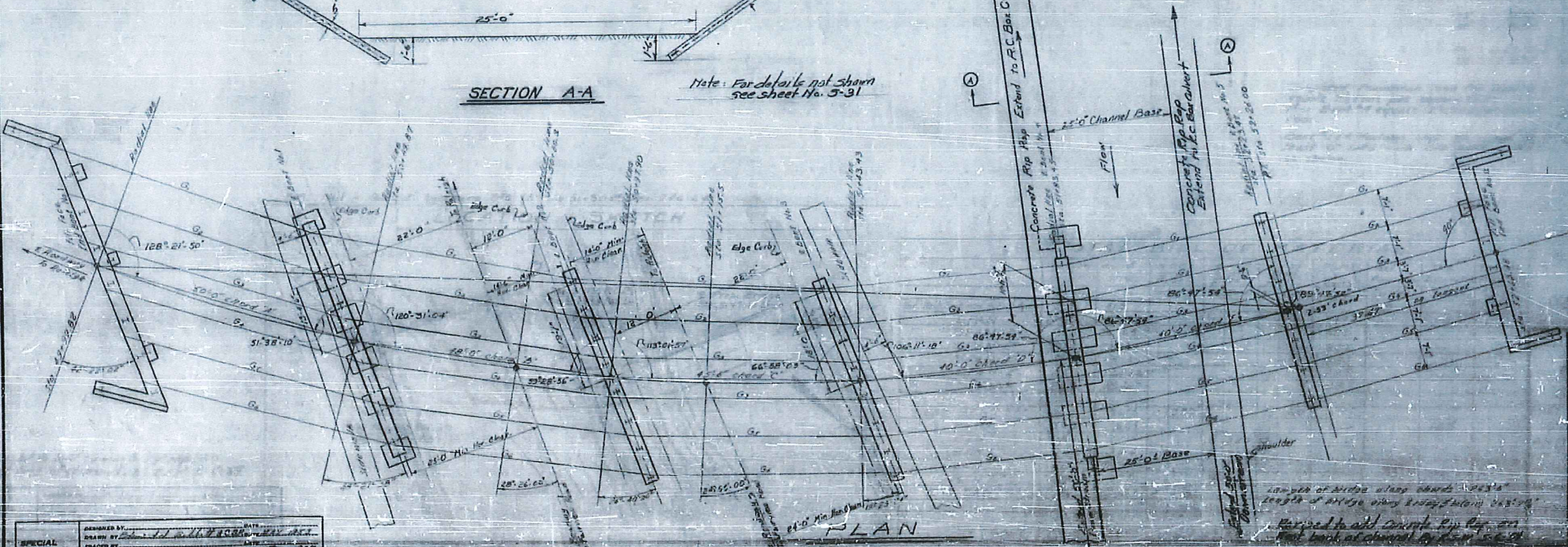
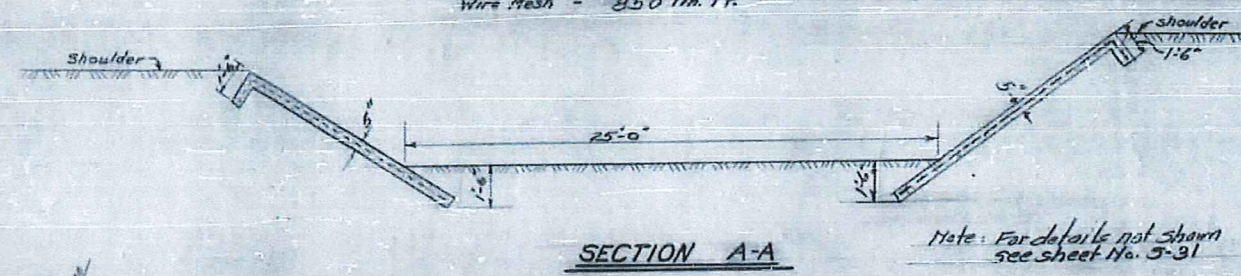
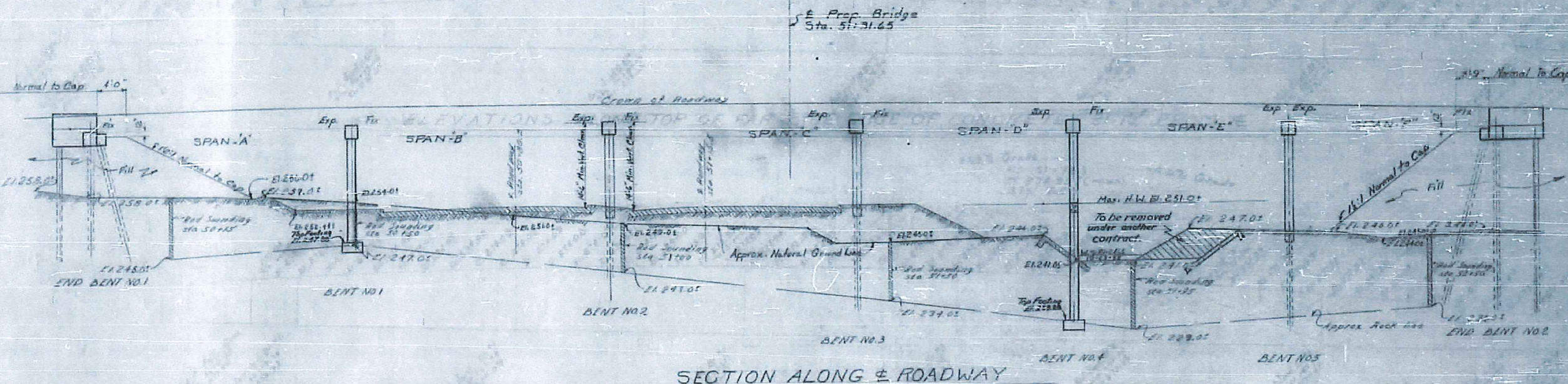


FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N. C.	4863	5-2	47
S.A. No. U-694 (B)				



PROJECT NO. 4863
WAKE COUNTY
STATION: 51+31.65
NASH DRIVE EXT. OVER DAM

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

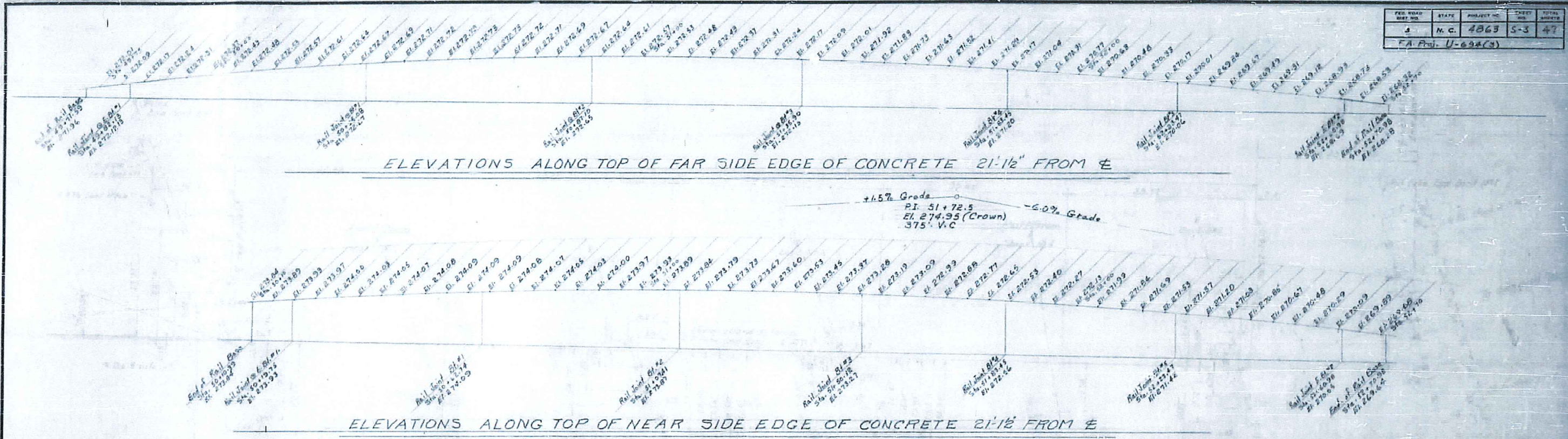
GENERAL DRAWING
FOR BRIDGE ON NASH DRIVE EXT.
OVER DAWSON STREET
AND PIGEON HOUSE BRANCH
IN RALEIGH

SPECIAL	DESIGNED BY: [Signature]	DATE: 4-25-28
	DRAWN BY: [Signature]	DATE: 4-25-28
	CHECKED BY: [Signature]	DATE: 4-25-28
	APPROVED BY: [Signature]	DATE: 4-25-28

Length of bridge along chord 243'±
Length of bridge along bridge axis 245'±
Revised to add Concrete Rip Rap on
East bank of channel for 245'±

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
4	N. C.	4863	5-3	47

FA Proj. U-694(3)



+1.5% Grade
 P.I. 51+72.5
 El. 274.95 (Crown)
 375' V.C.

-6.0% Grade

NOTES

Test piles will not be required. Order list to be based on piles 30' longer than:

35' "	"	81#2
40' "	"	81#3
40' "	"	81#5
35' "	"	81#2

Files shall be driven to a min. bearing capacity as shown below:

8" H 36 - 15 tons each
12" H 53 - 30 " "
14" H 75 - 40 " "

Concrete surfaces to be finished in accordance with the Specifications

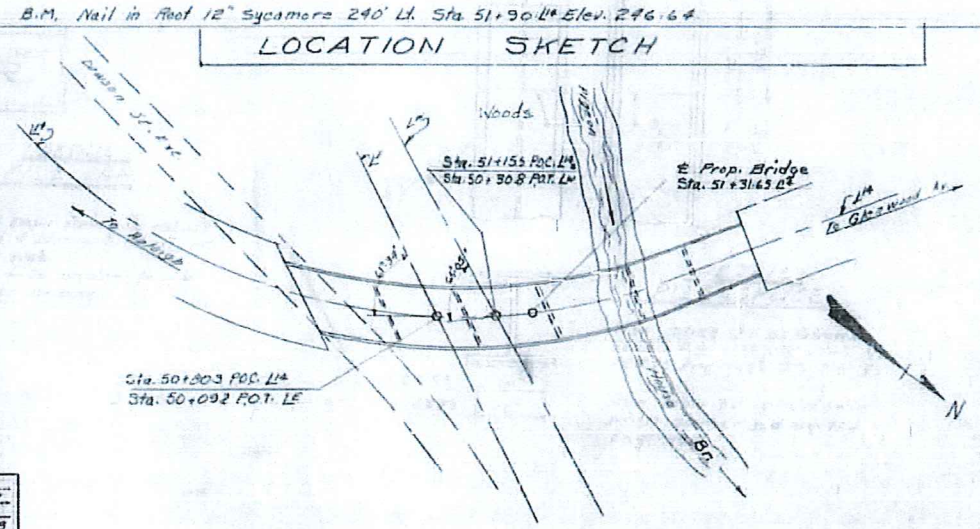
Assumed Live Load = H15-S12 (4#)

For other "Design Data" and "General Notes" see Sheet 5N.

Bent #1 ft footings shall be carried at least 6" into rock with maximum thickness as shown.

Foot Bent piles shall be driven through the roadway fill.

Standard size No. 4 coarse aggregate will be used in the rails. For division of class "A" concrete see sheet 5S-15.



TOTAL BILL OF MATERIAL

Class/Spec	Quantity	Weight	Notes
Cu. Yds.	Lbs.	No. Lbs. Ft.	No. Lbs. Ft.
End Rail Sections to Jct. Rents	2.8	415	
SPAN-A	104.9	28,072	
SPAN-B	98.1	26,145	
SPAN-C	92.1	23,525	
SPAN-D	82.3	19,249	
SPAN-E	81.7	19,066	
SPAN-F	63.9	18,424	
END BENT #1	21.0	3616	11 330
BENT #1	39.3	11,604	
BENT #2	28.7	2194	2 280
BENT #3	28.0	2114	2 320
BENT #4	58.3	16,767	
BENT #5	28.1	7776	7 280
END BENT #2	18.5	2863	2 280
TOTALS	771.7	175,850	19 612 23 880 4 130 1830

PROJECT NO. 4863
WAKE COUNTY
STATION: 51+51.65 TO
NASH DR. EXT. OVER DAWSON

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION

GENERAL DRAWING
 FOR BRIDGE ON NASH DRIVE EXT.
 OVER DAWSON STREET,
 AND PIGEON HOUSE BRANCH
 IN RALEIGH

MAY 1953

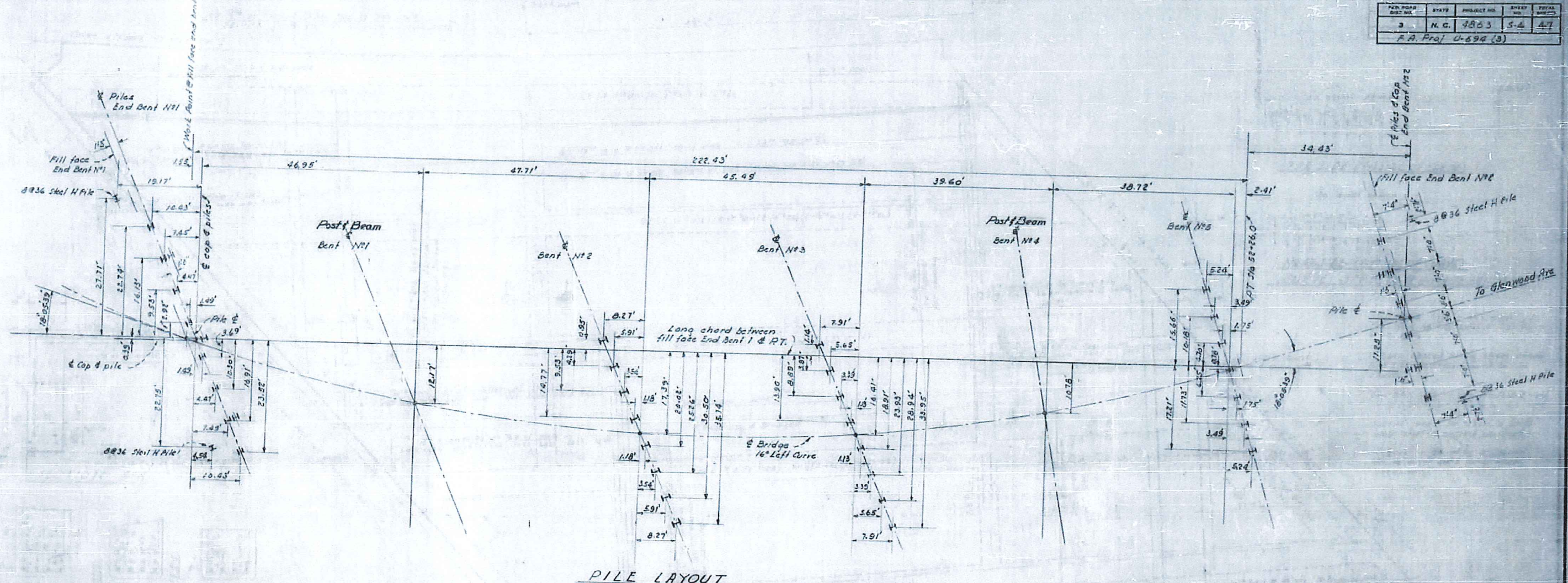
SUBMITTED BY: [Signature]
 APPROVED BY: [Signature]

Revised to add concrete riprap on west bank of channel. By P.S.W. 5-6-57

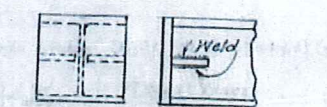
SPECIAL

DESIGNED BY: [Signature] DATE: [Date]
 DRAWN BY: [Signature] DATE: [Date]
 CHECKED BY: [Signature] DATE: [Date]
 Revised By: BSW. Checked By: [Signature]

P&R ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N. C.	1863	5-4	47
F.A. Proj. U-694 (3)				

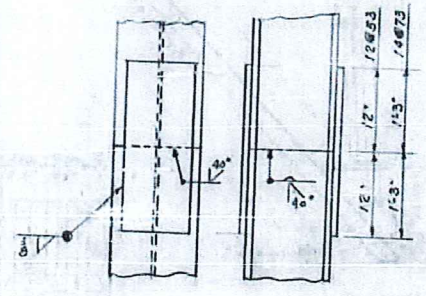


PILE LAYOUT



DETAIL PILE CAP

Pile caps from pile cut off split & slot web to fit over pile web. Cap to be welded to pile after driving.



DETAIL PILE SPLICE

Use splice plates as follows
 12#53 pile 10' x 3/8" x 2'0" plates
 14#73 pile 12' x 3/8" x 2'6" plates
 Pile may be spliced only when authorized by the Engineer.

