

# INDEX OF SHEETS

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11	COMPOSITE PILE BENT
12	TOWER BENT
13	30 FT. SPAN

## SOUTH CAROLINA STATE HIGHWAY DEPARTMENT COLUMBIA

# PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

FEDERAL AID PROJECT NO. F-241(4)

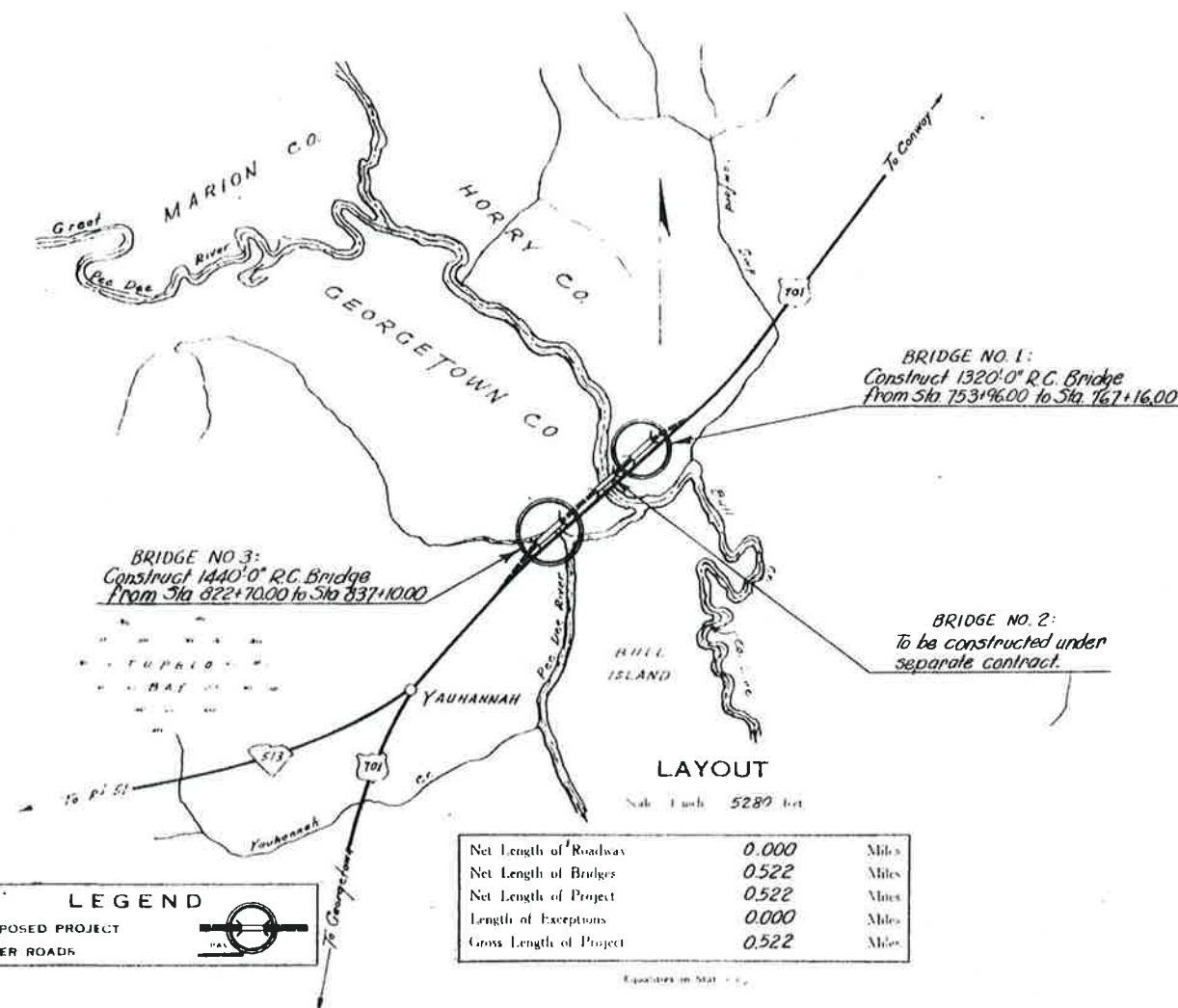
S. C. DOCKET NO. 2226.226.1

U. S. ROUTE NO. 701

## HORRY-GEORGETOWN COS. OVERFLOW BRIDGES NO. 1 & NO. 3 GREAT PEE DEE RIVER AT YAUHANNAH

### SUMMARY OF ESTIMATED QUANTITIES

CLASS 'A' CONCRETE	3697.22	C.Y.
REINFORCING STEEL	835,148	LBS.
18" PRE-CAST CONCRETE PILING	15,924	L.F.
CONCRETE TILE SLOPE DRAINS	277	L.F.



Net Length of Roadway	0.000	Miles
Net Length of Bridges	0.522	Miles
Net Length of Project	0.522	Miles
Length of Exceptions	0.000	Miles
Gross Length of Project	0.522	Miles

APPROVED:

*S. H. Rawner* 2/19/52  
STATE HIGHWAY ENGINEER DATE

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER

DATE

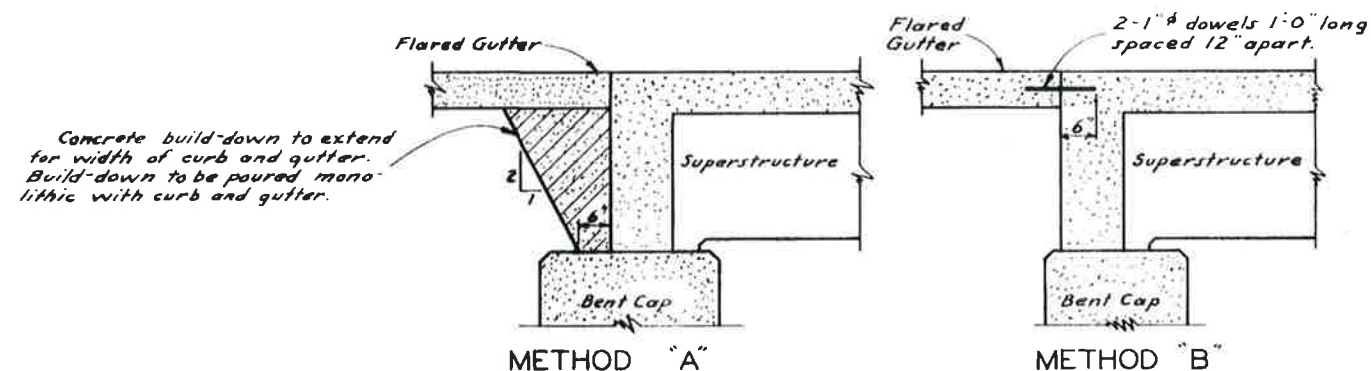
APPROVED

DIVISION ENGINEER

DATE

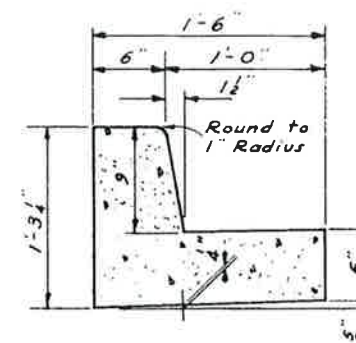
Note: All workmanship and material on this project to conform with South Carolina State Highway Department Standard Specifications for Highway Construction dated March 15th, 1939, as approved by the Administrator, Federal Works Agency.

FED. RD. DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	GEORGETOWN Horry	2226.226	701	2	13



**METHOD "A"**  
**METHOD "B"**

Note: Ends of curb and gutter adjacent to bridge to be supported by one of the methods shown above. Use method "A" when there is sufficient width and length of bent cap to support concrete build-down. Otherwise use Method "B".  
The quantity of concrete or reinforcing steel involved shall be computed by the Engineer and added to the quantities shown on this sheet.

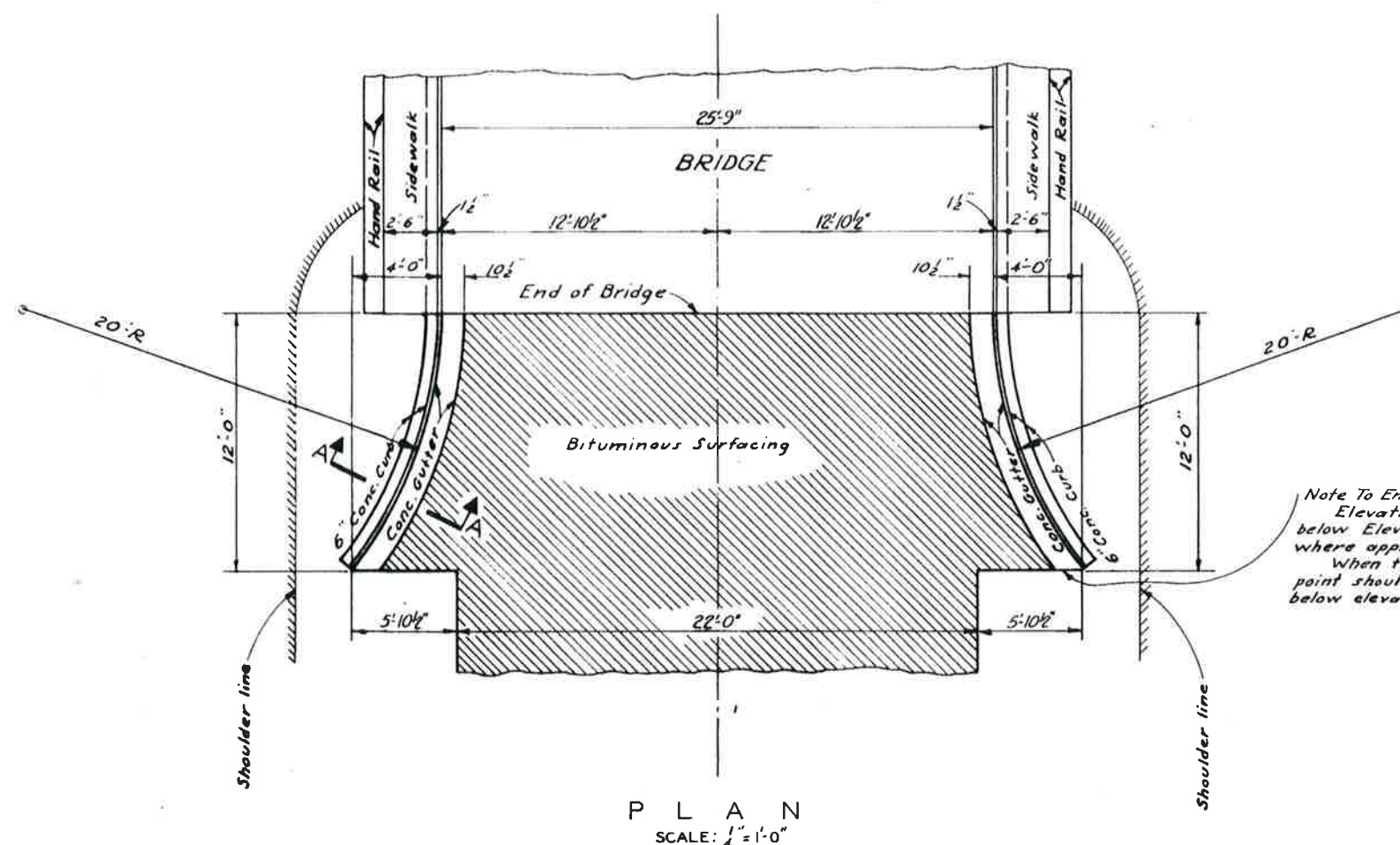


SECTION A-A  
SCALE: 1/2" = 1'-0"

### CURB AND GUTTER SUPPORT

SCALE: 3/4" = 1'-0"

All costs of constructing the concrete curb and gutter at the ends of the bridge will be included in payment for the concrete involved at the Unit Price Bid for Class "A" Concrete.



