

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

FED. DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	W.P.G.S. 397A	1936	1	22

ARKANSAS JOB NO 5195

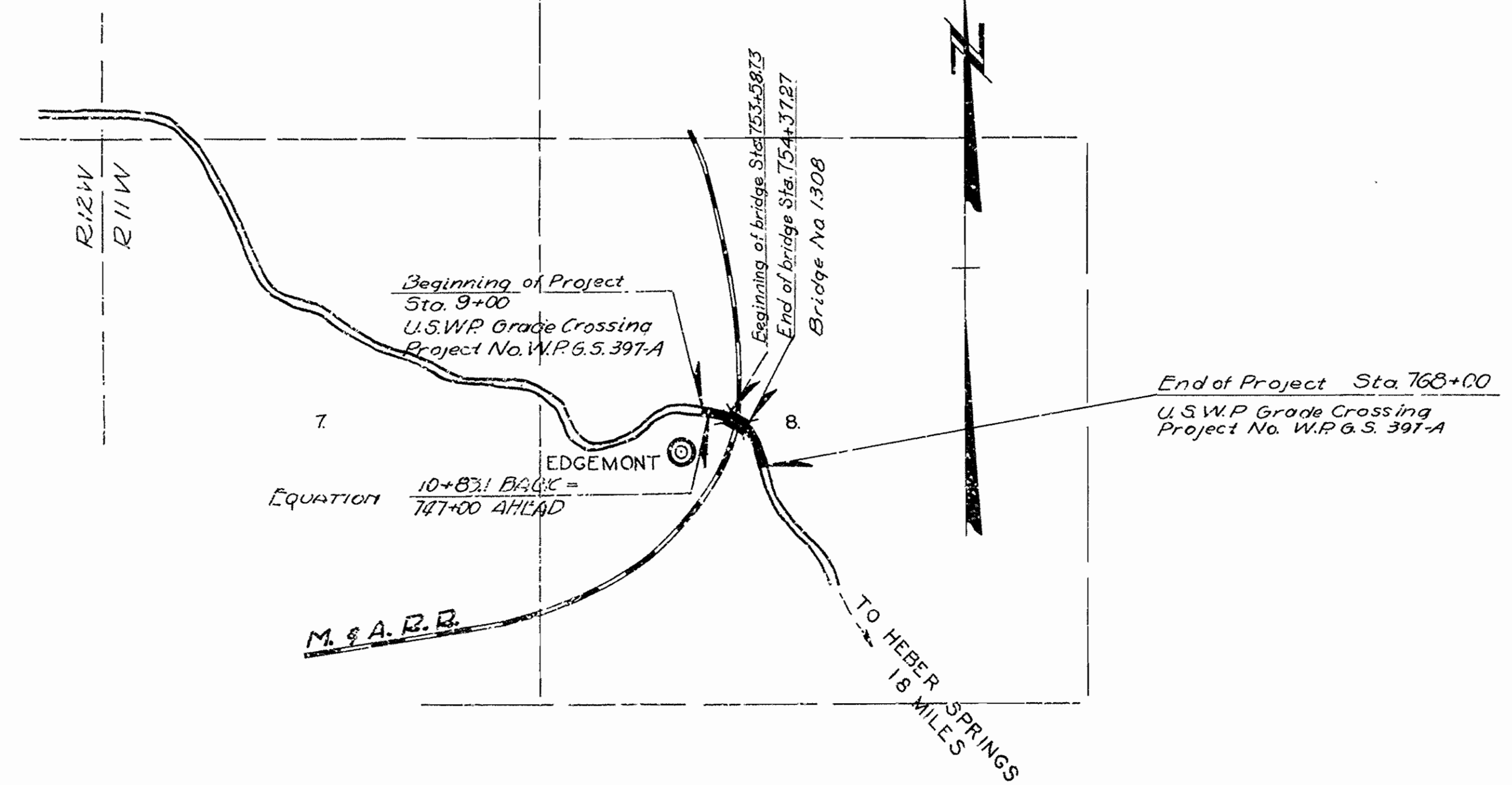
INDEX OF SHEETS

SHEET NO.	DRWG. NO.	TITLE
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2	4103	Schedule of Quantities
3 & 4	4101a & b	Plan and Profile of earth approaches
5	FS-9	Typical Section of Grading
6	FS-6	Coordination of Horizontal and Vertical Curves
7 & 8 & 9	147-3, 147-3A, 147-3B	Super-elevation and Widening of curves
10	142	Reinforced Concrete Box Culverts
11	144-A	Method of Extending Existing Structures
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13	C102	Layout of Overhead Crossing
14	2103	Details of Arch Span
15	2387	Details of Project Markers, etc.
16	585	Details of Embankment West of Bridge Ends
17	422	Mass Diagram
18, 19, 20, 21 & 22	4104a-c	Cross Sections

**PLAN OF PROPOSED BRIDGE**  
**OVER MISSOURI AND ARKANSAS RAILWAY**  
**NEAR EDMONT**  
**CLEBURNE COUNTY**  
**ROUTE 16 SEC. 11**  
**JOB NO 5195**  
**U.S.W.P. GRADE CROSSING PROJECT No. W.P.G.S. 397A**

**QUANTITIES**  
WORK TO BE DONE BY CONTRACT

ITEM NO.	ITEM	QUANTITY	UNIT
11	Clearing	1.72	Acres
11	Grubbing	390	Acres
12	Solid Rock Excavation	203	Cu Yds
SP412	Unclassified Excavation	14,250	Cu Yds
13	Dry Excavation for Structures	104	Cu Yds
13	Solid Rock Excavation for Structures	303	Cu Yds
19	Overhaul	65,756	Sq Yds
52	Class "A" Concrete (Markers)	22.23	Cu Yds
51	Class "B" Concrete (Roadways)	2.40	Cu Yds
55	Reinforcing Steel (Headwalls & Markers)	3050	Lbs
60	18" Reinforced Concrete Pipe	186	Lin ft
60	18" Corrugated Metal Pipe	20	Lin ft
64	Relaying Culvert Pipe	68	Lin ft
91	Class "A" Concrete for Bridges	1048	Cu Yds
91	Class "B" Concrete for Bridges	1129	Cu Yds
92	Reinforcing Steel for Bridges	32810	Lbs
94	Concrete Railing for Bridges	173	Lin ft
SP	Bronze Project Marker Plates	2	
SP	Bronze State Bridge Name Plates (4" x 8")	1	
SP	Fence Moved and Replaced	1.5	Rods
SP281	Membrane Waterproofing	2195	Sq ft
SP	Traffic Service Gravel	441	Cu Yds



