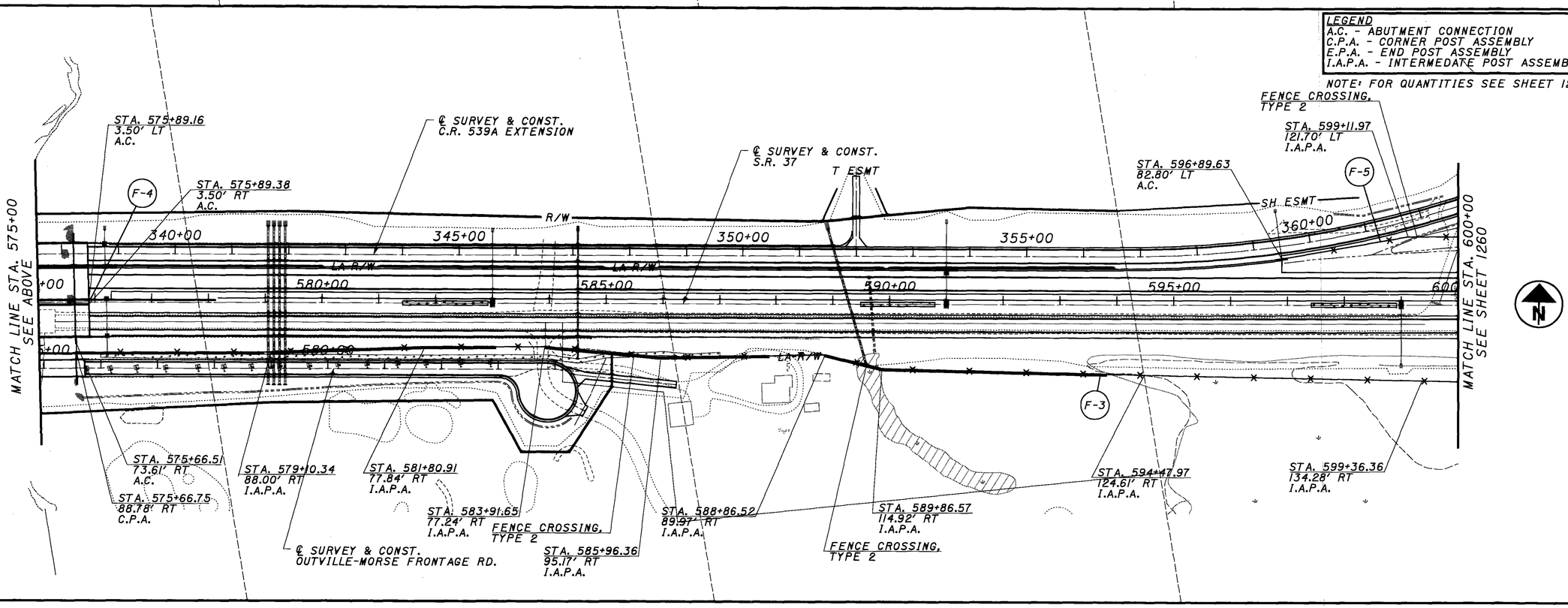
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10/26/2006
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HORIZONTAL SCALE IN FEET
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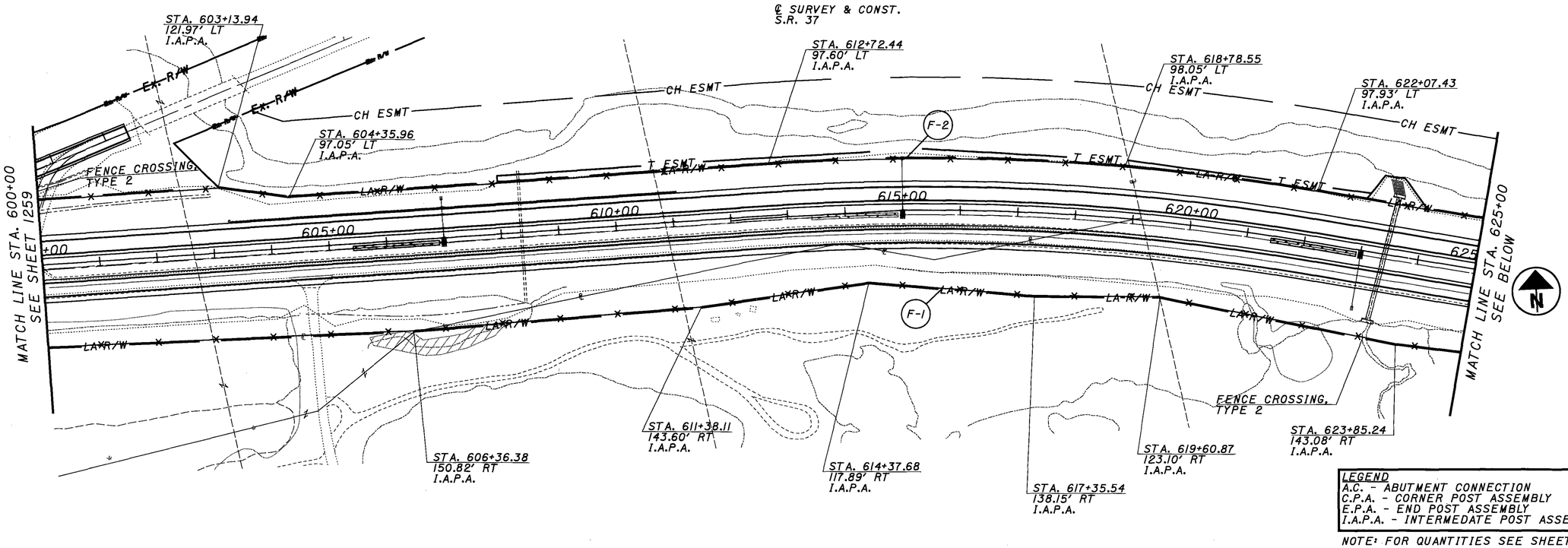
CALCULATED BER
CHECKED JMA

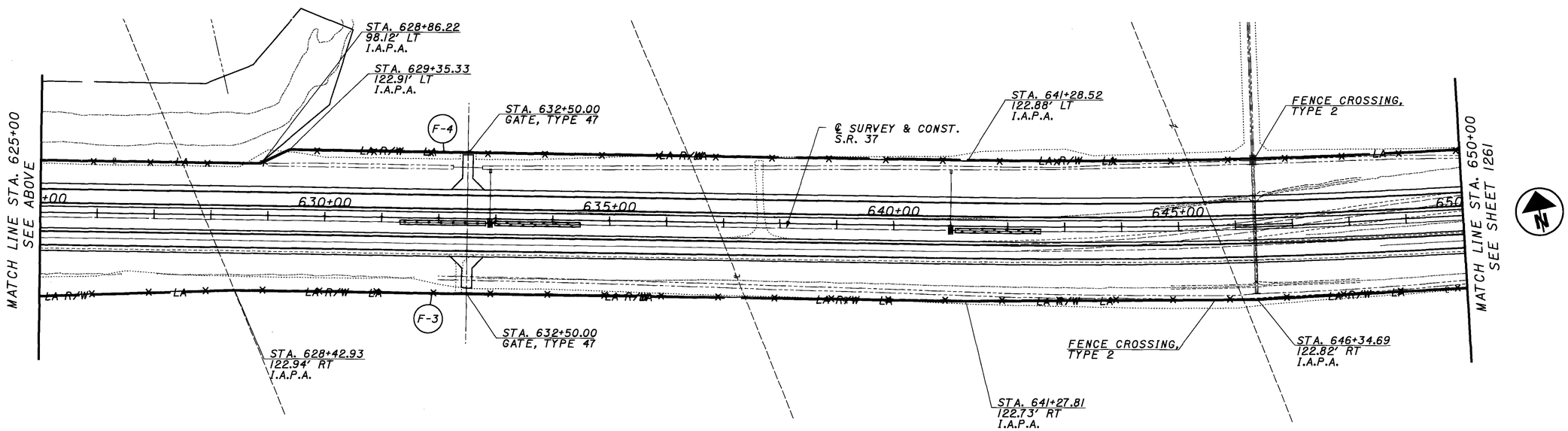
FENCE PLAN - S.R. 37
STA. 550+00 TO STA. 600+00

LIC-161-6.65
LIC-37-10.25

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HORIZONTAL SCALE IN FEET
0 50 100 200

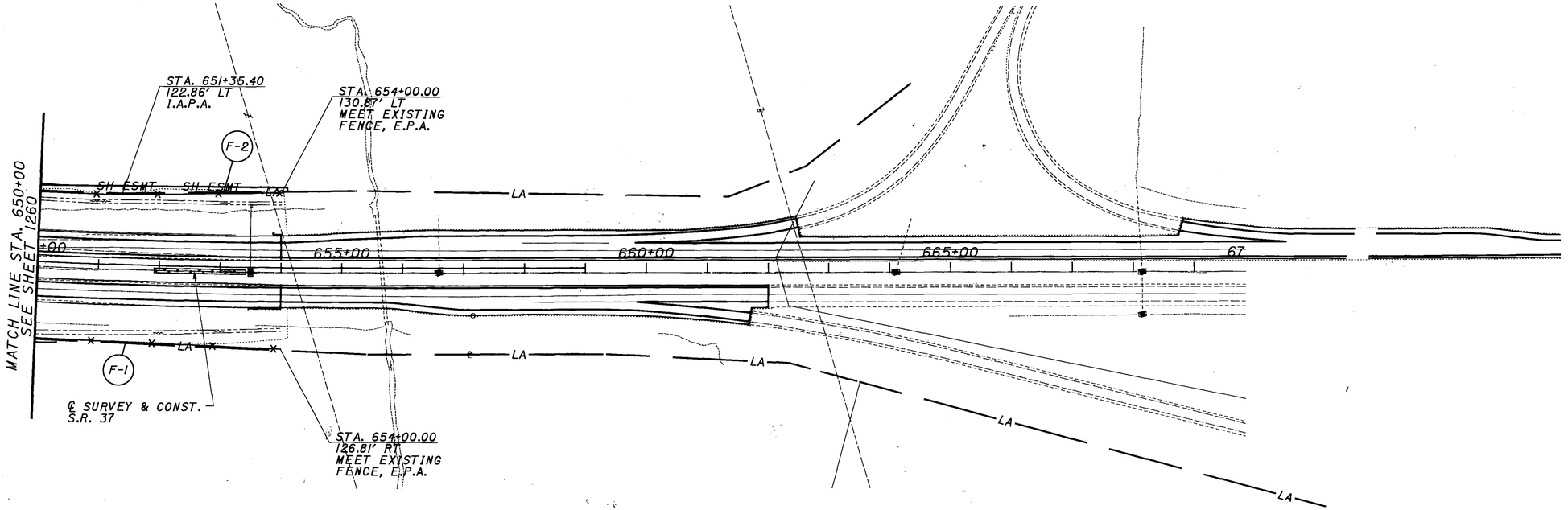
CALCULATED BER
CHECKED JMA

FENCE PLAN - S.R. 37
STA. 600+00 TO STA. 650+00

LIC-161-6.65
LIC-37-10.25

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1349

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LEGEND
A.C. - ABUTMENT CONNECTION
C.P.A. - CORNER POST ASSEMBLY
E.P.A. - END POST ASSEMBLY
I.A.P.A. - INTERMEDATE POST ASSEMBLY

NOTE: FOR QUANTITIES SEE SHEET 128

0 50 100 200
HORIZONTAL SCALE IN FEET

CALCULATED BER
CHECKED JMA

FENCE PLAN - S.R. 37
STA. 650+00 TO STA. 670+00

LIC-161-6.65
LIC-37-10.25

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ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY AND ARE FROM THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD. 83. AS ESTABLISHED BY GPS MEASUREMENTS.

EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE, FRANKLIN COUNTY & LICKING COUNTY, OHIO

NEW ALBANY CORP LINE. RECORDED IN PB 17, PAGES 161-162

LEGEND

- ⏢ - STONE FOUND
- o - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - PROPOSED ℄ REFERENCE MONUMENT
- ✗ - RAILROAD SPIKE SET

LOTS 10 & 11, QTR. TWP. 3, T2N, R14W, USML; LOTS 25 & 26, QTR. TWP. 4, T2N, R14W, USML ST. ALBANS TWP. LICKING COUNTY

SERVICE RD. 10
CURVE 1
P.I. STA. 145+26.74
D = 08°44'01" RT.
Dc = 12°00'42"
R = 477.00'
T = 36.43'
L = 72.71'
E = 1.39'

SERVICE RD. 10
CURVE 2
P.I. STA. 146+98.16
D = 24°04'10" LT.
Dc = 20°02'01"
R = 286.00'
T = 60.97'
L = 120.15'
E = 6.43'

EX. S.R. 161
CURVE 1
P.I. STA. 141+28.06
D = 22°33'04" LT.
Dc = 01°30'04"
R = 3,816.72'
T = 760.96'
L = 1,502.22'
E = 75.12'

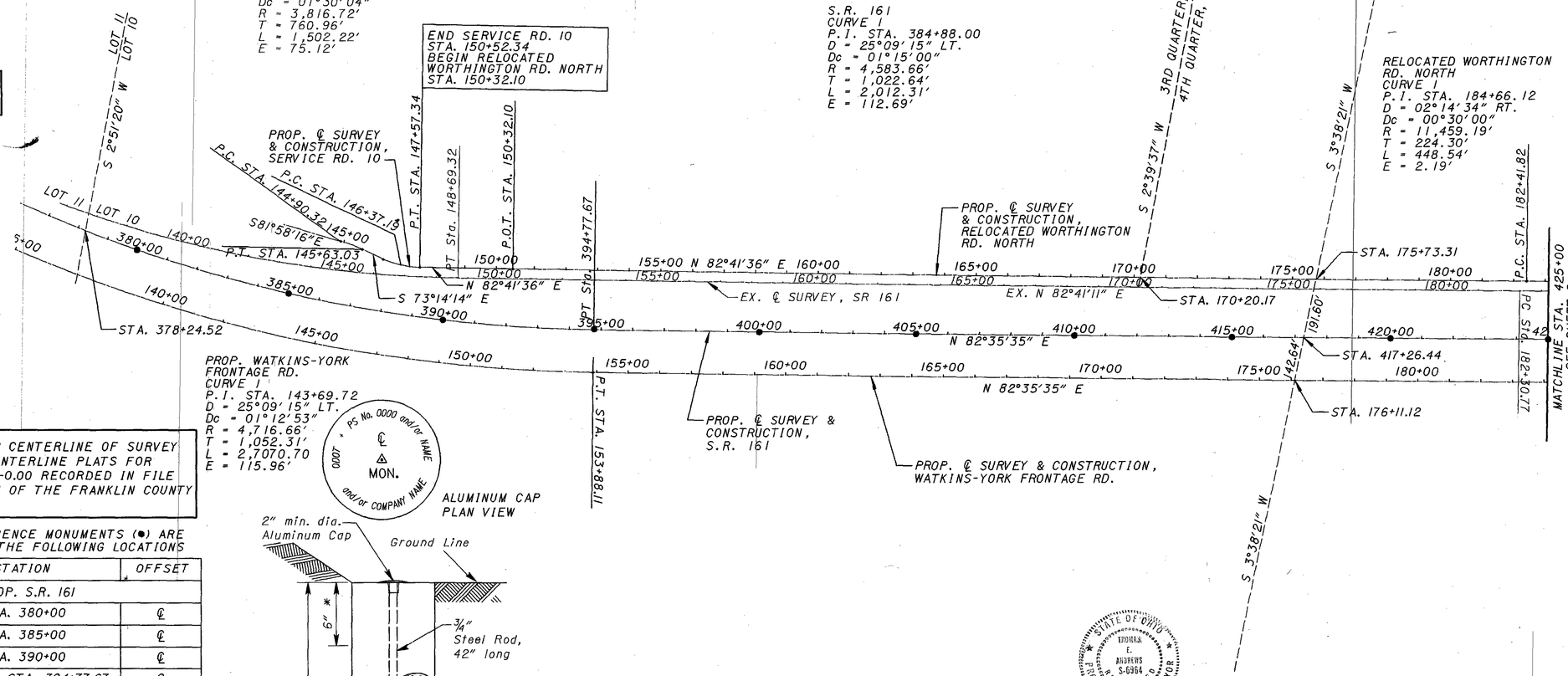
END SERVICE RD. 10
STA. 150+52.34
BEGIN RELOCATED WORTHINGTON RD. NORTH
STA. 150+32.10

S.R. 161
CURVE 1
P.I. STA. 384+88.00
D = 25°09'15" LT.
Dc = 01°15'00"
R = 4,583.66'
T = 1,022.64'
L = 2,012.31'
E = 112.69'

RELOCATED WORTHINGTON RD. NORTH
CURVE 1
P.I. STA. 184+66.12
D = 02°14'34" RT.
Dc = 00°30'00"
R = 11,459.19'
T = 224.30'
L = 448.54'
E = 2.19'

EX. S.R. 161
CURVE 2
P.I. STA. 184+54.14
D = 02°14'22" RT.
Dc = 00°30'05"
R = 11,427.54'
T = 223.36'
L = 446.67'
E = 2.18'

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.



NOTE: FOR THE 1992 CENTERLINE OF SURVEY FOR S.R. 161 SEE CENTERLINE PLATS FOR FRA-161-16.75/LIC-161-0.00 RECORDED IN FILE 78 PAGES 30 AND 31 OF THE FRANKLIN COUNTY PLAT RECORDS.

CENTERLINE REFERENCE MONUMENTS (●) ARE TO BE PLACED AT THE FOLLOWING LOCATIONS

QUANTITY	STATION	OFFSET
	PROP. S.R. 161	
1	PROP. STA. 380+00	℄
1	PROP. STA. 385+00	℄
1	PROP. STA. 390+00	℄
1	PROP. PT STA. 394+77.67	℄
1	PROP. STA. 400+00	℄
1	PROP. STA. 405+00	℄
1	PROP. STA. 410+00	℄
1	PROP. STA. 415+00	℄
1	PROP. STA. 420+00	℄
1	PROP. STA. 425+00	℄
10	SUBTOTAL SHEET 1	

ALUMINUM CAP PLAN VIEW

* The upper 6" of the 42" cast in place monument shall be formed.

CENTERLINE REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM 1.1 (REV. 4-29-99) OF THE OHIO DEPARTMENT OF TRANSPORTATION. THE PLACING OF THE MONUMENTS SHALL BE UNDER THE DIRECTION OF A SURVEYOR REGISTERED IN THE STATE OF OHIO AND ARE TO BE SET, AS SHOWN BY THE HIGHWAY CONTRACTOR AT THE TIME OF CONSTRUCTION. ANY ALTERATIONS, WITH PRIOR APPROVAL OF THE OHIO DEPARTMENT OF TRANSPORTATON, SHALL BE NOTED AND O.D.O.T. SHALL BE NOTIFIED OF THE NEW LOCATIONS.

STATE OF OHIO · THOMAS E. ANDREWS S-6964 · REGISTERED PROFESSIONAL SURVEYOR

RECEIVED _____, 2006

RECORDED _____, 2006

INSTRUMENT NO. _____

_____
COUNTY RECORDER

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY PERFORMED BY THE OHIO DEPARTMENT OF TRANSPORTATION IN 2002 BY DISTRICT 5, OHIO DEPARTMENT OF TRANSPORTATION.

THE ESTABLISHMENT OF THE PROPERTY LINES AND EXISTING RIGHT OF WAY LINES SHOWN ON THIS PLAN AS OF THIS DATE WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION.

11-22-06
THOMAS E. ANDREWS P.S. 6964 DATE

N

HORIZONTAL SCALE IN FEET
0 100 200 400

PID NO. 77221

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.

CENTERLINE PLAT
STA. 380+00 TO STA. 425+00 PROP. S.R. 161

LIC-161-6.65
LIC-37-10.25

1 / 88

1263
1349

L1610011.RCP 09/26/05

LOTS 26, 27, 28, 29, 30, 31 & 32
QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TWP.
LICKING COUNTY

RWRN C1 — RELOCATED WORTHINGTON RD. NORTH, CURVE 1
P.I. STA. 184+66.12
D = 02°14'34" RT.
Dc = 00°30'00"
R = 11,459.19'
T = 224.30'
L = 448.54'
E = 2.19'

RWRN C2 — RELOCATED WORTHINGTON RD. NORTH, CURVE 2
P.I. STA. 193+70.21
D = 36°25'42" LT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 20°31'01" LT.
Lc = 341.95'
Ts = 447.75'
Es = 53.60'

ESRI61 C2 — EX. S.R. 161, CURVE 2
P.I. STA. 184+54.14
D = 02°14'22" RT.
Dc = 00°30'05"
R = 11,427.54'
T = 223.36'
L = 446.67'
E = 2.18'

PSRI61 C2 — S.R. 161, CURVE 2
P.I. STA. 438+03.66
D = 10°37'01" RT.
Dc = 00°45'00"
R = 7,639.44'
T = 709.83'
L = 1,415.59'
E = 32.91'

ESRI61 C3 — EX. S.R. 161, CURVE 3
P.I. STA. 206+62.90
D=06°11'45" LT.
Dc=00°30'04"
R=11,435.61'
T=618.90'
L=1,236.60'
E=16.74'

RI C1 — RAMP I, CURVE 1
P.I. STA. 440+88.24
D = 20°30'00" LT.
Dc = 07°30'00"
R = 764.49'
T = 138.24'
L = 273.33'
E = 12.40'

RI C2 — RAMP I, CURVE 2
P.I. STA. 448+45.43
D = 23°51'58" RT.
Dc = 10°00'00"
R = 573.69'
T = 121.24'
L = 238.66'
E = 12.67'

RWRN C3 — RELOCATED WORTHINGTON RD. NORTH, CURVE 2
P.I. STA. 207+00
D = 39°41'55" RT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 23°47'14" RT.
Lc = 396.45'
Ts = 478.34'
Es = 63.58'

RWRN C4 — RELOCATED WORTHINGTON RD. NORTH, CURVE 4
P.I. STA. 217+99.96
D = 29°27'57" RT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 13°33'16" RT.
Lc = 225.91'
Ts = 384.42'
Es = 35.63'

RJ C1 — RAMP J, CURVE 1
P.I. STA. 454+18.04
D = 32°23'57" RT.
Dc = 11°30'00"
R = 498.22'
T = 144.74'
L = 281.73'
E = 20.60'

RJ C2 — RAMP J, CURVE 2
P.I. STA. 459+41.24
D = 26°00'00" LT.
Dc = 07°30'00"
R = 763.94'
T = 176.37'
L = 346.67'
E = 20.09'

RWRN C5 — RELOCATED WORTHINGTON RD. NORTH, CURVE 5
P.I. STA. 227+95.54
D = 39°00'54" LT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 23°06'13" LT.
Lc = 385.06'
Ts = 471.89'
Es = 61.41'

RJ C3 — RAMP J, CURVE 3
P.I. STA. 463+88.76
D = 08°18'07" LT.
Dc = 01°30'00"
R = 3,819.72'
T = 277.22'
L = 553.46'
E = 10.05'

PWYFR C2 — PROP. WATKINS-YORK FRONTAGE RD., CURVE 2
P.I. STA. 194+97.02
D = 48°34'39" RT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 32°39'57" RT.
Lc = 544.44'
Ts = 564.83'
Es = 96.10'

PWYFR C3 — PROP. WATKINS-YORK FRONTAGE RD., CURVE 3
P.I. STA. 206+84.64
D = 22°40'55" LT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 06°46'14" LT.
Lc = 112.84'
Ts = 324.65'
Es = 22.14'

RK C1 — RAMP K, CURVE 1
P.I. STA. 437+53.40
D = 12°28'42" RT.
Dc = 02°15'00"
R = 2,546.48'
T = 278.40'
L = 554.60'
E = 15.17'

RK C2 — RAMP K, CURVE 2
P.I. STA. 441+79.34
D = 22°10'47" RT.
Dc = 07°30'00"
R = 763.94'
T = 149.74'
L = 295.73'
E = 14.54'

RK C3 — RAMP K, CURVE 3
P.I. STA. 447+90.43
D = 25°00'15" LT.
Dc = 10°00'00"
R = 572.96'
T = 127.04'
L = 250.04'
E = 13.92'

RL C1 — RAMP L, CURVE 1
P.I. STA. 454+27.21
D = 27°16'57" LT.
Dc = 10°00'00"
R = 572.96'
T = 139.05'
L = 272.82'
E = 16.63'

RL C2 — RAMP L, CURVE 2
P.I. STA. 460+42.93
D = 29°09'25" RT.
Dc = 07°30'00"
R = 763.94'
T = 198.69'
L = 388.76'
E = 25.41'

PSRII C1 — SERVICE RD. 11, CURVE 1
P.I. STA. 214+89.99
D = 81°05'19" LT.
Dc = 27°56'57"
R = 205.00'
T = 175.36'
L = 290.13'
E = 64.77'

PSRII C2 — SERVICE RD. 11, CURVE 2
P.I. STA. 219+02.01
D = 52°06'41" RT.
Dc = 09°59'57"
R = 573.00'
T = 280.16'
L = 521.15'
E = 64.82'

PSRII C3 — SERVICE RD. 11, CURVE 3
P.I. STA. 225+44.05
D = 32°16'35" RT.
Dc = 09°59.57"
R = 573.00'
T = 165.80'
L = 322.78'
E = 23.51'

Ⓐ STA. 395+70.02, S.R. 37 = STA. 212+83.63, RELOCATED WORTHINGTON ROAD NORTH

Ⓑ STA. 451+13.72, S.R. 161 END, S.R. 37 BEGINS = STA. 406+76.95 S.R. 37

Ⓒ STA. 411+12.78 S.R. 37 = STA. 451+60.74 RAMP K = STA. 450+41.60 RAMP L

Ⓓ STA. 417+63.14 S.R. 37 = STA. 212+25.08 WATKINS-YORK FRONTAGE ROAD = STA. 212+58.82 SERVICE RD. 11

CENTERLINE REFERENCE MONUMENTS (●) ARE TO BE PLACED AT THE FOLLOWING LOCATIONS

QUANTITY	STATION	OFFSET
	PROP. S.R. 161/37	
1	PROP. STA. 430+00	℄
1	PROP. STA. 435+00	℄
1	PROP. STA. 440+00	℄
1	PROP. PT STA. 445+09.43	℄
1	PROP. STA. 450+00	℄
1	PROP. STA. 455+00	℄
1	PROP. STA. 460+00	℄
1	PROP. STA. 465+00	℄
1	PROP. STA. 470+00	℄
1	PROP. STA. 475+00	℄
10	SUBTOTAL SHEET 2	

LEGEND
- △ - STONE FOUND
- ○ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - PROPOSED ℄ REFERENCE MONUMENT
- ✕ - RAILROAD SPIKE SET

REV	DATE	DESCRIPTION

PLAN COMPLETED: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 100, 200, 400

PID NO. 77221

R.W. DESIGNER C.S. | R.W. REVIEWER T.A.

CENTERLINE PLAT
STA. 425+00 PROP. S.R. 161
TO STA. 475+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

2 / 88

1263
1349

L16100I2.RCP 09/26/05

LOTS 32, 33, 34, 35, 36, 37 & 38
QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TWP.
LICKING COUNTY

LEGEND

- ▭ - STONE FOUND
- o - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - PROPOSED ℄ REFERENCE MONUMENT
- ✗ - RAILROAD SPIKE SET

CENTERLINE REFERENCE MONUMENTS (●) ARE TO BE PLACED AT THE FOLLOWING LOCATIONS

QUANTITY	STATION	OFFSET
PROP. S.R. 37		
1	PROP. STA. 480+00	℄
1	PROP. STA. 485+00	℄
1	PROP. PC STA. 488+61.58	℄
1	PROP. PT STA. 494+45.94	℄
1	PROP. STA. 500+00	℄
1	PROP. STA. 505+00	℄
1	PROP. STA. 510+00	℄
1	PROP. STA. 515+00	℄
1	PROP. STA. 520+00	℄
1	PROP. STA. 525+00	℄
10	SUBTOTAL SHEET 3	

EX. S.R. 37
CURVE 1
P.I. Sta = 247+94.29
D = 47° 01′ 02″ (RT)
Dc = 3° 30′ 00″
R = 1,637.02′
Ls = 250.00′
Theta = 4° 22′ 30″
LT = 166.72′
ST = 83.38′
x = 249.85′
y = 6.36′
k = 124.98′
p = 1.59′
Dc = 38° 16′ 02″ (RT)
Lc = 1,093.35′
Ts = 837.76′
Es = 149.90′

EX. S.R. 37
CURVE 2
P.I. Sta = 268+89.97
D = 26° 03′ 46″ (LT)
Dc = 3° 30′ 00″
R = 1,637.02′
Ls = 250.00′
Theta = 4° 22′ 30″
LT = 166.72′
ST = 83.38′
x = 249.85′
y = 6.36′
k = 124.98′
p = 1.59′
Dc = 17° 18′ 46″ (LT)
Lc = 494.65′
Ts = 504.22′
Es = 44.91′

S.R. 37
CURVE 1
P.I. STA. 491+53.90
D = 04°22′58″ RT.
Dc = 00°45′00″
R = 7,639.44′
T = 292.32′
L = 584.36′
E = 5.59′

OUTVILLE-MORSE FRONTAGE RD.
CURVE 1
P.I. STA. 512+00.30
D = 03°51′37″ RT.
Dc = 00°30′00″
R = 11,459.19′
T = 386.17′
L = 772.05′
E = 6.51′

S 3°54′48″ W
S 4°06′41″ W
S 3°49′12″ W
S 3°46′35″ W
S 86°38′39″ E
S 86°47′24″ E
S 86°16′03″ E
S 82°24′26″ E
EX. S 80°18′55″ E

APPROXIMATE LOCATION LOT LINE

LOT 32 / LOT 33
LOT 33 / LOT 34
LOT 34 / LOT 35
LOT 35 / LOT 36
LOT 36 / LOT 37
LOT 37 / LOT 38

235+00, 240+00, 245+00, 250+00, 255+00, 260+00, 265+00, 270+00, 275+00, 280+00, 285+00
475+00, 480+00, 485+00, 490+00, 495+00, 500+00, 505+00, 510+00, 515+00, 520+00, 525+00
25+00, 20+00, 15+00

TS Sta. 239+56.53
SC Sta. 242+06.53
CS Sta. 252+99.88
ST Sta. 255+49.88
P.O.T. STA. 30+00.00
TS Sta. 263+85.74
SC Sta. 266+35.74
CS Sta. 271+30.39
ST Sta. 273+80.39
PC Sta. 488+61.58
PT Sta. 494+45.94
POT Sta. 26+27.25
P.C. STA. 508+14.13
P.T. STA. 515+86.18
P.T. STA. 13+72.14
P.T. STA. 243+17.17

STA. 476+12.22
STA. 241+72.04
STA. 497+19.43
STA. 488+68.48
STA. 497+21.01 S.R. 37 = STA. 22+66.21, OUTVILLE RD.
STA. 20+50, OUTVILLE RD. = STA. 497+31.85 OUTVILLE-MORSE FRONTAGE RD.
STA. 505+37.09
STA. 505+48.08
STA. 509+71.87
STA. 509+81.92
STA. 518+17.53
STA. 518+26.90

161.26′
133.09′
117.26′
245.10′

EX. ℄ SURVEY, S.R. 37
EX. ℄ SURVEY, OUTVILLE RD.
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37
PROP. ℄ SURVEY & CONSTRUCTION, SERVICE RD. II
PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.
PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE RD.

MATCHLINE STA. 475+00 SEE SHEET 2
MATCHLINE STA. 525+00 SEE SHEET 4

REV	DATE	DESCRIPTION

PLAN COMPLETED: 4/29/05

L16100I3.RCP 09/26/05

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PID NO. 77221

HORIZONTAL SCALE IN FEET
0 100 200 400

CENTERLINE PLAT
STA. 475+00 TO STA. 525+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

3 / 88

1264
1349

LOTS 38, 39, 40 & 41
QTR. TWP. 4, T2N, R14W, USML
LOT 41, QTR. TWP. 4
T2N, R13W, USML
ST. ALBANS. TWP.
LOTS 27, 28 & 29
QTR. TWP. 3, T2N, R13W
GRANVILLE TWP.
LICKING COUNTY

APPROXIMATE LOCATION LOT LINE — LOT 38 / LOT 39 — S 3°43'41" W
LOT 39 / LOT 40 — S 4°01'00" W
APPROXIMATE LOCATION LOT LINE — LOT 40 / LOT 41 — S 4°03'16" W
ST. ALBANS TWP. / GRANVILLE TWP. — RANGE 14 / RANGE 13 — S 4°03'16" W
LOT 41 / LOT 29 — 4TH QUARTER / 3RD QUARTER — S 4°03'16" W
LOT 29 / LOT 28 — S 3°18'02" W
APPROXIMATE LOCATION LOT LINE — LOT 28 / LOT 27 — S 4°08'06" W

EX. ℄ SURVEY, S.R. 37

C.R. 539A EXTENSION
CURVE 1
P.I. STA. 313+44.17
D = 01°18'17" LT.
Dc = 00°30'00"
R = 11,459.16'
T = 130.49'
L = 260.96'
E = 0.74'

C.R. 539A EXTENSION
CURVE 2
P.I. STA. 322+55.21
D = 00°47'13" LT.
Dc = 00°30'00"
R = 11,459.16'
T = 78.70'
L = 157.40'
E = 0.27'

EX. S.R. 37
CURVE 3
P.I. STA. 328+56.93
D = 03°44'32" RT.
Dc = 00°30'04"
R = 11,431.93'
T = 373.47'
L = 746.67'
E = 6.10'

C.R. 539A EXTENSION
CURVE 3
P.I. STA. 336+26.62
D = 05°50'33" RT.
Dc = 01°13'38"
R = 4,668.74'
T = 238.24'
L = 476.07'
E = 6.07'

PROP. S.R. 37
CURVE 2
P.I. STA. 573+72.12
D = 05°50'33" RT.
Dc = 01°15'00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'

OUTVILLE-MORSE FRONTAGE RD.
CURVE 2
P.I. STA. 573+67.71
D = 05°50'33" RT.
Dc = 01°15'00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'

MATCHLINE STA. 525+00 SEE SHEET 3

P.O.T. STA. 288+00.00

290+00 295+00 300+00 305+00 310+00 315+00 320+00 325+00 330+00 335+00

STA. 526+64.87
STA. 526+74.34
STA. 535+13.10
STA. 535+21.97
STA. 543+42.63
STA. 543+51.43
STA. 545+89.28
STA. 545+98.08
STA. 552+83.79
STA. 552+91.57
STA. 561+29.48
STA. 569+73.58
STA. 571+38.22
STA. 305+84.34
STA. 297+52.28
STA. 308+31.72
STA. 315+27.89
STA. 323+63.50
STA. 332+09.85
STA. 560+21.27
STA. 569+64.95

S 80° 18' 55" E
S 82° 24' 26" E
S 81° 37' 13" E
S 76° 34' 23" E

157.01' 126.57' 115.78' 96.26' 86.33' 86.24'
117.27' 117.23' 117.22' 117.22' 117.22' 117.33' 117.29'

PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

P.C. STA. 312+13.68
P.T. STA. 314+74.64
P.C. STA. 321+76.51
P.T. STA. 323+33.91
P.C. STA. 324+8.46
P.C. STA. 333+88.38
P.C. STA. 571+33.81
PT Sta. 332+30.33

MATCHLINE STA. 575+00 SEE SHEET 5

PT Sta. 14+99.47
C.S. STA. 14+55.25
S.C. STA. 12+27.56
PC Sta. 11+88.53
T.S. STA. 9+71.21
P.O.T. STA. 7+53.65
STA. 561+56.93 OUTVILLE-MORSE FRONTAGE RD. STA. 18+49.92 MORSE RD.
STA. 14+50.96
PROP. ℄ SURVEY & CONSTRUCTION, MORSE RD.
EX. ℄ SURVEY, MORSE RD.

CENTERLINE REFERENCE MONUMENTS (●) ARE TO BE PLACED AT THE FOLLOWING LOCATIONS

QUANTITY	STATION	OFFSET
	PROP. S.R. 37	
1	PROP. STA. 530+00	℄
1	PROP. STA. 535+00	℄
1	PROP. STA. 540+00	℄
1	PROP. STA. 545+00	℄
1	PROP. STA. 550+00	℄
1	PROP. STA. 555+00	℄
1	PROP. STA. 560+00	℄
1	PROP. STA. 565+00	℄
1	PROP. PC STA. 571+38.22	℄
9	SUBTOTAL SHEET 4	

LEGEND
- ⏢ - STONE FOUND
- o - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - PROPOSED ℄ REFERENCE MONUMENT
- ✗ - RAILROAD SPIKE SET

N

0 100 200 400 HORIZONTAL SCALE IN FEET

R.W. DESIGNER: C.S.
R.W. REVIEWER: T.A.
PID NO.: 77221

CENTERLINE PLAT
STA. 525+00 TO STA. 575+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

4 / 88

REV	DATE	DESCRIPTION

PLAN COMPLETED: 4/29/05

1265
1349

L16100I4.RCP 09/26/05

LOTS 21, 22, 23, 24, 25, 26 & 27
QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TWP.
LICKING COUNTY

C.R. 539A EXTENSION
CURVE 3
P.I. STA. 336+26.62
D = 05°50'33" RT.
Dc = 01°13'38"
R = 4,668.74'
T = 238.24'
L = 476.07'
E = 6.07'

PROP. S.R. 37
CURVE 2
P.I. STA. 573+72.12
D = 05°50'33" RT.
Dc = 01°15'00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'

APPROXIMATE LOCATION LOT LINE
LOT 27 / LOT 26
S 4°08'06" W

APPROXIMATE LOCATION LOT LINE
LOT 26 / LOT 25
S 4°08'06" W

LOT 25 / LOT 24
S 4°08'06" W

C.R. 539A EXTENSION
CURVE 4
CURVE 360+04.05
D = 19°00'34" LT.
Dc = 03°00'00"
R = 1,909.86'
Ls = 159.00'
THETA = 02°23'06"
LT = 106.01'
ST = 53.01'
x = 158.97'
y = 2.21'
k = 79.50'
p = 0.55'
Dc = 14°14'22" LT.
Lc = 474.64'
Ts = 399.35'
Es = 14.84'

APPROXIMATE LOCATION LOT LINE
LOT 24 / LOT 23
S 4°51'36" W

APPROXIMATE LOCATION LOT LINE
LOT 23 / LOT 22
S 4°51'36" W

LOT 22 / LOT 21
S 4°42'47" W

PROP. S.R. 37
CURVE 3
P.I. STA. 617+41.76
D = 13°43'30" RT.
Dc = 01°28'00"
R = 3,906.55'
T = 470.15'
L = 935.80'
E = 28.19'

P.T. STA. 338+64.44
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37
POT Sta. 343+80.41
POT Sta. 347+16.84
T.S. STA. 356+04.70
S.C. STA. 357+63.70
C.S. STA. 362+38.34
S.T. STA. 363+97.34
P.O.T. STA. 364+66.85
PROP. PC Sta. 612+71.61
PROP. PT Sta. 622+07.41
MATCHLINE STA. 575+00 SEE SHEET 4
P.T. STA. 576+01.20
PROP. ℄ SURVEY & CONSTRUCTION, C.R. 539A EXTENSION
STA. 348+49.54
STA. 340+27.10
340+00
345+00
350+00
355+00
360+00
P.T. STA. 576+05.61
87.23'
580+00
POT Sta. 0+00
347+51.35
585+00
87.23'
590+00
87.39'
595+00
600+00
605+00
610+00
615+00
620+00
625+00
118.56'
340+00
POT Sta. 345+00
344+12.41
EX. S76°34'23"E
EX. N 13°25'36" E
5+00
10+00
15+00
20+00
25+00
30+00
35+00
40+00
576+00
580+00
STA. 356+71.66
STA. 586+04.76
EX. N 13°25'36" E
STA. 594+27.20
STA. 602+65.84
STA. 610+86.65
STA. 619+18.14
STA. 619+60.68
125.09' RT.
N 84°25'33" E
EX. & PROP. S 62°50'23" E
EX. & PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37
EX. & PROP. S 76°33'53" E
STA. 577+82.32
STA. 577+91.10
EX. S 76°34'23" E
EX. ℄ SURVEY, S.R. 37
S 76°33'53"E
PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.
EX. PC Sta. 28+36.30
EX. PT Sta. 37+72.10
MATCHLINE STA. 625+00 SEE SHEET 6
S 4°08'06" W
S 4°51'36" W

OUTVILLE-MORSE FRONTAGE RD.
CURVE 2
P.I. STA. 573+67.71
D = 05°50'33" RT.
Dc = 01°15'00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'

EX. S.R. 37
CURVE 4
P.I. STA. 33+06.45
D = 13°43'30" RT.
Dc = 01°28'00"
R = 3,906.55'
T = 470.15'
L = 935.80'
E = 28.19'

CENTERLINE REFERENCE MONUMENTS (●) ARE TO BE PLACED AT THE FOLLOWING LOCATIONS

QUANTITY	STATION	OFFSET
	PROP. S.R. 37	
1	PROP. PT STA. 576+05.61	℄
1	PROP. STA. 580+00	℄
1	PROP. STA. 585+00	℄
1	PROP. STA. 590+00	℄
1	PROP. STA. 595+00	℄
1	PROP. STA. 600+00	℄
1	PROP. STA. 605+00	℄
1	PROP. STA. 610+00	℄
1	PROP. STA. 615+00	℄
1	PROP. STA. 620+00	℄
10	SUBTOTAL SHEET 5	

LEGEND
- ⏢ - STONE FOUND
- ○ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - PROPOSED ℄ REFERENCE MONUMENT
- ✗ - RAILROAD SPIKE SET

REV	DATE	DESCRIPTION

PLAN COMPLETED: 4/29/05

HORIZONTAL SCALE IN FEET
0 100 200 400

R.W. DESIGNER: C.S.
R.W. REVIEWER: T.A.
PID NO. 77221

CENTERLINE PLAT
PROP. S.R. 37
STA. 575+00 TO STA. 625+00

LIC-161-6.65
LIC-37-10.25

5 / 88

1266
1349

L16100I5.RCP 09/26/05

LOTS 16, 17, 18, 19, 20 & 21
QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TWP.
LICKING COUNTY

LOT 20 / LOT 21 — S 4°17'06" W
LOT 19 / LOT 20 — S 3°41'34" W
LOT 18 / LOT 19 — S 4°35'03" W
LOT 17 / LOT 18 — S 4°35'03" W
LOT 16 / LOT 17 — S 4°35'03" W

PROP. S.R. 37
CURVE 4
P.I. STA. 648+36.87
D = 06°36'15" LT.
Dc = 00°28'00"
R = 12,277.67'
T = 708.37'
L = 1,415.18'
E = 20.42'

END PROJECT
STA. 654+00
PROP. S.R. 37
S.L.W. 12.39

EX. PC Sta. 56+93.19
PROP. PC Sta. 641+28.50

EX. PT Sta. 71+08.36
PROP. PT Sta. 655+43.68

EX. & PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

STA. 636+37.06
124.90' LT.

STA. 627+90.26

S 4°36'28" W
135.02'

STA. 636+88.84
0.20' LT.

STA. 636+88.97

STA. 654+21.02

PROP. S 69°26'38" E

STA. 662+64.80

STA. 645+64.78

EX. & PROP. S 62°50'23" E

MATCHLINE STA. 625+00
SEE SHEET 5

+00 | 630+00 | 635+00 | 640+00 | 645+00 | 650+00 | 655+00 | 660+00 | 665+00 | 670+00
45+00 | 50+00 | 55+00 | 60+00 | 65+00 | 70+00 | 75+00 | 80+00 | 85+00

EX. S.R. 37
CURVE 5
P.I. STA. 64+01.56
D = 06°36'15" LT.
Dc = 00°28'00"
R = 12,277.67'
T = 708.37'
L = 1,415.18'
E = 20.42'

CENTERLINE REFERENCE MONUMENTS (●) ARE TO BE PLACED AT THE FOLLOWING LOCATIONS

QUANTITY	STATION	OFFSET
	PROP. S.R. 37	
1	PROP. STA. 630+00	℄
1	PROP. STA. 635+00	℄
1	PROP. PC STA. 641+28.50	℄
1	PROP. STA. 645+00	℄
1	PROP. PC STA. 650+00.97	℄
1	PROP. PT STA. 655+43.68	℄
6	SUBTOTAL SHEET 6	
10	SUBTOTAL SHEET 1	
10	SUBTOTAL SHEET 2	
10	SUBTOTAL SHEET 3	
9	SUBTOTAL SHEET 4	
10	SUBTOTAL SHEET 5	
55	TOTAL CARRIED TO GENERAL SUMMARY	

LEGEND
- STONE FOUND
- I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - PROPOSED ℄ REFERENCE MONUMENT
- ✗ - RAILROAD SPIKE SET

REV	DATE	DESCRIPTION

PLAN COMPLETED: 4/29/05

HORIZONTAL SCALE IN FEET
0 100 200 400

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PID NO. 77221

CENTERLINE PLAT
STA. 625+00 TO STA. 670+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

6 / 88
1267
1349

L16100I6.RCP 09/26/05

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE — CORP LINE OR
FENCE (EXISTING) — (PROPOSED)
CENTERLINE — 325+00 — 330+00
TREES — STUMPS — (TO BE REMOVED)
UTILITY POLES: TELEPHONE — POWER — LIGHT
LIMITED ACCESS & RIGHT OF WAY — LA-R/W
LIMITED ACCESS (ONLY) — LA
RIGHT OF WAY — R/W
TEMP. RIGHT OF WAY — T ESMT
EXISTING RIGHT OF WAY — R/W
PROPERTY LINE — (IN EXISTING FENCE)
GUARDRAIL (EXISTING) — (PROPOSED)
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT — CH ESMT
AERIAL EASEMENT — A ESMT
UTILITY EASEMENT — U ESMT

STRUCTURES KEY:

- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LOTS 10 &11, QTR. TWP. 3, T2N, R14W, USML; LOTS 25 & 26, QTR. TWP. 4, T2N, R14W, USML ST. ALBANS TWP. LICKING COUNTY

UTILITY OWNERS

COLUMBIA GAS OF OHIO
920 GOODALE AVE.
COLUMBUS, OHIO 43212
ATTN: LYLE WHITTEMORE
614-460-2170

MARATHON ASHLAND PIPELINE LLC
539 SOUTH MAIN ST.
FINDLAY, OHIO 45840
ATTN: DAVID S. WISNER
419-421-2211

AMERICAN ELECTRIC POWER TRANSMISSION (AEP)
825 TECH CENTER DRIVE
GAHANNA, OH 43230
ATTN: MICHELLE L. ODOM
614-552-1108

ENERVEST OPERATING LLC
300 CAPITOL STREET
CHARLESTON, WV 25301
ATTN: DAVID ELKIN
304-343-5505

ALLTEL
66 NORTH FOURTH ST.
NEWARK, OHIO 43055
ATTN: SHARON INGELMAN
740-349-8915

LICKING RURAL ELECTRIC, INC.
11339 MT. VERNON RD.
P.O. BOX 455
UTICA, OHIO 43080-0455
ATTN: JOHN STRATHMAN
1-800-255-6815

AMERICAN ELECTRIC POWER
CENTRAL OHIO REGION (AEP)
850 TECH CENTER DR.
GAHANNA, OH 43230
ATTN: RICK ECKEL
614-883-6829

SPRINT
441 WEST BROAD STREET
PATASKALA, OHIO 43062
ATTN: DENNIS FIGLEY
614-927-8301

INSIGHT COMMUNICATIONS
3770 EAST LIVINGSTON AVE.
COLUMBUS, OHIO 43227
ATTN: JOHN WINTERS
614-501-9432

COLUMBIA GAS TRANSMISSION CORP.
301 MAPLE ST.
SUGAR GROVE, OHIO 43155
ATTN: JOHN RADER
740-746-2279

(178) CIRCLE G LAZY K RANCH LIMITED PARTNERSHIP 66-318222-00.000 PARCEL 1

(178) CIRCLE G LAZY K RANCH LIMITED PARTNERSHIP 66-318222-02.000 PARCEL 2 NO TAKE

(181) SCOTT ALLEN & SANDRA ELLEN MOWREY 66-319200-00.000 PARCEL 1

66-319200-00.001 PARCEL 4 NO TAKE

(184) GEORGE L. & FRANCES E. DAVISON 66-317820-00.000 PARCEL 1 NO TAKE

(184) GEORGE L. & FRANCES E. DAVISON 66-317826-00.000 NO TAKE

JOSEPH B. & ANITA C. HALE 66-317826-00.001

STEVEN L. & PAMELA S. HILLS 66-317826-01.000

(176) RICHARD J. & SUSAN E. CHENAULT 66-318222 -01.000

(179) HEIRS OF EVERETT W. & BEULAH V. BROWN

(177) MICHAEL D. & DAWN M. TURNER 66-318222-03.000

(173) JAMES E. & KATHRYN V. STACY TOTAL TAKE FROM PHASE ONE

(174) STEVEN E. & ELIZABETH S. TUTTLE 66-318642 -00.000

(175) CHARLES W. & BERNICE J. UTTER 66-317730-00.001

"E" PARCEL

STEVEN E. & ELIZABETH S. TUTTLE 66-317730-00.000 NO TAKE

(182) RUTH ANN CALDWELL, TRUSTEE, UNDER THE ROBERT G. CALDWELL LIVING TRUST
RUTH ANN CALDWELL, TRUSTEE, UNDER THE RUTH ANN CALDWELL LIVING TRUST
66-318348-00.000

(183) RONALD E. & RAYMOND A., JUDY & LINDA L. CROAK 66-318276-00.000

(184) GEORGE L. & FRANCES E. DAVISON 66-317832-00.000 PARCEL 2

BEGIN PROJECT STA. 351+00 PROP. S.R. 161

BEGIN L/A ACQUISITION STA. 381+97.67 PROP. S.R. 161

BEGIN WORK STA. 143+00 SERVICE RD. 10

BEGIN R/W ACQUISITION STA. 144+50 SERVICE RD. 10

END WORK STA. 150+52.34 SERVICE RD. 10

BEGIN WORK STA. 150+32.10 RELOCATED WORTHINGTON RD. NORTH

EQUATION: STA 150+52.34 BK = STA 150+32.10 AHD

BEGIN WORK STA. 113+00 PROP. WATKINS-YORK FRONTAGE RD.

BEGIN R/W ACQUISITION PROP. WATKINS-YORK FRONTAGE RD. STA. 140+18.78

PROP. ℄ SURVEY & CONSTRUCTION, RELOCATED WORTHINGTON RD. NORTH

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 161

PROP. ℄ SURVEY & CONSTRUCTION, WATKINS-YORK FRONTAGE RD.

TEMPORARY

PROP. L/A R/W

PROP. R/W

PROP. R/W

LOT 11 LOT 10

LOT 25 LOT 26

3RD QUARTER, 2ND TWP., 14TH RANGE 4TH QUARTER, 2ND TWP., 14TH RANGE

MATCHLINE STA. 425+00 SEE SHEET 9

SEE SHEET 8A FOR ALL PROPERTIES OF THIS OWNER

REV	DATE	DESCRIPTION
4	8/15/06	CHANGED 182 OWNERSHIP
3	8/02/06	ADDED 175-E, DELETED 175-TV1 & 175-TV2
2	6/23/06	REVISED 184 AUD. PAR. NO.
1	2/06/06	DELETED 177-TV, REVISED 176-WDV & 177-WDV

PLAN COMPLETED: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 100, 200, 400

PID NO. 77221

R.W. DESIGNER C.S. R.W. REVIEWER T.A.

PARCELS 173, 174, 175, 176, 177, 178, 181, 182, 183, 184, 192, 193

PROPERTY MAP
STA. 380+00 TO STA. 425+00 PROP. S.R. 161

LIC-161-6.65
LIC-37-10.25

8 / 88

1268
1349

L161001I.RPM 08/15/06

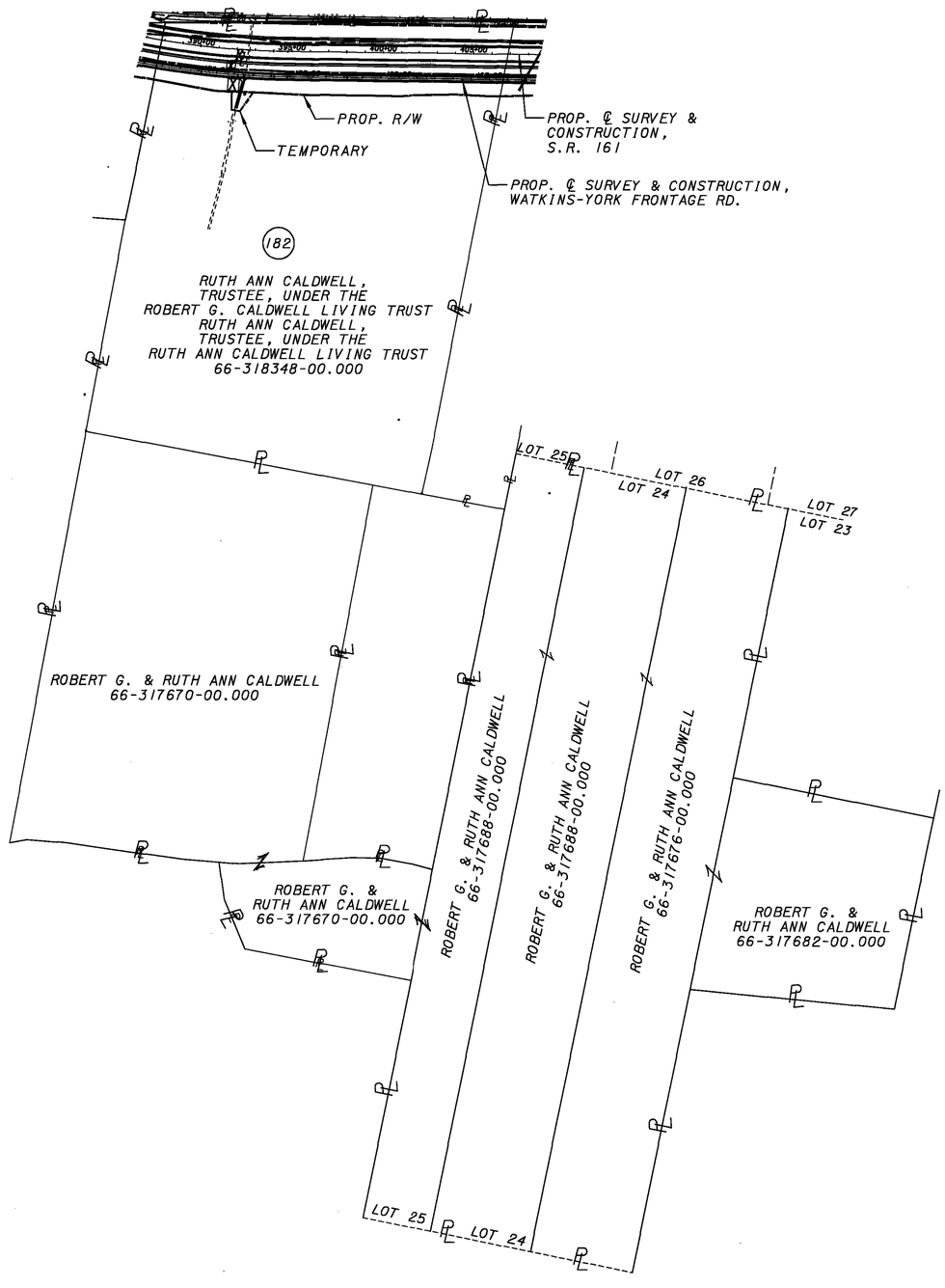
CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE — CORP LINE — OR
FENCE (EXISTING) — X — X — (PROPOSED) — X —
CENTERLINE — 325+00 — 330+00
TREES STUMPS (TO BE REMOVED)
UTILITY POLES: TELEPHONE POWER LIGHT
LIMITED ACCESS & RIGHT OF WAY — LA-R/W —
LIMITED ACCESS (ONLY) — LA —
RIGHT OF WAY — R/W —
TEMP. RIGHT OF WAY — T ESMT —
EXISTING RIGHT OF WAY — R/W —
PROPERTY LINE — ℄ — (IN EXISTING FENCE) — X —
GUARDRAIL (EXISTING) — o — o — o — (PROPOSED) — •
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT — CH ESMT —
AERIAL EASEMENT — A ESMT —
UTILITY EASEMENT — U ESMT —

STRUCTURES KEY:

- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LOTS 1 & 9, QTR. TWP. 3, T2N, R14W, USML; LOTS 23, 24, 25, 26 & 27, QTR. TWP. 4, T2N, R14W, USML ST. ALBANS TWP. LICKING COUNTY



REV	DATE	DESCRIPTION
1	8/15/06	CHANGED 182 OWNERSHIP

PLAN COMPLETED: 4/29/05

HORIZONTAL SCALE IN FEET
0 200 400 800

PID NO. 77221

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.

PARCELS 173.174.175. 176.177.178. 181.182.183. 184.192.193

PROPERTY MAP
STA. 380+00 TO STA. 425+00 PROP. S.R. 161

LIC-161-6.65
LIC-37-10.25

8A/88

1269
1349

L161OO17.RPM 08/15/06

LOTS 26, 27, 28, 29, 30, 31 & 32
QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TWP.
LICKING COUNTY

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

CONVENTIONAL SIGNS
COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE
FENCE (EXISTING) (PROPOSED)
CENTERLINE
TREES STUMPS (TO BE REMOVED)
UTILITY POLES: TELEPHONE POWER LIGHT
LIMITED ACCESS & RIGHT OF WAY
LIMITED ACCESS (ONLY) LA
RIGHT OF WAY R/W
TEMP. RIGHT OF WAY T ESMT
EXISTING RIGHT OF WAY R/W
PROPERTY LINE (IN EXISTING FENCE)
GUARDRAIL (EXISTING) (PROPOSED)
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT CH ESMT
AERIAL EASEMENT A ESMT
UTILITY EASEMENT U ESMT

(185) DOUGLAS L. BENNETT 66-318990-00.000, PARCEL 2 NO TAKE
(188) RICHARD E. SEVERANCE 66-319056-00.004 PARCEL 3, NO TAKE
(188) RICHARD E. SEVERANCE 66-319056-00.002, PARCEL 4, NO TAKE
(188) RICHARD E. SEVERANCE 66-319056-00.003 PARCEL 2
(185) DOUGLAS L. BENNETT 66-318990-00.000 PARCEL 1
(188) RICHARD E. SEVERANCE 66-319056-00.000 PARCEL 1
(188) RICHARD E. SEVERANCE 66-319056-00.001 PARCEL 3
(184) GEORGE L. & FRANCES E. DAVISON 66-317826-00.000
(193) STEVEN L. & PAMELA S. HILLS 66-317826-01.000
(184) GEORGE L. & FRANCES E. DAVISON 66-317832-00.000 PARCEL 2
(186) RONALD C. & CLAUDIA K. HUTCHINSON 66-317514-01.000
(184) GEORGE L. & FRANCES E. DAVISON 66-317514-01.001 NO TAKE
(189) THOMAS N. & KIMBERLY A. TANEFF 66-317514-00.000
(211) KENNETH E. CONNER 66-319842-00.000
(201) ROBERT E. BAKER 66-317328-00.000
(213) JOHN E. & BETTY F. HANKINSON, TRUSTEES 66-318138-00.00
(214) THE CHURCH OF CHRIST AT ALEXANDRIA, INC. 66-318138-01.000 NO TAKE
(215) JAMES & F. JEAN WILLIAMS 66-319992-00.000 NO TAKE
(209) JOHN E. & BETTY F. HANKINSON, TRUSTEES 66-318138-00.000
(210) MARTHA ACKERMAN 66-317310-00.000
(212) LANA HANLON 66-319536-00.000
(190) TIMOTHY M. & MARILYNN A. LIGHT 66-317436-00.001
(191) PETER BENSON, ETAL 66-317436-00.000
(195) 66-317436-00.004
(196) 66-320640-00.000
(197) 66-319770-00.000
(198) 66-317436-01.000
(199) WILBERT W. & ALICE W. BODEN 66-317436-00.002
66-317436-02.000
(202) 66-317316-00.000
(203) 66-321138-00.000
(204) 66-319530-00.000
(205) 66-321540-00.000

BEGIN L/A ACQUISITION STA. 394+60 PROP. S.R. 37
BEGIN WORK STA. 394+00 PROP. S.R. 37
BEGIN R/W ACQUISITION STA. 191+20, PROP. RELOCATED WORTHINGTON RD. NORTH
END WORK STA. 233+00 RELOCATED WORTHINGTON RD. NORTH
END R/W ACQUISITION STA. 233+92.83 RELOCATED WORTHINGTON RD. NORTH
END WORK STA. 212+12.65 WATKINS-YORK FRONTAGE RD.
BEGIN WORK STA. 212+70.82 SERVICE RD. 11
END L/A ACQUISITION BEGIN R/W ACQUISITION STA. 418+52.54 PROP. S.R. 37
END WORK STA. 419+71.00 PROP. S.R. 37
END R/W ACQUISITION STA. 420+31.28 PROP. S.R. 37

EX. ℄ SURVEY S.R. 37
EX. ℄ SURVEY S.R. 161
EX. ℄ SURVEY YORK RD.
PROP. ℄ SURVEY & CONSTRUCTION, RELOCATED WORTHINGTON RD. NORTH
PROP. ℄ SURVEY & CONSTRUCTION, RAMP I
PROP. ℄ SURVEY & CONSTRUCTION, RAMP J
PROP. ℄ SURVEY & CONSTRUCTION, RAMP K
PROP. ℄ SURVEY & CONSTRUCTION, RAMP L
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 161
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37
PROP. ℄ SURVEY & CONSTRUCTION, SERVICE RD. 11
PROP. ℄ SURVEY & CONSTRUCTION, WATKINS-YORK FRONTAGE RD.
PROP. L/A
PROP. L/A R/W
PROP. L/A WORK AGREEMENT
PROP. R/W
PROP. R/W "E" PARCEL
TEMPORARY
TOTAL TAKE
HATCHED AREA FOR FUTURE VACATION
APPROXIMATE LOCATION LOT LINE
MATCHLINE STA. 425+00 SEE SHEET 8
MATCHLINE STA. 475+00 SEE SHEET 10
57.026 AC.
95.026 AC.
5.506 AC.
5.173 AC.
4.725 AC.
2.202 AC.
1.872AC.
2.633AC.
1.561 AC.
0.739 AC.
0.920 AC.
0.213AC.

(187) MICHAEL E. & EDWINA ORBAN 66-318330-00.000, TOTAL TAKE
(195) TERRY STAGGERS & SUZANNE SCOTT-STAGGERS 66-317436-00.004, TOTAL TAKE BY ORIGINAL DEED
(196) TED A. ZANGMEISTER 66-320640-00.000, TOTAL TAKE BY ORIGINAL DEED
(197) JAMES HENRY & DOROTHY JEAN BOARD, TRUSTEES 66-319770-00.000, TOTAL TAKE BY ORIGINAL DEED
(198) CHARLES DENNIS & SUSAN E. CLARK 66-317436-01.000, PARCEL 1 66-317436-02.000, PARCEL 2
(202) DAVID E. & KATHRINE A. HORNER 66-317316-00.000
(203) ROBERT J. & CHERYL J. SCUNDA 66-321138-00.000, TOTAL TAKE
(204) WILLIAM E. & HELEN A. BETTAC 66-319530-00.000, TOTAL TAKE
(205) JAMES M. & BRENDA G. DUNFEE 66-321540-00.000, TOTAL TAKE

REV	DATE	DESCRIPTION
8	8/18/06	ADDED WORK AGREEMENT TO PARCEL 210
7	8/04/06	ADDED 191-E
6	7/26/06	REVISED NAME ON 211
5	6/23/06	REVISED 184 AUD. PAR. NO.
4	5/19/06	UPDATED NAME ON PARCEL 189
3	4/07/06	NAME CHANGE FOR PARCEL 212
2	7/11/05	ADDED 184-TY, CHANGED 195, 196 & 197 TO TOTAL TAKES
1	6/02/05	DELETED DRIVE FROM PARCEL 211

PLAN COMPLETED: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 100, 200, 400

PID NO. 77221
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.

PARCELS
184,185,187,188,189,190,191,193,195,196,197,198,199,202,203,204,205,209,210,211,212,213,214 & 215

PROPERTY MAP
STA. 425+00 PROP. S.R. 161
TO STA. 475+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

9 / 88

1270
1349

L16100I2.RPM 08/18/06

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE — CORP LINE ——— OR
FENCE (EXISTING) —x—x— (PROPOSED) —x—
CENTERLINE 325+00 330+00
TREES STUMPS (TO BE REMOVED)
UTILITY POLES: TELEPHONE POWER LIGHT
LIMITED ACCESS & RIGHT OF WAY — LA-R/W
LIMITED ACCESS (ONLY) — LA
RIGHT OF WAY — R/W
TEMP. RIGHT OF WAY — T ESMT
EXISTING RIGHT OF WAY — R/W
PROPERTY LINE — ℄ (IN EXISTING FENCE) —x—
GUARDRAIL (EXISTING) — o o o (PROPOSED) —•—
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT — CH ESMT
AERIAL EASEMENT — A ESMT
UTILITY EASEMENT — U ESMT

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LOTS 32, 33, 34, 35, 36, 37 & 38
QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TWP.
LICKING COUNTY

(213) JOHN E. & BETTY F. HANKINSON, TRUSTEES 66-318138-00.000

(215) JAMES & F. JEAN WILLIAMS 66-319992-00.000

(209) JOHN E. & BETTY F. HANKINSON, TRUSTEES 66-318138-00.000

(216) DAVID A. & MARY JEAN MORITZ 66-319032-00.000 TRACT 1, PARCEL 1

(216) DAVID A. & MARY JEAN MORITZ 66-319026-00.000 TRACT 2, PARCEL 2

(216) DAVID A. & MARY JEAN MORITZ 66-319044-00.000 TRACT 2, PARCEL 2

(216) DAVID A. & MARY JEAN MORITZ 66-319020-00.000 TRACT 2, PARCEL 1

(220) RONALD E., JOYCE W. & ARNOLD K. KISSELL 66-318318-00.000

(226) BETTY F. & JOHN E. HANKINSON, TRUSTEES 66-318144-00.000 TRACT 1, PARCEL 2

(225) KENNETH M. & MARY LOU HANKINSON 66-320472-00.000 PARCEL 1

(225) 66-302472-00.000 PARCEL 2

(226) (BETTY F. & JOHN E. HANKINSON, TRUSTEES 66-320466-00.000 NO TAKE

LOT 32 LOT 33 LOT 34 LOT 35 LOT 36 LOT 37 LOT 38

APPROXIMATE LOCATION LOT LINE

12.527 AC.

3.333 AC.

EX. ℄ SURVEY, S.R. 37

EX. ℄ SURVEY, OUTVILLE RD.

END R/W ACQUISITION STA. 26+50 OUTVILLE RD.

END WORK STA. 26+25 OUTVILLE RD.

BEGIN WORK STA. 497+43.92 OUTVILLE-MORSE FRONTAGE RD.

BEGIN WORK STA. 18+60 OUTVILLE RD.

BEGIN R/W ACQUISITION STA. 18+40 OUTVILLE RD.

END WORK STA. 242+99.58 SERVICE RD. 11

END R/W ACQUISITION STA. 477+80, PROP. S.R. 37 SERVICE RD. 11

TEMPORARY

PROP. L/A

PROP. R/W

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

PROP. ℄ SURVEY & CONSTRUCTION, SERVICE RD. 11

PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.

PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE RD.

PROP. L/A R/W

MATCHLINE STA. 475+00 SEE SHEET 9

MATCHLINE STA. 525+00 SEE SHEET 11

45+00 450+00 455+00 460+00 465+00 470+00 475+00 480+00 485+00 490+00 495+00 500+00 505+00 510+00 515+00 520+00 525+00 530+00 535+00 540+00 545+00 550+00 555+00 560+00 565+00 570+00 575+00 580+00 585+00 590+00 595+00 600+00 605+00 610+00 615+00 620+00 625+00 630+00 635+00 640+00 645+00 650+00 655+00 660+00 665+00 670+00 675+00 680+00 685+00 690+00 695+00 700+00 705+00 710+00 715+00 720+00 725+00 730+00 735+00 740+00 745+00 750+00 755+00 760+00 765+00 770+00 775+00 780+00 785+00 790+00 795+00 800+00 805+00 810+00 815+00 820+00 825+00 830+00 835+00 840+00 845+00 850+00 855+00 860+00 865+00 870+00 875+00 880+00 885+00 890+00 895+00 900+00 905+00 910+00 915+00 920+00 925+00 930+00 935+00 940+00 945+00 950+00 955+00 960+00 965+00 970+00 975+00 980+00 985+00 990+00 995+00 1000+00 1005+00 1010+00 1015+00 1020+00 1025+00 1030+00 1035+00 1040+00 1045+00 1050+00 1055+00 1060+00 1065+00 1070+00 1075+00 1080+00 1085+00 1090+00 1095+00 1100+00 1105+00 1110+00 1115+00 1120+00 1125+00 1130+00 1135+00 1140+00 1145+00 1150+00 1155+00 1160+00 1165+00 1170+00 1175+00 1180+00 1185+00 1190+00 1195+00 1200+00 1205+00 1210+00 1215+00 1220+00 1225+00 1230+00 1235+00 1240+00 1245+00 1250+00 1255+00 1260+00 1265+00 1270+00 1275+00 1280+00 1285+00 1290+00 1295+00 1300+00 1305+00 1310+00 1315+00 1320+00 1325+00 1330+00 1335+00 1340+00 1345+00 1350+00 1355+00 1360+00 1365+00 1370+00 1375+00 1380+00 1385+00 1390+00 1395+00 1400+00 1405+00 1410+00 1415+00 1420+00 1425+00 1430+00 1435+00 1440+00 1445+00 1450+00 1455+00 1460+00 1465+00 1470+00 1475+00 1480+00 1485+00 1490+00 1495+00 1500+00 1505+00 1510+00 1515+00 1520+00 1525+00 1530+00 1535+00 1540+00 1545+00 1550+00 1555+00 1560+00 1565+00 1570+00 1575+00 1580+00 1585+00 1590+00 1595+00 1600+00 1605+00 1610+00 1615+00 1620+00 1625+00 1630+00 1635+00 1640+00 1645+00 1650+00 1655+00 1660+00 1665+00 1670+00 1675+00 1680+00 1685+00 1690+00 1695+00 1700+00 1705+00 1710+00 1715+00 1720+00 1725+00 1730+00 1735+00 1740+00 1745+00 1750+00 1755+00 1760+00 1765+00 1770+00 1775+00 1780+00 1785+00 1790+00 1795+00 1800+00 1805+00 1810+00 1815+00 1820+00 1825+00 1830+00 1835+00 1840+00 1845+00 1850+00 1855+00 1860+00 1865+00 1870+00 1875+00 1880+00 1885+00 1890+00 1895+00 1900+00 1905+00 1910+00 1915+00 1920+00 1925+00 1930+00 1935+00 1940+00 1945+00 1950+00 1955+00 1960+00 1965+00 1970+00 1975+00 1980+00 1985+00 1990+00 1995+00 2000+00 2005+00 2010+00 2015+00 2020+00 2025+00 2030+00 2035+00 2040+00 2045+00 2050+00 2055+00 2060+00 2065+00 2070+00 2075+00 2080+00 2085+00 2090+00 2095+00 2100+00 2105+00 2110+00 2115+00 2120+00 2125+00 2130+00 2135+00 2140+00 2145+00 2150+00 2155+00 2160+00 2165+00 2170+00 2175+00 2180+00 2185+00 2190+00 2195+00 2200+00 2205+00 2210+00 2215+00 2220+00 2225+00 2230+00 2235+00 2240+00 2245+00 2250+00 2255+00 2260+00 2265+00 2270+00 2275+00 2280+00 2285+00 2290+00 2295+00 2300+00 2305+00 2310+00 2315+00 2320+00 2325+00 2330+00 2335+00 2340+00 2345+00 2350+00 2355+00 2360+00 2365+00 2370+00 2375+00 2380+00 2385+00 2390+00 2395+00 2400+00 2405+00 2410+00 2415+00 2420+00 2425+00 2430+00 2435+00 2440+00 2445+00 2450+00 2455+00 2460+00 2465+00 2470+00 2475+00 2480+00 2485+00 2490+00 2495+00 2500+00 2505+00 2510+00 2515+00 2520+00 2525+00 2530+00 2535+00 2540+00 2545+00 2550+00 2555+00 2560+00 2565+00 2570+00 2575+00 2580+00 2585+00 2590+00 2595+00 2600+00 2605+00 2610+00 2615+00 2620+00 2625+00 2630+00 2635+00 2640+00 2645+00 2650+00 2655+00 2660+00 2665+00 2670+00 2675+00 2680+00 2685+00 2690+00 2695+00 2700+00 2705+00 2710+00 2715+00 2720+00 2725+00 2730+00 2735+00 2740+00 2745+00 2750+00 2755+00 2760+00 2765+00 2770+00 2775+00 2780+00 2785+00 2790+00 2795+00 2800+00 2805+00 2810+00 2815+00 2820+00 2825+00 2830+00 2835+00 2840+00 2845+00 2850+00 2855+00 2860+00 2865+00 2870+00 2875+00 2880+00 2885+00 2890+00 2895+00 2900+00 2905+00 2910+00 2915+00 2920+00 2925+00 2930+00 2935+00 2940+00 2945+00 2950+00 2955+00 2960+00 2965+00 2970+00 2975+00 2980+00 2985+00 2990+00 2995+00 3000+00 3005+00 3010+00 3015+00 3020+00 3025+00 3030+00 3035+00 3040+00 3045+00 3050+00 3055+00 3060+00 3065+00 3070+00 3075+00 3080+00 3085+00 3090+00 3095+00 3100+00 3105+00 3110+00 3115+00 3120+00 3125+00 3130+00 3135+00 3140+00 3145+00 3150+00 3155+00 3160+00 3165+00 3170+00 3175+00 3180+00 3185+00 3190+00 3195+00 3200+00 3205+00 3210+00 3215+00 3220+00 3225+00 3230+00 3235+00 3240+00 3245+00 3250+00 3255+00 3260+00 3265+00 3270+00 3275+00 3280+00 3285+00 3290+00 3295+00 3300+00 3305+00 3310+00 3315+00 3320+00 3325+00 3330+00 3335+00 3340+00 3345+00 3350+00 3355+00 3360+00 3365+00 3370+00 3375+00 3380+00 3385+00 3390+00 3395+00 3400+00 3405+00 3410+00 3415+00 3420+00 3425+00 3430+00 3435+00 3440+00 3445+00 3450+00 3455+00 3460+00 3465+00 3470+00 3475+00 3480+00 3485+00 3490+00 3495+00 3500+00 3505+00 3510+00 3515+00 3520+00 3525+00 3530+00 3535+00 3540+00 3545+00 3550+00 3555+00 3560+00 3565+00 3570+00 3575+00 3580+00 3585+00 3590+00 3595+00 3600+00 3605+00 3610+00 3615+00 3620+00 3625+00 3630+00 3635+00 3640+00 3645+00 3650+00 3655+00 3660+00 3665+00 3670+00 3675+00 3680+00 3685+00 3690+00 3695+00 3700+00 3705+00 3710+00 3715+00 3720+00 3725+00 3730+00 3735+00 3740+00 3745+00 3750+00 3755+00 3760+00 3765+00 3770+00 3775+00 3780+00 3785+00 3790+00 3795+00 3800+00 3805+00 3810+00 3815+00 3820+00 3825+00 3830+00 3835+00 3840+00 3845+00 3850+00 3855+00 3860+00 3865+00 3870+00 3875+00 3880+00 3885+00 3890+00 3895+00 3900+00 3905+00 3910+00 3915+00 3920+00 3925+00 3930+00 3935+00 3940+00 3945+00 3950+00 3955+00 3960+00 3965+00 3970+00 3975+00 3980+00 3985+00 3990+00 3995+00 4000+00 4005+00 4010+00 4015+00 4020+00 4025+00 4030+00 4035+00 4040+00 4045+00 4050+00 4055+00 4060+00 4065+00 4070+00 4075+00 4080+00 4085+00 4090+00 4095+00 4100+00 4105+00 4110+00 4115+00 4120+00 4125+00 4130+00 4135+00 4140+00 4145+00 4150+00 4155+00 4160+00 4165+00 4170+00 4175+00 4180+00 4185+00 4190+00 4195+00 4200+00 4205+00 4210+00 4215+00 4220+00 4225+00 4230+00 4235+00 4240+00 4245+00 4250+00 4255+00 4260+00 4265+00 4270+00 4275+00 4280+00 4285+00 4290+00 4295+00 4300+00 4305+00 4310+00 4315+00 4320+00 4325+00 4330+00 4335+00 4340+00 4345+00 4350+00 4355+00 4360+00 4365+00 4370+00 4375+00 4380+00 4385+00 4390+00 4395+00 4400+00 4405+00 4410+00 4415+00 4420+00 4425+00 4430+00 4435+00 4440+00 4445+00 4450+00 4455+00 4460+00 4465+00 4470+00 4475+00 4480+00 4485+00 4490+00 4495+00 4500+00 4505+00 4510+00 4515+00 4520+00 4525+00 4530+00 4535+00 4540+00 4545+00 4550+00 4555+00 4560+00 4565+00 4570+00 4575+00 4580+00 4585+00 4590+00 4595+00 4600+00 4605+00 4610+00 4615+00 4620+00 4625+00 4630+00 4635+00 4640+00 4645+00 4650+00 4655+00 4660+00 4665+00 4670+00 4675+00 4680+00 4685+00 4690+00 4695+00 4700+00 4705+00 4710+00 4715+00 4720+00 4725+00 4730+00 4735+00 4740+00 4745+00 4750+00 4755+00 4760+00 4765+00 4770+00 4775+00 4780+00 4785+00 4790+00 4795+00 4800+00 4805+00 4810+00 4815+00 4820+00 4825+00 4830+00 4835+00 4840+00 4845+00 4850+00 4855+00 4860+00 4865+00 4870+00 4875+00 4880+00 4885+00 4890+00 4895+00 4900+00 4905+00 4910+00 4915+00 4920+00 4925+00 4930+00 4935+00 4940+00 4945+00 4950+00 4955+00 4960+00 4965+00 4970+00 4975+00 4980+00 4985+00 4990+00 4995+00 5000+00 5005+00 5010+00 5015+00 5020+00 5025+00 5030+00 5035+00 5040+00 5045+00 5050+00 5055+00 5060+00 5065+00 5070+00 5075+00 5080+00 5085+00 5090+00 5095+00 5100+00 5105+00 5110+00 5115+00 5120+00 5125+00 5130+00 5135+00 5140+00 5145+00 5150+00 5155+00 5160+00 5165+00 5170+00 5175+00 5180+00 5185+00 5190+00 5195+00 5200+00 5205+00 5210+00 5215+00 5220+00 5225+00 5230+00 5235+00 5240+00 5245+00 5250+00 5255+00 5260+00 5265+00 5270+00 5275+00 5280+00 5285+00 5290+00 5295+00 5300+00 5305+00 5310+00 5315+00 5320+00 5325+00 5330+00 5335+00 5340+00 5345+00 5350+00 5355+00 5360+00 5365+00 5370+00 5375+00 5380+00 5385+00 5390+00 5395+00 5400+00 5405+00 5410+00 5415+00 5420+00 5425+00 5430+00 5435+00 5440+00 5445+00 5450+00 5455+00 5460+00 5465+00 5470+00 5475+00 5480+00 5485+00 5490+00 5495+00 5500+00 5505+00 5510+00 5515+00 5520+00 5525+00 5530+00 5535+00 5540+00 5545+00 5550+00 5555+00 5560+00 5565+00 5570+00 5575+00 5580+00 5585+00 5590+00 5595+00 5600+00 5605+00 5610+00 5615+00 5620+00 5625+00 5630+00 5635+00 5640+00 5645+00 5650+00 5655+00 5660+00 5665+00 5670+00 5675+00 5680+00 5685+00 5690+00 5695+00 5700+00 5705+00 5710+00 5715+00 5720+00 5725+00 5730+00 5735+00 5740+00 5745+00 5750+00 5755+00 5760+00 5765+00 5770+00 5775+00 5780+00 5785+00 5790+00 5795+00 5800+00 5805+00 5810+00 5815+00 5820+00 5825+00 5830+00 5835+00 5840+00 5845+00 5850+00 5855+00 5860+00 5865+00 5870+00 5875+00 5880+00 5885+00 5890+00 5895+00 5900+00 5905+00 5910+00 5915+00 5920+00 5925+00 5930+00 5935+00 5940+00 5945+00 5950+00 5955+00 5960+00 5965+00 5970+00 5975+00 5980+00 5985+00 5990+00 5995+00 6000+00 6005+00 6010+00 6015+00 6020+00 6025+00 6030+00 6035+00 6040+00 6045+00 6050+00 6055+00 6060+00 6065+00 6070+00 6075+00 6080+00 6085+00 6090+00 6095+00 6100+00 6105+00 6110+00 6115+00 6120+00 6125+00 6130+00 6135+00 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11565+00 11570+00 11575+00 11580+00 11585+00 11590+00 11595+00 11600+00 11605+00 11610+00 11615+00 11620+00 11625+00 11630+00 11635+00 11640+00 11645+00 11650+00 11655+00 11660+00 11665+00 11670+00 11675+00 11680+00 11685+00 11690+00 11695+00 11700+00 11705+00 11710+00 11715+00 11720+00 11725+00 11730+00 11735+00 11740+00 11745+00 11750+00 11755+00 11760+00 11765+00 11770+00 11775+00 11780+00 11785+00 11790+00 11795+00 11800+00 11805+00 11810+00 11815+00 11820+00 11825+00 11830+00 11835+00 11840+00 11845+00 11850+00 11855+00 11860+00 11865+00 11870+00 11875+00 11880+00 11885+00 11890+00 11895+00 11900+00 11905+00 11910+00 11915+00 11920+00 11925+00 11930+00 11935+00 11940+00 11945+00 11950+00 11955+00 11960+00 11965+00 11970+00 11975+00 11980+00 11985+00 11990+00 11995+00 12000+00 12005+00 12010+00 12015+00 12020+00 12025+00 12030+00 12035+00 12040+00 12045+00 12050+00 12055+00 12060+00 12065+00 12070+00 12075+00 12080+00 12085+00 12090+00 12095+00 12100+00 12105+00 12110+00 12115+00 12120+00 12125+00 12130+00 12135+00 12140+00 12145+00 12150+00 12155+00 12160+00 12165+00 12170+00 12175+00 12180+00 12185+00 12190+00 12195+00 12200+00 12205+00 12210+00 12215+00 12220+00 12225+00 12230+00 12235+00 12240+00 12245+00 12250+00 12255+00 12260+00 12265+00 12270+00 12275+00 12280+00 12285+00 12290+00 12295+00 12300+00 12305+00 12310+00 12315+00 12320+00 12325+00 12330+00 12335+00 12340+00 12345+00 12350+00 12355+00 12360+00 12365+00 12370+00 12375+00 12380+00 12385+00 12390+00 12395+00 12400+00 12405+00 12410+00 12415+00 12420+00 12425+00 12430+00 12435+00 12440+00 12445+00 12450+00 12455+00 12460+00 12465+00 12470+00 12475+00 12480+00 12485+00 12490+00 12495+00 12500+00 12505+00 12510+00 12515+00 12520+00 12525+00 12530+00 12535+00 12540+00 12545+00 12550+00 12555+00 12560+00 12565+00 12570+00 12575+00 12580+00 12585+00 12590+00 12595+00 12600+00 12605+00 12610+00 12615+00 12620+00 12625+00 12630+00 12635+00 12640+00 12645+00 12650+00 12655+00 12660+00 12665+00 12670+00 12675+00 12680+00 12685+00 12690+00 12695+00 12700+00 12705+00 12710+00 12715+00 12720+00 12725+00 12730+00 12735+00 12740+00 12745+00 12750+00 12755+00 12760+00 12765+00 12770+00 12775+00 12780+00 12785+00 12790+00 12795+00 12800+00 12805+00 12810+00 12815+00 12820+00 12825+00 12830+00 12835+00 12840+00 12845+00 12850+00 12855+00 12860+00 12865+00 12870+00 12875+00 12880+00 12885+00 12890+00 12895+00 12900+00 12905+00 12910+00 12915+00 12920+00 12925+00 12930+00 12935+00 12940+00 12945+00 12950+00 12955+00 12960+00 12965+00 12970+00 12975+00 12980+00 12985+00 12990+00 12995+00 13000+00 13005+00 13010+00 13015+00 13020+00 13025+00 13030+00 13035+00 13040+00 13045+00 13050+00 13055+00 13060+00 13065+00 13070+00 13075+00 13080+00 13085+00 13090+00 13095+00 13100+00 13105+00 13110+00 13115+00 13120+00 13125+00 13130+00 13135+00 13140+00 13145+00 13150+00 13155+00 13160+00 13165+00 13170+00 13175+00 13180+00 13185+00 13190+00 13195+00 13200+00 13205+00 13210+00 13215+00 13220+00 13225+00 13230+00 13235+00 13240+00 13245+00 13250+00 13255+00 13260+00 13265+00 13270+00 13275+00 13280+00 13285+00 13290+00 13295+00 13300+00 13305+00 13310+00 13315+00 13320+00 13325+00 13330+00 13335+00 13340+00 13345+00 13350+00 13355+00 13360+00 13365+00 13370+00 13375+00 13380+00 13385+00 13390+00 13395+00 13400+00 13405+00 13410+00 13415+00 13420+00 13425+00 13430+00 13435+00 13440+00 13445+00 13450+00 13455+00 13460+00 13465+00 13470+00 13475+00 13480+00 13485+00 13490+00 13495+00 13500+00 13505+00 13510+00 13515+00 13520+00 13525+00 13530+00 13535+00 13540+00 13545+00 13550+00 13555+00 13560+00 13565+00 13570+00 13575+00 13580+00 13585+00 13590+00 13595+00 13600+00 13605+00 13610+00 13615+00 13620+00 13625+00 13630+00 13635+00 13640+00 13645+00 13650+00 13655+00 13660+00 13665+00 13670+00 13675+00 13680+00 13685+00 13690+00 13695+00 13700+00 13705+00 13710+00 13715+00 13720+00 13725+00 13730+00 13735+00 13740+00 13745+00 13750+00 13755+00 13760+00 13765+00 13770+00 13775+00 13780+00 13785+00 13790+00 13795+00 13800+00 13805+00 13810+00 13815+00 13820+00 13825+00 13830+00 13835+00 13840+00 13845+00 13850+00 13855+00 13860+00 13865+00 13870+00 13875+00 13880+00 13885+00 13890+00 13895+00 13900+00 13905+00 13910+00 13915+00 13920+00 13925+00 13930+00 13935+00 13940+00 13945+00 13950+00 13955+00 13960+00 13965+00 13970+00 13975+00 13980+00 13985+00 13990+00 13995+00 14000+00 14005+00 14010+00 14015+00 14020+00 14025+00 14030+00 14035+00 14040+00 14045+00 14050+00 14055+00 14060+00 14065+00 14070+00 14075+00 14080+00 14085+00 14090+00 14095+00 14100+00 14105+00 14110+00 14115+00 14120+00 14125+00 14130+00 14135+00 14140+00 14145+00 14150+00 14155+00 14160+00 14165+00 14170+00 14175+00 14180+00 14185+00 14190+00 14195+00 14200+00 14205+00 14210+00 14215+00 14220+00 14225+00 14230+00 14235+00 14240+00 14245+00 14250+00 14255+00 14260+00 14265+00 14270+00 14275+00 14280+00 14285+00 14290+00 14295+00 14300+00 14305+00 14310+00 14315+00 14320+00 14325+00 14330+00 14335+00 14340+00 14345+00 14350+00 14355+00 14360+00 14365+00 14370+00 14375+00 14380+00 14385+00 14390+00 14395+00 14400+00 14405+00 14410+00 14415+00 14420+00 14425+00 14430+00 14435+00 14440+00 14445+00 14450+00 14455+00 14460+00 14465+00 14470+00 14475+00 14480+00 14485+00 14490+00 14495+00 14500+00 14505+00 14510+00 14515+00 14520+00 14525+00 14530+00 14535+00 14540+00 14545+00 14550+00 14555+00 14560+00 14565+00 14570+00 14575+00 14580+00 14585+00 14590+00 14595+00 14600+00 14605+00 14610+00 14615+00 14620+00 14625+00 14630+00 14635+00 14640+00 14645+00 14650+00 14655+00 14660+00 14665+00 14670+00 14675+00 14680+00 14685+00 14690+00 14695+00 14700+00 14705+00 14710+00 14715+00 14720+00 14725+00 14730+00 14735+00 14740+00 14745+00 14750+00 14755+00 14760+00 14765+00 14770+00 14775+00 14780+00 14785+00 14790+00 14795+00 14800+00 14805+00 14810+00 14815+00 14820+00 14825+00 14830+00 14835+00 14840+00 14845+00 14850+00 14855+00 14860+00 14865+00 14870+00 14875+00 14880+00 14885+00 14890+00 14895+00 14900+00 14905+00 14910+00 14915+00 14920+00 14925+00 14930+00 14935+00 14940+00 14945+00 14950+00 14955+

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE — CORP LINE — OR
FENCE (EXISTING) — X — X — (PROPOSED) — X
325+00 — 330+00
CENTERLINE
TREES — STUMPS — (TO BE REMOVED)
UTILITY POLES: TELEPHONE — POWER — LIGHT
LIMITED ACCESS & RIGHT OF WAY — LA-R/W
LIMITED ACCESS (ONLY) — LA
RIGHT OF WAY — R/W
TEMP. RIGHT OF WAY — T ESMT
EXISTING RIGHT OF WAY — R/W
PROPERTY LINE — (IN EXISTING FENCE)
GUARDRAIL (EXISTING) — (PROPOSED)
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT — CH ESMT
AERIAL EASEMENT — A ESMT
UTILITY EASEMENT — U ESMT

STRUCTURES KEY:

- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LOTS 38, 39, 40 & 41
QTR. TWP. 4, T2N, R14W, USML
LOT 41, QTR. TWP. 4, T2N, R13W, USML
ST. ALBANS. TWP.
LOTS 27, 28 & 29
QTR. TWP. 3, T2N, R13W
GRANVILLE TWP.
LICKING COUNTY

N

HORIZONTAL SCALE IN FEET
0 100 200 400

PID NO. 77221

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.

PARCELS 226.227.228. 229.230.231. 232.233.234 & 240

PROPERTY MAP
STA. 525+00 TO STA. 575+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

226 BETTY F. & JOHN E. HANKINSON, TRUSTEES 66-318144-00.000 TRACT 1, PARCEL 2

226 BETTY F. & JOHN E. HANKINSON, TRUSTEES 66-318144-00.000 TRACT 1, PARCEL 2

226 BETTY F. & JOHN E. HANKINSON, TRUSTEES 66-318144-00.000 TRACT 1, PARCEL 2

226 BETTY F. & JOHN E. HANKINSON, TRUSTEES 19-041964-00.000

233 LARRY & RENEE F. MARTIN 19-042696-00.000

240 EVA F. MONTGOMERY 19-042570-00.000 PARCEL 1

232 PHILLIP J. & BARBARA J. WATTS 19-041964-00.001

LOT 38 / LOT 39
LOT 39 / LOT 40
LOT 40 / LOT 41
LOT 41 / LOT 29 — 4TH QUARTER / 3RD QUARTER
LOT 29 / LOT 28
LOT 28 / LOT 27
APPROXIMATE LOCATION LOT LINE
RANGE 14 / RANGE 13
ST. ALBANS TWP. / GRANVILLE TWP.

BEGIN WORK
STA. 295+50
C.R. 539A EXTENSION

BEGIN R/W ACQUISITION
STA. 296+44.79
C.R. 539A EXTENSION

MATCHLINE STA. 525+00 SEE SHEET 10

MATCHLINE STA. 575+00 SEE SHEET 12

TEMPORARY
EX. ℄ SURVEY, S.R. 37
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37
PROP. L/A R/W
PROP. R/W
TEMPORARY R/W

227 THOMAS C. & SUSAN E. SHAW 66-320586-00.000

228 JERRY D. JACKSON 66-320586-00.002

229 NORMA J. KENT 66-320652-00.000

230 DANIEL D. VAN NESS, ETAL, TRUSTEES 66-319206-00.000

231 STEVEN H. & KAREN G. WILLIAMS 19-041976-00.000 PARCEL 2

231 STEVEN H. & KAREN G. WILLIAMS 19-041976-01.000 PARCEL 1

234 BARBARA O'BANNON & MARILYN LINGEN 19-042690-00.000 PARCEL 1

BARBARA O'BANNON & MARILYN LINGEN 19-042696-01.000 PARCEL 2

226 BETTY F. & JOHN E. HANKINSON, TRUSTEES 66-320466-00.000 NO TAKE

240 EVA F. MONTGOMERY 19-042570-00.000 PARCEL 1

PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.

PROP. ℄ SURVEY & CONSTRUCTION, MORSE RD.

END WORK
STA. 18+38.92
MORSE RD.

BEGIN WORK
STA. 7+75
MORSE RD.

BEGIN R/W ACQUISITION
STA. 7+53.65
MORSE RD.

EX. ℄ SURVEY, MORSE RD.

REV	DATE	DESCRIPTION
7	9/05/06	REVISED 226 AUD. PAR. NO.
6	9/01/06	ADDED 3 TEMPS ON PARCEL 240
5	7/18/06	DELETED 226-TV3
4	6/29/06	REVISED 234 OWNERS NAME
3	6/05/06	REVISED 229-WDV & 229-TV
2	5/10/06	DELETED 232-WL, REVISED 232-WDV, 226-WL2, 226-WDV2 & 240-WDV1
1	8/24/05	DELETE 227-TV, REVISE 227-WDV

PLAN COMPLETED: 4/29/05

11 / 88

1272 / 1349

L161001A.RPW 09/05/06

LOTS 21, 22, 23, 24, 25, 26, & 27
QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TWP.
LICKING COUNTY

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE — CORP LINE — OR
FENCE (EXISTING) — (PROPOSED)
CENTERLINE — 325+00 — 330+00
TREES — STUMPS — (TO BE REMOVED)
UTILITY POLES: TELEPHONE — POWER — LIGHT
LIMITED ACCESS & RIGHT OF WAY — LA-R/W
LIMITED ACCESS (ONLY) — LA
RIGHT OF WAY — R/W
TEMP. RIGHT OF WAY — T ESMT
EXISTING RIGHT OF WAY — R/W
PROPERTY LINE — (IN EXISTING FENCE)
GUARDRAIL (EXISTING) — (PROPOSED)
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT — CH ESMT
AERIAL EASEMENT — A ESMT
UTILITY EASEMENT — U ESMT

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LOT 27 / LOT 26 — LOT LINE — APPROXIMATE LOCATION
LOT 26 / LOT 25 — LOT LINE — APPROXIMATE LOCATION
LOT 25 / LOT 24
LOT 24 / LOT 23
LOT 23 / LOT 22
LOT 22 / LOT 21

241 TALBOTT L. II & DANIEL D. VAN NESS 19-043374-00.000
245 GEORGE MCMILLIN III 19-042444-00.000
247 THE THOMAS J. EVANS FOUNDATION 19-041520-00.001
240 EVA F. MONTGOMERY 19-042570-00.000 PARCEL 1
242 PAR GOLF GROUP, INC. 19-042900-00.000
244 RICHARD F. NESS JR., TRUSTEE 19-042630-00.000
246 OWENS CORNING FIBERGLASS CORPORATION 19-042444-01.000 NO TAKE
246 OWENS CORNING FIBERGLASS CORPORATION 19-043608-00.000 NO TAKE
246 OWENS CORNING FIBERGLASS CORPORATION 19-041520-00.000 NO TAKE

END L/A ACQUISITION STA. 594+27.20 PROP. S.R. 161
END WORK STA. 364+40 C.R. 539A EXTENSION
END R/W ACQUISITION STA. 356+59.26 C.R. 539A EXTENSION
END WORK STA. 584+40 OUTVILLE-MORSE FRONTAGE RD.
END R/W ACQUISITION STA. 585+10, S.R. 37 OUTVILLE-MORSE FRONTAGE RD.

PROP. ℄ SURVEY & CONSTRUCTION, C.R. 539A EXTENSION
PROP. R/W
PROP. L/A R/W
PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.
PROP. L/A R/W
PROP. R/W
TEMPORARY
PROP. EASEMENT
EX. DRIVE ACCESS TO BE ELIMINATED
EX. & PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

MATCHLINE STA. 575+00 SEE SHEET 11
MATCHLINE STA. 625+00 SEE SHEET 13

340+00 345+00 350+00 355+00 360+00 365+00 370+00 375+00 380+00 385+00 390+00 395+00 400+00 405+00 410+00 415+00 420+00 425+00 430+00 435+00 440+00 445+00 450+00 455+00 460+00 465+00 470+00 475+00 480+00 485+00 490+00 495+00 500+00 505+00 510+00 515+00 520+00 525+00 530+00 535+00 540+00 545+00 550+00 555+00 560+00 565+00 570+00 575+00 580+00 585+00 590+00 595+00 600+00 605+00 610+00 615+00 620+00 625+00 630+00 635+00 640+00

REV	DATE	DESCRIPTION
2	5/01/06	REVISED 244-WL, 244-WDV & 244-TV
1	5/16/05	ELIMINATED DRIVE ACCESS PARCEL 246

PLAN COMPLETED: 4/29/05

L16100I5.RPM 05/01/06

N

0 100 200 400 HORIZONTAL SCALE IN FEET

PID NO. 77221

R.W. DESIGNER C.S. | R.W. REVIEWER T.A.

PARCELS 240.241.242. 244.245.246 & 247

PROPERTY MAP
STA. 575+00 TO STA. 625+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

12/88

1273/1349

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORP. LINE — CORP LINE — OR
FENCE (EXISTING) — (PROPOSED)
CENTERLINE — 325+00 — 330+00
TREES — STUMPS — (TO BE REMOVED)
UTILITY POLES: TELEPHONE — POWER — LIGHT
LIMITED ACCESS & RIGHT OF WAY — LA-R/W
LIMITED ACCESS (ONLY) — LA
RIGHT OF WAY — R/W
TEMP. RIGHT OF WAY — T ESMT
EXISTING RIGHT OF WAY — R/W
PROPERTY LINE — (IN EXISTING FENCE)
GUARDRAIL (EXISTING) — (PROPOSED)
RAILROAD
CONSTRUCTION LIMITS
CHANNEL EASEMENT — CH ESMT
AERIAL EASEMENT — A ESMT
UTILITY EASEMENT — U ESMT

STRUCTURES KEY:

- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LOTS 16, 17, 18, 19, 20 & 21
QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TWP.
LICKING COUNTY

LOT 16 / LOT 17
LOT 17 / LOT 18
LOT 18 / LOT 19
LOT 19 / LOT 20
LOT 20 / LOT 21

(248) LEE ANN BAILEY, ETAL
19-042894-00.000
"E" PARCEL

(247) THE THOMAS J. EVANS FOUNDATION
19-042390-00.000

(247) THE THOMAS J. EVANS FOUNDATION
19-041520-00.001

(246) OWENS CORNING FIBERGLASS CORPORATION
19-041520-00.000
NO TAKE

(250) TOWNSHIP OF GRANVILLE
19-042390-00.001

BEGIN L/A ESMT.
ACQUISITION
STA. 637+85
PROP. S.R. 37 LT.

END L/A ESMT.
ACQUISITION
STA. 654+10
PROP. S.R. 37 LT.

END PROJECT
STA. 654+00
PROP. S.R. 37
S.L.M. 12.39

EX. & PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

PROP. CHANNEL EASEMENT

EX. DRIVE ACCESS TO BE ELIMINATED

EX. DRIVE ACCESS TO BE ELIMINATED

BEGIN L/A ESMT.
ACQUISITION
STA. 639+35
PROP. S.R. 37 RT.

END L/A ESMT.
ACQUISITION
STA. 650+35
PROP. S.R. 37 RT.

APPROXIMATE LOCATION LOT LINE

APPROXIMATE LOCATION LOT LINE

MATCHLINE STA. 625+00
SEE SHEET 12

625+00 630+00 635+00 640+00 645+00 650+00 655+00 660+00 665+00 670+00
45'00 50'00 55'00 60'00 65'00 70'00 75'00 80'00 85'00

N

0 100 200 400
HORIZONTAL SCALE IN FEET

PID NO. 77221

PARCELS 246.247.248. & 250
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.

PROPERTY MAP PROP. S.R. 37
STA. 625+00 TO STA. 670+00

LIC-161-6.65
LIC-37-10.25

13/88

1274
1349

REV	DATE	DESCRIPTION
2	8/14/06	ADDED 248-E
1	5/16/05	ELIMINATED DRIVE ACCESS PARCELS 246, 248 & 250

PLAN COMPLETED: 4/29/05

L16100I6.RPM 08/14/06

TOTAL NUMBER OF :

57 - OWNERSHIPS
52 - OWNERSHIPS WITH TAKES 23 - OWNERSHIPS WITH STRUCTURES INVOLVED
7 - TOTAL TAKES 0 - OWNERSHIPS WITH "P" ITEMS

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE			
174-WL	STEVEN E. & ELIZABETH S. TUTTLE	27,28	OR 679	641	66-318642-00.000	7.000	0.140	0.295	0.140	0.155							
174-WDV		27,28						0.484	0	0.484	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 174							0.779	0.140	0.639			6.221				
174-TV		27,28						0.311	0	0.311	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE & RESIDENCE TO BE REMOVED		
					66-317730-00.000	64.584									NO TAKE		
175-WL	CHARLES W. & BERNICE J. UTTER	27,28	20021029	0040810	66-317730-00.001	**11.495	0.508	1.709	0.508	1.201	YES				RESIDENCE TO BE REMOVED		
175-WDV		27,28						1.235	0	1.235	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, MULTIPLE STRUCTURES TO BE REMOVED		
175-E		27A						8.551	0	8.551	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, FRAME BUILDING TO BE REMOVED		
	TOTAL 175							11.495	0.508	10.987			0.000		**11.486-RECORD AREA; 11.495-SURVEY AREA		
176-WDV	RICHARD J. & SUSAN E. CHENAULT	27,28	OR 124	174	66-318222-01.000	9.817									PARCEL 1		
						0.12									PARCEL 2		
						0.14									PARCEL 3		
	TOTAL 176					10.077	0	0.102	0	0.102	NO	9.975			TO BE TAKEN IN THE NAME OF THE COUNTY		
177-WDV	MICHAEL D. & DAWN M. TURNER	27,28	19981005	0037765	66-318222-03.000	2.274	0	0.068	0	0.068	NO	2.206			TO BE TAKEN IN THE NAME OF THE COUNTY		
177-TV	NOT USED																
178-WDV	CIRCLE G LAZY K RANCH LIMITED PARTNERSHIP	27,28	20041123	0041880	66-318222-00.000	94.267		0.235	0	0.235	NO				PARCEL 1		
			20041123	0041879	66-318222-02.000	9.916		0.020	0	0.020	NO				NO TAKE, PARCEL 2		
	TOTAL 178					104.183	0	0.255	0	0.255		103.928			TO BE TAKEN IN THE NAME OF THE COUNTY		
179-WL	HEIRS OF EVERETT W. & BEULAH V. BROWN	27,28	547	344	UNKNOWN	UNKNOWN	5.631	3.822	3.822	0	NO						
179-WDV1		27,28						0.160	0.160	0	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
179-WDV2		27-30						1.649	1.649	0	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 179							5.631	5.631	0		0.000			TOTAL TAKE		
180	NOT USED																
181-TV	SCOTT ALLEN & SANDRA ELLEN MOWREY	31,32	OR 706	418	66-319200-00.000	126.62		0.016	0	0.016	NO				FOR DRAINAGE, PARCEL 1, TO BE TAKEN IN THE NAME OF THE COUNTY		
			OR 706	412	66-319200-00.001	1.600									NO TAKE, PARCEL 2		
			OR 137	163											NO TAKE, PARCEL 3		
	TOTAL 181					128.22					NO				NO TAKE, PARCEL 4		
182-WL	RUTH ANN CALDWELL, TRUSTEE, UNDER THE ROBERT G. CALDWELL LIVING TRUST	27-31	20060808	0023071 &	66-318348-00.000	102.27	4.445	11.306	3.770	7.536	YES				RESIDENCE & GARAGE TO BE REMOVED; LOT 9		
182-WDV1	RUTH ANN CALDWELL, TRUSTEE, UNDER THE RUTH ANN CALDWELL LIVING TRUST	27-31	20060808	0023072				0.675	0.675	0	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
182-WDV2		27-31						5.106	0	5.106	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, METAL GARAGE TO BE REMOVED		
	TOTAL 182							17.087	4.445	12.642			85.183				
182-TV		29,30						0.194	0	0.194	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
			343	294	66-317670-00.000	95.65									NO TAKE; LOT 1		
			343	294	66-317688-00.000	85.40									NO TAKE; LOT 24		
			343	294	66-317676-00.000	50.00									NO TAKE; LOT 24		
			255	133	66-317682-00.000	22.76									NO TAKE; LOT 23		
183-WL	RONALD E. & RAYWOND A. JUDY & LINDA L. CROAK	31-33	20020919	0035075	66-318276-00.000	58.16	2.505	6.328	2.026	4.302	YES				MULTIPLE STRUCTURES TO BE REMOVED		
183-WDV1		31-33						0.479	0.479	0	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
183-WDV2		31-33						2.368	0	2.368	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 183							9.175	2.505	6.670			48.985				
														STATE			

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

NOTE:
UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS ACQUIRED FOR THE PURPOSE OF STRUCTURE REMOVAL TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR. UPON COMPLETION OF THE WORK REQUIRED FOR SUCH REMOVAL AND SUBSEQUENT RECLAMATION, THE EASEMENT SHALL BE VACATED IMMEDIATELY.

REV BY:	DATE	DESCRIPTION
CS	8/15/06	CHANGED 182 OWNERSHIP
CS	8/02/06	ADDED 175-E, DELETED 175-TV1 & 175-TV2
CS	2/22/06	ADDED ADJACENT PROPERTIES TO PARCEL 178 & REVISED RECORD AREA & RESIDUE
CS	2/06/06	REVISED 174-WDV & 177-WDV

FIELD REVIEW BY: CS & TA
OWNERSHIP VERIFIED BY: TA
DATE COMPLETE: 4/29/05

L16I0018.RSS 08/15/06

FEDERAL PROJECT NO. NONE
PID NO. 77221
STATE JOB NO. 455460
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PARCELS 174-183
LIC-161-6.65
LIC-37-10.25

SUMMARY OF ADDITIONAL RIGHT OF WAY

14/88
1275
1349

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

① RESIDUE LEFT OF PROP. WATKINS-YORK FRONTAGE RD.
② RESIDUE RIGHT OF PROP. WATKINS-YORK FRONTAGE RD.
⑤ RESIDUE LEFT OF PROP. WORTHINGTON RD. NORTH
⑥ RESIDUE RIGHT OF PROP. WORTHINGTON RD. NORTH

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE			
184-WL	GEORGE L. & FRANCES E. DAVISON	33-35	445	429	66-317832-00.000	50	1.707	5.312	1.707	3.605	NO				PARCEL 2		
184-WDV		33-34						1.997	0	1.997	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 184							7.309	1.707	5.602			42.691				
184-TV		33,34						0.053	0	0.053	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
					66-317820-00.000	36.5									NO TAKE, PARCEL 1		
					66-317826-00.000	43.66									NO TAKE		
					66-317514-01.001	9.726									NO TAKE		
185-WDV	DOUGLAS L. BENNETT	35,36	825	801	66-318990-00.000	50	1.310	0.356	0.270	0.086	NO	48.604			PARCEL 1, TO BE TAKEN IN THE NAME OF THE COUNTY		
185-TV		35,36						0.071	0	0.071	NO				DRIVEWAY GATE & SPRING TANK TO BE REMOVED; TO CONSTRUCT DRIVE		
						24.35									NO TAKE, PARCEL 2		
186-WL	RONALD C. & CLAUDIA K. HUTCHINSON	35,36	OR 125	279	66-317514-01.000	11.274	0.885	2.705	0.885	1.820	NO						
186-WDV		33-36						1.474	0	1.474	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, MULTIPLE STRUCTURES TO BE REMOVED		
	TOTAL 186							4.179	0.885	3.294			7.095				
186-TV		33-36						0.316	0	0.316	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, TO REMOVE STRUCTURE		
187-WL	MICHAEL E. & EDWINA ORBAN	35,36	OR 186	394	66-318330-00.000	3.211	1.553	3.133	1.553	1.580	YES				(1.83 IN LOT 28, 1.39 IN LOT 27; MULTIPLE STRUCTURES TO BE REMOVED		
187-WDV								0.078	0	0.078	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 187	35,36						3.211	1.553	1.658		0.000	0.000		TOTAL TAKE		
188-WL	RICHARD E. SEVERANCE	35-40,75,76	199911010044959		66-319056-00.000	49.131		2.593	1.501	1.092	NO				PARCEL 1		
					66-319056-00.003	39.008		2.615	1.551	1.064	NO				PARCEL 2		
			19990729003141 3		66-319056-00.001	4.898		3.311	1.486	1.825	YES				RESIDENCE TO BE REMOVED, PARCEL 3		
	TOTAL 188-WL							8.519	4.538	3.981							
188-WDV		35,36,73-76			66-319056-00.000	49.131		4.452	0.276	4.176	NO				PARCEL 1		
					66-319056-00.003	39.008		3.345	0	3.345	NO				PARCEL 2		
	TOTAL 188-WDV							7.797	0.276	7.521					TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 66-319056-00.000					49.131	1.777	7.045	1.777	5.268		39.884⑤	2.202⑥				
	TOTAL 66-319056-00.003					39.008	3.900	5.960	1.551	4.409		25.974⑤	4.725⑥				
	TOTAL 66-319056-00.001					4.898	1.486	3.311	1.486	1.825			1.587⑥				
					66-319056-00.004	12.471						12.471⑤			NO TAKE		
			19991101044959		66-319056-00.002	14.714						14.714⑤			NO TAKE, PARCEL 4		
	TOTAL 188					120.222	7.163	16.316	4.814	11.502		93.043⑤	8.514⑥				
188-TV1		73,74			66-319056-00.000			0.096	0	0.096	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, PARCEL 1, TO CONSTRUCT DRIVE		
188-TV2		73,74			66-319056-00.000			0.043	0	0.043	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, PARCEL 1, TO CONSTRUCT DRIVE		
188-TV3		73,74			66-319056-00.003			0.759	0	0.759	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, PARCEL 2, FOR DRAINAGE		
188-TV4		75,76			66-319056-00.003			0.021	0	0.021	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, PARCEL 2, FOR DRAINAGE		
188-TV5		37,38			66-319056-00.003			0.156	0	0.156	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, PARCEL 2, FOR DRAINAGE		
					66-319056-00.001			0.065	0	0.065	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, PARCEL 3, FOR DRAINAGE		
	TOTAL 188-TV5							0.221	0	0.221							
														STATE			

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

NOTE:
UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS ACQUIRED FOR THE PURPOSE OF STRUCTURE REMOVAL TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR. UPON COMPLETION OF THE WORK REQUIRED FOR SUCH REMOVAL AND SUBSEQUENT RECLAMATION, THE EASEMENT SHALL BE VACATED IMMEDIATELY.

REV BY:	DATE	DESCRIPTION
CS	2/10/06	REVISED RECORD AREAS & RES. ON PARCEL 188
CS	2/03/06	ADDED REMOVAL ITEMS ON PARCEL 185-TV
CS	7/11/05	ADDED 184-TV
FIELD REVIEW BY: CS & TA		
OWNERSHIP VERIFIED BY: TA		
DATE COMPLETE: 4/29/05		

L16/0019.RSS 02/10/06

FEDERAL PROJECT NO. NONE
PID NO. 77221
STATE JOB NO. 455460
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PARCELS 184-188

SUMMARY OF ADDITIONAL RIGHT OF WAY

LIC-161-6.65
LIC-37-10.25

15/88

1276
1349

NET RESIDUE - RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

① RESIDUE LEFT OF PROP. WATKINS-YORK FRONTAGE RD.

② RESIDUE RIGHT OF PROP. WATKINS-YORK FRONTAGE RD.

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE			
189-WL1	THOMAS N. & KIMBERLY A. TANEFF	35,36	200506290	019520	66-317514-00.000	43.233	2.671	0.881	0.293	0.588	NO						
189-WL2		35-38,79,80						6.927	2.378	4.549	NO						
189-WDV		35,36,83,84						5.688	0	5.688	YES				TO BE TAKEN IN THE NAME OF THE COUNTY, MULTIPLE STRUCTURES TO BE REMOVED		
	TOTAL 189							13.496	2.671	10.825		1.872 ①	27.865 ②				
189-TV1		83,84						0.105	0	0.105	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
189-TV2		83,84						0.331	0	0.331	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
190-WL	TIMOTHY M. & MARYILYNN A. LIGHT	37,38	OR 338	294	66-317436-00.001	2.050	0.787	2.050	0.787	1.263	YES		0.000		TOTAL TAKE, MULTIPLE STRUCTURES TO BE REMOVED		
191-WL	PETER BENSON, ETAL	37,38,79,80	200405200	018046	66-317436-00.000	**12.729	2.098	11.121	2.098	9.023	NO				** RECORD AREA=9.231 AC.; SURVEY AREA=12.729 AC.		
191-WDV		83,84						0.015	0	0.015					TO BE TAKEN IN THE NAME OF THE COUNTY		
191-E		83,84						1.593	0	1.593							
	TOTAL 191							12.729	2.098	10.631			0.000				
192	JOSEPH B. & ANITA C. HALE		200003010	006391	66-317826-00.001	1.864					NO				NO TAKE		
			OR 817	657													
193	STEVEN L. & PAMELA S. HILLS		797	381	66-317826-01.000	1.272					NO				NO TAKE		
			796	1007													
194	NOT USED																
195-TT	TERRY STAGGERS & SUSAN SCOTT-STAGGERS	79,80	200005180	015832	66-317436-00.004	1.798	0.205	1.798	0.205	1.593	YES	0.000			STRUCTURES TO BE REMOVED; TOTAL TAKE BY ORIGINAL DEED		
196-TT	TED A. ZANGMEISTER	79,80,85,86	OR 919	724	66-320640-00.000	0.838	0.103	0.838	0.103	0.735	YES	0.000			STRUCTURES TO BE REMOVED; TOTAL TAKE BY ORIGINAL DEED		
197-TT	JAMES HENRY & DOROTHY JEAN BOARD, TRUSTEES	85,86	200202260	007421	66-319770-00.000	1.485	0.174	1.485	0.174	1.311	YES	0.000			STRUCTURES TO BE REMOVED; TOTAL TAKE BY ORIGINAL DEED		
198-WDV	CHARLES DENNIS & SUSAN E. CLARK	85,86	200012200	040483	66-317436-01.000	1.000	0.123	0.239	0.123	0.116	NO	0.761			PARCEL 1, TO BE TAKEN IN THE NAME OF THE COUNTY		
					66-317436-02.000	0.629									NO TAKE, PARCEL 2		
199-WDV	WILBERT W. & ALICE W. BODEN	83-86	OR 366	721	66-317436-00.002	11.844	0.123	1.833	0	1.833	NO	2.634 ①	7.254 ②		TO BE TAKEN IN THE NAME OF THE COUNTY		
200	NOT USED																
														STATE			

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

NOTE:
UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS ACQUIRED FOR THE PURPOSE OF STRUCTURE REMOVAL TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR. UPON COMPLETION OF THE WORK REQUIRED FOR SUCH REMOVAL AND SUBSEQUENT RECLAMATION, THE EASEMENT SHALL BE VACATED IMMEDIATELY.

