

STATE OF NORTH CAROLINA  
STATE HIGHWAY COMMISSION

STATE PROJECT NO.	NO.	STATE PROJECT NO.	NO.
	829361		
F.A. PROJECT NO.			

INDEX OF SHEETS

Sheet No. 1. Title Page

2. Estimate of Quantities

3. R.H. 304 (S.C.) Details for Plain Concrete

3. R.S. 300 (S.C.) Details for Concrete

3.7 General Notes

4. & 9 Plans & Profiles

10. Schedule of Earth Work

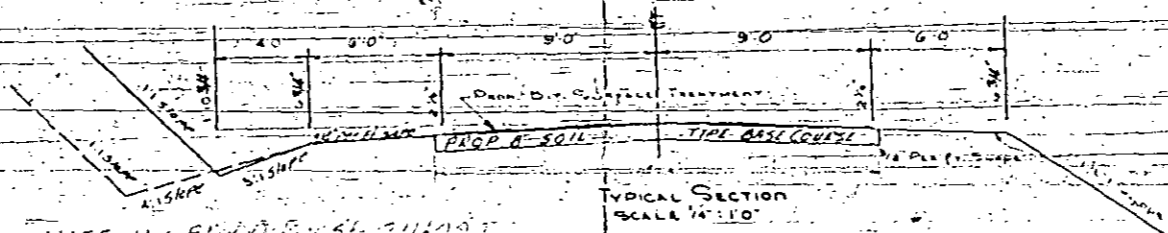
11. & 12 Cross Sections

PLAN AND PROFILE OF PROPOSED  
STATE HIGHWAY  
IREDELL COUNTY

BEG. AT STA. 2100 & POINT IN E. OF L. 14' 0" CO. RD. APPROX. 2 1/2 M. NORTH OF HAYDEN BRIDGE IN A NORTHERLY DIRECTION ALONG OR NEAR E. 1/4 SEC. 40 ENDING AT A POINT AT EDGE OF PART OF S. 70 TO STA. 2102+11.2 END OF PROJ.

CONVENTIONAL SIGNS

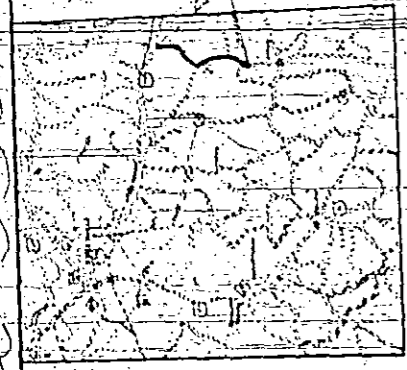
County Line	_____
Township Line	_____
City or Town Line	_____
Right of Way Line	_____
Survey Line	_____
Property Line	_____
Wire Fence	_____
Board Fence	_____
Present Traveled Road	_____
Railroad	_____
Grade Elevation	_____
Ground Elevation	_____
Pipe Culvert	_____
Box Culvert	_____
Woods	_____
Telephone or Telegraph Pole	_____
Tower Pole and Line	_____
Power Pole	_____
Right of Way Markers	_____



NOTE: Use End of Proj. Sta. 21100.7  
Sta. 21000 as the IREDELL CROSSING

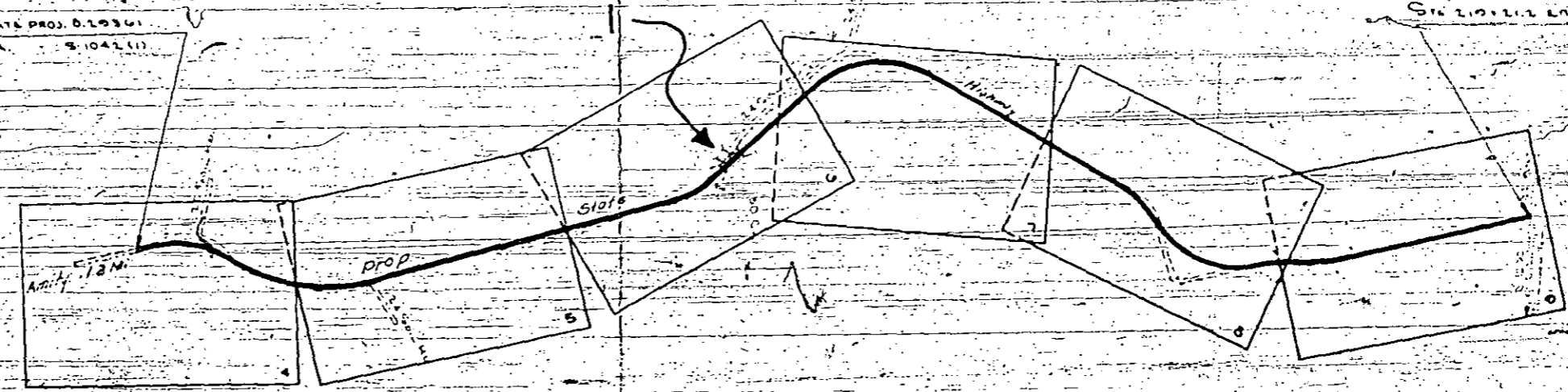
SCALES  
PLAN 1"=100 FT.  
PROFILE 1"=100 HOR.  
1"=10 VERT.

Sketch Map Showing Sand Pits & Shipping Points in Vicinity of State Proj. 829361  
① Denotes Sand Pits



STA. 2100 BEG. STATE PROJ. 829361  
F.A. 5-1042(1)

STA. 2102+11.2 END STATE PROJ. 829361  
F.A. 5-1042(1)



LAYOUT SCALE 1"=800'

LENGTH ROADWAY F.A. PROJ. 5-1042(1) 3.51 MI.  
STRUCTURES 2.03 MI.  
TOTAL LENGTH STATE PROJ. 829361 5.54 MI.

Prepared in Office of  
STATE HIGHWAY COMMISSION  
RALEIGH, N. C.

Designed by BURDELL  
Checked by HALL  
Date: 10-15-31

State Standard Specifications  
Approved by Bureau Control

Right of Way on this project is 60' wide

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

APPROVED: \_\_\_\_\_  
DIVISION CHIEF

INDEX

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Superstructure Sta. 119115	3 & 4
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Pipe Record (Bents 1 & 2)	11
Pipe Record (Bents 1 & 3 & 4)	12
Pipe Record (End Bent No. 1)	13
Final Estimate	14

FINAL ESTIMATE ON NORTH CAROLINA STATE PROJECT NO. 8-29361

FOR STRUCTURE ON COUNTY ROAD FROM A POINT ON A 24' SOIL COUNTY ROAD APPROX. 1.2 MILES NORTH OF AMITY  
 NORTH TO A POINT ON U.S. 70 APPROX. 0.25 MILE WEST OF ELMWOOD, IREDELL COUNTY, N.C.

DIVISION NO. 12

CONTRACTOR - DICHERSON, INC.  
 MONROE, N.C.

CONTRACT LET DATE - MAY 12, 1959  
 WORK STARTED DATE - JUNE 15, 1959  
 WORK COMPLETED DATE - DEC 7, 1959

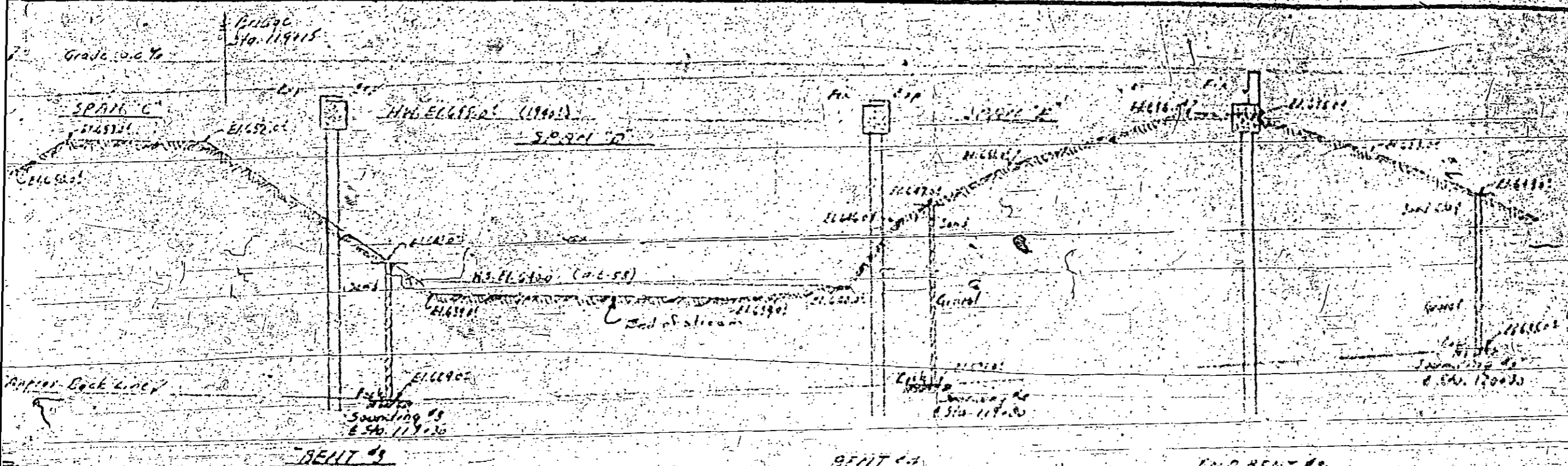
E.L. KEMPER - DIVISION ENGINEER  
 F.T. WAGNER - RESIDENT ENGINEER  
 J.W. ALEXANDER - MASONRY INSPECTOR

NOTE - The Final Note Books, properly marked, are submitted  
 herewith as a part of this Final Estimate as follows -  
 1. Masonry Book  
 3. Dairies

Reel # 668  
 Pos # 20  
 (Bridge Plans)



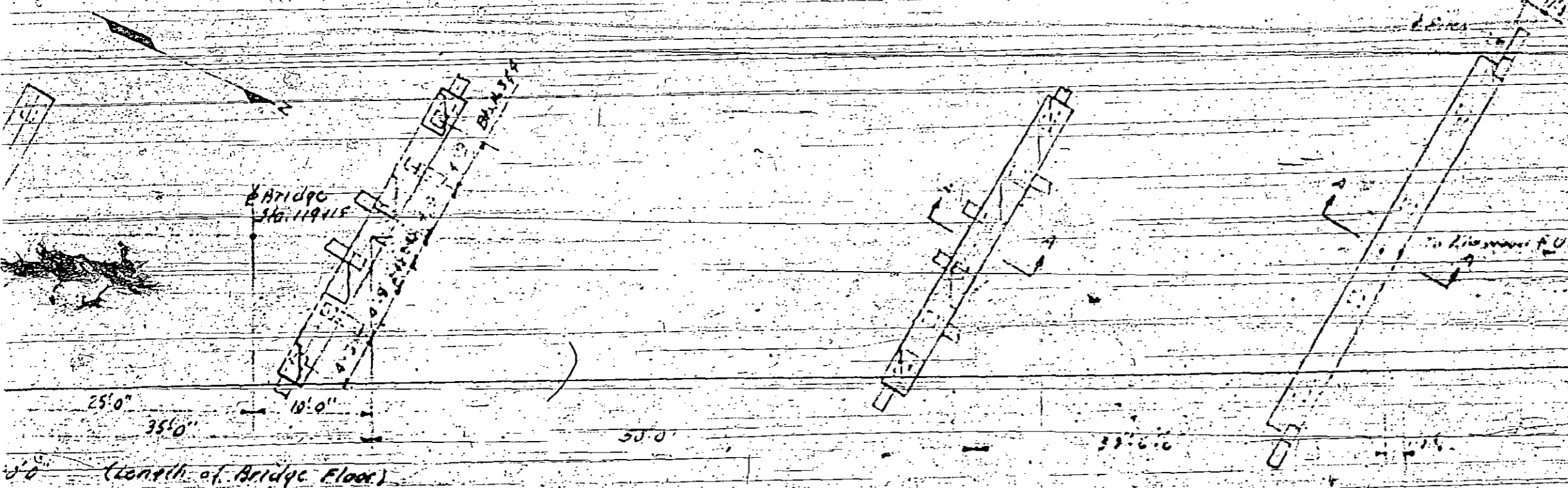
DES. NO.	DATE	BY
1	M. C.	8.29
F.A. Proj. 5.10 & 2(C)		



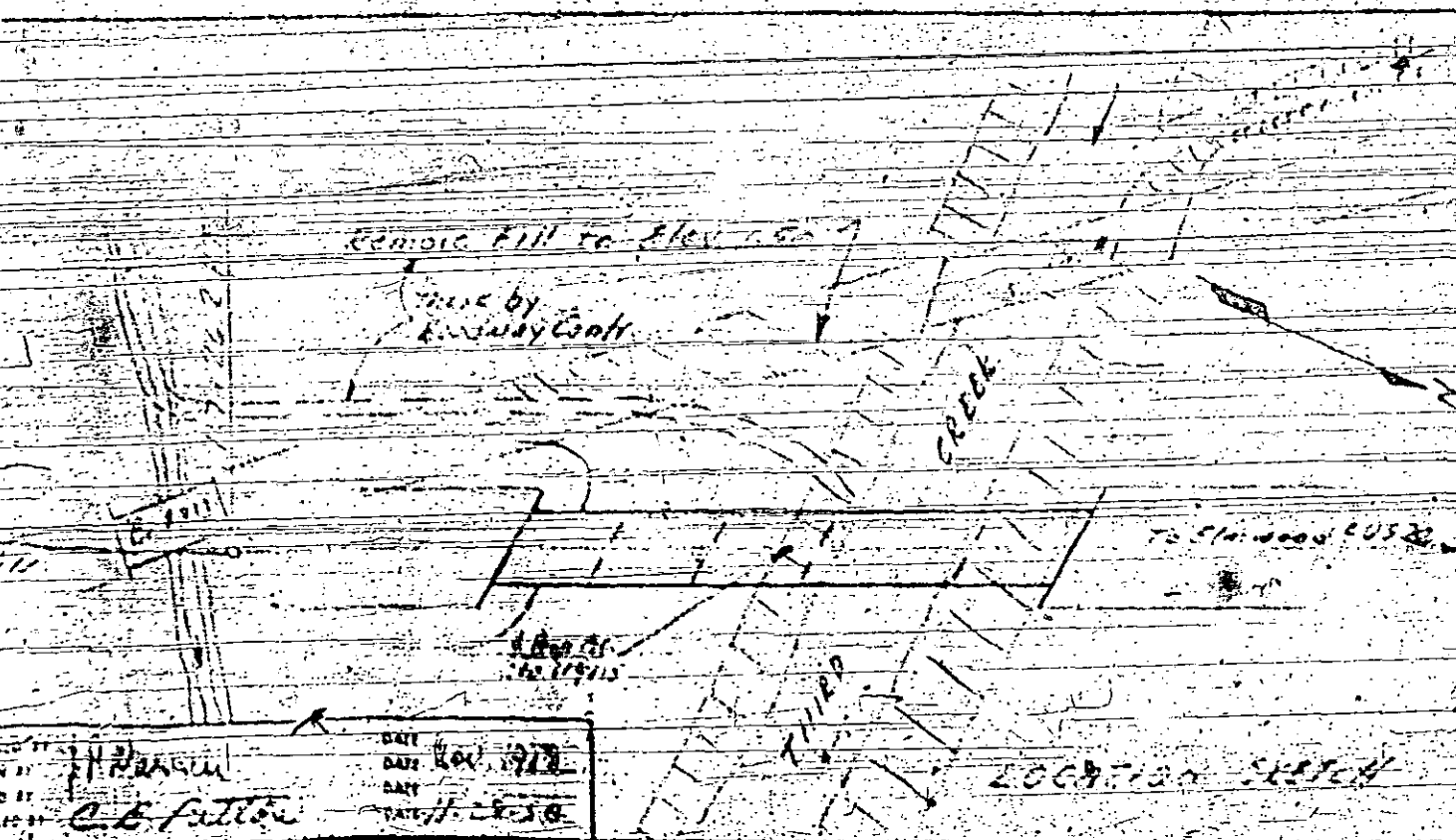
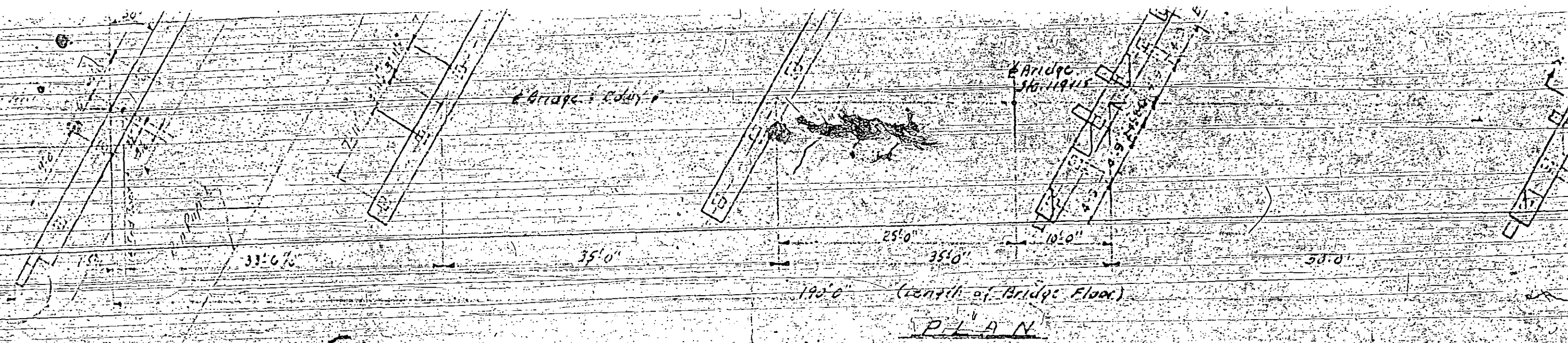
ELEVATION ALONG E ROADWAY  
BENTS SECTION A-A

NOTES

Assumed Live Load  $H15 (2+1)$   
 for other design of "Generalized" section  
 for surface finish requirements see Special Pro  
 Test piles will not be required. Capacity  
 to be based on piles 27' 0" long.  
 Piles for Bent 1 and 2 shall be  
 driven to a minimum bearing capacity  
 of 25 tons each.  
 Piles for Bent 3 shall be driven to a minimum  
 bearing capacity of 30 tons each and piles  
 Bent 3 shall be driven to a maximum  
 bearing capacity of 28 tons each.  
 MAINTENANCE & REMOVAL OF EXISTING  
 STRUCTURE & STA. 11915 TO STA. 11915  
 After serving as a temporary crossing the  
 existing structure (Bent 1) & Sta. 11915  
 located 60' upstream consisting of  
 2 x 12 timber spans 61 & 90' in length  
 supported on existing pile abutments & bents  
 pile abutments with untreated timber  
 bents; and the existing structure (Bent 1)  
 & Sta. 11915 consisting of 16' x 18' in  
 span on creosoted pile abutment with  
 untreated bents shall be removed as  
 follows:  
 Superstructure completely  
 Substructure to an elevation  
 of 1.0' above natural ground