P L A N  
SCALE: 1/4" = 1'-0"

* QUANTITIES	
ONE END OF BRIDGE	
Class "A" Concrete	1.12 CY.

\* Does not include quantities for Curb & Gutter Support. (See note above)

Note To Engineer:  
Elevation of this point to be set 6" below Elevation of gutter at end of Bridge where approach is on a 0.0% grade.  
When the approach is on a grade, this point should be set (6" x % of grade x 12') below elevation of gutter at end of Bridge.

S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
DETAILS OF  
FLARED CURB AND GUTTER

AT ENDS OF BRIDGE

DOCKET NO. 2226.226 ROUTE NO. 701  
GEORGETOWN  
COUNTY Horry DATE FEB. 1952  
SCALE AS NOTED

Rev.			
Drawn	W. E. S. B-51		
Des.	W. E. S. B-51		
By	chkd.	Date	

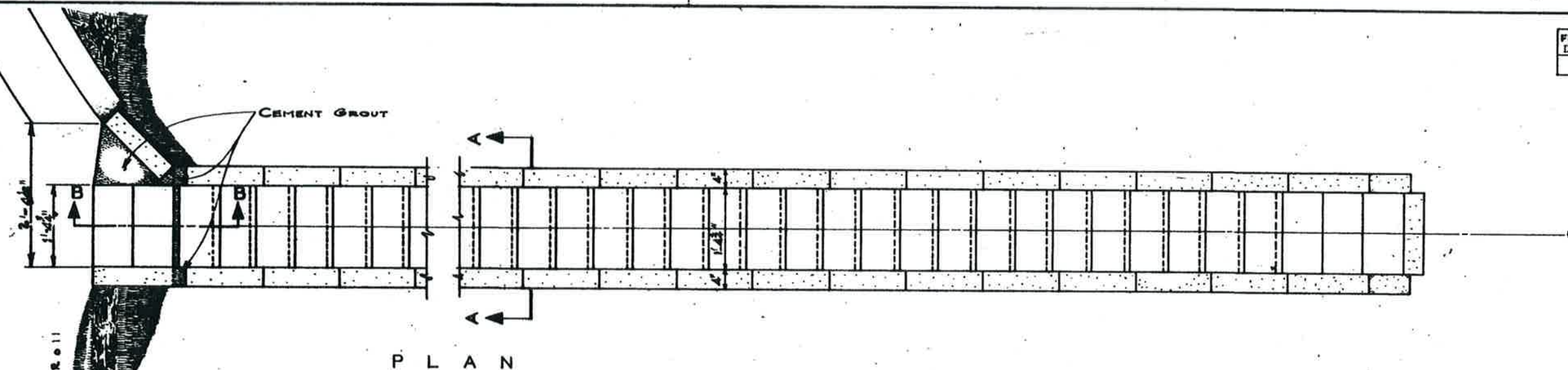
Revised for Docket No. 2226.226-EAS - Feb. 1952  
Checked by: E.M.Q. - Feb. 1952



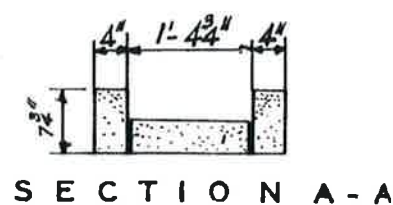
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	GEORGETOWN	2226.226	701	3	13

HORRY

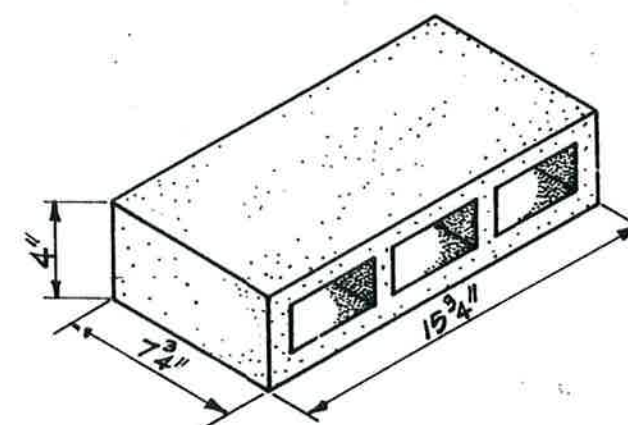
ROADWAY



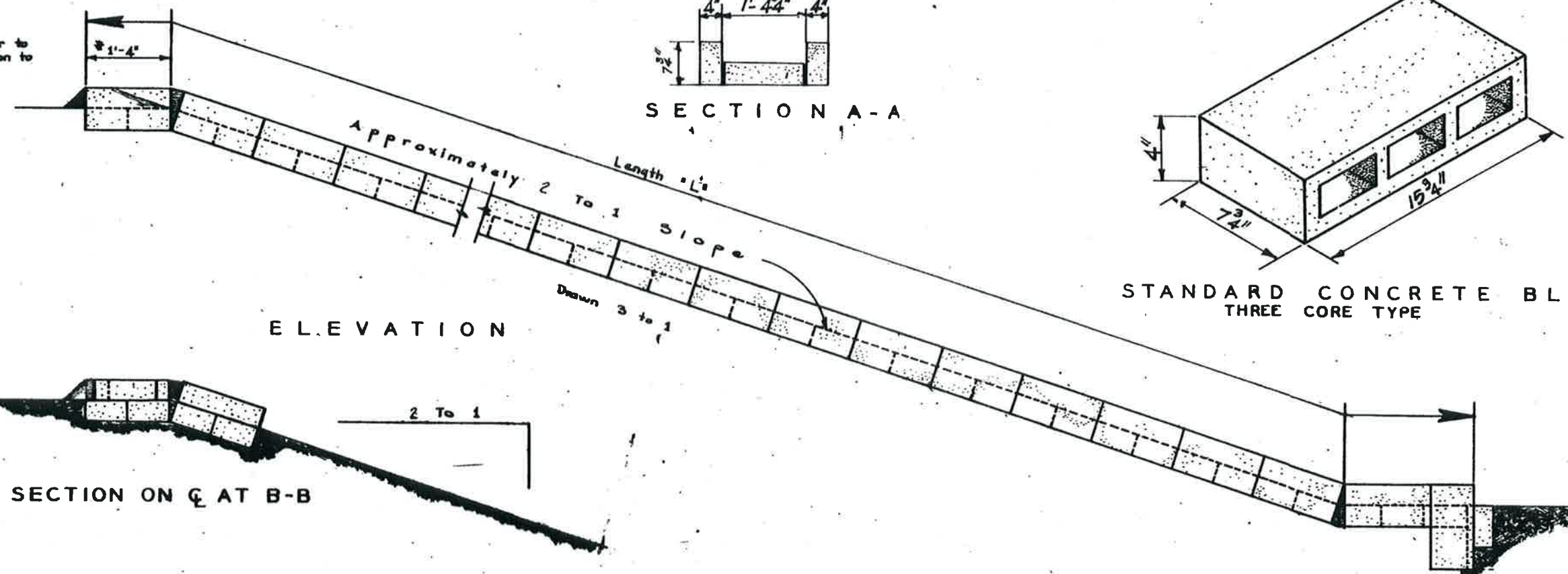
P L A N



S E C T I O N A - A



S T A N D A R D C O N C R E T E B L O C K  
T H R E E C O R E T Y P E



E L E V A T I O N

S E C T I O N O N C A T B - B

TOTAL LENGTH  $\frac{Br. No. 1}{Br. No. 3} \frac{181. Ft.}{96. Ft.}$

Scale 1" = 1 Ft

NOTE: Necessary concrete and extra blocks at end of drain will be paid for as 2 feet of slope drain at unit price bid per lin. ft. All blocks shall be laid with a 1/2" joint of 1:3 Mortar. All costs of necessary excavation for the construction of the slope drains shall be included in the unit-price bid per lin. ft. of concrete Tile Slope Drains.

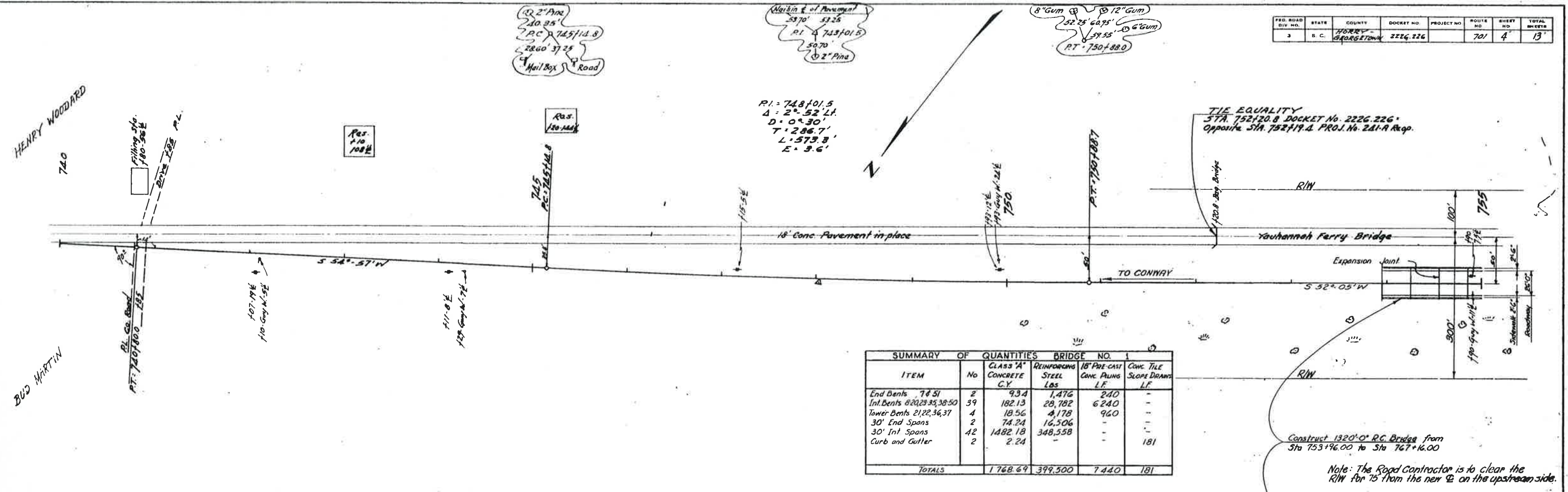
S . C . STATE HIGHWAY DEPARTMENT  
COLUMBIA

# TYPICAL CONCRETE TILE SLOPE DRAINS

S . C . DOCKET NO. 2226.226 GEORGETOWN COUNTY  
ROUTE NO. 701 HORRY DATE FEB. 1952

Adapted For Docket No. 2226.226: C.E.S. - Feb. 1952  
Checked by: E.M.Q. - Feb. 1952