REV BY:	DATE	DESCRIPTION
CS	8/08/06	ADDED 191-E
CS	5/19/06	UPDATED NAME ON PARCEL 189
CS	7/11/05	CHANGED 195, 196 & 197 TO TOTAL TAKES

FIELD REVIEW BY: CS & TA
OWNERSHIP VERIFIED BY: TA
DATE COMPLETE: 4/29/05

L161O020.RSS 08/08/06

FEDERAL PROJECT NO. NONE
PID NO. 77221
STATE JOB NO. 455460
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PARCELS 189-200

SUMMARY OF ADDITIONAL RIGHT OF WAY

LIC-161-6.65
LIC-37-10.25

16/88

1277
1349

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

③ RESIDUE LEFT OF SERVICE RD. 11

④ RESIDUE RIGHT OF SERVICE RD. 11

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE			
201-WL1	ROBERT E. BAKER	75,76	199806050021123		66-317328-00.000	197	6.186	0.163	0.120	0.043	NO				* CONCRETE PAD ENCROACHING ON NORTH L/A LINE		
201-WL2		39-42,79-82						16.057	0.677	15.380	NO						
201-WL3		79,80,85,86						0.753	0.323	0.430	NO						
201-WDV1		75-78						5.445	0.758	4.687	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
201-WDV2		41,42,81,82						3.938	0	3.938	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
201-WDV3		79,80,85,86						1.014	0	1.014	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
201-WDV4		85,86						0.233	0.123	0.110	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 201							27.603	2.001	25.602		69.266	95.946				
201-TV1		75,76						0.055	0	0.055	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
201-TV2		41,42,81,82						0.027	0	0.027	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; FOR DRAINAGE		
202-WL1	DAVID E. KATHRINE A. HORNER	79-82	200206270023988		66-317316-00.000	6.5	0.141	1.843	0.055	1.788	NO						
202-WL2		79,80						0.292	0.086	0.206	NO						
202-WDV		79-82						1.388	0	1.388	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 202							3.523	0.141	3.382		0.739 ③	2.238 ④				
202-TV		79-82						0.158	0	0.158					TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
203-WL	ROBERT J. & CHERYL J. SKUNDA	79,80	OR 747	269	66-321138-00.000	**0.985	0.138	0.985	0.138	0.847	YES		0.000		TOTAL TAKE, **RECORD AREA =1.0 AC., SURVEY AREA=0.985 AC.; MULTIPLE STRUCTURES TO BE REMOVED		
204-WL	WILLIAM E. HELEN A. BETTAC	39,40	OR 721	417	66-319530-00.000	1.882	0.838	1.882	0.838	1.044	YES	0.000			TOTAL TAKE, MULTIPLE STRUCTURES TO BE REMOVED		
205-WL	JAMES M. & BRENDA G. DUNFEE	39,40	OR 826	372	66-321540-00.000	2.326	0.664	2.326	0.664	1.662	YES	0.000			TOTAL TAKE, MULTIPLE STRUCTURES TO BE REMOVED		
206	NOT USED																
207	NOT USED																
208	NOT USED																
209-WL	JOHN E. & BETTY E. HANKINSON, TRUSTEES	41-44	200011200036823		66-318138-00.000	66.790	0.155	4.494	0	4.494	NO						
209-WDV		41-44						2.189	0	2.189	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 209							6.683	0	6.683		28.440	31.512		THIS AUD. PARC. NO. ALSO USED WITH PARCEL 213		
209-TV		41,42						0.055	0	0.055	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
210-WL	MARTHA ACKERMAN	39,40,75,76	199711040005789		66-317310-00.000	5.567	1.034	1.486	1.034	0.452	YES	4.081			SHED TO BE REMOVED		
210-T		75,76						0.094	0	0.094	YES				RESIDENCE TO BE REMOVED		
211-WL	KENNETH E. CONNOR	75,76	200006300021033		66-319842-00.000			0.095	0.079	0.016	NO				TRACT 3		
					66-319836-00.000			0.123	0.092	0.031	NO				TRACT 1		
	TOTAL 211-WL							0.218	0.171	0.047							
			200006300021033		66-319842-00.000			0.158	0	0.158	NO				TRACT 3		
211-WDV		75,76			66-319842-00.000			0.038	0	0.038	NO				TRACT 2		
					66-319836-00.000			0.452	0	0.452	YES				TRACT 1; MULTIPLE STRUCTURES TO BE REMOVED		
	TOTAL 211-WDV							0.648	0	0.648					TO BE TAKEN IN THE NAME OF THE CITY		
					66-319842-00.000	1.967	0.397	0.291	0.079	0.212							
					66-319836-00.000	0.568	0.092	0.575	0.092	0.483							
	TOTAL 211					2.535	0.489	0.866	0.171	0.695			1.351				
														STATE			

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

NOTE:
UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS ACQUIRED FOR THE PURPOSE OF STRUCTURE REMOVAL TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR. UPON COMPLETION OF THE WORK REQUIRED FOR SUCH REMOVAL AND SUBSEQUENT RECLAMATION, THE EASEMENT SHALL BE VACATED IMMEDIATELY.

REV BY:	DATE	DESCRIPTION
CS	7/26/06	REVISED NAME ON PARCEL 211
CS	5/26/06	REVISED OWNERS RECORD PARCEL 209
FIELD REVIEW BY: CS & TA		
OWNERSHIP VERIFIED BY: TA		
DATE COMPLETE: 4/29/05		

L161002I.RSS 07/26/06

FEDERAL PROJECT NO. NONE

STATE JOB NO. 455460 PID NO. 77221

R.W. DESIGNER C.S. R.W. REVIEWER T.A.

PARCELS 201-211

LIC-161-6.65
LIC-37-10.25

SUMMARY OF ADDITIONAL RIGHT OF WAY

17 / 88

1278
1349

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE ▲			
212-WL	LANA HANLON	39-42	OR 447	695	66-319536-00.000	6.95	0.945	2.067	0	2.067	YES	3.938			STRUCTURE TO BE REMOVED		
			691	467													
212-T		41,42						0.072	0	0.072	NO				FOR DRAINAGE		
213-WDV	JOHN E. & BETTY E. HANKINSON, TRUSTEES	77,78	200011200036823		66-318138-00.000	66.790	0.721	0.771	0.721	0.051	NO	66.018			TO BE TAKEN IN THE NAME OF THE COUNTY; THIS AUD. PARC. NO. ALSO USED WITH PARCEL 209		
214	THE CHURCH OF CHRIST AT ALEXANDRIA INC.	77,78	830	494	66-318138-01.000	5.887					NO				NO TAKE		
215	JAMES B. & F. JEAN WILLIAMS	77,78	739	717	66-319992-00.000	4.240					NO				NO TAKE		
216-WL	DAVID A. & MARY JEAN MORITZ	43-47	781	778	66-319032-00.000			10.800	0	10.800	NO				TRACT 1, PARCEL 1		
					66-319026-00.000			7.607	0.261	7.346	NO				TRACT 1, PARCEL 2		
					66-319020-00.000			3.219	0.562	2.657	NO				TRACT 2, PARCEL 1		
					66-319044-00.000			6.479	0.269	6.210	NO				TRACT 2, PARCEL 2		
	TOTAL 216-WL							28.105	1.092	27.013							
216-WDV1		43,44	781	778	66-319032-00.000			0.668	0	0.668	NO				TO BE TAKEN IN THE NAME OF THE COUNTY TRACT 1, PARCEL 1		
216-WDV2		45,46	781	778	66-319026-00.000			0.341	0.133	0.208	NO				TRACT 1, PARCEL 2		
					66-319044-00.000			0.370	0.133	0.237	NO				TRACT 2, PARCEL 2		
	TOTAL 216-WDV2							0.711	0.266	0.445					TO BE TAKEN IN THE NAME OF THE COUNTY		
216-WDV3		45-47	781	778	66-319026-00.000			0.274	0.163	0.111	NO				TRACT 1, PARCEL 2		
					66-319044-00.000			3.975	0.071	3.904	NO				TRACT 2, PARCEL 2		
					66-319038-00.000			0.476	0.094	0.382	NO				TRACT 1, PARCEL 3		
	TOTAL 216-WDV3							4.725	0.328	4.397					TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 66-319032-00.000					138.996	7.079	11.468	0	11.468		48.283	72.166				
	TOTAL 66-319026-00.000					82.0	8.121	8.222	0.557	7.665		43.851	22.363				
	TOTAL 66-319020-00.000					50.0	2.471	3.219	0.562	2.657		21.424	23.448				
	TOTAL 66-319044-00.000					53.7	4.632	10.824	0.473	10.351		38.717					
	TOTAL 66-319038-00.000					45.0	0.493	0.476	0.094	0.382			44.125				
	TOTAL 216					369.696	22.796	34.209	1.686	32.523		152.275	162.102				
216-T		45,46			66-319032-00.000			0.076	0	0.076	NO				FOR DRAINAGE		
216-TV		47,48			66-319038-00.000			0.075	0	0.075	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
217	NOT USED																
218	NOT USED																
219	NOT USED																
220-WL	RONALD E., JOYCE W. & ARNOLD K. KISSELL	47-50	671	295	66-318318-00.000	105	3.663	5.157	1.595	3.562	NO						
220-WDV		47-50						2.608	0	2.608	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 220							7.765	1.595	6.170		48.745	46.422				
220-TV		49,50						0.950	0	0.950	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
221	NOT USED																
														STATE ▼			

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

NOTE:
UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS ACQUIRED FOR THE PURPOSE OF STRUCTURE REMOVAL TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR. UPON COMPLETION OF THE WORK REQUIRED FOR SUCH REMOVAL AND SUBSEQUENT RECLAMATION, THE EASEMENT SHALL BE VACATED IMMEDIATELY.

REV BY:	DATE	DESCRIPTION
CS	5/26/06	REVISED OWNERS RECORD PARCEL 209
CS	4/07/06	NAME CHANGE FOR PARCEL 212
FIELD REVIEW BY: CS & TA		
OWNERSHIP VERIFIED BY: TA		
DATE COMPLETE: 4/29/05		

L1610022.RSS 05/26/06

FEDERAL PROJECT NO. NONE
PID NO. 77221
STATE JOB NO. 455460
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PARCELS 212-221
LIC-161-6.65
LIC-37-10.25

SUMMARY OF ADDITIONAL RIGHT OF WAY

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
222	NOT USED													STATE			
223	NOT USED																
224	NOT USED																
225-WL	KENNETH M. & MARY LOU HANKINSON	49,50	OR 723	506	66-320472-00.000	**0.987	0.221	0.902	0.221	0.681	YES				PARCEL 1, MULTIPLE STRUCTURES TO BE REMOVED; **RECORD AREA=1.140AC.;SURVEY AREA=0.987		
225-WDV		49,50	OR 723	506	66-320472-00.000			0.085	0	0.085	NO				PARCEL 1		
					66-302472-00.000	**0.344	0	0.344	0	0.344	NO				PARCEL 2;**RECORD AREA=0.337AC., SURVEY AREA=0.344AC.		
	TOTAL 225-WDV					**1.331	0.221	0.429	0	0.429		0	0		TOTAL TAKE, TO BE TAKEN IN THE NAME OF THE COUNTY, MULTIPLE STRUCTURES TO BE REMOVED		
226-WL1	BETTY F. & JOHN E. HANKINSON, TRUSTEES	51,52	200104	10011851	66-318144-00.000			6.763	3.127	3.636	YES				TRACT 1, PARCEL 2, MULTIPLE STRUCTURES TO BE REMOVED		
226-WL2		53-56	199807	00026122	19-041964-00.000			1.146	1.146	0	NO				TRACT 1, PARCEL 2, MULTIPLE STRUCTURES TO BE REMOVED		
226-WDV1		49-52	200104	10011851	66-318144-00.000			2.344	0	2.344	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TRACT 1, PARCEL 2		
226-WDV2		53-56	200104	10011851	66-318144-00.000			0.923	0.814	0.109	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TRACT 1, PARCEL 2		
			200004	30011610	19-041964-00.000			1.985	1.671	0.314	NO						
	TOTAL 226-WDV2							2.908	2.485	0.423							
	TOTAL 66-318144-00.000					312.751	12.147	10.030	3.941	6.089		294.515					
	TOTAL 19-041964-00.000					26.080	2.817	3.131	2.817	0.314		22.949					
	TOTAL 226					338.831	14.964	13.161	6.758	6.403		317.464					
226-TV1		51,52			66-318144-00.000			0.061	0	0.061	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; FOR DRAINAGE		
226-TV2		51,52			66-318144-00.000			0.012	0	0.012	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; FOR DRAINAGE		
226-TV3															NOT USED		
226-TV4		53-56			19-041964-00.000			0.225	0	0.225	YES				TO BE TAKEN IN THE NAME OF THE COUNTY; RESIDENCE TO BE REMOVED		
			199810	60039509	66-320586-00.000	1.389									* 2 STY. BLOCK BARN & METAL BARN ENCROACHING; NO TAKE		
					66-319212-01.000												
227-WL	THOMAS C. & SUSAN E. SHAW	51,52	199810	60039510	66-320586-00.000	5.002	0	0.775	0	0.775	NO						
227-WDV		51,52						0.481	0	0.481	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 227							1.256	0	1.256			3.746				
228-WL	JERRY D. JACKSON	51,52	200404	60011717	66-320586-00.002	5.974	0	0.752	0	0.752	NO						
			199812	30050460													
228-WDV		51,52						0.453	0	0.453	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 228							1.205	0	1.205		4.769					
228-TV		51,52						0.802	0	0.802	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
229-WDV	NORMA J. KENT	51-54	503	225	66-320652-00.000	1.610	0	0.397	0	0.397	NO		1.213		TO BE TAKEN IN THE NAME OF THE COUNTY		
					66-320646-00.000	0.250					NO				NO TAKE		
229-TV		51-54						0.166	0	0.166	NO				TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
230-WL	DANIEL D. VAN NESS, ETAL, TRUSTEES	53,54	200102	90004137	66-319206-00.000	51.776	6.851	5.190	4.205	0.985	NO						
			200011	70036623													
230-WDV1		53,54						0.400	0.400	0	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
230-WDV2		53,54						4.409	0	4.409	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 230							9.999	4.605	5.394			39.531				
230-TV		53,54						0.654	0	0.654	NO			STATE	TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

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REV BY:	DATE	DESCRIPTION
CS	9/05/06	REVISED 226-WDV2 AUD. PAR. NO.
CS	7/18/06	DELETED PARCEL 226-TV3
CS	6/05/06	REVISED 229-WDV & 229-TV
CS	5/10/06	REVISED 226-WL2 & 226-WDV2
CS	8/24/05	DELETE 227-TV, REVISE 227-WDV

FIELD REVIEW BY: CS & TA
OWNERSHIP VERIFIED BY: TA
DATE COMPLETE: 4/29/05

L16100023.RSS 09/11/06

FEDERAL PROJECT NO. NONE
PID NO. 77221
STATE JOB NO. 455460
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PARCELS 222-230

SUMMARY OF ADDITIONAL RIGHT OF WAY

LIC-161-6.65
LIC-37-10.25

19/88

1280
1349

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE			
231-WL	STEVEN H. & KAREN G. WILLIAMS	53-56	OR 21	644	19-041976-00.000	6.655		1.241	0.962	0.279					PARCEL 2		
					19-041976-01.000	5.003		0.481	0.184	0.297					PARCEL 1		
	TOTAL 231-WL					11.658		1.722	1.146	0.576	NO						
231-WDV		53-56	OR 21	644	19-041976-00.000	6.655		1.506	0.002	1.504					PARCEL 2		
					19-041976-01.000	5.003		0.675	0	0.675	NO				PARCEL 1		
	TOTAL 231-WDV					11.658		2.181	0.002	2.179	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 19-041976-00.000					6.655	0.964	2.747	0.964	1.783			3.908				
	TOTAL 19-041976-01.000					5.003	0.184	1.156	0.184	0.972			3.847				
	TOTAL 231					11.658	1.148	3.903	1.148	2.755			7.755				
231-TV		55,56			19-041976-01.000			0.047	0	0.047	YES				PARCEL 2, RESIDENCE TO BE REMOVED, TO BE TAKEN IN THE NAME OF THE COUNTY		
232-WDV	PHLLIP J. & BARBARA J. WATTS	55,56	200004130011610		19-041964-00.001	20.841	0	0.787	0	0.787	NO	20.054			TO BE TAKEN IN THE NAME OF THE COUNTY		
232-TV		55,56						0.226	0	0.226	YES				STRUCTURES TO BE REMOVED & TO CONSTRUCT DRIVE, TO BE TAKEN IN THE NAME OF THE COUNTY		
233-WL	LARRY & RENEE F. MARTIN	55-58	OR 444	582	19-042696-00.000	29.844	2.090	0.489	0.489	0	NO						
233-WDV		55-58						2.503	1.595	0.908	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 233							2.992	2.084	0.908		26.846					
233-TV		57,58						0.060	0	0.060	NO				PARCEL 2, TO BE TAKEN IN THE NAME OF THE COUNTY; FOR DRAINAGE		
234-WL	BARBARA O'BANNON & MARILYN LINGEN	55-58	200606260018323 &		19-042690-00.000	24.330	3.317	2.673	2.346	0.327	NO						
234-WDV		55-58,87,88	200606260018324					4.211	0.797	3.414	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 234							6.884	3.143	3.741			17.272				
					19-042696-01.000	1.000									NO TAKE		
235	NOT USED																
236	NOT USED																
237	NOT USED																
238	NOT USED																
239	NOT USED																
240-WL	EVA F. MONTGOMERY	57-60	200002290006168		19-042570-00.000	195.63	7.637	4.847	4.462	0.385	NO				TRACT 1, PARCEL 1		
			300	483													
240-WDV1		57-60						3.262	0.940	2.322	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
240-WDV2		57-60						5.107	1.480	3.627	NO				TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 240							13.216	6.882	6.334		47.054	134.605				
240-TV		87,88						0.139	0	0.139	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
240-TV1		57,58						0.172	0	0.172	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
240-TV2		59,60						0.201	0	0.201	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
240-TV3		59,60						0.102	0	0.102	NO				TO BE TAKEN IN THE NAME OF THE COUNTY, TO CONSTRUCT DRIVE		
														STATE			

NOTE:
ALL TEMPORARY PARCELS TO BE OF 24 MONTHS DURATION.

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REV BY:	DATE	DESCRIPTION
CS	9/01/06	ADDED 3 TEMPS ON PARCEL 240
CS	6/29/06	REVISED 234 OWNER'S NAME & RECORD
CS	5/10/06	DELETED 232-WL, REVISED 232-WDV & 240-WDV1

FIELD REVIEW BY: CS & TA
OWNERSHIP VERIFIED BY: TA
DATE COMPLETE: 4/29/05

L1610024.RSS 09/01/06

FEDERAL PROJECT NO. NONE
PID NO. 77221
STATE JOB NO. 45460
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PARCELS 231-240

SUMMARY OF ADDITIONAL RIGHT OF WAY

LIC-161-6.65
LIC-37-10.25

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF STATE OF OHIO UNLESS OTHERWISE SHOWN.

*DENOTES RIGHT OF WAY ENCROACHMENT

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA(AC.)	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE
														STATE			
241-WL	TALBOTT L. II & DANIEL D. VAN NESS	59-64	OR 795	18	19-043374-00.000	29.33	6.321	4.106	4.106	0	NO						
241-WDV		59-64						4.050	2.215	1.835					TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 241							8.156	6.321	1.835		21.174					
241-TV		61,62						0.150	0	0.150					TO BE TAKEN IN THE NAME OF THE COUNTY; TO CONSTRUCT DRIVE		
242-WL	PAR GOLF GROUP INC.	59-62	OR 440	120	19-042900-00.000	154.759	1.508	0.599	0.599	0							
242-WDV		59-62						2.303	0.909	1.394					TO BE TAKEN IN THE NAME OF THE COUNTY		
	TOTAL 242							2.902	1.508	1.394			151.857				
242-TV		61,62						0.035	0	0.035					TO BE TAKEN IN THE NAME OF THE COUNTY; FOR GRADING		
243	NOT USED																
244-WL	RICHARD F. NEFF, JR., TRUSTEE	61-64	OR 687	719	19-042630-00.000	7.17	2.376	2.548	2.376	0.172					PARCEL 1		
244-WDV								0.158	0	0.158					TO BE TAKEN IN THE NAME OF THE COUNTY; HISTORICAL MARKER TO BE RELOCATED BY STATE FORCES		
	TOTAL 244							2.706	2.376	0.330			4.464				
244-TV		61,62						0.243	0	0.243					TO BE TAKEN IN THE NAME OF THE COUNTY; FOR GRADING		
245-SH	GEORGE H. MCMILLIN III	63,64	822	208	19-042444-00.000	75.421	16.001	0.350	0	0.350		59.070					
245-T		65-68						0.263	0	0.263					FOR GRADING WORK		
246-PRE1	OWENS CORNING FIBERGLASS CORP.	63,64	724	950	19-043608-00.000	106.025									NO TAKE; LOSS OF ACCESS		
246-PRE2		67,68	OR 117	577	19-041520-00.000	68.794	4.750								NO TAKE; LOSS OF ACCESS		
			743	229	19-042444-01.000	5.468									NO TAKE		
247-SH	THE THOMAS J EVANS FOUNDATION	67,68	OR 394	47	19-041520-00.001	16.589	2.481	0.072	0	0.072		14.036					
247-CH		67,68						0.006	0	0.006							
247-T		67,68						0.066	0	0.066					FOR GRADING WORK		
			OR 830	333	19-042390-00.000	24.593									NO TAKE		
248-LA	LEE ANN BAILEY, ETAL	69-72	OR 718	894	19-042894-00.000			0.614	0	0.614					RECORD AREA = 38.729 AC.; PARCELS 248-LA, 248-CH, 248-PRE & THE PRO ARE INCLUDED IN TOTAL ACREAGE OF PARCEL 248-E		
248-CH		71,72						0.247	0	0.247							
248-PRE		69,70													LOSS OF ACCESS		
248-E		13				56.889	15.160	56.889	15.160	41.729		0.000					
249	NOT USED																
250-LA	TOWNSHIP OF GRANVILLE	69-72	199901250003097		19-042390-00.001	72.824	2.574	0.317	0	0.317	NO		69.933				
250-PRE		69,70													NO TAKE; LOSS OF ACCESS		
														STATE			

NOTE:
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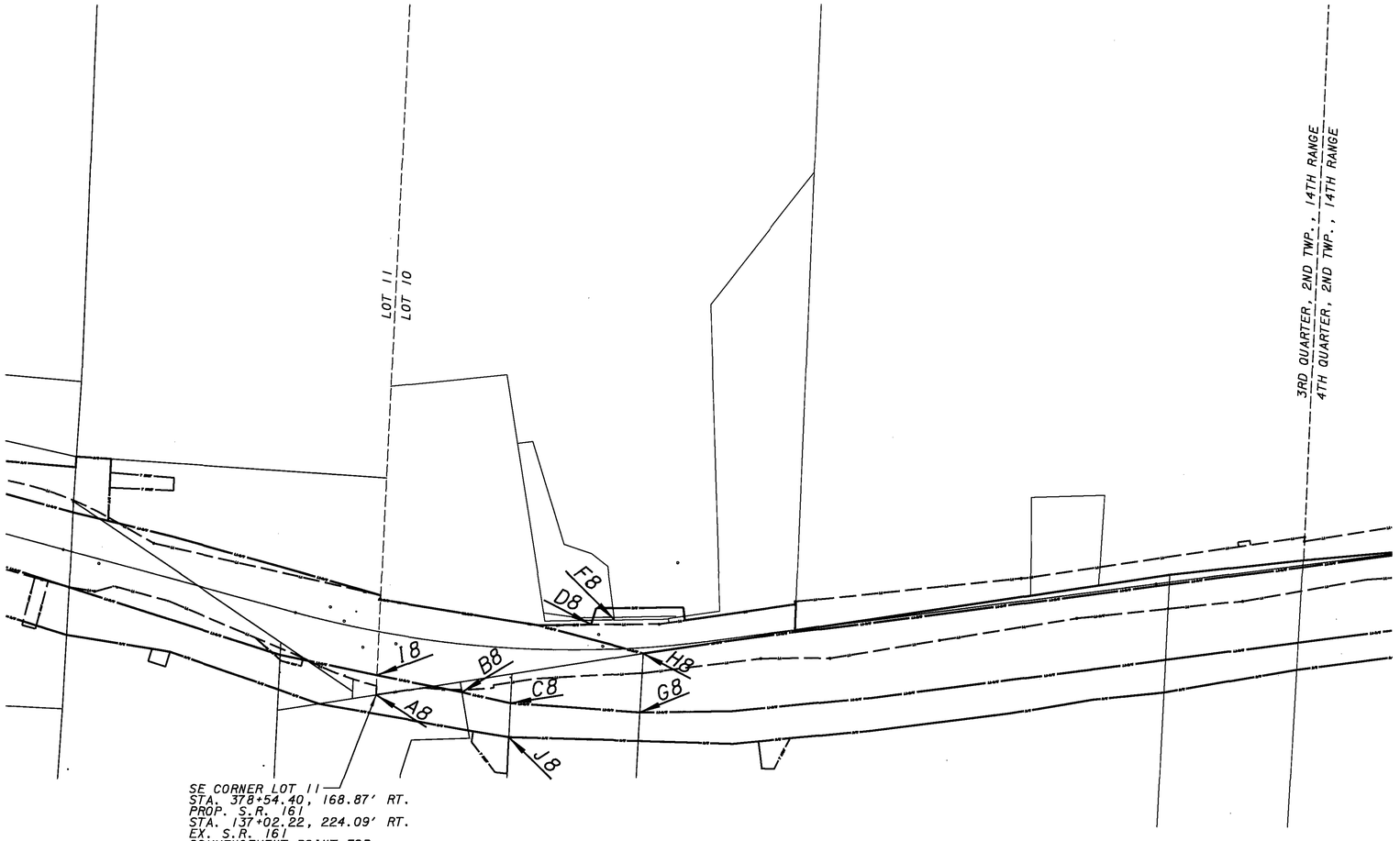
REV BY:	DATE	DESCRIPTION
CS	8/14/06	ADDED 248-E
CS	5/01/06	REVISED 244-WL, 244-WDV & 244-TV
CS	2/03/06	ADDED SIGN TO BE RELOCATED TO PARCEL 244-WDV
CS	5/17/05	ADDED 246-PR1; 246-PR & 250-PRE, CHANGED 248-SH & 250-SH TO 248-LA & 250-LA

FIELD REVIEW BY: CS & TA
OWNERSHIP VERIFIED BY: TA
DATE COMPLETE: 4/29/05

FEDERAL PROJECT NO. NONE
STATE JOB NO. PID NO. 455460 77221
R.W. DESIGNER C.S. R.W. REVIEWER T.A.
PARCELS 241-250
LIC-161-6.65 LIC-37-10.25
SUMMARY OF ADDITIONAL RIGHT OF WAY
21 / 88
1282 1349

L1610025.RSS 08/15/06

LOTS 10 & 11
QTR. TWP. 3, T2N, R14W, USML
LOT 25, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



SE CORNER LOT 11
STA. 378+54.40, 168.87' RT.
PROP. S.R. 161
STA. 137+02.22, 224.09' RT.
EX. S.R. 161
COMMENCEMENT POINT FOR
PARCELS 174-WL, 174-WDV,
175-WL, 175-WDV, 175-E, 176-WDV,
177-WDV, 178-WDV, 182-WL,
182-WDV1 & 182-WDV2

PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
174-WL & 174-WDV	A8 TO B8	N 88°11'43" E	309.34'	28
175-WL & 175-WDV	A8 TO C8	S 86°24'29" E	485.00'	28
175-E	A8 TO J8	S 71°56'48" E	502.46'	27A
176-WDV	A8 TO D8	N 72°08'55" E	814.97'	28
177-WDV & 178-WDV	A8 TO F8	N 72°45'06" E	900.09'	28
179-WDV1	A8 TO I8	N 02°51'20" E	69.96'	28
182-WL & 182-WDV2	A8 TO G8	S 86°06'56" E	952.12'	28
179-WL, 179-WDV2 &182-WDV1	A8 TO H8	N 81°16'15" E	973.88'	28

L16100I7.RCP 8/02/06

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PID NO. 24486

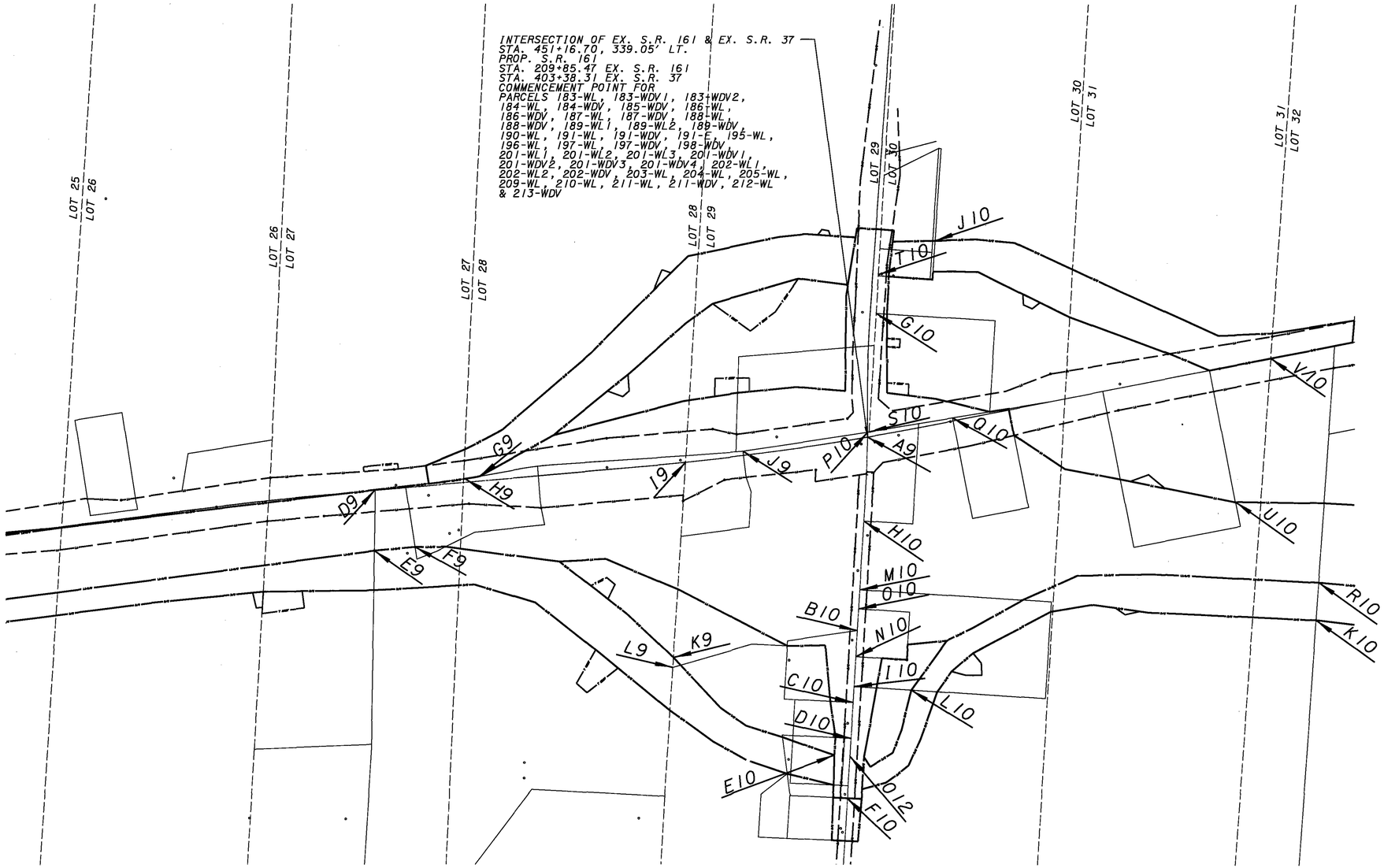
LEAD-IN COURSES FOR PARCELS 174 TO 182

LIC-161-6.65
LIC-37-10.25

22/88

1283
1349

LOTS 25, 26, 27, 28, 29, 30, 31 & 32
QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
183-WL 183-WDV1 & 184-WL	A9 TO B9	S 83°38'09" W	3,405.03'	34
183-WDV2 & 184-WDV	A9 TO C9	S 79°11'22" W	3,462.80'	34
185-WDV, 187-WL & 188-WDV	A9 TO H9	S 84°06'27" W	1,705.47'	36
186-WL & 189-WL1	A9 TO D9	S 83°55'19" W	2,078.54'	36
186-WDV & 189-WDV	A9 TO E9	S 77°02'28" W	2,124.87'	36
187-WDV	A9 TO F9	S 76°22'47" W	1,954.99'	36
188-WL	A9 TO G9	S 84°15'35" W	1,636.66'	36
189-WL2 & 190-WL	A9 TO I9	S 84°06'57" W	768.05'	38
191-WL	A9 TO J9	S 83°23'37" W	526.65'	38
191-WDV & 191-E	A9 TO K9	S 41°26'51" W	1,234.09'	84
199-WDV	A9 TO L9	S 40°18'28" W	1,266.80'	84

PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
195-WL	A9 TO B10	S 02°59'46" W	811.62'	80
196-WL	A9 TO C10	S 03°05'32" W	1,111.73'	80
197-WL	A9 TO D10	S 03°07'23" W	1,261.63'	86
197-WDV	A9 TO E10	S 05°57'27" W	1,338.43'	86
198-WDV & 201-WDV4	A9 TO F10	S 03°09'40" W	1,514.62'	86
201-WL1	A9 TO G10	N 04°03'12" E	521.59'	76
201-WL2	A9 TO H10	S 02°31'52" W	351.51'	40
201-WL3	A9 TO I10	S 03°04'33" W	1,045.74'	80
201-WDV1 & 211-WDV	A9 TO J10	N 18°53'47" E	876.36'	76
201-WDV2	A9 TO K10	S 67°52'55" E	2,029.57'	42
201-WDV3 & 202-WDV	A9 TO L10	S 09°50'13" E	1,074.46'	80
202-WL1	A9 TO M10	S 02°54'05" W	640.74'	80
202-WL2	A9 TO N10	S 03°02'18" W	920.74'	80
203-WL	A9 TO O10	S 02°57'05" W	720.74'	80
204-WL	A9 TO P10	N 00°04'03" W	19.96'	40

PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
205-WL	A9 TO Q10	N 77°22'05" E	365.67'	40
209-WL	A9 TO R10	S 72°14'03" E	1,985.73'	42
210-WL	A9 TO S10	N 19°57'00" E	22.49'	40
211-WL	A9 TO T10	N 03°53'15" E	681.60'	76
212-WL	A9 TO U10	S 80°08'55" E	1,565.51'	42
213-WDV	A9 TO V10	N 78°51'30" E	1,723.35'	78

L16I0018.RCP 8/15/06

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PID NO. 24486

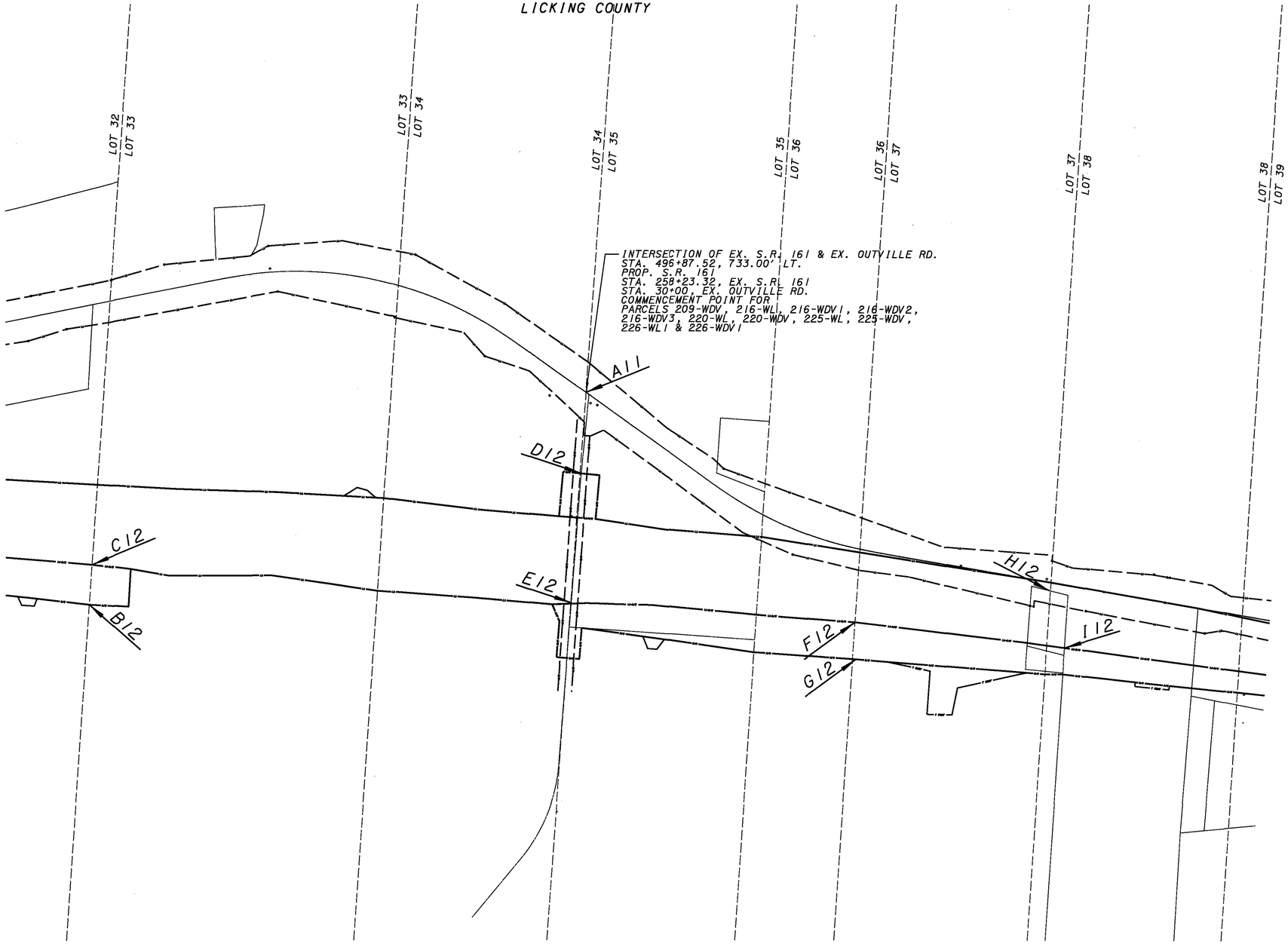
LEAD-IN COURSES FOR PARCELS 183 TO 213

LIC-161-6.65
LIC-37-10.25

23/88

1284
1349

LOTS 32, 33, 34, 35, 36, 37, 38 & 39
QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
216-WL	A11 TO C12	S 71°07'37" W	2,300.98'	44
209-WDV & 216-WDV1	A11 TO B12	S 67°13'48" W	2,374.25'	44
216-WDV2	A11 TO D12	S 05°21'00" W	350.00'	46
216-WDV3	A11 TO E12	S 04°53'56" W	920.56'	46
220-WL	A11 TO F12	S 49°34'28" E	1,536.38'	48
220-WDV	A11 TO G12	S 44°59'41" E	1,638.81'	48
225-WL & 226-WL1	A11 TO H12	S 67°56'29" E	2,186.89'	50
225-WDV & 226-WDV1	A11 TO I12	S 62°00'57" E	2,362.04'	50

L1610019.RCP 9/26/05

R.W. DESIGNER C.S.
R.W. REVIEWER T.A.
PID NO. 24486

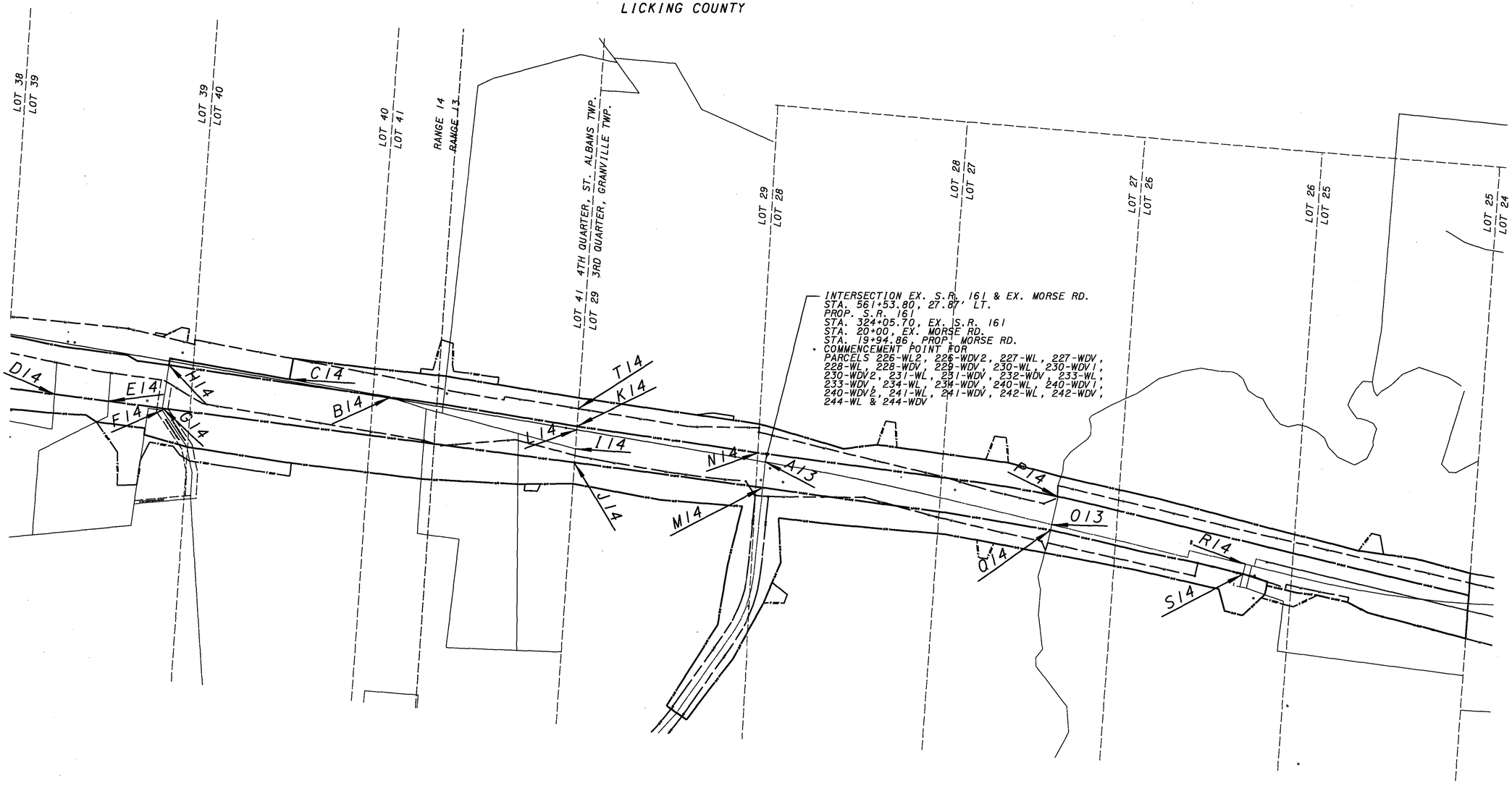
LEAD-IN COURSES FOR PARCELS 209 TO 226

LIC-161-6.65
LIC-37-10.25

24/88

1285
1349

LOTS 38, 39 & 40
QTR. TWP. 4, T2N, R14W, USML
LOT 41, QTR. TWP. 4 & 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LOTS 24, 25, 26, 27, 28 & 29
QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TWP.
LICKING COUNTY



PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
226-WL2	A13 TO B14	N 80°09'37" W	1,737.75'	54
226-WDV2	A13 TO C14	N 80°04'54" W	2,205.72'	54
227-WL & 227-WDV	A13 TO D14	N 84°28'42" W	3,261.68'	52
228-WL & 228-WDV	A13 TO E14	N 84°38'56" W	3,013.33'	52
229-WDV & 230-WDV2	A13 TO F14	N 85°02'17" W	2,765.31'	52
230-WL	A13 TO G14	N 84°51'02" W	2,764.77'	52
230-WDV1	A13 TO H14	N 80°42'08" W	2,760.34'	52
231-WL	A13 TO I14	N 86°04'50" W	870.07'	56
231-WDV & 234-WDV	A13 TO J14	S 89°49'41" W	872.44'	56

PARCEL	COURSE	CHORD BEARING	DISTANCE	POB ON SHT.
232-WDV	A13 TO T14	N 74°05'01" W	889.05'	56
233-WL & 233-WDV	A13 TO K14	N 79°19'22" W	875.91'	56
234-WL	A13 TO L14	N 80°18'55" W	874.28'	56
240-WL & 240-WDV2	A13 TO M14	S 05°54'12" W	117.92'	58
240-WDV1	A13 TO N14	N 39°12'27" W	54.24'	58
241-WL & 242-WL	A13 TO O14	S 77°49'27" E	1,337.19'	60
241-WDV	A13 TO P14	S 83°24'01" E	1,343.21'	60
242-WDV	A13 TO Q14	S 76°46'30" E	1,337.26'	60
244-WL	A13 TO R14	S 78°08'50" E	2,237.03'	62
244-WDV	A13 TO S14	S 76°59'54" E	2,236.22'	62

L1610020.RCP 6/12/06

PID NO. 24486
R.W. DESIGNER C.S.
R.W. REVIEWER T.A.

LEAD-IN COURSES FOR PARCELS 226 TO 244

LIC-161-6.65
LIC-37-10.25

LOTS 10 & 11, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

BEGIN PROJECT
STA. 351+00
PROP. S.R. 161
S.L.M. 6.65

BEGIN L/A ACQUISITION
STA. 381+97.67
PROP. S.R. 161

BEGIN R/W ACQUISITION
STA. 144+50
SERVICE RD. 10

BEGIN WORK
STA. 144+70
SERVICE RD. 10

BEGIN WORK
STA. 113+00
PROP. WATKINS-YORK
FRONTAGE RD.

BEGIN R/W ACQUISITION
STA. 140+18.78
PROP. WATKINS-YORK
FRONTAGE RD.

176
RICHARD J. & SUSAN E. CHENAULT
66-318222-01.000
RESIDENTIAL
PARCEL 1

177
MICHAEL D. & DAWN M. TURNER
66-318222-03.000
RESIDENTIAL

178
CIRCLE G LAZY K RANCH
LIMITED PARTNERSHIP
66-318222-00.000
COMMERCIAL
PARCEL 1

179
HEIRS OF
EVERETT W. &
BEULAH V. BROWN
TOTAL TAKE

173
JAMES E. & KATHRYN V. STACY
AUD. PARC. NO.
RESIDENTIAL
TOTAL TAKE FROM PHASE ONE

174
STEVEN E. & ELIZABETH S. TUTTLE
66-318642-00.000
RESIDENTIAL

175
CHARLES W. & BERNICE J. UTTER
66-317730-00.001
COMMERCIAL

182
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE ROBERT G. CALDWELL LIVING TRUST
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE RUTH ANN CALDWELL LIVING TRUST
66-318348-00.000

PROP. ℄ SURVEY & CONSTRUCTION, SERVICE RD. 10
EX. ℄ SURVEY, S.R. 161
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 161
PROP. ℄ SURVEY & CONSTRUCTION, WATKINS-YORK FRONTAGE RD.
EX. UNDERGROUND TELEPHONE LINE TO BE RELOCATED
CONSTRUCTION LIMITS
EX. FENCE TO BE REMOVED
STA. 141+94 PROP. WATKINS-YORK FRONTAGE RD.
STA. 145+26.53 SERVICE RD. 10
STA. 145+50 PROP. WATKINS-YORK FRONTAGE RD.
STA. 147+45.50 SERVICE RD. 10
MATCHLINE STA. 148+00 SERVICE RD. 10 SEE SHEET 29
MATCHLINE STA. 148+00 EX. S.R. 161 SEE SHEET 29
MATCHLINE STA. 149+00 PROP. WATKINS-YORK FRONTAGE RD. SEE SHEET 29
MATCHLINE STA. 390+00 EX. S.R. 161 SEE SHEET 29

NOTES:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 161 UNLESS OTHERWISE STATED.

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	8/15/06	CHANGED 182 OWNERSHIP
2	8/02/06	ADDED 175-E, DELETED 175-TV1 & 175-TV2
1	2/06/06	DELETED 177-TV, REVISED 176-WDV & 177-WDV

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 378+00 TO STA. 390+00 PROP. S.R. 161
STA. 137+00 TO STA. 148+00 EX. S.R. 161
STA. 143+00 SERVICE RD. 10 TO STA. 148+00 WORTHINGTON RD. NORTH
STA. 137+00 TO 149+00 PROP. FRONTAGE RD.

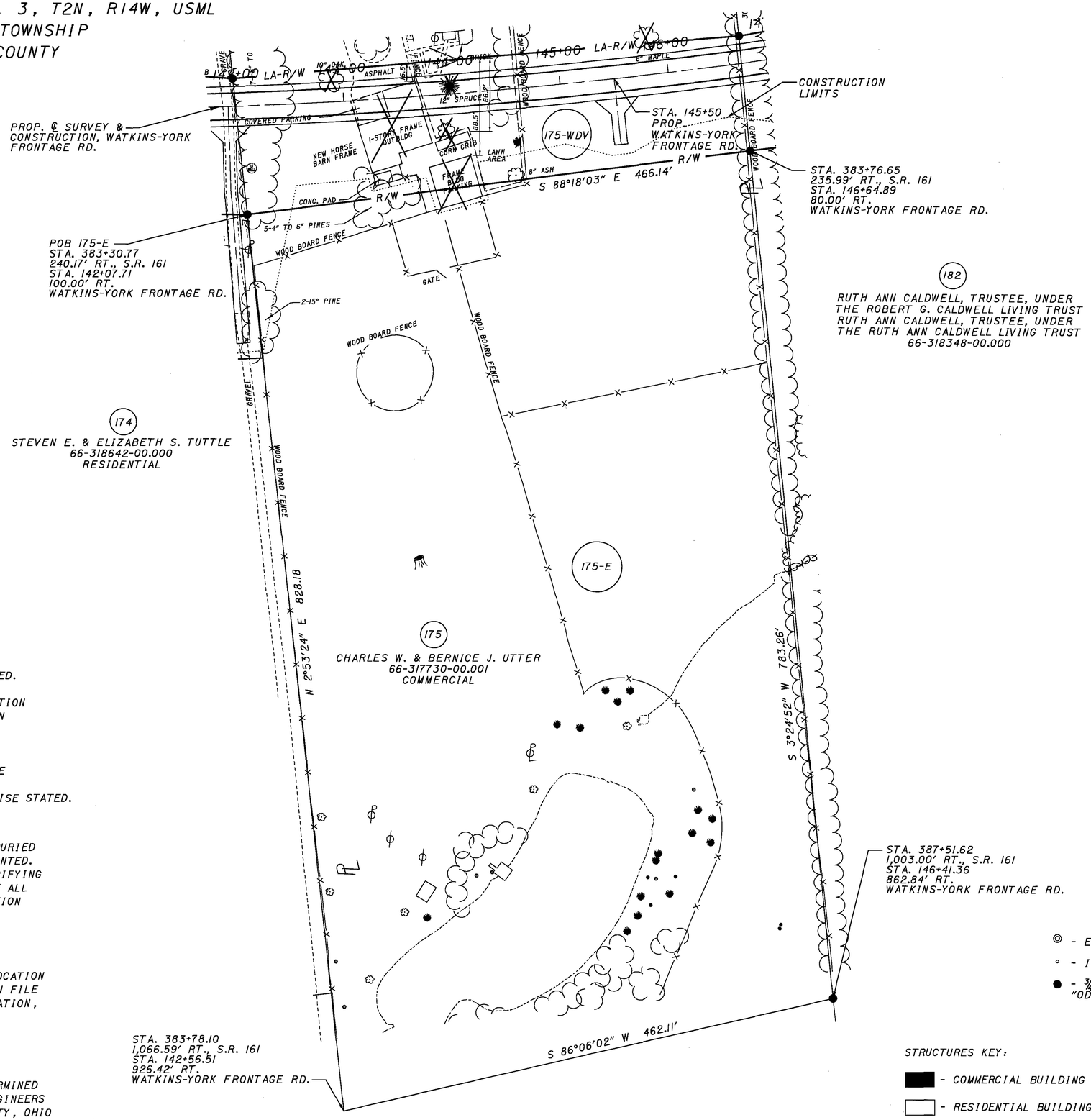
LIC-161-6.65
LIC-37-10.25

27 / 88

1287 / 1349

LIC10033.RDS 08/15/06

LOTS 10 & 11, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 161 UNLESS OTHERWISE STATED.

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	8/15/06	CHANGED 182 OWNERSHIP

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET PARCEL 175-E

LIC-161-6.65
LIC-37-10.25

27A/88

(1288/1349)

L6I0068.RDS 08/15/06

LOTS 10 & 11, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

BEGIN PROJECT
STA. 351+00
PROP. S.R. 161
S.L.M. 6.65

BEGIN L/A ACQUISITION
STA. 381+97.67
PROP. S.R. 161

BEGIN WORK
STA. 113+00
PROP. WATKINS-YORK
FRONTAGE RD.

BEGIN WORK
STA. 144+70
SERVICE RD. 10

BEGIN R/W ACQUISITION
STA. 144+50
SERVICE RD. 10

EX. S.R. 161
CURVE 1
P.I. STA. 141+28.06
D = 22°33'04" LT.
Dc = 01°30'04"
R = 3,816.72'
T = 760.96'
L = 1,502.22'
E = 75.12'

(176) RICHARD J. & SUSAN E. CHENAULT
66-318222-01.000
RESIDENTIAL
PARCEL 1

EX. MONUMENT
STA. 377+89.44
181.04' LT.

STA. 377+92.39
166.04' LT.

EX. IRON PIPE FOUND
STA. 377+89.44
179.68' LT.

S. 80°45'25" E 488.50'

270.64'

(179) HEIRS OF
EVERETT W. &
BEULAH V. BROWN
TOTAL TAKE

EX. ℄ SURVEY,
S.R. 161

S.R. 161
CURVE 1
P.I. STA. 384+88.00
D = 25°09'15" LT.
Dc = 01°15'00"
R = 4,583.66'
T = 1,022.64'
L = 2,012.31'
E = 112.69'

STA. 383+92.82
172.74' LT. S.R. 161

N 80°45'25" W
89.36'

S 81°58'16" E

N 89°15'21" E
440.05'

S 75°09'22" E
388.70'

EX. IRON PIN FOUND
STA. 384+17.89
176.05' LT.

POT STA. 143+00.00
51.61'

S 8°40'57" E

(177) MICHAEL D. & DAWN M. TURNER
66-318222-03.000
RESIDENTIAL

SERVICE RD. 10
CURVE 1
P.I. STA. 145+26.74
D = 08°44'01" RT.
Dc = 12°00'42"
R = 477.00'
T = 36.43'
L = 72.71'
E = 1.39'

STA. 144+60
50.06' LT.
SERVICE RD. 10

N 17°25'31" E
44.86'

STA. 144+52.68
5.81' LT.
SERVICE RD. 10

N 17°25'31" E
16.40'

POB 176-WDV
STA. 144+50
10.37' RT.
SERVICE RD. 10

SERVICE RD. 10
CURVE 2
P.I. STA. 146+98.16
D = 24°04'10" LT.
Dc = 20°02'01"
R = 286.00'
T = 60.97'
L = 120.15'
E = 6.43'

(178) CIRCLE G LAZY K RANCH
LIMITED PARTNERSHIP
66-318222-00.000
COMMERCIAL
PARCEL 1

S 88°58'23" W
195.19'
(178-WDV)

STA. 147+03.27
47.31' LT., SERVICE RD. 10

S 81°57'25" W 28.56' (176-WDV)

STA. 147+37.96
64.66' LT., SERVICE RD. 10

S 1°38'59" E 13.31'

STA. 148+00
100.00' LT., SERVICE RD. 10

S 7°18'25" E 47.31'

STA. 148+00
51.36' LT., SERVICE RD. 10

S 81°57'25" W 58.96' (178-WDV)

493.59' (179-WDV2)

STA. 147+37.46
51.36' LT., SERVICE RD. 10

(179-WDV2)

177-WDV

178-WDV

176-WDV

S 7°22'28" E

N89°16'12" E
60.08'

42.50'

STA. 145+16.15
60.00' LT.
SERVICE RD. 10

N 89°16'12" E
253.39'

POB 177-WDV
STA. 145+29.10
19.88' LT.
SERVICE RD. 10

S88°58'23"W
78.98'

N 88°58'23" E
195.19' (176-WDV)

S 89°15'21" W
25.16' (176-WDV)

EX. IRON PIN FOUND
STA. 145+34.75
4.43' LT.,
SERVICE RD. 10

PROP. ℄ SURVEY &
CONSTRUCTION,
SERVICE RD. 10

S73°14'14"E

EX. MONUMENT
(LEANING)

N82°41'36"E

147+51.34

P.C. STA. 147+37.10

MATCHLINE STA. 148+00 PROP. SR. 161 SEE SHEET 30

MATCHLINE STA. 148+00 EX. SR. 161 SEE SHEET 30

555.05' (179-WDV2)
N81°33'13"E 1919.69' (182-WDV1)

405.80'

S 81°56'28" W

POB 179-WL, 179-WDV2
& 182-WDV1, PROP. S.R. 161
STA. 387+85.89
97.53' LT.,
STA. 146+56.26
66.49' RT., SERVICE RD. 10

EX. MONUMENT
STA. 387+83.20
26.88' LT.

PC STA. 144+90.32

PT STA. 145+63.03

N 81°16'15" E 770.06' (179-WL)

N 81°16'15" E 478.76'

STA. 387+82.19

212.67'

182-WL

182-WDV2

105.22'

STA. 146+67.73

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 161

PROP. ℄ SURVEY &
CONSTRUCTION, WATKINS-YORK
FRONTAGE RD.

N 88°08'30" W 341.59'

182

RUTH ANN CALDWELL, TRUSTEE, UNDER
THE ROBERT G. CALDWELL LIVING TRUST
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE RUTH ANN CALDWELL LIVING TRUST
66-318348-00.000

STA. 146+64.89
80.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

S 3°24'52" W

PROP. WATKINS-YORK
FRONTAGE RD.
CURVE 1
P.I. STA. 143+69.72
D = 25°09'15" LT.
Dc = 01°12'53"
R = 4,716.66'
T = 1,052.31'
L = 2,070.70
E = 115.96'

175-E

175-WDV

175-WL

174-WL

174-WDV

174-TV

179-WL

179-WDV1

N 78°52'23" W 201.76'

N 77°04'33" W 179.41'

N 85°48'43" W 467.13'

S 89°19'35" W 329.99'

N 81°16'15" E 188.15'

S 81°16'15" W 203.81'

69.96'

37.29'

105.56'

125.49'

142.01'

N 8°54'51" W

POB 179-WDV1
STA. 378+42.48
100.00' RT., PROP. S.R. 161
STA. 137+04.49
40.10' LT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 378+24.52

STA. 380+40
97.63' RT.
PROP. S.R. 161
STA. 139+08.03
42.51' LT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 381+36
64.57' RT.

STA. 383+14.51
9.62' RT.

STA. 338+48.84

EX. IRON PIN FOUND
STA. 383+17.71
53.11' RT.

POB 175-WL & 175-WDV
STA. 383+22.14
115.00' RT., PROP. S.R. 161
STA. 141+98.82
25.17' LT., PROP.
WATKINS-YORK FRONTAGE RD.

POB 182-WL & 182-WDV2
STA. 387+78.02
115.00' RT., PROP. S.R. 161
STA. 146+68.64
25.16' LT., PROP.
WATKINS-YORK FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 136+26.10
4.60' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 136+41.03
34.60' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 137+12.99
4.60' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 137+16.79
28.76' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 137+90.81

POB 174-WL & 174-WDV
STA. 381+47.44
100.00' RT., PROP. S.R. 161
STA. 140+18.78
40.15' LT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 140+31.93

STA. 142+00.64

STA. 140+80
95.37' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

N 80°15'24" W
148.68' (174-WDV)

130.43' (174-TV)

STA. 142+07.71
100.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIN FOUND
STA. 140+70.56
122.27' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 140+62.12
95.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

N 8°29'01" E
39.63'

STA. 140+80
135.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

N 37°35'28" W 138.38'

S 2°53'24" W
132.26'

N83°00'16"W
43.64'

EX. IRON PIPE FOUND
STA. 138+71.44
164.16' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIN FOUND
STA. 138+56.67
298.07' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 141+75
232.00' RT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 142+16.60
231.94' RT., PROP.
WATKINS-YORK FRONTAGE RD.

(173) JAMES E. & KATHRYN V. STACY
AUD. PARC. NO.
RESIDENTIAL
TOTAL TAKE FROM PHASE ONE

(174) STEVEN E. &
ELIZABETH S. TUTTLE
66-318642-00.000
RESIDENTIAL

(175) CHARLES W. &
BERNICE J. UTTER
66-317730-00.001
COMMERCIAL

136+00 137+00 138+00 139+00 140+00 141+00 142+00 143+00 144+00 145+00 146+00 147+00 148+00 149+00 150+00

378+00 379+00 380+00 381+00 382+00 383+00 384+00 385+00 386+00 387+00 388+00 389+00 390+00

144+00 145+00 146+00 147+00 148+00 149+00

143+00 144+00 145+00 146+00 147+00 148+00

N 2°45'26" E

LA R/W

LA-R/W

R/W

PL

PT

PC

LA

EX. IRON PIPE FOUND
STA. 136+26.10
4.60' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 136+41.03
34.60' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 137+12.99
4.60' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 137+16.79
28.76' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 137+90.81

EX. IRON PIN FOUND
STA. 138+56.67
298.07' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 138+71.44
164.16' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 139+08.03
42.51' LT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 140+80
135.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 140+80
95.37' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 140+62.12
95.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 141+75
232.00' RT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 142+07.71
100.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 142+16.60
231.94' RT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 146+64.89
80.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 147+03.27
47.31' LT., SERVICE RD. 10

STA. 147+37.96
64.66' LT., SERVICE RD. 10

STA. 148+00
100.00' LT., SERVICE RD. 10

STA. 148+00
51.36' LT., SERVICE RD. 10

STA. 147+37.46
51.36' LT., SERVICE RD. 10

STA. 146+56.26
66.49' RT., SERVICE RD. 10

STA. 387+82.19

STA. 146+67.73

STA. 387+83.20
26.88' LT.

STA. 387+85.89
97.53' LT.,
STA. 146+56.26
66.49' RT., SERVICE RD. 10

STA. 383+14.51
9.62' RT.

STA. 383+17.71
53.11' RT.

STA. 384+17.89
176.05' LT.

STA. 383+92.82
172.74' LT. S.R. 161

STA. 384+88.00

STA. 385+00

STA. 386+00

STA. 387+00

STA. 388+00

STA. 389+00

STA. 390+00

STA. 144+00

STA. 145+00

STA. 146+00

STA. 147+00

STA. 148+00

STA. 149+00

STA. 150+00

STA. 143+00

STA. 144+00

STA. 145+00

STA. 146+00

STA. 147+00

STA. 148+00

STA. 149+00

STA. 150+00

STA. 378+00

STA. 379+00

STA. 380+00

STA. 381+00

STA. 382+00

STA. 383+00

STA. 384+00

STA. 385+00

STA. 386+00

STA. 387+00

STA. 388+00

STA. 389+00

STA. 390+00

STA. 136+00

STA. 137+00

STA. 138+00

STA. 139+00

STA. 140+00

STA. 141+00

STA. 142+00

STA. 143+00

STA. 144+00

STA. 145+00

STA. 146+00

STA. 147+00

STA. 148+00

STA. 149+00

STA. 150+00

MATCHLINE STA. 149+00 PROP. WATKINS-YORK FRONTAGE RD. SEE SHEET 30

MATCHLINE STA. 390+00 PROP. S.R. 161 SEE SHEET 30

MATCHLINE STA. 148+00 EX. SR. 161 SEE SHEET 30

MATCHLINE STA. 148+00 PROP. SR. 161 SEE SHEET 30

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 161 UNLESS OTHERWISE STATED.

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	8/15/06	CHANGED 182 OWNERSHIP
2	8/02/06	ADDED 175-E, DELETED 175-TV1 & 175-TV2
1	2/06/06	DELETED 177-TV, REVISED 176-WDV & 177-WDV

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 378+00 TO STA. 390+00 PROP. S.R. 161
STA. 137+00 TO STA. 148+00 EX. S.R. 161
STA. 143+00 SERVICE RD. 10 TO STA. 149+00 WORTHINGTON RD. NORTH
STA. 137+00 TO 149+00 PROP. FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

28 / 88

1289
1349

LI6I033D.RDS 08/15/06

LOT 10, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

178
CIRCLE G LAZY K RANCH
LIMITED PARTNERSHIP
66-318222-00.000
COMMERCIAL
PARCEL 1

178
CIRCLE G LAZY K RANCH
LIMITED PARTNERSHIP
66-318222-00.000
NO TAKE
PARCEL 2

END WORK
STA. 150+52.34
SERVICE RD. 10

BEGIN WORK
STA. 150+32.10
RELOCATED WORTHINGTON
RD. NORTH

179
HEIRS OF
EVERETT W. &
BEULAH V. BROWN
TOTAL TAKE

181
SCOTT ALLEN & SANDRA ELLEN MOWREY
66-319200-00.000
AGRICULTURAL
PARCEL 1

182
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE ROBERT G. CALDWELL LIVING TRUST
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE RUTH ANN CALDWELL LIVING TRUST
66-318348-00.000

MATCHLINE STA. 148+00 RELOCATED SERVICE RD. 10 SEE SHEET 27
MATCHLINE STA. 148+00 EX. S.R. 161 SEE SHEET 27
MATCHLINE STA. 160+00 RELOCATED WORTHINGTON RD. NORTH SEE SHEET 31
MATCHLINE STA. 160+00 EX. S.R. 161 SEE SHEET 31
MATCHLINE STA. 390+00 PROP. S.R. 161 SEE SHEET 27
MATCHLINE STA. 402+00 PROP. S.R. 161 SEE SHEET 31
MATCHLINE STA. 149+00 PROP. WATKINS-YORK FRONTAGE RD. SEE SHEET 27
MATCHLINE STA. 161+00 PROP. WATKINS-YORK FRONTAGE RD. SEE SHEET 31

P.O.T. STA. 150+32.10
P.T. STA. 394+77.67
P.T. STA. 153+88.11

PROP. ℄ SURVEY & CONSTRUCTION SERVICE RD. 10
PROP. ℄ SURVEY & CONSTRUCTION, RELOCATED WORTHINGTON RD. NORTH
EX. ℄ SURVEY, S.R. 161
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 161
PROP. ℄ SURVEY & CONSTRUCTION, PROP. WATKINS-YORK FRONTAGE RD.
* EX. FENCE TO BE REMOVED
CONSTRUCTION LIMITS
STA. 151+55 PROP. WATKINS-YORK FRONTAGE RD.

182-WDV1
182-WDV2
182-WL
182-TV
179-WDV2

SMOOTH WIRE FENCE
WOOD BOARD FENCE
GATE
PROPANE TANK
CONC. SILO
METAL SILO
1-STORY FRAME GARAGE
1-STORY FRAME
NO. 7152
1-STORY FRAME BARN
1-STORY CONC. BARN
2-STORY FRAME BARN
CONC. WALK
CULTIVATED FIELD
PASTURE
GRAVEL
SIGN
TWIN 4" CRAB
4" CRAB
5-3" ALBERTA SPRUCE
10" SPRUCE
10" MAPLE
36" MAPLE
30" MAPLE
15" MAPLE
12" WALNUT
4" MAPLE
4-8" MAPLES
1-6" MAPLES
TWIN 8" ELM
TWIN 5" ELM
6" ELM
DEAD
10" ASH
5" ASH
18" CHERRY
15" CHERRY
8" CHERRY
6" CHERRY
10" APPLE
12" APPLE
8" ASH
TWIN 8" ASH
1-8" LOCUST
5-4" LOCUST
AEP (OVERHEAD)
SPRINT
LA
R/W
LA-R/W
T ESMT

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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NOTE:
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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
1	8/15/06	CHANGED 182 OWNERSHIP

COMPLETION DATE: 4/29/05

0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 148+00 TO 160+00 EX. S.R. 161
STA. 390+00 TO STA. 402+00 PROP. S.R. 161
STA. 148+00 SERVICE RD. 10 TO STA. 160+00 RELOCATED WORTHINGTON RD. NORTH
STA. 149+00 TO 161+00 PROP. FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

29/88

1290
1349

L16I0034.RDS 08/15/06

LOT 10, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

EX. S.R. 161
CURVE 1
P.I. STA. 141+28.06
D = 22°33'04" LT.
Dc = 01°30'04"
R = 3,816.72'
T = 760.96'
L = 1,502.22'
E = 75.12'

178
CIRCLE G LAZY K RANCH
LIMITED PARTNERSHIP
66-318222-00.000
COMMERCIAL
PARCEL 1

178
CIRCLE G LAZY K RANCH
LIMITED PARTNERSHIP
66-318222-00.000
NO TAKE
PARCEL 2

END WORK
STA. 150+52.34
SERVICE RD. 10

BEGIN WORK
STA. 150+32.10
RELOCATED WORTHINGTON
RD. NORTH

179
HEIRS OF
EVERETT W. &
BEULAH V. BROWN
TOTAL TAKE

179-WDV2

P.T. Sta. 148+69.32

P.O.T. STA. 150+32.10

S 2°27'13" W

EX. MONUMENT
STA. 151+84.82
67.52' LT., RELOCATED
WORTHINGTON RD. NORTH

EX. CONCRETE MONUMENT
STA. 151+85.80
57.91' LT., RELOCATED
WORTHINGTON RD. NORTH

STA. 151+70.05
33.66' RT., RELOCATED
WORTHINGTON RD. NORTH

S.R. 161
CURVE 1
P.I. STA. 384+88.00
D = 25°09'15" LT.
Dc = 01°15'00"
R = 4,583.66'
T = 1,022.64'
L = 2,012.31'
E = 112.69'

181
SCOTT ALLEN & SANDRA ELLEN MOWREY
66-319200-00.000
AGRICULTURAL
PARCEL 1

N 81°57'25" E 493.59'

PROP. ℄ SURVEY &
CONSTRUCTION
SERVICE RD. 10

EX. MONUMENT
STA. 151+83.71
57.58' LT., RELOCATED
WORTHINGTON RD. NORTH

92.91'

182-WDV1

EX. ℄ SURVEY,
S.R. 161

MATCHLINE
STA. 148+00
RELOCATED
SERVICE RD. 10
SEE SHEET 28

MATCHLINE
STA. 160+00
RELOCATED
WORTHINGTON
RD. NORTH
SEE SHEET 32

STA. 151+75.84

S 81°33'13" W 555.05' (179-WDV2 ALONG ℄)

N 82°41'36" E

N81°33'13"E 1,919.69' (181-WDV) ALONG ℄

N 82°41'11" E

LA-R/W
S 81°56'28" W 405.80'

LA-R/W
S 82°57'35" W 491.06'

LA-R/W
S 82°35'35" W 500.00'

MATCHLINE
STA. 148+00
EX. S.R. 161
SEE SHEET 28

MATCHLINE
STA. 160+00
EX. S.R. 161
SEE SHEET 32

STA. 392+00
145.00' LT., PROP. S.R. 161
STA. 150+41.10
39.37' RT. SERVICE RD. 10

PROP. ℄ SURVEY
& CONSTRUCTION, RELOCATED
WORTHINGTON RD. NORTH

STA. 397+00
150.00' LT., PROP. S.R. 161
STA. 155+11.92
41.66' RT. RELOCATED
WORTHINGTON RD. NORTH

P.T. STA. 394+77.67

EX. MONUMENT
STA. 394+70.53
44.65' LT.

EX. MONUMENT
STA. 392+16.71
67.89' LT.

EX. MONUMENT
STA. 398+70.42
57.14' LT.

MATCHLINE STA. 390+00
PROP. S.R. 161
SEE SHEET 28

MATCHLINE STA. 402+00
PROP. S.R. 161
SEE SHEET 32

391+00 392+00 393+00 394+00 395+00 396+00 397+00 398+00 399+00 400+00 401+00 402

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 161

N 82°35'35" E

STA. 391+00
115.00' RT., PROP. S.R. 161
STA. 150+00.47
25.10' LT., PROP.
WATKINS-YORK FRONTAGE RD.

182-WL

STA. 396+00
115.00' RT., PROP. S.R. 161
STA. 155+12.00
25.00' LT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 401+00
115.00' RT., PROP. S.R. 161
STA. 160+12.00
25.00' LT., PROP.
WATKINS-YORK FRONTAGE RD.

S 89°19'35" W
389.99'

S 84°23'12" W 509.29'

P.T. STA. 153+88.11

LA-R/W

S 82°35'35" W 500.00'

S 82°35'35" W
304.29'

MATCHLINE
STA. 149+00
PROP. WATKINS-YORK
FRONTAGE RD.
SEE SHEET 28

MATCHLINE
STA. 161+00
PROP. WATKINS-YORK
FRONTAGE RD.
SEE SHEET 32

N 82°35'35" E

182-WDV2

STA. 150+90
91.27' RT.

STA. 152+05
89.05' RT.

N 88°08'30" W
341.59'

R/W

117.22'

S 84°25'52" W 507.63'

R/W

S 82°35'35" W 500.00'

R/W
S 80°18'09" W
300.24'

PROP. ℄ SURVEY &
CONSTRUCTION, PROP. WATKINS-YORK
FRONTAGE RD.

STA. 150+00.00
95.00' RT., PROP.
WATKINS-YORK FRONTAGE RD.

N 6°48'04" W
98.87'

182-TV

T ESMT
S 21°30'12" W
125.34'

STA. 155+00.00
95.00' RT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 160+00.00
95.00' RT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 150+95
190.00' RT.

N88°01'34"W
47.10'

STA. 151+40
195.00' RT.

PROP. WATKINS-YORK
FRONTAGE RD.
CURVE 1
P.I. STA. 143+69.72
D = 25°09'15" LT.
Dc = 01°12'53"
R = 4,716.66'
T = 1,052.31'
L = 2,7070.70
E = 115.96'

182
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE ROBERT G. CALDWELL LIVING TRUST
RUTH ANN CALDWELL, TRUSTEE, UNDER
THE RUTH ANN CALDWELL LIVING TRUST
66-318348-00.000

LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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REV	DATE	DESCRIPTION
1	8/15/06	CHANGED 182 OWNERSHIP

COMPLETION DATE: 4/29/05

0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 148+00 TO STA. 160+00 EX. S.R. 161
STA. 390+00 TO STA. 402+00 PROP. S.R. 161
STA. 160+00 RELOCATED WORTHINGTON RD. NORTH
STA. 149+00 TO 161+00 PROP. FRONTAGE RD.
STA. 148+00 SERVICE RD. 10 TO STA. 150+52.34 SERVICE RD. 10

LIC-161-6.65
LIC-37-10.25

30/88

1291
1349

08/15/06
L1610340.RDS

LOT 10, QTR. TWP. 3, T2N, R14W, USML
LOT 25, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

181
SCOTT ALLEN & SANDRA ELLEN MOWREY
66-319200-00.001
AGRICULTURAL
PARCEL 4
NO TAKE

181
SCOTT ALLEN & SANDRA ELLEN MOWREY
66-319200-00.000
AGRICULTURAL
PARCEL 1

184
GEORGE L. & FRANCES E. DAVISON
66-317820-00.000
AGRICULTURAL
PARCEL 1
NO TAKE

182
RUTH ANN CALDWELL, TRUSTEE, UNDER THE ROBERT G. CALDWELL LIVING TRUST
RUTH ANN CALDWELL, TRUSTEE, UNDER THE RUTH ANN CALDWELL LIVING TRUST
66-318348-00.000

183
RONALD E., RAYMOND A. JUDY & LINDA L. CROAK
66-318276-00.000
AGRICULTURAL

183
RONALD E., RAYMOND A. JUDY & LINDA L. CROAK
66-318276-00.000
AGRICULTURAL

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
1	8/15/06	CHANGED 182 OWNERSHIP
COMPLETION DATE: 4/29/05		

CALCULATED C.S.
CHECKED T.A.
0 50 100
HORIZONTAL SCALE IN FEET

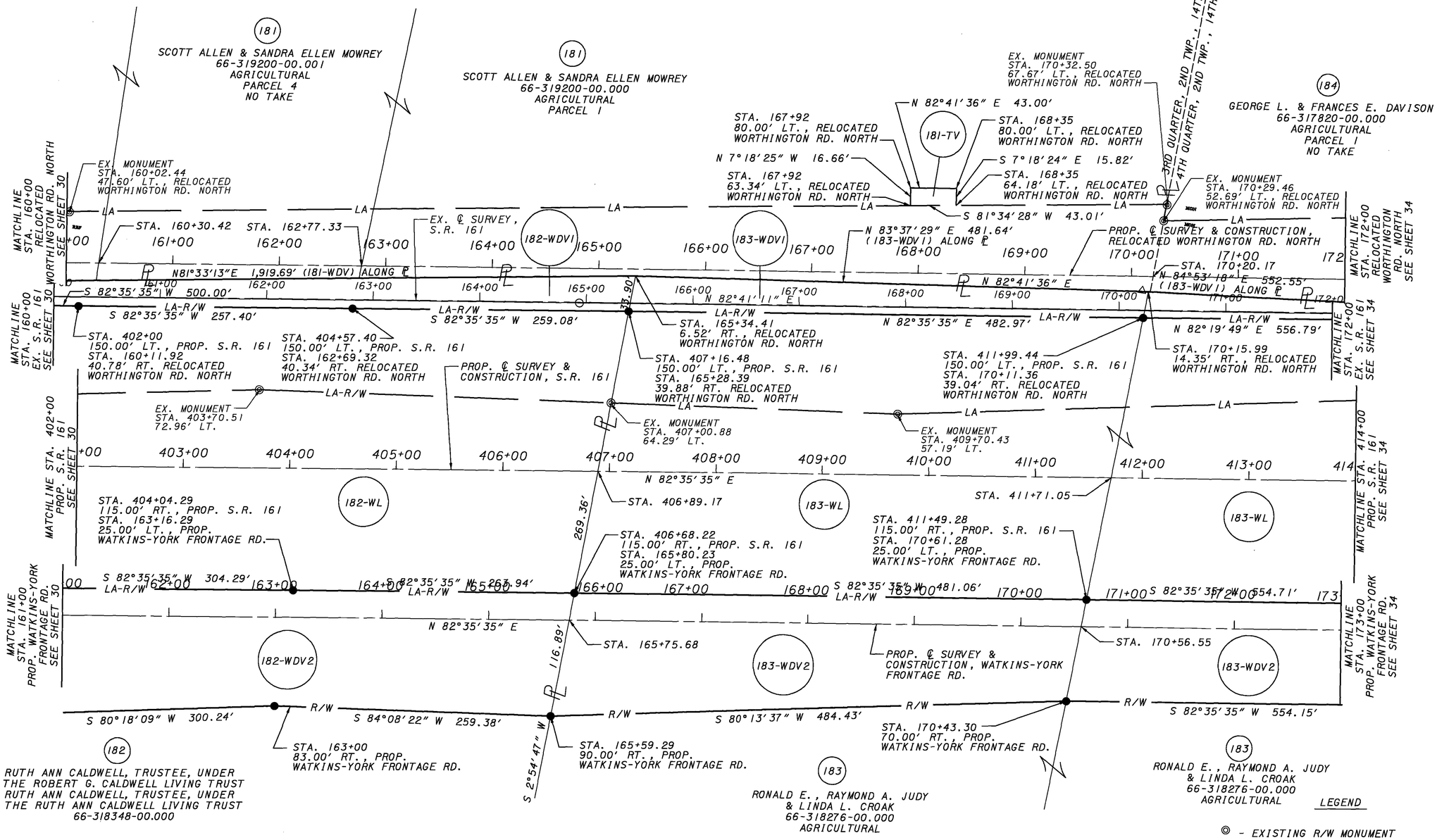
RIGHT OF WAY DETAIL SHEET
STA. 402+00 TO STA. 414+00 PROP. S.R. 161
STA. 160+00 TO 172+00 EX. S.R. 161
STA. 161+00 TO STA. 173+00 PROP. FRONTAGE RD.
STA. 172+00 RELOCATED WORTHINGTON RD. NORTH

LIC-161-6.65
LIC-37-10.25

31/88
1292
1349

L1610035.RDS 08/15/06

LOT 10, QTR. TWP. 3, T2N, R14W, USML
LOT 25, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 161 UNLESS OTHERWISE STATED.

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

RIGHT OF WAY DETAIL SHEET
STA. 402+00 TO STA. 414+00 PROP. S.R. 161
STA. 160+00 TO 172+00 EX. S.R. 161
STA. 161+00 TO STA. 173+00 PROP. FRONTAGE RD.
STA. 160+00 TO STA. 172+00 RELOCATED WORTHINGTON RD. NORTH

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

LIC-161-6.65
LIC-37-10.25

REV	DATE	DESCRIPTION
1	8/15/06	CHANGED 182 OWNERSHIP

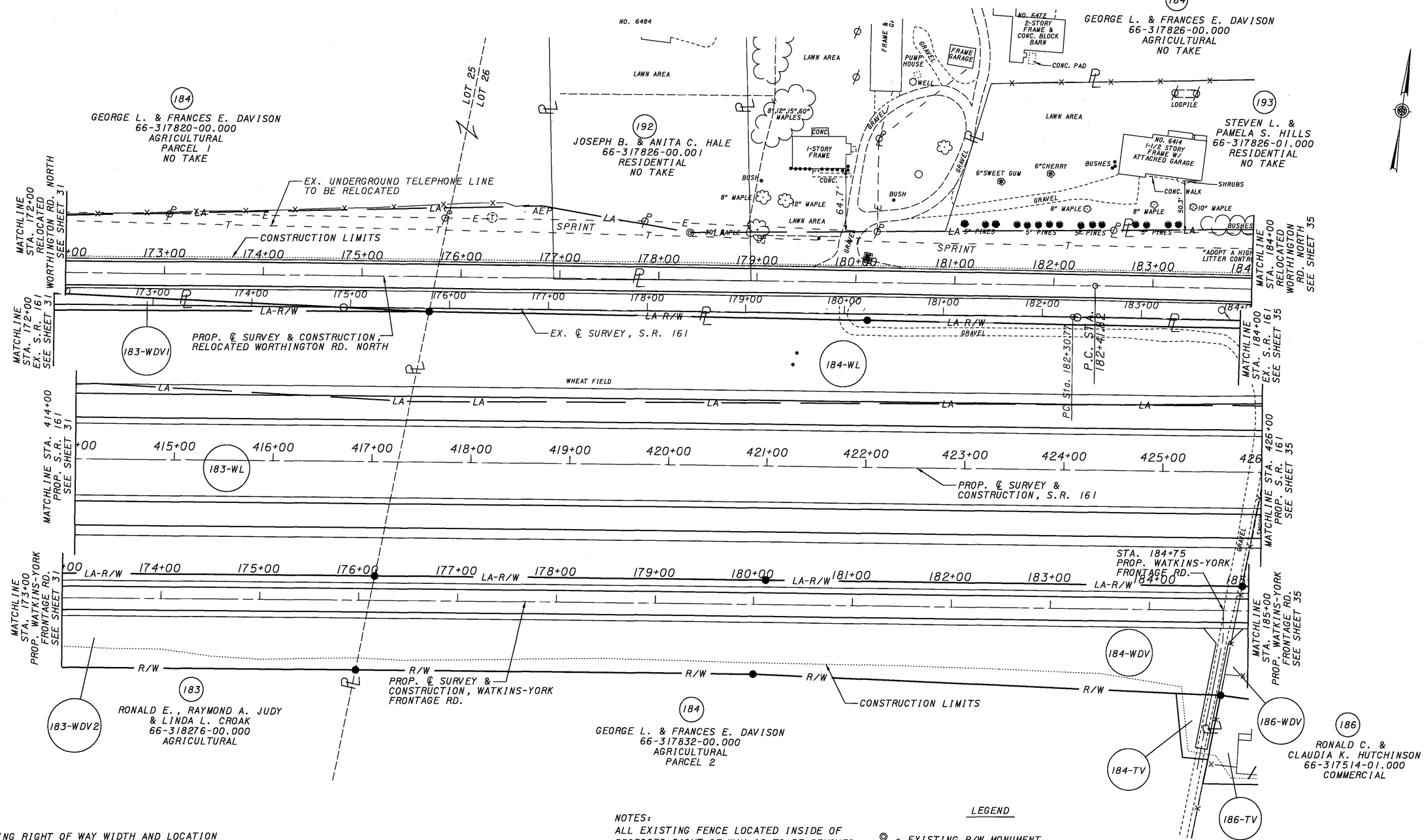
COMPLETION DATE: 4/29/05

32/88

1293
1349

LI6I035D.RDS 08/15/06

LOTS 25 & 26, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
2	6/26/06	REVISED 184 AUD. PAR. NO.
1	7/11/05	ADDED 184-TV

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

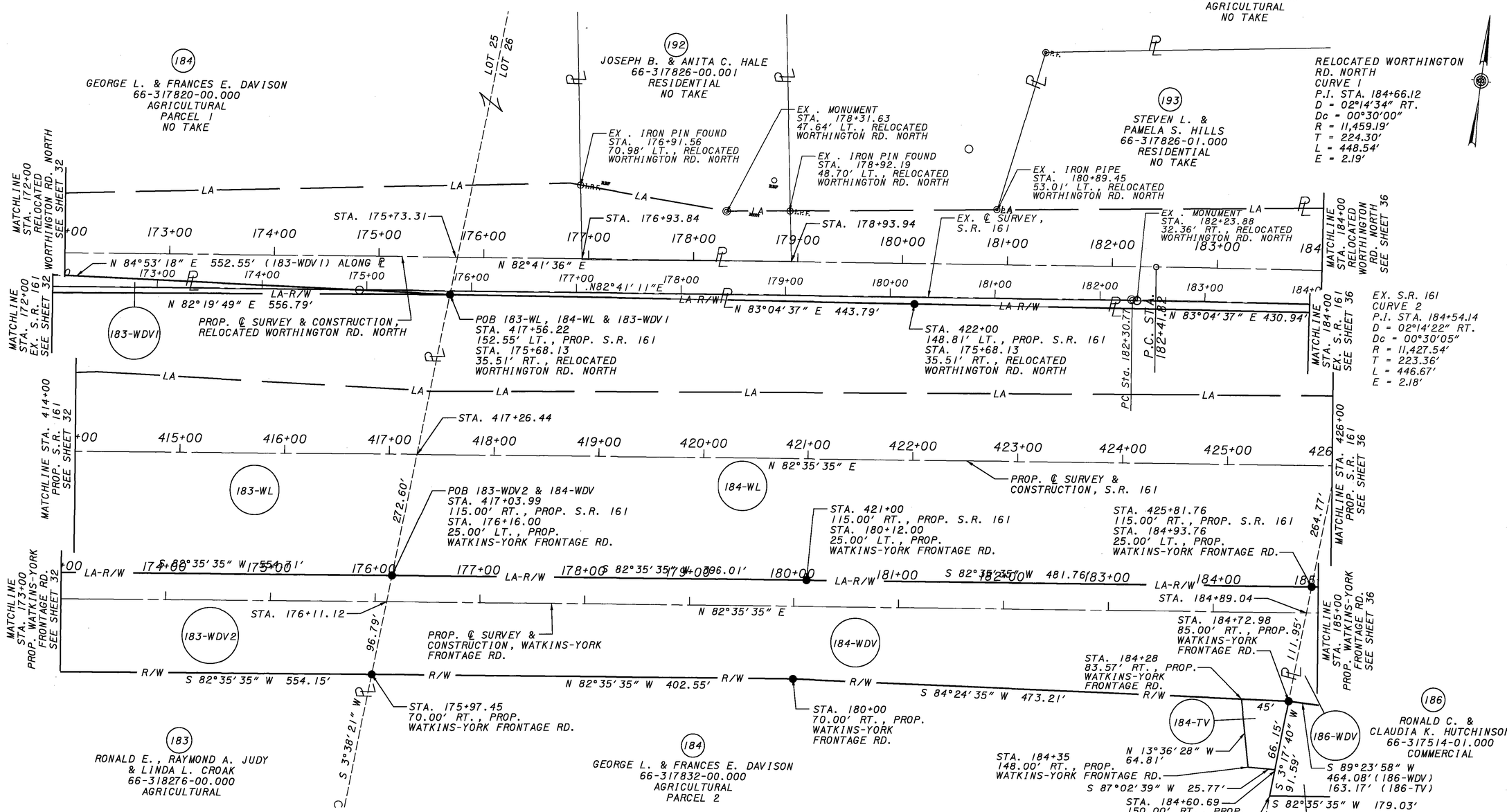
RIGHT OF WAY DETAIL SHEET
STA. 414+00 TO STA. 426+00 PROP. S.R. 161
172+00 TO 184+00 EX. S.R. 161
STA. 173+00 TO STA. 185+00 PROP. FRONTAGE RD.
STA. 172+00 TO STA. 184+00 RELOCATED WORTHINGTON RD. NORTH

LIC-161-6.65
LIC-37-10.25

33/88
1294/1349

LI610036.RDS 06/26/06

LOTS 25 & 26, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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LEGEND
◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
2	6/26/06	REVISED 184 AUD. PAR. NO.
1	7/11/05	ADDED 184-TV

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S. CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 414+00 TO STA. 426+00 PROP. S.R. 161
STA. 173+00 TO 184+00 EX. S.R. 161
STA. 172+00 TO STA. 185+00 PROP. FRONTAGE RD.
STA. 184+00 RELOCATED WORTHINGTON RD. NORTH

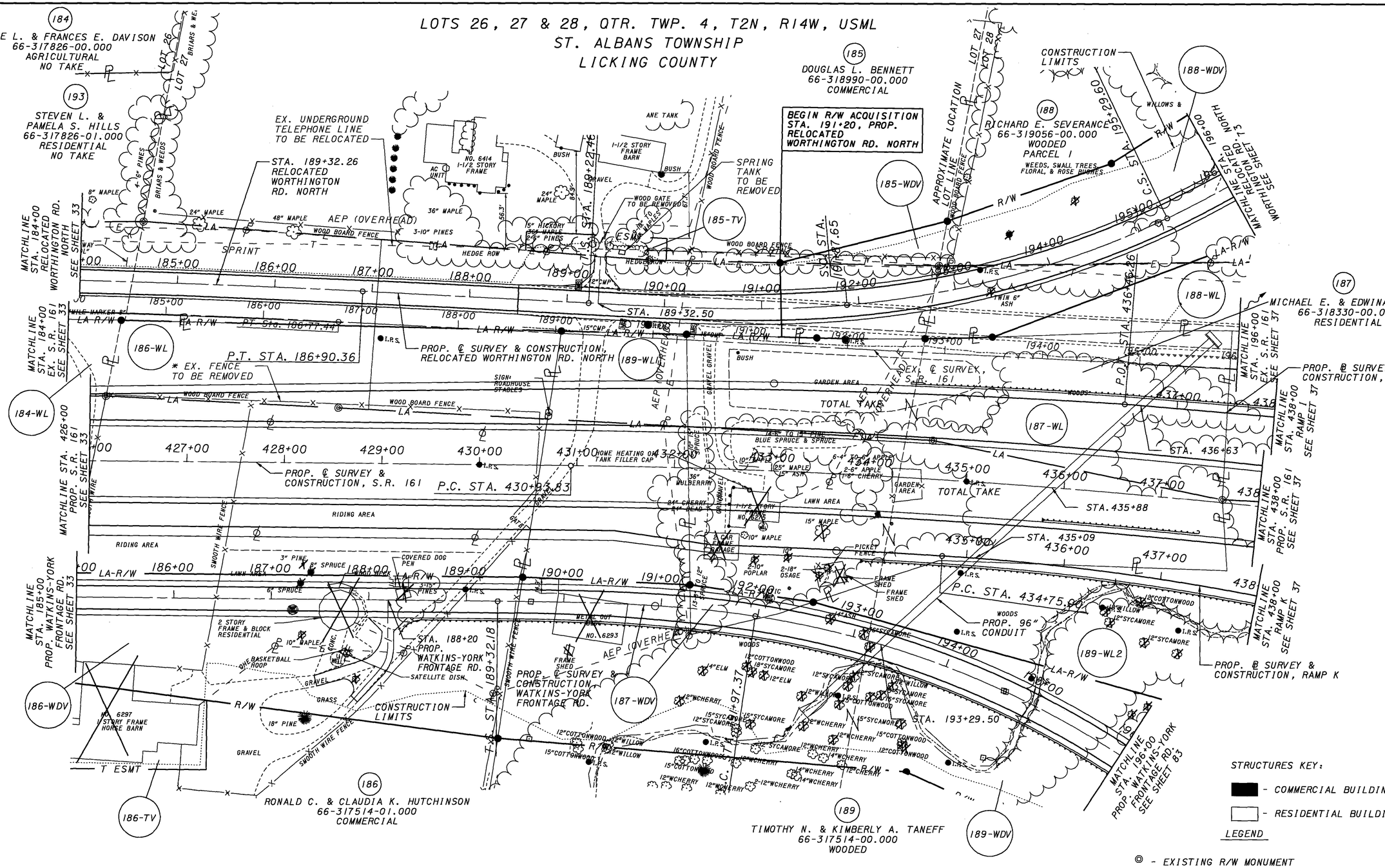
LIC-161-6.65
LIC-37-10.25

34/88

1295
1349

L16036D.RDS 06/26/06

LOTS 26, 27 & 28, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



STRUCTURES KEY:

- ■ - COMMERCIAL BUILDING
- □ - RESIDENTIAL BUILDING

LEGEND

- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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REV	DATE	DESCRIPTION
3	6/26/06	REVISED 184 AUD. PAR. NO.
2	5/19/06	UPDATED NAME ON PARCEL 189
1	2/03/06	MARKED REMOVAL ITEMS ON PARCEL 185-TV

COMPLETION DATE: 4/29/05

CALCULATED C.S. CHECKED T.A.

0 25 50 100 HORIZONTAL SCALE IN FEET

RIGHT OF WAY DETAIL SHEET
STA. 426+00 TO STA. 438+00 PROP. S.R. 161
STA. 184+00 TO STA. 196+00 EX. S.R. 161
STA. 185+00 TO STA. 195+00 PROP. WATKINS-YORK FRONTAGE RD.
STA. 435+00 TO STA. 438+00 RAMP I
STA. 437+00 TO STA. 438+00 RAMP K
STA. 196+00 RELOCATED WORTHINGTON RD. NORTH

LIC-161-6.65
LIC-37-10.25

35/88

1296
1349

L161O037.RDS 06/26/06

LOTS 26, 27 & 28, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

(184) GEORGE L. & FRANCES E. DAVISON
66-317826-00.000
AGRICULTURAL
NO TAKE

(193) STEVEN L. & PAMELA S. HILLS
66-317826-01.000
RESIDENTIAL
NO TAKE

(185) DOUGLAS L. BENNETT
66-318990-00.000
COMMERCIAL

(188) RICHARD E. SEVERANCE
66-319056-00.000
WOODED
PARCEL 1

(189) TIMOTHY N. & KIMBERLY A. TANEFF
66-317514-00.000
WOODED

(186) RONALD C. & CLAUDIA K. HUTCHINSON
66-317514-01.000
COMMERCIAL

(187) MICHAEL E. & EDWINA ORBAN
66-318330-00.000
LAND USE
TOTAL TAKE

RELOCATED WORTHINGTON RD. NORTH
CURVE 1
P.I. STA. 184+66.12
D = 02°14'34" RT.
Dc = 00°30'00"
R = 11,459.19'
T = 224.30'
L = 448.54'
E = 2.19'

185-WDV & 187-WL ℄ CURVE
CH. = N 82°17'34" E 111.04'
D = 02°13'16" LT.
R = 2,864.79'
L = 111.05'

EX. S.R. 161
CURVE 2
P.I. STA. 184+54.14
D = 02°14'22" RT.
Dc = 00°30'05"
R = 11,427.54'
T = 223.36'
L = 446.67'
E = 2.18'

EX. MONUMENT
STA. 184+63.24
62.19' LT., RELOCATED
WORTHINGTON RD. NORTH

STA. 184+53.55
PROP. ℄ SURVEY & CONSTRUCTION, RELOCATED WORTHINGTON RD. NORTH

EX. IRON PIN FOUND
STA. 184+63.24
62.19' LT., RELOCATED
WORTHINGTON RD. NORTH

MATCHLINE STA. 184+00 RELOCATED WORTHINGTON RD. NORTH SEE SHEET 34

N 83°04'37" E 430.94' (184-WL) ALONG ℄

STA. 426+30.93
145.17' LT.
PROP. S.R. 161
STA. 175+68.13
35.51' RT., RELOCATED
WORTHINGTON RD. NORTH

P.T. STA. 186+90.36

EX. MONUMENT
STA. 426+16.14
66.92' LT.

EX. MONUMENT
STA. 428+54.76
56.86' LT.

MATCHLINE STA. 426+00 PROP. S.R. 161 SEE SHEET 34

N 82°35'35" E

STA. 426+03.49

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 161

P.C. STA. 430+93.83

STA. 430+62.52

STA. 432+14.23

EX. IRON PIPE FOUND
STA. 430+68.72
47.72' LT.

EX. N 84°55'33" E

N 83°24'12" E 451.83'

POB 186-WL & 189-WL
STA. 430+82.71
138.78' LT., PROP. S.R. 161
STA. 188+96.10
30.16' RT., RELOCATED
WORTHINGTON RD. NORTH

N 83°24'12" E
128.12'

STA. 432+08.75
137.85' LT.
PROP. S.R. 161
STA. 190+23.62
27.42' RT., RELOCATED
WORTHINGTON RD. NORTH

POB 186-WDV & 189-WDV
STA. 430+45.79
115.00' RT., PROP. S.R. 161
STA. 189+57.76
25.01' LT., PROP.
WATKINS-YORK FRONTAGE RD.

S 84°36'05" W
171.50'

N 89°49'14" W
258.06'

256.45'

S 82°35'35" W 464.03'

STA. 189+54.16

STA. 191+29.90

PROP. ℄ SURVEY & CONSTRUCTION, WATKINS-YORK FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 191+32.71
26.92' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

EX. IRON PIPE FOUND
STA. 192+19.52
5.99' LT., PROP.
WATKINS-YORK FRONTAGE RD.

STA. 189+33.79
140.00' RT., PROP.
WATKINS-YORK FRONTAGE RD.

S 0°52'15" W

T. STA. 189+32.18

166.74'

STA. 186+35
104.34' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

163.17'

S 89°23'58" W 464.08'

S 7°24'25" E
70.66'

T ESMT
S 82°35'35" W 179.03'

STA. 186+35
175.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 189+22.46

N 84°48'57" E
144.17'

STA. 188+55
70.00' LT., RELOCATED
WORTHINGTON RD. NORTH

N 5°03'50" W
19.61'

S 86°21'12" W
130.84'

STA. 188+55
50.39' LT., RELOCATED
WORTHINGTON RD. NORTH

STA. 189+86.18
46.98' LT., RELOCATED
WORTHINGTON RD. NORTH

EX. MONUMENT FOUND
STA. 189+82.67
46.93' LT., RELOCATED
WORTHINGTON RD. NORTH

STA. 190+00
70.00' LT.
RELOCATED
WORTHINGTON
RD. NORTH

T ESMT

S5°44'35"E
22.68'

STA. 190+00
47.32' LT.
RELOCATED
WORTHINGTON
RD. NORTH

S82°57'53"W
13.64'

STA. 191+20
29.27' RT., PROP.
RELOCATED
WORTHINGTON RD.
NORTH

STA. 191+20
46.71' LT., PROP.
RELOCATED
WORTHINGTON RD.
NORTH

BEGIN R/W ACQUISITION
STA. 191+20, PROP.
RELOCATED
WORTHINGTON RD. NORTH

APPROXIMATE LOT LINE LOCATION
N 2°38'08" E
191.63'

LOT 27
LOT 28

S.C. STA. 191+87.65

N 67°51'36" E
176.98'

STA. 193+06.68
70.00' LT.
RELOCATED
WORTHINGTON
RD. NORTH

N 62°26'28" E 178.41'

EX. MONUMENT FOUND
STA. 192+88.05
26.29' LT., RELOCATED
WORTHINGTON RD. NORTH

EX. IRON PIN FOUND
STA. 193+04.36
31.41' LT., RELOCATED
WORTHINGTON RD. NORTH

STA. 195+00
75.00' LT.
RELOCATED
WORTHINGTON
RD. NORTH

C.S. STA. 195+00

MATCHLINE STA. 196+00 RELOCATED WORTHINGTON SHEET SEE SHEET 14

N 49°10'56" E
486.49'

187-WL ℄ CURVE
CH. = N 81°25'12" E 80.83'
D = 03°14'01" RT.
R = 1,432.39'
L = 80.84'

RELOCATED WORTHINGTON RD. NORTH
CURVE 2
P.I. STA. 193+70.21
D = 36°25'42" LT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 20°31'01" LT.
Lc = 341.95'
Ts = 447.75'
Es = 53.60'

187-WL & 188-WDV ℄ CURVE
CH. = N 80°29'34" E 68.95'
D = 01°22'44" LT. (187-WL)
RT. (188-WDV)
R = 2,864.79'
L = 68.95'

STA. 192+77.44

N79°28'40"W
75.98'

S83°24'12"W
35.97' (185-WDV)

N 83°24'12" E
133.97'

STA. 433+40.33, 139.12' LT.
PROP. S.R. 161
STA. 191+54.99
31.60' RT., RELOCATED
WORTHINGTON RD. NORTH

POB 187-WL, 185-WDV & 188-WDV
STA. 434+49.24
144.08' LT., PROP. S.R. 161
STA. 192+61.21
44.29' RT., RELOCATED
WORTHINGTON RD. NORTH

EX. IRON PIPE FOUND
STA. 432+12.53
42.31' LT.

STA. 434+30.59

STA. 433+48.77
132.80' RT., PROP. S.R. 161
STA. 192+52.70
25.00' LT., PROP. WATKINS-YORK
FRONTAGE RD.

STA. 193+15.62

S 61°11'04" W 352.70'

STA. 436+46.26

P.I. STA. 436+22.75

POB 188-WL
STA. 435+16.63
150.11' LT., PROP. S.R. 161
STA. 193+25.76
56.11' RT., RELOCATED
WORTHINGTON RD. NORTH

N79°48'12"E
165.00'

N 84°55'33" E

EX. IRON PIN FOUND
STA. 436+55.10
42.51' LT., RAMP I

STA. 436+77.20
168.97' LT.
PROP. S.R. 161

EX. MONUMENT
STA. 434+63.31
39.19' LT.

STA. 437+51.87

EX. MONUMENT FOUND
STA. 437+62.81
3.11' LT.
PROP. S.R. 161

STA. 437+63.32

STA. 435+76.32

S 83°53'26" W
295.04'

P.C. STA. 434+75.00

N 89°45'18" E, 128.11'

S 63°28'01" W
135.99'

STA. 192+05.48

S68°27'46"W
92.06'

STA. 434+77.10
82.92' RT.
PROP. S.R. 161

N 82°35'45" W 481.70'

STA. 437+49.66
85.42' LT.
RAMP I

188-WL ℄ CURVE
CH. = S 83°01'34" W 161.06'
D = 06°26'44" LT.
R = 1,432.39'
L = 161.14'

MATCHLINE STA. 196+00 EX. S.R. 161 SEE SHEET 38

PROP. ℄ SURVEY & CONSTRUCTION, RAMP I

S 4°44'22" E
174.23'

N 86°44'49" E

MATCHLINE STA. 438+00 PROP. S.R. 161 SEE SHEET 38

S.R. 161
CURVE 2
P.I. STA. 438+03.66
D = 10°37'01" RT.
Dc = 00°45'00"
R = 7,639.44'
T = 709.83'
L = 1,415.59'
E = 32.91'

S11°43'41"E
573.14'

MATCHLINE STA. 438+00 RAMP K SEE SHEET 38

RAMP K
CURVE 1
P.I. STA. 437+53.40
D = 12°28'42" RT.
Dc = 02°15'00"
R = 2,546.48'
T = 278.40'
L = 554.60'
E = 15.17'

PROP. ℄ SURVEY & CONSTRUCTION, RAMP K

EX. IRON PIPE FOUND
STA. 437+74.79
69.05' LT., PROP. S.R. 161
STA. 437+65.56
19.20' LT., RAMP K

STA. 194+00
115.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

N 73°35'00" W 267.84'

MATCHLINE STA. 196+00 PROP. WATKINS-YORK FRONTAGE RD. SEE SHEET 84

PROP. WATKINS-YORK
FRONTAGE RD.
CURVE 2
P.I. STA. 194+97.02
D = 48°34'39" RT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 32°39'57" RT.
Lc = 544.44'
Ts = 564.83'
Es = 96.10'

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

LEGEND
◎ - EXISTING R/W MONUMENT
∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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REV	DATE	DESCRIPTION
2	6/26/06	REVISED 184 AUD. PAR. NO.
1	5/19/06	UPDATED NAME ON PARCEL 189

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 426+00.00 TO STA. 438+00.00 PROP. S.R. 161
STA. 185+00 TO STA. 196+00 PROP. WATKINS-YORK FRONTAGE RD.
STA. 435+00 TO STA. 438+00 RAMP K
STA. 437+00 TO STA. 438+00 RAMP I
STA. 184+00 TO STA. 186+00 RELOCATED WORTHINGTON RD. NORTH

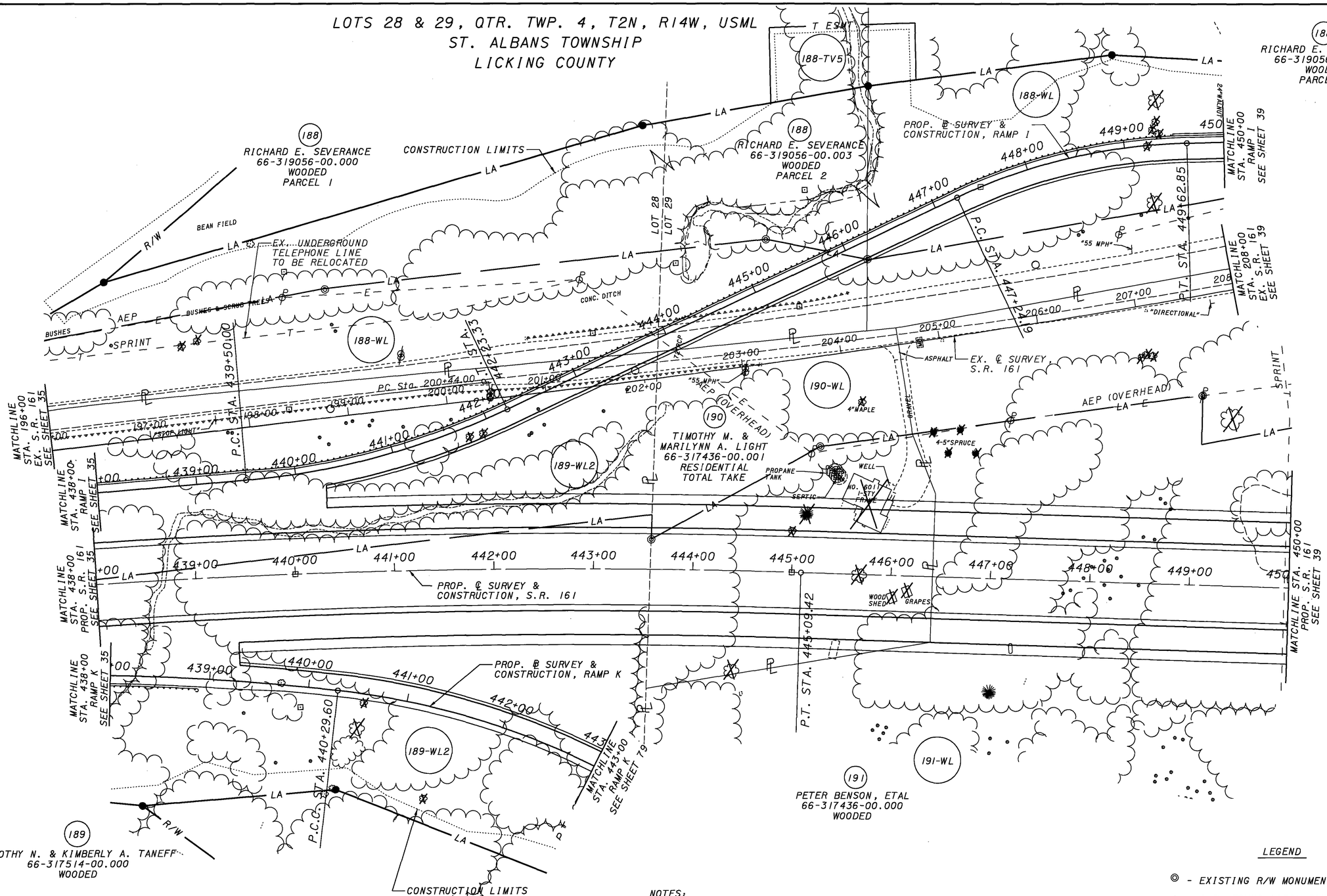
LIC-161-6.65
LIC-37-10.25

36/88

1297
1349

L161037D.RDS 06/26/06

LOTS 28 & 29, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	5/19/06	UPDATED NAME ON PARCEL 189

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 438+00 TO STA. 450+00 PROP. S.R. 161
STA. 196+00 TO 208+00 EX. S.R. 161
STA. 438+00 TO 450+00 RAMP I
STA. 438+00 TO 443+00 RAMP K

LIC-161-6.65
LIC-37-10.25

37/88

1298
1349

L1610038.RDS 05/19/06

LOTS 28 & 29, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

RAMP I
CURVE 1
P.I. STA. 440+88.24
D = 20°30'00" LT.
Dc = 07°30'00"
R = 764.49'
T = 138.24'
L = 273.33'
E = 12.40'

EX. S.R. 161
CURVE 3
P.I. STA. 206+62.90
D = 06°11'45" LT.
Dc = 00°30'04"
R = 11,435.61'
T = 618.90'
L = 1,236.60'
E = 16.74'

(188) RICHARD E. SEVERANCE
66-319056-00.000
WOODED
PARCEL 1

(D) 189-WL2 ℄ CURVE
CH = N 84°38'34" E 80.29'
D = 3°12'43" RT.
R = 1,432.39'
L = 80.30'

(E) 188-WL ℄ CURVE
CH. = S 83°01'34" W 161.06'
D = 06°26'44" LT.
R = 1,432.39'
L = 161.14'

STA. 196+60
70.00' RT., RELOCATED
WORTHINGTON RD. NORTH

N 75°22'26" E 564.49'

STA. 444+68.12
200.00' LT.
RAMP I

N 81°18'24" E
230.92'

STA. 446+26
235.00' LT.
RAMP I

N 89°30'28" E
T ESMT

146.58'

STA. 447+52
178.00' LT.
RAMP I

S 0°19'23" W 57.08'

N 84°12'59" E 247.07'

S 85°29'20" E 206.90'

(188) RICHARD E. SEVERANCE
66-319056-00.001
WOODED
PARCEL 3

S 89°53'13" E

N0°23'50"E
75.77'

(188-TV5)

48.63'

99.53'

STA. 447+35
125.12' LT.
RAMP I

STA. 448+99.97
95.04' LT.
RAMP I

STA. 445+95
165.86' LT.
RAMP I

STA. 446+91.12
140.00' LT.
RAMP I

PROP. ℄ SURVEY &
CONSTRUCTION, RAMP I

STA. 446+24.31

(188-WL)

MATCHLINE
STA. 450+00
RAMP I
SEE SHEET 40

EX. MONUMENT
STA. 440+73.98
176.67' LT., RAMP I

EX. MONUMENT
STA. 445+32.32
44.377' LT.
RAMP I

LOT 28
LOT 29

(188) RICHARD E. SEVERANCE
66-319056-00.003
WOODED
PARCEL 2

EX. MONUMENT
LEANING BAD

EX. ℄ SURVEY,
S.R. 161

N 81°14'49" E
537.08' (188-WL)
529.30' (191-WL)

P.C. STA. 447+24.19

P.T. STA. 449+62.85

92.11'

MATCHLINE
STA. 208+00
EX. S.R. 161
SEE SHEET 40

RAMP I
CURVE 2
P.I. STA. 448+45.43
D = 23°51'58" RT.
Dc = 10°00'00"
R = 573.69'
T = 121.24'
L = 238.66'
E = 12.67'

STA. 443+91.49

N 66°14'49" E

N 85°41'26" E 241.53'

STA. 438+29.89
88.37' LT.
RAMP I

N 86°11'08" E 538.38'

PC Sta. 200+44.00

STA. 439+50.00

P.C. STA. 442+23.33

MATCHLINE
STA. 196+00
EX. S.R. 161
SEE SHEET 36

N 84°55'33" E

N 86°44'49" E

(188-WL)

(190) TIMOTHY M. & MARILYNN A. LIGHT
66-317436-00.001
RESIDENTIAL

POB 189-WL2 & 190-WL
STA. 443+84.90
12.02' RT., RAMP I

188.07'

S 1°58'46" W

POB 191-WL
STA. 446+12.65
92.42' RT.
RAMP I
STA. 445+97.77
249.27' LT., PROP. S.R. 161

S 7°17'26" E
108.22'

EX. MONUMENT
STA. 449+08.03
190.90' LT.

(189-WL2)

(190-WL)

EX. CONCRETE MONUMENT
STA. 443+58.10
30.36' LT.

STA. 446+17.49
142.86' LT., PROP. S.R. 161

EX. MONUMENT
STA. 445+25.10
127.46' LT.

TOTAL TAKE

S 19°38'36" E 63.98'

O.R.P.

EX. IRON PIN FOUND
STA. 446+42.34
83.90' LT., PROP. S.R. 161

149.88'

MATCHLINE
STA. 438+00
PROP. S.R. 161
SEE SHEET 36

STA. 443+57.20

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 161

439+00 440+00 441+00 442+00 443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00

S 86°47'24" E

MATCHLINE STA. 450+00
PROP. S.R. 161
SEE SHEET 40

EX. IRON PIN FOUND
STA. 443+54.18
119.36' RT.
PROP. S.R. 161

S 3°29'51" W 338.58'

S 3°33'34" W

STA. 446+41.83

(191-WL)

S 82°17'30" W 290.06'

P.T. STA. 445+09.42

STA. 446+41.42
65.97' RT.

MATCHLINE
STA. 438+00
RAMP K
SEE SHEET 36

PROP. ℄ SURVEY &
CONSTRUCTION, RAMP K

RAMP K
CURVE 1
P.I. STA. 437+53.40
D = 12°28'42" RT.
Dc = 02°15'00"
R = 2,546.48'
T = 278.40'
L = 554.60'
E = 15.17'

(189) TIMOTHY N. & KIMBERLY A. TANEFF
66-317514-00.000
WOODED

P.C.C. STA. 440+29.60

STA. 440+40
100.00' RT.
RAMP K

S 3°37'39" W
222.33'

P.T.

MATCHLINE
STA. 443+00
RAMP K
SEE SHEET 80

S.R. 161
CURVE 2
P.I. STA. 438+03.66
D = 10°37'01" RT.
Dc = 00°45'00"
R = 7,639.44'
T = 709.83'
L = 1,415.59'
E = 32.91'

(191) PETER BENSON, ETAL
66-317436-00.000
WOODED

N 82°35'45" W
481.70'

S 86°47'36" W 194.95'

STA. 438+37.32
130.96' RT., RAMP K
STA. 197+00
110.00' LT., PROP. WATKINS-YORK
FRONTAGE RD.