PLAN



547 - 47 Nail in Base 10" Trim Willow 220' El. Sta. 115+00 Elev 659.23

TOTAL BILL OF MATERIALS

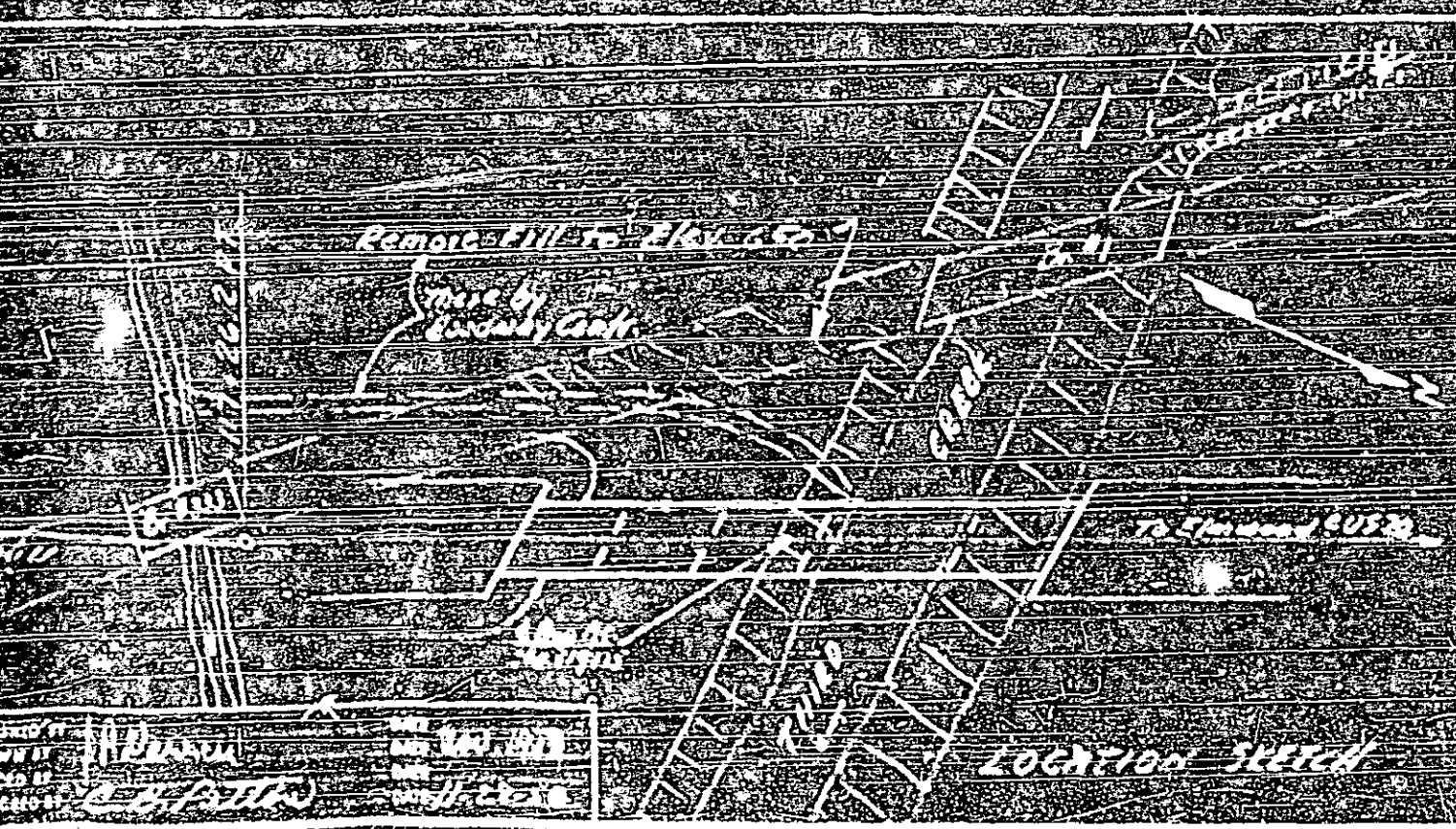
	Class A Concrete	Reinf. Steel	Struct. Steel	12" Prestress Conc. Piles		Plain Rip Rap	Concrete Rip Rap		Mfr. 3' diam. of Best 511-930 119+15 117+60 Lower Riv.
				No.	Lin. Ft.				
Span A-C	115.6	22330	57900						
Span D	39.1	7899	28200						
End Pier #1	9.6	1751		4	100	160	200		
Pier #1	6.3	1507		4	100				
Pier #2	6.3	1507		4	100				
Pier #3	6.5	1500		6	100				
Pier #4	6.5	1500		6	100				
End Pier #2	9.6	1751		4	100				
<b>TOTAL</b>	<b>199.7</b>	<b>39744</b>	<b>86100</b>	<b>28</b>	<b>755</b>	<b>160</b>	<b>200</b>		<b>400.00</b>

DATE  
DATE  
DATE  
DATE

11/20/50  
11/20/50  
11/20/50  
11/20/50

C. B. Fulton

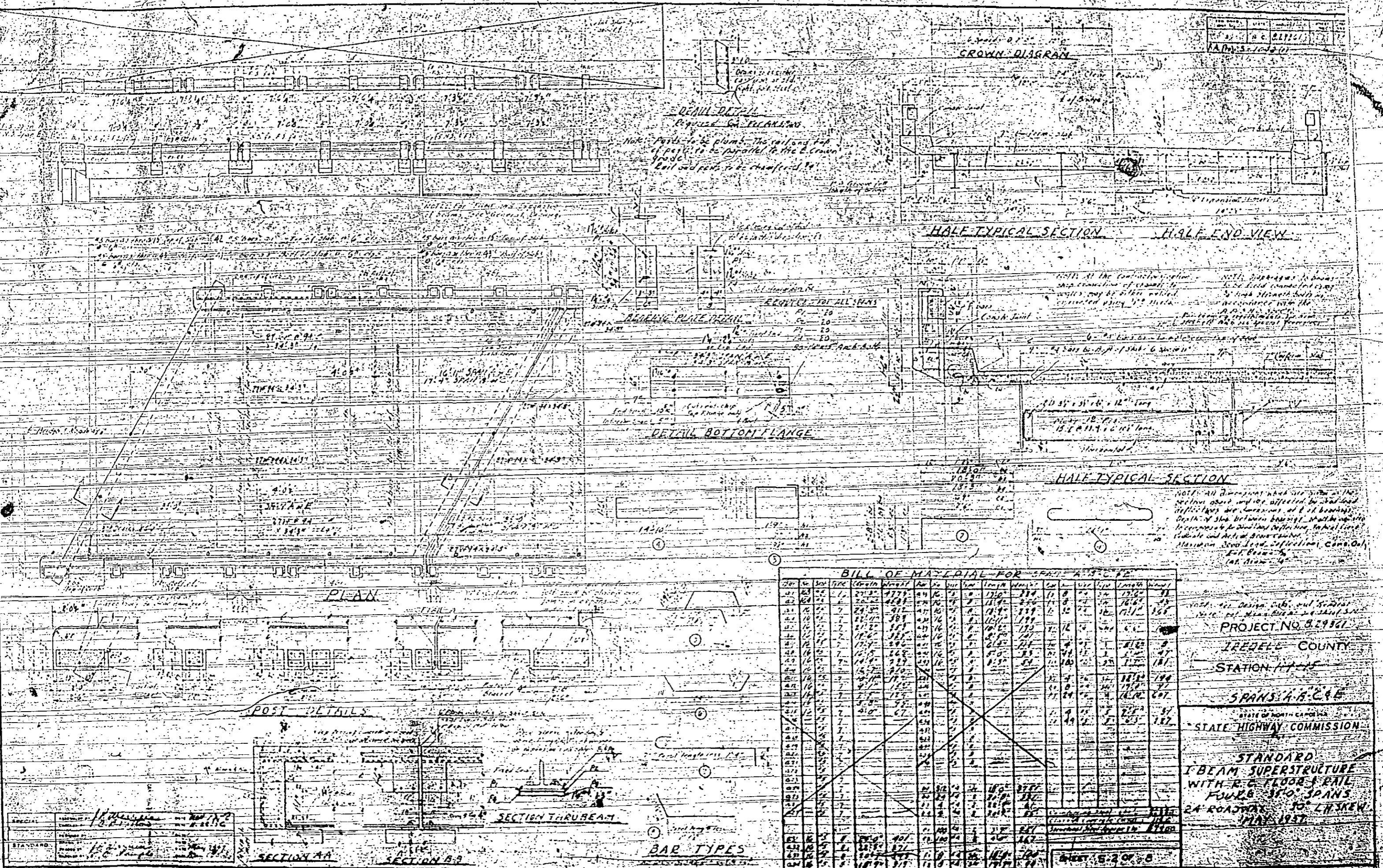
LOCATION SKETCH



651-47 mill in base 10' trim willow 220' at 9th 115000 15th 6542

TOTAL BILL OF MATERIAL

	Class A	Reinf.	Struct.	12' Section	More	Concrete				Sp. 1000
	Concrete	Steel	Steel	Low Alk.	Lip Riv.	Rip Riv.				
	Cu Yds	Lbs	Sq. Ft.	No.	Lbs.	Sq. Yds				
Span A B C E	1156	22310	57900							
Span D	381	7699	20200							
End Bent #1	96	1751		4	100	200				
Bent #1	63	1507		4	100					
Bent #2	63	1507		4	100					
Bent #3	65	1500		6	100					
Bent #4	68	1500		6	100					
End Bent #2	96	1751		4	100					
TOTAL	1999	39746	86100	28	755	760				



**DETAIL DETAIL**  
 Required for all spans.  
 Note: Posts to be plumb. The rail and top of post to be parallel to the C. Crown.  
 Rail and posts to be chamfered.

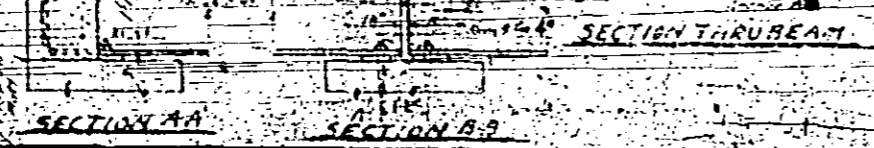
**REQUIRE FOR ALL SPANS**  
 P1 - 20  
 P2 - 20  
 P3 - 20  
 P4 - 20  
 P5 - 20  
 P6 - 20  
 P7 - 20  
 P8 - 20  
 P9 - 20  
 P10 - 20  
 P11 - 20  
 P12 - 20  
 P13 - 20  
 P14 - 20  
 P15 - 20  
 P16 - 20  
 P17 - 20  
 P18 - 20  
 P19 - 20  
 P20 - 20

**BILL OF MATERIAL FOR SPAN A-B-C-E**

NO.	QTY.	UNIT	DESCRIPTION	NO.	QTY.	UNIT	DESCRIPTION	NO.	QTY.	UNIT	DESCRIPTION	NO.	QTY.	UNIT	DESCRIPTION
1	1	SPAN	A-B-C-E	1	1	SPAN	A-B-C-E	1	1	SPAN	A-B-C-E	1	1	SPAN	A-B-C-E
2	1	POST	A-B-C-E	2	1	POST	A-B-C-E	3	1	POST	A-B-C-E	4	1	POST	A-B-C-E
5	1	POST	A-B-C-E	6	1	POST	A-B-C-E	7	1	POST	A-B-C-E	8	1	POST	A-B-C-E
9	1	POST	A-B-C-E	10	1	POST	A-B-C-E	11	1	POST	A-B-C-E	12	1	POST	A-B-C-E
13	1	POST	A-B-C-E	14	1	POST	A-B-C-E	15	1	POST	A-B-C-E	16	1	POST	A-B-C-E
17	1	POST	A-B-C-E	18	1	POST	A-B-C-E	19	1	POST	A-B-C-E	20	1	POST	A-B-C-E
21	1	POST	A-B-C-E	22	1	POST	A-B-C-E	23	1	POST	A-B-C-E	24	1	POST	A-B-C-E
25	1	POST	A-B-C-E	26	1	POST	A-B-C-E	27	1	POST	A-B-C-E	28	1	POST	A-B-C-E
29	1	POST	A-B-C-E	30	1	POST	A-B-C-E	31	1	POST	A-B-C-E	32	1	POST	A-B-C-E
33	1	POST	A-B-C-E	34	1	POST	A-B-C-E	35	1	POST	A-B-C-E	36	1	POST	A-B-C-E
37	1	POST	A-B-C-E	38	1	POST	A-B-C-E	39	1	POST	A-B-C-E	40	1	POST	A-B-C-E
41	1	POST	A-B-C-E	42	1	POST	A-B-C-E	43	1	POST	A-B-C-E	44	1	POST	A-B-C-E
45	1	POST	A-B-C-E	46	1	POST	A-B-C-E	47	1	POST	A-B-C-E	48	1	POST	A-B-C-E
49	1	POST	A-B-C-E	50	1	POST	A-B-C-E	51	1	POST	A-B-C-E	52	1	POST	A-B-C-E
53	1	POST	A-B-C-E	54	1	POST	A-B-C-E	55	1	POST	A-B-C-E	56	1	POST	A-B-C-E
57	1	POST	A-B-C-E	58	1	POST	A-B-C-E	59	1	POST	A-B-C-E	60	1	POST	A-B-C-E
61	1	POST	A-B-C-E	62	1	POST	A-B-C-E	63	1	POST	A-B-C-E	64	1	POST	A-B-C-E
65	1	POST	A-B-C-E	66	1	POST	A-B-C-E	67	1	POST	A-B-C-E	68	1	POST	A-B-C-E
69	1	POST	A-B-C-E	70	1	POST	A-B-C-E	71	1	POST	A-B-C-E	72	1	POST	A-B-C-E
73	1	POST	A-B-C-E	74	1	POST	A-B-C-E	75	1	POST	A-B-C-E	76	1	POST	A-B-C-E
77	1	POST	A-B-C-E	78	1	POST	A-B-C-E	79	1	POST	A-B-C-E	80	1	POST	A-B-C-E
81	1	POST	A-B-C-E	82	1	POST	A-B-C-E	83	1	POST	A-B-C-E	84	1	POST	A-B-C-E
85	1	POST	A-B-C-E	86	1	POST	A-B-C-E	87	1	POST	A-B-C-E	88	1	POST	A-B-C-E
89	1	POST	A-B-C-E	90	1	POST	A-B-C-E	91	1	POST	A-B-C-E	92	1	POST	A-B-C-E
93	1	POST	A-B-C-E	94	1	POST	A-B-C-E	95	1	POST	A-B-C-E	96	1	POST	A-B-C-E
97	1	POST	A-B-C-E	98	1	POST	A-B-C-E	99	1	POST	A-B-C-E	100	1	POST	A-B-C-E

PROJECT NO. 529361  
 IREDELL COUNTY  
 STATION 17-15  
 SPANS A-B-C-E  
 STATE HIGHWAY COMMISSION  
 STANDARD  
 I-BEAM SUPERSTRUCTURE  
 WITH R.C. FLOOR & RAIL  
 FOUR 35'0" SPANS  
 24' ROADWAY 10' L.H. SKEW  
 MAY 1957

SPECIAL	1/2" x 1/2" x 1/2"	1/2" x 1/2" x 1/2"
STANDARD	1/2" x 1/2" x 1/2"	1/2" x 1/2" x 1/2"



**BAR TYPES**

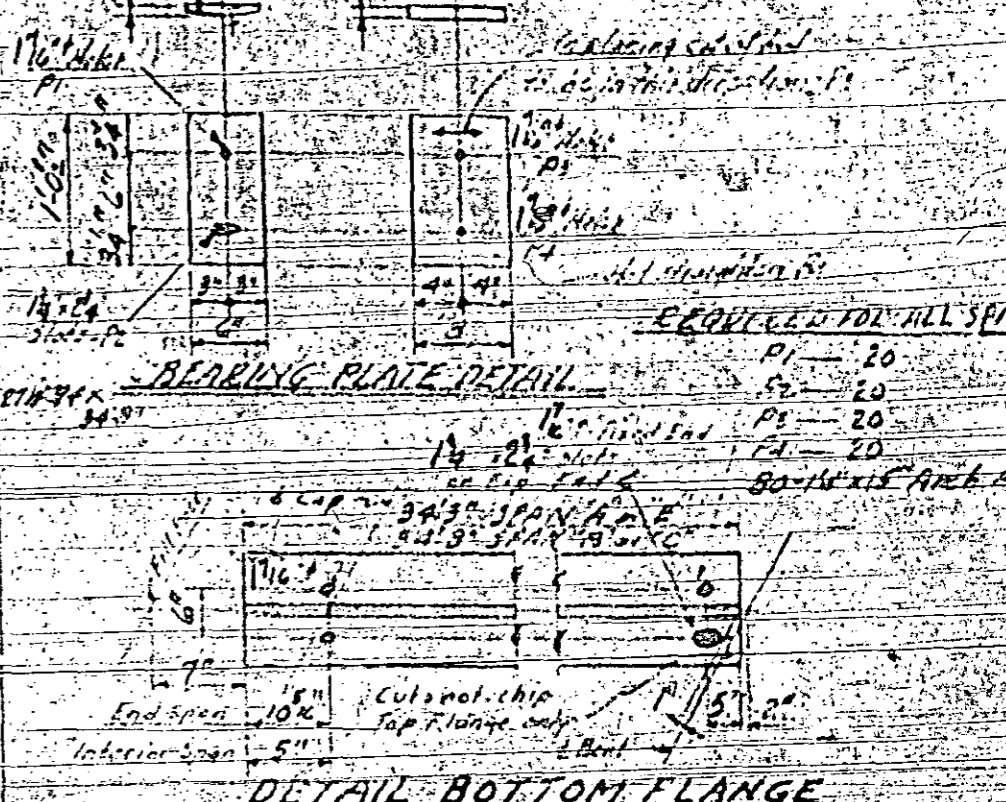
Rail and posts to be changed 9'

NOTE: For fixed and expansion joints of beams, see General Drawing

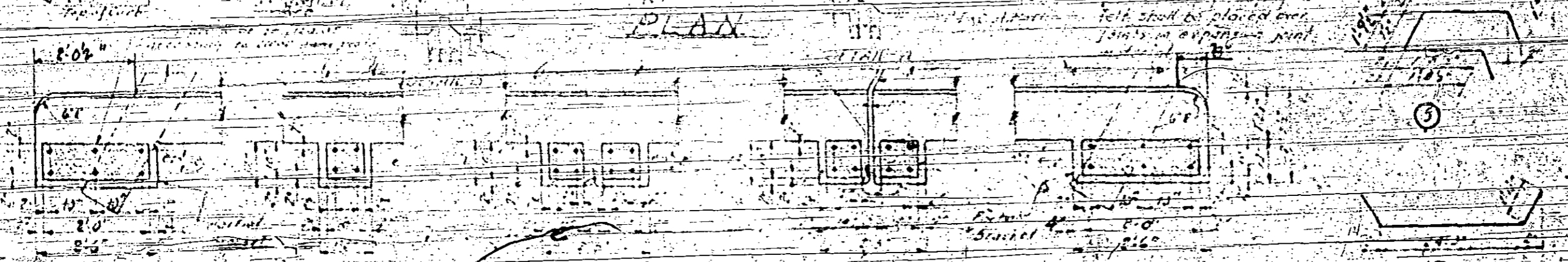
42 bars at 15" top of slab - 42 bars at 15" top of slab  
 25 bars at 15" top of slab - 25 bars at 15" top of slab  
 42 bars at 15" top of slab - 42 bars at 15" top of slab  
 25 bars at 15" top of slab - 25 bars at 15" top of slab



