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GROUND PHOTO LAB

MICROFILMED
SEP 1 0 1986
ON
APERTURE CARDS

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
ASD.-30-8.52 & WAY.-30-0.00
ASHLAND COUNTY
MOHICAN TOWNSHIP
WAYNE COUNTY
PLAIN TOWNSHIP

F-1072 (8)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

1 / 198

ASHLAND & WAYNE CO.
ASD.-30-8.52
WAY.-30-0.00
LIMITED ACCESS

MICROFILMED
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THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02, REVISED CODE OF OHIO.

1963 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

THE RIGHT-OF-WAY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: [signature]
DATE: 2-5-64 DIVISION DEPUTY DIRECTOR

APPROVED: D.H. Overman
DATE: 1-29-64 ENGINEER OF BRIDGES

APPROVED: R.N. Rikett
DATE: 2-7-64 ENGINEER OF LOCATION AND DESIGN

APPROVED: [signature]
DATE: 2-7-64 DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION

APPROVED: T.H. Brown
DATE: 2-7-64 DEPUTY DIRECTOR OF RIGHT OF WAY

APPROVED: F. W. Wilson
DATE: 2-7-64 DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING

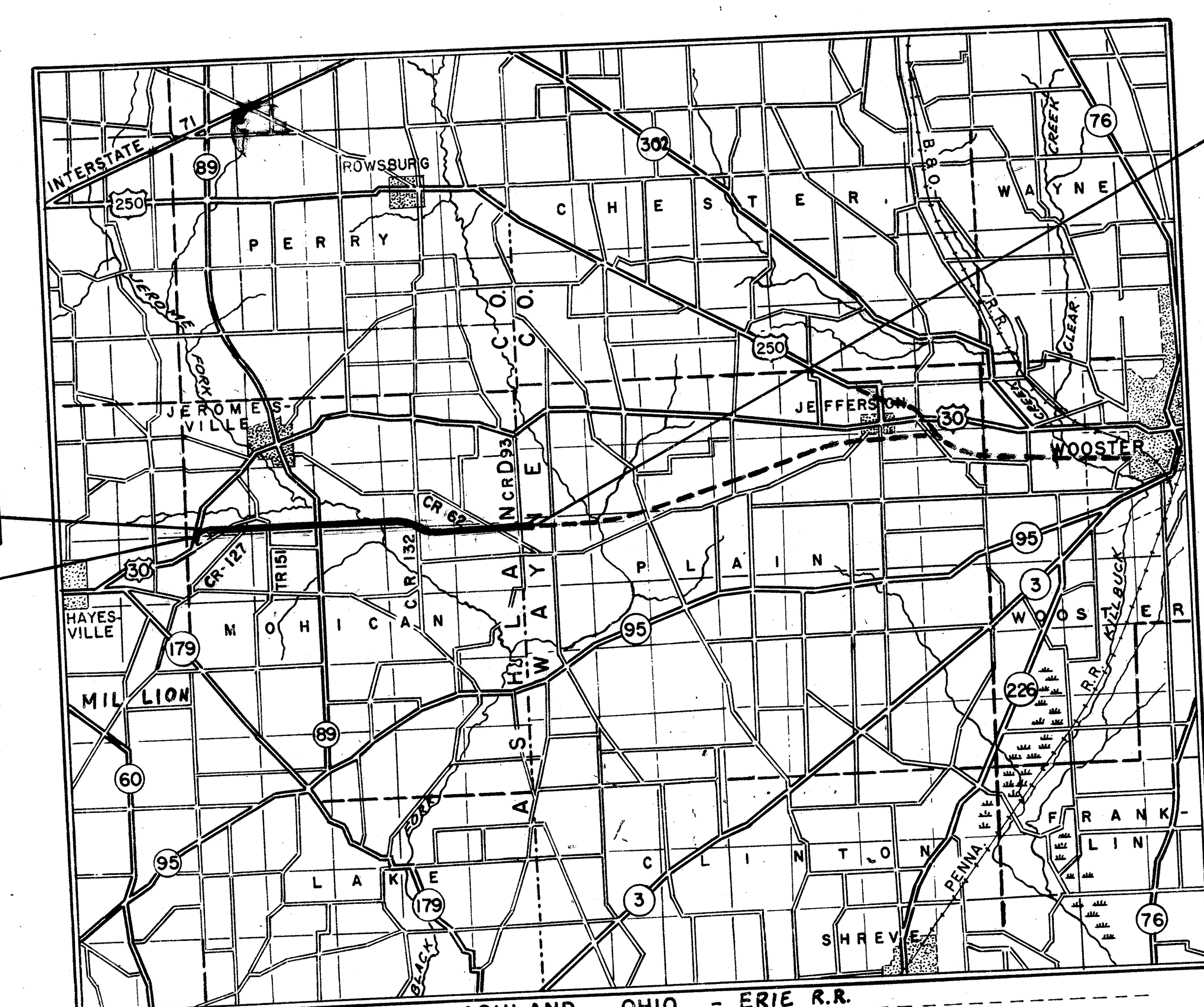
APPROVED:
DATE: ______ FIRST ASSISTANT DIRECTOR

APPROVED: [signature]
DATE: 2-13-64 DIRECTOR OF HIGHWAYS

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
CENTER LINE
FENCE LINE
POLE LINE
RAILROAD
GUARD RAIL
DRAIN PIPE

INDEX OF SHEETS



DELIVERY POINT ASHLAND, OHIO - ERIE R.R.
AVERAGE HAUL FROM SIDING 15 MILES

LOCATION MAP

SCALE IN MILES 0 1 2 3 4 5

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS

Sheets No's. 12 and 16 revised 5-1-64 C.E.H.
Sheets No's. 156, 162, 168, 170, 175 and 177 revised 6-5-64
Sheet No. 176 revised 6-23-64
Sheet No. 170 revised 9-17-64

LINE DATA

	WORK	PROJECT
BEGIN	STA. 36+34	STA 450+00
STATION EQUATION	STA. 50+00 BK. STA. 450+00 AH.	
ASHLAND-WAYNE COUNTY LINE	STA. 701+55.06 BK. STA. 0+00 AH.	
END	STA. 5+00	STA. 3+70
SIDE ROADS (FROM SHEET No. 4)	8,041.48 L.F.	
GROSS LENGTH	35,062.54 L.F.	25,525.06 L.F.
NO EQUALITY		
NET LENGTH	35,062.54 L.F. OR 6.640 MI.	25,525.06 L.F. OR 4.834 MI.

SCALES

PLAN 1" = 50'
PROFILE - HORIZONTAL 1" = 50'
PROFILE - VERTICAL 1" = 10'
CROSS SECTIONS 1" = 10'

SUPPLEMENTAL SPECIFICATIONS

CE-101.04	5-22-56
L-120	REV. 1-2-62
S-101	7-12-62
S-307	8-23-60

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: ______
DIVISION ENGINEER ______ DATE

STANDARD DRAWINGS

			11-15-60	I-15 No. 5-A	2-1-63	RB-1-55	2-2-59	FACI-2	3-8-63
B-T-70-71	11-15-60	HW-D	2-1-63	L-3	4-1-50	CSB-1-55 (SHEETS 1,2,&7)	2-2-59	I-8 CB 2-2-A&B	2-1-63
B-T-71-R	3-2-53	HW-E	11-15-60	L-3-A	4-1-50	CSB-2-56 (SHEETS 1,2,3&6)	2-2-59	I8 CB NO.5	2-1-63
DR-1	1-3-55	I-1	2-1-63	L.J. No. 1	7-1-55	AR-1-57	4-2-62	FSB-1-62	1-15-63
F-1	2-1-63	I-8 C.B. No. 8	1-22-52	RI-1	7-15-58	L-1	4-1-50		
F-3	2-1-63	I-14-G	11-15-60	T-35	1-2-56	I-21-23	8-1-56		
G-7.07	6-1-56	I-15-No. 1	11-15-60	T.J.	9-12-60	SP-53	6-30-61		
HW-A&B	7-15-57	I-15-No. 2	8-17-60	AS-1-54	7-5-62	FACI-1	3-8-63		
HW-C	7-15-57	I-15-No. 2-A							

PREPARED AND RECOMMENDED BY
SHAFFER, PARRETT AND ASSOCIATES
CONSULTING ENGINEERS
MANSFIELD OHIO WOOSTER

FILE NO.	ASD.-30-8.52 WAY.-30-0.00 DATE OF LETTING ______ CONTRACT NO. ______

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AUG 1 5 1967
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INDEX TO UTILITIES

1	OHIO BELL TELEPHONE CO.	820 N. SUPERIOR AVE., CLEVELAND 13, OHIO
2	OHIO EDISON CO.	47 N. MAIN ST., AKRON 8, OHIO
3	OHIO FUEL GAS CO.	N. FRONT ST., COLUMBUS, OHIO
4	NORTHERN OHIO TELEPHONE CO.	BOX 299, BELLEVUE, OHIO
5	FIRELANDS ELECTRIC CO.	3 E. MAIN ST., NEW LONDON, OHIO

CURVE DATA 1,2,3

CURVE NO.1	CURVE NO.2	CURVE NO.3
P.I. STA. 4+46.20	P.I. STA. 17+31.10	P.I. STA. 27+54.07
Δ = 21°10'	Δ = 65° 38' 10"	Δ = 35° 48' 30"
D = 5° 00'	D = 10° 00'	D = 10° 00'
R = 1145.916'	R = 572.96'	R = 572.96'
T = 214.10'	T = 369.58'	T = 185.11
L = 423.33'	L = 656.36'	L = 358.05

SCHEMATIC PLAN SHEET NO.1

MICROFILMED
SEP 10 1986

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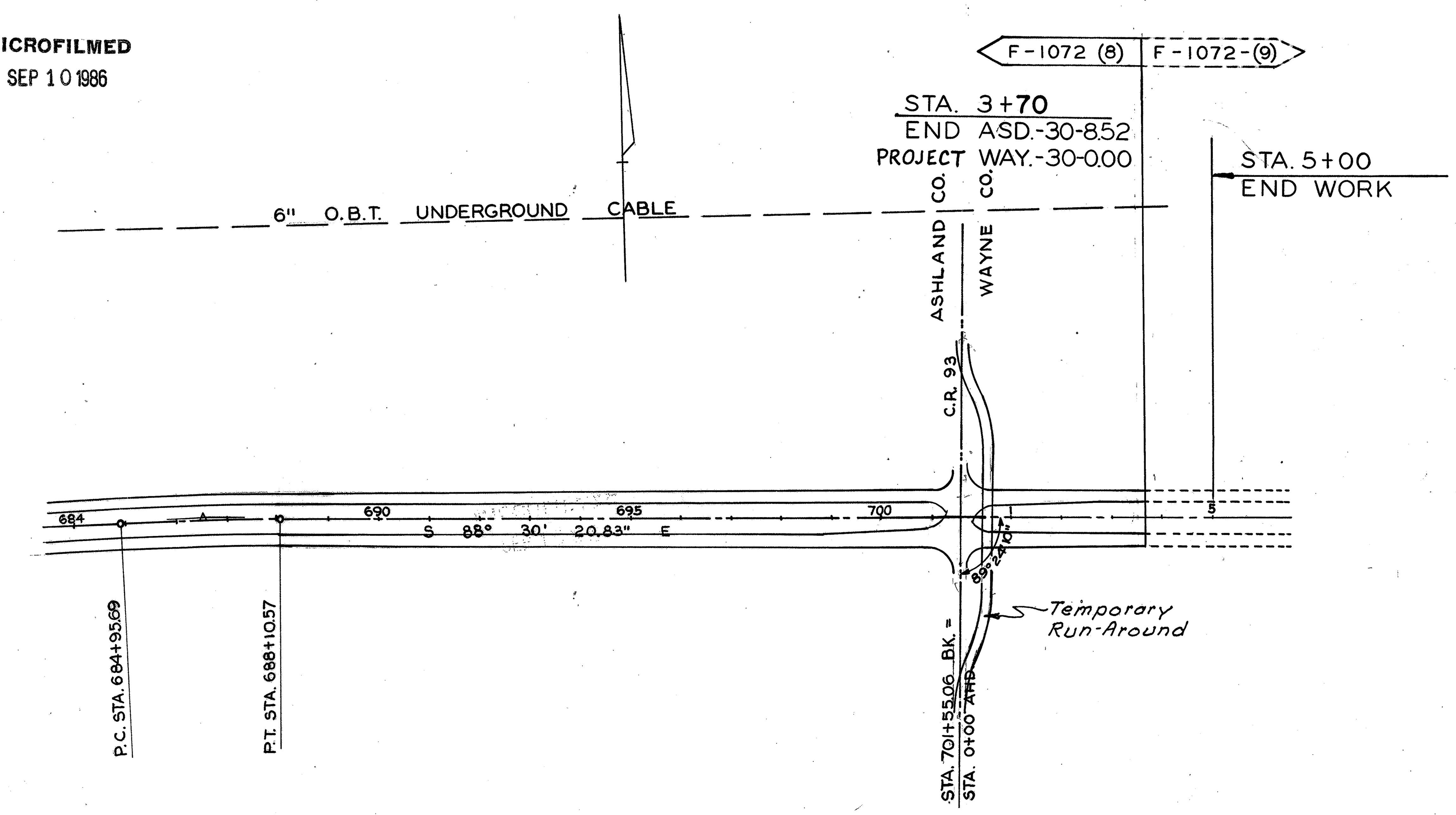
SCHEMATIC PLAN SHEET NO. 2

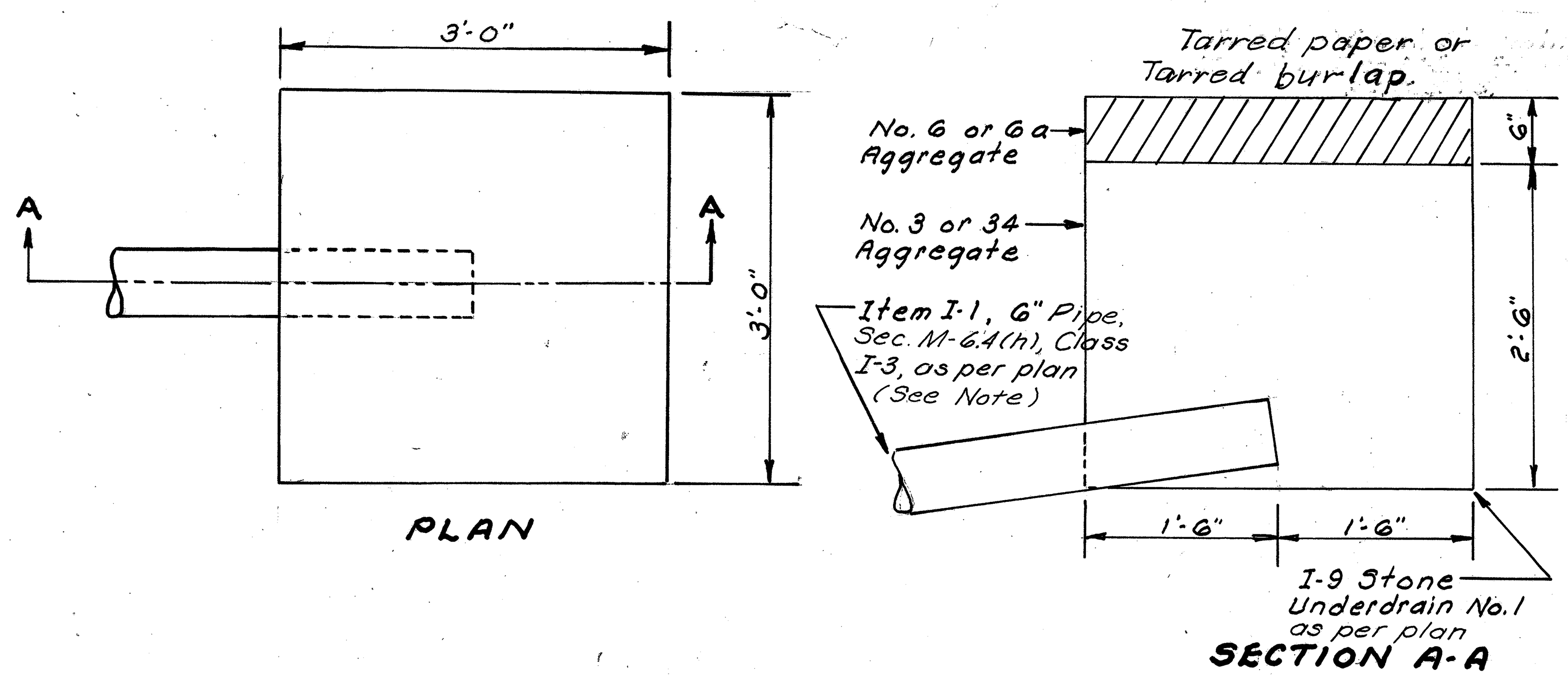
ASD.-30-8.52
WAY.-30-0.00



CURVE DATA
P.I. STA. 686+53.14
Δ = 1° 28' 10"
D = 0° 28'
T = 157.45'
L = 314.88'
R = 12277.67'
E = 1.01'

SUMMARY OF WORK ON SIDE ROADS

NAME	STA. TO STA.		LENGTH
C.R. 127	Sta. 1+50	Sta. 11+02.52	943.54
	Sta. 12+17.44	Sta. 27+50	1812.16
T.R. 151	Sta. 9+00	Sta. 14+46	546.00
	Sta. 15+54	Sta. 19+50	396.00
S.R. 89	Sta. 187+50	Sta. 191+90.04	440.04
	Sta. 192+98.04	Sta. 197+50	451.96
C.R. 132	Sta. 8+50	Sta. 14+45.20	595.20
	Sta. 15+54.86	Sta. 18+50	295.14
C.R. 62	Sta. 9+00	Sta. 23+00	1400.00'
C.R. 93	Sta. 14+00	Sta. 14+45.97	345.97
	Sta. 15+54.03	Sta. 18+53	298.97
Conn. "N"	Sta. 1+50.5	Sta. 6+67.0	516.50
	Total	=	8,041.48



NOTES

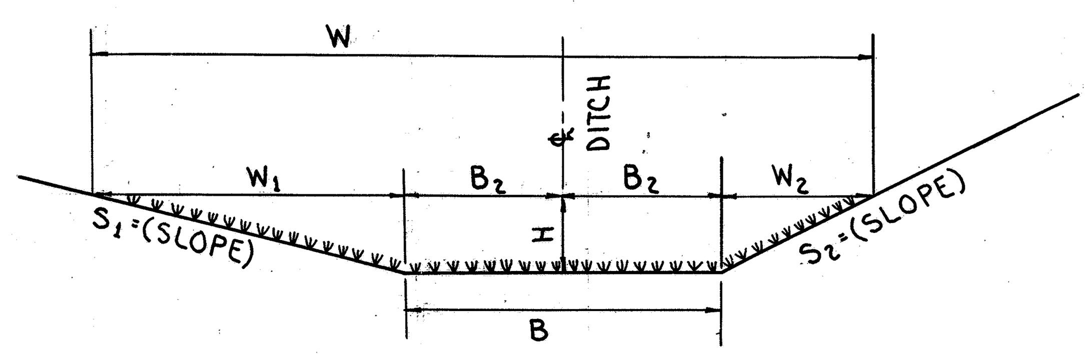
Aggregate, tarred paper or burlap and necessary Excavation for Spring Drains shall be included for payment in the price bid per lin. ft. for Item I-9 Stone Underdrains, No. 1, as per plan. Spring Drains shall be placed at locations designated by Engineer.

The Class I-3 Pipe for Spring Drainage shall be covered with Class 3 Porous Backfill Material to a height of one (1) foot above the top of the pipe. The remainder of the backfill for this item shall meet the specification requirements for Type 2 Backfill.

Estimated Quantities of 15 Lin. Ft. of Item I-9 Stone Underdrains, No. 1, as per plan, and 250 Lin. Ft. of Item I-1, 6" Pipe, Sec. M-6.4(h), Class I-3, as per plan are carried in the Summary of Tables for draining Springs. This item shall be non-performed in the event no Springs are encountered.

DETAIL SECTION SPRING DRAIN

SOD LINING PLACEMENT IN ROADWAY DITCHES



NOTE:

SOD LINING SHALL BE PLACED IN ROADWAY DITCHES TO HEIGHT "H" USING THE FOLLOWING CRITERIA TO FIND THE VARIOUS DIMENSIONS

FORMULA

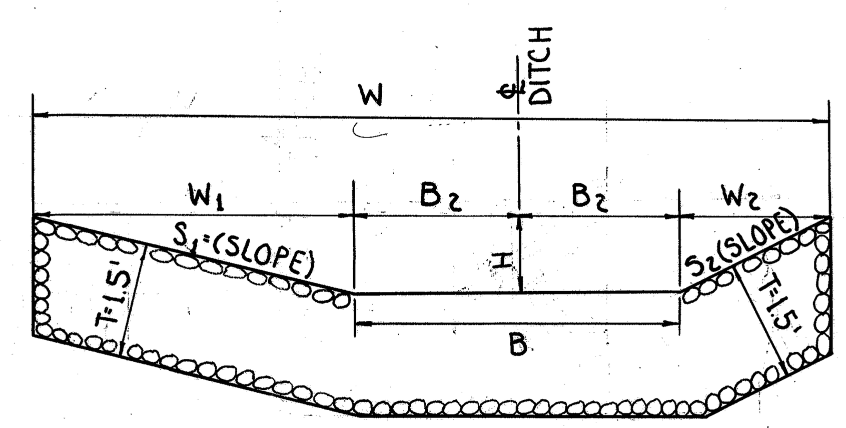
① $H = \frac{W-B}{(S_1+S_2)}$

② $W_1 = S_1(H)$

③ $W_2 = S_2(H)$

W = TOTAL WIDTH OF SOD LINING
W_1 = WIDTH OF SOD FROM EDGE OF DITCH TO SIDE SLOPE
W_2 = WIDTH OF SOD FROM EDGE OF DITCH TO BACK SLOPE
B = WIDTH OF BOTTOM OF DITCH

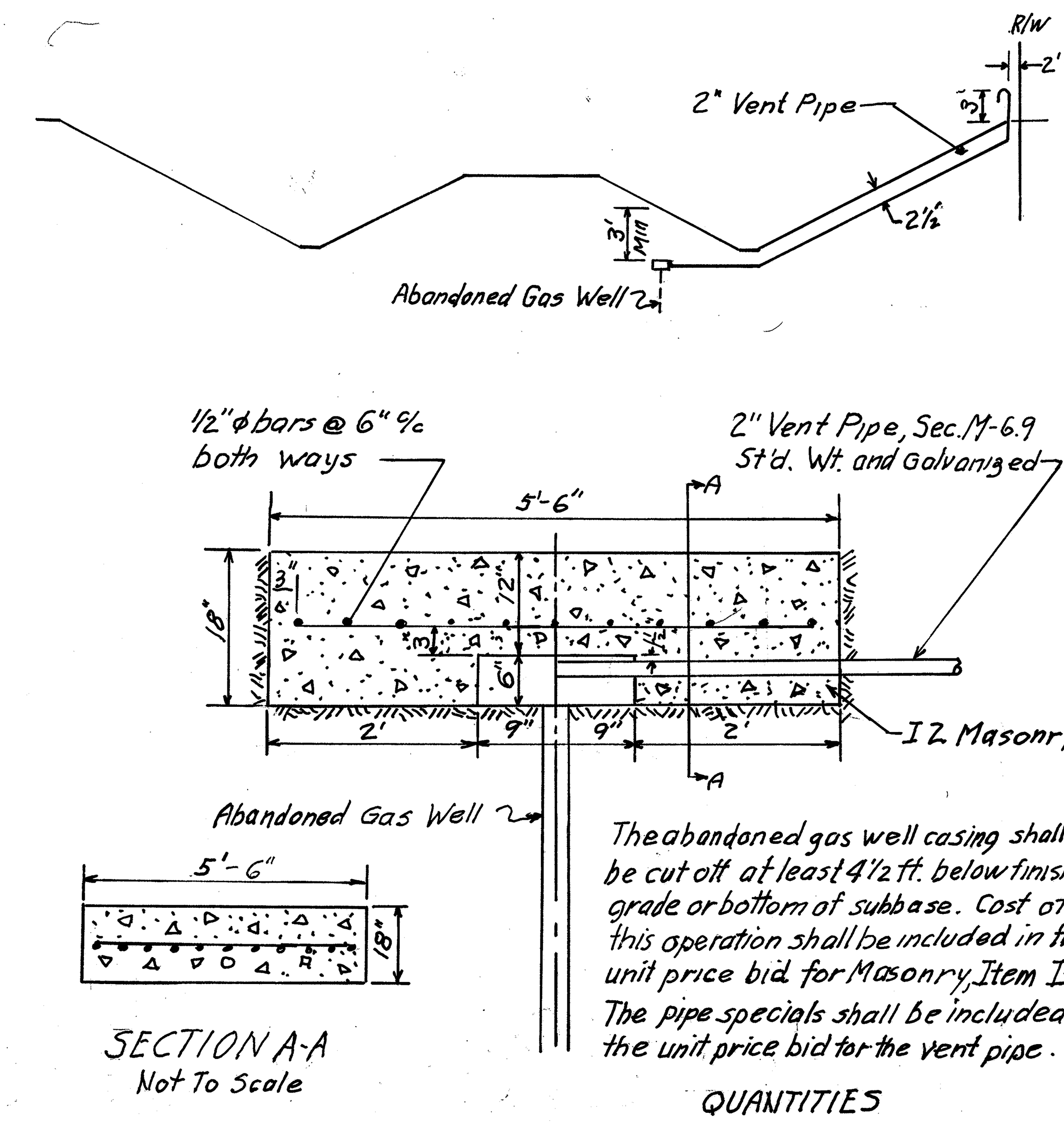
DUMPED ROCK CHANNEL PROTECTION ROADWAY DITCHES



NOTE:

DUMPED ROCK CHANNEL PROTECTION SHALL BE PLACED IN ROADWAY DITCHES TO HEIGHT "H", USING THE ABOVE CRITERIA* FOR SOD PLACEMENT, TO FIND THE VARIOUS DIMENSIONS FOR THE DUMPED ROCK CHANNEL PROTECTION.

* USE CRITERIA IN THE ABOVE SKETCH



The abandoned gas well casing shall be cut off at least 4 1/2 ft. below finished grade or bottom of subbase. Cost of this operation shall be included in the unit price bid for Masonry, Item I-2. The pipe specials shall be included in the unit price bid for the vent pipe.

QUANTITIES

I-2 Masonry 17 Cu.Yd.
I-1 2" Pipe, Sec. M-6.9 St'd Wt. Galvanized with Type 4 Backfill, as per plan 800 Lin. ft.

ABANDONED GAS WELL VENT DETAIL

Note: For Details not Shown See Std. Dwg. RI-1

TYPICAL SECTIONS

TYPE T-71

SCALE: $\frac{3}{16}$" = 1'-0"

NORMAL SECTION

Sta. 638+00	to	Sta. 663+00	=	2500.00	Lin. Ft.
Sta. 461+00	to	Sta. 476+00	=	1500.00	Lin. Ft.
Sta. 486+00	to	Sta. 521+00	=	3500.00	Lin. Ft.
Sta. 537+00	to	Sta. 576+00	=	3900.00	Lin. Ft.
Sta. 579+00	to	Sta. 584+00	=	500.00	Lin. Ft.
Sta. 586+00	to	Sta. 595+50	=	950.00	Lin. Ft.
Sta. 609+00	to	Sta. 615+72.50	=	672.50	Lin. Ft.
Sta. 629+76.24	to	Sta. 633+50	=	373.76	Lin. Ft.
Sta. 697+00	to	Sta. 701+55.06	=	455.06	Lin. Ft.
Sta. 0+00	to	Sta. 3+70	=	370.00	Lin. Ft.
		Total	=	14,721.32	Lin. Ft.

Deduct for Bridges & Approach Slabs:

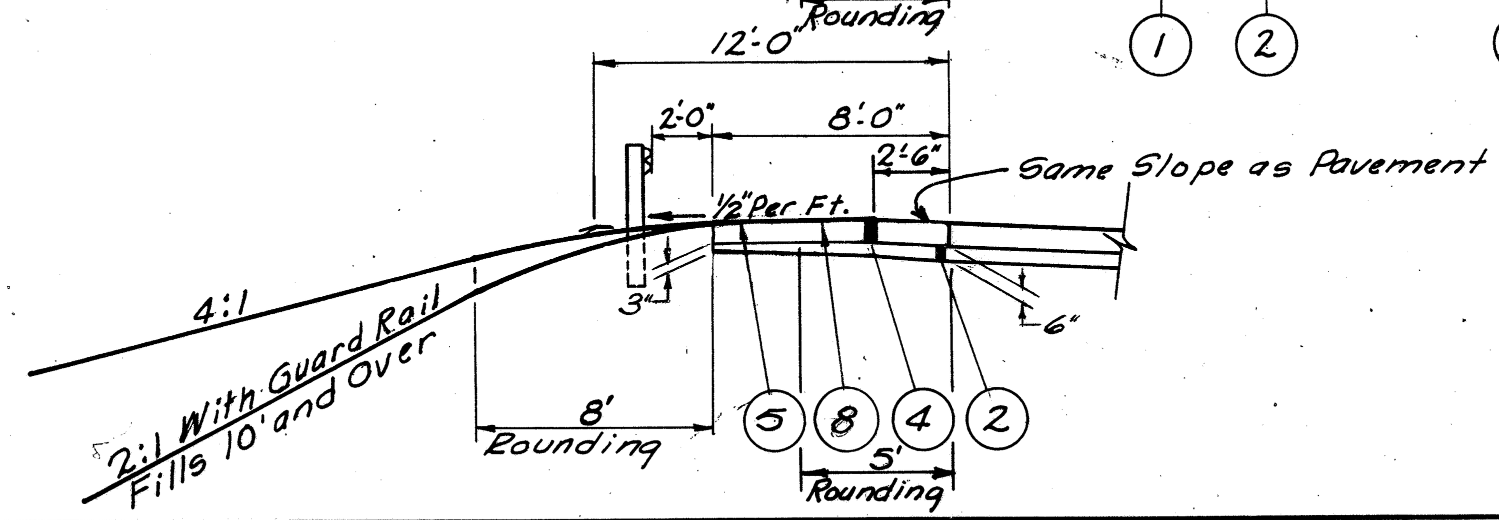
Bridge No. ASD-30-0933	= 165.00 Lin. Ft.		
Bridge No. ASD-30-1124	= 222.10 (part length)		
Bridge No. ASD-30-1193	= 165.00 Lin. Ft.	552.10	Lin. Ft.
Net Total	=	14,169.22	Lin. Ft.

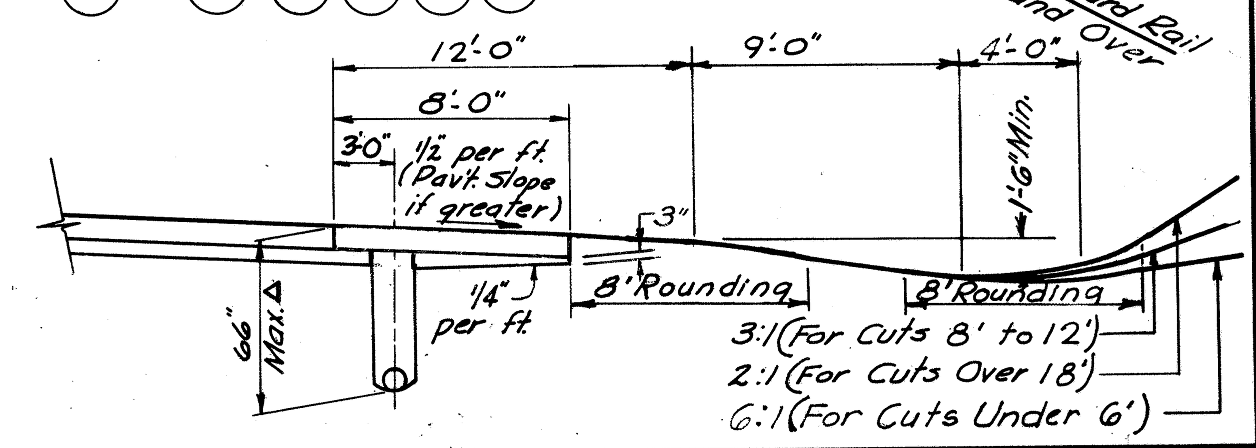
LEGEND

1. T-71 9" Reinforced Portland Cement Concrete Pavement
2. I-22 Subbase, Grading "A" or "B", as per plan
4. B-19 9" Aggregate Base Course
5. T-31 ❀Bituminous Surface Treatment Consisting of One Application as follows: 0.008 Cubic Yard No 6 Aggregate and 0.30 Gallon Bituminous Material per square Yard.
6. I-9 Stone Underdrains No. 2
7. I-1 6" Class I-3 Pipe
8. T-30 Bituminous Prime Coat, 0.40 Gallon per Square Yard, Sec. M-5.7, RT-2 or RT-3

Δ 5.5' From Edge of Pav't., Unless Otherwise Shown

❀ Section M-5.7, RT-8, or RT-9, or Section M-5.12 CBAE-3





SUPERELEVATED SECTION

Sta. 615+72.50	to	Sta. 629+76.24	=	1403.74	Lin. Ft.
		Total	=	1403.74	Lin. Ft.

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TYPICAL SECTION

TYPE - T-71

ROCK EXCAVATION

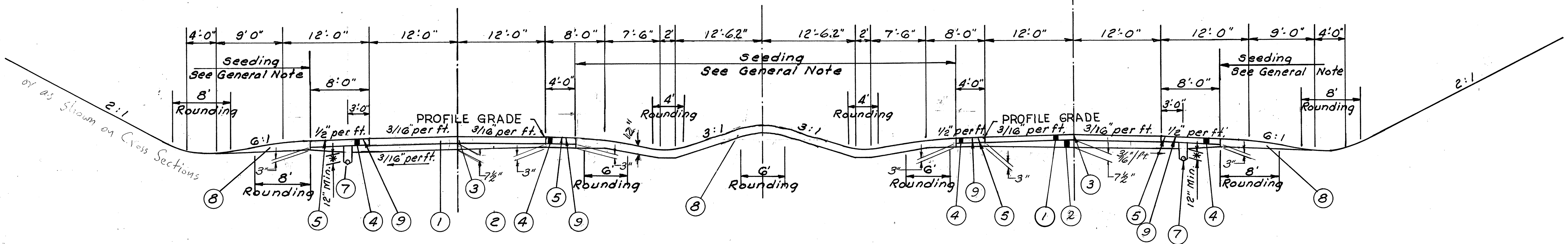
1:1 BACKSLOPE

STA. 452+00 TO STA. 459+00	=	700 Lin. Ft.
STA. 478+00 TO STA. 485+00	=	700 Lin. Ft.
	Total =	1400 Lin. Ft.

½:1 BACKSLOPE

STA. 665+00 TO STA. 686+00 = 2100 Lin. Ft.

ROCK EXCAVATION FOR SUBGRADE



STA. 450+00	to	Sta. 452+00	=	200 Lin. Ft.
STA. 459+00	to	Sta. 461+00	=	200 Lin. Ft.
STA. 476+00	to	Sta. 478+00	=	200 Lin. Ft.
STA. 485+00	to	Sta. 486+00	=	100 Lin. Ft.
STA. 663+00	to	Sta. 665+00	=	200 Lin. Ft.
STA. 686+00	to	Sta. 697+00	=	1100 Lin. Ft.
		Total	=	2000 Lin. Ft.

1. T-71 9" Reinforced R.C. Concrete Pavement
2. I-22 Subbase, Grading "A" or "B", as per plan
3. Standard Longitudinal Joint
4. B-19 9" Aggregate Base Course
5. T-31 Bituminous Surface Treatment Consisting of One Application as Follows; 0.008 Cu. Yd. No. 6 Aggregate and 0.30 Gal. of Bituminous Material per Sq. Yd.; Sec. M-5.7, RT-8, or RT-9; or Sec. M-5.12 CBAE-3
7. I-1 6" Class I-3 Pipe, Sec. M-6.4 (h)
* (Depth), unless otherwise shown on plans.
8. L-3 Placing Stockpiled Topsoil, as per plan
9. T-30 Bituminous Prime Coat, 0.40 Gallon per Square Yard, Sec. M-5.7, RT-2 or RT-3

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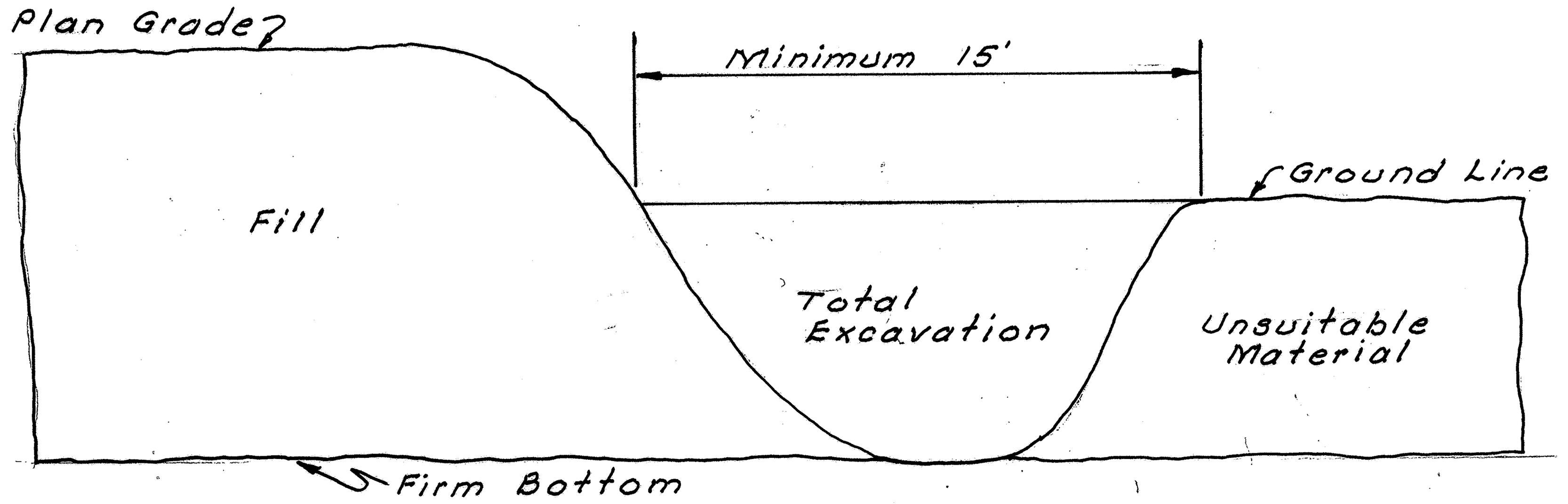
TYPICAL SECTION
GRANULAR BORROW



LONGITUDINAL SECTION

For pavement Details
See Sheet 5

Sta. 521+00 to Sta. 537+00 = 1600 Lin. Ft.
Sta. 576+00 to Sta. 579+00 = 300 Lin. Ft.
Sta. 584+00 to Sta. 586+00 = 200 Lin. Ft.
Sta. 633+50 to Sta. 638+00 = 450 Lin. Ft.
Total = 2550 Lin. Ft.

METHOD 1 - Notes A,B,D,E,F,G & H apply to this typical section.

A. **TRENCHING & BACKFILLING** shall be constructed progressively across the areas to be excavated, and so coordinated as to leave an open trench not to exceed in length, at any time the working length of the equipment for excavation of the areas involved.

B. **FILL** shall be constructed by the method of end dumping using Granular Material up to the elevation designated on the plans. Embankment required above this elevation, if any, shall be constructed in accordance with Sec. E-1.08 of The Construction and Material Specifications.

For Superelevated Section,
Sta. 596+00 to Sta. 607+99.64,
See Typical Section Detail,
Sheet No. 5.

METHOD 2 - Notes B,C,E & H apply to this typical section.

Sta. 596+00 to Sta. 609+00 = 1300 Lin. Ft.
Deduct for Bridge No. ASD-30-1124 (part length) 6.09 Lin. Ft.
Net Total = 1293.91 Lin. Ft.

C. **GENERAL NOTES~**
The Foundation in the Area between Sta. 596+00 and Sta. 609+00 shall be cleared but need not be scalped or compacted prior to placement of 2' layer of Granular Borrow. The Embankment in this area shall be completed to Sub-Grade Elevation for not less than Sixty (60) Days prior to placement of the Pavement.

D. **EXCAVATION** of unsuitable material ahead of the fill and end dumping of Granular Material across the bog areas shall be advanced in a straight line for the full embankment width to avoid entrapment of unsuitable material beneath any portion of the fill.

E. **GRANULAR MATERIAL** required for treatment of excavated areas and embankment areas, where unsuitable material is encountered, shall be specified as "E-4 Borrow using Granular Material as per plan." The Granular Material shall meet the requirements of Sec. E-1.02 of The Construction and Material Specification. Modified to require at least 75 per-cent by weight of the grains or particles to be retained on the No. 200 sieve.

F. **EXCAVATED UNSUITABLE MATERIAL** which is to be used adjacent to fills for slope flattening or which is piled adjacent to fills, to be disposed of later in accordance with Sec. E-1.06, shall be shaped to its final position or removed from the area at least two weeks prior to paving operations on the fill.

G. **EQUIPMENT** used for excavation of unsuitable material shall be located ahead of the excavation unless otherwise authorized by the Director.

H. **QUANTITIES**
The quantity of "E-4 Borrow using Granular Material, as per plan," which does not require any Excavation of Unsuitable Material shall be determined in accordance with the provisions of Sec. E-4.04. } Method 2

The quantity of "E-4 Borrow using Granular Material, as per plan, including the Cost of Excavation of Unsuitable Material" shall be the total quantity of Granular Material, placed as indicated for Method 1 above and the unit price bid therefor shall include payment for removal and disposal of the excavated unsuitable material, and for all other operations involved in placing the granular borrow up to the existing ground level. This quantity shall be measured in accordance with Sec. E-4.04. } Method 1

SCHEDULE SHOWING DEPTH OF EXCAVATION FOR UNSUITABLE MATERIAL AT FOLLOWING STATIONS & DISTANCE FROM ℄.

Station	Left 70'	Left 20'	℄	Right 20'	Right 70'
521+00	0'	0'		0'	0'
522+00	0'	0'		4'	4'
524+00	0'	0'		4'	4'
526+00	5'	5'		5'	5'
528+00	5'	5'		5'	5'
529+00	7'	5'		5'	4'
531+00	4'	4'		5'	5'
533+00	6'	5'		5'	8'
535+00	6'	5'	3'	3'	3'
536+00	7'	7'		7'	7'
537+00	0'	0'		0'	0'
575+50	0'	0'		0'	0'
576+00	4'	4'		0'	0'
577+00	5'	5'		4'	3'

Station	Left 95'	Left 70'	Left 50'	Left 20'	℄	Right 20'	Right 50'	Right 70'	Right 95'
578+00		0		12'		10'		10'	
579+00		0		0		0		0	
583+50		0		0		0		0	
584+00		0		0		0		2'	
585+00		0		0		2'		3'	
586+00		0		0		2'		2'	
633+50	0		0		0		0		0
634+00	5'		5'		7'		0		0
635+00	5'		5'		5'		15'		20'
636+00	0		0		5'		5'		16'
637+00	0		0		0		6'		10'
638+00	0		0		0		0		0

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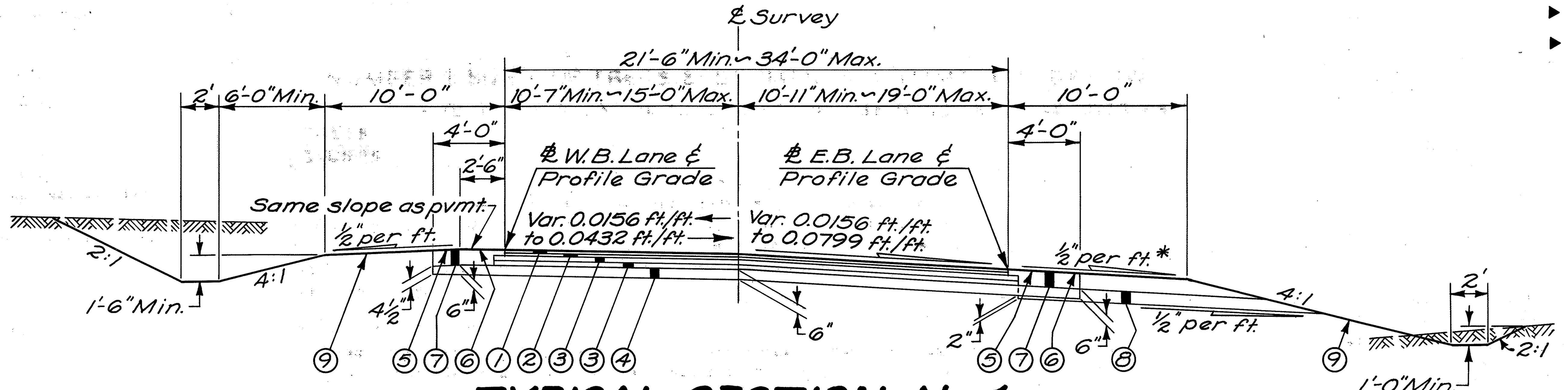
TYPICAL SECTIONS
TYPE T-35 on B-21

SCALE IN FEET
5 0 5 10

LEGEND

- ▶ ① T-35 1" Asphaltic Concrete Surface Course, Type "C" (70-85)
- ▶ ② B-35 1¼" Asphaltic Concrete Leveling Course (70-85)
- ▶ ③ B-21 3½" Waterproofed Aggregate Base Course
- ④ I-22 Subbase, Grading "A" or "B" (Depth as shown)
- ⑤ T-30 Bituminous Prime Coat, 0.40 Gal. per Sq. Yd., Sec. M-5.7, RT-2 or RT-3.
- ⑥ T-31 Bituminous Surface Treatment consisting of one application as follows: 0.008 Cu. Yd. of No. 6 Aggregate and 0.30 Gal. Bituminous Material per Sq. Yd.; Sec. M-5.7, RT-8 or RT-9; or Sec. M-5.12, CBAE-3.
- ⑦ B-19 9" Aggregate Base Course (to be placed in two courses)
- ⑧ I-9 Stone Underdrains No. 2
- ⑨ L-9 Seeding and Protecting, as per plan
- ⑩ I-1 6" Pipe, Class I-3



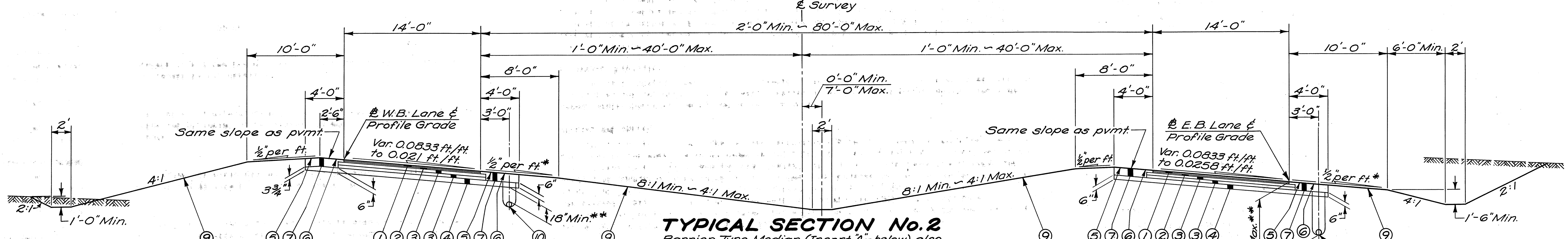
TYPICAL SECTION No. 1

NORMAL WESTBOUND
Sta. 39+00 ℄ Survey to Sta. 39+73.54 ℄ Survey = 73.54 Lin. Ft.
Sta. 39+22.21 ℄ W.B. to Sta. 39+40 ℄ W.B. = 17.79 Lin. Ft.

SUPERELEVATED WESTBOUND
Sta. 39+40 ℄ W.B. to Sta. 41+05 ℄ W.B. = 165.00 Lin. Ft.

NORMAL EASTBOUND
Sta. 39+00 ℄ Survey to Sta. 39+73.54 ℄ Survey = 73.54 Lin. Ft.

SUPERELEVATED EASTBOUND
Sta. 40+24.88 ℄ E.B. to Sta. 42+05 ℄ E.B. = 180.12 Lin. Ft.

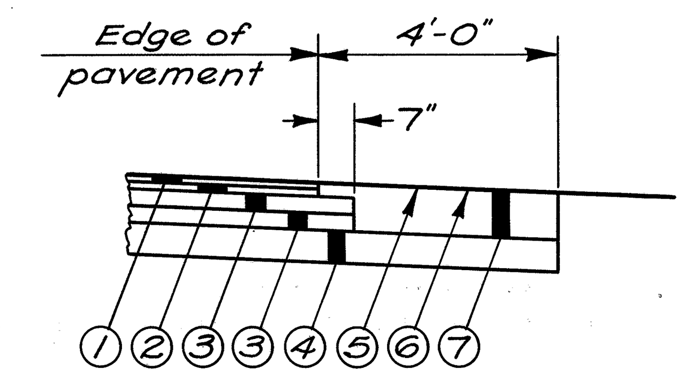


TYPICAL SECTION No. 2

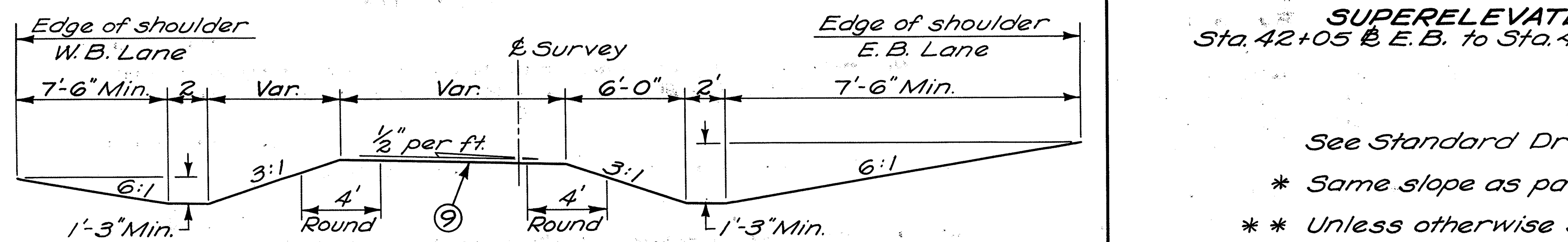
Barrier Type Median (Insert "A" - below) also applicable on this Typical.
See Cross Sections for locations.

SUPERELEVATED WESTBOUND
Sta. 41+05 ℄ W.B. to Sta. 49+00 ℄ W.B. = 795.00 Lin. Ft.

SUPERELEVATED EASTBOUND
Sta. 42+05 ℄ E.B. to Sta. 49+00 ℄ E.B. = 695.00 Lin. Ft.



EDGE COURSE DESIGN



INSERT "A"

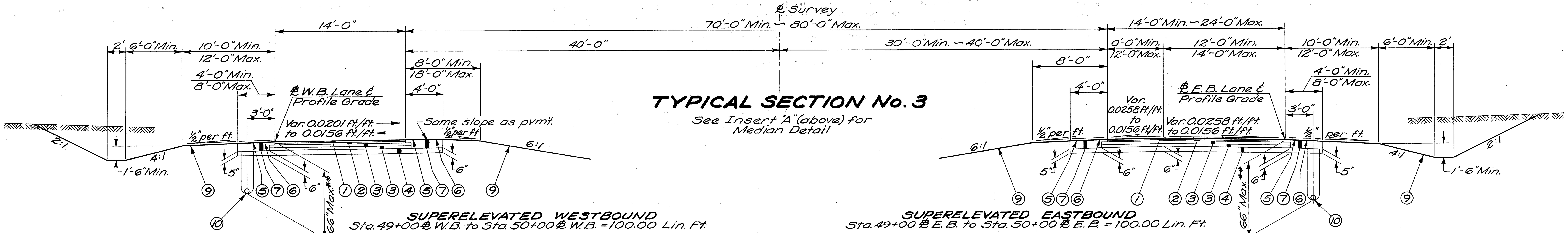
NOTES

See Standard Drawing RI-1 for details not shown.

* Same slope as pavement if slope is greater than ½" per ft.

** Unless otherwise shown.

▶ Thickness shown is designed thickness as described in Sections T-35.01, B-35.01 and B-21.01.



TYPICAL SECTION No. 3

See Insert "A" (above) for Median Detail

SUPERELEVATED WESTBOUND
Sta. 49+00 ℄ W.B. to Sta. 50+00 ℄ W.B. = 100.00 Lin. Ft.

SUPERELEVATED EASTBOUND
Sta. 49+00 ℄ E.B. to Sta. 50+00 ℄ E.B. = 100.00 Lin. Ft.

TEMPORARY CONNECTION "S" ~ TYPICAL SECTIONS

GENERAL NOTES

Item I-9 Stone Underdrains No. 2 (Temporary Connection)
Stone Underdrains shall be placed at 50 foot intervals on normal or superelevated sections (low side) when pavement width does not exceed 14 foot. When superelevated pavement width exceeds 14 foot, the Stone Underdrains shall be placed at 25 foot intervals (low side). When Item I-1 Pipe Underdrains have been provided, the I-9 shall not be used.

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE OFFICE FOR THE EXCLUSIVE USE OF THE STATE EMPLOYEES IN ACCORDANCE WITH SEC. S-0.01 (B), HAVING A MINIMUM OF 500 SQUARE FEET OF FLOOR SPACE. THE CONTRACTOR SHALL HAVE A TELEPHONE INSTALLED AND MAINTAINED IN THE FIELD OFFICE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ALSO INSTALL WIRING AND OUTLETS SUITABLE FOR CONNECTING TO OFFICE EQUIPMENT, AND PROVIDE 110 VOLT ALTERNATING CURRENT DURING THE CONSTRUCTION OF THIS PROJECT.

DESIGN SPEED

THE GEOMETRICS FOR THIS PROJECT HAVE BEEN PLANNED FOR A DESIGN SPEED OF 70 MILES PER HOUR.

UTILITIES

THE CONTRACTOR SHALL NOTIFY, AT LEAST 48 HOURS BEFORE BREAKING GROUND, ALL PUBLIC SERVICE CORPORATIONS HAVING WIRE, POLES, PIPE, CONDUITS, MANHOLES OR OTHER STRUCTURES THAT MAY BE AFFECTED BY THIS OPERATION, INCLUDING ALL STRUCTURES WHICH ARE AFFECTED & NOT SHOWN ON THESE PLANS. ANY AND ALL WORK REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THEIR RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THESE PLANS.

ROUNDING OF CORNERS ON CROSS SECTIONS

THE ROUNDED CORNERS, SHOWN ON STANDARD DRAWING RI-1, AS MODIFIED BY THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN IN THESE PLANS.

R/W MONUMENTS, FEDERAL PROJECT MARKERS AND SECTION MARKERS

EXISTING R/W MONUMENTS, BENCH MARKS, FEDERAL PROJECT MARKERS AND SECTION MARKERS THAT WILL BE REMOVED BY CONSTRUCTION, SHALL BE PROTECTED BY THE CONTRACTOR AS PER SECTION G-7.09 UNTIL THEY CAN BE WITNESSED, REFERENCED AND RESET BY THE CONSTRUCTION CREW.

ELEVATION DATUM

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

REPLACEMENT

THE CONTRACTOR SHALL REPLACE AT HIS OWN EXPENSE ANY ITEM NOT SPECIFICALLY LISTED FOR REMOVAL THAT IS DAMAGED OR DESTROYED BY HIS OPERATION.

SUPERELEVATION

SUPERELEVATED CURVES SHALL BE BUILT WITHOUT CROWN. THE CROWN SHALL BE WORKED OUT OF THE PAVEMENT IN THE PORTION BETWEEN THE BEGINNING OF THE TRANSITION AND THE POINT WHERE THE SUPERELEVATION EQUALS TWICE THE CROWN.

NON-RIGID PAVEMENT REMOVAL

REMOVAL AND DISPOSAL OF EXISTING NON-RIGID PAVEMENT, UNLESS OTHERWISE INDICATED ON THESE PLANS, SHALL BE MEASURED AND PAID FOR AS ITEM E-1, ROADWAY EXCAVATION.

GUARD RAIL REMOVAL

THE REMOVAL OF ANY GUARD RAIL POSTS LYING WITHIN THE LIMITS OF ROADWAY EXCAVATION OR EMBANKMENT (AND NOT SPECIFICALLY PAID FOR UNDER A SEPARATE ITEM) IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ROADWAY EXCAVATION. ALL RESULTING MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM AT NO EXTRA COST TO THE STATE, EXCEPT THAT THE STEEL RAIL ON ALL EXISTING STEEL BEAM TYPE OR STEEL CABLE ON STEEL CABLE TYPE GUARD RAILS SHALL BE STORED ON THE RIGHT-OF-WAY FOR DISPOSAL BY THE OWNER.

I-15 Temporary Guard Rail, as per plan
See Note in Proposal for description of Temporary Guard Rail

GUARD RAIL ADJACENT TO BRIDGE PARAPET

ONE ADDITIONAL GUARD RAIL POST SHALL BE PROVIDED IN THE CENTER OF EACH PANEL OF GUARD RAIL ADJACENT TO THE PARAPET, PAYMENT FOR WHICH SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM I-15 GUARD RAIL.

FLARING GUARD RAIL AT BRIDGES

THE GUARD RAIL SHALL BE FLARED TO MEET THE BRIDGE RAILING IN SUCH A MANNER THAT THE CHANGE IN ALIGNMENT SHALL NOT EXCEED 1:20.

GAS WELLS

ABANDONMENT OF GAS WELLS SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS SET FORTH BY THE BUREAU OF MINES. ESTIMATED GAS WELLS TO BE PLUGGED, 10. See Sh.4 for Est. Quantities TO DO THIS WORK.

CONTRACTION AND EXPANSION JOINTS: Although specific locations of certain expansion and contraction 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 T.J.

Seeding and Protecting (Temporary Connection)
Quantities for Seeding, Item L-9 for the Temporary Connections are calculated for the soil areas between the work limits. Seed shall be sown at the rate of 3 pounds per 1000 square feet. The seed mixture shall be the same as used through out the project.

REMOVAL OF TREES AND STUMPS

ALL TREES AND STUMPS AS MARKED BY THE STATE FORCES LOCATED WITHIN 10' OF THE CONSTRUCTION LIMITS OR WITHIN 50' OF THE PAVEMENT EDGE; ALL ELM TREES AND STUMPS WITHIN THE RIGHT-OF-WAY; ALL DEAD OR PARTIALLY DEAD TREES; AND ALL TREES AS NECESSARY FOR CONSTRUCTION OF THE RIGHT-OF-WAY FENCE AS SHOWN ON THE PLANS SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM E-9 REMOVAL OF TREES AND STUMPS. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE TREES AND STUMPS TO BE REMOVED.

NUMBER & SIZES OF TREES & STUMPS IS ESTIMATED BELOW

	12" TO 18"	18" TO 24"	24" TO 30"	30" TO 36"	36" TO 42"	42" TO 48"	OVER 48"
TREES	402	69	41	18	13	10	3
STUMPS	20	20	14	14	6		

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT-OF-WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM E-9, REMOVAL OF TREES AND STUMPS.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE STATE OF OHIO MAKES NO GUARANTEES AS TO THEIR ACCURACY OR COMPLETENESS.

CENTER LINE REFERENCE MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED OF CLASS "C" CONCRETE, CAST-IN-PLACE IN A CIRCULAR HOLE 8 INCHES IN DIAMETER AND 44 INCHES IN DEPTH. TOP OF CONCRETE SHALL BE FINISHED AT A DEPTH 2 INCHES BELOW GROUND LEVEL AND THE UPPER 6 INCH PORTION OF THE CONCRETE SHALL BE FORMED. A 16-D NAIL SHALL BE EMBEDDED IN THE WET CONCRETE AS DIRECTED BY THE ENGINEER TO MARK CENTER LINE AND STATION.

ESTIMATED QUANTITIES

SPECIFIC LOCATIONS AND USAGE OF ESTIMATED QUANTITIES SET UP ON THIS PLAN TO BE USED "AS DIRECTED BY THE ENGINEER" SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

SEEDING AND PROTECTION *(All areas except Temporary Connections)*

QUANTITIES FOR SEEDING ITEM L-9 ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE LINES 10 FEET OUTSIDE THE WORK LIMITS AS SHOWN ON THE CROSS-SECTIONS, OR THE RIGHT-OF-WAY LINE IF SUCH LINE IS LESS THAN 10 FEET FROM THE WORK LIMITS. ALL AREAS OUTSIDE THESE LIMITS WHERE THE VEGATATIVE GROWTH HAS BEEN INJURIOUSLY DISTURBED OR DESTROYED BY THE CONTRACTOR SHALL BE RESTORED AND SEEDED IN ACCORDANCE WITH THE PROVISIONS OF SEC. G-7.09 BY THE CONTRACTOR AT HIS OWN EXPENSE. SEED SHALL BE SOWN AT THE RATE OF 3 POUNDS PER 1000 SQUARE FEET EXCEPT AS OTHERWISE NOTED IN THE PLANS. THE FOLLOWING SEED MIXTURE SHALL BE USED THROUGHOUT THE LIMITS OF THE PROJECT IN LIEU OF THE MIXTURE LISTED IN SECTION L-9.11:

75 % KENTUCKY 31 FESCUE
20 % KENTUCKY BLUEGRASS
5 % ALSIKE CLOVER

L-9 COMMERCIAL FERTILIZER

ALL AREAS TO BE SEEDED UNDER ITEM L-9 OR SODDED UNDER L-10 SHALL HAVE COMMERCIAL FERTILIZER 12-12-12, APPLIED AT THE RATE OF 20 POUNDS PER 1,000 SQUARE FEET.

CONSTRUCTION LAYOUT STAKES

SEE NOTE IN PROPOSAL DESCRIBING THE WORK INCLUDED IN THIS LUMP SUM PAY ITEM.

DRILLED WELL ABANDONED

THE EXISTING CONCRETE OR STONE SLAB WELL COVER SHALL BE REMOVED AND DISPOSED OF. THE PUMP AND ALL OTHER SALVAGEABLE PARTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE CASING SHALL BE CUT OFF AT LEAST TWO FEET BELOW THE PROPOSED FINISHED GRADE OUTSIDE PROPOSED PAVEMENT AREAS OR AT LEAST TWO FEET BELOW THE PROPOSED SUBGRADE ELEVATION INSIDE PROPOSED PAVEMENT AREAS AND CAPPED WITH CLASS "E" CONCRETE OR A STANDARD THREADED PIPE CAP. THE UNIT PRICE BID FOR EACH "DRILLED WELL ABANDONED" SHALL INCLUDE PAYMENT FOR ALL LABOR, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM. AN ESTIMATED NUMBER IS LISTED BELOW:

ITEM SPECIAL, DRILLED WELLS ABANDONED (1) ONE EACH [ESTIMATED QUANTITY TO BE USED WHERE DIRECTED BY THE ENGINEER, IF NEEDED]

PIPE FOR SUBGRADE DRAINAGE

10 LIN. FT. OF 6" CLASS F-4 PIPE SHALL BE FURNISHED AND PLACED BY THE CONTRACTOR, IN MANHOLES, CATCH BASINS AND INLETS FOR EACH SUBGRADE DRAIN, WHERE, AND AS DIRECTED BY THE ENGINEER. PAYMENT FOR EACH SHALL BE MADE AT THE PRICE BID PER LINEAL FOOT OF CLASS F-4 PIPE.

ITEM I-9 STONE UNDERDRAINS NO. 2 (USR 30)
Stone underdrains shall be placed at 30 foot intervals on the outside of normal crowned sections and the low side of superelevated sections, so placed that every other one is adjacent to a transverse pavement joint. A stone underdrain shall be placed at the low point of each sag vertical curve. Where Item I-1 Pipe Underdrains have been provided, the stone underdrains shall not be used.

FEDERAL AID CONSTRUCTION INDENTIFICATION SIGNS
The Contractor shall furnish, erect, maintain and subsequently remove Federal Aid construction identification signs at each of the following locations:
1. Sta. 36+35 Rt. Temp. Conn. "S"
2. Sta. 6+66 Lt. Temp. Conn. "N"
Sign details shall be as specified on Standard Drawing FACI-1, Code N-44(2)-102 and the signs shall be erected in accordance with Standard Drawing FACI-2. Additional requirements shall be in accordance withs notes in the proposal.

LOCATION AND SIZE OF PIPE

THE LOCATION, TYPE, DEPTH AND SIZE OF ALL EXISTING PIPES ARE SHOWN AS NEARLY EXACT AS THE AVAILABLE INFORMATION WILL PERMIT. THE STATE WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS FOUND DURING CONSTRUCTION.

REMOVAL OF ALL EXISTING PIPE

THE REMOVAL OF ALL EXISTING PIPE DRAINS WITHIN THE LIMITS OF PROPOSED EXCAVATION ITEMS, SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

PLUGGING PIPE ENDS

THE UPSTREAM ENDS OF PIPE LINES OR TILE LINES INTERCEPTED BY EARTHWORK OPERATIONS SHALL BE EFFECTIVELY BLOCKED AND COVERED. BROKEN PIECES AND PORTIONS OF PIPE OR TILE SHALL BE REMOVED UNTIL A WHOLE LENGTH IS ENCOUNTERED, WHICH SHALL BE BLOCKED WITH CONCRETE, FLAT STONE OR BRICK LAID IN MORTAR, PRECAST CLAY OR CONCRETE STOPPER. PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE PRICE BID FOR ROADWAY EXCAVATION, ITEM E-1.

FIELD DRAINS

ALL FARM TILES WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS AND WHICH CROSS THE ROADWAY SHALL BE REPLACED WITHIN THE RIGHT-OF-WAY LIMITS BY A PIPE ONE SIZE LARGER THAN THE EXISTING PIPE. THE NEW PIPE SHALL BE ITEM I-1 CLASS J-1.

EXISTING COLLECTORS AND ISOLATED FARM TILES WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF THE ROADWAY DITCHES SHALL BE OUTLETTED INTO THE ROADWAY DITCH. THE OPTIMUM OUTLET ELEVATION SHALL BE, IF POSSIBLE, ONE FOOT ABOVE THE FLOW-LINE ELEVATION OF THE DITCH. LATERAL TILE FIELDS WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY ITEM I-1 CLASS H-2 PIPE AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET, OR ROADWAY CROSSING. THE LOCATION, TYPE, SIZE, AND GRADE OF REQUIRED REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION, AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

I-1	8"	CLASS J-1	500 LIN. FT.
I-1	12"	CLASS J-1	300 LIN. FT.
I-1	8"	CLASS H-2 PIPE	300 LIN. FT.
I-1	12"	CLASS H-2 PIPE	300 LIN. FT.
I-1	8"	PIPE OUTLETS CLASS F-4 Sec M-6.4(c)	100 LIN. FT.
I-1	12"	PIPE OUTLETS CLASS F-4	100 LIN. FT.
I-5	8"	PIPE SPECIALS FOR CLASS J-1 PIPE,	5 EACH
I-5	12"	PIPE SPECIALS FOR CLASS J-1 PIPE,	5 EACH
I-5	8"	PIPE SPECIALS FOR CLASS H-2 PIPE	5 EACH
I-5	12"	PIPE SPECIALS FOR CLASS H-2 PIPE	5 EACH
I-10		DUMPED ROCK CHANNEL PROTECTION	25 CU. YD.

CONNECTIONS TO EXISTING PIPE

AT PLACES WHERE THE PLANS PROVIDE FOR PROPOSED DRAINAGE PIPE TO BE CONNECTED TO EXISTING PIPES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE, BOTH AS TO LINE AND GRADE, BEFORE HE STARTS TO LAY THE PROPOSED PIPE. THE COST OF THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT PIPE ITEM.

EROSION CONTROL

ITEMS I-10, I-14, AND L-10 ARE PROVIDED IN THESE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS, EXCEPT AS SHOWN ON THE TYPICAL SECTIONS FOR ROCK CUT. THE ENGINEER SHALL CHECK AND NONPERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS, WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

PRIVATE SEWER TAPS

THIS PLAN MAKES NO PROVISION FOR CONNECTING, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT, ANY EXISTING OR NEW PRIVATE DRAINAGE TO THE NEW HIGHWAY DRAINAGE SYSTEM WHEN SUCH PRIVATE DRAINS CARRY EFFLUENT OR DRAINAGE FROM LEACHING BED OUTLETS, CELLAR DRAINS, OR SINK DRAINS, OR POLLUTED WATER OF ANY KIND. CONNECTIONS MAY BE MADE TO THE EXISTING OR NEW HIGHWAY DRAINAGE SYSTEM WHEN THE WATER CARRIED TO THE PROJECT DRAINAGE SYSTEM DOES NOT COME WITHIN THE CATEGORY OUTLINED ABOVE.

ACCEPTABLE WATER INCLUDES FLOW FROM ROOF DRAINS, FIELD DRAINS, AND ENCLOSED NATURAL DRAINAGE SOURCES WHICH WOULD REACH THE ROAD THROUGH NATURAL CHANNELS IF SUCH WATER WAS NOT CONDUCTED ARTIFICIALLY. EXISTING SEWER TAPS WHICH DO NOT CARRY ACCEPTABLE WATER, AS DEFINED ABOVE, SHALL BE PLUGGED AT THE RIGHT-OF-WAY LINE. PLUGGING SPECIFIED SHALL BE BY MEANS OF CLASS "E" CONCRETE, AND PAYMENT THEREFOR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM E-1, ROADWAY EXCAVATION. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER, IN MAKING THE ABOVE DESCRIBED CONNECTIONS:

ITEM I-1 8" CLASS E-1 PIPE 100 LIN. FT.
ITEM I-5 8" PIPE SPECIALS FOR CLASS "E" PIPE 5 EACH

REINFORCED ENDS ON CORRUGATED METAL PIPE
Reinforced ends will be required on all corrugated metal Class F-4, Section M-6.4(c) Pipe for driveways and underdrain outlets if the pipe ends are unprotected by headwalls, catch basins, or manholes.

GENERAL NOTES

SCARIFICATION OF EXISTING FLEXIBLE PAVEMENT

WITHIN THE LIMITS OF CONSTRUCTION WHERE THE EXISTING FLEXIBLE PAVEMENT WILL HAVE LESS THAN 6 INCHES OF FILL PLACED UPON IT, THE PAVEMENT SHALL BE THOROUGHLY SCARIFIED FOR ITS FULL DEPTH, MIXED WITH SUFFICIENT SOIL AND PROPERLY RECOMPACTED TO INSURE THE ELIMINATION OF ANY PLANES OF SEPARATION BETWEEN IT AND THE EMBANKMENT PLACED THEREON. PAYMENT FOR SCARIFICATION AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM E-1, ROADWAY EXCAVATION.

NON-RIGID PAVEMENT REMOVAL OUTSIDE NORMAL CONSTRUCTION LIMITS

AFTER THE EXISTING PAVEMENT HAS BEEN REMOVED, UNDER ITEM E-8, THE OLD ROADWAY SHALL BE PLOWED, HARROWED, AND DRAGGED TO A SMOOTH GRADE, THE OLD DITCHES FILLED, AS DIRECTED BY THE ENGINEER, AND THE ENTIRE AREA SLOPED TO DRAIN AND LEFT IN A NEAT CONDITION READY FOR SEEDING. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT REMOVAL, ITEM E-8. SEEDING SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM L-9.

DRAINAGE OF BASE MATERIAL

WHERE THE BASE MATERIAL IS DRAINED BY I-9 STONE UNDERDRAINS OR BY EXTENSIONS OF THE SUBBASE THROUGH THE SHOULDERS TO THE FILL SLOPE OR THE DITCH LINE, THE CONTRACTOR SHALL FINISH, SEED, AND MULCH THE SLOPES SO AS NOT TO IMPEDE DRAINAGE OF THE BASE MATERIAL. THE ACTUAL AREA OF THE OUTCROP OF THE SUBBASE MATERIAL OR THE I-9 STONE UNDERDRAINS SHALL NOT BE SEEDED.

ITEM I-9 STONE UNDERDRAINS, NO. 2 (INTERSECTING ROADS ONLY)

STONE UNDERDRAINS SHALL BE PLACED AT 100 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS AND AT 50 FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS. WHERE STONE UNDERDRAINS ARE USED TO DRAIN AN ASPHALTIC CONCRETE TYPE PAVEMENT, THEY SHALL BE CONSTRUCTED PRIOR TO PLACING THE ASPHALTIC CONCRETE SURFACE OR BASE COURSES.

PART WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY OF BUILDING CERTAIN CROSS ROADS UNDER TRAFFIC AND CONSTRUCTING THE PAVEMENT PART AT A TIME, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT ON CENTERLINE IN THE BASE AND SUBBASE COURSES. THIS SHALL BE ACCOMPLISHED BY BUILDING THE BASE AND SUBBASE COURSES PLACED WITH THE FIRST PORTION OF THE PAVEMENT BUILT, AT LEAST 18 INCHES BEYOND THE CENTERLINE AND BY SURFACING NO CLOSER THAN 18 INCHES TO THE EDGE OF THE ABOVE COURSES. WHEN THE SECOND PORTION OF THE PAVEMENT IS BUILT, AT LEAST 12 INCHES OF THESE PROJECTING COURSES SHALL BE BROKEN DOWN AND THOROUGHLY KEYED IN WITH THE NEWLY PLACED CORRESPONDING COURSES IN THE SECOND PORTION OF THE PAVEMENT. PAYMENT FOR THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTINENT PAVEMENT ITEMS.

SPRING DRAINS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER IN DRAINING SPRINGS ENCOUNTERED DURING CONSTRUCTION.

ITEM I-9 STONE UNDERDRAINS, NO. 1, AS PER PLAN	15 LIN. FT.
ITEM I-1 6" PIPE, SEC. M-64(h) CLASS I-3, AS PER PLAN	250 LIN. FT.

FOR DETAILS OF PROPOSED TREATMENT OF SPRING DRAINAGE SEE SHEET NO. 4

SOD AT HEADWALLS

AN 18" WIDE STRIP OF SOD SHALL BE PLACED, ALONG THE BACK AND BOTH ENDS OF EACH HEADWALL, AROUND INLETS AND ALONG BOTH SIDES OF PAVED GUTTER TO PREVENT EROSION. THE ABOVE ITEM HAS BEEN INCLUDED IN QUANTITIES OF ITEM L-10 SODDING.

DUMPED ROCK CHANNEL PROTECTION

DUMPED ROCK CHANNEL PROTECTION SHALL BE PLACED AT THE OUTLET OF ALL CLASS A-1 PIPES, AND CLASS B-1 PIPES OF 24" DIAMETER AND OVER, IMMEDIATELY AFTER THE PIPE HAS BEEN PLACED AND THE OUTLET CHANNEL IS CUT. THIS APPLIES ONLY WHERE DUMPED ROCK CHANNEL PROTECTION IS CALLED FOR ON PLANS.

EROSION CONTROL FOR SIDE AND MEDIAN DITCHES

THE SOD LINING REQUIRED IN THE MEDIAN AND SIDE DITCHES SHALL BE PLACED IN ACCORDANCE WITH THE DESIGN CRITERIA, DETAILED ON SHEET NO. 4.

WHERE DUMPED ROCK CHANNEL PROTECTION IS REQUIRED FOR ROADWAY DITCHES, PLACEMENT SHALL BE IN ACCORDANCE WITH DETAIL, SHOWN ON SHEET NO. 4.

SPECIAL GRANULAR BEDDING FOR PIPE STRUCTURES

PORTIONS OR ALL OF THE PROPOSED PIPE SEWER LEFT OF STA. 529+50 AND THE PROPOSED PIPE CULVERTS AT STATIONS 535+83 AND 577+00 LIE WITHIN AN AREA OF UNSUITABLE FOUNDATION MATERIAL FOR WHICH TREATMENT IS OUTLINED ON SHEET 7. THOSE PORTIONS OF THE PROPOSED PIPES OF THESE STRUCTURES WHICH LIE OUTSIDE THE ACTUAL AREA OF FOUNDATION REPLACEMENT WITH GRANULAR BORROW AS DESCRIBED ON SHEET 7 SHALL, IN LIEU OF THE BEDDING DEPTH REQUIREMENTS OF SEC. I-1.04, HAVE A MINIMUM DEPTH OF GRANULAR MATERIAL BELOW THE BOTTOM OF THE PIPE, OF TWELVE (12) INCHES.

THE PROPOSED HEADWALLS FOR THESE STRUCTURES SHALL ALSO BE BEDDED IN GRANULAR MATERIAL TO THIS SAME MINIMUM DEPTH BELOW THE LOW POINT OF THE FOOTERS, AS SHOWN ON THE CROSS SECTIONS.

PAYMENT FOR ADDITIONAL EXCAVATION AND FOR FURNISHING AND PLACING SPECIAL BACKFILL REQUIRED TO ACCOMPLISH THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE PIPE AND MASONRY ITEMS.

ITEM E-1 COMPACTED SUBGRADE

The B-19 shoulders treated with T-31 shall be considered to be "paved shoulders" for the purpose of computing the area of subgrade to be compacted to a depth of 12" and paid for under Item E-1 Compacted Subgrade.

PAYMENT FOR TEMPORARY ROADWAYS

PAYMENT FOR CONSTRUCTION, MAINTENANCE, AND SUBSEQUENT REMOVAL, WHEREVER REQUIRED, OF TEMPORARY ROADWAYS NOT SEPARATELY ITEMIZED UNDER ITEM S-15, EXCEPT FOR FURNISHING AND PLACING OF ITEMS I-4 AND T-10, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR "MAINTAINING TRAFFIC."

TEMPORARY CULVERTS

PAYMENT FOR CONSTRUCTION, MAINTENANCE, AND SUBSEQUENT REMOVAL OF TEMPORARY CULVERTS AND SEWER EXTENSIONS REQUIRED FOR CONSTRUCTION OF ITEM S-15 RUN-AROUNDS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR RUN-AROUNDS.

ROCK SUBGRADE

THE CONTRACTOR SHALL BE PAID FOR THE THICKNESS OF I-22 MATERIAL SHOWN ON THE TYPICAL SECTIONS IN ROCK EXCAVATION AREAS. ANY POCKETS IN THE ROCK BELOW THE PLAN SUBGRADE ELEVATION SHALL DRAIN EITHER LONGITUDINALLY OR LATERALLY AND ALL IRREGULARITIES IN THE ROCK BELOW THIS ELEVATION SHALL BE FILLED WITH I-22 MATERIAL AT NO ADDITIONAL COST TO THE STATE.

I-22 UNDER APPROACH SLABS

THE SPACE BETWEEN THE SURFACE OF THE SUBGRADE AND THE BOTTOM OF THE APPROACH SLAB SHALL BE BACK FILLED WITH ITEM I-22 SUBBASE.

I-22 SUBBASE GRADING A AND B AS PER PLAN

MATERIAL FOR THIS ITEM SHALL MEET THE REQUIREMENTS FOR ITEM I-22 GRADING A OR B EXCEPT THAT FOR BOTH GRADINGS THE PER CENT PASSING THE NUMBER 200 SIEVE SHALL NOT EXCEED 10 AT THE TIME OF INCORPERATION INTO THE WORK.

ITEM L-1 TOPSOIL STOCKPILED

THE MATERIAL TO BE STOCKPILED FOR PLACEMENT AS ITEM L-3 IN ROCK CUT ON THIS PROJECT SHALL BE OBTAINED UNDER ITEM L-1 WITHIN THE LIMITS OF RIGHT OF WAY. NO BORROW ITEM IS ANTICIPATED FOR THIS PURPOSE. THIS ITEM SHALL BE IN ADDITION TO THE NORMAL REQUIREMENTS OF ITEM E-1.03(a).

ITEM L-3 PLACING STOCKPILED TOPSOIL AS PER PLAN

THE METHOD OF MEASUREMENT FOR THIS ITEM SHALL BE IN CUBIC YARDS COMPACTED IN PLACE, IN LIEU OF SQUARE YARDS, FOR TOPSOIL IN ROCK CUT AREAS.

FURNISHING AND PLACING COMMERCIAL FERTILIZER IS INCLUDED IN ITEM L-9 IN LIEU OF ITEM L-3.

ALL OTHER REQUIREMENTS SHALL BE AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

EROSION CONTROL IN ROCK SECTION

WHERE ROCK IS ENCOUNTERED IN THE SIDE DITCHES IN THE AREAS THAT SODDING IS CALLED FOR ON THE PLAN AND PROFILE SHEETS, THE SODDING IN THE BOTTOM AND THE OUTSIDE OF THE DITCH SHALL BE OMITTED AND THE SOD ON THE INSLOPE SHALL BE 6' IN WIDTH.

MAINTAINING TRAFFIC

TOWNSHIP ROAD 151 (WEST)

EXISTING TOWNSHIP ROAD 151 (WEST) SHALL REMAIN OPEN TO TRAFFIC UNTIL SUCH TIME AS RELOCATED COUNTY ROAD 127, RELOCATED TOWNSHIP ROAD 151 AND THE COUNTY ROAD 127 INTERSECTION WITH U.S.R. 30 HAVE BEEN COMPLETED. AT SUCH TIME OF COMPLETION, TOWNSHIP ROAD 151 TRAFFIC SHALL BE ROUTED OVER THE RELOCATED TOWNSHIP ROAD 151 AND COUNTY ROAD 127.

COUNTY ROAD 127

EXISTING COUNTY ROAD 127 SHALL BE KEPT OPEN TO TRAFFIC UNTIL SUCH TIME AS RELOCATED COUNTY ROAD 127 AND ITS INTERSECTION WITH U.S.R. 30 HAVE BEEN COMPLETED. AT SUCH TIME, COUNTY ROAD 127 TRAFFIC SHALL BE ROUTED OVER THE COMPLETED RELOCATED COUNTY ROAD 127.

TOWNSHIP ROAD 151 (EAST)

TOWNSHIP ROAD 151 (EAST) SHALL BE CLOSED TO TRAFFIC DURING THE PERIOD OF CONSTRUCTION FOR TOWNSHIP ROAD 151 AND ITS INTERSECTION WITH U.S.R. 30. THIS ROAD SHALL NOT BE CLOSED FOR A PERIOD OF LONGER THAN SIXTY (60) DAYS. DURING THE TIME THAT THIS ROAD IS CLOSED, THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN LIGHTS, SIGNS AND BARRICADES AT THE INTERSECTIONS OF TOWNSHIP ROAD 151 WITH TOWNSHIP ROAD 64 AND COUNTY ROAD 127, CLOSING TOWNSHIP ROAD 151 (EAST) TO TRAFFIC.

STATE ROUTE 89

TWO-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES ON STATE ROUTE 89 UNTIL SUCH TIME AS ACTUAL CONSTRUCTION IS STARTED ON THE RECONSTRUCTION OF STATE ROUTE 89. AT THIS TIME, THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY RUNAROUND AS DETAILED ON THE PLANS. THE CONTRACTOR WILL FURNISH, ERECT AND MAINTAIN LIGHTS, SIGNS AND BARRICADES NECESSARY FOR THE MAINTENANCE AND SAFETY OF TWO-WAY TRAFFIC AT ALL TIMES.

U.S.R. 30

Two-way traffic shall be maintained at all times on Existing U.S.R. 30 until such time as actual construction is started on the Temporary Connection. At this time the Contractor shall construct a temporary runaround as detailed on the plans. The Contractor will furnish, erect and maintain Lights, Signs and Barricades necessary for the maintenance and safety of two-way traffic at all times.

COUNTY ROAD 132

TWO-WAY TRAFFIC WILL BE MAINTAINED ON COUNTY ROAD 132 UNTIL SUCH TIME AS ACTUAL CONSTRUCTION OF THE APPROACHES IS STARTED. THE CONTRACTOR SHALL COMPLETE THE APPROACHES IN A PERIOD OF NOT OVER THIRTY (30) DAYS. AFTER SUCH TIME, ONE-WAY TRAFFIC WILL BE MAINTAINED ON COUNTY ROAD 132 UNTIL THE INTERSECTION OF U.S.R. 30 WITH COUNTY ROAD 132 IS COMPLETE.

THE CONTRACTOR WILL FURNISH, ERECT AND MAINTAIN LIGHTS, SIGNS, AND BARRICADES NECESSARY FOR THE MAINTENANCE AND SAFETY OF TRAFFIC AT ALL TIMES, at the intersections with CR. 62 + 227

AN ESTIMATED AMOUNT OF I-4, CALCIUM CHLORIDE; AND T-10, TRAFFIC COMPACTED SURFACE COURSE, HAVE BEEN ALLOWED FOR THE MAINTENANCE OF ONE-WAY TRAFFIC.

THE CONTRACTOR SHALL SO SCHEDULE HIS WORK IN A MANNER THAT COUNTY ROAD 132 AND COUNTY ROAD 62 ARE NOT CLOSED TO TRAFFIC AT THE SAME TIME.

COUNTY ROAD 62

COUNTY ROAD 62 SHALL BE KEPT OPEN FOR TWO-WAY TRAFFIC UNTIL SUCH TIME AS THE GRADING ON U.S.R. 30 WILL MAKE IT NECESSARY FOR COUNTY ROAD 62 TO BE CLOSED TO TRAFFIC. AT SUCH TIME, THE CONTRACTOR WILL FURNISH, ERECT AND MAINTAIN LIGHTS, SIGNS AND BARRICADES AT THE INTERSECTIONS OF COUNTY ROAD 62 AND ASHLAND-WAYNE COUNTY LINE ROAD 74 AND COUNTY ROAD 62 AND TOWNSHIP ROAD 189, CLOSING COUNTY ROAD 62 TO TRAFFIC. IT WILL BE NECESSARY FOR COUNTY ROAD 62 TO BE CLOSED TO TRAFFIC UNTIL THE COMPLETION OF COUNTY ROAD 62 STRUCTURE AND THE APPROACHES TO SAID STRUCTURE.

THE COUNTY ROAD 62 STRUCTURE SHALL BE STARTED AS SOON AS THE ROUGH GRADING OF U.S.R. 30 HAS BEEN COMPLETED AT THIS LOCATION AND THE CONTRACTOR SHALL USE DILIGENT EFFORTS TO COMPLETE THIS STRUCTURE AT THE EARLIEST POSSIBLE DATE. THE CONTRACTOR SHALL NOT CLOSE COUNTY ROAD 132 AND COUNTY ROAD 62 TO TRAFFIC AT THE SAME TIME.

ASHLAND-WAYNE COUNTY LINE ROAD NO. 74

TWO-WAY TRAFFIC WILL BE MAINTAINED ON COUNTY ROAD 74 UNTIL SUCH TIME AS ACTUAL CONSTRUCTION IS STARTED ON THE RECONSTRUCTION OF COUNTY ROAD 74. AT THAT TIME THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY RUNAROUND AS DETAILED ON THE PLANS. THE CONTRACTOR WILL FURNISH, ERECT AND MAINTAIN LIGHTS, SIGNS, AND BARRICADES NECESSARY FOR THE MAINTENANCE AND SAFETY OF TWO-WAY TRAFFIC AT ALL TIMES.

PRIVATE DRIVES

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE TEMPORARY DRIVES, IF NEEDED, TO ALLOW ACCESS TO ALL PROPERTY OWNERS DURING CONSTRUCTION. QUANTITIES OF T-10, TRAFFIC COMPACTED SURFACE COURSE; AND I-4, CALCIUM CHLORIDE, HAVE BEEN ALLOWED FOR MAINTAINING TRAFFIC. THE COST OF PROVIDING TEMPORARY DRIVES IS INCLUDED IN THE ABOVE ITEMS.

LIGHTS, SIGNS AND BARRICADES

THE CONTRACTOR SHALL, IN CONJUNCTION WITH THE GENERAL REQUIREMENTS OF Item I-3, Maintaining Traffic perform THE FOLLOWING ON THIS PROJECT:

(A) FURNISH, ERECT AND MAINTAIN MOVABLE GATES ON INTERSECTING ROADS CLOSED TO TRAFFIC AT ALL POINTS WHERE LOCAL TRAFFIC TERMINATES.

(B) FURNISH, ERECT AND MAINTAIN LIGHTS, SIGNS AND BARRICADES AT THE WORK LIMITS ON ALL INTERSECTING ROADS WHICH REMAIN OPEN TO TRAFFIC.

(C) FURNISH, ERECT AND MAINTAIN STANDARD 40" X 24" "ROAD CLOSED" SIGNS, SIGN SUPPORTS AND LIGHTS AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

1. TOWNSHIP ROAD 151 AT ITS INTERSECTION WITH COUNTY ROAD 127 AND TOWNSHIP ROAD 64.
2. COUNTY ROAD 132 AT ITS INTERSECTION WITH COUNTY ROAD 62 AND COUNTY ROAD 227.
3. COUNTY ROAD 62 AT ITS INTERSECTION WITH TOWNSHIP ROAD 189 AND ASHLAND-WAYNE COUNTY LINE ROAD 74.

PAYMENT FOR FURNISHING, ERECTING, MAINTAINING AND REMOVING BARRICADES, GATES, LIGHTS AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC, Item I-3.

AN ESTIMATED AMOUNT OF T-10, TRAFFIC COMPACTED SURFACE COURSE; AND I-4, CALCIUM CHLORIDE, HAS BEEN PROVIDED FOR THE MAINTENANCE OF TRAFFIC.

ESTIMATED QUANTITIES

ROAD	T-10	I-4, CALCIUM CHLORIDE
COUNTY ROAD 132	100 CU. YDS.	2 TONS
PRIVATE DRIVES	50 CU. YDS.	1 TON

USE OF TEMPORARY RUNAROUNDS: The limits and duration of use of temporary runarounds shall be held to an absolute minimum, and in all cases shall be subject to the approval of the Engineer.

ITEM S-15, TEMPORARY RUNAROUND ROADS.

All embankment placed for this item shall be removed and all excavated areas refilled to origional ground level and the entire area seeded.

ITEM S.S. CE-101.04 COMPACTION USING HEAVY PNEUMATIC TIRED ROLLER

An estimated quantity of 89 hours for this item has been provided in the General Summary for use in proof rolling of subgrade on the mainline and ramp pavements as directed by the Engineer. Proof rolling will not be requested where rock or shale occurs in subgrade and in areas where subbase has been thickened to replace frost susceptible silts. In lieu of the requirements of CE-101.04, a minimum of one coverage will be required to check the subgrade. Moisture content of the top 12" of subgrade shall not exceed optimum at the time of proof rolling. Tire pressure and total load shall be varied as directed by the Engineer within the limits provided in CE-101.04.

CALCULATIONS

DESCRIPTION	TOTAL	UNIT
T-71 9" REINFORCED P.C. CONCRETE PAVEMENT		
LENGTH		
STA 450+00 TO STA 491+94.24 = 4194.24 LIN FT		
STA 493+59.24 TO STA 593+27.90 = 9968.66 " "		
STA 596+06.09 TO STA 629+95.16 = 3389.07 " "		
STA 631+60.16 TO STA 701+55.06 = 6994.90 " "		
STA 0+00 TO STA 3+70 = 370.00 " "		
24916.87 " "		
AREA = (24916.87 × 48) ÷ 9 = 132889.97 SQ. YDS USE	132890	SQ. YDS.
B-19 AGGREGATE BASE COURSE		
RIGHT PAVEMENT, RIGHT SHOULDER		
STA 450+00 TO STA 474+96.17 = 2496.17 LIN FT		
STA 476+28.13 TO STA 492+19.24 = 1591.11 " "		
STA 493+34.24 TO STA 501+88.62 = 854.38 " "		
STA 503+02.63 TO STA 540+15.06 = 3712.43 " "		
STA 541+28.98 TO STA 593+93.18 = 5264.20 " "		
STA 596+71.37 TO STA 619+50 = 2278.63 " "		
STA 620+61.10 TO STA 630+20.16 = 959.06 " "		
STA 631+35.16 TO STA 700+94.19 = 6959.03 " "		
STA 0+52.98 TO STA 3+70 = 317.02 " "		
TOTAL LENGTH 24432.03 LIN FT.		
LEFT PAVEMENT, LEFT SHOULDER		
STA 450+00 TO STA 475+21.87 = 2571.87 LIN FT		
STA 477+03.83 TO STA 492+19.24 = 1515.41 " "		
STA 493+34.24 TO STA 501+98.83 = 864.09 " "		
STA 503+12.84 TO STA 540+23.44 = 3710.60 " "		
STA 541+37.36 TO STA 592+62.62 = 5125.26 " "		
STA 595+40.18 TO STA 619+21.35 = 2381.17 " "		
STA 620+38.39 TO STA 630+20.16 = 981.77 " "		
STA 631+35.16 TO STA 701+02.08 = 6966.92 " "		
STA 0+60.92 TO STA 3+70 = 313.02 " "		
TOTAL LENGTH 24432.03 LIN FT		
RIGHT PAVEMENT, LEFT SHOULDER		
STA 450+00 TO STA 472+93.29 = 2293.29 LIN FT		
STA 476+66.91 TO STA 492+19.24 = 1552.33 " "		
STA 493+34.24 TO STA 499+45.30 = 611.06 " "		
STA 503+16.36 TO STA 535+68.43 = 3252.07 " "		
STA 542+28.34 TO STA 593+67.29 = 5138.95 " "		
STA 596+45.47 TO STA 616+88.32 = 2042.85 " "		
STA 620+60.10 TO STA 630+20.16 = 960.06 " "		
STA 631+35.16 TO STA 698+49.63 = 6714.47 " "		
STA 0+65.63 TO STA 3+70 = 304.37 " "		
TOTAL LENGTH 22869.45 LIN FT		
LEFT PAVEMENT, RIGHT SHOULDER		
STA 450+00 TO STA 475+32.58 = 2532.58 LIN FT.		
STA 479+06.71 TO STA 492+19.24 = 1312.53 " "		
STA 493+34.24 TO STA 501+85.10 = 850.86 " "		
STA 505+56.16 TO STA 539+24.08 = 3367.92 " "		
STA 545+83.99 TO STA 592+88.52 = 4704.53 " "		
STA 595+66.71 TO STA 619+28.11 = 2361.40 " "		
STA 622+99.85 TO STA 630+20.16 = 720.31 " "		
STA 631+35.16 TO STA 700+89.43 = 6954.27 " "		
3+05.43 TO STA 3+70 = 64.57 " "		
TOTAL LENGTH 22868.97 LIN FT		
AREA OF PAVED SHOULDERS		
8(24432.03 + 24426.67) ÷ 9 = 43429.96 SQ. YDS.		
4(22869.45 + 22868.97) ÷ 9 = 20328.19 " "		
AREA OF TAPERS JEROME FORK BRIDGE = 99.92 " "		
TOTAL AREA = 63858.07 SQ. YDS.		
VOLUME = 63,858.07 × 9/36 = 15,964.52 CU. YDS. USE	15,965	CU. YDS
T-31 BITUMINOUS SURFACE TREATMENT		
BITUMINOUS MATERIAL		
63,858.07 × 0.30 GAL PER SQ YD. = 19,157.42 GAL USE	19,157	GAL
No. 6 AGGREGATE		
63,858.07 × .008 = 638.58 CU. YDS. USE	639	CU. YDS

DESCRIPTION	TOTAL	UNIT
T-30 BITUMINOUS PRIME COAT		
63,858.07 Sq. Yds. x 0.40 Gal. per Sq. Yd. = 25,543.23 Gal.		
Use	25,543	Gal.
I-22 SUBBASE, GRADING "A" or "B", AS PER PLAN		
LEFT LANE & RIGHT LANE		
STA 450+00 TO 492+19.24 = 4219.24 LIN FT.		
STA 493+34.24 TO 593+52.90 = 10018.66 " "		
STA 595+81.09 TO 596+36.97 = 55.88 " "		
VOLUME (14293.78 × 72) × 0.491725 (AVERAGE THICKNESS) ÷ 27 = 18,742.95 CU. YDS.		
STA 596+36.97 TO STA 606+28.64 = 991.67 LIN FT		
VOLUME = (991.67 × 72) × 0.49468 (AVERAGE THICKNESS) ÷ 27 = 1,308.16		
STA 606+28.64 TO STA 617+43.50 = 1114.86 LIN. FT		
VOLUME = (1114.86 × 72) × 0.49634 ÷ 27 = 1,475.60		
STA 617+43.50 TO STA 628+05.24 = 1061.74 LIN FT.		
VOLUME = (1061.74 × 72) × 0.49468 ÷ 27 = 1,400.59		
STA 628+05.24 TO STA 630+16 = 210.76 LIN FT		
STA 631+35.16 TO STA 701+55.06 = 7019.90 " "		
STA 0+00 TO STA 3+70 = 370.00 " "		
TOTAL 7600.66 " "		
VOLUME = (7600.66 × 72) × 0.49043 ÷ 27 = 9,945.02		
TOTAL 32,872.32 USE	32,872	CU. YDS.
E-1 COMPACTED SUBGRADE		
Area of Concrete Pavement 132890 Sq. Yds.		
Area of Paved Shoulders 63858 " "		
Extra Area (Intersecting Roads) 17594 " "		
State Route 89 & Side Roads 15559 " "		
Area of Approach Slabs 843 " "		
Deduct Area for Rock Subgrade - 44000 " "		
Net Area. 176744 " " USE	176744	Sq. Yds.
L-9 SEEDING & PROTECTING		
Main Line (U.S.R. 30) 561,586 Sq. Yds		
Deduct for Sod, Paved Gutter & Dumped Rock 29,836 Sq. Yds.		
Net Total 531,750 Sq. Yds.		
Culvert & Bridge Channels 4,036 " "		
Intersecting Roads except Conn. "S" & "N" 57749 Sq. Yds.		
Deduct for Sod & Dumped Rock 4836 " "		
Net Total 52913 Sq. Yds.		
Total 588,699 Sq. Yds. use	588,699	Sq. Yds.
Total Sod = 27,485 Sq. Yds.		
L-9 COMMERCIAL FERTILIZER Seeding for Main Line & Side Roads = 588,699 Sq. Yds.		
Seeding for Conn "N" & "S" = 16,519 Sq. Yds = 16,519 Sq. Yds.		
Total = (632,703 × 9 × $\frac{20}{1000}$) ÷ 2000 = 56.94 Tons use	57	Tons
I-9 Stone Underdrains No. 2		
Length of left shoulder after deductions for I-1, Bridges, and Intersections = 13,470 Lin. Ft.		
Number required = 13,470 ÷ 30 = 449 + 1 for sag = 450 Each		
Length = 450 × 17.29 Ft. (Avg. Length) = 7,780.50 Lin. Ft.		
Length of right shoulder after deductions for I-1, Bridges, and Intersections = 14,550 Lin. Ft.		
Number required = 14,550 ÷ 30 = 485 + 1 for sag = 486 Each		
Length = 486 × 17.85 Ft. (Avg. Length) = 8,675.10 Lin. Ft.		
Add for extended shoulder areas = 220.00 Lin. Ft.		
Total = 16,675.60 Lin. Ft. Use	16,676	Lin. Ft.

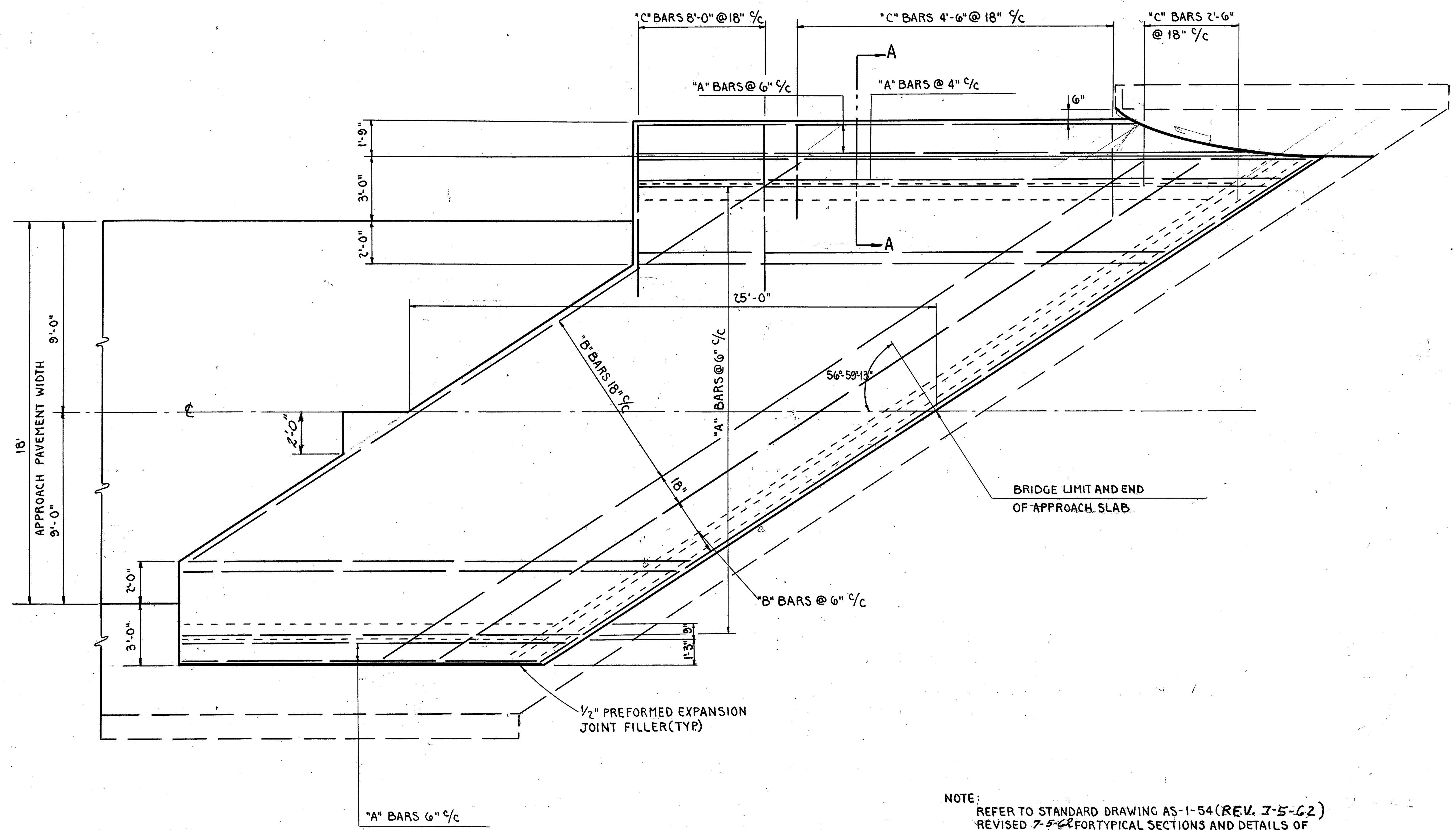
16,593

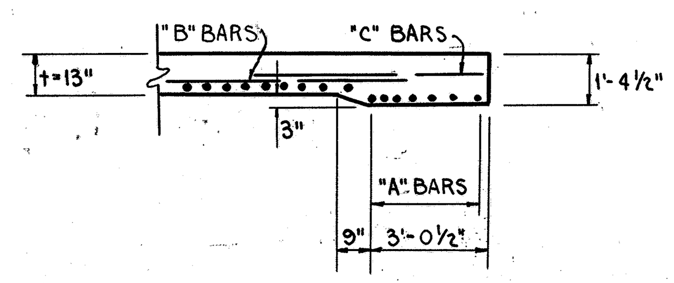
CALCULATIONS CONTINUED

DESCRIPTION	TOTAL	UNIT
L-1 TOPSOIL STOCKPILED		
Sta. 450+00 to Sta. 461+00 = 1100 Lin. Ft.		
Sta. 478+00 to Sta. 486+00 = 800 Lin. Ft.		
Sta. 663+00 to Sta. 697+00 = 3400 Lin. Ft.		
Total = 5300 Lin. Ft.		
Volume = [5300 × 75.76 (Sq. Ft. per Lin. Ft.)] ÷ 27 = 14871.41 Cu. Yds.		
Total Volume = 14,871.41 Cu. Yds. + 20% for Compaction = 17,845.69 Cu. Yds. Use	17,846	Cu. Yds.
L-3 PLACING STOCKPILED TOPSOIL		
Volume = L-1 Volume without compaction factor = 14,871.41 Cu. Yds. use	14,871	Cu. Yds.
E-11 WATER		
Total Embankment = 891,230 Cu. Yds.		
Total B-19 = 19,975 Cu. Yds.		
Total I-22 = 35,787 Cu. Yds.		
Total = 946,992 Cu. Yds.		
Total Water = 946,992 × 5 ÷ 1000 = 4734.96 M. Gals. use	4,735	M. Gals

I-7 SUMMARY OF APPROACH SLABS

Quaker Spring (Std.)	266.67	Sq. Yds.
Jerome Fork (Std.)	266.67	"
Glenn Run (Std.)	266.67	"
County Road 62 (See below)	143.24	"
Total	943.25	Sq. Yds.





SECTION AA

NOTE:
REFER TO STANDARD DRAWING AS-1-54 (REV. 7-5-62) REVISED 7-5-62 FOR TYPICAL SECTIONS AND DETAILS OF APPROACH SLABS. STANDARDS TO BE MODIFIED AS NECESSARY TO ACCOMODATE REINFORCING PLAN AS SHOWN. CONCRETE TO BE CLASS "C". PREFORMED EXPANSION JOINT TO BE INCLUDED IN THE PRICE BID FOR ITEM I-7, REINFORCED CONCRETE APPROACH SLAB.
"A" BARS = #8
"B" BARS = #5
"C" BARS #5
"C" BARS SHALL BE PLACED NORMAL TO CENTER LINE OF ROADWAY.

DETAIL OF APPROACH SLAB
STRUCTURE ASD-30-1283

CALCULATIONS

TEMPORARY CONNECTION "S"

ASD-30-8.52
WAY-30-0.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

11-A
198

T-35 1" ASPHALTIC CONCRETE SURFACE COURSE TYPE "C"		
EASTBOUND LANE		
STA 39+00 ℄ SURVEY TO STA 39+73.54 ℄ SURVEY = 73.54 LIN FT		
AVERAGE WIDTH = 11.45 FT		
VOLUME = 73.54 × 11.45 × 0.0833 ÷ 27 =	2.60 CU YDS	
STA 40+24.88 TO STA 40+97.96 = 73.08 LIN FT		
WIDTH = 12 FT		
VOLUME = 73.08 × 12 × 0.0833 ÷ 27 =	2.71 CU YDS	
STA 40+97.96 TO STA 42+04.8 = 106.84 LIN FT		
AVERAGE WIDTH = 15.5 FT		
VOLUME = 106.84 × 15.5 × 0.0833 ÷ 27 =	5.11 CU YDS	
STA 42+04.8 TO STA 42+69.8 = 65.00 LIN FT		
AVERAGE WIDTH = 16 FT		
VOLUME = 65.00 × 16 × 0.0833 ÷ 27 =	3.21 CU YDS	
STA 42+69.8 TO STA 49+00 = 630.20 LIN FT		
WIDTH = 14 FT		
VOLUME = 630.20 × 14 × 0.0833 ÷ 27 =	27.22 CU YDS	
STA 49+00 TO STA 50+00 = 100.00 LIN FT		
AVERAGE WIDTH = 19 FT		
VOLUME = 100.00 × 19 × 0.0833 ÷ 27 =	5.86 CU YDS	
ADD FOR FEATHERING STA 38+80 TO STA 39+00 =	0.70 CU YDS	
WESTBOUND LANE		
STA 39+00 ℄ SURVEY TO STA 39+73.54 ℄ SURVEY=73.54 LIN FT		
AVERAGE WIDTH = 11.30 FT		
VOLUME = 73.54 × 11.30 × 0.0833 ÷ 27 =	2.56 CU YDS	
STA 39+22.21 TO STA 41+05.0 = 182.79 LIN FT		
AVERAGE WIDTH = 13.5 FT		
VOLUME = 182.79 × 13.5 × 0.0833 ÷ 27 =	7.61 CU YDS	
STA 41+05.0 TO STA 50+00 = 895.00 LIN FT		
WIDTH = 14 FT		
VOLUME = 895.00 × 14 × 0.0833 ÷ 27 =	38.66 CU YDS	
ADD FOR ADDITIONAL PAVEMENT IN GORE AREA =	2.01 CU YDS	
TOTAL T-35 =		98.25 CU YDS
TO SUMMARY USE:		98.3 CU YDS

B-35 1-1/4" ASPHALTIC CONCRETE LEVELING COURSE		
EASTBOUND AND WESTBOUND LANES		
SURFACE AREA FROM T-35 CALC = 98.25 - 0.70 = (97.55 (27) ÷ 0.0833 = 31,618.84 SQ FT		
VOLUME = 31,618.84 × 0.1042 ÷ 27 =		122.03 CU YDS
TO SUMMARY USE:		122.0 CU YDS

B-21 7" WATERPROOFED AGGREGATE BASE COURSE		
EASTBOUND AND WESTBOUND LANES		
SURFACE AREA FROM B-35 CALC = 31,618.84 SQ FT		
VOLUME = 31,618.84 × 0.5833 ÷ 27 =	683.08 CU YDS	
LENGTH OF ADDITIONAL 7" WIDTH = 3,521.79 LIN FT		
VOLUME = 3,521.79 × 0.5833 × 0.5833 ÷ 27 =	44.38 CU YDS	
TOTAL B-21 =		727.46 CU YDS
TO SUMMARY USE:		727.5 CU YDS

I-22 SUBBASE		
EASTBOUND AND WESTBOUND LANES		
SURFACE AREA FROM B-35 CALC= 31,618.84 SQ FT		
VOLUME = 31,618.84 × 0.5000 ÷ 27 =	585.53 CU YDS	
LENGTH OF ADDITIONAL 7" WIDTH = 3,521.79 LIN FT		
VOLUME = 3,521.79 × 0.5833 × 0.5000 ÷ 27 =	38.04 CU YDS	
EASTBOUND OUTSIDE SHOULDER		
STA 39+00 ℄ SURVEY TO STA 39+73.54 ℄ SURVEY = 73.54 LIN FT		
VOLUME = 73.54 × 3.4167 × 0.4583 ÷ 27 =	4.27 CU YDS	

I-22 SUBBASE (CONTINUED)		
STA 40+24.88 TO STA 49+00 = 875.12 LIN FT		
VOLUME = 875.12 × 3.4167 × 0.5000 ÷ 27 =	55.37 CU YDS	
STA 49+00 TO STA 50+00 = 100.00 LIN FT		
VOLUME = 100.00 × 3.4167 × 0.4583 ÷ 27 =	5.80 CU YDS	
ADD FOR ADDITIONAL WIDTH =	1.70 CU YDS	
EASTBOUND INSIDE SHOULDER		
STA 43+01.4 TO STA 49+00 = 598.6 LIN FT		
DEDUCT FOR INTERSECTION = 90.0 LIN FT		
NET LENGTH = 508.6 LIN FT		
VOLUME = 508.6 × 3.4167 × 0.5000 ÷ 27 =	32.18 CU YDS	
STA 49+00 TO STA 50+00 = 100.00 LIN FT		
VOLUME = 100.00 × 3.4167 × 0.4583 ÷ 27 =	5.80 CU YDS	
WESTBOUND OUTSIDE SHOULDER		
STA 39+00 ℄ SURVEY TO STA 39+73.54 ℄ SURVEY = 73.54 LIN FT		
STA 39+22.21 TO STA 39+40 = 17.79 LIN FT		
TOTAL LENGTH = 91.33 LIN FT		
VOLUME = 91.33 × 3.4167 × 0.4583 ÷ 27 =	5.30 CU YDS	
STA 39+40 TO STA 41+05 = 165.00 LIN FT		
VOLUME = 165.00 × 1.6146 SQ FT ÷ 27 =	9.87 CU YDS	
STA 41+05 TO STA 49+00 = 795.00 LIN FT		
DEDUCT FOR INTERSECTION = 142.00 LIN FT		
NET LENGTH = 653.00 LIN FT		
VOLUME = 653.00 × 1.5677 ÷ 27 =	37.92 CU YDS	
STA 49+00 TO STA 50+00 = 100.00 LIN FT		
VOLUME = 100.00 × 3.4167 × 0.4583 ÷ 27 =	5.80 CU YDS	
ADD FOR ADDITIONAL WIDTH =	1.70 CU YDS	
WESTBOUND INSIDE SHOULDER		
STA 42+07.8 TO STA 50+00 = 792.20 LIN FT		
DEDUCT FOR INTERSECTION = 49.00 LIN FT		
NET LENGTH = 743.20 LIN FT		
VOLUME = 743.20 × 3.4167 × 0.5000 ÷ 27 =	47.02 CU YDS	
TOTAL I-22 =		836.30 CU YDS
TO SUMMARY USE:		836.3 CU YDS

T-31 BITUMINOUS SURFACE TREATMENT (NO. 6 AGGREGATE)		
RATE OF APPLICATION: 0.008 CU YDS PER SQ YD		
LENGTH OF EASTBOUND SHOULDERS = 1,657.26 LIN FT		
VOLUME = 1,657.26 × 4 × 0.008 ÷ 9 =	5.89 CU YDS	
ADD FOR ADDITIONAL WIDTH =	0.09 CU YDS	
LENGTH OF WESTBOUND SHOULDERS = 1,752.53 LIN FT		
VOLUME = 1,725.53 × 4 × 0.008 ÷ 9 =	6.23 CU YDS	
ADD FOR ADDITIONAL WIDTH =	0.09 CU YDS	
TOTAL T-31 (NO. 6 AGGREGATE)		12.30 CU YDS
TO SUMMARY USE:		12.3 CU YDS

T-31 BITUMINOUS SURFACE TREATMENT (BITUMINOUS MATERIAL)		
RATE OF APPLICATION: 0.30 GAL PER SQ YD		
EASTBOUND SHOULDERS		
SURFACE AREA = 6,629.04 SQ FT + 100.00 SQ FT = 6,729.04 SQ FT		
VOLUME = 6,729.04 × 0.30 ÷ 9 =	224.30 GALS	
WESTBOUND SHOULDERS		
SURFACE AREA = 7,010.12 + 100.00 SQ FT = 7,110.12 SQ FT		
VOLUME = 7,110.12 × 0.30 ÷ 9 =	237.00 GALS	
TOTAL T-31 (BITUMINOUS MATERIAL)		461.30 GALS
TO SUMMARY USE:		461.3 GALS

T-30 BITUMINOUS PRIME COAT		
RATE OF APPLICATION: 0.40 GAL PER SQ YD		
EASTBOUND SHOULDERS		
VOLUME = 6,729.04 × 0.40 ÷ 9 =	299.07 GALS	
WESTBOUND SHOULDERS		
VOLUME = 7,110.12 × 0.40 ÷ 9 =	316.01 GALS	
TOTAL T-30 (BITUMINOUS PRIME COAT)		615.08 GALS
TO SUMMARY USE:		615.1 GALS

T-30 BITUMINOUS TACK COAT		
RATE OF APPLICATION: 0.10 GAL PER SQ YD		
FEATHERING STA 38+80 ℄ SURVEY TO STA 39+00 ℄ SURVEY		
VOLUME = 430 SQ FT × 0.10 ÷ 9 =		4.78 GALS
TO SUMMARY USE:		4.8 GALS

E-1 COMPACTED SUBGRADE		
SURFACE AREA OF PAVEMENT FROM B-35 CALC = 31,618.84 SQ FT		
AREA = 31,618.84 ÷ 9 =	3,513.10 SQ YDS	
SURFACE AREA OF SHOULDERS FROM T-30 CALC = 13,839.16 SQ FT		
AREA 13,839.16 ÷ 9 =	1,537.68 SQ YDS	
TOTAL E-1 COMPACTED SUBGRADE =		5,050.88 SQ YDS
TO SUMMARY USE:		5,051 SQ YDS

I-9 STONE UNDERDRAINS NO. 2		
WESTBOUND LANE		
STA 39+00 ℄ SURVEY TO STA 39+73.54 ℄ SURVEY = 73.54 LIN FT		
STA 39+22.21 TO STA 40.00 = 77.79 LIN FT		
STA 49+50 TO STA 50+00 = 50.00 LIN FT		
TOTAL LENGTH OF RUN = 201.33 LIN FT		
NO. I-9'S REQUIRED = 201.33 ÷ 50 = 4+1 = 5 EACH		
LENGTH PER I-9 = 16.90 FT		
TOTAL LENGTH = 5× 16.90 =	84.50 LIN FT	
EASTBOUND LANE		
STA 39+00 ℄ SURVEY TO STA 39+73.54 ℄ SURVEY = 73.54 LIN FT		
STA 40+24.88 TO STA 40+50 = 25.12 LIN FT		
STA 42+50 TO STA 43+50 = 100.00 LIN FT		
TOTAL LENGTH OF RUN = 198.66 LIN FT		
NO. I-9'S REQUIRED 198.66 ÷ 50 = 4+1 = 5 EACH		
TOTAL LENGTH = 5 × 16.90 =	84.50 LIN FT	
STA 40+50 TO STA 42+50 = 200.00 LIN FT		
NO. I-9'S REQUIRED = 200.00 ÷ 25 = 8 EACH		
TOTAL LENGTH = 8 × 16.90 =	135.20 LIN FT	
TOTAL I-9 STONE UNDERDRAINS NO. 2		304.20 LIN FT
TO SUMMARY USE:		304 LIN FT

* Subsequent to the completion of this plan, the L-3 quantity for the hump median (excluding rock areas) was deleted. The earthwork quantity shown is the adjustment.

SUMMARY OF TABLES

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		12 / 198

ASD.-30-8.52
WAY.-30-0.00

From Sheet No.	E-1 Excavation	E-1 Embankment	E-1 Emb. + 20%	Compacted Subgrade	E-3 Channel Excavation	E-4 Granular Borrow, as per plan	Granular Borrow, Including Excavation, as per plan	E-8 Removal of Existing Pavement	E-9 Removal of Trees & Stumps	E-11 Water	E-12 Pipe Removed 15" and Under	E-12 Pipe Removed Over 15"	I-23 Traffic Dividers	B-19 Aggregate Base Course	B-21 Waterproofed Aggregate Base Course	B-35 Asphaltic Conc. Leveling Course	B-70 8" P.C. Concrete Base Course	T-30 Bituminous Prime Coat	Bituminous Tack Coat	T-31 Bituminous Surface Treatment Bituminous Material	No. 6 Aggregate	T-35 Asphaltic Concrete Type "C" Surface Course	Asphaltic Concrete Surface Course Type "A" (85-100)	T-70 9" P.C. Concrete Pavement	T-71 9" Reinf. P.C. Conc. Pavement
	Cu. Yds.			Sq. Yd.	Cu. Yds.			SQ. YDS.	Lump	M. Gal.	Lin. Ft.		Each	Cu. Yds.			Sq. Yd.	Gal.		Gal.	Cu. Yd.	Cu. Yd.		Sq. Yd.	
4																									
8									Lump																
9																									
10				176,744										15964	5322					19,157	639				132890
11										4735															
17	22511	4260	5112		15			500																	
18	244940	0	0																						
19	5591	55073	66088																						
20	86484	24565	29478																						
21	36416	10,821	12,986																						
22	1,058	24,570	29,484																						
23	3462	30699	36839																						
24	5149	27528	33034		2		8625																		
25	790	44623	53548				22220																		
26	6282	12,258	14,710																						
27	6483	40,524	48,629																						
28	14891	25215	30258																						
29	17,860	22384	26861				7654																		
30	3283	26887	32265				761																		
31	6739	79328	95194			13,087																			
32	2905	64,580	77496			7,620																			
33	2703	48,385	58,062																						
34	10350	134728	161674				13346																		
35	7798	114389	137267				1,056																		
36	7717	73720	88464																						
37	122557	88	106																						
38	212310	0	0																						
39	182444	0	0																						
40	81509	0	0																						
41	2890	1828	2194																						
	-1,191*	9,742*	11,691*																						
111	1946	7,143	8572					800						870											
113	6584	1961	2353					1740						1178											
114														132			10465	211.2	104.6	158.2	4.3	29.1		713.9	
11-A				5051											727.5	122.0		615.1	4.8	461.3	12.3	98.3			
118	596	954	1146											298											
119														120			8249	192.0	82.5	134.3	3.9	22.9		461.7	
16-A	808	3689	4427					889					17												
122	705	230	276								72			225		92.0		455.0				40.0			
123														140			15424	223.7	154.1	167.8	4.5	42.8		458.9	
110-B	261	3169	3803		13			493				24		114	259.8	44.9		115.2	3.3	106.6	2.9	41.4			
126	405	8650	10380											248				583.0					65.0		
127														132			8325	211.2	83.2	158.4	4.3	23.2		456.3	
131-A	204	97	115								22			73				63.0					7.0		
131	3070	177	213								61	18		284				663.0					73.0		
133	5466	0	0								22			188											
134														123			8388	197.3	83.8	147.7	4.0	23.3		457.8	
137																									
138																									
140																									
143																									
145					328							30													
146					347																				
147					1																				
148					75																				
149					364																				
178																									
197																									
Total	~~1,113,9~~ 1,113,976	~~902,65~~ -902,265	1,082,725	181,795	1145	20707	53,662	4422	Lump	4735	177	72	17	20,089	~~63093~~ 987	2589	50851	~~35297~~ 29,073	516.3	20491.3	675.2	321.0	145.0	25486	132,890

From Sheet No.	I-1 Class A-1 Pipe 54" Sec. M-6.4(d)	30" Sec. M-6.6(a) or Sec. M-6.8(b)	60" Sec. M-6.6(d)	30" Sec. M-6.6(b) or Sec. M-6.8(b)	30" Sec. M-6.6(c)	42" Sec. M-6.6(b)	48" Sec. M-6.6(b)	48" Sec. M-6.6(a) or Sec. M-6.4(d)	60" Sec. M-6.6(a)	72" Sec. M-6.4(g) 10-8 Gage	48" Sec. M-6.6(c)	I-1 Class B-1 Pipe 15" Sec. M-6.6(c)	18"	24" Sec. M-6.6(b) or Sec. M-6.8(b)	27" Sec. M-6.6(c)	Special Drilled Wells Abandoned
	Lin. Ft.											Lin. Ft.				Each
4																
8																1
9																
10																
11																
17																
18																
19																
20																
21																
22																
23																
24		186														
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																
36																
37																
38																
39																
40		168														
41																
111																
113												46	72			
114																
118															56	
119																
16-A																
122																
123																
110-B			124													
126														86		
127																
131A																
131																
133																
134																
137																
138																
140																
143																
145							42	84			228					
146						184			168							
147	180				190											
148				194		162										
149										276						
178																
197																
Total	180	354	124	194	190	346	42	84	168	276	228	46	72	86	56	1

* Subsequent to the completion of this plan, the quantity for the hump median (excluding rock areas) was deleted. The earthwork quantity shown is the adjustment.

Rev. 5-1-64 C.E.H.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	13 / 198

ASD.-30-8.52
WAY.-30-0.00

SUMMARY OF TABLES

From Sheet No.	I-1, Class C-1 Pipe 12" Sec. M-6.4(c) Lin. Ft.	I-1, Class C-1 Pipe 15" Sec. M-6.4(c) Lin. Ft.	I-1, Class E-1 Pipe 8" Lin. Ft.	I-1, Class E-1 Pipe 12" Lin. Ft.	I-1, Class E-1 Pipe 15" Lin. Ft.	I-1, Class E-1 Pipe 30" Lin. Ft.	I-1 6" Class F1 Pipe Lin. Ft.	I-1, Class F-4 Pipe 6" Lin. Ft.	I-1, Class F-4 Pipe 8" Sec. M-6.4(c) Lin. Ft.	I-1, Class F-4 Pipe 12" Lin. Ft.	I-1, Class F-4 Pipe 15" Lin. Ft.	I-1, Class J-1 Pipe 12" Lin. Ft.	I-1, Class J-1 Pipe 6" Lin. Ft.	I-1, Class J-1 Pipe 15" Lin. Ft.	I-1, Class J-1 Pipe 8" Lin. Ft.	I-1, Class J-1 Pipe 30" Lin. Ft.	I-1, Class H2 Pipe 8" Lin. Ft.	I-1, Class H2 Pipe 12" Lin. Ft.	I-1 Class I-3 Pipe 6" Shallow Lin. Ft.	I-1 Class I-3 Pipe 6" Deep Lin. Ft.	I-1 Class I-3 Pipe 6" Sec. M-6.4(h) Lin. Ft.	I-1 Class I-3 Pipe 6" Sec. M-6.4(h) As Per Plan Lin. Ft.	I-2 Masonry Cu. Yd.
4																							17.0
8			100						100	100		300			500		300	300					
9																						250	
10																							
11																							
17						25		50						93		209			791	392			0.80
18				27	300			20					64								2196		
19				27	200				20					75					322	234	56		3.22
20				15										85							1636		3.22
21	183			27				10	10					67							824		3.87
22				15			284		10					65									3.22
23				27										81	756								3.22
24				27										73									17.62
25					154									69									3.22
26																							
27				54										154						400			6.44
28				27					10		24			55						1,280	56		3.22
29				54	125				20					73						1,144	56		3.22
30				27					10					65					893				3.22
31	122							10											200	669			1.30
32				54					10		66	298	60	107					400				6.44
33				29				20						182					588	389	562		6.44
34	185								10										412				.65
35				54					10		61			120						227			6.44
36				27					20					71						1051	84		3.22
37				54	500				20					75						800	1453		
38																					2200		
39				227				20					68								2192		
40				377	550				20											959	1216		10.80
41																				740	56		
111		50																					
113																							1.12
114																							
11-A																							
118		58																					0.94
119																							
16-A																			250				
122		90																					
123																							
110-B																							5.00
126		50																					0.82
127																							
131A		126																					
131		132																					
133																							
134																							
137																							
138																							
140																							
143																							
145																							22.04
146																							42.93
147																							51.70
148																							36.09
149																							50.32
178																							
Total	490	506	100	1149	1829	25	284	130	270	100	151	598	192	1510	1256	209	300	300	3856	8285	12,587	250	317.74

From Sheet No.	I-5 Pipe Specials, Class I-3: 6"-60° Bend (Each)	Class I-3: 6"x6" Tee (Each)	Class I-3: 6"x6"x60° Wye (Each)	Class I-3: 6"-90° Bend (Each)	Class I-3: 6" 60° Bend Sec. M-6.4(h) (Each)	Class I-3: 6"x6" Tee Sec. M-6.4(h) (Each)	Class I-3: 6"x6"x60° Wye Sec. M-6.4(h) (Each)	6" 90° BEND SEC. M-6.4(h) (Each)	15" 25° Bend Class F-4 (Each)	I-7 Reinf. Conc. Approach Slab Sq. Yd.	I-1 2" Pipe Sec. M-6.9 Std. Wgt. Galvanized Steel using Type 4 Backfill L.F.	I-8 Std. No. 5 Catch Basin Each	I-8 Std. No. 8 Catch Basin Each	I-8 Std. 2-2-A Catch Basin Each	Monument Assemblies	Monuments, Centerline	I-9 Stone Underdrains, No. 1 Lin. Ft.	I-9 Stone Underdrains, No. 2 Lin. Ft.	I-10 Riprap 6" Reinf. Conc. Slab	Dumped Rock Channel Protection	I-14 Paved Gutter Std. Type 1 (Mod.) 4' Bottom 1' High Lin. Ft.
4											800										
8																				25	
9																	15				
10																		16,676			
11										94325											
17	4											1	2	1						16	
18													2								
19			1	2		2							2							86	
20				1		2							2							6	
21							1						3							73	
22					1								2				3				
23													2								
24													2								
25													4							8	
26																				57	
27													4							89	
28	1					2			2				2							6	
29		1	1			2							4							112	
30			1										2							74	
31		1											2							135	
32	1								4				4							19	
33						1	1						4							12	
34													2								
35			1						2				4							341	
36	2					3							2							795	
37							2						4							43	
38																					
39								2					2							48	
40			2										4								990
41						2															
111																					
113																		492			
114																					
11-A																		304			
118																					
119																					
16-A																				37	
122																		69			
123																					
110-B																		136		19	
126																		57			
127																					
131A																					
131																		207		60	
133																		143		296	
134																					
137																					
138																					
140																					
143																					
145																			131.3	86.1	
146																				24.2	
147																					
148																			79.0	39.8	
149																			78.0	219.0	
178															15	44					
Total	8	2	6	3	1	14	4	2	8	94325	800	1	61	1	15	44	18	18,084	288.3	2767	990

See Pipe Specials (Additional) from Sheet No. 14

SUMMARY OF TABLES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD.-30-8.52
WAY.-30-0.00

From Sheet No.	I-15 Guard Rail: Steel Beam Std. Type, Deep.	I-15 Guard Rail: Wire Cable Type, Three Cables	I-15 Guard Rail: Temporary, as per plan	I-22 Subbase, Grading "A" or "B" as per plan	I-26 Chain Link Fence	S-22 Removal of Portions of Exist. Structure	S-24 Removal of Exist. Structure	T-10 Furnishing & placing Traffic Bound Surface Course	S-15 Temporary Runaround	I-4 Calcium Chloride for Dust Control	S-15 Temporary Runaround Class "A"	L-1 Topsoil Stockpiled	L-3 Placing Stock-piled Topsoil	L-9 Seeding & Protecting Roadway Areas	L-9 Commercial Fertilizer 12:12:12	L-10 Sodding	L-10 Sodding for Special Berm & Slope Protection	L-120 Jute Matting	SS CE 101.04 Compaction using Heavy Pneumatic Tired Roller	I-5 Pipe Specials: 8" For Class J-1 Pipe	12" For Class J-1 Pipe	8" For Class H-2 Pipe	12" For Class H-2 Pipe	8" For Class E-1 Pipe	From Sheet No.
	Lin. Ft.			Cu. Yd.	Lin. Ft.	Cu. Yd.	Lump	Cu. Yds.	Lump	Ton	Lump	Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton	Sq. Yd.	Sq. Yd.	Sq. Yd.	Hours	Each					
4																									4
8																				5	5	5	5	5	8
9								150		3									89						9
10				32,054										588,699	57										10
11												17,846	14,871												11
17														9930		610									17
18			1000													1501		250							18
19	1400															724		250							19
20	725															1114		250							20
21	456.64															1722		350							21
22	558.36															330		250							22
23	150															194		250							23
24	650															22		264							24
25	1025															309		236							25
26	125															105		198							26
27	1800															723		322							27
28	950															338		250							28
29	975															1682		500							29
30	766.61															557		250							30
31	1972.09															3176		250							31
32	1751.0															1420		250							32
33	1372.54															32		500							33
34	2215															887		250							34
35	1850															715		1018							35
36	750															1713		1032							36
37	175															835		448							37
38																1488		96							38
39																1502		250							39
40	150.0															1097		500							40
41																237									41
111		800														1016									111
113				465.0												1999									113
114				404.7																					114
11-A				836.3																					11-A
118																420									118
119				283.1										4508											119
16-A											Lump					365									16-A
122				139.0				410	Lump	6						96									122
123				440.4										2081											123
110-B	150			268.0			Lump				Lump					66									110-B
126		475		113.0												2									126
127				288.4																					127
131A																									131A
131	400			134.0												95									131
133				75.0		1.0		231	Lump	3						202									133
134				286.5																					134
137																									137
138																									138
140																									140
143																	123								143
145																10									145
146																18									146
147																15									147
148																13									148
149																12									149
178																									178
197					426																				197
Total	20,367.24	1275	1000	35,787	426	1.0	Lump	791	Lump	12	Lump	17,846	14,871	605,218	57	27,362	123	8214	89	5	5	5	5	5	Total

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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

GENERAL SUMMARY

CODE TYPE 7221

ITEM NO.	PARTICI-PATING	100 PERCENT STATE	QUANT.	UNIT	DESCRIPTION
					ROADWAY
E-1	1,113,976		1,113,976	CU. YDS.	ROADWAY EXCAVATION METHOD "B" AS PER PLAN
E-1	181,795		181,795	SQ YDS	COMPACTED SUBGRADE
E-4	20,707		20,707	CU. YDS.	BORROW, USING GRANULAR MATERIAL AS PER PLAN
E-4	53,662		53,662	CU. YDS	BORROW, USING GRANULAR MATERIAL AS PER PLAN INCLUDING THE COST OF EXCAVATION OF UNSUITABLE MATERIAL
E-8	4,422		4,422	SQ. YDS.	REMOVAL & DISPOSAL OF EXISTING FLEXIBLE PAVEMENT, AS PER PLAN
E-9	LUMP		LUMP	LUMP	REMOVAL OF TREES AND STUMPS
E-11	4735		4735	M.GAL	WATER
E-12	177		177	LIN FT	PIPE REMOVED 15" AND UNDER
E-12	72		72	LIN FT	PIPE REMOVED, OVER 15"
I-8	44		44	EACH	CENTER LINE REFERENCE MONUMENTS, AS PER PLAN
I-8	15		15	EACH	STANDARD MONUMENT ASSEMBLIES
I-15	20,367.24		20,367.24	LIN FT	GUARD RAIL, STEEL BEAM STANDARD TYPE (DEEP)
I-15	1,000		1,000	LIN FT	GUARDRAIL, TEMPORARY, AS PER PLAN
I-15	1275		1275	LIN FT	GUARDRAIL, WIRE CABLE TYPE, THREE CABLES
L-1	17,846		17,846	CU. YDS	TOPSOIL STOCKPILED
L-3	14,871		14,871	CU. YDS	PLACING STOCKPILED TOPSOIL AS PER PLAN
L-9	605,218		605,218	SQ YDS	SEEDING & PROTECTING, AS PER PLAN
L-9	57		57	TONS	COMMERCIAL FERTILIZER (12-12-12)
L-10	27,362		27,362	SQ YDS	SODDING
L-10	123		123	SQ YDS	SODDING FOR SPECIAL SLOPE AND BERM PROTECTION, AS PER PLAN
L-120	8,214		8,214	SQ YDS	JUTE MATTING
I-4	12		12	TONS	CALCIUM CHLORIDE FOR DUST CONTROL
T-10	791		791	CU YDS	TRAFFIC COMPACTED SURFACE COURSE, FOR MAINTAINING TRAFFIC
I-26	426		426	LIN FT	CHAIN LINK FENCE
S-22	1		1	CU. YD.	REMOVAL OF PORTIONS OF EXISTING STRUCTURE
S-24	LUMP		LUMP	LUMP	REMOVAL OF EXISTING STRUCTURE
S-15	LUMP		LUMP	LUMP	TEMPORARY RUNAROUND ROADS
S-15	LUMP		LUMP	LUMP	TEMPORARY RUNAROUND ROAD USING CLASS 'A' PAVEMENT, as per plan.
SPECIAL	1		1	EACH	DRILLED WELL ABANDONED
SSCE 101.04	89		89	HOURS	COMPACTION USING HEAVY PNEUMATIC TIRED ROLLER

ITEM NO.	PARTICI-PATING	100 PERCENT STATE	QUANT.	UNIT	DESCRIPTION
					DRAINAGE
E-3	1145		1145	CU. YDS	CHANNEL EXCAVATION
I-1	250		250	LIN. FT.	6" CLASS I-3 PIPE, SEC. M-6.4(h) AS PER PLAN
I-1	192		192	LIN FT	6" CLASS J-1 PIPE
I-1	1256		1256	LIN FT	8" CLASS J-1 PIPE
I-1	598		598	LIN FT	12" CLASS J-1 PIPE
I-1	1510		1510	LIN FT	15" CLASS J-1 PIPE
I-1	180		180	LIN. FT.	54" CLASS A-1 PIPE, SEC. M-6.4(d)
I-1	354		354	LIN FT	30" CLASS A-1 PIPE SEC M-6.6(a) or SEC M6.8(b)
I-1	194		194	LIN FT	30" CLASS A-1 PIPE SEC M6.6(b) or SEC M6.8(b)
I-1	190		190	LIN FT	30" CLASS A-1 PIPE SEC M6.6(c)
I-1	346		346	LIN. FT.	42" CLASS A-1 PIPE SEC. M-6.6(b)
I-1	42		42	LIN FT	48" CLASS A-1 PIPE, SEC M-6.6(b)
I-1	84		84	LIN FT	48" CLASS A-1 PIPE, SEC M-6.6(a) or SEC M-6.4(d)
I-1	228		228	LIN FT	48" CLASS A-1 PIPE, SEC M-6.6(c)
I-1	168		168	LIN FT	60" CLASS A-1 PIPE, SEC M-6.6(a)
I-1	276		276	LIN FT	72" CLASS A-1 PIPE SEC M-6.4(g) 10-8 GAGE
I-1	46		46	LIN FT	15" CLASS B-1 PIPE SEC M-6.6(c)
I-1	72		72	LIN FT	18" CLASS B-1 PIPE
I-1	56		56	LIN FT	27" CLASS B-1 PIPE SEC M-6.6(c)
I-1	86		86	LIN FT	24" CLASS B-1 PIPE SEC. M-6.6(b) or SEC. M-6.8(b)
I-1	490		490	LIN FT	12" CLASS C-1 PIPE SEC. M-6.4(c)
I-1	506		506	LIN FT	15" CLASS C-1 PIPE SEC. M-6.4(c)
I-1	100		100	LIN FT	8" CLASS E-1 PIPE
I-1	1149		1149	LIN FT	12" CLASS E-1 PIPE
I-1	1829		1829	LIN FT	15" CLASS E-1 PIPE
I-1	124		124	LIN. FT.	60" CLASS A-1 PIPE, SEC. M-6.6(d)
I-1	284		284	LIN FT	6" CLASS F-1 PIPE
I-1	270		270	LIN FT	8" CLASS F-4 PIPE SEC M-6.4(c)
I-1	151		151	LIN FT	15" CLASS F-4 PIPE
I-1	100		100	LIN FT	12" CLASS F-4 PIPE
I-1	300		300	LIN FT	8" CLASS H-2 PIPE
I-1	300		300	LIN FT	12" CLASS H-2 PIPE
I-1	25		25	LIN FT	30" CLASS E-1 PIPE
I-1	209		209	LIN FT	30" CLASS J-1 PIPE
I-1	12,141		12,141	LIN FT	6" CLASS I-3 PIPE
I-1	12,587		12,587	LIN FT	6" CLASS I-3 PIPE, SEC M-6.4(h)
I-1	130		130	LIN FT	6" CLASS F-4 PIPE
I-2	318		318	CU. YDS	MASONRY
I-1	800		800	LIN. FT.	2" Standard weight galvanized Steel Pipe Sec. M-6.9, as per plan.
I-5	5		5	EACH	8" CLASS J-1 PIPE SPECIALS
I-5	5		5	EACH	12" CLASS J-1 PIPE SPECIALS
I-5	5		5	EACH	8" CLASS E-1 PIPE SPECIALS
I-5	8		8	EACH	15" CLASS F-4 PIPE SPECIALS,
I-5	5		5	EACH	8" CLASS H-2 PIPE SPECIALS
I-5	5		5	EACH	12" CLASS H-2 PIPE SPECIALS
I-5	19		19	EACH	6" CLASS I-3 PIPE SPECIALS
I-8	61		61	EACH	STANDARD NO. 8 CATCH BASIN
I-9	18		18	LIN. FT	STONE UNDERDRAINS NO. 1, AS PER PLAN
I-9	18,084		18,084	LIN. FT	STONE UNDERDRAINS NO. 2
I-10	288		288	SQ YDS	RIP RAP, 6" REINFORCED CONCRETE SLAB, AS PER PLAN
I-10	2,767		2,767	CU. YDS	DUMPED ROCK CHANNEL PROTECTION
I-5	21		21	EACH	6" CLASS I-3 PIPE SPECIALS, SEC M-6.4(h)
I-14	990		990	LIN FT	STANDARD TYPE 1 PAVED GUTTER (MODIFIED, AS PER PLAN)
I-8	1		1	EACH	STANDARD NO. 2-2-A CATCH BASIN
I-8	1		1	EACH	STANDARD NO. 5 CATCH BASIN

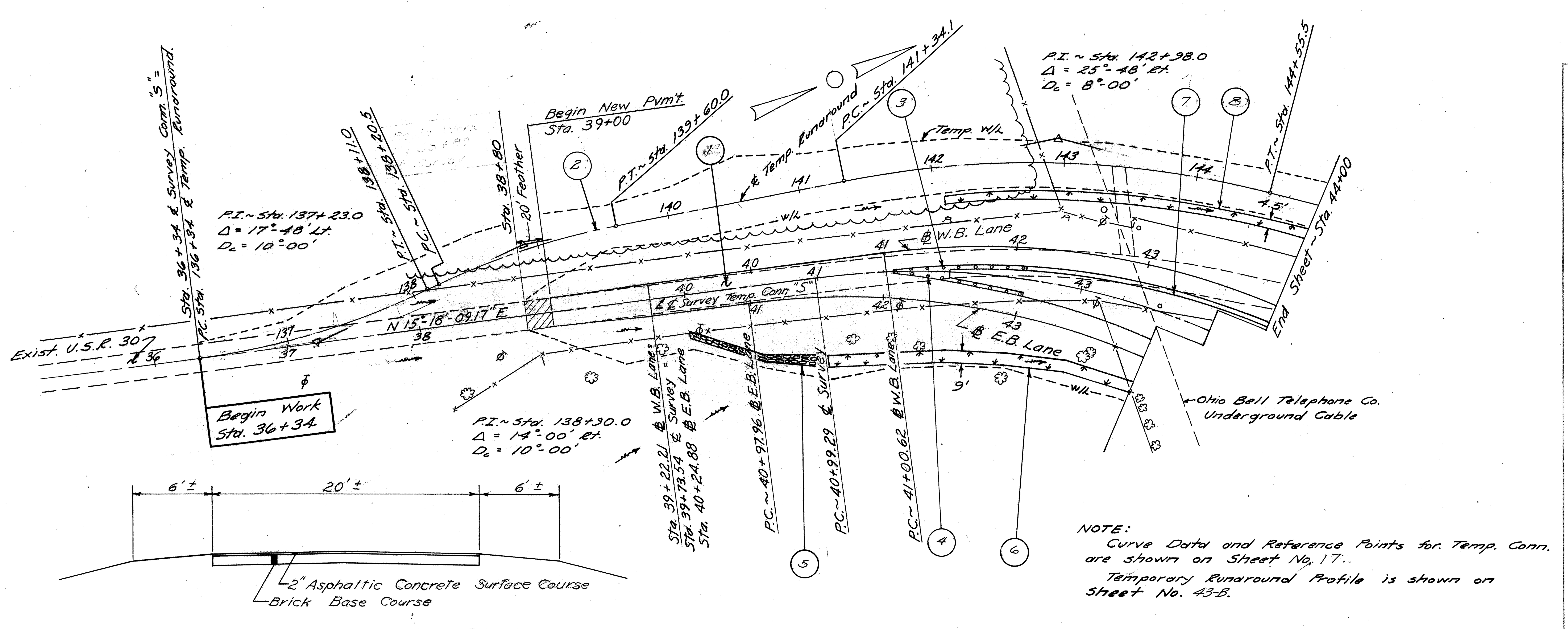
GENERAL SUMMARY

TYPE CODE 7221

ITEM NO.	PARTICI-PATING		QUANT.	UNIT	DESCRIPTION
					PAVEMENT
B-19	20,089		20,089	CU. YDS	AGGREGATE BASE COURSE
B-21	~~6,309~~	9872	~~6,309~~	CU. YDS	WATERPROOFED AGGREGATE BASE COURSE
B-35	259		259	CU. YDS	ASPHALTIC CONCRETE LEVELING COURSE (85-100)
B-70	5085		5085	SQ YDS	8" PORTLAND CEMENT CONCRETE BASE COURSE
T-30	516		516	GALLON	BITUMINOUS TACK COAT; SEC. M-5.5, MS-2 OR RS-1, OR SEC. M-5.2, RC-1 OR RC-2, AS PER SEC. T-30.02
T-30	~~3530~~	29,073	~~3530~~	GALLON	BITUMINOUS PRIME COAT; SEC. M-5.7, RT-2 OR RT-3
T-31	675		675	CU. YDS	BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE
T-31	20,491		20,491	GALLON	BITUMINOUS SURFACE TREATMENT, BITUMINOUS MATERIAL, SECTION M-5.7, RT-8 OR RT-9 OR
T-35	145		145	CU. YDS	ASPHALTIC CONCRETE SURFACE COURSE, TYPE "A" (85-100) SECTION M-5.12 CBAE-3
T-35	321		321	CU. YDS	ASPHALTIC CONCRETE SURFACE COURSE, TYPE "C" (70-85)
T-70	2548		2548	SQ. YDS	9" PORTLAND CEMENT CONCRETE PAVEMENT
T-71	132890		132890	SQ. YDS	9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
I-7	943.25		943.25	SQ. YDS	REINFORCED CONCRETE APPROACH SLABS (T=13")
I-22	35,787		35,787	CU. YDS.	SUBBASE GRADING "A" or "B", AS PER PLAN.
I-23	17		17	EACH	PRECAST WHITE PORTLAND CEMENT CONCRETE TRAFFIC DIVIDERS

ITEM NO.			QUANT.	UNIT	DESCRIPTION
					STRUCTURES OVER 20 FEET
					ASD-30-0933 LT & RT
					FOR SUMMARY OF QUANTITIES SEE SHEET NO. 156
					ASD-30-1124 LT & RT
					FOR SUMMARY OF QUANTITIES SEE SHEET NO. 162
					ASD-30-1193 LT & RT
					FOR SUMMARY OF QUANTITIES SEE SHEET NO. 168
					ASD-30-1283
					FOR SUMMARY OF QUANTITIES SEE SHEET NO. 170
			Lump	Lump	Construction Layout Stakes
I-3			LUMP	LUMP	MAINTAINING TRAFFIC

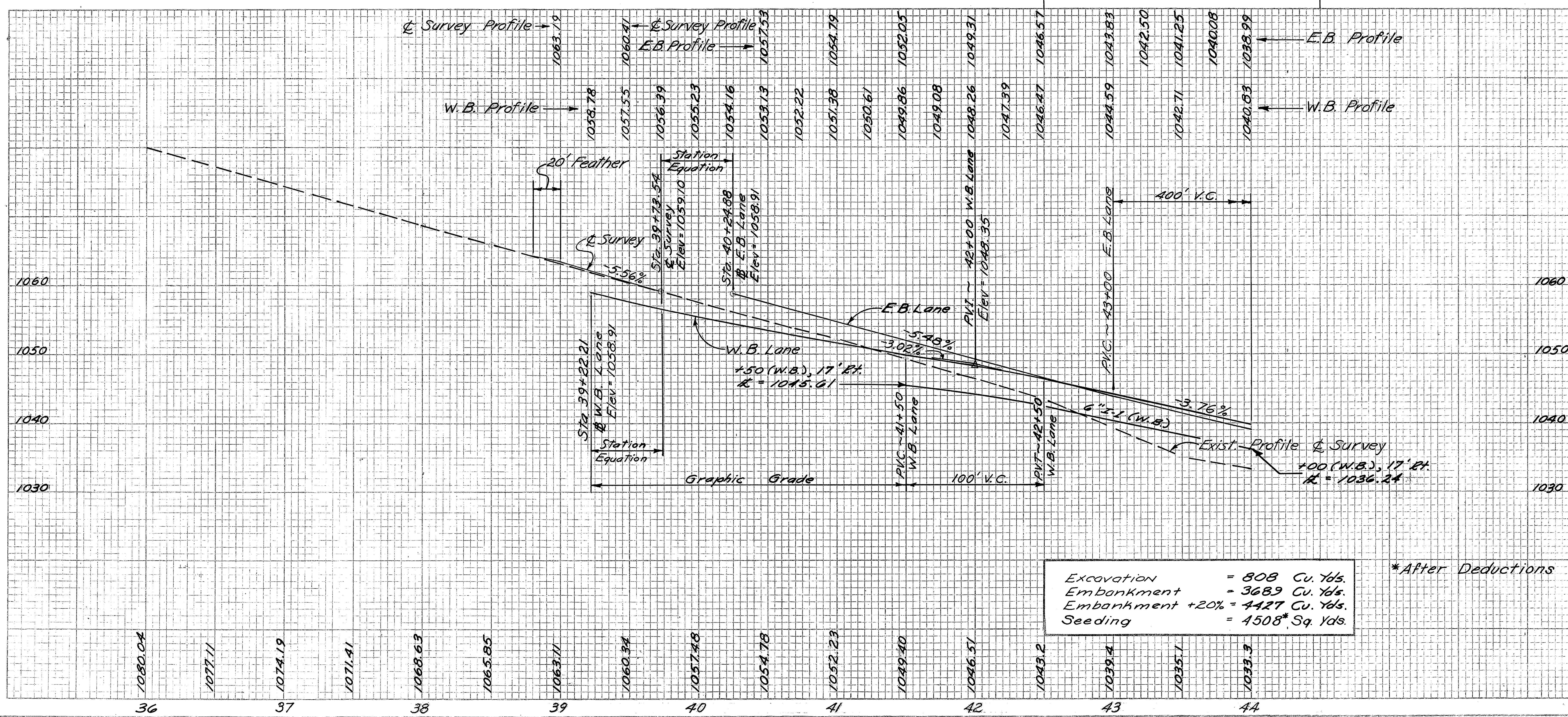
Rev. 5-1-64 C.E.H.