PILE DATA

	Steel H Piles			Length	Drive to feet each
	12#53	14#73	16#73		
End Bent No. 1	2	11		30'	15
Bent No. 2			8	35'	40
Bent No. 3			8	40'	40
Bent No. 4			7	40'	40
End Bent No. 5	2		8	35'	15
				35'	30

PROJECT NO. 1863
 WAKE COUNTY
 STATION: 51+31.65 L/R

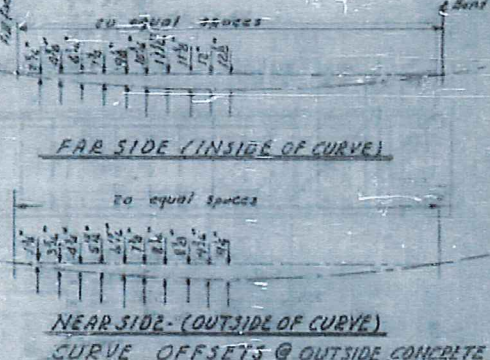
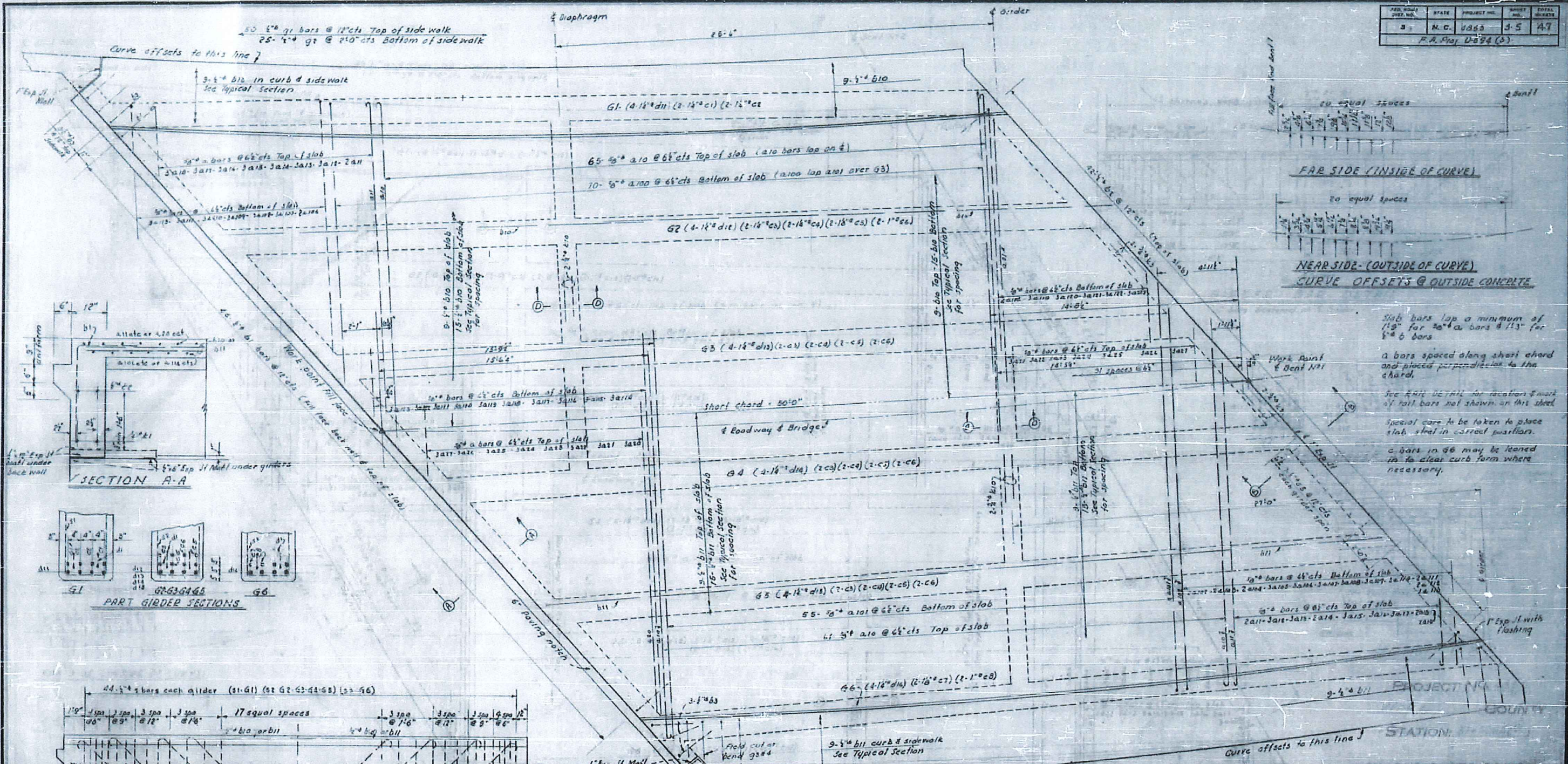
NASH D.R. EXT. OVER DAWSON
 STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 SUBSTRUCTURE
 PILE LAYOUT

JULY 1953

DESIGNED BY: Jack Blair
 CHECKED BY: E. H. ...
 REVISION BY: E. H. ...

APPROVED BY: [Signature]
 STATE ENGINEER

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	3-5	47
F.A. Proj. D-294 (3)				



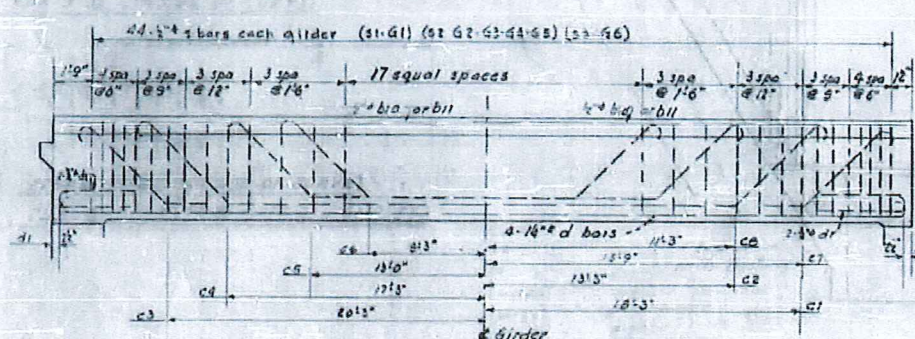
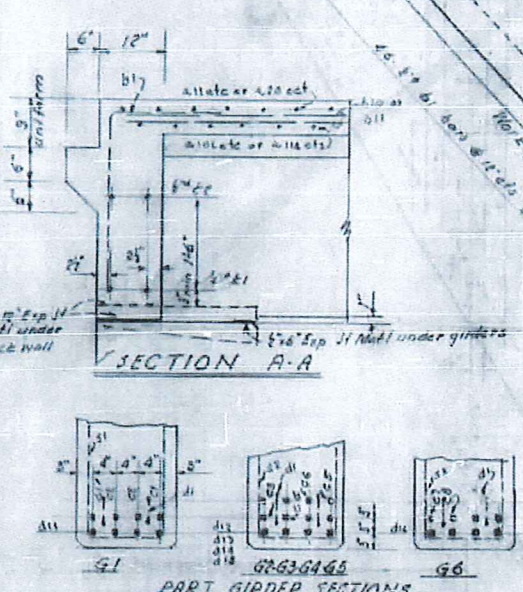
Slab bars lap a minimum of 12\"/>

a bars spaced along short chord and placed perpendicular to the chord.

See ENR DETAIL for location & mark of rail bars not shown on this sheet.

Special care to be taken to place slab steel in correct positions.

a bars in G6 may be leaned in to clear curb form where necessary.



GIRDER BAR DETAIL
C bars centered on f girder

NASH DREXT OVER DANSON

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

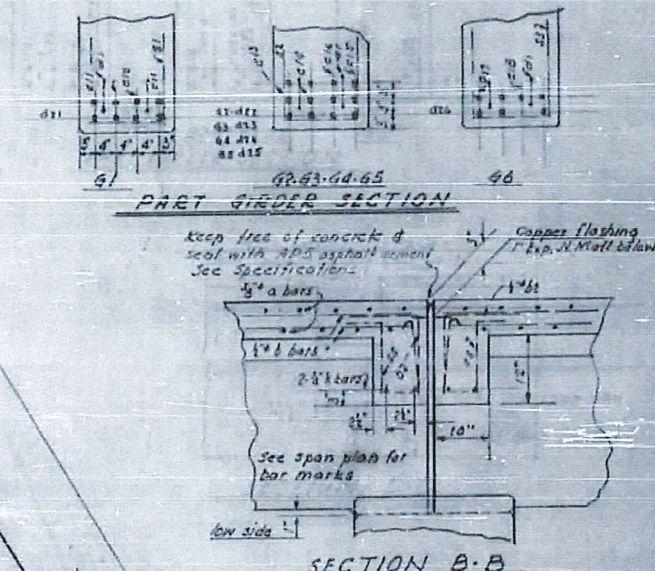
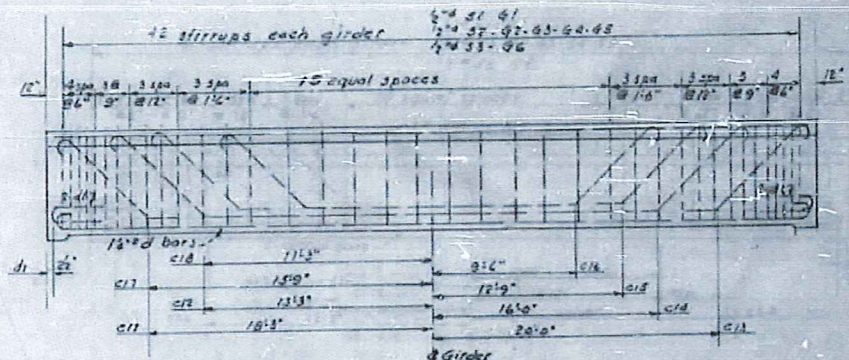
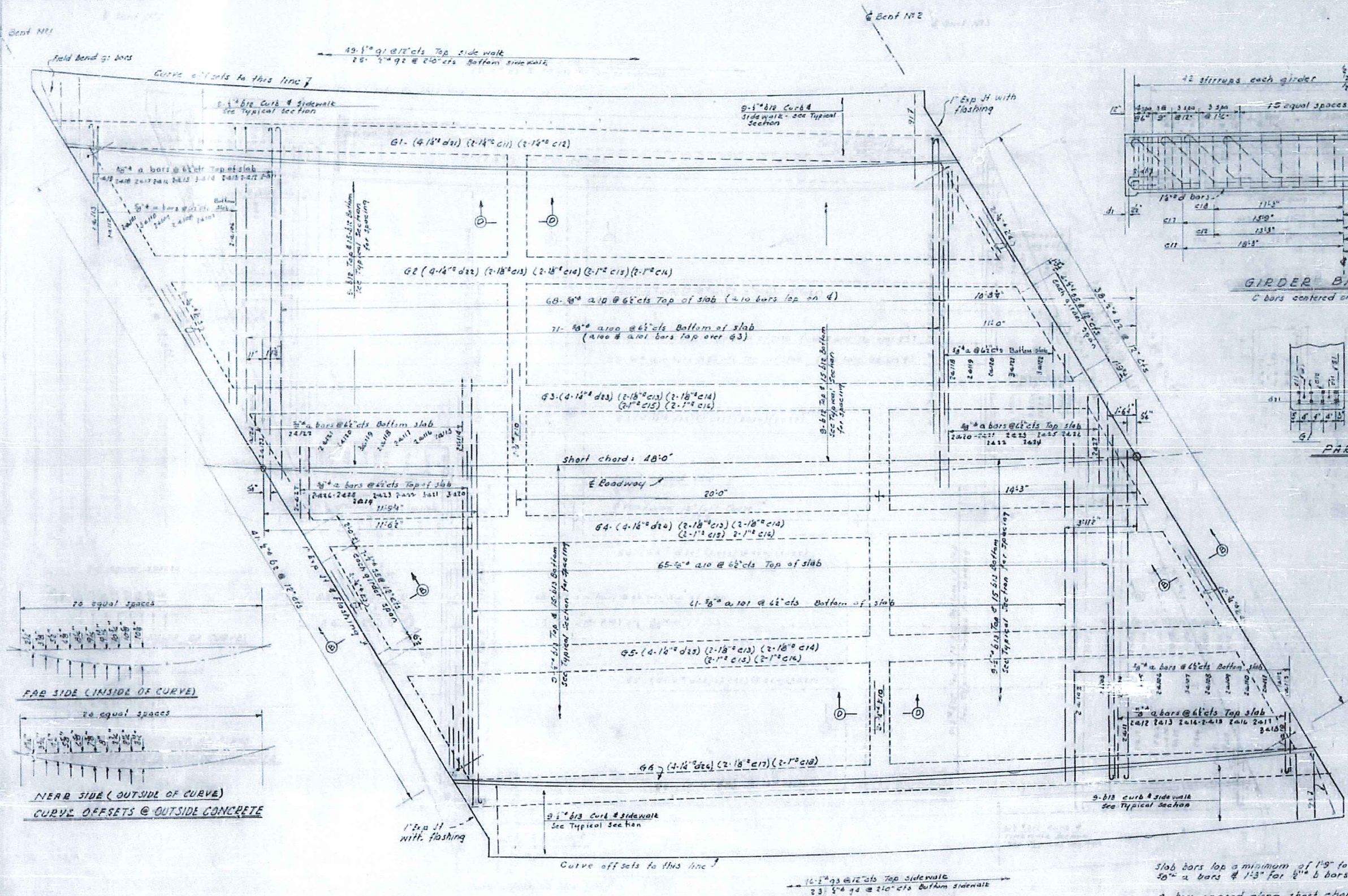
SUPERSTRUCTURE
SPAN A
CONCRETE PLAN

MAY 1953

PROJECT NO. 4863
WAKE COUNTY
STATION 51+3165 L3

DESIGNED BY: <i>John Glenn</i>	DATE: <i>May 1953</i>
DRAWN BY: <i>R. H. D. [unclear]</i>	DATE: <i>May 1953</i>
CHECKED BY: <i>[unclear]</i>	DATE: <i>May 1953</i>

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	7-6	77
R.A. Proj. U-654(3)				



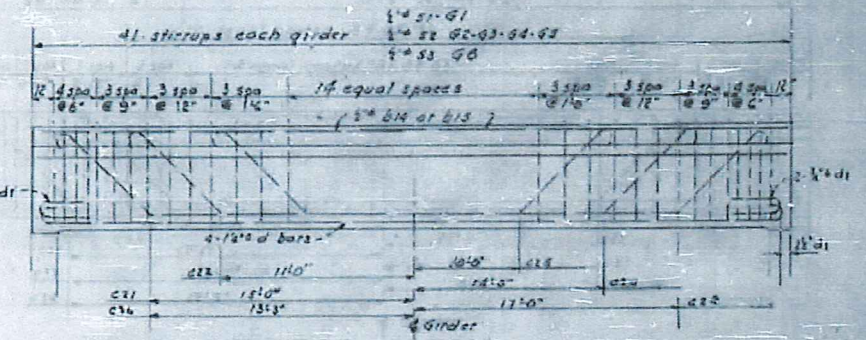
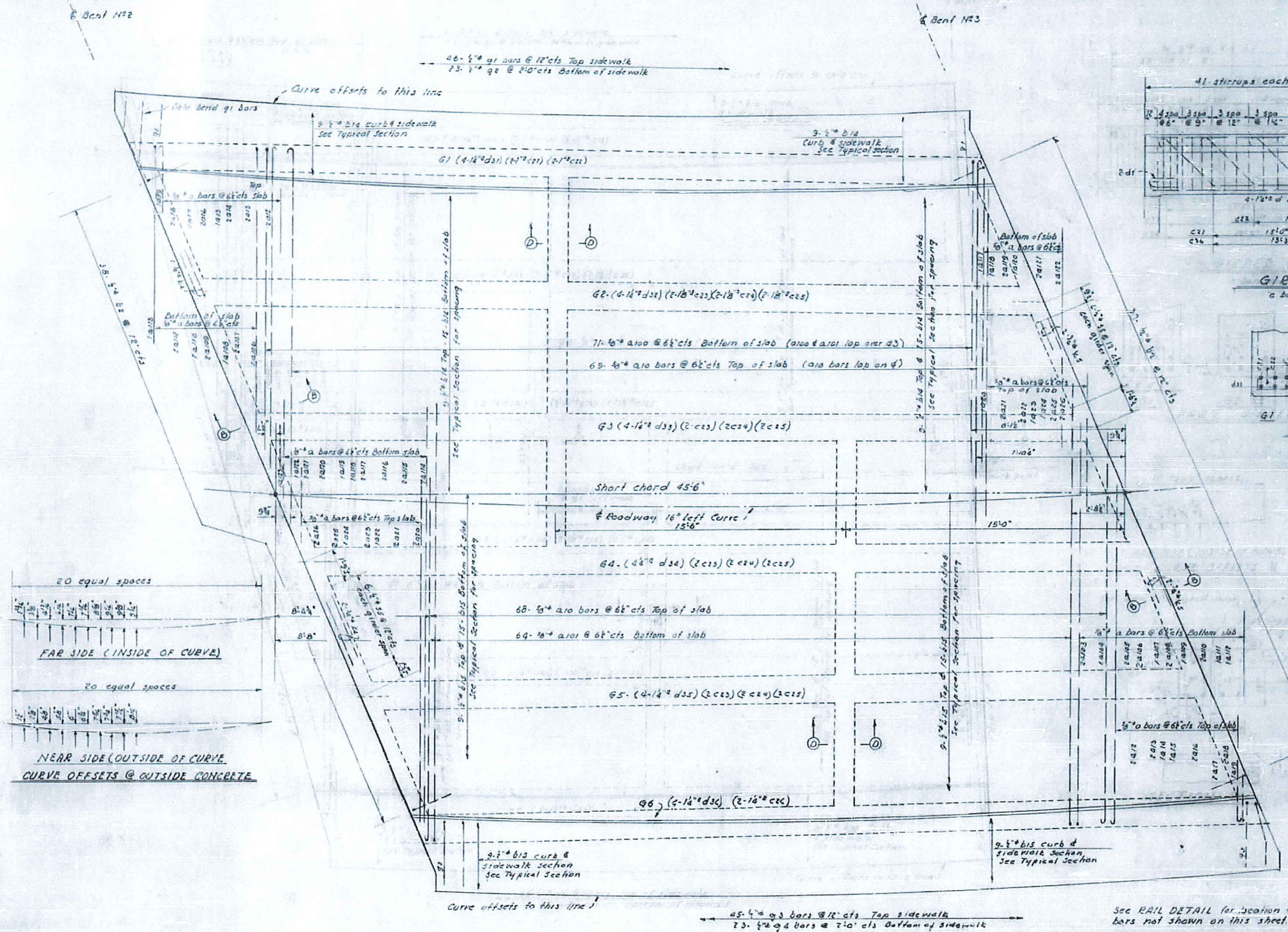
PROJECT No. 4863
 WAKE COUNTY
 STATION: 51+51.6514

NASH DR. EXT. OVER DAWSON
 STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 RALEIGH
 SUPERSTRUCTURE
 SPAN B
 CONCRETE PLAN
 MAY 1953

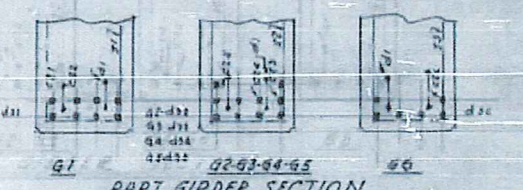
Slab bars lap a minimum of 1'-0" for 5/8" a bars & 1'-3" for 3/4" b bars.
 a bars spaced along short chord and placed perpendicular to the chord.
 See RAIL DETAIL for location & mark of rail bars not shown on this sheet

