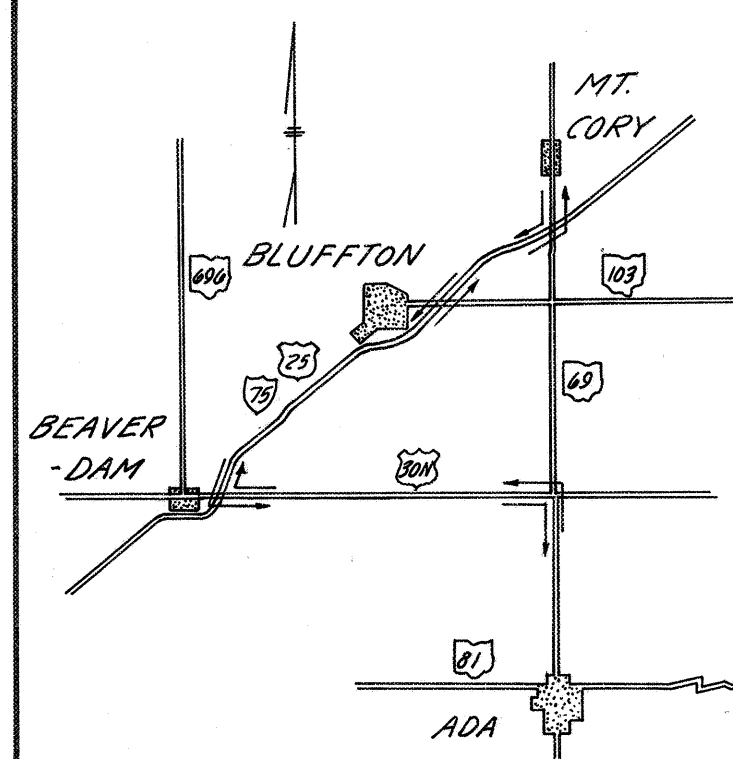


S-712(9)

MICROFILMED
JUL 15 1986

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
HAN-69-(1.14)(1.97)(2.31)(3.28)(4.23)(6.17)
HANCOCK COUNTY
ORANGE & UNION TOWNSHIPS



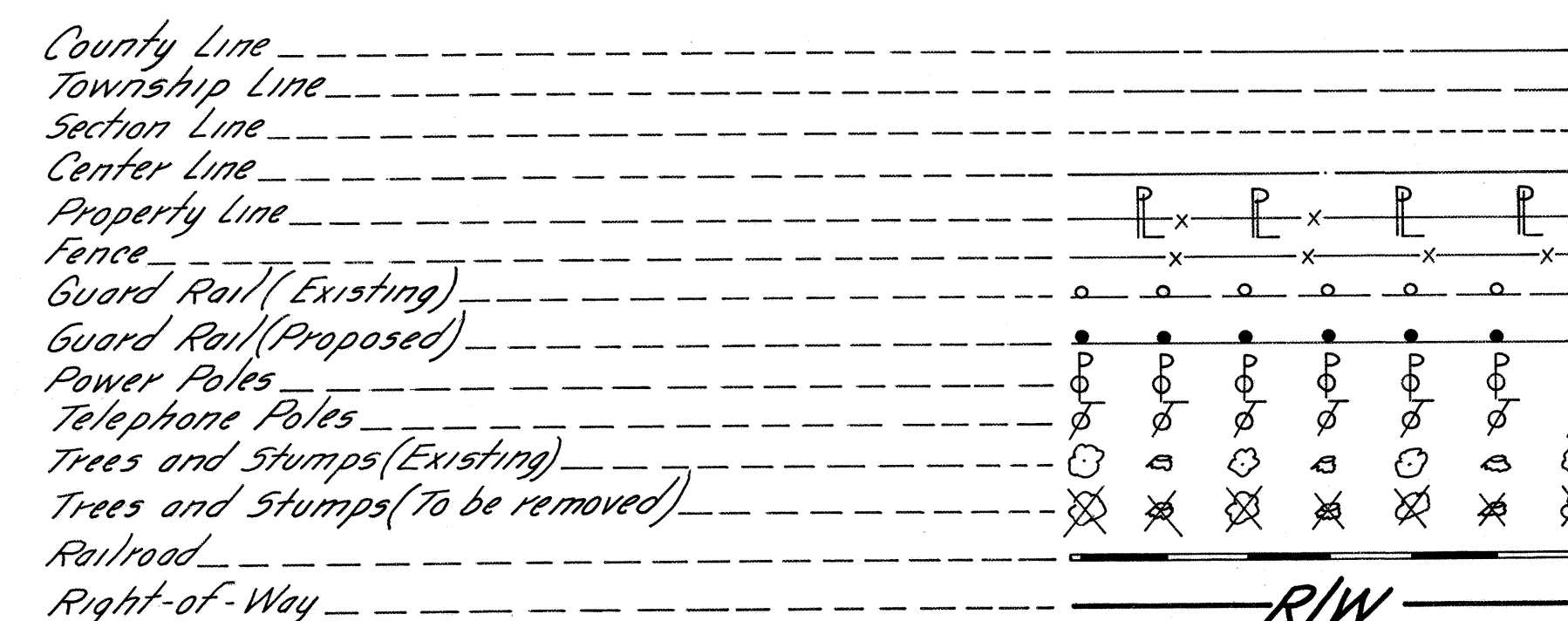
DETOUR MAP
Scale in Miles

MICROFILMED
OCT 11 1978
REPRODUCTION

DESIGN DESIGNATION

CURRENT A. D. T. (1966 Est.) (750)
DESIGN YEAR A. D. T. (1986) (940)
D. H. V. (95)
D. (60%)
T. (10%)
V. 50 M.P.H.

CONVENTIONAL SIGNS



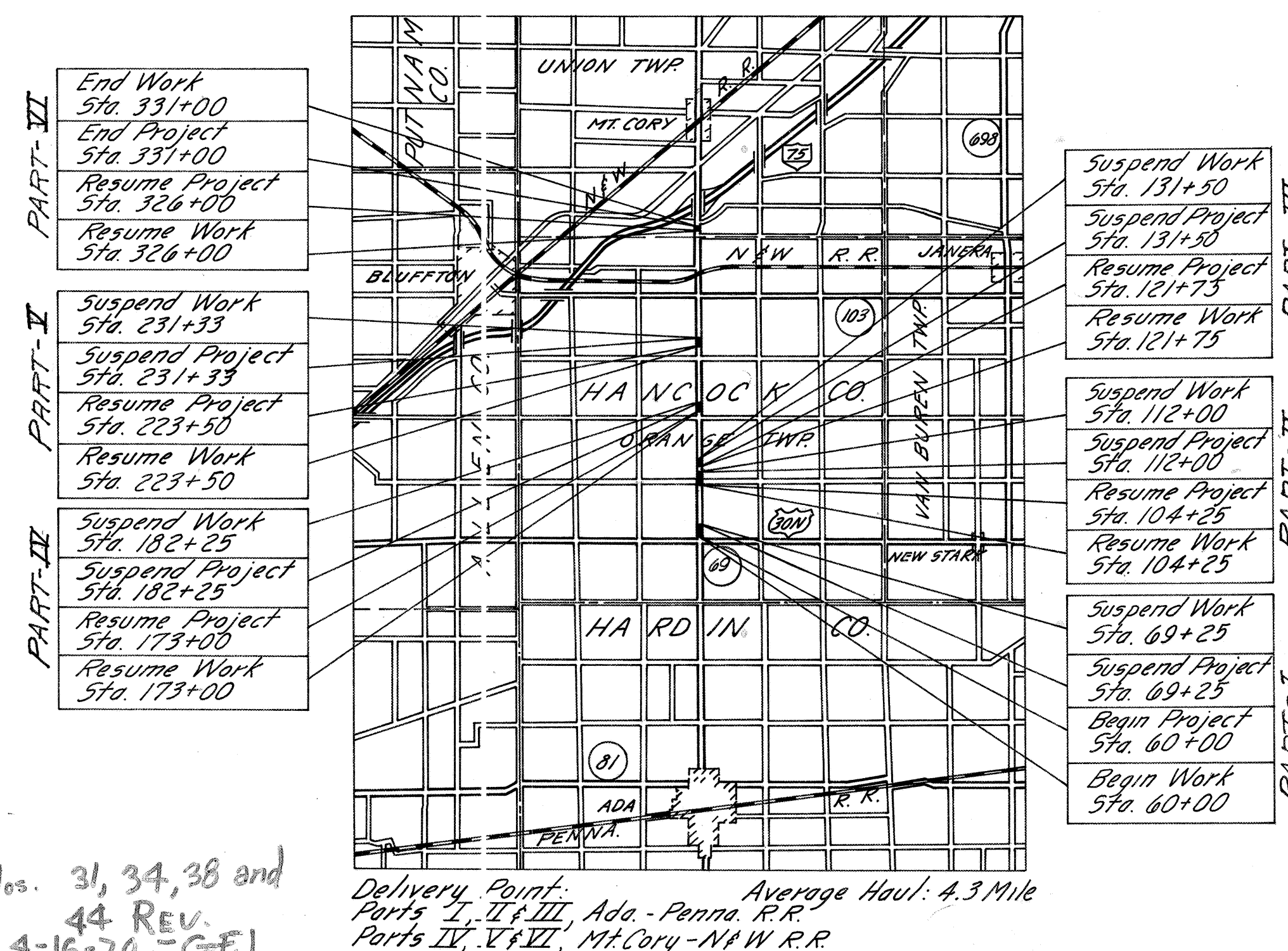
INDEX OF SHEETS

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	21-22
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	24-25
	26
	27
	28-29

LINE DATA

Begin Project, Sta. 60+00; Suspend Project, Sta. 69+25	PART-I	925	Lin. Ft.
Resume Project, Sta. 104+25; Suspend Project, Sta. 112+00	PART-II	775	Lin. Ft.
Resume Project, Sta. 121+75; Suspend Project, Sta. 131+50	PART-III	975	Lin. Ft.
Resume Project, Sta. 173+00; Suspend Project, Sta. 182+25	PART-IV	925	Lin. Ft.
Resume Project, Sta. 223+50; Suspend Project, Sta. 231+33	PART-V	783	Lin. Ft.
Resume Project, Sta. 326+00; End Project, Sta. 331+00	PART-VI	500	Lin. Ft.
Net length of Project		4,883	Lin. Ft. = 0.924 Mi.

Net length of Work equals Net length of Project.

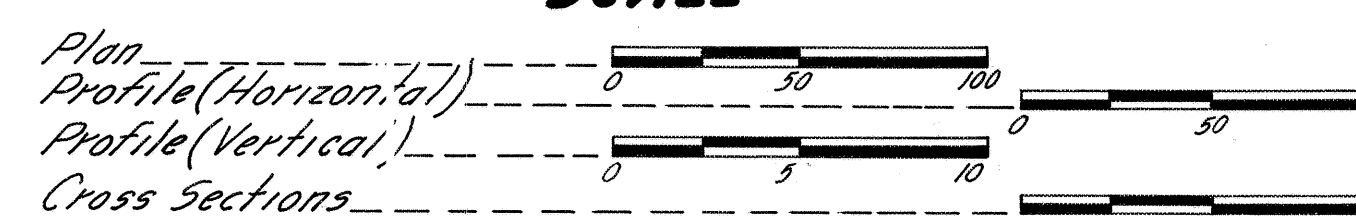


SCALE IN MILES

LOCATION MAP

Portion to be improved	
State Highways	
Other Roads	
Detour Route	

SCALE



STANDARD DRAWINGS					
A5-1-54	8-10-65	MC-1	10-1-67	P-1-54	11-8-65
BP-5	6-1-65	MC-3	5-1-66	CS-1-65	6-1-65
BP-6	6-1-65	MC-4	6-1-65	SB-1-64 (Sh. #2)	11-8-65
CB-2-2-A#8	6-1-65	SP-53	6-30-61		
GR-1	1-1-67	FACI-1	9-15-67	BP-3	1-10-67
GR-2A	1-1-67	FACI-2	6-1-65		
L-1	6-1-65	A-1-54	11-8-65		

SUPPLEMENTAL SPECIFICATIONS	
808	1-13-67
825	1-1-67
1001	3-21-66

Quantities Checked By	Date
A.E.S.	5-8-67

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
APPROVED:

DIVISION ENGINEER DATE

1967 SPECIFICATIONS

The Standard Specifications of the State of Ohio Department of Highways, including changes and supplemental specification 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 require the closing to traffic of the highway, except as noted on sheet 3, and that detours will be provided as indicated on the plans.

Approved Norman R. Conn.
Date 5-10-67 Division Deputy Director

Approved C. H. Alfwater
Date 12-5-67 Engineer of Bridges

Approved R. E. Balle
Date 12-6-67 Engineer of Location and Design

Approved P. E. Shultz
Date 12-7-67 Deputy Director of Design and Construction

Approved THBorne
Date 12-21-67 Deputy Director of Right-of-Way

Approved Thomas M. Major
Date 12-21-67 Deputy Director of Planning and Programming

Approved R. W. Wilson
Date 12-21-67 First Assistant Director

Approved P. E. Mesleard
Date 12-21-67 Director of Highways

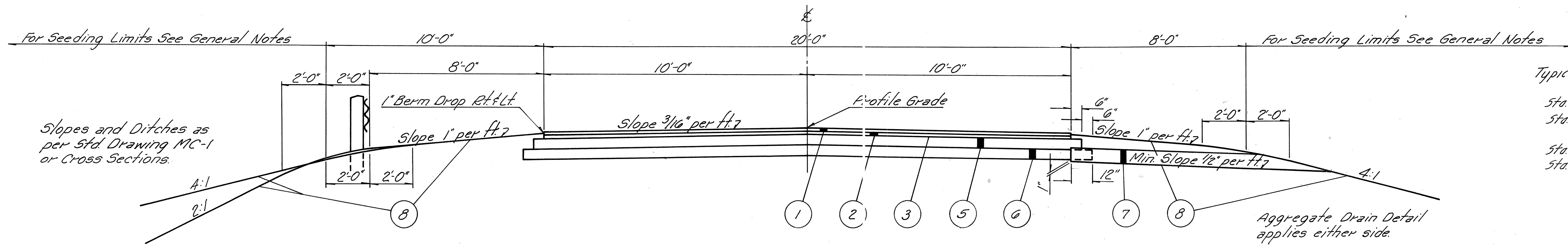
No RR
Hwy 7
12-5-67

File No.	Hancock County HAM-69 - (1.14)(1.97)(2.31)(3.28)(4.23)(6.17)
Date of Letting	19
Contract No.	

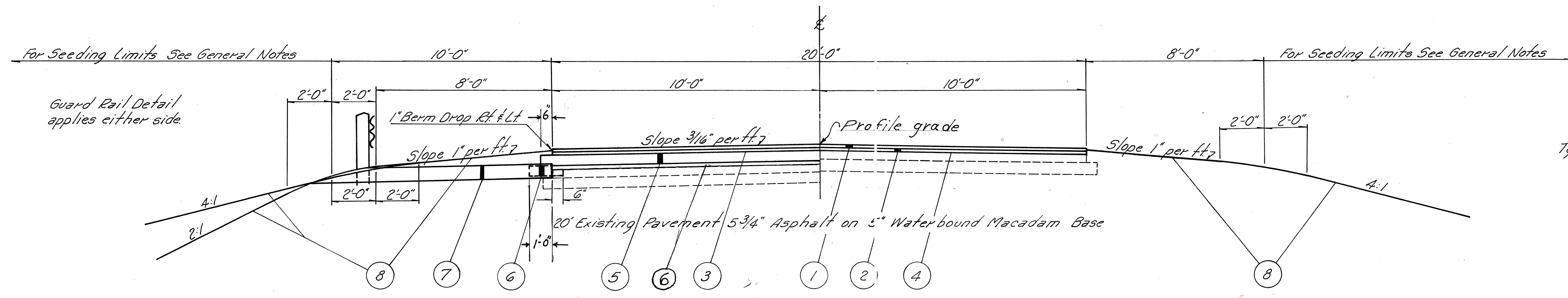
TYPICAL SECTIONS TYPE 404

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

HANCOCK COUNTY
HAN-69-(1.14)(1.97)(2.31)(3.28)(4.23)(6.17)

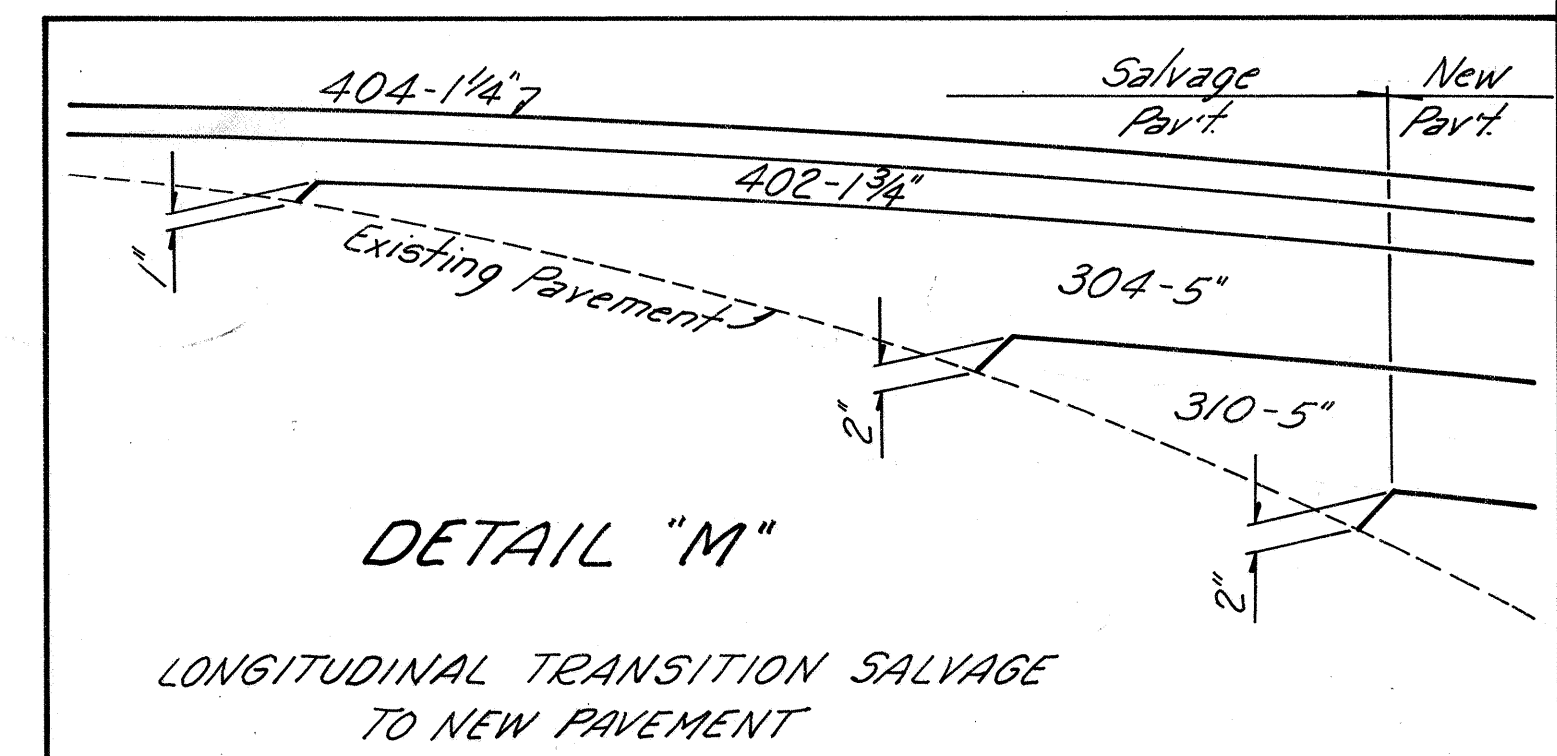


Typical Section at left applies:
Part I
Sta. 62+00 to Sta. 63+38.24 = 138.24 Lin. Ft.
Sta. 64+41.76 to Sta. 67+20 = 278.24 Lin. Ft.
Part II
Sta. 105+60 to Sta. 107+47.69 = 187.69 Lin. Ft.
Sta. 108+20.31 to Sta. 109+75 = 154.69 Lin. Ft.
Total = 758.86 Lin. Ft.



Typical Section at left applies:
Part I
Sta. 60+00 to Sta. 62+00 = 200 Lin. Ft.
Sta. 67+20 to Sta. 69+25 = 205 Lin. Ft.
Part II
Sta. 104+25 to Sta. 105+60 = 135 Lin. Ft.
Sta. 109+75 to Sta. 112+00 = 225 Lin. Ft.
Part III
Sta. 121+75 to Sta. 124+84.75 = 309.75 Lin. Ft.
Sta. 125+61.25 to Sta. 131+50 = 588.75 Lin. Ft.
Part IV
Sta. 173+00 to Sta. 177+04.99 = 404.99 Lin. Ft.
Sta. 178+41.01 to Sta. 182+25 = 383.99 Lin. Ft.
Part V
Sta. 223+50 to Sta. 231+33 = 783 Lin. Ft.
Part VI
Sta. 326+00 to Sta. 328+15.25 = 215.25 Lin. Ft.
Sta. 328+89.75 to Sta. 331+00 = 210.25 Lin. Ft.
Total = 3660.98 Lin. Ft.

1. Item 404 1/4" Asphalt Concrete (85-100)
2. Item 402 1 3/4" Asphalt Concrete (85-100)
3. Item 408 Bituminous Prime Coat using 702.09 RT-2 or RT-3 applied at the rate of 0.40 Gal. per Sq. Yd.
4. Item 407 Tack Coat 702.04 MS-2 or .25-1 or 702.02 RC-70 or RC-250 applied at the rate of 0.10 Gal. per Sq. Yd.
5. Item 304 5" Aggregate Base
6. Item 310 5" Subbase
7. Item 605 Aggregate Drains See General Notes.
8. Item 659 Seeding and Mulching



GENERAL NOTES

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS ~ The rounded corners shown on Standard Drawing MC-1, apply to all cross sections, even though otherwise shown on these plans.

FIELD OFFICE ~ The contractor shall, in addition to the requirements of 105.152, provide a suitable field office having a minimum of 300 sq. ft. of floor space. The contractor shall have a telephone installed and maintained in this office during the construction of this project. The contractor shall also provide and maintain sanitary provisions as per 107.06. All the above is included in the lump sum price bid for the field office.

ELEVATION DATUM ~ All elevations refer to U.S.G.S. datum.

CONNECTIONS TO EXISTING PIPE ~ At places where the plans provide for proposed pipe to be connected to existing pipe, 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 603 conduit item.

ITEM 604 ~ All Standard 2-2A Catch Basins designated in these plans shall be built with a 12" sump.

EROSION CONTROL ~ Items 601 and 660 are provided in these plans for erosion control. The Engineer will check and non-perform or adjust locations and quantities for these items where indicated by field conditions during construction.

REMOVAL OF TREES AND STUMPS ~ All trees and stumps specifically marked for removal within the construction limits of this project shall be removed under the lump sum price bid for the Item 201 Clearing and Grubbing, except those trees and stumps designated by the Engineer to be preserved.

The following is an approximate estimate of the number of trees and stumps to be removed.

Sizes	No. of Trees						No. of Stumps					
	Part I	Part II	Part III	Part IV	Part V	Part VI	Part I	Part II	Part III	Part IV	Part V	Part VI
18"												
30"		2										
48"												

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 limits. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item 201 Clearing and Grubbing.

SEEDING ~ Quantities for seeding are calculated for the soil areas between the work limits as shown on the cross sections.

SEEDING FORMULA ~ The following seed mixture shall, in lieu of the mixtures listed in 659.09 be used throughout the limits of this project.

60% Kentucky Blue Grass
25% Chewings Fescue
15% Red Top

Any stone or other debris 2" or greater in dimension shall be removed from the exposed surface of the seed bed.

DRIVEWAYS ~ All driveways shown on these plans shall be Type 1 Standard Drawing BP-6, modified by deleting the 12" offset at the edge of pavement. Field drives shall be 6", Item 304.

DETOUR LIMITATION ~ Two-way traffic shall be maintained at all times, except that for a period not to exceed 180 consecutive calendar days, through traffic may be detoured as shown on sheet No. 1. An Estimated Quantity of ten (10) C.Y. of Item 410-Traffic Compacted Surface has been carried to the General Summary to be used for maintaining traffic, as directed by the Engineer.

CONSTRUCTION LAYOUT STAKES ~ See note in the proposal describing the work included in this lump sum.

ITEM 605 AGGREGATE DRAINS ~ Aggregate drains shall be placed at fifty (50) foot intervals on each side of normal crowned sections, or as directed by the Engineer.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS ~ The contractor shall furnish, erect, maintain and subsequently remove Federal Aid Construction Identification Signs at each of the following approximate locations:

- Sta. 60+00 (Right)
- Sta. 331+00 (Left)

Sign Details shall be as specified on FACI Code N-54(1) 96(2). The signs shall be erected in accordance with Standard Drawing FACI-2. Additional requirements shall be in accordance with notes in the proposal.

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.

GUARD RAIL MODIFIED AS PER PLAN: (See Detail on Sheet 3A)

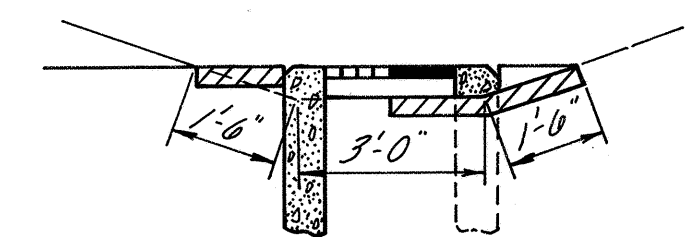
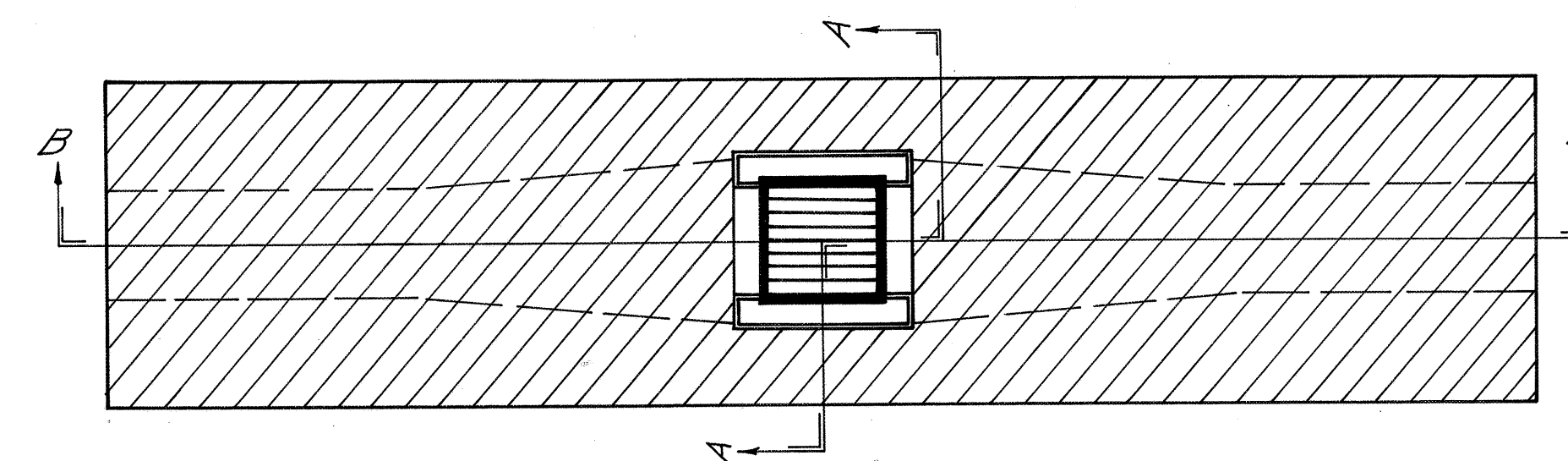
Post spacing for all Type 4 guard rail shall be at 6'-3" intervals with Spacer blocks attached between the posts and rail element.
Type 4 guard rail shall be constructed with the new guard rail approach end assemblies on both ends, except when one end is adjacent to or continues across a bridge.
Type 4 guard rail with post spacing at 6'-3", spacer blocks, and new approach end assemblies will be paid for as 606 Guard Rail, Type 4 Modified as per plan, complete in place.

ADJUSTING GUARD RAIL LOCATIONS:

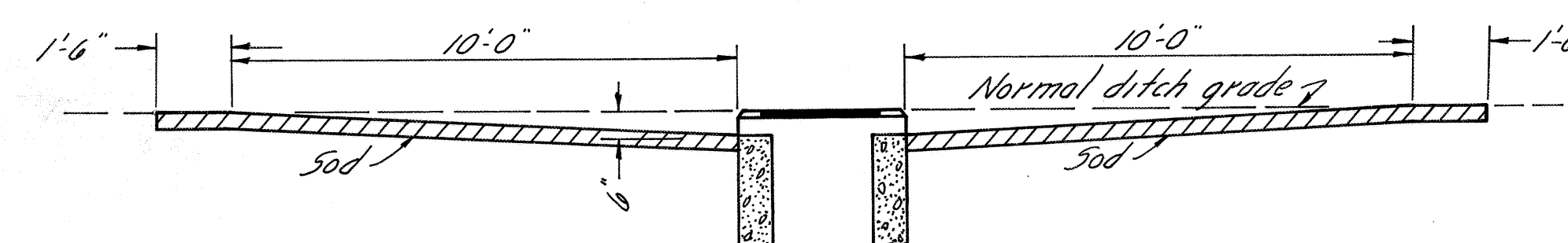
Prior to staking the guard rail, the Engineer shall make a field inspection and, if necessary, adjust the stations of the end posts to accommodate field conditions and to provide better protection for traffic.

DETAIL OF SODDING AT CATCH BASINS

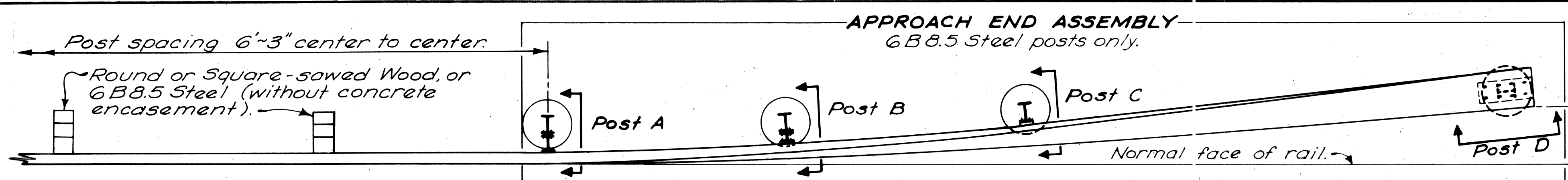
AREA 16 SQ. YDS.