TYPICAL SECTION ADJOINING PAVEMENT

NOTE:
Curve Data and Reference Points for Temp. Conn. are shown on Sheet No. 17.
Temporary Runaround Profile is shown on Sheet No. 43-B.

B.M. Spike in root of 24" Ash. 60' Lt. of Sta. 42+66
Elevation 1042.73



Excavation	= 808 Cu. Yds.
Embankment	= 3689 Cu. Yds.
Embankment +20%	= 4427 Cu. Yds.
Seeding	= 4508* Sq. Yds.

*After Deductions

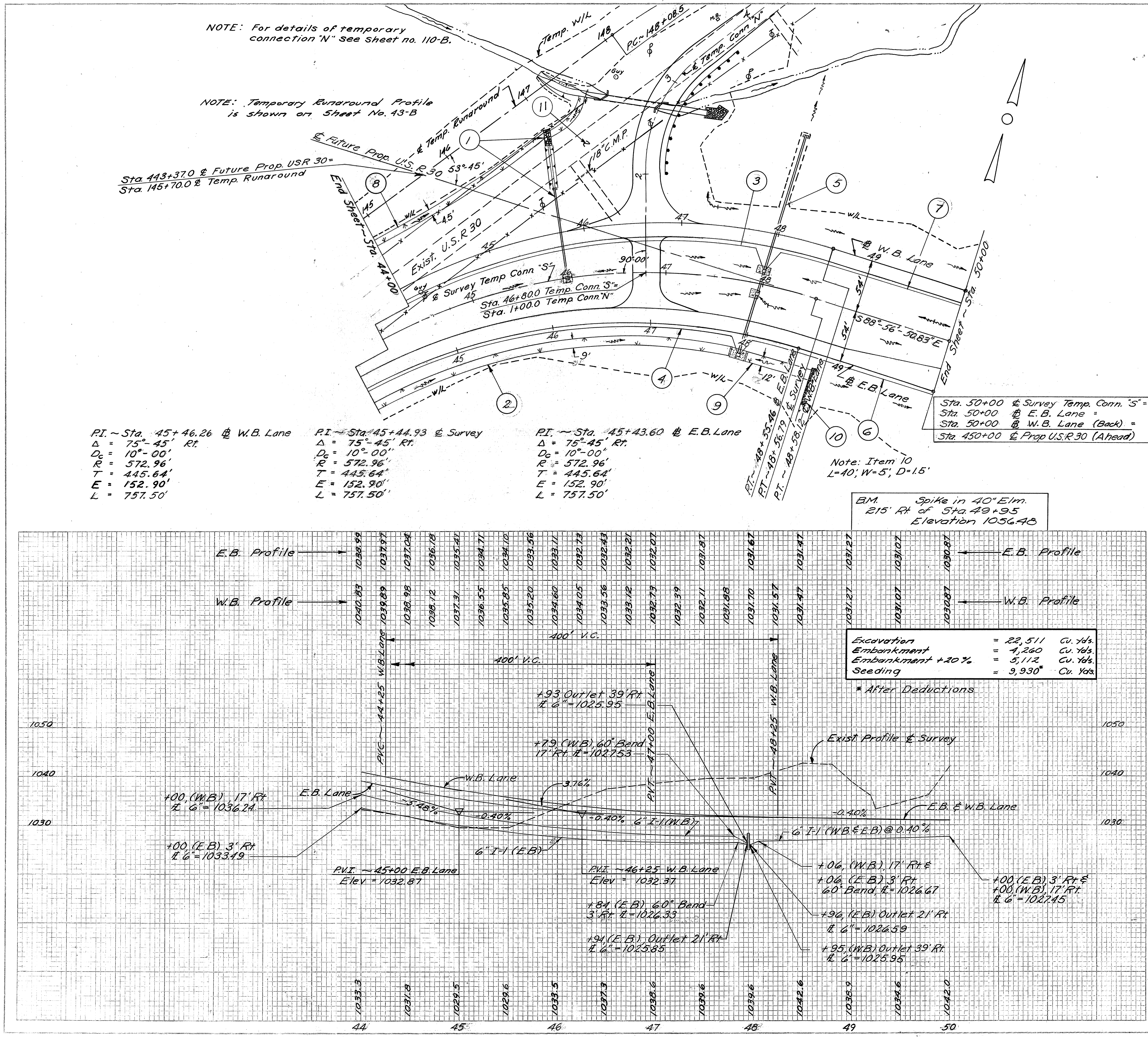
ESTIMATED QUANTITIES

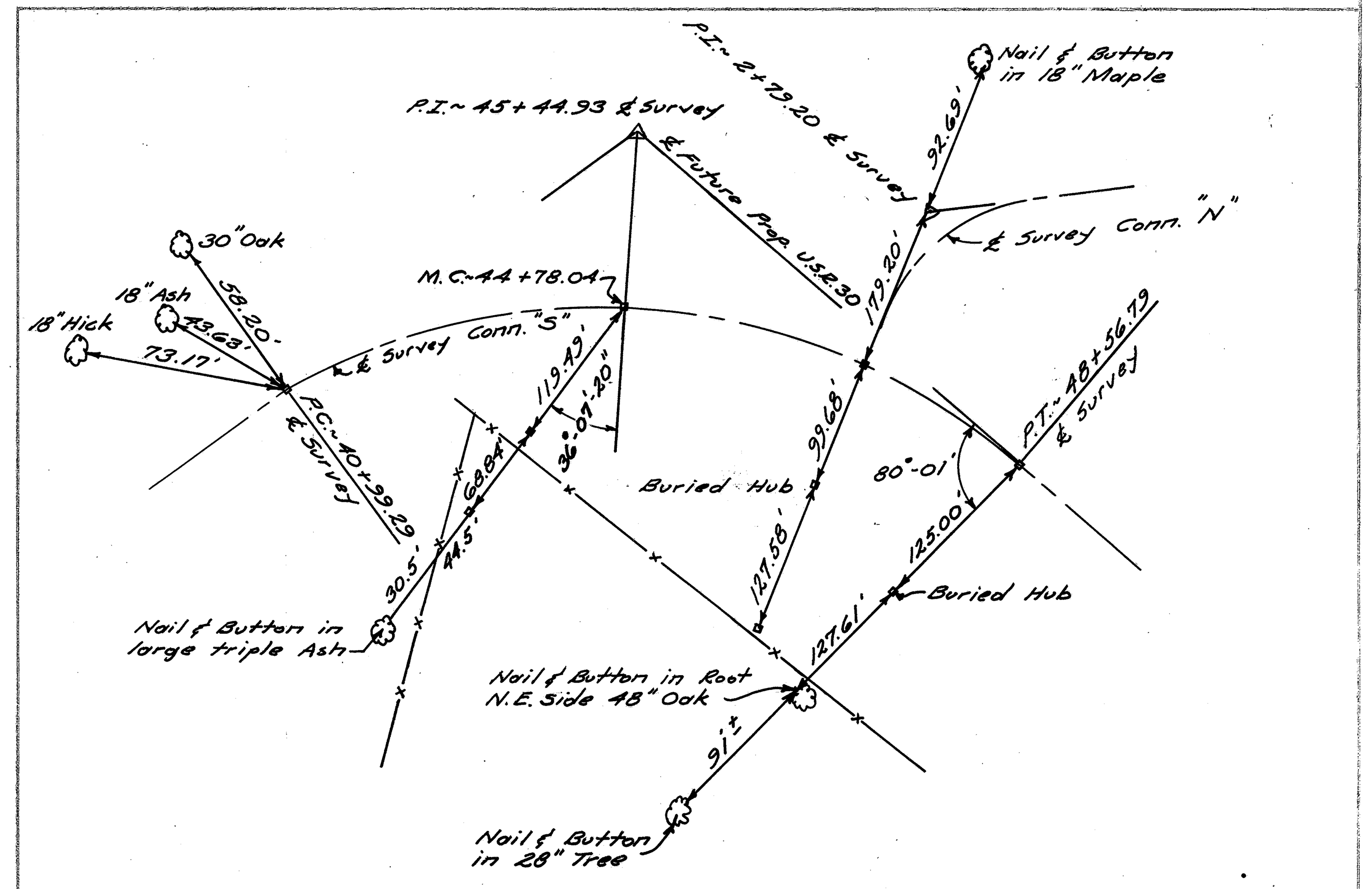
REF. NO.	STATION TO STATION	SIDE	E-8 Removal & Disposal of Ex. Pvm't.	I-1 6" Cl. I-3 Shallow	I-10 Dumped Rock C.P.	I-23 Traffic Dividers	L-10 Sodding	S-15 Class "A"
			Sq. Yds.	Lin. Ft.	Cu. Yds.	Each	Sq. Yds.	Lump
1	39+00 ~ 43+00 ℄ Survey	℄	889					
2	136+34 ~ 144+93	℄						Lump
3	41+06.2 ~ 42+05.8 (W.B.)	Rt.				9		
4	42+18.0 ~ 42+99.4 (E.B.)	Lt.				8		
5	40+50 ~ 41+60 (E.B.)	Rt.			37			
6	41+60 ~ 44+00 (E.B.)	Rt.					228	
7	41+50 ~ 44+00 (W.B.)	Lt.		250				
8	41+50 ~ 44+00 (W.B.)	Lt.					137	
TOTALS			889	250	37	17	365	Lump

TEMP. CONN. "S" ~ Sta. 36+34 to Sta. 44+00

ASD-30-8.52
WAY-30-0.00

FED. RD. DIVISION	STATE	PROJECT	TYPE FHIDS	
2	OHIO	F-1072(8)		17/198





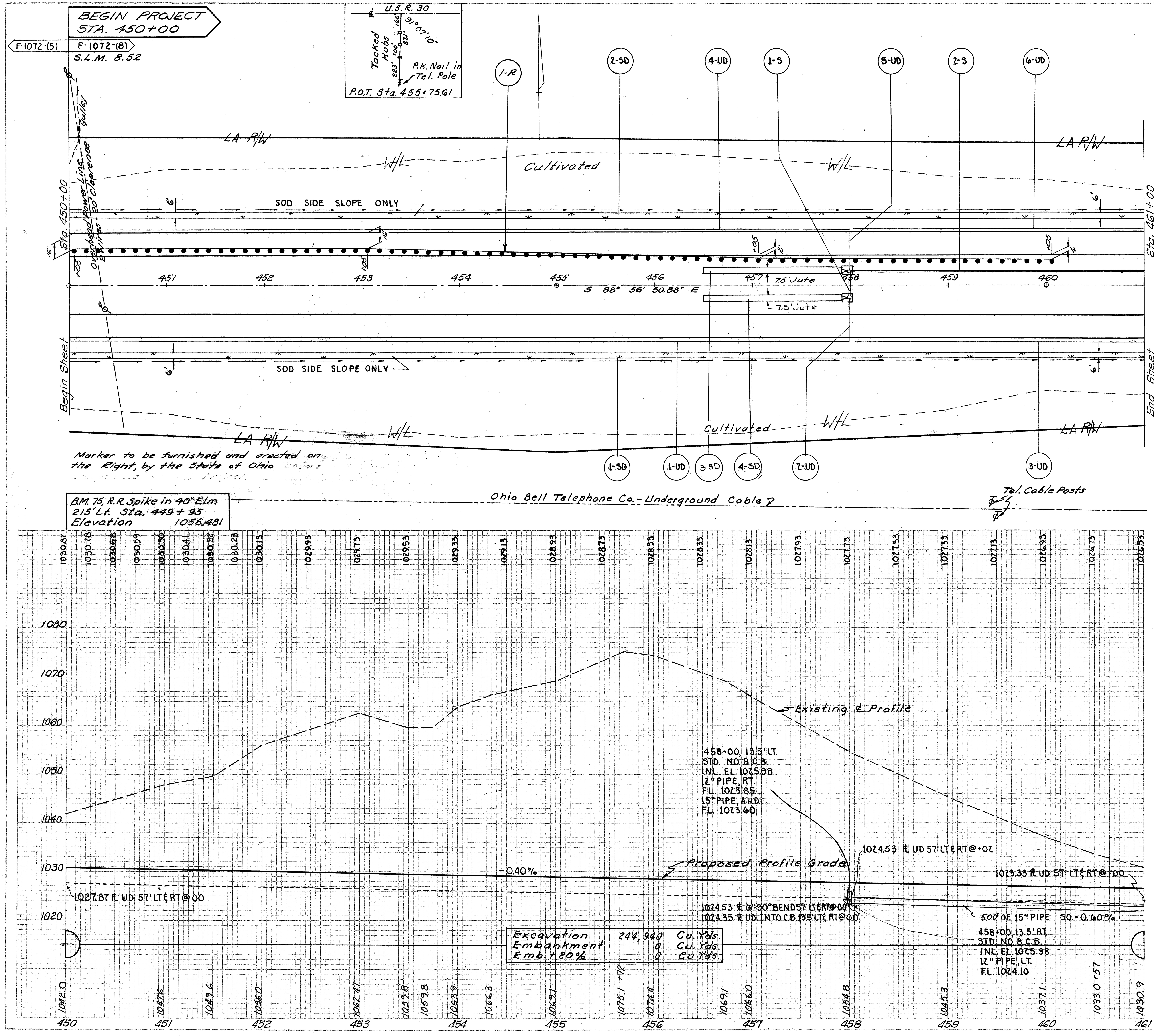
REFERENCE POINTS

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	E-3 Cu. Yds.	E-8 Removal & Disposal of Ex. Pavm't Sq. Yds.	I-1 6" Cl. I-3 Lin. Ft. Shall.	I-1 6" Cl. I-3 Lin. Ft. Deep	I-1 6" Class F-4 Lin. Ft.	I-1 15" Class J-1 Lin. Ft.	I-1 30" Class E-1 Lin. Ft.	I-1 30" Class J-1 Lin. Ft.	I-2 Class "C" Cu. Yds.	I-5 6" 60° Cl. I-3 Each	I-8 Std. #2-2-A C.B. Each	I-8 Std. #5 C.B. Each	I-8 Std. #8 C.B. Each	I-10 Dumped Rock C.P. Cu. Yds.	L-10 Sq. Yds.	See Sheet No.
1	46+00 (℄ Survey)	Lt.	15					93			0.3		1			5	11	43-D
2	44+00 (E.B.) 47+85 (E.B.)	Rt.															373	
3	44+00 (W.B.) 47+93 (W.B.)	Rt.			382		20					1						
4	44+00 (E.B.) 47+94 (E.B.)	Rt.				392	10					1						
5	448+00 (℄ Future USR 30)	℄							25	209	0.5			1	2		20	43-E
6	47+96 (E.B.) 50+00 (E.B.)	Rt.			204		10					1						
7	47+95 (W.B.) 50+00 (W.B.)	Rt.			205		10					1						
8	44+00 (W.B.) 45+72 (W.B.)	Lt.															102	
9	48+07 (E.B.) 48+76 (E.B.)	Rt.															92	
10	448+78 (E.B.)	Rt.														11	12	43-E
11	44+75 ~ 46+50 ℄ Survey	Lt.		500														
	Sub-Totals		15	500	791	392	50	93	25	209	0.8	4	1	1	2	16	610	
					1183													

TEMP. CONN. "S" ~ Sta. 44+00 to Sta. 50+00

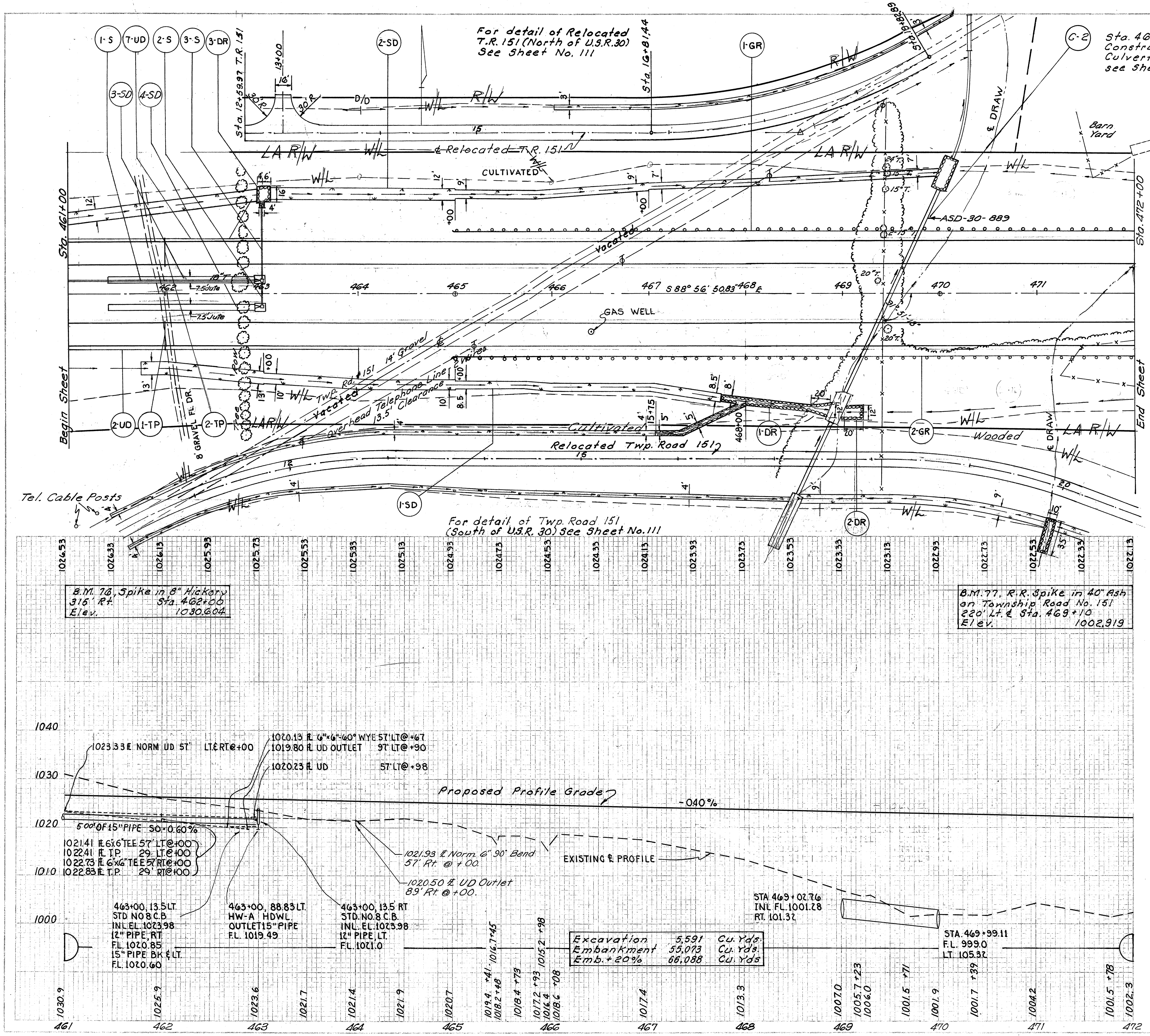
ASD-30-8.52
WAY-30-0.00



Reference No.	Side	Station From	Station To	I-1 PIPE CLASS E-1 12" LIN.FT.	I-1 PIPE CLASS E-1 15" LIN.FT.	I-2 HEADWALL STD. HW-A CU. YDS.	I-8 CATCH BASIN STD. NO. 8 EACH	L-10 SODDING SQ. YDS.	L-120 JUTE MATTING SQ. YDS.	I-15 Temporary Guard Rail, as per plan Lin. Ft.
1-SD	RT	450+00	461+00					744		
2-SD	LT.	450+00	461+00					744		
3-SD	LT.	456+42	457+92						125	
4-SD	RT.	456+42	457+92						125	
1-R	Lt.	450+05	460+05							1000
1-S	RT-LT.	458+00		27			1	13		
2-S	LT	458+00	461+00		300		1			
TOTALS				27	300		2	1501	250	1000

Reference No.	Side	Station From	Station To	I-1 6" PIPE CLASS I-3 SEC. M-6.4(h) LIN FT.	I-1 6" PIPE CLASS J-1 LIN.FT	I-1 6" PIPE OUTLET CLASS F-4 LIN.FT.	I-5 PIPES SPECIALS CLASS I-3 6"-90° Bend EACH
1-UD	RT.	450+00	458+00	800			
2-UD	RT.	458+00			32	10	1
3-UD	RT.	458+02	461+00	298			
4-UD	LT.	450+00	458+00	800			
5-UD	LT.	458+00			32	10	1
6-UD	LT.	458+02	461+00	298			
TOTALS				2196	64	20	2

ASD-30-8.52
WAY-30-0.00



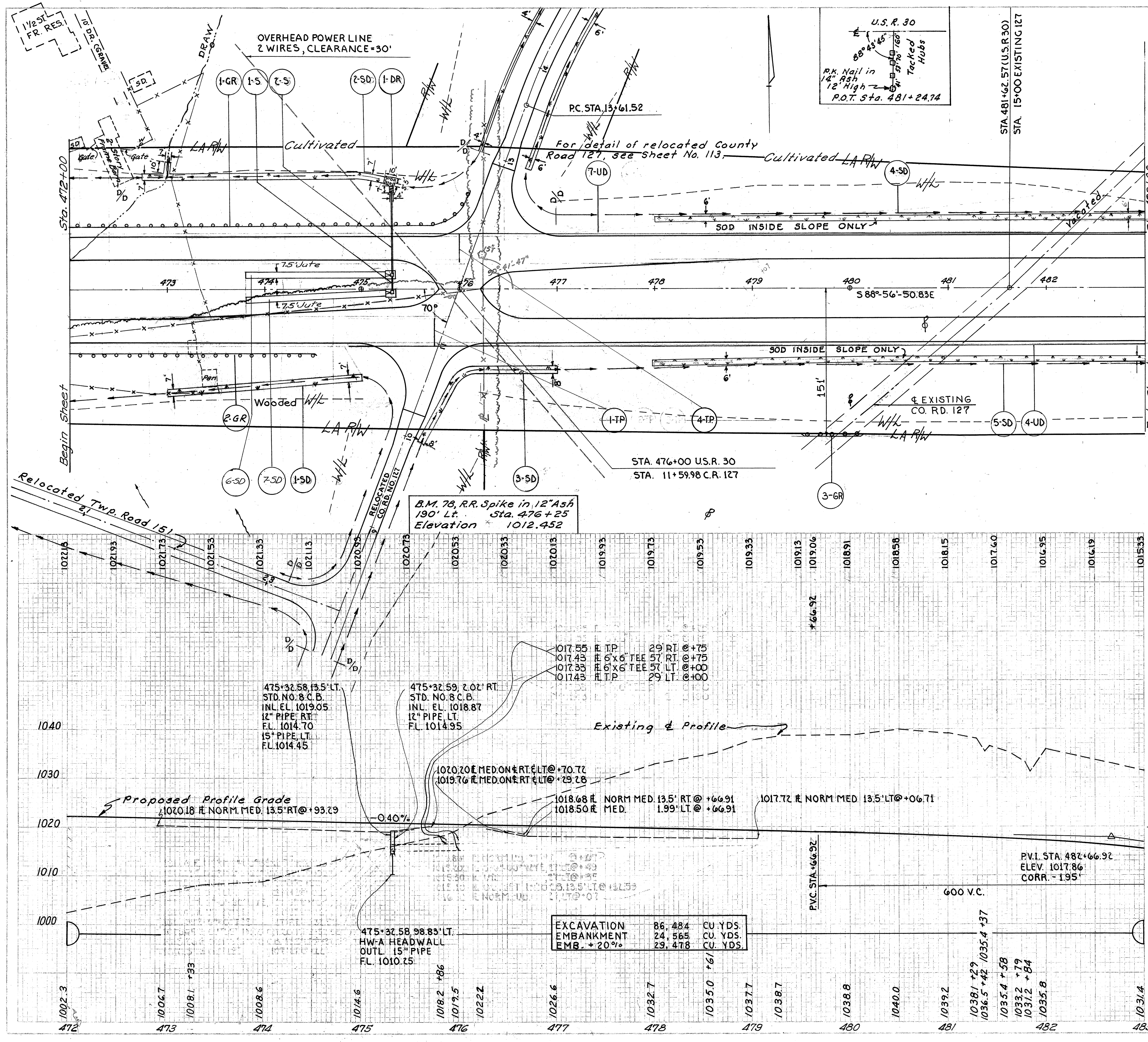
Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep.	I-10 DUMPED ROCK CHANNEL PROTECTION, T=18"	I-1 PIPE CLASS E-1 12"	I-1 15" PIPE, CLASS J-1	I-2 HEADWALL STD. HW-A	I-8 CATCH BASIN STD. NO. 8	I-1 PIPE CLASS E-1 15"	L-10 SODDING	L-120 JUTE MATTING
				Lin. Ft.	CU. YDS.	LIN. FT.	LIN. FT.	CU. YDS.	EACH	LIN. FT.	SQ. YDS.	SQ. YDS.
1-GR	Lt.	465+00	472+00	700								
2-GR	Rt.	465+00	472+00	700								
1-SD	RT.	461+75	467+75								708	
2-SD	LT.	461+00										
1-S	LT.	461+00	463+00							200		
2-S	RT-LT.	463+00				27			1		7	
3-S	LT.	463+00					75	3.22	1		9	
1-DR	RT.	467+75	468+85		60							
2-DR	RT.	469+00	469+20		15							
3 DR	LT.	463+00			11							
3-SD	LT.	461+43	462+93									125
4-SD	RT.	461+43	462+93									125
TOTALS				1400	86	27	75	3.22	2	200	724	250

Reference No.	Side	Station From	Station To	I-1 6" PIPE CLASS I-3 SHALLOW	I-1 6" PIPE CLASS I-3 DEEP		I-1 8" PIPE OUTLET CLASS F-4		I-5 PIPE SPECIALS CLASS I-3 6"-90° BEND		I-5 CLASS I-3 6"-6"-60 WYE	I-5 CLASS I-3 6"x6" TEE SEC. M-64(h)	I-1 6" PIPE CLASS I-3 SEC. M-64 (h)
				LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.		EACH				LIN. FT.
2-UD	RT.	461+00	464+00	322									
7-UD	LT.	461+00	462+98		234		10				1		
1-TP	RT.	462+00										1	28
2TP	LT.	462+00										1	28
TOTALS				322	234		10		1		1	2	56

Sta. 461+00 to Sta. 472+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

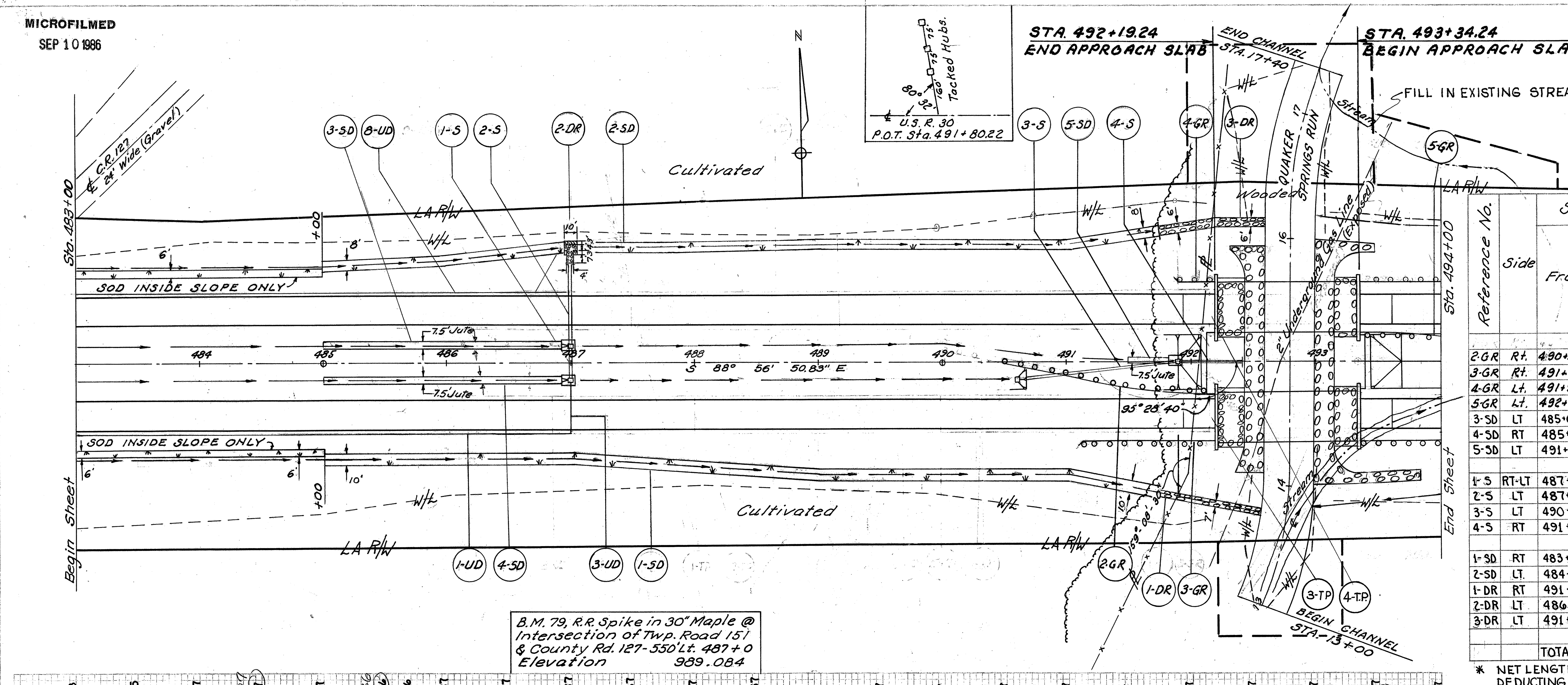


Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (Lin. Ft.)	I-10 DUMPED ROCK CHANNEL PROTECTION, T-18" (CU. YDS.)	I-1 PIPE CLASS E-1 12" (LIN. FT.)	I-1 15" PIPE CLASS J-1 (LIN. FT.)	I-2 HEADWALL STD. HW-A (CU. YDS)	I-8 CATCH BASIN STD. NO. 8 (EACH)	L-10 SODDING (SQ. YDS.)	L-120 JUTE MATTING (SQ. YDS.)
1-GR	Lt.	472+00	476+08	425							
2GR	Rt	472+00	474+50	250							
3-GR	RT.	479+59	480+09	50							
1-DR.	LT.	475+25	475+35		6						
1-S	RT-LT.	475+32.58				15 ✓			1	7	
2-S	LT.	475+32.58					85 ✓	3.22	1	9	
1-SD	RT.	473+00	475+00							160	
2-SD	LT.	472+75	475+25							191	
3-SD	RT.	476+21.28	477+00							71	
4-SD	LT.	478+00	483+00							338	
5-SD	RT.	478+00	483+00							338	
6-SD	LT.	473+80	475+30								125
7-SD	RT.	473+80	475+30								125
Totals				725	6	15	85	3.22	2	1114	250

Reference No.	Side	Station From	Station To	I-1 6" PIPE CLASS I-3 SHALLOW (LIN. FT.)	I-1 6" PIPE CLASS I-3 SEC. M6.4(h) (LIN FT.)	I-5 PIPE SPECIALS CLASS I-3 6"x6" TEE SEC. M-6.4(h)
4-UD	RT.	474+85	483+00		815	
7-UD	LT.	475+35	483+00		765	
1-TP	RT.	475+75			28	1
4-TP	LT.	476+00			28	1
TOTALS					1636	2

Sta. 472+00 to Sta. 483+00

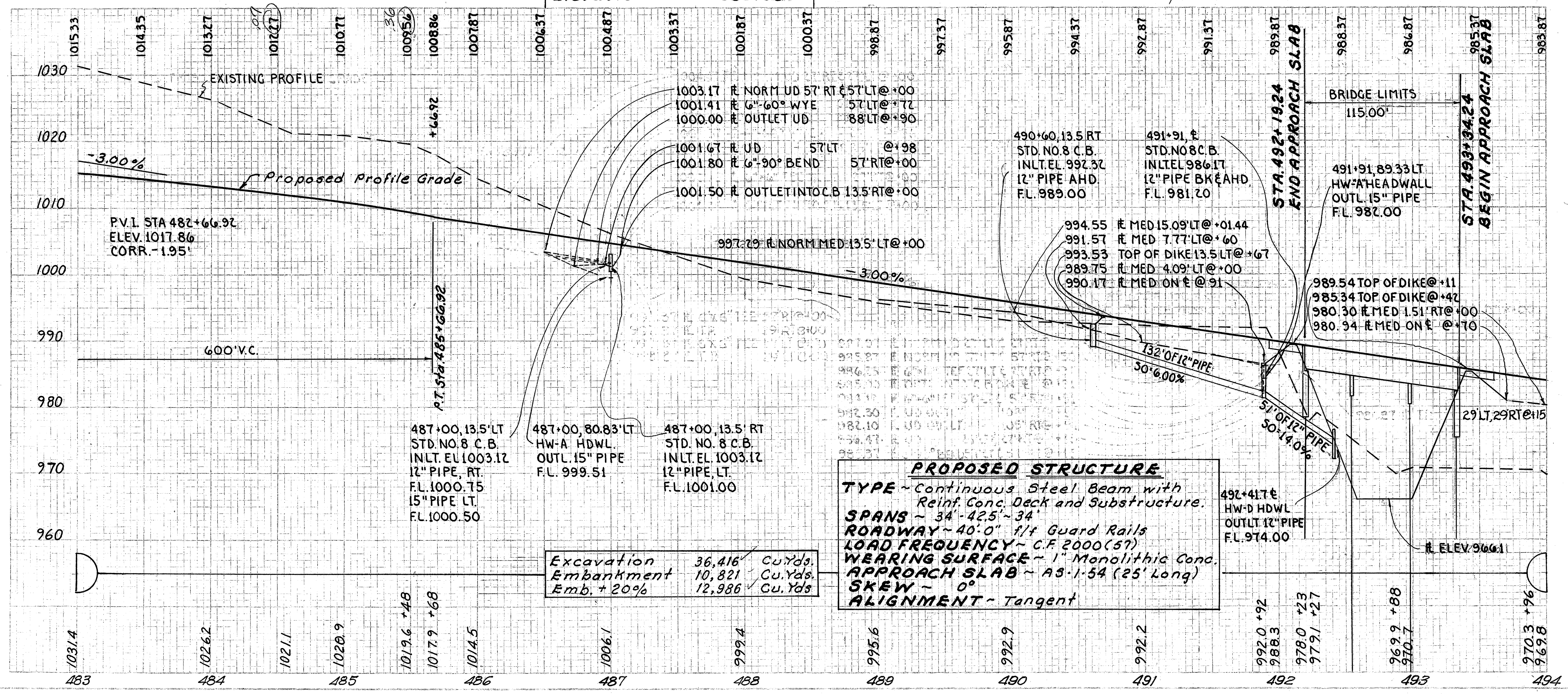
ASD-30-8.52
WAY-30-0.00



Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (Lin.Ft.)		I-1 Pipe Class E-1 12" (LIN.FT.)	I-1 15" Pipe, Class J-1 (LIN.FT.)	I-2 Head-Walls HW-A (C.Y.)	I-2 Head-Walls STD HW-D (C.Y.)	I-8 Catch Basin Std. No. 8 (EACH)	L-10 Sodding (SQ.YDS.)	I-10 Dumped Rock Channel Protection, T-18" (CU.YDS.)	I-1 Pipe Class C-1 12" (LIN.FT.)	L-120 Jute Matting (SQ.YDS.)
2-GR	Rt.	490+51.69	493+36.12	172.50*										
3-GR	Rt.	491+11.12	494+00	173.88*										
4-GR	Lt.	491+92.37	494+00	92.63*										
5-GR	Lt.	492+17.37	494+00	67.63*										
3-SD	LT	485+00	486+93											161
4-SD	RT	485+00	486+93											161
5-SD	LT	491+50	491+84											28
1-S	RT-LT	487+00				27				1	7			
2-S	LT	487+00					67	3.22		1	9			
3-S	LT	490+60	491+91							1			132	
4-S	RT	491+91							.65		9		51	
1-SD	RT	483+50	491+75								953			
2-SD	LT.	484+75	491+75								744			
1-DR	RT	491+75	492+60									35		
2-DR	LT	486+96	487+06									8		
3-DR	LT	491+75	492+60									30		
		TOTALS		506.64		27	67	3.22	.65	3	1722	73	183	350

* NET LENGTH AFTER DEDUCTING STRUCTURE LIMITS.

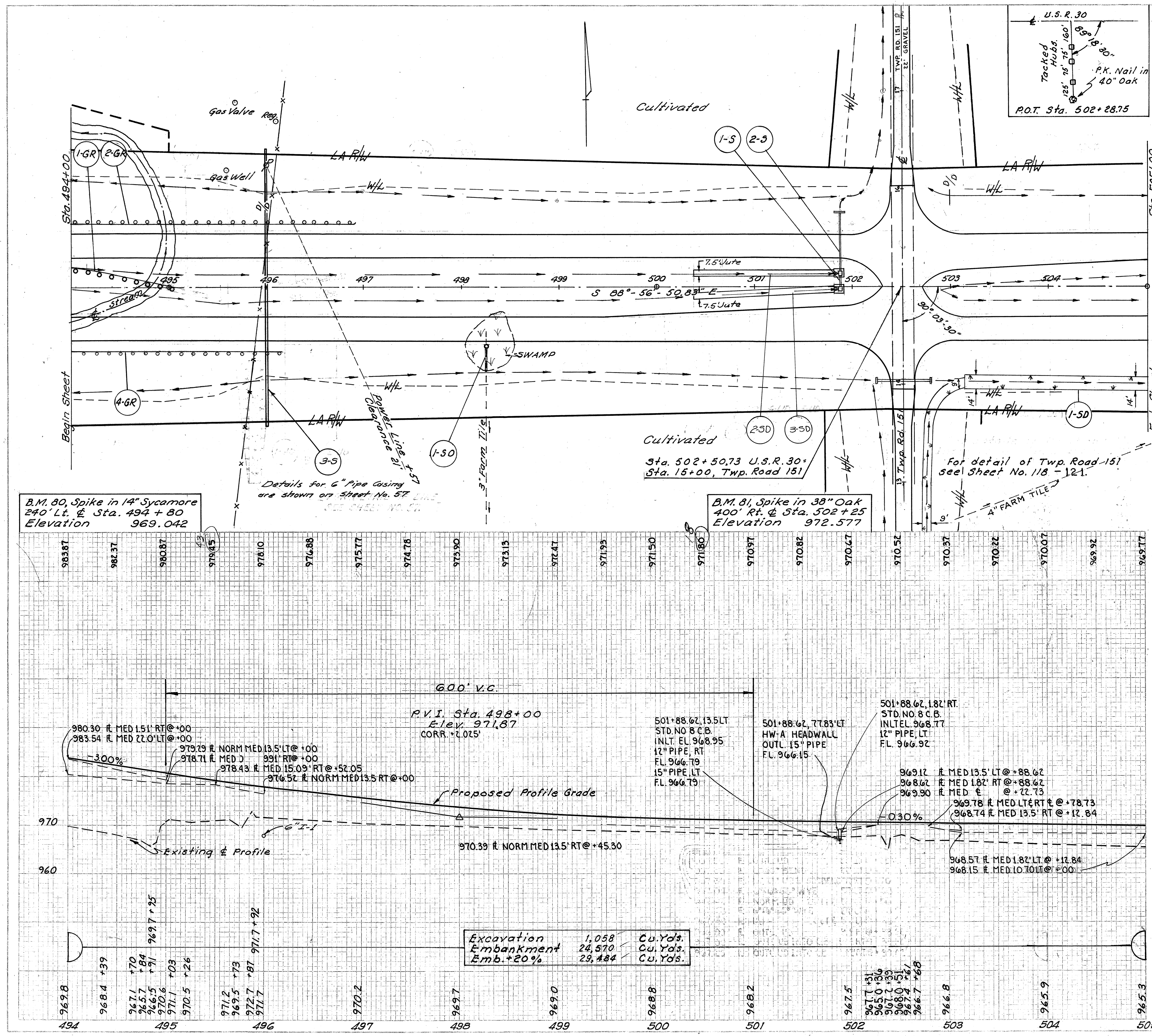
Reference No.	Side	Station From	Station To	I-1 6" Pipe Class I-3 Shallow (LIN.FT)	I-1 6" Pipe Class I-3 Deep (LIN FT)	I-1 6" Pipe Class I-3 Sec. M6.4(h) (LIN FT.)	I-1 6" Pipe Class J-1 (LIN FT)		I-1 Pipe Outlet Class F-4 6" (LIN FT)	I-1 Pipe Outlet Class F-4 8" (LIN FT)	I-5 Pipe Specials	I-5 Pipe Specials Class I-3 6"x6"-60° WYE Sec. M-6.4(h) (EACH)	I-5	I-5 Class I-3 6"-90° Bend Sec. M6.4(h) (EACH)
1-UD	RT.	483+00	487+00			400								
3-UD	RT	487+00					44		10					1
8-UD	LT	483+00	486+98			424				10		1		
		TOTALS				824	44		10	10		1		1



Sta. 483+00 to Sta. 494+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	22 / 198

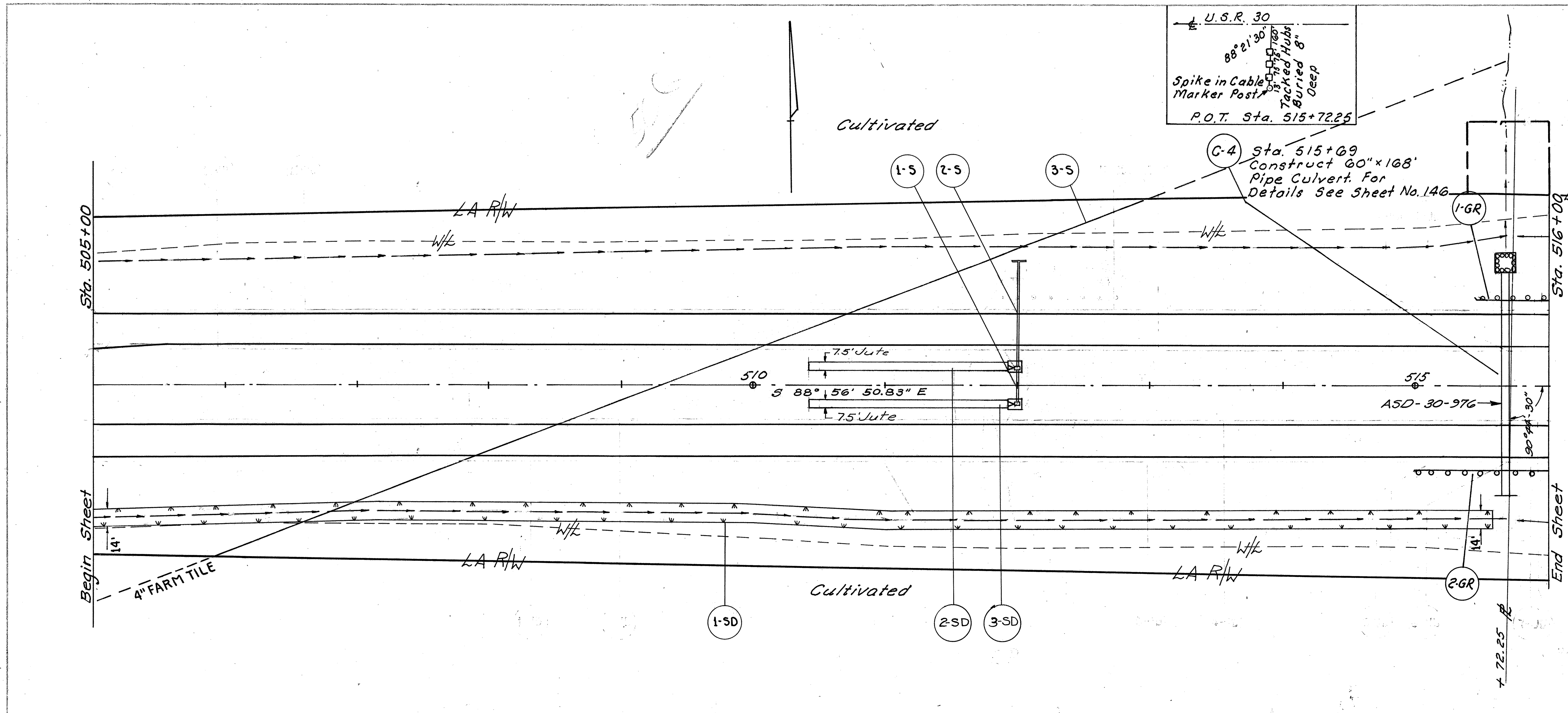
ASD-30-8.52
WAY-30-0.00



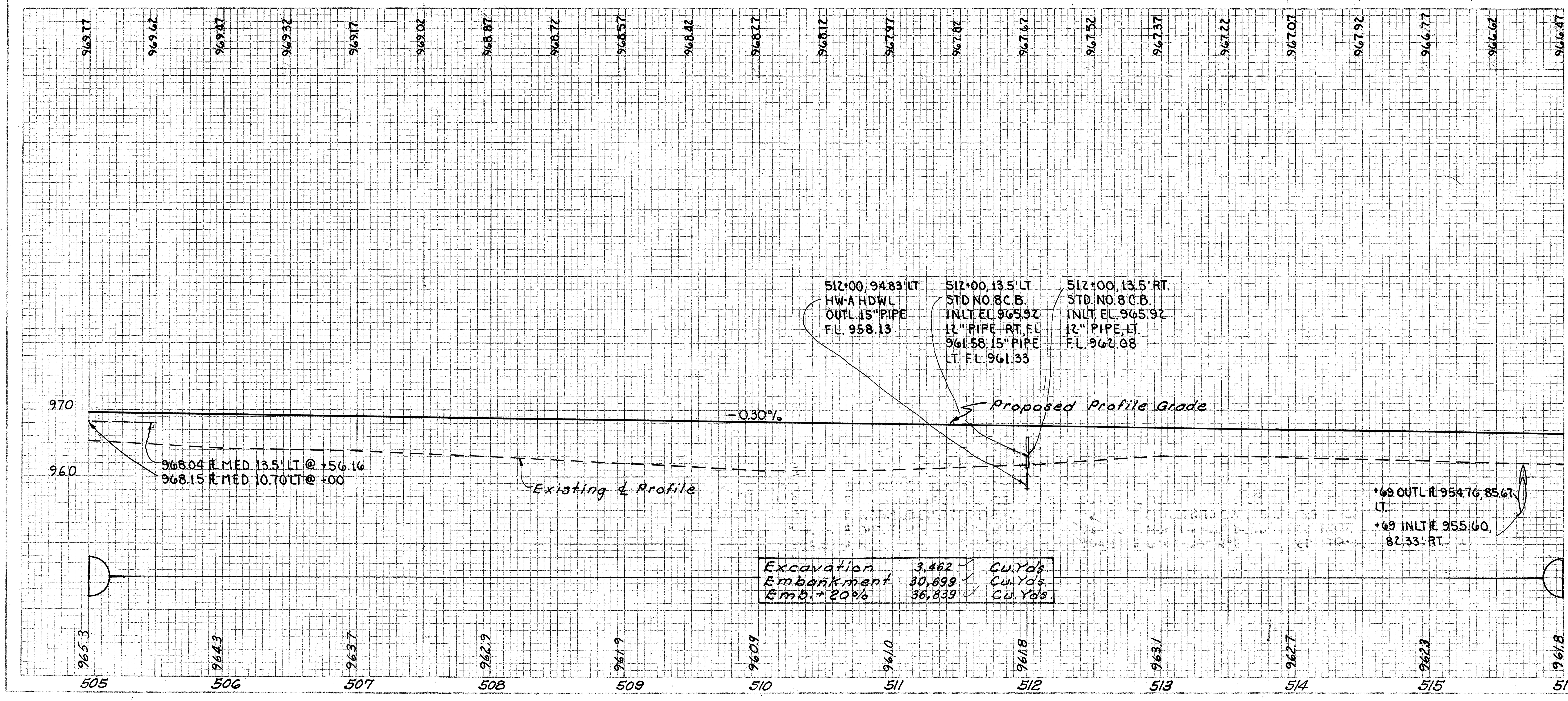
Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (Lin. Ft.)		I-1 Pipe Class E-1 12" (LIN. FT.)	I-1 15" Pipe, Class J-1 (LIN. FT.)	I-2 Headwall Std. HW-A (CU. YDS.)	I-8 Catch Basin Std. No. 8 (EACH)	L-10 Sodding (SQ. YDS.)	I-9 Stone Underdrains No. 1 (LIN. FT)	I-1 6" Pipe Class I-3 Sec. M-6A(h) as per plan (LIN. FT.)	8" Pipe Class F-4 Sec. M-6A(c) (LIN. FT.)
1-GR	Lt.	494+00	495+01.80	104.87									
2-GR	Lt.	494+00	496+92.37	292.37									
4-GR	Rt.	494+00	496+11.12	211.12									
1-S	RT-LT	501+88.62				15			1	7			
2-S	LT	501+88.62					65	3.22	1	9			
1-SD	RT	503+12.84	504+00							314			
1-SO	RT	498+25									3	16	10
		TOTALS		608.36		15	65	3.22	2	330	3	16	10

Reference No.	Side	Station From	Station To	L-120 Jute Matting (SQ. YDS.)	I-1 6" Pipe Class F-1 (LIN. FT.)
2-SD	LT.	500+38	501+88	125	
3-SD	RT.	500+38	501+88	125	
3-S	℄	496+00			284
TOTALS				250	284

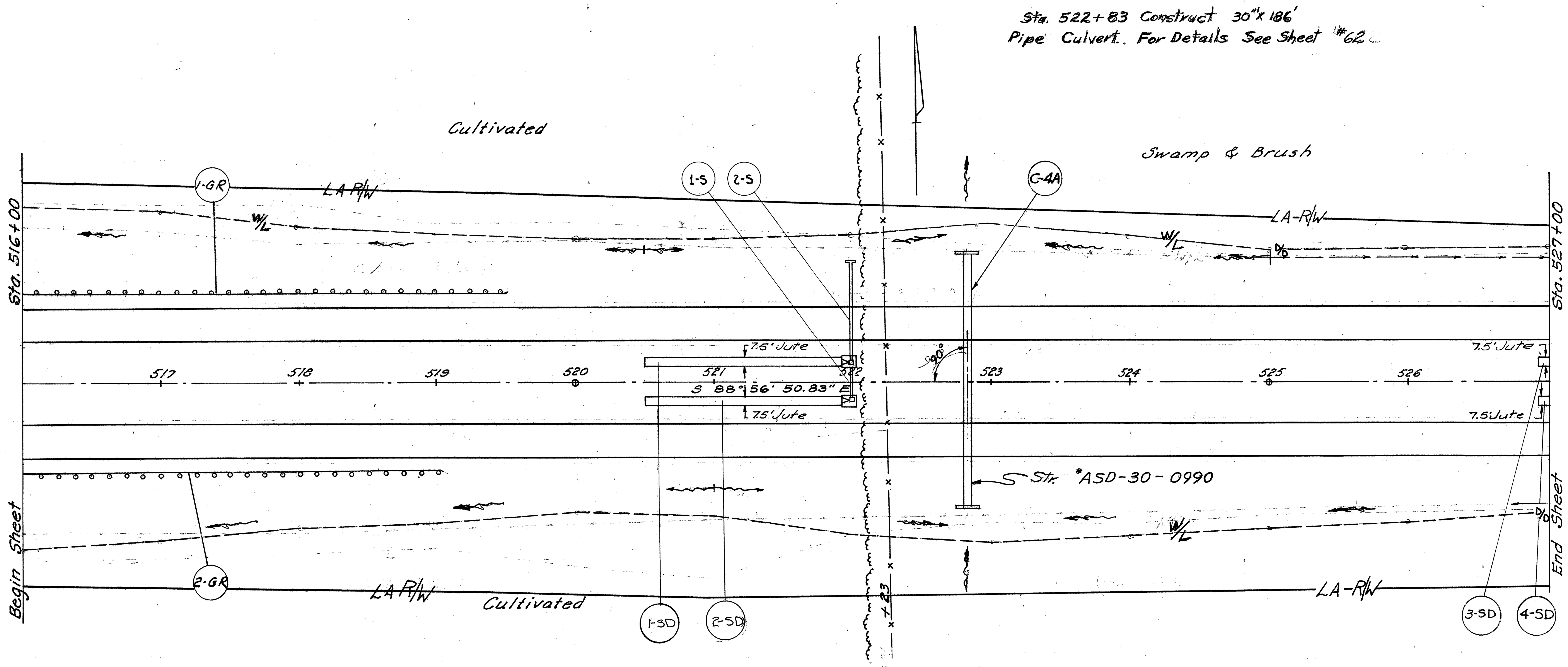
Sta. 494+00 to Sta. 505+00



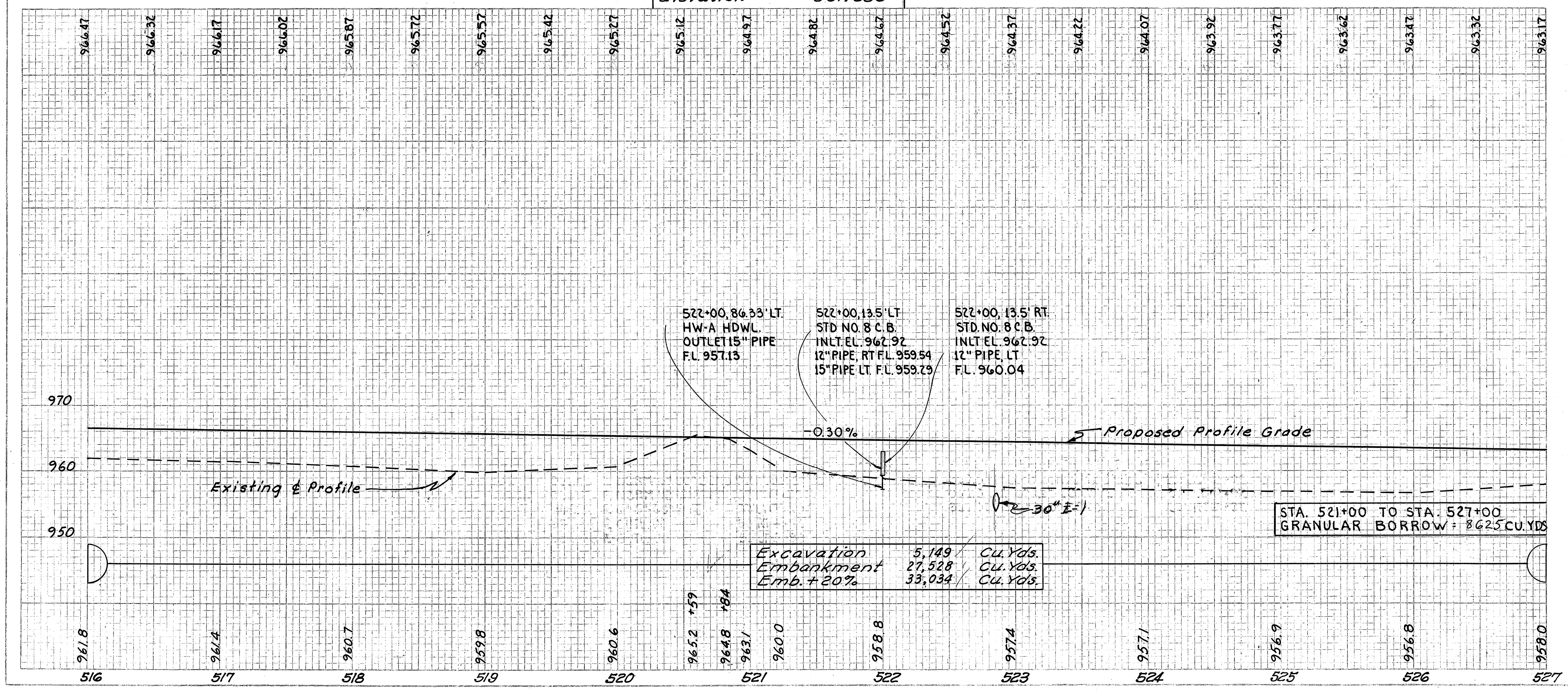
Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (Lin. Ft.)	I-1 PIPE CLASS E-1 12" (LIN.FT.)	I-1 15" PIPE CLASS J-1 (LIN.FT.)	I-2 HEADWALL STD. HW-A (CU.YDS.)	I-8 CATCH BASIN STD. NO. 8 (EACH)	L-10 SODDING (SQ.YDS.)	I-1 PIPE CLASS J-1 8"	L-120 JUTE MATTING (SQ.YDS.)		
1-GR	Lt.	515+50	516+00	50									
2-GR	Rt.	515+00	516+00	100									
1-S	RT-LT	512+00			27			1	7				
2-S	LT	512+00				81	3.22	1	9				
3-S	RT-LT	505+60	512+95							756			
1-SD	RT	505+00	515+60						178				
2-SD	LT.	510+43	511+93								125		
3-SD	RT.	510+43	511+93								125		
TOTALS				150	27	81	3.22	2	194	756	250		



ASD-30-8.52
WAY-30-0.00



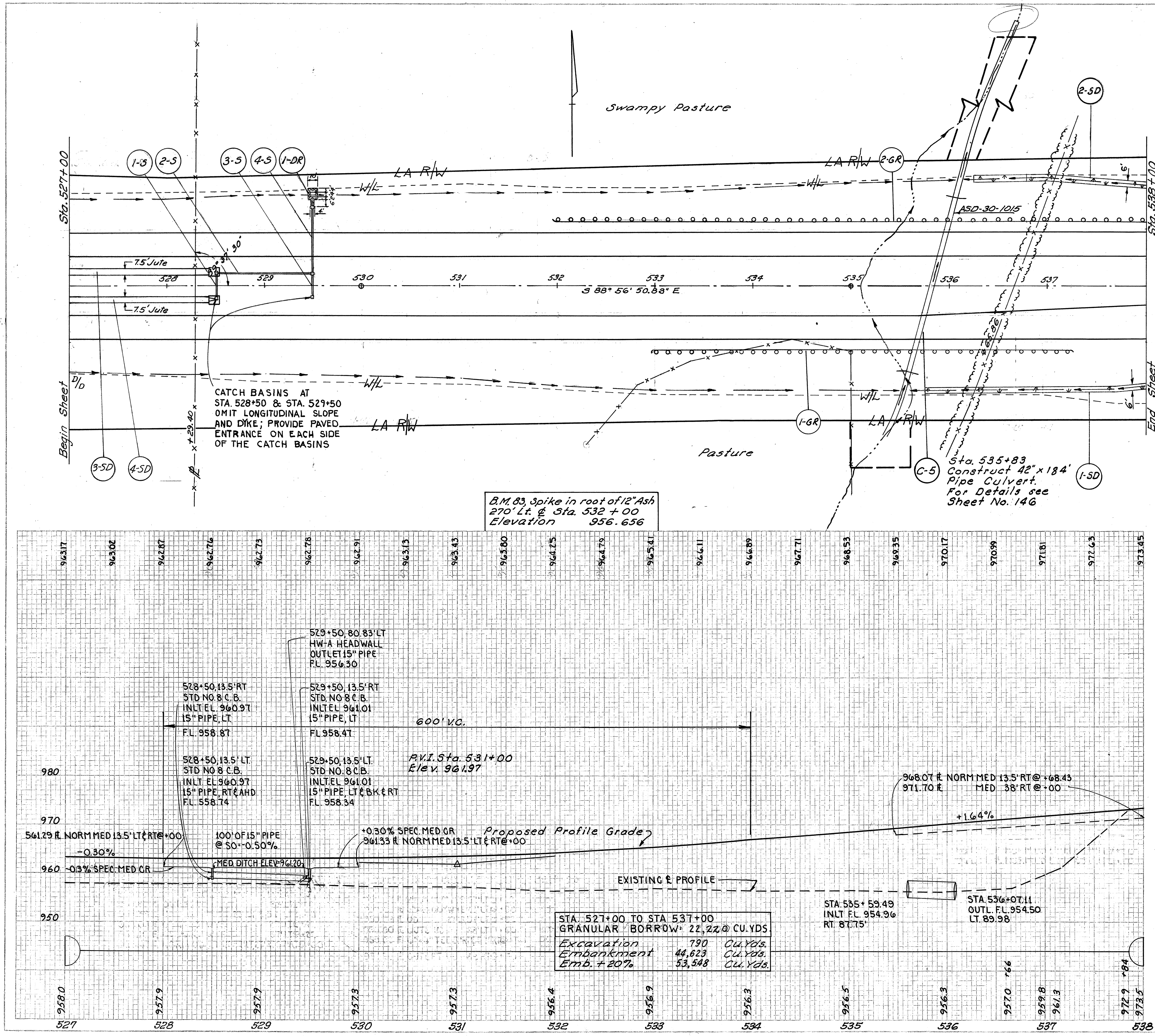
B.M. 82, Spike in Cable Marker
Post #273 - 300' Rt. ℄ Sta. 522+15
Elevation 961.386



Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep	I-1 PIPE CLASS E-1 12"	I-1 15" PIPE, CLASS J-1	I-2 HEADWALL STD. HW-A	I-8 CATCH BASIN STD. NO. 8	L-10 SODDING	I-1 30" Pipe M-6.6(a) or M-6.8(b) Class A-1	E-3	L-120 JUTE MATTING
				Lin. Ft.	LIN. FT.	LIN. FT.	CU. YDS.	EACH	SQ. YDS.	Lin. Ft.	Cu. Yds.	SQ. YDS.
1-GR	Lt.	516+00	519+50	350								
2-GR	Rt.	516+00	519+00	300								
1-S	RT-LT	522+00			27			1	7			
2-S	LT	522+00				73	3.22	1	9			
G-4A	℄	522+83					15.4		6	186	2	
1-SD	LT.	520+43	521+93									125
2-SD	RT.	520+43	521+93									125
3-SD	LT.	526+93	527+00									7
4-SD	RT.	526+93	527+00									7
TOTALS				650	27	73	17.62	2	22	186	2	264

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

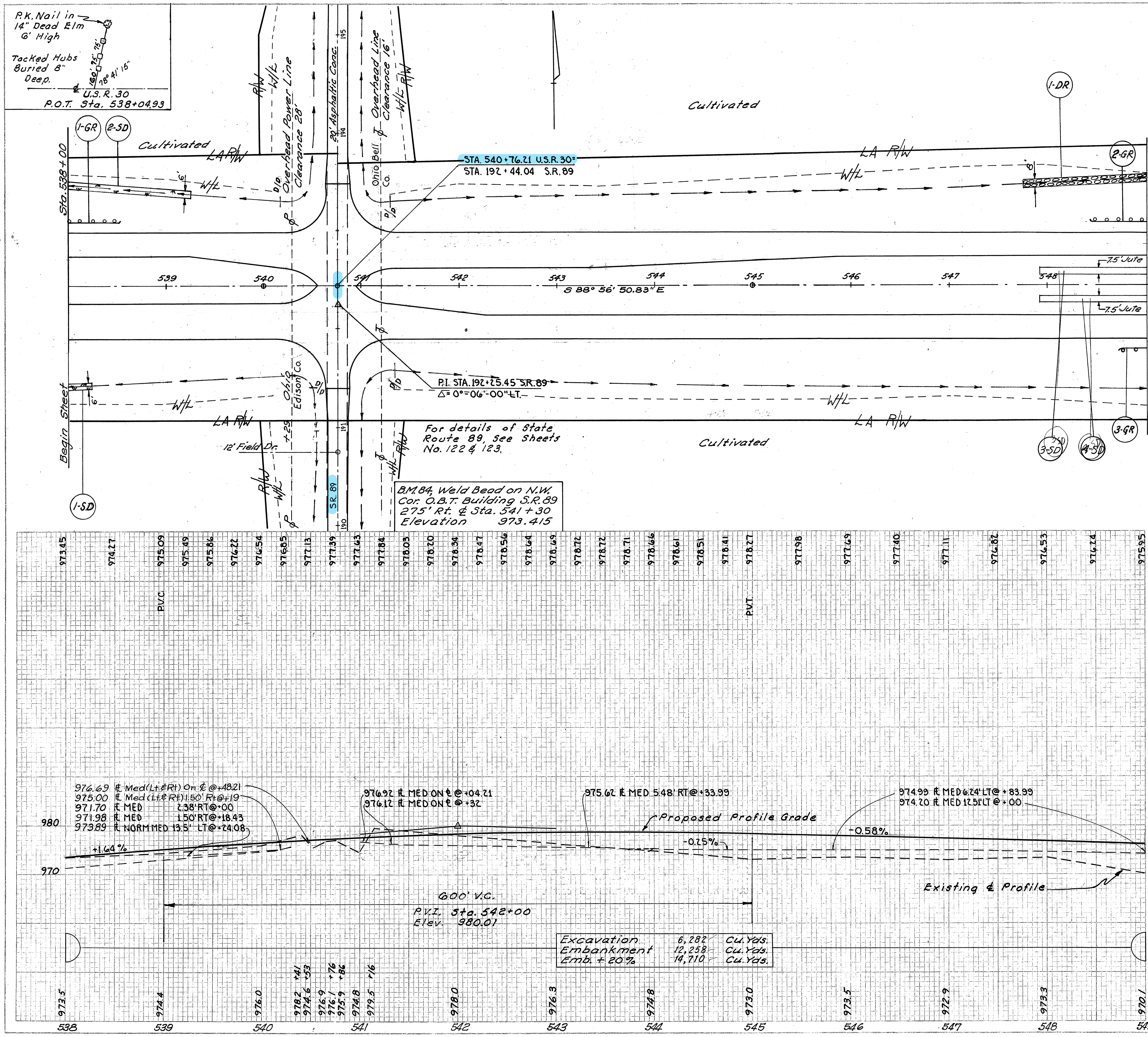
ASD-30-8.52
WAY-30-0.00



Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep	L-120 JUTE MATTING	I-1 PIPE CLASS E-1 15"	I-1 15" PIPE CLASS J-1	I-2 HEADWALL STD. HW-A	I-8 CATCH BASIN STD. NO. 8	L-10 SODDING	I-10 DUMPED ROCK CHANNEL PROTECTION T-1.5'
				Lin. Ft.	SQ. YDS.	LIN. FT.	LIN. FT.	CU. YDS.	EACH	SQ. YDS.	CU. YDS.
1-GR	Rt.	533+00	537+25	425							
2-GR	Lt.	532+00	538+00	600							
1-S	RT-LT	528+50				27			1	7	
2-S	LT	528+50	529+50			100			1	7	
3-S	RT-LT	529+50				27			1	7	
4-S	LT	529+50					69	3.22	1	9	
1-DR	LT.	529+46	529+56								8
1-SD	RT	535+75	538+00							157	
2-SD	LT	536+25	538+00							122	
3-SD	LT.	527+00	528+43		118						
4-SD	RT.	527+00	528+43		118						
Totals				1025	236	154	69	3.22	4	309	8

Sta. 527+00 to Sta. 538+00

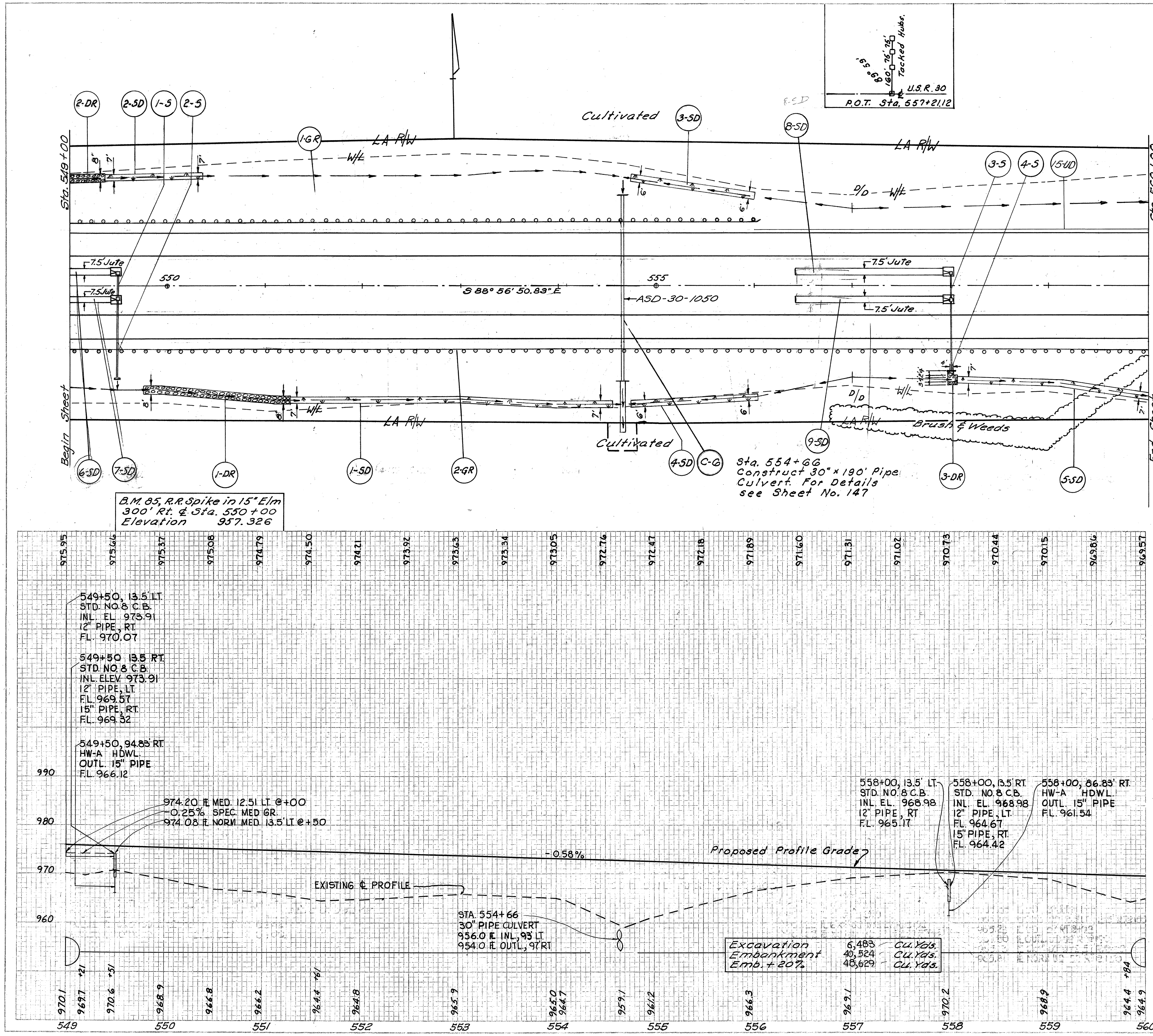
ASD-30-8.52
WAY-30-0.00



Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (Lin. Ft.)	L-10 Sodding (SQ. YDS.)	I-10 Dumped Rock Channel Protection, T=1.5' (CU. YDS.)	L-120 Jute Matting (SQ. YDS.)
1-GR	Lt.	538+00	538+50	50			
2-GR	LT	548+50	549+00	50			
3-GR	RT	548+75	549+00	25			
1-SD	RT	538+00	538+25		18		
2-SD	LT	538+00	539+25		87		
1-DR	LT	547+75	549+00			57	
3-SD	LT.	~~547+93~~	~~549+00~~				89
4-SD	RT.	~~547+93~~	~~549+00~~				89
Totals				125	105	57	198

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00



Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep	I-1 Pipe Class E-1 12"	I-1 15" Pipe, Class J-1	I-2 Headwall Std. HW-A	I-8 Catch Basin Std. No. 8	L-10 Sodding	I-10 Dumped Rock Channel Protection, T=1.5'
				Lin. Ft.	LIN. FT.	LIN. FT.	CU. YDS	EACH	SQ. YDS.	CU. YDS.
1-GR	Lt.	549+00	556+00	700						
2-GR	Rt.	550+00	560+00	1.100						
1-S	LT.-RT.	549+50			27			1	7	
2-S	RT.	549+50				81	3.22	1	9	
3-S	LT.-RT.	558+00			27			1	7	
4-S	RT.	558+00				73	3.22	1	9	
1-DR	RT.	549+75	551+25							71
2-DR	LT.	549+00	549+25							12
3-DR	RT.	557+96	558+06							6
1-SD	RT.	551+25	554+55						280	
2-SD	LT.	549+25	550+25						82	
3-SD	LT.	554+75	556+00						87	
4-SD	RT.	554+75	556+00						87	
5-SD	LT.	558+06	560+00						155	
Totals				1800	54	154	6.44	4	723	89

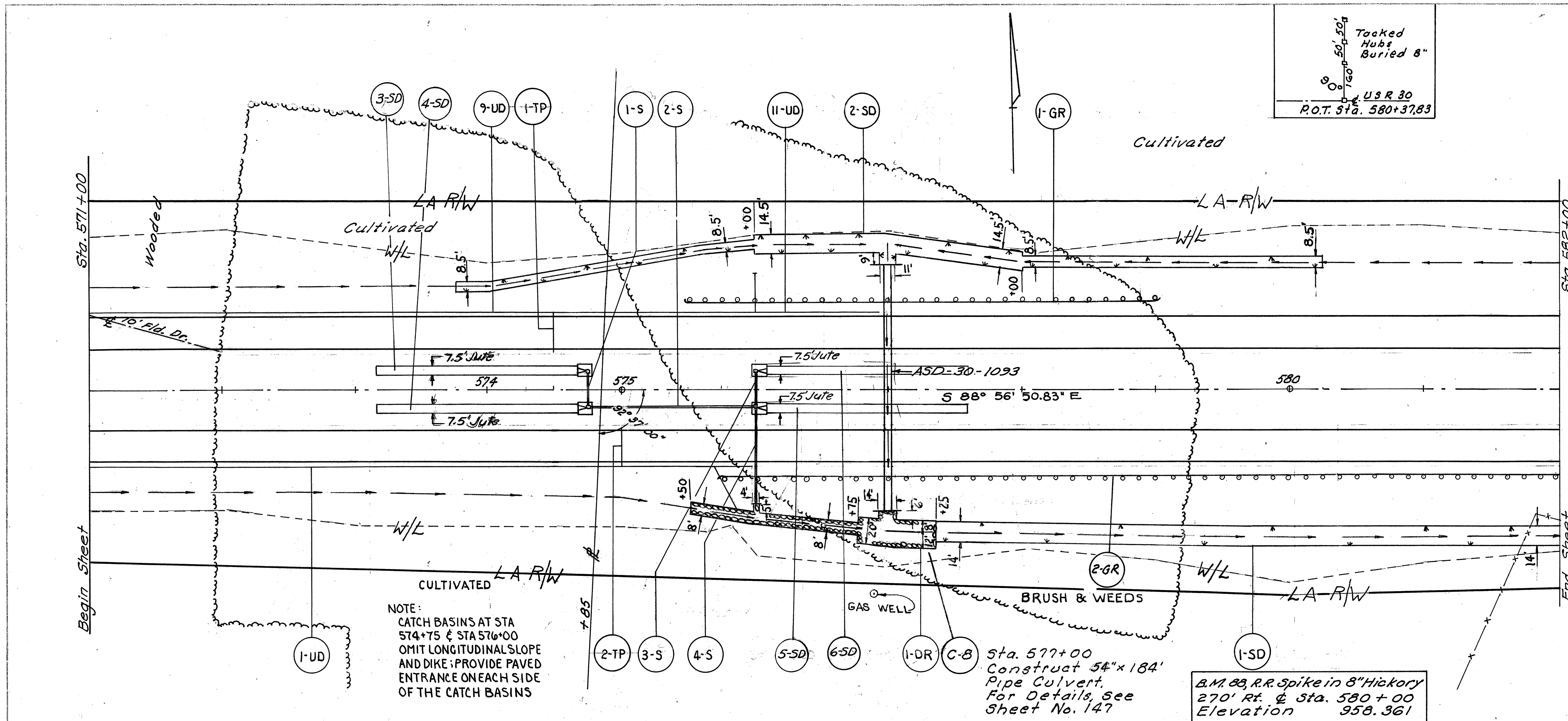
Reference No.	Side	Station From	Station To	L-120 Jute Matting	I-1 6" Pipe Class I-3 Deep
				SQ. YDS.	LIN. FT.
6-SD	LT.	549+00	549+43	36	
7-SD	RT.	549+00	549+43	36	
8-SD	LT.	556+4	557+93	125	
9-SD	RT.	556+4	557+93	125	
15-UD	LT.	556+00	560+00		400
TOTALS				322	400

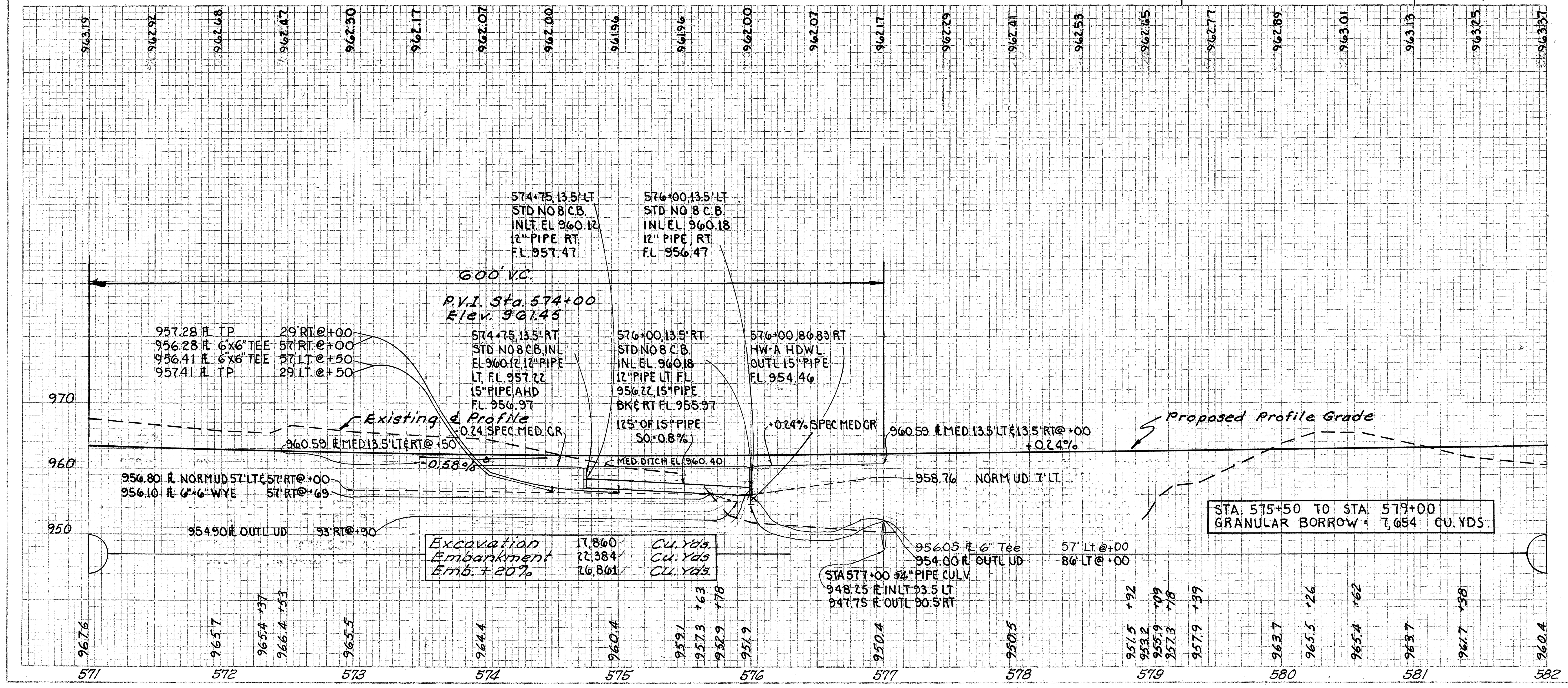
125
89
36

Sta. 549+00 to Sta. 560+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD - 30 - 8.52
WAY - 30 - 0.00





Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep	I-1 Pipe Class E-1 12"	I-1 Pipe Class E-1 15"	I-1 15" Pipe Class J-1	I-2 Headwall Std. HW-A	I-8 Catch Basin Std. No. 8	L-10 Sodding	I-10 Dumped Rock Channel Protection T=1.5'	L-120 Jute Matting
				Lin. Ft.	LIN. FT.	LIN. FT	LIN. FT.	CU. YDS.	EACH	SQ. YDS.	CU. YDS.	SQ. YDS.
1-GR	Lt.	575+50	579+00	350								
2-GR	Rt.	575+75	582+00	625								
1-S	LT-RT	574+75			27				1	7		
2-S	RT	574+75	576+00			125			1	7		
3-S	LT-RT	576+00			27				1	7		
4-S	RT	576+00					73	3.22	1	9		
1-SD	RT	577+25	582+00							867		
2-SD	LT	573+75	580+25							785		
1-DR	RT	575+50	577+25								112	
3-SD	LT.	573+18	574+68									125
4-SD	RT.	573+18	574+68									125
5-SD	RT.	576+07	577+57									125
6-SD	LT.	576+07	577+57									125
TOTALS				975	54	125	73	3.22	4	1682	112	500

REFERENCE NO	SIDE	STATION FROM	STATION TO		I-1 6" PIPE CLASS I-3 DEEP			I-1 8" PIPE OUTLET CLASS F-4 M-6.4(c)	I-5 PIPE SPECIALS CLASS I-3 6"-TEE	PIPE SPECIALS CLASS I-3 6"x6" 60° WYE	I-5 6"-6" TEE SEC. M-6.4(h)	I-1 6" PIPE CLASS - I-3 SEC. M-6.4(h)	
					LIN FT			LIN FT	EACH		EACH	LIN. FT	
1-UD	RT	571+00	575+98		530			10		1			
9-UD	LT	571+00	576+00		519			10	1				
11-UD	LT	576+00	576+95		95								
1-TP	LT	574+50									1	28	
2-TP	RT	575+00									1	28	
TOTALS					1144			20	1	1	2	56	

Sta. 571+00 to Sta. 582+00

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		31 / 198

ASD-30-8.52
WAY-30-0.00

Show appr. slabs - plan + profile

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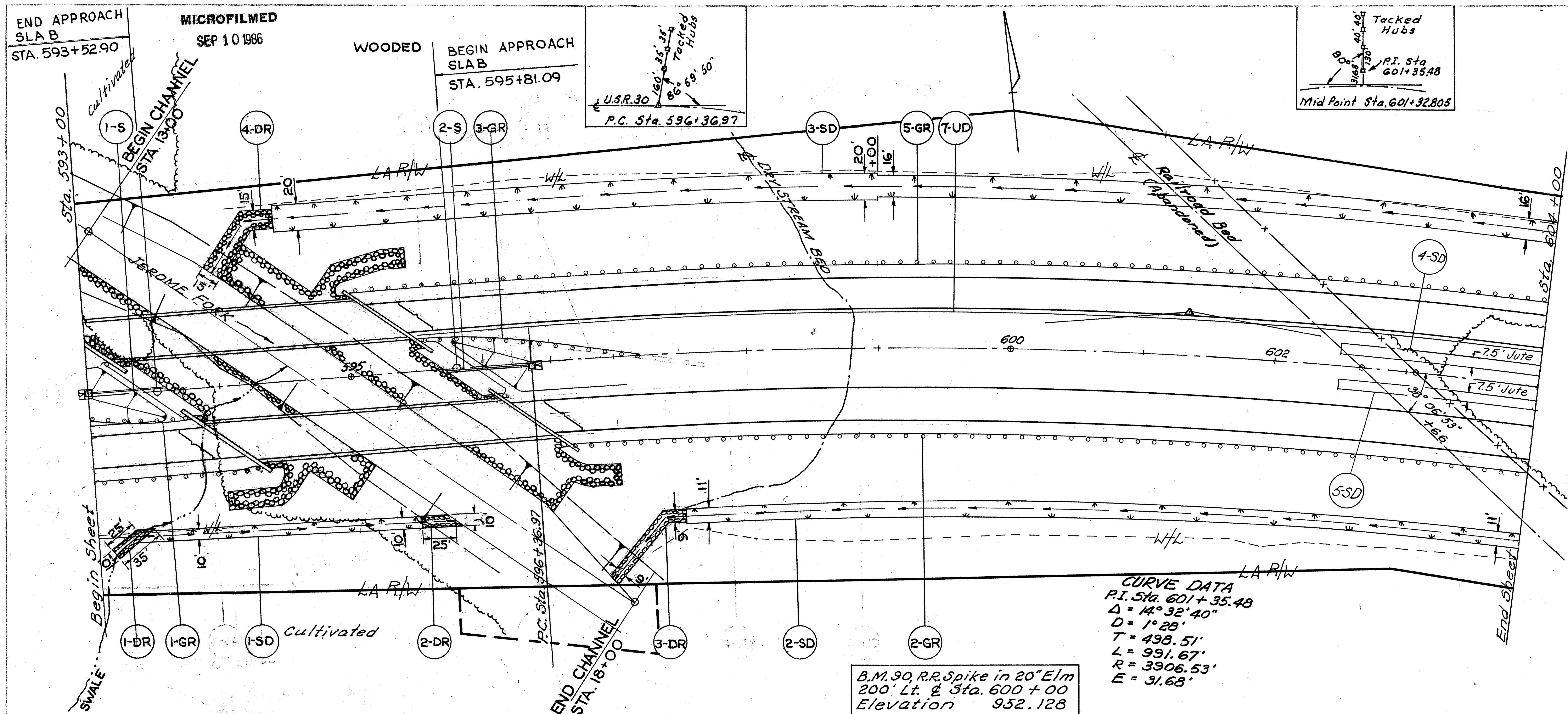
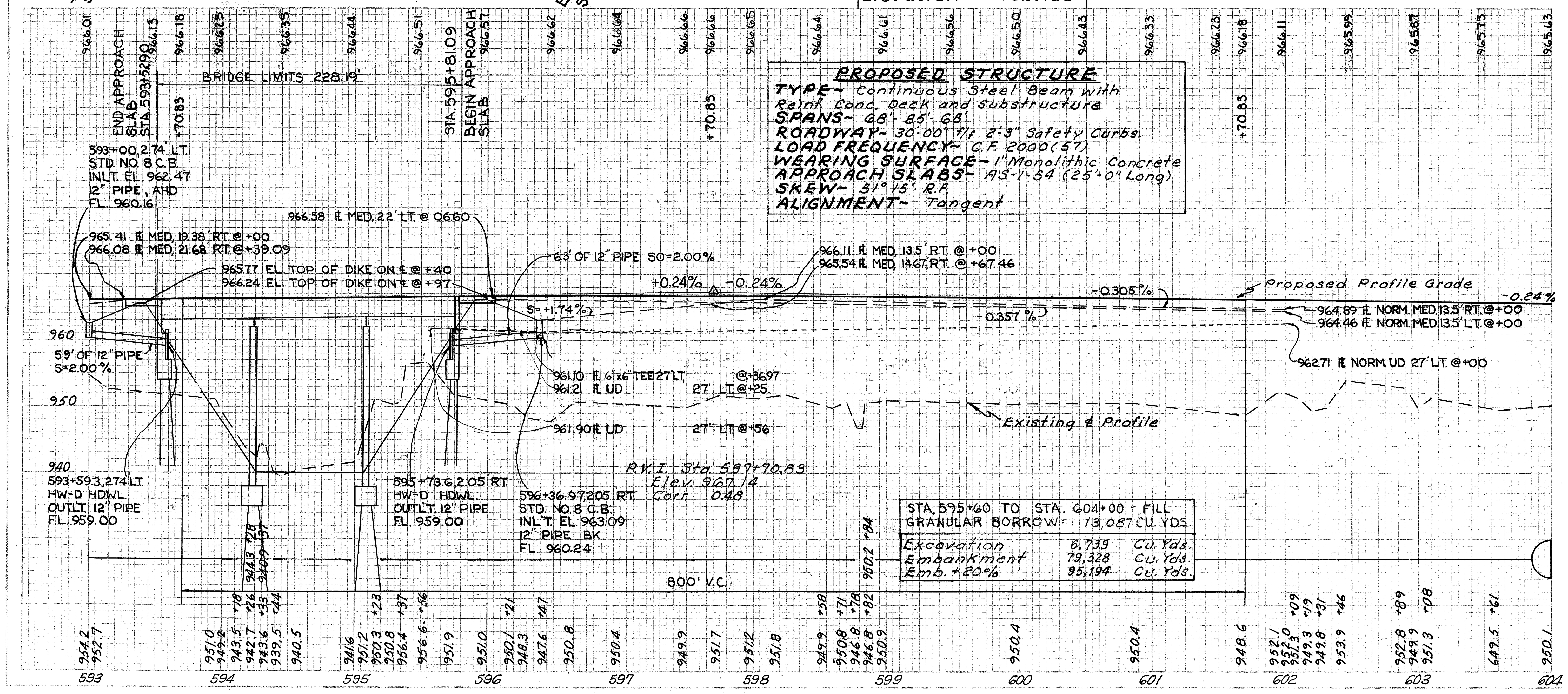


Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (LIN. FT.)	I-1 12" Pipe Class C-1 (LIN. FT.)	I-2 Headwall Std. HW-D (CU. YDS.)	I-8 Catch Basin Std. No. 8 (EACH)	L-10 Sodding (SQ. YDS.)	I-10 Dumped Rock Channel Protection T=1.5' (CU. YDS.)
1-GR	Rt.	593+00	596+19.43	85.27*					
2-GR	Rt.	593+00	604+00	859.31*					
3-GR	Lt.	593+14.56	597+17.46	171.81*					
5-GR	Lt.	595+08.80	604+00	905.70*					
1-S	LT.	593+00			59	.65	1	9	
2-S	LT.	596+36.97			63	.65	1	9	
1-SD	RT.	593+35	595+45					250	
2-SD	RT.	597+50	603+94					846	
3-SD	LT.	594+50	604+00					2062	
1-DR	RT.	593+30							16
2-DR	RT.	595+45	595+70						13
3-DR	RT.	596+90	597+50						43
4-DR	LT.	594+00	594+50						63
TOTALS				2022.09	122	1.30	2	3176	135

* NET LENGTH AFTER DEDUCTING STRUCTURE LENGTH OR COMPENSATING FOR LENGTH @ CURVE.

REFERENCE NO.	SIDE	STATION FROM	STATION TO	I-1 6" PIPE CLASS I-3 SHALLOW (LIN. FT.)	I-1 6" PIPE CLASS I-3 DEEP (LIN. FT.)	I-1 6" PIPE OUTLET CLASS F-4 (LIN. FT.)	I-5 PIPE SPECIALS CLASS I-3 6"x6 TEE (EACH)	L-120 Jute Matting (Sq. Yds.)
4-SD	LT.	602+43	603+93					125
5-SD	RT.	602+43	603+93					125
7-UD	LT.	595+56	604+00	200	669	10	1	
TOTALS				200	669	10	1	250

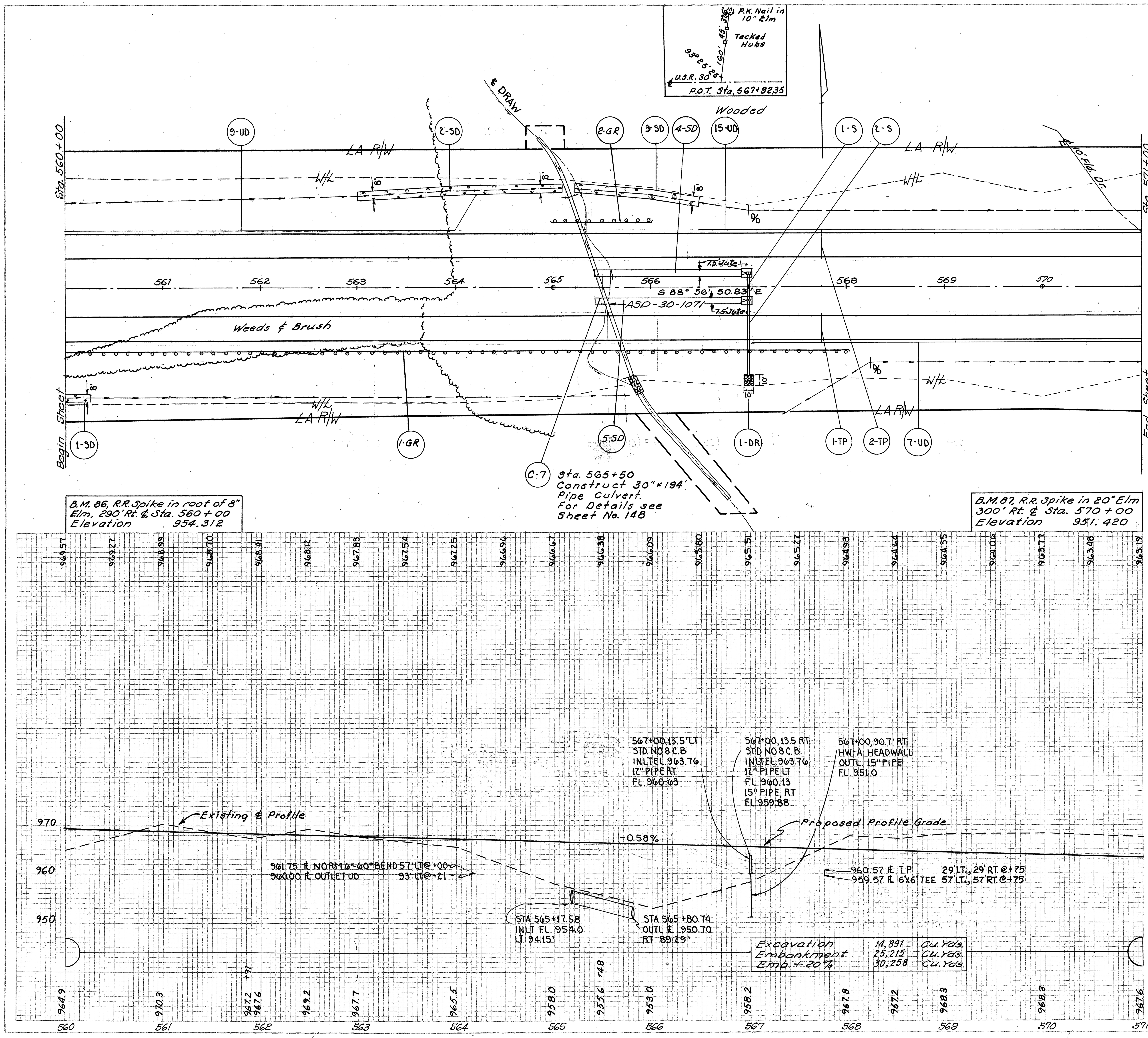


Sta. 593+00 to Sta. 604+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

28
198

ASD - 30 - 8.52
WAY - 30 - 0.00



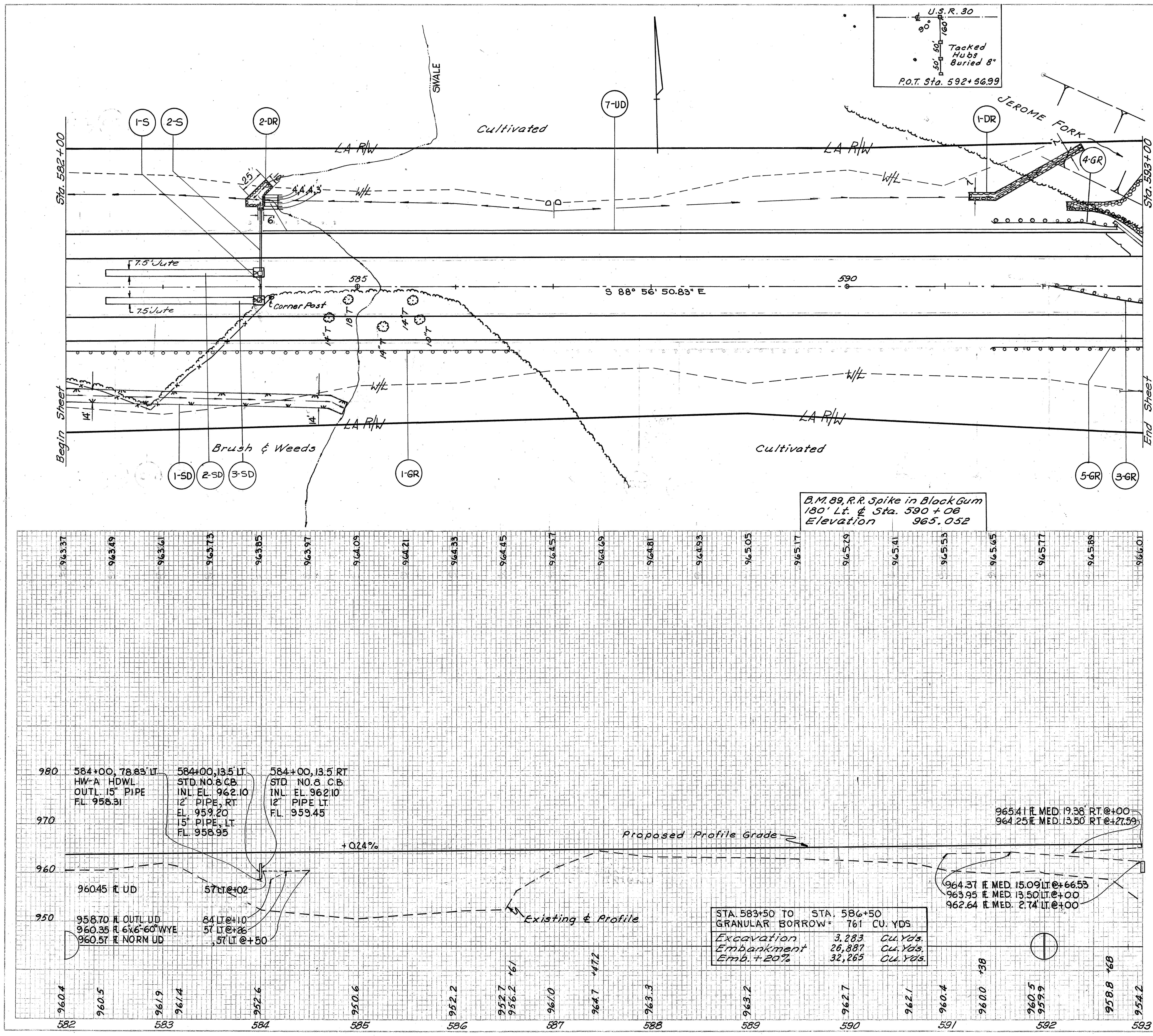
Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep	I-1 Pipe Class E-1 12"	I-1 15" Pipe, Class J-1	I-2 Headwall Std. HW-A	I-5 15" 25° Bend Class F-4	I-8 Catch Basin Std. No. 8	L-10 Sodding	I-1 Pipe Class F-4 15"	I-10 Dumped Rock Channel Protection T=1.5'	L-120 Jute Matting
				Lin. Ft.	LIN. FT	LIN. FT.	CU. YDS.	EACH	EACH	SQ. YDS.	LIN. FT.	CU. YDS.	SQ. YDS.
1-GR	Rt.	560+00	568+50	850									
2-GR	Lt.	565+00	566+00	100									
1-S	LT-RT	567+00			27				1	7			
2-S	RT	567+00				55	3.22	2	1	9	24		
1-SD	RT	560+00	560+25							20			
2-SD	LT	563+00	565+10							189			
3-SD	LT	565+25	566+50							113			
1-DR	RT	567+00										6	
4-SD	LT	565+43	566+93										125
5-SD	RT	565+43	566+93										125
TOTALS				950	27	55	3.22	2	2	338	24	6	250

Reference No	Side	Station From	Station To		I-1 6" Pipe Class I-3 Deep			I-1 8" Pipe Outlet Class F-4 Sec. M-6.4 (c)	I-5 Pipe Specials Class I-3: 6"-60° Bend		I-5 Pipe Specials Class I-3: 6"x6" Tee Sec. M-6.4(i)	I-1 6" Pipe Class I-3 Sec. M-6.4(h)		
					LIN FT			LIN FT	EACH		EACH	LIN. FT.		
7-UD	RT	567+02	571+00		398									
9-UD	LT	560+00	564+21		432			10	1					
15-UD	LT	~~565+35~~ 566+50	571+00		450									
1-TP	RT	567+75									1	28		
2-TP	LT	567+75									1	28		
TOTALS					1280			10	1		2	56		

Sta. 560+00 to Sta. 571+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	30/198

ASD - 30 - 8.52
WAY - 30 - 0.00



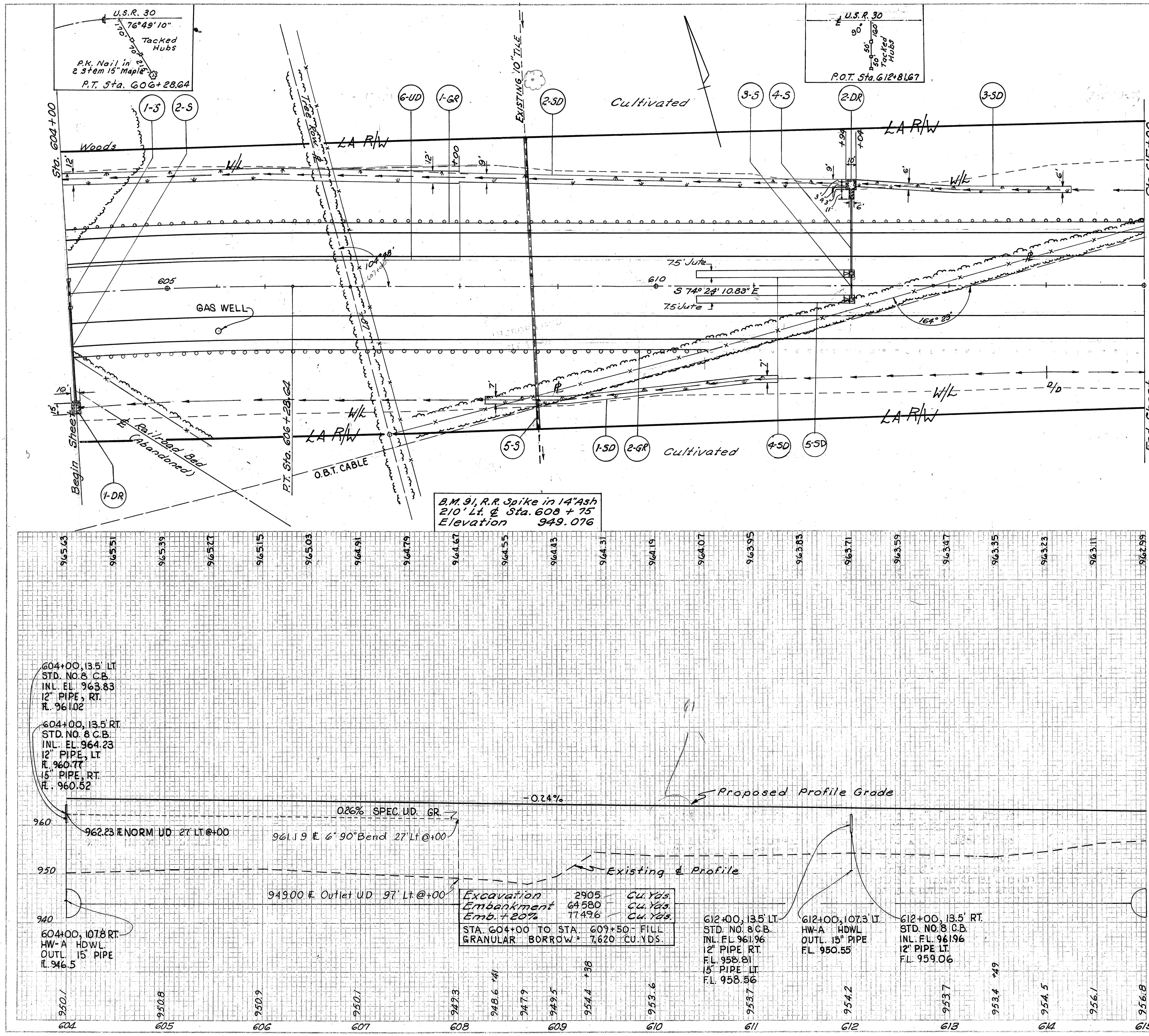
Reference No.	Side	Station From	Station To	I-15 Guard Rail Steel Beam Deep (Lin. Ft.)		I-1 Pipe Class E-1 12" (LIN. FT.)	I-1 15" Pipe Class J-1 (LIN. FT.)	I-2 Headwall Std. HW-A (CU. YDS.)	I-8 Catch Basin Std. No. 8 (EACH)	L-10 Sodding (SQ. YDS.)	I-10 Dumped Rock Channel Protection T=1.5' (CU. YDS.)	L-120 Jute Matting (SQ. YDS.)
1-GR	Rt.	582+00	586+50	450								
3-GR	Rt.	592+16.53	593+00	86.54*								
4-GR	Lt.	591+52.4±	593+00	126.32*								
5-GR	Rt.	591+46.25	593+00	153.75								
1-S	RT-LT.	584+00				27			1	7		
2-S	LT.	584+00					65	3.22	1	9		
1-SD	RT.	582+00	584+90							541		
1-DR	LT.	591+25	592+40								46	
2-DR	LT.	583+85	584+04								28	
~~2-SD~~	~~LT.~~	~~582+40~~	~~583+98~~									~~125~~
3-SD	RT.	582+40	583+90									125
TOTALS				816.61		27	65	3.22	2	557	74	250

* NET LENGTH AFTER DEDUCTING STRUCTURE LIMITS.

Reference No.	Side	Station From	Station To	I-1 6" Pipe Class I-3 Shallow (LIN. FT.)			I-1 8" Pipe Outlet Class F-4 Sec. M-6.4(c) (LIN. FT.)	I-5 Pipe Specials Class I-3 6"x6"-60° WYE (EACH)
7-UD	LT.	584+02	592+74	893			10	1
TOTALS				893			10	1

Sta. 582+00 to Sta. 593+00

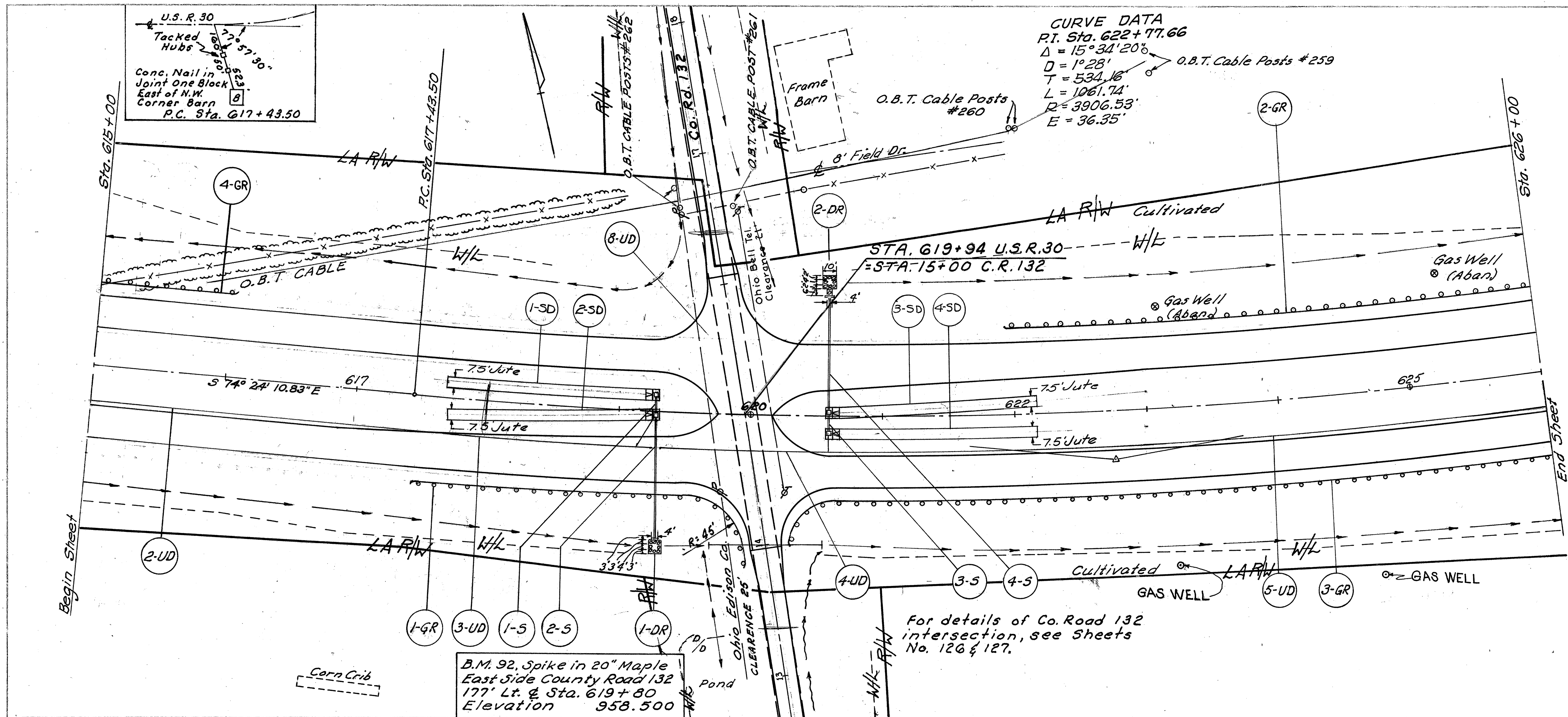
ASD-30-8.52
WAY-30-0.00

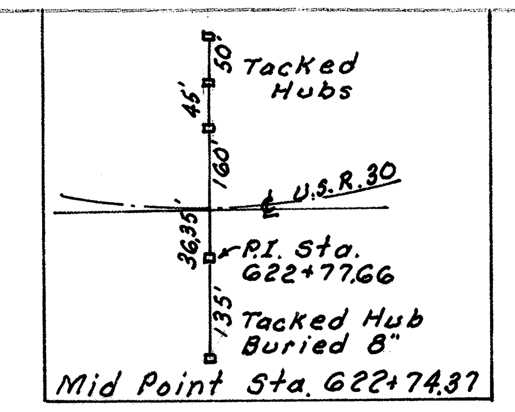


Reference No.	Side	Station From	Station To	I-15 GUARD RAIL STEEL BEAM DEEP Lin. Ft.	I-1 12" PIPE CLASS E-1 LIN. FT.	I-1 15" PIPE, CLASS J-1 LIN. FT.	I-1 15" PIPE CLASS F-4 LIN. FT.	I-2 HEADWALLS STD. HW-A CU. YDS.	I-5 15" 25° BENDS CLASS F-4 EACH	I-8 CATCH BASINS STD. NO. 8 EACH	L-10 SODDING SQ. YDS.	I-10 DUMPED ROCK CHANNEL PROTECTION, T=1.5' CU. YDS.	I-1 12" PIPE CLASS J-1 LIN. FT.
1-GR	Lt.	604+00	615+00	1104.75									
2-GR	Rt.	604+00	610+50	646.25									
1-S	LT.→RT.	604+00			27					1	7		
2-S	RT.	604+00				52	45	3.22	2	1	9		
3-S	RT→LT.	612+00			27					1	7		
4-S	LT.	612+00				55	21	3.22	2	1	9		
5-S	LT→RT	608+67	608+80										298
1-SD	RT.	608+25	611+25								239		
2-SD	LT.	604+00	611+94								995		
3-SD	LT.	612+04	614+25								154		
1-DR	RT.	603+94	604+04									9	
2-DR	LT.	611+94	612+04									10	
Totals				1751.0	54	107	66	6.44	4	4	1420	19	298

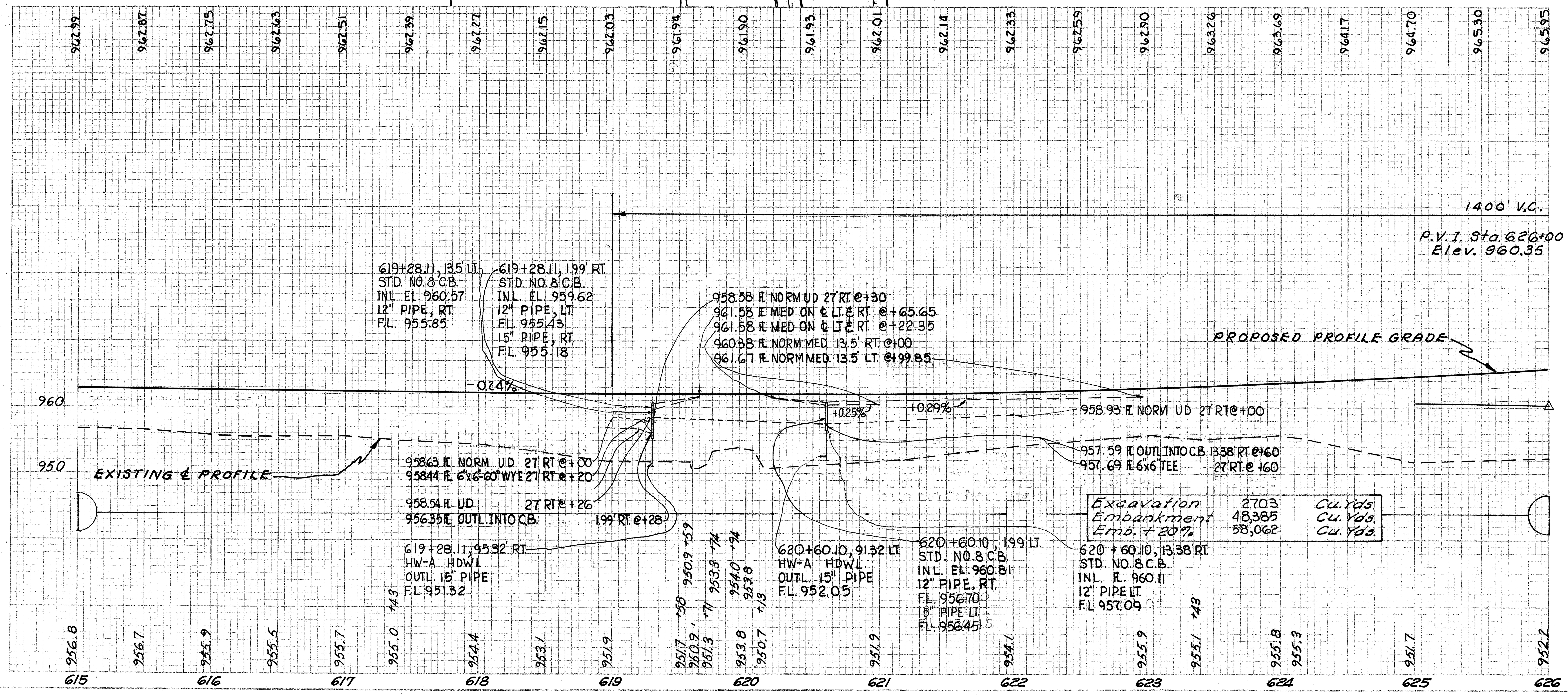
Reference No.	Side	Station From	Station To	I-1 6" PIPE CLASS I-3 SHALLOW LIN. FT.			I-1 8" PIPE OUTLET CLASS F-4 Sec. M-6.4 (c) LIN. FT.	I-5 PIPE SPECIALS CLASS I-3 6"-90° BEND EACH	I-1 6" Pipe Class J-1 Lin. Ft.	L-120 Jute Matting Sq. Yds.
4-SD	LT	610+43	611+93							125
5-SD	RT	610+43	611+93							125
6-UD	LT.	604+00	608+00	400			10	1	60	
TOTALS				400			10	1	60	250

ASD-30-8.52
WAY-30-0.00





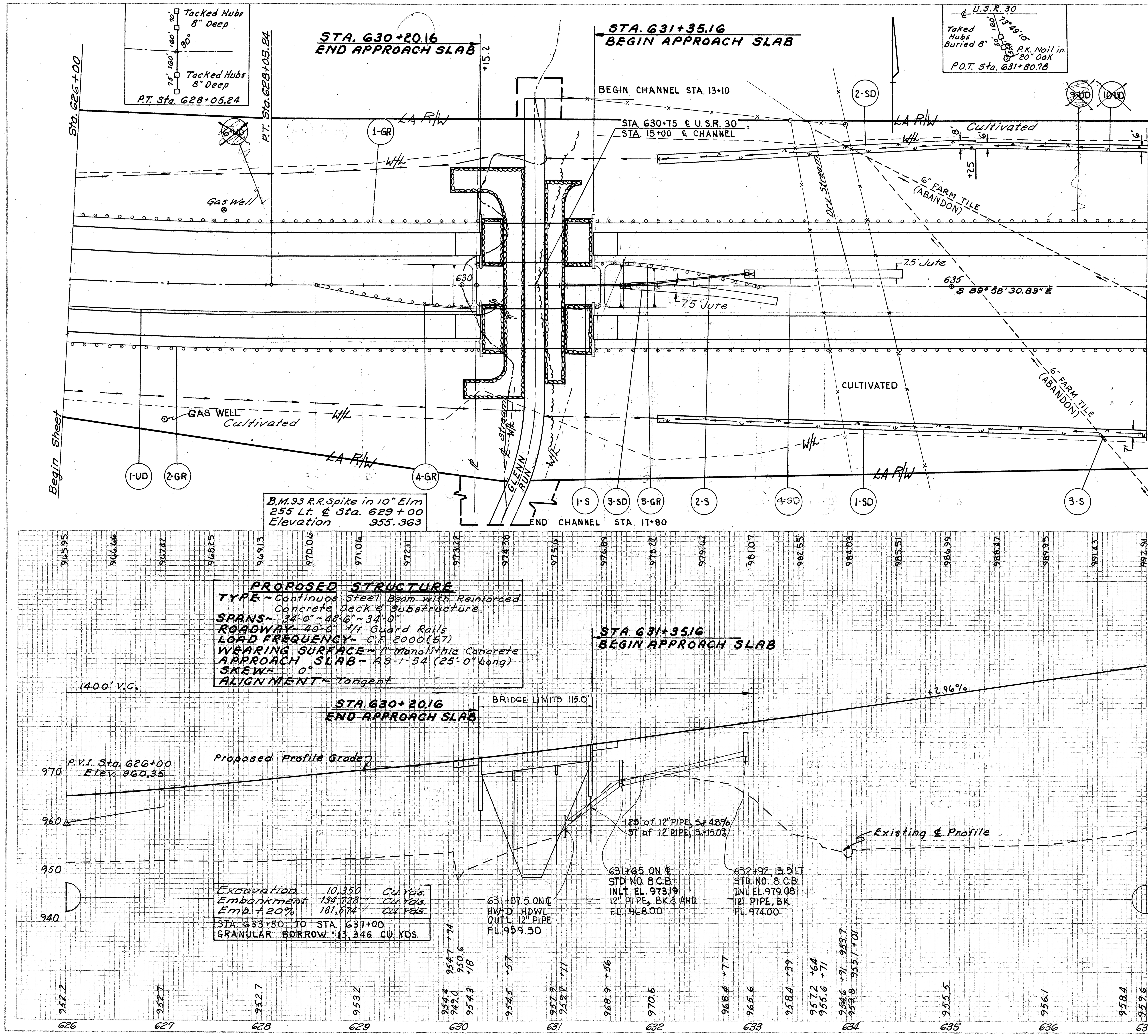
Reference No.	Side	Station From	Station To	I-15 STEEL BEAM GUARD RAIL DEEP LIN.FT.		I-1 12" PIPE CLASS E-1 LIN.FT.	I-1 15" PIPE CLASS J-1 LIN.FT.	I-2 HEADWALL STD. HW-A CU.YDS.	I-8 CATCH BASIN STD. NO. 8 EACH	L-10 SODDING SQ.YDS.	I-10 DUMPED ROCK CHANNEL PROTECTION T=1.5' CU.YDS.	L-120 JUTE MATTING SQ.YDS.	
1-GR	Rt.	617+50	620+00	275									
2-GR	LT.	622+00	626+00	400									
3-GR	RT.	620+23	626+00	600									
4-GR	LT.	615+00	615+97.54	97.54									
1-S	LT.-RT.	619+28.11				15			1	7			
2-S	RT.	619+28.11					93	3.22	1	9			
3-S	RT.-LT.	620+60.10				14			1	7			
4-S	LT.	620+60.10					89	3.22	1	9			
1-SD	LT.	617+71	619+21									125	
2-SD	RT.	617+71	619+21									125	
3-SD	LT.	620+67	622+17									125	
4-SD	RT.	620+67	622+17									125	
1-DR	RT.	619+22	619+32								7		
2-DR	LT.	620+56	620+66								5		
Totals				1372.54		29	182	6.44	4	32	12	500	



Reference No.	Side	Station From	Station To	I-1 6" PIPE CLASS I-3 SHALLOW LIN. FT.	I-1 6" PIPE CLASS I-3 DEEP LIN. FT.	I-1 6" PIPE CLASS I-3 SEC. M-6.4(h) LIN. FT.	I-1 6" PIPE OUTLET CLASS F-4 LIN. FT.	I-1	I-5 PIPE SPECIALS CLASS I-3		I-5 PIPE SPECIALS CLASS I-3 6"x6"-60° WYE SEC. M-6.4(h) EACH	I-5 PIPE SPECIALS CLASS I-3 6"x6" TEE SEC. M-6.4(h) EACH		
2-UD	RT.	615+00	616+88	188										
3-UD	RT.	616+88	619+28			255	10				1			
4-UD	RT.	619+30	620+60			134	10					1		
5-UD	RT.	620+60	626+00	400	140									
Totals				588	140	389	20				1	1		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	34 / 198

ASD-30-8.52
WAY-30-0.00



Reference No.	Side	Station From	Station To	I-15 GUARD RAIL STEEL BEAM DEEP LIN. FT.		I-1 8" PIPE CLASS F-4 Sec. M-6.4(c) LIN. FT.	I-1 PIPE CLASS C-1 12" LIN. FT.	I-2 HEADWALL STD. HW-D CU. YDS.	I-8 CATCH BASIN STD. NO. 8 EACH	L-10 SODDING SQ. YDS.	L-120 JUTE MATTING SQ. YDS.
1-GR.	LT.	626+00	637+00	985.0	*						
2-GR.	RT.	626+00	637+00	985.0	*						
4-GR.	RT.	628+50.52	631+37.04	172.50							
5-GR.	LT.	630+18.29	633+04.81	172.50							
1-S	℄	631+07.5	631+65				58	.65	1	9	
2-S	℄ - LT	631+65	631+92				127		1	7	
3-S	RT.	636+55				10					
1-SD	RT.	632+00	637+00							407	
2-SD	LT.	632+00	637+00							464	
3-SD	RT.	631+72	633+32								125
4-SD	LT.	633+00	634+50								125
TOTALS				2315.0		10	185	0.65	2	887	250

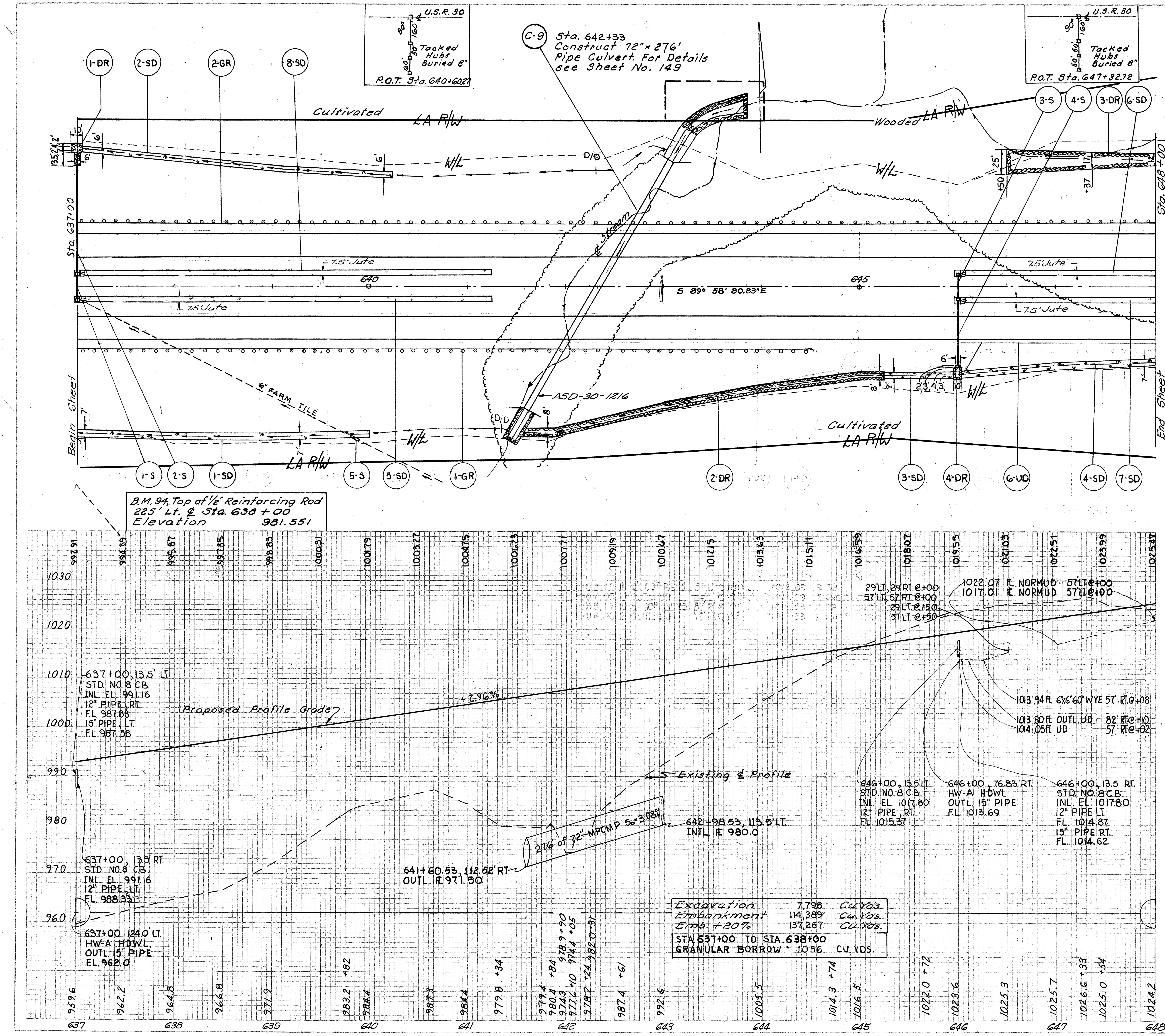
* NET LENGTH AFTER DEDUCTING STRUCTURE LIMITS.

