

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

S-78 (6)

FED. RD. DIVISION	STATE	PROJECT	1
2	OHIO	S-78 (6)	19

HIGHLAND COUNTY
HIG-72-5.79

HIG-72-5.79

FAIRFIELD TOWNSHIP

HIGHLAND COUNTY

CONVENTIONAL SIGNS

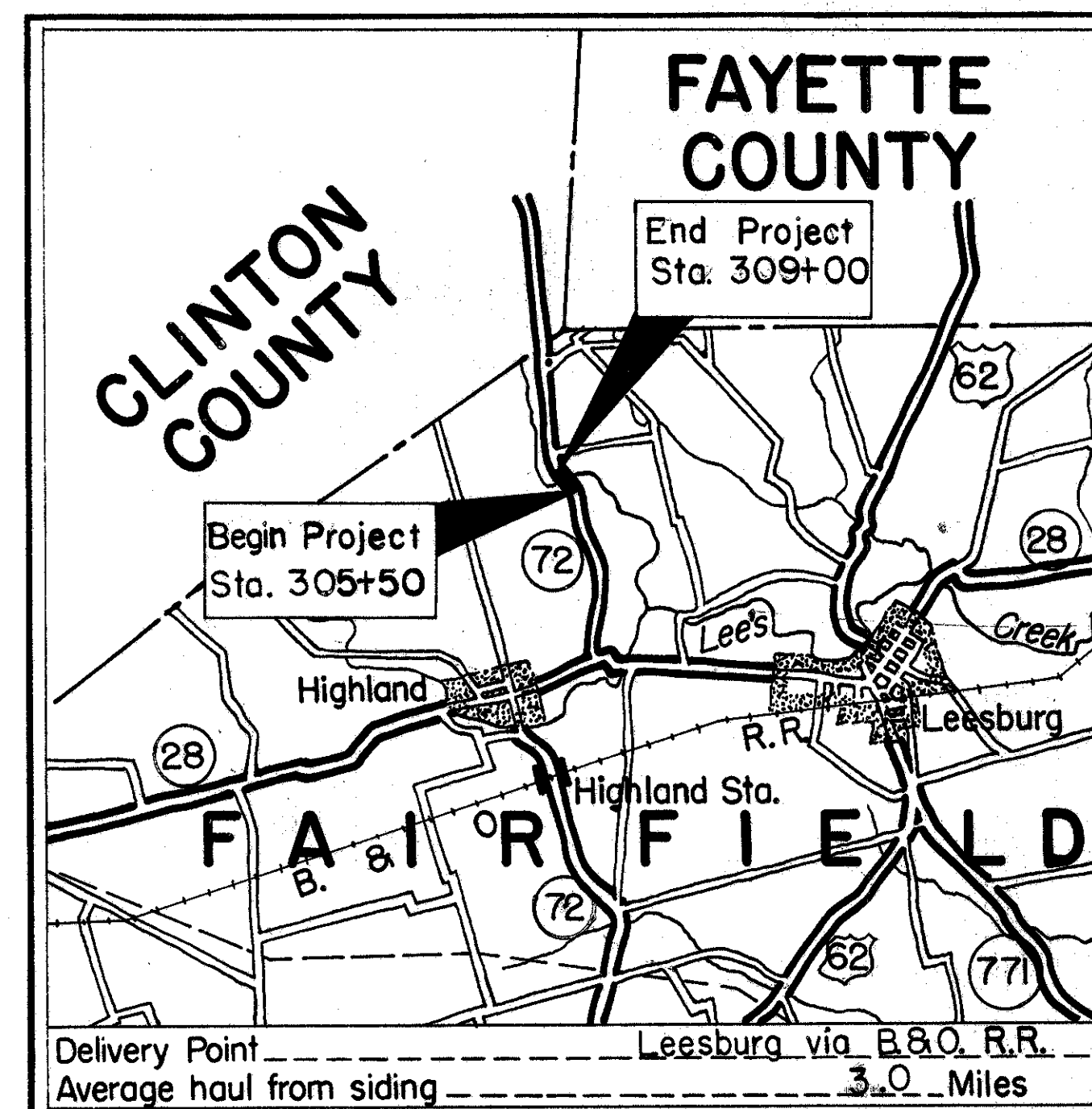
State Line	-----
County Line	-----
Township Line	-----
Section Line	-----
Center Line	-----
Corporation Line	-----
Fence Line	-x-x-x-x-x-
Guard Rail (existing)	-o-o-o-o-o-
Guard Rail (proposed)	-o-o-o-o-o-
Steam Railroad	-----
Power Poles	-o-o-o-o-
Telephone Poles	-o-o-o-o-
Trees or Stumps (existing)	-o-o-o-o-
Trees or Stumps (to be removed)	-o-o-o-o-

INDEX OF SHEETS

Title Sheet	1
Typical Sections	3-4
Notes	5
Summary of Quantities	6-8
General Summary	9-12
Plan & Profile	13-15
Cross Sections	16-18
Structures Over 20' Span	19
Channel Sections	14
Right-of-Way	
Revised As-Built	

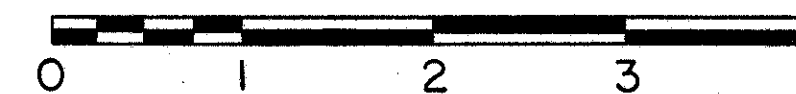
LINE DATA

Begin Project	Sta. 305+50.
End Project	Sta. 309+00
Net Length of Project	350 Lin. Ft. or 0.066 Mile
Add for Approaches	
Sta. 304+70 to Sta. 305+50	80 Lin. Ft.
Sta. 309+00 to Sta. 310+00	100 Lin. Ft.
Net Length of Work	530 Lin. Ft. or 0.100 Mile



LOCATION MAP

SCALE OF MILES



Portion to be improved
State Roads
Other Roads

SCALE

Plan: 1" = 50'
Profile: Horizontal: 1" = 50'
Profile: Vertical: 1" = 5'

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 to traffic of the highway and that provisions for maintenance and safety of traffic will be as set forth on these plans and estimates.

Approved: Joseph M. Doyle P.E. 1209
Date: 1-9-56 Division Deputy Director

Approved: John J. Newkirk
Date: 2-21-56 Deputy Director of Planning & Programming

Approved: Richard D. Ort
Date: 2-16-56 Engineer of Bridges

Approved: E.S. P...
Date: 2-20-56 Engineer of Location & Design

Approved: W. J. ...
Date: 2-20-56 Deputy Director of Design & Construction

Approved: V. J. ...
Date: 2-21-56 First Assistant Director

Approved: S. O. ...
Date: 2-21-56 Director of Highways

APR 5 1961
GROUND PHOTOLAI

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DISTRICT ENGINEER

DATE

File No.	HIGHLAND COUNTY HIG. 72-5.79
Date of Letting	_____ 19
Contract No.	_____

Supplemental Prints of Standard Construction Drawings					
A-1-54	12-1-54	L-1	4-1-50	L-3-A	4-1-50
AS-1-54	12-1-54	T-15 No.1	8-1-55	P-1-54	12-1-54
CS-1-54	2-5-54	T-15 No.2	12-1-54	RI-1	1-3-55
DR-1	1-3-55	L-3	4-1-50	T-35	1-2-56
G-7.07	1-2-55				

Supplemental Specifications	
B-119	Rev. 12-14-55
L-209.12	7-17-54
6	12-28-55

TYPICAL SECTION

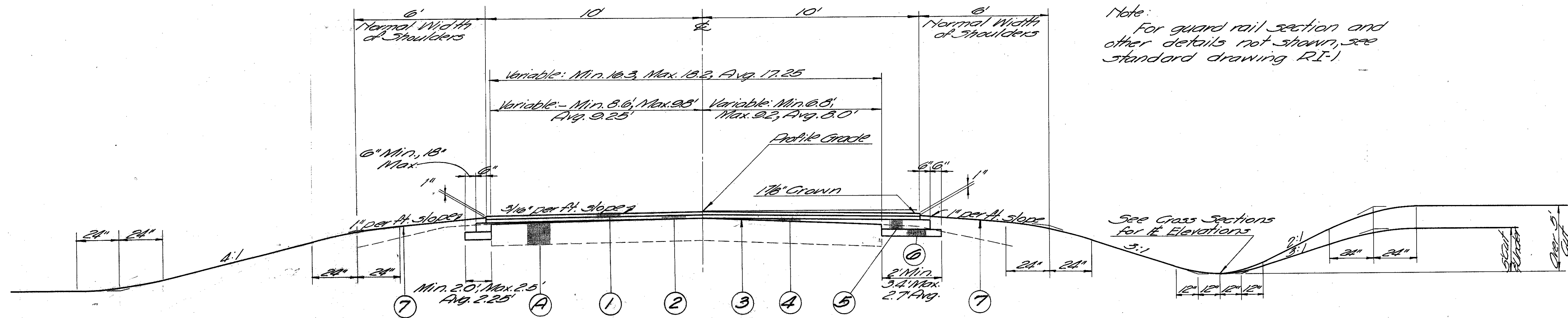
TYPE T-35

Scale: 3/8" = 1'-0"

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

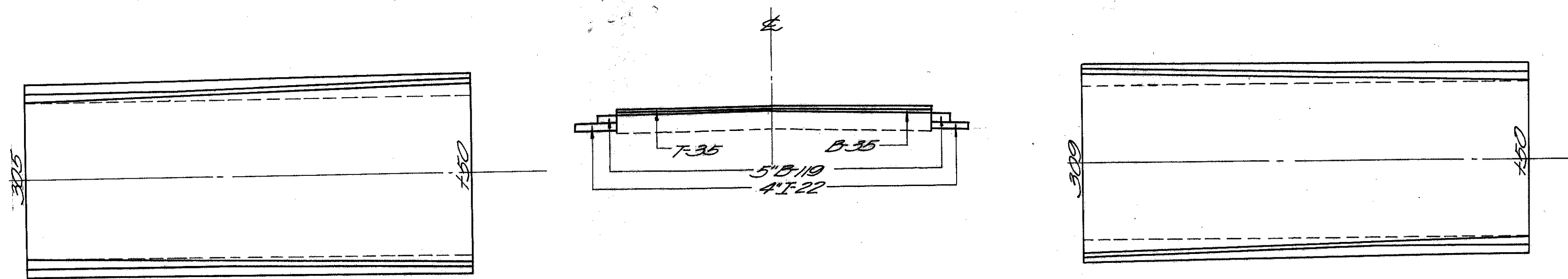
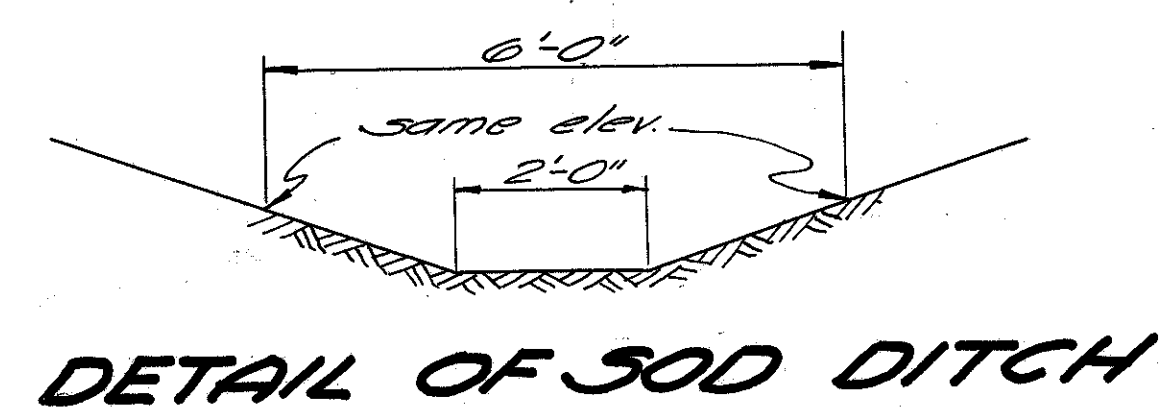
2
19

HIGHLAND COUNTY
HIG-72-5.79

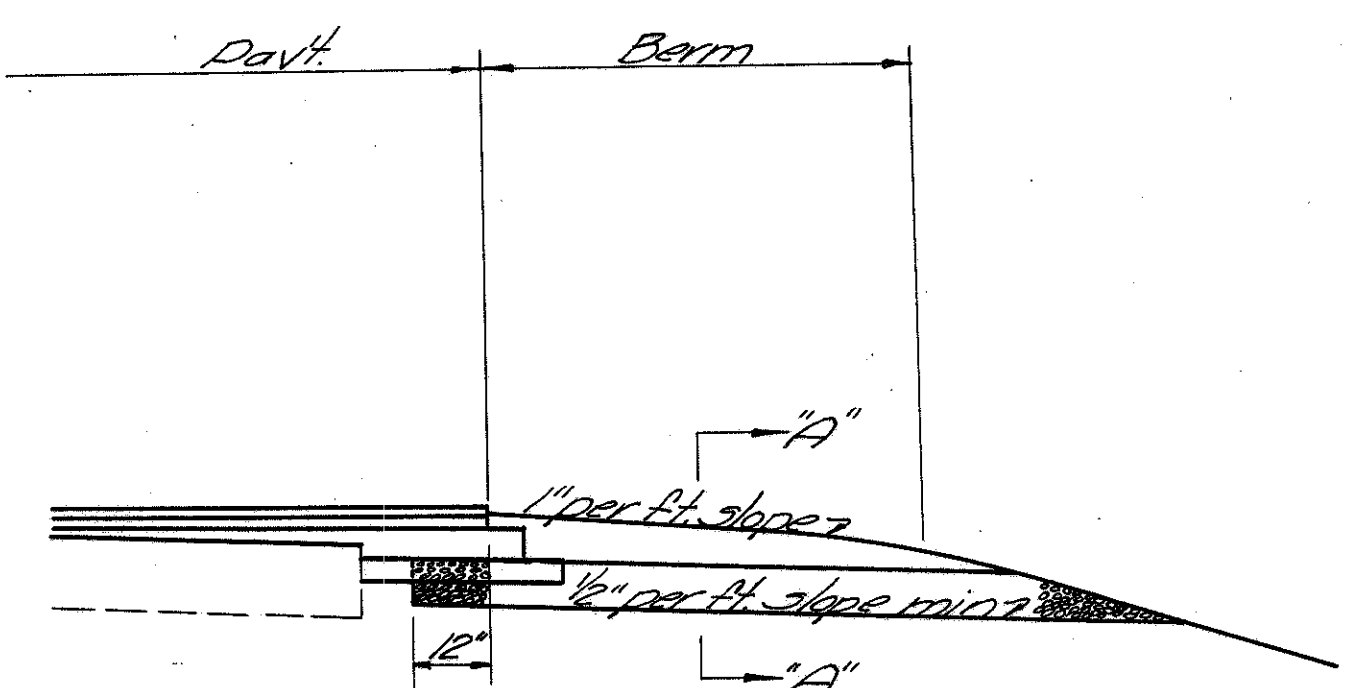


Note:
For guard rail section and other details not shown, see standard drawing RI-1.

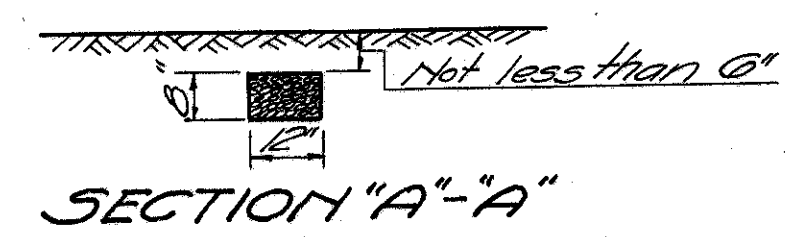
TYPICAL SECTION "A"
The above typical section applies between the following stations:
Sta. 305+50 to Sta. 306+89.72 139.72 Lin. Ft.
Sta. 307+09.28 to Sta. 309+00 100.72 Lin. Ft.
Net length of Typical Section "A" 240.44 Lin. Ft.



