

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GAL-35-3.79

OHIO

FHWA
REGION 5FEDERAL
PROJECT

1

630

CONVENTIONAL SIGNS

Township Line	-----	Existing Sewer (Sanitary)	-----	San	-----
Section Line	-----	Proposed Sewer	-----		
Center Line	-----	Guardrail (existing)	o-o-o	(proposed)	o-o-o
Existing Right of Way	-----	Water Valves			o
Limited Access (only)	-----	Gas Valves			o
Limited Access & Right of Way	-----	Water Hydrant			o
Slope Easement	-----	Utility Poles: Telephone	o	, Power	o
Work Limits	-----	Light			o
Property Line	-----	Existing Manholes			o
Fence Line (existing)	x-x-x-x-x-x-x	Proposed Manholes			o
Water Line	-----	Existing Catch Basins			o
Gas Line	-----	Proposed Catch Basins			o
Underground Telephone Conduit	-----	Catch Basin Removed			o
Existing Sewer (Storm)	-----	Trees	o	Stumps	o
		(to be removed)	o		o

GAL-35-3.79
RACCOON & SPRINGFIELD
TOWNSHIPS
GALLIA COUNTY

100% STATE

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director, Department of Transportation, in accordance with the provisions of Section 5512.02 of the Revised Code of Ohio.

1989 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on plans and estimates.

Approved Joseph L. Leach, P.E.
Date 10-24-89 District Deputy Director of Transportation

Approved P.D. Hamilton
Date 1-17-90 Engineer, Bureau of Bridges and Structural Design

Approved Chadwick J. Stitt
Date 1-25-90 Chief Engineer, Plan. and Design

Approved Bernard B. Hurst
Date 1-25-90 Director, Department of Transportation

UNDERGROUND UTILITIES

TWO WORKING DAYS
BEFORE YOU DIG
Call... 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL SPECIFICATIONS

814	1-21-88	802	5-4-88
843	1-29-88	940	6-10-87
836	11-12-85	806	11-24-86
944	6-24-89	841	5-16-84
847	10-17-83	906	11-24-86
		915	1-21-88
947	10-17-83	931	6-18-85
942	10-29-86		

PLANS PREPARED BY
COLUMBUS ENGINEERING CONSULTANTS, LIMITED
CONSULTING CIVIL ENGINEERS
1580 KING AVE.
COLUMBUS, OHIO
FOR
THE STATE OF OHIO

INDEX OF SHEETS

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REST AREA INTERCHANGE			
RAMP PROFILES	97-98		

* THESE SHEETS ARE NOT INCLUDED IN THE PLANS
** INCLUDES SHEETS 503A AND 503B AND 495A
o Sheets 596-598 not used.

SHEETS 585, 586, 588 REVISED
5-1-90 K.J.W.

LINE DATA

BEGIN PROJECT
END PROJECT
ADDITIONS AND/OR DEDUCTIONS
LENGTH OF PROJECT

STA. 200+00.00
STA. 440+97.88
-18.24 L.F.
24,079.64 L.F. OR 4.561 Mi.

ADD FOR WORK:

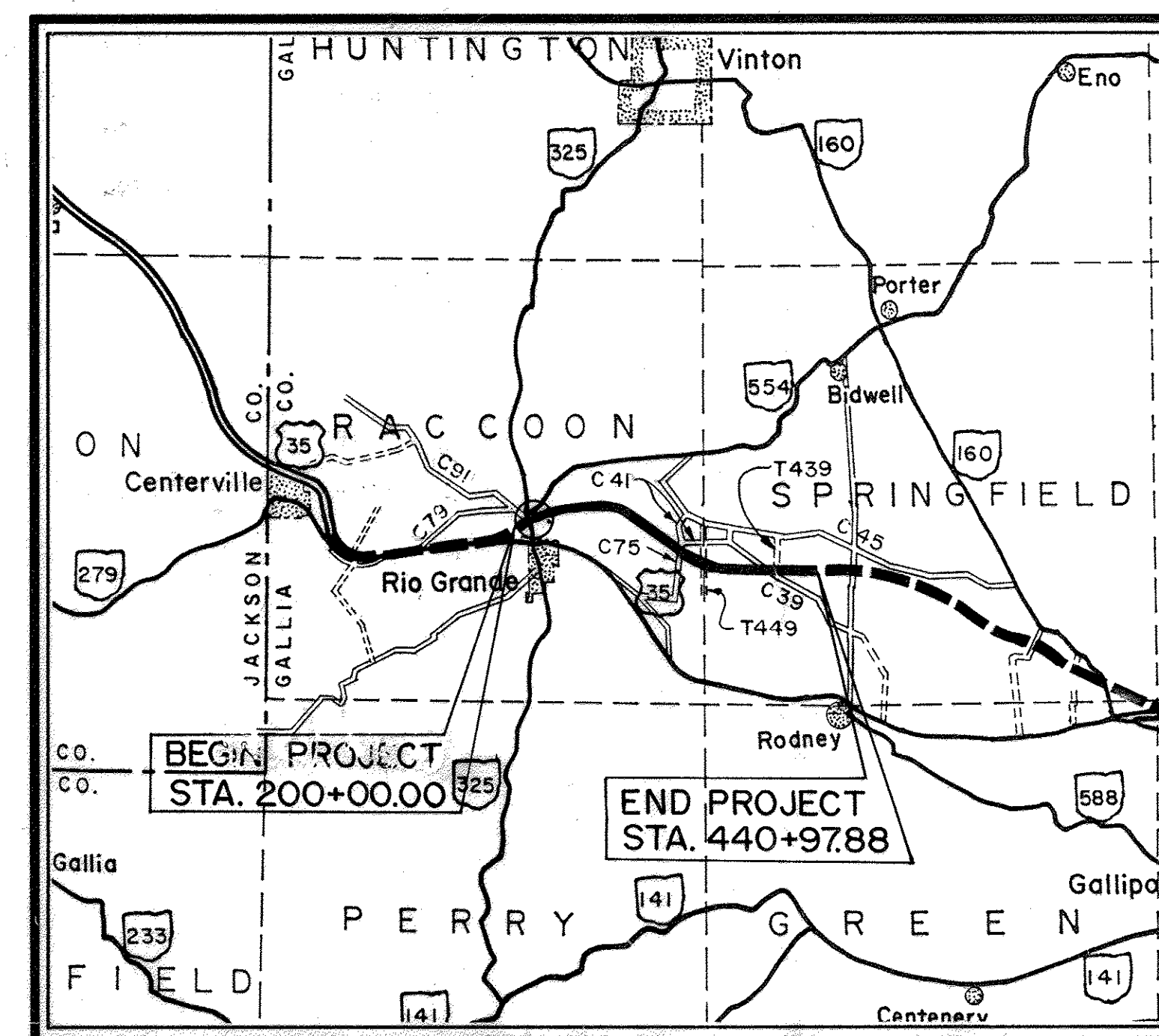
U.S. 35 RELOC.	STA. 198+01.00 TO 200+00.00	199.00 L.F.
S.R. 325 RELOC.	STA. 86+25.00 TO 110+75.00	2450.00 L.F.
C.R. 3 RELOC.	STA. 3+75.00 TO 9+87.00	612.00 L.F.
C.R. 57B RELOC.	STA. 113+75.00 TO 124+87.00	1112.00 L.F.
C.R. 554 CONN.	STA. 125+18.00 TO 129+75.00	457.00 L.F.
C.R. 2-33 CONN.	STA. 38+50.00 TO 93+00.00	5450.00 L.F.
C.R. 2-34 CONN.	STA. 4+00.00 TO 13+50.00	950.00 L.F.
C.R. 34 CONN.	STA. 9+00.00 TO 9+90.00	90.00 L.F.
C.R. 33 RELOC.	STA. 10+10.00 TO 22+00.00	1190.00 L.F.
C.R. 57B CONN.	STA. 10+87.00 TO 12+50.00	163.00 L.F.

LENGTH OF WORK

36,752.64 L.F.
OR 6.961 Mi.

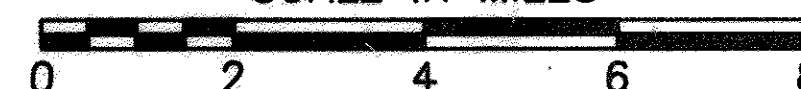
Project: GALLIA COUNTY GAL-35-3.79
Date of Letting 19 Contract No.

SEAL



LOCATION MAP

SCALE IN MILES



Portion to be Improved
State & Federal Routes
County Roads
Township Roads
Interchange

SCALES

Plan: 0 50 100

Cross Section: Horizontal 0 10 20 Vertical 0 10 20

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-3	12-6-76	F-3	5-1-76	MC-1	6-13-69	HL-10.11	5-1-87	HL-60.12	5-1-87	TC-72.20	2-26-82
BP-4	10-1-87	F-4	11-10-83	MC-4	7-26-76	HL-10.12	5-1-87	HL-60.31	5-1-87	AS-1-81	11-27-81
BP-6	10-1-87	F-5	5-1-76	MC-10	5-1-76	HL-10.13	5-1-87	TC-35.10	8-29-84	BR-1	5-29-79
BP-7	10-1-87	F-6	5-1-76	MC-11	8-1-78	HL-20.11	5-1-87	TC-41.10	8-29-84	CPA-2.13	4-10-73
BP-5	10-1-87	GR-1	1-11-85	MC-5	6-12-75	HL-20.14	5-1-87	TC-41.20	3-26-79	CP-2.13	4-10-73
BP-2	1-11-85	GR-2B	2-5-82	MC-12	12-18-84	HL-20.15	5-1-87	TC-41.50	3-26-79	CS-2.13	4-10-73
CB-2-2A&B	5-1-79	GR-3	1-21-85	MH-1	6-12-75	HL-30.21	5-1-87	TC-42.10	8-19-77	FB-1-82	5-10-82
CB-4	11-10-83	GR-4	2-5-82	MC-8	6-12-75	HL-30.22	5-1-87	TC-42.20	3-26-79	SD-1-69	6-12-69
CB-5	11-10-83	GR-4A	1-30-84	MH-3	12-18-84	HL-30.31	5-1-87	TC-51.10	1-20-84	ICD-1-82	8-1-84
CB-458-A	5-1-79	GR-5	2-5-82	MH-5	6-12-75	HL-40.10	5-1-87	TC-51.11	1-20-84		
CB-3	5-1-79	GR-6	2-5-82	MH-2	6-12-75	HL-50.11	5-1-87	TC-52.10	4-3-79		
F-1	11-10-83	GR-2C	2-5-82	LA-1	6-1-79	HL-50.21	5-1-87	TC-52.20	4-3-79		
F-2	5-1-76	HW-4A	4-1-80			HL-60.11	5-1-87	TC-61.10	4-5-82		
		HW-4B	4-1-80					TC-71.10	4-9-79		

SPECIAL PROVISIONS

REINFORCED EARTH WALLS
DATED 2-7-90
ENGINEERED FILL
DATED 2-7-90

REVISED 2-14-90

SCHEMATIC PLAN

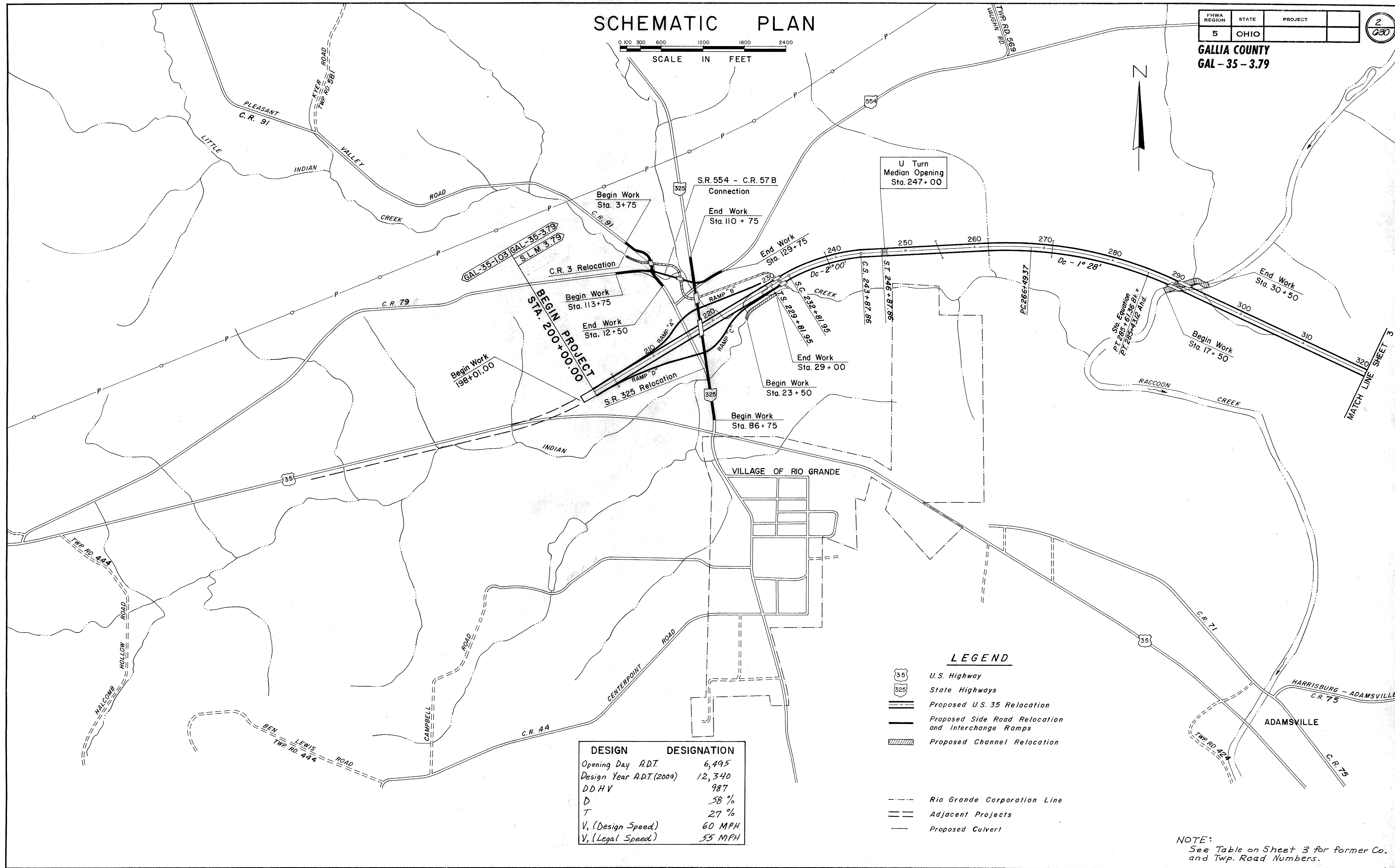
0 100 300 600 1200 1800 2400

SCALE IN FEET

FHWA REGION	STATE	PROJECT
5	OHIO	

GALLIA COUNTY
GAL - 35 - 3.79

2
230



DESIGN	DESIGNATION
Opening Day A.D.T.	6,495
Design Year A.D.T.(2009)	12,340
DDHV	987
D	58 %
T	27 %
V _d (Design Speed)	60 MPH
V _l (Legal Speed)	55 MPH

LEGEND



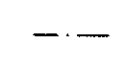
U.S. Highway

State Highways

Proposed U.S. 35 Relocation

Proposed Side Road Relocation and Interchange Ramps

Proposed Channel Relocation



Rio Grande Corporation Line

Adjacent Projects

Proposed Culvert

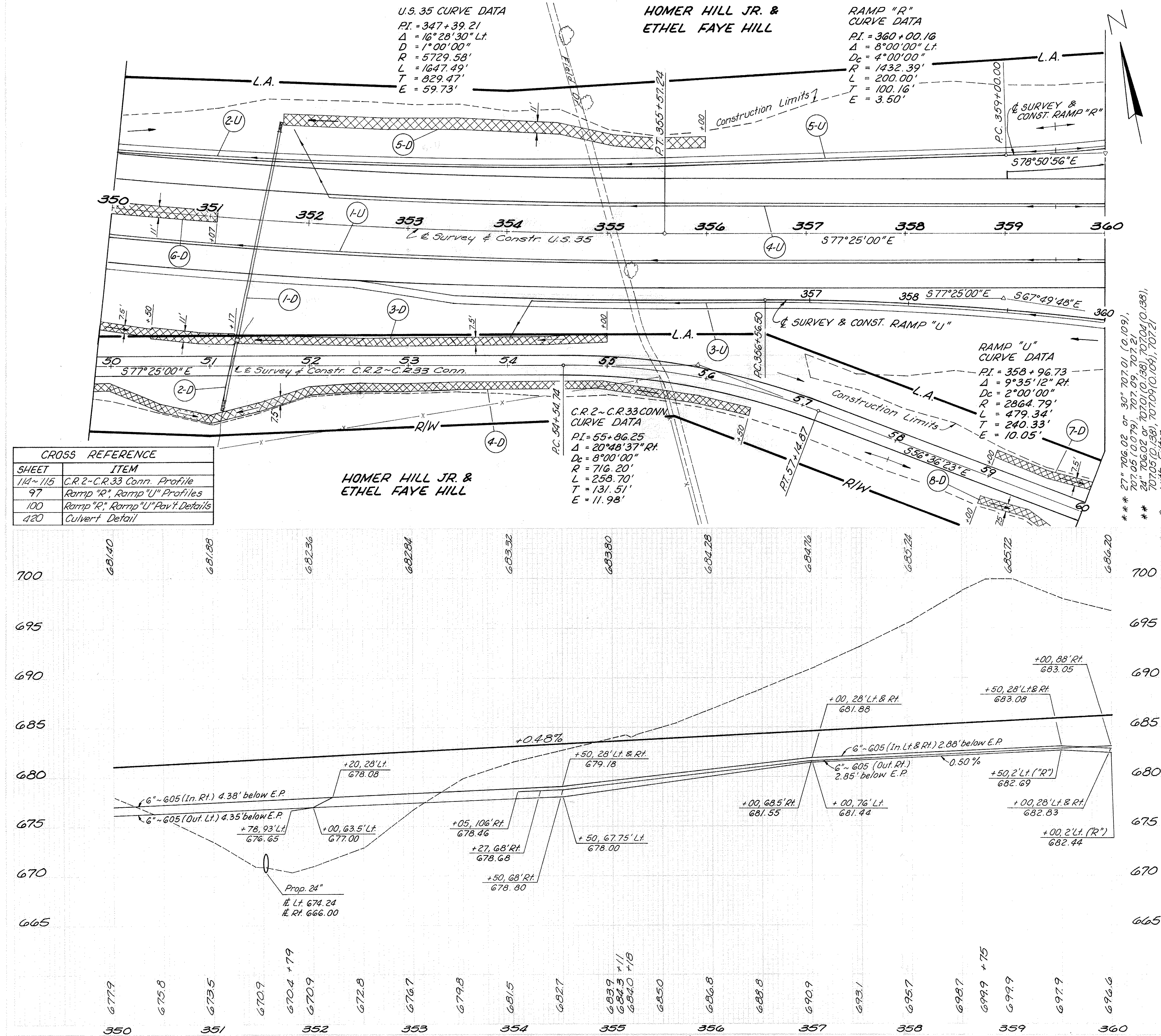
NOTE:
See Table on Sheet 3 for former Co.
and Twp. Road Numbers.

A graphic scale bar labeled "SCALE IN FEET" with markings at 0, 100, 300, 600, 1200, 1800, and 2400 feet.

GALLIA COUNTY
GAL - 35 - 3.79

3
630





GALLIA COUNTY
 GAL - 35 - 3.79

670
 Ditch
 Erosion
 Prof.
 S.Y.

Bends
 &
 Brn.
 Ea.

Unclassified
 Pipe
 Under
 L.F.

No.
 5-A
 C.B.
 Ea.

Type
 "A"
 "B"
 "C"
 L.F.

Concrete
 Type
 "A"
 "B"
 "C"
 L.F.

Rock
 Charn.
 Type
 "A"
 "B"
 "C"
 L.F.

Riprap
 Type
 "A"
 "B"
 "C"
 L.F.

S.Y.

601

602

603

604

605

606

607

420

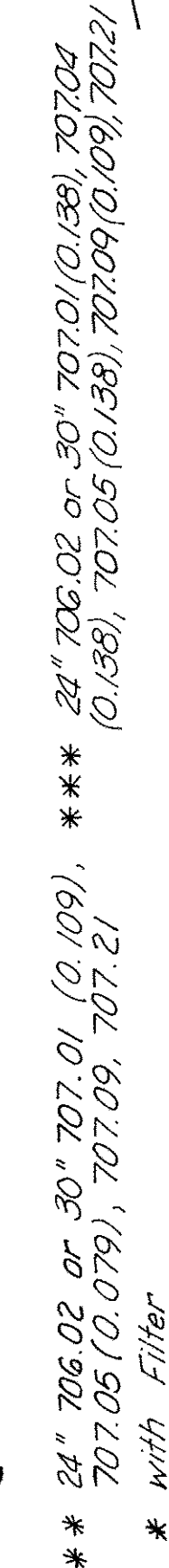
474
 554
 533
 131
 84
 84

300 700
 196
 315 300
 300 480
 575 250

1-D 351+52 L&R
 2-D 51+21, C.R.2~33 L&R
 3-D 350+00 to 355+00 R
 4-D 49+85 to 56+50, C.R.2~33 L
 5-D 351+64 to 356+00 L
 6-D 350+00 to 351+07 L
 7-D 59+00 to 60+00, C.R.2~33 L
 8-D 59+00 to 60+00, C.R.2~33 R

1-U 350+00 to 360+00 R
 2-U 350+00 to 351+96 L
 3-U 354+05 to 360+00 R
 4-U 352+00 to 360+00 L
 5-U 351+78 to 360+00 L

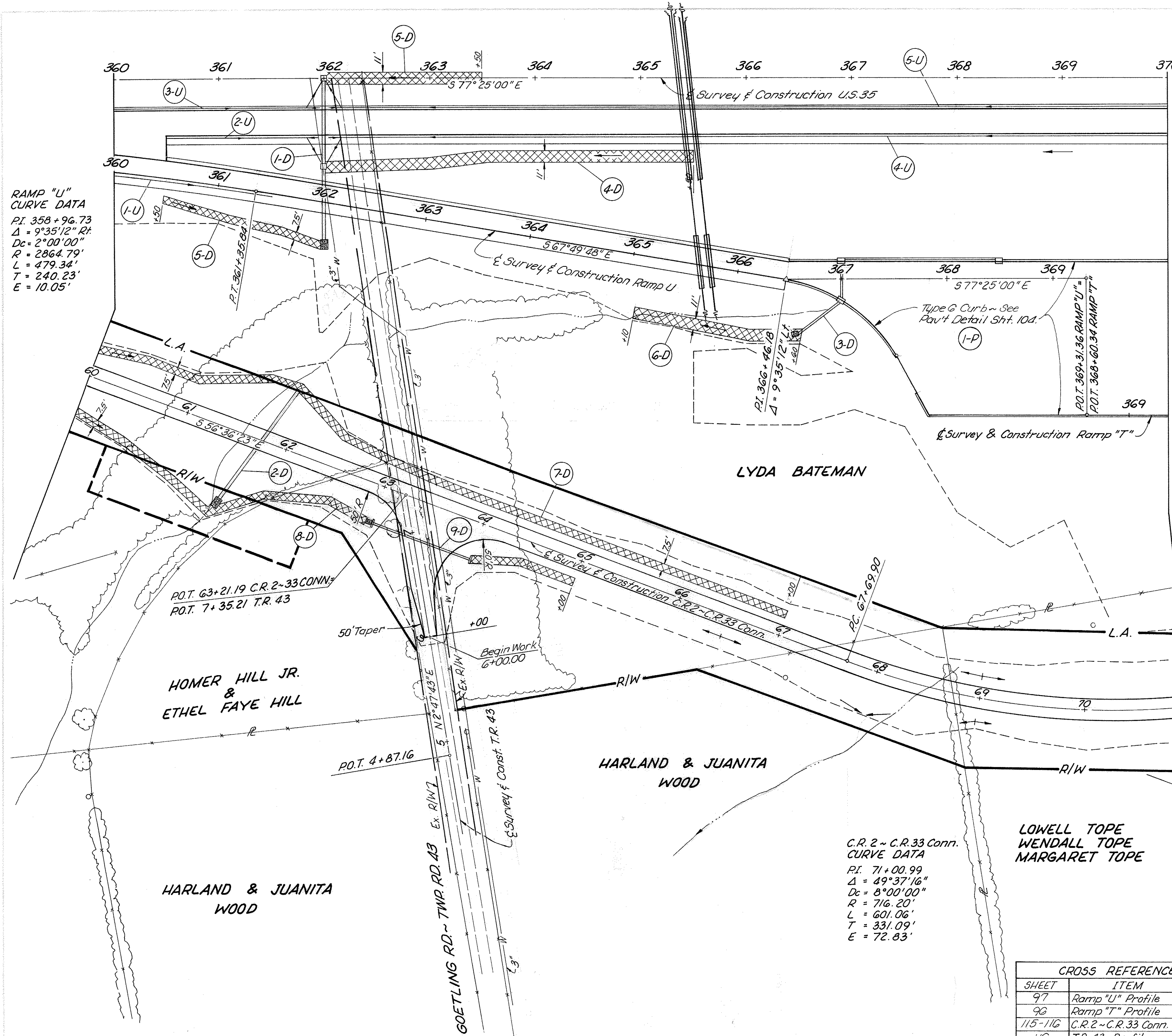
350+00 to 360+00



	71.6	1.1	0.74	82	82	193	44	/	3	
1-D	362 + 00	Lt								421
2-D	365 + 00	Lt								250
3-D	361 + 00 to 366 + 75	Lt								
4-D	361 + 00 to 365 + 35 Ramp R*	Lt								485
5-D	362 + 40 to 364 + 10 Ramp R*	Rt								142
6-D	362 + 00 to 364 + 00	Lt								245
7-D	362 + 00 to 363 + 50	Rt								184

[illegible]

RAMP "U"
 CURVE DATA
 P.I. 358+96.73
 $\Delta = 9^{\circ}35'12''$ Rt
 $D_c = 2^{\circ}00'00''$
 $R = 2864.79'$
 $L = 479.34'$
 $T = 240.23'$
 $E = 10.05'$



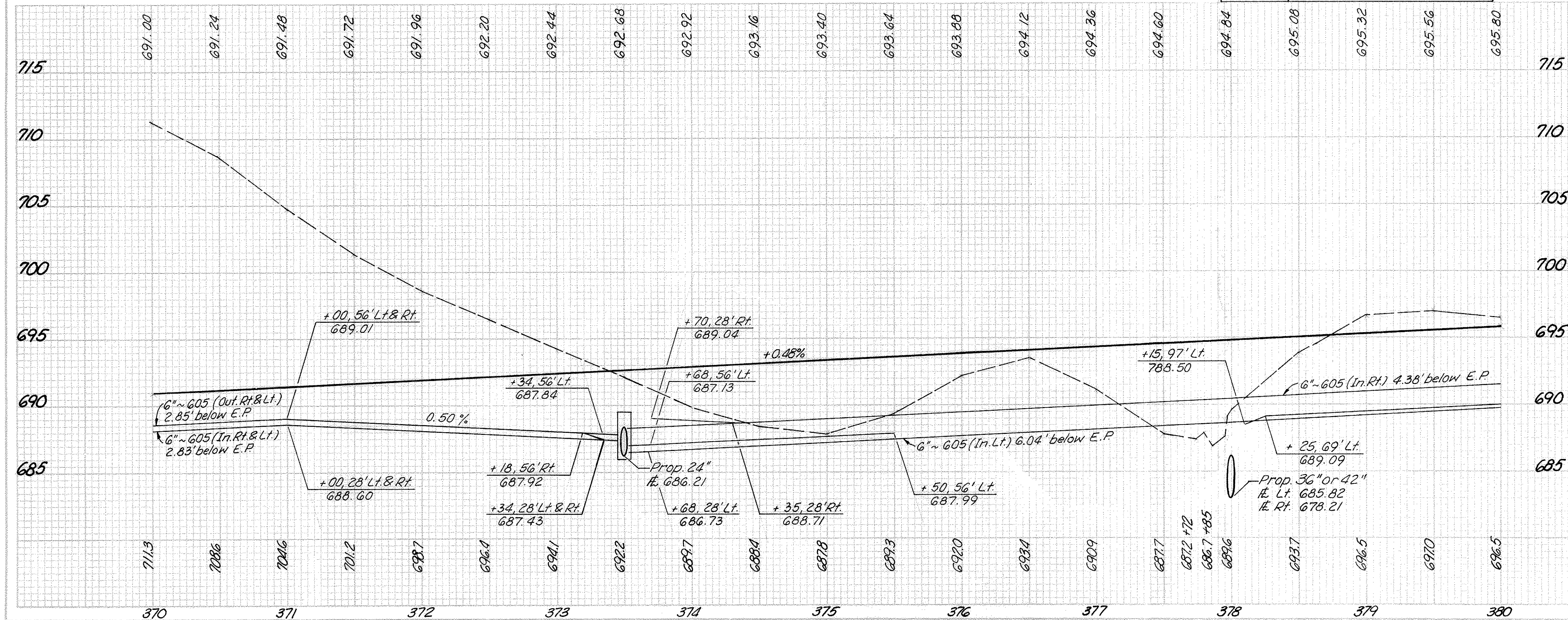
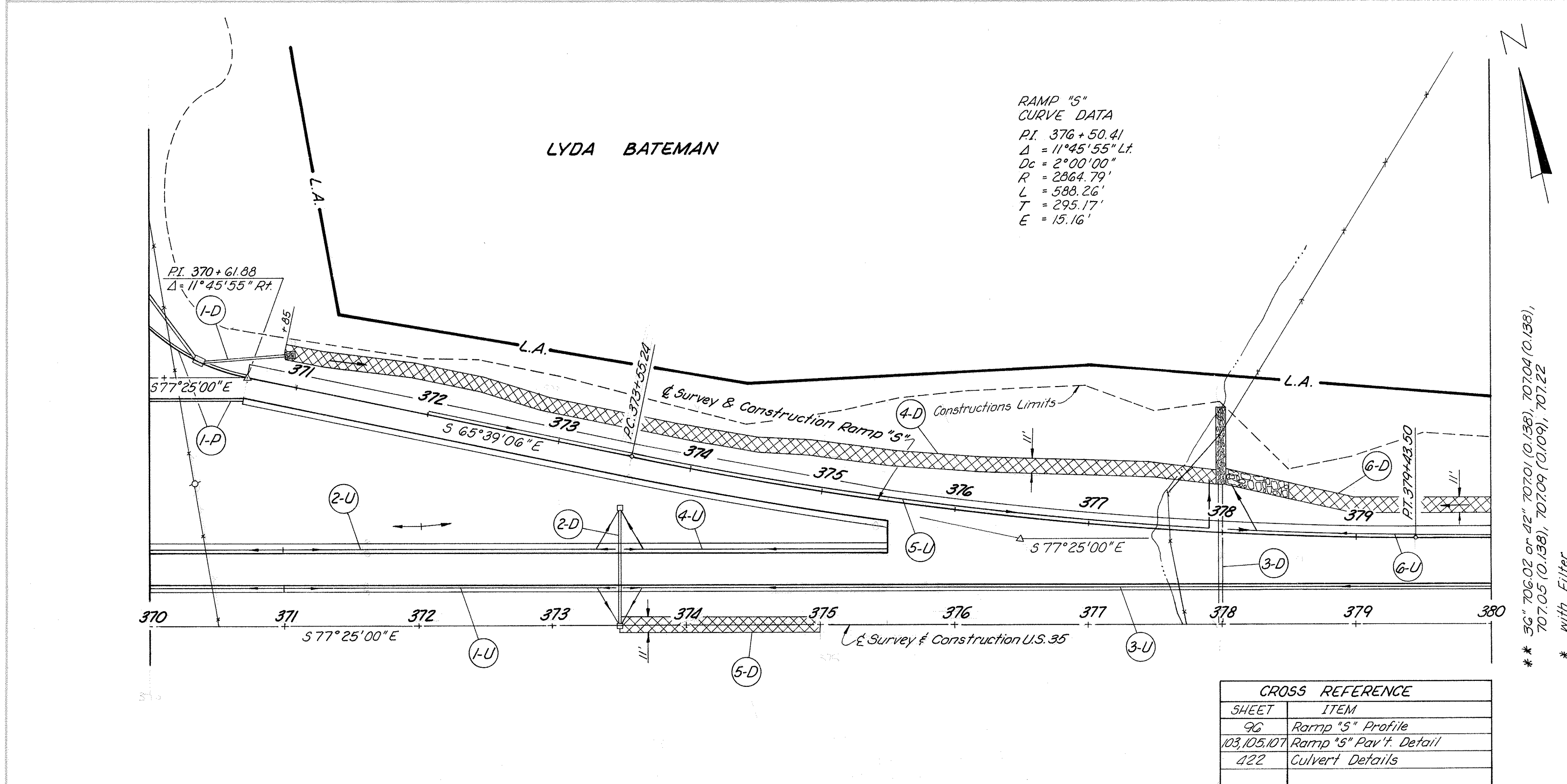
C.R. 2 ~ C.R. 33 Conn.
 CURVE DATA
 P.I. 71+00.99
 $\Delta = 49^{\circ}37'16''$
 $D_c = 8^{\circ}00'00''$
 $R = 716.20'$
 $L = 601.06'$
 $T = 331.09'$
 $E = 72.83'$

LOWELL TOPE
 WENDALL TOPE
 MARGARET TOPE

CROSS REFERENCE	
SHEET	ITEM
97	Ramp "U" Profile
98	Ramp "T" Profile
115-116	C.R. 2 ~ C.R. 33 Conn. Profile
116	T.R. 43 Profile
100, 102, 104	Pav't Details Ramps "T" & "U"
117	Pav't Det. C.R. 2-33 & T.R. 43 Int.
421 & 427	Culvert Details
428A-D	Casement Detail

30" 706.02 or 36" 707.01 (0.109), 707.05 (0.079), 707.09, 707.21
 27" 706.02 or 33" 707.01 (0.109), 707.05 (0.079), 707.09, 707.21
 24" 706.02 or 30" 707.01 (0.138), 707.04 (0.138), 707.09 (0.109), 707.21
 * with Filter

ITEM NO.	QTY	UNIT	ESTIMATED QUANTITIES									
			601	602	603	Type "A"	Type "B"	Type "C"	Type "D"	Type "E"	Type "F"	Type "G"
1-D	362+00	Rt										
2-D	61+75, C.R. 2-33 Conn.	L & R										
3-D	366+50 to 368+50	Rt										
4-D	362+00 to 365+50	Rt										
5-D	360+50 to 362+10 Ramp "U"	Rt										
6-D	365+10 to 366+60 Ramp "U"	Rt										
7-D	60+00 to 67+00 C.R. 2-33	Lt										
8-D	60+00 to 65+00 C.R. 2-33	Rt										
9-D	63+00 to 64+00 C.R. 2-33	Rt										
1-P	366+37 to 370+00	Rt										
1-U	360+00 to 361+50 ("U")	Rt										
2-U	360+50 to 362+00	Rt										
3-U	360+00 to 362+00	Rt										
4-U	362+00 to 370+00	Rt										
5-U	362+00 to 370+00	Rt										