PLAN



DETAIL BOTTOM FLANGE



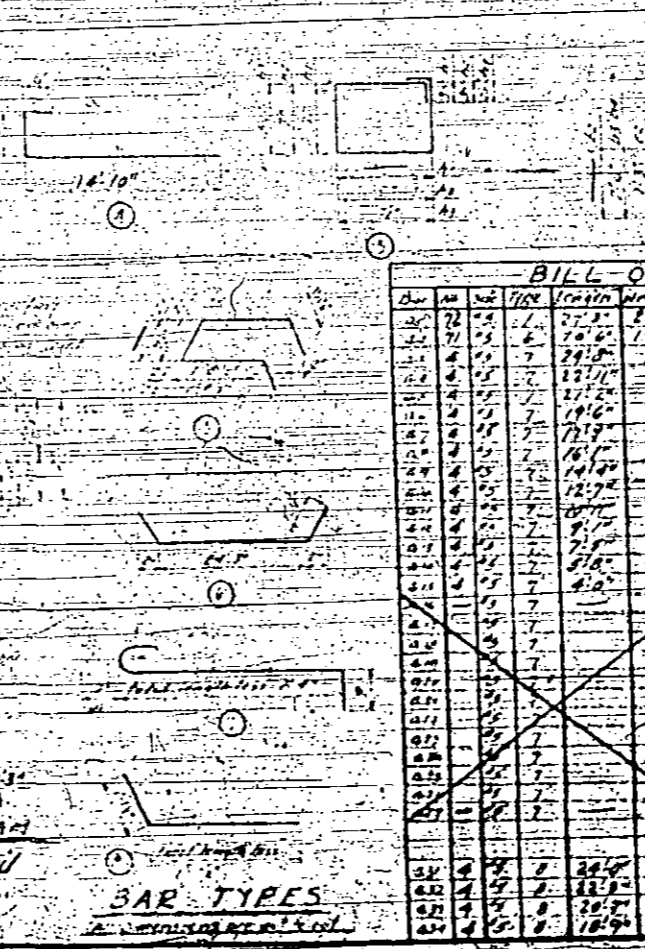
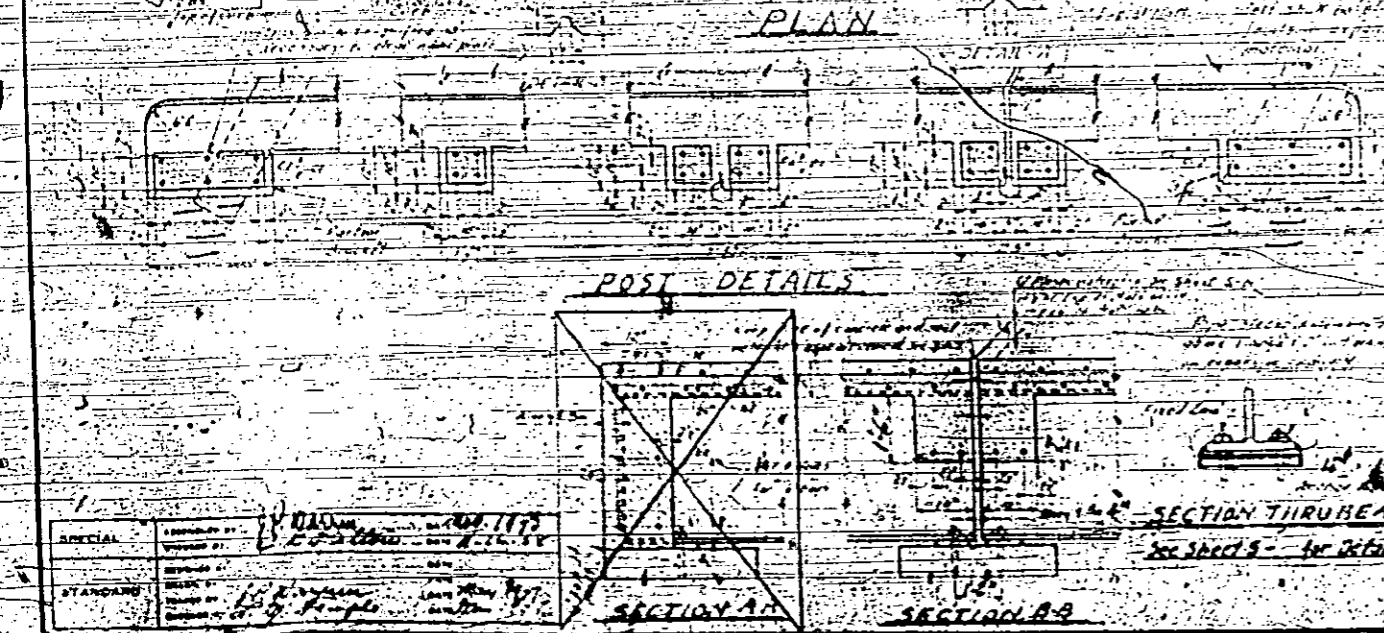
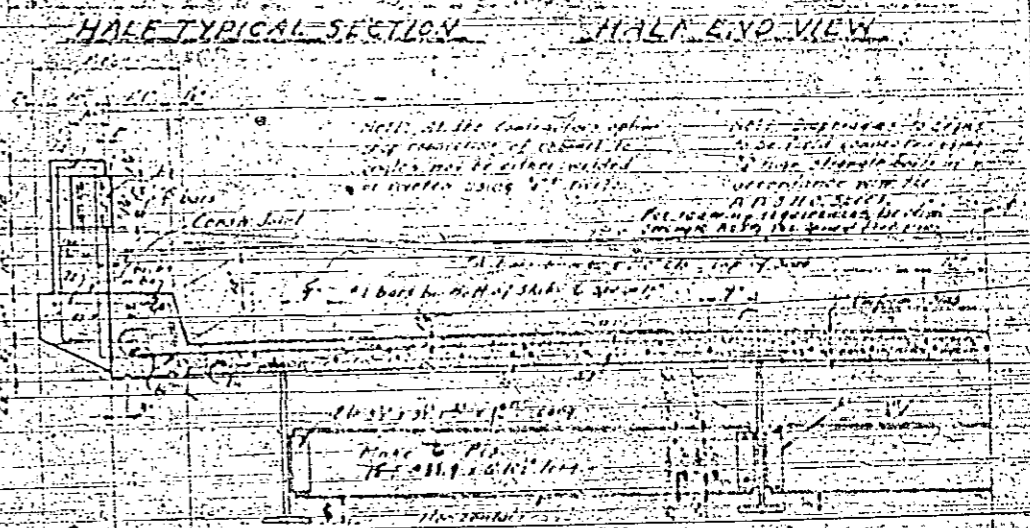
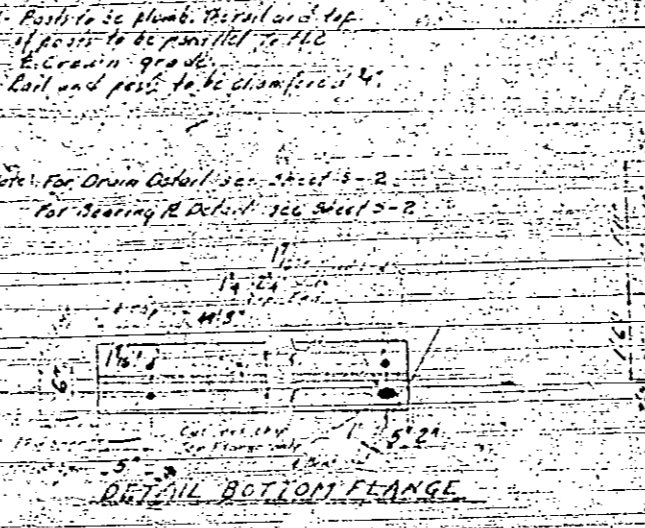
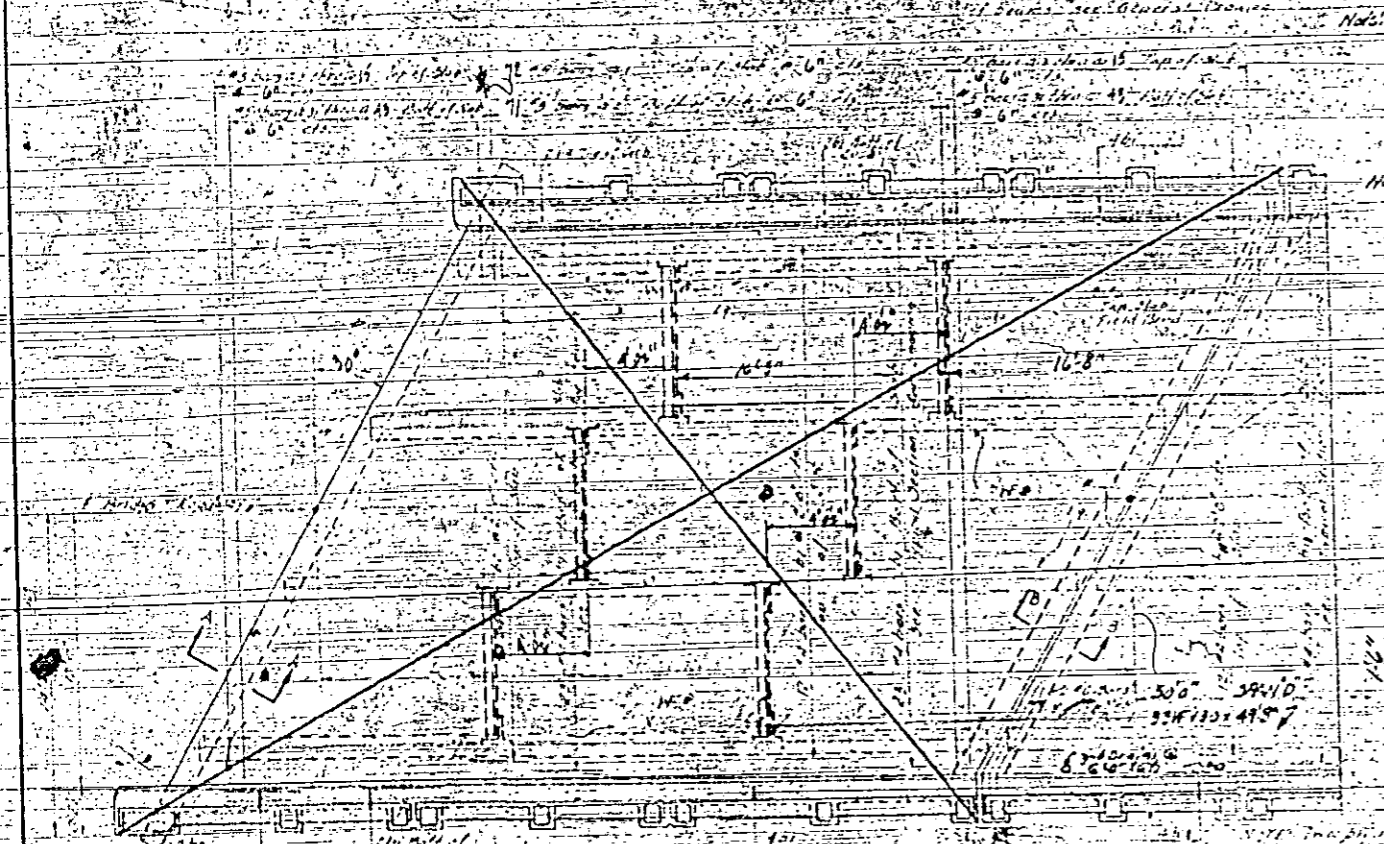
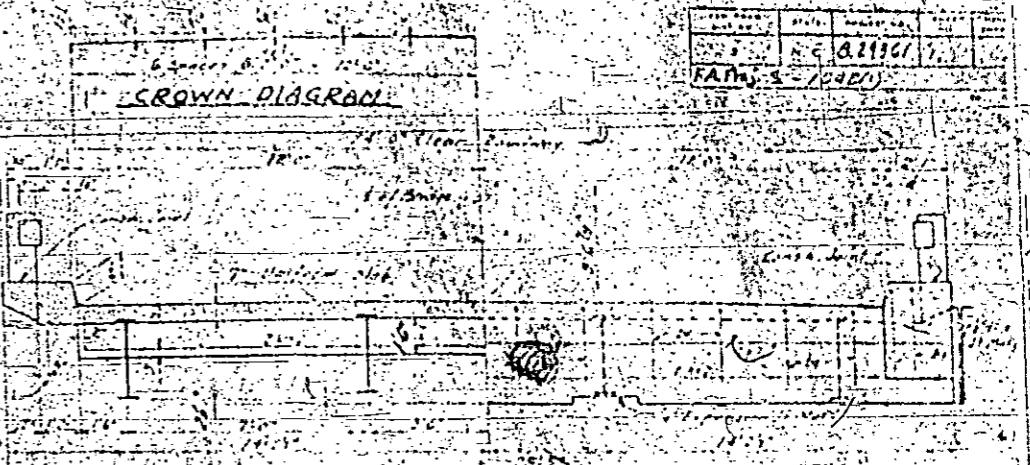
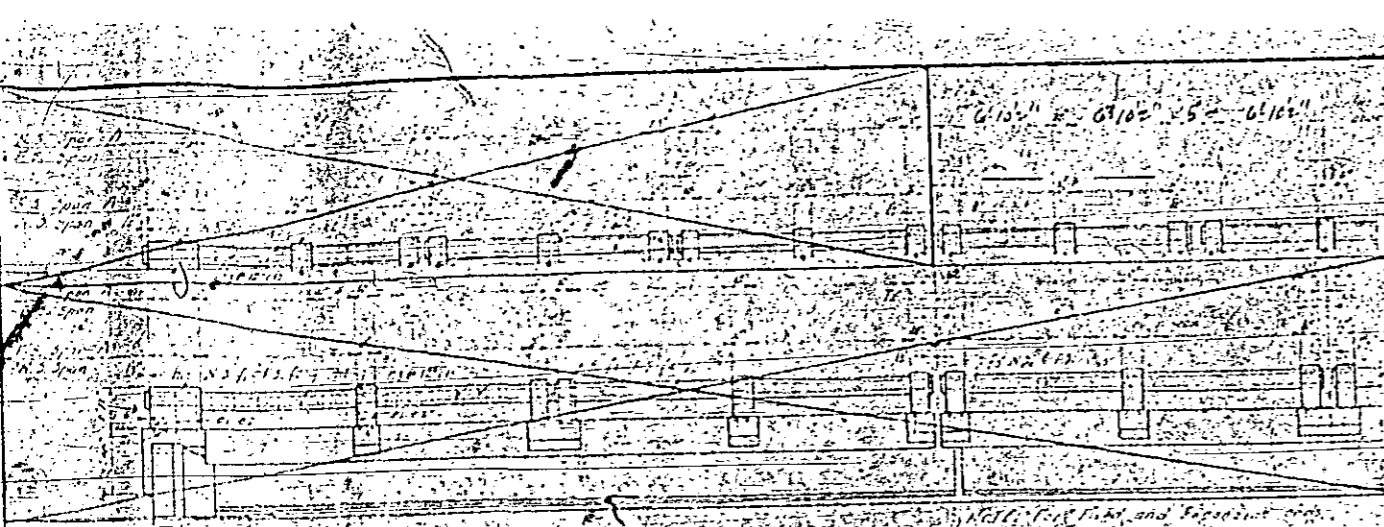
POST DETAILS

Qty	No.	SIZE	TYPE	Length
01	23	8"	1	27' 3"
02	64	4"	6	24' 0"
03	16	4"	7	24' 0"
04	10	4"	7	22' 0"
05	16	4"	7	21' 0"
06	16	4"	7	19' 6"
07	16	4"	7	17' 0"
08	16	4"	7	16' 0"
09	16	4"	7	14' 0"
10	10	4"	7	10' 0"
11	16	4"	7	9' 0"
12	16	4"	7	7' 0"
13	16	4"	7	5' 0"
14	16	4"	7	4' 0"
15	16	4"	7	3' 0"
16	16	4"	7	2' 0"
17	16	4"	7	1' 0"
18	16	4"	7	1' 0"
19	16	4"	7	1' 0"
20	16	4"	7	1' 0"

BILL







**BILL OF MATERIAL FOR SPAN D**

Item	Qty	Spec	Weight	Material	Notes
1	2	1/2"	27.5	2542	...
2	2	1/2"	10.6	1165	...
3	4	1/2"	22.8	169	...
4	4	1/2"	22.7	169	...
5	4	1/2"	27.1	169	...
6	4	1/2"	27.2	169	...
7	4	1/2"	19.6	169	...
8	4	1/2"	19.7	169	...
9	4	1/2"	16.1	169	...
10	4	1/2"	16.2	169	...
11	4	1/2"	12.7	169	...
12	4	1/2"	9.1	169	...
13	4	1/2"	9.1	169	...
14	4	1/2"	5.1	169	...
15	4	1/2"	5.1	169	...
16	4	1/2"	1.2	169	...
17	4	1/2"	1.2	169	...
18	4	1/2"	1.2	169	...
19	4	1/2"	1.2	169	...
20	4	1/2"	1.2	169	...
21	4	1/2"	1.2	169	...
22	4	1/2"	1.2	169	...
23	4	1/2"	1.2	169	...
24	4	1/2"	1.2	169	...
25	4	1/2"	1.2	169	...
26	4	1/2"	1.2	169	...
27	4	1/2"	1.2	169	...
28	4	1/2"	1.2	169	...
29	4	1/2"	1.2	169	...
30	4	1/2"	1.2	169	...

PROJECT NO. 8.2986  
 IREDELL COUNTY  
 STATION 114+15  
 SPAN "D"  
 STATE HIGHWAY COMMISSION  
 STANDARD  
 I-BEAM SUPERSTRUCTURE  
 WITH R.C. FLOOR & RAIL  
 ONE 8' 0" SPANS  
 24' ROADWAY TO LANSKREW  
 APR. 1937

SPECIAL  
 STANDARD  
 APPROVED BY  
 DATE  
 DRAWN BY  
 CHECKED BY  
 DATE

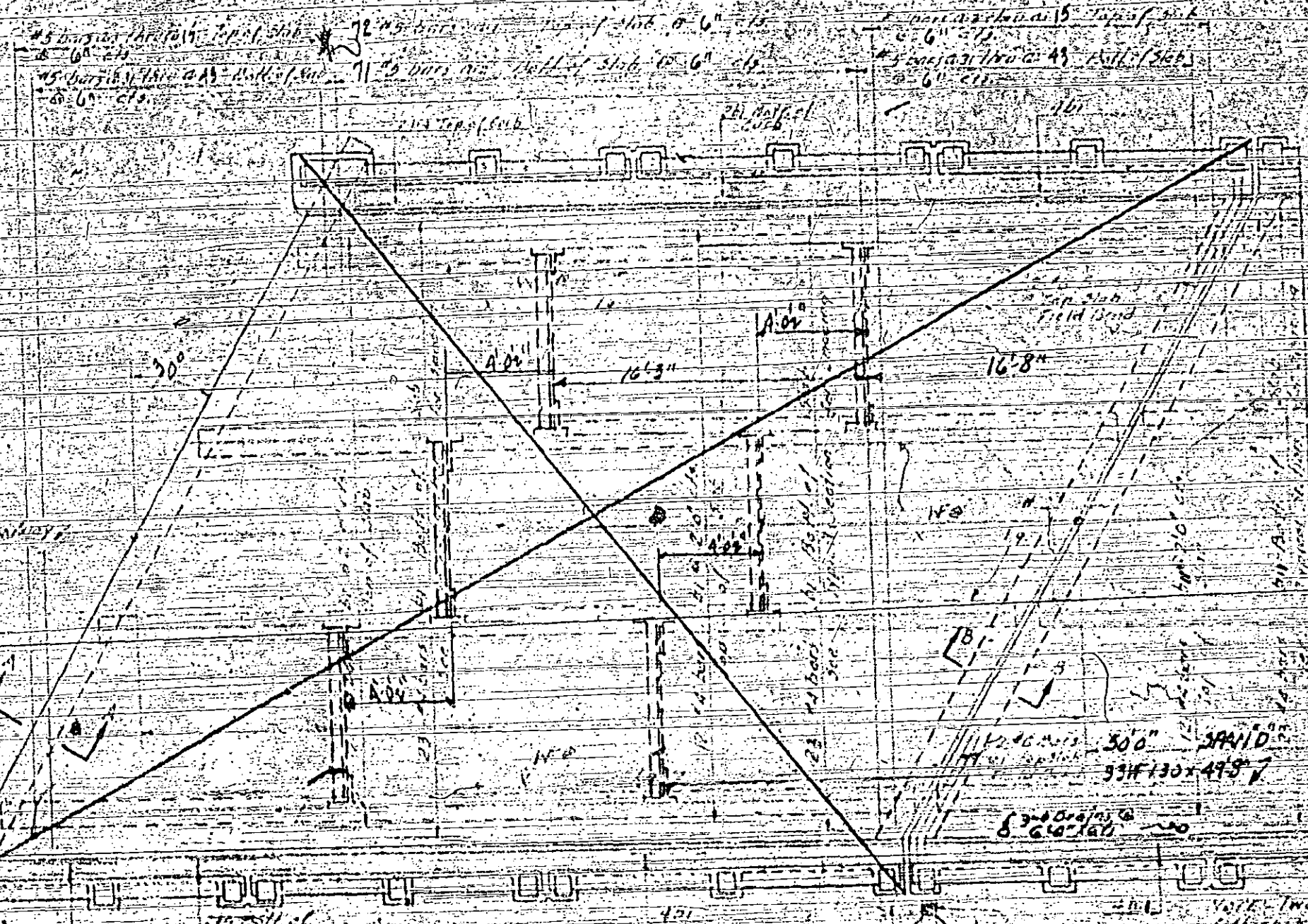
STD. 710-A-24 ROADWAY WIDTH 24' LANSKREW (S)

11/10/1911

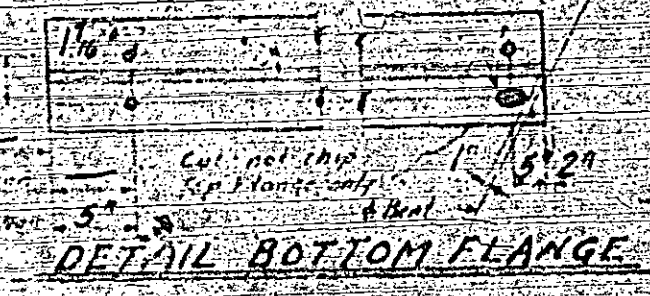
Note: For Truss and Expansion  
of Beams see General Drawing

Note: Posts to be plumb. The rail and top  
of posts to be parallel to the  
2-crown grade.  
Rail and posts to be chamfered 2°.

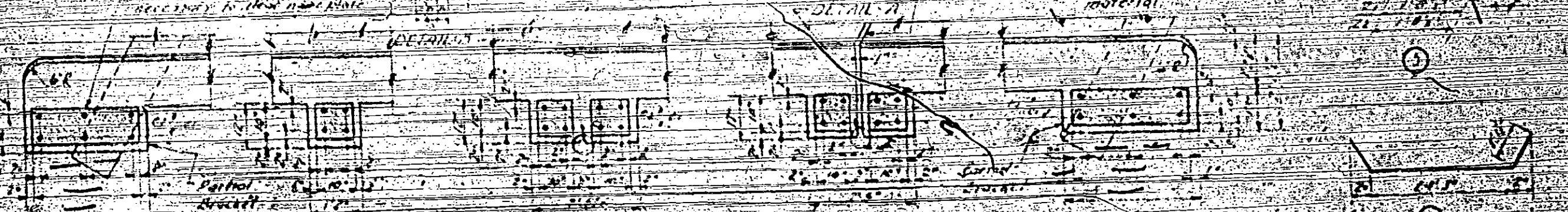
Note: For Drain Detail see Sheet S-2  
For Bearing R Detail see Sheet S-2



PLAN



DETAIL BOTTOM FLANGE



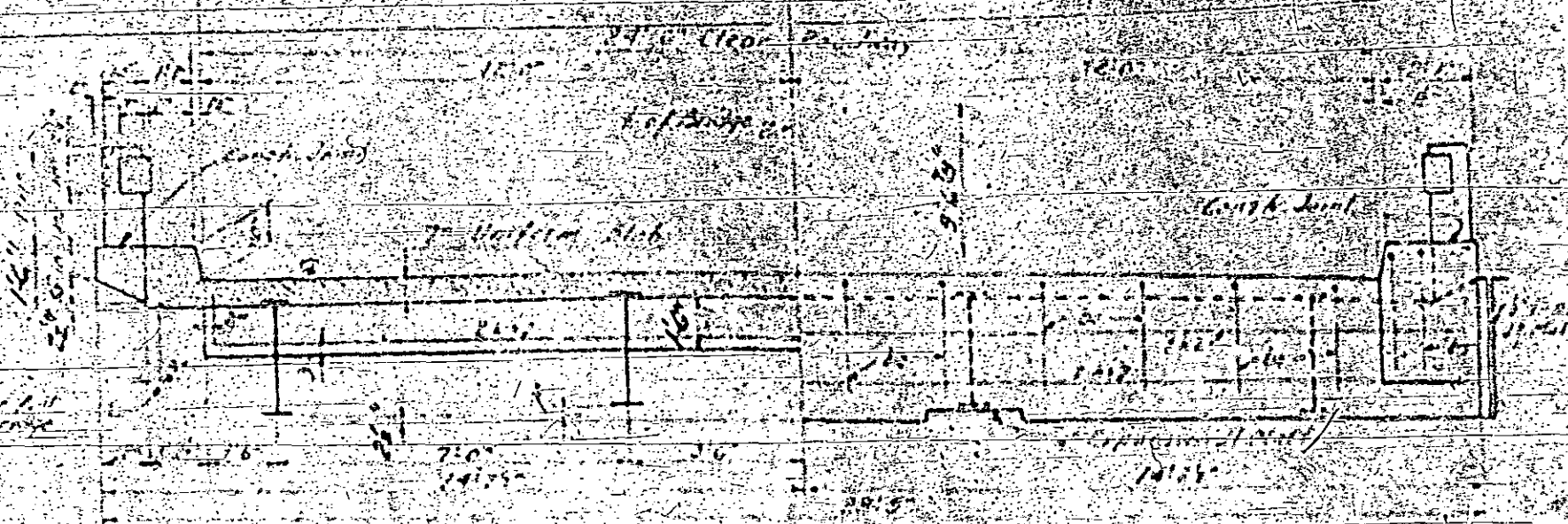
POST DETAILS

BILL				
Bar No.	Size	Type	Length	
27	2 1/2"	7/16"	27'3"	
28	2 1/2"	6"	20'6"	
29	4"	7"	29'8"	
30	4"	7"	22'11"	
31	4"	7"	27'5"	
32	4"	7"	19'6"	
33	4"	7"	18'9"	
34	4"	7"	18'7"	
35	4"	7"	19'9"	
36	4"	7"	18'7"	
37	4"	7"	20'7"	
38	4"	7"	21'7"	
39	4"	7"	21'7"	
40	4"	7"	21'7"	
41	4"	7"	21'7"	
42	4"	7"	21'7"	
43	4"	7"	21'7"	
44	4"	7"	21'7"	
45	4"	7"	21'7"	
46	4"	7"	21'7"	
47	4"	7"	21'7"	
48	4"	7"	21'7"	
49	4"	7"	21'7"	
50	4"	7"	21'7"	

Note: Two ply roofing  
felt shall be placed over  
joints in expansion joint  
material.