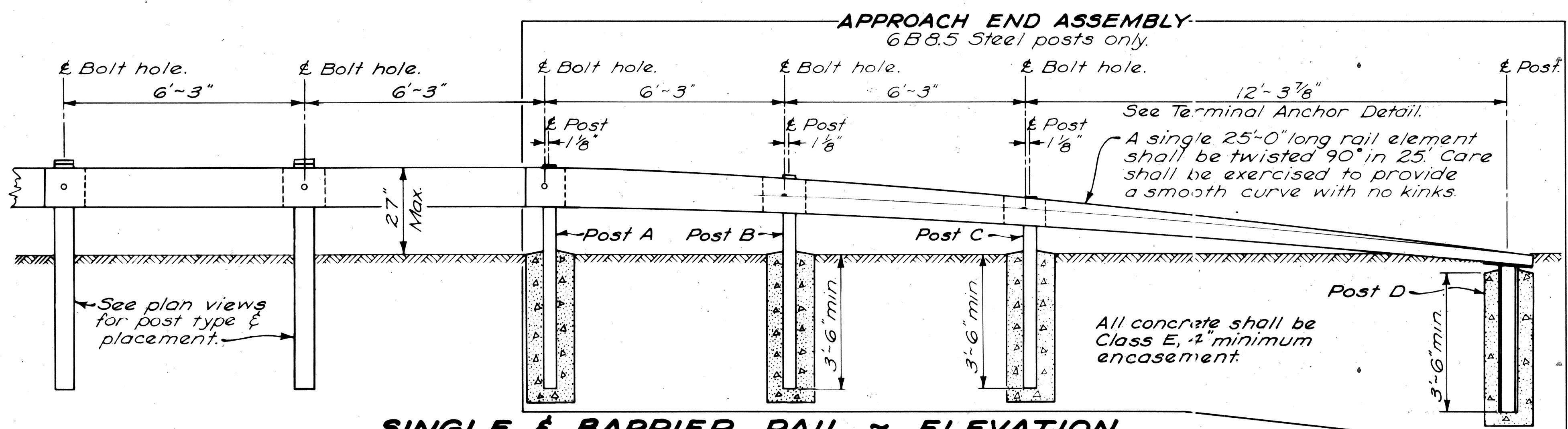
SECTION A-A



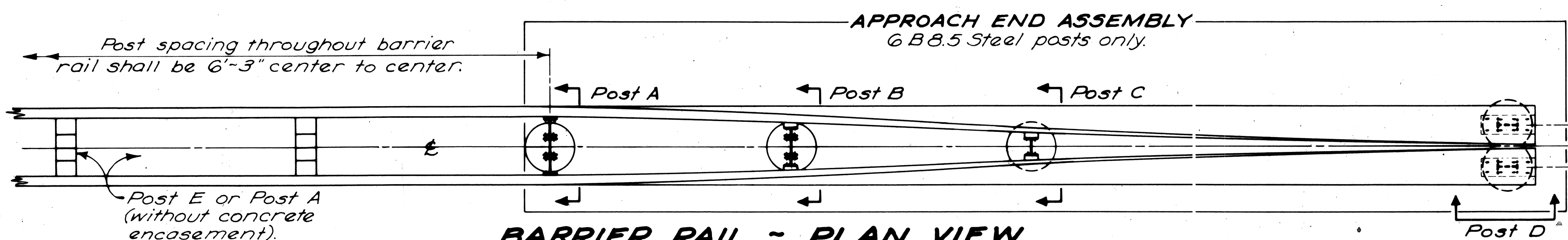
SECTION B-B



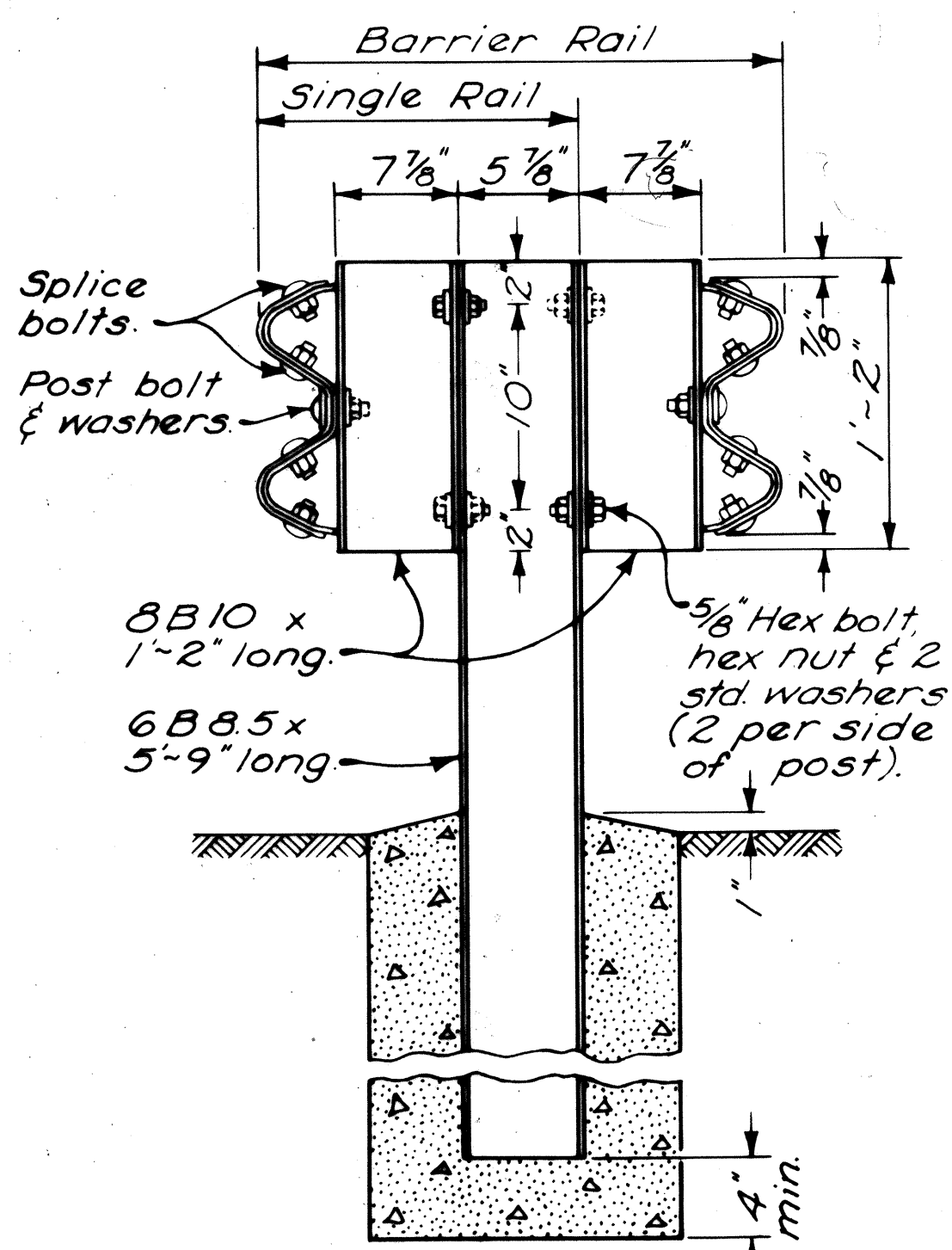
SINGLE RAIL - PLAN VIEW



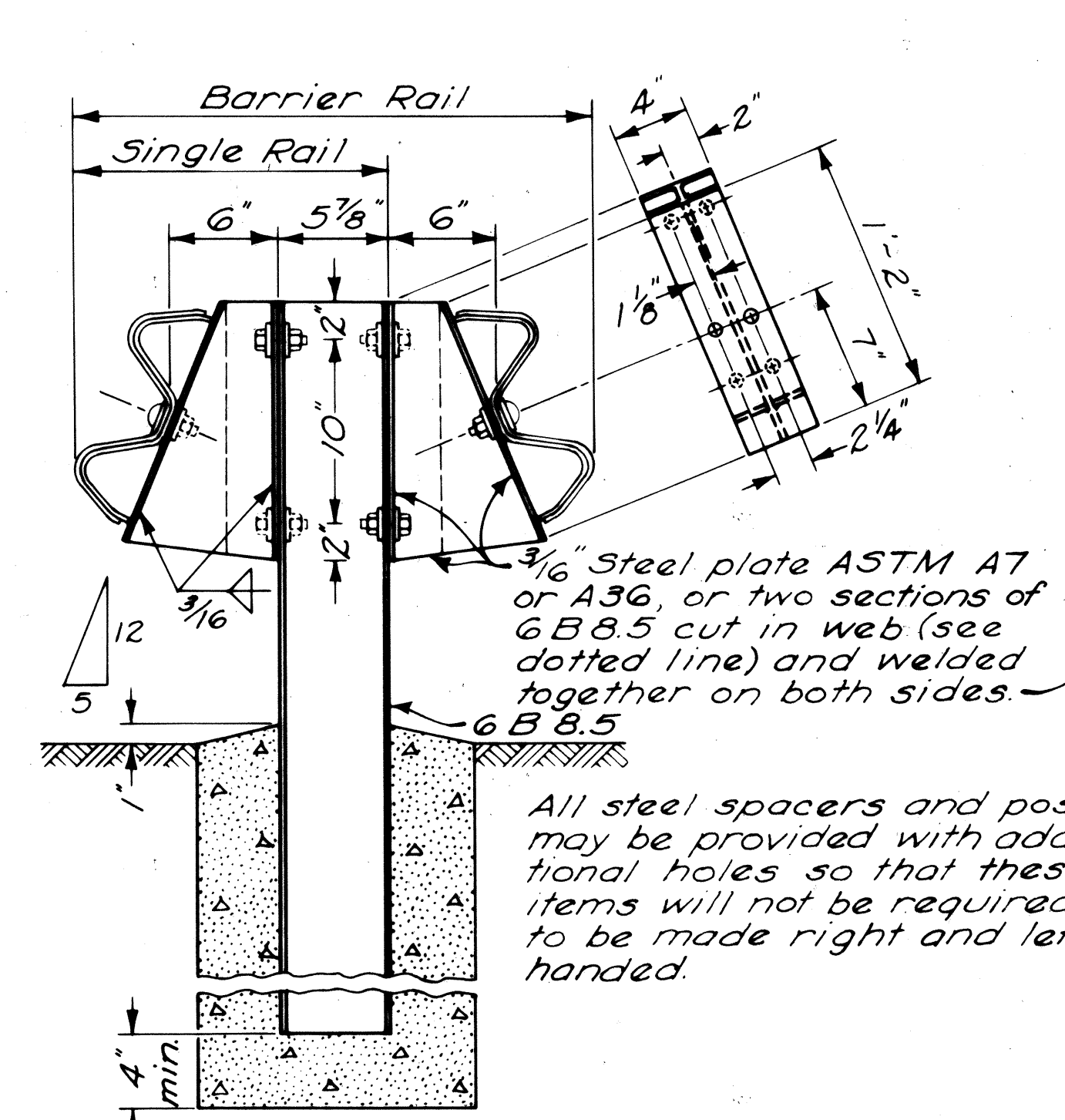
SINGLE & BARRIER RAIL - ELEVATION



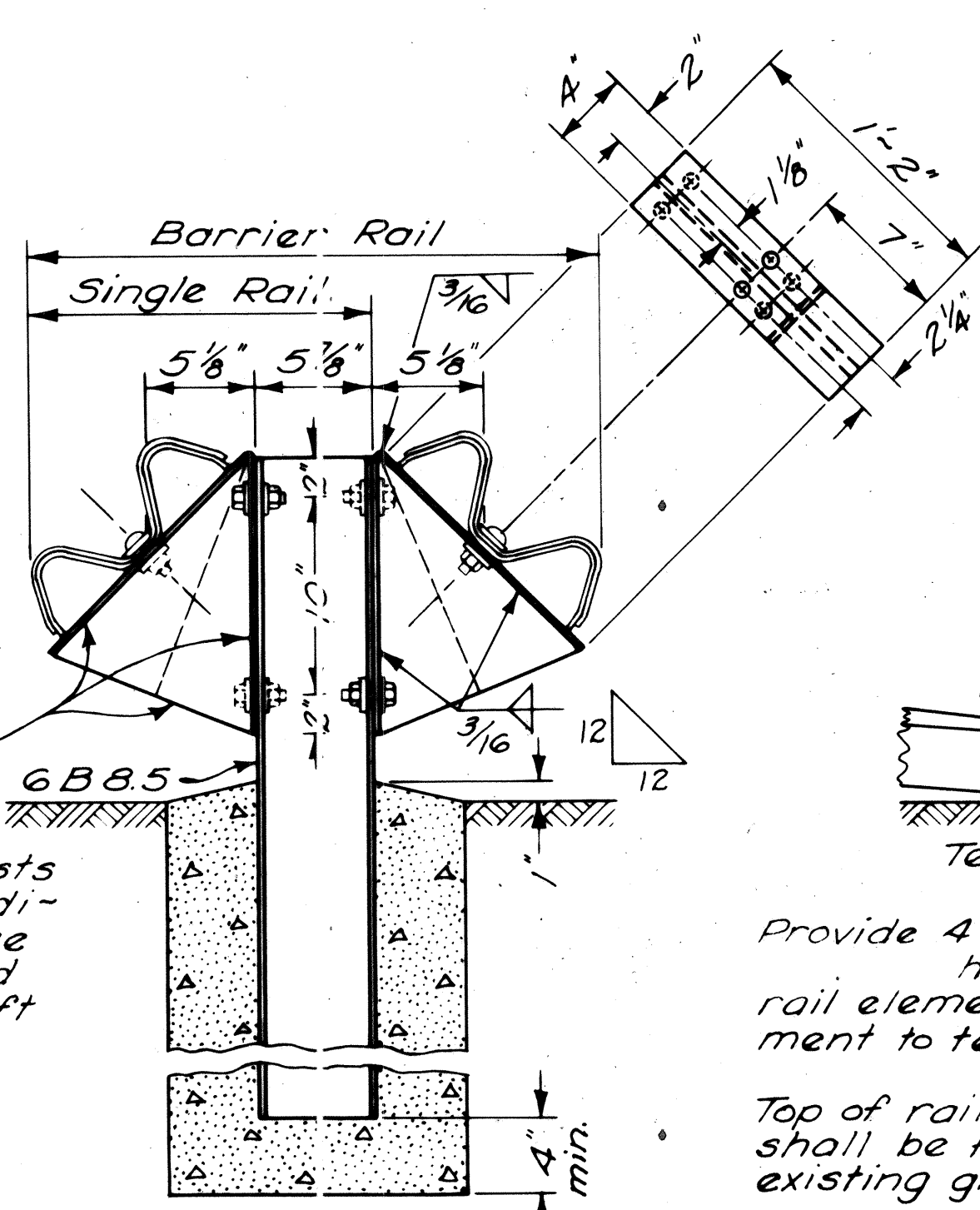
BARRIER RAIL - PLAN VIEW



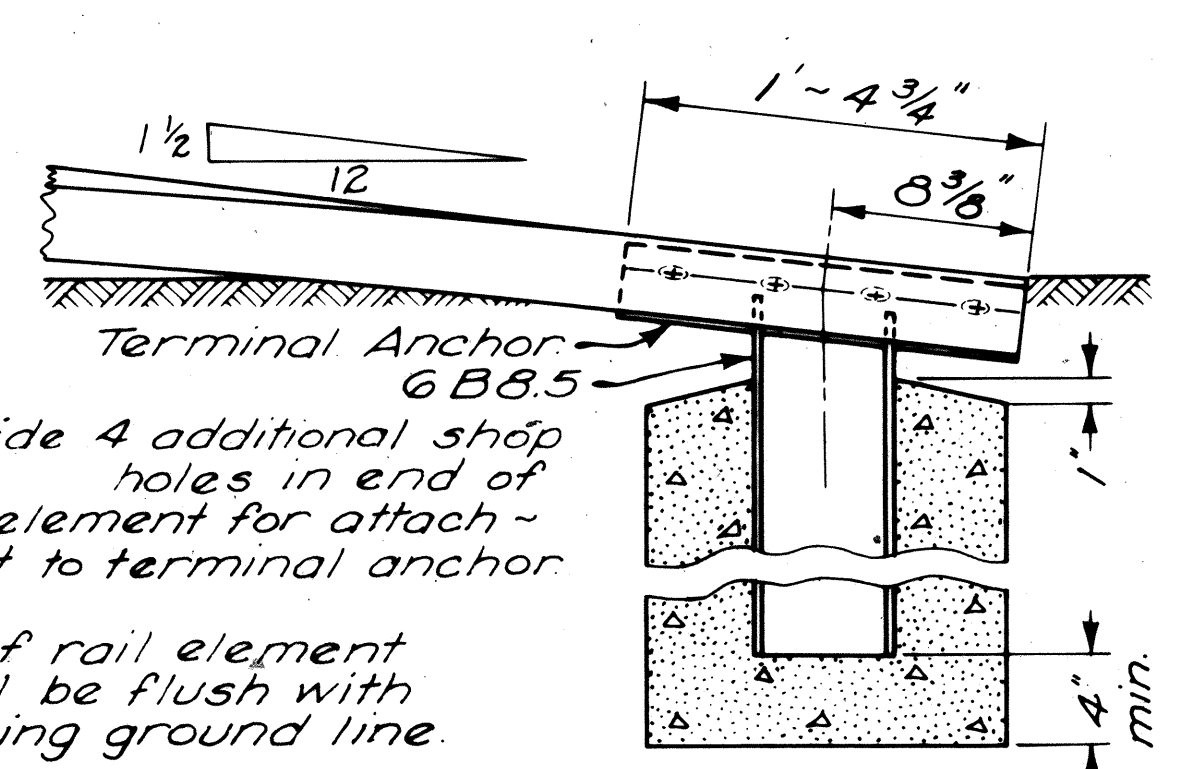
POST A



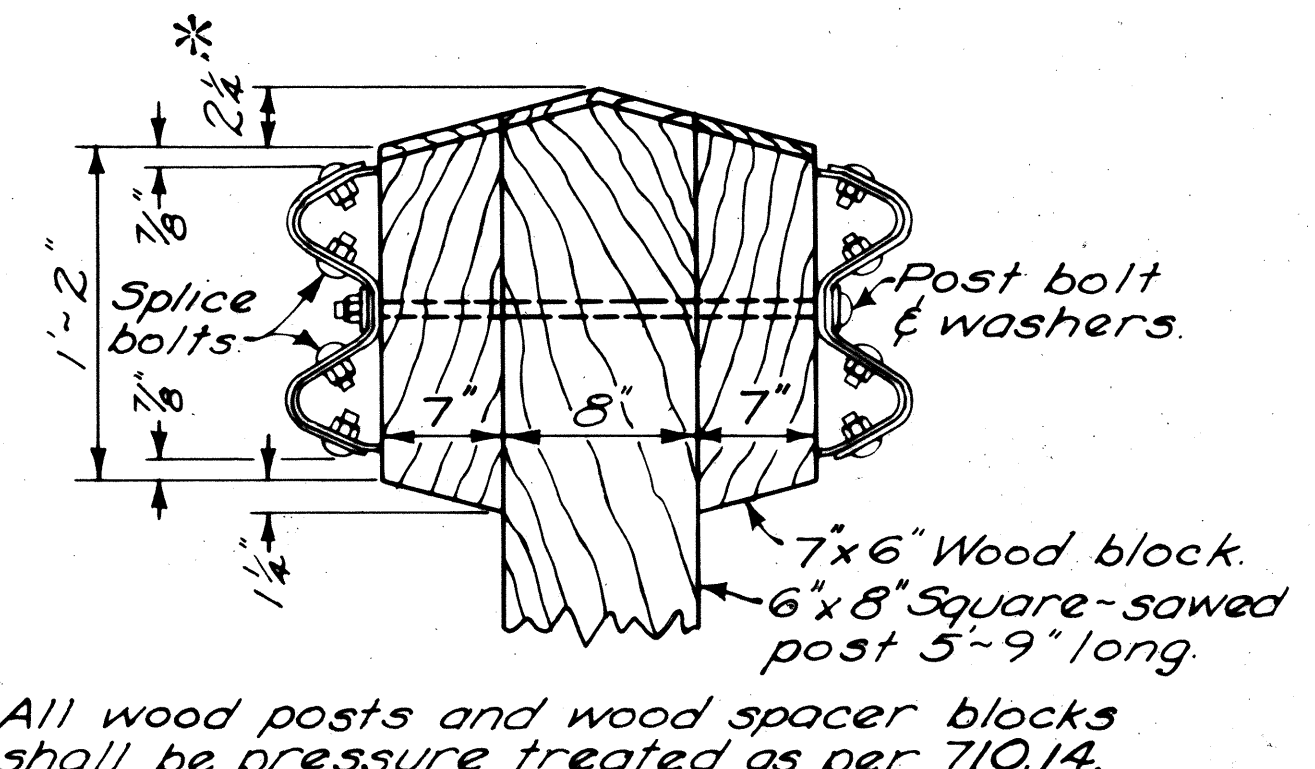
POST B



POST C



POST D



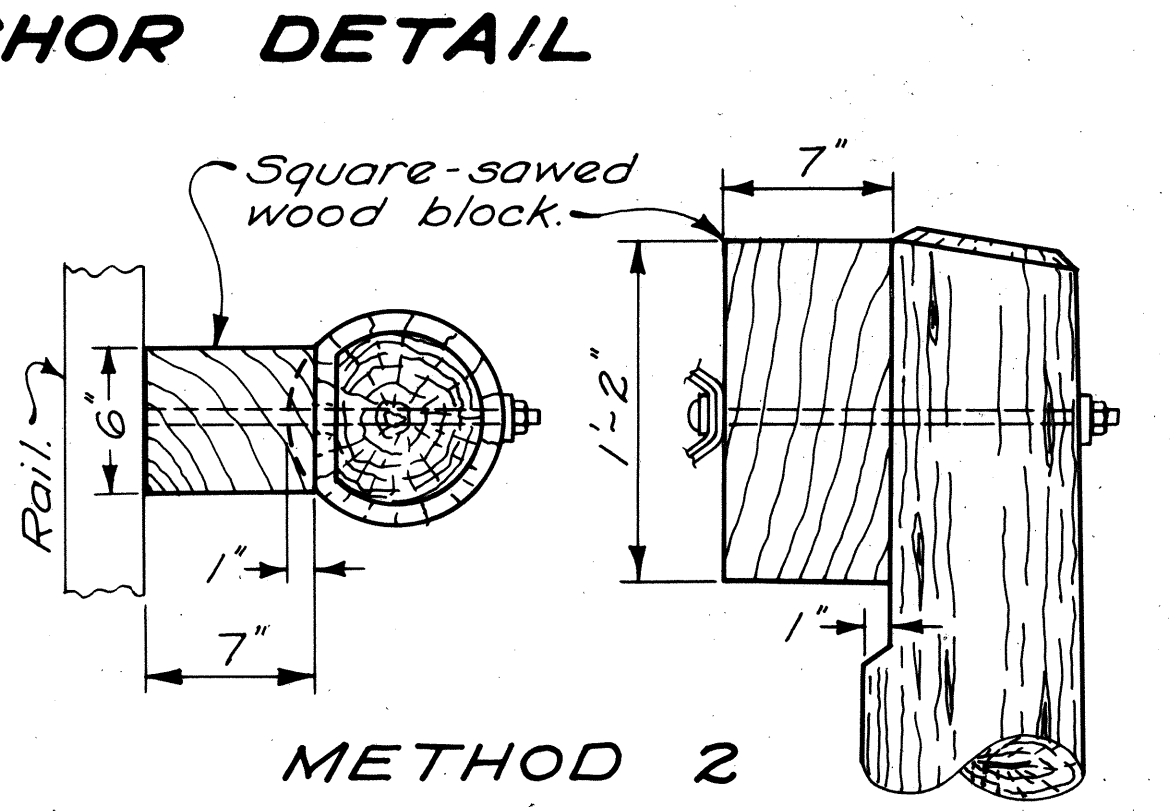
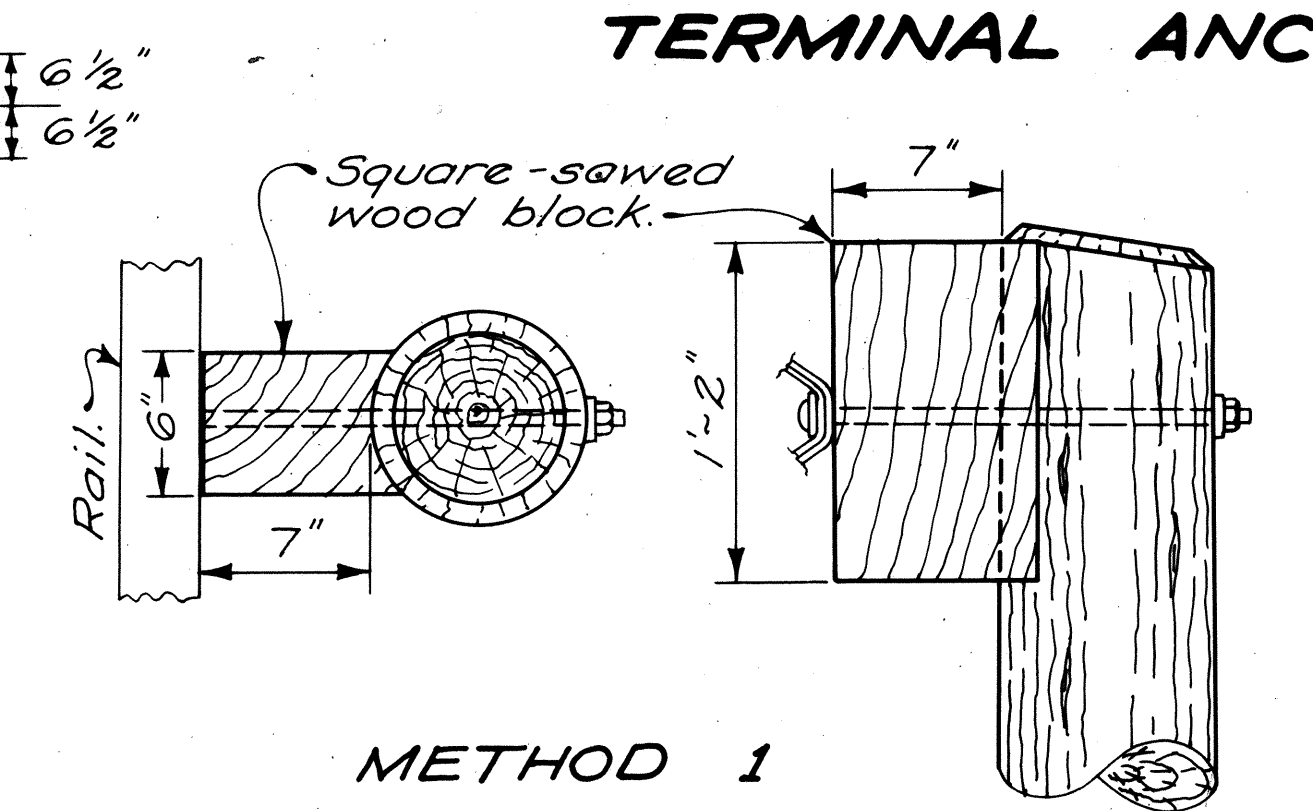
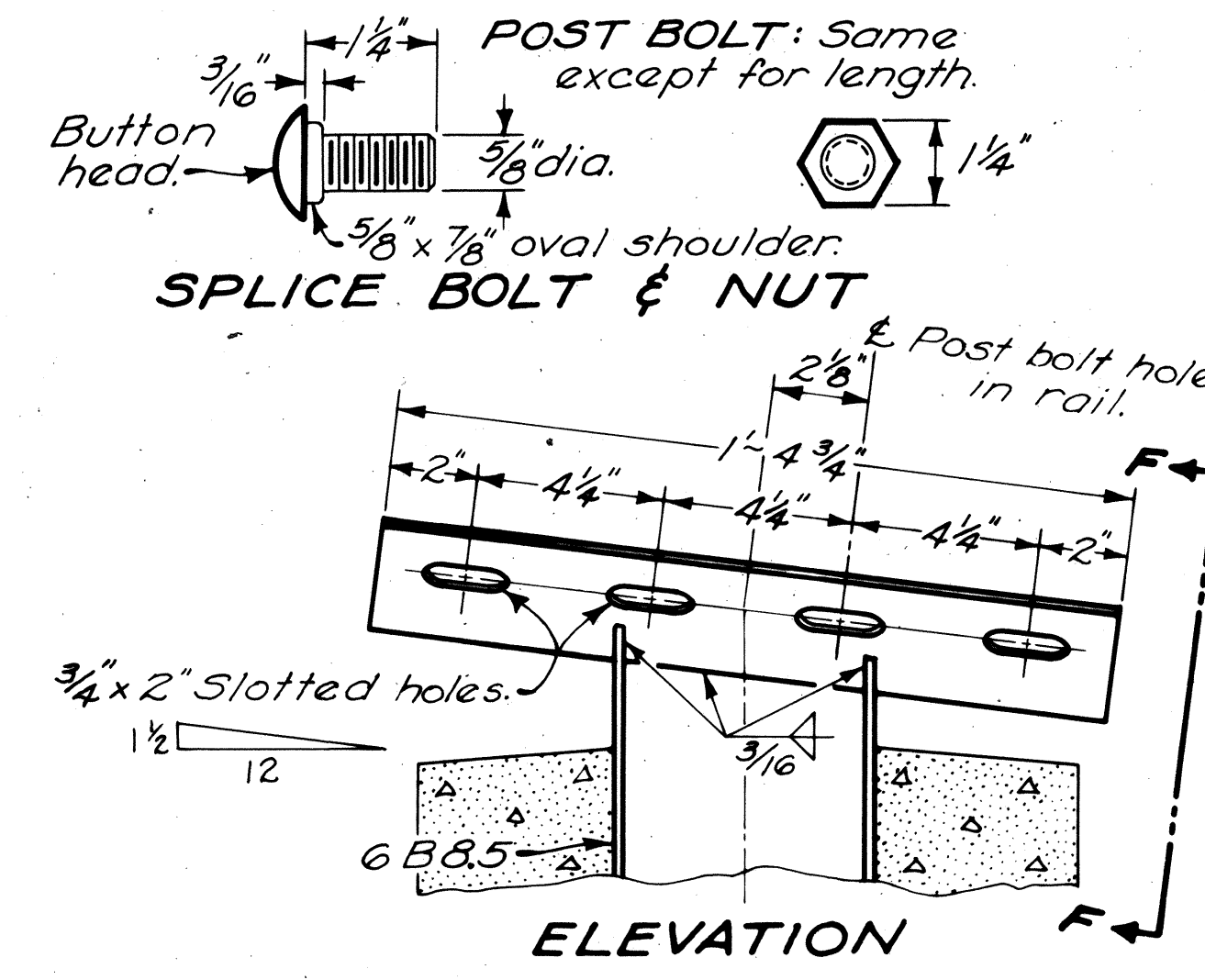
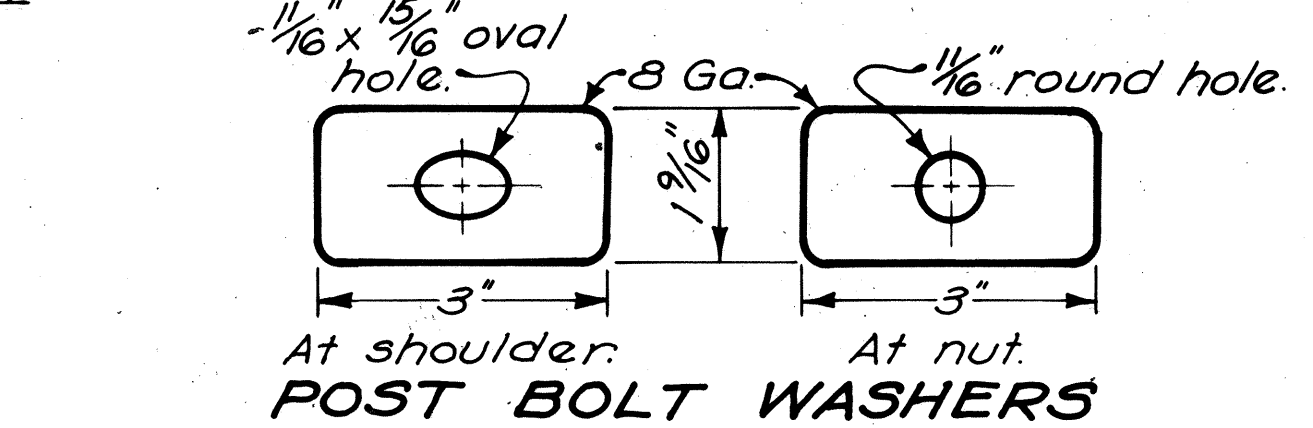
POST E

NOTES

For details not shown, see Standard Drawings GR-1 and GR-2A.

All steel parts shall be galvanized in accordance with ASTM A123, A153 or A525, whichever may apply.

This drawing shall govern where a conflict arises.



ROUND WOOD POSTS*

Alternate methods of placing the spacer blocks on the round posts may be submitted for consideration and approval by the Engineer.

* Tops of driven posts need not be trimmed.

PAVEMENT COMPUTATIONS

Station				404	402	407	408		304	310	611	203	202
				1/4" Asphalt Concrete	1/2" Asphalt Concrete	Tack Coat	Bituminous Prime Coat	Cover Aggregate	Aggregate Base	Subbase	Reinforced Concrete Approach Slabs	Subgrade Preparation	Existing Pavement Removed & Disposed of (Refer 2002)
From	To	Lin. Ft.		Cu. Yds.	Cu. Yds.	Gals.	Gals.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Sq. Yds.	Sq. Yds.	Sq. Yds.
Bridge No. 0121 Part I													
60+00	62+00	200.00	Salvage	14.16	14.91	17	117	1.17	35.46	17.05			
62+00	63+38.24	138.24	New	10.67	14.93		129	1.29	44.80	46.93		307	
63+38.24	64+41.76	103.52	Br't Appr.							19.15	111	98	40
64+41.76	67+20	278.24	New	21.47	30.06		260	2.60	90.17	94.46		618	
67+20	69+25	205.00	Salvage	13.76	15.02	17	121	1.21	33.28	20.09			
From Sheet No. 5									10.30				
Total Part I		925.00		60.06	74.92	34	627	6.27	214.01	197.68	111	1023	40
Bridge No. 0204 Part II													
104+25	105+60	135.00	Salvage	10.75	11.00	11	79	0.79	27.40	18.88			
105+60	107+47.69	187.69	New	14.48	20.28		175	1.75	60.83	63.72		417	
107+47.69	108+20.31	72.62	Br't Appr.							19.15	111	98	44
108+20.31	109+75	154.69	New	11.94	16.71		144	1.44	50.13	52.52		344	
109+75	112+00	225.00	Salvage	16.77	17.12	22	117	1.17	37.35	23.39			
Intersection No. 1-P				23.87	31.02	9	248	2.48	91.00	88.58		613	
From Sheet No. 9									9.10				
Total Part II		775.00		77.81	96.13	42	763	7.63	275.81	266.24	111	1472	44
Bridge No. 0237 Part III													
121+75	124+84.75	309.75	Salvage	24.62	28.59	22	196	1.96	73.33	50.06			
124+84.75	125+61.25	76.50	Br't Appr.							19.15	111		44
125+61.25	131+50	588.75	Salvage	46.45	57.43	22	456	4.56	139.58	121.76			
From Sheet No. 14									11.30				
Total Part III		975.00		71.07	86.02	44	652	6.52	224.21	190.97	111		44
Bridge No. 0336 Part IV													
173+00	177+04.99	404.99	Salvage	30.09	33.46	33	238	2.38	83.02	77.24			
177+04.99	178+41.01	136.02	Br't Appr.							19.15	111		62
178+41.01	182+25	383.99	Salvage	29.94	35.76	17	288	2.88	91.86	67.10			
From Sheet No. 18									30.90				
Total Part IV		925.00		60.03	69.22	50	526	5.26	205.78	163.49	111		62
Structure No. 0430 Part V													
223+30	231+33	783.00	Salvage	62.18	70.95	74	420	4.20	143.15	*72.04			44
From Sheet No. 23									30.90				
Total Part V				62.18	70.95	74	420	4.20	174.05	*72.04			44
Bridge No. 0622 Part VI													
326+00	328+15.25	215.25	Salvage	14.08	24.59	48				19.15	111		40
328+15.25	328+89.75	74.50	Br't Appr.										
328+89.75	331+00	210.25	Salvage	13.41	23.87	47							
Total Part VI		500.00		27.49	48.46	95				19.15	111		40
Grand Total													
				358.64	445.70	339	2988	29.88	1093.86	909.57	555	2495	274

* Includes part. replacement for pipe crossover

MISCELLANEOUS COMPUTATIONS

	Part I	Part II	Part III	Part IV	Part V	Part VI
Seeding and Mulching						
From Table	5040	4993	5380	4787	4377	2458
Deduct 660 Sodding	43		16	32	127	20
Deduct 601 Dumped Rock Channel Protection	42	42	42	44	62	52
Net Seeding, Sq. Yds.	4955	4951	5322	4711	4188	2386
Item 659 Comm. Fertilizer, 12-12-12						
Seeding and Mulching	4955	4951	5322	4711	4188	2386
660 Sodding	43		16	32	127	20
Quantity = 5Y x 9 x 20 = 1000 = 2000	$\frac{4998 \times 9 \times 20}{2000000} = .450$	$\frac{4951 \times 9 \times 20}{2000000} = .446$	$\frac{5338 \times 9 \times 20}{2000000} = .480$	$\frac{4743 \times 9 \times 20}{2000000} = .427$	$\frac{4315 \times 9 \times 20}{2000000} = .388$	$\frac{2406 \times 9 \times 20}{2000000} = .217$
Item 605 Aggregate Drains						
Number of Drains	28	27	34	28	23	11
Average Length (est.)	11.5	11.5	11.5	11.5	11.5	11.5
Quantity, Lin. Ft.	322	311	391	322	265	127

GENERAL SUMMARY

Item	6201 (* Exceptions as noted)							Unit	Description
	Part I	Part II	Part III	Part IV	Part V	Part VI	Total		
ROADWAY									
201	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Clearing and Grubbing
202					Lump		Lump	Lump	Existing Structures removed
202	4	3	2	1	2		12	Each	Catch Basin and Inlet removed
203	669	672	737	973	358	493	3902	Cu. Yd.	Excavation not including Embankment Construction
203	1234	1543	1201	767	471	196	5412	Cu. Yd.	Embankment
203	1023	1472					2495	Sq. Yd.	Subgrade Preparation
606	705.46	604.76	497.00	352.96	637.50	551.00	3348.68	Lin. Ft.	Guard Rail, Type 4, modified as per plan
202	40	44	44	62	44	40	274	Sq. Yd.	Pavement removed and disposed of
410							10	Cu. Yd.	Traffic Compacted Surface, Type A or B
EROSION CONTROL									
*659	4955	4951	5322	4711	4188	2386	26513	Sq. Yd.	Seeding and Mulching, as per plan
*601	21	21	21	22	47	26	158	Cu. Yd.	Dumped Rock Channel Protection
*660	43		16	32	127	20	238	Sq. Yd.	Sodding
*659	0.45	0.45	0.48	0.43	0.39	0.22	2.42	Ton	Commercial Fertilizer (12-12-12)
DRAINAGE									
603			10		10		20	Lin. Ft.	6" Conduit, Type F
603	10	20		50	24	10	114	Lin. Ft.	8" Conduit, Type F
603	32		45		18	10	105	Lin. Ft.	10" Conduit, Type F
603	26	40	10		10		86	Lin. Ft.	12" Conduit, Type F
603						10	10	Lin. Ft.	18" Conduit, Type F
603						10	10	Lin. Ft.	24" Conduit, Type F
603						10	10	Lin. Ft.	6" Conduit, Type E
603			6	38	38		82	Lin. Ft.	8" Conduit, Type E
603	28					50	78	Lin. Ft.	10" Conduit, Type E
603	12		18		22		52	Lin. Ft.	12" Conduit, Type E
603						58	58	Lin. Ft.	24" Conduit, Type E
603	28		62	90	28		208	Lin. Ft.	12" Conduit, Type D
603		12					12	Lin. Ft.	8" Conduit, Type B with Class B Bedding
603		35					35	Lin. Ft.	12" Conduit, Type B with Class B Bedding
603					72		72	Lin. Ft.	8" x 5" x 11" Conduit, Type A with Class B Bedding, 707.03, 10-10 Gage V
604	1	2	1		2		6	Each	5th 2-2A Catch Basin, Modified, as per plan
602					7.3		7.3	Cu. Yd.	Concrete Masonry
605	322	311	391	322	265	127	1738	Lin. Ft.	Aggregate Drains
PAVEMENT									
310	198	266	191	164	72	19	910	Cu. Yds.	Subbase
304	214	276	224	206	174		1094	Cu. Yds.	Aggregate Base
408	627	763	652	526	420		2988	Gals.	Bituminous Prime Coat, 702.09 RT-2 or RT-3
408	6	8	7	5	4		30	Cu. Yds.	Cover Aggregate
407	34	42	44	50	74	95	339	Gals.	Tack Coat, 702.04 MS-2 or RS-1; 702.02 RC-70 or RC-250
402	75	96	86	69	71	49	446	Cu. Yds.	Asphalt Concrete (85-100)
404	60	78	71	60	62	28	359	Cu. Yds.	Asphalt Concrete (85-100)
611	111	111	111	111		111	555	Sq. Yds.	Reinforced Concrete Approach Slabs (T=13")
614	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Maintaining Traffic
	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Construction Layout Stakes
								Lump	Field Office
STRUCTURES 20' SPAN AND OVER									
Han-69-0121, See Sheet No. 31									
Han-69-0204, See Sheet No. 34									
Han-69-0237, See Sheet No. 38									
Han-69-0336, See Sheet No. 41									
Han-69-0622, See Sheet No. 44									

* Code No. Y005

EARTHWORK-203

Sheet No.	Part No.	Embankment, C.Y.	Excavation, C.Y.
5	I	1234	669
9	II	1543	672
14	III	1201	737
18	IV	767	973
23	V	471	358
27	VI	196	493
Totals		5412	3902

SEEDING-659

Sheet No.	Part No.	Sq. Yds.
6	I	5040
10	II	4993
15	III	5380
19	IV	4787
24	V	4377
28	VI	2458
Total		27035

EXISTING STRUCTURE

Span ~ 23'-0"

Type ~ Concrete Slab

Roadway ~ 24'-0"

Skew ~ None

Loading ~ CF 130

PROPOSED STRUCTURE

Type ~ Continuous Reinf. Conc. Slab

with capped pile substructure

Spans ~ 16'-20'-16' % Bearings

Roadway ~ 36'-0" +/- Guardrail

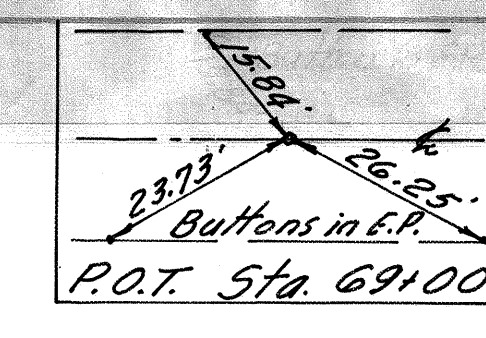
Load Frequency ~ CF-130(57)

Skew ~ 10° R.F.