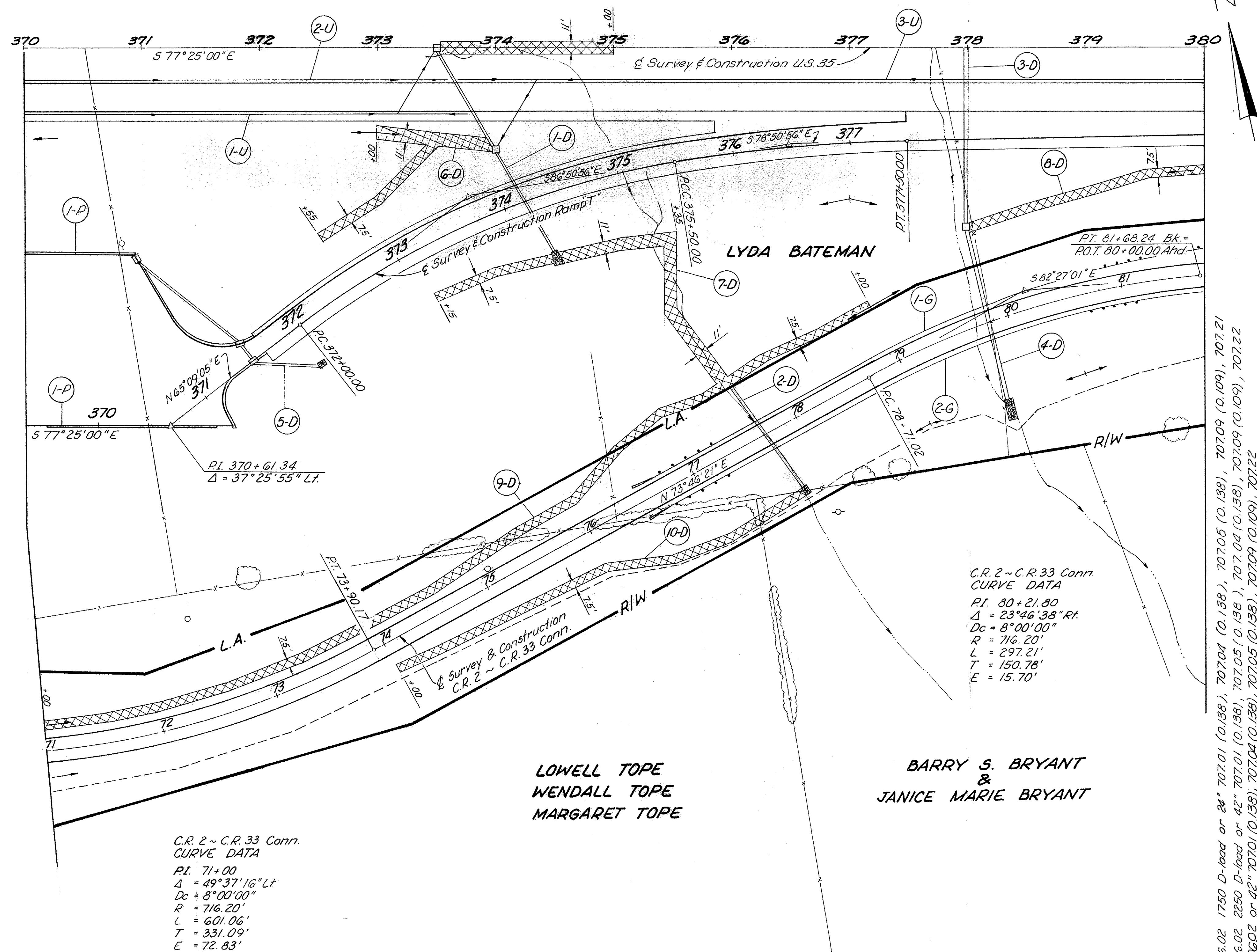
GALLIA COUNTY
GAL-35-3.79

PRD. POL. DIVISION	STATE	PROJECT	
2	OHIO		

68
630

REF. NO.	STATION TO STATION	SIDE	UNITS	601	602	603	604	605	609	670
				Rock Chann. Type C*	Corc. Mesory *	Type "A" *	No. 5" C.B. Ea.	No. 6" Uncas Shallow Pipe Ea.	Type Curb L.F.	Ditch Erosion Protec. S.Y.
I-D	369+40 to 371+00	Lt								
2-D	373+50	Lt								
3-D	370+00 to 373+50	Lt								
4-D	370+85 to 378+00 Ramp "S"	Lt								
5-D	373+50 to 375+00	Lt								
6-D	378+00 to 380+00	Lt								
I-P	370+00 to 370+20	Lt								
I-U	370+00 to 373+50	Lt								
2-U	370+00 to 373+50	Lt								
3-U	373+50 to 380+00	Lt								
4-U	373+50 to 375+00	Lt								
5-U	372+00 (5') to 377+90	Lt								
6-U	378+04 to 380+00	Lt								
TOTALS to General Summary				44.3	26.1	1.50	105	47	149	1,242

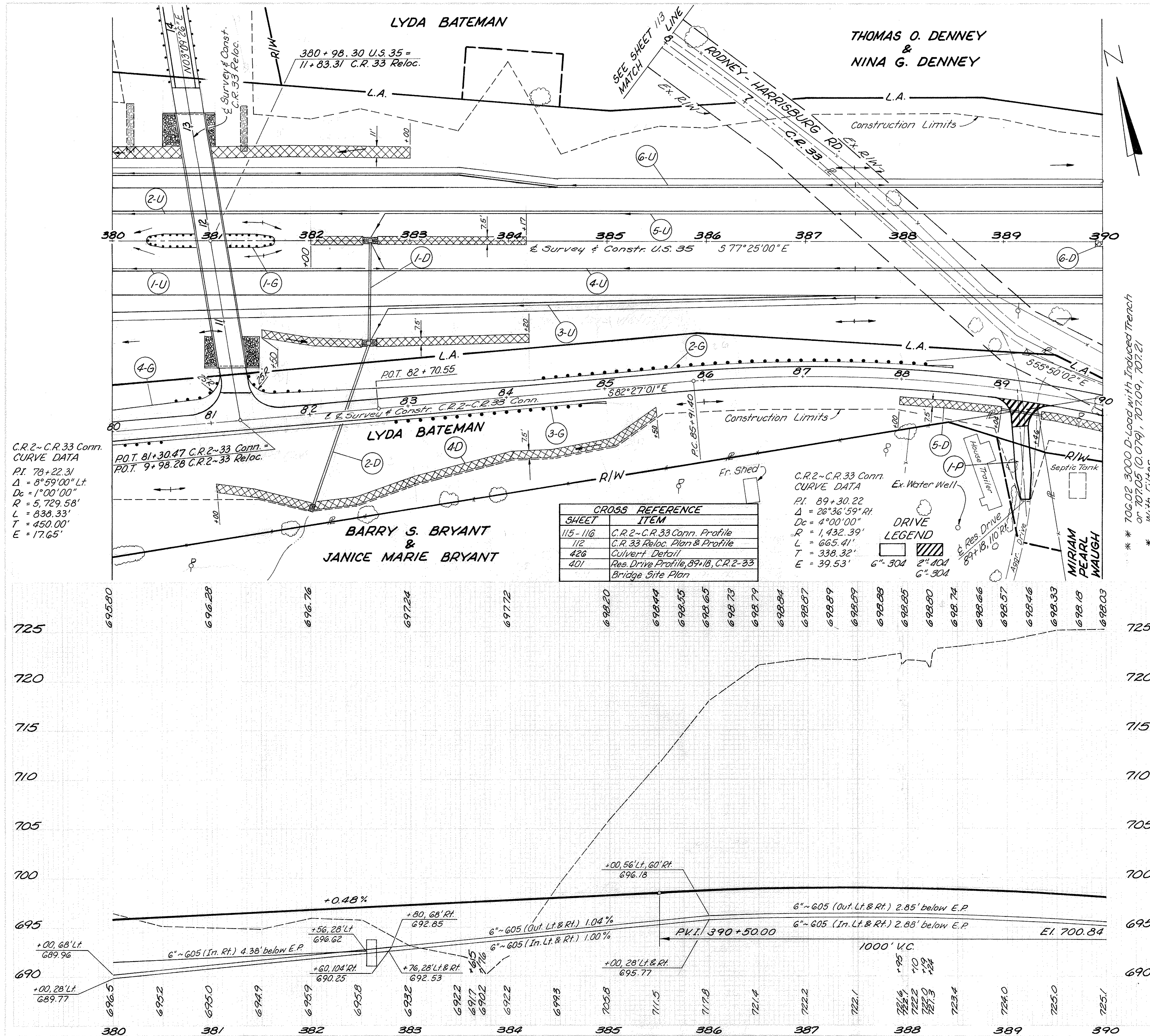
370+00 to 380+00 LT.



CROSS REFERENCES	
SHEET	ITEM
97	Ramp "T" Profile
115	C.R. 2 ~ C.R. 33 Conn. Profile
104, 106, 107	Ramp "T" Pavement Detail
422	Culvert Details

- ① 21" 706.02 1750 D-load or 24" 707.01 (0.138), 707.04 (0.138), 707.05 (0.138), 707.09 (0.109), 707.21
 ② 36" 706.02 2250 D-load or 42" 707.01 (0.138), 707.05 (0.138), 707.09 (0.109), 707.21
 ** 36" 706.02 or 42" 707.01 (0.138), 707.04 (0.138), 707.05 (0.138), 707.09 (0.109), 707.21
 * with Filter

ITEM	G05		G01		G02		G03			G04				G06		G09		G70																								
	6" Unclas. Type L.F.	Shallow Underdr. L.F.	Bends & Pipewr. Bran. Ea.	Riprap S.Y.	Rock Chann. Type B* C.Y.	Rock Chann. Type C* Masonry ** C.Y.	Type A" L.F.	Type A" L.F.	Type A" L.F.	Type "g" 12" L.F.	Type "g" 24" L.F.	Type "F" 6" L.F.	Type "F" 8" L.F.	Type C 5-A Ea.	Type 12" C.B. Ea.	No. 4-A C.B. Ea.	Guard Rail Type 4 L.F.	Anchor Assembly Type A Ea.	Type 6 Curb L.F.	Ditch Erosion Prot. S.Y.																						
1-D 373+50 to 374+50 Rt					8.0	0.46			199					1																												
2-D 77+70 C.R.2~33 Conn. Lt.R					4.7	0.78		105																																		
3-D 378+00 Rt																																										
4-D 79+83 C.R.2~33 Conn. Lt.R								152																																		
5-D 370+93 to 372+50 Rt				3.9	10.1	1.1	1.84	151																																		
6-D 372+55 to 374+10 Ramp T Lt							0.21		22					168		3				231																						
7-D 373+15 to 375+35 Ramp T Rt																				385																						
8-D 378+00 to 380+00 Rt																				167																						
9-D 71+00 to 79+00 C.R.2~33 Lt																				667																						
10-D 74+00 to 77+75 C.R.2~33 Rt																				313																						
1-P 370+00 to 372+07 Rt																			454																							
1-G 76+50 to 81+68 C.R.2~33 Lt																	493																									
2-G 76+50 to 81+68 C.R.2~33 Rt																	493																									
1-U 370+00 to 373+76 Rt	276	100	/																																							
2-U 370+00 to 373+60 Rt	282	100	/																																							
3-U 373+70 to 380+00 Rt	67	565	/																																							
TOTALS to General Summary																					645	765	3.9	10.1	13.8	3.29	152	151	105	22	199	64	20	10	168	2	3	1	986	2	454	1,763



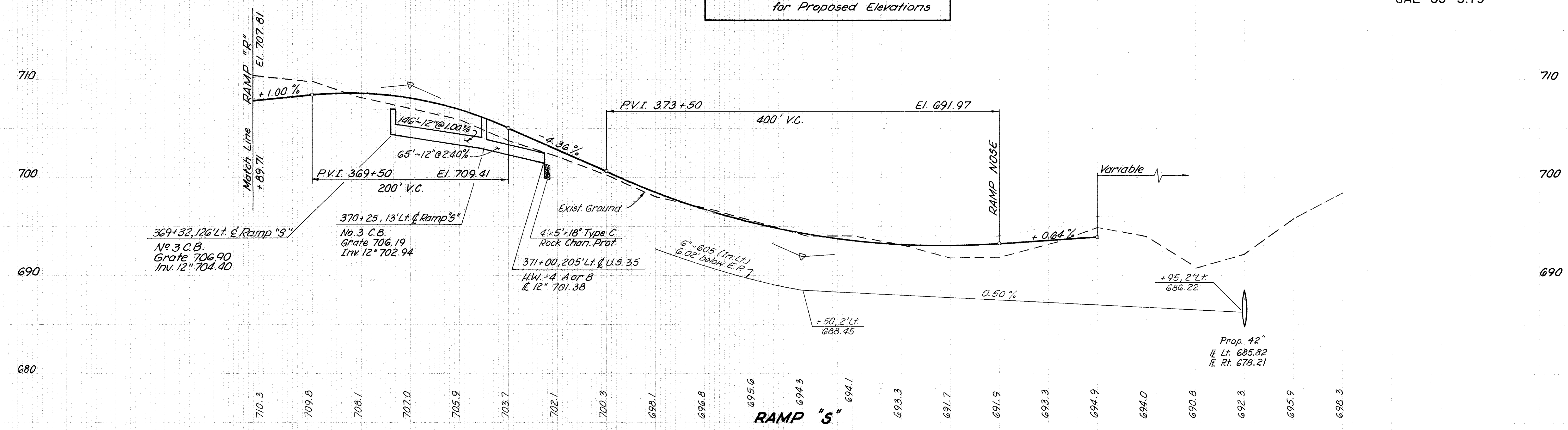
GALLIA COUNTY
 GAL-35-3.79

70
 030

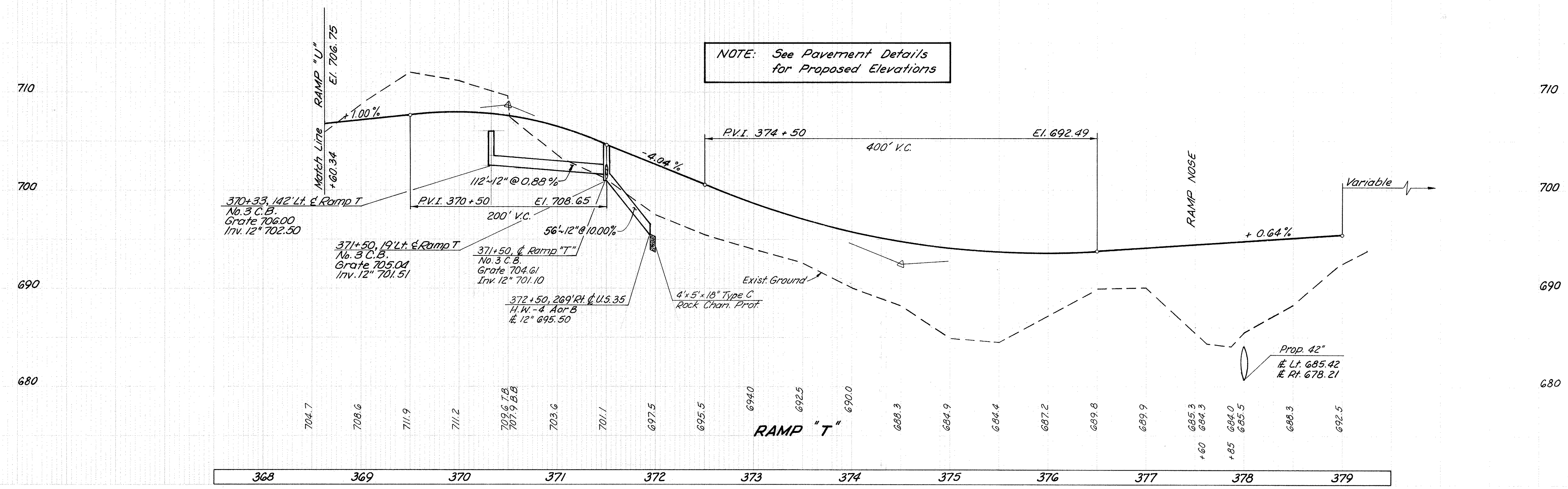
ITEM	QTY	UNIT	PRICE	TOTAL
1-P 89+18	1	Rt.	3269	3269
1-D 382+60 to 384+17	1	Rt.		
2-D 82+41 C.R.2-33	1	L&R		
3-D 380+00 to 383+00	1	Lt		
4-D 81+00 to 85+50 C.R.2-33	1	Rt		
5-D 88+00 to 90+06 C.R.2-33	1	Rt		
6-D 389+93 to 390+00	1	Q		
1-G 380+32 to 381+08	1	Q		
2-G 81+40 to 88+50 C.R.2-33	1	Lt		
3-G 80+00 to 85+00 C.R.2-33	1	Rt		
4-G 80+00 to 81+10 C.R.2-33	1	Lt		
1-U 380+00 to 382+56	1	Rt		
2-U 380+00 to 382+74	1	Lt		
3-U 382+60 to 390+00	1	Rt		
4-U 382+60 to 390+00	1	Rt		
5-U 382+60 to 390+00	1	Lt		
6-U 380+00 to 390+00	1	Lt		
601	1.8	C.Y.		
602	0.54	C.Y.		
603	97	L.F.		
604	1	Ea.		
605	256	Ea.		
606	1	Ea.		
607	1	Ea.		
608	1	Ea.		
609	1	Ea.		
610	1	Ea.		
611	1	Ea.		
612	1	Ea.		
613	1	Ea.		
614	1	Ea.		
615	1	Ea.		
616	1	Ea.		
617	1	Ea.		
618	1	Ea.		
619	1	Ea.		
620	1	Ea.		
621	1	Ea.		
622	1	Ea.		
623	1	Ea.		
624	1	Ea.		
625	1	Ea.		
626	1	Ea.		
627	1	Ea.		
628	1	Ea.		
629	1	Ea.		
630	1	Ea.		
631	1	Ea.		
632	1	Ea.		
633	1	Ea.		
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638	1	Ea.		
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642	1	Ea.		
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663	1	Ea.		
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666	1	Ea.		
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712	1	Ea.		
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716	1	Ea.		
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720	1	Ea.		
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380+00 to 390+00

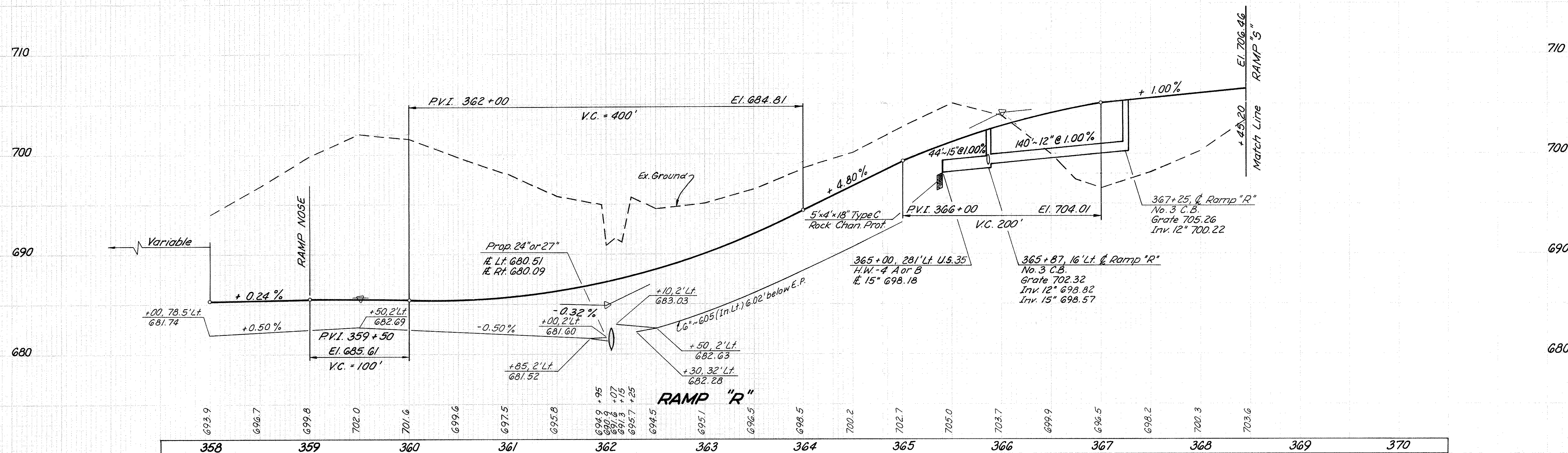
NOTE: See Pavement Details
for Proposed Elevations



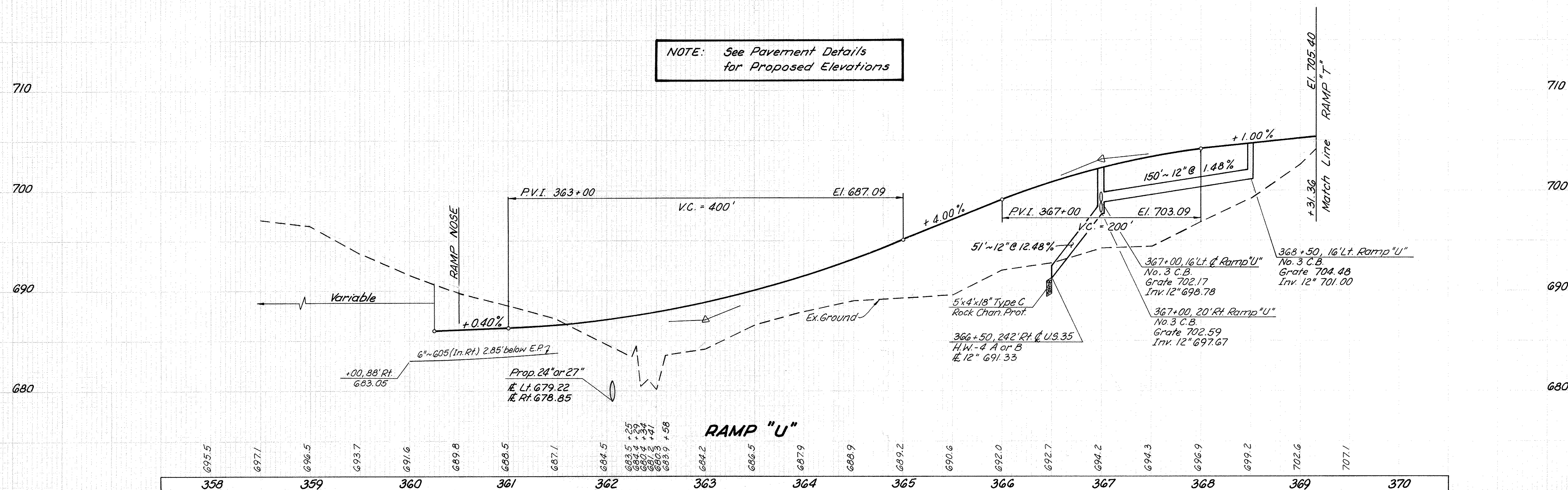
NOTE: See Pavement Details
for Proposed Elevations



NOTE: See Pavement Details
 for Proposed Elevations



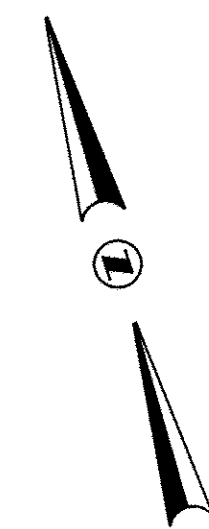
NOTE: See Pavement Details
 for Proposed Elevations



FHWA REGION	STATE	PROJECT
5	OHIO	

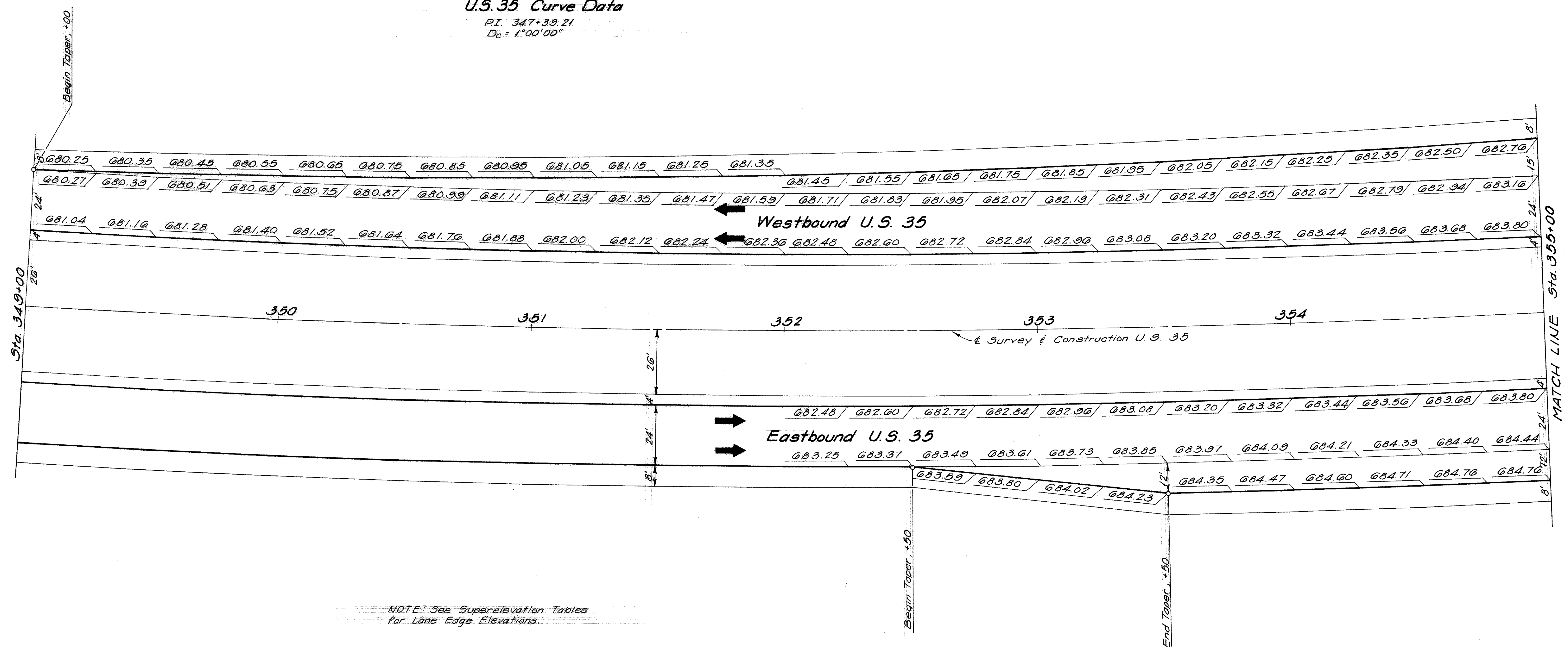
99
030

GALLIA COUNTY
GAL-35-3.79



U.S. 35 Curve Data

PI. 347+39.21
D_c = 1°00'00"



FHWA REGION	STATE	PROJECT	
5	OHIO		

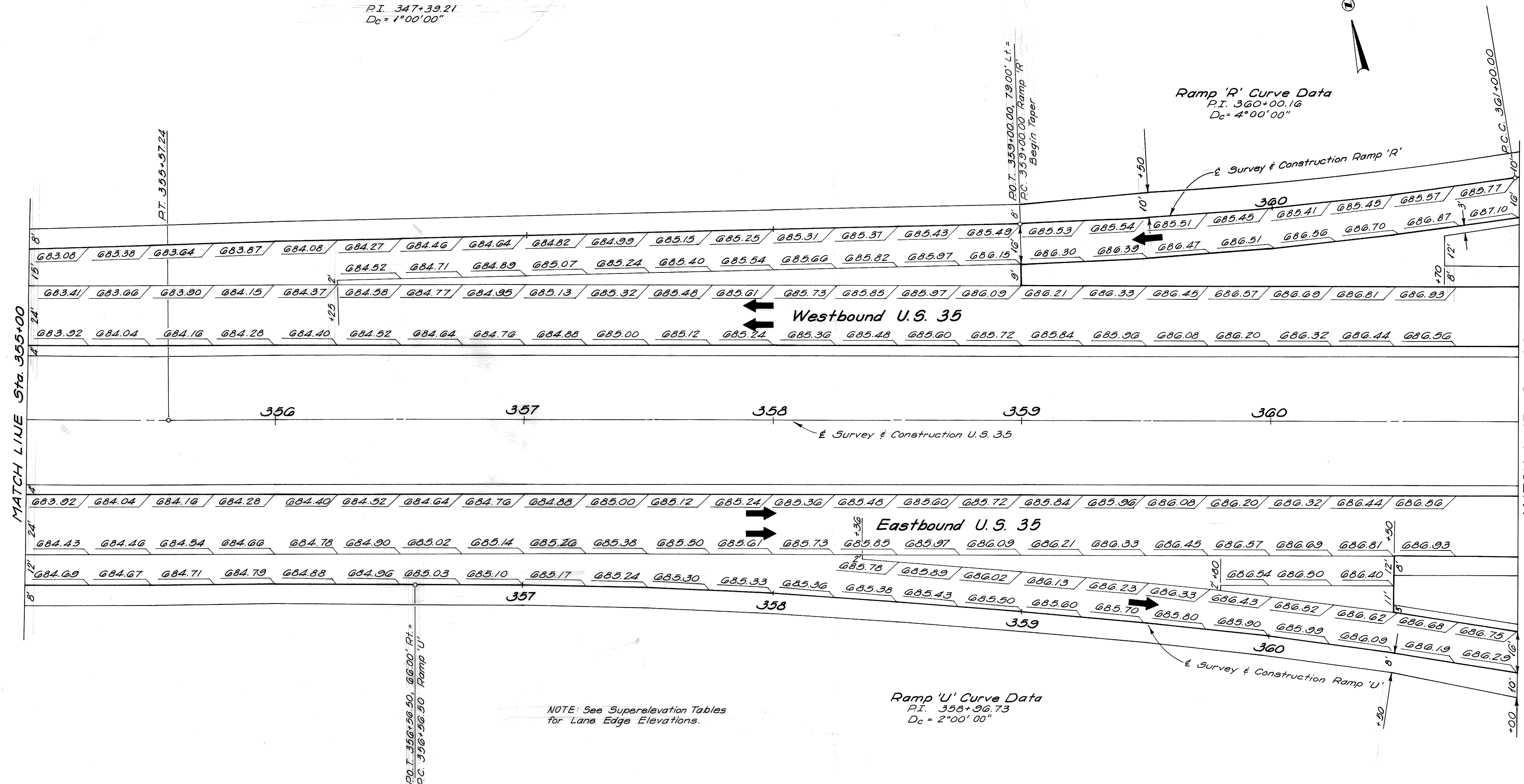
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630

GALLIA COUNTY
GAL-35-3.79

U.S. 35 Curve Data

P.I. 347+39.21
Dc = 1°00'00"

Ramp 'R' Curve Data
P.I. 360+00.16
Dc = 4°00'00"



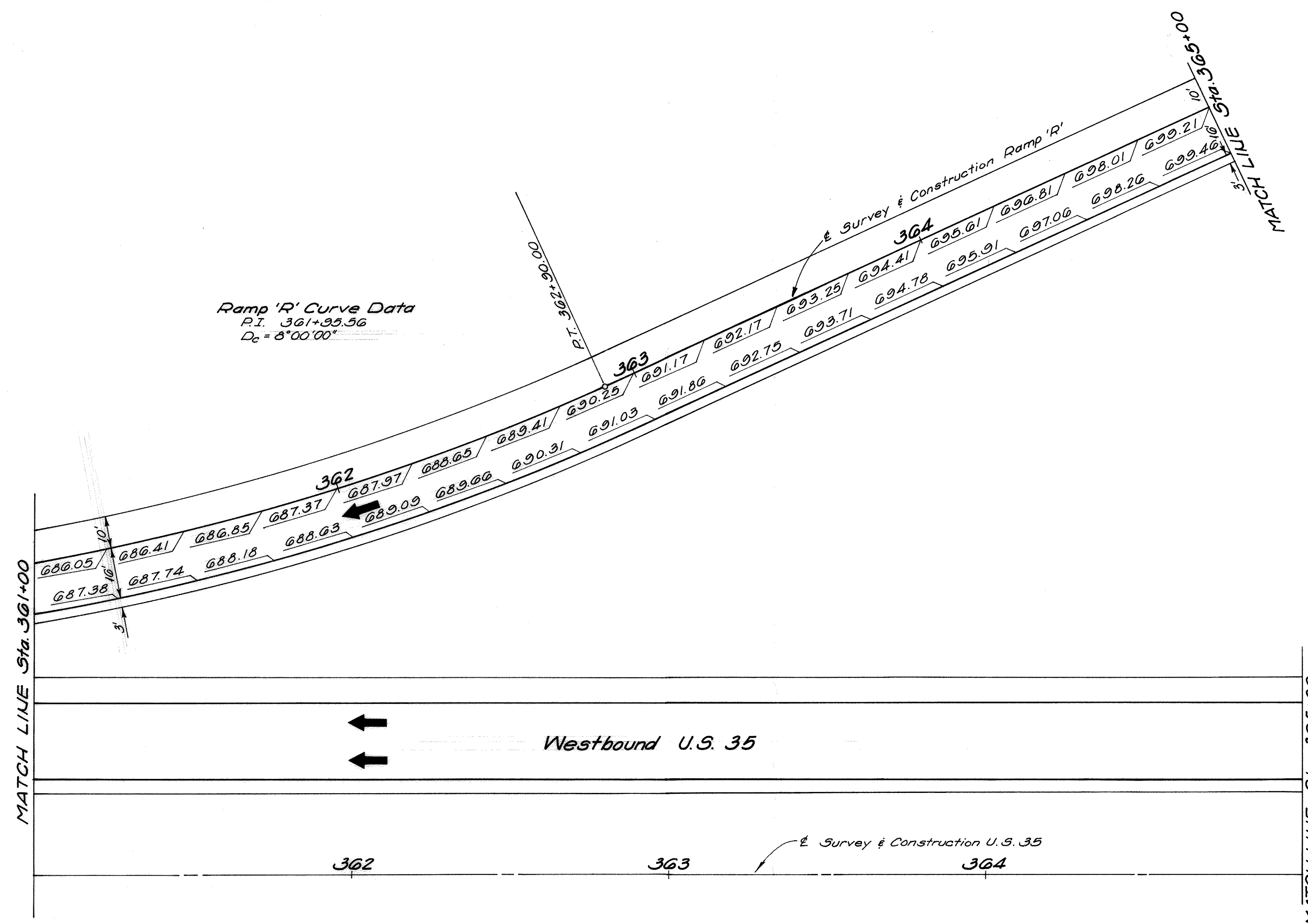
PAVEMENT DETAILS

355+00 to 361+00

FHWA REGION	STATE	PROJECT	
5	OHIO		

101
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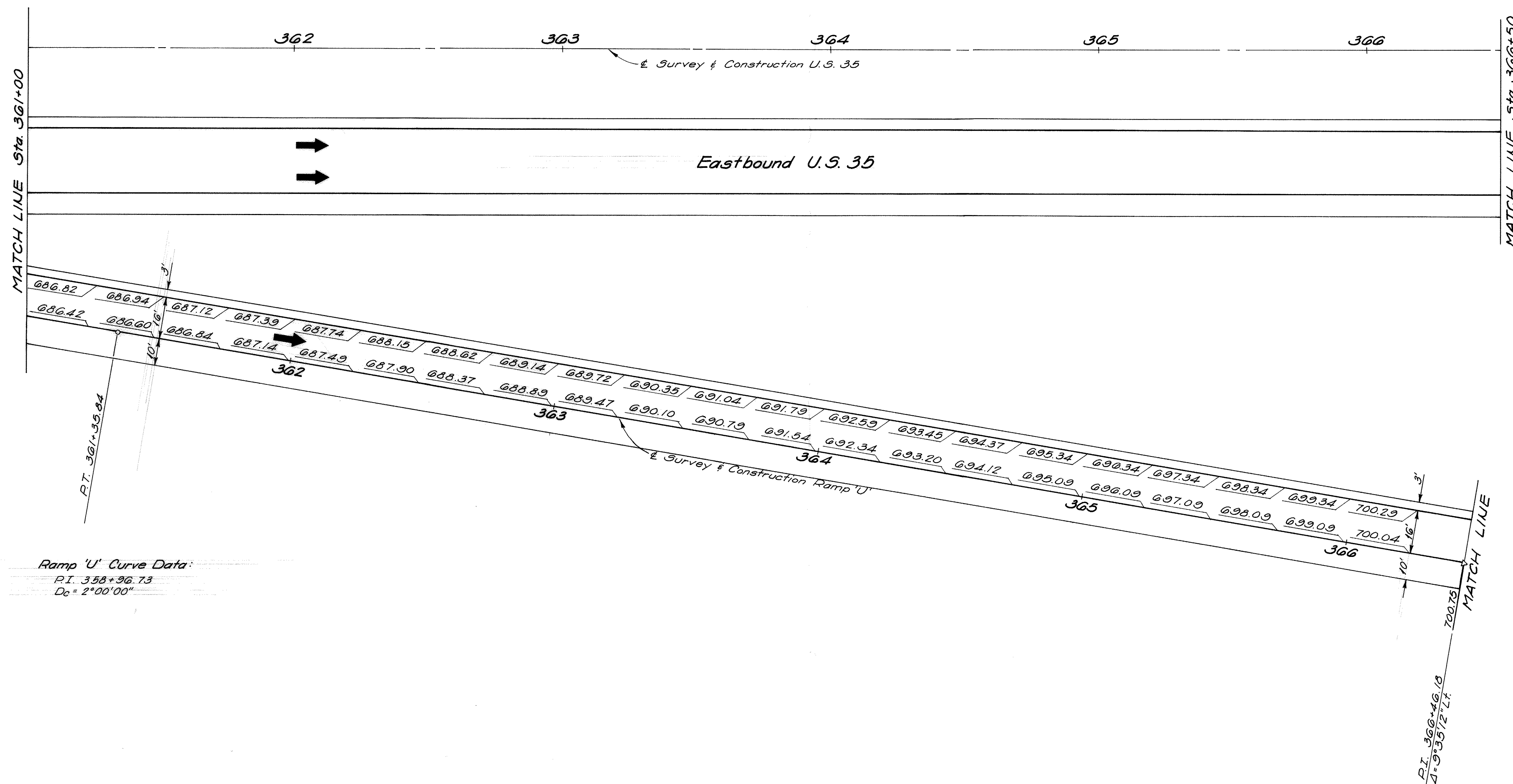
GALLIA COUNTY
GAL-35-3.79