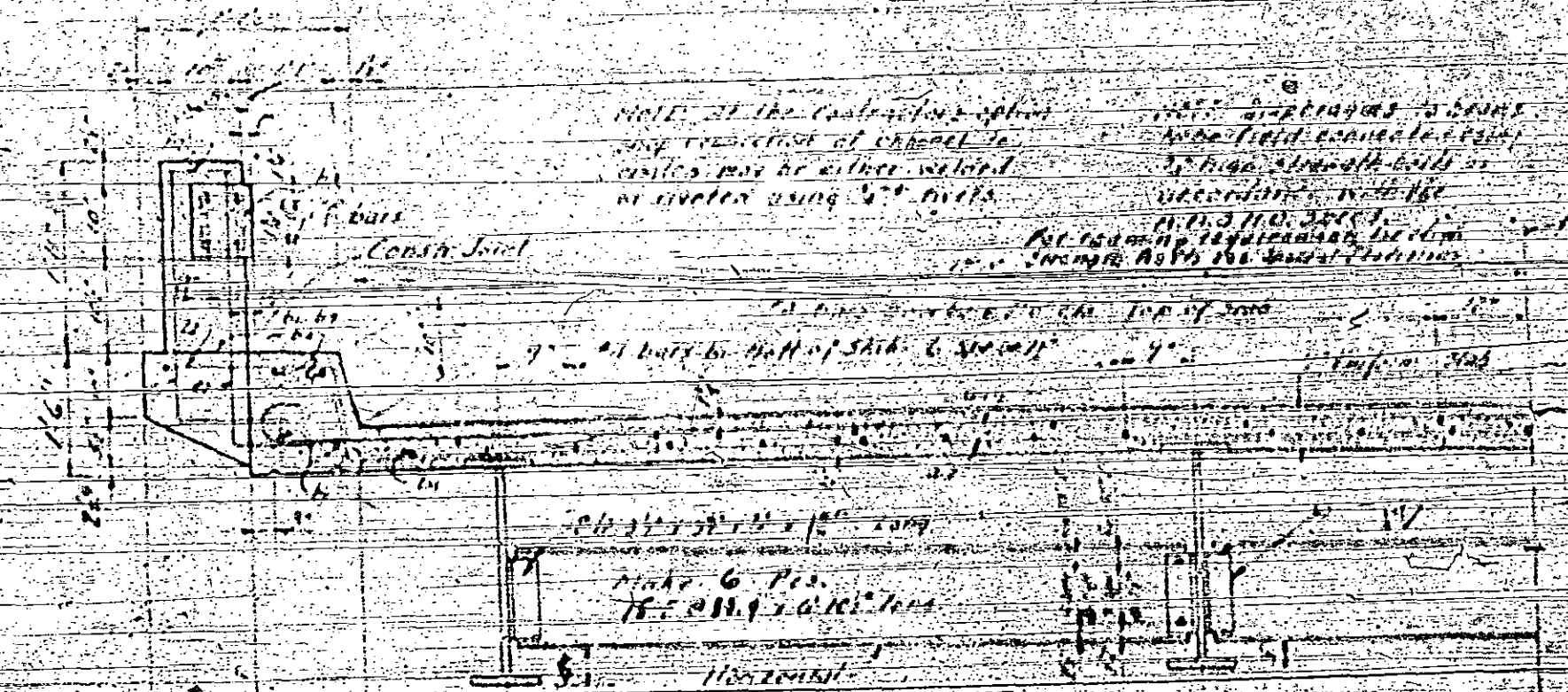
6" BRICK PAVING ON GRADE S-N  
1/2" SAND FILL UNDER  
1" ASPHALT FILL UNDER  
1" SAND FILL UNDER

**CROWN DIAGRAM**

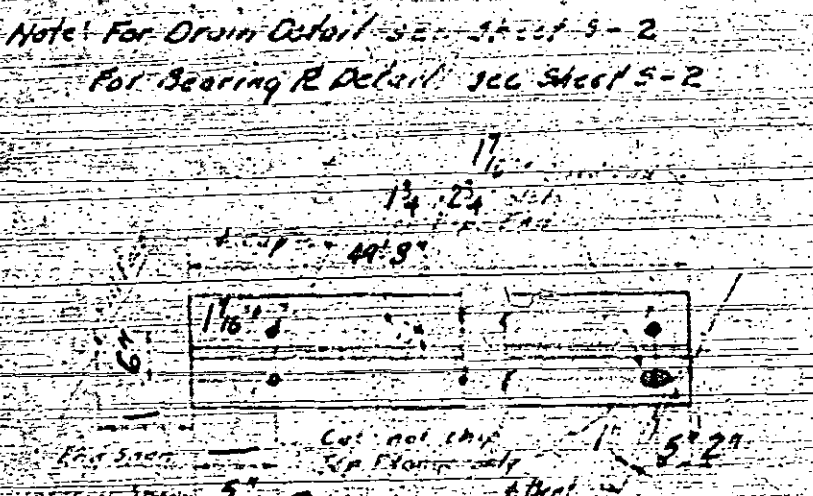


**HALF TYPICAL SECTION**

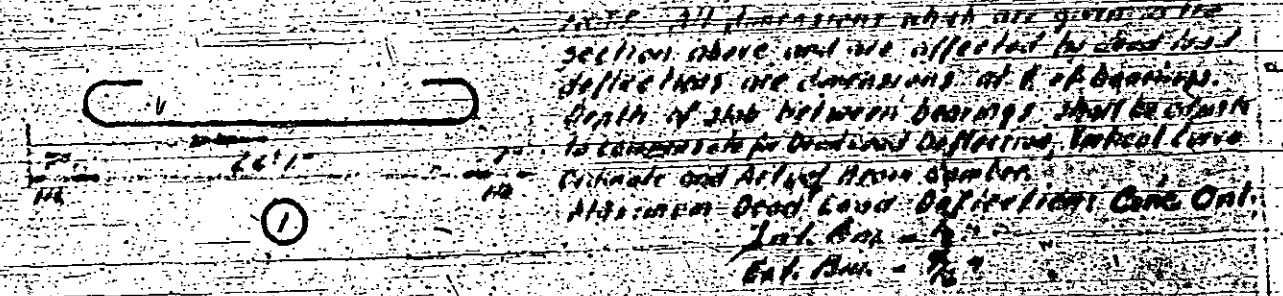
**HALF END VIEW**



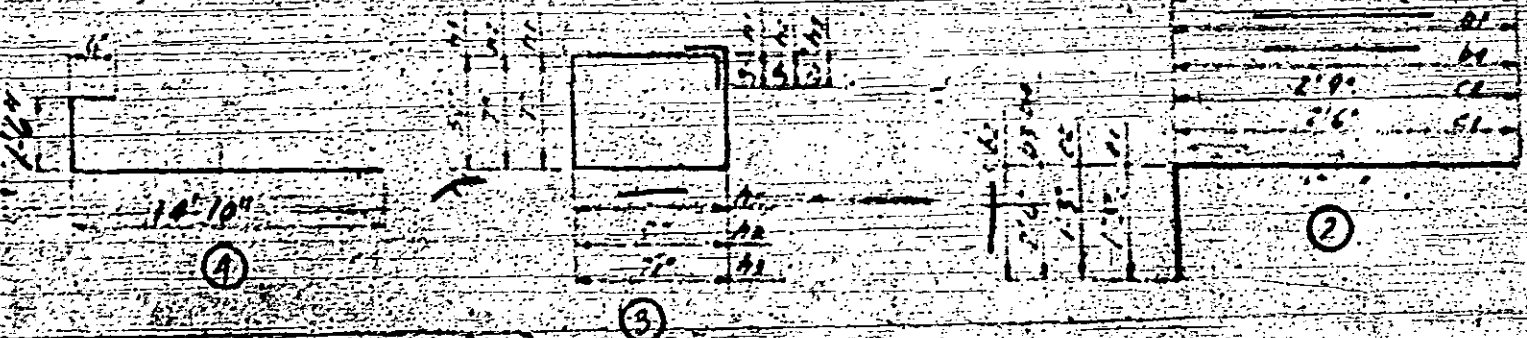
**DETAIL BOTTOM FLANGE**



**HALF TYPICAL SECTION**



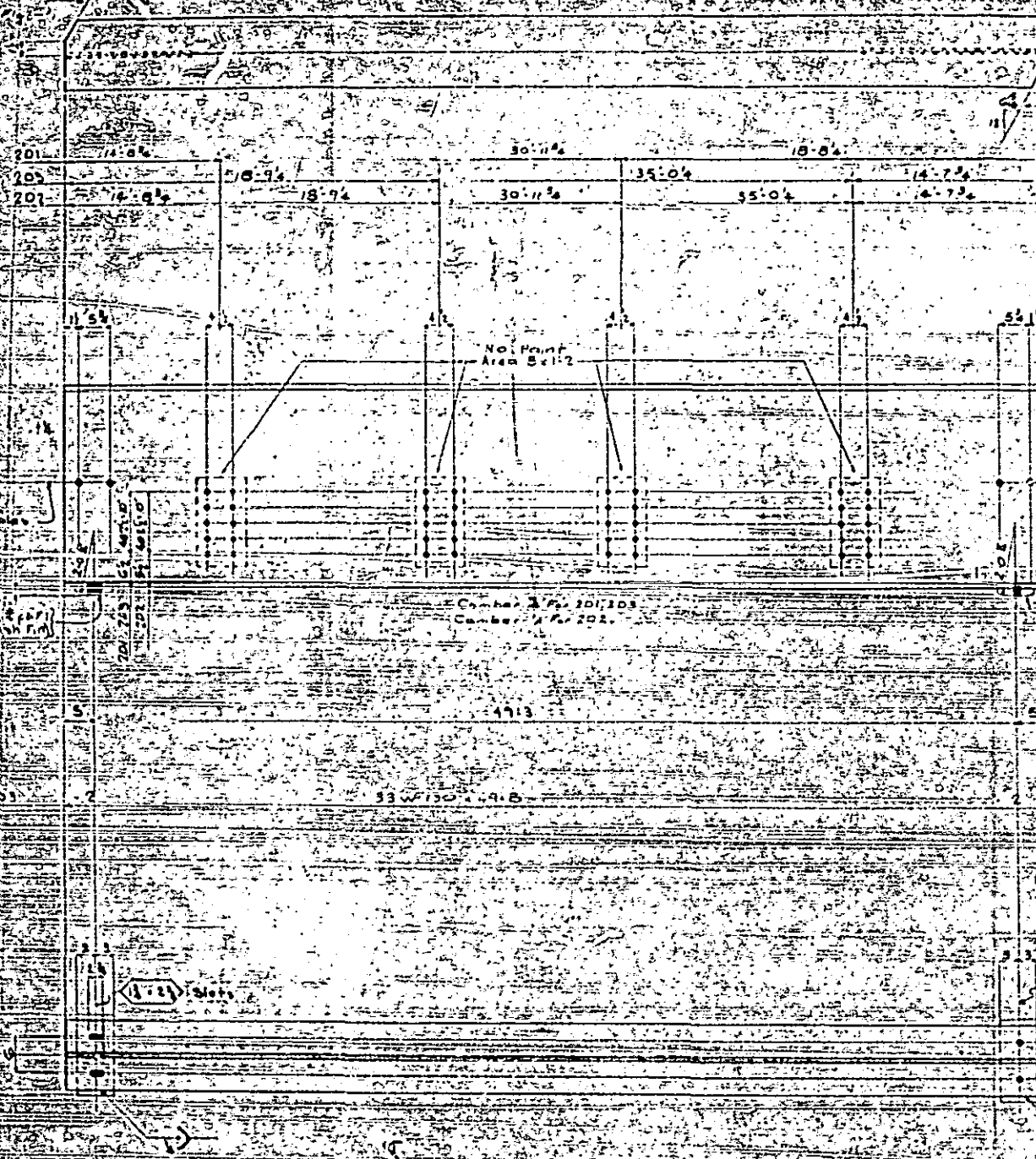
**BILL OF MATERIAL FOR SPAN 'D'**



Notes: Posts to be plumb. The rail and top of posts to be parallel to the crown grade. Rail and posts to be chamfered 45°.

Note: For Drain Detail see sheet 5-2. For Bearing R Detail see sheet 5-2.

**SHOP BILL**

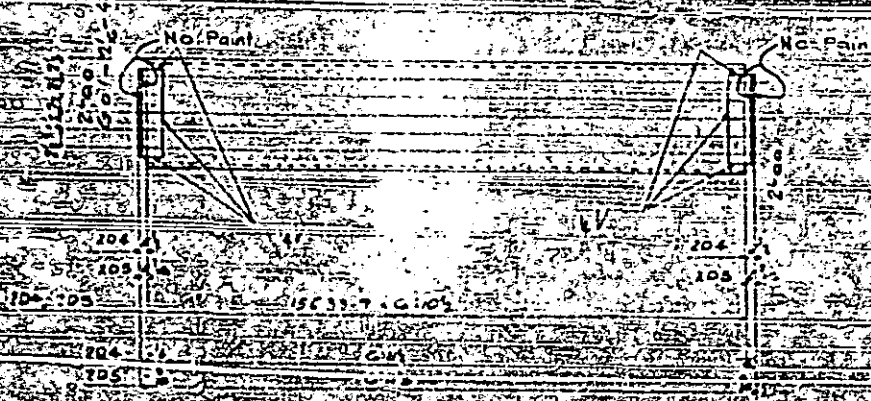


Center of G. 201, 203  
Center of G. 202

Project No. 621161  
Tarrant County  
Stations 119 + 18

Note: Coat All Mached Surface of Girders with a  
Mixture of White Lead & Tallow

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
101	...	...	...	...	...
102	...	...	...	...	...
103	...	...	...	...	...
104	...	...	...	...	...
105	...	...	...	...	...
106	...	...	...	...	...
107	...	...	...	...	...
108	...	...	...	...	...
109	...	...	...	...	...
110	...	...	...	...	...
111	...	...	...	...	...
112	...	...	...	...	...
113	...	...	...	...	...
114	...	...	...	...	...
115	...	...	...	...	...
116	...	...	...	...	...
117	...	...	...	...	...
118	...	...	...	...	...
119	...	...	...	...	...
120	...	...	...	...	...
121	...	...	...	...	...
122	...	...	...	...	...
123	...	...	...	...	...
124	...	...	...	...	...
125	...	...	...	...	...
126	...	...	...	...	...
127	...	...	...	...	...
128	...	...	...	...	...
129	...	...	...	...	...
130	...	...	...	...	...
131	...	...	...	...	...
132	...	...	...	...	...
133	...	...	...	...	...
134	...	...	...	...	...
135	...	...	...	...	...
136	...	...	...	...	...
137	...	...	...	...	...
138	...	...	...	...	...
139	...	...	...	...	...
140	...	...	...	...	...
141	...	...	...	...	...
142	...	...	...	...	...
143	...	...	...	...	...
144	...	...	...	...	...
145	...	...	...	...	...
146	...	...	...	...	...
147	...	...	...	...	...
148	...	...	...	...	...
149	...	...	...	...	...
150	...	...	...	...	...
151	...	...	...	...	...
152	...	...	...	...	...
153	...	...	...	...	...
154	...	...	...	...	...
155	...	...	...	...	...
156	...	...	...	...	...
157	...	...	...	...	...
158	...	...	...	...	...
159	...	...	...	...	...
160	...	...	...	...	...
161	...	...	...	...	...
162	...	...	...	...	...
163	...	...	...	...	...
164	...	...	...	...	...
165	...	...	...	...	...
166	...	...	...	...	...
167	...	...	...	...	...
168	...	...	...	...	...
169	...	...	...	...	...
170	...	...	...	...	...
171	...	...	...	...	...
172	...	...	...	...	...
173	...	...	...	...	...
174	...	...	...	...	...
175	...	...	...	...	...
176	...	...	...	...	...
177	...	...	...	...	...
178	...	...	...	...	...
179	...	...	...	...	...
180	...	...	...	...	...
181	...	...	...	...	...
182	...	...	...	...	...
183	...	...	...	...	...
184	...	...	...	...	...
185	...	...	...	...	...
186	...	...	...	...	...
187	...	...	...	...	...
188	...	...	...	...	...
189	...	...	...	...	...
190	...	...	...	...	...
191	...	...	...	...	...
192	...	...	...	...	...
193	...	...	...	...	...
194	...	...	...	...	...
195	...	...	...	...	...
196	...	...	...	...	...
197	...	...	...	...	...
198	...	...	...	...	...
199	...	...	...	...	...
200	...	...	...	...	...



GENERAL NOTES

ORDER NO. 27, COLON

DETAILS NO. BROWN

FOR BROWN, P. C. & T. CO.

CUSTOMER DELIVER TO

AT YAMON, CALIF.

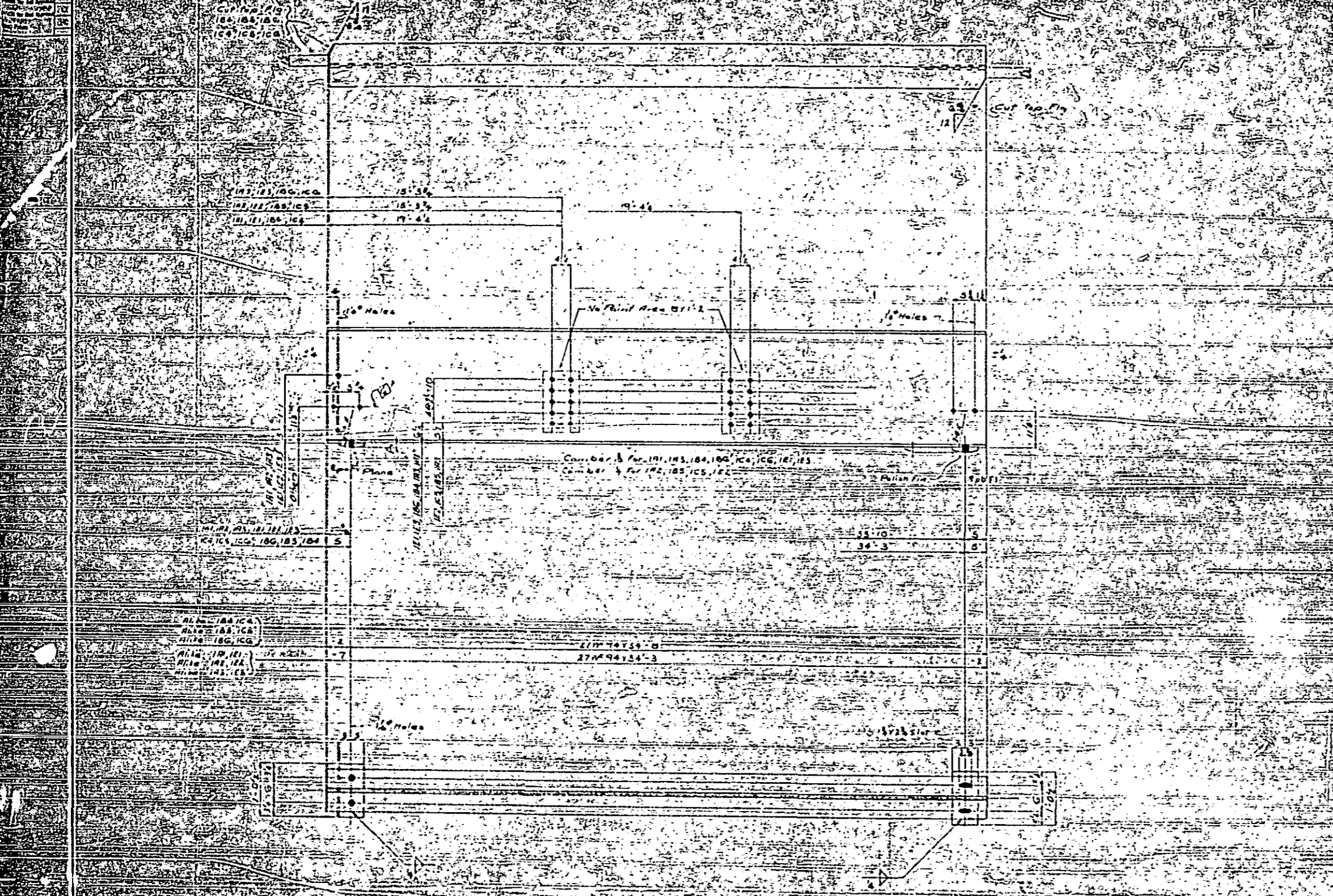
CAROLINA STEEL & IRON CO.