Reference No.	Side	Station From	Station To	I-1 6" PIPE CLASS I-3 SHALLOW LIN. FT.
1-UD	RT.	626+00	630+12	412'
TOTALS				412

Sta. 626+00 to Sta. 637+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00



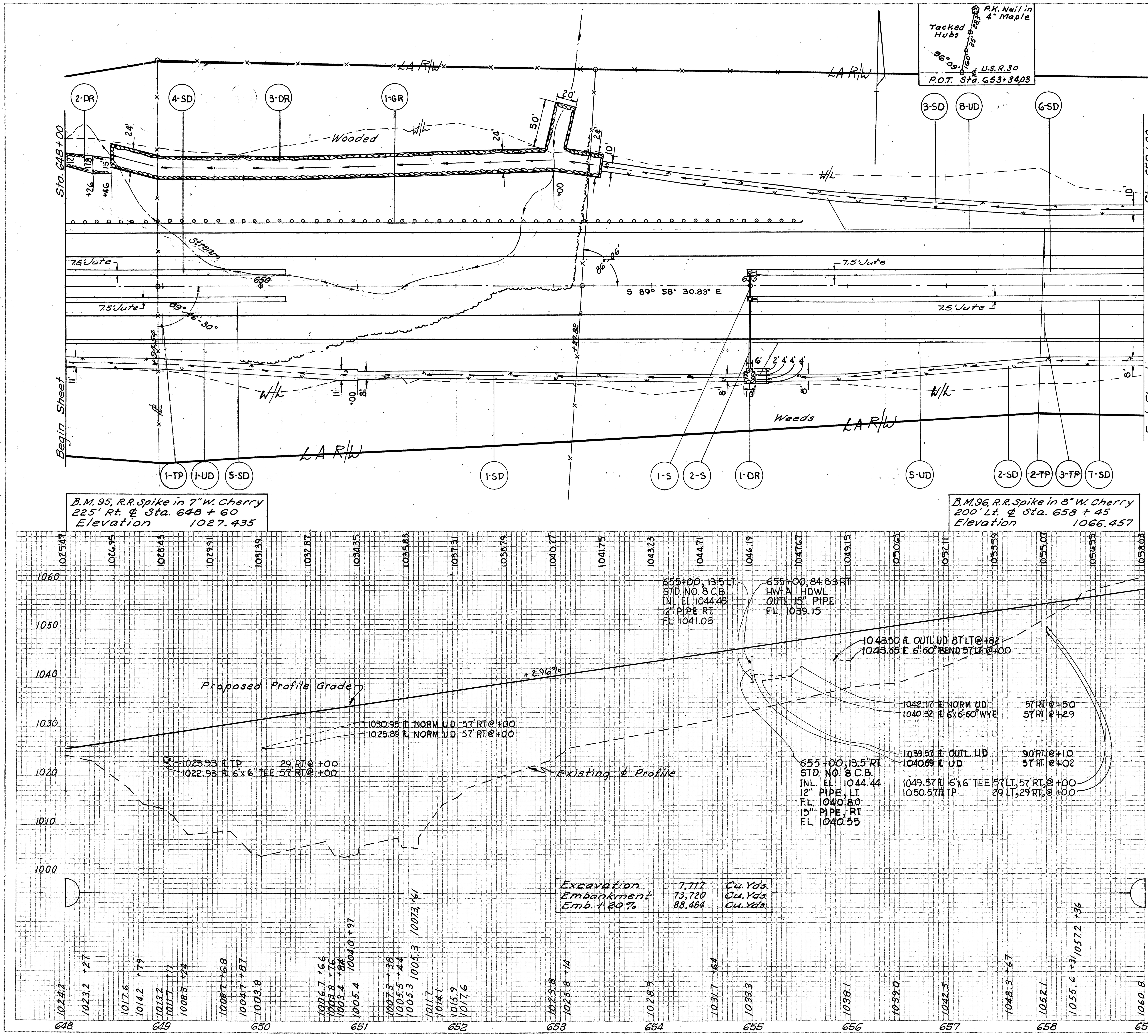
Reference No.	Side	Station From	Station To	I-15 GUARD RAIL STEEL BEAM DEEP LIN. FT.	I-10 DUMPED ROCK FILL T=1.5' CU. YDS.	I-1 PIPE CLASS E-1 12" LIN. FT.	I-1 PIPE CLASS E-4 15" LIN. FT.	I-1 15" PIPE, CLASS J-1 LIN. FT.	I-2 HEADWALL STD. HW-A CU. YDS.	I-5 15"-25° BEND CLASS F-4 EACH	I-8 CATCH BASIN STD. NO. 8 EACH	L-10 SODDING SQ. YDS.	I-10 DUMPED ROCK CHANNEL PROTECTION T=1.5' CU. YDS.
1-GR	RT.	637+00	644+50	750.00									
2-GR	LT.	637+00	648+00	1100									
1-S	RT.→LT.	637+00				27 ✓					1	7	
2-S	LT.	637+00					61 ✓	55 ✓	3.22	2	1	9	
3-S	LT.→RT.	646+00				27 ✓					1	7	
4-S	RT.	646+00						65 ✓	3.22		1	9	
1-SD	RT.	637+00	640+00									246	
2-SD	LT.	637+04	640+25									226	
3-SD	RT.	645+25	645+94									55	
4-SD	RT.	646+04	648+00									156	
1-DR	LT.	636+94	637+04										10
2-DR	RT.	641+58	645+25										173
3-DR	LT.	646+50	648+00										151
4-DR	RT.	645+94	646+04										7
TOTALS				1850		54 ✓	61 ✓	120 ✓	6.44 ✓	2 ✓	4 ✓	711.5 ✓	341 ✓

Reference No.	Side	Station From	Station To	L-120 JUTE MATTING SQ. YDS.		I-1 6" PIPE CLASS I-3 DEEP LIN. FT.		I-1 8" PIPE OUTLET CLASS F-4 Sec. M-6A(C) LIN. FT.	I-5 PIPE SPECIALS CLASS I-3 6"x6"-60° WYE EACH				
5-S	RT.	639+85											
8-SD	LT.	637+07	641+25	348									
5-SD	RT.	637+07	641+25	348									
6-SD	LT.	646+07	648+00	161									
7-SD	RT.	646+07	648+00	161									
6-UD	RT.	646+02	648+00			227		10	1				
TOTALS				1018		227		10	1				

Sta. 637+00 to Sta. 648+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

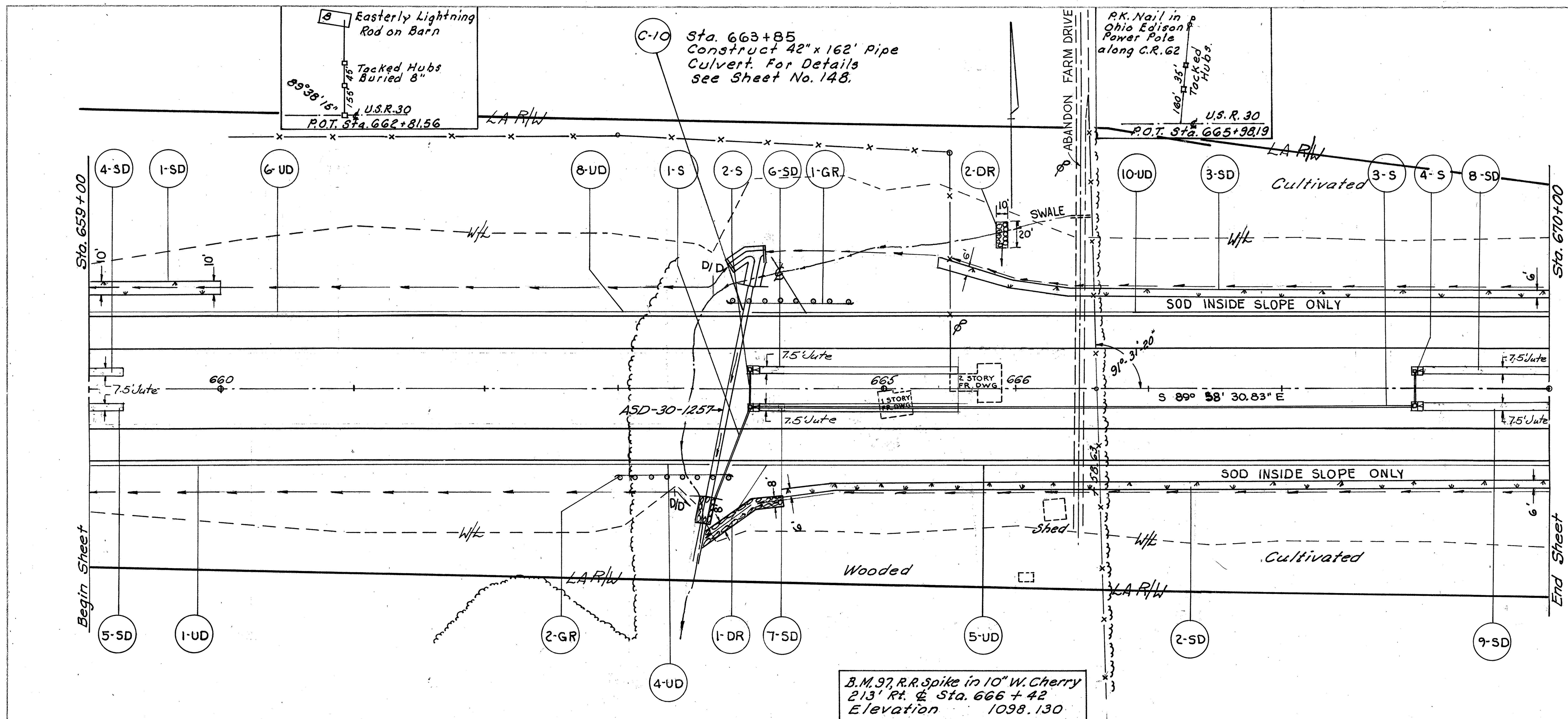
ASD-30-8.52
WAY-30-0.00

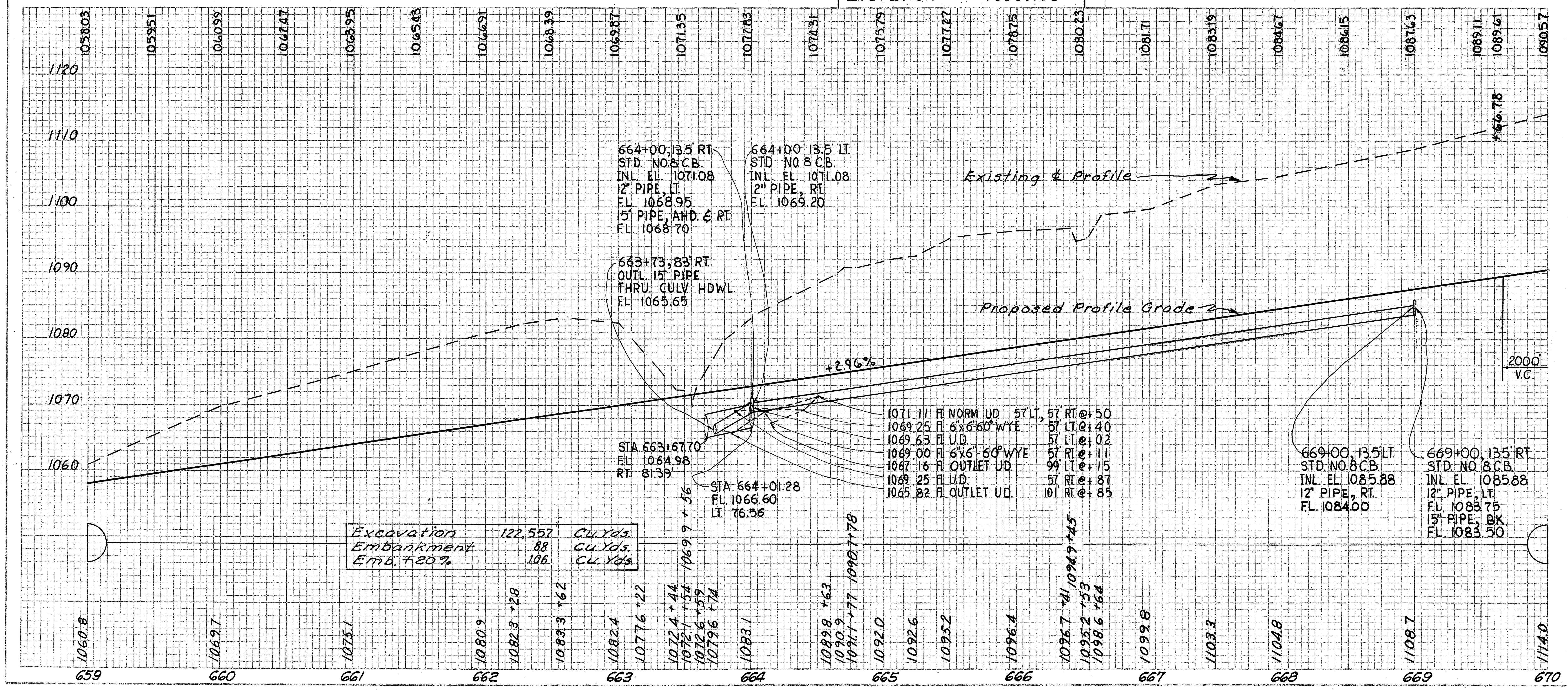


Reference No.	Side	Station From	Station To	I-1 PIPE CLASS E-1 12" (LIN FT.)	I-1 15" PIPE, CLASS J-1 (LIN. FT.)	I-2 HEADWALL STD. HW-A (CU. YDS.)	I-8 CATCH BASIN STD. NO. 8 (EACH)	L-10 SODDING (SQ YDS)	I-10 DUMPED ROCK CHANNEL PROTECTION T=1.5' (CU. YDS)	I-10 DUMPED ROCK FILL T=1.5' (CU. YDS)	I-15 STEEL BEAM GUARD RAIL DEEP (LIN. FT.)	L-120 JUTE MATTING (SQ. YDS.)
1-GR	LT.	648+00	655+50								750	
1-S	LT.-RT.	655+00		27			1	7				
2-S	RT.	655+00			71	3.22	1	9				
1-SD	RT.	651+25	654+94					723				
2-SD	RT.	655+04	659+00					358				
3-SD	LT.	653+50	659+00					616				
4-SD	LT.	648+00	650+25									188
5-SD	RT.	648+00	650+25									188
6-SD	LT.	655+07	659+00									328
7-SD	RT.	655+07	659+00									328
1-DR	RT.	654+94	655+04						6			
2-DR	LT.	648+00	648+46						45			
3-DR	LT.	648+46	653+50						744			
TOTALS				27	71	3.22	2	1713	795		750	1032

Reference No.	Side	Station From	Station To		I-1 6" PIPE CLASS I-3 DEEP (LIN. FT.)		I-1 8" PIPE OUTLET CLASS F-4 Sec. M-6.4(c) (LIN. FT.)	I-5 PIPE SPECIALS CLASS I-3: 6"-60° BEND (EACH)	I-5 PIPE SPECIALS CLASS I-3: 6"x6"-60° WYE (EACH)	I-5 PIPE SPECIALS CLASS I-3: 6"x6" TEE SEC. M-6.4(h) (EACH)	I-1 6" PIPE CLASS I-3 SEC. M-6.4(h) (LIN. FT.)
1-UD	RT.	648+00	651+00		300						
5-UD	RT.	655+02	659+00		426		10		1		
8-UD	LT.	655+82	659+00		325		10	1			
1-TP	RT.	649+00								1	28
2-TP	LT.	658+00								1	28
3-TP	RT.	658+00								1	28
TOTALS					1051		20	1	1	3	84

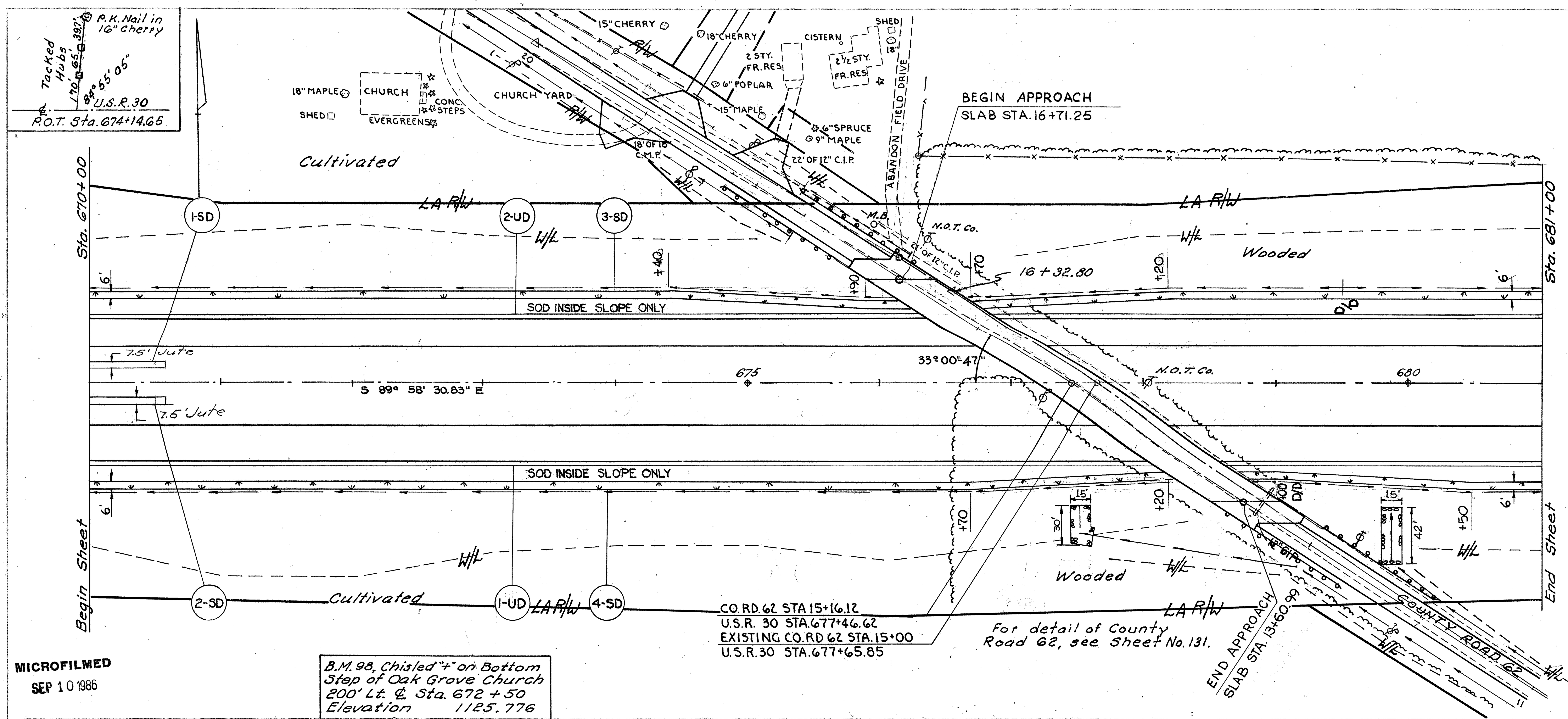
ASD-30-8.52
WAY-30-0.00





Reference No.	Side	Station From	Station To	I-1 Pipe Class E-1 12" (Lin. Ft.)	I-1 Pipe Class E-1 15" (Lin. Ft.)	I-1 15" Pipe, Class J-1 (Lin. Ft.)	I-8 Catch Basin Std. No. 8 (Each)	L-10 Sodding (Sq. Yds.)	I-10 Dumped Rock Channel Protection T=1.5' (Cu. Yds.)	I-10 Dumped Rock Fill T=1.5' (Cu. Yds.)	I-15 Steel Beam Guard Rail Deep (Lin. Ft.)	L-120 Jute Matting (Sq. Yds.)
1-S	RT.	663+73	664+00			75	1	7				
2-S	LT.→RT.	664+00		27			1	7				
3-S	RT.	664+00	669+00		500		1	7				
4-S	LT.→RT.	669+00		27			1	7				
1-GR	LT.	663+86	664+73.5								87.5	
2-GR	RT.	663+01	663+88.5								87.5	
1-SD	LT.	659+00	660+00					112				
2-SD	RT.	664+25	670+00					389				
3-SD	LT.	665+50	670+00					306				
1-DR	RT.	663+62	664+25						31			
2-DR	LT.	665+90							12			
4-SD	LT.	659+00	659+25									21
5-SD	RT.	659+00	659+25									21
6-SD	LT.	664+07	665+57									125
7-SD	RT.	664+07	665+57									125
8-SD	LT.	669+07	670+00									78
9-SD	RT.	669+07	670+00									78
TOTALS				54	500	75	4	835	43		175.0	448

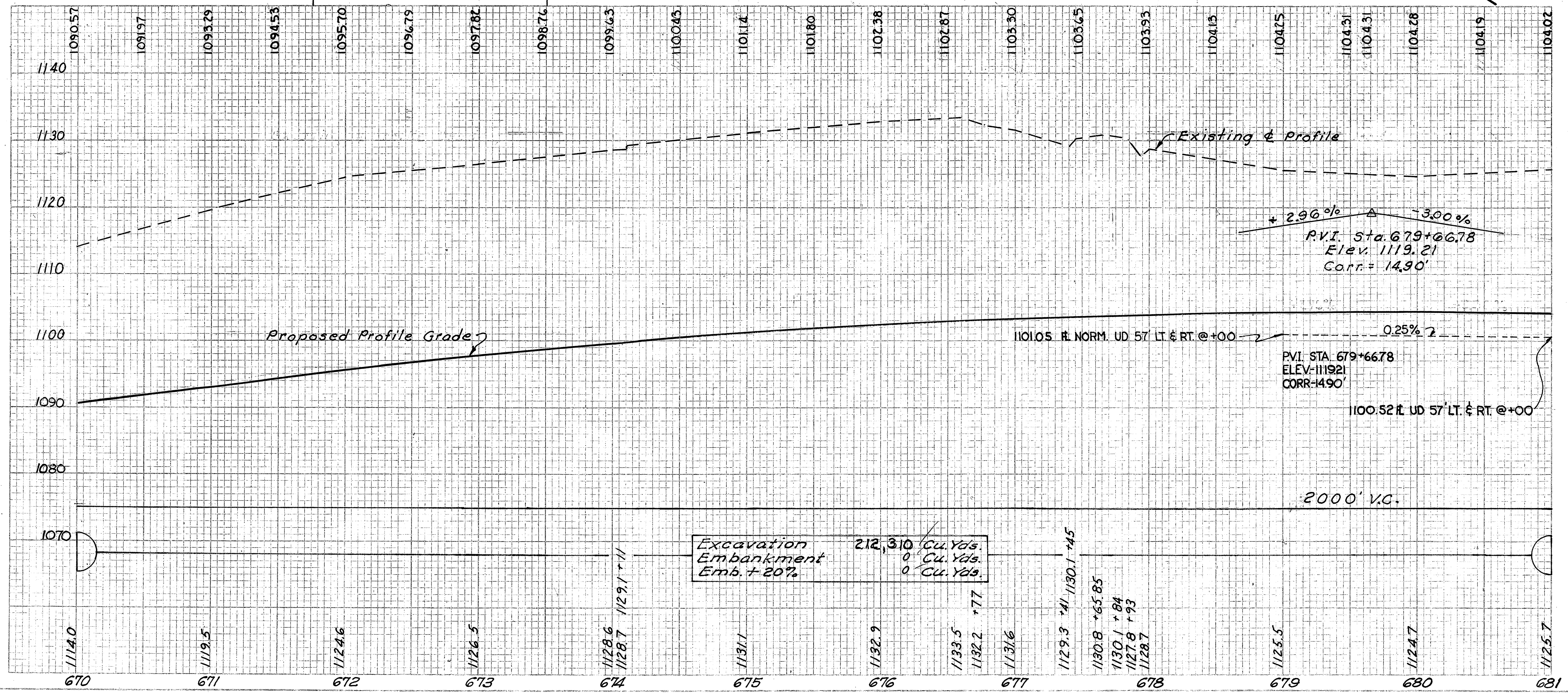
Reference No.	Side	Station From	Station To	I-1 6" Pipe Class I-3 Deep (Lin. Ft.)	I-1 6" Pipe Class I-3 Sec. M-6.4(h) (Lin. Ft.)	I-1 8" Pipe Outlet Class F-4 Sec. M-6.4(c) (Lin. Ft.)	I-5 Pipe Specials Class I-3 6"x6"-60° WYE Sec. M-6.4(h) (Each)
1-UD	RT	659+00	663+00	400			
4-UD	RT.	663+00	663+69		69		
5-UD	RT.	663+85	670+00		654	10	1
6-UD	LT.	659+00	663+00	400			
8-UD	Lt.	663+00	663+93		93		
10-UD	LT.	664+02	670+00		637	10	1
TOTALS				800	1453	20	2



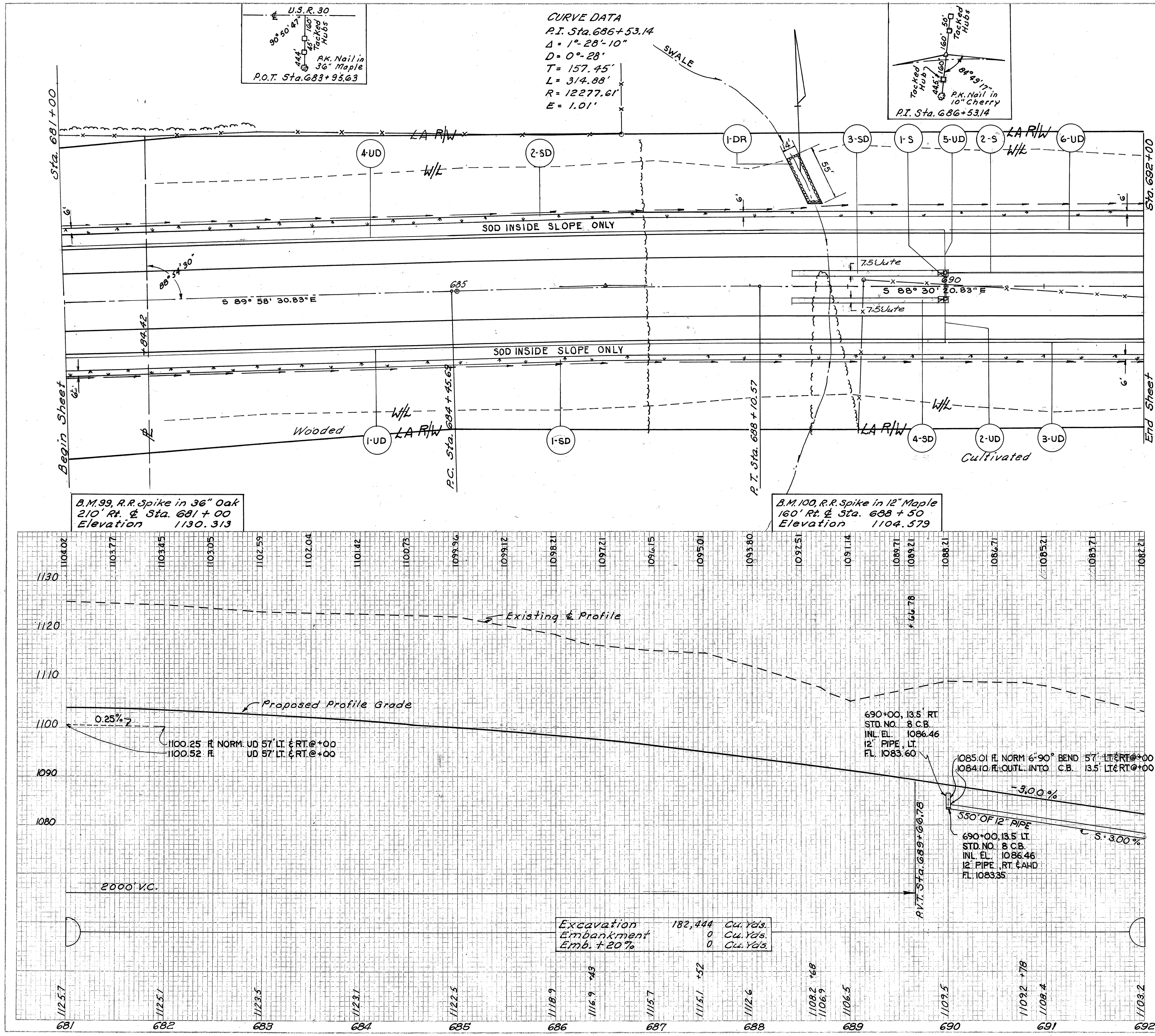
MICROFILMED
SEP 10 1986

B.M. 98, Chisled "+" on Bottom Step of Oak Grove Church 200' Lt. ℄ Sta. 672 + 50 Elevation 1125.776

Reference No.	Side	Station From	Station To	I-15 STEEL BEAM GUARD RAIL DEEP LIN.FT.	L-10 SODDING SQ.YDS.	L-120 JUTE MATTING SQ.YDS.
1-SD	LT.	670+00	670.57			48
2-SD	RT.	670+00	670+57			48
3-SD	LT.	670+00	681+00		744	
4-SD	RT.	670+00	681+00		744	
TOTALS					1488	96



REFERENCE NO.	SIDE	STATION FROM	STATION TO	I-1 6" PIPE CLASS - I-3 SEC. M-6.4 (h) LIN.FT.
1-UD	RT.	670 +00	681+00	11 00
2-UD	LT.	670 +00	681+00	11.00
TOTALS				2200

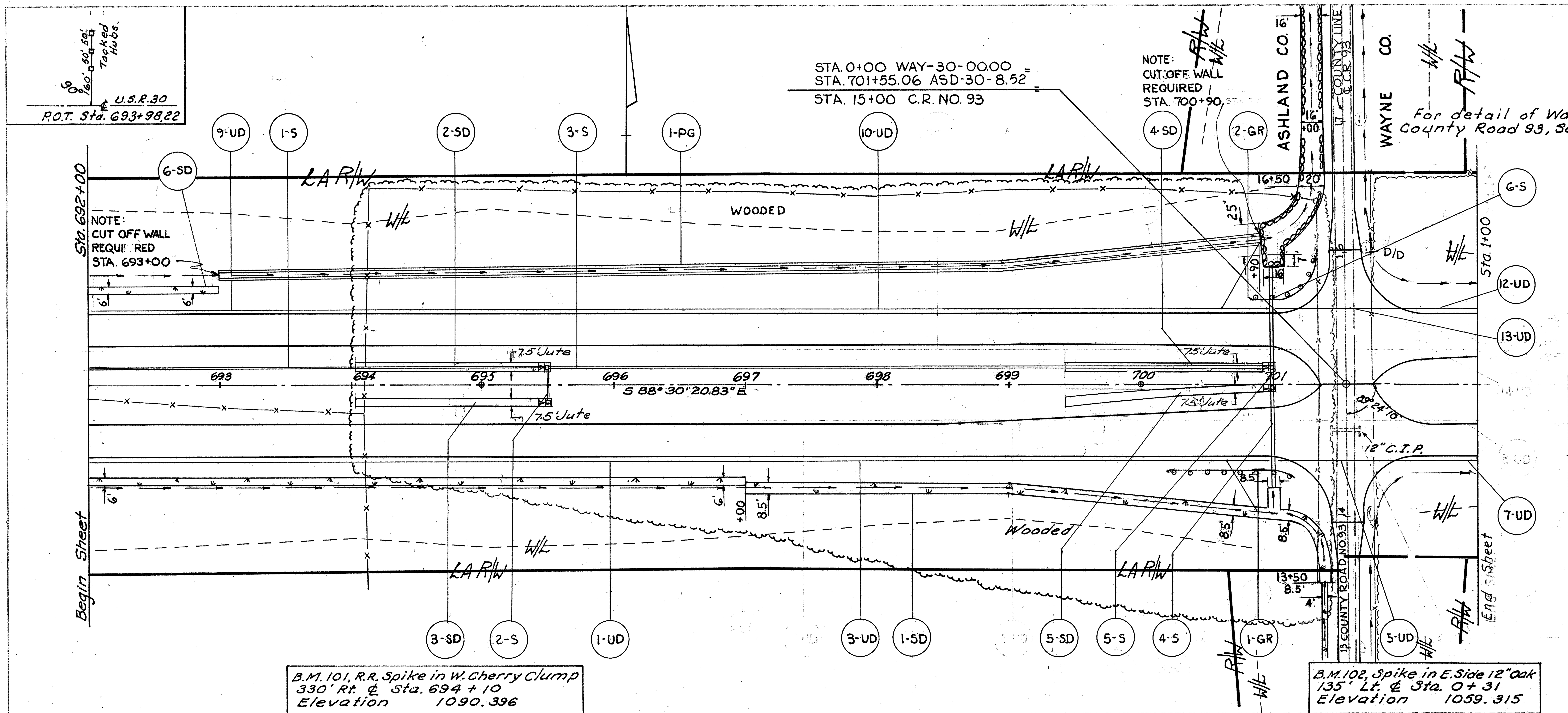


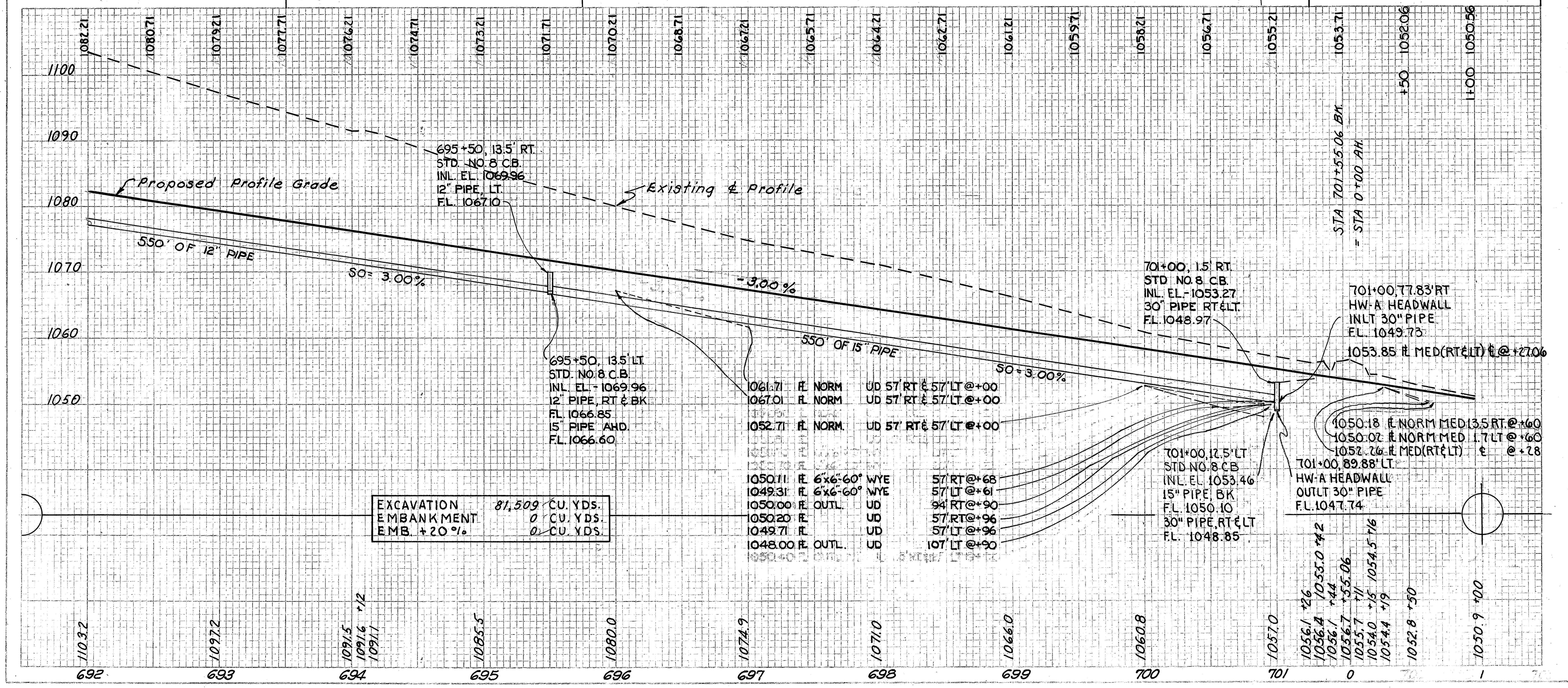
Reference No.	Side	Station From	Station To	I-1 PIPE CLASS E-1 12" (LIN FT.)	I-8 CATCH BASIN STD. NO. 8 (EACH)	L-10 SODDING (SQ. YDS.)	I-10 DUMPED ROCK CHAN. PROT. T = 1.5' (CU. YDS.)	I-14 PAVED GUTTER STD. TYPE 1 (MOD) 4' BOTT., 1' HIGH (LIN FT.)	L-120 JUTE MATTING (SQ. YDS.)
1-S	RT.-LT.	690+00		27	1	7			
2-S	LT.	690+00	692+00	200	1	7			
1-SD	RT.	681+00	692+00			744			
2-SD	LT.	681+00	692+00			744			
3-SD	LT	688+	689+93			[illegible]			125
4-SD	RT.	688+	689+93			[illegible]			125
1-DR.	LT.	688+70					48		
TOTALS				227	2	1502	48		250

REFERENCE NO.	SIDE	STATION FROM	STATION TO	I-1 6" PIPE CLASS I-3 SEC. M-6.4(h) (LIN. FT.)	I-1 6" PIPE CLASS J-1 (LIN. FT.)	I-1 6" PIPE OUTLET CLASS F-4 (LIN. FT.)	I-5 PIPE SPECIALS CLASS I-3 Sec. M-6.4(h) 6" 90° BEND (EACH)
1 UD	RT.	681+00	690+00	900			
2 UD	RT.	690+00			34	10	1
3 UD	RT.	690+04	692+00	196			
4 UD	LT.	681+00	690+00	900			
5 UD	LT.	690+00			34	10	1
6 UD	LT.	690+04	692+00	196			
TOTALS				2192	68	20	2

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(B)	40 / 198

ASD-30-8.52
WAY-30-0.00

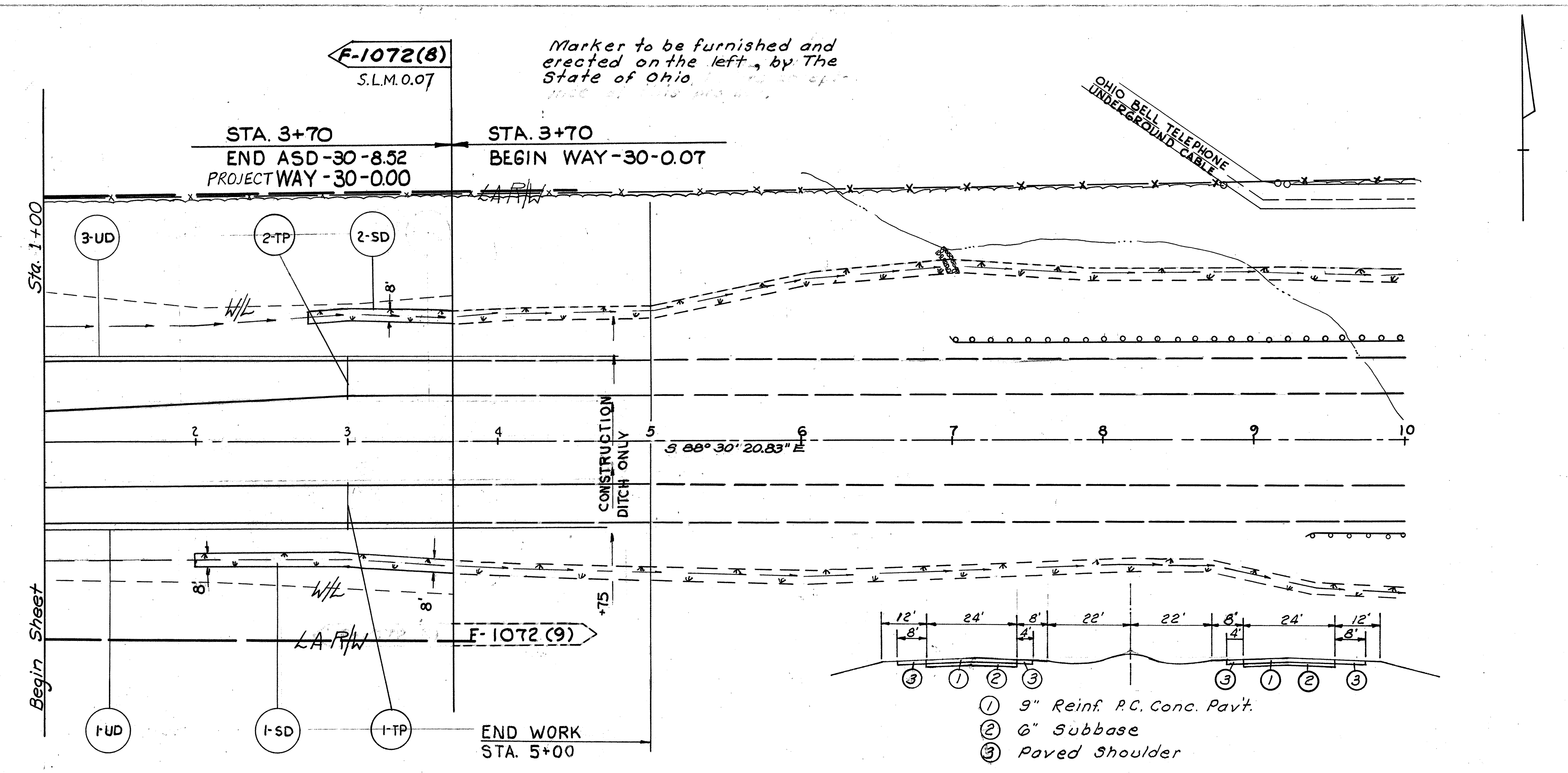




Reference No.	Side	Station From	Station To	I-1 Pipe Class E-1 12" (Lin. Ft.)	I-1 Pipe Class E-1 15" (Lin. Ft.)	I-1 30" Pipe, Class A-1 Sec. M6.6(a), Sec. M6.6(b), Sec. M6.8(b) (Lin. Ft.)	I-2 Headwall Std. HW-A (Cu. Yds.)	I-8 Catch Basin Std. No. 8 (Each)	L-10 Sodding (Sq. Yds.)	I-14 Paved Gutter Std. Type "I" (Mod.) 4' Bott., 1' High (Lin. Ft.)	I-15 Steel Beam Guard Rail Deep (Lin. Ft.)	L-120 Jute Matting (Sq. Yds.)
1-S	LT	692+00	695+50	350								
2-S	RT-LT	695+50		27				11	7			
3-S	LT	695+50	701+00		550			1	7			
4-S	RT	701+00				77	5.40		9			
5-S	RT-LT	701+00				14		1				
6-S	LT	701+00				77	5.40	1	9			
1-SD	RT	692+00	701+04						734			
2-SD	LT	693+93	695+43						[illegible]			125
3-SD	RT	693+93	695+43						[illegible]			125
4-SD	LT	699+43	700+93						[illegible]			125
5-SD	RT	699+43	700+93						[illegible]			125
6-SD	LT	692+00	693+00						67			
1-PG	LT	693+00	700+90						264	790		
1-GR	RT	700+25	701+10								87.5	
2-GR	LT	700+87.5	701+31								62.5	
TOTALS				377	550	168	10.80	4	1097	790	150.0	500

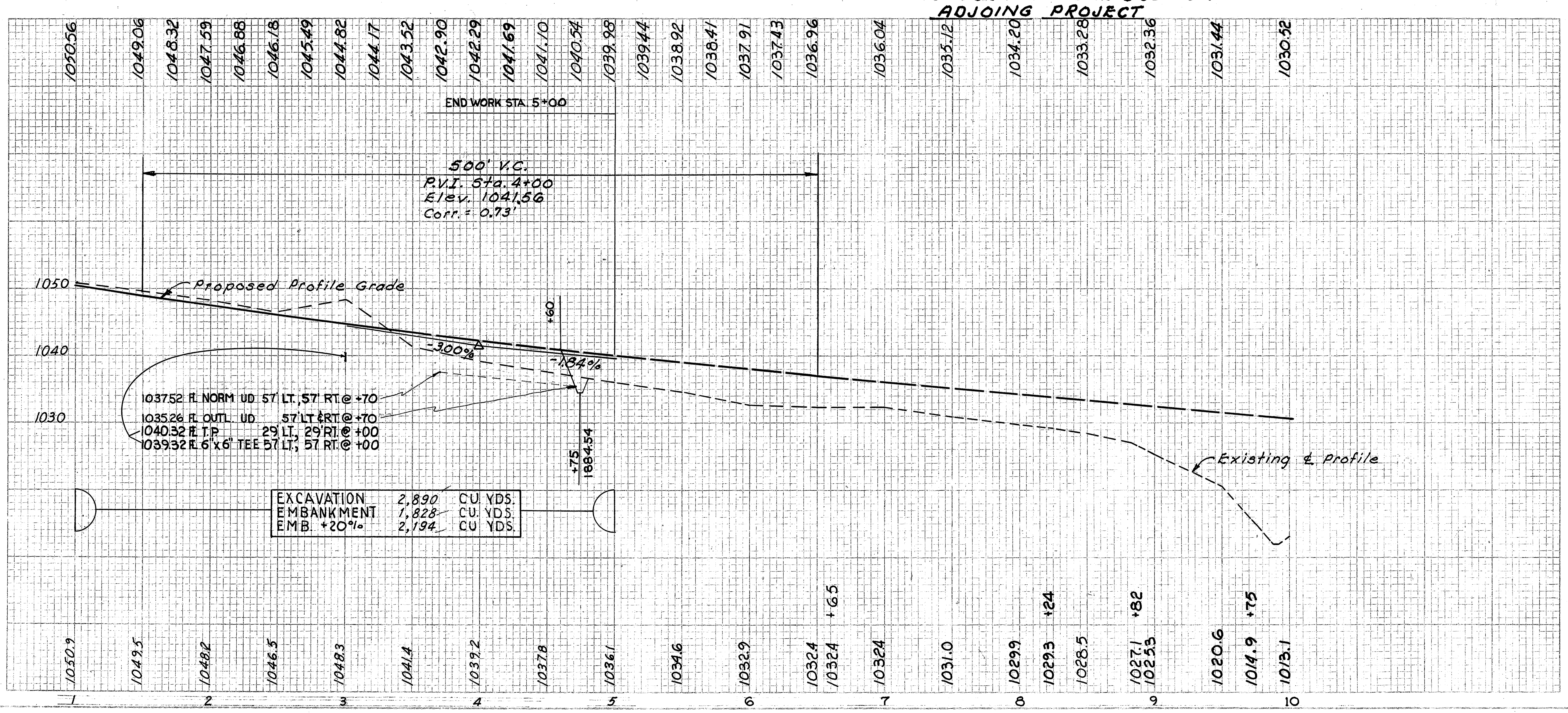
Reference No.	Side	Station From	Station To	I-1 6" Pipe Class I-3 Deep (Lin Ft)	I-1 6" Pipe Class I-3 Sec. M-6.4(h) (Lin Ft)	I-1 8" Pipe Outlet Class F-A Sec. M-6.4(c) (Lin Ft)	I-5 Pipe Specials Class I-3 6"×6"-60° WYE (Each)
1-UD	RT	692+00	697+00		500		
3-UD	RT	697+00	700+96	429		10	1
5-UD	RT	701+04	0+53		104		
7-UD	RT	0+53	1+00	47			
9-UD	LT	692+00	697+00		500		
10-UD	LT	697+00	700+96	444		10	1
12-UD	LT	0+61	1+00	39			
13-UD	LT	701+04	0+61		112		
TOTALS				959	1216	20	2

Sta. 692+00 to Sta. 701+55.06



PROPOSED TYPICAL SECTION
ADJOINING PROJECT

REFERENCE NO.	SIDE	STATION FROM	STATION TO	L-10 SODDING SQ.YDS.		I-1 6" PIPE CLASS I-3 DEEP LIN.FT.		I-1 6" PIPE CLASS I-3 SEC. M-6.4(h) EACH	I-5 PIPE SPECIALS CLASS I-3 6"x6" TEE SEC. M-6.4(I) LIN. FT.
1-SD	RT	2+00	3+70	152					
2-SD	LT	2+75	3+70	85					
1-UD	RT.	1+00	4+70			370			
3-UD	LT.	1+00	4+70			370			
1-TP	RT.	3+00						28	1
2-TP	LT.	3+00						28	1
TOTALS				237		740		56	2



SUPERELEVATION TABLES

ASD. -30 - 8.52
WAY. -30 - 0.00

STA. 615 + 72.50 TO 629 + 76.24

W.B.P. / E.B.P.

℄ PAV'T ELEV. (W.B.P.)	LEFT EDGE ELEV.	DEDUCT FR. RT. EDGE	RIGHT EDGE ELEV.	STATION	LEFT EDGE ELEV.	ADD TO LEFT EDGE	RIGHT EDGE ELEV.	℄ PAV'T ELEV. (E.B.P.)
963.01	962.82	-0.00	962.82	615+72.50	962.82	+0.00	962.82	963.01
962.99	962.80	-0.01	962.81	+75	962.81	+0.01	962.82	963.00
962.88	962.69	-0.06	962.75	616+00	962.75	+0.06	962.81	962.94
962.75	962.56	-0.13	962.69	+25	962.69	+0.13	962.82	962.88
962.63	962.44	-0.19	962.63	616+47.50	962.63	+0.19	962.82	962.89
962.62	962.43	-0.20	962.63	+50	962.63	+0.20	962.83	962.89
962.35	962.16	-0.38	962.54	+85.50	962.54	+0.38	962.92	962.73
	962.06	-0.45	962.51	617+00	962.51	+0.45	962.96	
	961.87	-0.58	962.45	+25	962.45	+0.58	963.03	
	961.74	-0.67	962.41	+43.50	962.41	+0.67	963.08	
	961.69	-0.70	962.39	+50	962.39	+0.70	963.09	
	961.50	-0.83	962.33	+75	962.33	+0.83	963.16	
	961.32	-0.95	962.27	618+00	962.27	+0.95	963.22	
	961.13	-1.08	962.21	+25	962.21	+1.08	963.29	
	961.03	-1.15	962.18	+39.50	962.18	+1.15	963.33	
	961.00		962.15	+50	962.15		963.30	
	960.94		962.09	+75	962.09		963.24	
	960.88		962.03	619+00	962.03		963.18	
	960.83		961.98	+25	961.98		963.13	
	960.79		961.94	+50	961.94		963.09	
	960.76		961.91	+75	961.91		963.06	
	960.75		961.90	+94	961.90		963.05	
	960.75		961.90	620+00	961.90		963.05	
	960.76		961.91	+05	961.91		963.06	
	960.76		961.91	+25	961.91		963.06	
	960.78		961.93	+50	961.93		963.08	
	960.81		961.96	+75	961.96		963.11	
	960.86		962.01	621+00	962.01		963.16	
	960.92		962.07	+25	962.07		963.22	
	960.99		962.14	+50	962.14		963.29	
	961.08		962.23	+75	962.23		963.38	
	961.18		962.33	622+00	962.33		963.48	
	961.31		962.46	+25	962.46		963.61	
	961.44		962.59	+50	962.59		963.74	
	961.59		962.74	+75	962.74		963.89	
	961.75		962.90	623+00	962.90		964.05	
	961.92		963.07	+25	963.07		964.22	
	962.11		963.26	+50	963.26		964.41	
	962.32		963.47	+75	963.47		964.62	
	962.54		963.69	624+00	963.69		964.84	
	962.77		963.92	+25	963.92		965.07	
	963.02		964.17	+50	964.17		965.32	
	963.55		964.70	625+00	964.70		965.85	
	963.84		964.99	+25	964.99		966.14	
	964.15		965.30	+50	965.30		966.45	
	964.47		965.62	+75	965.62		966.77	
	964.80		965.95	626+00	965.95		967.10	
	965.15		966.30	+25	966.30		967.45	
	965.51		966.66	+50	966.66		967.81	
	965.88		967.03	+75	967.03		968.18	
	966.27		967.42	627+00	967.42		968.57	
	966.42	-1.15	967.57	+09.24	967.57	+1.15	968.72	
	966.76	-1.07	967.83	+25	967.83	+1.07	968.90	
	967.31	-0.94	968.25	+50	968.25	+0.94	969.19	
	967.86	-0.82	968.68	+75	968.68	+0.82	969.50	
	968.44	-0.69	969.13	628+00	969.13	+0.69	969.82	
	968.56	-0.67	969.23	+05.24	969.23	+0.67	969.90	
	969.02	-0.57	969.59	+25	969.59	+0.57	970.16	
	969.62	-0.44	970.06	+50	970.06	+0.44	970.50	
970.13	969.94	-0.38	970.32	+63.24	970.32	+0.38	970.70	970.51
970.42	970.23	-0.32	970.55	+75	970.55	+0.32	970.87	970.74
971.06	970.87	-0.19	971.06	629+00	971.06	+0.19	971.25	971.25
971.09	970.90	-0.19	971.09	+01.24	971.09	+0.19	971.28	971.28
971.64	971.45	-0.13	971.58	+25	971.58	+0.13	971.71	971.77
972.23	972.04	-0.07	972.11	+50	972.11	+0.07	972.18	972.30
972.85	972.66	-0.00	972.66	+75	972.66	+0.00	972.66	972.75
972.88	972.69	-0.00	972.69	+76.24	972.69	+0.00	972.69	972.88

STA. 595+50 TO STA. 607+99.64

W.B.P. / E.B.P.

℄ PAV'T ELEV. (W.B.P.)	LEFT EDGE ELEV.	ADD TO RIGHT EDGE	RIGHT EDGE ELEV.	STATION	LEFT EDGE ELEV.	DEDUCT FR. LEFT EDGE	RIGHT EDGE ELEV.	℄ PAV'T ELEV. (E.B.P.)
966.70	966.51	+0.00	966.51	595+50	966.51	-0.00	966.51	
966.71	966.56	+0.04	966.52	+58.03	966.52		966.52	
966.73	966.64	+0.10	966.54	+70	966.54		966.54	
966.73	966.67	+0.13	966.54	+75	966.54		966.54	
966.74	966.71	+0.16	966.55	+81.09	966.55		966.55	
966.76	966.81	+0.24	966.57	+97	966.57		966.57	
966.76	966.82	+0.25	966.57	596+00	966.57		966.57	
966.78	966.93	+0.34	966.59	+18.47	966.59		966.59	
966.78	966.94	+0.35	966.59	+20	966.59		966.59	
966.78	966.96	+0.37	966.59	+24	966.59		966.59	
966.79	966.98	+0.375	966.60	+25	966.60		966.60	
966.79	966.98	+0.38	966.60	+26	966.60		966.60	
	967.02	+0.42	966.60	+33.42	966.60		966.60	
	967.03	+0.43	966.60	+36.97	966.60		966.60	
	967.09	+0.49	966.60	+48.37	966.60		966.60	
	967.10	+0.50	966.60	+50	966.60	-0.00	966.60	966.79
	967.26	+0.63	966.63	+75	966.63	-0.13	966.50	966.69
	967.39	+0.75	966.64	597+00	966.64	-0.25	966.39	966.58
	967.53	+0.88	966.65	+25	966.65	-0.375	966.27	966.46
	967.53	+0.88	966.65	+26	966.65	-0.38	966.27	966.46
	967.66	+1.00	966.66	+50	966.66	-0.50	966.16	
	967.79	+1.13	966.66	+75	966.66	-0.63	966.03	
	967.81	+1.15	966.66	+80	966.66	-0.65	966.01	
	967.80		966.65	598+00	966.65	-0.75	965.90	
	967.80		966.65	+25	966.65	-0.88	965.77	
	967.79		966.64	+50	966.64	-1.00	965.64	
	967.78		966.63	+70	966.63	-1.10	965.53	
	967.78		966.63	+75	966.63	-1.13	965.50	
	967.78		966.63	+80	966.63	-1.15	965.48	
	967.77		966.62	+88	966.62		965.47	
	967.76		966.61	599+00	966.61		965.46	
	967.74		966.59	+25	966.59		965.44	
	967.71		966.56	+50	966.56		965.41	
	967.68		966.53	+75	966.53		965.38	
	967.65		966.50	600+00	966.50		965.35	
	967.62		966.47	+25	966.47		965.32	
	967.58		966.43	+50	966.43		965.28	
	967.53		966.38	+75	966.38		965.23	
	967.48		966.33	601+00	966.33		965.18	
	967.43		966.28	+25	966.28		965.13	
	967.38		966.23	+50	966.23		965.08	
	967.32		966.17	+75	966.17		965.02	
	967.26		966.11	602+00	966.11		964.96	
	967.20		966.05	+25	966.05		964.90	
	967.14		965.99	+50	965.99		964.84	
	967.08		965.93	+75	965.93		964.78	
	967.02		965.87	603+00	965.87		964.72	
	966.96		965.81	+25	965.81		964.66	
	966.90		965.75	+50	965.75		964.60	
	966.83		965.69	+75	965.69		964.54	
	966.78		965.63	604+00	965.63		964.48	
	966.72		965.57	+25	965.57		964.42	
	966.66		965.51	+50	965.51		964.36	
	966.60		965.45	+75	965.45		964.30	
	966.54		965.39	605+00	965.39		964.24	
	966.48		965.33	+25	965.33		964.18	
	966.46	+1.15	965.31	+32.64	965.31	-1.15	964.16	
	966.33	+1.06	965.27	+50	965.27	-1.06	964.21	
	966.15	+0.94	965.21	+75	965.21	-0.94	964.27	
	965.96	+0.81	965.15	606+00	965.15	-0.81	964.34	
	965.78	+0.69	965.09	+25	965.09	-0.69	964.40	
	965.75	+0.67	965.08	+28.64	965.08	-0.67	964.41	
	965.75	+0.67	965.08	+29	965.08	-0.67	964.41	
	965.59	+0.56	965.03	+50	965.03	-0.56	964.47	
	965.41	+0.44	964.97	+75	964.97	-0.44	964.53	
965.13	965.32	+0.38	964.94	+86.64	964.94	-0.38	964.56	964.75
965.10	965.22	+0.31	964.91	607+00	964.91	-0.31	964.60	964.79
965.04	965.04	+0.19	964.85	+24.64	964.85	-0.19	964.66	964.85
965.04	965.04	+0.19	964.85	+25	964.85	-0.19	964.66	964.85
964.98	964.91	+0.12	964.79	+50	964.79	-0.12	964.67	964.86
964.92	964.79	+0.06	964.73	+75	964.73	-0.06	964.67	964.86
964.86	964.67	+0.00	964.67	+99.64	964.67	-0.00	964.67	964.86

TEMPORARY CONNECTION "S"

P.I.~Sta. 45+43.60 (E.B.) $D_c = 10°00'$
$\Delta = 75°45'$ Rt. S = 0.0833 ft./ft.

STATION E.B. LANE	LEFT EDGE ELEV.	PROFILE ELEV.
42+75	1046.37	1045.20
43+00	1045.00	1043.83
+25	1043.67	1042.50
+50	1042.42	1041.25
+75	1041.25	1040.08
44+00	1040.16	1038.99
+25	1039.14	1037.97
+50	1038.21	1037.04
+75	1037.35	1036.18
45+00	1036.58	1035.41
+25	1035.88	1034.71
+50	1035.27	1034.10
+75	1034.73	1033.56
46+00	1034.28	1033.11
+25	1033.90	1032.73
+50	1033.60	1032.43
+75	1033.38	1032.21
47+00	1033.24	1032.07
+25	1033.14	1031.97
+50	1032.98	1031.87
+75	1032.76	1031.77
48+00	1032.53	1031.67
+25	1032.31	1031.57
+50	1032.08	1031.47
+75	1031.86	1031.37
49+00	1031.63	1031.27

TEMPORARY CONNECTION "S"

P.I.~Sta. 45+46.26 (W.B.) $D_c = 10°00"$
$\Delta = 75°45'$ Rt. S=0.0833 ft./ft.

STATION W.B. LANE	PROFILE ELEV.	RIGHT EDGE ELEV.
41+25	1050.61	1049.90
+50	1049.86	1049.03
+75	1049.08	1048.12
42+00	1048.26	1047.18
+25	1047.39	1046.22
+50	1046.47	1045.30
+75	1045.53	1044.36
43+00	1044.59	1043.42
+25	1043.65	1042.48
+50	1042.71	1041.54
+75	1041.77	1040.60
44+00	1040.83	1039.66
+25	1039.89	1038.72
+50	1038.98	1037.81
+75	1038.12	1036.95
45+00	1037.31	1036.14
+25	1036.55	1035.38
+50	1035.85	1034.68
+75	1035.20	1034.03
46+00	1034.60	1033.43
+25	1034.05	1032.88
+50	1033.56	1032.39
+75	1033.12	1031.95
47+00	1032.73	1031.56
+25	1032.39	1031.23
+50	1032.11	1031.08
+75	1031.88	1030.97
48+00	1031.70	1030.92
+25	1031.57	1030.91
+50	1031.47	1030.94
+75	1031.37	1030.96
49+00	1031.27	1030.99
+25	1031.17	1031.01
+50	1031.07	1031.04
+75	1030.97	1031.06
50+00	1030.87	1031.09

SUPERELEVATION TABLES

RELOCATED CO. RD. NO. 127
STA. 1+66.87 TO STA. 7+11.68

LEFT EDGE ELEV.	DEDUCT FROM P.G.	PROFILE GRADE ON ℄	STATION	PROFILE GRADE ON ℄	ADD TO OR DEDUCT FR. P.G.	RIGHT EDGE ELEV.
1016.57	-0.28	1016.85	1+66.87	1016.85	-0.28	1016.57
1016.72		1017.00	+75	1017.00	-0.24	1016.76
1017.14		1017.42	2+00	1017.42	-0.11	1017.31
1017.52		1017.80	2+23.12BK	1017.80	0.00	1017.80
1017.52		1017.80	2+32.10AH	1017.80	0.00	1017.80
1017.82		1018.10	+50	1018.10	+0.08	1018.18
1018.24		1018.52	+75	1018.52	+0.21	1018.73
1018.47		1018.75	+88.35	1018.75	+0.28	1019.03
1018.65		1018.93	3+00	1018.93		1019.21
1019.06		1019.34	+25	1019.34		1019.62
1019.48		1019.76	+50	1019.76		1020.04
1019.90		1020.18	+75	1020.18		1020.46
1020.31		1020.59	4+00	1020.59		1020.87
1020.73		1021.01	+25	1021.01		1021.29
1021.14		1021.42	+50	1021.42		1021.70
1021.56		1021.84	+75	1021.84		1022.12
1021.97		1022.25	5+00	1022.25		1022.53
1022.39		1022.67	+25	1022.67		1022.95
1022.80		1023.08	+50	1023.08		1023.36
1023.22		1023.50	+75	1023.50		1023.78
1023.62		1023.90	+99.18	1023.90	+0.28	1024.18
1023.63		1023.91	6+00	1023.91	+0.28	1024.19
1024.05		1024.33	+25	1024.33	+0.15	1024.48
1024.46		1024.74	+50	1024.74	+0.03	1024.77
1024.55		1024.83	+55.43	1024.83	0.00	1024.83
1024.88		1025.16	+75	1025.16	-0.10	1025.06
1025.29		1025.57	7+00	1025.57	-0.22	1025.35
1025.46	-0.28	1025.74	+11.68	1025.74	-0.28	1025.46

RELOCATED CO. RD. NO. 127
STA. 13+05.30 TO STA. 20+74.18

LEFT EDGE ELEV.	ADD TO OR DEDUCT FR. P.G.	PROFILE GRADE ON ℄	STATION	PROFILE GRADE ON ℄	DEDUCT FROM P.G.	RIGHT EDGE ELEV.
1018.40	-0.28	1018.68	13+05.03	1018.68	-0.28	1018.40
1017.95	-0.19	1018.14	+23.22	1018.14		1017.86
1017.90	-0.18	1018.08	+25	1018.08		1017.80
1017.13	-0.06	1017.19	+50	1017.19		1016.91
1016.63	-0.00	1016.63	+61.55	1016.63		1016.35
1016.24	+0.07	1016.17	+75	1016.17		1015.89
1015.20	+0.19	1015.01	14+00	1015.01		1014.73
1014.41	+0.28	1014.13	+17.80	1014.13		1013.85
1013.99		1013.71	+25	1013.71		1013.43
1012.56		1012.28	+50	1012.28		1012.00
1011.06		1010.78	+75	1010.78		1010.50
1009.56		1009.28	15+00	1009.28		1009.00
1008.06		1007.78	+25	1007.78		1007.50
1006.56		1006.28	+50	1006.28		1006.00
1005.06		1004.78	+75	1004.78		1004.50
1003.56		1003.28	16+00	1003.28		1003.00
1002.10		1001.82	+25	1001.82		1001.54
1000.73		1000.45	+50	1000.45		1000.17
999.43		999.15	+75	999.15		998.87
998.23		997.95	17+00	997.95		997.67
997.10		996.82	+25	996.82		996.54
996.06		995.78	+50	995.78		995.50
995.10		994.82	+75	994.82		994.54
994.22		993.94	18+00	993.94		993.66
993.43		993.15	+25	993.15		992.87
992.72		992.44	+50	992.44		992.16
992.30		992.02	+75	992.02		991.74
991.55		991.27	19+00	991.27		990.99
991.08		990.80	+25	990.80		990.52
990.72		990.43	+50	990.43		990.15
990.56	+0.28	990.28	+61.68	990.28		990.00
990.34	+0.21	990.13	+75	990.13		989.85
989.91	+0.09	989.82	20+00	989.82		989.54
989.80	0.00	989.80	+17.93	989.80		989.52
989.71	-0.04	989.75	+25	989.75		989.47
989.42	-0.16	989.58	+50	989.58		989.30
989.14	-0.28	989.42	+74.18	989.42	-0.28	989.14

RELOCATED CO. RD. NO. 127
STA. 25+13.29 TO STA. 27+03.63

LEFT EDGE ELEV.	DEDUCT FROM P.G.	PROFILE GRADE ON ℄	STATION	PROFILE GRADE ON ℄	ADD TO OR DEDUCT FR. P.G.	RIGHT EDGE ELEV.
986.15	-0.28	986.43	25+13.29	986.43	-0.28	986.15
986.07		986.35	+25	986.35	-0.22	986.13
985.90		986.18	+50	986.18	-0.10	986.08
985.77		986.05	+69.54	986.05	0.00	986.05
985.73		986.01	+75	986.01	+0.03	986.04
985.56		985.84	26+00	985.84	+0.15	985.95
985.39		985.67	+25	985.67	+0.28	985.95
985.38		985.66	+25.79	985.66	+0.28	985.94
985.22		985.50	+50	985.50		985.78
985.03		985.33	+75	985.33		985.61
984.88		985.16	27+00	985.16		985.44
984.72		985.00	+25	985.00		985.28
984.54		984.82	+50	984.82		985.10
984.37		984.65	+75	984.65		984.93
984.20		984.48	28+00	984.48		984.76
984.03		984.31	+25	984.31		984.59
984.86		984.14	+50	984.14		984.42
983.71		983.99	+71.33	983.99	+0.28	984.27
983.69		983.97	+75	983.97	+0.26	984.23
983.52		983.80	29+00	983.80	+0.14	983.94
983.35		983.63	+25	983.63	+0.01	983.64
983.33		983.61	29+27.58BK	983.61	0.00	983.61
983.33		983.61	26+47.38AH	983.61	0.00	983.61
983.31		983.59	+50	983.59	-0.01	983.58
983.14		983.42	+75	983.42	-0.14	983.28
982.97		983.25	27+00	983.25	-0.28	982.97
982.95	-0.28	983.23	+03.63	983.23	-0.28	982.95

SUPERELEVATION TABLES

F-1072 (8)

43-A
198

ASD - 30 - 8.52
WAY - 30 - 0.00

Temporary Connection "S" ~ Sta 38+00 to Sta. 39+50

OHIO F-1072(8) 43-B 198

ASD-30-8.52
WAY-30-0.00

Temporary Connection "S" ~ Sta. 40+00 to Sta. 41+50

F-1072 (8)

ASD-30-8.52
WAY-30-0.00

Temporary Connection "S" ~ Sta. 42+00 to Sta. 44+00

43-D
198

F-1072 (8)

ASD - 30 - 8.52
WAY - 30 - 0.00

ESTIMATED QUANTITIES STA. 46+00			
I-1	15" Pipe, Class J-1	93	Lin. Ft.
I-2	Masonry, Class "C"	0.3	Cu. Yds.
I-8	Standard # 2-2-A Catch Basin	1	Each
I-8	Dumped Rock Channel Protection	5	Cu. Yds.
L-10	Sodding	11	Sq. Yds.
E-3	Channel Excavation	15	Cu. Yds.

Note: Median Outlet Quantities Carried to Sheet # 17

Temporary Connection "S" ~ Sta. 44+50 to Sta. 46+00

ASD-30-8.52
WAY-30-0.00

F-1072 (8)

43E
198

ESTIMATED QUANTITIES
Sta. 448+00 ℄ Future Prop. U.S.R. 30

I-1	30" Pipe, Class E-1	=	25	Lin. Ft.
I-1	30" Pipe, Class J-1	=	209	Lin. Ft.
I-2	Masonry, Class "C"	=	0.5	Cu. Yds.
I-8	Standard No. 5 Catch Basin	=	1	Each
I-8	Standard No. 8 Catch Basin	=	2	Each
L-10	Sodding	=	20	Sq. Yds.

Note: Storm Sewer Quantities Carried to Sheet No. 17

Temporary Connection "S" ~ Sta. 47+00 to Sta. 48+80

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	44 / 198

ASD - 30 - 8.52
WAY - 30 - 0.00

Note: Subsequent to the completion of this plan, the L-3 quantity for the hump median (excluding rock cut areas) was deleted; therefore, the horizontal line shown on each cross section, indicating the bottom of the L-3 area is to be disregarded.

The subbase plotted on the cross sections is not in accord with the typical section; however, the pavement shall be built as shown by the typical section.

Sta. 49+25 Temporary Connection "S" to Sta. 452+00 Prop. U.S.R. 30

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
7687	0		
		11,937	0
7302	0		
		15,251	0
7145	0		
		23,941	0
5782	0		

Sta. 452+00

Sta. 453+00 to Sta. 454+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
10,250	0		
		10,256	0
10,260	0		
		26,851	0
9600	0		
		32,017	0
7687	0		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
2075	0		
		9296	0
2945	0		
		17,463	0
6485	0		
		27,928	0
8595	0		
		34,901	0
10,250	0		

Sta. 457+00 to Sta. 460+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	48 / 198

ASD-30-8.52
WAY-30-0.00

	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
465+73	81	715		
			221	1684
465+00	82	530		
			333	1787
464+00	98	435		
			311	1176
463+00	70	200		
			526	93
462+00	214	0		
			2204	0
461+00 AH	976	0		
461+00 BK	1040	0		
			5769	0
Sta. 460+00	2075	0		

Sta. 461+00 to Sta. 465+73

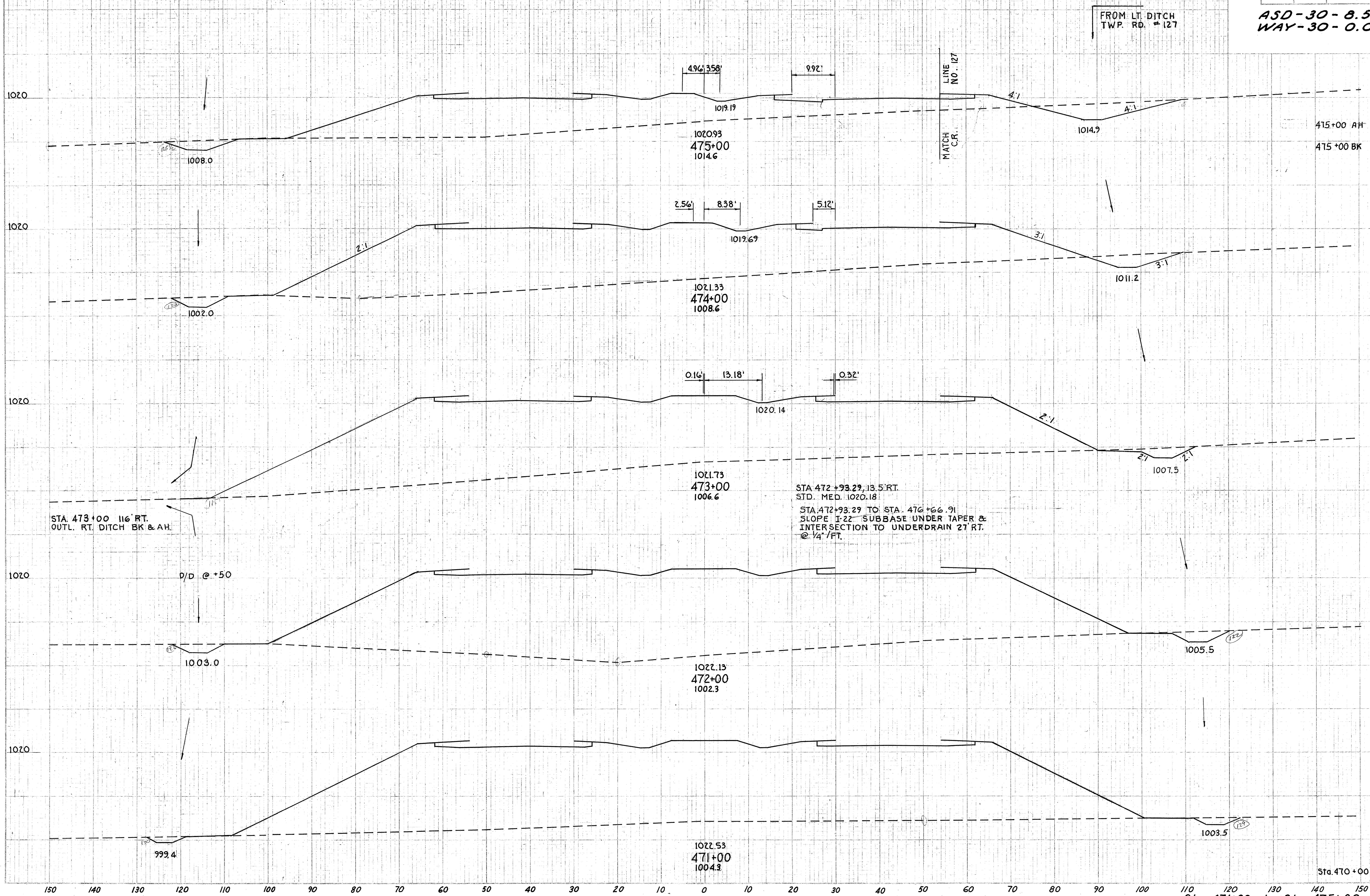
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	49 / 198

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
140	3270		
		481	10,629
120	2470		
		381	7492
86	1576		
		346	5023
101	1136		
		335	3741
80	884		
		81	800
81	715		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

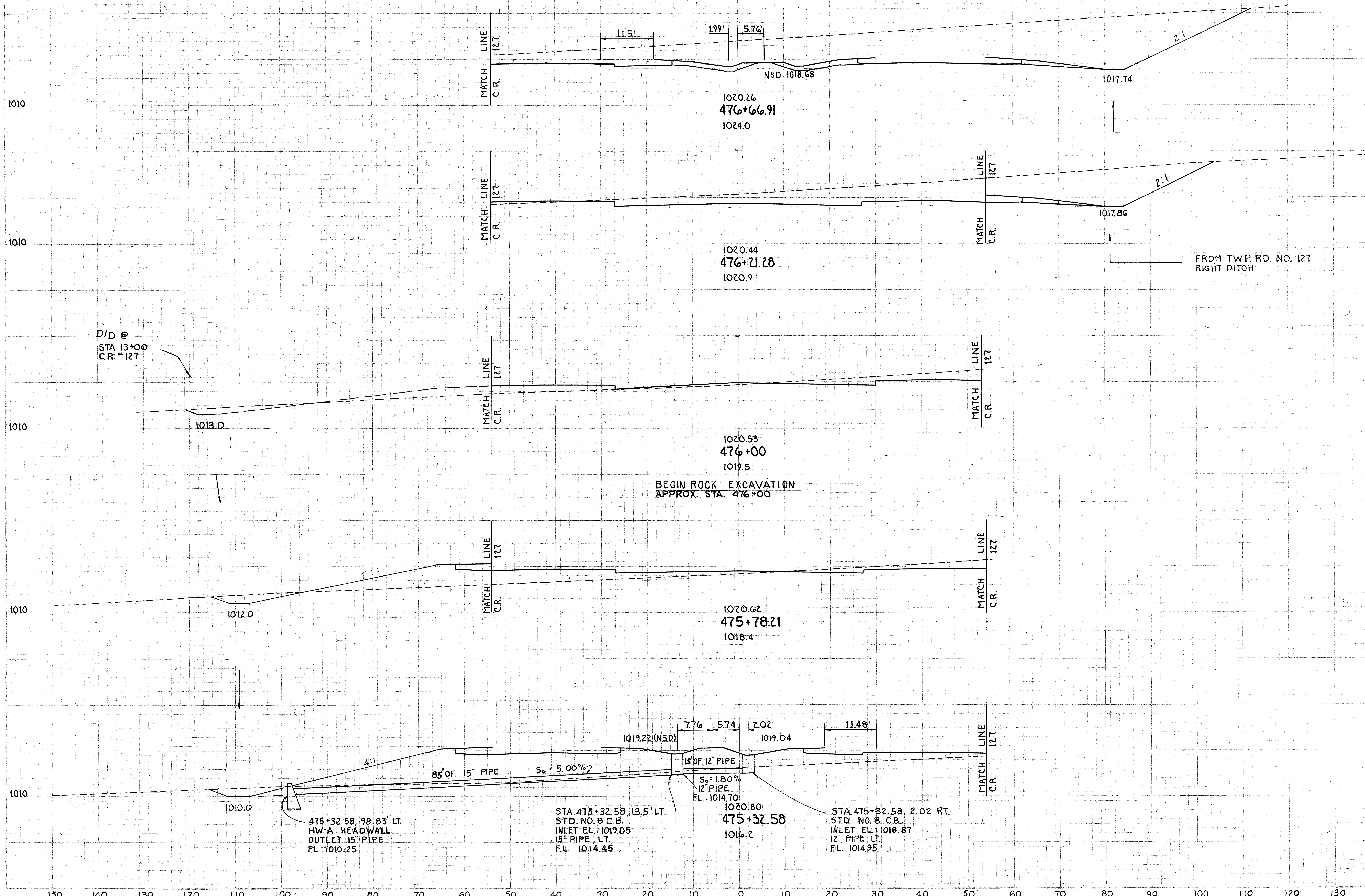
ASD-30-8.52
WAY-30-0.00



Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
475+00 AH	22	812		
475+00 BK	82	852		
			257	4976
	57	1835		
			146	8017
	22	2527		
			102	9976
	33	2860		
			87	10,944
	14	3050		
			285	11,704
Sta. 470+00	140	3270		

Sta. 471+00 to Sta. 475+00

ASD.- 30 - 8.52
WAY. - 30 - 0.00



Station	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	965	0		
			1223	3
476+21.28 AH	482	3		
476+21.28 BK	222	3		
			111	12
	60	26		
			38	48
475+78.21 AH	32	92		
475+78.21 BK	57	194		
			72	642
	27	565		
			30	831
Sta. 475+00 AH	22	812		

STA. 475+32.58 TO STA. 476+66.91

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
	4395	0		
			15,567	0
	4008	0		
			13,043	0
478+00 AH	3035	0		
478+00 BK.	2915	0		
			8114	0
477+00 AH	1407	0		
477+00 BK.	1322	0		
			1405	0
Sta. 476+66.91	965	0		

Sta. 477+00 to Sta. 480+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area		Cu Yds	
Cut	Fill	Cut	Fill
2800	0		
		11,309	0
3307	0		
		13,739	0
4112	0		
		5833	0
4310	0		
		10,254	0
4535	0		
		16,556	0
4395	0		

Sta. 481+00 to Sta. 484+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
490+00	126	280		
			317	1257
489+00	45	399		
			224	1100
488+00	76	195		
			974	370
487+00	450	5		
			3467	9
486+00	1422	0		
			6804	0
485+00 AH	2252	0		
485+00 BK	2317	0		
			9476	0
Sta. 484+00	2800	0		

Sta. 485+00 to Sta. 490+00

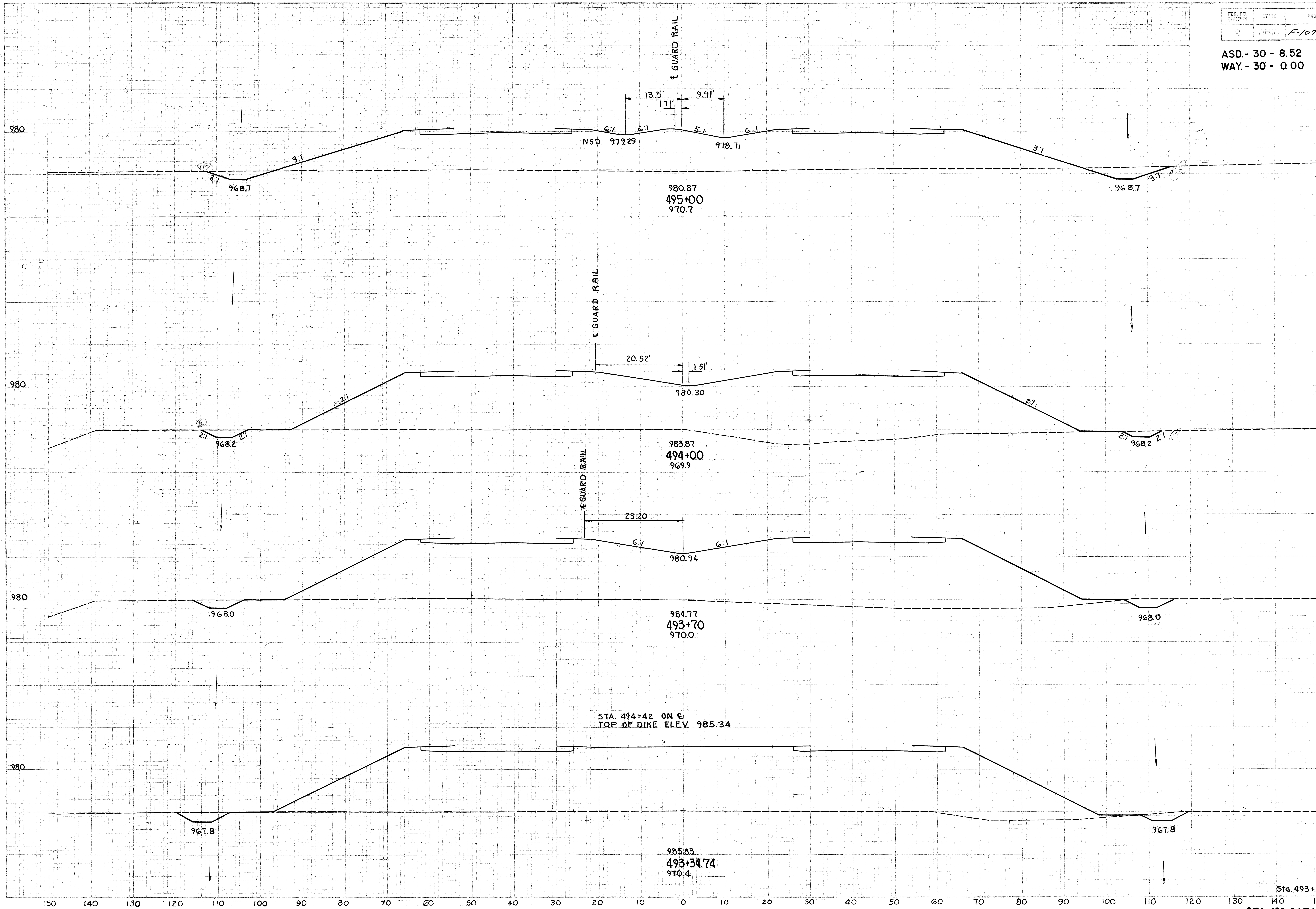
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
0	0		
		80	253
282	895		
		630	552
900	141		
		2172	237
403	1		
		475	26
238	33		
		405	348
126	280		

Sta. 490+60 to Sta. 493+10

ASD.- 30 - 8.52
WAY.- 30 - 0.00



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
38	1468		
		109	6849
21	2230		
		30	2511
32	2290		
		40	3060
28	2395		
		13	1098
0	0		

STA. 493+34.74 TO STA. 495+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

57
198

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
34	318		
		104	1394
22	435		
		78	2083
20	690		
		37	3093
0	980		
		16	1926
18	1177		
		54	2538
193	1468		

Sta. 495+00

Sta. 495+51.80 to Sta. 499+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD - 30 - 8.52
WAY - 30 - 0.00

Sta. 500+00 to Sta. 504+00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
504+00	23	489		
			99	1403
503+12.84 AH	38	380		
503+12.84 BK	0	265		
			0	301
502+70.73	0	120		
			0	171
502+30.73	0	110		
			0	230
501+88.62 AH	0	185		
501+88.62 BK	33	270		
			128	827
501+00	45	234		
			170	878
500+00	47	240		
			150	1033
Sta. 499+00	34	318		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
55	930		
		185	3263
45	832		
		144	2967
33	770		
		120	2680
32	677		
		104	2476
24	660		
		115	2161
38	507		
		113	1844
23	489		

Sta. 504+00

Sta. 505+00 to Sta. 510+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

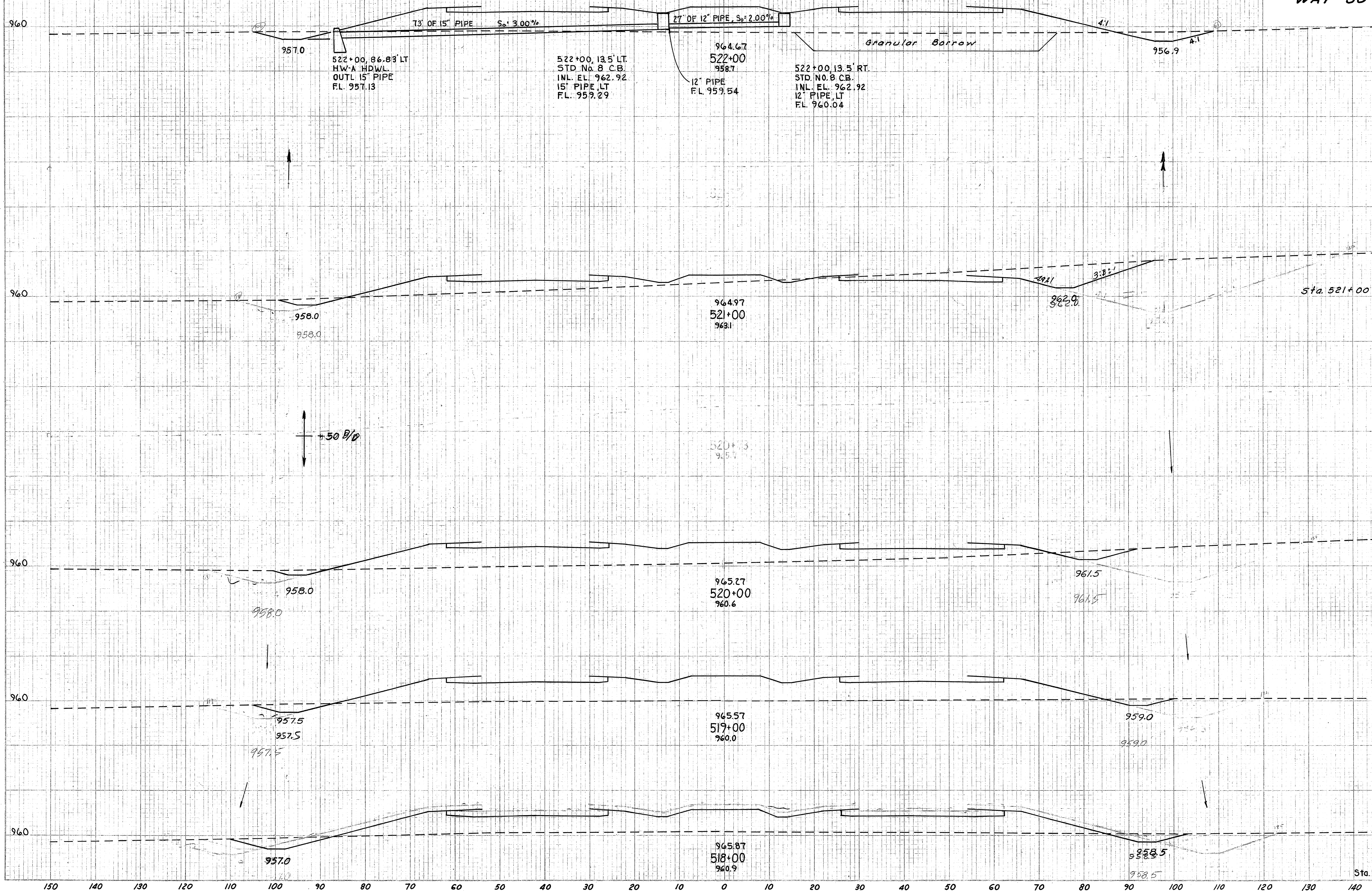
ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
238	700		
		904	2396
250	594		
		761	2269
161	631		
		511	2428
115	680		
		461	2376
134	603		
		472	2665
121	836		
		356	3620
71	1119		
		233	3794
55	930		

Sta. 511+00 to Sta. 517+00

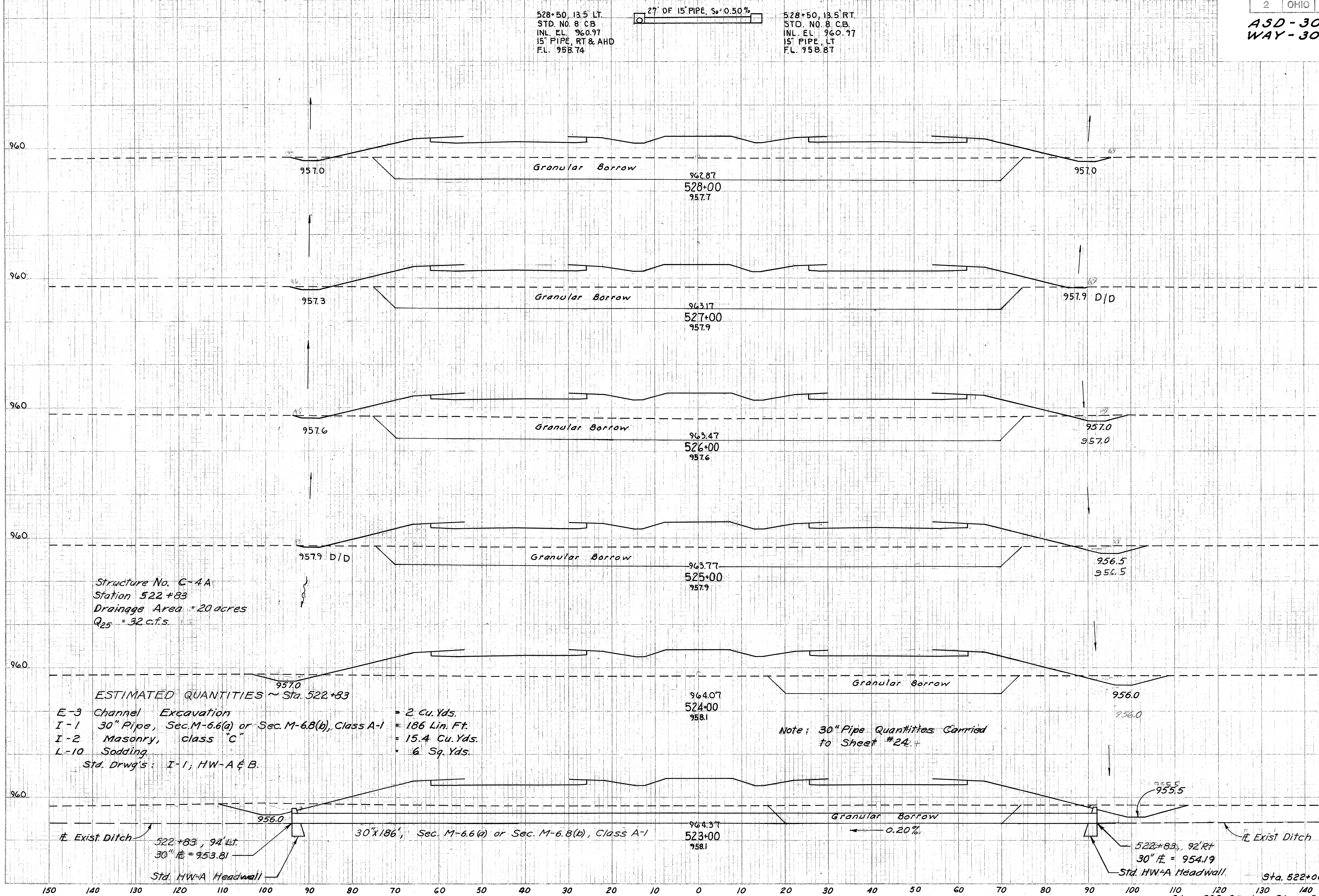
FED. RD. DIVISION	STATE	PROJECT		SHEET
2	OHIO	F-1072(8)		61 / 198

ASD - 30 - 8.52
WAY - 30 - 0.00



	Granular Borrow Sq. Ft.	Granular Borrow Cu. Yds	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
	205		37	795		
		380			1081	1861
Sta. 521+00	0		547	211		
					1489	1502
			257	600		
					600	2437
			67	716		
					289	2993
			89	900		
					606	2963
Sta. 517+00			238	700		

Sta. 518+00 to Sta. 522+00



ESTIMATED QUANTITIES ~ Sta. 522+83

- E-3 Channel Excavation = 2 Cu. Yds.
- I-1 30" Pipe, Sec. M-6.6(a) or Sec. M-6.8(b), Class A-1 = 186 Lin. Ft.
- I-2 Masonry, class "C" = 15.4 Cu. Yds.
- L-10 Sodding = 6 Sq. Yds.

Std. Drwg's: I-1; HW-A & B.

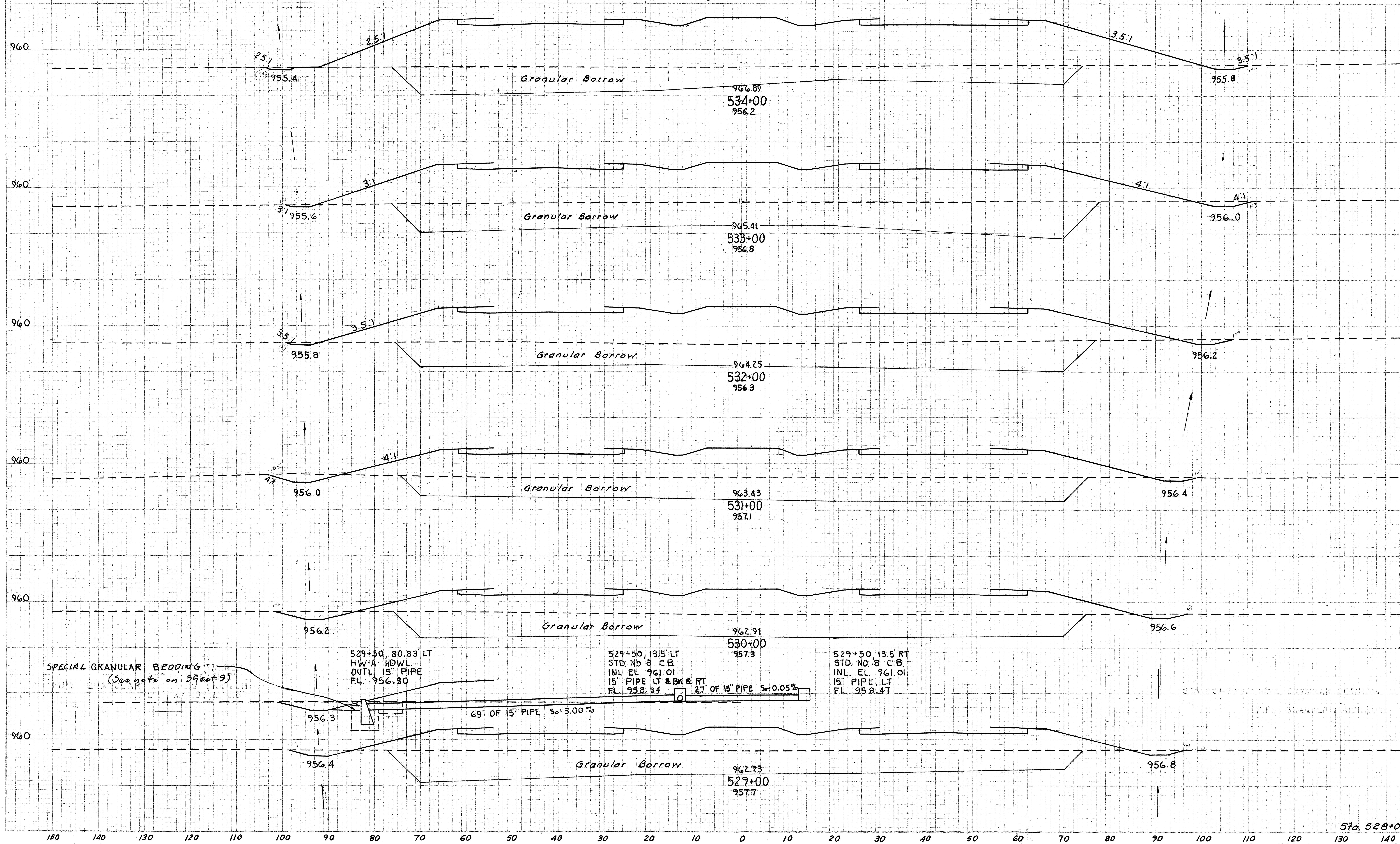
Note: 30" Pipe Quantities Carried to Sheet #24.

Granular Borrow Sq. Ft.	Granular Borrow Cu. Yds.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
720		6	587		
	2574			15	2243
670		2	624		
	2519			9	2415
690		3	680		
	2422			11	2559
618		3	702		
	1528			19	2670
207		7	740		
	800			43	2815
225		16	780		
	796			98	2917
205		37	795		

Sta. 523+00 to Sta. 528+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00



Granular Borrow Sq.Ft.	Granular Borrow Cu.Yds.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
617		6	1522		
	2698			28	5091
840		9	1227		
	2944			28	4226
750		6	1055		
	2593			46	3439
650		19	802		
	2493			74	2670
696		21	640		
	2659			63	2263
740		13	582		
	2704			35	2165
720		6	587		

Sta. 529+00 to Sta. 534+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
538+00	199	54		
			181	173
537+70	126	256		
			213	2478
537+00	38	1655		
			30	2327
536+66	9	2040		
			26	4855
536+00	12	1932		
			31	6726
535+00	5	1700		
			20	5967
534+00	6	1522		

Granular Borrow	Sq. Ft.	Cu. Yds.
Sta. 537+00	0	0
		741
	400	
		1296
	300	
		1698
Sta. 534+00	617	

Sta. 535+00 to Sta. 538+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
544+00	85	425		
			335	1333
543+00	96	295		
			474	550
542+00	160	2		
			727	7
541+32 AH	417	3		
541+32 BK	265	0		
			177	134
540+96	0	200		
			0	247
540+56	0	133		
			86	91
540+19 AH	125	0		
540+19 BK	227	2		
			1203	31
539+00	319	12		
			959	122
Sta. 538+00	199	54		

Sta. 539+00 to Sta. 544+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	66 / 198

ASD-30-8.52
WAY-30-0.00

Sta. 545+00 to Sta. 550+00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
125	845		
		491	3213
140	890		
		552	2467
158	442		
		528	1776
127	517		
		450	1807
116	459		
		424	1878
113	555		
		367	1815
85	425		

Sta. 544+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
73	1840		
		113	2469
105	2080		
		272	5222
117	2192		
		961	6471
402	1302		
		1276	5189
287	1500		
		1059	4911
285	1152		
		759	3698
125	845		

Sta. 551+00 to Sta. 555+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

68
198

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
359	350		
		850	1991
100	725		
		344	1498
86	84		
		539	181
205	14		
		493	330
10	164		
		30	2119
6	980		
		146	5223
73	1840		

Sta. 556+00 to Sta. 561+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	69 198

ASD - 30 - 8.52
WAY - 30 - 0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
0	915		
		22	4945
12	1755		
		74	6125
28	1552		
		217	4184
89	707		
		700	2439
289	610		
		1291	2133
Sta. 562+00: 408	542		
		1420	1652
Sta. 561+00: 359	350		

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

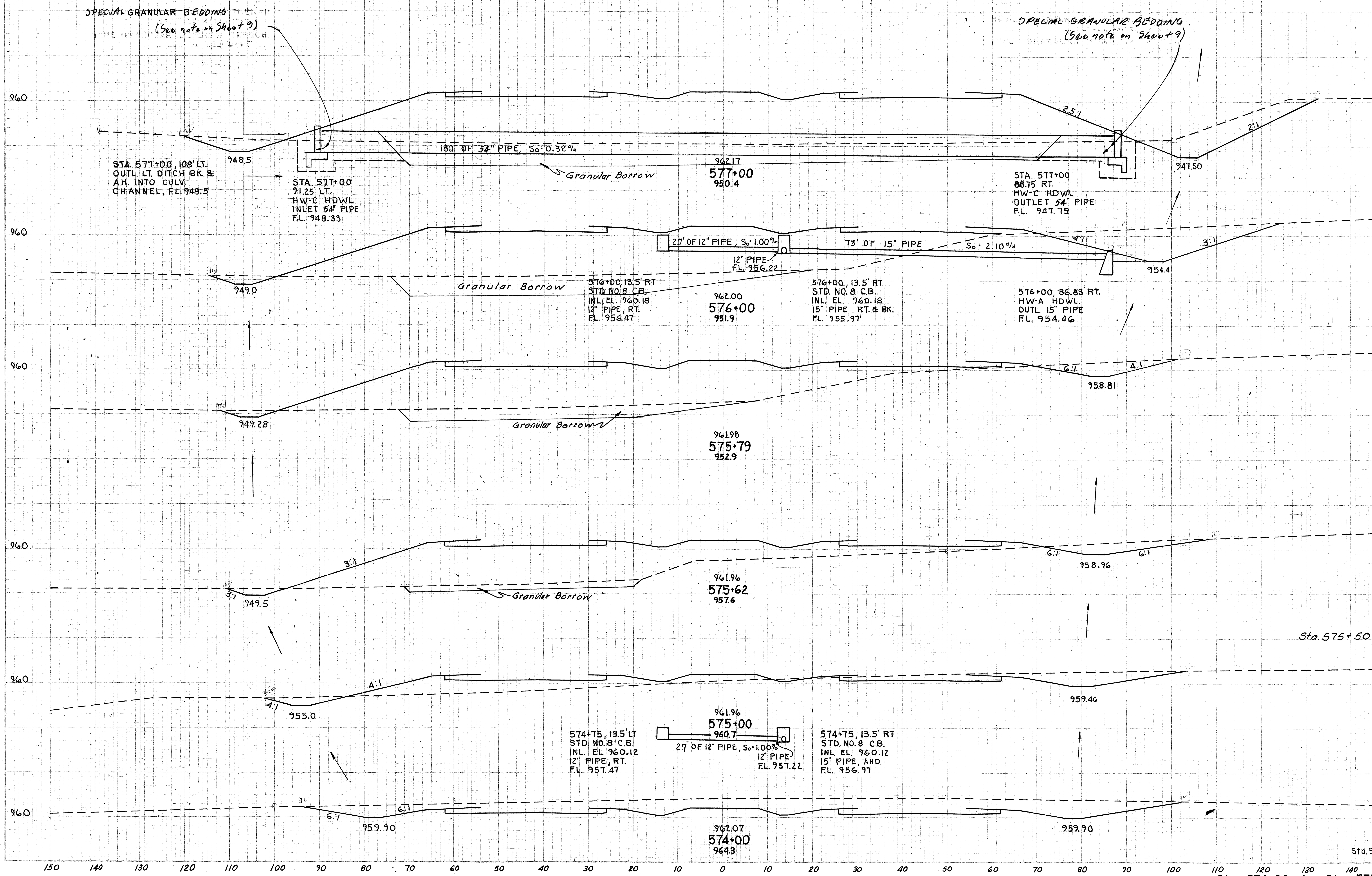
ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
450	0		
		1944	0
600	0		
		2713	0
865	0		
		3343	0
940	0		
		3439	0
917	0		
		2707	20
545	17		
		828	1726
0	915		

Sta. 568+00 to Sta. 573+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD-30-8.52
WAY-30-0.00

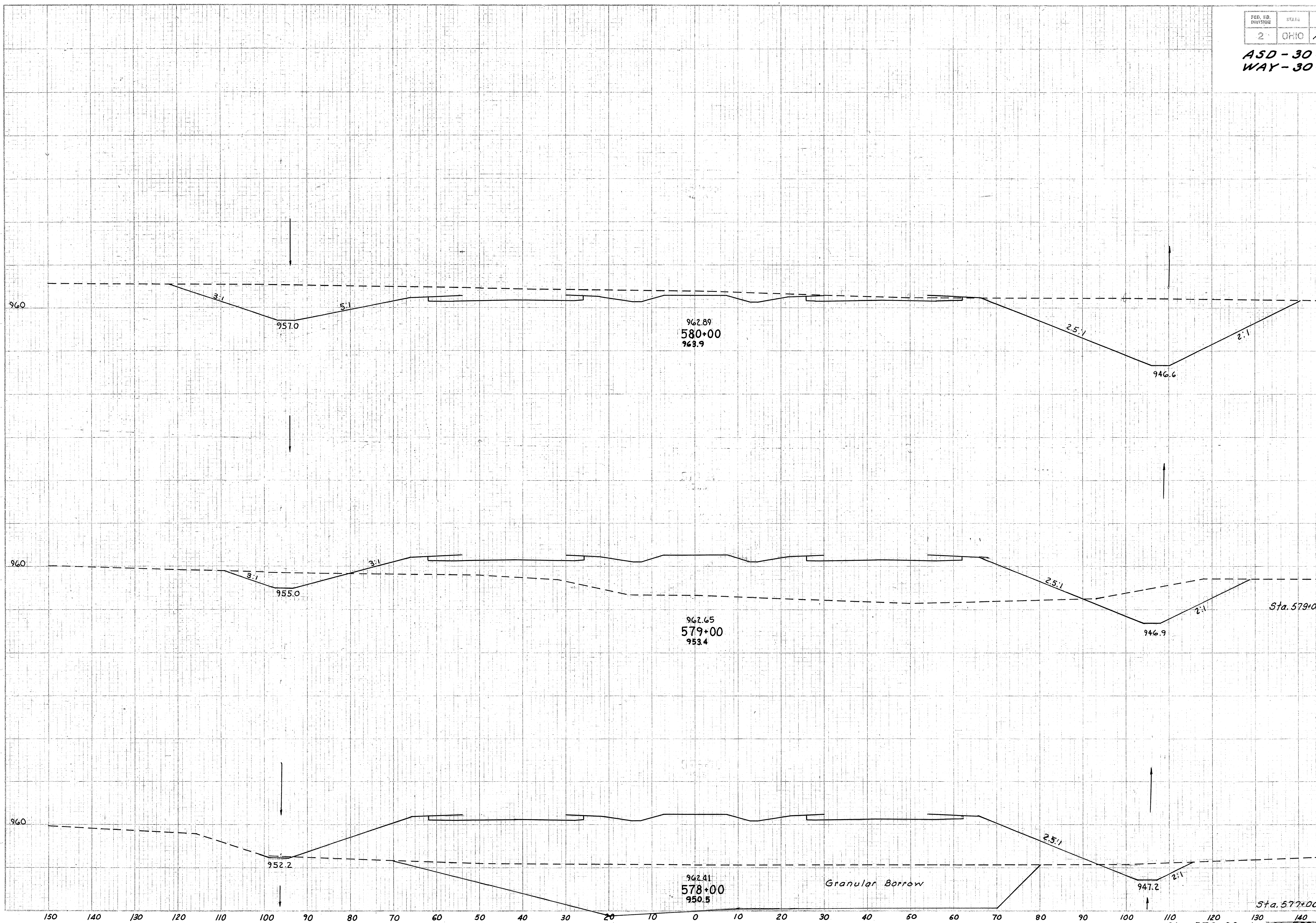


Sta. 574+00 to Sta. 577+00

Station	Granular Borrow Sq.Ft.	Granular Borrow Cu.Yd.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
577+00	620		175	1680		
		1704			726	5352
576+00	300		217	1210		
		179			107	864
575+79	160		58	1010		
		67			34	561
575+62	50		50	770		
		12			200	1100
Sta. 575+50	0					
575+00			124	188		
					1187	258
574+00			517	0		
					1791	0
Sta. 573+00			450	0		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00



	Granular Borrow Sq.Ft.	Granular Borrow Cu.Yd.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
			1130	0		
					2546	1726
Sta. 579+00	0		245	1150		
		2272			556	5245
	1227		55	1682		
		3420			426	6226
Sta. 577+00	620		175	1680		

Sta. 578+00 to Sta. 580+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	73 / 198

ASD-30-8.52
WAY-30-0.00

	Granular Borrow Sq.Ft.	Granular Borrow Cu.Yds.
Sta. 586+50	0	
		81
586+00	87	
		337
585+00	95	
		287
584+00	60	
		56
Sta. 583+50	0	

	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
587+00	7	262		
			22	3559
586+00	5	1660		
			11	6834
585+00	1	2030		
			94	6630
584+00	50	1550		
			807	3226
583+00	386	192		
			1363	1189
582+00	350	450		
			2093	943
Sta. 581+00	780	59		
			3537	109
Sta. 580+00	1130	0		

STA. 581+00 TO STA. 587+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(B)	

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
200	797		
		394	2457
13	530		
		191	1396
90	224		
		259	637
50	120		
		111	348
10	68		
		31	611
7	262		

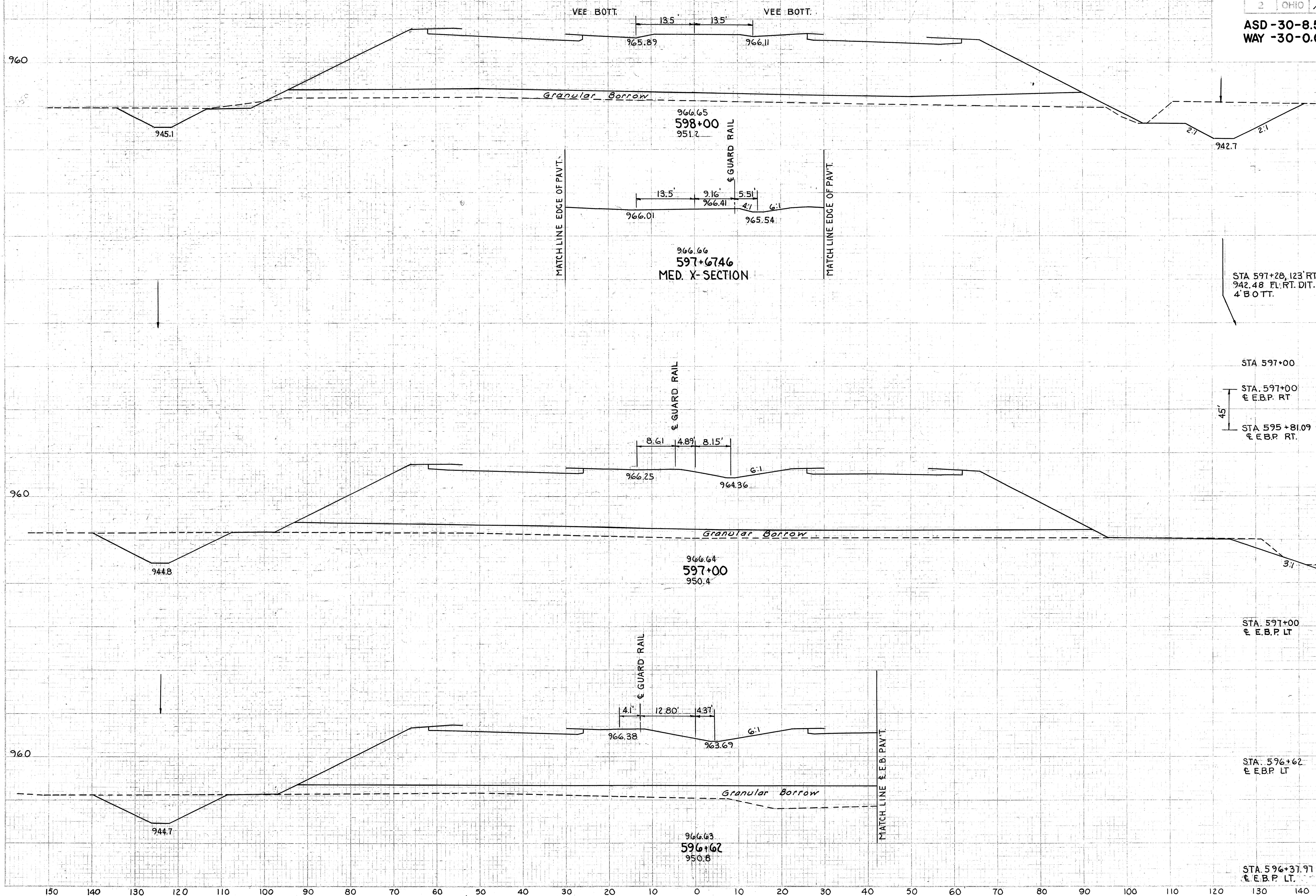
Sta. 587+47 to Sta. 592+00

ASD - 30 - 8.52
WAY - 30 - 0.00

Sta. 593+00 to Sta. 596+36.97

Station	Granular Borrow Sq.Ft.	Granular Borrow Cu.Yd.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
STA. 596+36.97 ℄ E.B.P. LT. (85')	437		125	1520		
		801				
					465	6228
Sta. 595+60	0					
STA. 595+81.09 ℄ E.B.P. LT			170	2436		
STA. 595+81.09 (14')			270	3263		
					70	846
STA. 595+60			0	0		
STA. 593+90 (20')			0	0		
					52	1086
STA. 593+52.90			140	2932		
STA. 593+52.90 ℄ W.B.P. LT. (50')			120	552		
					257	697
STA. 592+00 ℄ W.B.P. LT.			157	200		
STA. 593+52.90 ℄ W.B.P. RT. (85')			20	2380		
					39	5675
STA. 593+00 ℄ W.B.P. RT. (100')			5	1225		
					9	3454
STA 592+00 ℄ W.B.P. RT.			0	640		

ASD-30-8.52
WAY-30-0.00

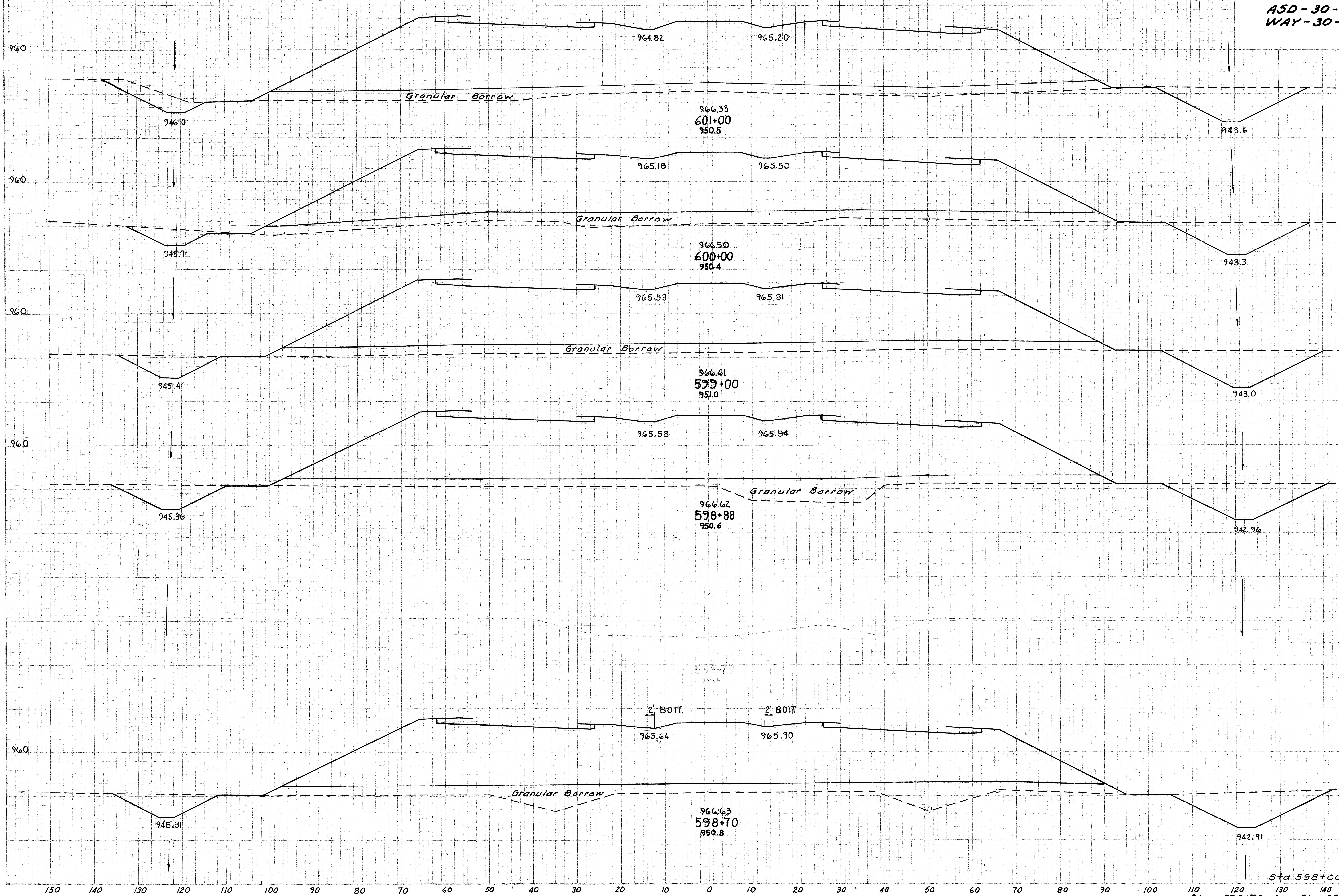


Station	Granular Borrow Sq.Ft.	Granular Borrow Cu.Yd.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
	355		247	1967		
					719	7319
STA 597+28, 123' RT. 942.48 FL. RT. DIT. 4' BOTT.						
STA 597+00			141	1985		
		1302				
STA. 597+00 ℄ E.B.P. RT			41	500		
					118	1106
STA. 595+81.09 ℄ E.B.P. RT.			100	827		
STA. 597+00 ℄ E.B.P. LT	348		120	1485		
		580				
					168	2076
STA. 596+62 ℄ E.B.P. LT	405		113	1465		
		391			552	6912
STA. 596+37.97 ℄ E.B.P. LT.	437		125	1520		

STA. 596+62 TO STA. 598+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD - 30 - 8.52
WAY - 30 - 0.00

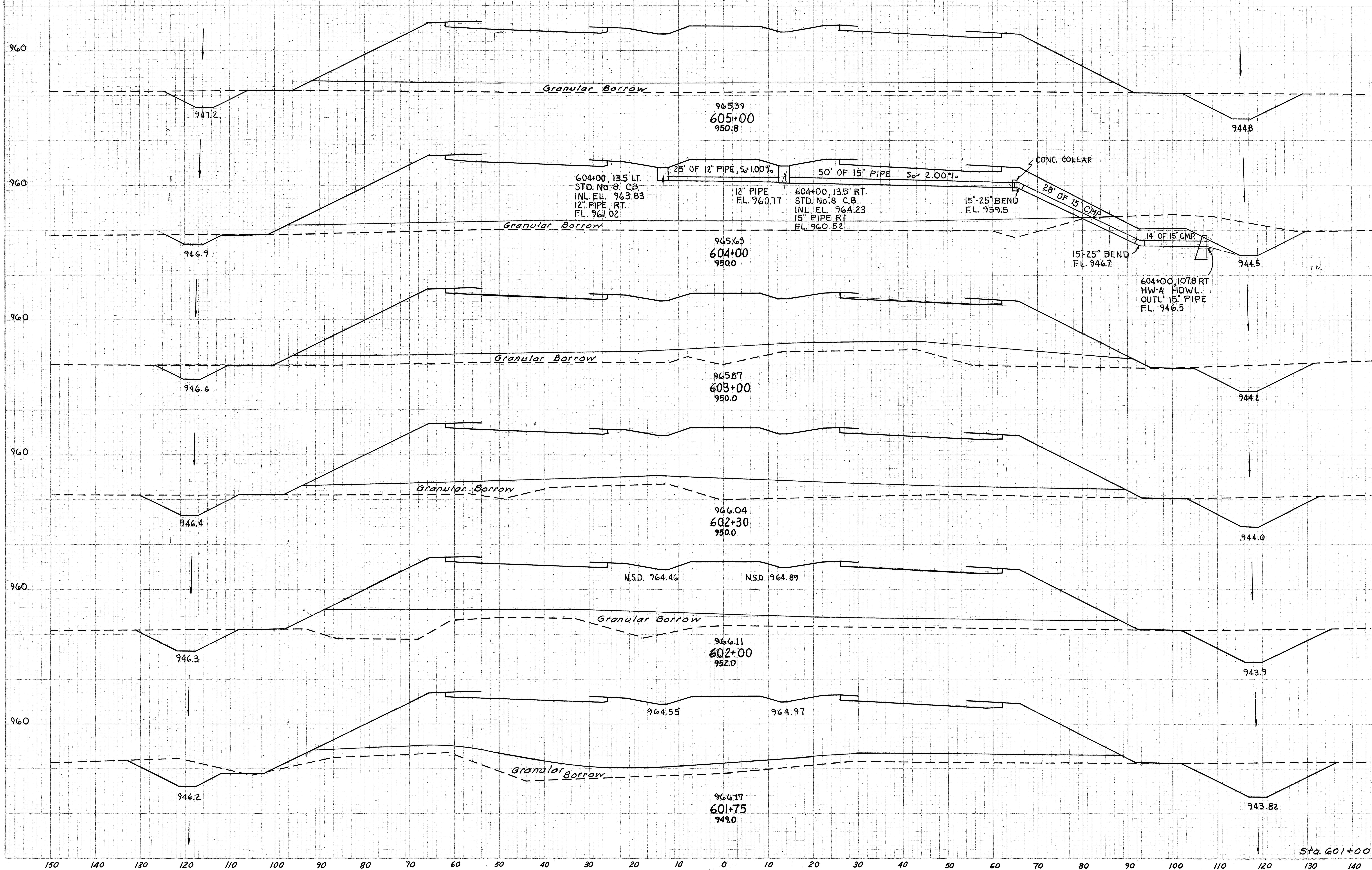


Sta. 598+70 to Sta. 601+00

Granular Borrow		End Area		Cu Yds	
Sq. Ft.	Cu. Yd.	Cut	Fill	Cut	Fill
380		205	2170		
	1593			713	7716
480		180	1997		
	1620			791	7402
395		247	2000		
	192			111	908
465		251	2085		
	318			161	1384
487		232	2066		
	1092			621	5228
355		247	1967		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	78 / 198

ASD-30-8.52
WAY-30-0.00

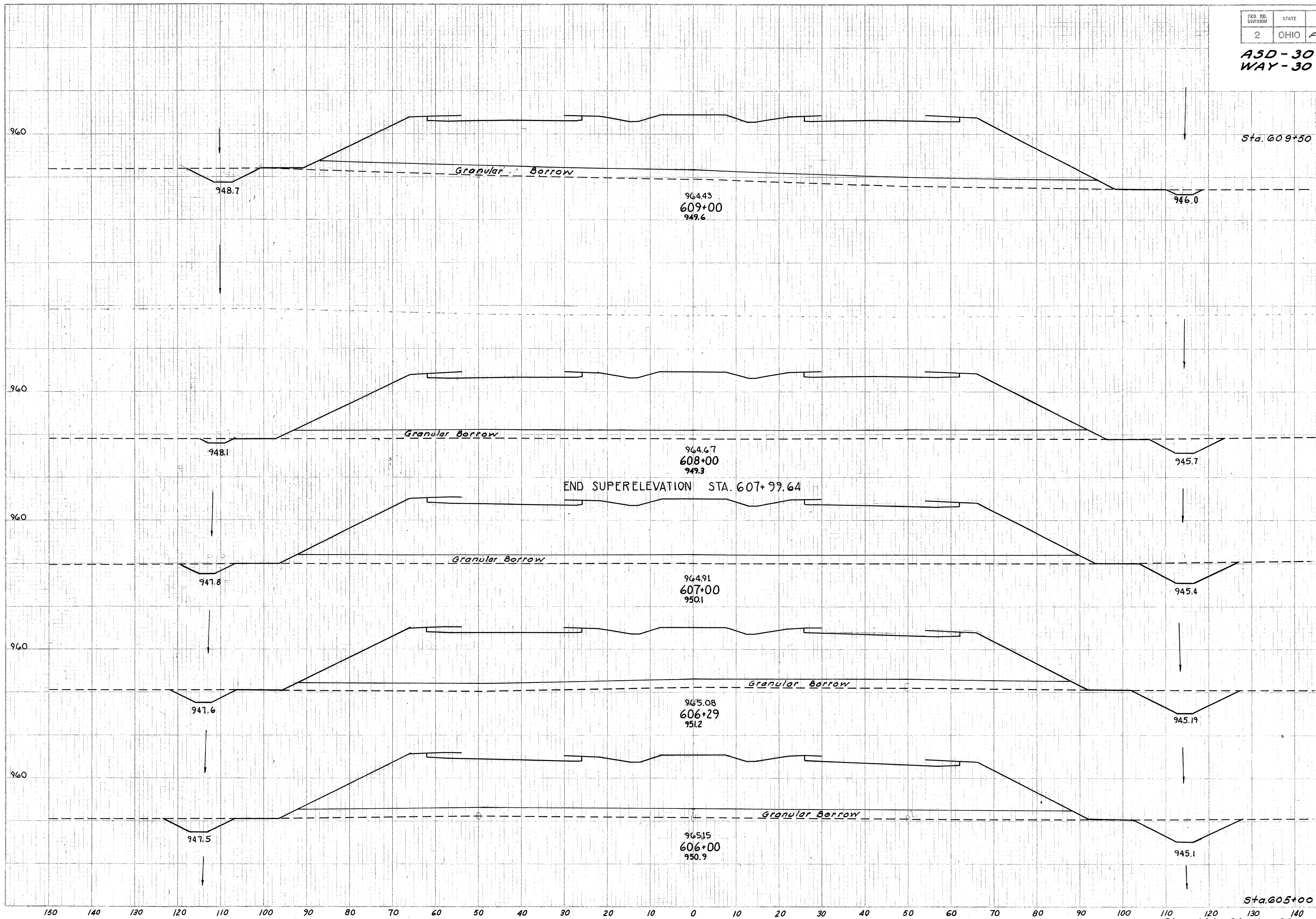


Sta. 601+75 to Sta. 605+00

Granular Borrow Sq.Ft.	Granular Borrow Cu.Yd.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
475		120	1670		
	1583			559	6908
380		182	2060		
	1630			556	7149
500		118	1800		
	1297			361	4641
500		160	1780		
	614			195	1945
605		190	1720		
	505			190	1733
485		220	2022		
	1202			591	5823
380		205	2170		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

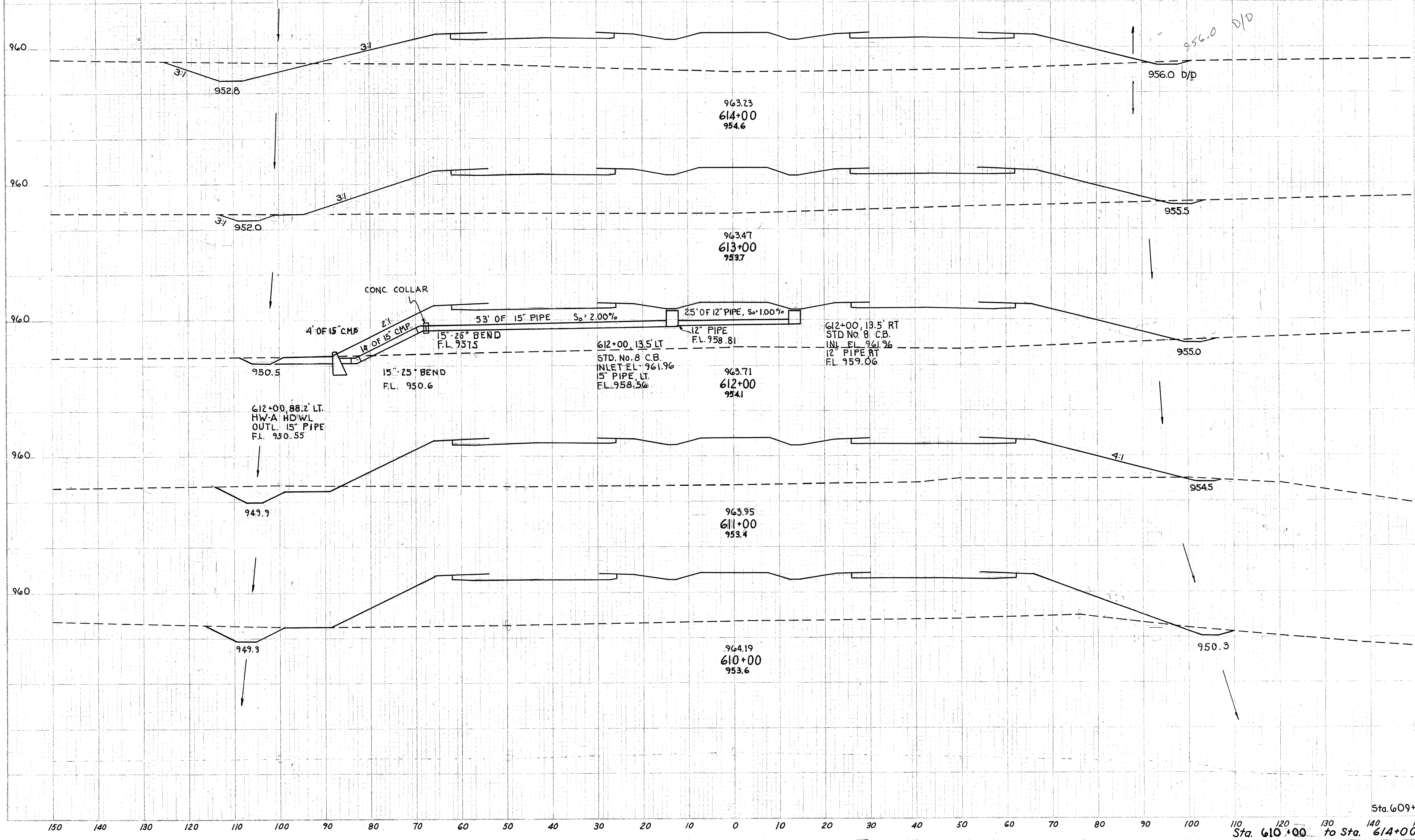
ASD-30-8.52
WAY-30-0.00



Station	Granular Borrow Sq.Ft	Granular Borrow Cu.Yd	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
Sta. 609+50	0					
		356				
	384		63	1867		
		1393			183	7152
	368		36	1995		
		1363			202	7139
	368		73	1860		
		968			224	4747
	368		97	1750		
		396			109	1883
	368		105	1755		
		1561			417	6343
Sta. 605+00	475		120	1610		

Sta. 606+00 to Sta. 609+00

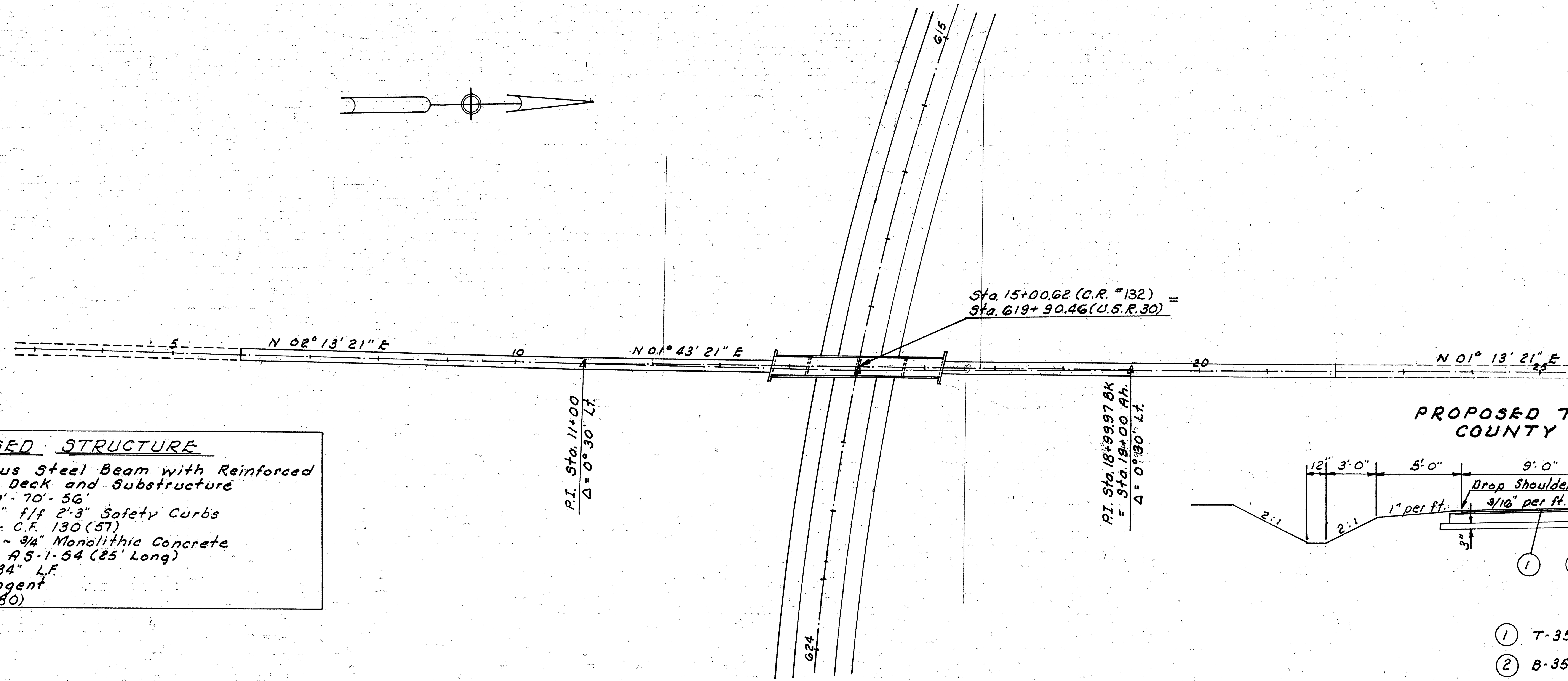
ASD-30-8.52
WAY-30-0.00



End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
90	1102		
		183	4550
9	1355		
		33	5173
9	1438		
		113	5495
52	1429		
		185	5461
48	1520		
		206	6273
63	1867		

Sta. 610+00 to Sta. 614+00

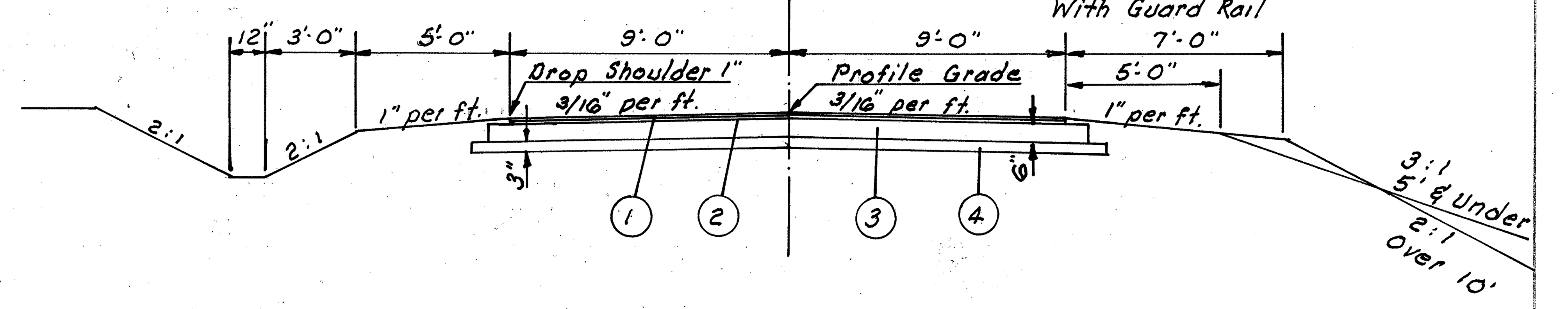
ASD-30-8.52
WAY-30-0.00



PROPOSED STRUCTURE

Type ~ Continuous Steel Beam with Reinforced Concrete Deck and Substructure
Spans ~ 56'-70'-70'-56'
Roadway ~ 24'-0" f/f 2'-3" Safety Curbs
Load Frequency ~ C.F. 130 (57)
Wearing Surface ~ 3/4" Monolithic Concrete
Approach Slab ~ AS-1-54 (25' Long)
Skew ~ 10° 14' 34" L.F.
Alignment ~ Tangent
A.D.T. ~ 231 (1980)

PROPOSED TYPICAL SECTION COUNTY ROAD 132



(1) T-35 3/4" Asphaltic Concrete Surface Course
(2) B-35 3/4" Asphaltic Concrete Leveling Course
(3) B-19 Aggregate Base Course
(4) I-22 Subbase, Grading "A" or "B", as per plan.

PLATE 4—CROSS SECTION
KEUFFEL & ESSER CO. NEW YORK

GRADE SEPARATION, U.S.R 30 WITH ASHLAND COUNTY ROAD 132

FUTURE GRADE SEPERATION S.R. 89

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

ASD 30-8.52
WAY. 30-0.00

GRADE SEPARATION U.S.R. 30 WITH STATE ROUTE 89

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

ASD.- 30 - 8.52
WAY.- 30 - 0.00

GRADE SEPARATION U.S.R. 30 WITH STATE ROUTE 89

ASHLAND-WAYNE COUNTY LINE
GRADE SEPARATION, U.S.R. 30 WITH WAYNE COUNTY ROAD 93

ASHLAND-WAYNE COUNTY LINE
GRADE SEPARATION U.S.R. 30 WITH WAYNE COUNTY ROAD 93

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

ASD.-30-8.52
WAY.-30-0.00

GRADE SPARATION U.S.R. 30 WITH ASHLAND COUNTY ROAD 132

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

ASD.- 30 - 8.52
WAY.- 30 - 0.00

GRADE SEPARATION U.S.R. 30 WITH ASHLAND COUNTY ROAD 132

FUTURE GRADE SEPERATION S.R. 89

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

ASD 30-8.52
WAY. 30-0.00

GRADE SEPARATION U.S.R. 30 WITH STATE ROUTE 89

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

ASD.- 30 - 8.52
WAY.- 30 - 0.00

GRADE SEPARATION U.S.R. 30 WITH STATE ROUTE 89

PLATE 4 - CROSS SECTION

ASHLAND-WAYNE COUNTY LINE

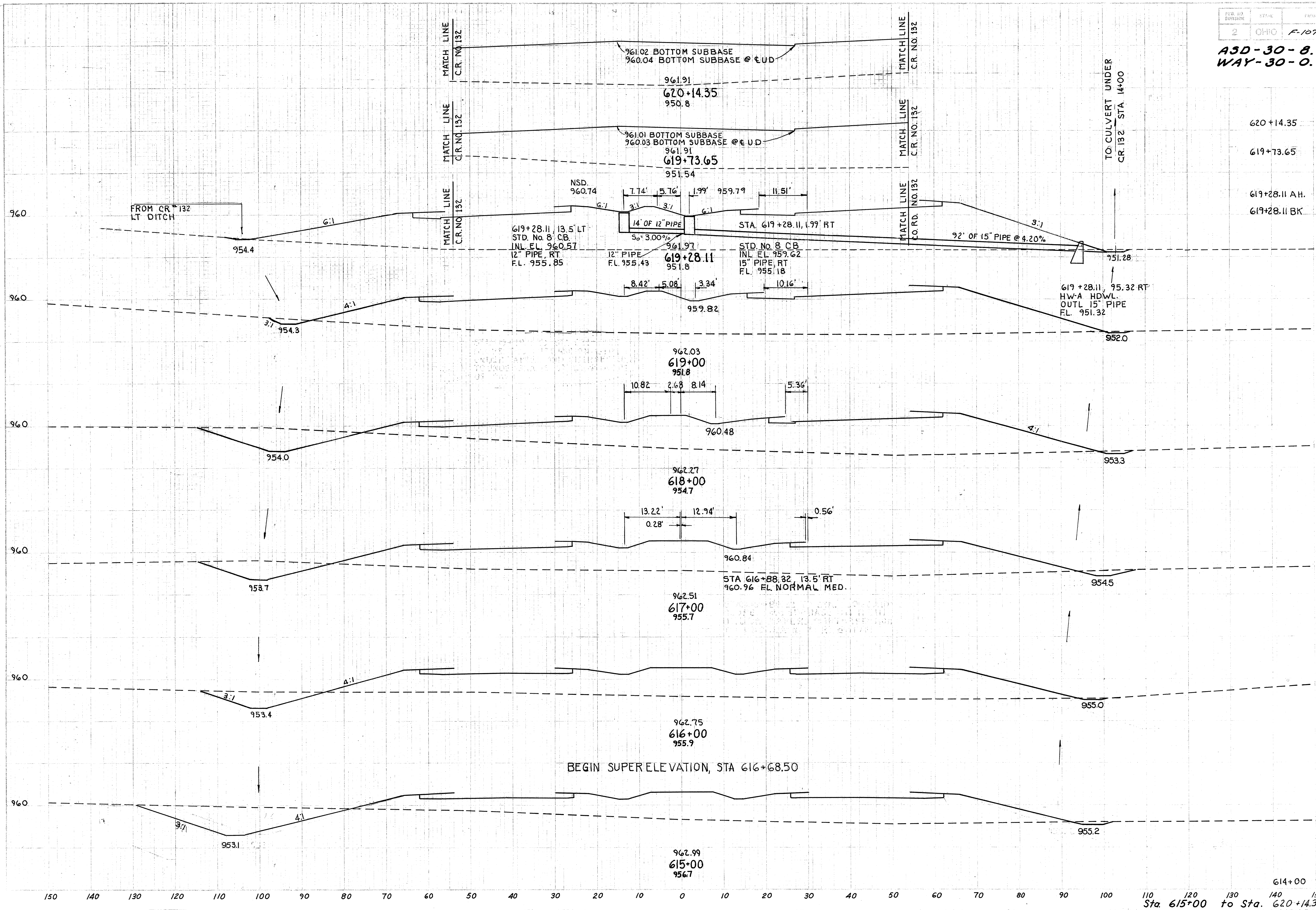
GRADE SEPARATION, U.S.R. 30 WITH WAYNE COUNTY ROAD 93

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

ASD. 30 - 8.52
WAY. 30 - 0.00

ASHLAND-WAYNE COUNTY LINE
GRADE SEPARATION U.S.R. 30 WITH WAYNE COUNTY ROAD 93

ASD-30-8.52
WAY-30-0.00



	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
620+14.35	0	940		
			0	1410
619+73.65	0	930		
			0	1586
619+28.11 AH.	0	950		
619+28.11 BK	3	1455		
			5	1479
	6	1385		
			219	4361
	112	970		
			343	3519
	73	930		
			202	3300
	36	852		
			391	2993
	175	764		
			491	3456
614+00	90	1102		

Sta. 615+00 to Sta. 620+14.35

ASD - 30 - 8.52
WAY - 30 - 0.00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
625+00	56	1865		
			319	5695
624+00	116	1210		
			459	4185
623+00	132	1050		
			394	4130
622+00	81	1180		
			183	4754
621+00	18	1387		
			23	2017
620+60.10 AH	12	1342		
620+60.10 BK	0	950		
			0	1602
Sta.620+14.35	0	940		

Sta. 620+60.10 to Sta. 625+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

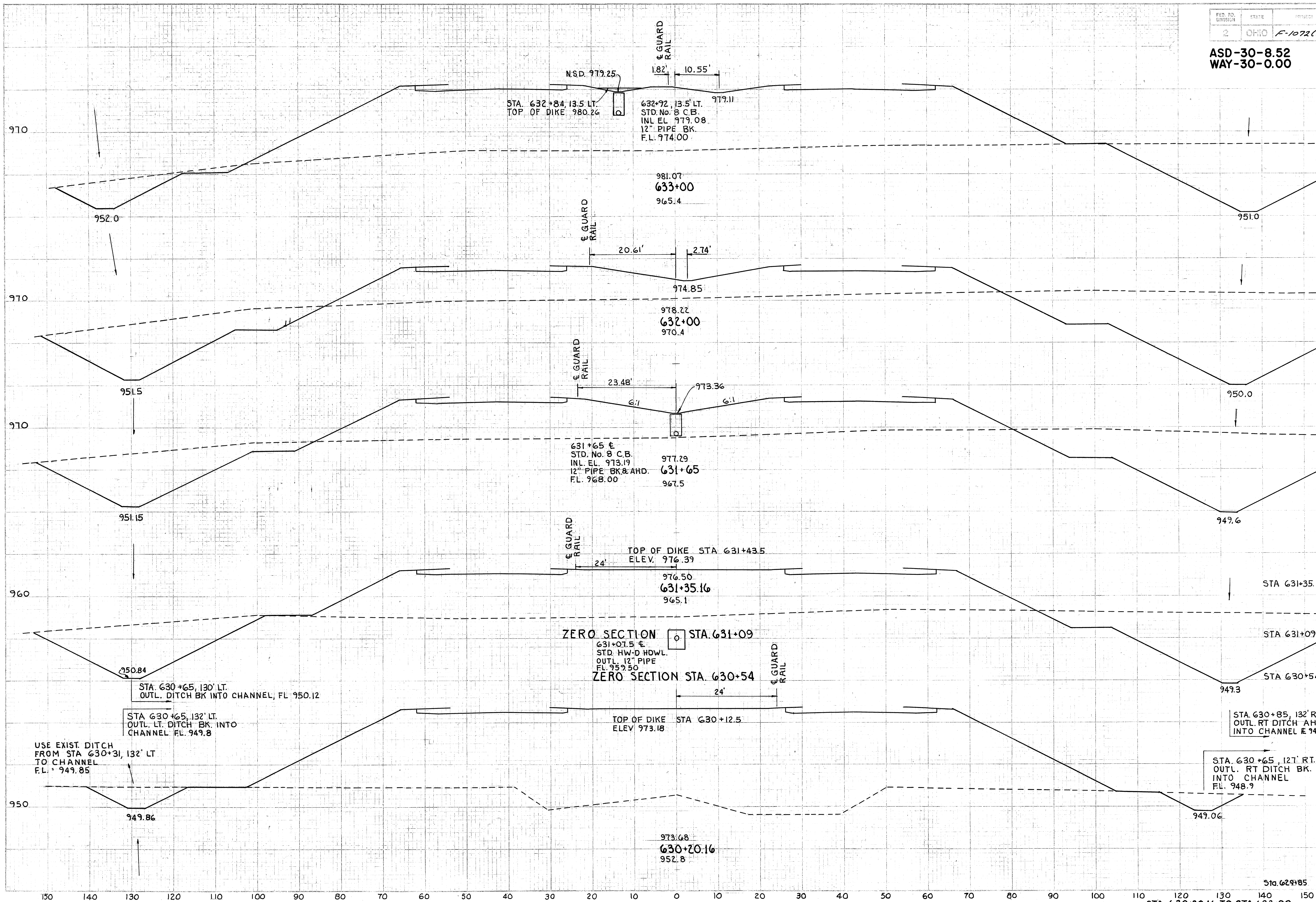
83
198

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
120	3130		
		303	9397
72	2840		
		231	9775
56	2580		
		206	9301
52	2315		
		157	8194
33	2110		
		165	7362
56	1865		

Sta. 626+00 to Sta. 629+85

ASD-30-8.52
WAY-30-0.00

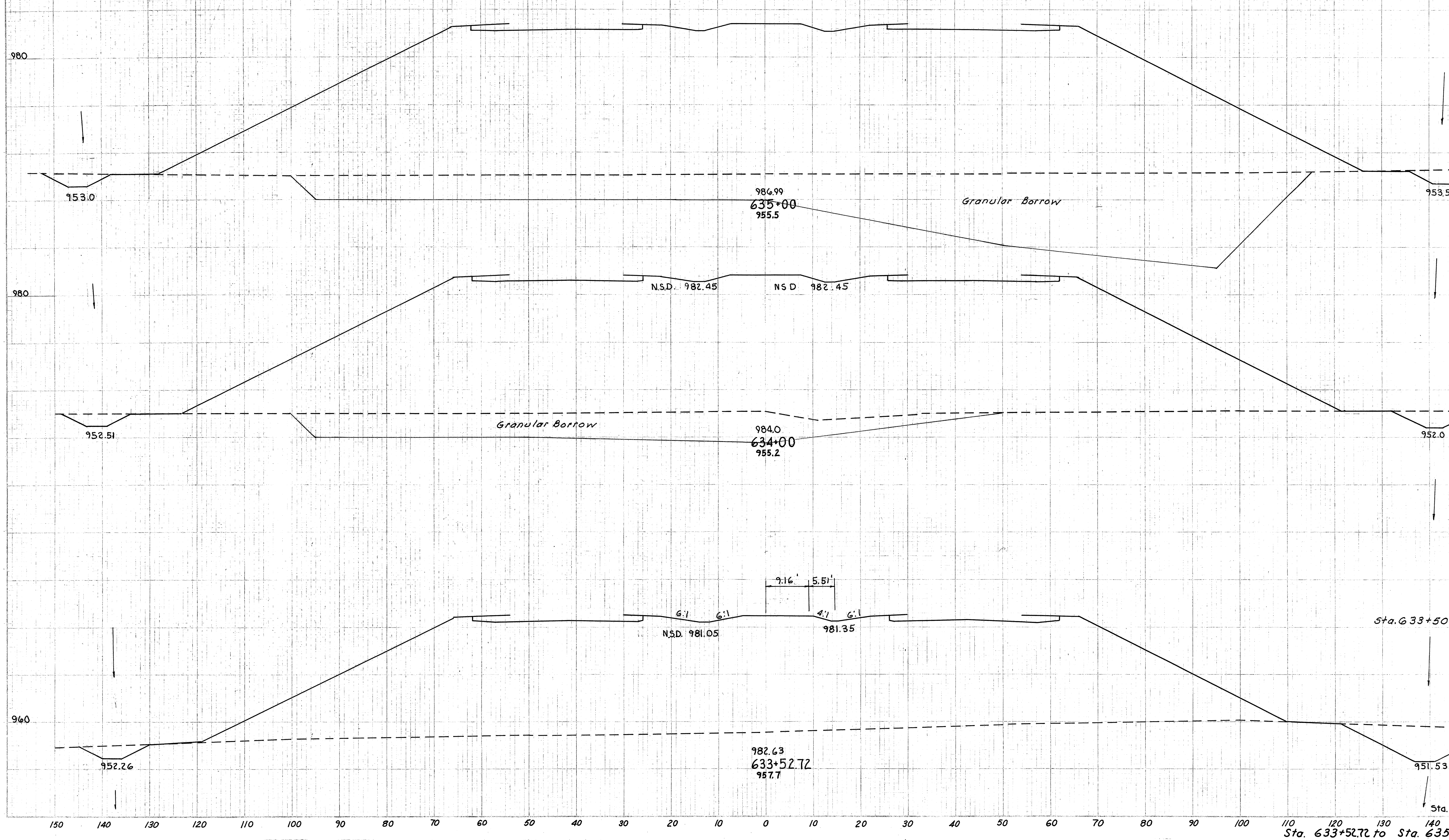


	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	677	2315		
			4147	5963
	1562	905		
			1810	1313
	1230	1120		
			1239	1457
STA 631+35.16	1012	1515		
			491	734
STA 631+09	0	0		
STA 630+54	0	0		
			76	2154
	120	3437		
			157	4276
Sta. 629+85	120	3130		

STA. 630+20.16 TO STA. 633+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(B)	

ASD-30-8.52
WAY-30-0.00



Station	Granular Borrow Sq.Ft.	Granular Borrow Cu.Yd.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
635+00	2005		52	5890		
		4973			206	20,676
634+00	680		59	5274		
		630			201	8322
Sta. 633+50	0.					
633+52.72			170	4230		
					828	6390
Sta. 633+00			677	2315		

Sta. 633+52.72 to Sta. 635+00

PRO. NO. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD-30-8.52
WAY-30-0.00

Station	Granular Borrow Sq. Ft.	Granular Borrow Cu. Yd.	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
STA 638+50			78	5487		
					142	10,063
Sta. 638+00	0		75	5380		
		1056			226	21,644
STA. 637+00	570		47	6307		
		2843			144	23,774
STA. 636+00	965		31	6530		
		4900			154	23,002
Sta. 635+00	2005		52	5890		

Sta. 636+00 to Sta. 638+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
136	3040		
		245	6440
128	3976		
		220	8284
110	5030		
		174	9738
78	5487		

Sta. 639+00 to Sta. 640+28

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		88 / 198

ASD - 30 - 8.52
WAY - 30 - 0.00

Station	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
641+84	172	4714		
			477	12,902
641+00	134	3580		
			185	4971
STA 640+60	115	3130		
			279	6856
Sta. 640+00	136	3040		

Sta. 640+60 to Sta. 641+84

ASD-30-8.52
WAY-30-0.00

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
70	4460		
		59	2388
155	4750		
		25	1186
67	5920		
		25	1424
120	5060		
		76	2534
72	4714		

Sta. 641+98 to Sta. 642+25

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	90 / 198

ASD-30-8.52
WAY-30-0.00

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
780	0		
		1680	76
127	41		
		330	2383
51	1246		
		581	8681
263	3442		
		376	9496
44	4327		
		19	1465
70	4460		

Sta. 642+34 to Sta. 646+00

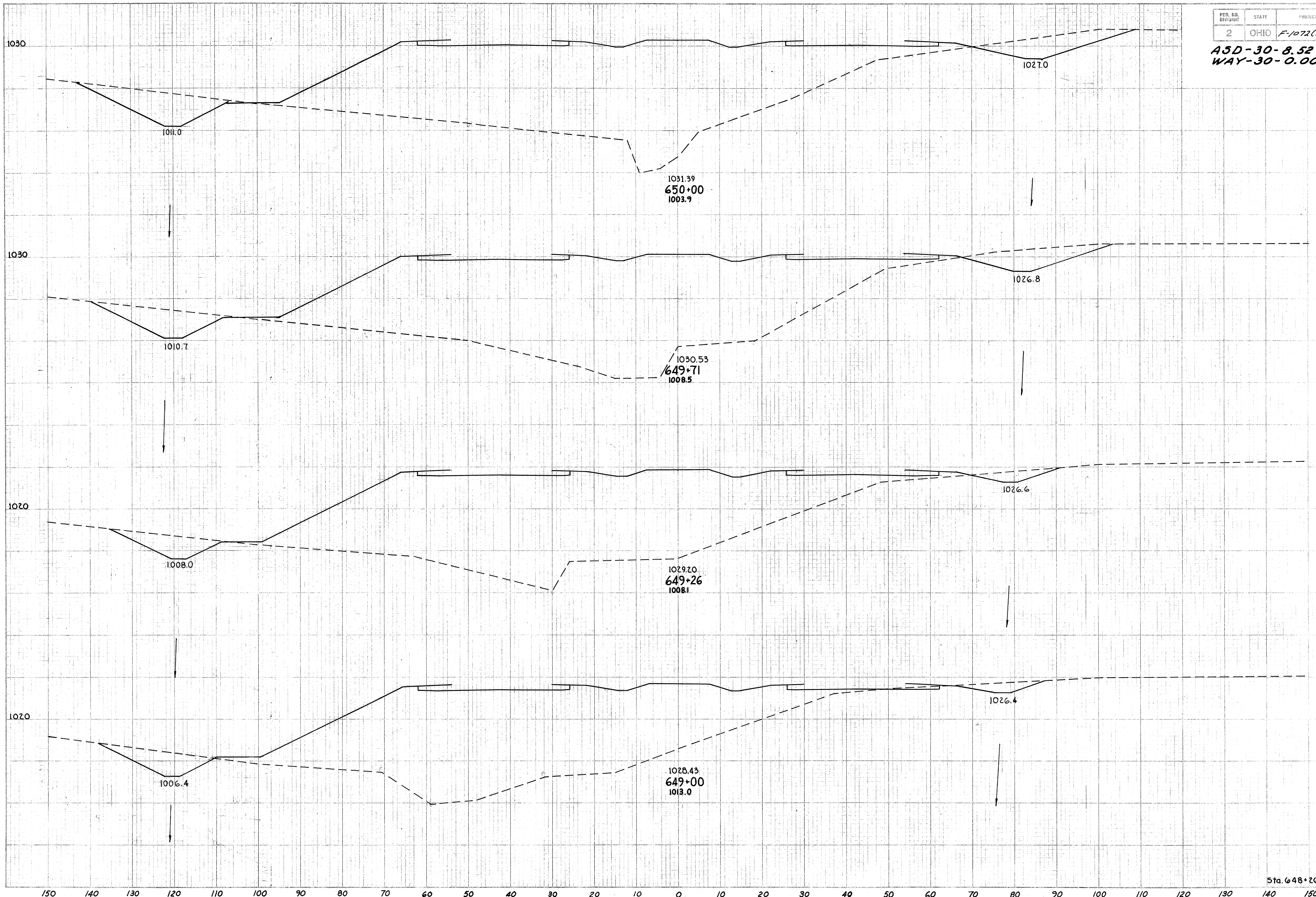
ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
120	1550		
		104	1309
95	1168		
		353	2576
207	1040		
		315	891
252	260		
		1874	481
760	0		

Sta. 647+00 to Sta. 648+26

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

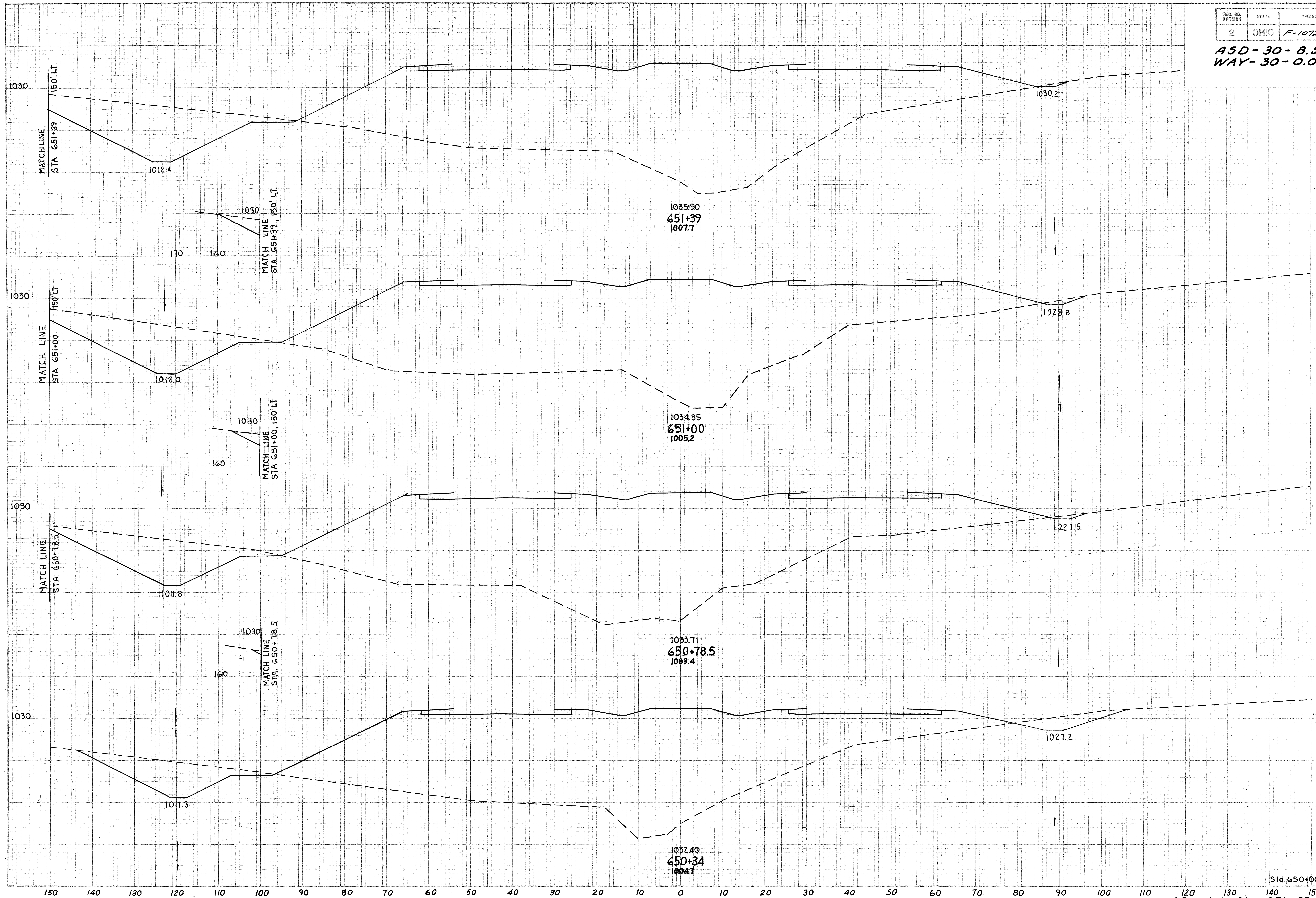


Sta. 649+00 to Sta. 650+00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
270	2335		
		253	2621
200	2545		
		259	4052
110	2317		
		105	2122
108	2090		
		313	4989
120	1550		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(B)	93 / 198

ASD-30-8.52
WAY-30-0.00



End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
438	2735		
		568	4027
348	2840		
		260	2296
304	2925		
		277	4586
132	2640		
		253	3133
270	2335		

Sta. 650+34 to Sta. 651+39

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(B)	

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
4	2635		
		248	5033
264	2800		
		772	5252
570	2862		
		795	4544
451	2970		
		184	1269
374	2740		
		107	710
438	2735		

