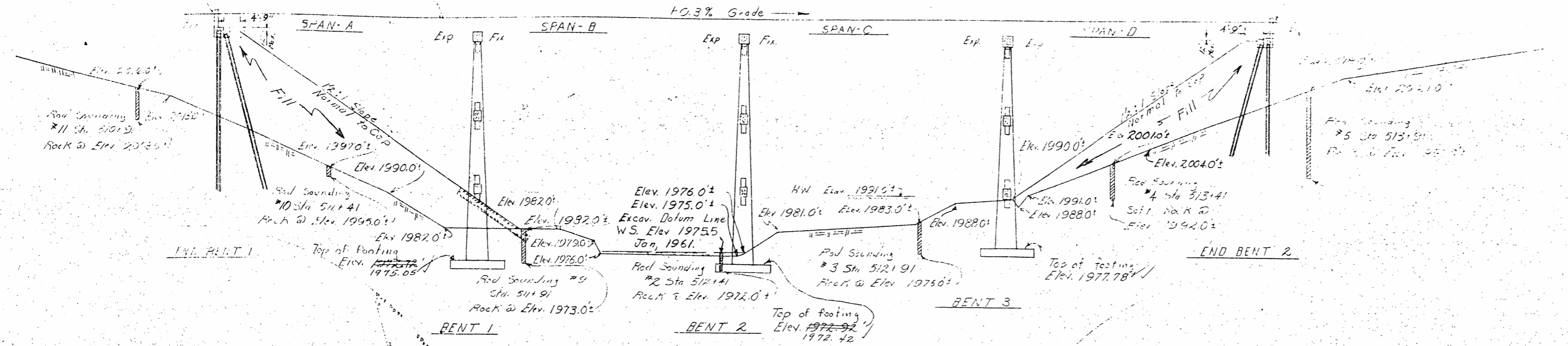


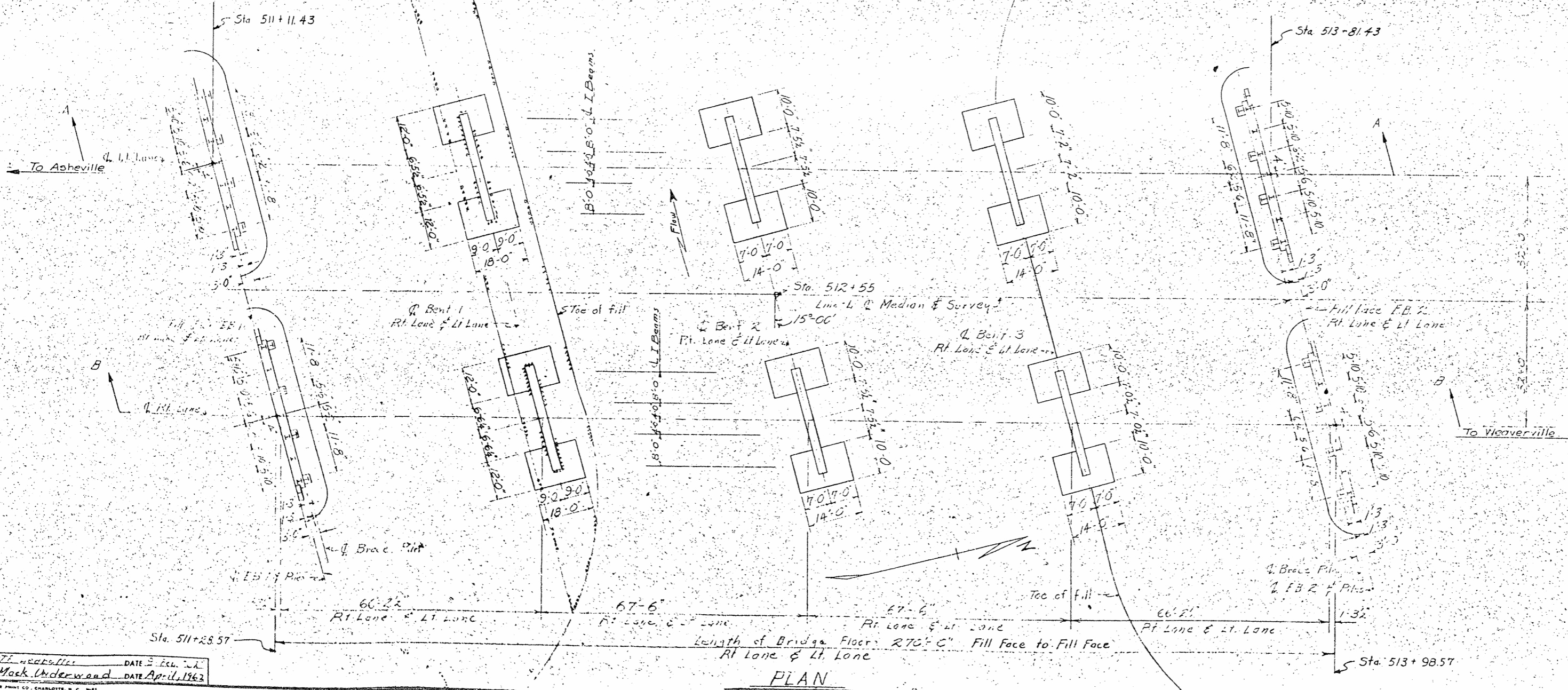
5  
2030  
5  
2020  
5  
2010  
5  
2000  
5  
990  
5  
980  
5  
970  
5  
960  
5  
950