Wearing Surface ~ 1" Monolithic Concrete

Approach Slabs ~ A5-1-54 (25' Long)

Alignment ~ Tangent



ROADWAY DRAINAGE "D"

Ref. No.	Station		Side	601	660	603				202	604	602		Bends & Branches
				Dumped Rock Channel / 18" Trunk	Sodding	Conduit Lin. Ft.								
						F E								
	From	To		Cu. Yd.	Sq. Yd.	8"	12"	10"	8"	12"		Each		Each
1-D	63+60	63+78	Lt.	5.2			16							1
2-D	63+72	63+90	Rt.	5.2			10							1
3-D	63+98	64+52	Lt.	5.2	27			16						1
4-D	64+02	64+24	Rt.	5.2		10		16						1
5-D	66+23	66+34	Lt.		16				22		1	1		2
6-D	66+29		Rt.						6		1			
7-D	63+22		Rt.							6	1			
8-D	63+20		Lt.							6	1			
Totals				20.8	43	10	26	32	28	12	4	1		

GUARD RAIL "G"

Ref. No.	Station	Side	Guard Rail Type 4	Lin. Ft. Straight
From	To			
1-G	61+93.22	66+05.72	Lt.	358.98
2-G	61+92.28	65+99.28	Rt.	346.48
Totals				705.46

* Deduct 53.52' for Bridge Rail

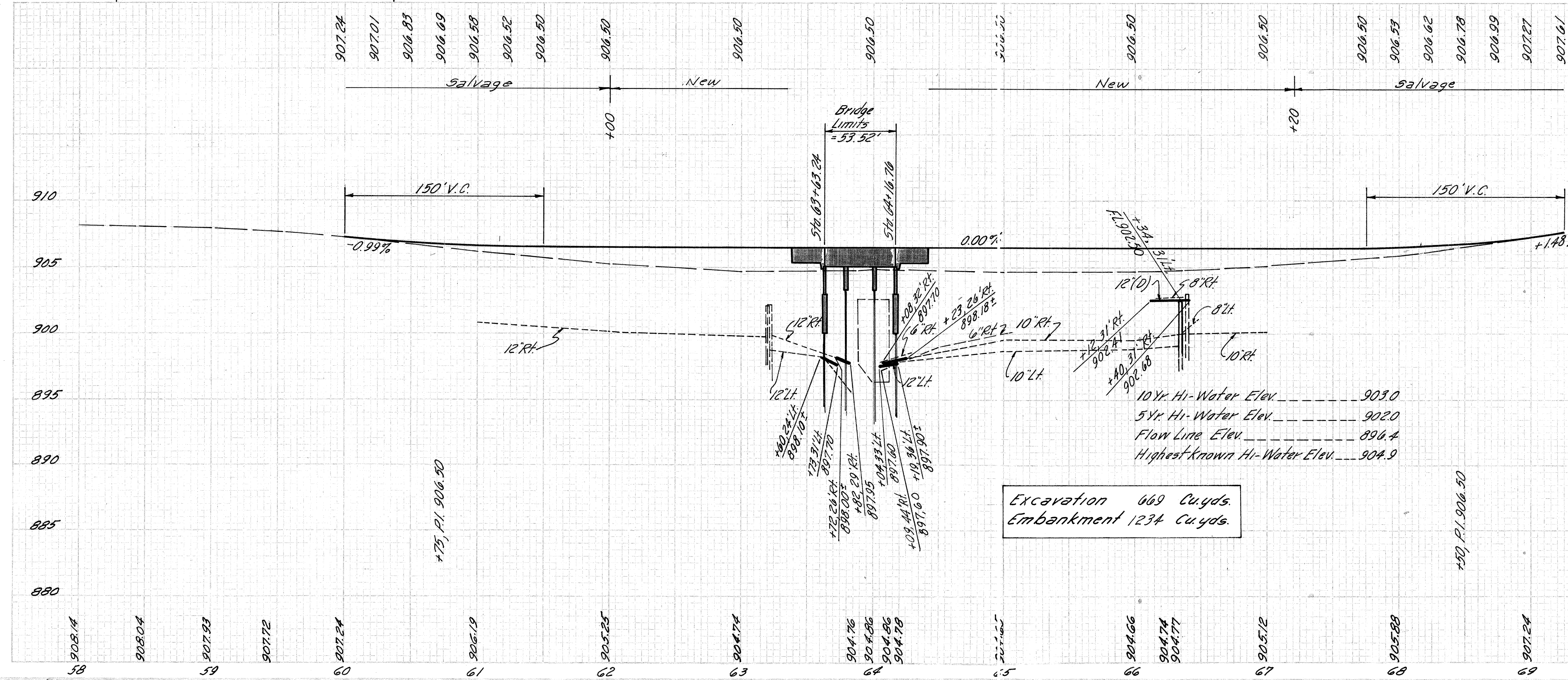
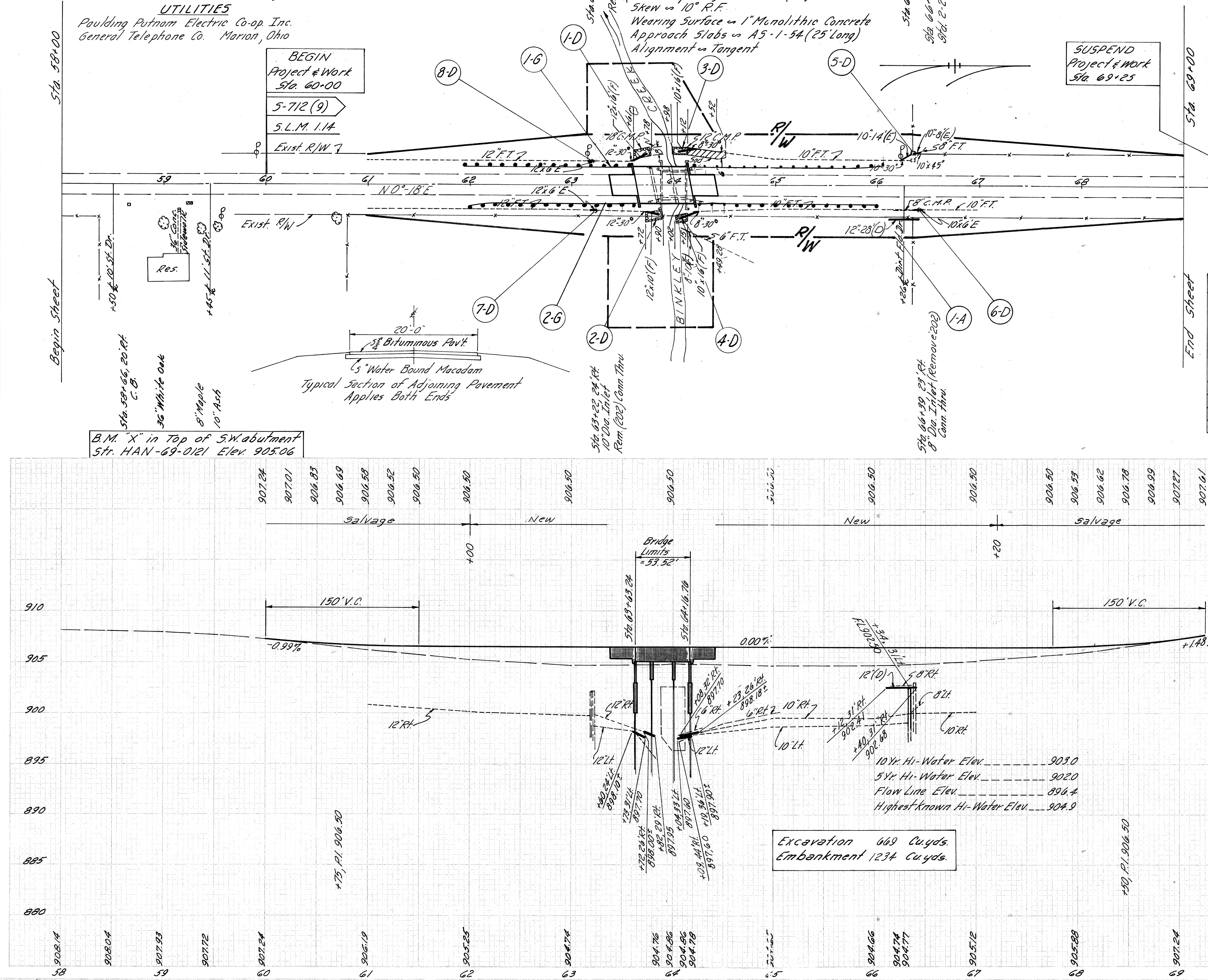
MICROFILMED

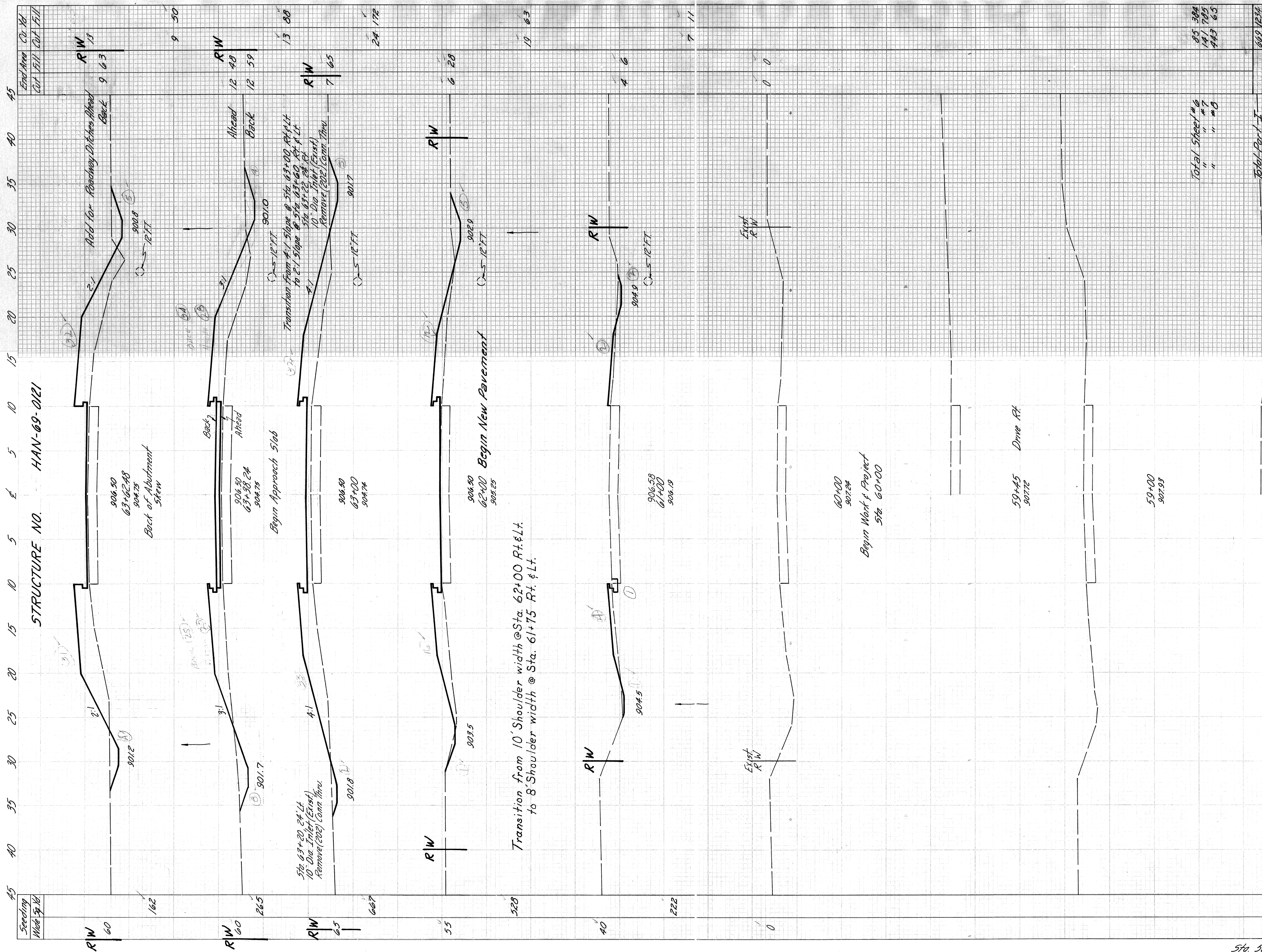
JUL 15 1986

SIDE APPROACHES "A"

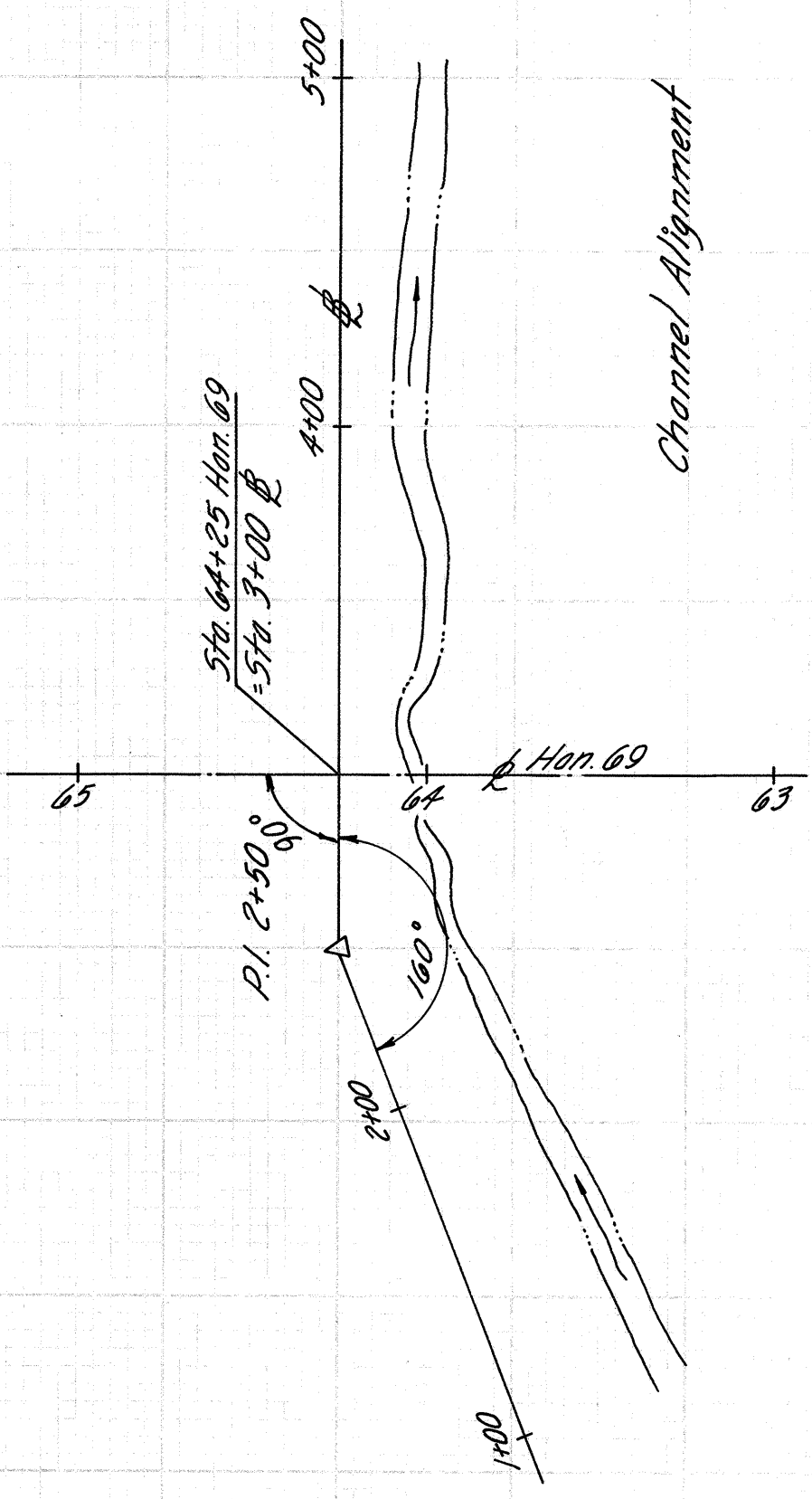
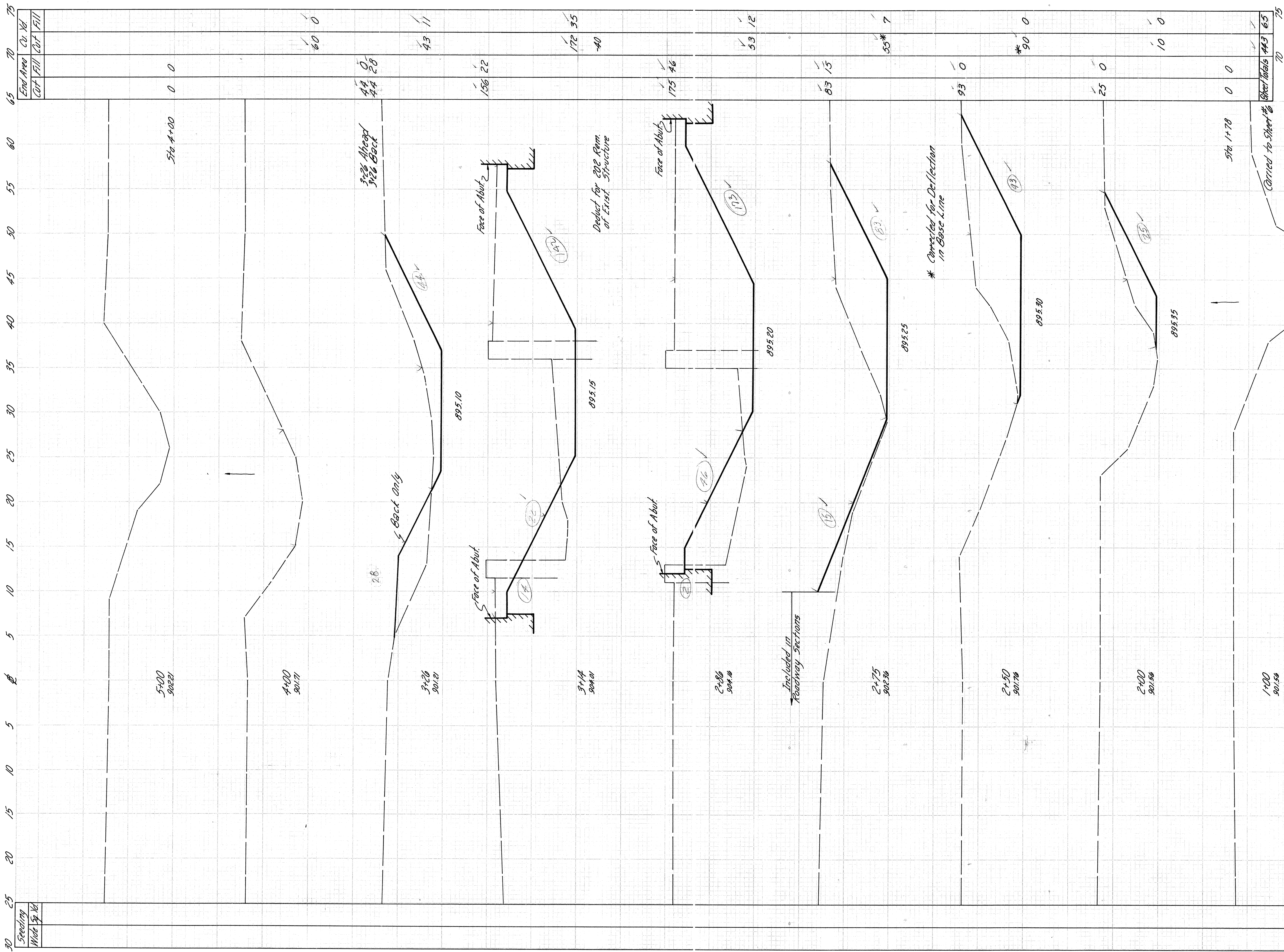
Item No.	Station	Side	304 Aggr. Base Cu. Yd.	Conduit Type "D" Lin. Ft.	Remarks
1-A	66+26	Rt.	10.3	28	Field Drive
Total			10.3	28	

* Place 304 Aggregate to 25' Length (Back of Radius)





Sta. 58+00 to Sta. 63+87



Channel Sections Sta 1+00 to Sta 5+00 Binkley Creek

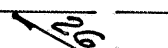
ROADWAY			DRAINAGE "D"					Bends & Branches	
Ref. No.	Station	Side	601	660	603			202	604
			Dump Rock Chon. Prof. 18" Thick	Sodding	Conduit Lin. Ft.			Catch Basins Removed	Catch Basins (Mod)
			Cu. Yd.	Sq. Yd.	B	F	8"	12"	8"
1-D	105+48	105+58	Rt.		15	6		1	1
2-D	105+50	105+61	Lt.		14	6		1	1
3-D	106+05	107+88	Rt.	5.2	6		20	1	1
4-D	107+65	107+88	Rt.	5.2			20		1
5-D	107+42	107+60	Lt.	5.2					
6-D	107+80	107+94	Lt.	5.2					
7-D	108+06	108+21	Rt.	5.2			20		1

GUARD RAIL "6"				
Ref. No	Station		Side	606
				Guard Rail Type 4
				Lim. Ft.
	From	To		Straight
	1-6	106+34.55		109+59.55*
2-6	106+33.45	109+58.45*	Rt.	302.38
Totals				604.76

* Deduct 22.62' For Bridge

Ref. - Buttons
25.83' in Part. &
22.06' 46.17'
P.O.T. Sta. 101+00

EXISTING STRUCTURE
Span ~ 23'-0"
Type ~ Concrete Slab
Roadway ~ 24'-0"
Skew ~ None.
Loading ~ CF/30.



 26.96° 37.84°

 23.37° Ref. -

 Buttons in Per't.

 $\Delta = 0^\circ 18' \text{ Lt.}$

 P.I. Sta. 104+50.00

Resume Work & Proj.
Sta. 104+25

PROPOSED STRUCTURE

PROPOSED STRUCTURE
Type $\hookrightarrow$ Single span reinforced concrete slab with reinforced concrete wall abutments.
Span $\hookrightarrow$ 20'-0" f/f of abutments.
Roadway $\hookrightarrow$ 36'-0" f/f guard rail.
Load Frequency $\hookrightarrow$ CF=130 (57).
Skew $\hookrightarrow$ 18° R.F.
Wearing Surface $\hookrightarrow$ 1" Monolithic concrete
Approach Slabs $\hookrightarrow$ A5-1-54 (25' long).
Alignment $\hookrightarrow$ Tangent.

Suspend Proj. & Work
Sta. 112+00

A hand-drawn sketch of a road intersection. A vertical line represents a road with a bearing of 23.73° and a distance of 29.27 to a point labeled 'Buttons in Part.'. From this point, a line branches off to the right with a bearing of 27.55° and a distance of 27.55 . Below the sketch, the text 'P.O.T. Sta. 113+00' is written.

Note:- For details not shown see Cross Sections & Intersection Drawing I.P. Sheet No.13

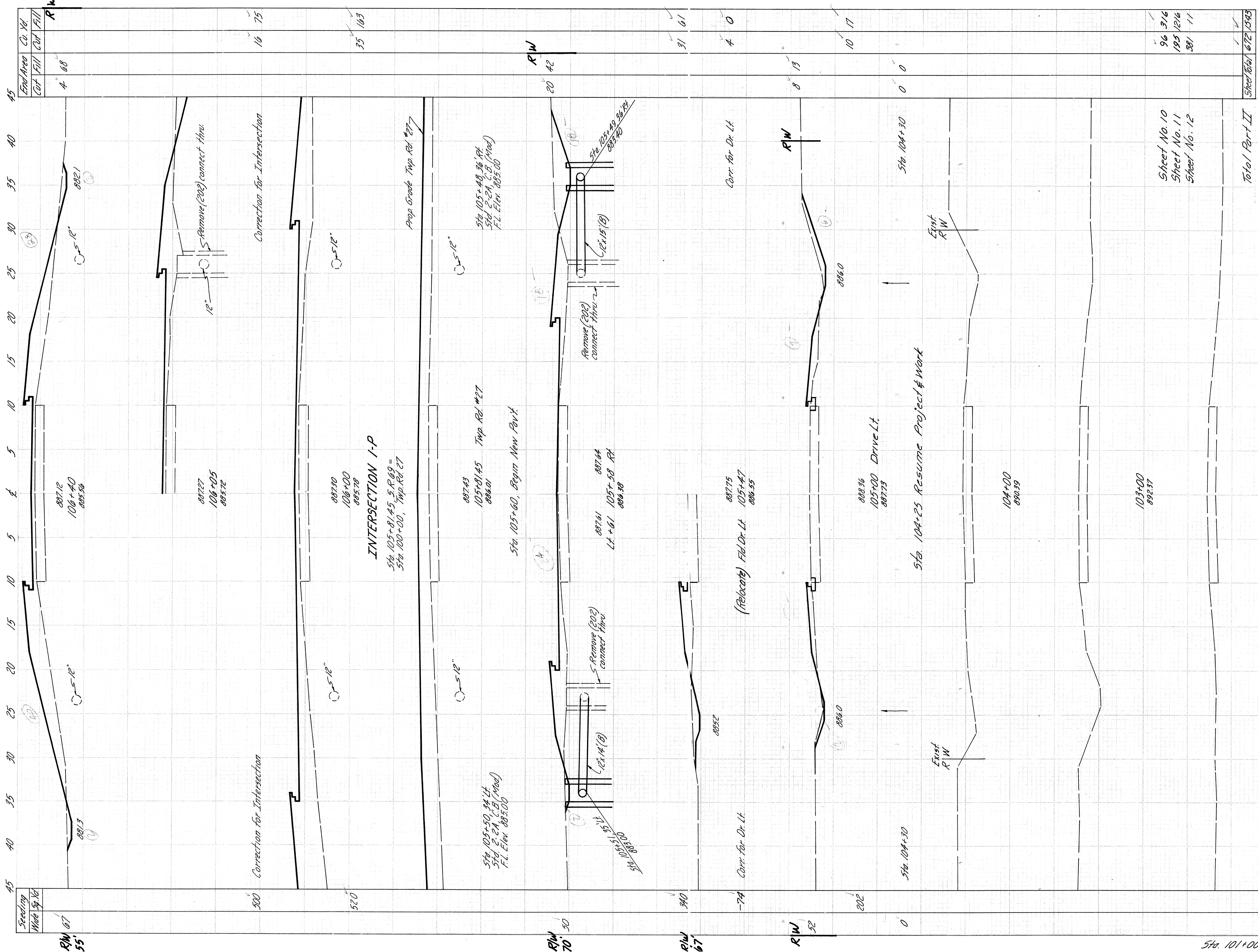
UTILITIES

Hancock-Wood Electric Co-op Inc., North Baltimore, Ohio
General Telephone Co. Marion, Ohio

B.M. #2 Spike in 15" Walnut
Sta. 105+57, 50' Rt., Elev. 888.13

B.M. #1 Spike in ϕ , 29' RT.
Sta. 111 + 94 Elev. 892.14

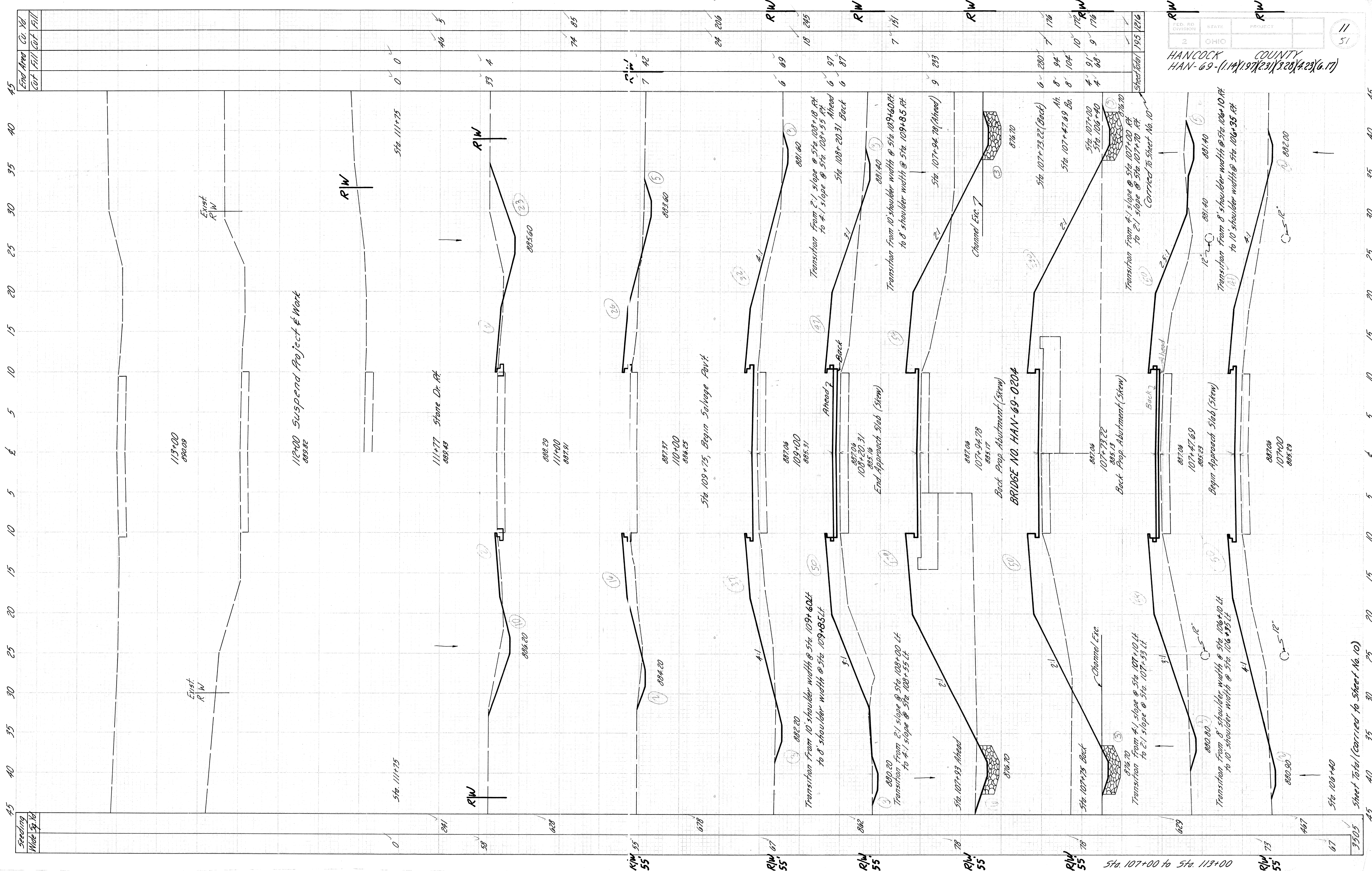
Excavation	672	Cu.yds.
Embankment	1543	Cu.yds.

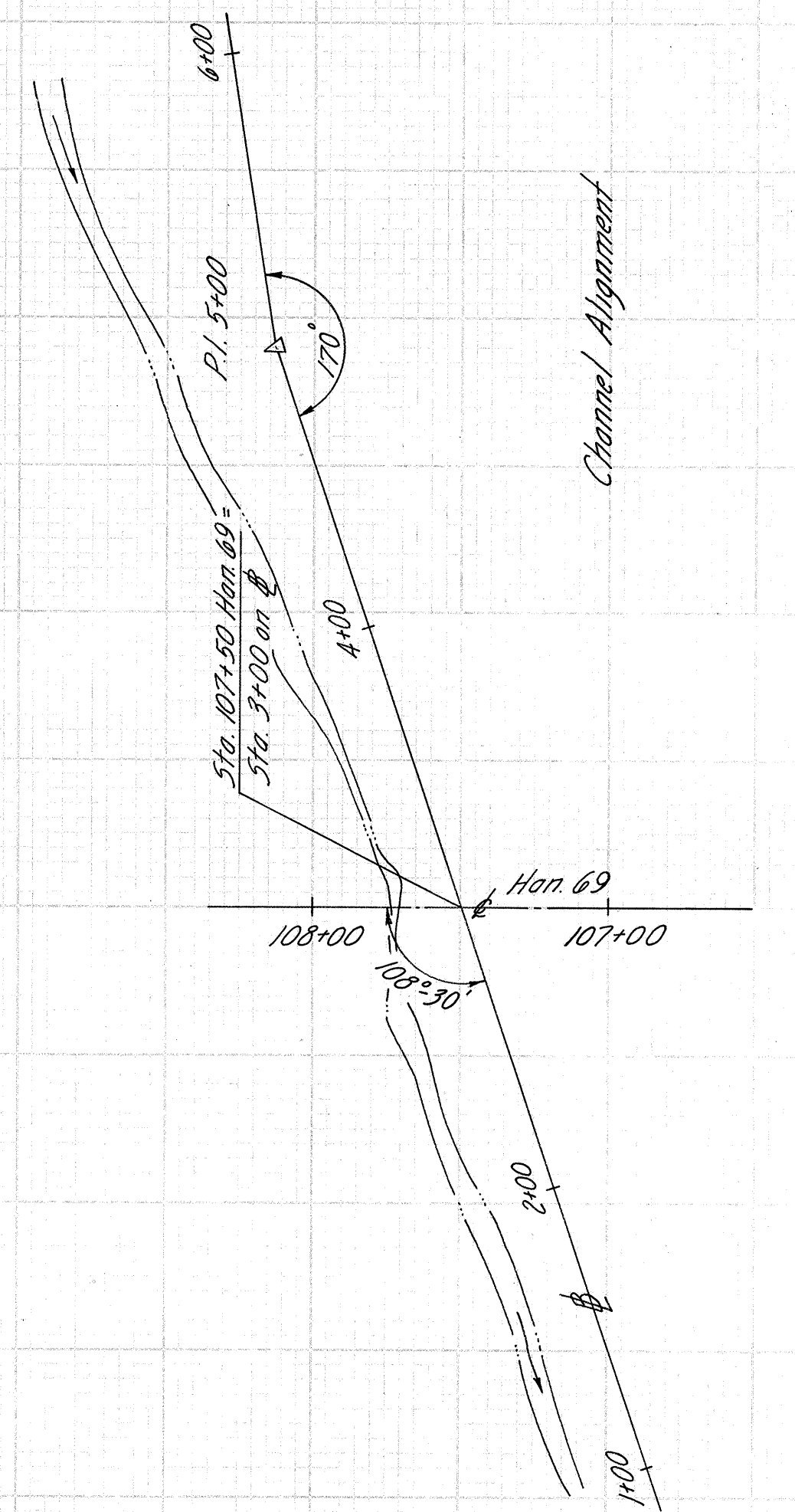
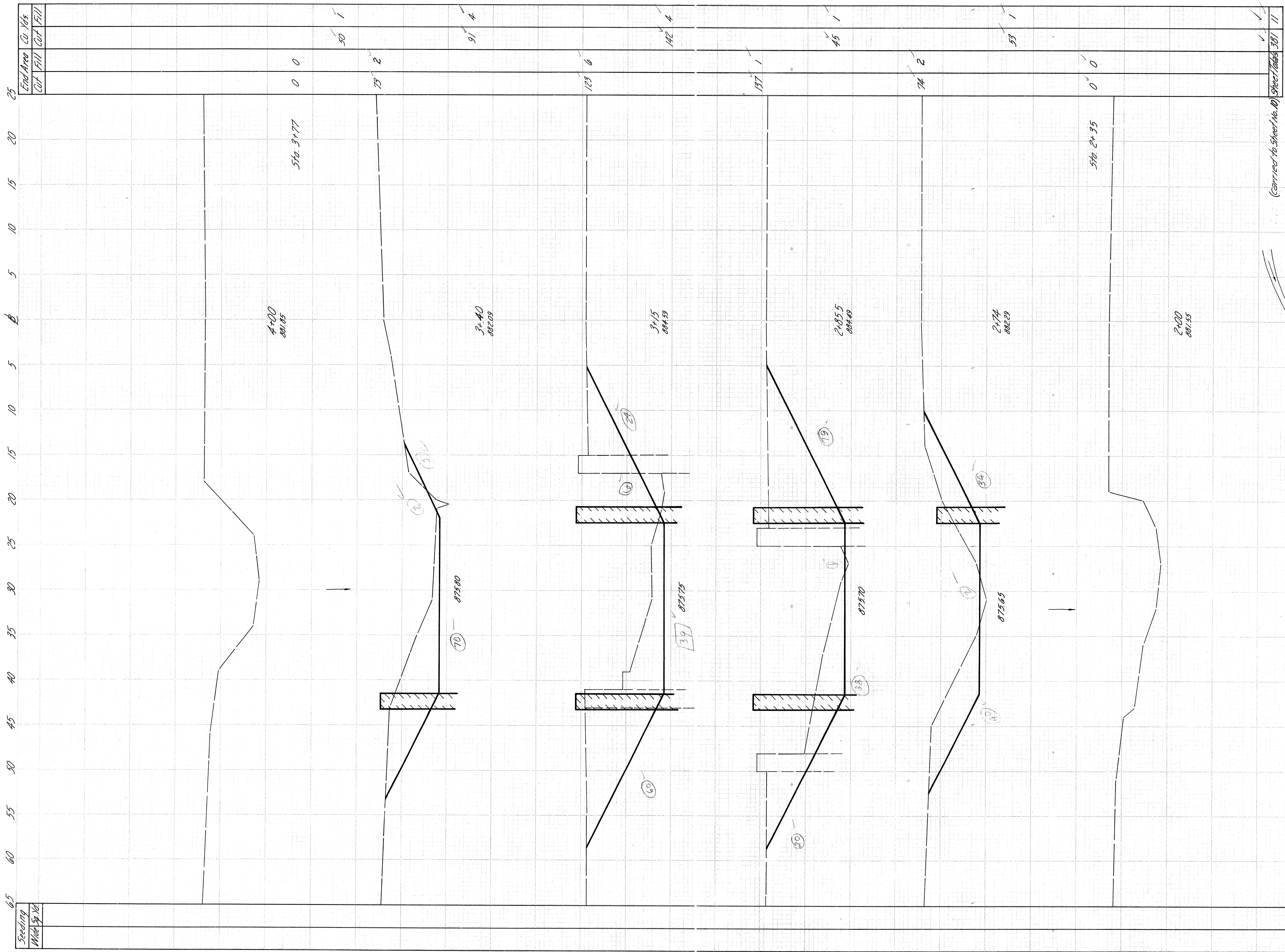


Sta. 101+00 to Sta. 106+40

1488 Sheet No. 10
3505 Sheet No. 11

Total Part II

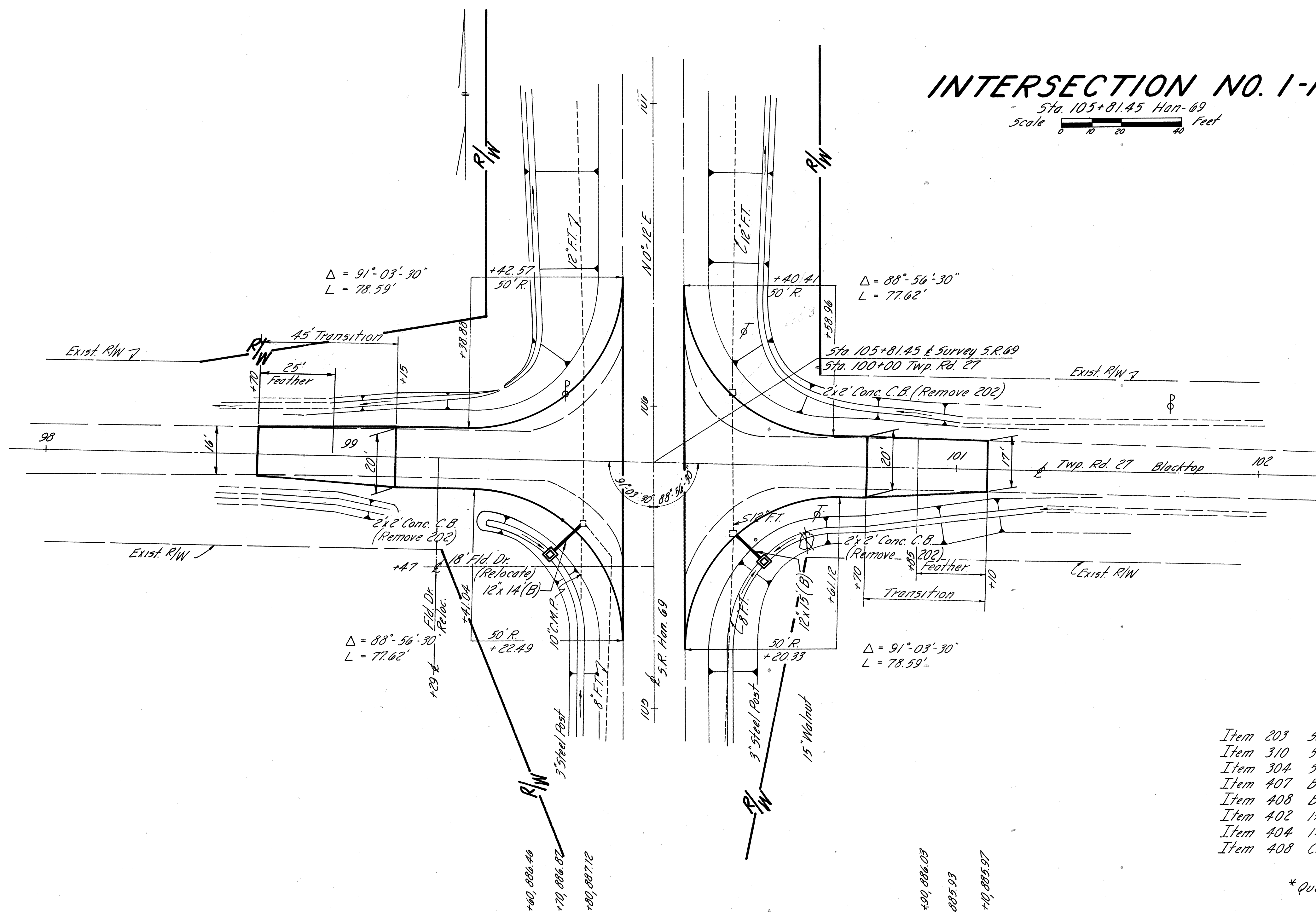




HANCOCK COUNTY
HAN-69-(1.14)(1.97)(2.31)(3.28)(4.23)(6.17)

INTERSECTION NO. 1-P

Sta. 105+81.45 Hon-69
Scale  Feet

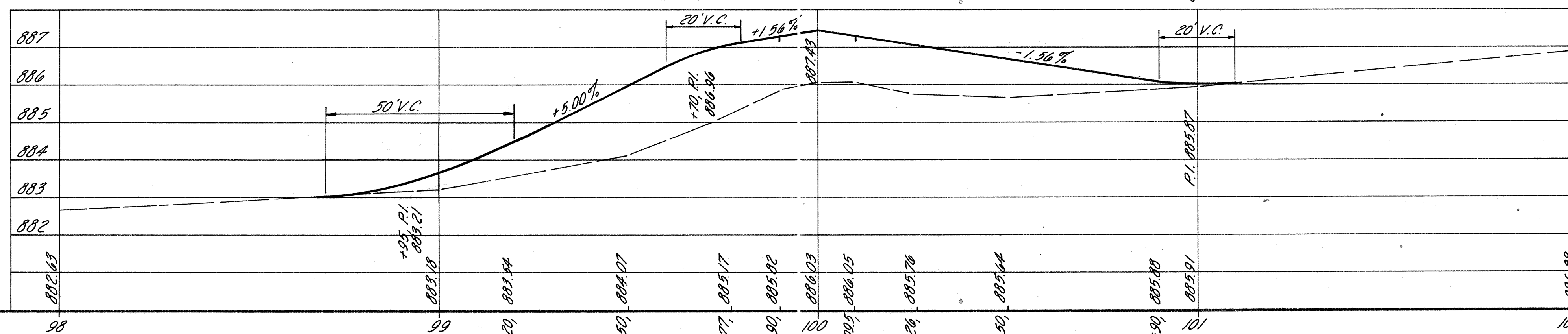


*ESTIMATED QUANTITIES

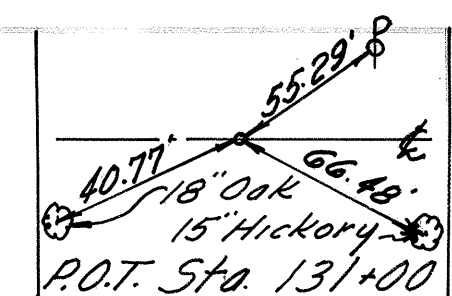
Item 203	Subgrade Preparation	613	Sq. Yd.
Item 310	5" Subbase	88.58	Cu. Yd.
Item 304	5" Aggregate Base	91.00	Cu. Yd.
Item 407	Bituminous Tack Coat	9	Gal.
Item 408	Bituminous Prime Coat	248	Gal.
Item 402	1 1/2" Asphalt Concrete	31.02	Cu. Yd.
Item 404	1 1/4" Asphalt Concrete	23.87	Cu. Yd.
Item 408	Cover Aggregate	248	Cu. Yd.