WORK TO BE DONE BY RAILROAD COMPANY  
Adjusting Telegraph Lines

Specifications approved by Chief, Bureau of Public Roads, September 28, 1925, and adopted by State Highway Commission May 30, 1925 with revisions and Special Provisions as follows:

Pamphlet	Revised	Approved
A	March 1, 1931	June 13, 1931
J	Nov. 1, 1931	Nov. 21, 1932
L	July 8, 1935	
M	March 1, 1931	June 13, 1931
N	Oct 1, 1933	

**SPECIAL PROVISIONS**

item	No. of Sheets
Subletting and Labor	16
Beginning and prosecution of Work	1
Extra and Force Account Work	1
Bronze Project Marker Plates and Bronze State Br Name Plates	1
Fence Moved and Replaced	1
Membrane Waterproofing for Spandrel Filled Arches	3
Traffic Service Gravel	2
Removing Minor Obstructions	1
Engineer's Field Office	1
Employment Centers for Labor	1

**LAYOUT**

Scale: 1 Inch = 1000 Ft.

LENGTH OF PROJECT =	2283.10 Ft	= 0.431 Miles
LENGTH OF BRIDGE =	78.541 "	= 0.014 "
LENGTH OF EMBANKMENT =	2204.56 "	= 0.417 "
LENGTH OF JOB =	2283.10 "	= 0.432 "

See also Quant. 12-2-35 etc.

APPROVED [Signature]

CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]

DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]

CHIEF - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]

CHAIRMAN - STATE HIGHWAY COMMISSION

APPROVED [Signature]

STATE HIGHWAY ENGINEER

*N.R. Sawyer*  
BRIDGE ENGINEER

BRIDGES No. 1308

DRAWING No. 4099



FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	WPGS.397A	1936	2	22
STATE JOB NO.5-195					

SCHEDULE OF BRIDGE QUANTITIES

UNIT OF BRIDGE	ITEM NO. 13	ITEM NO. 13	ITEM NO. 91	ITEM NO. 91	ITEM NO. 92	ITEM NO. 94	ITEM NO. S.P.	ITEM NO. S.P.
	DRY EXCAV. FOR STRUCT. CU.YDS.	SOLID ROCK EXCAV. FOR STRUCT. CU.YDS.	CLASS 'A' CON. FOR BRIDGE CU.YDS.	CLASS 'B' CON. FOR BRIDGE CU.YDS.	REINF. STEEL FOR BRIDGE LBS.	CONC. RAIL FOR BRIDGE LIN. FT.	MEMBRANE WATERPROOF. SQ. FT.	BRONZE STATE BR. NAME PLS. EACH
ABUTMENT NO. 1	66	1483	383		5117	8		1
ONE 70' 0" SPANDREL FILLED ARCH			22.9	112.9	22189	157	2195	
ABUTMENT NO. 2	26	1553	43.6		5504	8		
TOTAL	92	3036	104.8	112.9	32810	173	2195	1

SUMMARY OF ROADWAY QUANTITIES

ITEM NO.	ITEM	QUANT.	UNIT
11	CLEARING	1762	ACRE
11	GRUBBING	1390	ACRE
SP&12	UNCLASSIFIED EXCAVATION	11236	CU.YDS.
12	SOLID ROCK EXCAVATION	203	CU.YDS.
13	DRY EXCAVATION FOR STRUCTURES	12	CU.YDS.
19	OVERHAUL	65756	STAYD.
54	CLASS 'A' CONCRETE	2923	CU.YDS.
54	CLASS 'B' CONCRETE	260	CU.YDS.
55	REINFORCING STEEL	3050	LBS.
60	18" REINFORCED CONCRETE PIPE	126	LIN. FT.
60	18" CORRUGATED METAL PIPE	20	LIN. FT.
64	RELAYING CULVERT PIPE	66	LIN. FT.
SP	TRAFFIC SERVICE GRAVEL	441	CU.YDS.
S.P.	FENCE MOVED & REPLACED	168	ROD
S.P.	BRONZE PROJECT MARKER FLATES	2	EACH

STRUCTURES

LOCATION	DESCRIPTION	SPAN	HEIGHT	LENGTH	PIPE CONCRETE				REINF. STEEL LBS.	RELAYING CULVERT PIPE LIN. FT.	DRY STRUC. EXC. CU. YDS.	BRONZE PROJ. MARKER PLS. TYPE AL-1 EACH	REMARKS
					R.C. 18"	C.M. 18"	CLASS 'A' CU.YDS.	CLASS 'B' CU.YDS.					
742+50	18" CMP 20' LONG LT. SIDE DRAIN						20						
749+56	RELAY & EXTEND 18" RCP IN PLACE			78				130	48	21			COMPLETED LENGTH 99'
756+06	RELAY & EXTEND 18" RCP IN PLACE			48				130	48	21			COMPLETED LENGTH 69'
760+44	5X5 RC. BOX 33' LONG IN PLACE TO EXTEND	5	5	72				28.51			12		EXTEND 28' LEFT & 11' RT. COMPLETED LENGTH 72'
764+68	RELAY 24" RCP 24' LONG IN RT. SIDE DITCH									24			OBTAIN PIPE FROM STA. 763+94
	2 PROJ. MARKER POSTS							0.26				2	
	17 R/W. MARKER POSTS							0.46					
	TOTALS			126	20	29.23	260	3050	66	12	2		

CLEARING & GRUBBING

STATION	TO STATION	CLEARING ACRES	GRUBBING ACRES
9+00	749+00	0.220	0.093
749+00	752+00	0.344	0.122
752+00	753+58.73	0.212	0.212
754+37.27	755+00	0.022	0.006
762+00	768+00	0.964	0.957
TOTAL		1.762	1.390

REMOVING MINOR OBSTRUCTIONS

STATION	DESCRIPTION
759+75	30' OF LOOSE STONE WALL ON RT.
759+75	50' OF LOOSE STONE WALL ON LT.
760+44	6X6 WOOD RESERVOIR AND PIPE
766+58	3 BOARD BARRICADE ACROSS ROAD
767+30	70' OF LOOSE STONE WALL ON RT.