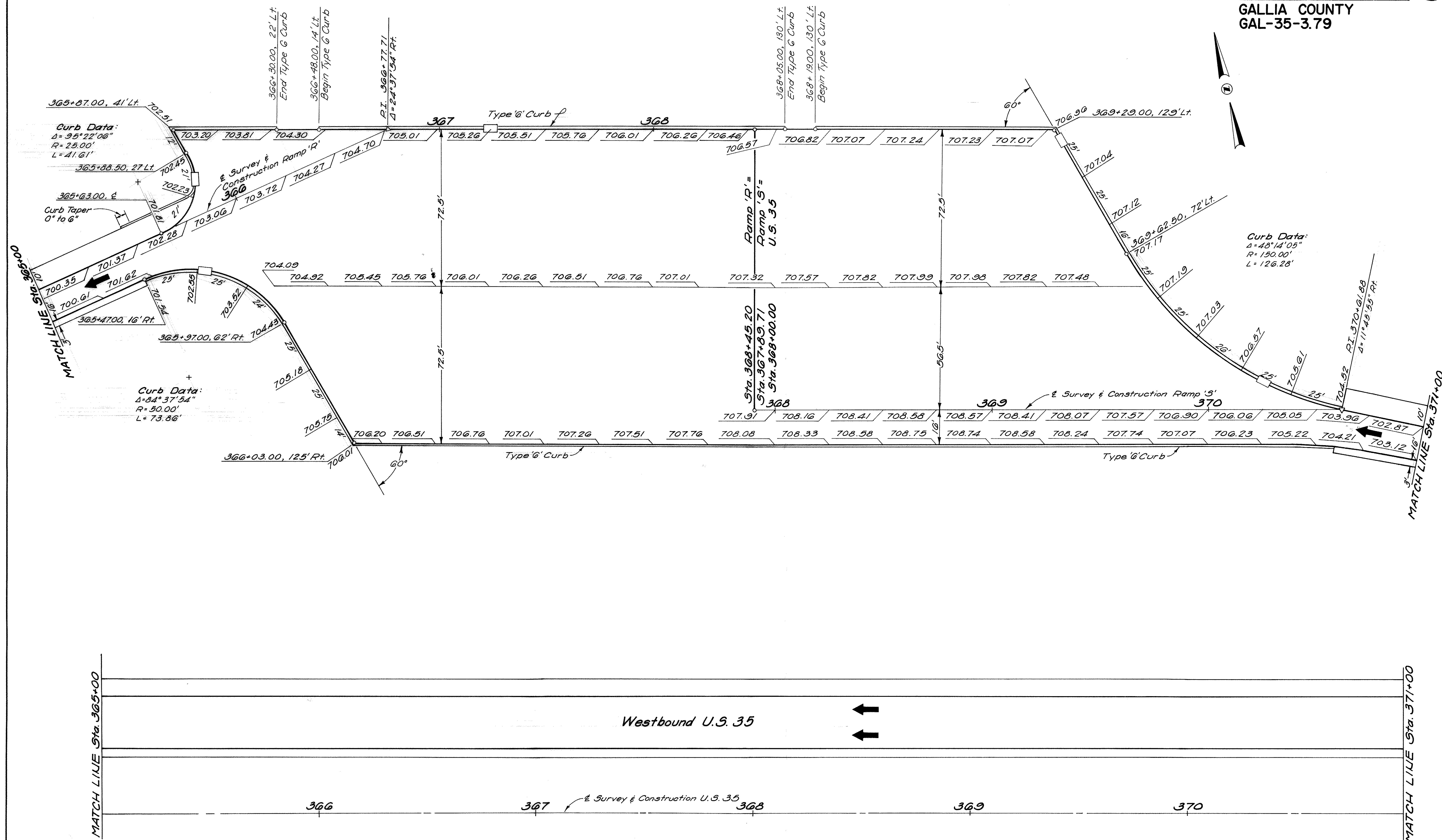
FHWA REGION	STATE	PROJECT	
5	OHIO		

102
630

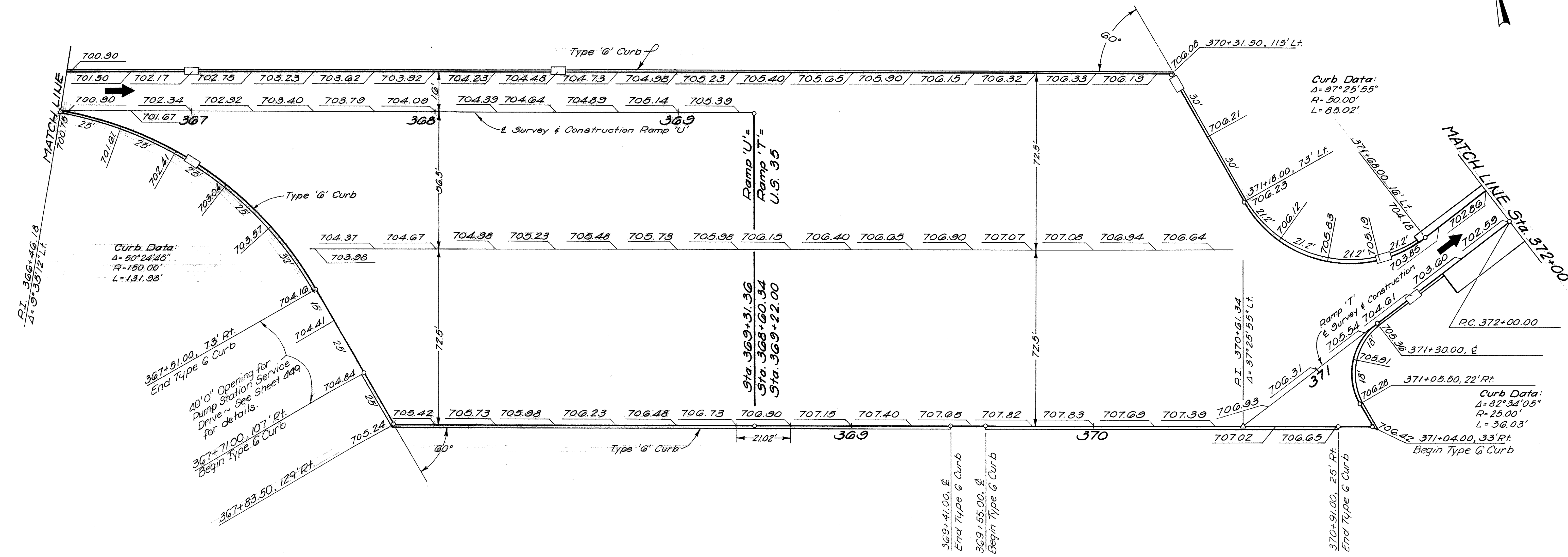
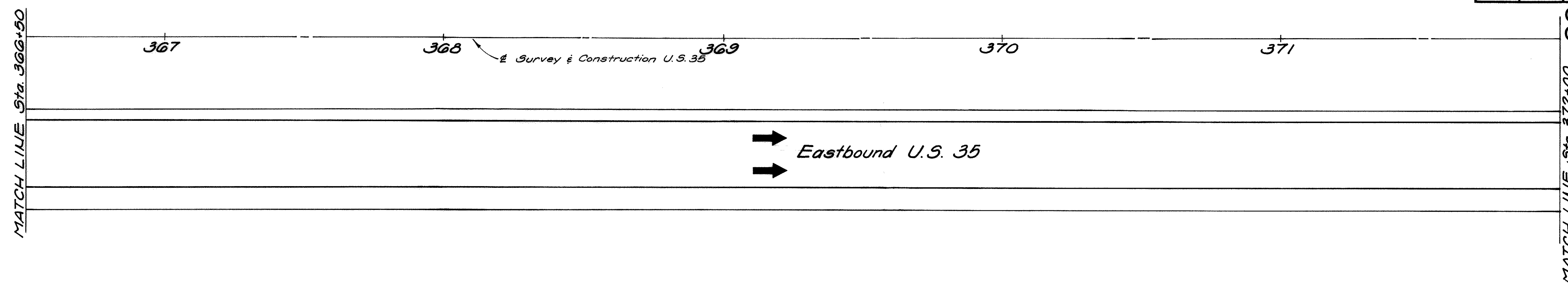
GALLIA COUNTY
GAL-35-3.79



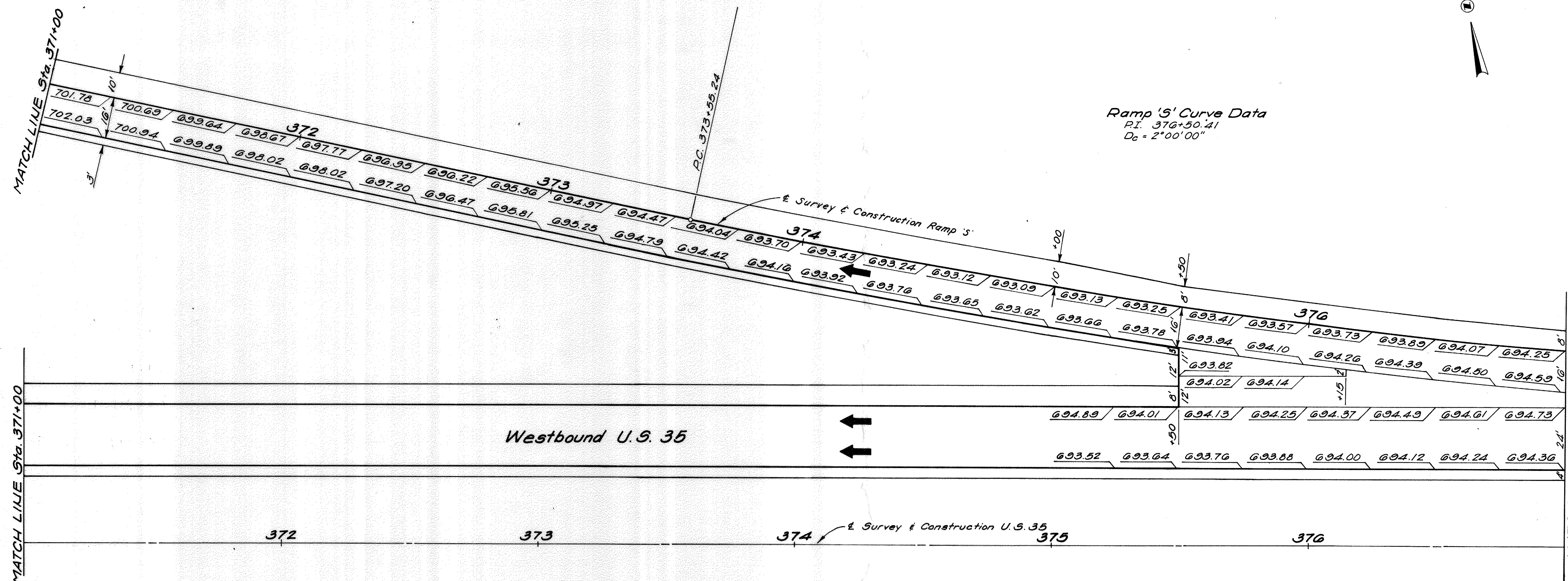
GALLIA COUNTY
GAL-35-3.79



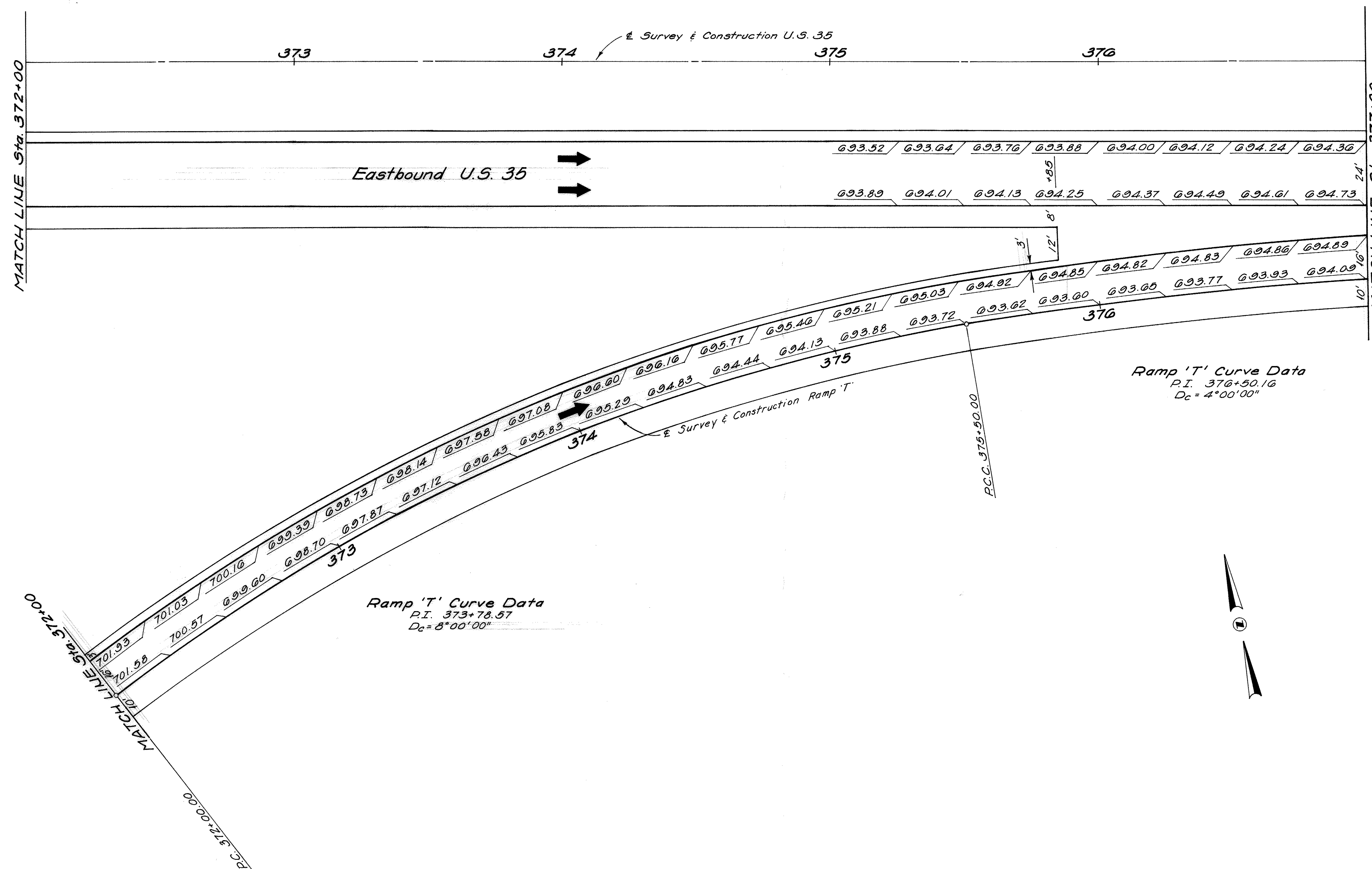
GALLIA COUNTY
GAL-35-3.79



GALLIA COUNTY
GAL-35-3.79



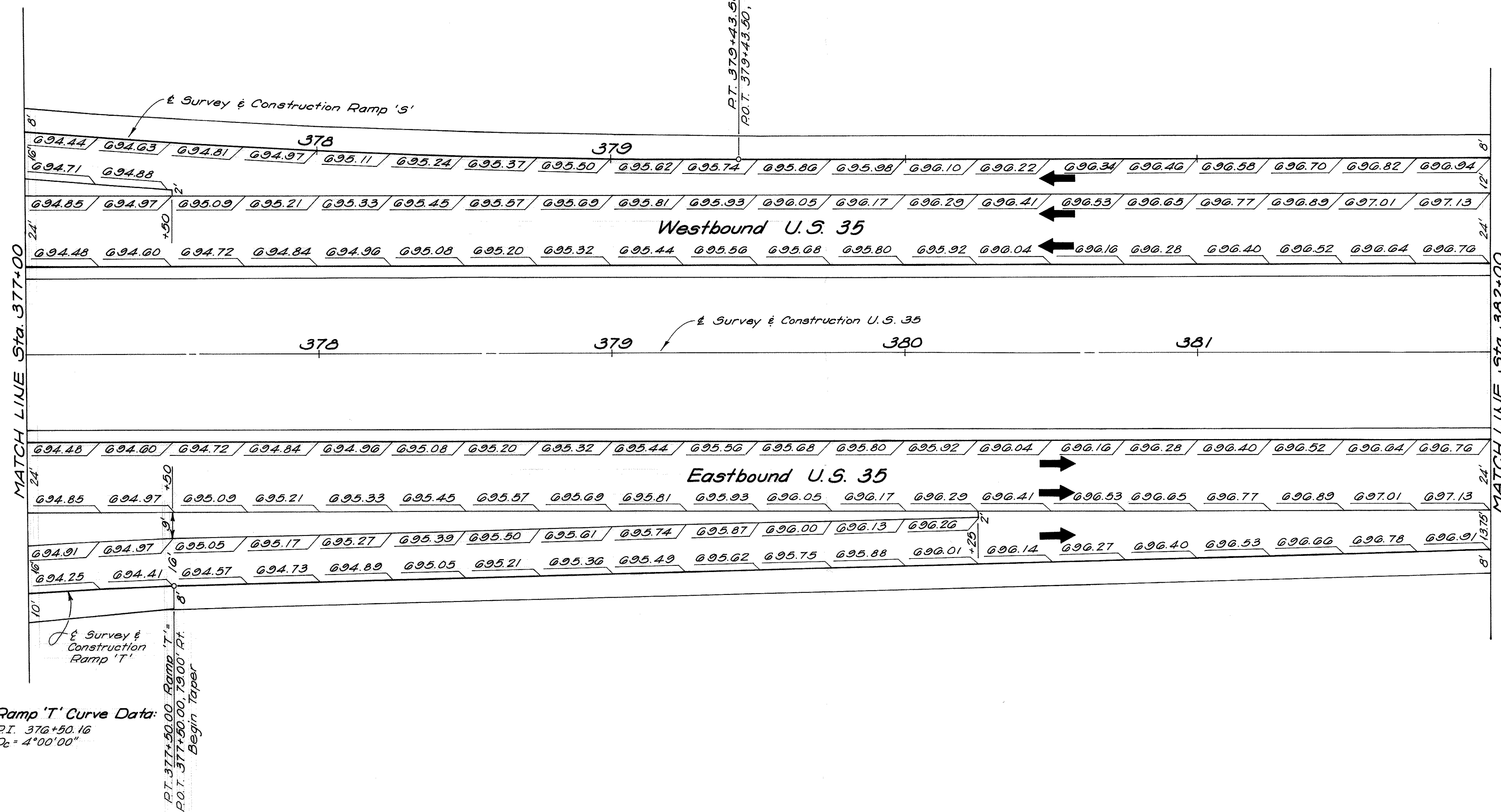
NOTE: See Superelevation Tables
for Lane Edge Elevations.



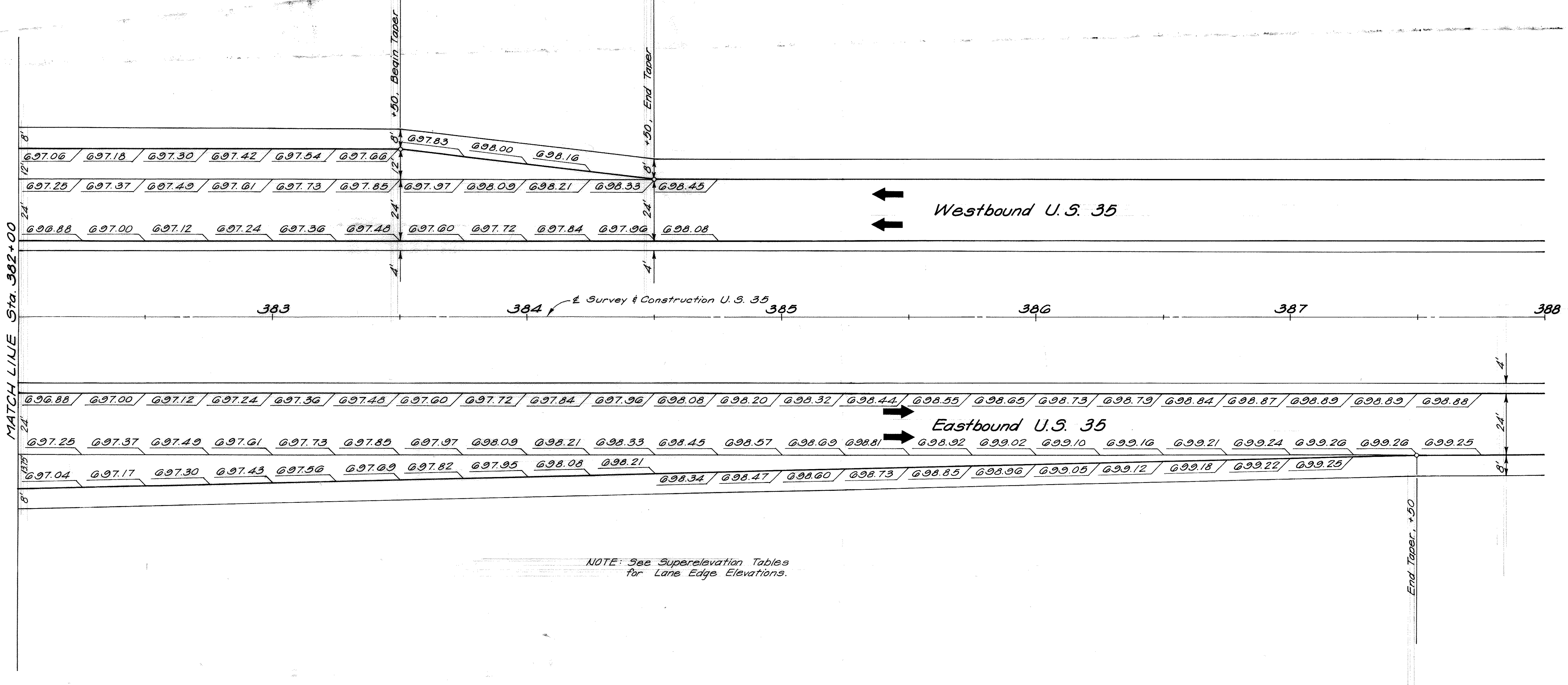
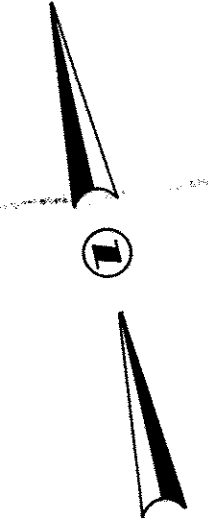


Ramp 'S' Curve Data:
P.I. 376+50.41
D_c = 2°00'00"

P.T. 379+43.50 Ramp 'S' =
P.O.T. 379+43.50, 66.00 Lt.

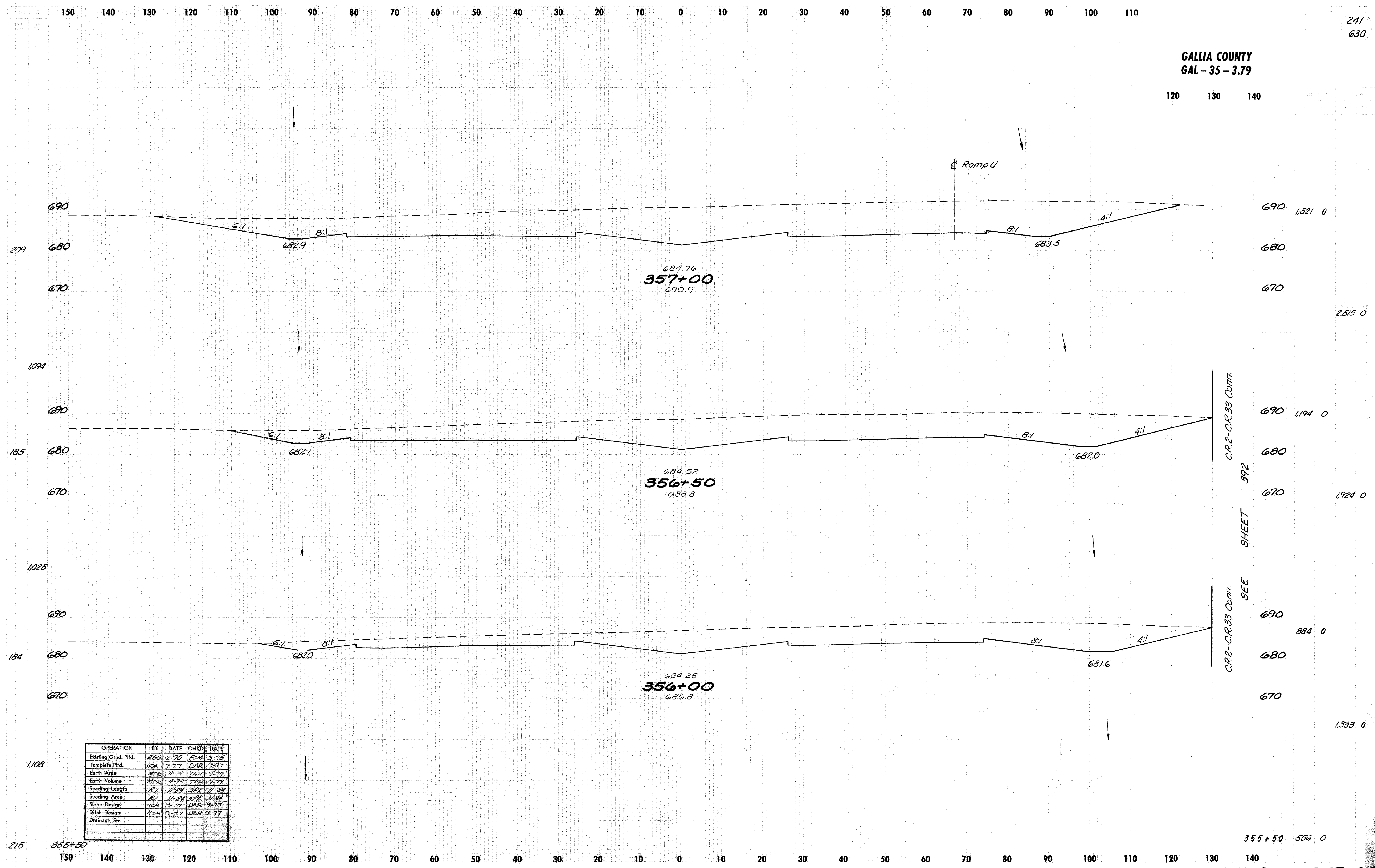


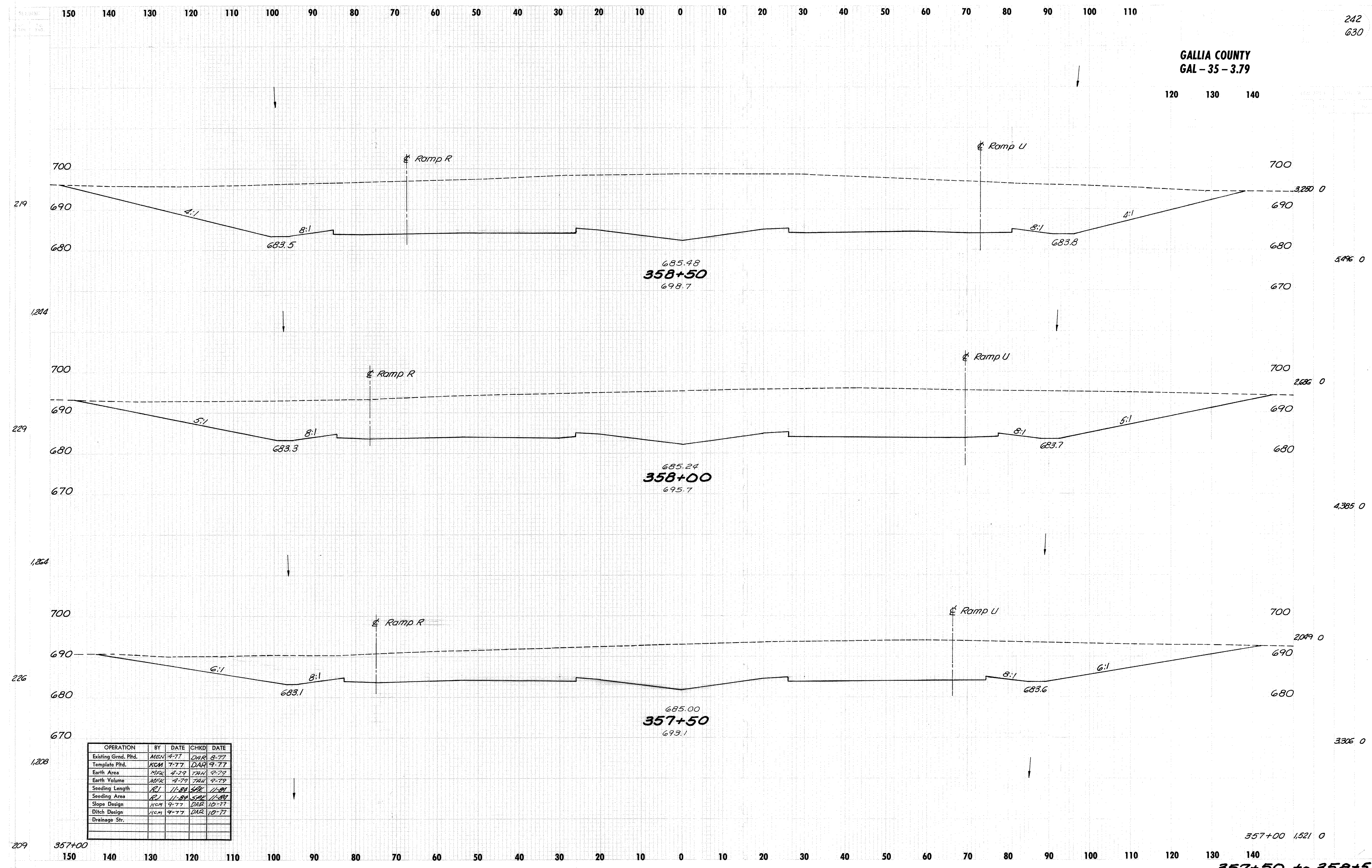
Ramp 'T' Curve Data:
P.I. 376+50.16
D_c = 4°00'00"



GALLIA COUNTY
GAL - 35 - 3.79

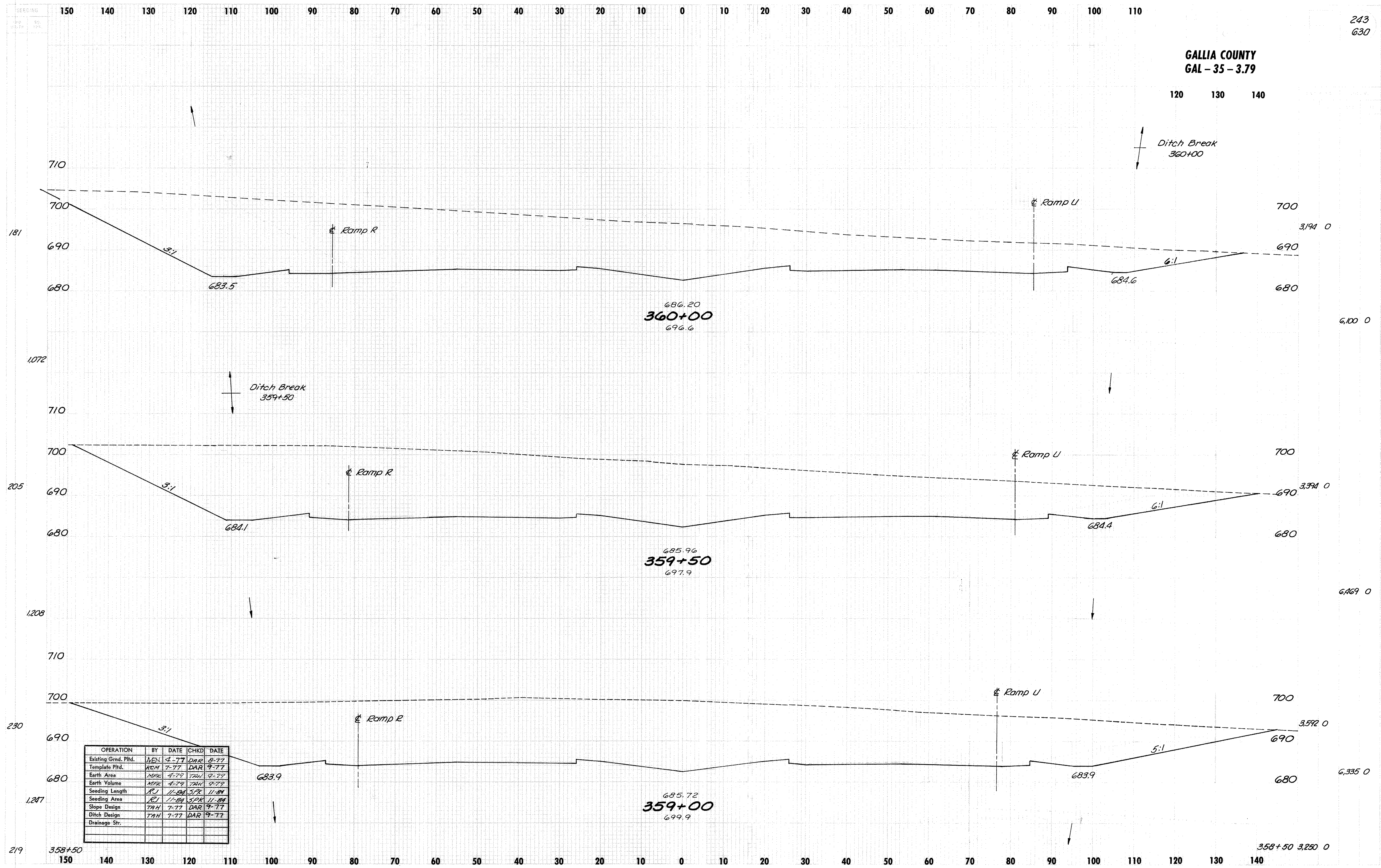
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GALLIA COUNTY
GAL - 35 - 3.79

OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	MEN	4-77	DAR	8-77
Template Pltd.	KCM	7-77	DAR	9-77
Earth Area	MFK	4-79	THH	9-79
Earth Volume	MFK	4-79	THH	9-79
Seeding Length	RJ	11-88	SPR	11-88
Seeding Area	RJ	11-88	SPR	11-88
Slope Design	KCM	9-77	DAR	10-77
Ditch Design	KCM	9-77	DAR	10-77
Drainage Str.				



GALLIA COUNTY
GAL - 35 - 3.79

OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pld.	ADN	4-77	DAR	8-77
Template Pld.	KCM	7-77	DAR	9-77
Earth Area	MEK	4-79	TAH	9-79
Earth Volume	MEK	4-79	TAH	9-79
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	TAH	7-77	DAR	9-77
Ditch Design	TAH	7-77	DAR	9-77
Drainage Str.				