MEMPHIS, TENN.

DATE

BY

APPROVED



**SHOP BILL**

ITEM NO.	DESCRIPTION	QTY.	UNIT	PRICE	TOTAL	REMARKS
1	PLATE 1/2" x 12" x 4"	1	LB	1.20	1.20	
2	PLATE 1/2" x 12" x 4 1/4"	1	LB	1.20	1.20	
3	PLATE 1/2" x 12" x 4 1/2"	1	LB	1.20	1.20	
4	PLATE 1/2" x 12" x 4 3/4"	1	LB	1.20	1.20	
5	PLATE 1/2" x 12" x 5"	1	LB	1.20	1.20	
6	PLATE 1/2" x 12" x 5 1/4"	1	LB	1.20	1.20	
7	PLATE 1/2" x 12" x 5 1/2"	1	LB	1.20	1.20	
8	PLATE 1/2" x 12" x 5 3/4"	1	LB	1.20	1.20	
9	PLATE 1/2" x 12" x 6"	1	LB	1.20	1.20	
10	PLATE 1/2" x 12" x 6 1/4"	1	LB	1.20	1.20	
11	PLATE 1/2" x 12" x 6 1/2"	1	LB	1.20	1.20	
12	PLATE 1/2" x 12" x 6 3/4"	1	LB	1.20	1.20	
13	PLATE 1/2" x 12" x 7"	1	LB	1.20	1.20	
14	PLATE 1/2" x 12" x 7 1/4"	1	LB	1.20	1.20	
15	PLATE 1/2" x 12" x 7 1/2"	1	LB	1.20	1.20	
16	PLATE 1/2" x 12" x 7 3/4"	1	LB	1.20	1.20	
17	PLATE 1/2" x 12" x 8"	1	LB	1.20	1.20	
18	PLATE 1/2" x 12" x 8 1/4"	1	LB	1.20	1.20	
19	PLATE 1/2" x 12" x 8 1/2"	1	LB	1.20	1.20	
20	PLATE 1/2" x 12" x 8 3/4"	1	LB	1.20	1.20	
21	PLATE 1/2" x 12" x 9"	1	LB	1.20	1.20	
22	PLATE 1/2" x 12" x 9 1/4"	1	LB	1.20	1.20	
23	PLATE 1/2" x 12" x 9 1/2"	1	LB	1.20	1.20	
24	PLATE 1/2" x 12" x 9 3/4"	1	LB	1.20	1.20	
25	PLATE 1/2" x 12" x 10"	1	LB	1.20	1.20	
26	PLATE 1/2" x 12" x 10 1/4"	1	LB	1.20	1.20	
27	PLATE 1/2" x 12" x 10 1/2"	1	LB	1.20	1.20	
28	PLATE 1/2" x 12" x 10 3/4"	1	LB	1.20	1.20	
29	PLATE 1/2" x 12" x 11"	1	LB	1.20	1.20	
30	PLATE 1/2" x 12" x 11 1/4"	1	LB	1.20	1.20	
31	PLATE 1/2" x 12" x 11 1/2"	1	LB	1.20	1.20	
32	PLATE 1/2" x 12" x 11 3/4"	1	LB	1.20	1.20	
33	PLATE 1/2" x 12" x 12"	1	LB	1.20	1.20	
34	PLATE 1/2" x 12" x 12 1/4"	1	LB	1.20	1.20	
35	PLATE 1/2" x 12" x 12 1/2"	1	LB	1.20	1.20	
36	PLATE 1/2" x 12" x 12 3/4"	1	LB	1.20	1.20	
37	PLATE 1/2" x 12" x 13"	1	LB	1.20	1.20	
38	PLATE 1/2" x 12" x 13 1/4"	1	LB	1.20	1.20	
39	PLATE 1/2" x 12" x 13 1/2"	1	LB	1.20	1.20	
40	PLATE 1/2" x 12" x 13 3/4"	1	LB	1.20	1.20	
41	PLATE 1/2" x 12" x 14"	1	LB	1.20	1.20	
42	PLATE 1/2" x 12" x 14 1/4"	1	LB	1.20	1.20	
43	PLATE 1/2" x 12" x 14 1/2"	1	LB	1.20	1.20	
44	PLATE 1/2" x 12" x 14 3/4"	1	LB	1.20	1.20	
45	PLATE 1/2" x 12" x 15"	1	LB	1.20	1.20	
46	PLATE 1/2" x 12" x 15 1/4"	1	LB	1.20	1.20	
47	PLATE 1/2" x 12" x 15 1/2"	1	LB	1.20	1.20	
48	PLATE 1/2" x 12" x 15 3/4"	1	LB	1.20	1.20	
49	PLATE 1/2" x 12" x 16"	1	LB	1.20	1.20	
50	PLATE 1/2" x 12" x 16 1/4"	1	LB	1.20	1.20	
51	PLATE 1/2" x 12" x 16 1/2"	1	LB	1.20	1.20	
52	PLATE 1/2" x 12" x 16 3/4"	1	LB	1.20	1.20	
53	PLATE 1/2" x 12" x 17"	1	LB	1.20	1.20	
54	PLATE 1/2" x 12" x 17 1/4"	1	LB	1.20	1.20	
55	PLATE 1/2" x 12" x 17 1/2"	1	LB	1.20	1.20	
56	PLATE 1/2" x 12" x 17 3/4"	1	LB	1.20	1.20	
57	PLATE 1/2" x 12" x 18"	1	LB	1.20	1.20	
58	PLATE 1/2" x 12" x 18 1/4"	1	LB	1.20	1.20	
59	PLATE 1/2" x 12" x 18 1/2"	1	LB	1.20	1.20	
60	PLATE 1/2" x 12" x 18 3/4"	1	LB	1.20	1.20	
61	PLATE 1/2" x 12" x 19"	1	LB	1.20	1.20	
62	PLATE 1/2" x 12" x 19 1/4"	1	LB	1.20	1.20	
63	PLATE 1/2" x 12" x 19 1/2"	1	LB	1.20	1.20	
64	PLATE 1/2" x 12" x 19 3/4"	1	LB	1.20	1.20	
65	PLATE 1/2" x 12" x 20"	1	LB	1.20	1.20	
66	PLATE 1/2" x 12" x 20 1/4"	1	LB	1.20	1.20	
67	PLATE 1/2" x 12" x 20 1/2"	1	LB	1.20	1.20	
68	PLATE 1/2" x 12" x 20 3/4"	1	LB	1.20	1.20	
69	PLATE 1/2" x 12" x 21"	1	LB	1.20	1.20	
70	PLATE 1/2" x 12" x 21 1/4"	1	LB	1.20	1.20	
71	PLATE 1/2" x 12" x 21 1/2"	1	LB	1.20	1.20	
72	PLATE 1/2" x 12" x 21 3/4"	1	LB	1.20	1.20	
73	PLATE 1/2" x 12" x 22"	1	LB	1.20	1.20	
74	PLATE 1/2" x 12" x 22 1/4"	1	LB	1.20	1.20	
75	PLATE 1/2" x 12" x 22 1/2"	1	LB	1.20	1.20	
76	PLATE 1/2" x 12" x 22 3/4"	1	LB	1.20	1.20	
77	PLATE 1/2" x 12" x 23"	1	LB	1.20	1.20	
78	PLATE 1/2" x 12" x 23 1/4"	1	LB	1.20	1.20	
79	PLATE 1/2" x 12" x 23 1/2"	1	LB	1.20	1.20	
80	PLATE 1/2" x 12" x 23 3/4"	1	LB	1.20	1.20	
81	PLATE 1/2" x 12" x 24"	1	LB	1.20	1.20	
82	PLATE 1/2" x 12" x 24 1/4"	1	LB	1.20	1.20	
83	PLATE 1/2" x 12" x 24 1/2"	1	LB	1.20	1.20	
84	PLATE 1/2" x 12" x 24 3/4"	1	LB	1.20	1.20	
85	PLATE 1/2" x 12" x 25"	1	LB	1.20	1.20	
86	PLATE 1/2" x 12" x 25 1/4"	1	LB	1.20	1.20	
87	PLATE 1/2" x 12" x 25 1/2"	1	LB	1.20	1.20	
88	PLATE 1/2" x 12" x 25 3/4"	1	LB	1.20	1.20	
89	PLATE 1/2" x 12" x 26"	1	LB	1.20	1.20	
90	PLATE 1/2" x 12" x 26 1/4"	1	LB	1.20	1.20	
91	PLATE 1/2" x 12" x 26 1/2"	1	LB	1.20	1.20	
92	PLATE 1/2" x 12" x 26 3/4"	1	LB	1.20	1.20	
93	PLATE 1/2" x 12" x 27"	1	LB	1.20	1.20	
94	PLATE 1/2" x 12" x 27 1/4"	1	LB	1.20	1.20	
95	PLATE 1/2" x 12" x 27 1/2"	1	LB	1.20	1.20	
96	PLATE 1/2" x 12" x 27 3/4"	1	LB	1.20	1.20	
97	PLATE 1/2" x 12" x 28"	1	LB	1.20	1.20	
98	PLATE 1/2" x 12" x 28 1/4"	1	LB	1.20	1.20	
99	PLATE 1/2" x 12" x 28 1/2"	1	LB	1.20	1.20	
100	PLATE 1/2" x 12" x 28 3/4"	1	LB	1.20	1.20	
101	PLATE 1/2" x 12" x 29"	1	LB	1.20	1.20	
102	PLATE 1/2" x 12" x 29 1/4"	1	LB	1.20	1.20	
103	PLATE 1/2" x 12" x 29 1/2"	1	LB	1.20	1.20	
104	PLATE 1/2" x 12" x 29 3/4"	1	LB	1.20	1.20	
105	PLATE 1/2" x 12" x 30"	1	LB	1.20	1.20	
106	PLATE 1/2" x 12" x 30 1/4"	1	LB	1.20	1.20	
107	PLATE 1/2" x 12" x 30 1/2"	1	LB	1.20	1.20	
108	PLATE 1/2" x 12" x 30 3/4"	1	LB	1.20	1.20	
109	PLATE 1/2" x 12" x 31"	1	LB	1.20	1.20	
110	PLATE 1/2" x 12" x 31 1/4"	1	LB	1.20	1.20	
111	PLATE 1/2" x 12" x 31 1/2"	1	LB	1.20	1.20	
112	PLATE 1/2" x 12" x 31 3/4"	1	LB	1.20	1.20	
113	PLATE 1/2" x 12" x 32"	1	LB	1.20	1.20	
114	PLATE 1/2" x 12" x 32 1/4"	1	LB	1.20	1.20	
115	PLATE 1/2" x 12" x 32 1/2"	1	LB	1.20	1.20	
116	PLATE 1/2" x 12" x 32 3/4"	1	LB	1.20	1.20	
117	PLATE 1/2" x 12" x 33"	1	LB	1.20	1.20	
118	PLATE 1/2" x 12" x 33 1/4"	1	LB	1.20	1.20	
119	PLATE 1/2" x 12" x 33 1/2"	1	LB	1.20	1.20	
120	PLATE 1/2" x 12" x 33 3/4"	1	LB	1.20	1.20	
121	PLATE 1/2" x 12" x 34"	1	LB	1.20	1.20	
122	PLATE 1/2" x 12" x 34 1/4"	1	LB	1.20	1.20	
123	PLATE 1/2" x 12" x 34 1/2"	1	LB	1.20	1.20	
124	PLATE 1/2" x 12" x 34 3/4"	1	LB	1.20	1.20	
125	PLATE 1/2" x 12" x 35"	1	LB	1.20	1.20	
126	PLATE 1/2" x 12" x 35 1/4"	1	LB	1.20	1.20	
127	PLATE 1/2" x 12" x 35 1/2"	1	LB	1.20	1.20	
128	PLATE 1/2" x 12" x 35 3/4"	1	LB	1.20	1.20	
129	PLATE 1/2" x 12" x 36"	1	LB	1.20	1.20	
130	PLATE 1/2" x 12" x 36 1/4"	1	LB	1.20	1.20	
131	PLATE 1/2" x 12" x 36 1/2"	1	LB	1.20	1.20	
132	PLATE 1/2" x 12" x 36 3/4"	1	LB	1.20	1.20	
133	PLATE 1/2" x 12" x 37"	1	LB	1.20	1.20	
134	PLATE 1/2" x 12" x 37 1/4"	1	LB	1.20	1.20	
135	PLATE 1/2" x 12" x 37 1/2"	1	LB	1.20	1.20	
136	PLATE 1/2" x 12" x 37 3/4"	1	LB	1.20	1.20	
137	PLATE 1/2" x 12" x 38"	1	LB	1.20	1.20	
138	PLATE 1/2" x 12" x 38 1/4"	1	LB	1.20	1.20	
139	PLATE 1/2" x 12" x 38 1/2"	1	LB	1.20	1.20	
140	PLATE 1/2" x 12" x 38 3/4"	1	LB	1.20	1.20	
141	PLATE 1/2" x 12" x 39"	1	LB	1.20	1.20	
142	PLATE 1/2" x 12" x 39 1/4"	1	LB	1.20	1.20	
143	PLATE 1/2" x 12" x 39 1/2"	1	LB	1.20	1.20	
144	PLATE 1/2" x 12" x 39 3/4"	1	LB	1.20	1.20	
145	PLATE 1/2" x 12" x 40"	1	LB			



CAROLINA STEEL AND IRON COMPANY  
GREENSBORO, N. C.  
SHOP BILL

SHIPPING LIST      ORDERED      IN      DESCRIPTION      LENGTH      QUANTITY      WEIGHT

PIPE SLEEVES

32 PS1      32 1 1/2" Pipe Sleeve O 1 3/8  
8 PS2      8 1 1/4" Pipe Sleeve O 2  
40 Washers      40 5/16" Cup Washers 1 1/2" Hole

Project No: 8-29361  
Iredell County  
Station 119+15

For N.C. State Hwy Bridge  
Over Third Creek  
Iredell County, N.C.  
Customer: Dickerson, Inc.

Shop File  
Drawing No.  
Made by: EDV  
Checked: ABJ  
Date: 6-30-59  
Order No: 59-6040A  
Sheet: AB3

CAROLINA STEEL AND IRON COMPANY  
GREENSBORO, N. C.  
SHOP BILL

SHIPPING LIST      ORDERED      IN      DESCRIPTION      LENGTH      QUANTITY      WEIGHT

FIELD BOLTS

370 Bolts      370 3/4" H.T. Bolts O 2 1/4  
740 Washers      740 Hardened Washers 1 1/2" Hole

PROJECT No: 8-29361  
IREDILL COUNTY  
STATION: 119+15

For N.C. State Hwy Bridge  
Over Third Creek  
Iredell County, N.C.  
Customer: Dickerson, Inc.

Shop File  
Drawing No.  
Made by: EDV  
Checked: ABJ  
Date: 6-30-59  
Order No: 59-6040A  
Sheet: AB2

CAROLINA STEEL AND IRON COMPANY  
GREENSBORO, N. C.  
SHOP BILL

SHIPPING LIST      ORDERED      IN      DESCRIPTION      LENGTH      QUANTITY      WEIGHT

Anchor Bolts

80 Bolts      80 Bolts 1 1/2" x 3"

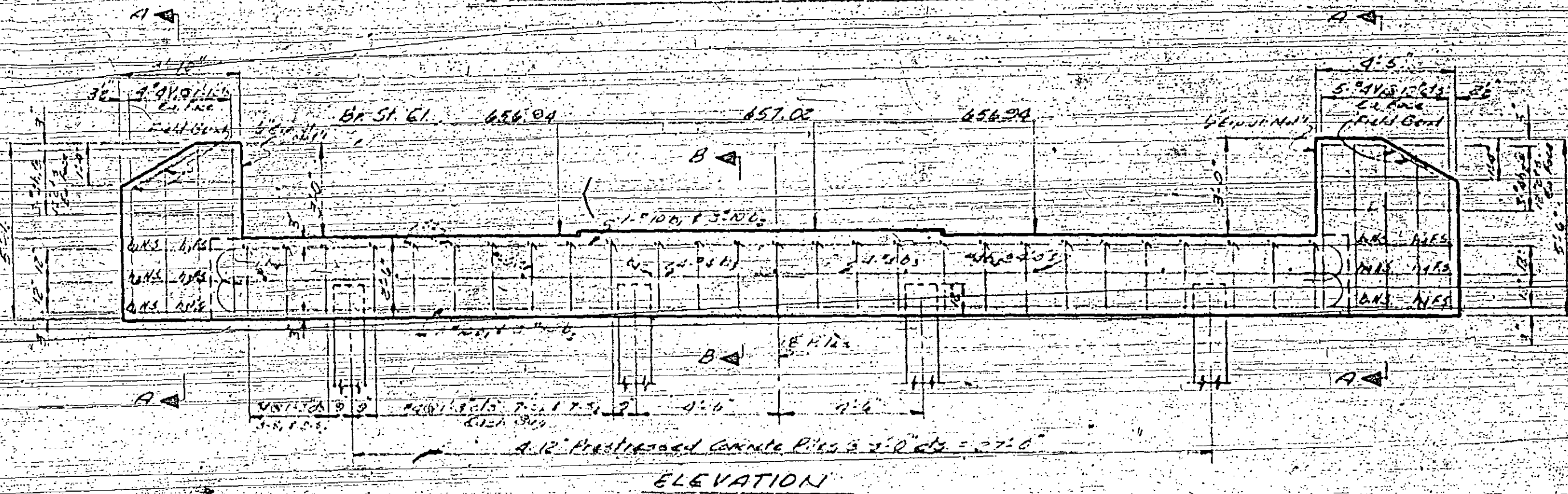
Project 8-29361  
Station 119+15  
Iredell County, N.C.  
Customer: Dickerson, Inc.