FENCE MOVED & REPLACED

STATION	TO STATION	RT. RODS	LT. RODS
9+00	764+00	61.4	58.6
764+00	768+00	24.2	24.2
TOTAL		85.6	82.8
USE 168 RODS			

EARTHWORK

STATION TO STATION	UNCLASS. EX. CU.YDS.	UNCLASS. INLET, OUTLET, ETC. CU.YD.	SOLID ROCK EX. CU.YDS.	OVERHAUL STA.YDS.
9+00 768+00	10986	250	203	65756
TOTAL	10986	250	203	65756
11,236				

GRAVEL SUMMARY

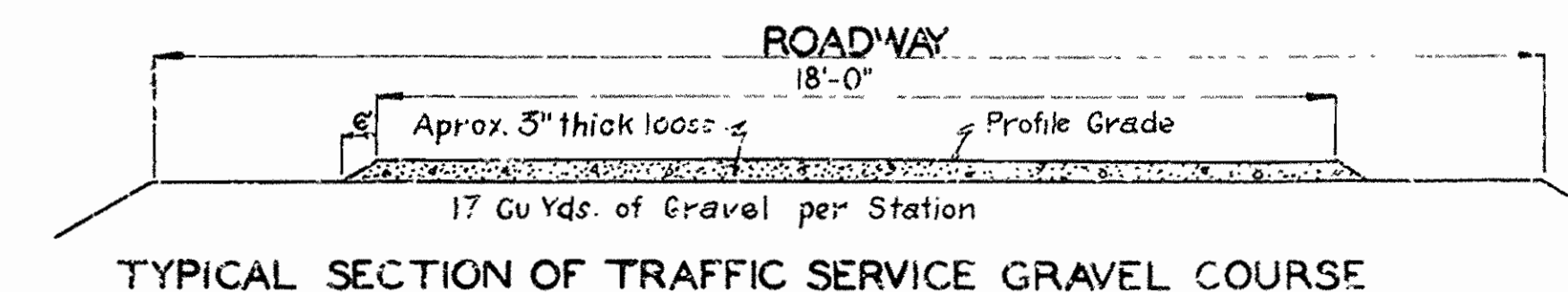
STATION TO STATION	TRAFFIC SERVICE GRAVEL CU.YD.	ADDL. FOR CURVE WDG. CU.YDS.	TOTAL CU.YDS.
9+00 768+00	388.13	52.94	441.07
TOTAL	388.13	52.94	441.07
USE 441			

CURVE WIDENING

P.I. STATION	LENGTH OF CURVE	DEGREE	ADDL. FOR CURVE WIDEN. SQ.YDS.	CU.YDS.
8+03.7	264.6	8°	67.95	5.61
751+64.5	353.9	20°	227.06	18.78
760+77.7	360.8	15°	234.86	19.42
763+91.4	167.1	14°	110.43	9.13
TOTAL			640.20	52.94

BRONZE PROJECT MARKER PLATES

STATION	TYPE	NUMBER
9+00	AL-1	1
768+00	AL-1	1
TOTAL		2



TYPICAL SECTION OF TRAFFIC SERVICE GRAVEL COURSE

SCHEDULE OF QUANTITIES OF BRIDGE OVER MISSOURI AND ARKANSAS RAILWAY NEAR EDGEMONT CLEBURNE COUNTY ROUTE 16. SEC. 11.

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

Drawn By: G.B.Y. Date: 11-12-35  
Traced By: G.B.Y. Date: 11-12-35  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
BRIDGE NO. 1308 DRAWING NO. 4100

*G.B.Y.*  
BRIDGE ENGINEER



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	Ark.	W.R.G. 5397A	1936	13	22

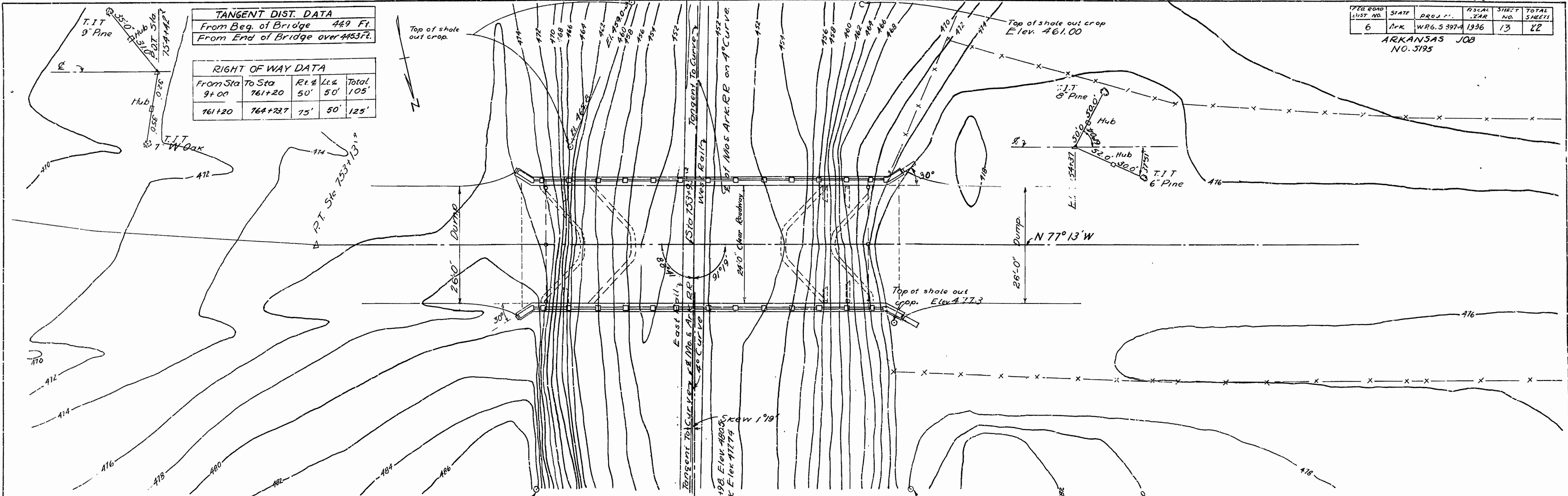
ARKANSAS JOB NO. 5195

**TANGENT DIST. DATA**

From Beg. of Bridge 449 Ft.  
From End of Bridge over 4453 Ft.