R/W

N 67°01'16" W 326.79'

RAMP K
CURVE 2
P.I. STA. 441+79.34
D = 22°10'47" RT.
Dc = 07°30'00"
R = 763.94'
T = 149.74'
L = 295.73'
E = 14.54'

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 161 UNLESS OTHERWISE STATED.

LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	5/19/06	UPDATED NAME ON PARCEL 189

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 438+00 TO STA. 450+00 PROP. S.R. 161
STA. 196+00 TO 208+00 EX. S.R. 161
STA. 438+00 TO 450+00 RAMP I
STA. 438+00 TO 443+00 RAMP K

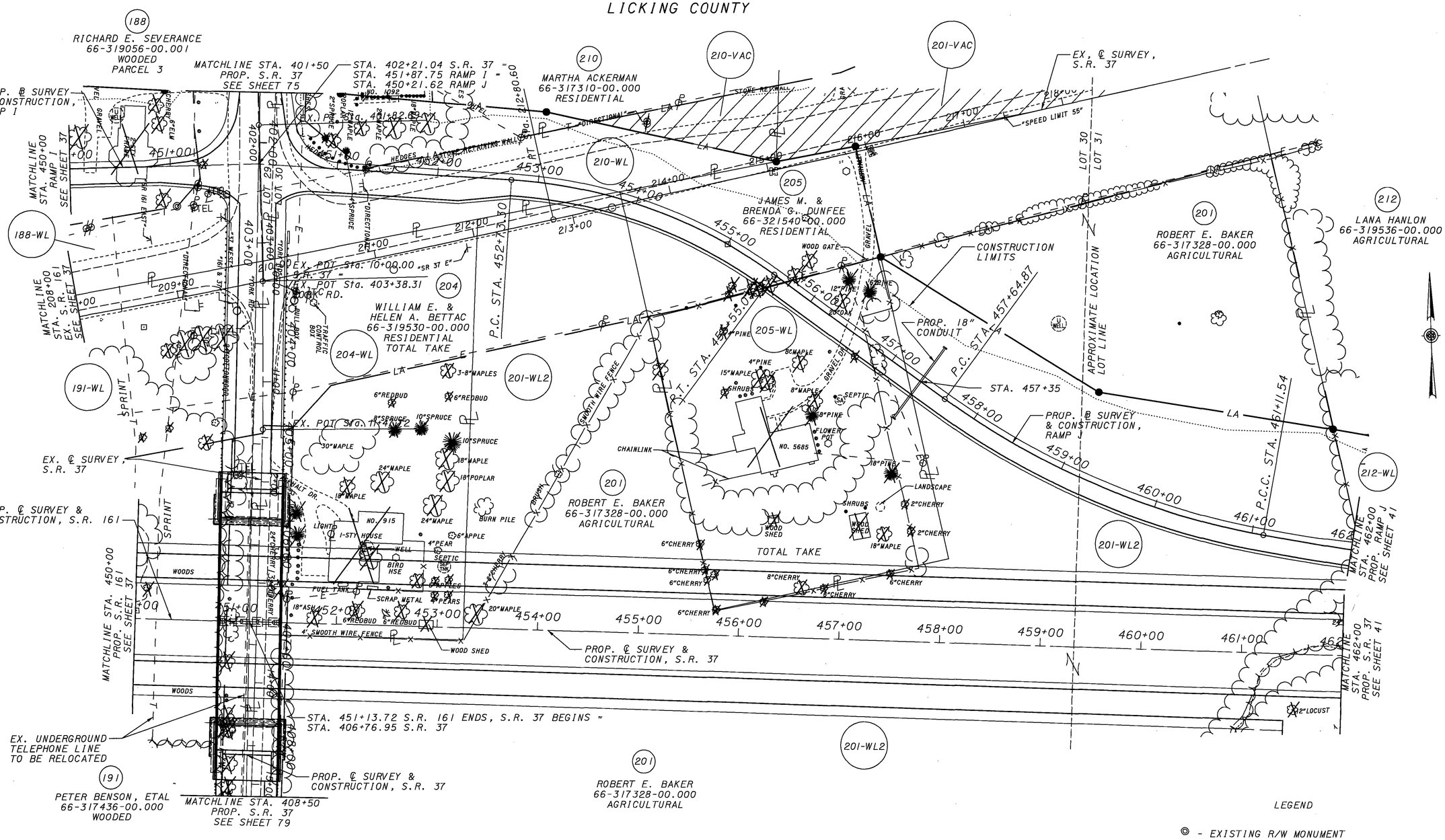
LIC-161-6.65
LIC-37-10.25

38 / 88

1299
1349

L161038D.RDS 05/19/06

LOTS 29, 30 & 31, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

2	4/07/06	NAME CHANGE FOR PARCEL 212
1	1/04/06	ADDED 201-VAC & 210-VAC
REV	DATE	DESCRIPTION
COMPLETION DATE: 4/29/05		

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 450+00 PROP. S.R. 161 TO STA. 462+00 PROP. S.R. 37
STA. 208+00 EX. S.R. 161 TO 220+00 EX. S.R. 37
STA. 401+50 TO STA. 408+50 PROP. S.R. 37
STA. 450+00 TO STA. 482+00 PROP. RAMP J
STA. 460+00 TO STA. 492+00 PROP. RAMP L

LIC-161-6.65
LIC-37-10.25

39/88

1300
1349

05/09/06
L1610039.RDS

LOTS 29, 30 & 31, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

(188) RICHARD E. SEVERANCE
66-319056-00.001
WOODED
PARCEL 3

STA. 450+95.94
75.11' LT., RAMP I
STA. 401+50
95.00' RT., PROP. S.R. 37

S 85°29'20" E 206.90'
LA

MATCHLINE STA. 401+50
PROP. S.R. 37
SEE SHEET 76

EX. ℄ SURVEY,
S.R. 37

PROP. ℄ SURVEY &
CONSTRUCTION, RAMP I

EX. IRON PIN FOUND
STA. 401+90.73
60.01' LT., S.R. 37

MATCHLINE
STA. 450+00
RAMP I
SEE SHEET 38

S 89°53'13" E

EX. IRON PIN FOUND
STA. 402+19.37
59.12' LT., S.R. 37

EX. S.R. 37
CURVE 1
P.I. STA. 399+78.61
D = 04°05'00" LT.
Dc = 01°00'00"
R = 5,729.49'
T = 204.25'
L = 408.33'
E = 3.64'

EX. MONUMENT
STA. 451+05.76
40.11' RT.

188-WL

N 81°14'49" E
537.08' (188-WL)
529.30' (191-WL)

MATCHLINE
STA. 208+00
EX. S.R. 161
SEE SHEET 38

EX. ℄ S.R. 161

POB 204-WL
STA. 403+18.01
5.58' LT.
PROP. S.R. 37

EX. S.R. 161
CURVE 3
P.I. STA. 206+62.90
D = 06°11'45" LT.
Dc = 00°30'04"
R = 11,435.61'
T = 618.90'
L = 1,236.60'
E = 16.74'

191-WL

EX. ℄ SURVEY,
YORK RD.

(210) MARTHA ACKERMAN
66-317310-00.000
RESIDENTIAL

MATCHLINE STA. 401+50
PROP. S.R. 37
SEE SHEET 76

S 83°24'53" E 205.36'
LA

EX. PT Sta. 401+82.69
N 3°20'51" E
500.00' (210-WL)
856.00' (188-WL)

STA. 450+36.07

EX. S 0°04'03" E 7.79'

S 84°53'13" E

N 81°14'49" E 7.79'

POB 210-WL
STA. 403+16.47
13.22' LT.
S.R. 37

N 80°26'11" E 210.19'

EX. POT Sta. 10+00.00

EX. GPS
STA.
452+46.62
EX. POT Sta. 403+38.31 354.82' LT.
YORK RD.

STA. 452+42.32
41.51' RT., RAMP J

N 0°04'03" W 19.96'

STA. 403+37.94
6.52' LT.

EX. IRON PIN FOUND
STA. 453+26.35
272.43' LT., S.R. 37

N 1°23'54" E 147.72'
(191-WL & 204-WL)

EX. POT Sta. 11+47.72

STA. 404+85.63
9.65' LT.
S.R. 37

N 3°21'06" E
203.84' (204-WL)
663.97' (191-WL)

191-WL

204-WL

EX. 406+00 R/W

EX. 407+00 R/W

EX. 408+00 R/W

EX. ℄ LOT 29

EX. ℄ LOT 30

EX. S 2°36'47" W 402.00'

EX. S 1°23'54" W 404.00'

EX. S 3°21'06" W 408.00'

12+00
13+00
14+00
15+00

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 161

MATCHLINE STA. 450+00
PROP. S.R. 161
SEE SHEET 38

(191) PETER BENSON, ETAL
66-317436-00.000
WOODED

MATCHLINE STA. 408+50
PROP. S.R. 37
SEE SHEET 80

STA. 453+00
70.00' LT.
RAMP J

STA. 453+42.41
67.60' LT.
RAMP J

N 80°04'32" E
187.78'

210-WL

S 76°32'07" E
233.97' (210-WL)
185.66' (210-VAC)

PT STA. 212+80.60

S 3°20'51" W
75.72'

210-VAC

STA. 215+29.01
81.04' LT.
EX. S.R. 37

STA. 215+91.61
79.57' LT.
EX. SR 37

EX. CON. MON.
STA. 217+90.01
114.96' LT.
EX. SR 37

STA. 217+91.31
114.57' LT.
EX. SR 37

201-VAC

N 80°14'59" E 505.19'

N 68°47'18" E
202.74'

N80°04'32"E
62.63'

MATCHLINE
STA. 220+00
EX. S.R. 37
SEE SHEET 78

216+00
217+00
218+00
219+00
220

N 78°43'49" E

S 78°44'06" W
676.13'

EX. ℄ SURVEY,
S.R. 37

LOT 30
LOT 31

S 80°26'11" W
259.98'

STA. 217+69.76
0.03' LT.
EX. SR 37

STA. 455+47.32
151.32' LT.
RAMP J

N80°26'11"E
239.11'

158.90'

POB 210-VAC
STA. 455+00.71
96.04' LT.
RAMP J

RAMP J
CURVE 2
P.I. STA. 459+41.24
D = 26°00'00" LT.
Dc = 07°30'00"
R = 763.94'
T = 176.37'
L = 346.67'
E = 20.09'

(212) LANA HANLON
66-319536-00.000
AGRICULTURAL

(201) ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

S 11°15'54" E

S 80°26'11" W
214+00
512.97'

453+00
454+00
455+00
456+00
457+00
458+00
459+00
460+00
461+00
462

RAMP J
CURVE 1
P.I. STA. 454+18.04
D = 32°23'57" RT.
Dc = 11°30'00"
R = 498.22'
T = 144.74'
L = 281.73'
E = 20.60'

N80°26'11"E
143.88'

POB 205-WL
STA. 453+80.91
6.67' RT., RAMP J

EX. MONUMENT FOUND
STA. 454+94.61
75.17' RT.
RAMP J

P.C. STA. 452+73.30

P.T. STA. 455+55.03

S 52°29'16" E

STA. 457+17.60

205-WL

N 11°15'54" E 427.44'

205
JAMES M. &
BRENDA G. DUNFEE
66-321540-00.000
RESIDENTIAL

TOTAL TAKE

201-WL2

N 3°29'01" E 419.32'

(201) ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

STA. 453+26.23

STA. 455+75.33
25.01' LT.

N 78°44'06" E 239.00'

STA. 453+26.17
12.25' RT., PROP. S.R. 37 (4 LANE DIVIDED)

S 86°50'25" E 205.30'

POB 201-WL2
STA. 406+89.45
7.02' RT., PROP. S.R. 37
STA. 451+20.87
12.43' RT., PROP. S.R. 37 (4 lane divided)

S 3°21'06" W 408.00'

N 3°21'06" E 289.25' (201-WL2)

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 37

(201) ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

S 86°47'24" E

N 11°15'54" W
307.28' (201-WL2)
420.34' (205-WL)

STA. 458+06.74
84.75' LT.
S.R. 37

O.R.F.

EX. IRON PIN FOUND
STA. 458+07.17
83.15' LT.

APPROXIMATE LOCATION
LOT LINE

STA. 459+33.56

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 37

S 56°43'42" E 457+64.87

P.C. STA. 255.02'

STA. 459+00
85.00' LT., RAMP J

PROP. ℄ SURVEY & CONSTRUCTION,
RAMP J

STA. 459+19.75

P.C.C. STA. 461+11.54

S 79°34'16" E 235.60'
LA

STA. 461+63.04
114.98' LT.
RAMP J

S 78°58'13" E
491.91'

291.25'

212-WL

MATCHLINE
STA. 462+00
PROP. RAMP J
SEE SHEET 42

MATCHLINE
STA. 462+00
PROP. S.R. 37
SEE SHEET 42

N

S 11°15'54" E

LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 (4 LANE DIVIDED) UNLESS OTHERWISE STATED.

REV	DATE	DESCRIPTION
2	4/07/06	NAME CHANGE FOR PARCEL 212
1	1/04/06	ADDED 201-VAC & 210-VAC

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 450+00 PROP. S.R. 161 TO STA. 462+00 PROP. S.R. 37
STA. 208+00 EX. S.R. 161 TO 220+00 EX. S.R. 37
STA. 401+50 TO STA. 408+50 PROP. S.R. 37
STA. 450+00 TO STA. 462+00 PROP. RAMP J

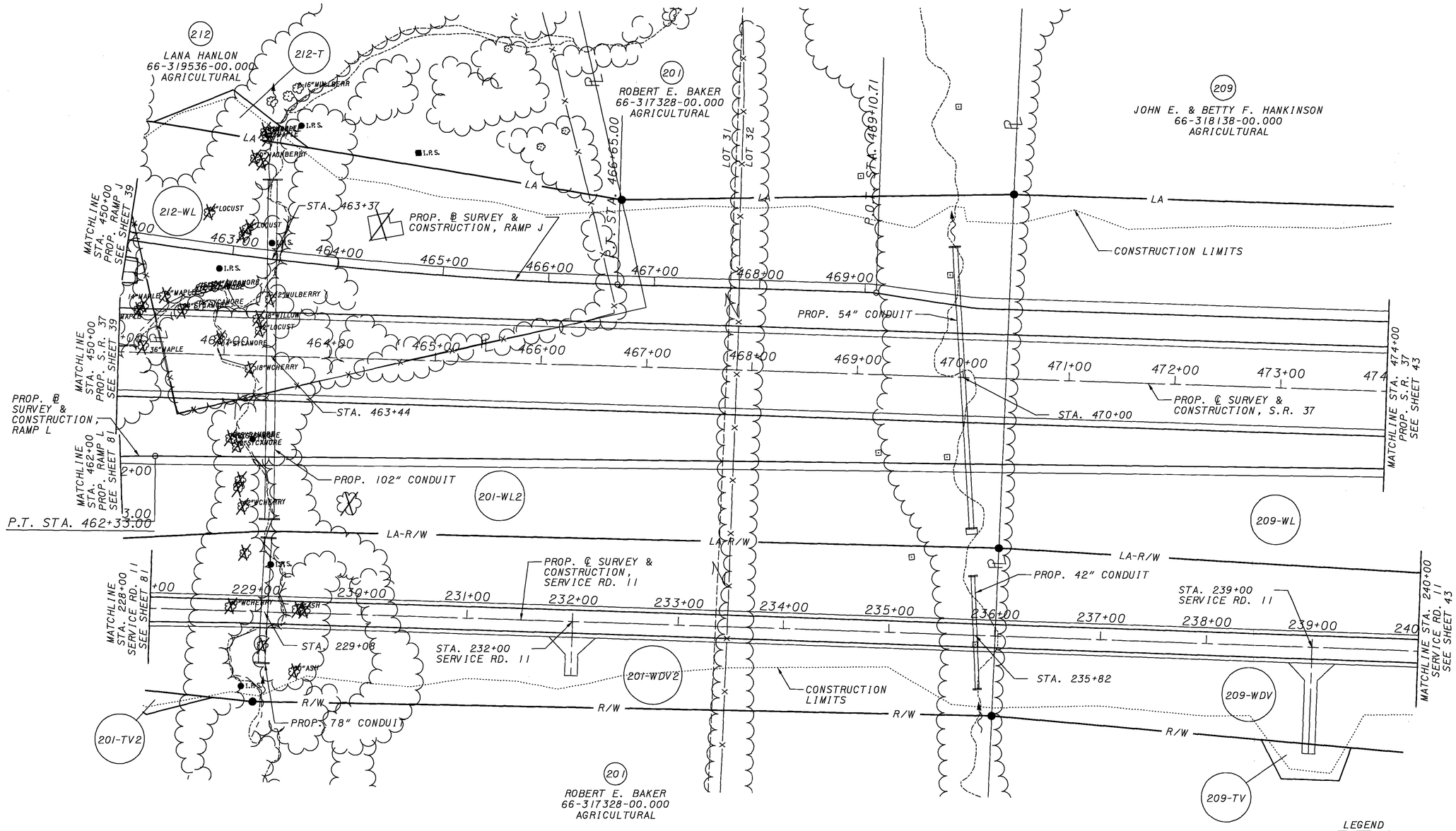
LIC-161-6.65
LIC-37-10.25

40/88

1301
1349

L161039D.RDS 04/07/06

LOTS 31 & 32, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
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THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

REV	DATE	DESCRIPTION
1	4/07/06	NAME CHANGE FOR PARCEL 212

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 450+00 TO STA. 474+00 PROP. S.R. 37
STA. 228+00 TO STA. 240+00 SERVICE RD. 11
STA. 462+00 TO STA. 462+00 PROP. RAMP L
STA. 450+00 TO STA. 469+00 PROP. RAMP J

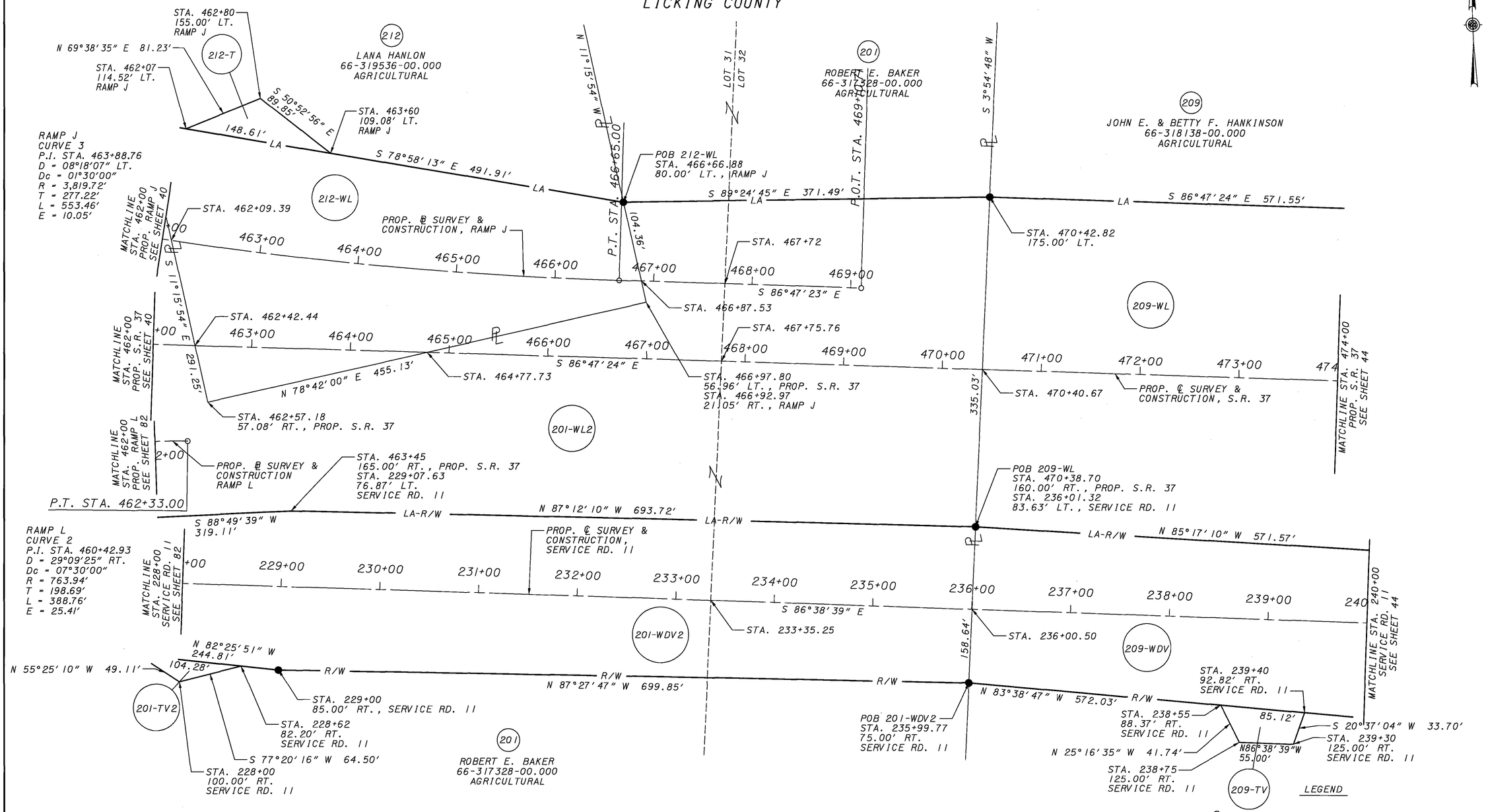
LIC-161-6.65
LIC-37-10.25

41 / 88

1302
1349

04/07/06
LI6I0040.RDS

LOTS 31 & 32, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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NOTE:
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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	4/07/06	NAME CHANGE FOR PARCEL 212

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 462+00 TO STA. 474+00 PROP. S.R. 37
STA. 228+00 TO STA. 240+00 SERVICE RD. 11
STA. 462+00 TO STA. 462+00 PROP. RAMP L
STA. 462+00 TO STA. 469+00 PROP. RAMP J

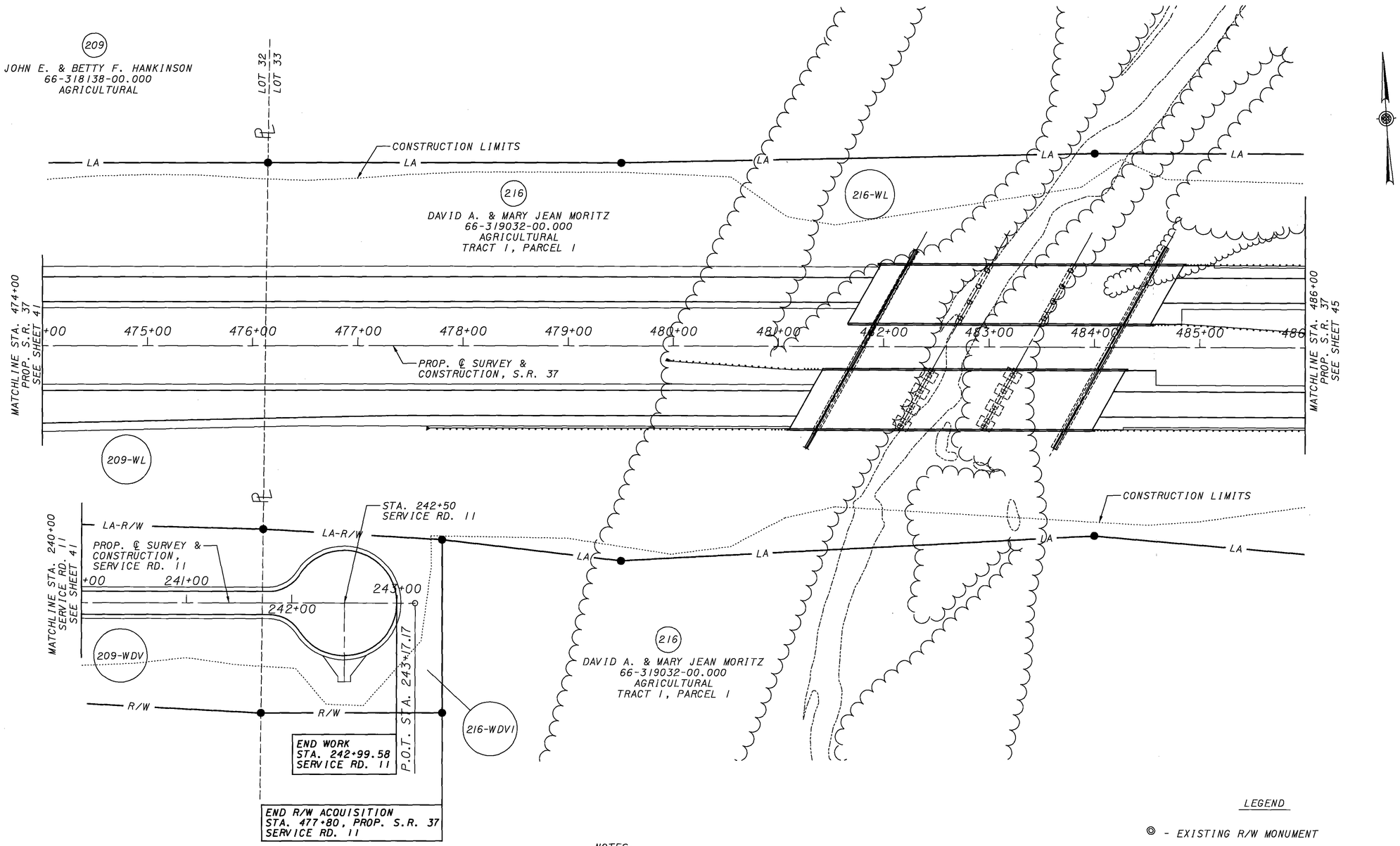
LIC-161-6.65
LIC-37-10.25

42 / 88

1303
1349

04/07/06
LI61040D.RDS

LOTS 32 & 33, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 474+00 PROP. S.R. 37
STA. 240+00 TO STA. 486+00 PROP. S.R. 37
STA. 243+00 SERVICE RD. 11

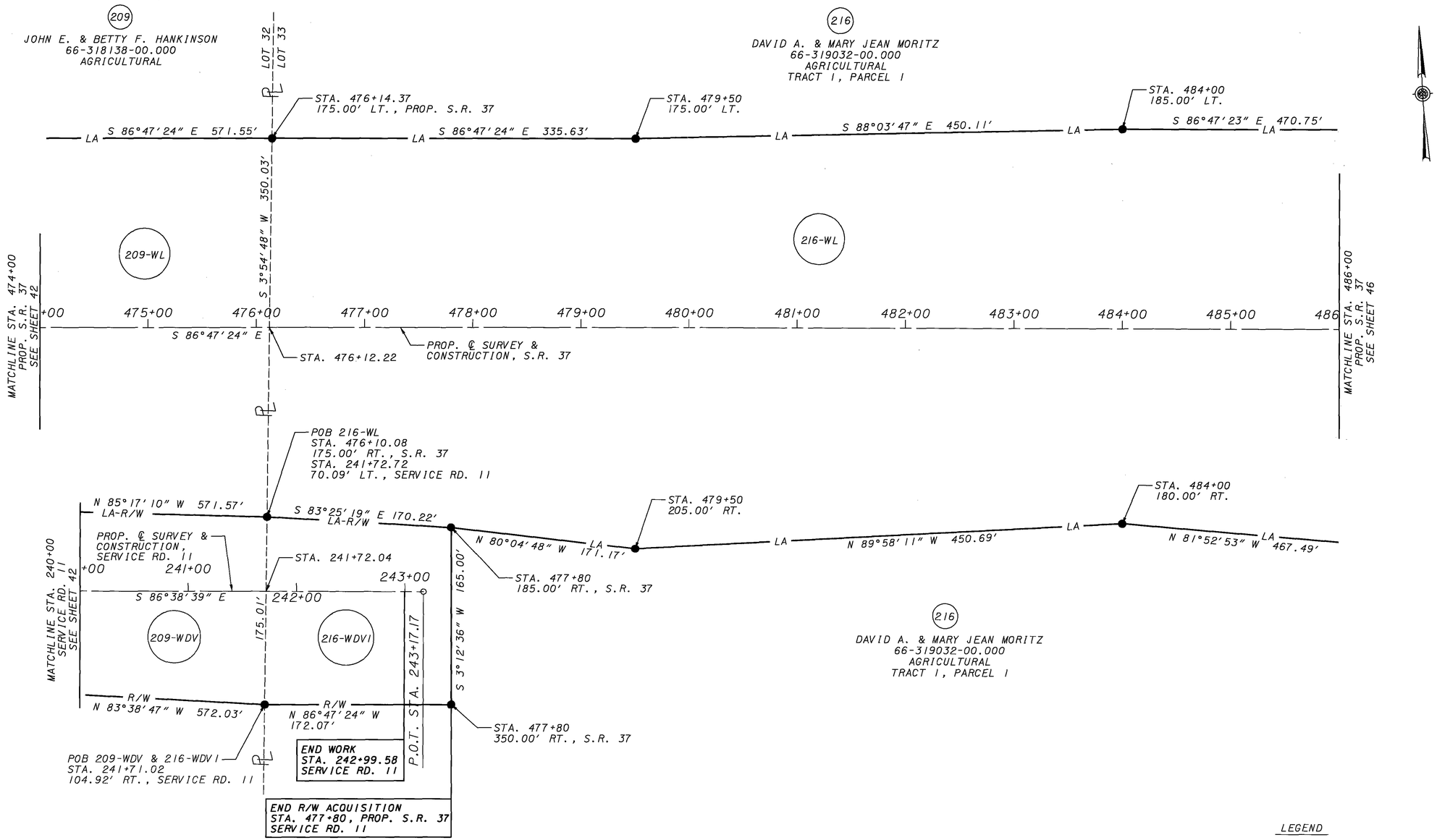
LIC-161-6.65
LIC-37-10.25

43/88

1304
1349

L16I004LRDS 09/26/05

LOTS 32 & 33, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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LEGEND

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● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
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□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 474+00 TO STA. 486+00 PROP. S.R. 37
STA. 240+00 TO STA. 243+00 SERVICE RD. 11

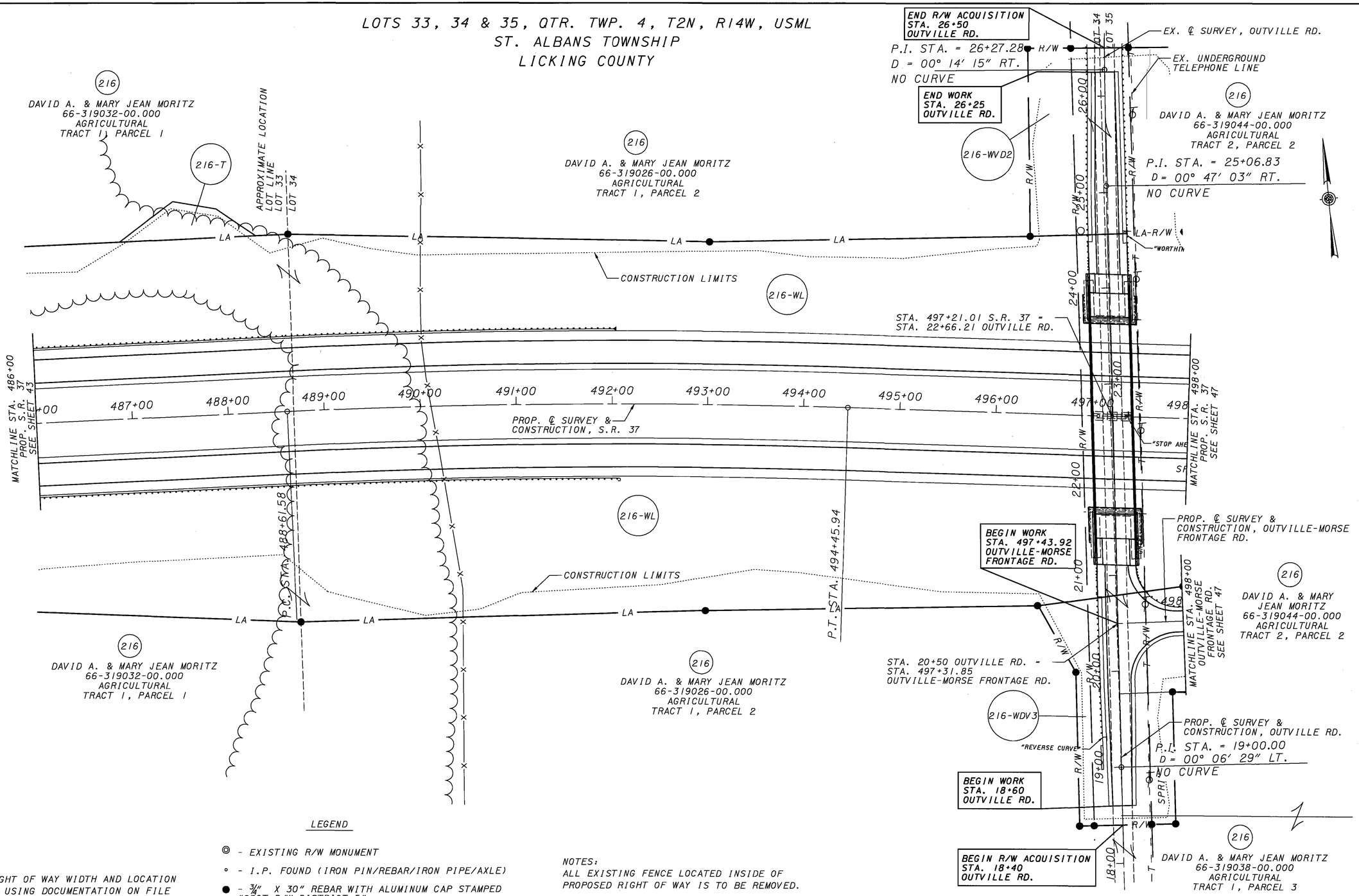
LIC-161-6.65
LIC-37-10.25

44/88

1305
1349

L16104ID.RDS 09/26/05

LOTS 33, 34 & 35, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



LEGEND

- ◎ - EXISTING R/W MONUMENT
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FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:

- ■ - COMMERCIAL BUILDING
- □ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 486+00 TO STA. 498+00 PROP. S.R. 37
STA. 18+00 TO STA. 26+00 PROP. OUTVILLE RD.
STA. 498+00 OUTVILLE-MORSE FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

45/88

1306
1349

L1610042.RDS 05/09/06

LOTS 33, 34 & 35, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

END R/W ACQUISITION
STA. 26+50
OUTVILLE RD.

END WORK
STA. 26+25
OUTVILLE RD.

BEGIN WORK
STA. 497+43.92
OUTVILLE-MORSE
FRONTAGE RD.

BEGIN WORK
STA. 18+60
OUTVILLE RD.

BEGIN R/W ACQUISITION
STA. 18+40
OUTVILLE RD.

216
DAVID A. & MARY JEAN MORITZ
66-319032-00.000
AGRICULTURAL
TRACT 1, PARCEL 1

216
DAVID A. & MARY JEAN MORITZ
66-319026-00.000
AGRICULTURAL
TRACT 1, PARCEL 2

216
DAVID A. & MARY JEAN MORITZ
66-319044-00.000
AGRICULTURAL
TRACT 2, PARCEL 2

216
DAVID A. & MARY JEAN MORITZ
66-319038-00.000
AGRICULTURAL
TRACT 1, PARCEL 3

216-T
S 74°15'40" E 46.10'
STA. 487+52
225.00' LT.
N 58°07'08" E 69.58'
S 86°47'23" E 470.75'
142.00'
STA. 486+95
185.00' LT.
STA. 487+97
215.00' LT.
S 49°57'52" E 50.05'
STA. 488+37
185.00' LT.

LOT 33 / LOT 34

APPROXIMATE LOCATION LOT LINE

STA. 488+70.53
185.00' LT.

LA
S 83°09'26" E 439.65'
LA
STA. 493+00
170.00' LT.
S 85°13'44" E 333.64'
LA

216-WDV2
STA. 24+56.09
80.33' LT.
PROP. OUTVILLE RD.
STA. 496+30.00
185.00' LT.
PROP. S.R. 37

STA. 26+50
80.00' LT., PROP. OUTVILLE RD.
EX. P.I. STA. = 26+27.28
= 00°14'15" RT.
NO CURVE
STA. 26+49.44
35.08' LT.
S84°39'00"E
74.91'
N 5°01'54" E
195.33'
EX. N 04°26'11" E
N 05°06'45" E
R/W
LOT 34
LOT 35
POB 216-WDV2, STA. 26+50
5.09' LT., PROP. OUTVILLE RD.
EX. ℄ SURVEY, OUTVILLE RD.
N 05°23'34" E
85.09'
STA. 26+50
80.00' RT.
PROP. OUTVILLE RD.
191.60'
S 4°56'42" W
STA. 26+50.40
24.91' RT.
26+00
N 05°21'00" E
33.9'
26.1'
EX. P.I. STA. = 25+06.83
D = 00°47'03" RT.
NO CURVE
25+00
S 81°28'59" E 310.04'
STA. 24+56.97
79.98' RT.
PROP. OUTVILLE RD.
STA. 497+90.00
195.00' LT.
PROP. S.R. 37
N 85°59'01" W
LA-R/W
160.31'
24+00
23+00
STA. 497+19.43

MATCHLINE STA. 486+00
PROP. S.R. 37
SEE SHEET 44

487+00
488+00
489+00
490+00
491+00
492+00
493+00
494+00
495+00
496+00
497+00
498+00
S 86°47'24" E
STA. 488+68.48
PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37
S 82°24'26" E

MATCHLINE STA. 498+00
PROP. S.R. 37
SEE SHEET 48

S.R. 37
CURVE 1
P.I. STA. 491+53.90
D = 04°22'58" RT.
Dc = 00°45'00"
R = 7,639.44'
T = 292.32'
L = 584.36'
E = 5.59'

216-WL

P.T. STA. 494+45.94

POB 216-WDV3
STA. 497+30.78
186.54' RT., PROP. S.R. 37
STA. 20+79.42
0.87' LT., PROP. OUTVILLE RD.

S 88°07'50" W
152.07' (216-WL)
70.18' (216-WDV3)
PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.
S 86°16'03" E
N 04°19'42" E
22+00
21+00
20+00
19+00
18+00
R/W

P.C. STA. 488+61.58

N 81°52'53" W 467.49'
LA
LA
N 85°48'31" W 421.71'
LA
STA. 493+00
215.00' RT.
N 85°06'52" W 346.27'
LA
STA. 488+65.90
220.00' RT.
STA. 496+50
200.00' RT., PROP. S.R. 37
STA. 20+70.58
82.29' LT., PROP. OUTVILLE RD.
N 88°07'50" E
81.89'
(216-WDV3)
233.31'
N 19°52'10" W
STA. 20+00
45.00' LT., PROP.
OUTVILLE RD.
159.91'
N 4°22'07" E
216-WDV3
N 85°33'49" W 100.00'
STA. 18+40
29.86' LT., PROP.
OUTVILLE RD.

MATCHLINE STA. 498+00
OUTVILLE-MORSE FRONTAGE RD.
SEE SHEET 48
498
STA. 497+86.09
73.78' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.
STA. 19+76.79
55.00' RT., PROP.
OUTVILLE RD.
EX. N 39°22'48" E
136.89'
S 4°22'32" W
PROP. ℄ SURVEY & CONSTRUCTION, OUTVILLE RD.
EX. P.I. STA. = 19+00.00
D = 00°06'29" LT.
NO CURVE
N 04°26'11" E
STA. 18+40
55.00' RT., PROP.
OUTVILLE RD.
STA. 18+40
30.15' RT., PROP.
OUTVILLE RD.

LEGEND

◎ - EXISTING R/W MONUMENT

∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 486+00 TO STA. 498+00 PROP. S.R. 37
STA. 18+00 TO STA. 26+00 PROP. OUTVILLE RD.
STA. 498+00 OUTVILLE-MORSE FRONTAGE RD.

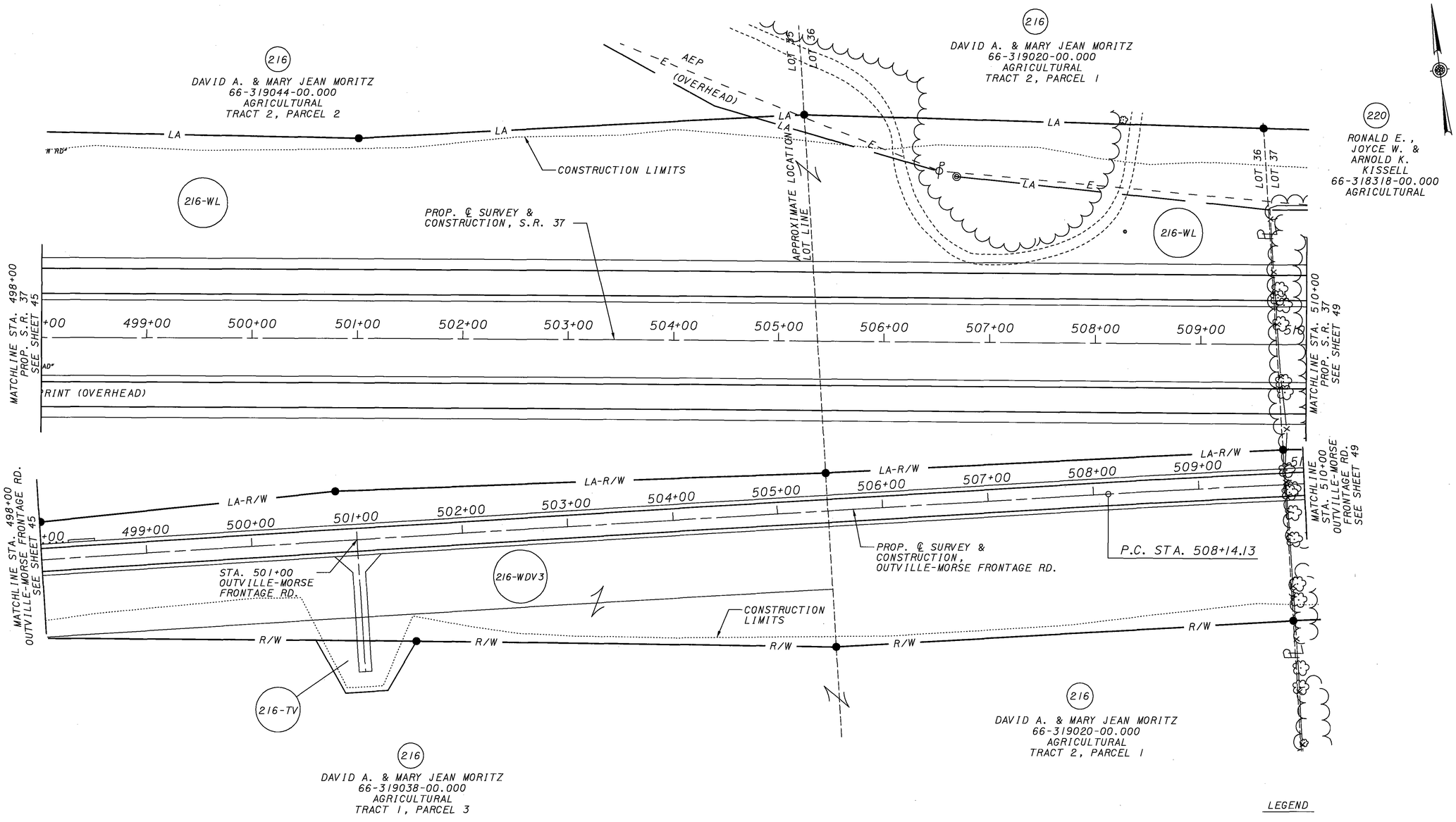
LIC-161-6.65
LIC-37-10.25

46/88

1309
1349

L161042D.RDS 09/26/05

LOTS 35, 36 & 37, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
PROP. S.R. 37
STA. 498+00 TO STA. 510+00
OUTVILLE-MORSE FRONTAGE RD.

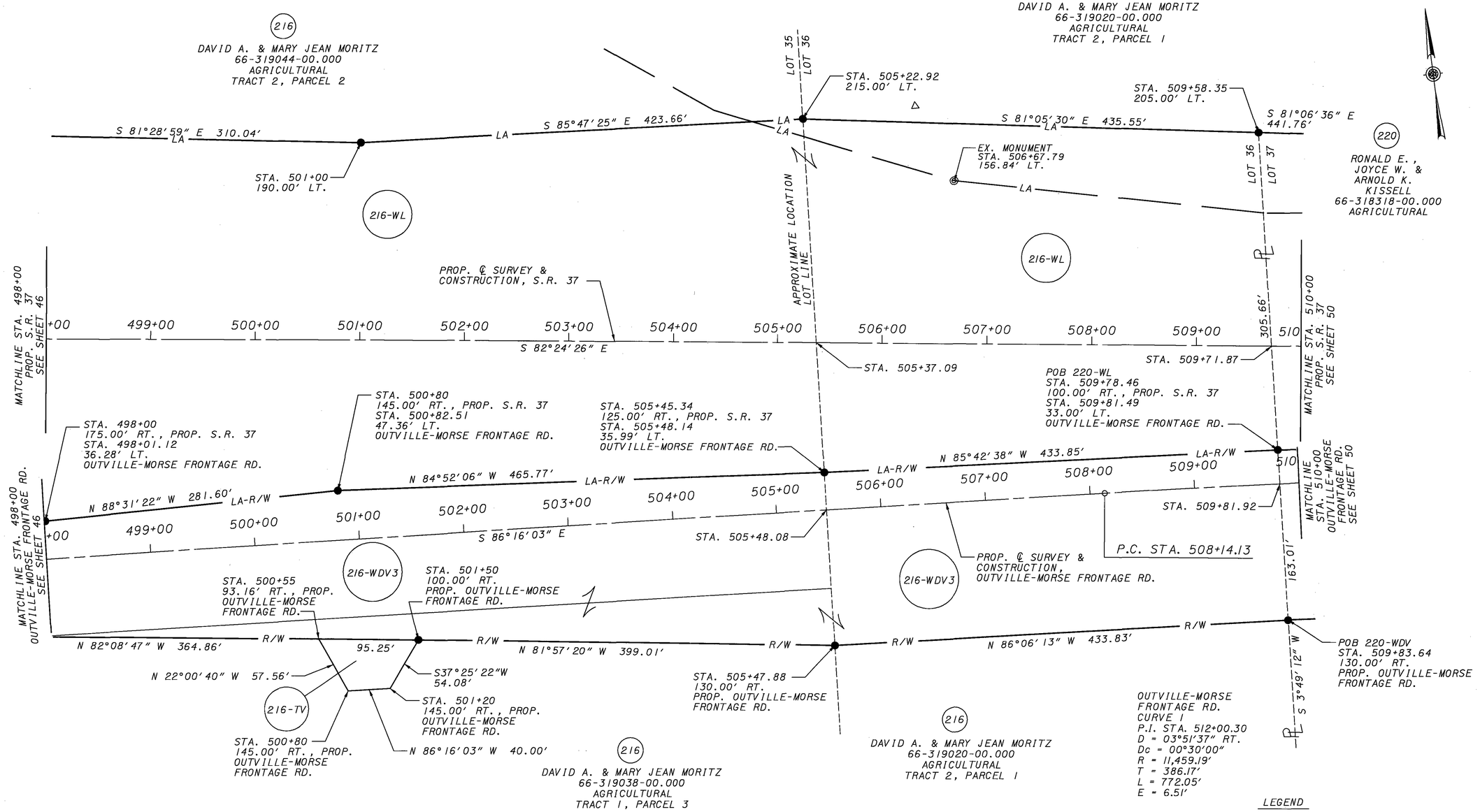
LIC-161-6.65
LIC-37-10.25

47 / 88

1308
1349

LI610043.RDS 09/26/05

LOTS 35, 36 & 37, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 498+00 TO STA. 510+00 PROP. S.R. 37
STA. 498+00 TO STA. 510+00 OUTVILLE-MORSE FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

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REV	DATE	DESCRIPTION

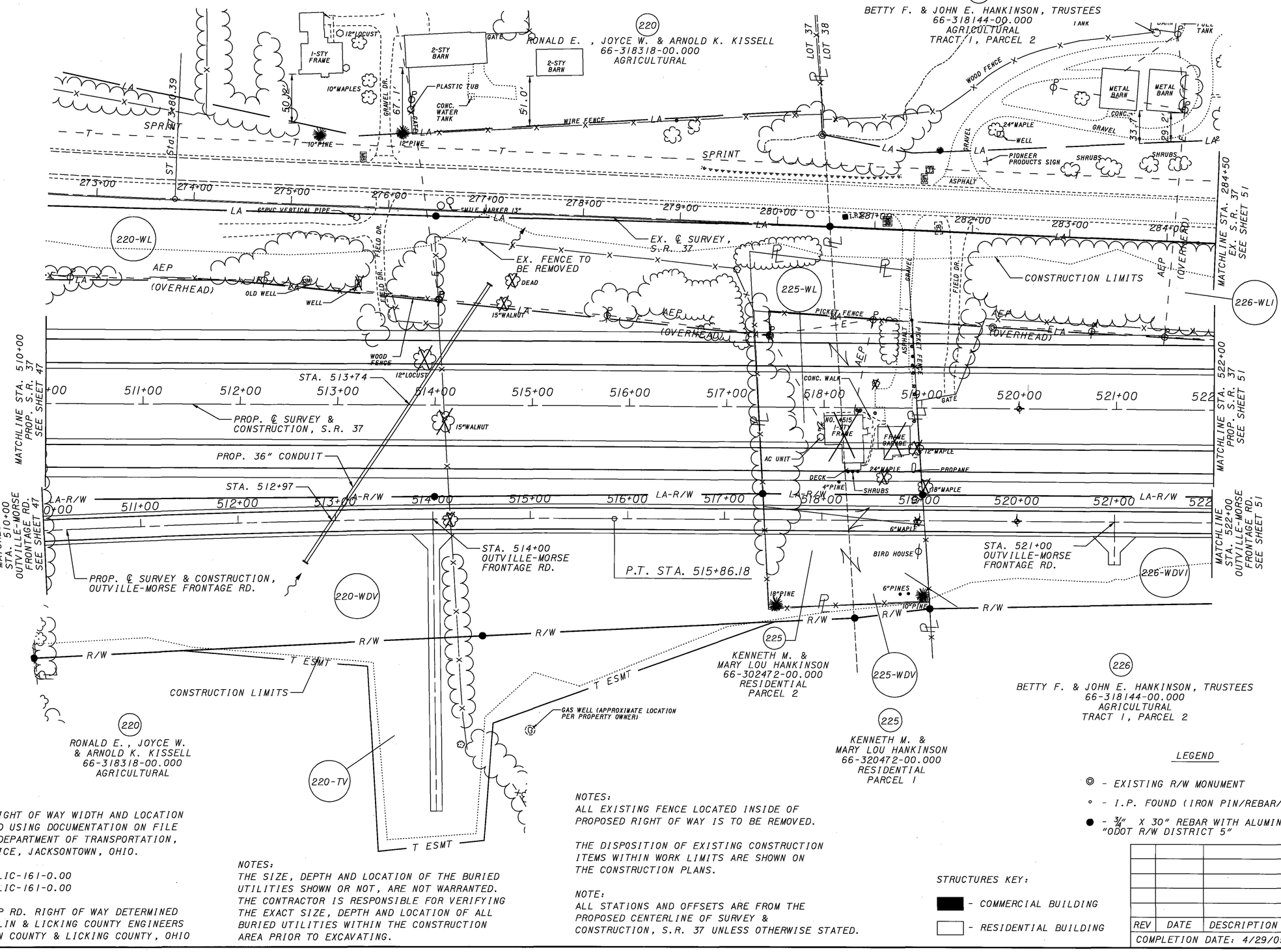
COMPLETION DATE: 4/29/05

48/88

1309
1349

L1610430.RDS 09/26/05

LOTS 37 & 38, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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CHECKED T.A.

0 25 50 100
HORIZONTAL SCALE IN FEET

RIGHT OF WAY DETAIL SHEET
STA. 510+00 TO STA. 522+00 PROP. S.R. 37
272+50 TO 284+50 EX. S.R. 37
STA. 522+00 OUTVILLE-MORSE FRONTAGE RD.

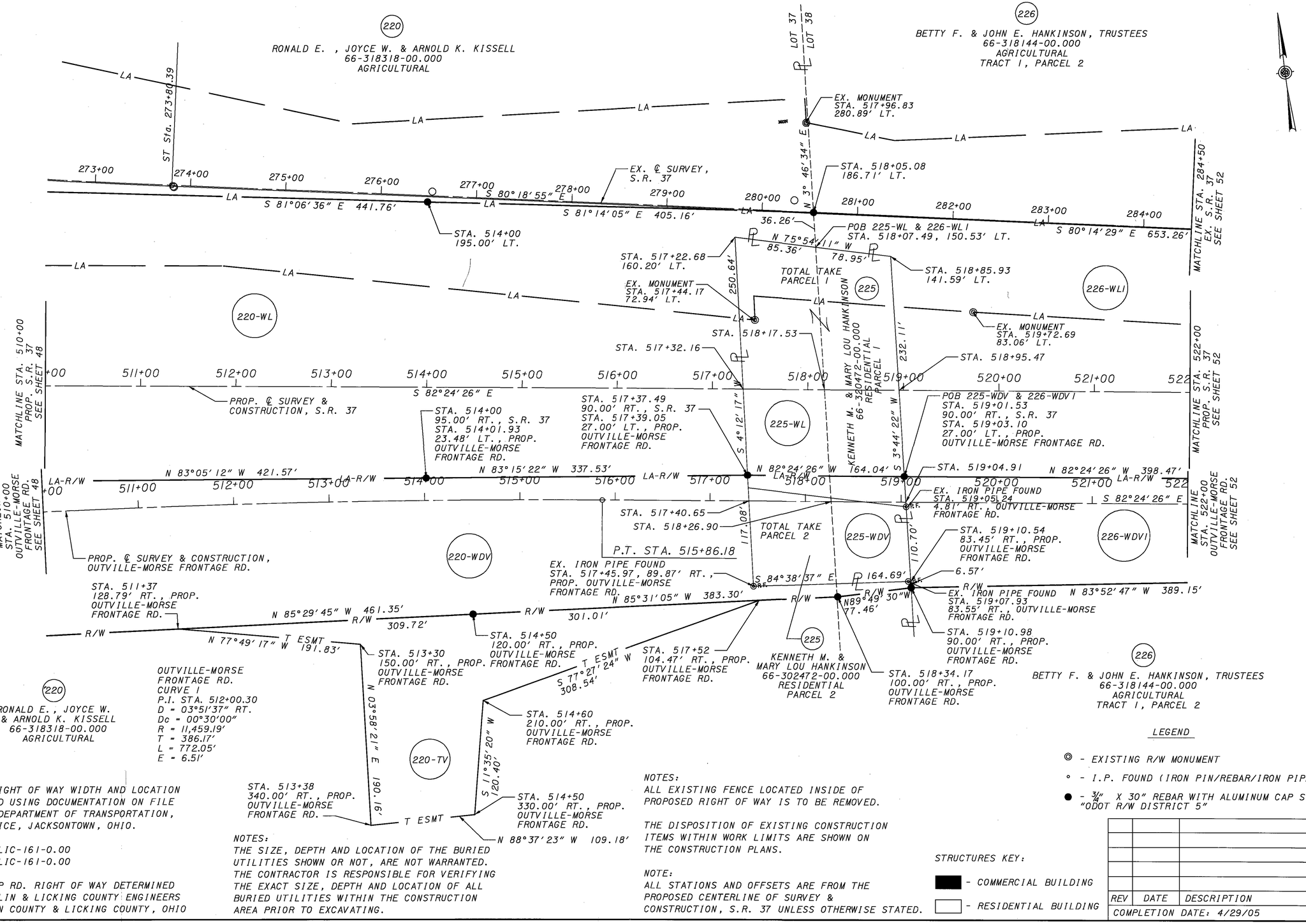
LIC-161-6.65
LIC-37-10.25

49/88

1310
1349

LIC0044.RDS 05/09/06

LOTS 37 & 38, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
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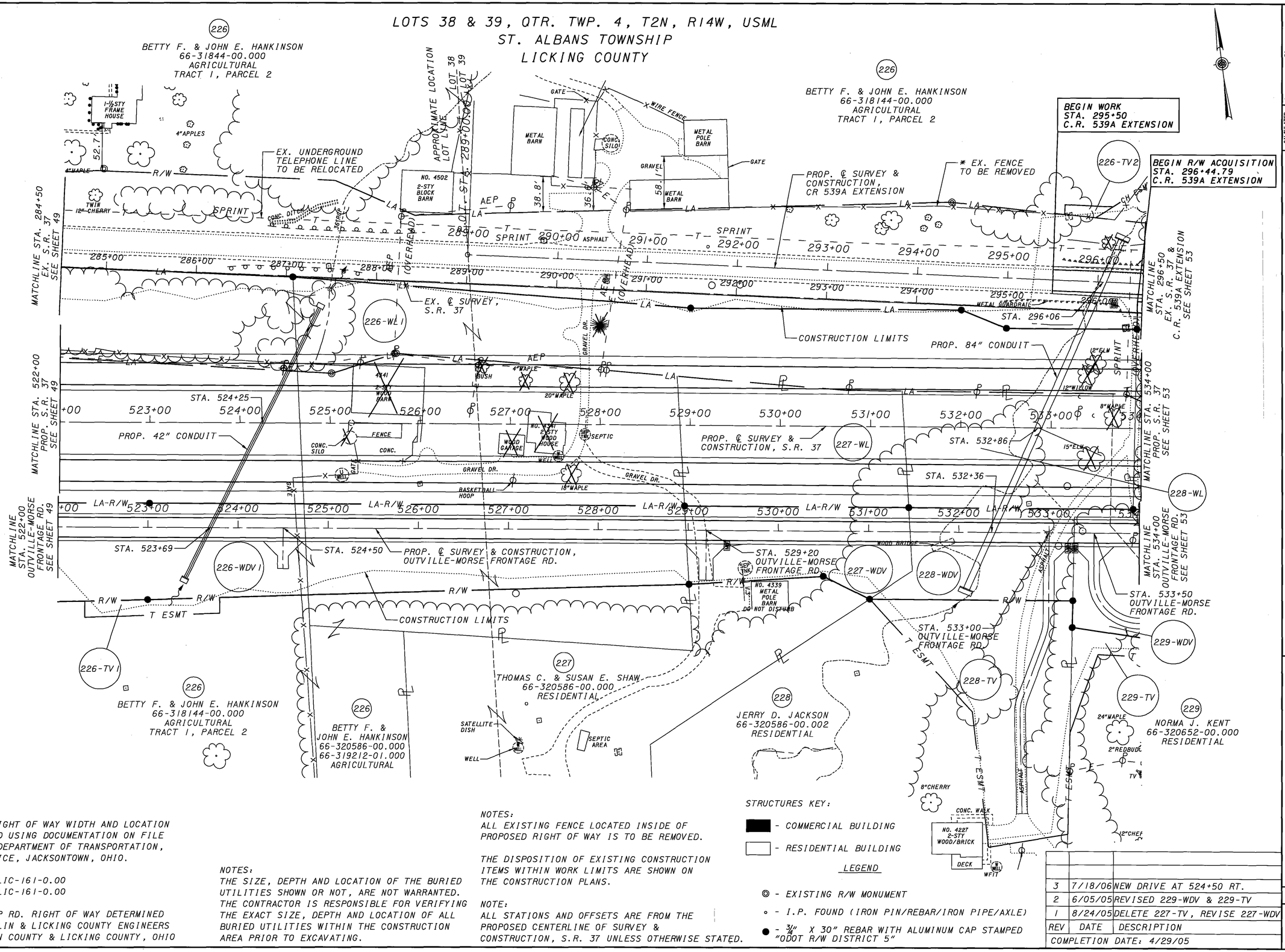
LEGEND

◎ - EXISTING R/W MONUMENT
○ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

LOTS 38 & 39, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	7/18/06	NEW DRIVE AT 524+50 RT.
2	6/05/05	REVISED 229-WDV & 229-TV
1	8/24/05	DELETE 227-TV, REVISE 227-WDV

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 522+00 TO STA. 534+00 PROP. S.R. 37
STA. 284+50 TO STA. 296+50 EX. S.R. 37 & CR539A EXTENSION
STA. 522+00 TO 534+00 OUTVILLE-MORSE FRONTAGE RD.

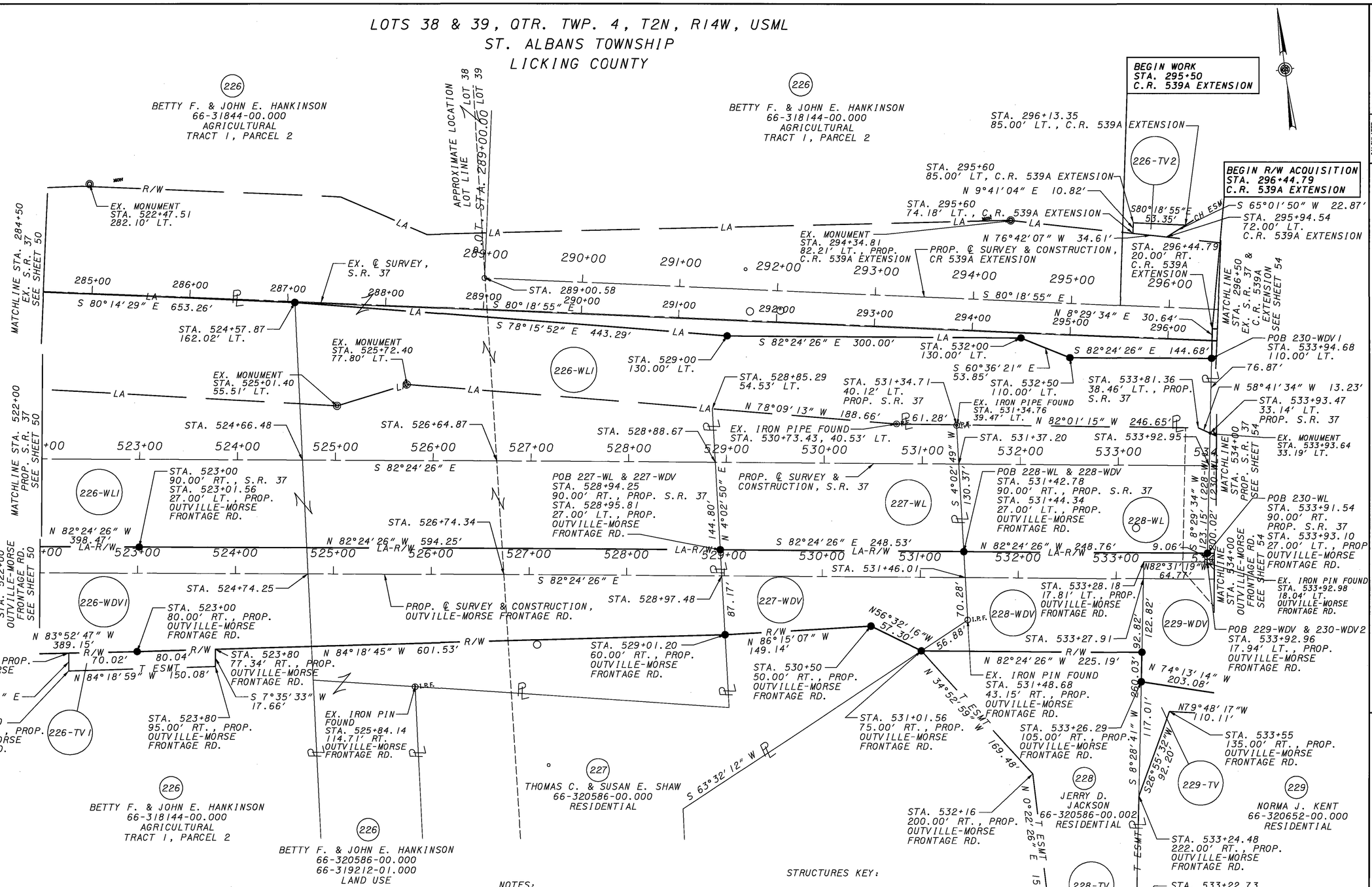
LIC-161-6.65
LIC-37-10.25

51 / 88

1312
1349

LI6I0045.RDS 07/18/06

LOTS 38 & 39, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- EXISTING R/W MONUMENT
- I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
2	6/05/05	REVISED 229-WDV & 229-TV
1	8/24/05	DELETE 227-TV, REVISE 227-WDV

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 522+00 TO STA. 534+00 PROP. S.R. 37
STA. 296+50 EX. S.R. 37 & CR 539A EXTENSION
STA. 522+00 TO STA. 534+00 OUTVILLE-MORSE FRONTAGE RD.
STA. 284+50 TO STA. 296+50

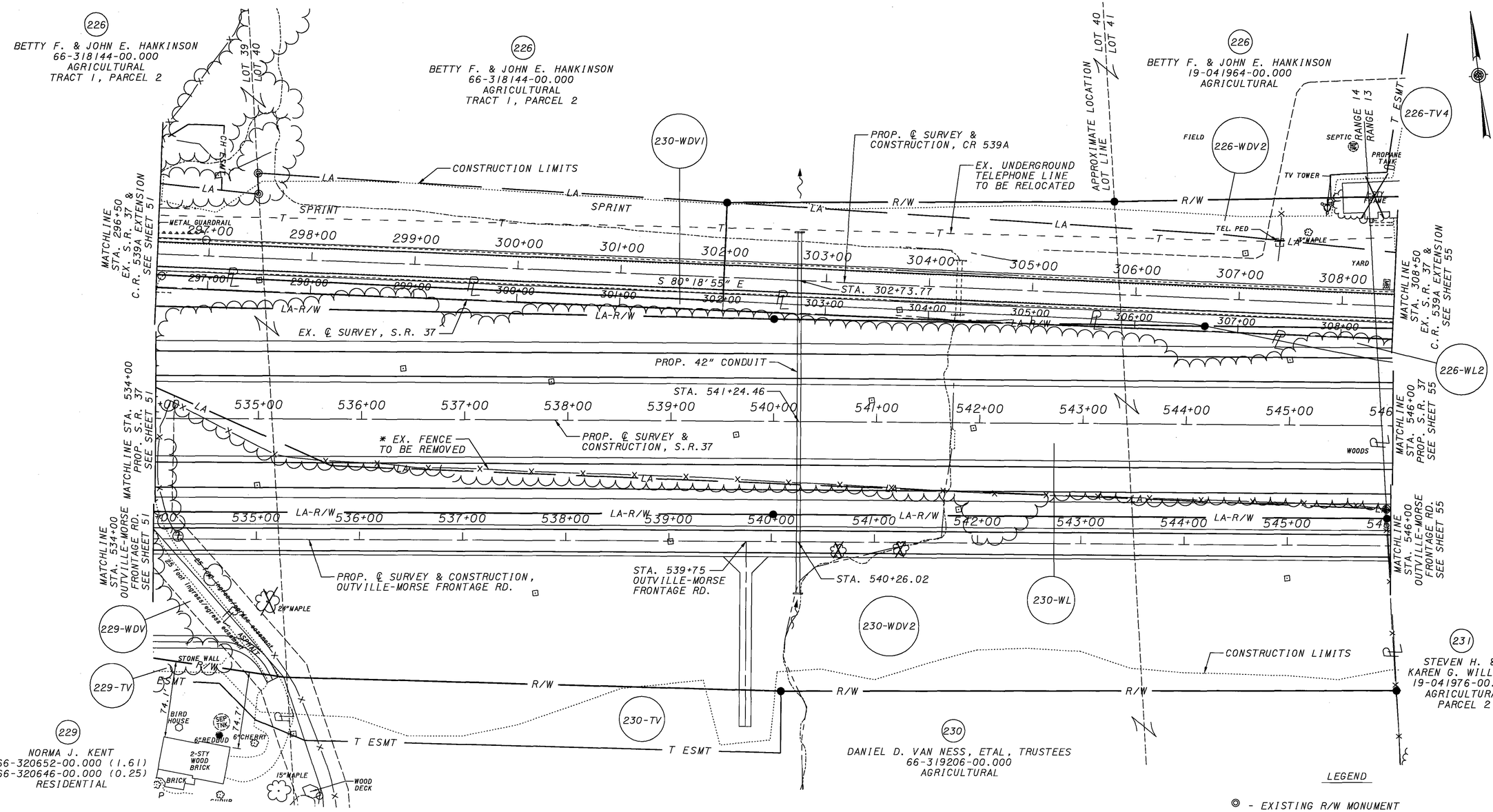
LIC-161-6.65
LIC-37-10.25

52/88

1313
1349

L16I045D.RDS 06/05/06

LOTS 39, 40 & 41, QTR. TWP. 4, T2N, R14W, USML
LOT 41, QTR. TWP. 4, T2N, R13W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	9/05/06	REVISED 226-WDV2 AUD. PAR. NO.
2	7/18/06	DELETED 226-TV3
1	6/05/05	REVISED 229-WDV & 229-TV
COMPLETION DATE: 4/29/05		

CALCULATED C.S.
CHECKED T.A.

0 25 50 100
HORIZONTAL SCALE IN FEET

RIGHT OF WAY DETAIL SHEET
STA. 534+00 TO STA. 546+00 PROP. S.R. 37
STA. 296+50 TO 308+50 EX. 37 & CR 539A EXTENSION
STA. 534+00 TO STA. 546+00 OUTVILLE-MORSE FRONTAGE RD.

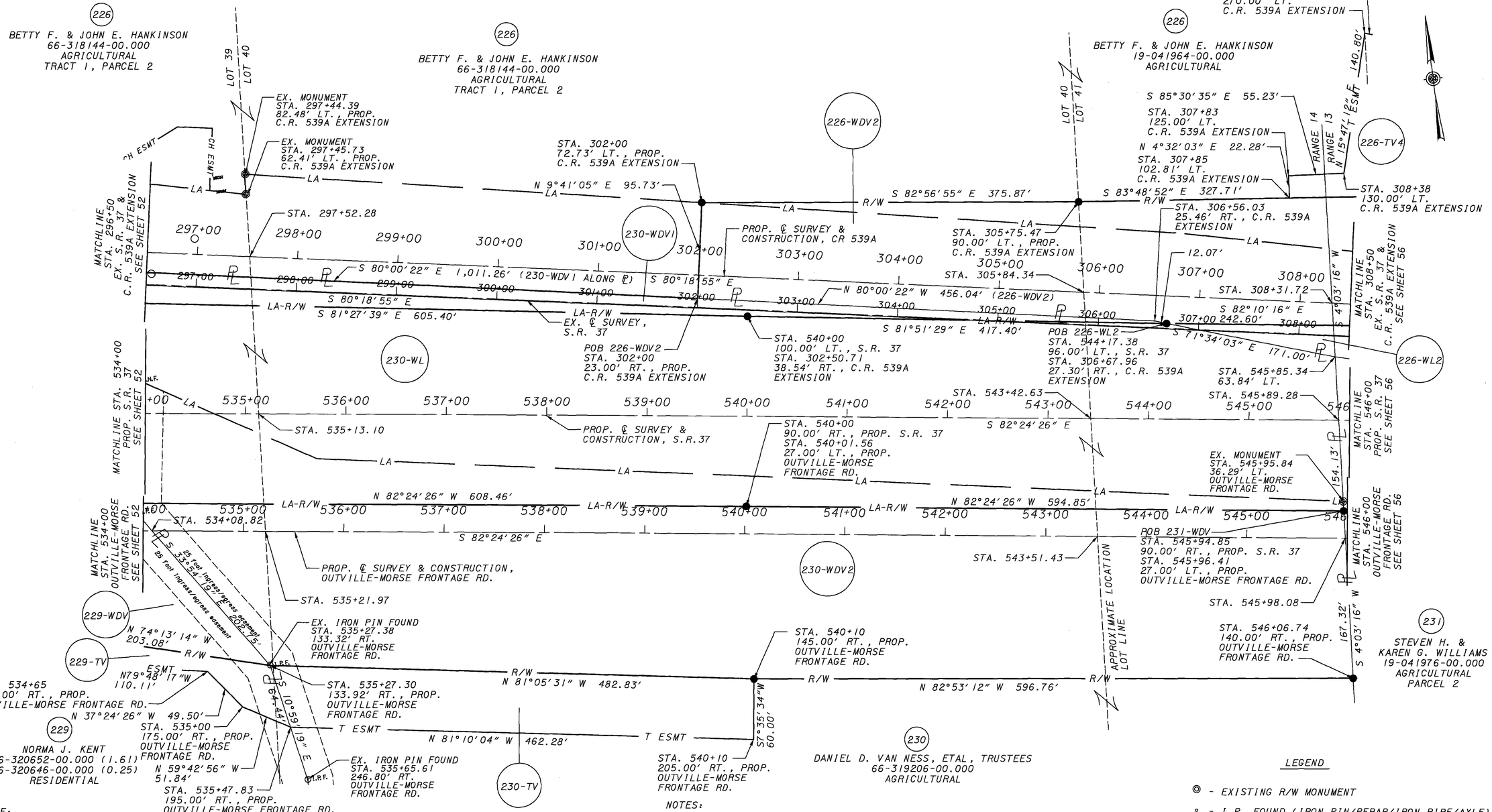
LIC-161-6.65
LIC-37-10.25

53/88

1314
1349

LI6I0046.RDS 09/05/06

LOTS 39, 40 & 41, QTR. TWP. 4, T2N, R14W, USML
LOT 41, QTR. TWP. 4, T2N, R13W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	9/05/06	REVISED 226-WDV2 AUD. PAR. NO.
2	7/18/06	DELETED 226-TV3
1	6/05/05	REVISED 229-WDV & 229-TV

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 534+00 TO STA. 546+00 PROP. S.R. 37
STA. 296+50 TO 308+50 EX. 37 & CR 539A EXTENSION
STA. 534+00 TO STA. 546+00 OUTVILLE-MORSE FRONTAGE RD.

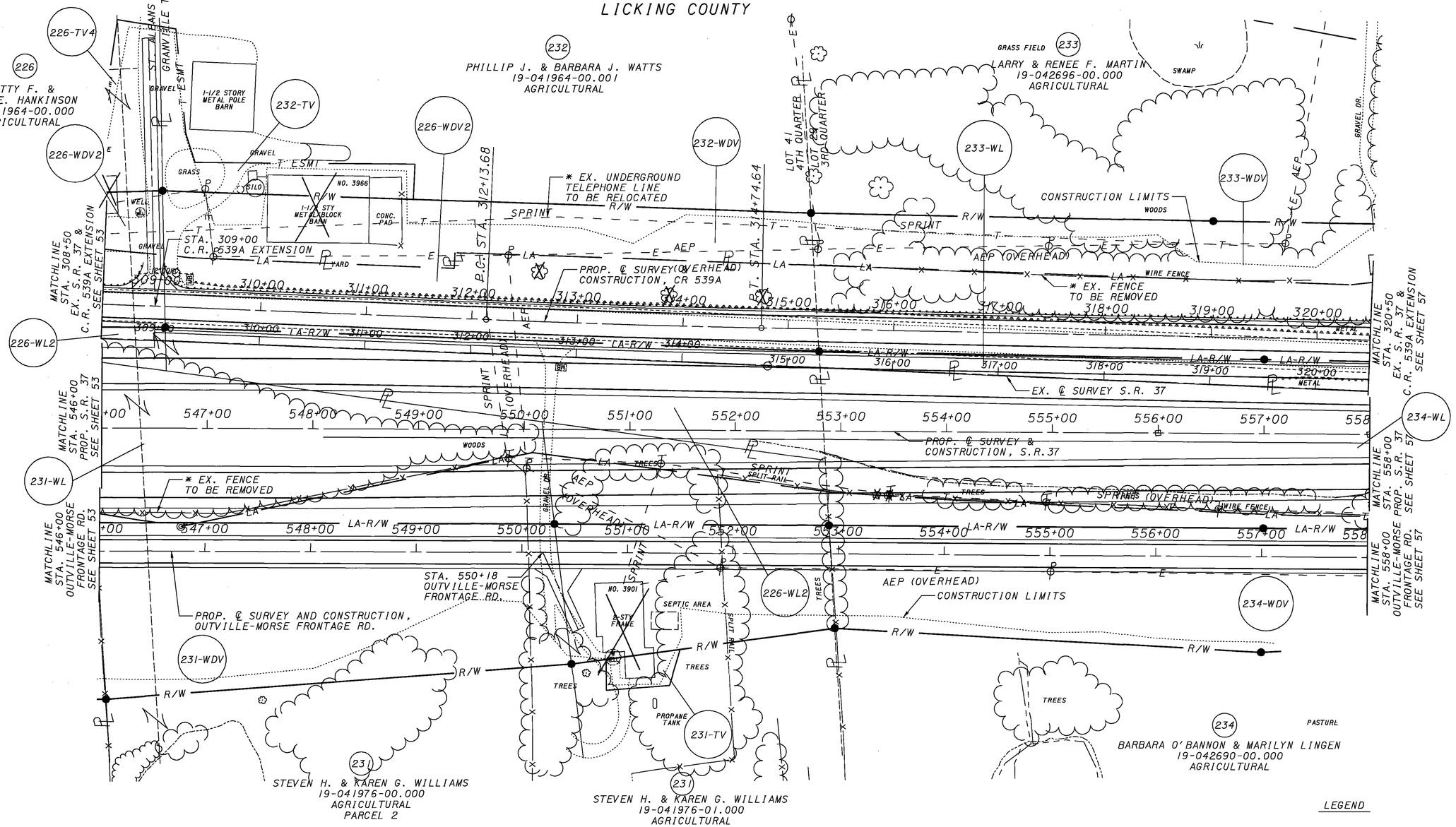
LIC-161-6.65
LIC-37-10.25

54 / 88

1315
1349

09/05/06
LI6I046D.RDS

LOT 41, QTR. TWP. 4, T2N, R13W, USML
ST. ALBANS TOWNSHIP
LOT 29, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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LEGEND

◎ - EXISTING R/W MONUMENT
∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
2	6/29/06	REVISED 234 OWNER'S NAME
1	5/10/06	DELETED 232-WL, REVISED 232-WDV, 226-WL2 & 226-WDV2

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 546+00 TO STA. 558+00 PROP. S.R. 37
STA. 308+50 TO STA. 320+50 EX. S.R. 37 & CR 539A EXTENSION
STA. 546+00 TO 558+00 OUTVILLE-MORSE FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

55/88

1316
1309

L16I0047.RDS 06/29/06

LOT 41, QTR. TWP. 4, T2N, R13W, USML
ST. ALBANS TOWNSHIP
LOT 29, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY

① STA. 311+81.23, 47.49' LT., C.R. 539A EXTENSION
② N 76°50'11" W 25.37'
③ STA. 309+06.27, 49.00' LT., C.R. 539A EXTENSION

STA. 308+93.15, 265.00' LT., C.R. 539A EXTENSION
S 73°13'18" E 40.49'
S 72°59'04" E 15.67'
STA. 309+08.69, 263.00' LT., C.R. 539A EXTENSION
ST. ALBANS TWP. / GRANVILLE TWP.
S 19°57'10" W 98.06'
ESMT
N 6°12'26" E 155.29'
S 82°14'34" E 208.12'
STA. 311+40, 145.00' LT., C.R. 539A EXTENSION
S 9°41'04" W 33.47'
STA. 311+40, 111.53' LT., C.R. 539A EXTENSION
STA. 309+22, 165.00' LT., C.R. 539A EXTENSION
S 10°38'19" E 28.79'
STA. 309+32, 138.00' LT., C.R. 539A EXTENSION
ESMT
STA. 309+02.56, 110.00' LT., C.R. 539A EXTENSION
S 83°48'52" E 327.71' (226-WDV2) 117.78' (226-TV4)
STA. 308+79.58
61.12'
R/W 237.44'
S 80°41'07" E 614.48'
S 16°06'06" W 15.04'
STA. 546+59.98, 95.00' LT., PROP. S.R. 37
STA. 309+10.43, 19.44' RT., C.R. 539A EXTENSION
STA. 311+82.91, 62.44' LT., C.R. 539A EXTENSION
N 80°39'53" W 339.00'
N 80°19'23" W 249.64'
STA. 309+31.59, 47.46' LT., C.R. 539A EXTENSION
S 82°10'16" E 242.60'
S 80°18'55" E
S 80°33'26" E 619.50'
S 74°56'42" E 435.23' (231-WL)
STA. 546+60.97, 53.93' LT.
STA. 546+37.01
EX. MONUMENT STA. 546+77.17, 23.44' LT., OUTVILLE-MORSE FRONTAGE RD.
STA. 546+45.81
PROP. ℄ SURVEY AND CONSTRUCTION, OUTVILLE-MORSE FRONTAGE RD.
STA. 550+16.88, 7.32' LT.
STA. 550+18.58
N 74°56'42" W 706.16' (226-WL2)
STA. 550+34.08
STA. 550+29.12, 90.00' RT., PROP. S.R. 37, STA. 550+30.69, 27.00' LT., PROP. OUTVILLE-MORSE FRONTAGE RD.
STA. 550+80, 100.41' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
N 86°57'01" W 441.94'
STA. 550+47.29, 105.00' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
70.68'
N87°10'15"W 60.21'
N 7°35'34" E 29.59'
STA. 550+80, 130.00' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
STA. 551+50, 90.60' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
S 23°48'05" W 35.82'
STA. 551+40, 125.00' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
STA. 552+91.57
STA. 552+96.92, 70.00' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
S 89°36'41" W 252.07'
N 79°34'00" W 403.58'
N 85°27'36" W 375.53'
STA. 557+00, 90.00' RT., PROP. OUTVILLE-MORSE FRONTAGE RD.
S 4°03'16" W 97.19'
62.25'
150.07' (234-WL)
POB 231-WL, STA. 552+85.52, 27.87' RT.
POB 231-WDV & 234-WDV, STA. 552+89.36, 90.00' RT., PROP. S.R. 37, STA. 552+90.92, 27.00' LT., PROP. OUTVILLE-MORSE FRONTAGE RD.
PROP. ℄ SURVEY & CONSTRUCTION, S.R.37
S 82°24'26" E
STA. 557+00, 90.00' RT., PROP. S.R. 37, STA. 557+01.56, 27.00' LT., PROP. OUTVILLE-MORSE FRONTAGE RD.
S 82°24'26" E 457.27'
S 82°24'26" E
N 82°24'26" W 434.28'
N 82°24'26" W 260.23'
S 82°24'26" E 410.64'
LA-R/W
LA
P.C. STA. 312+13.68
P.T. STA. 314+74.64
PROP. ℄ SURVEY & CONSTRUCTION, CR 539A
EX. MONUMENT STA. 314+80.89, 35.83' RT., PROP. C.R. 539A EXTENSION
LOT 41 4TH QUARTER / LOT 29 3RD QUARTER
S 4°03'16" W 49.70' (232-WDV)
81.73' (226-WDV2)
103.07'
15.25'
POB 234-WL, STA. 552+80.10, 59.78' LT.
STA. 552+83.79
EX. S 80°18'55" E 838.65' (233-WL) 874.28' (234-WL)
EX. ℄ SURVEY S.R. 37
STA. 315+19.57, 110.00' LT., C.R. 539A EXTENSION
POB 232-WDV, STA. 315+23.32, 60.44' LT., C.R. 539A EXTENSION, STA. 552+74.11, 156.57' LT., S.R. 37
STA. 315+27.89
POB 233-WL & 233-WDV, STA. 552+79.16, 75.00' LT., PROP. S.R. 37, STA. 315+29.48, 21.05' RT., C.R. 539A EXTENSION
S 81°43'35" E 420.87'
S 81°37'13" E 380.43'
S 81°47'28" E 452.74'
STA. 319+00, 110.00' LT., C.R. 539A EXTENSION
STA. 557+00, 70.00' LT., PROP. S.R. 37, STA. 319+50.35, 20.27' RT., C.R. 539A EXTENSION
S 81°37'13" E
S 81°43'02" E 410.80'
MATCHLINE STA. 308+50 EX. S.R. 37 & C.R. 539A EXTENSION SEE SHEET 54
MATCHLINE STA. 320+50 EX. S.R. 37 & C.R. 539A EXTENSION SEE SHEET 58
MATCHLINE STA. 546+00 PROP. S.R. 37 SEE SHEET 54
MATCHLINE STA. 546+00 OUTVILLE-MORSE FRONTAGE RD. SEE SHEET 54
MATCHLINE STA. 558+00 PROP. S.R. 37 SEE SHEET 58
MATCHLINE STA. 558+00 OUTVILLE-MORSE FRONTAGE RD. SEE SHEET 58
STA. 546+00 547+00 548+00 549+00 550+00 551+00 552+00 553+00 554+00 555+00 556+00 557+00 558
STA. 309+00 310+00 311+00 312+00 313+00 314+00 315+00 316+00 317+00 318+00 319+00 320+00

232 PHILLIP J. & BARBARA J. WATTS
19-041964-00.001
AGRICULTURAL

226 BETTY F. & JOHN E. HANKINSON
19-041964-00.000
AGRICULTURAL

233 LARRY & RENEE F. MARTIN
19-042696-00.000
AGRICULTURAL

234 BARBARA O'BANNON & MARILYN LINGEN
19-042690-00.000
AGRICULTURAL

231 STEVEN H. & KAREN G. WILLIAMS
19-041976-00.000
AGRICULTURAL
PARCEL 2

231 STEVEN H. & KAREN G. WILLIAMS
19-041976-01.000
AGRICULTURAL
PARCEL 1

226-TV4, 232-TV, 226-WDV2, 226-WL2, 231-WL, 231-WDV, 231-TV, 232-WDV, 233-WDV, 233-WL, 234-WL, 234-WDV

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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LEGEND
◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
2	6/29/06	REVISED 234 OWNER'S NAME
1	5/10/06	DELETED 232-WL, REVISED 232-WDV, 226-WL2 & 226-WDV2

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100
CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 546+00 TO STA. 558+00 PROP. S.R. 37
STA. 308+50 TO STA. 320+50 EX. S.R. 37 & CR 539A EXTENSION
STA. 546+00 TO 558+00 OUTVILLE-MORSE FRONTAGE RD.

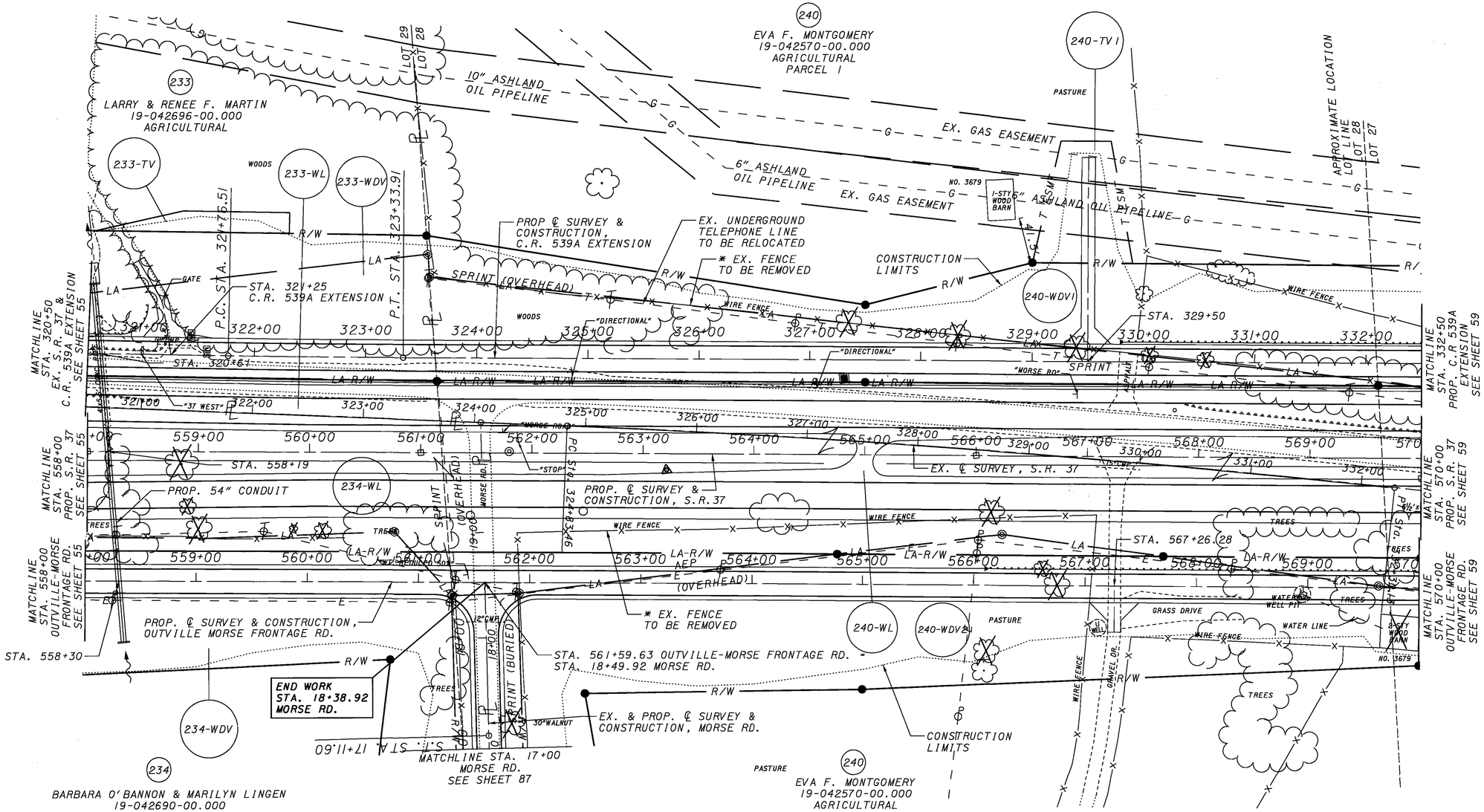
LIC-161-6.65
LIC-37-10.25

56/88

1319
1349

L16I047D.RDS 06/29/06

LOTS 27, 28 & 29, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



RIGHT OF WAY DETAIL SHEET
STA. 558+00 TO STA. 570+00 PROP. S.R. 37
STA. 320+50 EX. S.R. 37 & CR539A EXTENSION TO STA. 332+50 CR539A EXTENSION
STA. 558+00 TO STA. 570+00 OUTVILLE-MORSE FRONTAGE RD.

CALCULATED C.S.
CHECKED T.A.

0 25 50 100
HORIZONTAL SCALE IN FEET

LIC-161-6.65
LIC-37-10.25

57/88

1318
1349

LIC10048.RDS 09/01/06

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
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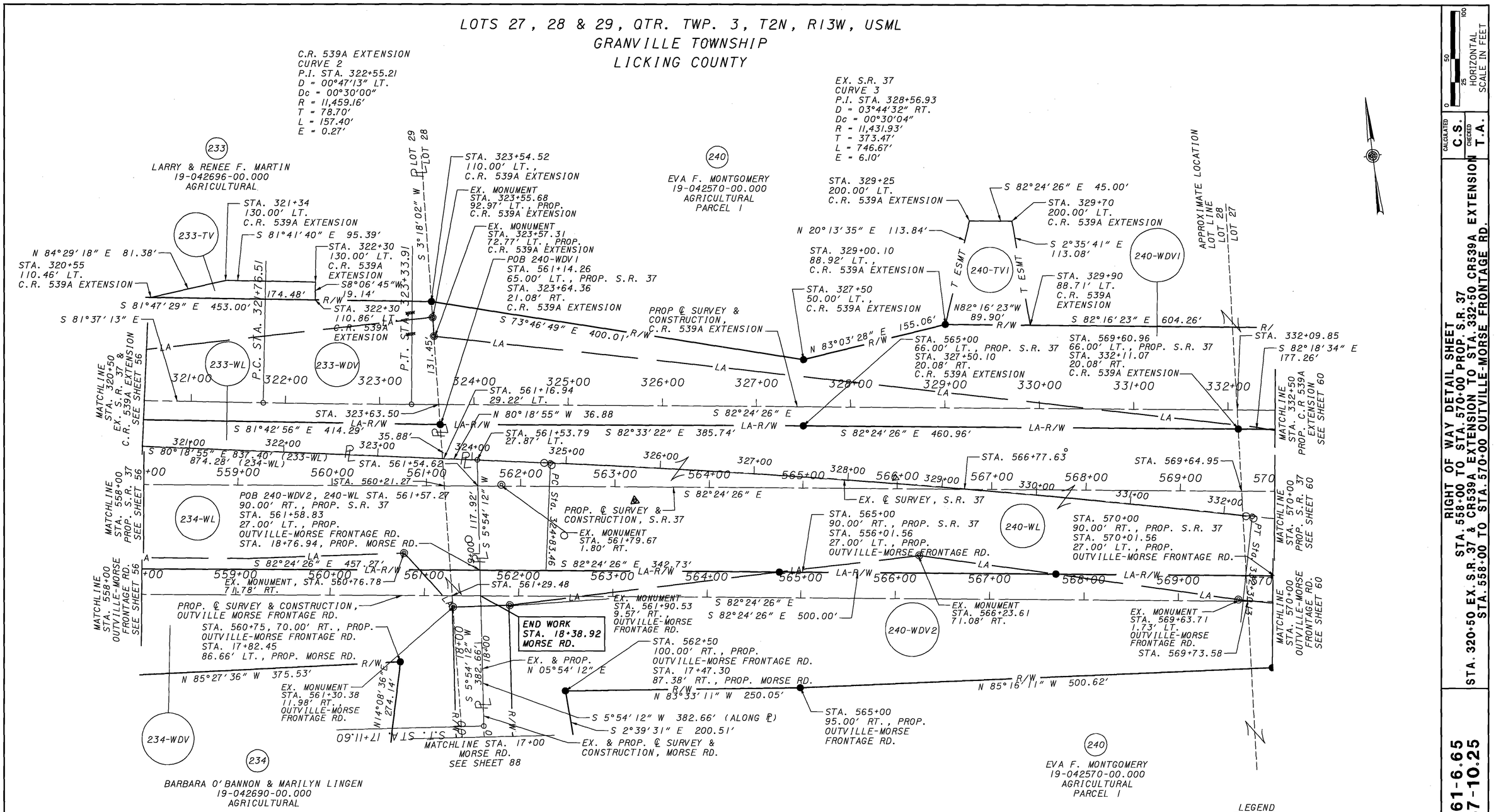
STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	9/01/06	ADDED 240-TV I
2	6/29/06	REVISED 234 OWNER'S NAME
1	5/8/06	REVISED 240-WDV I

COMPLETION DATE: 4/29/05

LOTS 27, 28 & 29, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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NOTE:
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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	9/01/06	ADDED 240-TV1
2	6/29/06	REVISED 234 OWNER'S NAME
1	5/8/06	REVISED 240-WDV1
COMPLETION DATE: 4/29/05		

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 558+00 TO STA. 570+00 PROP. S.R. 37
STA. 320+50 EX. S.R. 37 & CR539A EXTENSION TO STA. 332+50 CR539A EXTENSION
STA. 558+00 TO STA. 570+00 OUTVILLE-MORSE FRONTAGE RD.

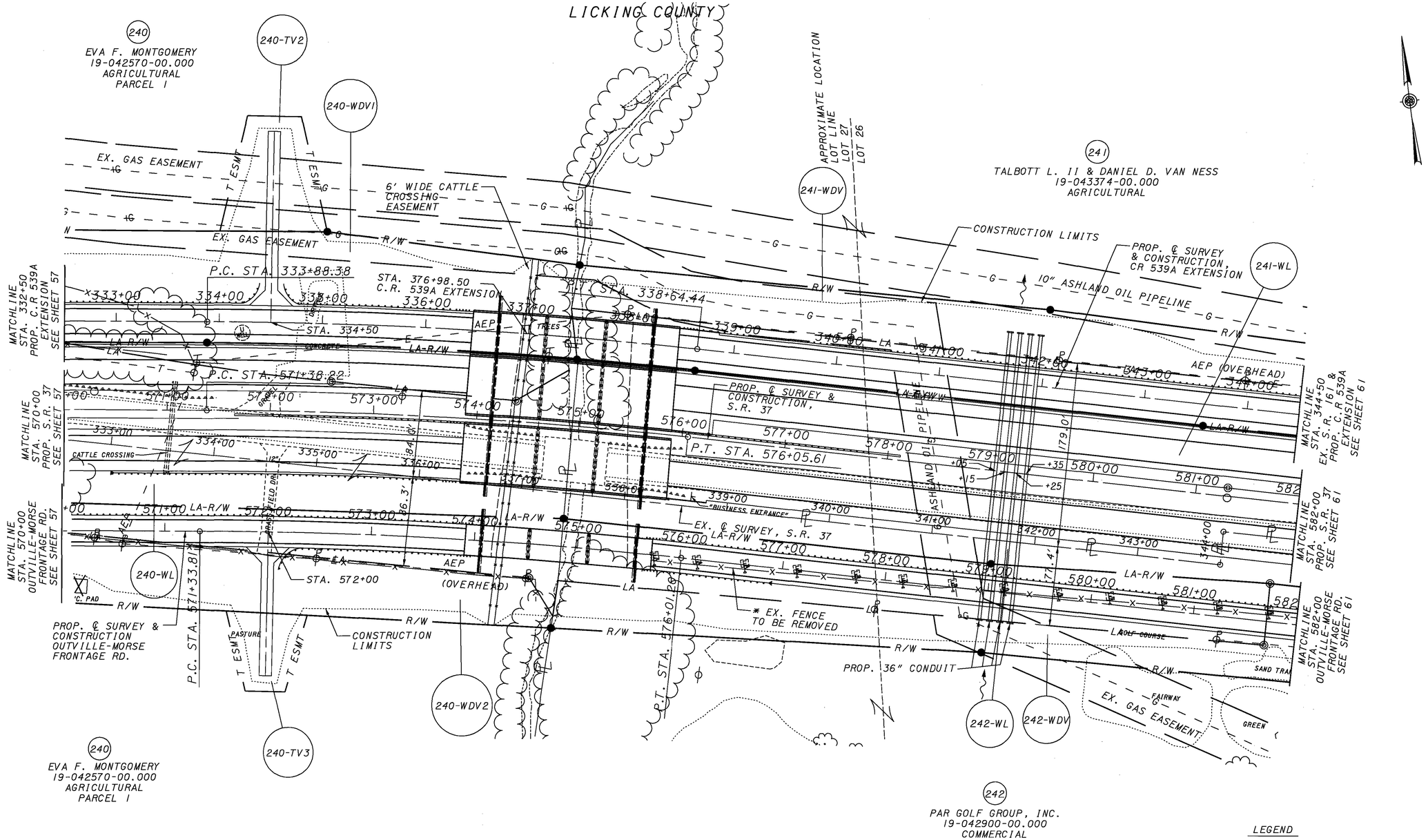
LIC-161-6.65
LIC-37-10.25

58 / 88

1319
1319

L161048D.RDS 09/01/06

LOTS 26 & 27, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTE:
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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
3	9/01/06	ADDED 240-TV2 & 240-TV3
2	8/2/06	ADDED CATTLE CROSSING EASEMENT TO PARCEL 240
1	5/8/06	REVISED 240-WDV1

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 570+00 TO STA. 582+00 PROP. S.R. 37
STA. 332+50 TO STA. 344+50 EX. S.R. 161 & CR 539A EXTENSION
STA. 570+00 TO STA. 582+00 OUTVILLE-MORSE FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

59/88

1320
1349

L1610049.RDS 09/01/06

LOTS 26 & 27, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY

240
EVA F. MONTGOMERY
19-042570-00.000
AGRICULTURAL
PARCEL 1

STA. 334+75
200.00' LT.
C.R. 539A EXTENSION

S 81°39'03" E
52.14'

STA. 334+25
200.00' LT.
C.R. 539A EXTENSION

N 20°49'12" E 115.16'

STA. 334+00
87.76' LT.
C.R. 539A EXTENSION

S 82°16'23" E
604.26'

N
STA. 571+38.22
65.70' LT., S.R. 37
STA. 333+88.32
20.39' RT.
C.R. 539A EXTENSION

MATCHLINE
STA. 332+50
PROP. C.R 539A
EXTENSION
SEE SHEET 58

P.C. STA. 333+88.38

S82°18'34"E
177.26'

P.C. STA. 571+38.22

S 82°24'26" E

LA-R/W

LA

333+00 334+00 335+00

240-TV2

T ESMT

N 82°16'23" W
104.14'

S 05°20'39" E
114.57'
T ESMT

A
240-WL & 240-WDV1
CH = S 80°05'02" E 358.88'
D = 4°17'49" RT.
R = 4,786.49'
L = 358.96'

C.R. 539A EXTENSION
CURVE 3
P.I. STA. 336+26.62
D = 05°50'33" RT.
Dc = 01°13'38"
R = 4,668.74'
T = 238.24'
L = 476.07'
E = 6.07'

STA. 337+39.31
27.69' LT.
C.R. 539A EXTENSION

B
241-WL & 241-WDV
CH = S 77°16'27" E 115.08'
D = 1°25'06" RT.
R = 4,648.66'
L = 115.08'

APPROXIMATE LOCATION
LOT LINE LOT 27
LOT 26

STA. 335+02.20
88.92' LT.
C.R. 539A EXTENSION

STA. 574+43.15
158.64' LT., S.R. 37

S 75°07'54" E 246.66'
R/W

6' WIDE
CATTLE CROSSING
EASEMENT

S 0°50'39" W 49.71'

336+00 337+00

240-WDV1

S 18°22'41" W 42.58'

P.T. STA. 338+64.44

338+00 339+00

STA. 337+44.05
70.00' LT.
C.R. 539A EXTENSION

241-WDV

S 77°23'12" E 457.79'
R/W

STA. 340+27.10

340+00 341+00

LA

R/W

241
TALBOTT L. II & DANIEL D. VAN NESS
19-043374-00.000
AGRICULTURAL

STA. 342+00
75.00' LT.

S 75°25'09" E 500.10'
R/W

PROP. ℄ SURVEY
& CONSTRUCTION, CR 539A EXTENSION

342+00 343+00 344+00

S 76°33'53" E

MATCHLINE
STA. 344+50
EX. S.R. 161 &
PROP. C.R 539A
EXTENSION
SEE SHEET 62

EX. MONUMENT
STA. 574+37.32
19.83' LT.

STA. 574+93.22
59.50' LT., PROP. S.R. 37

PROP. ℄ SURVEY &
CONSTRUCTION, S.R. 37

S 76°33'53" E 494.39'

S 76°33'53" E
494.11'

STA. 577+82.32

MATCHLINE
STA. 570+00
PROP. S.R. 37
SEE SHEET 58

571+00 572+00 573+00 574+00 575+00 576+00 577+00 578+00 579+00 580+00 581+00

S 82°24'26" E

333+00 334+00 335+00

EX. MONUMENT
STA. 572+58.17
29.91' LT.

240-WL

84.0'

S 14°18'48" W
357.54'

S 12°31'47" W
1149.50'

125.01'
(241-WL)

P.T. STA. 576+05.61

EX. MONUMENT
STA. 581+30.64
8.09' LT.

PROP. ℄ SURVEY &
CONSTRUCTION
OUTVILLE-MORSE
FRONTAGE RD.

S 80°49'37" E 484.78'

S 12°31'47" W
60.52'

96.31'

2
336+00
24.49'

EX. ℄ SURVEY, S.R. 37

339+00 340+00

N 76°35'46" W 637.15'

1
575+00

LA-R/W

S 76°45'19" E 416.25'

STA. 579+10.38
90.00' RT.
PROP. S.R. 37
STA. 579+00
27.00' LT.
OUTVILLE-MORSE
FRONTAGE RD.

242-WL

241-WL

S 76°33'53" E
STA. 581+30.89
34.55' RT.

MATCHLINE
STA. 562+00
PROP. S.R. 37
SEE SHEET 62

341+00 342+00 343+00 344+00

S13°25'36"W 32.00'

N76°34'23"W
304.43' (241-WL)
262.17' (242-WL)

S 76°41'33" E
212.09'

582

MATCHLINE
STA. 570+00
OUTVILLE-MORSE
FRONTAGE RD.
SEE SHEET 58

STA. 571+60
77.62' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

STA. 572+40
80.28' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

EX. MONUMENT
STA. 574+55.25
33.04' RT.
OUTVILLE-MORSE
FRONTAGE RD.

STA. 574+87.02

60.52

S 78°42'51" E 270.76'
LA-R/W

STA. 577+91.10

S 76°33'53" E

R/W

LA

P.C. STA. 571+33.81

S79°38'43"E
78.67'

N 79°38'43" W 474.79'

46.69'

P.T. STA. 576+01.20

N 79°31'17" W 417.82'

STA. 581+30.89
66.55' RT.

N 77°17'58" W 390.03'

STA. 570+00
70.00' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

N79°38'40"W
79.79'
T ESMT

S23°54'43"W
77.22'
T ESMT

STA. 574+24.18
198.40' RT., S.R. 37

STA. 574+83.84
33.41' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

STA. 574+80.62
80.00' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

S 15°51'05" W

STA. 579+00
60.00' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

EX. CONCRETE MONUMENT
STA. 581+80.95
79.84' RT.
PROP. S.R. 37
STA. 581+70.57
37.16' LT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

EX. MONUMENT
STA. 581+71.19
23.20' RT.
OUTVILLE-MORSE
FRONTAGE RD.

240-TV3

240-WDV2

242-WDV

STA. 571+80
155.00' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

STA. 572+20
155.00' RT., PROP.
OUTVILLE-MORSE
FRONTAGE RD.

N 81°34'48" W
38.65'

240
EVA F. MONTGOMERY
19-042570-00.000
AGRICULTURAL
PARCEL 1

242
PAR GOLF GROUP, INC.
19-042900-00.000
COMMERCIAL

OUTVILLE-MORSE
FRONTAGE RD.
CURVE 2
P.I. STA. 573+67.71
D = 05°50'33" RT.
Dc = 01°15'00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'

S.R. 37
CURVE 2
P.I. STA. 573+72.12
D = 05°50'33" RT.
Dc = 01°15'00"
R = 4,583.66'
T = 233.90'
L = 467.39'
E = 5.96'

③ STA. 576+05.61 65.00' LT. PROP. S.R. 37 STA. 338+64.49 21.08' RT. C.R. 539A EXTENSION	④ STA. 581+00 65.00' LT. PROP. S.R. 37 STA. 343+58.88 21.08' RT. C.R. 539A EXTENSION
⑤ POB 241-WDV STA. 574+92.14 65.00' LT. PROP. S.R. 37 STA. 337+48.89 21.08' RT. C.R. 539A EXTENSION	

① POB 242-WDV STA. 574+91.89 90.00' RT. PROP. S.R. 37 STA. 574+84.43 27.11' LT., PROP. OUTVILLE-MORSE FRONTAGE RD.	② POB 241-WL & 242-WL STA. 574+92.11 65.51' RT. PROP. S.R. 37

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
3	9/01/06	ADDED 240-TV2 & 240-TV3
2	8/2/06	ADDED CATTLE CROSSING EASEMENT TO PARCEL 240
1	5/8/06	REVISED 240-WDV1
		COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 570+00 TO STA. 582+00 PROP. S.R. 37
STA. 332+50 TO STA. 344+50 EX. S.R. 161 & CR 539A EXTENSION
STA. 570+00 TO STA. 582+00 OUTVILLE-MORSE FRONTAGE RD.

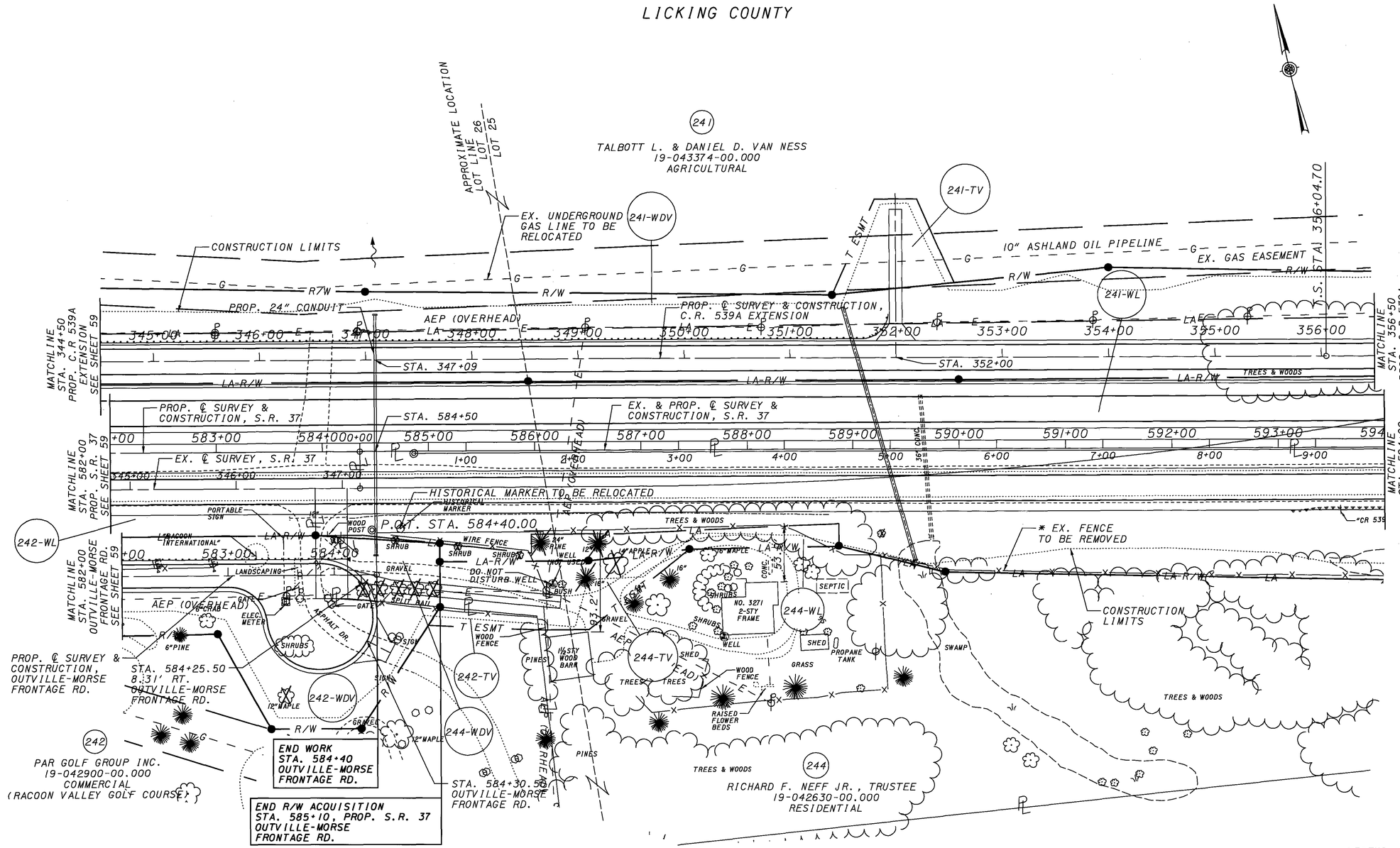
LIC-161-6.65
LIC-37-10.25

60 / 88

1321
1341

09/01/06
L161049D.RDS

LOTS 25 & 26, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 582+00 TO STA. 594+00 PROP. S.R. 37
STA. 344+50 TO STA. 356+50 PROP. CR 539A EXTENSION
STA. 582+00 TO STA. 584+00 OUTVILLE-MORSE FRONTAGE RD.

LIC-161-6.65
LIC-37-10.25

LEGEND

- ◎ - EXISTING R/W MONUMENT
- ∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

- ■ - COMMERCIAL BUILDING
- □ - RESIDENTIAL BUILDING

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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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REV	DATE	DESCRIPTION
2	5/01/06	REVISED 244-WL, 244-WDV & 244-TV
1	2/03/06	ADDED COMMENTS TO HISTORICAL MARKER & WELL ON PARCEL 244-WDV

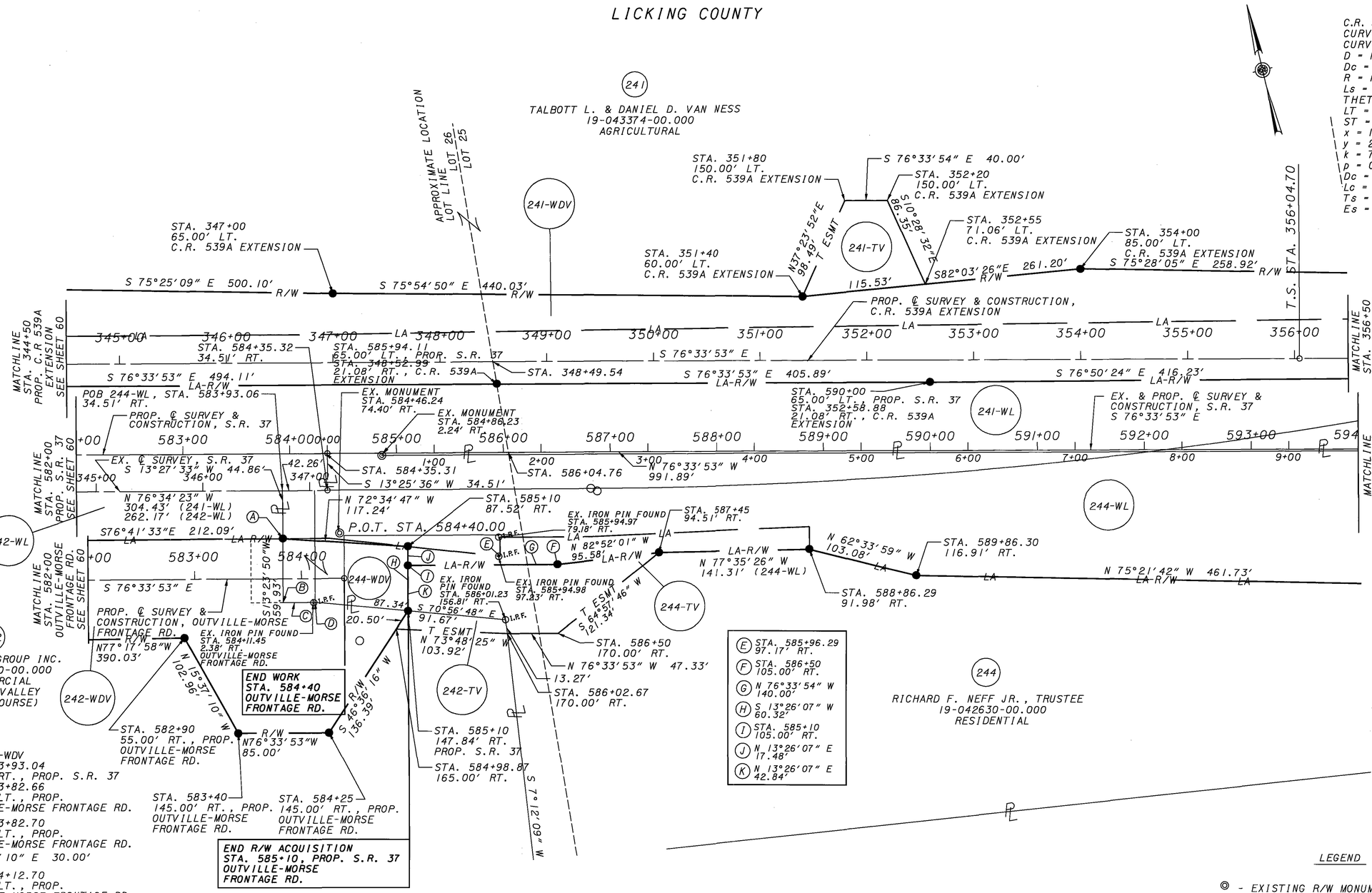
COMPLETION DATE: 4/29/05

61/88

1322
1349

LIG10050.RDS 05/09/06

LOTS 25 & 26, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
1	5/01/06	REVISED 244-WL, 244-WDV & 244-TV

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 582+00 TO STA. 594+00 PROP. S.R. 37
STA. 344+50 TO STA. 356+50 PROP. CR 539A EXTENSION
STA. 582+00 TO STA. 584+00 OUTVILLE-MORSE FRONTAGE RD.