SPECIAL	DESIGNED BY: <i>H. Calver</i>	DATE: <i>April 1953</i>
	DRAWN BY: <i>W. H. Wagoner</i>	DATE: <i>April 1953</i>
	CHECKED BY: <i>H. H. Wagoner</i>	DATE: <i>April 1953</i>
	APPROVED BY: <i>H. H. Wagoner</i>	DATE: <i>April 1953</i>

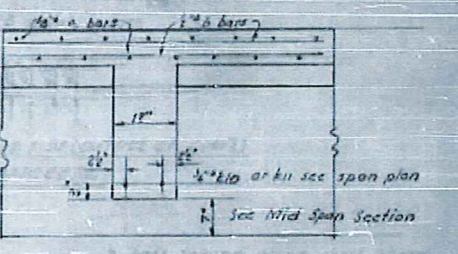
FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	5-7	47
F.R. Proj. U-454(3)				



GIRDER BAR DETAIL
a bars centered on girder



PART GIRDER SECTION



SECTION D-D

PROJECT NO. 4863
WAKE COUNTY
STATION: 5+316.119

NASH DR. EXT. OVER DAWSON

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

SUPERSTRUCTURE
SPAN C
CONCRETE PLAN

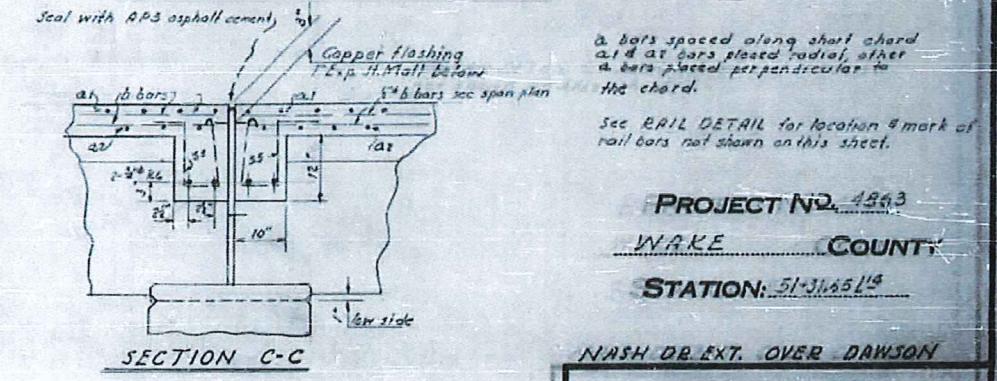
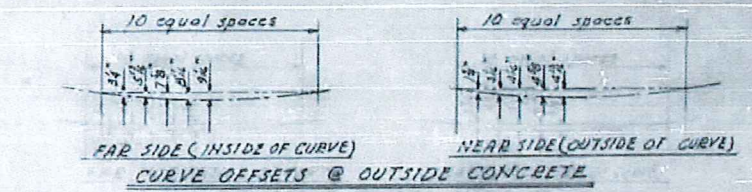
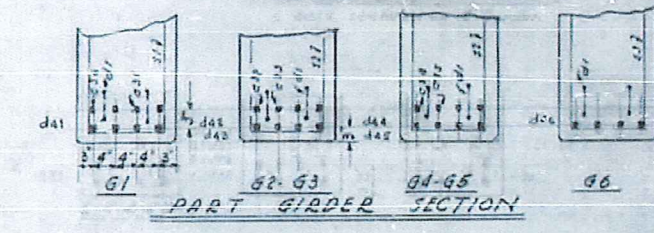
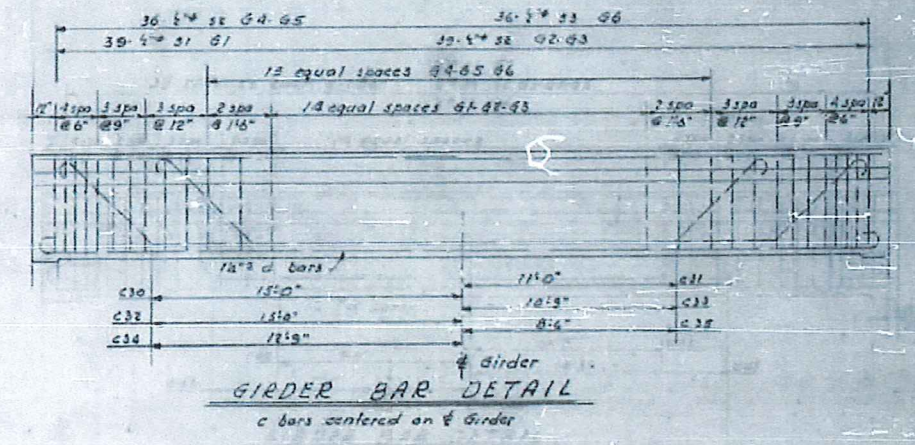
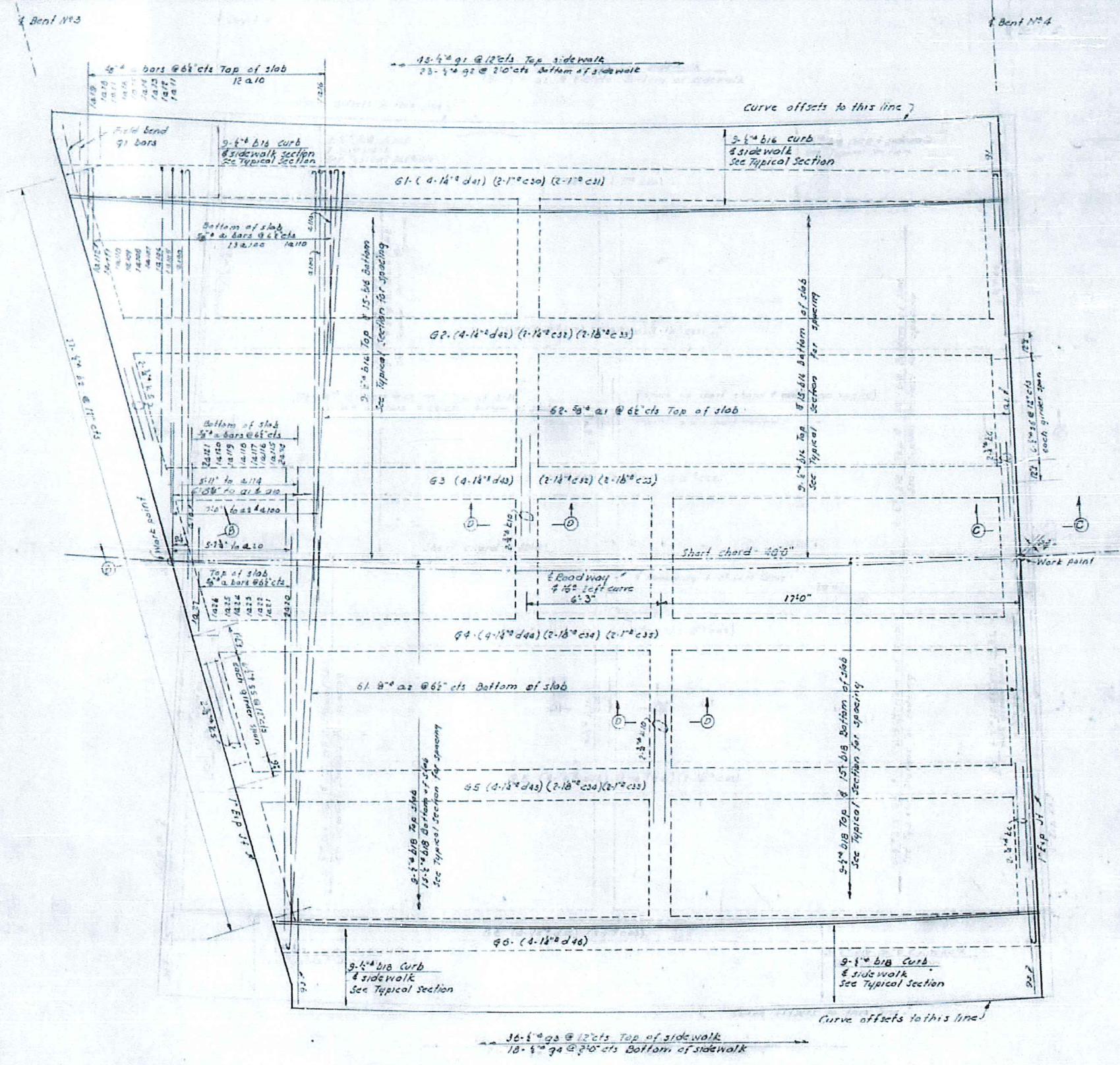
MAY 1953

DESIGNED BY: [Signature]
CHECKED BY: [Signature]

See RAIL DETAIL for location & mark of rail bars not shown on this sheet.
Slab bars top a minimum of 1" for 5/8" a bars & 1-3" for 7/8" b bars
a bars spaced along short chord and placed perpendicular to the chord.

DESIGNED BY	DATE
CHECKED BY	DATE

P.B. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	5-B	47
F.A. Proj. 4894(3)				



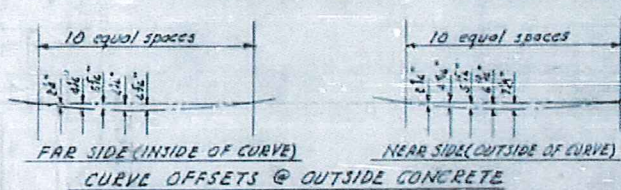
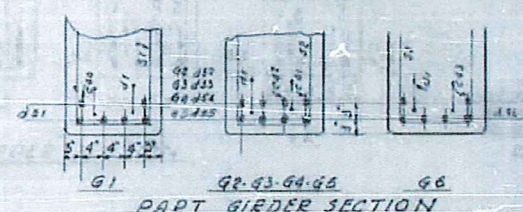
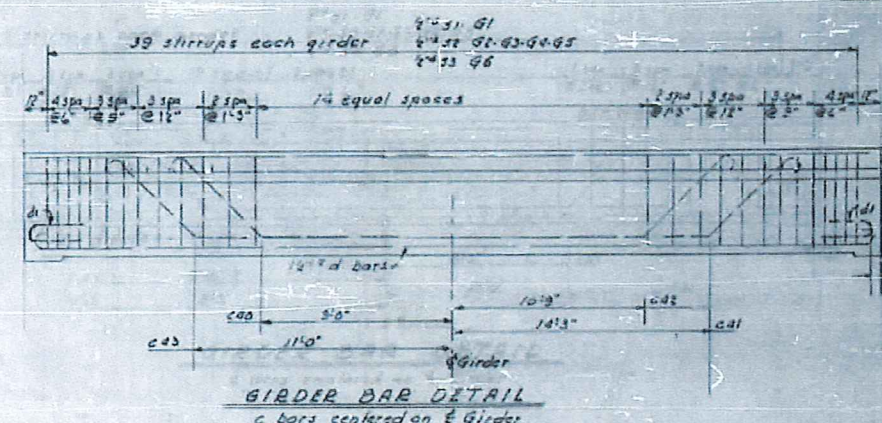
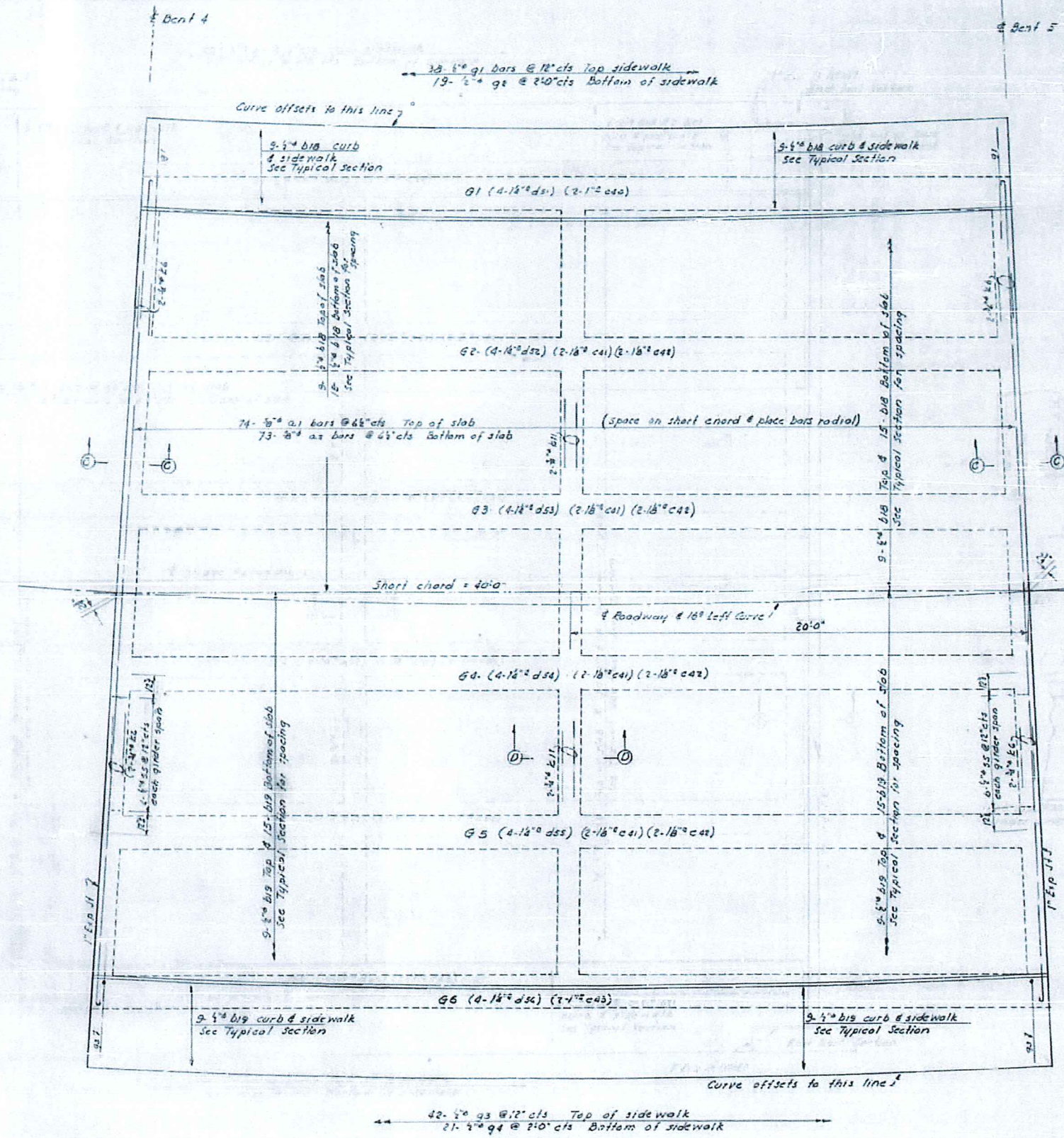
PROJECT NO. 4863
 WAKE COUNTY
 STATION: 51+31.65 1/4

NASH DR. EXT. OVER DAWSON
 STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 BALDWIN
 SUPERSTRUCTURE
 SPAN D
 CONCRETE PLAN

MAY 1933
 W. R. [Signature]
 W. R. [Signature]

SPECIAL	DESIGNED BY	DATE
	DRAWN BY	DATE
	CHECKED BY	DATE

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
2	N.C.	4863	5-9	47
F. A. Proj. 0-594(3)				



See RAIL DETAIL for location & mark of rail bars not shown on this sheet.