*Quantities carried to Pavement Computations, Sheet No. 4

Note: Pavement edge dimensions as shown on Typical Sections.

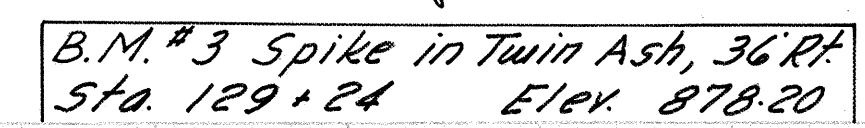


Intersection Detail No. 1-P



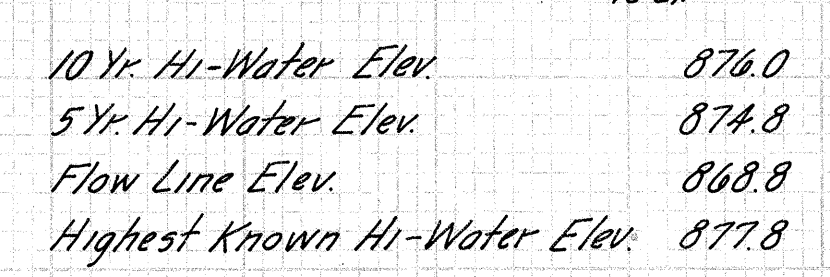
Resume
Project & Work
Sta. 121+75

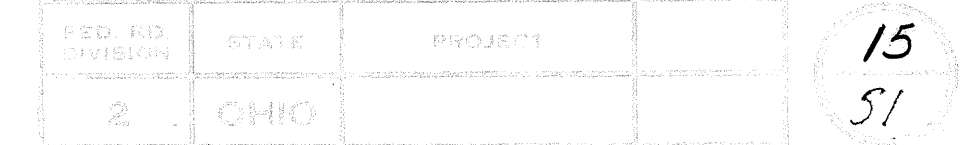
Begin Sheet	Sta. 119+00
-------------	-------------



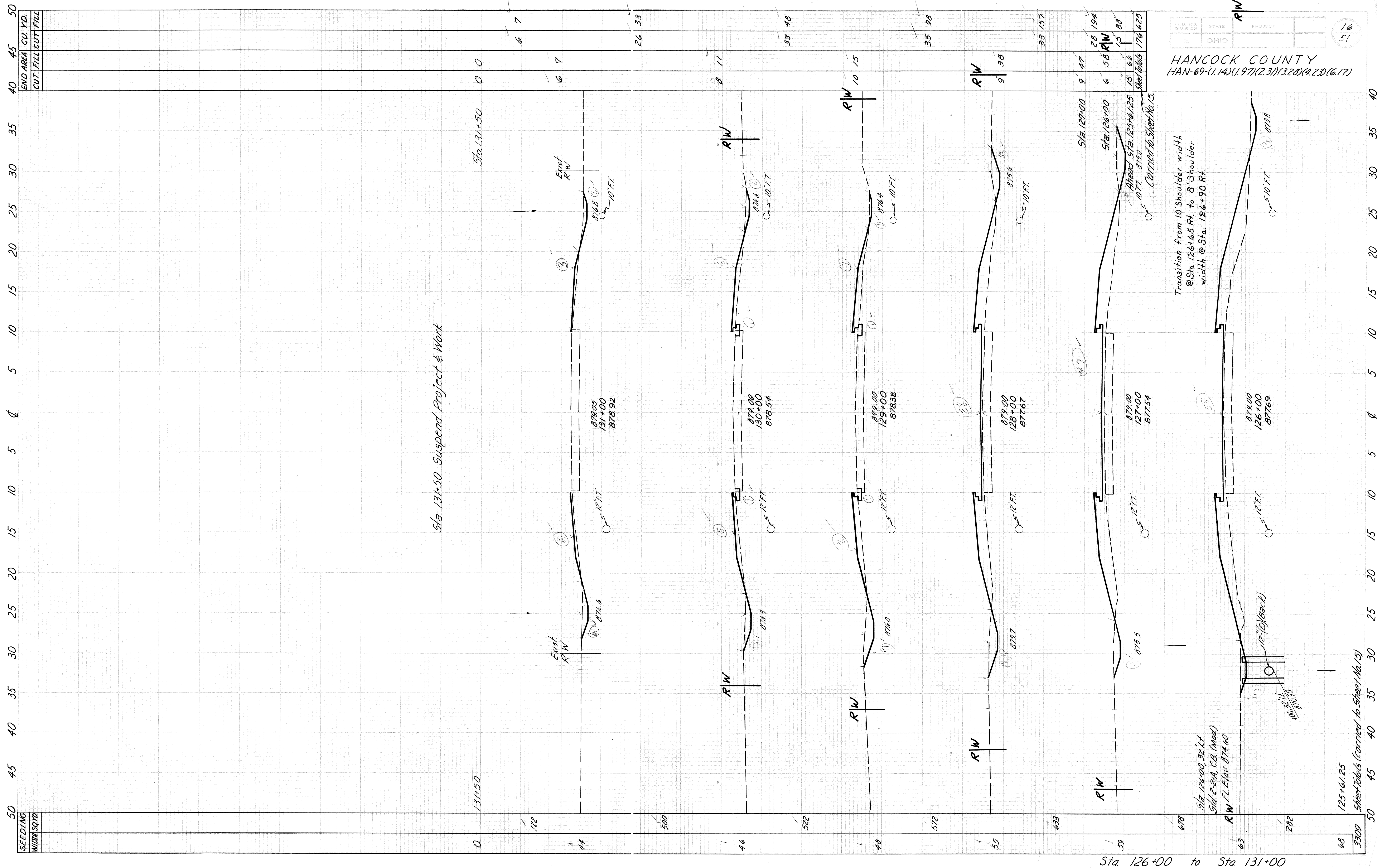
<i>SIDE APPROACHES "A"</i>						
<i>Ref. No.</i>	<i>Station</i>	<i>Side</i>	<i>30+0</i>	<i>60+3</i>	<i>Length Lin. Ft.</i>	<i>Remarks</i>
			<i>Aggr. Base Cu Yd</i>	<i>Conduit D Lin. Ft. 12"</i>		
1-A	125+79	Lt.	11.9	6.2	30	Form Drive
	<i>Totals</i>		11.9	6.2		

* Deduct 26.50' For Bridge





Sta. 120+00 to Sta. 125+79



30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60

Seeding
Wide Sp. 16

End Area
Cut Fill

Sta. 4+00
874.06

Sta. 4+00
0

Sta. 4+00
0

Sta. 4+00
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Sta. 4+00
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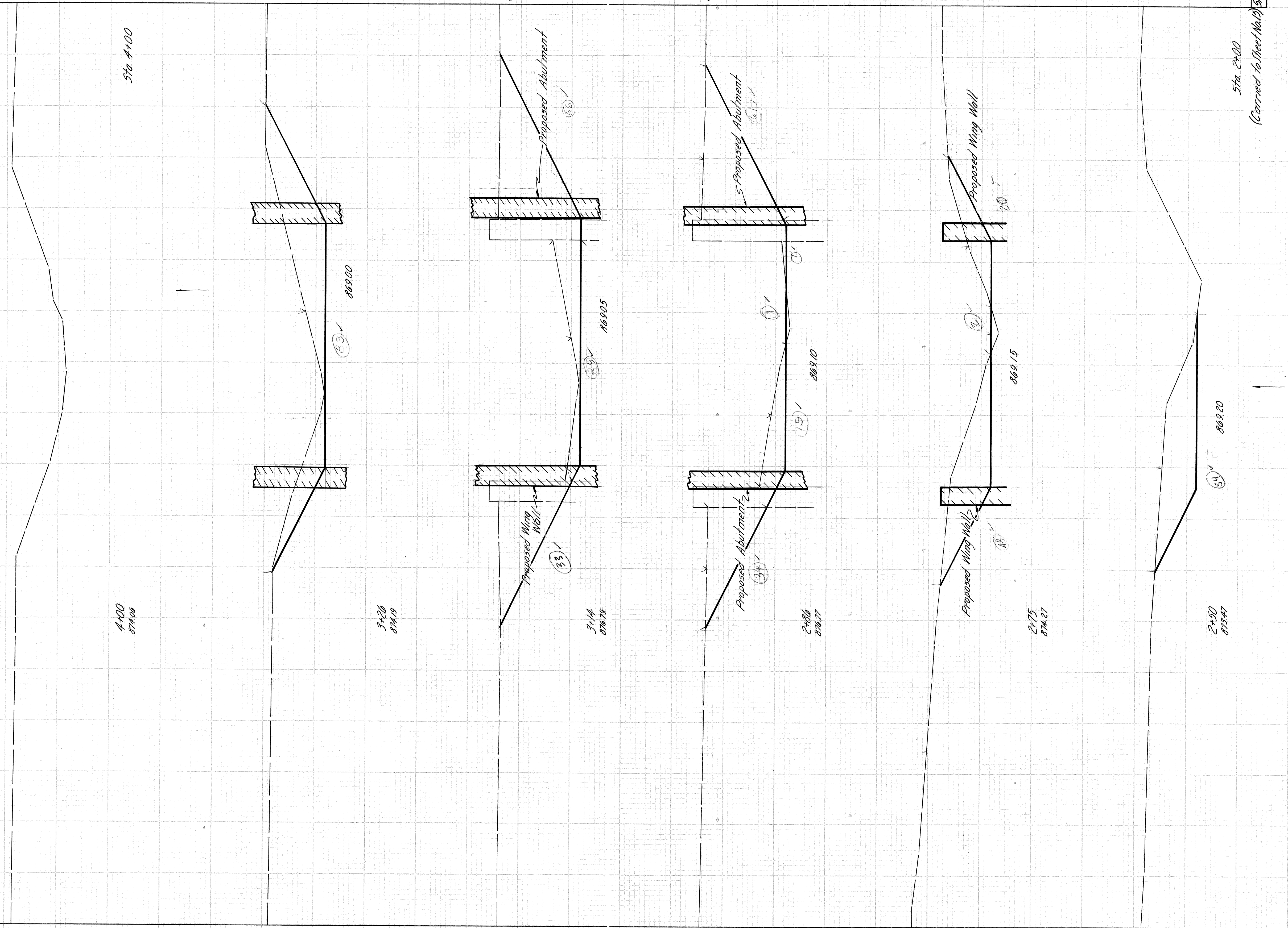
Sta. 4+00
0

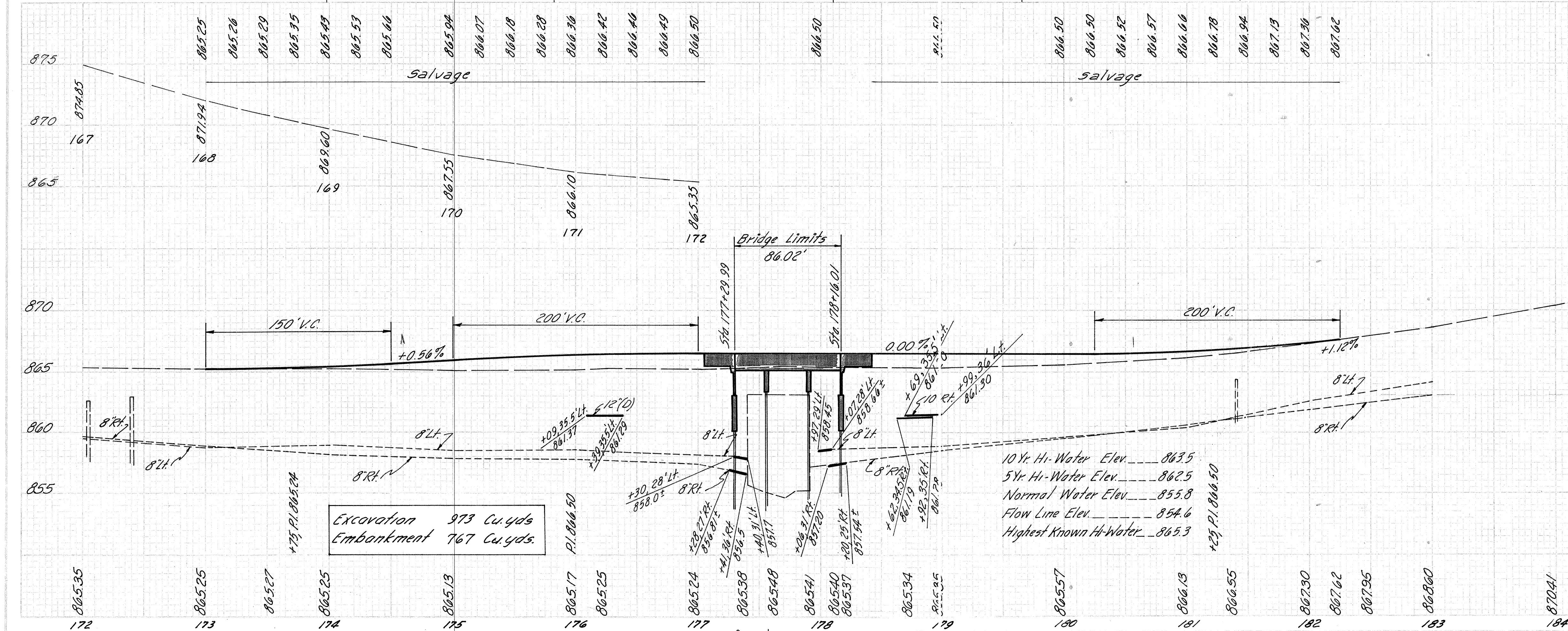
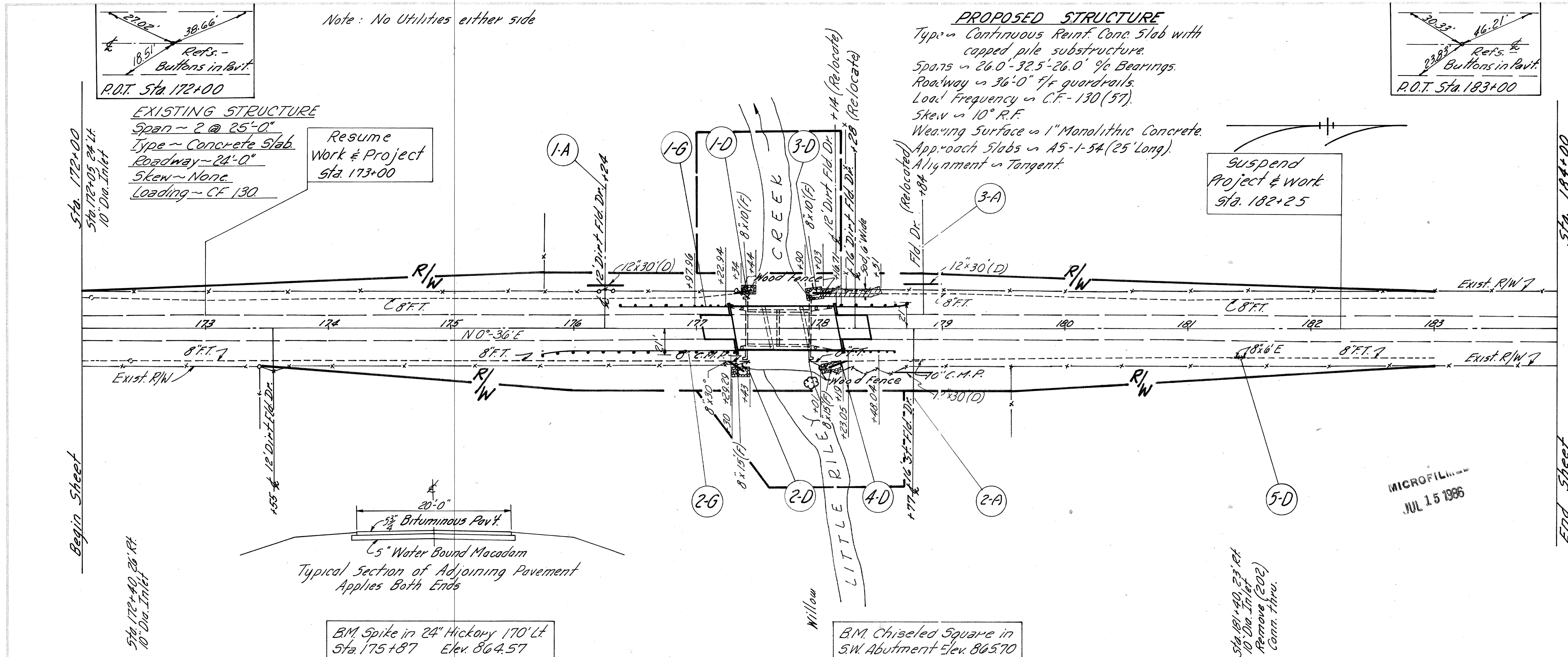
Sta. 4+00
0

Sta. 4+00
0

Sta. 4+00
0

Sta. 4+00
0





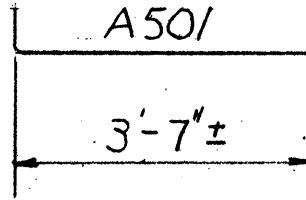
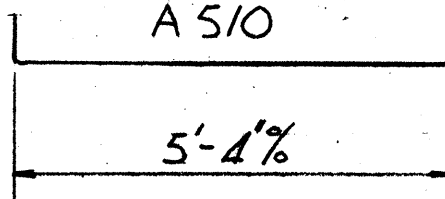
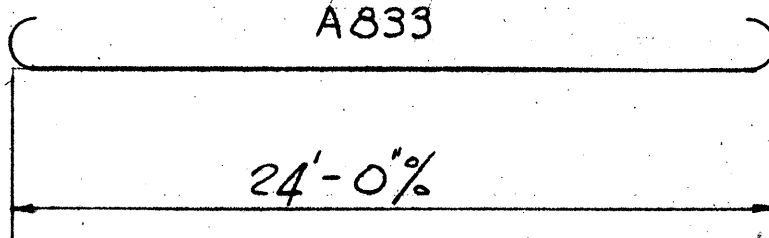
ROADWAY DRAINAGE "D"										
Station		Side		601	600	603		604	202	Bends & Branches
						Conduit Lin. Ft.				
Ref. No.	From	To		Dumped Rock Chan. Prot. 18" Thick	Sodding	F	E	Std. No. 22A C.B. (Mod)	Inlet Removed	Each
						Co. Yds.	Sq. Yds.			
	1-D	177+30	177+44	Lt.	4.5		10			1
	2-D	177+28	177+43	Rt.	5.5		15			
	3-D	177+90	178+07	Lt.	7.2		32			1
	4-D	178+01	178+20	Rt.	5.0		15		1	
	5-D	181+37	181+43	Rt.			6			
Totals					22.2	32	50	6	1	

SIDE APPROACHES "A"								
Ref. No.	Station	Side	304		603		Remarks	Length
			Aggr. Base	Co. Yd.	Conduit, D Lin. Ft.	12"		
1-A	176+24	Lt.	* 10.3		30		Field Drive	
2-A	178+77	Rt.	* 10.3		30		Field Drive	
3-A	178+84	Lt.	* 10.3		30		Field Drive	
Totals			30.9	90				
* Place 304 Aggregate to 25' Length (Back of Radius)								

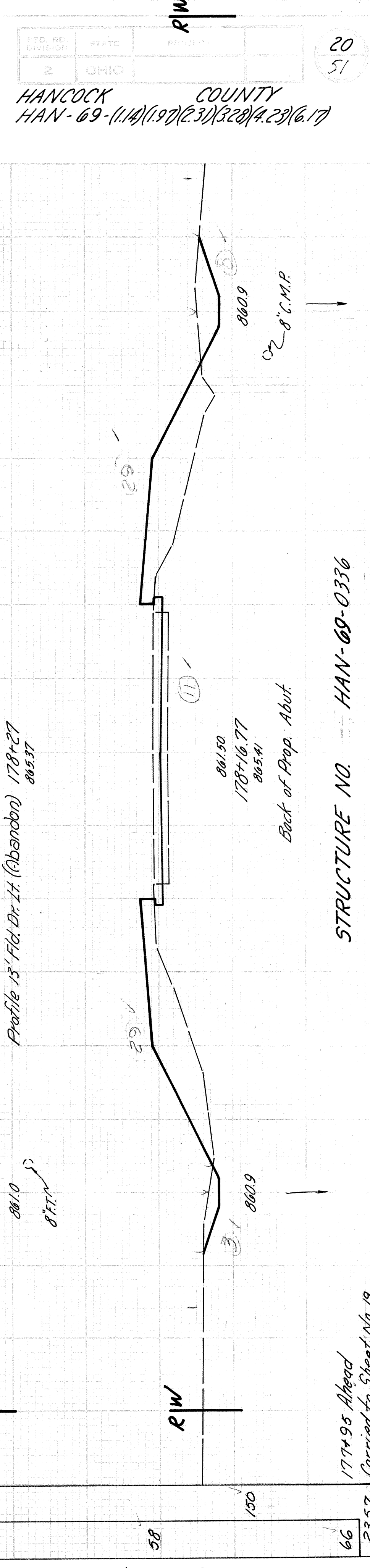
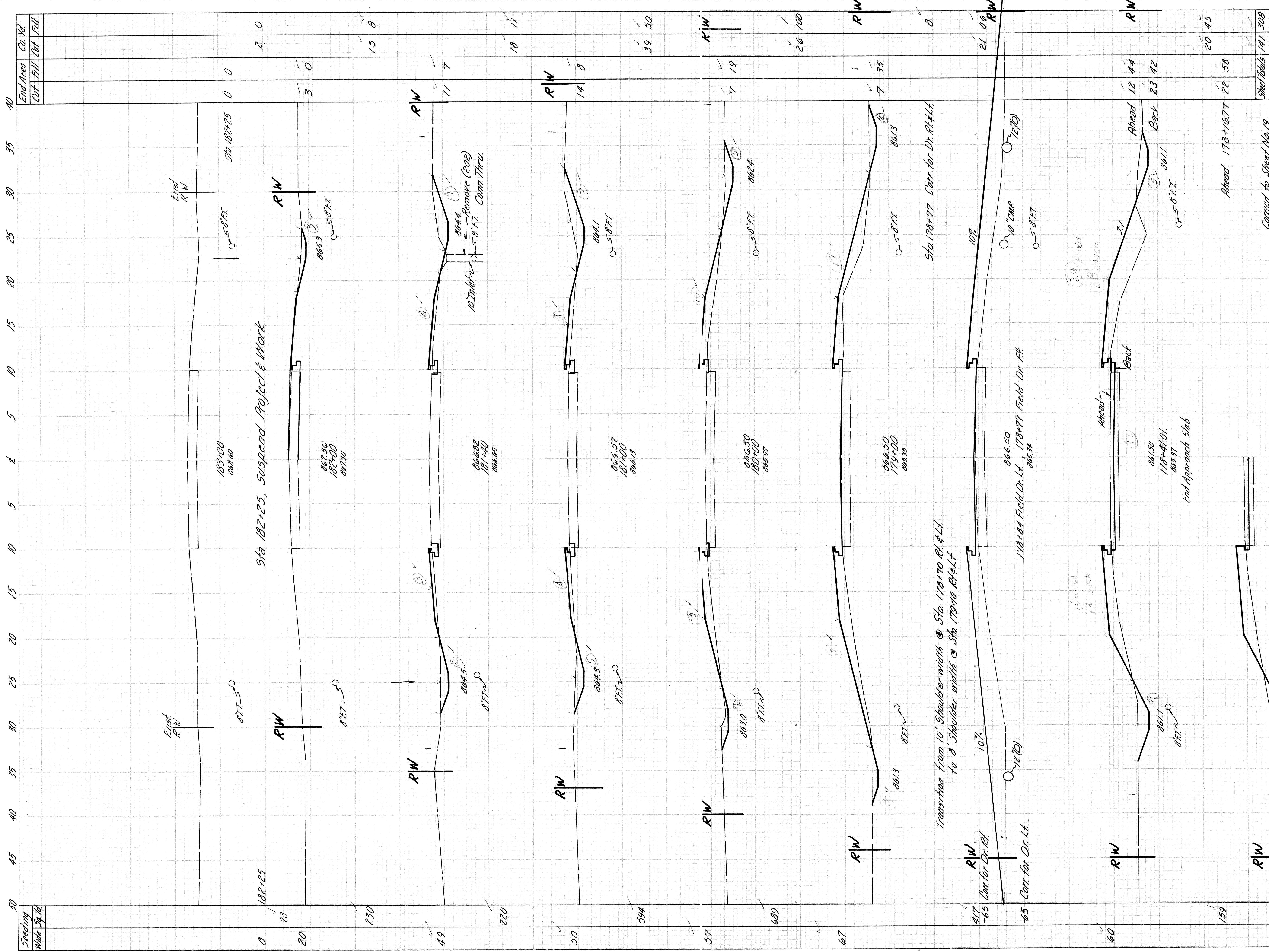
GUARD RAIL "G"					
Ref. No.	Station	Side	606		
			Guard Rail Type 4	Lin. Ft.	Straight
1-G	176+35.6*	Lt.	178+72.96	157.48	
2-G	175+23.04*	Rt.	178+64.54	201.48	
Totals					352.96

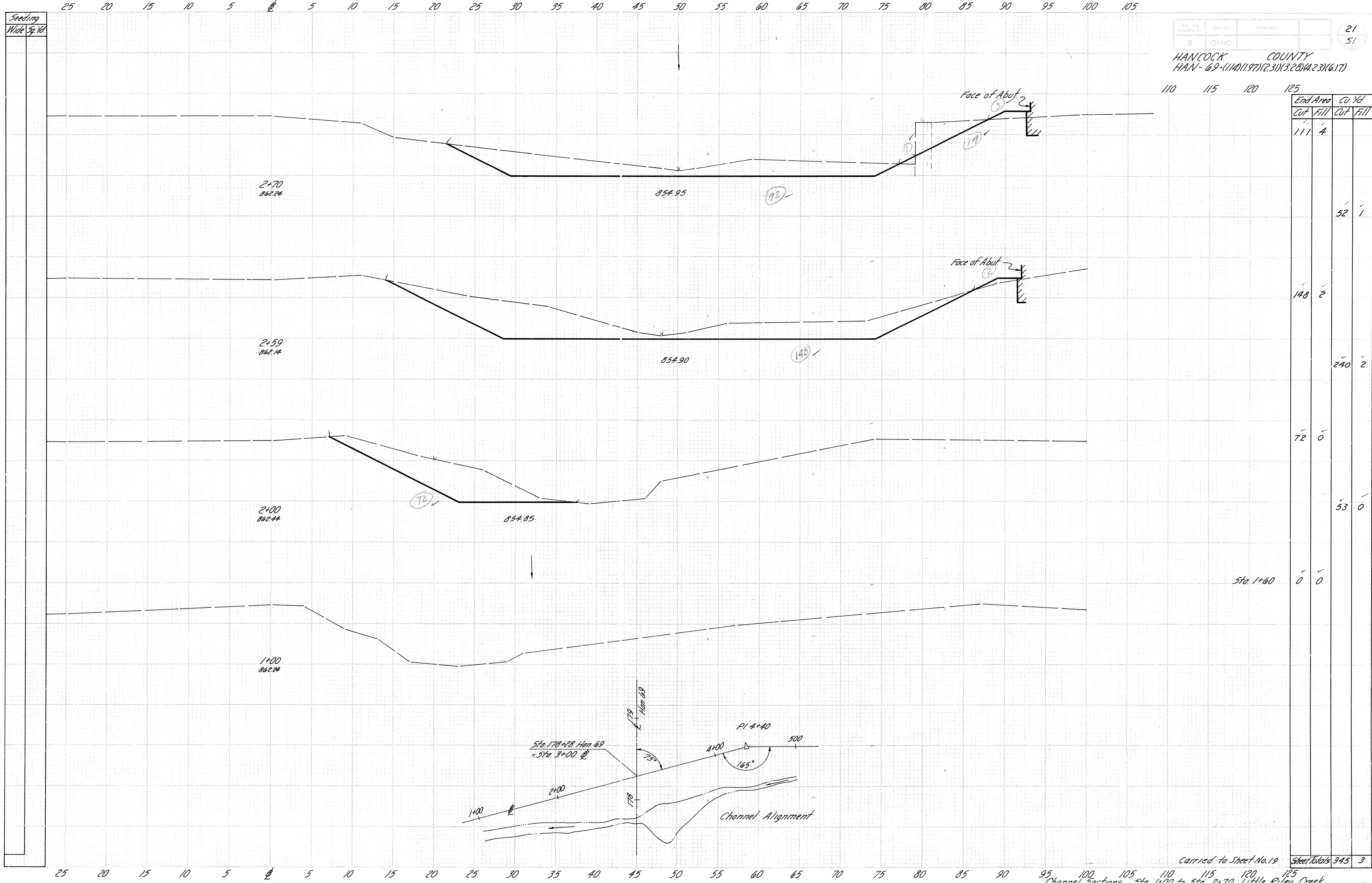
HAN-69-(114)(197)(2.31)(3.28)(4.23)(6.17)

REINFORCING STEEL LIST

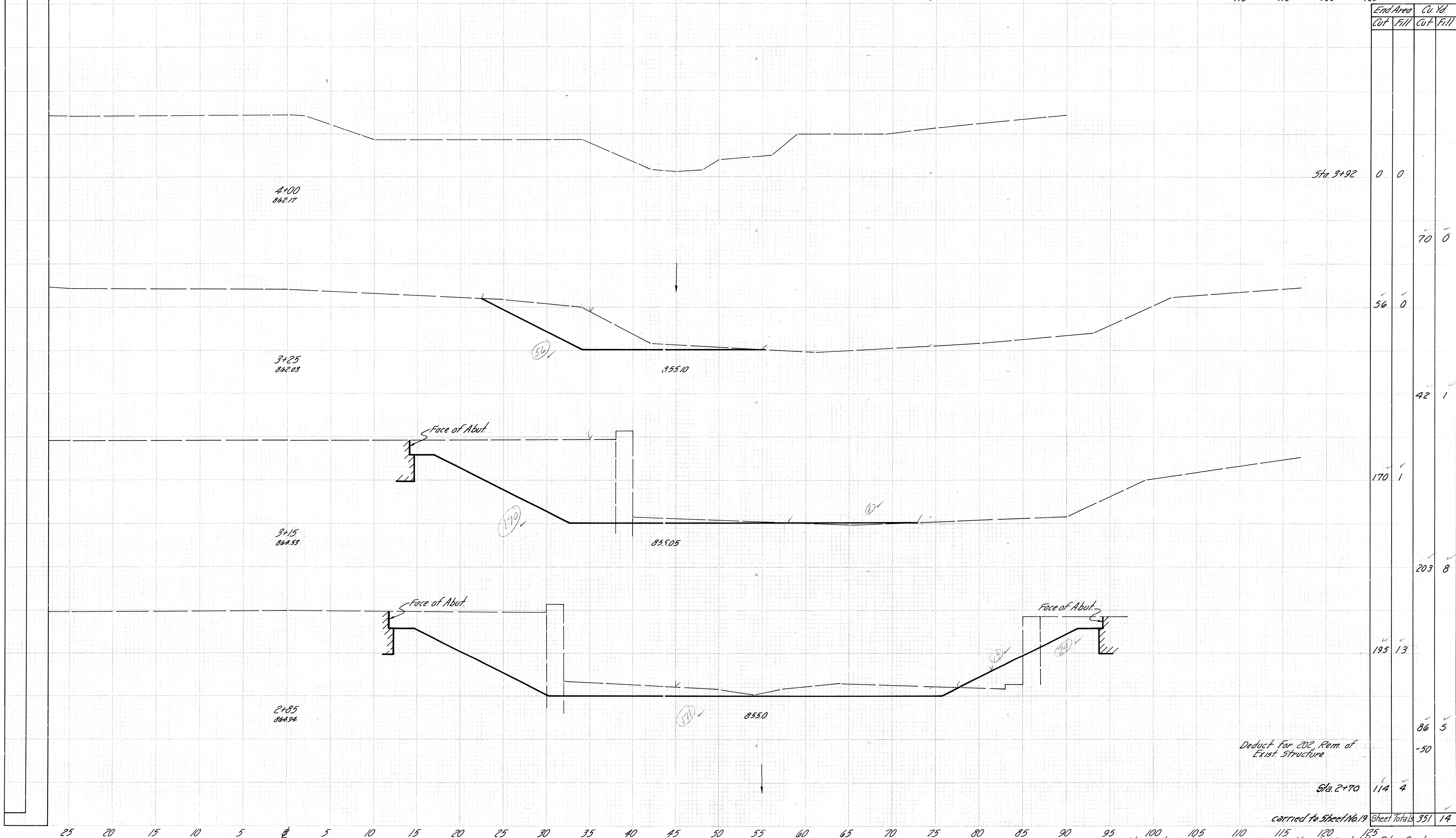
Mark	No.	Length	Weight	Shp.	Bending Diagrams
Abutment					
A501	78	4'-1"	332	B	
A502	96	7'-8"	768	S	
A503	16	27'-10"	464	S	
A504	36	9'-2"	314	S	
A505	4	8'-2"	34	S	
A506	20	7'-2"	149	S	
A507	8	6'-2"	51	S	
A508	16	5'-2"	86	S	
A509	32	6'-2"	206	S	
A510	28	6'-4"	172	B	
A511	4	2'-3"	9	S	
A512	2	14'-0"	29	S	
A513	8	25'-0"	209	S	
A514	4	7'-2"	30	S	
A515	4	3'-8"	15	S	
A516	4	28'-0"	117	S	
A517	12	30'-4"	380	S	
A518	30	6'-10"	214	S	
A519	10	21'-6"	224	S	
A520	20	8'-0"	167	S	
A521	4	5'-0"	21	S	
A522	4	18'-2"	76	S	
Superstructure					
A833	79	26'-2"	5519	B	
B601	50	35'-6"	2666	S	
C501	13	24'-0"	325	S	
Replacement Bars					
RE601	1	6'-6"	-	S	
RE601	1	5'-11"	-	S	
RE501	1	5'-7"	-	S	

MICROFILMED
JUL 15 1986





Seeding
Wide Sp. 14



End Area		Cu Yd	
Cut	Fill	Cut	Fill
0	0	70	0
56	0	42	1
170	1	203	8
195	13	86	5
		-50	
114	4		
Sheet Totals		351	14

ROADWAY DRAINAGE "D"																			
Ref. No.	Station		Side	601 Dugout Rock Channel Protection 18" Thick	660 Saddling	603 Conduit Lin. Ft.						202 Removal of Exist. Struct. Lump	604 Catch Basin (Each)	605 2-2A Each	202 Masonry CY	202 C.B. Removal Each	Bent's Branched Each		
						A													
	From					To		A		E								F	
	Cu. Yd.	Sq. Yd.				8"	12"	6"	10"	12"	8"								
1-D	225+29		Right		32		8"	12"	6"	10"	12"	8"		Lump	Each	CY	Each	Each	
2-D	225+90	226+85	LT.	3	57	8" x 5-11"			22		10				2		1	1	2
3-D	227+00	227+07	LT.																1
4-D	226+94	227+09	RT.	4						18									1
5-D	226+73	227+26	LT.	7			14					10							1
6-D	227+25	227+40	RT.	6									14						1
*1-C	226+93	227+27	RT.	27	38	72								Lump			73		
Totals				47	127	72	38	22	10	18	10	24	Lump	Lump	2	73	1	1	

* See Sheet No. 26 for Details

GUARD RAIL "G"				
Ref. No.	Station		Side	606
				Guard Rail Type 4
	From	To		Lin. Ft. Straight
1-G	225+62.5	227+62.5	LT	200.00
2-G	225+67	230+04.5	RT	437.50
Totals				637.50

SIDE APPROACHES "A"					
Ref. No.	Station	Side	304 Aggr. Base Cu. Yd.	Conduit Type D Lin. Ft.	Remarks
1-A	225+39	LT	*10.3	35	Field Drive
2-A	225+42	RT	*10.3	38	Field Drive
3-A	227+85	LT	*10.3	28	Field Drive
Totals			30.9	28	

* Place 304 Aggregate to 25' length (Back of Radius)

Excavation 358 Cu. yds.
Embankment 471 Cu. yds.