GALLIA COUNTY
GAL - 35 - 3.79

120 130 140

710

700

Ramp R

Ramp U

231

690

680 688.9

5:1

685.5

8:1

686.92
361+50
691.1

685.1

690

683.5 680

1.866 0

670

1.317

710

700

Ramp R

Ramp U

243

690

680

683.1

6:1

685.9

8:1

686.68
361+00
693.0

8:1

685.3

6:1

700

690

683.8 680

2.216 0

1.172

710

700

Ramp R

Ramp U

179

690

680

683.3

686.44
360+50
695.0

6:1

684.1

700

690

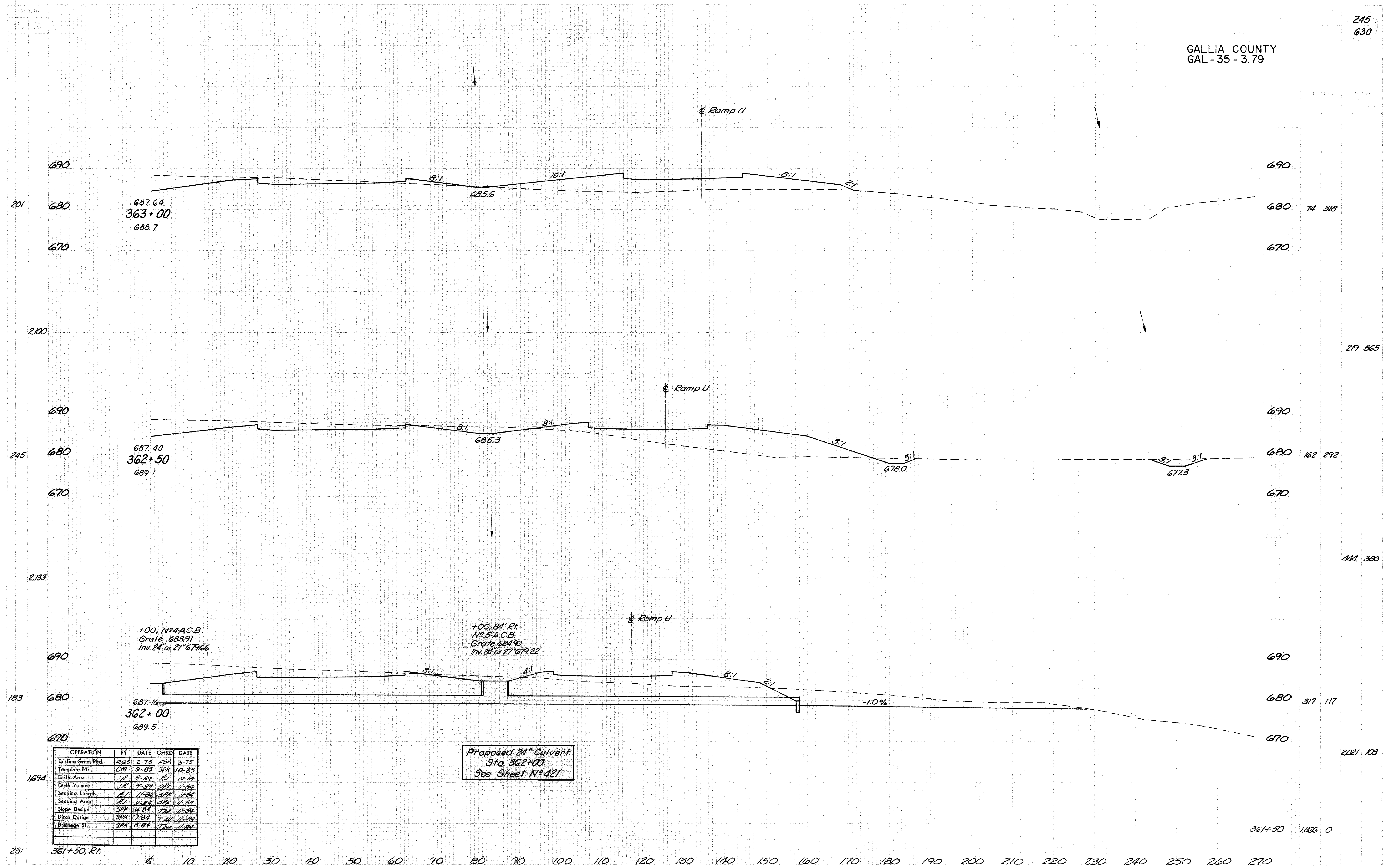
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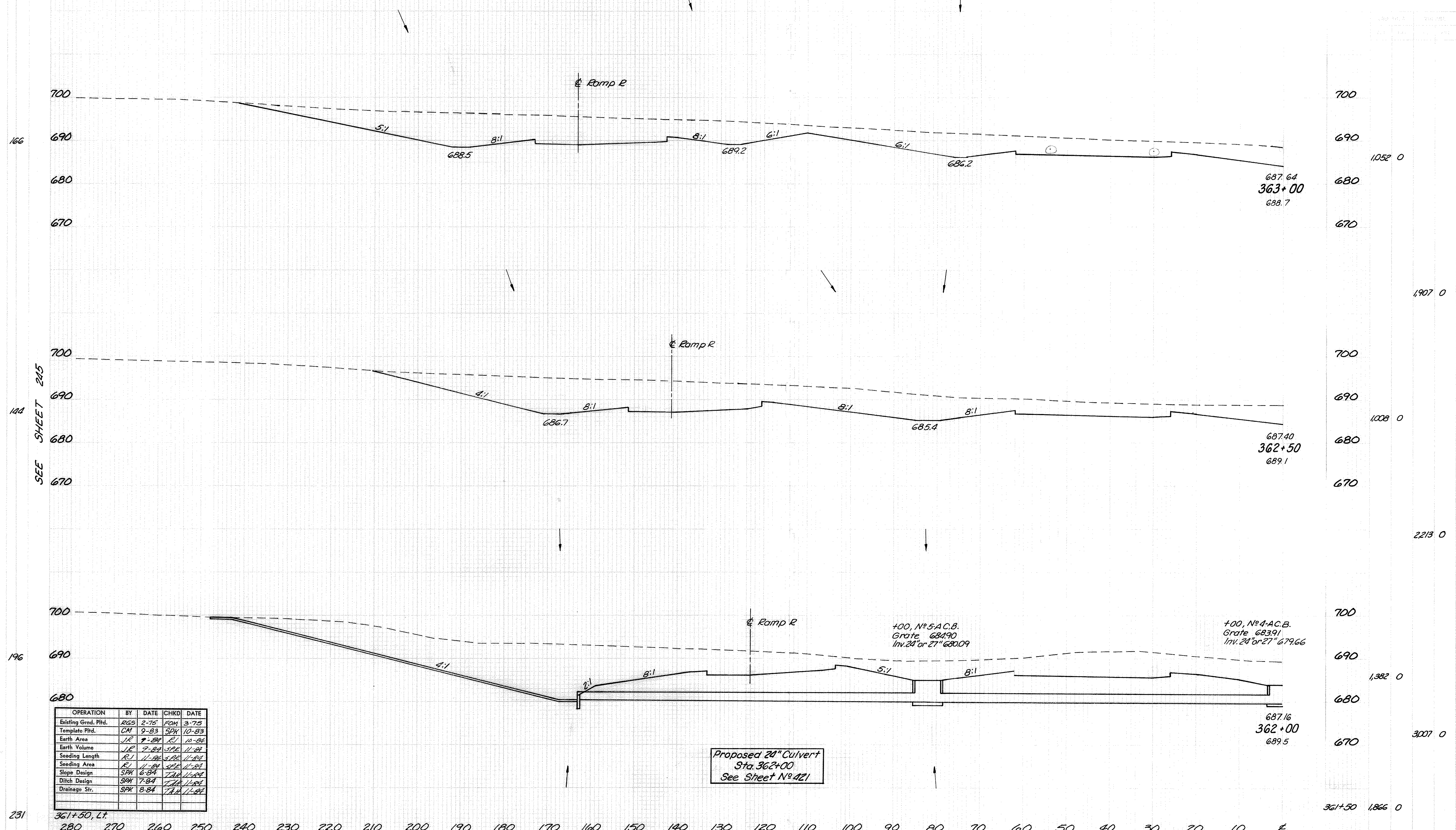
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OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	MEN	4-77	DAR	8-77
Template Pltd.	MEN	7-77	KCM	9-77
Earth Area	MRK	4-79	TAH	9-79
Earth Volume	MRK	4-79	TAH	9-79
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	TAH	8-77	KCM	8-77
Ditch Design	TAH	8-77	KCM	8-77
Drainage Str.				

Ditch Break
360+00



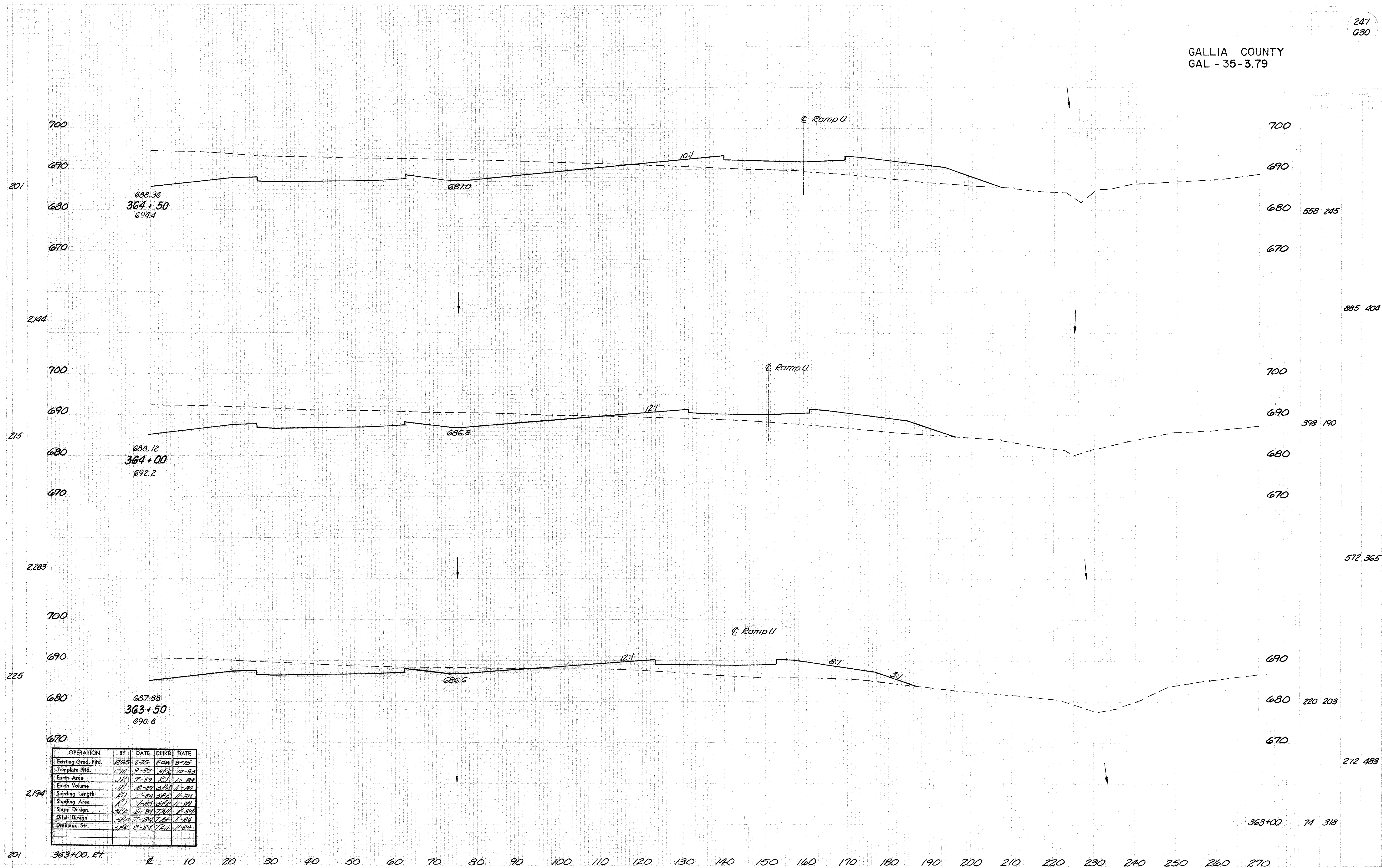
GALLIA COUNTY
GAL - 35-3.79



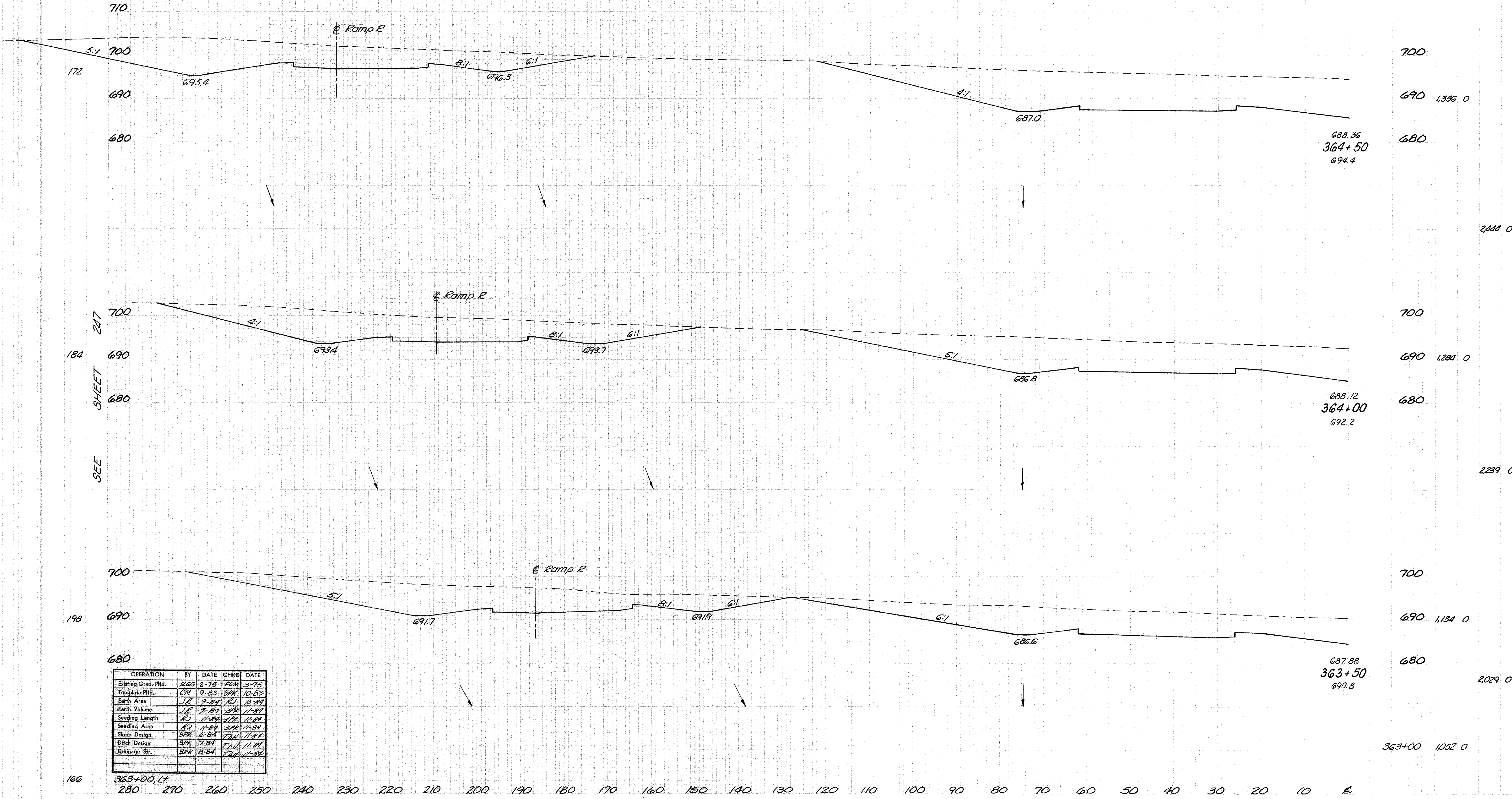
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RGS	2-75	FOM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	JR	9-84	RJ	10-84
Earth Volume	JR	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAL	11-84
Ditch Design	SPK	7-84	TAL	11-84
Drainage Str.	SPK	8-84	TAL	11-84

Proposed 24" Culvert
Sta. 362+00
See Sheet N° 421

GALLIA COUNTY
GAL - 35-3.79

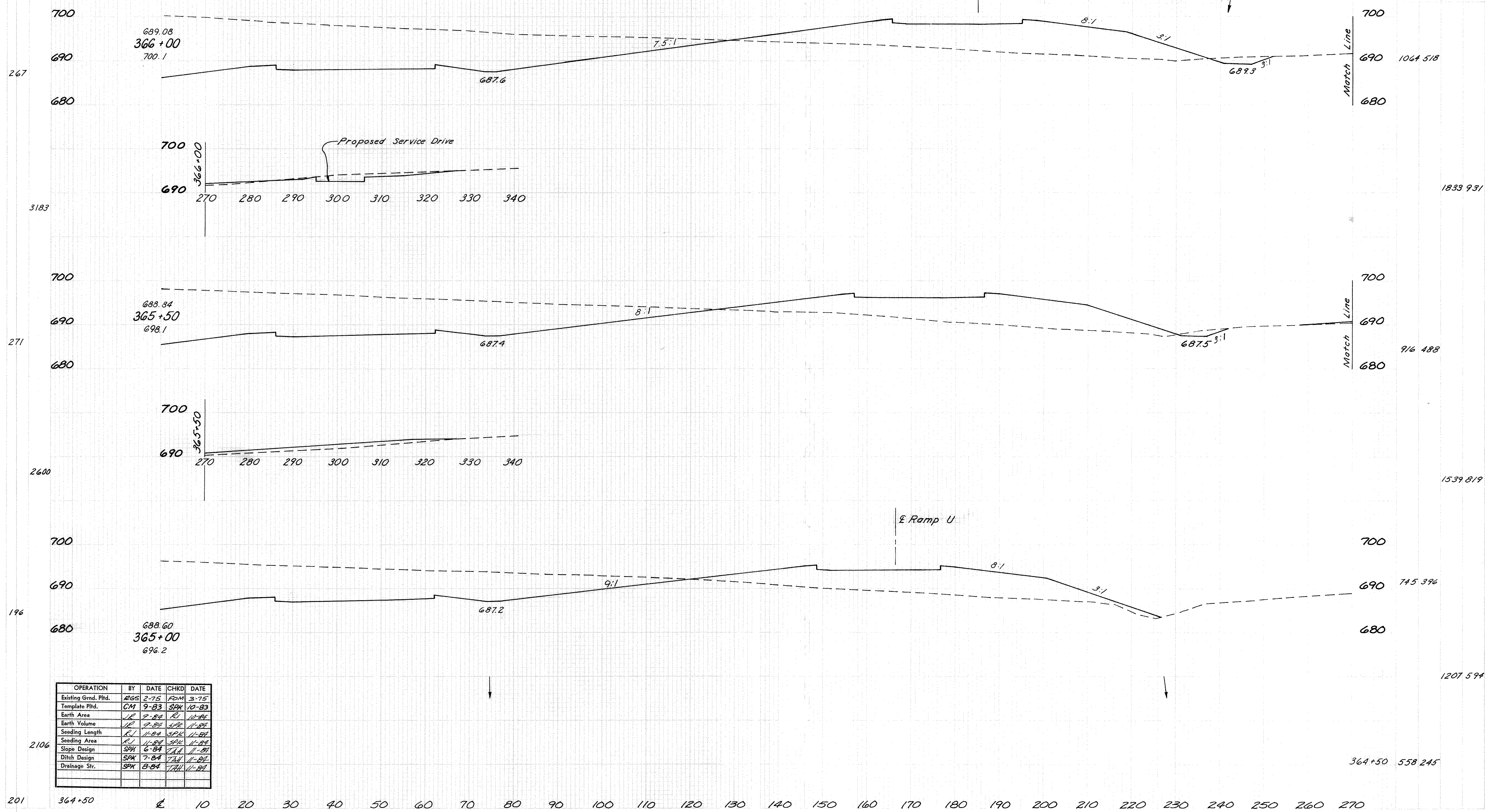


GALLIA COUNTY
GAL - 35-3.79



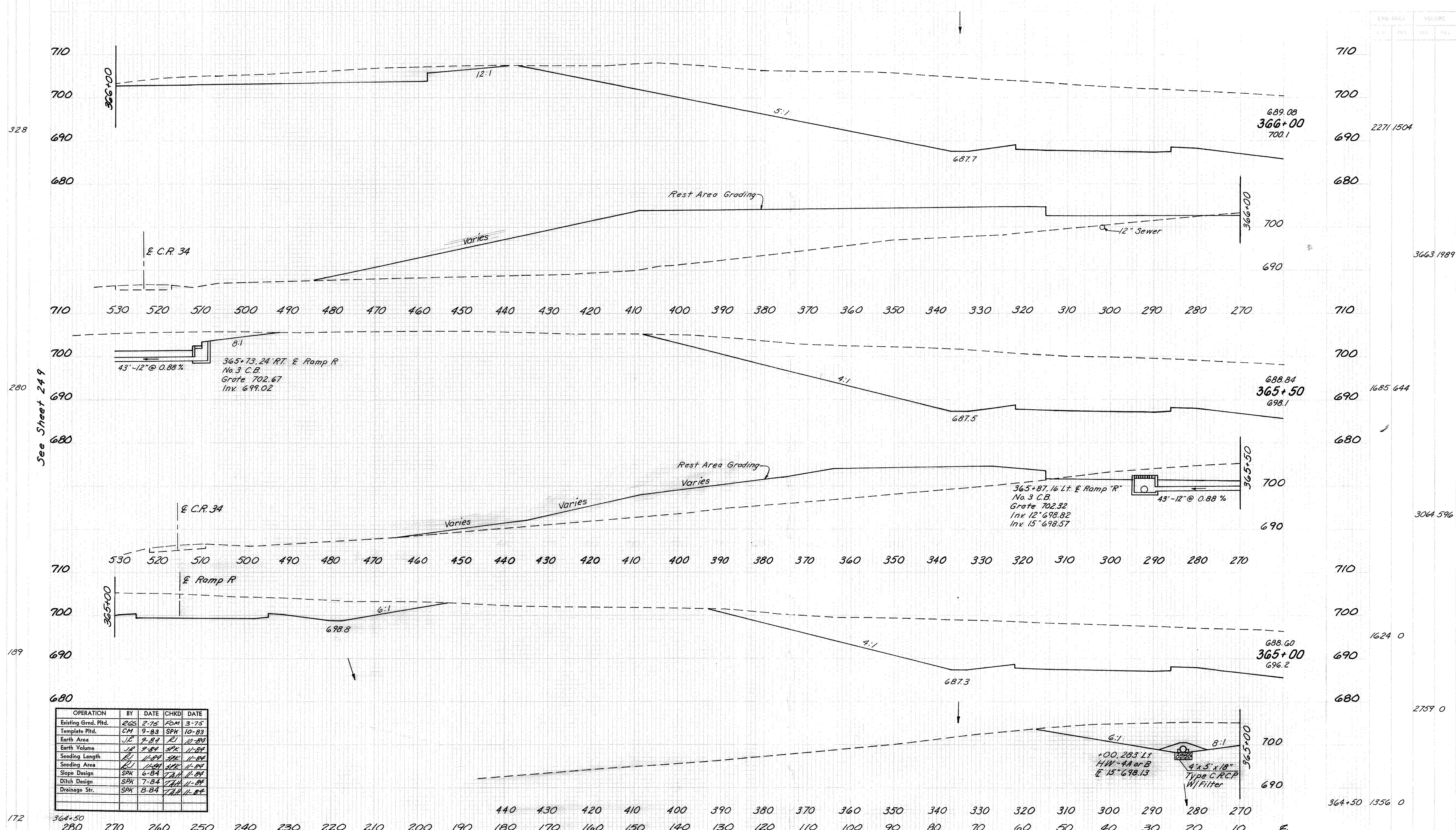
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pld.	ZGS	2-75	FCM	3-75
Template Pld.	CIM	9-83	SPK	10-83
Earth Area	JL	9-84	RJ	10-84
Earth Volume	JL	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAM	11-84
Ditch Design	SPK	7-84	TAM	11-84
Drainage Str.	SPK	8-84	TAM	11-84

GALLIA COUNTY
GAL - 35-3.79



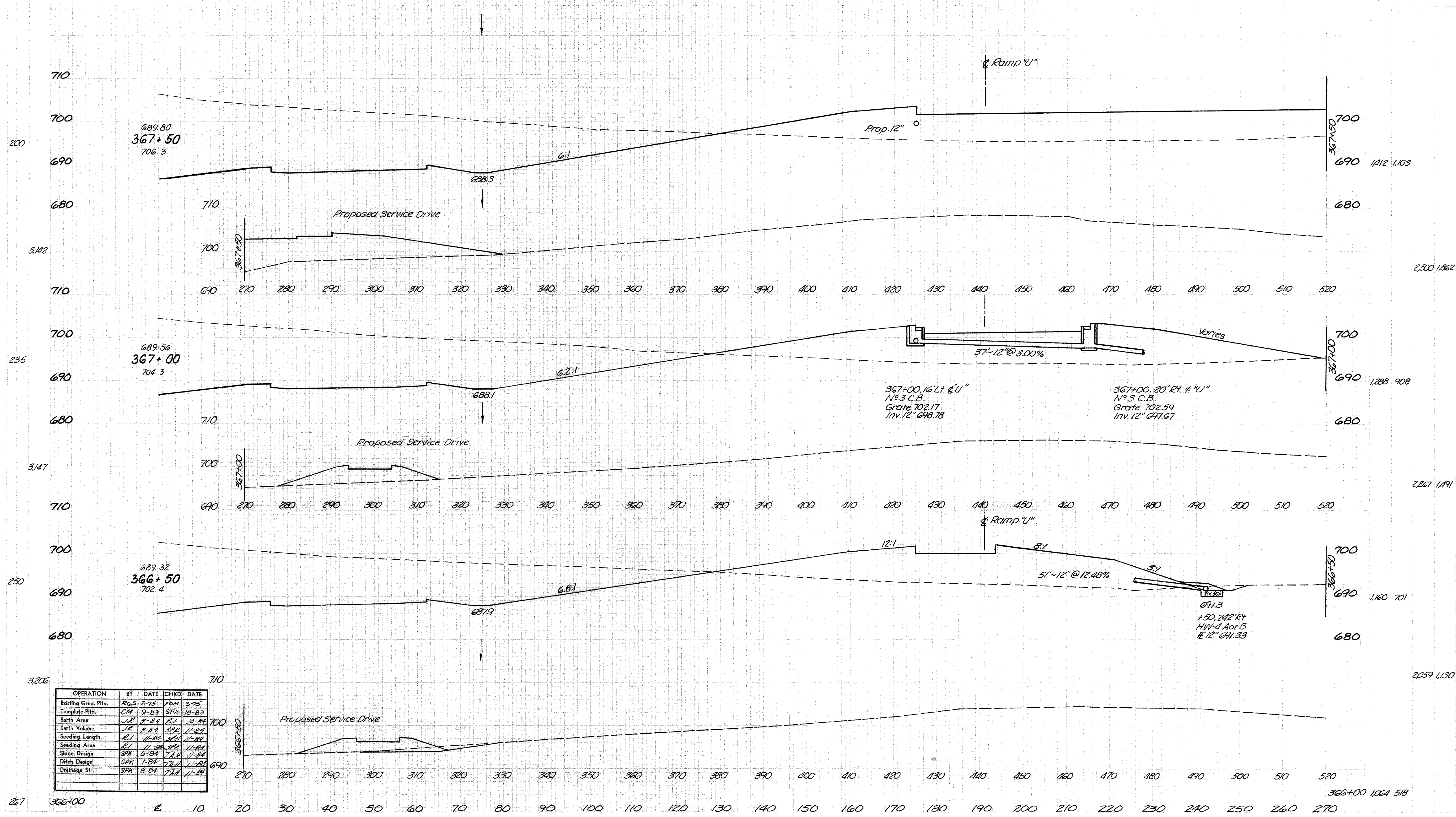
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	EGS	2-75	FCM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	JL	2-84	RJ	10-84
Earth Volume	JL	2-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TJL	11-84
Ditch Design	SPK	7-84	TJL	11-84
Drainage Str.	SPK	8-84	TJL	11-84

GALLIA COUNTY
GAL -35- 3.79

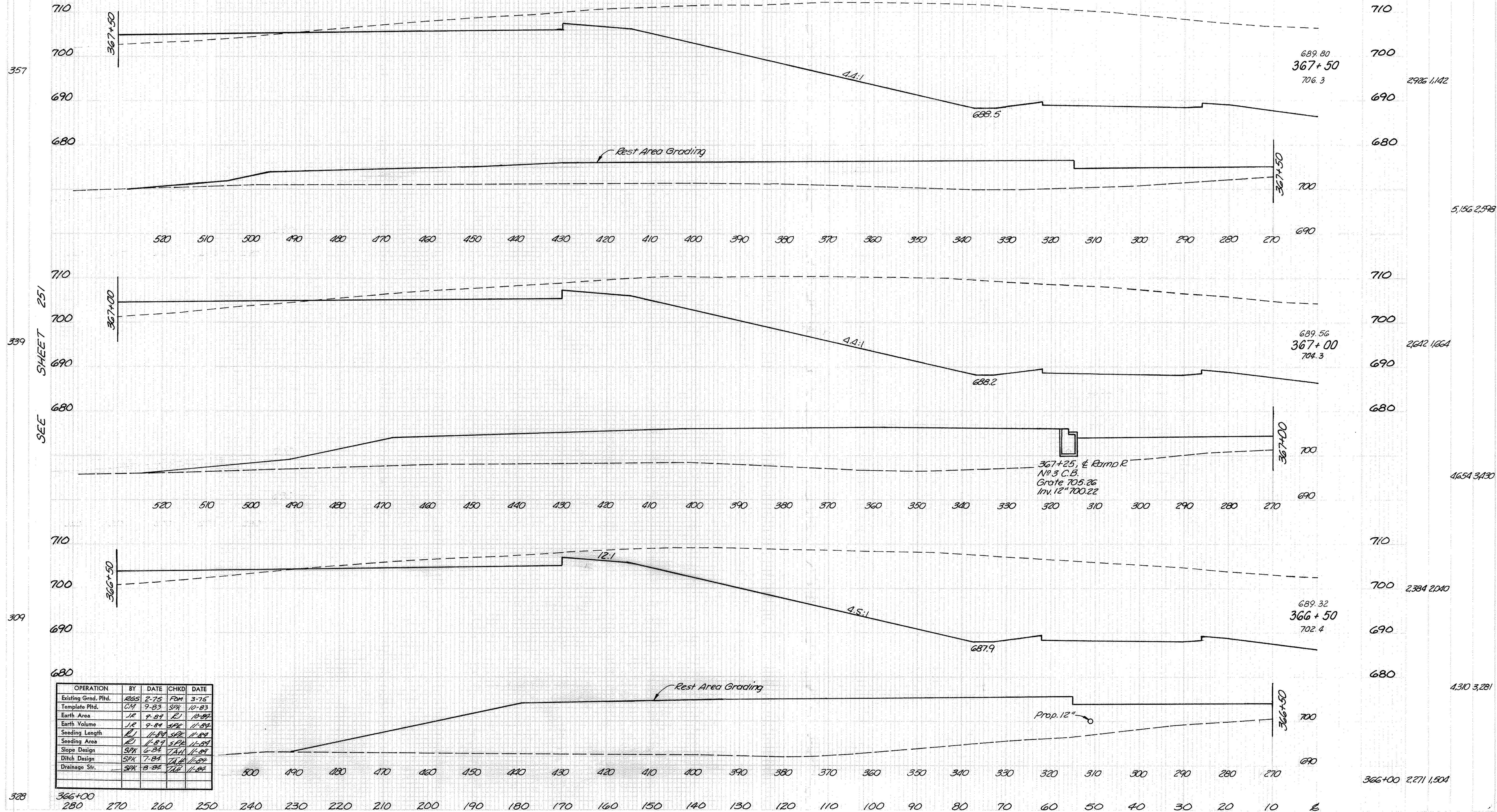


OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	EGS	2-75	FCM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	JL	7-84	RL	10-84
Earth Volume	JL	7-84	SPK	11-84
Seeding Length	RL	11-84	SPK	11-84
Seeding Area	RL	11-84	SPK	11-84
Slope Design	SPK	6-84	TAL	11-84
Ditch Design	SPK	7-84	TAL	11-84
Drainage Str.	SPK	8-84	TAL	11-84