Fill Face End Bent 1  
Sta 511+11.43  
Cr. Elev. 2034.31

Fill Face End Bent 2  
Sta 513+81.45  
Cr. Elev. 2035.12



SECTION ALONG Q LEFT LANE  
BENTS & END BENTS on SECTION-AA



PLAN

DESIGNED BY: *[Signature]* DATE: *[Date]*  
CHECKED BY: *[Signature]* DATE: April, 1963

370  
373  
PROJECT NO. 2-19066-01  
BUNCOMBE COUNTY  
STATION: 512+55 Q. MED.

STATE OF NORTH CAROLINA		DATE	BY
STATE HIGHWAY COMMISSION			
GENERAL DRAWING			
TRIAL BRIDGES OVER REEMS CREEK ON PROPOSED US19 & US23 BETWEEN ASHEVILLE & WEAVERVILLE			
FEB. 1962			
228		766	



PROJECT NO.	STATE	PROJ. NO.
81906601	N.C.	81906601
FA. Proj. SF-13-1 (101)		

NOTES

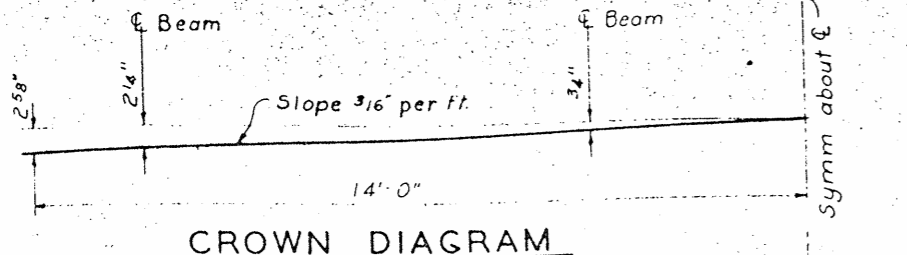
Assumed Live Load H20-S16 44 or Alternate Loading

Concrete in Compression 110 lbs per sq. in.  
 Reinforcing Steel in Tension 20000 lbs per sq. in.  
 Stress in Extreme Fiber of Structural Steel 20,000 lbs per sq. in.