EXISTING STRUCTURE
Span ~ 18'-0"
Type ~ Concrete Slab
Roadway ~ 24'-0"
Skew ~ None
Loading ~ CF 130
Area ~ 109 Sq. Ft.

RESUME
Work & Project
Sta. 223+50

UTILITIES
Hancock - Wood Electric Co-op Inc.
North Baltimore, Ohio

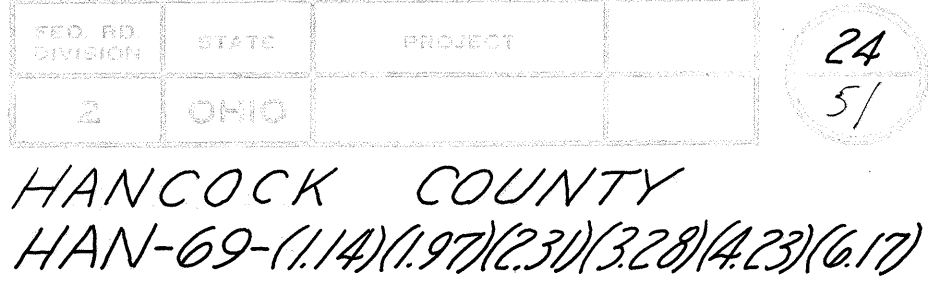
Suspend
Project & Work
Sta. 231+33

Structure No. 1-C
HAN-69-0430 for
details see Sheet No. 26

B.M. - Chisled in N.W. abutment
HAN-69-0430 E.I. = 854.85

Begin Sheet

End Sheet

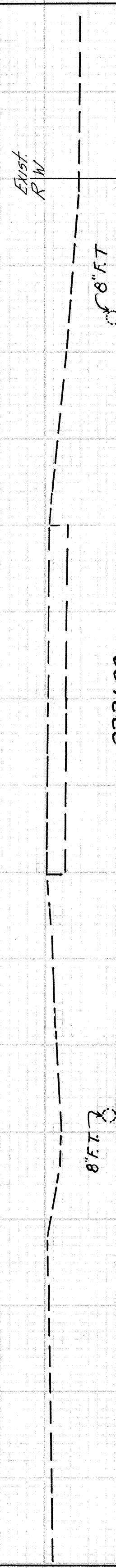


4377	Total Part I
------	--------------

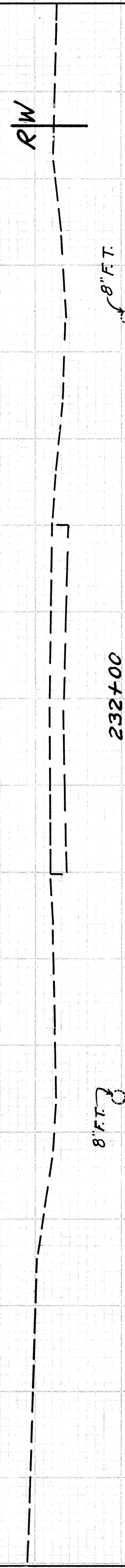
SEEDING
WIDE SPAD

END AREA	C.U.Y.D.	FILL
CUT	FILL	CUT

50 45 40 35 30 25 20 15 10 5 4 5 10 15 20 25 30 35 40 45 50

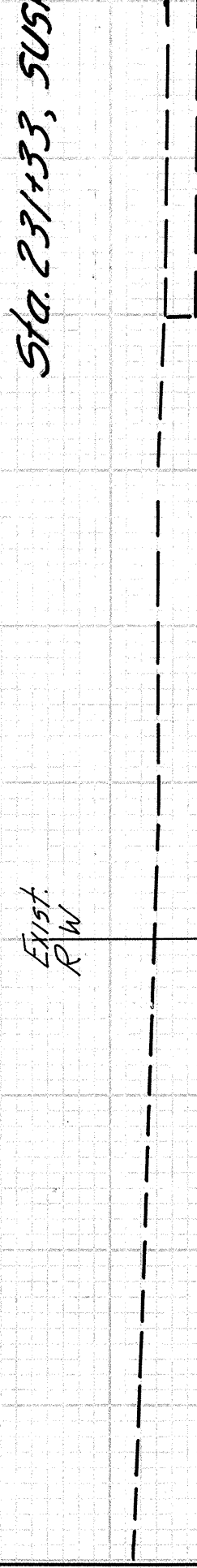


233+00
859.85

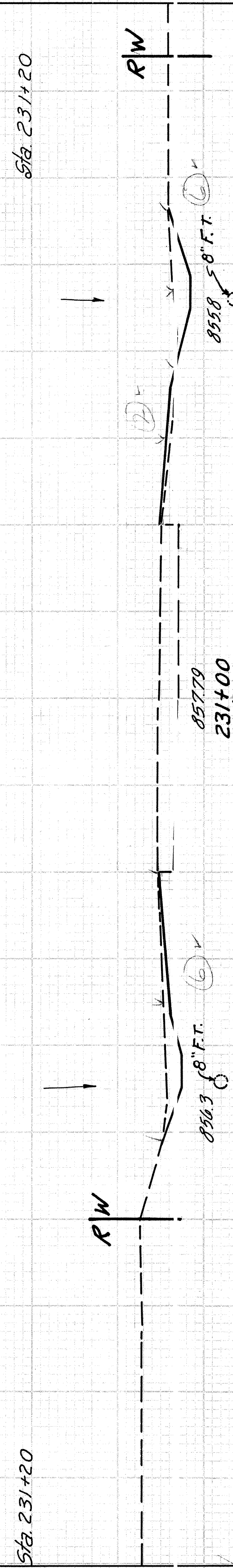


232+00
859.19

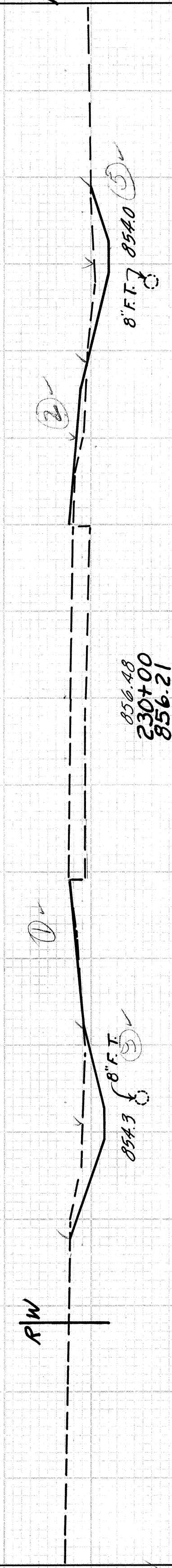
Sta. 231+33, SUSPEND PROT. # WORK



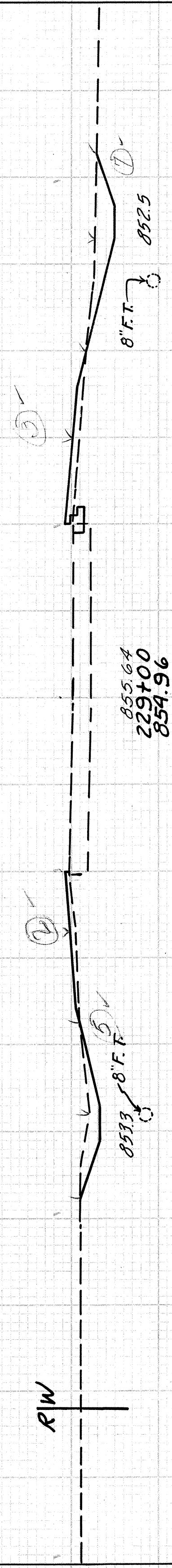
231+33 Drive Left. (Stone)
858.24



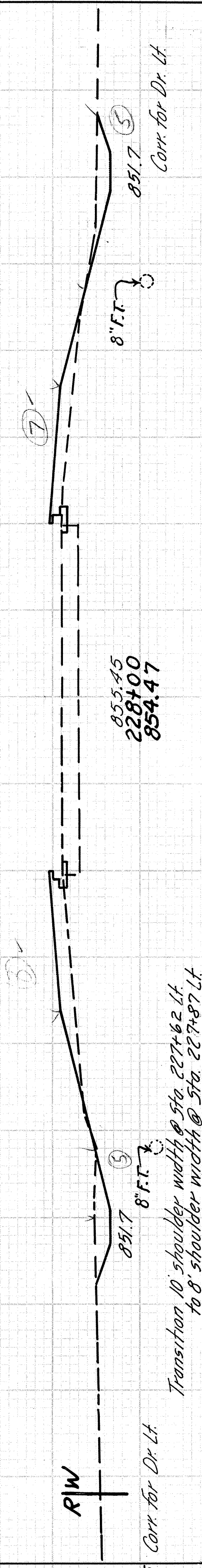
231+00
857.61



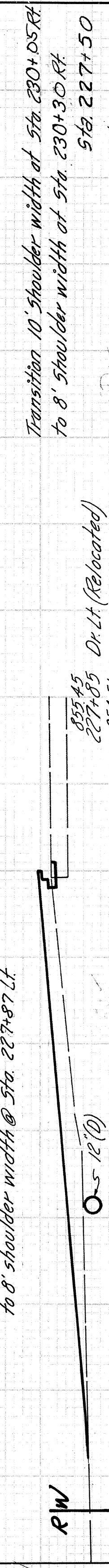
230+00
856.21



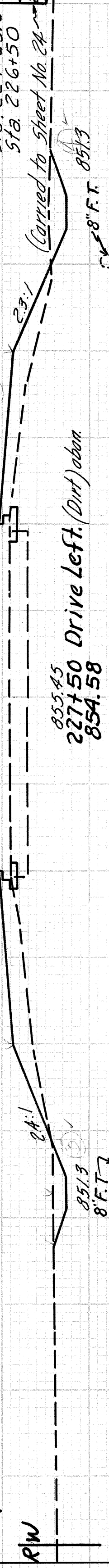
229+00
854.96



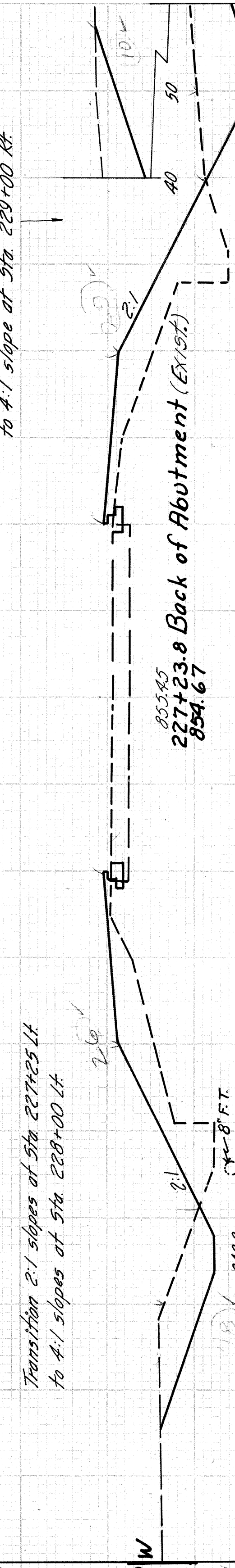
228+00
854.47



227+50
854.51



227+50 Drive Left. (Dirt) abutment
854.58



227+23.8 Back of Abutment (EXIST.)
854.67

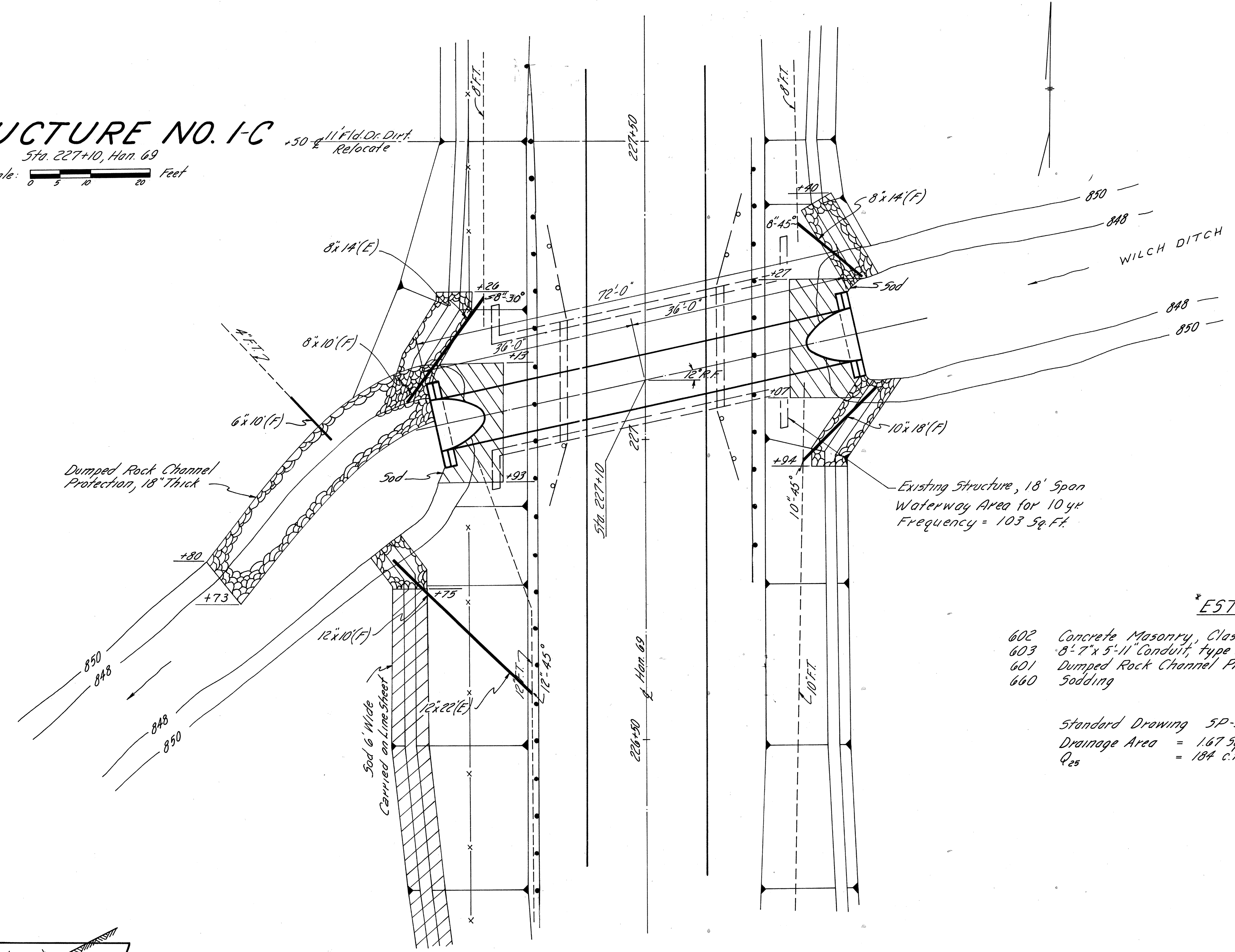


227+50
854.51

Sta. 227+23.8 to Sta. 233+00

STRUCTURE NO. 1-C

Sta. 227+10, Han. 69
 Scale: 0 5 10 20 Feet

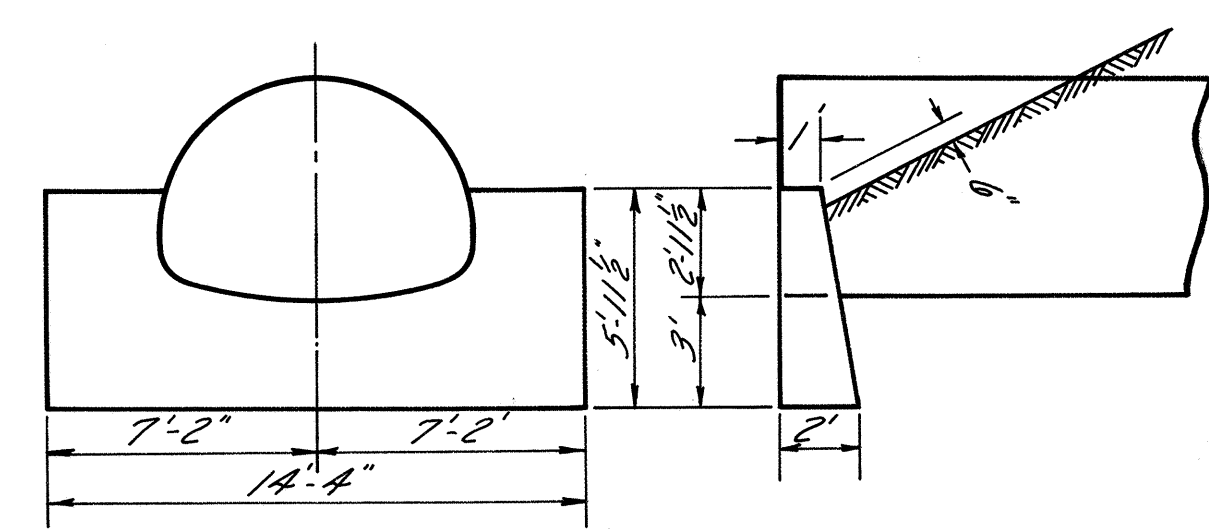


*ESTIMATED QUANTITIES

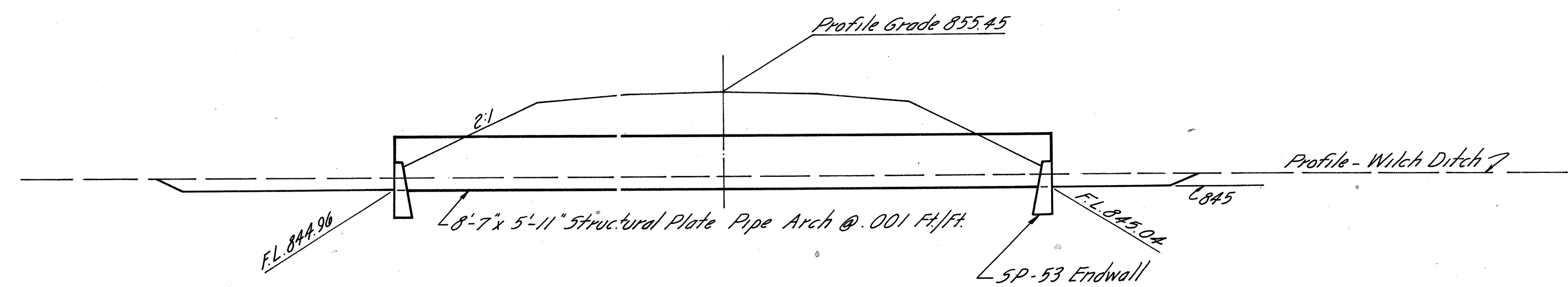
602	Concrete Masonry, Class C	7.30	Cu. Yds.
603	8'-7" x 5'-11" Conduit, type A with Class B Bedding, 707.03, 10-10 Gage	72	Lin. Ft.
601	Dumped Rock Channel Protection	27	Cu. Yds.
660	Sodding	38	Sq. Yds.

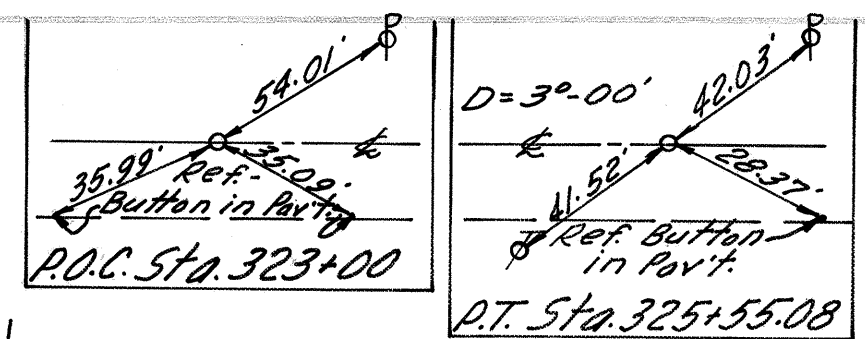
Standard Drawing 5P-53
 Drainage Area = 1.67 Sq. Mi.
 Q₂₅ = 184 C.F.S.

* Quantities Carried to Line Sheet No. 23



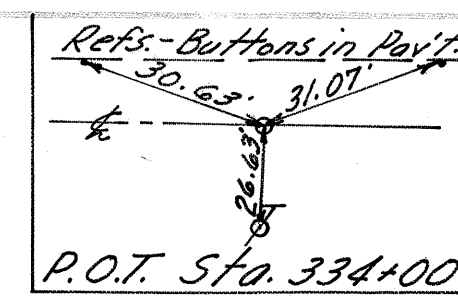
ENDWALL DETAIL





UTILITIES
Hancock-Wood Electric Co-op Inc., North Baltimore, Ohio
Community Telephone Co. Leipsic, Ohio

PROPOSED STRUCTURE
Type ~ Single span reinforced concrete slab with reinf. conc. wall abutments.
Span ~ 22'-0" $\frac{1}{2}$ abutments.
Roadway ~ 36'-0" $\frac{1}{2}$ guardrails.
Load Frequency ~ C.F. = 130 (57).
Skew ~ None
Wearing Surface ~ 1" Monolithic conc.
Approach Slabs ~ A5-1-54 (25' long).
Alignment ~ Tangent.



ROADWAY DRAINAGE "D"

Ref. No.	Station		Side	Dump Rock Chain Prot. 18" Thick	601 660 Sloobing	603 Conduit Lin. Ft.								Bends & Branches
						E				F				
	From	To				Cu. Yd.	Sq. Yd.	6"	8"	10"	24"	6"	10"	
1-D	328+00	328+43	Lt.	5.0	20									
2-D	327+91	328+86	Rt.	16.0		10	38	50	58	10	10	10		6
3-D	328+63	328+77	Lt.	5.0										
Totals				26.0	20	10	38	50	58	10	10	10		

GUARD RAIL "G"

Ref. No.	Station		Side	Guard Rail Type 4	Lim. Ft. Straight
	From	To			
	From	To			
1-G	326+99.37*	327+99.37	Lt	275.5	
2-G	327+05.62*	330+05.62	Rt	275.5	
Totals				551.0	

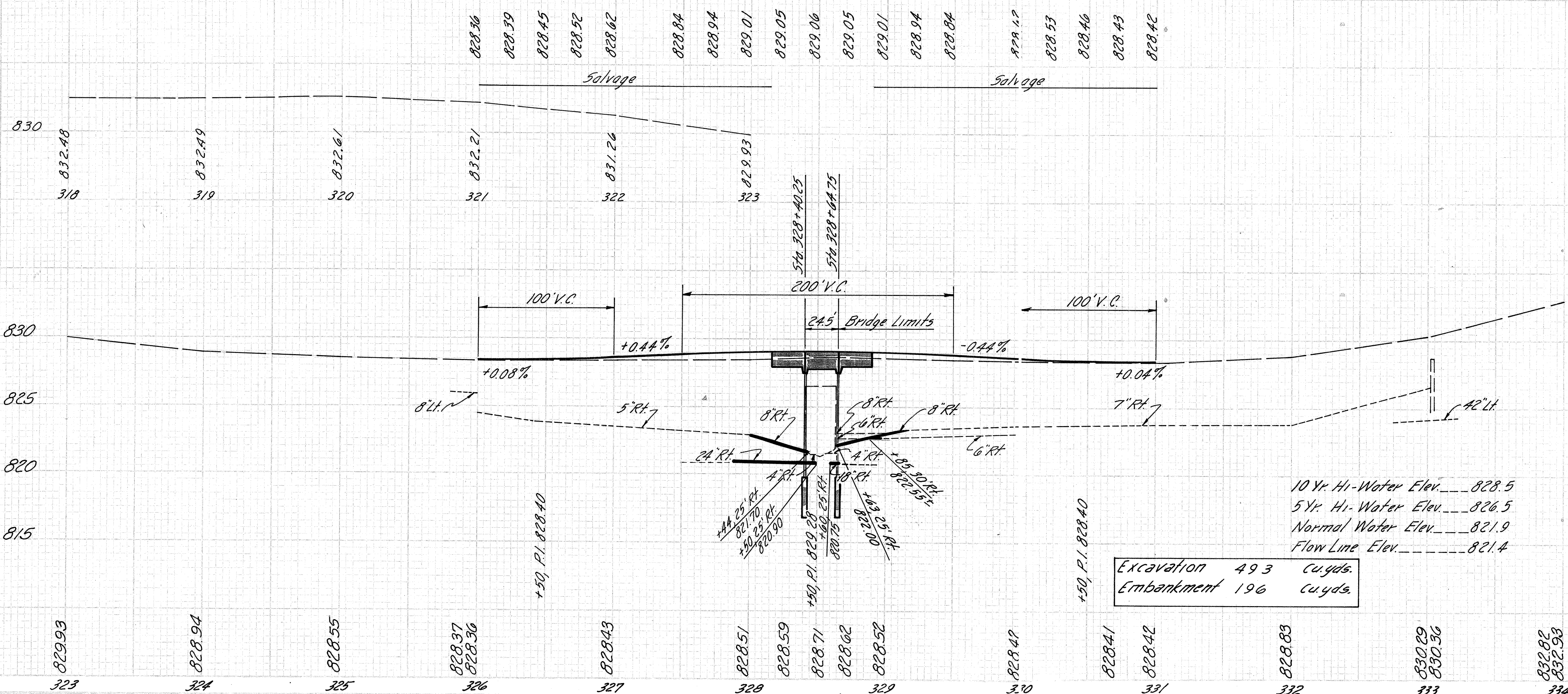
* Deduct 24.5' for Bridge

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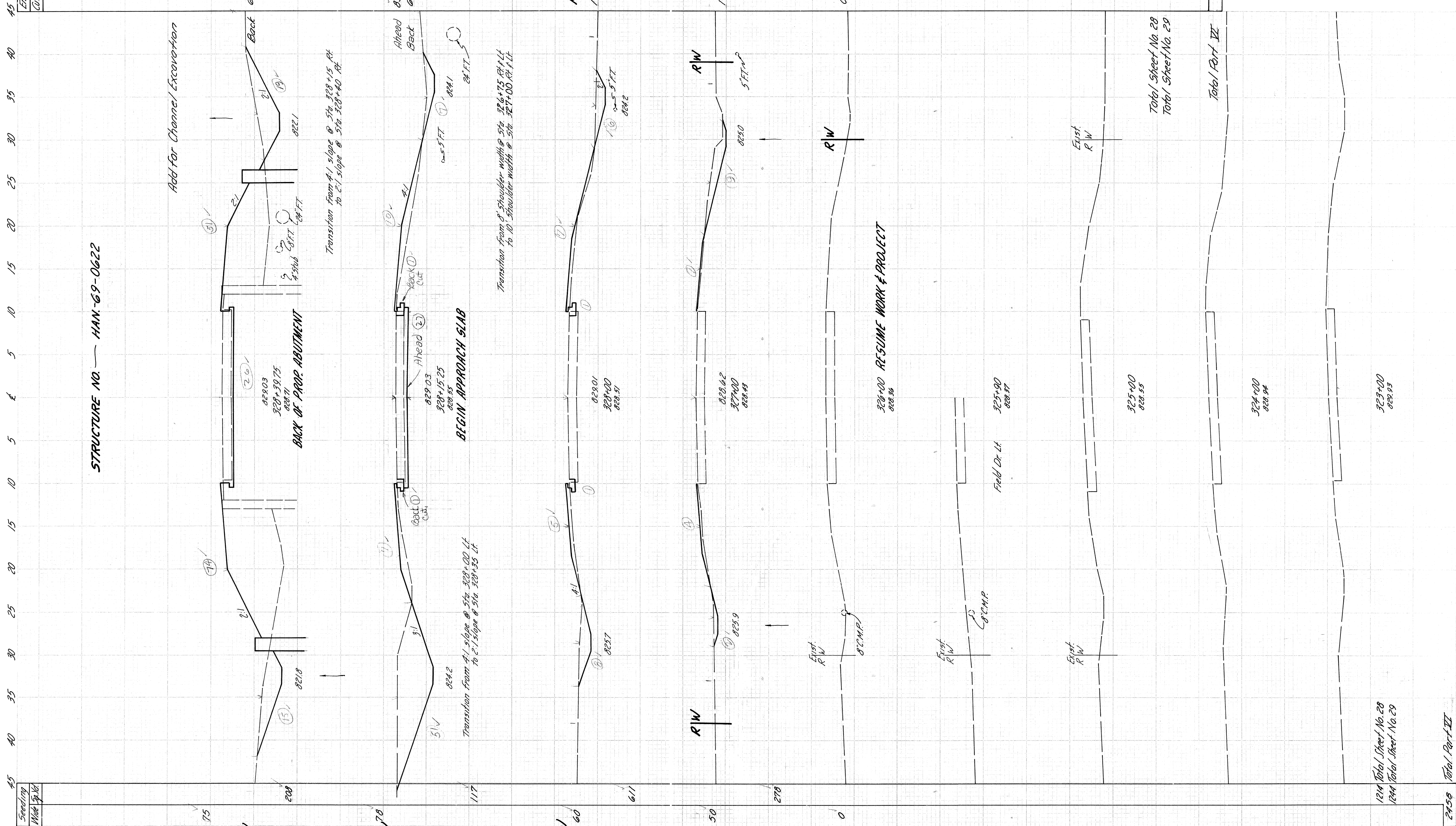
B.M. No. 1 Spike in ϕ 39" Rt.
Sta. 323+45 Elev. 828.64

B.M. Chiseled Square on top of
North Post of E. Banister
HAN-69-0622 Elev. 831.93

B.M. No. 2 Chiseled "X" End Wall, 60' Lt.
Sta. 332+75 Elev. 828.60



Excavation 493 Cu. yds.
Embankment 196 Cu. yds.



STRUCTURE NO. — HAN-69-0622

Add for Channel Excavation

BACK OF PROP. ABUTMENT

BEGIN APPROACH SLAB

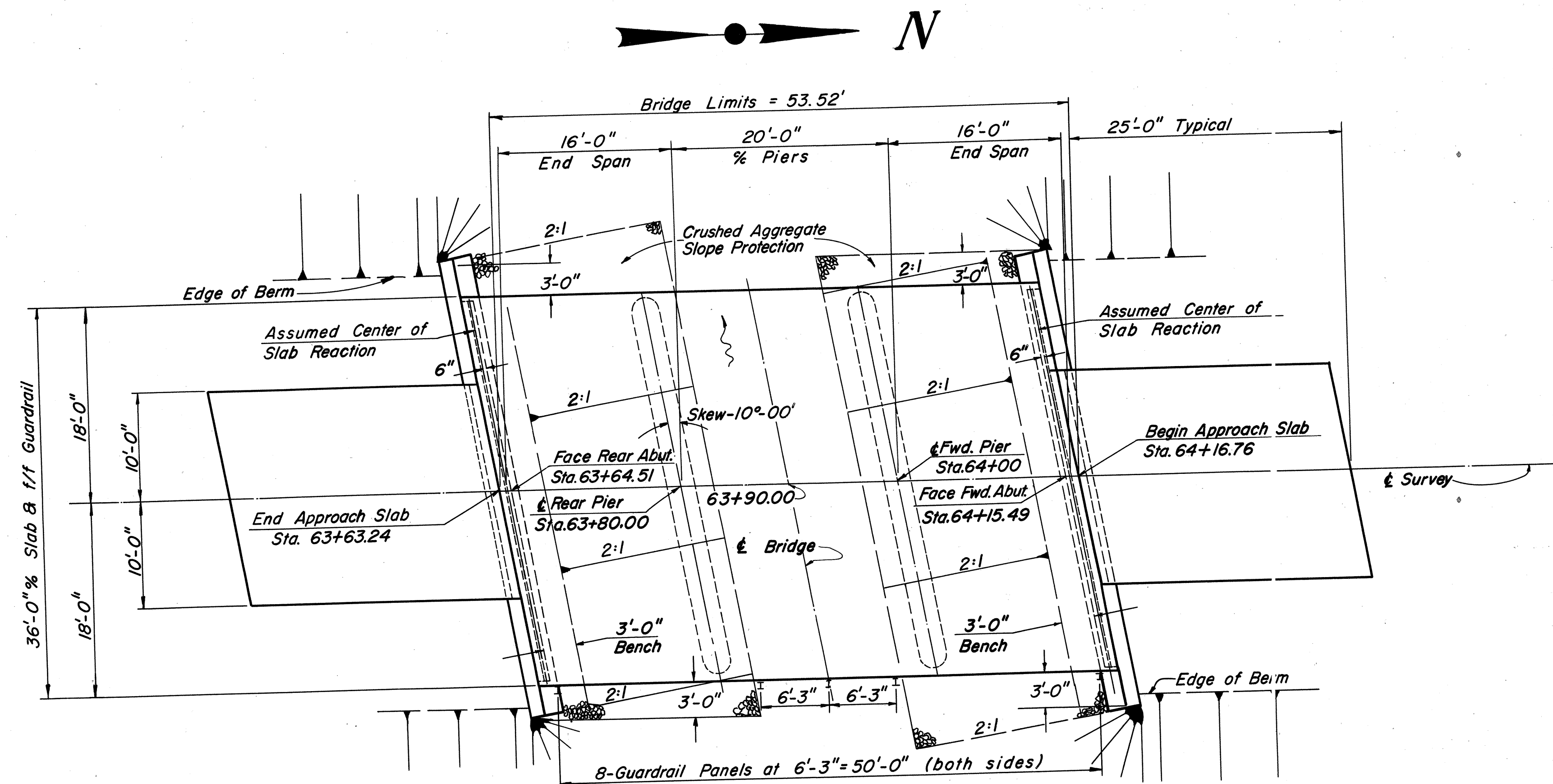
RESUME WORK & PROJECT

Sta. 323+00 to Sta. 328+52.6

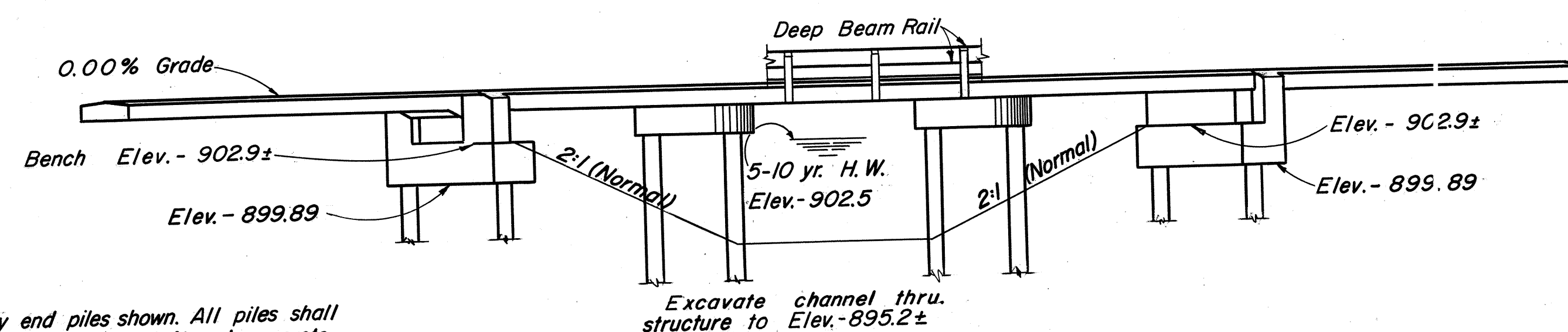
End Area	Cu. Yd.
Cut	Fill
60	125
66	64
21	8
50	31
11	5
0	0
357	112
136	84
493	196

1214 Total Sheet No. 28
1244 Total Sheet No. 29

Total Part III



GENERAL PLAN



Note: Only end piles shown. All piles shall be 14" cast-in-place reinforced concrete.

ELEVATION

ESTIMATED QUANTITIES									
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	PIERS	ABUTS	GEN'L	AS BUILT	
202	Lump	Sum	Existing structure removed				Lump		
503	71	Cu. Yds.	Unclassified excavation			71			
505	Lump	Sum	First test pile				Lump		
507	480	Lin. Ft.	14" Cast-in-place reinforced concrete piles		240	240		8-59	421
509	24,770	Lbs.	Reinforcing steel	16,234	3,689	4,847			
511	87	Cu. Yds.	Class C concrete, superstructure and pier caps	74	13				
511	43	Cu. Yds.	Class E concrete, abutments			43			
517	107.04	Lin. Ft.	Railing (Two deep beam rails with steel posts and bolts)	107.04					
518	15	Cu. Yds.	Porous backfill			15			
601	197	Sq. Yds.	Crushed aggregate slope protection				197		
808	87	Units	Water-reducing, set-retarding admixture	74	13			8-87	
825	230	Sq. Yds.	Concrete surface treatment	230					

GENERAL NOTES

REFERENCE shall be made to Standard Drawings A-1-54 and P-1-54, both revised 11-8-65, CS-1-65 dated 6-1-65, and to Supplemental Specifications 808 dated 1-13-67 & 825 dated 1-1-67.