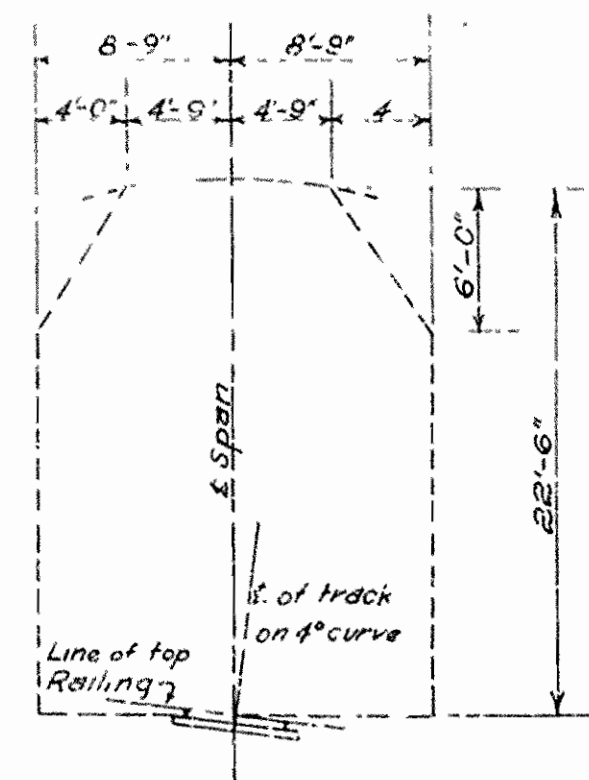
**RIGHT OF WAY DATA**

From Sta	To Sta	Rt. #	Lt. #	Total
9+00	761+20	50'	50'	105'
761+20	764+72.7	75'	50'	125'



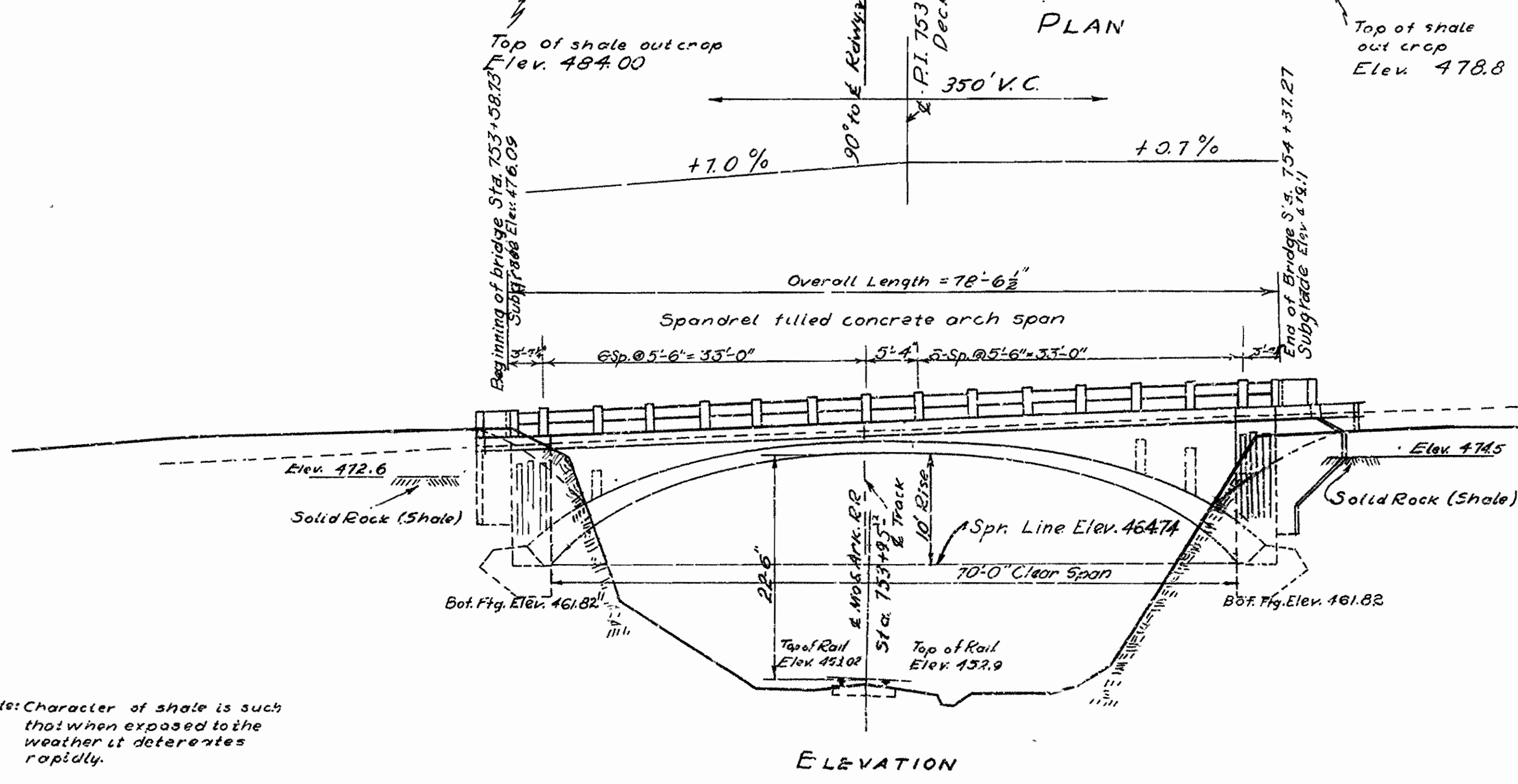
**QUANTITIES**

Item No.	Item	Quantity
13	Dry Excavation for Structures	92 Cu Yds.
13	Rock Excavation for Structures	303 Cu Yds.
91	Class A Concrete for Bridge	1048 Cu Yds.
91	Class S Concrete for Bridge	112.9 Cu Yds.
92	Reinforcing St. I for Bridge	32,730 Lbs.
94	Concrete Railing for Bridge	173 Lin Ft.
SP	Membrane Waterproofing	2,195 Sq Ft.
SP	Bronze Stone Bridge Name Plates (Type B)	1 Each



Minimum Clearance Diagram

Note: Character of shale is such that when exposed to the weather it deteriorates rapidly.