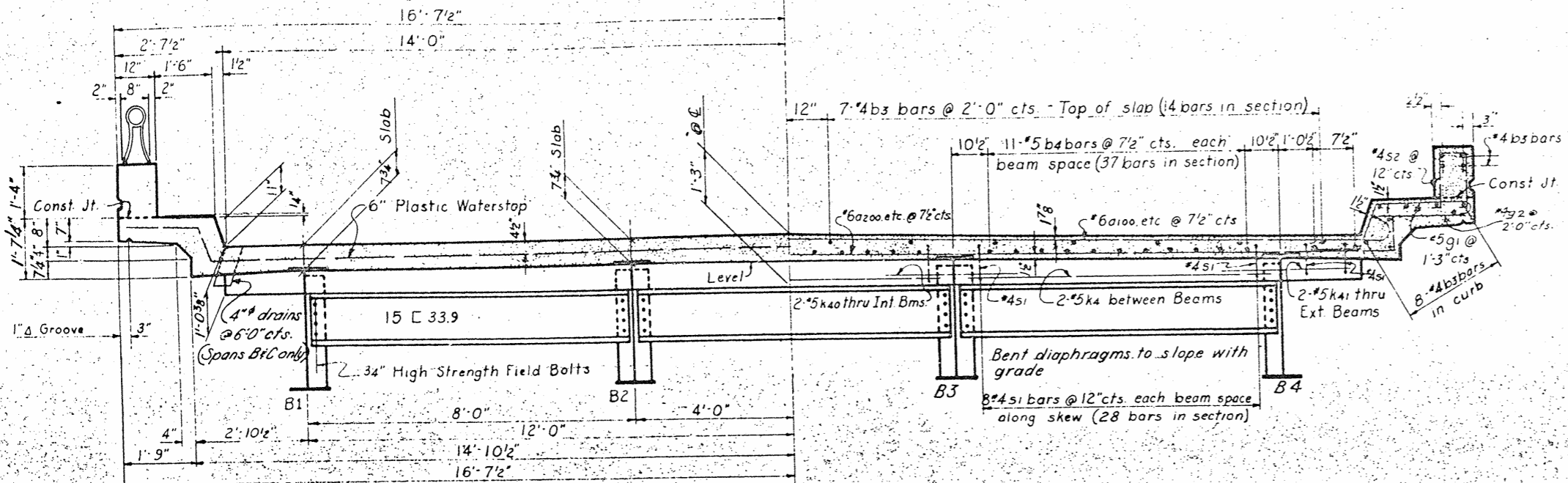
For other Design Data and General Notes, See Sheet 5-N

For bars indicated and no bar mark shown, see Concrete Plan for the different spans

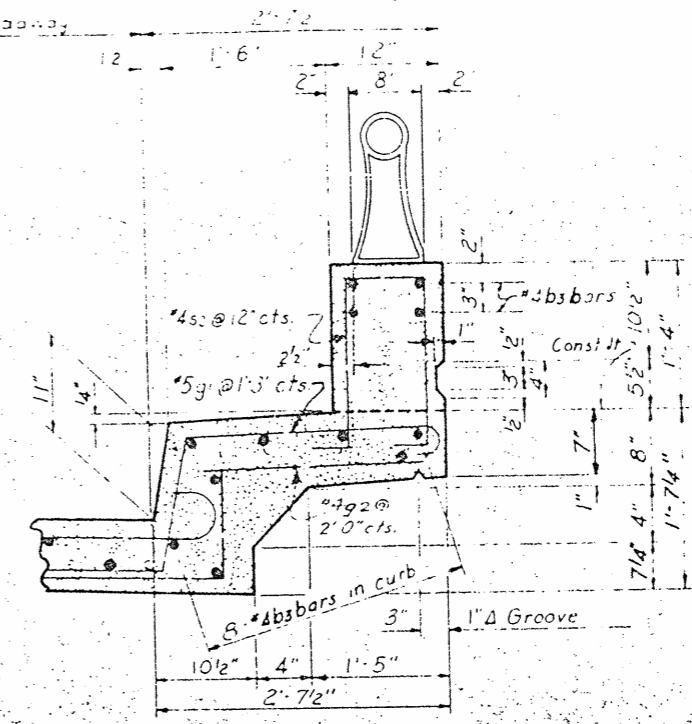
Expansion joints to be kept free of concrete and sealed with AP5 Asphalt Cement