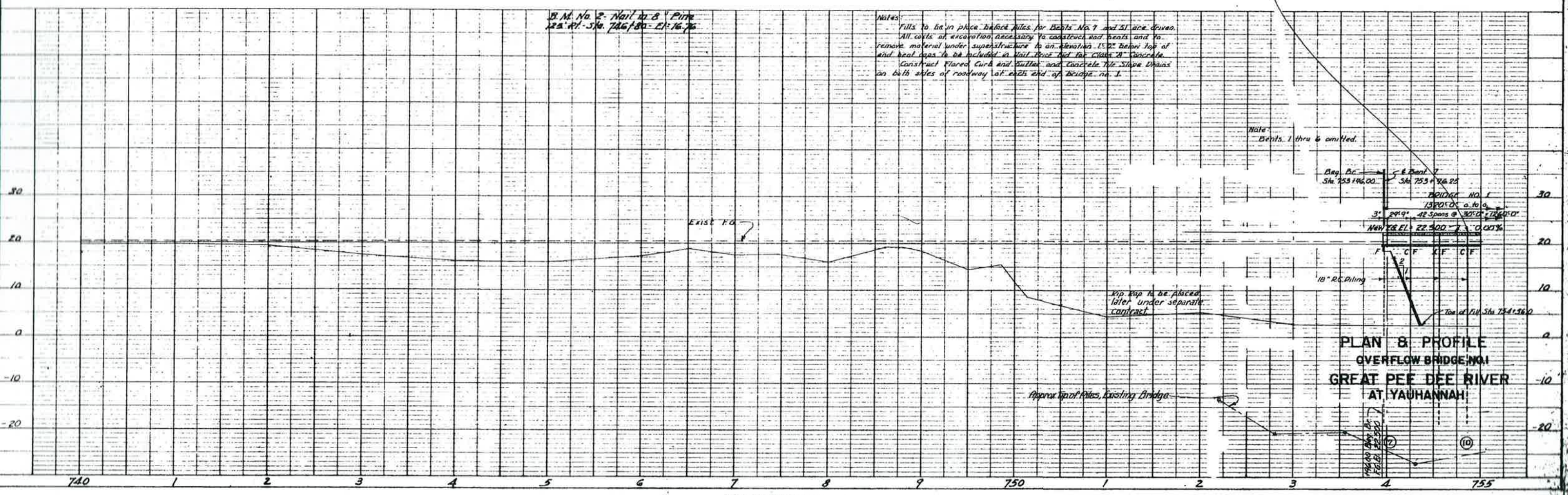




SUMMARY OF QUANTITIES		BRIDGE NO. 1			
ITEM	No	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS	18" PRE-CAST CONC. PILING L.F.	CONC. TILE SLOPE DRAINS L.F.
End Bents 7451	2	9.34	1,476	240	-
Int. Bents 820, 233, 38, 50	39	182.13	28,782	6,240	-
Tower Bents 212, 36, 37	4	18.56	4,178	960	-
30' End Spans	2	74.24	16,506	-	-
30' Int. Spans	42	1,482.18	348,558	-	-
Curb and Gutter	2	2.24	-	-	181
<b>TOTALS</b>		<b>1,768.69</b>	<b>399,500</b>	<b>7,440</b>	<b>181</b>

Construct 1320'-0" RC Bridge from Sta 753+96.00 to Sta 767+16.00

Note: The Road Contractor is to clear the R/W for 15' from the new R/W on the upstream side.



**PLAN & PROFILE OVERFLOW BRIDGE NO. 1 GREAT PEE DEE RIVER AT YAUHANNAH**

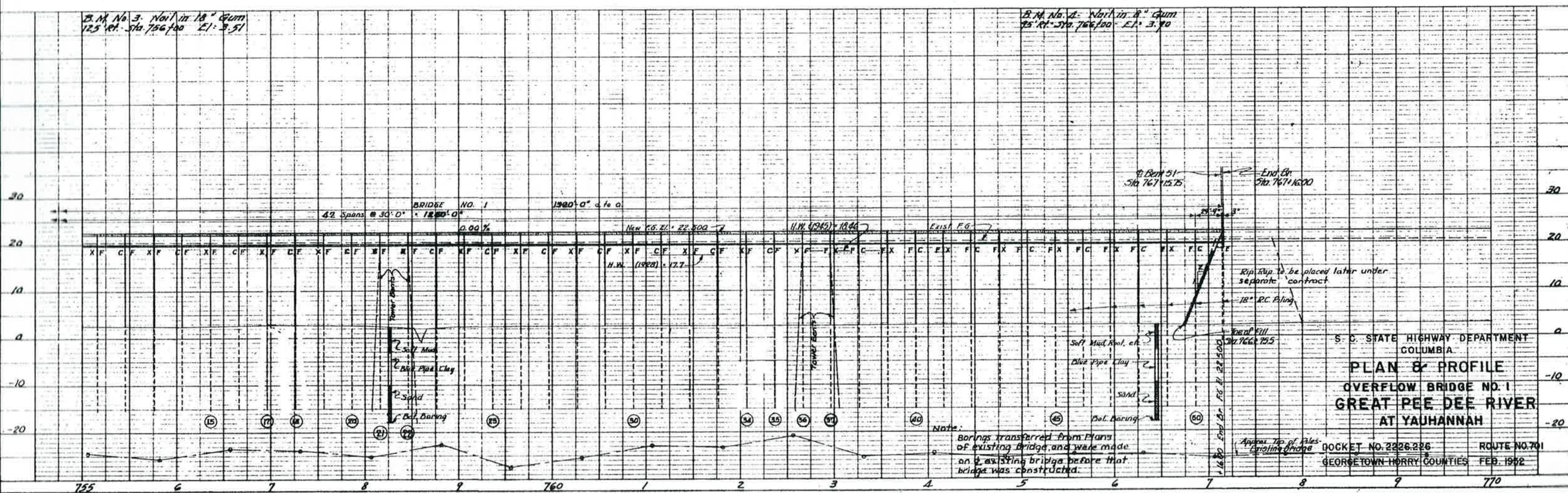




Note: The Road Contractor is to clear the R/W for 15' from the new R on the upstream side.

B.M. No. 3. Nail in 18" Gum  
125' Sta. 756+00 E.I. 3.51

B.M. No. 4. Nail in 8" Gum  
75' Sta. 766+00 E.I. 3.70



S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
**PLAN & PROFILE**  
**OVERFLOW BRIDGE NO. 1**  
**GREAT PEE DEE RIVER**  
**AT YAUHANNAH**  
DOCKET NO. 2226.226  
ROUTE NO. 701  
GEORGETOWN-HORRY COUNTIES  
FEB. 1962





FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	HARVEY - GEORGETOWN	2226.226		701	7 13

Bridge Piling  
37.25'  
24.60'  
ROT 802.597.3  
25.35'  
0.5" Maple

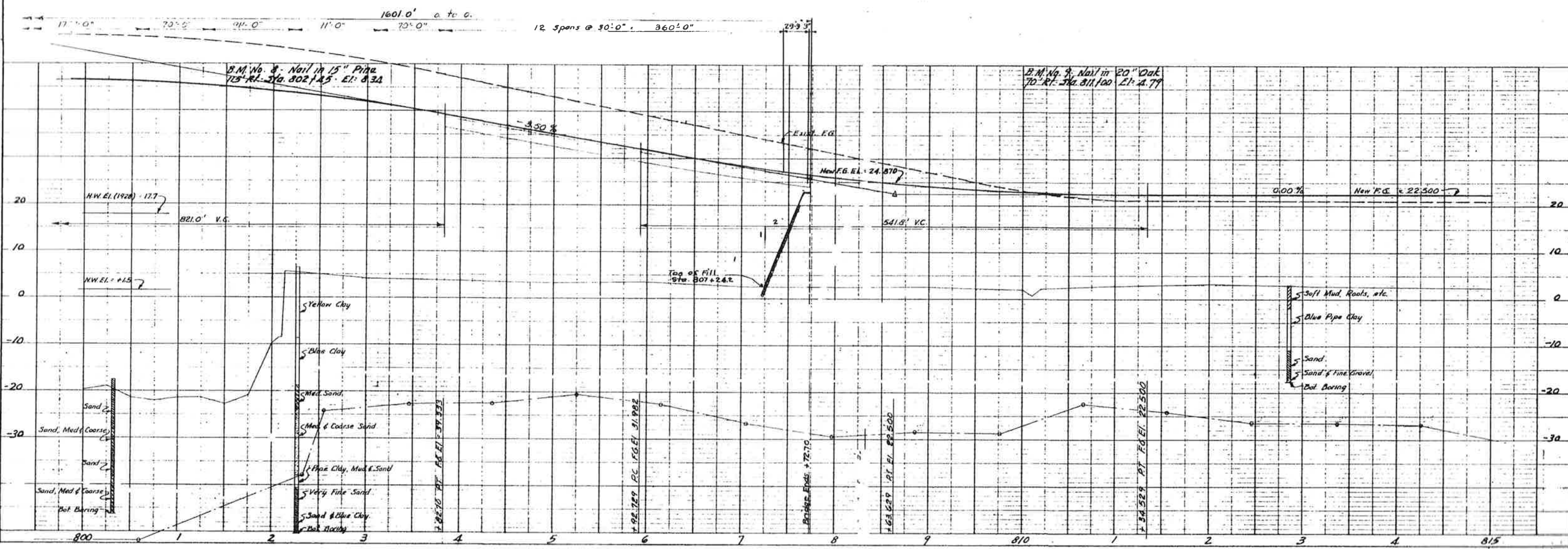
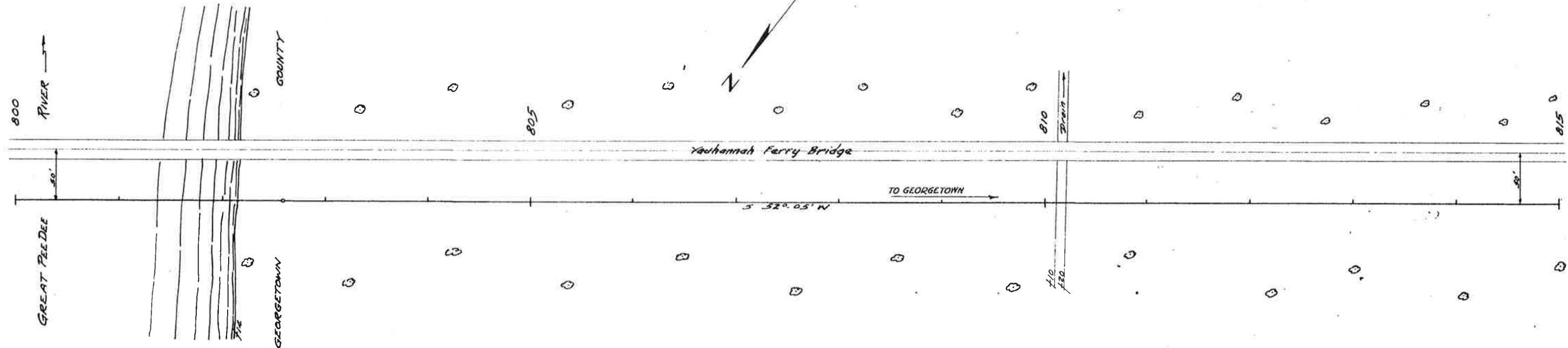