FEATHERING DETAIL & TYPICAL SECTION



PART SECTION SHOWING I-9 STONE UNDERDRAINS



SECTION "A-A"

I-9 UNDERDRAINS	
LT. #	RTE
305+50	305+75
306+00	306+25
306+50	306+75
	307+25
308+50	308+75
309+00	

LEGEND

- ① Item T-35 1 1/4" Asphaltic Concrete Surface Course, Type "A" or "C" (85-100)
- ② Item B-35 2" Asphaltic Concrete Leveling Course (85-100)
- ③ Item T-30 Bituminous Prime Coat, Sec. M-5.3, MC-0 or MC-1, or Sec. M-5.7, RT-2 or RT-3 applied at the rate of 0.35 gal. per square yard.
- ④ Item B-110 Crushed Aggregate Base, 0" Min., 5" Max. 2" Avg.
- ⑤ Item B-110 5" Crushed Aggregate Base
- ⑥ Item I-22 4" Sub-base
- ⑦ Item L-9 Seeding & Protecting
- ⑧ Exist. T-32 on Macadam

NOTES

GENERAL

FIELD OFFICE

The contractor shall provide a suitable "Field Office" in accordance with section 5-0.01(b), having a minimum of 150 sq. ft. of floor space. The contractor shall have a telephone installed and maintained during construction of this project.

UTILITY OWNERS

Any and all work required for removing, relocating and construction of new facilities for private or public utilities will be done by and at the expense of the respective owners unless otherwise noted on the plans.

DESIGN SPEED

The geometrics for this project have been planned for a design speed of 50 miles per hour.

TRAFFIC

Two way traffic will be maintained at all times, except during placing of proposed pavement when one way traffic will be permitted as directed by the Engineer.

The existing and the proposed pavement shall be used to maintain traffic wherever and whenever possible.

The Contractor's attention is directed to the following sections of the Construction and Material Specifications:

- G-4.05 Maintenance of Local Traffic
- G-7.06 Public Convenience and Safety
- G-7.07 Barricades, Danger and Warning Signs
- T-35.23 Protection of Wearing Course

This note shall not be construed to waive any portion of the Construction and Material Specifications.

The following is a suggested sequence of construction operations to facilitate the maintenance of two-way traffic at all times.

Maintain traffic by means of the existing and proposed pavement and a temporary runaround constructed on the left.

An estimated amount of 5-15 material has been provided in the Structure Summary for maintenance of traffic.

The preceding is not a mandatory schedule of construction procedure. In lieu of the above, the Contractor may submit to the Director for approval a written detail schedule of his alternate method of maintenance of traffic and construction procedure.

Prior to adoption and use of an alternate schedule for the maintenance of traffic, approval shall be obtained from the Director.

5-15 AGGREGATE (Carried to Structure Summary)

Station to	Station	Length	Width	Depth	cu. yd.
305+50	309+50	250'	20'	12"	193

5-15 CALCIUM (Carried to Structure Summary)

185 cu. yds x 40# cu. yd. x 12000 = 3.77 tons - Use 4 Tons

PAVEMENT

I-22 SUBBASE

In lieu of the requirements of I-22.04 Method of Measurement and I-22.05 Basis of Payment the I-22 subbase material shall be paid for on a compacted volume basis determined by conversion from tonnage. The material shall be weighed on approved scales and the cubic yards of compacted material computed on the basis of the following conversion factors:

One Cubic Yard of:	Material meeting A or C grading	3500 lbs.
	Material meeting B or D grading	3000 lbs.

If the material meets either gradings A or C, payment shall be based on the 3500 lbs. factor even though it may also meet B or D requirements.

Freight bills or certified weigh bills shall be furnished to the Engineer as requested during the progress of the work.

B-119 CRUSHED AGGREGATE BASE

In lieu of the provisions of B-119, Sec. 4, Method of Measurement and Sec. 5, Basis of Payment, the crushed aggregate base course shall be paid for on a compacted volume basis determined by conversion from tonnage. The material shall be weighed on approved scales and the cubic yards of compacted material computed on the basis of the following conversion factors:

One Cubic Yard of:	Crushed stone or gravel	3000 lbs.
	Crushed Slag *	3500 lbs.

*3000 shall be used instead of 3500 when the slag is from a source which is on record at the laboratory, as having a dry-rodded weight of 90 lbs. per cubic foot or more.

Freight bills or certified weigh bills shall be furnished to the Engineer as requested during the progress of the work.

SUBGRADE COMPACTION: Subgrade under drives, approaches or mailbox turnouts paved with B-119 material shall be compacted for a depth of six (6) inches to the density requirements shown in Table III, Item E-1. Payment for subgrade compaction, as specified above, shall be included in the unit price bid for Item E-1 Roadway Excavation.

ROADWAY

ROADWAY EXCAVATION

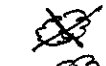
All roadway excavation shown on the roadway cross sections, regardless of the nature of the material encountered, will be paid for as Item E-1 Roadway Excavation.

SEEDING AND PROTECTING

Quantities for seeding are calculated for the soil areas within the construction limits as shown on the cross sections and payment shall not be made for seeding beyond these limits. Areas outside construction limits where the Engineer determines that the existing grass areas have been disturbed by construction operations shall be seeded in accordance with Section G-7.09 at the contractor's expense.

REMOVAL OF TREES AND STUMPS

Trees or stumps shall be removed or preserved as indicated on the plans by the following symbols:

Trees or stumps to be removed 

Trees to be preserved 

The number of trees or stumps to be removed, as indicated by the above symbols is approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps, even though these trees or stumps are not indicated on the plans or are indicated to be preserved.

Payment for the removal of these additional trees or stumps is included in the Lump Sum bid for the removal of trees and stumps.

ROUNDING OF CORNERS ON CROSS SECTIONS

The rounded corners, shown on the Typical Sections, apply to all cross sections even though otherwise shown in these plans.

FERTILIZING SOD AREAS

All sod areas are to have Commercial Fertilizer (10-6-4) and Agricultural Liming Materials applied at the same rate and in the same manner as for the seeded areas in accordance with Section L-9.11.

The sod bed shall have two inches of loose soil on which sod is laid after excavation for sod thickness.

DRAINAGE OF SUBBASE MATERIAL

Where subbase material is drained by I-9^s or by extensions thru the shoulders to the fill slope or ditch line the Contractor shall finish, seed and mulch the slopes so as not to impede drainage of the subbase drains. The actual area of cuticrop of the subbase drains shall not be seeded.

NOTES & GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	4 19
2	OHIO		

HIGHLAND COUNTY
HIG-72-5.79

ROADWAY

REMOVAL (MISCELLANEOUS)

The removal and disposal of any existing pavement, sidewalk, building foundations, steps, cellar floors, well covers, cisterns, tanks of all kinds, concrete bases, walls, curb and gutters, rails, ties, pole stubs, guard posts, head walls, pipes, cast iron plates, or other masonry lying within or below the limits of Roadway Excavation, Item E-1, Excavation for Structures, Item E-2, or Channel Excavation, Item E-3 (and not specifically paid for under a separate item) are classified as excavation and paid for under the excavation item of which they are a part.

Sidewalks, steps, cellar floors, or other masonry shall be excavated to a depth of three (3) feet below the proposed pavement subgrade if located within the proposed pavement area, and to a depth of three (3) feet below the proposed finished surface if without the limits of the proposed pavement area.

Pavement, cellar floors, or other masonry below the above limits shall be broken up into portions, whose area does not exceed one (1) square foot, but need not be removed.

Backfilling shall be performed according to Section E-1.08 of the Construction and Material Specifications.

Wells, cisterns and tanks of all kinds shall be filled with broken foundation masonry, or rock placed as rock embankment, according to Section E-1.08 of the Construction and Material Specifications.

Payment for the above operations shall be included in the contract unit price bid for Roadway Excavation, Item E-1, Excavation for all Structures, Item E-2 and Channel Excavation, Item E-3.

Additional excavation necessary to perform any of the above operations shall be paid for at the contract unit price bid per cubic yard for Roadway Excavation, Item E-1, Excavation for Structures, Item E-2 and Channel Excavation, Item E-3.

GENERAL SUMMARY

Item	Quantity	Type	Unit	Description
Roadway				
E-1	283		Cu.Yd.	Roadway Excavation, as per plan
E-4	311		Cu.Yd.	Borrow
E-9	Lump		Lump	Removal of Trees and Stumps
E-11	0		M.Gals.	Water
I-15	115.88		Lin.Ft.	Guard Rail Steel Beam Type (Deep)
L-9	2801		Sq.Yd.	Seeding & Protecting
L-9	0.26		Tons	Commercial Fertilizer (10-0-4)
L-9	1.31		Tons	Agricultural Liming Materials
L-10	120		Sq.Yd.	Sodding
Drainage				
I-9	110		Lin.Ft.	Stone Underdrains, 11" x 2
I-10	10		Cu.Yd.	Dumped Rock Fill, as per plan
Pavement				
T-35	32		Cu.Yd.	Asphaltic Concrete Surface Course, Type "A" or "C" (85-100)
B-35	33		Cu.Yd.	Asphaltic Concrete Leveling Course (85-100)
T-30	143		Gals.	Bituminous Prime Coat, Sec. M-5.7, RT-2 or RT-3, or Sec. M-5.3, MG-0 or MG-1
T-30	7		Gals.	Bituminous Tack Coat, as per plan
B-10	51		Cu.Yd.	Crushed Aggregate Base Course, as per plan
I-22	27		Cu.Yd.	Subbase, as per plan
I-7	67		Sq.Yd.	Reinforced Concrete Approach Slabs (T=10")
Structures Over 20 Ft. Span For Quantities, See Sheet 17 ^o 14				
Special	Lump		Lump	Maintaining Traffic, See Note on Sheet 17 ^o 3

SUMMARY OF QUANTITIES

HIGHLAND COUNTY
HIS-72-5.79

PAVEMENT CALCULATIONS															
See Sheet No.	Station to Station	Side	T-35	F-35	B-35	B-35	T-30	B-110	B-110	B-110	I-22	I-7	I-9	*F-30	
			1 1/2" Asphaltic Concrete Surface Course	Asphaltic Concrete Surface Course Var. Depth	2" Asphaltic Concrete Leveling Course	Asphaltic Concrete Leveling Course Var. Depth	Bituminous Drive Coat (20-25 gal/3Y)	5" Crushed Aggregate Base	6" Crushed Aggregate Base	6" Crushed Aggregate Base	4" Sub-base	Reinforced Concrete Approach Slabs	Stone Underdrains 11" x 2"	Stone Underdrains 11" x 2"	Bituminous Seal Coat (20-25 gal/3Y)
			Sq. Yd.	Cu. Yd.	Sq. Yd.	Cu. Yd.	Sq. Yd.	Sq. Yd.	Sq. Yd.	Sq. Yd.	Sq. Yd.	Sq. Yd.	Sq. Yd.	Lin. Ft.	Sq. Yd.
Typical Section "A"															
2	300+44 to 300+140		534.3		534.3										
	300+44 x 2.1 x 140	RT					56.1	56.1							
	300+44 x 1.7 x 140	LT					45.4	45.4							
	300+44 x 2.25 x 140	LT								60.1					
	300+44 x 2.7 x 140	RT								72.1					
	300+44 x 10.25 x 140						273.8	273.8							
Feather Area															
	305+00-305+50			4.3		1.5	16.7	16.7		22.2					
	309+00-309+50			4.3		1.5	16.7	16.7		22.2					
Approach Slabs															
	306+00.72-307+04.72		66.6							35.0	33.3		33.3		
	307+54.28-307+00.28		66.6							35.0	33.3		33.3		
7	Drive 305+00	RT								88.5					
7	Mail Box 300+70.5	RT								12.8					
2	To be used as directed by Engr.												110		
Sub-total			667.5	8.6	534.3	3.0	408.7	154.9	273.8	101.3	246.0	66.6	110	66.6	
Conv. to C.Y. Gravel etc.			23.2	8.6	29.7	3.0	143.0	18.7	15.2	16.9	27.4	66.6	110	6.7	
Total			232	8.6	29.7	3.0	143.0	18.7	15.2	16.9	27.4	66.6	110	6.7	
			31.8		32.7				50.8						

Note: Approach Slabs shall have 2 1/2" Asphaltic Concrete Surface Course, laid in two 1 1/4" courses.
* See Note in Proposal

GUARD RAIL				
See Sheet No.	Station to Station	Side	I-15 Guard Rail Steel Beam Type (Drop) Lin. Ft.	
7	306+50.10-308+70.00	LT	137.50	
7	306+71.31-308+08.81	RT	137.50	
			-150.12	
Total			124.88	

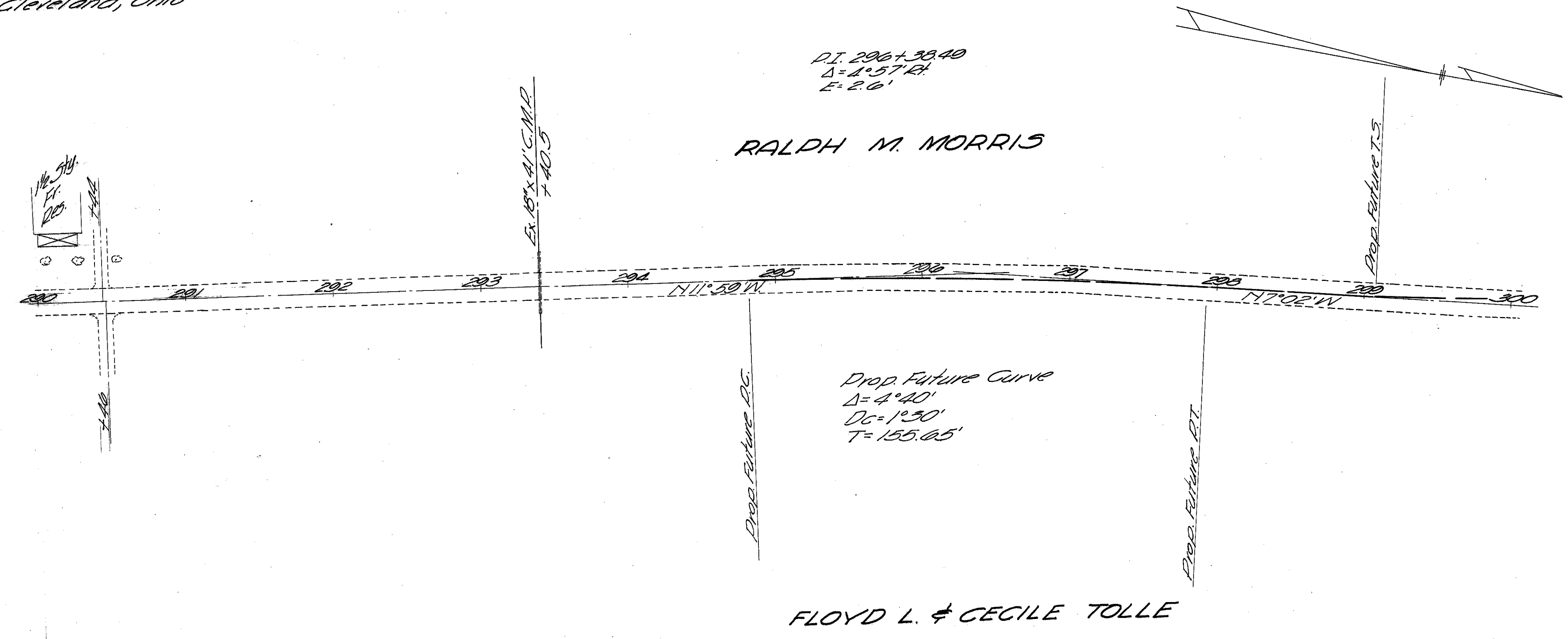
REMOVAL OF TREES & STUMPS	
Item E-9	Lump

BORROW CALCULATIONS	
Roadway Embankment	96.7 Cu. Yd.
Roadway Embankment + 20%	116.0 Cu. Yd.
Item E-1 Roadway Excavation	283 Cu. Yd.
Gross Borrow, Item E-4	877 Cu. Yd.
Available to reduce borrow	
Channel Excavation, Item E-3	56.6 Cu. Yd.
Net Borrow, Item E-4	311 Cu. Yd.