GALLIA COUNTY
GAL - 35 - 3.79

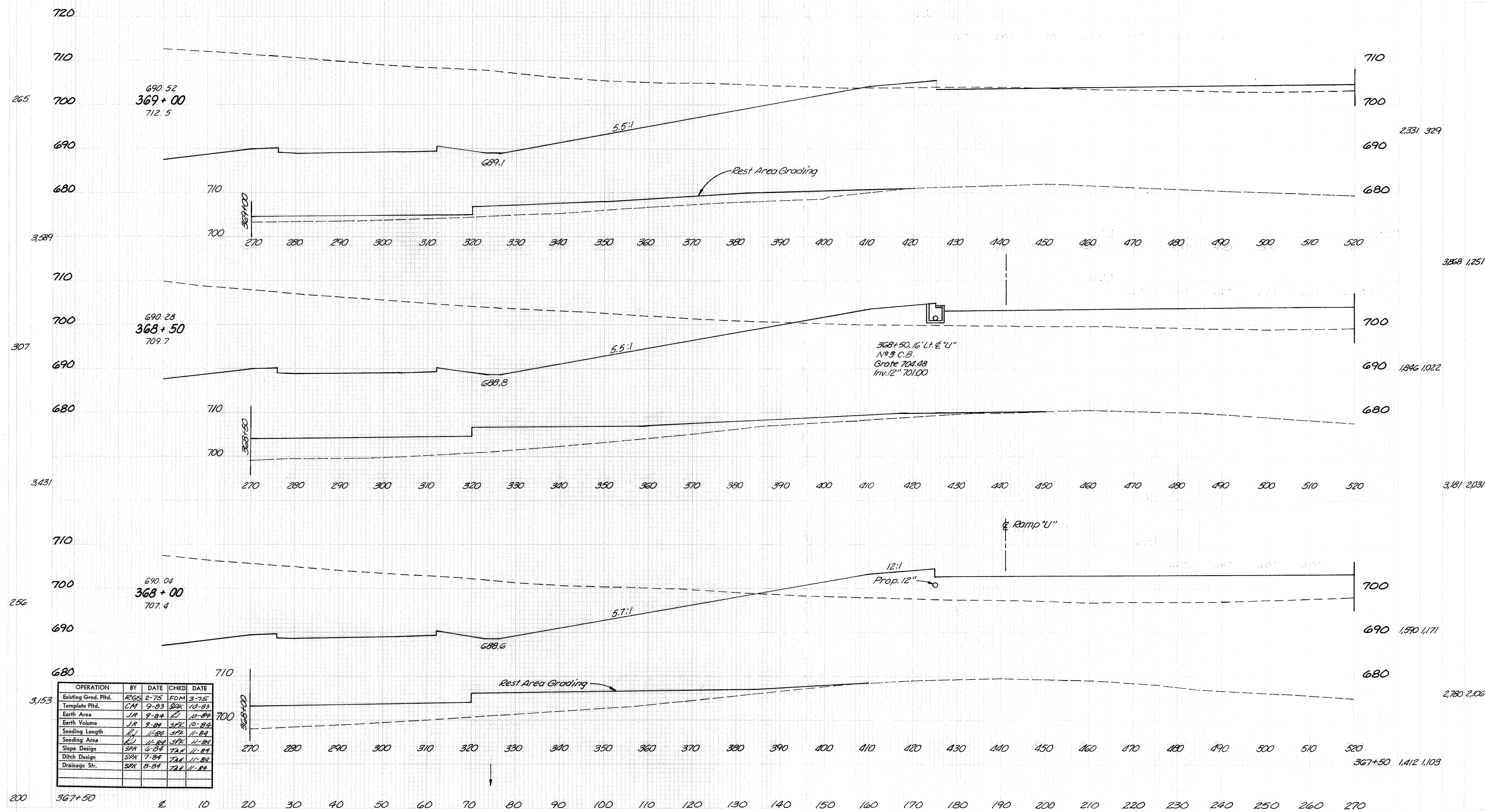


GALLIA COUNTY
GAL - 35 - 3.79



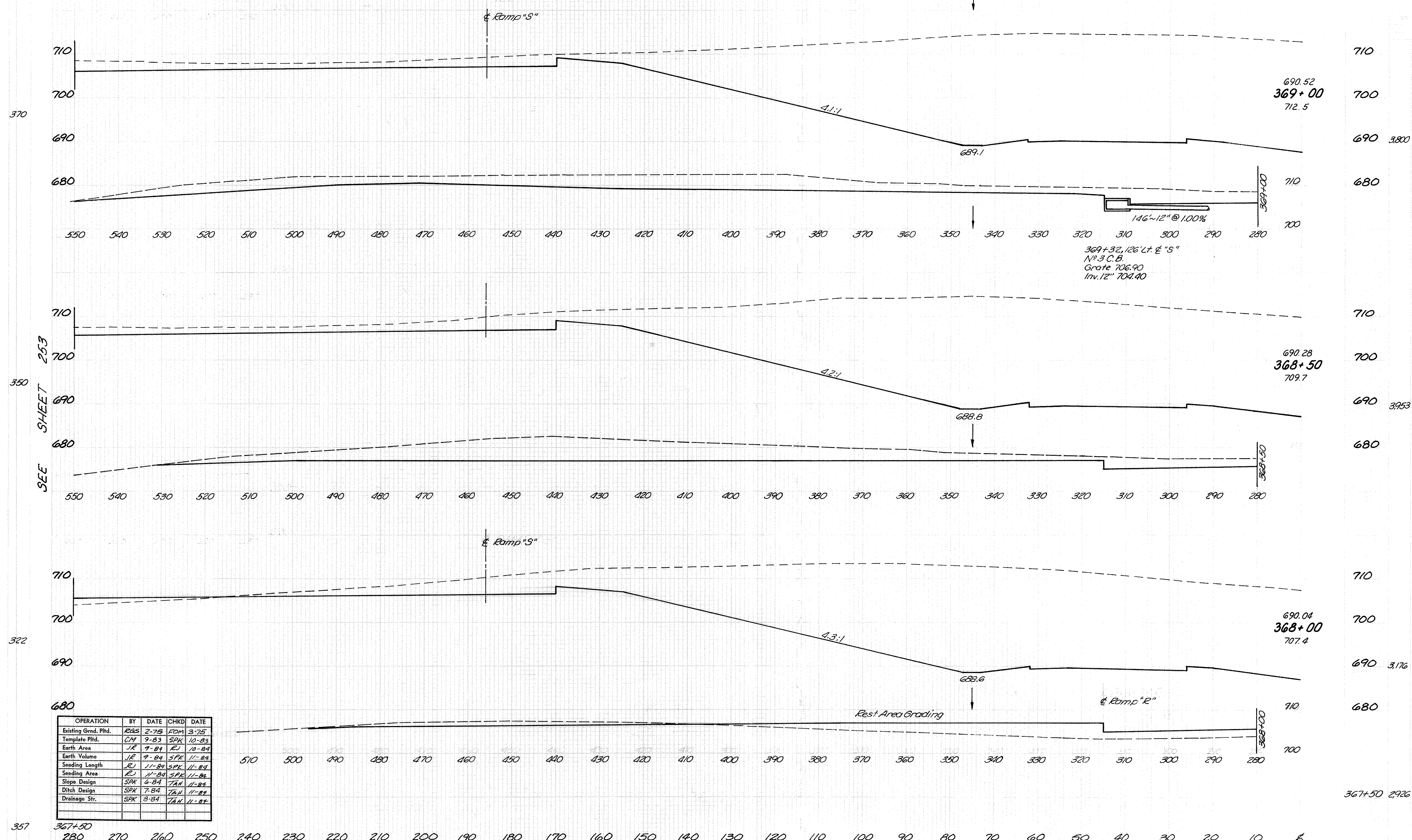
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RGS	2-75	FOM	3-75
Template Pltd.	CIM	9-83	SPK	10-83
Earth Area	JR	9-84	SPK	10-84
Earth Volume	JR	9-84	SPK	11-84
Seeding Length	AL	11-84	SPK	11-84
Seeding Area	AL	11-84	SPK	11-84
Slope Design	SPK	6-84	TAH	11-84
Ditch Design	SPK	7-84	TAH	11-84
Drainage Str.	SPK	8-84	TAH	11-84

GALLIA COUNTY
GAL - 35-3.79



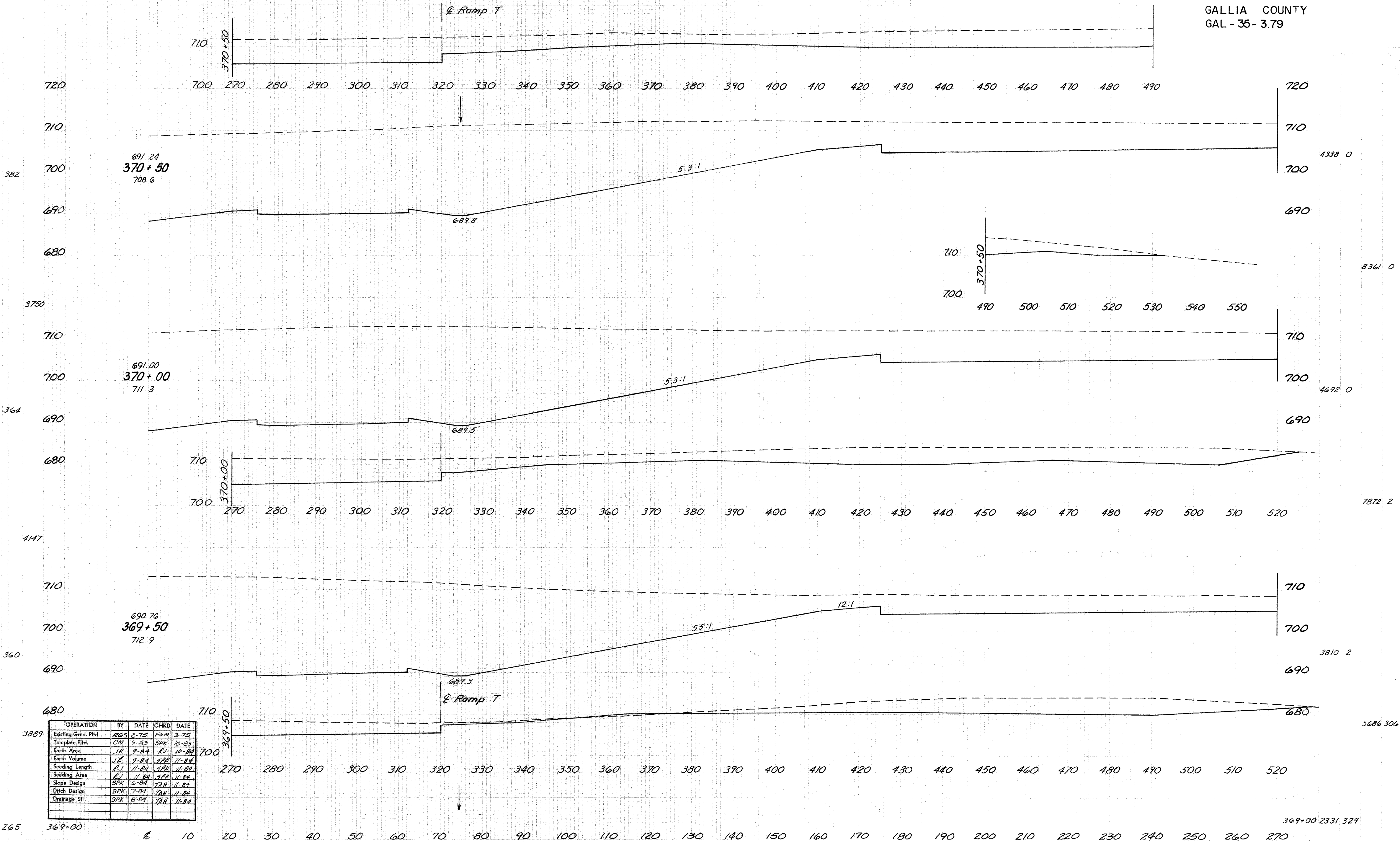
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RGS	2-75	FDM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	JR	9-84	TL	11-84
Earth Volume	JR	9-84	SPK	10-84
Seeding Length	TL	11-84	SPK	11-84
Seeding Area	TL	11-84	SPK	11-84
Slope Design	SPK	6-84	TAL	11-84
Ditch Design	SPK	7-84	TAL	11-84
Drainage Str.	SPK	8-84	TAL	11-84

GALLIA COUNTY
GAL-35-3.79

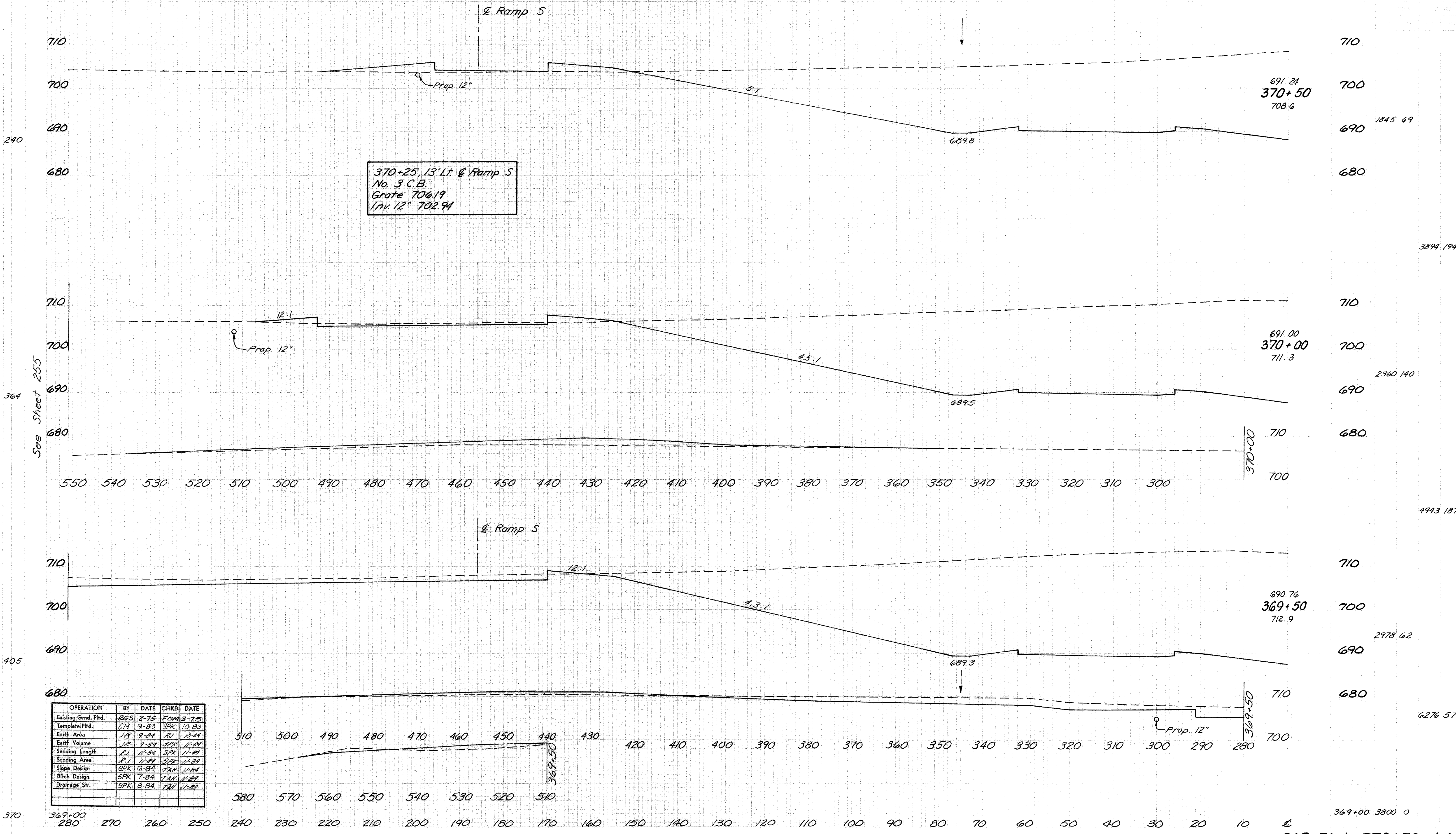


OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RAS	2-75	MDM	3-75
Template Pltd.	CNY	9-83	SPK	10-83
Earth Area	JR	9-84	RJ	10-84
Earth Volume	JR	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAN	11-84
Ditch Design	SPK	7-84	TAN	11-84
Drainage Str.	SPK	8-84	TAN	11-84

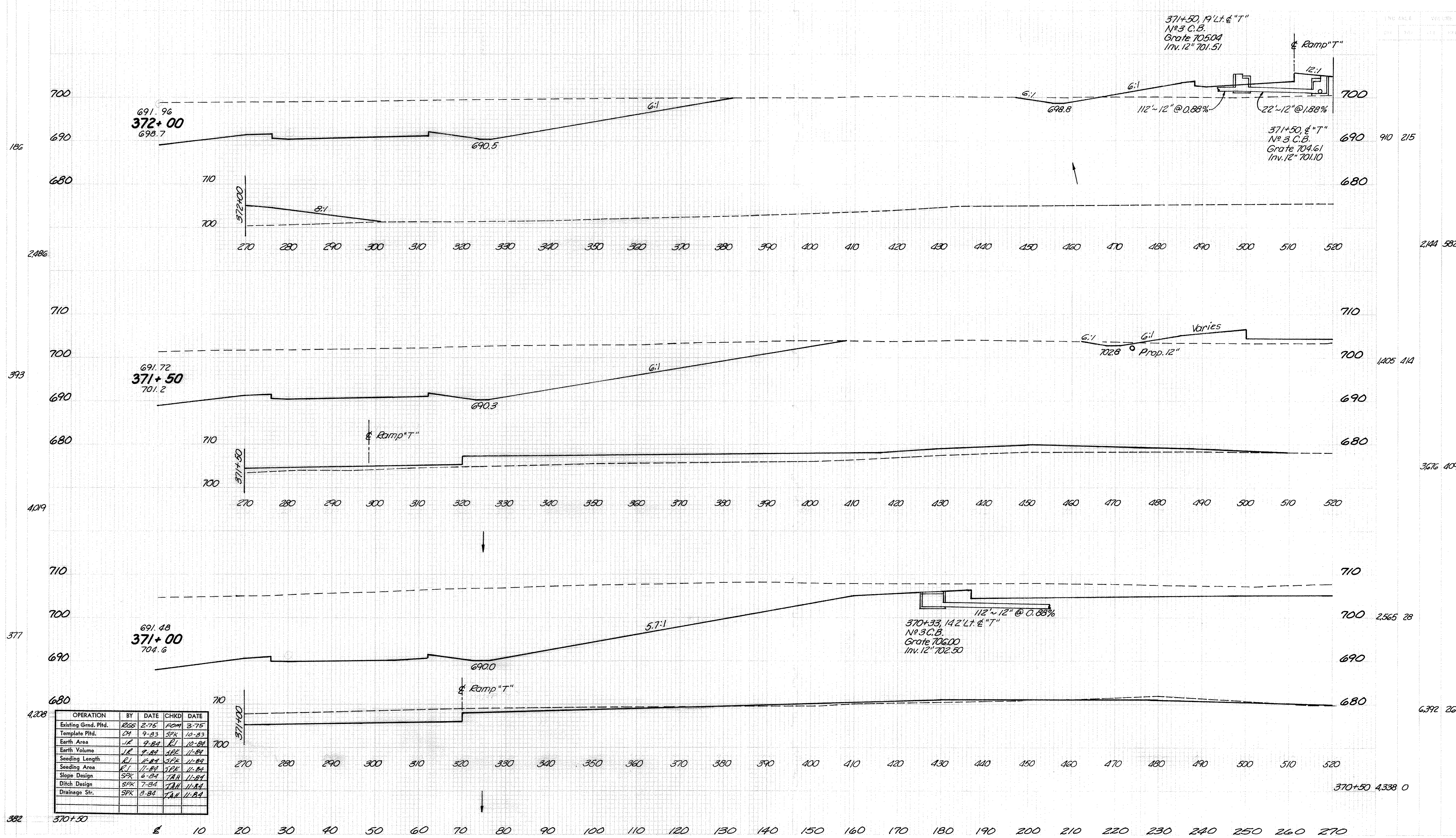
GALLIA COUNTY
GAL - 35 - 3.79



OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pld.	RGS	2-75	FOH	3-75
Template Pld.	CM	9-83	SPK	10-83
Earth Area	JR	9-84	RJ	10-84
Earth Volume	JE	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAH	11-84
Ditch Design	SPK	7-84	TAH	11-84
Drainage Str.	SPK	8-84	TAH	11-84

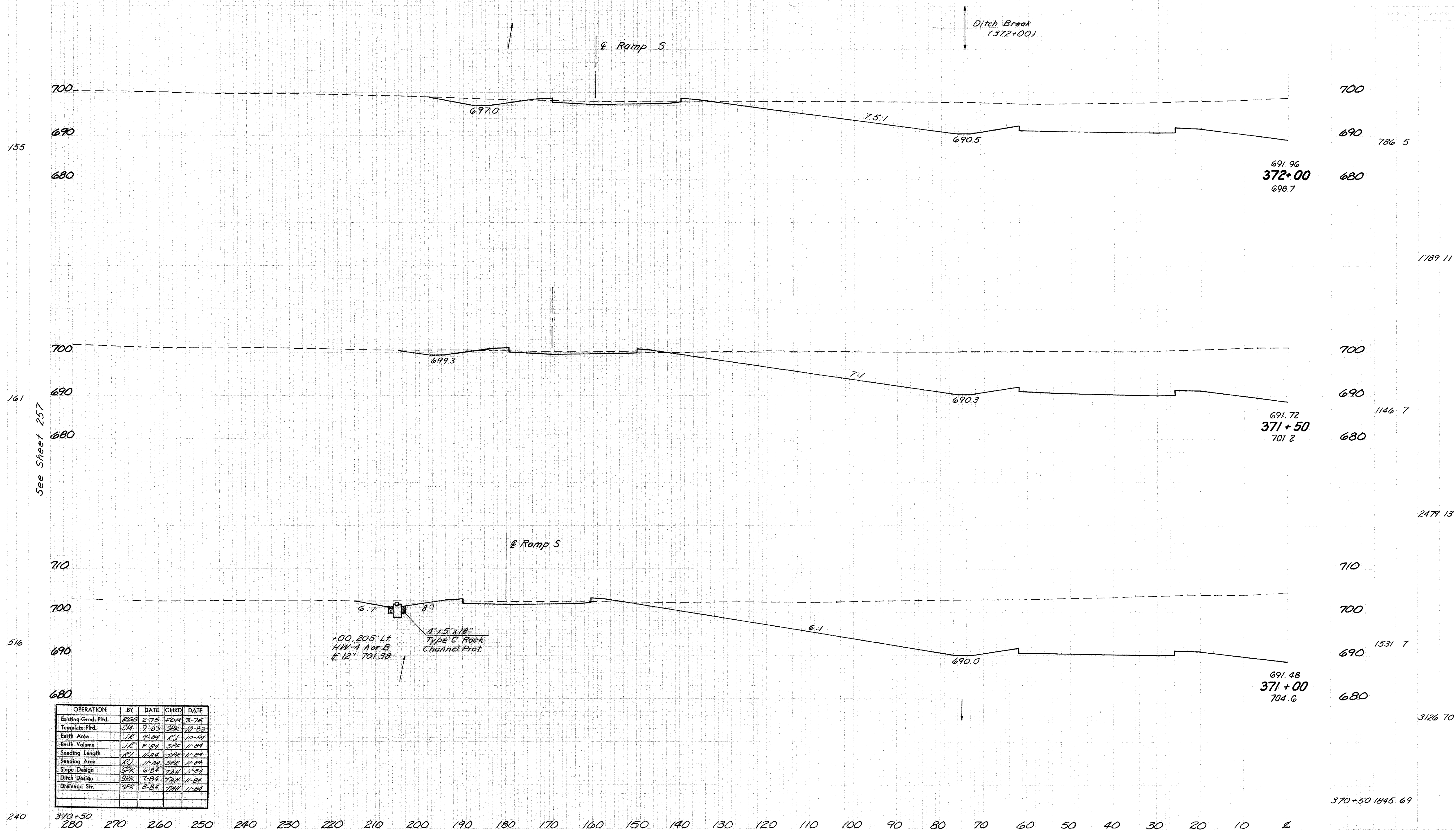


GALLIA COUNTY
GAL - 35 - 3.79

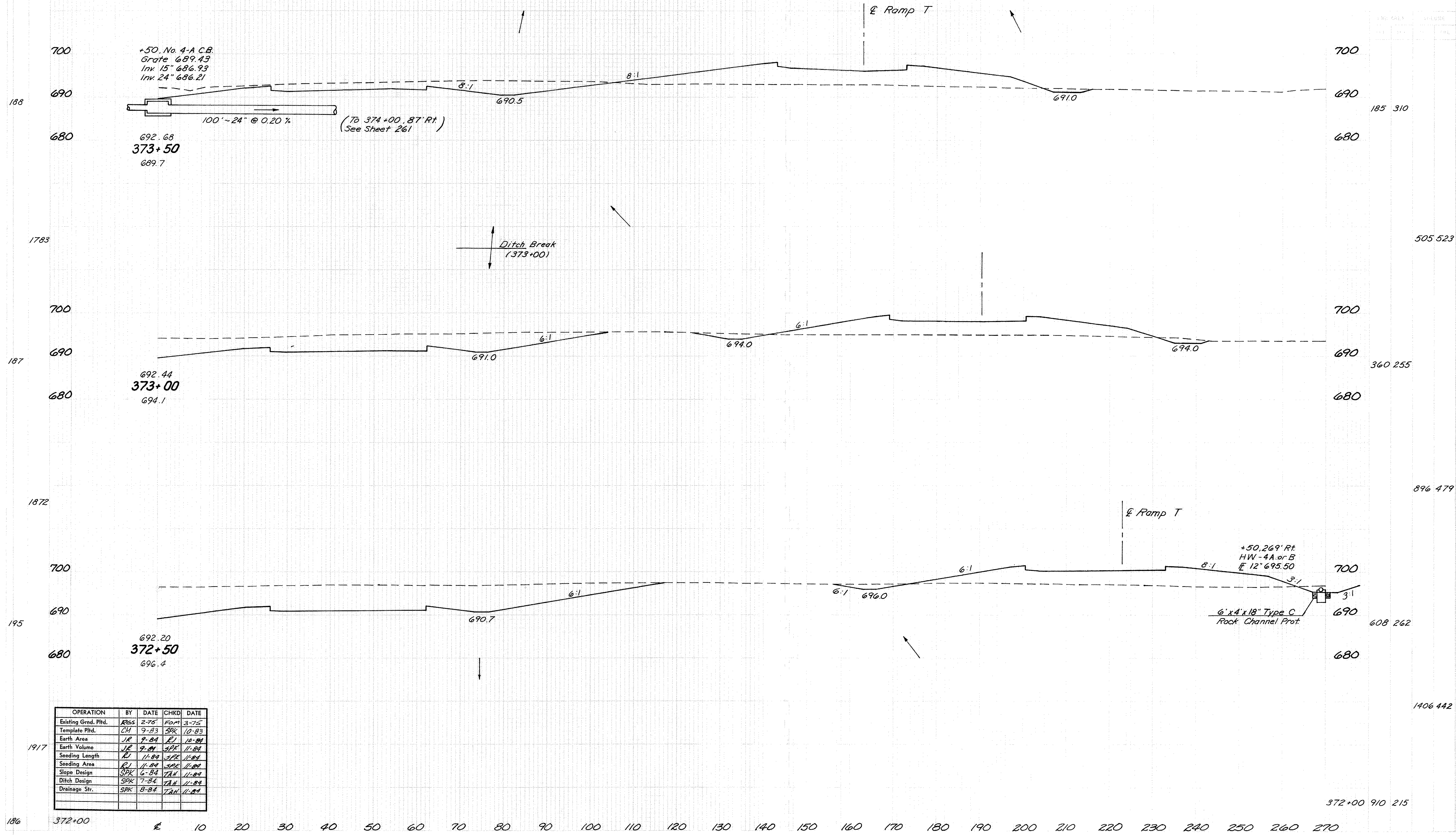


OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RSS	2-75	ROM	3-75
Template Pltd.	OM	9-83	SPK	10-83
Earth Area	JR	9-84	RL	10-84
Earth Volume	JR	9-84	SPK	11-84
Seeding Length	RL	11-84	SPK	11-84
Seeding Area	RL	11-84	SPK	11-84
Slope Design	SPK	6-84	TAL	11-84
Ditch Design	SPK	7-84	TAL	11-84
Drainage Str.	SPK	8-84	TAL	11-84

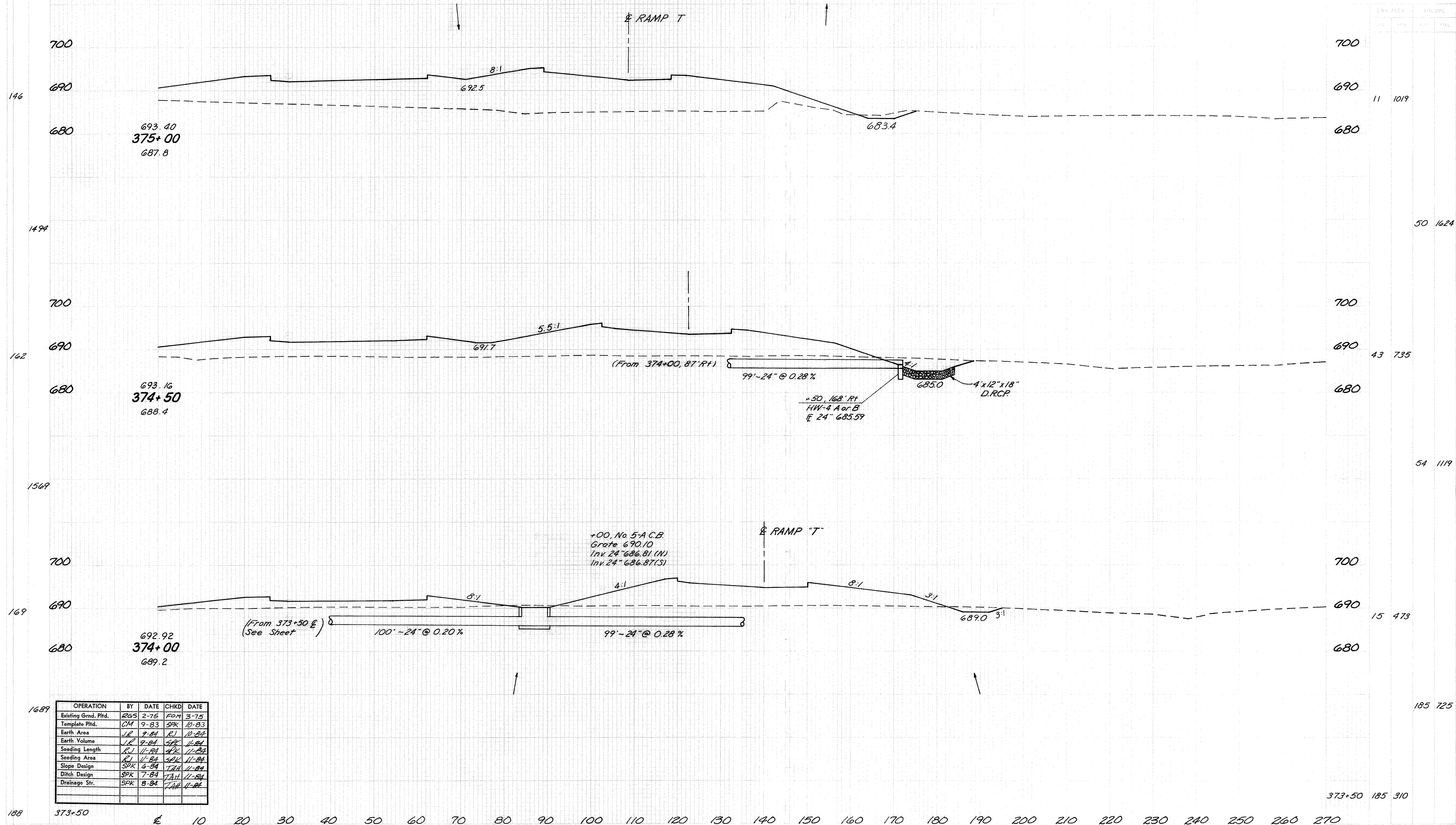
GALLIA COUNTY
GAL - 35- 3.79



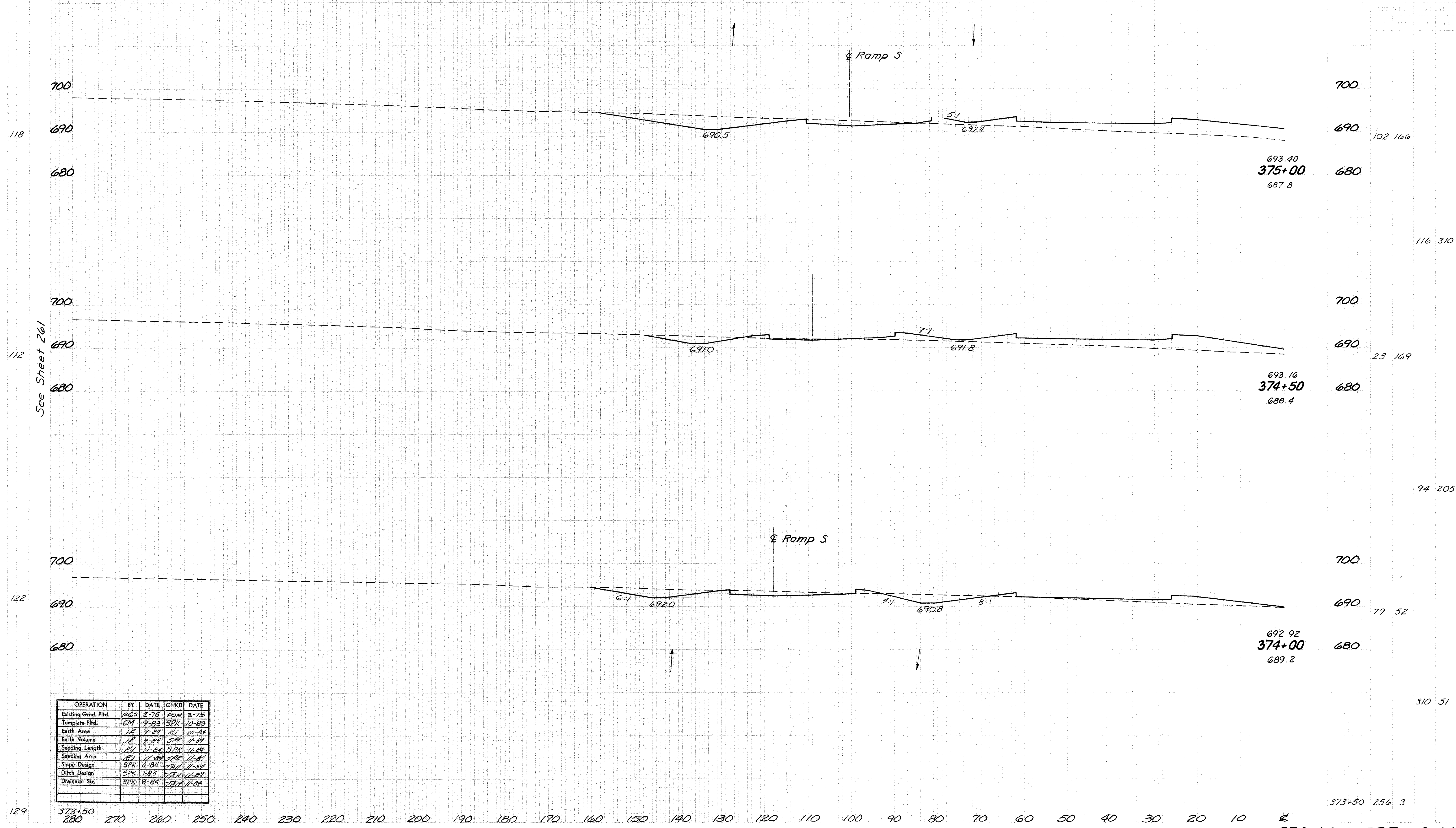
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RGS	2-75	FDM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	J.P	9-84	F.L	10-84
Earth Volume	J.P	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAM	11-84
Ditch Design	SPK	7-84	TAM	11-84
Drainage Str.	SPK	8-84	TAM	11-84