Shop File  
Drawing No.  
Made by: ABJ  
Checked: ABJ  
Date: 6/1/59  
Order No: 59-6040A  
Sheet: AB1

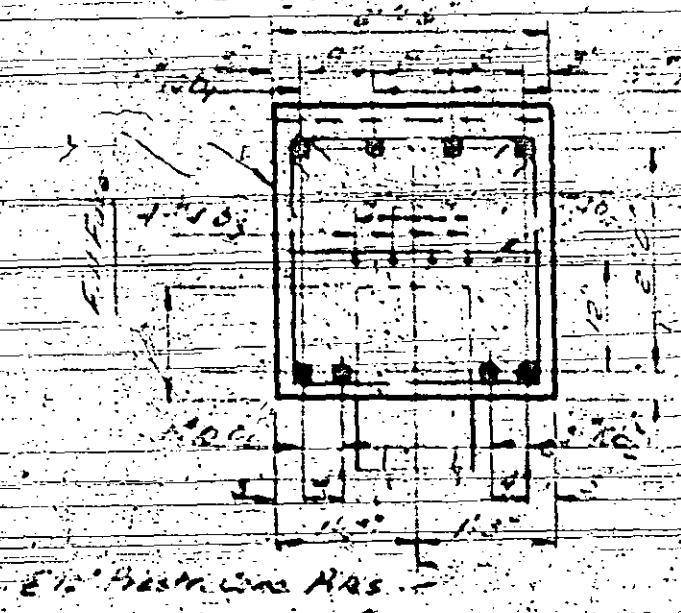




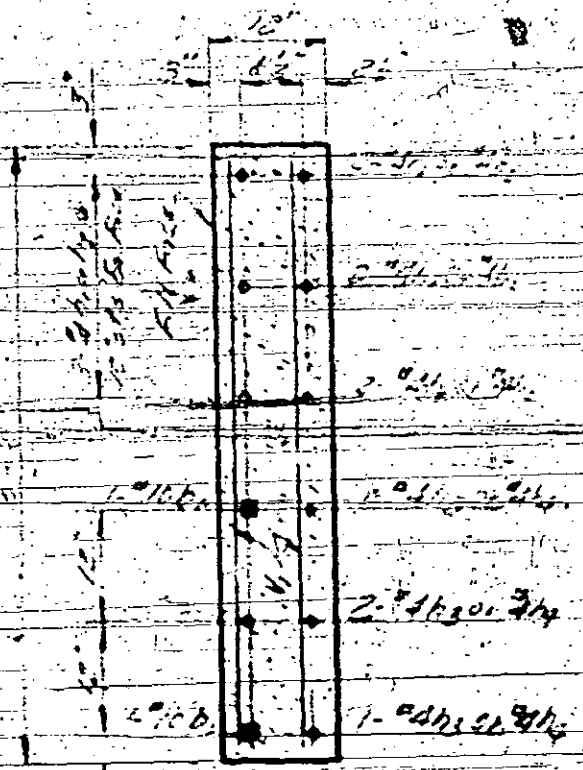
END BENT NO. 2 SIMILAR BY ROTATION



ELEVATION



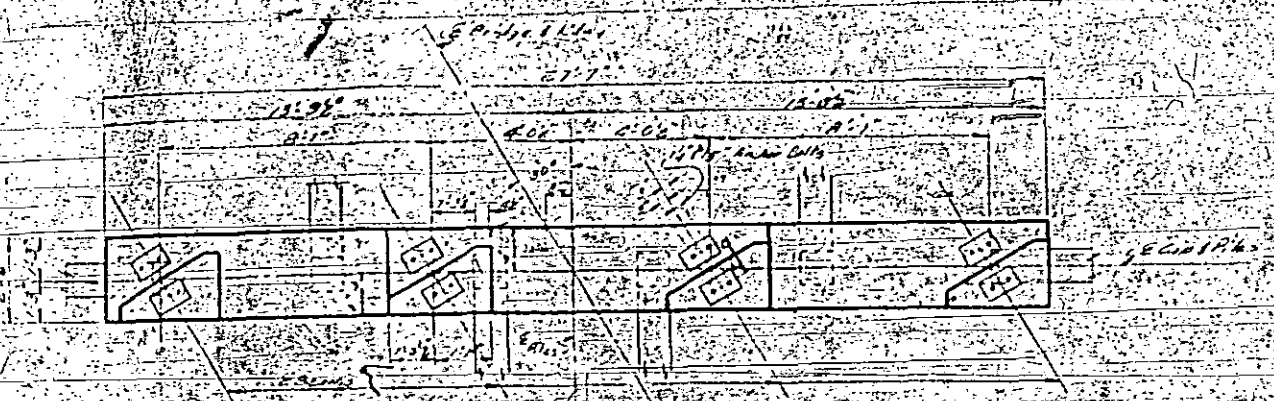
SECTION B-B



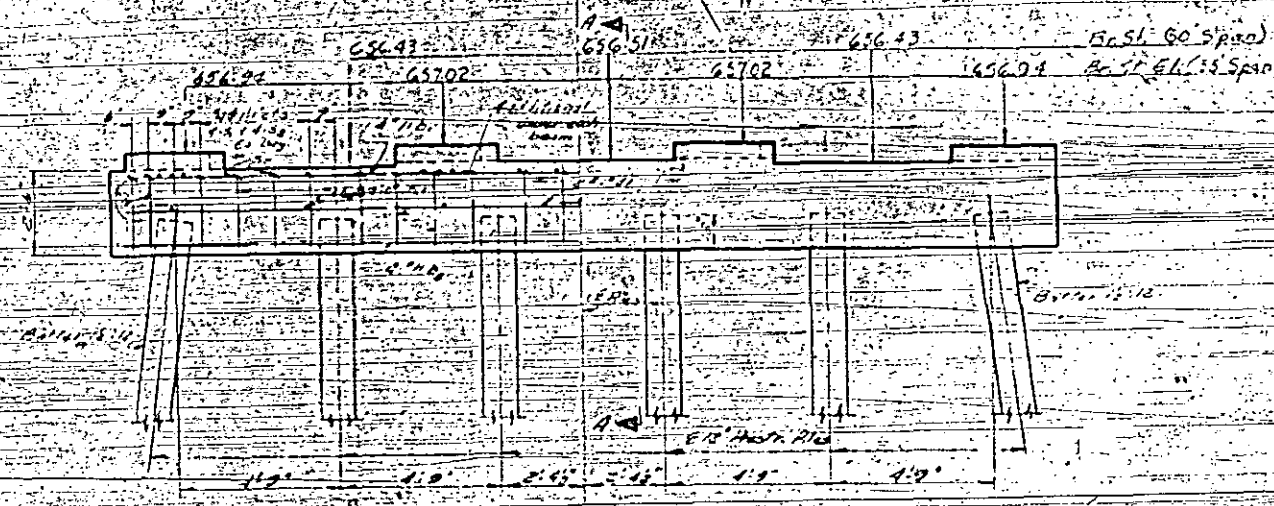
SECTION A-A

NOTE: Drive Piles to a min. capacity of 85 tons

DESIGNED BY	DATE
DRAWN BY	DATE
TRACED BY	DATE
CHECKED BY	DATE

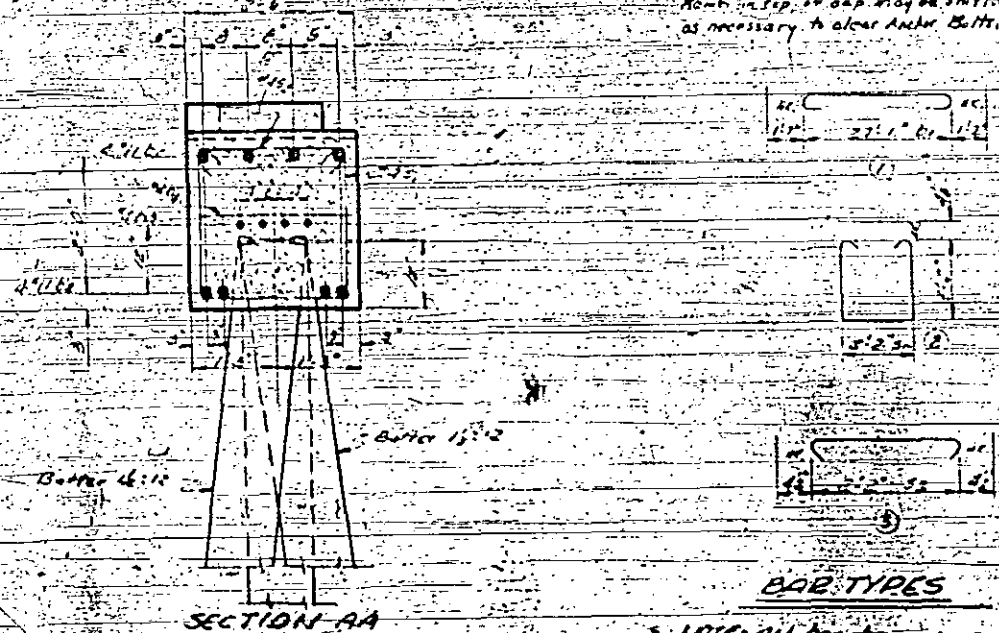


PLAN OF CAP BENT NO. 3  
 BENT NO. 4 SIMILAR BY ROTATION



ELEVATION

NOTE: Drive Piles to a minimum bearing capacity of 28 tons each. Anchor in top of cap may be shifted as necessary to clear Anchor Bolts.



SECTION AA

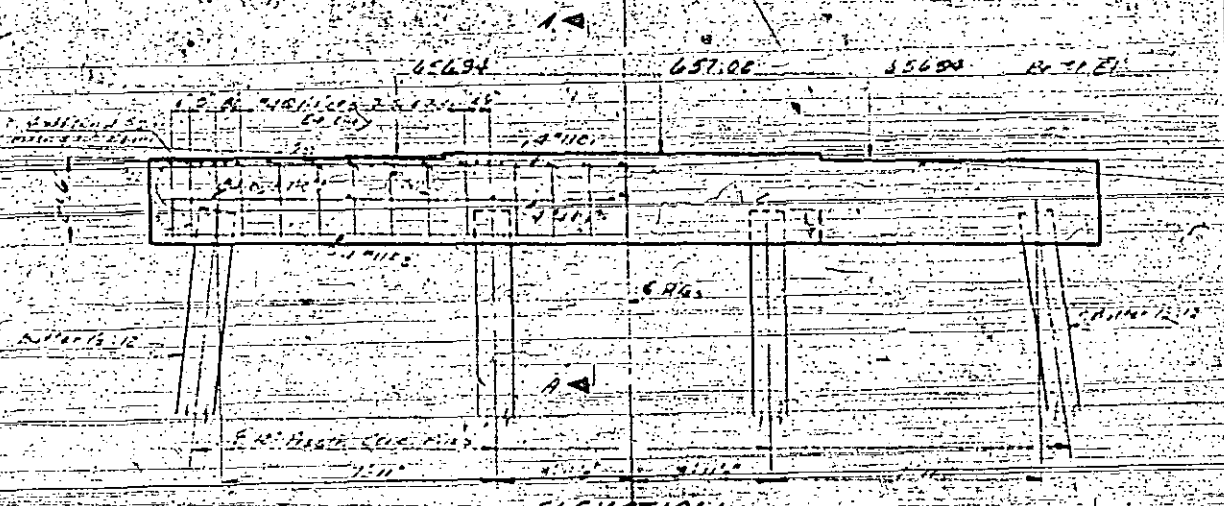
BAR TYPES

NOTE: All bar dimensions are out to out.

NOTE: Concrete displaced by pile heads has been deducted.

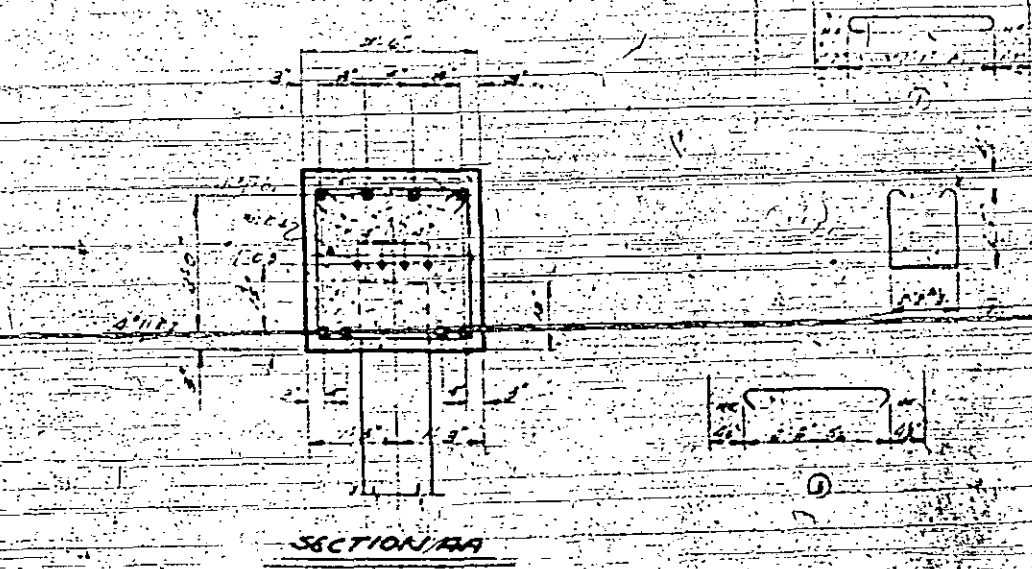


PLAN OF CAP BENT NO. 1 AND 2



ELEVATION

NOTE: Drive Piles to a minimum bearing capacity of 30 tons each.



SECTION AA

BAR TYPES

Note: Bar in top of cap may be shifted as necessary to clear Anchor Bolts.

NOTE: All bar dimensions are out to out.

TWO ROAD

BILL OF MATERIAL FOR ONE BENT

BAR NO.	SIZE	TYPE	LENGTH	WT.
1	#11	L	30'-3"	6
2	#11	S	27'-7"	5
3	#8	S	14'-5"	2
4	#8	S	14'-5"	2
5	#8	S	7'-5"	1
6	#8	S	7'-5"	1

BENT NO. 1  
 Reinforcing Steel - 60,000  
 Class "A" Concrete - 6.5  
 12" Reinforced Concrete Piles  
 BENT NO. 2  
 Reinforcing Steel - 60,000  
 Class "A" Concrete - 6.5  
 12" Reinforced Concrete Piles

NOTE: Concrete displaced by pile heads has been deducted.

PROJECT NO. 229561

IREDELL COUNTY

STATION 112+15  
 BENTS NO. 1, 2, 3, 4

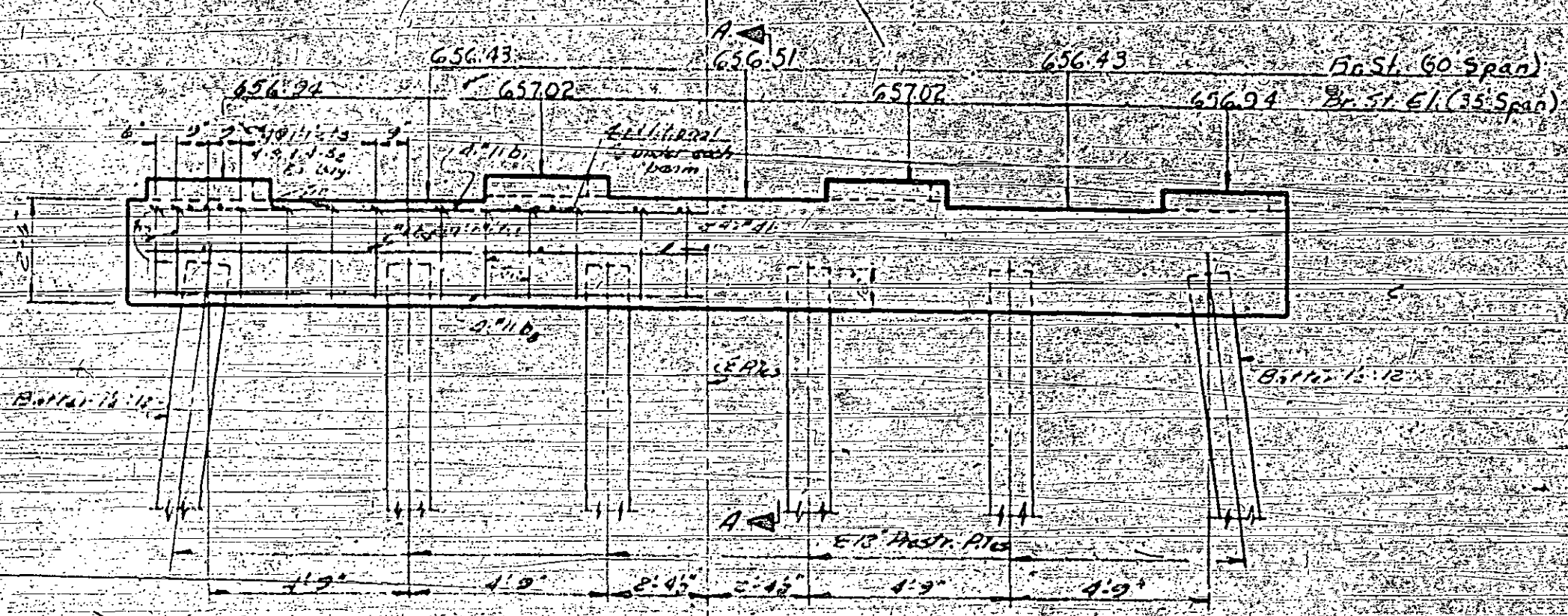
STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION

SUBSTRUCTURE

NOV 1950

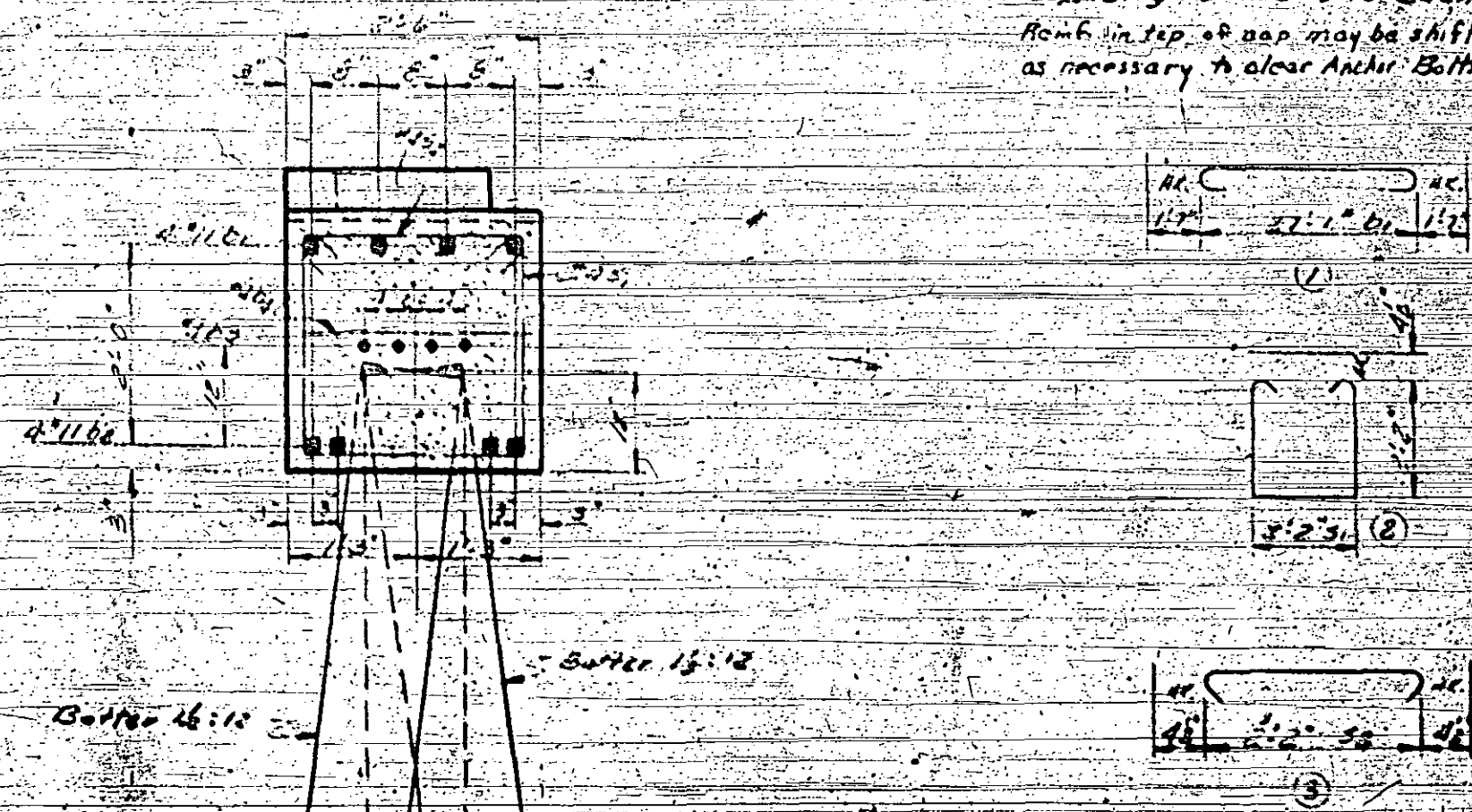
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 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 11/28/50

PLAN OF CAP BENT NO. 3  
BENT NO. 4 SIMILAR BY ROTATION



ELEVATION

NOTE: Drive Piles to a minimum bearing capacity of 28 tons each. Rumb in top of cap may be shifted as necessary to clear Anchor Bolts.