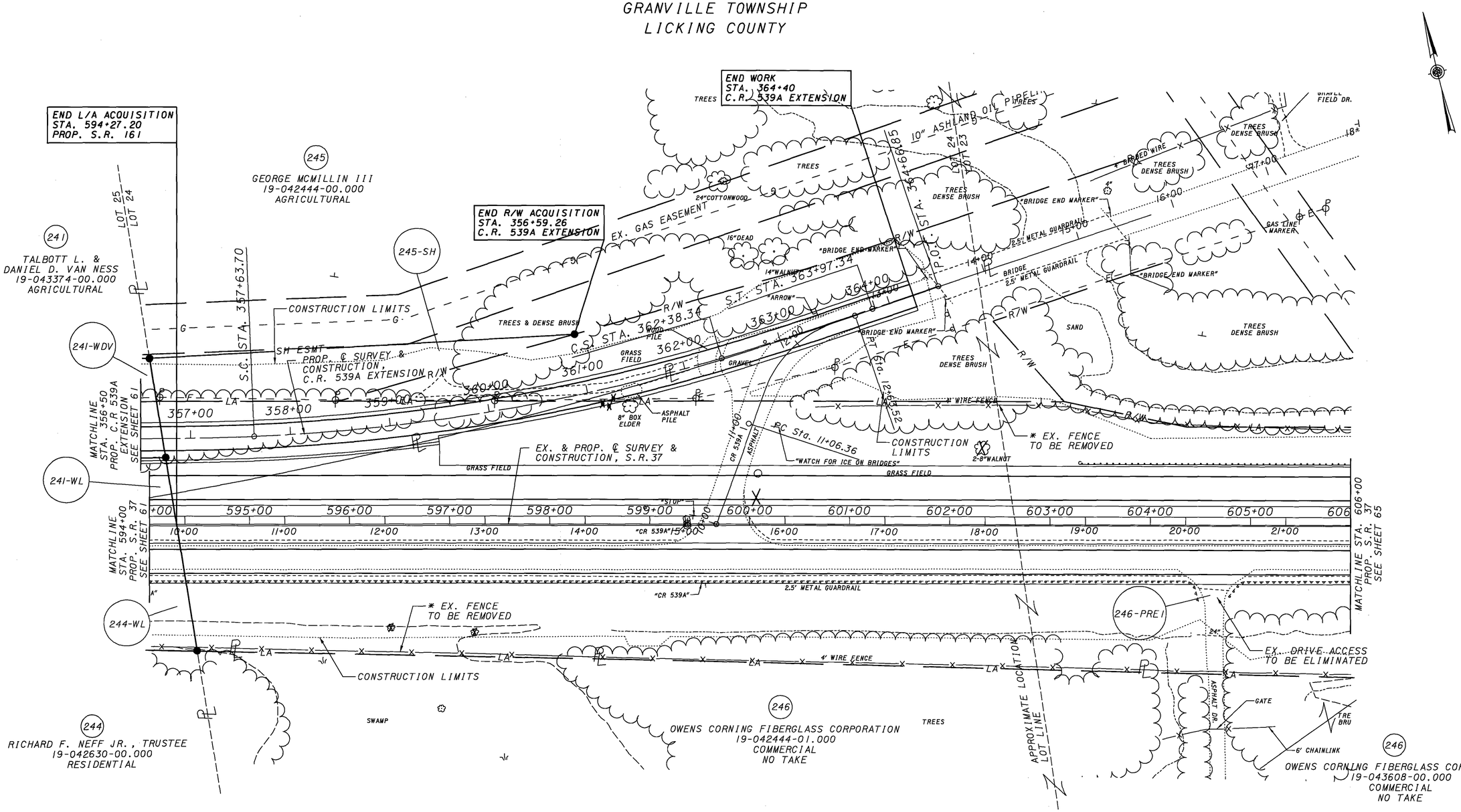
LIC-161-6.65
LIC-37-10.25

62/88

1323
1349

L161050D.RDS 05/01/06

LOTS 23, 24 & 25, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
1	5/17/05	ELIMINATE DRIVE ACCESS TO PARCEL 246

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 594+00 TO STA. 606+00 PROP. S.R. 37
STA. 356+50 TO STA. 364+00 CR 539A EXTENSION

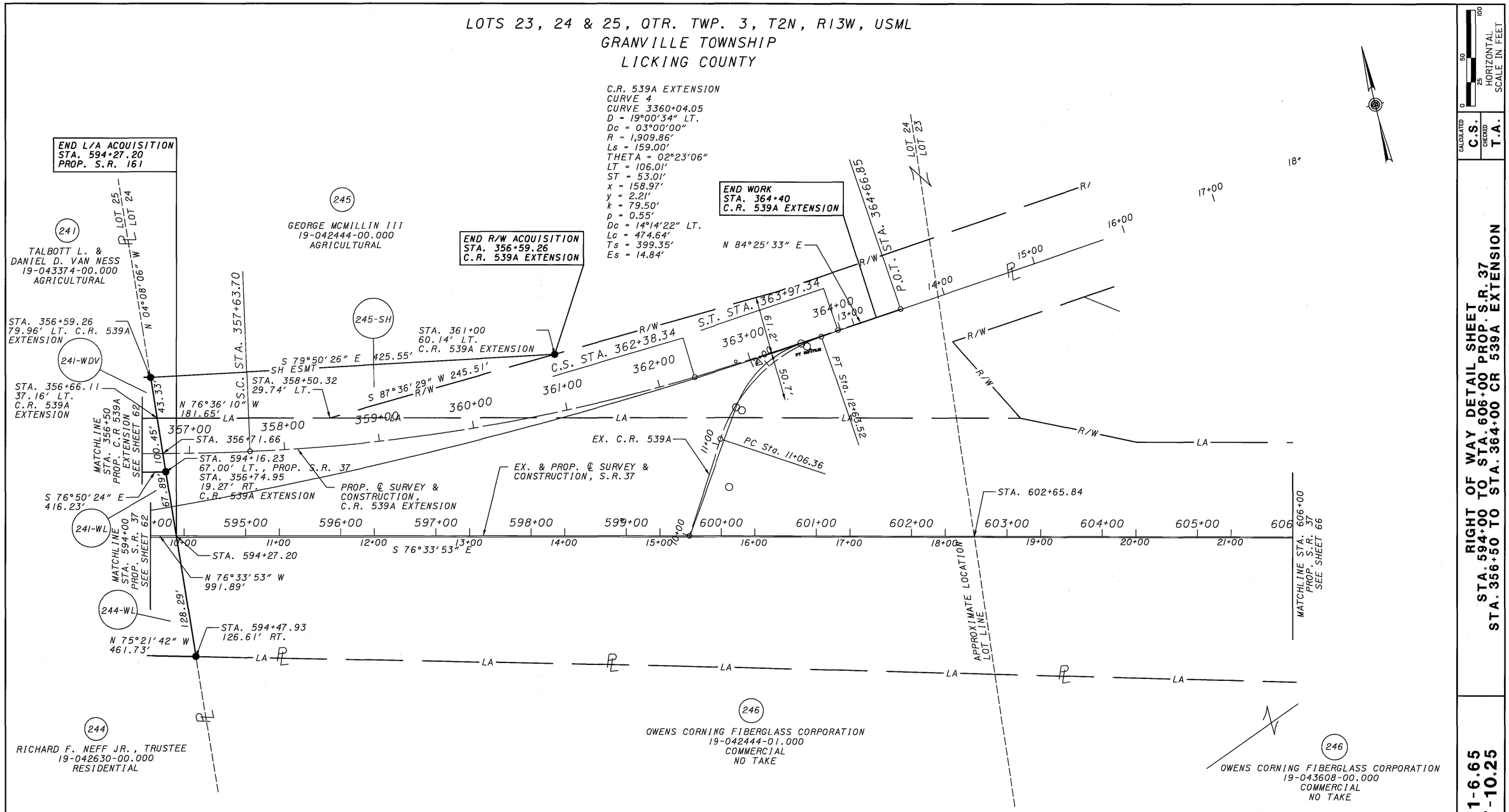
LIC-161-6.65
LIC-37-10.25

63/88

1324
1349
1347

L:\61005\LRDS 05/09/06

LOTS 23, 24 & 25, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 594+00 TO STA. 606+00 PROP. S.R. 37
STA. 356+50 TO STA. 364+00 CR 539A EXTENSION

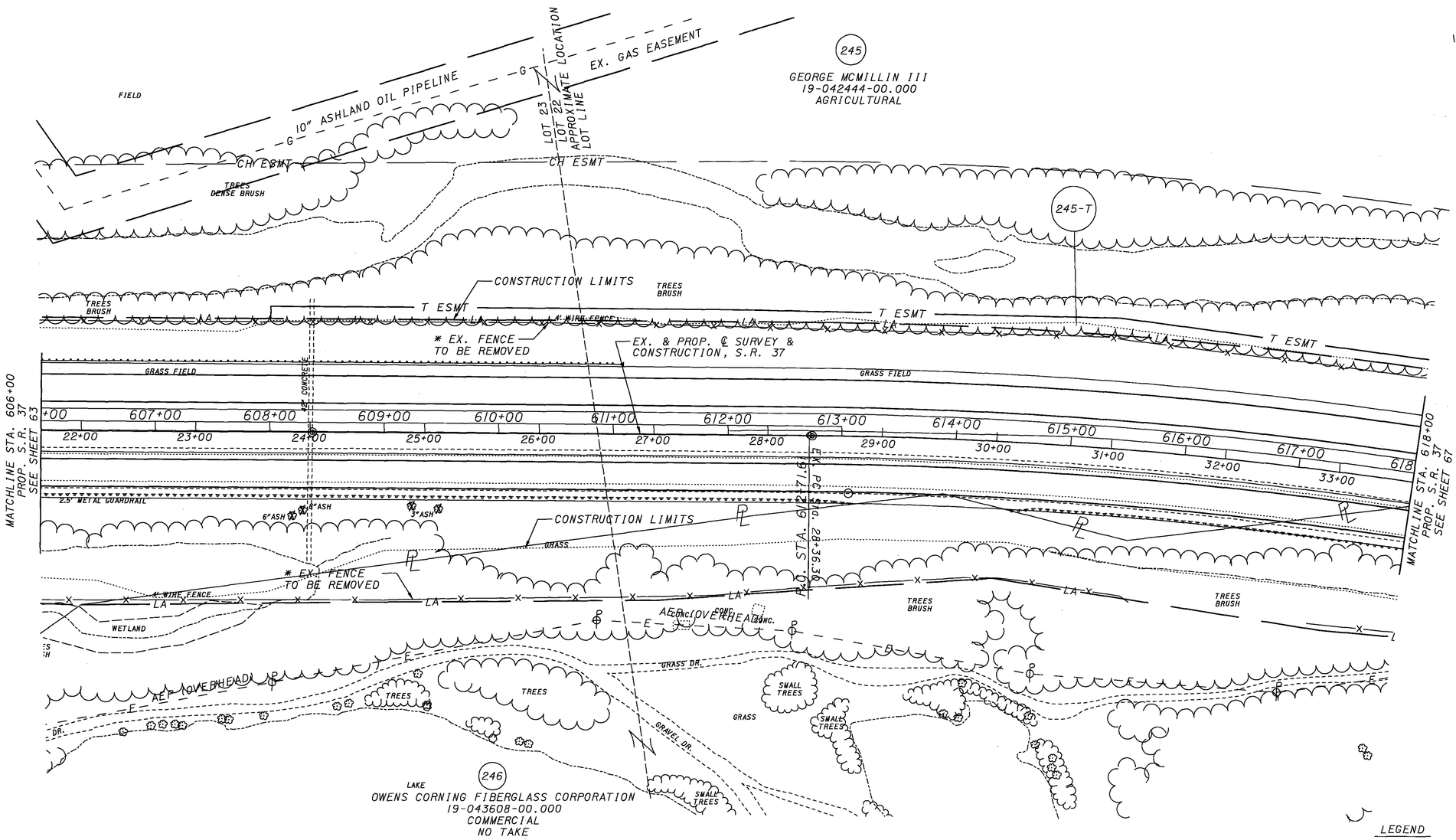
LIC-161-6.65
LIC-37-10.25

64/88

1335
1349

LIC105D.RDS 09/26/05

LOTS 22 & 23, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 606+00 TO STA. 618+00 PROP. S.R. 37

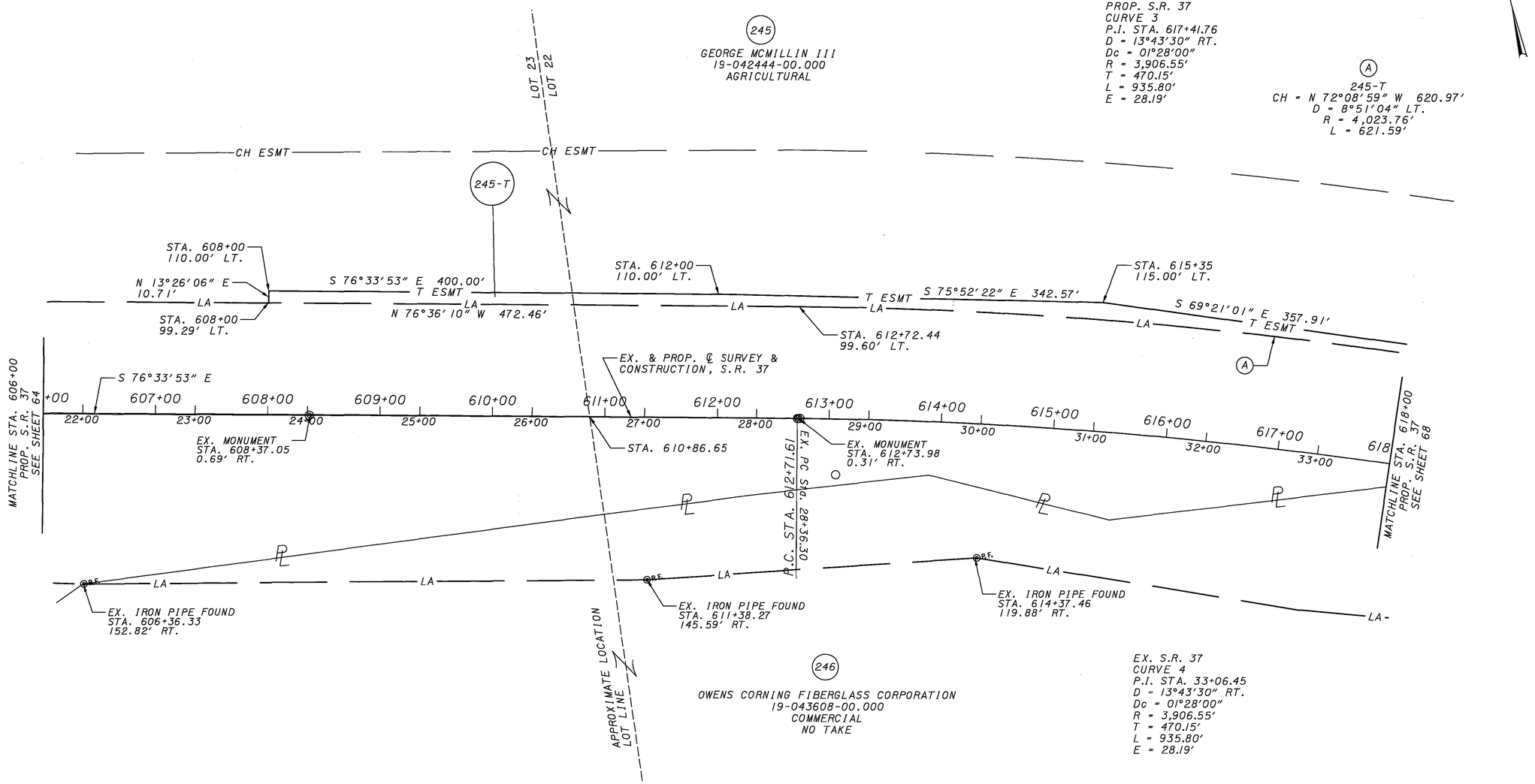
LIC-161-6.65
LIC-37-10.25

65/88

1332
1349

LI6I0052.RDS 05/09/06

LOTS 22 & 23, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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LEGEND

◎ - EXISTING R/W MONUMENT
∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 606+00 TO STA. 618+00 PROP. S.R. 37

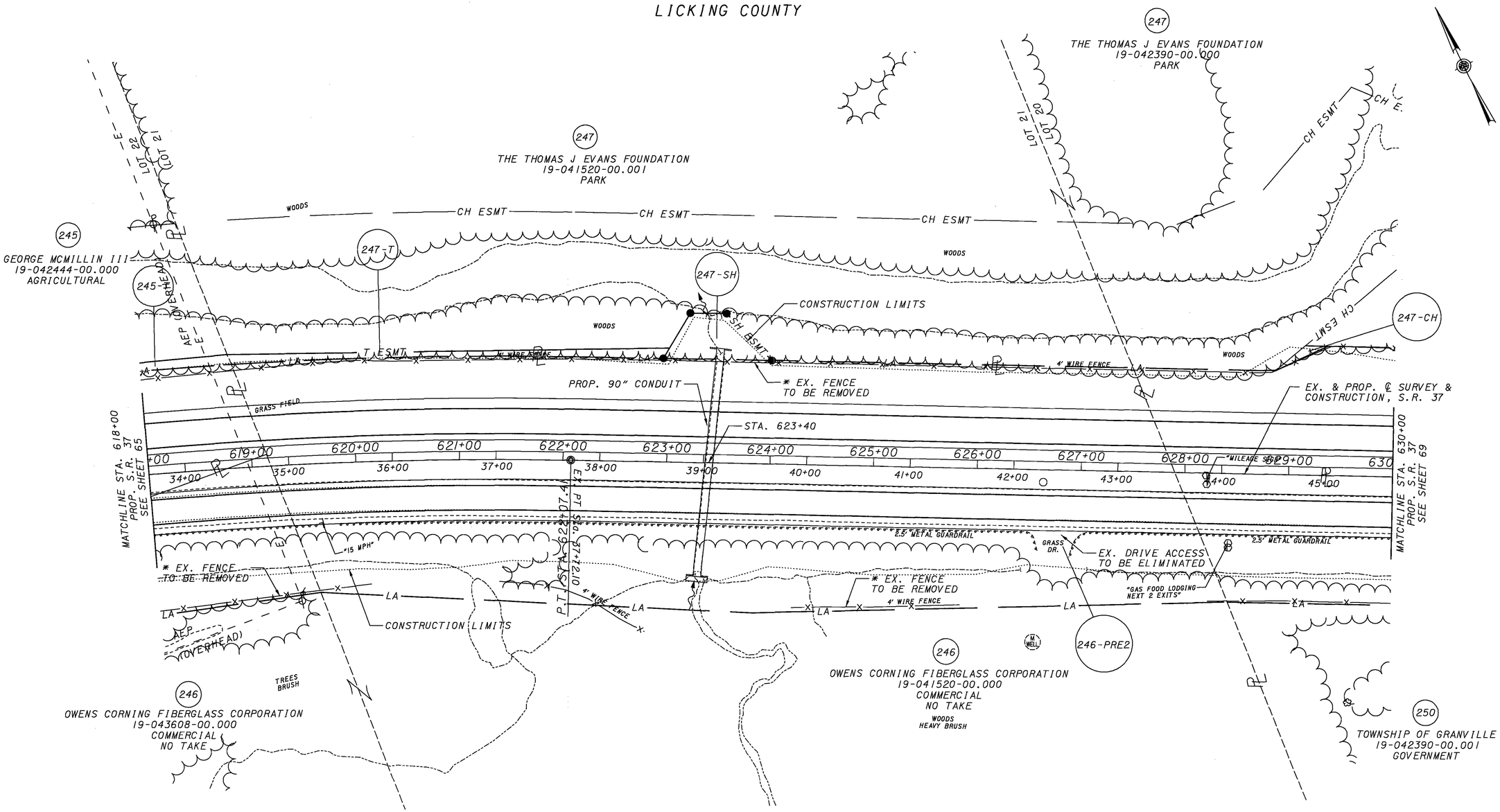
LIC-161-6.65
LIC-37-10.25

66/88

132.7
134.0

09/26/05
L161052D.RDS

LOTS 20, 21 & 22, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:
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- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
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REV	DATE	DESCRIPTION
1	5/17/05	ELIMINATE DRIVE ACCESS TO PARCEL 246

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 618+00 TO STA. 630+00 PROP. S.R. 37

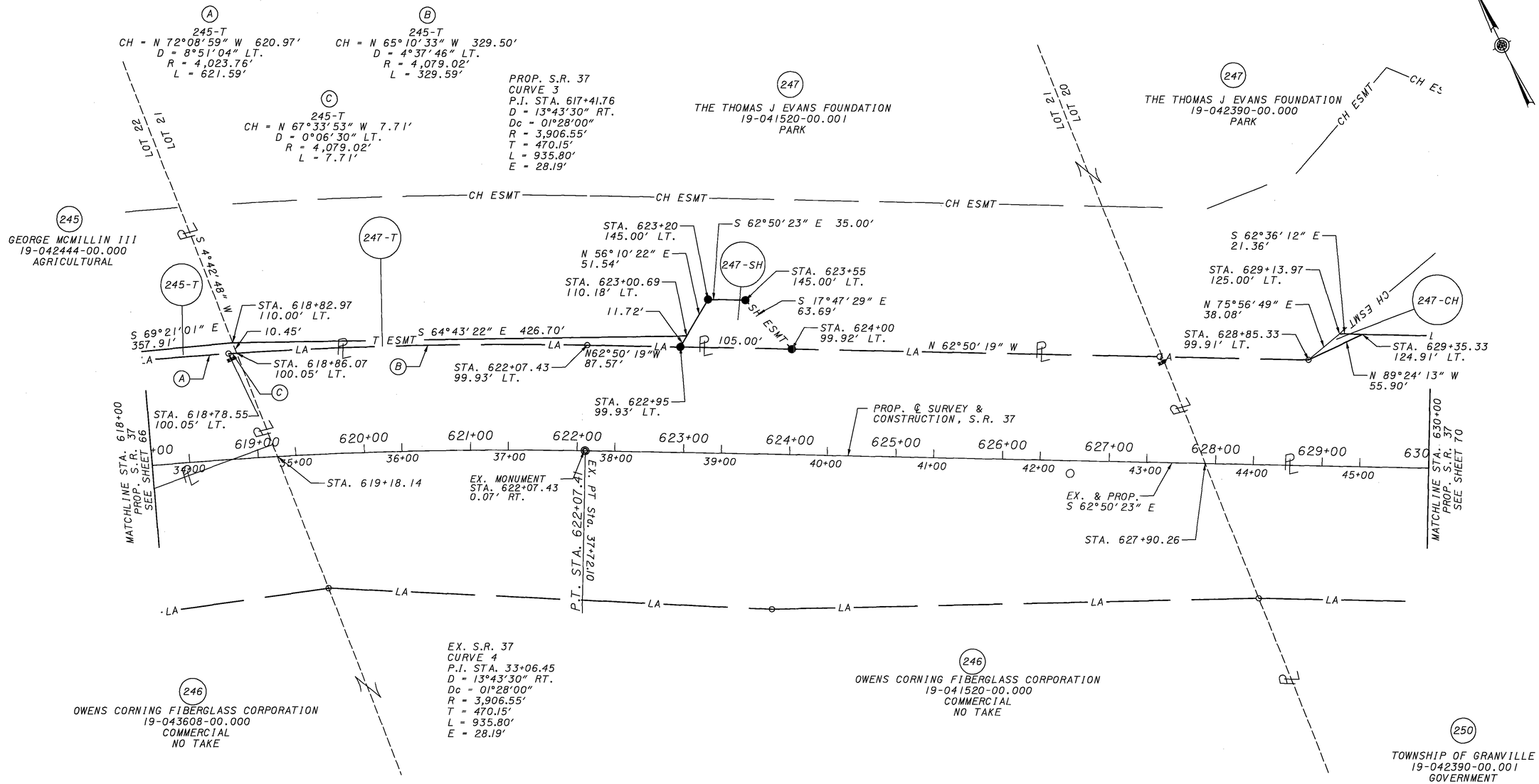
LIC-161-6.65
LIC-37-10.25

67/88

1328
1349

L1610053.RDS 05/09/06

LOTS 20, 21 & 22, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 618+00 TO STA. 630+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

68/88

1329
1340

LEGEND

- ◎ - EXISTING R/W MONUMENT
- ∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

- ■ - COMMERCIAL BUILDING
- □ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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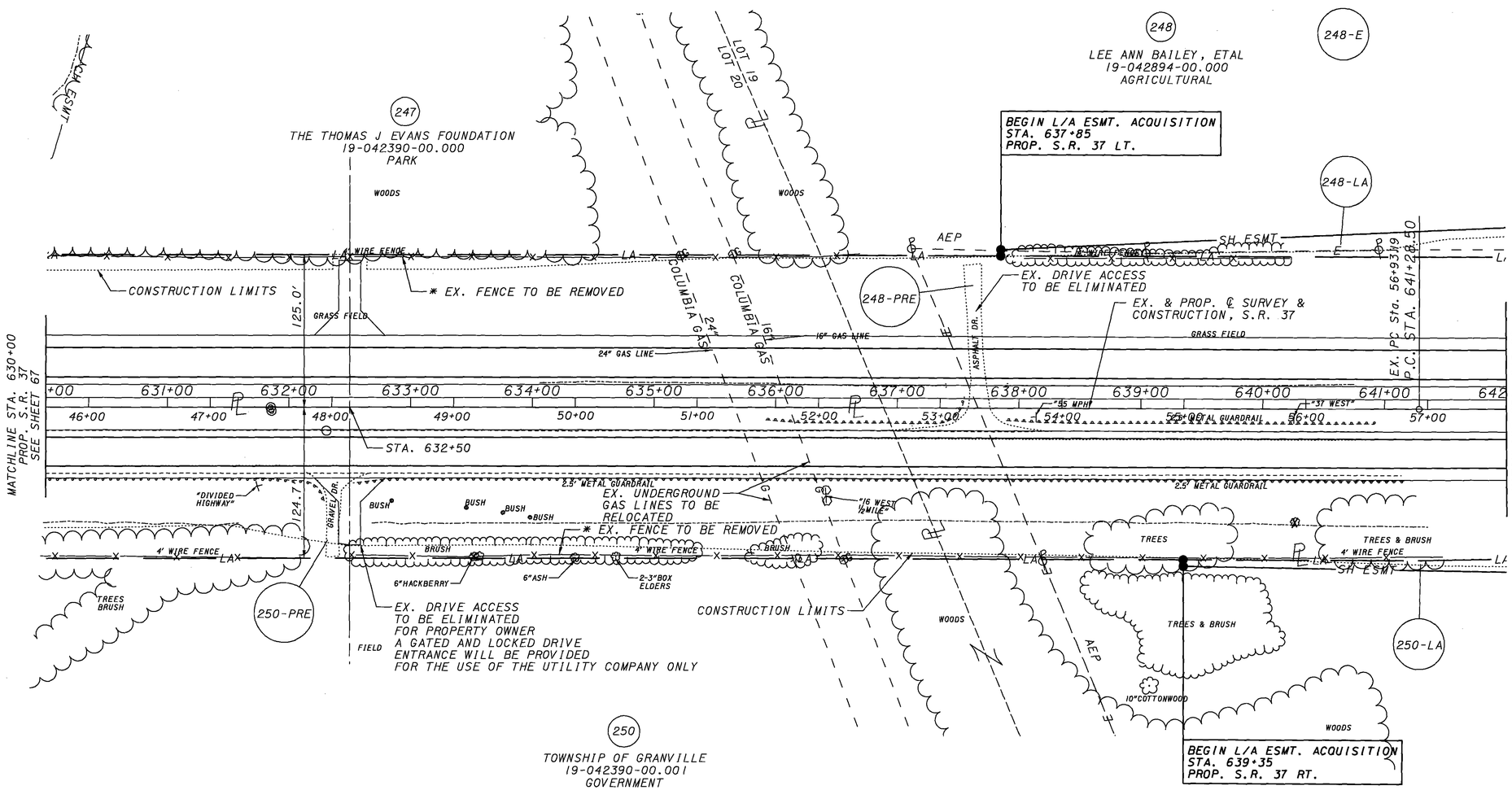
NOTES:
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NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

09/26/05
L161053D.RDS

LOTS 19 & 20, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
2	8/17/06	ADDED 248-E
1	5/17/05	ELIMINATE DRIVE ACCESS TO PARCELS 248 & 250 CHANGED 248-SH & 250-SH TO 248-LA & 250-LA

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 630+00 TO STA. 642+00 PROP. S.R. 37

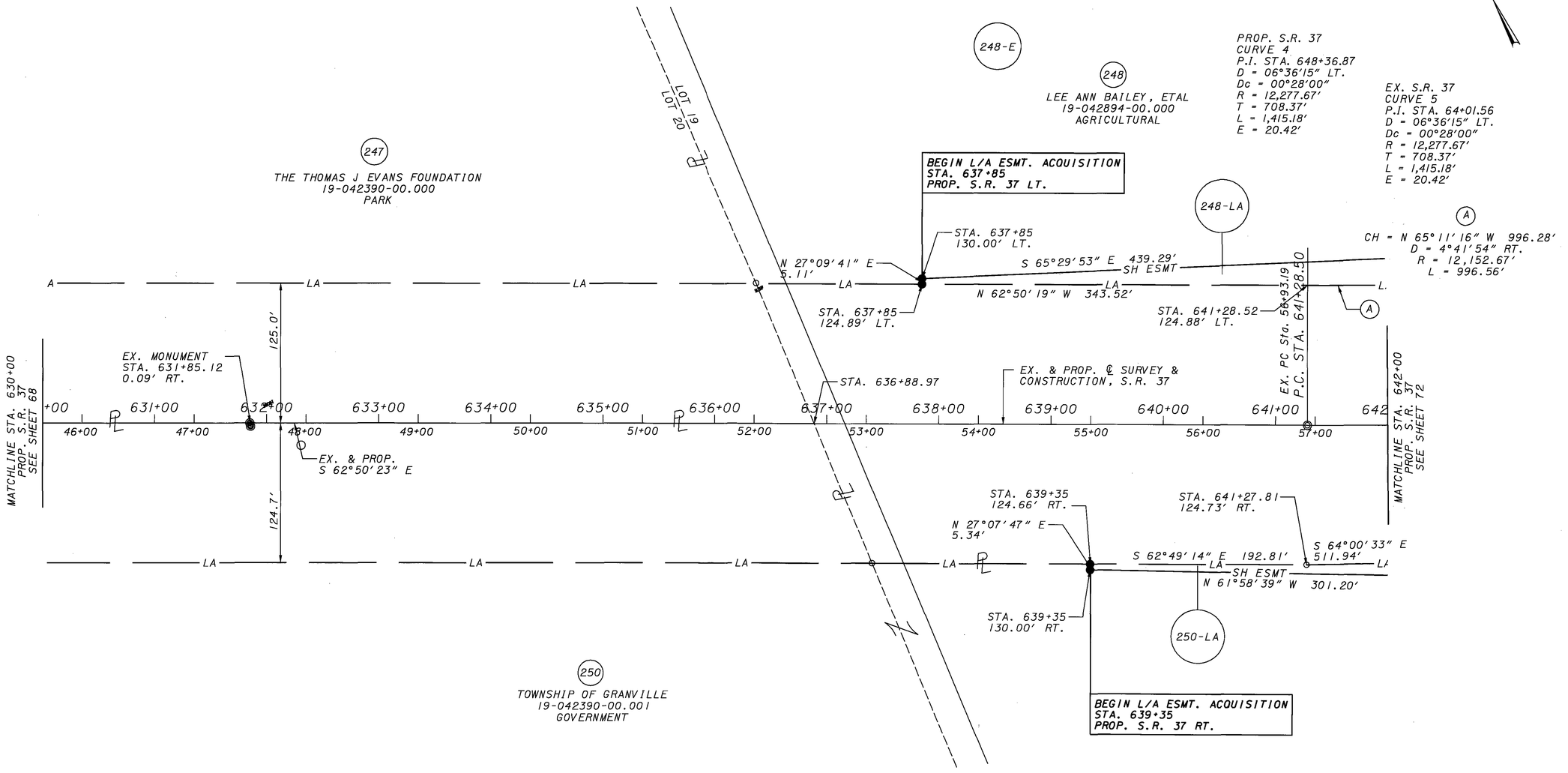
LIC-161-6.65
LIC-37-10.25

69/88

1330
1349

L16I0054.RDS 08/18/06

LOTS 19 & 20, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
2	8/17/06	ADDED 248-E
1	5/17/05	CHANGED 248-SH & 250-SH TO 248-LA & 250-LA

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 630+00 TO STA. 642+00 PROP. S.R. 37

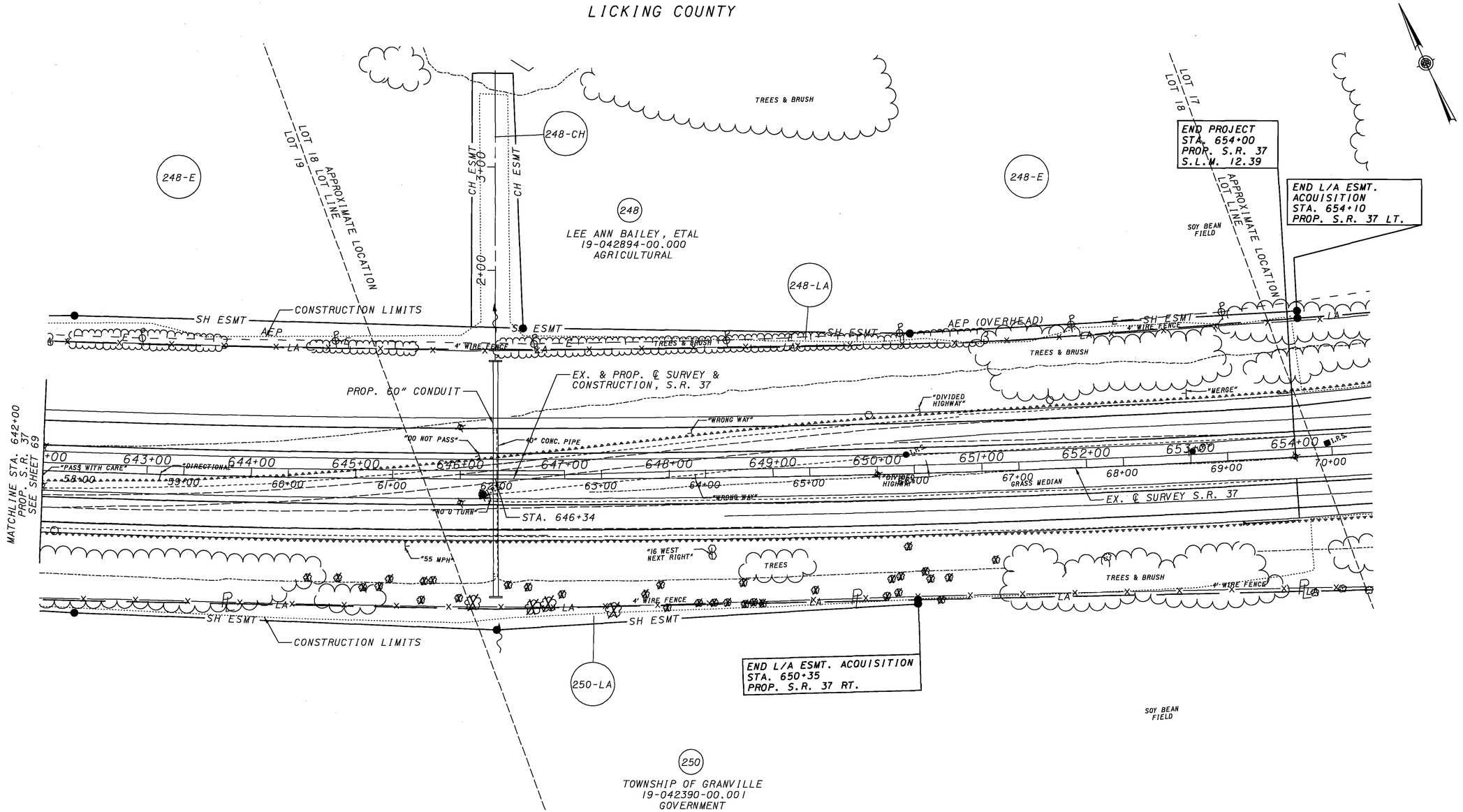
LIC-161-6.65
LIC-37-10.25

70/88

1331
1340

L161054D.RDS 08/17/06

LOTS 17, 18 & 19, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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REV	DATE	DESCRIPTION
2	8/17/06	ADDED 248-E
1	5/17/05	CHANGED 248-SH & 250-SH TO 248-LA & 250-LA

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 642+00 TO STA. 654+00 PROP. S.R. 37

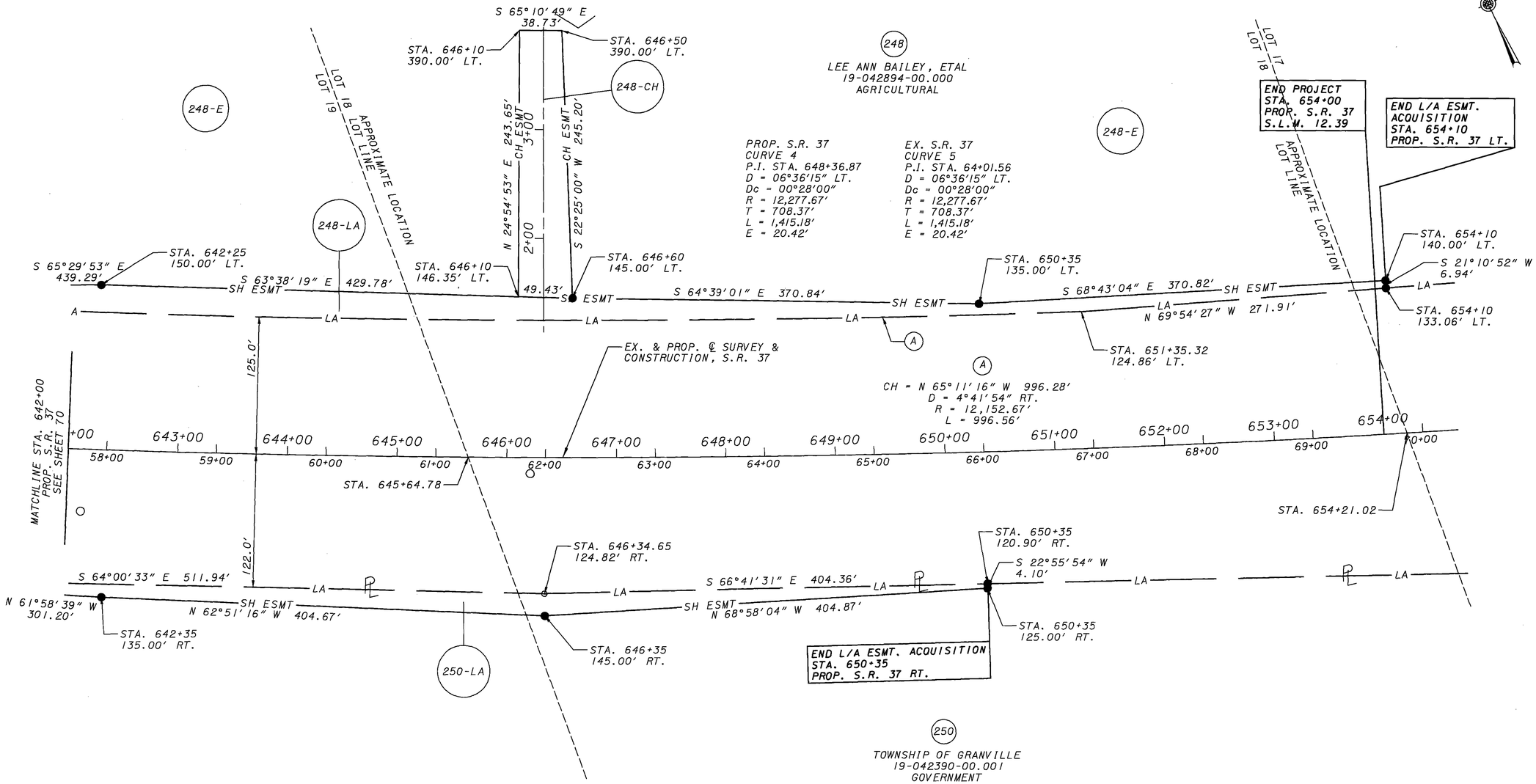
LIC-161-6.65
LIC-37-10.25

71/88

1332
1349

L1610055.RDS 08/17/06

LOTS 17, 18 & 19, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 642+00 TO STA. 654+00 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

72/88

1333
1349

NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:

- *COMMERCIAL BUILDING*
- *RESIDENTIAL BUILDING*

LEGEND

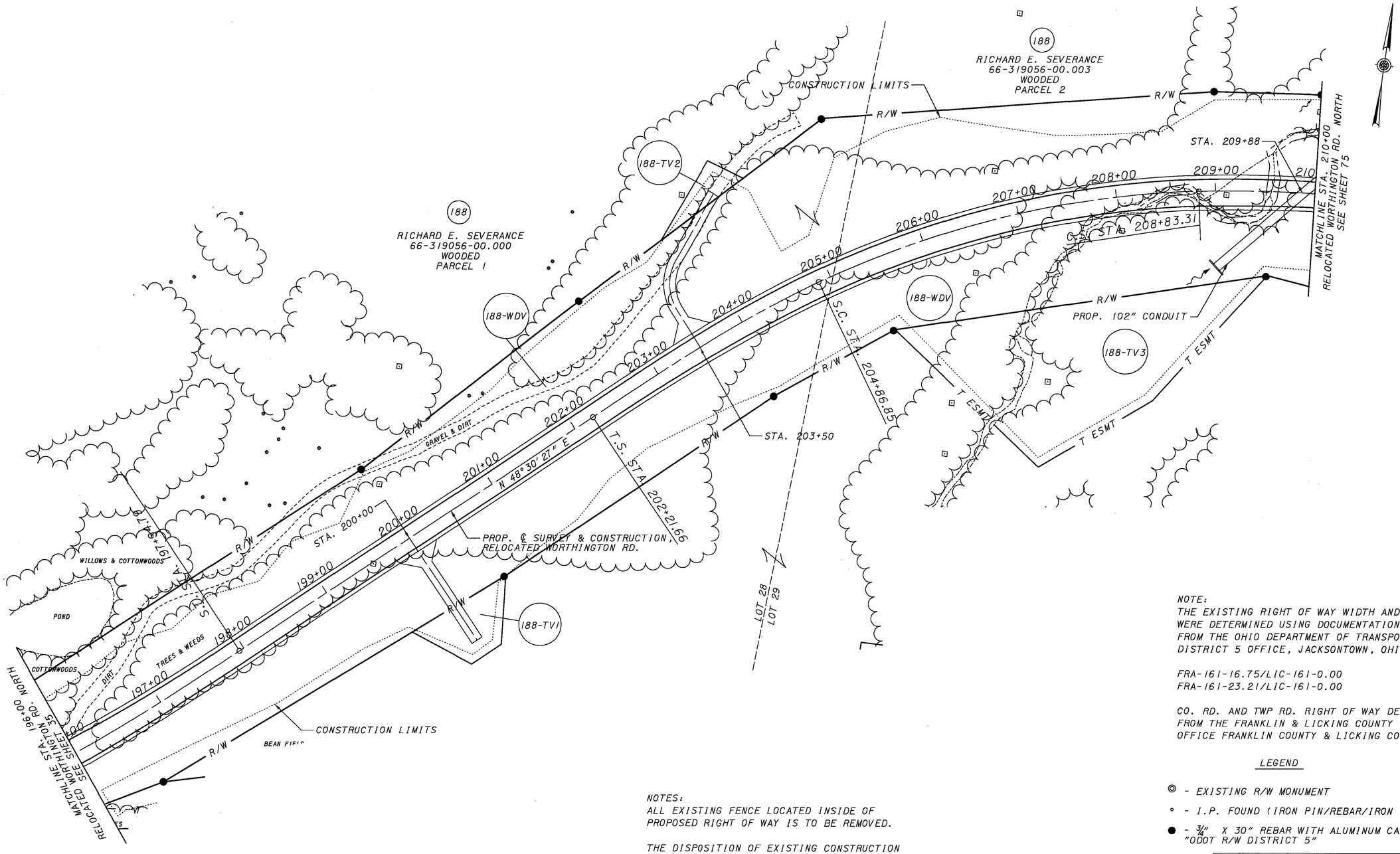
- ◎ - *EXISTING R/W MONUMENT*
- ° - *I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)*
- ● - *¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"*

REV	DATE	DESCRIPTION
2	8/17/06	ADDED 248-E
1	5/17/05	CHANGED 248-SH & 250-SH TO 248-LA & 250-LA

COMPLETION DATE: 4/29/05

LI6I055D.RDS 08/17/06

LOTS 28 & 29, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTES:
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THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
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STRUCTURES KEY:

- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 196+00 TO STA. 210+00 RELOCATED WORTHINGTON RD. NORTH

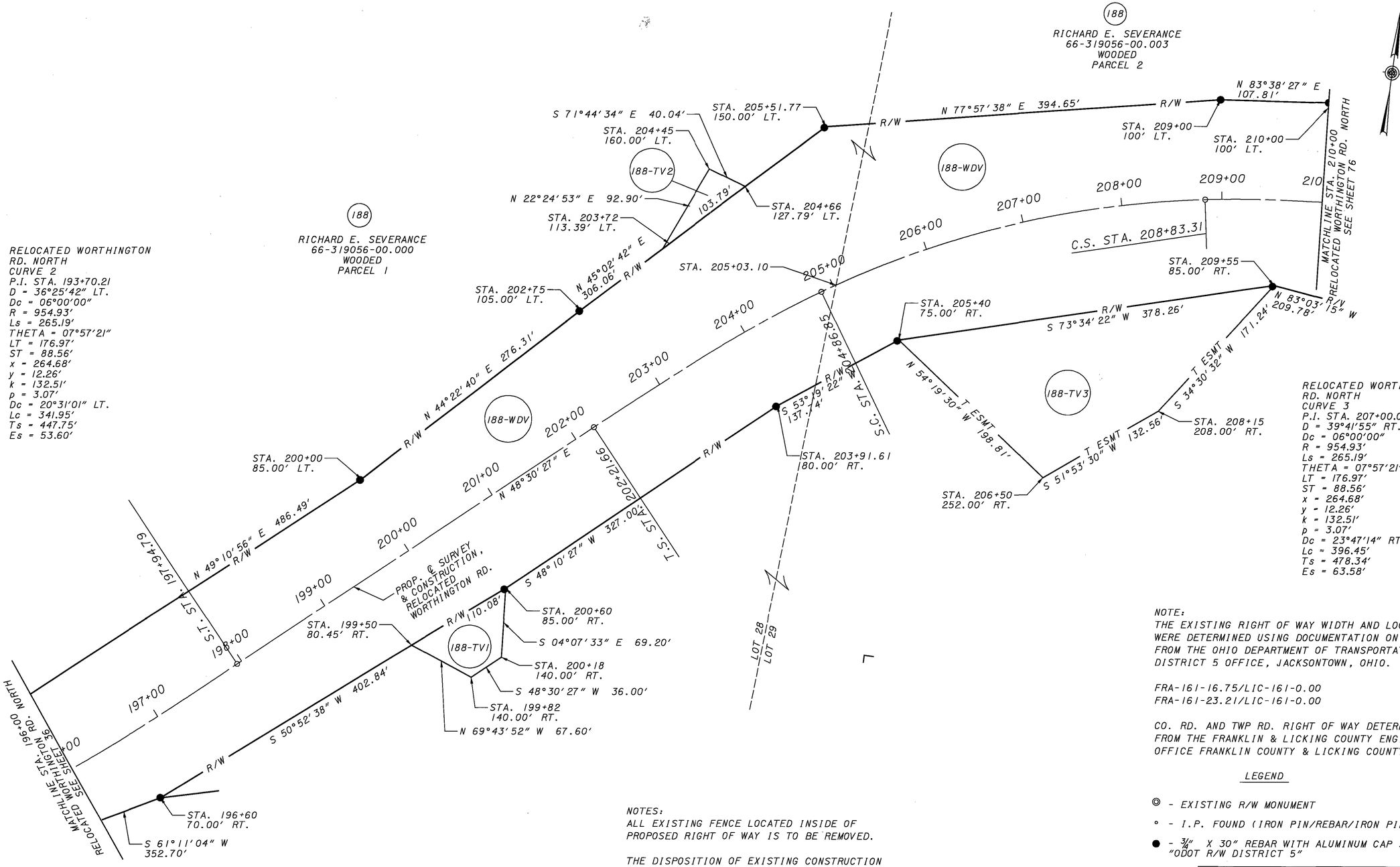
LIC-161-6.65
LIC-37-10.25

73/88

1334
1379

L16I0060.RDS 09/26/05

LOTS 28 & 29, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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FRA-161-23.21/LIC-161-0.00

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LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S. CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 196+00 TO STA. 210+00 RELOCATED WORTHINGTON RD. NORTH

LIC-161-6.65
LIC-37-10.25

74/88

1335
1349

L161060D.RDS 09/26/05

LOTS 29, 30 & 31, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

BEGIN WORK
STA. 394+00
PROP. S.R. 37

BEGIN L/A ACQUISITION
STA. 394+60
PROP. S.R. 37

188
RICHARD E. SEVERANCE
66-319056-00.003
WOODED
PARCEL 2

188-TV4
188-WDV
188-WL
188-WA
188-T

211
KENNETH E. CONNER
66-319842-00.000
RESIDENTIAL

211-WL
211-WDV

201
ROBERT E. BAKER
19-317328-00.000
AGRICULTURAL

201-WDV1
201-WLI
201-TV1

210
MARTHA ACKERMAN
66-317310-00.000
RESIDENTIAL

210-WA
210-WL
210-T

P.T. STA. 394+53.96
STA. 395+70.02 S.R. 37
STA. 212+83.63
RELOCATED WORTHINGTON RD. NORTH

MATCHLINE STA. 210+00
RELOCATED WORTHINGTON RD. NORTH
SEE SHEET 73

CONSTRUCTION LIMITS

S.T. STA. 211+48.50

P.T. STA. 397+09.40

Ex. BC Std. 397+74.36

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

EX. ℄ SURVEY, S.R. 37

WORK AGREEMENT

SHED TO BE REMOVED

MATCHLINE STA. 401+50
PROP. S.R. 37
SEE SHEET 39

S.C. STA. 216+80.73

66-319836
-00.000

P.T. STA. 214+15.54

PROP. ℄ SURVEY & CONSTRUCTION, RELOCATED WORTHINGTON RD. NORTH

Lot 30
Lot 31
APPROXIMATE LOT LINE

C.S. STA. 219+06.64

STA. 220+00
RELOCATED WORTHINGTON RD. NORTH

S.T. STA. 221+71.83

STA. 223+00

PROP. 27" CONDUIT

MATCHLINE STA. 223+00
RELOCATED WORTHINGTON RD. NORTH
SEE SHEET 77

LEGEND

◎ - EXISTING R/W MONUMENT
∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
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- RESIDENTIAL BUILDING

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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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REV	DATE	DESCRIPTION
3	8/18/06	ADDED WORK AGREEMENT TO PARCEL 210
2	7/26/06	REVISED NAME ON PARCEL 211
1	6/02/05	DELETED DRIVE FROM PARCEL 211

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 210+00 TO STA. 223+00 RELOCATED WORTHINGTON RD. NORTH
STA 394+00 TO 401+50 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

75/88

1336
1349

L161006I.RDS 08/18/06

LOTS 29, 30 & 31, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

(188) RICHARD E. SEVERANCE 66-319056-00.003 WOODED PARCEL 2

(211) KENNETH E. CONNER 66-319842-00.000 RESIDENTIAL

(201) ROBERT E. BAKER 19-317328-00.000 LAND USE AGRICULTURAL

(210) MARTHA ACKERMAN 66-317310-00.000 RESIDENTIAL

(188) RICHARD E. SEVERANCE 66-319056-00.001 WOODED PARCEL 3

66-319836-00.000 RESIDENTIAL

BEGIN WORK STA. 394+00 S.R. 37

BEGIN L/A ACQUISITION STA. 394+60 PROP. S.R. 37

S 80°07'49" E 28.44'

STA. 210+68 115.00' LT., RELOCATED WORTHINGTON RD. NORTH

N 38°07'21" E 28.55'

STA. 210+50 93.40' LT., RELOCATED WORTHINGTON RD. NORTH

(A) STA. 210+95 109.00' LT. RELOCATED WORTHINGTON RD. NORTH

(B) S 20°37'44" E 22.43'

(C) STA. 211+02 87.74' LT. RELOCATED WORTHINGTON RD. NORTH

MATCHLINE STA. 210+00 RELOCATED WORTHINGTON RD. NORTH SEE SHEET 74

53.65'

S 86°21'31" E 212.00'

STA. 212+06.73 77.67' LT., RELOCATED WORTHINGTON RD. NORTH STA. 395+00 83.72' RT., PROP. S.R. 37

STA. 394+59.78 80.00' RT. PROP. S.R. 37

S 85°59'05" E 101.48'

STA. 394+60.05 21.48' LT., PROP. S.R. 37

S 85°59'05" E 53.52'

STA. 394+60.20 75.00' LT., PROP. S.R. 37

P.C. STA. 394+53.96

STA. 213+61.89 55.00' LT., RELOCATED WORTHINGTON RD. NORTH

EX. IRON PIN FOUND STA. 395+40.68 25.11' RT. S.R. 37

STA. 213+05.66

N 88°12'22" E 396.00'

N 88°36'27" E 178.02'

POB 201-WDV1 & 211-WDV STA. 215+38.28 55.00' LT., RELOCATED WORTHINGTON RD. NORTH

N 88°07'30" E 170.45'

STA. 217+00 70.00' LT., RELOCATED WORTHINGTON RD. NORTH

S 85°10'53" E 163.62'

STA. 218+50 90.00' LT., RELOCATED WORTHINGTON RD. NORTH

S 65°10'10" E 268.06'

STA. 215+34.58

S 3°45'45" W (211-WDV) 164.37' (201-WDV1) 130.31'

PROP. ℄ SURVEY & CONSTRUCTION, RELOCATED WORTHINGTON RD. NORTH

STA. 222+02.10 80.00' LT., RELOCATED WORTHINGTON RD. NORTH

LOT 30 LOT 31 APPROXIMATE LOT LINE

S.T. STA. 221+71.83

S 64°56'46" E 223.90'

P.T. STA. 396+57.09 65.00' LT. PROP. S.R. 37

S.T. STA. 214+15.54

S.C. STA. 216+80.73

S.T. STA. 219+06.64

C.S. STA. 219+06.64

STA. 211+48.50

202.67' (188-WDV) 293.77'

N 9°00'41" E

POB 211-WL STA. 396+56.41 21.56' LT. S.R. 37

149.45'

183.86'

S 86°14'14" E

N 89°18'29" W 189.40'

STA. 215+29.21 75.00' RT. RELOCATED WORTHINGTON RD. NORTH

STA. 217+30 65.00' RT. RELOCATED WORTHINGTON RD. NORTH

N 63°34'25" W 428.81'

STA. 219+55 103.63' RT., RELOCATED WORTHINGTON RD. NORTH

STA. 221+37.40

STA. 220+42 106.65' RT. RELOCATED WORTHINGTON RD. NORTH

80.80'

N 3°37'01" W 46.35'

STA. 219+78 145.00' RT., RELOCATED WORTHINGTON RD. NORTH

S51°20'07"W 42.63'

STA. 220+22 145.00' RT. RELOCATED WORTHINGTON RD. NORTH

N 65°40'56" W 40.00'

STA. 221+84.86 105.00' RT., RELOCATED WORTHINGTON RD. NORTH

N 69°43'57" W 445.44'

MATCHLINE STA. 223+00 RELOCATED WORTHINGTON RD. NORTH SEE SHEET 78

STA. 211+68.73 121.41' RT., RELOCATED WORTHINGTON RD. NORTH STA. 397+00 104.39' RT., PROP. S.R. 37

N 83°03'15" W 209.78'

STA. 397+50 110.00' RT. PROP. S.R. 37

EX. IRON PIN FOUND STA. 397+37.81 64.61' RT., S.R. 37

EX. IRON PIN FOUND STA. 397+72.39 65.51' RT., S.R. 37

RELOCATED WORTHINGTON RD. NORTH CURVE 3 P.I. STA. 207+00.00 D = 39°41'55" RT. Dc = 06°00'00" R = 954.93' Ls = 265.19' THETA = 07°57'21" LT = 176.97' ST = 88.56' x = 264.68' y = 12.26' k = 132.51' p = 3.07' Dc = 23°47'14" RT. Lc = 396.45' Ts = 478.34' Es = 63.58'

N 0°27'56" E 400.28'

EX. IRON PIPE FOUND STA. 399+62.88 68.63' RT., S.R. 37

EX. ℄ SURVEY, S.R. 37

S 0°27'56" W 399.72'

S 0°00'57" W 397.00'

EX. PC Sta. 397+74.36

N 3°20'50" E 160.01'

S 2°39'20" W 159.71'

POB 201-WL1 STA. 398+16.51 19.63' LT., S.R. 37

STA. 398+17.09 65.00' LT., S.R. 37

45.38'

66.1'

57.9'

S 86°39'09" E

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

EX. S.R. 37 CURVE 1 P.I. STA. 399+78.61 D = 04°05'00" LT. Dc = 01°00'00" R = 5,729.49' T = 204.25' L = 408.33' E = 3.64'

S 0°02'00" W 333.24'

N 3°20'51" E 500.00' (210-WL)

S 3°20'51" W 856.47'

STA. 401+08 78.11' LT., PROP. S.R. 37

S 87°12'36" E 90.35'

T ESMT

42.04'

STA. 451+85 120.00' LT., RAMP J

S 0°50'49" E 48.15'

STA. 451+90 72.11' LT., RAMP J

N 83°24'53" W 91.59'

STA. 401+50 80.00' LT., S.R. 37

STA. 450+95.94 75.11' LT., RAMP I STA. 401+50 95.00' RT., PROP. S.R. 37

MATCHLINE STA. 401+50 PROP. S.R. 37 SEE SHEET 40

EX. IRON PIN FOUND STA. 215+26.66 108.97' RT., RELOCATED WORTHINGTON RD. NORTH

EX. IRON PIN FOUND STA. 215+16.26 107.92' RT. RELOCATED WORTHINGTON RD. NORTH

EX. PC Sta. 397+74.36

201-WL1

211-WL

188-WL

210-WL

210-T

188-TV4

201-TV1

188-WDV

211-WDV

201-WDV1

RELOCATED WORTHINGTON RD. NORTH CURVE 4 P.I. STA. 217+99.96 D = 29°27'57" RT. Dc = 06°00'00" R = 954.93' Ls = 265.19' THETA = 07°57'21" LT = 176.97' ST = 88.56' x = 264.68' y = 12.26' k = 132.51' p = 3.07' Dc = 13°33'16" RT. Lc = 225.91' Ts = 384.42' Es = 35.63'

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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 210+00 TO STA. 223+00 RELOCATED WORTHINGTON RD. NORTH
STA 394+00 TO STA 401+50 PROP. S.R. 37

LIC-161-6.65
LIC-37-10.25

REV	DATE	DESCRIPTION
1	7/26/06	REVISED NAME ON PARCEL 211

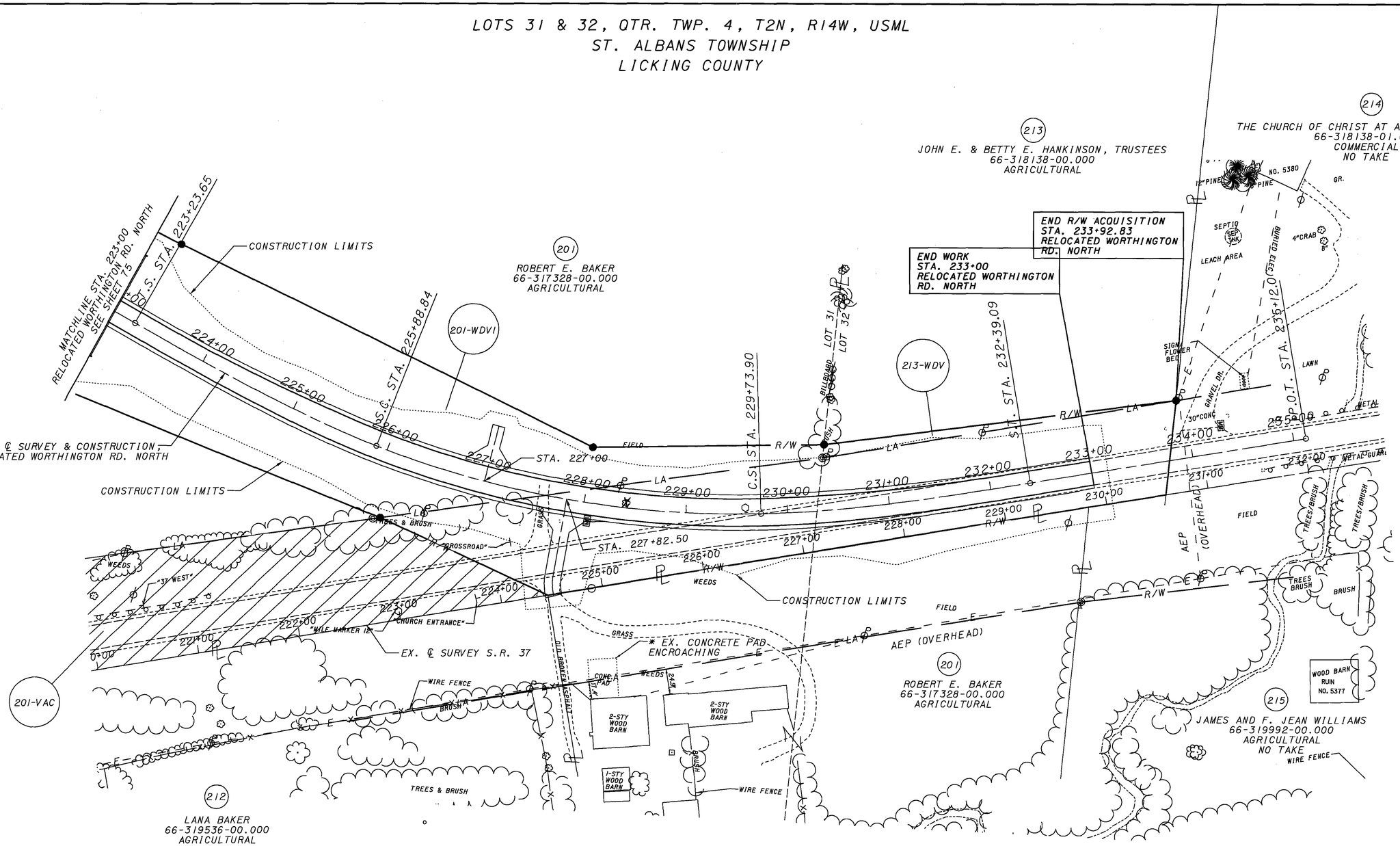
COMPLETION DATE: 4/29/05

76/88

1338
1349

L161O6ID.RDS 07/26/06

LOTS 31 & 32, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



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LEGEND
- ◎ - EXISTING R/W MONUMENT
- ∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
1	1/04/06	ADDED 201-VAC

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET STA. 223+00 TO STA. 235+00 RELOCATED WORTHINGTON RD. NORTH

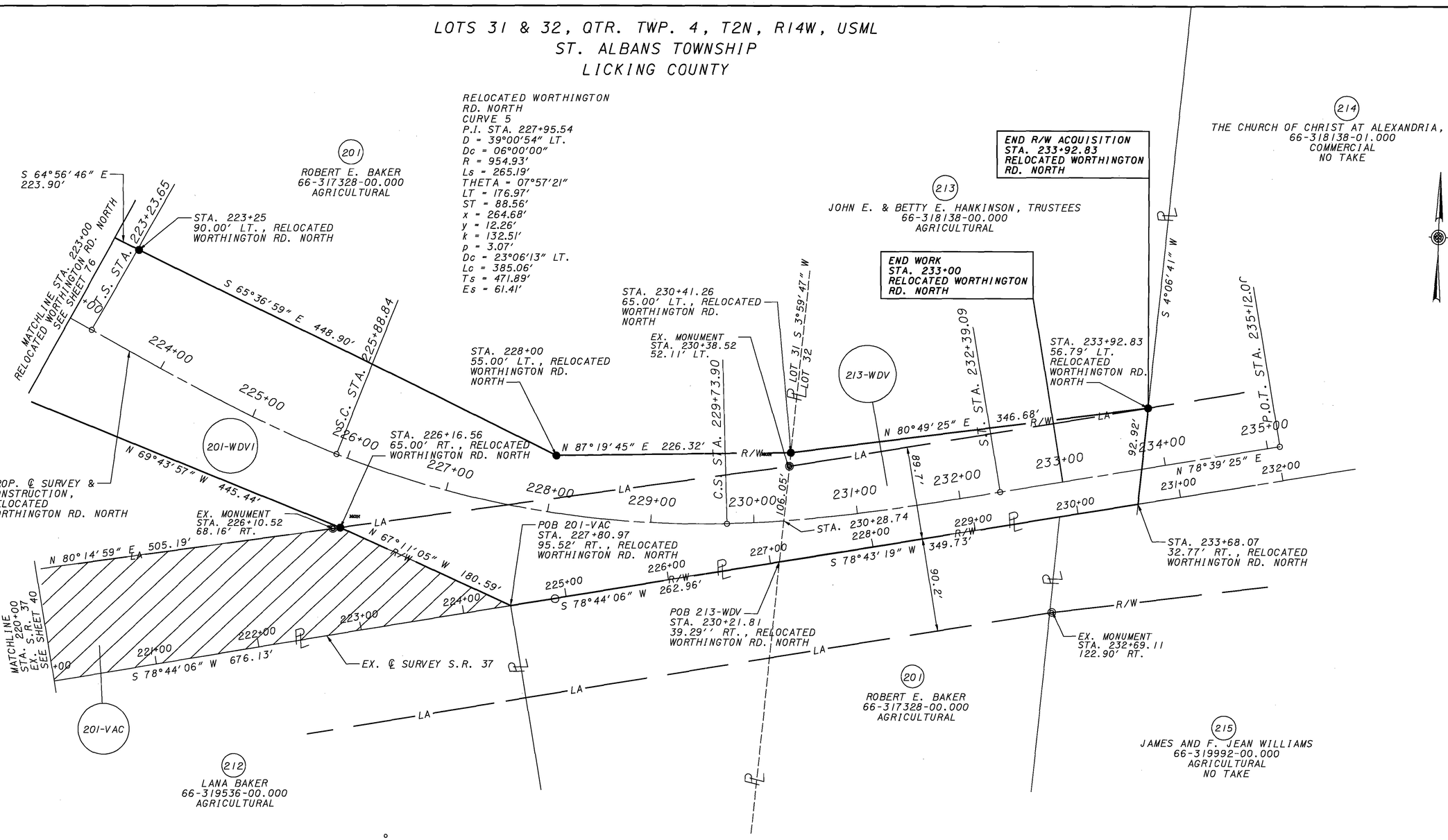
LIC-161-6.65
LIC-37-10.25

77/88

1336
1349

L1610062.RDS 01/04/06

LOTS 31 & 32, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 223+00 TO STA. 235+00 RELOCATED WORTHINGTON RD. NORTH

LIC-161-6.65
LIC-37-10.25

78/88

(1339)
(1349)

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- RESIDENTIAL BUILDING

LEGEND

- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
1	1/04/06	ADDED 201-VAC

COMPLETION DATE: 4/29/05

L161062D.RDS 01/04/06

LOTS 28 & 29 & 30, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

191
PETER BENSON, ETAL
66-317436-00.000
WOODED

MATCHLINE STA. 443+00 RAMP K SEE SHEET 37

PROP. ℄ SURVEY & CONSTRUCTION, RAMP K

P.T. STA. 443+25.33

P.C. STA. 446+53.39

P.T. STA. 449+13.43

STA. 410+39

MATCHLINE STA. 408+50 PROP. S.R. 37 SEE SHEET 39

EX. ℄ SURVEY, S.R. 37

"STOP LIGHT"

201-WL2

201
ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

STA. 411+12.78 S.R. 37 =
STA. 451+60.74 RAMP K =
STA. 450+41.60 RAMP L

ROBERT J. & CHERYL J. SCUNDA
66-321138-00.000
RESIDENTIAL

"CROSS ROAD"

203

PROP. ℄ SURVEY & CONSTRUCTION, RAMP L

P.C. STA. 411+02.83

P.T. STA. 452+88.16

MATCHLINE STA. 453+00 RAMP L SEE SHEET 81

189-WL2

189
TIMOTHY N. & KIMBERLY A. TANEFF
66-317514-00.000
WOODED

191-WL

STA. 450+34

PROP. 60" CONDUIT

CONSTRUCTION LIMITS

TOTAL TAKE

202
DAVID E. & KATHRINE A. HORNER
66-317316-00.000
RESIDENTIAL

202-WL1

203-WL

MATCHLINE STA. 220+00 SERVICE RD. 11 SEE SHEET 81

CONSTRUCTION LIMITS

EX. UNDERGROUND TELEPHONE LINES TO BE RELOCATED

P.T. STA. 412+54.34

195
TERRY STAGGERS & SUZANNE SCOTT-STAGGERS
66-317436-00.004
TOTAL TAKE BY ORIGINAL DEED

202-WDV

202-WL2

202-TV

195-TT

PROP. ℄ SURVEY & CONSTRUCTION, S.R. 37

CONSTRUCTION LIMITS

EX. UNDERGROUND TELEPHONE LINE TO BE RELOCATED

201-WDV3

201
ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

CONSTRUCTION LIMITS

PROP. ℄ SURVEY & CONSTRUCTION, SERVICE RD. 11

MATCHLINE STA. 217+00 SERVICE RD. 11 SEE SHEET 85

201-WL3

199
WILBERT W. & ALICE W. BODEN
66-317436-00.002
RESIDENTIAL

196
TED A. ZANGMEISTER
66-320640-00.000
TOTAL TAKE BY ORIGINAL DEED

196-TT

MATCHLINE STA. 415+00 PROP. S.R. 37 SEE SHEET 85

LOT 28 LOT 29 LOT 30

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 408+50 TO STA. 415+00 PROP. S.R. 37
STA. 217+00 TO STA. 220+00 SERVICE RD. 11
STA. 443+00 TO STA. 451+00 RAMP K
STA. 451+00 TO STA. 453+00 RAMP L

LIC-161-6.65
LIC-37-10.25

79/88

1340
1349

LEGEND

- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

- ■ - COMMERCIAL BUILDING
- □ - RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

REV	DATE	DESCRIPTION
2	5/19/06	UPDATED NAME ON PARCEL 189
1	7/11/05	CHANGED 195 & 196 TO TOTAL TAKES

COMPLETION DATE: 4/29/05

LI6I0063.RDS 05/19/06

LOTS 28, 29 & 30, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

RAMP K
CURVE 2
P.I. STA. 441+79.34
D - 22°10'47" RT.
Dc - 07°30'00"
R - 763.94'
T - 149.74'
L - 295.73'
E - 14.54'

(191) PETER BENSON, ETAL
66-317436-00.000
WOODED

RAMP K
CURVE 3
P.I. STA. 447+90.43
D - 25°00'15" LT.
Dc - 10°00'00"
R - 572.96'
T - 127.04'
L - 250.04'
E - 13.92'

S.R. 37
CURVE 1
P.I. STA. 411+78.69
D - 00°45'31" RT.
Dc - 00°30'00"
R - 11,459.16'
T - 75.85'
L - 151.71'
E - 0.25'

MATCHLINE STA. 443+00
RAMP K
SEE SHEET 38

STA. 443+25.33
P.T.
N 67°01'16" W
326.79'

STA. 443+54.91
PROP. ℄ SURVEY & CONSTRUCTION, RAMP K
S 59°51'13" E
444+00
445+00
446+00
447+00
448+00
449+00
P.C. STA. 446+63.39
P.T. STA. 449+13.43
S 84°51'28" E

(189-WL2)
(191-WL)
222.33'

STA. 444+07.31
105.00' RT.
RAMP K

LA
N 62°53'04" W 519.93'

(189) TIMOTHY N. & KIMBERLY A. TANEFF
66-317514-00.000
WOODED

LOT 28
LOT 29
S 3°37'39" W

EX. IRON PIN FOUND
STA. 412+09.60
288.37' RT.
PROP. S.R. 37
STA. 448+82.18
107.80' RT., RAMP K

EX. IRON PIN FOUND
STA. 447+67.29
158.54' RT.
RAMP K

EX. IRON PIN FOUND
STA. 412+31.13
288.46' RT.
PROP. S.R. 37
STA. 448+83.63
128.71' RT., RAMP K

N 3°26'10" E
20.99'
S 89°16'57" W 158.83'

(195) TERRY STAGGERS & SUZANNE SCOTT-STAGGERS
66-317436-00.004
TOTAL TAKE BY ORIGINAL DEED

EX. IRON PIN FOUND
STA. 414+53.57
288.69' RT.
S.R. 37

N 87°24'16" W

EX. IRON PIPE FOUND
STA. 414+52.96
243.75' RT.
S.R. 37

(199) WILBERT W. & ALICE W. BODEN
66-317436-00.002
RESIDENTIAL

EX. IRON PIN FOUND
STA. 411+55.20
29.58' RT.
S.R. 37
N 81°25'17" E 295.57'

POB 195-WL
STA. 411+49.54
1.19' LT.
PROP. S.R. 37

S 3°21'06" W
300.12' (195-WL)
200.00' (203-WL)

P.T. STA. 412+54.54
STA. 412+20
130.00' RT.
PROP. S.R. 37
STA. 450+34.95
111.55' RT., RAMP K

POB 202-WL2
STA. 412+58.65
0.74' LT.
PROP. S.R. 37

N 5°16'23" W
233.20'
95.82'

STA. 414+50.94
95.00' RT.
PROP. S.R. 37

N 7°58'31" W
152.48'

(196) TED A. ZANGMEISTER
66-320640-00.000
TOTAL TAKE BY ORIGINAL DEED

(195-TT)
(196-TT)

MATCHLINE STA. 415+00
PROP. S.R. 37
SEE SHEET 86

MATCHLINE STA. 408+50
PROP. S.R. 37
SEE SHEET 40

EX. ℄ SURVEY, S.R. 37
S 03°21'06" W
30.0' 30.0'

N 3°21'06" E
289.25' (201-WL2)
663.97' (191-WL)

POB 202-WL1
STA. 409+78.68
3.29' LT.
PROP. S.R. 37

N 3°21'06" E
80.00' (202-WL1)

POB 203-WL
STA. 410+58.67
2.26' LT., PROP. S.R. 37

P.C. STA. 411+02.83

LOT 28
LOT 30
R/W
409+00
410+00
411+00
412+00
413+00
414+00
415+00
16+00
17+00
18+00
19+00

(201-WL2)
(202-WL1)
(203-WL)

(201) ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

N 86°33'16" W 685.23'

STA. 452+60.63
41.58' LT.
RAMP L

PROP. ℄ SURVEY & CONSTRUCTION, RAMP L
S 86°33'16" E 214.79'
TOTAL TAKE
S 89°51'28" E

RAMP L
CURVE 1
P.I. STA. 454+27.21
D - 27°16'57" LT.
Dc - 10°00'00"
R - 572.96'
T - 139.05'
L - 272.82'
E - 16.63'

P.C. STA. 452+88.16
453+00
MATCHLINE STA. RAMP L
SEE SHEET 82

(202) DAVID E. & KATHRINE A. HORNER
66-317316-00.000
RESIDENTIAL

S 3°26'44" W
200.00' (203-WL)
136.81' (202-WL1)

ROBERT J. & CHERYL J. SCUNDA
66-321138-00.000
RESIDENTIAL

EX. CONCRETE MONUMENT
STA. 412+58.93
215.20' RT., PROP S.R. 37
STA. 452+49.10
158.09' RT., RAMP L

N 86°33'16" W 214.46'
109.26'

STA. 412+58.79
110.00' LT. S.R. 37

S 84°01'13" W 164.94'

STA. 452+52.75
95.00' RT.
RAMP L

(202-WDV)
(202-WL2)
(201-WL3)

MATCHLINE STA. SERVICE RD. 11
SEE SHEET 82

PROP. ℄ SURVEY & CONSTRUCTION, SERVICE RD. 11
220+00

S 49°41'39" W
117.93'

(202-TV)

N 75°50'31" W
63.62'

STA. 219+40
50.00' RT.
SERVICE RD. 11

255.04'
R/W
219+00
218+00
109.22'

S 35°54'03" E
S 35°07'20" W
103.14'

STA. 218+26.82
50.00' RT.
SERVICE RD. 11

(201) ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

SERVICE RD. 11
CURVE 2
P.I. STA. 219+02.01
D - 52°06'41" RT.
Dc - 09°59'57"
R - 573.00'
T - 280.16'
L - 521.15'
E - 64.82'

S 10°12'55" W
125.88'
94.21'
N 86°33'16" W
S 10°13'28" W
293.32'
N 3°21'06" E
468.89'
(201-WL3)

POB 201-WL3
STA. 413+83.65
0.79' LT.
S.R. 37

STA. 413+83.77
95.00' LT.
S.R. 37

POB 201-WDV3
& 202-WDV
& 201-WDV3
STA. 217+82.71
50.00' LT.
SERVICE RD. 11

N 13°49'34" E
169.84'

S 19°27'57" W
209.52'

MATCHLINE STA. SERVICE RD. 11
SEE SHEET 86

POB 196-WL
STA. 414+49.65
0.81' LT.
PROP. S.R. 37

S 3°21'06" W
149.90' (196-WL)

LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTES:
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THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

REV	DATE	DESCRIPTION
2	5/19/06	UPDATED NAME ON PARCEL 189
1	7/11/05	CHANGED 195 & 196 TO TOTAL TAKES

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 408+50 TO STA. 415+00 PROP. S.R. 37
STA. 217+00 TO STA. 220+00 SERVICE RD. 11
STA. 443+00 TO STA. 451+00 RAMP K
STA. 451+00 TO STA. 453+00 RAMP L

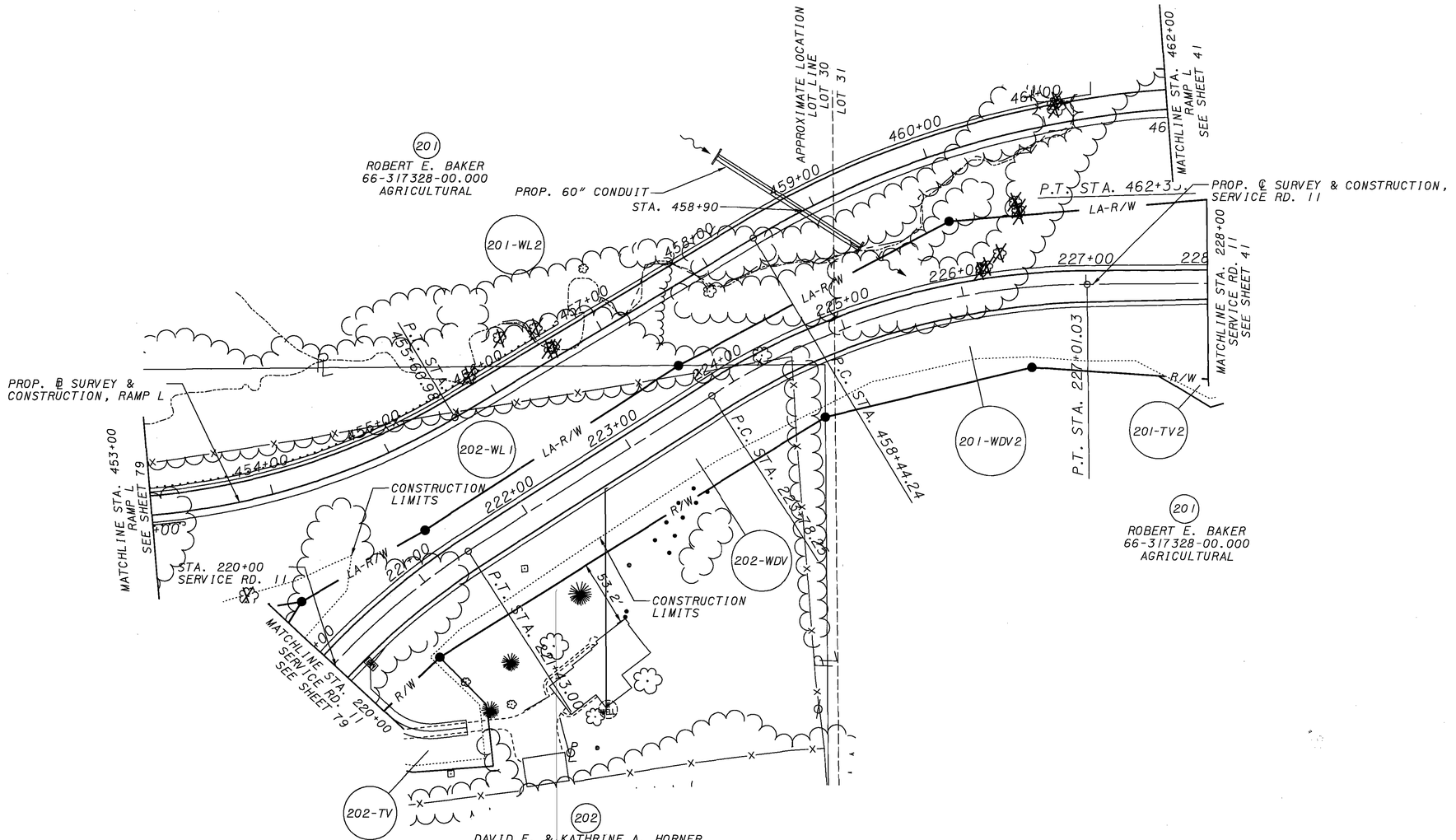
LIC-161-6.65
LIC-37-10.25

80/88

(341)
(349)

LI61063D.RDS 05/19/06

LOTS 30 & 31, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

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NOTE:
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LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 453+00 TO STA. 462+00 RAMP L
STA. 220+00 TO STA. 228+00 SERVICE RD. 11

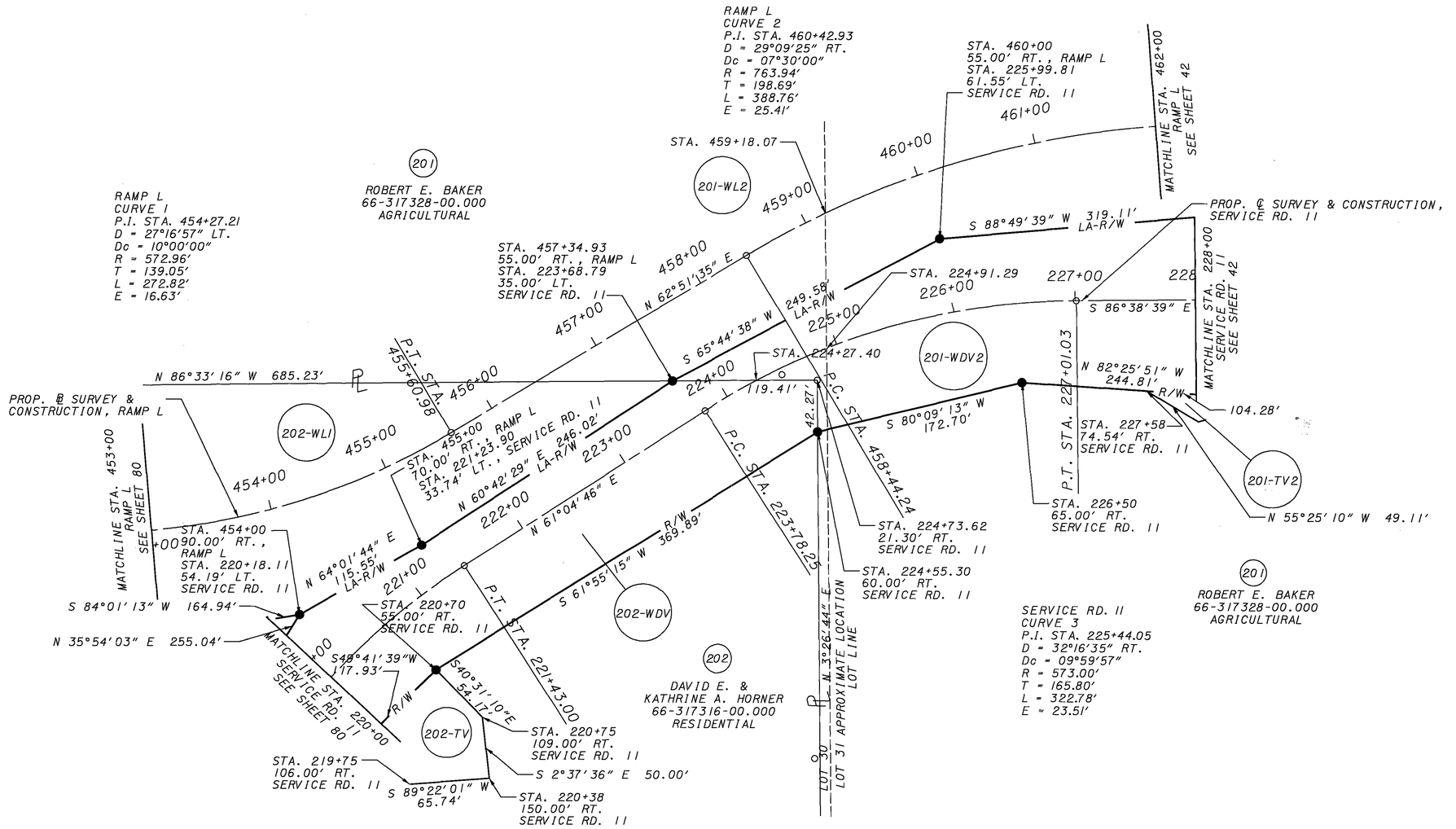
LIC-161-6.65
LIC-37-10.25

81 / 88

1348
1349

LI6I0064.RDS 09/26/05

LOTS 30 & 31, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 453+00 TO STA. 462+00 RAMP L
STA. 220+00 TO STA. 228+00 SERVICE RD. 11

LIC-161-6.65
LIC-37-10.25

82/88

1343
1349

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTE:
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LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - 3/4" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

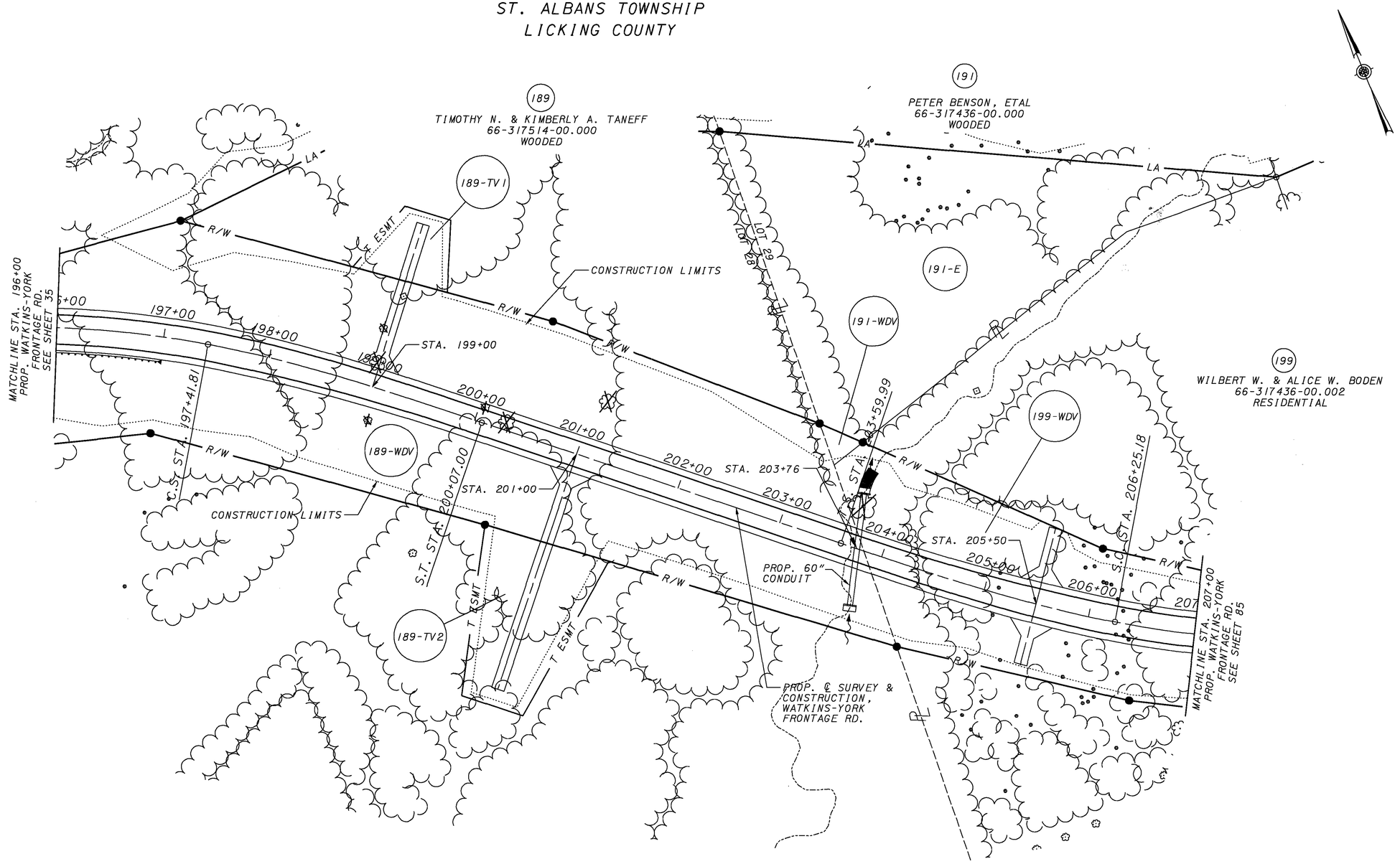
STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION

COMPLETION DATE: 4/29/05

09/26/05
LI6I064D.RDS

LOTS 28 & 29, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



LEGEND

◎ - EXISTING R/W MONUMENT

∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTES:
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NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, WATKINS-YORK FRONTAGE RD. UNLESS OTHERWISE STATED.

REV	DATE	DESCRIPTION
2	8/15/06	ADDED 191-E
1	5/19/06	UPDATED NAME ON PARCEL 189

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 196+00 TO STA. 207+00 PROP. WATKINS-YORK FRONTAGE RD.

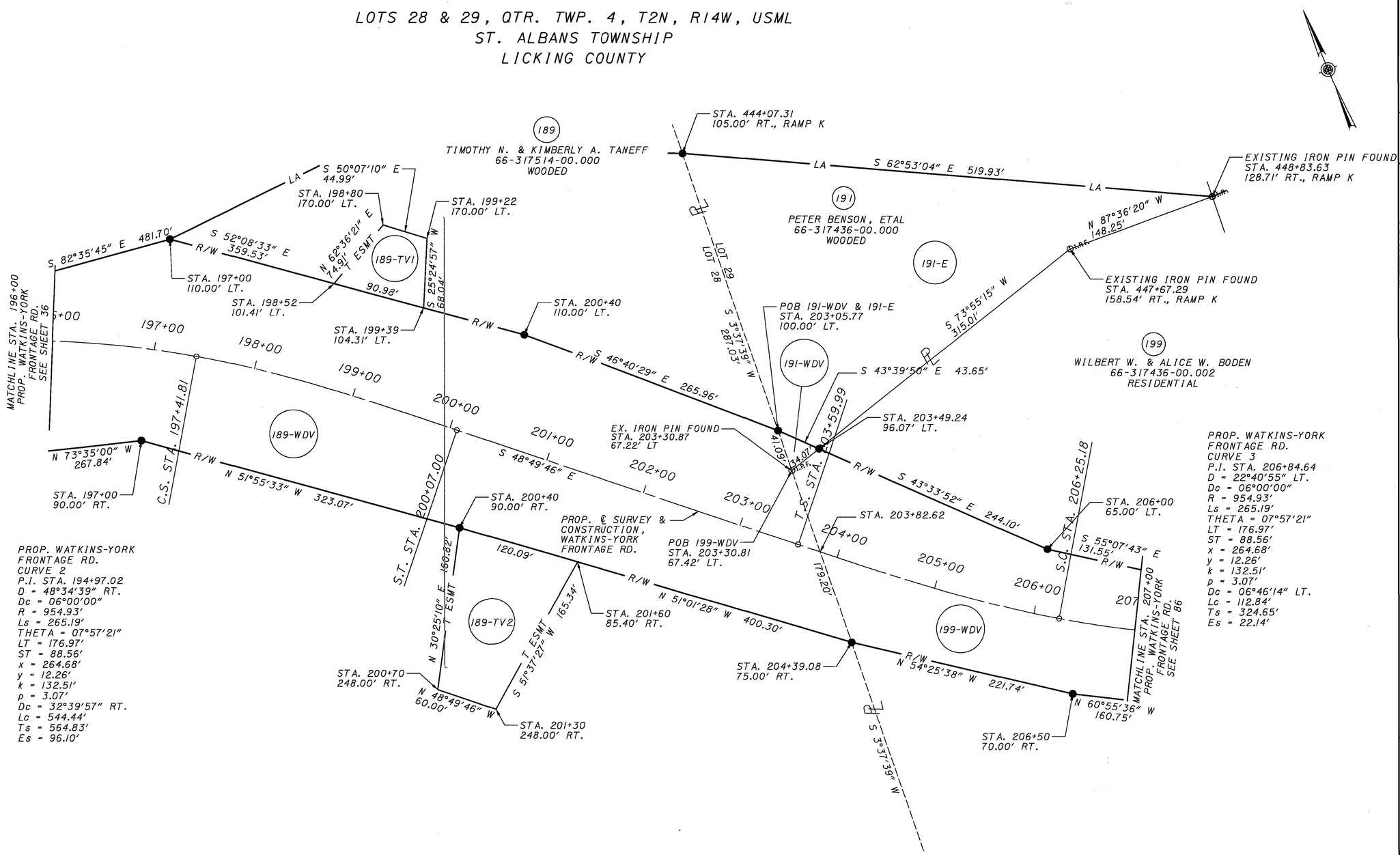
LIC-161-6.65
LIC-37-10.25

83/88

1344
1349

L161O065.RDS 08/15/06

LOTS 28 & 29, QTR. TWP. 4, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



PROP. WATKINS-YORK
FRONTAGE RD.
CURVE 2
P.I. STA. 194+97.02
D = 48°34'39" RT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 32°39'57" RT.
Lc = 544.44'
Ts = 564.83'
Es = 96.10'

PROP. WATKINS-YORK
FRONTAGE RD.
CURVE 3
P.I. STA. 206+84.64
D = 22°40'55" LT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 06°46'14" LT.
Lc = 112.84'
Ts = 324.65'
Es = 22.14'

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTE:
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STRUCTURES KEY:
- COMMERCIAL BUILDING
- RESIDENTIAL BUILDING

LEGEND
- ◎ - EXISTING R/W MONUMENT
- ° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
- ● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

REV	DATE	DESCRIPTION
2	8/15/06	ADDED 191-E
1	5/19/06	UPDATED NAME ON PARCEL 189

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

CALCULATED: C.S.
CHECKED: T.A.

RIGHT OF WAY DETAIL SHEET
STA. 196+00 TO STA. 207+00 PROP. WATKINS-YORK FRONTAGE RD.

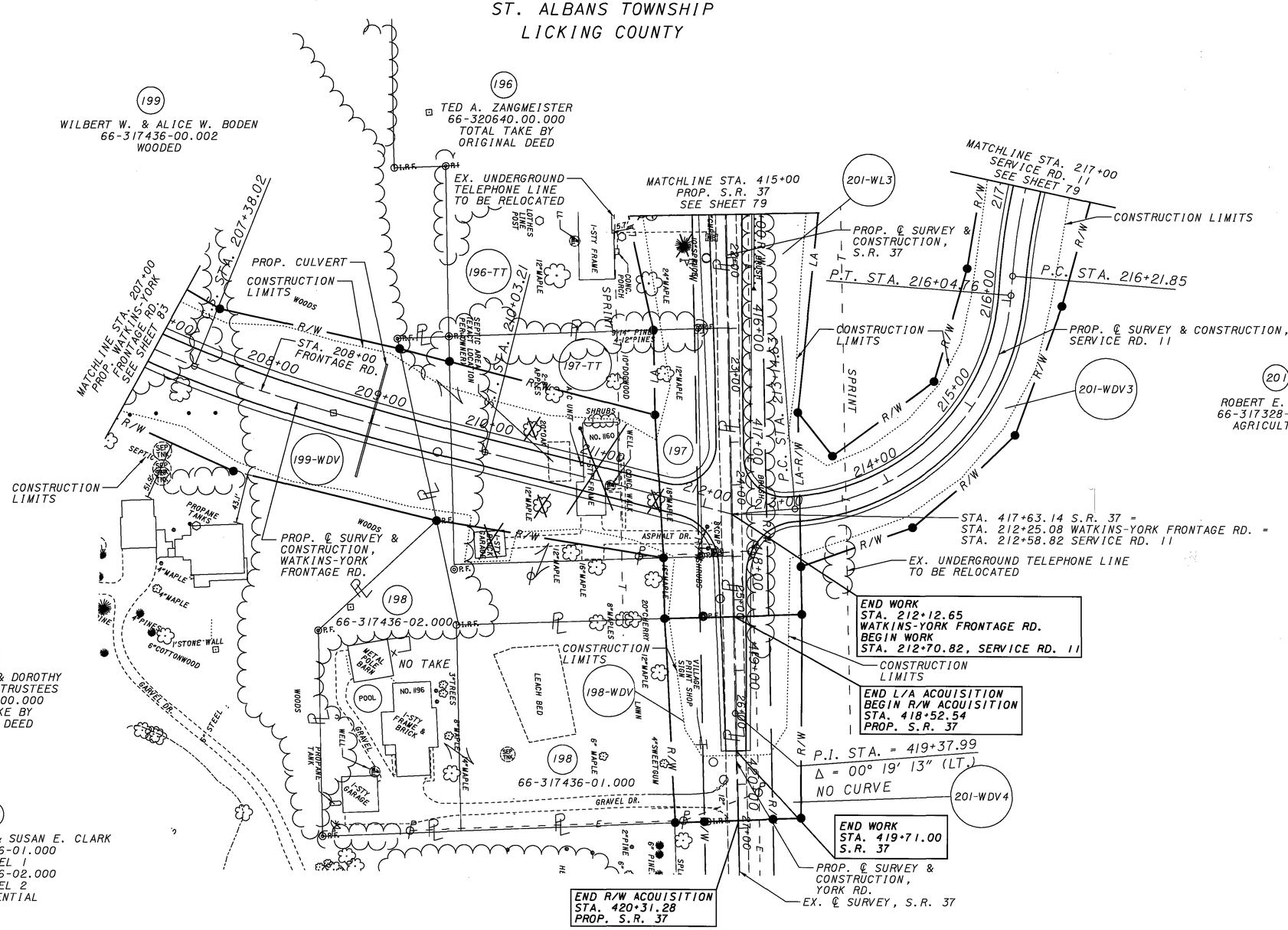
LIC-161-6.65
LIC-37-10.25

84/88

1345
1349

L161065D.RDS 08/15/06

LOTS 7,8,10 & 11, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY



NOTE:
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FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
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NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

¾" X 30" REBAR WITH ALUMINUM CAP STAMPED ODOT R/W DISTRICT 5"

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	7/11/05	CHANGED 196 & 197 TO TOTAL TAKES

COMPLETION DATE: 4/29/05

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 207+00 TO STA. 415+00 PROP. S.R. 37
STA. 213+00 TO STA. 212+00 PROP. WATKINS-YORK FRONTAGE RD.
STA. 212+58.82 TO STA. 213+00 PROP. SERVICE RD. 11

LIC-161-6.65
LIC-37-10.25

85/88

13346
13349

LIC10066.RDS 05/09/06

LOTS 29 & 30, QTR. TWP. 3, T2N, R14W, USML
ST. ALBANS TOWNSHIP
LICKING COUNTY

199
WILBERT W. & ALICE W. BODEN
66-317436-00.002
WOODED

196
TED A. ZANGMEISTER
66-320640.00.000
TOTAL TAKE BY
ORIGINAL DEED

PROP. WATKINS-YORK FRONTAGE RD.
CURVE 3
P.I. STA. 206+84.64
D = 22°40'55" LT.
Dc = 06°00'00"
R = 954.93'
Ls = 265.19'
THETA = 07°57'21"
LT = 176.97'
ST = 88.56'
x = 264.68'
y = 12.26'
k = 132.51'
p = 3.07'
Dc = 06°46'14" LT.
Lc = 112.84'
Ts = 324.65'
Es = 22.14'

STA. 207+40
55.00' LT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 207+38.02

S 55°07'42" E
131.55'

STA. 209+53.24
70.00' LT., PROP.
WATKINS-YORK
FRONTAGE RD.

STA. 209+07.30
70.00' LT., PROP.
WATKINS-YORK
FRONTAGE RD.

S 70°53'25" E
45.01'

MATCHLINE STA. 207+00
PROP. WATKINS-YORK
FRONTAGE RD.
SEE SHEET 84

S 72°58'23" E
160.64'

208+00

199-WDV

209+00

STA. 209+72.73

STA. 209+42.97

PROP. ℄ SURVEY &
CONSTRUCTION,
WATKINS-YORK
FRONTAGE RD.

STA. 209+76.51
68.33' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

R/W
N 60°55'36" W
160.75'

STA. 208+00
75.00' RT., PROP.
WATKINS-YORK
FRONTAGE RD.

N 71°47'58" W 182.39'

EX. IRON PIPE FOUND
STA. 210+01.68
105.98' RT.
WATKINS-YORK FRONTAGE RD.

N 76°16'42" W
201.15'

S 3°21'06" W
149.90' (196-WL)

196-TT

POB 197-WL
STA. 415+99.55
0.86' LT.
PROP. S.R. 37

N 87°24'16" W

STA. 416+00.44
65.00' RT.
PROP. S.R. 37

65.87'

STA. 210+03.21

S.T.

S 70°54'47" E 185.77'

210+00

S 71°30'41" E

STA. 418+00.38
60.00' RT. PROP S.R. 37

STA. 211+76.87
51.60' RT. PROP.
WATKINS-YORK FRONTAGE RD.

211+00

N 3°22'18" E
74.58'

N 1°05'17" E
125.48'

MATCHLINE STA. 415+00
PROP. S.R. 37
SEE SHEET 80

S 3°21'06" W
252.99' (197-WL)
(201-WL3)

468.89'

N 7°58'31" W
152.48'

LA

R/W

416+00

207

30

LOT

29

LOT

S 3°22'18" W 293.32'

LA

P.C. STA. 213+14.63

201-WL3

212+00

214+00

213+00

S 31°22'18" W
135.00'
(201-WDV3)

201-WDV3

EX. IRON PIPE FOUND
STA. 418+58.18
363.03' RT.
S.R. 37

199
WILBERT W. & ALICE W. BODEN
66-317436-00.002
WOODED

197
JAMES HENRY & DOROTHY
JEAN BOARD, TRUSTEES
66-319770-00.000
TOTAL TAKE BY
ORIGINAL DEED

EX. IRON PIPE FOUND
STA. 420+36.14
363.70' RT.
S.R. 37

198
CHARLES DENNIS
& SUSAN E. CLARK
66-317436-02.000
PARCEL 2
RESIDENTIAL
NO TAKE

197-TT

N 87°24'15" W

STA. 418+53.37
60.00' RT.
PROP. S.R. 37

60.95'

N 3°22'18" E
52.99'

179.05

POB 198-WDV & 201-WDV4
STA. 418+52.54
0.95' LT.
PROP. S.R. 37

198
CHARLES DENNIS
& SUSAN E. CLARK
66-317436-01.000
PARCEL 1
RESIDENTIAL

198-WDV

N 1°36'10" E
R/W

N 87°42'43" W

STA. 420+32.02
55.00' RT., PROP. S.R. 37

55.49'

EX. IRON PIN FOUND
STA. 418+55.84
242.19' RT.
S.R. 37

EX. IRON PIN FOUND
STA. 420+34.48
242.75' RT.
S.R. 37

STA. 420+31.28
0.49' LT.
PROP. S.R. 37

END R/W ACQUISITION
STA. 420+31.28
PROP. S.R. 37

87°24'15"W
59.06'

END WORK
STA. 212+12.65
WATKINS-YORK FRONTAGE RD.
BEGIN WORK
STA. 212+70.82, SERVICE RD. 11

STA. 418+51.74
60.00' LT., S.R. 37

END L/A ACQUISITION
BEGIN R/W ACQUISITION
STA. 418+52.54
PROP. S.R. 37

EX. MONUMENT FOUND
STA. 418+51.88
26.25' RT.
S.R. 37

419+00

178.74'

S 3°21'06" W
260.00'

178.56'

S4°48'37"W
R/W

P.I. STA. = 419+37.99
= 00° 19' 13" (LT.)
NO CURVE

420+00

STA. 420+30.56
55.00' LT., S.R. 37

END WORK
STA. 419+71.00
S.R. 37

201-WDV4

30.0' 30.0'

PROP. ℄ SURVEY &
CONSTRUCTION,
YORK RD.

N 87°42'43" W 54.52'

EX. ℄ SURVEY, S.R. 37
S 03°21'06" W

EX. IRON PIN FOUND
STA. 420+31.64
26.58' RT.
S.R. 37

MATCHLINE STA. 217+00
SERVICE RD. 11
SEE SHEET 80

N 13°29'34"E
169.84'

217

R/W

S 19°27'57" W
209.52'

SERVICE RD. 11
CURVE 2
P.I. STA. 219+02.01
D = 52°06'41" RT.
Dc = 09°59'57"
R = 573.00'
T = 280.16'
L = 521.15'
E = 64.82'

P.T. STA. 216+04.76

6

P.C. STA. 216+21.85

N 08°58'05" E

STA. 216+00
45.00' RT.
SERVICE RD. 11

PROP. ℄ SURVEY & CONSTRUCTION,
SERVICE RD. 11

216+00

N20°43'24"E
215+00
03.35'

5

2

3

4

N57°45'18"E
110.42'

R/W

S24°16'21"W
120.75'

R/W

201
ROBERT E. BAKER
66-317328-00.000
AGRICULTURAL

STA. 215+00
45.00' RT.
SERVICE RD. 11

S52°13'19"W
120.75'

R/W

SERVICE RD. 11
CURVE 1
P.I. STA. 214+89.99
D = 81°05'19" LT.
Dc = 27°56'57"
R = 205.00'
T = 175.36'
L = 290.13'
E = 64.77'

S 89°56'37" E

STA. 214+00
45.00' RT., SERVICE RD. 11

S 75°01'01" W
103.24'

STA. 418+10, 60.00' LT., S.R. 37
STA. 213+15.74
50.25' RT., SERVICE RD. 11

① STA. 416+75
65.00' RT., S.R. 37
STA. 211+39.34
68.14' LT., WATKINS-YORK FRONTAGE RD.

② STA. 416+75
60.00' LT., S.R. 37
STA. 213+30.23
84.18' LT., SERVICE RD. 11

③ S 33°46'12" E 48.84'

④ STA. 213+60.17
39.90' LT., SERVICE RD. 11

⑤ STA. 215+00
40.00' LT., SERVICE RD. 11

⑥ STA. 216+25
40.00' LT., SERVICE RD. 11

LEGEND

◎ - EXISTING R/W MONUMENT

° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, S.R. 37 UNLESS OTHERWISE STATED.

REV	DATE	DESCRIPTION
1	7/11/05	CHANGED 196 & 197 TO TOTAL TAKES

COMPLETION DATE: 4/29/05

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 415+00 TO STA. 421+00 PROP. S.R. 37
STA. 212+00 PROP. WATKINS-YORK FRONTAGE RD.
STA. 213+00 TO STA. 217+00 PROP. SERVICE RD. 11

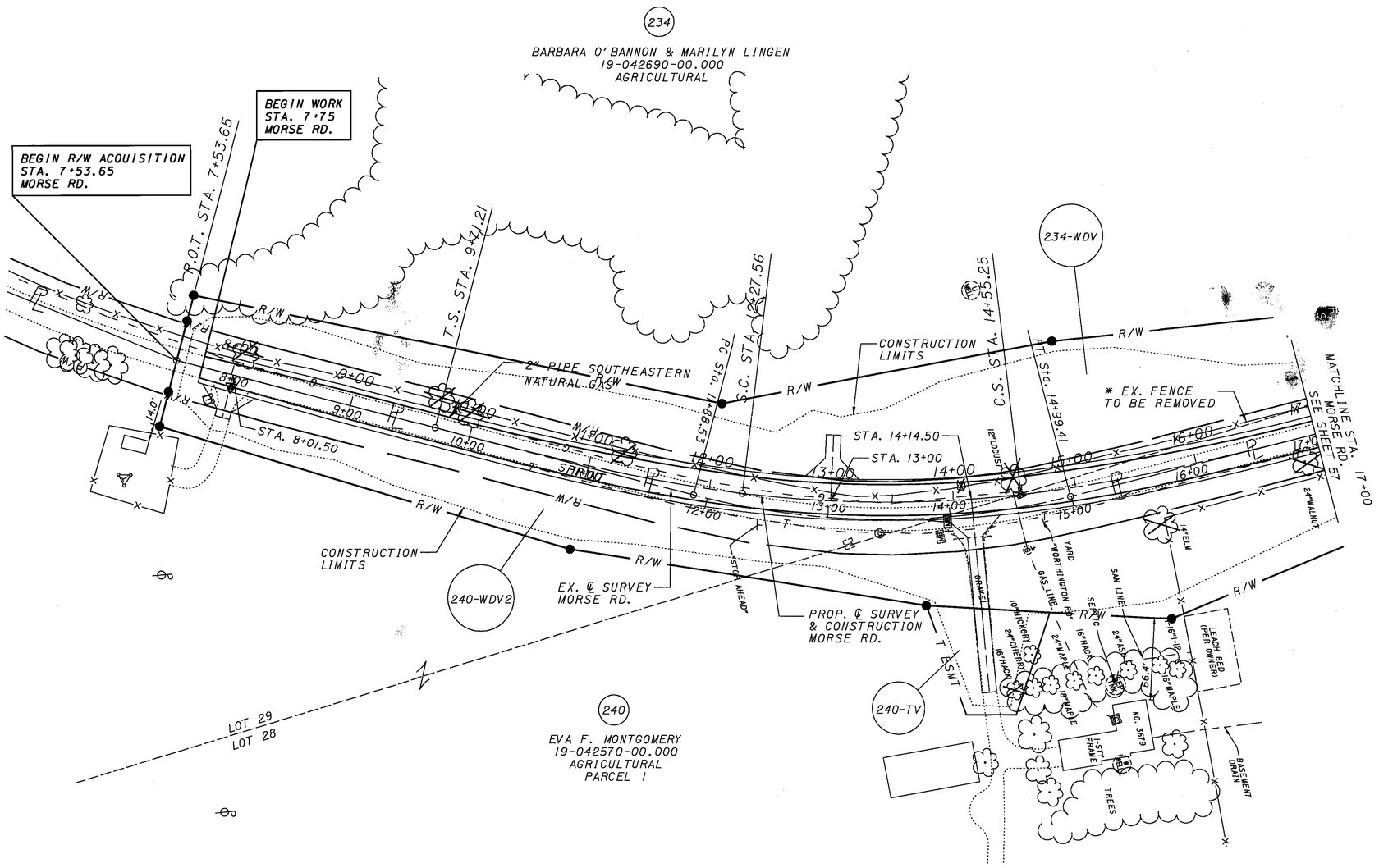
LIC-161-6.65
LIC-37-10.25

86/88

1348
1349

09/26/05
LI61066D.RDS

LOTS 28 & 29, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



LEGEND

◎ - EXISTING R/W MONUMENT

∘ - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)

● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, MORSE RD. UNLESS OTHERWISE STATED.

STRUCTURES KEY:

■ - COMMERCIAL BUILDING

□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	6/29/06	REVISED 234 OWNER'S NAME

COMPLETION DATE: 4/29/05

CALCULATED C.S.
CHECKED T.A.

0 25 50 100
HORIZONTAL SCALE IN FEET

RIGHT OF WAY DETAIL SHEET
STA. 7+75 TO STA. 17+00 PROP. MORSE RD.

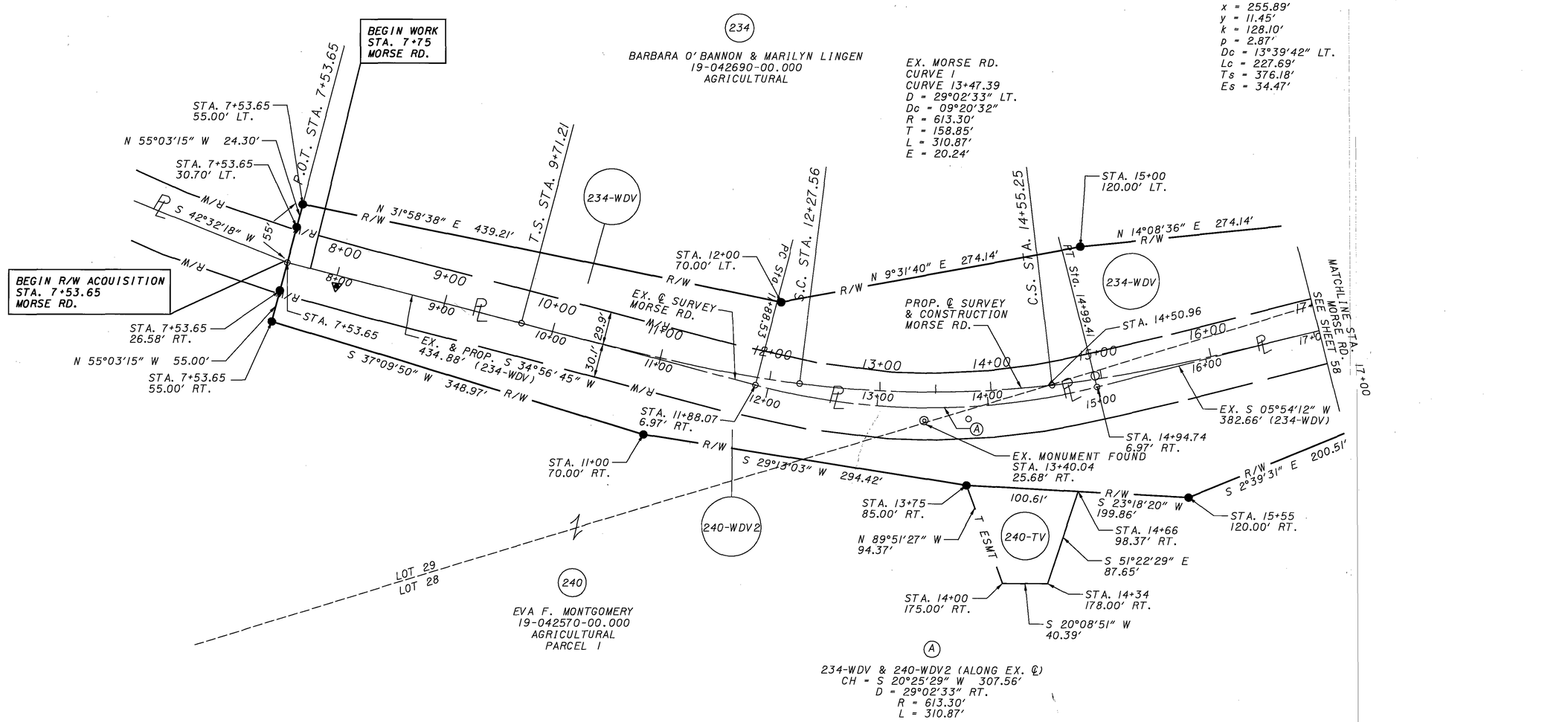
LIC-161-6.65
LIC-37-10.25

87/88

1348
1349

L1610067.RDS 06/29/06

LOTS 28 & 29, QTR. TWP. 3, T2N, R13W, USML
GRANVILLE TOWNSHIP
LICKING COUNTY



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED C.S.
CHECKED T.A.