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.

Reinforcing Steel-ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.

REMOVAL OF EXISTING STRUCTURE:

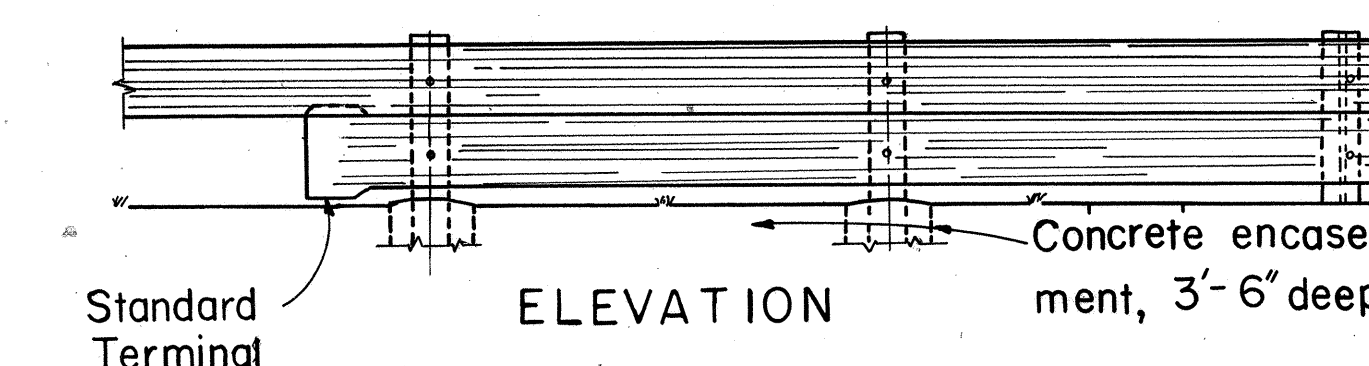
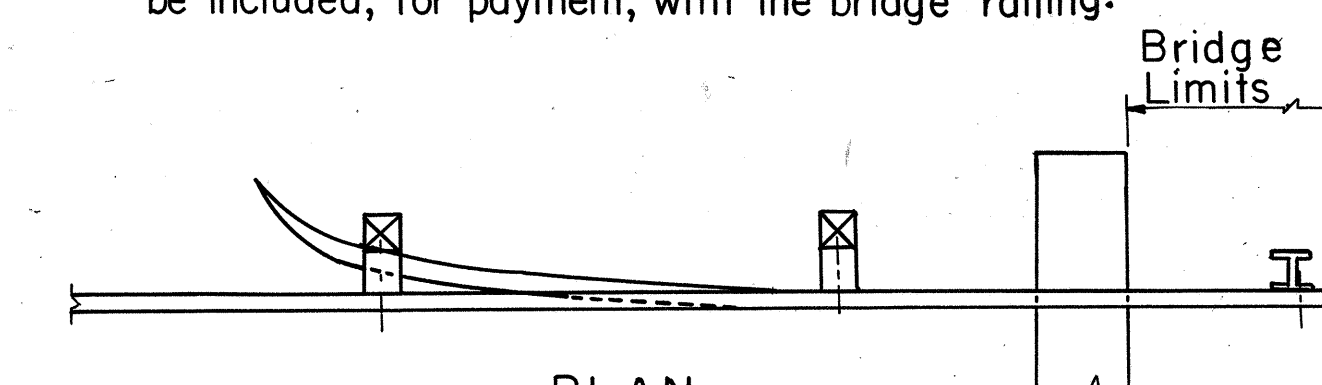
When no longer needed to maintain traffic the existing structure shall be removed.

EXCAVATION QUANTITY for the abutments in addition to that outlined in Section 503.10 includes the removal of material bounded by the proposed bench, by the front vert. plane described in Sec. 503.10 and by the finished slope of the cut.

PILES shall be driven to a maximum bearing capacity of 18 tons per pile for the abutments and 23 tons per pile for the piers.

PIER PILE ENCASEMENT as shown on Standard Drawing No. P-1-54 may be omitted provided the tapered portion, if any, of all pier piles does not extend above the stream bed or the proposed surface of the ground. If the tapered portion of any pile extends above these limitations, the encasement will be required for all the pier piles. If the encasement is omitted the pile casings shall have a thickness of metal not less than No. 7 ga. and the painting of the piles shall extend to low water elevation or, if the proposed surface of the ground is above low water, the painting shall extend to at least one foot below the proposed surface of the ground.

That portion of the lower guard rail that projects outside the bridge limits shall be included, for payment, with the bridge railing.



TWO DEEP BEAM RAILING

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

GENERAL PLAN & ELEVATION
GENERAL NOTES & ESTIMATED
QUANTITIES

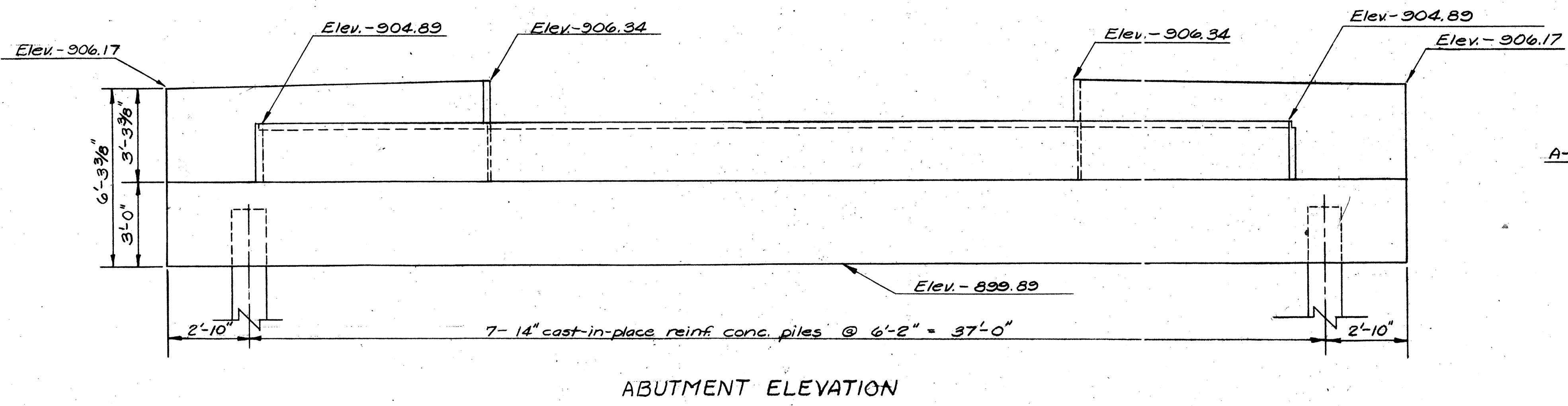
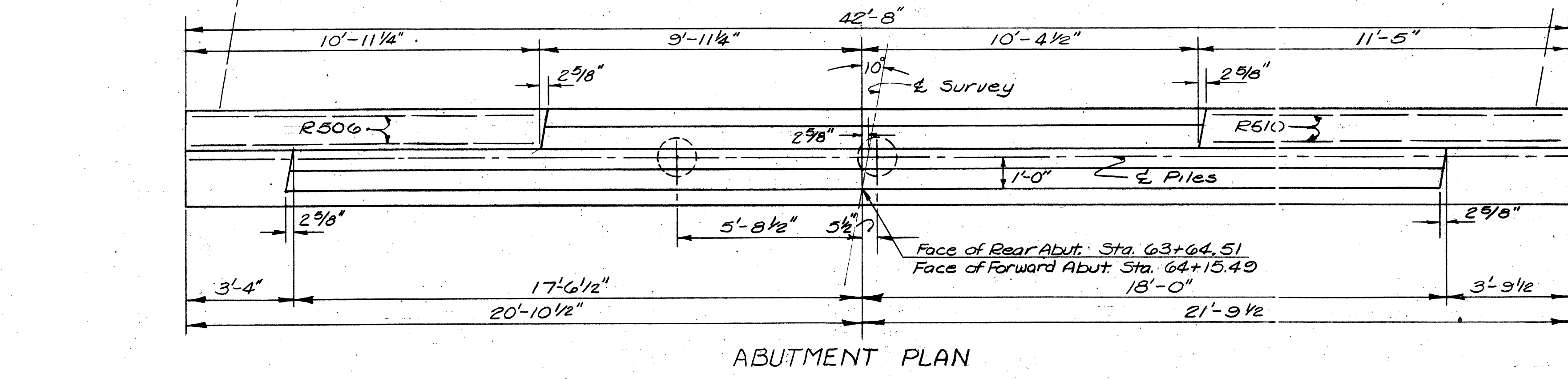
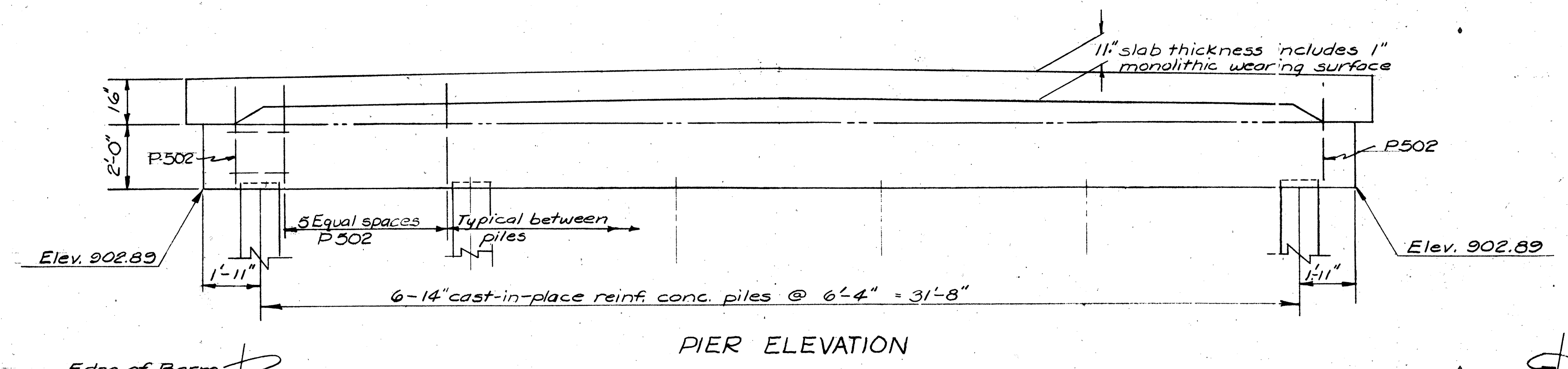
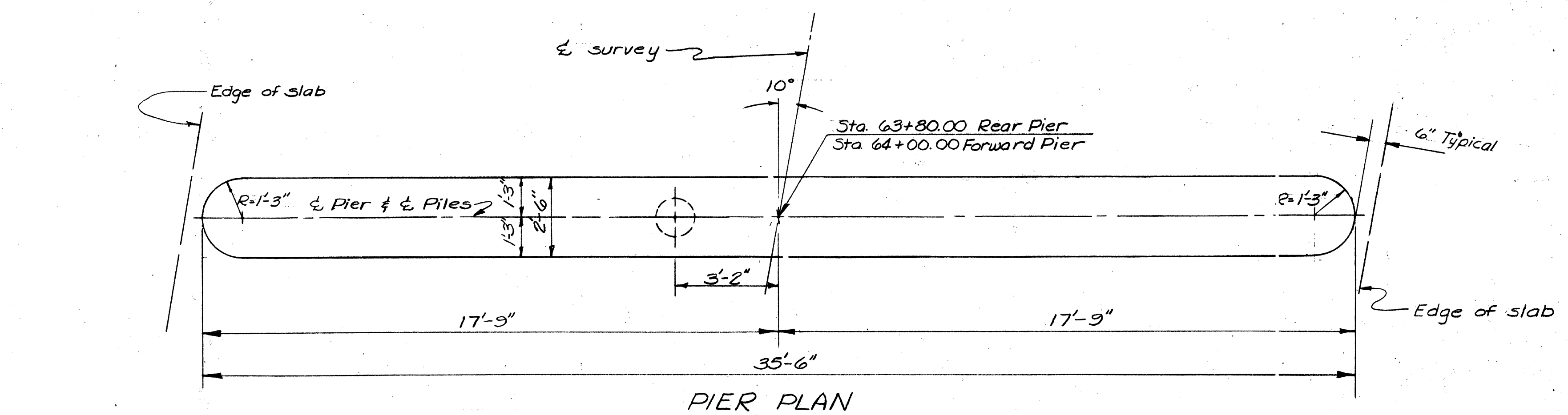
BRIDGE NO. HAN-69-0121
Over Binkley Creek

STA. 63+63.24 To 64+16.76

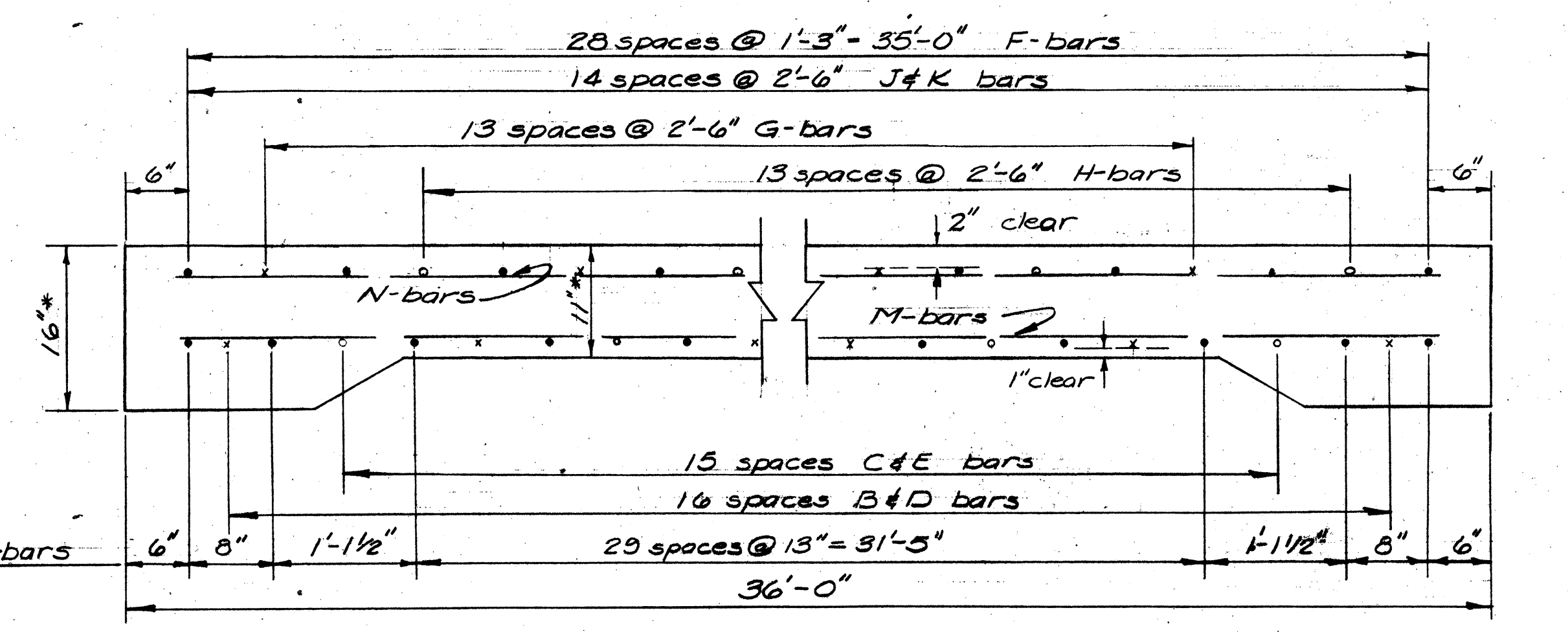
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
B.W.E.	E.P.M.	E.P.M.	FFE	BFG	1-31-67	

REV 4-16-70 G.F.J.

HAN-63-(1.14)(1.97)(2.31)(3.28)(4.23)(6.17)



REINFORCING STEEL LIST									
Superstructure					Abutments				
Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp
A720	102	19'-3"	4013	S	R1001	16	19'-2"	1320	S
B720	34	15'-3"	1060	B	R801	16	22'-5"	958	S
C720	32	13'-8"	894	B	R501	16	22'-0"	367	S
D720	17	15'-6"	539	S	R502	136	6'-7"	934	B
E720	16	11'-0"	360	S	R503	8	18'-4"	153	S
F820	58	14'-10"	2297	S	R504	24	5'-4"	134	S
G820	28	9'-4"	698	S	R505	28	7'-11"	231	B
H820	28	8'-4"	623	S	R506	4	10'-7"	44	S
J601	30	11'-5"	514	S	R507	16	5'-0"	83	S
K601	15	9'-2"	207	S	R508	24	6'-8"	167	B
M601	52	36'-0"	2812	S	R509	24	8'-5"	211	B
N601	41	36'-0"	2217	S	R510	4	10'-10"	45	S
Piers					Replacement bars				
P1001	8	36'-0"	1239	S	RE1001	1	7'-2"	—	S
P901	8	33'-0"	898	S	RE901	1	6'-10"	—	S
P701	72	4'-0"	589	S	RE801	1	6'-6"	—	S
P501	4	33'-0"	138	S	RE701	1	6'-2"	—	S
P502	64	9'-0"	601	B	RE601	1	5'-11"	—	S
P503	8	6'-4"	53	B	RE501	1	5'-7"	—	S
P401	48	5'-4"	171	B	RE401	1	5'-4"	—	B

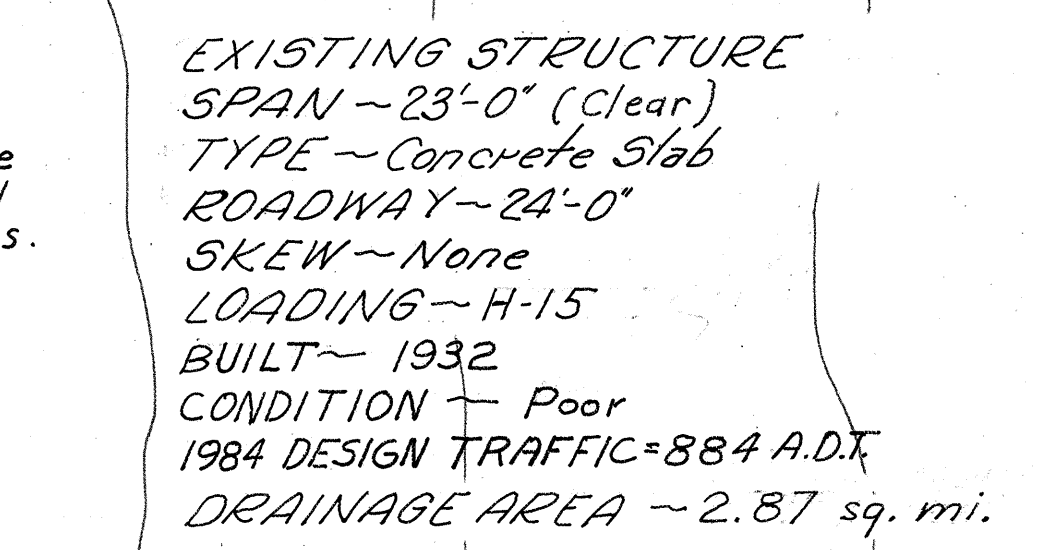


* Note: The 16" & 11" dimensions shown include a 1" monolithic wearing surface.

For complete details refer to Standard Drawing C5-1-65 Sections B-B, C-C, & D-D

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES						
ABUTMENT and PIER DETAILS, SECTION & REINFORCING STEEL LIST						
BRIDGE No. HAN-63-0121 over Binkley Creek						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
B/E	B/E		FFE	B/E	1-31-67	

5.5 ± Miles south of Mt. Cory



PROPOSED STRUCTURE

TYPE: Single span reinforced concrete slab with reinforced concrete wall abutments
SPANS: 20'-0" face to face of abutments
ROADWAY: 36'-0" F/F guard rail
LOAD FREQUENCY: C/F=130 (57)
SKEW: 18° R.F.
WEARING SURFACE: 1" monolithic concrete
APPROACH SLABS: AS-1-54 (25' long)
ALIGNMENT: tangent

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

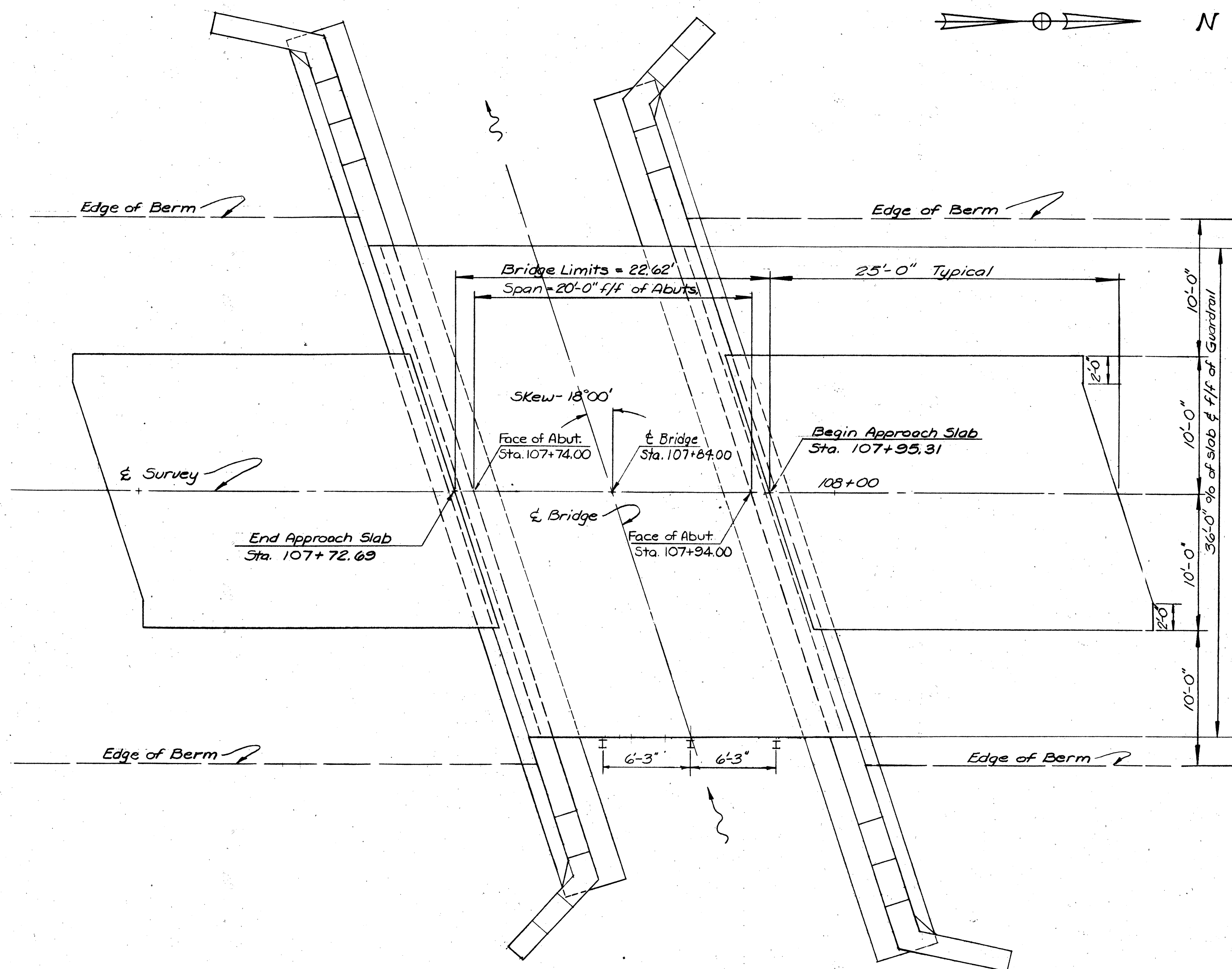
BRIDGE NO. HAN-69-0204
OVER CUMMINS DITCH
HANCOCK CO SR-69

SEC.	STA. 107+72.69
SCALE 1" = 20'	107+95.31

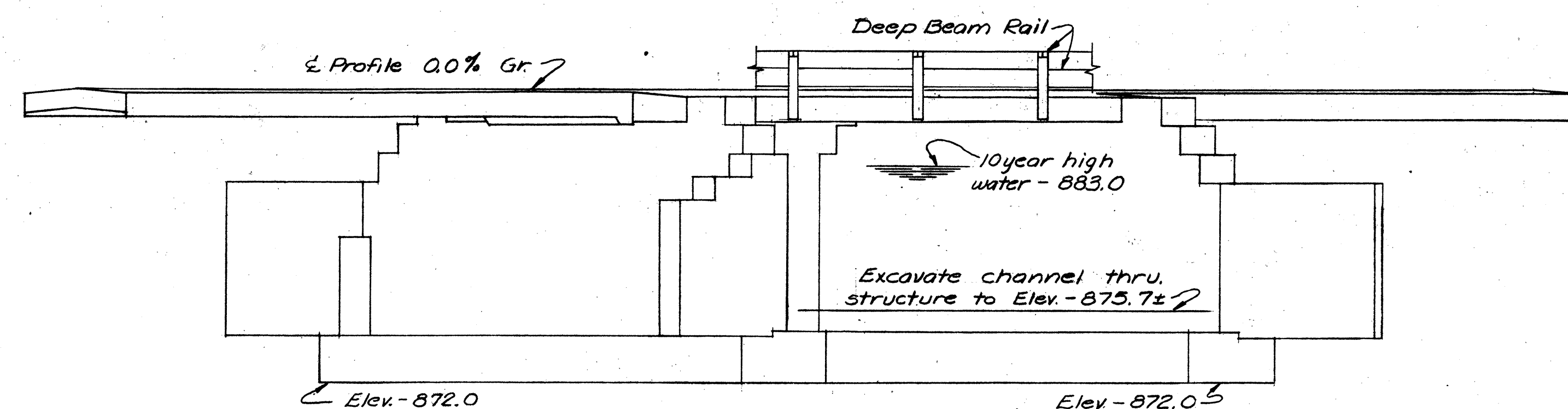
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		D.H.S.	D.H.S.	R.E.J.	P. E. S.

BFG 6-6-67 R.M.M.

01448



GENERAL PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings SB-1-64, sheets 1 and 2, revised 11-8-65 and to Supplemental Specifications 808 dated 1-13-67 and 825 dated 1-1-67.

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.

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.

For two deep beam railing see sheet 31

DESIGN DATA: (Cont.)
Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed.

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

FOUNDATION BEARING PRESSURE: Footings are designed for a maximum bearing pressure of 4.0 tons per sq. ft.

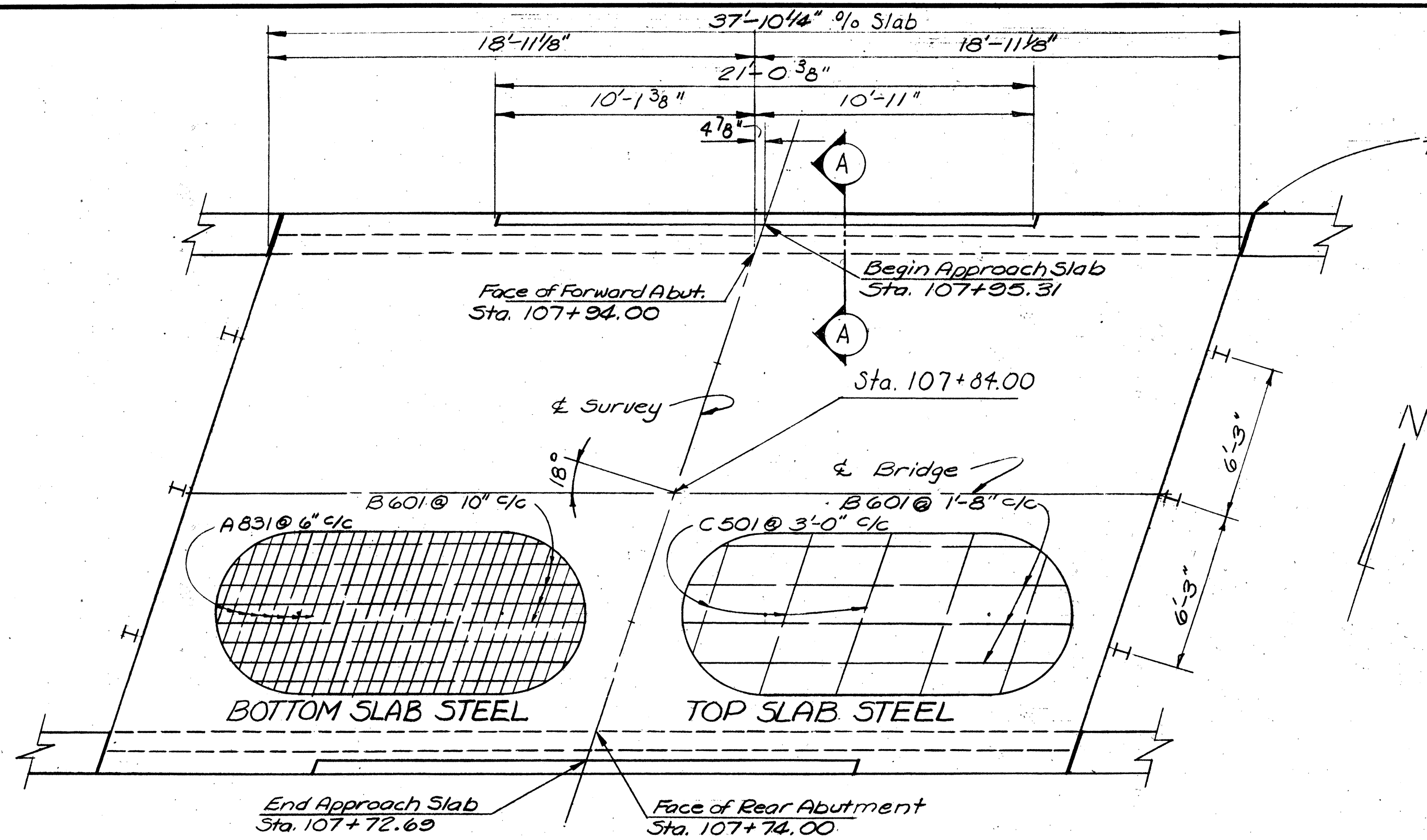
ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super	Abuts.	Gen'l.	As Built
202	Lump	Sum	Existing structure removed			Lump	
503	Lump	Sum	Cofferdams, Cribbs and Sheeting			Lump	
503	15.5	Cu. Yds.	Unclassified excavation, including rock		15.5		
509	12,864	Lbs.	Reinforcing steel	7725	5139		
511	38	Cu. Yds.	Class C concrete, super-structure	38			
511	105	Cu. Yds.	Class E concrete, abutments above footings		105		
511	58	Cu. Yds.	Class E concrete, footings		58		
516	11	Sq. ft.	1/2" Preformed expansion joint filler, AASHTO M-153			11	
517	45.24	Lin. ft.	Railing, (Two deep beam rails with steel posts and bolts)	45.24			
518	69	Cu. Yds.	Porous backfill			69	
808	38	Units	Water-reducing, set-retarding admixture	38			38
825	100	Sq. Yds.	Concrete surface treatment	100			

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STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES						
GENERAL PLAN & ELEVATION, NOTES, & ESTIMATED QUANTITIES						
BRIDGE No. HAN-69-0204 over CUMMINS DITCH						
DESIGNED B.W.	DRAWN B.W.	TRACED N.R.B.	CHECKED J.N.E.S. 5-25-67	REVIEWED B.F.G.	DATE 6-6-67	REVISED

REV 4-16-70 G.F.J.



SUPERSTRUCTURE DETAILS

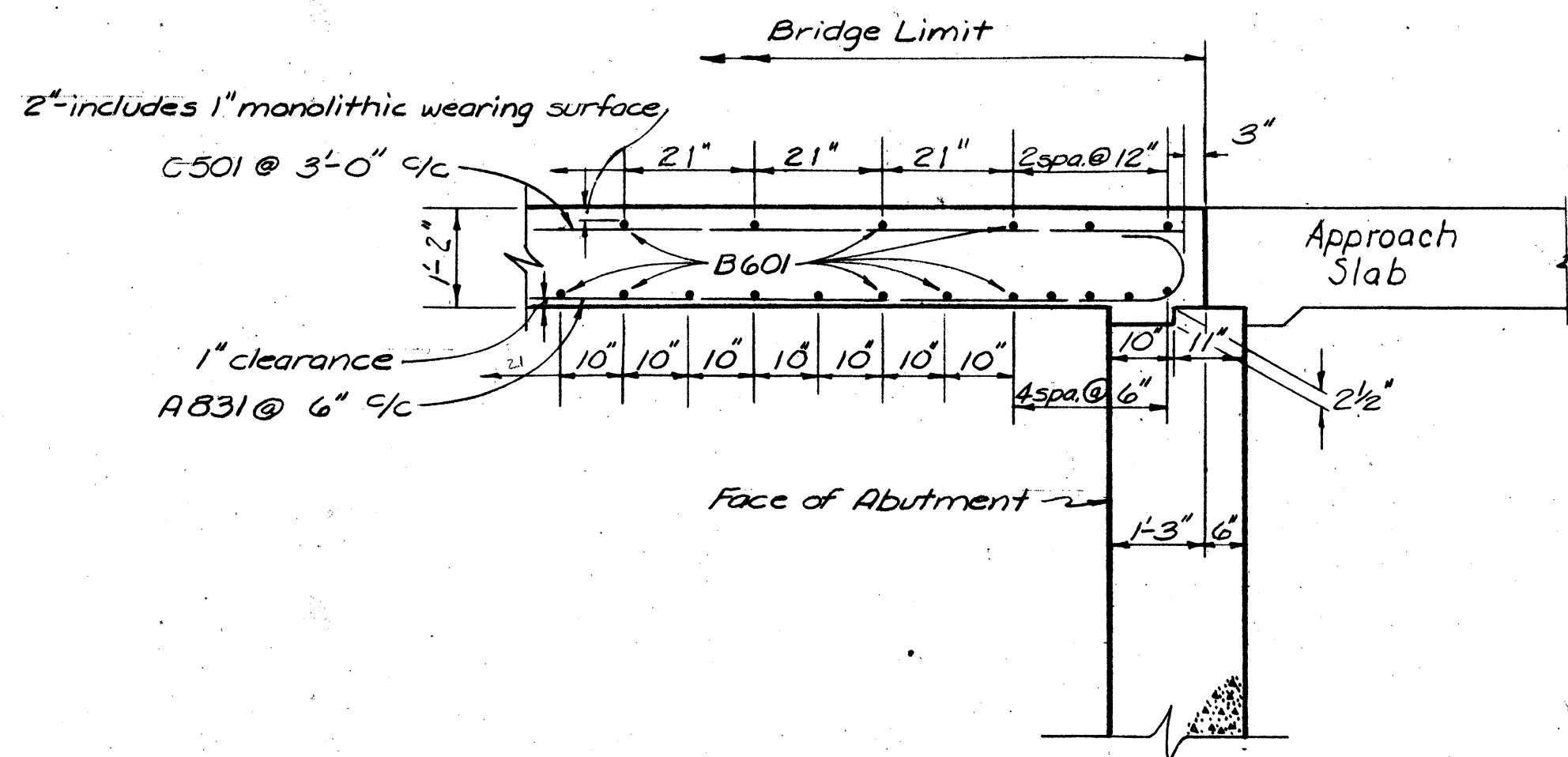
Longitudinal bars are spaced parallel to the face of abutment.

REINFORCING STEEL LIST					Bending Diagram					REINFORCING STEEL LIST				
Mark	No.	Length	Weight	Shp.						Mark	No.	Length	Weight	Shp.
Superstructure										Abutments (Cont.)				
A831	76	24'-2"	4904	B						D513	4	5'-9"	24	S
B601	45	37'-4"	2523	S						D514	16	8'-2"	136	B
C501	13	22'-0"	298	S						D515	30	9'-1"	284	B
Abutments										D516	24	8'-4"	209	B
D601	34	10'-6"	536	B						D517	16	7'-5"	124	S
D602	4	12'-0"	72	B						D518	4	8'-11"	37	S
D603	50	4'-10"	363	B						D519	4	7'-9"	32	S
										D520	8	6'-7"	55	S
D501	58	10'-4"	625	S						D521	2	6'-5"	13	B
D502	8	4'-9"	40	S						D522	2	2'-10"	6	B
D503	16	11'-10"	198	S						D523	2	3'-0"	8	B
D504	16	6'-3"	104	S						Replacement bars				
D505	4	5'-2"	22	S						RE801	1	6'-6"	—	S
D506	50	10'-8"	561	S						RE601	1	5'-11"	—	S
D507	6	8'-10"	55	S						RE501	1	5'-7"	—	S
D508	6	3'-1"	19	S										
D509	4	26'-11"	112	S										
D510	4	30'-10"	129	S										
D511	4	30'-1"	126	S										
D512	36	33'-3"	1249	S										

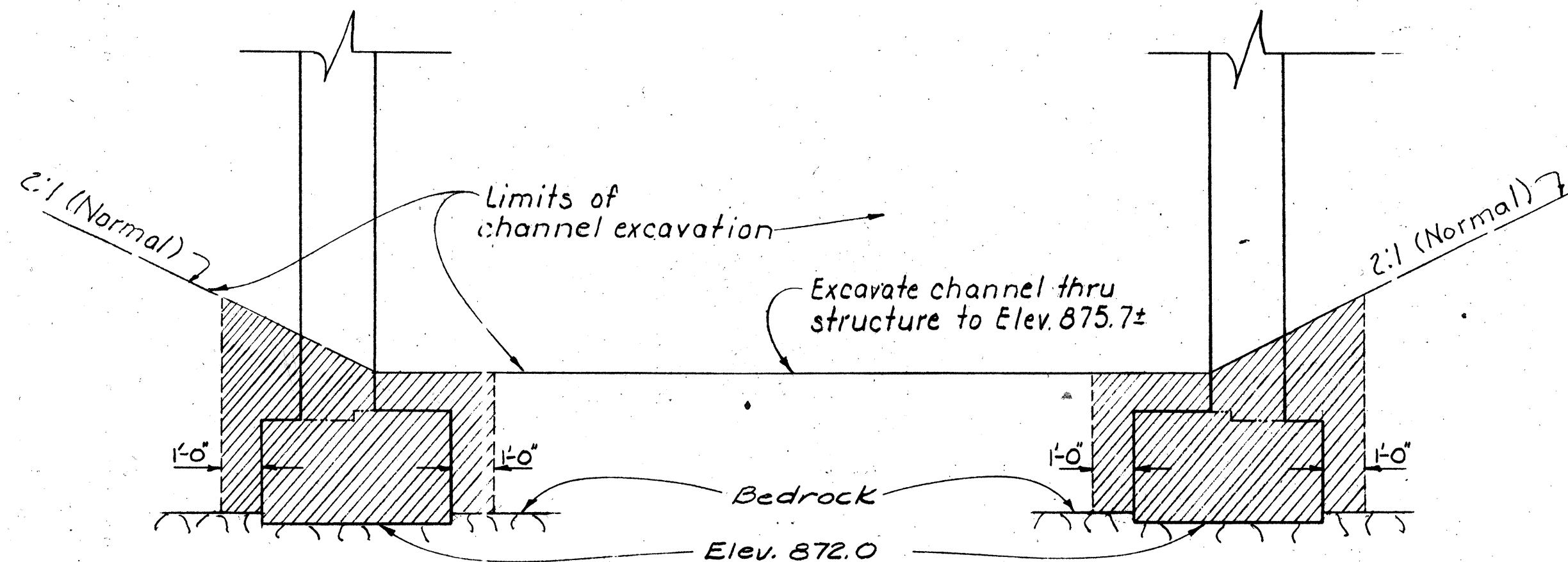
BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

* SPECIAL NOTE :

EXCAVATION QUANTITY includes the removal of material described by the shaded area shown in Detail-A, for the full length of the abutment. The quantity shall be measured as a solid bounded on the bottom and sides by the planes described in Sec. 503.10 and bounded on the top by the limits of channel excavation.