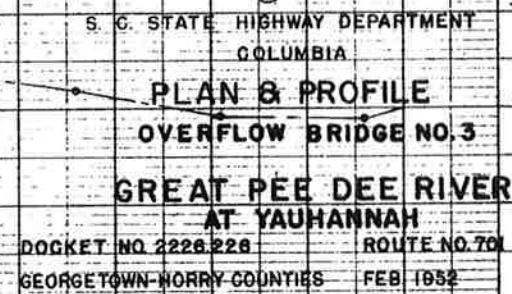
PLATE 1. PLAN - PROFILE OF BRIDGE





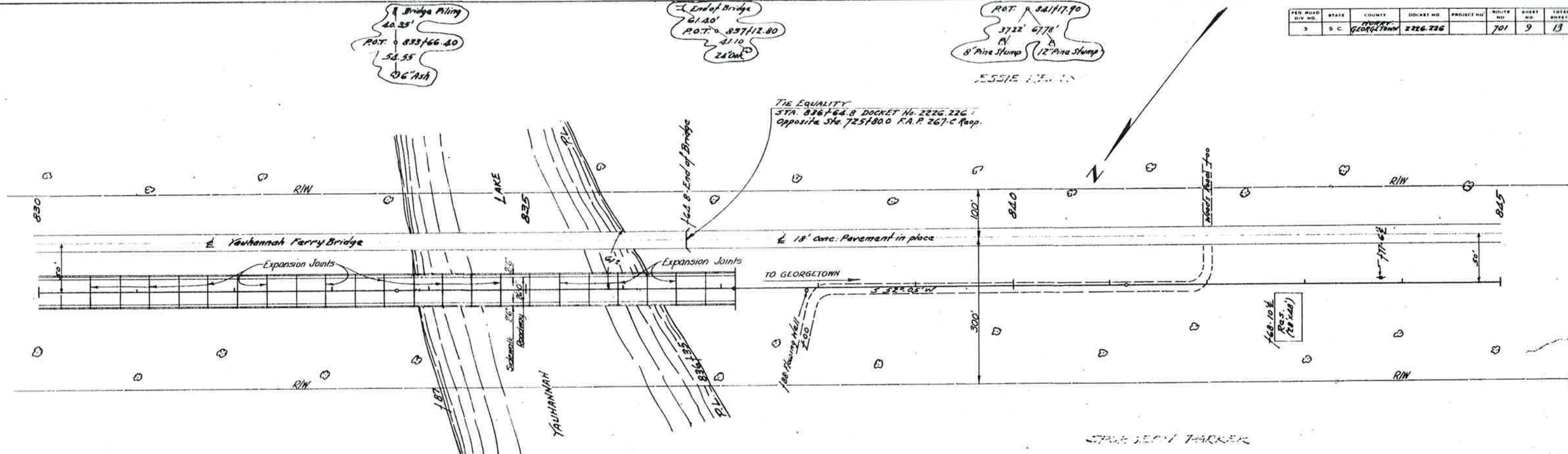
Notes

- Fills to be in place before piles for Bent No. 3 are driven.
- All costs of excavation necessary to construct end bents and to remove material under superstructure to an elevation 1'0" below top of end bent caps to be included in Unit Price bid for Class "A" Concrete.
- Construct Flared Curb and Gutter on both sides of roadway at each end of Bridge No. 3.
- Construct Concrete Side Slope, Drains on both sides of roadway at beginning of Bridge No. 3.

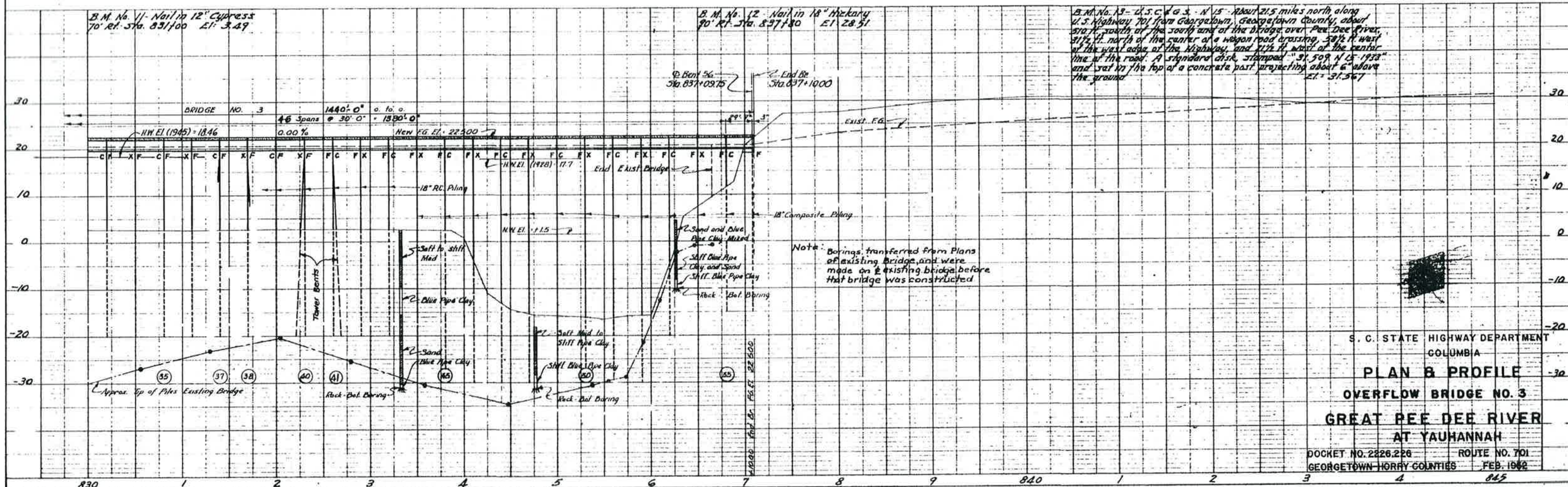




FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	GEORGETOWN	2226.226		701	9	13



Note: The Road Contractor is to clear the R/W for 75' from the new bridge on the upstream side.



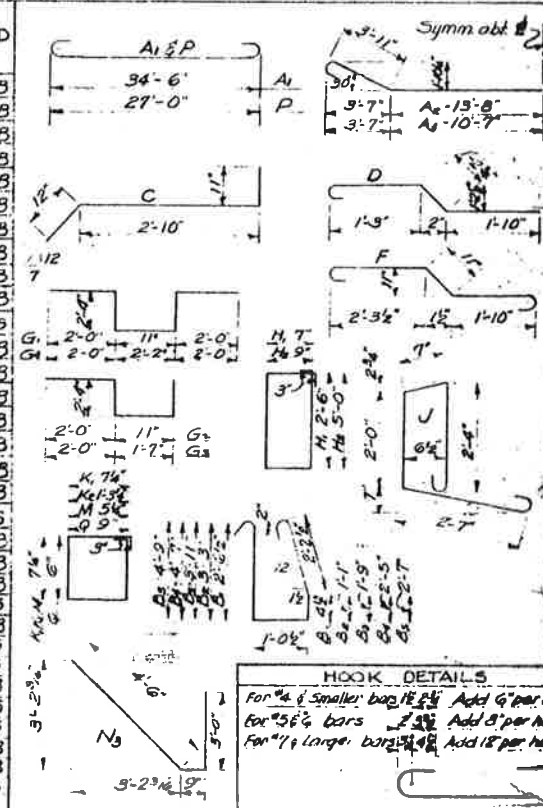
S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
**PLAN & PROFILE**  
**OVERFLOW BRIDGE NO. 3**  
**GREAT PEE DEE RIVER**  
**AT YAUHANNAH**  
DOCKET NO. 2226.226 ROUTE NO. 701  
GEORGETOWN Horry Counties FEB. 1962



FED. RD. DIV. NO.	STATE	COUNTY	SC DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Chester Lancaster	1229.235	9	9	21

# SCHEDULE OF REINFORCING STEEL

Mark	Size	No. Req.	End Int	Int Span	Length D
A	11	8	8	8	36'-6"
A	8	4	4	4	37'-2"
A	8	4	4	4	31'-0"
B	4	54	54	46	7'-2"
B	4	—	2	8	7'-2"
B	4	—	2	9	11'-8"
B	4	—	2	11	3'-8"
B	4	—	2	11	7'-8"
C	4	136	140	136	4'-9"
D	4	68	68	68	4'-10"
E	4	20	20	20	3'-5"
F	4	26	24	24	6'-1"
G	4	4	4	4	9'-7"
G	4	2	4	4	7'-7"
G	4	2	—	—	8'-5"
G	4	2	2	2	10'-10"
H	4	6	12	6	6'-6"
H	4	—	—	—	12'-0"
I	4	8	16	32	3'-1"
J	4	26	24	24	8'-6"
K	2	27	24	24	2'-11"
L	2	4	—	—	4'-5"
L	4	16	16	16	17'-0"
M	2	48	48	48	2'-7"
N	4	12	—	—	5'-9"
N	4	4	—	—	2'-6"
N	4	12	—	—	8'-3"
O	4	8	—	—	4'-5"
O	6	—	—	—	2'-8"
O	2	—	—	—	23'-5"
O	4	—	—	—	3'-0"
O	4	—	—	—	2'-0"
O	4	—	—	—	2'-0"



## ESTIMATED QUANTITIES

ITEM	END SP	SP 'A'	SP 'B'
Class A Concrete	21.7CY	20.8CY	22.8CY
Reinforcing Steel	4367LB	4300LB	4515LB

Includes 40 lbs. for Exp. Bolt assemblies.

Notes:-

Design data (new portion) H15-512-44 loading (no overload) AASHTO, Spec. 1953  $f'_c = 20,000 \text{ psi}$ ,  $f_y = 1200 \text{ psi}$ ,  $v = 225 \text{ psi}$ ,  $u = 900 \text{ psi}$ ,  $n = 10$ .

All concrete shall be Class A.

All dimensions relative to Reinforcing Steel are to centers of bars. Structural grade Reinforcing Steel not permitted.

Diaphragms, curbs, brackets and wings shall be poured monolithically with beams and slabs. Handrails and key shall not be poured until after superstructure falsework has been struck.

All exposed edges shall be chamfered  $\frac{3}{4}"$ , except as noted.

The Contractor shall repair or replace at his own expense and in a manner satisfactory to the engineer any portion of the existing structure damaged as a result of his own negligence or carelessness.

All dimensions of new construction are subject to existing conditions.

Portions of existing structure that are to be removed are indicated by hatched areas.

All reinforcing steel protruding above surface of concrete after chipping shall be cut off level with the surface of the concrete, except as noted.

Existing asphalt surfacing shall be retained. New asphalt surfacing to be done by S.C.H.D. forces.

All costs of removing and disposal of designated portions of old concrete structure shall be included in the unit price bid for Class A Concrete.