Sta. 651+46 to Sta. 653+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

95
198

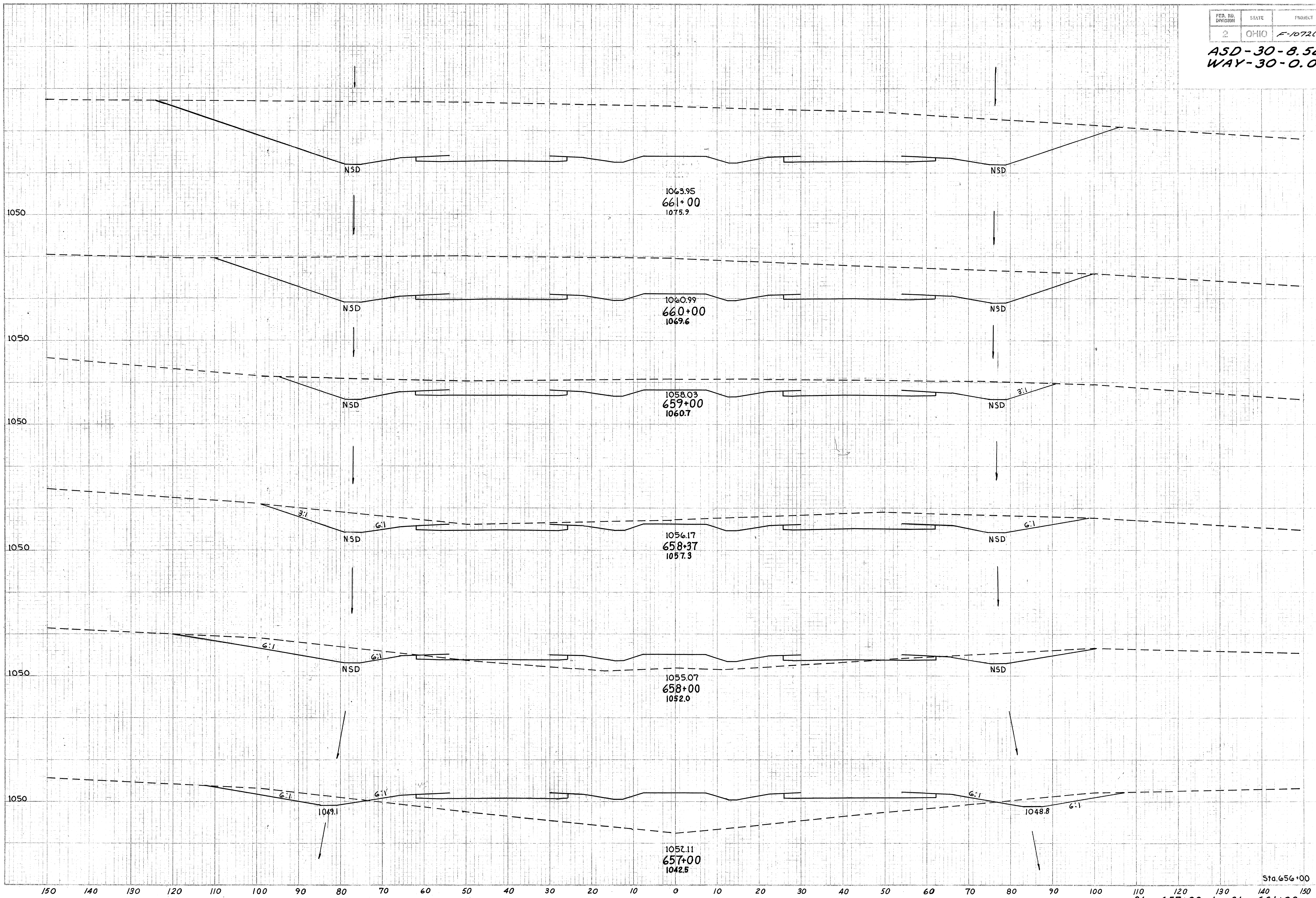
ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
85	1190		
		250	5093
50	1560		
		287	8166
105	2850		
		210	5595
84	2185		
		66	3571
4	2635		

Sta. 653+40 to Sta. 656+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD-30-8.52
WAY-30-0.00



End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
2405	0		
		7426	0
1605	0		
		4047	0
580	0		
		1248	0
490	0		
		437	120
148	175		
		419	1676
78	730		
		302	3556
85	1190		

Sta. 657+00 to Sta. 661+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu. Yds Cut	Cu. Yds Fill
411	167		
		71	19
548	81		
		253	17
690	2		
		2604	2
2658	0		
		1868	0
2946	0		
		8627	0
2735	0		
		9518	
2405	0		

Sta. 662+00 to Sta. 663+57

ASD-30-8.52
WAY-30-0.00

Station	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
666+00	3510	0		
			96	
			8121	0
665+41	3922	0		
			5868	0
665+00	3806	0		
			4649	0
664+66	3577	0		
			7515	0
664+00	2620	0		
			1846	0
663+73 AH	1070	0		
663+73 BK	1020	0		
			424	50
Sta. 663+57	411	167		

Sta. 663+73 to Sta. 666+00

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		99 / 198

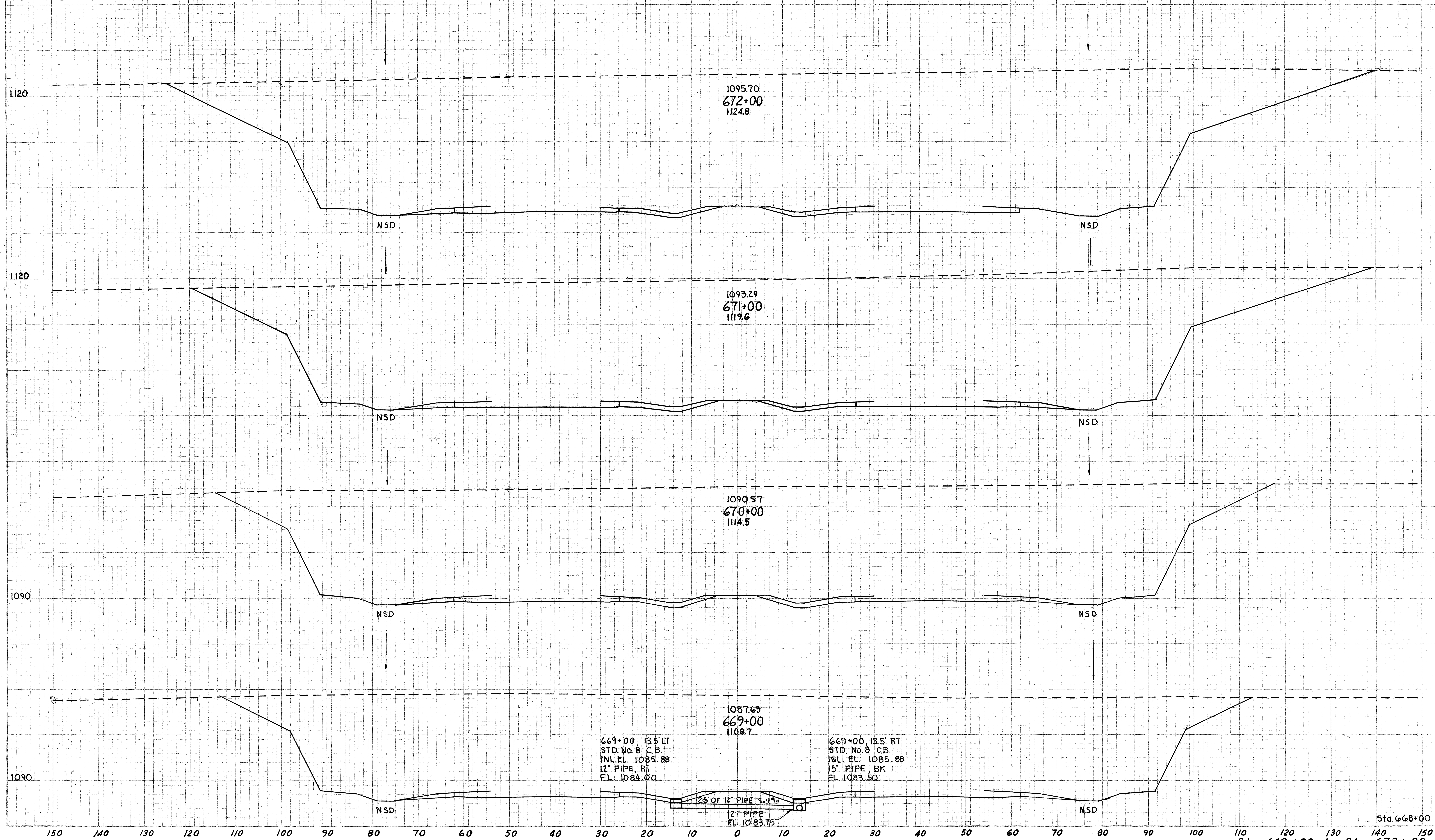
ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
4115	0		
		14,333	0
3625	0		
		5374	0
3630	0		
		1989	0
3080	0		
		5310	0
3510	0		

Sta. 666+44 to Sta. 668+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00



End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
6232	0		
		22,074	0
5687	0		
		19,532	
4860	0		
		16,939	0
4287	0		
		15,559	0
4115	0		

Sta. 669+00 to Sta. 672+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(B)

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
5650	0		
		21,348	0
5817	0		
		21,941	0
5970	0		
		22,131	0
5980	0		
		22,617	0
6232	0		

Sta. 673+00 to Sta. 676+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
3391	0		
		14,554	0
4468	0		
		5807	0
4755	0		
		12,172	0
5205	0		
		20,102	0
5650	0		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

103
198

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
4465	0		
		16,791	0
4602	0		
		17,004	0
4580	0		
		16,204	0
4170	0		
		13,928	0
3391	0		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
3905	0		
		15,130	0
4265	0		
		16,148	0
4455	0		
		17,047	0
4750	0		
		17,287	0
4585	0		
		16,760	0
4465	0		

Sta. 684+00 to Sta. 688+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (B)	

ASD-30-8.52
WAY-30-0.00

End Area		Cu Yds	
Cut	Fill	Cut	Fill
4091			
		16,409	0
4770	0		
		18,541	0
5242	0		
		18,471	0
4732	0		
		15,398	0
3583	0		
		13,867	0
3905	0		

Sta. 689+00 to Sta. 693+00

ASD-30-8.52
WAY-30-0.00

	End Area Cut	End Area Fill	Cu Yds Cut	Cu Yds Fill
	1450	0		
			6134	0
AH.	1862	0		
BK.	1912	0		
			7957	0
	2385	0		
			9778	0
	2895	0		
			11,555	0
	3345	0		
			13,770	0
	4091	0		

Sta. 694+00 to Sta. 698+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

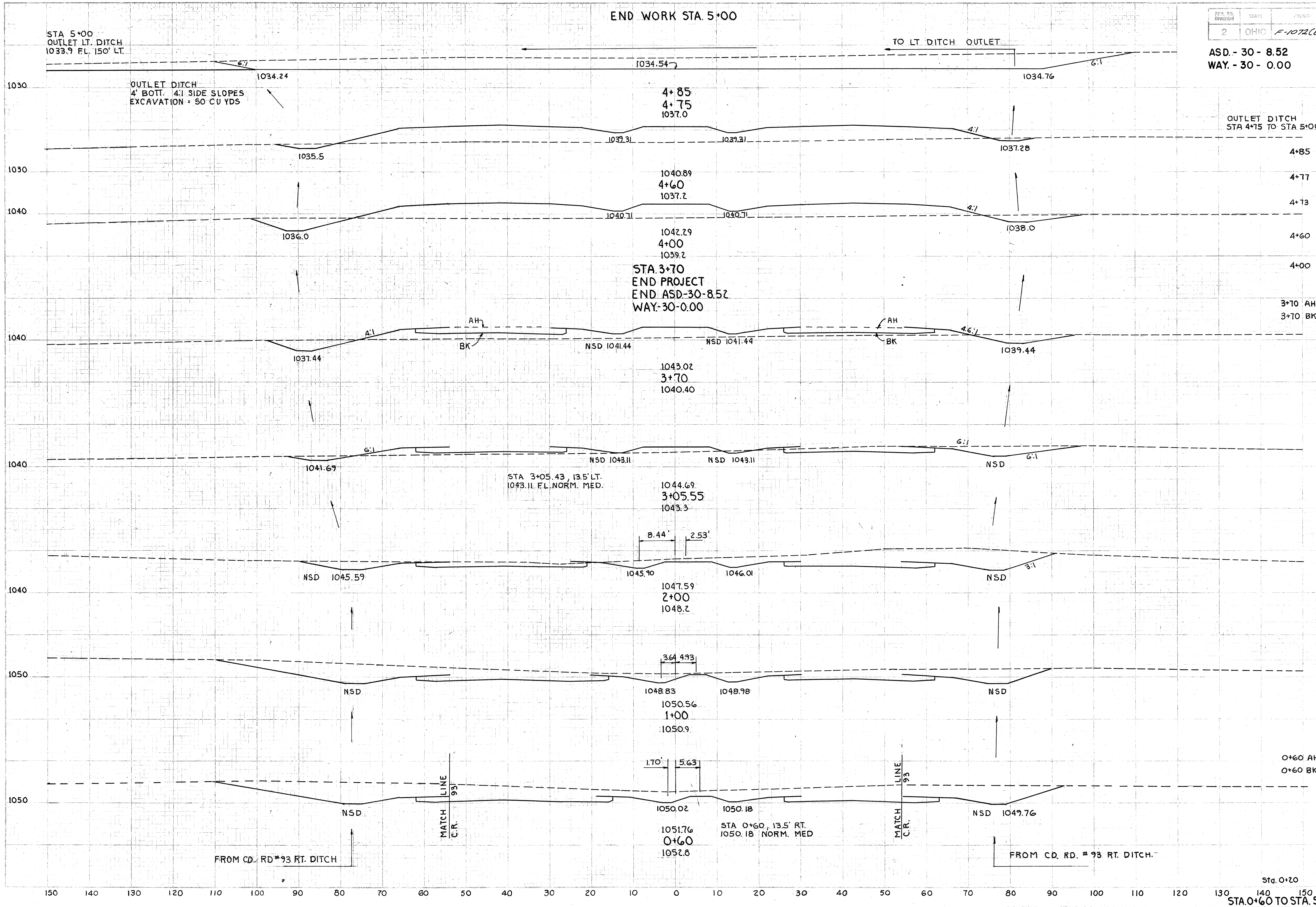
ASD.- 30- 8.52
WAY.- 30- 0.00

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL	
510	0			
		359	0	
457	0			
		309	0	
377	0			
		466	0	
340	0			701+00 AH
1360	0			701+00 BK
		4445	0	
1040	0			
		4093	0	
1170	0			
		4852	0	
1450	0			Sta. 698+00

STA. 699+00 TO STA. 0+20

ASD. - 30 - 8.52
WAY. - 30 - 0.00

END WORK STA. 5+00



Station	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
OUTLET DITCH STA 4+75 TO STA 5+00			50	
4+85	0	0		
			82	0
4+77	550	0		
			83	0
4+73	550	0		
			135	120
4+60	9	465		
			72	939
4+00	56	380		
			68	356
3+70 AH	65	260		
3+70 BK	65	190		
			172	298
	79	59		
			841	115
	357	0		
			1437	0
	425	0		
			767	0
0+60 AH	610	0		
0+60 BK	320	0		
			615	0
Sta. 0+20	510	0		

STA. 0+60 TO STA. 5+00

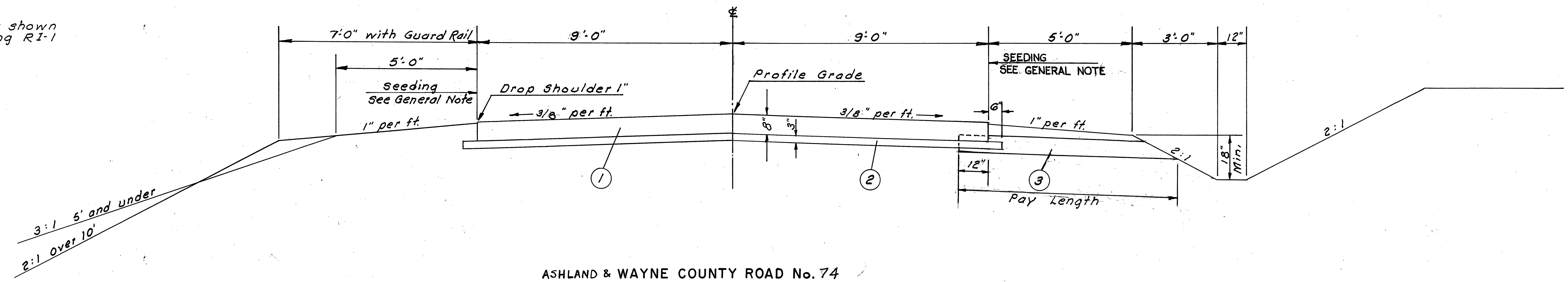
FED. RD. DIVISION	STATE	PROJECT	
		F-1072(8)	

ASD. 30-8.52
WAY. 30-0.00

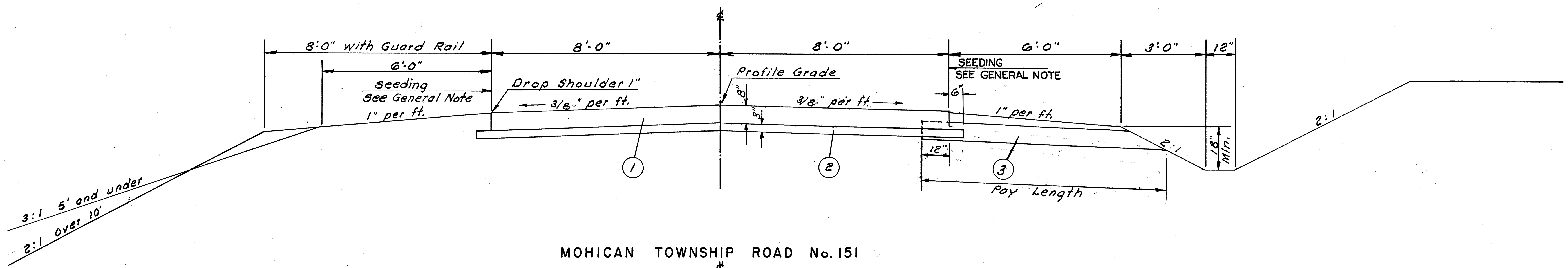
TYPICAL SECTION
TYPE B-19

Note ~ For details not shown
See Std. Drawing RI-1

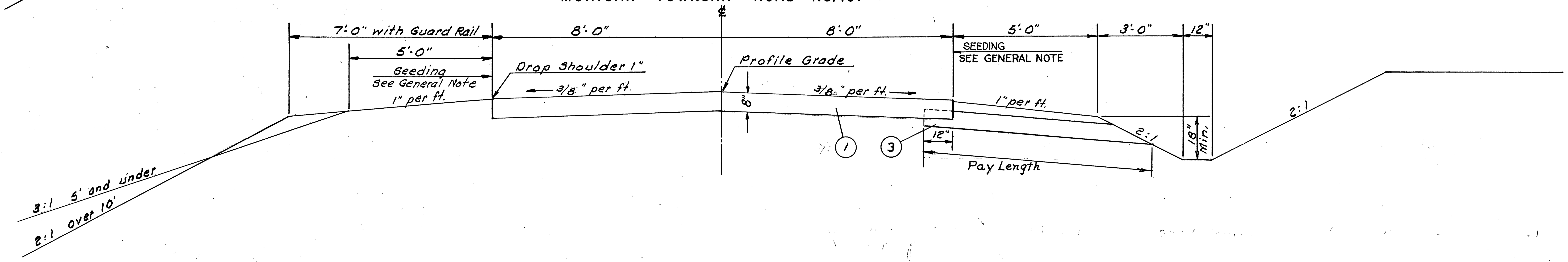
ASHLAND COUNTY ROAD No. 127



ASHLAND & WAYNE COUNTY ROAD No. 74



MOHICAN TOWNSHIP ROAD No. 151



(1) B-19 Aggregate Base Course
(2) I-22 Subbase, Grading "A" or "B", as per plan
(3) I-9 Stone Underdrain, No. 2

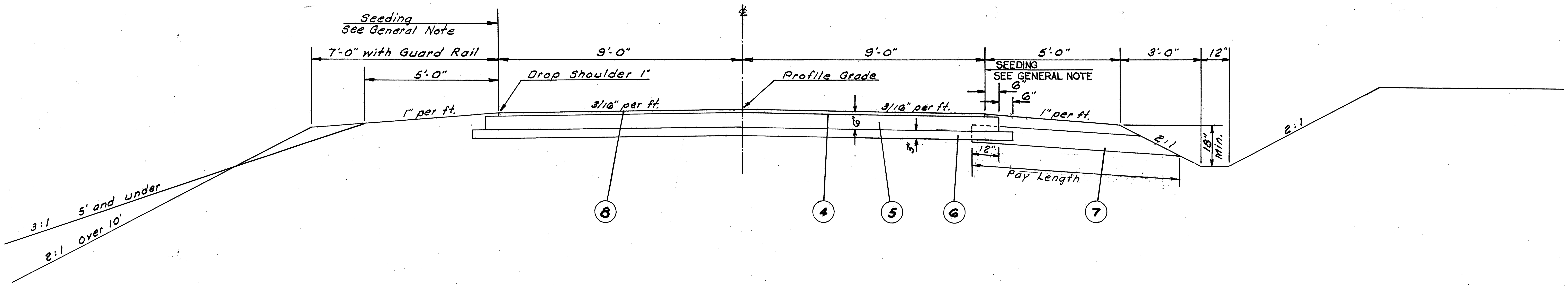
TYPICAL SECTION

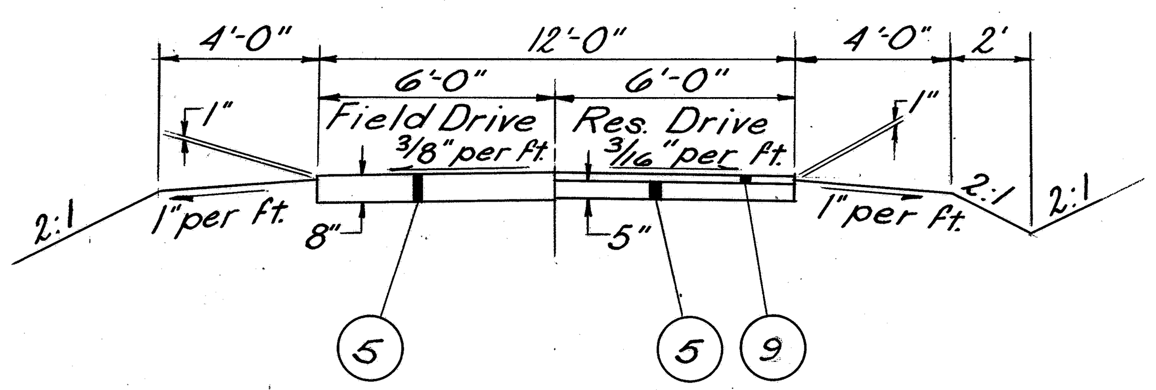
TYPE T-35

Note ~ For details not shown
See Standard Drawing RI-1

STATE ROUTE No. 89

ASHLAND COUNTY ROAD No. 132
ASHLAND COUNTY ROAD No. 62





RESIDENCE AND FIELD DRIVE

Note: The surface course of the residence drive at Station 4+14 Temporary Connection "N" shall be constructed using two (2) 1 inch courses of T-35, Asphaltic Concrete Surface Course Type C (70-85) in lieu of T-35 Type A (85-100).

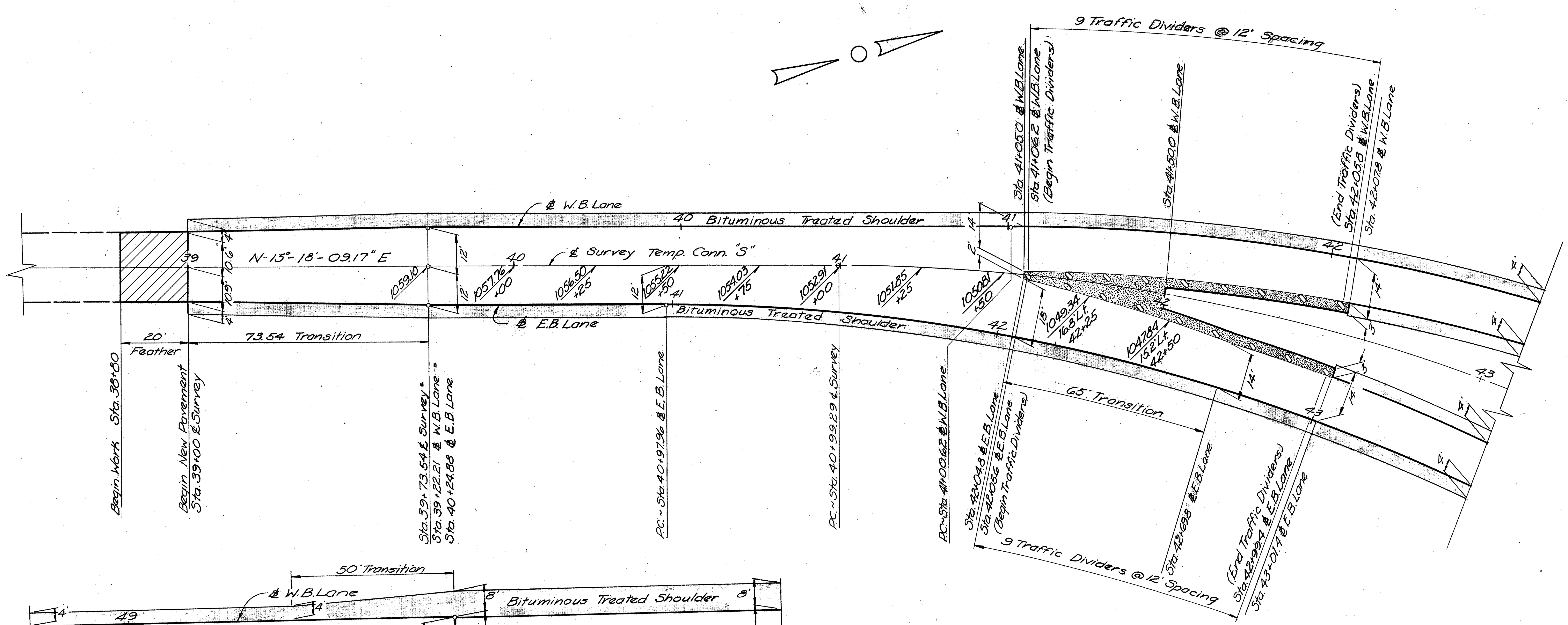
*Thicknesses shown are designed thicknesses as described in Sections T-35.01 and B-35.01.

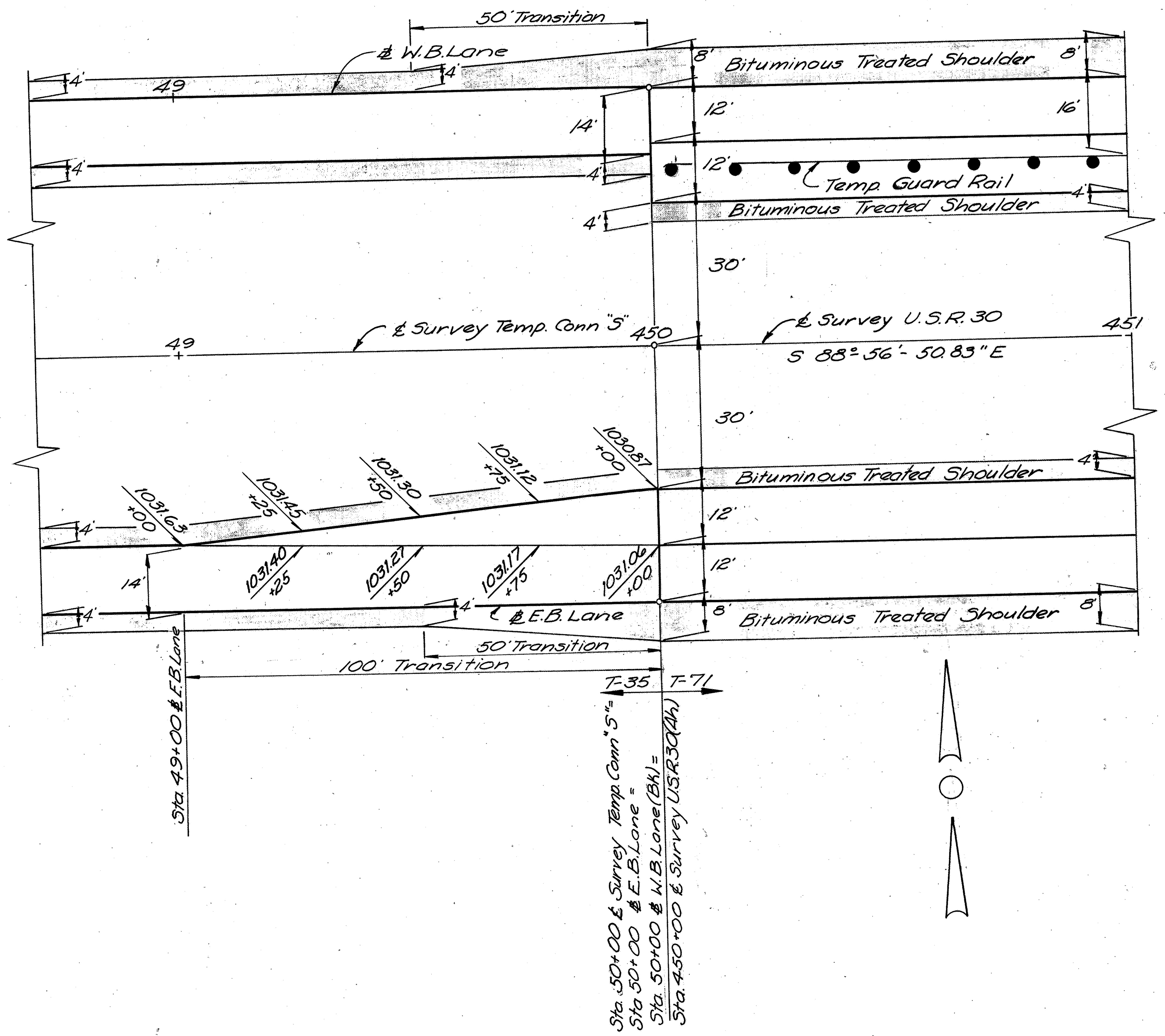
1. T-35* 1¼" Asphaltic Concrete Surface Course, Type C (70-85)
2. B-35* 1¼" Asphaltic Concrete Leveling Course (70-85)
3. B-35* 1½ Asphaltic Concrete Leveling Course (70-85)
4. T-30 Bituminous Prime Coat, 0.4 gal. per sq. yd.
5. B-19 Aggregate Base Course
6. I-22 Subbase, Grading "A" or "B" as per plan
7. I-9 Stone Underdrains No. 2
8. T-35* 1½" Asphaltic Concrete Surface Course Type A (85-100)
9. T-35* 2" Asphaltic Concrete Surface Course Type A (85-100)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

110A / 198

ASD-30-8.52
WAY-30-0.00





Speckled area represents additional pavement of the same composition as that used on the traveled lanes. The three foot width shall be placed at the same slope as the adjacent pavement. The variable width shall be placed so that drainage may be accomplished transversly.

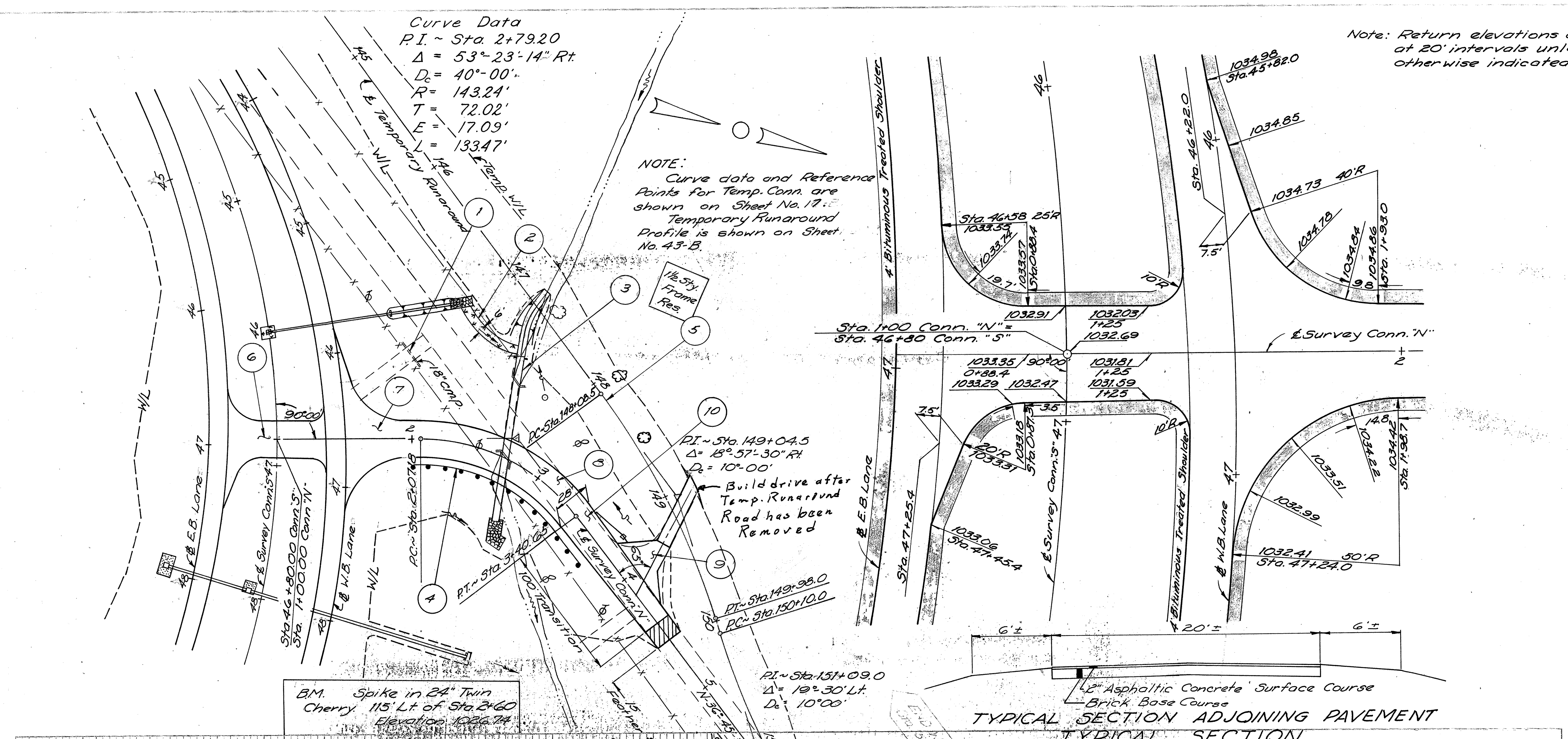
0 5 10 20 40
Scale in feet

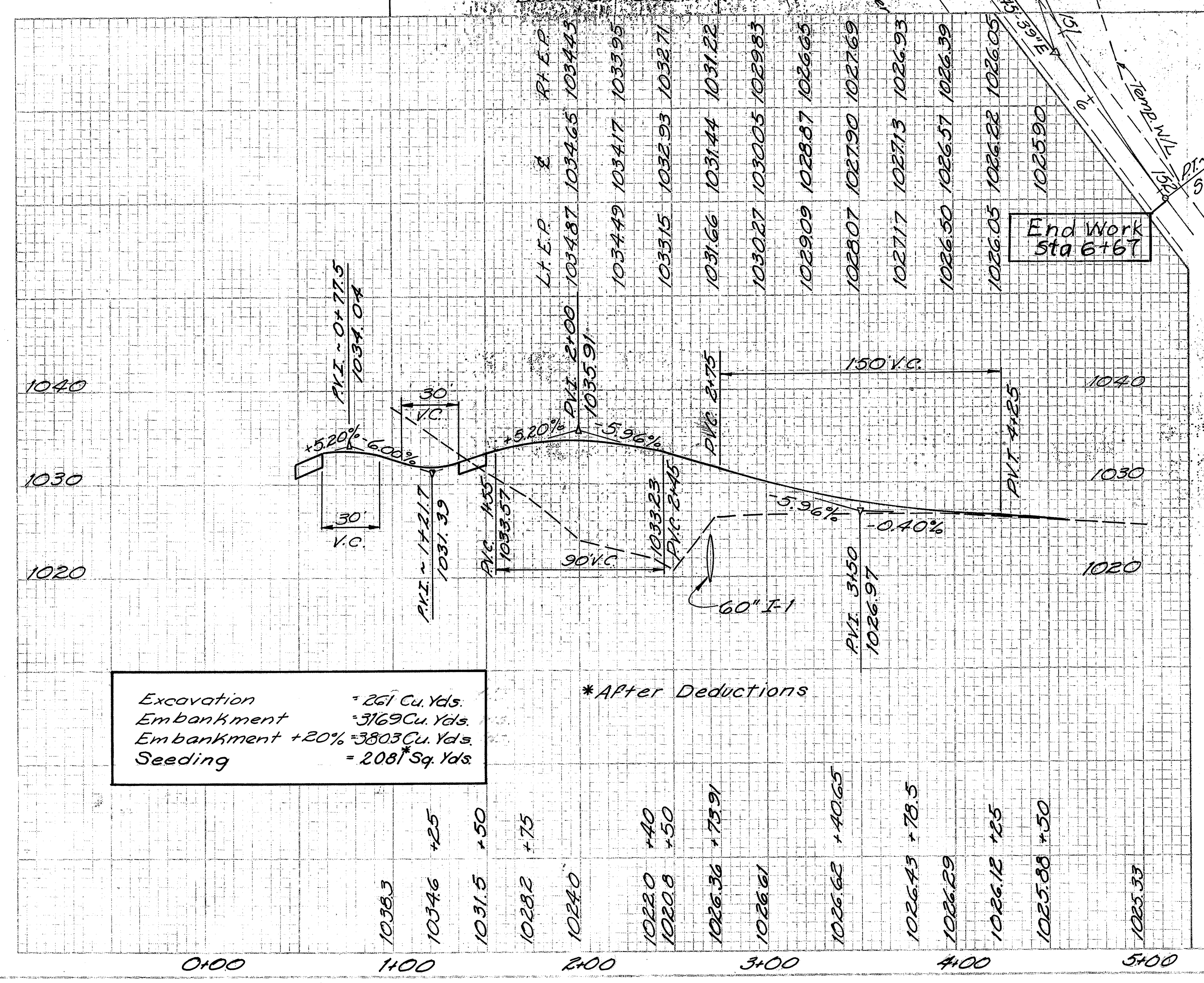
TEMPORARY CONNECTION "S" DETAILS

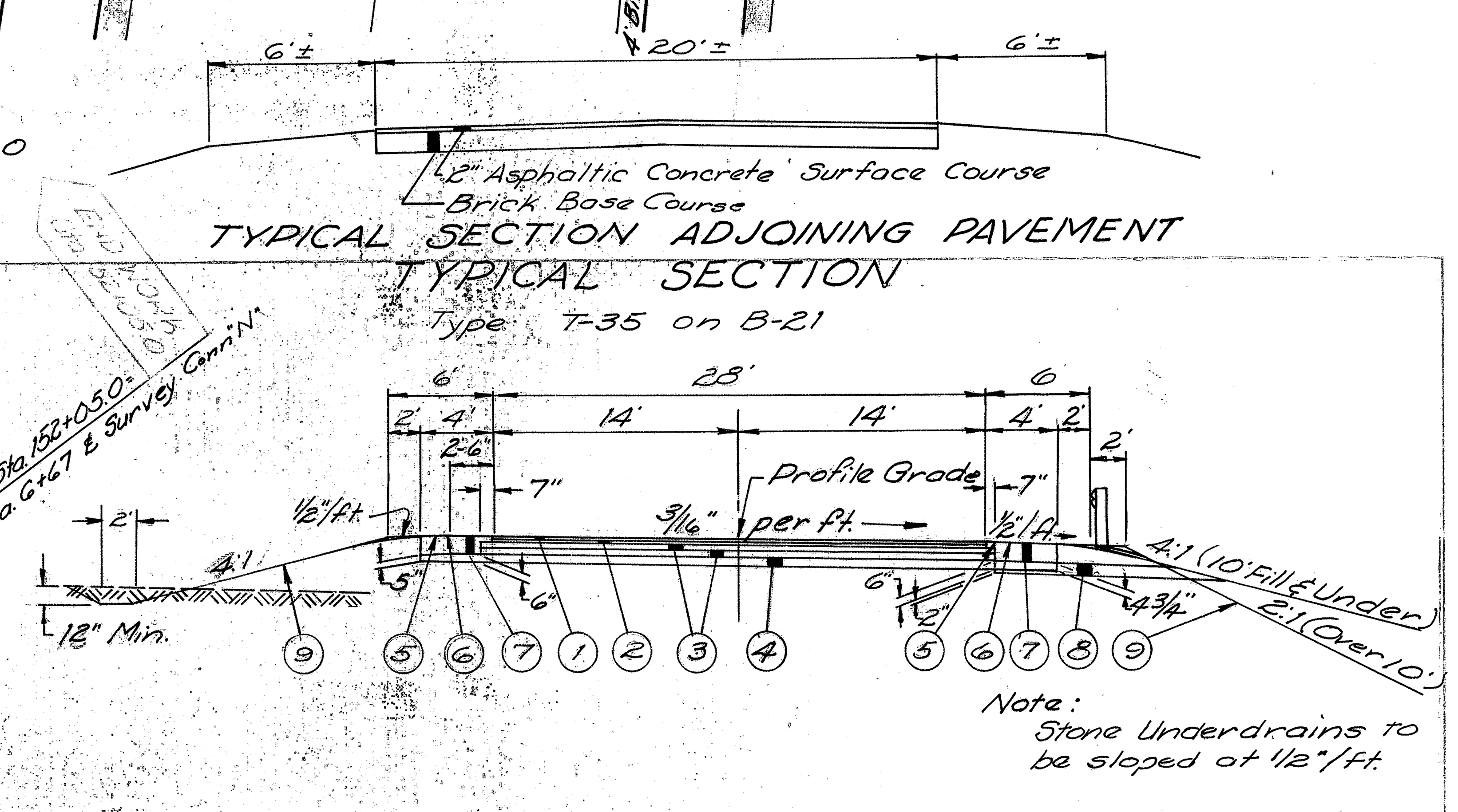
ASD-30-8.52
WAY-30-0.00

FED. RD. DIVISION	STATE	PROJECT	FUNDS	
2	OHIO	F-1072(8)		110-B / 198

Note: Return elevations are at 20' intervals unless otherwise indicated.







1. 1" T-35 Asphaltic Concrete Surface Course Type "C" (70-85)
2. 1¼" B-35 Asphaltic Concrete Leveling Course (70-85)
3. 3½" B-21 Waterproofed Aggregate Base Course
4. I-22 Subbase
5. T-30 Bituminous Prime Coat, 0.40 Gallon per Sq. Yd. Sec. M-5.7, RT-2 or RT-3
6. T-31 Bituminous Surface Treatment Consisting of One Application as follows: 0.008 Cu. Yd. No. 6 Aggregate and 0.30 Gallon Bituminous Material per Sq. Yd. Section M-5.7, RT-8 or RT-9 or Section M-5.12 CBAE-3
7. 9" B-19 Aggregate Base Course (to be placed in two courses.)
8. I-9 Stone Underdrains No. 2
9. L-9 Seeding and Protecting, as per plan.

Scale In Feet 5 0 5 10

ESTIMATED QUANTITIES

* Type C (70-85)

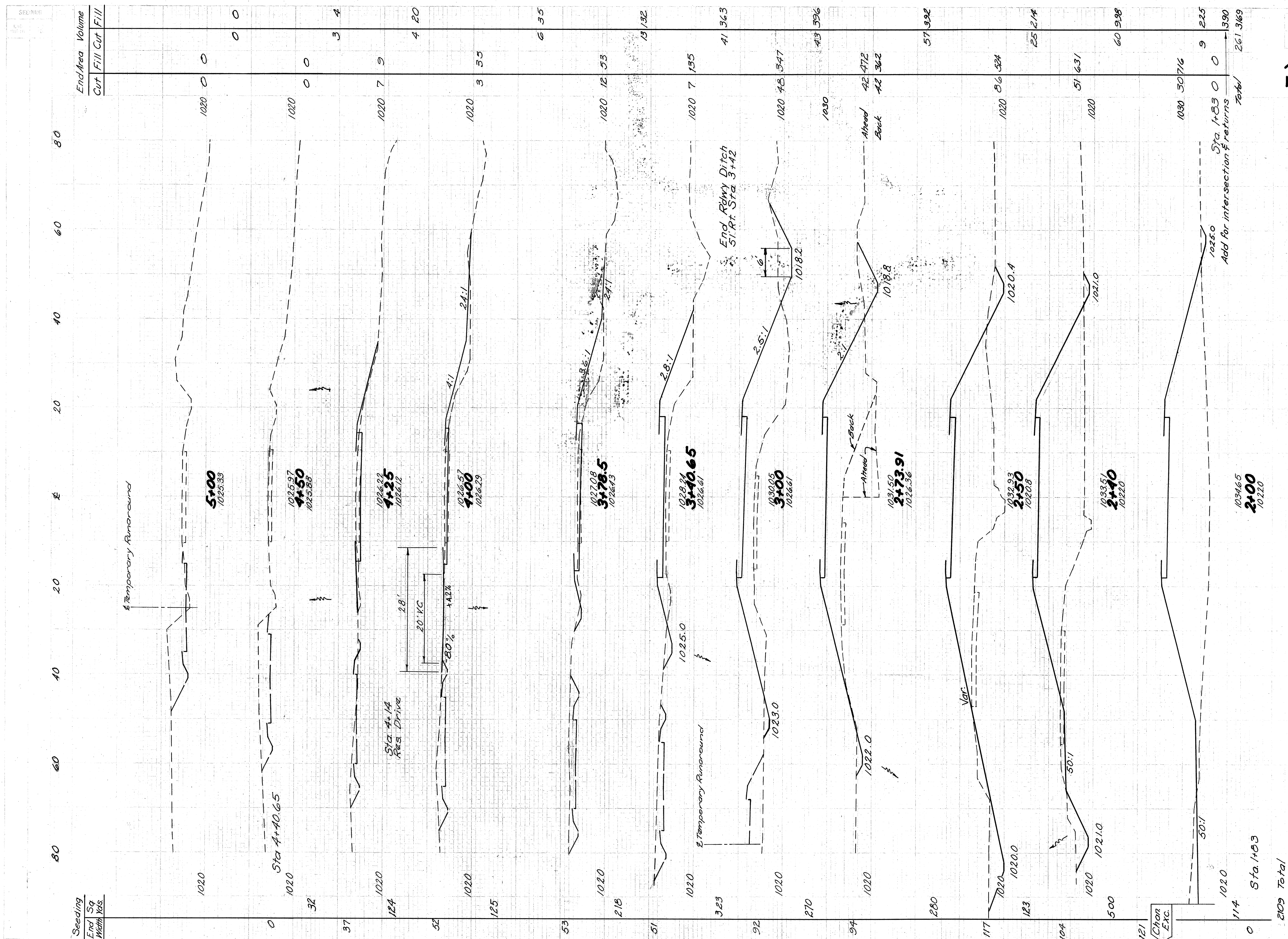
REF. NO.	STATION TO STATION	SIDE	E-3	E-8 Removal & Disposal of Ex. Pvm't	E-12 Over 15"	I-1 60" M-6.6(d) Cl. A-1	I-2 Class "E"	I-10 D.R. Chan. Prot.	I-15 Steel Beam Deep	L-10	S-24	S-15 Class "A"	B-19 5"	B-19 9"	B-21 7"	B-35 Level 1¼"	I-22	T-35* 1"	T-35* 2"	T-31 No. 6 Agg.	T-31 Bit. Mat.	T-30 Prime	I-9 Stone Underdrains #2	T-30 Tack	SEE SHEET NO.
			Cu. Yds.	Sq. Yds.	Lin. Ft.	Lin. Ft.	Cu. Yds.	Cu. Yds.	Lin. Ft.	Sq. Yds.	Lump	Lump	Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Sq. Yds.	Sq. Yds.	Cu. Yds.	Gal.	Gal.	Lin. Ft.	Gal.	
1	2+00	Lt.			24																				
2	2+25 to 2+50	Lt.								40															
3	2+70	℄	13			124	5.0	19		26	Lump														144-A
4	2+00 to 3+70	Rt.							150																
5	144+93 to 152+05	℄										Lump													
6	0+63 to 1+36	Lt. & Rt.												19.4	59.2	9.7	60.0	7.7		0.7	26.3	35.1			
7	1+50 to 1+98.7	Lt. & Rt.												16.4	56.7	9.4	56.8	7.5		0.6	22.2	29.6			
8	1+98.7 to 4+55.65	Lt. & Rt.												47.7	143.9	25.8	151.2	20.6		1.6	58.1	50.5	136	3.3	
9	4+14	Lt.											14.0	16.7					5.6						
10	2+40 to 4+40.65	℄		493																					
	Subtotals												14.0	100.2				35.8	5.6						
			13	493	24	124	5.0	19	150	66	Lump	Lump	114.2		259.8	44.9	268.0	41.4		2.9	106.6	115.2	136	3.3	
	TOTALS																								

TEMP. CONN. "N" ~ Sta. 0+00 to Sta. 6+67

110-C
198

F-1072(8)

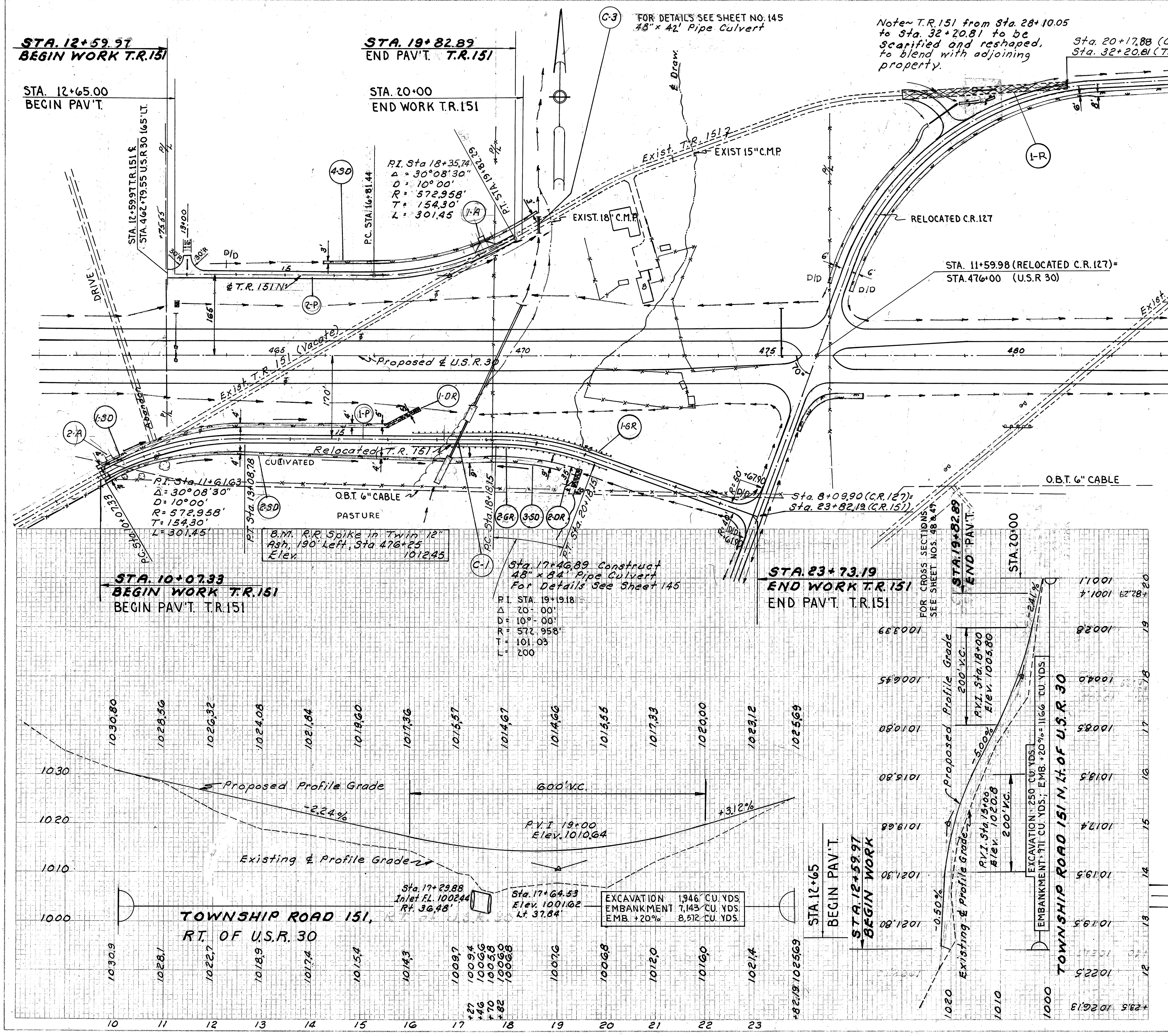
ASD - 30 - 8.52
WAY - 30 - 0.00

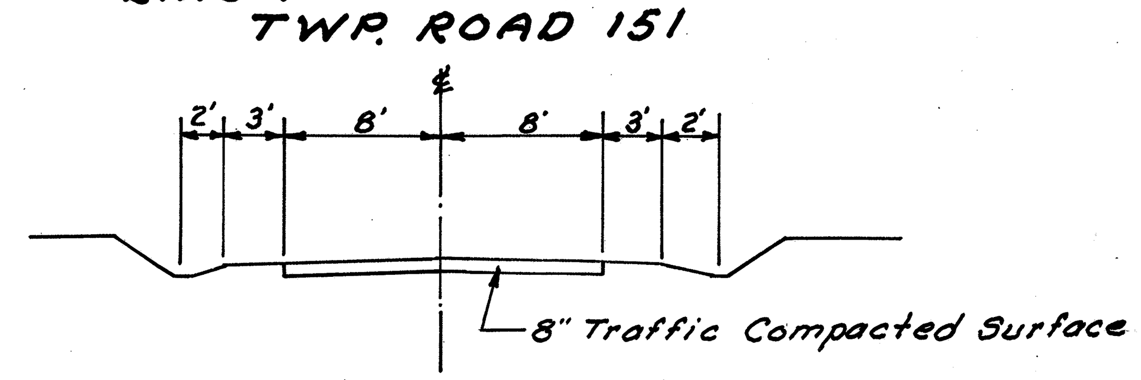


Temporary Connection "N" Sta. 2+00 to Sta. 5+00

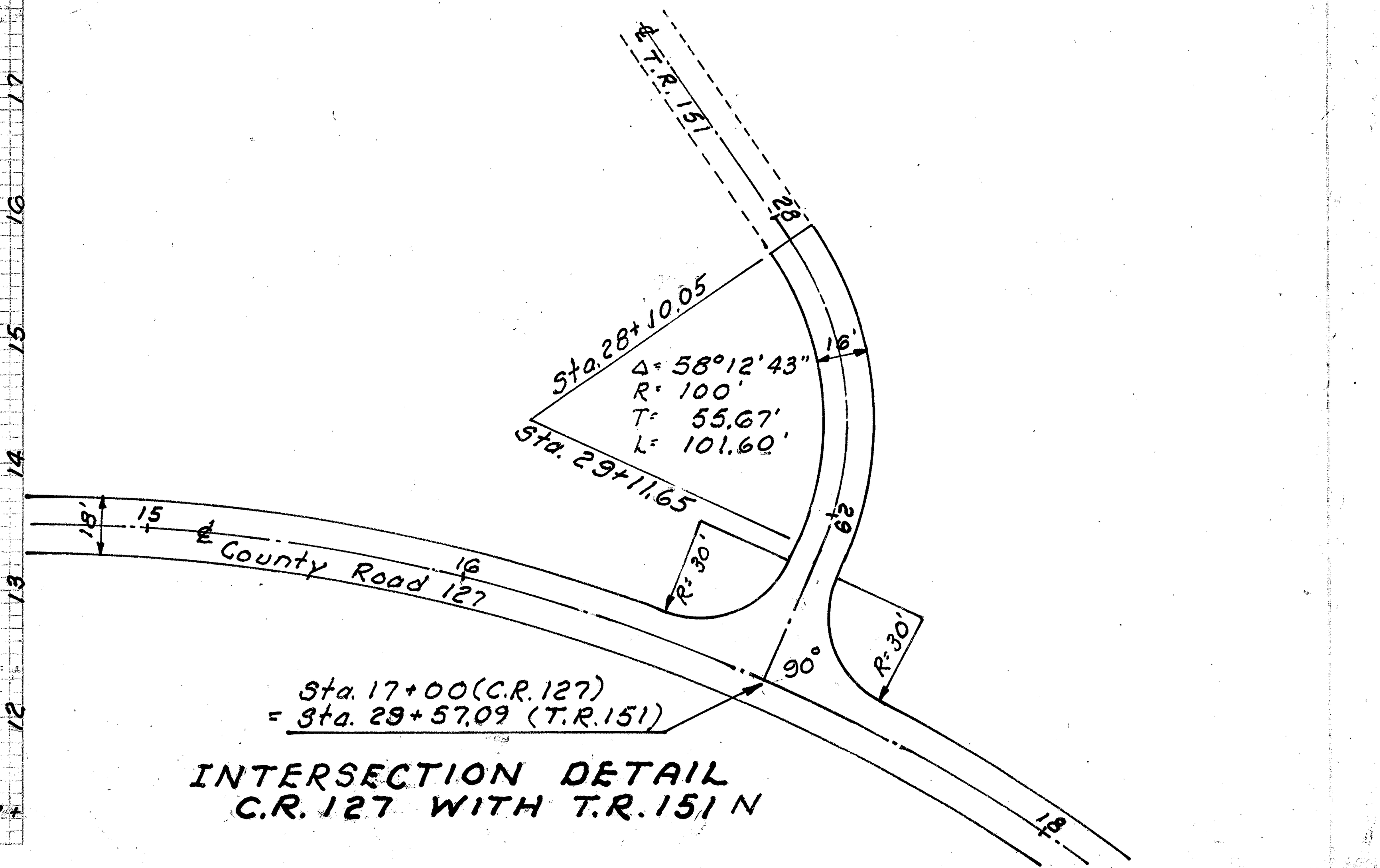
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	111 / 198

ASD. 30 - 8.52
WAY. 30 - 0.00





REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE CU. YDS.	I-15 GUARD RAIL WIRE CABLE TYPE THREE CABLES LIN. FT.	I-10 DUMPED ROCK CHANNEL PROTECTION T-1.5 CU. YDS.		L-10 SODDING SQ. YDS.	E-8 REMOVAL & DISPOSAL OF EXIST. PAV'T. SQ. YDS.	I-1 15" Class C-1 pipe Lin. Ft.			
1-P	Rt.	10+07.33	23+13.47	562									
2-P	Lt.	12+60	19+83.05	290									
1-GR	Lt.	16+50	20+50		400								
2-GR	Rt.	16+50	20+50		400								
1-SD	Lt.	10+07.83	15+75					253					
2-SD	Rt.	10+07.83	17+29					321					
3-SD	Rt.	17+30	9+95					290					
4-SD	Lt.	15+80	20+35					152					
1-R	℄	28+10.05	32+20.81						800				
1-DR	Lt.	15+75	16+69			21							
2-DR	Rt.	20+00				20							
1-A	Lt.	19+20		9						20			
2-A	Lt.	10+40		9						30			
Totals				870	800	41		1016	800	50			



INTERSECTION DETAIL C.R.127 WITH T.R.151 N

MOHICAN TOWNSHIP ROAD 151

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

112
198

ASD. - 30 - 8.52
WAY. - 30 - 0.00

STA. 10+07.33 TO STA. 23+73.19 MOHICAN TOWNSHIP ROAD 151, RIGHT OF U.S.R. 30

2	OHIO	F-1072(8)

113
198

ASD-30-8.52
WAY.-30-0.00

REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE CU. YDS.	I-9 STONE UNDERDRAINS NO. 2 LIN. FT.	I-22 SUBBASE CU. YDS.	L-10 SODDING SQ. YDS.	I-1 18" PIPE CLASS B-1 LIN. FT.	I-2 H.W.-E END WALL CU. YDS.	I-1 15" Pipe Class B-1 LIN. FT.	E-8 REMOVAL & DISPOSAL OF EXIST. PAV'T. SQ. YDS.
1-P		2+32.10	27+05	1114	492	465					
2-P	Lt.	17+00		64							
1-R	℄	11+25	25+40								1740
1-SD	Lt.	1+50	4+50				216				
2-SD	Rt.	10+00	10+94				91				
3-SD	Rt.	13+00	27+50				1515				
4-SD	Lt.	13+00	16+82				136				
5-SD	Lt.	17+18	18+10				41				
1-S		4+65							0.52	46	
2-S	Lt	17+00						72	0.60		
Totals				1178	492	465	1999	72	1.12	46	1740

ASHLAND COUNTY ROAD 127

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD. 30 - 8.52
WAY. 30 - 0.00

JOINT LEGEND
① STANDARD LONGITUDINAL JOINT
② EXPANSION JOINTS WITHOUT DOWELS
③ STANDARD KEY JOINTS WITHOUT TIE BARS

ESTIMATED QUANTITIES

T-70	9" P.C. CONCRETE PAVEMENT	713.9	SQ. YDS.
B-70	8" P.C. CONCRETE BASE COURSE	1046.5	SQ. YDS.
T-30	BITUMINOUS TACK COAT	104.6	GALS.
T-35	1"▲ ASPHALTIC CONCRETE SURFACE COURSE TYPE "C"	29.1	CU. YDS.
T-31	BITUMINOUS SURFACE TREATMENT BITUMINOUS MAT'L.	131.8	GALS.
T-31	BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE	4.3	CU. YDS.
~~B-19~~	~~9" AGGREGATE BASE COURSE~~	~~132.0~~	" "
~~T-30~~	~~BITUMINOUS PRIME COAT~~	~~211.2~~	GALS.
I-22	SUBBASE GRADING "A" or "B" AS PER PLANS	404.7	" "

▲ Thickness shown is designed thickness as described in Section T-35.01

INTERSECTION COUNTY ROAD 127

2	OHIO	F-1072(8)

ASD. 30- 8.52
WAY. 30- 0.00

STA 0+00 TO STA 10+00 COUNTY ROAD 127

ASD. 30 - 8.52
WAY. 30 - 0.00

STA 11+00 TO STA 21+00 COUNTY ROAD 127

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	117 / 198

ASD. 30- 8.52
WAY. 30- 0.00

STA. 22+00 TO STA. 27+50, C.R. 127

2	OHIO	F-1072(8)	

ASD. 30 - 8.52
WAY. 30 - 0.00

REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE CU. YDS.	I-1 27" CLASS B-1 PIPE, SEC. M 6.6(c) LIN. FT.	I-2 HW-E ENDWALL MASONRY CU. YDS.	I-1 15" CLASS C-1 PIPE LIN. FT.	L-10 SODDING SQ. YDS.
1-P	LT & RT	10+00	19+00	282				
1-S	LT→RT	14+04			56	0.94		
1-A	LT	10+50		16			58	
1-SD	RT	9+00	14+00					361
2-SD	LT	9+00	10+23					59
TOTALS				298	56	0.94	58	420

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		119 / 198

ASD.-30-8.52
WAY.-30-0.00

JOINT LEGEND

① STANDARD LONGITUDINAL JOINT
② EXPANSION JOINTS WITHOUT DOWELS
③ STANDARD KEY JOINTS WITHOUT TIE BARS

ESTIMATED QUANTITIES

T-70	9" P.C. CONCRETE PAVEMENT	461.7	SQ. YDS.
B-70	8" P.C. CONCRETE BASE COURSE	824.9	SQ. YDS.
T-30	BITUMINOUS TACKCOAT	82.5	GALS.
T-35	1"▲ ASPHALTIC CONCRETE SURFACE COURSE TYPE "C"	22.9	CU. YDS.
T-31	BITUMINOUS SURFACE TREATMENT BITUMINOUS MAT'L.	111.9	GALS.
T-31	BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE	3.9	CU. YDS.
~~B-19~~	~~9" AGGREGATE BASE COURSE~~	120.0	" "
~~T-30~~	~~BITUMINOUS PRIME COAT~~	192.0	GALS.
I-22	SUBBASE GRADING "A" or "B" AS PER PLANS	283.1	" "

▲ Thickness shown is designed thickness as described in Section T-35.01

INTERSECTION TOWNSHIP ROAD 151 EAST

2	OHIO	F-1072(8)	

ASD. 30-8.52
WAY. 30-0.00

Station	End Area Cut	End Area Fill
14+00	50	60
13+50	23	22
13+00	16	9
12+00	6	16
11+50	9	13
11+00	6	28
10+50	47	2
10+00	46	0
9+50	64	0
9+00	8	0

Cu. Yds. Cut	Cu. Yds. Fill
68	76
36	29
41	46
14	27
14	38
	23
49	28
86	2
102	0
67	0

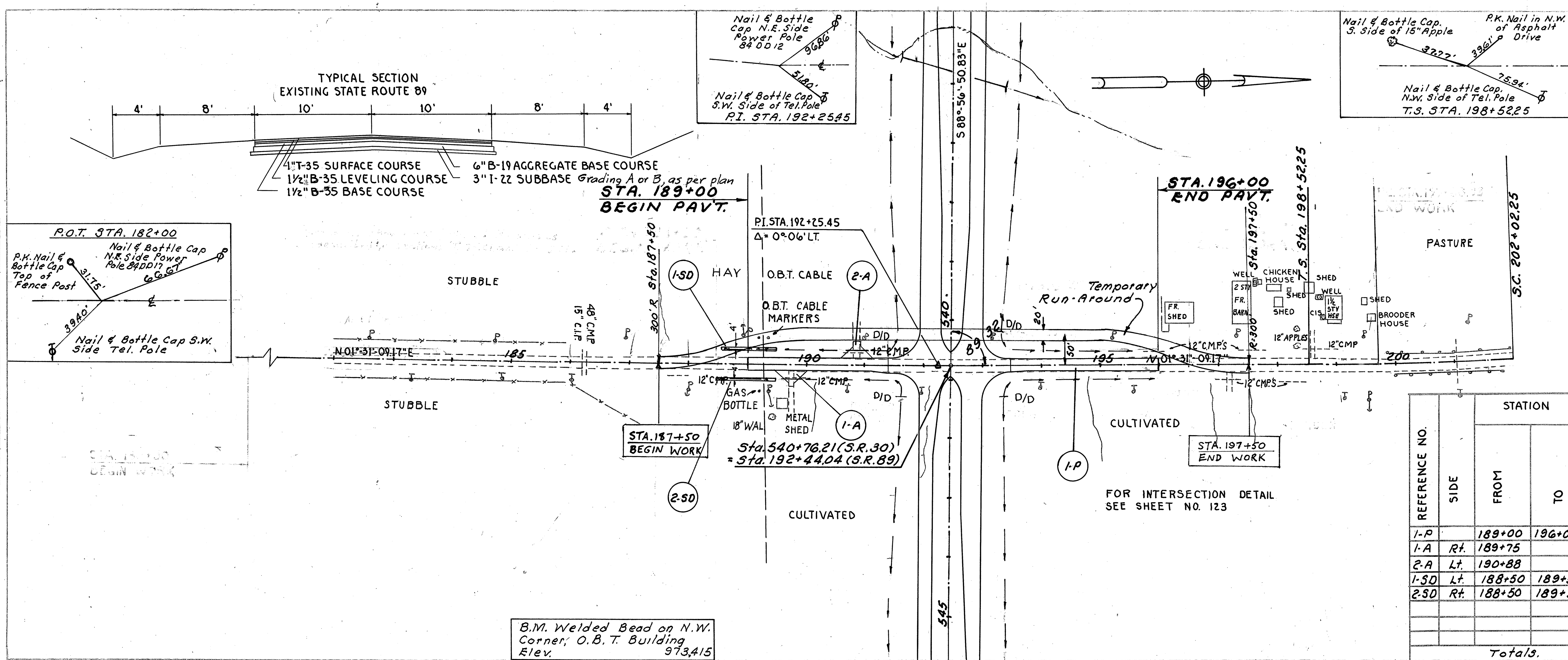
STA. 8+00 TO STA. 14+00 MOHICAN TOWNSHIP ROAD 151 (EAST)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

ASD. 30 - 8.52
WAY. 30 - 0.00

STA. 14+46 TO STA. 21+00 MOHICAN TOWNSHIP ROAD 151 (EAST)

ASD 30-8.52
WAY 30-0.00



Note: The grade for the temporary run-around shall be the same as on the existing pavement.

Temporary Run-Around
Sta. 187+50 to Sta. 197+50 (Left)

T-10	Furnishing & Placing Traffic Bound Surface Course	Lump Sum 410 Cu.Yds.
I-4	Calcium Chloride For Dust Control	6 Tons.

REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE CU.YDS.	B-35 1½" ASPHALTIC CONC. LEVELING COURSE CU.YDS.	B-35 1½" ASPHALTIC CONC. LEVELING COURSE CU.YDS.	T-30 BIT. PRIME COAT 0.4 GAL. PER SQ. YD. GAL.	T-35 1" ASPHALTIC CONC. SURFACE COURSE TYPE "C" CU.YDS.	I-9 STONE UNDERDRAINS NO. 2 LIN. FT.	I-22 SUBBASE Grading A or B CU.YDS.	I-1 15" CLASS C-1 PIPE LIN. FT.	E-12 PIPE REMOVED 15" & UNDER LIN. FT.	L-10 SODDING SY. YDS.
1-P		189+00	196+00	199	47	45	455	40	69	139			
1-A	Rt.	189+75		13							46	36	
2-A	Lt.	190+88		13							44	36	
1-SD	Lt.	188+50	189+50										48
2-SD	Rt.	188+50	189+50										48
Totals.				225	47	45	455	40	69	139	90	72	96

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

123
198

ASD. 30 - 8.52
WAY. 30 - 0.00

EAST BOUND TAPER DETAIL

WEST BOUND TAPER DETAIL

JOINT LEGEND

1. *Standard Longitudinal Joint*
2. *Expansion Joints without Dowels*
3. *Standard Key Joints without Tie Bars*

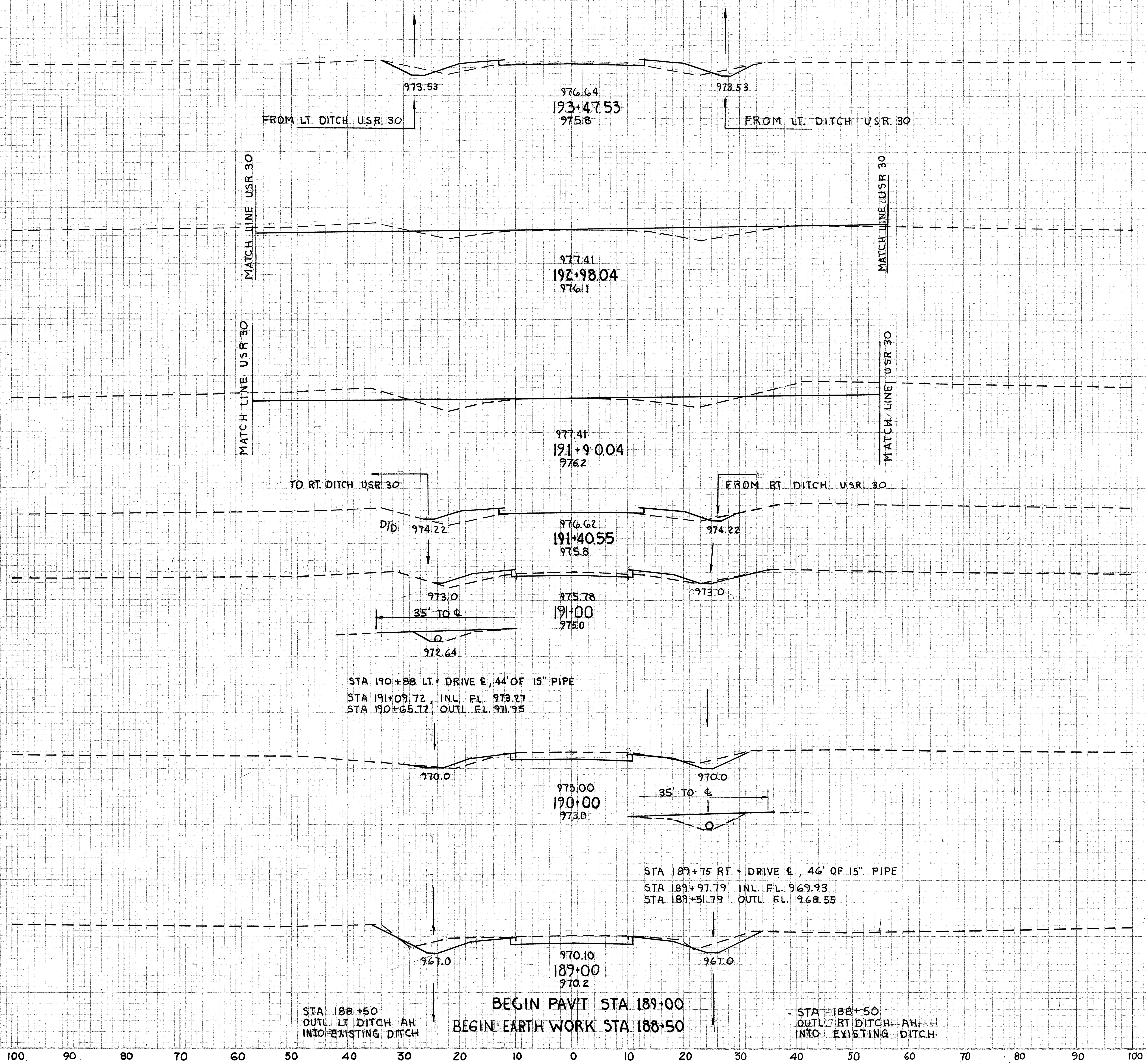
▲*Thickness shown is designed thickness as described in Section T-35.01.*

ESTIMATED QUANTITIES

T-70	9" P.C. CONCRETE PAVEMENT	458.9	SQ. YDS.
B-70	8" P.C. CONCRETE BASE COURSE	1542.4	SQ. YDS.
T-30	BITUMINOUS TACK COAT	154.1	GALS.
T-35	▲ASPHALTIC CONCRETE SURFACE COURSE TYPE "C"	42.8	CU. YDS.
T-31	BITUMINOUS SURFACE TREATMENT BITUMINOUS MAT'L.	139.8	GALS.
T-31	BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE	4.5	CU. YDS.
B-19	9" AGGREGATE BASE COURSE	139.8	" "
T-30	BITUMINOUS PRIME COAT	223.7	GALS.
I-22	SUBBASE GRADING "A" or "B" AS PER PLANS	440.4	" "

STATE ROUTE 89 INTERSECTION

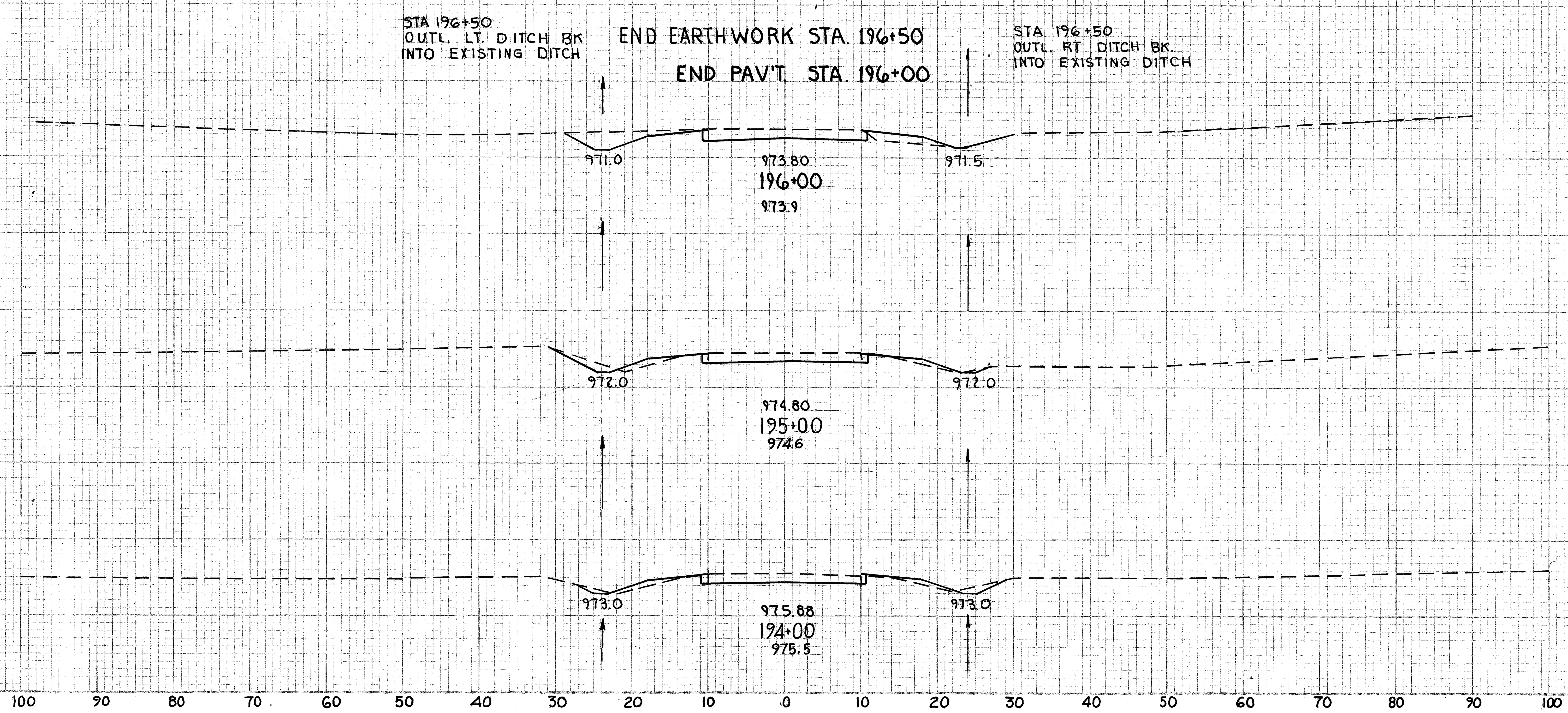
ASD. 30- 8.52
WAY. 30 - 0.00



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	8	19		
			26	52
STA 192+98.04	20	37		
STA 191+90.04	90	30		
			85	50
	1	24		
			14	23
	17	6		
FIELD DRIVE				7
			87	17
	30	3		
FIELD DRIVE				15
			152	6
	52	0		
			48	0
Sta. 188+50	0	0		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD. 30 - 8.52
WAY. 30 - 0.00



END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		42	7
45	7		
		128	19
24	3		
		87	9
23	2		
		36	25
8	19		

Sta. 193+47.53

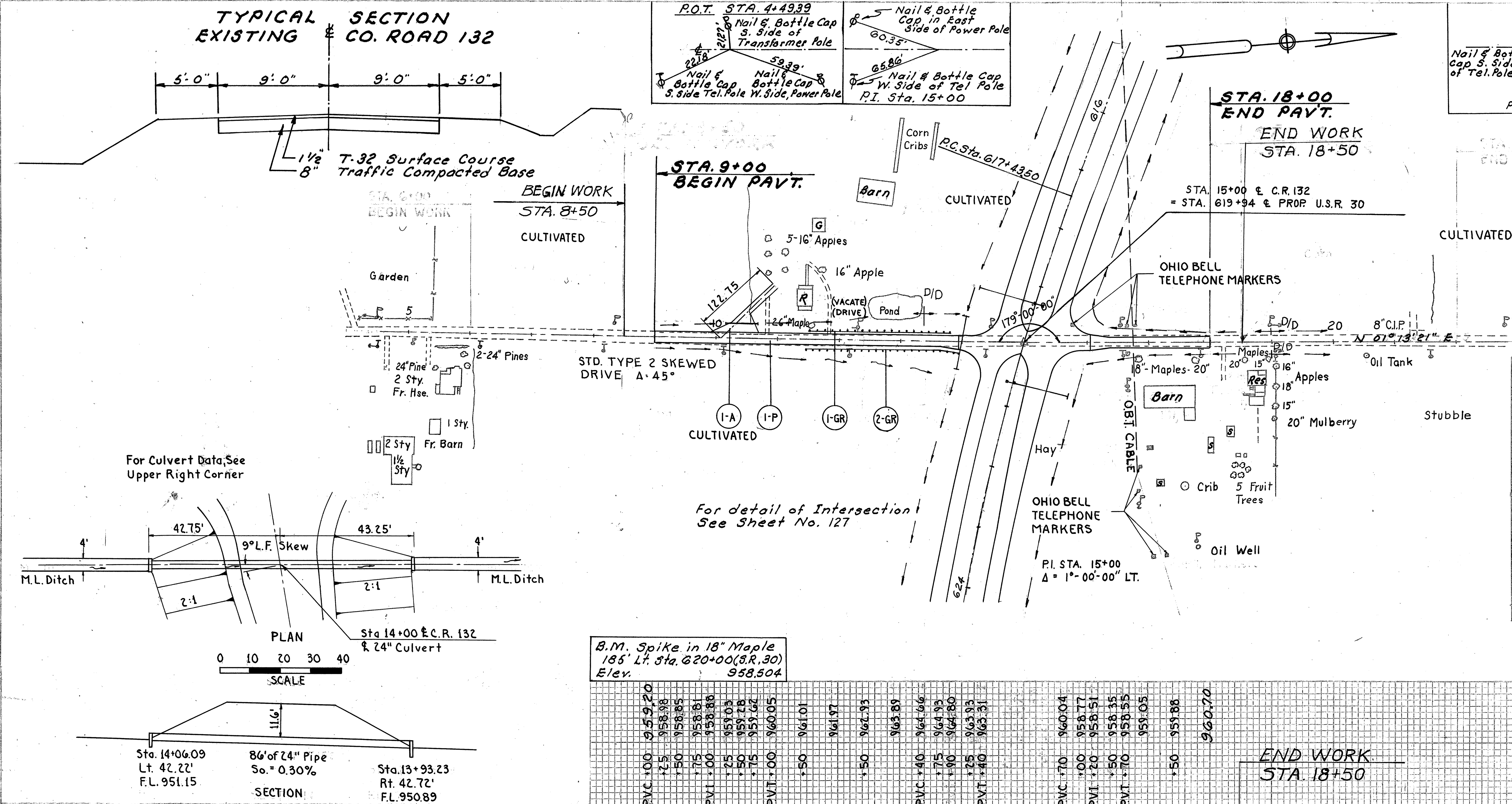
ASD. 30 - 8.52
WAY. 30 - 0.00

CULVERT DATA

TYPE - Pipe Culvert, Std. Drwgs. Nos. I-1, HW-E
SIZE - 24"×86' Pipe Culvert, Sec. M-6.6(b) or Sec. M-6.8 (b)
WORK Construct Pipe Culvert with
REQUIRED Headwalls as Per Plans

ESTIMATED QUANTITIES

I-1	24" Pipe Culvert Class B-1 Sec. M-6.6(b) or Sec. M-6.8 (b)	86	Lin. Ft.
I-2	Endwalls, Std. HW-E	0.82	Cu. Yds.
L-10	Sodding	2	Sq. Yds.



REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE (CU. YDS.)	T-30 BIT. PRIME COAT, 0.4 GAL. PER SQ. YD. (GAL.)	T-35 1½" ASPHALTIC ▲ CONC. SURFACE COURSE, TYPE 'A' (CU. YDS.)	I-9 STONE UNDERDRAINS NO. 2 (LIN. FT.)	I-22 SUBBASE (CU. YDS.)	I-15 GUARD RAIL WIRE CABLE TYPE THREE CABLES (LIN. FT.)	L-10 SODDING (SQ. YDS.)	I-1 PIPE 15" CLASS C-1 (LIN. FT.)
1-P	LT&RT	9+00	18+00	215	489	51	57	113			
1-A	LT	10+12		33	94	14					50
1-GR	LT	11+53	13+78						225		
2-GR	RT	11+47	13+97						250		
TOTALS				248	583	65	57	113	475		50

▲ Thickness shown is designed thickness as described in Sections T-35.01

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

127
198

ASD. 30-8.52
WAY. 30-0.00

CURVE DATA ℄ USR 30
P.I. STA. 622+77.66
Δ = 15° 34' 20"
D = 1° 28'
T = 534.16'
L = 1061.74'
R = 3906.53'
E = 36.35'

JOINT LEGEND
1. STANDARD LONGITUDINAL JOINT
2. EXPANSION JOINTS WITHOUT DOWELS
3. STANDARD KEY JOINT WITHOUT TIE BARS

ESTIMATED QUANTITIES

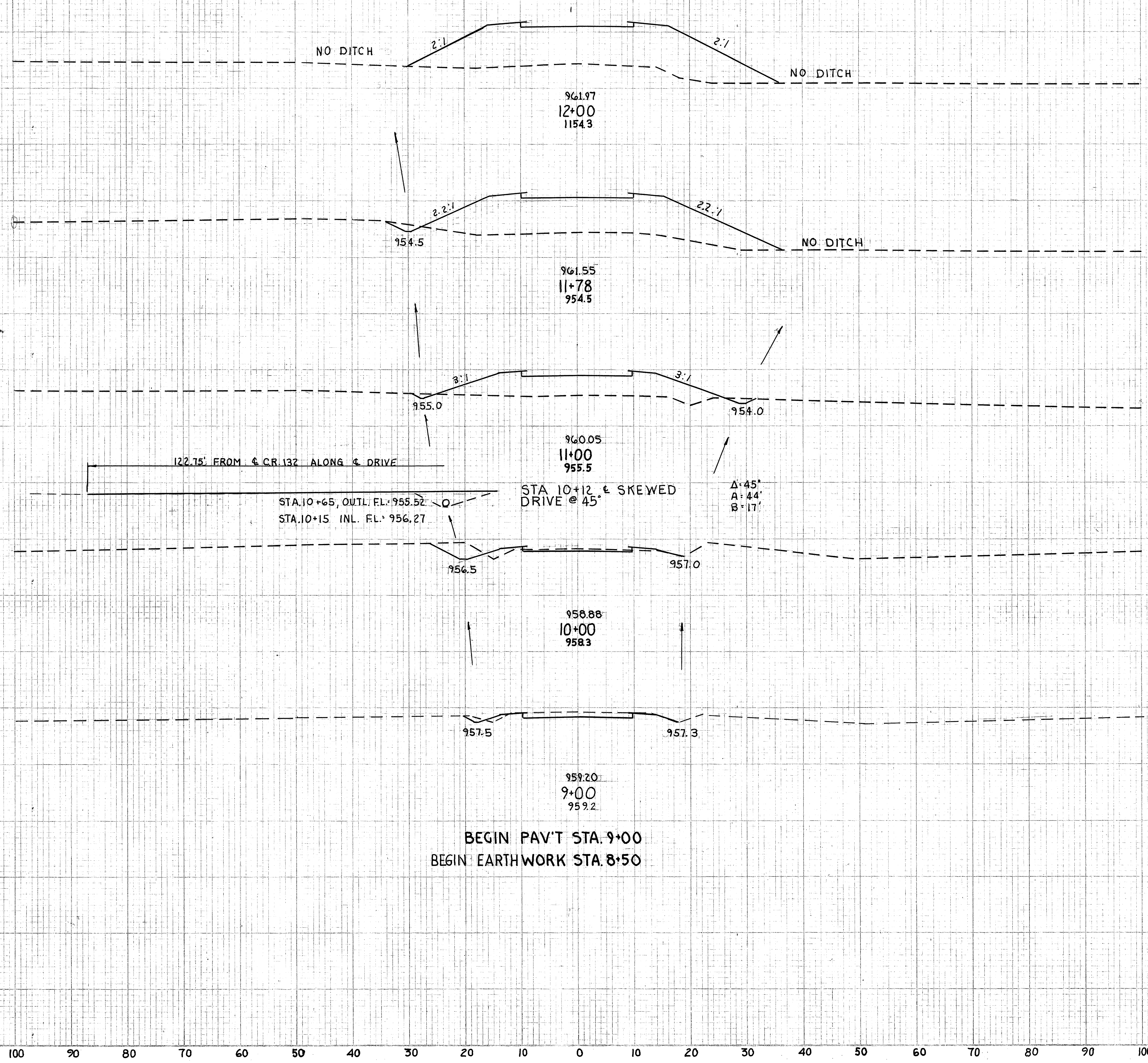
T-70	9" P.C. CONCRETE PAVEMENT	456.3	SQ. YDS.
B-70	8" P.C. CONCRETE BASE COURSE	832.5	SQ. YDS
T-30	BITUMINOUS TACK COAT	83.2	GALS.
T-35	1" ASPHALTIC CONCRETE SURFACE COURSE TYPE "C"	23.2	CU. YDS.
T-31	BITUMINOUS SURFACE TREATMENT BITUMINOUS MAT'L.	132.0	GALS.
T-31	BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE	4.3	CU. YDS.
~~B-19~~	~~9" AGGREGATE BASE COURSE~~	~~132.0~~	" "
~~T-30~~	~~BITUMINOUS PRIME COAT~~	~~211.2~~	~~GALS.~~
I-22	SUBBASE GRADING "A" or "B" AS PER PLANS	288.4	" "

▲ *Thickness shown is designed thickness as described in Section T-35.01.*

COUNTY ROAD 132 INTERSECTION

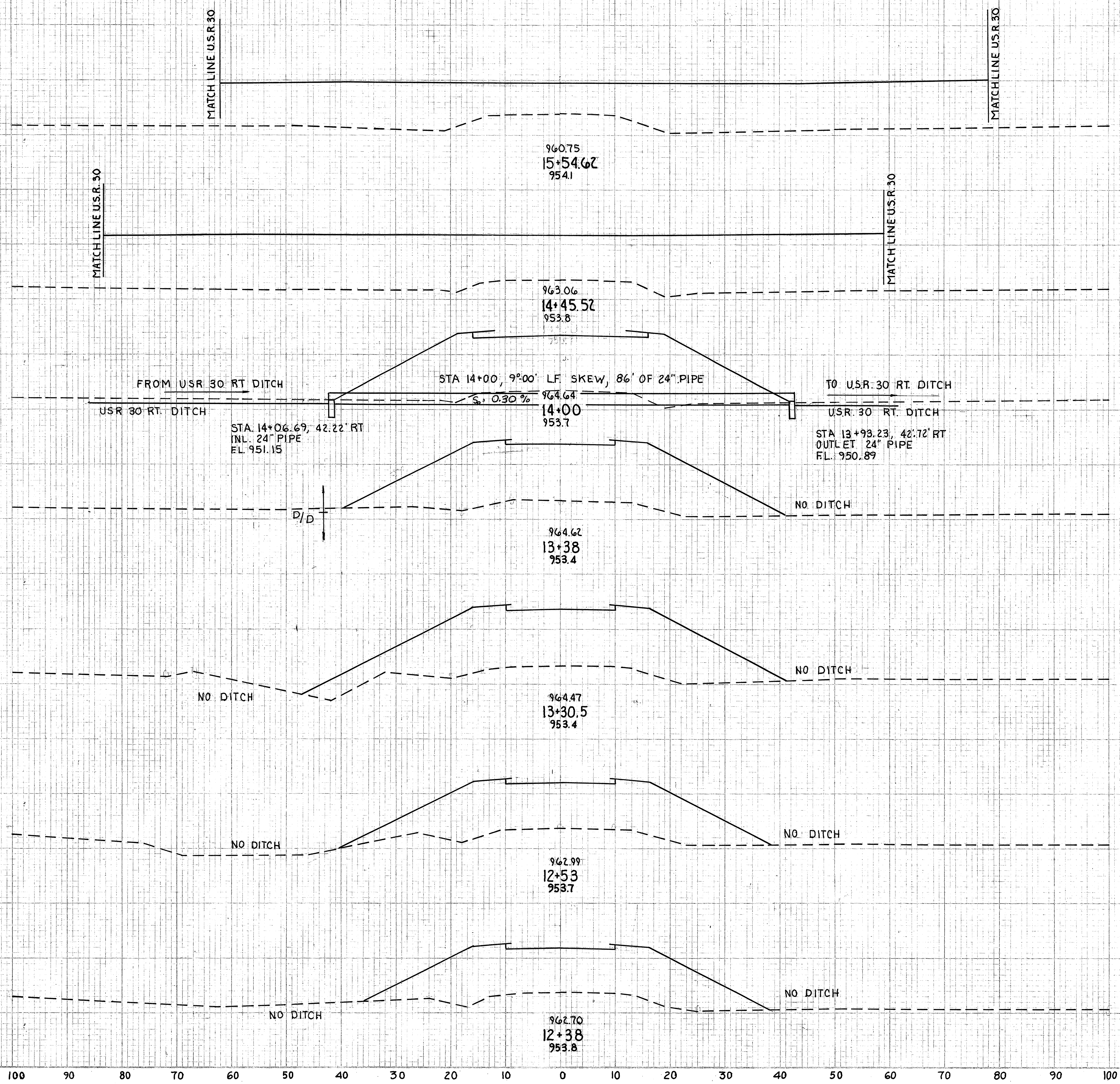
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD. - 30- 8.52
WAY. - 30- 0.00



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	0	360		
			2	273
	3	310		
			9	650
	3	140		
DRIVEWAY				25
			31	267
	14	4		
			50	9
	13	1		
			12	1
STA 8+50	0	0		

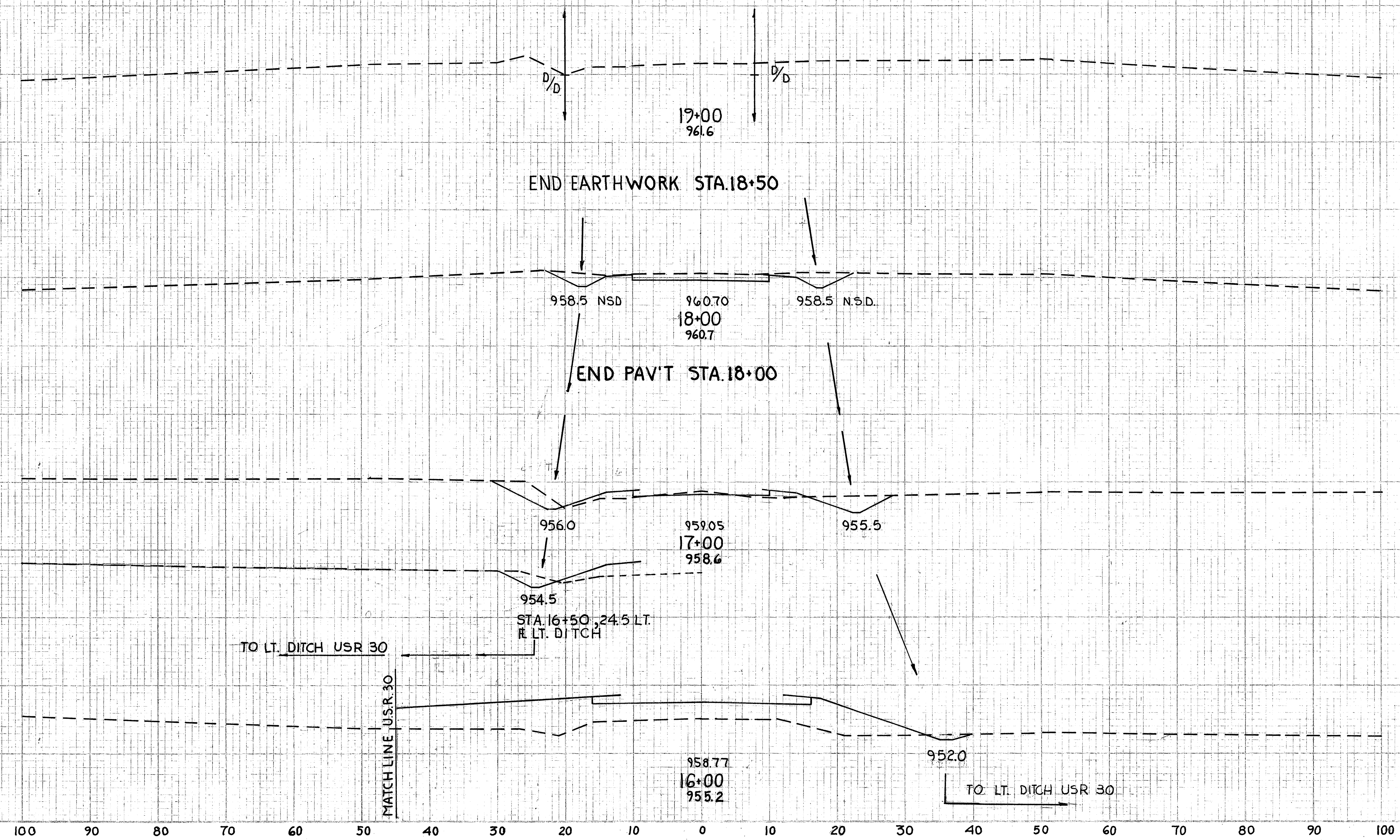
ASD.-30-8.52
WAY.-30-0.00



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
STA 15+54.62	0	1060		
			32	1726
STA 14+45.52	0	1355		
	38	692		
			48	1513
	3	625		
			1	192
	0	677		
			0	1680
	0	500		
			0	273
	0	480		
			0	592
Sta.12+00	0	360		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

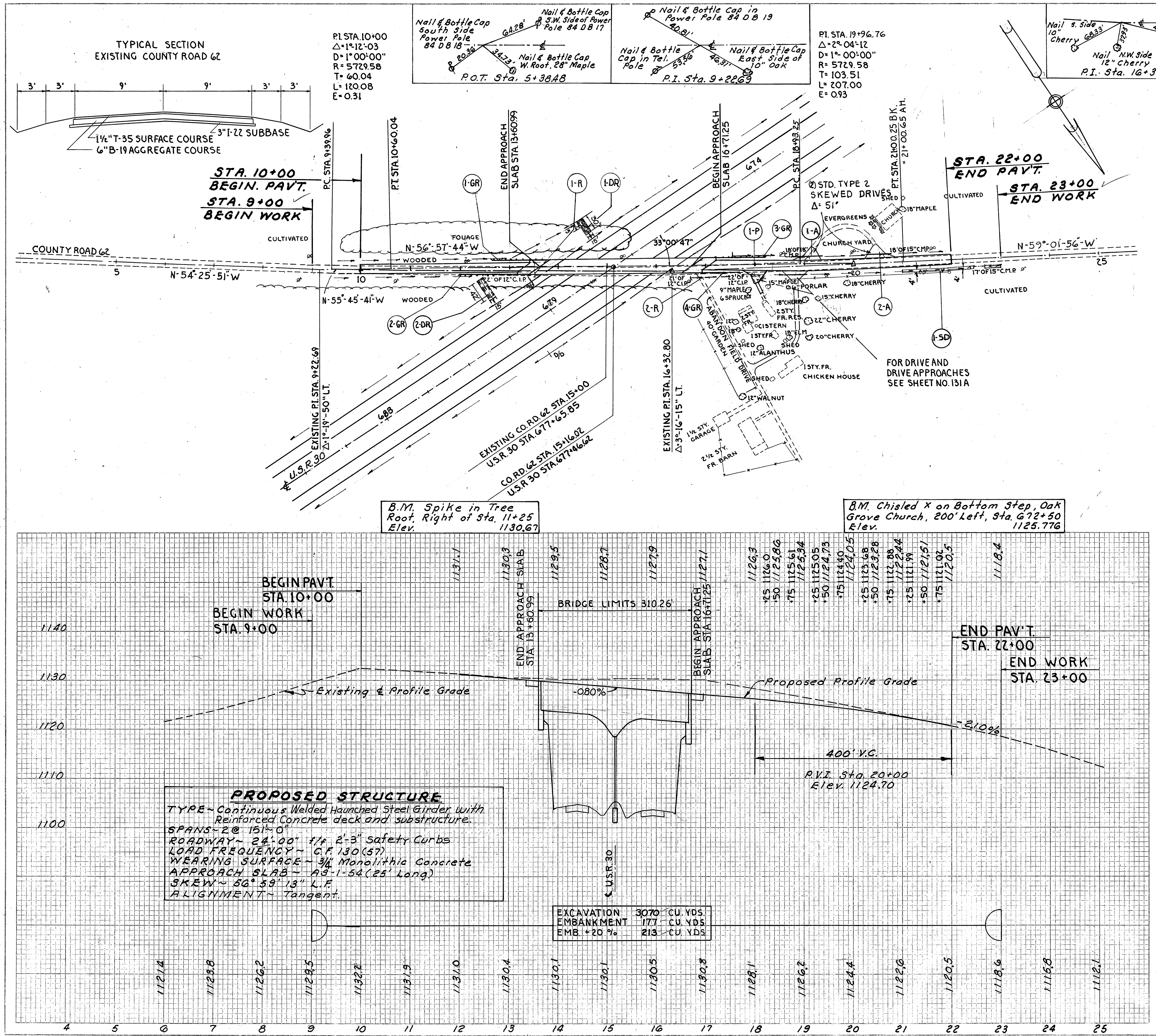
ASD. - 30.- 8.52
WAY. - 30- 0.00



	END AREA CUT	END AREA FILL	CU YDS. CUT	CU YDS. FILL
18+50	0	0		
			35	
18+00	38	0		
			124	13
17+00	29	7		
			43	99
16+50	15	100		
			16	278
16+00	2	200		
			2	1059
Sta.15+54.62	0	1060		

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD. 30 - 8.52
WAY. 30 - 0.00



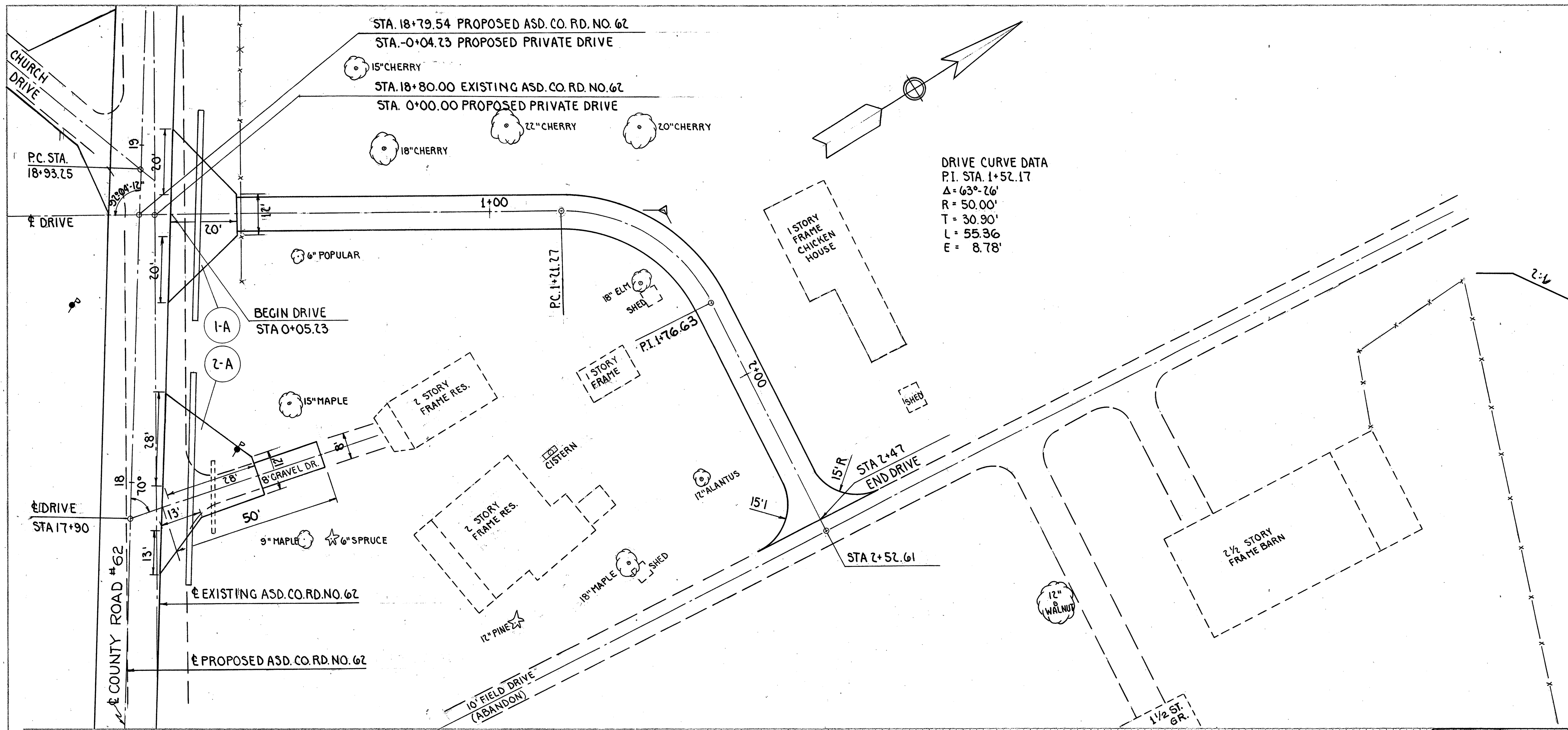
REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE CU. YDS.	T-30 BIT. PRIME COAT 0.4 GAL. PER SQ. YD. GAL.	T-35 ▲1½" ASPHALTIC CONC. SURFACE COURSE "TYPE A" CU. YDS.	I-9 STONE UNDERDRAINS NO. 2 LIN. FT.	I-22 SUBBASE CU. YDS.	I-1 15" CLASS "C-1" PIPE LIN. FT.	E-12 PIPE REMOVED 15" & UNDER L.F.	E-12 PIPE REMOVED OVER 15" L.F.	I-15 GUARD RAIL STEEL BEAM DEEP LIN. FT.	I-10 DUMPED ROCK CHANNEL PROTECTION T=1.5' CU. YDS.	L-10 SODDING SQ. YDS.
1-P	LT & RT	10+00	22+00	254	577	61	207	134						
1-A	LT	18+90		15	43	6			66		18			
2-A	RT	20+72		15	43	6			66	18				
1-GR	LT	12+66	13+66									100		
2-GR	RT	11+98.5	12+98.5									100		
3-GR	LT	17+19.5	18+19.5									100		
4-GR	RT	16+69.5	17+69.5									100		
1-DR	LT	14+33	14+67										25	
2-DR	RT	12+50	12+67										35	
1-SD	RT	21+00	23+00											95
1-R	LT & RT	13+49	13+50							22				
2-R	RT	16+87	17+08							21				
TOTALS				284	663	73	207	134	132	61	18	400	60	95

▲ Thickness shown is designed thickness as described in Section T-35.01.

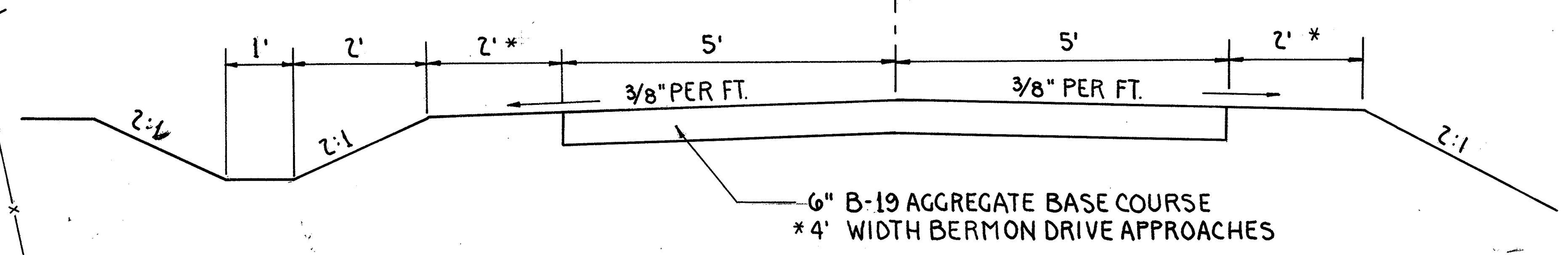
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(B)

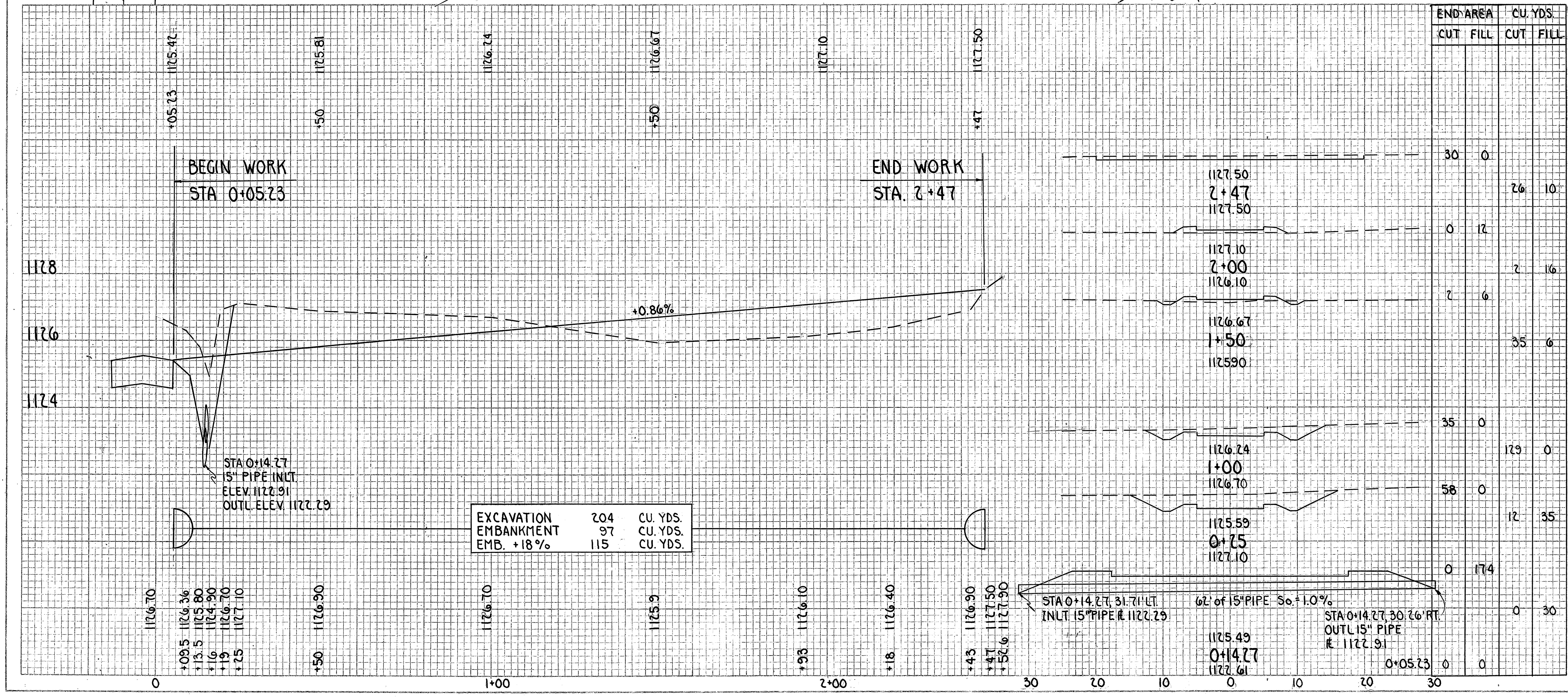
131A
198

ASD. 30-8.52
WAY. 30-0.00



PROPOSED TYPICAL SECTION FOR DRIVE





REFERENCE NO	SIDE	STATION FROM	STATION TO	B-19 6" AGGREGATE BASE COURSE CU. YDS.	T-30 BIT. PRIME COAT 0.4 GAL PER SQ. YD. GAL	T-35 ▲1½ ASPHALTIC CONC. SURFACE COURSE, TYPE "A" CU. YDS.	I-1 15" CLASS C-1 PIPE LIN. FT.	E-12 15" & UNDER PIPE REMOVED LIN. FT.
1-A	℄	0+05.23	2+47	55	28	3	62	
2-A	RT	17+90	ASD.C.R.62	18	35	4	64	22
TOTALS				73	63	7	126	22

▲ *Thickness shown is designed thickness as described in Section T-35.01.*

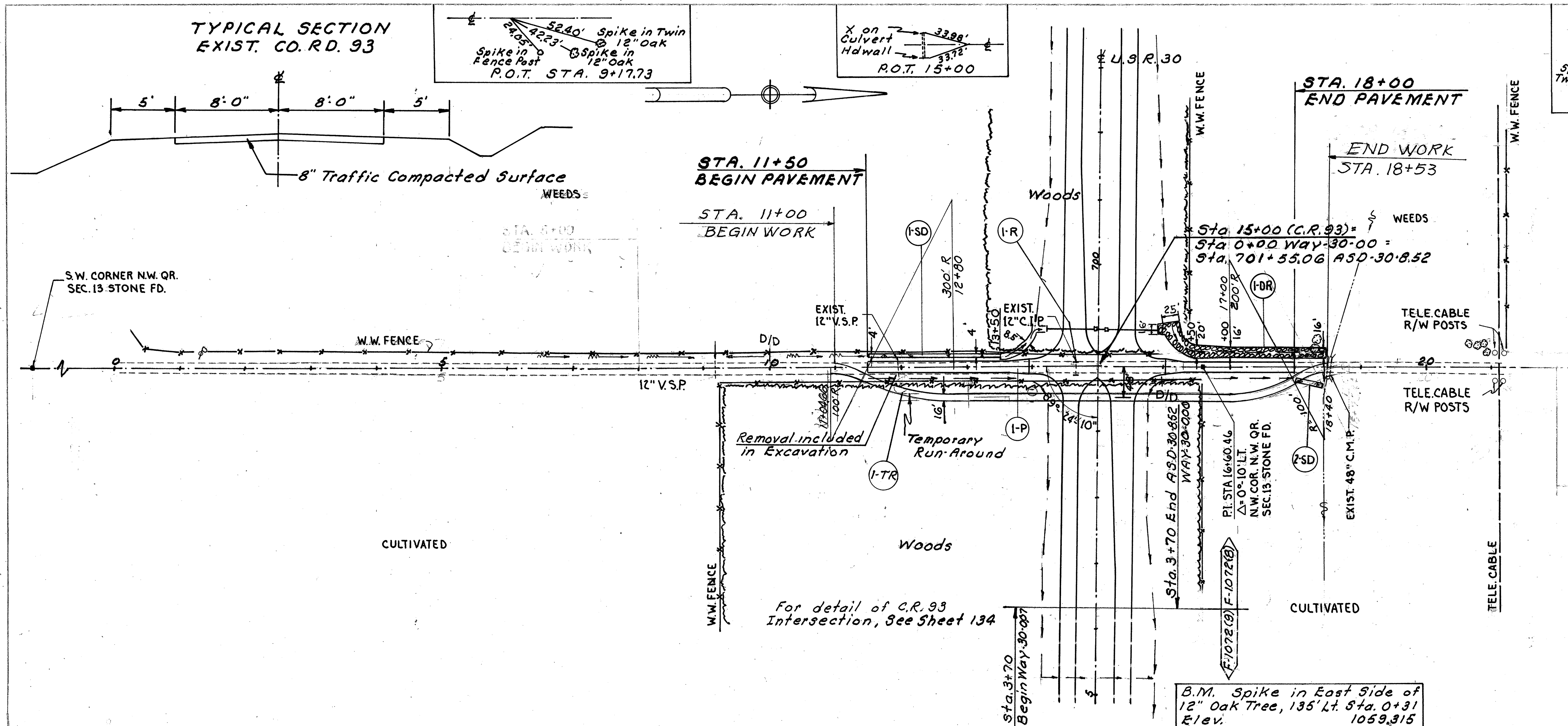
DRIVE OFF ASHLAND COUNTY ROAD NO. 62

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

132
198

A.S.D. - 30-8.52
WAY. - 30-0.00

ASD: 30 - 8.52
WAY. 30 - 0.00



REFERENCE NO.	SIDE	STATION FROM	STATION TO	B-19 AGGREGATE BASE COURSE	I-9 STONE UNDERDRAINS NO. 2	I-22 SUBBASE	E-12 PIPE REMOVED 15" & UNDER	S-22 REMOVAL OF PORTIONS OF EXIST. STR.	I-10 DUMPED ROCK CHANNEL PROTECTION, T-1.5'	L-10 SODDING	S-15 Temporary Run-Around	T-10 Furnishing & Placing Aggregate, Traffic Bound Surface Course	I-4 Calcium Chloride for dust control
				CU. YDS.	LIN. FT.	CU. YDS.	LIN. FT.	CU. YDS.	CU. YDS.	SQ. YDS.		Cu. Yd.	Ton
1-P	LT & RT	11+50	18+00	188	143	75							
1-R	LT & RT	14+66					22	1					
1-DR	LT.	15+90	18+53						296				
1-SD	LT	11+50	14+00							177			
2-SD	RT	18+00	18+53							25			
1-TR	Rt.	12+80	18+40								Lump	231	3
TOTALS				188	143	75	22	1	296	202	Lump	231	3

Note: The grade for the temporary run-around shall be the same as of the existing pavement.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD. 30 - 8.52
WAY. 30 - 0.00

ESTIMATED QUANTITIES

T-70	9" P.C. CONCRETE PAVEMENT	457.8	SQ. YDS.
B-70	8" P.C. CONCRETE BASE COURSE	838.8	SQ. YDS
T-30	BITUMINOUS TACK COAT	83.8	GALS.
T-35	1"▲ ASPHALTIC CONCRETE SURFACE COURSE TYPE "C"	23.3	CU. YDS.
T-31	BITUMINOUS SURFACE TREATMENT BITUMINOUS MAT'L.	123.1	GALS.
T-31	BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE	4.0	CU. YDS.
~~B-19~~	~~9" AGGREGATE BASE COURSE~~	~~123.3~~	" "
~~T-30~~	~~BITUMINOUS PRIME COAT~~	~~197.3~~	GALS.
I-22	SUBBASE GRADING "A" or "B" AS PER PLANS	286.5	" "

▲ *Thickness shown is designed thickness as described in Section T-35.01*

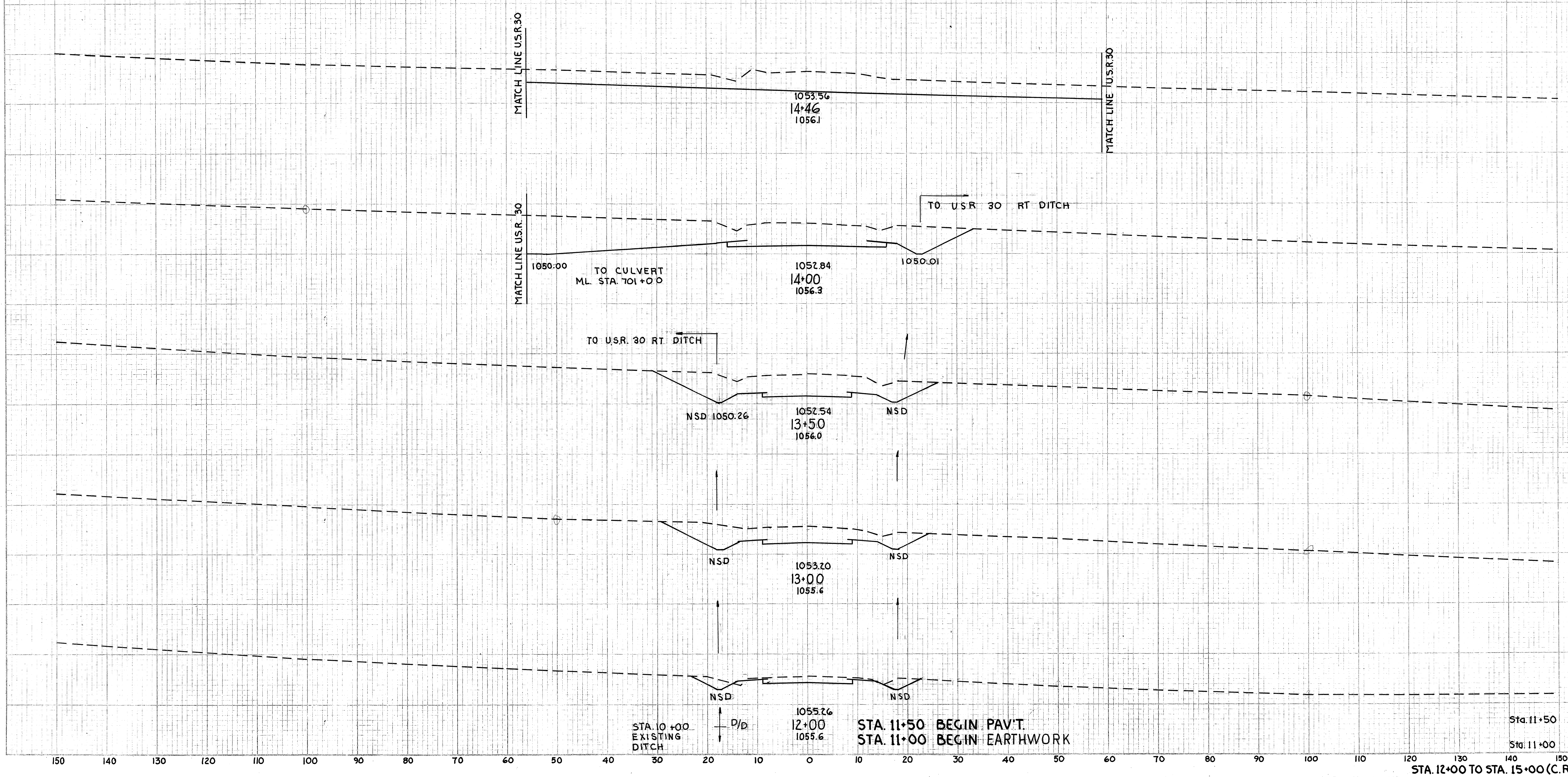
JOINT LEGEND

1. *Standard Longitudinal Joint*
2. *Expansion Joints without Dowels*
3. *Standard Key Joint without Tie Bars*

COUNTY ROAD 74 INTERSECTION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-1072(8)

ASD. 30 - 8.52
WAY 30 - 0.00



Station	END AREA CUT	END AREA FILL	CU. YDS CUT	CU. YDS FILL
14+46	320	0		
			643	0
14+00	435	0		
			570	0
13+50	180	0		
			303	0
13+00	147	0		
			330	0
12+00	31	0		
			58	0
Sta. 11+50	31	0		
			29	0
Sta. 11+00	0	0		

STA. 12+00 TO STA. 15+00 (C.R. 74)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD. 30 - 8.52
WAY. 30 - 0.00

	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
STA 18+50	0	0		
			152	0
	164	0		
			896	
	320	0		
			676	0
	410	0		
			919	0
	582	0		
			890	0
	462	0		
			—	—
Std 14+46	320	0		

STA. 15+50 TO STA. 18+50 (C.R. 74)

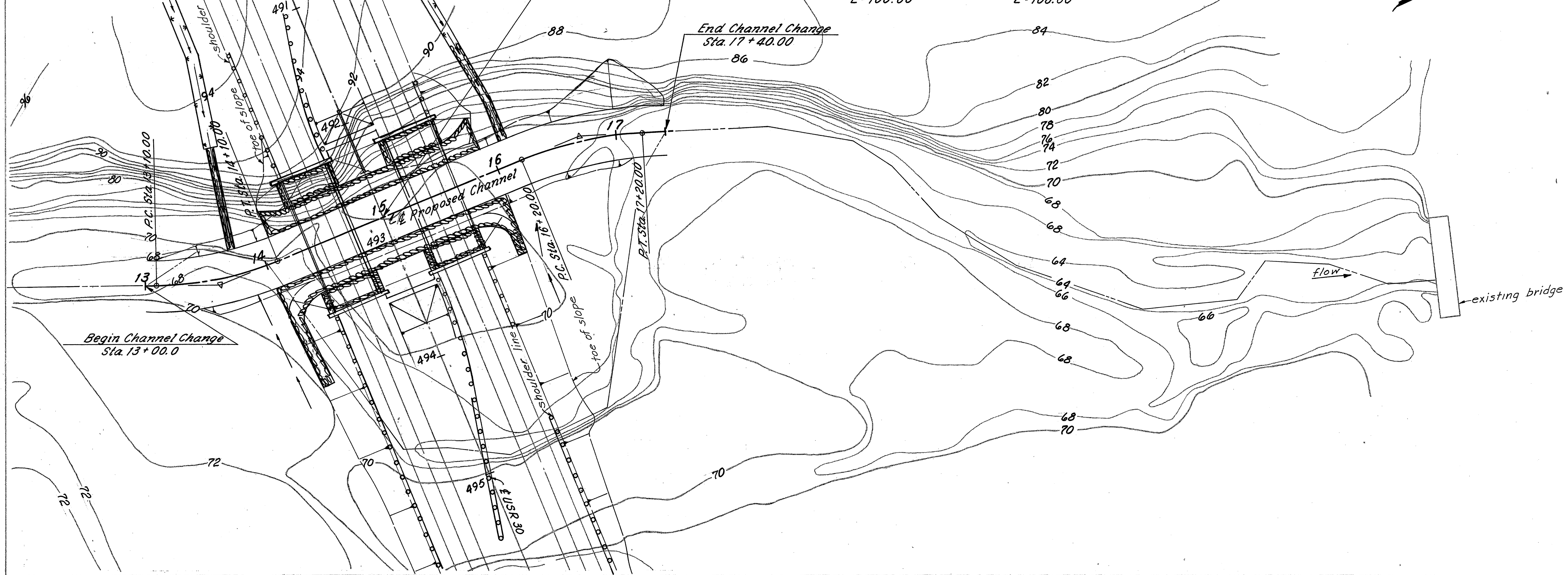
FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		

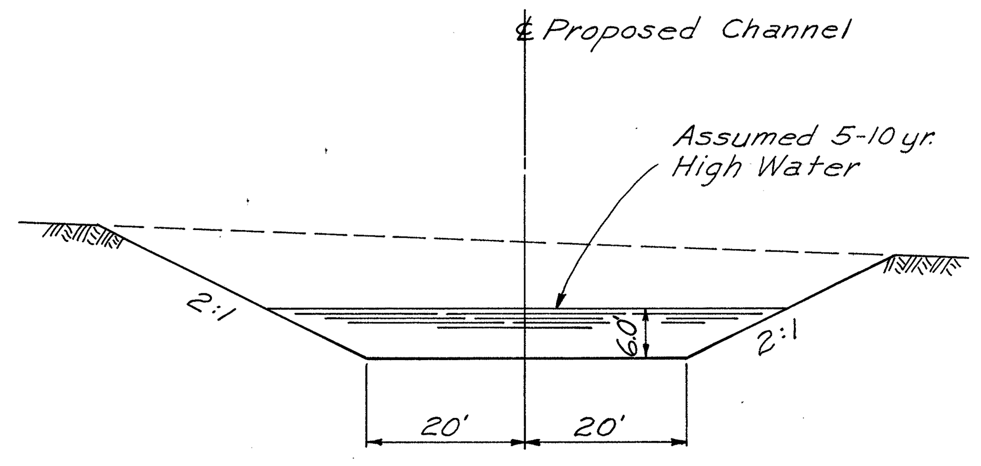
ASD.-30-8.52
WAY.-30-0.00

CHANNEL CHANGE CURVE DATA

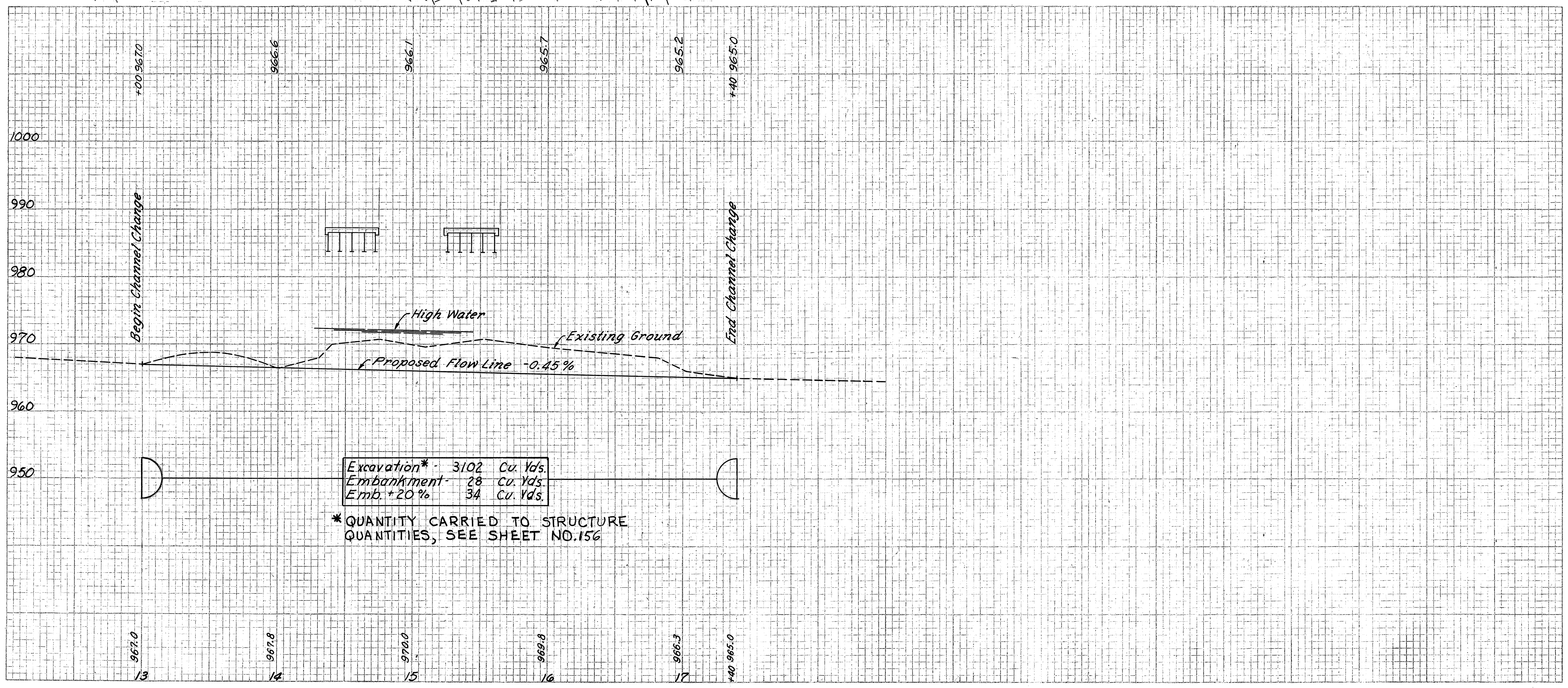
P.I. Sta. 13+60.57	P.I. Sta. 16+70.46
Δ = 21°-00' Lt.	Δ = 19°-00' Rt.
D = 21°-00'	D = 19°-00'
R = 272.84	R = 301.56
T = 50.57	T = 50.46
L = 100.00'	L = 100.00'

Drainage Area = 9.6 Sq. Mi.





TYPICAL CHANNEL SECTION



*QUANTITY CARRIED TO STRUCTURE QUANTITIES, SEE SHEET NO. 156

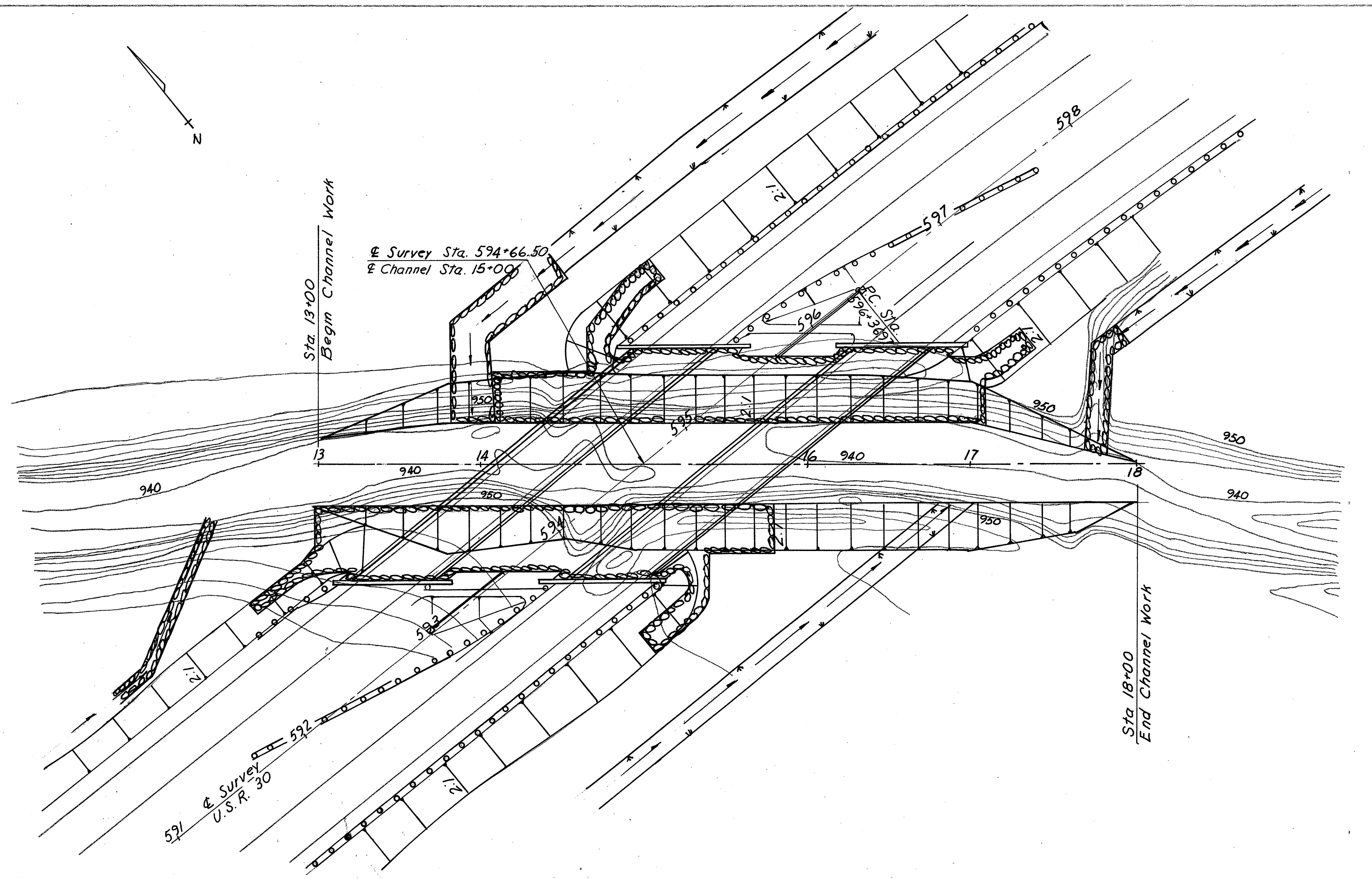
QUAKER SPRINGS RUN

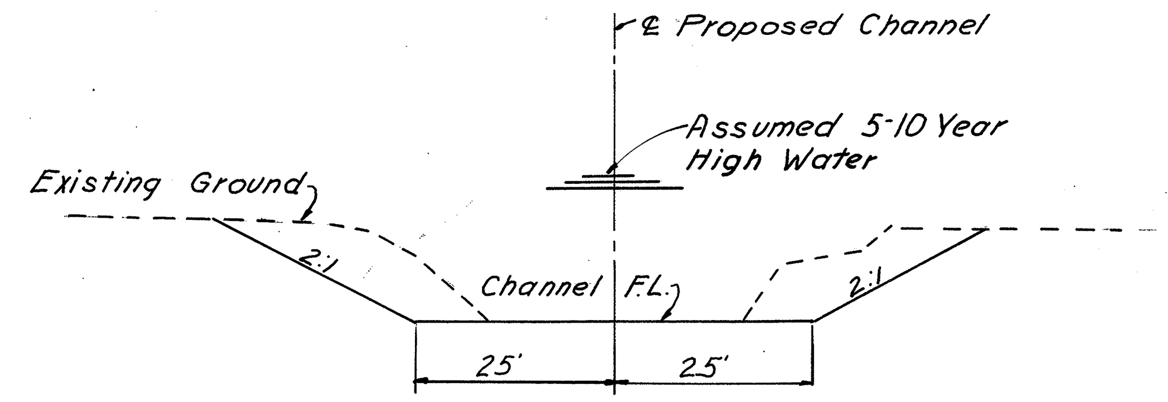
CHANNEL CHANGE STA. 492+80.0

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		

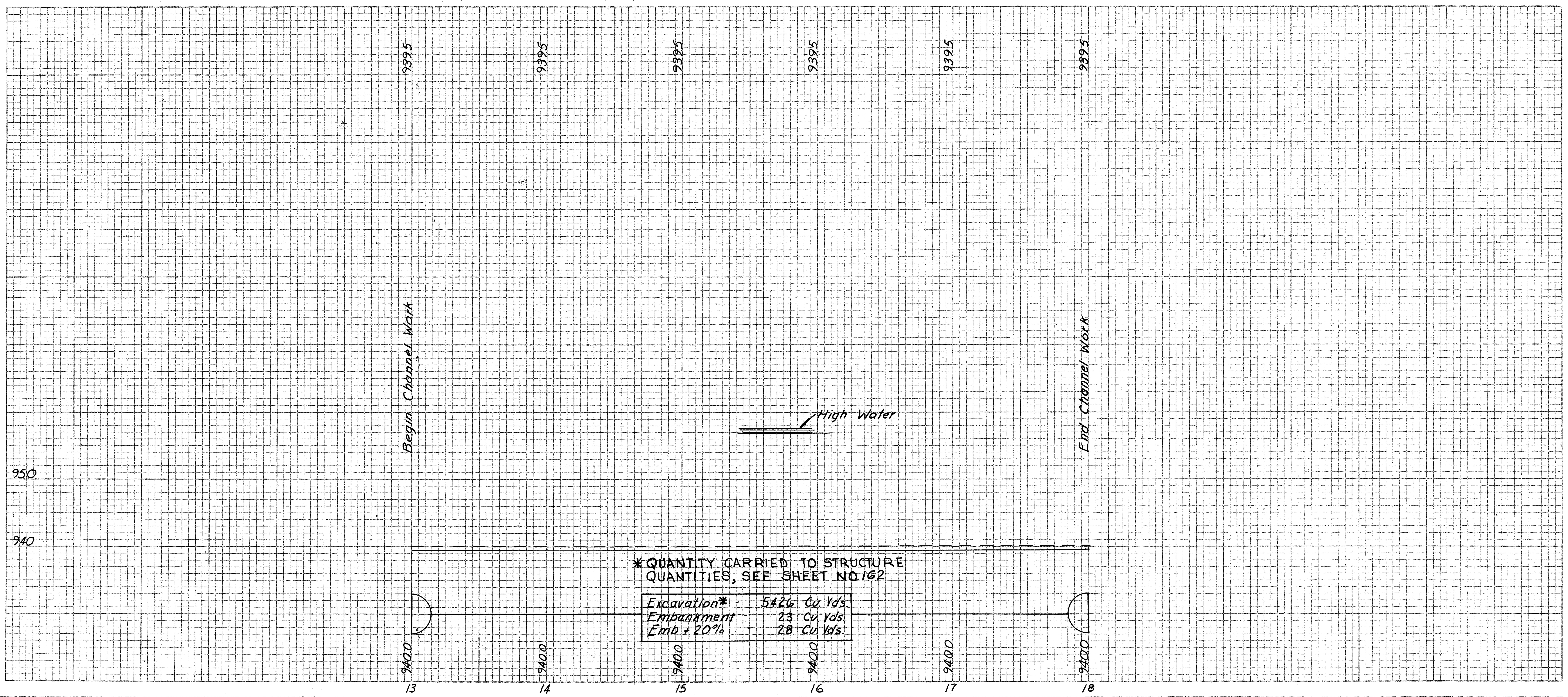
ASD.- 30 - 8.52
WAY.- 30 - 0.00

Drainage Area
145 Sq. Miles





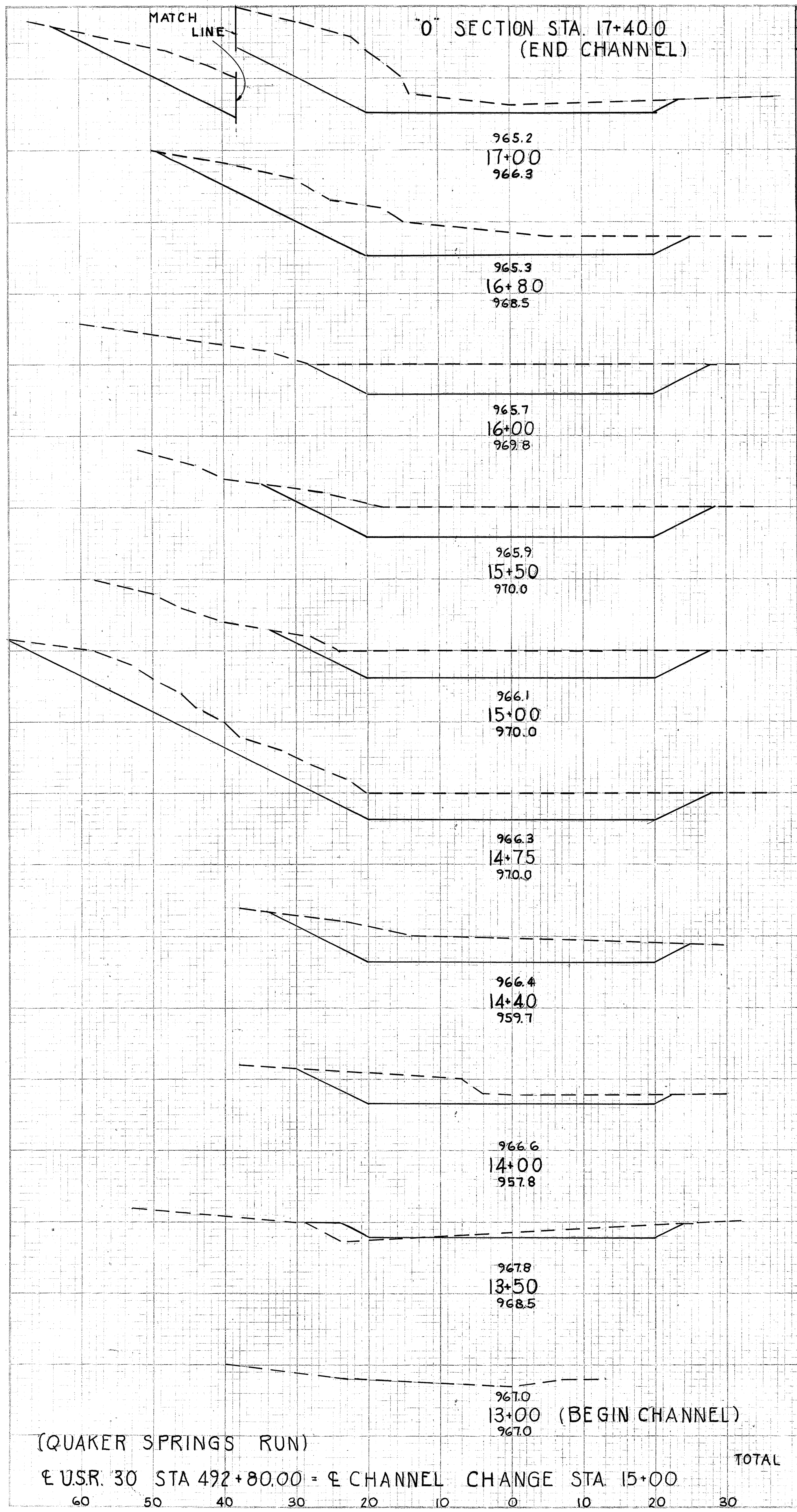
TYPICAL CHANNEL SECTION



*QUANTITY CARRIED TO STRUCTURE
QUANTITIES, SEE SHEET NO.162

Excavation*	5426 Cu. Yds.
Embankment	23 Cu. Yds.
Emb + 20%	28 Cu. Yds.