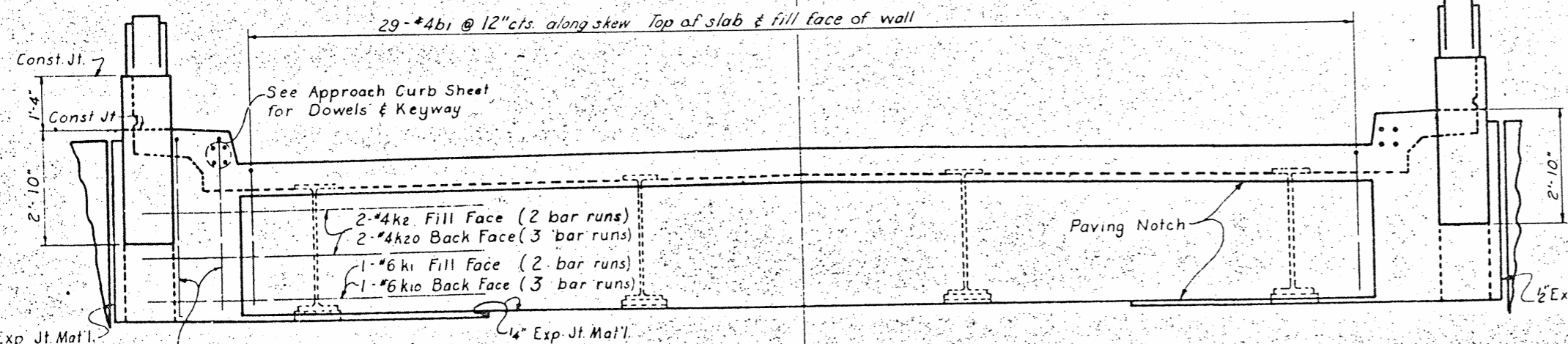
CROWN DIAGRAM



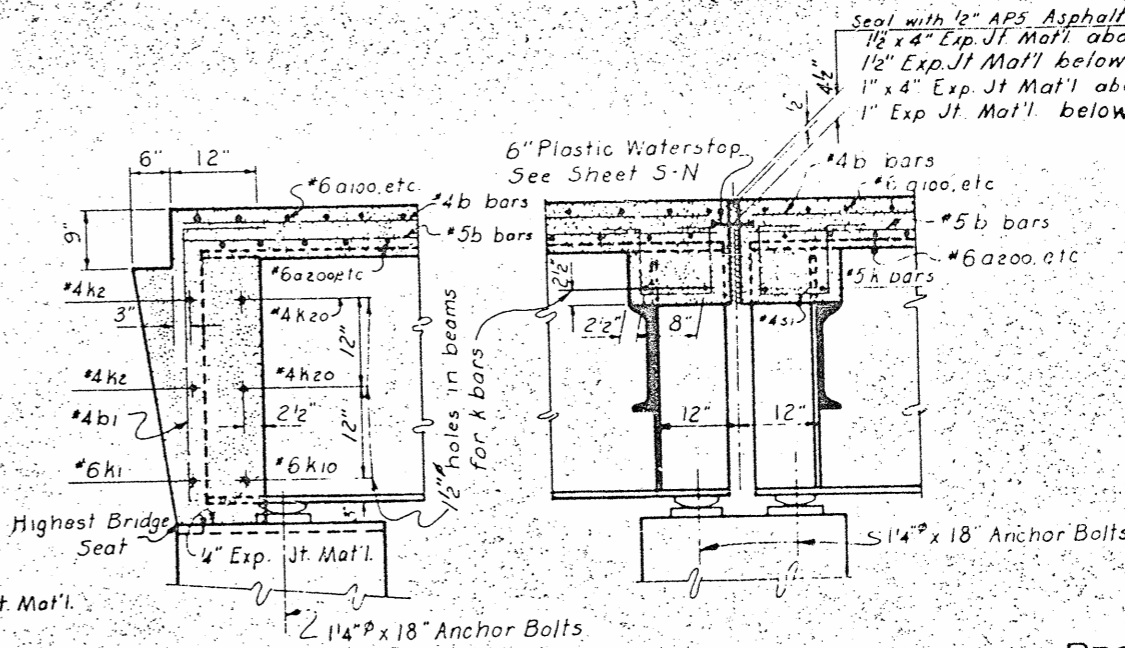
TYPICAL SECTION SHOWING DIAPHRAGMS AT BENTS