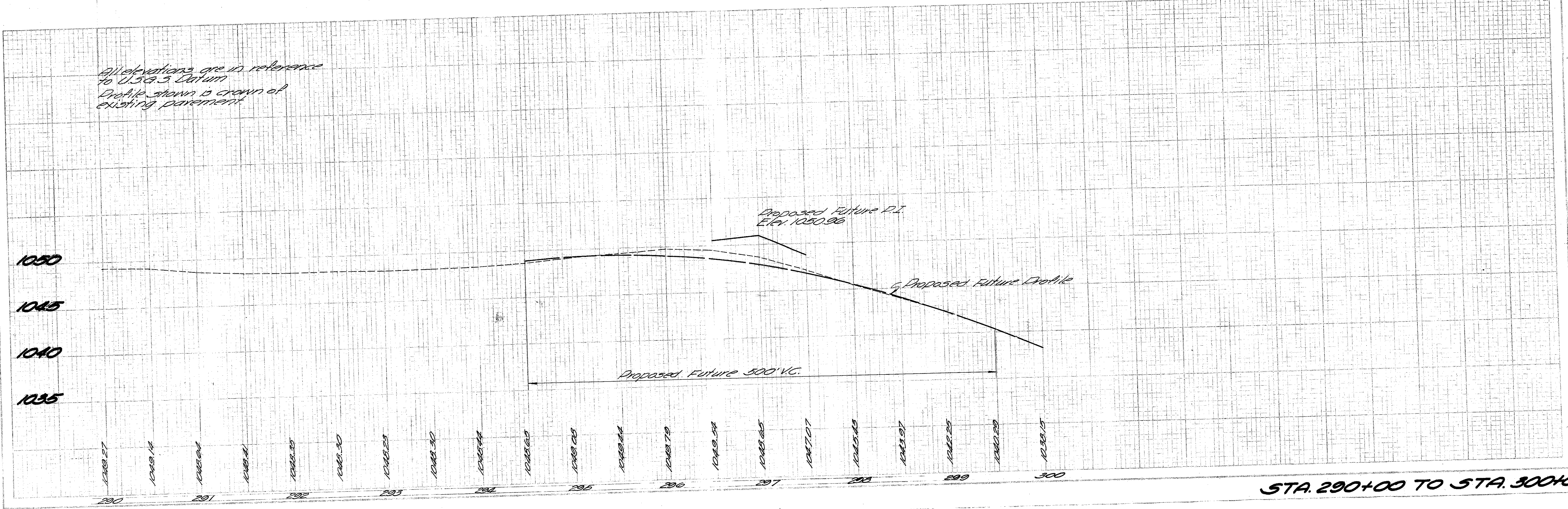
EROSION CONTROL							
See Sheet No.	Station to Station	Side	L-9	L-9	L-10	I-10	
			Seeding & Protecting	Commercial Fertilizer (10-6-4)	Agricultural Liming Materials	Seeding 6' wide	Dumped Rock Fill
			Sq. Yd.	Tons	Tons	Sq. Yd.	Cu. Yd.
7	307+71-308+50	LT				120	10
10	304+70-307+04.72		1393				
11	307+67-308+75		909				
	Channel Seeding 8+75-11+00		495				
Total			2801	0.26	1.31	120	10

EXCAVATION & EMBANKMENT				
See Sheet No.	Station to Station	Side	E-1	E-4
			Roadway Excavation	Roadway Embankment + 20%
			Cu. Yd.	Cu. Yd.
7	304+70-307+04.72		160	520
7	307+67-308+75		123	447
Total			283	967

UTILITY OWNERS
 P The Dayton Power & Light Co
 Washington C. H., Ohio
 T The Ohio Bell Telephone Co
 Cleveland, Ohio



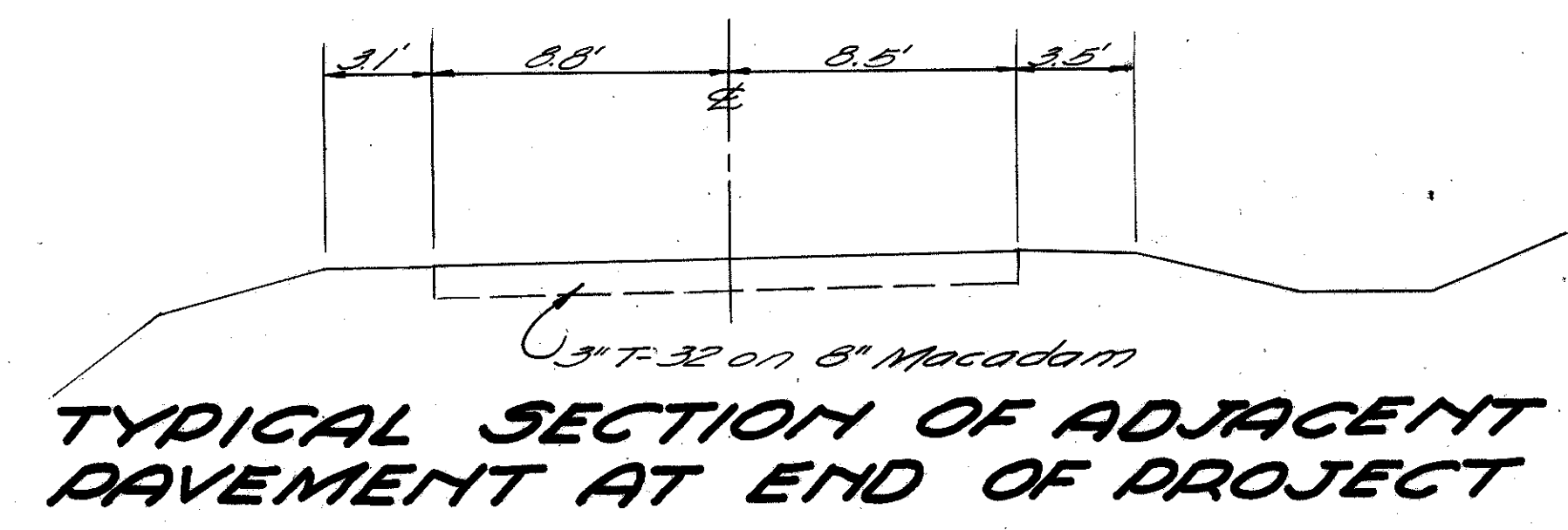
FLOYD L. & CECILE TOLLE



STA. 290+00 TO STA. 300+00

**HIGHLAND COUNTY
HIG-72-5.79**

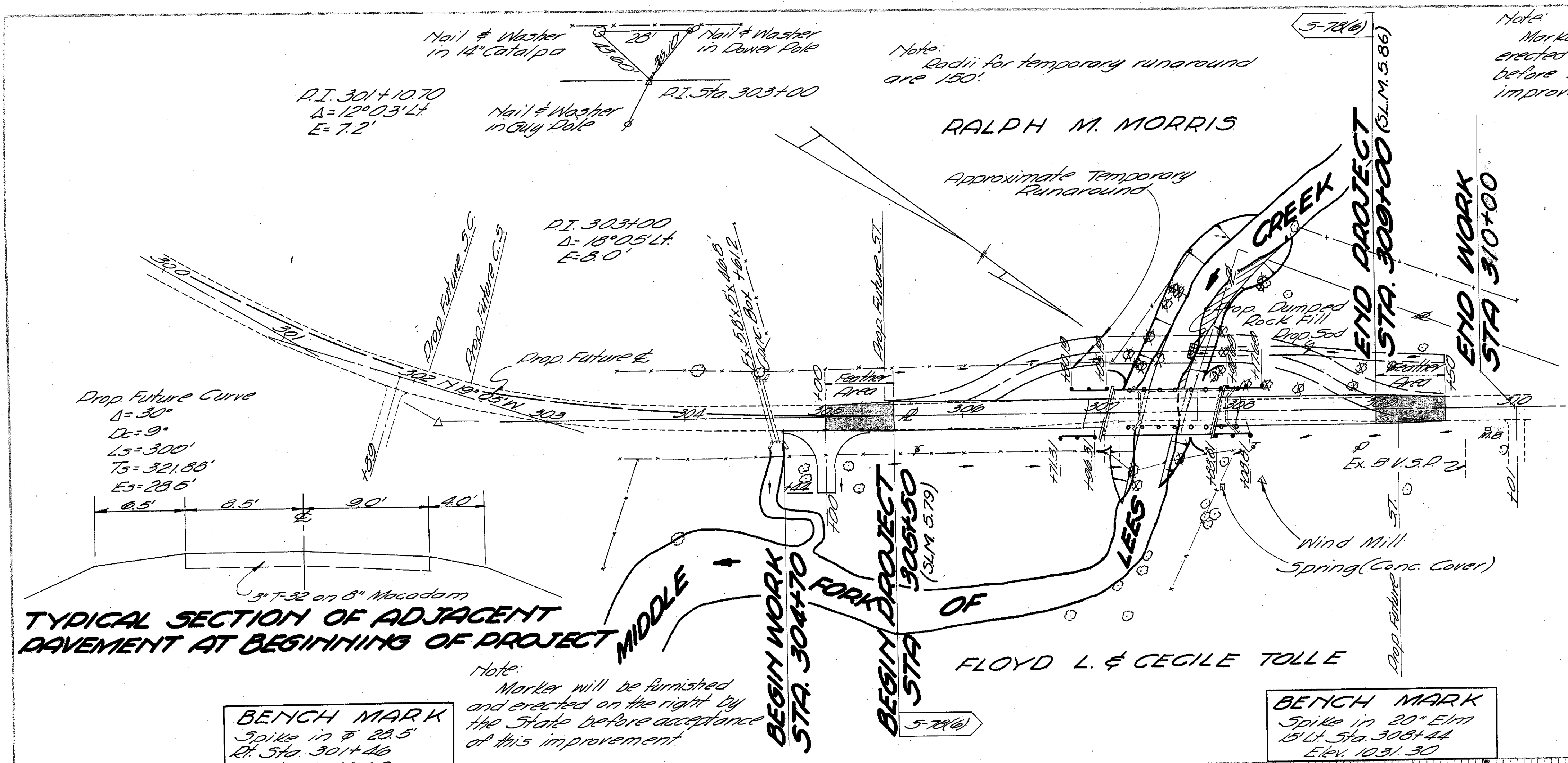
Note:
Marker will be furnished and erected on the left by the State before the acceptance of this improvement.



PROPOSED STRUCTURE
 TYPE: Cont. joint conc. slab with corrugated pipe diaphragms and abuts
 SPANS: 24'-30'-24' 96 bays
 ROADWAY: 32'-0\"/>

EXISTING BRIDGE DATA
 BR-HI-72-61A
 TYPE: Steel Beam
 SPAN: 58'-0\"/>

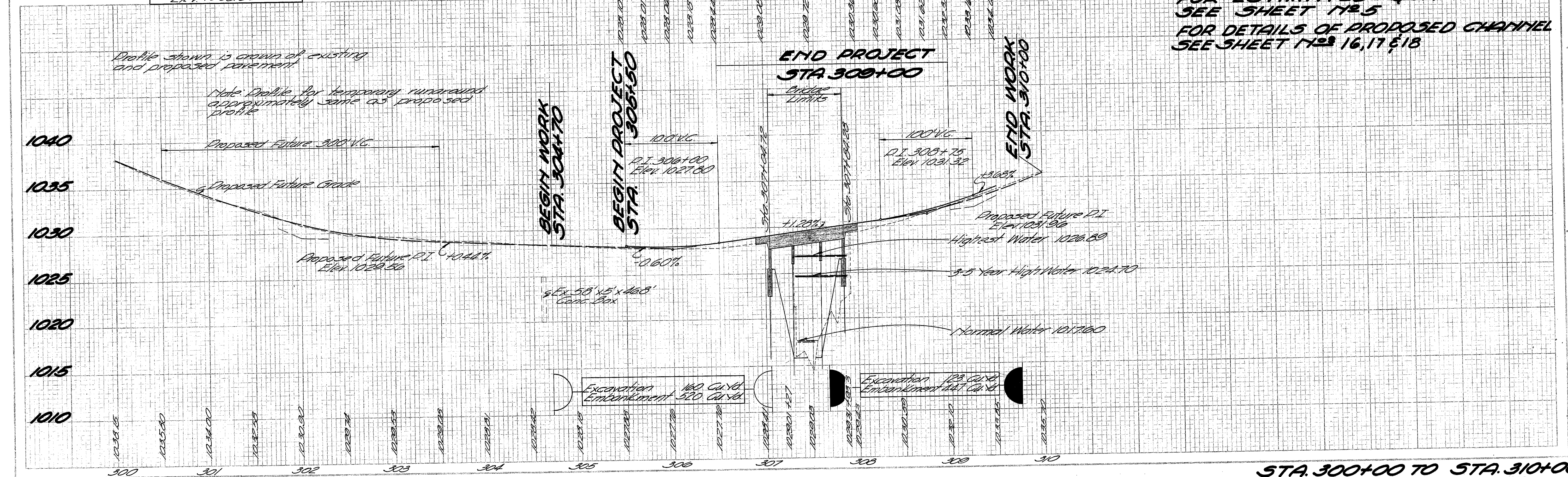
**FOR ESTIMATED QUANTITIES
SEE SHEET 1785
FOR DETAILS OF PROPOSED CHANNEL
SEE SHEET 1789 16, 17 & 18**