RIGHT OF WAY DETAIL SHEET
STA. 7+75 TO STA. 17+00 PROP. MORSE RD.

LIC-161-6.65
LIC-37-10.25

88/88

1349
1349

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

FRA-161-16.75/LIC-161-0.00
FRA-161-23.21/LIC-161-0.00

CO. RD. AND TWP RD. RIGHT OF WAY DETERMINED FROM THE FRANKLIN & LICKING COUNTY ENGINEERS OFFICE FRANKLIN COUNTY & LICKING COUNTY, OHIO

NOTES:
THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATING.

NOTES:
ALL EXISTING FENCE LOCATED INSIDE OF PROPOSED RIGHT OF WAY IS TO BE REMOVED.

THE DISPOSITION OF EXISTING CONSTRUCTION ITEMS WITHIN WORK LIMITS ARE SHOWN ON THE CONSTRUCTION PLANS.

NOTE:
ALL STATIONS AND OFFSETS ARE FROM THE PROPOSED CENTERLINE OF SURVEY & CONSTRUCTION, MORSE RD. UNLESS OTHERWISE STATED.

LEGEND

◎ - EXISTING R/W MONUMENT
° - I.P. FOUND (IRON PIN/REBAR/IRON PIPE/AXLE)
● - ¾" X 30" REBAR WITH ALUMINUM CAP STAMPED "ODOT R/W DISTRICT 5"

STRUCTURES KEY:
■ - COMMERCIAL BUILDING
□ - RESIDENTIAL BUILDING

REV	DATE	DESCRIPTION
1	6/29/06	REVISED 234 OWNER'S NAME

COMPLETION DATE: 4/29/05

L161067D.RDS 09/25/06

GENERAL INFORMATION

INTRODUCTION

THIS REPORT CONSISTS OF THE SOIL INVESTIGATION FOR THE CONSTRUCTION OF APPROXIMATELY 5.7 MILES OF LIMITED ACCESS ROADWAY FOR S.R. 161 ALONG A NEW ALIGNMENT BETWEEN WATKINS ROAD AND S.R. 16 IN LICKING COUNTY. THE PROJECT ALSO INCLUDES AN INTERCHANGE AT S.R. 37 AND ASSOCIATED SERVICE ROADS AND RAMPS.

THE PROJECT INDEX IS ON A LATER SHEET.

GEOLOGY AND OBSERVATIONS OF THE PROJECT

THE PROJECT IS LOCATED WITHIN THE GALION GLACIATED LOW PLATEAU OF THE CENTRAL LOWLAND TILL PLAINS. THIS AREA IS CHARACTERIZED BY ROLLING TERRAIN OF THE TRANSITION AREA BETWEEN THE TILL PLAIN SECTIONS AND THE GLACIATED ALLEGHENY PLATEAU. THE MODERATE RELIEF DEVELOPED WITHIN THE OVERBURDEN CONSISTS OF THIN TO THICK, GLACIALLY DEPOSITED SOILS WITH OCCASIONAL INCISED STREAM CHANNELS. GLACIAL DEPOSITS ENCOUNTERED WITHIN THE AREA CONSIST OF GROUND AND END MORAINES, KAMES, OUTWASH TERRACES, AND ALLUVIAL DEPOSITS. GENERAL GEOLOGIC REFERENCES REPORT THAT THE SITE WAS COVERED BY BOTH THE WISCONSIN AND ILLINOIAN GLACIERS.

OVERBURDEN VARIES IN THICKNESS ACROSS THE PROJECT. THE UNDERLYING BEDROCK CONSISTS OF MISSISSIPPIAN AGED INTERBEDDED SHALE AND SANDSTONE OF THE LOGAN AND CUYAHOGA FORMATIONS. GEOLOGIC MAPPING OF THE AREA DOES NOT DIVIDE THE UNIT INTO INDIVIDUAL FORMATIONS. THE BEDROCK TOPOGRAPHY VARIES GREATLY ACROSS THE PROJECT DUE TO THE PRESENCE OF PREGLACIAL VALLEYS THAT THAT HAVE BEEN FILLED IN WITH RELATIVELY THICK GLACIAL DEPOSITS. BEDROCK OUTCROPS MAY BE EVIDENT ALONG SOME OF THE STREAM BEDS.

GENERALLY, THE PROJECT CONSISTS OF CULTIVATED AND FALLOW FIELDS WITH OCCASIONAL STRUCTURES FOR RESIDENCES AND FARMING ACTIVITIES. THE AREAS THAT ARE, OR HAVE BEEN, CULTIVATED MAY ENCOUNTER RELATIVELY THICK ORGANIC LAYERS DUE TO THE PRESENCES OF THE "PLOW ZONE" ASSOCIATED WITH FIELD CULTIVATION. ADDITIONALLY, THIN TO POSSIBLY THICK LAYERS OF ALLUVIAL STREAM DEPOSITS MAY BE ENCOUNTERED ALONG NOT ONLY RACCOON CREEK, BUT ALSO ITS TRIBUTARIES. THESE DEPOSITS ARE NOT CONSOLIDATED AND MAY BE SATURATED AND CONTAIN ORGANIC LAYERS.

EXPLORATION

THE EXPLORATION CONSISTED OF DRILLING A TOTAL OF 204 BORINGS FOR THE MAINLINE ROAD AND ASSOCIATED SERVICE ROADS AND RAMPS. BORINGS DRILLED FOR THE MAINLINE ROAD ARE DESIGNATED BY AN "R" PREFIX, AND BORINGS FOR THE SERVICE ROADS AND RAMPS ARE DESIGNATED BY AN "RS" PREFIX. THE BORINGS WERE DRILLED BETWEEN JULY 7 AND SEPTEMBER 27, 2004 USING EITHER AN ATV OR TRUCK-MOUNTED ROTARY DRILL RIG AND WERE DRILLED TO DEPTHS BETWEEN 10.0 AND 50.0 FEET. THE ROADWAY BORINGS WERE SPACED APPROXIMATELY AT 400-FOOT INTERVALS.

(CONTINUED ON NEXT PAGE)

LEGEND FOR PROJECT AND AVERAGE RESULTS OF TESTS - 561 SAMPLES TESTED

DESCRIPTION	ODOT CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
GRAVEL	A-1-a(0)	60	20	9	- 11	-	NP	NP	13	25
GRAVEL WITH SAND	A-1-b(0)	44	23	16	- 17	-	NP	NP	14	41
GRAVEL WITH SAND AND SILT	A-2-4(0)	36	19	17	20	10	25	8	14	25
GRAVEL WITH SAND, SILT, AND CLAY	A-2-6(1)	38	19	12	16	15	34	14	17	5
GRAVEL WITH SAND, SILT, AND CLAY	A-2-7(1)	47	21	10	8	14	42	20	22	1
COARSE AND FINE SAND	A-3a(0)	3	19	59	- 19	-	NP	NP	24	7
SANDY SILT	A-4a(5)	11	11	20	37	21	24	8	14	217
SILT	A-4b(8)	2	3	12	61	22	27	7	24	50
SILT AND CLAY	A-6a(8)	7	8	16	41	28	31	13	18	128
SILTY CLAY	A-6b(11)	3	4	12	45	36	37	18	21	36
ELASTIC CLAY	A-7-5(13)	0	1	9	58	32	48	18	34	2
CLAY	A-7-6(15)	3	4	8	46	39	45	24	27	24
WEATHERED SHALE	---	VISUAL CLASSIFICATION								
SHALE	---	VISUAL CLASSIFICATION								
SANDSTONE	---	VISUAL CLASSIFICATION								
SILTSTONE	---	VISUAL CLASSIFICATION								
CLAYSHALE	---	VISUAL CLASSIFICATION								
SOD AND/OR TOPSOIL	---	VISUAL CLASSIFICATION								

NUMBER OF BLOWS FOR "STANDARD PENETRATION" TEST

X/Y/Z — X=NUMBER OF BLOWS FOR FIRST 6 INCHES; Y=NUMBER OF BLOWS FOR SECOND 6 INCHES; Z=NUMBER OF BLOWS FOR THIRD 6 INCHES

TR — TOP OF ROCK

W.O.H. — WEIGHT OF HAMMER

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT e.g. 15

- ● WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT
- ○ INDICATES A NON-PLASTIC MATERIAL WITH A HIGH WATER CONTENT
- W FREE WATER
- ▽ STATIC WATER LEVEL
- ▼ STATIC WATER LEVEL (INCLUDES DRILLING WATER)
- DRIVE SAMPLE AND/OR CORE BORING - PLAN VIEW
- DRIVE SAMPLE AND/OR CORE BORING - PROFILE VIEW

NOTE

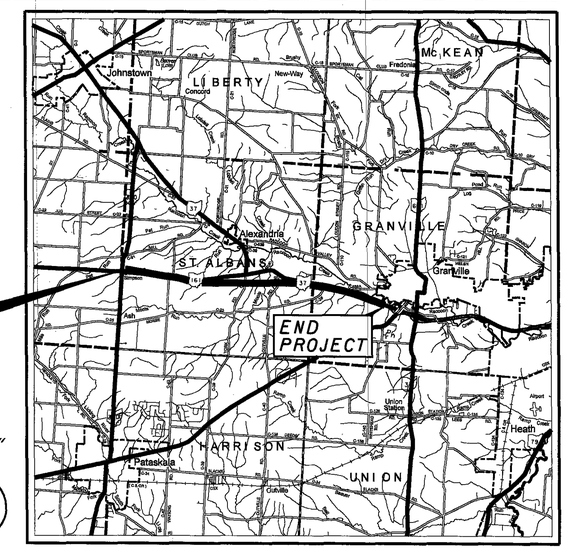
ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN ON THE SOIL PROFILE SHEETS HAS BEEN SO REPORTED. ADDITIONAL SUBSURFACE INVESTIGATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE OR THE OFFICE OF GEOTECHNICAL ENGINEERING AT 1600 WEST BROAD STREET, COLUMBUS, OH 43223 OR THE OFFICE OF STRUCTURAL ENGINEERING AT 1980 WEST BROAD STREET, COLUMBUS, OH 43223.

PREPARED BY:

DLZ OHIO, INC.
6121 HUNTLEY ROAD
COLUMBUS, OHIO 43229
(614) 888-0040

LATITUDE: 40°04'20" LONGITUDE: 82°36'00"

SCALE IN MILES
0 2 4 6 8



LOCATION MAP

DLZ

DRAWN PAN CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

1 | 82

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GENERAL INFORMATION CONT.

EXPLORATION (CONTINUED)

SAMPLING WAS PERFORMED IN 1.5-FOOT INCREMENTS AT INTERVALS NOT EXCEEDING 5 FEET. WHERE THE SAMPLER ENCOUNTERED RESISTANCE TO PENETRATION OF 6 INCHES OR LESS AFTER 50 BLOWS OF THE DROP HAMMER, THE SAMPLING INCREMENT WAS DISCONTINUED. IN BORINGS WHERE ROCK WAS CORED, NXM OR NQ SIZE DIAMOND CORING TOOLS WERE USED.

SUBSURFACE INFORMATION FROM BORINGS DRILLED BY OTHERS ARE SHOWN ON THESE DRAWINGS AS APPROPRIATE WHERE THE INFORMATION WAS AVAILABLE. THE INFORMATION FROM THESE BORINGS WAS NOT INCLUDED IN THE SOIL SUMMARY. STRUCTURE BORINGS WERE DRILLED BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ARE DESIGNATED BY A "B" OR "N" PREFIX. SOME ROADWAY BORINGS BETWEEN STA. 351+00 AND 380+00 WERE DRILLED BY CTL ENGINEERING, INC., FOR A DIFFERENT PHASE OF THE PROJECT. THESE BORINGS ARE NOTED AS BEING DRILLED BY CTL.

INVESTIGATIONAL FINDINGS

THROUGHOUT THE PROJECT, THE PRIMARY SOIL TYPES ENCOUNTERED WERE SANDY SILT (A-4a) AND SILT AND CLAY (A-6a). LESSER AMOUNTS OF GRAVEL (A-1-a, A-1-b, A-2-4, A-2-6), SAND (A-3a), SILT (A-4b), SILTY CLAY (A-6b) AND CLAY (A-7-6) WERE ALSO ENCOUNTERED.

THE MAINLINE BORINGS DRILLED THROUGH EXISTING PAVEMENT GENERALLY ENCOUNTERED 2 TO 12 INCHES OF ASPHALT OVER 1 TO 8 INCHES OF AGGREGATE BASE. THE BORINGS FOR THE SERVICE ROADS AND RAMPS THAT WERE DRILLED THROUGH EXISTING PAVEMENT GENERALLY ENCOUNTERED 5 TO 9 INCHES OF ASPHALT OVER 3 TO 16 INCHES OF AGGREGATE BASE. BORINGS NOT DRILLED THROUGH EXISTING PAVEMENT TYPICALLY ENCOUNTERED UP TO 14 INCHES OF TOPSOIL WITH AN AVERAGE THICKNESS OF 5 TO 7 INCHES.

BEDROCK WAS ENCOUNTERED WITHIN THREE AREAS OF THE PROJECT. BEDROCK WAS ENCOUNTERED BY BORINGS DRILLED BY THE OHIO DEPARTMENT OF TRANSPORTATION FOR THE PROPOSED CULVERT AT SIMPSON'S RUN AND FOR THE PROPOSED BRIDGE AT MOOTS RUN. BEDROCK WAS ALSO ENCOUNTERED AROUND OUTVILLE ROAD BY BORINGS DRILLED FOR THE PROPOSED STRUCTURE AND ROADWAY BETWEEN STA. 497+00 AND 512+00.

THE STRUCTURE BORINGS FOR THE PROPOSED CULVERT AT SIMPSONS RUN ENCOUNTERED BEDROCK AT ELEVATIONS VARYING FROM 1017.1 TO 1019.0. THE BEDROCK CONSISTED OF BLACK SHALE AND SILTSTONE. THE RQD OF THE CORED SAMPLES VARIED FROM 6 TO 14%.

THE STRUCTURE BORINGS FOR THE PROPOSED BRIDGE AT MOOTS RUN ENCOUNTERED BEDROCK AT ELEVATIONS VARYING FROM 918.2 TO 958.7. THE BEDROCK GENERALLY CONSISTED OF GRAY SHALE, SILTSTONE, AND SANDSTONE. THE RQD OF THE CORED SAMPLES VARIED FROM 0 TO 48%. ADDITIONALLY A BEDROCK OUTCROP WAS NOTED ALONG THE WEST BANK OF MOOTS RUN NEAR THE PROPOSED BRIDGE ABUTMENT. THE OUTCROP CONSISTED OF A HARD TO VERY HARD SANDSTONE CAP AT EL 955.9 WITH OCCASIONAL SHALE OR HIGHLY ARGILLACEOUS BEDS, OVERLYING INTERBEDDED SANDSTONE AND SHALE.

BORINGS R-055 THROUGH R-058, RS-047 AND RS-048 ENCOUNTERED SEVERELY WEATHERED BEDROCK RANGING FROM EL 1018.1 TO 1001.1 AND CONSISTING OF BROWN AND GRAY SHALE WITH OCCASIONAL SANDSTONE FRAGMENTS. AT DEPTH THE BEDROCK BECAME MORE COMPETENT AND WAS SAMPLED BY CORING. THE INTACT BEDROCK CONSISTED PRIMARILY OF SHALE WITH INTERBEDDED SANDSTONE. THE SHALE WAS GENERALLY MEDIUM HARD TO HARD WITH THE SANDSTONE VARYING FROM HARD TO VERY HARD. GENERALLY, THE BEDROCK CORE WAS IN MODERATELY WEATHERED TO FRESH (UNWEATHERED) CONDITION WITH THE MAJORITY OF THE BEDROCK IN A SLIGHTLY WEATHERED CONDITION. THE RQD OF THE CORED SAMPLES RANGED FROM 0 TO 73% WITH AN AVERAGE RQD OF 28%.

SEEPAGE WAS ENCOUNTERED IN THE BORINGS THROUGHOUT THE PROJECT, GENERALLY AT DEPTHS GREATER THAN 5 FEET BELOW THE GROUND SURFACE. A TOTAL OF 64 BORINGS ENCOUNTERED SEEPAGE BETWEEN DEPTHS OF 1 AND 40 FEET BELOW THE GROUND SURFACE. SIXTY EIGHT BORINGS HAD MEASURABLE NATURAL WATER LEVELS UPON COMPLETION OF THE DRILLING ACTIVITIES. THESE WATER LEVELS RANGED FROM 1 TO 36 FEET BELOW THE GROUND SURFACE WITH AN AVERAGE DEPTH TO WATER OF 13 FEET. IT SHOULD BE NOTED THAT SEVERAL OF THE SEEPAGE ZONES ARE LOCATED WITHIN AREAS TO BE CUT FOR A BACKSLOPE AND ARE LOCATED ABOVE THE PROPOSED SUBGRADE ELEVATIONS.

DRAWN PAN
CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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PROJECT INDEX

STATION FROM	STATION TO	PLAN SHEET	PROFILE SHEET	CUT MAX.	FILL EMB. MAX.
LIC-161 MAINLINE					
345+00	357+50	12	12	18.0′	--
357+50	370+00	13	13	10.0′	--
370+00	382+50	14	14	16.0′	1.0′
382+50	395+00	15	15	15.0′	15.5′
395+00	407+50	16	16	--	16.0′
407+50	420+00	17	17	--	7.5′
420+00	432+50	18	18	7.0′	6.0′
432+50	445+00	19	19	7.5′	29.0′
445+00	457+50	20	20	5.5′	5.0′
457+50	467+50	21	21	3.5′	17.0′
467+50	477+50	22	22	19.5′	8.0′
477+50	490+00	23	23	20.0′	23.5′
490+00	502+50	24	24	33.5′	--
502+50	515+00	25	25	38.0′	--
515+00	527+50	26	26	15.5′	11.0′
527+50	540+00	27	27	21.0′	9.0′
540+00	552+50	28	28	16.5′	19.0′
552+50	565+00	29	29	11.0′	18.5′
565+00	577+50	30	30	3.0′	14.0′
577+50	590+00	31	31	--	13.0′
590+00	602+50	32	32	--	5.5′
602+50	615+00	33	33	1.0′	5.0′
615+00	627+50	34	34	1.0′	0.5′
627+50	640+00	35	35	--	5.0′
640+00	652+50	36	36	1.0′	5.0′
652+50	665+00	37	37	--	3.0′

STATION FROM	STATION TO	PLAN SHEET	PROFILE SHEET	CUT MAX.	FILL EMB. MAX.
RAMP I					
440+28	443+00	38	38	--	23.5′
443+00	451+88	39	39	--	27.0′
RAMP J					
450+22	461+00	40	40	8.5′	15.0′
461+00	470+16	41	41	7.5′	--
RAMP K					
431+41	441+00	42	42	1.5′	6.0′
441+00	451+61	43	43	1.5′	31.0′
RAMP L					
450+42	459+50	44	44	--	31.5′
459+50	462+33	45	45	--	11.0′
WATKINS-YORK FRONTAGE ROAD					
105+00	117+50	46	46	4.0′	8.5′
117+50	130+00	47	47	7.0′	14.5′
130+00	142+50	48	48	21.5′	23.0′
142+50	155+00	49	49	15.0′	14.0′
155+00	167+50	50	50	--	16.0′
167+50	180+00	51	51	2.0′	6.0′
180+00	192+50	52	52	6.0′	7.0′
192+50	205+00	53	53	17.5′	28.0′
205+00	212+25	54	54	4.5′	8.0′
SERVICE ROAD 10					
143+00	148+50	55	55	1.5′	2.0′
RELOCATED WORTHINGTON ROAD					
187+50	200+00	56	56	7.5′	3.0′
200+00	212+00	57	57	7.5′	14.5′
212+00	225+00	58	58	4.0′	14.0′
225+00	235+00	59	59	--	4.5′

STATION FROM	STATION TO	PLAN SHEET	PROFILE SHEET	CUT MAX.	FILL EMB. MAX.
S.R. 37					
393+29	403+00	60	60	--	16.0′
403+00	413+00	61	61	--	30.0′
413+00	421+25	62	62	--	16.5′
SERVICE ROAD 11					
212+50	226+00	63	63	1.5′	4.0′
226+00	237+00	64	64	7.0′	14.5′
237+00	243+17	65	65	--	6.5′
OUTVILLE ROAD					
18+00	29+00	66	66	--	1.5′
OUTVILLE-MORSE FRONTAGE ROAD					
497+32	503+50	67	67	24.0′	--
503+50	514+50	68	68	32.0′	--
514+50	525+50	69	69	32.5′	10.0′
525+50	536+50	70	70	35.0′	7.0′
536+50	547+50	71	71	35.5′	3.5′
547+50	558+50	72	72	18.0′	15.5′
558+50	569+50	73	73	18.5′	11.5′
569+50	580+50	74	74	3.0′	11.0′
580+50	584+40	75	75	--	2.5′
C.R. 539A EXTENSION					
297+00	302+50	76	76	--	7.0′
302+50	315+00	77	77	--	15.5′
315+00	327+50	78	78	4.5′	14.0′
327+50	340+00	79	79	--	20.0′
340+00	352+50	80	80	--	14.5′
352+50	364+40	81	81	--	13.5′
MORSE ROAD					
8+50	18+61	82	82	10.5′	5.0′

DRAWN PAN
CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 MAINLINE

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-100	364+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 13.0	3	8	18	39	32	27	10	16	A-4a *
		13.0 - 20.0	2	8	18	38	35	31	15	19	A-6a
R-098	368+00	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 13.5	9	10	21	40	22	22	9	11	A-4a *
		13.5 - 20.0	14	9	18	38	21	24	9	11	A-4a
R-097	372+00	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 3.0	BROWN SILT AND CLAY, VISUAL								A-6a *
		3.0 - 6.0	7	8	18	38	30	27	9	15	A-4a
		6.0 - 15.0	2	5	18	37	38	29	12	21	A-6a
R-096	378+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 3.0	8	2	6	61	24	NP	NP	21	A-4b *
		3.0 - 8.0	GRAY SILTY CLAY, VISUAL								A-6b
		8.0 - 13.0	15	11	24	34	16	NP	NP	9	A-4a
		13.0 - 20.0	36	28	20	- 16 -		NP	NP	6	A-1-b
R-095	382+00	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 4.5	BROWN SILT AND CLAY, VISUAL								A-6a
		4.5 - 6.0	BROWN SANDY SILT, VISUAL								A-4a
		6.0 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 23.5	11	13	17	39	20	22	8	11	A-4a *
		23.5 - 28.9	15	10	18	37	21	20	6	10	A-4a
R-094	386+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
		8.0 - 15.5	GRAY SILTY CLAY, VISUAL								A-6b *
		15.5 - 18.0	55	23	10	12		NP	NP	11	A-1-a
		18.0 - 25.0	15	11	18	36	20	20	6	12	A-4a
R-093	390+00	0.0 - 8.0	1	4	13	40	43	36	19	20	A-6b *
	CL	8.0 - 10.5	30	27	12	17	15	34	16	21	A-2-6
		10.5 - 15.0	10	10	18	40	22	22	8	11	A-4a
R-092	394+00	0.0 - 16.0	8	9	16	44	23	20	5	12	A-4a
	CL	16.0 - 20.0	10	10	18	39	22	20	7	10	A-4a
R-091	398+00	0.0 - 7.5	5	8	16	38	32	24	8	13	A-4a
	CL	7.5 - 20.0	4	9	16	41	29	26	10	12	A-4a
R-090	402+00	0.0 - 0.1	TOPSOIL								VISUAL
	CL	0.1 - 6.0	0	8	17	42	33	27	10	17	A-4a
		6.0 - 20.0	13	10	19	37	21	20	7	10	A-4a
R-089	406+00	0.0 - 3.0	0	2	7	61	30	27	5	26	A-4b
	CL	3.0 - 6.0	0	1	8	67	24	27	8	27	A-4b
		6.0 - 15.0	10	7	15	39	29	23	7	16	A-4a
R-088	410+00	0.0 - 4.5	3	8	16	42	32	28	12	14	A-6a *
	CL	4.5 - 10.0	3	7	16	41	32	27	10	14	A-4a
R-087	414+00	0.0 - 6.0	3	9	16	41	31	28	12	14	A-6a *
	CL	6.0 - 10.0	5	7	17	38	34	26	10	14	A-4a
R-086	418+00	0.0 - 6.0	16	7	14	35	29	29	12	13	A-6a *
	CL	6.0 - 10.0	6	6	14	41	33	28	11	13	A-6a
R-085	422+00	0.0 - 1.5	9	4	16	50	23	NP	NP	22	A-4b *
	CL	1.5 - 8.0	5	5	18	37	35	36	18	20	A-6b
		8.0 - 10.0	BROWN SILT AND CLAY, VISUAL							16	A-6a
R-084	426+00	0.0 - 1.5	19	7	17	36	21	NP	NP	15	A-4a *
	CL	1.5 - 4.5	1	4	19	42	34	35	15	20	A-6a
		4.5 - 10.5	14	9	18	33	26	26	9	13	A-4a
		10.5 - 15.0	5	8	16	39	31	26	12	12	A-6a
R-083	430+20	0.0 - 3.0	2	6	15	41	36	34	16	22	A-6b *
	CL	3.0 - 6.0	6	11	18	38	27	23	8	14	A-4a
		6.0 - 10.0	BROWN SANDY SILT, VISUAL							15	A-4a
R-082	433+00	0.0 - 0.6	TOPSOIL								VISUAL
	70.0 Lt.	0.6 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a *
		10.5 - 13.0	GRAY SILT AND CLAY, VISUAL								A-6a
		13.0 - 18.0	25	19	19	25	13	22	8	10	A-4a
		18.0 - 23.0	GRAY SILT AND CLAY, VISUAL							14	A-6a
		23.0 - 25.0	GRAY SANDY SILT, VISUAL							16	A-4a
R-081	435+00	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 1.5	6	5	14	51	24	28	7	21	A-4b *
		1.5 - 10.0	2	3	15	43	37	35	17	17	A-6b
R-080	438+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 4.5	21	8	35	26	11	NP	NP	18	A-4a
		4.5 - 8.5	18	11	16	34	21	25	10	12	A-4a
		8.5 - 13.0	17	11	17	33	22	22	7	11	A-4a
		13.0 - 18.0	9	15	48	- 28 -		NP	NP	13	A-3a
		18.0 - 25.0	7	12	19	35	26	23	9	11	A-4a
R-079	442+00	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 1.5	2	6	27	54	11	NP	NP	34	A-4b
		1.5 - 6.0	31	18	19	18	14	28	9	9	A-2-4
		6.0 - 23.0	18	10	17	35	21	24	10	10	A-4a
		23.0 - 23.8	SEVERELY WEATHERED GRAY SHALE								VISUAL
R-078	444+00	0.0 - 0.3	TOPSOIL								VISUAL
	137.0 Lt.	0.3 - 6.0	4	15	38	30	14	24	7	26	A-4a
		6.0 - 15.0	23	11	17	30	19	22	8	11	A-4a
R-076	444+00	0.0 - 0.4	TOPSOIL								VISUAL
	55.0 Rt.	0.4 - 3.0	BROWN SANDY SILT, VISUAL								A-4a *
		3.0 - 8.0	0	4	17	44	35	32	16	13	A-6b
		8.0 - 13.0	4	9	16	42	29	28	11	13	A-6a
		13.0 - 15.0	BROWN COARSE AND FINE SAND, VISUAL							9	A-3a
R-075	448+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 1.5	11	6	15	42	27	42	26	14	A-7-6 *
		1.5 - 10.0	3	5	18	37	37	33	17	15	A-6b
R-074	454+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 4.5	BROWN SILT AND CLAY, VISUAL								A-6a *
		4.5 - 12.5	3	16	24	37	21	19	5	12	A-4a
		12.5 - 15.5	11	10	21	36	21	21	7	10	A-4a
		15.5 - 18.0	BROWN GRAVEL, VISUAL							5	A-1-a
		18.0 - 20.0	BROWN FINE SAND, VISUAL							11	A-3
R-073	457+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 4.5	BROWN SANDY SILT, VISUAL								A-4a *
		4.5 - 6.0	BROWN SILT AND CLAY, VISUAL								A-6a
		6.0 - 8.0	6	8	37	34	16	NP	NP	15	A-4a
		8.0 - 15.0	10	12	21	33	24	23	8	14	A-4a
R-072	460+00	0.0 - 0.9	TOPSOIL								VISUAL
	88.0 Lt.	0.9 - 6.0	3	15	18	32	32	37	18	22	A-6b *
		6.0 - 15.0	16	19	20	31	15	24	8	11	A-4a
R-071	460+00	0.0 - 0.9	0	5	15	58	23	NP	NP	27	A-4b
	50.0 Rt.	0.9 - 3.0	13	16	18	30	24	29	12	17	A-6a
		3.0 - 8.0	6	6	17	33	38	31	14	17	A-6a
		8.0 - 10.0	25	19	16	29	10	NP	NP	15	A-4a
R-070	463+00	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 1.5	48	8	15	24	5	NP	NP	18	A-2-4
		1.5 - 8.0	25	17	20	24	14	20	6	9	A-4a
		8.0 - 13.0	49	21	12	- 17 -		NP	NP	13	A-1-b
		13.0 - 20.0	5	14	18	36	27	26	10	15	A-4a
R-069	465+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 4.5	BROWN SANDY SILT, VISUAL								A-4a *
		4.5 - 12.5	5	10	22	49	13	22	8	10	A-4a
		12.5 - 18.0	19	24	16	33	9	27	10	15	A-4a
		18.0 - 20.0	GRAY SILTY CLAY, VISUAL							11	A-6b
R-068	469+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a *
		8.0 - 15.0	14	12	20	43	13	23	8	11	A-4a
		15.0 - 23.0	22	14	16	36	12	25	10	11	A-4a
		23.0 - 25.0	GRAY GRAVEL, VISUAL							9	A-1-a
R-067	470+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 1.5	41	10	14	30	5	NP	NP	27	A-2-4
		1.5 - 3.0	56	18	15	- 11 -		NP	NP	11	A-1-a
		3.0 - 10.0	10	18	15	42	15	24	7	16	A-4a
R-066	474+00	0.0 - 3.0	BROWN SILT AND CLAY, VISUAL								A-6a
	CL	3.0 - 6.0	BROWN SANDY SILT, VISUAL								A-4a
		6.0 - 8.0	BROWN COARSE AND FINE SAND, VISUAL								A-3a
		8.0 - 11.0	BROWN SANDY SILT, VISUAL								A-4a
		11.0 - 22.5	17	12	18	33	21	22	8	13	A-4a *
		22.5 - 25.5	15	10	17	36	23	24	10	13	A-4a
		25.5 - 30.0	GRAY COARSE AND FINE SAND, VISUAL								A-3a

DRAWN PAN CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 MAINLINE

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-065	478+00	0.0 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
	CL	8.0 - 13.0	BROWN SANDY SILT, VISUAL								A-4a
		13.0 - 20.5	BROWN SILT AND CLAY, VISUAL								A-6a *
		20.5 - 28.0	44	20	12	18	6	NP	NP	16	A-1-b
		28.0 - 32.0	33	27	13	20	7	NP	NP	18	A-2-4
		32.0 - 35.0	GRAY SILTY CLAY, VISUAL							12	A-6b
R-063	481+00	0.0 - 0.7	TOPSOIL								VISUAL
	104.0 Rt.	0.7 - 6.0	0	1	18	59	21	33	10	16	A-4b
		6.0 - 10.5	6	11	18	40	25	27	11	11	A-6a
		10.5 - 15.5	57	15	8	- 20 -		NP	NP	8	A-1-b
		15.5 - 20.0	5	13	22	43	18	25	9	12	A-4a
		20.0 - 25.0	11	9	20	43	17	24	10	11	A-4a
R-064	481+20	0.0 - 0.3	TOPSOIL								VISUAL
	55.0 Lt.	0.3 - 3.0	0	2	5	69	24	37	12	32	A-6a *
		3.0 - 8.0	0	0	7	56	37	39	18	24	A-6b
		8.0 - 10.0	GRAY SANDY SILT, VISUAL							10	A-4a
R-061	488+50	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 4.5	5	8	20	48	19	33	11	15	A-6a
		4.5 - 10.5	4	4	21	41	30	32	16	13	A-6b
		10.5 - 23.0	4	6	17	47	26	24	9	10	A-4a
		23.0 - 25.0	0	1	4	35	59	36	15	19	A-6a
R-060	491+50	0.0 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
	CL	3.0 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 23.0	GRAY AND BROWN SILTY CLAY, VISUAL								A-6b
		23.0 - 32.0	BROWN SILT AND CLAY, VISUAL								A-6a *
		32.0 - 37.0	3	11	71	- 15 -		NP	NP	26	A-3a
		37.0 - 40.0	31	14	18	- 37 -		NP	NP	15	A-4a
R-059	494+00	0.0 - 4.5	BROWN SANDY SILT, VISUAL								A-4a
	CL	4.5 - 15.5	BROWN SILT AND CLAY, VISUAL								A-6a
		15.5 - 25.5	GRAY SANDY SILT, VISUAL								A-4a *
		25.5 - 28.0	BROWN SILT AND CLAY, VISUAL								A-6a
		28.0 - 32.0	GRAY CLAY, VISUAL								A-7-6
		32.0 - 37.0	GRAY GRAVEL, VISUAL								A-1-a
		37.0 - 40.0	8	6	17	49	20	21	6	15	A-4a
R-058	500+00	0.0 - 15.5	BROWN SILT AND CLAY, VISUAL								A-6a
	CL	15.5 - 18.0	BROWN FINE SAND, VISUAL								A-3
		18.0 - 20.5	GRAY SILTY CLAY, VISUAL								A-6b
		20.5 - 30.0	SEVERELY WEATHERED BROWN SHALE							7	VISUAL *
		30.0 - 35.6	INTERBEDDED SANDSTONE AND SHALE								VISUAL
		35.6 - 40.9	GRAY SANDSTONE								VISUAL
		40.9 - 45.0	INTERBEDDED SANDSTONE AND SHALE								VISUAL

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-057	504+00	0.0 - 3.0	BROWN SILT, VISUAL								A-4b
	CL	3.0 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 13.0	4	10	18	38	30	22	8	13	A-4a
		13.0 - 20.0	SEVERELY WEATHERED GRAY SHALE							7	VISUAL
		20.0 - 30.0	GRAY SHALE								VISUAL
		30.0 - 40.8	BROWNISH GRAY SANDSTONE								VISUAL *
		40.8 - 44.1	INTERBEDDED SANDSTONE AND SHALE								VISUAL
		44.1 - 46.9	GRAYISH BROWN SANDSTONE								VISUAL
		46.9 - 50.0	INTERBEDDED SANDSTONE AND SHALE								VISUAL
R-056	508+00	0.0 - 3.0	5	13	16	32	34	32	13	15	A-6a
	CL	3.0 - 10.5	2	4	48	23	23	24	7	21	A-4a
		10.5 - 13.5	1	2	8	58	31	36	14	15	A-6a
		13.5 - 25.0	SEVERELY WEATHERED BROWN SHALE								VISUAL
		25.0 - 45.0	GRAY SHALE								VISUAL *
R-055	512+00	0.0 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
	CL	8.0 - 13.0	GRAY SILTY CLAY, VISUAL								A-6b *
		13.0 - 18.0	GRAY CLAY, VISUAL								A-7-6
		18.0 - 30.0	SEVERELY WEATHERED GRAY SHALE							12	VISUAL
R-054	516+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 10.5	LIGHT BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 23.0	33	11	14	28	14	22	8	8	A-4a *
		23.0 - 30.0	19	9	17	34	23	25	10	11	A-4a
R-053	520+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
		8.0 - 13.0	BROWN SILTY CLAY, VISUAL								A-6b *
		13.0 - 20.5	GRAY SILT AND CLAY, VISUAL								A-6a
		20.5 - 23.0	5	15	25	36	20	22	6	13	A-4a
		23.0 - 25.5	12	8	17	37	26	27	13	13	A-6a
		25.5 - 28.0	BROWN GRAVEL, VISUAL							7	A-1-a
		28.0 - 30.0	GRAY SILT AND CLAY, VISUAL							10	A-6a
R-052	524+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 4.5	2	8	21	35	34	36	18	28	A-6b
		4.5 - 15.0	2	9	18	43	29	25	9	13	A-4a
R-051	529+00	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 1.5	0	1	9	58	32	39	15	23	A-6a
		1.5 - 8.0	0	1	7	55	38	41	24	27	A-7-6
		8.0 - 15.0	7	9	17	41	26	24	8	14	A-4a
R-050	531+50	0.0 - 1.1	0	1	11	60	28	48	18	33	A-7-5
	CL	1.1 - 6.0	1	3	20	51	25	25	9	26	A-4b
		6.0 - 10.0	4	4	18	54	20	24	6	30	A-4b
R-048	536+50	0.0 - 0.3	TOPSOIL								VISUAL
	48.0 Lt.	0.3 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 13.0	GRAY GRAVEL, VISUAL								A-1-a *
		13.0 - 15.5	BROWN COARSE AND FINE SAND, VISUAL								A-3a
		15.5 - 17.5	57	23	12	- 9 -		NP	NP	11	A-1-a
		17.5 - 25.0	73	11	6	- 10 -		NP	NP	10	A-1-a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-047	538+50	0.0 - 0.3	TOPSOIL								VISUAL
	19.0 Lt.	0.3 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 13.0	3	6	17	41	34	31	13	19	A-6a *
		13.0 - 15.5	2	3	9	63	23	22	5	17	A-4b
		15.5 - 20.0	GRAY SANDY SILT, VISUAL							10	A-4a
R-046	541+50	0.0 - 0.2	TOPSOIL								VISUAL
	72.0 Lt.	0.2 - 2.5	7	10	18	47	19	30	7	17	A-4a
		2.5 - 3.0	31	37	18	- 14 -		NP	NP	15	A-1-b
		3.0 - 4.5	12	15	23	32	18	25	8	9	A-4a
		4.5 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
		8.0 - 10.5	0	13	72	- 15 -		NP	NP	23	A-3a
		10.5 - 15.0	8	8	20	38	27	29	13	13	A-6a
R-045	541+90	0.0 - 0.8	TOPSOIL								VISUAL
	7.0 Rt.	0.8 - 6.5	8	16	24	37	16	23	6	9	A-4a
		6.5 - 15.0	15	10	19	36	20	23	7	9	A-4a
R-044	543+50	0.0 - 0.5	TOPSOIL								VISUAL
	20.0 Rt.	0.5 - 9.5	BROWN SILT AND CLAY, VISUAL								A-6a
		9.5 - 19.5	BROWN GRAVEL WITH SAND, VISUAL								A-1-b *
		19.5 - 22.0	2	8	22	51	17	21	5	17	A-4b
		22.0 - 26.0	1	24	18	34	23	23	8	11	A-4a
		26.0 - 28.0	BROWN GRAVEL WITH SAND, VISUAL							8	A-1-b
		28.0 - 30.0	BROWN SANDY SILT, VISUAL							15	A-4a
R-043	546+75	0.0 - 1.1	TOPSOIL								VISUAL
	90.0 Rt.	1.1 - 4.5	BROWN SANDY SILT, VISUAL								A-4a
		4.5 - 13.0	BROWN SILT AND CLAY, VISUAL								A-6a
		13.0 - 15.5	BROWN GRAVEL WITH SAND, VISUAL								A-1-b
		15.5 - 18.0	BROWN SILTY CLAY, VISUAL								A-6b
		18.0 - 23.0	BROWN SANDY SILT, VISUAL								A-4a
		23.0 - 25.5	GRAY SILT, VISUAL								A-4b *
		25.5 - 31.0	GRAY SILTY CLAY, VISUAL								A-6b
		31.0 - 40.0	36	21	21	- 22 -		NP	NP	9	A-1-b
R-042	550+02	0.0 - 0.3	TOPSOIL								VISUAL
	10.0 Lt.	0.3 - 3.0	1	6	21	55	18	34	9	26	A-4b
		3.0 - 20.0	2	7	18	43	31	25	9	16	A-4a
R-041	554+00	0.0 - 0.8	TOPSOIL								VISUAL
	CL	0.8 - 7.5	4	7	21	40	28	32	14	24	A-6a
		7.5 - 13.0	11	8	23	35	23	30	13	21	A-6a
		13.0 - 15.5	31	26	14	18	12	28	10	20	A-2-4
		15.5 - 25.0	GRAY SILT AND CLAY, VISUAL								A-6a
R-040	558+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 3.0	3	7	14	40	36	37	19	14	A-6b
		3.0 - 6.0	10	11	17	42	21	31	11	14	A-6a
		6.0 - 10.5	0	2	11	46	41	42	19	27	A-7-6
		10.5 - 13.5	0	0	6	53	41	26	9	22	A-4b
		13.5 - 15.0	0	6	25	48	21	22	6	18	A-4a
		15.0 - 25.0	4	5	16	44	31	25	9	15	A-4a

DRAWN PAN CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 MAINLINE

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-039	561+00	0.0 - 0.3	TOPSOIL								VISUAL
	9.0 Rt.	0.3 - 4.5	5	11	21	42	21	22	7	11	A-4a *
		4.5 - 8.0	11	15	22	35	17	20	5	5	A-4a
		8.0 - 10.0	BROWN GRAVEL, VISUAL							6	A-1-a
R-038	563+46	0.0 - 0.2	TOPSOIL								VISUAL
	21.0 Lt.	0.2 - 8.0	42	20	22	- 16 -		NP	NP	9	A-1-b *
		8.0 - 15.0	64	16	10	- 10 -		NP	NP	7	A-1-a
R-037	566+00	0.0 - 0.5	TOPSOIL								VISUAL
	17.0 Lt.	0.5 - 4.5	24	12	20	30	15	23	8	12	A-4a *
		4.5 - 8.0	14	15	21	23	27	38	19	19	A-6b
		8.0 - 10.5	BROWN SANDY SILT, VISUAL							11	A-4a
		10.5 - 15.0	BROWN FINE SAND, VISUAL							9	A-3
R-036	570+00	0.0 - 0.5	TOPSOIL								VISUAL
	18.0 Rt.	0.5 - 1.5	71	15	6	- 8 -		NP	NP	4	A-1-a *
		1.5 - 3.0	20	16	21	33	11	NP	NP	13	A-4a
		3.0 - 10.0	0	2	6	56	37	34	16	22	A-6b
R-035	579+00	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 4.5	6	3	21	53	17	32	11	17	A-6a
		4.5 - 8.0	52	24	14	- 11 -		NP	NP	12	A-1-a
		8.0 - 10.5	21	14	20	29	16	26	9	24	A-4a
		10.5 - 13.0	27	27	24	- 23 -		NP	NP	27	A-1-b
		13.0 - 15.0	0	1	14	72	13	23	3	23	A-4b
		15.0 - 20.0	1	3	14	65	17	25	6	23	A-4b
R-034	582+00	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 1.5	24	20	16	23	17	31	13	12	A-6a
		1.5 - 3.0	SANDSTONE FRAGMENTS								VISUAL
		3.0 - 15.0	51	27	8	- 14 -		NP	NP	24	A-1-a
R-033	586+00	0.0 - 0.2	TOPSOIL								VISUAL
	CL	0.2 - 4.5	38	8	13	23	18	28	12	10	A-6a
		4.5 - 6.0	25	3	7	42	22	35	15	24	A-6a
		6.0 - 8.5	1	5	35	35	24	27	12	24	A-6a
		8.5 - 10.5	6	7	19	42	27	32	14	21	A-6a
		10.5 - 15.0	65	17	6	- 13 -		NP	NP	17	A-1-a
R-032	590+00	0.0 - 0.8	TOPSOIL								VISUAL
	50.0 Lt.	0.8 - 6.0	8	2	9	56	25	46	27	42	A-7-6
		6.0 - 11.0	47	25	11	- 18 -		NP	NP	17	A-1-b
		11.0 - 13.0	25	39	19	14	3	NP	NP	15	A-1-b
		13.0 - 20.0	46	15	10	- 29 -		NP	NP	17	A-2-4
R-031	590+00	0.0 - 0.3	TOPSOIL								VISUAL
	14.0 Rt.	0.3 - 4.5	37	21	16	15	11	24	8	9	A-2-4 *
		4.5 - 6.0	28	19	15	25	14	25	9	12	A-4a
		6.0 - 8.0	43	21	15	13	9	22	6	8	A-1-b
		8.0 - 10.5	20	9	17	31	24	34	13	26	A-6a
		10.5 - 15.0	44	24	13	14	6	NP	NP	17	A-1-b
R-030	594+00	0.0 - 0.2	TOPSOIL								VISUAL
	55.0 Lt.	0.2 - 6.0	41	21	16	10	13	28	11	12	A-2-6
		6.0 - 8.0	1	3	4	65	27	51	31	36	A-7-6
		8.0 - 10.0	0	0	4	60	36	38	18	25	A-6b
R-029	594+00	0.0 - 1.4	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	9.5 Rt.	1.4 - 2.5	3	8	15	49	26	28	9	19	A-4a
		2.5 - 8.0	4	11	21	37	27	30	14	14	A-6a
		8.0 - 10.0	34	20	14	21	11	26	9	13	A-2-4
R-028	598+00	0.0 - 0.3	TOPSOIL								VISUAL
	40.0 Lt.	0.3 - 3.0	9	8	20	31	33	38	22	17	A-6b
		3.0 - 4.5	34	20	13	15	18	38	18	19	A-2-6
		4.5 - 8.0	36	18	11	20	15	--	--	17	A-2-6
		8.0 - 15.0	32	9	16	30	12	18	5	11	A-4a
R-027	598+00	0.0 - 1.2	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	5.0 Rt.	1.2 - 4.0	16	10	17	33	24	27	11	14	A-6a
		4.0 - 8.0	27	11	18	29	16	25	8	12	A-4a
		8.0 - 10.0	59	17	9	- 14 -		NP	NP	6	A-1-a
R-026	602+00	0.0 - 0.3	TOPSOIL								VISUAL
	55.0 Lt.	0.3 - 1.5	31	24	16	20	10	26	6	6	A-2-4
		1.5 - 3.0	0	1	6	60	32	37	13	23	A-6a
		3.0 - 6.0	0	4	5	52	40	37	16	23	A-6b
		6.0 - 13.0	0	1	53	31	15	NP	NP	24	A-4a
		13.0 - 17.0	4	39	43	9	5	NP	NP	27	A-3a
		17.0 - 20.5	GRAY SILT, VISUAL								A-4b
		20.5 - 21.8	2	34	50	10	4	NP	NP	17	A-3a
		21.8 - 23.5	0	0	4	71	25	27	6	30	A-4b
		23.5 - 30.0	0	0	1	74	25	29	8	31	A-4b
R-025	602+00	0.0 - 1.5	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	7.0 Rt.	1.5 - 4.0	9	10	18	37	26	33	15	16	A-6a
		4.0 - 10.0	27	4	10	40	19	27	8	15	A-4a
R-024	606+00	0.0 - 0.2	TOPSOIL								VISUAL
	50.0 Lt.	0.2 - 4.5	10	11	19	35	26	29	12	12	A-6a
		4.5 - 6.0	5	10	18	40	26	29	12	15	A-6a
		6.0 - 10.0	0	4	53	31	12	NP	NP	13	A-4a
R-023	606+00	0.0 - 0.3	TOPSOIL								VISUAL
	11.0 Rt.	0.3 - 3.0	14	12	18	35	20	24	8	9	A-4a *
		3.0 - 6.0	11	5	14	43	26	26	9	14	A-4a
		6.0 - 10.0	18	10	19	33	21	28	10	12	A-4a
R-022	610+00	0.0 - 0.2	TOPSOIL								VISUAL
	55.0 Lt.	0.2 - 3.0	22	11	32	23	12	21	4	7	A-2-4
		3.0 - 4.5	13	12	20	31	25	33	14	17	A-6a
		4.5 - 10.0	0	0	31	47	22	27	9	22	A-4a
R-021	610+00	0.0 - 0.2	TOPSOIL								VISUAL
	15.0 Rt.	0.2 - 1.5	18	10	21	32	20	25	9	11	A-4a *
		1.5 - 3.0	24	14	19	27	16	24	7	10	A-4a
		3.0 - 10.0	19	13	17	30	21	30	12	13	A-6a
R-020	614+00	0.0 - 0.2	TOPSOIL								VISUAL
	50.0 Lt.	0.2 - 6.0	14	10	21	33	22	27	10	12	A-4a
		6.0 - 9.0	4	25	33	20	18	NP	NP	18	A-4a
		9.0 - 10.5	21	13	18	28	20	30	12	20	A-6a
		10.5 - 15.0	33	14	31	16	6	NP	NP	27	A-2-4
R-019	614+00	0.0 - 0.2	TOPSOIL								VISUAL
	16.0 Rt.	0.2 - 1.5	30	8	19	27	16	23	8	9	A-4a
		1.5 - 4.5	22	12	19	29	18	25	9	10	A-4a *
		4.5 - 7.5	6	12	20	38	24	23	8	11	A-4a
		7.5 - 13.0	18	21	16	28	17	25	8	13	A-4a
		13.0 - 15.0	26	21	18	19	16	26	10	15	A-2-4
R-018	618+00	0.0 - 0.3	TOPSOIL								VISUAL
	50.0 Lt.	0.3 - 3.0	BROWN SILT AND CLAY, VISUAL								A-6a
		3.0 - 4.5	2	7	16	52	23	25	6	18	A-4b
		4.5 - 8.0	0	0	11	72	17	27	6	27	A-4b
		8.0 - 10.5	0	0	32	55	13	NP	NP	34	A-4b
		10.5 - 13.0	1	13	67	- 19 -		NP	NP	24	A-3a
		13.0 - 15.0	58	13	13	- 17 -		NP	NP	11	A-1-b
R-017	618+00	0.0 - 0.3	TOPSOIL								VISUAL
	17.0 Rt.	0.3 - 4.5	8	11	20	38	22	22	7	9	A-4a *
		4.5 - 6.0	5	13	20	38	24	--	--	11	A-6a
		6.0 - 15.0	4	7	18	42	30	31	14	16	A-6a
R-016	622+00	0.0 - 0.2	TOPSOIL								VISUAL
	50.0 Lt.	0.2 - 3.0	16	9	18	33	24	28	12	12	A-6a
		3.0 - 8.5	0	0	10	73	17	25	6	18	A-4b
		8.5 - 10.0	3	5	53	- 39 -		NP	NP	--	A-4a
		10.0 - 13.0	0	6	42	42	10	NP	NP	--	A-4a
		13.0 - 15.0	66	14	15	- 5 -		NP	NP	14	A-1-a
R-015	622+00	0.0 - 0.7	ASPHALT CONCRETE								VISUAL
	20.0 Rt.	0.7 - 5.8	5	13	18	40	24	25	11	11	A-6a *
		5.8 - 11.5	8	3	17	44	28	30	13	15	A-6a
		11.5 - 13.5	9	9	24	40	18	NP	NP	21	A-4a
		13.5 - 15.0	0	1	57	33	9	NP	NP	15	A-4a
R-014	626+00	0.0 - 0.3	TOPSOIL								VISUAL
	45.0 Lt.	0.3 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 4.5	1	1	21	57	20	28	6	23	A-4b
		4.5 - 8.0	0	0	19	58	23	33	13	29	A-6a
		8.0 - 10.5	0	8	64	- 28 -		NP	NP	36	A-3a
		10.5 - 15.0	52	16	23	- 9 -		NP	NP	25	A-1-b
R-013	626+00	0.0 - 0.2	TOPSOIL								VISUAL
	15.0 Rt.	0.2 - 3.0	18	17	18	31	16	25	8	10	A-4a *
		3.0 - 4.5	6	9	17	37	31	31	15	16	A-6a
		4.5 - 8.0	16	9	18	35	22	24	8	12	A-4a
		8.0 - 13.7	33	10	10	29	18	30	13	13	A-6a

DRAWN PAN CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 MAINLINE AND SERVICE ROADS

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-012	630+00	0.0 - 0.2	TOPSOIL								VISUAL
	35.0 Lt.	0.2 - 1.5	0	2	8	58	32	40	19	23	A-6b
		1.5 - 6.0	0	1	33	49	17	25	5	18	A-4a
		6.0 - 10.5	0	0	5	66	29	36	14	32	A-6a
		10.5 - 13.0	11	43	41	- 5 -		NP	NP	29	A-1-b
		13.0 - 30.0	0	0	3	75	22	29	7	35	A-4b
		30.0 - 40.0	0	0	1	78	21	24	4	23	A-4b
R-011	630+00	0.0 - 0.2	TOPSOIL								VISUAL
	16.0 Rt.	0.2 - 6.0	10	9	23	37	21	25	9	12	A-4a *
		6.0 - 8.0	9	14	21	35	21	26	10	14	A-4a
		8.0 - 10.5	BROWN SILT AND CLAY, VISUAL							14	A-6a
		10.5 - 13.0	GRAY SILT AND CLAY, VISUAL							21	A-6a
		13.0 - 15.0	0	0	25	28	47	NP	NP	28	A-4a
R-010	634+00	0.0 - 4.5	0	2	4	43	51	42	19	24	A-7-6
	38.0 Lt.	4.5 - 8.0	0	0	4	60	36	40	21	26	A-6b
		8.0 - 10.0	BROWN SANDY SILT, VISUAL							11	A-4a
R-009	634+00	0.0 - 0.4	TOPSOIL								VISUAL
	15.0 Rt.	0.4 - 4.5	8	16	20	32	25	25	9	10	A-4a *
		4.5 - 8.5	10	14	23	36	18	25	8	14	A-4a
		8.5 - 15.0	0	1	3	48	48	39	17	24	A-6b
R-008	638+00	0.0 - 1.0	TOPSOIL								VISUAL
	35.0 Lt.	1.0 - 1.5	2	4	12	47	35	41	15	25	A-7-6
		1.5 - 4.5	0	3	4	41	52	45	22	23	A-7-6
		4.5 - 8.0	0	1	6	67	26	32	12	26	A-6a
		8.0 - 10.0	10	6	34	41	9	NP	NP	18	A-4a
R-007	638+00	0.0 - 0.2	TOPSOIL								VISUAL
	16.0 Rt.	0.2 - 4.5	16	20	20	26	18	22	6	7	A-4a *
		4.5 - 6.0	14	16	20	31	20	25	7	10	A-4a
		6.0 - 11.0	0	3	12	55	29	35	13	23	A-6a
		11.0 - 15.0	0	1	4	42	54	46	23	25	A-7-6
R-006	642+00	0.0 - 0.8	TOPSOIL								VISUAL
	24.0 Lt.	0.8 - 1.5	0	3	7	45	45	50	23	26	A-7-6
		1.5 - 4.5	0	4	6	36	54	54	32	25	A-7-6
		4.5 - 7.5	0	1	9	72	18	NP	NP	23	A-4b
		7.5 - 10.5	5	2	13	64	15	NP	NP	24	A-4b
		10.5 - 15.0	0	0	3	61	36	26	8	24	A-4b
R-005	642+00	0.0 - 0.3	TOPSOIL								VISUAL
	14.0 Rt.	0.3 - 1.5	BROWN SILT AND CLAY, VISUAL							10	A-6a *
		1.5 - 4.5	17	11	16	35	22	26	9	11	A-4a
		4.5 - 10.0	18	7	21	35	19	26	9	12	A-4a
R-004	646+00	0.0 - 1.0	TOPSOIL								VISUAL
	50.0 Lt.	1.0 - 1.5	0	1	8	55	36	48	18	35	A-7-5
		1.5 - 3.0	0	0	1	33	66	51	30	27	A-7-6
		3.0 - 6.0	0	0	14	66	20	27	7	28	A-4b
		6.0 - 10.5	7	8	17	52	16	25	5	24	A-4b
		10.5 - 15.0	7	3	7	36	47	31	12	22	A-6a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
R-003	646+00	0.0 - 1.5	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	23.0 Rt.	1.5 - 2.5	45	19	13	15	8	22	5	8	A-1-b
		2.5 - 6.0	12	15	15	35	23	24	7	17	A-4a
		6.0 - 8.5	8	15	20	35	22	26	9	10	A-4a
		8.5 - 10.0	13	9	22	40	16	26	8	14	A-4a
R-002	650+00	0.0 - 0.2	TOPSOIL								VISUAL
	CL	0.2 - 3.0	15	7	20	37	21	27	10	13	A-4a *
		3.0 - 10.0	10	12	20	37	21	26	9	13	A-4a
R-001	654+00	0.0 - 0.2	TOPSOIL								VISUAL
	CL	0.2 - 3.0	7	4	16	51	22	28	9	16	A-4b *
		3.0 - 4.5	1	2	22	50	25	31	12	19	A-6a
		4.5 - 6.0	BROWN SANDY SILT, VISUAL							19	A-4a
		6.0 - 10.0	0	3	13	55	29	28	11	21	A-6a
SERVICE ROAD 10											
RS-116	143+40	0.0 - 0.7	TOPSOIL								VISUAL
	5.0 Rt.	0.7 - 1.5	0	2	5	66	27	27	7	24	A-4b *
		1.5 - 10.0	7	4	15	39	35	34	16	17	A-6b
RS-115	145+75	0.0 - 0.5	TOPSOIL								VISUAL
	5.0 Lt.	0.5 - 1.5	BROWN SILT, VISUAL							25	A-4b
		1.5 - 3.0	0	3	9	48	40	40	20	22	A-6b *
		3.0 - 6.0	6	8	12	45	30	26	10	13	A-4a
		6.0 - 8.5	BROWN SILT AND CLAY, VISUAL							17	A-6a
		8.5 - 10.0	GRAY SILTY CLAY, VISUAL							14	A-6b
RS-114	148+50	0.0 - 3.0	1	6	16	40	37	31	16	8	A-6b *
	15.0 Lt.	3.0 - 10.0	14	9	15	34	29	28	12	13	A-6a
WATKINS-YORK FRONTAGE ROAD											
RS-108	137+31	0.0 - 1.5	BROWN GRAVEL WITH SAND, VISUAL								A-1-b
	11.0 Rt.	1.5 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 23.0	BROWN SILT AND CLAY, VISUAL								A-6a *
		23.0 - 27.5	20	14	18	31	18	23	9	9	A-4a
		27.5 - 35.0	10	13	18	38	22	23	8	11	A-4a
RS-107	140+66	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 3.0	BROWN SILT, VISUAL								A-4b
		3.0 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 27.5	6	10	20	41	24	21	7	12	A-4a *
		27.5 - 35.0	6	12	21	38	23	20	6	9	A-4a
RS-106	144+66	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 1.5	BROWN SILT, VISUAL								A-4b
		1.5 - 13.0	5	9	16	37	32	30	12	16	A-6a *
		13.0 - 20.0	7	11	22	38	23	20	6	13	A-4a
RS-105	149+16	0.0 - 4.5	0	2	4	49	45	46	26	27	A-7-6
	CL	4.5 - 6.0	6	7	17	38	32	33	14	23	A-6a
		6.0 - 18.5	2	9	17	42	30	27	12	15	A-6a
		18.5 - 20.0	10	8	18	35	29	25	12	12	A-6a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
WATKINS-YORK FRONTAGE ROAD (CONT.)											
RS-104	153+16	0.0 - 0.1	TOPSOIL								VISUAL
	CL	0.1 - 4.5	3	5	14	42	35	39	21	25	A-6b
		4.5 - 14.5	8	7	14	39	32	26	10	15	A-4a
		14.5 - 15.0	53	21	10	- 16 -		NP	NP	11	A-1-b
RS-103	157+16	0.0 - 1.5	6	7	20	41	26	30	10	18	A-4a
	CL	1.5 - 4.5	2	2	15	45	36	35	17	19	A-6b
		4.5 - 20.0	2	10	17	41	29	25	8	14	A-4a
RS-102	161+16	0.0 - 1.5	0	3	21	52	25	26	7	14	A-4b
	CL	1.5 - 8.0	5	8	17	38	32	29	12	17	A-6a
		8.0 - 15.0	8	13	19	37	23	21	6	11	A-4a
RS-101	165+16	0.0 - 10.0	2	8	17	40	34	25	8	14	A-4a
	CL										
RS-100	169+16	0.0 - 6.0	4	9	16	40	31	25	9	14	A-4a *
	CL	6.0 - 10.5	8	9	16	38	29	26	11	13	A-6a
		10.5 - 15.0	GRAY SILTY CLAY, VISUAL							13	A-6b
RS-099	173+16	0.0 - 4.5	7	9	18	36	30	27	11	14	A-6a *
	CL	4.5 - 6.0	4	8	17	40	32	25	10	14	A-4a
		6.0 - 10.0	8	7	17	40	28	24	9	12	A-4a
RS-098	177+16	0.0 - 3.0	0	3	8	60	29	33	10	23	A-4b *
	CL	3.0 - 6.0	18	2	7	42	31	32	12	18	A-6a
		6.0 - 10.0	4	7	18	46	26	26	10	13	A-4a
RS-097	181+16	0.0 - 1.5	0	4	13	62	21	24	7	26	A-4b *
	CL	1.5 - 10.0	0	2	7	50	41	35	17	25	A-6b
RS-096	184+66	0.0 - 1.5	8	2	6	61	24	NP	NP	21	A-4b *
	CL	1.5 - 10.0	0	1	5	52	42	38	18	25	A-6b
RS-095	188+78	0.0 - 0.9	TOPSOIL								VISUAL
	10.0 Lt.	0.9 - 4.5	BROWN SILT AND CLAY, VISUAL								A-6a *
		4.5 - 6.0	3	7	15	39	36	26	10	14	A-4a
		6.0 - 15.0	9	7	14	37	32	24	8	14	A-4a
RS-094	192+14	0.0 - 0.6	TOPSOIL								VISUAL
	15.0 Lt.	0.6 - 1.5	BROWN SANDY SILT, VISUAL								A-4a
		1.5 - 8.5	8	17	12	35	28	26	10	12	A-4a *
		8.5 - 13.0	4	8	16	42	31	26	10	14	A-4a
		13.0 - 15.0	GRAY SILT AND CLAY, VISUAL							15	A-6a
RS-093	194+66	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 4.5	33	20	17	19	12	20	3	13	A-2-4
		4.5 - 8.0	13	10	18	38	21	23	8	11	A-4a
		8.0 - 13.0	32	19	18	25	7	NP	NP	15	A-2-4
		13.0 - 25.0	6	11	17	43	24	22	7	4	A-4a

DRAWN PAN CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 SERVICE ROADS AND RAMPS

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
WATKINS-YORK FRONTAGE ROAD (CONT.)											
RS-092	197+66	0.0 - 1.0	TOPSOIL								VISUAL
	CL	1.0 - 13.0	BROWN SILT AND CLAY, VISUAL								A-6a
		13.0 - 15.5	BROWN SANDY SILT, VISUAL								A-4a
		15.5 - 20.5	BROWN GRAVEL WITH SAND, VISUAL								A-1-b *
		20.5 - 23.0	15	25	17	33	10	NP	NP	16	A-4a
		23.0 - 30.0	6	9	22	38	24	23	8	13	A-4a
RS-091	200+66	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
		8.0 - 14.5	GRAY SILTY CLAY, VISUAL								A-6b
		14.5 - 22.0	26	10	14	37	13	22	9	11	A-4a *
		22.0 - 30.0	17	11	17	43	12	27	13	12	A-6a
RS-090	204+56	0.0 - 0.4	TOPSOIL								VISUAL
	6.0 Rt.	0.4 - 1.5	1	4	18	52	25	31	10	26	A-4b
		1.5 - 10.0	24	10	17	26	24	35	18	17	A-6b
RS-089	208+66	0.0 - 1.1	TOPSOIL								VISUAL
	CL	1.1 - 3.0	0	3	6	62	29	NP	NP	29	A-4b
		3.0 - 10.0	3	8	17	41	30	28	12	14	A-6a
RELOCATED WORTHINGTON ROAD											
RS-088	191+50	0.0 - 1.5	BROWN SANDY SILT, VISUAL							12	A-4a *
	10.0 Lt.	1.5 - 3.0	5	8	17	39	32	30	14	15	A-6a
		3.0 - 6.0	7	12	21	35	25	26	10	15	A-4a
		6.0 - 7.5	BROWN SILTY CLAY, VISUAL							17	A-6b
RS-087	195+50	0.0 - 0.8	TOPSOIL								VISUAL
	CL	0.8 - 6.0	3	6	23	56	12	NP	NP	23	A-4b *
		6.0 - 10.5	11	12	24	34	20	26	9	17	A-4a
		10.5 - 15.0	GRAY SILT AND CLAY, VISUAL							14	A-6a
RS-086	199+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 12.5	8	7	21	39	26	25	10	13	A-4a *
		12.5 - 20.0	7	12	18	40	24	26	10	12	A-4a
RS-085	203+50	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 3.0	6	6	10	38	41	39	19	14	A-6b *
		3.0 - 10.0	2	7	20	38	33	31	13	15	A-6a
RS-084	207+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 8.0	BROWN SANDY SILT, VISUAL								A-4a *
		8.0 - 13.5	8	7	16	50	19	23	8	11	A-4a
		13.5 - 20.0	17	11	17	33	22	23	9	10	A-4a
RS-083	210+00	0.0 - 3.0	0	3	33	47	16	33	10	38	A-4a
	CL	3.0 - 8.5	39	21	18	17	6	25	6	16	A-1-b
		8.5 - 15.0	36	19	36	- 10 -		NP	NP	19	A-1-b
RS-082	216+50	0.0 - 3.0	4	7	21	39	29	28	13	15	A-6a *
	CL	3.0 - 6.0	11	11	19	37	22	26	10	13	A-4a
		6.0 - 10.0	BROWN SANDY SILT, VISUAL							20	A-4a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
RELOCATED WORTHINGTON ROAD (CONT.)											
RS-081	220+50	0.0 - 4.5	0	4	6	61	29	30	10	18	A-4b
	CL	4.5 - 6.0	41	27	21	- 11 -		NP	NP	21	A-1-b
		6.0 - 8.0	21	14	25	26	14	20	5	17	A-4a
		8.0 - 15.5	58	22	6	- 13 -		NP	NP	14	A-1-a
		15.5 - 18.0	10	11	19	38	23	22	8	12	A-4a
		18.0 - 20.0	47	37	8	- 9 -		NP	NP	15	A-1-b
RS-080	224+50	0.0 - 1.5	0	4	22	49	25	24	8	13	A-4a *
	CL	1.5 - 4.5	21	17	12	17	33	47	26	20	A-7-6
		4.5 - 6.0	59	24	8	- 9 -		NP	NP	19	A-1-a
		6.0 - 10.0	24	12	16	31	17	22	8	13	A-4a
RS-079	228+50	0.0 - 4.5	BROWN SILT AND CLAY, VISUAL								A-6a *
	13.0 Rt.	4.5 - 10.0	BROWN SANDY SILT, VISUAL								A-4a
RS-078	232+50	0.0 - 0.4	TOPSOIL								VISUAL
	15.0 Lt.	0.4 - 3.0	BROWN SANDY SILT, VISUAL							16	A-4a *
		3.0 - 4.5	0	4	8	41	47	37	19	25	A-6b
		4.5 - 8.0	20	27	15	14	25	41	24	25	A-7-6
		8.0 - 13.0	BROWN GRAVEL, VISUAL							26	A-1a
		13.0 - 15.0	BROWN SILTY CLAY, VISUAL							10	A-6b
RAMP I											
RS-077	443+21	0.0 - 1.2	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL
	5.5 Rt.	1.2 - 8.0	6	6	18	43	28	27	10	16	A-4a
		8.0 - 20.5	5	4	14	42	35	31	15	18	A-6a
		20.5 - 23.0	0	4	13	62	21	47	29	25	A-7-6
		23.0 - 35.0	5	8	18	40	28	25	10	12	A-4a
RS-076	447+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 13.0	3	6	14	45	31	28	12	15	A-6a *
		13.0 - 18.0	49	18	13	14	5	20	3	5	A-1-b
		18.0 - 23.0	28	24	13	27	9	NP	NP	13	A-4a
		23.0 - 30.0	12	13	15	38	22	23	8	14	A-4a
		30.0 - 45.0	GRAY GRAVEL WITH SAND, VISUAL								A-1-b
RAMP K											
RS-075	443+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 4.5	8	6	17	42	27	27	10	16	A-4a *
		4.5 - 10.0	2	9	17	42	30	26	10	14	A-4a
RS-074	447+00	0.0 - 1.0	TOPSOIL								VISUAL
	CL	1.0 - 1.5	0	2	7	56	36	35	15	24	A-6a
		1.5 - 4.5	0	0	2	48	51	43	23	23	A-7-6
		4.5 - 6.0	6	11	26	45	12	NP	NP	19	A-4a
		6.0 - 20.0	5	8	16	43	28	24	10	13	A-4a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
SR 37											
RS-073	395+70	0.0 - 0.2	TOPSOIL								VISUAL
	14.0 Lt.	0.2 - 3.0	40	24	17	15	5	NP	NP	8	A-1-b *
		3.0 - 8.0	27	11	18	29	17	23	7	18	A-4a
		8.0 - 10.0	GRAY SILTY CLAY, VISUAL							11	A-6b
RS-072	399+00	0.0 - 1.0	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL
	16.0 Lt.	1.0 - 8.0	8	5	17	38	32	28	11	16	A-6a
		8.0 - 10.0	7	10	17	39	26	23	9	12	A-4a
RS-071	402+20	0.0 - 1.0	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL
	26.0 Rt.	1.0 - 2.5	6	9	23	39	23	24	8	15	A-4a
		2.5 - 4.0	9	13	24	36	18	23	8	14	A-4a
		4.0 - 13.0	5	8	18	42	26	24	10	12	A-4a
		13.0 - 18.0	20	20	22	29	9	22	4	11	A-4a
		18.0 - 20.0	54	23	14	- 9 -		NP	NP	15	A-1-a
RS-070	411+00	0.0 - 1.2	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL
	10.0 Rt.	1.2 - 2.5	4	11	21	50	14	27	8	19	A-4a
		2.5 - 8.0	7	13	28	44	8	NP	NP	18	A-4a
		8.0 - 20.5	8	14	22	35	22	36	15	28	A-6a
		20.5 - 25.0	55	20	10	- 16 -		NP	NP	28	A-1-b
RS-069	414+50	0.0 - 0.9	TOPSOIL								VISUAL
	10.0 Rt.	0.9 - 2.5	9	5	15	48	23	29	9	21	A-4a
		2.5 - 8.0	2	3	15	56	25	31	12	22	A-6a
		8.0 - 10.0	2	13	8	48	28	25	7	20	A-4a
		10.0 - 15.0	7	17	28	23	26	23	8	16	A-4a
RS-068	417+50	0.0 - 1.0	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	10.0 Rt.	1.0 - 2.5	10	8	16	36	30	28	12	13	A-6a
		2.5 - 10.0	8	8	17	38	30	26	10	14	A-4a
RAMP J											
RS-067	454+00	0.0 - 1.0	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL
	CL	1.0 - 5.5	6	10	18	41	25	22	8	13	A-4a
		5.5 - 18.0	53	27	7	- 13 -		NP	NP	7	A-1-a
		18.0 - 20.0	8	9	22	46	15	19	4	12	A-4a
RS-066	457+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 3.0	0	6	8	61	26	36	11	29	A-6a
		3.0 - 10.0	0	1	3	62	34	31	11	31	A-6a
RS-065	460+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 6.0	BROWN SANDY SILT, VISUAL								A-4a
		6.0 - 8.5	BROWN GRAVEL WITH SAND, VISUAL								A-1-b *
		8.5 - 12.5	37	24	14	17	9	21	4	8	A-2-4
		12.5 - 18.0	39	19	12	20	9	23	6	8	A-2-4
		18.0 - 20.0	BROWN SILT AND CLAY, VISUAL							11	A-6a

DRAWN PAN CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 SERVICE ROADS AND RAMPS

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
RAMP L											
RS-064	453+50	0.0 - 1.0	TOPSOIL								VISUAL
	CL	1.0 - 4.5	BROWN SANDY SILT, VISUAL								A-4a
		4.5 - 10.5	BROWN SILT AND CLAY, VISUAL								A-6a
		10.5 - 13.0	44	20	12	- 24 -		NP	NP	17	A-1-b
		13.0 - 20.0	39	13	13	- 35 -		NP	NP	18	A-2-4
RS-062	460+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 6.0	1	4	22	51	22	40	19	32	A-6b
		6.0 - 10.0	19	15	20	30	16	21	8	10	A-4a
SERVICE ROAD II											
RS-061	215+00	0.0 - 3.0	0	4	13	47	36	32	13	19	A-6a *
	CL	3.0 - 8.0	5	6	16	39	34	31	14	18	A-6a
		8.0 - 10.0	BROWN COARSE AND FINE SAND, VISUAL					20			A-3a
RS-060	219+00	0.0 - 1.0	TOPSOIL								VISUAL
	CL	1.0 - 3.0	21	8	19	31	21	29	II	19	A-6a *
		3.0 - 10.0	7	8	18	38	29	19	4	13	A-4a
RS-059	222+90	0.0 - 1.0	TOPSOIL								VISUAL
	39.0 Lt.	1.0 - 4.5	10	20	15	33	22	30	II	17	A-6a *
		4.5 - 10.0	45	21	15	- 19 -		NP	NP	20	A-1-b
RS-058	227+00	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 3.0	6	17	24	37	16	29	13	18	A-6a
		3.0 - 10.0	23	18	18	29	13	30	13	16	A-6a *
RS-057	229+68	0.0 - 0.4	TOPSOIL								VISUAL
	9.0 Lt.	0.4 - 3.0	26	8	14	38	14	NP	NP	23	A-4a
		3.0 - 13.0	22	19	20	26	14	NP	NP	10	A-4a
		13.0 - 15.0	52	24	10	- 14 -		NP	NP	16	A-1-a
RS-056	231+00	0.0 - 0.9	TOPSOIL								VISUAL
	CL	0.9 - 4.5	6	21	27	26	21	28	II	15	A-6a *
		4.5 - 10.0	13	13	24	28	23	28	12	15	A-6a
RS-055	233+45	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 1.5	2	4	14	68	13	33	9	17	A-4b *
		1.5 - 10.0	2	8	15	54	22	29	12	II	A-6a
RS-054	236+00	0.0 - 1.5	1	5	14	68	12	NP	NP	42	A-4b
	CL	1.5 - 18.0	16	10	18	44	12	26	10	12	A-4a
		18.0 - 20.0	67	16	6	- 11 -		NP	NP	14	A-1-a
RS-053	239+50	0.0 - 1.5	0	2	3	70	24	25	5	23	A-4b
	CL	1.5 - 3.0	9	7	14	40	30	32	15	19	A-6a
		3.0 - 8.0	25	17	16	24	18	29	12	13	A-6a
		8.0 - 10.0	52	15	16	- 17 -		NP	NP	II	A-1-b
RS-052	242+50	0.0 - 4.5	2	4	8	59	27	33	15	22	A-6a *
	CL	4.5 - 6.0	16	10	17	37	20	31	13	17	A-6a
		6.0 - 15.0	BROWN COARSE AND FINE SAND, VISUAL					8			A-3a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
OUTVILLE ROAD											
RS-050	19+00	0.0 - 1.5	BROWN GRAVEL, VISUAL							II	A-1-a *
	10.0 Lt.	1.5 - 4.5	1	2	9	47	41	41	21	28	A-7-6
		4.5 - 10.0	3	9	23	43	22	24	9	16	A-4a
RS-051	26+00	0.0 - 1.1	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	10.0 Lt.	1.1 - 4.0	3	5	17	37	39	33	16	18	A-6b
		4.0 - 10.0	2	5	19	39	35	28	12	20	A-6a
OUTVILLE-MORSE FRONTAGE ROAD											
RS-049	500+02	0.0 - 1.5	2	6	16	48	28	29	9	20	A-4a *
	45.5 Lt.	1.5 - 10.0	13	4	12	37	34	34	15	20	A-6a
RS-048	504+02	0.0 - 4.5	BROWN SANDY SILT, VISUAL								A-4a
	43.0 Lt.	4.5 - 6.0	BROWN SILT AND CLAY, VISUAL								A-6a
		6.0 - 15.5	BROWN SILTY CLAY, VISUAL								A-6b
		15.5 - 25.0	SEVERELY WEATHERED GRAY SHALE							14	VISUAL
		25.0 - 35.0	GRAY SHALE								VISUAL *
RS-047	508+01	0.0 - 8.0	10	8	16	41	25	28	II	15	A-6a
	26.5 Lt.	8.0 - 20.0	8	3	13	47	28	34	12	II	A-6a
		20.0 - 35.0	GRAY SHALE								VISUAL *
RS-046	512+00	0.0 - 12.5	9	7	15	42	27	24	9	12	A-4a
	7.0 Lt.	12.5 - 20.0	9	12	18	36	25	23	9	II	A-4a *
RS-045	516+00	0.0 - 0.9	TOPSOIL								VISUAL
	50.0 Rt.	0.9 - 4.5	BROWN SILT AND CLAY, VISUAL								A-6a
		4.5 - 15.5	BROWN FINE SAND, VISUAL								A-3
		15.5 - 20.5	GRAY SILTY CLAY, VISUAL								A-6b
		20.5 - 23.0	GRAY FINE SAND, VISUAL								A-3
		23.0 - 30.0	GRAY SILTY CLAY, VISUAL								A-6b
		30.0 - 40.0	16	10	18	38	18	23	9	10	A-4a *
		40.0 - 47.3	II	10	16	39	24	25	10	12	A-4a
		47.3 - 50.0	SEVERELY WEATHERED GRAY SHALE							5	VISUAL
RS-044	520+00	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 11.0	BROWN SILT AND CLAY, VISUAL								A-6a *
		11.0 - 12.5	II	II	18	37	24	23	8	13	A-4a
		12.5 - 15.5	14	16	17	29	23	23	8	12	A-4a
		15.5 - 20.0	BROWN GRAVEL WITH SAND, VISUAL							II	A-1-b
RS-043	524+00	0.0 - 0.5	TOPSOIL							18	VISUAL
	CL	0.5 - 3.0	0	1	2	49	48	46	26	25	A-7-6 *
		3.0 - 10.0	0	1	18	53	28	29	13	26	A-6a
RS-042	529+00	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 1.5	1	7	24	46	22	32	II	19	A-6a *
		1.5 - 4.5	3	8	22	43	26	24	8	16	A-4a
		4.5 - 10.0	5	9	23	39	24	22	6	13	A-4a
RS-041	531+50	0.0 - 1.2	TOPSOIL								VISUAL
	CL	1.2 - 6.0	0	1	9	66	25	39	14	28	A-6a
		6.0 - 7.5	4	7	15	41	34	26	9	16	A-4a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
OUTVILLE-MORSE FRONTAGE ROAD (CONT.)											
RS-040	534+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 12.5	4	7	14	41	33	28	II	12	A-6a *
		12.5 - 20.0	6	7	17	43	27	24	II	12	A-6a
RS-039	536+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 1.5	BROWN SANDY SILT, VISUAL								A-4a
		1.5 - 28.0	BROWN SILT AND CLAY, VISUAL								A-6a
		28.0 - 30.0	BROWN SANDY SILT, VISUAL								A-4a
		30.0 - 42.0	GRAY FINE SAND, VISUAL								A-3 *
		42.0 - 48.0	0	0	2	71	27	24	6	19	A-4b
		48.0 - 50.0	GRAY SANDY SILT, VISUAL							II	A-4a
RS-038	538+50	0.0 - 0.4	TOPSOIL								VISUAL
	CL	0.4 - 28.0	BROWN SILT AND CLAY, VISUAL								A-6a
		28.0 - 36.0	BROWN GRAVEL WITH SAND, VISUAL								A-1-b *
		36.0 - 45.0	17	17	18	30	19	26	10	12	A-4a
RS-037	541+25	0.0 - 0.4	TOPSOIL								VISUAL
	8.0 Lt.	0.4 - 1.5	1	3	12	64	21	45	17	29	A-7-6 *
		1.5 - 6.0	14	11	20	35	20	26	8	14	A-4a
		6.0 - 10.0	17	10	17	33	23	25	10	II	A-4a
RS-036	543+50	0.0 - 0.3	TOPSOIL								VISUAL
	90.0 Rt.	0.3 - 1.5	BROWN SANDY SILT, VISUAL								A-4a
		1.5 - 4.5	BROWN SILT AND CLAY, VISUAL								A-6a
		4.5 - 15.5	BROWN SILT AND CLAY, VISUAL								A-6a
		15.5 - 18.0	GRAY SILTY CLAY, VISUAL								A-6b
		18.0 - 23.0	BROWN GRAVEL WITH SAND, VISUAL								A-1-b
		23.0 - 30.0	GRAY SILTY CLAY, VISUAL								A-6b *
		30.0 - 40.0	20	11	16	36	17	22	8	9	A-4a
RS-035	547+00	0.0 - 0.3	TOPSOIL								VISUAL
	85.0 Rt.	0.3 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 15.5	BROWN SILT AND CLAY, VISUAL								A-6a
		15.5 - 20.5	BROWN GRAVEL WITH SAND, VISUAL								A-1-b
		20.5 - 30.0	BROWN SANDY SILT, VISUAL								A-4a *
		30.0 - 39.3	46	24	13	II	6	NP	NP	10	A-1-b
RS-034	550+10	0.0 - 1.0	TOPSOIL								VISUAL
	CL	1.0 - 10.0	9	7	15	38	32	31	14	18	A-6a
RS-033	554+00	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 3.0	1	5	18	48	28	33	13	21	A-6a
		3.0 - 10.5	6	4	15	39	36	28	II	15	A-6a
		10.5 - 20.0	II	8	17	40	24	21	6	II	A-4a
RS-032	558+00	0.0 - 0.6	TOPSOIL								VISUAL
	CL	0.6 - 10.5	7	II	20	33	29	32	15	20	A-6a
		10.5 - 20.0	8	8	23	42	20	21	7	II	A-4a

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SOIL PROFILE

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LIC-37-10.25

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 SERVICE ROADS

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
OUTVILLE-MORSE FRONTAGE ROAD (CONT.)											
RS-031	561+42	0.0 - 0.3	TOPSOIL								VISUAL
	15.0 Lt.	0.3 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 8.0	2	10	32	27	29	29	14	21	A-6a *
		8.0 - 13.0	1	4	12	44	38	27	10	17	A-4a
		13.0 - 15.0	BROWN SILT AND CLAY, VISUAL							15	A-6a
RS-030	563+50	0.0 - 0.8	TOPSOIL								VISUAL
	40.0 Lt.	0.8 - 3.0	BROWN SANDY SILT, VISUAL								A-4a
		3.0 - 18.0	BROWN SILT AND CLAY, VISUAL								A-6a
		18.0 - 28.0	58	18	11	- 14 -		NP	NP	8	A-1-a *
		28.0 - 34.3	28	35	23	- 14 -		NP	NP	7	A-1-b
RS-029	566+00	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 8.0	1	4	28	44	23	24	9	18	A-4a *
		8.0 - 15.0	51	12	13	- 24 -		NP	NP	13	A-1-b
RS-028	569+91	0.0 - 1.0	TOPSOIL								VISUAL
	13.0 Rt.	1.0 - 3.0	BROWN SANDY SILT, VISUAL								VISUAL *
		3.0 - 8.0	44	35	11	- 10 -		NP	NP	6	A-1-b
		8.0 - 15.0	65	18	6	- 10 -		NP	NP	5	A-1-a
RS-027	579+00	0.0 - 0.9	TOPSOIL								VISUAL
	10.0 Lt.	0.9 - 3.0	0	1	26	54	19	27	9	19	A-4b *
		3.0 - 4.5	57	14	15	- 14 -		NP	NP	10	A-1-a
		4.5 - 6.0	31	16	18	23	12	26	8	14	A-2-4
		6.0 - 10.0	0	1	4	57	38	38	18	24	A-6b
RS-026	582+00	0.0 - 0.9	TOPSOIL							18	VISUAL
	20.0 Lt.	0.9 - 3.0	0	2	9	58	31	41	16	23	A-7-6 *
		3.0 - 10.0	10	20	15	30	25	32	12	18	A-6a
RS-025	583+89	0.0 - 0.7	TOPSOIL								VISUAL
	CL	0.7 - 3.0	51	10	9	18	13	34	13	14	A-2-6 *
		3.0 - 6.0	22	12	17	35	15	30	11	16	A-6a
		6.0 - 13.5	54	20	8	- 19 -		NP	NP	14	A-1-b
		13.5 - 13.9	GRAY FINE SAND, VISUAL								A-3
		13.9 - 14.7	GRAY SILT AND CLAY, VISUAL								A-6a
		14.7 - 15.0	BROWN GRAVEL WITH SAND, VISUAL								A-1-b

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
MORSE ROAD											
RS-022	8+50	0.0 - 2.0	ASPHALT CONCRETE, AGGREGATE BASE							4	VISUAL *
	6.0 Rt.	2.0 - 3.0	6	13	21	32	28	30	14	17	A-6a
		3.0 - 10.0	1	7	16	44	32	28	12	15	A-6a
RS-023	12+00	0.0 - 1.5	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	12.0 Rt.	1.5 - 6.0	0	1	6	63	30	40	16	31	A-6b
		6.0 - 10.5	3	2	9	55	31	37	17	26	A-6b
		10.5 - 15.0	BROWN SANDY SILT, VISUAL							20	A-4a
RS-024	15+50	0.0 - 1.5	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL
	10.0 Rt.	1.5 - 4.5	BROWN SANDY SILT, VISUAL								A-4a
		4.5 - 8.0	BROWN SILT AND CLAY, VISUAL								A-6a
		8.0 - 15.5	BROWN SANDY SILT, VISUAL								A-4a *
		15.5 - 17.5	48	26	17	- 9 -		NP	NP	5	A-1-b
		17.5 - 25.0	49	23	14	- 14 -		NP	NP	5	A-1-b
CR539A EXTENSION											
RS-021	297+00	0.0 - 0.5	AGGREGATE BASE								VISUAL *
	20.0 Rt.	0.5 - 1.5	BROWN SILT AND CLAY, VISUAL							10	A-6a
		1.5 - 3.0	23	22	20	27	9	NP	NP	5	A-4a
		3.0 - 8.5	0	1	10	47	42	42	25	23	A-7-6
		8.5 - 10.0	BROWN SILT AND CLAY, VISUAL							7	A-6a
RS-020	301+00	0.0 - 3.0	15	7	15	37	27	31	13	13	A-6a *
	18.0 Lt.	3.0 - 10.0	1	2	10	59	28	39	15	27	A-6a
RS-019	304+00	0.0 - 0.3	TOPSOIL								VISUAL
	18.0 Lt.	0.3 - 1.5	19	8	19	32	22	28	10	13	A-4a
		1.5 - 6.0	9	6	16	47	22	32	11	28	A-6a
		6.0 - 7.5	4	7	17	42	30	27	10	15	A-4a
		7.5 - 10.0	8	10	17	38	27	23	6	17	A-4a
		10.0 - 15.0	14	11	19	36	20	22	6	14	A-4a
RS-018	306+00	0.0 - 0.3	TOPSOIL								VISUAL
	20.0 Rt.	0.3 - 1.5	6	7	17	40	31	29	13	11	A-6a
		1.5 - 3.0	6	7	17	40	30	26	10	13	A-4a
		3.0 - 8.0	4	8	18	46	25	23	8	13	A-4a
		8.0 - 18.0	69	14	7	- 11 -		NP	NP	9	A-1-a
		18.0 - 20.0	8	14	22	37	18	23	7	15	A-4a
RS-017	309+50	0.0 - 3.0	3	11	19	39	27	23	8	12	A-4a
	17.0 Rt.	3.0 - 4.5	0	3	10	55	32	29	9	21	A-4b
		4.5 - 6.0	0	3	11	51	35	31	12	22	A-6a
		6.0 - 10.5	10	21	24	23	22	33	15	24	A-6a
		10.5 - 15.5	3	7	20	45	24	26	9	21	A-4a
		15.5 - 18.0	54	15	11	- 20 -		NP	NP	14	A-1-b
		18.0 - 20.0	10	7	16	36	32	27	10	15	A-4a
RS-016	312+52	0.0 - 1.0	AGGREGATE BASE								VISUAL
	18.0 Rt.	1.0 - 13.0	3	8	17	40	33	28	11	15	A-6a
		13.0 - 18.0	1	5	27	49	18	24	6	27	A-4a
		18.0 - 20.0	4	6	15	40	34	26	10	16	A-4a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
CR539A EXTENSION (CONT.)											
RS-015	316+50	0.0 - 0.3	TOPSOIL								VISUAL
	40.0 Lt.	0.3 - 8.0	1	4	18	59	19	30	12	21	A-6a
		8.0 - 20.0	0	0	29	61	9	NP	NP	31	A-4b
RS-014	316+50	0.0 - 0.3	TOPSOIL								VISUAL
	24.0 Rt.	0.3 - 3.0	4	5	12	44	35	28	11	16	A-6a
		3.0 - 4.5	2	6	20	39	33	30	13	16	A-6a
		4.5 - 8.0	2	7	19	41	31	27	11	15	A-6a
		8.0 - 10.5	7	13	25	36	19	28	9	18	A-4a
		10.5 - 20.0	2	4	11	46	37	36	17	22	A-6b
RS-013	320+50	0.0 - 0.3	TOPSOIL								VISUAL
	40.0 Lt.	0.3 - 4.5	7	5	13	59	16	23	7	9	A-4b
		4.5 - 8.0	17	7	15	42	20	34	14	13	A-6a
		8.0 - 15.5	21	20	19	34	7	NP	NP	18	A-4a
		15.5 - 20.0	66	17	8	- 9 -		NP	NP	10	A-1-a
RS-012	320+50	0.0 - 3.0	8	9	18	40	25	33	13	19	A-6a *
	39.0 Rt.	3.0 - 8.5	2	8	17	44	29	30	14	17	A-6a
		8.5 - 15.5	0	2	5	57	36	36	15	26	A-6a
		15.5 - 20.0	0	1	7	47	45	42	21	26	A-7-6
RS-011	323+72	0.0 - 1.5	ASPHALT CONCRETE, AGGREGATE BASE								VISUAL *
	8.5 Rt.	1.5 - 4.5	24	15	18	28	16	26	8	12	A-4a
		4.5 - 10.0	42	15	11	- 32 -		NP	NP	8	A-2-4
RS-010	326+00	0.0 - 0.3	TOPSOIL								VISUAL
	14.0 Rt.	0.3 - 6.0	BROWN SANDY SILT, VISUAL							9	A-4a *
		6.0 - 8.0	31	28	23	- 19 -		NP	NP	8	A-1-b
		8.0 - 10.5	0	0	5	70	25	24	7	21	A-4b
		10.5 - 15.0	BROWN GRAVEL, VISUAL							7	A-1-a
RS-009	328+50	0.0 - 1.2	TOPSOIL								VISUAL
	CL	1.2 - 4.5	14	16	20	32	19	30	10	14	A-4a
		4.5 - 15.0	60	16	8	- 16 -		NP	NP	6	A-1-b
RS-008	332+50	0.0 - 3.0	32	21	15	18	15	28	10	14	A-2-4
	CL	3.0 - 6.0	10	14	20	35	22	33	14	29	A-6a
		6.0 - 8.0	29	28	20	16	8	27	4	19	A-1-b
		8.0 - 20.0	52	25	10	- 13 -		NP	NP	17	A-1-a
RS-007	341+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 4.5	5	3	38	36	19	20	4	16	A-4a
		4.5 - 6.0	45	11	19	14	11	25	7	16	A-2-4
		6.0 - 10.5	45	16	14	16	10	26	8	19	A-2-4
		10.5 - 18.0	64	26	3	- 7 -		NP	NP	18	A-1-a
		18.0 - 20.0	42	16	15	22	6	NP	NP	14	A-2-4
RS-006	344+50	0.0 - 0.3	TOPSOIL								VISUAL
	CL	0.3 - 4.5	0	11	38	32	19	23	6	15	A-4a
		4.5 - 6.0	BROWN GRAVEL, VISUAL								A-1-a
		6.0 - 8.5	48	21	10	8	14	42	20	22	A-2-7
		8.5 - 15.0	58	18	9	- 15 -		NP	NP	30	A-1-a

SOIL PROFILE

DRAWN PAN CHECKED DAA

LIC-161-6.65
LIC-37-10.25

10 | 82

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SUMMARY OF SOIL TEST DATA
LIC-161/37-6.65/10.25 SERVICE ROADS

* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC. PERCENTAGES MAY NOT ADD UP TO 100% DUE TO ROUNDING.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.
CR539A EXTENSION (CONT.)											
RS-005	348+50	0.0 - 0.5	TOPSOIL								VISUAL
	CL	0.5 - 1.5	2	5	15	58	20	42	19	41	A-7-6
		1.5 - 8.0	0	0	4	55	41	39	20	27	A-6b
		8.0 - 10.5	32	27	19	16	7	NP	NP	22	A-1-b
		10.5 - 13.0	6	6	18	45	26	33	12	31	A-6a
		13.0 - 20.0	44	33	11	- 12 -		NP	NP	19	A-1-b
RS-002	360+50	0.0 - 0.2	TOPSOIL								VISUAL
	5.0 Rt.	0.2 - 3.0	34	27	20	9	11	25	8	9	A-2-4 *
		3.0 - 10.0	36	19	17	20	9	NP	NP	14	A-2-4
RS-001	364+10	0.0 - 4.5	19	20	14	29	19	30	14	15	A-6a *
	18.0 Lt.	4.5 - 6.0	34	24	13	17	12	26	10	11	A-2-4
		6.0 - 8.0	GRAY SILT, VISUAL								A-4b
		8.0 - 10.0	BROWN GRAVEL, VISUAL							7	A-1-a

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.

BORING	STATION & OFFSET	DEPTH FROM - TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	ODOT CLASS.

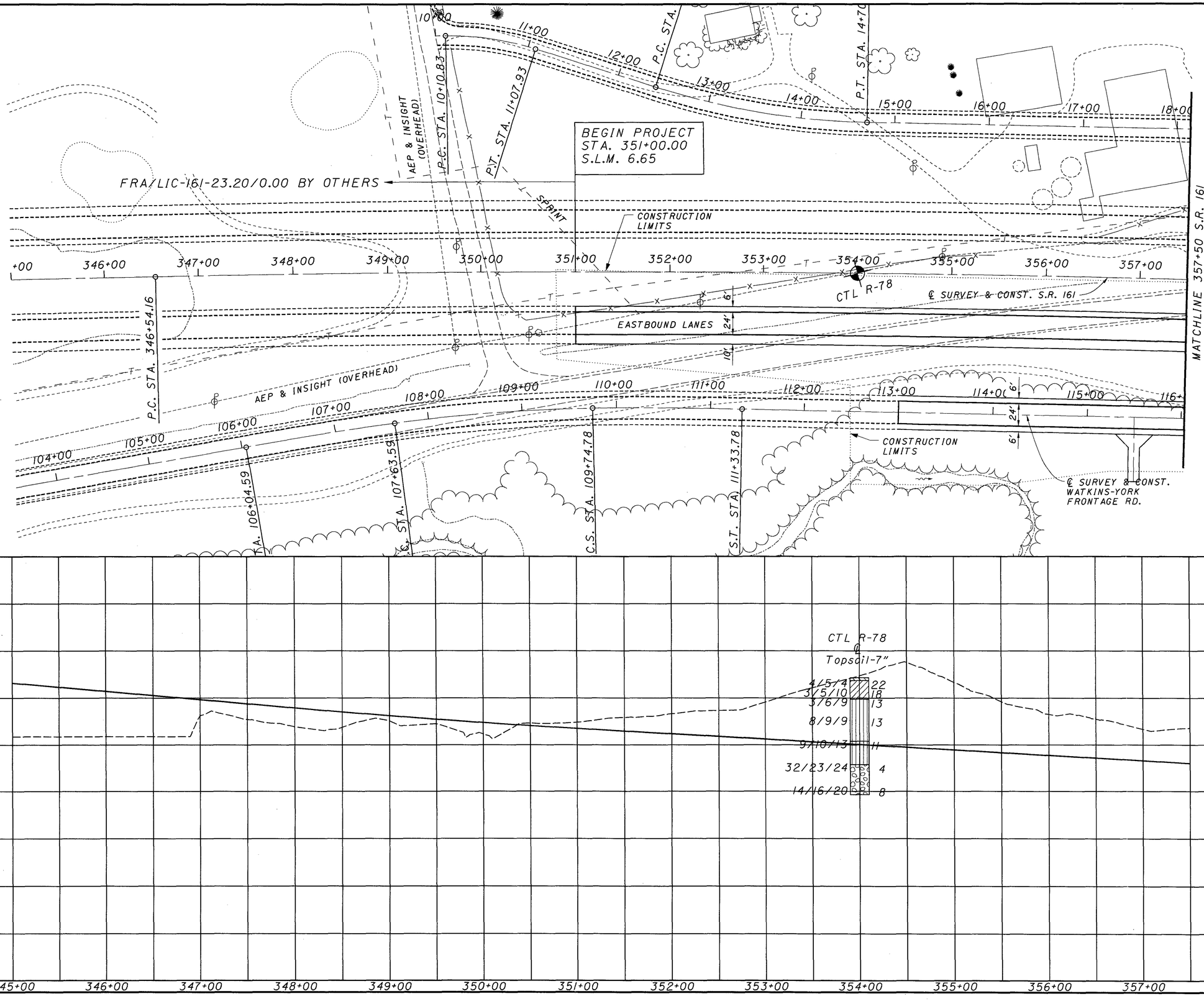
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CHECKED DAA

SOIL PROFILE

LIC-161-6.65
LIC-37-10.25

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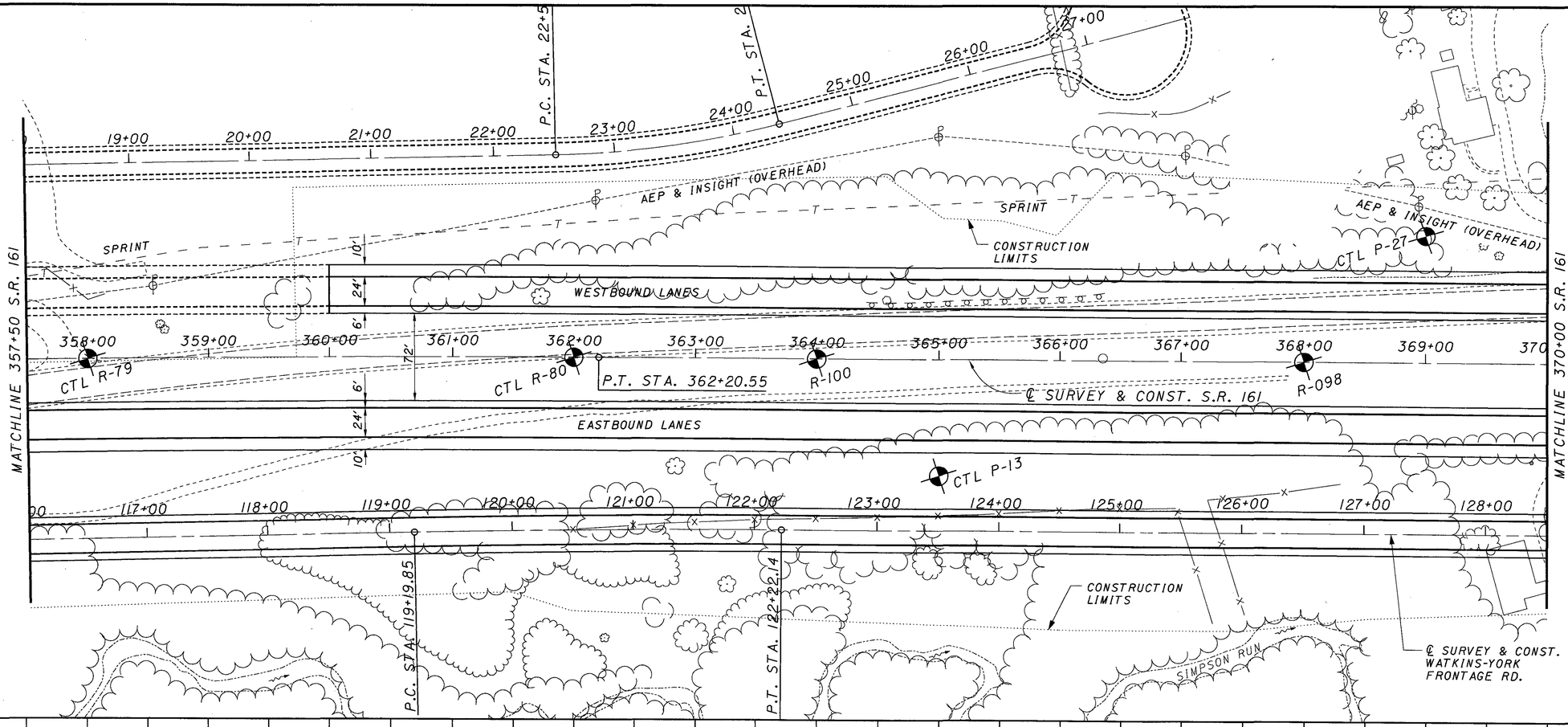
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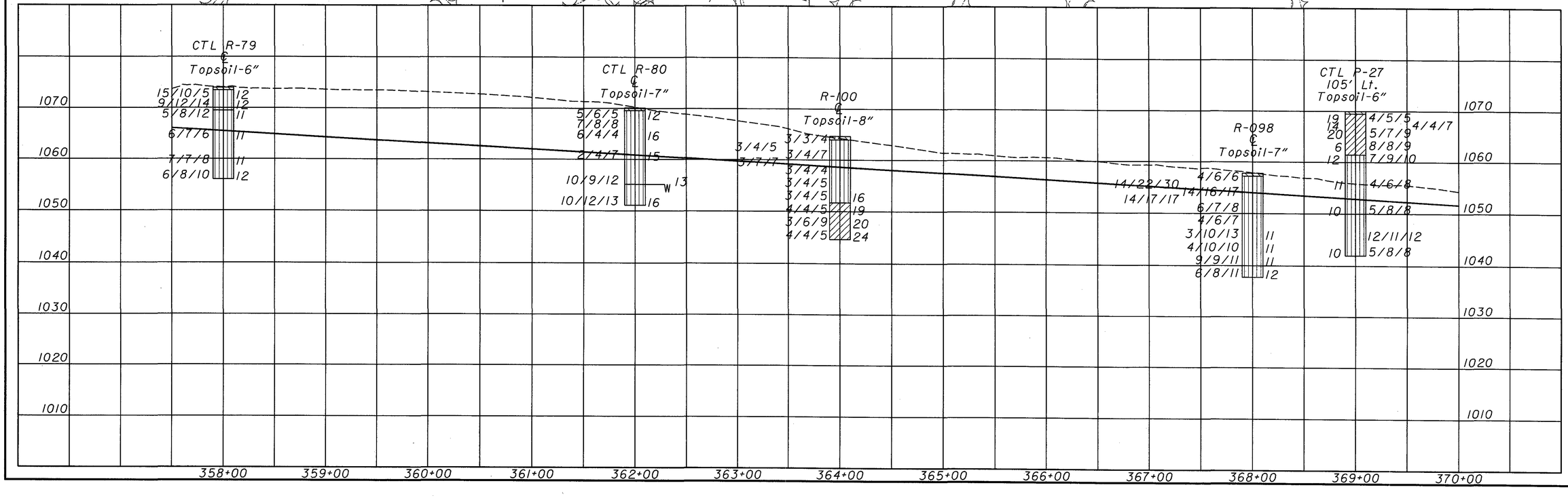
HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAM

SOIL PROFILE - S.R. 161
STA. 345+00 TO STA. 357+50 S.R. 161

LIC-161-6.65
LIC-37-10.25





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SOIL PROFILE - S.R. 161
STA. 357+50 TO STA. 370+00 S.R. 161

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

LIC-161-6.65
LIC-37-10.25

13/82

SOIL PROFILE - S.R. 161
STA. 370+00 TO STA. 382+50 S.R. 161

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

LIC-161-6.65
LIC-37-10.25

14/82

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SIMPSON RUN
WOODS
2" REDBUD
SHED
1-1/2 STORY STUCCO RISE
DECK
SPLIT RAIL FENCE
12" PINE
12" MAPLE
10" CRAB
PICKET
GRAVEL
12" SPRUCE
2" CRAB
SPRINT
SHED
10" BLUE SPRUCE
TRIPLE 8" COTTONWOOD
CONSTRUCTION LIMITS
WOVEN WIRE FENCE
6" ASH
CONC. DITCH
8" ASH
BUSH
1" PINE
5" ASH
3" ASH
2" ASH
1" ASH
MATCHLINE 370+00 S.R. 161
MATCHLINE 382+50 S.R. 161
WESTBOUND LANES
EASTBOUND LANES
P.C. STA. 372+65.36
B-01
B-02
B-03
R-097
R-096
R-095
3-5" ASH
4" ASH
SURVEY & CONST. S.R. 161
TRIPLE 6" ASH
2-2" LOCUST
12" CMP
AEP & INSIGHT (OVERHEAD)
CTL P-14
RS-108
RS-107
2" PINE
4" SPRUCE
LAWN AREA
4" CRAB
LAWN
2-12" SWEET GUM
5" ASH
1-STORY BRICK
1-STORY FRAME
1-1/2 CAR FRAME GARAGE
℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD
STA. 133+17.41
CONSTRUCTION LIMITS

R-097 ℄ Topsoil-7"
B-1 59' Lt. Asphalt Concrete Pavement-2" Aggregate Base-4"
B-2 34' Rt. Topsoil-6"
R-096 ℄ Topsoil-6"
R-095 ℄ Topsoil-7"

Black, arenaceous, broken and jointed SHALE with thick clay seams

SILTSTONE, black, firm, carbonaceous, highly jointed; interbedded with thick gray, hard, very fine-grained sandstone seams. Core loss 0%. RQD=14.

Gray, very fine-grained, jointed SANDSTONE

SILTSTONE, black, firm, carbonaceous, with scattered clay seams, mostly broken and jointed; interbedded near the top with a thick gray, hard, broken and jointed limestone seam, near the middle with a black, broken and jointed shale seam and throughout with scattered seams and intervals ranging up to 0.7' thick of dark gray, hard, very fine-grained sandstone. Core loss 0%. RQD=8.

370+00 371+00 372+00 373+00 374+00 375+00 376+00 377+00 378+00 379+00 380+00 381+00 382+00
1070 1060 1050 1040 1030 1020 1010

SOIL PROFILE - S.R. 161
STA. 382+50 TO STA. 395+00 S.R. 161

LIC-161-6.65
LIC-37-10.25

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

N

15 / 82

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SOIL PROFILE - S.R. 161
STA. 395+00 TO STA. 407+50 S.R. 161

LIC-161-6.65
LIC-37-10.25

DRAWN RLS
CHECKED PAM

HORIZONTAL SCALE IN FEET
0 25 50 100

16 / 82

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SMOOTH WIRE FENCE
2-STORY FRAME BARN
CONC. SILO
GRAVEL
SHRUBS
12" APPLE
18" MAPLE
24" MAPLE
8" MAPLE
AEP & INSIGHT (OVERHEAD)
1-8" LOCUST
15" CAP
8" SPRUCE
5-4" SPRUCE
3-4" PINES
5-4" LOCUST
5" ASH
TWIN 8" ASH
CONSTRUCTION LIMITS
℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH
10" DEAD
4-8" MAPLES
10" MAPLE
TWIN 5" ELM
4" MAPLE
10" ASH
TWIN 6" ELM
2-6" CHERRY
5" ASH
18" CHERRY
10" APPLE
8" ASH
12" CHERRY
6" ELM
6" ASH
6" CHERRY
15" CHERRY
INSIGHT (OVERHEAD)
MATCHLINE 395+00 S.R. 161
MATCHLINE 407+50 S.R. 161
10' DEAD
3-4" ELM
TWIN 6" ELM
24' WESTBOUND LANES
4-10" BOXELDER
72'
℄ SURVEY & CONST. S.R. 161
CULTIVATED FIELD
24' EASTBOUND LANES
110'
℄ SURVEY & CONST. RS-102 WATKINS-YORK FRONTAGE ROAD
CONSTRUCTION LIMITS
25- 6" TO 15" TREES
R-091
R-090
R-089
RS-103
RS-101

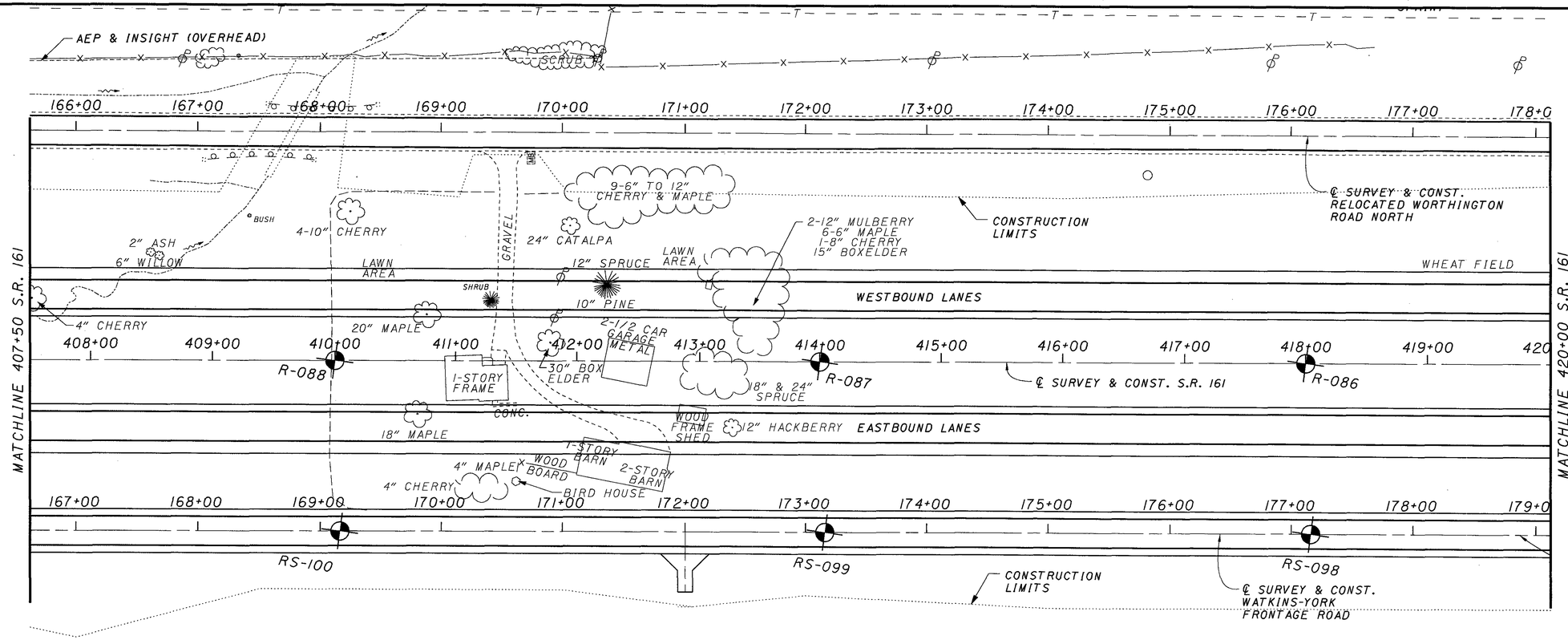
395+00 396+00 397+00 398+00 399+00 400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00

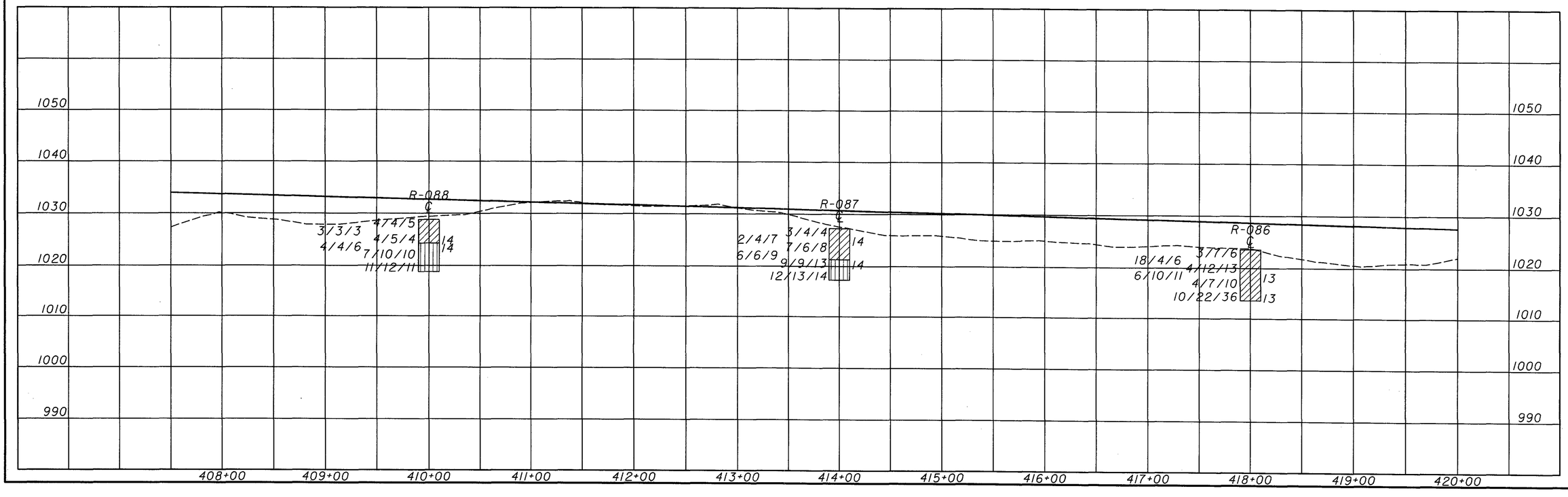
1050 1040 1030 1020 1010 1000 990

R-091 ℄
2/4/4
6/9/9
4/3/5
4/4/5
12/12/16
10/12/14
11/12/13
9/9/10
2/3/4
9/10/12
13
12
W

R-090 ℄
Topsoil-1"
1/2/4
5/5/7
1/1/2
5/5/9
3/5/6
9/11/13
8/7/8
5/5/7
6/6/7
5/8/12
17
10

R-089 ℄
1/2/2
3/6/5
4/2/3
2/1/1
1/3/5
4/4/5
3/5/6
2/4/6
26
27
16
W





SOIL PROFILE - S.R. 161
STA. 407+50 TO STA. 420+00 S.R. 161

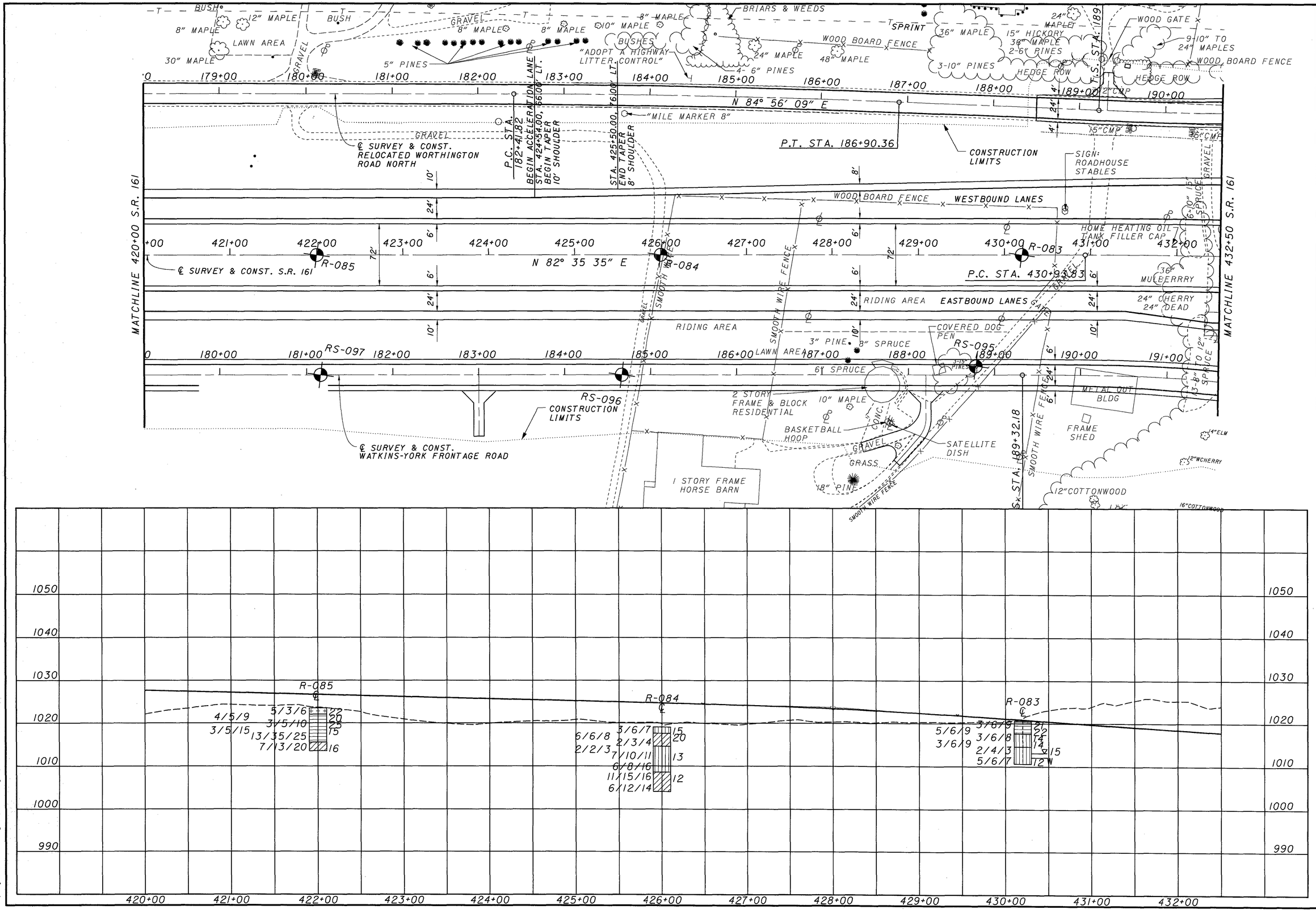
LIC-161-6.65
LIC-37-10.25

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

17 / 82

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N

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAM

SOIL PROFILE - S.R. 161
STA. 420+00 TO STA. 432+50 S.R. 161

LIC-161-6.65
LIC-37-10.25

18/82

SOIL PROFILE - S.R. 161
STA. 432+50 TO STA. 445+00 S.R. 161

LIC-161-6.65
LIC-37-10.25

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

19/82

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"DIRECTIONAL"

ASPHALT

GRAVEL

4"MAPLE

4-5"SPRUCE

WELL

1-STY FRAME

WETLAND
TOTAL AREA- 0.452 AC.
DISTURBED AREA- 0.452 AC.