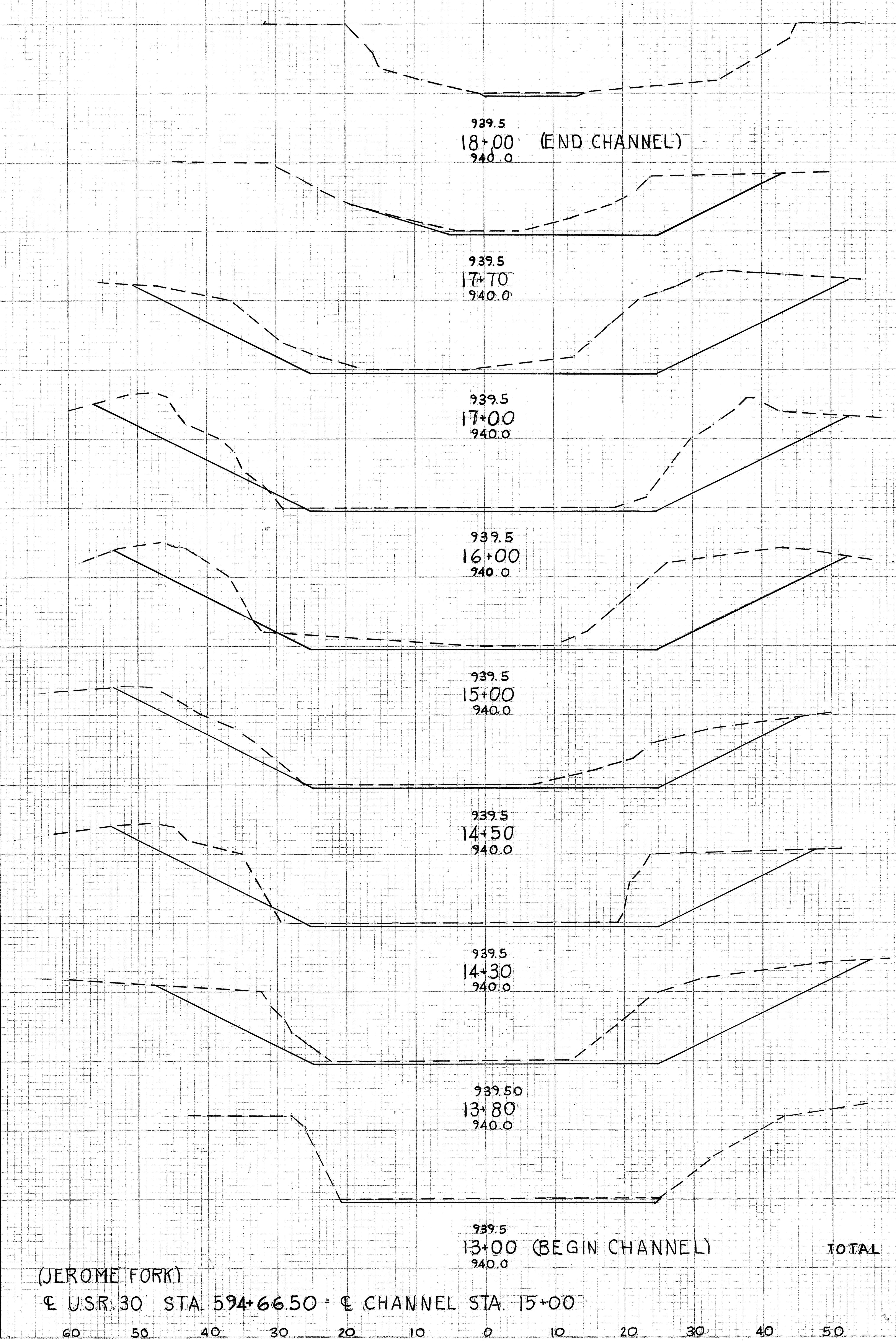
JEROME FORK
CHANNEL WORK STA. 594+66.50



(QUAKER SPRINGS RUN)

℄ U.S.R. 30 STA. 492+80.00 = ℄ CHANNEL CHANGE STA. 15+00

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0	0		
		241	0
325	0		
		226	0
285	0		
		741	0
215	0		
		417	0
235	0		
		426	0
225	0		
		269	0
350	0		
		362	0
208	0		
		243	0
120	0		
		144	14
35	15		
		33	14
0	0	—	—
TOTAL		3102	28



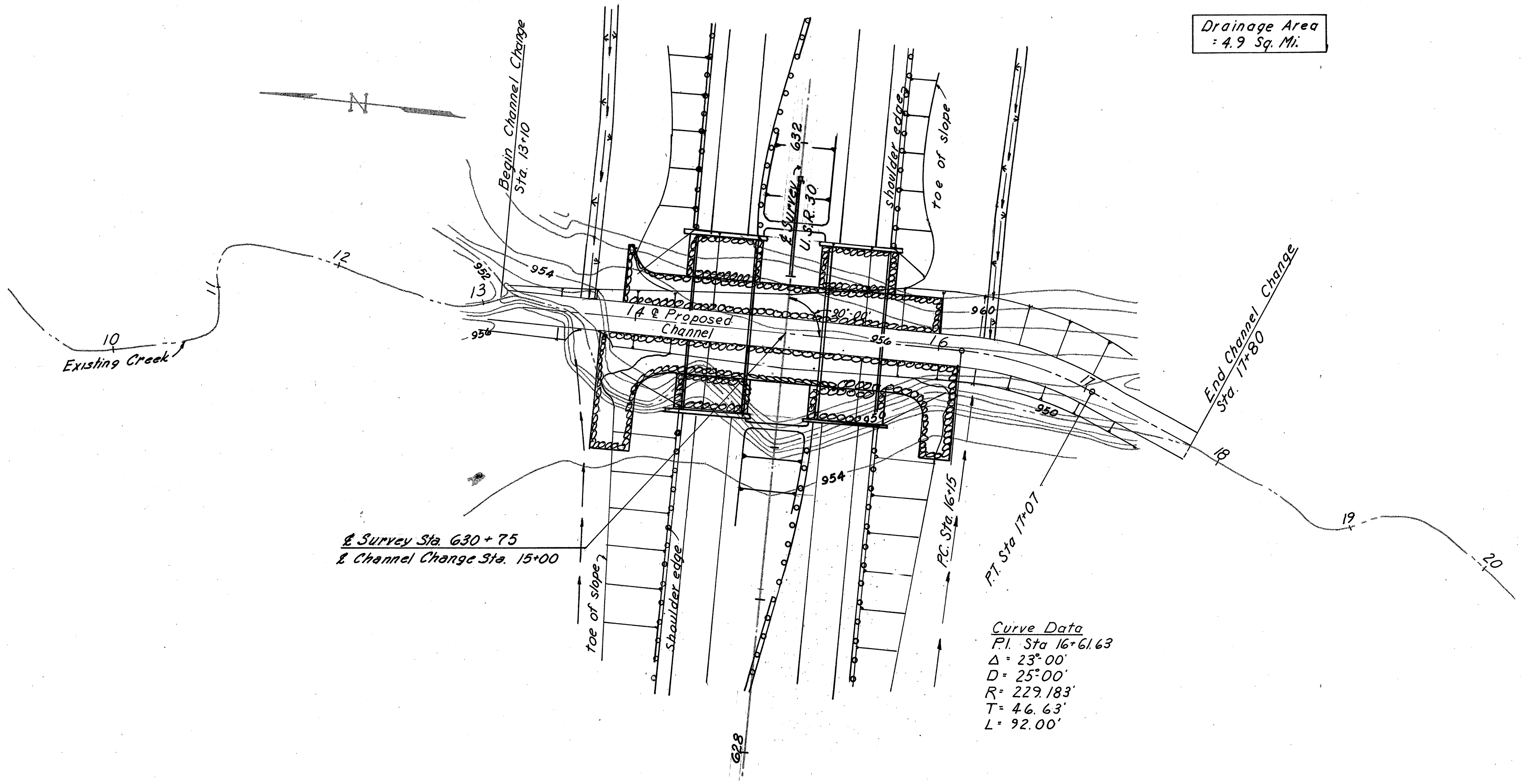
(JEROME FORK)

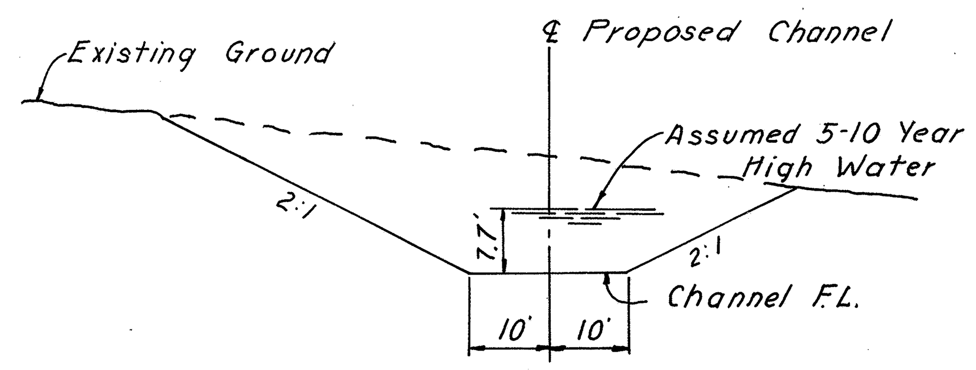
℄ U.S.R. 30 STA. 594+66.50 = ℄ CHANNEL STA. 15+00

END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
8	0		
		65	0
165	0		
		772	0
430	0		
		1352	6
300	3		
		1320	9
413	2		
		591	2
225	0		
		178	2
255	4		
		574	4
365	0		
		574	0
22	0		
		—	—
TOTAL		5426	23

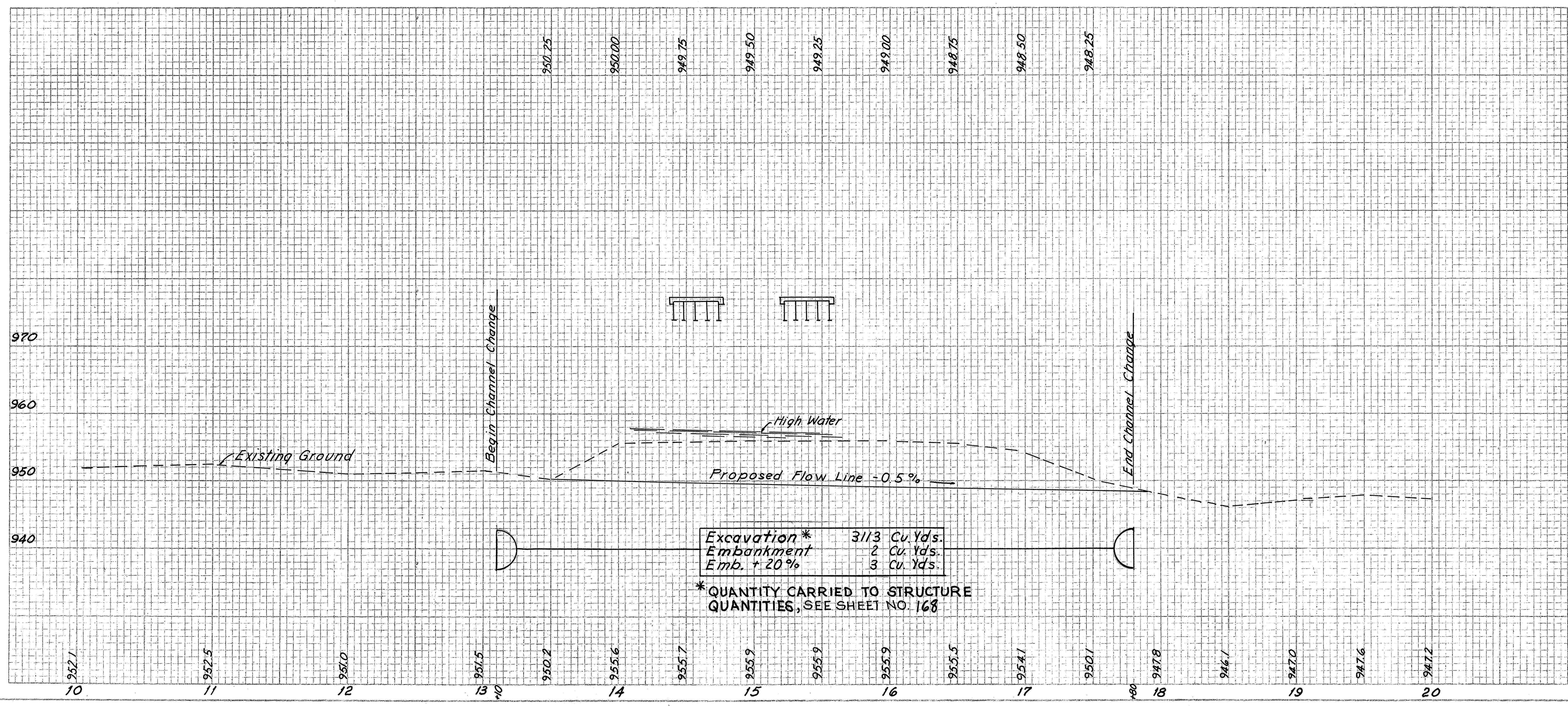
CHANNEL EXCAVATION FOR BRIDGES

ASD.-30-8.52
WAY.-30-0.00

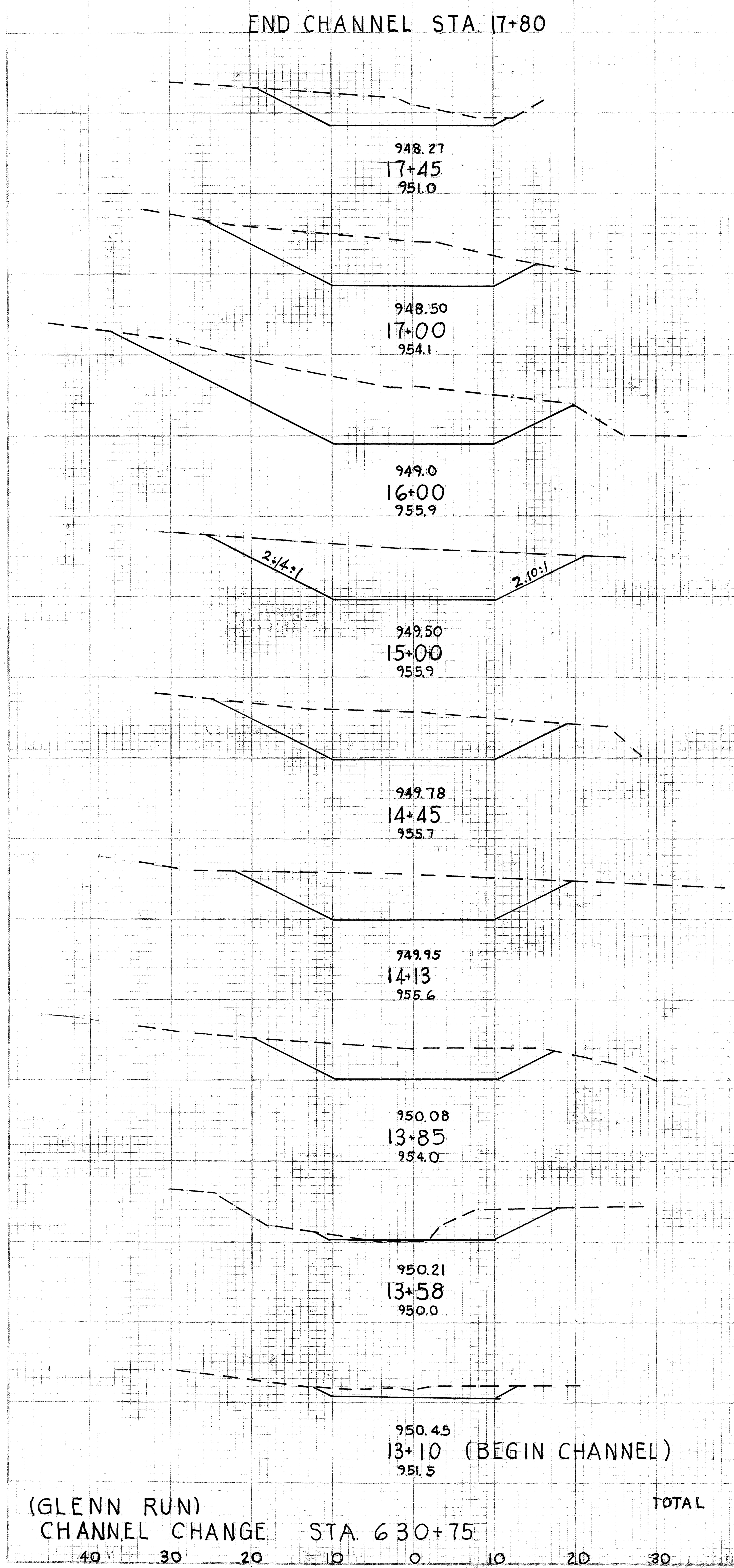




TYPICAL CHANNEL SECTION



GLENN RUN
CHANNEL CHANGE STA. 630+75



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	0	0		
			52	0
	80	0		
			205	0
	165	0		
			889	0
	315	0		
			1009	0
	230	0		
			428	0
	190	0		
			211	0
	165	0		
			151	0
	125	0		
			112	1
	37	1		
			56	1
	25	0		
			—	—
TOTAL			3113	2

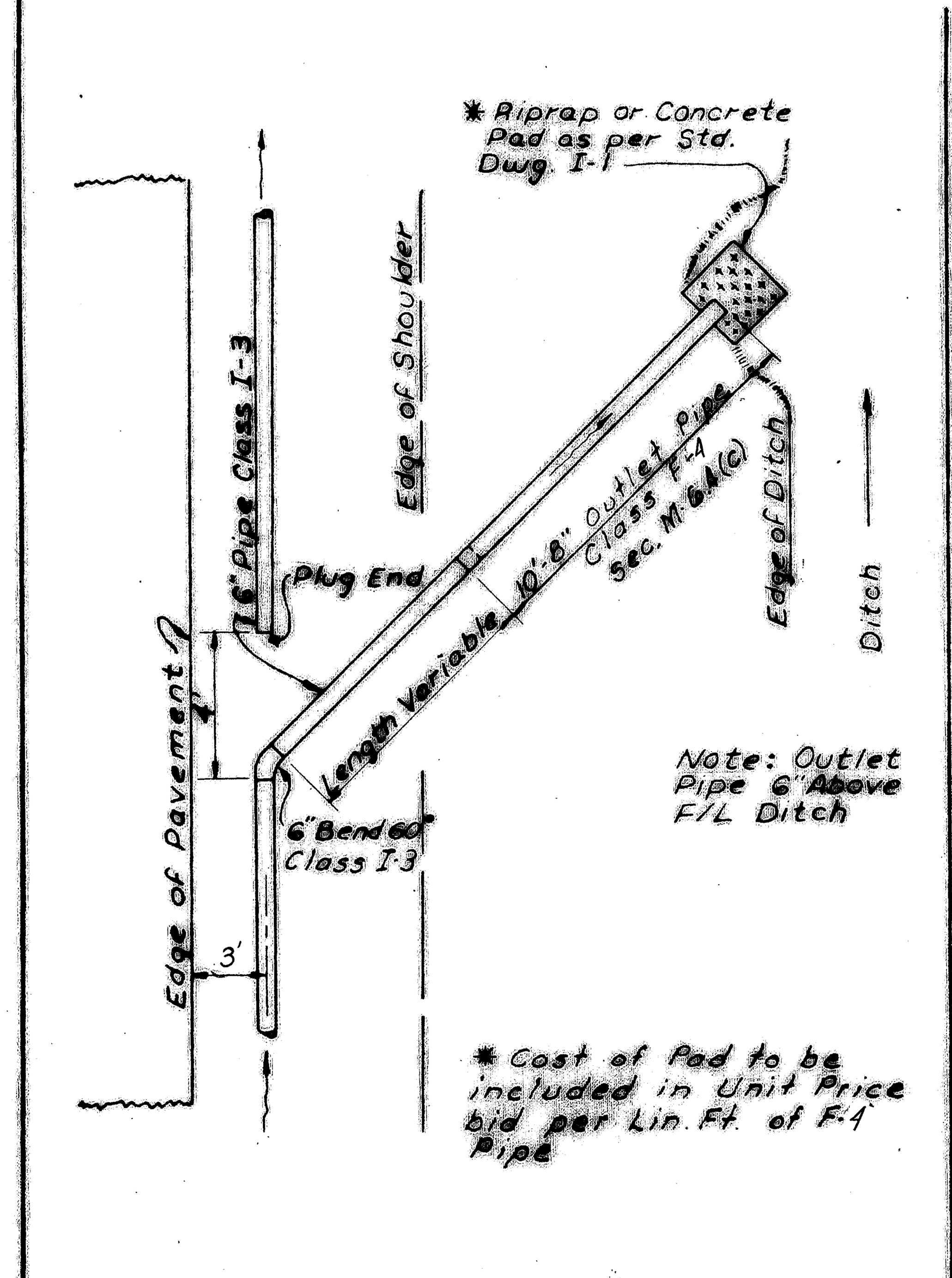
(GLENN RUN)
CHANNEL CHANGE STA. 630+75

CHANNEL EXCAVATION FOR BRIDGES

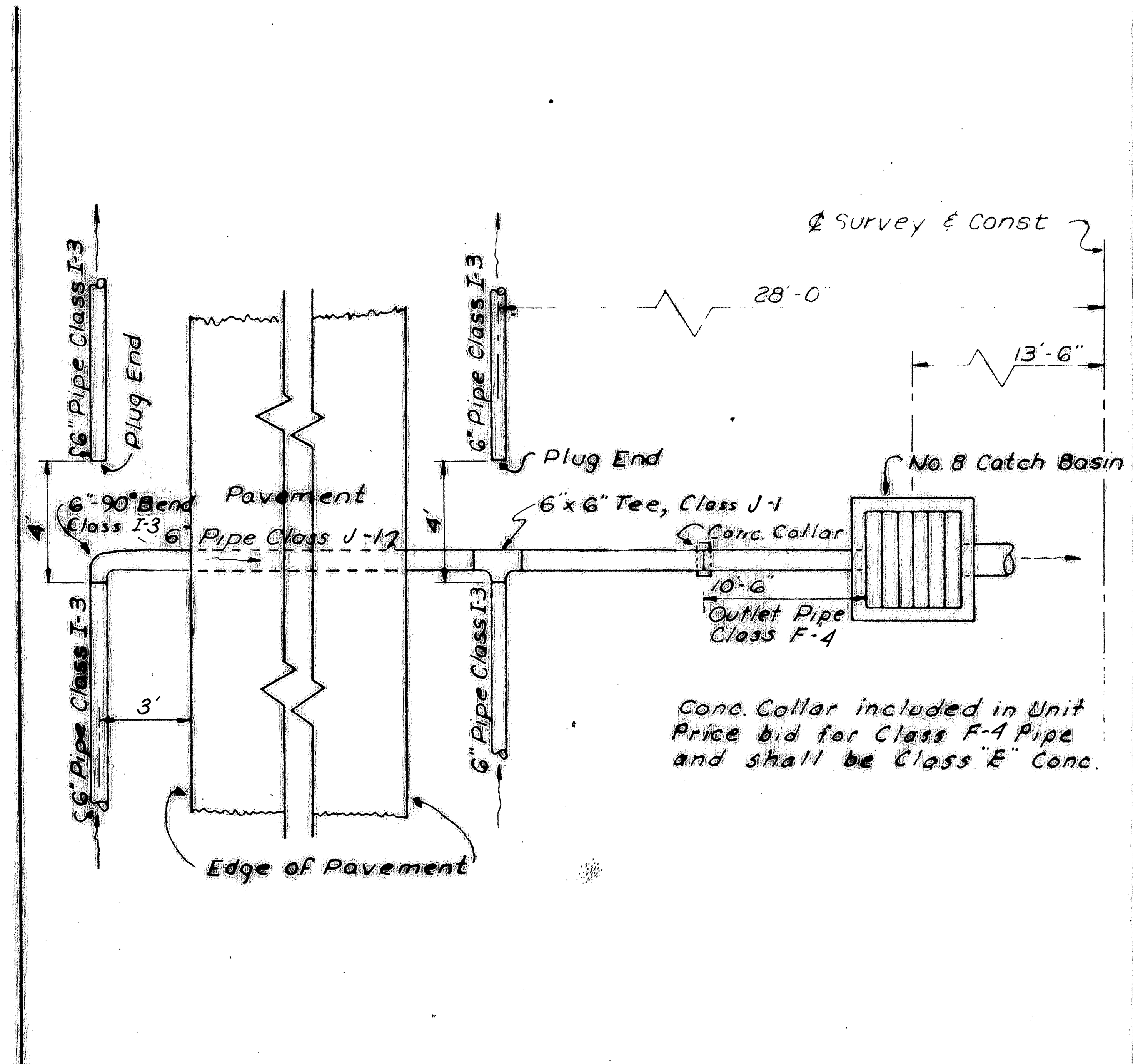
SPECIAL CONSTRUCTION DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

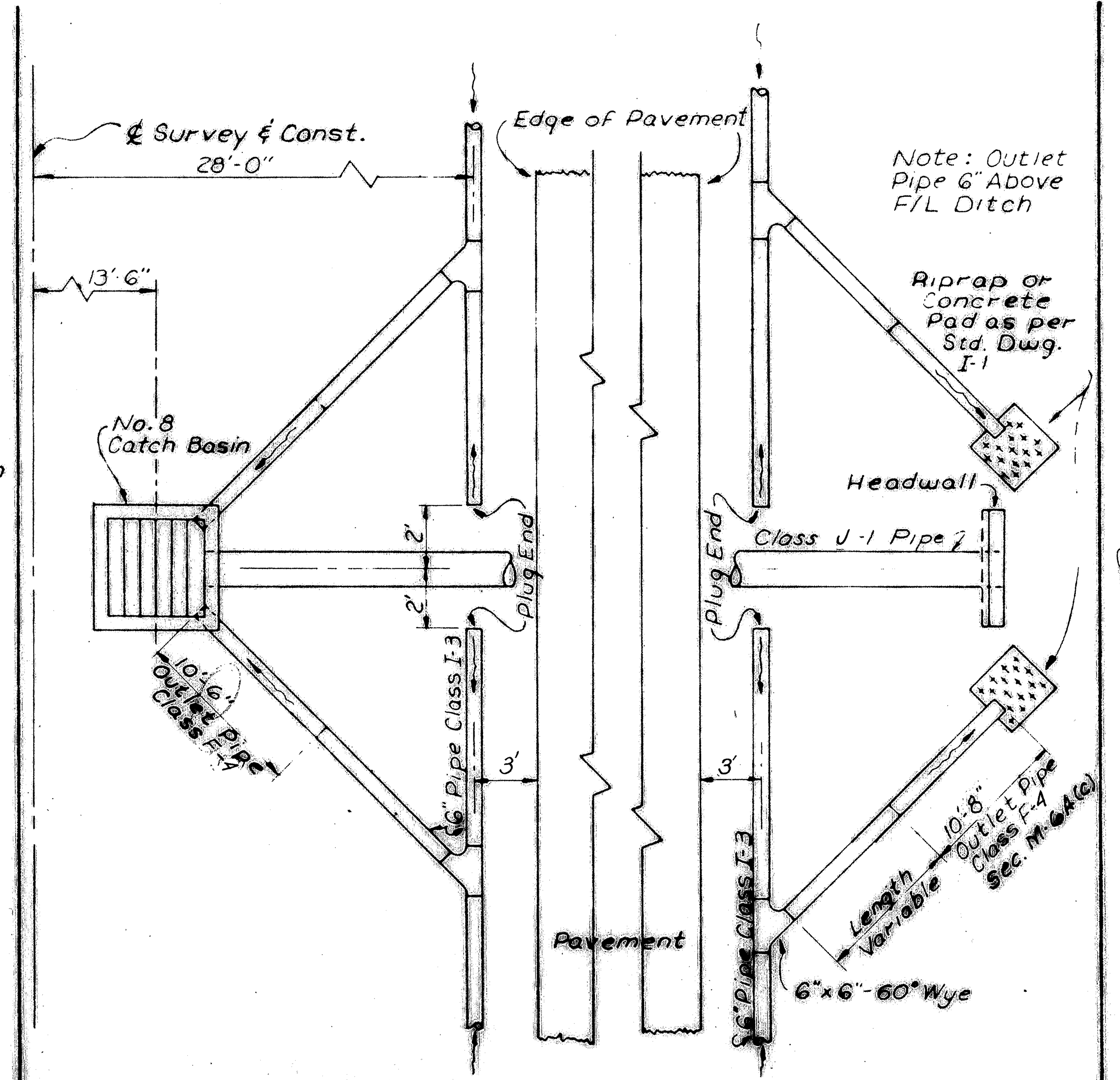
ASD-30-8.52
WAY-30-0.00



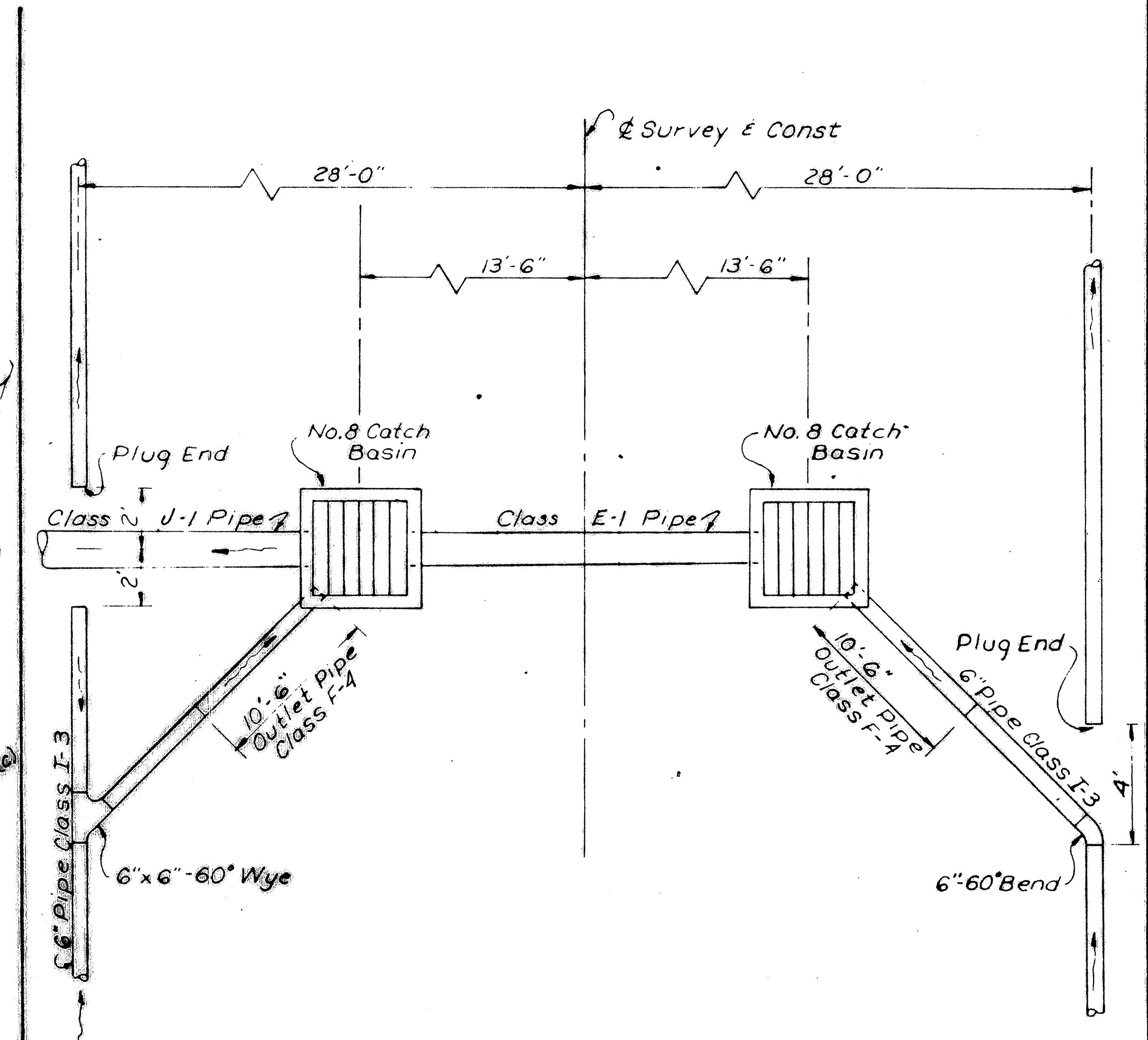
UNDERDRAIN OUTLET DETAIL "A"



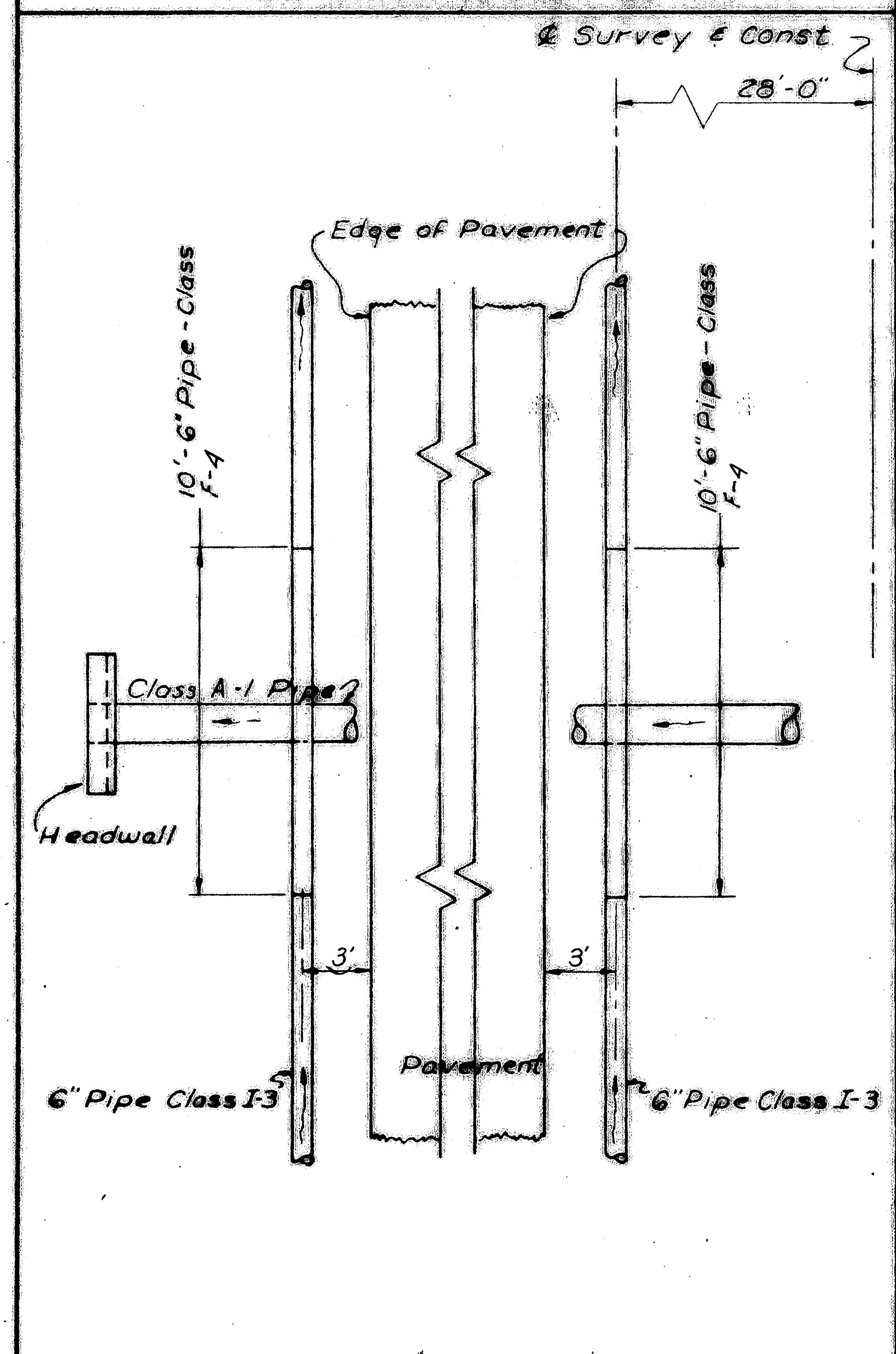
UNDERDRAIN OUTLET DETAIL "B"



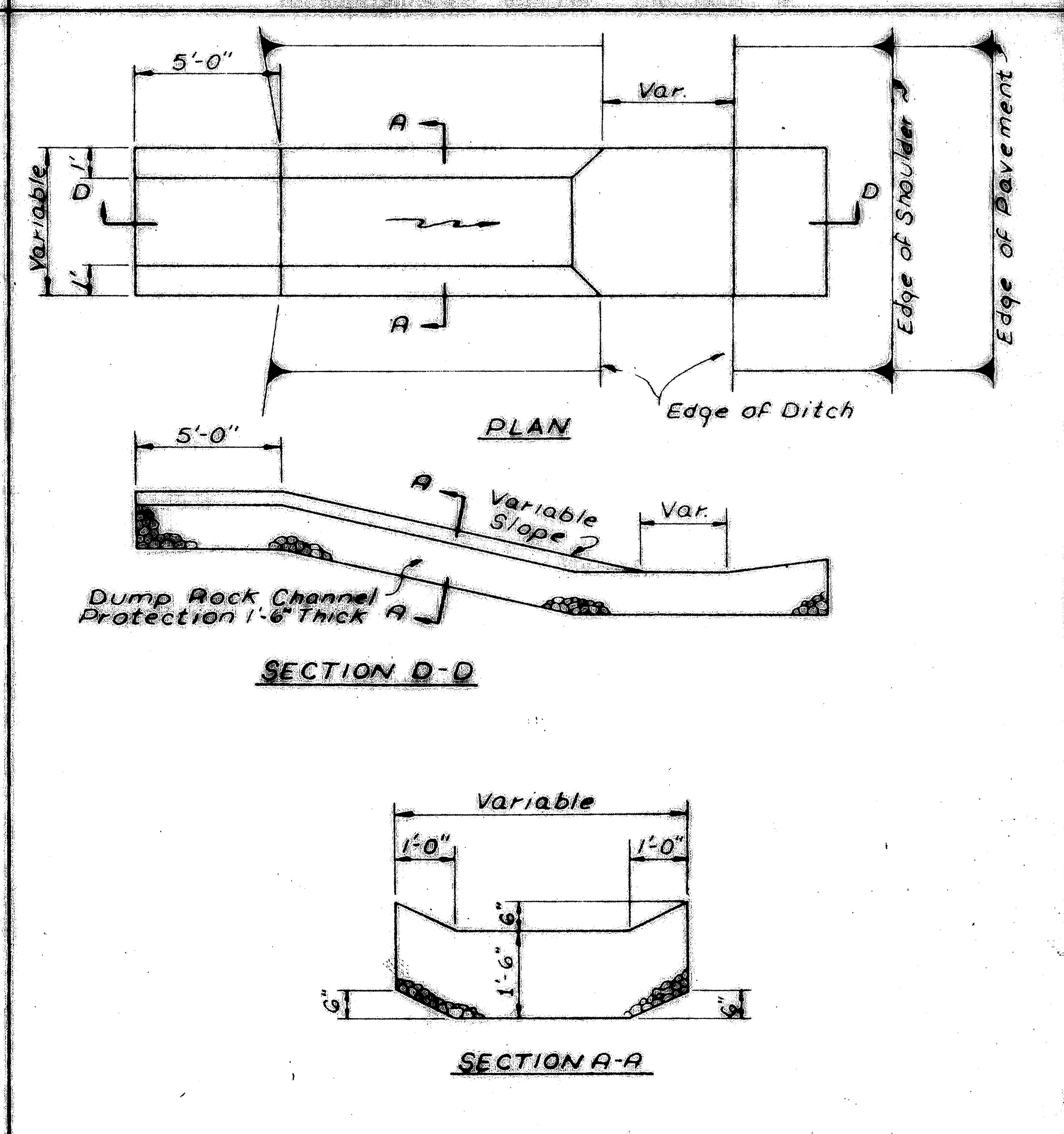
UNDERDRAIN OUTLET DETAIL "C"



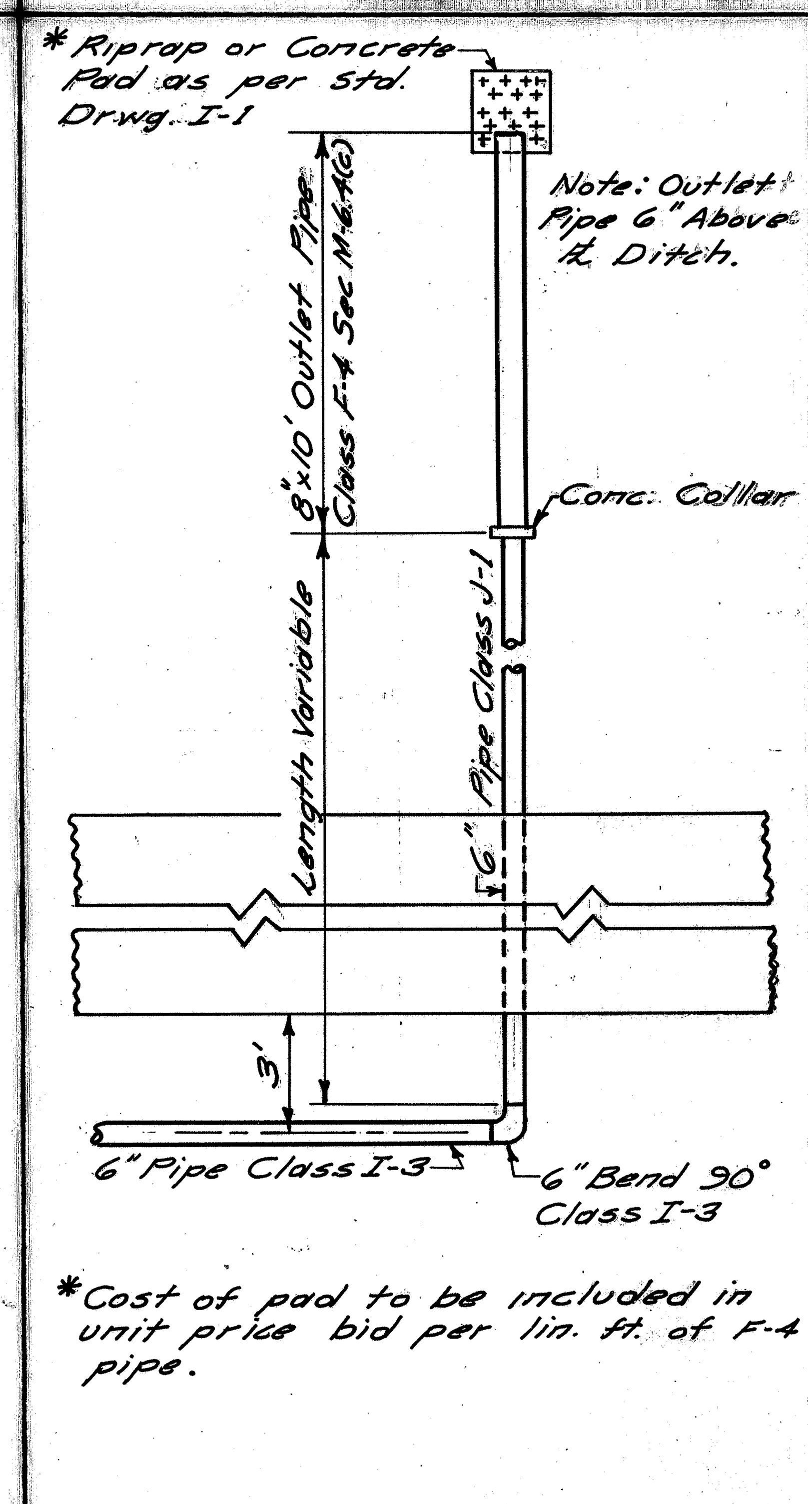
UNDERDRAIN OUTLET DETAIL "D"



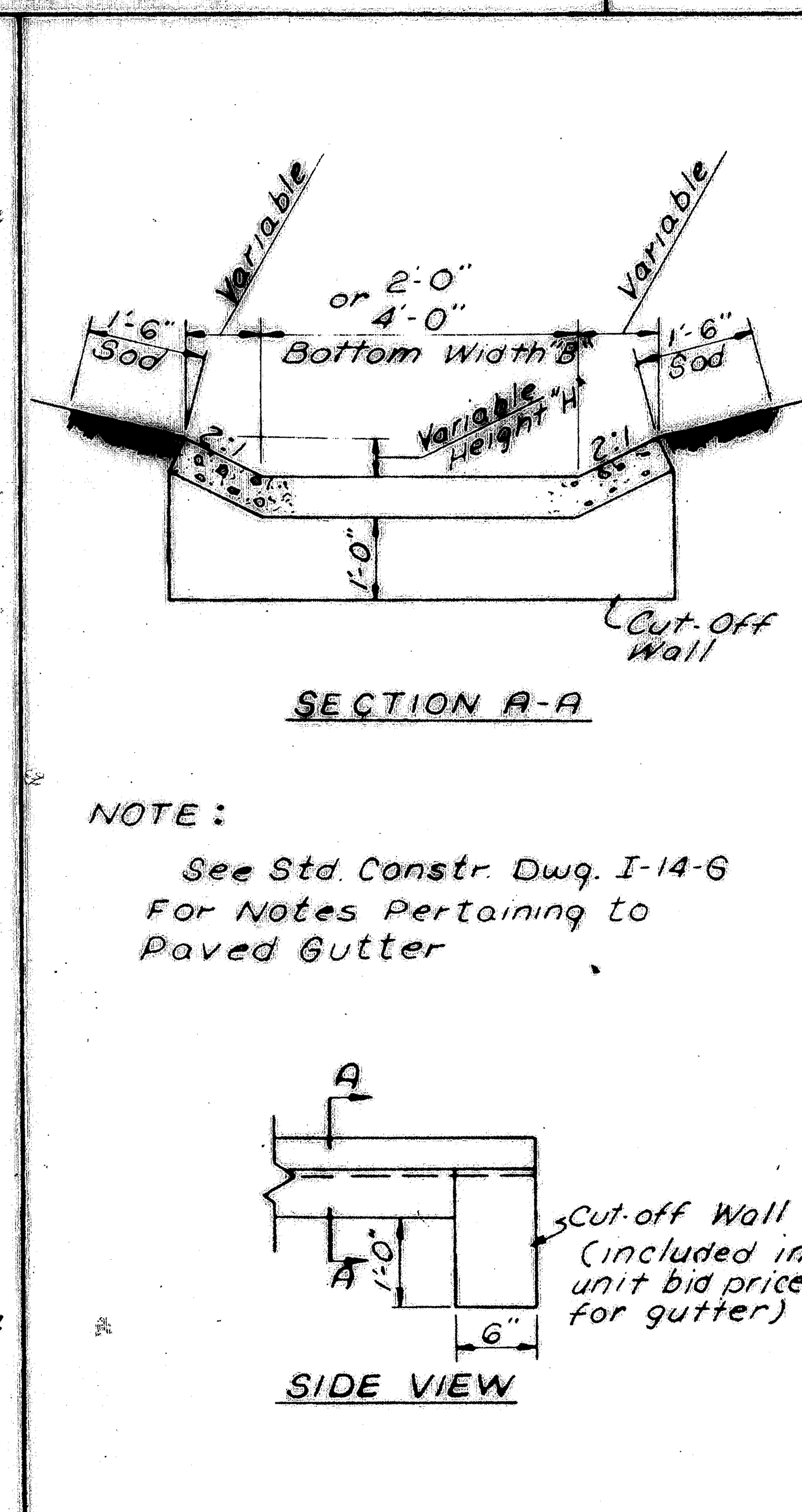
UNDERDRAIN DETAIL "E"



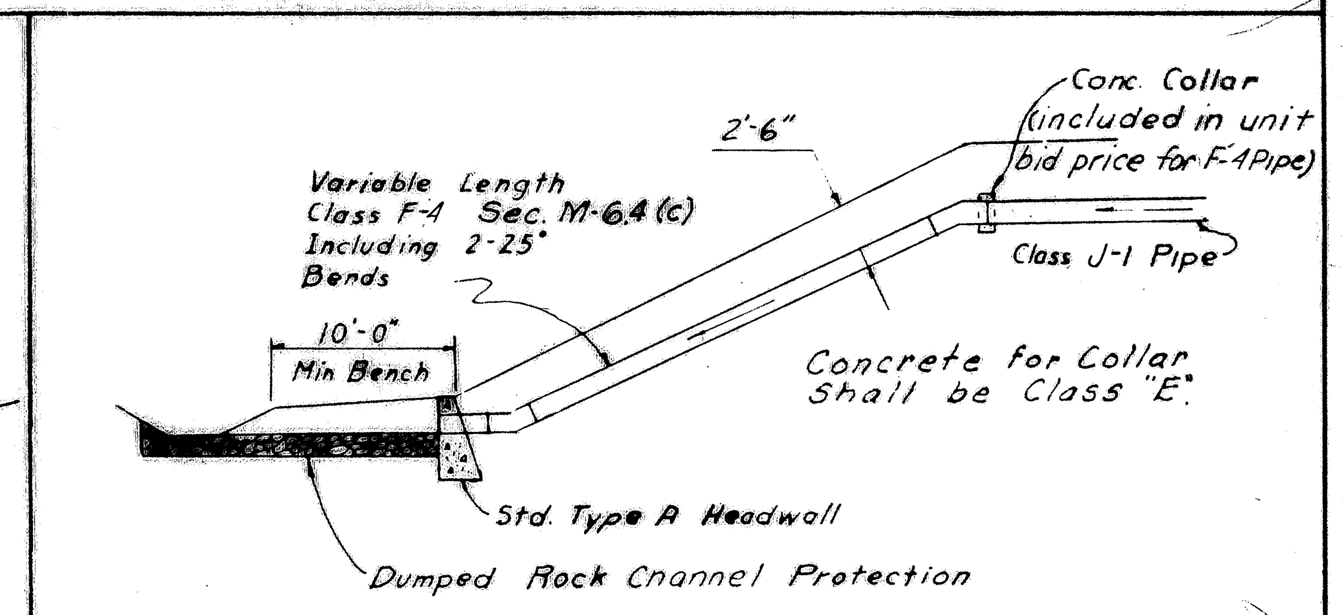
EROSION CONTROL AT SWALES



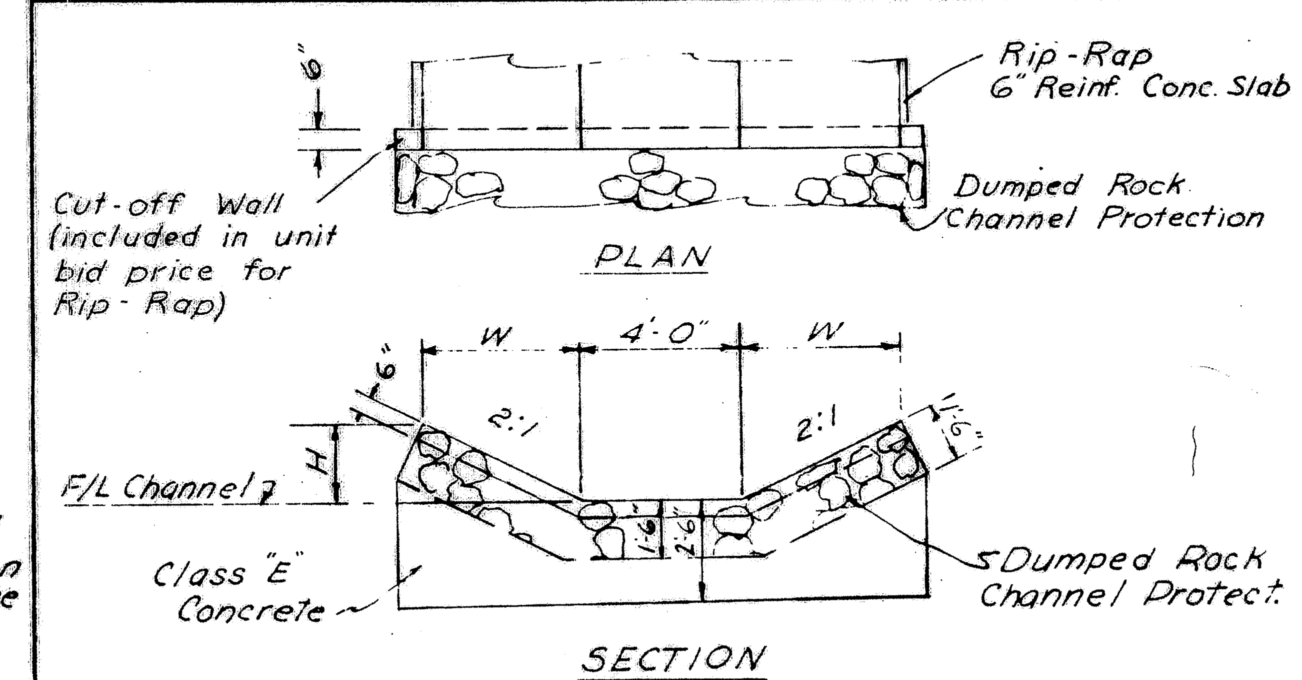
UNDERDRAIN OUTLET DETAIL "F"



MODIFIED TYPE I PAVED GUTTER



MEDIAN OUTLET DETAIL IN HIGH FILL



Culvert Station	Side	W	H
17+46.89 (TR 151)	RT.	4'	2'
642+33 (USR 30)	LT.	6'	3'
663+85 (USR 30)	LT.	4'	2'
663+85 (USR 30)	LT.	4'	2'

CUT-OFF WALL DETAIL FOR I-10 RIP-RAP

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072(8)		143/198

ASD-30-8.52
WAY-30-0.00

TYPICAL APPROACH SLAB EROSION CONTROL

SPECIAL BERM AND SLOPE PROTECTION

Prior to placement of sod on the berm and slope, galvanized poultry fence shall be placed on the finished grade in strands which shall be at right angles to the direction of flow. Each strand shall be staked securely on top and bottom with stakes at four foot intervals, and alternated in rows four feet apart.

Stakes shall be 1"x1"x8" wood stakes and shall be perpendicular to the ground and flush with the top of the sod.

The fence shall be Straight Line Poultry Fence or equivalent with strand width of four feet having a two inch mesh and all wires No. 20 Gauge.

The strands of fencing shall be fastened together at twelve inch intervals by means of hog rings.

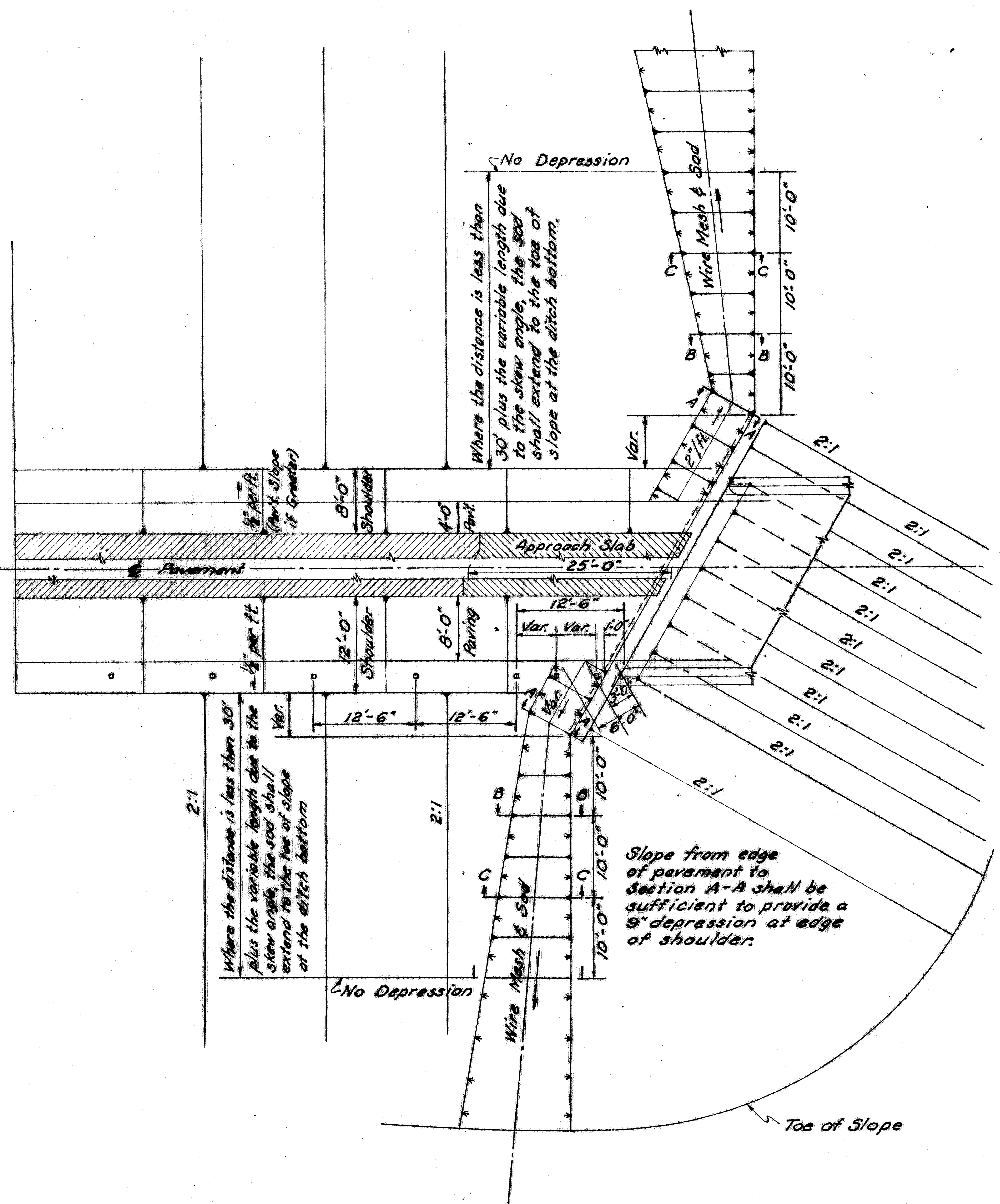
The fence shall be secured to the wood stakes by metal staples.

Sod shall be laid in accordance with Construction and Materials Specifications Section L-10.07

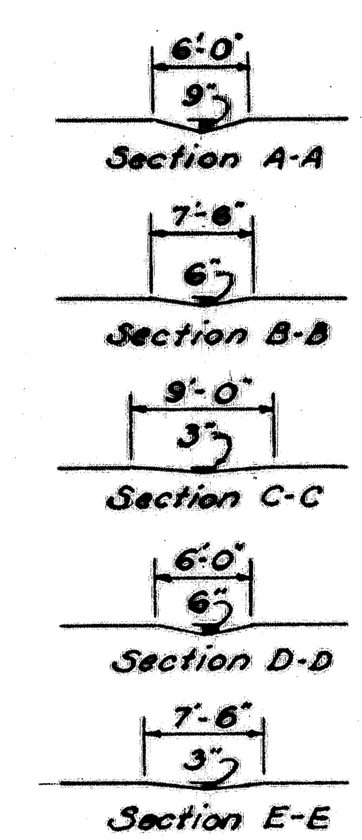
This item is required only where rate of side slope is steeper than 6 to 1.

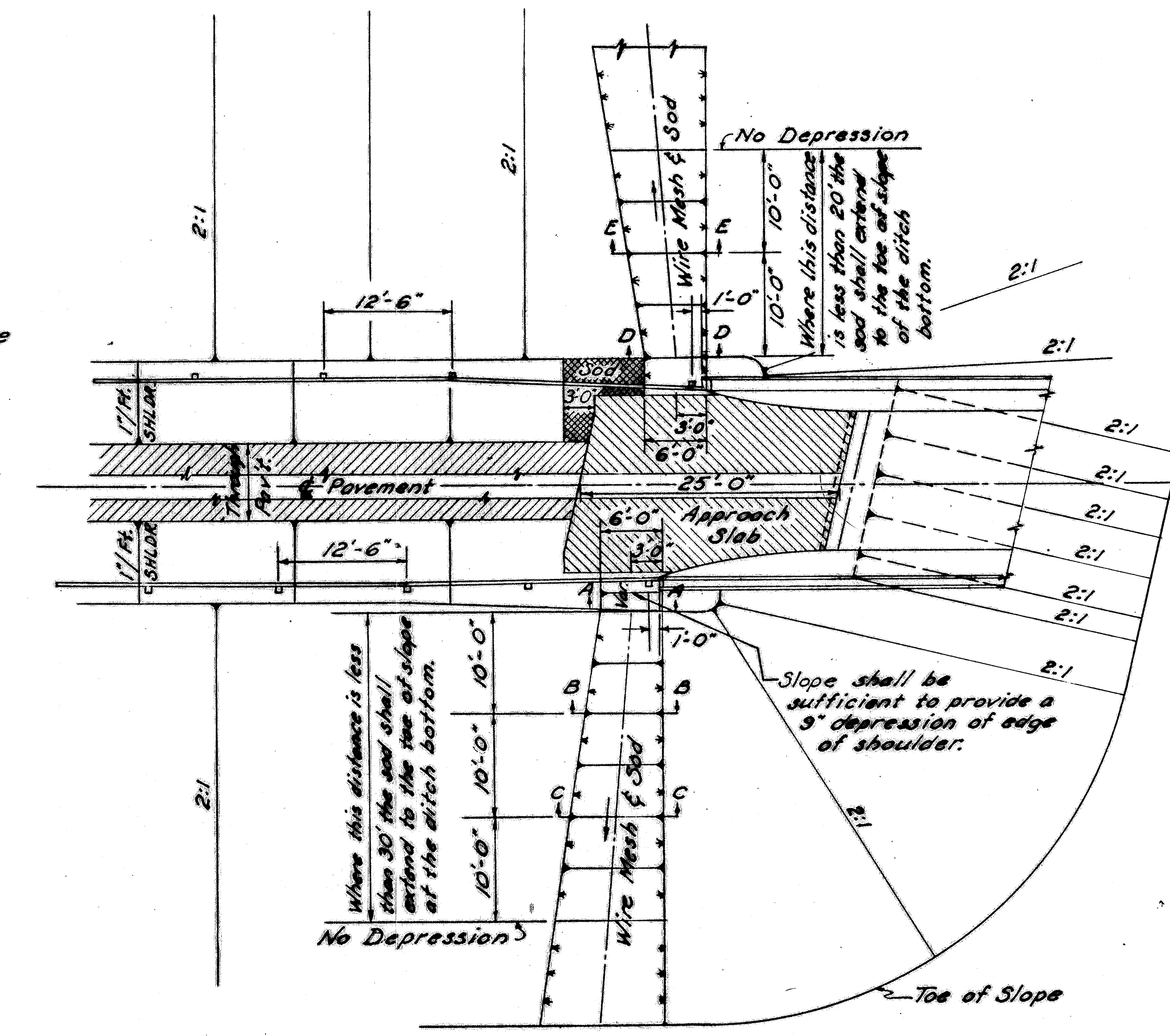
Payment for all the above shall be included in the unit price bid for Item L-10 Sodding for Special Berm and Slope Protection.

STATION	DISTANCE	SQ.YDS. SOD
594+20 Rt.	85	75
592+64 Lt.	40	36
17+21 Rt. (C.R.62)	9	6
17+69 Lt (C.R.62)	9	6
	Total	123



MAINLINE ROADS





SECONDARY ROADS

HEADWALL - TYPE B

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

144
198

ASD.-30-8.52
WAY. -30-0.00

HEADWALL DIMENSIONS

Station	Skew	Pipe Size	Type	sec.		H	W	A	B	C	D	E
469+50, LT.& RT.	25°	42"	CONC.	B-B		4'-7"	4'-0"	1'-3"	7'-9"	9'-2"	5'-3"	1'-0"
535+83 LT.	15°	42"	CONC.	B-B		4'-7"	4'-0"	1'-3"	7'-3"	9'-3"	5'-4"	0'-9"
535+83 RT.	"	"	"	"		"	"	"	"	9'-8"	5'-9"	0'-6"
642+33 LT.	30°	72"	MPCMP	B-B		7'-6"	5'-9"	2'-1½"	14'-10"	14'-7"	8'-3"	2'-3"
642+33 RT.	"	"	"	"		"	"	"	"	15'-2"	8'-10"	2'-0"
663+85 LT.	12°	42"	CONC.	B-B		4'-7"	4'-0"	1'-3"	7'-2"	10'-6"	6'-7"	0'-5"
663+85 RT.	"	"	"	"		"	"	"	"	11'-2"	7'-3"	0'-0"
565+50 LT	19°	30"	CONC.	C-C		6'-6"	—	1'-0"	8'-6"	9'-2"	6'-1"	0'-8"
565+50 RT	"	"	"	"		"	—	"	5'-8"	7'-1"	4'-0"	0'-8"

REINFORCEMENT BAR SCHEDULE

Station	a-1 No.	a-1 Length	a-2 No.	a-2 Length	a-3 No.	a-3 Length	a-4 No.	a-4 Length	a-5 No.	a-5 Length
469+50, LT.& RT.	4	16'-0"	2	16'-7"	2	17'-8"	2	16'-8"	2	17'-5"
535+83 LT.	4	15'-10	2	16'-2"	2	16'-6"	2	16'-3"	2	16'-7"
535+83 RT.	4	16'-3"	2	16'-7"	2	16'-11"	2	16'-7"	2	16'-11"
642+33 LT.	4	27'-5"	2	29'-1"	2	30'-7"	2	29'-4"	2	30'-3"
642+33 RT.	4	28'-0"	2	29'-8"	2	31'-2"	2	29'-11"	2	30'-10"
663+85 LT.	4	17'-1"	2	17'-4"	2	17'-8	2	17'-4"	2	17'-8"
663+85 RT.	4	17'-9"	2	18'-0"	2	18'-4"	2	18'-0"	2	18'-4"
565+50 LT										
565+50 RT										

Station	c-1 No.	c-1 Length	c-2 No.	c-2 Length	c-3 No.	c-3 Length	c-4 No.	c-4 Length	c-5 No.	c-5 Length	c-6 No.	c-6 Length	c-7 No.	c-7 Length
469+50, LT.& RT.	2	8'-11"	2	8'-2"	2	8'-2"	2	7'-5"	2	3'-0"	2	4'-7"	2	5'-4"
535+83 LT.	2	8'-0"	2	7'-3"	2	7'-8"	2	6'-11"	2	3'-0"	2	4'-8"	2	5'-5"
535+83 RT.	2	8'-0"	2	7'-3"	2	7'-8"	2	6'-11"	2	3'-3"	2	5'-1"	2	5'-10"
642+33 LT.	2	17'-3"	2	16'-8"	2	15'-9"	2	15'-2"	2	4'-5"	2	7'-11"	2	8'-6"
642+33 RT.	2	17'-3"	2	16'-8"	2	15'-9"	2	15'-2"	2	4'-8"	2	8'-6"	2	9'-1"
663+85 LT.	2	7'-11"	2	7'-2"	2	7'-7"	2	6'-8"	2	3'-8"	2	6'-3"	2	7'-0"
663+85 RT.	2	7'-11"	2	7'-2"	2	7'-7"	2	6'-8"	2	4'-0"	2	6'-11"	2	7'-8"
565+50 LT	6	6'-2"	6	6'-6"	2	17'-4"	2	18'-4" TO 18'-0"	2	8'-10" TO 8'-4"	4	6'-2" TO 5'-6"	2	5'-10"
565+50 RT	5	6'-2"	5	6'-6"	2	12'-5"	2	13'-5" TO 13'-1"	2	5'-6" TO 5'-0"	3	6'-2" TO 5'-6"	2	3'-9"

Station	d, Sec B-B / c-8, Sec C-C No.	d / c-8 Length	f, Sec B-B / c-9, Sec C-C No.	f / c-9 Length	h No.	h Length	m No.	m Length	e No.	e Length	K No.	K Length
469+50, LT.& RT.	4	6'-9"	8	4'-2"	6	9'-1"	8	3'-8"	3	6'-9" TO 5'-9"	3	9'-1" TO 8'-1"
535+83 LT.	4	6'-9"	8	4'-2"	6	9'-1"	8	3'-8"	3	6'-9" TO 6'-0"	3	9'-1" TO 8'-4"
535+83 RT.	4	6'-9"	8	4'-2"	6	9'-1"	8	3'-8"	3	6'-9" TO 6'-3"	3	9'-1" TO 8'-7"
642+33 LT.	6	9'-8"	12	5'-5"	7	13'-0"	12	5'-5"	4	9'-8" TO 7'-5"	4	13'-0" TO 10'-9"
642+33 RT.	6	9'-8"	12	5'-5"	7	13'-0"	12	5'-5"	4	9'-8" TO 7'-8"	4	13'-0" TO 11'-0"
663+85 LT.	4	6'-9"	8	4'-2"	6	9'-1"	8	3'-8"	3	6'-9" TO 6'-4"	3	9'-1" TO 8'-8"
663+85 RT.	4	6'-9"	8	4-2"	6	9'-1"	8	3'-8"	3	6'-9"	3	9'-1"
565+50 LT	4	6'-6" TO 5'-10"	2	17'-8" TO 17'-5"								
565+50 RT	3	6'-6" TO 5'-10"	2	12'-9" TO 12'-6"								

Notes:

For other notes and details of Type "B" headwall refer to Std. Drwg. HW-A & B

All quantities are for one headwall.

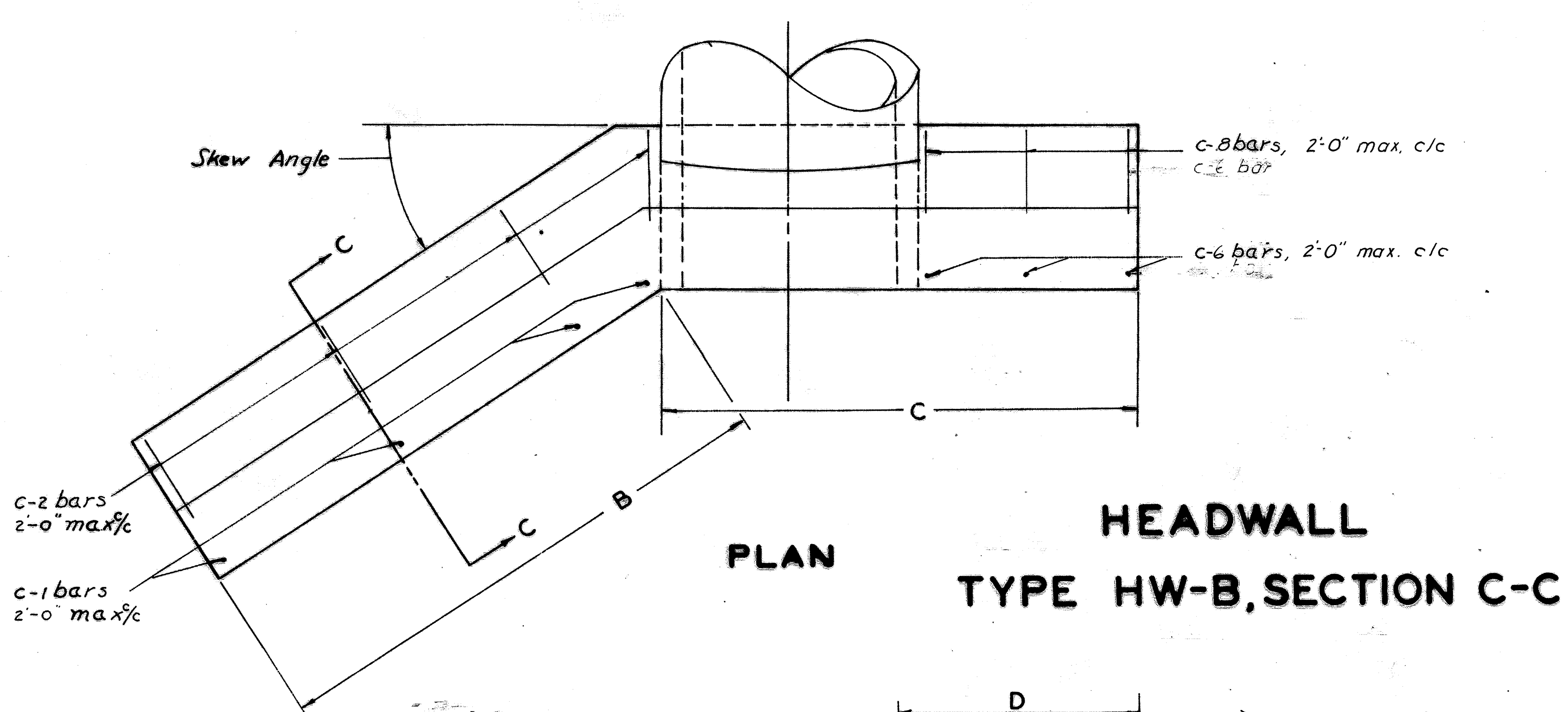
All reinforcing bars are #5 except h & k bars, which are the size specified in Standard Construction Drawing HW-C. for "h" bars.

An 18" wide strip of sod shall be placed along the back and both ends of each headwall. under Item L-10.

QUANTITIES

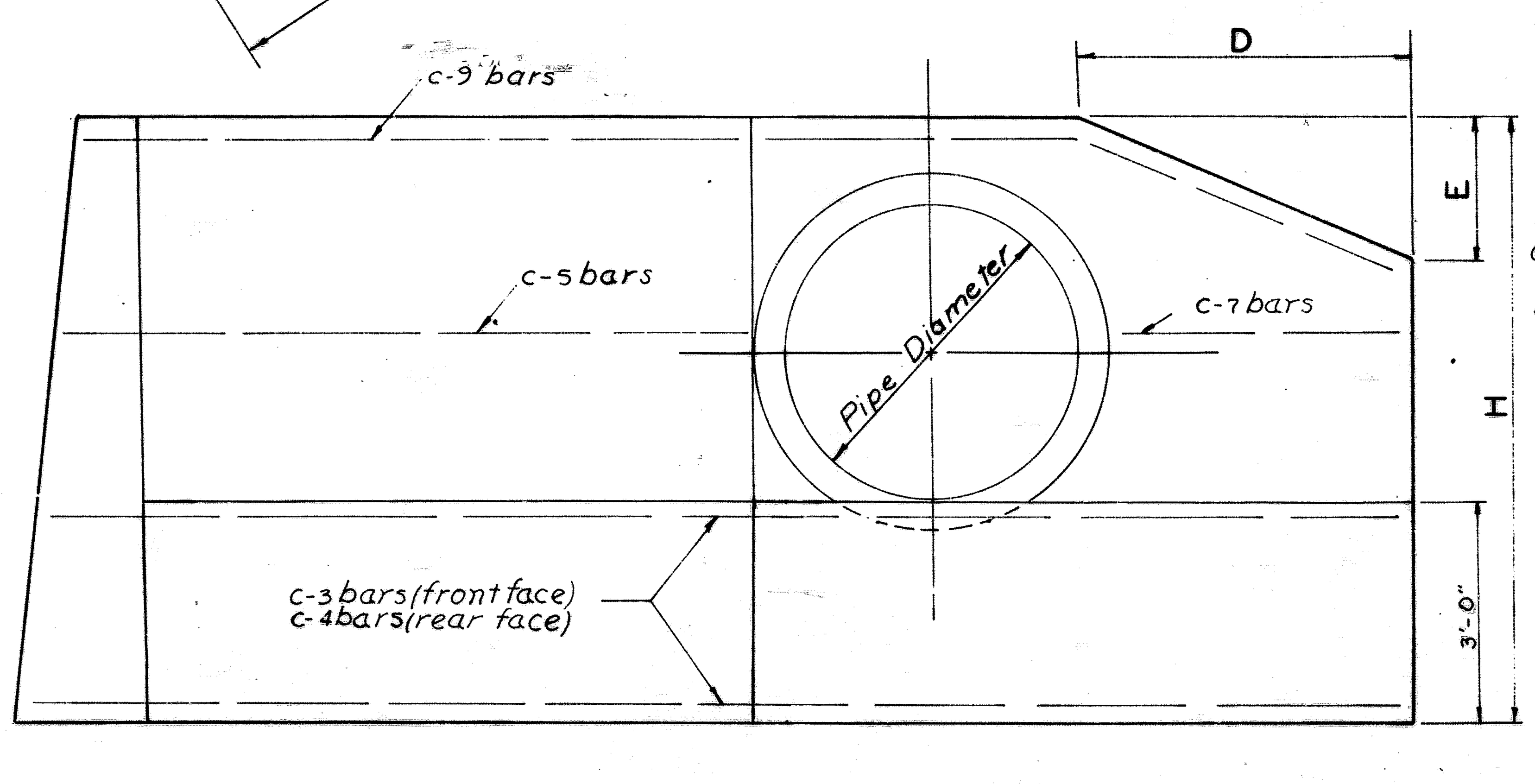
Station	Reinf. St. Lbs.	Concrete Cu. Yds.	Sodding Sq. Yds.
469+50 LT.&RT.	504 (2)	9.80 (2)	3 (2)
535+83 LT.	488	10.01	3
535+83 RT.	498	10.29	3
642+33 LT.	983	24.87	6
642+33 RT.	994	25.45	6
663+85 LT.	512	10.62	3
663+85 RT.	526	11.12	3
565+50 LT.	271	8.47	4
565+50 RT.	203	5.98	3

All Quantities Carried to Culvert Sheets
All Concrete to be Class "C"

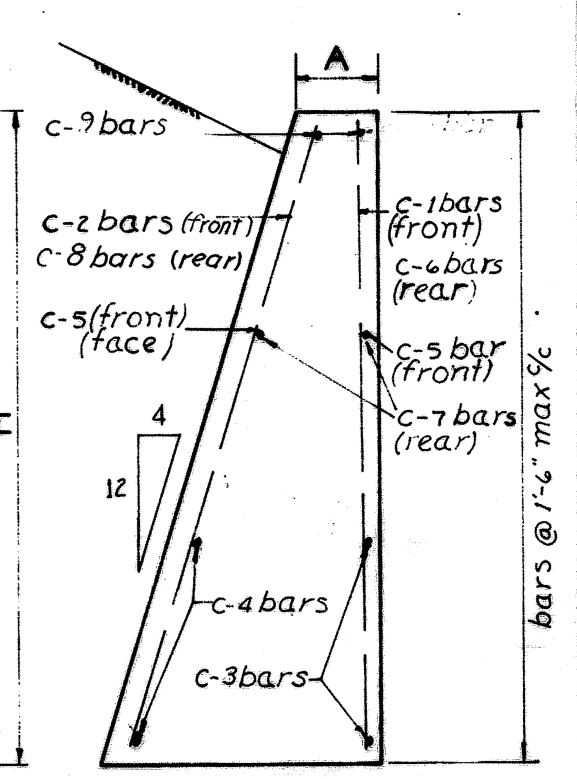


PLAN

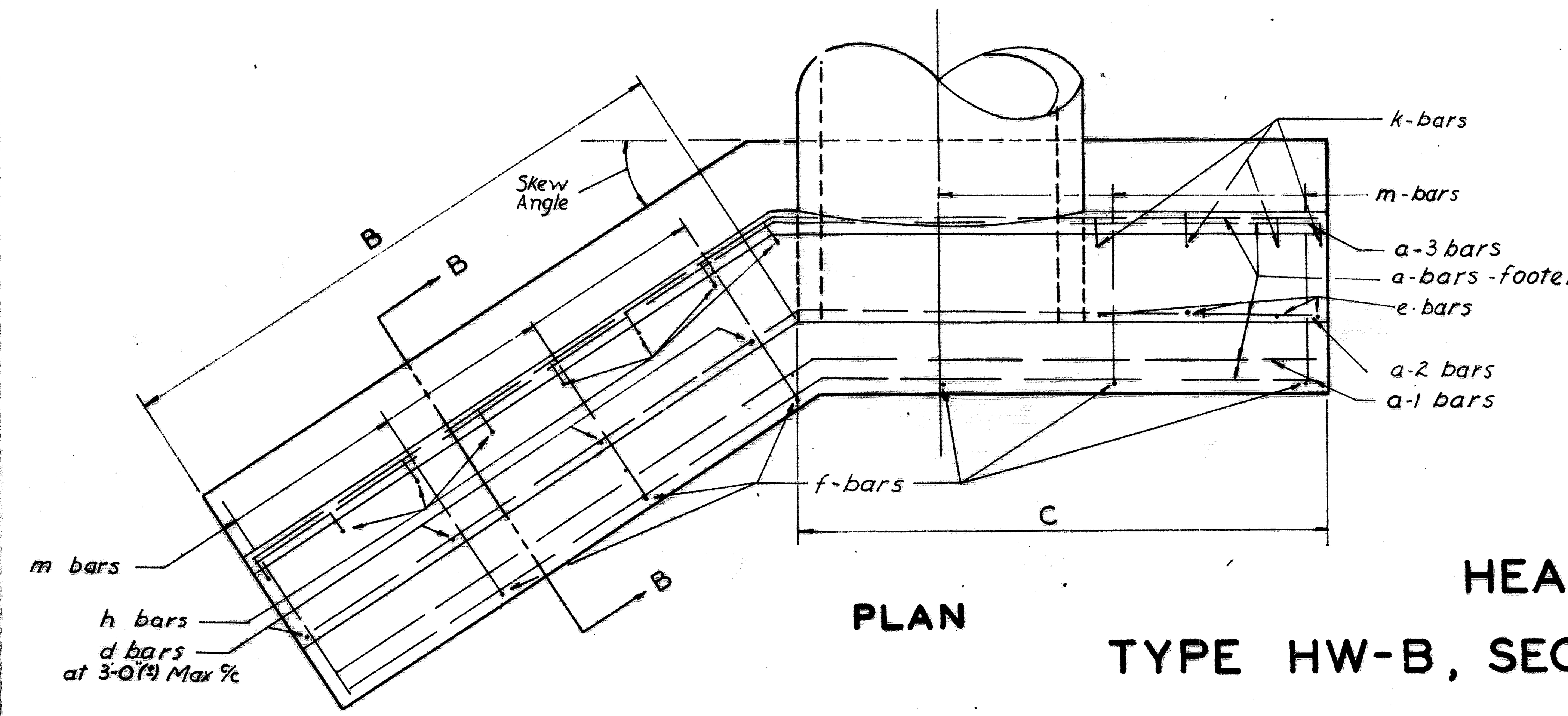
HEADWALL
TYPE HW-B, SECTION C-C



ELEVATION

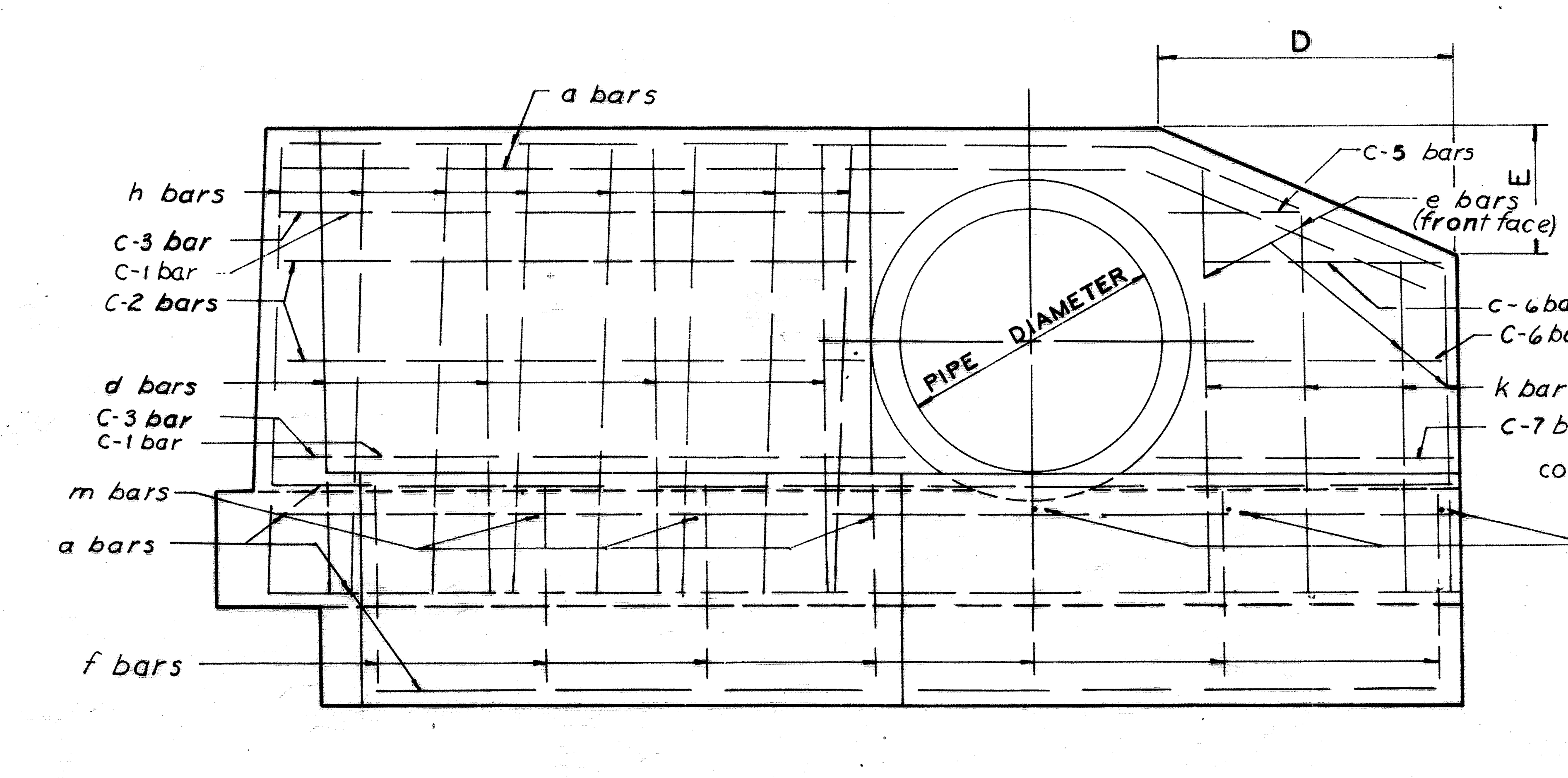


SECTION C-C

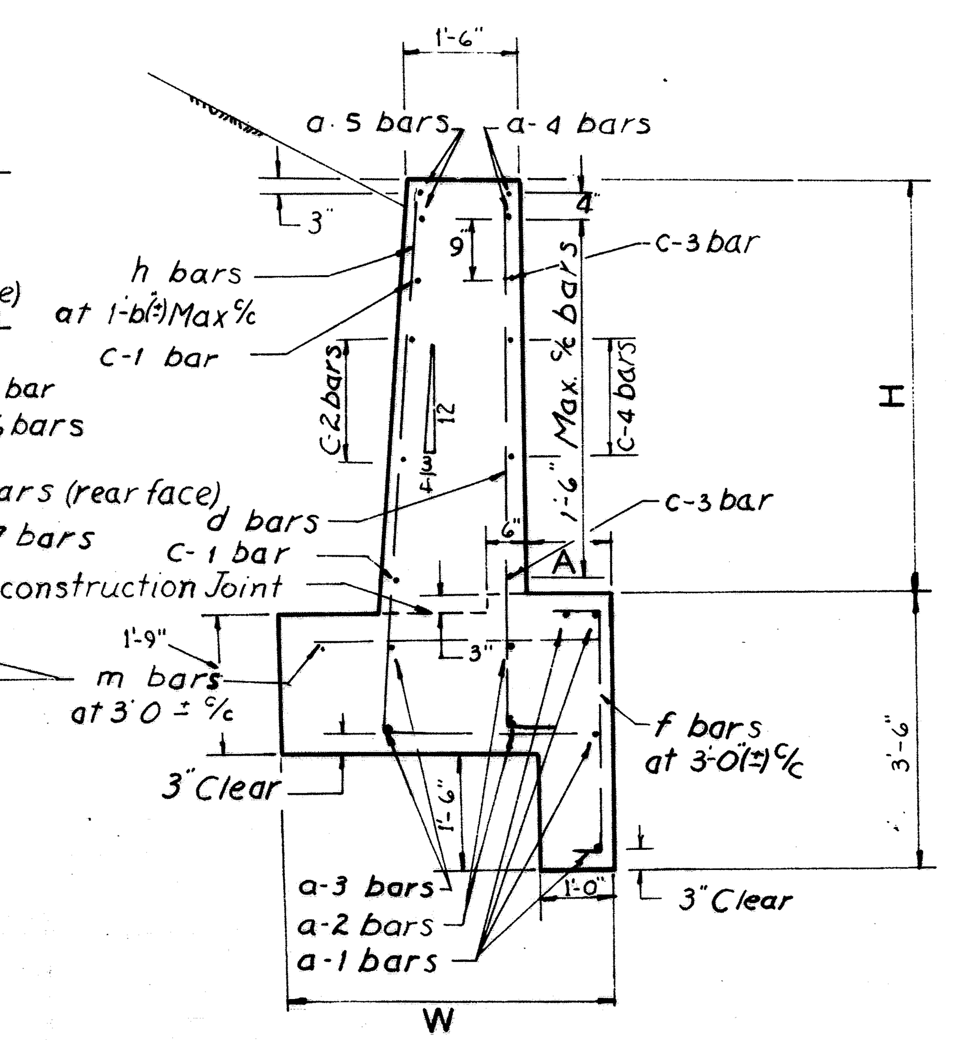


PLAN

HEADWALL
TYPE HW-B, SECTION B-B (MODIFIED)



ELEVATION



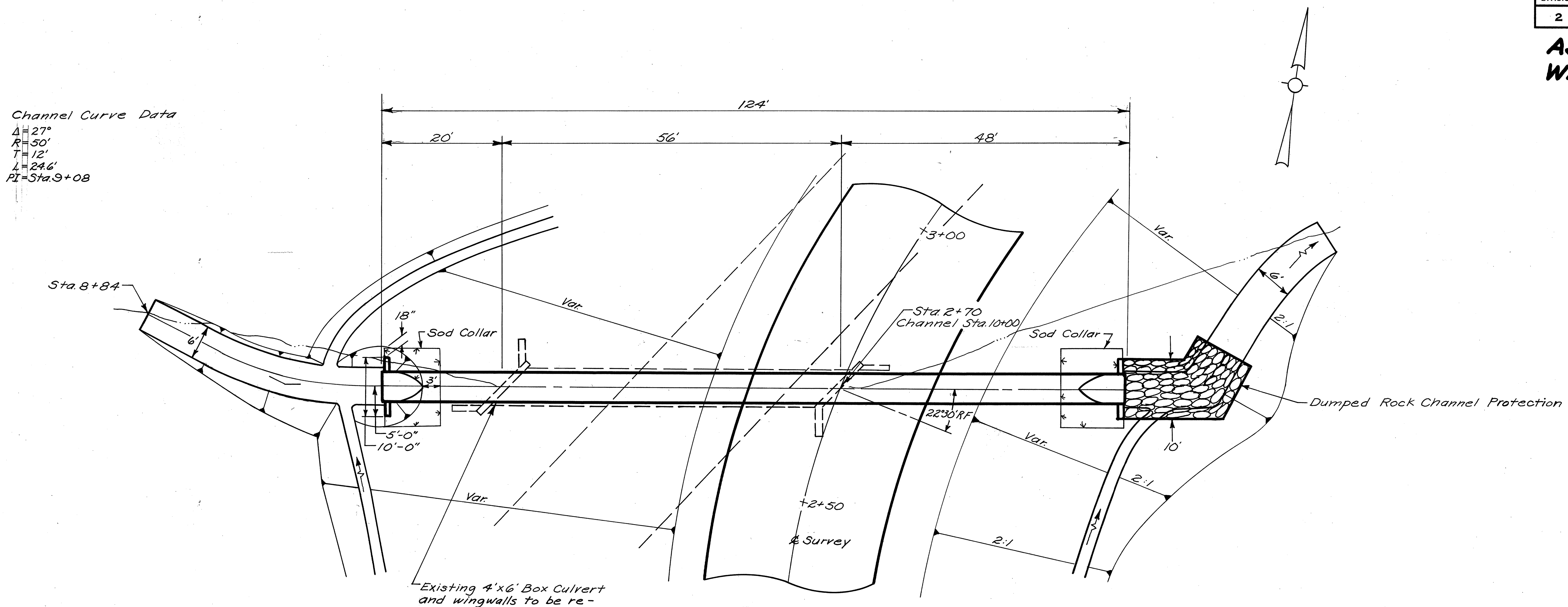
SECTION B-B

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072 (8)		

144A / 198

ASD-30-8.52
WAY-30-0.00

Channel Curve Data
Δ = 27°
R = 50'
T = 12'
L = 24.6'
PI = Sta. 9+08



PLAN

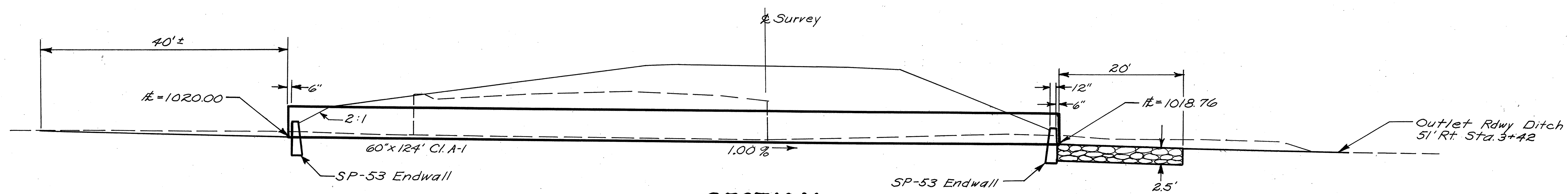
Channel X-Sections
Scale: 1" = 10'

	E-3	
	E.A.	C.Y.
9+24 (2:1; 1020.00; 1021.1)	18	13
8+84	0	
Total		13

ESTIMATED QUANTITIES

E-3	Channel Excavation	13 Cu. Yds.
I-1	60" Pipe, Sec. M-6.6 (d) Class A-1	124' Lin Ft.
I-2	Masonry, Class "E"	5.0 Cu. Yds.
I-10	Dumped Rock Channel Protection	19 Cu. Yds.
S-24	Removal of Existing Structures	Lump
L-10	Sodding	26 Sq. Yds.

Std. Drwgs: I-1, SP-53



SECTION
Scale: 1" = 10'

Designed	Checked	Inked
1-3-64 P.M.G.	1-6-64 J.R.E.	1-7-64 D.W.R.

PIPE DETAIL ~ STA. 2+70 TEMPORARY CONNECTION "N"

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD - 30 - 8.52
WAY - 30 - 0.00

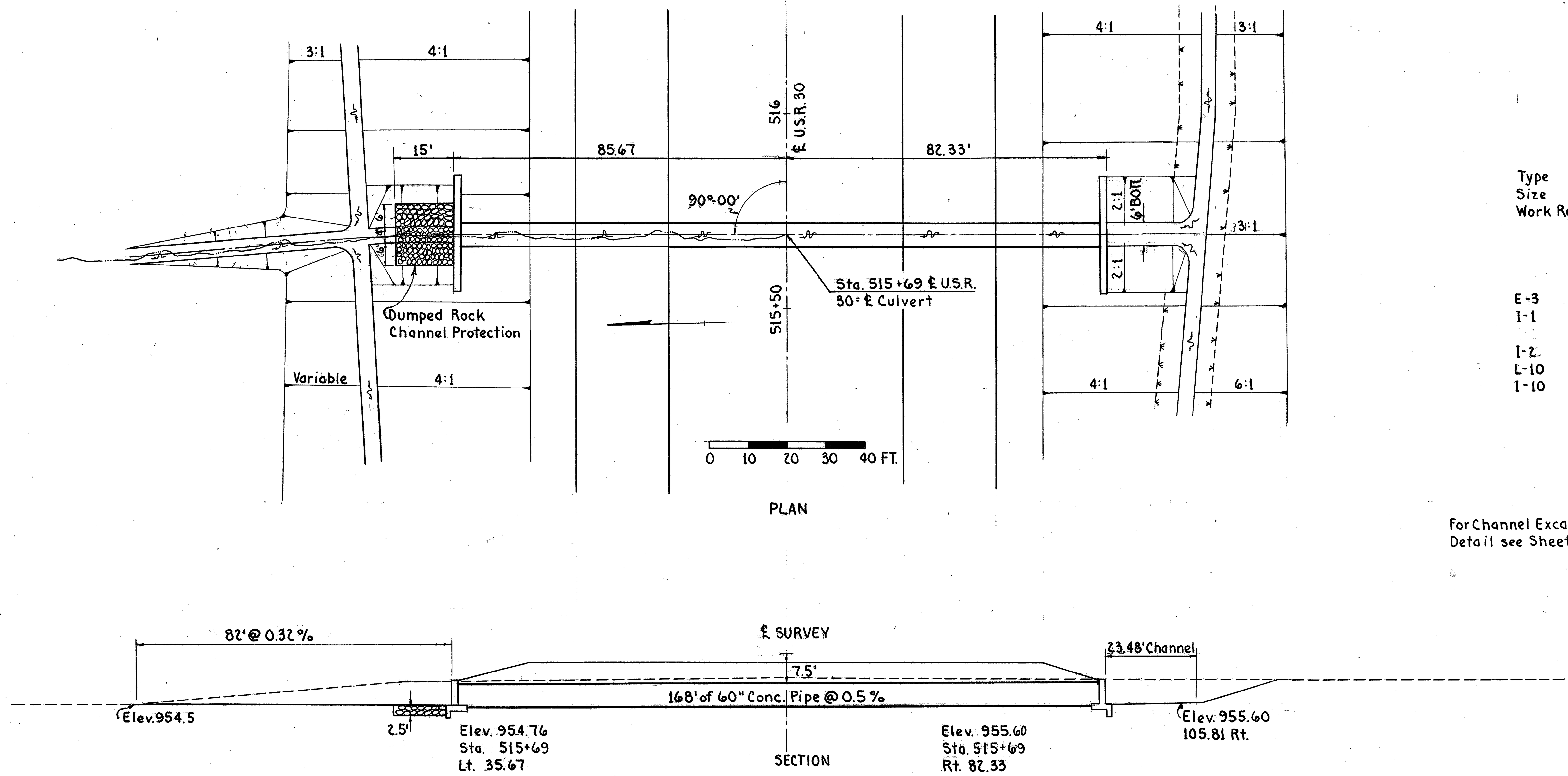
CULVERT DATA

TYPE - Pipe Culverts, Std Drwgs. No. I-1, HW-A & B, & E
SIZE - 48" x 228' Pipe Culvert, Sec. M-6.6(c)
48" x 84' Pipe Culvert Sec. M-6.4(d) or Sec. M-6.6(a)
48" x 42' Pipe Culvert Sec. M-6.6(b)
WORK REQUIRED - Channel Excavation; Construct Pipe Culverts With Headwalls As Per Plan

ESTIMATED QUANTITIES

E-3	Channel Excavation	328	Cu. Yds.
I-1	48" Pipe Culvert, Class A-1, Sec. M-6.6(c)	228	Lin. Ft.
I-1	48" Pipe Culvert, Class A-1, Sec. M-6.4(d) or Sec. M-6.6(a)	84	Lin. Ft.
I-1	48" Pipe Culvert, Class A-1, Sec. M-6.6(b)	42	Lin. Ft.
I-2	Headwalls, Std. HW-B, as Per Plan	19.60	Cu. Yds.
I-2	Endwalls, Std. HW-E	2.44	Cu. Yds.
E-12	Pipe Removed over 15"	30	Lin. Ft.
L-10	Sodding	10	Sq. Yds.
I-10	Dumped Rock Channel Protection	86.1	Cu. Yds.
I-10	Rip Rap, 6" Reinf. Conc. Slab	131.3	Sq. Yds.

ASD-30-8.52
WAY-30-0.00



CULVERT DATA

Type - Pipe Culvert, Std. Drwg. Nos. I-1, HW-C
Size - 60" × 168' Pipe Culvert, Sec. M-6.6(a)
Work Required - Channel Excavation, and Construct Pipe Culvert with Headwalls

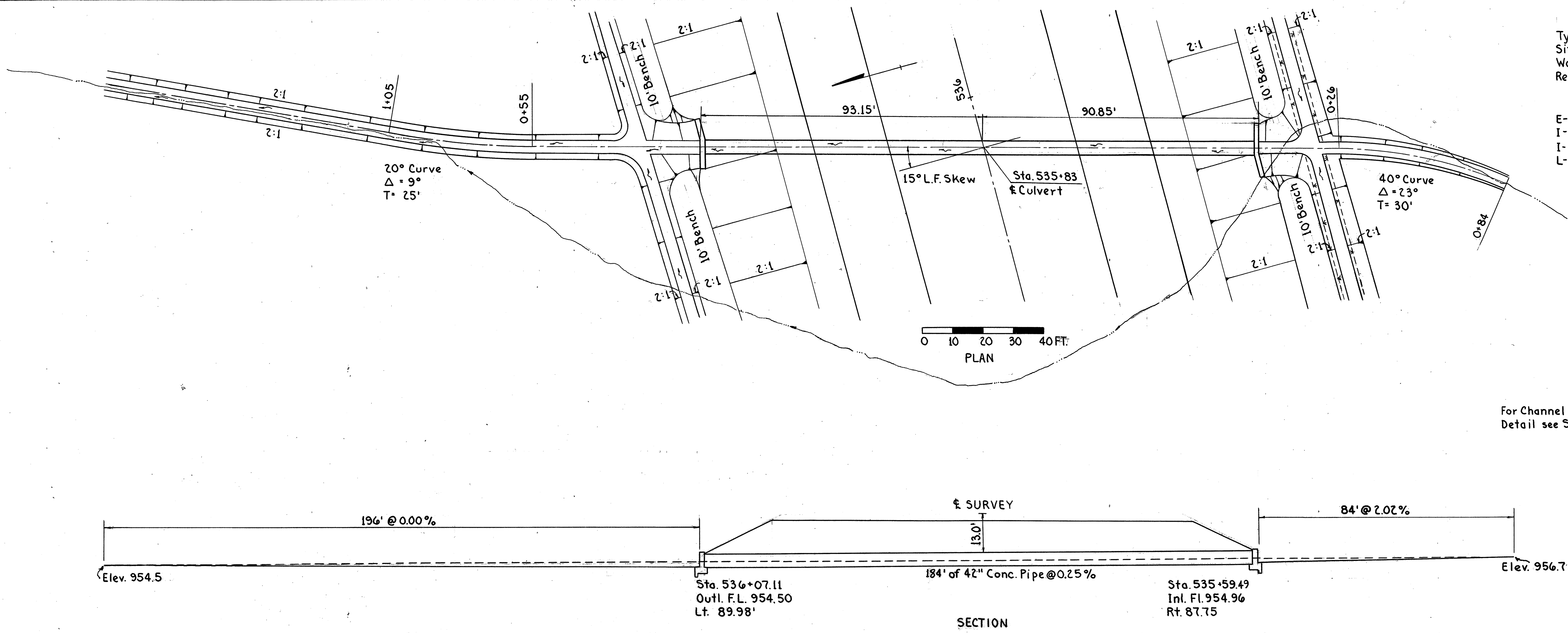
ESTIMATED QUANTITES

E-3	-	Channel Excavation	210	Cu. Yds.
I-1	-	60" Pipe Culvert Class "A-1"		
	-	Reinf. Conc. Pipe, Sec. M 6.6(a)	168	Lin. Ft.
I-2	-	Headwall HW-C	22.63	Cu. Yds.
L-10	-	Sodding	12	Sq. Yds.
I-10	-	Dumped Rock Channel Protection	24.2	Cu. Yds.

For Channel Excavation Detail see Sheet No. 150

A = 97.4 Acs.
Q_{25} = 148 cfs.

C-4
Culvert Sta. 515+69



CULVERT DATA

Type - Pipe Culvert, Std. Drwg. Nos. I-1, HW-A & B
Size - 42" × 184' Pipe Culvert, Sec. M 6.6(b)
Work Required _ Channel Excavtion; Construct Pipe Culvert with Headwalls as Per Plans

ESTIMATED QUANTITES

E-3	-	Channel Excavation	137	Cu. Yds.
I-1	-	42" Pipe Culvert Class A-1, Sec. M-6.6(b)	184	Lin. Ft.
I-2	-	Headwalls, Std. HW-B, as Per Plan	20.30	Cu. Yds.
L-10	-	Sodding	6	Sq. Yds.

See note on Sheet 9 for special bedding requirements for this pipe structure

For Channel Excavation Detail see Sheet No. 150

A = 20.7 Acs.
Q_{25} = 31.6 cfs.
C-5
Culvert Sta. 535+83

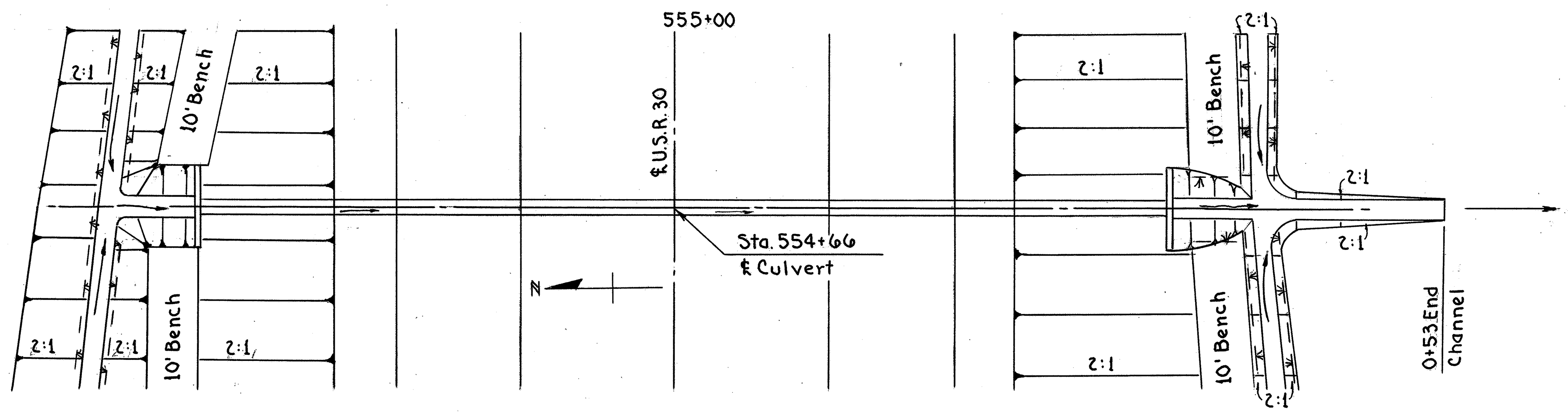
ASD-30-8.52
WAY-30-0.00

CULVERT DATA

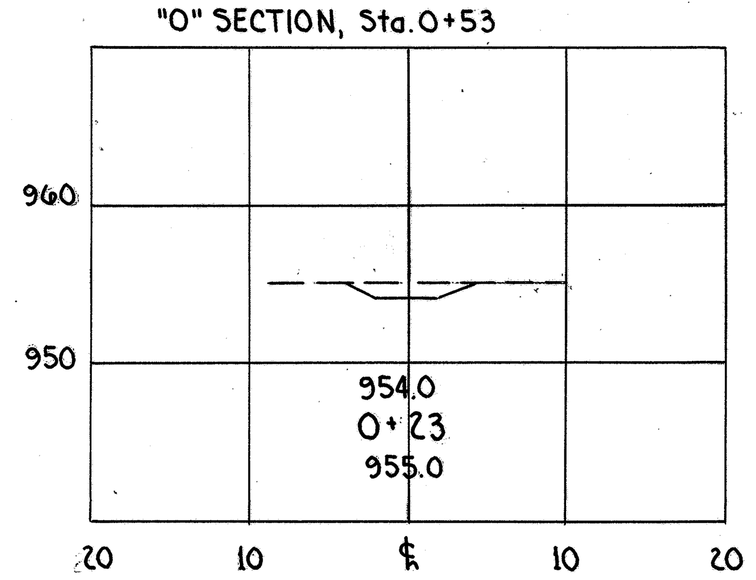
TYPE - Pipe Culvert, Std, Drwg. Nos. I-1, HW-A & B
SIZE 30"×190' Pipe Culvert, Sec. M-6.6(c)
WORK REQUIRED - Channel Excavation; Construct Pipe Culvert with Headwalls.

ESTIMATED QUANTITIES

E-3	Channel Excavation	1	Cu.Yd.
I-1	30" Pipe Culvert, Class A-1, Sec. M6.6(c)	190	Lin.Ft.
I-2	Headwalls, Std. HW-A	7.54	Cu.Yds.
L-10	Sodding	6	Sq.Yds.



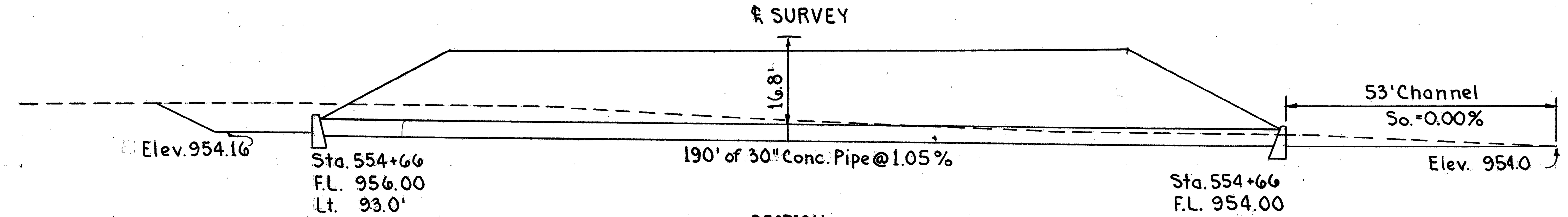
0 10 20 30 40
PLAN



Sta. 554+66, 97.0' Rt, U.S.R. 30
= Sta. 0+00 Rt. Channel (@ HDWL)

Scale: 1"=10'

CUT	
End Area	Cu. Yds.
0	
	1
6	



SECTION

For Channel Excavation Detail see Sheet No. 150

A=15.6 Acs.
Q_{25} = 35.2 cfs.

C-6
Culvert Sta. 554+66

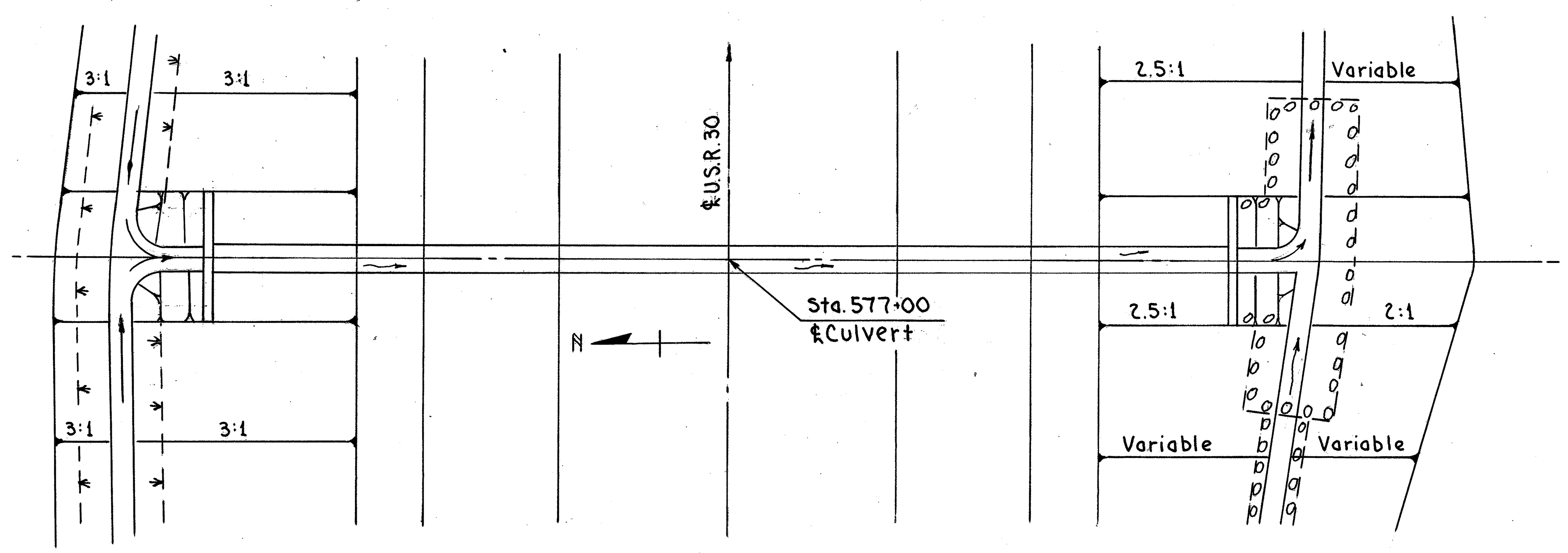
CULVERT DATA

TYPE - Pipe Culvert, Std. Drwg. Nos. I-1, HW-C
SIZE - 54"×180' Pipe Culvert, Sec. M-6.4(d)
WORK REQUIRED - Construct Pipe Culvert with Headwalls

ESTIMATED QUANTITIES

I-1	54" Pipe Culvert, Class A-1, Sec. M-6.4(d)	180	Lin.Ft.
I-2	Headwalls, Std. HW-C	36.30	Cu. Yds.
L-10	Sodding	9	Sq. Yds.

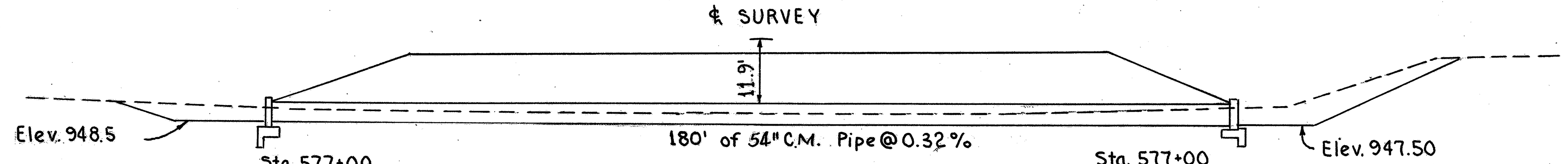
See note on Sheet 9 for special bedding requirements at this structure



0 10 20 30 40
PLAN

For Channel Excavation Detail see Sheet No. 150

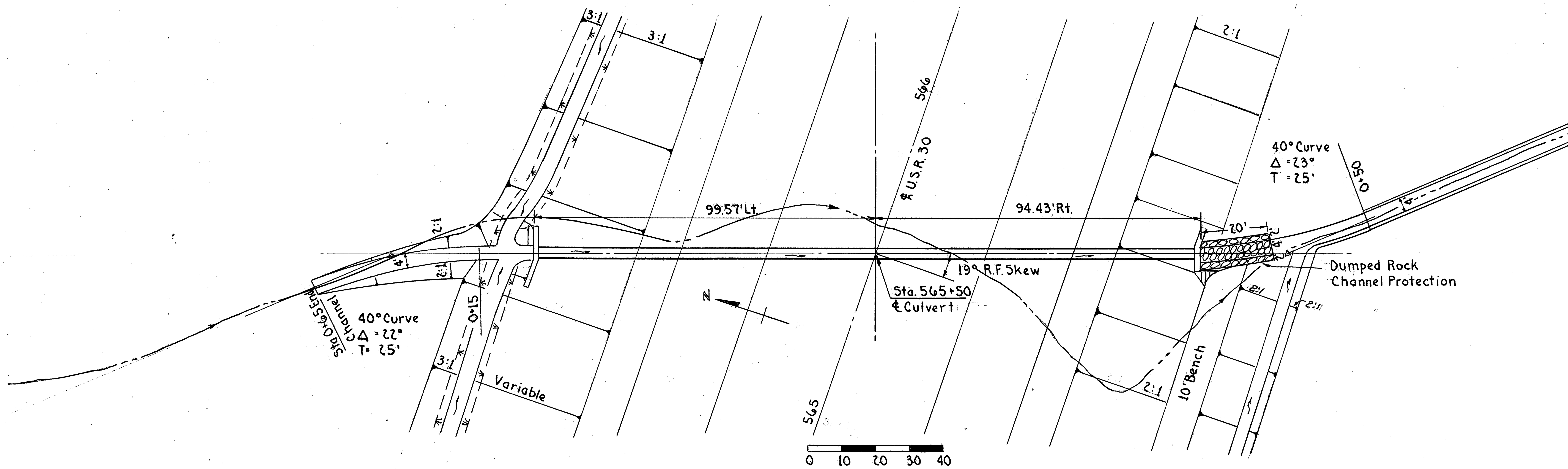
A=29.8 Acs.
Q_{25} = 54.4 cfs.



SECTION

C-8
Culvert Sta. 577+00

ASD-30-8.52
WAY-30-0.00



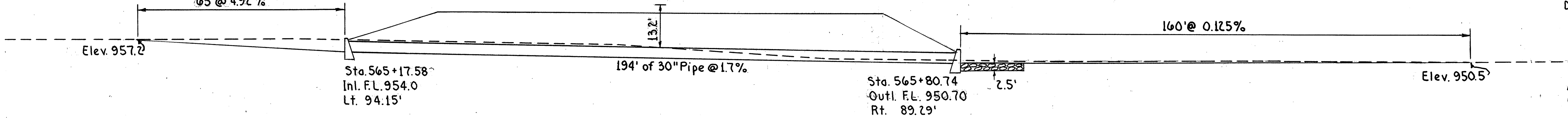
PLAN

CULVERT DATA

TYPE - Pipe Culvert, Std. Drwg. Nos. I-1, HW-A & B
SIZE - 30"×194' Pipe Culvert, Sec. M-6.6(b) or Sec. M-6.8(b)
WORK - Channel Excavation; Construct Pipe Culvert
REQUIRED with Headwalls as Per Plan

ESTIMATED QUANTITIES

E-3	Channel Excavation	34	Cu. Yds.
I-1	30" Pipe Culvert, Class A-1, Sec. M-6.6(b) or Sec. M-6.8(b)	194	Lin Ft.
I-2	Headwalls, HW-B, as Per Plan	14.45	Cu. Yds.
L-10	Sodding	7	Sq. Yds.
I-10	Dumped Rock Channel Protection	15.7	Cu. Yds.

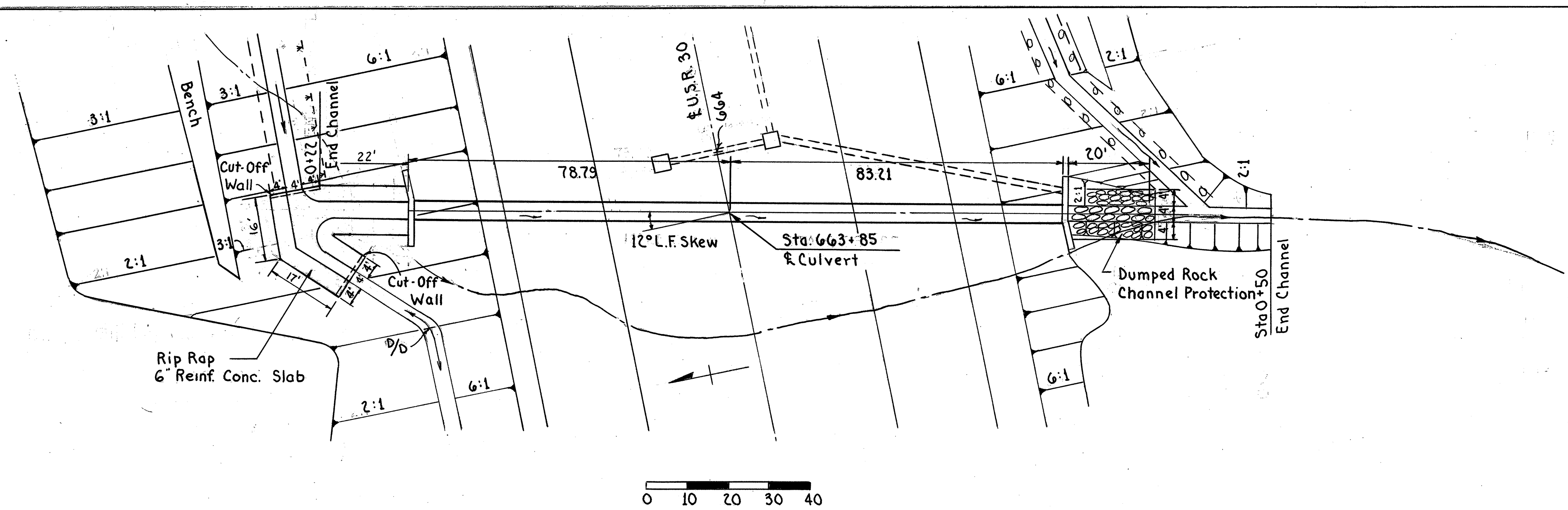


SECTION

For Channel Excavation Detail see Sheet No. 150

A = 15.0 Acs.
Q = 34.6 Cfs.

C-7
CULVERT - STA. 565 + 50



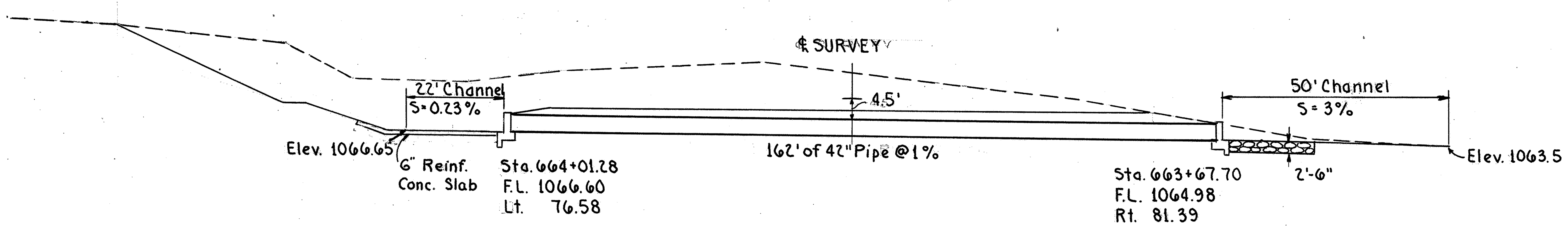
PLAN

CULVERT DATA

TYPE - Pipe Culvert Std. Drwg. Nos. I-1, HWA & B
SIZE - 42"×162 Pipe Culvert, Sec. M-6.6(b)
WORK - Channel Excavation; Channel Protection
REQUIRED Construct Pipe Culvert with Headwalls as Per Plan.

ESTIMATED QUANTITIES

E-3	Channel Excavation	41	Cu. Yds
I-1	42" Culvert, Class A-1, Sec. M-6.6(b)	162	Lin Ft.
I-2	Headwalls H.W-B, as per plan	21.64	Cu. Yds.
L-10	Sodding	6	Sq. Yds.
I-10	Dumped Rock Channel Protection	24.1	Cu. Yds.
I-10	Rip Rap, 6" Reinf. Conc. Slab	79.0	Sq. Yds.



SECTION

For Channel Excavation Detail see Sheet No. 150

A = 19.6 Acs.
Q_{25} = 52 Cfs.

C-10
CULVERT STA. 663 + 85

CULVERTS, STA. 565 + 50, STA. 663 + 85

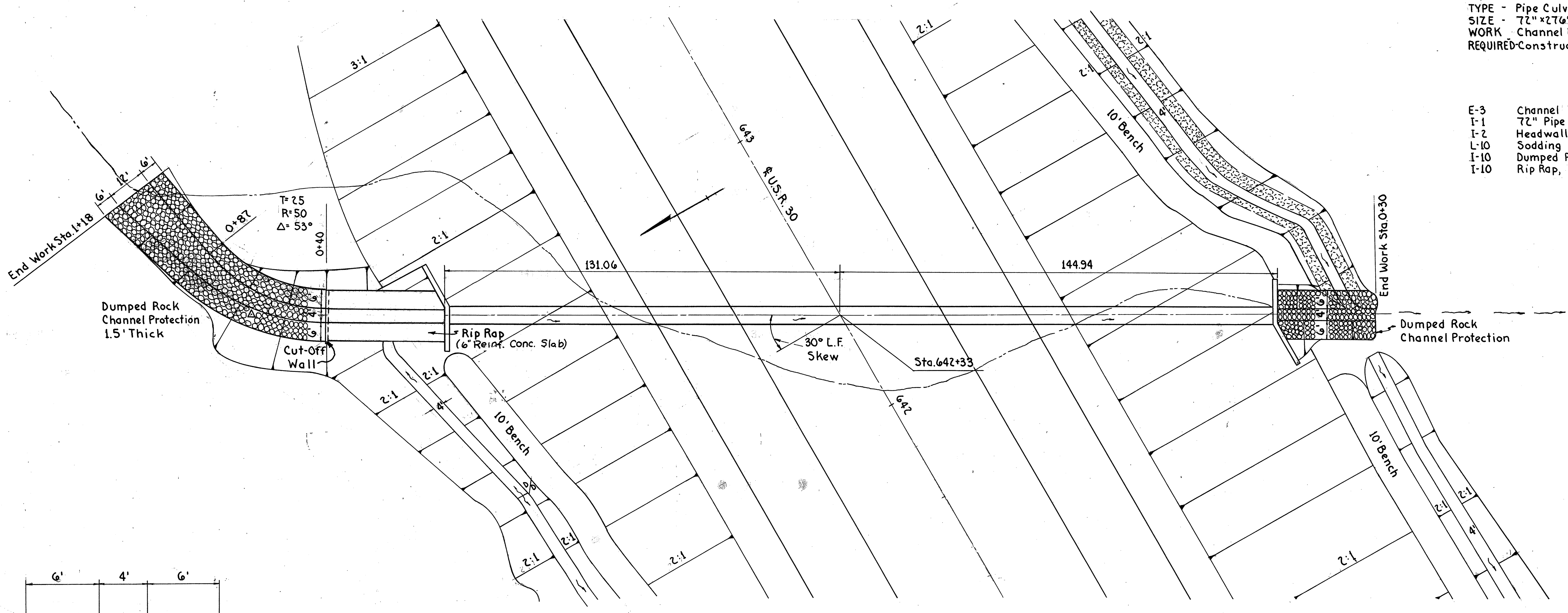
ASD-30-8.52
WAY-30-0.00

CULVERT DATA

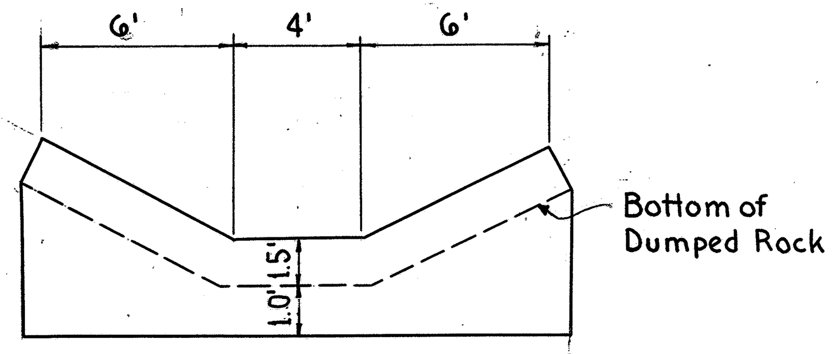
TYPE - Pipe Culvert, Std. Drwg. Nos. I-1, HW-A & B
SIZE - 72"×276' Pipe Culvert, Sec M-6.4(g) 10:8 Gage
WORK - Channel Excavation; Channel Protection;
REQUIRED - Construct Pipe Culvert with Headwalls as Per Plan

ESTIMATED QUANTITES

E-3	Channel Excavation	364	Cu. Yds.
I-1	72" Pipe Culvert Class A-1, Sec. M-6.4(g)	276	Lin. Ft.
I-2	Headwalls, Std. HW-B, as Per Plan	50.32	Cu. Yds.
L-10	Sodding	12	Sq. Yds.
I-10	Dumped Rock Channel Protection	219	Cu. Yds.
I-10	Rip Rap, 6" Reinf. Conc. Slab	78	Sq. Yds.



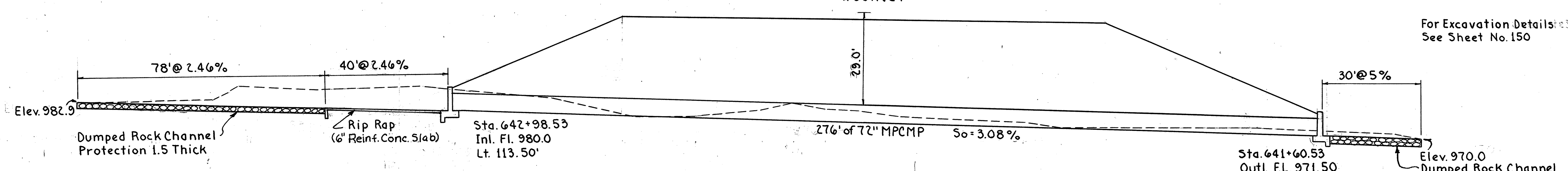
PLAN



CUT-OFF WALL

A=145.3 Acs.
Q_{25}=200 Cfs.

For Excavation Details See Sheet No. 150



SECTION

C-9
Culvert, Sta. 642+33

ASD-30-8.52
WAY-30-0.00

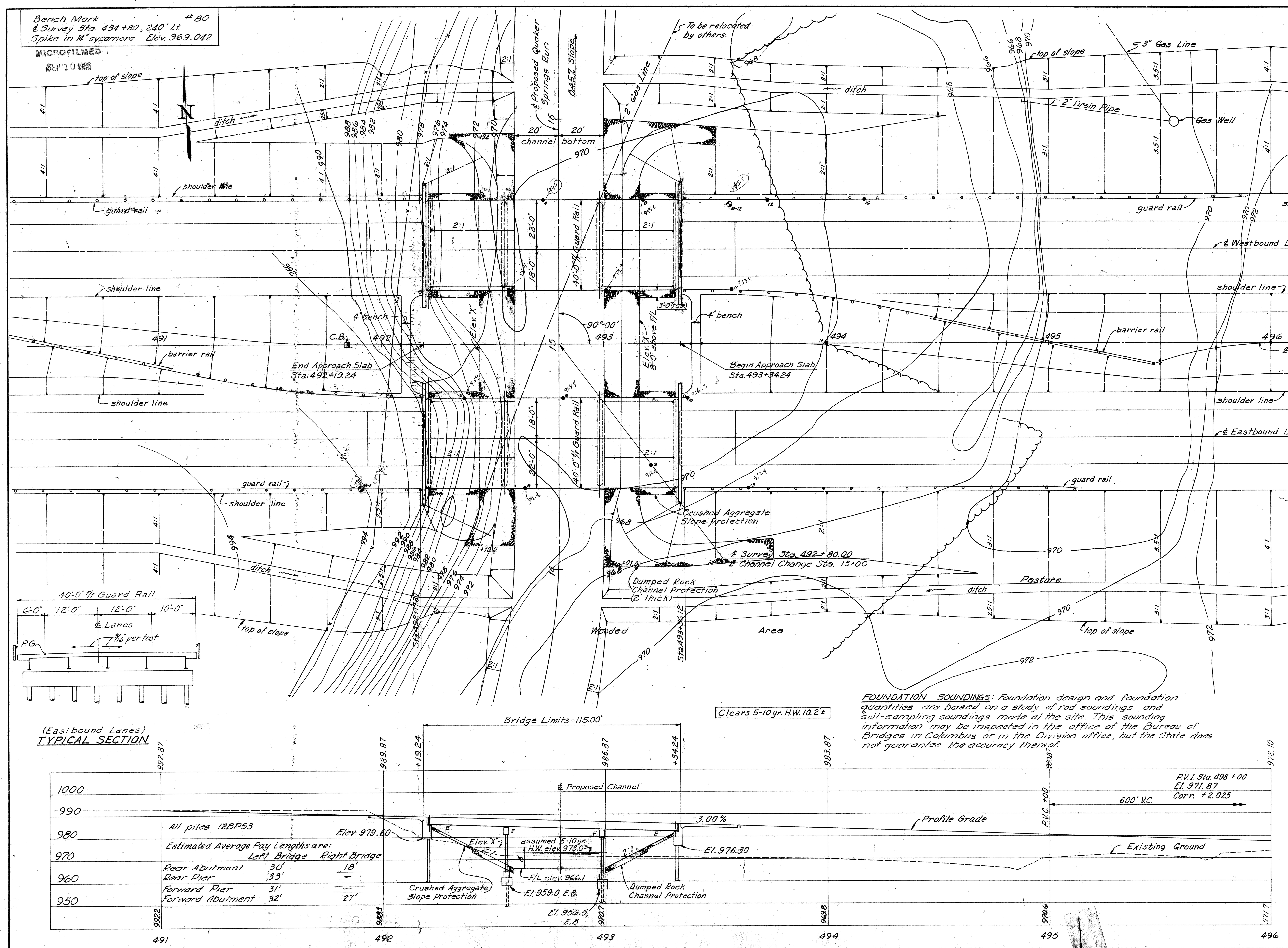
CHANNEL EXCAVATION FOR CULVERTS

FED RD DIVISION	STATE	PROJECT
2	OHIO	F-1072 (8)

151 / 198

ASD-30-8.52
WAY-30-0.00

Bench Mark #80
℄ Survey Sta. 494+80, 240' Lt
Spike in 14" sycamore Elev. 969.042



Estimated Average Pay Lengths are:

	Left Bridge	Right Bridge
Rear Abutment	30'	18'
Rear Pier	33'	
Forward Pier	31'	
Forward Abutment	32'	27'

FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but the State does not guarantee the accuracy thereof.

SOIL BORING LEGEND

- Core Boring
- Rod Sounding

NEAREST EXISTING BRIDGE

Thru steel truss on masonry abutments T.R.151 0.16 miles downstream, 76' horz. x 8' vert. clear opening, 0° skew

PROPOSED STRUCTURE

TYPE: Continuous steel beams with reinforced concrete deck and capped-pile substructure.
SPANS: 34'; 42.5'; 34'
ROADWAY: 40'-0" F/F guard rail
LOAD FREQUENCY: CF=2000(57)
WEARING SURFACE: 1" Monolithic concrete
APPROACH SLAB: AS-1-54 (25'-0" Long)
SKEW: 0°
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC: 6800 (1980)

Drainage Area = 9.6 sq. mi.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

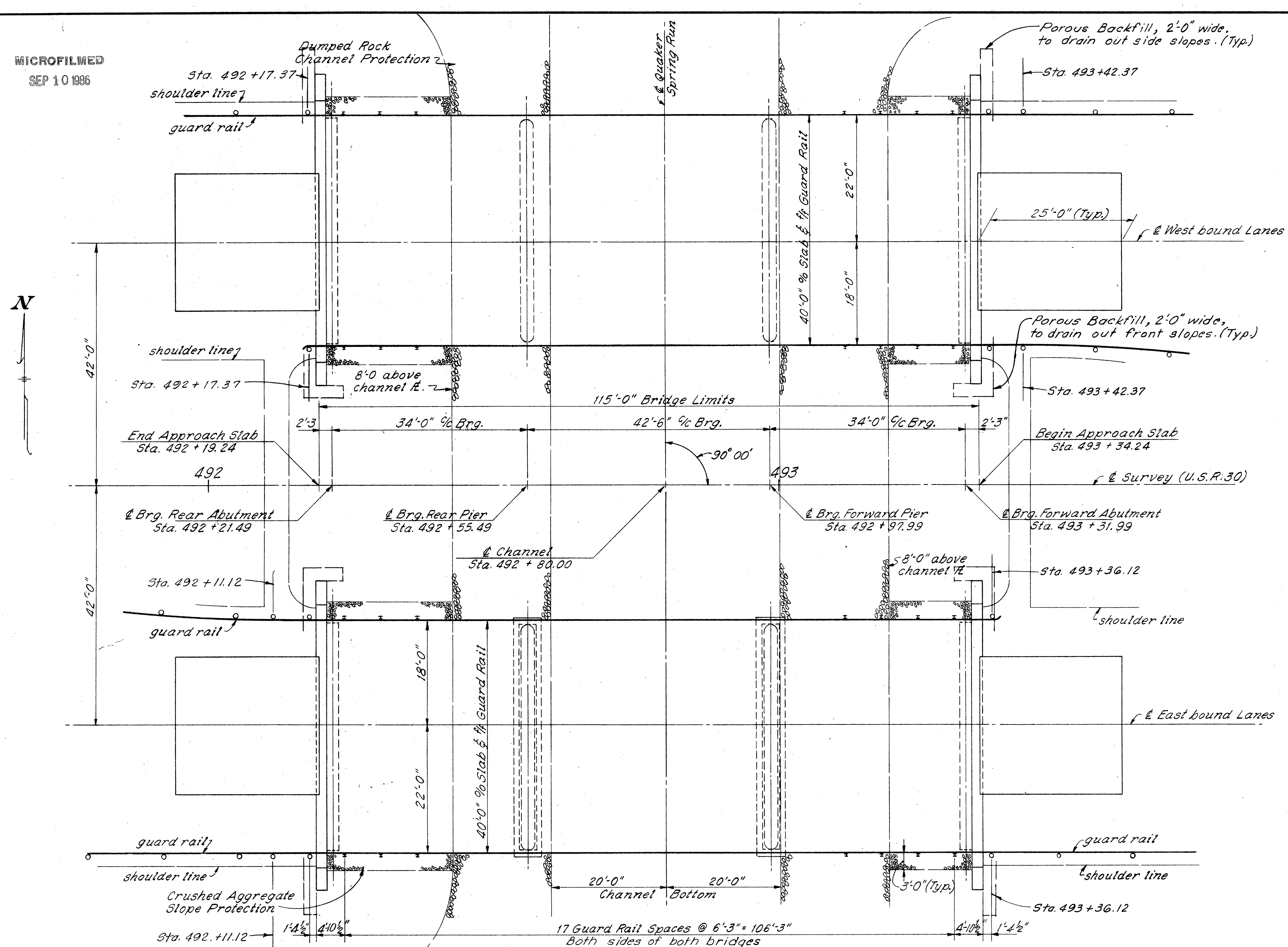
SITE PLAN

BRIDGE ASD-30-0933 L&R
OVER QUAKER SPRINGS RUN

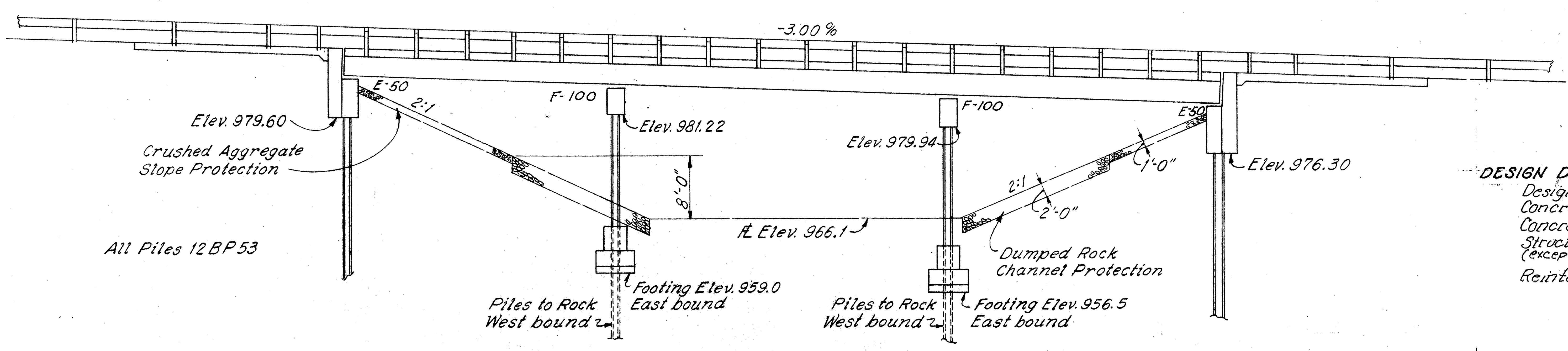
ASHLAND COUNTY U.S.R. 30
STA. 492 + 19.24 TO STA. 493 + 34.24

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.G.	J.C.Z.	Joe	R.A.K.			

ASD-30-8.52
WAY-30-0.00



GENERAL PLAN



GENERAL ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings AS-1-54 (revised 7-5-62) and CSB-1-55, sheets 1, 2 and 7 of 8 (revised 2-2-59), FSB-1-62 revised 1-15-63 and to Supplemental Specifications S-101 & S-307 dated 7-12-62 and 8-23-60 respectively.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments.

PILES shall be driven to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating:

LOCATION		Required Formula Capacity in Tons per Pile			Design Load Tons per Pile
		7,000 ft-lb	11,000 ft-lb	15,000 ft-lb	
Left Bridge	Rear Abutment Piles	60	55	50	47
	Rear Pier Piles	50	45	40	39
	Forward Pier Piles	50	45	40	37
	Forward Abutment Piles	60	55	50	48
Right Bridge	Rear Abutment Piles	50	45	40	39
	Forward Abutment Piles	55	50	45	45

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between the transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the contractor, be made in the shop. Class "B" welds are shown as

B

BRIDGE SEATS: Special care must be taken in placing bars in the bridge seats so that they will not interfere with the drilling of holes for anchor bolts.

MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.

CONTINUOUS BEAM SHOP ASSEMBLY: Reference paragraph 4, Sec. S-7.12 of the Construction and Material Specifications, if rolled beams are field spliced only at supports, for the purpose of checking the fit-up of weld joint preparation, only two adjacent beams need be shop assembled at a time in their correct, unloaded positions. All beams shall be assembled and match marked.

DESIGN DATA

Design Loading - CF 2000 (57).
Concrete Class C - basic unit stress 1,333 p.s.i.
Concrete Class E - basic unit stress 1,133 p.s.i.
Structural Steel (except piling) - ASTM A36 - basic unit stress 20,000 p.s.i. (ASTM A7 and A373 steel not permitted)
Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.

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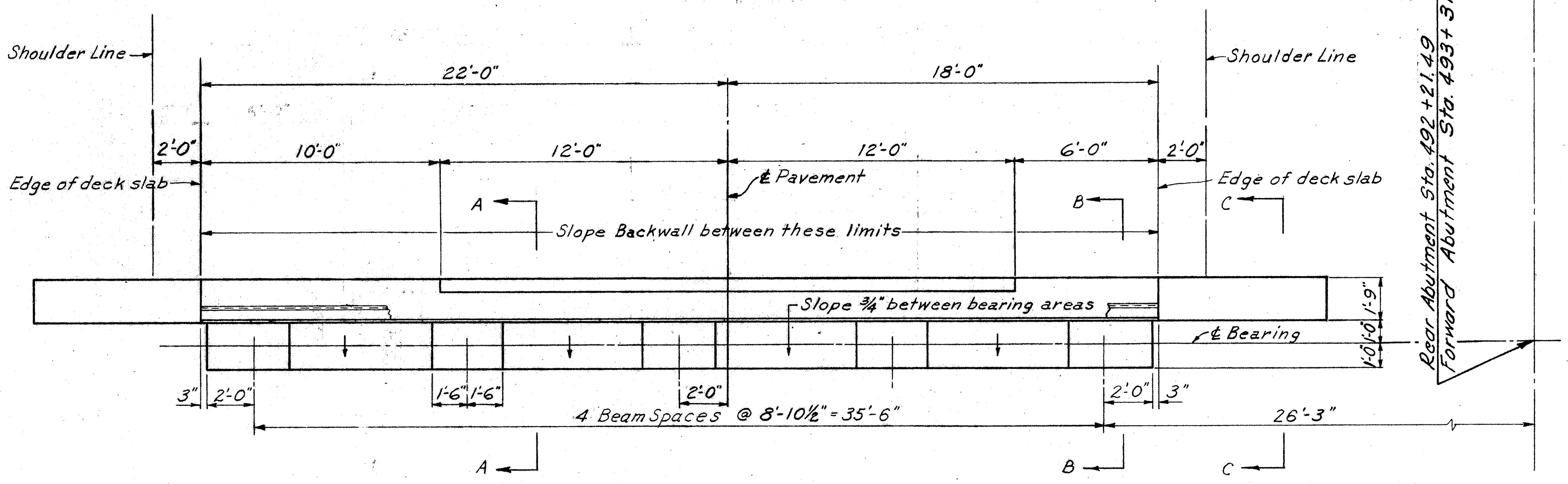
MANSFIELD, OHIO.

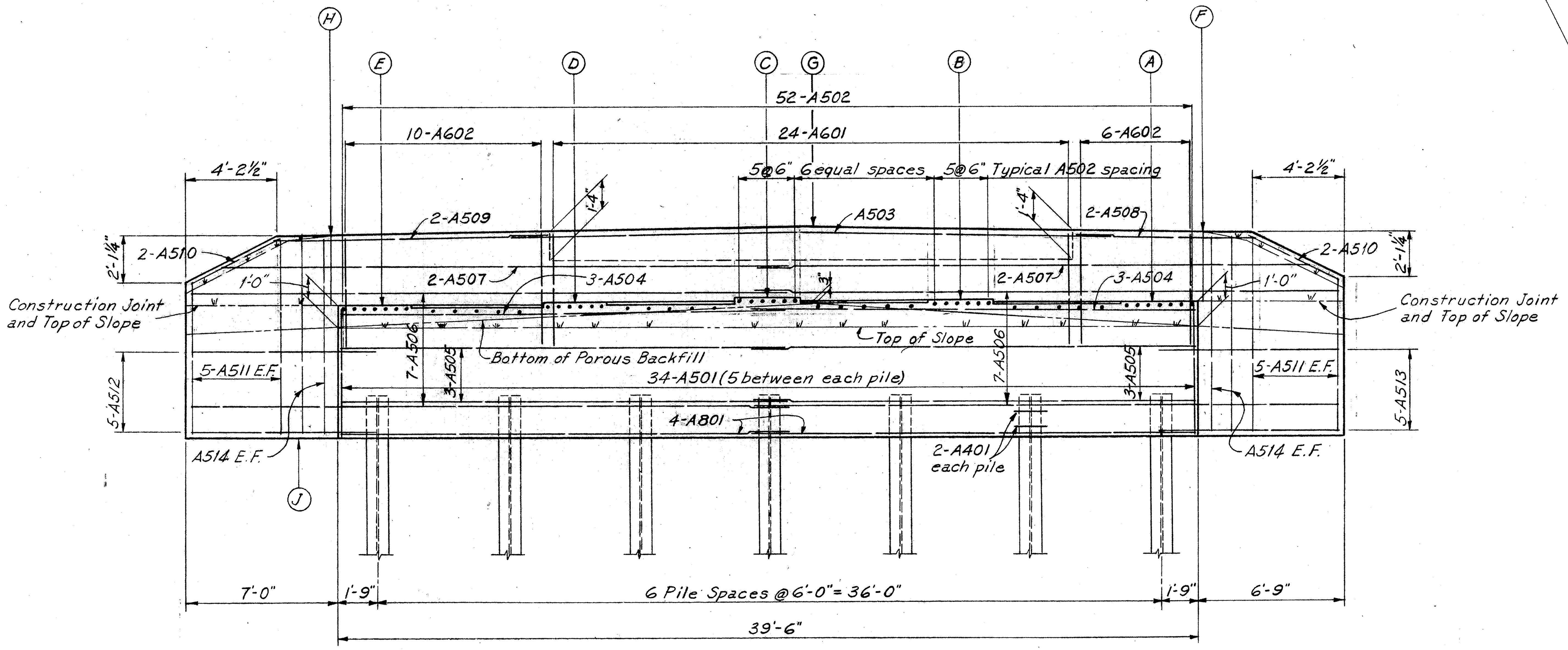
GENERAL PLAN & ELEVATION AND GENERAL NOTES
BRIDGE ASD-30-0933 L & R
OVER QUAKER SPRINGS RUN
ASHLAND COUNTY U.S.R. 30
STA. 492 + 19.24 TO STA. 493 + 34.24

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	UL	RAK			



PLAN

The area of the abutment face immediately below the beam seats shall be finished with particular care to provide a plane surface at right angles with the grade of the structure insuring full bearing for the bumper angles.