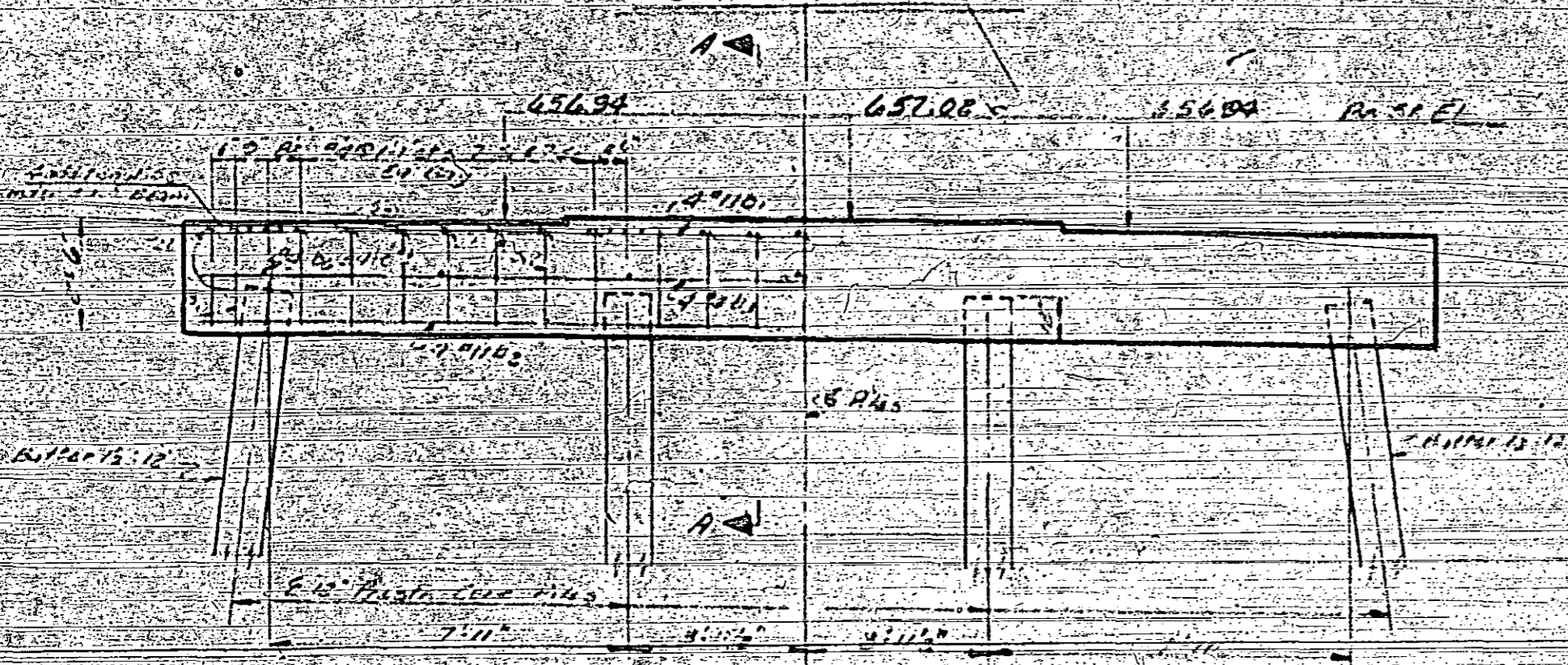


TWO REQ'D  
BILL OF MATERIAL  
FOR ONE BENT

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
b	4	"11		30'-5"	643
p	4	"11	STR.	27'-1"	576
l	9	"2	STR.	10'-5"	77
o	7	"4	STR.	2'-2"	10
s	20	"4		5'-3"	110
5	40	"3		2'-11"	78

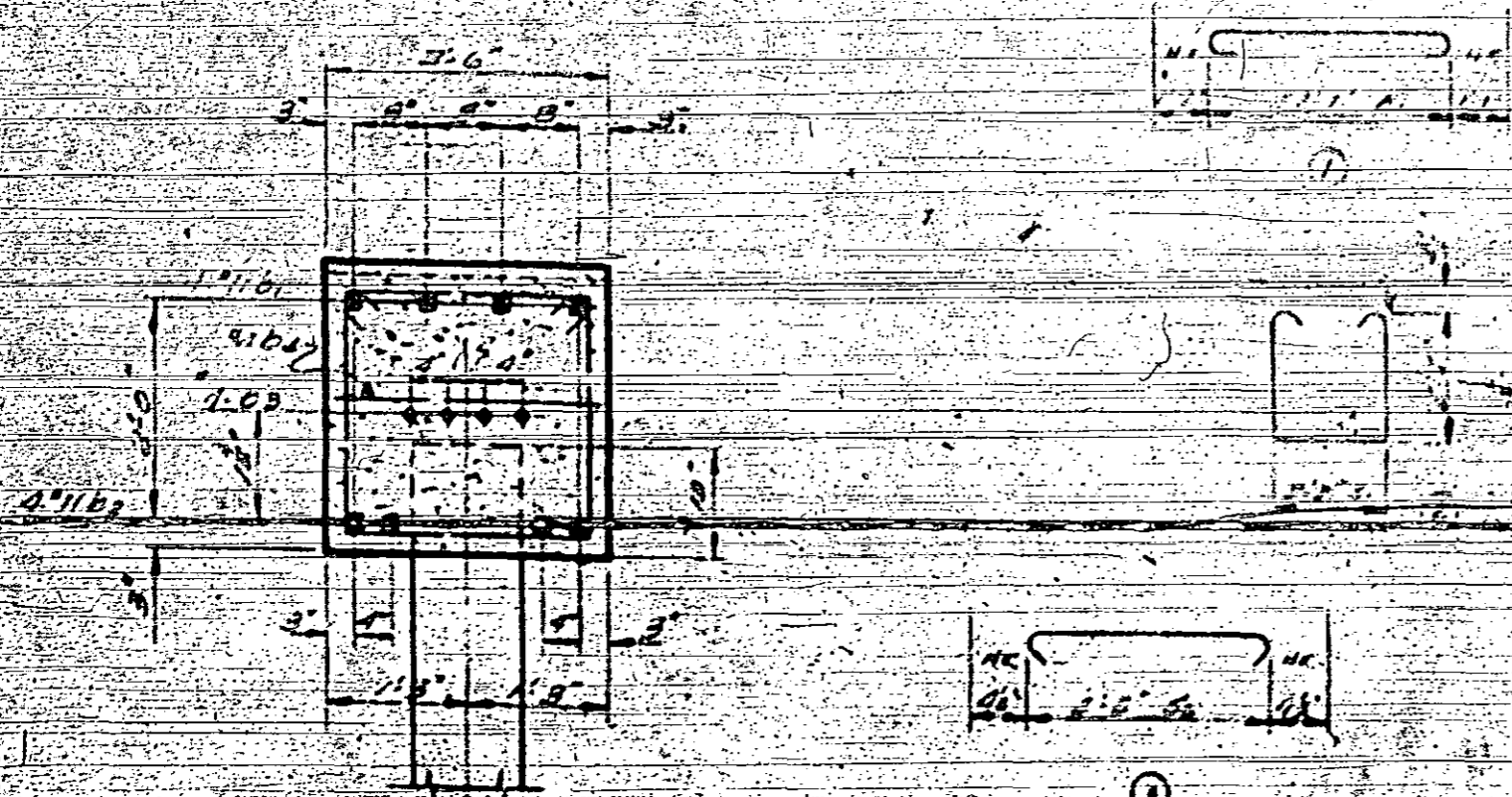
BENT NO. 3  
Reinforcing Steel 100' 1500

PLAN OF CAP  
BENT NO 1 & NO 2



ELEVATION

NOTE: Drive Piles to a minimum bearing capacity of 30 tons each.



SECTION AA

BAR TYPES

BENT NO 1  
 Reinforcing Steel - 40s 15  
 Class A Concrete 2500 psi  
 12" Heated C.C. Piles 15' x 15'  
 BENT NO 2  
 Reinforcing Steel - 40s 15  
 Class A Concrete 2500 psi  
 12" Heated C.C. Piles 15' x 15'

NOTE: Concrete disturbed by pile heads has been deducted.

PROJECT NO. 829361

IBDELL COUNTY

STATION 119+15

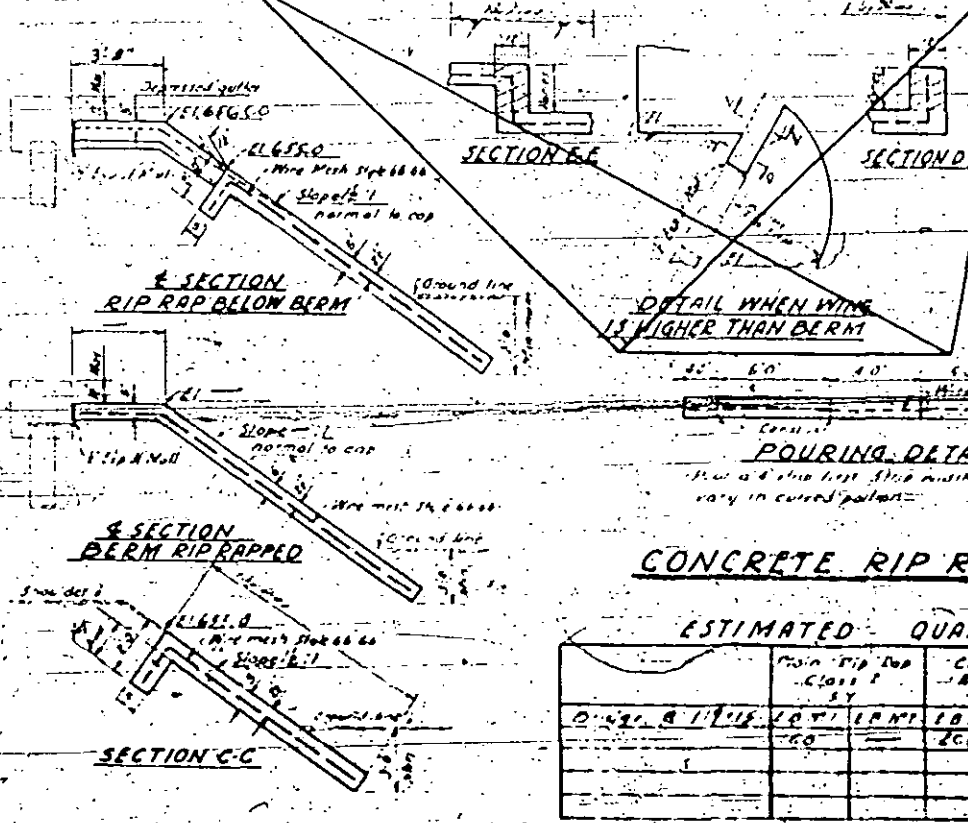
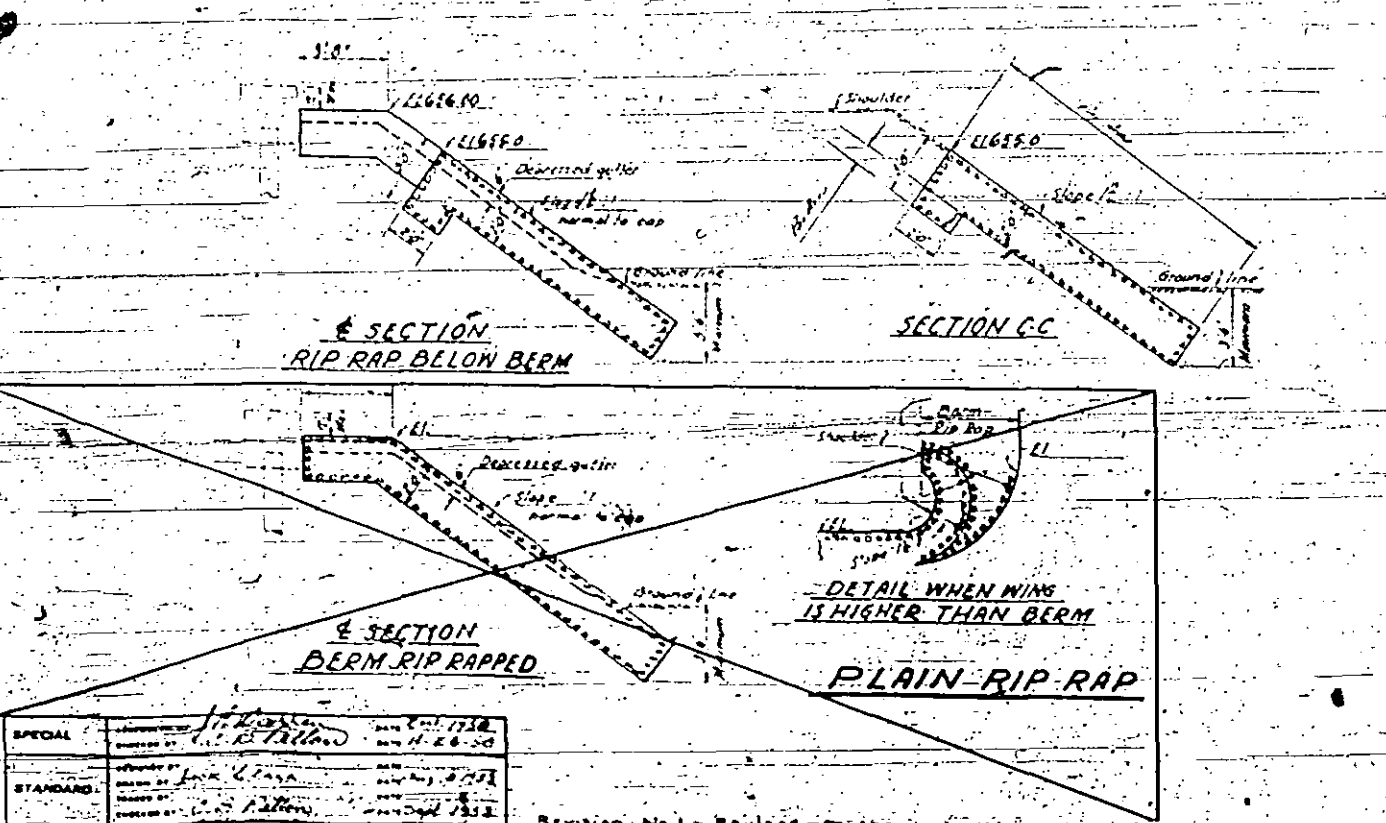
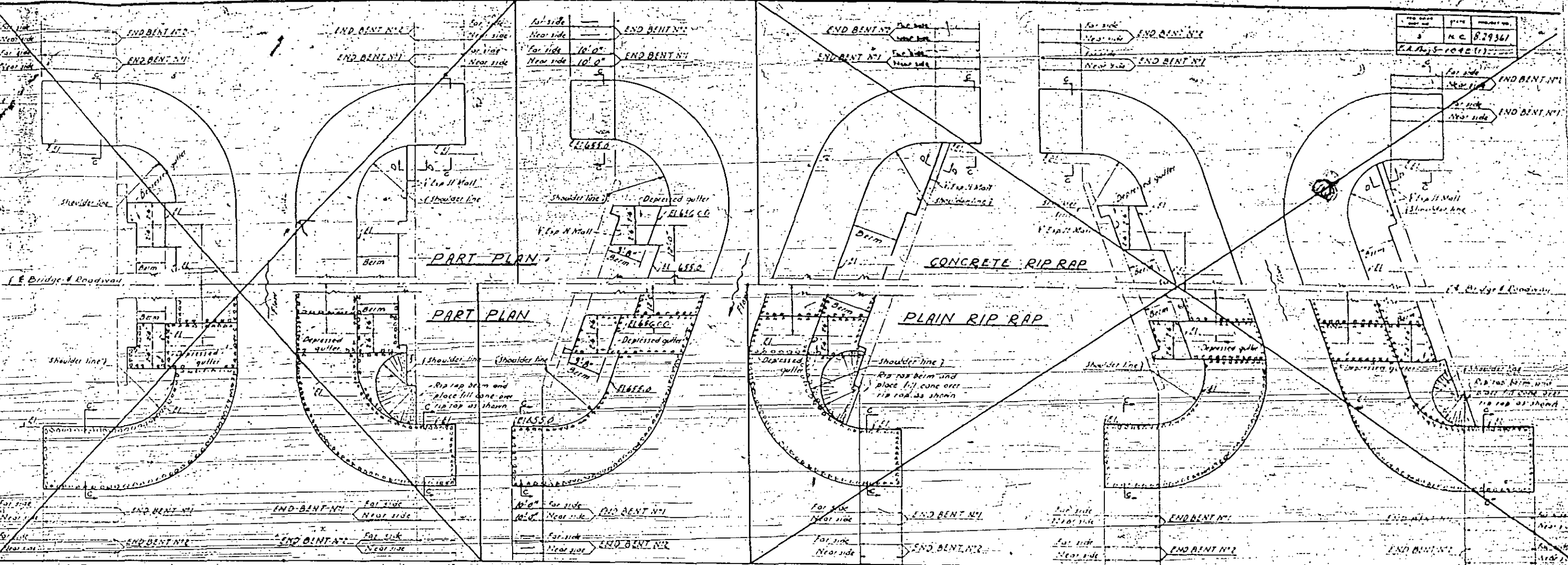
BENTS NO 1, 2, 3 & 4

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION

SUBSTRUCTURE



PROJECT NO. 829361  
 IREDELL COUNTY



**NOTE**  
 CONCRETE RIP RAP shall be cast in situ with the rip rap concrete aggregate. Wire mesh reinforcement to be 3/8" x 3/8" galvanized steel bars spaced at 12" x 12" in both directions. Concrete to be poured in alternate 4" lifts as shown in pouring detail.  
 TOP WALLS shall be constructed at ends of rip rap bents. No float shall be used on the top of the rip rap.  
 DEPRESSED GUTTERS to be formed as indicated by type of rip rap specified. Gutter also in plain rip rap to be formed with 1" formed metal. All mesh and material installed in forming and pouring shall be mounted in the unit price bid for rip rap.  
 Note: Concrete in units shown in detail shall be placed by a crane and not by hand. All units shall be placed on a prepared and compacted subgrade. The units shall be placed on the prepared subgrade and shall be placed on the prepared subgrade and shall be placed on the prepared subgrade.

PROJECT NO. 829361  
 IREDELL COUNTY  
 STATION: 1179.15

**POURING DETAIL**  
 This detail is for reference only. Actual pouring details may vary in curved patterns.

**CONCRETE RIP RAP**

**ESTIMATED QUANTITIES**

Item	Plain Rip Rap Class I	Concrete Rip Rap Class I	Wire Mesh
0.500	1.000	1.000	1.000
1.000	2.000	2.000	2.000
2.000	4.000	4.000	4.000
4.000	8.000	8.000	8.000
8.000	16.000	16.000	16.000
16.000	32.000	32.000	32.000
32.000	64.000	64.000	64.000
64.000	128.000	128.000	128.000
128.000	256.000	256.000	256.000
256.000	512.000	512.000	512.000
512.000	1024.000	1024.000	1024.000
1024.000	2048.000	2048.000	2048.000
2048.000	4096.000	4096.000	4096.000
4096.000	8192.000	8192.000	8192.000
8192.000	16384.000	16384.000	16384.000
16384.000	32768.000	32768.000	32768.000
32768.000	65536.000	65536.000	65536.000
65536.000	131072.000	131072.000	131072.000
131072.000	262144.000	262144.000	262144.000
262144.000	524288.000	524288.000	524288.000
524288.000	1048576.000	1048576.000	1048576.000
1048576.000	2097152.000	2097152.000	2097152.000
2097152.000	4194304.000	4194304.000	4194304.000
4194304.000	8388608.000	8388608.000	8388608.000
8388608.000	16777216.000	16777216.000	16777216.000
16777216.000	33554432.000	33554432.000	33554432.000
33554432.000	67108864.000	67108864.000	67108864.000
67108864.000	134217728.000	134217728.000	134217728.000
134217728.000	268435456.000	268435456.000	268435456.000
268435456.000	536870912.000	536870912.000	536870912.000
536870912.000	1073741824.000	1073741824.000	1073741824.000
1073741824.000	2147483648.000	2147483648.000	2147483648.000
2147483648.000	4294967296.000	4294967296.000	4294967296.000
4294967296.000	8589934592.000	8589934592.000	8589934592.000
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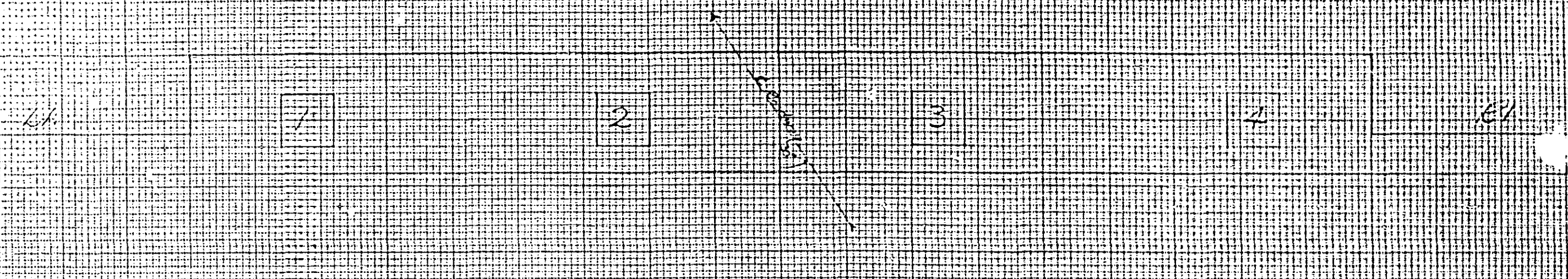




END BENT No. 1 & No. 2

Bridge Sta 119+15

12" Prestressed Concrete Piles



End Bent No. 1

Pile No	Pile Length	Cut-off	Pile Length	Rotation	Blows	Drop	Temp
No 1	21'-0"	0'-0"	21'-0"	21° 1/2"	5	5"	24.4 Tons
No 2	21'-0"	1'-6"	20'-0"	25° 1/2"	5	5"	30.5 "
No 3	21'-0"	1'-0"	20'-0"	25° 1/4"	10	5"	25.7 "
No 4	21'-0"	2'-0"	19'-0"	25° 3/8"	6	5"	30.1 "
TOTALS	108'-0"	5'-0"	103'-0"				
Number of cut-offs = 3							

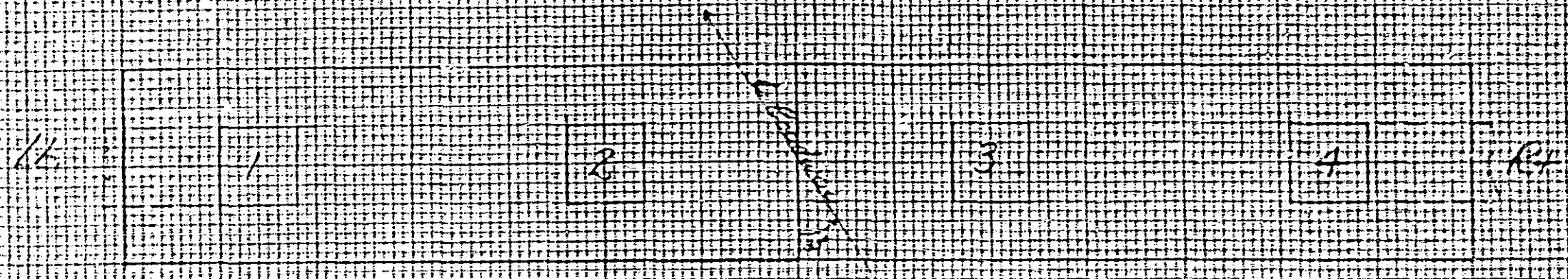
End Bent No. 2

Pile No	Pile Length	Cut-off	Pile Length	Rotation	Blows	Drop	Temp
No 1	27'-0"	4'-6"	22'-0"	20° 1/2"	5	5"	41.3 Tons
No 2	27'-0"	3'-0"	24'-0"	22° 1/2"	5	5"	38.0 "
No 3	27'-0"	5'-0"	22'-0"	22° 1/2"	5	5"	42.8 "
No 4	27'-0"	5'-0"	22'-0"	22° 1/2"	5	5"	42.3 "
TOTALS	108'-0"	19'-6"	88'-0"				
Number of cut-offs = 4							