TYPICAL SECTION OF ADJACENT PAVEMENT AT BEGINNING OF PROJECT

BENCH MARK
 Spike in 20\"/>

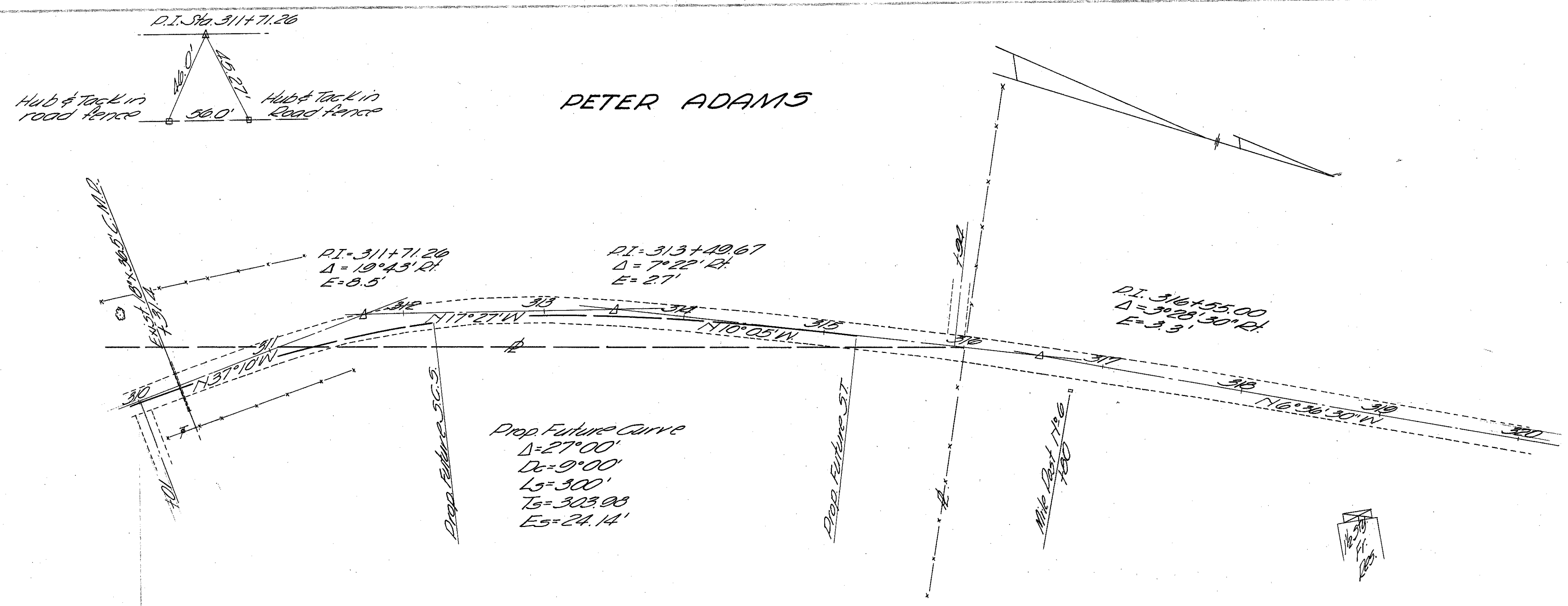
BENCH MARK
 Spike in 20\"/>



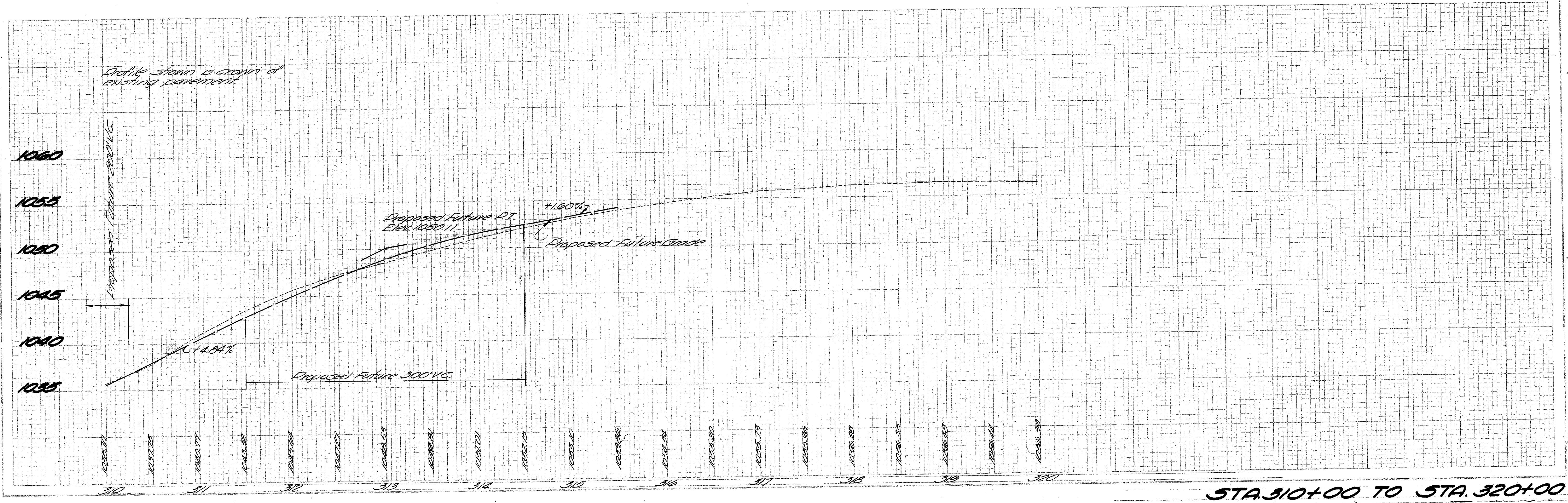
STA. 300+00 TO STA. 310+00

HIGHLAND COUNTY
HIG-72-5.79

PETER ADAMS

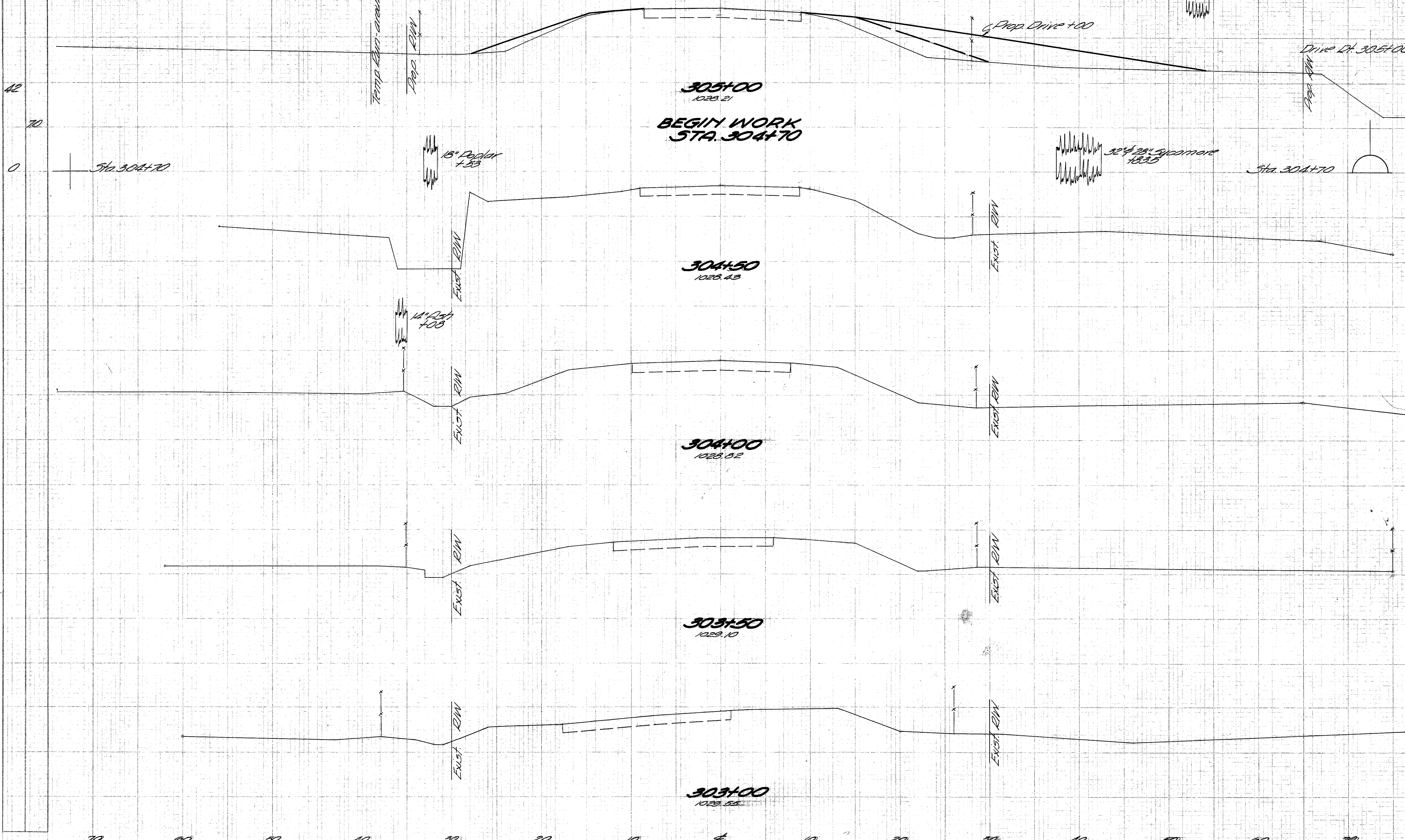


FLOYD L. & CECILE TOLLE



Seeding
End Sq.
Width Yds.

HIGHLAND COUNTY
HIG-72-5.79



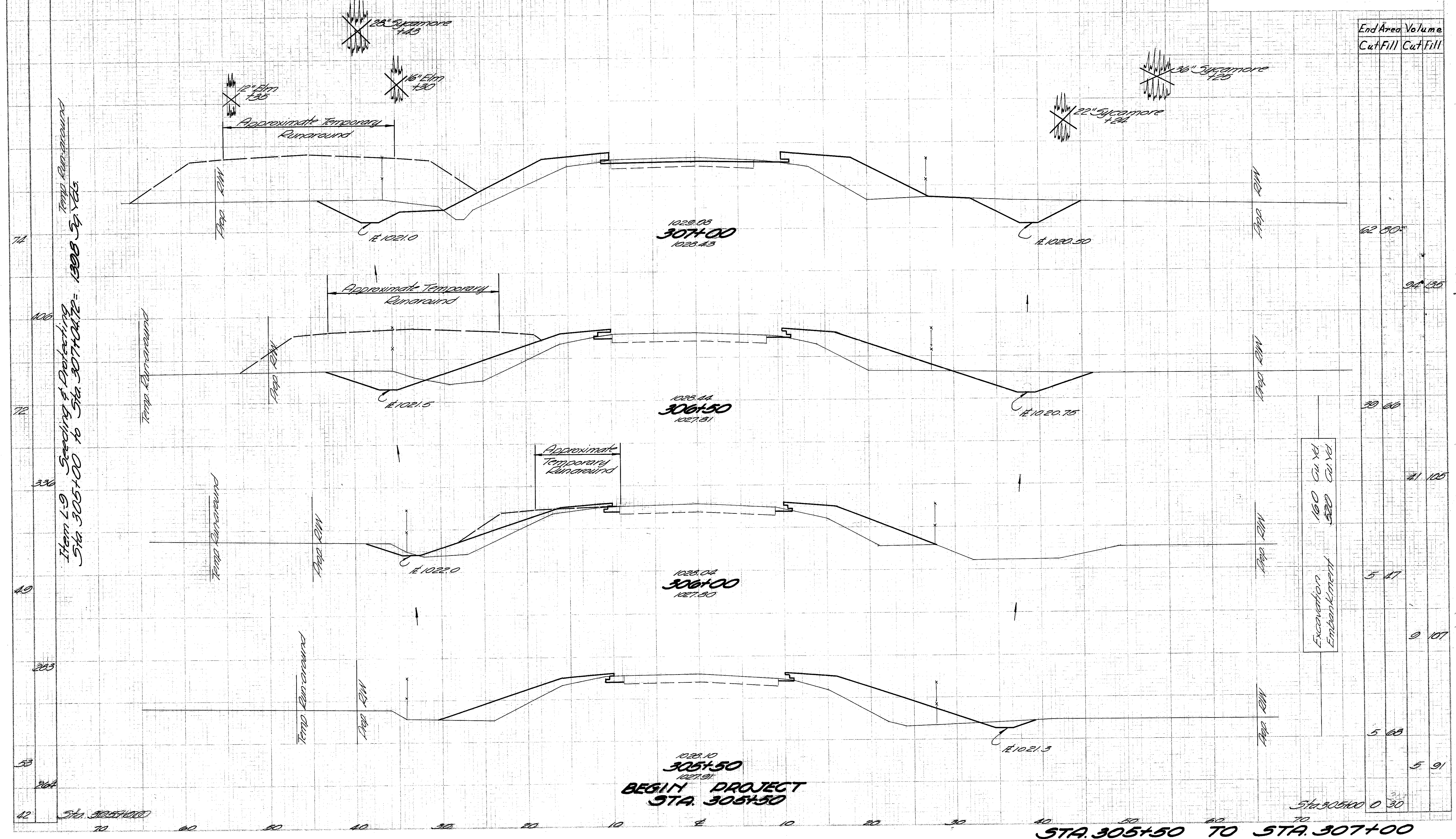
End Area	Volume
Cut	Fill
0	51
0	30
0	17
0	0

STA. 303+00 TO STA. 305+00

**HIGHLAND COUNTY
HIG-72-5.79**

Seeding
End Sq.
Width Yds.

End Area Volume
Cut/Fill Cut/Fill



Item L9 Seeding & Ditching
Sta. 305+00 to Sta. 307+00.72 = 1300.72 Sq. Yds.

74
106
72
330
49
223
53
42

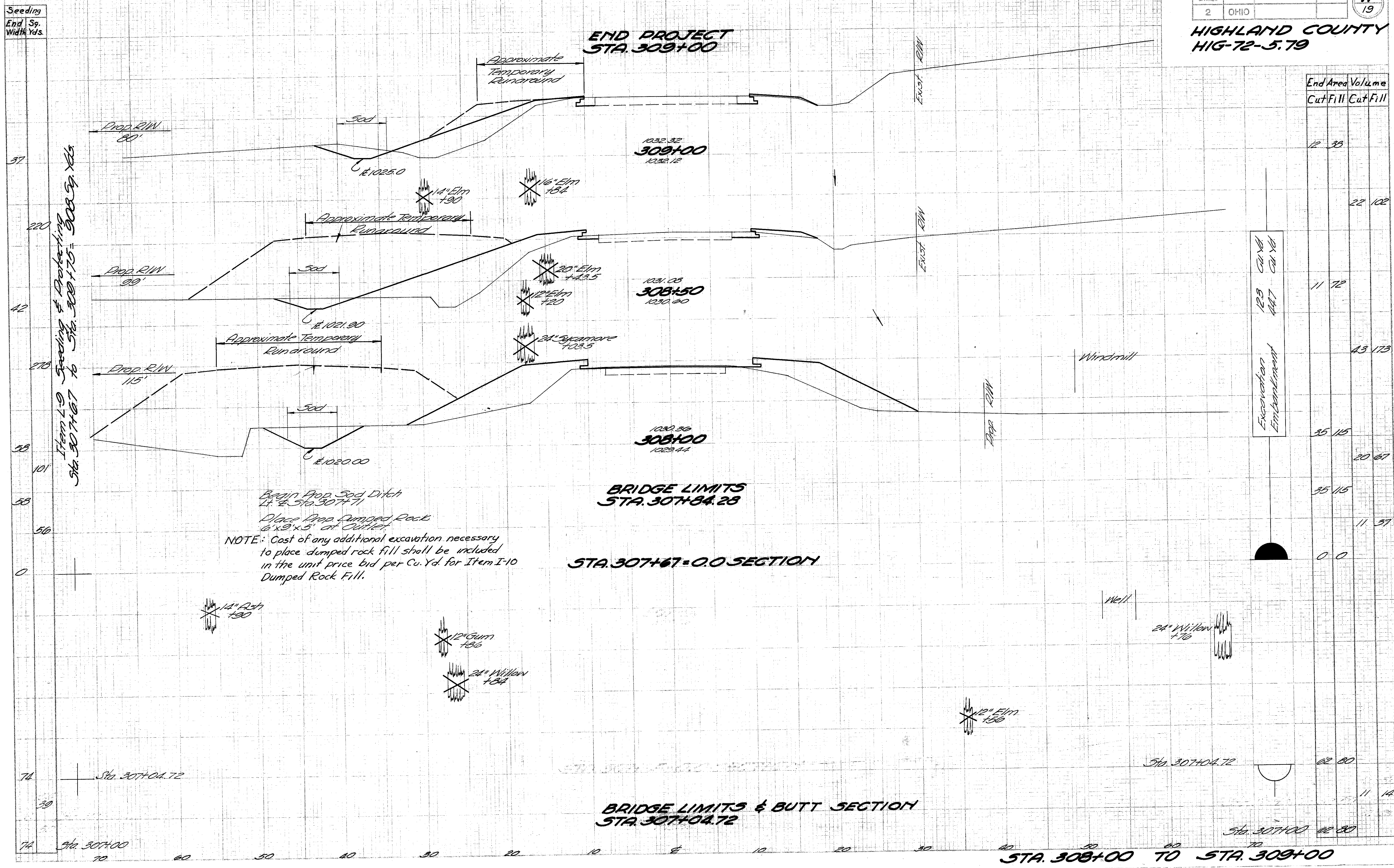
62.80
94.85
39.66
41.05
5.47
0.107
5.08
5.91
0.30

Excavation	160	Cu Yd
Embankment	520	Cu Yd

1028.10
305+50
1027.91
**BEGIN PROJECT
STA. 305+50**

STA. 305+50 TO STA. 307+00

**HIGHLAND COUNTY
HIG-72-5.79**



Seeding	End Sq. Width Yds.
	74
	70
	60
	50
	40
	30
	20
	10
	0
	10
	20
	30
	40
	50
	58
	68
	74

End Area		Volume	
Cut	Fill	Cut	Fill
12	33		
		22	102
11	72		
		43	173
35	115		
		20	67
35	115		
		11	37
0	0		
		62	80
		11	14
		12	80

Item 1-9 Seeding & Protecting
 Sta. 307+67 to Sta. 309+00 = 900 Sq. Yds.