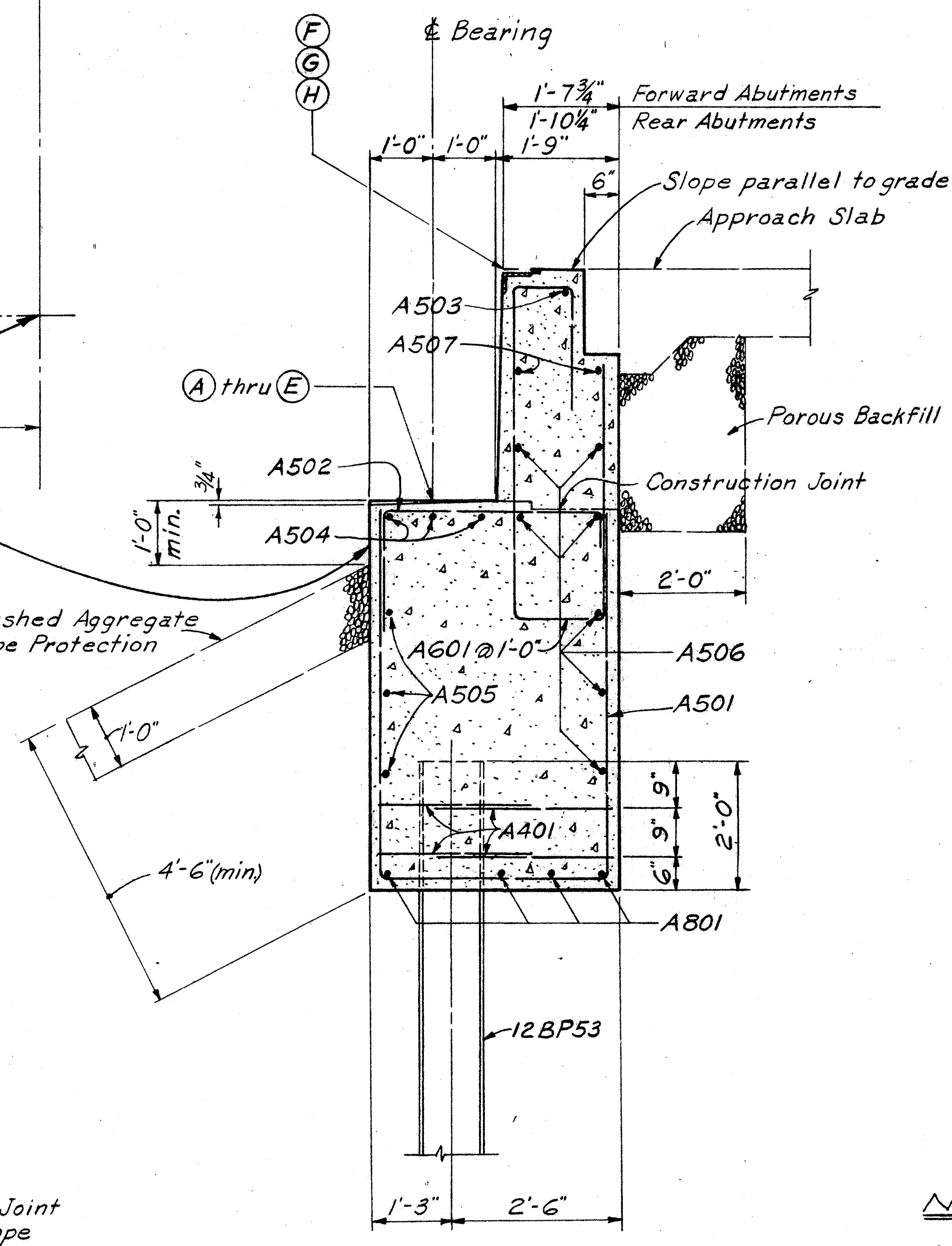


ELEVATION

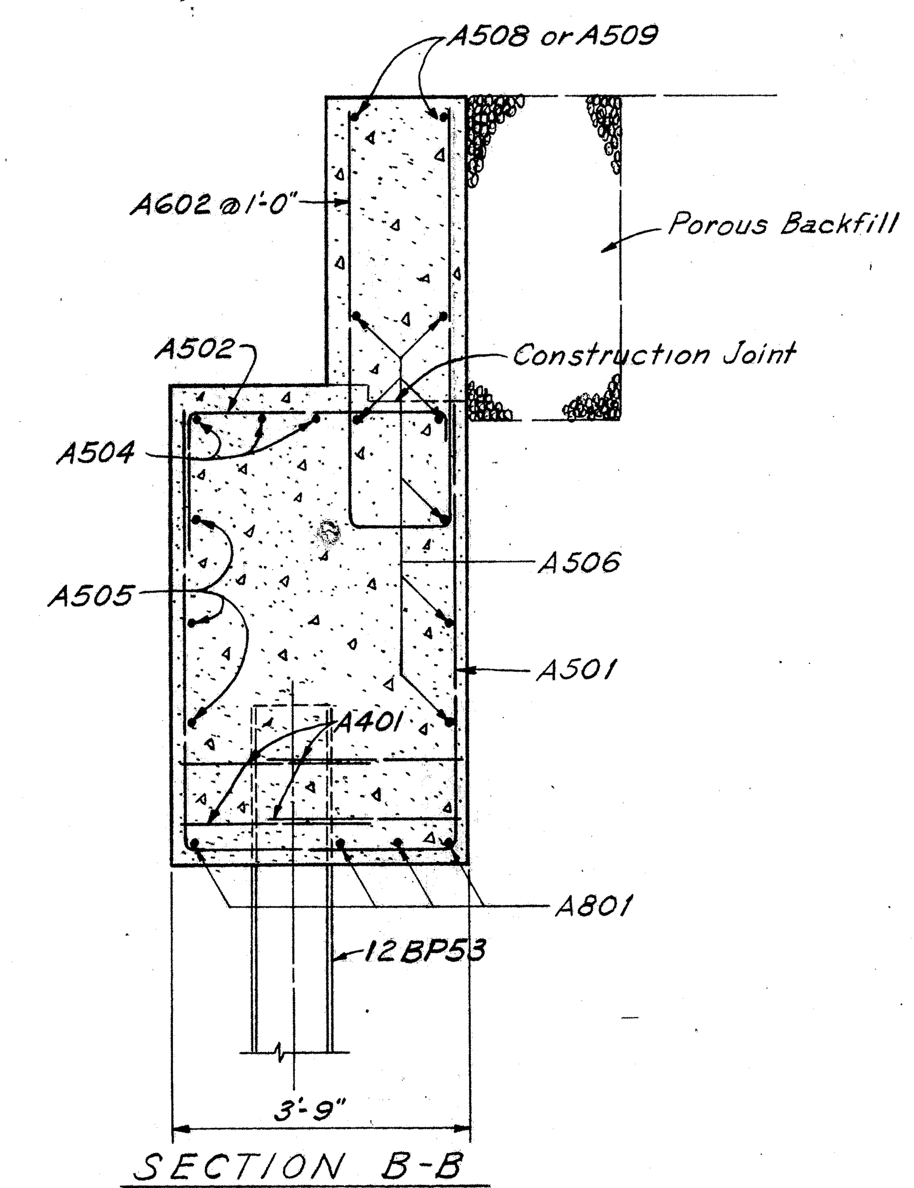
Left Bridge Forward Abutment looking ahead
Right Bridge Rear Abutment looking back } AS SHOWN.

Left Bridge Rear Abutment looking back
Right Bridge Forward Abutment looking ahead } OPP. HAND.

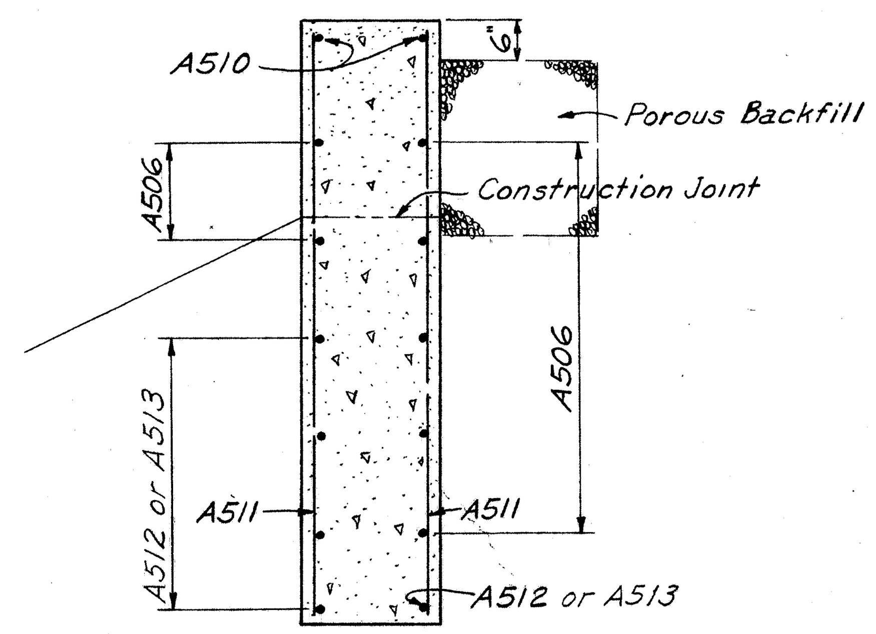
TABLE OF ELEVATIONS									
LOCATION	A	B	C	D	E	F	G	H	J
Rear Abutments	985.54	985.68	985.76	985.62	985.48	989.158	989.440	989.096	979.60
Forward Abutments	982.23	982.36	982.44	982.30	982.16	985.784	986.065	985.721	976.30



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the abutment, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

PROCEDURE: The embankment shall be placed and compacted up to finished spill-thru slope and to the level of the subgrade, after which excavation shall be made for the abutments.

CONCRETE: All abutment concrete shall be Class "E".

NOTATION: F.F. - Front Face
R.F. - Rear Face
E.F. - Each Face

GENERAL NOTES: See Sheet 152.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

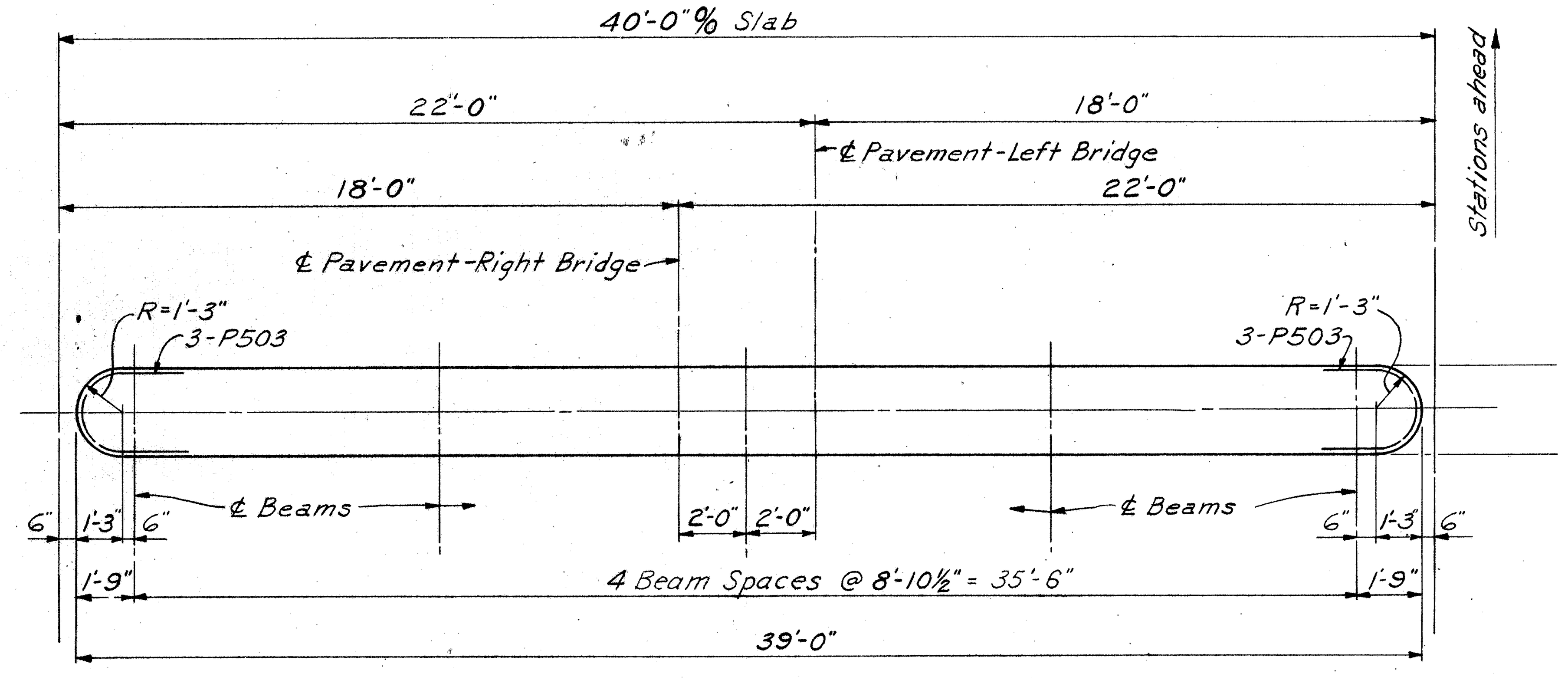
ABUTMENTS

BRIDGE ASD-30-0933 L & R
OVER QUAKER SPRINGS RUN

ASHLAND COUNTY U.S.R. 30
STA. 492 + 19.24 TO STA. 493 + 34.24

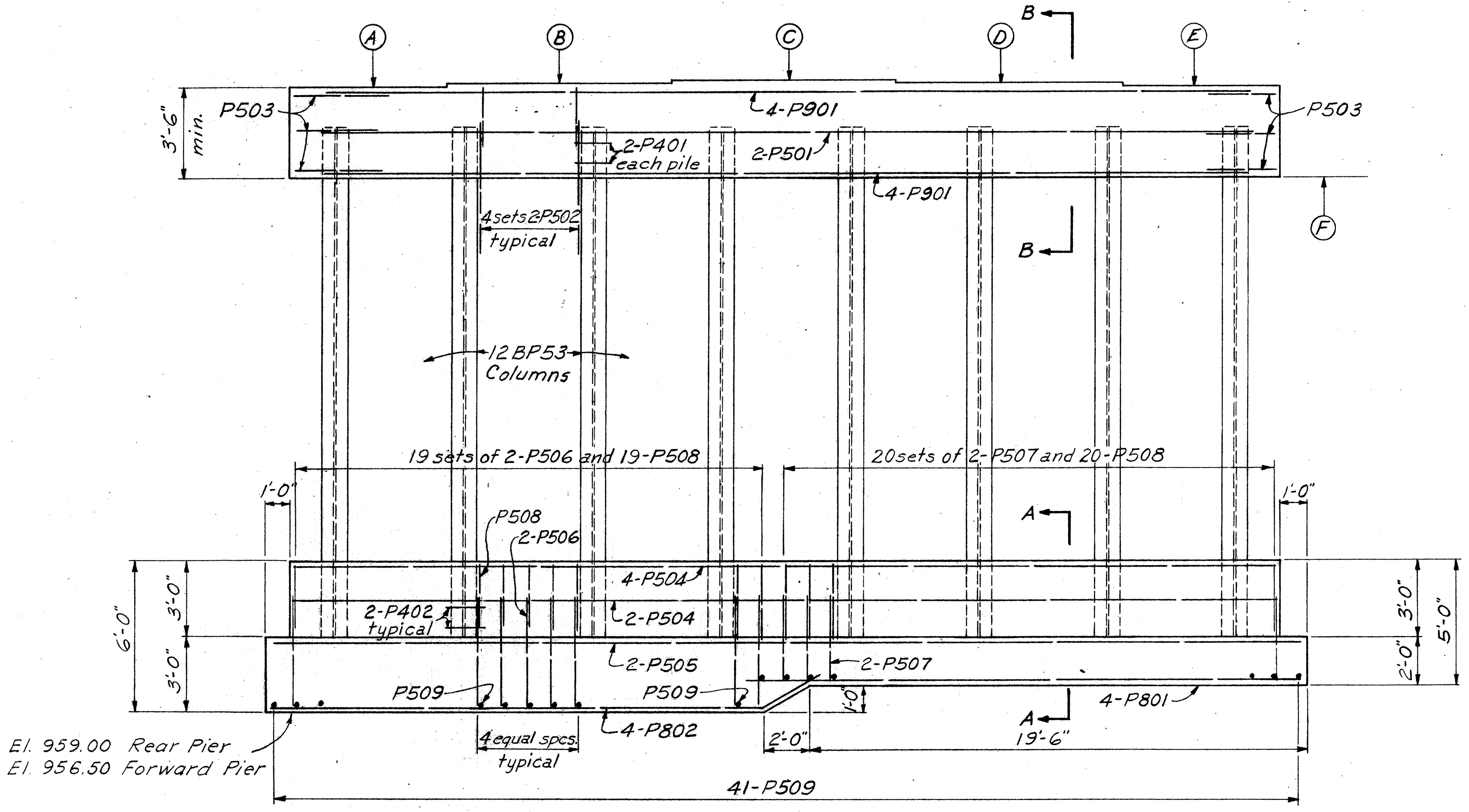
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	UL	RAK			

ASD - 30 - 8.52
WAY - 30 - 0.00

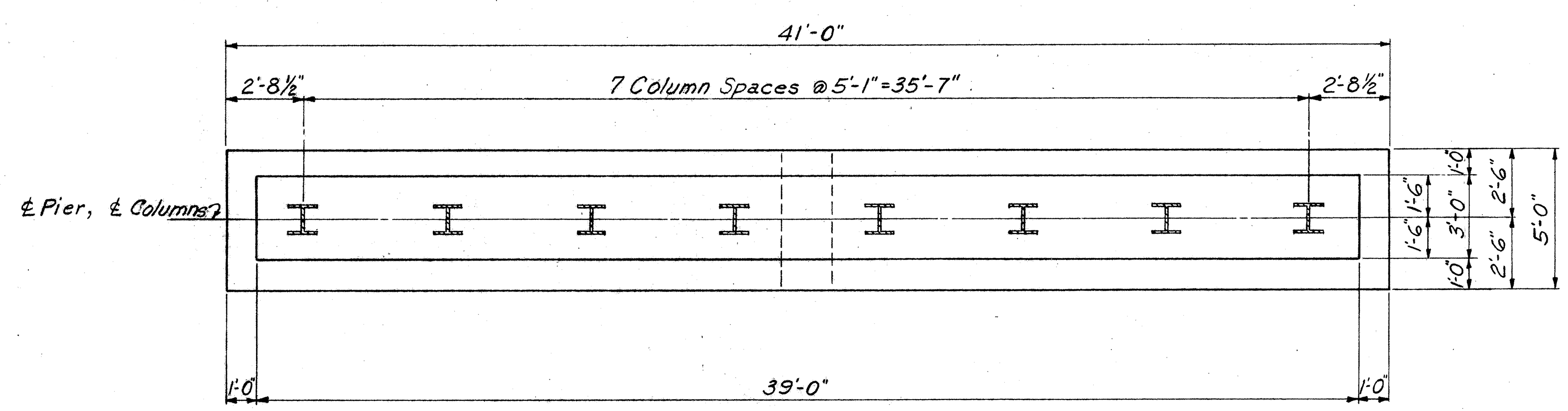


PLAN

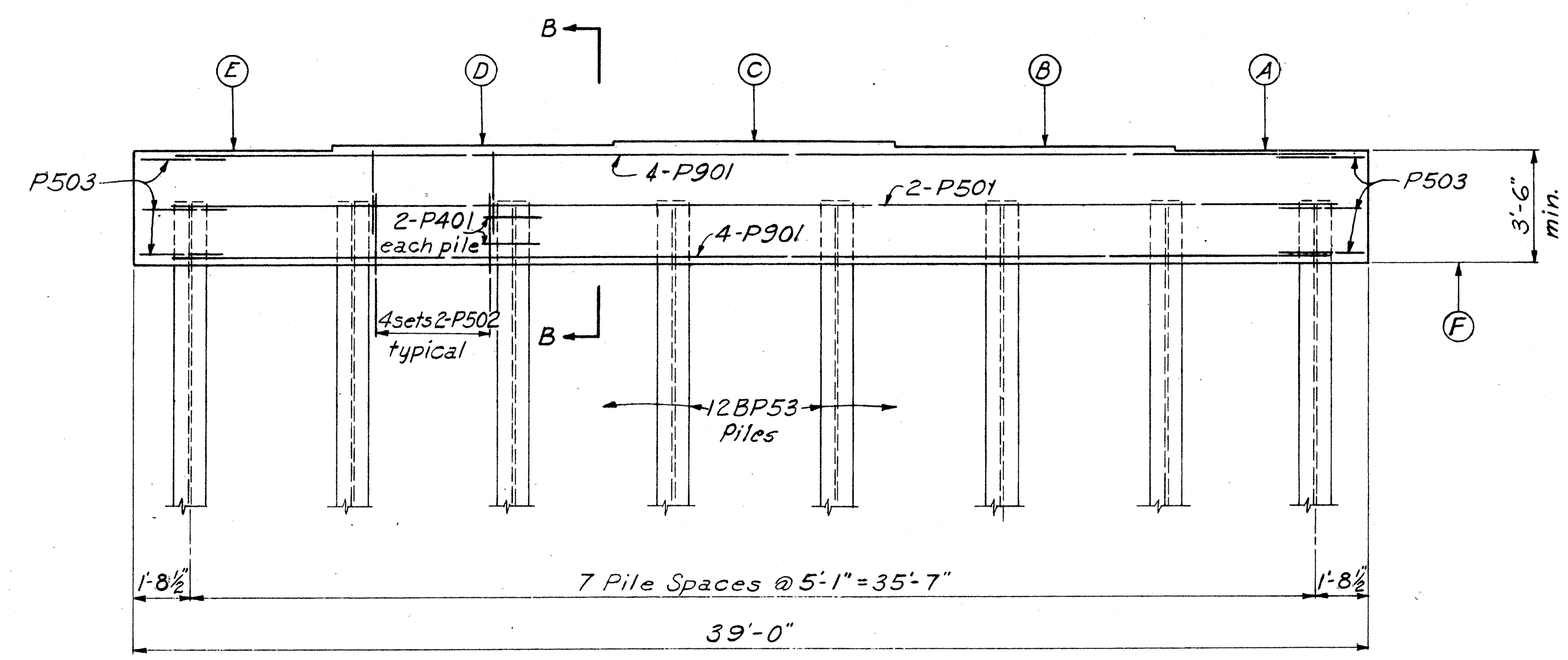
TABLE OF ELEVATIONS						
LOCATION	A	B	C	D	E	F
Rear Piers	984.43	984.57	984.65	984.51	984.37	980.87
Forward Piers	983.16	983.30	983.37	983.23	983.10	979.59



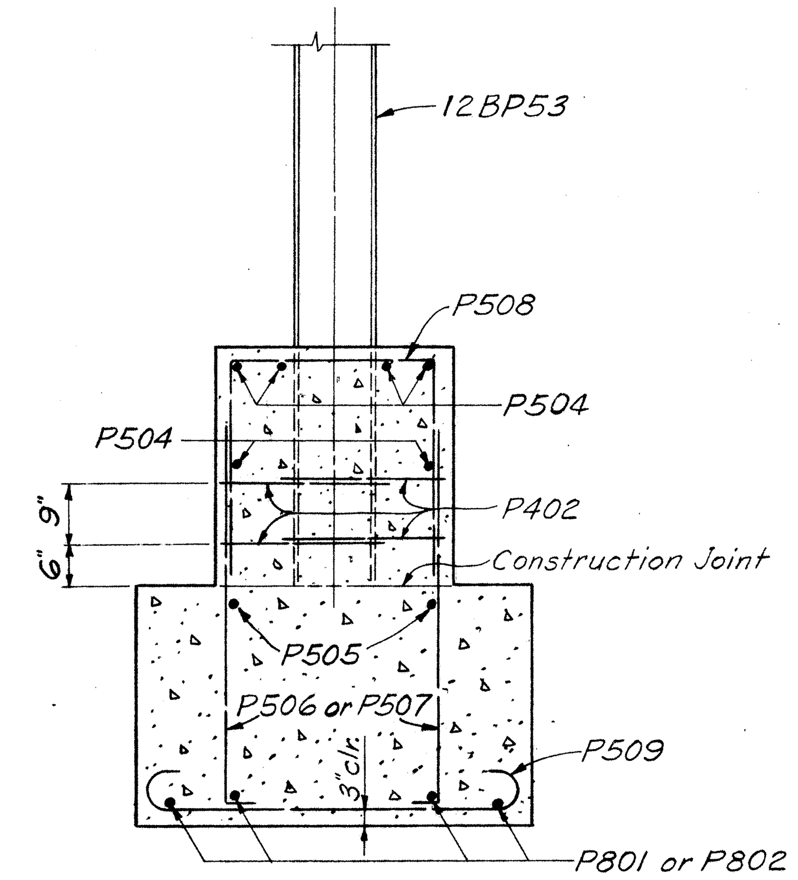
ELEVATION
(Right structure)



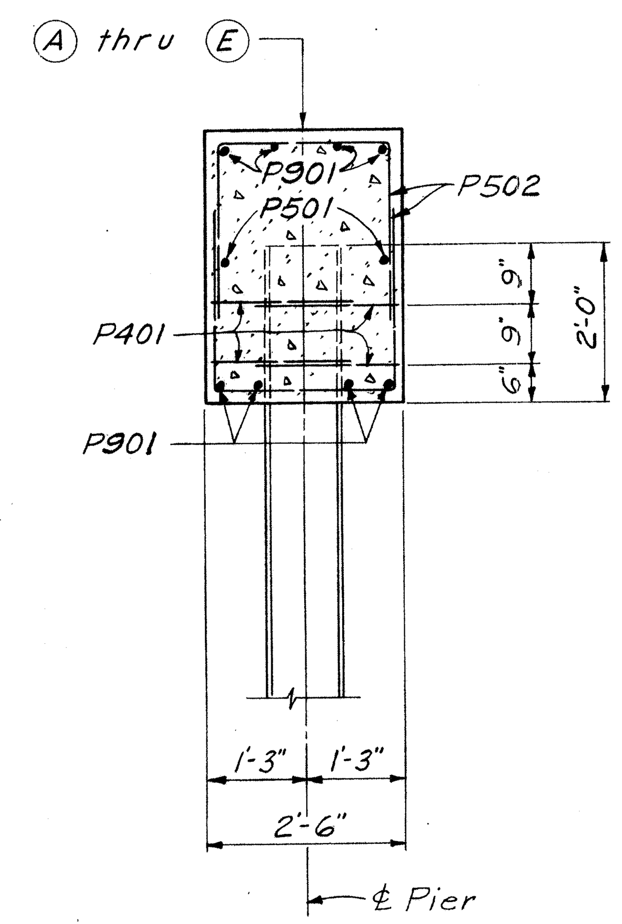
FOOTING PLAN
(Right structure)



ELEVATION
(Left structure)



SECTION A-A



SECTION B-B

NOTES:

CONCRETE for Pier Caps shall be Class "C" and for Eastbound Pier Footings shall be Class "E".

GENERAL NOTES: See Sheet 152.

RIGHT BRIDGE ONLY:
12 BP53 columns shall be included with Item S-7 "Structural Steel" for payment.

Footings shall extend a minimum of 3" into solid rock or to the elevation shown, whichever is lower.

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Consulting Engineers
MANSFIELD, OHIO.

PIERS

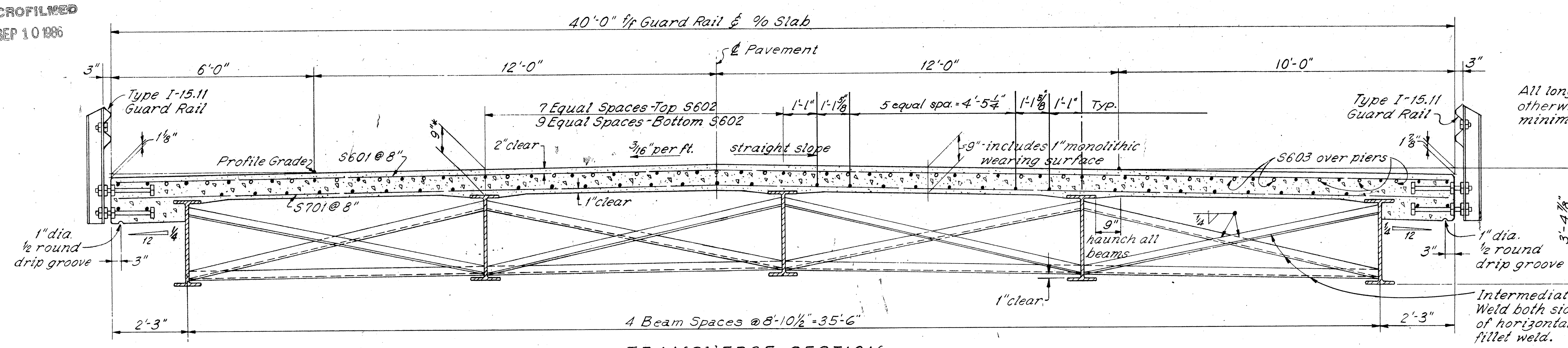
BRIDGE ASD-30-0933 L & R
OVER QUAKER SPRINGS RUN

ASHLAND COUNTY U.S.R. 30
STA. 492 + 19.24 TO STA. 493 + 34.24

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	JCZ	RAK			

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072 (8)		155/198

ASD-30-8.52
WAY-30-0.00



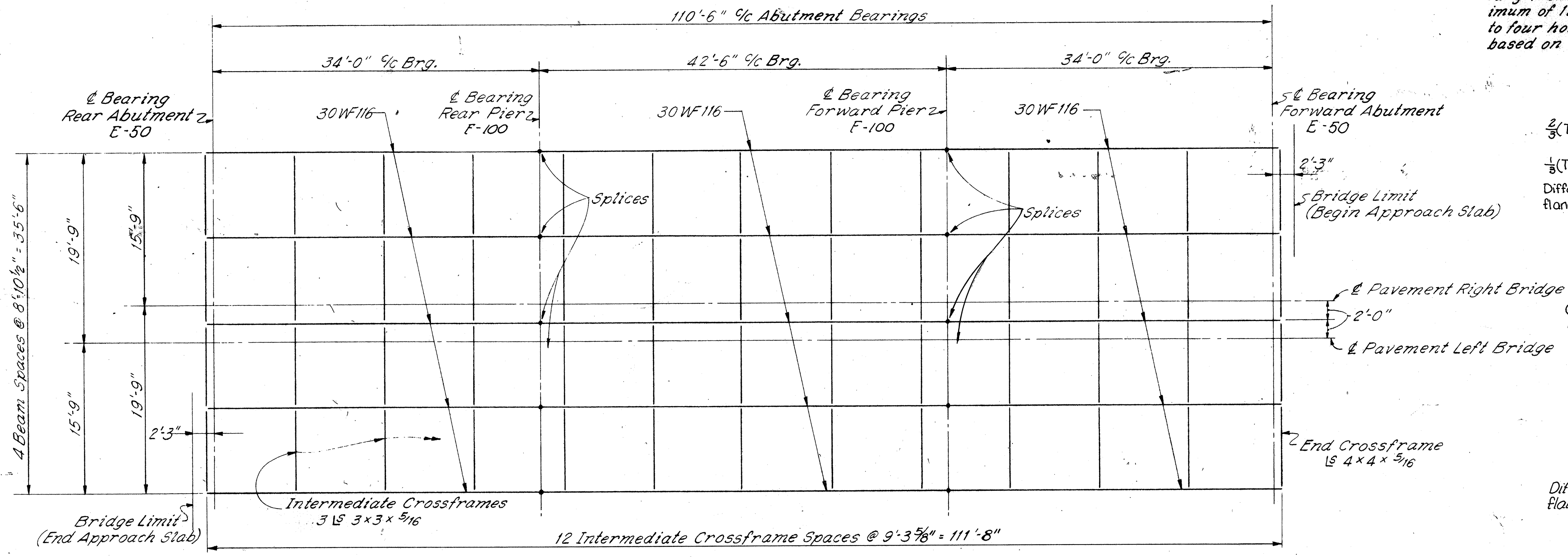
TRANSVERSE SECTION

Intermediate Crossframe angles 3×3×5/16. Weld both sides of vertical leg and top side of horizontal leg to beam with ¼" continuous fillet weld.

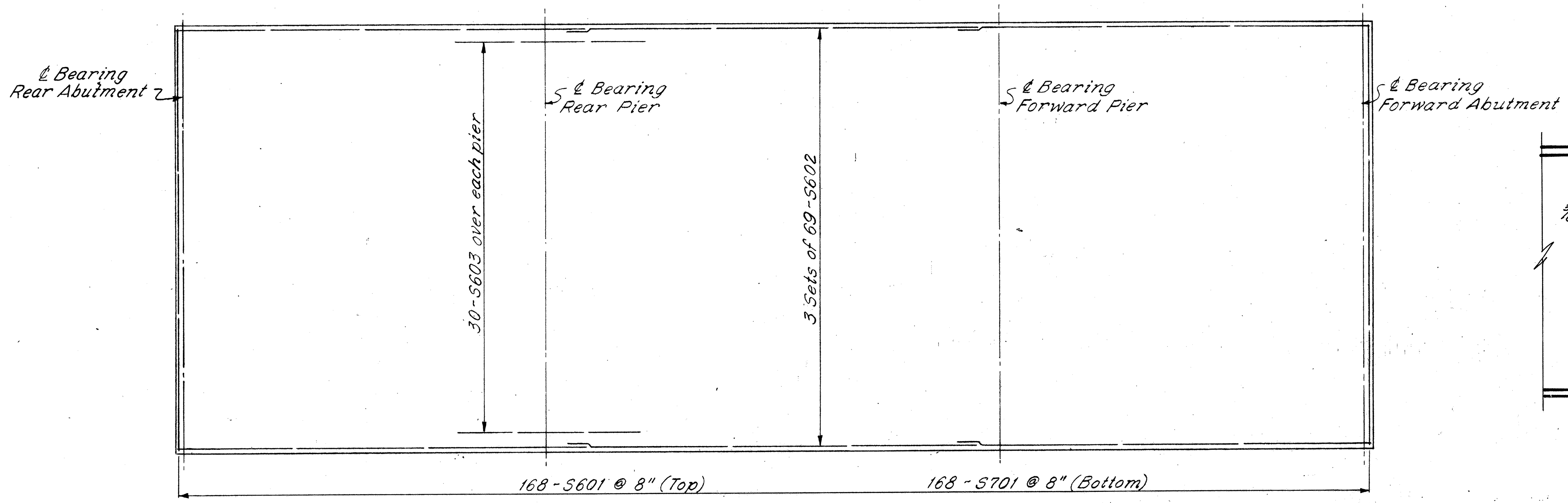
All longitudinal bars S602 except as otherwise shown. Lap 1'-11" minimum.

* This is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

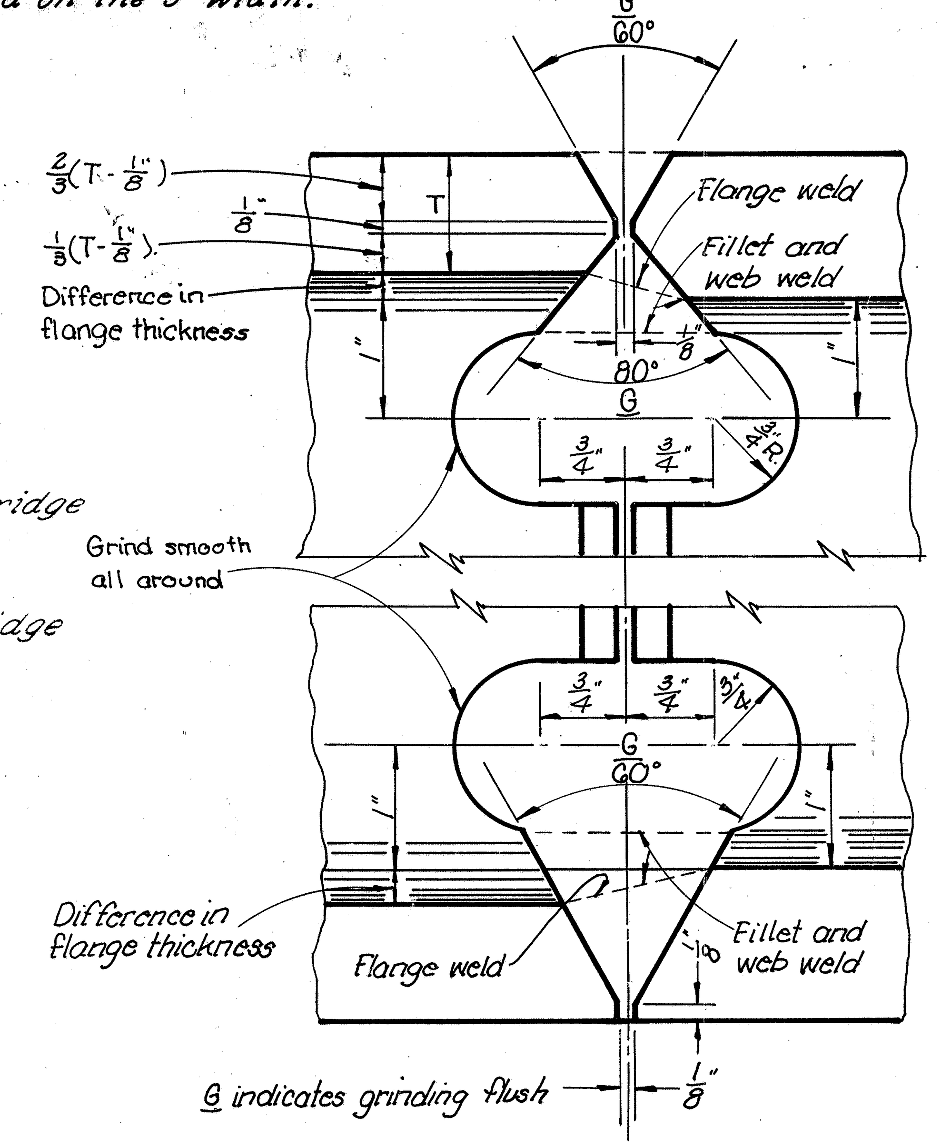
DECK BEAM HAUNCH: The haunch in the deck slab adjacent to the top of the steel beams, which is shown as 9" wide, may vary from this dimension with a minimum of 6" and a maximum of 12". Maximum slope of haunch shall be one vertical to four horizontal. Payment for deck slab concrete shall be based on the 9" width.



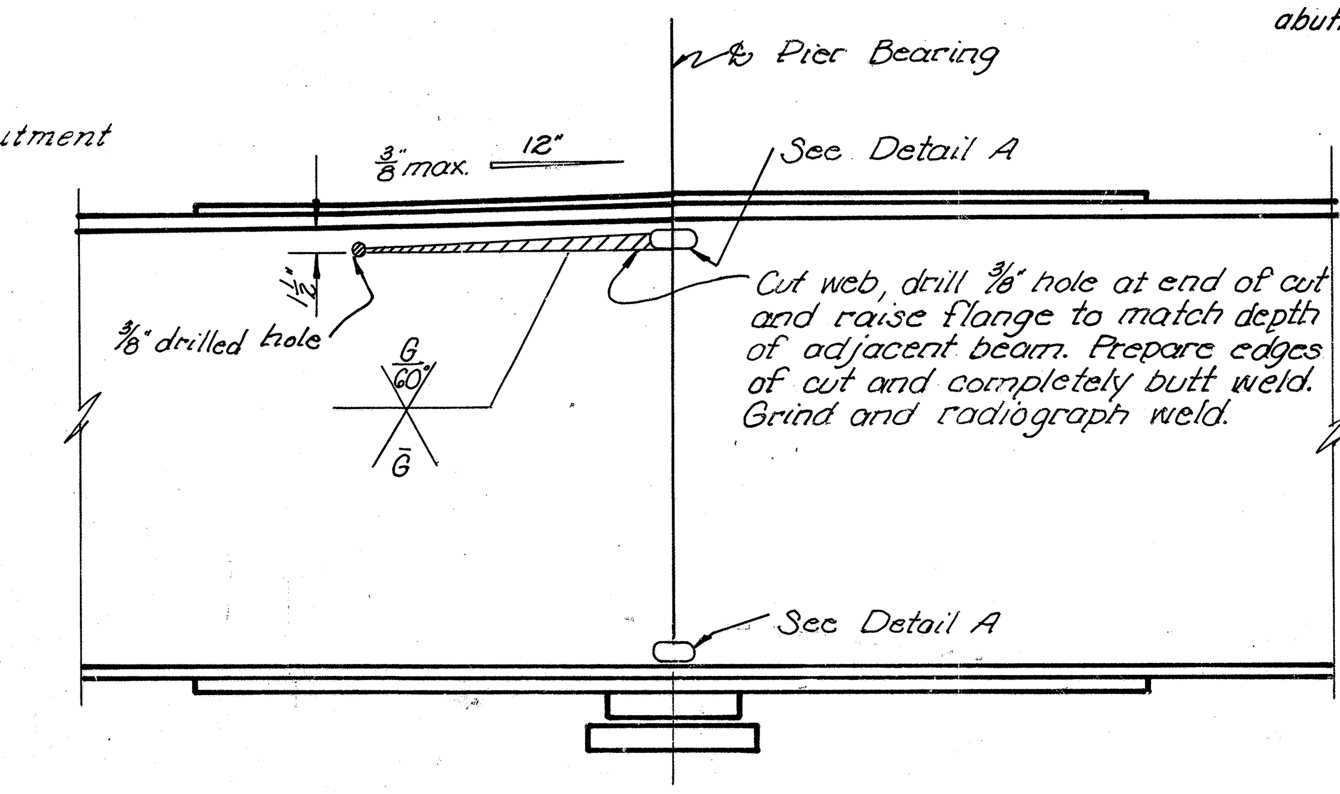
FRAMING PLAN



SLAB PLAN



DETAIL A



BEAM SPLICE DETAIL
(For splicing beams having depths differing by more than ⅛")

NOTES:

BEAM SPLICE DETAILS (without moment plates), END CROSSFRAMES, END DAM DETAILS AND JOINTS, RAILING DETAILS, AND BEARING PLATES: See Std. Dwg. CSB-1-55, sheets 1, 2 and 7 of 8.

CAMBER: No camber required.

RAILING POST SPACING: See sheet 152.

GENERAL NOTES: See sheet 152.

BEAM WEB WELDS: Butt welds in webs of beams may have convex reinforcement in accordance with Sec. S-7.22. Finishing flush by grinding is not required.

BUMPER ANGLES: 8×8×¾ bumper angles with 3-½ web plates shall be placed as shown on Std. Dwg. CSB-1-55 except that the angles shall be placed in full bearing against the abutment before welding.

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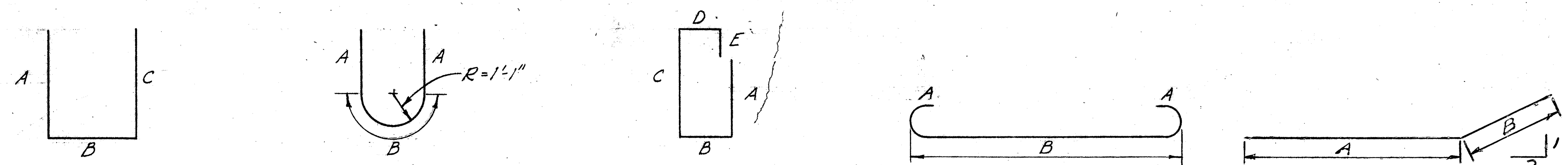
Consulting Engineers
MANSFIELD, OHIO.

SUPERSTRUCTURE
BRIDGE ASD-30-0933 L&R
OVER QUAKER SPRINGS RUN

ASHLAND COUNTY U.S.R. 30
STA. 492 + 19.24 TO STA. 493 + 34.24

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	LH	RAK			

ASD-30-8.52
WAY-30-0.00



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5

ABUTMENTS									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A401	112	6'-6" 6'-9"	1	2'-6"	1'-9"	2'-6"			486 505
A501	136	14'-7" 4"	1	5'-7"	3'-5"	5'-7"			2033 2069
A502	208	5'-9" 6"	1	1'-10"	3'-5"	6"			1193 1247
A503	4	27'-2"	Str.						113
A504	24	20'-5"	Str.						511
A505	24	23'-10"	1	20'-5"	3'-5"	0			597
A506	56	27'-5"	Str.						1601
A507	16	25'-10"	Str.						431
A508	8	8'-3"	Str.						69
A509	8	12'-7"	Str.						105
A510	16	4'-8"	Str.						78
A511	80	Varies	Str.	Varies from 9'-1" to 7'-1", 16 each by 6"					674
A512	20 10	8'-7"	Str.						179 90
A513	20 10	8'-4"	Str.						174 87
A514	32	9'-1"	Str.						303
		13'-4"							
A601	96	14'-0"	3	4'-3"	1'-4"	5'-7"	10"	2'-0"	1923 2019
A602	64	12'-6" 2"	1	5'-7"	1'-4"	5'-7"			1170 1202
A801	32	20'-10"	Str.						1780
								Total	13 481

PIERS									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P401	128	5'-7" 4"	1	1'-11"	1'-9"	1'-11"			456 477
P402	64	6'-1"	1	2'-2"	1'-9"	2'-2"			249 260
		5'-10"							
P501	8	36'-6"	Str.						305
P502	224	6'-9" 7'-0"	1	2'-5"	2'-2"	2'-5"			1577 1635
P503	24	6'-4" 6"	2	1'-7"	3'-8" 4"				163 159
P504	12	38'-8"	Str.						484
P505	4	40'-8"	Str.						170
P506	76	4'-11"	1	4'-5"	6"	0			390
P507	80	3'-11"	1	3'-5"	6"	0			327
P508	78	7'-9" 8'-0"	1	2'-8"	2'-8"	2'-8"			630 651
P509	82	5'-8"	4	7"	4'-6"				485
P901	32	36'-6"	Str.						3971
P801	8	21'-9"	Str.						465
P802	8	22'-0"	Str. 5	19'-3"	2'-9"				470
								Total	10,249

SUPERSTRUCTURE									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
S601	336	39'-8"	Str.						20019
S602	414	38'-6"	Str.						23940
S603	120	17'-0"	Str.						3064
S701	336	39'-8"	Str.						27242
								Total	74265

REPLACEMENT BARS		
MARK	NO.	LENGTH
RE400	1	5'-3"
RE500	1	5'-7"
RE600	3	5'-10"
RE700	2	6'-2"
RE800	1	6'-6"
RE900	1	6'-10"

ESTIMATED QUANTITIES - 2 BRIDGES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUTS	PIERS	GENERAL
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump
E-2	339	Cu. Yds.	Unclassified excavation		228	111	
E-2	30	Cu. Yds.	Rock excavation			30	
E-3	3102	Cu. Yds.	Channel excavation				3102
S-1	268	Cu. Yds.	Class "C" concrete, superstructure	268			
S-1	52	Cu. Yds.	Class "C" concrete, pier caps			52	
S-1	201	Cu. Yds.	Class "E" concrete, abutments		201		
S-1	64	Cu. Yds.	Class "E" concrete, pier footings			64	
S-101	268	Each	Water-reducing, set-retarding Admixture	268	13,420		
97,827 S-4	97,995	Lbs.	Reinforcing steel	74,265	13,481	10,249	10,142
S-7	186,080	Lbs.	Structural steel	167,848		18,232	
S-8	186,080	Lbs.	Field painting of structural steel	167,848		18,232	
S-14	460	Lin. Ft.	Railing (Type I-15.11 with galvanized bolts and posts)	460			
S-16	Lump	Sum	First Test Pile				Lump
S-18	1,262	Lin. Ft.	Steel Piles 12 BP 53		750	512	
S-29	67	Cu. Yds.	Porous backfill		67		
I-10	716	Sq. Yds.	Crushed aggregate slope protection				716
I-10	648	Cu. Yds.	Dumped rock channel protection				648

NOTES:

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

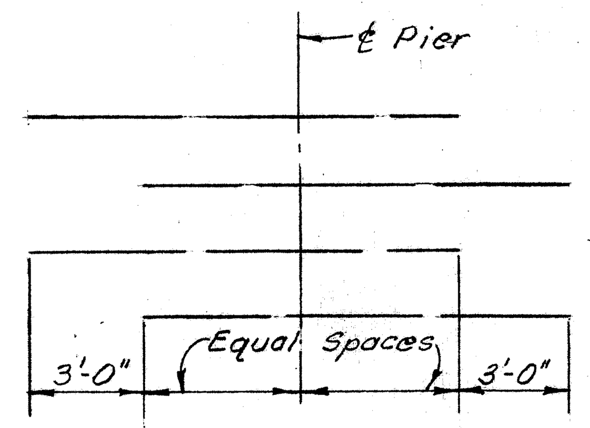


DIAGRAM SHOWING STAGGER OF S603 BARS OVER PIERS

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

REINFORCING STEEL AND ESTIMATED QUANTITIES

BRIDGE ASD-30-0933 L & R
OVER QUAKER SPRINGS RUN
ASHLAND COUNTY U.S.R. 30
STA. 492 + 19.24 TO STA. 493 + 34.24

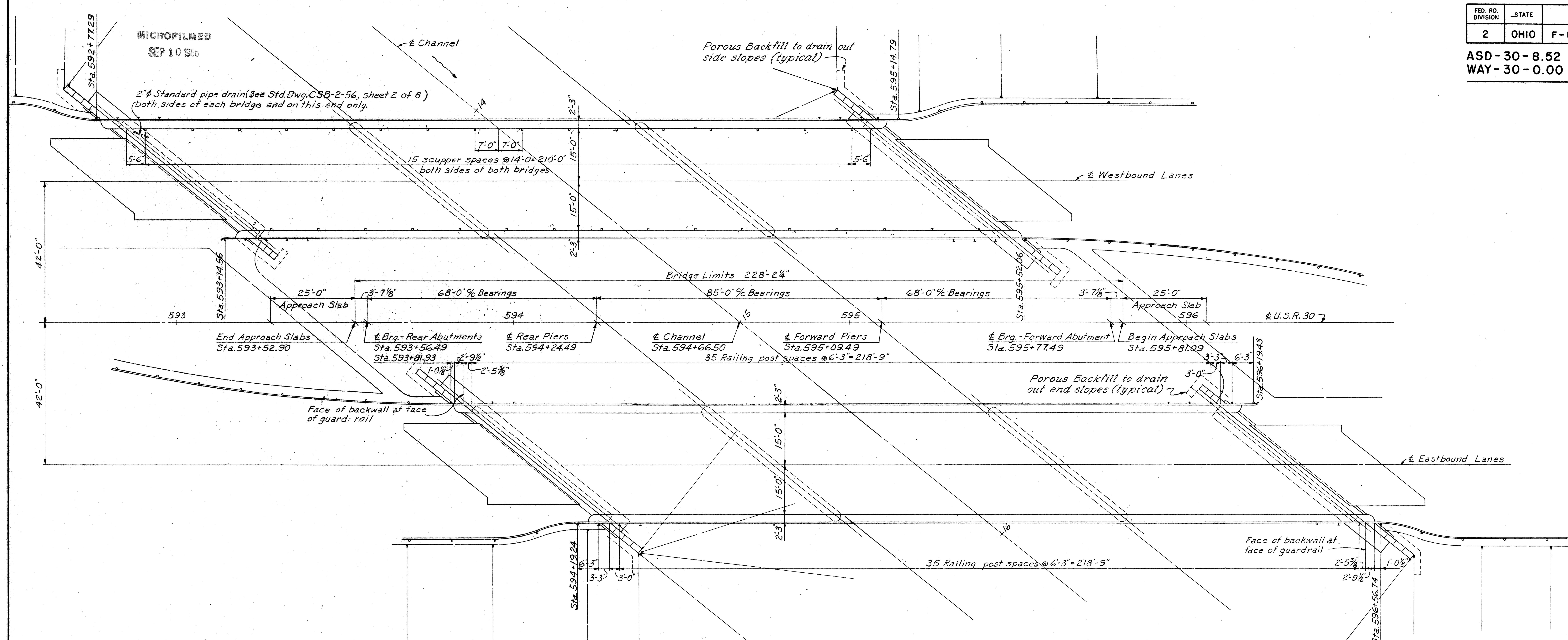
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	ED	R.A.K.			6-5-64


MICROFILMED
SEP 10 '86
FED. RD. DIVISION | STATE | PROJECT
2 | OHIO | F-1072 (8)
157
198
ASD-30-8.52
WAY-30-0.00
Bench Mark #89
℄ Survey Sta. 590+06, 180' Lt. R.R. Spike in 12" Black Gum. Elev. 965.052
CURVE DATA:
P.I. = Sta. 601 + 35.48
Δ = 14°-32'-40" Right
D = 1°-28'
T = 498.51'
L = 991.67'
R = 3906.53'
E = 31.68'
℄ Survey Sta. 594+66.50
℄ Channel Sta. 15+00
N
Transition to existing ground
slope varies
℄ Jerome Fork (Mohican River)
top of cut
toe of slope
Dumped Rock Channel Protection
shoulder line
guard rail
Elev. "X"
Foliage
Wooded Area
℄ West bound Lanes
Begin Approach Slab
Sta. 595 +81.09
P.C. Sta. 596+36.97
barrier rail
℄ Survey U.S.R. 30
Elev. "X" 20' above Channel Flow Line
51°-15'
38°-45'
B-5
B-14
Elev. "X" 3'-0" Typ.
End Approach Slab
Sta. 593 +52.90
34'-6" f/f guardrail
℄ East bound Lanes
Special Berm & Slope Protection
Hay Field
25'-0" Channel Bottom Elev. 939.50
Flow
Corn Field
Field
34'-6" f/f Guard Rail
2'-3" 3'-0" 12'-0" 12'-0" 3'-0" 2'-3"
P.G.
3/16"/Ft.
49'-10"*
*measured in skew.
TYPICAL SECTION
FOUNDATION INVESTIGATION LEGEND
• - Rod sounding location
⊕ - Core boring location
FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of rod soundings and soil sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus, or in the Division office, but the State assumes no responsibility for the accuracy thereof.
NEAREST EXISTING BRIDGE
Thru steel truss on masonry abutments C.R. 132, 1.0 miles downstream, 128' horiz. x 12' vert. clear opening, 30° skew.
PROPOSED STRUCTURES
TYPE: Continuous steel beams with reinforced concrete deck and substructure.
SPANS: 68'-0"; 85'-0"; 68'-0" ℄ Brgs.
ROADWAY: 30'-0" f/f 2'-3" Safety Curbs.
LOAD FREQUENCY: CF = 2000 (57)
WEARING SURFACE: 1" Monolithic concrete.
APPROACH SLABS: AS-1-54 (25'-0" Long)
SKEW: 51°-15' R.F.
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC: 6520 (1980)
Drainage Area = 145 Sq. Mi.
800' V.C.
Bridge Limits 228.19'
Clears assumed 5-10 year H.W. 4.7' ±.
P.V.C. +70.83
P.V.I. Sta. 597+70.83
P.V.I. El. 967.14
LVC = 800'
Corr. = -0.48'
Profile Grade
+0.24%
-0.24%
Existing Ground
Footing Elev.
954.30 - L. Bridge
954.50 - R. Bridge
Assumed 5-10 yr. H.W. Elev. = 957.50
℄ Elev. 939.50
Elev. "X"
20'
2:1 Slope (normal)
Dumped Rock Channel Protection 2'-0" Thick
Footing Elev.
954.70 - L. Bridge
954.90 - R. Bridge
Footing Elev.
934.10 - L. Bridge
934.40 - R. Bridge
Footing Elev.
934.30 - L. Bridge
934.50 - R. Bridge
All piling 12" cast-in-place reinforced concrete. Estimated average pay lengths are:
Abutments - 80'
Piers - 75'
970
960
950
940
930
592
593
594
595
596
597
SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.
SITE PLAN
BRIDGE ASD-30-1124 L&R
OVER JEROME FORK - MOHICAN RIVER
ASHLAND COUNTY U.S.R. 30
STA. 593 + 52.90 TO STA. 595 + 81.09
DESIGNED D.H.T.
DRAWN R.H.U.
TRACED V.L.
CHECKED R.A.K.
REVIEWED
DATE
REVISED

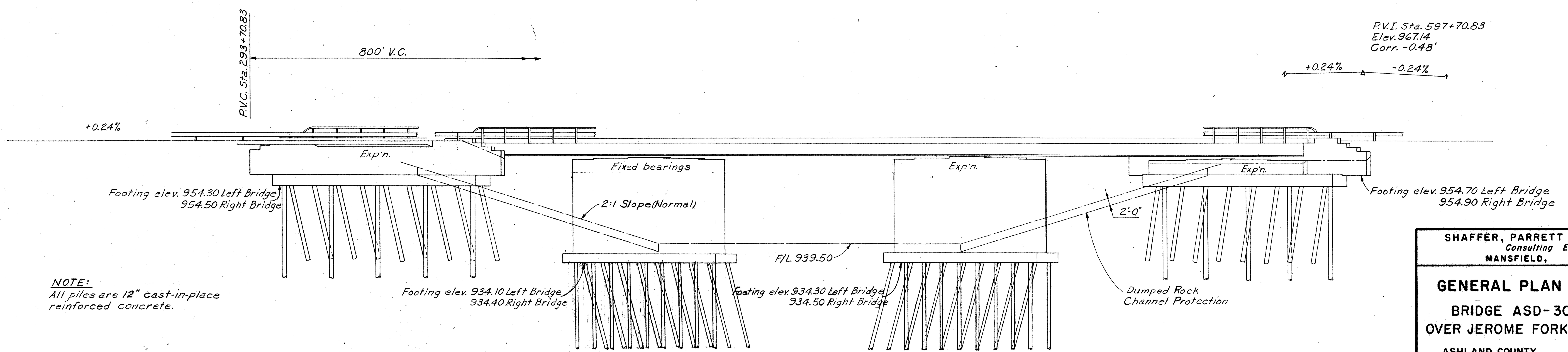
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

158
198

ASD-30-8.52
WAY-30-0.00



GENERAL PLAN



NOTE:
All piles are 12" cast-in-place reinforced concrete.

GENERAL ELEVATION

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

GENERAL PLAN & ELEVATION

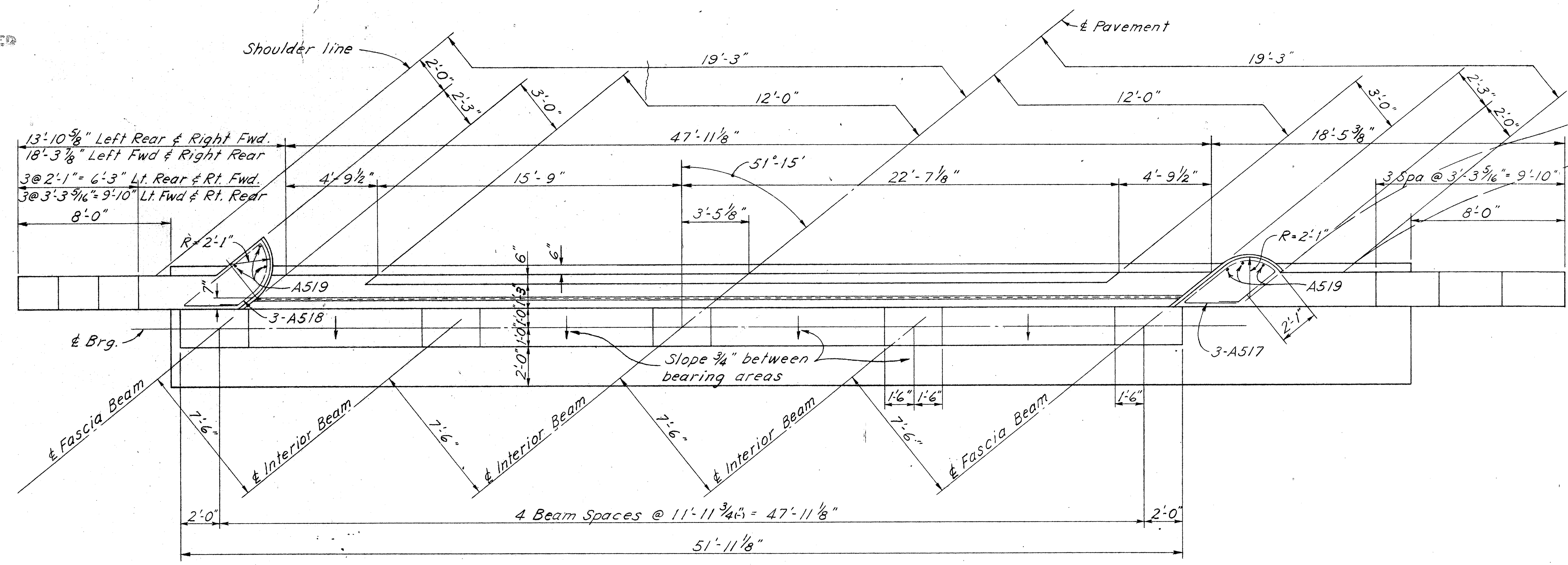
BRIDGE ASD-30-1124 L&R
OVER JEROME FORK - MOHICAN RIVER

ASHLAND COUNTY U.S.R. 30
STA. 593 + 52.90 TO STA. 595 + 81.09

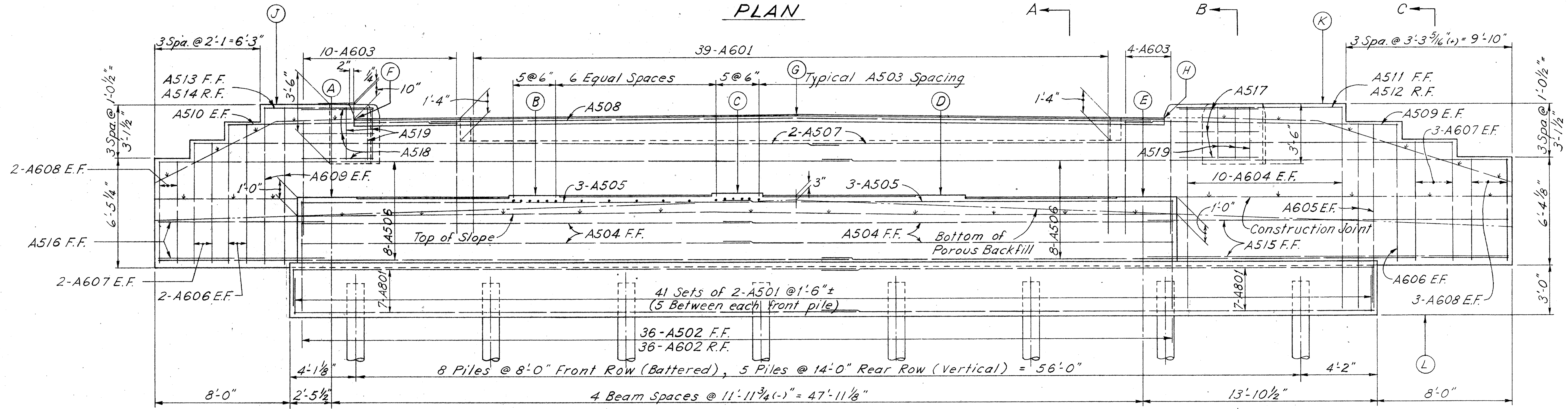
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	JCZ	RAK			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

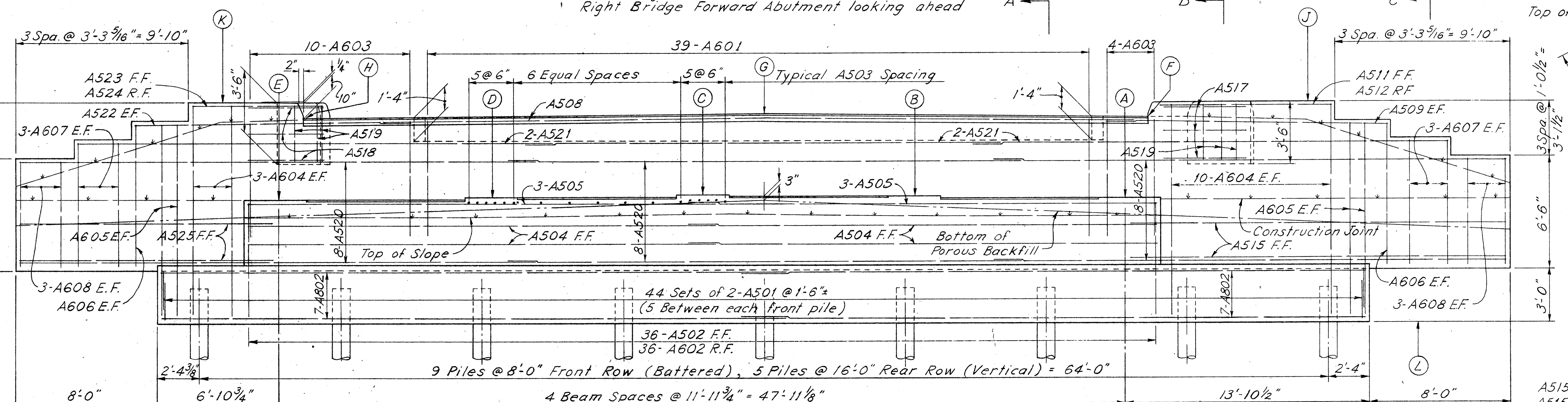
ASD-30-8.52
WAY-30-0.00



PLAN



ELEVATION
Left Bridge Rear Abutment looking back
Right Bridge Forward Abutment looking ahead



ELEVATION
Left Bridge Forward Abutment looking ahead
Right Bridge Rear Abutment looking back

TABLE OF ELEVATIONS

	LOCATION	(A)	(B)	(C)	(D)	(E)
LEFT BRIDGE	Rear Abutment	961.403	961.498	961.593	961.453	961.314
	Forward Abutment	961.844	961.948	962.052	961.921	961.789
RIGHT BRIDGE	Rear Abutment	961.564	961.702	961.840	961.743	961.645
	Forward Abutment	961.922	962.048	962.173	962.064	961.954

	LOCATION	(F)	(G)	(H)	(J)	(K)	(L)
LEFT BRIDGE	Rear Abutment	966.014	966.204	965.924	966.868	966.779	954.30
	Forward Abutment	966.461	966.670	966.406	967.315	967.260	954.70
RIGHT BRIDGE	Rear Abutment	966.175	966.451	966.256	967.029	967.110	954.50
	Forward Abutment	966.538	966.789	966.569	967.392	967.424	954.90

NOTES:

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the abutment, shall be considered as paid for in the price per cu. yd. paid for porous backfill.

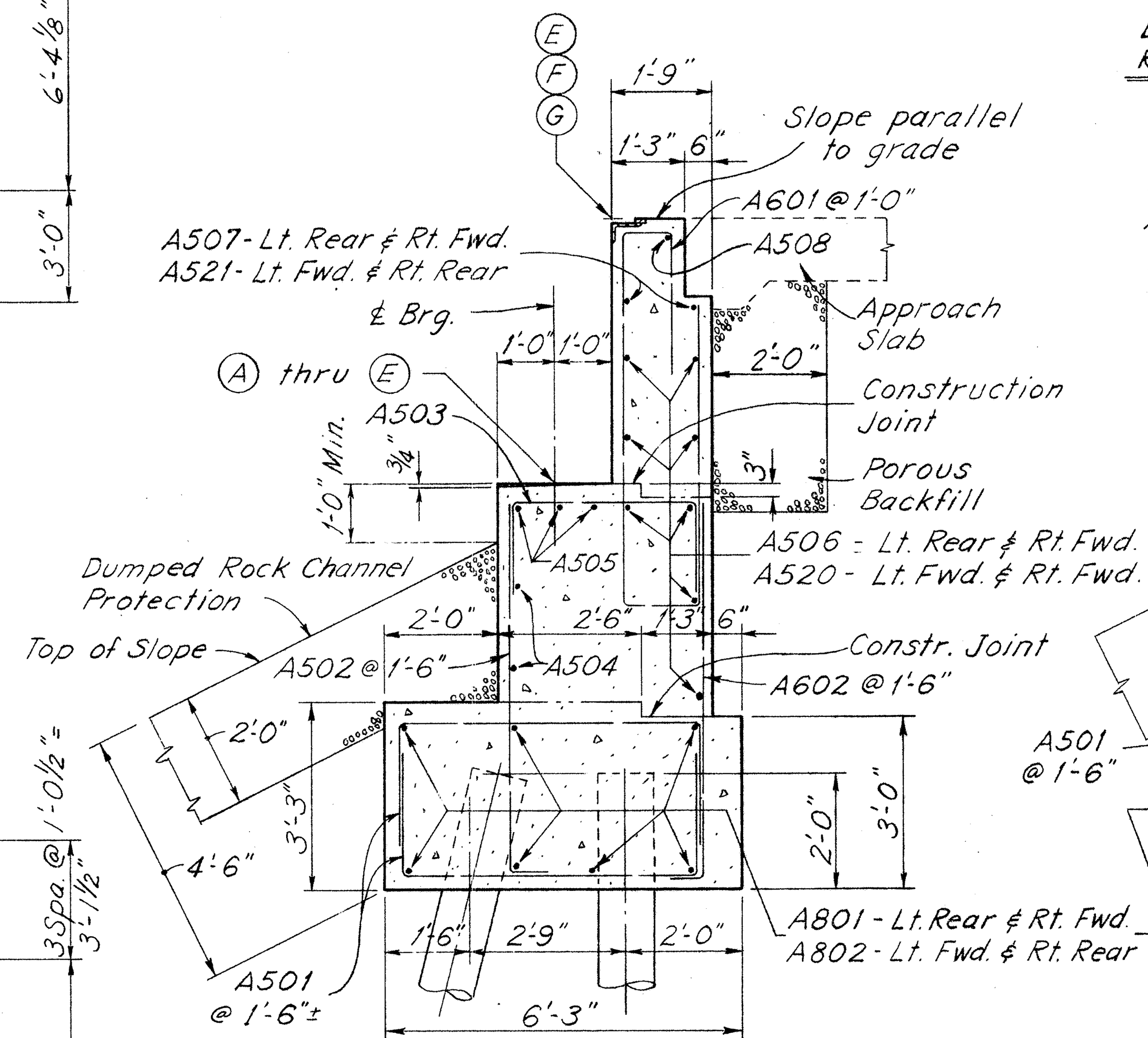
PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade, after which excavation shall be made for the abutments and piers.

ABUTMENT CONCRETE: All abutment concrete shall be Class "E".

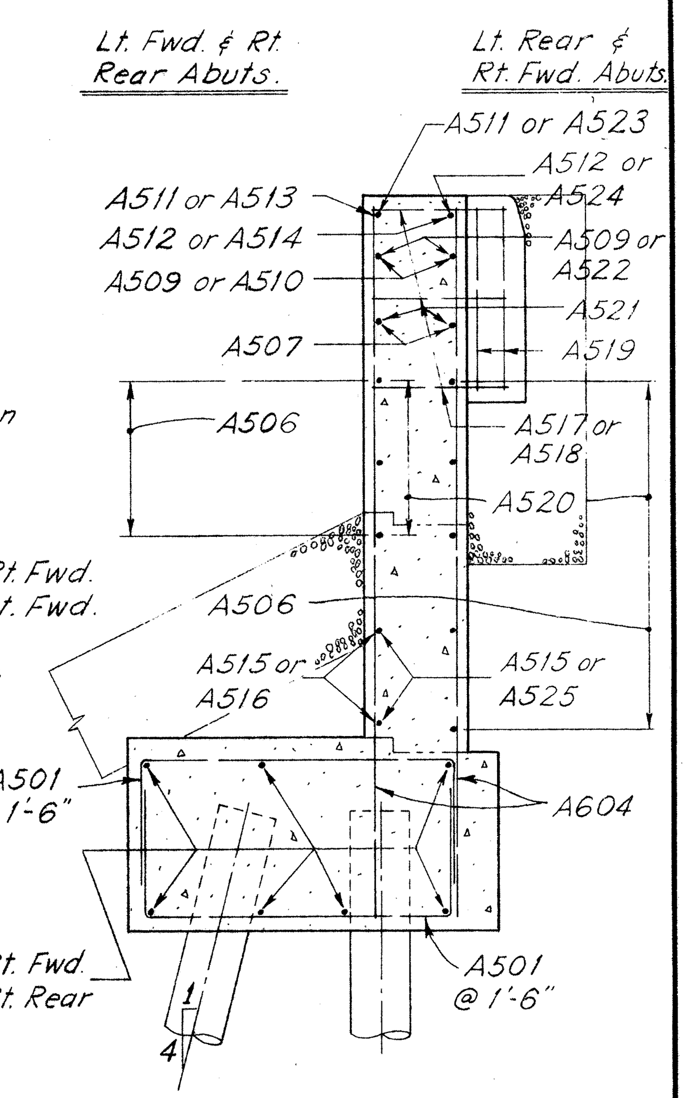
PILE CONCRETE for Cast-in-place Reinforced Concrete Piles shall be Class "C" and shall be included in the bid price per lineal foot for Item S-18.

NOTATION: F.F. - Front Face, R.F. - Rear Face, E.F. - Each Face.

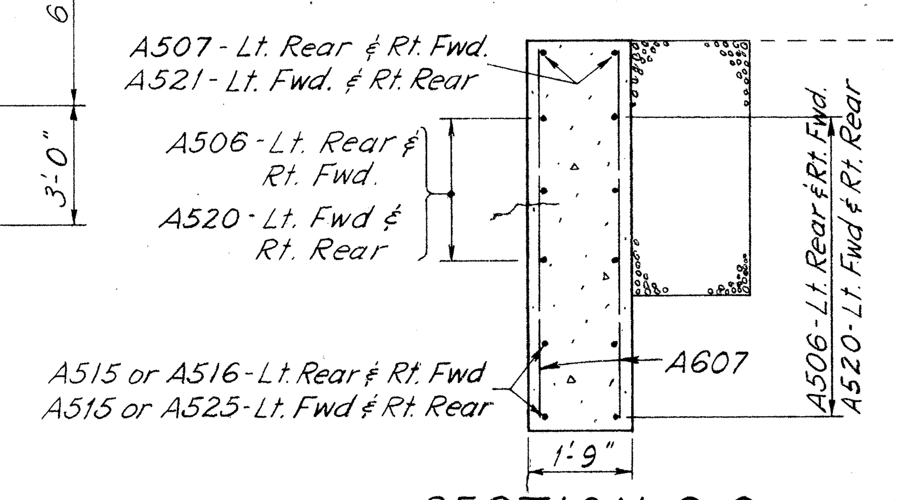
GENERAL NOTES: See Sheet 162.



SECTION A-A



SECTION B-B



SECTION C-C

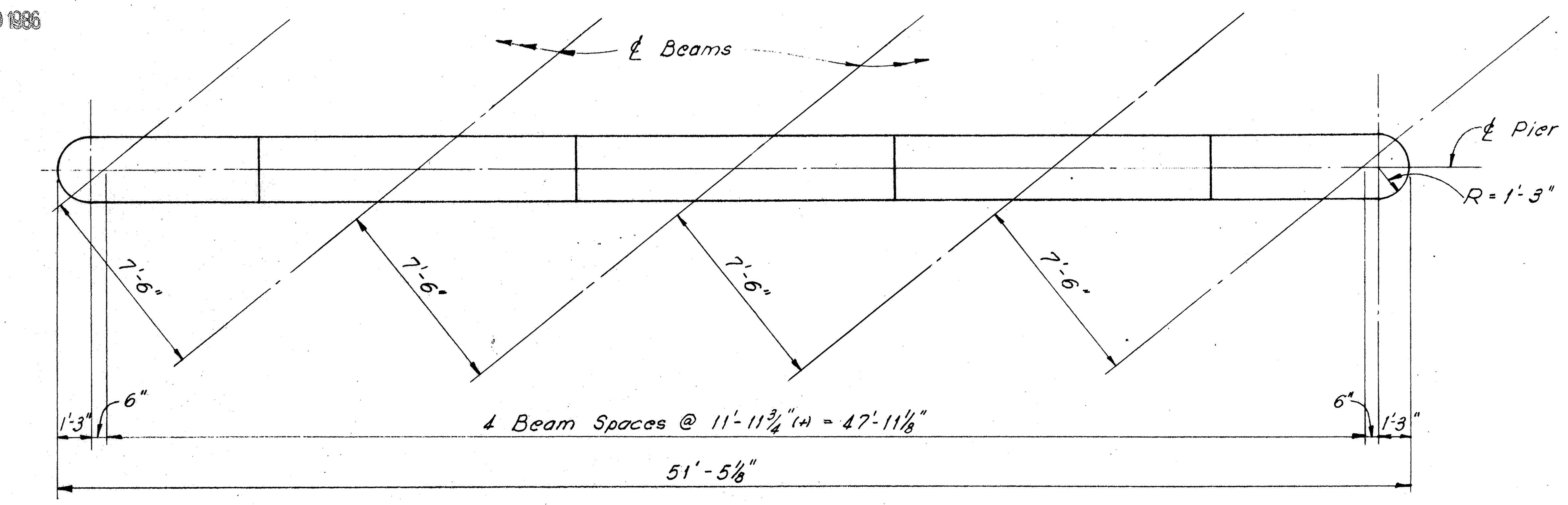
SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

ABUTMENTS

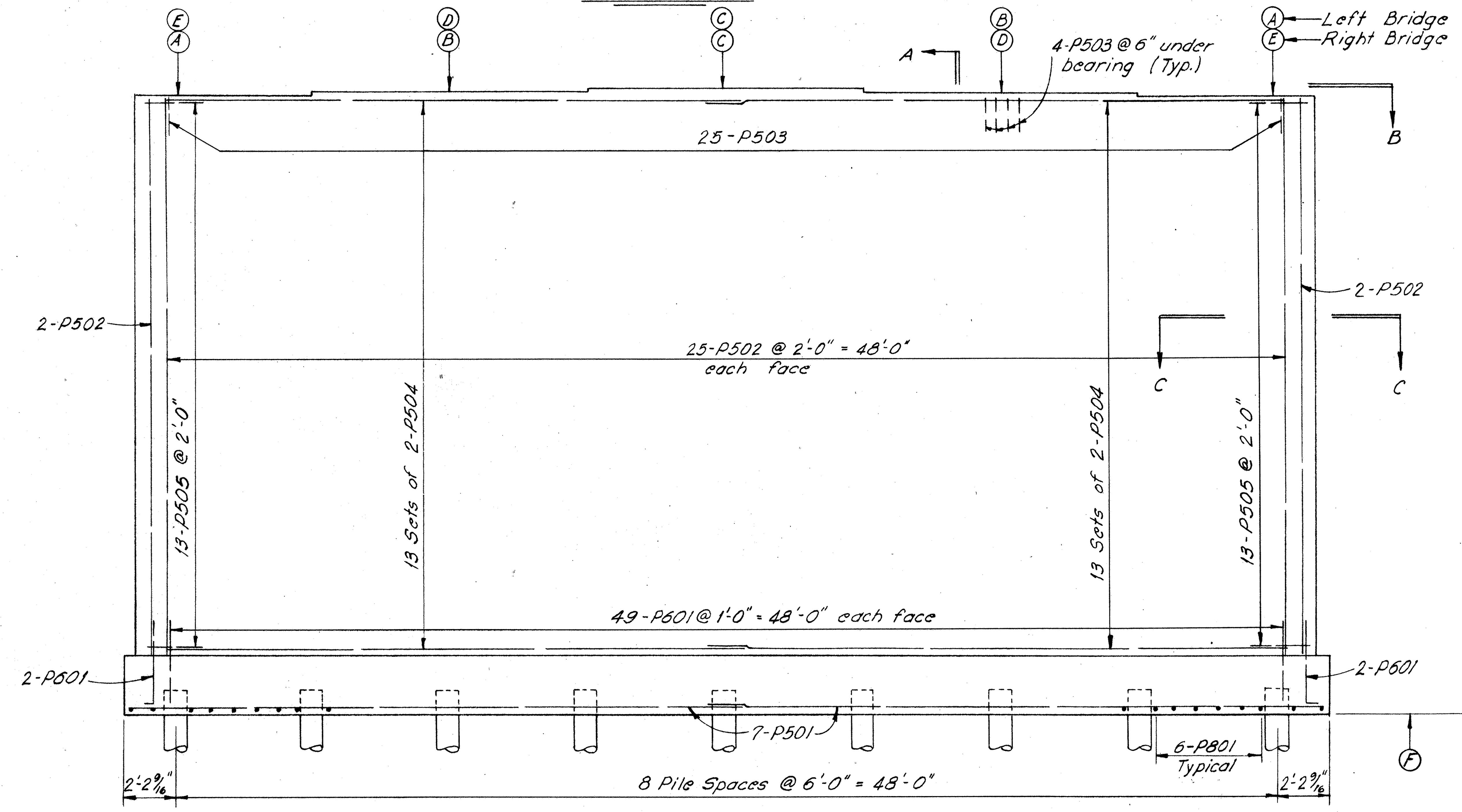
BRIDGE ASD-30-1124 L & R
OVER JEROME FORK - MOHICAN RIVER

ASHLAND COUNTY U.S.R. 30
STA. 593 + 52.90 TO STA. 595 + 81.09

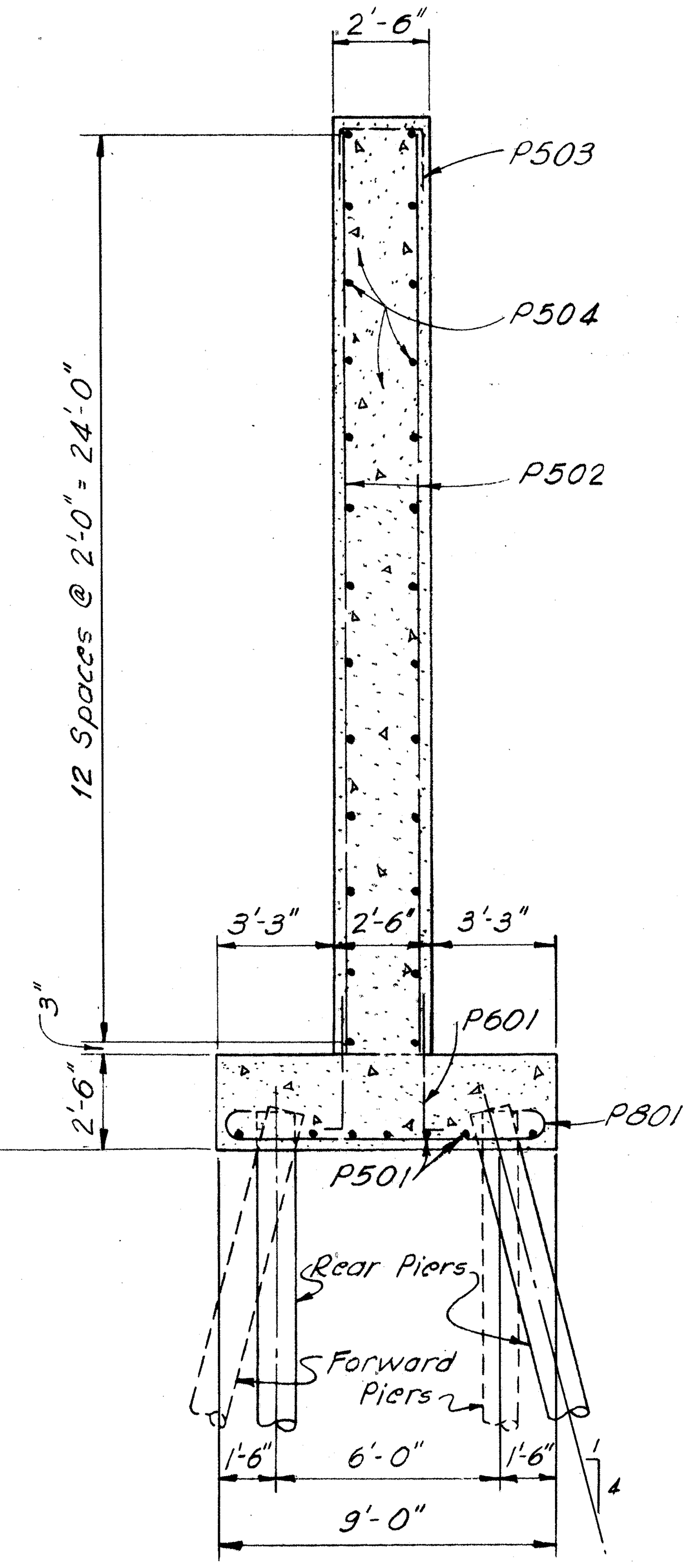
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	RAK	RAK			



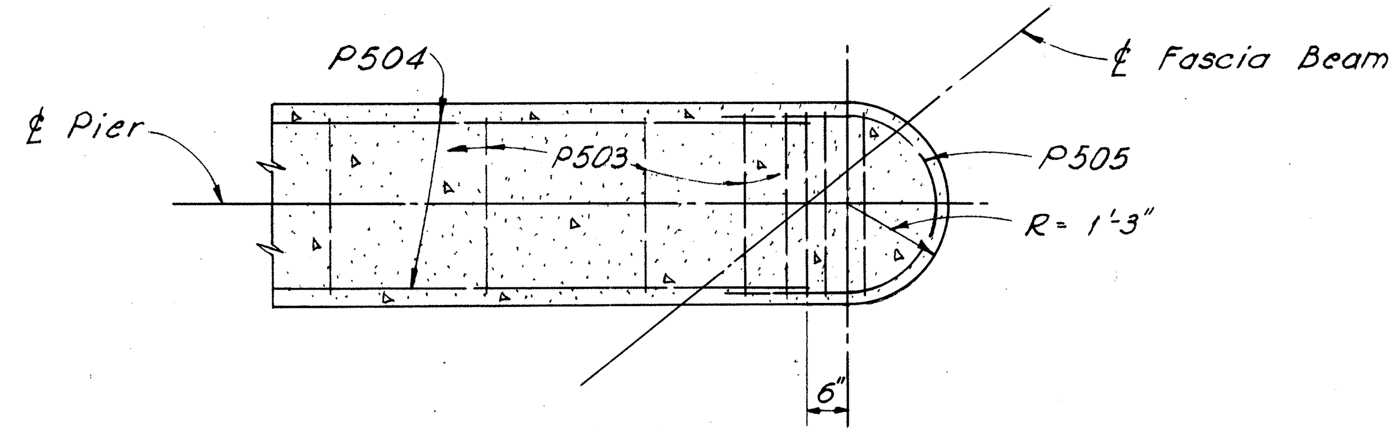
PLAN



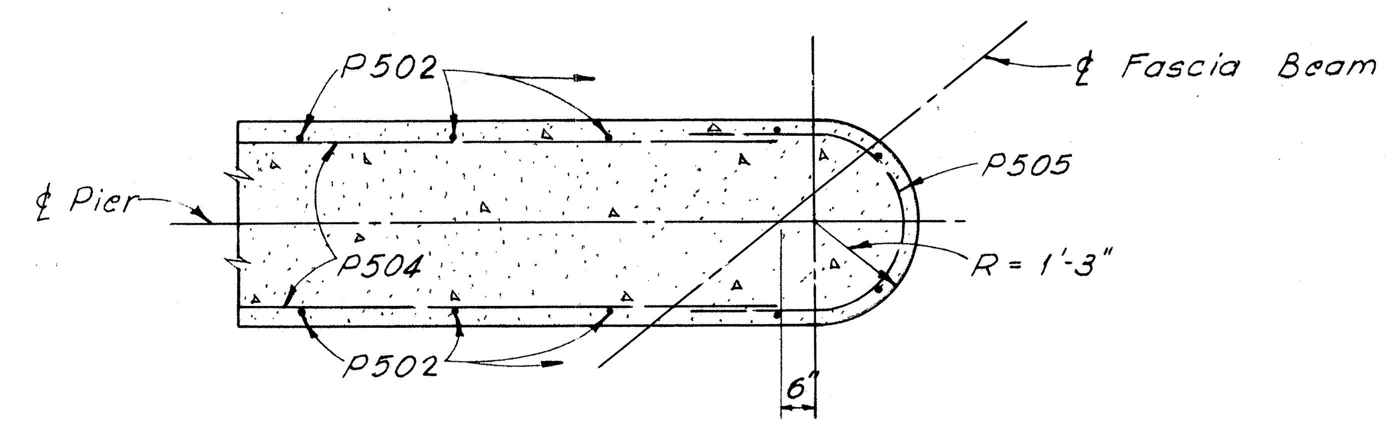
ELEVATION



SECTION A-A



SECTION B-B



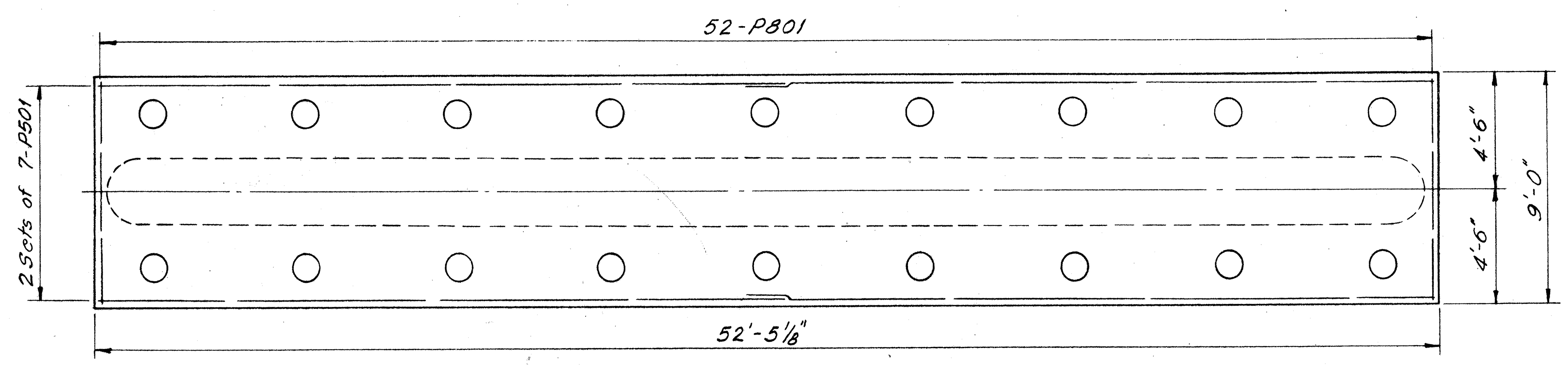
SECTION C-C

NOTES:

PIER CONCRETE: All concrete for pier footings and stem shall be Class "E".

PILE CONCRETE for 12"ϕ cast-in-place reinforced concrete piles shall be Class "C" and shall be included in the price per lineal foot for Item 8-18.

GENERAL NOTES: See Sheet 162.



FOOTING PLAN

TABLE OF ELEVATIONS

LOCATION		A	B	C	D	E	F
LEFT BRIDGE	Rear Pier	961.029	961.125	961.220	961.080	960.940	934.10
	Forward Pier	961.201	961.301	961.401	961.266	961.131	934.30
RIGHT BRIDGE	Rear Pier	961.169	961.303	961.437	961.336	961.235	934.40
	Forward Pier	961.306	961.436	961.565	961.460	961.353	934.50

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

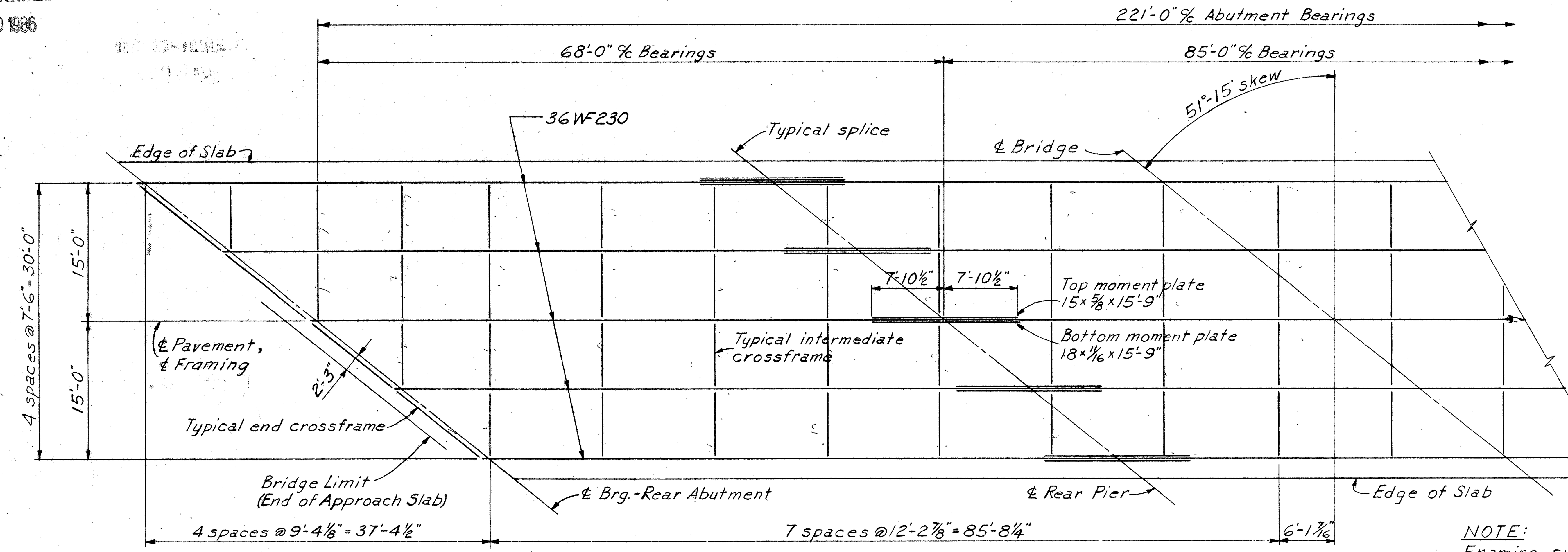
PIERS

BRIDGE ASD-30-1124 L&R
OVER JEROME FORK - MOHICAN RIVER

ASHLAND COUNTY U.S.R. 30
STA. 593 + 52.90 TO STA. 595 + 81.09

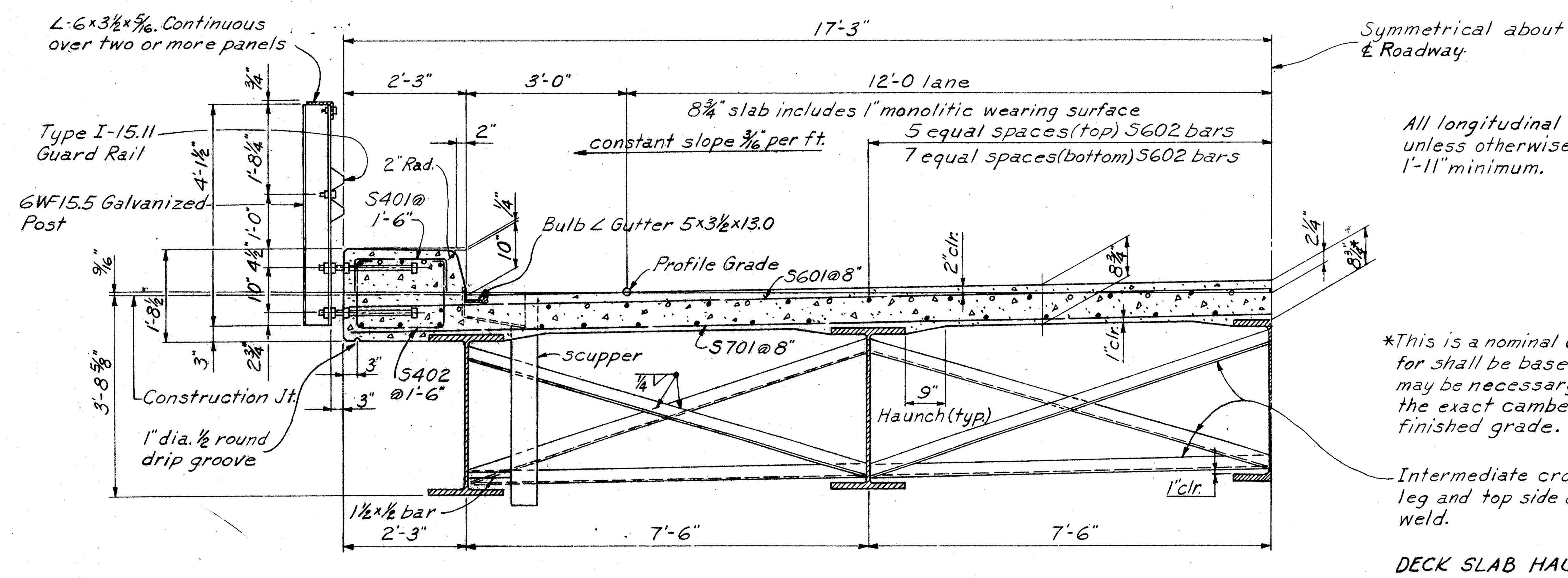
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.K.	JEG	Ed				

ASD-30-8.52
WAY-30-0.00



NOTE:
Framing symmetrical by rotation about ℄ bridge

HALF FRAMING PLAN



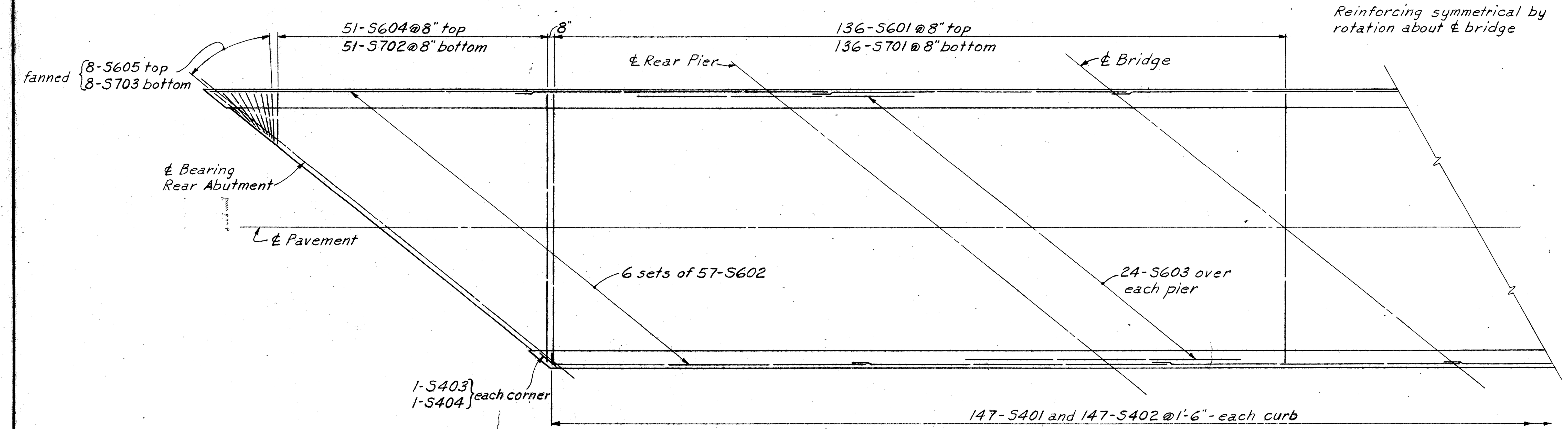
All longitudinal bars are S602 unless otherwise shown. Lap 1'-11" minimum.

*This is a nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

Intermediate crossframe angles 3×3×5/16. Weld both sides of vertical leg and top side of horizontal leg to beam with ¼" continuous fillet weld.

DECK SLAB HAUNCH: The haunch in the deck slab adjacent to the top of the steel beams, which is shown as 9" wide, may vary from this dimension with a minimum of 6" and maximum of 12". Maximum slope of haunch shall be one vertical to four horizontal. Payment for deck slab concrete shall be based on the 9" width.

HALF TRANSVERSE SECTION



Reinforcing symmetrical by rotation about ℄ bridge

HALF SLAB PLAN

NOTES:

CAMBERING of beams is required in accordance with the following table:

DEFLECTION AND CAMBER

	FASCIA BEAMS		INTERIOR BEAMS	
	END SPANS	MIDDLE SPAN	END SPANS	MIDDLE SPAN
Deflection due to weight of steel	0	1/16	0	1/16
Deflection due to weight of remaining dead load	1/16	5/32	1/16	5/32
Convexity required for vertical curve	+1/32	+1/16	+1/32	+1/16
Sum of deflection and convexity	3/32	3/16	3/32	7/32
Required camber	0	0	0	0

BEAM SPLICE WELDING PROCEDURE: See Std. Dwg. CSB-2-56, Sheet 1 of 6. Use R = 2⅜".

BEARINGS: See RB-1-55 for the following: R-100 Abutments
B-200 Rear Pier
R-200 Forward Pier

END CROSSFRAMES, END FINISH, GUTTERS, SCUPPERS, CURB PLATE DETAILS and BEAM SPLICE DETAILS: See Std. Dwg. CSB-2-56, Sheets 2 and 3 of 6.

RAILING: See Std. Dwg. CSB-2-56, Sheet 1 of 6.

RAILING POST AND SCUPPER SPACING: See Sheet 158

CONCRETE: All superstructure concrete shall be Class "C."

GENERAL NOTES: See Sheet 162.

BEAM WEB WELDS: Butt welds in webs of beams may have convex reinforcement in accordance with Sec. S-7.22. Finishing flush by grinding is not required.

CONTINUOUS BEAM SHOP ASSEMBLY: Reference paragraph 4, Sec. S-7.12 of the Construction and Material Specifications, if rolled beams are field spliced only at supports, for the purpose of checking the fit-up of weld joint preparation, only two adjacent beams need be shop assembled at a time in their correct, unloaded positions. All beams shall be assembled and match marked.

~~BEAM SPLICE DETAILS: See Sheet 155.~~

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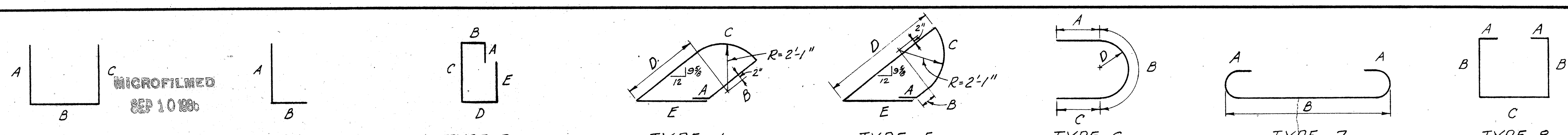
Consulting Engineers
MANSFIELD, OHIO.

SUPERSTRUCTURE

BRIDGE ASD-30-1124 L&R
OVER JEROME FORK - MOHICAN RIVER

ASHLAND COUNTY U.S.R. 30
STA. 593 + 52.90 TO STA. 595 + 81.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	JCZ	RAK			



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6 TYPE 7 TYPE 8

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A501	340	9'-3" (9'-6")	1	2'-1"	5'-4"	2'-1"			3280-(3369)
A502	144	7'-0" (7'-1")	2	6'-7"	6"				1051-(1064)
A503	208	6'-10" (7'-1")	1	1'-10"	3'-5"	1'-10"			1482-(1537)
A504	16	30'-0"	2	26'-7"	3'-5"				501
A505	24	26'-7"	Str.						665
A506	32	40'-10"	Str.						1363
A507	8	38'-2"	Str.						318
A508	4	42'-5"	Str.						177
A509	8	16'-4"	Str.						136
A510	4	13'-7"	Str.						57
A511	4-(2)	9'-10"	Str.						41-(21)
A512	4-(2)	8'-1"	Str.						34-(17)
A513	2	5'-0"	Str.						10
A514	2	6'-4"	Str.						13
A515	8	21'-4"	Str.						178
A516	4 (2)	10'-0"	Str.						42-(21)
A517	12	10'-8" (11'-6")	4	6"	2'-6"	(2'-10") (3'-1")	2'-9"	(2'-4") (2'-8")	133-(144)
A518	12	11'-6" (12'-4")	5	6"	1'-0"	(3'-1") (2'-10")	5'-1"	(2'-8") (2'-4")	144-(154)
A519	24	3'-2"	Str.						79
A520	48	29'-2"	Str.						1460
A521	12	27'-0"	Str.						338
A522	4	15'-8"	Str.						65
A523	2	5'-10"	Str.						12
A524	2	7'-2"	Str.						15
A525	4	14'-6"	Str.						60
A601	156	16'-8" (17'-4")	3	2'-6"	11"	6'-11"	1'-5"	5'-7"	3905-(4061)
A602	144	6'-10" (7'-0")	2	6'-6"	6"				1478-(1514)
A603	56	14'-9"	1	6'-8"	1'-5"	6'-8"			1241
A604	92-(46)	12'-0"	Str.						1658 (829)
A605	24	10'-11"	Str.						394
A606	20	8'-1"	Str.						243
A607	44	7'-0"	Str.						463
A608	44	6'-0"	Str.						397
A609	8	9'-2"	Str.						110
A801	28	33'-2"	Str.						2480
A802	28	35'-4"	Str.						2642
							Total		(26,038) 26,665

PIERS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P501	56	27'-3"	Str.						1592
P502	216	24'-2"	Str.						5444
P503	180	5'-1" (5'-4")	1	1'-7"	2'-2"	1'-7"			954-(960)
P504	208	25'-3"	Str.						5478
P505	104	6'-7"	6	1'-7"	3'-5"	1'-7"	1'-1"		714
P601	408	4'-(4)2"	2	3'-10"	6"				2553-(2856)
P801	208	10'-8"	7	1'-1"	8'-6"				5924
							Total		(22,768) 22,659

SUPERSTRUCTURE

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
S401	588	2'-9" (3'-0")	1	8"	1'-8"	8"			1080-(1178)
S402	588	5'-(8)3"	8	5-(8)	1'-6"	1'-8"			2062-(2023)
S403	8	3'-9" (4'-0")	1	8"	2'-8"	8"			20-(21)
S404	8	6'-(6)4"	8	5"	1'-6"	2'-8"			34 (35)
S601	542	34'-2"	Str.						27815
S602	684	38'-9"	Str.						39811
S603	96	34'-0"	Str.						4903
S604	204	Varies	Str.	33'-3" to 6'-8"	Vary 4 each by 6 3/8"				6115
S605	32	6'-3"	Str.						300
S701	542	34'-2"	Str.						37851
S702	204	Varies	Str.	33'-3" to 6'-8"	Vary 4 each by 6 3/8"				8322
S703	32	6'-3"	Str.						409
							Total		(128,789) 128,722

ESTIMATED QUANTITIES - 2 BRIDGES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUTS	PIERS	GENERAL		
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
E-2	851	Cu. Yds.	Unclassified excavation		420	431			
E-3	5426	Cu. Yds.	Channel excavation				5426		
S-1	484	Cu. Yds.	Class "C" concrete, superstructure	484					
S-1	432	Cu. Yds.	Class "E" concrete, abutments		432				
S-1	171	Cu. Yds.	Class "E" concrete, pier footings			171			
S-1	461	Cu. Yds.	Class "E" concrete, piers above footings			461			
178,046 S-4	(177,595)	Lbs.	Reinforcing steel	(128,789) 128,722	(26,038) 26,665	(22,768) 22,659			
S-7	597,349	Lbs.	Structural steel	597,349					
S-8	597,349	Lbs.	Field painting of structural steel	597,349					
S-14	912.76	Lin. Ft.	Railing (Type I-15.11 with handrail and galv. steel posts & bolts)	912.76					
S-16	Lump	Sum	First test pile				Lump		
S-17	Lump	Sum	First pile test load				Lump		
S-17	1	Each	Subsequent pile test load				1		
S-18	9,720	Lin. Ft.	12" Cast-in-place reinforced concrete piles		4320	5400			
S-29	111	Cu. Yds.	Porous backfill		111				
S-29	64	Each	~~Scuppers, including supports~~	64					
S-101	484	Each	Water-reducing, Set-retarding Admixture	484					
I-10	2267	Cu. Yds.	Dumped rock channel protection				2267		

GENERAL NOTES

REFERENCE shall be made to Standard Drawings AS-1-54 (revised 7-5-62), RB-1-55 (revised 2-2-59) and CSB-2-56, sheets 1, 2, 3 and 6 (revised 2-2-59) and to Supplemental Specifications S-101 and S-307 dated 7-12-62 and 8-23-60 respectively.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

EXCAVATION QUANTITY includes removal of fill material required for construction of the abutments.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections between the transverse construction joints which are parallel to the transverse reinforcing and are located near the center of any span.

WELDING of structural steel shall be Class "A" unless otherwise shown. Welds shown as field welds may, at the option of the contractor, be made in the shop. Class "B" welds are shown as:

B

BRIDGE SEATS: Special care must be taken in placing bars in the bridge seats so that they will not interfere with the drilling of holes for the anchor bolts.

CAST-IN-PLACE REINFORCED CONCRETE PILES shall be the type using a metal shell or casing that is left in place. The piles shall be driven to a minimum bearing capacity of 30 tons per pile for the abutments and 42 tons per pile for the piers.

~~MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.~~

~~DESIGN DATA~~ - See below

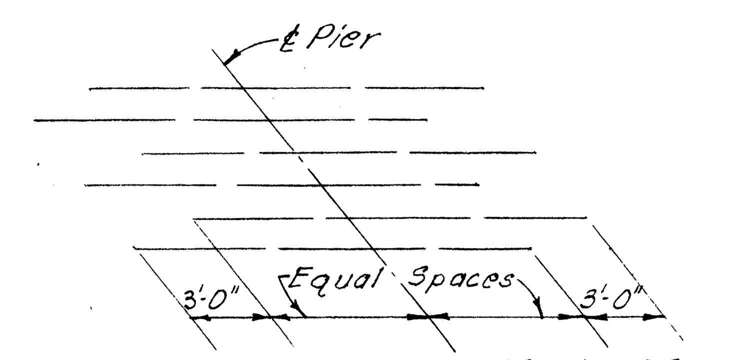


DIAGRAM SHOWING STAGGER OF A603 OVER PIERS

REPLACEMENT BARS

MARK	LENGTH	NO.
RE400	5'-3"	1
RE500	5'-7"	2
RE600	5'-11"	5
RE700	6'-3"	3
RE800	6'-6"	1

NOTES

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A701 is a No. 7 size bar and A1014 is a No. 10 size.

~~DESIGN~~ DATA

~~Design Loading - CF 2000 (57)~~
~~Concrete Class "C" - basic unit stress 1,333 p.s.i.~~
~~Concrete Class "E" - basic unit stress 1,133 p.s.i.~~
~~Structural Steel - ASTM A36 - basic unit stress 20,000 p.s.i.~~
~~(except piling) (ASTM A7 and A373 steel not permitted)~~
~~Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 psi.~~

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

REINFORCING STEEL, GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE ASD-30-1124 L&R
OVER JEROME FORK - MOHICAN RIVER

ASHLAND COUNTY — U.S.R. 30
STA. 593 + 52.90 TO STA. 595 + 81.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.A.K.	J.E.G.	J.E.G.				6-5-64

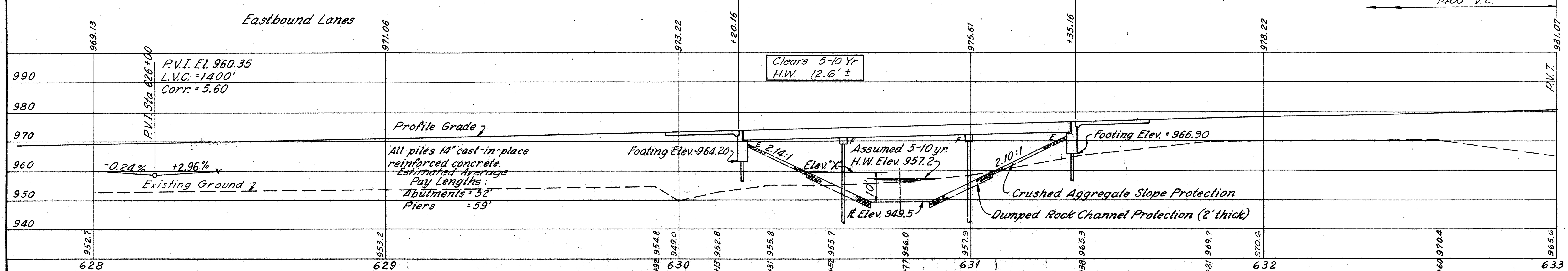
FED. RD. DIVISION 2 | STATE OHIO | PROJECT F-1072 (8)

163/198

ASD-30-8.52
WAY-30-0.00

FOUNDATION INVESTIGATION LEGEND
- Core Boring
- Rod Sounding

FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of rod soundings and soil sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but the State does not guarantee the accuracy thereof.



PROPOSED STRUCTURE

TYPE: Continuous steel beams with reinforced conc. deck and capped pile substructure.
SPANS: 34'-0"; 42'-6"; 34'-0"
ROADWAY: 40'-0" f/f Guard Rails.
LOAD FREQUENCY: CF 2000 (57)
WEARING SURFACE: 1" Monolithic concrete
APPROACH SLABS: AS-1-54 (25'-0" long)
SKEW: 0°
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC: 6630 (1980)

Drainage Area = 4.9 sq. mi.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO

SITE PLAN

BRIDGE ASD-30-1193 L & R
OVER GLENN RUN

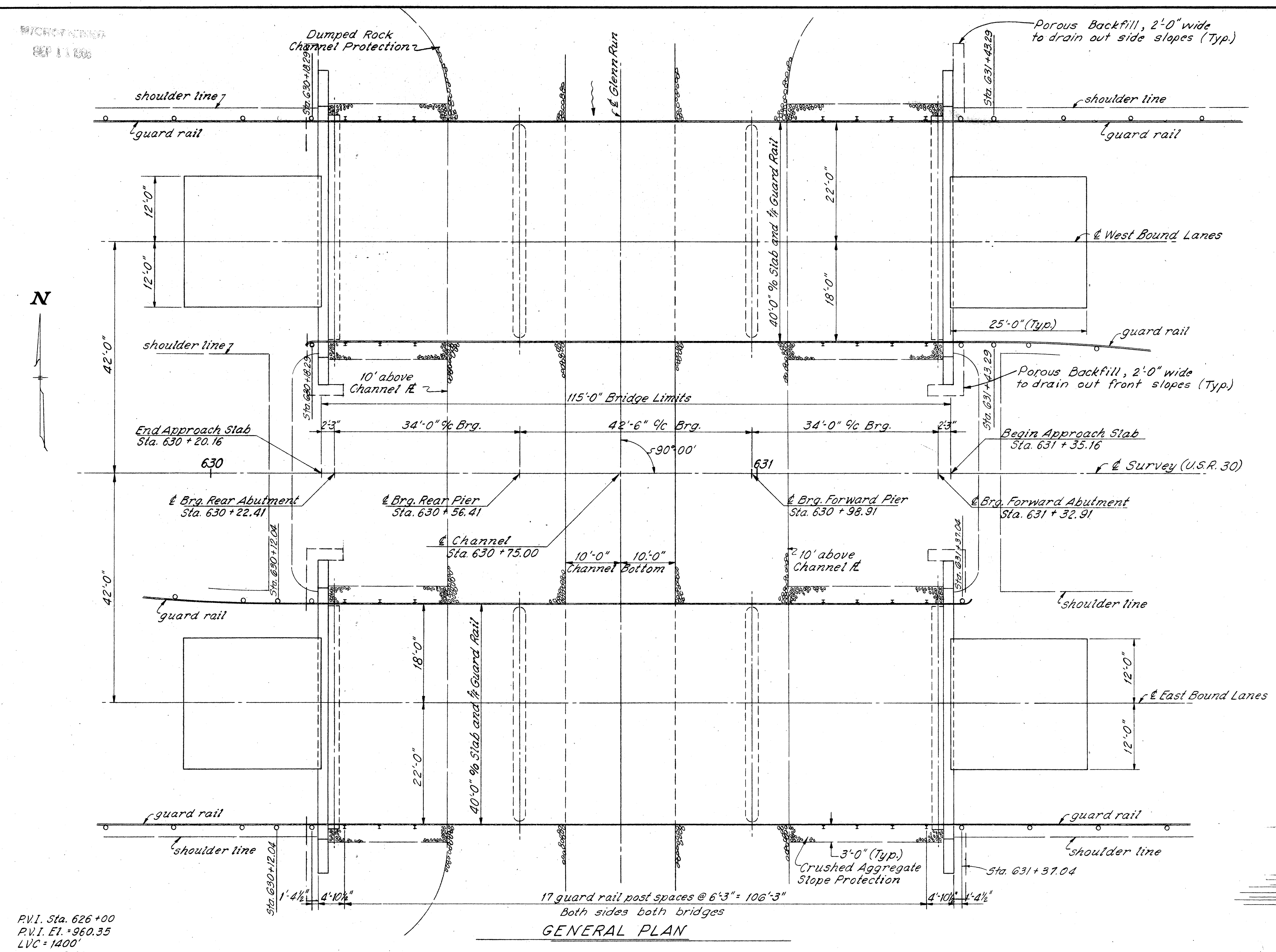
ASHLAND COUNTY U.S.R. 30
STA. 630 + 20.16 TO STA. 631 + 35.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.W.C.	J.W.C.	U.L.	R.A.K.			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

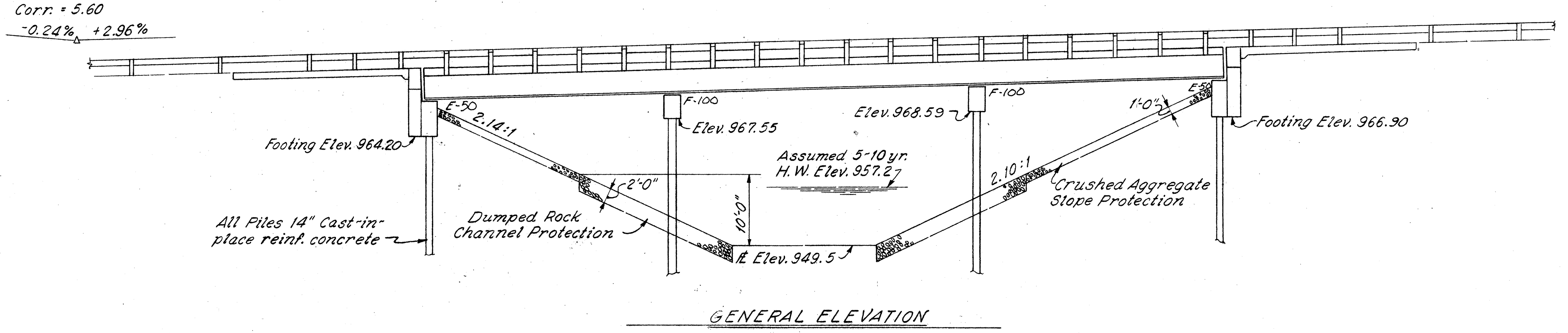
164
198

ASD-30-8.52
WAY-30-0.00



GENERAL PLAN

P.V.I. Sta. 626+00
P.V.I. El. = 960.35
LVC = 1400'
Corr. = 5.60
-0.24% +2.96%



GENERAL ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings AS-1-54 (revised 7-5-62) and CSB-1-55, sheets 1, 2, and 7 of 8 (revised 2-2-59), FSB-1-62 revised 1-15-63, and Supplemental Specifications S-101 & S-307 dated 7-12-62 and 8-23-60 respectively.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments.

CAST-IN-PLACE REINFORCED CONCRETE PILES shall be the type using a metal shell or casing that is left in place. The metal shell or casing of the pier piling above elevation 944.5 shall not be tapered and shall not be less than No. 7 gage. This portion of the pier piling shall be painted in accordance with Item S-8 (applying two coats as per Sec. M-9.9, M-9.10 or M-9.21 and two coats as per Sec. M-9.12) or galvanized in accordance with Sec. M-7.4(d). The cost of painting or galvanizing shall be included in the payment for Item S-18, "Cast-in-place Reinforced Concrete Piles.
Piles shall be driven to minimum bearing capacity of 28 tons per pile for the abutments and 32 tons per pile for the piers.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections between the transverse construction joints which are parallel to transverse reinforcing and are located near the center of any span.

WELDING of structural steel shall be Class "A" unless otherwise shown. Welds shown as field welds may at the option of the Contractor, be made in the shop. Class "B" welds are shown as B

BRIDGE SEATS: Special care must be taken in placing bars in the bridge seats so that they will not interfere with the drilling of holes for anchor bolts.

MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.

CONTINUOUS BEAM SHOP ASSEMBLY: Reference paragraph 4, Sec. S-7.12 of the Construction and Material Specifications, if rolled beams are field spliced only at supports, for the purpose of checking the fit-up of weld joint preparation, only two adjacent beams need be shop assembled at a time in their correct, unloaded positions. All beams shall be assembled and match marked

DESIGN DATA

Design Loading – CF 2000 (57)
Concrete Class C – basic unit stress 1,333 p.s.i.
Concrete Class C – basic unit stress 1,133 p.s.i.
Structural Steel – ASTM A36 - basic unit stress 20,000 p.s.i.
(except piling) (ASTM A7 and A373 steel not permited)
Reinforcing Steel – ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade.
Basic unit stress 20,000 p.s.i.

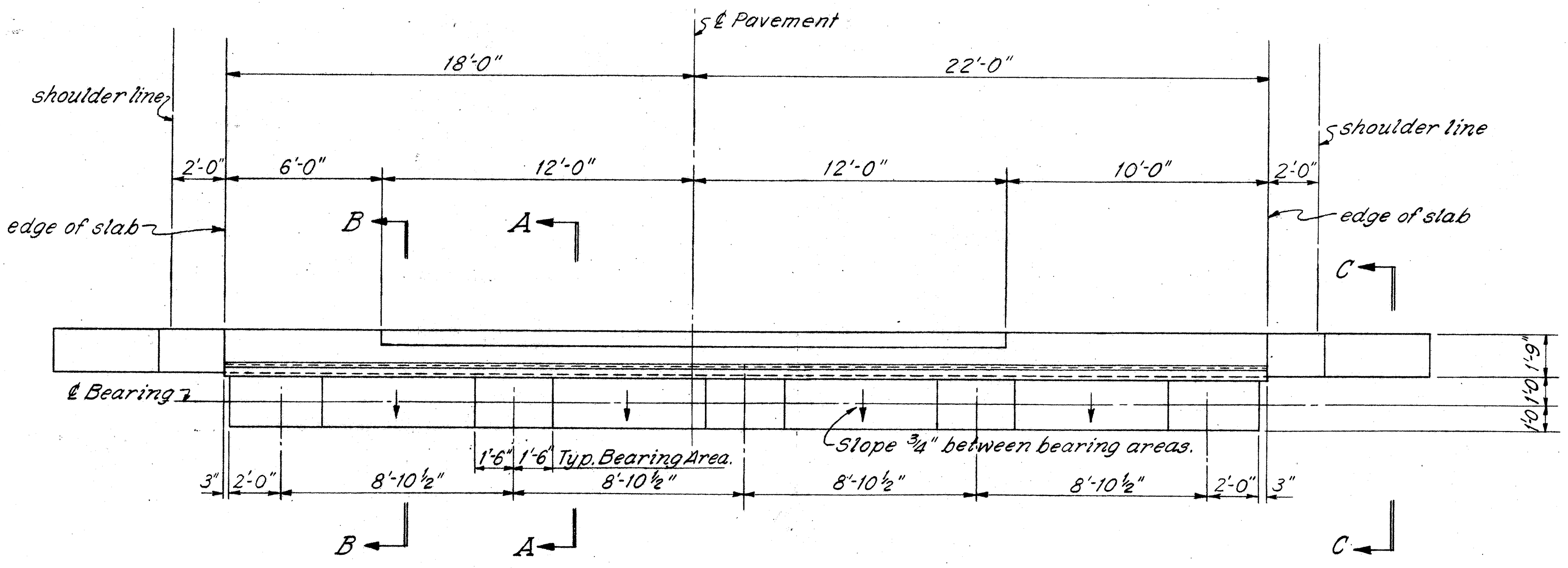
SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

GENERAL PLAN & ELEVATION AND GENERAL NOTES
BRIDGE ASD-30-1193 L&R
OVER GLENN RUN

ASHLAND COUNTY U.S.R. 30
STA. 630 + 20.16 TO STA. 631 + 35.16

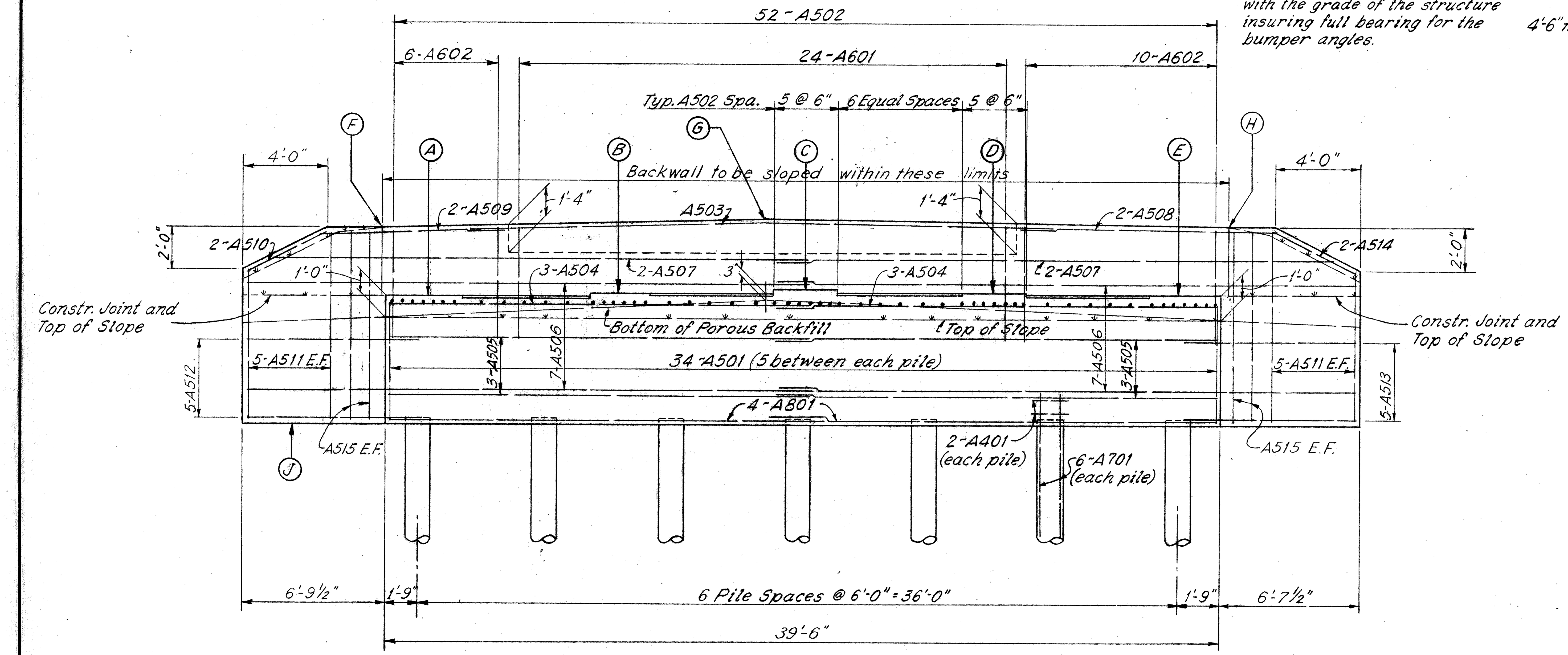
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.G.	J.E.G.	UL	R.A.K.			

ASD-30-8.52
WAY-30-0.00



PLAN

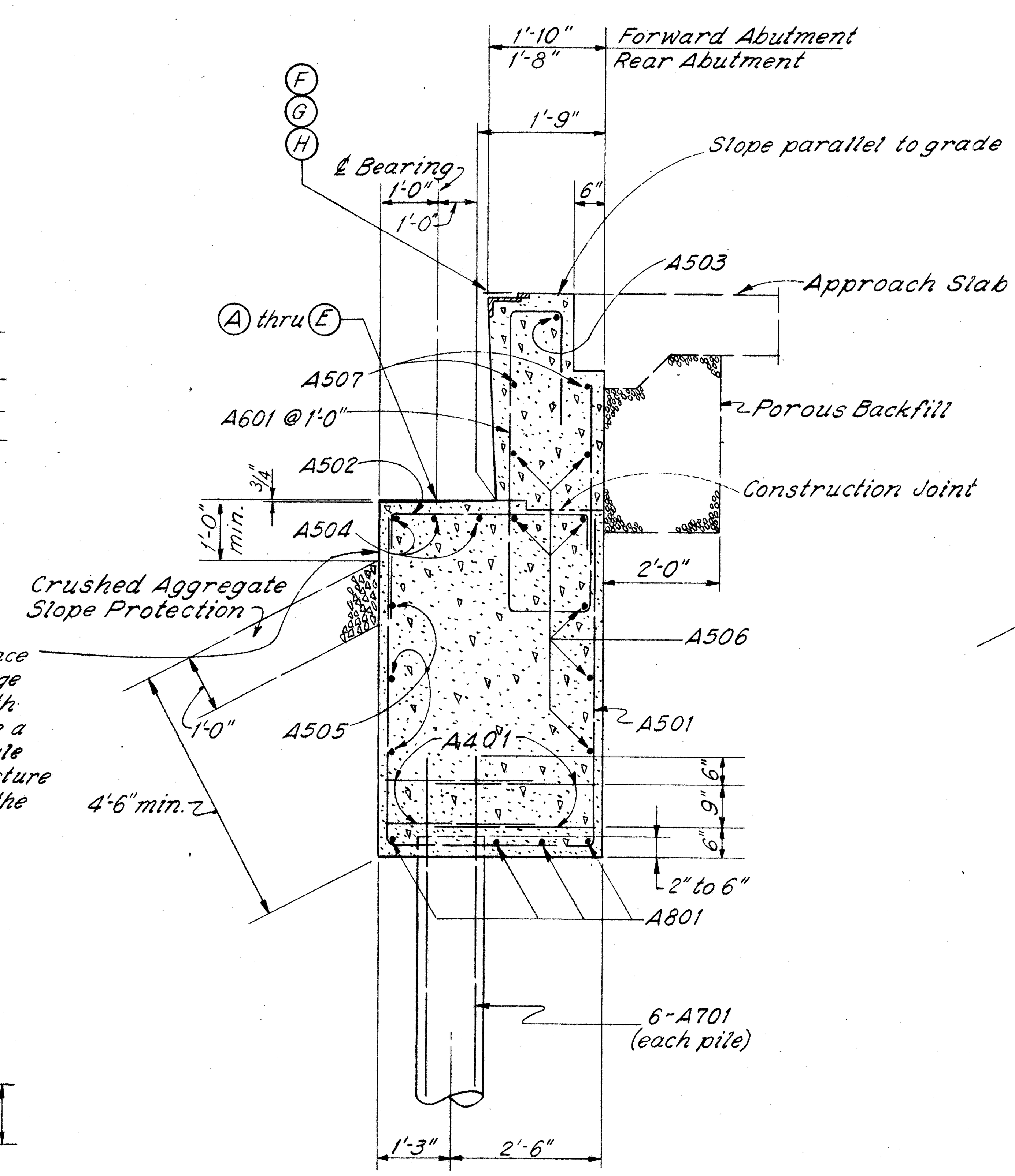
The area of the abutment face immediately below the bridge seats shall be finished with particular care to provide a plane surface at right angle with the grade of the structure insuring full bearing for the bumper angles.



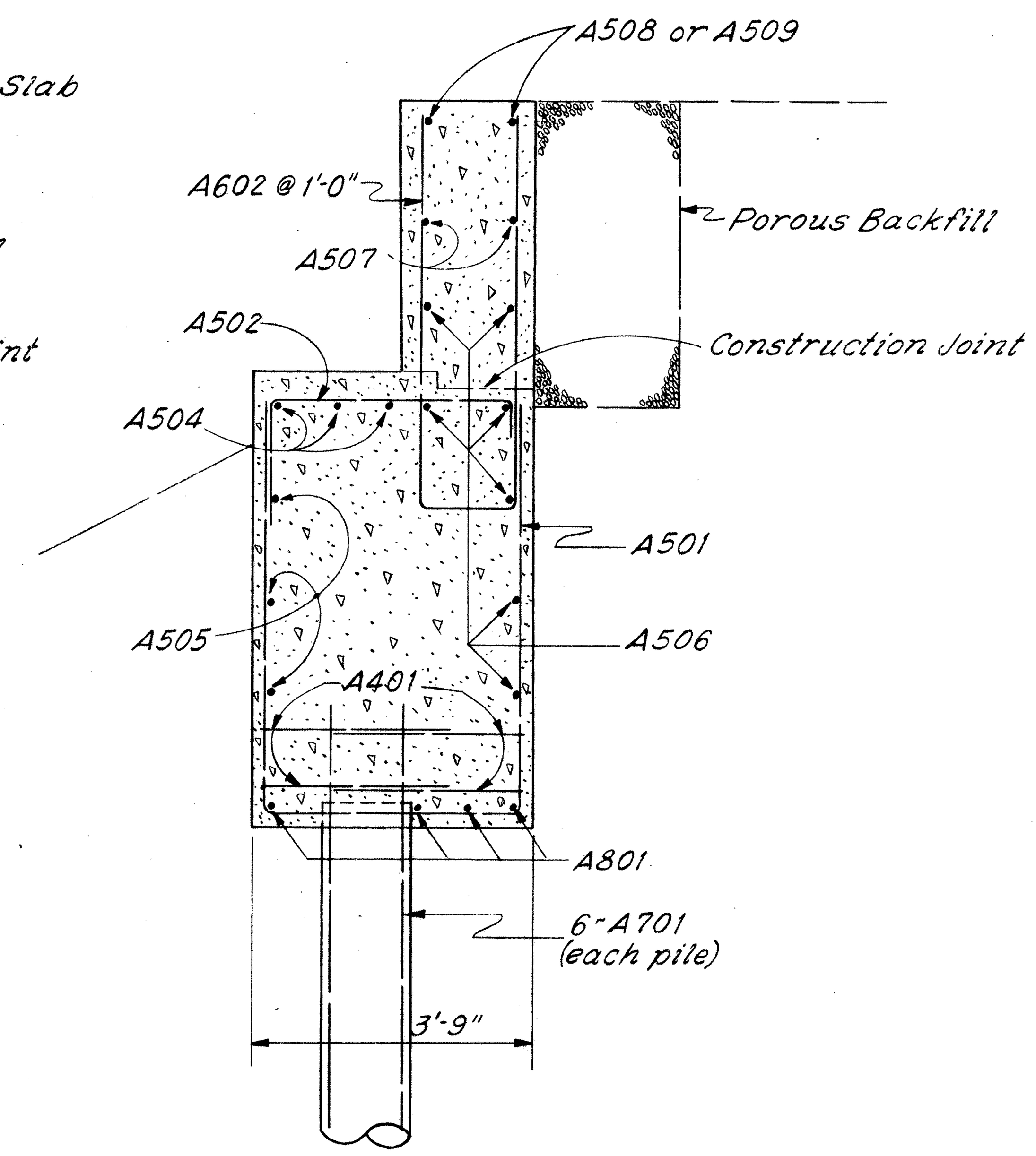
ELEVATION

Left Bridge Rear Abutment looking back
Right Bridge Forward Abutment looking ahead } As shown

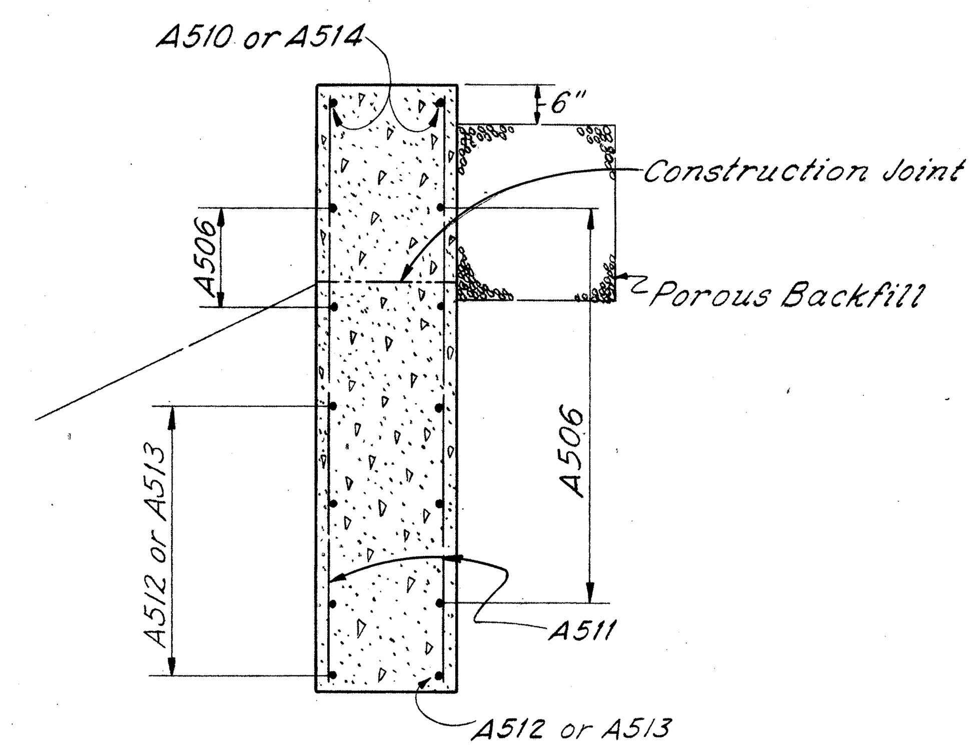
Left Bridge Forward Abutment looking ahead
Right Bridge Rear Abutment looking back } Opposite hand



SECTION A-A



SECTION B-B



SECTION C-C

TABLE OF ELEVATIONS									
LOCATION	A	B	C	D	E	F	G	H	J
Rear Abutments	970.05	970.19	970.26	970.12	969.99	973.615	973.896	973.553	964.20
Forward Abutments	972.76	972.90	972.97	972.83	972.70	976.373	976.654	976.311	966.90

NOTES

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the abutment, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

PROCEDURE: The embankment shall be placed and compacted up to finished spill-thru slope and to the level of the subgrade, after which excavation shall be made for the abutments. Such embankment shall be carried for a distance of at least 200 feet back of the rear abutments.

CONCRETE: All abutment concrete shall be Class "E".

PILE CONCRETE for Cast-in-place Reinforced Concrete Piles shall be Class "C" and shall be included in the bid price per lineal foot for Item S-18.

NOTATION: F.F. - Front Face
R.F. - Rear Face
E.F. - Each Face

GENERAL NOTES:
See Sheet 164.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

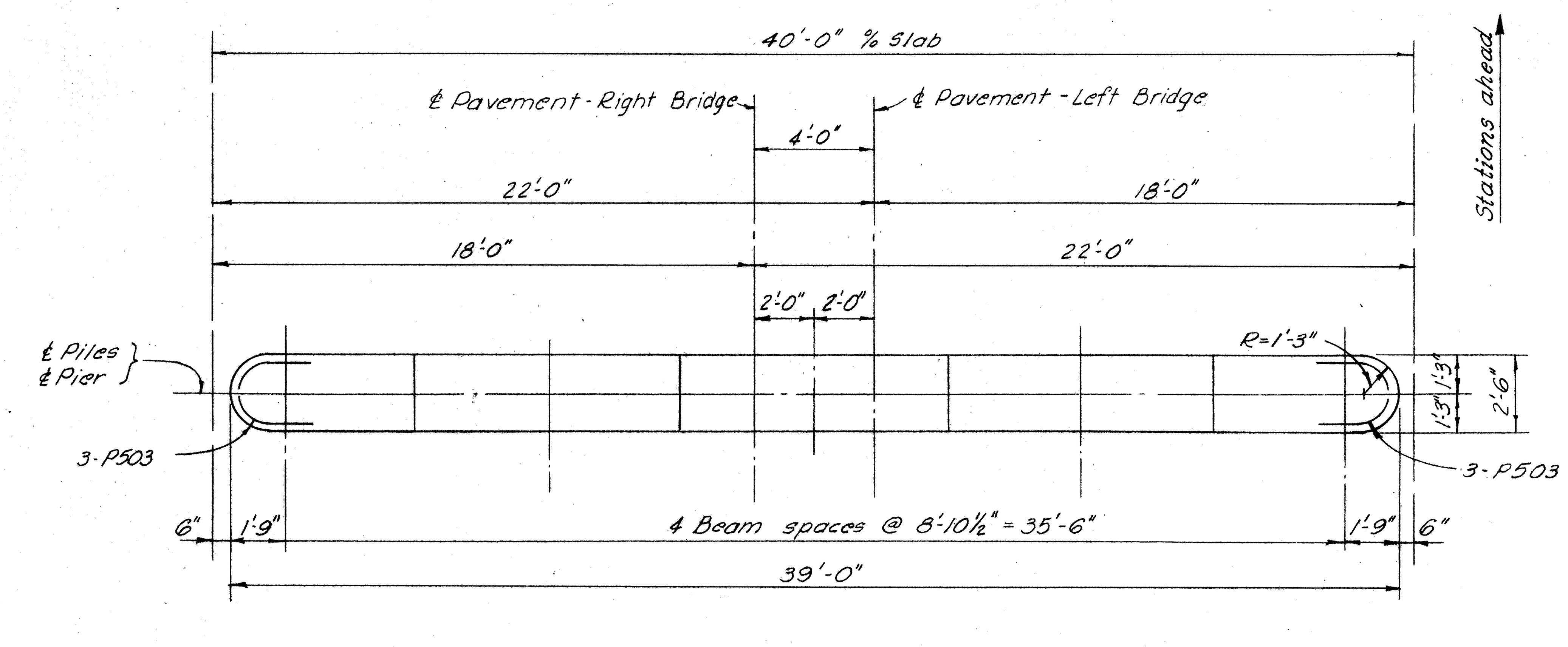
ABUTMENTS

BRIDGE ASD-30-1193 L & R
OVER GLENN RUN

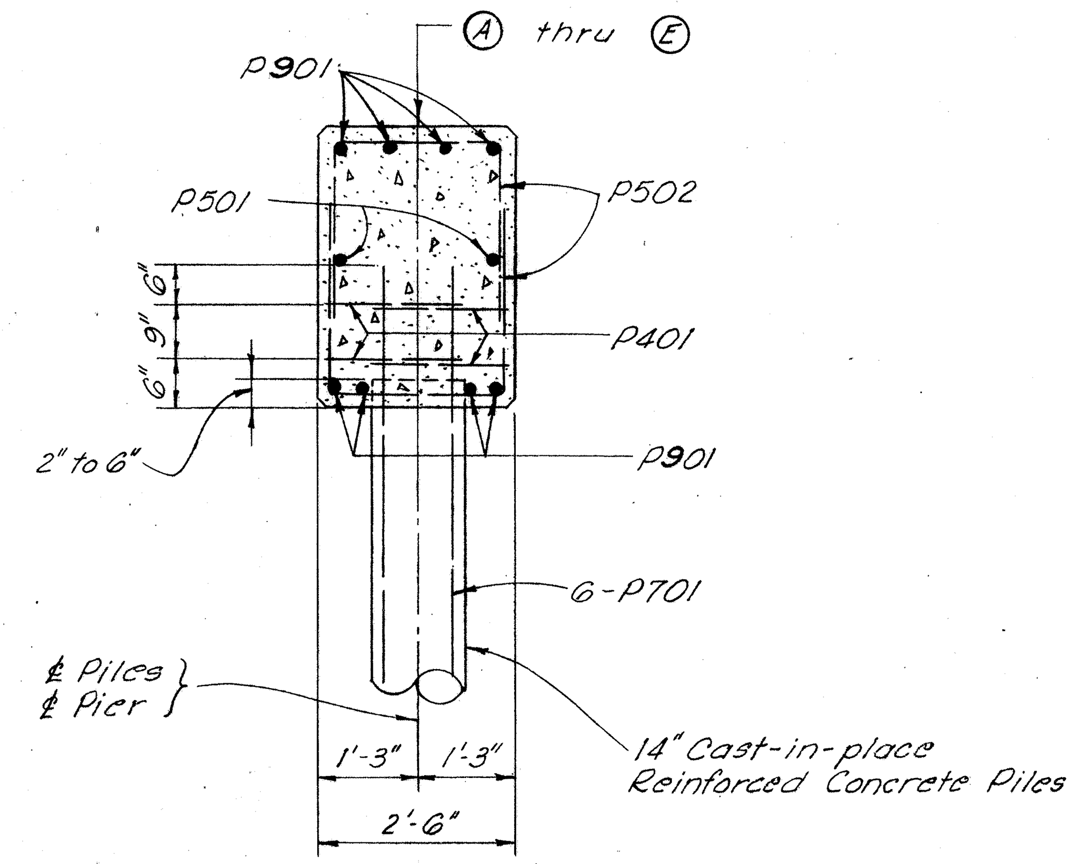
ASHLAND COUNTY U.S.R. 30
STA. 630 + 20.16 TO STA. 631 + 35.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.G.	J.E.G.	LH.	R.A.K.			