℄ SURVEY & CONST. S.R. 37

SPRING

WOODS

WOOD SHED

MATCHLINE 445+00 S.R. 161

P.T. STA. 445+09.42

446+83.39

S 86° 47' 24" E

B-04

B-05

B-06

℄ CONST. & SURVEY S.R. 161 STA. 451+13.72 =
℄ CONST. & SURVEY S.R. 37 STA. 406+76.95

"STOP LIGHT"

3-8"MAPLES

6"REDBUD

8"SPRUCE

10"SPRUCE

30"MAPLE

18"MAPLE

24"MAPLE

18"POPLAR

BURN PILE

LIGHT

1-STY HOUSE

WELL

SEPTIC

BIRD HSE

24"CHERRY

FUEL TANKS

SCRAP METAL

4"PEAR

6"APPLE

4"APPLES

4"PEARS

20"MAPLE

18"ASH

4' SMOOTH WIRE FENCE

WOOD SHED

SMOOTH WIRE FENCE

BRUSH

CHAINLINK

R.T. STA. 457+50 S.R. 161

8"MAPLE

4"PINE

15"MAPLE

SHRUBS

GRAVEL DR.

8"PINE

18"PINE

WOOD SHED

6"CHERRY

8"CHERRY

R-075

R-074

R-073

℄ SURVEY & CONST. S.R. 161

MATCHLINE 457+50 S.R. 161

NOTE: NOT ALL STRUCTURE BORINGS ARE SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS NOT SHOWN HERE.

R-075
℄
Topsoil-6"

B-5
6' Lt.
Asphalt Concrete Pavement-6"
Aggregate Base-6"

R-074
℄
Topsoil-11"

R-073
℄
Topsoil-11"

ENTIRE BORING DEPTH NOT SHOWN

445+00 446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+00 454+00 455+00 456+00 457+00

1010 1000 990 980 970 960 950

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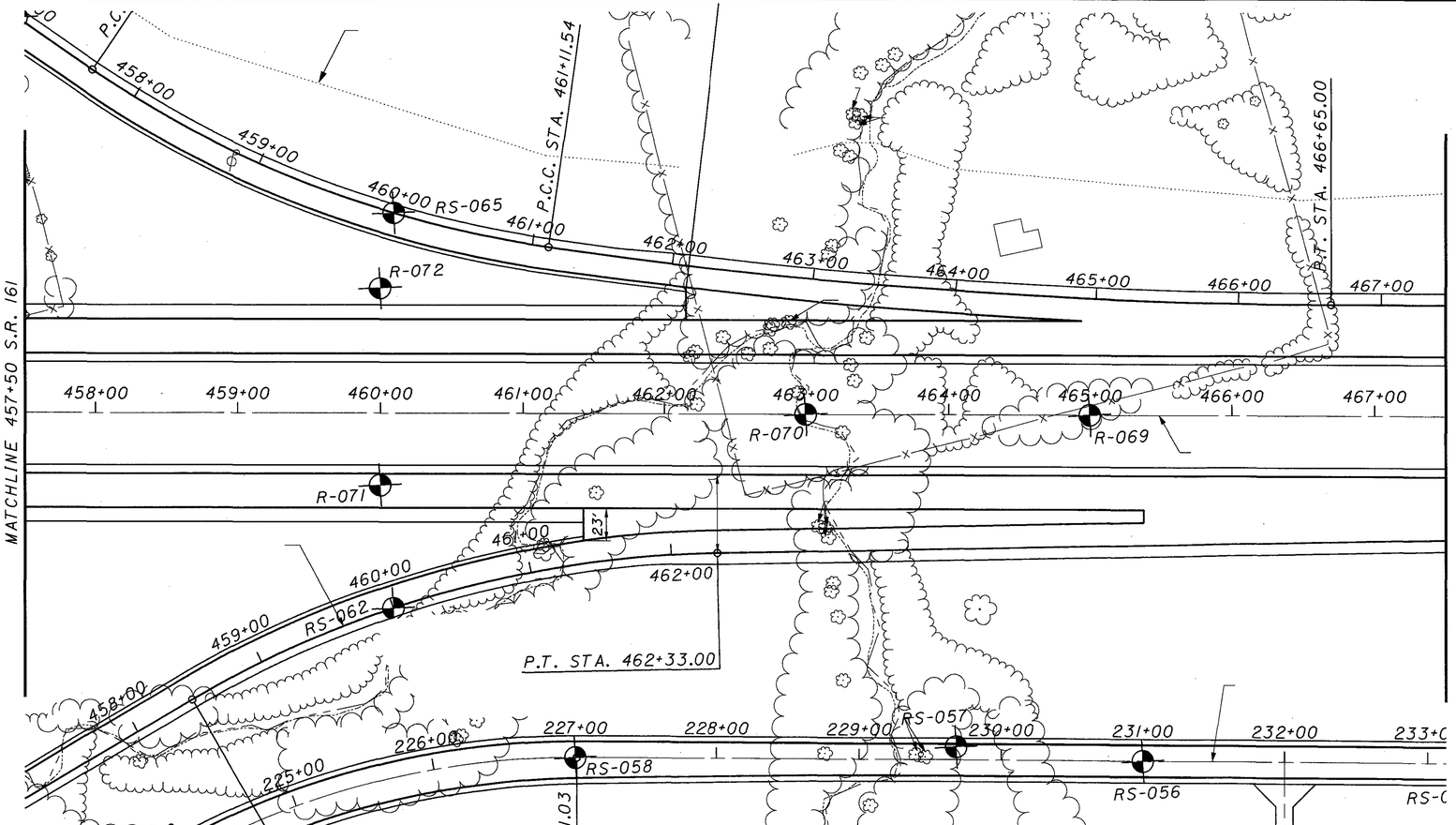
HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 161
STA. 445+00 TO STA. 457+50 S.R. 161

LIC-161-6.65
LIC-37-10.25

20/82



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SOIL PROFILE - S.R. 161/37
STA. 457+50 TO STA. 467+50 S.R. 161/37

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

LIC-161-6.65
LIC-37-10.25

℄ SURVEY & CONST. RAMP J

MATCHLINE 467+50 S.R. 37

468+00 469+00 P.O.T. STA. 469+10.71

8′ 36′ 24′ 10′

CONSTRUCTION LIMITS

WESTBOUND LANES

468+00 469+00 470+00 471+00 472+00 473+00 474+00 475+00 476+00 477+00

R-068 R-067 R-066

S 86° 47′ 24″ E

72′

℄ SURVEY & CONST. S.R. 37

EASTBOUND LANES

8′ 24′ 10′

MATCHLINE 477+50 S.R. 37

STA. 476+42.00, 68.00′ RT.
8′ SHOULDER

END ACCELERATION LANE
STA. 477+38.00, 66.00′ RT.
10′ SHOULDER

℄ CONST. & SURVEY S.R. 161 STA. 476+86.75 =
℄ CONST. & SURVEY SERVICE RD. II STA. 249+49.58

234+00 235+00 236+00 237+00 238+00 239+00 240+00 241+00 242+00

RS-052

RS-054 WETLAND
TOTAL AREA= 0.096 AC.
DISTURBED AREA= 0.037 AC.

RS-053 ℄ SURVEY & CONST. SERVICE ROAD II

22′ 4′

R-068 ℄
Topsoil-8″
1/3/3 1/2/2 0/1/2 2/2/2 0/2/3 2/3/5 4/5/5 2/4/4 4/5/5 24/21/12 5/6/6 2/4/6 11 11 9

R-067 ℄
Topsoil-6″
2/3/3 3/4/4 2/2/4 2/7/5 2/3/3 1/3/4 27 16

R-066 ℄
5/4/4 2/1/2 2/2/3 2/3/1 2/1/1 5/3/3 12/5/5 5/5/7 7/8/9 1/3/6 14/17/16 13/14/15 25/19/20 7/14/15 13 13 12 15

1000 990 980 970 960 950 940

468+00 469+00 470+00 471+00 472+00 473+00 474+00 475+00 476+00 477+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 467+50 TO STA. 477+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

WETLAND
TOTAL AREA= 0.084 AC.
DISTURBED AREA= 0.008 AC.

CONSTRUCTION LIMITS

MOOTS RUN

MATCHLINE 477+50 S.R. 37

MATCHLINE 490+00 S.R. 37

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 37

P.C. STA. 488+61.58

10' 24' 6' 12' 6' 24' 10'

478+00 479+00 480+00 481+00 482+00 483+00 484+00 485+00 486+00 487+00 488+00 489+00 490+00

R-065 R-064 R-063 R-061

B-07 B-08 B-09 B-10 B-11 B-12 B-13 B-14 N-1 N-2

0 25 50 100 HORIZONTAL SCALE IN FEET

DRAWN RLS CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 477+50 TO STA. 490+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

23/82

NOTE: NOT ALL STRUCTURE BORINGS ARE SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS NOT SHOWN HERE.

R-065 ℄

R-064 55' Lt. Topsoil-3"

B-7 65' Lt.

R-063 104' Rt. Topsoil-8"

ROCK SECTION 60' Lt.

N-1 103' Rt. Topsoil-18"

N-2 40' Rt. Topsoil-18"

R-061 ℄ Topsoil-5"

Hard to very hard brown SANDSTONE; fine grained, unweathered to slightly weathered, thinly bedded to medium bedded, occasional shale or highly argillaceous beds.

Interbedded medium hard brown SANDSTONE and SHALE; fine grained, moderately weathered, thinly bedded.

Brown, arenaceous, jointed CLAYSHALE with very fine grained, jointed sandstone seams and clay seams

SILTSTONE, gray, olive, firm to hard, with ferruginous stains, with scattered carbonaceous laminae and seams, with clay seams, broken and jointed in part. Core loss 0%. RQD=46

ENTIRE BORING DEPTH NOT SHOWN

990 980 970 960 950 940 930

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CONSTRUCTION LIMITS

MATCHLINE 490+00 S.R. 37

MATCHLINE 502+50 S.R. 37

"WORTHINGTON RD"

SPRINT (OVERHEAD)

P.I. STA. = 25+06.83
Δ = 00° 47' 03" RT.
NO CURVE

℄ CONST. & SURVEY S.R. 37 STA. 497+91.01 =
℄ CONST. & SURVEY OUTVILLE RD STA. 22+66.21

WESTBOUND LANES

EASTBOUND LANES

"STOP AHEAD"

℄ CONST. & SURVEY S.R. 37

℄ CONST. & SURVEY OUTVILLE RD STA. 20+50.00=
℄ CONST. & SURVEY OUTVILLE-MORSE FRONTAGE ROAD STA. 497+31.85

℄ SURVEY & CONST. OUTVILLE ROAD

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.

P.T. STA. 494+45.94

B-15 B-16 B-17 R-060 R-059 R-058 RS-049

10' 24' 6' 72" 6' 24' 10'

4' 24' 4'

+00 491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00

25+00 24+00 23+00 22+00 21+00 20+00

NOTE: NOT ALL STRUCTURE BORINGS ARE SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS NOT SHOWN HERE.

R-060 ℄
2/5/5 1/3/4
8/7/11 8/7/11
7/5/7
20/6/7
15/13/15
7/6/6
4/4/6
3/4/5
7/7/10
21/16/20
14/16/20
6/16/19
8/7/8 WO 26
9/17/17 15 W

R-059 ℄
5/5/4 1/3/3
7/7/10 5/6/8
6/7/9
6/7/9
5/7/14
10/16/14
7/6/6
2/4/6
4/5/6
4/4/6 W
6/9/8
5/6/7
7/5/6 W
2/5/6 15

B-16
30' Lt.
Topsoil-6"
3/4/5 22
3/3/4 23
2/3/3 27
3/5/7 18
7/6/8 14
1/3/6 16
10/12/12 11
1/2/2 16
1/2/2 26
4/8/12 28
4/7/11 16
7/12/18 14
11/18/24 13
50/6/ 9TR

R-058 ℄
3/9/11 3/6/9
3/7/10 3/7/9
4/8/10
4/6/11
5/6/10
4/4/7
10/16/17
3/5/13
18/40/50(5) 10TR
50(3) 7
50(1) 7
50(0)

Gray with brown jointed weathered CLAYSHALE SILTSTONE, dark gray, firm, carbonaceous, jointed in places; interbedded with medium to thick seams of gray, hard, very fine grained sandstone. Core loss 1%. RQD=69.

Severely weathered brown SHALE, contains sandstone fragments.

Hard interbedded dark gray SHALE and light gray SANDSTONE; fine grained, slightly weathered, thinly laminated, highly fractured. Core loss 2%. RQD=31.

Hard gray SANDSTONE; fine grained, unweathered, moderately fractured, rust stained. Core loss 2%. RQD=31.

Hard interbedded light gray SAMDSTONE and dark gray SHALE; fine grained, slightly weathered, thinly laminated, highly fractured, (turbidite). Core loss 0%. RQD=73.

1020 1010 1000 990 980 970 960

490+00 491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 490+00 TO STA. 502+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

24/82

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CONSTRUCTION LIMITS

MATCHLINE 502+50 S.R. 37

MATCHLINE 515+00 S.R. 37

10" PINE

12" PINE

"MILE MARKER 13"

6"PVC VERTICAL PIPE

FIELD DR.

OLD WELL

AEP & ALLTEL (OVERHEAD)

DEAD

WELL

15" WALNUT

WOOD FENCE

12" LOCUST

15" WALNUT

10'

WESTBOUND LANES 24'

6'

72'

6'

EASTBOUND LANES 24'

10'

503+00 504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00 515

R-057

℄ SURVEY & CONST. S.R. 37

R-056

R-055

RS-048

RS-047

509+00 4'

22'

4'

RS-046

P.C. STA. 508+14.13

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

CONSTRUCTION LIMITS

R-057 ℄

6/16/27 4/11/11 3/6/7 4/6/12 5/10/15 5/22/16 6/39/50(3) 27/50(4) 39/50(1)

13

9 TR

7 Severely weathered gray SHALE.

6

Hard dark gray SHALE; slightly to moderately weathered, highly fractured to broken, rust staining on joints. Core loss 10%. RQD=0.

Hard to very hard brownish gray SANDSTONE; fine grained, slightly to moderately weathered, highly fractured, rust staining on joints. Core loss 0%. RQD=15.

Hard interbedded light gray SANDSTONE and dark gray SHALE; fine grained, unweathered to slightly weathered, thinly laminated, highly fractured, (turbidite). Core loss 0%. RQD=38.

R-056 ℄

5/10/11 3/3/4 2/4/7 3/3/5 2/2/4 4/7/5 10/14/26 16/26/50(2) 26/50(2) 36/50(1) 50(2)

15

21

15

TR

Severely weathered brown SHALE.

Medium hard dark gray SHALE; moderately weathered, highly fractured. Core loss 30%. RQD=0.

Medium hard to hard interbedded dark gray SHALE and light gray SANDSTONE; fine grained, moderately weathered, highly fractured, (turbidite). Core loss 12%. RQD=0.

Very hard light brownish gray SANDSTONE; fine grained, unweathered, micaceous, medium to thickly bedded, moderately fractured. Core loss 0%. RQD=31.

Hard dark gray SHALE; unweathered, moderately fractured, contains sandstone interbeds. Core loss 0%. RQD=31.

R-055 ℄

8/13/14 5/9/13 3/5/9 6/14/15 4/6/8 3/10/15 21/19/15 4/7/14 4/8/8 14/41/35 12/16/50(2) 50(5) 50(2) 50(2)

12

8

7 Severely weathered gray SHALE.

6

1030 1020 1010 1000 990 980 970

503+00 504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00 515+00

HORIZONTAL SCALE IN FEET 0 25 50 100

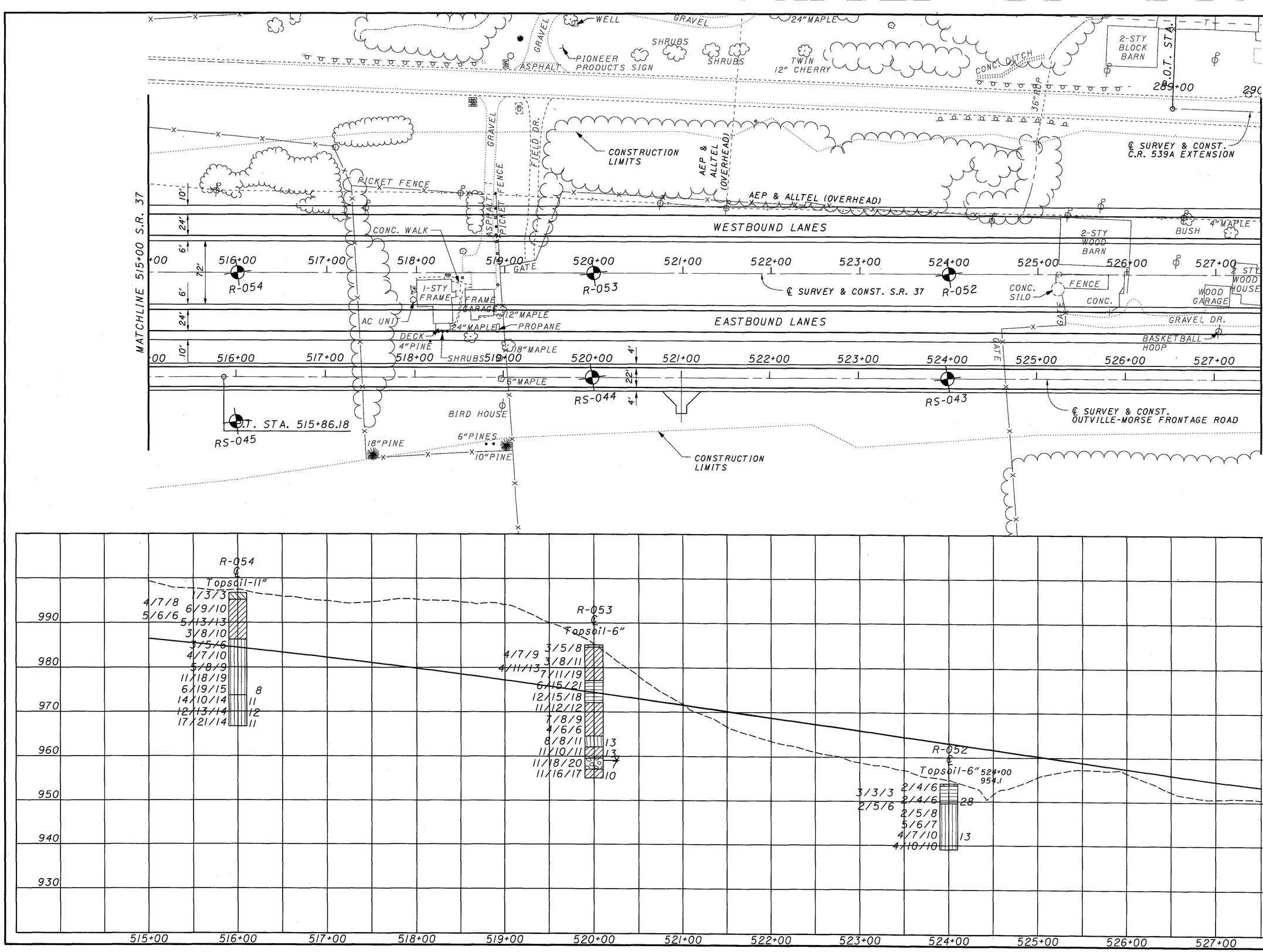
DRAWN RLS CHECKED PAM

SOIL PROFILE - S.R. 37
STA. 502+50 TO STA. 515+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

25/82

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 515+00 TO STA. 527+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

SOIL PROFILE - S.R. 37
STA. 527+50 TO STA. 540+00 S.R. 37
LIC-161-6.65
LIC-37-10.25

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

27/82

GRAVEL
METAL BARN
GATE
SPRINT
CONSTRUCTION LIMITS
ASPHALT
METAL GUARDRAIL
GRAVEL DR.
MATCHLINE 527+50 S.R. 37
MATCHLINE 540+00 S.R. 37
AEP & ALLTEL (OVERHEAD)
WESTBOUND LANES
EASTBOUND LANES
℄ SURVEY & CONST. S.R. 37
℄ SURVEY & CONST. C.R. 539A EXTENSION
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE RD.
S 80° 18′ 55″ E
S 82° 24′ 26″ E
20″MAPLE
18″MAPLE
12″ELM
12″WILLOW
8″MAPLE
15″ELM
24″MAPLE
SEPTIC
WOOD BRIDGE
METAL POLE BARN
ALLTEL (OVERHEAD)
STONE WALL
RS-020
RS-021
RS-040
RS-041
RS-042
RS-038
RS-039
R-047
R-048
R-050
R-051

R-051
℄
Topsoil-4″
2/4/6 2/2/4 | 5/8 3/2/4 3/2/2 7/9/46 18/10/10 11/7/7 | 23 27 14

R-050
℄
Topsoil-13″
3/4/4 1/1/2 | 1/4/5 3/3/2 3/2/2 2/7/9 | 33 W 26 30

R-048
48′ Lt.
Topsoil-4″
5/6/10 7/12/19 | 1/2/3 5/9/13 7/10/12 5/6/11 4/10/8 3/3/3 4/6/7 6/9/12 4/4/4 4/3/5 | W 11 10 14 13

R-047
19′ Lt.
Topsoil-3″
2/2/4 3/6/8 | 0/3/4 2/4/5 4/4/6 4/6/7 5/5/5 3/5/7 6/7/8 6/8/13 | 19 17 10 11

970 960 950 940 930 920 910

528+00 529+00 530+00 531+00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00

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FIELD
SEPTIC
PROPANE TANK
GRAVEL
GRASS
CONSTRUCTION LIMITS
TV TOWER
1-STY FRAME
WELL
SILO
1-1/2 STY - 1 METAL/BLOCK BARN
CONC. PAD
TEL. PED
3" MAPLE
℄ SURVEY & CONST. C.R. 539A EXTENSION
YARD
12" CONC.
AEP & ALLTEL (OVERHEAD)
P.C. STA. 312+13.68
P.T. STA. 314+74.64
RS-019
RS-018
RS-017
RS-016
303+00
304+00
305+00
306+00
307+00
308+00
309+00
310+00
311+00
312+00
313+00
314+00
315
ALLTEL (OVERHEAD)
22.83'
R-046
WESTBOUND LANES
MATCHLINE 540+00 S.R. 37
MATCHLINE 552+50 S.R. 37
541+00
542+00
543+00
544+00
545+00
546+00
547+00
548+00
549+00
550+00
551+00
552+00
R-042
R-045
R-044
R-043
℄ SURVEY & CONST. S.R. 37
WOODS
TREES
EASTBOUND LANES
ALLTEL (OVERHEAD)
RS-037
RS-036
RS-035
RS-034
CONSTRUCTION LIMITS
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
GRAVEL DR.
SEPTIC AREA
2-STY FRAME
SPLIT RAIL
TREES
PROPANE TANK

R-046
72' Lt.
Topsoil-2"
3/10/10 1/3/6 15
8/9/6 3/6/8 9
5/3/4
2/2/4 23
2/4/5
1/3/3 13

R-045
7' Rt.
Topsoil-10"
1/2/4
4/7/10 5/6/10
9 20/22/20
9 15/20/26
12 12/11/11
15 11/13/13

R-044
20' Rt.
Topsoil-6"
7/8/12 9/10/15
18/17/20 17/15/15
15/16/17
4/10/11
8/8/9
9/8/8
3/6/9
6/6/7
17 W 5/5/6
11 12/11/15
14 8 11/12/9
15 9/10/10

R-043
90' Rt.
Topsoil-13"
3/6/6 3/4/4
10/13/15 10/12/16
10/15/14
11/14/18
10/14/14
13/14/16
10/15/18
3/8/11
5/10/18
6/16/18 W
8/10/12
6/7/12
6/10/12 9
10/26/25 8

R-042
10' Lt.
Topsoil-4"
3/5/7
2/3/2 26
0/2/3 2/3/5
1/3/4
2/3/5 16
2/4/6
3/6/6
2/3/5
3/4/6

970
960
950
940
930
920
910

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DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - S.R. 37
STA. 540+00 TO STA. 552+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

28/82

WETLAND
TOTAL AREA= 3.067 AC.
DISTURBED AREA= 0.000 AC.

6" ASHLAND OIL PIPELINE

AEP & ALLTEL (OVERHEAD)

WOODS

CONSTRUCTION LIMITS

GATE

WIRE FENCE

P.C. STA. 321+76.51

P.T. STA. 323+33.91

℄ SURVEY & CONST. ALLTEL (OVERHEAD) C.R. 539A EXTENSION

RS-015

RS-013

RS-011

RS-010

"DIRECTIONAL"

"DIRECTIONAL"

RS-014

WESTBOUND LANES

METAL

RS-012

"37 WEST"

"MORSE ROAD"

"STOP"

R-039

R-038

END MEDIAN TAPER
STA. 560+04.84, 25' RT.

EASTBOUND LANES

TREES

WIRE FENCE

MORSE RD.

RS-031

RS-030

RS-033

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

RS-032

AEP & ALLTELL (OVERHEAD)

2"CM

"WT. REDUCED 50%"

℄ SURVEY & CONST. MORSE ROAD

30"WALNUT

24"WALNUT

S.T. STA. 17+11.60

PASTURE

MATCHLINE 552+50 S.R. 37

MATCHLINE 565+00 S.R. 37

R-041
℄
Topsoil-9"

R-040
℄
Topsoil-7"

R-039
9' Rt.
Topsoil-3"

R-038
21' Lt.
Topsoil-2"

553+00 554+00 555+00 556+00 557+00 558+00 559+00 560+00 561+00 562+00 563+00 564+00 565+00

960 950 940 930 920 910 900

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 552+50 TO STA. 565+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

29/82

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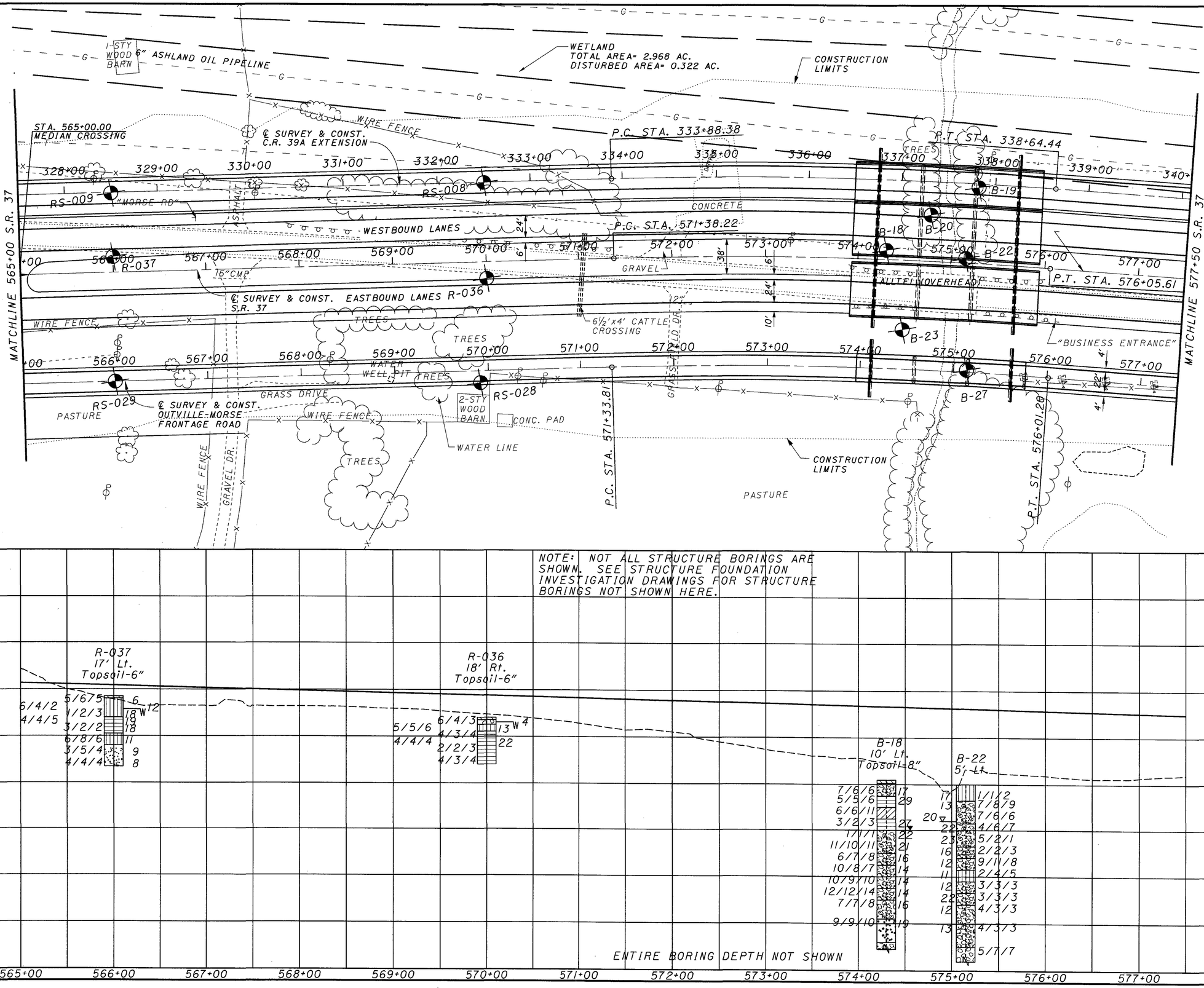
SOIL PROFILE - S.R. 37
STA. 565+00 TO STA. 577+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

30/82

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN



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10" ASHLAND OIL PIPELINE

CONSTRUCTION LIMITS

ALLTEL (OVERHEAD)

℄ SURVEY & CONST. C.R. 539A EXTENSION

MATCHLINE 577+50 S.R. 37

MATCHLINE 590+00 S.R. 37

RS-007 RS-006 RS-005 RS-027 RS-026 RS-025

R-035 R-034 R-033 R-032

WESTBOUND LANES

EASTBOUND LANES

6" ASHLAND OIL PIPELINE

℄ SURVEY & CONST. S.R. 37

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

AEP & ALLTEL (OVERHEAD)

P.O.T. STA. 584+40.00

PORTABLE SIGN

"RACOON INTERNATIONAL"

WOOD POST

HISTORICAL MARKER

WIRE FENCE

SHRUB

WELL (NOT USED)

BUSH

SPLIT RAIL

GATE

LANDSCAPING

GRAVEL

TREES & WOODS

24" PINE

14" APPLE

16" MAPLE

16"

18"

2-STY FRAME

CONC.

SEPTIC

SHRUBS

SHED

PROPANE TANK

WELL

1½ STY WOOD BARN

TREES

PINES

WOOD FENCE

GRASS

RAISED FLOWER BEDS

WETLAND

TOTAL AREA= 0.274 AC.

DISTURBED AREA= 0.011 AC.

GOLF COURSE

SAND TRAP

FAIRWAY

GREEN

6" CRAB

6" PINE

ELEC. METER

SHRUBS

ASPHALT DR.

SIGN

12" MAPLE

℄ CONST. & SURVEY S.R. 37 STA. 583+95.56 =
℄ CONST. & SURVEY SERVICE RD. 12 STA. 583+86.18

R-035
℄
Topsoil-5"
3/4/5
4/7/6
6/4/5
4/4/4
2/2/5
2/3/5
1/1/1
1/3/5
2/4/4
2/5/9
17
12
24 ●
27 ○
23 ●
23 ●

R-034
℄
Topsoil-4"
5/9/18
11/17/17
7/8/6
7/12/9
2/7/5
3/4/4
8/5/7
10/6/8
12
24W

R-033
℄
Topsoil-2"
8/9/10
7/12/13
3/4/4
6/9/10
2/4/5
2/2/3
2/7/10
10/15/14
10
24
24
21
17 W

R-032
50' Lt.
Topsoil-10"
0/1/2
0/2/2
1/1/1
2/3/7
2/3/3
4/5/10
4/4/5
6/6/5
4/5/6
42W
17
15
17

940 930 920 910 900 890 880

578+00 579+00 580+00 581+00 582+00 583+00 584+00 585+00 586+00 587+00 588+00 589+00 590+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 577+50 TO STA. 590+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

31 / 82

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SOIL PROFILE - S.R. 37
STA. 590+00 TO STA. 602+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

32/82

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

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10" ASHLAND OIL PIPELINE
CONSTRUCTION LIMITS
T.S. STA. 356+04.70
S.C. STA. 357+63.70
ALLTEL (OVERHEAD)
TREES & WOODS
TREES & DENSE BRUSH
16"DEAD
14"WALNUT
"BRIDGE END MARKER"
S.T. STA. 363+97.34
ARROW
C.S. STA. 362+38.34
GRASS FIELD
GRAVEL
BAR PILES
8" BOX ELDER
ASPHALT PILE
℄ SURVEY & CONST. C.R. 539A EXTENSION
CR 539A ASPHALT
TREES DENSE BRUSH
4' WIRE FENCE
2-8"WALNUT
"WATCH FOR ICE ON BRIDGES"
GRASS FIELD
WESTBOUND LANES
"STOP"
"CR 539A"
℄ SURVEY & CONST. S.R. 37
EASTBOUND LANES
2.5' METAL GUARDRAIL
WETLAND
TOTAL AREA- 7.085 AC.
DISTURBED AREA- 0.293 AC.
SWAMP
TREES
WETLAND
TOTAL AREA- 0.274 AC.
DISTURBED AREA- 0.011 AC.
MATCHLINE 590+00 S.R. 37
MATCHLINE 602+50 S.R. 37
R-030
R-031
R-029
R-028
R-027
R-026
R-025
I.R.S.
RS-001
RS-002

R-031
14' Rt.
Topsoil-4"

R-030
55' Lt.
Topsoil-2"

R-029
9.5' Rt.
Asphalt Concrete Pavement-9"
Aggregate Base-8"

R-028
40' Lt.
Topsoil-3"

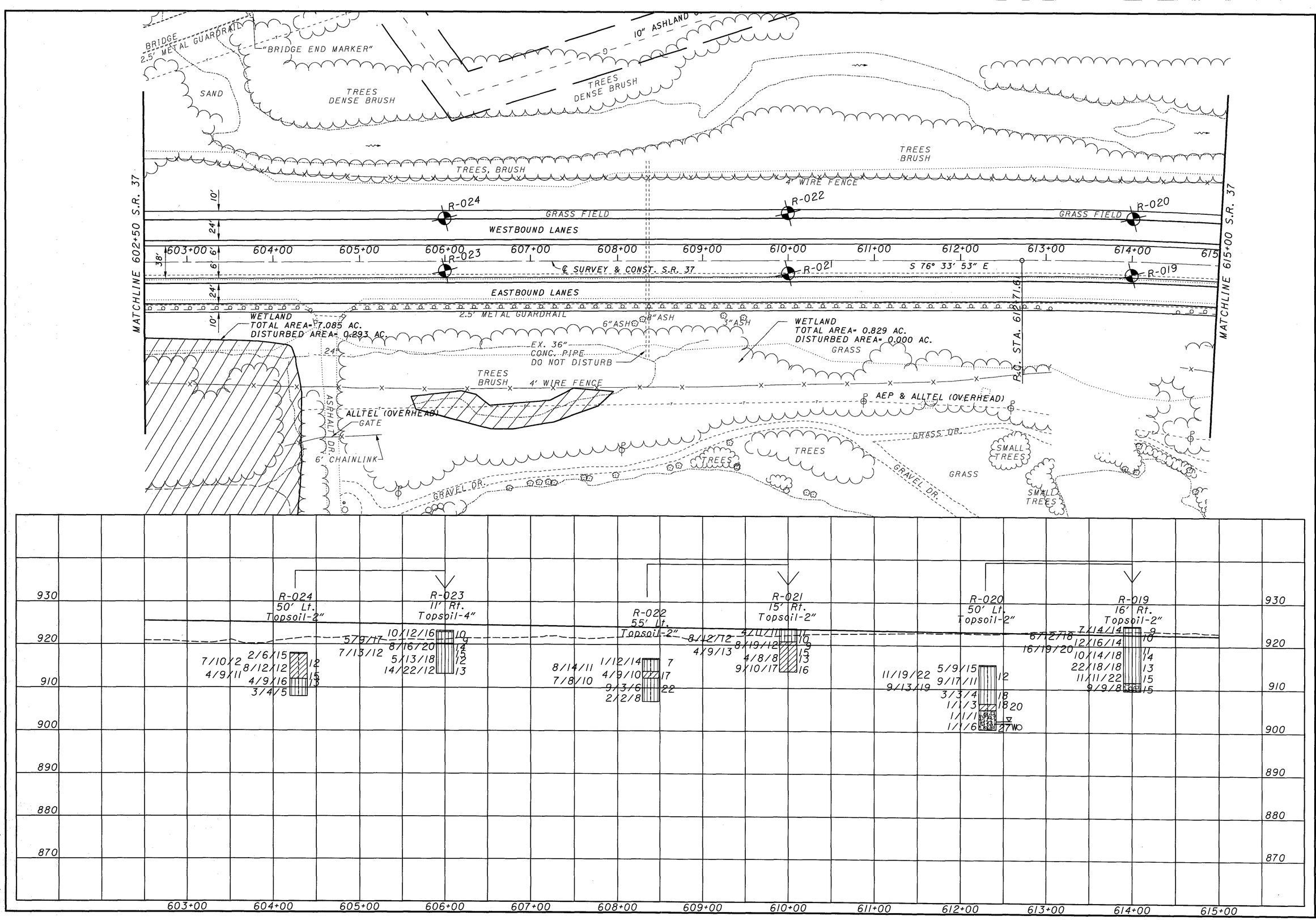
R-027
5' Rt.
Asphalt Concrete Pavement-8"
Aggregate Base-6"

R-026
55' Lt.
Topsoil-4"

R-025
7' Rt.
Asphalt Concrete Pavement-12"
Aggregate Base-6"

930
920
910
900
890
880
870

590+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+00 599+00 600+00 601+00 602+00



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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 602+50 TO STA. 615+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

WOODS

WOODS

WOODS

CONSTRUCTION LIMITS

AEP & ALLTEL (OVERHEAD)

4' WIRE FENCE

GRASS FIELD

4' WIRE FENCE

WESTBOUND LANES

R-018

R-016

R-014

R-017

℄ SURVEY & CONST. S.R. 37

R-015

R-013

EASTBOUND LANES

MATCHLINE 615+00 S.R. 37

616+00

617+00

618+00

619+00

620+00

621+00

622+00

623+00

624+00

625+00

626+00

627+00

MATCHLINE 627+50 S.R. 37

"15 MPH"

P.I. STA. 622+07

2.5' METAL GUARDRAIL

GRASS

DR.

4' WIRE FENCE

4' WIRE FENCE

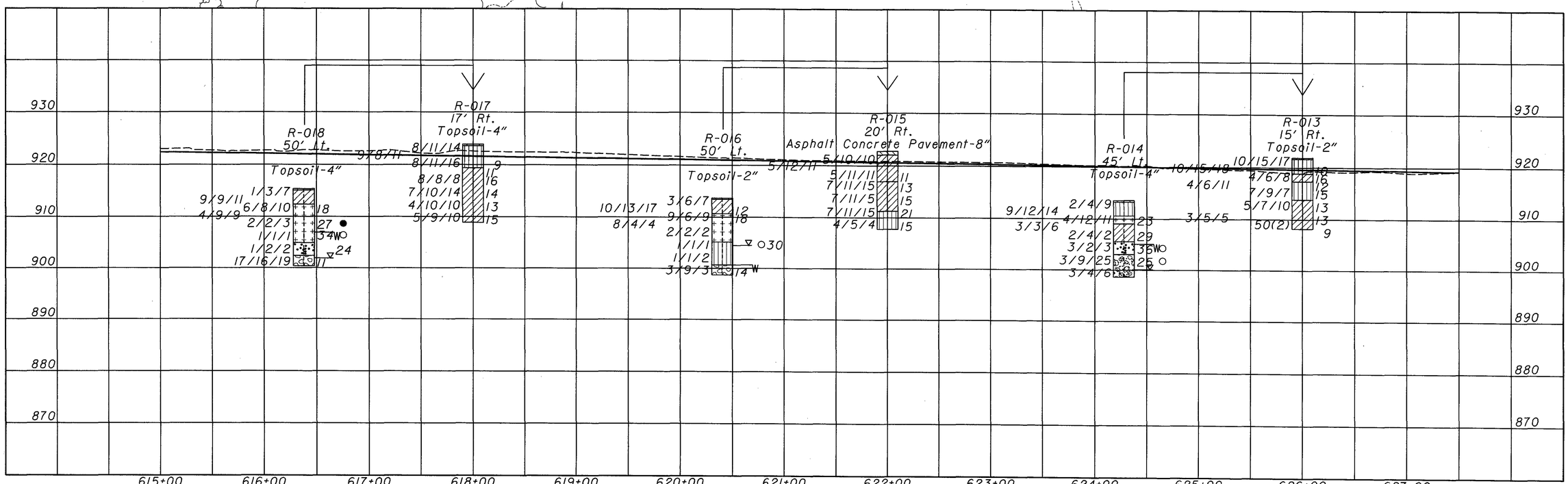
CONSTRUCTION LIMITS

TREES
BRUSH

TREES
BRUSH

WETLAND
TOTAL AREA= 0.259 AC.
DISTURBED AREA= 0.010 AC.

WOODS
HEAVY BRUSH



SOIL PROFILE - S.R. 37
STA. 615+00 TO STA. 627+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

34/82

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

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SOIL PROFILE - S.R. 37
STA. 627+50 TO STA. 640+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

35/82

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

MATCHLINE 627+50 S.R. 37

MATCHLINE 640+00 S.R. 37

WOODS
CONSTRUCTION LIMITS
4' WIRE FENCE
GRASS FIELD
"MILEAGE SIGN"
R-012
R-011
R-010
R-009
R-008
R-007
628+00
629+00
630+00
631+00
632+00
633+00
634+00
635+00
636+00
637+00
638+00
639+00
640
℄ SURVEY & CONST. S.R. 37
10'
24'
6'
38'
16" GAS LINE
24" GAS LINE
WESTBOUND LANES
EASTBOUND LANES
2.5' METAL GUARDRAIL
"GAS FOOD LODGING NEXT 2 EXITS"
"DIVIDED HIGHWAY"
GRAVEL DR.
BUSH
BRUSH
TREES
TREES & BRUSH
6"HACKBERRY
6"ASH
2-3"BOX ELDERS
"55 MPH"
"1/2 WEST 1/2 MILE"
ASPHALT DR.
10"COTTONWOOD
FIELD

R-012
35' Lt.
Topsoil-2"
3/8/11 2/3/7 23
3/2/4 5/5/7 18
2/2/3 32
1/2/1
2/3/2 29WD
1/1/1
0/1/1
1/1/0 34 35
1/1/1
0/2/2
1/2/3
2/3/4
6/6/10 23
4/6/7

R-011
16' Rt.
Topsoil-2"
4/7/9
10/11/16 12/20/36
6/8/11 12
4/6/7 14
6/8/9 21
5/4/3 28

R-010
38' Lt.
3/7/9 2/6/7 19
2/5/5 3/5/8 24
2/2/4 26
2/4/6 20
11

R-009
15' Rt.
Topsoil-5"
15/28/26
10/11/12
5/10/14 10
18/24/26 14
7/23/15 13
4/7/7 24
4/5/8 28
3/5/4 29

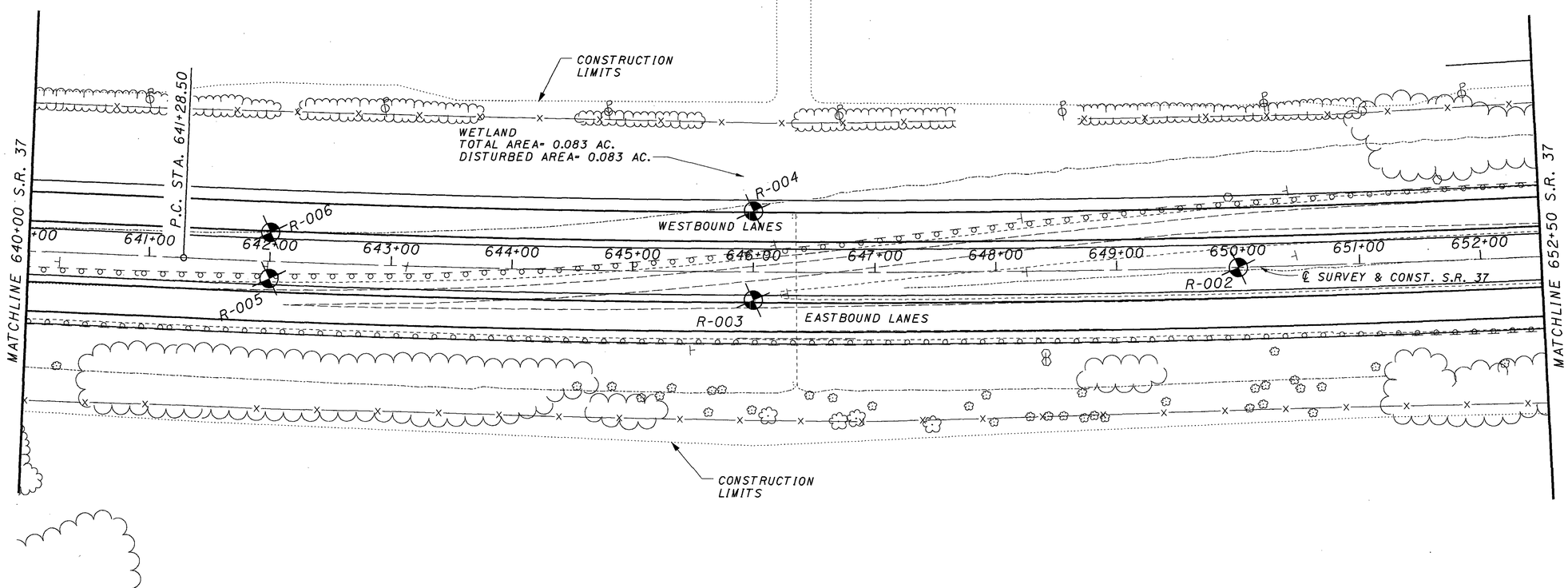
R-008
35' Lt.
Topsoil-12"
5/6/9 2/3/5 25
2/4/5 3/4/5 23
7/2/3 26
1/2/6 18

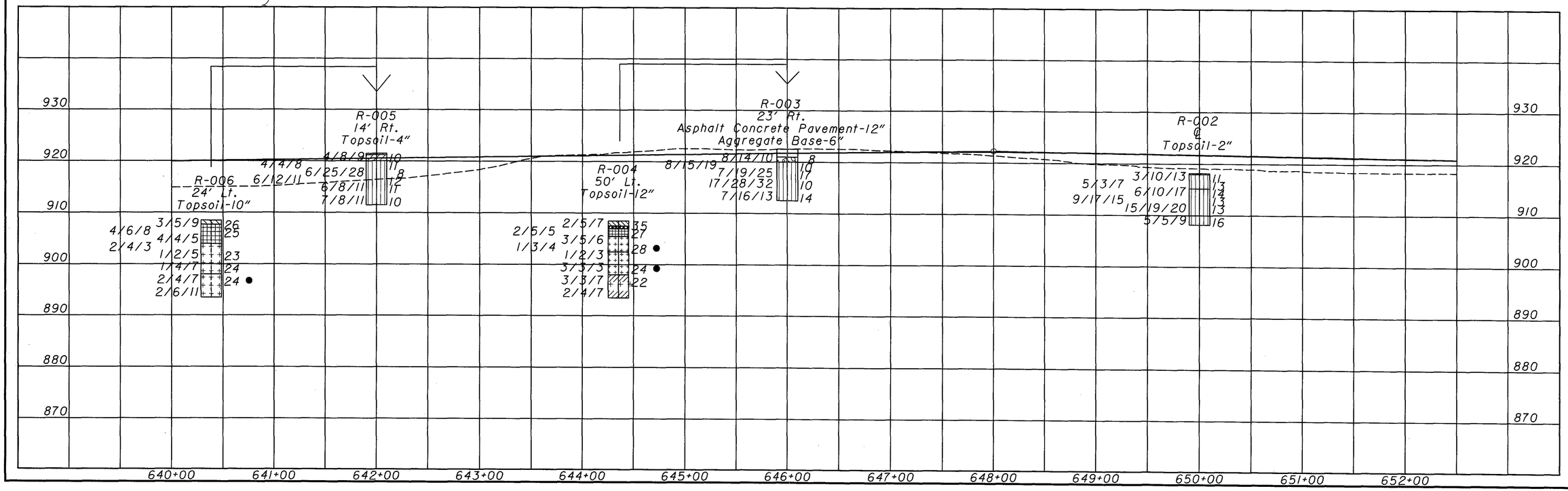
R-007
16' Rt.
Topsoil-2"
7/22/40
11/15/16
9/15/13 7
14/20/24 10
3/5/10 13
3/6/10 23
6/7/9 25
3/5/6 31

930
920
910
900
890
880
870

628+00 629+00 630+00 631+00 632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 640+00 TO STA. 652+50 S.R. 37

LIC-161-6.65
LIC-37-10.25

36/82

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END PROJECT
STA. 654+00.00
S.L.M. 12.39

BEGIN PVMT. TRANSITION
BEGIN SHLD. TRANSITION
STA. 653+25.00 (LT. & RT.)

CONSTRUCTION LIMITS

MATCHLINE 652+50 S.R. 37

P.T. STA. 655+43.68

653+00 654+00 655+00 656+00 657+00 658+00 659+00 660+00 661+00 662+00 663+00 664+00 665

℄ SURVEY & CONST. S.R. 37

10' 24' 6.6± 24' 10'
10.7± 24± 4.1± 24± 4.1± 10.7±

R-001

R-001
℄
Topsoil-2"

8/14/16 6/13/12 16
6/8/9 7/5/5 10
3/4/5 19
3/4/4 21
24

930 920 910 900 890 880 870

653+00 654+00 655+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 652+50 TO STA. 665+00 S.R. 37

LIC-161-6.65
LIC-37-10.25

37/82

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

RS-088

190+00 191+00 192+00 193+00 194+00

S.C. STA. 439+97.37

P.O.T. STA. 436+46.26

P.C. STA. 439+50.00

S.R. 161 STA. 440+34.31, 89' LT.
RAMP I STA. 440+28.41, 16' RT.

P.O.T. STA. 442+23.33

MATCHLINE STA. 443+00 RAMP I

R-082

WESTBOUND LANES

DENSE VEGETATION

9'

432+00 433+00 434+00 435+00 436+00 437+00 438+00 439+00 440+00 441+00 442+00

N 66° 14' 49" E

℄ SURVEY & CONST. RAMP I

R-081

℄ SURVEY & CONST. S.R. 161

R-080

EASTBOUND LANES

435+00 436+00 437+00 438+00 439+00 440+00 441+00 442+00 443+00

R-079

P.C. STA. 434+75.00

191+00 192+00 193+00 194+00 195+00 196+00 197+00

RS-C

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

℄ SURVEY & CONST. RAMP K

RS-093

CONSTRUCTION LIMITS

P.C.C. STA. 440+29.60

CONSTRUCTION LIMITS

RS-075

443+00 444+00

1000 990 980 970 960 950 940

R-079
143' Rt.
Topsoil-3"

3/11/13 0/2/2 34 O
5/14/13 6/10/14 9
5/9/12 10
3/5/5
4/6/7
4/4/4
7/9/10
4/5/7
4/7/7 50(4) ▽TR

437+00 438+00 439+00 440+00 441+00 442+00 443+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RAMP I
STA. 440+28.41 TO STA. 443+00.00

LIC-161-6.65
LIC-37-10.25

38/82

SOIL PROFILE - RAMP I
STA. 443+00 TO STA. 451+87.75

LIC-161-6.65
LIC-37-10.25

39/82

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

N

CONSTRUCTION LIMITS

℄ SURVEY & CONST. RAMP I

SPRINT (OVERHEAD)

MATCHLINE STA. 443+00 RAMP I

RS-077

RS-078

RS-076

N 66° 14' 49" E

P.C. STA. 447+24.19

P.T. STA. 449+28.85

STA. 451+08.75
63.70' LT.

STA. 451+24.21
79.70' RT.

+74.42

90.18

60'R

89° 53' RT.

87° 30'

℄ SURVEY & CONST. RAMP J

℄ SURVEY & CONST.S.R. 37 STA. 402+21.04 =
℄ SURVEY & CONST. RAMP I STA. 451+87.75=
℄ SURVEY & CONST. RAMP J STA. 450+21.62

END WORK
STA. 45+69.73

℄ SURVEY & CONST. S.R. 37

WESTBOUND LANES

EASTBOUND LANES

WETLAND
TOTAL AREA= 0.452 AC.
DISTURBED AREA= 0.452 AC.

SPRINT

RS-077
5.5' Rt.
Asphalt Concrete Pavement-6"
Aggregate Base-8"
3/6/7
4/5/4 16
6/7/8
8/9/10 18
4/5/5
3/8/8
6/8/9
6/6/7
2/2/3 25
10/12/14
10/10/12 12
6/7/8
5/10/12

RS-076
@
Topsoil-3"
1/1/3
1/3/5 15
2/4/6
4/5/7
4/7/9
6/13/14
5/26/28 5
9/14/16
5/6/6 13
8/10/11
5/6/10
4/8/9
3/4/5 14
2/4/7
5/8/8
7/12/12

PROPOSED PROFILE
EXIST. GRADE

RS-071
26' Rt.
Aspalt Concrete Pavement-8"
Aggregate Base-4"
7/10/10 15
4/5/10 2/5/9 14
4/10/10
8/7/10 12
2/7/13
19/24/12 11
7/24/14
4/11/11 9 15

1000 990 980 970 960 950 940

443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00 451+00

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℄ SURVEY & CONST. S.R. 37 STA. 402+21.04 = ℄ SURVEY & CONST. RAMP J STA. 450+21.62= ℄ SURVEY & CONST. RAMP I STA. 451+87.75

℄ SURVEY & CONST. RAMP I

℄ SURVEY & CONST. S.R. 37

87°30'

50'R

STA. 450+94.88
50.00' LT.

STA. 450+76.76
74.00' RT.

S 84° 53' 13" E

BEGIN PAVEMENT TAPER
-22.95, 24.00' RT.

END PAVEMENT TAPER
-72.95, 16' RT.

SPRINT (OVERHEAD)

P.T. STA. 455+55.03

S 52° 29' 16" E

P.C. STA. 457+64.87

CONSTRUCTION LIMITS

MATCHLINE STA. 461+00 RAMP J

℄ SURVEY & CONST. RAMP J

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 161

RS-071
26' RT.
Aspalt Concrete Pavement-8"
Aggregate Base-4"

RS-067
℄
Asphalt Concrete Pavement-6"
Aggregate Base-6"

RS-066
℄
Topsoil-11"

RS-065
℄
Topsoil-11"

4/5/10	7/10/10	15	6/8/8	8/10/11		2/3/5	2/3/6	29	3/4/4	3/4/5	
4/10/10	2/5/9	14	19/50(2)	7/9/11	13	3/3/5	3/3/5	31	4/6/6	4/6/5	
	8/7/10	12		10/20/27	7		4/6/10			27/37/5	
	2/7/13			8/13/20			4/10/11			2/6/10	
	19/24/12	11		11/12/14						12/19/18	8
	7/24/14			18/50(5)						12/17/25	8
	4/11/11	15W		9/13/15	12					50(5)	
										8/13/17	11

1010 1000 990 980 970 960 950

451+00 452+00 453+00 454+00 455+00 456+00 457+00 458+00 459+00 460+00 461+00

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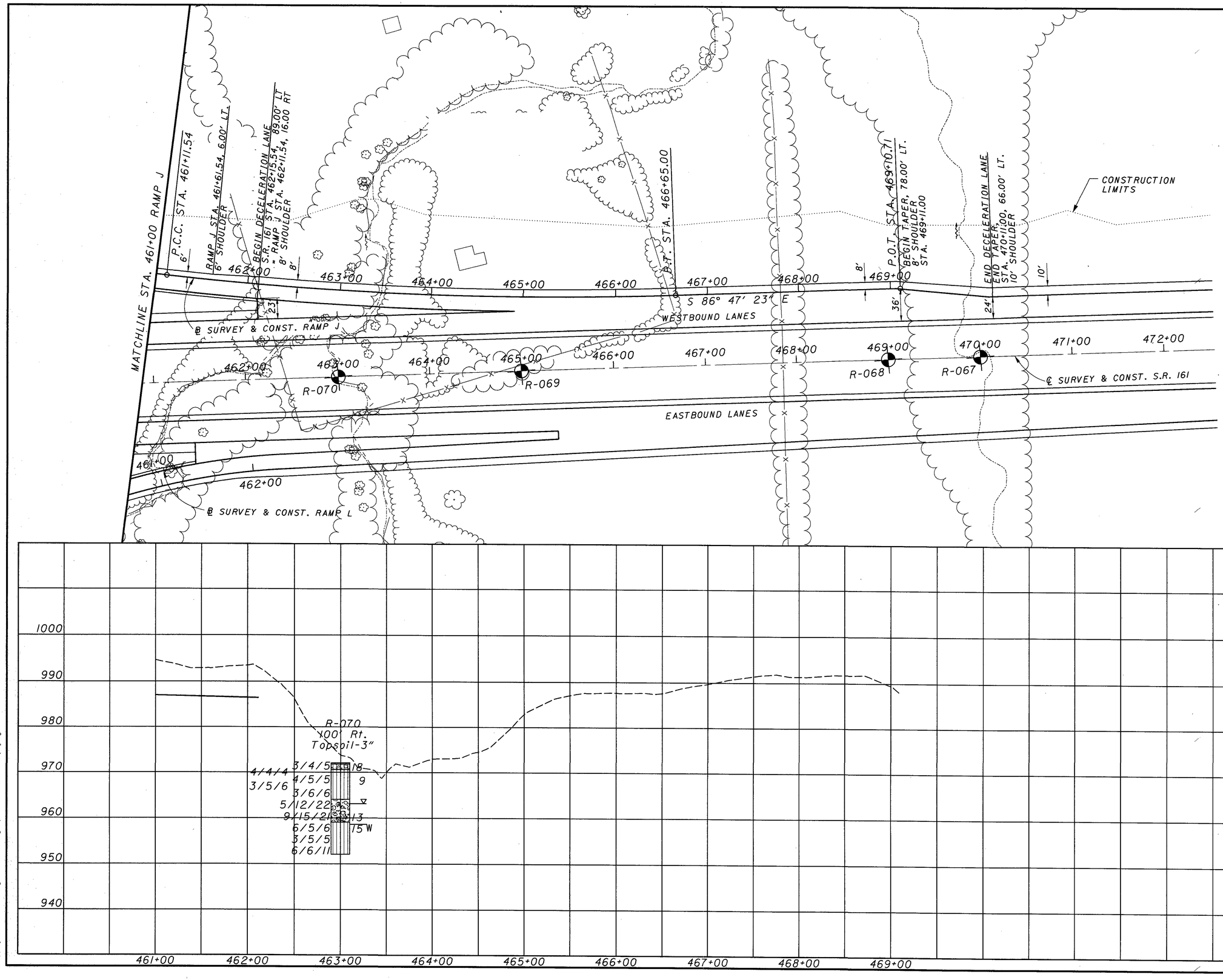
HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RAMP J
STA. 450+21.62 TO STA. 461+00

LIC-161-6.65
LIC-37-10.25

40/82



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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RAMP J
STA. 461+00 TO STA. 470+15.54

LIC-161-6.65
LIC-37-10.25

41 / 82

℄ SURVEY & CONST.
RELOCATED
WORTHINGTON ROAD NORTH

R-082

WESTBOUND LANES

DENSE VEGETATION

R-083

P.C. STA. 430+93.83

STA. 432+40.00, 78' RT.
END TAPER,
8' SHOULDER

R-081

℄ SURVEY & CONST. S.R. 161

EASTBOUND LANES

BEGIN DECELERATION LANE
STA. 431+40.00, 66' RT.
BEGIN TAPER, 10' SHOULDER

S-095

P.C. STA. 434+75.00

RS-093

℄ SURVEY & CONST.
WATKINS-YORK FRONTAGE ROAD

T.S. STA. 189+32.18

S.C. STA. 191+97.37

CONSTRUCTION
LIMITS

P.O.T. STA.

P.C.C. STA.

℄ SURVEY & CONST. RAMP I

℄ SURVEY & CONST. RAMP K

END DECELERATION LANE
S.R. 161 STA. 438+40.51, 89' RT.
RAMP K STA. 439+29.60, 16' RT.
BEGIN SHOULDER TAPER

RAMP K STA. 439+79.60
END SHOULDER TAPER
6' SHOULDER

P.C.C. STA. 440+29.60

MATCHLINE STA. 441+00 RAMP K

RS-092

188+00 189+00 190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00

430+00 431+00 432+00 433+00 434+00 435+00 436+00 437+00 438+00 439+00 440+00 441+00

1010 1000 990 980 970 960 950

R-080
95' Rt
Topsoil-4"

1/2/1		
27/27/3	1/5/5	18
5/9/9	4/8/9	12
	3/5/5	11
	3/5/5	
	1/7/13	13
	4/12/9	
	4/6/8	11
	5/9/11	
	3/4/5	

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RAMP K
STA. 431+40.51 TO STA. 441+00

LIC-161-6.65
LIC-37-10.25

42/82

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MATCHLINE STA. 441+00 RAMP K

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. RAMP K

℄ SURVEY & CONST. RAMP L

℄ SURVEY & CONST. S.R. 37

SPRINT (OVERHEAD)

P.T. STA. 443+09.42

P.C. STA. 446+63.39

P.T. STA. 443+25.33

P.C. STA. 411+02.83

℄ SURVEY & CONST. S.R. 37 STA. 411+12.78= ℄ SURVEY & CONST. RAMP K STA. 451+60.74= ℄ SURVEY & CONST. RAMP L STA. 450+41.60

P.T. STA. 412+54.54

STA. 450+99.14 66.00' LT.

STA. 450+87.31 50.00' RT.

50'R

34°28'

S 59° 51' 13" E

S 84° 51' 28" E

CONSTRUCTION LIMITS

R-079

R-076

RS-075

RS-074

RS-070

RS-075
℄
Topsoil-6"
3/5/12 16
5/11/14 18
12/13/17 17
12/12/14 14
7/9/11 14
7/9/10 13

RS-074
℄
Topsoil-13"
5/4/7 24
6/8/11 23
4/6/6 W 19
2/3/6 7/7/10
6/6/9
6/11/14 13
5/8/10
6/9/14
10/12/15

RS-070
10' Lt.
Asphalt Concre Pavement-8"
Aggregate Base-6"
5/8/9 19
5/5/7 18
3/5/7
2/3/6
2/6/7 28
5/5/7
1/2/5
4/17/17
10/12/14
7/7/10 28W
11/18/13

1020 1010 1000 990 980 970 960

441+00 442+00 443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00 451+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RAMP K
STA. 441+00 TO STA. 451+60.74

LIC-161-6.65
LIC-37-10.25

43/82

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SOIL PROFILE - RAMP L
STA. 450+41.60 TO STA. 459+50

LIC-161-6.65
LIC-37-10.25

44/82

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

N

B-06

SPRINT (OVERHEAD)

℄ SURVEY & CONST. S.R. 37

℄ SURVEY & CONST. S.R. 161

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. RAMP K

℄ SURVEY & CONST. RAMP L

℄ SURVEY & CONST. SERVICE ROAD II

CONSTRUCTION LIMITS

MATCHLINE STA. 459+50 RAMP L

P.I. STA. 449+13.43

P.C. STA. 411+02.83

P.T. STA. 412+54.57

P.C. STA. 452+88.16

P.T. STA. 455+60.98

P.C. STA. 458+44.24

P.C. STA. 223+78.25

STA. 451+18.55
332.80' LT.

STA. 450+99.63
189.82' LT.

87°31'45"

S 89° 51' 28" E

N 62° 51' 35" E

RS-070

RS-064

RS-059

449+00 450+00 451+00 452+00 453+00 454+00 455+00 456+00 457+00 458+00 459+00

412+00 411+00 410+00 409+00 408+00

224+00 223+00 222+00 221+00 220+00 225+00

RS-070
10' Lt.
Asphalt-8"
Aggregate Base-6"

5/5/7
2/3/6
5/8/9
3/5/7
2/6/7
5/5/7
1/2/5
4/17/17
10/12/14
7/7/10
11/18/13
WO

RS-064
℄
Topsoil-12"

5/8/8
11/11/12
2/3/5
7/11/13
5/6/6
5/5/10
3/3/3
4/2/2
1/5/5
8/11/16
W

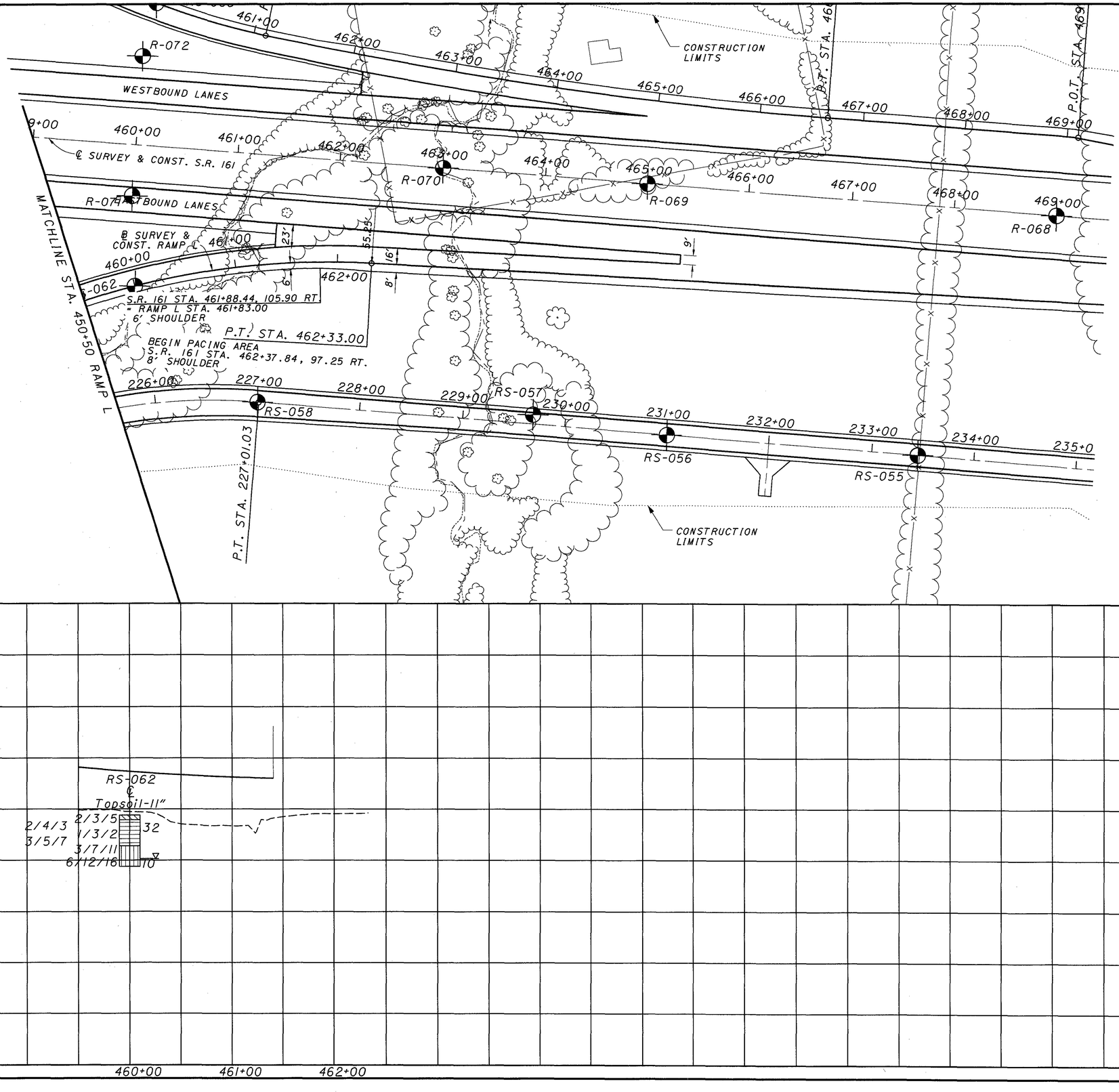
RS-059
55' Rt.
Topsoil-12"

3/3/3
1/1/2
3/5/6
8/11/2
1/2/3
5/10/11
W

1030 1020 1010 1000 990 980 970 960 950 940

451+00 452+00 453+00 454+00 455+00 456+00 457+00 458+00 459+00

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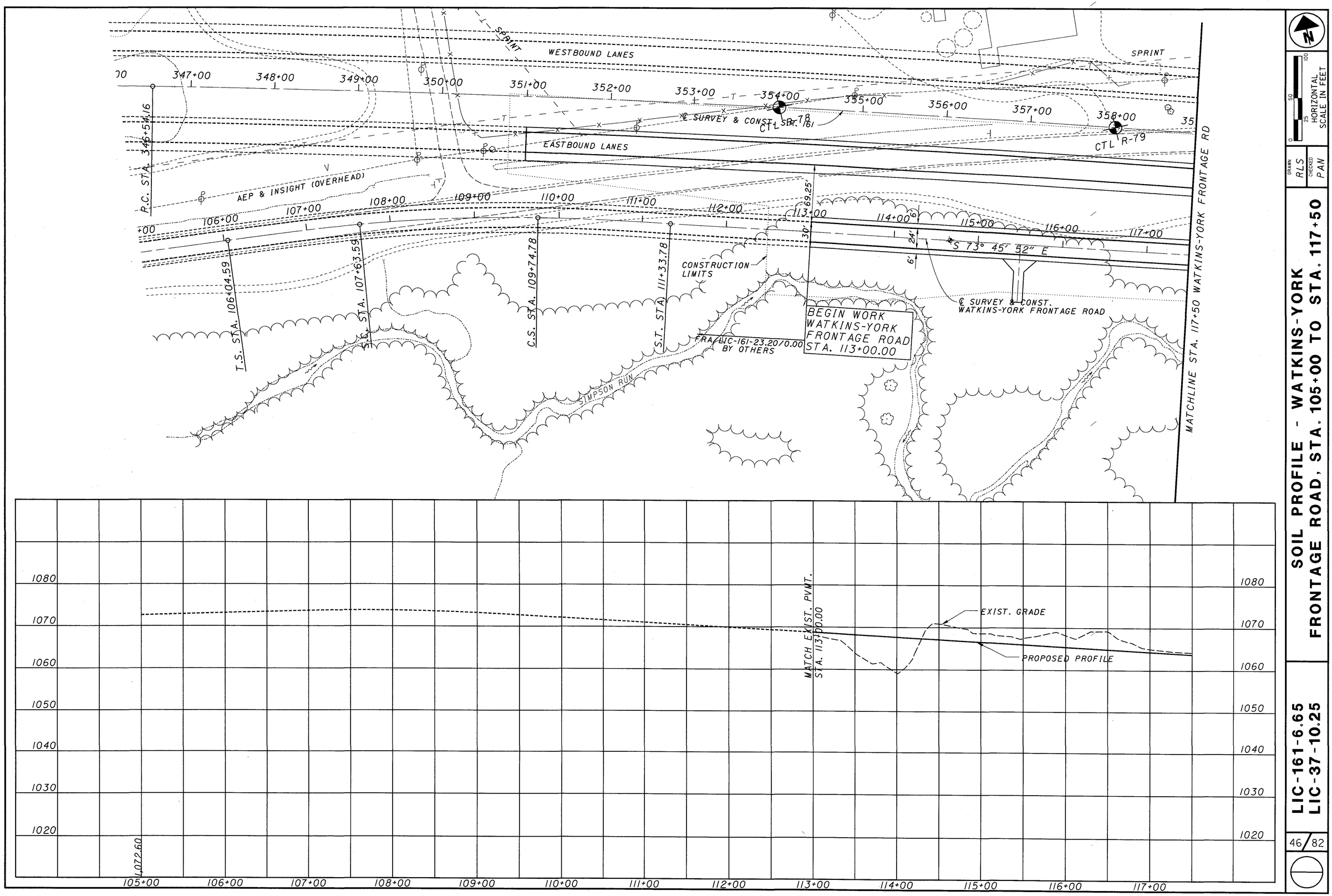
N

0 25 50 100
HORIZONTAL SCALE IN FEET

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RAMP L
STA. 459+50 TO STA. 462+33

LIC-161-6.65
LIC-37-10.25



HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 105+00 TO STA. 117+50

LIC-161-6.65
LIC-37-10.25

46/82

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AEP & INSIGHT

SPRINT

CONSTRUCTION LIMITS

AEP & INSIGHT (OVERHEAD)

CTL P-27

WESTBOUND LANES

360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00 371+00

CTL R-80

P.T. STA. 362+20.55

R-100

R-098

℄ SURVEY & CONST. S.R. 161

EASTBOUND LANES

MATCHLINE STA. 117+50 WATKINS-YORK FRONTAGE RD

CTL P-13

62'

118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00 128+00 129+00 130

S 73° 45' 52" E

S 72° 15' 10" E

P.C. STA. 119+19.85

P.T. STA. 122+22.14

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

CONSTRUCTION LIMITS

SIMPSON RUN

MATCHLINE STA. 130+00 WATKINS-YORK FRONTAGE RD

PROP. PROFILE GRADE

1070 1060 1050 1040 1030 1020 1010

EXIST. PROFILE GRADE

CTL P-13
45' Lt.
Topsoil-14"

3/3/4	13	14
6/5/7	14	
6/5/8	14	
19/18/12	5	
4/4/5	13	
3/5/6	13	

118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00 128+00 129+00 130+00

HORIZONTAL SCALE IN FEET
0 25 50 100

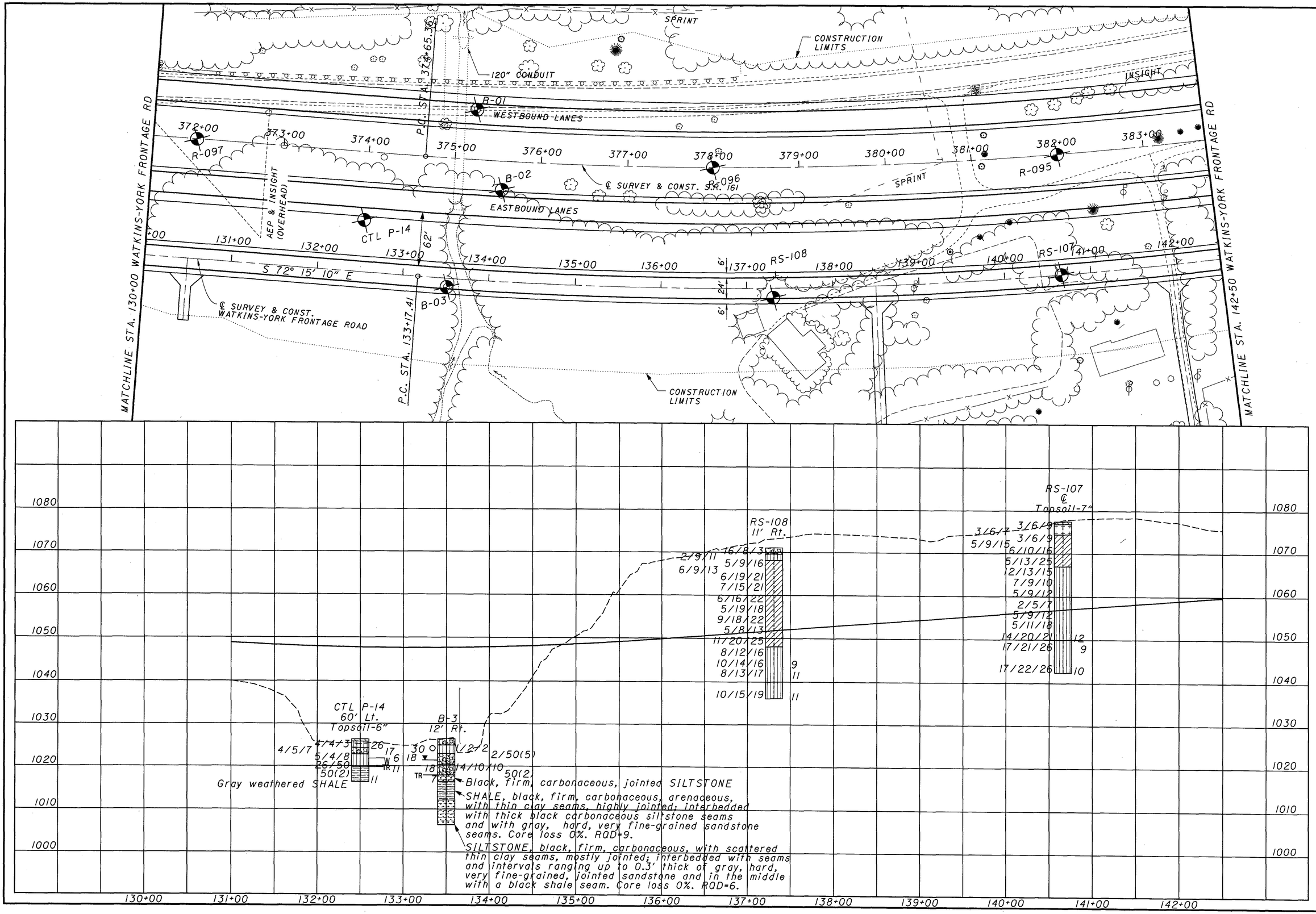
DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 117+50 TO STA. 130+00

LIC-161-6.65
LIC-37-10.25

47/82

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HORIZONTAL SCALE IN FEET
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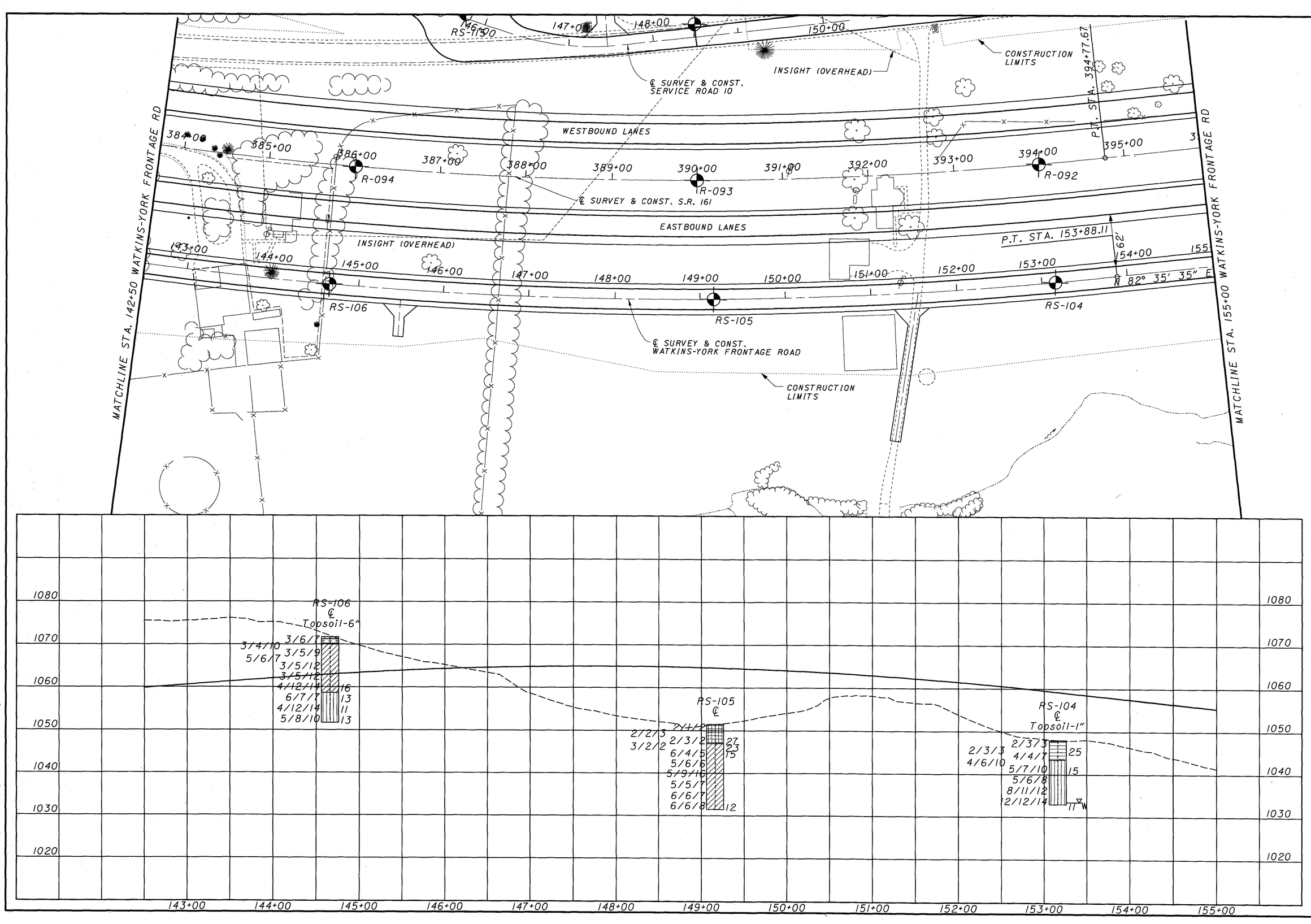
DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 130+00 TO STA. 142+50

LIC-161-6.65
LIC-37-10.25

48/82

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 142+50 TO STA. 155+00

LIC-161-6.65
LIC-37-10.25

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MATCHLINE STA. 155+00 WATKINS-YORK FRONTAGE RD

MATCHLINE STA. 167+50 WATKINS-YORK FRONTAGE RD

INSIGHT (OVERHEAD)

CONSTRUCTION LIMITS

WESTBOUND LANES

396+00 397+00 398+00 399+00 400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00 408+00

N 82° 35' 35" E

R-091

℄ SURVEY & CONST. R-090

R-089

EASTBOUND LANES

62'

156+00 157+00 158+00 159+00 160+00 161+00 162+00 163+00 164+00 165+00 166+00 167+00

6'

24'

6'

N 82° 35' 35" E

RS-103

RS-102

RS-101

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

CONSTRUCTION LIMITS

1050 1040 1030 1020 1010 1000 990

RS-103 ℄
3/3/4 5/3/5 18
3/3/5 3/2/3 19
4/4/5 14
4/3/4
15/9/8
8/5/7
8/9/14
4/4/5

RS-102 ℄
3/4/4 4/4/5 14
5/4/4 4/5/8 17
5/4/7
4/6/9 11
8/12/17
10/11/19

RS-101 ℄
3/4/5 4/4/5
5/5/8 8/8/10 14
5/8/5
9/14/7

155+00 156+00 157+00 158+00 159+00 160+00 161+00 162+00 163+00 164+00 165+00 166+00 167+00

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N

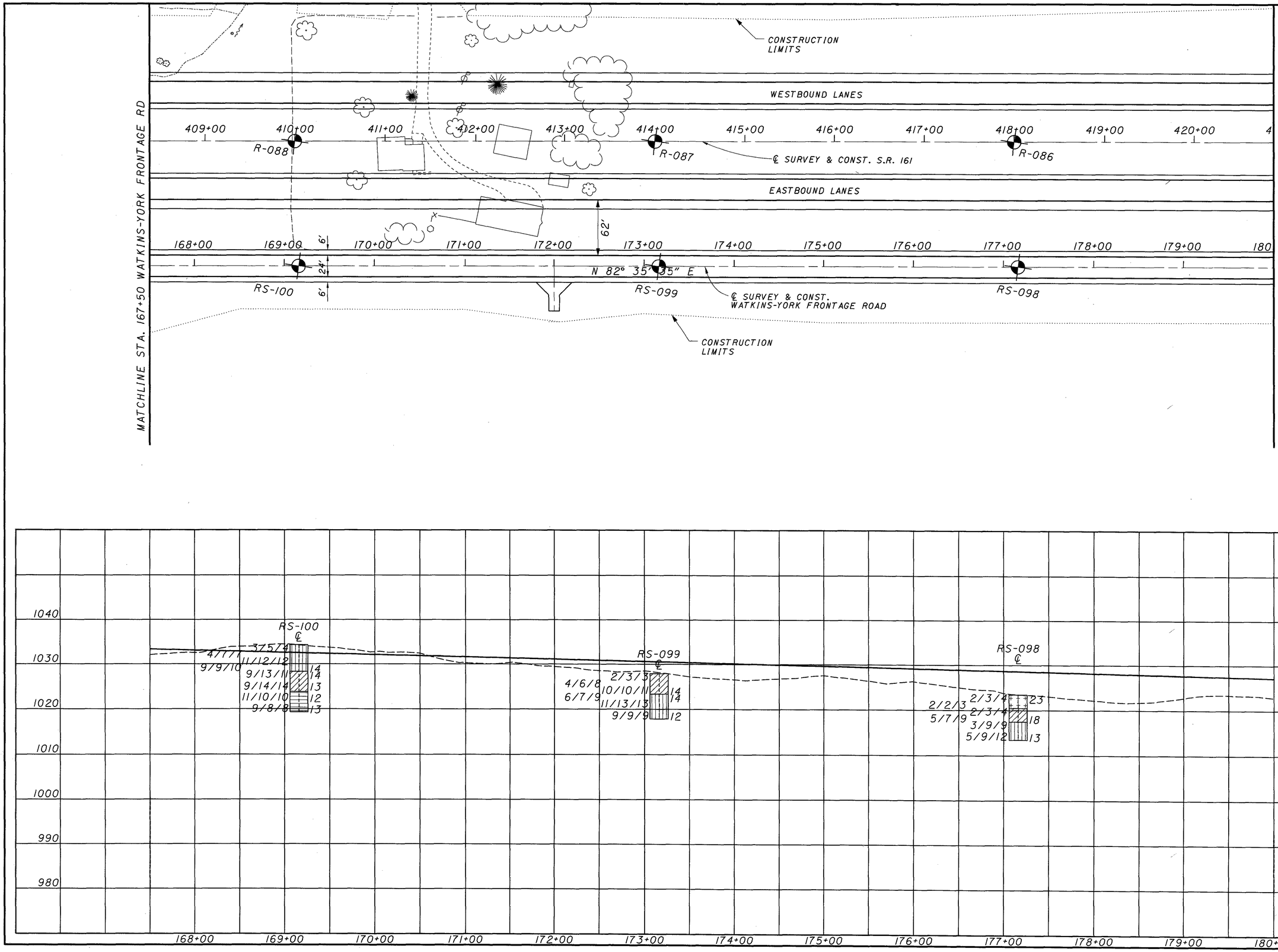
0 25 50 100
HORIZONTAL SCALE IN FEET

DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 155+00 TO STA. 167+50

LIC-161-6.65
LIC-37-10.25

50/82



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N

0 25 50 100
HORIZONTAL SCALE IN FEET

DRAWN RLS
CHECKED PAN

SOIL PROFILE
FRONTAGE ROAD, STA. 167+50 TO STA. 180+00
LIC-161-6.65
LIC-37-10.25

51 / 82

P.T

P.C.

WESTBOUND LANES

EASTBOUND LANES

MATCHLINE STA. 180+00 WATKINS-YORK FRONTAGE RD

MATCHLINE STA. 192+50 WATKINS-YORK FRONTAGE RD

421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00

R-085 R-084 R-083 R-082

℄ SURVEY & CONST. S.R. 161

P.C. STA. 430+93.83

DENSE VEGETATION

6' 24' 6'

180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00

RS-097 RS-096 RS-095 RS-094

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

CONSTRUCTION LIMITS

T.S. STA. 189+32.18
BEGIN PAVEMENT WIDENING
12' RT.

S.C. STA. 191+97.37
END PAVEMENT WIDENING
5' RT.

RS-097
℄
2/3/12
2/3/4 2/3/4 26
2/3/4 2/5/6 25
2/5/12

RS-096
℄
2/3/4 27
3/5/6 3/5/5 25
2/4/5 2/4/5
6/9/12

RS-095
10' Lt.
Topsoil-11"
3/9/9
3/5/9 4/6/10 14
8/18/26 7/15/26 12
11/23/36 13
5/17/24 15
7/9/12 13

RS-094
15' Lt.
Topsoil-7"
0/2/3
2/4/4 3/5/8 12
6/5/9 4/7/8 14
4/6/7 14
4/7/9 14
3/4/4 15

1030 1020 1010 1000 990 980 970

180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 180+00 TO STA. 192+50

LIC-161-6.65
LIC-37-10.25

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MATCHLINE STA. 192+50 WATKINS-YORK FRONTAGE RD

MATCHLINE STA. 205+00 WATKINS-YORK FRONTAGE RD

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. RAMP K

P.C. STA. 434+75.00

R-081

434+00 435+00 436+00

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

S 48° 49' 46" E

CONSTRUCTION LIMITS

C.S. STA. 197+41.81
BEGIN PAVEMENT TRANSITION 15' RT.

S.T. STA. 200+07.00
END PAVEMENT TRANSITION 12' RT.

T.S. STA. 203+59.99
BEGIN PAVEMENT WIDENING 12' LT.

RS-093 RS-092 RS-091 RS-090

193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00 201+00 202+00 203+00 204+00 205+00

6' 6' 24'

RS-093 ℄ Topsoil-5"

2/2/3 1/1/1
2/3/5 1/2/2 13
2/3/4 11
2/7/7 W
5/9/8 15
4/5/8 4
4/6/8
3/5/5
4/5/6
4/5/5

RS-092 ℄ Topsoil-12"

7/13/15 4/8/11
13/13/12 19/13/13
12/13/15
7/11/14
9/11/13 13/5/7
2/2/4
6/11/11
10/14/17
17/25/9 16
5/6/7 13
7/10/11 13
8/10/15 11

RS-091 ℄ Topsoil-8"

4/7/10 1/3/5
8/11/13 8/10/12
10/11/13
7/12/14
10/11/14
11/14/17
7/10/10
7/9/14 11
6/7/9 12 W
13/10/11 11
6/9/13
8/15/19 12

RS-090 61' Rt. Topsoil-5"

1/3/4 1/2/2 26
4/4/6 5/5/6 17
4/4/4 W
4/4/4

1020 1010 1000 990 980 970 960

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 192+50 TO STA. 205+00

LIC-161-6.65
LIC-37-10.25

53/82

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WATCHLINE STA. 205+00 WATKINS-YORK FRONTAGE RD

206+00 S.C.C. STA. 206+25.18 END PAVEMENT WIDENING 15' RT.

207+00 C.S. STA. 207+38.02 BEGIN PAVEMENT TRANSITION 15' RT.

CONSTRUCTION LIMITS

208+00

RS-089

209+00

210+00 S.T. STA. 210+03.21 END PAVEMENT TRANSITION, 12' RT.

211+00

RS-068

212+00

℄ SURVEY & CONST. WATKINS-YORK FRONTAGE ROAD

S 71° 30' 41" E

24'

6'

35'R

CONSTRUCTION LIMITS

STA. 211+80.67
58.00' RT.

END WORK
WATKINS-YORK
FRONTAGE ROAD
STA. 212+12.65

℄ SURVEY & CONST. YORK ROAD

POOL

RS-069

415+00

℄ SURVEY & CONST. S.R. 37

416+00

213+41.83 P.C. STA. 416+00

213+00

℄ SURVEY & CONST. SERVICE ROAD II

418+00

℄ SURVEY & CONST. S.R. 37 STA. 417+63.14 =
℄ WATKINS-YORK FRONTAGE ROAD STA. 212+25.08
℄ SURVEY & CONST. SERVICE ROAD II STA. 212+58.82

419+00

P.I. STA. = 419+37.99
Δ = 00° 19' 13" (LT.)
NO CURVE

420+00

RS-068
10' Lt.
Asphalt Concrete Pavement-6"
Aggregate Base-6"

6/7/9 13
3/6/10 4/8/11 12
6/12/18 15
4/9/12 15

RS-089
℄
Topsoil-13"

2/3/4 29
4/4/4 5/8/11 14
6/10/12 9/10/10
8/7/9

1020 1010 1000 990 980 970 960

205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - WATKINS-YORK FRONTAGE ROAD, STA. 205+00 TO STA. 212+25.08

LIC-161-6.65
LIC-37-10.25

54/82

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SOIL PROFILE
SERVICE ROAD 10

LIC-161-6.65
LIC-37-10.25

55/82

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

BEGIN WORK
SERVICE ROAD 10
STA. 143+00.00

P.O.T. STA. 143+00.00

CONSTRUCTION LIMITS

STA. 145+76.59
1.09' RT.

STA. 145+08.79
46.00' LT.

R.C. STA. 146+37.19

STA. 146+49.14
46' LT.

P.T. STA. 147+57.34

BEGIN FULL DEPTH PVMT.
STA. 148+50.00, LT. & RT.

END WORK
STA. 150+52.34
SERVICE RD. 10

BEGIN WORK
STA. 150+32.10
RELOCATED
WORTHINGTON RD. NORTH

STA. 150+52.34 ℄ SERVICE ROAD 10 = STA. 150+32.10 ℄ RELOCATED WORTHINGTON ROAD NORTH

RS-116

RS-115

RS-114

℄ SURVEY & CONST.
SERVICE ROAD 10

P.C. STA. 144+90.32

STA. 145+00.67
46.00' RT

P.T. STA. 145+63.03

BEGIN PAVEMENT TAPER
STA. 145+94.41, 47.80' RT.

END PAVEMENT TAPER
STA. 147+30.44, 11' RT.

℄ SURVEY & CONST.
RELOCATED WORTHINGTON
RD NORTH

AEP & INSIGHT
(OVERHEAD)

SPRINT

INSIGHT

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 161

P.T. STA. 153+00.1

R-094

R-093

R-092

35'R

50'R

22'

11'

382+00 383+00 384+00 385+00 386+00 387+00 388+00 389+00 390+00 391+00 392+00 393+00 394+00 395

143+00 144+00 145+00 146+00 147+00 148+00 149+00 150+00 151+00 152+00

1090 1080 1070 1060 1050 1040 1030

RS-116
5' Rt.
Topsoil-8"
3/4/7 24
3/6/7 17
3/7/11 15
4/8/11 22
7/11/12 15
6/11/11 8

RS-115
15' Lt.
Topsoil-6"
2/3/5 25
4/7/11 23
6/11/15 13
5/10/15 14
5/10/17 17
7/11/18 14

RS-114
15' Lt.
2/4/6 19
2/7/10 18
2/6/12 15
4/6/8 14
10/12/13 15
5/11/11 13

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MATCHLINE STA. 187+50 RELOCATED WORTHINGTON ROAD NORTH

MATCHLINE STA. 200+00 RELOCATED WORTHINGTON ROAD NORTH

POOL

BEGIN WORK RELOCATED WORTHINGTON ROAD NORTH STA. 188+50.00

BEGIN FULL DEPTH PVMT. AND SHOULDER TRANSITION STA. 188+50 LT. & RT.

END PAVEMENT AND SHOULDER TRANSITION STA. 188+75 LT. & RT.

T.S. STA. 189+22.46

BEGIN PAVEMENT WIDENING 2 LT.

S.C. STA. 1191+87.65

END PAVEMENT WIDENING 15' LT.

BEGIN PAVEMENT TRANSITION 15' LT.

C.S. STA. 195+29.60

STA. 197+94.79 PAVEMENT TRANSITION END 12' LT.

S.T.

SPRINT

CONSTRUCTION LIMITS

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

℄ SURVEY & CONST. S.R. 16

P.C. STA. 430+93.83

DENSE VEGETATION

RS-095

RS-088 10' Lt.

5/10/12 5/6/7 12
5/17/19 5/6/9 15
6/10/13 14
5/10/12 17
15

RS-087 ℄ Topsoil-10"

1/3/4 1/4/4
0/1/2 1/1/2 23
0/3/3 17
4/4/5 14
4/5/6 14
3/4/5 13

RS-086 ℄ Topsoil-4"

2/5/6
5/7/8 5/8/10
7/9/11 5/7/10
7/11/13 13
8/11/13 12
5/9/10 14
3/4/6 11
4/7/8

1020 1010 1000 990 980 970 960

188+00 189+00 190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00

HORIZONTAL SCALE IN FEET 0 25 50 100

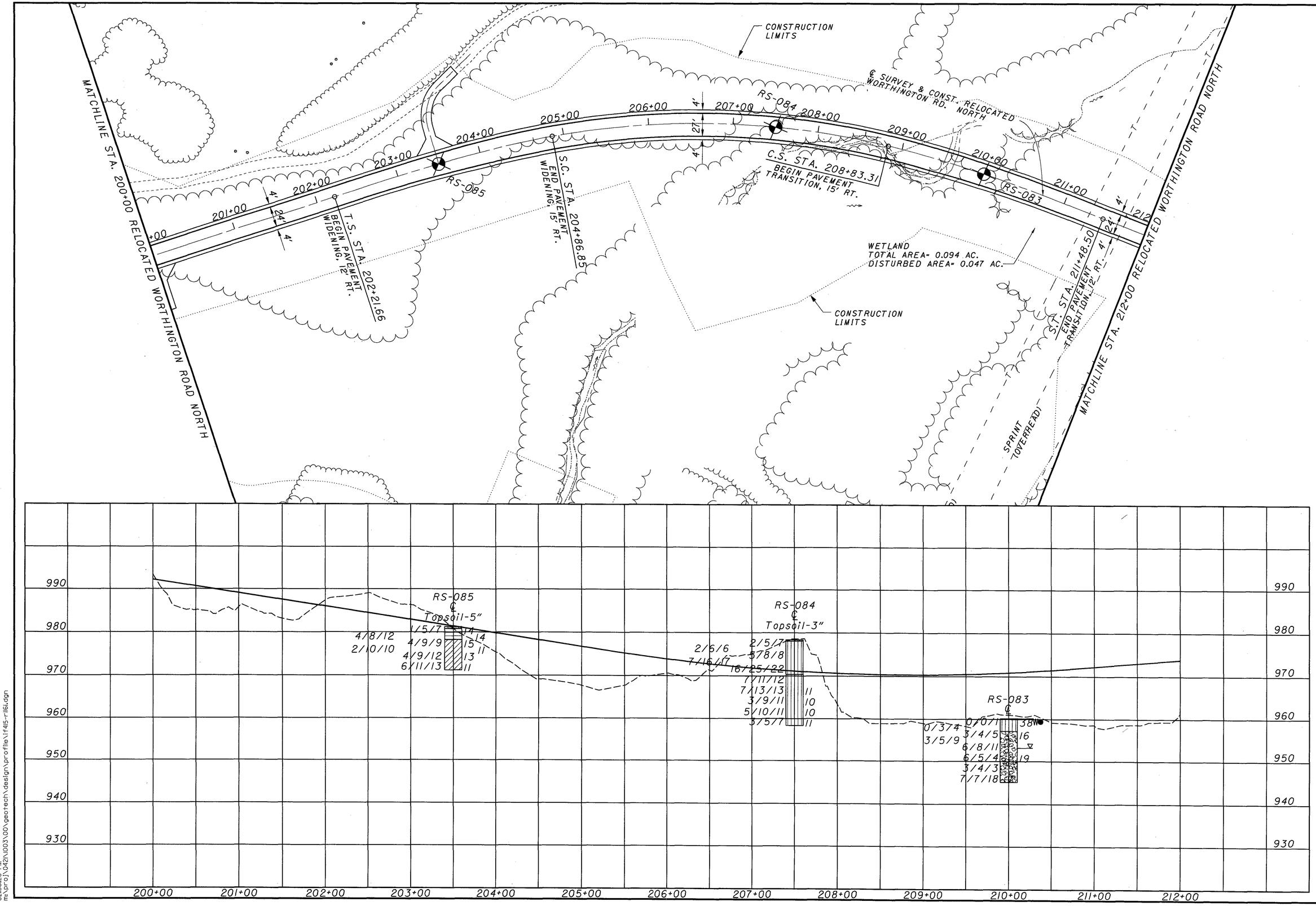
DRAWN RLS CHECKED PAN

SOIL PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 187+50 TO STA. 200+00

LIC-161-6.65
LIC-37-10.25

56/82

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SOIL PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 200+00 TO STA. 212+00

LIC-161-6.65
LIC-37-10.25

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

57 / 82

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P.O.T. STA. 393+29.11

SPRINT (OVERHEAD)

11.79
3.35
3.71'

394+00

STA. 213+51.61
61.97' LT.

P.C. STA. 394+53.96

SUSPEND WORK
STA. 198+80.64

℄ SURVEY & CONST. S.R. 37 STA. 395+70.02 "
℄ SURVEY & CONST. RELOCATED WORTHINGTON RD NORTH STA. 212+83.63

CONSTRUCTION LIMITS

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

MATCHLINE STA. 212+00 RELOCATED WORTHINGTON ROAD NORTH

STA. 212+27.05
61.91' LT.

50' R

395+00

N 88° 12' 22" E

215+00

216+00

RS-082

217+00

218+00

219+00

220+00

RS-081

221+00

222+00

223+00

224+00

225+00

4'
24'
27'
4'

S. STA. 223+23.65
BEGIN PAVEMENT WIDENING, 12' LT.

END PAVEMENT WIDENING, 15' RT.
S.C. STA. 216+80.73

BEGIN PAVEMENT TRANSITION, 15' RT.
C.S. STA. 219+06.64

END PAVEMENT TRANSITION, 12' RT.
S.T. STA. 221+71.83

S 62° 19' 41" E RS-080

CONSTRUCTION LIMITS

214+00

50' R

RS-073

396+00

35°07'

BEGIN PAVEMENT WIDENING, 12' RT.
S.C. STA. 214+15.54

RESUME WORK
STA. 198+90.03

STA. 213+40.48
62.03' RT.

P.T. STA. 397+09.40

397+00

℄ SURVEY & CONST. S.R. 37
STA. 212+16.04
62.09' LT.

10'

24'

398+00

SPRINT (OVERHEAD)

MATCHLINE STA. 225+00 RELOCATED WORTHINGTON ROAD NORTH

RS-073
℄
Topsoil-2"
8/13/7
5/9/12
3/4/9
3/7/9
7/11/14
5/6/6
18
18
13
11
8
15

RS-082
℄
6/7/6
10/8/7
4/8/6
12/11/11
3/3/5
6/6/4
15
13
20
19
15
16

RS-081
℄
3/4/4
2/1/1
2/4/4
4/4/4
1/1/6
3/2/2
8/7/6
5/6/7
7/7/9
4/4/7
18
27 W
14
12
15 W
17

RS-080
℄
4/7/6
3/1/1
2/4/5
9/5/3
1/1/1
4/9/9
13
19 W
13
20

980
970
960
950
940
930
920

212+00
213+00
214+00
215+00
216+00
217+00
218+00
219+00
220+00
221+00
222+00
223+00
224+00
225+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RELOCATED WORTHINGTON
ROAD NORTH, STA. 212+00 TO STA. 225+00

LIC-161-6.65
LIC-37-10.25

58/82

MATCHLINE STA. 225+00 RELOCATED WORTHINGTON ROAD NORTH

S.S.C. STA. 225+88.84
END PAVEMENT WIDENING, 15' LT.

CONSTRUCTION LIMITS

C.S. STA. 229+73.90
BEGIN PAVEMENT TRANSITION, 15' LT.

STA. 232+75.00
BEGIN PAVEMENT AND SHOULDER TRANSITION, LT. & RT.

℄ SURVEY & CONST. RELOCATED WORTHINGTON ROAD NORTH

S.T. STA. 232+39.09
END PAVEMENT TRANSITION, 12' LT.

STA. 233+00.00
END PAVEMENT AND SHOULDER TRANSITION, LT. & RT.

P.O.T. STA. 235+12.00

SPRINT (OVERHEAD)

RS-079

RS-078

11.68' N 78° 39' 25" E

END WORK
RELOCATED
WORTHINGTON ROAD NORTH
STA. 233+00.00

RUIN

RS-079
13' Rt.
3/6/7
4/9/8 4/10/8 W
4/5/8 4/6/7
5/10/10

RS-078
15' Lt.
Topsoil-5"
4/6/7 14
4/12/20 4/12/13 16 25
4/5/5 4/5/6 25 W 18
3/4/3 26
2/4/10 16
6/19/9 10

980 970 960 950 940 930 920

225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - RELOCATED WORTHINGTON ROAD NORTH, STA. 225+00 TO STA. 235+00

LIC-161-6.65
LIC-37-10.25

59/82

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℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

℄ SURVEY & CONST. RAMP J

STA. 401+74.28, 75.37' LT.

℄ SURVEY & CONST. S.R. 37 STA. 402+21.04 =
℄ SURVEY & CONST. RAMP I STA. 451+87.75 =
℄ SURVEY & CONST. RAMP J STA. 450+21.62

STA. 400+20.00, LT & RT
END ASPHALT PAVEMENT
BEGIN CONCRETE PAVEMENT

P.O.T. STA. 393+29.11

BEGIN PAVEMENT & SHOULDER TRANSITION, STA. 394+00.00 LT. & RT.
END PAVEMENT TRANSITION, STA. 394+15.00 12' LT. & RT.

P.C. STA. 394+53.96

END SHOULDER TRANSITION, STA. 395+22.05, 20.62' LT.

STA. 395+01.88, 62.00' LT.

T.S. STA. 214+15.54

P.T. STA. 397+09.40

STA. 396+27.06
62' LT.

CONSTRUCTION LIMITS

RS-072

RS-073

RS-071

394+00 395+00 396+00 397+00 398+00 399+00 400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00

50'R

84°53'

S 02° 36' 47" W

℄ SURVEY & CONST. S.R. 37
END PAVEMENT TAPER
STA. 401+26.81, 18' LT. & RT.

STA. 402+97.37
51.86' RT.

87°30'00"

MATCHLINE STA. 403+00 S.R. 37

S 03° 53' 25" W

STA. 395+13.69, 62' RT.
END SHOULDER TRANSITION,
STA. 395+33.97, 20.75' RT.

STA. 396+37.51, 62' RT.
BEGIN PAVEMENT TAPER
STA. 397+96.81, 12' LT. & RT.

STA. 401+60.84, 81.70' RT.

SPRINT (OVERHEAD)

℄ SURVEY & CONST. S.R. 37 STA. 395+70.02 =
℄ SURVEY & CONST. RELOCATED WORTHINGTON RD NORTH STA. 212+83.63

S.T. STA. 211+48.50

CONSTRUCTION LIMITS

SPRINT

WETLAND
TOTAL AREA- 0.094 AC.
DISTURBED AREA- 0.047 AC.

℄ SURVEY & CONST. RELOCATED WORTHINGTON RD. NORTH

℄ SURVEY & CONST. RAMP I

11.75' 3.37' 3.35' 24' 36'

SOIL PROFILE - S.R. 37
STA. 393+29.11 TO STA. 403+00

℄ RELOCATED WORTHINGTON RD NORTH

℄ RAMP I
℄ RAMP J

RS-073
14' Lt.
Topsoil-2"

8/13/7 3/4/9 18
5/9/12 3/7/9 18 8
7/11/14 13 15
5/6/6 11

RS-072
16' Lt.
Asphalt Concrete Pavement-9"
Aggregate Base-3"

9/17/18
9/15/13 9/15/18 16
3/7/8
4/7/8 12

RS-071
26' Rt.
Asphalt Concrete Pavement-8"
Aggregate Base-4"

7/10/10 15
4/5/10 2/5/9 14
4/10/10 8/7/19 12
2/7/13
19/24/12 11
7/24/14
4/11/11 15 W

1010 1000 990 980 970 960 950

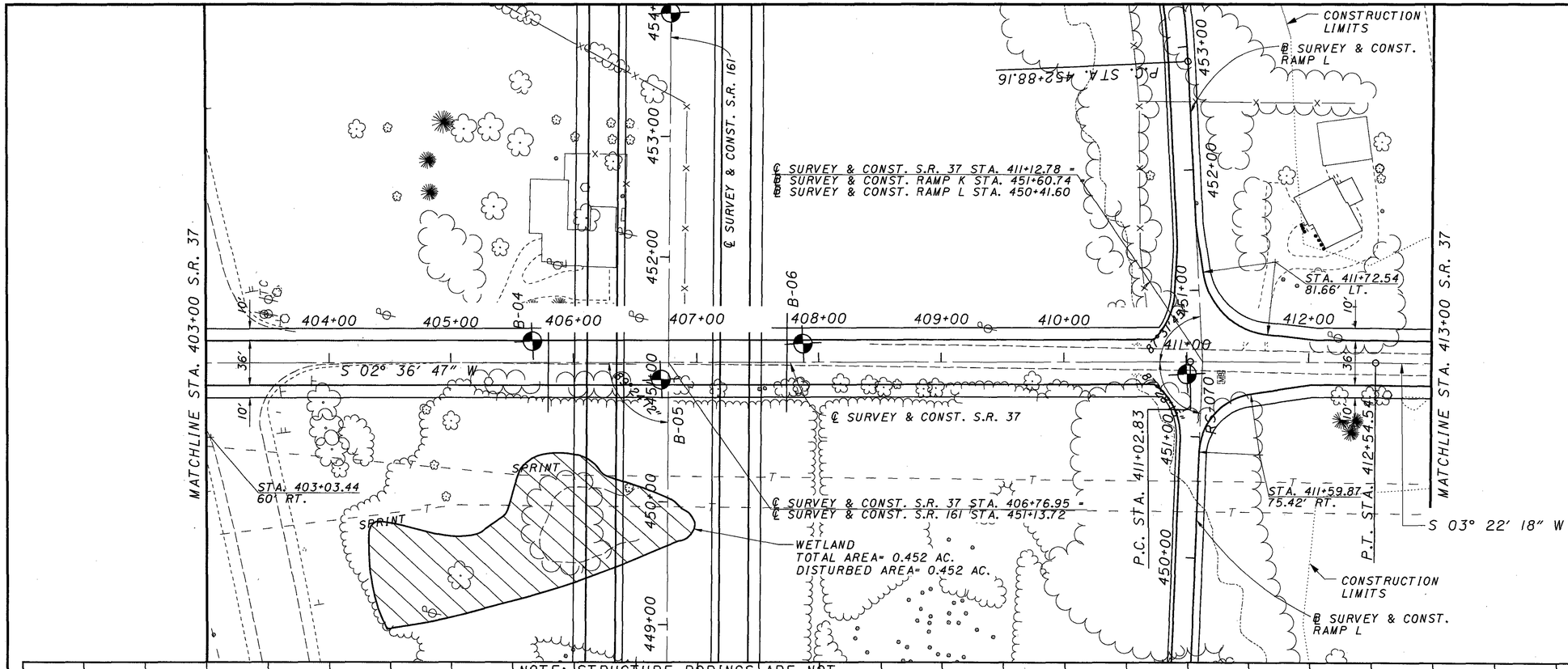
394+00 395+00 396+00 397+00 398+00 399+00 400+00 401+00 402+00 403+00

HORIZONTAL SCALE IN FEET
0 25 50 100

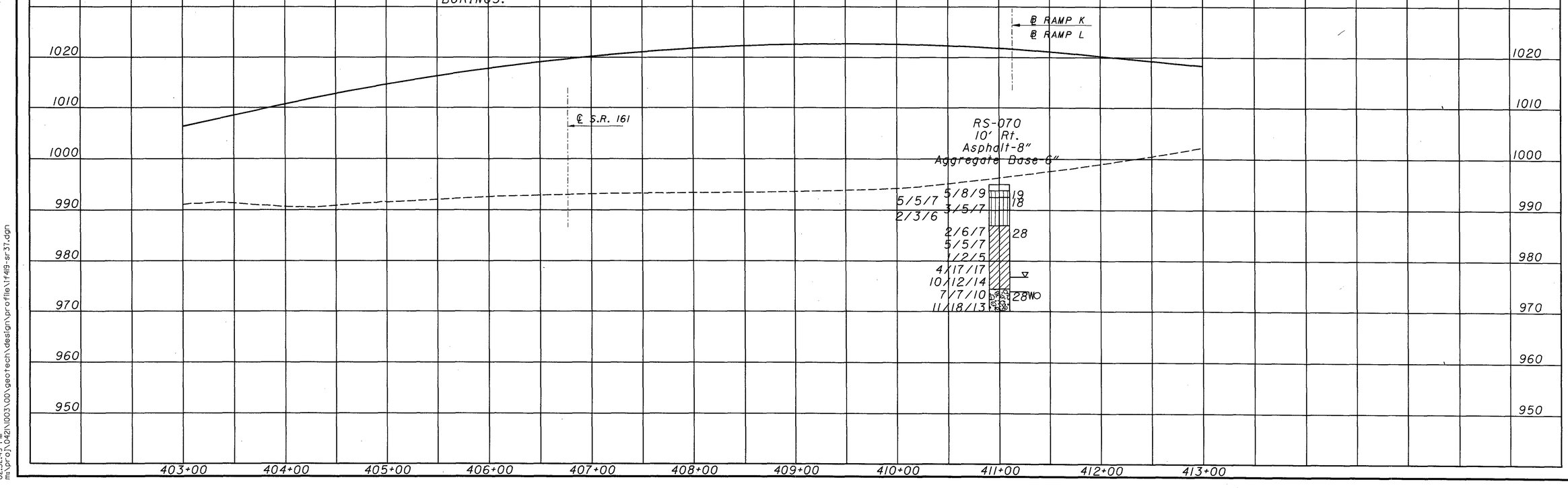
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CHECKED PAN

LIC-161-6.65
LIC-37-10.25

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NOTE: STRUCTURE BORINGS ARE NOT SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS.