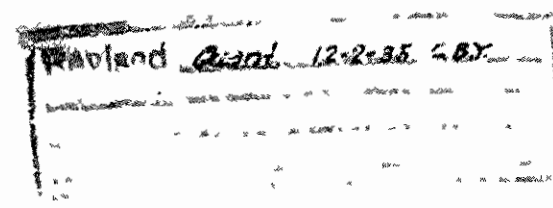


ELEVATION

Note: For Details of Arch Span, and General Notes see Drawing No. 4103.  
Rock excavation shall be done to neat lines of concrete footings. Care should be exercised to prevent shattering of rock faces by excessive blasting.  
Fill over arch ring shall be compacted in successive horizontal layers of one foot depths and shall be placed equally from both ends of the bridge, in order to keep loads balanced about 1/2 of span. Payment for this work shall be included in the price bid for Unclassified Excavation.

LAYOUT SHEET  
EDGEMONT OVERPASS  
MISSOURI AND ARKANSAS RAILWAY  
CLEBURNE COUNTY  
ROUTE 16 Sec. 11  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARKANSAS  
Drawn by: R.E.H. Date: 9-14-35  
Traced by: B.W.D. Date: 9-21-35  
Checked by: Date: Scale: 1"=10'  
BRIDGE No. 1308  
CODE No. 951  
DRAWING No. 4102

B.M. Elev. 4106.3  
S.W. cor. of East Abutment  
of pipe cul. Sta. 799+56.

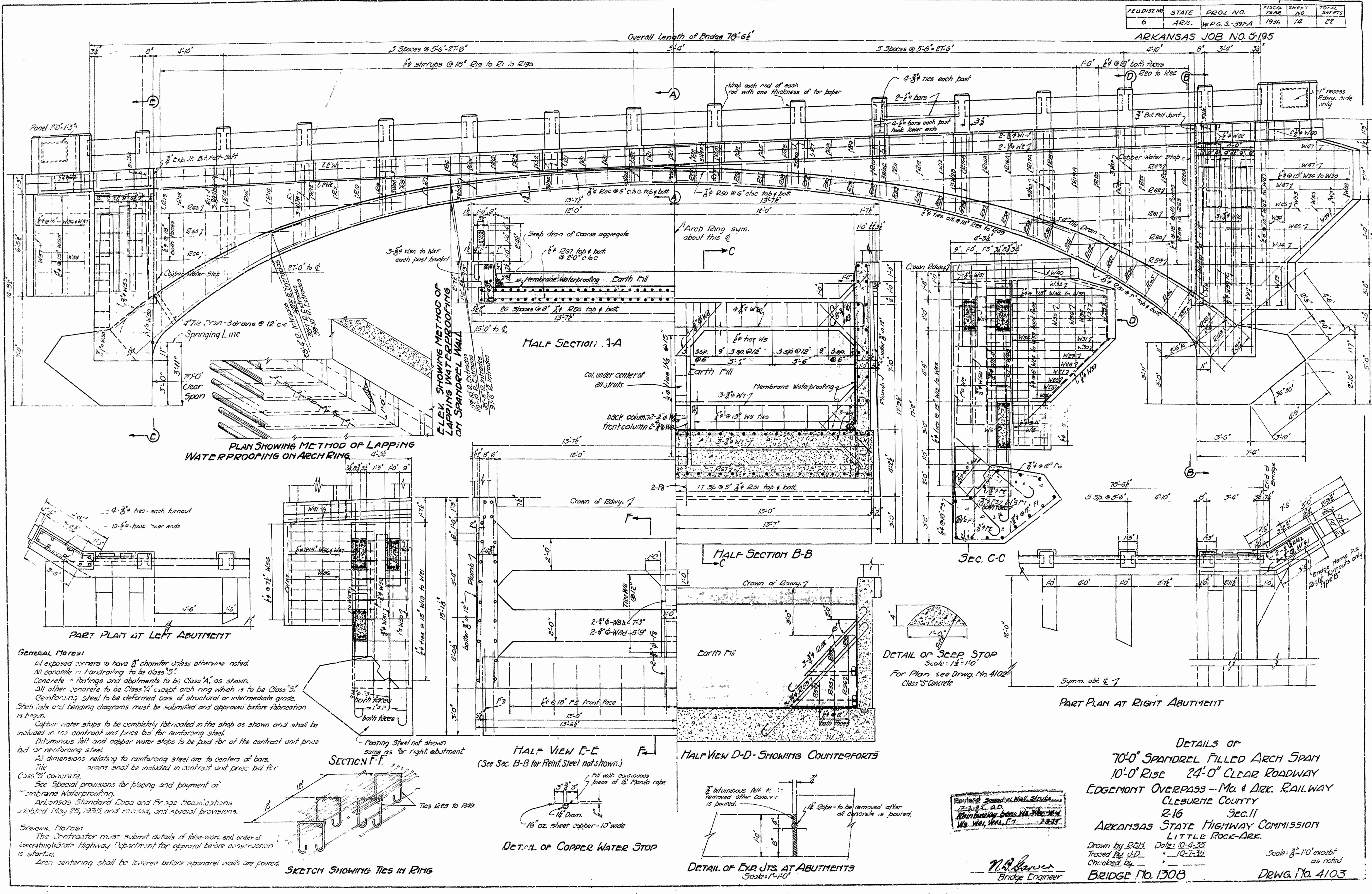


W.R. Gowan  
BRIDGE ENGINEER



FED. DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	AR.	W.P.G. S. 387-A	1936	14	22

ARKANSAS JOB NO. 5-195



**FLEX. SHOWING METHOD OF LAPPING WATERPROOFING ON SPANDREL WALL**

**PLAN SHOWING METHOD OF LAPPING WATERPROOFING ON ARCH RING**

**HALF SECTION A-A**

**HALF SECTION B-B**

**SEC. C-C**

**PART PLAN AT RIGHT ABUTMENT**

**DETAILS OF 70'-0" SPANDREL FILLED ARCH SPAN  
10'-0" RISE 24'-0" CLEAR ROADWAY  
EDGEMONT OVERPASS - MO. & ARK. RAILWAY  
CLEBURNE COUNTY  
R-16 SEC. II  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK-ARK.**

**GENERAL NOTES:**  
All exposed corners to have  $\frac{3}{8}$ " chamfer unless otherwise noted.  
All concrete in haunching to be Class "5".  
Concrete in footings and abutments to be Class "A", as shown.  
All other concrete to be Class "4" except arch ring which is to be Class "5".  
Reinforcing steel to be deformed class of structural or intermediate grade.  
Shop lists and bending diagrams must be submitted and approved before fabrication is begun.  
Copper water stops to be completely fabricated in the shop as shown and shall be included in the contract unit price bid for reinforcing steel.  
Bituminous felt and copper water stops to be paid for at the contract unit price bid for reinforcing steel.  
All dimensions relating to reinforcing steel are to centers of bars.  
Tie drains shall be included in contract unit price bid for Class "5" concrete.  
See special provisions for placing and payment of membrane waterproofing.  
Arkansas Standard Code and Practices, Specifications adopted May 25, 1935, and revisions, and special provisions.