Begin Prop. Sod Ditch
 Lt. Sta. 307+71
 Place Prop. Dumped Rock
 6'x9'x5' at Outlet
 NOTE: Cost of any additional excavation necessary
 to place dumped rock fill shall be included
 in the unit price bid per Cu. Yd. for Item I-10
 Dumped Rock Fill.

**BRIDGE LIMITS
STA. 307+84.25**

STA. 307+67 = 0.0 SECTION

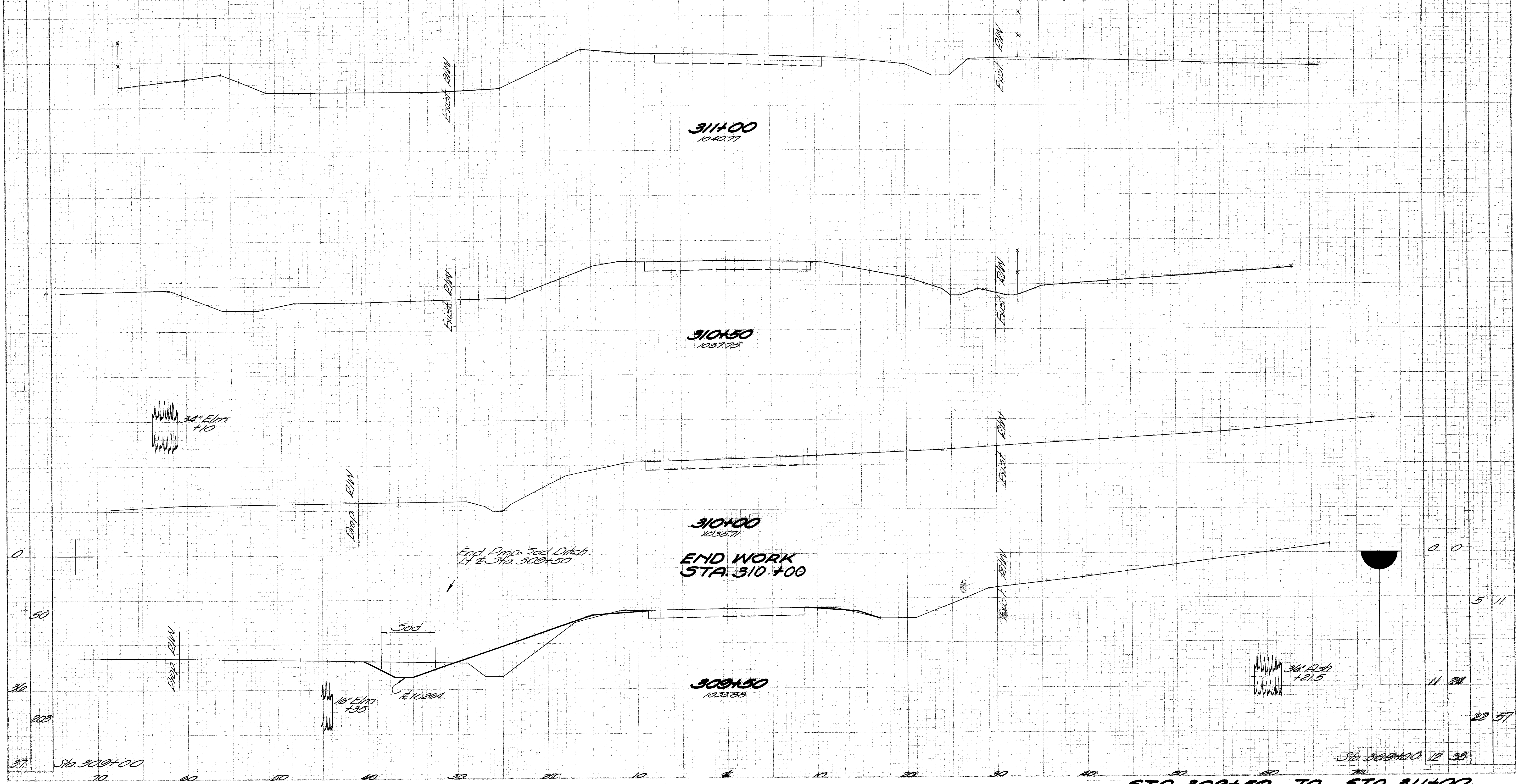
**BRIDGE LIMITS & BUTT SECTION
STA. 307+04.72**

STA. 308+00 TO STA. 309+00

Seeding
End St.
Width Yds.

HIGHLAND COUNTY
HIG-72-5.79

End Area Volume	
Cut	Fill

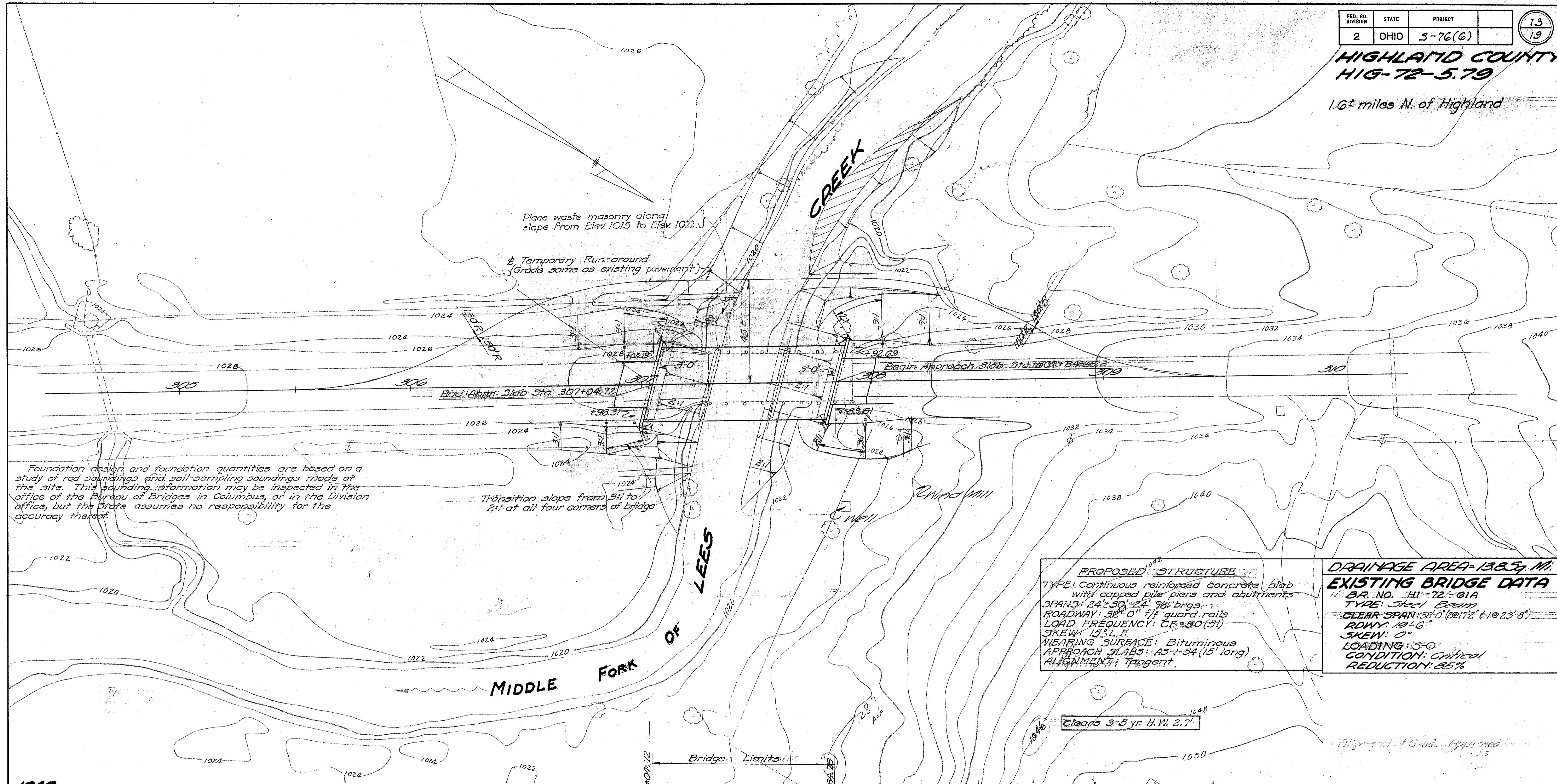


0	0
5	11
11	22
22	57

STA. 309+50 TO STA. 311+00

HIGHLAND COUNTY
HIG-72-5.79

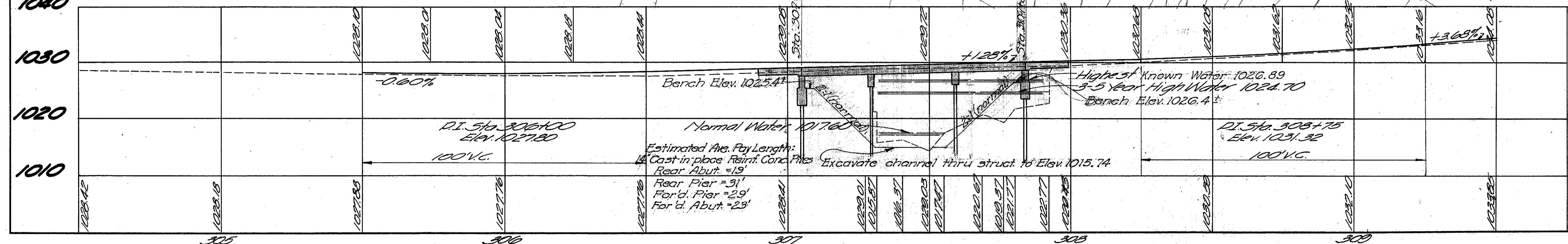
1.6 miles N. of Highland



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 reinforced concrete slab with capped pile piers and abutments
 SPANS: 24'-30'-24' 9/16' brgs.
 ROADWAY: 32'-0" f/f guard rails
 LOAD FREQUENCY: CF=30(5)
 SKEW: 15° L.F.
 WEARING SURFACE: Bituminous
 APPROACH SLABS: A5-1-54 (15' long)
 ALIGNMENT: Tangent

DRAINAGE AREA=138.5 MI.
EXISTING BRIDGE DATA
 BR. NO. HI-72-61A
 TYPE: Steel Beam
 CLEAR SPAN: 56'-0" @ 17'2" + 1 @ 23'-8"
 RDWY: 19'-6"
 SKEW: 0°
 LOADING: 5-0
 CONDITION: Critical
 REDUCTION: 85%



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

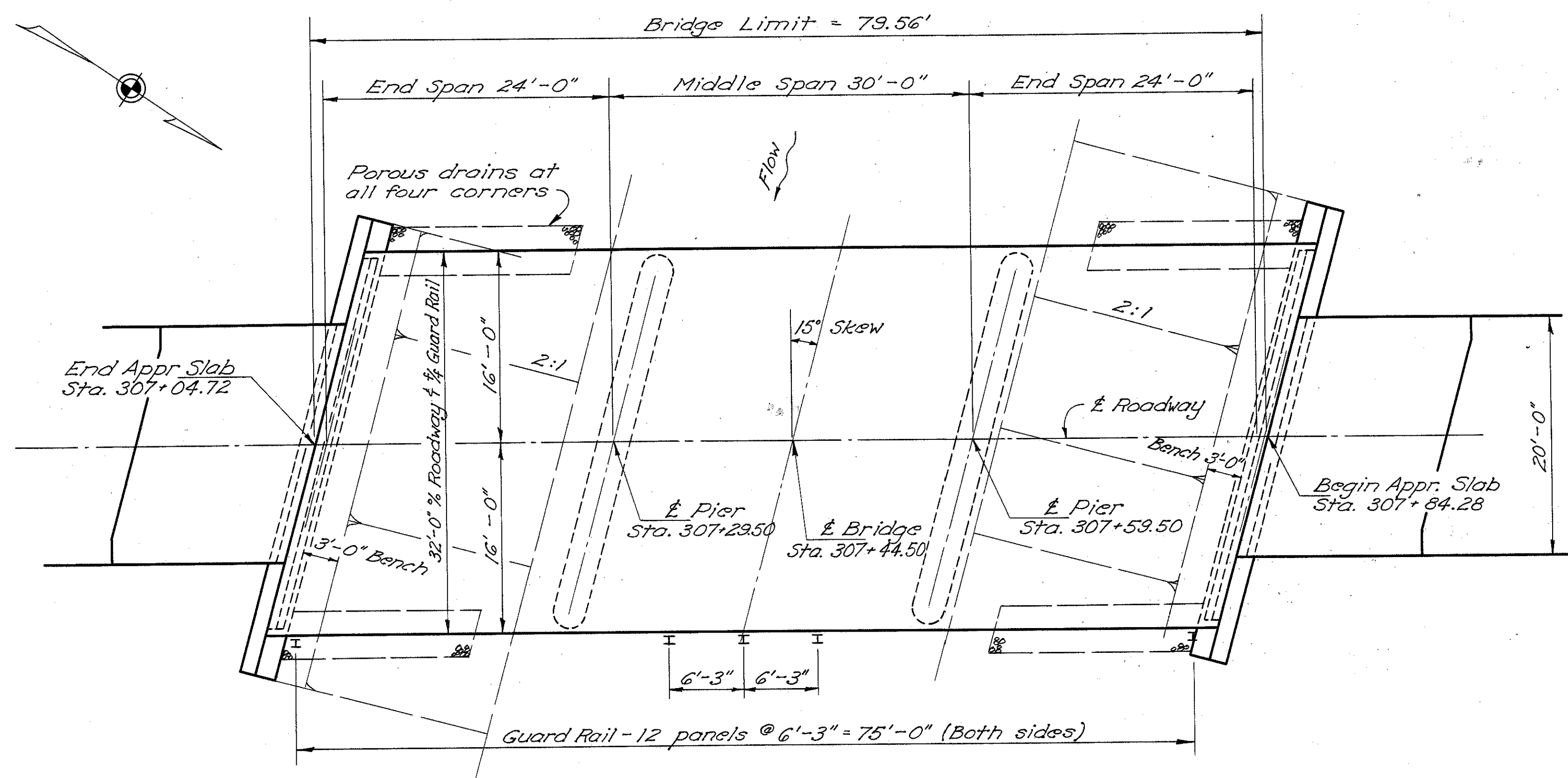
BRIDGE NO. HI-72-0582
OVER MIDDLE FORK OF LEES CREEK
HIGHLAND CO. S.R. 72
STA. 307+04.72
307+84.28

SCALE 1"=20'

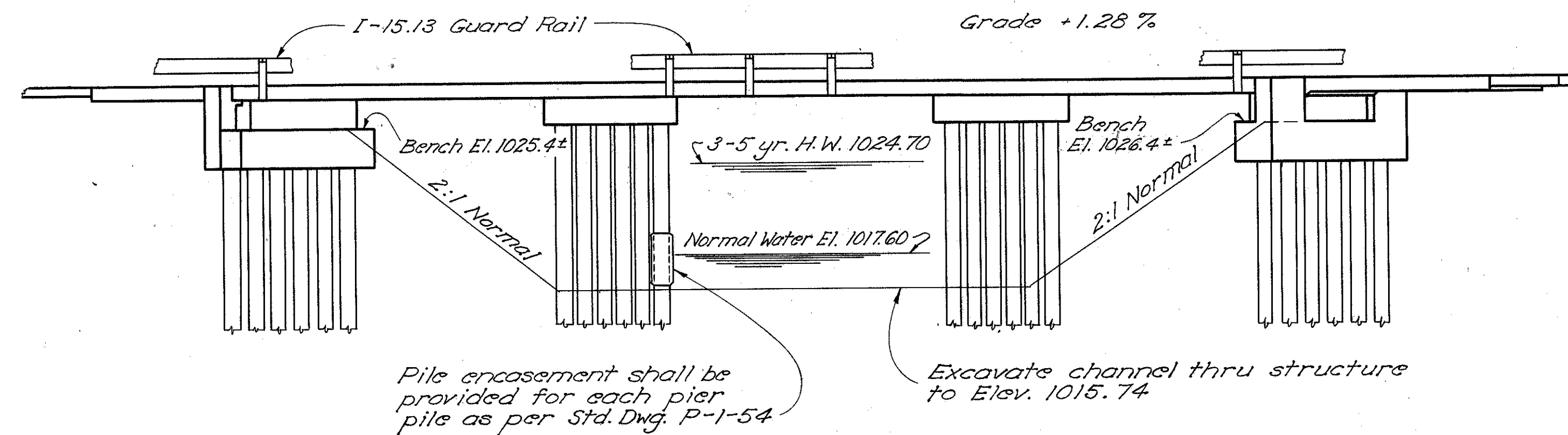
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Head Survey	Head Survey	DIC	DIC	J.P.P.	P.E.S.