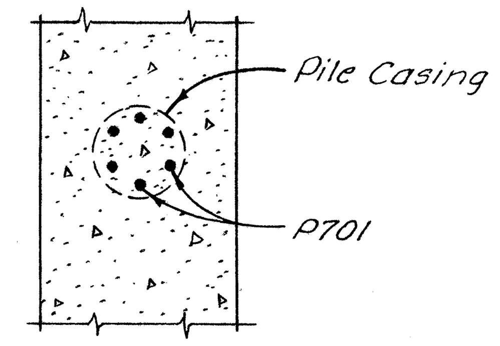
ASD-30-8.52
WAY-30-0.00



PLAN



SECTION A-A



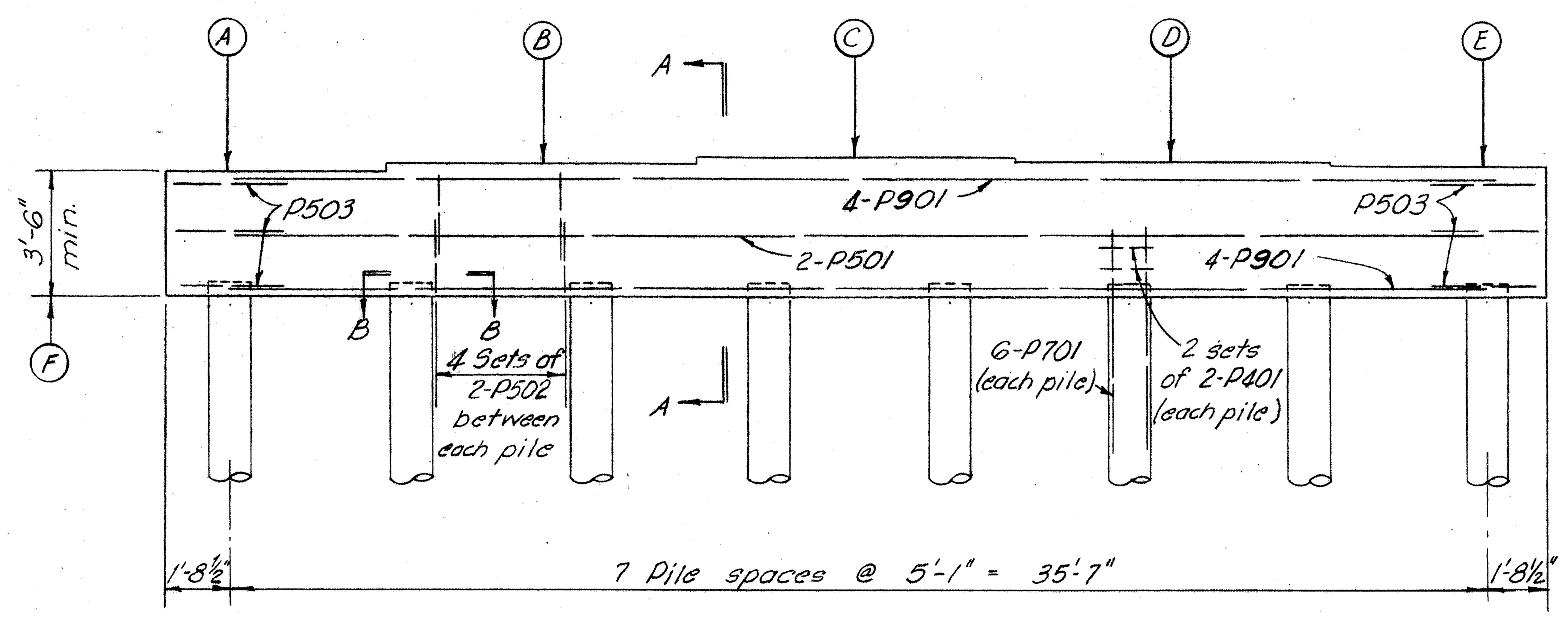
SECTION B-B

NOTES:

CONCRETE: All pier concrete shall be Class "C".

PILE CONCRETE for Cast-in-place Reinforced Concrete Piles shall be Class "C" and shall be included in the bid price per lineal foot for Item S-18.

GENERAL NOTES: See Sheet 164.



ELEVATION
Right Bridge Piers - shown
Left Bridge Piers - opposite hand

TABLE OF ELEVATIONS						
LOCATION	A	B	C	D	E	F
Rear Piers	970.77	970.90	970.98	970.84	970.70	967.20
Forward Piers	971.81	971.95	972.02	971.88	971.74	968.24

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MANSFIELD, OHIO.

PIERS

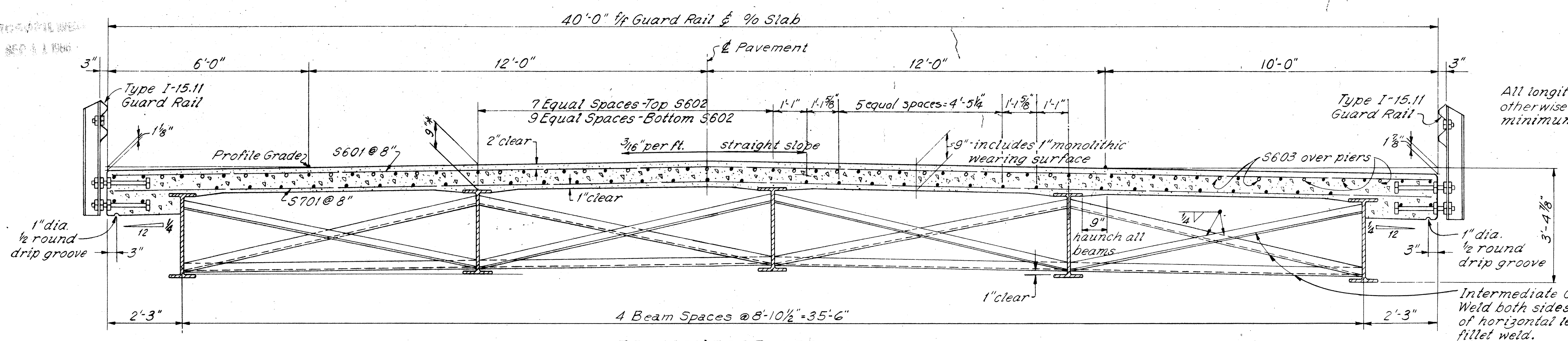
BRIDGE ASD-30-1193 L & R
OVER GLENN RUN

ASHLAND COUNTY U.S.R. 30
STA. 630 + 20.16 TO STA. 631 + 35.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	ED	RAK			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

ASD-30-8.52
WAY-30-0.00



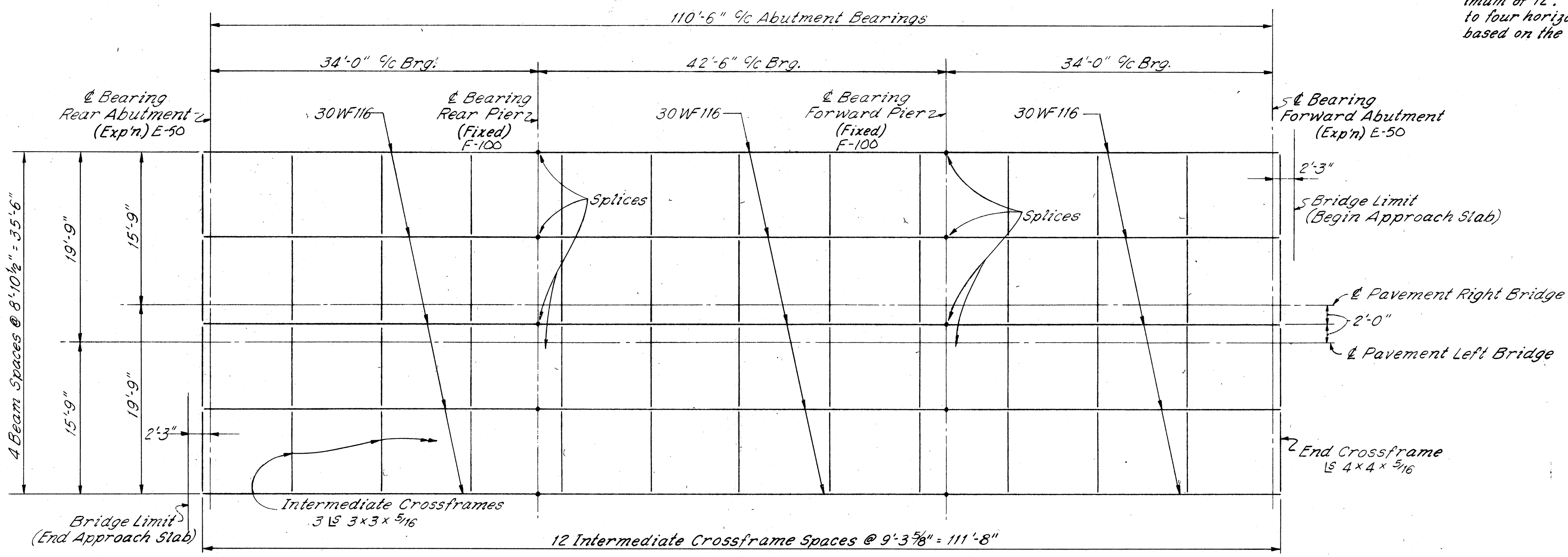
TRANSVERSE SECTION

All longitudinal bars S602 except as otherwise shown. Lap 1'-11" minimum.

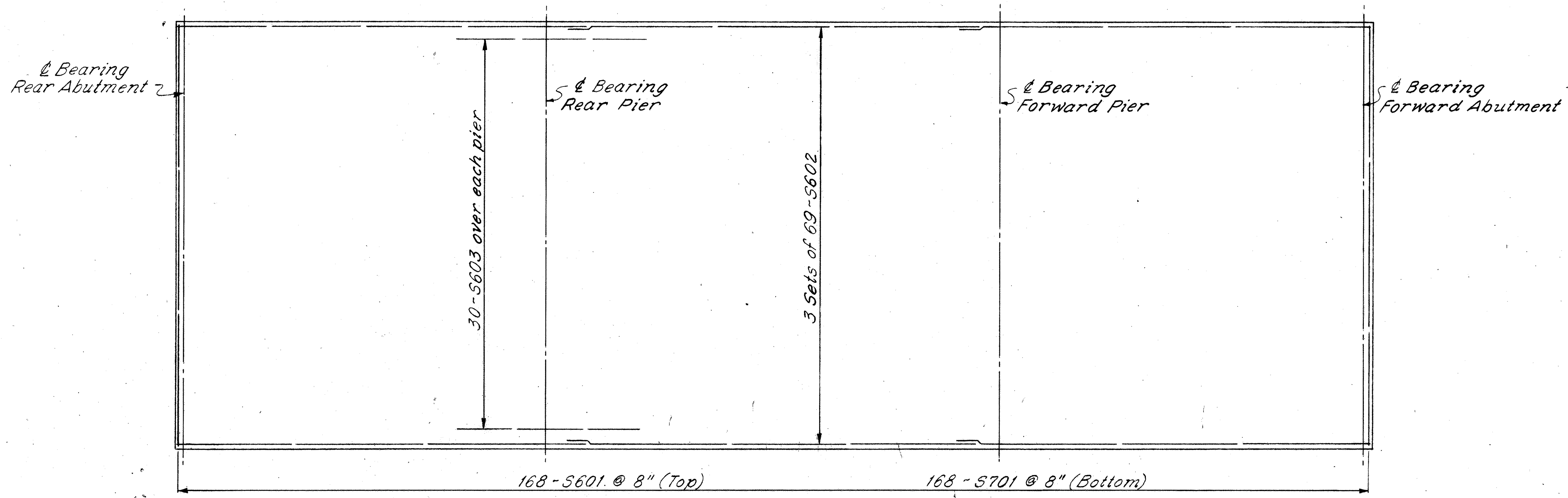
* This is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

Intermediate Crossframe angles 3×3×5/16. Weld both sides of vertical leg and top side of horizontal leg to beam with 1/4" continuous fillet weld.

DECK BEAM HAUNCH: The haunch in the deck slab adjacent to the top of the steel beams, which is shown as 9" wide, may vary from this dimension with a minimum of 6" and a maximum of 12". Maximum slope of haunch shall be one vertical to four horizontal. Payment for deck slab concrete shall be based on the 9" width.



FRAMING PLAN



SLAB PLAN

NOTES:

BEAM SPLICE DETAILS (without moment plates), END CROSSFRAMES, END DAM DETAILS AND JOINTS, RAILING DETAILS, See Std Dwg. CSB-1-55, sheets 1, 2 and 7 of 8.

CAMBER: No camber required.

RAILING POST SPACING See sheet 164.

GENERAL NOTES: See sheet 164.

BEAM WEB WELDS: Butt welds in webs of beams may have convex reinforcement in accordance with Sec. S-7.22. Finishing flush by grinding is not required.

BUMPER ANGLES: 8×8×3/4 bumper angles with 3-1/2 web plates shall be placed as shown on Std. Dwg. CSB-1-55 except that the angles shall be placed in full bearing against the abutment before welding.

For Beam Splice Details and Detail A see sht. 155.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

SUPERSTRUCTURE
BRIDGE ASD-30-1193 L&R
OVER GLENN RUN

ASHLAND COUNTY U.S.R. 30
STA. 630 + 20.16 TO STA. 631 + 35.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	LH	RAK			

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A401	112	6'-6" (6'-9")	1	2'-6"	1'-9"	2'-6"			486 (505)
A501	136	14'-(7")4"	1	5'-7"	3'-5"	5'-7"			2033 (2 069)
A502	208	5'-(9")6"	1	1'-10"	3'-5"	6"			1193 (1 247)
A503	4	27'-2"	Str.						113
A504	24	20'-5"	Str.						511
A505	24	23'-10"	1	20'-5"	3'-5"	0			597
A506	56	27'-1"	Str.						1 582
A507	16	25'-10"	Str.						431
A508	8	12'-0"	Str.						100
A509	8	8'-9"	Str.						73
A510	8	4'-2"	Str.						35
A511	80	Varies	Str.	Varies from 9'-1" to (5'-5") 7'-1", 16 each by 1"					676 (605)
A512	20	8'-3"	Str.						172
A513	20	8'-1"	Str.						169
A514	8	4'-2"	Str.						35
A515	32	9'-1"	Str.						303
		13'-4"							
A601	96	(14'-0")	3	2'-0"	10"	5'-7"	1'-4"	4'-3"	1923 (2 019)
A602	64	12'-(6")2"	1	5'-7"	1'-4"	5'-7"			1170 (1 202)
A701	168	4'-0"	Str.						1 374
A801	32	20'-10"	Str.						1 780
								Total	(14 922) 14756

PIERS

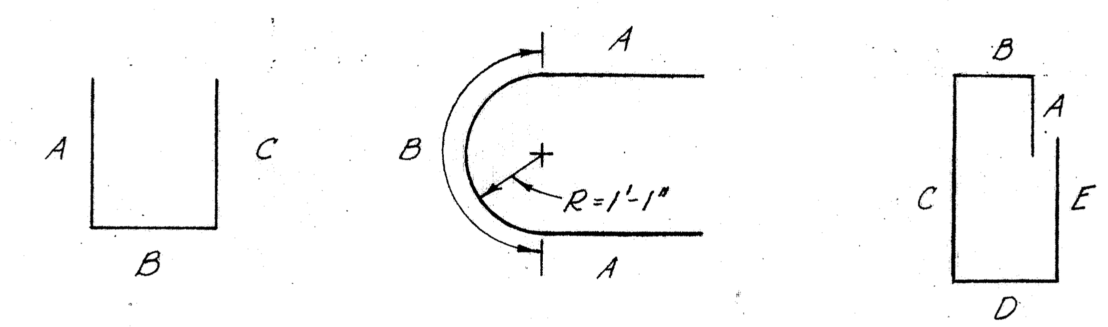
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P401	128	4'-10" (5'-1")	1	1'-8"	1'-9"	1'-8"			413 (435)
P501	8	36'-6"	Str.						305
P502	224 (112)	6'-9" (7'-0")	1	2'-5"	2'-2"	2'-5"			1577 (818)
P503	24	6'-(4")6"	2	1'-7"	(3'-8")				163 (159)
					3'-4"				
P901	32	36'-6"	Str.						3971
P701	192	4'-0"	Str.						1570
								Total	(7,258) 7,999

SUPERSTRUCTURE

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
S601	336	39'-8"	Str.						20 019
S602	414	38'-6"	Str.						23 940
S603	120	17'-0"	Str.						3 064
S701	336	39'-8"	Str.						27 242
								Total	74 265

REPLACEMENT BARS

MARK	NO.	LENGTH
RE400	1	5'-3"
RE500	1	5'-7"
RE600	3	5'-10"
RE700	2	6'-2"
RE800	1	6'-6"
RE900	1	6'-10"



TYPE 1 TYPE 2 TYPE 3

ESTIMATED QUANTITIES - 2 BRIDGES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTS	PIERS	SUPER	GENERAL
E-2	388	Cu. Yds.	Unclassified excavation	388			
E-3	3113	Cu. Yds.	Channel excavation				3113
S-1	268	Cu. Yds.	Class "C" concrete, superstructure			268	
S-1	50	Cu. Yds.	Class "C" concrete, pier caps		50		
S-1	197	Cu. Yds.	Class "E" concrete, abutments	197			
S-4	(96,445) 97,020	Lbs.	Reinforcing steel	(14,922) 14,756	(7,258) 7,999	74,265	
S-7	167,848	Lbs.	Structural steel			167,848	
S-8	167,848	Lbs.	Field painting of structural steel			167,848	
S-14	460	Lin. Ft.	Railing (Type I-15.11 with galvanized bolts and posts)			460	
S-16	Lump	Sum	First Test Pile				Lump
S-17	Lump	Sum	First pile test load				Lump
S-17	1	Each	Subsequent pile test load				1
S-18	3,340	Lin. Ft.	14" cast-in-place reinforced concrete piles	1,460	1,880		
S-29	67	Cu. Yds.	Porous backfill	67			
I-10	512	Sq. Yds.	Crushed aggregate slope protection.				512
I-10	988	Cu. Yds.	Dumped rock channel protection.				988
S-101	268	Each	Water-reducing, set-retarding admixture			268	

NOTES

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the **bar size number**. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

FIRST PILE TEST LOAD and subsequent pile test load to be applied if and where directed by the Engineer.

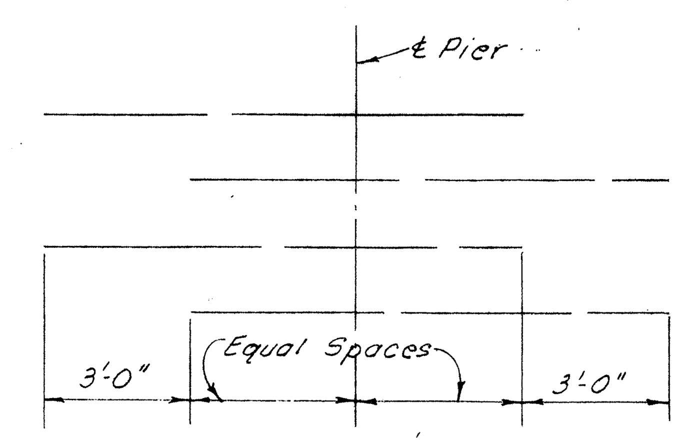


DIAGRAM SHOWING STAGGER OF S603 BARS OVER PIERS

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

REINFORCING STEEL LIST & ESTIMATED QUANTITIES
BRIDGE ASD-30-1193 L & R
OVER GLENN RUN

ASHLAND COUNTY U.S.R. 30
STA. 630 + 20.16 TO STA. 631 + 35.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.G.	J.E.G.	ED	R.A.K.			6-5-64

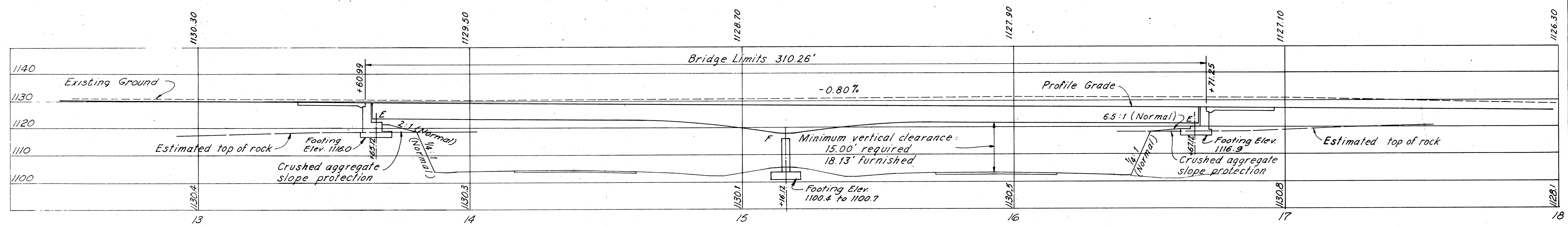
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

169
198

ASD-30-8.52
WAY-30-0.00

FOUNDATION INVESTIGATION LEGEND
- Indicates core boring
- Indicates rod sounding

FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus, or in the Division office, but the State assumes no responsibility for the accuracy thereof.



PROPOSED STRUCTURE

TYPE: Continuous welded haunched steel girder with reinforced concrete deck and substructure.
SPANS: 2 @ 151'-0"
ROADWAY: 24'-0" f/f 2'-3" safety curbs
LOAD FREQUENCY: CF 130 (57)
WEARING SURFACE: 3/4" monolithic conc.
APPROACH SLABS: AS-1-54 (25' long)
SKEW: 56°-59'-13" L.F.
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC: 129 (1981)

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

SITE PLAN

BRIDGE No. ASD-30-1283
U.S.R. 30 UNDER C.R. 62
ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	RAK				

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072(8)	

ASD-30-8.52
WAY-30-0.00

PLAN

ELEVATION

ESTIMATED QUANTITIES

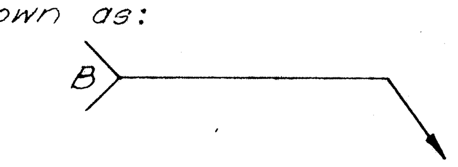
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUTS	PIERS	GEN'L		
E-2	483	Cu. Yds.	Unclassified excavation		483				
E-2	97	Cu. Yds.	Rock excavation		69	28			
S-1	301	Cu. Yds.	Class "C" concrete, superstructure	301					
S-1	18	Cu. Yds.	Class "C" concrete, pier columns			18			
S-1	238	Cu. Yds.	Class "E" concrete, abutments		238				
S-1	16	Cu. Yds.	Class "E" concrete, pier footings			16			
S-3	18	Lin. Ft.	Waterproofing, premolded sealing strip		18				
94,817 S-4	95,299	Lbs.	Reinforcing steel 74609	74,715	16,258 15,764	4326	~~4444~~		
S-7	505,316	Lbs.	Structural steel	505,316					
S-8	505,316	Lbs.	Field painting of structural steel	505,316					
S-14	725	Lin. Ft.	Railing Type "A" (Aluminum rail, supports & concrete parapet)	612	113				
	723.91			611.33	112.58				
S-29	10	Each	~~Scuppers, including supports~~	10					
S-29	51	Cu. Yds.	Porous backfill	51					
I-10	166	Sq. Yds.	Crushed Aggregate slope protection				166		
S-101	301	Each	Water-reducing, set-retarding admixture	301					

GENERAL NOTES

REFERENCE shall be made to Std. Dwgs. AS-1-54 (revised 7-5-62), AR-1-57 (revised 4-2-62), CSB-2-56 sheets 1,2 and 3 of 6 (revised 2-2-59) and RB-1-55 revised 2-2-59.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways dated 9-1-57 together with current revisions thereof.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop. Class "B" welds are shown as:



~~REFERENCE shall be made to Supplemental Specification S-101 and S-307 dated 7-12-62 and 8-23-60 respectively.~~

BRIDGE SEATS: Special care must be taken in placing bars in the bridge seats so that they will not interfere with the drilling of holes for anchor bolts.

PARAPETS: R502 thru R508 reinforcing bars and concrete above the parapet construction joint shall be included in the price per lineal foot of railing for payment.

POROUS BACKFILL shall extend upward to the subgrade elevation and for the full length of the abutment.

FOOTINGS shall extend a minimum of 3" into undisturbed rock or to the elevation shown, whichever is lower.

~~MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.~~

~~SURFACE FINISH OF CONCRETE: The requirements of Sec. S-1.22, Rubbed Finish, shall apply to the following concrete surface.~~
~~a.) The entire superstructure except the top and bottom surfaces of sidewalks and roadways.~~
~~b.) The entire surface of piers and abutments except bridge seats, backwalls and the face of spill-through abutments between outside girders.~~

DESIGN DATA

Design Loading - CF 130 (57)

Concrete Class "C" - basic unit stress 1,333 p.s.i.
Concrete Class "E" - basic unit stress 1,133 p.s.i.

~~STRUCTURAL STEEL - ASTM A36 - basic unit stress 20,000 p.s.i. (ASTM A7 and A373 steel not permitted)~~

~~REINFORCING STEEL - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i. Except, spiral reinforcement may be plain, Structural Grade with basic unit stress of 18,000 p.s.i.~~

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

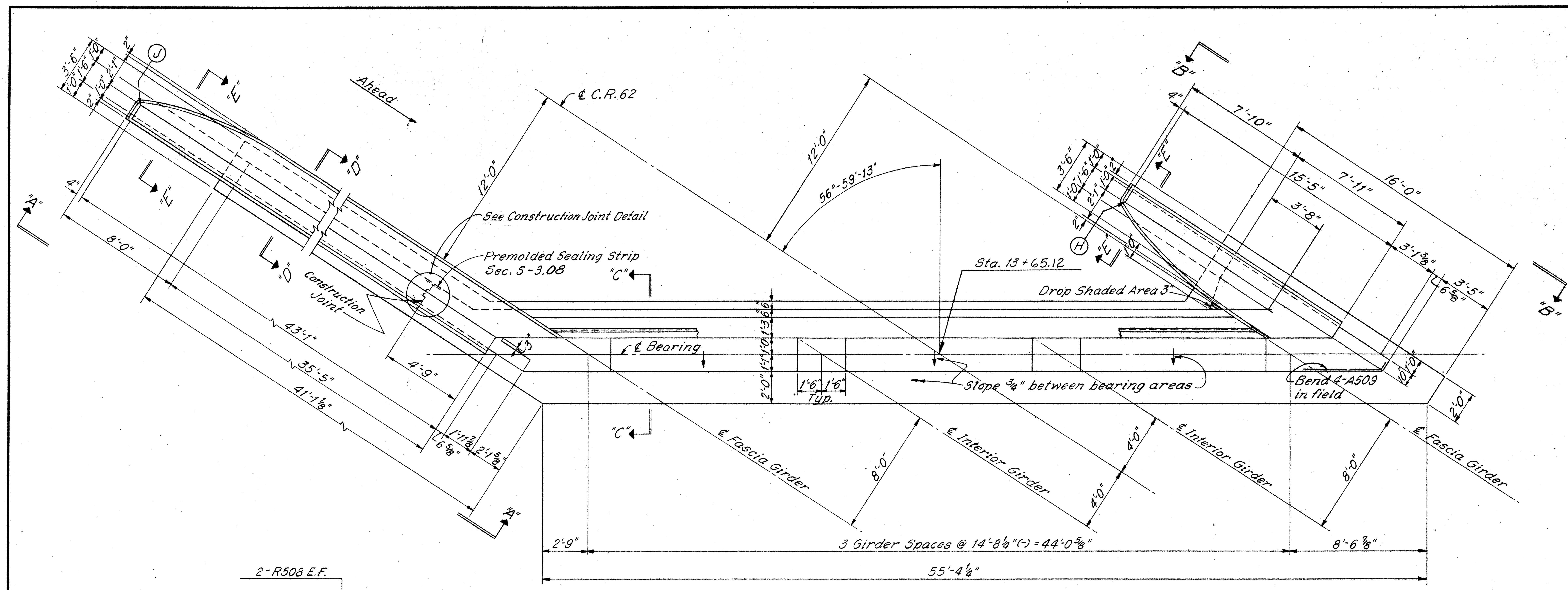
GENERAL PLAN, GENERAL NOTES AND ESTIMATED QUANTITIES
BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

ASHLAND COUNTY — U.S.R. 30
STA. 677 + 46.62

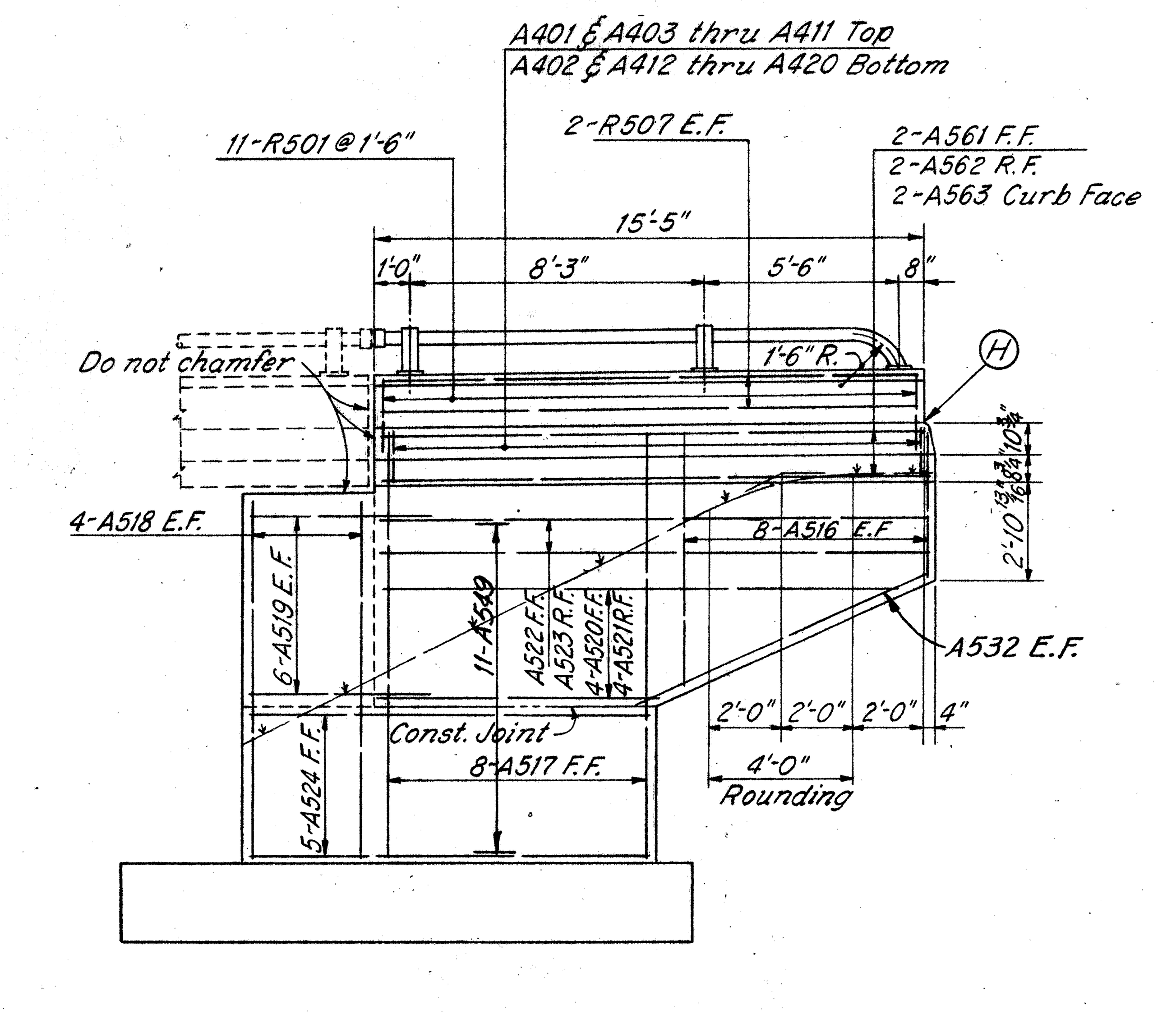
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	JEG	JEG				6-5-64 9-17-64

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

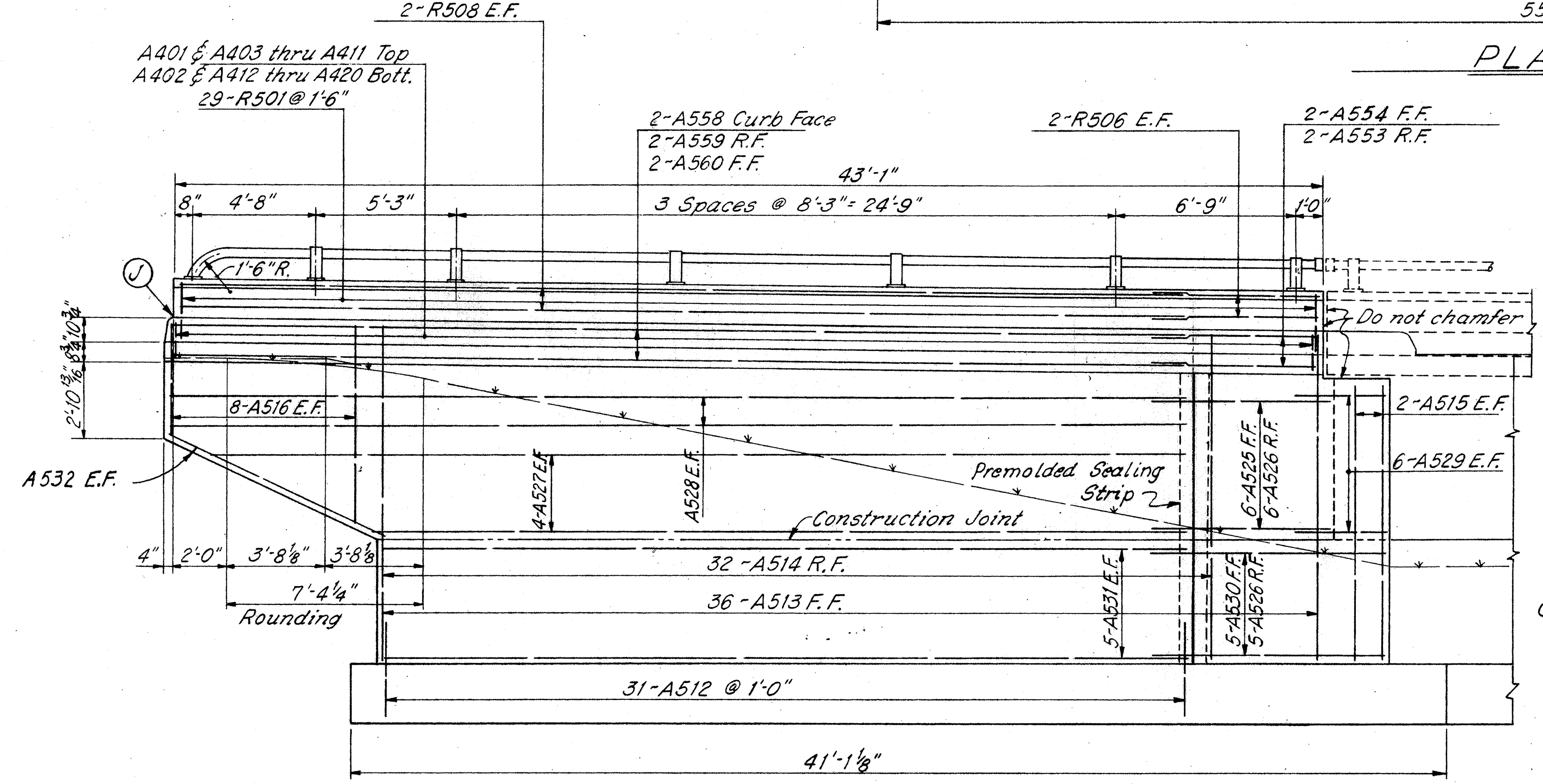
ASD-30-8.52
WAY-30-0.00



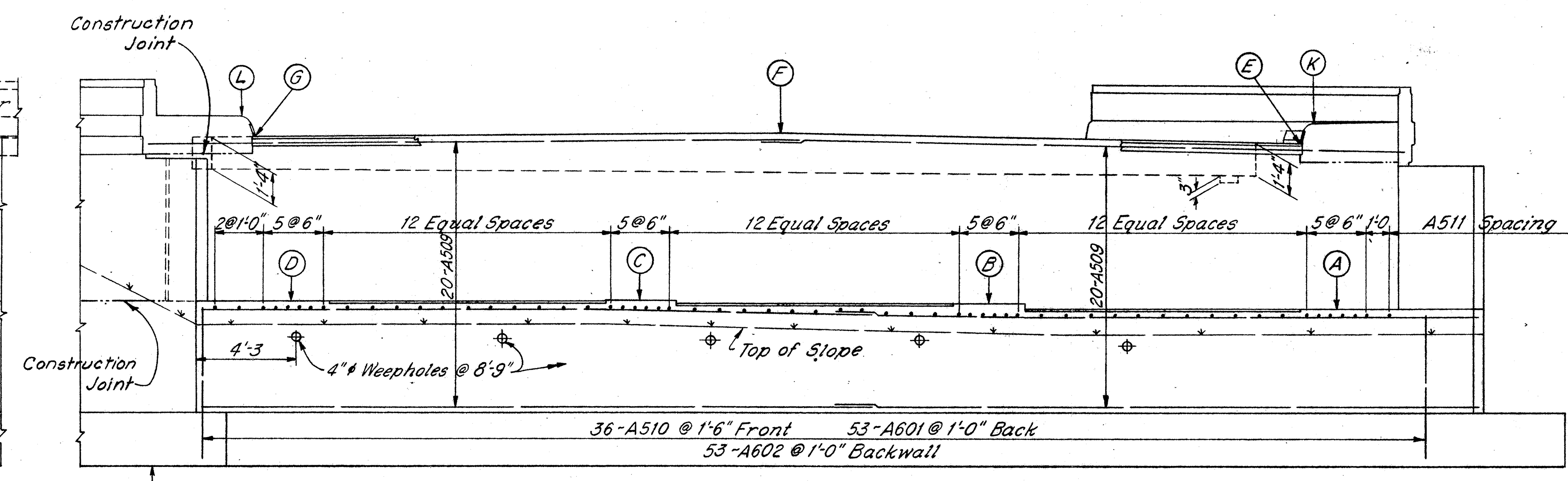
PLAN



VIEW "B-B"



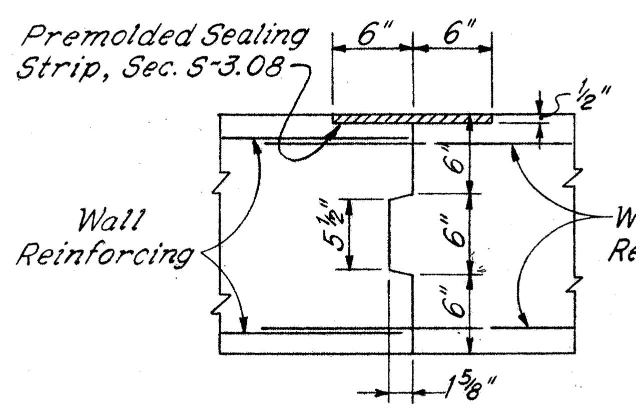
VIEW "A-A"



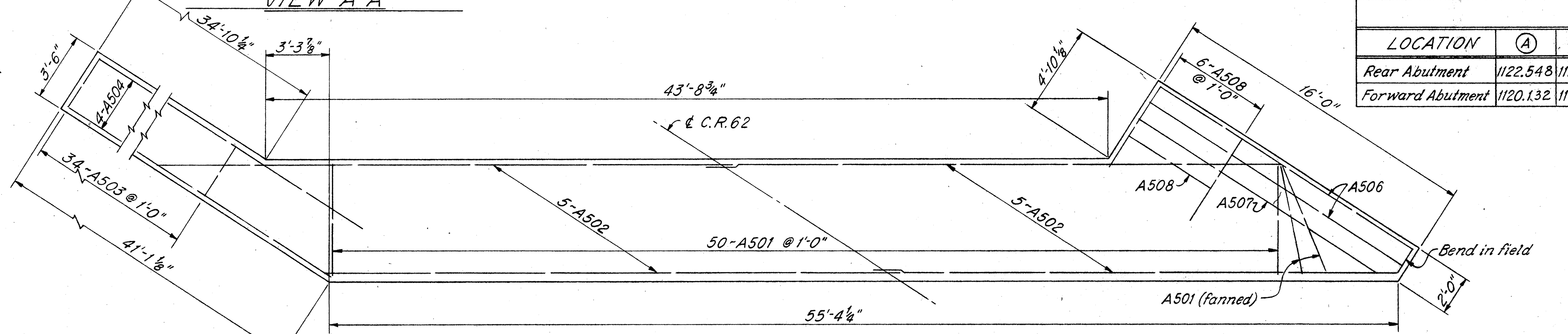
ELEVATION

TABLE OF ELEVATIONS												
LOCATION	A	B	C	D	E	F	G	H	J	K	L	M
Rear Abutment	1122.548	1122.772	1122.870	1122.844	1129.459	1129.794	1129.754	1130.378	1130.951	1130.292	1130.587	1116.00
Forward Abutment	1120.132	1120.356	1120.454	1120.428	1127.013	1127.348	1127.309	1127.495	1128.043	1127.846	1128.142	1116.90

ABUTMENT NOTES: See Sheet 172



CONSTRUCTION JOINT DETAIL



FOOTING PLAN

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

REAR ABUTMENT

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

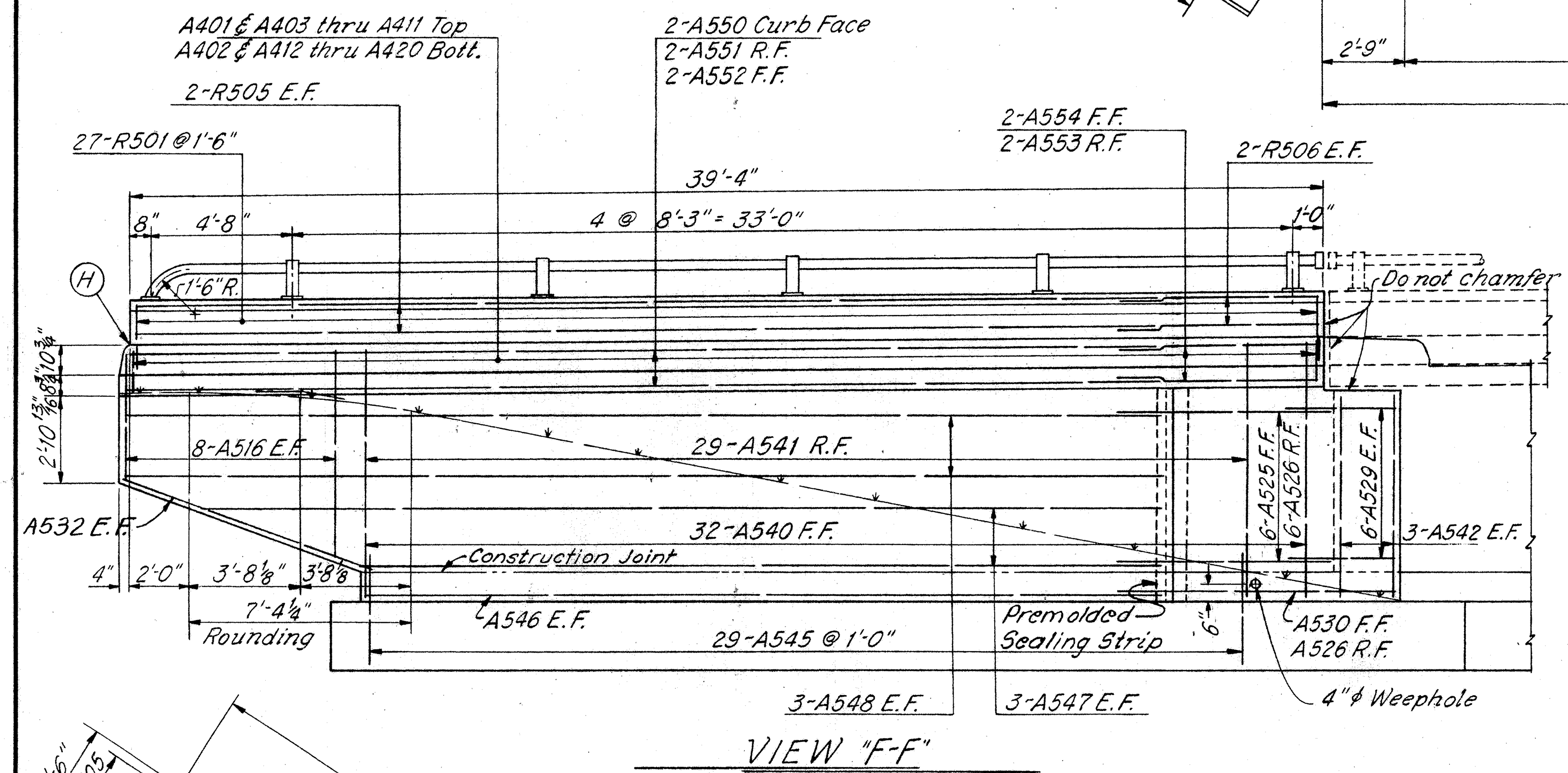
ASHLAND COUNTY U.S.R. 30

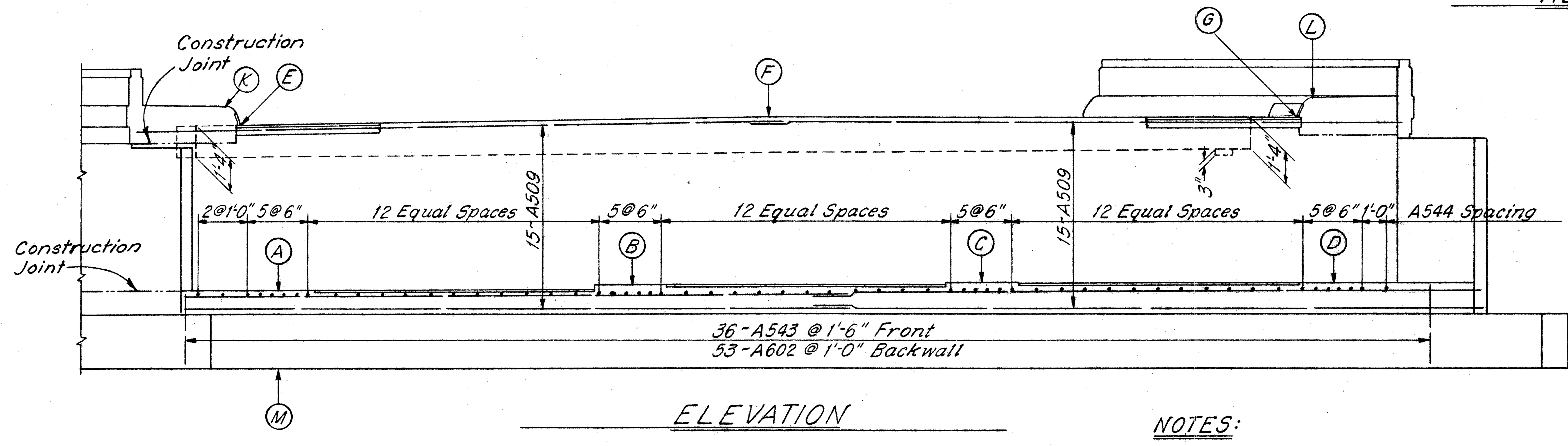
STA. 677 + 46.62

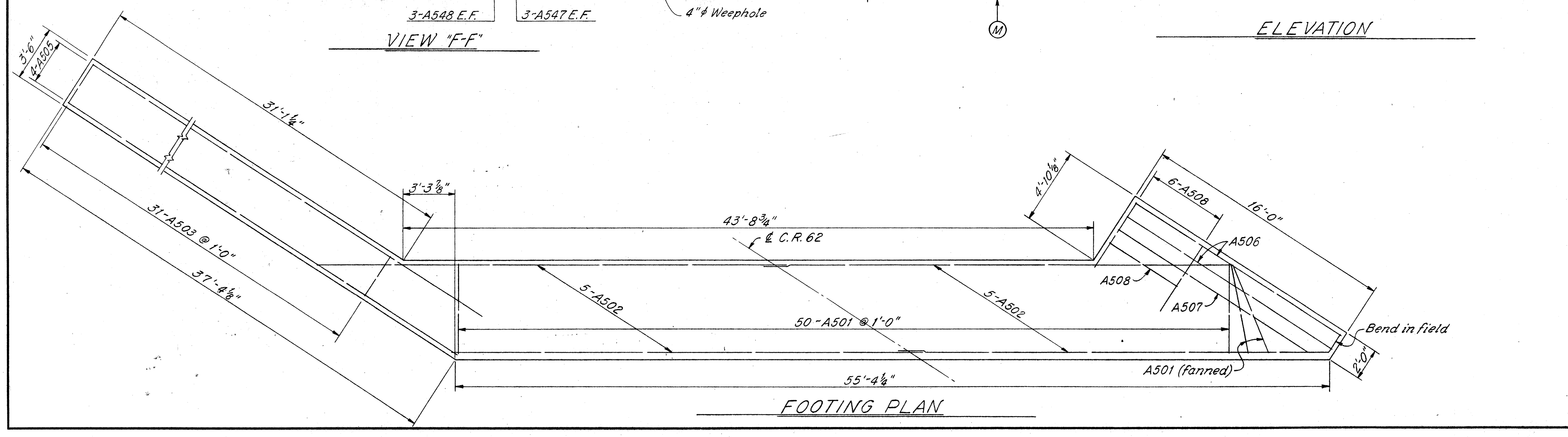
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	LH				

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

ASD-30-8.52
WAY-30-0.00







NOTES:

CONCRETE: All abutment concrete shall be Class "E" except parapet, which shall be Class "C".

EXCAVATION QUANTITY for the abutments, in addition to that outlined in Sec. E-2.09, includes the removal of material bounded by the proposed bench, by the front vertical plane described in Sec. E-2.09 and by the finished slope of the cut.

FOUNDATION BEARING PRESSURE: Abutment footings are designed for a maximum bearing pressure of 1.4 tons per square foot.

NOTATION: F.F.-Front Face; R.F.-Rear Face; E.F.-Each Face.

GENERAL NOTES: See Sheet 170.

RAILING: See AR-1-57.

ABUTMENT DETAILS: See Sheet 173.

CONSTRUCTION JOINT DETAILS: See Sheet 171.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

FORWARD ABUTMENT

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

ASHLAND COUNTY — U.S.R. 30

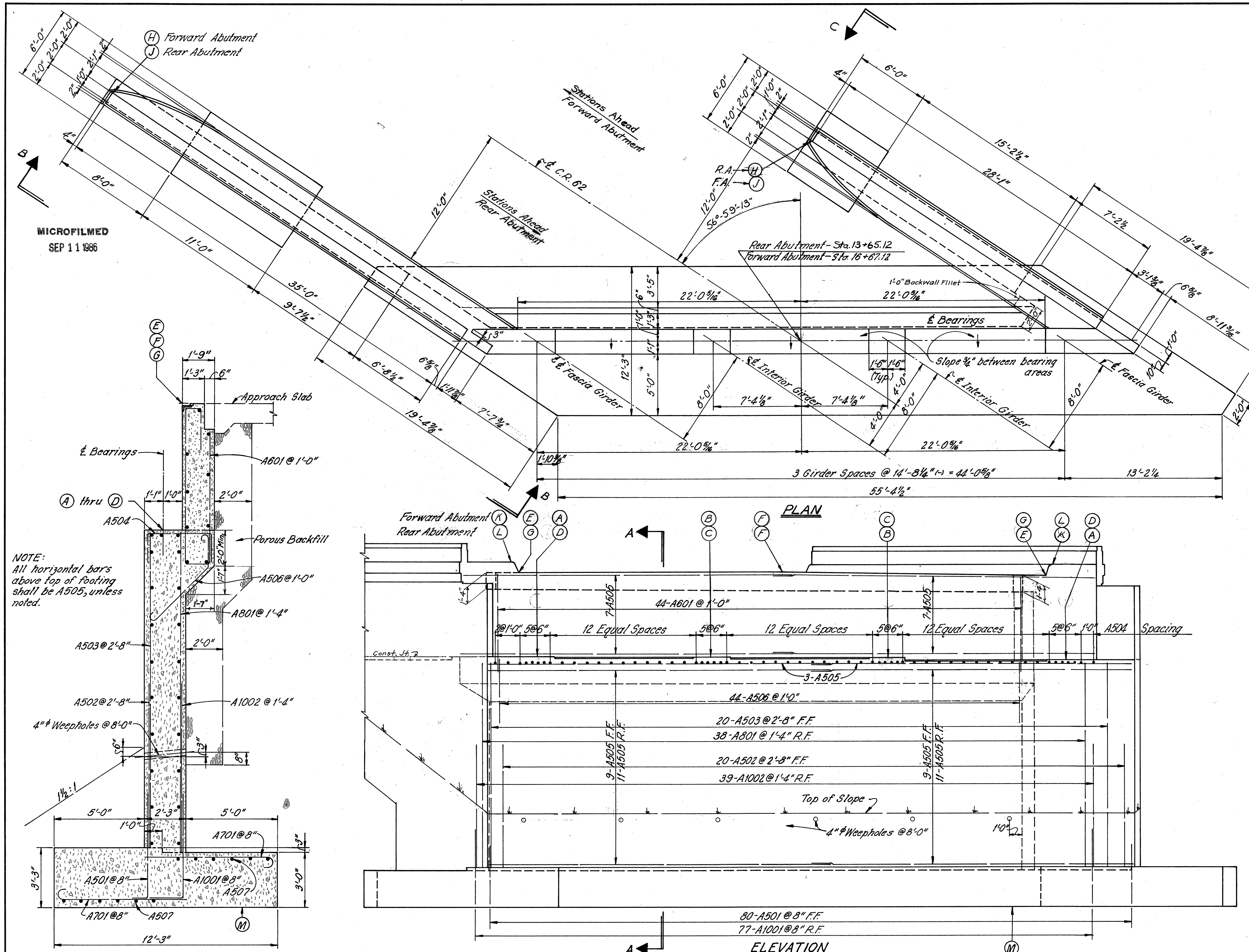
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	UL				

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	50 (1964)

ASD-30-8.52
WAY-30-0.00

Change Order No. 3



NOTES

<u>CONCRETE</u>: All abutment concrete shall be Class "E" except parapet, which shall be Class "C".

<u>FOUNDATION BEARING PRESSURE</u>: Abutment footings are designed for maximum bearing pressure of 2.1 tons per square foot.

<u>NOTATION</u>: F.F. - Front Face; R.F. - Rear Face; E.F. - Each Face
F - Fwd. Abut. R - Rear Abut.

<u>RAILING</u>: See AR-1-57

<u>EXCAVATION QUANTITY</u> for the abutments, in addition to that outlined in Sec. E-2.09, includes the removal of material bounded by the front vertical plane described in Sec. E-2.09 and by the finished slope of cut.

<u>GENERAL NOTES</u>: See Sheet 170.

TABLE OF ELEVATIONS

LOCATION	A	B	C	D	E	F	G	H	J	K	L	M	N	P
Rear Abutment	1122.548	1122.772	1122.870	1122.844	1129.459	1129.794	1129.754	1130.479	1130.886	1130.292	1130.587	1102.25	1114.08	1121.25
Forward Abutment	1120.132	1120.356	1120.454	1120.428	1127.013	1127.348	1127.309	1127.530	1127.936	1127.846	1128.142	1099.80	1111.27	1118.80

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION NO. 3

ABUTMENTS

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62
ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	JEG	H.W.M.			

ASD/WAY-30-8.52/0.00

MICROFILMED SEP 11 1986

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

ASD-30-8.52
WAY-30-0.00

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION NO. 3

ABUTMENT DETAILS

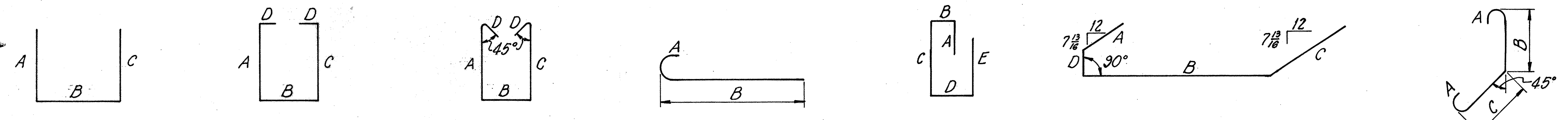
BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62
ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	P.B.	H.W.M.			

ASD/WAY-30-8.52/0.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

ASD-30-8.52
WAY-30-0.00



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6 TYPE 9

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R501	88	5'-9"	3	2'-3"	8"	2'-3"	5"		528
R502	8	34'-8"	Str.						*
R503	8	27'-9"	Str.						*
A1001	154	7'-7"	1	6'-0"	1'-10"	0			5025
A1002	78	10'-3"	Str.						3440
A801	76	17'-1"	Str.						3467
A701	308	7'-10"	4	10"	7'-0"				4931
A702	16	10'-4"	1	4'-6"	1'-8"	4'-6"			338
A703	16	13'-8"	Str.						447
A704	8	11'-4"	4	10"	10'-6"				185
A705	20	5'-4"	4	10"	4'-6"				218
A601	88	19'-8"	5	2'-3"	11"	8'-6"	1'-5"	7'-3"	2599
A602	4	32'-0"	Str.						192
A603	4	22'-6"	Str.						135
A604	10	6'-8"	Str.						100
A605	10	9'-8"	1	4'-2"	1'-8"	4'-2"			145
A501	160	6'-8"	1	6'-0"	10"	0			1113
A502	40	10'-0"	Str.						417
A503	40	16'-11"	Str.						706
A504	120	6'-6"	1	1'-7½"	3'-6"	1'-7½"			814
A505	120	28'-2"	Str.						3525
A506	88	7'-3"	9	7"	1'-7"	4'-6"			665
A507	48	30'-1"	Str.	Bend 4 in Field.					1506
A508	26	6'-4"	1	6½"	5'-6"	6½"			172
A509	18	10'-6"	Str.						197
A510	6	8'-9"	Str.						55
A511	16	5'-6"	Str.						92
A512	6	Varies	Str.	Vary from 10'-2" to 17'-0", Vary 2 ea. by 3'-5"					85
A513	6	Varies	Str.	Vary from 6'-8" to 13'-6", Vary 2 ea. by 3'-5"					63
A514	6	29'-6"	Str.						185
A515	6	26'-3"	Str.						164
A516	2	28'-5"	Str.						59
A517	2	27'-2"	Str.						57
A518	4	35'-4"	Str.						147
A519	4	34'-1"	Str.						142
A520	4	22'-10	Str.						95
A521	10	7'-5"	Str.						77
A522	20	24'-10"	Str.						518
A523	24	Varies	Str.	Vary from 14'-5" to 17'-9", Vary 4 ea. by 8"					403
A524	16	13'-8"	Str.						228
A525	4	6'-5"	Str.						27
A526	16	5'-3"	Str.						88

(1) - Vary from 2'-11" to 14'-3", Vary 2 ea. by 2'-10"
(2) - Vary from 6'-11" to 18'-3", Vary 2 ea. by 2'-10"
* Included with railing for payment.

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A527	4	38'-3"	Str.	Bend in Field					160
A528	4	34'-10"	Str.						145
A529	4	34'-0"	Str.						142
A530	24	8'-0"	6	0	4'-0"	4'-0"	0		200
A531	48	5'-2"	Str.						259
A532	28	10'-7"	1	4'-7"	1'-8"	4'-7"			309
A533	6	22'-10"	Str.						143
A534	18	24'-10"	Str.						466
A535	40	Varies	Str.	Vary from 7'-1" to 16'-10" Vary 4 ea. by 1'-1"					499
A536	10	6'-8"	Str.						70
A537	8	6'-0"	1	0	4'-1"	2'-0"			50
A538	10	Varies	Str.	Vary from 11'-8" to 22'-10" Vary 2 ea. by 2'-9½"					180
A539	10	(2)	1	0	4'-1"	(1)			131
A540	2	21'-10"	Str.						46
A541	2	18'-1"	Str.						38
A542	8	28'-1"	Str.						234
A543	8	24'-4"	Str.						203
A544	4	25'-0"	Str.						104
A401	92	3'-11"	1	8"	2'-10"	8"			241
A402	92	5'-9"	2	1'-2"	2'-10"	1'-2"	5"		353
A403	4	3'-10½"	1	8"	2'-9½"	8"			10
A404	4	3'-9"	1	8"	2'-8"	8"			11
A405	4	3'-7"	1	8"	2'-6"	8"			10
A406	4	3'-5"	1	8"	2'-4"	8"			9
A407	4	3'-3"	1	8"	2'-2"	8"			9
A408	4	3'-1"	1	8"	2'-0"	8"			8
A409	4	2'-8½"	1	8"	1'-7½"	8"			7
A410	4	2'-4"	1	8"	1'-3"	8"			6
A411	4	1'-11½"	1	8"	10½"	8"			5
A412	4	5'-8½	2	1'-2"	2'-9½"	1'-2"	5"		15
A413	4	5'-7"	2	1'-2"	2'-8"	1'-2"	5"		15
A414	4	5'-5"	2	1'-2"	2'-6"	1'-2"	5"		14
A415	4	5'-3"	2	1'-2"	2'-4"	1'-2"	5"		14
A416	4	5'-1"	2	1'-2"	2'-2"	1'-2"	5"		14
A417	4	4'-11"	2	1'-2"	2'-0"	1'-2"	5"		13
A418	4	4'-6½"	2	1'-2"	1'-7½"	1'-2"	5"		12
A419	4	4'-2"	2	1'-2"	1'-3"	1'-2"	5"		11
A420	4	3'-9½"	2	1'-2"	10½"	1'-2"	5"		10
								Total	37,516

ESTIMATED QUANTITIES

ITEM	UNIT	TOTAL	DESCRIPTION
E-2	Cu.Yds.	*250	Unclassified excavation
E-2	Cu.Yds.	*775	Rock excavation
S-1	Cu.Yds.	555	Class "E" concrete, abutment
S-4	Lbs.	37,516	Reinforcing steel
S-14	Lin.Ft.	126	Railing (Type "A" Aluminum rail, supports and concrete parapet)
S-29	Cu.Yds.	127	Porous backfill
			* To be final measured in field

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION NO. 3

REINFORCING STEEL LIST ESTIMATED QUANTITIES

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62
ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

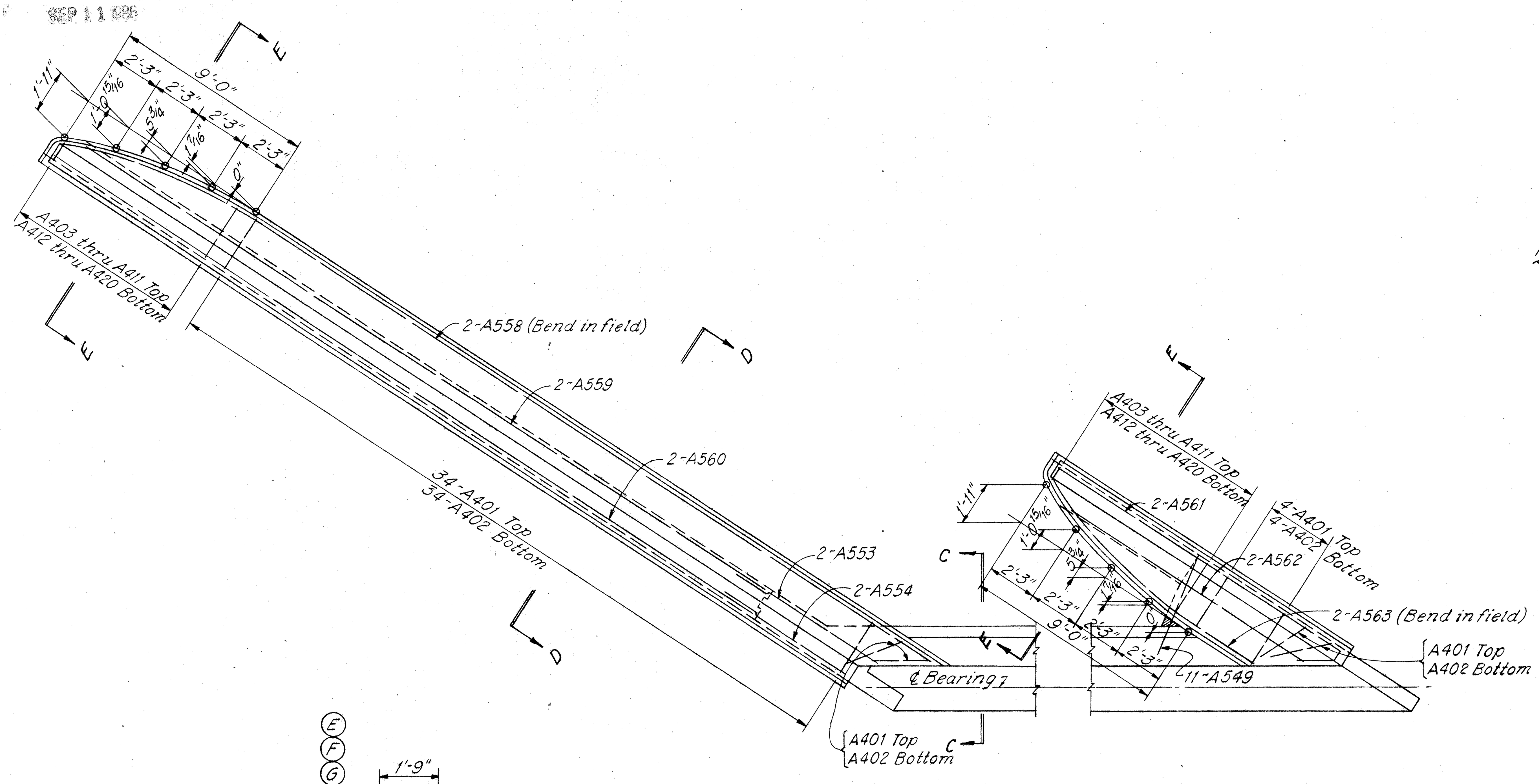
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEG	JEG	JEG	H.W.M.			

ASD/WAY - 30 - 8.52/0.00

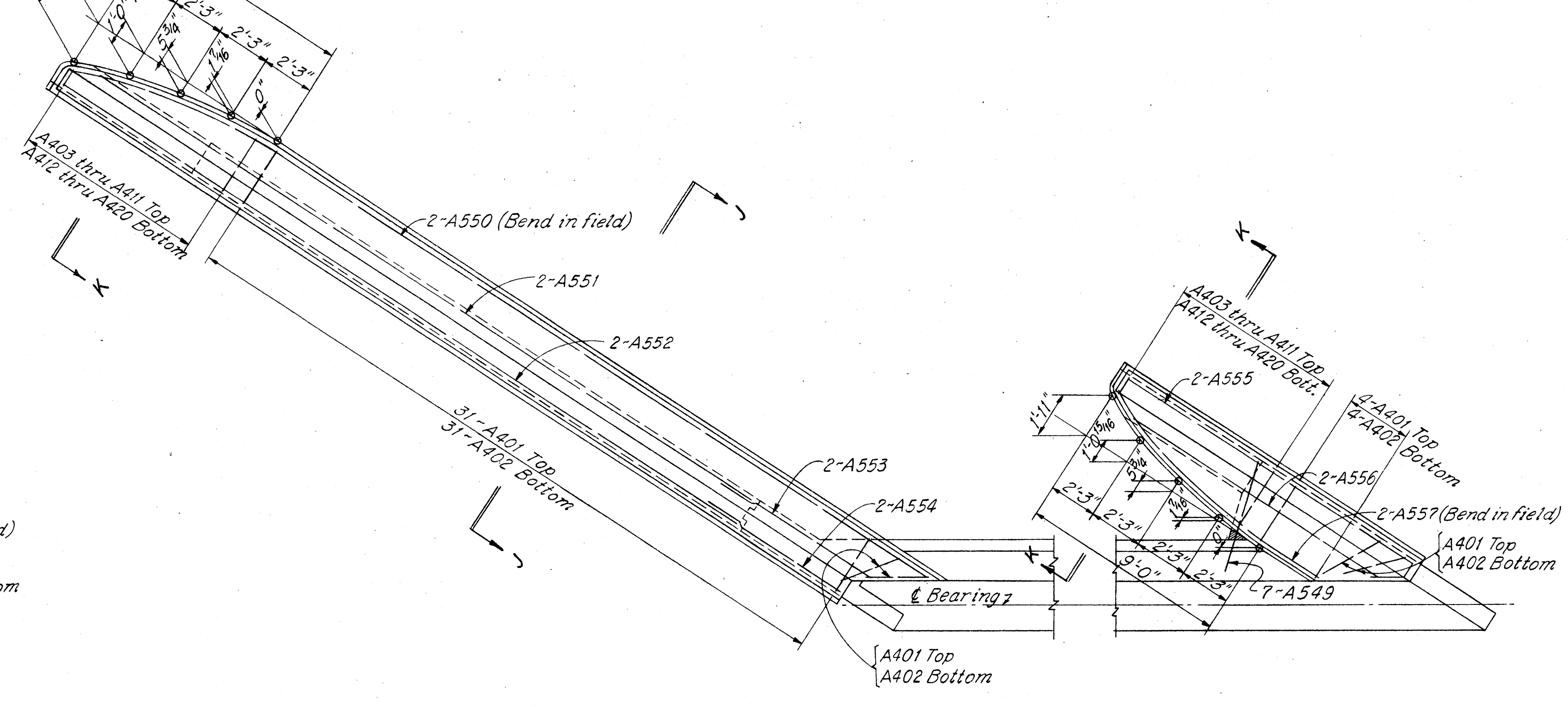
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

173
198

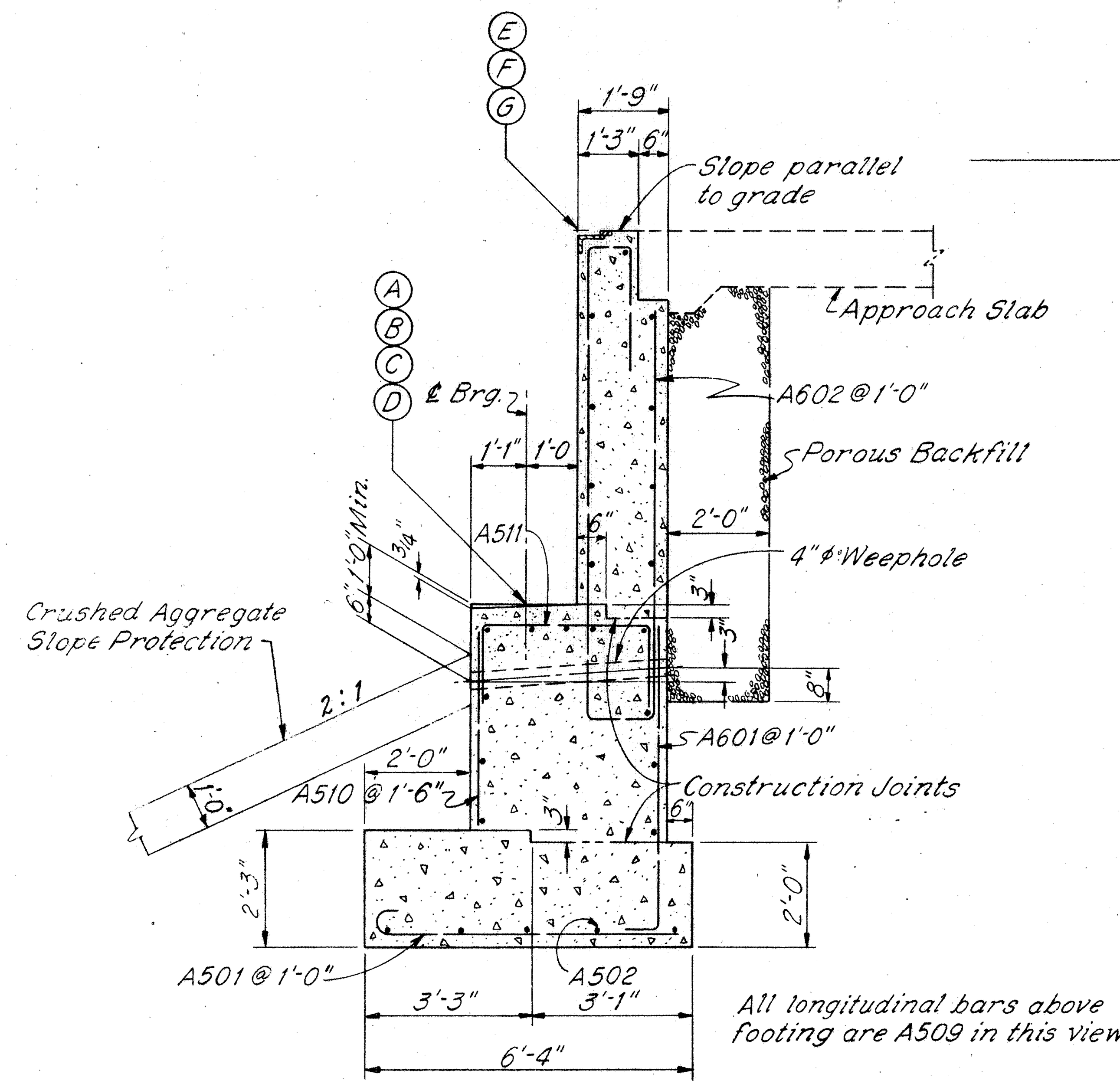
ASD-30-8.52
WAY-30-0.00



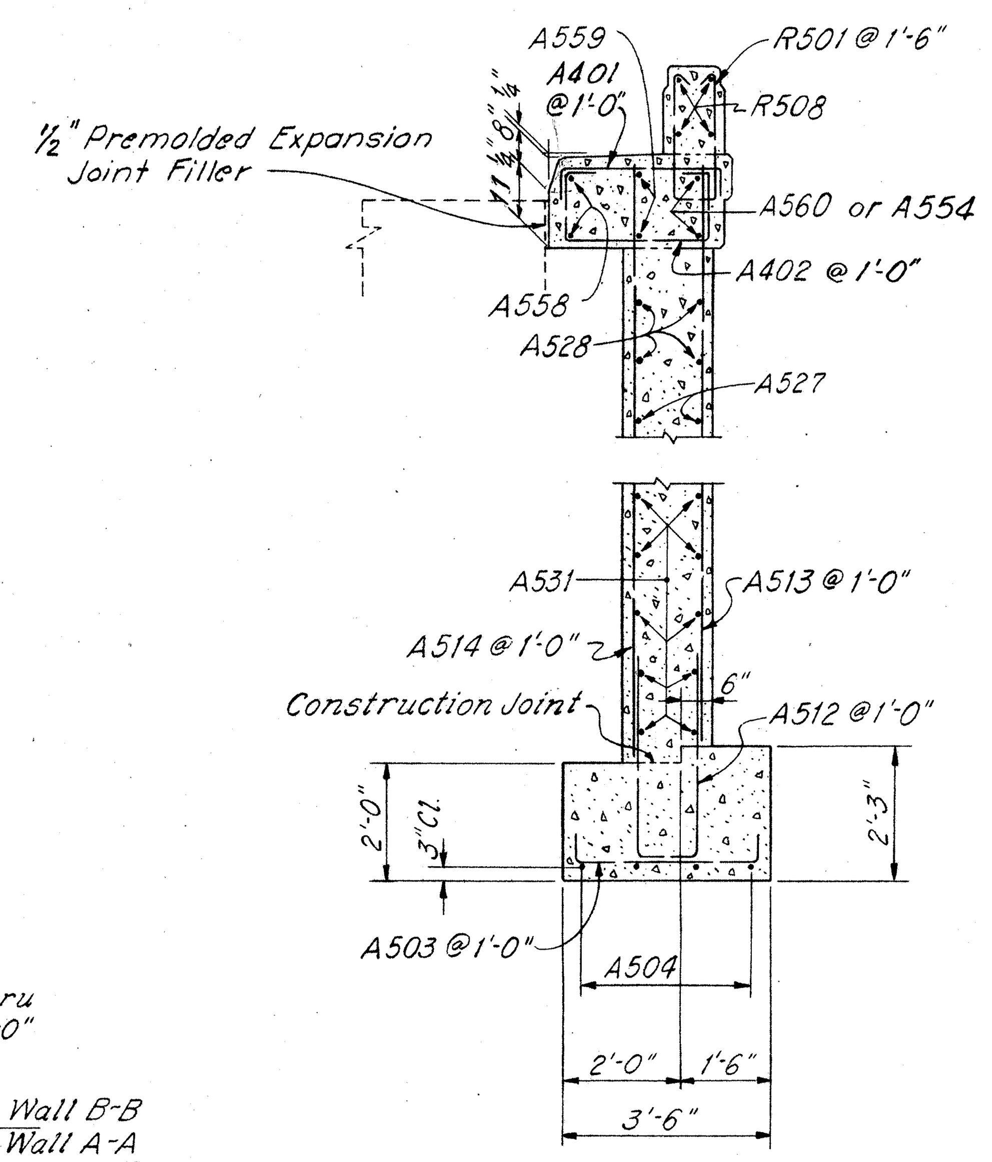
WINGWALL PLAN FOR REAR ABUTMENT



WINGWALL PLAN FOR FORWARD ABUTMENT



SECTION "C-C"



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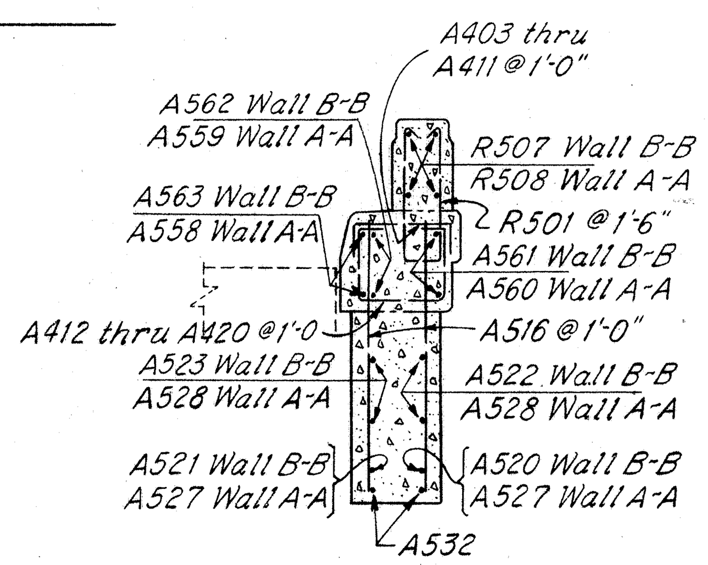
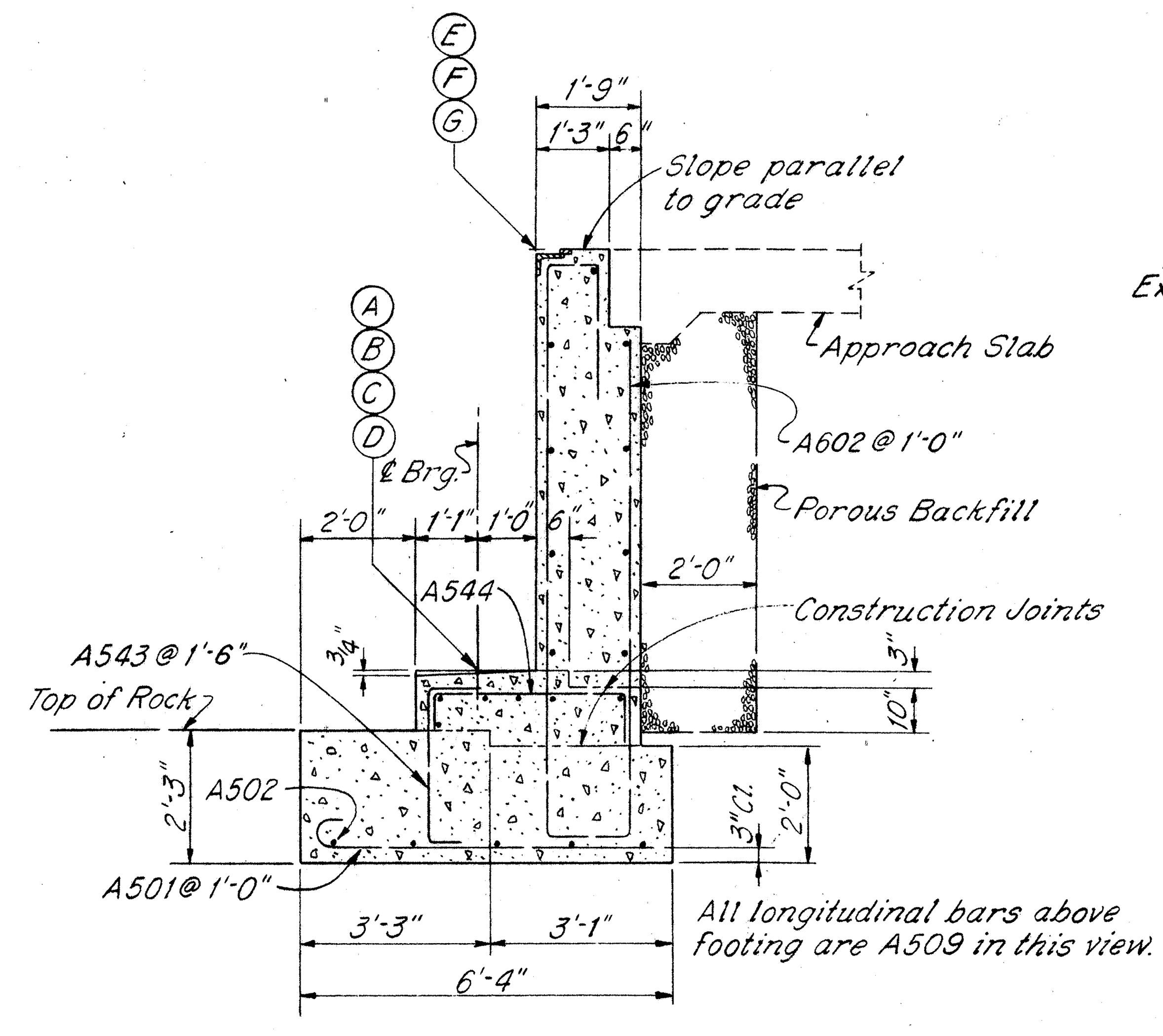
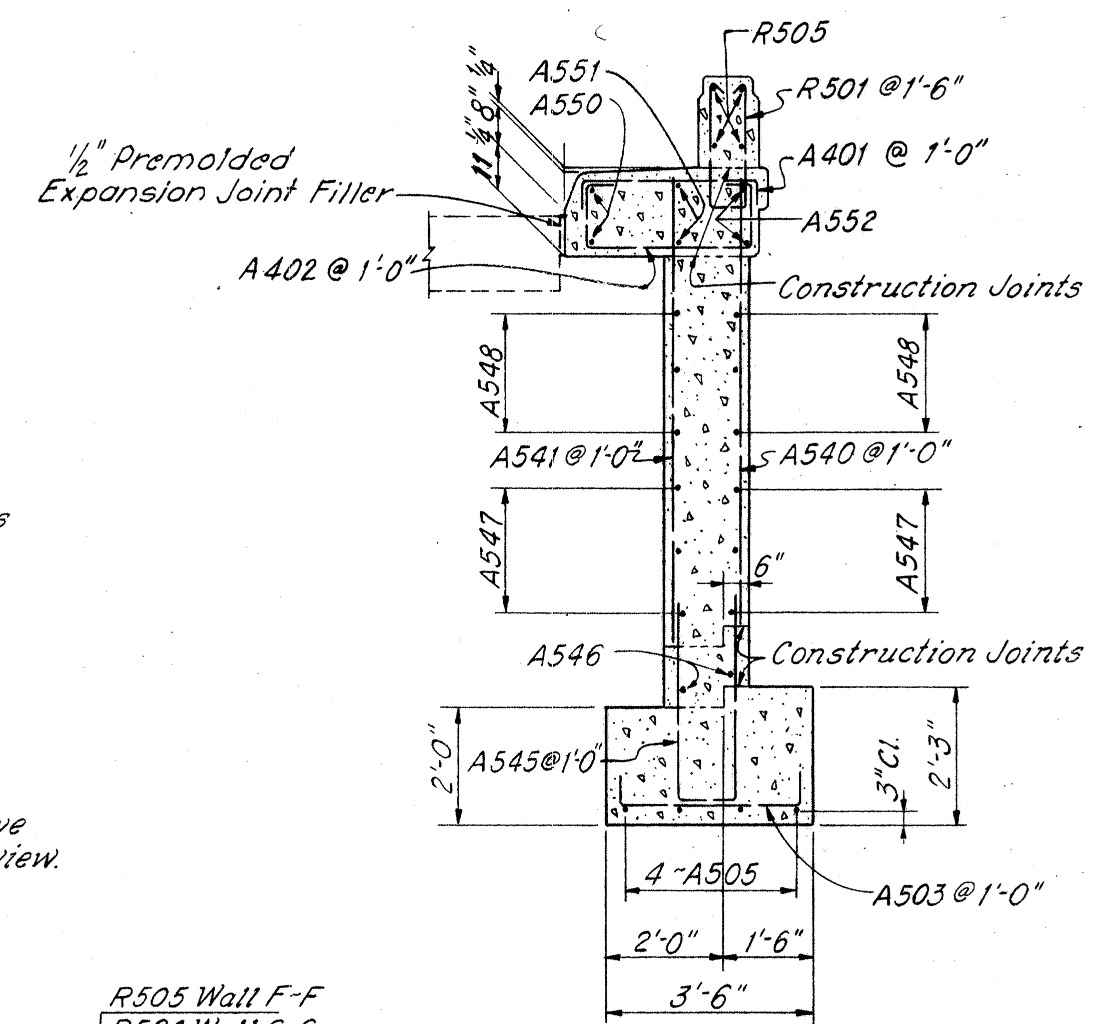


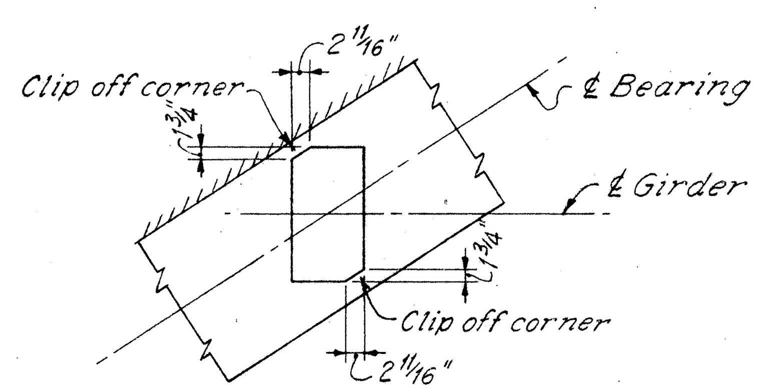
SECTION "E-E"



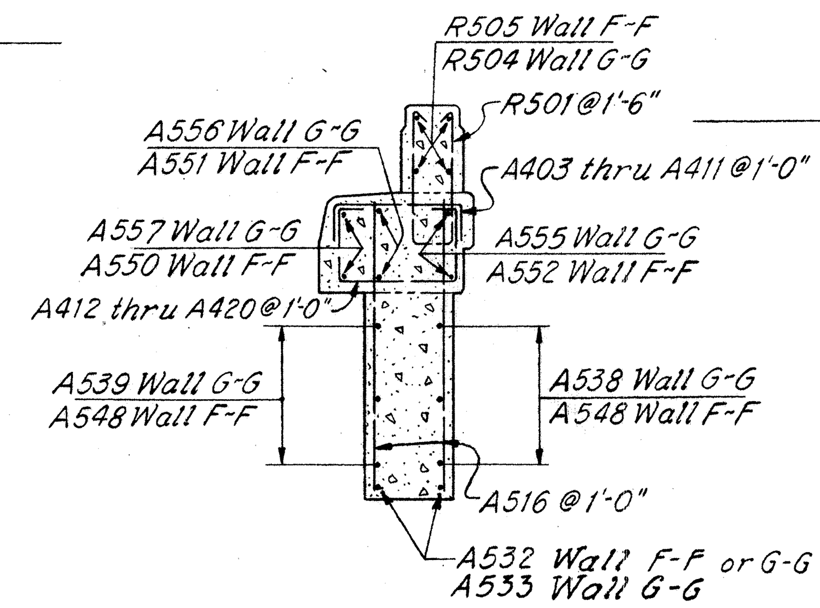
SECTION "H-H"



SECTION "J-J"



ABUTMENT BEARING PLATES



SECTION "K-K"

SHAFFER, PARRETT AND ASSOCIATES
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MANSFIELD, OHIO.

ABUTMENT DETAILS

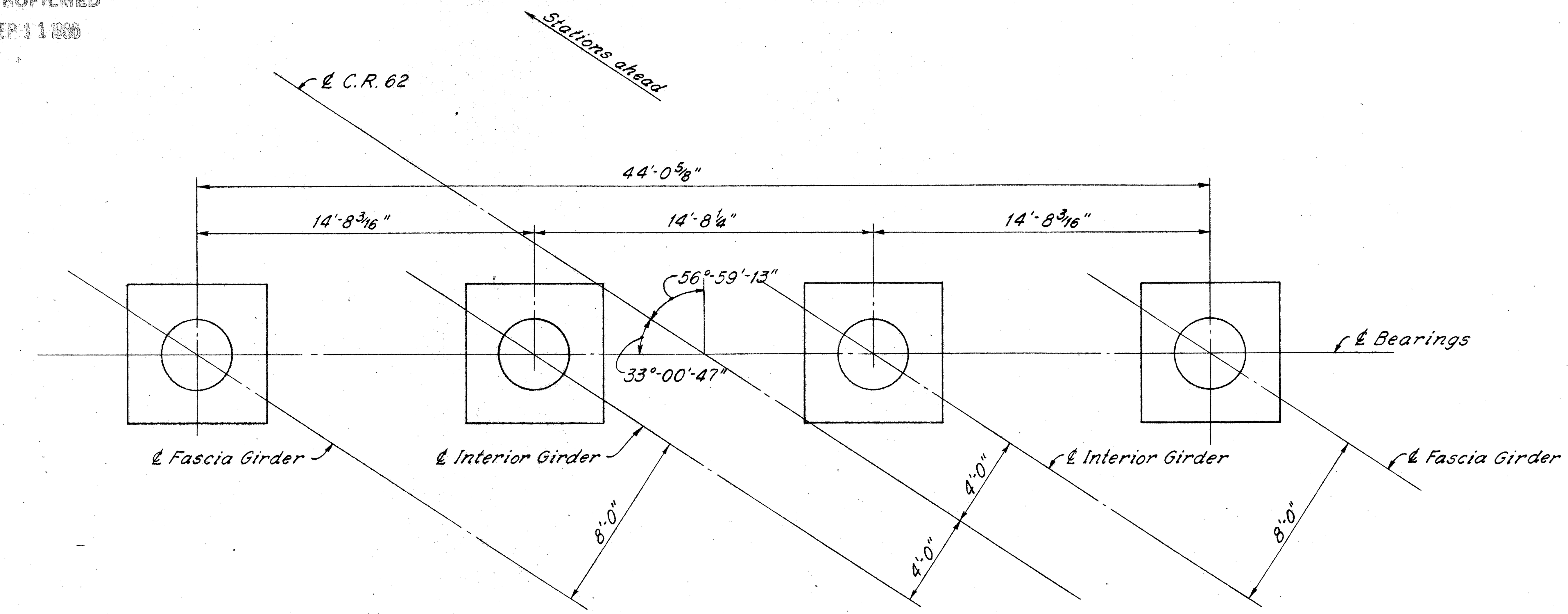
BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

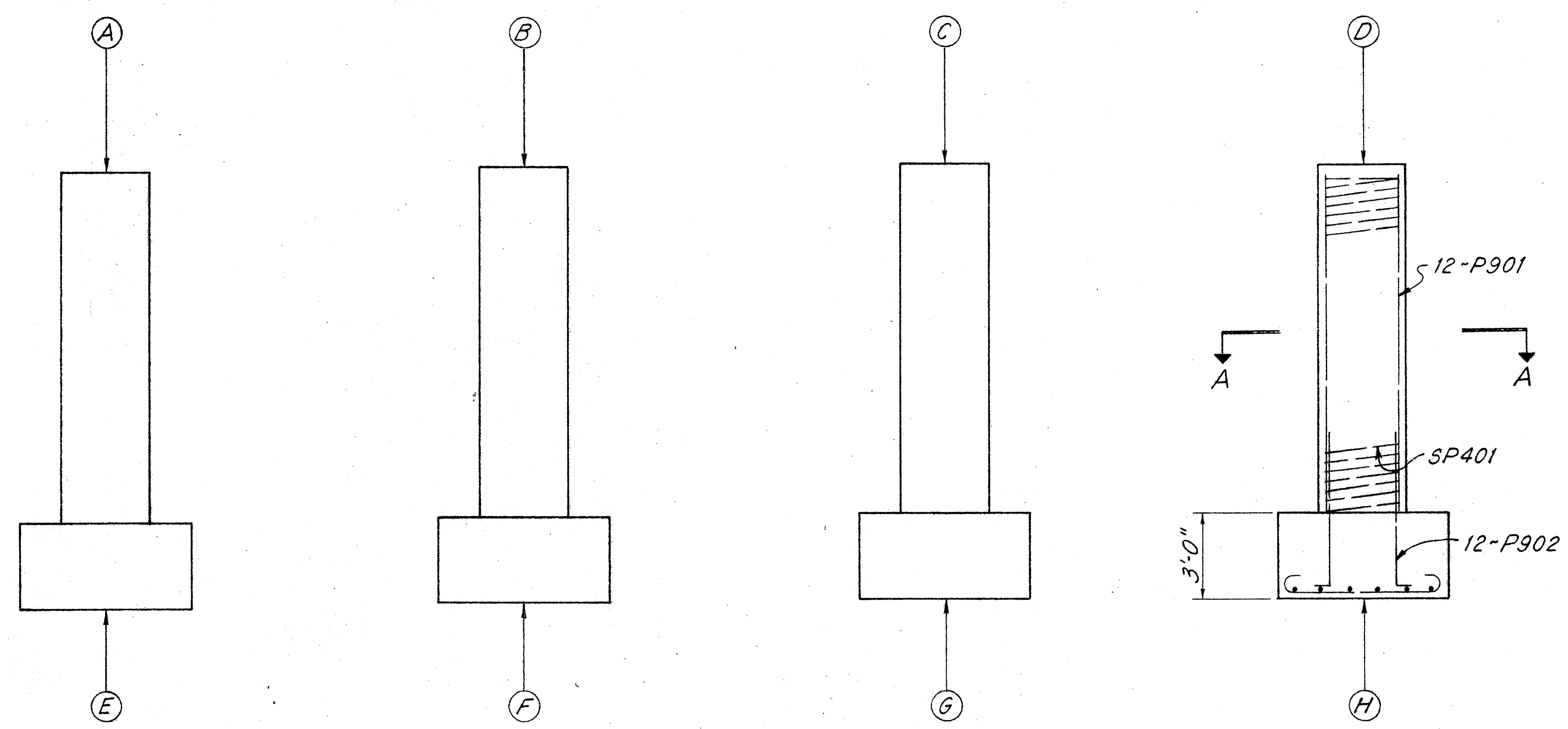
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	JEG	UL				

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO	F-1072 (8)		174 / 198

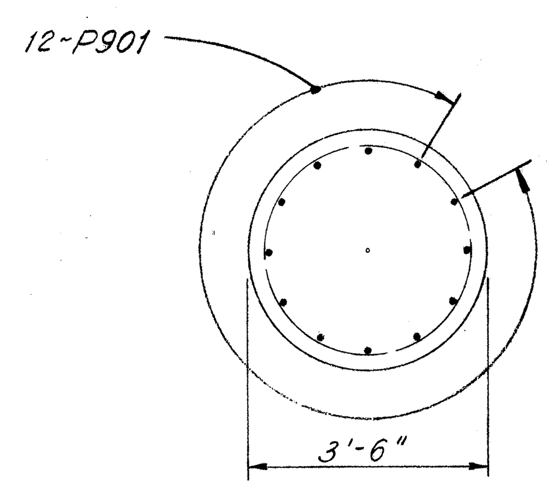
ASD-30-8.52
WAY-30-0.00



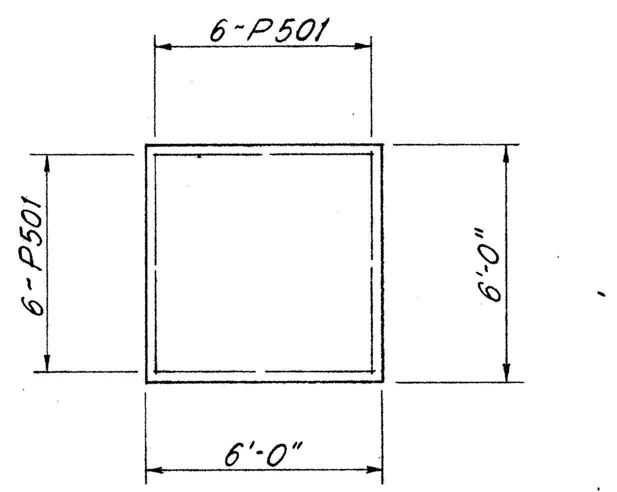
PLAN



ELEVATION



SECTION A-A



FOOTING PLAN

TABLE OF ELEVATIONS							
A	B	C	D	E	F	G	H
1115.653	1115.876	1115.975	1115.948	1100.40	1100.60	1100.70	1100.70

NOTES:

CONCRETE for pier columns shall be Class "C" and for pier footings shall be Class "E".

FOUNDATION BEARING PRESSURE: Footings are designed for a maximum bearing pressure of 5.4 tons per square foot.

GENERAL NOTES: See Sheet 170.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

PIER

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

ASHLAND COUNTY U.S.R. 30

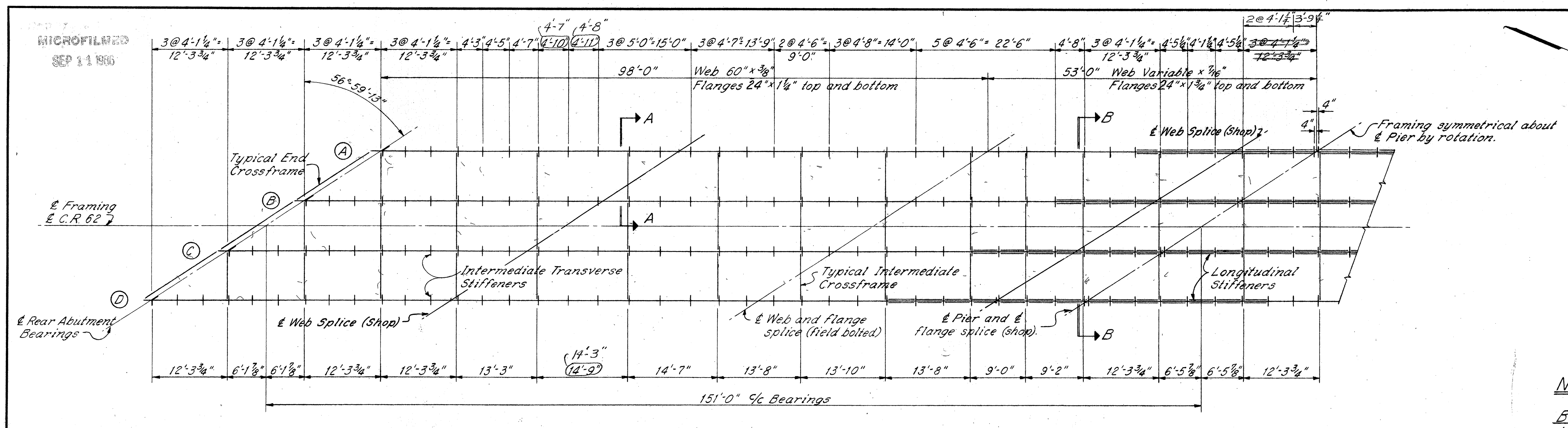
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	UL				

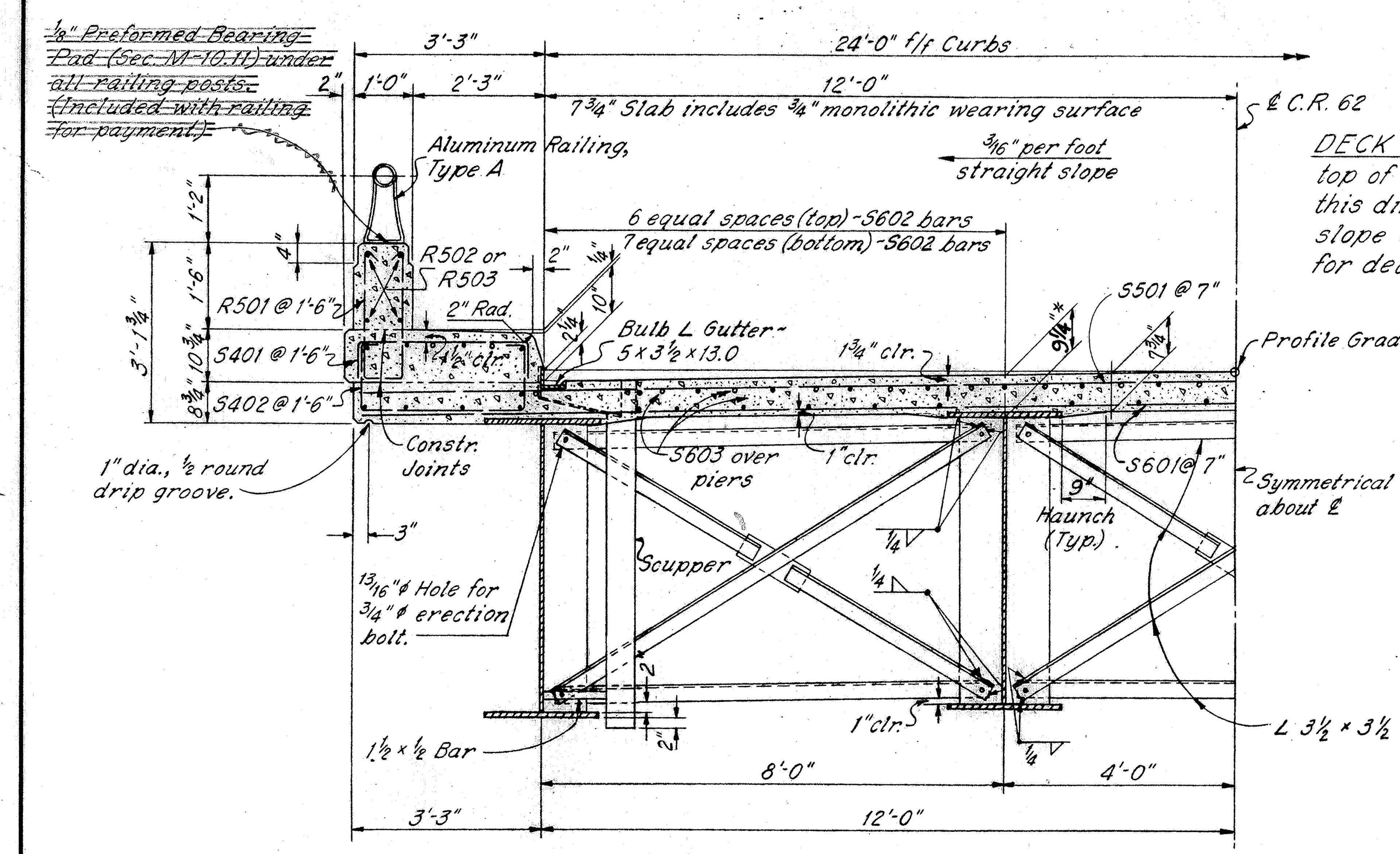
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

175
198

ASD-30-8.52
WAY-30-0.00



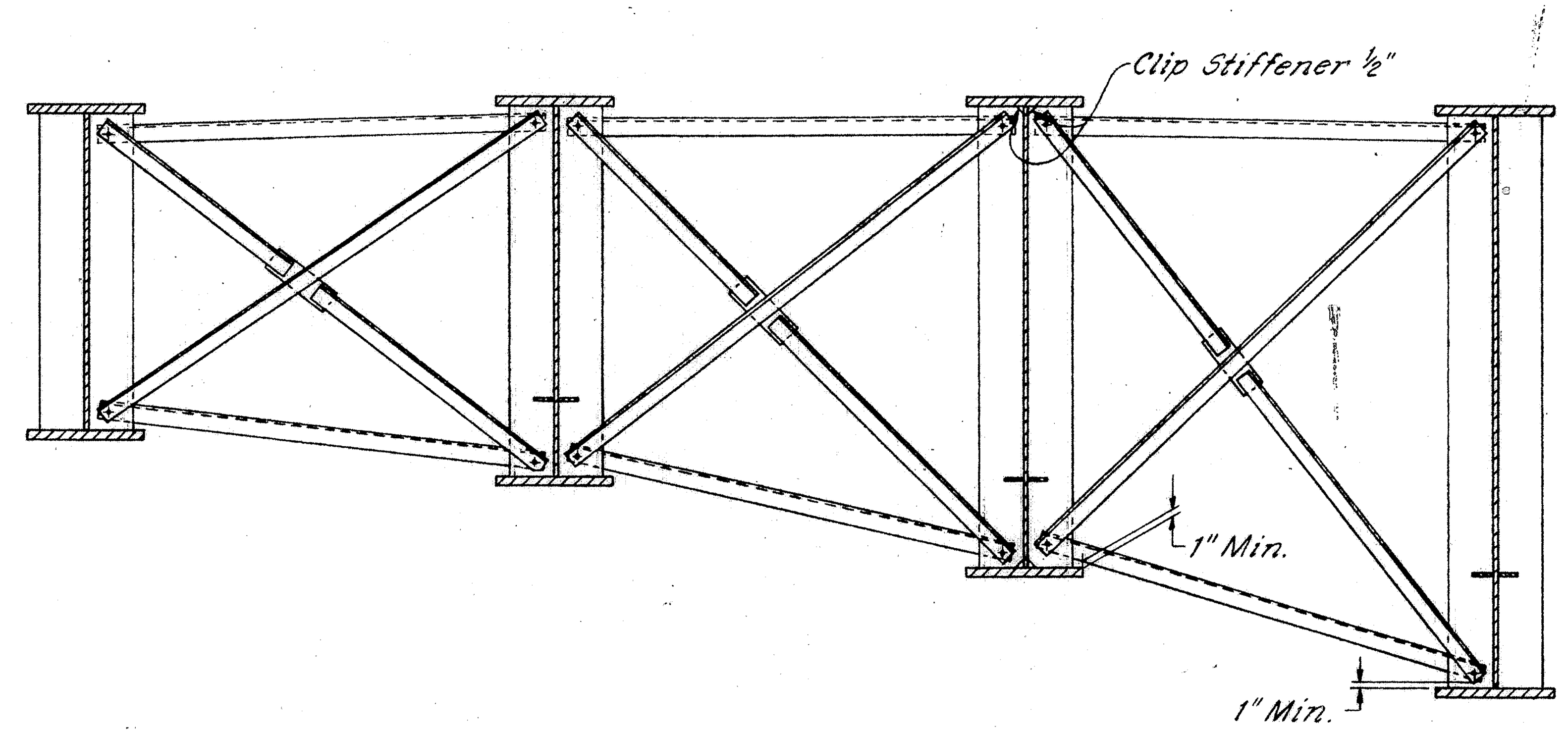
HALF FRAMING PLAN



SECTION A-A

*This is a nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to finish grade.

DECK SLAB HAUNCH: The haunch in the deck slab adjacent to the top of the steel girders, which is shown as 9" wide, may vary from this dimension with a minimum of 6" and maximum of 12". Maximum slope of haunch shall be one vertical to four horizontal. Payment for deck slab concrete shall be based on the 9" width.



SECTION B-B

Showing crossframes in haunched area.

NOTES

BEARINGS: See RB-1-55 for the following: R-125 Abutment Bearings. For Pier Bearings (B-400) use A=4", B=24", C=4", F=⅞", H=22⅞", K=18", L=32", R=14½", T=3½", and Y=1 13/16". See Sheet 173 for clipping of Abutment Bearing Plates.

CONCRETE DECK PLACING: Deck slab shall be placed in sections between transverse construction joints in the numerical order and direction shown, in order that the major portion of dead load deflection may occur prior to placing concrete over the pier.

END CROSSFRAMES, END FINISH, GUTTERS, SCUPPERS AND CURB PLATE DETAILS: See Std. Dwg. CSB-2-56, Sheets 2 and 3 of 6. Use 4×4×⅜ angles in place of 4×4×5/16 angles in end crossframes.

RAILING: See Std. Dwg. AR-1-57.

RAILING POST, PARAPET EXPANSION JOINT AND SCUPPER SPACING: See Sheet 170

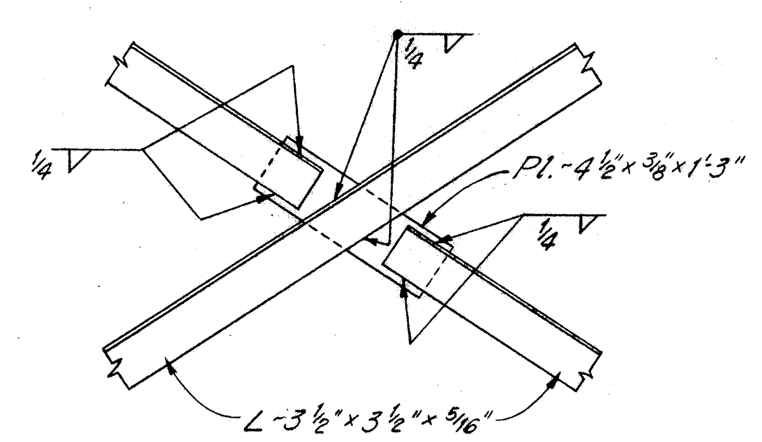
CONCRETE: All superstructure concrete shall be Class "C".

ADDITIONAL SPLICES: If additional shop splices are necessary, their location and detail shall be submitted to the Director for approval.

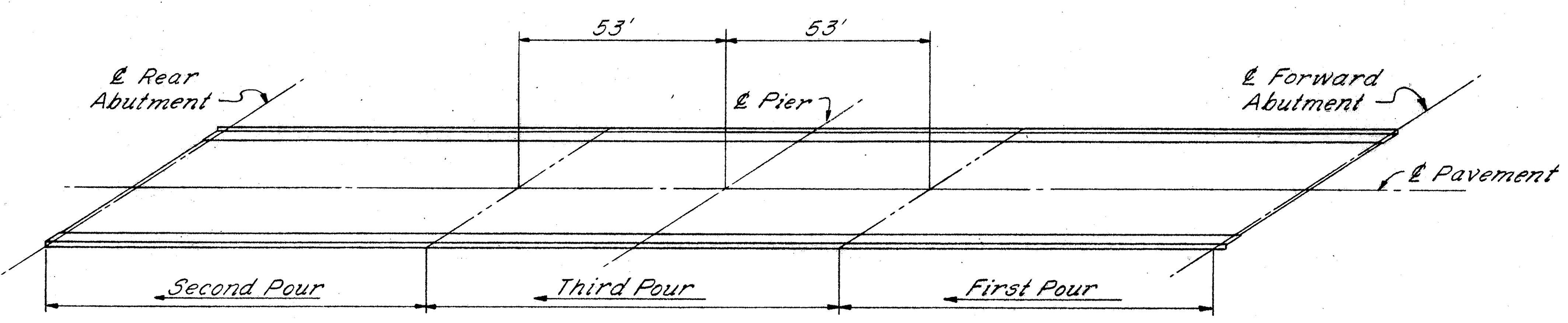
~~HIGH-STRENGTH STEEL BOLTS that are used as fitting-up bolts may be used in the final assembly if, after all bolts are placed and tightened, the fitting-up bolts are then loosened and retightened by turn of nut method.~~

GENERAL NOTES: See Sheet 170.

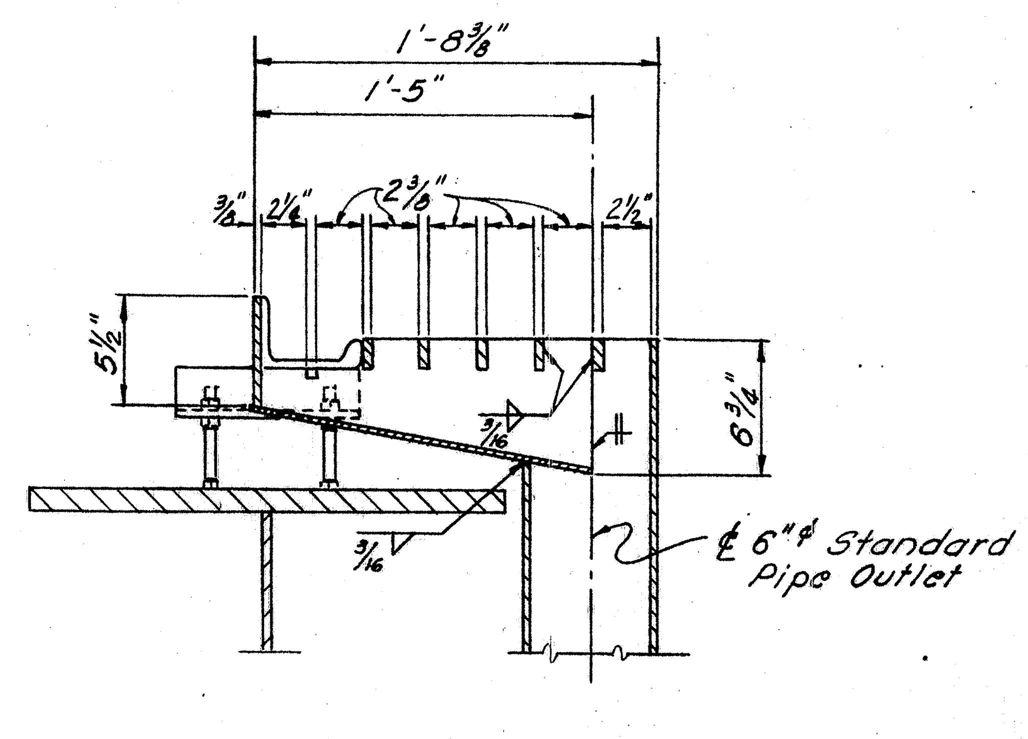
~~ERECTION PROCEDURE: The Contractor shall submit to the director, for approval, 3 prints showing his proposed erection procedure for the plate girders.~~



CROSSFRAME WELDING DETAIL



DECK CONCRETE PLACING DIAGRAM



SCUPPER DETAIL

For all other scupper details see CSB-2-56, sheet 3 of 6.

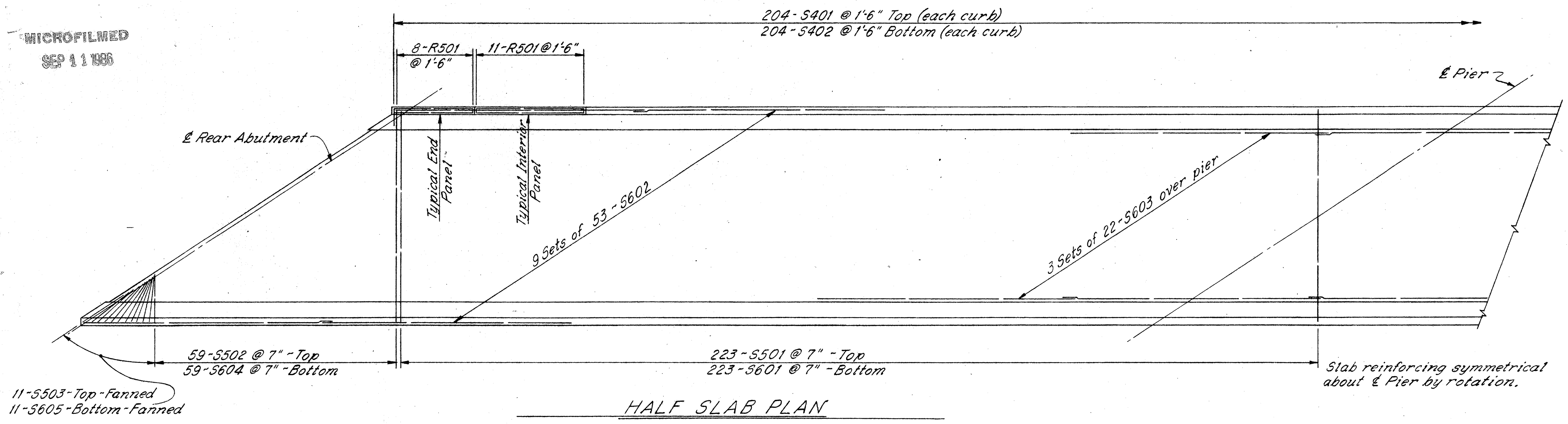
SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

SUPERSTRUCTURE - 1

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	UL				6-5-64

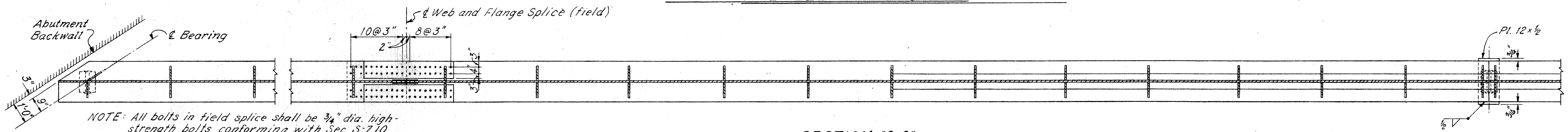


HALF SLAB PLAN

Note:

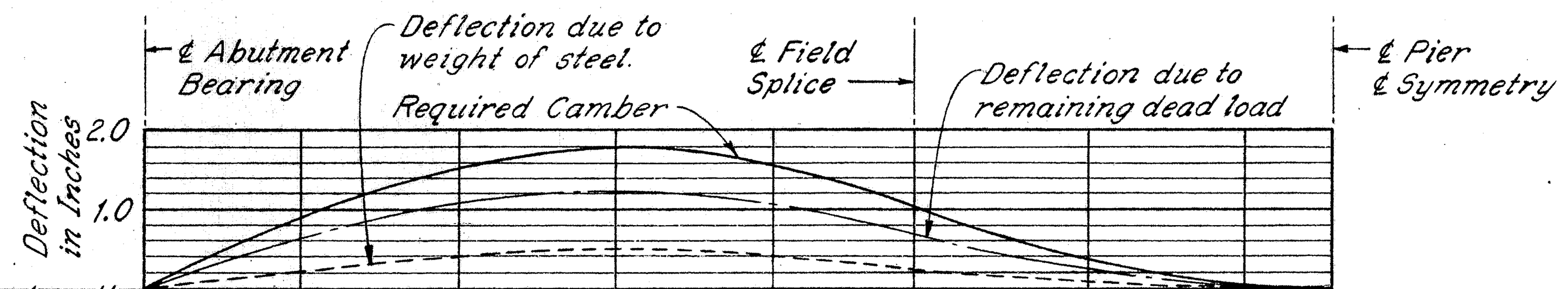
Supplementary to section S-7.14 of the Construction and Material Specifications, intermediate stiffeners of welded, built-up girders shall have contact bearing with the compression flange, but may have a clearance of not more than 1/8" from the tension flange, at the locations shown on the design drawings and on the shop details. In shop painting, care shall be taken to make certain that paint is forced through from one side to the other of the 1/8 opening.

HALF ELEVATION OF GIRDER



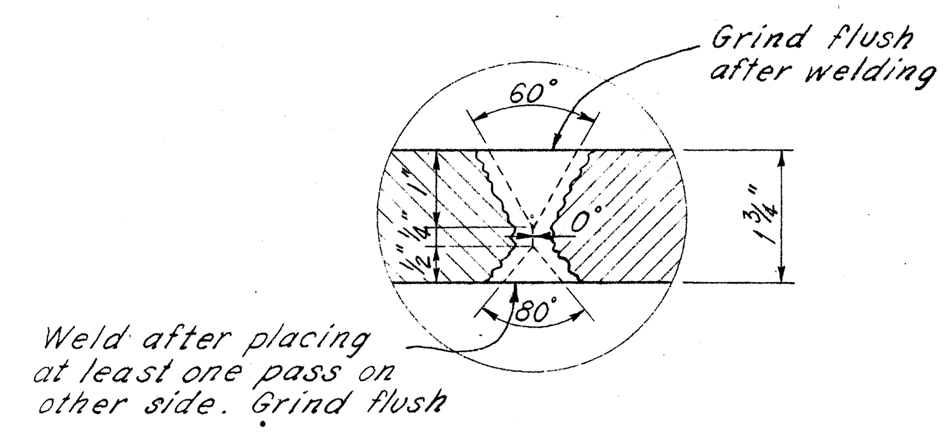
NOTE: All bolts in field splice shall be 3/4" dia. high-strength bolts conforming with Sec. S-7.10.

SECTION "C-C"

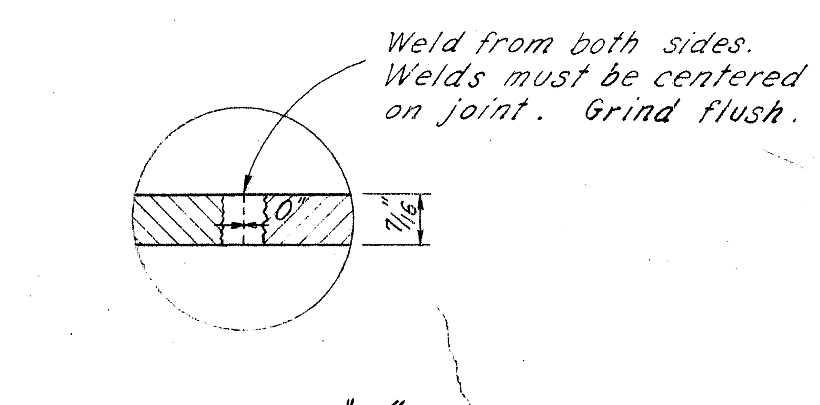


Length	0	20	40	60	80	98	120	140	151
Deflection due to weight of steel	0	.26"	.45"	.59"	.43"	.27"	.10"	.01"	0
Deflection due to remaining dead load	0	.64"	1.08"	1.22"	1.14"	.77"	.27"	.03"	0
Required Camber	0	.90"	1.53"	1.81"	1.57"	1.04"	.37"	.04"	0

CAMBER DIAGRAM



DETAIL "C"



DETAIL "D"

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

SUPERSTRUCTURE - 2

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62

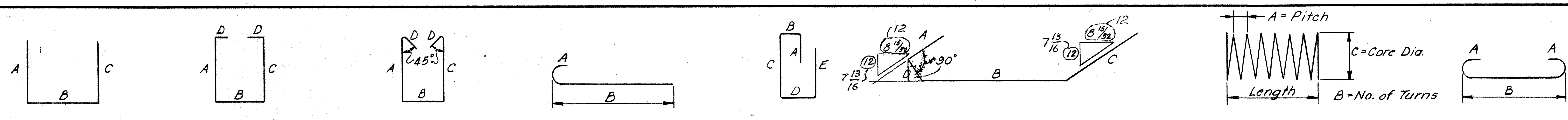
ASHLAND COUNTY U.S.R. 30

STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	RAK	VL				6-23-64

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1072 (8)	

ASD-30-8.52
WAY-30-0.00



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6 TYPE 7 TYPE 8

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R501	77	5'-(10")9"	3	2'-3"	8"	2'-3"	5"(4")		462 (468)
R504	4	14'-5"	Str.						*
R505	4	34'-0"	Str.						*
R506	8	6'-5"	Str.						*
R507	4	15'-1"	Str.						*
R508	4	37'-9"	Str.						*
		3'-11"							
A401	81	(4'-2")	1	8"	2'-10"	8"			212-(225)
A402	81	5'-9"	2	1'-2"	2'-10"	1'-2"	5"(3½")		311
A403	4	(4'-1½")3'-10½"	1	8"	2'-9½"	8"			11
A404	4	(4'-0")3'-9"	1	8"	2'-8"	8"			11
A405	4	3'-(10")7"	1	8"	2'-6"	8"			10
A406	4	3'-(8")5"	1	8"	2'-4"	8"			10
A407	4	3'-(6")3"	1	8"	2'-2"	8"			9
A408	4	3'-(4")1"	1	8"	2'-0"	8"			9
A409	4	2'-(11½")8½"	1	8"	1'-7½"	8"			8
A410	4	2'-(7")4"	1	8"	1'-3"	8"			7
A411	4	(2'-2½")1'-11½"	1	8"	10½"	8"			6
A412	4	5'-8½"	2	1'-2"	2'-9½"	1'-2"	5"(3½")		15
A413	4	5'-7"	2	1'-2"	2'-8"	1'-2"	5"(3½")		15
A414	4	5'-5"	2	1'-2"	2'-6"	1'-2"	5"(3½")		14
A415	4	5'-3"	2	1'-2"	2'-4"	1'-2"	5"(3½")		14
A416	4	5'-1"	2	1'-2"	2'-2"	1'-2"	5"(3½")		14
A417	4	4'-11"	2	1'-2"	2'-0"	1'-2"	5"(3½")		13
A418	4	4'-6½"	2	1'-2"	1'-7½"	1'-2"	5"(3½")		12
A419	4	4'-2"	2	1'-2"	1'-3"	1'-2"	5"(3½")		11
A420	4	3'-9½"	2	1'-2"	10½"	1'-2"	5"(3½")		10
A501	104	6'-5"	4	7"	5'-10"				696
A502	20	29'-10"	Str.						622
A503	65	3'-11"(4'-2")	1	6"	3'-2"	6"			266-(282)
A504	4	40'-8"	Str.						170
A505	4	37'-1"	Str.						155
A506	4	15'-6"	Str.						65
A507	2	14'-6"	Str.						30
A508	14	5'-0"	Str.						73
A509	70	28'-2"	Str.	Bend 6 in field.					2056
A510	36	4'-2"	Str.						156
A511	60	6'-(8")5"	1	1'-7"	3'-6"	1'-7"			402 (417)
A512	31	8'-(7")4"	1	3'-7"	1'-2"	3'-10"			269 (278)
A513	36	12'-4"	Str.						463
A514	32	12'-7"	Str.						420
A515	4	10'-6"	Str.						44
A516	64	Varies	Str.	4'-0" to 7'-1" Vary 8 each by 5"±					370
A517	8	12'-0"	Str.						100
A518	8	10'-2"	Str.						85
A519	24	5'-1"	Str.						127
A520	4	(2)	6	1'-7"	(1)	0	6"		56 (70)

(1) 8'-3" to 14'-3" Vary 1 each by 2'-0"
(2) 10'-4" to 16'-4" Vary 1 each by 2'-0"
(3) 7'-9" to 12'-7" Vary 1 each by 2'-5"
(4) 9'-10" to 14'-8" Vary 1 each by 2'-5"

REPLACEMENT BARS		
MARK	NUMBER	LENGTH
RE 400	1	5'-3"
RE 500	2	5'-7"
RE 600	3	5'-11"
RE 900	1	6'-10"

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A521	4	Varies	Str.	1'-7" to 9'-1" Vary each by 2'-6"					22
A522	2	17'-6"	6	1'-7"	15'-5"	0	6"		37
A523	2	9'-4"	Str.						19
A524	5	13'-6"	6	1'-7"	11'-5"	0	6"		70
A525	12	6'-10"	6	0	5'-3"	1'-7"			86
A526	18	4'-5"	Str.						83
A527	8	Varies	Str.	30'-6" to 36'-6" Vary 2 each by 2'-0"					280-(559)
A528	4	38'-2"	Str.						159
A529	24	4'-0"	Str.						100
A530	6	10'-7"	6	0	9'-0"	1'-7"	0		66
A531	10	30'-0"	Str.						313
A532	6	9'-0"	Str.						56
A533	2	8'-0"	Str.						17
A534	8	8'-7"	Str.						72
A535	2	12'-9"	6	1'-7"	10'-8"	0	6"		27
A536	3	(4)	6	1'-7"	(3)	0	6"		38
A537	3	Varies	Str.	1'-8" to 9'-6" Vary each by 3'-11"					18-(16)
A538	3	16'-10"	6	1'-7"	14'-9"	0	6"		53
A539	3	7'-6"	Str.						23
A540	40	7'-2"	Str.						299
A541	29	7'-7"	Str.						229-(224)
A542	6	6'-9"	Str.						42
A543	36	(4'-1")3'-10"	1	11"	2'-8"	6"			144-(153)
A544	60	5'-(3")0"	1	8"	3'-8"	11"			313-(329)
A545	29	10'-(7")4"	1	4'-7"	1'-2"	4'-10"			313-(320)
A546	2	26'-4"	Str.						55
A547	6	Varies	Str.	26'-6" to 31'-6" Vary 2 each by 2'-6"					182
A548	6	34'-0"	Str.						213
A549	18	4'-8"	Str.						88
A550	2	42'-0"	Str.	Bend in field.					88
A551	2	32'-3"	Str.						67
A552	2	34'-0"	Str.						71
A553	4	7'-0"	Str.						29
A554	4	6'-3"	Str.						26
A555	2	16'-6"	6	1'-7"	14'-5"	0	6"		34
A556	2	12'-3"	Str.						26
A557	2	11'-10"	Str.	Bend in field					25
A558	2	45'-9"	Str.	Bend in field					95
A559	2	36'-2"	Str.						75
A560	2	37'-9"	Str.						79
A561	2	17'-2"	6	1'-7"	15'-1"	0	6"		36
A562	2	12'-8"	Str.						26
A563	2	12'-6"	Str.	Bend in field					26
A601	53	(7'-0")6'-8"	1	6"	6'-6"	0			531-(557)
A602	106	(21'-5") 20'-9"	5	2'-3"	11"	9'-3"	1'-5"	7'-7"	3304-(3410)
							Total		(16,258) 15,764

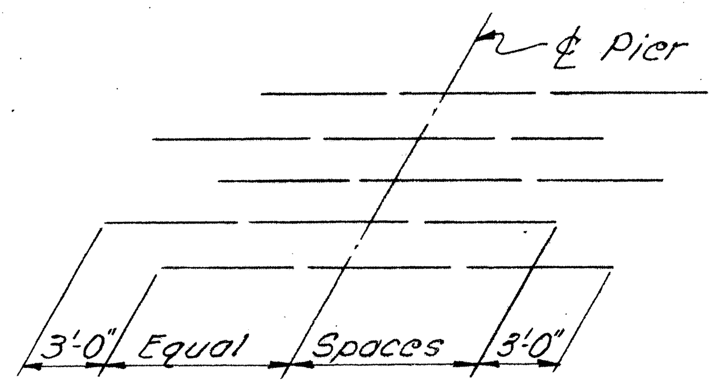


DIAGRAM SHOWING STAGGER OF S603 BARS OVER PIER

SUPERSTRUCTURE

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R501	432	5'-(10")9"	3	2'-3"	8"	2'-3"	5"(4")		2591-(2628)
R502	144	15'-4"	Str.						*
R503	16	11'-9"	Str.						*
S401	408	(4'-2")3'-11"	1	8"	2'-10"	8"			1067-(1136)
S402	408	5'-9"	2	1'-2"	2'-10"	1'-2"	5"(3½")		1567
S501	446	30'-2"	Str.						14033
S502	118	Varies	Str.	29'-10" to 7'-10½" Vary 2 each by 4½"					2320
S503	22	7'-6"	Str.						172
S601	446	30'-2"	Str.						20208
S602	477	35'-6"	Str.						25434
S603	66	36'-7"	Str.						3627
S604	118	Varies	Str.	29'-10" to 7'-10½" Vary 2 each by 4½"					3342
S605	22	7'-6"	Str.						248
						Total			(74,715) 74,609

PIERS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P501	48	6'-8"	8	7"	5'-6"				~~334~~-(337)
P901	48	12'-1"	Str.						1972
P902	48	6'-(2")8"	1	1'-0"(6")	5'-8"	0			1088 (1006)
SP401	4	12'-1"	7	4½"	35	38"			1050-(1011)
						Total			(4326) ~~4,444~~

NOTES:

BAR SIZE is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used indicate the bar size number. For example: A501 is a No. 5 size bar and A1014 is a No. 10 size bar.

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to 2" below the lowest pier bridge seat.
The "No. of Turns" shown is the "Length" divided by the pitch, plus three turns (total number of closed coils), expressed as the nearest whole number.
Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item S-4. 1½ closed coils shall be provided at the ends of each spiral unit.
Four (4) steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lineal foot of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based 0.68 lb. per lineal foot, will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

*- Included with railing for payment.

SHAFFER, PARRETT AND ASSOCIATES
Consulting Engineers
MANSFIELD, OHIO.

REINFORCING STEEL

BRIDGE NO. ASD-30-1283
U.S.R. 30 UNDER C.R. 62
ASHLAND COUNTY U.S.R. 30
STA. 677 + 46.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RAK	JEG	JEG				6-5-07

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

178 / 198

ASD.-30-8.52
WAY.-30-0.00

1 / 4

NOTE: Project Designations ASD-30-8.45 and ASD-30-392 appearing throughout this right of way plan shall be considered to read ASD-30-8.52 WAY-30-0.00

LOCATION PLAT

DEPARTMENT OF HIGHWAYS

ASD.-30-8.52 & WAY.-30-0.00

ASHLAND COUNTY

MOHICAN TOWNSHIP

WAYNE COUNTY

PLAIN TOWNSHIP

0 500 1000

SCALE IN FEET

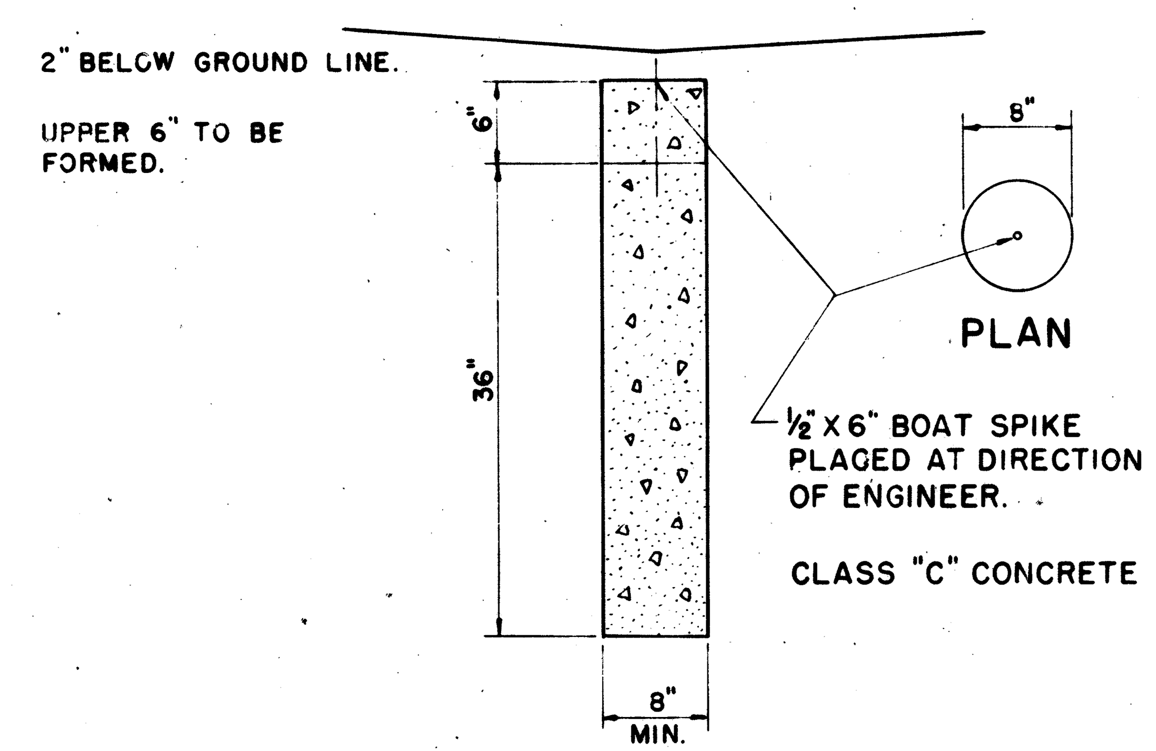
R/W BOUGHT UNDER
ASD.-30-8.45

LIMITED ACCESS

THIS IMPROVMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02, REVISED CODE OF OHIO, AND IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND RECORDED IN VOLUME 46, PAGE 634 DATE JUNE 19, 1961.

RECEIVED *January 24* AT *3-25 P.M.*
RECORDED *Jan 28*
PLAT BOOK *8* PAGE *52-52A 53-53A*
SIGNED [illegible] RECORDER,
FEE [illegible]
APPROVED:
SIGNED [illegible] P.E. No. 6311

DATE *Jan-23-'62* DIVISION DEPUTY DIRECTOR.
DIV. No. 3



SECTION

DETAIL OF RIGHT-OF-WAY REFERENCE MONUMENTS

NOTE: MONUMENTS TO BE PLACED BY CONTRACTOR

MONUMENT ASSEMBLIES, AS SHOWN ON STANDARD CONSTRUCTION DRAWING R.I.-1 (REVISED 7-15-58) OF THE DEPARTMENT OF HIGHWAYS, ARE TO BE PLACED DURING CONSTRUCTION. ALL OTHER MONUMENTS AS SHOWN ON SHEETS 2 AND 3 OF THE LOCATION PLAT ARE TO BE PLACED AFTER CONSTRUCTION.

MONUMENT SYMBOL ●

QUANTITIES

44 MONUMENT REFERENCE
15 MONUMENT ASSEMBLIES

MONUMENT REFERENCE

QUAN.	STATION	LOCATION	REMARKS
1	457+00	℄	P.O.T.
1	467+00	℄	P.O.T.
1	485+00	℄	P.O.T.
1	494+00	℄	P.O.T.
1	511+00	℄	P.O.T.
1	521+00	℄	P.O.T.
1	531+00	℄	P.O.T.
1	550+00	℄	P.O.T.
1	560+00	℄	P.O.T.
1	580+00	℄	P.O.T.
1	590+00	℄	P.O.T.
2	596+36.97	LF. OF ℄	P.C.
1	601+00	℄	P.O.C.
1	606+28.64	℄	P.T.
1	617+43.50	℄	P.C.
1	628+05.24	℄	P.T.
1	638+00	℄	P.O.T.
1	648+00	℄	P.O.T.
1	658+00	℄	P.O.T.
1	668+00	℄	P.O.T.
1	678+00	℄	P.O.T.
1	684+95.69	℄	P.C.
1	695+00	℄	P.O.T.
1	570+00	℄	P.O.T.
	COUNTY ROAD NO. 127		
2	2+32.10 AH.=2+23.12 BK.	RT. OF ℄	P.C.
2	4+46.20	RT. OF ℄	P.I.
2	17+31.10	LT. OF ℄	P.I.
1	27+54.07	RT. OF ℄	P.I.
2	29+27.01 BK.=26+47.41 AH.	RT. OF ℄	P.T.
	TOWNSHIP ROAD NO. 151 E		
2	8+00	LT. OF ℄	P.O.T.
1	20+31.09	RT. OF ℄	P.I.
2	23+00	LT. OF ℄	P.O.T.
	COUNTY ROAD NO. 93		
2	8+00	LT. OF ℄	P.O.T.
1	16+60.46	℄	P.I. & SEC. COR.
2	22+00	LT. OF ℄	P.O.T.

MONUMENT ASSEMBLIES

QUAN.	STATION	LOCATION	REMARKS
1	476+00=11+59.98 C.R. 127	℄	P.O.T.
1	502+50.73=15+00 T.R. 151 E	℄	P.O.T.
1	540+76.21=192+44.04 S.R. 89	℄	P.O.T.
1	619+94=15+00 C.R. 132	℄	P.O.C.
1	701+55.06=15+00 C.R. 93	℄	P.O.T.
	STATE ROAD NO. 89		
1	180+00	℄	P.O.T.
1	189+37.55	℄	P.O.T. & SEC. COR.
1	192+25.45	℄	P.I.
1	199+68.93	℄	P.C.
	COUNTY ROAD NO. 132		
1	6+00	℄	P.O.T.
1	22+00	℄	P.O.T.
	COUNTY ROAD NO. 62		
1	9+22.69	℄	P.I.
1	10+00	℄	P.I.
1	19+96.76	℄	P.I.
1	23+00	℄	P.O.T.