**SPECIAL NOTES:**  
The contractor must submit details of false work and order of concreting to the Highway Department for approval before construction is started.  
Arch centering shall be removed before spandrel walls are poured.

**DETAIL OF SLEEP STOP**  
Scale: 1/2" = 1'-0"  
For Plan see Drawg. No. 4102  
Class "5" Concrete

**DETAIL OF COPPER WATER STOP**

**DETAIL OF EXP. JTS. AT ABUTMENTS**  
Scale: 1/4" = 1'-0"

Reviewed Spandrel Wall Details  
12-2-35, D.D.  
Reinforcing Bars W.P.G. No. 12-2-35  
W.A. W., W.A. L.T. - E.B.S.

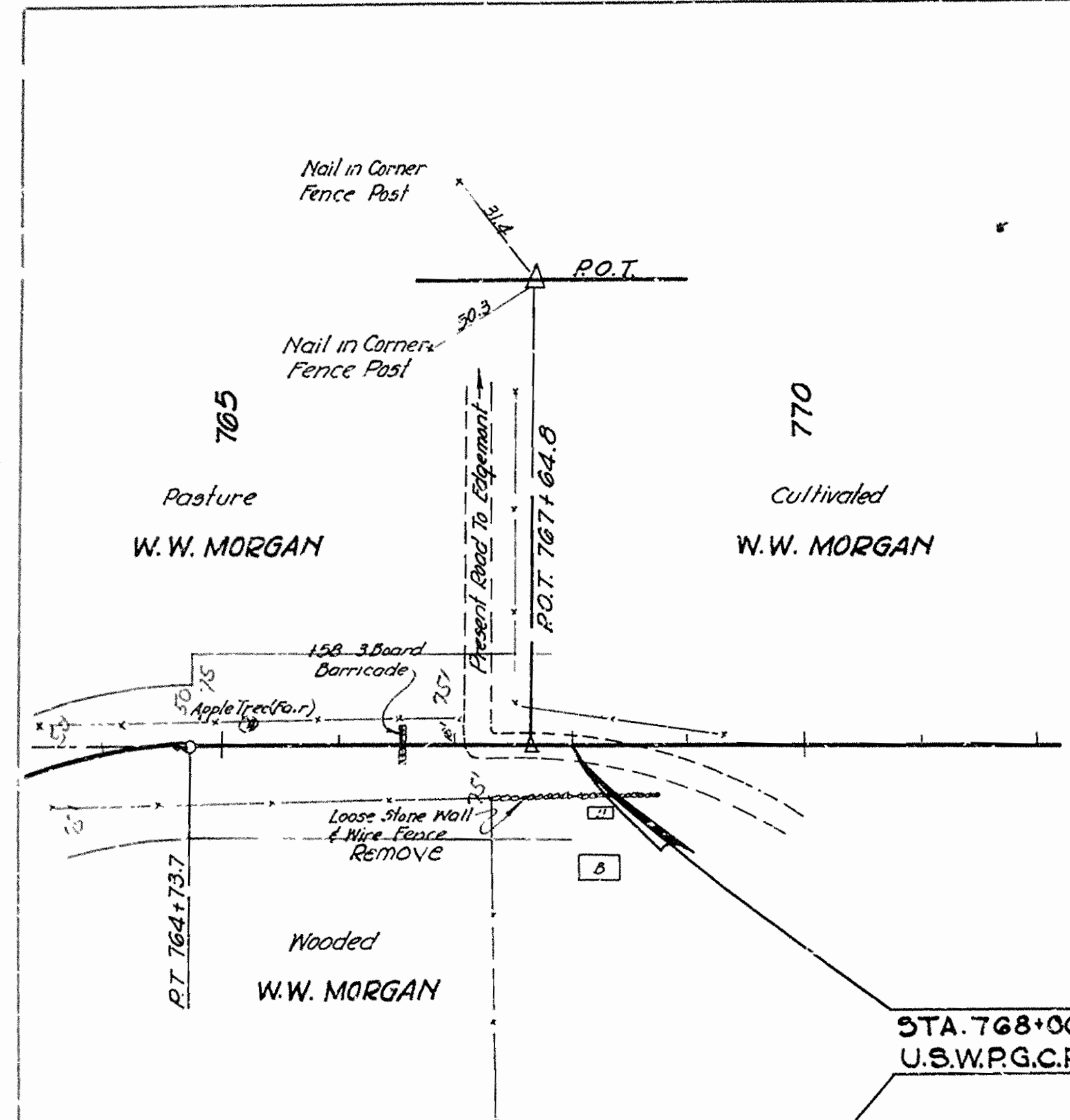
**N.A. Rensler**  
Bridge Engineer

Drawn by B.C.H. Date: 10-1-35  
Traced by J.D. " 10-1-36  
Checked by " " " " " "