# BENT'S No 1 & 2

Bridge Sta 119+15

10" Pre-stressed Concrete Piles



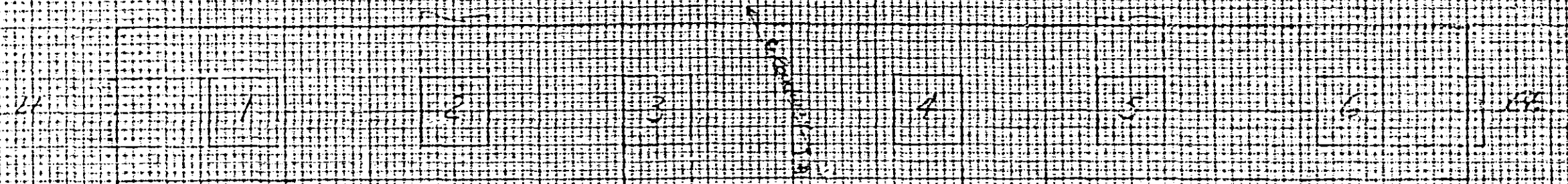
## Bent No 1

Pile No	Length	Cut-Off	Pile length	Distribution	Blows	Drop	Capacity
No 1	21'-0"	2'-0"	25'-0"	25' 1"	5	3"	41.5 Tons
No 2	21'-0"	1'-6"	25'-6"	25' 2"	10	5"	41.3
No 3	21'-0"	1'-0"	26'-0"	26' 1/2"	5	3"	33.3
No 4	21'-0"	1'-0"	26'-0"	26' 1"	5	5"	41.3
Totals	108'-0"	5'-6"	101'-6"				
Number Cut-Offs		4					

## Bent No 2

Pile No	Length	Cut-Off	Pile length	Distribution	Blows	Drop	Capacity
No 1	21'-0"	1'-0"	26'-0"	26' 1/2"	5	5"	33.5 Tons
No 2	21'-0"	1'-6"	25'-6"	25' 6"	5	5"	41.3
No 3	21'-0"	2'-0"	25'-0"	25' 1/2"	5	5"	33.5 Tons
No 4	21'-0"	2'-0"	25'-0"	25' 1/2"	5	5"	33.5
Totals	108'-0"	6'-6"	101'-6"				
Number Cut-Offs		4					

**BENT No 3 & 4**  
 Bridge Sta 113+15  
 15' Reinforced Concrete Piles



**Bent No 3**

Pile No	Length	Cut Off	Top Length	Penetration	Stems	Drags	Remarks
No 1	27'-0" ✓	11'-6" ✓	25'-6" ✓	25' 3/8" ✓	5"	0"	50.1 tons
No 2	27'-0" ✓	2'-0" ✓	35'-0" ✓	25' 1/8" ✓	10"	5"	22.2 tons
No 3	27'-0" ✓	2'-0" ✓	25'-0" ✓	25' 1/4" ✓	5"	5"	76.8 tons
No 4	27'-0" ✓	3'-0" ✓	25'-0" ✓	25' 1/8" ✓	5"	0"	49.2 tons
No 5	27'-0" ✓	7'-6" ✓	25'-6" ✓	25' 3/8" ✓	5"	5"	60.7 tons
No 6	27'-0" ✓	2'-0" ✓	25'-0" ✓	25' 7/8" ✓	5"	0"	75.0 tons
Totals	162'-0" ✓	11'-0" ✓	151'-0" ✓				
Number Cut Offs		6 ✓					

**Bent No 4**

Pile No	Length	Cut Off	Top Length	Penetration	Stems	Drags	Remarks
No 1	27'-0" ✓	7'-0" ✓	26'-0" ✓	26' 3/8" ✓	5"	5"	53.8 tons
No 2	27'-0" ✓	7'-6" ✓	26'-6" ✓	25' 3/8" ✓	5"	5"	59.7 tons
No 3	27'-0" ✓	7'-6" ✓	25'-6" ✓	25' 3/8" ✓	5"	5"	63.5 tons
No 4	27'-0" ✓	3'-0" ✓	24'-0" ✓	24' 3/8" ✓	5"	5"	74.0 tons
No 5	27'-0" ✓	3'-0" ✓	24'-0" ✓	24' 1/8" ✓	5"	0"	63.5 tons
No 6	27'-0" ✓	3'-0" ✓	24'-0" ✓	24' 7/8" ✓	5"	0"	63.8 tons
Totals	162'-0" ✓	15'-0" ✓	145'-6" ✓				
Number Cut Offs		6 ✓					

Number Cut Offs 6 ✓

Bent No 4

Pile No	Length	Cut Off	Pile Length	Penetration	Stems	Drags	Temper
No 1	21'0" ✓	1'0" ✓	20'0" ✓	3/8" ✓	5'	5'	53 3/4
No 2	21'0" ✓	1'0" ✓	20'0" ✓	3/8" ✓	5'	5'	53 3/4
No 3	21'0" ✓	1'0" ✓	20'0" ✓	3/8" ✓	5'	5'	53 3/4
No 4	21'0" ✓	3'0" ✓	18'0" ✓	3/8" ✓	5'	5'	53 3/4
No 5	21'0" ✓	3'0" ✓	18'0" ✓	3/8" ✓	5'	5'	53 3/4
No 6	21'0" ✓	3'0" ✓	18'0" ✓	3/8" ✓	5'	5'	53 3/4
Totals	126'0" ✓	12'0" ✓	114'0" ✓				
Number Cut Offs =	6 ✓						

SUMMARY

	Length	Cut Off	Pile Length	Penetration	Stems
End Bent No 1	108'0" ✓	5'0" ✓	103'0" ✓	3/8" ✓	3 ✓
Bent No 2	108'0" ✓	5'0" ✓	103'0" ✓	3/8" ✓	1 ✓
Bent No 3	108'0" ✓	4'0" ✓	104'0" ✓	3/8" ✓	1 ✓
Bent No 4	123'0" ✓	11'0" ✓	112'0" ✓	3/8" ✓	6 ✓
Bent No 5	123'0" ✓	12'0" ✓	111'0" ✓	3/8" ✓	6 ✓
End Bent No 6	108'0" ✓	19'0" ✓	89'0" ✓	3/8" ✓	4 ✓
Grand Total	780'0" ✓	60'0" ✓	720'0" ✓		27 ✓

RIP-RIP DETAIL (CONCRETE)  
 BRIDGE STA. 110+15  
 END BENT No. 1

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	P. 23961 SE	197	16
DATE: 1957			



① Rip-rap	12" thick
② Concrete	12" thick
③ Rip-rap	12" thick
④ Concrete	12" thick
⑤ Rip-rap	12" thick
⑥ Concrete	12" thick
⑦ Rip-rap	12" thick
⑧ Concrete	12" thick
⑨ Rip-rap	12" thick
⑩ Concrete	12" thick

11/22/57  
 11/21/57  
 11/20/57  
 11/19/57  
 11/18/57  
 11/17/57

## FINAL ESTIMATE OF STRUCTURE

Amount	Unit	Item	Contract Price	Total Amount
1 ✓		Maint. & Removal of Existing Structure at Sta 113+15	1000.00 ✓	\$1000.00 ✓
1095 ✓	Cu Yds	Class II Concrete	59.00 ✓	11,770.50 ✓
39,745 ✓	Lbs.	Reinforcing Steel	0.13 ✓	5,166.85 ✓
86100 ✓	Lbs.	Structural Steel	Lump Sum ✓	11,700.00 ✓
696 ✓	Lin Ft.	12" Prestressed Concrete Piles	6.00 ✓	4,176.00 ✓
60 ✓	Lin Ft.	12" Prestressed Conc Piles Cut Off	4.50 ✓	2,700.00 ✓
27 ✓	Nb.	12" Prest. Conc Piles No. Cut Off	6.00 ✓	1,620.00 ✓
191.9 ✓	Sq Yds	Concrete Ego. Rap	7.00 ✓	1,343.30 ✓

Total amount of Final Estimate 33,588.65 ✓  
 Less Previous Payments 33,422.68 ✓  
 Amount due on Final Payment \$165.97 ✓

I hereby certify that I have checked this estimate and it is true and correct according to my best knowledge and belief.

Signed: *J. J. Wilson* Date: *3/26/50*  
 Resident Engineer

Examined and approved by: *E. K. King* Date: *3/27/50*  
 Division Engineer

**THE FINAL ESTIMATE**  
 NC PROJECT NO. 827361  
 F.A. NO. 5-104203

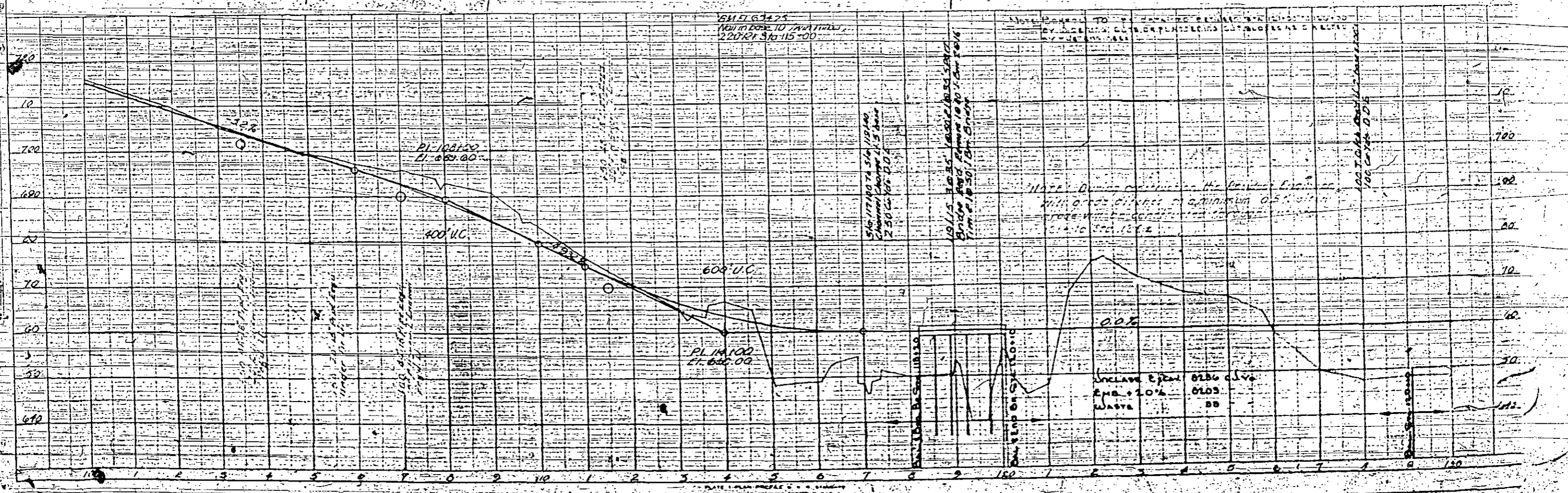
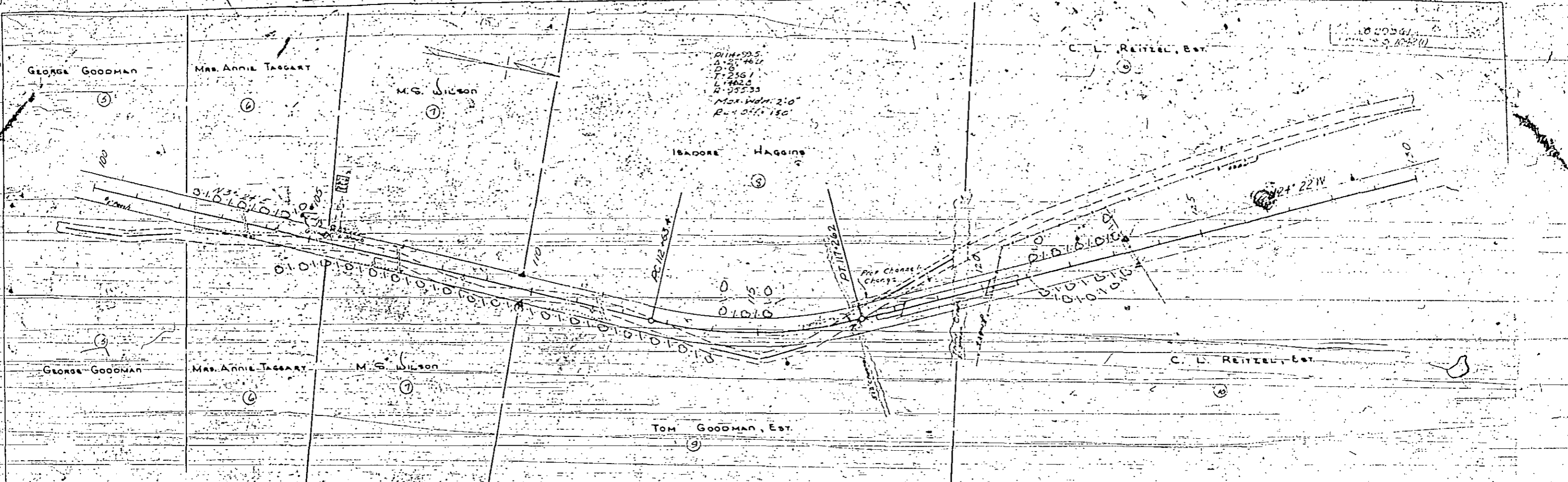
TOTAL AMOUNT	UNIT	ITEM	CONTRACT PRICE	TOTAL AMOUNT
2,277 ✓	Acres	Clearing	200.00 ✓	455.40 ✓
2,051 ✓	Acres	Grubbing	100.00 ✓	205.10 ✓
62,725.0 ✓	Cu. Yds.	Unclassified Excavation	25 ✓	15,532.00 ✓
<del>5,229</del> 985.0 ✓	Cu. Yds.	Drainage Ditch Excavation	50 ✓	<del>266,492.50</del> 492.50 ✓
9,309.61 ✓	Cu. Yds.	Overhaul (Special Fr. Mile)	66 ✓	553.58 ✓
10,021.50 ✓	Cu. Yds.	Soil Type Base Course	90 ✓	9,019.35 ✓
0 ✓	M.S.Y.	Units of 1000 Sq. Yds. or Fraction Thereof Reconditioning Road	50.00 ✓	0.00 ✓
34,365.25 ✓	Sq. Yds.	Bituminous Surface Treatment	30 ✓	10,309.58 ✓
15.22 ✓	Cu. Yds.	Concrete Endwalls Class C Course	75.00 ✓	1,141.50 ✓
260.0 ✓	Lin. Ft.	15" R.C. Pipe Culverts	2.50 ✓	650.00 ✓
8600 ✓	Lin. Ft.	18" R.C. pipe Culverts	3.30 ✓	2,838.00 ✓
1600 ✓	Lin. Ft.	24" R.C. pipe Culverts	5.00 ✓	8,000.00 ✓
60.0 ✓	Lin. Ft.	24" Bit. Coated C.M. pipe Culverts, Type B	6.00 ✓	360.00 ✓
5,415.0 ✓	Lin. Ft.	Barbed Wire Fence: Reset	.04 ✓	21,660.00 ✓
350 ✓	Each	Right of Way Markers	5.00 ✓	1,750.00 ✓
		Extra Work Order No. 12-40	1,140.00 ✓	1,140.00 ✓

TOTAL AMOUNT OF FINAL ESTIMATE ~~4,389,361~~ 13,893.61  
 LESS PREVIOUS PAYMENTS (EST. 1-5) (NCL) 39,230.14  
 BALANCE IN AMOUNT DUE ON FINAL ESTIMATE ~~4,350,131~~ 13,854.47  
 DEDUCTIONS FOR ASPHALTIC MATERIALS-AE-3 (See Sheet No. 50) 77.35 ✓  
 AMOUNT DUE ON FINAL ESTIMATE ~~4,272,898~~ 13,777.12

Sheet # 668  
 Post # 19  
 (Roadway Only)

I hereby certify that I have checked this estimate and that it is true and correct according to my best knowledge and belief.  
 Signed: [Signature] Date: January 1, 1965  
 Resident Engineer

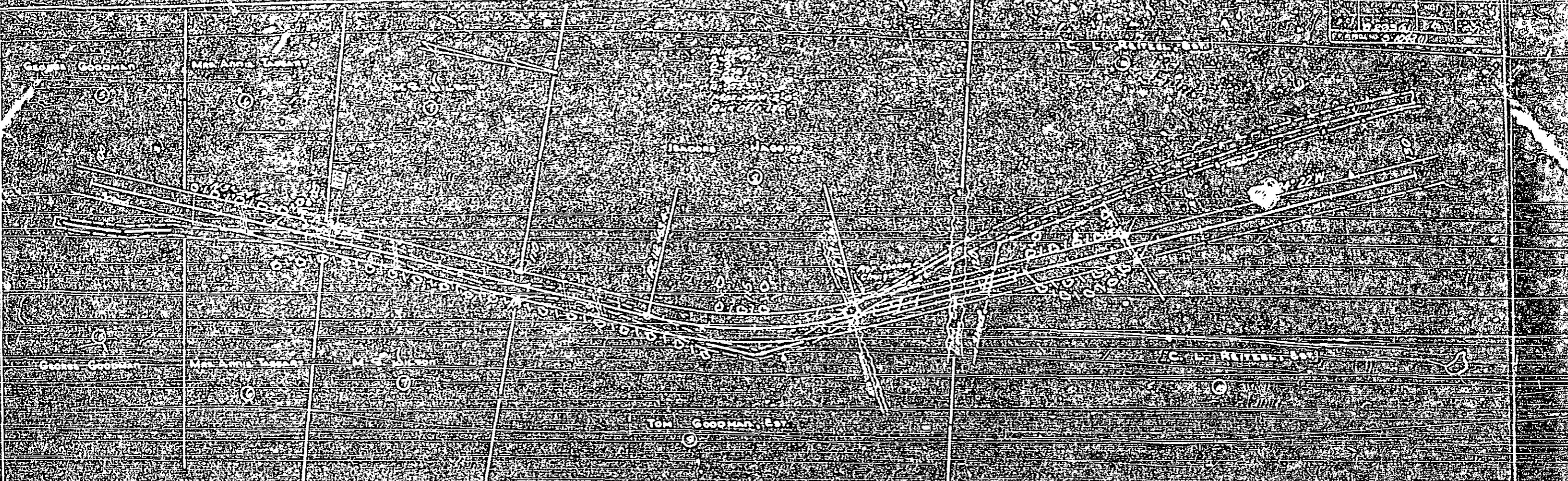
I hereby certify that I have examined this estimate in detail and that it is true and correct according to my best knowledge and belief.  
 Signed: [Signature] Date: 1/1/65  
 Division Engineer



DATE: PLAN PROFILE & ...  
 DRAWN BY: ...  
 CHECKED BY: ...



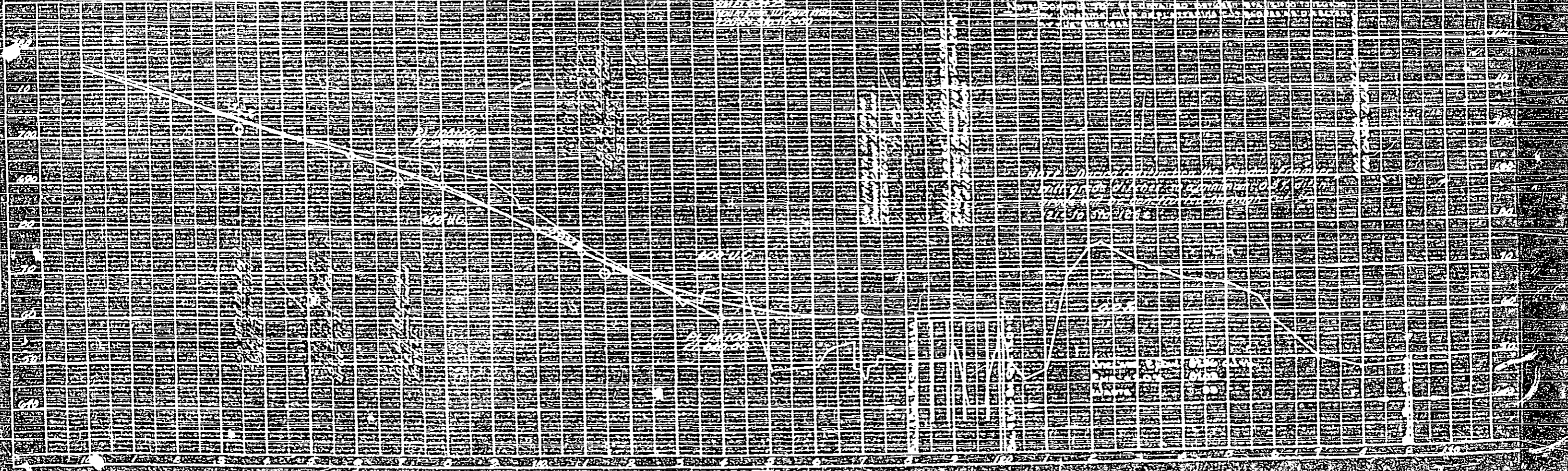
Water 1/4  
C. 1/4  
C. 1/4



Tom. Goodman, Esq.

James H. ...

C. 1/4



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