SOIL PROFILE - S.R. 37
STA. 403+00 TO STA. 413+00

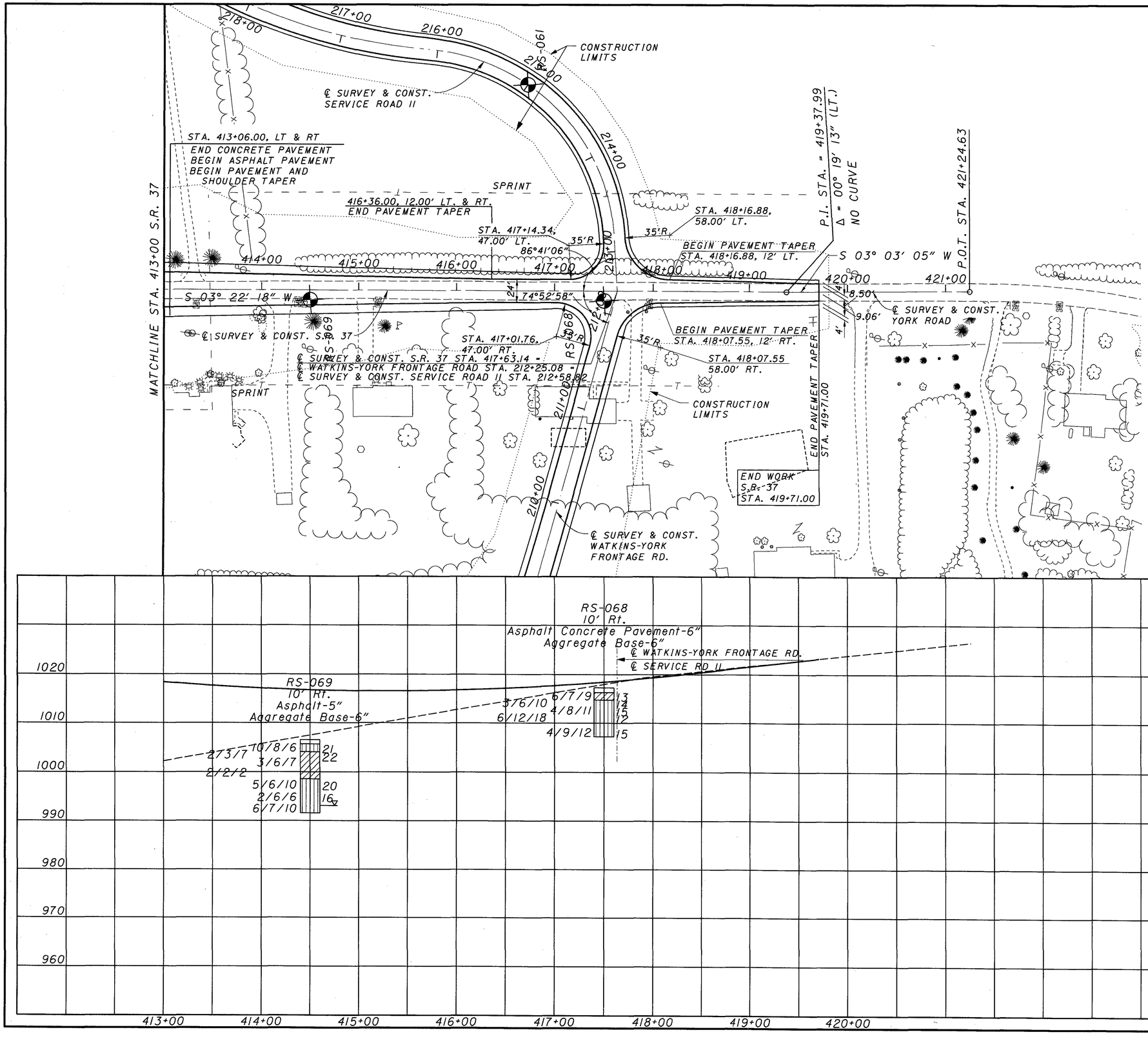
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CHECKED PAN

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LIC-37-10.25

61 / 82

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - S.R. 37
STA. 413+00 TO STA. 421+24.63

LIC-161-6.65
LIC-37-10.25

62/82

01/20/2005
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℄ SURVEY & CONST. S.R. 37 STA. 417+63.14 = ℄ SERVICE ROAD II STA. 212+58.82 = ℄ WATKINS-YORK FRONTAGE ROAD STA. 212+25.08

-069

-068

212+00

418+00

417+00

35R

36R

25.00'

22'

4'

S 89° 56' 37" E

STA. 213+13.62
57.00' RT.

℄ CONST. & SURVEY SERVICE ROAD II

RS-061

214+00

215+00

216+00

217+00

218+00

219+00

220+00

221+00

222+00

223+00

224+00

225+00

226+00

414+00

415+00

416+00

46.00' Lt.
P.C. STA. 213+14.63

86°41'06"

SPRINT

P.I. STA. 216+04.76

N 08° 58' 05" E

P.C. STA. 216+21.85

BEGIN PAVEMENT WIDENING STA. 215+70.65, 11' RT.

END PAVEMENT WIDENING STA. 218+26.59, 15.5' RT.

RS-060

26.5'

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

BEGIN WORK
SERVICE ROAD II
STA. 212+70.82

RS-064

454+00

455+00

456+00

457+00

458+00

459+00

460+00

℄ CONST. & SURVEY RAMP L

P.I. STA. 455+60.98

℄ CONST. & SURVEY S.R. 161

R-071

RS-062

℄ CONST. & SURVEY SERVICE ROAD II

N 61° 04' 46" E

RS-059

P.I. STA. 221+43.00

P.C. STA. 222+78.25

P.C. STA. 458+44.24

MATCHLINE STA. 226+00 SERVICE RD II

RS-061

4/6/7
4/6/9
4/4/5
3/5/5
4/4/2
1/1/1
16
18
13
20W
19
18

RS-060

Topsoil-12"

3/4/3
5/7/6
2/2/4
4/6/7
8/13/16
16/12/15
22
13
14
12
19
14

RS-059

39' Lt.
Topsoil-12"

3/3/3
1/1/2
3/5/6
2/1/2
1/2/3
5/10/11
15
17W
20
23
14
21
10

1020
1010
1000
990
980
970
960
950

213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00 224+00 225+00 226+00

HORIZONTAL SCALE IN FEET
0 25 50 100

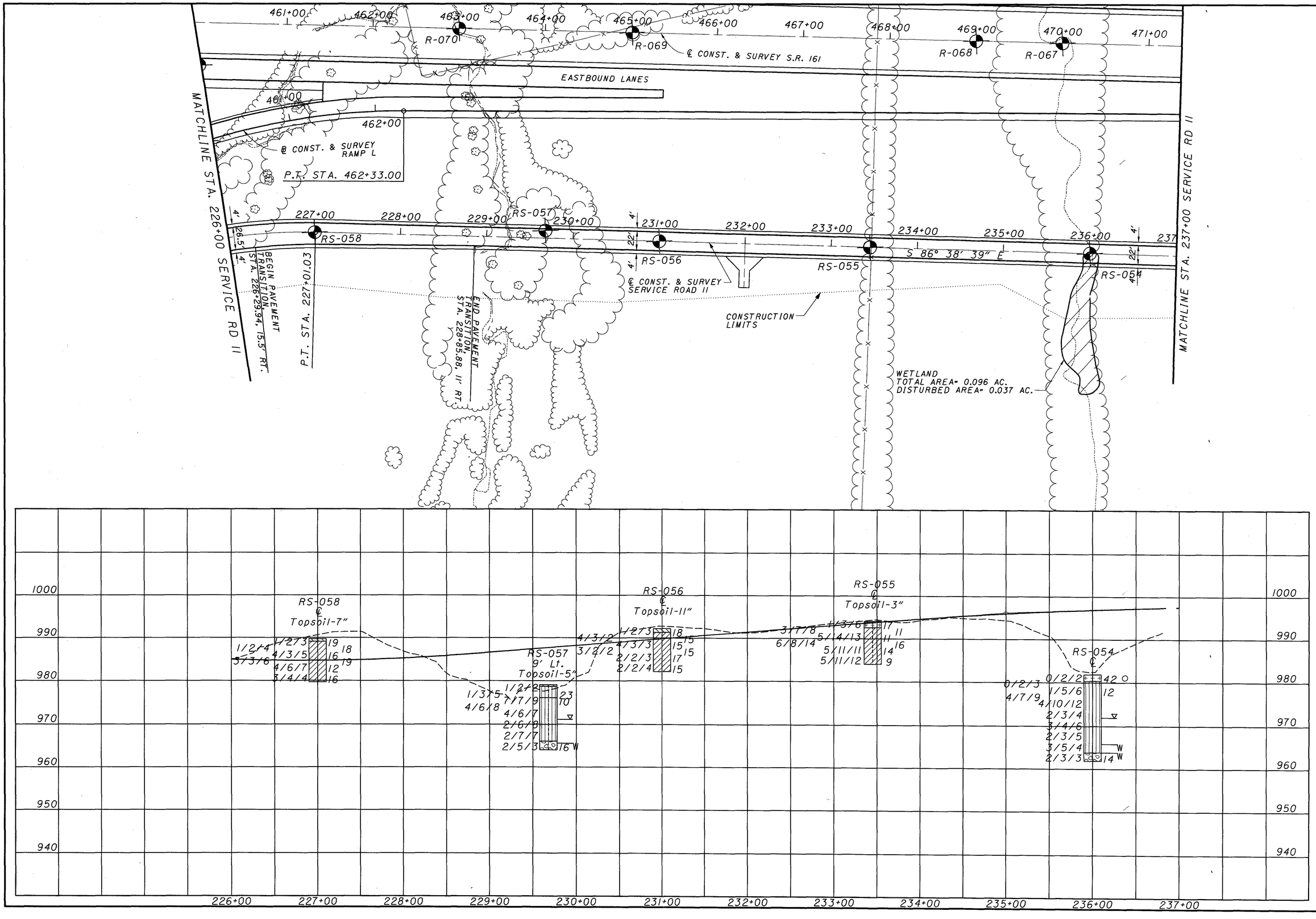
DRAWN RLS
CHECKED PAN

SOIL PROFILE - SERVICE ROAD 11
STA. 212+50 TO STA. 226+00

LIC-161-6.65
LIC-37-10.25

63/82

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HORIZONTAL SCALE IN FEET
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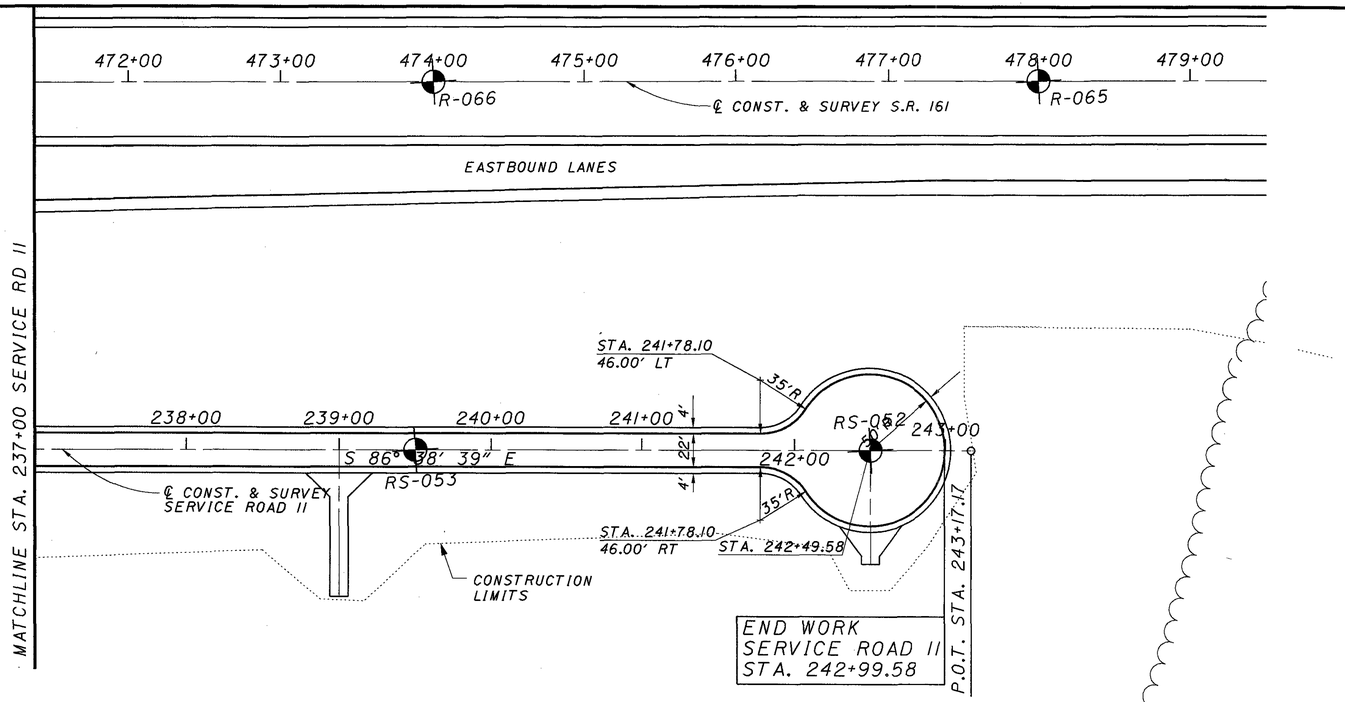
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CHECKED PAN

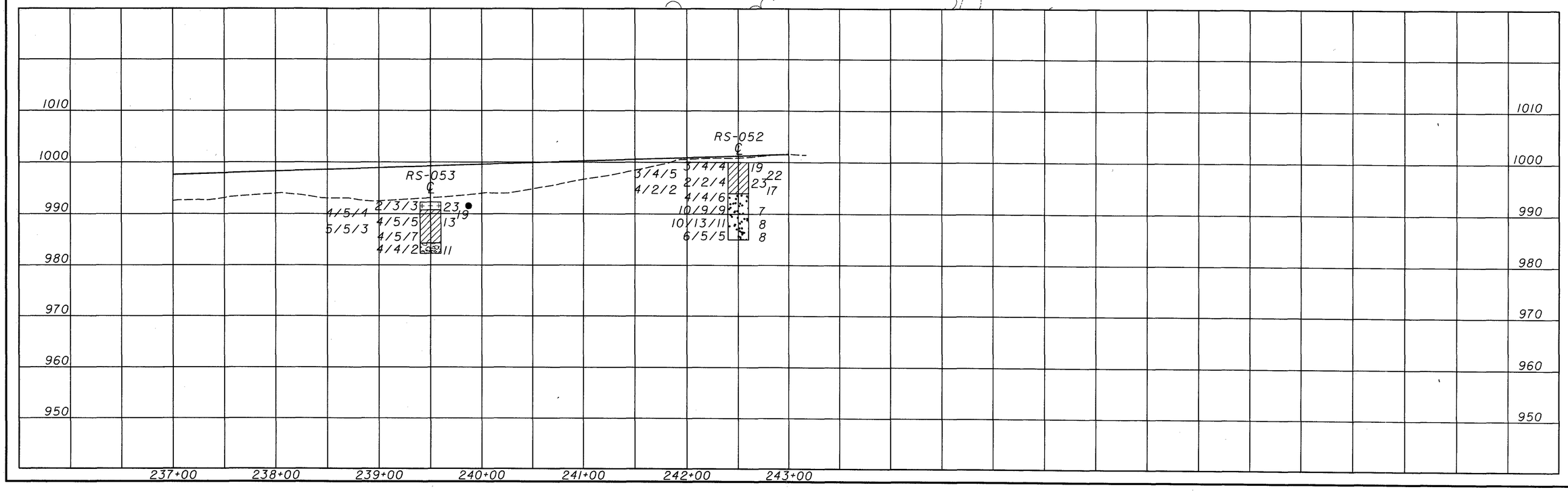
SOIL PROFILE - SERVICE ROAD 11
STA. 226+00 TO STA. 237+00

LIC-161-6.65
LIC-37-10.25

64/82

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N

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - SERVICE ROAD 11
STA. 237+00 TO STA. 243+17.17

LIC-161-6.65
LIC-37-10.25

65/82

℄ SURVEY & CONST. S.R. 161 STA. 497+21.01 =
℄ SURVEY & CONST. OUTVILLE ROAD STA. 22+66.21

℄ SURVEY & CONST. OUTVILLE ROAD STA. 20+50.00 =
℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD
STA. 497+31.85

BEGIN WORK
OUTVILLE ROAD
STA. 18+60.00

CONSTRUCTION LIMITS

RS-050

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 161

WESTBOUND LANES

CONSTRUCTION LIMITS

BEGIN PAVEMENT TRANSITION
STA. 24+98.00, LT. & RT.

N 05° 06' 45" E

END PAVEMENT TRANSITION
STA. 26+00.00, LT. & RT.

P.I. STA. = 26+27.28
Δ = 00° 14' 15" RT.
NO CURVE

B-17

℄ SURVEY & CONST. OUTVILLE ROAD

B-16

18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00

9.83'
10.29'
4'
24'
4'
4'
4'
10.02'
9.86'

N 04° 26' 11" E

N 04° 19' 42" E

N 05° 21' 00" E

SPRINT (OVERHEAD)

BEGIN PAVEMENT TRANSITION
STA. 18+60.00, LT. & RT.

P.I. STA. = 19+00.00
Δ = 00° 06' 29" LT.
NO CURVE

END PAVEMENT TRANSITION
STA. 19+80.00, 12' LT. & RT.

STA. 19+89.64
62.17 RT.

50'R

50'R

89°24'16"

STA. 21+11.65
62.00 RT.

P.I. STA. = 25+06.83
Δ = 00° 47' 03" RT.
NO CURVE

END WORK
OUTVILLE ROAD
STA. 26+25.00

495+00 496+00 497+00 498+00 499+00 500+00

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

RS-

R-05

500+0

RS-050
10' Lt.
2/4/4 6/4/7 11
3/6/10 2/4/7 27 28
3/7/12 14 16
7/13/17 15

RS-051
10' Lt.
Asphalt Concrete Pavement-7"
Aggregate Base-6"
5/5/8 5/6/9 19 18
3/8/12 3/5/6 20 16
19/36/42 10

1030 1020 1010 1000 990 980 970

18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00

NOTE: STRUCTURE BORINGS NOT SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS.

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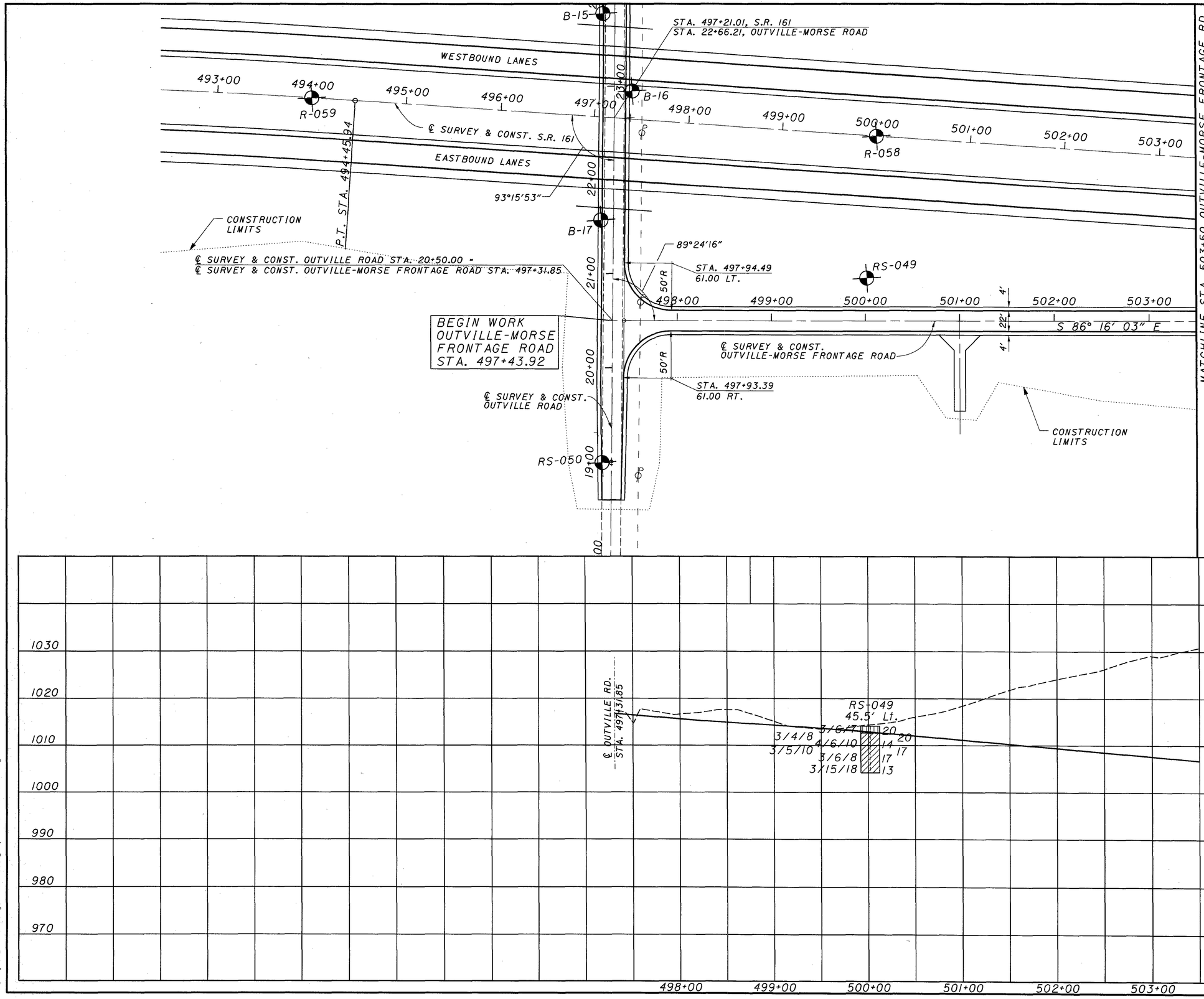
N

0 25 50 100
HORIZONTAL SCALE IN FEET

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE ROAD STA. 18+00 TO STA. 29+00

LIC-161-6.65
LIC-37-10.25



HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 497+31.85 TO STA. 503+50

LIC-161-6.65
LIC-37-10.25

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MATCHLINE STA. 503+50 OUTVILLE-MORSE FRONTAGE RD

MATCHLINE STA. 514+50 OUTVILLE-MORSE FRONTAGE RD

CONSTRUCTION LIMITS

AEP & ALLTEL (OVERHEAD)

WESTBOUND LANES

EASTBOUND LANES

504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00

R-057

℄ SURVEY & CONST. S.R. 161

R-056

R-055

RS-048

RS-047

RS-046

S 86° 16' 03" E

22'

4'

4'

P.C. STA. 508+14.13

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

CONSTRUCTION LIMITS

1050 1040 1030 1020 1010 1000 990 980 970

RS-048
43' Lt.

3/9/11 3/10/7 3/5/6 3/9/8 4/11/30 4/7/8 2/7/6 8/14/32 26/50(3) 50(4) 50(3) 50(4) 14 11 11 14 TR W

Severely weathered gray SHALE fragments

Soft to medium hard dark gray SHALE; moderately weathered, highly fractured, rust staining on joints, some clay filled joints. Core loss =0%. RQD=4.

RS-047
26.5' Lt.

3/12/13 3/6/10 4/5/12 4/7/10 4/7/12 15/20/26 23/50(4) 50(5) 50(5) 50(5) 15 11 11 7 TR

Severely weathered brown SHALE fragments.

Hard dark gray SHALE; moderately weathered, highly fractured to broken, rust stained, occasional sandstone interbeds and clasts. Core loss 3%. RQD=36.

RS-046
7' Lt.

5/10/14 8/14/14 4/5/9 3/11/13 4/8/10 4/8/11 5/10/11 5/10/13 5/15/21 9/15/18 12 11 11 11

504+00 505+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE
FRONTAGE ROAD, STA. 503+50 TO STA. 514+50

LIC-161-6.65
LIC-37-10.25

MATCHLINE STA. 514+50 OUTVILLE-MORSE FRONTAGE RD

MATCHLINE STA. 525+50 OUTVILLE-MORSE FRONTAGE RD

AEP & ALLTEL (OVERHEAD)

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

CONSTRUCTION LIMITS

515+00 516+00 517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00 525+00

R-054 R-053 R-052

RS-044 RS-043

RS-045

P.T. STA. 515+86.18

S 82° 24' 26" E

40' 26' 4' 22' 4'

1030 1020 1010 1000 990 980 970 960 950 940 930 920

RS-045
50' Rt.
Topsoil-11"

5/10/11 4/7/9
2/1/3 6/9/10
4/9/10
4/9/13
4/7/10
5/11/18
9/8/8
3/5/9 W
5/8/8
6/10/13
4/7/11
4/9/12
8/7/10
10/11/13 10
7/10/13 12
34/38/42 TR

5 Severely weathered gray SHALE fragments.

RS-044
℄
Topsoil-6"

4/5/5
4/7/9 5/7/15
6/7/12 6/7/10
4/7/10
5/7/9 13
5/7/10 12
15/12/14 10
6/12/15 12 W

RS-043
℄
Topsoil-6"

5/5/7 18
4/6/10 3/4/6 25
2/3/4 2/2/3 32
2/3/5 17

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE
FRONTAGE ROAD, STA. 514+50 TO STA. 525+50

LIC-161-6.65
LIC-37-10.25

69/82

MATCHLINE STA. 525+50 OUTVILLE-MORSE FRONTAGE RD

MATCHLINE STA. 536+50 OUTVILLE-MORSE FRONTAGE RD

CONSTRUCTION LIMITS

AEP & ALLTEL (OVERHEAD)

WESTBOUND LANES

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

℄ SURVEY & CONST. C.R. 539A EXTENSION

ALLTEL (OVERHEAD)

26'

40'

4'

22'

4'

S 82° 24' 26" E

526+00 527+00 528+00 529+00 530+00 531+00 532+00 533+00 534+00 535+00 536+00

R-051 R-050 RS-042 RS-041 RS-040 RS-021

970 960 950 940 930 920 910 980

RS-042 ℄ Topsoil-4"

3/4/5 19
4/6/7 3/5/9 16
4/7/11 4/7/10 13
5/6/9

RS-041 ℄ Topsoil-14"

1/2/6 28
2/5/6 3/3/6
2/4/4 4/8/11 16
3/7/11

RS-040 ℄ Topsoil-8"

2/2/4 3/3/4
4/5/8 3/5/8
5/10/15
7/15/25
9/18/31 12
13/19/25 12
7/10/15 12
5/10/11 12

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE
FRONTAGE ROAD, STA. 525+50 TO STA. 536+50

LIC-161-6.65
LIC-37-10.25

70/82

MATCHLINE STA. 536+50 OUTVILLE-MORSE FRONTAGE RD

MATCHLINE STA. 547+50 OUTVILLE-MORSE FRONTAGE RD

300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00

℄ SURVEY & CONST. C.R. 539A EXTENSION

RS-018

ALLTEL (OVERHEAD)

RS-017

R-048

R-046

WESTBOUND LANES

R-047

537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+00

R-045

℄ SURVEY & CONST. S.R. 161

R-044

EASTBOUND LANES

ALLTEL (OVERHEAD)

R-043

26'

40'

22'

4'

537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+00

-039

RS-038

S 82° 24' 26" E

RS-037

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

RS-036

RS-035

CONSTRUCTION LIMITS

RS-039
℄
Topsoil-4"

980	0/2/3	
	1/3/3	
	3/6/7	1/2/3
		3/6/8
		5/6/7
970		5/7/8
		2/4/4
		2/4/5
		2/3/5
960		4/2/10 W
		5/7/8 W
		6/6/9
		7/10/19 W
950		
		6/6/7
		5/8/15
940		
		5/8/9 19
		12/34/32 11
930		
920		

RS-038
℄
Topsoil-5"

	2/2/2	2/2/2
	1/2/3	1/2/2
		2/2/3
		3/6/8
		4/7/11
		4/6/9
		3/5/7
		4/6/6
		6/6/6
		7/5/5
		3/7/12
		12/12/12
		23/24/29
		10/17/21 12
		6/10/12 10

RS-037
8' Lt.
Topsoil-5"

	3/6/5	2/3/3 29
	4/10/13	3/7/8 14
		9/12/15 11
		4/5/5

RS-036
90° Rt.
Topsoil-3"

	3/3/5	2/2/3
	4/6/7	3/5/6
		4/6/8
		3/6/6
		5/5/10
		5/5/7
		4/5/6
		13/11/11
		11/12/14
		4/3/6
		4/4/7
		6/7/6
		8/13/13 9
		4/7/7 11

RS-035
85° Rt.
Topsoil-4"

	4/8/10	2/3/3
	4/10/13	4/6/10
		5/10/12
		5/10/14
		6/10/15
		15/50(3)
		6/16/20
		4/6/10
		4/8/11
		8/15/18
		8/10/18
		10/20/22
		16/16/17 10
		18/50/3" 11

980 970 960 950 940 930 920

537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+00

HORIZONTAL SCALE IN FEET
0 25 50 100

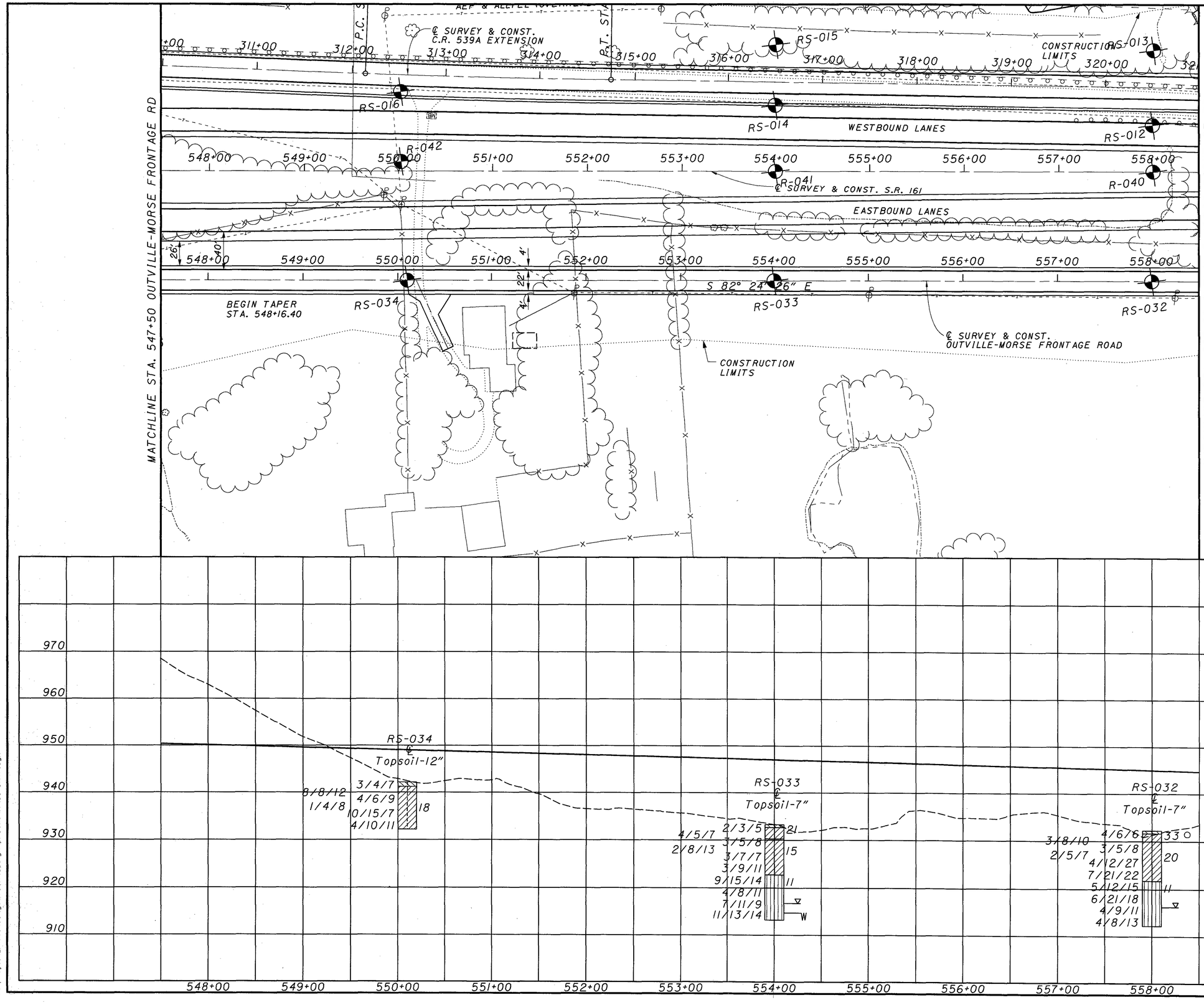
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CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 536+50 TO STA. 547+50

LIC-161-6.65
LIC-37-10.25

71 / 82

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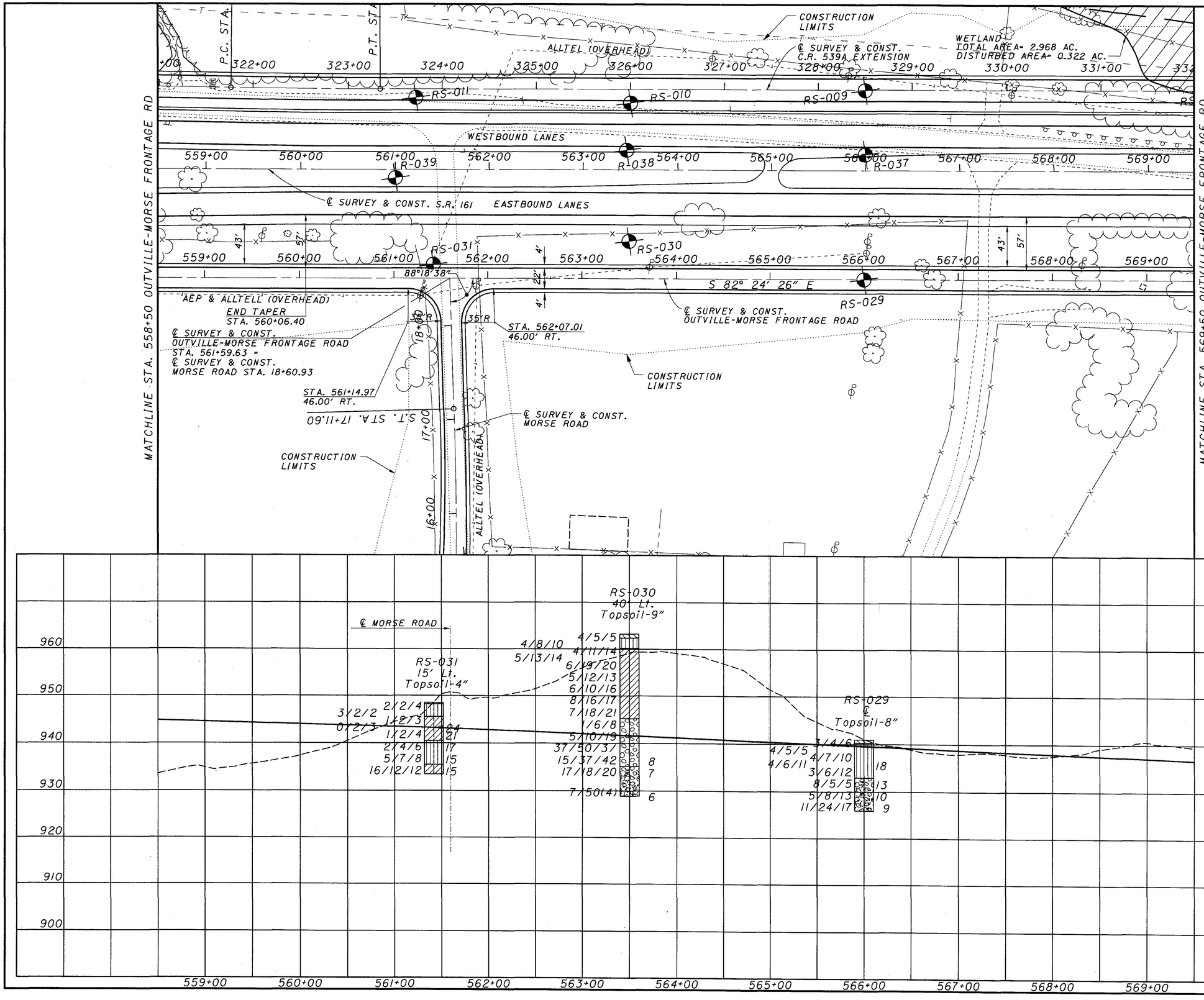
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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 547+50 TO STA. 558+50

LIC-161-6.65
LIC-37-10.25



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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 558+50 TO STA. 569+50

LIC-161-6.65
LIC-37-10.25

WETLAND
TOTAL AREA= 2.968 AC.
DISTURBED AREA= 0.322 AC.

MATCHLINE STA. 569+50 OUTVILLE-MORSE FRONTAGE RD

MATCHLINE STA. 580+50 OUTVILLE-MORSE FRONTAGE RD

CONSTRUCTION LIMITS

P.C. STA. 333+88.38

P.T. STA. 338+64.44

℄ SURVEY & CONST. C.R. 539A EXTENSION

ALLTEL (OVERHEAD)

P.C. STA. 571+38.22

WESTBOUND LANES

EASTBOUND LANES

P.T. STA. 576+05.61

℄ SURVEY & CONST. S.R. 161

6" ASHLAND OIL PIPELINE

B-18 B-19 B-20 B-22 B-23 B-27

R-036 R-035 RS-007 RS-027 RS-028

43' 57'

S 82° 24' 26" E

S 76° 33' 53" E

P.C. STA. 571+33.81

P.T. STA. 576+01.20

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

CONSTRUCTION LIMITS

CHIMNEY

NOTE: NOT ALL STRUCTURE BORINGS ARE SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS NOT SHOWN HERE.

RS-028
13' Rt.
Topsoil-12"

4/6/8 6
5/7/9 15
6/7/9 19/50(4)
18/22/32 5
22/29/42 4
8/10/10 9

B-27
℄
575+22
923.0

20 26 15 22 22
5/6/5 17
6/7/8 18
12/18/20 17
10/14/16 13
9/6/6 14
2/5/4 12
9/10/16 12
6/7/7 15
7/8/12 24

ENTIRE BORING DEPTH NOT SHOWN

RS-027
10' Lt.
Topsoil-11"

3/7/8 2/8/9 19
3/6/8 3/9/5 10
3/4/5 14
2/4/6 24

950 940 930 920 910 900 890

570+00 571+00 572+00 573+00 574+00 575+00 576+00 577+00 578+00 579+00 580+00

HORIZONTAL SCALE IN FEET
0 25 50 100

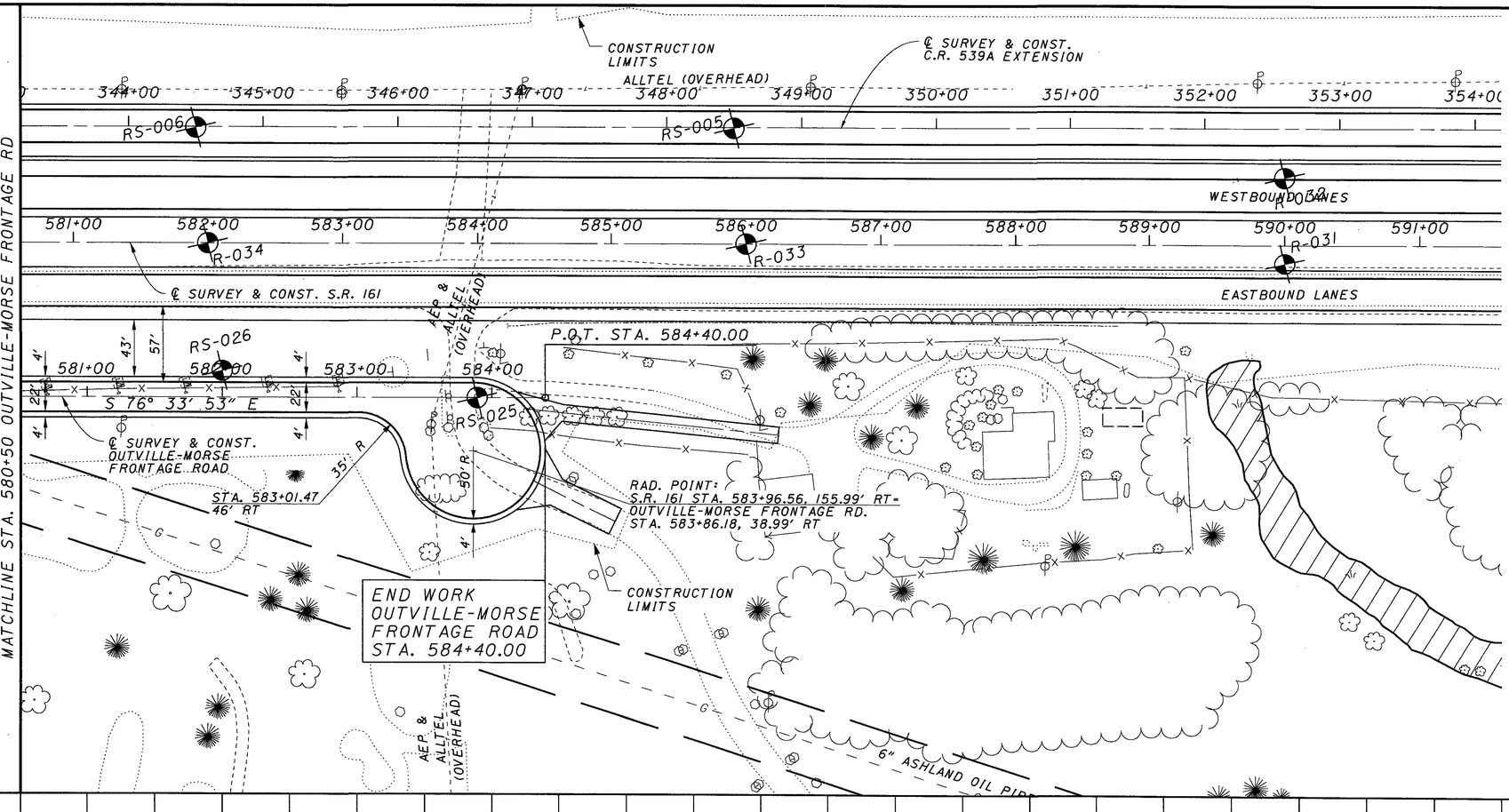
DRAWN RLS
CHECKED PAN

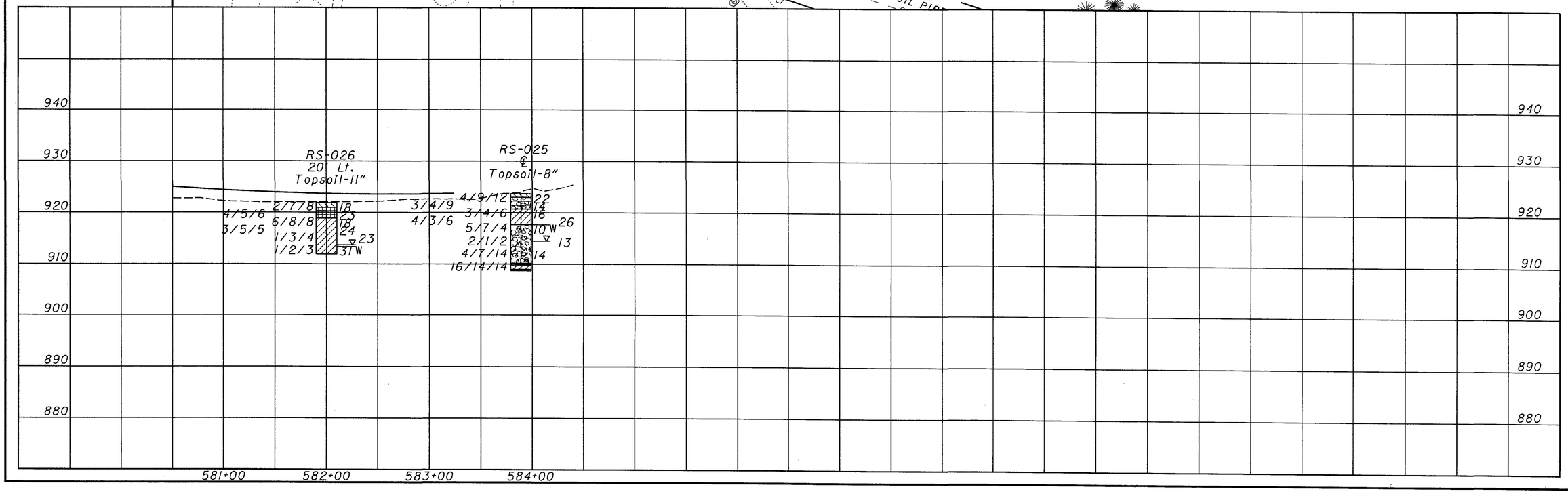
SOIL PROFILE - OUTVILLE-MORSE FRONTAGE ROAD, STA. 569+50 TO STA. 580+50

LIC-161-6.65
LIC-37-10.25

74/82

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - OUTVILLE-MORSE FRONTAGE RD, STA. 580+50 TO STA. 584+40.00

LIC-161-6.65
LIC-37-10.25

75/82

BEGIN WORK
C.R. 539A EXTENSION
STA. 297+00.00

BEGIN PAVEMENT AND SHOULDER TRANSITION STA. 297+00.00

END PAVEMENT AND SHOULDER TRANSITION STA. 297+50.00

CONSTRUCTION LIMITS

SPRINT

MATCHLINE STA. 302+50 C.R. 539A EXTENSION

+00 291+00 292+00 293+00 294+00 295+00 296+00 297+00 298+00 299+00 300+00 301+00 302+00

11.58
11.22
11.68
3.93
24'
4'

RS-020
RS-021
S 80° 18' 55" E

℄ SURVEY & CONST.
C.R. 539A EXTENSION

ALLTEL (OVERHEAD)

WESTBOUND LANES

AEP & ALLTEL (OVERHEAD)

R-048
R-047
R-050
R-051

528+00 529+00 530+00 531+00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 54

℄ SURVEY & CONST. S.R. 37

EASTBOUND LANES

RS-040
RS-039
RS-038
RS-042
RS-041

℄ SURVEY & CONST.
OUTVILLE-MORSE
FRONTAGE ROAD

ALLTEL (OVERHEAD)

CONSTRUCTION LIMITS

950 940 930 920 910 900 890

RS-021
20' Rt.
Aggregate Base-6"
16/19/26 6/8/8 10
1/2/3 6/4/3 5
3/3/4 23
2/4/6 7
W

RS-020
18' Lt.
4/5/8 4/5/7 14
4/4/6 6/6/7 13
3/4/6 27
2/4/4 22 26
18

290+00 291+00 292+00 293+00 294+00 295+00 296+00 297+00 298+00 299+00 300+00 301+00 302+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAM

SOIL PROFILE - C.R. 539A EXTENSION
STA. 297+00 TO STA. 302+50

LIC-161-6.65
LIC-37-10.25

76/82

MATCHLINE STA. 302+50 C.R. 539A EXTENSION

MATCHLINE STA. 315+00 C.R. 539A EXTENSION

CONSTRUCTION LIMITS

RS-019

BEGIN SHOULDER TRANSITION STA. 309+01.02, 35.26' RT.

P.C. STA. 312+13.68

P.T. STA. 314+74.64
END SHOULDER TRANSITION, 23.05' RT.

AEP & ALLTEL (OVERHEAD)

303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00 314+00 315

RS-018

4' 24' 4'

10'

S 80° 18' 55" E

19.28'

RS-017

RS-016

ALLTEL (OVERHEAD)

℄ SURVEY & CONST. C.R. 539A EXTENSION

R-046

WESTBOUND LANES

R-042

541+00 542+00 543+00 544+00 545+00 546+00 547+00 548+00 549+00 550+00 551+00 552+00

R-045

R-044

℄ SURVEY & CONST. S.R. 37

EASTBOUND LANES

ALLTEL (OVERHEAD)

R-043

RS-034

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

RS-037

CONSTRUCTION LIMITS

RS-036

RS-035

950 940 930 920 910 900 890

RS-019
18' Lt.
Topsoil-4"

3/5/5 13
2/2/3 2/2/2 28
2/4/5 3/9/8 15
2/4/6 17
3/5/7 W
3/5/8 14

RS-018
20' Rt.
Topsoil-3"

6/7/7 11
8/8/7 7/7/9 13
6/6/5 6/7/6 13
8/5/3 9
WOH W
1/1/2
0/1/1
9/10/12 15

RS-017
17' Rt.

4/6/9 5/6/8 12
4/4/5 5/5/6 21
2/2/4 22
1/2/2 W24
1/1/1 21
3/3/4 W14
0/2/3
7/7/8 15

RS-016
18' Rt.
Aggregate Base-12"

9/14/13 13/10/7
6/9/8 6/9/10
3/3/4
2/3/4 15
3/3/4
2/2/2
0/1/1 W 27
3/6/7 16

303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00 314+00 315+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE
LIC-161-6.65 LIC-37-10.25
STA. 302+50 TO STA. 315+00

77/82

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WETLAND
TOTAL AREA- 3.067 AC.
DISTURBED AREA- 3.067 AC.

MATCHLINE STA. 315+00 C.R. 539A EXTENSION

MATCHLINE STA. 327+50 C.R. 539A EXTENSION

AEP & ALLTEL (OVERHEAD)

10" ASHLAND OIL PIPELINE

6" ASHLAND OIL PIPELINE

CONSTRUCTION LIMITS

P.C. STA. 321+76.51

P.T. STA. 323+33.91

℄ SURVEY & CONST. ALLTEL (OVERHEAD) C.R. 539A EXTENSION

RS-015 RS-013 RS-011 RS-010

S 81° 37' 13" E

S 82° 24' 26" E

RS-014 RS-012

WESTBOUND LANES

℄ SURVEY & CONST. S.R. 37

R-041 R-040 R-039 R-038

EASTBOUND LANES

RS-033 RS-032 RS-031 RS-030

AEP & ALLTELL (OVERHEAD)
℄ SURVEY & CONST.
OUTVILLE-MORSE FRONTAGE ROAD

℄ SURVEY & CONST.
MORSE ROAD

CONSTRUCTION LIMITS

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - C.R. 539A EXTENSION
STA. 315+00 TO STA. 327+50

LIC-161-6.65
LIC-37-10.25

78/82

RS-014
24' Rt.
Topsoil-3"

RS-015
40' Lt.
Topsoil-4"

RS-013
40' Lt.
Topsoil-4"

RS-012
39' Rt.

RS-011
8.5' Rt.
Asphalt Concrete Pavement-6"
Aggregate Base-12"

RS-010
14' Rt.
Topsoil-4"

950 940 930 920 910 900 890

315+00 316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00

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6" ASHLAND OIL PIPELINE

WETLAND
TOTAL AREA= 2.968 AC.
DISTURBED AREA= 0.322 AC.

MATCHLINE STA. 327+50 C.R. 539A EXTENSION

MATCHLINE STA. 340+00 C.R. 539A EXTENSION

CONSTRUCTION LIMITS

P.C. STA. 333+88.38

P.T. STA. 338+64.44

WESTBOUND LANES

EASTBOUND LANES

P.C. STA. 571+38.22

P.T. STA. 576+05.61

ALTELL OVERHEAD

P.C. STA. 571+33.81

P.T. STA. 576+01.20

CHINNEY CREEK

RS-009 24' 26" E

RS-037

RS-036

RS-029

RS-028

RS-008

B-18

B-19

B-20

B-22

B-23

B-27

328+00 329+00 330+00 331+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00 340+00

566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00 574+00 575+00 576+00 577+00

NOTE: NOT ALL STRUCTURE BORINGS ARE SHOWN. SEE STRUCTURE FOUNDATION INVESTIGATION DRAWINGS FOR STRUCTURE BORINGS NOT SHOWN HERE.

950 940 930 920 910 900 890

RS-009 ℄
Topsoil-14"
4/12/11 2/3/7 14
7/23/35 5/7/13
7/15/15 6
9/15/16
11/21/15
19/50/26

RS-008 ℄
6/8/7
5/6/8 2/2/2 ▽14
2/3/5 29 19
4/9/9
4/10/10 17 W
14/28/15
15/26/14
5/10/15
4/8/6

B-19 ℄
2/2/2 23
3/2/3 ▽22
1/1/3 29 ●
1/1/2 18
WOH/1/1 23
6/8/15 16
9/8/7 16
2/2/2 18
3/2/3 15
5/5/4 17
3/1/3 17
4/5/6 16

ENTIRE BORING DEPTH NOT SHOWN

328+00 329+00 330+00 331+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00 340+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - C.R. 539A EXTENSION
STA. 327+50 TO STA. 340+00

LIC-161-6.65
LIC-37-10.25

79/82

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MATCHLINE STA. 340+00 C.R. 539A EXTENSION

MATCHLINE STA. 352+50 C.R. 539A EXTENSION

CONSTRUCTION LIMITS

ALLTEL (OVERHEAD)

℄ SURVEY & CONST. C.R. 539A EXTENSION

RS-007

RS-006

S 76° 33' 53" E RS-005

10'

6" ASHLAND OIL PIPELINE

WESTBOUND LANES

EASTBOUND LANES

R-035

℄ SURVEY & CONST. S.R. 3034

R-034

R-033

RS-027

RS-026

AEP & ALLTEL (OVERHEAD)

P.O.T. STA. 584+40.00

RS-025

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD

CONSTRUCTION LIMITS

6" ASHLAND OIL PI

RS-007
℄
Topsoil-7"
2/5/5
6/7/7 5/10/8 16
2/5/5 4/5/8 16
2/4/6 W19
2/6/8 18
3/5/9
3/5/8
6/5/8 14

RS-006
℄
Topsoil-4"
4/5/6 3/6/8 15
3/6/7 4/4/7
3/6/2 22
2/1/1 30W
5/10/12
5/8/10

RS-005
℄
Topsoil-6"
2/3/4 2/2/4 41
3/5/4 2/3/2 27
3/2/3 W
2/1/0 22W
2/1/1 31
2/5/10
4/5/10 19
8/10/12

930 920 910 900 890 880 870

340+00 341+00 342+00 343+00 344+00 345+00 346+00 347+00 348+00 349+00 350+00 351+00 352+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - C.R. 539A EXTENSION
STA. 340+00 TO STA. 352+50

LIC-161-6.65
LIC-37-10.25

80/82

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MATCHLINE STA. 352+50 C.R. 539A EXTENSION

10" ASHLAND OIL PIPELINE

℄ SURVEY & CONST. C.R. 539A EXTENSION

T.S. STA. 356+04.70 BEGIN SHOULDER TRANSITION, 11.05' RT.

S.C. STA. 357+63.70

CONSTRUCTION LIMITS

END SHOULDER TRANSITION STA. 359+19.44, 42' RT.

S 76° 33' 53" E

353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00

24'

6"

R-032

R-031

0+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+00 599+00 600+00 601+00 602+00 603+00

R-030 WESTBOUND LANES

R-029

EASTBOUND LANES

℄ SURVEY & CONST. S.R. 37

R-028

R-027

R-026

R-025

ALLTEL (OVERHEAD)

C.S. STA. 362+38.34

S.T. STA. 363+97.34

RS-001 364+00

4'

11.5'

P.O.T. STA. 364+66.85

END WORK C.R. 539A EXTENSION STA. 364+40.00

10" ASHLAND OIL PIPELINE

RS-002

DRY PACED

℄ SURVEY & CONST. C.R. 539A EXTENSION

ALLTEL (OVERHEAD)

END PAVEMENT TRANSITION STA. 364+40.00 N 84° 25' 33" E

BEGIN PAVEMENT TRANSITION STA. 363+90.00, 12' LT. & RT.

CONSTRUCTION LIMITS

WETLAND
TOTAL AREA= 7.085 AC.
DISTURBED AREA= 0.643 AC.

R-032
35' Rt.
Topsoil-10"
0/2/2
0/2/2
0/1/2
1/1/1
2/3/7
2/3/3
4/5/10
4/4/5
6/6/5
4/5/6
42W
17
15
17

R-030
30' Rt.
Topsoil-2"
12/12/12
8/14/16
4/10/17
7/9/7
6/8/5
8/5/5
12
36
25

RS-002
5' Rt.
Topsoil-2"
7/15/22
13/24/36
7/21/11
18/22/19
7/15/36
3/7/23
5
9
8
14
15
14

RS-001
18' Lt.
6/6/6
7/6/8
3/5/5
6/7/7
6/4/4
6/10/7
9
15
10
11
24
7

930 920 910 900 890 880 870

353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00

DRAWN RLS
CHECKED PAN

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - C.R. 539A EXTENSION STA. 352+50 TO STA. 364+40

LIC-161-6.65
LIC-37-10.25

81 / 82

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BEGIN PAVEMENT TRANSITION
STA. 7+75.00, LT. & RT.

P.O.T. STA. 7+53.65

END PAVEMENT TRANSITION, LT. & RT.
STA. 8+90.00

T.S. STA. 9+71.21
BEGIN PAVEMENT WIDENING, LT.

S.C. STA. 12+27.56
END PAVEMENT WIDENING, 14.5' LT.

C.S. STA. 14+55.25
BEGIN PAVEMENT TRANSITION, 14.5' LT.

S.T. STA. 17+11.09
END PAVEMENT TRANSITION, 11' LT.

2" PIPE SOUTHEASTERN NATURAL GAS

℄ SURVEY & CONST. MORSE ROAD

℄ SURVEY AND CONSTRUCTION OUTVILLE-MORSE FRONTAGE ROAD STA. 561+59.63

℄ SURVEY & CONST. MORSE ROAD STA. 18+60.93

STA. 18+05.26
46.00' LT.

AEP & ALLTEL (OVERHEAD)

CONSTRUCTION LIMITS

8.92'
9.06'

34° 56' 45" E

ALLTEL (OVERHEAD)

RS-022

RS-023

BEGIN WORK
MORSE ROAD
STA. 7+75.00

88°18'38"

N 05° 54' 12" E

RS-024

STA. 18+02.55
46.00' RT.

CONSTRUCTION LIMITS

℄ SURVEY & CONST. S.R. 161

℄ SURVEY & CONST. OUTVILLE-MORSE FRONTAGE ROAD 560+00

WESTBOUND

EASTBOUND

RS-031

RS-030

RS-011

R-039

R-038

END WORK
MORSE ROAD
STA. 18+38.92

RS-022
6' Rt.
Asphalt Concrete Pavement-8"
Aggregate Base-16"

RS-023
12' Rt.
Asphalt Concrete Pavement-8"
Aggregate Base-10"

RS-022
6' Rt.
Asphalt Concrete Pavement-8"
Aggregate Base-16"

R-031
25' Lt.
Topsoil-4"

1000
990
980
970
960
950
940
930
920
910

8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00

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HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN RLS
CHECKED PAN

SOIL PROFILE - MORSE ROAD
STA. 8+50 TO STA. 18+60.93

LIC-161-6.65
LIC-37-10.25

82/82

GEOLOGY OF THE SITE

THE CULVERT SITE IS LOCATED IN THE MODERATELY ROLLING GLACIATED PORTION OF THE ALLEGHENY PLATEAU REGION, ON THE FLOODPLAIN OF AND OVER SIMPSON RUN AND NEAR A CONFLUENCE WITH ONE OF ITS TRIBUTARIES, IN AN AREA WHERE SHALLOW TO MODERATELY DEEP ALLUVIAL DEPOSITS, FILL MATERIALS AND GLACIAL-DERIVED MATERIALS OVERLIE SHALE, SANDSTONE AND SILTSTONE BEDROCK OF MISSISSIPPIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF THREE DRIVE SAMPLE-CORE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM ROTARY AUGER MOUNTED ON A MOBILE PLATFORM, PERFORMED ON JUNE 14-16, 2004.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE TEST BORINGS DISCLOSED THAT INTERVALS OF LOOSE TO MEDIUM-DENSE UNSTRATIFIED BASIC SILT MODIFIED BY GRAVEL, SAND, STONE FRAGMENTS AND ROOTS THAT FLUCTUATE IN DENSITY WITH INCREASE IN DEPTH OVERLIE RELATIVELY FLAT-LYING BEDROCK SURFACE. TEST BORING NO. B-1 ENCOUNTERED BEDROCK SURFACE AT A DEPTH OF 31.0 FEET, ELEVATION 1017.1 FEET AND CONTINUED TO ADVANCE AN ADDITIONAL 14.2 FEET FOR A TOTAL DEPTH OF 45.2 FEET, ELEVATION 1002.9 FEET. COBBLES WERE ENCOUNTERED IN BORING B-1 BETWEEN 27.2 AND 30.0 FOOT DEPTHS, ELEVATIONS 1020.9 AND 1018.1 FEET. TEST BORING NO. B-2 ENCOUNTERED BEDROCK SURFACE AT A DEPTH OF 26.0 FEET, ELEVATION 1019.5 FEET AND CONTINUED TO ADVANCE AN ADDITIONAL 13.0 FEET FOR A TOTAL DEPTH OF 39.0 FEET, ELEVATION 1006.5 FEET. SOME ORGANIC MATERIAL WAS ENCOUNTERED IN BORING B-2 BETWEEN 0.5 AND 1.5 FEET DEEP. FURTHERMORE, COBBLES WERE ENCOUNTERED IN BORING B-2 AT 3.5, 6.0 and 18.5 FOOT DEPTHS, ELEVATIONS 1042.0, 1039.5 and 1027.0
FEET, RESPECTIVELY. TEST BORING NO. B-3 ENCOUNTERED BEDROCK SURFACE AT A DEPTH OF 8.5 FEET, ELEVATION 1017.9 FEET AND CONTINUED TO ADVANCE AN ADDITIONAL 11.5 FEET FOR A TOTAL DEPTH OF 20.0 FEET, ELEVATION 1006.4 FEET. A BOULDER WAS ENCOUNTERED IN BORING B-3 AT 3.5 FOOT DEPTH, ELEVATION 1022.9 FEET.

FREE WATER WAS OBSERVED AND MEASURED IN BORING B-1 AT 29.0 FOOT DEPTH, ELEVATION 1019.1 FEET AND IN BORING B-3 AT 5.0 FOOT DEPTH, ELEVATION 1021.4 FEET. IN ADDITION, SOME WET NONPLASTIC MATERIAL WAS ENCOUNTERED IN BORING B-3 ABOVE THE FREE WATER ELEVATION AT A DEPTH OF 3.5 FEET, ELEVATION 1022.9 FEET. NO FREE WATER OBSERVATIONS WERE MADE IN BORING B-2.

LEGEND

- Roadway or Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- TR — Top of Rock
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.
- Horizontal Bar on Boring Log in the profile view indicates the Depth the Sample was taken
- X/Y/Z — Figures Beside the Boring Log in the Profile view indicate the Number of Blows for Standard Penetration Test.
  - X = Number of Blows for First 6 in
  - Y = Number of Blows for Second 6 in
  - Z = Number of Blows for Third 6 in

SYMBOLS OF ROCK TYPES

- Coal
- Fire Clay or Underclay
- Weathered Mudstone
- Mudstone
- Weathered Shale
- Shale
- Weathered Clay-Shale
- Clay-Shale
- Weathered Siltstone
- Siltstone
- Weathered Sandstone
- Sandstone
- Conglomerate
- Weathered Conglomerate
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Flint
- Gypsum
- Boulders or Cobbles

GENERAL INFORMATION

Drive Sample/Press Sample/Core Borings

Drive sample borings are made by means of a mechanically-powered rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. split spoon sampler, at 2.5 ft and/or 5.0 ft depth intervals, driven by means of a 140 lbs hammer with a free fall of 2.5 ft. The number of blows required to drive the sampler three 0.5 ft increments is considered the standard penetration test.

Drive/press sample borings are made by means of a mechanically-powered rotary-type drill rig, employing a 2 in O.D., 1⅜in I.D. split spoon sampler, and a 3 in O.D. thin wall press sampling tube. The press sampling tube is advanced by continuous uniform pressure, applied by the drill rig.

Core borings are made by means of a mechanically-powered rotary-type drill rig, employing an NW-PAM core barrel with an industrial diamond cutting head.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, type of sample, number of blows for the standard penetration test in three 0.15 m increments, sample description based on laboratory test results utilizing the Casagrande AC classification system, sample number; and gradation, plasticity and moisture content determinations. Results of strength and consolidation testing, if performed on undisturbed samples, will appear graphically on separate enclosures. Rock samples are displayed on the log sheets including depth and elevation of the sample, amount of recovery and a visual classification based on type, color, degree of hardness, grain size, deterioration, bedding, acid reaction and other qualifying factors.

PARTICLE SIZE DEFINITIONS

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm	
		No. 10 sieve	No. 40 sieve	No. 200 sieve		

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
2/18/05	6/25/04
REVIEWED	
M.R.S.	
CHECKED	
J.B.H.	

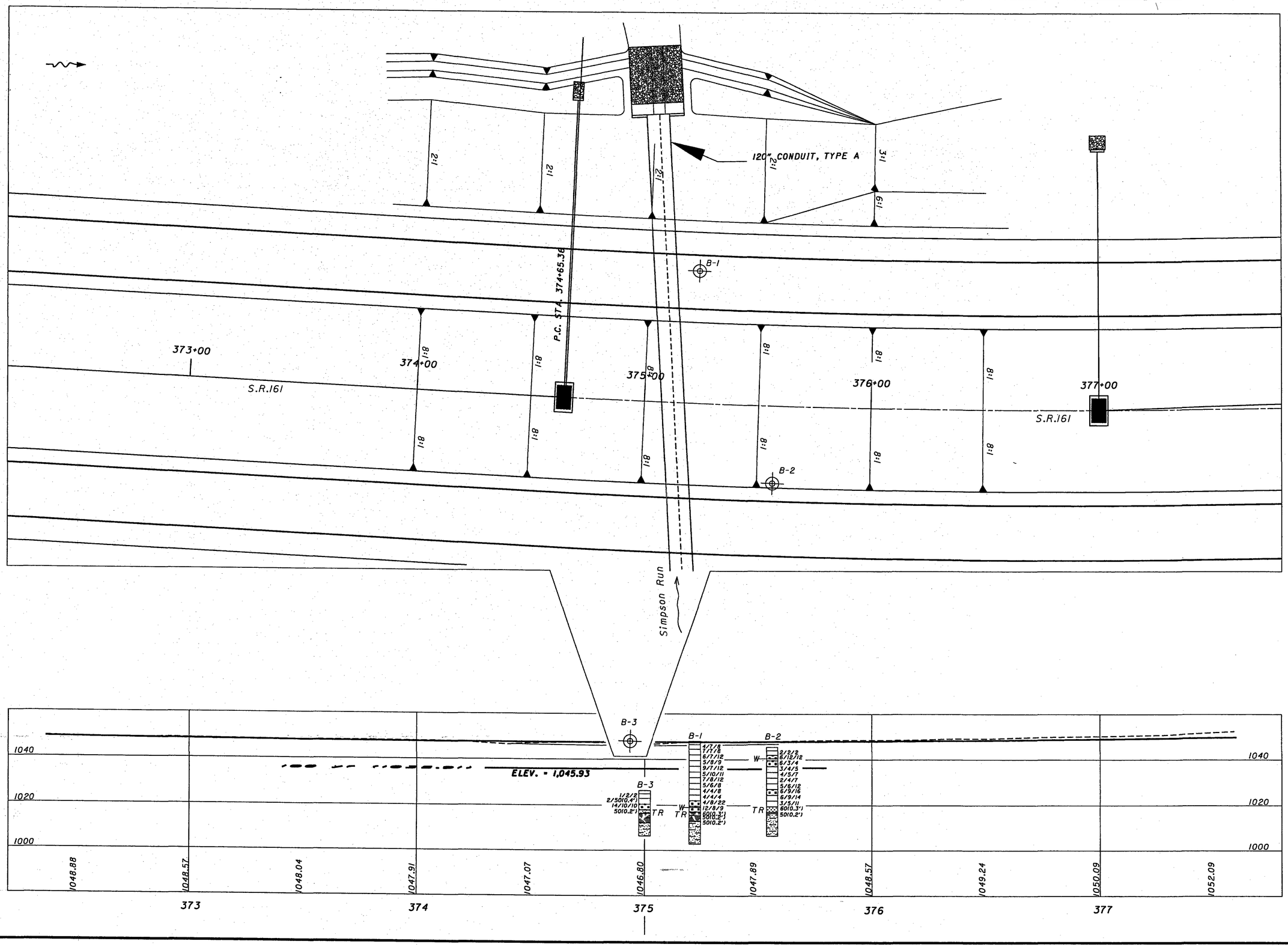
STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO.LIC-161-0712 L&R
OVER SIMPSONS RUN

LIC-161-6.65
LIC-37-10.25

1 / 29

03/02



STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-161-0712 L&R
OVER SIMPSONS RUN

SCALE IN FEET
0 20 40

DRAWN	CHECKED	REVIEWED	DATE
J.B.H.	J.B.H.	M.R.S.	6/25/04
		REVISED DATE 2/8/05	

LIC-161-6.65
LIC-37-10.25

2 / 29

03/02

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 6/14/04 Sampler: Type SS Dia. ____ Water Elev. 1019.1' Project Identification: LICKING
Date completed 6/14/04 LIC-161-7.08 L & R
Boring No. B-1 Station & Offset 375+22.59' LT. Surface Elev. 1048.1' OVER SIMPSON RUN

Elev. 1048.1	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
1047.6		AUGERED			0.2' ASPHALT & 0.3' SUBBASE	-	-	-	-	-	-	-	-	-	VISUAL
1046.6	2														
		4/7/8			BROWN AND GRAY GRAVELLY SANDY SILT	1	16	7	14	33	30	29	7	15	A-4a
1044.6	4														
		7/7/8			BROWN AND GRAY SANDY SILT	2	12	9	13	35	31	29	6	15	A-4a
1042.1	6														
		6/7/12			BROWN AND GRAY SANDY GRAVELLY SILT	3	26	7	12	32	23	25	6	11	A-4a
1039.6	8														
		5/8/9			BROWN AND GRAY GRAVELLY SANDY SILT	4	18	6	14	32	30	NP	NP	14	A-4a
1037.1	10														
		9/7/12			BROWN AND GRAY SANDY GRAVELLY SILT	5	20	6	12	33	29	27	4	15	A-4a
1034.6	12														
		5/10/11			BROWN AND GRAY GRAVELLY SANDY SILT	6	20	7	14	33	26	25	4	14	A-4a
1032.1	14														
		7/8/12			BROWN AND GRAY SANDY SILT	7	13	9	17	32	29	25	4	15	A-4a
1029.6	16														
		5/6/8			BROWN AND GRAY GRAVELLY SANDY SILT	8	19	6	13	36	26	27	5	14	A-4a
1027.1	18														
		4/4/8			BROWN AND GRAY GRAVELLY SANDY SILT	9	17	7	13	37	26	25	3	18	A-4a
1024.6	20														
		4/4/4			BROWN AND GRAY SANDY SILT	10	12	6	14	38	30	27	6	14	A-4a
1022.1	22														
		4/8/22			BROWN AND GRAY GRAVELLY SANDY SILT W/COBBLES	11	20	13	15	31	21	27	4	14	A-4a
1019.6	24				TOP OF ROCK										
		12/8/9			BROWN AND GRAY SILTY SANDY GRAVEL W/COBBLES	12	41	15	11	23	10	24	2	13	A-2-4
1017.1	26	60(0.3')			BLACK BROKEN AND JOINTED SHALE W/THICK CLAY SEAMS	13	-	-	-	-	-	-	-	14	VISUAL
1015.6	28	50(0.2')			BLACK ARENACEOUS, BROKEN AND JOINTED SHALE WITH THICK CLAY SEAMS	14	-	-	-	-	-	-	-	9	VISUAL
1013.1	30														
1012.9	32	50(0.2')			BLACK BROKEN AND JOINTED SILTSTONE	15	-	-	-	-	-	-	-	5	VISUAL
	34														
	36														
	38		5.0	0.0											
	40	14			SILTSTONE, BLACK, FIRM, CARBONACEOUS, HIGHLY JOINTED; INTERBEDDED WITH THICK GRAY, HARD, VERY FINE-GRAINED SANDSTONE SEAMS. NO CORE LOSS. R.Q.D. IS 14										
	42		5.0	0.0											
	44														
1002.9					BOTTOM OF BORING										

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-151 Revised 9/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 6/15/04 Sampler: Type SS Dia. ____ Water Elev. - Project Identification: LICKING
Date completed 6/15/04 Approx. LIC-161-7.08 L & R
Boring No. B-2 Station & Offset 375+56.34' RT. Surface Elev. 1045.5' OVER SIMPSON RUN

Elev. 1045.5	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
1045.0		AUGERED			TOPSOIL UNDERLAIN BY SOIL W/ROOTS & ORGANIC	-	-	-	-	-	-	-	-	-	VISUAL
1044.0	2														
		2/2/2			BROWN GRAVELLY SANDY SILT W/TRACE OF ROOTS	16	18	12	17	34	19	22	3	-	A-4a
1042.0	4														
		6/12/12			BROWN GRAVELLY SANDY SILT W/TRACE OF ROOTS & COBBLES	17	23	8	15	35	19	26	7	16	A-4a
1039.5	6														
		6/3/4			BROWN SANDY GRAVELLY SILT W/TRACE OF ROOTS & COBBLES	18	33	7	14	33	13	25	7	19	A-4a
1037.0	8														
		3/4/5			BROWN AND GRAY SANDY SILT	19	10	14	15	40	21	23	6	13	A-4a
1034.5	10														
		4/5/7			BROWN AND GRAY GRAVELLY SANDY SILT	20	21	9	14	32	24	22	6	13	A-4a
1032.0	12														
		2/4/7			BROWN AND GRAY SANDY SILT	21	12	9	15	36	28	24	8	13	A-4a
1029.5	14														
		5/6/12			BROWN AND GRAY GRAVELLY SANDY SILT	22	17	9	14	34	26	22	3	12	A-4a
1027.0	16														
		6/9/16			BROWN AND GRAY SANDY GRAVELLY SILT W/COBBLES	23	25	9	13	28	25	23	6	11	A-4a
1024.5	18														
		6/9/14			BROWN AND GRAY GRAVELLY SANDY SILT	24	15	11	15	35	24	NP	NP	11	A-4a
1022.0	20				TOP OF ROCK										
		3/5/11			BROWN AND GRAY SANDY GRAVELLY SILT	25	29	15	13	26	17	22	4	9	A-4a
1019.5	22	60(0.3')			GRAY, VERY FINE-GRAINED, JOINTED SANDSTONE	26								6	VISUAL
1017.0	24														
1016.5		50(0.2')			GRAY, VERY FINE-GRAINED, JOINTED SANDSTONE	27	-	-	-	-	-	-	-	5	VISUAL
	26														
	28														
	30		5.0	0.0											
	32	8			SILTSTONE, BLACK, FIRM, CARBONACEOUS, WITH SCATTERED CLAY SEAMS, MOSTLY BROKEN AND JOINTED; INTERBEDDED NEAR THE TOP WITH A THICK GRAY, HARD, BROKEN AND JOINTED LIMESTONE SEAM NEAR THE MIDDLE WITH A BLACK BROKEN AND JOINTED SHALE SEAM AND THROUGHOUT WITH SCATTERED SEAMS AND INTERVALS RANGING UP TO 0.7' THICK OF DARK GRAY, VERY FINE-GRAINED SANDSTONE. NO CORE LOSS. R.Q.D.IS 8										
	34														
	36		5.0	0.0											
	38														
1006.5					BOTTOM OF BORING										

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-151 Revised 9/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 6/16/04 Sampler: Type SS Dia. ____ Water Elev. 1021.4' Project Identification: LICKING
Date completed 6/16/04 Approx. LIC-161-7.08 L & R
Boring No. B-3 Station & Offset 375+00, 150' RT. Surface Elev. 1026.4' OVER SIMPSON RUN

Elev. 1026.4	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
1024.9	2														
		1/2/2			BROWN SANDY SILT WITH STONE FRAGS.	28	0	1	49	35	15	NP	NP	30	A-4a
1022.9	4	2/50 (0.4')			BROWN SILTY SANDY GRAVEL WITH STONE FRAGS.	29	43	6	20	21	10	NP	NP	18	A-2-4
1020.4	6														
		14/10/10			BROWN AND GRAY SILTY GRAVELLY SAND W/BOULDERS	30	30	45	12	25	6	NP	NP	18	A-2-4
1017.9	8	50(0.2')			BLACK, FIRM, CARBONACEOUS, JOINTED SILTSTONE	31	-	-	-	-	-	-	-	7	VISUAL
1016.4	10				TOP OF ROCK										
	12	9	5.0	0.0	SHALE, BLACK, CARBONACEOUS, ARENACEOUS, WITH THIN CLAY SEAMS, HIGHLY JOINTED; INTERBEDDED WITH THICK BLACK CARBONACEOUS SILTSTONE SEAMS AND WITH GRAY, HARD, FINE-GRAINED SANDSTONE SEAMS. NO CORE LOSS. R.Q.D. IS 9										
1012.1	14														
	16	6	5.0	0.0	SILTSTONE, BLACK, FIRM, CARBONACEOUS, WITH SCATTERED THIN CLAY SEAMS, MOSTLY JOINTED; INTERBEDDED WITH SEAMS AND INTERVALS RANGING UP TO 0.3' THICK OF GRAY, HARD, VERY FINE-GRAINED, JOINTED SANDSTONE AND IN THE MIDDLE WITH A BLACK SHALE SEAM. NO CORE LOSS. R.Q.D. IS 6										
	18														
1006.4	20				BOTTOM OF BORING										

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-151 Revised 9/95

OHIO DEPARTMENT OF TRANSPORTATION
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REVISED DATE 2/18/05 | DATE 6/25/04
REVIEWED M.R.S.
CHECKED J.B.H.
TYPED J.B.H.

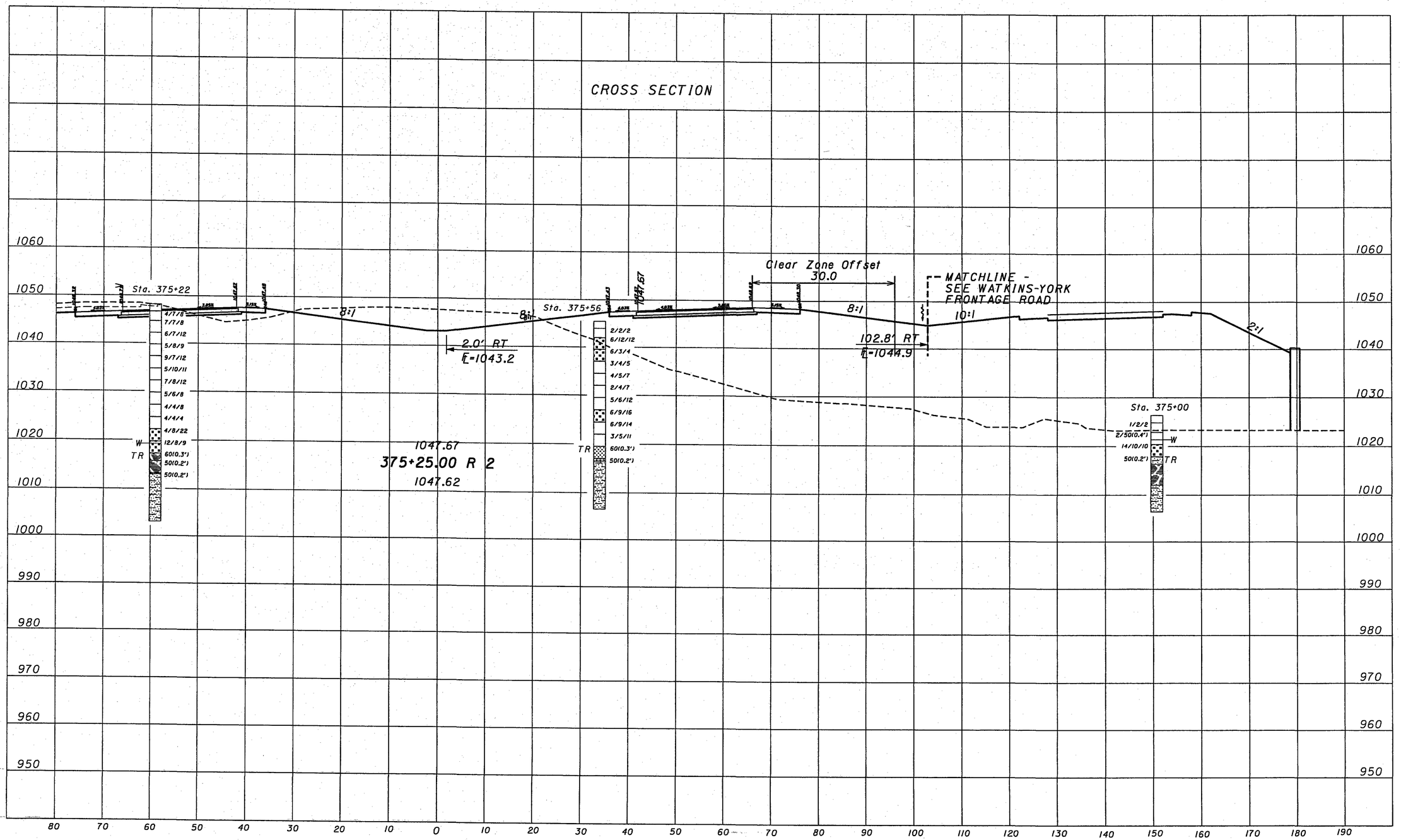
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO.LIC-161-0712 L&R
OVER SIMPSONS RUN

LIC-161-6.65
LIC-37-10.25

3 / 29

03/02

CROSS SECTION



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
2/18/05	6/25/04

TYPED	CHECKED	REVIEWED
J.B.H.	J.B.H.	W.R.S.

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO.LIC-161-0712 L&R
OVER SIMPSONS RUN

LIC-161-6.65
LIC-37-10.25

03/02

GEOLOGY OF THE SITE

THE SR 37 STRUCTURE SITE IS LOCATED IN THE DISSECTED GLACIATED PORTION OF THE ALLEGHENY PLATEAU REGION, OVER SR 161 AND IN AN AREA WHERE EXTREMELY DEEP GLACIAL-DERIVED MATERIALS OVERLIE BEDROCK OF MISSISSIPPIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF THREE DRIVE SAMPLE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM ROTARY AUGER MOUNTED ON A MOBILE PLATFORM, PERFORMED ON JUNE 17-23, 2004.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE TEST BORINGS ENOUNTERED INTERVALS OF LOOSE TO EXTREMELY DENSE UNSTRATIFIED BASIC SILT AND GRAVEL MODIFIED BY SAND, CLAY, STONE FRAGMENTS AND VARYING AMOUNTS OF EACH OTHER THAT ERRATICALLY INCREASE IN DENSITY WITH INCREASE IN DEPTH. TEST BORING NO. B-4 (MADE IN THE VICINITY OF THE NORTH ABUTMENT) PENETRATED TO A DEPTH OF 81.5 FEET, ELEVATION 910.3 FEET AND WAS TERMINATED AT THAT POINT AFTE
R PENETRATING 31.5 FEET OF MATERIAL REQUIRING 30
OR MORE BLOWS PER FOOT IN THE STANDARD PENETRATION TEST IMMEDIATELY PRIOR TO TERMINATION. TEST BORING NO. B-5 (MADE IN THE VICINITY OF THE CENTER PIER) PENETRATED TO A DEPTH OF 76.5 FEET, ELEVATION 916.2 FEET AND WAS TERMINATED AT THAT POINT AFTER PENETR
ATING 16.5 FEET OF MATERIAL REQUIRING OVER 50 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST IMMEDIATELY PRIOR TO TERMINATION. BOULDERS WERE ENCOUNTERED AT SEVERAL DEPTHS IN BORING B-5 BETWEEN 8.5 AND 25.0 FEET DEEP (ELEVATIONS 984.2 TO 967.7 FEET). TES
T BORING NO. B-6 (MADE IN THE VICINITY OF THE SOUTH ABUTMENT) PENETRATED TO A DEPTH OF 81.5 FEET, ELEVATION 911.8 FEET AND WAS TERMINATED AT THAT POINT AFTER PENETRATING 31.5 FEET OF MATERIAL REQUIRING OVER 30 BLOWS PER FOOT IN THE STANDARD PENETRATION T
EST IMMEDIATELY PRIOR TO TERMINATION. ORGANIC MATERIAL WAS ENCOUNTERED IN BORING B-6 BETWEEN 26.0 AND 36.5 FOOT DEPTHS, ELEVATIONS 967.3 AND 956.8 FEET. IN ADDITION, BOULDERS WERE ENCOUNTERED IN BORING B-6 BETWEEN 30.0 AND 36.5 FOOT DEPTHS, ELEVATIONS 96
3.3 AND 956.8 FEET.

BEDROCK SURFACE WAS NOT ENCOUNTERED IN ANY OF THE BORINGS.

FREE WATER WAS OBSERVED AND MEASURED IN BORING B-4 AT 19.5 FEET DEEP, ELEVATION 972.3 FEET, IN BORING B-5 AT 18.0 FEET DEEP, ELEVATION 974.7 FEET AND IN BORING B-6 AT 15.0 FEET DEEP, ELEVATION 978.3 FEET. IN ADDITION, SOME MATERIAL WITH A WATER CONTENT N
EARLY EQUAL TO THE LIQUID LIMIT WAS ENCOUNTERED IN BORING B-6 AT 3.5 FOOT DEPTH, ELEVATION 989.8 FEET.

LEGEND

- Roadway or Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- TR — Top of Rock
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.
- Horizontal Bar on Boring Log in the profile view indicates the Depth the Sample was taken
- X/Y/Z — Figures Beside the Boring Log in the Profile view Indicate the Number of Blows for Standard Penetration Test.
  - X = Number of Blows for First 6 in
  - Y = Number of Blows for Second 6 in
  - Z = Number of Blows for Third 6 in

SYMBOLS OF ROCK TYPES

- Coal
- Fire Clay or Underclay
- Weathered Mudstone
- Mudstone
- Weathered Shale
- Shale
- Weathered Clay-Shale
- Clay-Shale
- Weathered Siltstone
- Siltstone
- Weathered Sandstone
- Sandstone
- Conglomerate
- Weathered Conglomerate
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Flint
- Gypsum
- Boulders or Cobbles

GENERAL INFORMATION

Drive Sample/Press Sample/Core Borings

Drive sample borings are made by means of a mechanically-powered rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. split spoon sampler, at 2.5 ft and/or 5.0 ft depth intervals, driven by means of a 140 lbs hammer with a free fall of 2.5 ft. The number of blows required to drive the sampler three 0.5 ft increments is considered the standard penetration test.

Drive/press sample borings are made by means of a mechanically-powered rotary-type drill rig, employing a 2 in O.D., 1⅜in I.D. split spoon sampler, and a 3 in O.D. thin wall press sampling tube. The press sampling tube is advanced by continuous uniform pressure, applied by the drill rig.

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PARTICLE SIZE DEFINITIONS

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	12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm
			No. 10 sieve	No. 40 sieve	No. 200 sieve	

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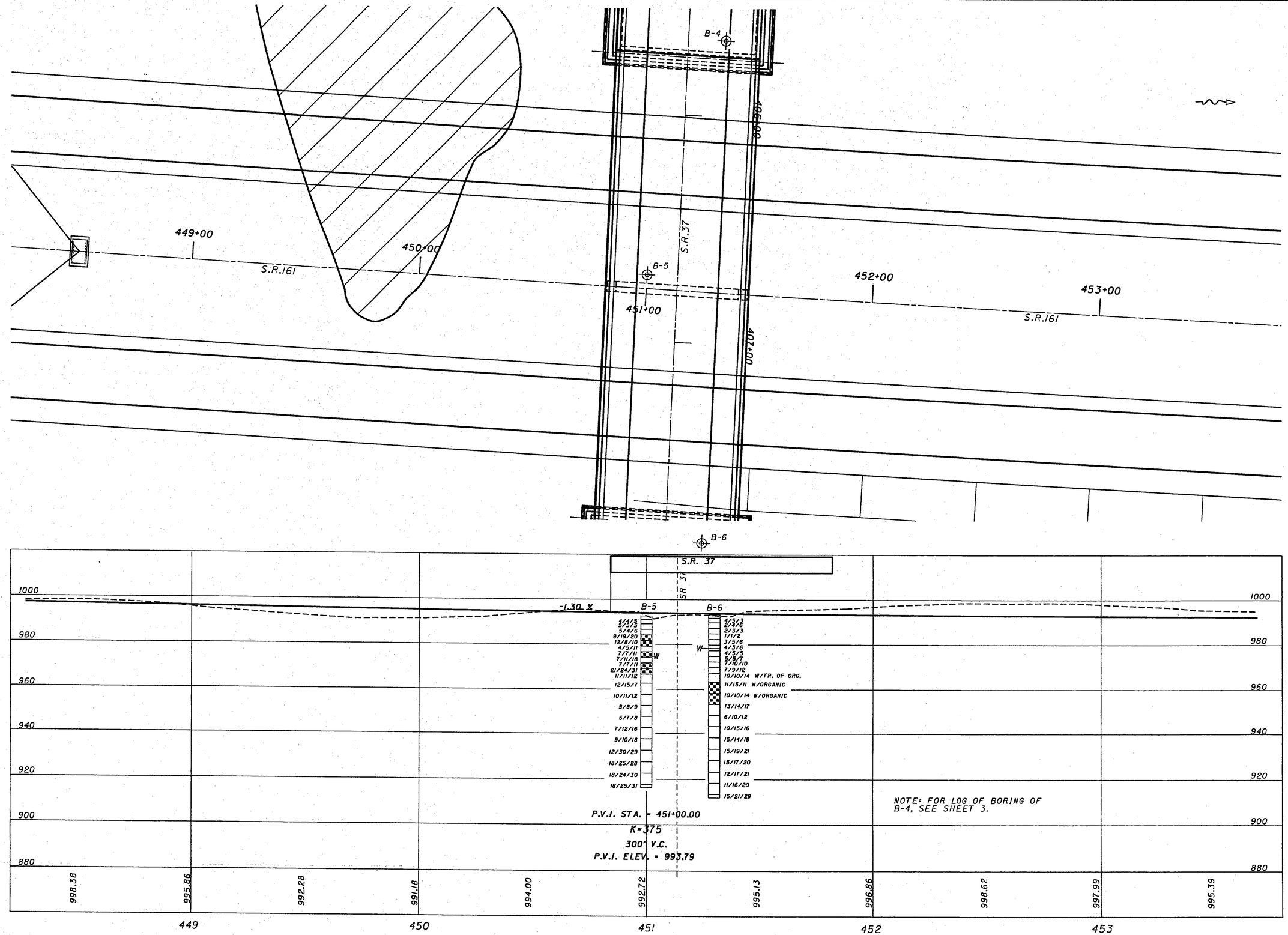
REVISED DATE	DATE
2/22/05	7/20/04
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M.R.S.	
CHECKED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-11.75
UNDER SR. 37

LIC-161-6.65
LIC-37-10.25

5 / 29

03/02



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SCALE IN FEET
0 20 40

REVISED DATE	DATE
2/22/05	7/20/04

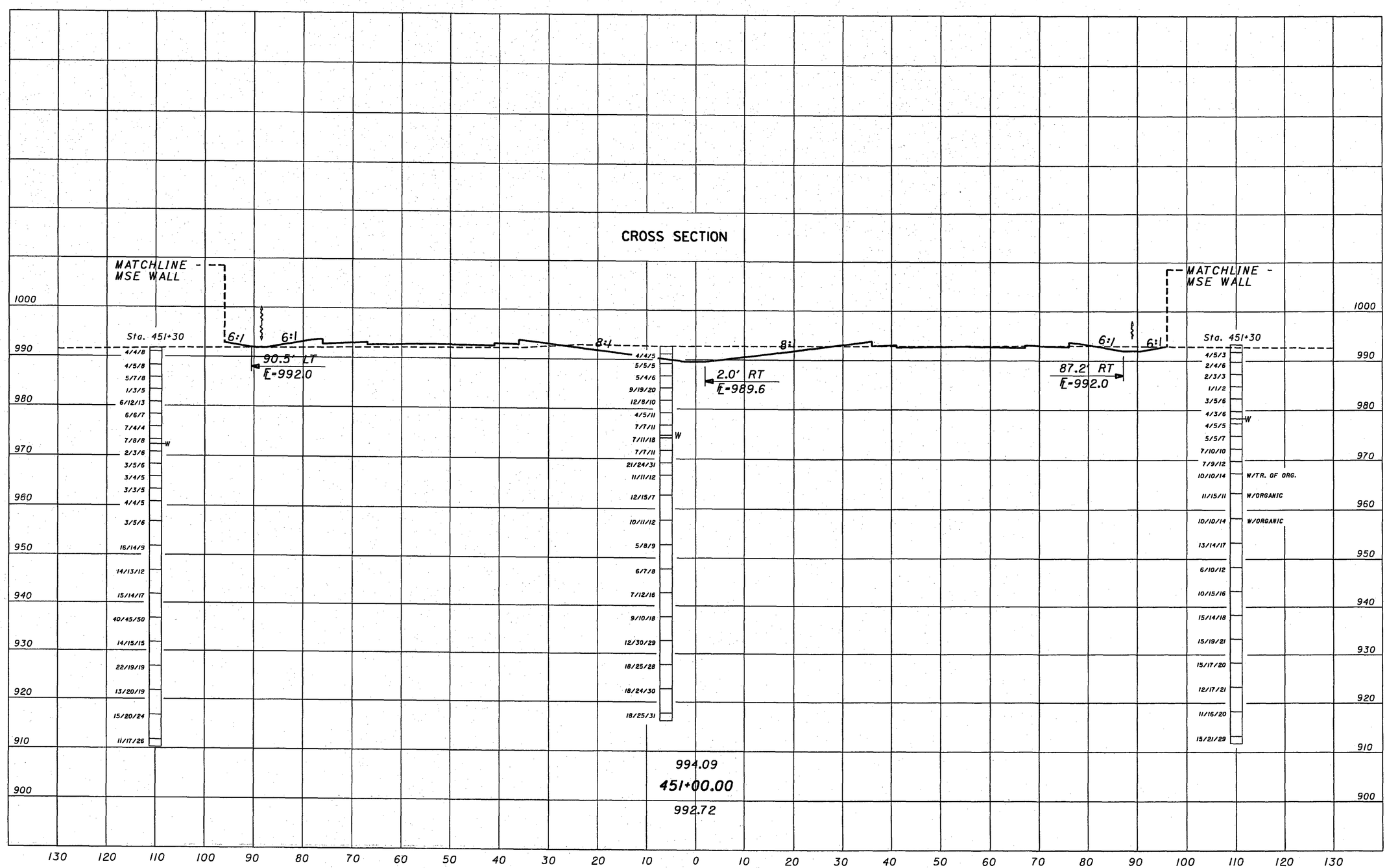
REVIEWED	CHECKED	DRAWN
M.R.S.	J.B.H.	J.B.H.

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-37-1175
UNDER S.R. 37

LIC-161-6.65
LIC-37-10.25

CROSS SECTION



OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
2/22/05	7/20/04
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M.R.S.	
CHECKED	
J.B.H.	
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J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1175
UNDER S.R. 37

LIC-161-6.65
LIC-37-10.25

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 6/17/04 Sampler: Type SS Dia. ____ Water Elev. 972.3' Project Identification: LICKING
Date completed 6/21/04 LIC-161-07.08 AT SR 37
Boring No. B-4 * Station & Offset 45+30, 110' LT. Surface Elev. 991.8'

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
990.3	2	AUGERED			0.1' ASPHALT & 0.3' SUBBASE										VISUAL
988.3	4	4/4/8			BROWN SANDY SILT	1	4	9	12	42	33	25	6	18	A-4a
985.8	6	4/5/8			BROWN CLAYEY SILT	2	3	5	11	54	27	24	10	16	A-4b
983.3	8	5/7/8			BROWN AND GRAY GRAVELLY SILT	3	31	5	9	36	19	18	1	15	A-4a
980.8	10	1/3/5			BROWN AND GRAY GRAVELLY SANDY SILT	4	16	5	11	41	27	20	4	14	A-4a
978.3	12	6/12/13			BROWN AND GRAY SANDY SILT	5	13	8	14	39	26	22	4	16	A-4a
975.8	16	6/6/7			BROWN AND GRAY SILTY SANDY GRAVEL	6	49	14	12	20	5	NP	NP	9	A-1-b
973.3	18	7/4/4			BROWN AND GRAY SANDY CLAYEY SILT & LARGE GRAVEL	7	-	-	-	-	-	-	-	6	VISUAL
970.8	20	7/8/8			BROWN AND GRAY SANDY CLAYEY SILT & ST. FRAGS.	8	-	-	-	-	-	-	-	13	VISUAL
968.3	24	2/3/6			BROWN SILTY SANDY GRAVEL	9	44	17	11	24	4	NP	NP	19	A-2-4
965.8	26	3/5/6			BROWN AND GRAY SILTY SANDY GRAVEL	10	-	-	-	-	-	-	-	14	VISUAL
963.3	28	3/4/5			GRAY SANDY SILT	11	13	10	17	37	23	17	2	13	A-4a
960.8	30	3/3/5			GRAY SANDY GRAVELLY SILT	12	28	12	13	30	17	20	5	15	A-4a
	32	4/4/5			GRAY GRAVELLY SANDY SILT	13	15	8	10	38	29	24	9	14	A-4a
956.8	34														
	36	3/5/6			GRAY GRAVELLY SANDY SILT	14	21	14	15	32	18	NP	NP	13	A-4a
951.8	38														
	40	16/14/9			GRAY SANDY GRAVELLY SILT	15	32	12	13	28	15	NP	NP	13	A-4a
946.8	44														
	46	14/13/12			GRAY SILTY SANDY GRAVEL	16	48	24	11	13	4	NP	NP	11	A-1-b
941.8	48														
	50	15/14/17			GRAY SILTY SANDY GRAVEL	17	38	24	12	20	6	NP	NP	11	A-2-4
936.8	54														
	56	40/45/50			GRAY SANDY SILT	18	12	12	20	35	21	NP	NP	15	A-4a
931.8	58														
	60	14/15/15			GRAY GRAVELLY SANDY SILT	19	19	14	16	33	18	NP	NP	12	A-4a
926.8	64														
	66	22/19/19			GRAY GRAVELLY SANDY SILT	20	25	10	24	28	13	NP	NP	11	A-4a
921.8	70														
	72	13/20/19			GRAY SANDY GRAVELLY SILT	21	22	9	12	36	21	25	7	10	A-4a
916.8	74														
	76	15/20/24			GRAY SANDY GRAVELLY SILT	22	25	10	9	36	20	23	6	8	A-4a
911.8	80														
910.3		11/17/26			GRAY GRAVELLY SANDY SILT	23	18	11	18	33	20	20	5	11	A-4a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/95

* NOTE: HARD DRILLING OCCURRED AT 64.0 FEET DEEP.

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 6/23/04 Sampler: Type SS Dia. ____ Water Elev. 974.7' Project Identification: LICKING
Date completed 6/23/04 LIC-161-07.08 AT SR 37
Boring No. B-5 * Station & Offset 45+00, 6' LT. Surface Elev. 992.7'

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
991.7	2	AUGERED			0.5' ASPHALT & 0.5' SUBBASE		-	-	-	-	-	-	-	-	VISUAL
989.2	4	4/4/5			BROWN SANDY SILT (REC. 1.5')	46	9	7	32	31	21	NP	NP	22	A-4a
986.7	6	5/5/5			BROWN SANDY SILT (REC. 1.5')	47	12	7	17	40	24	25	7	18	A-4a
984.2	8	5/4/6			BROWN SANDY SILT (REC. 1.5')	48	7	12	22	40	19	NP	NP	16	A-4a
981.7	10	9/19/20			BROWN GRAVELLY SANDY SILT WITH BOULDERS (REC. 1.5')	49	24	11	21	30	14	NP	NP	14	A-4a
979.2	12	12/8/10			BROWN AND GRAY GRAVELLY SANDY SILT W/BOULDERS (REC. 1.5')	50	28	13	15	29	15	21	5	11	A-4a
976.7	16	4/5/11			BROWN AND GRAY SANDY CLAYEY SILT W/ST. FRAGS. (REC. 1.5')	51	-	-	-	-	-	-	-	13	VISUAL
974.2	18	7/7/11			BROWN SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.5')	52	39	14	15	27	5	NP	NP	14	A-2-4
971.7	22	7/11/18			BROWN SANDY GRAVELLY SILT (REC. 1.5')	53	33	14	13	28	12	21	4	12	A-4a
969.2	24	7/7/11			BROWN SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.5')	54	45	16	8	26	5	NP	NP	16	A-2-4
966.7	26	21/24/31			BROWN SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.5')	55	45	22	12	17	4	NP	NP	14	A-1-b
	28	11/11/12			BROWN SILTY SANDY GRAVEL (REC. 1.5')	56	42	16	12	24	6	NP	NP	14	A-2-4
962.7	30														
	32	12/15/7			BROWN GRAVELLY SANDY SILT (REC. 1.5')	57	28	17	14	30	11	21	4	13	A-4a
958.2	34														
	36	10/11/12			GRAY GRAVELLY SANDY SILT (REC. 1.5')	58	20	12	14	34	20	21	5	12	A-4a
952.7	38														
	40	5/8/9			GRAY GRAVELLY SANDY SILT (REC. 1.5')	59	15	10	16	36	23	20	5	12	A-4a
947.7	44														
	46	6/7/8			GRAY SANDY GRAVELLY SILT (REC. 1.5')	60	26	12	13	31	18	21	5	14	A-4a
942.7	48														
	50	7/12/16			GRAY GRAVELLY SANDY SILT (REC. 1.5')	61	18	12	18	32	20	19	5	11	A-4a
937.5	54														
	56	9/10/18			GRAY SANDY SILT (REC. 1.5')	62	14	16	17	37	16	21	6	8	A-4a
9332.7	58														
	60	12/30/29			GRAY SANDY SILT (REC. 1.5')	63	-	-	-	-	-	-	-	11	VISUAL
927.7	64														
	66	18/25/28			GRAY SANDY SILT (REC. 1.5')	64	13	14	20	33	20	19	4	9	A-4a
922.7	68														
	70	18/24/30			GRAY GRAVELLY SANDY SILT (REC. 1.5')	65	21	10	15	35	19	21	6	9	A-4a
917.7	74														
916.2	76	18/25/31			GRAY SANDY SILT (REC. 1.5')	66	13	14	16	37	20	22	6	13	A-4a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/95

* NOTE: HOLE CAVED IN AT 16.0 FEET DEEP

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE 2/22/05	DATE 1/20/04
	REVIEWED M.R.S.
	CHECKED J.B.H.
	TYPED J.B.H.

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1175
UNDER S.R. 37

LIC-161-6.65
LIC-37-10.25

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 6/21/04 Sampler: Type SS Dia. Water Elev. 978.3' Project Identification:
Date completed 6/22/04 LIC-161-07.08 AT SR 37
Boring No. B-6 * Station & Offset 451+30, 110' RT. Surface Elev. 993.3'

Elev. 993.3	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
	0	AUGERED			ASPHALT = 0.1' & SUBBASE = 0.1'										VISUAL
991.8	2														
989.8	4	4/5/3			BROWN SANDY SILT	24	7	8	18	51	16	NP	NP	23	A-4b
987.3	6	2/4/6			BROWN SILTY CLAY	25	0	2	8	46	44	41	20	38	A-7-6
984.8	8	2/3/3			BROWN AND GRAY SILTY SANDY GRAVEL	26	47	7	8	27	11	NP	NP	19	A-4a
982.3	10	1/1/2			BROWN AND GRAY SANDY SILT	27	10	4	12	53	21	NP	NP	22	A-4b
979.8	12	3/5/6			BROWN AND GRAY GRAVELLY SANDY SILT	28	20	9	18	32	21	22	5	15	A-4a
977.3	14	4/3/6			GRAY SANDY SILT	29	13	11	21	37	18	NP	NP	13	A-4a
974.8	16	4/5/5			GRAY SANDY SILT	30	10	17	21	35	17	NP	NP	13	A-4a
972.3	18	5/5/7			GRAY SANDY SILT (REC. 1.5')	31	8	5	8	49	30	NP	NP	15	A-4a
969.8	20	7/10/10			GRAY SANDY SILT (REC. 1.5')	32	14	7	15	41	23	NP	NP	14	A-4a
967.3	22	7/9/12			GRAY AND BROWN SANDY GRAVELLY SILT (REC. 1.5')	33	30	11	15	29	15	20	5	14	A-4a
	24	10/10/14			BROWN SANDY GRAVELLY SILT W/TRACE OF ORGANIC (REC. 1.5')	34	30	13	14	34	9	NP	NP	143	A-4a
963.3	26														
	28	11/15/11			BROWN SILTY SANDY GRAVEL WITH BOULDERS & ORGANIC (REC. 1.5')	35	40	15	10	26	9	NP	NP	11	A-2-4
958.3	30														
	32	10/10/14			BROWN SILTY SANDY GRAVEL WITH BOULDERS & ORGANIC (REC. 1.5')	36	42	17	12	22	7	NP	NP	14	A-2-4
953.3	34														
	36	13/14/17			BROWN AND GRAY SILTY GRAVELLY SAND (REC. 1.5')	37	29	18	15	27	11	NP	NP	10	A-4a
948.3	38														
	40	6/10/12			GRAY GRAVELLY SANDY SILT (REC. 1.5')	38	15	12	15	35	23	20	5	12	A-4a
943.3	42														
	44	10/15/16			GRAY GRAVELLY SANDY SILT (REC. 1.5')	39	21	12	14	36	17	21	7	11	A-4a
938.3	46														
	48	15/14/18			GRAY GRAVELLY SANDY SILT (REC. 1.5')	40	17	11	15	35	22	21	7	12	A-4a
933.3	50														
	52	15/19/21			GRAY SILTY GRAVELLY SAND (REC. 1.5')	41	25	23	18	22	12	20	6	12	A-2-4
928.3	54														
	56	15/17/20			GRAY GRAVELLY SANDY SILT (REC. 1.5')	42	19	12	19	30	20	19	5	9	A-4a
923.3	58														
	60	12/17/21			GRAY GRAVELLY SANDY SILT (REC. 1.5')	43	15	12	17	34	22	20	5	10	A-4a
918.3	62														
	64	11/16/20			GRAY GRAVELLY SANDY SILT (REC. 1.5')	44	15	12	17	34	22	20	5	10	A-4a
913.3	66														
911.8	68	15/21/29			GRAY GRAVELLY SANDY SILT (REC. 1.5')	45	19	10	16	34	21	21	6	11	A-4a
	70														
	72														
	74														
	76														
	78														
	80														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLRevised 9/98

* NOTE: HOLE CAVED IN AT 15.0' FEET DEEP

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE 2/22/05		DATE 7/20/04
	REVIEWED M.R.S.	
	CHECKED J.B.H.	
	TYPED J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1175
UNDER S.R. 37

LIC-161-6.65
LIC-37-10.25

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE DISSECTED GLACIATED PORTION OF THE ALLEGHENY PLATEAU REGION, ON THE FLOODPLAIN OF AND OVER MOOTS RUN, IN AN AREA WHERE SHALLOW TO EXTREMELY DEEP ALLUVIAL DEPOSITS, GLACIAL-DERIVED MATERIALS AND RESIDUAL SOILS OVERLIE SHALE, CLAY-SHALE, WEATHERED CLAY-SHALE, SILTSTONE AND SANDSTONE BEDROCK OF MISSISSIPPIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF FIVE DRIVE SAMPLE BORINGS AND FIVE DRIVE SAMPLE-CORE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM ROTARY AUGER MOUNTED ON A MOBILE PLATFORM, PERFORMED BETWEEN JUNE 16 AND AUGUST 24, 2005.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE TEST BORINGS DISCLOSED THAT INTERVALS OF LOOSE TO EXTREMELY DENSE UNSTRATIFIED BASIC SILT, GRAVEL, CLAY AND SAND MODIFIED BY STONE FRAGMENTS AND VARYING AMOUNTS OF EACH OTHER THAT ERRATICALLY INCREASE IN DENSITY WITH INCREASE IN DEPTH OVERLIE SLOPING BEDROCK SURFACE AS SHOWN IN THE FOLLOWING TABLE:

Boring No.	Element	Rock Encountered Depth	Elev.	Amt. of Bedrock Penetration	Stand. Pen. Test *Blows/Ft.	Amt. Pen.	End Depth Depth	Elev.
B-7	Lt. Rear Abut.	18.5'	958.7'	11.5'	-	-	30.0'	947.2'
B-8	Lt. Rear Pier	1.0'	947.0'	14.0'	-	-	15.0'	933.0'
B-9	Lt. Fwd Pier	10.0'	940.0'	10.0'	-	-	20.0'	930.0'
B-10	Lt. Fwd. Pier	6.0'	944.2'	10.5'	-	-	16.5'	933.7'
B-11	Rt. Rear Pier	-	-	-	33 or more	30.5'	41.5'	912.6'
B-12	Rt. Rear Pier	31.0'	918.4'	9.0'	-	-	40.0'	909.4'
B-13	Rt. Fwd. Pier	-	-	-	35 or more	30.5'	41.5'	909.6'
B-14	Rt. Fwd. Pier	-	-	-	27 or more	33.0'	43.5'	911.0'
N-1	Rt. Fwd. Abut.	78.0'	876.8'	2.3'	-	-	80.3'	874.5'
N-2	Rt. Fwd. Abut.	75.0'	879.9'	0.3'	-	-	75.3'	879.6'

BEDROCK SURFACE WAS NOT ENCOUNTERED IN BORINGS B-11, B-13 OR B-14.

COBBLES OR BOULDERS WERE ENCOUNTERED IN BORING B-7 AT 2.3 AND 12.0 FOOT DEPTHS, ELEVATIONS 974.9 AND 965.2 FEET. ORGANIC MATERIAL WAS ENCOUNTERED IN BORING B-9 AT 6.0 FOOT DEPTH, ELEVATION 944.0 FEET AND A TRACE OF ORGANIC MATERIAL WAS ENCOUNTERED IN BORING B-13 AT 40.0 FOOT DEPTH, ELEVATION 911.1 FEET.

FREE WATER WAS OBSERVED AND MEASURED IN THE BORINGS AS FOLLOWS:

Boring No.	Free Water Elev. Depth	Elev.	
B-7	Dry		
B-8	1.0'	947.0'	
B-9	4.0'	946.0'	
B-10	3.0'	947.2'	
B-11	25.0'	929.1'	
B-12	3.0'	946.4'	
B-13	5.0'	946.1'	
B-14	9.0'	945.1'	
N-1	11.0'	943.8'	(Perched)
N-2	11.0'	943.9'	(Perched)

D50 VALUES WHICH HAVE BEEN CALCULATED FOR THE SCOUR ANALYSIS CAN BE FOUND ON SHEET 6.

LEGEND

- Roadway or Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- TR — Top of Rock
- W — Indicates Free Water Elevation.
- ▼ — Indicates Static Water Elevation.
- Horizontal Bar on Boring Log in the profile view indicates the Depth the Sample was taken
- X/Y/Z — Figures Beside the Boring Log in the Profile view indicate the Number of Blows for Standard Penetration Test.
  - X = Number of Blows for First 6 in
  - Y = Number of Blows for Second 6 in
  - Z = Number of Blows for Third 6 in

SYMBOLS OF ROCK TYPES

- Coal
- Fire Clay or Underclay
- Weathered Mudstone
- Mudstone
- Weathered Shale
- Shale
- Weathered Clay-Shale
- Clay-Shale
- Weathered Siltstone
- Siltstone
- Weathered Sandstone
- Sandstone
- Conglomerate
- Weathered Conglomerate
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Flint
- Gypsum
- Boulders or Cobbles

GENERAL INFORMATION

Drive Sample/Press Sample/Core Borings

Drive sample borings are made by means of a mechanically-powered rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. split spoon sampler, at 2.5 ft and/or 5.0 ft depth intervals, driven by means of a 140 lbs hammer with a free fall of 2.5 ft. The number of blows required to drive the sampler three 0.5 ft increments is considered the standard penetration test.

Drive/press sample borings are made by means of a mechanically-powered rotary-type drill rig, employing a 2 in O.D., 1⅜in I.D. split spoon sampler, and a 3 in O.D. thin wall press sampling tube. The press sampling tube is advanced by continuous uniform pressure, applied by the drill rig.

Core borings are made by means of a mechanically-powered rotary-type drill rig, employing an NW-PAM core barrel with an industrial diamond cutting head.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, type of sample, number of blows for the standard penetration test in three 0.15 m increments, sample description based on laboratory test results utilizing the Casagrande AC classification system, sample number; and gradation, plasticity and moisture content determinations. Results of strength and consolidation testing, if performed on undisturbed samples, will appear graphically on separate enclosures. Rock samples are displayed on the log sheets including depth and elevation of the sample, amount of recovery and a visual classification based on type, color, degree of hardness, grain size, deterioration, bedding, acid reaction and other qualifying factors.