Scale: 3/8" = 1'-0" except as noted  
BRIDGE No. 1308  
DRWG. No. 4103



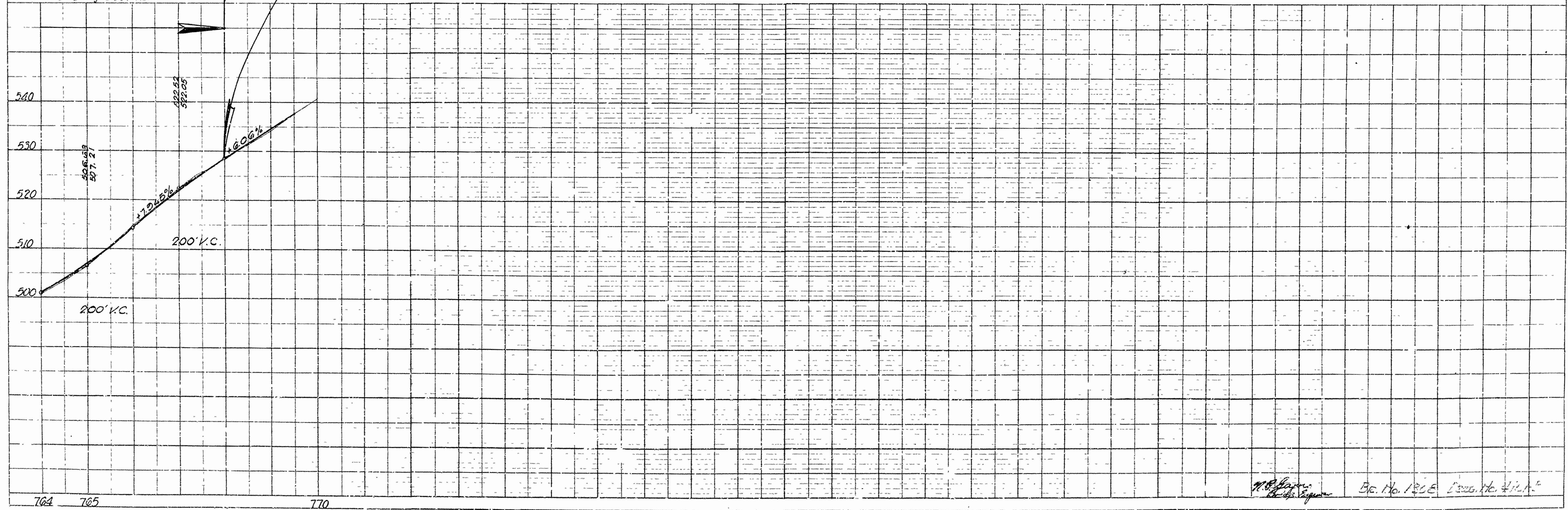
DATE	NO.	BY
JUN 6	5-195	+



STA. 768+00 END JOB 5195  
U.S.W.P.G.C.R.-W.P.G.S. 397-A

FENCE MOVED AND REPLACED  
Sta. 764+00 to Sta. 768+00 Road Rt. 24.2 - Road Lt. 24.2

Clear 0.964 Ac.  
Grubbing 0.957 Ac.



*M. J. [Signature]* Eng. No. 183E Desig. No. 4111

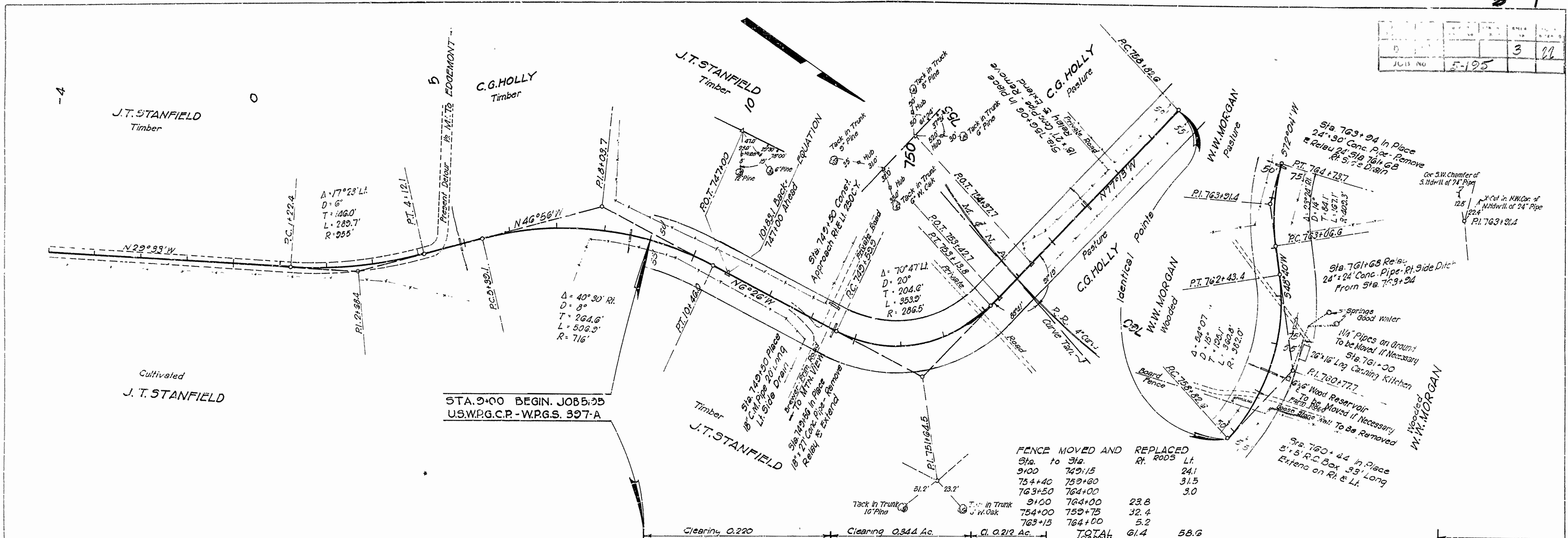
PLAN

PROFILE

764 765

770





**FENCE MOVED AND REPLACED**

Sta. to	Sta.	Rt. Rods	Lt.
9+00	749+15	24.1	24.1
754+40	753+60	31.5	31.5
763+50	764+00	3.0	3.0
9+00	764+00	23.8	23.8
754+00	753+75	32.4	32.4
763+15	764+00	5.2	5.2
<b>TOTAL</b>		<b>61.4</b>	<b>58.6</b>