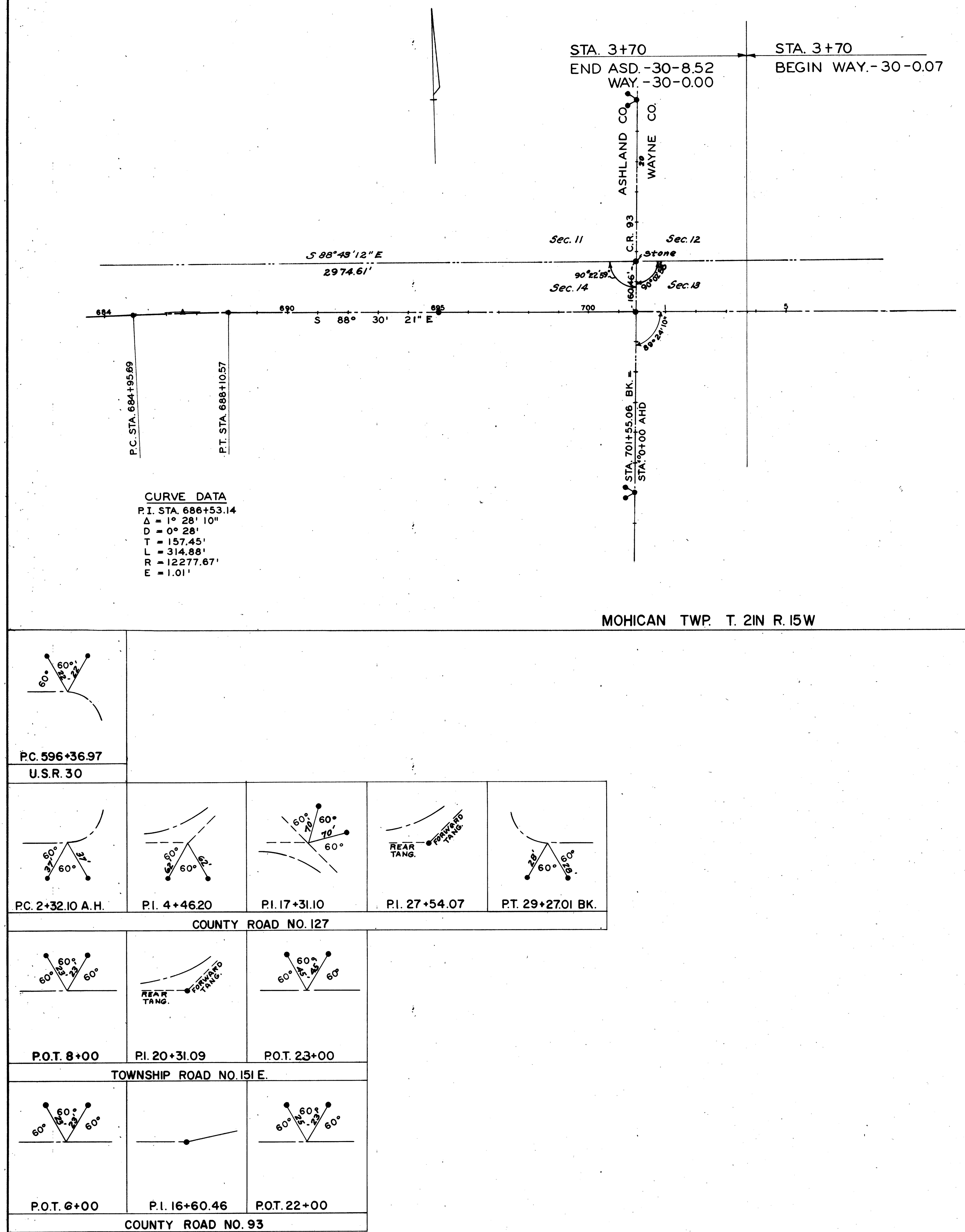
THIS PLAT WAS PREPARED BY
SHAFFER, PARRETT & ASSOCIATES
CONSULTING ENGINEERS, MANSFIELD, OHIO

Kenneth P. Shaffer
KENNETH P. SHAFFER,
REGISTERED SURVEYOR, No. 2172

RECEIVED ______ AT ______
RECORDED ______
PLAT BOOK ______ PAGE ______
SIGNED ______ RECORDER,
FEE ______

ASD.-30-8.52
WAY.-30-0.00

FED. RD. DIVISION | STATE | PROJECT
2 | OHIO
180 / 198
ASD.-30-8.52
WAY.-30-0.00
3 / 4
CURVE DATA
P.I. STA. 622+77.66
Δ = 15° 34' 20"
D = 1° 28'
T = 534.16'
L = 1061.74'
R = 3906.53'
E = 36.35'
CURVE DATA
P.I. STA. 601+35.48
Δ = 14° 32' 40"
D = 1° 28'
T = 498.51'
L = 991.67'
R = 3906.53'
E = 31.68'
STA. 564+00
1/2 Sec. Line N 0° 12' 40" E
Sta. 567+33.95
295.99'
S. 89° 10' 20" E
Stone
S 88° 56' 51" E
Sec. Line
2652.76'
S 88° 38' 39" E
Sta. 593+88.13 N. 0° 31' 07" E
Sec. Line
JEROME FORK
Sec. 9
Sec. 10
Sec. 16
Sec. 15
310.05'
34.14'
P.C. STA. 596+36.97
S 89° 35' 24" E
1859.22
P.T. STA. 608+28.64
Sta. 612+81.67
S 74° 24' 11" E
691.92
P.C. STA. 617+43.50
SEE DETAIL BELOW
N 1° 13' 21" E
℄ SURVEY
C.R. 132 Sta. 16+78.81
C.R. 132 Sta. 15+00
Δ = 1° 00' Lt.
Sta. 619+94
℄ C.R. 132
N 2° 13' 21" E
100° 42' 02"
BOLT
1/4 Sec. Cor.
Sec. Line
88° 11' 57"
E. LINE NW 1/4 SEC. 15
90° 34' 36"
MOHICAN TWP. T.21 N R.15 W
CURVE DATA 1 & 2
P.I. STA. 19+96.76
Δ = 2° 04' 12"
D = 1° 00' 00"
R = 5729.58'
T = 103.51'
L = 207.00'
E = 0.93'
P.I. STA. 10+00
Δ = 1° 12' 03"
D = 1° 00' 00"
R = 5729.58'
T = 60.04'
L = 120.08'
E = 0.31'
P.T. STA. 628+05.24
Sec. 10
Sec. 11
Sec. 15
Sec. 14
S 89° 21' 15" E
2528.60'
363.0'
Stone
S 88° 56' 01" E
2288.56
S 89° 58' 31" E
Sta. 645+30.47
Sta. 648+91.64 N 0° 23' 59" E
Sec. Line N 0° 23' 59" E
N 59° 01' 56" W
℄ EXIST. C.R. 62
P.T. 21+00 (BK) = 21+00.65 (AHD)
P.I. STA 16+32.80
Δ = 03° 16' 15" LT.
STA. 677+65.85 U.S.R. 30 = STA. 15+00 EXIST. C.R. 62
33° 00' 47"
℄ SURVEY
N 56° 57' 44" W
N 55° 45' 41" W
STA. 677+46.62 = STA. 15+16.02 C.R. 62 (RELOC)
Sta. 671+88.11 N 1° 30' 01" W
1/2 Sec. Line
P.I. STA. 9+22.69
Δ = 01° 19' 50" LT.
N 54° 25' 31" W
P.T. 10+60.04
P.C. 9+39.96
MOHICAN TWP. T.21 N R.15 W



STA. 3+70
END ASD.-30-8.52
WAY.-30-0.00
STA. 3+70
BEGIN WAY.-30-0.07
ASHLAND CO.
WAYNE CO.
C.R. 93
Sec. 11
Sec. 12
Sec. 14
Sec. 13
Stone
S 88° 49' 12" E
2974.61'
S 88° 30' 21" E
684
690
695
700
5
P.C. STA. 684+95.69
P.T. STA. 688+10.57
STA. 701+55.06 BK. = STA. 0+00 AHD
CURVE DATA
P.I. STA. 686+53.14
Δ = 1° 28' 10"
D = 0° 28'
T = 157.45'
L = 314.88'
R = 12277.67'
E = 1.01'
MOHICAN TWP. T. 21N R. 15W
P.C. 596+36.97
U.S.R. 30
P.C. 2+32.10 A.H.
P.I. 4+46.20
P.I. 17+31.10
P.I. 27+54.07
P.T. 29+27.01 BK.
REAR TANG.
FORWARD TANG.
COUNTY ROAD NO. 127
P.O.T. 8+00
P.I. 20+31.09
P.O.T. 23+00
TOWNSHIP ROAD NO. 151 E.
P.O.T. 6+00
P.I. 16+60.46
P.O.T. 22+00
COUNTY ROAD NO. 93

SOLD AS ASD/WAY.- 30-
8.52/0.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

S.R. 30 SEC. ASD.-30-8.45 ASHLAND COUNTY, OHIO TOTAL NO. OF OWNERS 23

PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA	TO BE ACQ'D LAND	TO BE ACQ'D BLD'G	RESIDUE LEFT	RESIDUE RIGHT	SHEET NO.	REMARKS As Acquired
29LA	WALTER L. ALLEN	260	278	77.36	8.96		65.00	3.00	2	Vol 289 Pg 164
29A	" "				0.07				11	" "
29	" "				0.22				16	" "
30LA	DANA F. REYNOLDS JR.	267	508	39.42	3.77		33.00	0	2	VOL 292 Pg 122
30	" "				0.81				11	" "
30A	" "				1.86				11	" "
31LA	WAVE FRENCH & GOLDA BELL	259	617	40.58	4.46	4	33.00	0	2&3	VOL 289 Pg 178
31					0.22				11	" "
31A	" " " "				2.08				11	" "
31B	" " " "				0.20				12	" "
31C	" " " "				0.34				12	" "
31X	" " " "				0.26				11	" "
31Y	" " " "				0.10				11	" "
32LA	DANA F. REYNOLDS JR.	267	508	139.3	9.58		120.00	5.00	3	VOL 292 Pg 122
32	" "				3.56				12	" "
32A	" "				0.29				13	" "
32X	" "				0.19				3	VOL 292 Pg 134
32B	" "				0.07				16	VOL 292 Pg 252
33	VERNON ICEMAN JR.	242	185	163.4	1.63		0	162.00	11&12	VOL 292 Pg 242
		206	183							
34LA	LUCILLE SMITH	245	578	180.83	6.06		10.00	163.00	3	Vol 287 Pg 216
34		259	566		0.61				13	" "
34A	" "				0.42				13	" "
34X	" "				0.19				3	" "
34Y	" "				0.18				3	" "
34WA	" "				0.16				3	" "
35LA	GUY M. & SELMA L. SMITH	245	580	120.0	7.94		27.00	85.00	3&4	VOL 289 Pg 104
35	" " "	245	581		0.31				13	" "
35A	" " "				0.42				13	" "
35X	" " "				0.02				4	" "
36LA	PETER WEIDNER	281	109	494.0	15.40		73.00	404.0	4&5	VOL 309 Pg 6
36	" "	232	388		1.35				14	" "
36A	" "	203	80		0.15				14	" "
36X	" "	203	127		0.06				4	" "
36Y	" "				0.13				5	" "
36Z	" "				0.06				5	" "
36B	RALPH & GEORGIA NOGGLE	238	380	160.0	0.11		160.00	0	14	VOL 289 Pg 59
36C	" " "				0.01				14	" "
37LA	NANCY A. SIGLER	206	162	198.12	21.20		164.00	13.00	5&6	VOL 289 Pg 318
37	" "	206	211		0.13				14	" "
37A	" "	199	241		0.03				14	" "
37X	" "	207	227		0.02				5	" "
37Y	" "				0.02				6	" "
37Z	" "				0.09				6	" "
37B	OHIO BELL TELEPHONE CO.	242	517	0.12	0.02		0	0.10	14	VOL 292 Pg 277
38LA	PETER WEIDNER	199	506	171.46	12.30		(L) 21.00	138.0	6	VOL 309 Pg 6
39LA	CORDELIA MOORE AUSTIN	278	243	100.56	0.18		100.0	0	6	VOL 289 Pg 65
		195	526							
40LA	VIRGIL & HELEN FLICKINGER	271	203	227.41	0.57		1.00	214.0	7	VOL 309 Pg 1
40ALA	" " "	251	275		11.44				7&8	" "
40A	" " "				0.56				13	" "
40B	" " "				0.21				13	" "
40C	" " "				0.01				13	" "
40X	" " "				0.07				7	" "
40Y	" " "				0.11				8&10	" "
41LA	C. L. & ETHEL M. AUSTIN	267	463	74.98	8.94		64.00	(L) 2.00	7	VOL 289 Pg 68
41X	" " "				0.08				7	" "
42LA	CLARA DAGUE	202	585	76.26	4.44		72.00	0	7	VOL 289 Pg 28
42	" "	195	155		0.25				13	" "

PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA	TO BE ACQ'D LAND	TO BE ACQ'D BLD'G	RESIDUE LEFT	RESIDUE RIGHT	SHEET NO.	REMARKS As Acquired
43	OSCAR & MARY JARVIS	245	138	2.89	0.39	✓	0	2.5	13	Vol 289 Pg 72
44LA	CHARLES G. & BLANCHE V. CAMERON	221	90	78.4	15.06		47.00	(L) 16.00	8	Vol 289 Pg 170
44	" " "				0.17				13	" "
44X	" " "				0.07				10	" "
44Y	" " "				0.04				8	" "
44Z	" " "				0.09				8	" "
45LA	MAURICE J. & MARY S. FOLEY	202	233	30.2	14.60	4	0.19	15.4	8&9	0.19 AC. ON LT. 15' LANE
										VOL 289 Pg 175
46LA	MERL FICKES	227	124	96.1	10.27		5.0	80.00	9	Vol 292 Pg 281
46	" "	226	509		0.03				15	" "
46A	" "				0.09				15	" "
46B	" "				0.01				15	" "
47	ALBERT FABER	257	591	63.0	0.01		63.0	0	15	VOL 289 Pg 33
		243	156							
		189	405							
48	H. E. FABER	178	273	78.86	0.09		79.0	0	15	Vol 289 Pg 113
48WA	" "				0.03				15	" "
48T.S.	" "				0.23				15	" "
48A	OAK GROVE CHURCH (TRUSTEES)	NO DEED		0.41	0.04		0.37	0	15	DEEDED TO JANE E. EAGLE VOL. 38, P. 148, 0.41 ACRES VOL 289 Pg 205
48AWA					0.08				15	VOL 289 Pg 205
49LA	JAMES C. TALLMADGE	260	597	122.5	13.49		15.0	93.0	10	Vol 292 Pg 313
49	" "				0.62				15	" "
49A	" "				0.71				15	" "
49B	EDWARD W. & EMMA J. MAXWELL	251	525	81.06	0.02		81.0	0	15	Vol 289 Pg 36
									VOID	
27LA	WALTER L. ALLEN	260	268	77.77	7.97				12,13,15	ASD-30-3.92
27	" "				0.50				16	See ~~Sheet 16A (198)~~
27-A	" "				1.48				16	for parcels
27-X	" "				0.08				12	applicable
27-Y	" "				0.04				12	to this project
27-T	" "				0.07				16	and shown
27-T-1	" "				0.23				16	hereon
27-B	EARL E. & WILMA BOYD	277	618	14.24	1.43				16	
28	W.L. & MARGARET FRIBLEY COOK	243	415	174.96	0.28				15&16	
28-A	" " " "				0.14				16	
28-T	" " " "				0.34				16	

3-6-64 PAR. 32B ADDED DF
REV. 1-17-64 D.F.

ASD. - 30 - 8.45

R.O.W. SHEET NO. 2 OF 16 SHEETS

FED. RD. DIVISION
STATE
PROJECT
2
OHIO
184
198
ASD. - 30 - 8.52
WAY - 30 - 0.00
3
16
SEE SHEET NO. 12
31 B
32
LA R/W
WAVE FRENCH & GOLDA BELL
31LA
145'@ 475+46.36
100'@ 12+71.89
145'@ 476+24.61 =
26.48'@ 13+04.65
143.92'@ 476+52.38 =
℄ @ 13+13.14
140.47 @ 477+41.58
85'@ 13+40.41
℄ @ 476+00 =
℄ @ 11+59.98
89°46'15"
CO. ROAD 127
R/W FENCE
Cultivated
FIRE LAND ELEC.
N 50°51'49"E
40°10'20"
Sta. 481+62.51
120.18'
482+66.17
117.31'
483+40.28
115'
484+00
S 88° 56' 51" E
CONT. 9.58 Ac
P.R.O. 0.48 "
TOTAL 10.06 "
DANA F. REYNOLDS
& " " JR.
32LA
RELOCATED 11
N 21°03'09"E
N 1°16'54"E
FIRELAND ELEC. 30' Clearance
SURVEY
142.84 @ 475+48.01
℄ @ 10+07.97
143.82'@ 476+23.44
71.22'@ 10+32.85
148.03'
479+48.47
149.02'
480+24.80
150'
481+00
℄ C.R. 127
31 A
SEE SHEET NO. 11 & 12
33
CABLE MARKER
MOHICAN-TWP.-T.21N R.15W SEC.7
APPROX. LOCATION OF O.B. TELE. UNDERGROUND CABLE
255'
492+00
255'
493+09.99
255'
493+50
END CHANNEL STA. 17+40
CURVE DATA
PI STA 16+70.46
Δ = 19° 00' RT.
D = 19° 00'
R = 301.56'
T = 50.46'
L = 100.00'
P.T. STA. 17+20
32Y
0.19Ac
34X
0.19Ac
34 WA
0.16 Ac.
145'
492+40.65
143.55
492+00
145'
493+50
160'
495+00
121.67'
495+00
Gas Valve
Regulator
110'
495+75
Ohio Fuel Gas well
See R/W form #76 for change in const
SEE SHEET NO. 13
34
35
120.00'@ 501+75.85 =
75'@ 16+19.92
120.00'@ 502+30.85 =
20'@ 16+19.98
120'@ 502+50.85 =
℄ @ 16+20
120.38'@ 502+70.85 =
20'@ 16+20.40
121.44 @ 503+25.85 =
75'@ 16+21.51
TWP. RD. 151 EAST
N 1°00'39"E
GUY M. & SELMA L. SMITH
35LA
LUCILLE SMITH
34LA
CONT. 6.06Ac
P.R.O. 0.11 "
TOTAL 6.17 "
Cultivated
R/W FENCE
TYPE #2 CROSSING
107.51
492+17.01
153°15
P.C. STA. 16+20
℄ SURVEY STA. 492+80
= ℄ CHANNEL STA. 15+00
Woods
SPRINGS RUN
2" Gas Line (Exposed)
FIRELANDS ELEC.
OHIO FUEL GAS CO. 3 1/16 Gas Line +33.91
134.13'
489+36.01
89°06'03"
89°54'
N 1°51'06"E
492+06.70
32 LA
89.59'
491+98.11
P.T. STA. 14+10
TYPE #2 CROSSING
QUAKER STREAM
Ohio Fuel
CURVE DATA
PI STA 13+60.57
Δ = 21° 00' LT
D = 21° 00'
R = 272.84
T = 50.57'
L = 100.00'
142.13'
493+25
34Y
0.18Ac
BEGIN CHANNEL STA 13+00
Pasture
Clearance 21'
SWAMP
3" Farm Tile
502+50.73 =
15+00
502+50.13
125'@ 502+50.60 =
℄ @ 13+75
125.32'@ 502+70.60 =
20'@ 13+74.70
126.30 @ 503+30.60 =
80'@ 13+73.78
125.37'@ 502+30.60 =
20'@ 13+76.61
126.48'@ 501+70.60 =
80.@13+73.44
145'
491+70.16
143.98
492+25
P.C. STA 13+10
Section Line
146.11'
489+31.62
SEC. 7
SEC. 8
220'
492+25
220'
493+25
34 A
35 A
SEE SHEET NO. 13
CABLE MARKER
MOHICAN TWP. T.21N R.15W SEC.8
DATE
REVISIONS
1-16-62
5-4-62
Rev. R/W on Parcel No. 34LA

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

185/198

ASD. - 30 - 8.92

WAY - 30 - 0.00

4/16

DATE	REVISIONS
1-16-68	

ASD. - 30 - 8.45

R.O.W. SHEET NO. 5 OF 16 SHEETS

ASD.-30-8.45

R.O.W. SHEET NO. 6 OF 16 SHEETS

R.O.W. SHEET NO. 7 OF 16 SHEETS

ASD. - 30 - 8.45

ASD.-30-8.45

R.O.W. SHEET NO. 8 OF 16 SHEETS

FED. RD. DIVISION
2
STATE
OHIO
PROJECT
190
198
ASD. - 30 - 8.52
WAY-30-0.00
9
16
SEC.-11
SEC LINE
S 88° 56' 01" E
SEC.-14
R/W FENCE
LA R/W
Weeds
Stream
MAURICE J. & MARY S. FOLEY
45LA
CONT. = 14.60 Ac
P.R.O. = 0.00 Ac
TOTAL = 14.60 Ac
S 89° 58' 31" E
STA 663+85
42" PIPE
TYPE #1 CROSSING
Wooded
1 STY. RES.
2 STY. RES.
46
LA
MERL
FICKES
130'
658+00
149.17
666+62.62
196.74
666+53.41
N 1° 30' 01" W
MOHICAN TWP, T21N, R15W SEC.-14
H. E. FABER
48
SEE SHEET NO. 15
46
47
46 B
48 A
48 AWA
SEE SHEET NO. 15
S 88° 43' 12" E
END TYPE "D" FENCE 671+80
BEGIN TYPE "C" FENCE 671+80
Cultivated
140'
671+00
140'
671+84.38
MERL FICKES
46LA
CONT. = 10.60 Ac
P.R.O. = 0.62 Ac
TOTAL = 11.22 Ac
1/2 SEC. LINE
N 1° 30' 01" W
STA 671+88.11
88° 28' 30"
S 89° 58' 31" E
180.86 @ 674+68.27
℄ @ 18+48.07
C.R. 62 SURVEY
PROPOSED
RELOCATION
P.I. EXIST. C.R. 62
33° 00' 47"
END TYPE "C" FENCE @ BRIDGE ABUT.
140' @ 675+95.67
35.15 @ 17+18.97
138'
678+00
140'
678+00
164.19
682+28.31
MERL FICKES
46LA
49
LA
JAMES C. TALMADGE
N 0° 52' 01" W
682+30.87
EXISTING ℄ C.R. 62 = STA. 677+65.85 ℄ U.S.R. 30
RELOC. C.R. 62 STA. 15+16.62 = ℄ U.S.R. 30 STA. 677+46.62
N 56° 57' 44" W
N 55° 45' 51" W
OHIO EDISON CO.
NORTHERN OHIO TELE. CO.
155.30 @ 680+38.74
28.93 @ 11+86.54
158.98
671+92.34
170'
676+00
46
A
SEE SHEET NO. 15
DATE
REVISIONS
1-16-62
MOHICAN TWP T21N R15W SEC.-14

FED. RD. DIVISION
2
STATE
OHIO
PROJECT
191
198
ASD. -30-8.52
WAY-30-0.00
10
16
SEC.-11
SEC. LINE
SEC-14
445' S 88°43'12"E.
164.19
682+28.31
155.71
686+71
46
LA
MERL FICKES
Wooded
Weeds
JAMES C. TALMADGE
49LA
CONT. = 13.16 Ac
P.R.O. = 0.14 Ac
TOTAL = 13.30 Ac
682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697
S 88° 30' 21" E
89°06'30"
N 0°52'01"W
682+30.87
P.C. STA. 684+95.69
138'
+95.5
140'
684+95.69
P.T. STA. 688+10.57
145'
688+10.57
148.79
682+33.19
LA R/W
CURVE DATA
P.I. STA. 686+53.14
Δ = 1° 28' 10"
D = 0° 28'
T = 157.45'
L = 314.88'
R = 12277.67'
E = 1.01'
MOHICAN TWP. T21N R15W SEC.-14
49
B
SEE SHEET NO. 15
49
A
SEE SHEET NO. 15
MILE STRIP
SEC.-12
STA. 3+70
END ASD.-30-8.52
WAY.-30-0.00
STA. 3+70
BEGIN WAY.-30-0.07
SEC.-11
SEC. LINE
SEC.-14
S 88°43'12"E
S 89°09'09"E
SEC.-13
MILE STRIP
90°22'59"
90°02'58"
161.59 @ 0+88.32
90' @ 16+60.53
Wooded
JAMES C. TALMADGE
49LA
CO.
CO.
Sta. 15+00 C.R. 93 =
Sta. 0+00 WAY. 30-00
Sta. 701+55.06 ASD. 30-8.52
ACQUIRED UNDER WAY-30-0.00
697 698 699 700 701 1 2 3
S 88° 30' 21" E
ASHLAND
WAYNE
1
LA
S 88° 30' 21" E
130' @ 0+81.36
90' @ 13+63.07
140.33 @ 700+46.52 =
90' @ 13+60.59
140.07 @ 701+36.52 =
20' @ 13+60.12
140' @ 0+01.46 =
@ 13+59.99
49
SEE SHEET NO. 15
1
ASHLAND CO.
T 21 N R15W SEC-14 MOHICAN TWP.
MILE STRIP
WAYNE CO.
PLAIN TWP. T21N R15W SEC. 13,12
629 630+47.53 87°-48'-50" 632
VIRGIL & HELEN FLICKINGER
40 ALA
SEE SHEET 8
GLENN RUN
44 LA
CHARLES G. &
BLANCHE V.
CAMERON
200'
630+38.89
LA R/W
194.17'
630+00
40Y
0.11Ac
44X
0.07Ac
198.68'
631+00
257.37'
630+81.71
255.88
630+37.76
290'
630+00
290'
630+70
SEC. 15-MOHICAN TWP.
T-21N R-15W
DATE
REVISIONS
1-16-62

ASD. - 30 - 8.45

FED. RD. DIVISION | STATE | PROJECT
2 | OHIO
192
198
ASD-30-8.52
WAY-30-0.00
11
16
END WORK 2+80 (CULTIVATED)
P.I. STA. 18+35.74
Δ = 30°08'30"
D = 10°00'
R = 572.96'
T = 154.30'
L = 301.45
30
DANA F. REYNOLDS
CONT. = 0.81 Ac.
PRO. = 0.14 Ac.
TOTAL = 0.95 Ac.
(CULTIVATED)
31
WAVE FRENCH & GOLDA BELL
CONT. = 0.22 Ac
PRO. = 0.15 Ac
TOTAL = 0.37 Ac
31X
0.26 Ac
RELOCATED TWP. RD 151 NORTH
℄ SURVEY
S 88°56'51"E
LA R/W
30LA
31LA
EXISTING TWP RD. 151
N 60°54'39"E
℄ SURVEY U.S.R. 30
15+00 TWP. RD. 151 =
465+71.16 U.S.R. 30
MOHICAN TWP T 21N R 15W SEC. 7
29LA
30LA
31LA
32LA
465+71.16 U.S.R. 30 =
15+00 EXIST. TWP. RD. 151
℄ SURVEY U.S.R. 30
RELOCATED TWP. RD. 151 SOUTH
S 88°56'51"E
℄ SURVEY
(CULTIVATED)
29
WALTER L. ALLEN
CONT. = 0.07 Ac
PRO. = 0.15 Ac
TOTAL = 0.22 Ac
CABLE MARKER
TREE ROW
SEC. 7
SEC. LINE
SEC. 18
30A
DANA F REYNOLDS
CONT. = 1.86 Ac.
PRO. = 0.07 Ac.
TOTAL = 1.93 Ac.
P.I. STA. 11+61.63
Δ = 30°08'30"
D = 10°00'
R = 572.96'
T = 154.30'
L = 301.45'
O.B. TELE. UNDERGROUND CABLE (APPROX. LOCATION)
31A
(WOODED)
WAVE FRENCH & GOLDA BELL
CONT. = 2.08 Ac.
PRO. = 0.00 Ac.
TOTAL = 2.08 Ac.
P.I. STA. 19+19.18'
Δ = 20°00'00"
D = 10°00'
R = 572.96'
T = 101.03'
L = 200.00'
33
VERNON ICEMAN JR. (SEE SHEET No. 12)
(CULTIVATED)
℄ SURVEY C.R. 127
476+00 U.S.R. 30 =
11+59.98 RELOC. C.R. 127
23+82.19 RELOC. TWP. RD. 151 =
8+09.90 RELOC. C.R. 127
MOHICAN TWP T 21N R 15W SEC. 7 & 18
1-16-62
RELOCATED TWP. ROAD No. 151 RT. & LT.

ASD – 30 – 8.45

ASD - 30 - 8.45

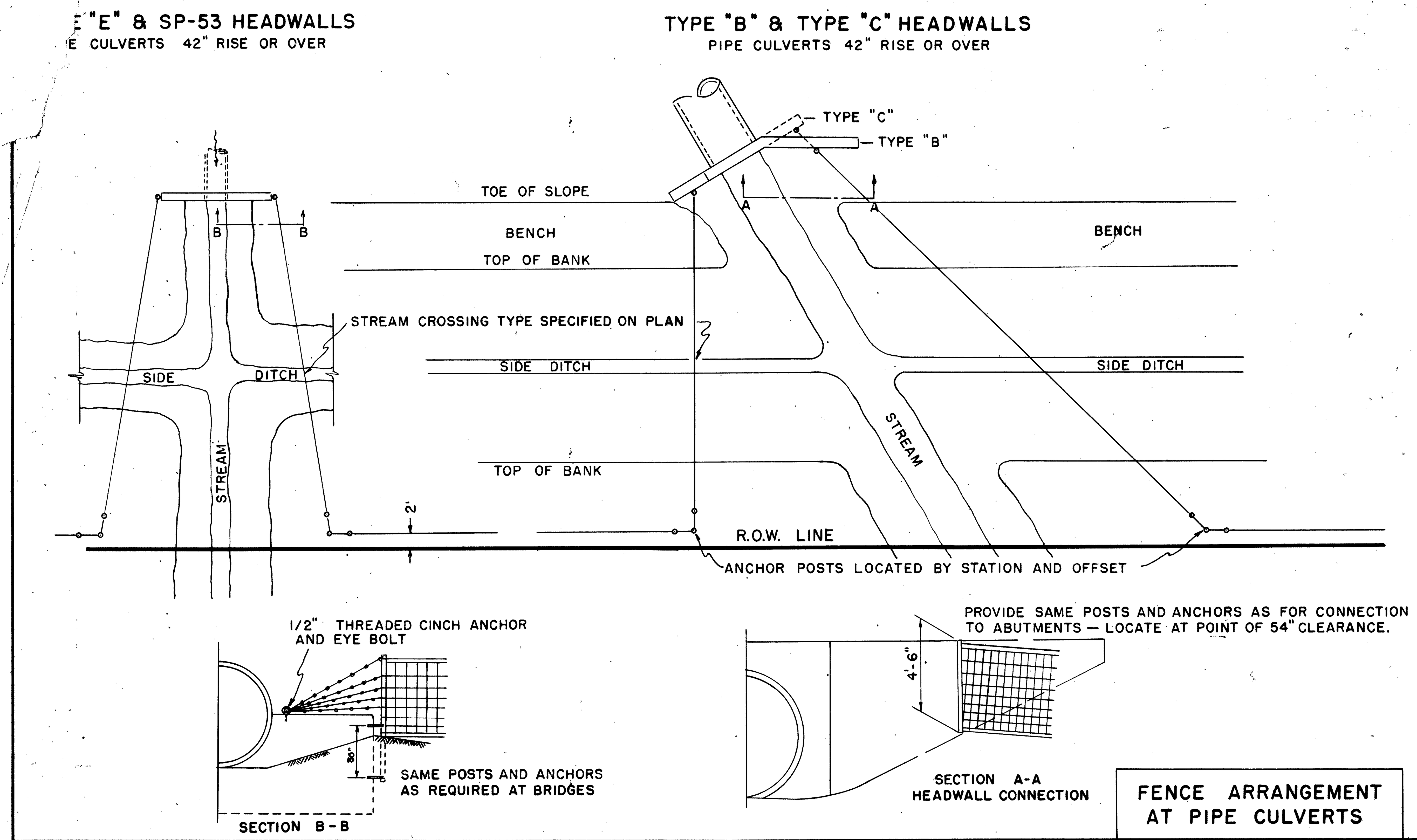
R.O.W. SHEET No. 12 OF 16 SHEETS


FED. RD. DIVISION 2
STATE OHIO
PROJECT
194 / 198
13 / 16
ASD-30-8.52
WAY-30-0.00
MATCH LINE STA 23+00
℄ SURVEY TWP. RD. 151 E
N 67°-50'-51"W
℄ QUAKER SPRINGS RUN STA 27+01.09
P.I. STA. = 20+31.09
Δ = 68°57'30"
D = 30°00'
R = 190.99'
T = 131.16'
L = 229.86'
FOR CONTINUATION OF LINE SEE DETAIL ABOVE MATCH LINE STA 23+00
SEC. 17
SEC. 8
SEC. LINE S 88°41'08"E
O.B. TELE. UNDERGROUND CABLE (APPROX. LOCATION)
Shed
Barn
2 Sty Frame Res.
FARM DRIVE
Retaining Wall
34A
LUCILLE SMITH
CONT. = 0.42 Ac
PRO. = 0.22 Ac
TOTAL = 0.64 Ac
34LA
34
(CULTIVATED)
LUCILLE SMITH
CONT = 0.61 Ac
PRO. = 0.49 Ac
TOTAL = 1.10 Ac
32A
DANA F. REYNOLDS Jr.
CONT. = 0.28 Ac
PRO. = 0.30 Ac
TOTAL = 0.58 Ac
CABLE MARKER
N 1°06'39"E TWP. ROAD 151 EAST ℄ SURVEY
11+99.42
89°56'30"
15+00 TWP. RD. 151 = 502+50.73 U.S.R. 30
℄ SURVEY U.S.R. 30 S 88°56'51"E
GAS MARKER
R = 150.99
P.T. 21+62.25 AH. = 21+29.79 BK.
35A
GUY M. & SELMA L. SMITH
CONT. = 0.42 Ac
PRO. = 0.22 Ac
TOTAL = 0.64 Ac
35LA
35
GUY M. & SELMA L. SMITH
CONT. = 0.31 Ac
PRO. = 0.20 Ac
TOTAL = 0.50 Ac
Rev. 5/4/62
MOHICAN TWP. T 21N R 15W SEC. 8 & 17
TWP. ROAD 151 EAST
VIRGIL & HELEN FLICKINGER
FRAME & BLK. BARN
40 ALA
SEC. 15
SEC. 10
42LA
42
CLARA DAGUE
CONT = 0.25 Ac
PRO = 0.27 Ac
TOTAL = 0.52 Ac
40 C
CONT 0.01 Ac.
PRO. 0.03
TOTAL 0.04
43
OSCAR & MARY JARVIS
CONT. = 0.39 Ac
PRO. = 0.27 Ac
TOTAL = 0.66 Ac
(CULTIVATED)
16" APPLE TREES
FRAME GAR.
2½ STY FRAME RES.
16" APPLE
26" MAPLE
POND
40 B
CONT. 0.21 Ac
PRO. 0.07
TOTAL 0.28
1/2 SEC. LINE
N 2°12'39"E
N 2°13'21"E
N 1°13'21"E
N 1°13'36"E
℄ SURVEY
COUNTY ROAD 132
P.I. 15+00 Δ = 1°00' LT.
CABLE MARKER
18" MAPLE
20" MAPLE
15" MAPLE
16" APPLE
OIL TANK
24" PINE
2 STY FRAME RES.
DRIVE
40A
VIRGIL & HELEN FLICKINGER
CONT = 0.56 Ac
PRO = 0.56 Ac
TOTAL = 1.12 Ac
40 ALA
FRAME BARN
2 STY FR. RES.
1 STY FRAME
WELL
FR. GAR.
FRAME CHICKEN HOUSE
FRAME SHED
44
CHARLES G. & BLANCHE V. CAMERON
CONT = 0.17 Ac.
PRO = 0.34 Ac
TOTAL = 0.51 Ac
Par. 49 WA removed & Par. 49 changed 1-23-62
1-16-62
MOHICAN TWP T21N R15W SEC. 10 & 15
C.R. 132


FED. RD. DIVISION
2
STATE
OHIO
PROJECT
195
198
ASD-30-8.52
WAY-30-0.00
14
16
SEC. 17
SEC. 8
SEC. 16
SEC. 9
36
PETER WEIDNER
CONT. = 1.35
PRO. = 1.79
TOTAL = 3.14
CULTIVATED
36LA
PETER WEIDNER
36A
PETER WEIDNER
CONT. = 0.15
PRO. = 0.23
TOTAL = 0.38
36
PETER WEIDNER
37B
OHIO BELL TELEPHONE CO.
CONT. = 0.02
PRO. = 0.05
TOTAL = 0.07
37A
NANCY A. SIGLER
CONT. = 0.03
P.R.O = 0.13
TOTAL = 0.26
37LA
NANCY A. SIGLER
37
NANCY A. SIGLER
CONT. = 0.13
PRO. = 0.63
TOTAL = 0.49
CABLE MARKERS
CABLE MARKER WITH GAS BOTTLE
O.B. TELE. UNDERGROUND CABLE (APPROC. LOCATION)
℄ TEMPORARY
℄ SURVEY
S.R. 89
Sec. Line
N-0°-41'-09"E
N-0°-35'-09"E
℄ SURVEY U.S.R. 30
R/W
L.A. R/W
R=300'
MOHICAN TWP. T 21 N R 15 W SEC. 8, 9, 16 & 17
SEC. 8
36B
CONT. 0.11 Ac.
RALPH G. & GEORGIA NOGGLE
P.I. = 200+85.69
Δ = 5°-15'
D = 2.2498°
R = 2546.73
T = 116.76
L = 233.35'
P.I. = 205+64.88
Δ = 21°-30'
D = 3°-00'
R = 1909.86'
T = 362.60'
L = 716.67'
FRAME SHED
FRAME BARN
WELL
SHED
CHICKEN HOUSE
FR. SHED
FR. SHED
WELL
1½ STY. FRAME RES
CISTERN
BROODER HOUSE
12" APPLE
GUY POLE
R=2491.73
R=2601.73
R=1854.86'
R=1964.86'
P.C.
P.C.C.
N-89°-15'-51"W
N-89°-22'-51"E
36A
37
NANCY A. SIGLER
36 C
CONT. 0.01 Ac.
RALPH G. & GEORGIA NOGGLE
SEC. 9
MOHICAN TWP. TWP. T 21 N R 15 W SEC. 8 & 9
1-16-62


FED. RD. DIVISION 2
STATE OHIO
PROJECT
196
198
ASD-30-8.52
WAY-30-0.00
15
16
P.I. = 10+00
△ = 1°12'03"
D = 1°00'00"
R = 5729.58'
T = 60.04'
L = 120.08'
E = 0.31'
46A
MERL FICKES
CONT. = 0.10 Ac
PRO = 0.33 Ac
TOTAL = 0.43 Ac
46LA
MERL FICKES
CULTIVATED
WOODED
46
MERL FICKES
CONT. = 0.03 Ac
PRO. = 0.09 Ac
TOTAL = 0.12 Ac
P.I. = 19+96.76
△ = 2°04'12"
D = 1°00'00"
R = 5729.58'
T = 103.51'
L = 207.00'
E = 0.93'
48A
OAK GROVE CHURCH
CONT. = .04 Ac
PRO. = .18 Ac
TOTAL = .22 Ac
46-B
MERL FICKES
CONT. = 0.01 Ac
P.R.O. = 0.07 Ac
TOTAL = 0.08 Ac
FRAME CHURCH
48AWA
48 WA
CO. RD. 62
N 54° 25' 51" W
N 55° 45' 41" W
N 56° 57' 44" W
N 59° 01' 56" W
34°-12'-50"
33°-00'-47"
RELOCATED CO. RD. 62
EXIST. C.R. 62
LA R/W
R/W
SEC. 14
SEC. 11
47
ALBERT FABER
CONT 0.01 Ac.
P.R.O. 0.06 "
TOTAL 0.07 "
48
H.E. FABER
CONT. = 0.09 Ac
PRO = 0.21 Ac
TOTAL = 0.30 Ac
48T.S.
0.23 Ac.
FRAME CHICKEN HOUSE
FR. SHED
QUANSET HUT
PRIVY
GARDEN
148.79
682+33.19
682+30.87
MOHICAN TWP T21N R15W SEC. 11 & 14
RELOCATED C.R. 62
49
JAMES C. TALLMADGE
CONT - 0.62 Ac.
49 LA
49A
JAMES C. TALLMADGE
CONT = 0.71 Ac.
49B
EDWARD W. & EMMA J. MAXWELL
CONT. 0.02 Ac.
FALLOWED
WOODED
CULTIVATED
SEC. 14
SEC. 11
ASHLAND CO.
WAYNE CO.
CO. RD. 93
N 0° 53' 49" E
N 0° 43' 49" E
CABLE MARKERS
1
2
1 LA
SEC. 13
MILE STRIP
SEC. 12
MILE STRIP
WAY-30-0.00
RIGHT OF WAY BOUGHT UNDER ANOTHER CONTRACT SECTION
1-16-62
MOHICAN TWP T21N R15W SEC. 11, 12, 13 & 14
C.R. 93

ASD - 30-8.45



FENCE ARRANGEMENT AT PIPE CULVERTS

NOTE: TYPE "D" FENCE NOT TO BE BUILT UNDER THIS CONTRACT AND SHALL BE WITHELD FOR FUTURE CONSTRUCTION.

RIGHT-OF-WAY FENCE SUMMARY

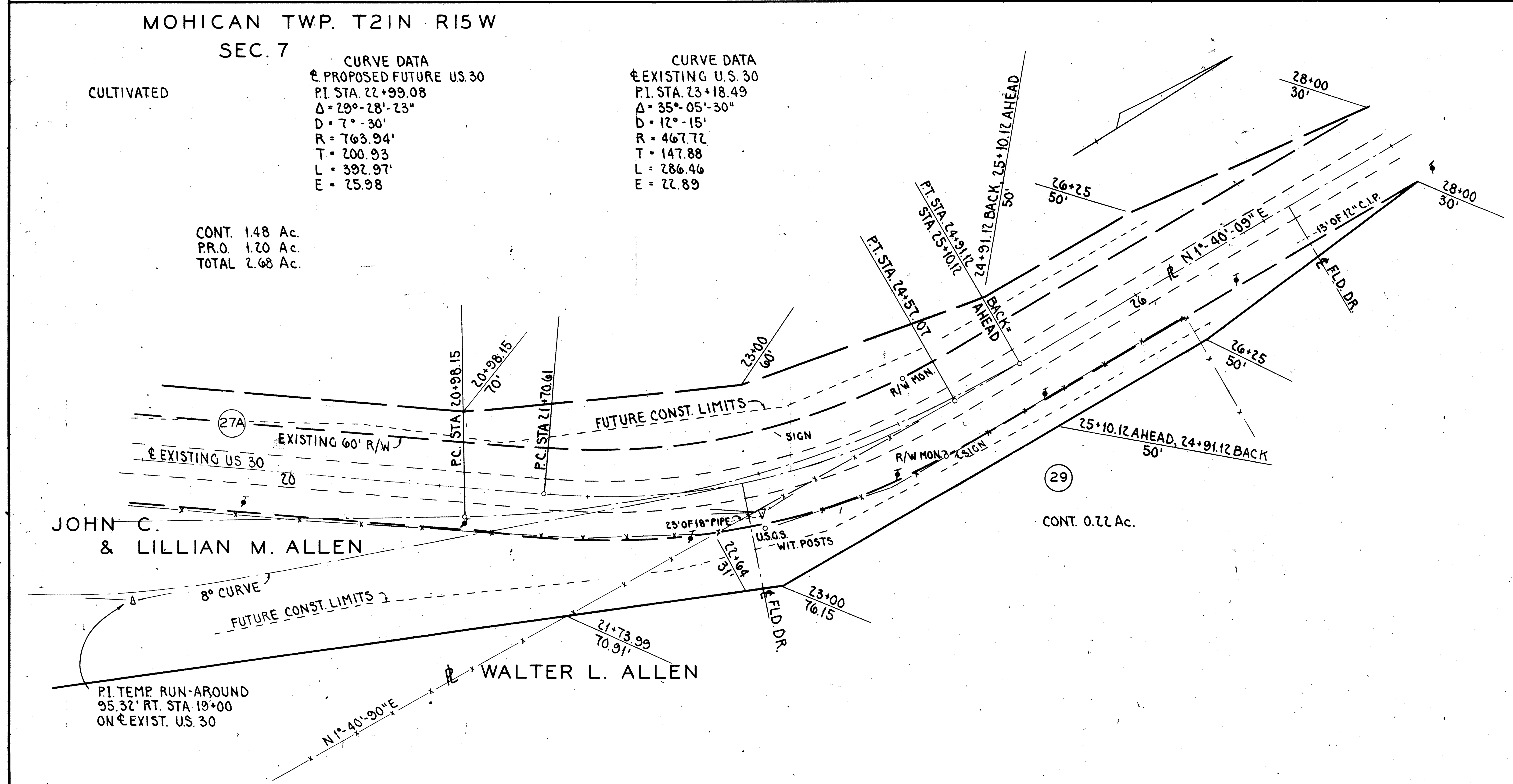
STATION	LIN. FT.	TYPE	END POST ASSEMBLY	COR. POST ASSEMBLY	INTERMEDIATE ANCHOR POST	SHEET
449+91 TO 474+00	4860	D		2	7	2
474+00 TO 504+00	5400	D	8	4	6	3
504+00 TO 534+00	6070	D		2	7	4
534+00 TO 564+00	5830	D	4	4	6	5
564+00 TO 594+00	5945	D		1	9	6
594+00 TO 622+00	5280	D	4	3	6	7
622+00 TO 652+00	6240	D	8		8	8
652+00 TO 682+00	5910	D		6	10	9
671+80 TO BRIDGE ABUT.	426	C		2		9
682+00 TO 3+70	4255	D	4		6	10
TOTAL	426	C		2		
TOTAL	49,790	D	28	22	65	

NOTE: 469 CU. YDS. DUMP ROCK FOR FENCE STREAM CROSSINGS.

END POST ASSEMBLY

INTERMEDIATE ANCHOR POST ASSEMBLY

CORNER POST ASSEMBLY



R/W PLAN STA. 3+00 to STA. 28+00 EXIST. U.S. 30

TE 54-A
200-4-60

GENERAL INFORMATION

INTRODUCTION

The project consists of the major relocation of 14.7 miles of USR 30, beginning 2.2 miles northeast of Hayesville, approximately 500 feet east of existing USR 30 and extending eastward, crossing Jerome Fork of the Mohican River and terminating at the Ashland - Wayne county line (County Road 93).

The proposed grade indicates cuts, a maximum of 17 feet in depth, and fills, a maximum of 36 feet in height.

GEOLOGY OF THE PROJECT

The alignment traverses a glaciated, moderately dissected portion of the Allegheny Plateau being incised by Jerome Fork of the Mohican River. Glacial drift in the uplands ranges from 5 to at least 22 feet in thickness; in the broad (2.7 miles) deeply-filled valley of Jerome Fork of the Mohican River, alluvial material reportedly ranges from 20 feet to in excess of 200 feet in thickness. Local bedrock consists primarily of shales and sandstones, of Mississippian age.

EXPLORATION

Exploratory borings were made by means of truck mounted mechanical earth auger, hand auger and peat sampler (in areas of difficult access), and rotary-type drill rig, between January 10 and February 10, 1961. Soil profile borings were supplemented by borings made in conjunction with the Quaker Springs Run, Jerome Fork of the Mohican River, Glenn Run, and County Road 62 structure foundation investigations.

INVESTIGATIONAL DISCLOSURES

Borings disclose the materials immediately below grade to consist predominantly of shale and sandstone bedrock, and secondarily of gravel, sand, silt, and silt clay in the A-1-a, A-3a, A-4, and A-6a classifications. Frost susceptible silts were encountered within three feet below grade at stations 462+00, 477+00, and 701+00.

Bedrock is anticipated in cut areas as follows:

Stations 450+00 to 460+00 - shale at grade, both ditches, and both backslopes.

Stations 477+50 to 4[illegible]+50 - shale at grade, both ditches, and both backslopes.

Stations 483+50 to 485+50 - shale at grade (Eastbound lanes), right ditchline, and right backslope.

Stations 664+25 to 667+50 - predominantly sandstone bedrock at grade, both ditches, and both backslopes.

In the embankment foundation areas, materials consist predominantly of silts, silt clays and clays in the A-4, A-6a, A-7-5, and A-7-6 classifications and peats (primarily fibrous and fine-textured). It is noted the most critical foundation areas occur within the flood plain of the Jerome Fork of the Mohican River, and chiefly in four locations:

Stations 522+00 to 536+00, embankment height 4-14 feet - highly compressible, low strength, fibrous and fine-textured peats, elastic clay and organic clay at-surface, extending to 150' Rt and 150' Lt of centerline, generally less than 5 feet in thickness, and underlain occasionally by wet silts, but most commonly by moist gravels.

Stations 576+00 to 570+00, embankment height approximately 10 feet - fibrous and fine-textured peats, highly compressible, low strength, at-surface, 5 feet thick, from at least 125' Lt to 75' Rt of centerline, underlain by 3 to at least 10 feet of wet, slightly compressible silts, underlain by gravels and sands.

Station 593+00 to 600+00, embankment height approximately 15 feet - wet, somewhat compressible silts, in the A-4b classification, contaminated by organic material, at-surface and up to at least 31 feet thick.

Stations 624+00 to 633+00 - soft, wet, low strength, compressible peats, generally right of centerline, primarily marly and sedimentary, up to 13 feet in thickness, generally overlain by 7 to 17 feet of wet silts and organic clays, and underlain by gravels, sands, and silts.

LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 1096 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel and/or stone fragments	A-1-a (0)	A-1-a	63	19	9	6	3	NP	NP	14	114
Gravel and/or stone fragments with sand	A-1-b (0)	A-1-b	45	20	19	10	6	NP	NP	15	112
Fine sand	A-3(0)	A-3	14	18	60	- 8 -		NP	NP	20	6
Coarse and fine sand	——	A-3a	11	16	53	12	8	NP	NP	19	54
Gravel and/or stone fragments with sand and silt	A-2-4 (0)	A-2-4	45	10	16	18	11	NP	NP	17	45
Gravel and/or stone fragments with sand, silt and clay	A-2-6 (0)	A-2-6	57	13	9	10	11	33	13	22	7
Sandy silt	A-4 (4)	A-4a	10	7	21	34	20	NP	NP	22	192
Silt	A-4 (8)	A-4b	2	1	8	65	24	NP	NP	20	270
Elastic silt and clay without organic material	A-5 (8)	A-5	0	0	7	59	34	42	8	33	1
Silt and clay	A-6(9)	A-6a	10	3	7	41	39	33	12	25	91
Silty clay	A-6 (11)	A-6b	0	1	9	44	46	37	17	34	9
Elastic clay without organic material unless otherwise noted	A-7-5(20)	A-7-5	2	4	9	43	42	82	37	65	38
Clay	A-7-6 (15)	A-7-6	1	2	5	45	47	48	22	41	45
Compact Peat			VISUAL CLASSIFICATION								1
Fibrous Peat			VISUAL CLASSIFICATION								28
Fine-Textured Peat			VISUAL CLASSIFICATION								23
Marly Sedimentary Peat			VISUAL CLASSIFICATION								14
Sedimentary Peat			VISUAL CLASSIFICATION								4
Loamy Peat			VISUAL CLASSIFICATION								5
Weathered Shale			VISUAL CLASSIFICATION								19
Shale / Indurated Clay			VISUAL CLASSIFICATION								
Sandstone / Clay Bedrock			VISUAL CLASSIFICATION								
Limestone			VISUAL CLASSIFICATION								
Various Other Materials			VISUAL CLASSIFICATION								18

Sod and/or Topsoil - X' = Approximate depth.

Berm material.

Auger boring - plan view.

Core boring - plan view.
Drive sample-core boring - plan view.

Auger boring plotted to vertical scale only.

Drive sample and/or core boring plotted to vertical scale only.

Number of blows for "Standard Penetration" test.
X = number of blows for the first 6 inches.
Y = number of blows for the second 6 inches.

Water content nearly equal to or greater than liquid limit.

Indicates a non-plastic material with high water content.

W Free water.

Static water level

NOTE: Figures beside borings indicate water content in percent. e.g. 15

NOTE: Small vertical figures beside borings indicate Loss on Ignition in precent e.g. 15 %

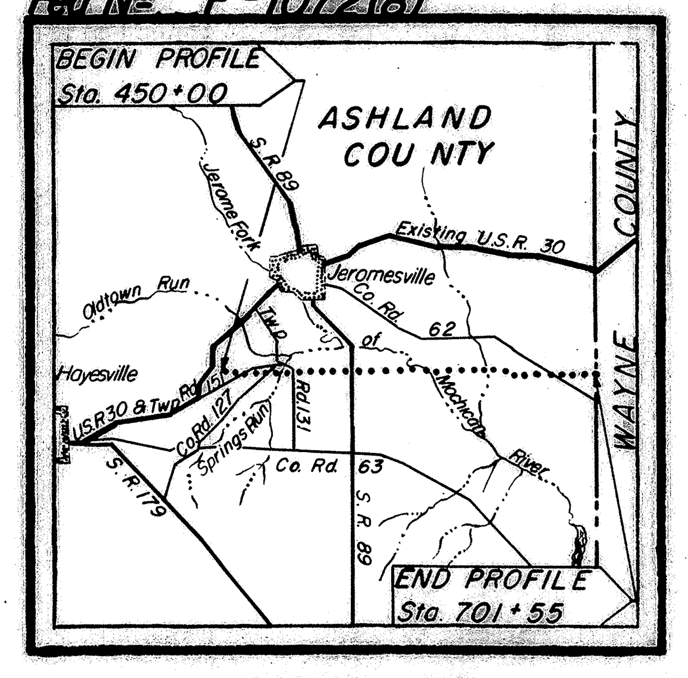
SOIL PROFILE
ASHLAND & WAYNE CO.
WAY - 30 - 0.00
ASD - 30 - 8.52

1 / 26

OHIO STATE HIGHWAY TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

Fed No. F-1072(8)



LOCATION MAP

Recon - N.P.L. 1-4 thru 20-61
Drilling - Auger - C.E.G. - J.R.G. - L.M.D. - 1-13 thru 24-61
Core - A.V. - W.F.H. - 1-26-61 - 2-1 thru 10-61
Drafting - W.E.J., R.F., D.A.P., C.L.I., R.L.G. - 3-7-61

SOIL PROFILE
ASHLAND COUNTY
WAY - 30 - 0.00
ASD - 30 - 8.52

2/26

OHIO STATE HIGHWAY TESTING LABORATORY
O S U CAMPUS COLUMBUS OHIO
F-1072(8)

SUMMARY OF SOIL TEST DATA

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.
*Denotes sample taken at or near grade.

STATION	OFFSET	DEPTH FROM-TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
450+00	CL	0.5-1.5	13	5	10	39	33	28	11	17	A-6a
		1.5-4.0	4	3	8	46	39	31	11	14	A-6a
		4.0-5.0	Gray Weathered Shale							10	Visual
		5.0-12.5	Gray Weathered Shale							10	Visual*
		12.5-18.0	Gray Weathered Shale							9	Visual*
		18.0-22.0	Gray Weathered Shale							8	Visual
453+00	CL	0.5-3.0	7	3	2	46	42	43	18	22	A-7-6
		3.0-6.0	22	1	2	50	25	32	5	13	A-4b
		6.0-9.0	47	4	4	28	17	28	11	12	A-6a
		9.0-10.5	Brown Weathered Shale							8	Visual
456+00	CL	0.4-1.0	43	10	26	12	9	NP	NP	12	A-1-b
		1.0-2.0	17	53	22	2	6	NP	NP	5	A-3a
		2.0-4.0	25	13	42	9	11	NP	NP	10	A-3a
		4.0-5.0	0	2	5	44	49	43	16	22	A-7-6
		5.0-7.0	4	2	4	46	44	36	11	15	A-6a
459+00	CL	0.5-2.5	30	8	10	30	22	29	7	16	A-4a
		2.5-6.0	27	2	4	43	24	34	11	13	A-6a
		6.0-11.5	64	2	2	19	13	31	8	14	A-2-4
		11.5-13.0	Gray Weathered Shale							9	Visual
		13.0-16.0	Gray Weathered Shale							9	Visual
		16.0-19.0	Gray Weathered Shale							8	Visual*
		19.0-19.5	Gray Clay							-	Visual*
		19.5-21.5	Gray Weathered Shale							8	Visual*
462+00	CL	0.5-1.5	0	2	3	55	40	31	9	23	A-4b*
		1.5-3.5	8	6	9	45	32	29	6	17	A-4a*
		3.5-10.0	20	4	8	37	31	31	11	15	A-6a
465+50	CL	0.3-2.0	24	7	12	37	20	NP	NP	19	A-4a
		2.0-6.0	37	12	13	18	20	31	9	15	A-4a
468+00	CL	0.5-3.0	3	6	13	37	41	31	12	20	A-6a
		3.0-6.0	7	5	13	37	38	27	11	19	A-6a
		6.0-8.0	16	6	12	34	32	27	11	14	A-6a
470+00	CL	1.0-2.0	46	8	5	21	20	36	12	18	A-6a
		2.0-10.0	63	9	7	10	11	31	11	17	A-2-6
		10.0-14.0	5	4	8	53	30	NP	NP	19	A-4b
		14.0-19.0	33	9	8	29	21	NP	NP	13	A-4a
		19.0-20.0	25	7	5	42	21	26	4	12	A-4a
		20.0-22.0	46	5	6	26	17	29	11	16	A-6a
473+30	CL	0.5-5.0	15	6	12	40	27	25	5	18	A-4a
		5.0-9.0	5	2	4	49	40	35	11	17	A-6a
		9.0-10.0	12	4	6	50	28	27	7	12	A-4b
477+00	CL	0.5-2.0	24	4	3	33	36	38	13	26	A-6a
		2.0-4.0	6	2	2	48	42	35	12	16	A-6a
		4.0-8.0	6	2	2	52	38	30	7	11	A-4b*
		8.0-11.0	Gray Weathered Shale							9	Visual*
480+00	80'Rt	0.4-1.5	4	3	5	49	39	32	11	21	A-6a
		1.5-6.0	18	2	5	42	33	32	12	13	A-6a
		6.0-9.0	Gray Weathered Shale							10	Visual
		9.0-11.5	Gray Weathered Shale							8	Visual
480+50	CL	0.4-1.5	24	2	5	39	30	32	11	20	A-6a
		1.5-4.5	31	2	3	39	25	32	11	10	A-6a
		4.5-10.0	Gray Weathered Shale							11	Visual
		10.0-11.0	Gray Weathered Shale							9	Visual
485+00	CL	0.5-1.5	14	2	2	42	40	36	11	23	A-6a
		1.5-3.0	4	2	3	45	46	36	12	17	A-6a
		3.0-7.0	2	1	1	40	56	38	14	16	A-6a*
		7.0-10.0	19	6	6	29	40	35	11	17	A-6a*
		10.0-12.0	Gray Weathered Shale							11	Visual
485+00	100'Rt	0.5-1.5	8	6	12	39	35	32	12	19	A-6a
		1.5-6.0	5	3	3	48	41	34	11	13	A-6a
		6.0-7.0	28	6	23	28	15	NP	NP	16	A-4a
		7.0-15.0	Gray Weathered Shale							12	Visual*
488+00	CL	0.7-1.5	0	0	1	62	37	35	12	23	A-6a
		1.5-7.0	0	0	9	62	29	25	3	20	A-4b
		7.0-9.5	Gray Weathered Shale							12	Visual
		9.5-10.5	Gray Weathered Shale							8	Visual
491+00	CL	0.7-2.0	17	12	12	34	25	27	7	20	A-4a
		2.0-6.0	46	21	16	10	7	NP	NP	11	A-1-b
		6.0-8.0	0	1	82	10	7	NP	NP	19	A-3a
		8.0-12.0	34	20	28	11	7	NP	NP	20	A-1-b
		12.0-13.0	70	8	9	9	4	NP	NP	10	A-1-a
		13.0-16.0	53	5	6	21	15	28	6	17	A-4a
		16.0-18.0	40	3	14	30	13	NP	NP	17	A-4a
		18.0-20.0	30	7	7	28	28	30	7	22	A-4a
493+15	CL	0.2-5.0	69	15	9	- 7 -		NP	NP	9	A-1-a
494+00	CL	0.7-5.5	57	21	9	9	4	NP	NP	15	A-1-a
		5.5-7.0	8	7	17	44	24	35	8	46	A-4a
		7.0-8.0	91	5	2	- 2 -		NP	NP	11	A-1-a
		8.0-11.0	32	11	10	29	18	NP	NP	15	A-4a
		11.0-13.0	77	11	4	- 8 -		NP	NP	12	A-1-a
497+00	CL	0.5-1.5	61	10	11	10	8	NP	NP	13	A-1-b
		1.5-7.0	0	4	20	54	22	NP	NP	25	A-4b
		7.0-9.0	77	13	6	- 4 -		NP	NP	16	A-1-a
		9.0-12.0	11	9	12	31	37	23	5	15	A-4a
		12.0-15.0	0	1	5	71	23	NP	NP	19	A-4b
		15.0-20.0	63	23	7	- 7 -		NP	NP	11	A-1-a
502+00	CL	0.5-1.5	0	0	17	59	24	NP	NP	31	A-4b
		1.5-2.0	0	3	8	61	28	NP	NP	36	A-4b
		2.0-5.0	77	8	4	6	5	NP	NP	13	A-1-a
		5.0-9.0	0	1	2	57	40	33	11	27	A-6a
		9.0-12.0	0	0	2	79	19	NP	NP	29	A-4b
		12.0-16.0	58	22	10	- 10 -		NP	NP	12	A-1-a
		16.0-17.0	5	6	7	62	20	NP	NP	26	A-4b
		17.0-20.0	21	7	12	31	29	21	5	14	A-4a
506+00	CL	0.8-2.0	39	4	6	32	19	NP	NP	24	A-4a
		2.0-6.0	74	11	7	5	3	NP	NP	14	A-1-a
		6.0-8.0	50	17	0	28	5	NP	NP	10	A-2-4
		8.0-10.0	2	3	32	54	9	NP	NP	24	A-4b
		10.0-11.0	2	3	5	74	16	NP	NP	19	A-4b
		11.0-12.0	0	2	9	79	10	NP	NP	26	A-4b
		12.0-16.0	58	10	11	16	5	NP	NP	15	A-1-b
		16.0-20.0	19	10	15	41	15	NP	NP	13	A-4a
508+00	CL	0.8-3.0	25	6	26	29	14	NP	NP	16	A-4a
		3.0-7.0	60	18	10	8	4	NP	NP	17	A-1-a
		7.0-12.0	72	11	8	6	3	NP	NP	14	A-1-a
		12.0-17.0	62	15	14	6	3	NP	NP	13	A-1-a
		17.0-20.0	47	27	11	10	5	NP	NP	13	A-1-b
		20.0-23.0	26	10	15	35	14	NP	NP	11	A-4a
510+00	CL	0.8-3.0	40	6	18	21	15	NP	NP	23	A-4a
		3.0-7.0	20	14	31	21	14	NP	NP	24	A-2-4
		7.0-13.0	63	17	10	7	3	NP	NP	16	A-1-a
		13.0-18.0	14	6	48	25	7	NP	NP	22	A-3a
		18.0-20.0	4	8	35	45	8	NP	NP	25	A-4a
513+00	CL	0.8-5.0	39	31	15	9	6	NP	NP	9	A-1-b
		5.0-10.0	69	17	7	4	3	NP	NP	14	A-1-a
		10.0-15.0	67	20	4	6	3	NP	NP	13	A-1-a
		15.0-20.0	0	2	70	17	11	NP	NP	18	A-3a
515+00	CL	0.8-6.0	77	9	5	5	4	NP	NP	12	A-1-a
		6.0-11.0	71	14	6	6	3	NP	NP	11	A-1-a
		11.0-16.0	39	34	15	7	5	NP	NP	14	A-1-b
		16.0-20.0	49	29	14	5	3	NP	NP	14	A-1-b
517+00	75'Lt	1.0-5.5	32	9	14	23	22	32	8	32	A-4a
		5.5-12.0	60	26	8	- 6 -		NP	NP	17	A-1-a
517+00	CL	0.3-6.0	48	9	12	19	12	NP	NP	13	A-2-4
		6.0-12.0	65	21	11	- 3 -		NP	NP	14	A-1-a
518+00	CL	0.5-5.5	20	6	21	36	17	NP	NP	15	A-4a
		5.5-7.0	57	16	12	8	7	NP	NP	17	A-1-a
		7.0-14.0	76	13	4	5	2	NP	NP	17	A-1-a
519+00	75'Lt	0.4-5.5	25	13	13	32	17	NP	NP	16	A-4a
		5.5-9.0	45	4	15	30	6	NP	NP	20	A-4a
		9.0-14.0	0	1	14	71	14	NP	NP	24	A-4b
519+00	CL	0.8-3.0	43	10	13	27	7	NP	NP	16	A-2-4
		3.0-8.0	53	21	16	7	3	NP	NP	16	A-1-a
		8.0-11.0	66	19	6	7	2	NP	NP	14	A-1-a
		11.0-13.0	12	1	3	61	23	31	5	30	A-4b
		13.0-20.0	75	14	5	5	1	NP	NP	12	A-1-a
520+00	CL	1.2-5.5	0	3	5	53	39	29	7	21	A-4b
		5.5-8.0	62	11	8	11	8	28	11	22	A-2-6
		8.0-12.0	50	27	10	8	5	NP	NP	16	A-1-a
520+75	CL	0.0-5.0	43	15	22	10	10	NP	NP	9	A-1-b*
		5.0-11.0	43	24	17	8	8	NP	NP	10	A-1-b
		11.0-15.0	27	45	20	5	3	NP	NP	17	A-1-b
521+00	75'Lt	1.0-6.0	30	3	5	32	30	41	19	39	A-7-6
		6.0-11.0	65	17	11	4	3	NP	NP	22	A-1-a
522+00	150'Lt	1.0-5.0	40	7	13	25	15	34	7	34	A-4a
		5.0-11.0	56	30	9	- 5 -		NP	NP	17	A-1-a
522+00	75'Lt	1.0-5.0	60	8	7	12	13	38	14	28	A-2-6
		5.0-11.0	52	33	8	4	3	NP	NP	15	A-1-a
522+00	CL	0.8-2.5	7	8	17	34	34	36	12	28	A-6a
		2.5-8.0	73	12	8	4	3	NP	NP	16	A-1-a
		8.0-14.0	54	24	11	8	3	NP	NP	16	A-1-a
		14.0-20.0	41	30	13	- 7 -		NP	NP	15	A-1-b
522+00	150'Rt	1.6-5.5	23	7	11	38	21	NP	NP	19	A-4a
		5.5-12.0	52	30	10	4	4	NP	NP	16	A-1-a
522+10	75'Rt	0.0-1.5	0	10	22	52	16	59	20	43	A-7-5
		1.5-4.0	32	9	11	29	19	NP	NP	25	A-4a
		4.0-10.0	56	29	7	- 8 -		NP	NP	15	A-1-a
523+00	CL	0.0-1.5	Black Organic clay							68	Visual
		1.5-3.0	29	6	14	33	18	NP	NP	31	A-4a
		3.0-5.5	30	11	11	33	15	NP	NP	33	A-4a
		5.5-14.0	66	15	8	7	4	NP	NP	15	A-1-a
524+00	150'Lt	1.5-5.5	33	11	15	25	16	NP	NP	40	A-4a
		5.5-12.0	67	27	3	- 3 -		NP	NP	18	A-1-a
524+00	75'Lt	1.5-6.0	31	8	17	28	16	NP	NP	31	A-4a
		6.0-12.0	50	31	6	- 4 -		NP	NP	15	A-1-a
524+00	CL	0.8-3.5	30	10	15	31	14	NP	NP	38	A-4a
		3.5-6.0	69	12	7	9	3	NP	NP	19	A-1-a
		6.0-8.0	0	2	6	61	31	NP	NP	21	A-4b
		8.0-10.0	0	2	8	63	27	28	7	24	A-4b
		10.0-15.0	51	28	14	- 7 -		NP	NP	16	A-1-b
		15.0-20.0	20	54	18	- 8 -		NP	NP	20	A-1-b
		20.0-25.0	22	53	22	- 3 -		NP	NP	18	A-1-b
524+00	75'Rt	0.0-2.0	Black Fibrous Peat							288	Visual
		2.0-3.5	0	5	9	45	41	55	33	58	A-7-6
		3.5-5.0	48	7	10	22	13	NP	NP	32	A-2-4
		5.0-11.0	45	37	9	- 9 -		NP	NP	15	A-1-b
524+00	150'Rt	1.6-5.0	20	5	15	40	20	NP	NP	36	A-4a
		5.0-12.0	54	27	8	7	4	NP	NP	15	A-1-a
525+00	CL	0.0-1.5	Black Fine-Textured Peat							261	Visual
		1.5-4.0	0	3	10	48	39	40	20	39	A-6b
		4.0-6.0	9	7	24	41	19	NP	NP	27	A-4a
		6.0-12.0	61	21	13	- 5 -		NP	NP	16	A-1-a
526+00	150'Lt	0.0-2.3	Black Fine-Textured Peat							351	Visual
		2.3-5.0	21	5	14	39	21	NP	NP	30	A-4a
		5.0-12.0	60	21	9	- 10 -		NP	NP	15	A-1-a
526+00	75'Lt	0.0-2.8	Black Fibrous Peat							249	Visual
		2.8-5.0	29	6	15	34	16	NP	NP	31	A-4a
		5.0-12.0	64	21	8	- 7 -		NP	NP	18	A-1-a
526+00	CL	1.5-5.0	0	2	6	55	37	65	36	56	A-7-6
		5.0-10.0	67	13	6	11	3	NP	NP	16	A-1-a
		10.0-15.0	66	22	7	- 5 -		NP	NP	11	A-1-a
		15.0-20.0	49	24	11	11	5	NP	NP	13	A-1-b
		20.0-25.0	5	20	67	- 8 -		NP	NP	26	A-3
526+00	75'Rt	0.0-2.0	Black Fibrous Peat							327	Visual
		2.5-5.0	0	1	3	49	47	46	19	65	A-7-6
		5.0-12.0	62	19	9	7	3	NP	NP	17	A-1-a
526+00	150'Rt	0.0-2.0	Black Fibrous Peat							300	Visual
		2.0-5.0	3	5	10	43	39	83	52	73	A-7-5
		5.0-11.0	64	18	10	- 8 -		NP	NP	14	A-1-a
527+00	CL	0.0-1.5	Black Fibrous Peat							330	Visual
		1.5-3.0	0	1	7	43	49	50	22	58	A-7-6
		3.0-6.0	42	8	16	27	7	NP	NP	23	A-2-4
		6.0-12.0	63	24	8	- 5 -		NP	NP	16	A-1-a
528+00	150'Lt	0.0-2.5	Black Fine-Textured Peat							329	Visual
		2.5-5.0	23	6	18	33	20	NP	NP	36	A-4a
		5.0-12.0	56	30	8	- 6 -		NP	NP	18	A-1-a
528+00	75'Lt	0.0-2.3	Black Fine-Textured Peat							194	Visual
		2.3-5.0	8	3	22	41	26	41	12	48	A-7-6
		5.0-12.0	60	23	7	5	5	NP	NP	16	A-1-a
528+00	CL	0.0-2.0	Brown Fine-Textured Peat with clay							169	Visual
		2.0-5.0	0	1	14	55	30	30	13	34	A-6a
		5.0-12.0	55	24	10	6	5	NP	NP	14	A-1-a
528+00	75'Rt	0.0-2.5	Black Fibrous Peat							302	Visual
		2.5-5.0	39	8	13	25	15	NP	NP	38	A-4a
		5.0-12.0	57	20	10	8	5	NP	NP	21	A-1-a
528+00	150'Rt	0.0-2.0	Black Fibrous Peat							209	Visual
		2.0-5.0	0	1	3	51	45	59	32	64	A-7-6
		5.0-12.0	60	16	8	10	6	NP	NP	18	A-1-b
528+50	CL	0.3-2.0	Black Fibrous Peat							263	Visual
		2.0-3.0	0	1	16	50	33	27	10	35	A-4b
		3.0-5.0	22	6	25	33	14	NP	NP	23	A-4a
		5.0-10.0	71	3	3	20	3	NP	NP	12	A-1-b
529+00	150'Lt	0.0-3.0	Black Fine-Textured Peat							290	Visual
		3.0-5.0	17	3	15	41	24	32	11	33	A-6a
		5.0-10.0	64	21	8	- 7 -		NP	NP	13	A-1-a
		10.0-15.0	0	2	18	67	13	NP	NP	19	A-4b
		15.0-20.0	37	46	11	- 6 -		NP	NP	31	A-1-b
529+00	75'Lt	0.0-3.0	Black Fibrous Peat							211	Visual
		3.0-7.0	0	1	14	51	34	37	14	41	A-6a
		7.0-12.0	65	20	6	5	4	NP	NP	16	A-1-a
529+00	CL	0.3-2.0	Black Fibrous Peat							245	Visual
		2.0-5.0	0	7	15	44	34	118	77	115	A-7-5
		5.0-10.0	66	22	7	- 5 -		NP	NP	14	A-1-a
		10.0-13.0	52	29	10	- 9 -		NP	NP	14	A-1-a
		13.0-20.0	8	7	51	27	7	NP	NP	19	A-3a
529+00	75'Rt	0.0-2.5	Black Fine-Textured Peat							457	Visual
		2.5-4.0	33	7	11	32	17	NP	NP	34	A-4a
		4.0-10.0	61	18	9	8	4	NP	NP	17	A-1-a
		10.0-15.0	32	26	31	5	6	NP	NP	14	A-1-b
529+00	150'Rt	0.0-3.0	Black Fine-Textured Peat							329	Visual
		3.0-5.0	11	16	16	30	27	49	13	41	A-7-5
		5.0-12.0	58	28	5	4	5	NP	NP	16	A-1-a
530+00	CL	0.3-2.0	Black Fibrous Peat							328	Visual
		2.0-5.0	0	0	21	51	28	NP	NP	27	A-4b
		5.0-11.0	53	30	11	- 6 -		NP	NP	15	A-1-a
		11.0-15.0	0	2	17	65	16	NP	NP	19	A-4b
531+00	150'Lt	0.0-2.5	Black Fibrous Peat							337	Visual
		2.5-4.0	11	3	22	37	27	32	10	27	A-4a
		4.0-7.0	46	9	13	16	16	NP	NP	38	A-2-4
		7.0-11.0	0	2	2	56	40	34	10	28	A-4b
		11.0-15.0	18	3	3	43	33	34	11	33	A-6a
		15.0-20.0	43	19	11	19	8	NP	NP	19	A-2-4
531+00	75'Lt	0.0-4.0	Black Fibrous Peat							371	Visual
		4.0-6.0	35	8	17	30	10	NP	NP	30	A-4a
		6.0-10.0	53	35	6	- 6 -		NP	NP	18	A-1-a
531+00	CL	0.0-3.0	Black Fine-Textured Peat							356	Visual
		3.0-4.0	13	1	1	40	45	49	19	69	A-7-5
		4.0-5.0	Black Fine-Textured Peat							193	Visual
		5.0-8.0	8	4	8	54	26	NP	NP	30	A-4b
		8.0-12.0	56	24	8	7	5	NP	NP	16	A-1-a
531+00	75'Rt	0.0-1.5	Black Fine-Textured Peat							341	Visual
		1.5-3.0	0	2	13	52	33	79	43	93	A-7-5
		3.0-5.0	Black Organic Clay W/Peat							121	Visual
		5.0-9.0	11	5	22	45	17	NP	NP	11	A-4a
		9.0-15.0	11	5	22	24	38	29	6	24	A-4a
		15.0-20.0	5	1	2	69	23	NP	NP	22	A-4b
531+00	150'Rt	0.0-1.0	Black Loamy Peat							128	Visual
		1.0-3.0	0	0	3	65	32	46	18	41	A-7-6
		3.0-5.0	Black Fine-Textured Peat								Visual
		5.0-6.0	16	3	7	50	24	NP	NP	20	A-4b
		6.0-11.0	62	23	6	6	3	NP	NP	11	A-1-a
532+00	CL	0.3-1.0	Black Fibrous Peat							143	Visual
		1.0-5.0	0	2	4	47	47	107	61	73	A-7-5
		5.0-10.0	0	1	1	65	33	NP	NP	21	A-4b
		10.0-15.0	0	1	1	63	35	NP	NP	31	A-4b
		15.0-19.0	0	1	21	61	17	24	NP	27	A-4b
		19.0-25.0	66	17	10	- 7 -		NP	NP	10	A-1-a
533+00	150'Lt	0.0-2.0	Black Fibrous Peat							220	Visual
		2.0-4.0	25	7	17	34	17	NP	NP	23	A-4a
		4.0-6.0	53	10	11	17	9	NP	NP	32	A-2-4
		6.0-11.0	14	12	14	41	19	NP	NP	22	A-4a
		11.0-16.0	21	3	4	42	30	30	14	20	A-6a
		16.0-20.0	66	14	9	7	4	NP	NP	13	A-1-a
533+00	75'Lt	0.0-1.5	Black Loamy Peat							185	Visual
		1.5-6.0	31	2	2	38	27	37	11	42	A-6a
		6.0-11.0	71	12	6	7	4	NP	NP	15	A-1-a
533+00	CL	0.0-1.2	Black Organic Clay							43	Visual
		1.2-4.0	0	0	6	56	38	37	13	35	A-6a
		4.0-8.0	32	8	13	27	20	31	11	21	A-6a
		8.0-12.0	58	27	9	- 6 -		NP	NP	13	A-1-a
533+00	75'Rt	0.0-1.0	Black Organic Clay W/Peat							58	Visual
		1.0-4.0	0	0	3	63	34	41	15	37	A-7-6
		4.0-8.0	10	5	11	39	35	87	22	75	A-7-5
		8.0-11.0	24	18	44	7	7	NP	NP	16	A-3a
533+00	150'Rt	0.0-1.0	0	1	12	57	30	41	17	25	A-7-6
		1.0-5.0	0	1	21	50	28	NP	NP	31	A-4b
		5.0-6.5	5	4	11	53	27	50	21	36	A-7-6
		6.5-12.0	34	32	19	10	5	NP	NP	14	A-1-b
534+00	CL	1.0-4.0	0	1	2	56	41	38	12	38	A-6a
		4.0-4.5	Black Organic Clay W/Peat							102	Visual
		4.5-9.0	18	11	33	18	20	NP	NP	18	A-4a
		9.0-12.0	51	28	10	7	4	NP	NP	15	A-1-a
535+00	150'Lt	0.0-1.0	Black Loamy Peat							167	Visual
		1.0-3.0	0	0	4	63	33	36	12	32	A-6a
		3.0-4.0	0	18	15	32	35	171	38	108	A-7-5
		4.0-7.0	8	0	4	57	31	37	10	33	A-4b
		7.0-12.0	53	31	9	4	3	NP	NP	17	A-1-a
535+00	75'Lt	0.0-0.8	Black Organic Clay							63	Visual
		0.8-4.0	5	1	5	61	28	35	9	39	A-4b
		4.0-6.0	Black Loamy Peat							127	Visual
		6.0-8.0	8	5	20	44	23	NP	NP	30	A-4a
		8.0-12.0	54	30	9	- 7 -		NP	NP	14	A-1-a
535+00	CL	0.6-3.0	0	1	7	54	38	28	8	30	A-4b
		3.0-5.0	0	5	21	53	21	64	16	58	A-7-5
		5.0-8.0	50	16	14	15	5	NP	NP	25	A-1-b
		8.0-13.0	45	20	10	21	4	NP	NP	14	A-1-b
		13.0-18.0	39	30	21	- 10 -		NP	NP	6	A-1-b
		18.0-20.0	0	1	17	67	15	NP	NP	19	A-4b
535+00	75'Rt	1.0-4.0	0	1	8	54	37	46	20	30	A-7-6
		4.0-5.0	Brown Organic Clay W/Peat							85	Visual
		5.0-9.0	15	16	22	31	16	NP	NP	25	A-4a
		9.0-15.0	33	39	16	9	3	NP	NP	14	A-1-b
535+00	150'Rt	0.0-1.0	0	5	13	56	26	73	31	55	A-7-5
		1.0-5.0	0	0	15	60	25	NP	NP	22	A-4b
		5.0-7.0	Brown Fine-Textured Peat							222	Visual
		7.0-12.0	48	21	19	7	5	NP	NP	15	A-1-b
536+00	CL	0.0-1.5	Dark Gray Fine-Textured Peat								Visual
		1.5-5.0	0	0	3	55	42	43	13	38	A-7-5
		5.0-7.0	0	0	7	59	34	42	8	33	A-5
		7.0-12.0	44	18	27	6	5	NP	NP	15	A-1-b
536+50	150'Rt	0.0-2.0	0	12	9	42	37	31	3	27	A-4a
		2.0-6.0	0	1	15	52	32	28	6	28	A-4b
		6.0-9.0	0	0	7	63	30	NP	NP	33	A-4b
		9.0-15.0	33	33	17	11	6	NP	NP	15	A-1-b
536+60	CL	0.0-0.8	0	2	7	56	35	NP	NP	36	A-4b
		0.8-3.0	0	1	7	57	35	40	10	28	A-4b
		3.0-6.0	9	10	24	38	19	NP	NP	31	A-4a
		6.0-9.0	0	4	9	53	34	32	8	28	A-4b
		9.0-12.0	39	28	21	7	5	NP	NP	14	A-1-b

(Continued on following sheet)

SUMMARY OF SOIL TEST DATA (Cont'd)

NOTE: NP shown in Liquid Limit and Plasticity Index indicates that the material is non-plastic.
*Denotes sample taken at or near grade.

STATION	OFFSET	DEPTH FROM-TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
536+60	75'Rt	0.0-2.0	7	2	8	56	27	NP	NP	24	A-4b
		2.0-5.0	0	1	25	53	21	NP	NP	31	A-4b
		5.0-6.0	Black Organic Clay W/Peat							80	Visual
		6.0-9.0	9	4	12	46	29	37	11	39	A-6a
		9.0-15.0	14	44	28	10	4	NP	NP	18	A-1-b
536+75	75'Lt	0.0-1.0	37	4	7	31	21	187	98	100	A-7-5
		1.0-4.0	14	0	9	55	22	NP	NP	44	A-4b
		4.0-8.0	10	1	17	40	32	NP	NP	57	A-4a
		8.0-12.0	51	18	11	12	8	NP	NP	15	A-1-b
536+85	150'Lt	0.0-1.5	Black Organic Clay							75	Visual
		1.5-4.0	6	1	4	57	32	31	10	38	A-4b
		4.0-8.0	3	2	6	41	48	50	21	55	A-7-6
		8.0-12.0	50	29	9	7	5	NP	NP	16	A-1-a
536+85	60'Rt	0.4-2.0	44	14	16	16	10	NP	NP	12	A-2-4
		2.0-4.0	Black Compact Peat							35	Visual
		4.0-6.0	36	10	16	23	15	NP	NP	22	A-4a
		6.0-9.0	25	11	16	26	18	24	11	25	A-6a
		9.0-15.0	12	27	42	12	7	NP	NP	21	A-3a
537+15	75'Lt	0.4-3.0	43	13	13	21	10	NP	NP	30	A-2-4
		3.0-4.0	8	10	27	33	22	NP	NP	30	A-4a
		4.0-6.0	12	12	24	33	19	NP	NP	20	A-4a
		6.0-8.0	0	7	12	40	41	30	13	27	A-6a
		8.0-13.0	0	0	37	56	7	NP	NP	22	A-4b
		13.0-17.0	0	0	17	75	8	NP	NP	21	A-4b
537+80	150'Rt	0.0-4.0	52	11	21	6	10	NP	NP	9	A-1-b
		4.0-10.0	41	33	14	7	5	NP	NP	5	A-1-b
538+00	CL	0.0-5.0	24	13	15	28	20	29	10	11	A-4a*
		5.0-11.0	38	24	15	12	11	24	6	7	A-1-b
538+20	150'Lt	0.0-4.0	41	8	11	23	17	31	13	18	A-6a
		4.0-8.0	68	12	8	7	5	NP	NP	10	A-1-a
		8.0-12.0	6	20	60	6	8	NP	NP	9	A-3a
540+00	CL	0.8-5.0	55	10	15	11	9	NP	NP	8	A-1-b*
		5.0-10.0	73	11	7	6	3	NP	NP	6	A-1-a
		10.0-15.0	68	15	8	6	3	NP	NP	6	A-1-a
543+00	CL	0.8-4.0	0	1	14	61	24	NP	NP	20	A-4b
		4.0-10.0	48	23	10	11	8	NP	NP	11	A-1-b
		10.0-12.0	1	2	82	8	7	NP	NP	8	A-3a
546+00	CL	0.8-3.0	7	6	25	41	21	NP	NP	12	A-4a
		3.0-8.0	58	26	6	7	3	NP	NP	6	A-1-a
		8.0-12.0	58	17	12	9	4	NP	NP	5	A-1-a
550+00	CL	0.8-3.0	9	3	26	41	21	NP	NP	24	A-4a
		3.0-9.0	17	34	37	- 12 -		NP	NP	8	A-1-b
		9.0-14.0	2	9	70	11	8	NP	NP	16	A-3a
553+00	CL	0.8-4.0	0	7	74	9	10	NP	NP	8	A-3a
		4.0-9.0	49	34	7	6	4	NP	NP	6	A-1-b
		9.0-12.0	53	25	11	6	5	NP	NP	5	A-1-a
		12.0-14.0	4	2	73	12	9	NP	NP	11	A-3a
		14.0-16.0	0	2	44	47	7	NP	NP	22	A-4a
554+60	CL	0.8-2.0	4	7	9	44	36	28	11	21	A-6a
		2.0-4.0	7	7	8	44	34	27	11	24	A-6a
		4.0-7.0	69	12	5	5	9	NP	NP	21	A-1-a
		7.0-12.0	2	4	79	4	11	NP	NP	22	A-3a
		12.0-16.0	0	9	72	10	9	NP	NP	21	A-3a
		16.0-20.0	16	30	46	- 8 -		NP	NP	19	A-3
555+00	100'Lt	0.8-4.0	0	2	5	57	36	NP	NP	26	A-4b
		4.0-7.0	15	5	21	41	18	22	7	19	A-4a
		7.0-10.0	52	22	13	8	5	NP	NP	11	A-1-a
		10.0-15.0	56	19	10	8	7	NP	NP	21	A-1-a
		15.0-20.0	43	6	42	5	4	NP	NP	19	A-2-4
555+00	100'Rt	0.8-2.0	25	3	14	33	25	28	8	22	A-4a
		2.0-5.0	17	9	20	31	23	25	7	24	A-4a
		5.0-10.0	21	13	18	27	21	NP	NP	29	A-4a
		10.0-12.0	26	22	33	10	8	NP	NP	19	A-3a
		12.0-16.0	0	1	69	21	9	NP	NP	19	A-3a
		16.0-20.0	83	8	4	- 5 -		NP	NP	11	A-1-a
559+00	CL	0.0-2.0	42	10	15	13	11	NP	NP	17	A-1-b
		2.0-7.0	59	20	8	5	8	NP	NP	8	A-1-a
		7.0-12.0	55	31	4	5	5	NP	NP	8	A-1-a
560+00	100'Rt	0.8-3.0	18	7	10	39	26	32	12	23	A-6a
		3.0-5.0	18	1	8	35	38	31	11	27	A-6a
		5.0-8.0	22	5	22	33	18	NP	NP	26	A-4a
		8.0-13.0	0	8	81	4	7	NP	NP	20	A-3a
		13.0-18.0	0	1	41	50	8	NP	NP	18	A-4b
		18.0-24.0	0	1	44	48	7	NP	NP	19	A-4a
		24.0-30.0	0	1	36	68	5	NP	NP	20	A-4b
563+00	CL	0.8-2.0	68	14	7	4	6	NP	NP	13	A-1-a*
		2.0-8.0	60	23	7	6	4	NP	NP	4	A-1-a
563+00	100'Rt	0.8-4.0	3	12	25	37	23	24	5	22	A-4a
		4.0-9.0	45	9	6	25	15	NP	NP	27	A-4a
		9.0-11.0	72	12	7	6	3	NP	NP	13	A-1-a
		11.0-16.0	10	1	8	70	11	NP	NP	18	A-4b
		16.0-21.0	9	2	19	61	9	NP	NP	22	A-4b
		21.0-26.0	0	1	43	51	5	NP	NP	26	A-4b
		26.0-30.0	3	1	14	70	12	NP	NP	25	A-4b
566+00	CL	0.5-3.0	21	5	21	32	21	NP	NP	17	A-4a
		3.0-5.0	37	21	20	11	11	NP	NP	21	A-1-b
		5.0-10.0	58	26	7	- 9 -		NP	NP	16	A-1-a
		10.0-15.0	10	28	51	- 11 -		NP	NP	20	A-3a
		15.0-20.0	14	11	68	2	5	NP	NP	19	A-3
566+00	100'Rt	0.5-4.0	0	1	6	43	50	37	12	30	A-6a
		4.0-6.0	0	1	3	59	37	28	9	28	A-4b
		6.0-7.0	40	14	15	21	10	NP	NP	28	A-2-4
		7.0-10.0	56	20	18	- 6 -		NP	NP	12	A-1-a
		10.0-15.0	11	4	30	46	9	NP	NP	25	A-4a
		15.0-20.0	16	3	24	17	10	NP	NP	21	A-4a
		20.0-25.0	3	1	13	75	8	NP	NP	20	A-4b
		25.0-30.0	0	0	81	15	4	NP	NP	22	A-3a
570+00	CL	0.5-5.0	7	15	43	14	21	NP	NP	11	A-3a
		5.0-10.0	38	23	22	9	8	NP	NP	5	A-1-b*
		10.0-14.0	56	23	9	6	6	NP	NP	6	A-1-a*
573+00	CL	0.8-3.0	16	16	37	15	16	NP	NP	9	A-3a
		3.0-7.0	2	8	76	3	11	NP	NP	7	A-3a*
		7.0-14.0	55	20	9	12	4	NP	NP	11	A-1-b
		14.0-15.0	2	2	3	75	18	NP	NP	26	A-4b
576+00	150'Lt	0.0-2.5	Black Organic Sandy Silt							45	Visual
		2.5-5.0	0	4	19	50	27	NP	NP	20	A-4b
		5.0-10.0	40	20	20	16	4	NP	NP	20	A-1-b
		10.0-15.0	24	31	25	13	7	NP	NP	17	A-1-b
		15.0-20.0	20	2	2	60	16	NP	NP	21	A-4b
		20.0-25.0	53	1	4	36	6	NP	NP	21	A-4a
		25.0-31.0	0	1	12	79	8	NP	NP	20	A-4b
576+00	75'Lt	0.0-4.0	Black Fibrous Peat								Visual
		4.0-6.0	51	3	19	15	12	20	4	18	A-2-4
		6.0-8.0	22	27	31	4	16	NP	NP	23	A-3a
		8.0-10.0	42	26	16	10	6	NP	NP	19	A-1-b
		10.0-16.0	20	39	25	11	5	NP	NP	22	A-1-b
		16.0-21.0	9	1	3	65	22	NP	NP	20	A-4b
		21.0-26.0	3	1	10	77	9	NP	NP	21	A-4b
		26.0-31.0	0	1	6	83	10	NP	NP	22	A-4b
576+00	CL	0.3-3.0	1	10	33	28	28	NP	NP	25	A-4a
		3.0-6.0	17	17	25	23	18	NP	NP	26	A-4a
		6.0-10.0	6	25	47	12	10	NP	NP	23	A-3a
		10.0-12.0	8	25	46	11	10	NP	NP	22	A-3a
		12.0-17.0	9	1	5	72	13	NP	NP	19	A-4b
		17.0-22.0	0	1	6	83	10	NP	NP	26	A-4b
		22.0-27.0	0	1	2	79	18	NP	NP	22	A-4b
		27.0-31.0	0	0	1	82	17	NP	NP	46	A-4b
576+70	CL	0.0-5.0	Black Fibrous Peat							314	Visual
		5.0-7.0	0	9	31	28	32	NP	NP	25	A-4a
		7.0-9.0	17	5	22	31	25	NP	NP	33	A-4a
		9.0-13.0	0	2	6	59	33	28	6	34	A-4b
		13.0-18.0	16	43	23	10	8	NP	NP	18	A-3a
		18.0-22.0	17	20	48	7	8	NP	NP	22	A-3a
		22.0-24.0	13	26	52	4	5	NP	NP	20	A-3
		24.0-28.0	76	7	7	4	6	NP	NP	12	A-1-a
		28.0-31.0	0	1	7	79	13	NP	NP	23	A-4b
577+00	125'Lt	0.3-2.0	4	10	54	22	10	NP	NP	31	A-3a
		2.0-3.0	Black Fine-Textured Peat								Visual
		3.0-6.0	10	7	31	35	17	NP	NP	24	A-4a
		6.0-10.0	18	21	35	14	12	NP	NP	24	A-3a
		10.0-15.0	71	17	7	- 5 -		NP	NP	14	A-1-a
		15.0-17.0	61	19	10	- 10 -		NP	NP	12	A-1-a
		17.0-22.0	6	3	12	71	8	NP	NP	19	A-4b
		22.0-28.0	1	2	10	79	8	NP	NP	21	A-4b
		28.0-31.0	38	1	4	50	7	NP	NP	22	A-4b
577+00	75'Lt	0.0-5.0	Black Fibrous Peat								Visual
		5.0-10.0	6	5	26	38	25	NP	NP	65	A-4a
		10.0-11.0	0	1	49	33	17	NP	NP	25	A-4a
577+00	CL	0.0-5.0	Black Fibrous Peat							179	Visual
		5.0-12.0	0	9	20	39	32	NP	NP	47	A-4a
		12.0-16.0	0	2	10	60	28	NP	NP	15	A-4b
577+00	45'Rt	1.0-2.0	13	15	30	28	14	NP	NP	32	A-4a
		2.0-5.0	5	12	33	30	20	NP	NP	22	A-4a
		5.0-10.0	18	34	26	13	9	NP	NP	23	A-3a
		10.0-12.0	60	14	12	8	6	NP	NP	15	A-1-a
		12.0-17.0	3	2	5	81	9	NP	NP	20	A-4b
		17.0-22.0	17	1	2	71	9	NP	NP	25	A-4b
		22.0-27.0	10	1	3	75	11	NP	NP	22	A-4b
		27.0-31.0	4	1	2	80	13	NP	NP	21	A-4b
577+00	75'Rt	0.0-3.0	Black Fine-Textured Peat							78	Visual
		3.0-4.0	13	12	31	29	15	NP	NP	26	A-4a
		4.0-5.0	7	13	23	38	19	NP	NP	24	A-4a
		5.0-8.0	0	28	33	25	14	NP	NP	31	A-4a
		8.0-11.0	45	10	30	9	6	NP	NP	16	A-1-b
		11.0-17.0	70	18	6	- 6 -		NP	NP	11	A-1-a
		17.0-22.0	16	3	2	69	10	NP	NP	21	A-4b
		22.0-27.0	5	1	2	74	18	NP	NP	20	A-4b
		27.0-31.0	3	1	8	72	16	NP	NP	20	A-4b
577+00	130'Rt	0.3-4.0	10	9	23	39	19	NP	NP	9	A-4a
		4.0-9.0	31	22	23	9	15	NP	NP	10	A-1-b
		9.0-11.0	37	19	27	9	8	NP	NP	22	A-1-b
		11.0-15.0	32	18	32	9	9	NP	NP	20	A-1-b
		15.0-20.0	0	1	1	88	10	NP	NP	23	A-4b
		20.0-25.0	6	1	3	77	13	NP	NP	20	A-4b
		25.0-31.0	10	2	3	66	19	NP	NP	22	A-4b
577+50	CL	0.0-6.0	Black Fibrous Peat							245	Visual
		6.0-11.0	0	0	8	61	31	NP	NP	16	A-4b
		11.0-14.0	0	0	2	62	36	NP	NP	32	A-4b
		14.0-15.0	0	1	46	36	17	NP	NP	17	A-4a
578+00	121'Lt	0.3-4.0	13	7	33	31	16	NP	NP	12	A-4a
		4.0-6.0	57	18	11	7	7	NP	NP	11	A-1-a
		6.0-9.0	20	11	22	28	19	NP	NP	26	A-4a
		9.0-14.0	52	12	14	15	7	NP	NP	20	A-1-b
		14.0-15.0	0	4	71	18	7	NP	NP	24	A-3a
		15.0-18.0	0	1	8	29	62	36	12	30	A-6a
		18.0-23.0	0	1	3	78	18	NP	NP	21	A-4b
		23.0-25.0	6	4	5	62	23	NP	NP	20	A-4b
		25.0-31.0	0	1	7	84	8	NP	NP	20	A-4b
578+00	75'Lt	0.0-5.0	0	10	26	44	20	NP	NP	32	A-4a
578+00	CL	0.0-5.0	Black Fibrous Peat							146	Visual
		5.0-12.0	0	4	17	56	23	NP	NP	50	A-4b
		12.0-15.0	0	0	10	63	27	NP	NP	28	A-4b
578+00	75'Rt	0.0-5.0	Black Fibrous Peat							176	Visual
		5.0-10.0	0	5	25	46	24	NP	NP	46	A-4a
		10.0-12.0	0	0	2	65	33	NP	NP	38	A-4b
578+00	150'Rt	0.0-2.0	4	11	27	34	24	NP	NP	23	A-4a
		2.0-3.0	47	6	16	20	11	NP	NP	20	A-2-4
		3.0-5.0	20	30	23	14	13	NP	NP	22	A-3a
		5.0-11.0	16	21	41	14	8	NP	NP	24	A-3a
		11.0-17.0	50	30	12	- 8 -		NP	NP	13	A-1-a
		17.0-23.0	0	1	3	88	8	NP	NP	21	A-4b
		23.0-28.0	0	1	5	83	11	NP	NP	19	A-4b
		28.0-31.0	4	2	5	77	12	NP	NP	18	A-4b
578+30	CL	0.0-5.0	Black Fibrous Peat							352	Visual
		5.0-10.0	0	2	21	47	30	NP	NP	36	A-4a
		10.0-14.0	0	1	21	53	25	NP	NP	27	A-4b
		14.0-19.0	14	13	50	17	6	NP	NP	19	A-3a
		19.0-25.0	31	33	22	7	7	NP	NP	13	A-1-b
		25.0-31.0	31	19	24	20	6	NP	NP	16	A-2-4
579+00	CL	0.5-5.0	8	14	27	36	15	NP	NP	16	A-4a
		5.0-10.0	5	14	31	29	21	24	3	30	A-4a
		10.0-12.0	4	17	30	22	18	NP	NP	26	A-4a
		12.0-14.0	17	25	17	5	6	NP	NP	15	A-1-b
		14.0-20.0	0	0	2	88	10	NP	NP	22	A-4b
		20.0-25.0	0	1	1	78	20	NP	NP	22	A-4b
		25.0-27.0	0	0	2	75	23	NP	NP	19	A-4b
		27.0-30.0	0	0	4	85	11	NP	NP	21	A-4b
579+00	75'Rt	0.0-2.5	Black Organic Sandy Silt							37	Visual
		2.5-5.0	15	6	29	30	20	NP	NP	27	A-4a
		5.0-8.0	18	12	32	24	14	NP	NP	33	A-4a
		8.0-13.0	24	35	26	10	5	NP	NP	18	A-1-b
		13.0-15.0	15	27	43	9	6	NP	NP	20	A-3a
		15.0-17.0	14	5	12	27	42	26	11	20	A-6a
		17.0-24.0	5	9	71	10	5	NP	NP	23	A-3a
		24.0-30.0	4	1	2	63	30	NP	NP	23	A-4b
581+00	CL	0.8-4.0	19	25	23	19	14	NP	NP	8	A-2-4*
		4.0-9.0	9	30	31	12	9	NP	NP	5	A-3a*
		9.0-10.0	0	4	49	37	10	NP	NP	13	A-4a
		10.0-11.0	68	12	6	10	4	NP	NP	10	A-1-a
		11.0-15.0	0	0	1	85	14	NP	NP	30	A-4b
583+00	CL	0.8-4.0	23	26	21	15	15	NP	NP	9	A-2-4*
		4.0-6.0	39	30	14	11	6	NP	NP	5	A-1-b
		6.0-7.0	7	3	2	14	74	44	17	26	A-7-6
		7.0-12.0	0	1	8	74	17	NP	NP	24	A-4b
		12.0-14.0	0	0	1	87	12	NP	NP	26	A-4b
		14.0-20.0	0	0	1	82	17	NP	NP	27	A-4b
584+00	CL	0.5-5.0	36	18	19	15	12	NP	NP	13	A-2-4
		5.0-10.0	0	1	6	80	13	NP	NP	25	A-4b
		10.0-13.0	37	15	35	7	6	NP	NP	19	A-1-b
		13.0-18.0	1	1	5	68	25	NP	NP	20	A-4b
		18.0-23.0	32	8	8	41	11	NP	NP	17	A-4a
		23.0-28.0	14	2	4	71	9	NP	NP	21	A-4b
		28.0-30.0	3	1	3	81	12	NP	NP	25	A-4b
584+00	100'Rt	0.5-2.0	0	4	13	40	43	53	15	52	A-7-5
		2.0-7.0	25	12	17	29	17	24	5	17	A-4a
		7.0-11.0	0	5	8	61	26	NP	NP	27	A-4b
		11.0-15.0	43	33	14	5	5	NP	NP	16	A-1-b
		15.0-20.0	7	28	52	5	8	NP	NP	21	A-3a
		20.0-25.0	8	2	6	64	20	NP	NP	22	A-4b
		25.0-30.0	0	1	2	86	11	NP	NP	22	A-4b
585+00	50'Lt	0.5-5.0	52	15	16	9	8	NP	NP	13	A-1-b
		5.0-10.0	64	17	6	8	5	NP	NP	16	A-1-a
		10.0-15.0	0	1	1	87	11	NP	NP	23	A-4b
		15.0-20.0	0	0	2	89	9	NP	NP	21	A-4b
		20.0-25.0	10	3	4	75	8	NP	NP	21	A-4b
		25.0-30.0	0	2	4	85	9	NP	NP	21	A-4b
585+00	CL	0.8-3.0	0	7	36	36	21	NP	NP	16	A-4a
		3.0-4.0	0	4	26	34	36	32	10	27	A-4a
		4.0-5.0	0	3	30	40	27	NP	NP	22	A-4a
		5.0-8.0	60	10	8	11	11	34	16	28	A-2-6
		8.0-12.0	61	16	8	10	5	NP	NP	17	A-1-a
		12.0-16.0	0	4	1	18	77	47	23	28	A-7-6
		16.0-21.0	0	0	3	83	14	NP	NP	21	A-4b
		21.0-26.0	0	0	2	88	10	NP	NP	22	A-4b
		26.0-31.0	0	1	2	90	7	NP	NP	24	A-4b
585+00	55'Rt	0.0-2.0	Gray Sedimentary Peat							95	Visual
		2.0-6.0	0	0	1	38	61	36	15	28	A-6a
		6.0-8.0	0	0	0	44	56	33	13	30	A-6a
		8.0-13.0	0	1	0	42	57	32	12	33	A-6a
		13.0-18.0	0	0	0	39	61	35	35	13	A-6a
		18.0-25.0	0	0	0	73	27	32	9	31	A-4b
		25.0-27.0	0	1	21	65	13	NP	NP	22	A-4b
		27.0-31.0	54	10	9	17	10	NP	NP	17	A-2-4
585+00	100'Rt	2.0-2.5	Black Fine-Textured Peat							143	Visual
		2.5-5.0	0	0	1	43	56	37	16	30	A-6b
		5.0-10.0	0	0	0	36	64	29	11	31	A-6a
		10.0-15.0	0	0	0	41	59	28	11	31	A-6a
		15.0-20.0	0	0	0	45	55	43	14	37	A-7-6
		20.0-25.0	0	0	0	37	63	37	16	41	A-6b
		25.0-31.0	0	0	0	30	70	37	15	38	A-6a
586+00	CL	0.5-4.0	23	12	25	24	16	26	10	21	A-4a
		4.0-9.0	40	22	14	10	14	35	16	25	A-2-6
		9.0-14.0	50	17	15	9	9	25	8	22	A-2-4
		14.0-17.0	48	20	21	6	5	NP	NP	15	A-1-b
		17.0-21.0	0	2	2	27	60	44	19	30	A-7-6
		21.0-25.0	0	2	2	25	71	51	23	27	A-7-6
586+00	100'Rt	0.5-2.0	0	2	3	38	57	61	18	63	A-7-5
		2.0-7.0	0	1	3	46	50	47	22	31	A-7-6
		7.0-12.0	0	0	1	44	55	43	21	34	A-7-6
		12.0-17.0	0	1	0	46	53	32	11	36	A-6a
		17.0-22.0	0	1	2	41	56	36	13	33	A-6a
		22.0-25.0	0	0	20	60	20	NP	NP	21	A-4b
		25.0-30.0	0	0	1	42	57	37	14	35	A-6a
589+00	CL	0.8-3.0	54	26	13	3	4	NP	NP	7	A-1-a*
		3.0-6.0	40	13	25	13	9	NP	NP	5	A-1-b
		6.0-9.0	72	13	6	6	3	NP	NP	8	A-1-a
		9.0-12.0	0	1	2	52	45	NP	NP	27	A-4b
593+00	CL	0.4-3.0	26	9	12	28	25	23	7	16	A-4a
		3.0-4.0	66	12	7	6	9	30	14	13	A-2-6
		4.0-5.0	0	2	1	15	82	53	26	23	A-7-6
		5.0-8.0	0	1	1	78	20	NP	NP	30	A-4b
		8.0-13.0	0	0	0	83	17	NP	NP	22	A-4b
		13.0-18.0	0	0	0	72	28	NP	NP	25	A-4b
		18.0-23.0	0	0	0	67	33	NP	NP	23	A-4b
		23.0-28.0	0	0	1	75	24	NP	NP	21	A-4b
		28.0-31.0	0	0	3	72	25	NP	NP	20	A-4b
596+00	CL	0.0-5.0	0	2	22	48	28	NP	NP	24	A-4a
		5.0-11.0	0	1	23	53	23	NP	NP	23	A-4b
		11.0-16.0	0	1	23	50	26	NP	NP	29	A-4b
		16.0-20.0	32	22	32	9	5	NP	NP	14	A-1-b
597+50	50'Lt	0.0-5.0	0	1	17	41	41	35	6	30	A-4a
		5.0-11.0	0	1	10	63	26	NP	NP	28	A-4b
		11.0-16.0	0	0	17	60	23	NP	NP	30	A-4b
		16.0-20.0	48	16	13	16	7	NP	NP	17	A-1-b
598+75	CL	0.0-5.0	0	0	6	62	32	NP	NP	36	A-4b
		5.0-10.0	0	1	8	62	29	NP	NP	34	A-4b
		10.0-15.0	0	0	2	59	39	39	8	42	A-4b
		15.0-20.0	0	2	2	58	38	NP	NP	25	A-4b
601+50	CL	0.0-5.0	0	0	8	63	29	NP	NP	36	A-4b
		5.0-9.0	0	1	20	36	43	41	12	50	A-7-6
		9.0-12.0	0	1	22	50	27	NP	NP	43	A-4b
		12.0-16.0	0	12	34	38	16	NP	NP	34	A-4a
603+50	CL	0.0-6.0	0	3	23	46	28	34	9	32	A-4a
		6.0-10.0	0	1	20	51	28	NP	NP	40	A-4b
		10.0-15.0	0	39	23	15	23	NP	NP	37	A-4a
		15.0-20.0	12	2	3	65	18	NP	NP	24	A-4b
606+00	CL	0.0-1.2	0	1	12	55	32	38	9	37	A-4b
		1.2-6.0	0	3	13	50	34	32	8	29	A-4b
		6.0-13.0	0	0	1	47	52	46	17	30	A-7-6
		13.0-16.0	0	3	52	28	17	NP	NP	31	A-4a
		16.0-20.0	0	0	0	77	23	NP	NP	23	A-4b
608+00	CL	0.8-4.0	0	3	3	42	52	50	21	31	A-7-6
		4.0-9.0	0	0	1	37	62	51	19	37	A-7-5
		9.0-15.0	0	0	10	54	36	NP	NP	31	A-4b
		15.0-20.0	0	0	5	49	46	40	17	35	A-6b
611+00	CL	0.0-5.0	57	12	16	7	8	NP	NP	9	A-1-b
		5.0-7.0	52	19	9	8	12	38	12	18	A-2-6
		7.0-12.0	0	2	1	60	37	NP	NP	26	A-4b
		12.0-16.0	0	1	1	39	59	41	15	34	A-7-6
615+00	CL	0.0-4.0	32	17	31	9	11	NP	NP	9	A-2-4
		4.0-7.0	59	16	13	6	6	NP	NP	16	A-1-a
		7.0-12.0	0	2	1	55	42	NP	NP	30	A-4b
619+00	CL	0.8-5.0	0	5	33	37	25	NP	NP	18	A-4a
		5.0-11.0	10	8	38	35	9	NP	NP	22	A-4a
		11.0-15.0	15	46	31	- 8 -		NP	NP	19	A-3a
622+00	CL	0.0-5.0	45	14	19	12	10	NP	NP	11	A-1-b
		5.0-8.0	19	6	8	50	17	32	2	27	A-4b
		8.0-14.0	0	0	0	74	26	NP	NP	32	A-4b
626+00	CL	0.0-6.0	0	2	6	52	40	38	13	25	A-6a
		6.0-10.0	0	1	31	46	22	NP	NP	28	A-4a
		10.0-16.0	0	2	1	76	21	NP	NP	23	A-4b

(Continued on following sheet)

SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

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OHIO STATE HIGHWAY TESTING LABORATORY
O S U CAMPUS COLUMBUS OHIO
F-1072(8)

SUMMARY OF SOIL TEST DATA (Cont'd)

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.
*Denotes sample taken at or near grade.

Station	Offset	Depth From-To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	% W.C.	SHTL Class.
628+00	CL	0.0-1.5	0	1	9	57	33	36	10	32	A-4b
		1.5-8.0	37	8	12	25	18	32	11	24	A-6a
		8.0-10.0	58	12	10	13	7	NP	NP	22	A-1-b
		10.0-15.0	11	2	2	67	18	NP	NP	25	A-4b
		15.0-20.0	16	1	2	50	31	31	5	20	A-4b
629+00	CL	0.0-3.0	0	1	28	55	16	NP	NP	22	A-4b
		3.0-6.0	0	1	19	51	29	NP	NP	36	A-4b
		6.0-11.0	0	2	19	57	22	NP	NP	31	A-4b
		11.0-14.0	22	7	25	33	13	NP	NP	14	A-4a
		14.0-20.0	0	0	1	64	35	NP	NP	25	A-4b
632+00	CL	0.0-4.0	11	9	43	23	14	NP	NP	11	A-4a
		4.0-8.0	12	16	51	12	9	NP	NP	11	A-3a
		8.0-12.0	26	27	30	11	6	NP	NP	12	A-1-b
		12.0-16.0	0	1	2	79	18	NP	NP	28	A-4b
633+40	100'Lt	0.0-3.0	17	10	33	24	16	NP	NP	19	A-4a
		3.0-8.0	0	0	1	79	20	NP	NP	33	A-4b
		6.0-15.0	0	0	1	81	18	NP	NP	25	A-4b
		15.0-20.0	0	0	0	59	41	NP	NP	25	A-4b
633+40	CL	0.0-5.0	28	7	35	18	12	NP	NP	14	A-2-4
		5.0-9.0	19	12	44	10	15	NP	NP	20	A-3a
		9.0-15.0	0	1	2	76	21	NP	NP	21	A-4b
		15.0-20.0	2	1	1	69	27	NP	NP	29	A-4b
633+00	100'Rt	0.0-4.0	0	3	28	45	24	NP	NP	22	A-4a
		4.0-10.0	0	0	1	60	39	NP	NP	36	A-4b
		10.0-15.0	0	0	1	79	20	NP	NP	25	A-4b
		15.0-20.0	0	0	0	71	29	NP	NP	30	A-4b
633+75	CL	0.3-2.0	0	1	11	52	36	NP	NP	36	A-4b
		2.0-3.0	Black Organic Silt Clay							66	Visual
		3.0-5.0	0	2	27	31	40	31	16	43	A-6b
		5.0-6.0	0	10	53	26	11	NP	NP	23	A-4a
		6.0-11.0	25	37	29	- 9 -		NP	NP	15	A-1-b
		11.0-16.0	0	2	2	69	27	NP	NP	25	A-4b
		16.0-21.0	0	2	3	68	27	NP	NP	28	A-4b
		21.0-25.0	0	1	2	79	18	NP	NP	28	A-4b
		25.0-30.0	0	0	1	70	29	NP	NP	27	A-4b
633+90	50'Rt	0.3-2.0	0	1	5	56	38	NP	NP	43	A-4b
		2.0-3.0	Black Organic Silt Clay							35	Visual
		3.0-5.0	0	4	31	42	23	26	8	35	A-4a
		5.0-7.0	0	2	33	46	19	NP	NP	26	A-4a
		7.0-13.0	38	24	30	- 8 -		NP	NP	18	A-1-b
		13.0-18.0	0	1	2	79	18	NP	NP	26	A-4b
		18.0-25.0	0	0	2	72	26	NP	NP	27	A-4b
		25.0-30.0	0	0	1	58	41	NP	NP	26	A-4b
633+95	100'Rt	0.3-2.0	0	0	4	65	31	NP	NP	31	A-4b
		2.0-3.0	Black Organic Silt Clay							135	Visual
		3.0-6.0	4	8	50	22	16	NP	NP	22	A-4a
		6.0-11.0	36	17	28	13	6	NP	NP	15	A-1-b
		11.0-17.0	39	31	23	- 7 -		NP	NP	14	A-1-b
		17.0-23.0	0	1	1	85	13	NP	NP	25	A-4b
		23.0-30.0	0	1	2	72	25	NP	NP	26	A-4b
634+00	150'Lt	0.3-2.0	0	1	2	55	42	NP	NP	33	A-4b
		2.0-6.0	Black Fibrous Peat							392	Visual
		6.0-11.0	0	0	2	48	50	33	14	40	A-6a
		11.0-16.0	0	1	1	43	55	34	11	34	A-6a
		16.0-20.0	0	0	13	41	46	24	11	34	A-6a
		20.0-23.0	29	10	41	13	7	NP	NP	21	A-3a
		23.0-25.0	0	1	2	58	39	NP	NP	25	A-4b
		25.0-30.0	0	1	3	73	23	NP	NP	24	A-4b
634+00	100'Lt	0.3-2.0	0	1	4	42	53	44	11	52	A-7-5
		2.0-5.0	Black Fibrous Peat							262	Visual
		5.0-9.0	0	3	47	32	18	NP	NP	32	A-4a
		9.0-15.0	23	14	46	14	3	NP	NP	17	A-3a
		15.0-20.0	0	2	7	69	22	NP	NP	23	A-4b
		20.0-25.0	0	1	3	82	14	NP	NP	27	A-4b
		25.0-30.0	0	1	3	79	17	NP	NP	23	A-4b
634+00	50'Lt	0.3-2.0	0	1	6	61	32	NP	NP	31	A-4b
		2.0-3.0	Black Fibrous Peat							307	Visual
		3.0-5.0	0	3	21	41	35	63	36	64	A-7-6
		5.0-7.0	0	1	11	59	29	NP	NP	37	A-4b
		7.0-11.0	0	5	57	22	16	NP	NP	25	A-4a
		11.0-16.0	40	13	26	14	7	NP	NP	19	A-1-b
		16.0-21.0	0	2	4	73	21	NP	NP	21	A-4b
		21.0-26.0	0	1	4	74	21	NP	NP	24	A-4b
		26.0-30.0	0	0	1	66	33	NP	NP	26	A-4b
634+00	150'Rt	0.0-3.0	0	0	3	64	33	NP	NP	30	A-4b
		3.0-4.0	Black Loamy Peat							141	Visual
		4.0-5.0	0	2	21	38	39	44	14	40	A-7-5
		5.0-8.0	0	4	34	33	29	22	4	36	A-4a
		8.0-11.0	28	10	31	21	10	NP	NP	38	A-2-4
		11.0-16.0	13	6	31	32	18	NP	NP	40	A-4a
		16.0-19.0	13	5	34	36	12	NP	NP	26	A-4a
		19.0-23.0	0	7	56	31	6	NP	NP	19	A-4a
		23.0-26.0	31	35	19	11	4	NP	NP	12	A-1-b
		26.0-30.0	0	2	4	74	20	NP	NP	22	A-4b
634+15	CL	0.3-3.0	0	0	1	69	30	NP	NP	31	A-4b
		3.0-5.0	Black Fibrous Peat							220	Visual
		5.0-7.0	0	4	26	40	30	83	52	59	A-7-5
		7.0-11.0	0	7	37	42	14	NP	NP	34	A-4a
		11.0-16.0	0	1	11	67	21	NP	NP	26	A-4b
		16.0-20.0	35	16	31	- 18 -		NP	NP	18	A-1-b
		20.0-25.0	0	2	3	71	24	NP	NP	25	A-4b
		25.0-30.0	0	1	1	76	22	NP	NP	25	A-4b
635+00	150'Lt	0.0-2.0	0	12	74	7	7	NP	NP	32	A-3a
		2.0-3.0	0	0	1	11	88	114	67	97	A-7-5
		3.0-7.0	0	3	7	61	29	43*	20	33	A-7-6
		7.0-12.0	0	0	2	48	49	31	11	36	A-6a
		12.0-17.0	48	[illegible]	35	5	3	NP	NP	17	A-1-b
		17.0-20.0	48	[illegible]	27	16	6	NP	NP	17	A-1-b
635+00	100'Lt	0.0-2.0	0	16	50	31	3	NP	NP	30	A-3a
		2.0-3.0	Black Fine Textured Peat							187	Visual
		3.0-6.0	0	10	8	28	54	45	18	42	A-7-6
		6.0-11.0	0	0	1	47	52	44	16	36	A-7-6
		11.0-16.0	0	0	1	38	61	39	12	38	A-6a
		16.0-20.0	0	1	3	45	51	35	12	37	A-6a
		20.0-25.0	52	12	24	7	5	NP	NP	13	A-1-b
		25.0-30.0	11	1	6	62	20	NP	NP	19	A-4b
635+00	50'Lt	0.0-2.0	0	0	4	56	40	NP	NP	42	A-4b
		2.0-4.0	Black Organic Clay							153	Visual
		4.0-6.0	0	0	2	35	63	60	35	53	A-7-6
		6.0-11.0	0	1	7	56	36	33	7	20	A-4b
		11.0-15.0	0	0	1	46	53	37	13	30	A-6a
		15.0-20.0	45	23	22	6	4	NP	NP	17	A-1-b
		20.0-25.0	4	7	73	11	5	NP	NP	21	A-3a
		25.0-30.0	33	1	4	42	20	NP	NP	17	A-4a
635+00	CL	0.3-2.0	0	1	2	66	31	NP	NP	35	A-4b
		2.0-4.0	Black Organic Clay							130	Visual
		4.0-8.0	0	1	10	41	48	45	23	38	A-7-6
		8.0-11.0	0	2	13	59	26	NP	NP	37	A-4b
		11.0-15.0	0	1	11	58	30	NP	NP	43	A-4b
		15.0-18.0	0	0	3	60	37	41	16	41	A-7-6
		18.0-20.0	46	11	24	13	6	NP	NP	21	A-1-b
		20.0-22.0	36	5	8	42	9	NP	NP	19	A-4a
		22.0-27.0	0	1	2	71	26	NP	NP	24	A-4b
		27.0-31.0	0	1	1	82	16	NP	NP	25	A-4b
635+00	50'Rt	0.3-3.0	0	0	2	72	26	NP	NP	31	A-4b
		3.0-5.0	Black Fibrous Peat							271	Visual
		5.0-7.0	0	0	1	48	51	52	19	61	A-7-5
		7.0-8.0	0	0	4	37	59	93	50	79	A-7-5
		8.0-11.0	Black Organic Clay							65	Visual
		11.0-16.0	0	0	7	60	33	44	18	42	A-7-6
		16.0-20.0	0	0	6	60	34	51	23	54	A-7-6
		20.0-25.0	13	10	42	24	11	NP	NP	27	A-3a
		25.0-27.0	25	9	48	11	7	NP	NP	18	A-3a
		27.0-31.0	52	13	23	8	4	NP	NP	14	A-1-b
635+00	100'Rt	0.3-3.0	0	0	2	61	37	NP	NP	36	A-4b
		3.0-4.0	Black Fibrous Peat							374	Visual
		4.0-5.0	0	0	1	50	49	42	17	49	A-7-6
		5.0-7.0	0	0	2	59	39	37	11	30	A-6a
		7.0-12.0	Gray Marly Sedimentary Peat							106	Visual
		12.0-17.0	Gray Marly Sedimentary Peat							76	Visual
		17.0-20.0	Gray Marly Sedimentary Peat							80	Visual
		20.0-25.0	24	17	51	2	6	NP	NP	18	A-3
		25.0-31.0	54	11	22	9	4	NP	NP	12	A-1-b
635+00	150'Rt	0.3-3.0	0	0	2	73	25	NP	NP	29	A-4b
		3.0-5.0	Black Fibrous Peat							187	Visual
		5.0-9.0	0	0	5	44	51	44	18	41	A-7-6
		9.0-11.0	0	0	6	64	30	44	19	39	A-7-6
		11.0-16.0	Black Fibrous Peat							126	Visual
		16.0-21.0	Gray Marly Sedimentary Peat							121	Visual
		21.0-23.0	Gray Marly Sedimentary Peat							105	Visual
		23.0-24.0	0	0	2	62	36	34	11	28	A-6a
		24.0-28.0	0	1	5	63	31	60	30	57	A-7-5
		28.0-32.0	0	0	4	67	29	45	20	57	A-7-6
635+00	200'Rt	0.6-4.0	0	2	13	58	27	NP	NP	32	A-4b
		4.0-5.0	Black Fine Textured Peat								Visual
		5.0-7.0	0	2	14	50	34	31	8	38	A-4b
		7.0-10.0	0	0	2	55	43	36	12	30	A-6a
		10.0-22.0	Black Fine Textured Peat								Visual
		22.0-26.0	0	0	3	66	31	36	10	42	A-4b
		26.0-30.0	0	1	2	77	20	NP	NP	24	A-4b
		30.0-36.0	0	1	1	84	14	NP	NP	28	A-4b
636+00	100'Lt	0.0-2.0	2	4	28	36	30	27	5	23	A-4a
		2.0-4.0	0	0	10	45	45	37	14	25	A-6a
		4.0-7.0	6	1	26	37	30	26	10	25	A-4a
		7.0-11.0	13	4	57	-26 -		NP	NP	23	A-3a
		11.0-15.0	15	15	55	-15 -		NP	NP	20	A-3a
		15.0-20.0	60	11	19	-10 -		NP	NP	15	A-1-a
636+00	50'Lt	0.0-1.5	0	4	28	44	24	37	13	45	A-6a
		1.5-4.0	0	6	41	26	27	30	11	32	A-6a
		4.0-6.0	24	10	33	19	14	NP	NP	26	A-2-4
		6.0-11.0	55	12	23	6	4	NP	NP	20	A-1-b
		11.0-16.0	41	15	29	9	6	NP	NP	18	A-1-b
		16.0-20.0	59	11	23	- 7 -		NP	NP	16	A-1-a
636+00	CL	1.0-5.0	0	1	10	45	44	-	-	67	A-7-5
		5.0-10.0	16	8	57	11	8	NP	NP	24	A-3a
		10.0-15.0	64	9	15	8	4	NP	NP	16	A-1-a
		15.0-19.0	11	38	37	8	6	NP	NP	18	A-3a
		19.0-20.0	6	3	8	27	56	34	12	25	A-6a
636+00	50'Rt	1.0-3.0	0	1	4	39	56	57	17	61	A-7-5
		3.0-5.0	0	1	7	45	47	66	36	48	A-7-5
		5.0-7.0	8	3	14	50	25	NP	NP	29	A-4b
		7.0-11.0	0	0	8	63	29	NP	NP	27	A-4b
		11.0-16.0	61	10	16	10	3	NP	NP	14	A-1-a
		16.0-20.0	64	11	13	9	3	NP	NP	14	A-1-a
636+00	100'Rt	0.0-2.0	0	3	22	53	22	NP	NP	32	A-4b
		2.0-4.0	0	4	7	44	45	135	89	75	A-7-5
		4.0-8.0	0	1	5	44	50	59	34	42	A-7-6
		8.0-13.0	Gray Marly Sedimentary Peat							95	Visual
		13.0-16.0	Gray Marly Sedimentary Peat							67	Visual
		16.0-21.0	51	12	26	7	4	NP	NP	16	A-1-b
		21.0-25.0	47	15	28	-10 -		NP	NP	12	A-1-b
636+00	150'Rt	0.3-3.0	0	2	22	58	18	NP	NP	27	A-4b
		3.0-4.0	0	1	8	66	25	33	5	32	A-4b
		4.0-6.0	Black Fine Textured Peat							—	Visual
		6.0-9.0	0	1	2	48	49	61	38	45	A-7-6
		9.0-11.0	0	0	1	62	37	62	29	46	A-7-5
		11.0-15.0	Black Fibrous Peat							212	Visual
		15.0-20.0	Gray Marly Sedimentary Peat							148	Visual
		20.0-24.0	Gray Marly Sedimentary Peat							110	Visual
		24.0-29.0	0	0	2	59	39	59	33	53	A-7-6
		29.0-32.0	0	1	4	58	37	93	51	71	A-7-5
636+00	200'Rt	0.0-5.0	0	1	18	58	23	NP	NP	27	A-4b
		5.0-7.0	0	2	5	39	54	51	11	72	A-7-5
		7.0-9.0	0	1	12	55	32	NP	NP	44	A-4b
		9.0-11.0	0	1	9	64	26	NP	NP	26	A-4b
		11.0-13.0	Black Organic Clay							50	Visual
		13.0-17.0	0	1	2	53	44	44	14	62	A-7-5
		17.0-19.0	Black Compact Fine Textured Peat							127	Visual
		19.0-24.0	Gray Marly Sedimentary Peat							118	Visual
		24.0-30.0	Gray Marly Sedimentary Peat							96	Visual
		30.0-32.0	0	1	2	66	31	36	10	41	A-4b
637+00	CL	0.0-5.0	65	3	10	14	8	NP	NP	23	A-1-b
		5.0-7.0	0	1	1	33	65	43	17	26	A-7-6
		7.0-11.0	66	6	8	14	6	NP	NP	15	A-1-b
		11.0-16.0	4	1	2	61	32	NP	NP	24	A-4b
		16.0-20.0	0	1	4	70	25	NP	NP	25	A-4b
637+00	50'Rt	0.0-4.0	0	1	7	39	53	53	28	53	A-7-6
		4.0-6.0	0	5	29	45	21	NP	NP	29	A-4a
		6.0-10.0	64	6	12	13	5	NP	NP	18	A-1-b
		10.0-13.0	0	1	1	31	67	37	12	28	A-6a
		13.0-16.0	74	3	5	13	5	NP	NP	20	A-1-b
		16.0-20.0	0	1	12	62	25	NP	NP	25	A-4b
637+00	100'Rt	0.3-4.0	0	0	2	48	50	102	71	47	A-7-5
		4.0-7.0	0	1	8	57	34	66	34	48	A-7-5
		7.0-11.0	0	2	18	51	29	NP	NP	37	A-4b
		11.0-15.0	62	14	16	- 8 -		NP	NP	15	A-1-a
		15.0-18.0	0	1	2	40	57	34	11	26	A-6a
		18.0-20.0	0	1	21	57	21	NP	NP	24	A-4b
637+00	150'Rt	0.0-2.0	0	2	17	55	26	NP	NP	31	A-4b
		2.0-3.0	0	1	12	34	53	57	19	34	A-7-5
		3.0-5.0	0	0	7	48	45	38	17	34	A-6b
		5.0-8.0	0	0	10	61	29	29	7	33	A-4b
		8.0-12.0	Dr. Gray Silty Sedimentary Peat W/ Marl							94	Visual
		12.0-17.0	50	15	26	- 9 -		NP	NP	15	A-1-b
		17.0-19.0	39	11	23	18	9	NP	NP	15	A-2-4
		19.0-25.0	0	1	11	65	23	NP	NP	24	A-4b
637+00	200'Rt	0.0-3.0	0	1	23	55	21	NP	NP	25	A-4b
		3.0-5.0	0	1	17	44	38	37	16	37	A-6b
		5.0-10.0	0	3	24	51	22	23	4	21	A-4b
		10.0-14.0	0	1	35	44	20	NP	NP	31	A-4a
		14.0-19.0	Gray Marly Sedimentary Peat							100	Visual
		19.0-23.0	Gray Marly Sedimentary Peat							70	Visual
		23.0-26.0	31	9	20	24	16	NP	NP	34	A-4a
		26.0-30.0	66	7	16	7	4	NP	NP	13	A-1-a
638+00	CL	0.0-4.0	32	8	37	14	9	NP	NP	12	A-2-4
		4.0-8.0	32	9	28	19	12	NP	NP	13	A-2-4
		8.0-13.0	0	1	4	41	54	28	11	20	A-6a
		13.0-17.0	65	7	9	14	5	NP	NP	17	A-1-b
		17.0-21.0	44	10	22	14	10	NP	NP	14	A-1-b
638+00	50'Rt	0.0-5.0	0	3	20	41	36	31	11	20	A-6a
		5.0-7.0	0	4	27	39	30	26	8	28	A-4a
		7.0-12.0	52	10	25	8	5	NP	NP	16	A-1-b
		12.0-15.0	43	8	16	25	8	NP	NP	16	A-2-4
		15.0-18.0	0	0	2	45	53	30	11	24	A-6a
		18.0-22.0	59	7	12	16	6	NP	NP	17	A-1-b
638+00	100'Rt	0.0-3.0	0	0	10	45	45	40	16	33	A-6b
		3.0-4.0	0	1	19	46	34	32	12	29	A-6a
		4.0-6.0	0	1	12	56	31	31	11	28	A-6a
		6.0-9.0	0	1	28	50	21	NP	NP	20	A-4b
		9.0-10.0	Gray Silty Sedimentary Peat							63	Visual
		10.0-13.0	0	0	5	61	34	NP	NP	32	A-4b
		13.0-18.0	61	9	20	6	4	NP	NP	13	A-1-a
		18.0-22.0	64	4	8	18	6	NP	NP	15	A-1-b
638+00	150'Rt	0.0-4.0	0	5	28	38	23	NP	NP	24	A-4a
		4.0-6.0	0	1	17	53	29	25	4	27	A-4b
		6.0-8.0	0	0	16	61	23	NP	NP	20	A-4b
		8.0-10.0	Black Fibrous Peat							228	Visual
		10.0-11.0	Gray Silty Sedimentary Peat							78	Visual
		11.0-12.0	0	1	9	58	31	NP	NP	30	A-4b
		12.0-18.0	0	1	14	53	32	NP	NP	40	A-4b
		18.0-22.0	0	1	2	50	47	NP	NP	22	A-4b
		22.0-26.0	50	7	14	21	8	NP	NP	18	A-2-4
638+00	200'Rt	0.0-3.0	0	2	20	45	33	30	11	25	A-6a
		3.0-6.0	4	3	30	39	24	NP	NP	21	A-4a
		6.0-8.0	0	1	12	53	34	24	10	22	A-4b
		8.0-12.0	0	1	29	48	22	NP	NP	25	A-4a
		12.0-18.0	Gray Marly Sedimentary Peat							91	Visual
		18.0-24.0	0	2	16	48	34	45	14	17	A-7-5
		24.0-28.0	31	21	23	13	12	NP	NP	17	A-1-b
		28.0-30.0	0	1	3	38	58	38	11	25	A-6a
639+00	100'Rt	0.0-3.0	0	1	19	46	34	30	12	27	A-6a
		3.0-5.0	8	3	23	35	31	27	11	20	A-6a
		5.0-8.0	17	4	22	34	23	24	6	20	A-4a
		8.0-14.0	47	7	24	14	8	NP	NP	19	A-1-b
		14.0-20.0	55	6	18	15	6	NP	NP	17	A-1-b
639+00	150'Rt	0.0-3.0	0	2	17	45	36	33	11	25	A-6a
		3.0-6.0	0	1	15	51	33	27	7	21	A-4b
		6.0-8.0	0	0	15	56	29	NP	NP	24	A-4b
		8.0-10.0	0	1	8	57	34	35	8	37	A-4b
		10.0-12.0	18	8	29	30	15	NP	NP	19	A-4a
		12.0-17.0	48	10	23	14	5	NP	NP	13	A-1-b
		17.0-20.0	55	8	11	20	6	NP	NP	15	A-2-4
640+00	CL	0.0-4.0	40	10	20	20	10	NP	NP	12	A-2-4
		4.0-9.0	58	10	13	12	7	NP	NP	10	A-1-b
		9.0-14.0	74	4	7	9	6	NP	NP	9	A-1-a
		14.0-19.0	72	5	8	9	6	NP	NP	11	A-1-a
		19.0-22.0	43	10	14	24	9	NP	NP	13	A-2-4
		22.0-25.0	13	6	12	44	25	21	7	14	A-4a
		25.0-28.0	26	4	10	37	23	21	4	15	A-4a
		28.0-30.0	33	41	17	- 9 -		NP	NP	16	A-1-b
640+00	150'Rt	0.0-3.0	0	2	27	49	22	NP	NP	24	A-4a
		3.0-6.0	54	5	20	12	9	NP	NP	9	A-1-b
		6.0-11.0	45	9	25	14	10	NP	NP	16	A-1-b
		11.0-16.0	63	5	17	10	5	NP	NP	17	A-1-b
		16.0-17.0	9	2	11	58	22	NP	NP	28	A-4b
		17.0-21.0	60	6	17	10	7	NP	NP	15	A-1-b
641+50	CL	0.0-2.0	11	2	18	30	39	42	12	38	A-7-5
		2.0-7.0	17	3	20	20	22	NP	NP	29	A-4a
		7.0-11.0	72	15	4	- 9 -		NP	NP	16	A-1-a
		11.0-16.0	18	6	12	43	21	NP	NP	13	A-4a
		16.0-22.0	30	10	13	31	16	NP	NP	14	A-4a
		22.0-26.0	25	6	5	34	30	NP	NP	18	A-4a
		26.0-28.0	10	4	4	47	35	30	11	14	A-6a
644+00	CL	0.5-2.0	37	4	21	19	19	24	9	14	A-4a
		2.0-7.0	36	5	10	29	20	25	6	15	A-4a
		7.0-10.5	31	5	23	24	17	22	3	17	A-4a
		10.5-15.0	19	7	14	38	22	23	5	16	A-4a
647+50	100'Lt	0.4-4.0	12	5	29	31	23	NP	NP	18	A-4a
647+50	CL	0.4-5.0	49	4	8	23	16	25	5	9	A-4a*
		5.0-9.0	27	8	8	36	21	26	6	9	A-4a
649+00	35'Rt	0.4-2.0	9	4	11	52	24	NP	NP	18	A-4b
		2.0-6.0	50	11	13	13	13	25	6	9	A-2-4
		6.0-10.0	29	5	10	35	21	NP	NP	11	A-4a
652+25	CL	0.4-4.0	36	4	14	32	14	NP	NP	8	A-4a
		4.0-8.0	17	6	10	42	25	NP	NP	13	A-4a
655+00	CL	0.0-1.5	13	2	11	50	24	25	4	22	A-4b
		1.5-3.0	0	2	17	44	37	34	14	25	A-6a
		3.0-11.0	22	6	10	37	25	22	3	14	A-4a
		11.0-16.0	30	6	8	37	19	25	8	12	A-4a
658+00	CL	0.4-3.0	0	1	10	55	34	30	10	21	A-4b
		3.0-6.5	0	2	19	51	28	24	7	19	A-4b
		6.5-12.0	30	5	10	34	21	20	6	15	A-4a
662+00	CL	0.4-2.0	11	4	16	38	31	25	9	21	A-4a
		2.0-8.0	28	5	12	33	22	22	7	15	A-4a
		8.0-12.5	25	5	11	35	24	NP	NP	15	A-4a
		12.5-18.0	26	5	10	38	21	NP	NP	14	A-4a*
664+50	CL	0.4-2.0	11	5	13	44	27	NP	NP	17	A-4a
		2.0-9.0	35	4	13	29	19	NP	NP	9	A-4a
		9.0-13.0	Gray Weathered Shale							10	Visual*
668+00	CL	0.5-1.5	5	3	12	50	30	25	8	20	A-4b
		1.5-5.0	42	4	8	27	19	21	4	13	A-4a
		5.0-8.0	63	2	6	19	10	NP	NP	9	A-2-4
672+00	CL	0.6-1.0	1	2	8	59	30	NP	NP	19	A-4b
		1.0-4.0	16	4	12	38	30	24	11	14	A-6a
		4.0-8.0	47	4	8	24	17	NP	NP	11	A-4a
		8.0-9.0	52	6	10	18	14	NP	NP	12	A-2-4
		9.0-10.0	77	6	5	7	5	NP	NP	12	A-1-a
676+00	CL	0.5-1.5	0	9	14	45	32	NP	NP	20	A-4a
		1.5-7.0	27	1	5	43	24	27	11	14	A-6a
		7.0-10.0	64	6	7	15	8	NP	NP	10	A-1-b
679+00	CL	0.4-1.5	0	1	3	65	31	34	13	20	A-6a
		1.5-6.0	36	4	11	27	22	24	7	11	A-4a
		6.0-9.0	53	6	7	19	15	NP	NP	9	A-2-4
		9.0-11.0	60	4	12	14	10	NP	NP	12	A-1-b
681+50	CL	0.4-5.0	29	4	5	37	25	25	5	11	A-4a
		5.0-9.0	17	4	10	38	31	27	11	12	A-6a
		9.0-11.0	56	8	6	17	13	29	9	8	A-2-4
		11.0-12.0	71	4	6	12	7	27	7	10	A-2-4

(Continued on following sheet)

SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

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OHIO STATE HIGHWAY
TESTING LABORATORY
O S U CAMPUS COLUMBUS OHIO
F-1072(B)

SUMMARY OF SOIL TEST DATA (Con'd)

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.
*Denotes sample taken at or near grade.

STATION & OFFSET		DEPTH FROM-TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SOIL CLASS.
683+00	50'Rt	0.4-1.5	9	6	13	46	26	NP	NP	17	A-4a
		1.5-9.0	26	5	10	36	23	27	8	12	A-4a
		9.0-11.0	60	3	10	16	11	NP	NP	13	A-2-4
686+50	CL	0.4-3.0	0	0	7	65	28	NP	NP	14	A-4b
		3.0-7.5	57	5	8	20	10	NP	NP	8	A-2-4
		7.5-15.0	52	2	2	24	20	33	11	11	A-6a
689+00	CL	0.2-1.0	0	12	16	28	44	63	23	38	A-7-5
		1.0-2.0	24	8	11	28	29	34	12	24	A-6a
		2.0-5.0	49	13	10	17	11	26	6	15	A-2-4
		5.0-13.0	58	2	5	27	8	NP	NP	15	A-2-4
		13.0-19.0	41	0	11	37	11	NP	NP	14	A-4a*
		19.0-20.0	35	3	19	20	14	NP	NP	13	A-4a
691+00	CL	0.5-1.5	4	2	11	43	40	34	14	24	A-6a
		1.5-5.0	15	4	13	52	16	27	8	15	A-4b
		5.0-7.0	15	5	12	51	17	NP	NP	15	A-4b
		7.0-11.0	31	4	9	37	19	NP	NP	13	A-4a
		11.0-15.0	28	6	11	37	18	NP	NP	12	A-4a
694+00	CL	0.4-3.0	7	1	7	63	22	NP	NP	11	A-4b
		3.0-10.0	28	5	12	37	18	NP	NP	9	A-4a
		10.0-13.5	21	5	6	28	40	36	11	14	A-6a*
697+50	50'Rt	0.4-1.5	3	2	9	56	30	NP	NP	16	A-4b
		1.5-8.0	22	5	10	37	26	27	11	11	A-6a
		8.0-13.0	25	5	11	37	22	24	5	11	A-4a*
		13.0-15.0	23	4	7	39	27	27	6	14	A-4a
		15.0-16.0	72	6	4	13	5	NP	NP	8	A-1-b
701+00	CL	0.5-1.5	0	2	4	50	44	30	16	18	A-6b
		1.5-3.0	7	1	6	52	34	33	11	24	A-6a*
		3.0-8.0	14	4	11	45	26	26	7	14	A-4a*
		8.0-13.0	33	7	12	32	16	NP	NP	18	A-4a
		13.0-15.0	26	5	14	39	16	NP	NP	16	A-4a
		15.0-17.0	20	5	13	43	19	NP	NP	16	A-4a
		17.0-21.0	13	2	75	5	5	NP	NP	19	A-3

DRIVE SAMPLE SOIL TEST DATA

STATION & OFFSET		DEPTH FROM-TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SOIL CLASS.
491+90	64'Rt	5.0-6.0	43	20	15	13	9	NP	NP	15	A-1-b
		7.5-8.5	22	16	37	16	9	NP	NP	11	A-3a
		10.0-11.0	56	16	12	11	5	NP	NP	12	A-1-b
		12.5-13.5	30	12	12	30	16	21	5	11	A-4a
		15.0-16.0	64	4	8	18	6	NP	NP	15	A-1-b
		18.0-18.2	Gray Broken Shale							12	Visual
		20.0-20.4	Brown Broken Shale							15	Visual
		22.0-22.2	Brown Broken Shale							13	Visual
493+56	62'Lt	2.5-3.5	Brown Silty Sandy Gravel								Visual
		5.0-6.0	Brown Silty Sandy Gravel								Visual
		7.5-8.5	Brown Silty Sandy Gravel								Visual
		10.0-11.0	31	12	11	31	15	19	1	12	A-4a
		15.0-16.0	65	21	7	- 7 -		NP	NP	8	A-1-a
		17.5-18.5	61	21	8	-10 -		NP	NP	11	A-1-a
630+93	64'Lt	2.5-3.5	2	8	42	29	19	NP	NP	16	A-4a
		5.0-6.0	32	8	10	30	20	29	7	20	A-4a
		7.5-8.5	0	0	0	79	21	NP	NP	23	A-4b
		10.0-11.0	0	1	1	73	25	NP	NP	27	A-4b
		12.5-13.5	0	0	0	70	30	NP	NP	26	A-4b
		15.0-16.0	0	0	0	64	36	NP	NP	27	A-4b
		17.5-18.5	0	0	0	58	42	30	7	29	A-4b
		20.0-21.0	0	0	0	71	29	NP	NP	28	A-4b
		25.0-26.0	0	0	0	65	35	NP	NP	25	A-4b
		30.0-[illegible]	0	0	0	81	19	NP	NP	22	A-4b
		35.0-[illegible]	0	0	0	90	10	NP	NP	26	A-4b
		40.0-41.0	0	0	0	88	12	NP	NP	27	A-4b
		45.0-46.0	0	0	1	88	11	NP	NP	27	A-4b
		50.0-51.0	23	1	2	66	8	NP	NP	26	A-4b
		55.0-56.0	0	0	1	88	11	NP	NP	25	A-4b
		60.0-61.0	0	0	3	87	10	NP	NP	27	A-4b
		65.0-66.0	0	1	5	87	7	NP	NP	24	A-4b
		70.0-71.0	0	0	2	76	22	NP	NP	27	A-4b
674+84	66'Rt	5.0-6.0	54	7	7	22	10	NP	NP	15	A-2-4
683+00	CL	5.0-6.0	19	6	12	39	24	27	11	15	A-6a
		10.0-10.5	51	6	19	16	8	NP	NP	22	A-1-b

TE-54-B
800-4-60

TE-54-B
800-4-60

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

7
26

STA. 491+90, 64'RT

A. Shale, gray and brown, broken.

B. Sandstone, brown, medium-grained, fossiliferous firm, very badly broken. Core Loss 33%

C. Shale, gray, siliceous, fissile, medium-soft, crumbly. Core Loss 8%.

D. Sandstone, gray, fine-grained, thin-bedded, firm, badly broken, with 0.8' gray, medium-soft, crumbly, shale at elev. 959.0', and 0.5' of brown, medium-grained, firm sandstone at elev. 962.2'. Core Loss 9%.

Shale, gray, fissile, weathered, soft, crumbly, with 0.2' gray, hard, fossiliferous limestone at elev. 938.5' with 0.6' of medium-firm shale at elev. 936.9'. Core Loss 39%.

Sandstone, gray, medium-grained, fossiliferous, calcareous, thin-bedded, firm, broken. No Core Loss.
Shale, gray, fissile, soft, crumbly. No Core Loss.
Sandstone, gray, medium-grained, thin-bedded, firm, badly broken. No Core Loss.

482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514

TE-54-B
800-4-60

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

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OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

CROSS SECTION INDEX	
Station	Page
519+00	15
522+00	15
524+00	15
526+00	15
528+00	16
529+00	16
531+00	16
533+00	16
535+00	17
536+66	17
538+00	17

Water flowing in open ditch (1/4/61)

SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

CROSS SECTION INDEX

Station	Page
555+00	17
563+00	18
566+00	18
576+00	18
577+00	19
578+00	19

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

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CROSS SECTION INDEX	
Station	Page
578+00	19
579+00	19
584+00	20
585+00	20
586+00	21

DRIVE SAMPLE SOIL TEST DATA

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non plastic.

STATION & OFFSET		DEPTH FROM-TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL. CLASS.
595+82	14' Rt	2.5-3.5	0	0	30	46	24	NP	NP	18	A-4a
		5.0-6.0	0	0	18	59	23	NP	NP	19	A-4b
		7.5-8.5	0	0	4	48	48	42	16	26	A-7-6
		10.0-11.0	0	0	13	56	31	29	7	24	A-4b
		12.5-13.5	0	0	23	55	22	NP	NP	26	A-4b
		15.0-16.0	9	4	28	42	17	30	8	12	A-4a
		17.5-18.5	64	16	10	7	3	NP	NP	15	A-1-a
		25.0-26.0	58	28	7	- 7 -		NP	NP	13	A-1-a
		30.0-31.0	5	13	67	-15 -		NP	NP	16	A-3a
		35.0-36.0	27	44	24	- 5 -		NP	NP	16	A-1-b
		40.0-41.0	44	26	20	-10 -		NP	NP	15	A-1-b
		45.0-46.0	45	23	19	-13 -		NP	NP	14	A-1-b
		50.0-51.0	60	16	15	- 9 -		NP	NP	12	A-1-a
		55.0-56.0	1	1	28	-70 -		NP	NP	22	A-[illegible]
		60.0-61.0	7	1	28	50	14	NP	NP	18	A-4b
		65.0-66.0	0	1	9	46	44	31	18	32	A-6b
		70.0-71.0	0	0	1	56	43	NP	NP	34	A-4b
		75.0-76.0	0	0	0	68	32	NP	NP	34	A-4b
		85.0-86.0	0	0	0	66	34	NP	NP	22	A-4b

TE-54.8
800-4-60

CROSS SECTION INDEX	
Station	Page
633+45	21
634+00	22
635+00	22
636+00	23
637+00	23
638+00	24
639+00	24
640+00	25

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

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SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

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OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)


SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)
13
26
Top of Rock-In-Place
Sandstone, brown, fine-grained, fossiliferous, thin-bedded, firm, badly broken, with clay seams from elev. 1004.5' to elev. 1002.7' and heavy iron staining. Core Loss 6%.
Shale, gray, siliceous, fissile, firm, broken, interbedded with, firm, gray, fine-grained sandstone. 90% Shale/ 10% Sandstone. Core Loss 3%.
Sandstone, gray, fine-grained, thin-bedded, firm, broken, with 1.0' of gray, fissile shale at elev. 1056.7' to 1055.7. Core Loss 1%.
Refusal
Refusal (Boulders)
100' Lt.
35' Rt.
Cross Section
Sta. 647+50
Proposed Section
Approximate Ground line
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674

TE-54 B
800-4-60

CROSS SECTION INDEX	
Station	Page
674+85	25
683+90	26
691+00	26

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

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26

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

15
26

TE-54-B
800-4-60

TE-54-B
800-4-60

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

17/26

SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072(8)

18/26

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072 (8)

19
26


SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072(8)
20
26
Cross Section
Sta. 585+00
Proposed Section
Sod & TS = 0.5'
Hole squeezed in at elev. 936.5'
Sod & TS = 0.8'
slightly organic
Hole caved in at elev. 942.6'
Hole caved in at elev. 940.8'
Hole caved in at elev. 936.4'
970
960
950
940
930
920
910
150
100
50
℄
50
100
150
Cross Section
Sta. 584+00
Proposed Section
Sod & TS = 0.5'
Sod & TS = 0.5'
organic
trace of organic
Hole squeezed in at elev. 936.5'
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD.-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072(B)

21/26

SOIL PROFILE

ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

F-1672(8)

22
26

SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52

OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072(8)

23/26

Cross Section
Sta. 637+00

Cross Section
Sta. 636+00


SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1073 (8)
24
26
Cross Section
Sta. 639+00
Proposed Section
Sod & TS=0.8'
Hole caved in at elev. 957.1'
Hole caved in at elev. 954.7'
trace of organic
Cross Section
Sta. 638+00
Proposed Section
Hole caved in at elev. 953.8
Hole caved in at elev. 955.7'
Hole caved in at elev. 948.3'
Hole caved in at elev. 949.0'
Hole caved in at elev. 952.0'
trace of organic
1010
1000
990
980
970
960
950
940
930


SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
25
26
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072(B)
Cross Section
Sta. 674+00
(Sta. 674+85)
23
29
15
Top of Rock-In-Place
Sandstone, brown, medium-grained, thin-bedded, firm, broken, crumbly at top 0.5' with 0.5' soft, crumbly shale at bottom. Core loss 10%.
Proposed Section
Sandstone, gray, medium-grained, slightly fossiliferous, thin-bedded, firm, broken, with heavy iron staining, and pebbly in places. Core Loss 1%.
1140
1130
1120
1110
1100
1090
1080
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Cross Section
Sta. 640+00
Proposed Section
Sod & TS=0.8'
12
10
9
11
13
14
15
16
Sod & TS=0.8
24
9
W
16
17
28
15
Hole caved in at elev. 964.5'
1010
1000
990
980
970
960
950
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160


SOIL PROFILE
ASHLAND COUNTY
WAY-30-0.00
ASD-30-8.52
OHIO STATE HIGHWAY
TESTING LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO
F-1072(8)
26/26
Cross Section
Sta. 691+00
(Auger-Core Boring)
TS=0.5'
24
15
15
13
13
Brown silty clay with pebbles and boulders.
Proposed section
Top of Rock-In-Place
Sandstone, brown, fine-grained, thin-bedded, firm, broken, interbedded with crumbly gray shale. 95% Sandstone/5% Shale. Core Loss 10%.
1110
1100
1090
1080
1070
1060
1050
1040
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Cross Section
Sta. 683+90
Approximate Groundline
(Sta. 684+00)
TS=0.4'
17
12
13
15
22
Top of Rock-In-Place
Proposed section
Sandstone, brown, fine-grained, thin-bedded, firm, broken with trace of crumbly, gray shale. No Core Loss.
Sandstone, gray, medium-grained, thin-bedded, firm, broken, with 1.8' brown, medium-grained sandstone at elev. 1087.0'. No Core Loss.
1130
1120
1110
1100
1090
1080
1070
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150