BPG 9-8-56 2-15-56
09195

HIGHLAND COUNTY
Hig-72-5.79



GENERAL PLAN



ELEVATION

ESTIMATED QUANTITIES								
Item	Total	Unit	Description	Superstr.	Abut.	Piers	Gen.	As Built
E-2	58	cu.yd.	Unclassified excavation		58			
E-3	566	cu.yd.	Channel excavation				566	6-1 -107 459
S-1	104	cu.yd.	Class "C" concrete, superstructure & pier caps	92		12		
S-1	39	cu.yd.	Class "E" concrete, abutments		39			
S-3	282	sq.yd.	Type "C" waterproofing	282				
S-4	23,272	lb.	Reinforcing steel	21,541	4,314	3,314	103	
S-14	159.12	lin.ft.	Railing (Type I-15.13 with galvanized steel posts & bolts)	159.12				
S-15	198	cu.yd.	Temporary run-around bridge and approaches				198	6-1 -67.04 125.96
S-15	4	ton	Chloride (M-10) for surface course of run-around approaches				4	6-1 -3.2 0.8
S-16	1	sum	First test pile				1	6-1
S-18	645	lin.ft.	14" cast-in-place reinforced concrete piles		255	360		6-1 -58.96 556.54
S-24	1	sum	Removal of existing structure				1	6-1
S-29	12	cu.yd.	Porous drains on embankment slopes				12	
S-29	12	cu.yd.	Porous backfill			12		
T-35	18	cu.yd.	Asphaltic concrete surface course, Type "A" or "C" (85-100)	18				

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CS-1-54, A-1-54 and P-1-54, all revised 12-1-54.

TEMPORARY RUN-AROUND BRIDGE AND APPROACHES: Load frequency for bridge, CF-30, with unit stress increased 25% as per Sec. 82 of the Design Specifications for Highway Structures. T-10 surface course on the approaches. Due to the critical condition of the existing structure the temporary run-around bridge and approaches shall be constructed as soon as possible.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic, the existing structure shall be removed. Steel beams shall be carefully dismantled and piled along the right-of-way for disposal by the State's forces. The south abutment shall be removed to proposed ground surface and to whatever extent is necessary to avoid interference with new construction, including pile driving. The north abutment shall be removed to at least 3 feet below the top of proposed pavement and shoulders. Suitable waste masonry shall be placed in embankment slopes as shown on Site Plan and the remaining waste masonry may be disposed of as bank protection as directed by the Engineer. The remainder of the removed materials shall become the property of the Contractor.

PILING shall be driven to a minimum bearing capacity of 23 tons for the abutments and 29 tons for the piers. The length of penetration of every pile shall be at least 80% of the estimated average pay length of the piles in the pertinent pier or abutment as indicated on the plans unless a lesser penetration is approved by the Director.

GRAVEL, if used as the coarse aggregate, shall be according to Sec. M-3.93 instead of M-3.91 for Class "C" concrete in the superstructure. Gravel meeting the requirements of Sec. M-3.93 also may be used for other concrete in this structure.

GALVANIZING of all members which are specified to be galvanized shall be as called for in Sec. M-7.4 (d).

ASPHALTIC CONCRETE SURFACE COURSE, Item T-35, laid in two courses, shall be provided.

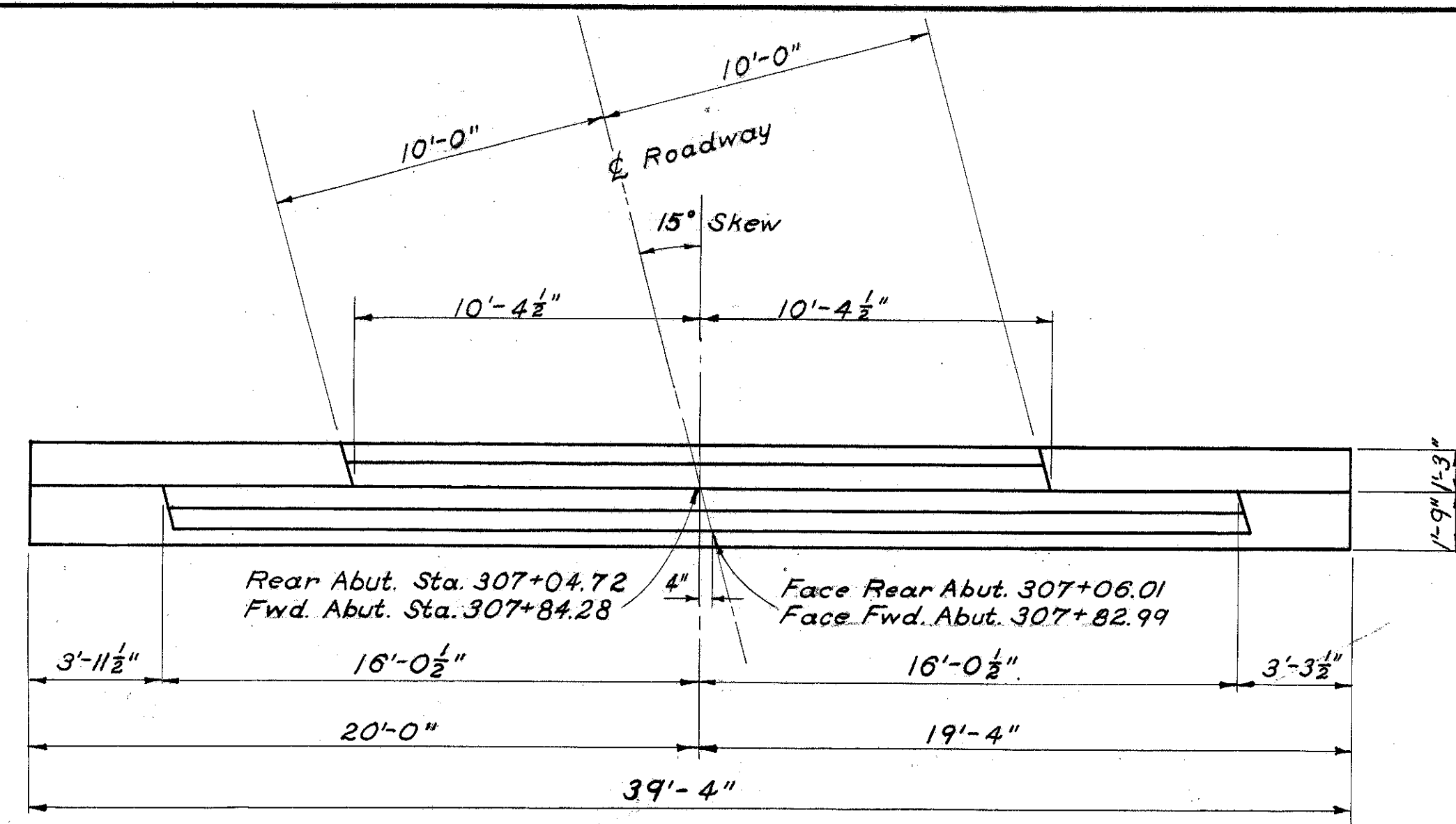
POROUS DRAINS, extending from face of abutment to Elev. 1017.6, shall be provided at all four corners of the bridge. The drains shall be 4 ft. wide and one foot thick.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

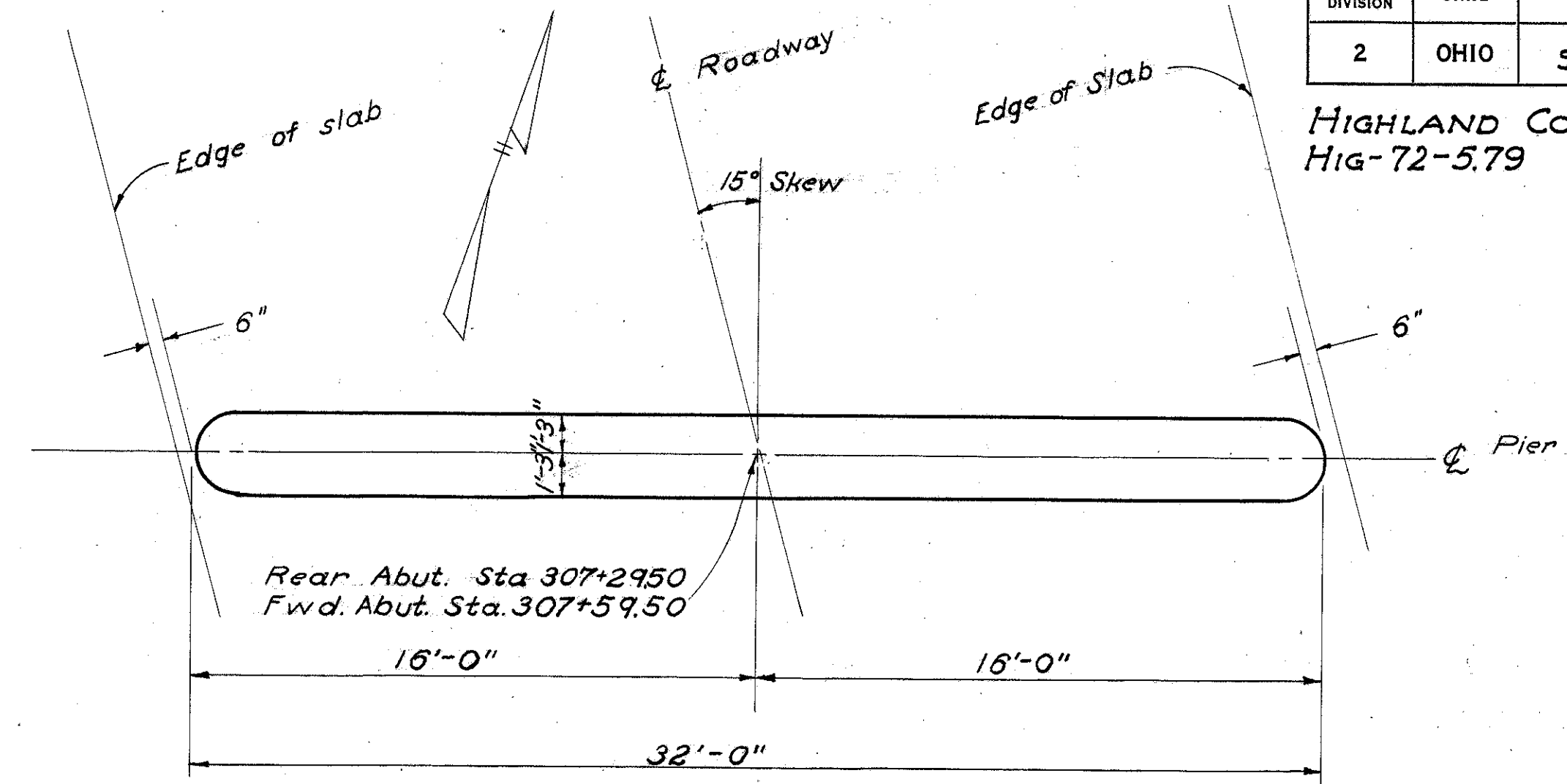
**GENERAL PLAN & ELEVATION,
NOTES & ESTIMATED QUANTITIES**
BRIDGE No. **HIG-72-0582**
over **MIDDLE FORK OF LEES CREEK**
Highland County Sta. 307+04.72
Sta. 307+84.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.Y.	S.Y.		R.H.N.	BFG	2-15-56	