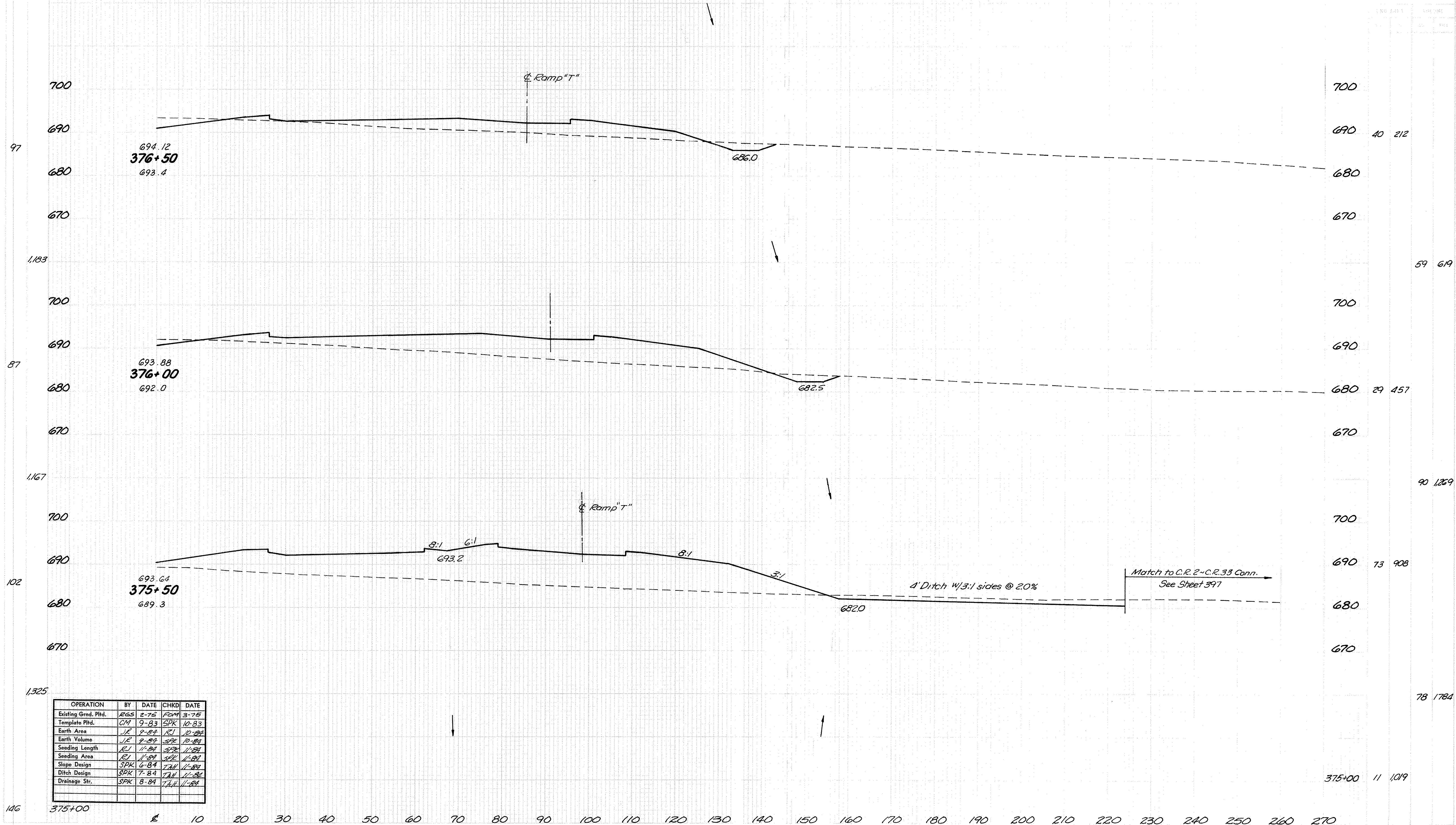




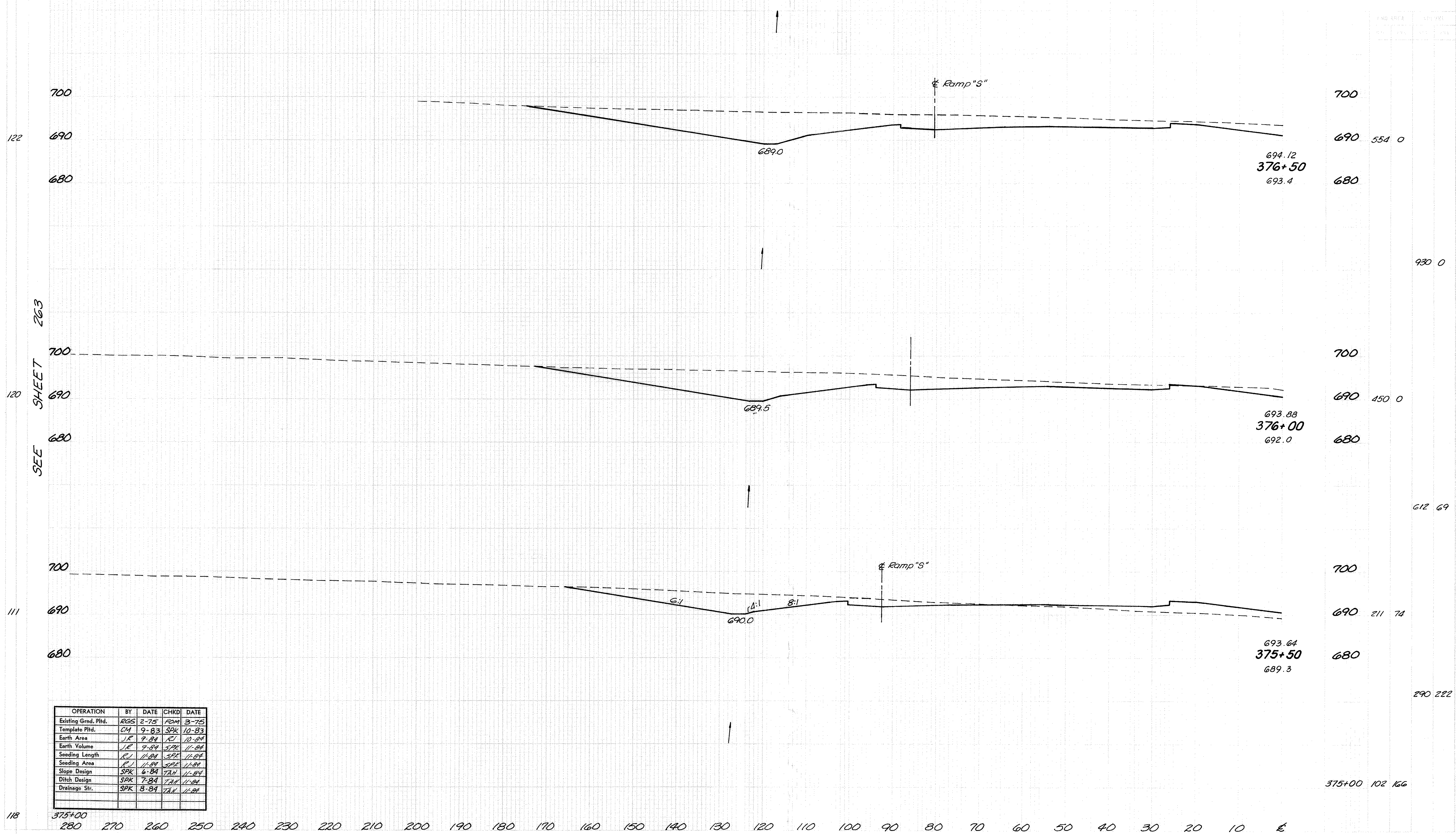


GALLIA COUNTY
GAL - 35-3.79

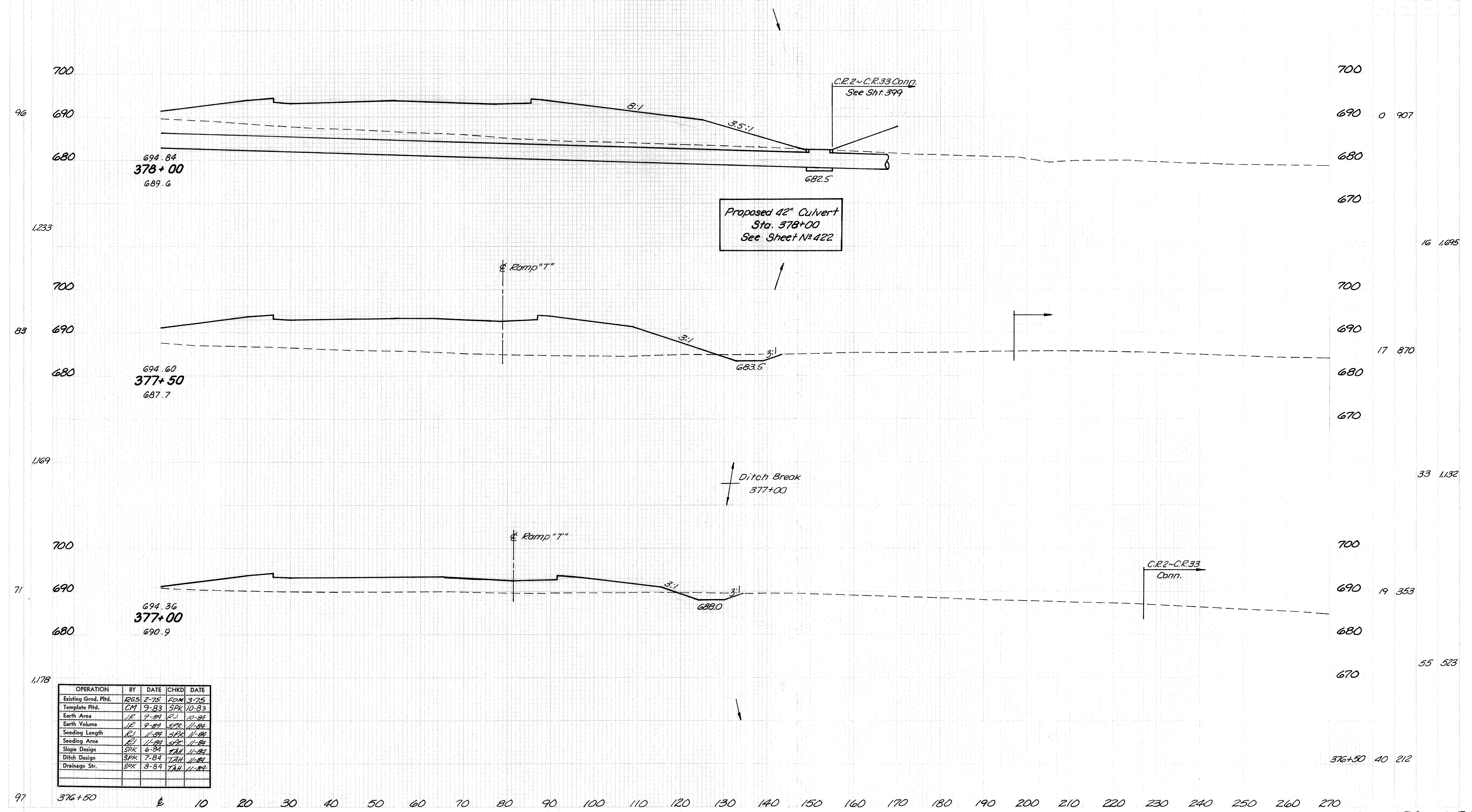




GALLIA COUNTY
GAL - 35-3.79

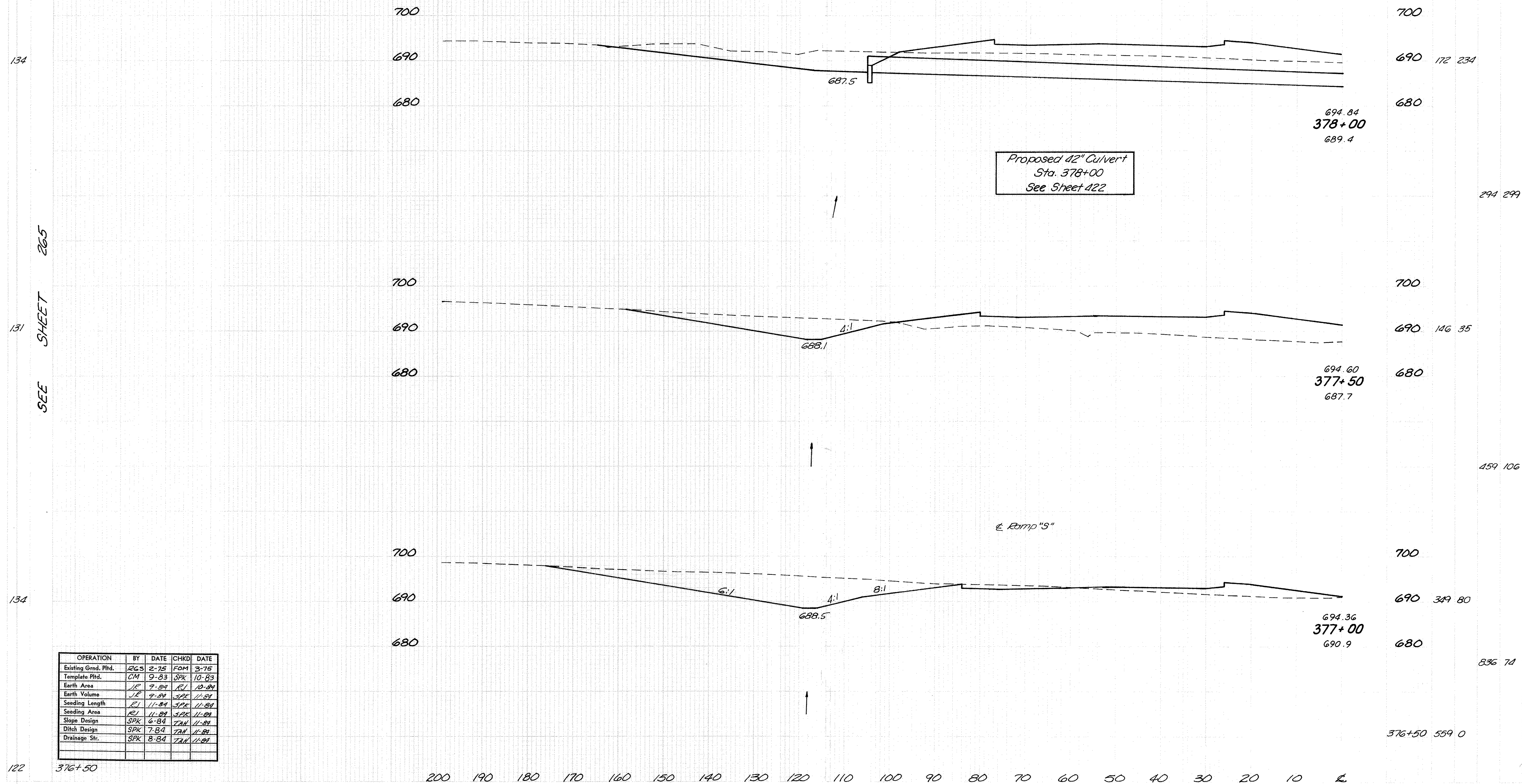


OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RGS	2-75	ROM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	JR	9-84	RI	10-84
Earth Volume	JR	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAH	11-84
Ditch Design	SPK	7-84	TAH	11-84
Drainage Str.	SPK	8-84	TAH	11-84

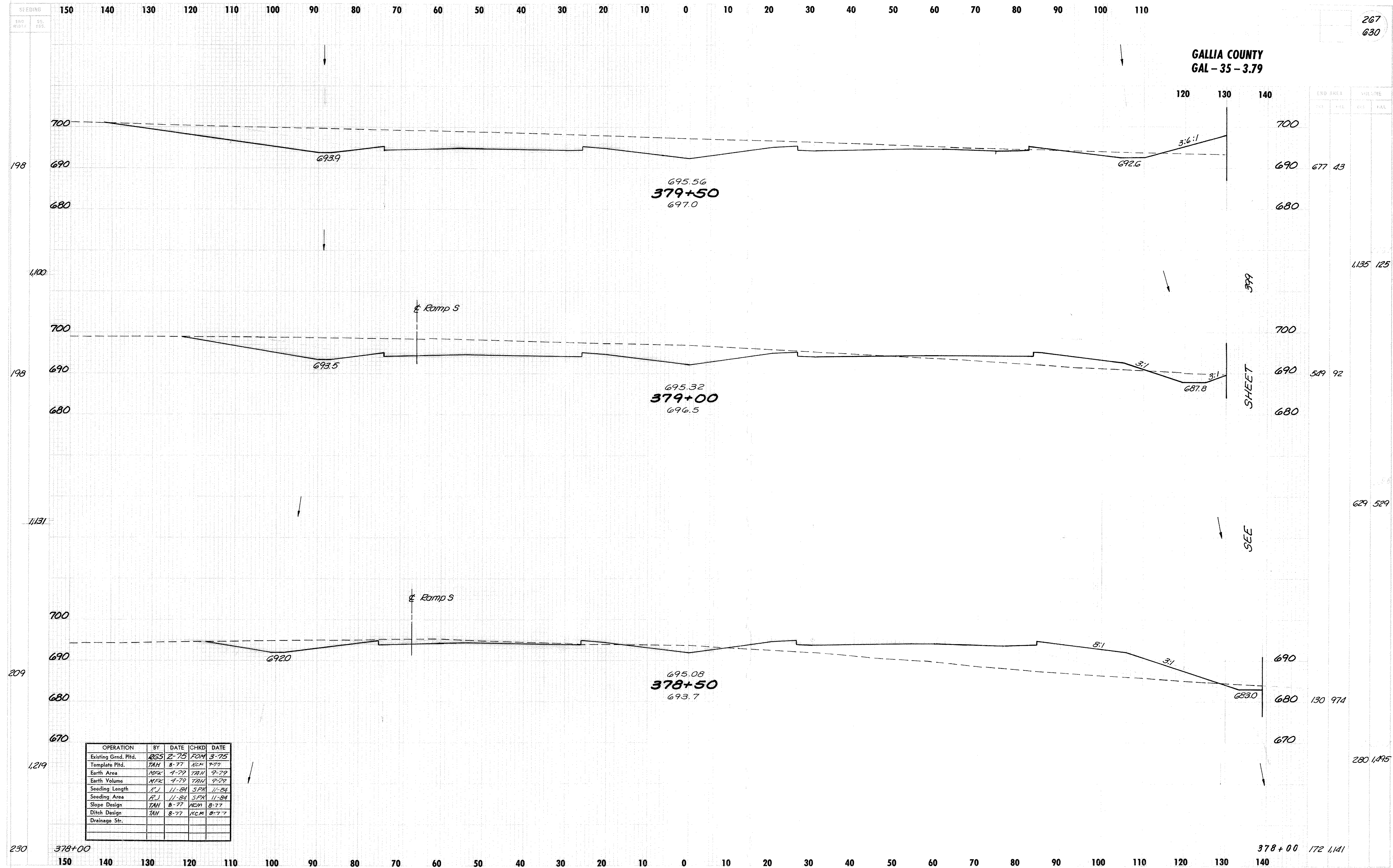


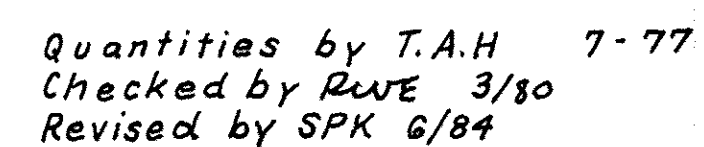
OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pftd.	RGS	2-75	FOM	3-75
Template Pftd.	CM	9-83	SPK	10-83
Earth Area	JE	7-84	RJ	10-84
Earth Volume	JE	7-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAH	11-84
Ditch Design	SPK	7-84	TAH	11-84
Drainage Str.	SPK	8-84	TAH	11-84

GALLIA COUNTY
GAL -35-3.79

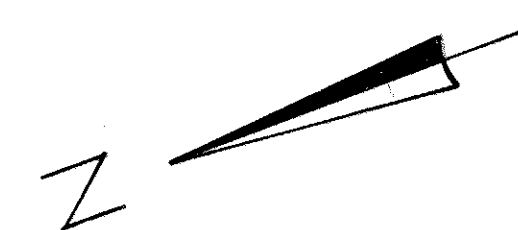


OPERATION	BY	DATE	CHKD	DATE
Existing Grnd. Pltd.	RCS	2-75	FOM	3-75
Template Pltd.	CM	9-83	SPK	10-83
Earth Area	JR	9-84	RJ	10-84
Earth Volume	JR	9-84	SPK	11-84
Seeding Length	RJ	11-84	SPK	11-84
Seeding Area	RJ	11-84	SPK	11-84
Slope Design	SPK	6-84	TAM	11-84
Ditch Design	SPK	7-84	TAM	11-84
Drainage Str.	SPK	8-84	TAM	11-84





603 82' ~ Type A, 24" 706.02 or 30" 707.01
(0.109), 707.05 (0.079), 707.09, 707.21
166 ~ Type A, 24" 706.02 or 30" 707.01
(0.138), 707.04 (0.138), 707.05 (0.138),
707.09 (0.109), 707.21
74 ~ Type A, 27" 706.02 or 33" 707.01
(0.109), 707.05 (0.079), 707.09, 707.21
602 1.27 C.Y. Concrete Masonry
604 1 Ea. Std. No 5-A Catch Basin
1 Ea. Std. No 4-A Catch Basin
601 716 S.Y. Riprap ~ 6" Keir. Conc. Slab
Drainage Area = 11.49 Ac.
Q₅₀ = 31.3 cfs



GALLIA COUNTY
GAL - 35 - 3.79

Quantities by T.A.H. 8-77
Checked by R.W.E. 3-80
Revised by S.P.K. 6-84

DRAINAGE STRUCTURE
C.R.2 - C.R. 33 CONN. ~ STA. 79+83
ESTIMATED QUANTITIES
TO SHEET No. 69

603 151' ~ Type A 36" 706.02, 2250 D-Load, or 42" 707.01 (0.138), 707.05 (0.138), 707.04 (0.138), 707.09 (0.109), 707.22

602 1.84 C.Y. Concrete Masonry

601 10.1 C.Y. R.C.P. Type B w/Filter

601 3.9 S.Y. Riprap - 6" Rein. Conc. Slab

Drainage Area = 26.2 Acres
Q₅₀ = 109 cfs

STRUCTURE No. GAL - 35 - 7.16
ESTIMATED QUANTITIES
TO SHEET No. 68

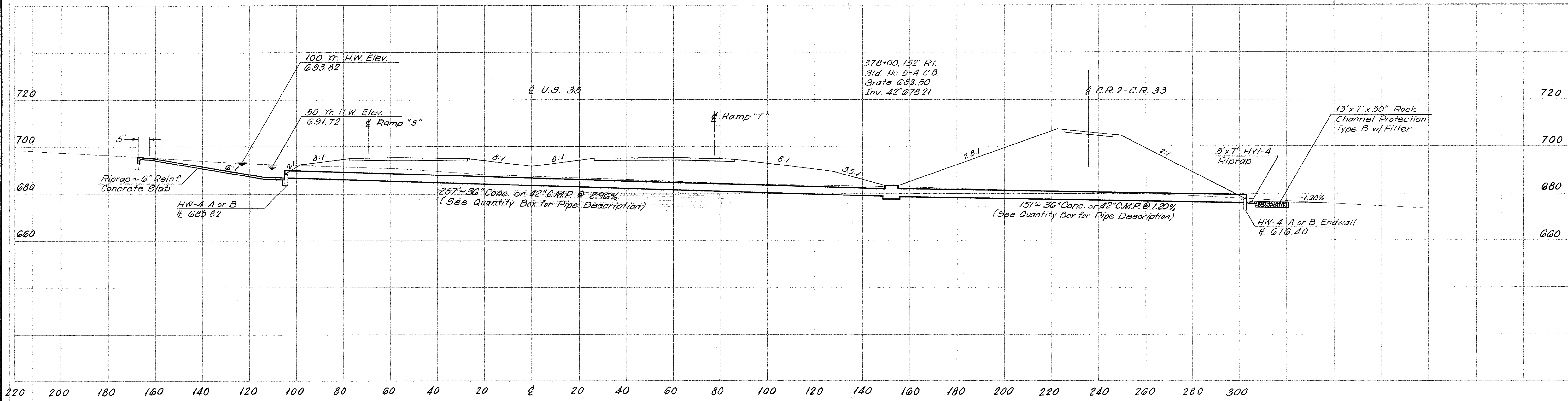
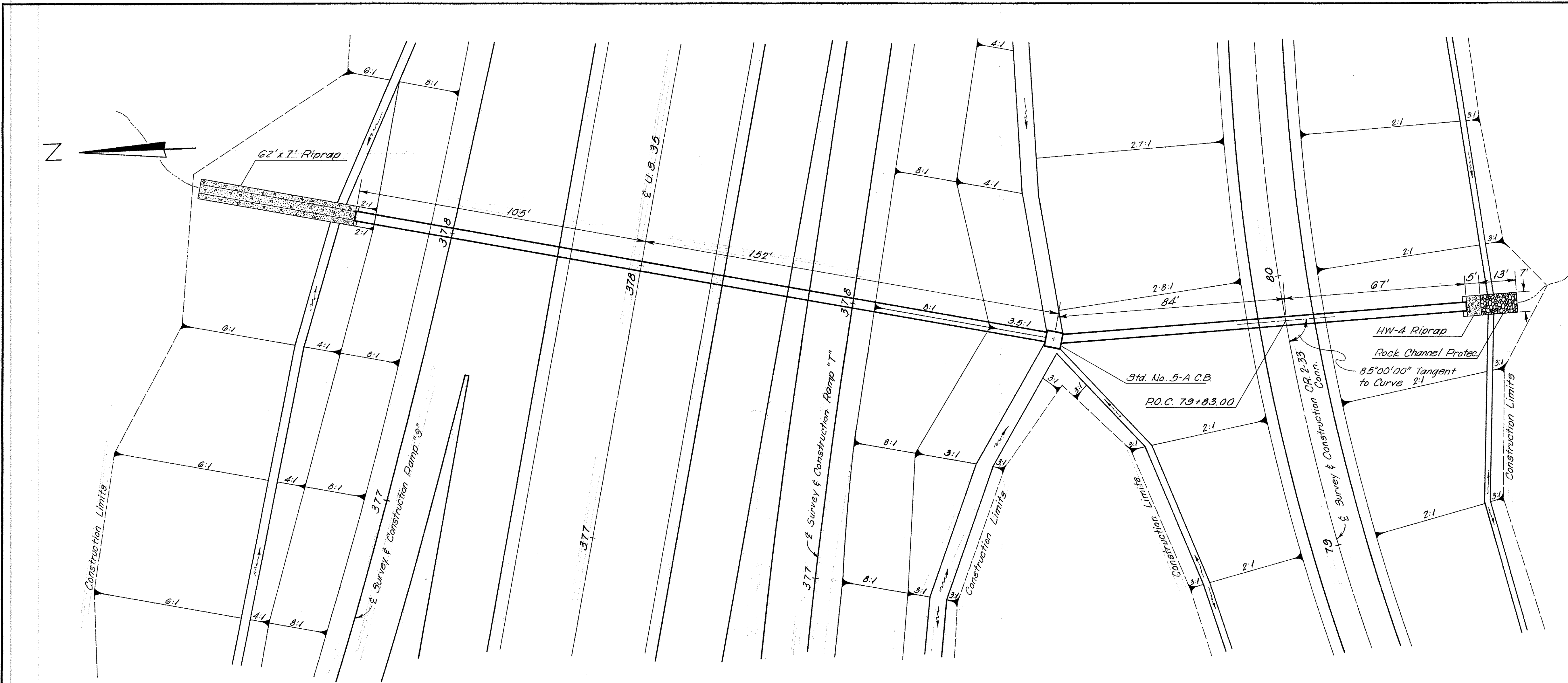
603 257' ~ Type A, 36" 706.02 or 42" 707.01 (0.138), 707.04 (0.138), 707.05 (0.138), 707.09 (0.109), 707.22

602 1.29 C.Y. Concrete Masonry

601 41.3 S.Y. Riprap - 6" Rein. Conc. Slab

604 1 Ea. Std. No. 5-A Catch Basin

Drainage Area = 24.84 Acres
Q₅₀ = 84.0 cfs



ESTIMATED QUANTITIES - WATER AND SEWER LINES

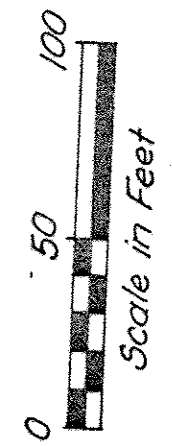
ITEM	602	814	814	603	
REF. NO.	CONCRETE MASONRY	14" Steel Pipe Encasement Open Cut	4" Water Main Pipe 4" Water Main Pipe 4" Water Main Pipe 4" Water Main Pipe	1" AIR RELEASE OUTLET	4" Cast Iron Pipe 4" Cast Iron Pipe 4" Cast Iron Pipe 4" Cast Iron Pipe
	Cu. Yds.	Lin. Ft.	Lin. Ft.	EACH	Lin. Ft.
W-1	0.43		597	2	
S-1	0.30				621
D-1		100			
D-2		380			
D-3		120			
TOTAL	0.73	600	597	2	621

FHWA REGION	STATE	PROJECT
5	OHIO	

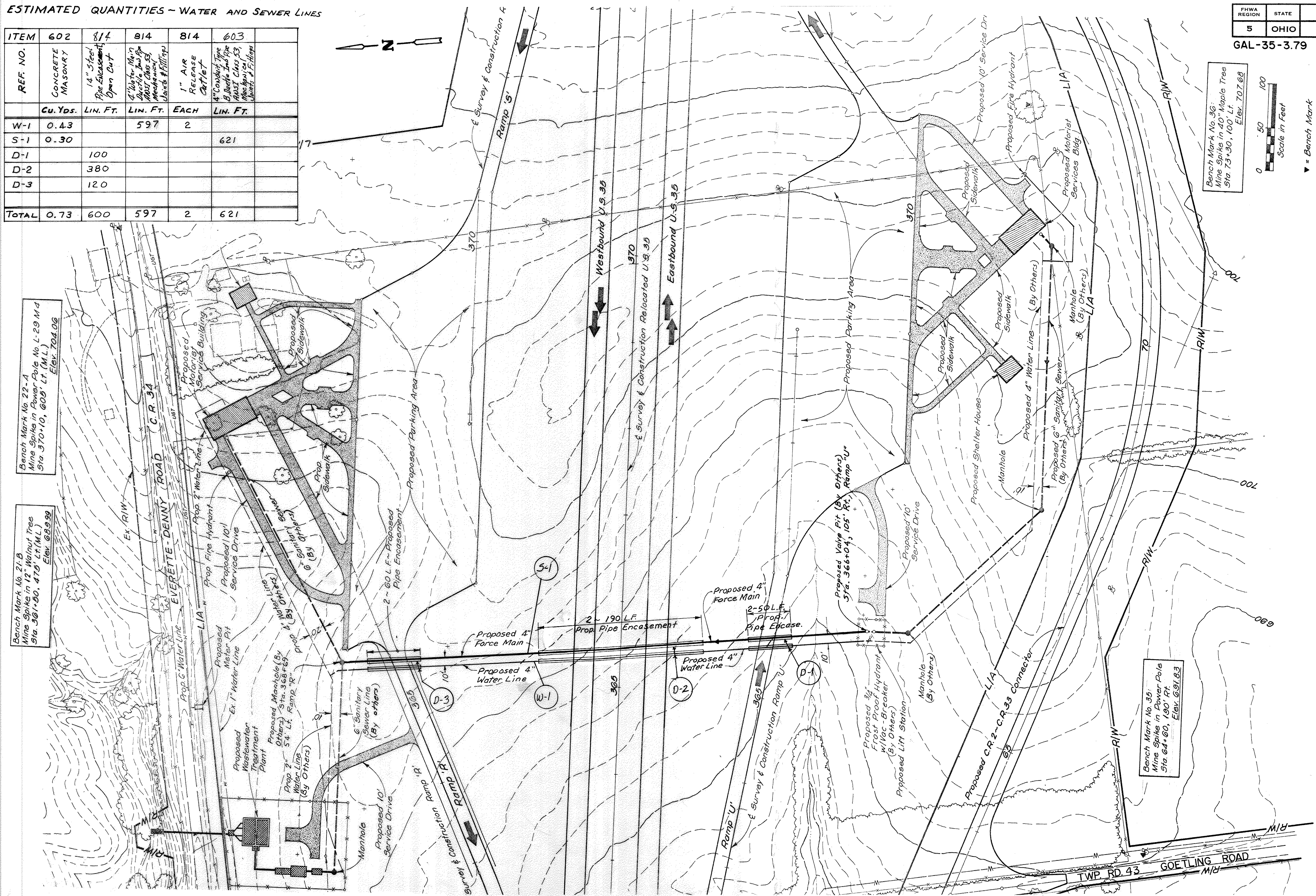
GAL-35-3.79

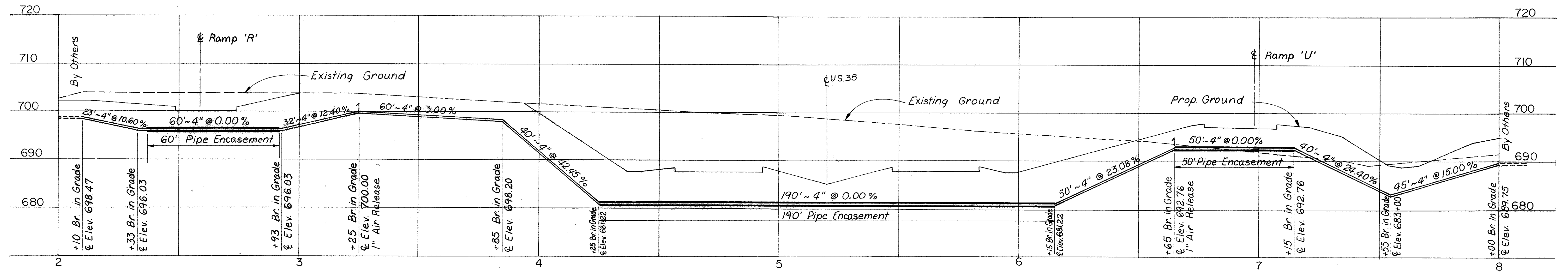
428A
630

Bench Mark No. 36:
Mine Spike in 40" Maple Tree
Sta. 73+50, 100' Lt.
Elev. 707.68

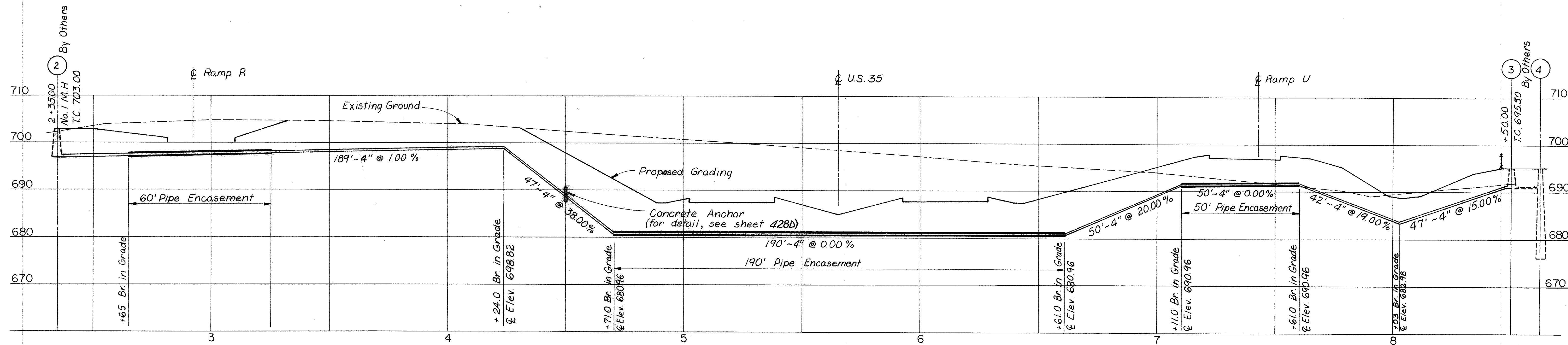


▼ = Bench Mark



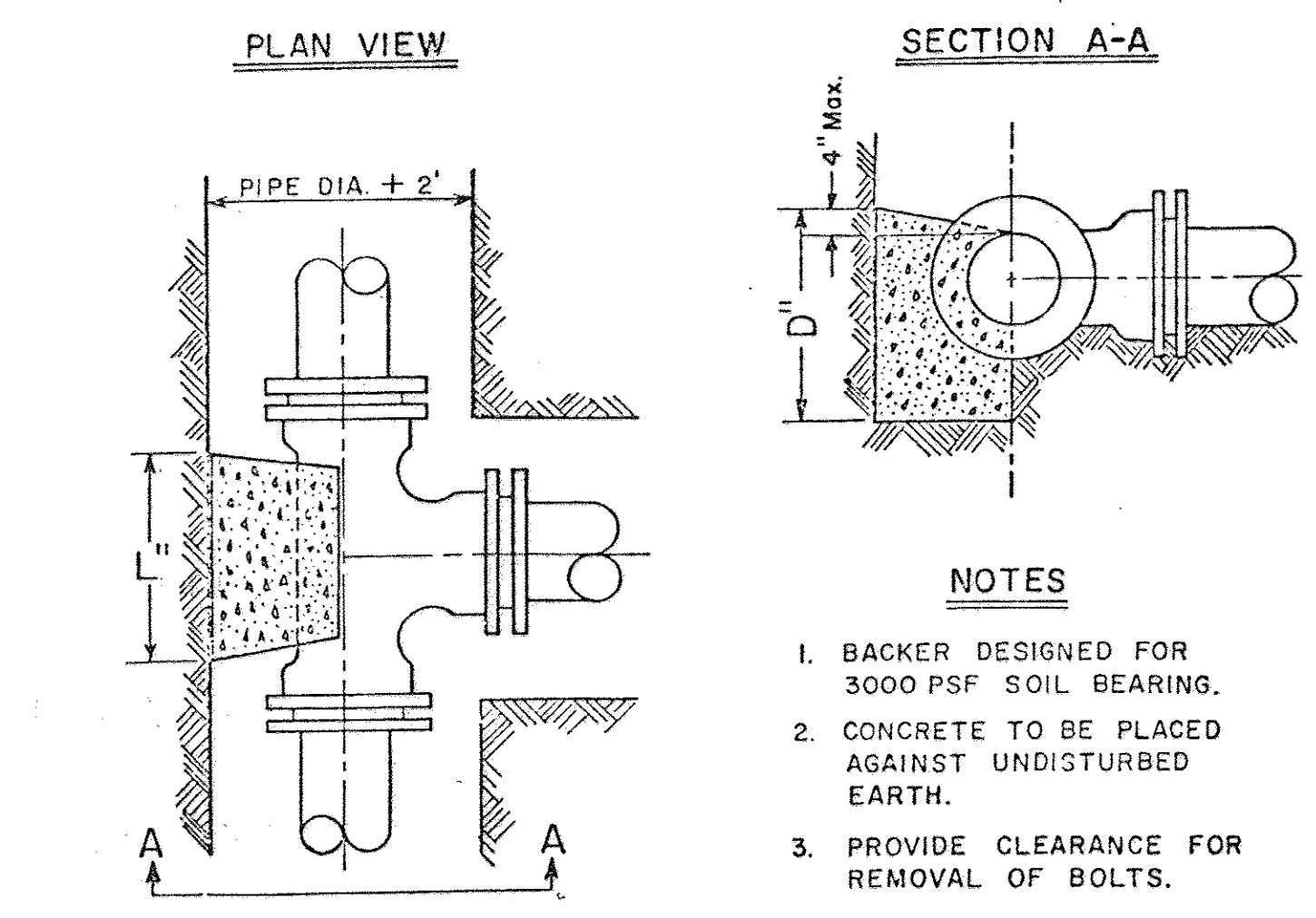


U.S. 35 WATERLINE CROSSING



U.S. 35 SANITARY SEWER CROSSING

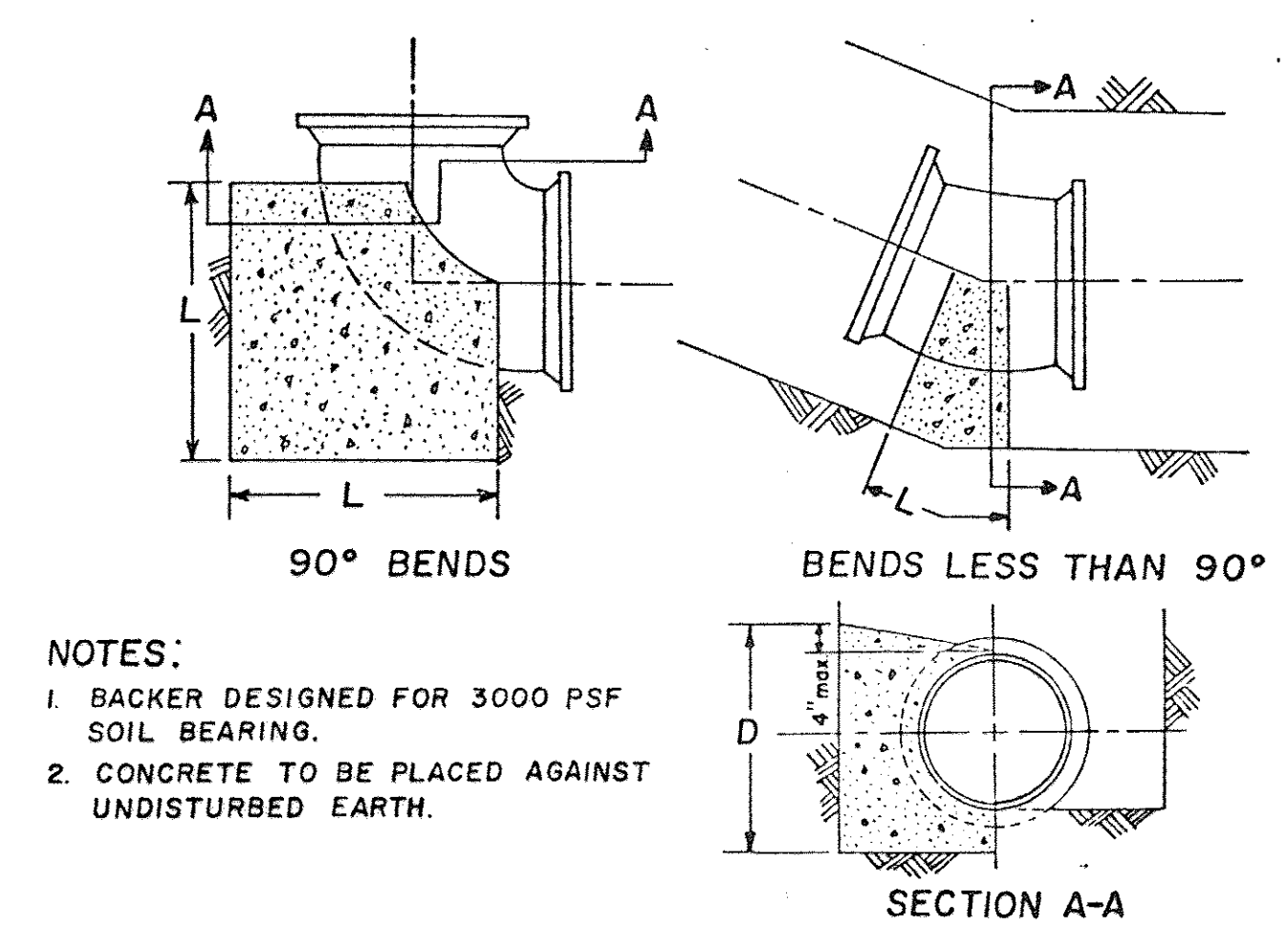
GALLIA COUNTY
GAL-35-3.79



- NOTES**
1. BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
 2. CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH.
 3. PROVIDE CLEARANCE FOR REMOVAL OF BOLTS.