SECTION A-A

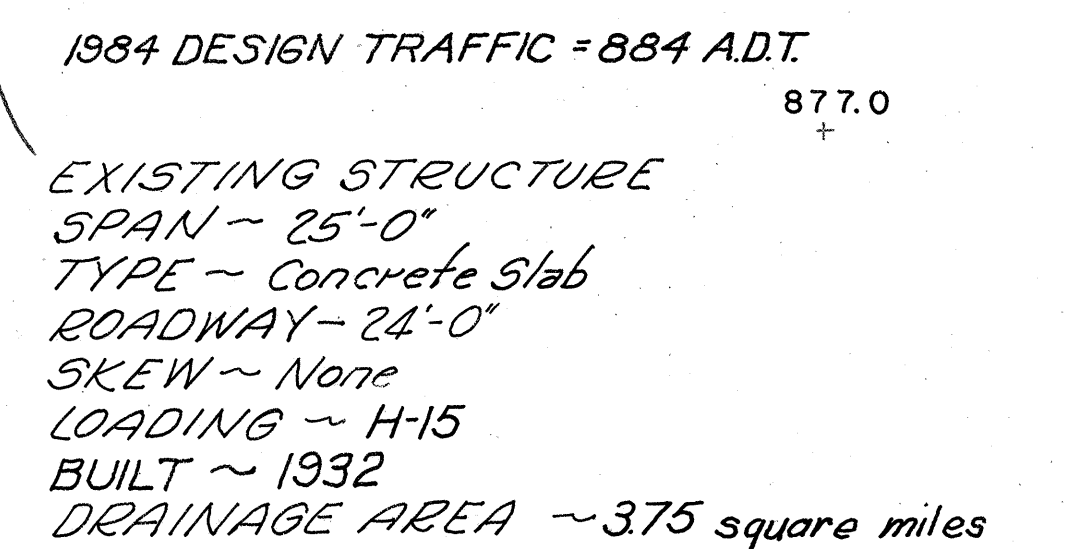


DETAIL-A *

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JUL 15 1986

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES					
SUPERSTRUCTURE DETAILS & REINFORCING STEEL LIST, EXCAVATION QUANTITY DETAIL					
Bridge No. - HAN-69-0204 over Cummins Ditch					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
B.W.E.	B.W.E.	R.M.W.	INNES	BFG	6-6-67
REVISED					

37
51



PROPOSED STRUCTURE			
<i>TYPE: Single span reinforced concrete slab with reinforced concrete wall abutments</i> <i>SPANS: 24'-0" face to face of abutments</i> <i>ROADWAY: 36'-0" face to face of guard rails</i> <i>LOAD FREQUENCY: CF = 130 (57)</i> <i>SKEW: None</i> <i>WEARING SURFACE: 1" monolithic concrete</i> <i>APPROACH SLABS: AS-1-54 (25' long)</i> <i>ALIGNMENT: Tangent</i>			
STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES			
SITE PLAN			
BRIDGE NO. <i>OVER CUMMINS DITCH</i> HANCOCK CO		HAN-69-0237 SR. 69	
SEC. SCALE 1" = 20'		STA. 125 + 09.75 125 + 36.25	
PRESENT TOPOGRAPHY		PROPOSED WORK	
SURVEYED AERIAL SURVEY	DRAWN AERIAL SURVEY	DRAWN <i>D.H.S.</i>	CHECKED <i>D.H.S.</i>
		<i>R.E.J.</i>	<i>P.E.S.</i>
BFG 3-1-67			

HANCOCK COUNTY
HAN-69-(1.24)(1.97)(2.31)(3.28)(4.23)(6.17)

GENERAL NOTES

Reference shall be made to Standard Drawings SB-1-64 sheets 1 and 2 revised 11-8-65, and to Supplemental Specifications 808 dated 1-13-67 and 825 dated 1-1-67.

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.
Reinforcing Steel- ASTM A15, A16, A160, Deformed,
Intermediate or Hard Grade.
Basic unit stress 20,000 p.s.i.

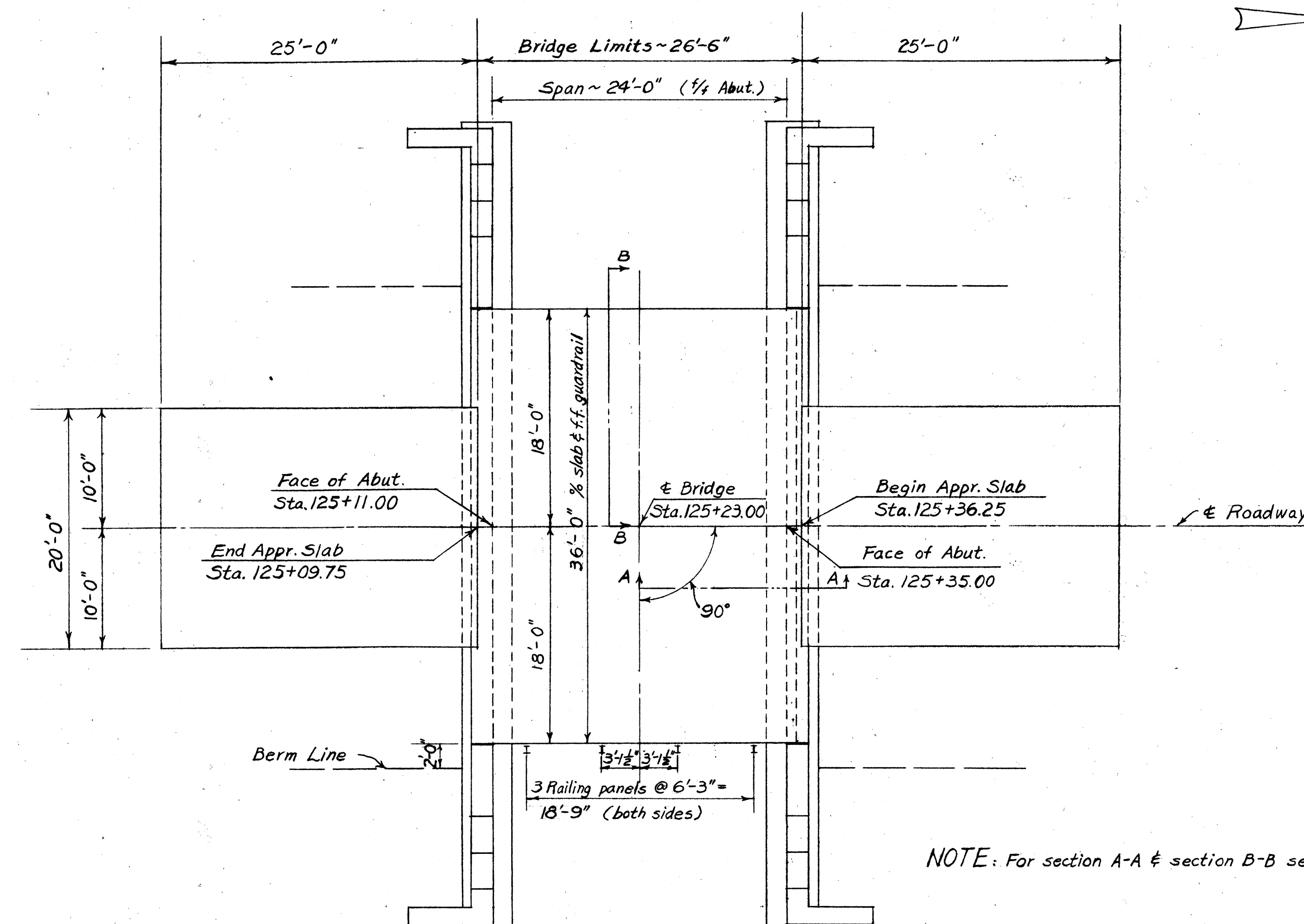
Removal of Existing Structure: When no longer needed to maintain traffic the existing structure shall be removed.

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

Foundation Bearing Pressure: Abutment footings are designed for a maximum bearing pressure of 4.0 tons per sq. ft.

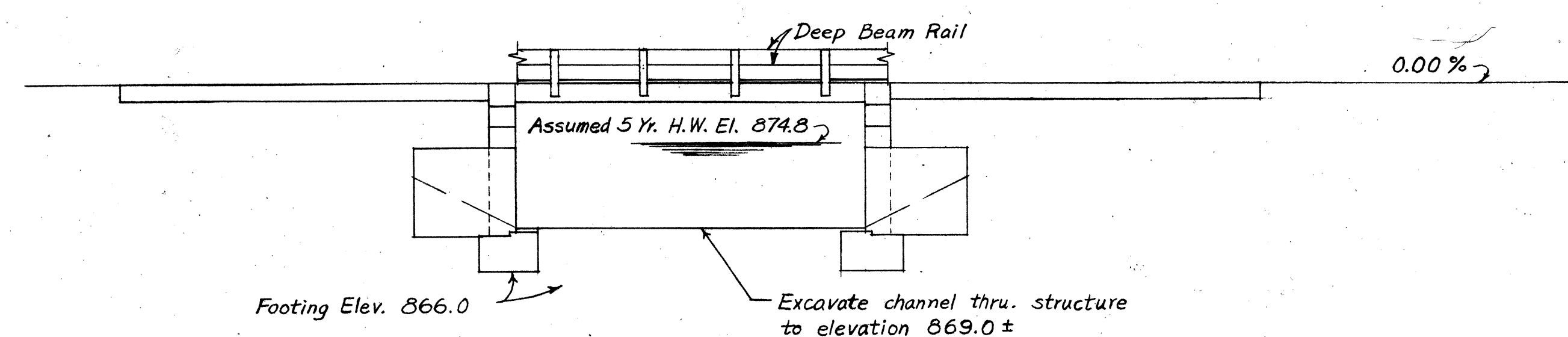
Slab Thickness is $15\frac{3}{4}$ " which includes 1" for monolithic wearing surface.

For Two-deep beam railing see sheet 31



NOTE: For section A-A & section B-B see sheet no. 39

GENERAL PLAN



ELEVATION

ESTIMATED QUANTITIES

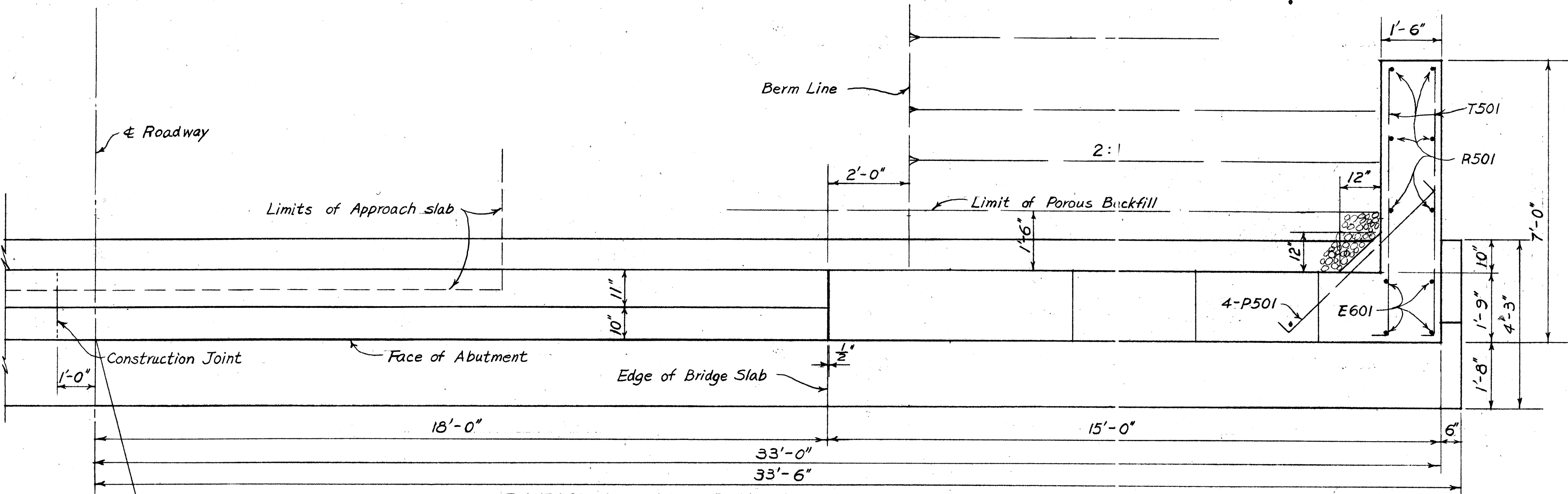
ESTIMATED QUANTITIES							
Item	Total	Unit	Description	Super.	Abts.	Gen'l	As Built
202	Lump	Sum	Existing structure removed			Lump	
503	49	Cu.Yds.	Unclassified excavation		49		
503	42	Cu.Yds.	Rock excavation		42		
503	Lump	Sum	Cofferdams, cribs and sheeting			Lump	
509	13807	Lbs.	Reinforcing steel	9478	4329		
511	48	Cu.Yds.	Class C concrete, superstructure	48			
511	78	Cu.Yds.	Class E concrete, abutment walls		78		
511	55	Cu.Yds.	Class E concrete, abutment footings		55		
516	10	Sq.Ft.	½" Preformed expansion joint filler, AASHTO M-153		10		
517	53.00	Lin.Ft.	Railing (two deep beam rails with galvanized steel posts & bolts)	53.00			
518	50	Cu.Yds.	Porous backfill		50		
808	48	Units	Water-reducing, set-retarding admixture	48			
825	115	Sq.Yds.	Concrete surface treatment	115			

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

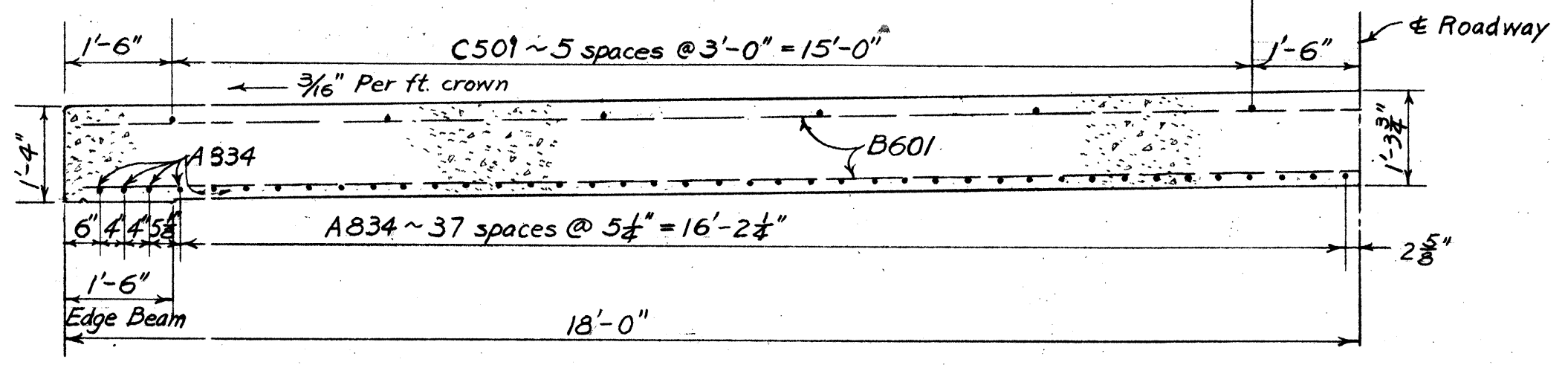
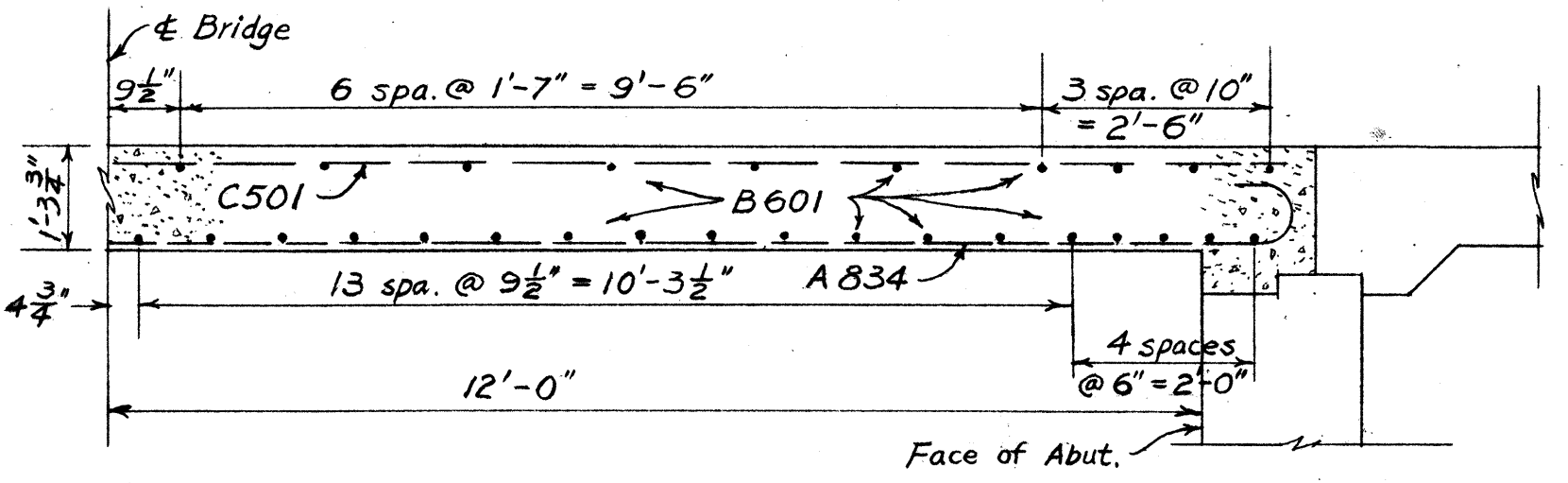
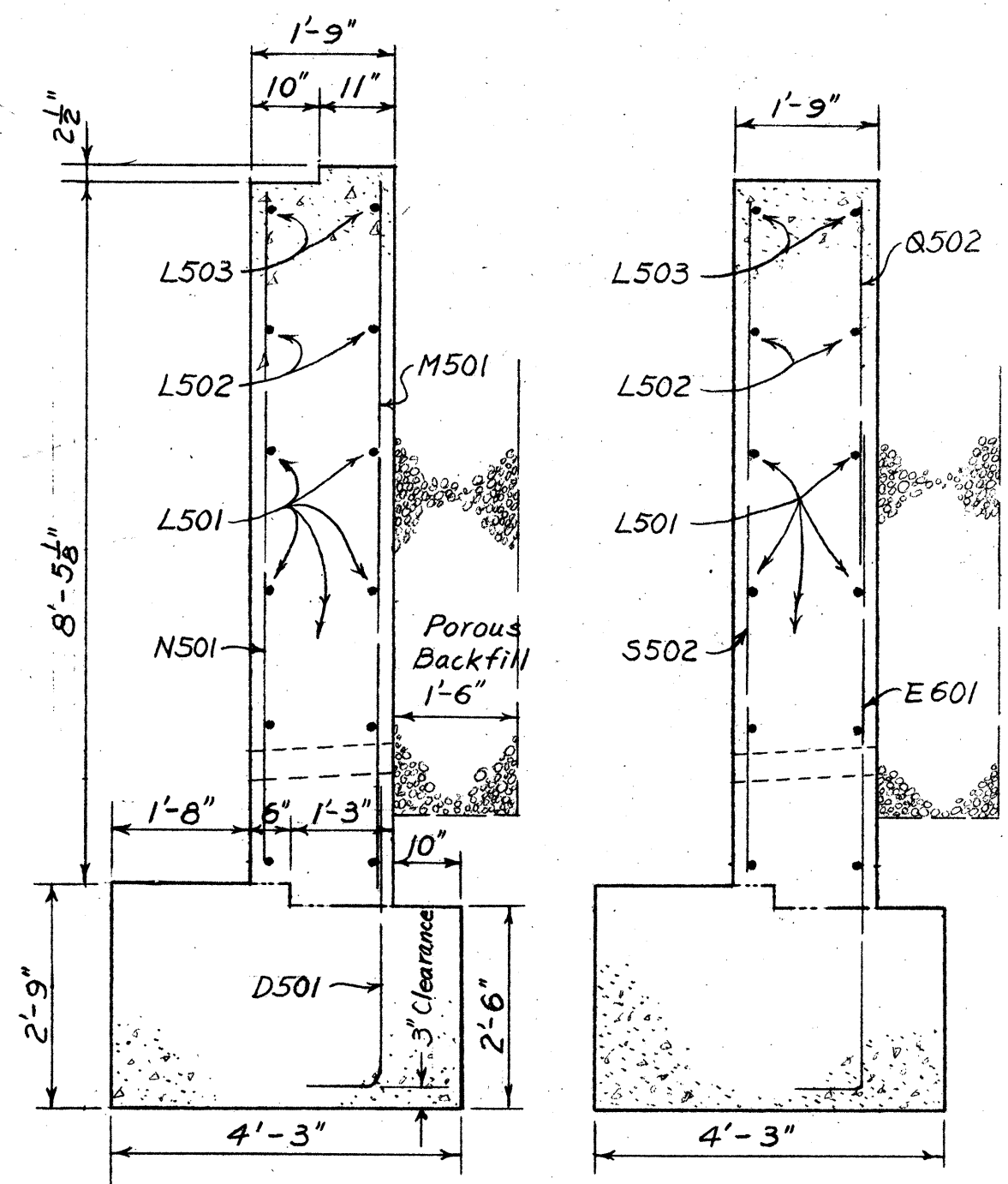
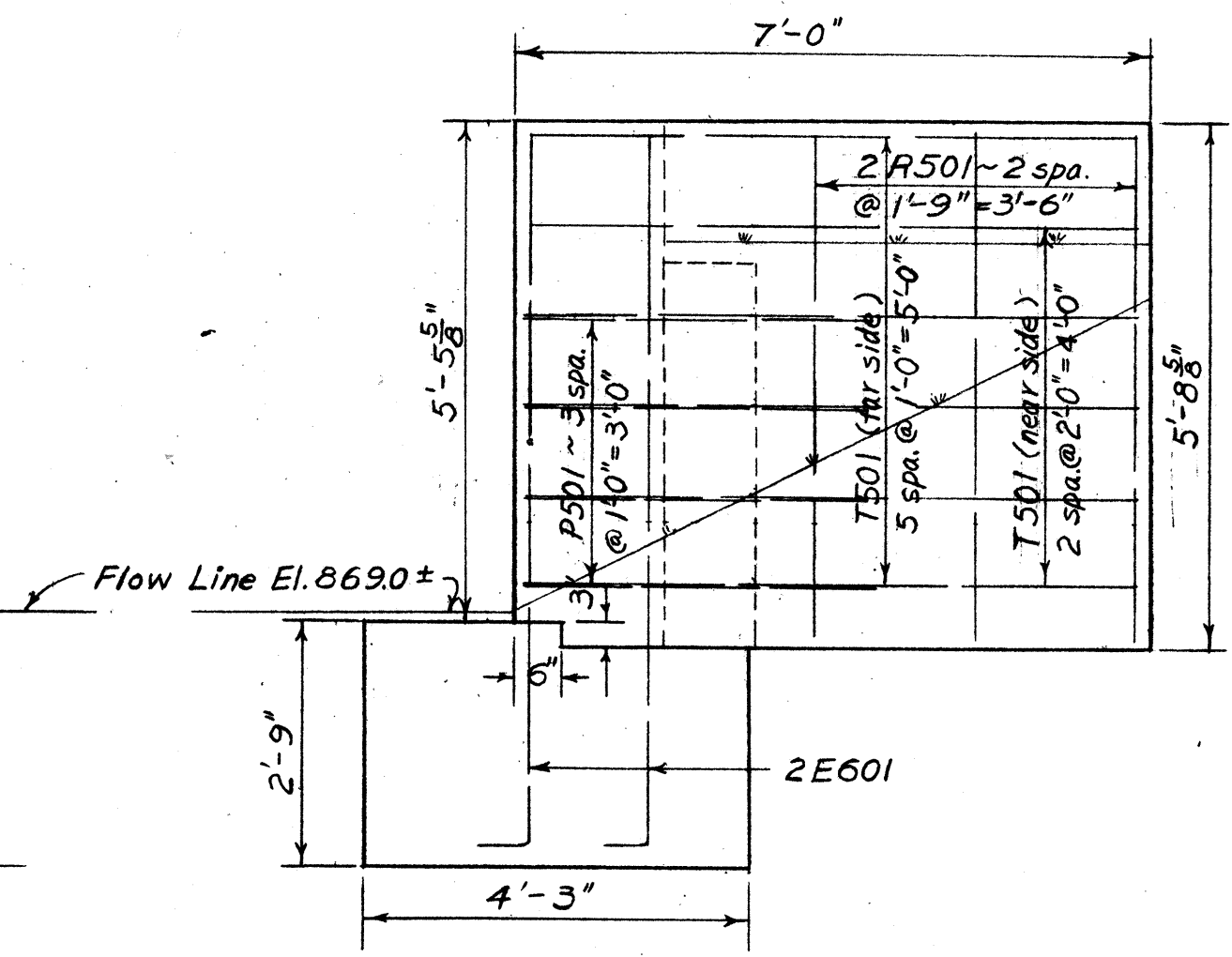
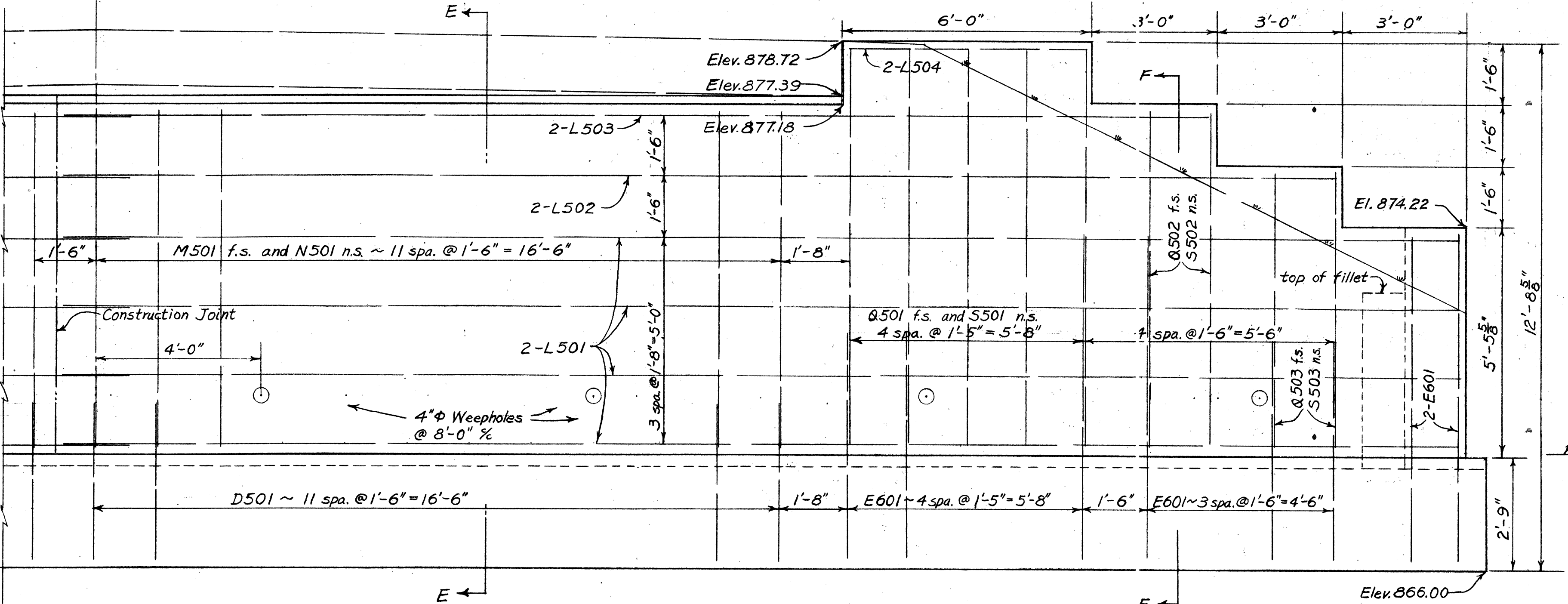
GENERAL PLAN, ELEVATION, NOTES,
AND ESTIMATED QUANTITIES
BRIDGE No. HAN-69-0237
OVER CUMMINS DITCH

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIEWED
E.S.T.	E.S.T.	E.P.M.	J.D.R. 20/73	BFG	3-1-67	

REV. 4-16-70 GFJ



REINFORCING STEEL LIST									
Mark	No.	Length	Weight	Shp	Bending Diagram				
Superstructure					Abutments (Cont)				
A834	62	28'-2"	6,167	B	Replacement Bars				
B601	56	35'-6"	2,986	S	RE601	1	6'-6"	—	S
C501	12	26'-0"	325	S	RE601	1	5'-11"	—	S
Abutments					RE501	1	5'-7"	—	S
E601	52	8'-5"	657	B					
D501	46	4'-4"	208	B					
L501	32	33'-8"	1,124	S					
L502	8	30'-8"	256	S					
L503	8	27'-8"	231	S					
L504	8	5'-7"	47	S					
M501	46	8'-5"	404	S					
N501	46	8'-0"	384	S					



Note:
For additional superstructure details see Std. Dwg. SB-1-64, Sheet 1.
n.s. denotes near side, f.s. denotes far side.

MICROFILMED
JUL 15 1986

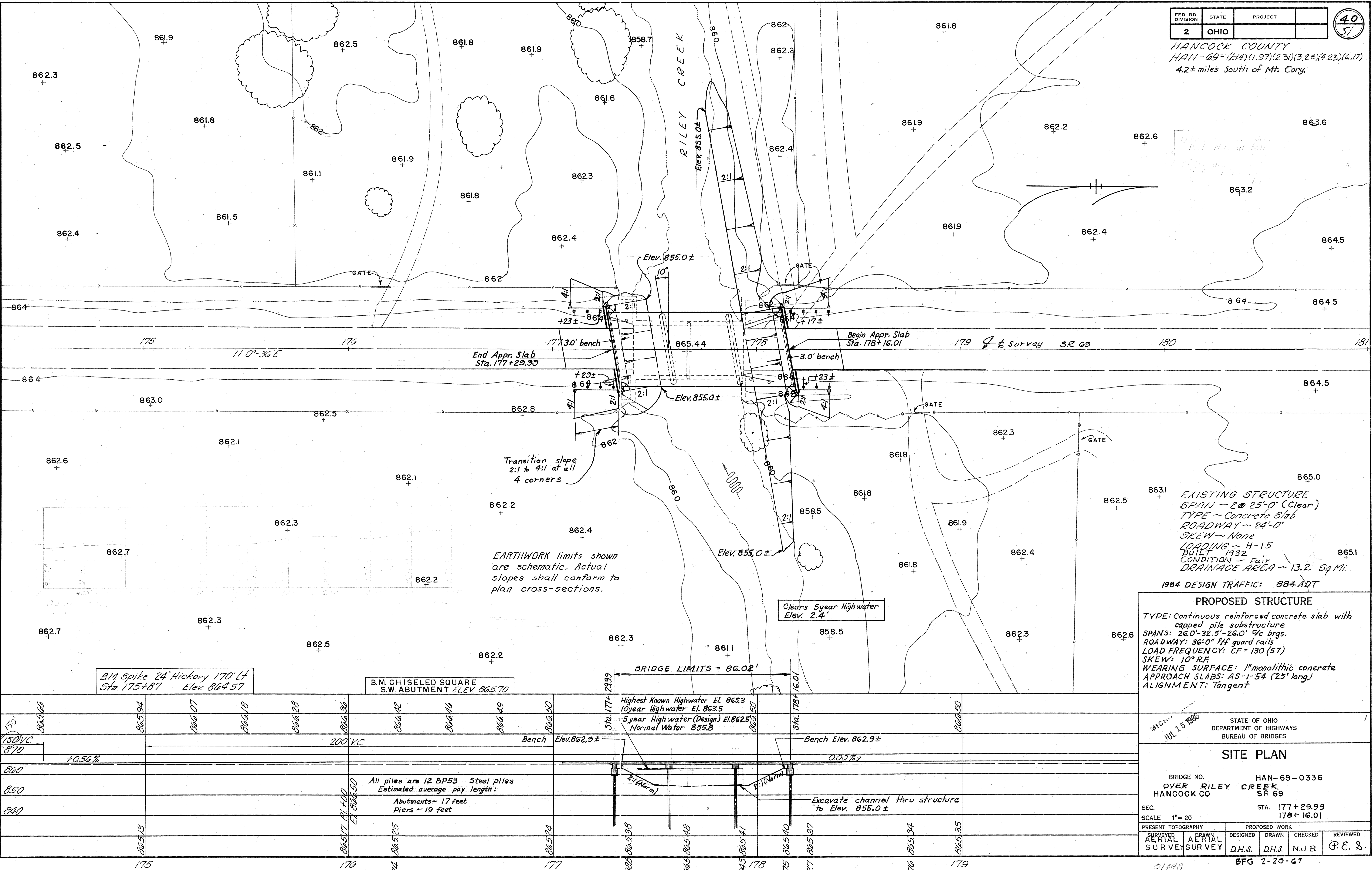
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

PARTIAL ABUTMENT PLAN,
ELEVATION, REINFORCING
STEEL DETAIL AND LIST
BRIDGE No. HAN-69-0237
OVER CUMMINS DITCH

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.S.T.	E.S.T.		J.D.R.	BFG	3-1-67	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		40 51

HANCOCK COUNTY
HAN-69-(114)(1.97)(2.31)(3.28)(4.23)(6.17)
4.2± miles South of Mt. Cory.



HANCOCK COUNTY
HAN-69-(174)(197)(230)(328)(423)(617)

GENERAL NOTES

REFERENCE shall be made to Std. Drwgs. CS-1-65 dated 6-1-65, P-1-54 revised 11-8-65, A-1-54 revised 11-8-65, and to Supplemental Specifications No. 808 dated 1-13-67 & 825 dated 1-1-67.

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.
Reinforcing Steel - ASTM A15, A16, A160,
Deformed, Intermediate or
Hard Grade, basic unit
stress 20,000 p.s.i.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed.

PILES shall be driven through the existing sub-soils to firm contact with bedrock at both abutments and both piers. 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. 507.05 is not less than the following value for a pile hammer of the indicated energy rating.

For the abutment piles:

40 tons per pile using a 7,000 ft. lb. hammer
35 tons per pile using an 11,000 ft. lb. hammer
30 tons per pile using a 15,000 ft. lb. or greater hammer.