PROJECT NO. 4863
WAKE COUNTY
STATION: 51+31.63 L⁴

NASH DR. EXT. OVER DANSON

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

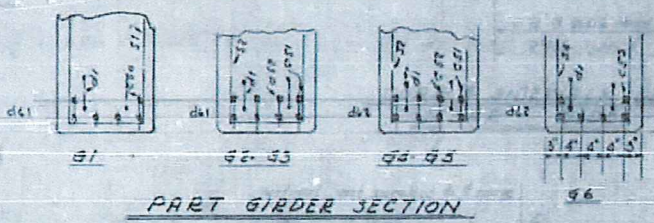
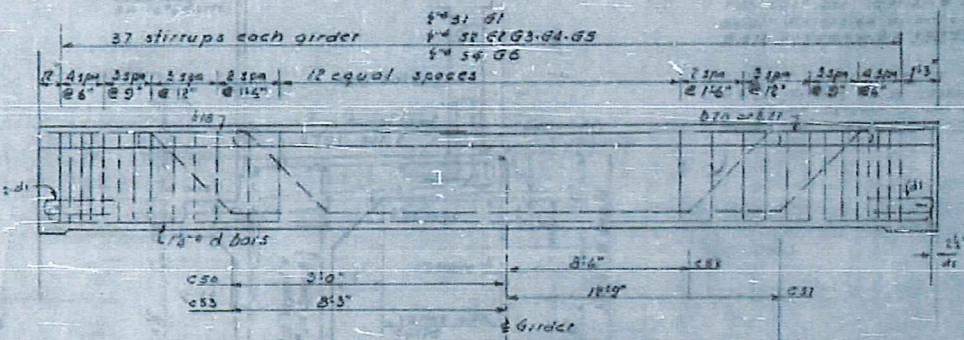
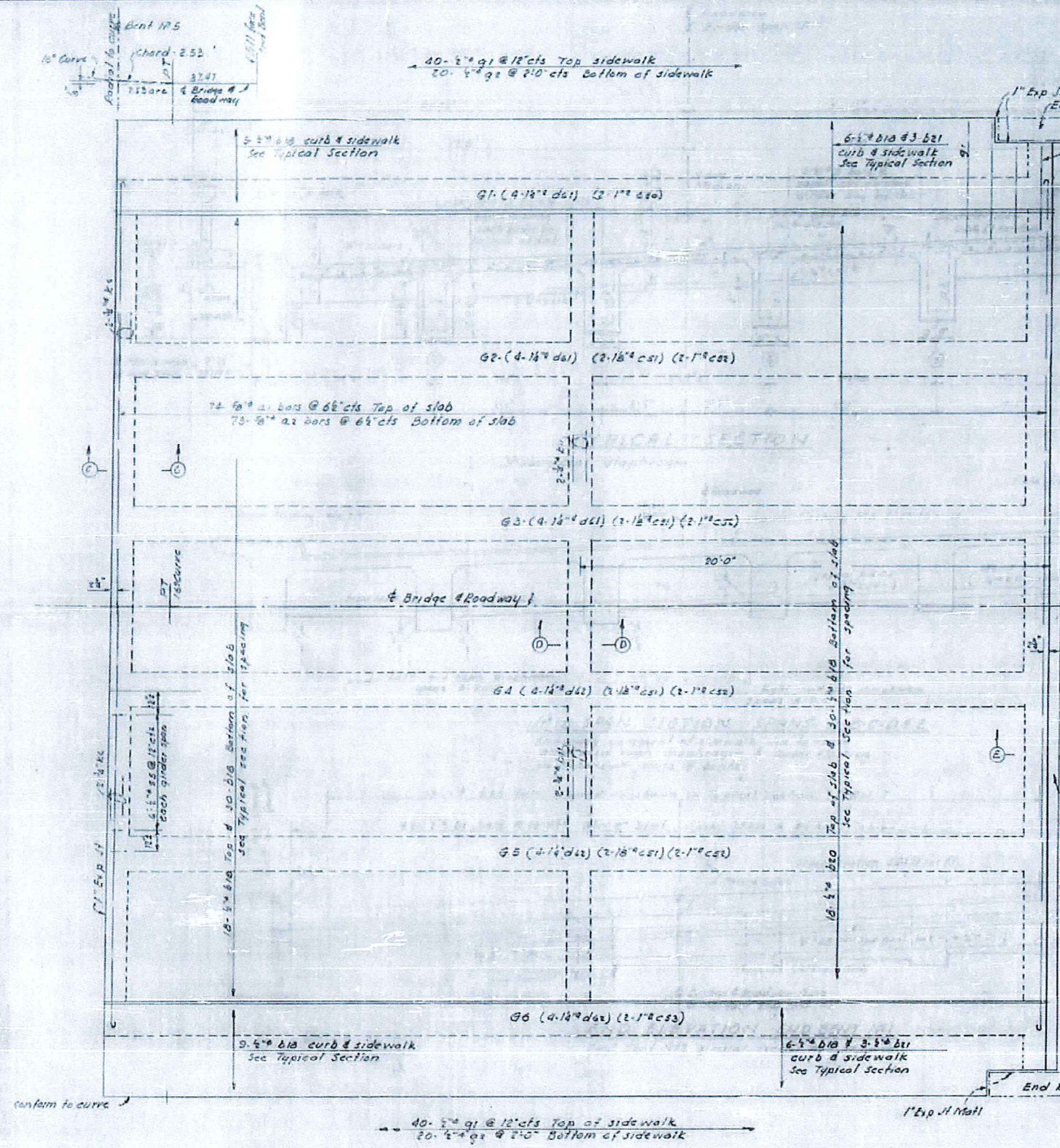
SUPERSTRUCTURE
SPAN E
CONCRETE PLAN

MAY 1953

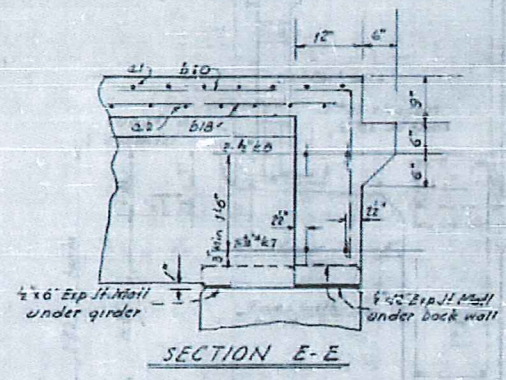
DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: May 1953

DESIGNED BY: [Signature]	DATE: May 1953
CHECKED BY: [Signature]	DATE: May 1953

PER. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	3-10	4-7
R. A. FROST (U-6945)				



See RAIL DETAIL for location & mark of rail bars not shown.
 End Rail Section indicated above curb & sidewalk is a part of the Superstructure and details are shown in RAIL DETAIL & ELEVATION below this line a part of end bent rail.



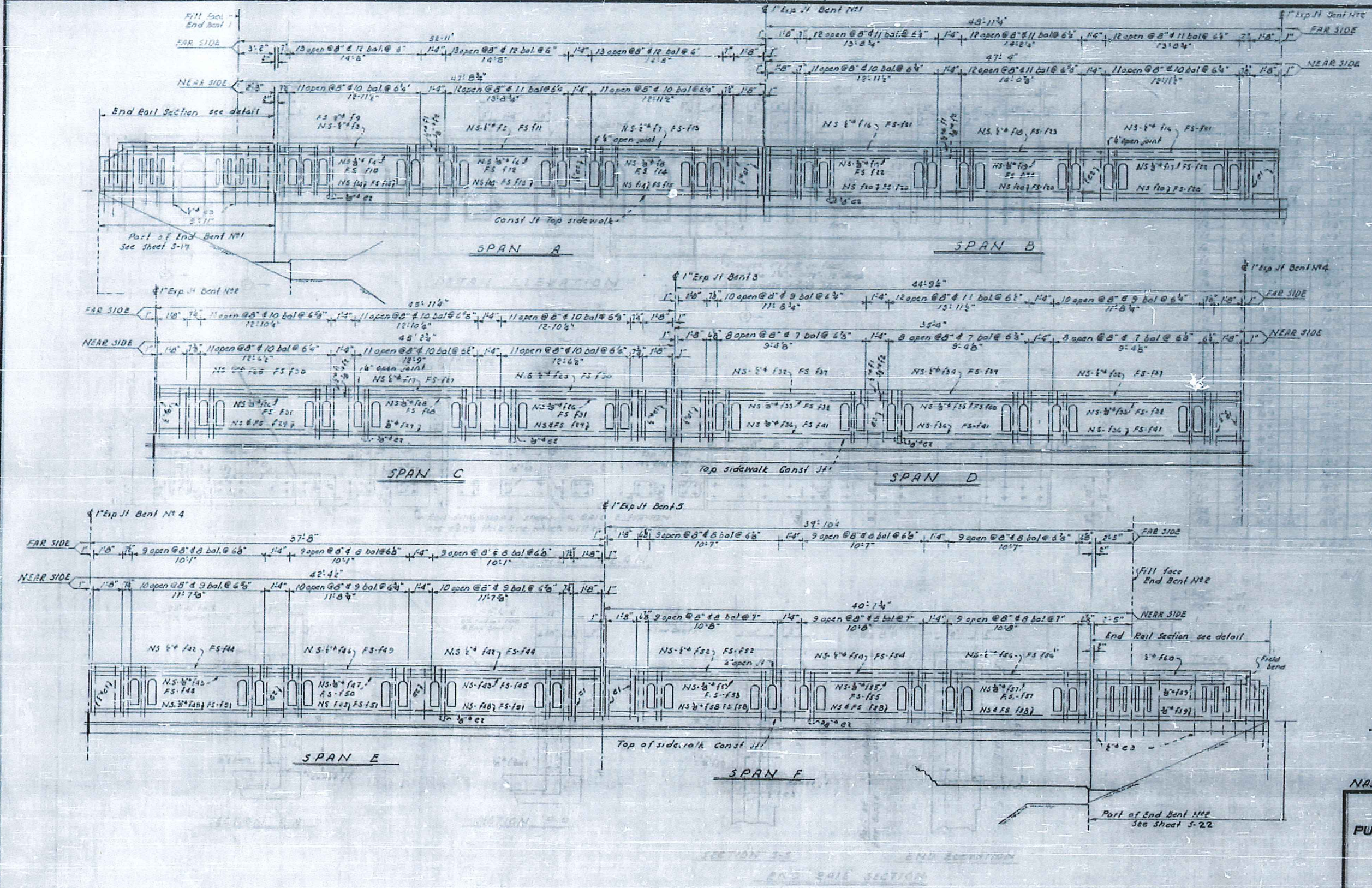
PROJECT NO. 4863
 WAKE COUNTY
 STATION: 51+31.65 L¹/₄

NASH DE EXT OVER DAWSON
 STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 RAILROAD
 SUPERSTRUCTURE
 SPAN F
 CONCRETE PLAN
 MAY 1953
 W. H. FROST
 W. H. FROST

DESIGNED BY: A. G. GIBSON	DATE: May 1953
DRAWN BY: A. G. GIBSON	DATE: May 1953
CHECKED BY: R. H. WILSON	DATE: May 1953

PROJECT NO.	DATE	BY	CHECKED	TOTAL SHEETS
4865	5-12-53	J. H. Green	J. H. Green	14

Far side is the inside of curve and Near side the outside of curve.
 Length dimensions shown are along the outer edge of the sidewalk and measured on arc of the curve.
 Top of rail to be parallel to the roadway & vertical curve.
 All vertical edges & faces to be plumb.



PROJECT NO. 4865
 WAKE COUNTY
 STATION: 51+31.6514

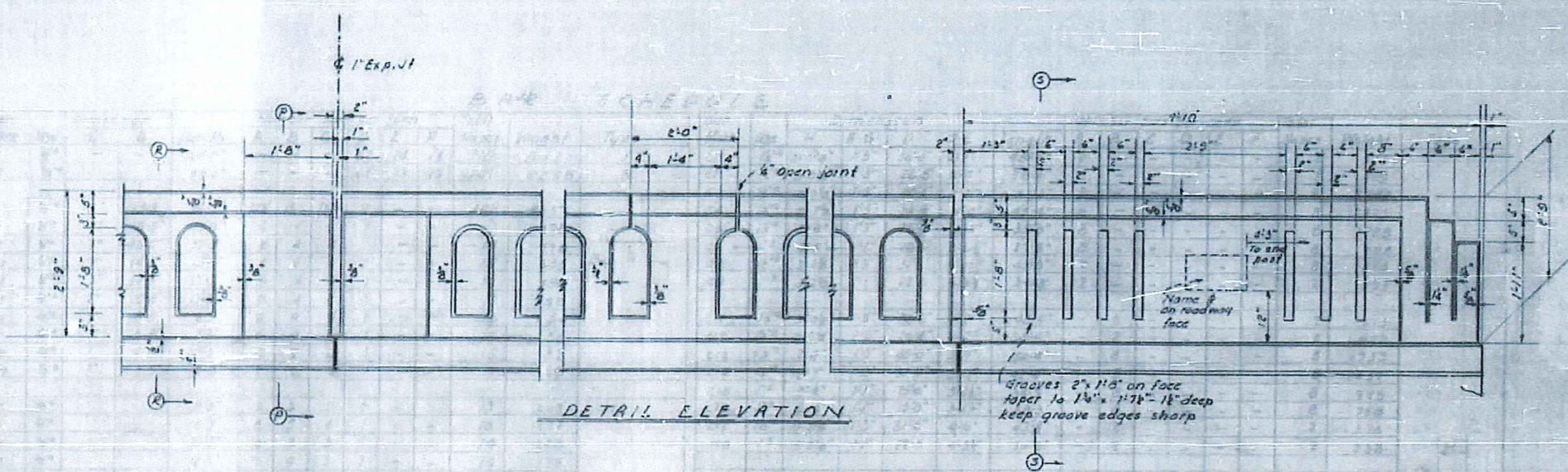
NASH DE. EXT OVER DAWSON
 STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 SUPERSTRUCTURE
 RAIL ELEVATION

MAY 1953

DESIGNED BY	DATE
J. H. Green	5-12-53
TRACED BY	DATE
J. H. Green	5-12-53

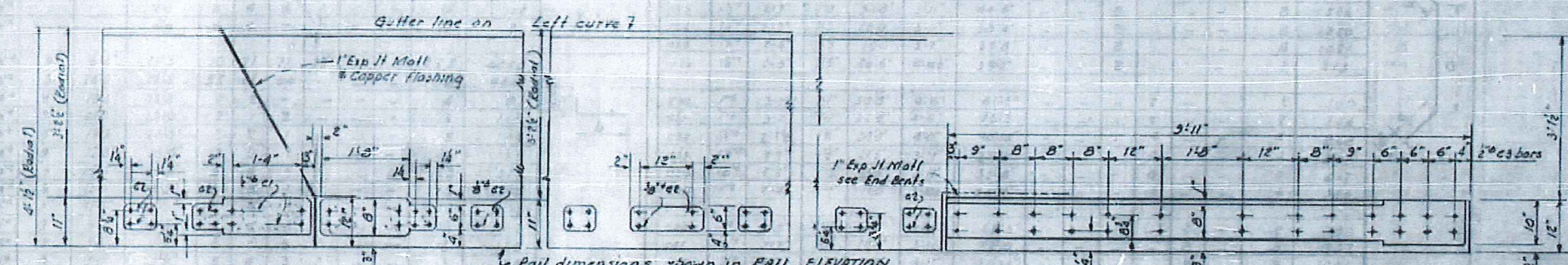
APPROVED BY: [Signature]
 STATE ENGINEER

DESIGN NO.	DATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	ALC	4863	5-13	47
R.R. Proj. U-696(5)				



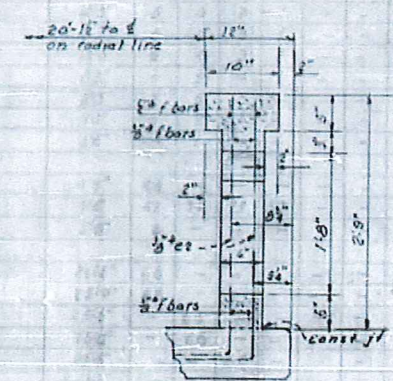
DETAIL ELEVATION

Grooves 2" x 1/4" on face taper to 1/4" x 1/4" - 1/8" deep keep groove edges sharp

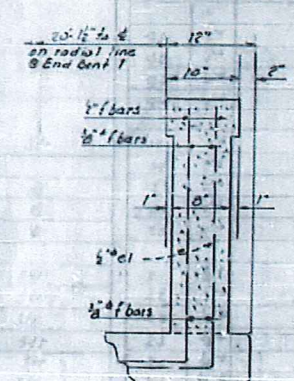


DETAIL PLAN

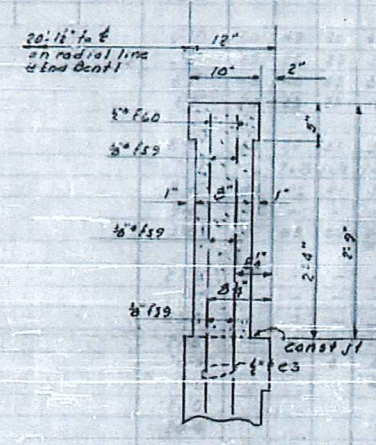
Rail dimensions shown in ELEVATION are along this line which will conform to the curve



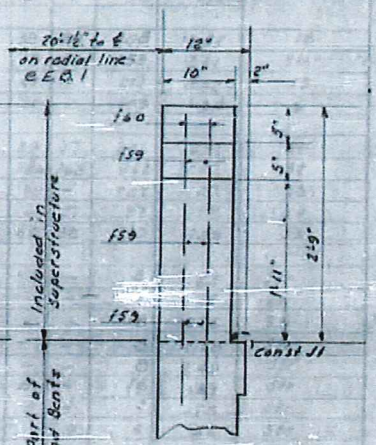
SECTION R-R



SECTION P-P



SECTION S-S



END ELEVATION

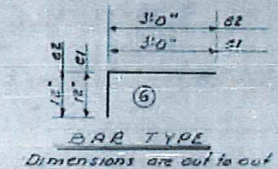
END RAIL SECTION

POST & RAIL BAR SCHEDULE

Bar	No. Bars	Size	Type	Length	Weight	Bar	No. Bars	Size	Type	Length	Weight
E1	80	1/2"	6	4'-0"	21.8	F50	4	2"	1/2"	14'-0"	37
E2	1552	3/8"	6	4'-0"	233.4	F50	4	2"	1/2"	14'-0"	22
E3	102	1/2"	Str	4'-0"	2.28	F50	4	2"	1/2"	14'-0"	17
F1	48	1/2"	Str	1'-8"	5.8	F50	2	2"	1/2"	8'-0"	11
F2	48	3/8"	4	1'-8"	1.2	F50	2	2"	1/2"	8'-0"	6
F3	2	2"	1/2"	13'-0"	17	F50	4	2"	1/2"	12'-0"	2.8
F4	2	2"	1/2"	13'-0"	17	F50	4	2"	1/2"	12'-0"	2.8
F5	2	2"	1/2"	12'-9"	17	F50	4	2"	1/2"	12'-0"	2.8
F6	2	2"	1/2"	12'-9"	17	F50	4	2"	1/2"	12'-0"	2.8
F7	2	2"	1/2"	14'-7"	19	F50	2	2"	1/2"	12'-0"	1.0
F8	2	2"	1/2"	14'-7"	19	F50	6	2"	1/2"	12'-0"	3.4
F9	2	2"	1/2"	14'-9"	20	F50	4	2"	1/2"	12'-0"	3.2
F10	2	2"	1/2"	14'-9"	20	F50	4	2"	1/2"	12'-0"	3.2
F11	2	2"	1/2"	12'-9"	18	F50	4	2"	1/2"	11'-9"	3.1
F12	2	2"	1/2"	13'-9"	19	F50	4	2"	1/2"	11'-9"	1.8
F13	2	2"	1/2"	16'-0"	22	F50	2	2"	1/2"	10'-9"	1.4
F14	8	2"	1/2"	16'-0"	49	F50	2	2"	1/2"	10'-9"	8
F15	6	2"	1/2"	17'-3"	38	F50	6	2"	1/2"	14'-9"	3.3
F16	4	2"	1/2"	19'-7"	19	F50	2	2"	1/2"	9'-0"	1.2
F17	4	2"	1/2"	19'-7"	23	F50	2	2"	1/2"	9'-0"	7
F18	2	2"	1/2"	13'-1"	18	F50	6	2"	1/2"	13'-0"	3.9
F19	2	2"	1/2"	13'-1"	18	F50	4	2"	1/2"	12'-0"	2.3
F20	12	2"	1/2"	17'-0"	77	F50	4	2"	1/2"	12'-0"	1.3
F21	4	2"	1/2"	15'-4"	40	F50	4	2"	1/2"	9'-0"	2.6
F22	4	2"	1/2"	15'-4"	23	F50	4	2"	1/2"	9'-0"	1.6
F23	2	2"	1/2"	12'-3"	18	F50	4	2"	1/2"	10'-0"	2.8
F24	2	2"	1/2"	12'-3"	18	F50	4	2"	1/2"	10'-0"	1.6
F25	4	2"	1/2"	12'-3"	38	F50	12	2"	1/2"	13'-0"	6.9
F26	4	2"	1/2"	14'-2"	21	F50	24	2"	1/2"	9'-0"	2.8
F27	4	2"	1/2"	12'-0"	38	F50	8	2"	1/2"	14'-0"	5.1
F28	4	2"	1/2"	12'-0"	18						
F29	12	2"	1/2"	14'-0"	70						