R UN	3"			4"			6"		
	L"	D"	Vc.f.	L"	D"	Vc.f.	L"	D"	Vc.f.
3"	12	5	0.5						
4"	10	6	0.5	11	8	0.8			
6"	9	7	0.5	11	8	0.8	18	12	1.9

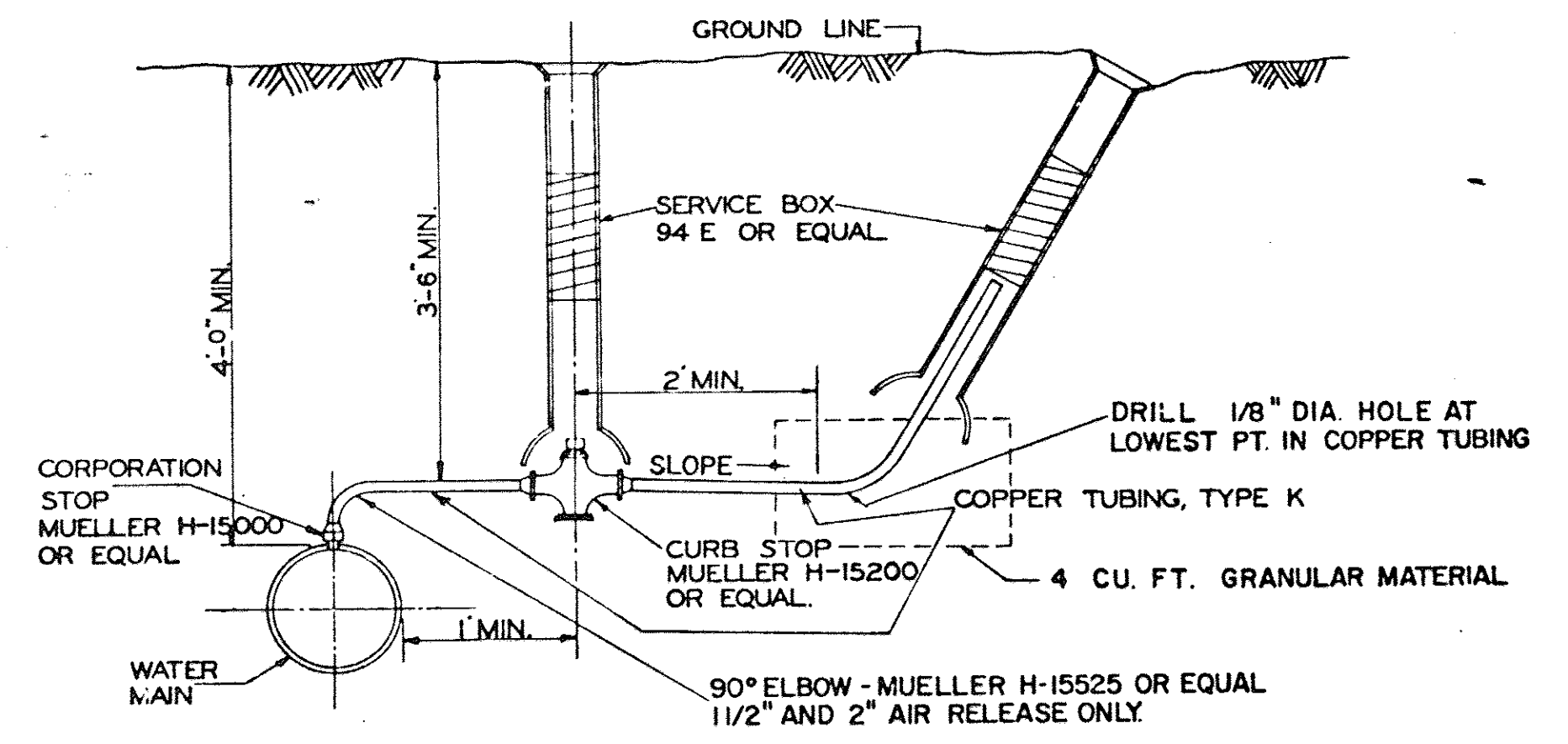
STANDARD DETAIL
BACKING FOR TEES



- NOTES:**
1. BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
 2. CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH.

SIZE OF PIPE	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	L"	D"	Vc.f.	L"	D"	Vc.f.	L"	D"	Vc.f.	L"	D"	Vc.f.
3"	4	3	0.1	6	4	0.2	10	4	0.3	10	4	0.3
4"	5	4	0.2	9	5	0.4	14	5	0.6	14	5	0.6
6"	8	6	0.5	12	7	0.7	20	8	1.4	18	9	1.7

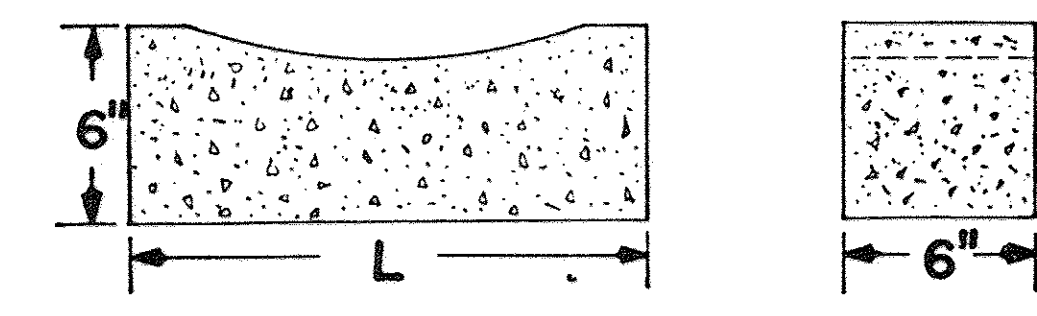
STANDARD DETAIL
BACKING FOR BENDS
HORIZONTAL AND VERTICAL SAG



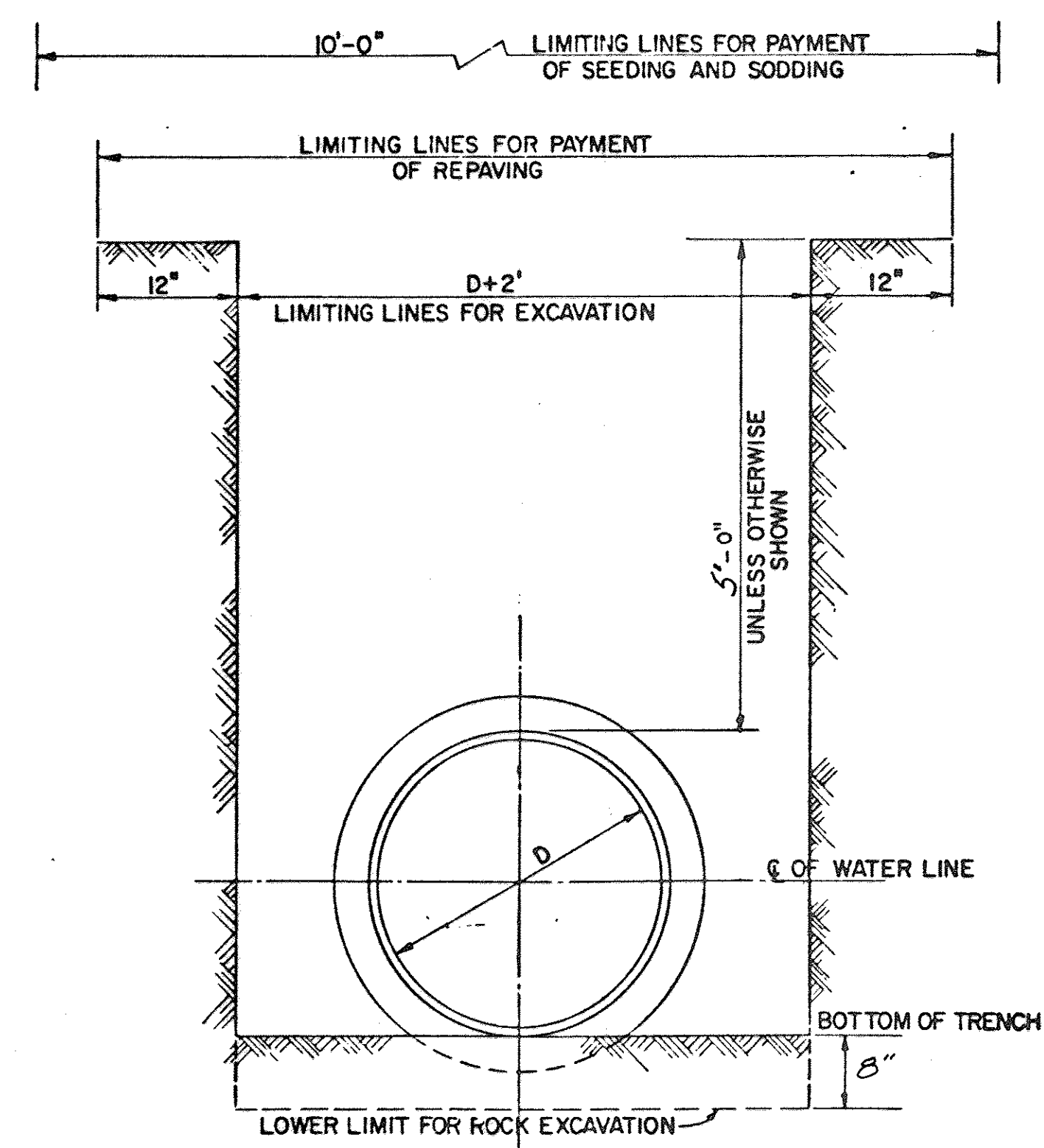
STANDARD DETAIL
TYPICAL AIR RELEASE
3/4" THRU 2"

GATE VALVES

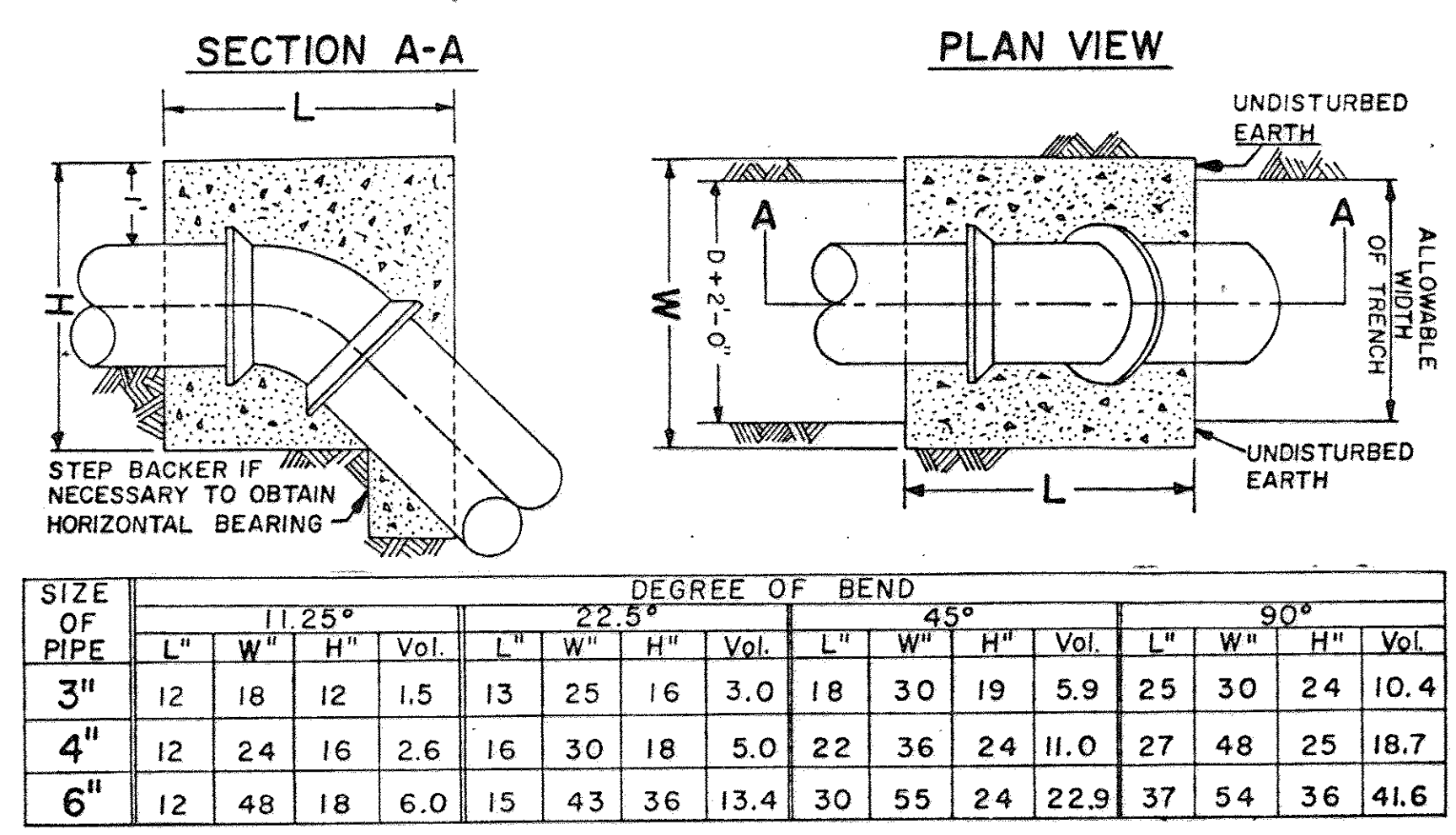
SIZE OF VALVE	L	VOLUME CU-FT
3"	15"	0.31
4"	16"	0.33
6"	17"	0.36
8"	20"	0.42
12"	24"	0.50
16"	30"	0.63



CONCRETE VALVE SUPPORTS
STANDARD DETAIL



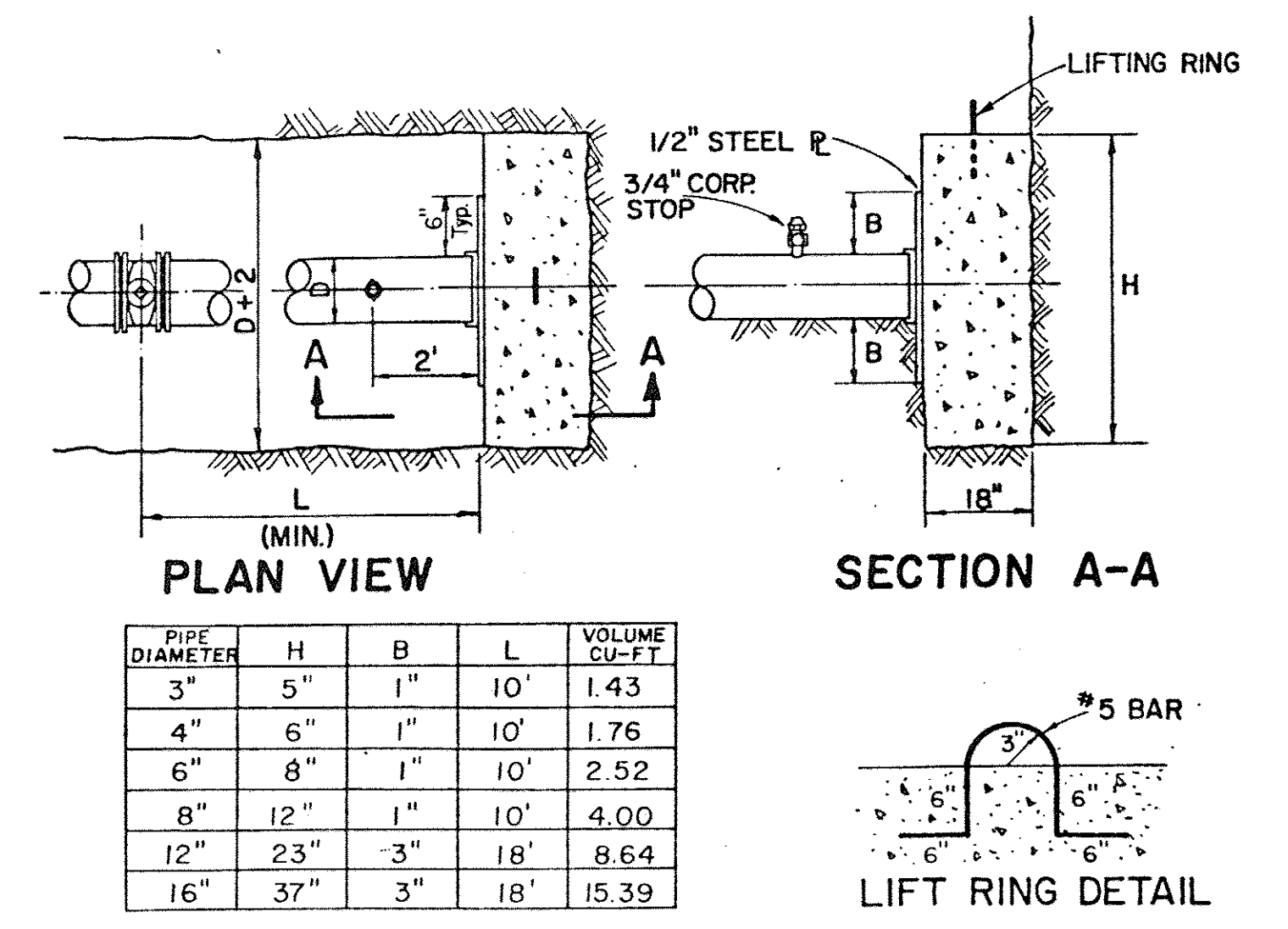
STANDARD DETAIL
TYPICAL TRENCH



SIZE OF PIPE	DEGREE OF BEND											
	11.25°			22.5°			45°			90°		
	L"	W"	H"	Vol.	L"	W"	H"	Vol.	L"	W"	H"	Vol.
3"	12	18	12	1.5	13	25	16	3.0	18	30	19	5.9
4"	12	24	16	2.6	16	30	18	5.0	22	36	24	11.0
6"	12	48	18	6.0	15	43	36	13.4	30	55	24	22.9

- NOTE:**
1. VOLUMES GIVEN IN CUBIC FEET.
 2. BACKER TO BE CENTERED HORIZONTALLY ON BEND.
 3. STEEL WILL BE USED AS REQUIRED BY THE ENGINEER.

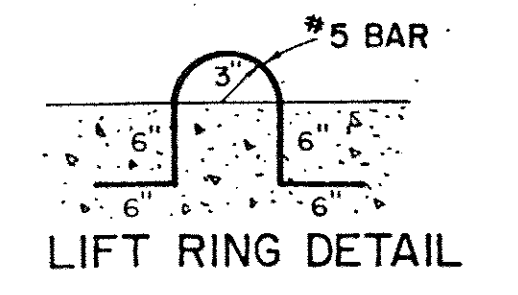
STANDARD DETAIL
BACKING FOR VERTICAL BENDS
(OVER BENDS ONLY)

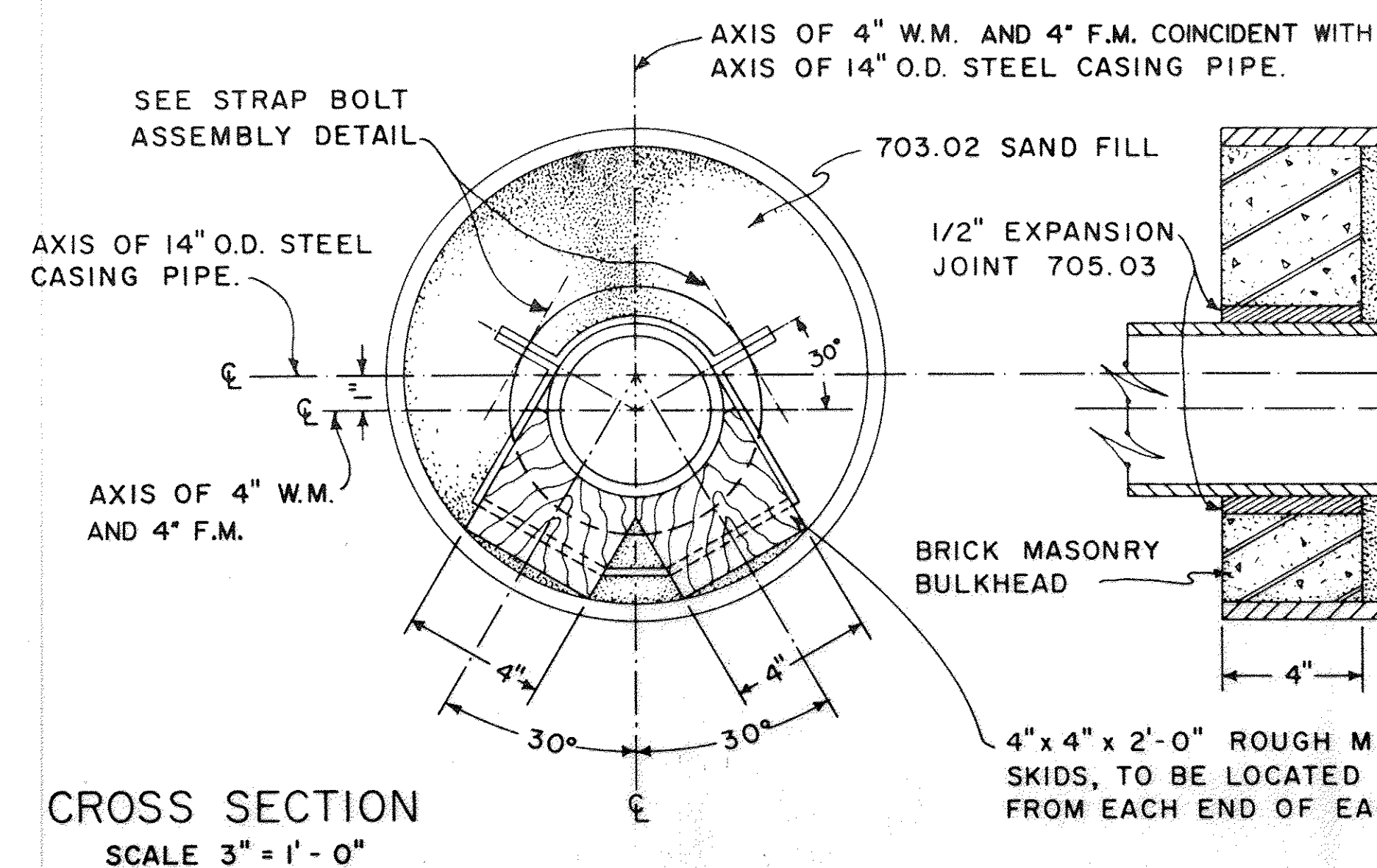


PIPE DIAMETER	H	B	L	VOLUME CU-FT
3"	5"	1"	10'	1.43
4"	6"	1"	10'	1.76
6"	8"	1"	10'	2.52
8"	12"	1"	10'	4.00
12"	23"	3"	18'	8.64
16"	37"	3"	18'	15.39

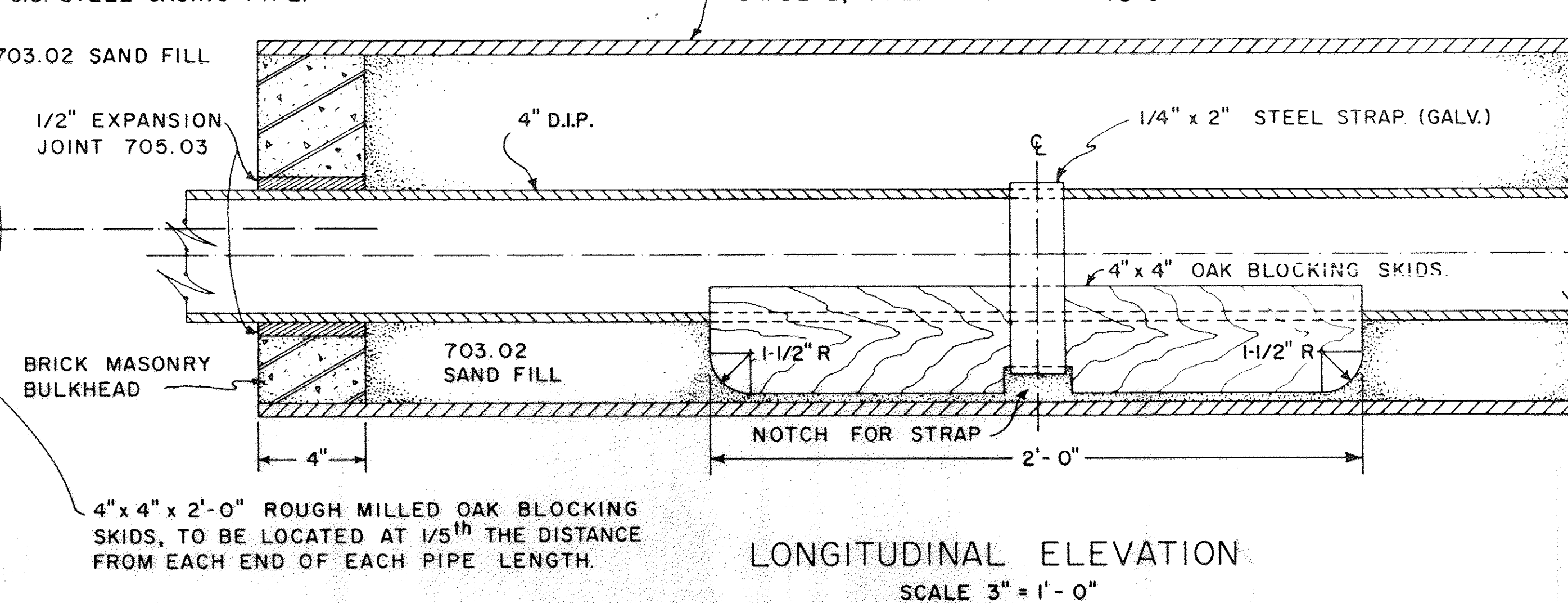
- NOTE:**
1. BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
 2. END OF PIPE CAPPED OR PLUGGED.
 3. GREASE STEEL PLATE WHERE IN CONTACT WITH CONCRETE BACKER.
 4. PLACE CONCRETE AGAINST UNDISTURBED SOIL.
 5. THOROUGHLY COMPACT BACKFILL BETWEEN VALVE AND END OF PIPE.

STANDARD DETAIL
THRUST BLOCK DETAIL
END OF PIPE





14" O.D. STEEL CASING PIPE A.S.T.M. A-53 GRADE B OR A.S.T.M. A-139 GRADE B, WALL THICKNESS 0.375



4" FORCE MAIN AND
4" WATER MAIN ENCASEMENT

PAYMENT: THE 14-INCH O.D. STEEL CASING PIPE, INCLUDING THE ROUGH MILLED OAK BLOCKING, 1/4-INCH STEEL STRAPS WITH BOLTS, NUTS AND WASHER ASSEMBLIES, MASONRY BULKHEADS AND 703.02 AGGREGATE SAND FILL, SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER LINEAR FOOT FOR ITEM 814-14-INCH STEEL PIPE ENCASEMENT, OPEN CUT. WHICH PRICE AND PAYMENT SHALL INCLUDE THE FURNISHING OF ALL LABOR, MATERIALS, AND SMALL TOOLS AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK. THE STEEL CASING PIPE SECTIONS SHALL BE JOINED BY BUTT WELDING IN ACCORDANCE WITH 513.17.

PAYMENT WILL BE MADE FOR THE SPECIFIED WATER MAIN & FORCE MAIN INSTALLED IN STEEL CASING PIPE AT CONTRACT UNIT PRICE BID PER L.F. FOR ITEM 814- 4" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 53, MECHANICAL JOINTS & FITTINGS AND ITEM 603- 4" CONDUIT, TYPE B, DUCTILE IRON PIPE ANSI CLASS 53, MECHANICAL JOINTS & FITTINGS (SANITARY)

NOTE: ALL STRAPS SHALL BE FABRICATED FROM ANSI NO. C-1018, COLD FINISHED 1/4-INCH x 2-INCH FLAT BARS, WT. 1.700 LBS. PER FT. AND SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.

THE ENDS OF THE PROPOSED WATER MAIN AND FORCE MAIN SHALL BE PLUGGED AND MARKED WITH STAKE OR OTHER SUITABLE MEANS WHERE WORK STOPS WITH THIS PROJECT.

ITEM 814-4" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 53, MECHANICAL JOINTS AND FITTINGS

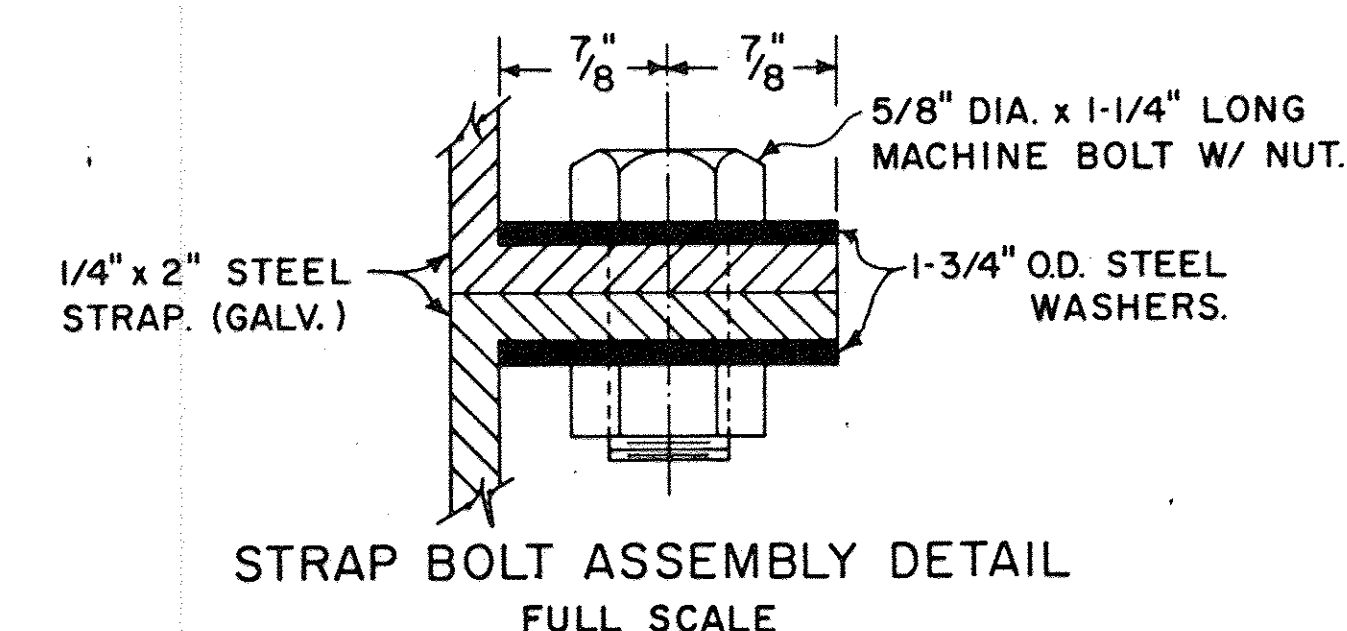
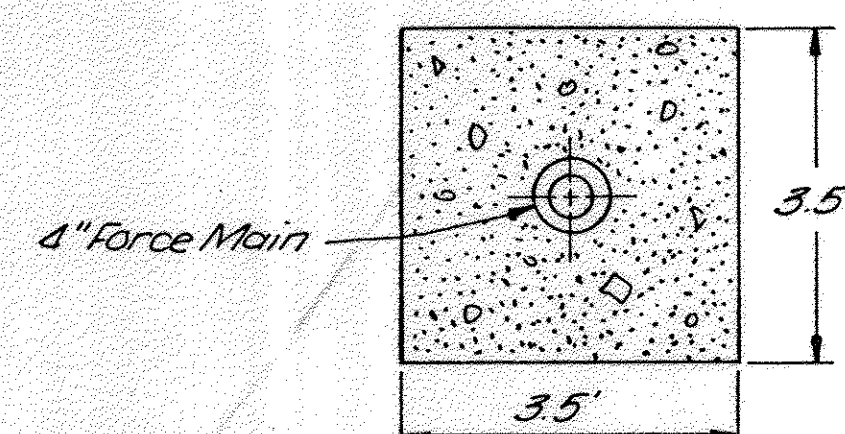
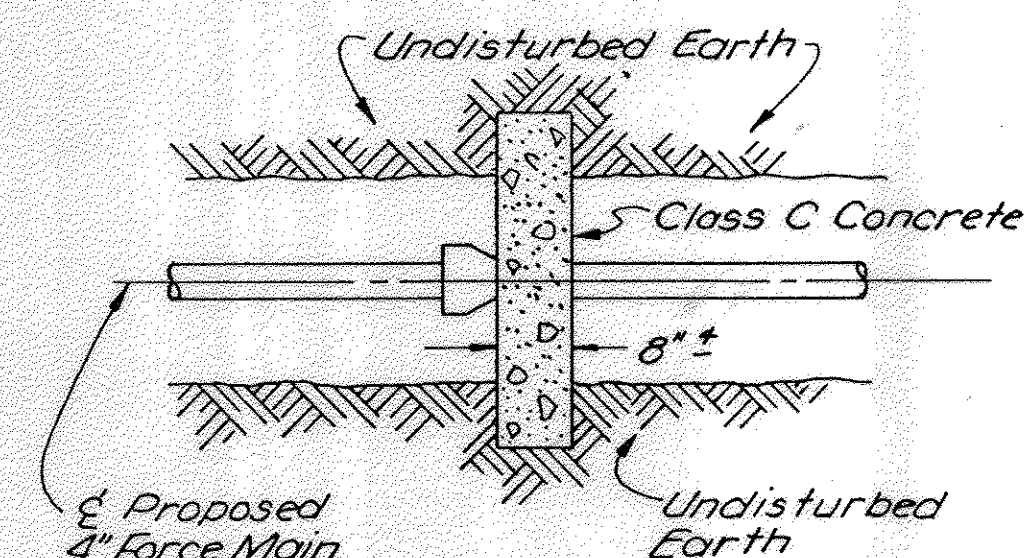
ALL NEW WATER LINE CONSTRUCTION SHALL BE MADE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION NO. 814, "WATER MAINS AND SERVICE BRANCHES" WITH THE EXCEPTION OF SPECIFIC PAY ITEMS DESCRIBED IN THE ESTIMATED QUANTITIES LIST INCLUDED IN THE PLAN. REACTION BACKING SHALL BE PAID FOR UNDER ITEM 602, CONCRETE MASONRY.