S.C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

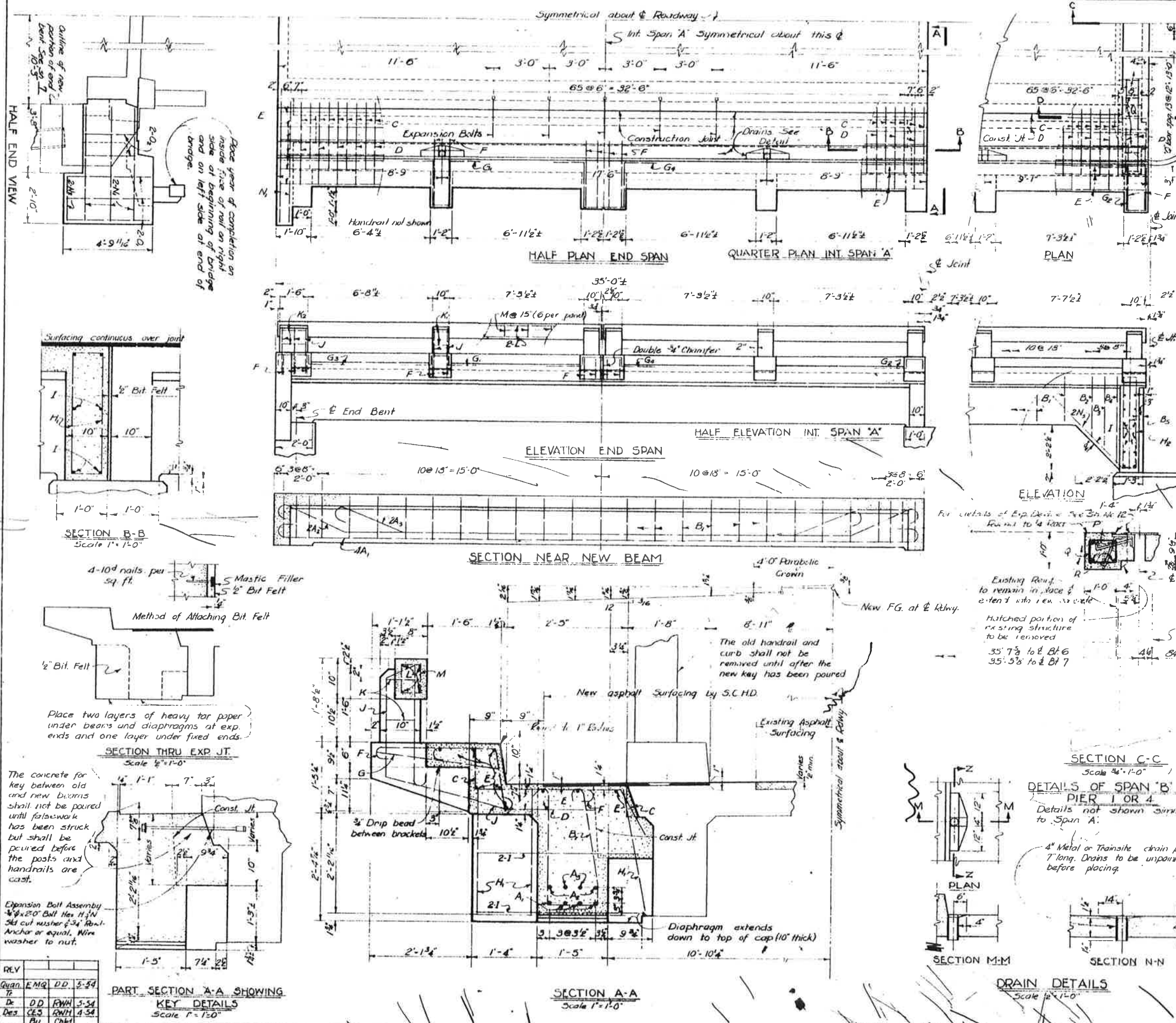
WIDENING DETAILS - 35'-0" SPAN  
FOR BRIDGE OVER

CATAWBA RIVER

DOCKET NO: 1229.235 ROUTE NO: 9

COUNTY: CHESTER-LANCASTER DATE: MAY 1954

SCALE:  $\frac{3}{8}" = 1'-0"$  OR AS NOTED.





STEEL SCHEDULE				BENDING DETAIL
MARK	NO. REQD	SIZE NO.	LENGTH	
A	8	8	27'-0"	
B	28	4	7'-8"	
Development	8	8	0'-10"	
Class A' Concrete 4-67 CY Reinforcing Steel <sup>1</sup> 738 Lbs.				

Hook for No 4 & smaller bars  
add 6" per hook.

Hook for No 5 & No 6 bors  
add 8" per hook.

Hook for No. 7 & larger bars  
add 12" per hook.

**NOTES:**

All concrete to be class "A".  
Structural grade reinforcing steel not permitted.  
All exposed edges to be finished "as" unless otherwise noted.  
All dimensions relative to reinforcing steel are to centers of bars.

MARK	UNDER 45'	45'-50'	50'-55'	55'-60'
A	1" Ø (ØB)	1 1/8" Ø (ØC)	1 3/8" Ø (ØD)	1 1/2" Ø (ØE)
B	1" Ø (ØB)	1 1/8" Ø (ØC)	1 3/8" Ø (ØD)	1 1/2" Ø (ØE)
D, E, D <sub>x</sub>	OMIT	1 3/8" Ø (ØD)	1 3/8" Ø (ØD)	1 1/2" Ø (ØE)

**HOOP DETAIL**

Corner bars only.  
Bend into cap as shown  
in elevation.

DETAIL OF 18" SQUARE CONCRETE PILE

QUANTITIES FOR 50'-0" PILE  
Concrete = 4.028 CK, Steel = 1246 Lbs.  
For quantities for lengths greater or  
less than 50'-0" add or deduct 0.083 CK  
of concrete and 22 lbs of steel per foot.  
(22# of steel per foot is approximate)

BRIDGE NO. 1  
BENTS NO. 7-20, 23, 35 & 38 551

BRIDGE NO. 3  
BENTS NO. 8-23226639 4283

S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

BENT FOR 30' SPAN

GREAT PEE DEE RIVER  
AT YAUHANNAH

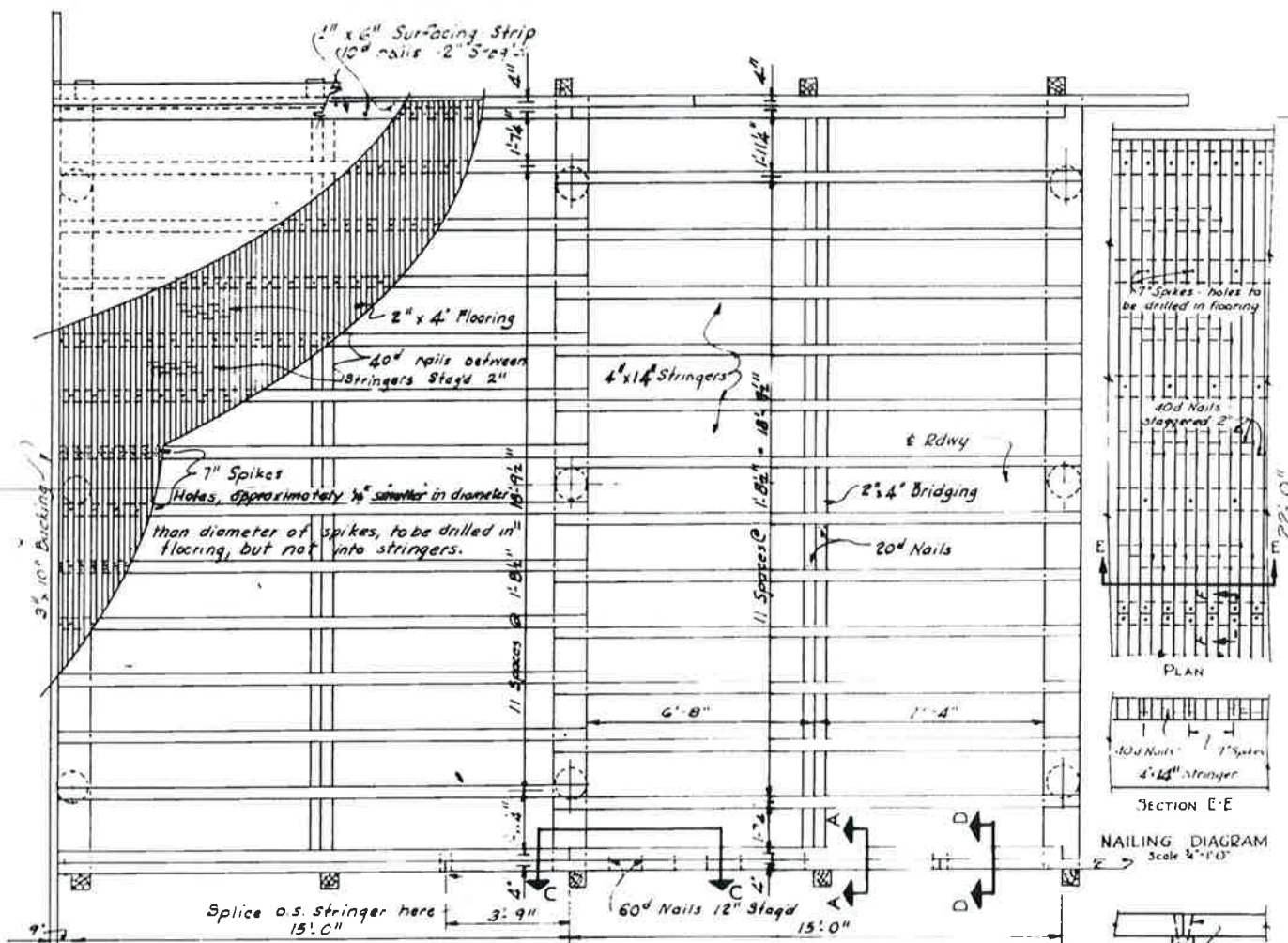
DOCKET NO. 2226.226 ROUTE NO. 701  
COUNTY : GEORGETOWN-HORRY DATE : FEB. 1985

SCALE 1/2" = 1'-0"

Rev.	Eng	EAS	4-52
	For DA	2226.226	
Rev.	EAS	R.N.H.	2-52
	For DA	2226.226	
Quon	JVD	ATC	8-44
Thompson	JVD	ATC	8-44
Drum	JVD	ATC	8-44
Design	JVD	ATC	8-44
	Bu	CH'd	Date



FEEDING	STATE	COUNTY	S.C. DIST.	ROUTE	STATION	NO. PILES
3	S. C.					

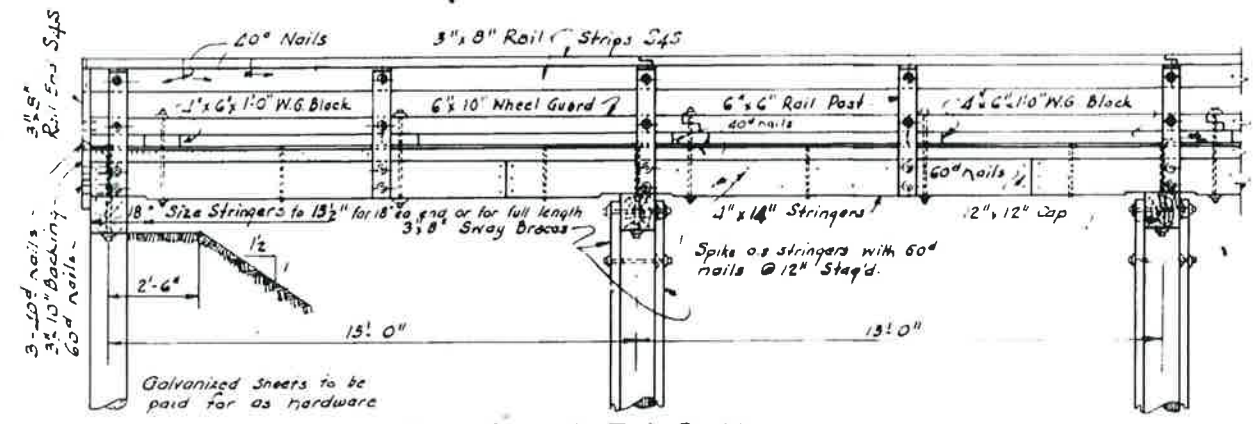


PLAN

NAILING DIAGRAM  
Scale 3/4" = 1'-0"

NOTE: If this system of nailing tends to split the stringer, substitute a horizontal 40" nail for one of the vertical 7" spikes at the joint.