Reinforcing Steel Posts & Rail 4415 lbs

For concrete quantity see Bill of Material



BAR TYPE
Dimensions are out to out

PROJECT NO. 4863
WAKE COUNTY
STATION: 51/16.5 1/2
NASH DR. EXT OVER DAWSON

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION
SUPERSTRUCTURE
RAIL DETAILS

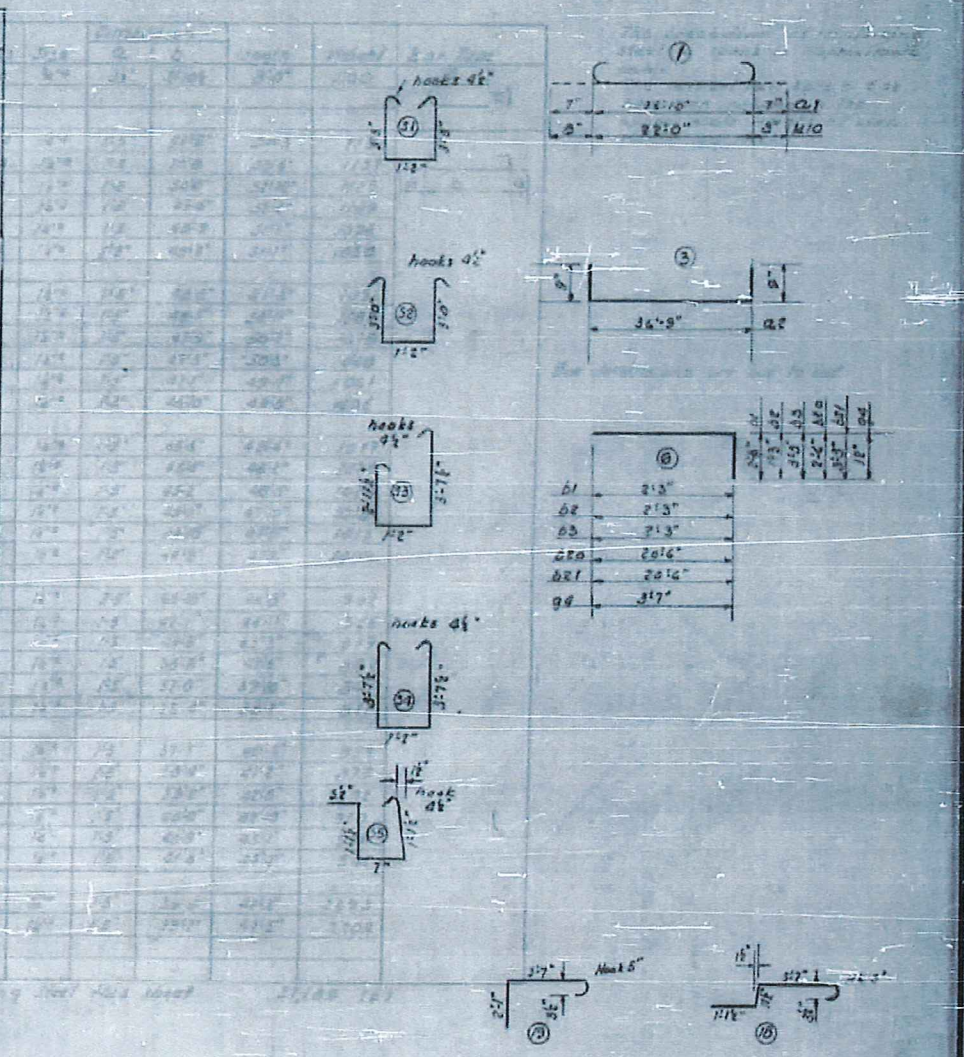
MAY 1933

SPECIAL	DESIGNED BY	DATE
	DRAWN BY	DATE
	CHECKED BY	DATE

APPROVED BY: [Signature]
SUPERVISOR

BAR SCHEDULE

Bar Mark	Size	Dimension			Number bars per span						Total No. bars	Weight	Type	Bar Mark	Size	Dimension				Number bars per span						Total No. bars	Weight	Type	
		a	b	Length	A	B	C	D	E	F						H	A-G	D	C-E	Length	A	B	C	D	E				F
a.1	3/8"	-	-	38'0"	-	-	-	62	74	74	210	8323	1	c1	1/2"	3'-0"	11'5"	36'6"	4'7"	48'6"	2	-	-	-	-	2	515	1	
a.2	3/8"	-	-	38'3"	-	-	-	61	73	73	207	8258	3	c2	1/2"	3'-0"	11'5"	36'6"	4'7"	48'6"	2	-	-	-	-	2	459	3	
a.10	3/8"	7"	19'8"	20'3"	72	135	137	12	-	-	408	8417	-	c3	1/2"	2'-7"	11'5"	40'8"	4'6"	51'4"	8	-	-	-	-	8	2182	-	
a.11	3/8"	7"	18'5"	19'0"	4	4	-	1	-	-	9	178	-	c4	1/2"	2'-7"	11'5"	34'5"	4'6"	45'4"	2	-	-	-	-	2	1927	-	
a.12	3/8"	7"	16'8"	17'3"	6	4	4	1	-	-	15	270	-	c5	1/2"	2'-4"	11'5"	26'0"	3'7"	35'8"	8	-	-	-	-	8	1228	-	
a.13	3/8"	7"	14'9"	15'4"	6	4	4	1	-	-	15	235	-	c6	1/2"	2'-4"	11'5"	18'8"	3'6"	27'9"	8	-	-	-	-	8	739	-	
a.14	3/8"	7"	12'5"	13'0"	5	5	3	1	-	-	14	190	-	c7	1/2"	3'-2"	11'5"	31'6"	4'10"	43'8"	2	-	-	-	-	2	376	-	
a.15	3/8"	7"	10'8"	11'3"	6	4	2	1	-	-	13	152	-	c8	1/2"	3'-2"	11'5"	22'6"	4'9"	34'3"	2	-	-	-	-	2	233	-	
a.16	3/8"	7"	8'8"	9'3"	6	4	4	2	-	-	16	154	-	c11	1/2"	3'-0"	11'5"	36'6"	4'7"	48'6"	-	2	-	-	-	2	212	-	
a.17	3/8"	7"	6'8"	7'3"	6	4	2	1	-	-	13	98	-	c12	1/2"	3'-0"	11'5"	26'6"	4'7"	35'6"	-	2	-	-	-	2	400	-	
a.18	3/8"	7"	4'8"	5'3"	5	5	4	1	-	-	15	82	-	c13	1/2"	2'-7"	11'5"	40'0"	3'11"	50'4"	-	8	-	-	-	8	1733	-	
a.19	3/8"	7"	3'5"	4'0"	2	2	2	1	-	-	7	29	-	c14	1/2"	2'-7"	11'5"	32'0"	3'11"	42'4"	-	8	-	-	-	8	1437	-	
a.20	3/8"	-	-	4'3"	3	3	3	2	-	-	13	347	-	c15	1/2"	2'-4"	11'5"	26'6"	3'4"	34'9"	-	8	-	-	-	8	345	-	
a.21	3/8"	-	-	4'3"	6	4	4	1	-	-	15	271	-	c16	1/2"	2'-4"	11'5"	19'0"	3'4"	28'3"	-	8	-	-	-	8	760	-	
a.22	3/8"	-	-	4'3"	6	4	4	1	-	-	15	271	-	c17	1/2"	3'-2"	11'5"	31'6"	4'10"	43'8"	-	2	-	-	-	2	376	-	
a.23	3/8"	-	-	4'3"	6	4	3	1	-	-	14	179	-	c18	1/2"	3'-2"	11'5"	22'6"	4'9"	34'3"	-	2	-	-	-	2	233	-	
a.24	3/8"	-	-	4'3"	6	4	2	1	-	-	13	142	-	c21	1/2"	3'-0"	11'5"	36'6"	4'7"	48'6"	-	2	-	-	-	2	212	-	
a.25	3/8"	-	-	4'3"	6	4	4	1	-	-	15	129	-	c22	1/2"	3'-0"	11'5"	26'6"	4'7"	35'6"	-	2	-	-	-	2	226	-	
a.26	3/8"	-	-	4'6"	6	4	4	1	-	-	15	102	-	c23	1/2"	2'-7"	11'5"	34'0"	3'11"	44'0"	-	8	-	-	-	8	1326	-	
a.27	3/8"	-	-	4'6"	6	4	-	1	-	-	11	52	-	c24	1/2"	2'-7"	11'5"	28'0"	3'11"	38'4"	-	8	-	-	-	8	1320	-	
a.28	3/8"	-	-	4'6"	6	4	-	1	-	-	11	52	-	c25	1/2"	2'-4"	11'5"	20'0"	3'7"	29'8"	-	8	-	-	-	8	1021	-	
a.29	3/8"	-	-	4'6"	6	4	-	1	-	-	11	52	-	c26	1/2"	3'-3"	11'5"	26'6"	4'10"	39'1"	-	2	-	-	-	2	415	-	
a.30	3/8"	5"	17'3"	17'8"	70	71	71	12	-	-	225	4048	-	c30	1/2"	3'-0"	11'5"	30'0"	4'6"	41'2"	-	-	2	-	-	2	280	-	
a.31	3/8"	5"	14'0"	14'5"	55	61	64	-	-	-	180	4607	-	c31	1/2"	3'-0"	11'5"	22'0"	4'6"	33'2"	-	-	2	-	-	2	226	-	
a.32	3/8"	5"	12'8"	13'3"	2	2	-	-	-	-	4	97	-	c32	1/2"	2'-7"	11'5"	30'0"	4'6"	40'10"	-	-	4	-	-	4	868	-	
a.33	3/8"	5"	11'3"	11'8"	2	2	1	-	-	-	5	104	-	c33	1/2"	2'-7"	11'5"	24'6"	3'11"	34'10"	-	-	4	-	-	4	548	-	
a.34	3/8"	5"	9'9"	10'4"	3	3	2	1	-	-	9	169	-	c34	1/2"	2'-7"	11'5"	24'6"	3'11"	34'10"	-	-	4	-	-	4	548	-	
a.35	3/8"	5"	7'5"	8'0"	5	4	3	1	-	-	13	214	-	c35	1/2"	2'-7"	11'5"	17'0"	3'10"	24'11"	-	-	4	-	-	4	366	-	
a.36	3/8"	5"	6'0"	6'5"	6	5	3	1	-	-	15	215	-	c40	1/2"	3'-0"	11'5"	18'0"	4'6"	29'2"	-	-	2	-	-	2	198	-	
a.37	3/8"	5"	4'6"	5'1"	6	4	3	1	-	-	14	172	-	c41	1/2"	2'-7"	11'5"	28'6"	3'11"	32'10"	-	-	8	-	-	8	1327	-	
a.38	3/8"	5"	3'0"	3'5"	6	4	3	1	-	-	14	122	-	c42	1/2"	2'-7"	11'5"	21'8"	3'11"	31'10"	-	-	8	-	-	8	1096	-	
a.39	3/8"	5"	1'5"	2'0"	5	4	3	1	-	-	13	78	-	c43	1/2"	3'-2"	11'5"	22'0"	4'9"	33'9"	-	-	2	-	-	2	229	-	
a.40	3/8"	5"	1'5"	2'0"	4	2	1	-	-	-	7	27	-	c80	1/2"	3'-0"	11'5"	18'0"	4'6"	29'2"	-	-	2	-	-	2	198	-	
a.41	3/8"	5"	1'5"	2'0"	3	2	1	2	-	-	8	106	-	c81	1/2"	2'-7"	11'5"	25'6"	3'11"	35'10"	-	-	8	-	-	8	1234	-	
a.42	3/8"	5"	1'5"	2'0"	3	2	2	1	-	-	8	106	-	c82	1/2"	2'-7"	11'5"	17'0"	3'10"	26'11"	-	-	8	-	-	8	732	-	
a.43	3/8"	5"	1'5"	2'0"	3	2	3	1	-	-	9	153	-	c83	1/2"	3'-2"	11'5"	16'6"	4'9"	28'3"	-	-	2	-	-	2	192	-	
a.44	3/8"	5"	1'5"	2'0"	3	2	2	1	-	-	8	106	-	q1	2"	-	-	-	-	6'1"	50	42	46	43	38	80	308	1252	78
a.45	3/8"	5"	1'5"	2'0"	3	2	2	1	-	-	8	106	-	q2	2"	-	-	-	-	3'0"	25	25	23	23	19	40	153	311	57
a.46	3/8"	5"	1'5"	2'0"	3	2	3	1	-	-	9	153	-	q3	2"	-	-	-	-	6'1"	48	46	45	36	42	-	217	882	19
a.47	3/8"	5"	1'5"	2'0"	5	4	2	1	-	-	12	178	-	q4	2"	-	-	-	-	4'7"	24	23	23	18	21	-	109	354	6
a.48	3/8"	5"	1'5"	2'0"	6	5	3	1	-	-	15	192	-	s1	2"	-	-	-	-	8'9"	44	32	31	39	39	37	242	1414	51
a.49	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	s2	2"	-	-	-	-	7'11"	176	168	164	150	156	108	962	5087	57
a.50	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	s3	2"	-	-	-	-	8'6"	24	42	41	36	39	-	202	1147	33
a.51	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	s4	2"	-	-	-	-	9'2"	-	-	-	-	37	-	37	227	54
a.52	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	s5	2"	-	-	-	-	3'8"	35	65	60	60	60	60	310	759	53
a.53	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k1	3/4"	-	-	-	-	27'6"	4	-	-	-	-	-	4	165	57
a.54	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k2	3/4"	-	-	-	-	27'0"	4	-	-	-	-	-	4	72	57
a.55	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k3	3/4"	-	-	-	-	23'0"	4	4	-	-	-	-	8	276	57
a.56	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k4	3/4"	-	-	-	-	27'6"	-	4	4	-	-	-	8	288	57
a.57	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k5	3/4"	-	-	-	-	20'9"	-	-	4	-	-	-	8	289	57
a.58	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k6	3/4"	-	-	-	-	19'6"	-	-	4	8	4	-	16	469	57
a.59	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k7	3/4"	-	-	-	-	27'0"	-	-	-	-	-	-	4	120	57
a.60	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k8	3/4"	-	-	-	-	20'6"	-	-	-	-	-	-	4	55	57
a.61	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k9	3/4"	-	-	-	-	23'4"	4	4	4	4	-	-	16	561	1
a.62	3/8"	5"	1'5"	2'0"	6	4	3	1	-	-	14	150	-	k11	3/4"	-	-	-	-	19'3"	-	-	-	4	4	-	8	251	57



PROJECT NO. 4863
WAKE COUNTY
STATION: 51.3165.14

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION

SUPERSTRUCTURE SLAB REINFORCING STEEL

MAY 1947

APPROVED BY: *[Signature]*

Weight Reinforcing Steel this sheet 93316 lbs
 Bar schedule continued on sheet 5-13 & 5-15

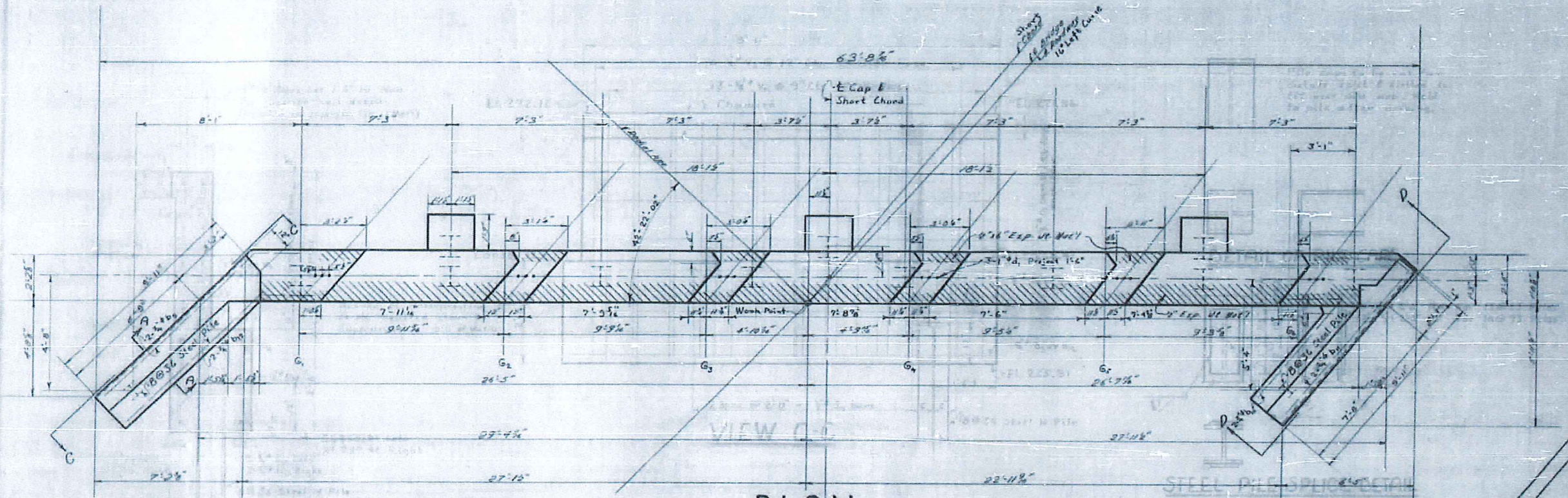
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DRAWN BY: <i>[Signature]</i>	DATE: 5-13-47
CHECKED BY: <i>[Signature]</i>	DATE: 5-13-47