HIGHLAND COUNTY
Hig-72-5.79



ABUTMENT PLAN



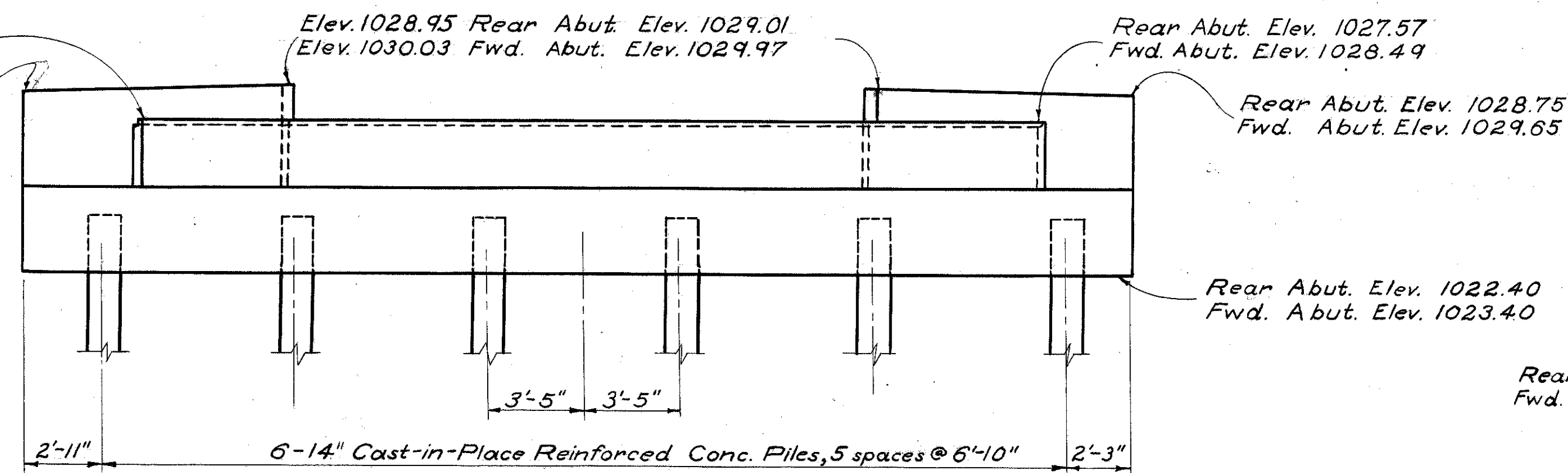
PIER PLAN

Rear Abut. Elev. 1027.47
Fwd. Abut. Elev. 1028.59

Elev. 1028.95 Rear Abut. Elev. 1029.01
Elev. 1030.03 Fwd. Abut. Elev. 1029.97

Rear Abut. Elev. 1027.57
Fwd. Abut. Elev. 1028.49

Rear Abut. Elev. 1028.57
Fwd. Abut. Elev. 1029.77



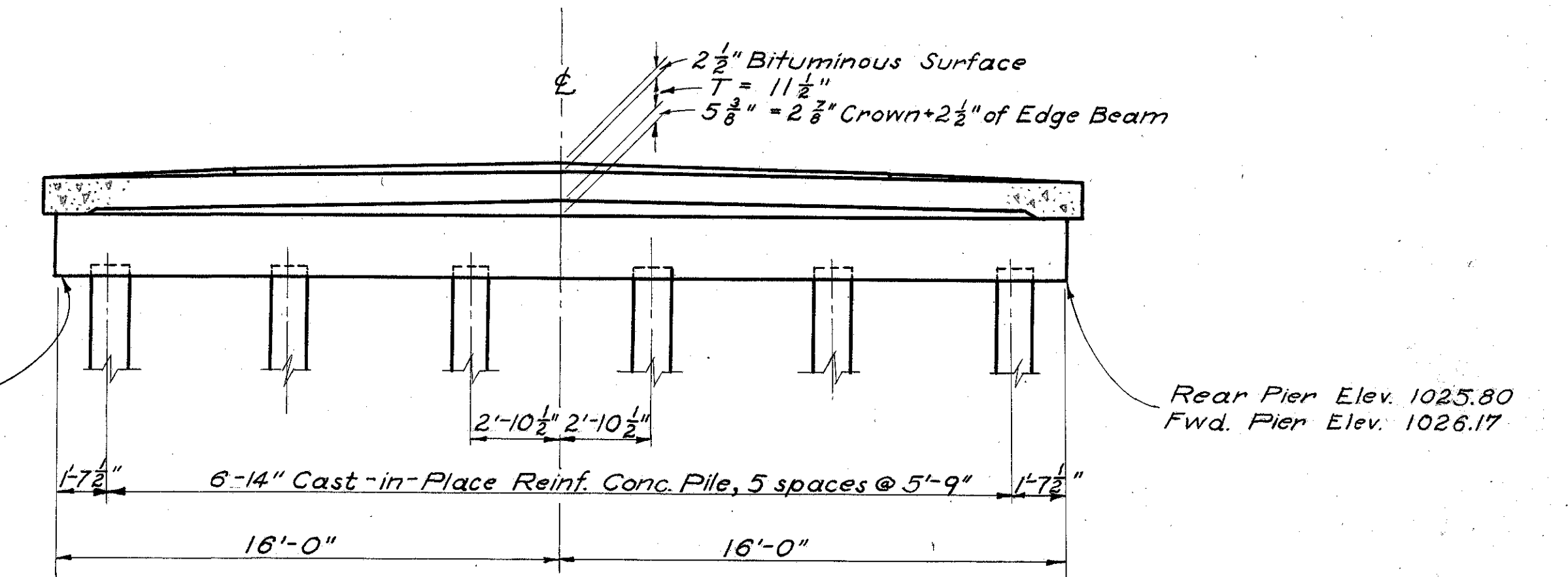
ABUTMENT ELEVATION

Rear Abut. Elev. 1028.75
Fwd. Abut. Elev. 1029.65

Rear Abut. Elev. 1022.40
Fwd. Abut. Elev. 1023.40

Rear Pier Elev. 1025.90
Fwd. Pier Elev. 1026.28

2 1/2" Bituminous Surface
T = 1 1/2"
5 3/8" = 2 3/8" Crown + 2 1/2" of Edge Beam

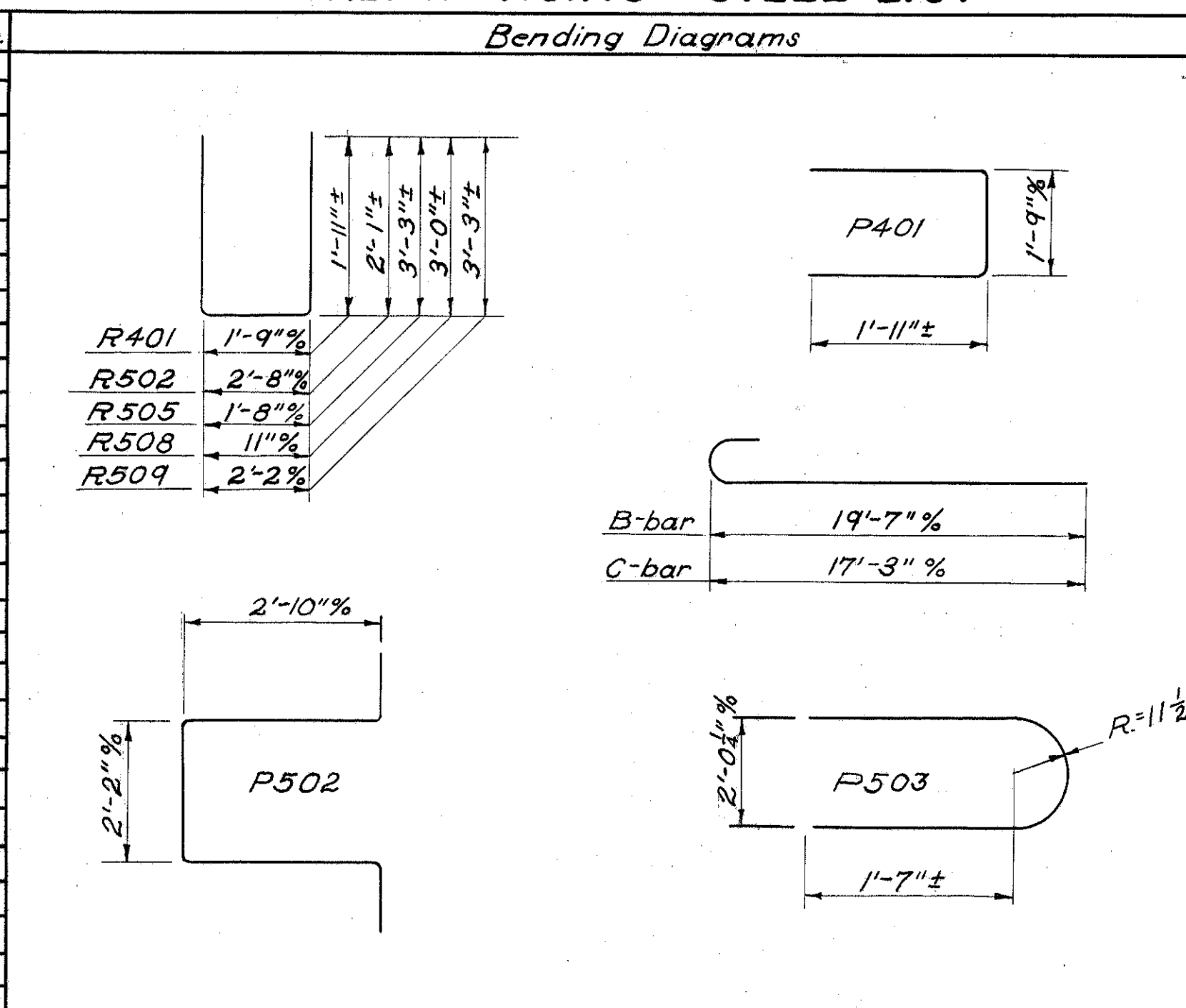


PIER ELEVATION

Rear Pier Elev. 1025.80
Fwd. Pier Elev. 1026.17

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp.
Abutment				
R401	48	5'-5"	174	B
R501	16	20'-3"	338	S
R502	116	6'-7"	797	B
R503	8	16'-8"	139	S
R504	24	5'-4"	134	S
R505	28	7'-11"	231	B
R506	8	8'-10"	74	S
R507	16	5'-1"	85	S
R508	18	6'-8"	111	B
R509	16	8'-5"	140	B
R801	16	20'-9"	886	S
R1001	16	17'-6"	1205	S
Replacement Bar				
R1001	1	7'-2"	31	S
R901	1	6'-10"	23	S
R801	1	6'-6"	17	S
R701	1	6'-2"	13	S
R601	1	5'-11"	9	S
R501	1	5'-7"	6	S
R401	1	5'-3"	4	S



Mark	No.	Length	Weight	Shp.
Pier				
P401	48	5'-5"	174	B
P501	4	29'-6"	123	S
P502	48	9'-0"	451	B
P503	8	6'-4"	53	B
P701	72	4'-0"	589	S
P901	8	29'-6"	802	S
P1001	8	32'-7"	1122	S
Superstructure				
A804	75	28'-1"	5623	S
B804	24	20'-8"	1324	B
C804	24	18'-4"	1175	B
D804	12	19'-6"	625	S
E804	12	15'-4"	491	S
F804	64	20'-5"	3489	S
G804	32	11'-2"	954	S
H804	32	9'-3"	790	S
J801	32	16'-9"	805	S
K801	46	14'-3"	343	S
M801	87	32'-7"	3279	S
N801	54	32'-7"	2643	S

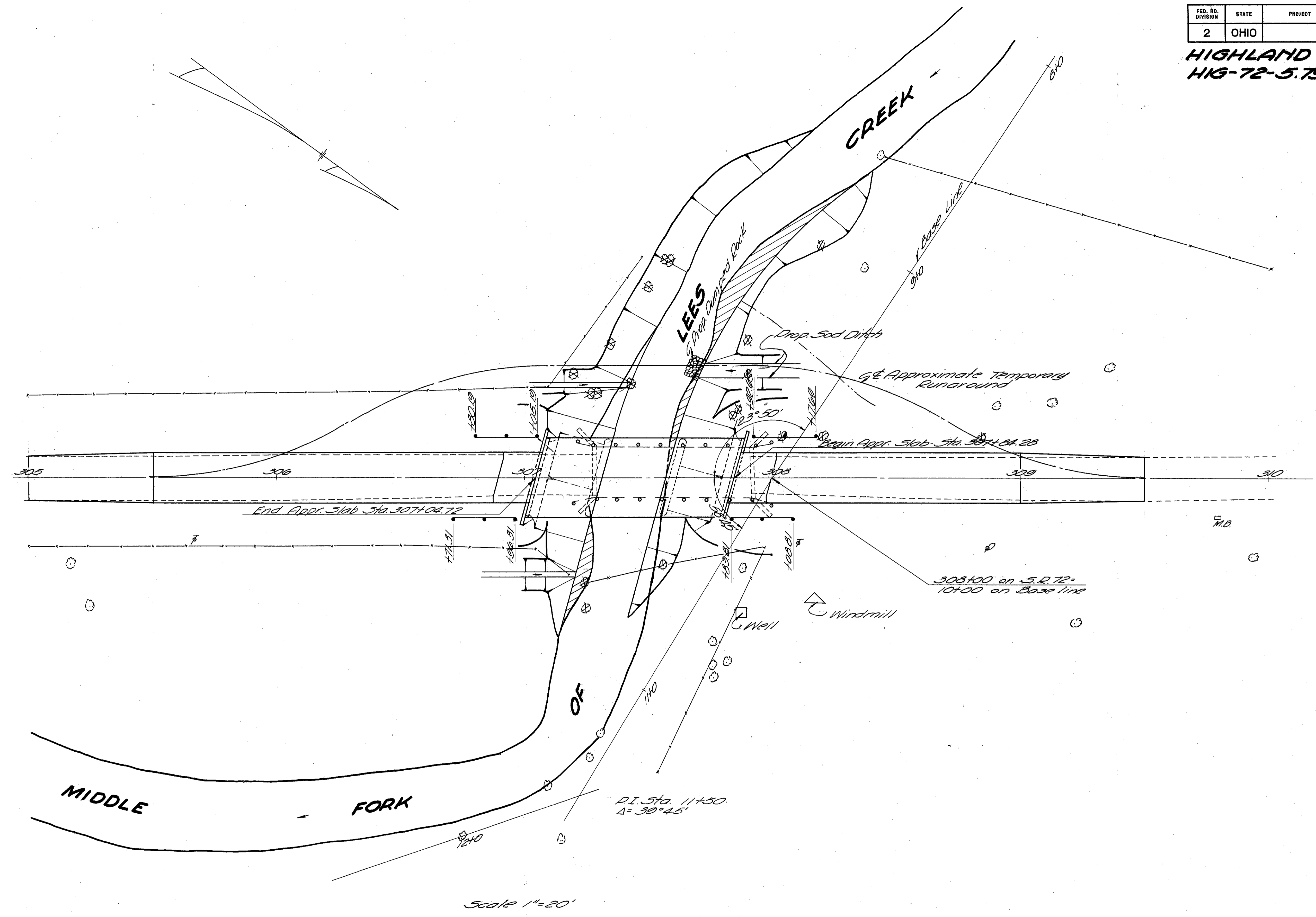
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ABUTMENT & PIER DETAILS
STEEL LIST
BRIDGE NO. HIG-72-0582 over
MIDDLE FORK of LEES CREEK
HIGHLAND COUNTY Sta. 307+04.72
Sta. 307+84.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.Y.	S.Y.	\$	RHN	BFG	2-15-56	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		16 19

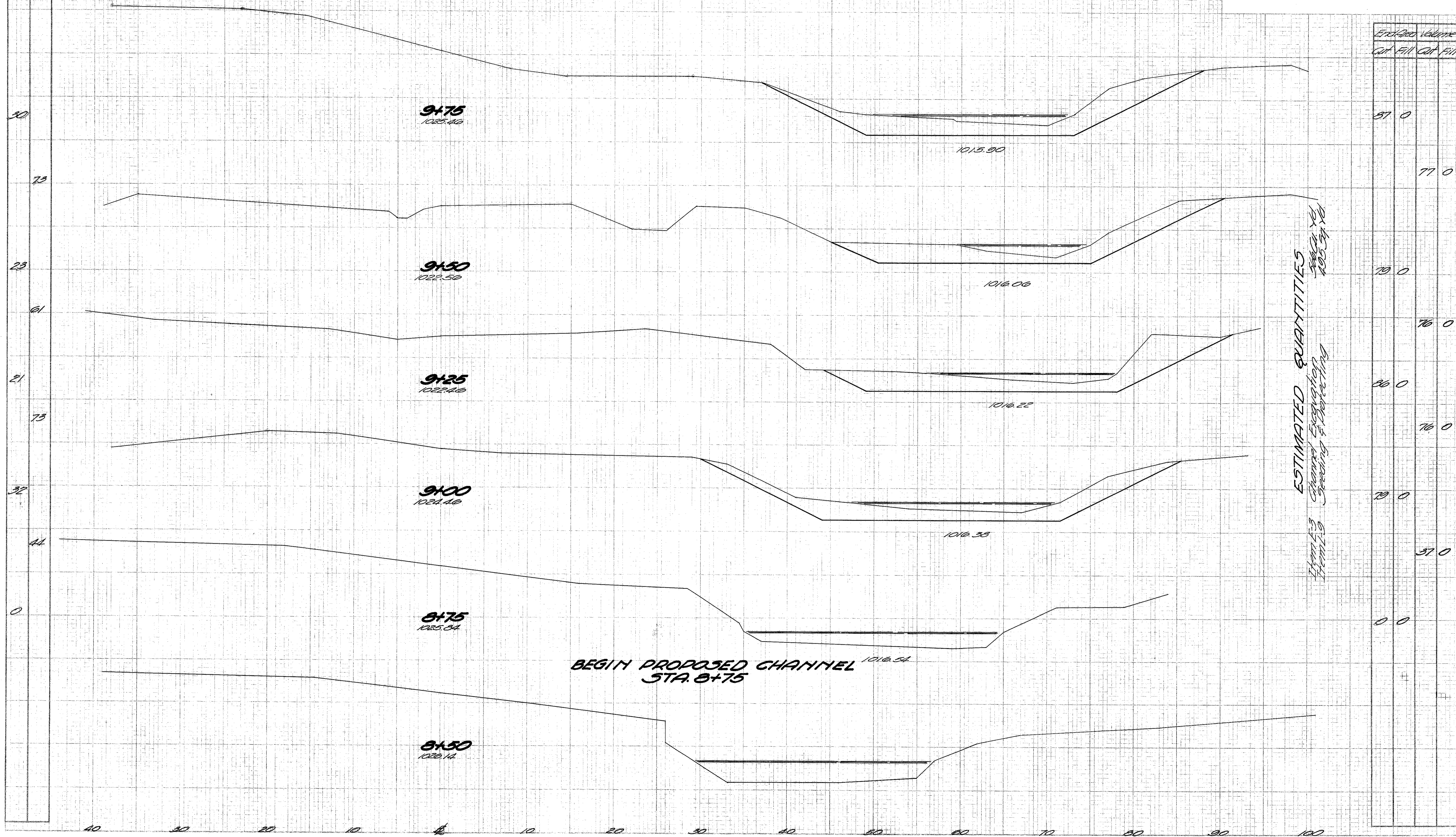
HIGHLAND COUNTY
 HIG-72-5.79



CHANNEL PLAN

Reading
Elev. Sta.
Width - 100

HIGHLAND COUNTY
HIG-72-5.70



BEGIN PROPOSED CHANNEL
STA. 8+75

ESTIMATED QUANTITIES
From E.S. Channel Elevation
Standing & Ditching
2884.46
495.54
16'