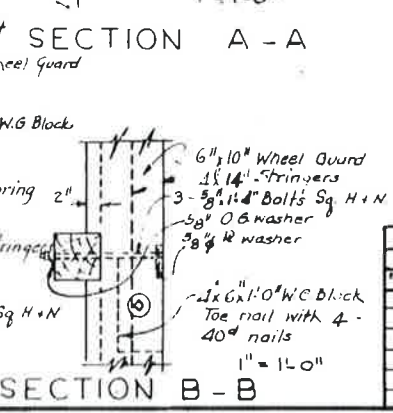
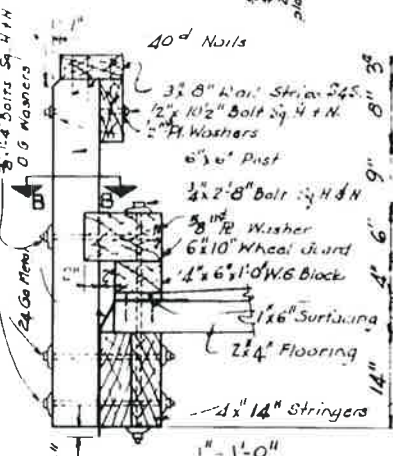
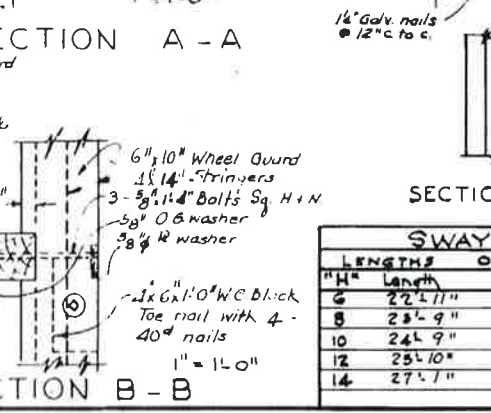
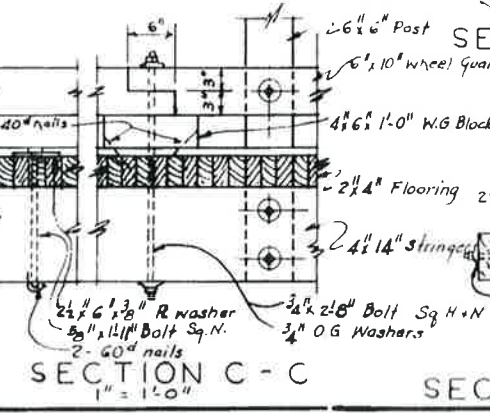
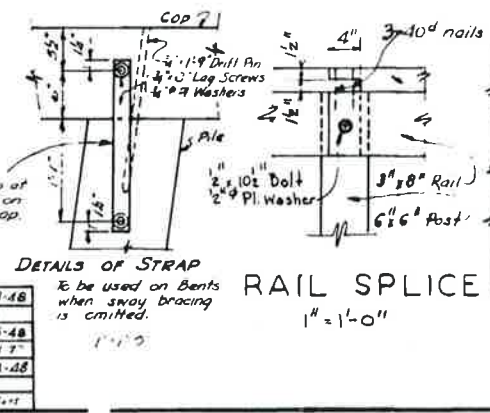
SECTION F-F



ELEVATION

NOTES:  
Design Data: A.A.S.H.O. (944)  
H10 loading,  $f_w = 1600 \text{ psi}$   
Flooring to be sized to a constant width of not less than 1 1/2"  
The quantity of flooring to be paid for will be that shown in table of quantities (number of pieces computed on thickness of 1 1/2")  
All flooring not used in the bridge to be delivered to the Department.  
Flooring, caps and stringers to be sized before treating.  
Cap to be sized to constant depth of 1 1/2"

REV.	DES.	RKM	1-48	REV.	CES	MAB	3-48	REV.	CES	RKH	8-48
QUAN.	22	2	2	REV.	CES	MAB <td>3-48</td> <td>REV.</td> <td>CES</td> <td>WB<td>3-48</td></td>	3-48	REV.	CES	WB <td>3-48</td>	3-48
TR.	WB	2	2	REV.	CES	MAB <td>3-48</td> <td>REV.</td> <td>CES</td> <td>WB<td>3-48</td></td>	3-48	REV.	CES	WB <td>3-48</td>	3-48
DE.	2	2	2	REV.	CES	RKM <td>2-48</td> <td>REV.</td> <td>CES</td> <td>WB<td>3-48</td></td>	2-48	REV.	CES	WB <td>3-48</td>	3-48
DES.	2	2	2	REV.	CES	RKM <td>2-48</td> <td>REV.</td> <td>CES</td> <td>WB<td>3-48</td></td>	2-48	REV.	CES	WB <td>3-48</td>	3-48
BY	CRD	DATE		BY	CRD	DATE		BY	CRD	DATE	



SWAY BRACES

NO.	SIZE	M.D.M.
1	3" x 8"	
2	3" x 8"	
3	3" x 8"	

TABLE OF SWAY BRACES

NO.	SIZE	M.D.M.
1	3" x 8"	
2	3" x 8"	
3	3" x 8"	

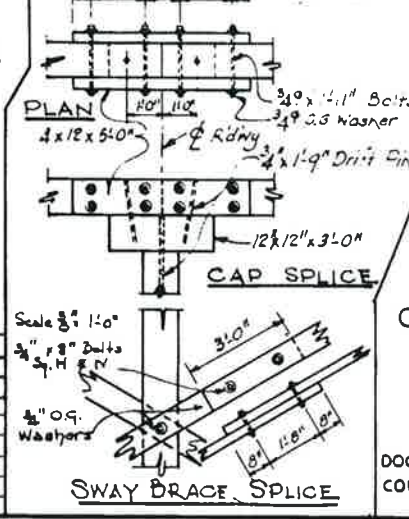
QUANTITIES - TWO END SPANS

TIMBER			HARDWARE		
NO.	DESCRIPTION	QTY.	NO.	DESCRIPTION	QTY.
1	Caps	2 x 2 x 24'-0"	9	Drift Pins	3/4" x 1'-9"
2	Stringers	4 x 14 x 19'-2"	6	Bolts Sq. H. & N.	3/4" x 1'-8"
3	"	4 x 14 x 19'-2"	1	"	3/4" x 1'-11"
4	"	4 x 14 x 19'-2"	32	O.G. Washers	3/4"
5	"	4 x 14 x 19'-2"	10	Bolts Sq. H. & N.	3/4" x 2'-8"
6	Bridging	2 x 4 x 22'-6"	30	Bolts	5/8" x 1'-4"
7	Flooring	2 x 4 x 19'-2"	56	O.G. Washers	5/8"
8	"	2 x 4 x 19'-2"	10	P. Washers	5/8"
9	"	2 x 4 x 19'-2"	8	Bolts Sq. H.	5/8" x 1'-11"
10	"	2 x 4 x 19'-2"	14	P. Washers	2 1/2" x 6" x 3/8"
11	Surfacing Str.	1" x 6" x 15'-6"	10	Bolts Sq. H. & N.	1/2" x 10"
12	W.G. Blocks	4 x 6 x 10"	20	P. Washers	1/2"
13	Wheel Guard	6 x 10 x 10"	6	Bolts Sq. H. & N.	5/8" x 2'-7"
14	"	6 x 10 x 10"	4	Straps	2" x 1/2" x 1/2"
15	Posts	6 x 6 x 10"	8	Lag Screws	1/2" x 8"
16	Rail Strips S4S	3 x 8 x 16'-2"	64	P. Washers	3/4"
17	"	3 x 8 x 16'-2"	20	"	20"
18	Rail End S4S	3 x 8 x 5'-4"	40	"	60"
19	Backing	3 x 10 x 14'-0"	280	Spikes	1/2"
20	"	3 x 10 x 14'-0"	280	Roofing Nails	1/2"
21	"	3 x 10 x 14'-0"	6	24 Ga. G.I. Strip	1/2" x 2'-0"
22	"	3 x 10 x 14'-0"	4	24 Ga. G.I. Strip	2'-5" x 15'-3"
Total		7544	Total		39331

QUANTITIES - ONE INTERIOR SPAN

TIMBER			HARDWARE		
NO.	DESCRIPTION	QTY.	NO.	DESCRIPTION	QTY.
1	Caps	12 x 12 x 24'-0"	3	Drift Pins	3/4" x 1'-9"
2	Stringers	4 x 14 x 15'-0"	6	Bolts Sq. H. & N.	3/4" x 1'-8"
3	Stringers	4 x 14 x 15'-0"	1	"	3/4" x 1'-11"
4	Bridging	2 x 4 x 22'-6"	22	O.G. Washers	3/4"
5	Flooring	2 x 4 x 19'-2"	4	Bolts Sq. H. & N.	3/4" x 2'-8"
6	"	2 x 4 x 19'-2"	12	"	5/8" x 1'-4"
7	"	2 x 4 x 19'-2"	22	O.G. Washers	5/8"
8	"	2 x 4 x 19'-2"	4	P. Washers	5/8"
9	"	2 x 4 x 19'-2"	8	Bolts Sq. H.	5/8" x 1'-11"
10	Surfacing Strip	1" x 6" x 15'-6"	10	P. Washers	2 1/2" x 6" x 3/8"
11	W.G. Blocks	4 x 6 x 10"	6	Bolts Sq. H. & N.	5/8" x 10"
12	Wheel Guard	6 x 10 x 10"	4	Bolts Sq. H. & N.	5/8" x 2'-7"
13	Posts	6 x 6 x 10"	8	P. Washers	3/4"
14	Rail Strips S4S	3 x 8 x 16'-2"	64	Roofing Nails	1/2"
15	"	3 x 8 x 16'-2"	20	"	10"
16	Rail End S4S	3 x 8 x 5'-4"	40	"	60"
17	Backing	3 x 10 x 14'-0"	280	Spikes	1/2"
18	"	3 x 10 x 14'-0"	280	Roofing Nails	1/2"
19	"	3 x 10 x 14'-0"	6	24 Ga. G.I. Strip	1/2" x 2'-0"
20	"	3 x 10 x 14'-0"	4	24 Ga. G.I. Strip	2'-5" x 15'-3"
Total		33421	Total		39331

PERMISSIBLE SPLICES  
Caps and Sway Braces may be spliced as shown below at one point only at the Contractor's expense.