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	578	578

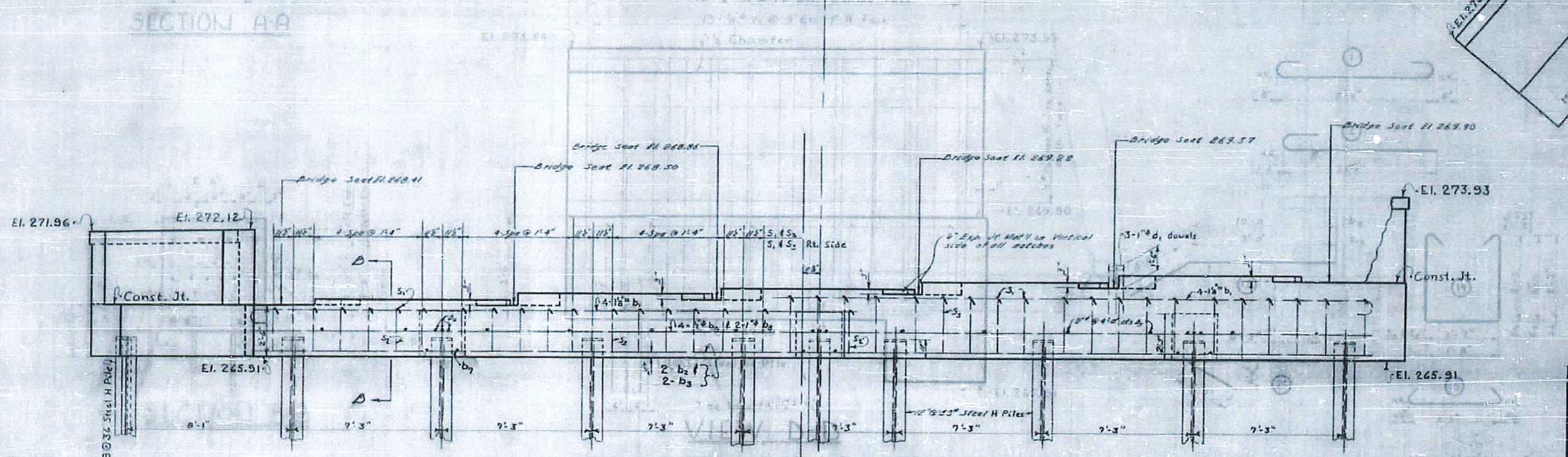
F.A. Proj. U. 694 (3)

End Rail here above gap to conform to horizontal curve.
Mid. Ordinates: $\frac{1}{8}$ Left
 $\frac{3}{8}$ Right

End Bent piles to be driven to the following minimum bearing capacity per pile:
12 @ 53 30 Tons
2 @ 36 15 Tons

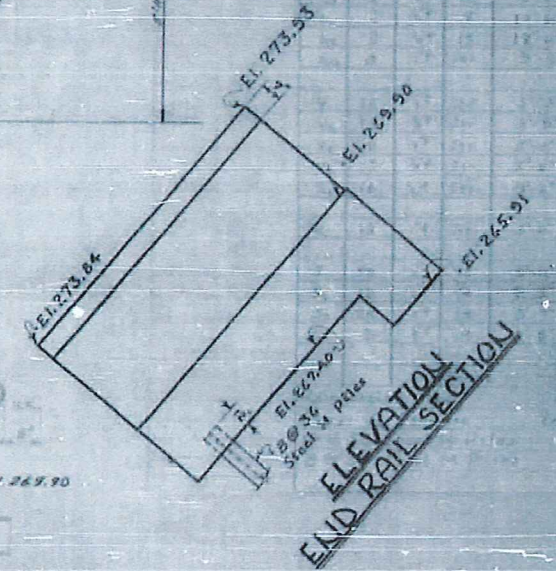


PLAN



END RAIL VIEW

ELEVATION-CAP ALONG FILL FACE



PROJECT NO. 4863
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
SUBSTRUCTURE
STATION: 51 + 31.65

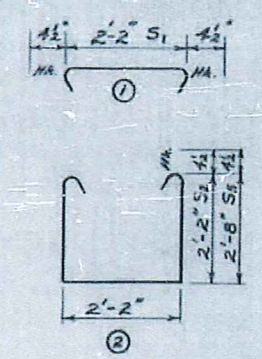
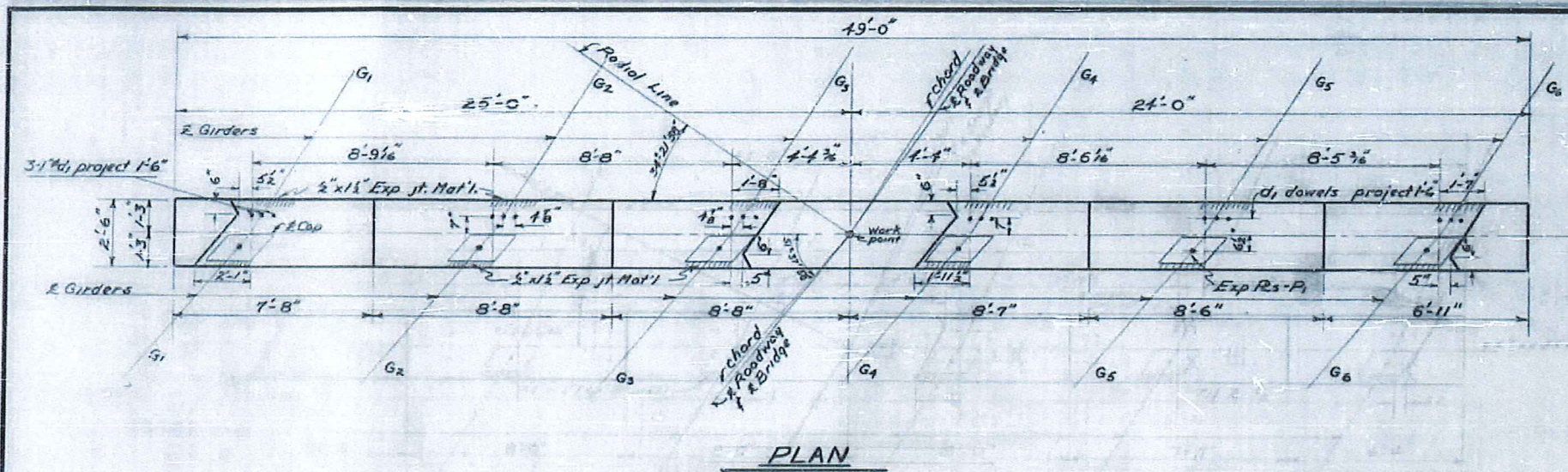
NASH DR. EXT. OVER LAWSAN

STATE OF NORTH CAROLINA
STATE HIGHWAY AND PUBLIC WORKS COMMISSION
SUBSTRUCTURE
END BENT No. 1
APRIL 1959

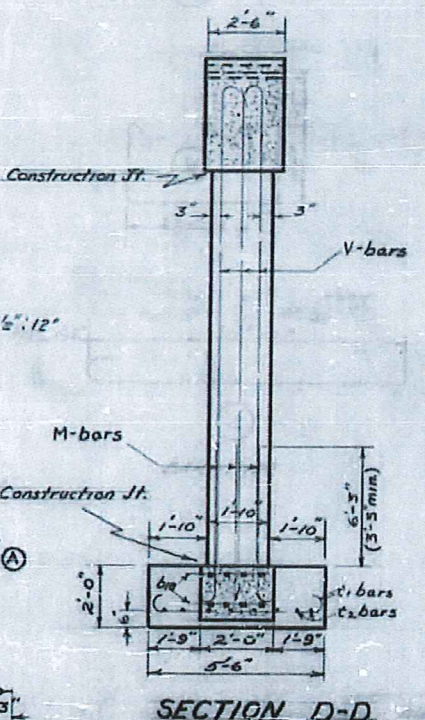
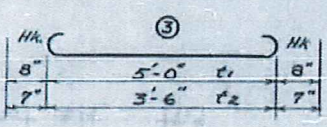
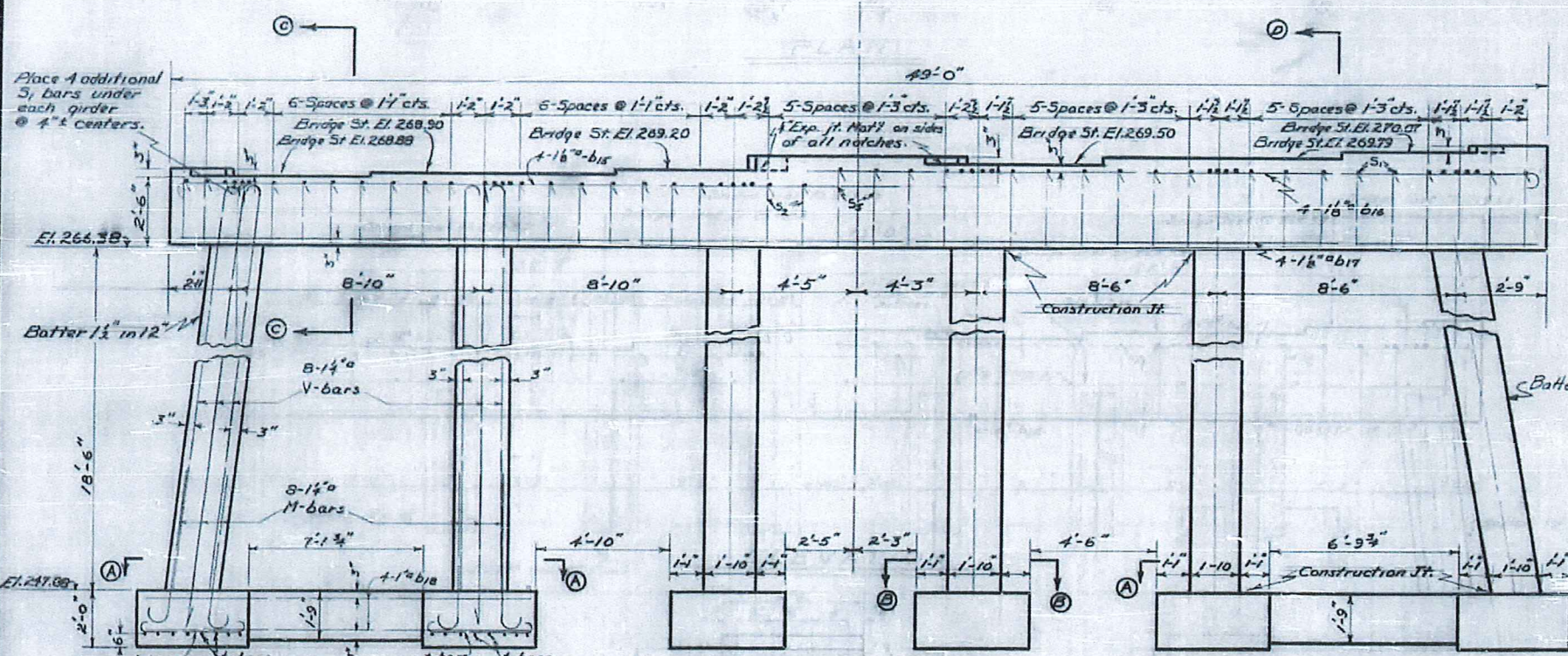
SPECIAL
DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
DATE: APRIL 1959

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	5-18	47

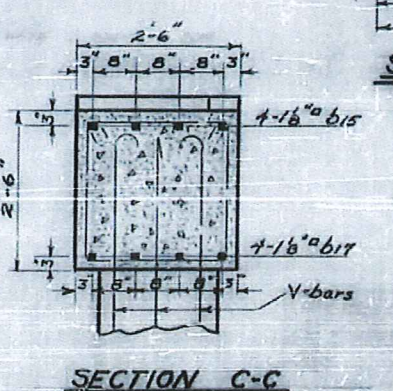
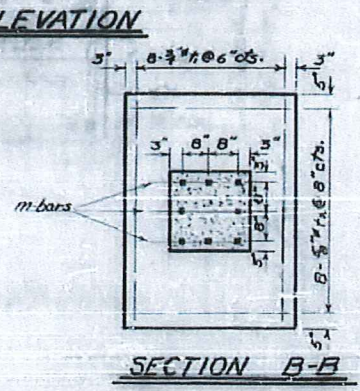
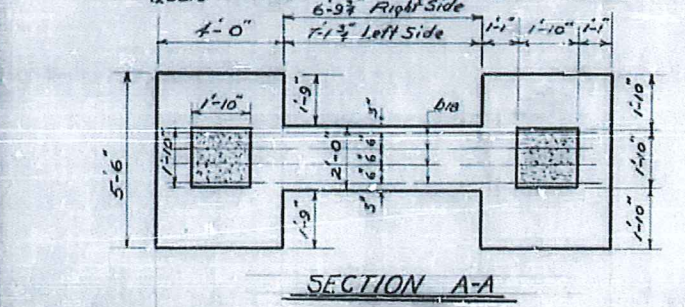
F.A. Proj. U-694(3)



HA	Length	Weight
1-3	26'-6"	615
1-3	25'-6"	616
1-5	20'-7"	V
1-5	7'-7"	H



BILL OF MATERIAL						
Bar	No	Type	Size	Length	Weight	
b15	4	A	1 1/2"	27'-9"	478	
b16	4	A	1 1/2"	26'-9"	460	
b17	4	Str.	1 1/2"	48'-6"	835	
b18	16	Str.	1"	17'-6"	789	
S1	60	1	5/8"	2'-11"	117	
S2	18	2	5/8"	7'-3"	87	
S2	18	2	3/4"	8'-3"	99	
d1	18	Str.	1"	3'-0"	144	
H	48	A	1/4"	9'-0"	2295	
V	48	A	1/4"	22'-0"	5610	
t1	48	3	3/8"	6'-7"	456	
t2	48	3	5/8"	4'-8"	234	
Reinforcing Steel -					Lbs.	11,604
Class "A" Concrete -					Cu. Yds.	39.3



SPECIAL
 DESIGNED BY: *T.W. Wilson* DATE: *Aug 1953*
 DRAWN BY: *T.W. Wilson* DATE: *Aug 1953*
 CHECKED BY: *T.W. Wilson* DATE: *Aug 1953*

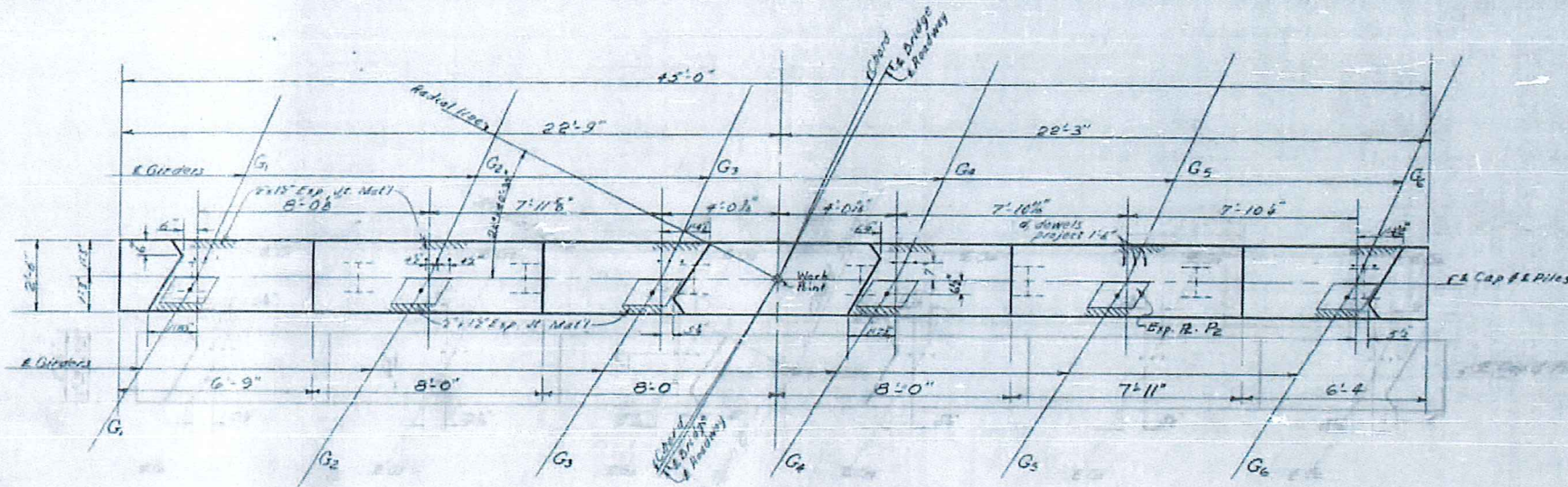
PROJECT NO. 4863
 WAKE COUNTY
 STATION: 51+31.65 L+14
 NASH DR. EXT. OVER DAWSON

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION

BENT No 1
 AUGUST 1953

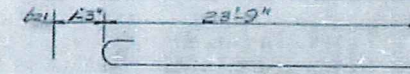
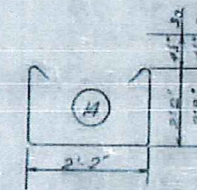
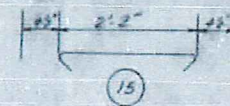
APPROVED BY: *[Signature]*
 STATE HIGHWAY ENGINEER

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
30	N.C.	4862	5-18	47
E.S. Proj. D-294(3)				