PARTICLE SIZE DEFINITIONS

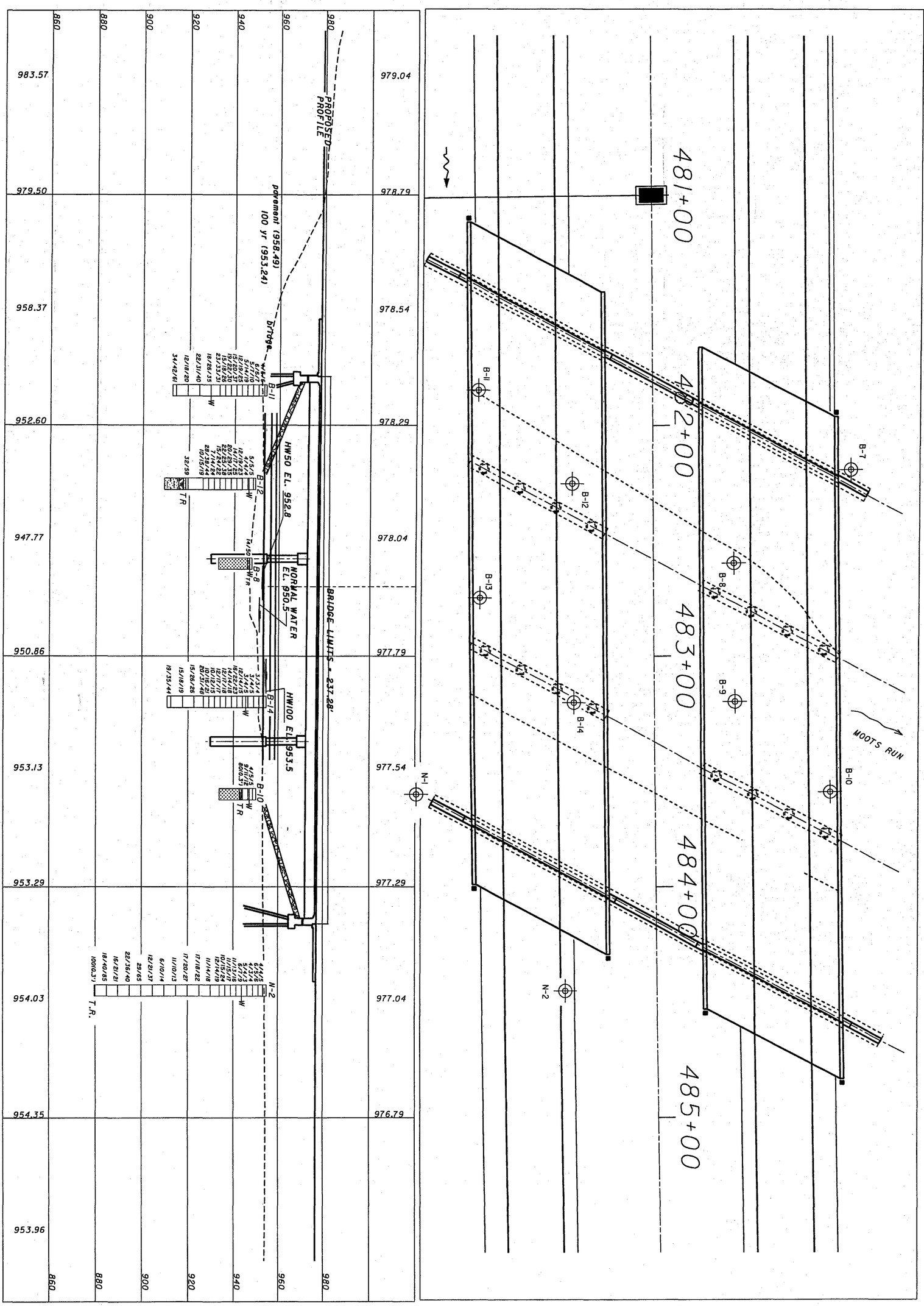
Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
	12" 3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm	
		No. 10 sieve	No. 40 sieve	No. 200 sieve		

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

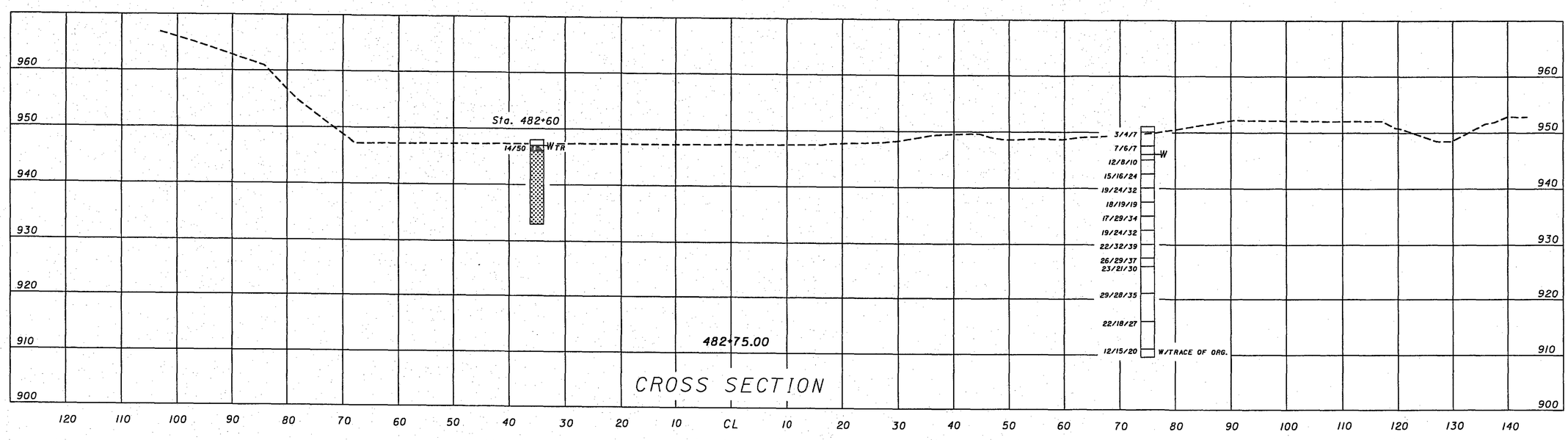
REVISED DATE 9/8/04, 11/15/04, 3/4/05 | DATE 8/6/04
REVIEWED M.R.S.
CHECKED J.B.H.

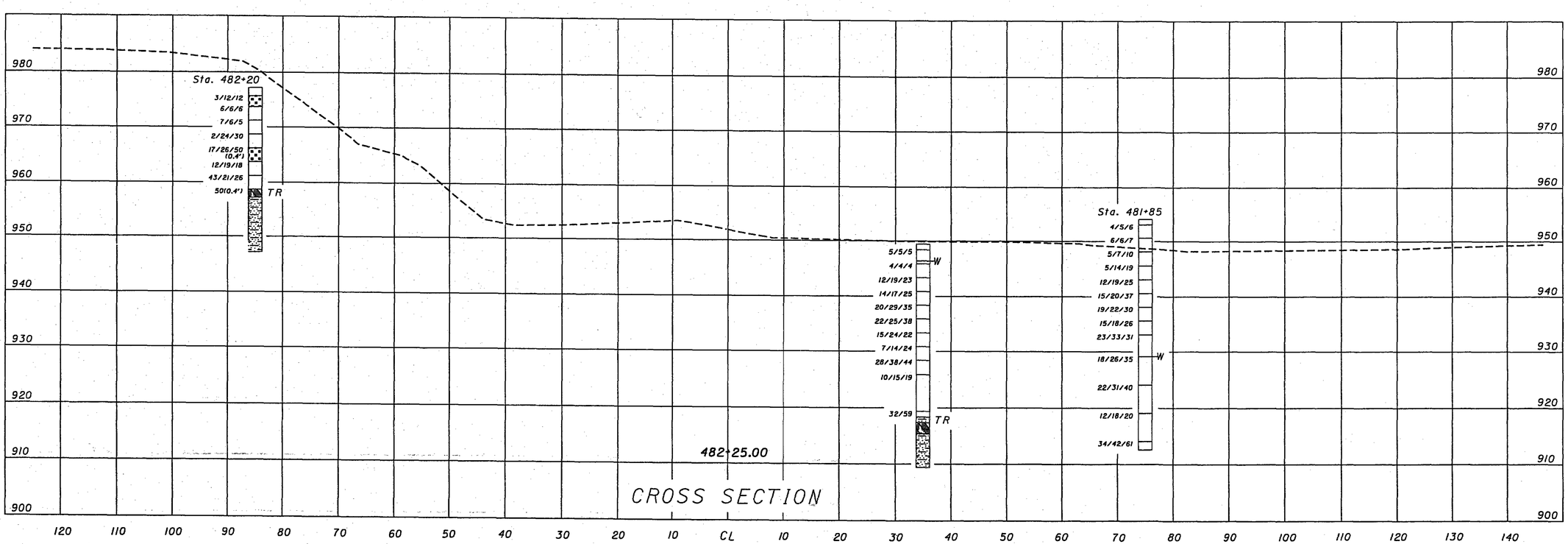
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1225
OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25



11/29	LIC-161-6.65 LIC-37-10.25	STRUCTURE FOUNDATION INVESTIGATION BRIDGE NO. LIC-37-1225 OVER MOOTS RUN	DRAWN J.B.H.	CHECKED J.B.H.	REVISED DATE 9/8/04, 11/15/04, 3/4/05 REVIEWED M.R.S.	DATE 8/6/04	0 20 40 SCALE IN FEET





SCALE IN FEET
0 10 20

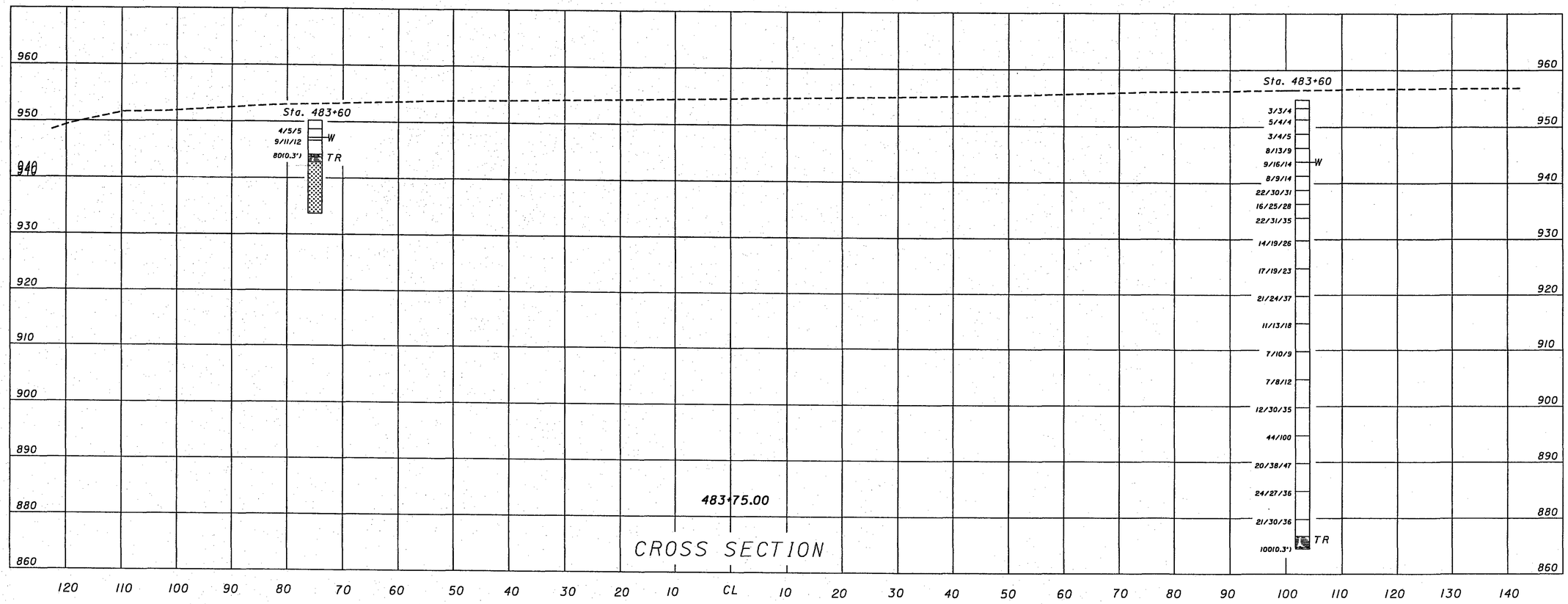
REVISED DATE	DATE
9/8/04, 11/5/04, 3/4/05	8/6/04

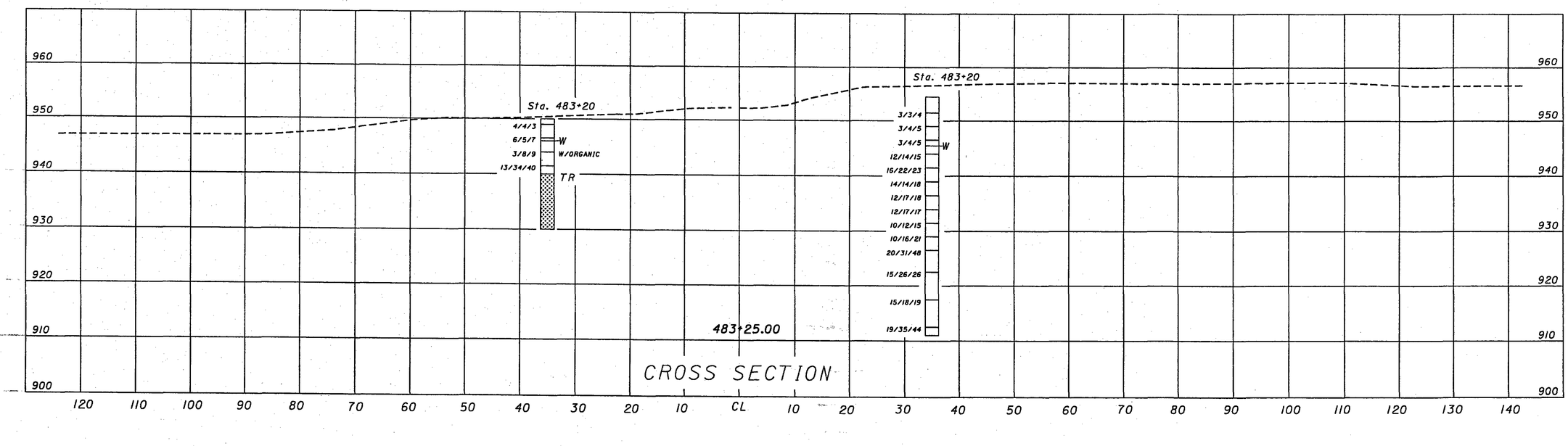
REVIEWED	CHECKED	DRAWN
W.R.S.	J.B.H.	J.B.H.

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1225
OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25

12 / 29





0 10 20
SCALE IN FEET

REVISED DATE	DATE
9/8/04, 11/15/04, 3/4/05	8/6/04
REVIEWED M.R.S.	
CHECKED J.B.H.	
DRAWN J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1225
OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25

13/29

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(1/12)

LOG OF BORING

Date Started 6/16/04 Sampler: Type SS Dia. Water Elev. - Project Identification: LICKING
Date completed 6/21/04 LIC-161-07.08
Boring No. B-7 Station & Offset 482+20, 85' LT. Surface Elev. 977.2' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
977.2	0														
975.7	2														
973.7	4	3/12/12			BROWN CLAYEY SANDY GRAVEL WITH COBBLES	1	37	14	10	18	21	39	18	25	A-6b
971.2	6	6/6/6			BROWN GRAVELLY SANDY CLAY	2	18	10	13	32	27	38	17	18	A-6b
968.7	8	7/6/5			BROWN SANDY SILT	3	14	8	15	36	27	25	8	20	A-4a
966.2	10	2/24/30			BROWN SANDY SILT	4	12	10	16	35	27	23	8	12	A-4a
963.7	12	17/26/50			BROWN AND GRAY GRAVELLY SANDY SILT WITH BOULDERS	5	20	10	15	33	22	22	8	12	A-4a
961.2	16	12/19/18			BROWN AND GRAY SANDY GRAVELLY SILT TOP OF ROCK	6	21	13	7	44	15	28	7	16	A-4a
958.7	18	43/21/26			BROWN SILT & CLAY W/ST. FRAGS. (RESIDUAL SOIL)	7	-	-	-	-	-	-	-	10	VISUAL
		50(0.5')			*	8	-	-	-	-	-	-	-	9	VISUAL
957.2	20														
	22		5.0	0.0											
	24														
	26	46			SILTSTONE, GRAY, OLIVE, FIRM TO HARD, W/FERRUGINOUS STAINS, W/SCATTERED CARBONACEOUS LAMINAE AND SEAMS, W/CLAY SEAMS, BROKEN AND JOINTED IN PART; WITH A THICK BLACK, HIGHLY BROKEN AND JOINTED SHALE SEAM IN THE LOWER PORTION. NO CORE LOSS. R.Q.D. IS 46										
	28		5.0	0.0											
947.2	30														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/05

* BROWN, ARENACEOUS, JOINTED CLAY-SHALE W/VERY FINE-GRAINED, JOINTED SANDSTONE SEAMS AND CLAY SEAMS.

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(2/12)

LOG OF BORING

Date Started 7/14/04 Sampler: Type SS Dia. Water Elev. 947.0' Project Identification: LICKING
Date completed 7/14/04 LIC-161-07.08
Boring No. B-8 Station & Offset 482+60, 35' LT. Surface Elev. 948.0' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description TOP OF ROCK	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
948.0	0	AUGERED			CREEK BED MATERIAL	-	-	-	-	-	-	-	-	-	VISUAL
947.0	2	14/50			BROWN JOINTED ARENACEOUS SHALE W/CLAY SEAMS (REC 1.0')	33	-	-	-	-	-	-	-	7	VISUAL
	4		2.0	1.0											
	6														
	8		4.7	0.3	SANDSTONE, BROWN, GRAY, OLIVE, FIRM, VERY FINE-GRAINED, THIN TO MEDIUM-BEDDED, WITH SCATTERED THIN CLAY SEAMS, JOINTED IN PART; GRADING TO SILTSTONE IN PART; INTERBEDDED IN THE UPPER PORTION WITH A 1.5' THICK BROWN, GRAY, ARENACEOUS HIGHLY BROKEN AND JOINTED SHALE INTERVAL CONTAINING CLAY SEAMS. CORE LOSS 10 % R.Q.D. IS 48										
	10	48													
	12														
	14		5.0	0.0											
933.0															

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/05

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(3/12)

LOG OF BORING

Date Started 7/13/04 Sampler: Type SS Dia. Water Elev. 946.0' Project Identification: LICKING
Date completed 7/13/04 LIC-161-07.08
Boring No. B-9 Station & Offset 483+20, 35' LT. Surface Elev. 950.0' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
950.0	0	AUGERED			TOPSOIL										VISUAL
948.0	2	4/4/3			BROWN SILTY GRAVELLY SAND (REC. 1.2')	1	44	33	11	11	1	NP	NP	11	A-1-b
946.5	4														
	6	6/5/7			BROWN SILTY SANDY GRAVEL (REC. 0.8')	2	62	17	8	11	2	NP	NP	17	A-1-a
944.0					TOP OF ROCK										
	8	3/8/9			GRAY SILT W/ORGANIC (REC. 1.5')	3	7	5	5	66	17	24	3	23	A-4b
941.5	10	13/34/40			GRAY SILT (RESIDUAL SOIL) (REC. 1.5')	4	0	12	8	64	15	NP	NP	12	A-4b
	12														
	14														
	16	40	8.7	1.3	SANDSTONE, GRAY, BROWN, FIRM TO HARD, WITH A FEW THIN FERRUGINOUS SEAMS, VERY FINE-GRAINED, THIN TO MEDIUM-BEDDED, WITH CLAY SEAMS IN THE UPPER PORTION, JOINTED IN PART, WITH A 0.7' THICK BROKEN AND JOINTED INTERVAL IN THE UPPER PORTION; GRADING TO SILTSTONE IN PART. CORE LOSS 13 % R.Q.D. IS 40										
	18														
930.0	20														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/05

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(4/12)

LOG OF BORING

Date Started 6/24/04 Sampler: Type SS Dia. Water Elev. 947.2' Project Identification: LICKING
Date completed 6/25/04 LIC-161-07.08
Boring No. B-10 Station & Offset 483+60, 75' LT. Surface Elev. 950.2' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
950.2	0														
948.7	2														
946.7	4	4/5/5			BROWN SILTY SANDY GRAVEL (REC. 1.0') TOP OF ROCK	67	50	10	14	22	4	NP	NP	15	A-2-4
	6	9/11/12			BROWN SAND, SILT, CLAY & GRAVEL (REC. 1.0')	68	-	-	-	-	-	-	-	24	VISUAL
944.2		80(0.3')			OLIVE AND GRAY WEA. CLAY-SHALE (REC. 0.3')	69	-	-	-	-	-	-	-	7	VISUAL
943.1		0													
942.8	8				SHALE, GRAY, FIRM, ARENACEOUS, WITH THICK LITHIC CLAY SEAMS, BROKEN AND JOINTED IN PART. NO CORE LOSS. R.Q.D. IS 0										
	10		5.0	0.0											
	12	38			SANDSTONE, GRAY, WITH BROWN, FIRM TO HARD, WITH CARBONACEOUS LAMINAE AND SEAMS, VERY FINE-GRAINED THIN TO MEDIUM-BEDDED, JOINTED IN PLACES. NO CORE LOSS. R.Q.D. IS 38										
	14		5.0	0.0											
933.7	16														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/05

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(5/12)

LOG OF BORING

Date Started 7/21/04 Sampler: Type SS Dia. Water Elev. 929.1' Project Identification: LICKING
Date completed 7/22/04 LIC-161-07.08
Boring No. B-11 Station & Offset 481+85, 75' RT. Surface Elev. 954.1' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
954.1	0														
953.1	2	4/5/6			BROWN SILTY SANDY GRAVEL (REC. 1.0')	45	57	19	11	12	1	NP	NP	7	A-1-a
950.6	4	6/6/7			BROWN SILTY SANDY GRAVEL (REC. 1.5')	46	60	15	9	13	3	NP	NP	7	A-1-b
948.1	6	5/7/10			GRAY GRAVELLY SANDY CLAY (REC. 1.5')	47	18	10	15	33	24	33	14	11	A-6a
945.6	8	5/14/19			GRAY GRAVELLY SANDY SILT (REC. 1.5')	48	25	16	13	29	17	20	4	11	A-4a
943.1	10	12/19/25			GRAY SANDY CLAY (REC. 1.5')	49	10	9	17	45	19	21	5	12	A-6b
940.6	12	15/20/37			GRAY SANDY SILT (REC. 1.5')	50	14	4	16	51	15	NP	NP	12	A-4b
938.1	14	19/22/30			GRAY SANDY SILT (REC. 1.5')	51	11	10	21	37	21	19	5	9	A-4a
935.6	16	15/18/26			GRAY SANDY SILT (REC. 1.5')	52	12	11	22	40	15	19	3	9	A-4a
933.1	18	23/33/31			GRAY GRAVELLY SANDY SILT (REC. 1.5')	53	15	10	22	40	13	NP	NP	9	A-4a
929.1	20	18/26/35			GRAY GRAVELLY SANDY SILT (REC. 1.5')	54	15	10	23	38	14	NP	NP	9	A-4a
924.1	22	22/31/40			GRAY SANDY SILT (REC. 1.5')	55	12	11	25	35	14	21	6	10	A-4a
919.1	24	12/18/20			BROWNISH-GRAY LAMINATED SILT & CLAY (REC. 1.5')	56	-	-	-	-	-	-	-	20	VISUAL
914.1	26	34/42/61			GRAY SILT (REC. 1.5')	57	0	7	10	65	18	NP	NP	15	A-4b
912.6															

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GL Revised 5/05

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
9/8/04, 11/15/04, 3/4/05	8/6/04
REVIEWED	
W.R.S.	
CHECKED	
J.B.H.	
TYPED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1225
OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(6/12)

LOG OF BORING

Date Started 7/19/04 Sampler: Type SS Dia. ____ Water Elev. 946.4' Project Identification: LICKING
Date completed 7/20/04 LIC-161-07.08
Boring No. B-12 Station & Offset 482+25, 35' RT. Surface Elev. 949.4' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	% Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
948.4	0	AUGERED			CREEK BED MATERIAL	-	-	-	-	-	-	-	-	-	VISUAL
	2	5/5/5			BROWN SILTY SANDY GRAVEL (REC. 1.0')	34	52	20	12	14	2	NP	NP	16	A-1-b
945.9	4														
	6	4/4/4			BROWN SILTY SANDY GRAVEL (REC. 1.3')	35	48	17	11	18	6	NP	NP	19	A-1-b
943.4	8	12/19/23			BROWN SILTY SANDY GRAVEL (REC. 1.5')	36	43	13	11	23	10	NP	NP	15	A-2-4
940.9	10	14/17/25			GRAY SANDY SILT (REC. 1.5')	37	13	5	12	48	22	NP	NP	17	A-4a
938.4	12	20/29/35			GRAY SANDY SILT (REC. 1.5')	38	4	1	30	51	14	NP	NP	18	A-4b
935.9	14	22/25/38			GRAY SANDY SILT (REC. 1.5')	39	2	1	26	60	11	NP	NP	16	A-4b
933.4	16	15/24/22			GRAY GRAVELLY SANDY SILT (REC. 1.5')	40	17	7	18	39	19	NP	NP	10	A-4a
930.9	18	7/14/24			GRAY SANDY SILT (REC. 1.5')	41	9	9	20	41	21	NP	NP	10	A-4a
928.4	20	28/38/44			GRAY GRAVELLY SANDY SILT (REC. 1.5')	42	21	9	21	33	16	NP	NP	10	A-4a
925.9	22	10/15/19			GRAY SILT AND CLAY (REC. 1.5')	43	0	1	2	42	55	33	14	23	A-6a
	24				TOP OF ROCK										
	26														
	28														
919.4	30				GRAY SANDY SILT W/ARENACEOUS SHALE AT THE BOTTOM (REC. 1.0')	44	11	14	9	52	14	NP	NP	13	A-4b
918.4	32	32/59													
917.4	32	0	3.8	1.2	(A)										
915.4	34	0			CLAY-SHALE, GRAY, OLIVE, BROWN, VERY SOFT. NO CORE LOSS R.Q.D. IS 0										
	36														
	38	0	5.0	0.0	SILTSTONE, MEDIUM TO DARK GRAY, FIRM, CARBONACEOUS IN PART, WITH FERRUGINOUS STAINS, WITH CLAY SEAMS, HIGHLY BROKEN AND JOINTED IN THE UPPER PORTION, BROKEN AND JOINTED IN PART BELOW; INTERBEDDED WITH A COUPLE THICK GRAY, VERY FINE-GRAINED SANDSTONE SEAMS AND WITH INTERVALS RANGING UP TO 0.4' THICK OF BLACK, BROKEN AND JOINTED SHALE. NO CORE LOSS R.Q.D. IS 0										
909.4	40														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-GL Revised 9/95

(A) SILTSTONE, GRAY, FIRM, THIN-BEDDED, BROKEN AND JOINTED; GRADING TO VERY FINE-GRAINED SANDSTONE NEAR THE BOTTOM, INTERBEDDED WITH HTICK GRAY LITHIC CLAY INTERBEDS COMPRISING 50-55% OF THE INTERVAL. CORE LOSS 20 % R.Q.D. IS 0

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(7/12)

LOG OF BORING

Date Started 7/13/04 Sampler: Type SS Dia. ____ Water Elev. 946.1' Project Identification: LICKING
Date completed 7/14/04 LIC-161-07.08
Boring No. B-13 Station & Offset 482+75, 75' RT. Surface Elev. 951.1' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	% Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
951.1	0	AUGERED			TOPSOIL	-	-	-	-	-	-	-	-	-	VISUAL
	2	3/4/7			BROWN SILTY GRAVELLY SAND (REC. 1.2')	5	24	14	29	26	7	NP	NP	15	A-2-4
947.6	4														
	6	7/6/7			BROWN SILTY SANDY GRAVEL (REC. 1.3')	6	52	17	12	14	5	NP	NP	12	A-1-b
945.1	8	12/8/10			GRAY GRAVELLY SANDY SILT (REC. 1.5')	7	24	18	16	24	18	24	4	11	A-4a
942.6	10	15/16/24			GRAY SILTY GRAVELLY SAND (REC. 1.5')	8	23	21	30	17	9	NP	NP	12	A-3a
940.1	12	19/24/32			GRAY GRAVELLY SANDY SILT (REC. 1.5')	9	28	14	15	29	14	NP	NP	9	A-4a
937.6	14	18/19/19			GRAY SANDY GRAVELLY CLAY (REC. 1.0')	10	28	9	15	29	19	33	15	12	A-4a
935.1	16	17/29/34			GRAY SANDY SILT (REC. 1.5')	11	11	9	19	42	19	NP	NP	11	A-4a
932.6	18	19/24/32			GRAY SANDY SILT (REC. 1.5')	12	11	10	23	39	17	NP	NP	10	A-4a
930.1	20	22/32/39			GRAY SANDY SILT (REC. 1.5')	13	10	10	24	36	20	22	7	9	A-4a
927.6	22	26/29/37			GRAY SANDY GRAVELLY SILT (REC. 1.5')	14	27	8	18	32	15	NP	NP	9	A-4a
926.1	24	23/21/30			GRAY SANDY SILT (REC. 1.5')	15	11	9	23	40	17	NP	NP	9	A-4a
	26														
	28														
922.1	30	29/28/35			GRAY GRAVELLY SANDY SILT (REC. 1.5')	16	15	10	26	36	13	NP	NP	9	A-4a
	32														
	34														
916.1	36	22/18/27			GRAY GRAVELLY SANDY SILT (REC. 1.5')	17	21	8	15	36	20	NP	NP	12	A-4a
	38														
911.1	40														
909.6		12/15/20			GRAY SILT & CLAY W/TR OF ORG. (REC. 1.5')	18	0	0	0	36	64	33	14	22	A-6a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-GL Revised 9/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(8/12)

LOG OF BORING

Date Started 7/14/04 Sampler: Type SS Dia. ____ Water Elev. 945.5' Project Identification: LICKING
Date completed 7/14/04 LIC-161-07.08
Boring No. B-14 Station & Offset 483+20, 35' RT. Surface Elev. 954.5' OVER MOOTS RUN

Elev.	Depth	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	% Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
954.5	0														
952.5	2				OVERBURDEN REMOVED BY DOZER	-	-	-	-	-	-	-	-	-	VISUAL
951.5	4														
	6	3/3/4			BROWN SILTY GRAVELLY SAND (REC. 1.0')	19	35	24	25	13	3	NP	NP	7	A-1-b
949.0	8	3/4/5			BROWN SILTY GRAVELLY SAND (REC. 1.5')	20	30	35	19	15	1	NP	NP	7	A-1-b
946.5	10	3/4/5			BROWN SILTY SAND & ST. FRAGS. (REC. 1.5')	21	-	-	-	-	-	-	-	18	VISUAL
944.0	12	12/14/15			GRAY SANDY SILT (REC. 1.5')	22	11	10	17	40	22	21	6	12	A-4a
941.5	14	16/22/23			GRAY SANDY SILT (REC. 1.5')	23	7	9	19	41	24	22	7	11	A-4a
939.0	16	14/14/18			GRAY SANDY SILT (REC. 1.5')	24	5	9	18	45	23	22	7	13	A-4a
936.5	18	12/17/18			GRAY SANDY SILT (REC. 1.5')	25	9	7	18	42	24	22	7	11	A-4a
934.0	20	12/17/17			GRAY SANDY SILT (REC. 1.5')	26	7	8	17	44	24	22	7	13	A-4a
931.5	22	10/12/15			GRAY SANDY SILT (REC. 1.5')	27	5	8	20	44	23	22	6	11	A-4a
929.0	24	10/16/21			GRAY SANDY SILT (REC. 1.5')	28	4	11	24	44	17	NP	NP	10	A-4a
926.5	26	20/31/48			GRAY SANDY SILT	29	7	9	25	43	16	17	3	11	A-4a
	28														
922.5	30														
	32	15/26/26			GRAY SANDY SILT (REC. 1.5')	30	13	11	25	37	14	17	3	9	A-4a
	34														
	36														
917.5	38	15/18/19			GRAY SILT AND CLAY (REC. 1.5')	31	0	0	1	32	67	32	14	22	A-6a
	40														
912.5	42														
911.0		19/35/44			GRAY SILT AND CLAY (LAMINATED) (REC. 1.5')	32	4	6	6	55	29	32	14	17	A-6a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-GL Revised 9/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(9)

D 50 VALUES

Sampler: Type SS Dia. 1 3/8"

Project Identification: LIC-161-7.08
(Over Moots Run)
STRUCTURE FOUNDATION INVESTIGATION

D_{50} Values

Boring No.	Sample No.	Elevation	D_{50} Value
B-9	2	946.5 - 945.0 ft.	3.9200 mm
	3	944.0 - 942.5 ft.	0.0192 mm
	4	941.5 - 940.0 ft.	0.0218 mm
B-10	67	948.7 - 947.2 ft.	1.2200 mm
B-11	47	948.1 - 946.6 ft.	0.0488 mm
	48	945.6 - 944.1 ft.	0.1250 mm
	49	943.1 - 941.6 ft.	0.0374 mm
	50	940.6 - 939.1 ft.	0.0083 mm
B-12	44	948.2 - 946.7 ft.	2.2800 mm
	45	945.7 - 944.2 ft.	1.7400 mm
	46	943.2 - 941.7 ft.	1.0070 mm
	57	940.7 - 939.2 ft.	0.0247 mm
	58	938.2 - 936.7 ft.	0.0340 mm
	59	935.7 - 934.2 ft.	0.0292 mm
B-13	5	946.7 - 945.2 ft.	2.2800 mm
	7	944.2 - 942.7 ft.	0.1950 mm
	8	941.7 - 940.2 ft.	0.2560 mm
B-14	19	951.1 - 949.6 ft.	0.7510 mm
	20	948.6 - 947.1 ft.	0.8020 mm
	21	946.1 - 944.6 ft.	0.0395 mm
	22	943.6 - 942.1 ft.	0.0344 mm
	23	941.1 - 939.6 ft.	0.0344 mm

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
9/8/04, 11/15/04, 3/4/05	8/6/04
REVIEWED	
M.R.S.	
CHECKED	
J.B.H.	
TYPED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1225
OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25

15/29

State of Ohio
Department of Transportation
Office of Geotechnical Engineering
LOG OF BORING

(9/12)

Date Started 8/23/04 Sampler: Type SS Dia. Perched Water Elev. 943.8' Project Identification: LICKING
Date completed 8/24/04 LIC-161-07.08
Boring No. N-1 Station & Offset 483+60, 103' RT. Surface Elev. 954.8' OVER MOOTS RUN

Elev. 954.8	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
953.3	2	AUGERED			TOPSOIL	-	-	-	-	-	-	-	-	-	VISUAL
951.3	4	3/3/4			BROWN SANDY CLAY WITH ROOTS (REC. 1.5')	1	0	1	22	53	24	35	15	24	A-6a
948.8	6	5/4/4			BROWN AND GRAY SANDY CLAY (REC. 1.5')	2	7	2	29	42	20	27	14	22	A-6a
946.3	8	3/4/5			BROWN AND GRAY SILTY SANDY GRAVEL (REC. 1.2')	3	54	10	12	18	6	NP	NP	15	A-1-b
943.8	10	8/13/9			BROWN AND GRAY SILTY SANDY GRAVEL (REC. 1.5')	4	54	10	15	18	3	NP	NP	18	A-1-b
941.3	14	9/16/14			BROWN SILTY SANDY GRAVEL (REC. 1.5')	5	37	25	10	23	5	NP	NP	29	A-2-4
938.8	16	8/9/14			BROWN AND GRAY GRAVELLY SANDY SILT (REC. 1.5')	6	17	10	17	37	19	21	5	12	A-4a
936.3	18	22/30/31			GRAY GRAVELLY SANDY SILT (REC. 1.5')	7	25	8	17	34	16	21	5	9	A-4a
933.8	20	16/25/28			GRAY GRAVELLY SANDY SILT (REC. 1.5')	8	18	9	20	39	14	20	4	9	A-4a
	22	22/31/35			GRAY SANDY SILT (REC. 1.5')	9	8	10	21	42	19	20	6	10	A-4a
929.8	24														
	26	14/19/26			BROWNISH-GRAY SANDY SILT (REC. 1.5')	10	9	9	21	41	20	21	6	8	A-4a
924.8	28														
	30														
	32	17/19/23			GRAY SANDY SILT (REC. 1.5')	11	13	8	19	40	20	21	6	8	A-4a
919.8	34														
	36	21/24/37			GRAY SANDY SILT (REC. 1.5')	12	8	9	22	48	13	22	6	10	A-4a
914.8	38														
	40														
	42	11/13/18			GRAY SANDY SILT (REC. 1.5')	13	7	6	13	52	22	22	6	12	A-4b
909.8	44														
	46	7/10/9			GRAY SILT (REC. 1.5')	14	3	3	7	44	43	22	6	22	A-4a
904.8	48														
	50														
	52	7/8/12			GRAY CLAYEY SILT (LAMINATED) (REC. 1.5')	15	0	4	5	51	40	24	8	22	A-4b
899.8	54														
	56	12/30/35			GRAY AND BROWN SANDY SILT (REC. 1.5')	16	10	17	19	46	8	NP	NP	15	A-4a
894.8	58														
	60														
	62	44/100			GRAY AND RED SANDY SILT (REC. 1.0')	17	11	17	18	41	13	NP	NP	11	A-4a
889.8	64														
	66	20/38/47			BROWN AND GRAY SANDY SILT (REC. 1.5')	18	12	14	9	47	18	NP	NP	12	A-4a
884.8	68														
	70														
	72	24/27/36			BROWN, GRAY & RED GRAVELLY SANDY SILT (REC. 1.5')	19	24	13	11	35	17	NP	NP	11	A-4a
879.8	74				TOP OF ROCK										
	76	21/30/36			BROWN AND GRAY SANDY SILT (REC. 1.5')	20	8	12	11	48	21	NP	NP	12	A-4a
876.8	78	AUGERED			WEAK SHALE (DRILLER'S DESCRIPTION)	-	-	-	-	-	-	-	-	-	VISUAL
874.8	80	100(0.3')			GRAY, FIRM, ARENACEOUS, JOINTED SHALE (REC. 0.3')	21	-	-	-	-	-	-	-	8	VISUAL
874.5					BOTTOM OF BORING										

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-151 Revised 5/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering
LOG OF BORING

(11/12)

Date Started 8/17/04 Sampler: Type SS Dia. Perched Water Elev. 943.9' Project Identification: LICKING
Date completed 8/18/04 LIC-161-07.08
Boring No. N-2 Station & Offset 484+45, 40' RT. Surface Elev. 954.9' OVER MOOTS RUN

Elev. 954.9	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics: % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
953.4	2	AUGERED			TOPSOIL	-	-	-	-	-	-	-	-	-	VISUAL
951.4	4	4/4/5			BROWN SILTY GRAVELLY SAND (REC. 1.5')	1	24	27	20	22	7	NP	NP	11	A-2-4
948.9	6	6/5/6			BROWN SILTY GRAVELLY SAND (REC. 1.5')	2	39	27	12	17	5	NP	NP	10	A-1-b
946.4	8	4/3/4			BROWN SILTY SANDY GRAVEL (REC. 1.5')	3	60	18	7	12	3	NP	NP	11	A-1-a
943.9	10	5/4/3			BROWN SILTY SANDY GRAVEL (REC. 1.5')	4	48	17	10	18	7	25	7	20	A-2-4
941.4	12	6/7/9			GRAY GRAVELLY SANDY SILT (REC. 1.5')	5	20	10	16	35	19	22	6	11	A-4a
938.9	14	11/13/16			GRAY SANDY SILT (REC. 1.5')	6	11	10	16	41	22	22	6	12	A-4a
936.4	16	11/15/17			GRAY SANDY SILT (REC. 1.5')	7	14	7	17	42	20	21	5	10	A-4a
933.9	18	10/15/24			GRAY SILT (REC. 1.5')	8	0	5	11	56	28	21	5	132	A-4b
	20	12/14/19			GRAY SILT (REC. 1.5')	9	5	5	10	52	28	23	6	13	A-4b
929.9	22														
	24	11/14/18			GRAY SILT (REC. 1.5')	10	0	2	4	67	27	23	6	17	A-4b
924.9	26														
	28														
	30	17/18/22			GRAY SANDY SILT (REC. 1.5')	11	7	7	13	48	25	20	6	11	A-4a
919.9	32														
	34	17/20/27			GRAY SANDY SILT (REC. 1.5')	12	7	11	22	41	19	20	5	10	A-4a
914.9	36														
	38	11/10/13			GRAY CLAYEY SILT (REC. 1.5')	13	0	0	1	39	60	31	9	24	A-4a
909.9	40														
	42	6/10/14			GRAY CLAYEY SILT (LAMINATED) (REC. 1.5')	14	0	0	1	56	43	31	10	20	A-4b
904.9	44														
	46	12/21/37			GRAY AND BLUE SANDY SILT (REC. 1.5')	15	8	15	7	57	13	23	2	13	A-4b
899.9	48														
	50	29/65			GRAY, GREEN, & BLUE GRAVELLY SANDY SILT (REC. 1.5')	16	21	12	20	39	8	22	0	14	A-4a
894.9	52														
	54	22/36/40			GRAY, GREEN & BLUE SANDY SILT (REC. 1.5')	17	10	15	7	51	17	NP	NP	14	A-4b
889.9	56														
	58	16/21/21			BROWN SANDY SILT (LAMINATED) (REC. 1.5')	18	9	11	5	45	30	31	9	16	A-4a
884.9	60														
	62	18/40/85			BROWN AND GRAY SILT (LAMINATED) (REC. 1.5')	19	11	5	4	50	30	30	6	12	A-4b
879.9	64				TOP OF ROCK										
879.6		100(0.3')			GRAY, FIRM, VERY FINE-GRAINED, JOINTED SANDSTONE (REC. 0.3')	20	-	-	-	-	-	-	-	4	VISUAL
					BOTTOM OF BORING										

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm
Form TE-151 Revised 5/95

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
9/8/04, 11/15/04, 3/14/05	8/6/04
REVIEWED	
W.R.S.	
CHECKED	
J.B.H.	
TYPED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1225
OVER MOOTS RUN

LIC-161-6.65
LIC-37-10.25

16/29

07/03

GEOLOGY OF THE SITE

THE SR 37 STRUCTURE SITE IS LOCATED IN THE GENTLY ROLLING GLACIATED PORTION OF THE ALLEGHENY PLATEAU REGION, OVER SR 161 AND IN AN AREA WHERE MODERATELY TO EXTREMELY DEEP GLACIAL-DERIVED MATERIALS OVERLIE CLAY-SHALE, SHALE WEATHERED CLAY-SHALE, SANDSTONE AND SILTSTONE BEDROCK OF MISSISSIPPIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF THREE DRIVE SAMPLE-CORE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM ROTARY AUGER MOUNTED ON A MOBILE PLATFORM, PERFORMED ON JULY 22-29, 2004.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE TEST BORINGS DISCLOSED THAT INTERVALS OF EXTREMELY LOOSE TO EXTREMELY DENSE UNSTRATIFIED BASIC SILT, GRAVEL, SAND AND CLAY MODIFIED BY VARYING AMOUNTS OF EACH OTHER THAT ERRATICALLY INCREASE IN DENSITY WITH INCREASE IN DEPTH OVERLIE SLOPING BEDROCK SURFACE. TEST BORING NO. B-15 (MADE IN THE VICINITY OF THE NORTH ABUTMENT) ENCOUNTERED BEDROCK SURFACE AT 55.0 FOOT DEPTH, ELEVATION 955.8 FEET AND CONTINUED TO ADVANCE AN ADDITIONAL 15.0 FEET FOR A TOTAL DEPTH OF 70.0 FEET, ELEVATION 940.8 FEET. A TRACE OF ORGANIC MATERIAL WAS ENCOUTNERED AT 18.5 FOOT DEPTH, ELEVATION 992.3 FEET AND SOME DECAYED WOOD WAS ENCOUNTERED AT 30.0 FOOT DEPTH, ELEVATION 980.8 FEET IN BORING B-15. TEST BORING NO. B-16 (MADE IN THE VICINITY OF THE CENTER PIER) ENCOUNTERED BEDROCK SURFACE AT 45.0 FOOT DEPTH, ELEVATION 966.7 FEET AND CONTINUED TO ADVANCE AN ADDITIONAL 10.5 FEET FOR A TOTAL DEPTH OF 55.5 FEET, ELEVATION 956.2 FEET. ORGANIC MATERIAL WAS ENCOUNTERED IN BORING B-16 BETWEEN 3.5 AND 10.0 FOOT DEPTHS, ELEVATIONS 1008.2 AND 1001.7 FEET. TEST BORING NO. B-17 (MADE IN THE VICINITY OF THE SOUTH ABUTMENT) ENCOUNTERED BEDROCK SURFACE AT 30.0 FOOT DEPTH, ELEVATION 984.7 FEET AND CONTINUED TO ADVANCE AN ADDITIONAL 11.5 FEET FOR A TOTAL DEPTH OF 41.5 FEET, ELEVATION 9973.2 FEET.

FREE WATER WAS OBSERVED AND MEASURED IN BORING B-15 AT 20.0 FEET DEEP, ELEVATION 990.8 FEET, IN BORING B-16 AT 20.0 FEET DEEP, ELEVATION 991.7 FEET AND IN BORING B-17 AT 20.0 FEET DEEP, ELEVATION 994.7 FEET.

LEGEND

- Roadway or Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- TR — Top of Rock
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.
- Horizontal Bar on Boring Log in the profile view indicates the Depth the Sample was taken
- X/Y/Z — Figures Beside the Boring Log in the Profile view indicate the Number of Blows for Standard Penetration Test.
  - X = Number of Blows for First 6 in
  - Y = Number of Blows for Second 6 in
  - Z = Number of Blows for Third 6 in

SYMBOLS OF ROCK TYPES

- Coal
- Fire Clay or Underclay
- Weathered Mudstone
- Mudstone
- Weathered Shale
- Shale
- Weathered Clay-Shale
- Clay-Shale
- Weathered Siltstone
- Siltstone
- Weathered Sandstone
- Sandstone
- Conglomerate
- Weathered Conglomerate
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Flint
- Gypsum
- Boulders or Cobbles

GENERAL INFORMATION

Drive Sample/Press Sample/Core Borings

Drive sample borings are made by means of a mechanically-powered rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. split spoon sampler, at 2.5 ft and/or 5.0 ft depth intervals, driven by means of a 140 lbs hammer with a free fall of 2.5 ft. The number of blows required to drive the sampler three 0.5 ft increments is considered the standard penetration test.

Drive/press sample borings are made by means of a mechanically-powered rotary-type drill rig, employing a 2 in O.D., 1⅜in I.D. split spoon sampler, and a 3 in O.D. thin wall press sampling tube. The press sampling tube is advanced by continuous uniform pressure, applied by the drill rig.

Core borings are made by means of a mechanically-powered rotary-type drill rig, employing an NW-PAM core barrel with an industrial diamond cutting head.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, type of sample, number of blows for the standard penetration test in three 0.15 m increments, sample description based on laboratory test results utilizing the Casagrande AC classification system, sample number; and gradation, plasticity and moisture content determinations. Results of strength and consolidation testing, if performed on undisturbed samples, will appear graphically on separate enclosures. Rock samples are displayed on the log sheets including depth and elevation of the sample, amount of recovery and a visual classification based on type, color, degree of hardness, grain size, deterioration, bedding, acid reaction and other qualifying factors.

PARTICLE SIZE DEFINITIONS

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0 mm (No. 10 sieve)	0.42 mm (No. 40 sieve)	0.074 mm (No. 200 sieve)		0.005 mm

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

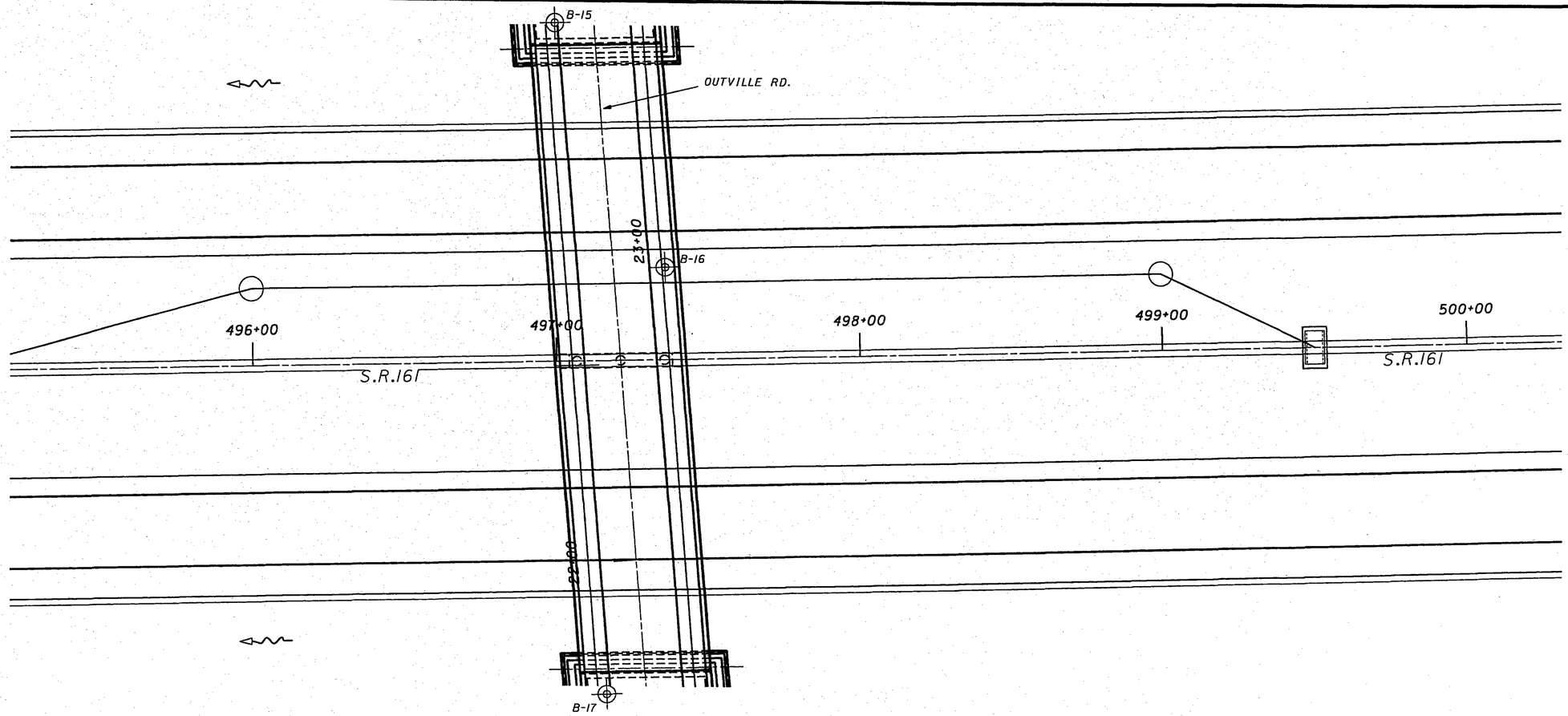
REVISED DATE 2/24/05 | DATE 8/19/04
REVIEWED M.R.S. | CHECKED J.B.H.

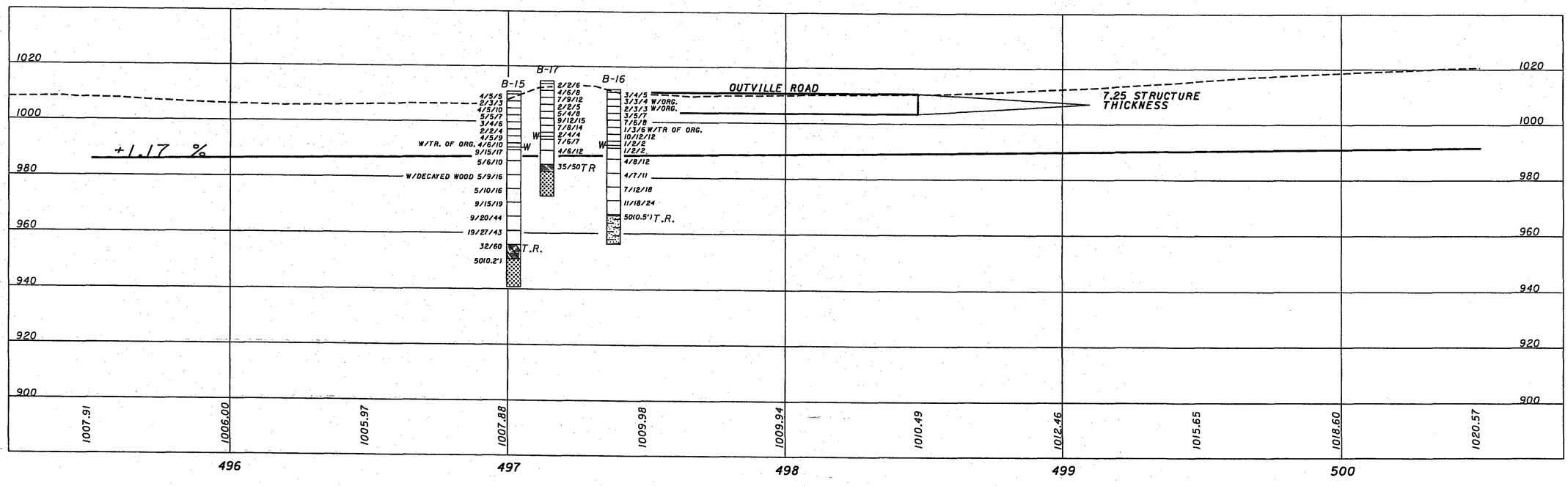
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1255
UNDER OUTVILLE RD.

LIC-161-6.65
LIC-37-10.25

17 / 29

03 /03





SCALE IN FEET
0 20 40

REVISED DATE	DATE
2/24/05	8/9/04

REVIEWED	CHECKED	DRAWN
M.R.S.	J.B.H.	J.B.H.

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-37-1255
UNDER OUTVILLE RD.

LIC-161-6.65
LIC-37-10.25

SCALE IN FEET
0 20 40

REVISED DATE	DATE
2/24/05	8/19/04

DRAWN J.B.H. | CHECKED J.B.H. | REVIEWED M.R.S.

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-37-1255
UNDER OUTVILLE RD.

LIC-161-6.65
LIC-37-10.25

19 / 29

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 7/22/04 Sampler: Type SS Dia. Water Elev. 990.8' Project Identification: LICKING
Date completed 7/26/04 LIC-161-7.08
Boring No. B-15 Station & Offset 497+02, 110' LT. Surface Elev. 1010.8' OVER OUTVILLE RD.

Elev.	Depth	Std. Pen./ R.O.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
1010.8	0	AUGERED			TOPSOIL	-	-	-	-	-	-	-	-	-	VISUAL
1009.8	2	4/4/5			BROWN SANDY SILT (REC. 1.5')	58	14	11	18	37	20	NP	NP	15	A-4a
1007.3	4	2/3/3			BROWN GRAVELLY SANDY SILT (REC. 1.5')	59	26	9	19	32	14	NP	NP	14	A-4a
1004.8	6	4/5/10			BROWN SANDY SILT (REC. 1.5')	60	14	8	16	37	25	24	8	14	A-4a
1002.3	8	5/5/7			BROWN AND GRAY GRAVELLY SANDY SILT (REC. 1.5')	61	16	8	14	36	26	22	6	13	A-4a
999.8	10	3/4/6			GRAY GRAVELLY SANDY SILT (REC. 1.5')	62	24	12	15	32	17	20	5	12	A-4a
997.3	12	2/2/4			GRAY SANDY GRAVELLY SILT (REC. 1.5')	63	37	9	12	27	15	21	6	13	A-4a
994.8	14	4/5/9			GRAY SANDY GRAVELLY SILT (REC. 1.5')	64	34	13	13	25	15	21	5	12	A-4a
992.3	16	4/6/10			BROWN SILTY SANDY GRAVEL W/TR. OF ORGANIC (REC. 1.5')	65	38	20	12	25	5	NP	NP	11	A-2-4
989.8	18	9/15/17			BROWN SILTY SAND (REC. 1.5')	66	0	0	71	26	3	NP	NP	19	A-3a
	20														
985.8	22	5/6/10			GRAY GRAVELLY SANDY SILT (REC. 1.5')	67	19	9	11	35	26	21	6	15	A-4a
	24														
980.8	26	5/9/16			GRAY GRAVELLY SANDY SILT W/DECAYED WOOD (REC. 1.5')	68	20	7	13	35	25	NP	NP	13	A-4a
	28														
975.8	30	5/10/16			GRAY SANDY SILT (REC. 1.5')	69	11	6	12	42	29	NP	NP	12	A-4a
	32														
970.8	34	9/15/19			GRAY GRAVELLY SANDY SILT (REC. 1.5')	70	19	16	15	33	17	NP	NP	13	A-4a
	36														
965.8	38	9/20/44			GRAY SANDY SILT (REC. 1.5')	71	6	16	18	45	15	NP	NP	15	A-4a
	40														
960.8	42	19/27/43			GRAY SANDY SILT (REC. 1.5')	72	5	6	10	53	26	NP	NP	16	A-4b
	44				TOP OF ROCK										
955.8	46	32/60			GRAY CLAY-SHALE (REC. 1.0')	73	-	-	-	-	-	-	-	14	VISUAL
	48														
950.8	50	50(0.2')			GRAY CLAY-SHALE (REC. 0.2')	74	-	-	-	-	-	-	-	8	VISUAL
950.6	52														
	54														
	56														
	58														
	60														
	62														
	64														
	66	41	9.0	0.8	SANDSTONE, GRAY, BROWN, HARD, FINE-GRAINED, WITH CLAY SEAMS, JOINTED IN PLACES; INTERBEDDED THROUGHOUT WITH THICK DARK GRAY, FIRM SILTSTONE SEAMS AND THIN BLACK, CARBONACEOUS SHALE SEAMS AND IN THE UPPER PORTION WITH A 0.9' THICK BROWN, DARK GRAY, FIRM, ARENACEOUS, FERRUGINOUS CLAY-SHALE INTERVAL. CORE LOSS 8 % R.Q.D. IS 41									
	68														
940.8	70														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLBoring6 5/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 7/28/04 Sampler: Type SS Dia. Water Elev. 991.7' Project Identification: LICKING
Date completed 7/29/04 LIC-161-7.08
Boring No. B-16 Station & Offset 497+38, 30' LT. Surface Elev. 1011.7' OVER OUTVILLE RD.

Elev.	Depth	Std. Pen./ R.O.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
1011.7	0	AUGERED			TOPSOIL	-	-	-	-	-	-	-	-	-	VISUAL
1010.7	2	3/4/5			BROWN SILT (REC. 1.5')	86	0	1	1	65	33	26	6	22	A-4b
1008.2	4	3/3/4			BROWN SILT AND CLAY WITH ORGANIC (REC. 1.5')	87	0	1	3	49	47	32	11	23	A-6a
1005.7	6	2/3/3			BROWN GRAVELLY CLAY WITH ORGANIC (REC. 1.5')	88	13	7	3	48	29	33	12	27	A-6a
1003.2	8	3/5/7			BROWN SANDY SILT W/TRACE OF ORGANIC (REC. 1.5')	89	8	7	16	39	30	27	10	18	A-4a
1000.7	10	7/6/8			BROWN GRAVELLY SANDY SILT (REC. 1.5')	90	17	11	17	35	20	NP	NP	14	A-4a
998.2	12	1/3/6			BROWN SANDY GRAVELLY SILT W/TRACE OF ORGANIC (REC. 1.5')	91	36	10	13	26	15	NP	NP	16	A-4a
995.7	14	10/12/12			BROWN SILTY SANDY GRAVEL (REC. 1.5')	92	47	10	11	19	13	NP	NP	11	A-2-4
993.2	16	1/2/2			BROWN SILTY SANDY GRAVEL (REC. 1.5')	93	59	13	7	15	6	27	6	16	A-1-b
990.7	18	1/2/2			BROWN SILTY SANDY GRAVEL (REC. 1.5')	94	56	16	8	13	7	NP	NP	26	A-1-b
	20														
986.7	22	4/8/12			BROWN SILTY SAND (REC. 1.5')	95	14	34	30	18	4	NP	NP	28	A-3a
	24														
981.7	26	4/7/11			BROWN GRAVELLY SANDY SILT (REC. 1.5')	96	16	8	11	41	24	22	6	16	A-4a
	28														
976.7	30	7/12/18			BROWN GRAVELLY SANDY SILT (REC. 1.5')	97	21	10	15	34	20	24	6	14	A-4a
	32														
971.7	34	11/18/24			BROWN SANDY GRAVELLY SILT (REC. 1.5')	98	23	9	8	40	20	23	5	13	A-4a
	36				TOP OF ROCK										
966.7	38	50(0.5')			GRAY W/BROWN JOINTED WEA. CLAY-SHALE (REC. 1.5')	99	-	-	-	-	-	-	-	9	VISUAL
966.2	40														
	42														
	44														
	46														
	48														
	50	69	9.9	0.1	SILTSTONE, DARK GRAY, FIRM, CARBONACEOUS, JOINTED IN PLACES; INTERBEDDED WITH MEDIUM TO THICK SEAMS OF GRAY, HARD, VERY FINE-GRAINED SANDSTONE. CORE LOSS 1% R.Q.D. IS 69									
	52														
	54														
956.2															

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm, Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLBoring6 5/95

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
2/24/05	8/19/04
REVIEWED	
J.B.H.	
CHECKED	
J.B.H.	
TYPED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-37-1255
UNDER OUTVILLE RD.

LIC-161-6.65
LIC-37-10.25

20 / 29

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

LOG OF BORING

Date Started 7/27/04 Sampler: Type SS Dia. Water Elev. 994.7' Project Identification: LICKING
Date completed 7/28/04 LIC-161-7.08
Boring No. B-17 Station & Offset 497+14, 110' RT. Surface Elev. 1014.7' OVER OUTVILLE RD.

Elev.	Depth	Std. Pen./ R.O.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics Agg %	C.S. %	F.S. %	Silt %	Clay	L.L.	P.I.	W.C.	ODOT Class
1013.7	0	AUGERED			TOPSOIL		-	-	-	-	-	-	-	-	VISUAL
1011.2	2	2/2/6			BROWN SILTY GRAVEL (REC. 1.5')	75	65	3	6	16	10	NP	NP	15	A-2-4
1008.7	4	4/6/8			BROWN SILTY GRAVEL (REC. 1.5')	76	64	3	7	16	10	NP	NP	13	A-2-4
1006.2	6	7/9/12			BROWN GRAVELLY SANDY SILT (REC. 1.5')	77	16	9	14	38	23	NP	NP	15	A-4a
1003.7	8	2/2/5			BROWN SILTY SANDY GRAVEL (REC. 1.5')	78	51	7	9	23	10	NP	NP	13	A-2-4
1001.2	10	5/4/8			GRAY GRAVELLY SANDY SILT (REC. 1.5')	79	15	11	16	37	21	21	6	22	A-4a
998.7	12	9/12/15			GRAY SANDY GRAVELLY SILT (REC. 1.5')	80	29	12	16	26	17	19	3	11	A-4a
996.2	14	7/8/14			GRAY GRAVELLY SANDY SILT (REC. 1.5')	81	16	10	16	38	20	19	3	11	A-4a
993.7	16	2/4/4			BROWN AND GRAY SILTY SANDY GRAVEL (REC. 1.5')	82	38	11	14	27	10	17	2	12	A-4a
991.2	18	7/6/7			GRAY SILTY SANDY GRAVEL (REC. 1.5')	83	36	14	14	26	10	19	3	10	A-4a
988.7	20														
986.2	22														
983.7	24	4/6/12			GRAY GRAVELLY SANDY CLAY (REC. 1.5')	84	17	8	12	48	15	24	5	11	A-4a
	26				TOP OF ROCK										
984.7	28	35/50			GRAY, ARENACEOUS, BROKEN AND JOINTED SHALE W/CLAY SEAMS (REC. 1.0')	85	-	-	-	-	-	-	-	15	VISUAL
982.2	30														
	32														
	34														
	36														
	38	31	9.0	0.0	SANDSTONE, GRAY, HARD, VERY FINE-GRAINED, WITH SCATTERED CLAY SEAMS, THIN-BEDDED; INTERBEDDED WITH THICK DARK GRAY, FIRM, JOINTED IN PART SILTSTONE SEAMS AND WITH SCATTERED THIN TO MEDIUM-THICK BLACK, CARBONACEOUS, JOINTED IN PART SHALE SEAMS. CORE LOSS 1% R.O.D. IS 31										
	40														
973.2					BOTTOM OF BORING										

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-01 Revised 5/15

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

D 50 VALUES

Sampler: Type SS Dia. 13"

Project Identification: LIC-161-7.08
(Over Outville Road)
STRUCTURE FOUNDATION INVESTIGATION

D_{50} Values			
Boring No.	Sample No.	Elevation	D_{50} Value
B-16	86	1010.7 - 1009.2 ft.	0.0096 mm
	87	1008.2 - 1006.7 ft.	0.0058 mm
	88	1005.7 - 1004.2 ft.	0.0161 mm
	89	1003.2 - 1001.7 ft.	0.0200 mm
	90	1000.7 - 999.2 ft.	0.0509 mm
	91	998.2 - 996.7 ft.	0.2590 mm

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
2/24/05	8/19/04
REVIEWED	
M.R.S.	
CHECKED	
J.B.H.	
TYPED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO.LIC-37-1255
UNDER OUTVILLE RD.

LIC-161-6.65
LIC-37-10.25

21 / 29

03/02

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE DISSECTED GLACIATED PORTION OF THE ALLEGHENY PLATEAU REGION, ON THE FLOODPLAIN OF AND OVER CHIMNEY CREEK, IN AN AREA WHERE EXTREMELY DEEP ALLUVIAL DEPOSITS AND GLACIAL-DERIVED MATERIALS OVERLIE BEDROCK OF MISSISSIPPIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF SIX DRIVE SAMPLE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM ROTARY AUGER MOUNTED ON A MOBILE PLATFORM, PERFORMED BETWEEN JUNE 28 AND AUGUST 4, 2004.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE TEST BORINGS ENCOUNTERED INTERVALS OF EXTREMELY LOOSE TO EXTREMELY DENSE UNSTRATIFIED BASIC SAND, GRAVEL, SILT AND CLAY MODIFIED BY WOOD FRAGMENTS, ROOTS AND VARYING AMOUNTS OF EACH OTHER THAT ERRATICALLY INCREASE IN DENSITY WITH INCREASE IN DEPTH. THE BORINGS WERE TERMINATED AS SHOWN IN THE FOLLOWING TABLE:

Boring No.	Element	Stand. Pen. Test *Blows/Ft.	Amt. Pen.	End Depth Depth	End Depth Elev.	Free Water Elev. Depth	Free Water Elev. Elev.
B-18	Lt. Rear Abut. (Access Rd.)	33 or more	24.0'*	130.0'	791.0'	10.0'	911.0'
B-19	Lt. Rear Pier	25	1.5'	111.5'	810.4'	5.0'	916.9'
B-20	Lt. Fwd Pier (Access Rd.)	33 or more	6.5'	101.5'	820.7'	8.0'	914.2'
B-22	Lt. Fwd. Pier	38 or more	6.5'	126.5'	795.8'	8.0'	914.3'
B-23	Rt. Rear Pier	29 or more	16.5'	101.5'	822.6'	10.0'	914.1'
B-27	Rt. Fwd. Pier (Access Rd.)	40 or more	11.5'	91.5'	831.3'	6.0'	916.8'

BEDROCK SURFACE WAS NOT ENCOUNTERED IN ANY OF THE TEST BORINGS.

FREE WATER WAS OBSERVED AND MEASURED IN THE BORINGS AS INDICATED IN THE ABOVE TABLE. IN ADDITION, WET NONPLASTIC MATERIALS WERE ENCOUNTERED ABOVE THE WATER TABLE IN BORING B-19 AT 3.5 FOOT DEPTH, ELEVATION 918.4' AND IN BORING B-22 AT 6.0 FOOT DEPTH, ELEVATION 916.3'.

ORGANIC MATERIAL, BOULDERS AND RUNNING SAND THAT HEAVED IN THE AUGER FLIGHTS WERE ENCOUNTERED IN THE TEST BORINGS AS NOTED BELOW:

Boring No.	Organic Material Encountered Depth	Organic Material Encountered Elev.	Boulders Encountered Depth	Boulders Encountered Elev.	Heaving Sand Encountered Depth	Heaving Sand Encountered Elev.	Height of Sand
B-18	105.0' 115.0'	816.0' 806.0'	100.0' 124.0' to 130.0'	821.0' 797.0' to 791.0'	40.0' 70.0' 85.0' 90.0'	881.0' 851.0' 836.0' 831.0'	3.0' N/A 4.0' 12.0'
B-19	-	-	-	-	-	-	-
B-20	6.0' (Dec. Wood) 8.5' (Trace)	916.2' 913.7'	-	-	-	-	-
B-22	16.0'	906.3'	3.5' 6.0' 13.5' 16.0' 40.0' 45.0' 65.0'	918.8' 916.3' 908.8' 906.3' 882.3' 877.3' 857.3'	66.5' 70.0'	855.8' 852.3'	2.5' N/A
B-23	-	-	-	-	-	-	-
B-27	85.0'	837.8'	-	-	-	-	-

D50 VALUES WHICH HAVE BEEN CALCULATED FOR THE SCOUR ANALYSIS CAN BE FOUND ON SHEET 8.

*NOTE: FOLLOWING THE LAST DRIVE SAMPLE, 6.0 FEET OF MATERIAL WAS CORED, HOWEVER, IT TURNED OUT NOT TO BE ROCK BUT RATHER SOIL WITH BOULDERS.

LEGEND

- Roadway or Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- TR — Top of Rock
- W — Indicates Free Water Elevation.
- Indicates Static Water Elevation.
- Horizontal Bar on Boring Log in the profile view indicates the Depth the Sample was taken
- X/Y/Z — Figures Beside the Boring Log in the Profile view indicate the Number of Blows for Standard Penetration Test.
  - X = Number of Blows for First 6 in
  - Y = Number of Blows for Second 6 in
  - Z = Number of Blows for Third 6 in

SYMBOLS OF ROCK TYPES

- Coal
- Fire Clay or Underclay
- Weathered Mudstone
- Mudstone
- Weathered Shale
- Shale
- Weathered Clay-Shale
- Clay-Shale
- Weathered Siltstone
- Siltstone
- Weathered Sandstone
- Sandstone
- Conglomerate
- Weathered Conglomerate
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Flint
- Gypsum
- Boulders or Cobbles

GENERAL INFORMATION

Drive Sample/Press Sample/Core Borings

Drive sample borings are made by means of a mechanically-powered rotary-type drill rig employing a 2" O.D., I-3/8" I.D. split spoon sampler, at 2.5 ft and/or 5.0 ft depth intervals, driven by means of a 140 lbs hammer with a free fall of 2.5 ft. The number of blows required to drive the sampler three 0.5 ft increments is considered the standard penetration test.

Drive/press sample borings are made by means of a mechanically-powered rotary-type drill rig, employing a 2 in O.D., 1⅜in I.D. split spoon sampler, and a 3 in O.D. thin wall press sampling tube. The press sampling tube is advanced by continuous uniform pressure, applied by the drill rig.

Core borings are made by means of a mechanically-powered rotary-type drill rig, employing an NW-PAM core barrel with an industrial diamond cutting head.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, type of sample, number of blows for the standard penetration test in three 0.15 m increments, sample description based on laboratory test results utilizing the Casagrande AC classification system, sample number; and gradation, plasticity and moisture content determinations. Results of strength and consolidation testing, if performed on undisturbed samples, will appear graphically on separate enclosures. Rock samples are displayed on the log sheets including depth and elevation of the sample, amount of recovery and a visual classification based on type, color, degree of hardness, grain size, deterioration, bedding, acid reaction and other qualifying factors.

PARTICLE SIZE DEFINITIONS

Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
12"	3"	2.0 mm (No. 10 sieve)	0.42 mm (No. 40 sieve)	0.074 mm (No. 200 sieve)	0.005 mm	

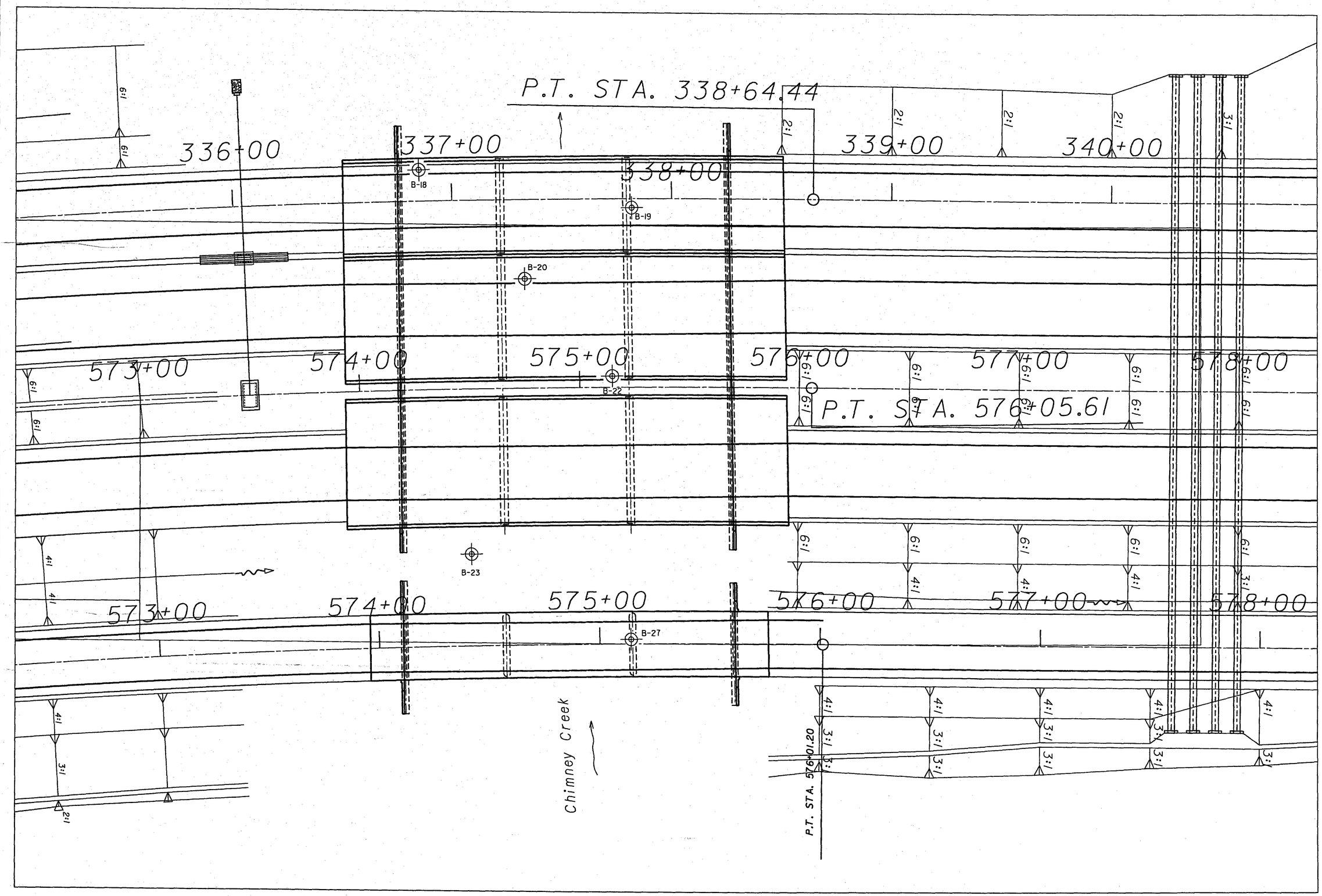
OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1600 WEST BROAD ST. COLUMBUS, OH 43223

REVISED DATE	DATE
3/14/05	8/24/04
REVIEWED	
M.R.S.	
CHECKED	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1405 L&R, CR539A & OUTVILLE-MORSE FRONTAGE RD OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25

22/29



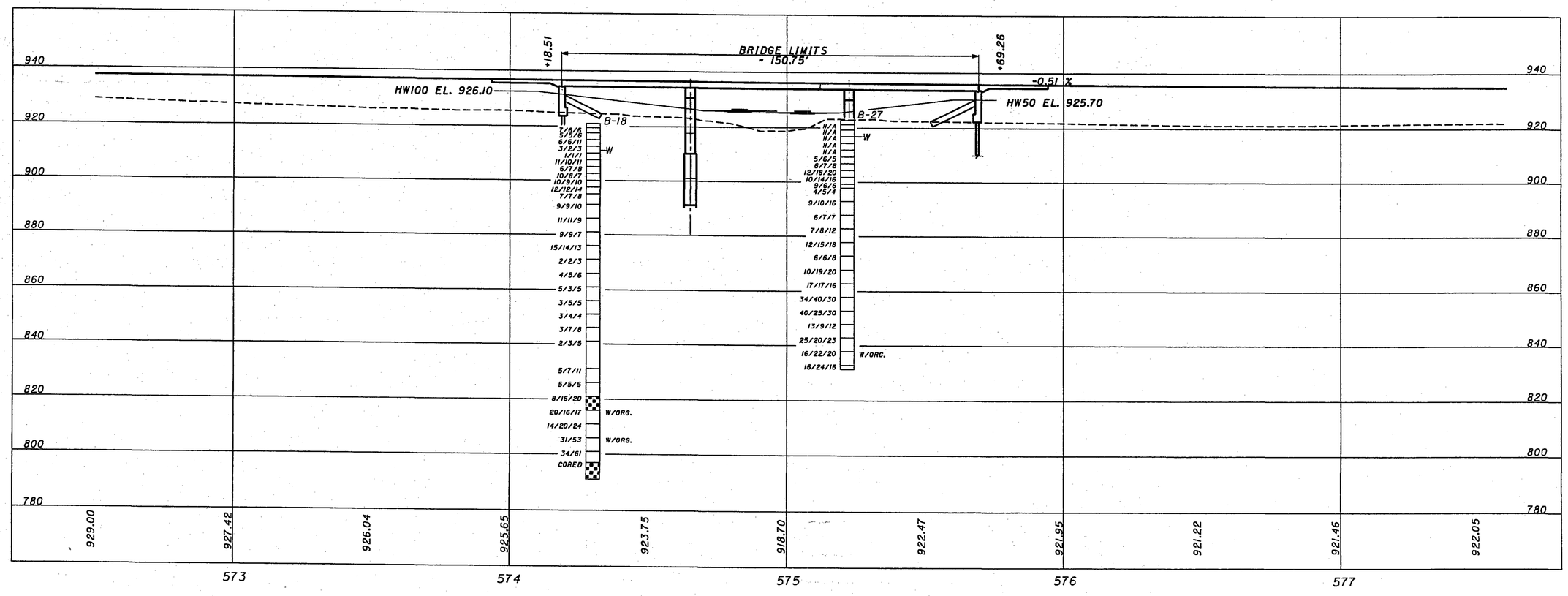
SCALE IN FEET
0 20 40

REVISED DATE	DATE
3/14/05	8/24/04
REVIEWED M.R.S.	
CHECKED J.B.H.	
DRAWN J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-1405L&R, CR539A & OUTVILLE-MORSE FRONTAGE RD
OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25

23/29

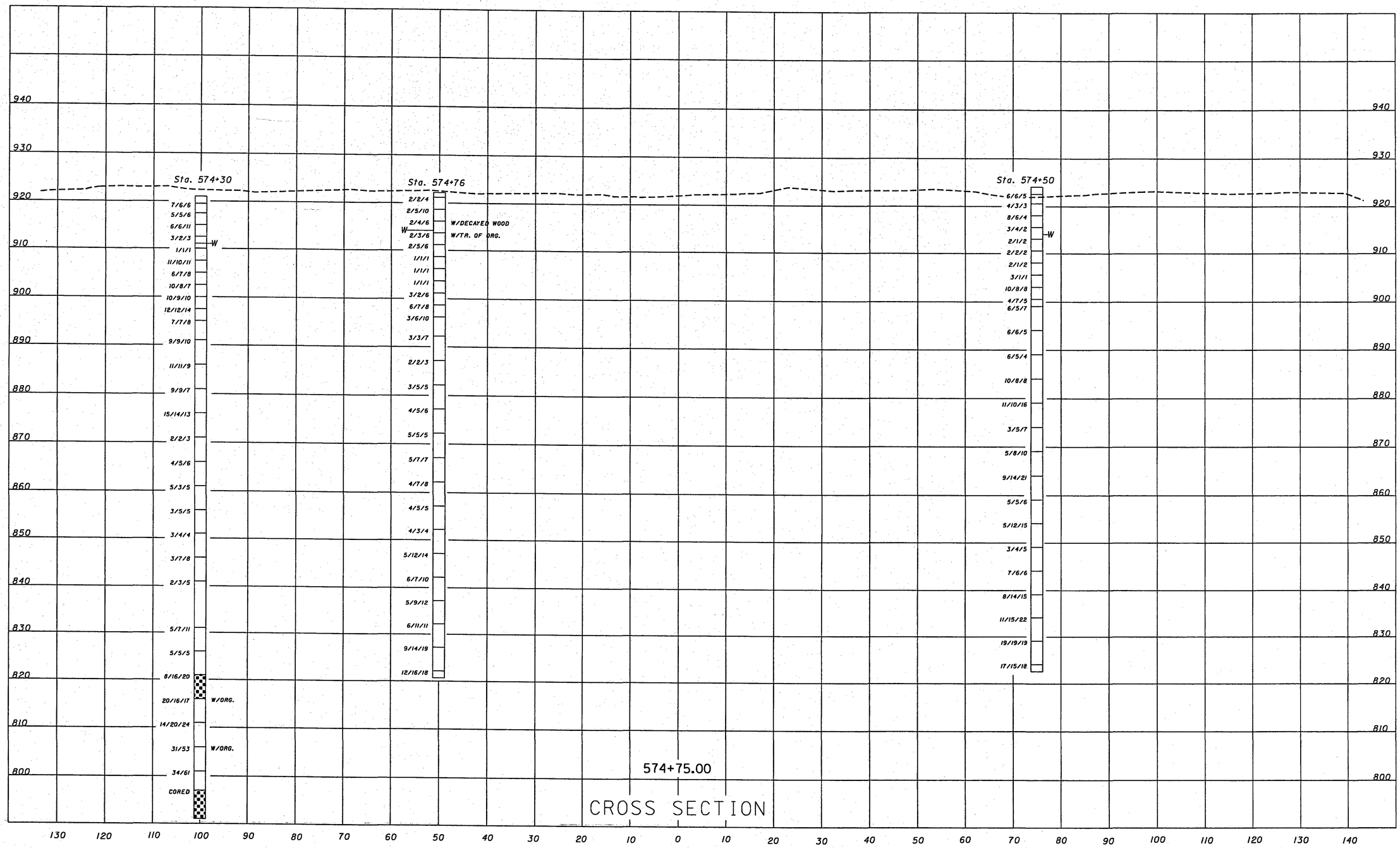


			REVISED DATE 3/14/05	0 20 40 SCALE IN FEET
	DRAWN J.B.H.	CHECKED J.B.H.	REVIEWED M.R.S.	DATE 8/24/04

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LIC-37-HOSLAR.CR539A & OUTVILLE-MORSE FRONTAGE RD
OVER CHINNEY CREEK

LIC-161-6.65
LIC-37-10.25

24 / 29



574+75.00

CROSS SECTION

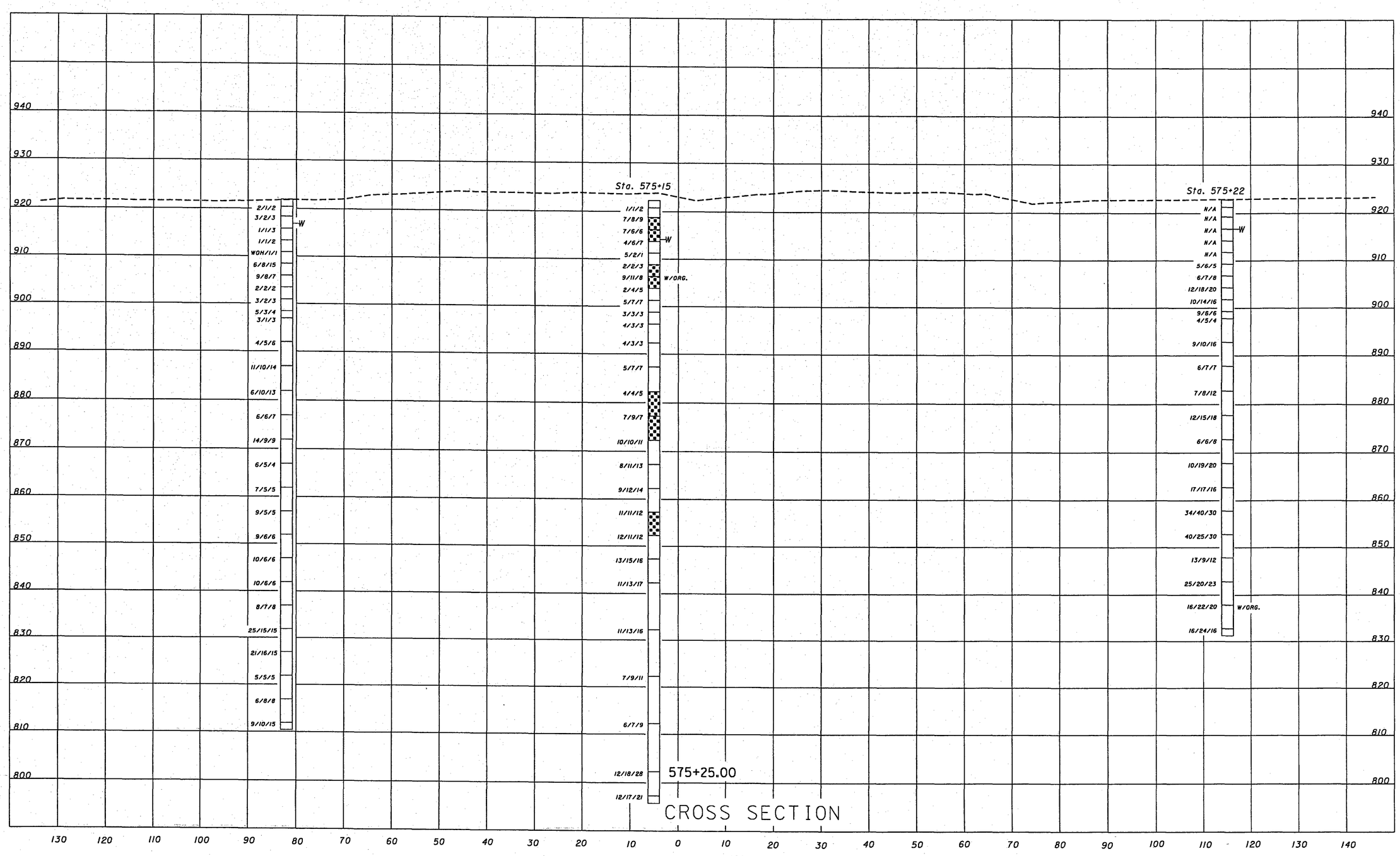
SCALE IN FEET
0 10 20

REVISED DATE	DATE
3/14/05	8/24/04
	REVIEWED M.R.S.
	CHECKED J.B.H.
	DRAWN J.B.H.

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-37-1405L&R, CR539A & OUTVILLE-MORSE FRONTAGE RD
OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25



SCALE IN FEET
0 10 20

REVISED DATE	DATE
3/14/05	8/24/04
REVIEWED	
M.R.S.	
CHECKED	
J.B.H.	
DRAWN	
J.B.H.	

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE NO. LIC-37-1405L&R, CR539A & OUTVILLE-MORSE FRONTAGE RD
OVER CHIMNEY CREEK

LIC-161-6.65
LIC-37-10.25

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(1/19)

LOG OF BORING

Date Started 6/28/04 Sampler: Type SS Dia. Water Elev. 911.0' Project Identification: LICKING
Date completed 7/7/04 LIC-161-7.08
Boring No. B-18 Station & Offset 574+30, 100' LT, Surface Elev. 921.0' OVER CHINNEY CREEK

Elev.	Depth	Std. Pen./ R.O.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
920.3	0	AUGERED			TOPSOIL		-	-	-	-	-	-	-	-	VISUAL
919.5	2														
	4	7/6/6			BROWN SILTY GRAVELLY SAND (REC. 1.5')	1	37	23	15	19	6	NP	NP	17	A-1-b
917.5	6	5/5/6			BROWN SILTY CLAY (REC. 1.5')	2	0	3	6	52	39	33	16	29	A-6b
915.0	8	6/6/11			BROWN AND GRAY SANDY CLAY (REC. 1.5')	3	13	12	16	33	26	33	14	-	A-6a
912.5	10	3/2/3			BROWN SILTY CLAY (REC. 1.5')	4	8	5	3	48	36	36	16	27	A-6b
910.0	12	1/1/1			BROWN SILTY GRAVELLY SAND (REC. 0.2')	5	37	33	8	17	5	NP	NP	22	A-1-b
907.6	14	11/10/11			BROWN SILTY GRAVELLY SAND (REC. 1.5')	6	19	48	10	18	5	NP	NP	21	A-1-b
905.0	16	6/7/8			BROWN SILTY SANDY GRAVEL (REC. 1.5')	7	47	22	12	16	3	NP	NP	16	A-1-b
902.5	18	10/8/7			BROWN AND GRAY SILTY GRAVELLY SAND (REC. 1.5')	8	33	35	10	18	4	NP	NP	14	A-1-b
900.0	20	10/9/10			BROWN SILTY SANDY GRAVEL (REC. 1.5')	9	47	25	9	16	3	NP	NP	14	A-1-b
897.5	22	12/12/14			BROWN SILTY GRAVELLY SAND (REC. 1.5')	10	30	38	13	17	2	NP	NP	14	A-1-b
895.0	24	7/7/8			BROWN AND GRAY SILTY SANDY GRAVEL	11	41	20	17	17	5	NP	NP	16	A-1-b
	26														
891.0	28	9/9/10			BROWN AND GRAY SILTY SAND (REC. 1.5')	12	0	40	47	12	1	NP	NP	19	A-3a
	30														
886.0	32	11/11/9			GRAY GRAVELLY SAND (REC. 1.5')	13	40	39	12	9	0	NP	NP	12	A-1-b
	34														
881.0	36	9/9/7			GRAY SAND (REC. 1.5') (SAND HEAVED 3.0' IN AUGERS)	14	10	42	42	6	0	NP	NP	24	A-1-b
	38														
876.0	40	15/14/13			GRAY SILTY SAND (REC. 1.5')	15	2	6	61	30	1	NP	NP	23	A-3a
	42														
871.0	44	2/2/3			GRAY SILTY SAND (REC. 1.2')	16	4	10	59	26	1	NP	NP	21	A-3a
	46														
866.0	48	4/5/6			GRAY SILTY SAND (REC. 1.5')	17	0	1	66	32	1	NP	NP	20	A-3a
	50														
861.0	52	5/3/5			GRAY SILTY SAND (REC. 1.5')	18	2	5	58	35	0	NP	NP	20	A-3a
	54														
856.0	56	3/5/5			GRAY SANDY SILT (REC. 1.5')	19	0	1	56	43	0	NP	NP	20	A-4a
	58														
851.0	60	3/4/4			GRAY SILT (REC. 1.5') (SAND HEAVED IN AUGERS)	20	0	0	6	87	7	NP	NP	23	A-4b
	62														
846.0	64	3/7/8			GRAY SANDY SILT (REC. 1.5')	21	9	14	36	40	1	NP	NP	18	A-4a
	66														
841.0	68	2/3/5			GRAY SILTY SAND (REC. 1.5')	22	6	2	64	27	1	NP	NP	24	A-3a
	70														
	72				(SAND HEAVED 4.0' IN AUGERS, NO SAMPLE TAKEN)										
	74														
836.0	76														
	78														
831.0	80	5/7/11			GRAY SILTY GRAVELLY SAND (REC. 1.5') (SAND HEAVED 12.0' IN AUGERS)	23	15	4	55	25	1	NP	NP	18	A-3a
	82														
826.0	84	5/5/5			GRAY SANDY SILT (REC. 1.5')	24	3	2	31	61	3	NP	NP	21	A-4b
	86														
821.0	88	8/16/20			GRAY SILTY GRAVELLY SAND WITH BOULDERS (REC. 1.5')	25	23	18	39	19	1	NP	NP	13	A-3a
	90														
816.0	92	20/16/17			GRAY SILTY GRAVELLY SAND WITH ORGANIC (REC. 1.5')	26	17	19	29	28	7	NP	NP	10	A-2-4
	94														
811.0	96	14/20/24			GRAY SILTY GRAVELLY SAND (REC. 1.5')	27	17	25	27	30	1	NP	NP	11	A-3a
	98														
806.0	100	31/53			GRAY SILTY SAND WITH ORGANIC (REC. 1.0')	28	6	21	58	14	1	NP	NP	11	A-3a
	102														
801.0	104	34/61			GRAY SILTY GRAVELLY SAND (REC. 1.0')	29	18	21	35	20	6	NP	NP	10	A-3a
797.0	106														
	108														
	110														
	112														
	114														
	116														
	118														
	120														
	122														
	124														
	126														
	128	0	6.0	0.0	BROWN LAMINATED CLAYEY SILT WITH GRAVEL & BOULDERS. CORE LOSS 83 % R.Q.D. IS 0										
789.0	130														

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLBacked 5/95

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(4/19)

LOG OF BORING

Date Started 8/3/04 Sampler: Type SS Dia. Water Elev. 916.9' Project Identification: LICKING
Date completed 8/3/04 LIC-161-7.08
Boring No. B-19 Station & Offset 575+25, 82' LT, Surface Elev. 921.9' OVER CHINNEY CREEK

Elev.	Depth	Std. Pen./ R.O.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
920.4	0														
	2	2/1/2			BROWN SANDY SILT	1	10	7	30	40	13	NP	NP	23	A-4a
918.4	4	3/2/3			BROWN SILTY GRAVELLY SAND	2	29	19	26	20	6	NP	NP	22	A-2-4
915.9	6	1/1/3			GRAY CLAYEY SILT	3	2	4	11	54	29	27	8	29	A-4b
913.4	8	1/1/2			BROWN SILTY SANDY GRAVEL	4	40	18	17	16	9	NP	NP	18	A-1-b
910.9	10	WOH/1/1			BROWN SILTY SANDY GRAVEL	5	44	22	12	17	5	NP	NP	23	A-1-b
908.4	12	6/8/15			BROWN AND GRAY SILTY SANDY GRAVEL	6	37	19	16	23	5	NP	NP	16	A-2-4
905.9	14	9/8/7			BROWN SILTY SANDY GRAVEL	7	62	12	8	15	3	NP	NP	15	A-1-b
903.4	16	2/2/2			BROWN AND GRAY SILTY GRAVELLY SAND	8	29	27	18	22	4	NP	NP	18	A-2-4
900.9	18	3/2/3			BROWN SILTY SANDY GRAVEL	9	39	25	9	22	5	NP	NP	15	A-2-4
898.4	20	5/5/4			BROWN AND GRAY SILTY SANDY GRAVEL	10	42	9	27	21	1	NP	NP	17	A-1-b
896.8	22	3/1/3			BROWN SILTY GRAVELLY SAND	11	38	32	11	16	3	NP	NP	17	A-1-b
	24														
891.9	26	4/5/6			BROWN SILTY SANDY GRAVEL	12	48	19	9	21	3	NP	NP	16	A-1-b
	28														
886.9	30	11/10/14			BROWN SILTY GRAVELLY SAND	13	33	38	9	18	2	NP	NP	16	A-1-b
	32														
881.9	34	6/10/13			BROWN SILTY SANDY GRAVEL	14	45	19	12	20	4	NP	NP	12	A-1-b
	36														
876.9	38	6/6/7			BROWN AND GRAY SANDY GRAVELLY SILT	15	31	14	14	29	12	22	6	15	A-4a
	40														
871.9	42	14/9/9			GRAY SILTY SANDY GRAVEL	16	42	21	15	16	6	NP	NP	12	A-1-b
	44														
866.9	46	6/5/4			GRAY SILTY GRAVELLY SAND	17	40	34	13	11	2	NP	NP	12	A-1-b
	48														
861.9	50	7/5/5			GRAY SILTY SANDY GRAVEL	18	59	20	8	11	2	NP	NP	11	A-1-a
	52														
856.9	54	9/5/5			BROWNISH-GRAY GRAVEL W/SAND & SILT	19	-	-	-	-	-	-	-	10	VISUAL
	56														
851.9	58	9/6/6			GRAY SANDY GRAVEL	20	53	28	10	9	0	NP	NP	11	A-1-a
	60														
846.9	62	10/6/6			BROWNN GRAVEL WITH SAND	21	-	-	-	-	-	-	-	7	VISUAL
	64														
841.9	66	10/6/6			GRAY SILTY SANDY GRAVEL	22	43	29	10	14	4	NP	NP	11	A-1-b
	68														
836.9	70	8/7/8			GRAY SILTY SANDY GRAVEL	23	48	20	17	12	3	NP	NP	14	A-1-b
	72														
831.9	74	25/15/15			GRAYISH-BROWN SILTY SAND W/GRAVEL	24	-	-	-	-	-	-	-	12	VISUAL
	76														
826.9	78	21/16/15			GRAY SAND	25	9	43	45	3	0	NP	NP	28	A-1-b
	80														
821.9	82	5/5/5			BROWNISH-GRAY GRAVEL WITH SAND	26	-	-	-	-	-	-	-	13	VISUAL
	84														
816.9	86	6/8/8			GRAY SILTY GRAVELLY SAND	27	25	29	29	14	3	NP	NP	13	A-1-b
	88														
811.9	90														
	92														
810.4	93	9/10/15			GRAY SILTY GRAVELLY SAND	28	30	25	24	18	3	NP	NP	16	A-1-b

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLBacked 5/95

27/29	LIC-161-6.65 LIC-37-10.25	STRUCTURE FOUNDATION INVESTIGATION BRIDGE NO. LIC-37-1405L&R, CR539A & OUTVILLE-MORSE FRONTAGE RD OVER CHINNEY CREEK			REVISED DATE 3/14/05		OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF GEOTECHNICAL ENGINEERING 1600 WEST BROAD ST. COLUMBUS, OH 43223	
			TYPED	CHECKED	REVIEWED	DATE		
			J.B.H.	J.B.H.	M.R.S.	8/24/04		

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(7/19)

LOG OF BORING

Date Started 8/2/04 Sampler: Type SS Dia. Water Elev. 914.2' Project Identification: LICKING
Date completed 8/4/04 LIC-161-7.08
Boring No. B-20 Station & Offset 574+76, 50' LT. Surface Elev. 922.2' OVER CHINNEY CREEK

Elev. 922.2	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
921.7		AUGERED			TOPSOIL		-	-	-	-	-	-	-	-	VISUAL
921.2	2	2/2/4			BROWN SILTY GRAVELLY SAND W/WOOD FRAGS. (REC. 0.8')	1	32	24	15	23	6	NP	NP	15	A-2-4
918.7	4	2/5/10			BROWN SILTY GRAVELLY SAND (REC. 1.3')	2	33	20	19	22	6	NP	NP	12	A-2-4
916.2	6	2/4/6			BROWN SILTY SANDY GRAVEL W/DECAYED WOOD (REC. 1.2')	3	39	12	15	24	10	NP	NP	20	A-2-4
913.7	8	2/3/6			BROWN SILTY GRAVELLY SAND WITH TRACE OF ORGANIC (REC. 1.5')	4	38	24	14	18	6	NP	NP	19	A-1-b
911.2	10	2/5/6			BROWN SILTY SANDY GRAVEL (REC. 1.5')	5	43	21	13	14	9	NP	NP	28	A-1-b
908.7	12	1/1/1			BROWN SILTY GRAVELLY SAND (REC. 1.5')	6	37	26	11	22	4	NP	NP	22	A-2-4
906.2	14	1/1/1			BROWN SILTY SANDY GRAVEL (REC. 1.3')	7	39	26	12	19	4	NP	NP	17	A-1-b
903.7	16	1/1/1			BROWN SILTY GRAVELLY SAND (REC. 1.3')	8	30	40	13	16	1	NP	NP	22	A-1-b
901.2	18	3/2/6			BROWN SILTY GRAVELLY SAND (REC. 1.5')	9	33	34	14	17	2	NP	NP	23	A-1-b
898.7	20	6/7/8			BROWN GRAVELLY SANDY SILT (REC. 1.5')	10	20	13	12	32	23	27	8	15	A-4a
896.2	22	3/6/10			BROWN SILTY GRAVELLY SAND (REC. 1.5')	11	33	22	18	22	5	NP	NP	13	A-2-4
892.2	24	3/3/7			GRAY GRAVELLY SAND (REC. 1.5')	12	17	50	24	8	1	NP	NP	15	A-1-b
887.2	26	2/2/3			GRAY GRAVELLY SAND (REC. 1.2')	13	46	36	11	7	0	NP	NP	11	A-1-b
882.2	28	3/5/5			GRAY SANDY GRAVEL (REC. 1.2')	14	47	37	8	7	1	NP	NP	14	A-1-b
877.2	30	4/5/6			GRAY SILTY GRAVELLY SAND (REC. 0.8')	15	39	28	22	9	2	NP	NP	16	A-1-b
872.2	32	5/5/5			GRAY SANDY GRAVEL (REC. 0.8')	16	62	24	8	6	0	NP	NP	12	A-1-a
867.2	34	5/7/7			GRAY SILTY GRAVELLY SAND (REC. 0.8')	17	32	24	32	12	0	NP	NP	16	A-1-b
862.2	36	4/7/8			GRAY SILTY GRAVELLY SAND (REC. 0.8')	18	22	24	42	11	1	NP	NP	16	A-3a
857.2	38	4/5/5			GRAY SILTY SANDY GRAVEL (REC. 1.0')	19	69	11	8	10	2	NP	NP	10	A-1-a
852.2	40	4/3/4			GRAY SANDY SILT (REC. 0.7')	20	0	2	40	56	2	NP	NP	23	A-4b
847.2	42	5/12/14			GRAY GRAVELLY SANDY SILT (REC. 0.8')	21	21	9	26	39	5	NP	NP	20	A-4a
842.2	44	6/7/10			GRAY SANDY SILT (REC. 1.5')	22	0	10	25	58	7	NP	NP	20	A-4b
837.2	46	5/9/12			GRAY SILTY SAND (REC. 1.5')	23	5	3	54	34	4	NP	NP	23	A-4a
832.2	48	6/11/11			GRAY SILTY SAND (REC. 1.5')	24	0	1	83	16	0	NP	NP	21	A-3a
827.2	50	9/14/19			GRAY SANDY SILT (REC. 1.5')	25	14	12	29	44	1	NP	NP	14	A-4a
822.2	100														
820.7	—	12/16/18			GRAY SILTY SAND (REC. 1.3')	26	0	16	72	12	0	NP	NP	10	A-3a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-125 Revised 5/98

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(10/19)

LOG OF BORING

Date Started 7/13/04 Sampler: Type SS Dia. Water Elev. 914.3' Project Identification: LICKING
Date completed 7/21/04 LIC-161-7.08
Boring No. B-22 Station & Offset 575+15, 5' LT. Surface Elev. 922.3' OVER CHINNEY CREEK

Elev. 922.3	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
920.8	2	1/1/2			BROWN SANDY SILT W/ROOTS (REC. 1.5')	1	8	10	41	33	8	NP	NP	17	A-4a
918.8	4	7/8/9			BROWN SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.5')	2	50	22	11	13	4	NP	NP	13	A-1-b
916.3	6	7/6/6			BROWN SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.5')	3	45	21	10	18	6	NP	NP	20	A-1-b
913.8	8	4/6/7			BROWN SILTY SANDY GRAVEL (REC. 1.0')	4	47	27	11	12	3	NP	NP	22	A-1-b
911.3	10	5/2/1			BROWN SILTY SANDY GRAVEL (REC. 1.0')	5	48	17	14	20	1	NP	NP	23	A-1-b
908.8	12	2/2/3			GRAY GRAVEL W/SOME SANDY CLAY AND BOULDERS (REC. 0.2')	6	-	-	-	-	-	-	-	16	VISUAL
906.3	14	9/11/8			BROWN SILTY SANDY GRAVEL WITH BOULDERS AND ORGANIC (REC. 1.5')	7	57	15	9	15	4	NP	NP	12	A-1-b
903.8	16	2/4/5			BROWN AND GRAY SANDY SILT (REC. 1.0')	8	12	14	16	34	24	20	4	11	A-4a
901.3	18	3/3/3			BROWN AND GRAY SILTY GRAVELLY SAND (REC. 1.0')	9	42	33	10	11	4	NP	NP	12	A-1-b
898.8	20	3/3/3			GRAY SILTY GRAVELLY SAND (REC. 1.5')	10	20	37	31	11	1	NP	NP	22	A-1-b
896.3	22	4/3/3			GRAY SILTY SANDY GRAVEL (REC. 0.5')	11	47	27	12	12	2	NP	NP	12	A-1-b
892.3	24	4/3/3			GRAY SILTY SANDY GRAVEL (REC. 0.5')	12	46	30	12	10	2	NP	NP	13	A-1-b
887.3	26	5/7/7			GRAY SILTY SANDY GRAVEL (REC. 0.5')	13	54	22	9	11	4	NP	NP	-	A-1-a
882.3	28	4/4/5			GRAY SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.0')	14	69	14	7	7	3	NP	NP	15	A-1-a
877.3	30	7/9/7			GRAY SILTY SANDY GRAVEL WITH BOULDERS (REC. 1.0')	15	54	25	10	10	1	NP	NP	12	A-1-a
872.3	32	10/10/11			BROWN SILTY GRAVELLY SAND (REC. 1.0')	16	28	45	17	9	1	NP	NP	15	A-1-b
867.3	34	8/11/13			BROWN SAND (REC. 1.5')	17	6	68	17	8	1	NP	NP	18	A-1-b
862.3	36	9/12/14			BROWN SILTY GRAVELLY SAND (REC. 1.5')	18	31	38	21	8	2	NP	NP	16	A-1-b
857.3	38	11/11/12			BROWN SILTY GRAVELLY SAND WITH BOULDERS (REC. 1.5') (SAND HEAVED 2.5' IN AUGERS)	19	37	38	15	9	1	NP	NP	16	A-1-b
852.3	40	12/11/12			BROWN GRAVELLY SAND (REC. 1.5') (SAND HEAVED IN AUGERS)	20	42	42	11	5	0	NP	NP	15	A-1-b
847.3	42	13/15/16			BROWN SILTY SANDY GRAVEL (REC. 1.5')	21	52	19	18	10	1	NP	NP	11	A-1-a
842.3	44	11/13/17			BROWN SANDY GRAVEL (REC. 1.5')	22	57	22	13	7	1	NP	NP	12	A-1-a
832.3	46	11/13/16			BROWN SILTY GRAVELLY SAND (REC. 1.2')	23	31	4	49	16	0	NP	NP	18	A-3a
822.3	50	7/9/11			GRAY SILTY SAND (REC. 1.5')	24	2	1	81	16	0	NP	NP	22	A-3a
812.3	60	6/7/9			GRAY SILTY SAND (REC. 1.5')	25	4	4	78	14	0	NP	NP	21	A-3a
802.3	70	12/18/28			GRAY SILTY SAND (REC. 1.5')	26	2	12	65	18	3	NP	NP	17	A-3a
797.3	75	12/17/21			BROWN SILTY SAND (REC. 1.5')	27	0	34	51	14	1	NP	NP	16	A-3a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-125 Revised 5/98

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(14/19)

LOG OF BORING

Date Started 7/28/04 Sampler: Type SS Dia. Water Elev. 914.1' Project Identification: LICKING
Date completed 8/3/04 LIC-161-7.08
Boring No. B-23 Station & Offset 574+50, 75' RT. Surface Elev. 924.1' OVER CHINNEY CREEK

Elev. 924.1	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
922.6	2														
920.6	4	6/6/5			BROWN SILTY SANDY GRAVEL	1	51	17	9	15	8	NP	NP	10	A-1-b
		4/3/3			BROWN SILTY SANDY GRAVEL	2	43	24	9	15	9	NP	NP	12	A-1-b
918.1	6														
	8	8/6/4			BROWN SILTY SANDY GRAVEL	3	52	18	8	15	7	NP	NP	9	A-1-b
915.6	10	3/4/2			BROWN SILTY SANDY GRAVEL	4	42	16	16	18	8	NP	NP	20	A-2-4
913.1	12	2/1/2			BROWN SILTY SANDY GRAVEL	5	58	18	9	12	3	NP	NP	21	A-1-a
910.6	14	2/2/2			BROWN SILTY SANDY GRAVEL	6	66	16	7	8	3	NP	NP	20	A-1-a
908.1	16	2/1/2			BROWN CLAYEY SANDY GRAVEL	7	45	25	10	12	8	31	11	24	A-2-6
905.6	18	3/1/1			BROWN SILTY SANDY GRAVEL	8	47	26	7	15	5	NP	NP	19	A-1-b
903.1	20	10/8/8			GRAY GRAVELLY SANDY SILT	9	18	13	11	35	23	21	5	14	A-4a
900.6	22	4/7/5			GRAY SILTY SANDY GRAVEL	10	41	22	9	19	9	21	5	14	A-2-4
898.1	24	6/5/7			BROWN SILTY SANDY GRAVEL	11	60	17	10	10	3	NP	NP	14	A-1-a
	26														
895.6	28														
893.1	30	6/6/5			GRAY SILTY SANDY GRAVEL	12	49	28	12	9	2	NP	NP	13	A-1-b
	32														
890.6	34														
888.1	36	6/5/4			GRAY SANDY GRAVEL	13	52	35	8	4	1	NP	NP	16	A-1-a
	38														
885.6	40														
883.1	42	10/8/8			GRAY SILTY SANDY GRAVEL	14	44	28	10	13	5	NP	NP	11	A-1-b
	44														
880.6	46	11/10/16			GRAY SILTY SANDY GRAVEL	15	47	32	10	9	2	NP	NP	11	A-1-b
878.1	48														
	50	3/5/7			GRAY SILTY SAND	16	2	4	82	11	1	NP	NP	21	A-3a
875.6	52														
873.1	54														
	56	5/8/10			GRAY SILTY SAND	17	0	2	69	28	1	NP	NP	21	A-3a
870.6	58														
868.1	60														
	62	9/14/21			GRAY SILTY GRAVELLY SAND	18	36	12	34	17	1	NP	NP	13	A-2-4
865.6	64														
863.1	66	5/5/6			GRAY SANDY SILT	19	0	0	54	43	3	NP	NP	22	A-4a
	68														
860.6	70														
858.1	72	5/12/15			GRAY SANDY SILT	20	0	0	46	51	3	NP	NP	21	A-4b
	74														
855.6	76	3/4/5			GRAY SANDY SILT	21	0	0	53	46	1	NP	NP	22	A-4a
853.1	78														
	80														
850.6	82	7/6/6			GRAY SANDY SILT	22	0	0	21	75	4	NP	NP	23	A-4b
848.1	84														
	86	8/14/15			GRAY SILTY SAND	23	0	27	57	13	3	NP	NP	20	A-3a
845.6	88														
843.1	90														
	92	11/15/22			GRAY SANDY SILT	24	0	1	33	65	1	NP	NP	22	A-4b
840.6	94														
838.1	96	19/19/19			GRAY SILTY GRAVELLY SAND	25	17	20	37	21	5	NP	NP	11	A-3a
	98														
835.6	100														
833.1	—	17/15/18			GRAY SILTY GRAVELLY SAND	26	31	17	27	19	6	NP	NP	10	A-2-4

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLBoring1 9/15

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(17/19)

LOG OF BORING

Date Started 7/27/04 Sampler: Type SS Dia. Water Elev. 916.8' Project Identification: LICKING
Date completed 7/28/04 LIC-161-7.08
Boring No. B-27 Station & Offset 575+22, 115' RT. Surface Elev. 922.8' OVER CHINNEY CREEK

Elev. 922.8	Depth 0	Std. Pen./ R.Q.D.	Rec. ft	Loss ft	Description	Sample No.	Physical Characteristics % Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
920.3	2														
918.3	4	N/A			BROWN SANDY SILT WITH WOOD FRAGS.	1	6	3	23	52	16	NP	NP	20	A-4b
		N/A			GRAY SILTY GRAVELLY SAND	2	23	10	28	31	8	NP	NP	24	A-4a
915.8	6														
	8	N/A			BROWN SILTY SANDY GRAVEL	3	65	16	8	9	2	NP	NP	15	A-1-a
913.3	10	N/A			BROWN SILTY SANDY GRAVEL	4	-	-	-	-	-	-	-	22	VISUAL
910.8	12	N/A			BROWN SILTY SANDY GRAVEL	5	43	25	8	19	5	NP	NP	22	A-1-b
908.3	14	5/6/5			GRAY SILTY SANDY GRAVEL	6	43	24	9	19	5	NP	NP	17	A-1-b
905.8	16	6/7/8			GRAY SILTY GRAVELLY SAND	7	19	25	30	20	6	NP	NP	18	A-3a
903.3	18	12/18/20			GRAY SILTY SAND	8	6	58	23	13	0	NP	NP	17	A-1-b
900.8	20	10/14/16			GRAY SANDY GRAVEL	9	61	31	4	3	1	NP	NP	13	A-1-a
898.3	22	9/6/6			GRAY SILTY SANDY GRAVEL	10	53	25	10	10	2	NP	NP	14	A-1-a
895.8	24	4/5/4			GRAY SANDY GRAVEL	11	51	34	9	6	0	NP	NP	12	A-1-a
	26														
893.3	28														
890.8	30	9/10/16			GRAY SILTY SANDY GRAVEL	12	49	28	11	10	2	NP	NP	12	A-1-b
	32														
888.3	34														
	36	6/7/7			GRAY SILTY GRAVELLY SAND	13	27	29	24	19	1	NP	NP	15	A-1-b
885.8	38														
883.3	40														
	42	7/8/12			GRAY SILTY SAND	14	0	1	67	31	1	NP	NP	24	A-3a
880.8	44														
878.3	46	12/15/18			GRAY SILTY SANDY GRAVEL	15	50	17	18	14	1	NP	NP	9	A-1-b
	48														
875.8	50														
	52	6/6/8			GRAY SANDY SILT	16	0	0	35	62	3	NP	NP	23	A-4b
873.3	54														
	56	10/19/20			GRAY SANDY SILT	17	5	1	32	58	4	NP	NP	15	A-4b
870.8	58														
868.3	60														
	62	17/17/16			GRAY SILTY SANDY GRAVEL	18	51	16	12	16	5	NP	NP	7	A-1-b
865.8	64														
863.3	66	38/40/30			GRAY SILTY SAND	19	0	1	81	18	0	NP	NP	25	A-3a
	68														
860.8	70														
858.3	72	40/25/30			GRAY SILTY SAND	20	12	10	53	20	5	NP	NP	14	A-3a
	74														
855.8	76	13/9/12			GRAY SILTY SANDY GRAVEL	21	56	10	13	17	4	NP	NP	13	A-1-b
853.3	78														
	80														
850.8	82	25/20/23			GRAY SILTY SANDY GRAVEL	22	38	14	9	28	11	NP	NP	13	A-4a
848.3	84														
	86	16/22/20			GRAY SILTY SANDY GRAVEL WITH ORGANIC	23	37	22	13	21	7	NP	NP	10	A-2-4
845.8	88														
843.3	90														
	—	16/24/16			GRAY SILTY SANDY GRAVEL	24	51	26	10	10	3	NP	NP	13	A-1-a

BOTTOM OF BORING

Particle Sizes: Agg= >2.00mm, Coarse Sand= 2.00-0.42mm Fine Sand= 0.42-0.074mm, Silt= 0.074-0.005mm, Clay= <0.005mm

Form TE-GLBoring1 9/15

State of Ohio
Department of Transportation
Office of Geotechnical Engineering

(⊖)

D 50 VALUES

Sampler: Type SS Dia. 1 3/8"

Project Identification: LIC-161-7.08
(over Chinney Creek)
STRUCTURE FOUNDATION INVESTIGATION

D_{50} Values			
Boring No.	Sample No.	Elevation	D_{50} Value
B-18	2	917.5 - 916.0 ft.	0.0089 mm
	3	915.0 - 913.5 ft.	0.0400 mm
	4	912.5 - 911.0 ft.	0.0108 mm
	5	910.0 - 908.5 ft.	1.1400 mm
B-19	2	917.8 - 916.3 ft.	0.3630 mm
	3	915.3 - 913.8 ft.	0.0138 mm
	4	912.8 - 911.3 ft.	0.8800 mm
	5	910.3 - 908.8 ft.	1.4700 mm
B-20	1	921.0 - 919.5 ft.	0.6580 mm
	2	918.5 - 917.0 ft.	0.5370 mm
	3	916.0 - 914.5 ft.	0.4410 mm
	4	913.5 - 912.0 ft.	0.9670 mm
	5	911.0 - 909.5 ft.	1.3300 mm
	6	908.5 - 907.0 ft.	1.0000 mm
B-22	1	921.1 - 919.6 ft.	0.1180 mm
	2	919.1 - 917.6 ft.	2.0000 mm
	3	916.6 - 915.1 ft.	1.5500 mm
	4	914.1 - 912.6 ft.	1.7400 mm
	5	911.6 - 910.1 ft.	1.7600 mm
B-23	1	922.8 - 921.3 ft.	2.1800 mm
	2	920.8 - 919.3 ft.	1.2500 mm
	3	918.3 - 916.8 ft.	2.2900 mm
	4	915.8 - 914.3 ft.	0.9800 mm
	5	913.3 - 911.8 ft.	3.1900 mm
	6	910.8 - 909.3 ft.	6.1700 mm
B-27	1	921.5 - 920.0 ft.	0.0295 mm
	2	919.5 - 918.0 ft.	0.1530 mm
	3	917.0 - 915.5 ft.	3.9400 mm
	5	912.0 - 910.5 ft.	1.3000 mm
	6	909.5 - 908.0 ft.	1.3700 mm