ITEM 603 , 4" CONDUIT, TYPE B, DUCTILE IRON PIPE ANSI CLASS 53, MECHANICAL JOINTS AND FITTINGS (SANITARY)

BETWEEN STATIONS 2+35 AND 8+50 MECHANICAL JOINT DUCTILE IRON PIPE MEETING ANSI/AWWA - A21.51/C151 AND ANSI/AWWA - A21.11/C111 STANDARDS. CLASS 53 SHALL BE USED.

CONCRETE ANCHOR DETAIL

4" Force Main, Sta. 4+50, See Sheet No. 428B



BUREAU OF DESIGN SERVICES DIVISION OF HIGHWAYS OHIO DEPARTMENT OF TRANSPORTATION	
FORCE MAIN AND WATER MAIN ENCASEMENT	DATE
GENERAL NOTE	
CONCRETE ANCHOR DETAIL	

CALC. BY GRS DATE 10/89		OHIO	5	
OHKD. BY TWS DATE 10/89		FHWA REGION		

LIGHTING GENERAL NOTES AND GENERAL SUMMARY

LIGHTING SUB-SUMMARY

LOCATION	STATION TO STATION			SIDE	Light Pole AT 15 B 41.7			Structure Grounding System Bridge No. Gal - 355-0127	Structure Grounding System Bridge No. Gal - 35 - 0413	Light Pole Foundation 24" x 80"	Ground Rod 7/3.16	LUMINAIRE			Pull Box Concrete 18" 7/3.08	Trench, 24" Deep	2" Conduit, 7/3.04	3" Conduit, 7/3.04	1 1/2" Duct Cable W/2 No. 4 AWG 5000 Volt Cables	No. 4 AWG 5000 Volt Distribution Cable	No. 10 AWG Pole & Bracket Cable	CONNECTOR KIT			
												200W HPS Style B, Type II, 7/3.11, 480 V										Type II	Type III	Type VII B	Cable Splicing Kit
From Sheet No 5/4					Ea.					Ea.	Ea.		Ea.		L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	Ea.	Ea.	Ea.	Ea.	
U.S. 35	200+50		Rt.	/						/	/		/								115	/	/		
	200+50	207+10	Rt.	/						/	/		/		662			672			115	/	/		
	207+10		Rt.	/						/	/		/								115	/	/		
	207+10	209+10(D)	Rt.	/						/	/		/		200			210			115	/	/		
	209+10(D)		Rt.	/						/	/		/								115	/	/		
	209+10(D)	208+90	Lt. & Rt.	/						/	/		/		70		30	80			115	/	/		
	208+90		Rt.	/						/	/		/								115	/	/		
U.S. 35	201+70		Lt.	/						/	/		/								115	/	/		
	201+70	205+20	Lt.	/						/	/		/		350			360			115	/	/		
	205+20		Lt.	/						/	/		/								115	/	/		
	205+20	208+45	Lt.	/						/	/		/		325			335			115	/	/	2	
	208+45		Lt.	/						/	/		/								115	/	/		
	208+45	103+45(325)	Lt.	/						/	/		/		1,155		80	1,165							
	208+45	208+90	Lt. & Rt.	/						/	/		/		165		110	175							
S.R. 325	96+00		Lt.	/						/	/		/								115	/	/		
	96+00	97+35	Lt. & Rt.	/						/	/		/		240		100	250			115	/	/		
	97+35		Rt.	/						/	/		/								115	/	/		
	97+35	98+58	Lt. & Rt.	/						/	/		/		175		50	185							
	98+58		Lt.	/						/	/		/											2	
	98+58	101+25	Lt.	/						/	/		/												
	101+25		Lt.	/						/	/		/											2	
	101+25	102+40	Lt.	/						/	/		/		115			125			115	/	/		
	102+40		Lt.	/						/	/		/								115	/	/		
	102+40	103+45	Lt. & Rt.	/						/	/		/		200		90	210			115	/	/		
	103+45		Rt.	/						/	/		/								115	/	/		
	103+45	220+00(B)	Lt. & Rt.	/						/	/		/		80			80						6	
	103+45	105+25	Rt.	/						/	/		/											6	
	105+25		Rt.	/						/	/		/												
	105+25	105+50	Rt.	/						/	/		/		25		25	150							
TOTAL SHEET No 5/4					11		1	1		11	11		11	4	3,762	452	485	3,847	1,874	1,265	11	11	2	16	

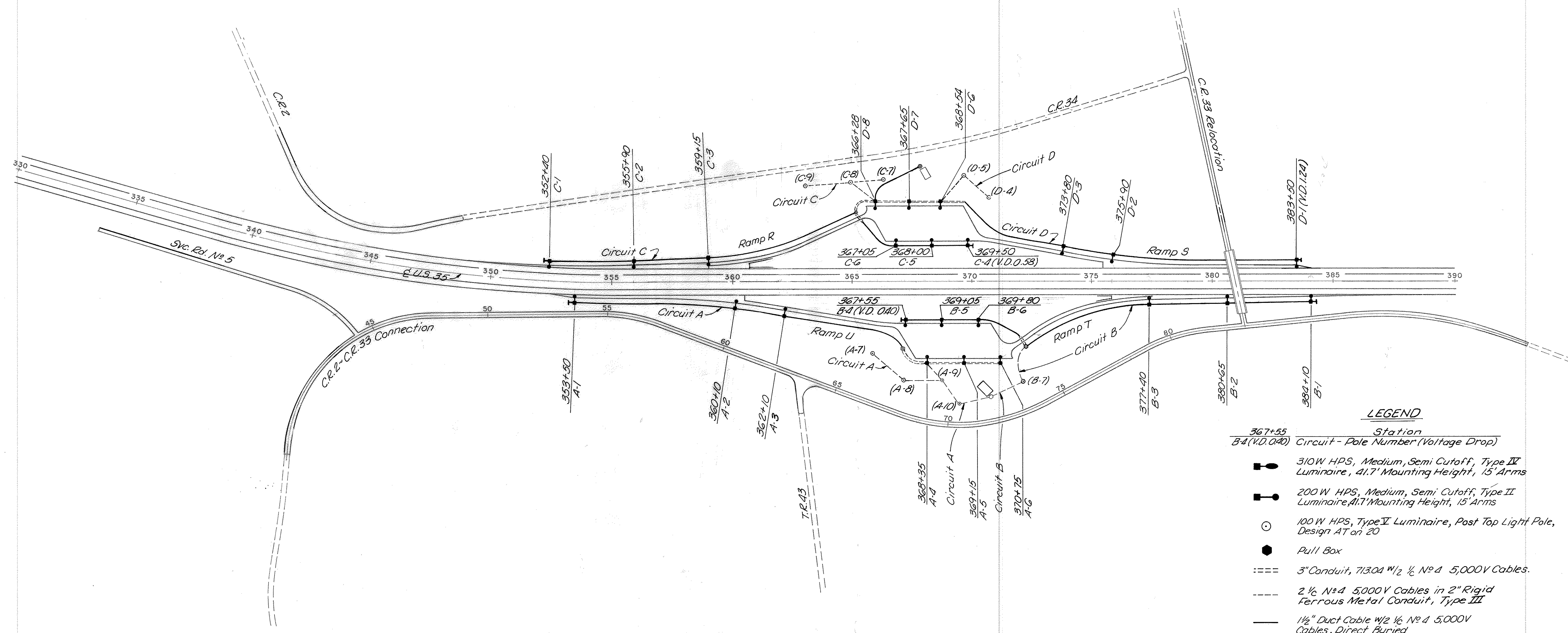
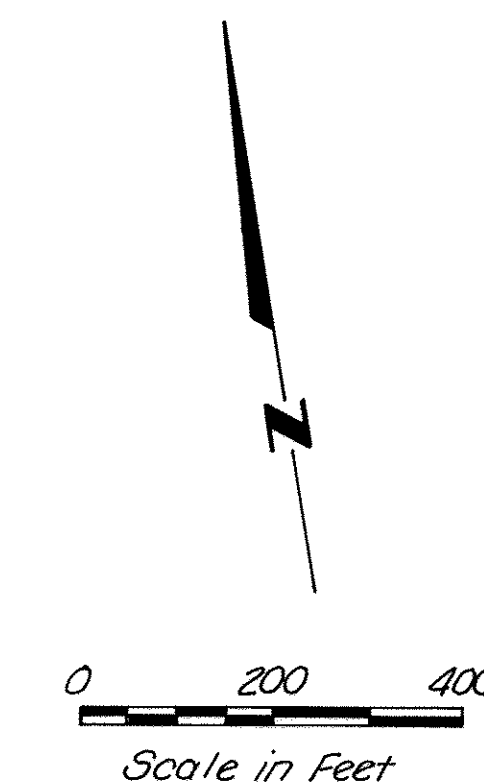
LOCATION			STATION TO STATION	SIDE	Light Pole AT 15 B 41.7	Light Pole Anchor Bolts On Structure	Power Service	Junction Box	Light Pole Foundation 20" x 8'0"	Ground Rod 7/3.16	Structure Grounding System Bridge No. Gal-35-0437R	Luminaire 200W HPS Style II, 480V Gal-35-0437L	Structure Grounding System Bridge No. Gal-35-0437L	12" Box Concrete 18" 7/3.08	Trench, 20" Deep	2" Conduit, 7/304	3" Conduit, 7/304	1 1/2" Duct Cable W/2 No.4 AWG 5000 Volt Cables	No.4 AWG 5000 Volt Distribution Cable	No.10 AWG Pole w/ Bracket Cable	CONNECTOR KIT				
From Sheet No 5/5					Ea.	Ea.	Ea.	Ea.	Ea.	Ea.		Ea.		Ea.		L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	Ea.	Ea.	Ea.	Ea.
Ramp B	220+00	226+75	Lt.																						
	226+75		Lt.	1					1	1		1				675			685		115	1	1	2	
	226+75	228+90(35)	Lt.													205			215						
U.S. 35	228+90		Lt.	1					1	1		1									115	1	1		
	228+90	230+35	Lt.													150			160						
	230+35		Lt.										1	1										2	
	230+35	231+10	Lt.										1				80		180						
	231+10		Lt.		4		1										5								
	231+10	231+60	Lt.														55		130						
	231+60		Lt.											1										2	
	231+60	235+50	Lt.													400		410							
235+50		Lt.	1					1	1		1									115	1	1			
U.S. 35	226+75(B)	227+05	Lt.													75		35	85						
	227+05		Lt.	1					1	1		1									115	1	1		
	227+05	227+55	Lt. & Rt.													165		115	175						
	227+55		Rt.	1					1	1		1									115	1	1		
	227+55	230+80	Rt.													325		335			115	1	1		
	230+80		Rt.	1					1	1		1													
	230+80	232+15	Rt.								1						135		290						
	232+15		Rt.										1											2	
232+15	234+30	Rt.													210		220								
234+30		Rt.	1					1	1		1									115	1	1			
S.R. 325	105+50	125+85(554)	Rt.													110		110	720						
S.R. 554	125+85		Rt.	1					1	1		1									115	1	1		
	125+85		Lt. & Rt.												60		60	420							
S.R. 554	124+20		Lt.	1					1	1		1									115	1	1		
	124+20	125+85	Lt.													165		80	175						
	125+85		Lt.				1						1												
TOTAL SHEET No 5/5				9	4	1	1	9	9	1	9	1	4			2540	275	400	2460	1740	1,035	9	9	2	6

LIGHTING SUB-SUMMARY

QUANTITIES BY: TK 8/85
CHECKED BY: TB 1/86

LOCATION	STATION TO STATION		SIDE	Light Pole AT 15 B d1.7	Light Pole AT on 20	Light Pole Foundation 24" x 60"	Light Pole Foundation 24" x 8'0"	Ground Rod 713.16	LUMINAIRE				Trench, 24" Deep	2" Conduit, 713.04	3" Conduit, 713.04	1 1/2" Duct Cable w/ 2 No. 4 AWG 5000 Volt Cables	No. 4 AWG 5000 Volt Distribution Cable	No. 10 AWG Pole and Bracket Cable	CONNECTOR KIT		
				Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Type II							Type III B	Cable Splicing Kit	
From Sheet No 517																					
U.S. 35	352+40		Lt.	1			1	1	1								115	2			
	352+40	355+90	Lt.				1	1	1			345			355		115	2			
	355+90		Lt.	1			1	1	1												
	355+90	359+15	Lt.				1	1	1			325			335		115	2			
	359+15		Lt.	1			1	1	1								115	2			
	359+15	361+50(R)	Lt.									230			230						
U.S. 35	353+50		Rt.	1			1	1	1								115	2			
	353+50	360+10	Rt.				1	1	1			665			675		115	2			
	360+10		Rt.	1			1	1	1								115	2			
	360+10	361+50(U)	Rt.									135			135						
TOTAL SHEET No 517				5			5	5	5			1,700			1,730		575	10			
From Sheet No 518																					
Ramp R	361+50	365+66	Lt.									400	20	410							2
	365+66		Lt.								1										
	365+66	366+31	Lt.				1	1	1		1	110	110		240		115	2	2	4	
	366+31		Lt.	1																	
Ramp R	363+95		Lt.	1		1		1		1							40	2			
	363+95	365+70	Lt.			1						180	180		380		40	2		2	
	365+70		Lt.	1		1		1		1		160	160		340		40	2			
	365+70	366+80	Lt.			1		1		1							40	2			
Ramp R	365+70	366+31	Lt.									125	125		270						
	366+31	368+20	Lt.									265	265		1,040					2	
	368+20		Lt.																		
	Ramp R	365+66	367+05	Lt. & Rt.				1	1	1			200	35	210			115	2		
367+05			Rt.	1																	
367+05		368+00(S)	Rt.									150		160							
Ramp S	368+00		Rt.	1		1	1		1			150			160		115	2			
	368+00	369+50	Rt.				1	1		1							115	2			
	369+50		Rt.	1			1	1		1											
Ramp R	366+31	367+67	Lt.				1	1		1		145	145		310		115	2			
	367+67		Lt.	1			1														
	367+67	368+55(S)	Lt.									145	145		310						
Ramp S	368+55		Lt.	1			1	1		1							115	2		2	
	368+55	369+15	Lt.			1		1				130	130		280		40	2			
	369+15		Lt.	1		1				1											
	369+15	370+25	Lt.			1		1			1	145	145		310		40	2			
	370+25		Lt.	1		1		1		1							40	2			
Ramp S	368+55	373+80	Lt.									580	80	590			115	2			
	373+80		Lt.	1			1	1	1												
	373+80	375+00	Lt.									120		130							
TOTAL SHEET No 518				7	5	5	7	12	1	6	5	2	3,005	740	800	1,660	3,480	1,005	24	6	8

LOCATION	STATION TO STATION		SIDE	Light Pole AT 15 B d1.7	Light Pole AT on 20	Light Pole Foundation 24" x 6'0"	Light Pole Foundation 24" x 8'0"	Ground Rod 713.16	LUMINAIRE			Pull Box Concrete 18" 713.08	Trench, 24" Deep	2" Conduit, 713.04	3" Conduit, 713.04	1 1/2" Duct Cable w/ 2 #4 AWG 5000 Volt Cables	N#2 AWG 5000 Volt Distribution Cable	N# 10 AWG Pole and Bracket Cable	CONNECTOR KIT			
				200W HPS Style B, Type II, 713.11, 240V	310W HPS Style C, Type II, 713.11, 240V	100 W HPS Post Top, Type X, 240V	Type II	Type III B	Cable Splicing Kit													
From Sheet No 519				Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.								Ea.	Ea.	Ea.	
Ramp U	361+50	362+20	Rt.										70			80						
	362+20		Rt.	1			1	1	1								115	2				
Ramp U	362+20	367+37	Rt.										550			560						
	367+37		Rt.								1										2	
	367+37	368+35	Rt.				1	1		1		125		125		270		115	2		2	
	368+35		Rt.	1																		
Ramp U	366+30		Rt.		1			1			1							40	2			
	366+30	367+45	Rt.					1				175	175			370		40	2			
	367+45		Rt.		1			1			1						40	2				
	367+45	369+05	Rt.									160	160			340						
	369+05		Rt.		1			1			1						40	2		2		
	369+05	368+90(T)	Rt.									110	110			240						
Ramp U	368+90		Rt.		1			1			1						40	2				
	368+90	370+10	Rt.									135	135			290						
	368+35	369+05	Rt.									115	115			250						
	368+35	369+18(T)	Rt.									155		155		330						
Ramp T	369+18		Rt.	1			1	1		1							115	2				
	369+18	370+66	Rt.									158		158		336						
	370+66		Rt.	1			1	1		1							115	2				
Ramp T	370+10		Rt.																		2	
	370+10	370+70	Rt.					1				145	145			310						
	370+70		Rt.		1					1							40	2				
	370+70	371+90	Rt.									180	180		380							
	371+90		Rt.								1										2	
Ramp U	367+55		Lt.	1			1	1		1							115	2				
	367+55	369+05	Lt.									150			160		115	2				
	369+05		Lt.	1			1	1		1							115	2				
	369+05	369+80(T)	Lt.									150			160							
Ramp T	369+80		Lt.	1			1	1		1							115	2				
	369+80	371+90	Lt. & Rt.									220	35	230								
	371+90	375+00	Rt.									305		315								
TOTAL SHEET No 519				7	5		5	7	12	1	6	5	2	2,903	1,020	473	1,885	2,736	1,005	24	4	6
From Sheet No 520																						
U.S. 35	375+00(S)	375+90	Lt.										90			90						
	375+90		Lt.	1			1	1	1								115	2				
	375+90	383+50	Lt.									760			770		115	2				
	383+50		Lt.	1			1	1	1													
U.S. 35	375+00(T)	377+40	Rt.										240			240		115	2			
	377+40		Rt.	1			1	1	1													
	377+40	380+65	Rt.				1	1	1			330			340		115	2				
	380+65		Rt.	1			1	1	1								115	2				
	380+65	384+10	Rt.									355			365							
	384+10		Rt.	1			1	1	1								115	2				
TOTAL SHEET No 520				5			5	5	5			1,775			1,805		575	10				



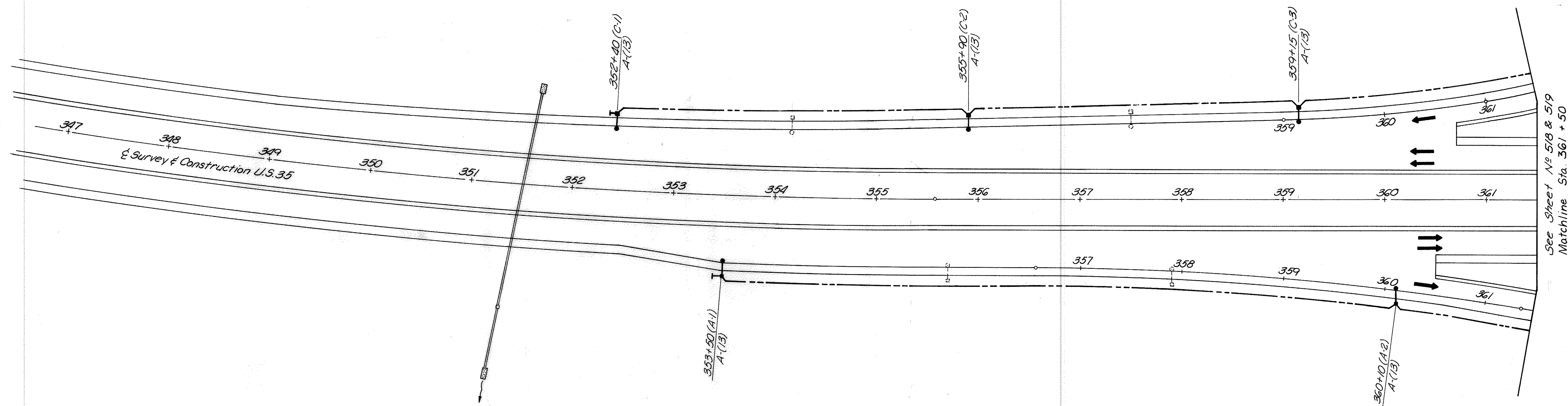
LEGEND

- | | |
|----------------------------|--|
| 367+55
B-4 (V.D. 0.040) | Station
Circuit - Pole Number (Voltage Drop) |
| | 310W HPS, Medium, Semi Cutoff, Type IV Luminaire, 41.7' Mounting Height, 15' Arms |
| | 200 W HPS, Medium, Semi Cutoff, Type II Luminaire, 41.7' Mounting Height, 15' Arms |
| | 100 W HPS, Type I Luminaire, Post Top Light Pole, Design AT or 20 |
| | Pull Box |
| | 3" Conduit, 713.04 W/2 1/2 N° 4 5,000V Cables. |
| | 2 1/2 N° 4 5,000V Cables in 2" Rigid Ferrous Metal Conduit, Type III |
| | 1 1/2" Duct Cable W/2 1/2 N° 4 5,000V Cables, Direct Buried |

LEGEND

- 310W HPS, Medium, Semi-Cutoff, Type III Luminaire, 41.7' Mounting Height, 15' Arms
- 200W HPS, Medium, Semi-Cutoff, Type II Luminaire, 41.7' Mounting Height, 15' Arms
- Future Poles
- 100W HPS, Type II Luminaire, Post Top Light Pole, Design AT on 20.
- Pull Box
- 3" Conduit, 713.04 with 1 1/2" Duct Cable
- 3" Conduit, 713.04 with 2 1/2" No 4 5000V Cables per Circuit.
- 2 1/2" No 4 5000V Cables in 2" Rigid Ferrous Metal Conduit, Type III.
- 1 1/2" Duct Cable w/ 2 1/2" No 4 5000V Cables, Direct Buried.
- Station (Circuit - Pole Number)
Pole Design - (offset from pavement edge)
- Power Service Line
- Telephone Service Line
- Stub And Cap Conduit

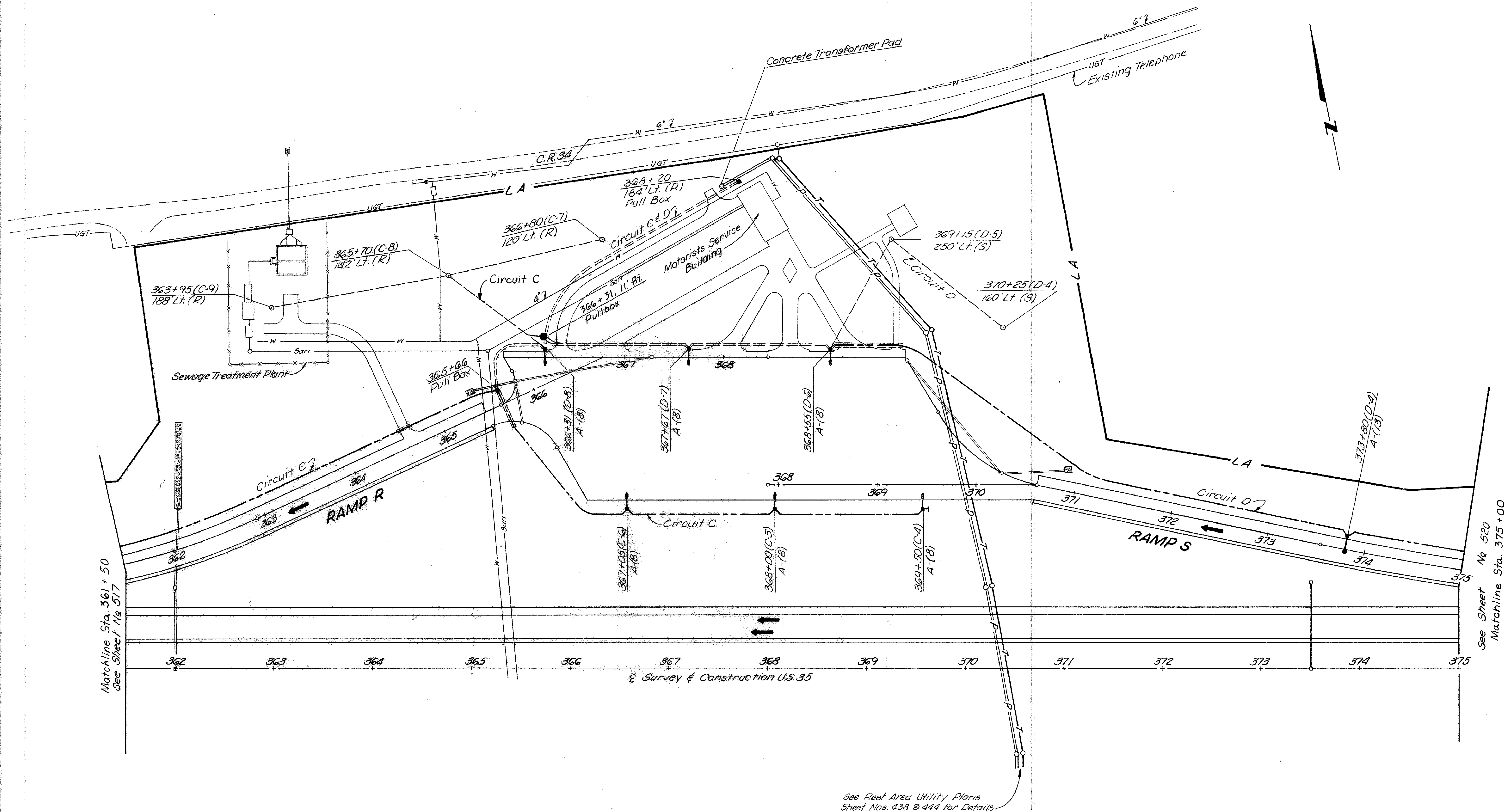
Ref. Letter	Pole Design Number
A	AT 15841.7



FHWA REGION	STATE	PROJECT
5	OHIO	

518
630

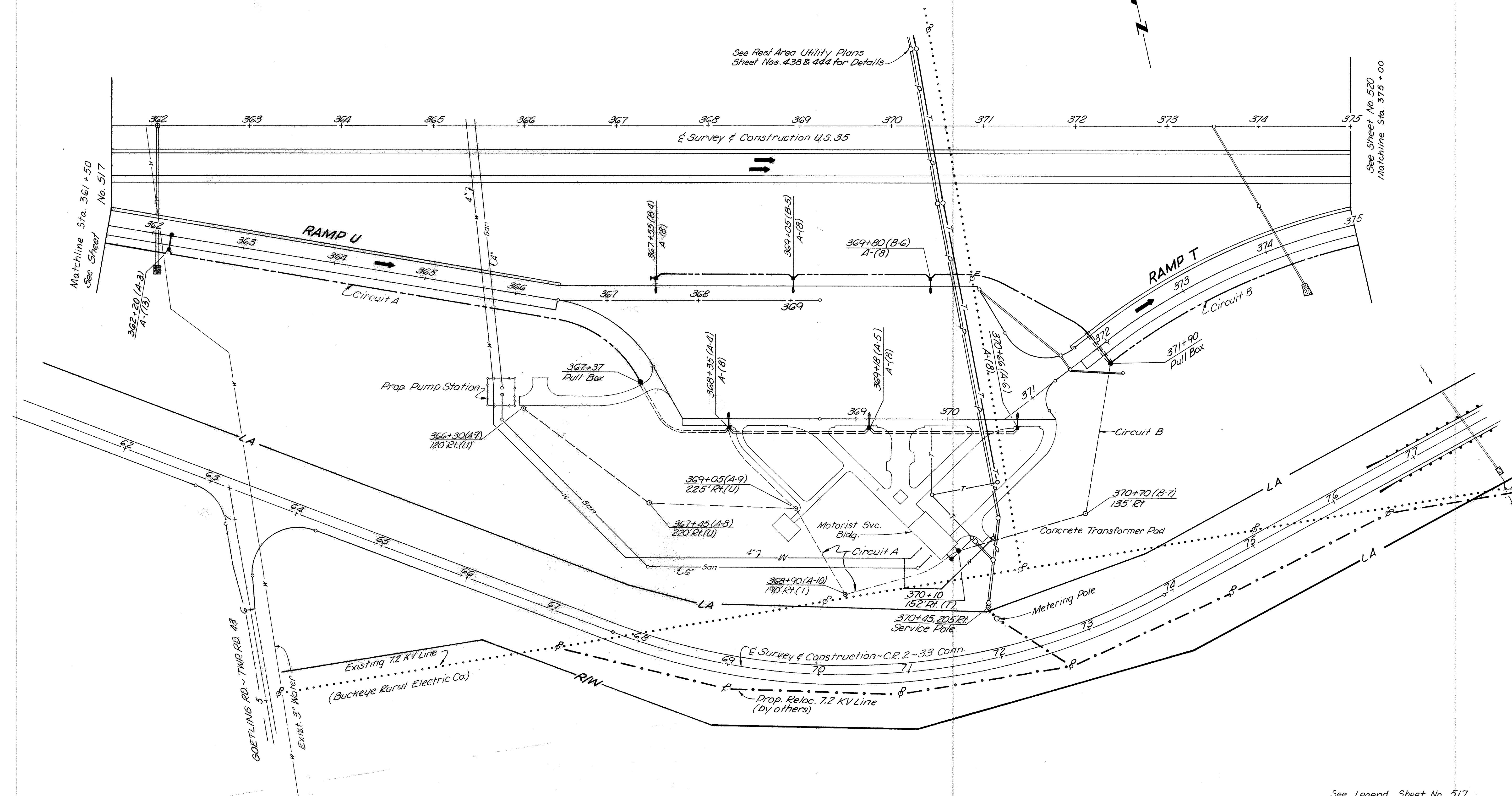
GALLIA COUNTY
GAL-35-3.79



FHWA REGION	STATE	PROJECT
5	OHIO	

519
630

GALLIA COUNTY
GAL-35-3.79

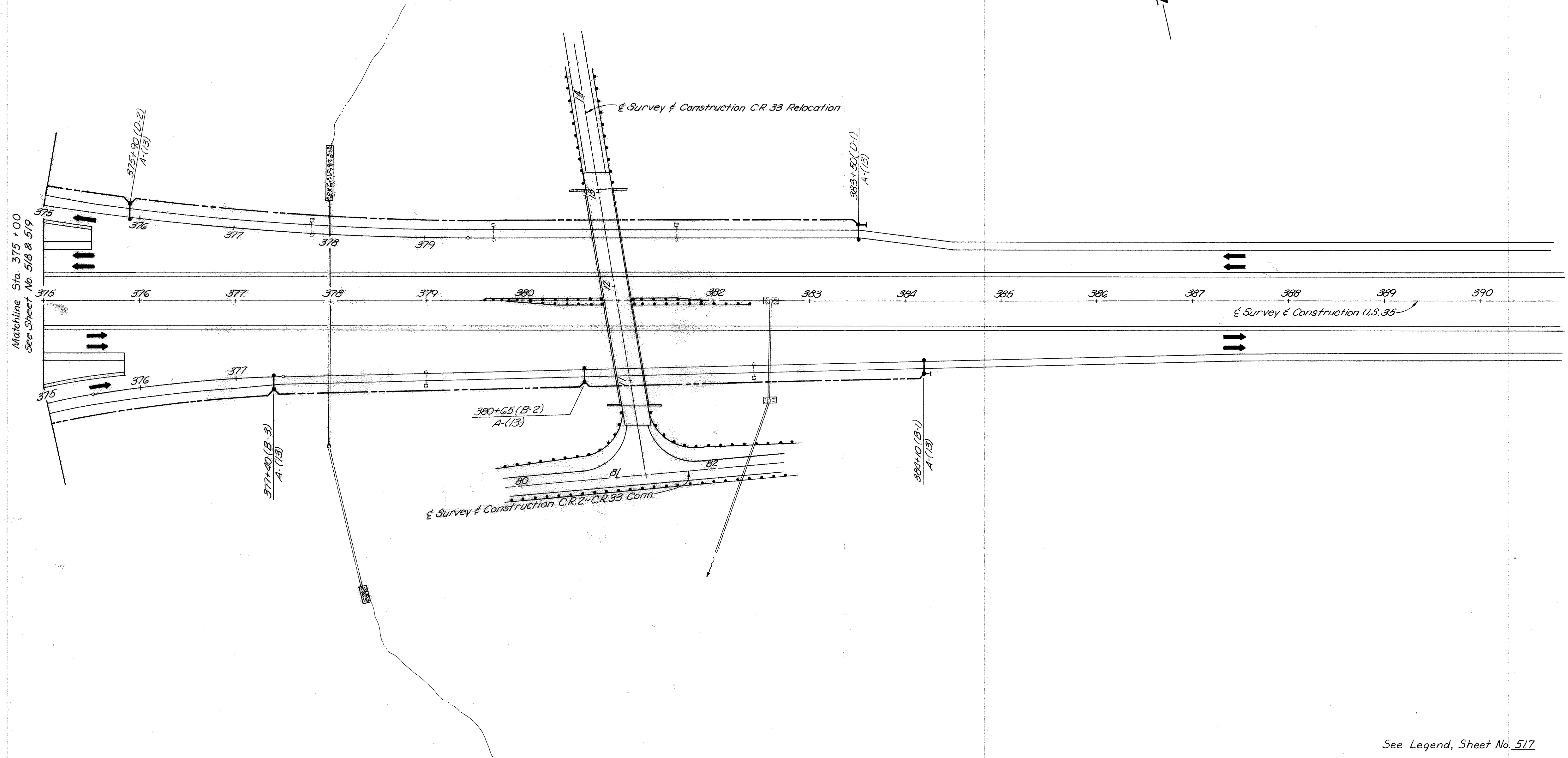


See Legend Sheet No. 517

FHWA REGION	STATE	PROJECT	
5	OHIO		

520
630

GALLIA COUNTY
GAL-35-3.79



See Legend, Sheet No. 517