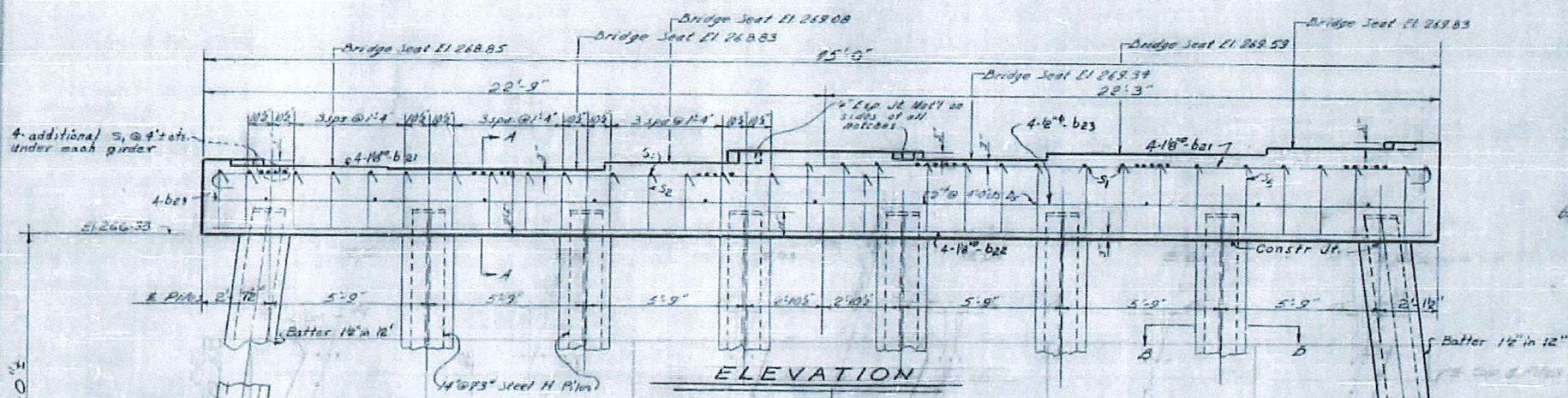


PLAN

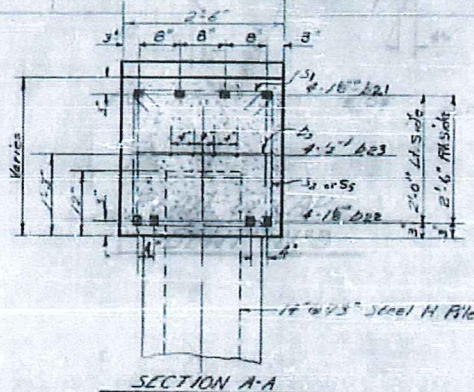
PLAN OF CAP
BENT No. 2



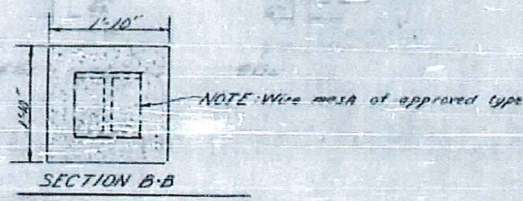
BAR TYPE



ELEVATION



SECTION A-A



SECTION B-B

PROJECT NO. 4862
 WAKE COUNTY
 STATION: 51+31.65
 NASH DRIVE EXT OVER DANFORD

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION

SUBSTRUCTURE

BENT No. 2

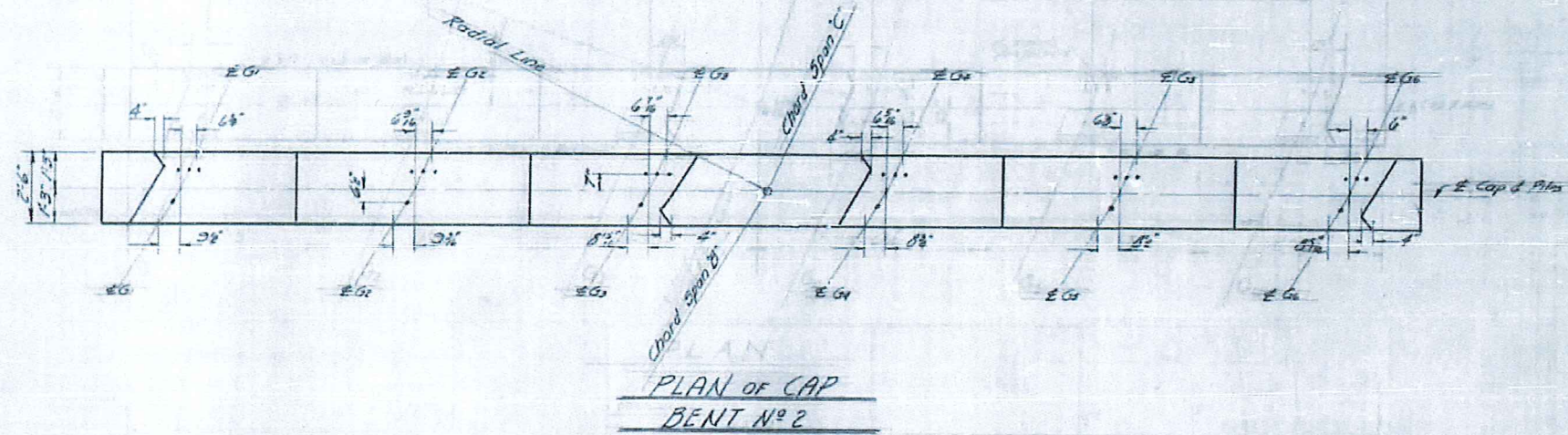
APRIL 1935

BILL OF MATERIAL				
Bar No.	Size	Type	Length	Weight
b21	1/2"	E	25'-0"	861
b22	1/2"	St	44'-6"	766
b23	1/2"	St	23'-0"	123
b4	1/2"	St	2'-3"	19
S1	5/8"	St	2'-11"	111
S2	5/8"	St	7'-3"	77
S3	1/2"	St	8'-3"	94

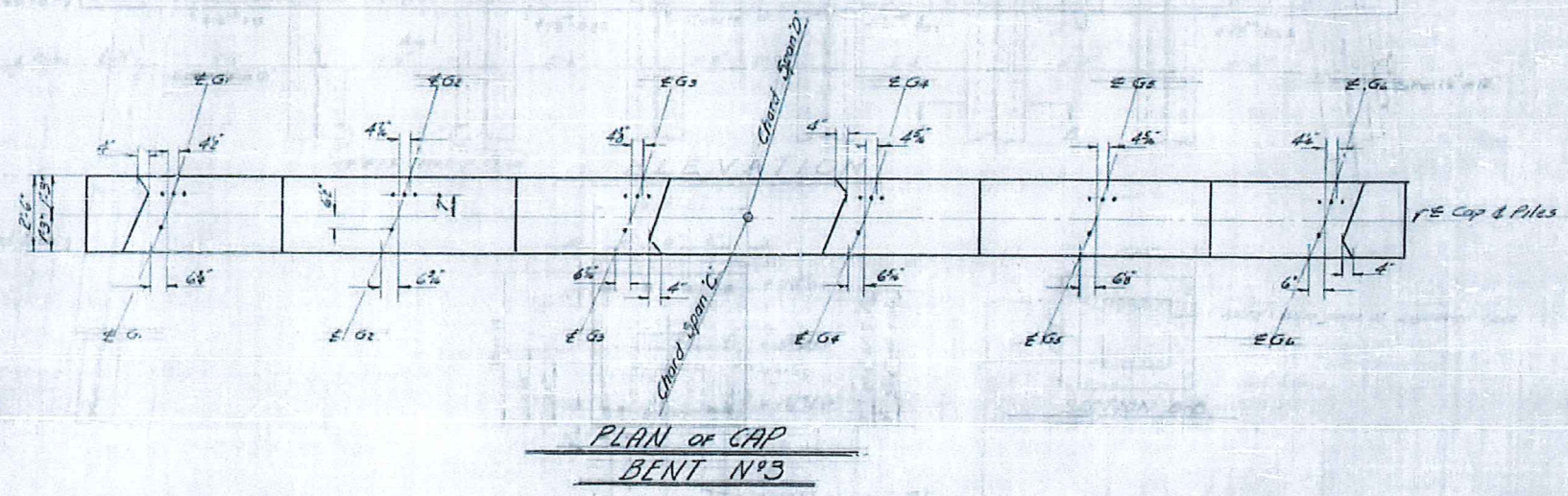
CONCRETE DISTRIBUTION	
Pile Encasement - Cu Yds	16.2
Cap	12.5
TOTAL	28.7

SPECIAL APPROVED BY: [Signature] DATE: APRIL 25, 1935
 DRAWN BY: [Signature] DATE: APRIL 25, 1935
 CHECKED BY: [Signature] DATE: APRIL 25, 1935

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N. C.	4363	5-19A	
P.A. Proj. U-2745				



Note: This sheet to be used in conjunction with sheets 5-19 & 5-20.



PROJECT NO. 4363
 WAKE COUNTY
 STATION 511.3165 L.R.
 NASH DR. OVER DAWSON

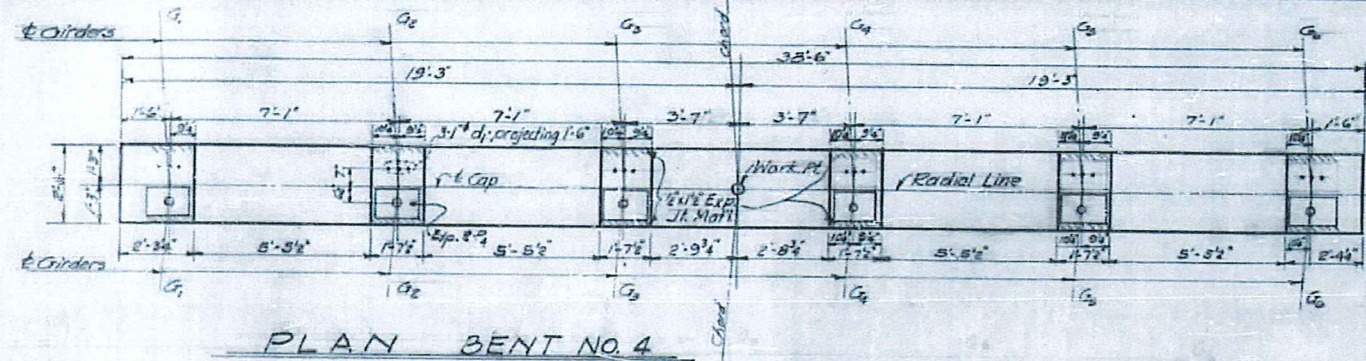
STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION

ADDITIONAL DETAILS
 OF CAP FOR BENT
 N° 2 & BENT N° 3
 March, 1954

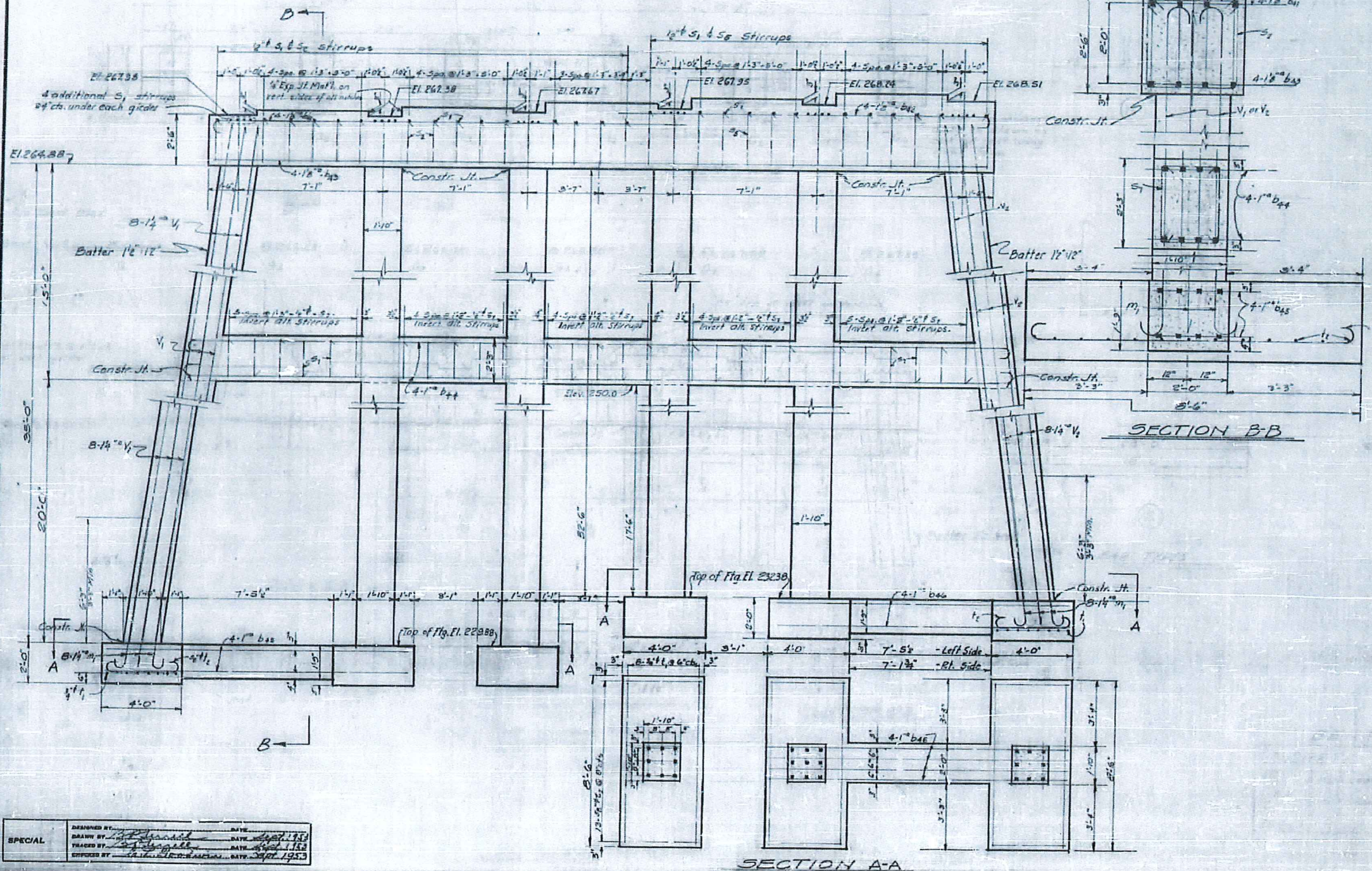
SPECIAL	DESIGNED BY	DATE
	DRAWN BY <i>E. H. Wiggins</i>	DATE <i>Mar, 1954</i>
	TRACED BY	DATE
	CHECKED BY	DATE

SHEET 5-19A OF

APPROVED BY *[Signature]*
 DATE *[Date]*

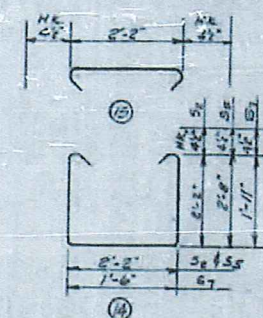


PLAN BENT NO. 4



SECTION A-A

SECTION B-B



FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N. C.	4863	5-21	47

F.A. Proj. U-694(3)

NO.	DESCRIPTION	QTY.
1	25'-0"	1
2	18'-0"	1
3	7'-9"	1
4	37'-1"	1
5	34'-7"	1

NO.	DESCRIPTION	QTY.
1	40'-0"	1
2	8'-6"	5
3	8'-0"	7

ONE BENT
BILL OF MATERIAL

Bar No.	Size	Type	Length	Weight
b ₁	4	1 1/2"	24'-3"	417
b ₂	4	1 1/2"	17'-3"	321
b ₃	4	1 1/2"	38'-0"	634
b ₄	8	1"	42'-2"	1147
b ₅	8	1"	15'-1"	410
b ₆	8	1"	14'-9"	401
d ₁	18	1"	3'-0"	184
m ₁	40	1 1/2"	9'-0"	8370
s ₁	31	1 1/2"	2'-11"	99
s ₂	15	1 1/2"	7'-3"	73
s ₃	12	1 1/2"	8'-3"	66
s ₇	27	1 1/2"	6'-1"	110
t ₁	45	3/4"	3'-6"	685
t ₂	70	3/4"	4'-10"	393
v ₁	24	1 1/2"	38'-6"	4309
v ₂	24	1 1/2"	36'-0"	4330

Reinforcing Steel - Lbs. = 16,767
Class "A" Concrete - cu. Yds. = 59.5

PROJECT NO. 4863
WAKE COUNTY
STATION: 51+31.65 D.
NASH. DG. EXT. OVER DAWSON ST.