TOTAL QUANTITIES  
TREATED LUMBER \_\_\_\_\_ M.B.M.  
HARDWARE \_\_\_\_\_ LBS.  
CREOSOTED TIMBER PILING \_\_\_\_\_ L.F.T.

All lumber except rail and railends to be creosoted. Rail and railends will be paid for at unit price bid for Treated Lumber.

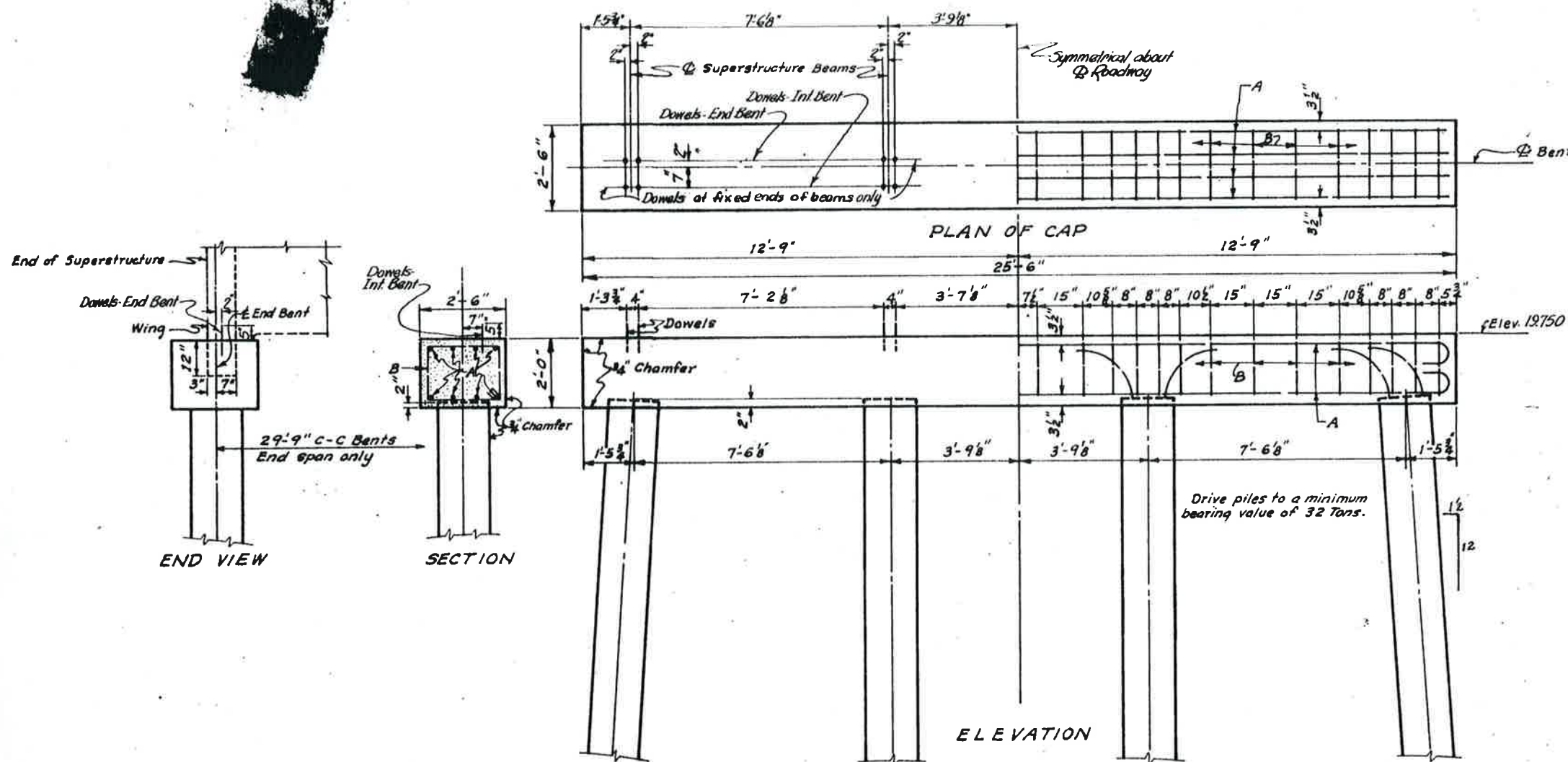
\*If Sway Bracing is omitted, deduct 32.02 Lbs for Bolts & Washers, and add 10.51 Lbs for Straps, Lag Screws & Washers.

H10 LIVE LOAD  
S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA  
CREOSOTED TIMBER BRIDGE  
15 FT. SPAN  
FOR BRIDGE OVER

DOCKET NO. \_\_\_\_\_ ROUTE NO. \_\_\_\_\_  
COUNTY \_\_\_\_\_ DATE \_\_\_\_\_



FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	GEORGETOWN HARRY	2226.226	701	11	13



STEEL SCHEDULE			
MARK	NO.	SIZE	LENGTH
A	8	8	27'-0"
B	28	4	7'-8"
Dowels	8	8	0'-10"

Class "A" Concrete 4.67 CY  
Reinforcing Steel 738 Lbs.

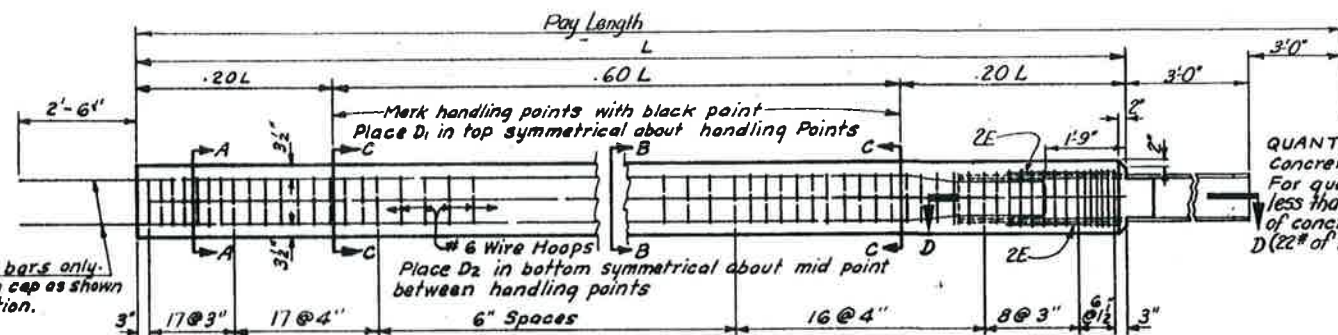
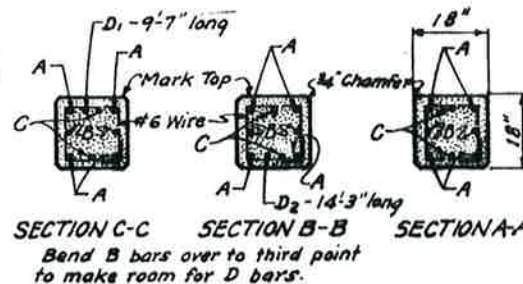
\*Includes 8 dowels (NH = 18 Lbs.)

- Hook for No. 4 & smaller bars add 6" per hook.
- Hook for No. 5 & No. 6 bars add 8" per hook.
- Hook for No. 7 & larger bars add 12" per hook.

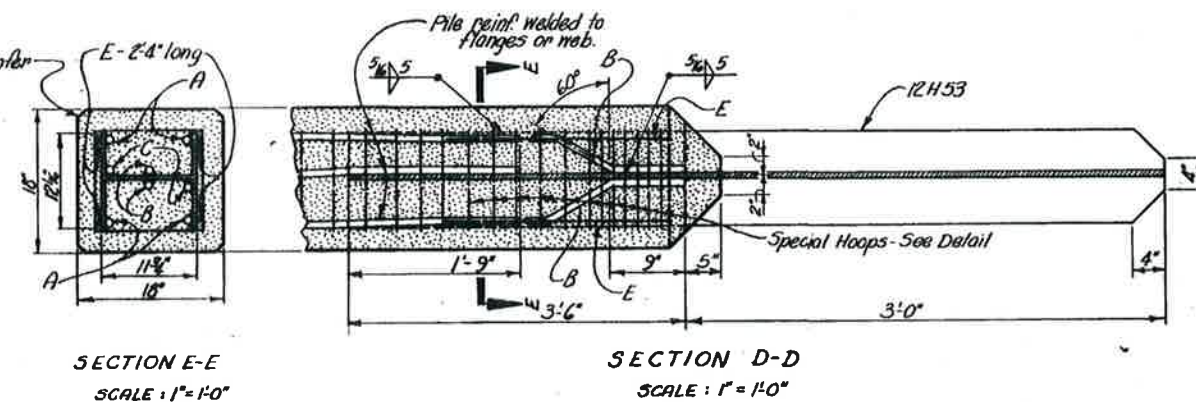
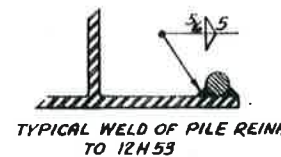
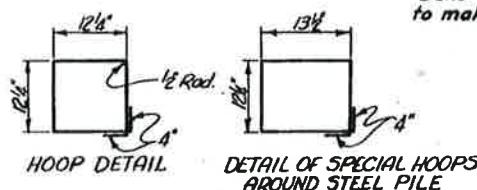
**NOTES:**

All concrete to be class "A".  
Structural grade reinforcing steel not permitted.  
All exposed edges to be chamfered 1/4" unless otherwise noted.  
All dimensions relative to reinforcing steel are to centers of bars.

MARK	UNDER 45	45-50	50-55	55-60
A	1" (48)	1" (48)	1" (48)	1" (48)
B & C	1" (48)	1" (48)	1" (48)	1" (48)
D, E & F	OMIT	1" (48)	1" (48)	1" (48)
E	2" (48)	2" (48)	2" (48)	2" (48)



QUANTITIES FOR 50'-0" PILE  
Concrete = 4.165 CY, Reinf. Steel = 1220 Lbs.  
For quantities for lengths greater or less than 50'-0" add or deduct 0.0833 CY of concrete and 22 lbs of reinf. steel per foot.  
D (22# of reinf. steel per foot is approximate)



**BRIDGE NO. 3**  
**BENT NOS. 44-56**

S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

**COMPOSITE PILE BENT**  
OVERFLOW BRIDGE NO. 3  
**GREAT PEE DEE RIVER**  
AT YAUHANNAH

DOCKET NO. 2226.226 ROUTE NO. 701  
COUNTY: GEORGETOWN HARRY DATE: FEB. 1952

SCALE 1/2" = 1'-0"

Rev.	ERS	RKH	1-52
For Docket	2226.226		
Quan	JVD	ATC	8-44
Traced	JVD	ATC	8-44
Drawn	JVD	ATC	8-44
Design	JVD	ATC	8-44
By	CH'd	Date	



STEEL SCHEDULE				BENDING DETAILS	
MARK	NO. REQD	SIZE NO.	LENGTH		
A	8	18	27'-0"		
B	28	4	7'-8"		
Don't	8	8	0'-10"		
Q	16	8	7'-6"		
Class A' Spacers 4 @ 3' C/C Reinforcing Steel 1058 Lbs					

Hook for No. 4 & smaller bars  
add 6" per hook.

Hook for #5 & #6 bars  
add 8" per hook.