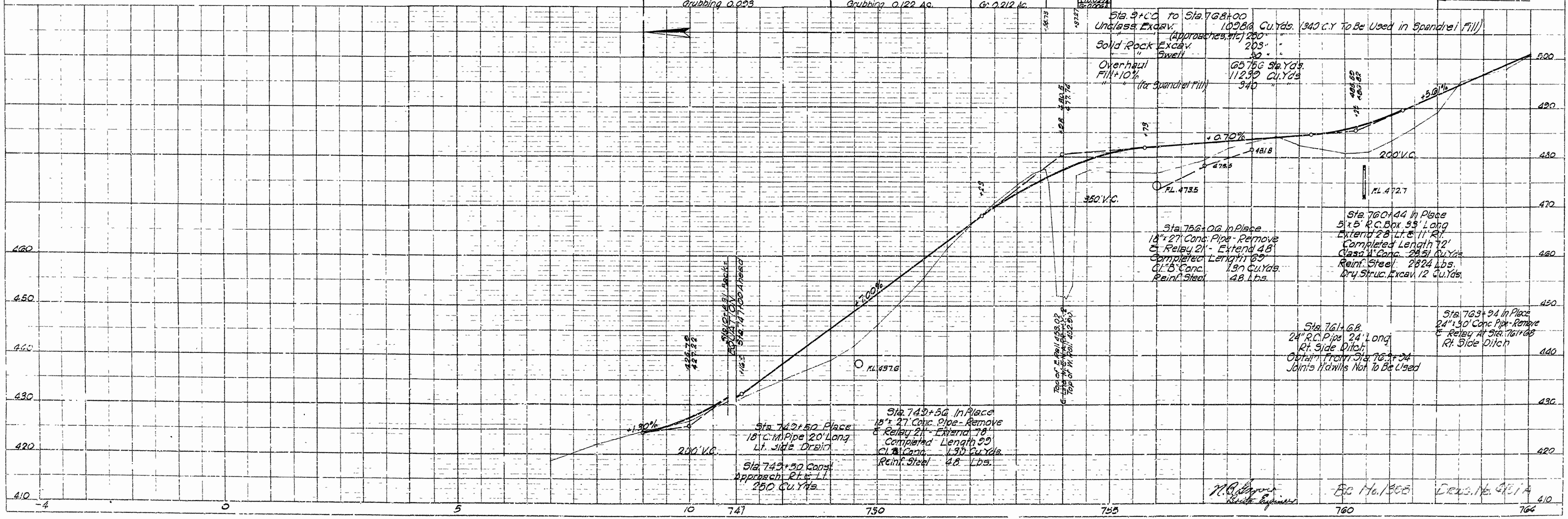
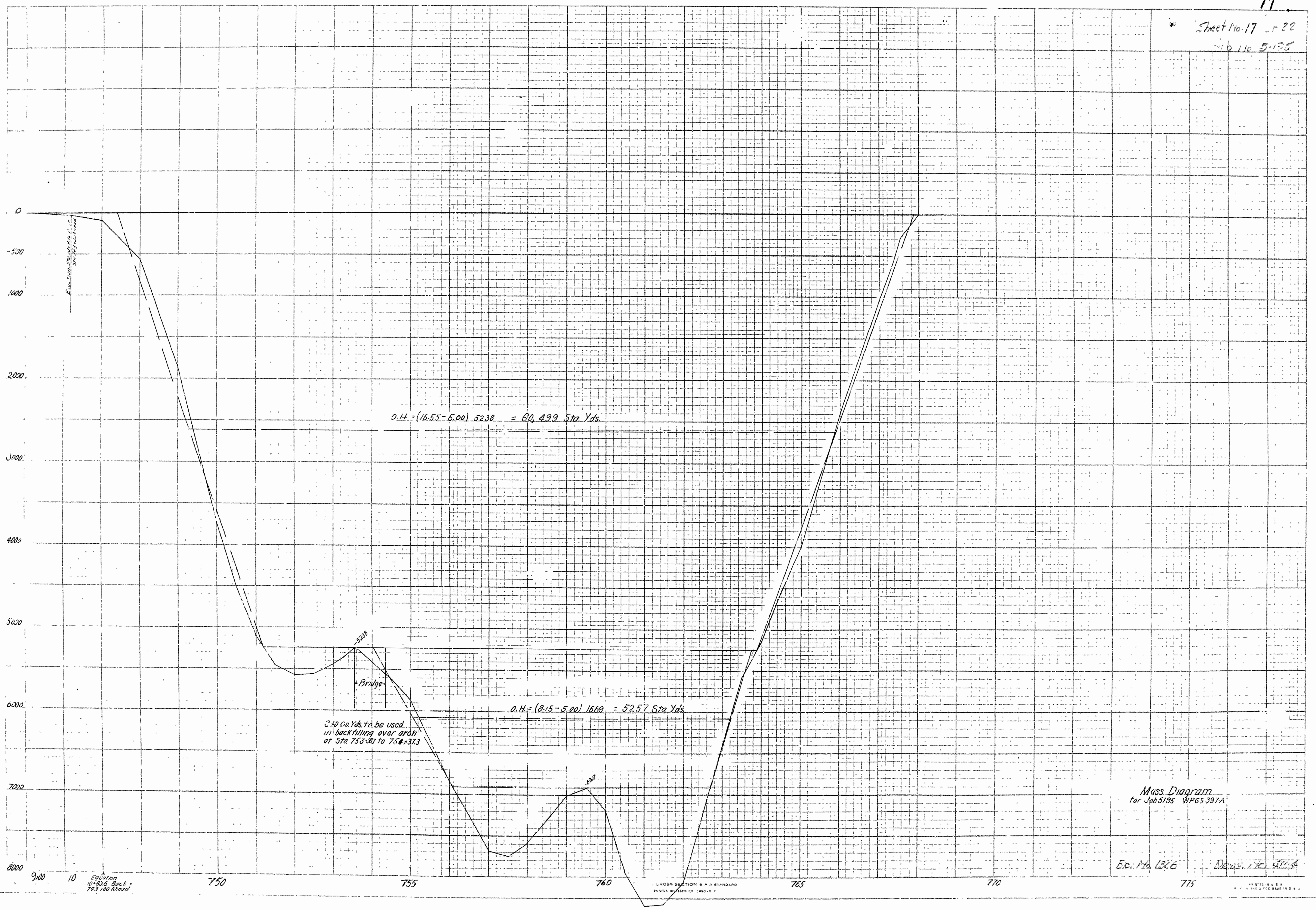


PLATE 1 PLAN-PROFILE 'S' R. 1 ANDARD





Mass Diagram  
for Job 5-195 V.P.G.S. 397A

E.S. No. 1365  
Dec 17, 1954

CROSS SECTION & P.A. STANDARD  
EUGENE DIVISION CO. ENGRS. N.Y.

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