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION

BENT No. 4

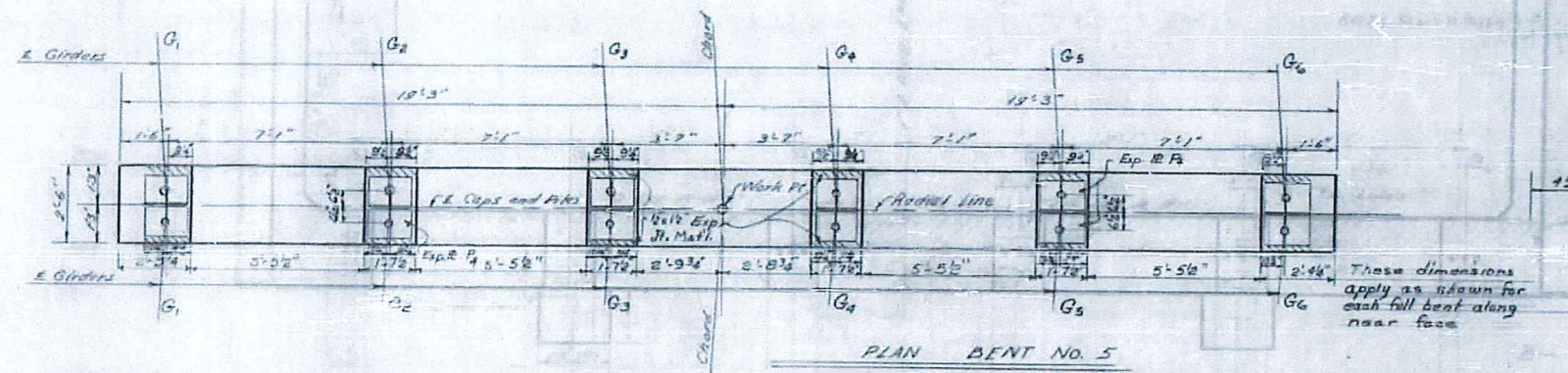
SEPTEMBER 1953

APPROVED BY: [Signature]
DATE: [Date]

SPECIAL
DESIGNED BY: [Signature] DATE: Sept. 1953
CHECKED BY: [Signature] DATE: Sept. 1953

FILE NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N.C.	4863	44	47

F.A. Proj. U-694(5)

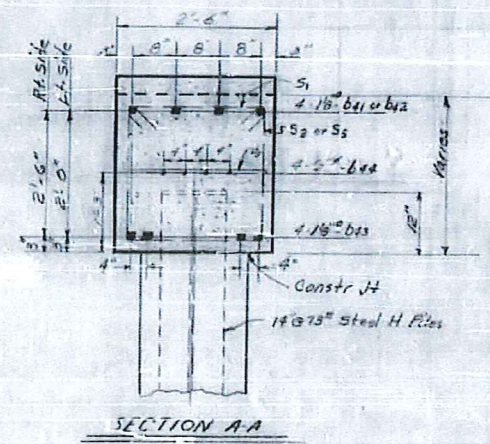
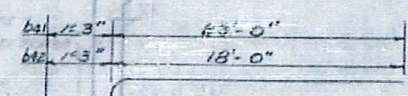
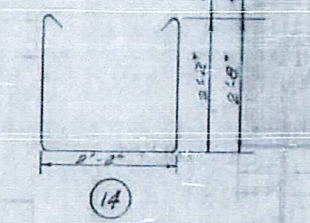
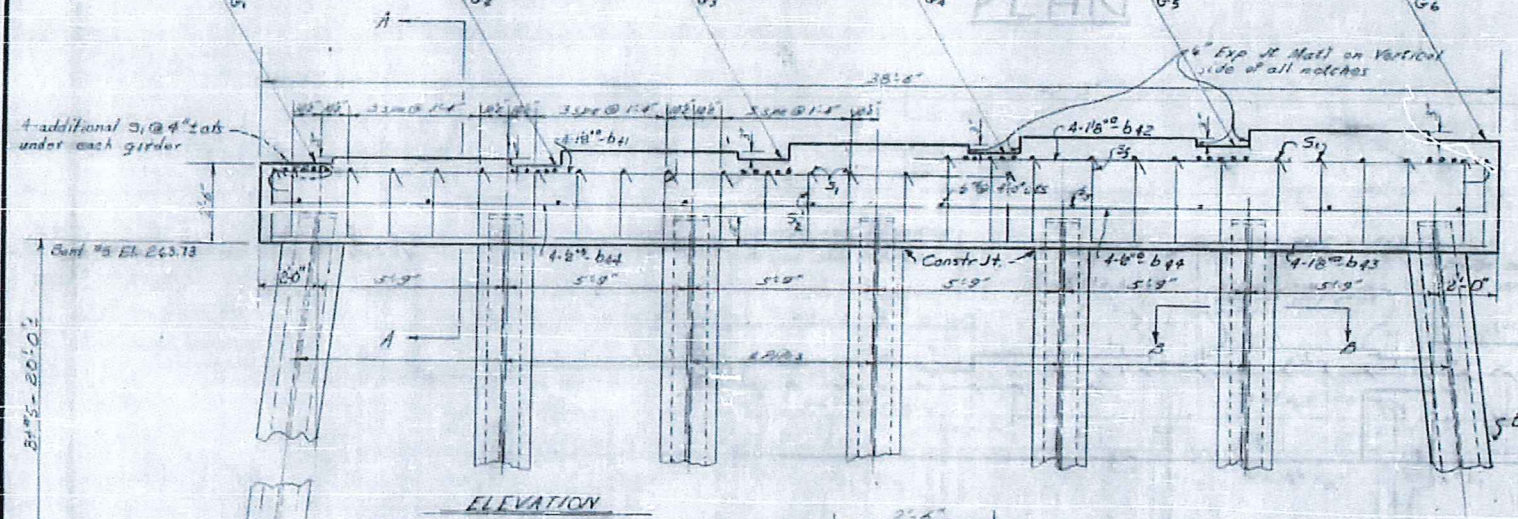
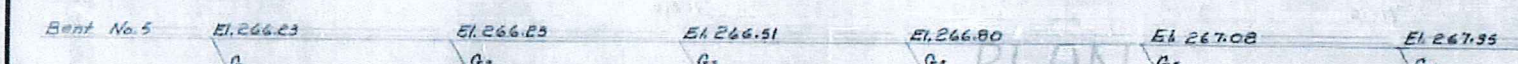


Note: Piles for Bent No. 5 shall be driven to a min. bearing capacity of 40 tons each.

Note: For Detail of Pile Cap & Pile Splice see sheet No. S-4.

Note: Steel pile volume has been deducted from Pile Encasement Concrete.

Bridge Seat Elev.



ONE BENT

Bar No.	Size	Qty	Length	Weight
0a1	4 1/8"	2	24'-3"	417
0a2	4 1/8"	2	19'-3"	351
0a3	4 1/8"	5	38'-0"	654
0a4	6 1/2"	5	28'-0"	107
0a5	10 6"	2	2'-3"	15
51	5/8 6"	15	2'-11"	103
52	1/2 7"	18	7'-9"	77
53	1/2 6"	18	8'-3"	72

Reinforcing Steel - Lbs 1976
 Class A Concrete - Cu. Yds 28.1
 14 G75 Steel H Piles - No. 7

PROJECT NO. 4863
 WAKE COUNTY
 STATION: 51+51.25
 NASH DR. EXT. OVER DANSON

BENT No. 5.

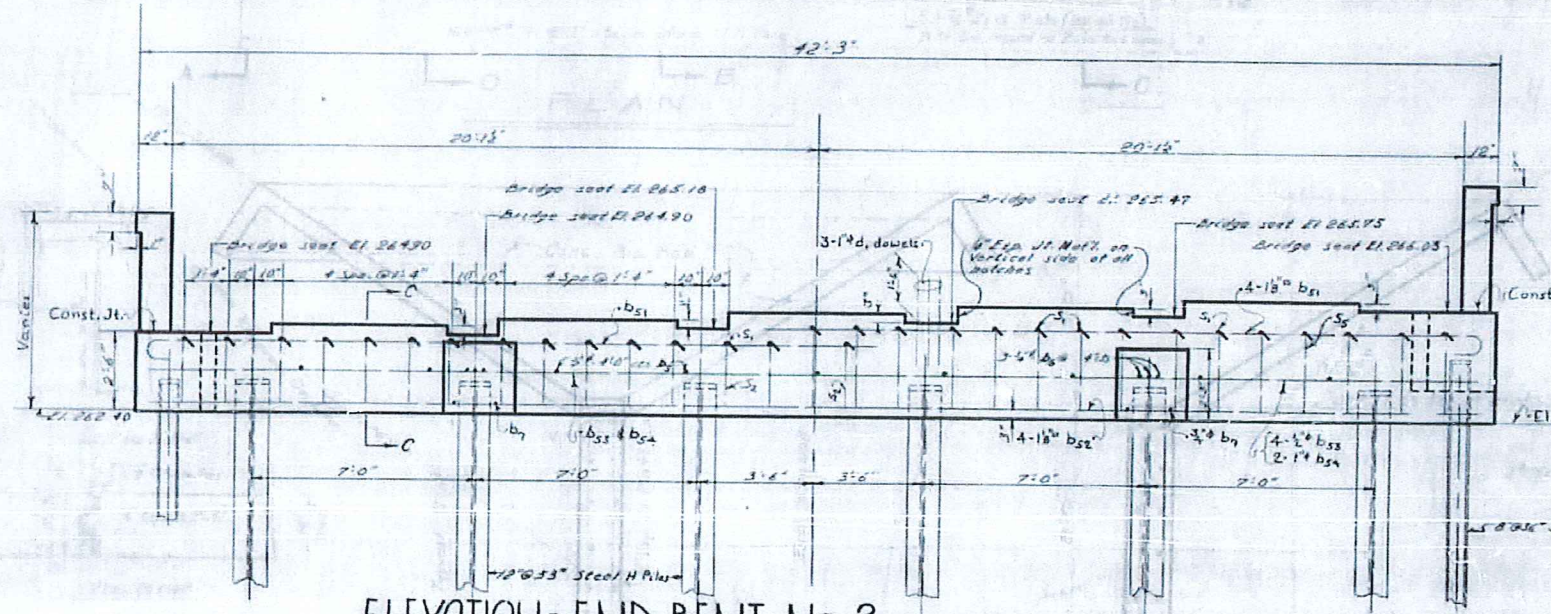
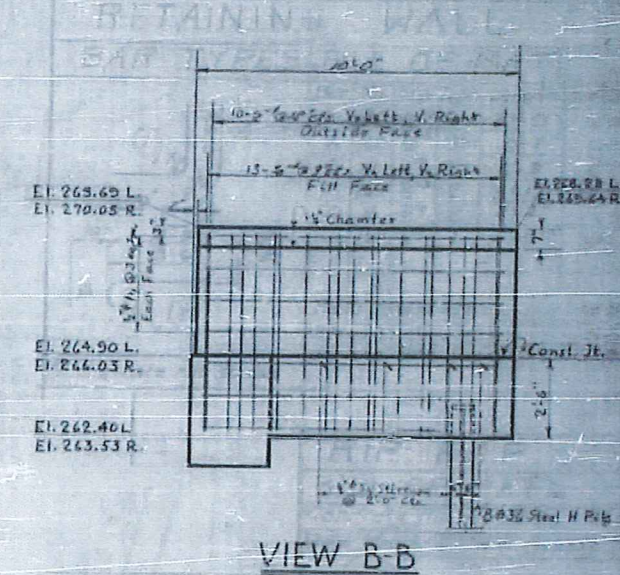
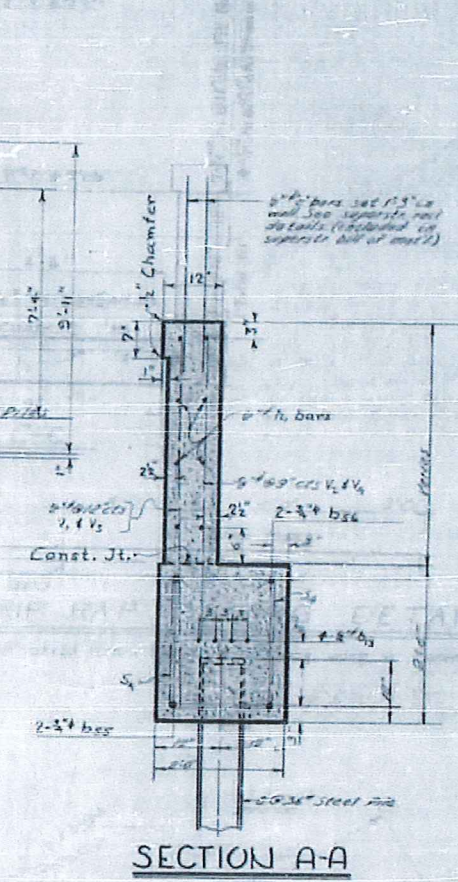
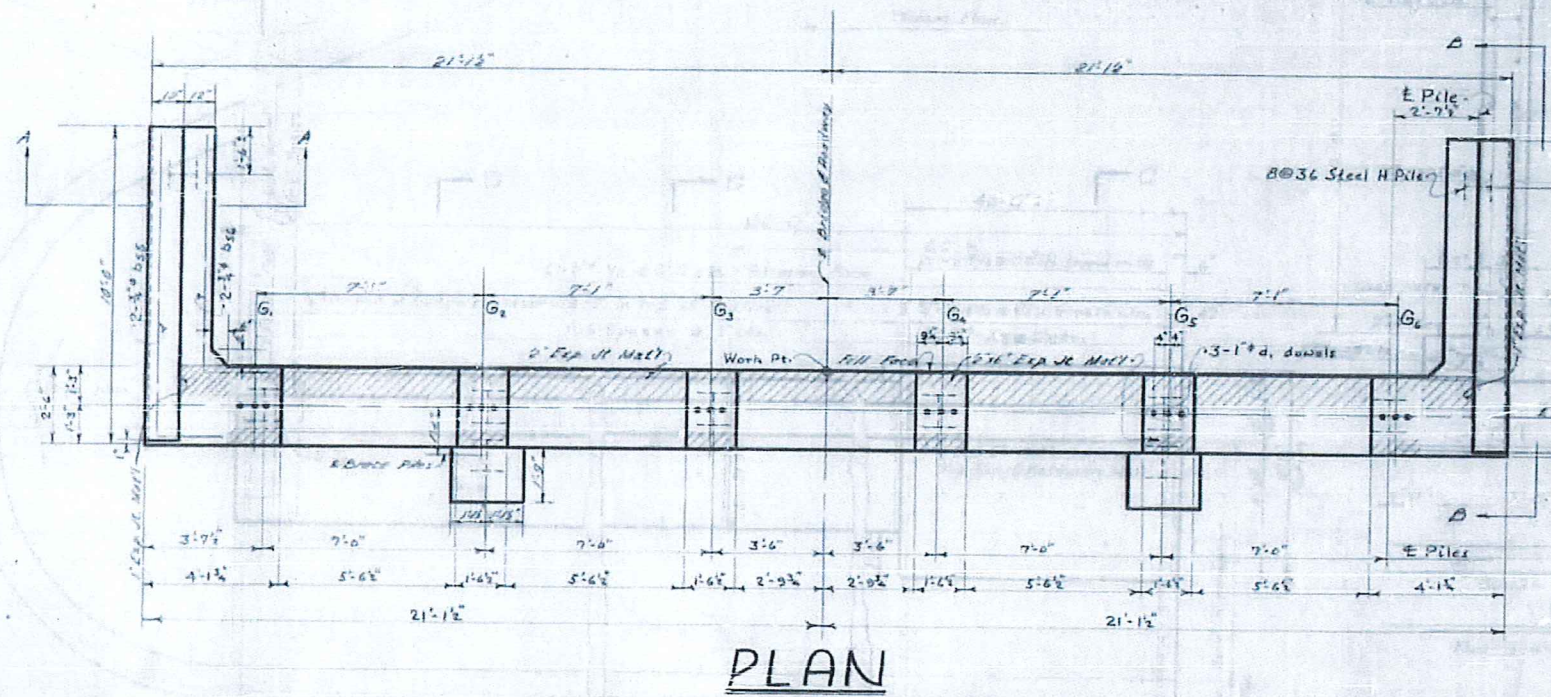
CONCRETE DISTRIBUTION	
File Encasement - Cu. Yds.	16.6
Cap - Cu. Yds.	11.5
Total -	Cu. Yds. 28.1

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 SUBSTRUCTURE
 BENT No. 5
 APRIL 1953

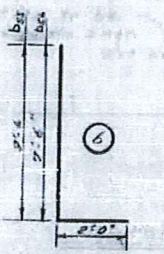
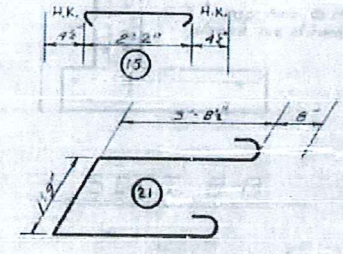
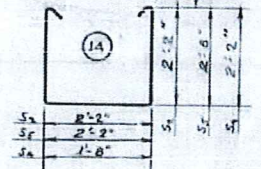
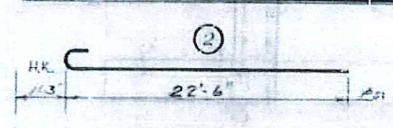
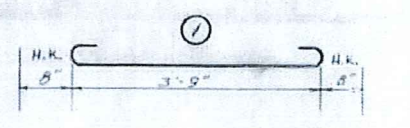
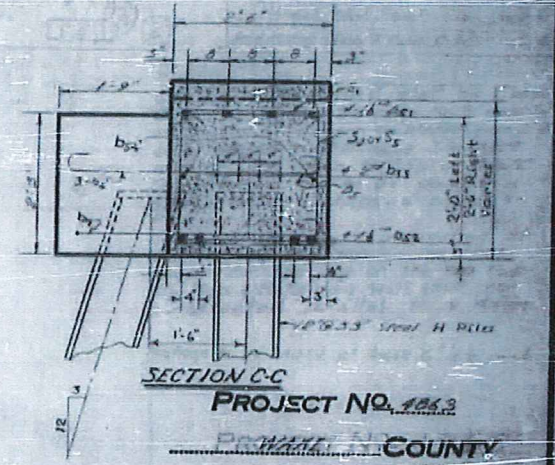
DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]

DESIGNED BY: [Signature] DATE: 1/20/53
 DRAWN BY: [Signature] DATE: 1/20/53
 CHECKED BY: [Signature] DATE: 1/20/53

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
3	N. C.	4863	3-22	47
F.R. Proj. U. 694 (3)				



NOTE: Piles for End Bent No. 2 to be driven to the following minimum bearing capacity per pile:
 12@53 - 30 tons
 8@36 - 15 tons
 Note: For Detail of Pile Cap & Pile Splice see Sheet No. S-4.



BAR TYPE
 Bar dimensions are out to out.

BILL OF MATERIAL FOR END BENT No. 2

Bar No	Size	Type	Length	Weight	Per	No.	Size	Type	Length	Weight
b ₁	1 1/2"	Str.	23'-9"	817	V ₃	10	1 1/2"	Str.	5'-0"	38
b ₂	4	Str.	41'-9"	719	V ₄	13	4"	Str.	5'-6"	75
b ₃	8	Str.	21'-6"	115						
b ₄	2	Str.	41'-9"	223	S ₁	30	2"	Str.	2'-11"	58
b ₅	4	Str.	11'-6"	69	S ₂	15	4"	Str.	7'-3"	73
b ₆	4	Str.	9'-6"	57	S ₃	8	4"	Str.	6'-0"	36
b ₇	11	Str.	2'-3"	17	S ₄	15	1 1/2"	Str.	8'-3"	83
b ₈	6	Str.	5'-1"	46						
b ₉	2	Str.	10'-4"	32						
b ₁₀	8	Str.	9'-6"	51						
d ₁	18	Str.	3'-5"	144						
h ₁	16	Str.	9'-6"	102						
V ₁	10	Str.	5'-3"	35						
V ₂	13	Str.	5'-5"	78						
Reinforcing Steel										2865
Close W. Concrete										18.5
12" @ 3" Steel H Piles										8
8" @ 3" Steel H Piles										2

PROJECT NO. 4863
 COUNTY
 STATION: 51 + 31.65
 NASH DR. EXT. OVER DAWSON
 STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 SUBSTRUCTURE
 END BENT No. 2
 APRIL 1953

SPECIAL
 DESIGNED BY: Edward J. ... DATE: APRIL 1953
 DRAWN BY: ... DATE: APRIL 1953
 CHECKED BY: ... DATE: APRIL 1953