Hook for No 7 & larger bars  
add 12" per hook.

All concrete to be class A.  
All reinforcing steel except wire to be deformed bars.  
All exposed edges to be chamfered 1/4" unless otherwise noted.

QUANTITIES FOR 50'-0" PILE  
Concrete = 4.028 CY, Steel = 1,283 Lbs.  
For quantities for lengths greater or  
less than 50'-0" add or deduct 0.0833 CY  
of concrete and 22 lbs of steel per foot.  
(22# of steel per foot is approximate)

BAR SIZES FOR DIFFERENT LENGTHS OF PILES				
MARK	UNDER 45	45-50	50-55	55-60
A	1" (8)	1 1/8" (8)	1 1/2" (9)	1 3/4" (9)
B	1" (8)	1 1/8" (8)	1 1/2" (8)	1 3/4" (9)
D, D <sub>2</sub>	Omit	1" (8)	1 1/8" (8)	1 1/2" (9)

SECTION C-C      SECTION B-B  
Bend B bars over to third point  
to make room for D bars.

SECTION 4-A

Corner bars only.  
Bend into cap as shown  
in elevation:

DETAIL OF 18" SQUARE CONCRETE PILE

End B bars 2'-0" from end of pile

BRIDGE NO.1: TOWER BENTS NO. 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 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, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852,

S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

TOWER BENT FOR 30 FT. SPAN  
OVERFLOW BRIDGES

GREAT PEE DEE RIVER

AT YAUHANNAH FERRY

DOCKET NO. 2226.226 ROUTE 70

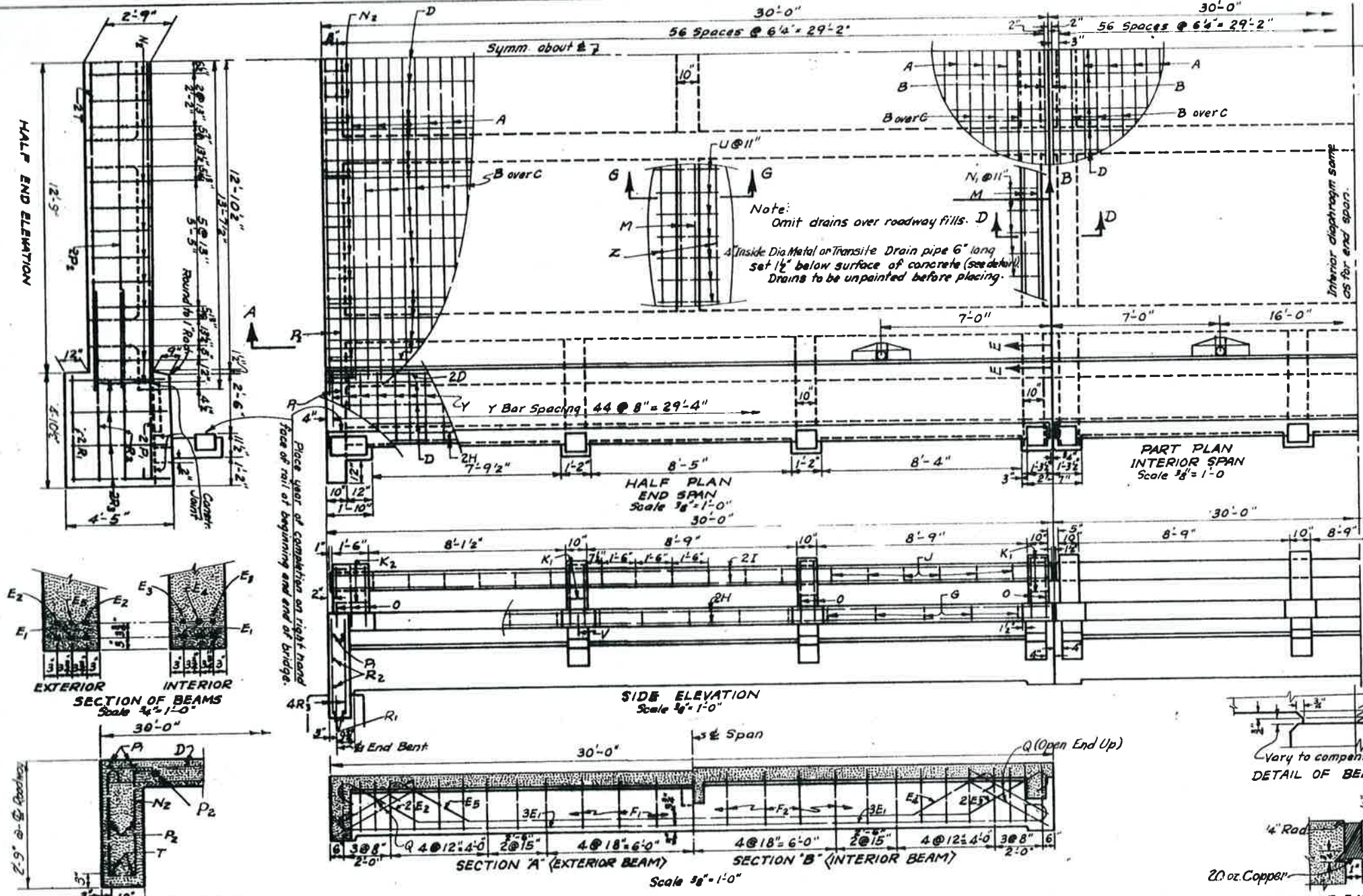
COUNTY GEORGETOWN DATE JAN

SECRET  
HARRY

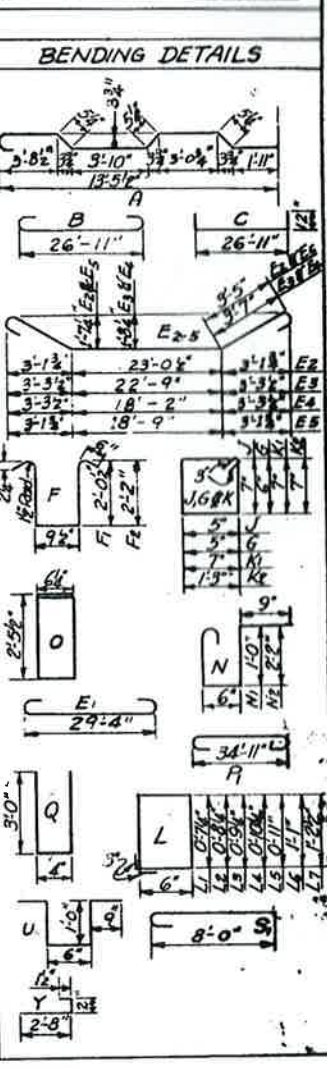
SCALE 1/2" = 1'-0"

Rev.	King	EAS	4-52
	For information	Handwritten	
Rev.	King	R.M.H.	2-52
	For 2126.355		
Warden	JVD	A.T.C.	8-44
Manager	JVD	A.T.C.	8-44
Director	JVD	A.T.C.	8-44
Director	W.D.R.	JVD	8-44
	By	Ch's	Date





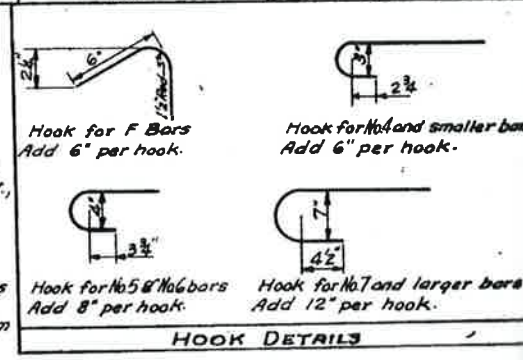
STEEL SCHEDULE									
ONE INTERIOR SPAN					ONE END SPAN				
MARK	SIZE	NO.	LENGTH	D	MARK	SIZE	NO.	LENGTH	D
A	5	27	29'-0"	B	L4	4	8	3'-1"	B
B	4	32	27'-11"	B	L4	4	8	3'-3"	B
C	4	28	28'-11"	B	L5	4	8	3'-5"	B
D	4	51	29'-8"	S	L6	4	8	3'-8"	B
E1	11	12	31'-4"	B	L7	4	8	3'-11"	B
E2	9	4	31'-10"	B	M	9	6	23'-3"	S
E3	8	4	31'-11"	B	N1	4	42	3'-9"	B
E4	9	2	27'-4"	B	O	4	16	6'-6"	B
E5	8	2	27'-7"	B	S1	6	16	8'-8"	B
F1	4	54	5'-10"	B	S2	6	16	5'-0"	S
F2	4	54	6'-1"	B	U	4	21	4'-0"	B
G	2	30	2'-4"	B	V	6	8	0'-10"	S
H	4	8	29'-8"	S	Y	3	90	3'-0"	B
I	4	8	29'-8"	S	Z	4	2	20'-10"	S
J	2	36	2'-6"	B	Q	6	16	6'-4"	B
K1	2	16	2'-10"	B					
L1	4	8	2'-9"	B					
L2	4	8	2'-11"	B					
L3	4	6	3'-1"	B					
L4	4	6	3'-3"	B					
L5	4	6	3'-5"	B					



SUMMARY OF QUANTITIES		
	ONE INTERIOR SPAN	ONE END SPAN
CLASS "A" CONCRETE	35.29 CY.	37.12 CY.
REINFORCING STEEL	8299 Lbs.	8253 Lbs.

**NOTES:**  
Design Data: A. A. S. H. O. Specifications (1941)  
H15-S12 Live load:  $f_s = 20,000$  PSI,  $f_c = 1,000$  PSI,  $n = 10$ ,  $v = 180$  PSI,  $u = 150$  PSI.  
All concrete shall be Class "A".  
Diaphragms, brackets and wings shall be cast monolithic with slabs and beams.  
Exposed edges shall be chamfered 3/4" unless otherwise specified.  
No sidewalk concrete shall be cast until beam falsework has been struck.  
Structural grade reinforcing steel not permitted.  
All dimensions relative to reinforcing steel are to centers of bars.

BREAKDOWN OF CONCRETE QUANTITIES		
	1 INT. SPAN	1 END SPAN
Beams, Slabs, Brackets	29.81 CY.	31.49 CY.
Sidewalks	3.96 CY.	4.05 CY.
Posts & Railing	1.52 CY.	1.58 CY.
Totals	35.29 CY.	37.12 CY.



S. C. STATE HIGHWAY DEPARTMENT  
COLUMBIA

**30 FOOT SPAN 2'-6" SIDEWALKS**

OVERFLOW BRIDGES

**GREAT PEE DEE RIVER**  
**AT YAUHANNAH**

S. C. DOCKET NO. 2226.226 ROUTE NO. 701  
GEORGETOWN-HORRY COUNTIES DATE: FEB. 1952

Quantity Breakdown By: W.B.B. 8-48; CKD BY E.A.S. 8-16  
Revised - A & Z Bars By WRT. 1-46. Ckd By: F.M.J.  
Revised - Removed Pavement Rest - J.V.D. 10-44 Ckd: M.H.  
Roadway Slab & Interior Beams See 26-30-1942  
O.S. Beams Des. C.R.R. Ckd Wch Brackets Des. F.M.J. CK. 1-10  
Drawn by E.M.Q. Traced By: J.V. Dunbar Jan. 44  
Quantities by Eng. Ckd. WCH Feb 1944