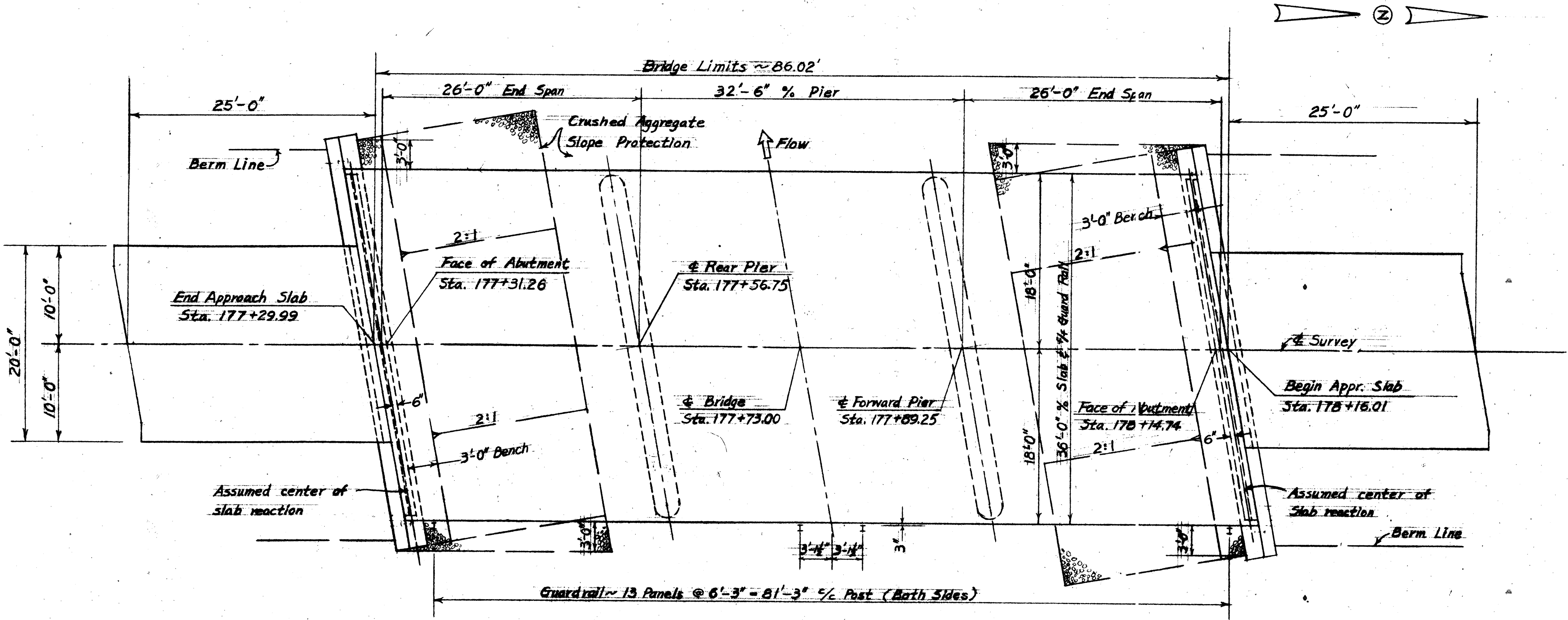
For the pier piles:

50 tons per pile using a 7,000 ft. lb. hammer
45 tons per pile using an 11,000 ft. lb. hammer
40 tons per pile using a 15,000 ft. lb. hammer

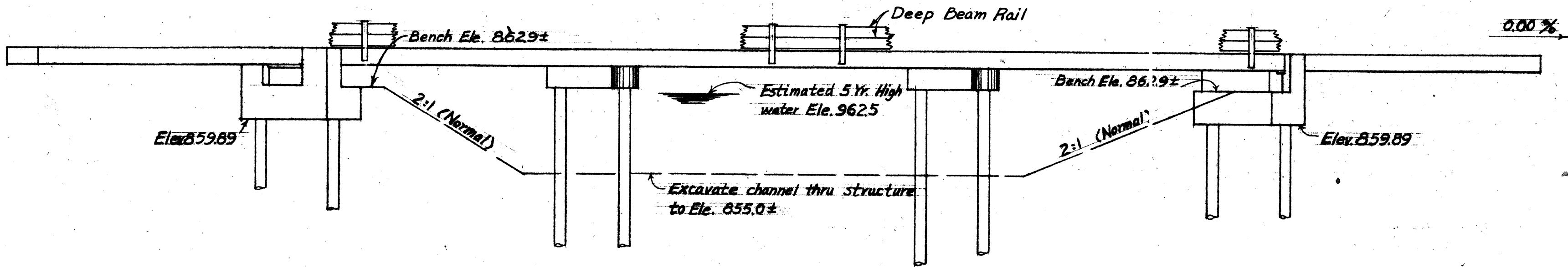
If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load of the abutment piles is 23 tons per pile and the pier piles is 30-32 tons per pile.

PIER PILE ENCASEMENT as shown on Std. Drwg. P-1-54 is not required. The painting of the piles shall extend to low water elevation or, if the proposed surface of the ground is above low water, it shall extend to at least one foot below the proposed surface of the ground.

For Two deep beam railing see sheet 31



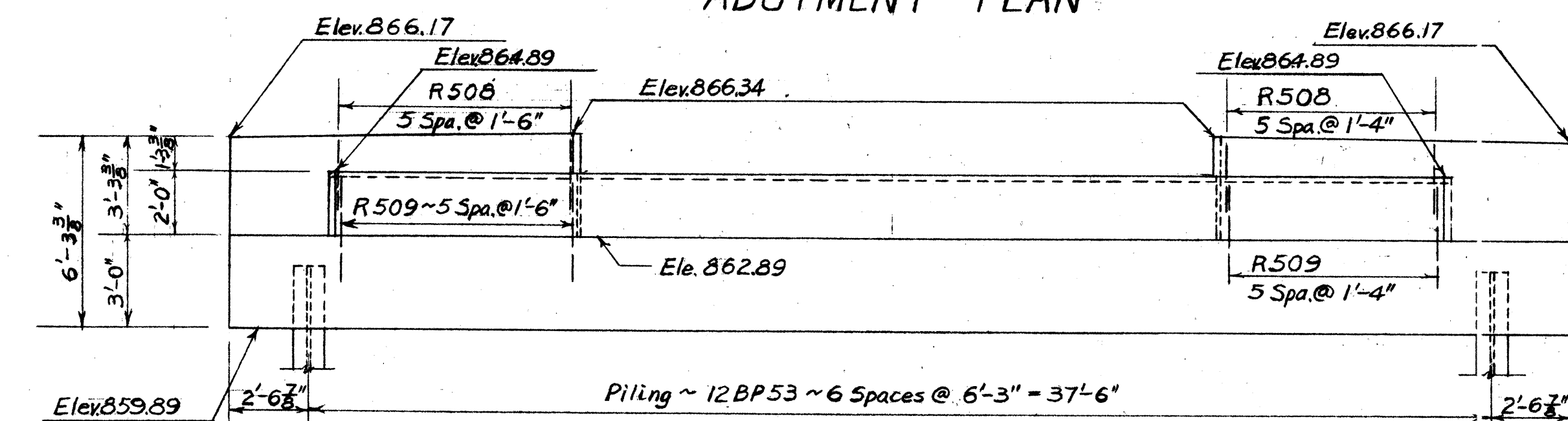
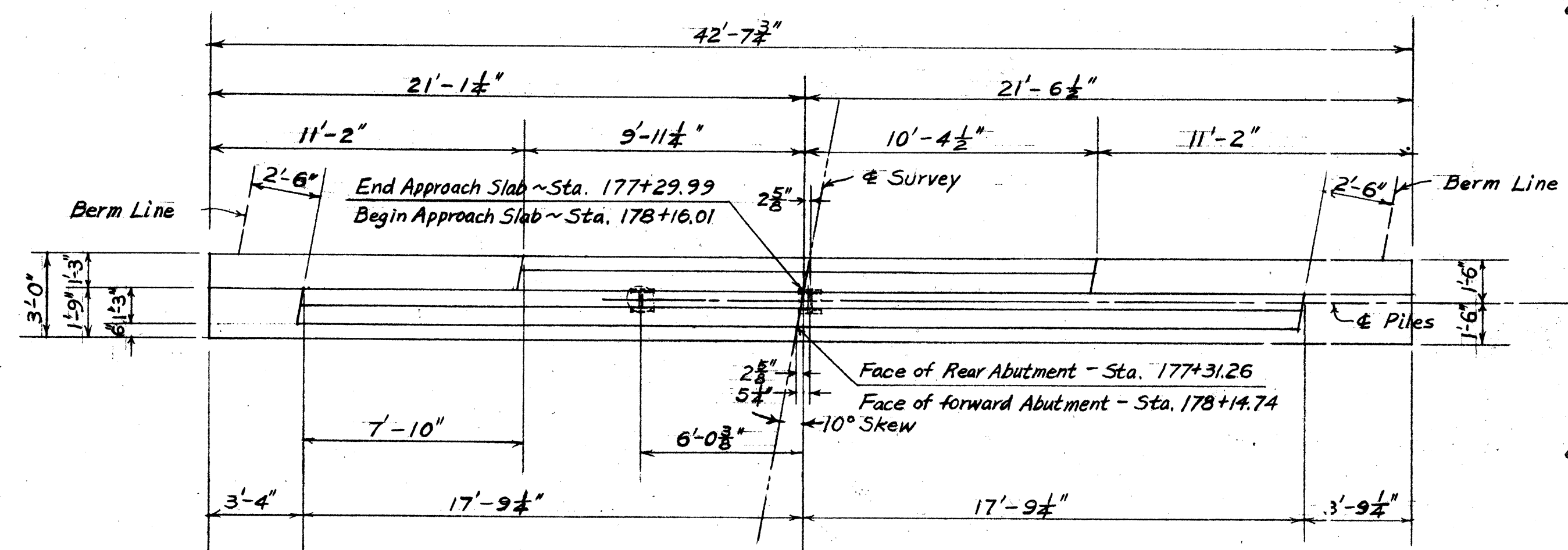
GENERAL PLAN



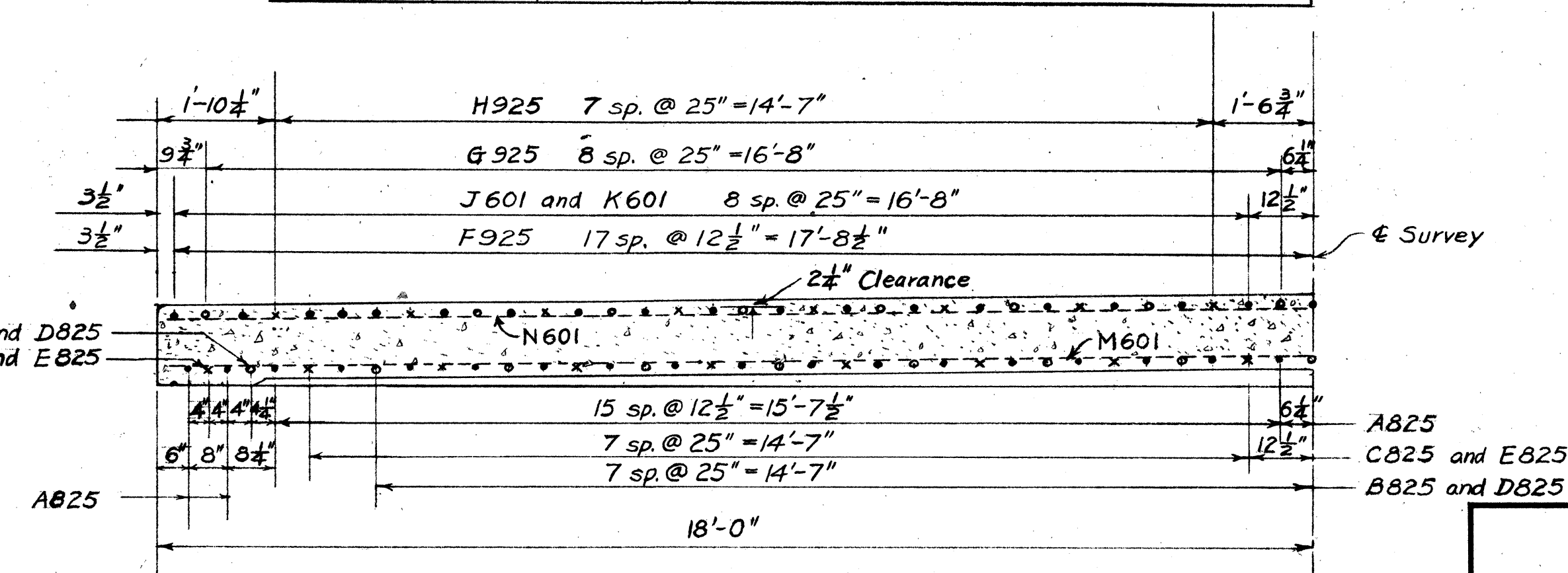
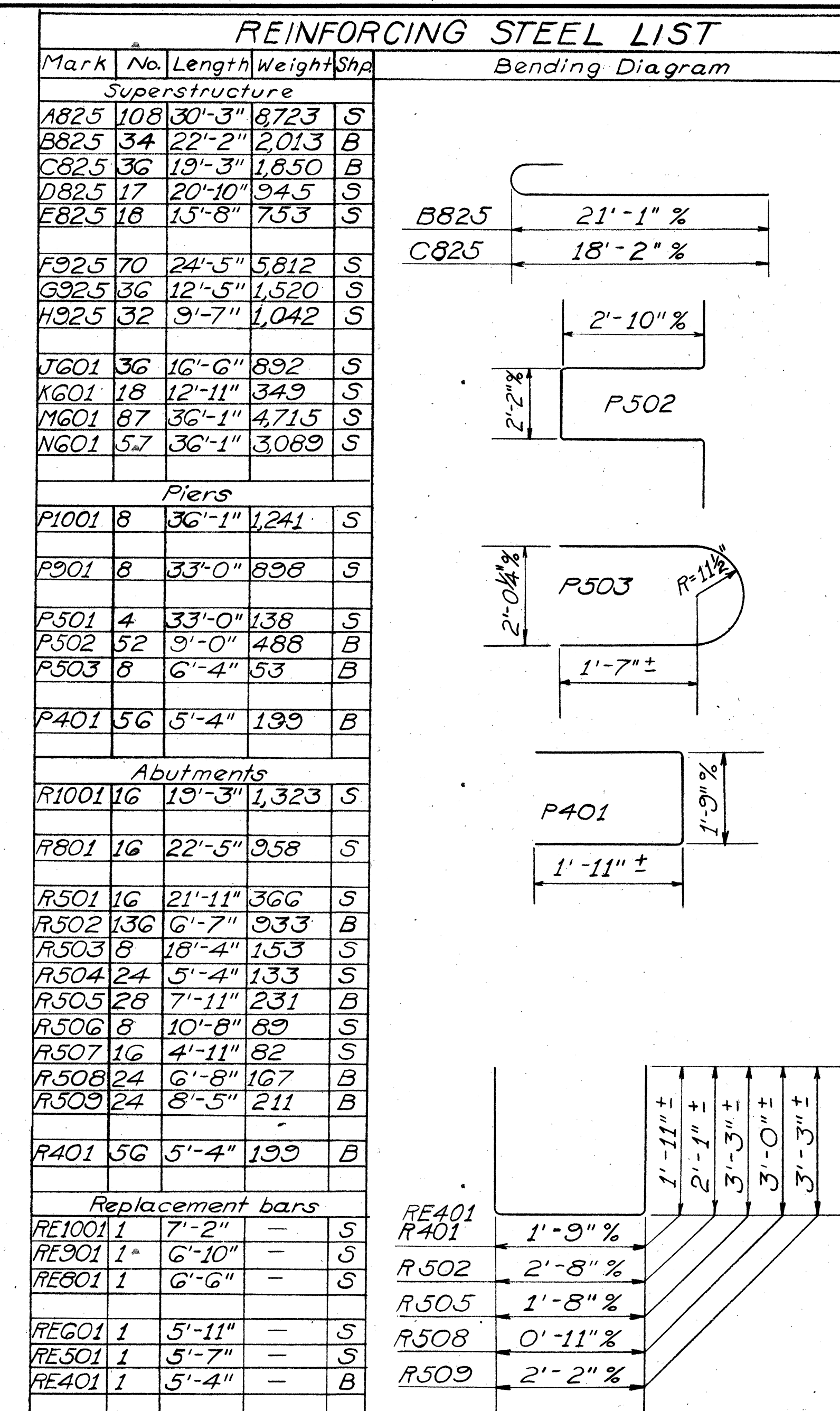
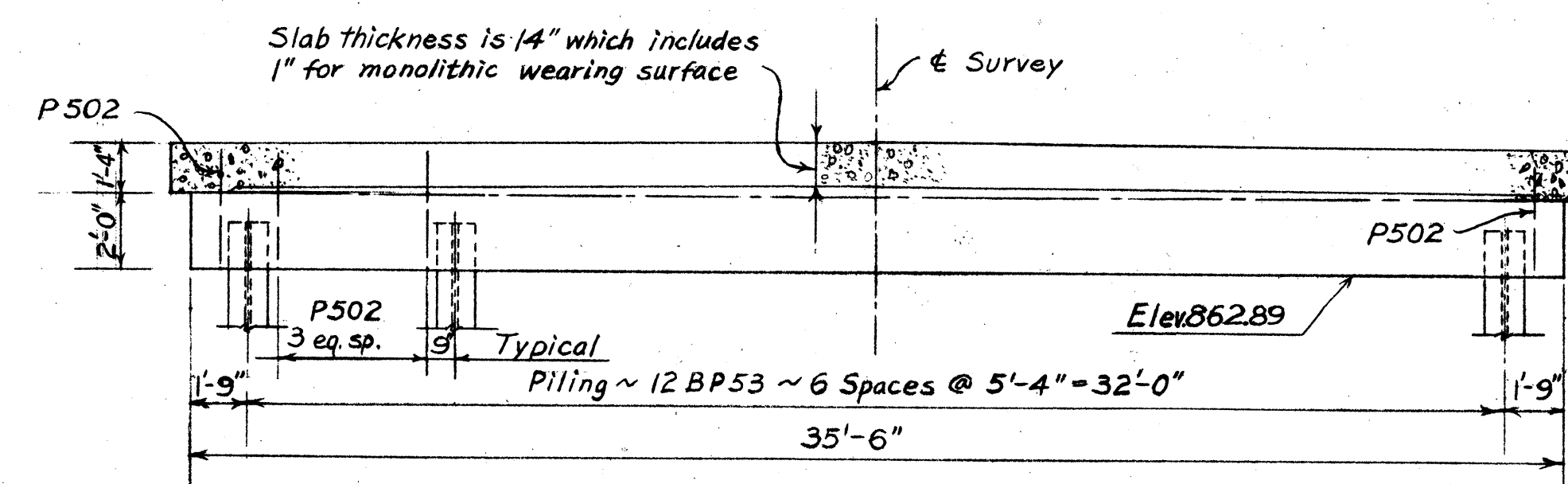
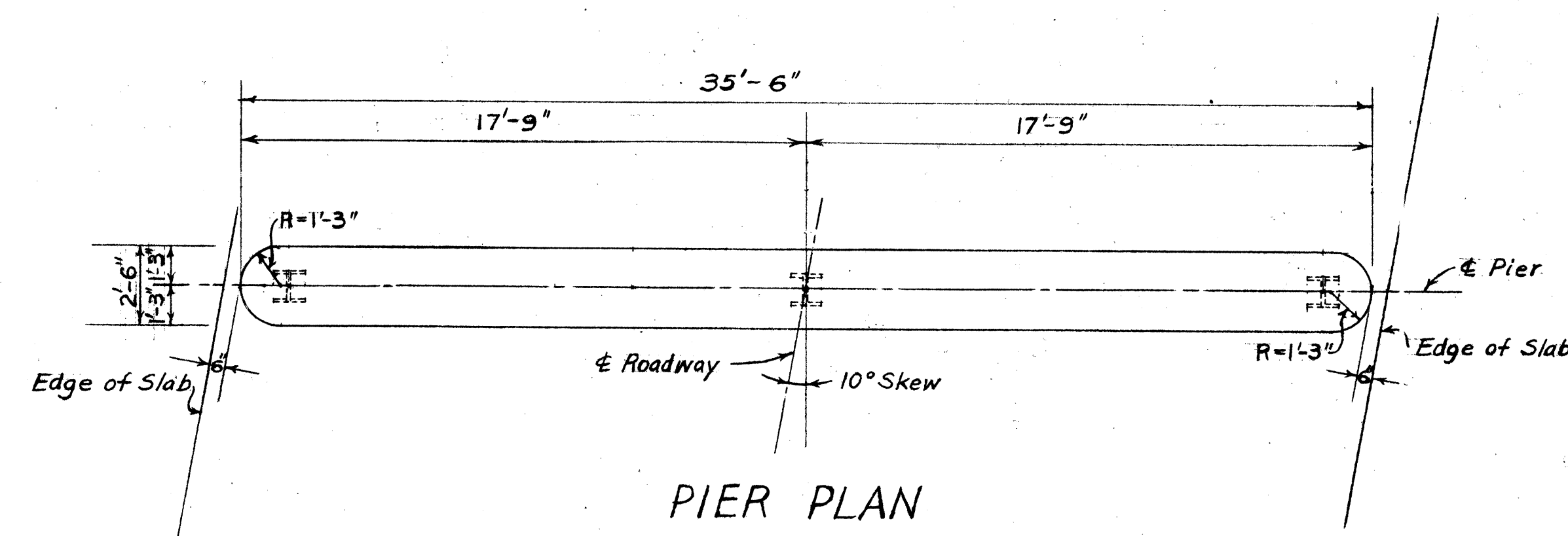
ELEVATION

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super.	Piers	Abuts.	Gen'l	As Built
202	Lump	Sum	Existing structures removed				Lump	
503	83	Cu. Yds.	Unclassified excavation			83		
505	Lump	Sum	First test pile				Lump	
507	510	Lin. Ft.	Steel piles (12BP 53)		270	240		
509	33,565	Lbs.	Reinforcing steel	31,703	3,017	4,845		
511	143	Cu. Yds.	Class C concrete, superstructure & pier caps	136	13			
511	44	Cu. Yds.	Class E concrete, abutments			44		
517	172.04	Lin. Ft.	Railing (two deep beam rails with steel posts & bolts)	172.04				
518	14	Cu. Yds.	Porous backfill			14		
601	200	Sq. Yds.	Crushed aggregate slope protection			200		
808	143	Units	Water-reducing, set-retarding admixture	136	13			
825	370	Sq. Yds.	Concrete surface treatment	370				



Note: All piles are 12 BP53
steel piles



Note: for more detail see standard drawing C S-1-65

HANCOCK COUNTY
HAN-69-(114)(197)(231)(328)(423)(6.17)

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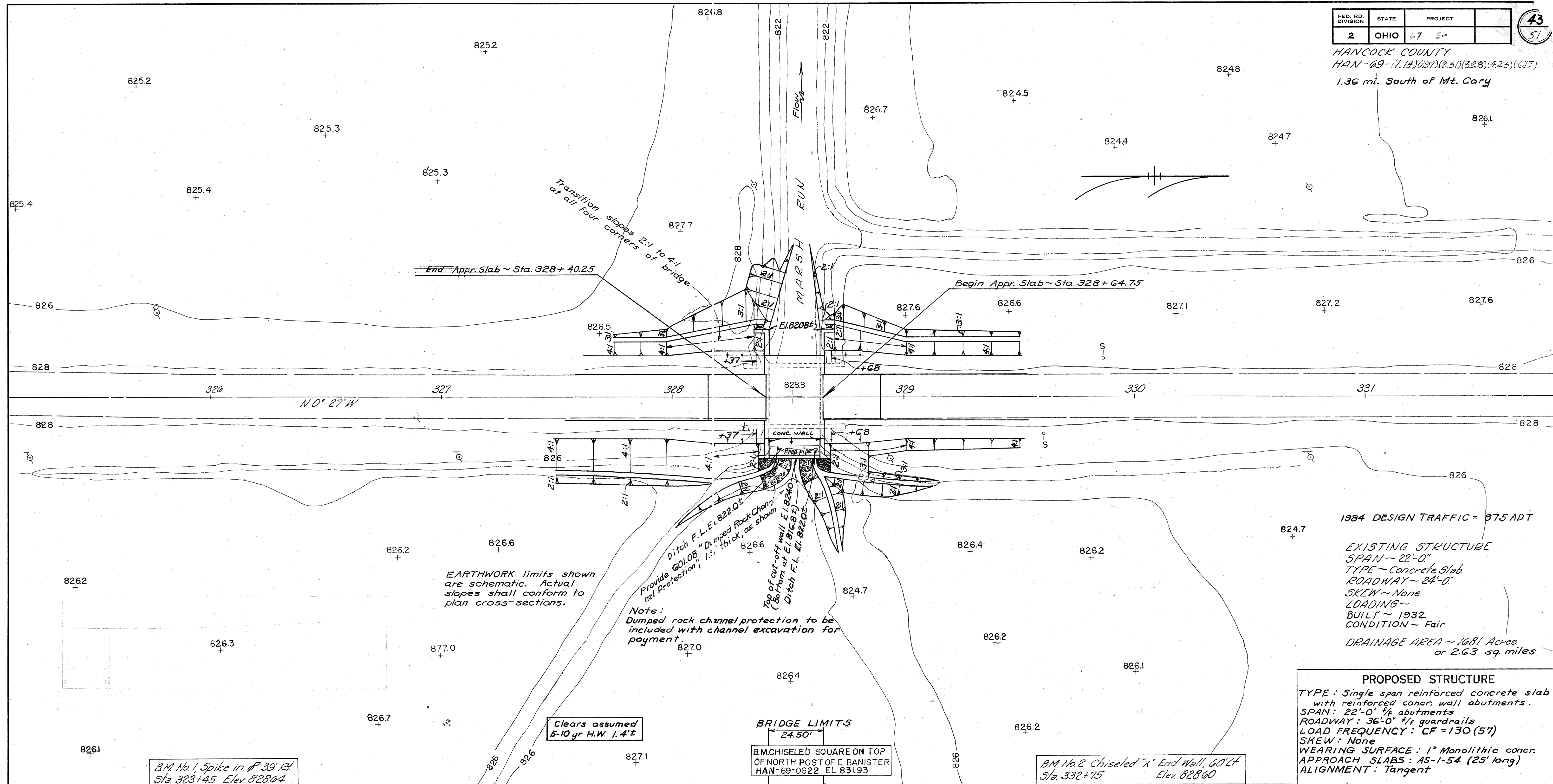
STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES		3 3
ABUTMENT, PIER AND SLAB REIN. DETAIL AND STEEL LIST BRIDGE No. HAN-69-0336 OVER RILEY CREEK		

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.S.T.	E.S.T.		INNES	BFG	2-20-67	

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	67 5-

43
51

HANCOCK COUNTY
HAN-69-(1.14)(1.17)(2.31)(3.28)(4.23)(6.17)
1.36 mi. South of Mt. Cory



1984 DESIGN TRAFFIC = 975 ADT

EXISTING STRUCTURE
SPAN ~ 22'-0"
TYPE ~ Concrete Slab
ROADWAY ~ 24'-0"
SKEW ~ None
LOADING ~
BUILT ~ 1932
CONDITION ~ Fair
DRAINAGE AREA ~ 1681 Acres
or 2.63 sq. miles

PROPOSED STRUCTURE

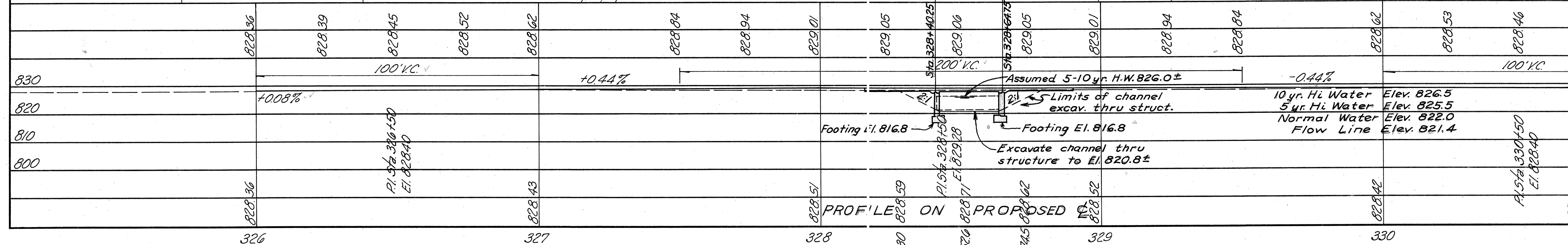
TYPE: Single span reinforced concrete slab with reinforced concr. wall abutments.
SPAN: 22'-0" 1/4 abutments
ROADWAY: 36'-0" 1/4 guardrails
LOAD FREQUENCY: CF = 130 (57)
SKEW: None
WEARING SURFACE: 1" Monolithic concr.
APPROACH SLABS: AS-1-54 (25' long)
ALIGNMENT: Tangent

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. HAN-69-0622
OVER MARSH RUN
HANCOCK CO SR 69

SEC.	SCALE	1" = 20'	STA.	328 + 40.25 328 + 64.75
PRES. TOPOGRAPHY	DESIGNED	D.G.M.	DRAWN	D.G.M.
SURVEYED	CHECKED	D.H.S.	REVIEWED	P.E. S.
AERIAL SURVEY	AERIAL SURVEY	N.R.B.		



GENERAL NOTES

HAN-69-(1.14)(1.97)(2.31)(3.28)(4.23)(6.17)

REFERENCE shall be made to Standard Drawing SB-1-64 sheets 1 and 2 revised 11-8-65, and to Supplemental Specifications 808 dated 1-13-67 and 825 dated 1-1-67.

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.

Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.

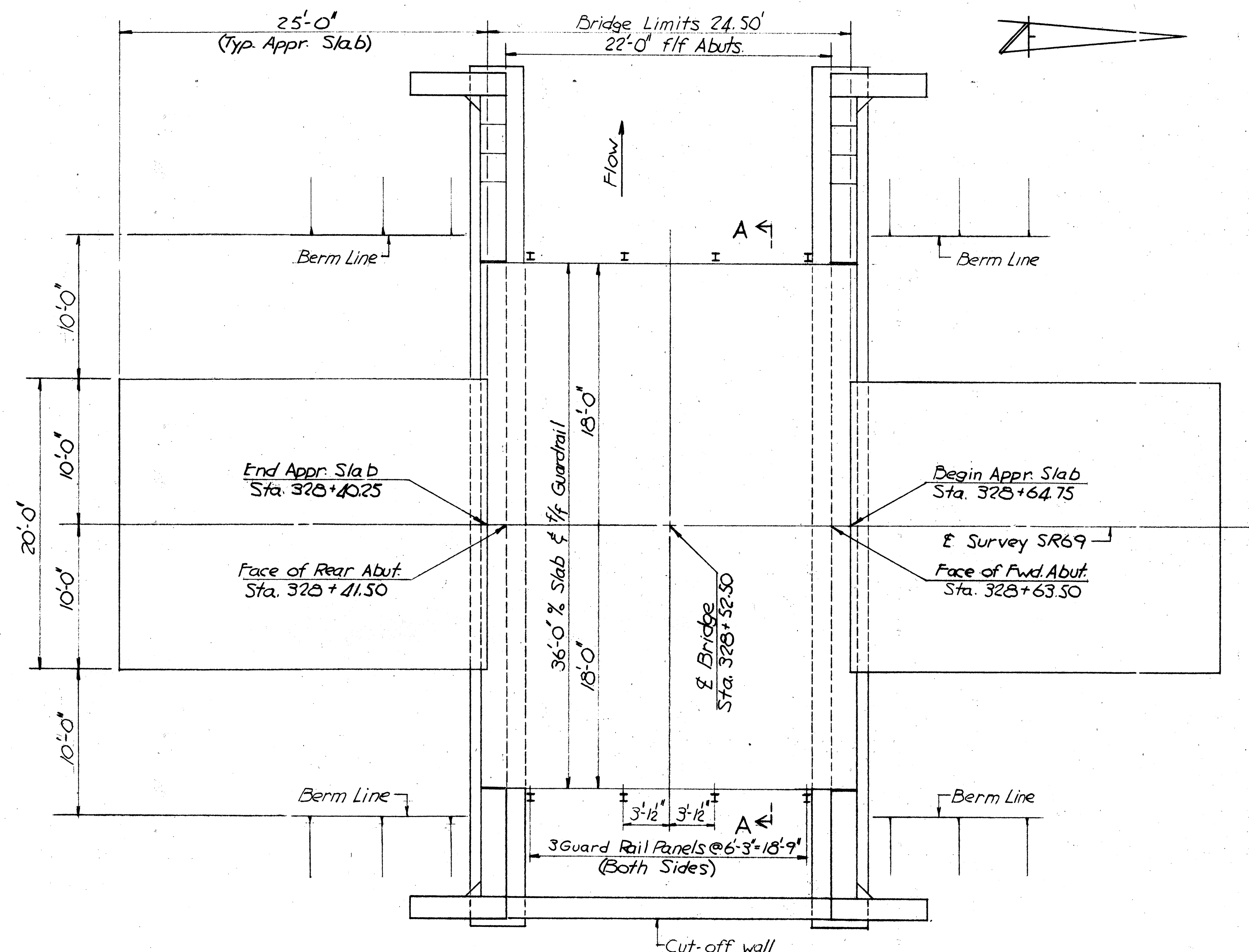
FOUNDATION BEARING PRESSURE:- Abutment footings are designed for a maximum bearing pressure of 2.5 tons per sq. ft.

FOOTING EXCAVATION shall extend for a distance 1 foot beyond the edge of the footings to elevation 812.8. The excavation shall then be backfilled to elevation 816.8, with a compacted granular material meeting the gradations of Item 310.

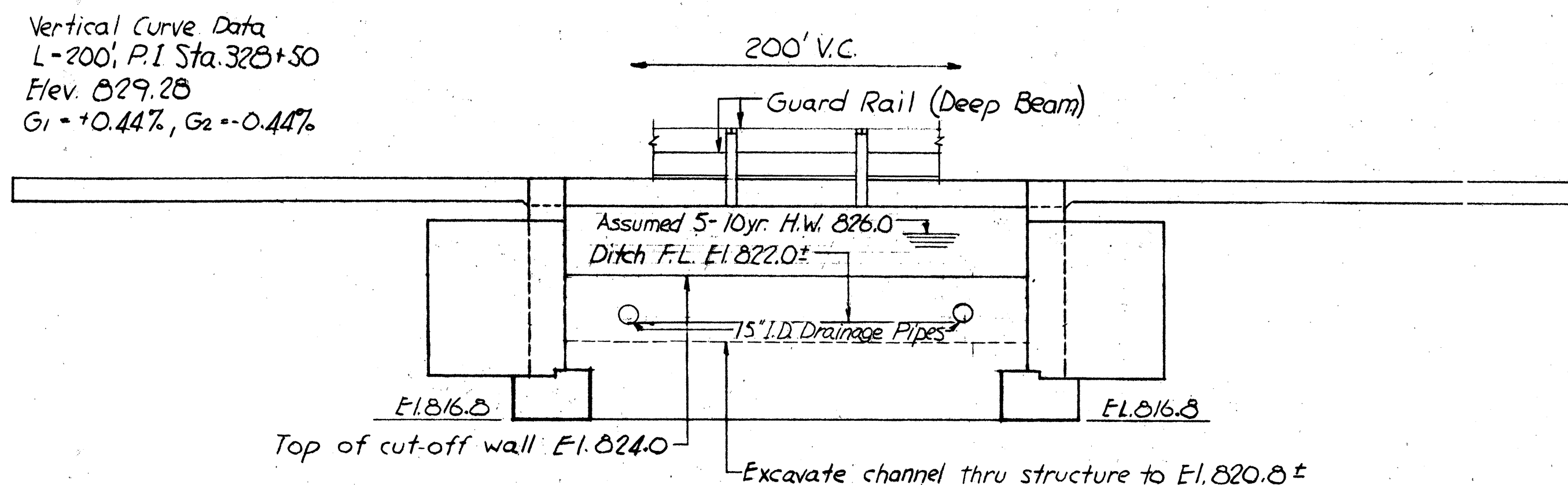
For Two deep beam railing see sheet 31

ESTIMATED QUANTITIES

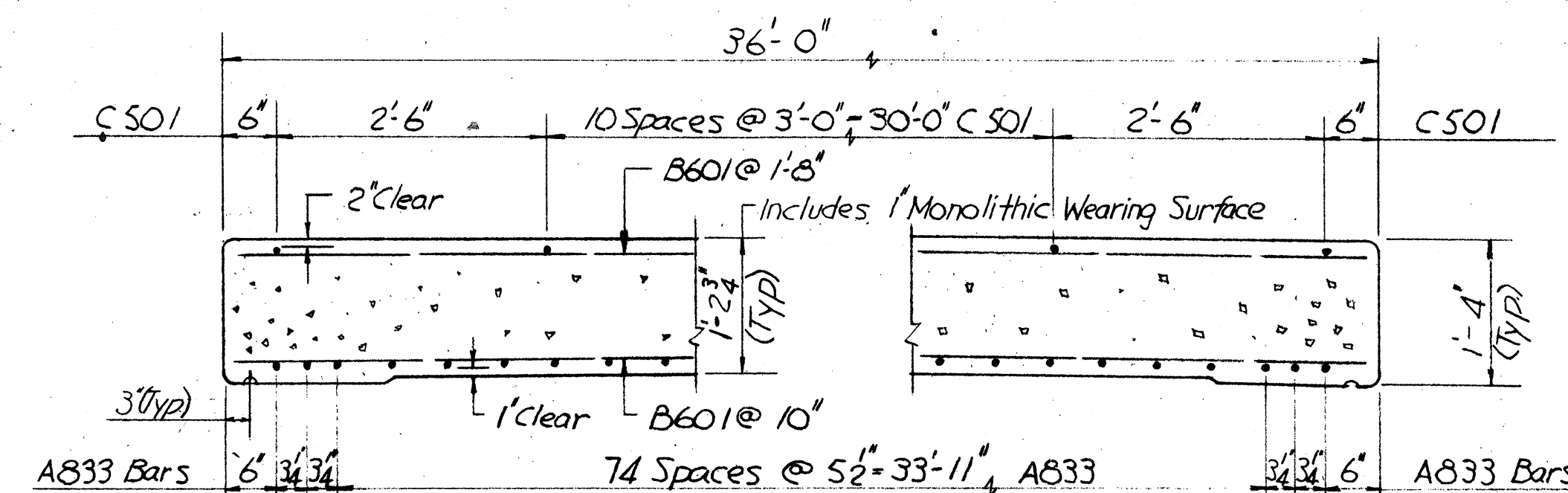
ESTIMATED QUANTITIES									
Item	Total	Unit	Description	Super	Abut.	Gen'l	As Built		
202	Lump	Sum	Existing structure removed			Lump			
310	110	Cu.Yds	Subbase		110				
503	Lump	Sum	Cofferdams, cribs and sheeting			Lump			
503	250	Cu.Yds	Unclassified excavation		250				
509	12608	Lbs.	Reinforcing steel	8511	4097				
511	43	Cu.Yds	Class C concrete, superstructure	43					
511	79	Cu.Yds	Class E concrete, abutment walls, wings & cut-off wall.		79				
511	43	Cu.Yds	Class E concrete, abutment footings		43				
516	10	Sq.ft.	1/2" Preformed expansion joint filler AASHTO Spec. M-153	10					
517	49	Lin.ft.	Railing (Two deep beam rails with steel posts and bolts)	49.0					
518	36	Cu.Yds	Porous backfill		36				
808	43	Units	Water-reducing, set-retarding admixture	43					
825	105	Sq.Yds	Concrete surface treatment		105				



GENERAL PLAN



ELEVATION



SECTION A-A

MICROFILMED
JUL 15 1986

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

GENERAL PLAN & ELEVATION
NOTES & ESTIMATED QUANTITIES

BRIDGE NO. HAN-69-0622 OVER
MARSH RUN HANCOCK CO.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JEM	JEM	JEM	FPK	BFG	5-31-67	

REV. 9-16-70 GFJ