CHANNEL SECTIONS - STA. 8+50 TO STA. 9+75

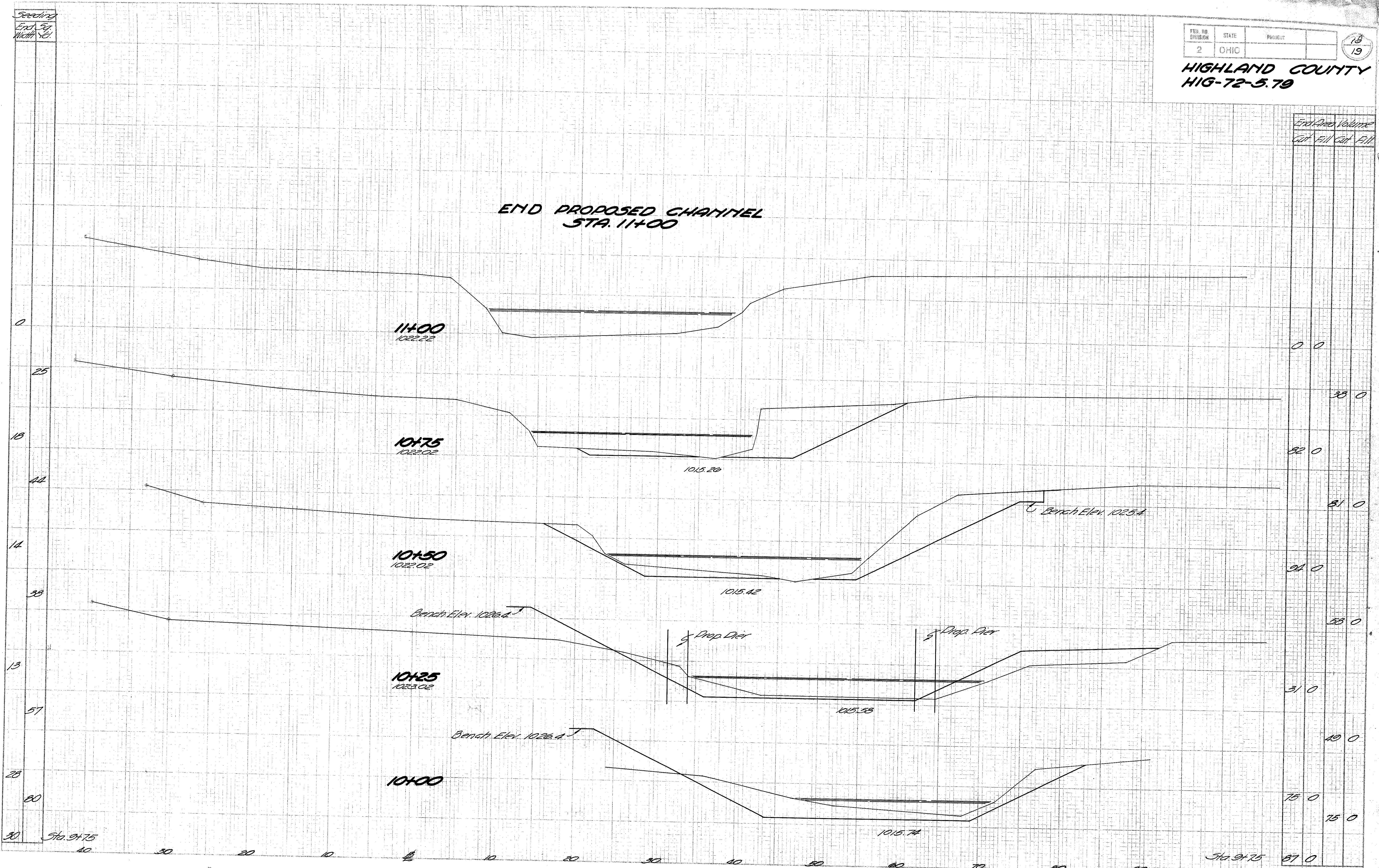
Sealing
End Sta.
Width

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

18
19

HIGHLAND COUNTY
HIG-72-5.79

END PROPOSED CHANNEL
STA. 11+00



End Area Volume
Cut Fill Cut Fill

Station	Cut	Fill	Cut	Fill
11+00	0	0		
10+75			33	0
10+50			32	0
10+25			31	0
10+00			24	0
Sta. 9+75			28	0
Sta. 9+75			31	0
Sta. 9+75			40	0
Sta. 9+75			75	0
Sta. 9+75			75	0
Sta. 9+75			87	0

UTILITIES:

Power Line Owned By The Dayton Power & Light Company
101 East Street, Washington C.H., Ohio
Telephone Line Owned By The Ohio Consolidated Telephone Company
Parsanouth, Ohio

V.M.S. 4003
FAIRFIELD TOWNSHIP

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	



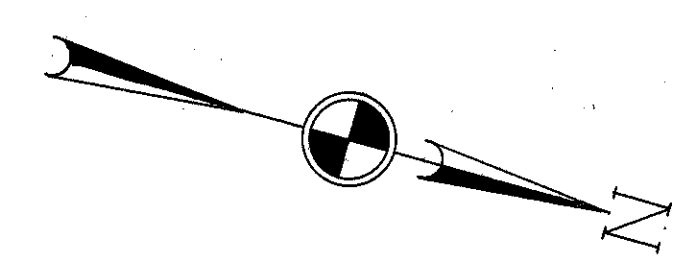
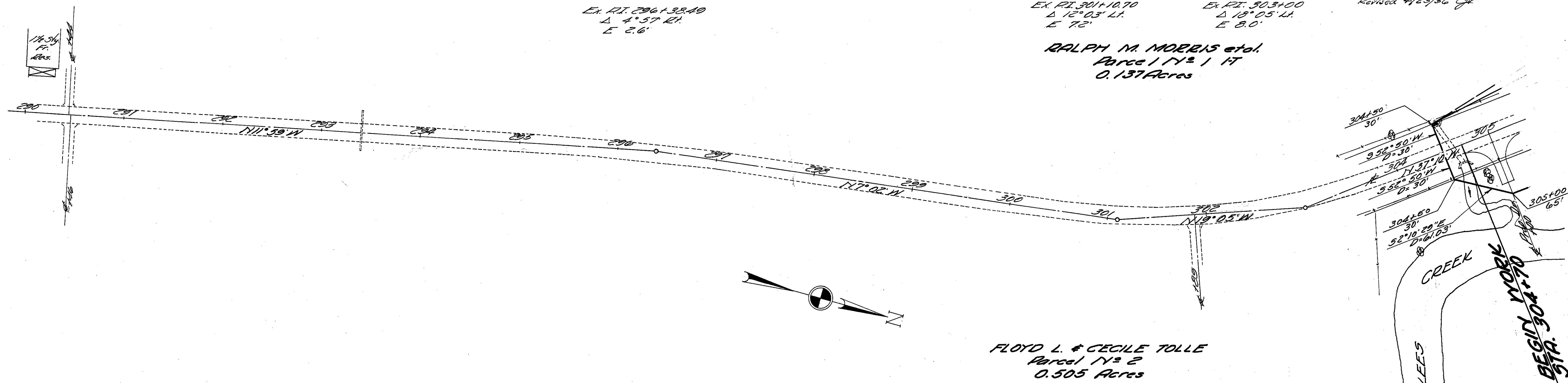
R/W PLAN
HIG. 72-579
HIGHLAND COUNTY
Revised 4/23/56 JH

Ex. P.I. 296+38.49
Δ 4° 57' RT.
E 2.6'

Ex. P.I. 301+10.70
Δ 12° 03' LT.
E 7.2'

Ex. P.I. 303+00
Δ 18° 05' LT.
E 8.0'

RALPH M. MORRIS et al.
Parcel 17² 17
0.137 Acres



FLOYD L. & CECILE TOLLE
Parcel 17² 2
0.505 Acres

V.M.S. 4003
FAIRFIELD TOWNSHIP

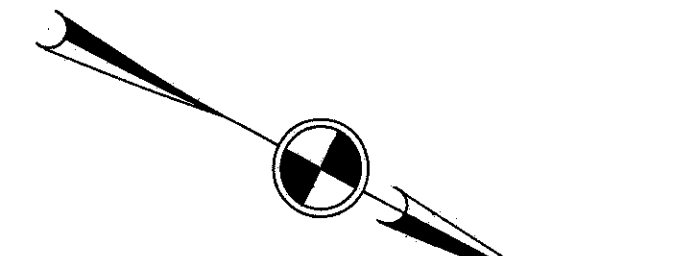
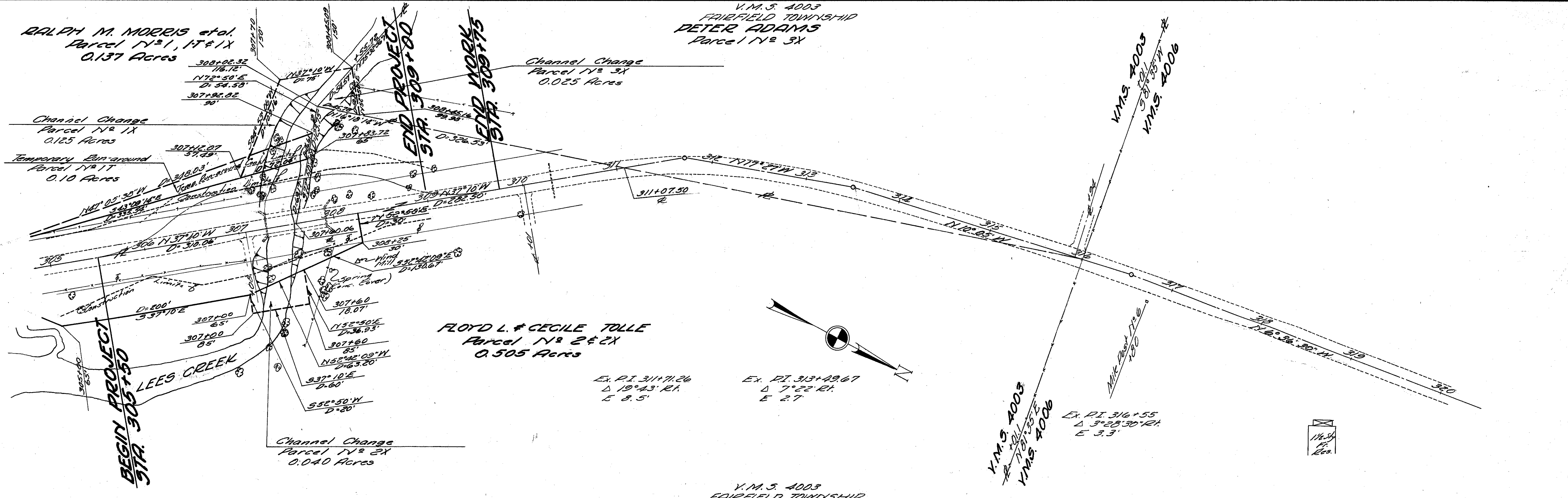
V.M.S. 4003
FAIRFIELD TOWNSHIP
PETER ADAMS
Parcel 17² 3X

RALPH M. MORRIS et al.
Parcel 17² 1, 17² 1X
0.137 Acres

Channel Change
Parcel 17² 3X
0.025 Acres

Channel Change
Parcel 17² 1X
0.125 Acres

Temporary Easement
Parcel 17² 17
0.10 Acres



FLOYD L. & CECILE TOLLE
Parcel 17² 2 & 2X
0.505 Acres

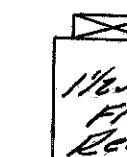
Ex. P.I. 311+71.06
Δ 19° 43' RT.
E 8.5'

Ex. P.I. 313+29.67
Δ 7° 22' RT.
E 2.7'




V.M.S. 4003
V.M.S. 4006

Ex. P.I. 316+55
Δ 3° 28' 30" RT.
E 3.3'

V.M.S. 4003
FAIRFIELD TOWNSHIP



LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 15 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
 SANDY SILT.	A-4(5)	A-4a	11	8	20	35	26	23	7	14	10
 SILT AND CLAY.	A-6(8)	A-6a	12	6	16	36	30	32	14	18	5
 BERM MATERIAL.											

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT.

NOTE A: THIS A-4a SOIL WILL BE RUBBERY AND UNSTABLE AT WATER CONTENTS WHICH EXCEED THE OPTIMUM.

AUGER BORING PLOTTED TO VERTICAL SCALE ONLY.

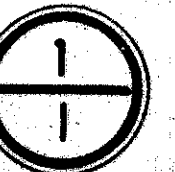
AUGER BORING-PLAN VIEW.

-SAMPLES TESTED-
LAB. NOS. SO: 24099 - 24113 INCL.

SOIL PROFILE
HIGHLAND COUNTY

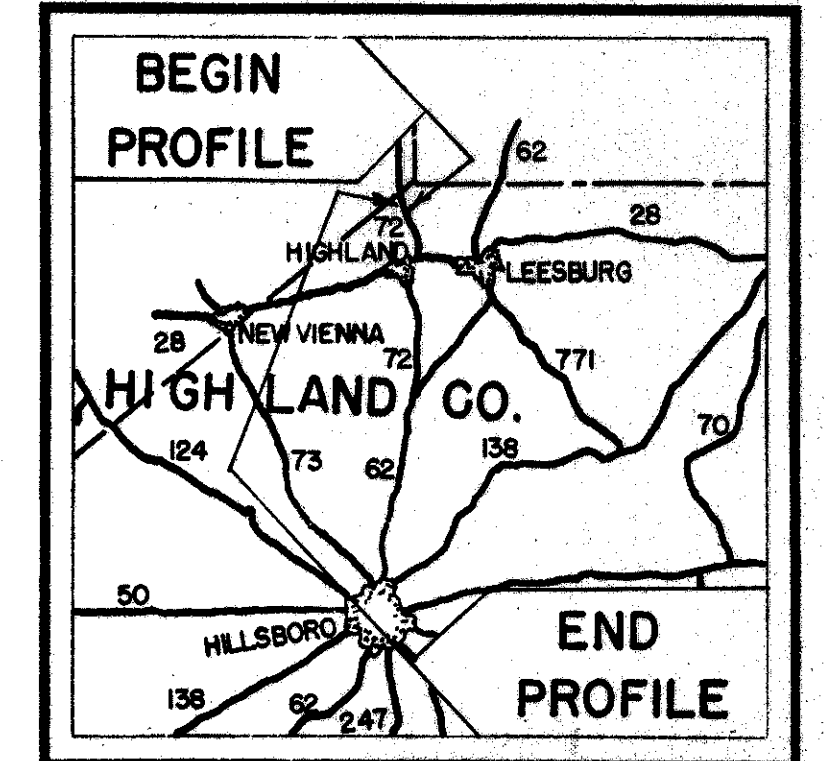
HIG-72-5.79

STATE HIGHWAY TESTING AND
RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO



NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

FED. NO. - S-78 (6)



LOCATION MAP