CURB & RAIL SECTION



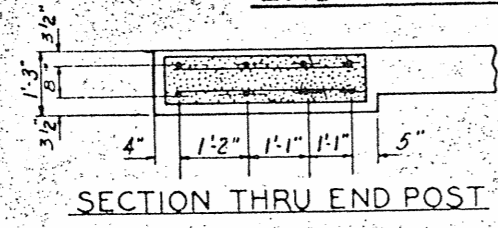
END ELEVATION



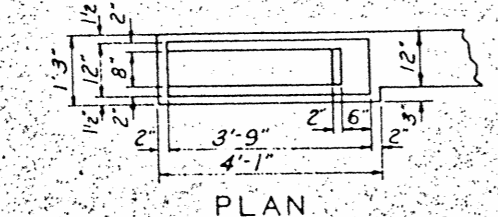
SECTION-A-A

SECTION-B-B

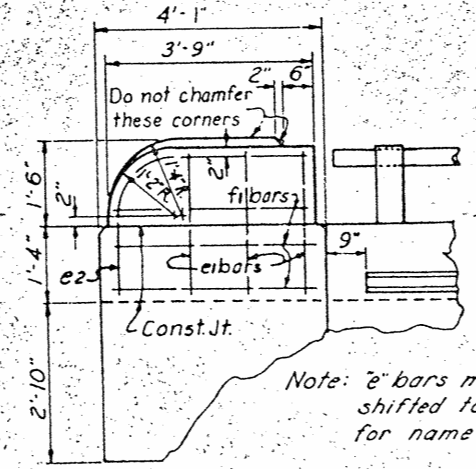
PROJECT NO. 81906601  
 BUNCOMBE COUNTY  
 STATION: 512 + 55 & Median



SECTION THRU END POST



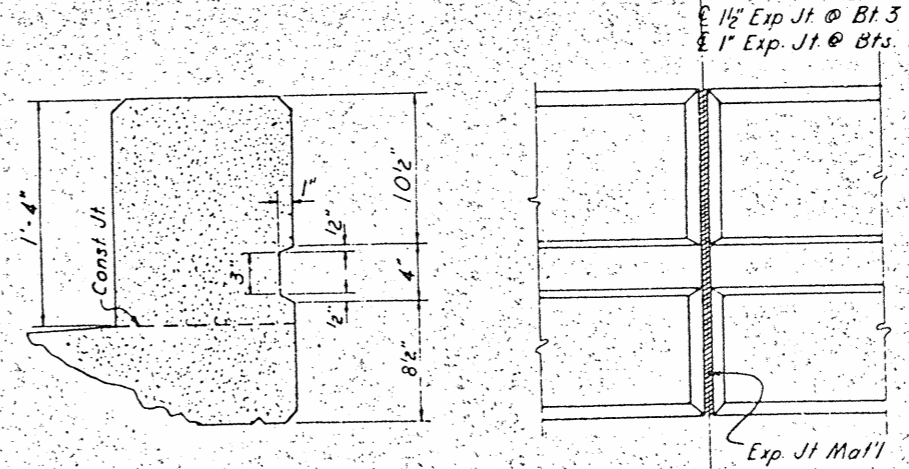
PLAN



ELEVATION

Note: 2" bars may be shifted to clear for name plate

END POST DETAILS



DETAIL RAIL BASE GROOVE

LEFT & RIGHT LANES

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION

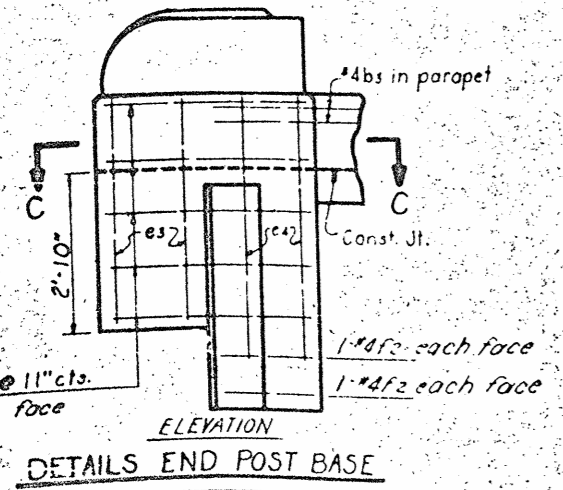
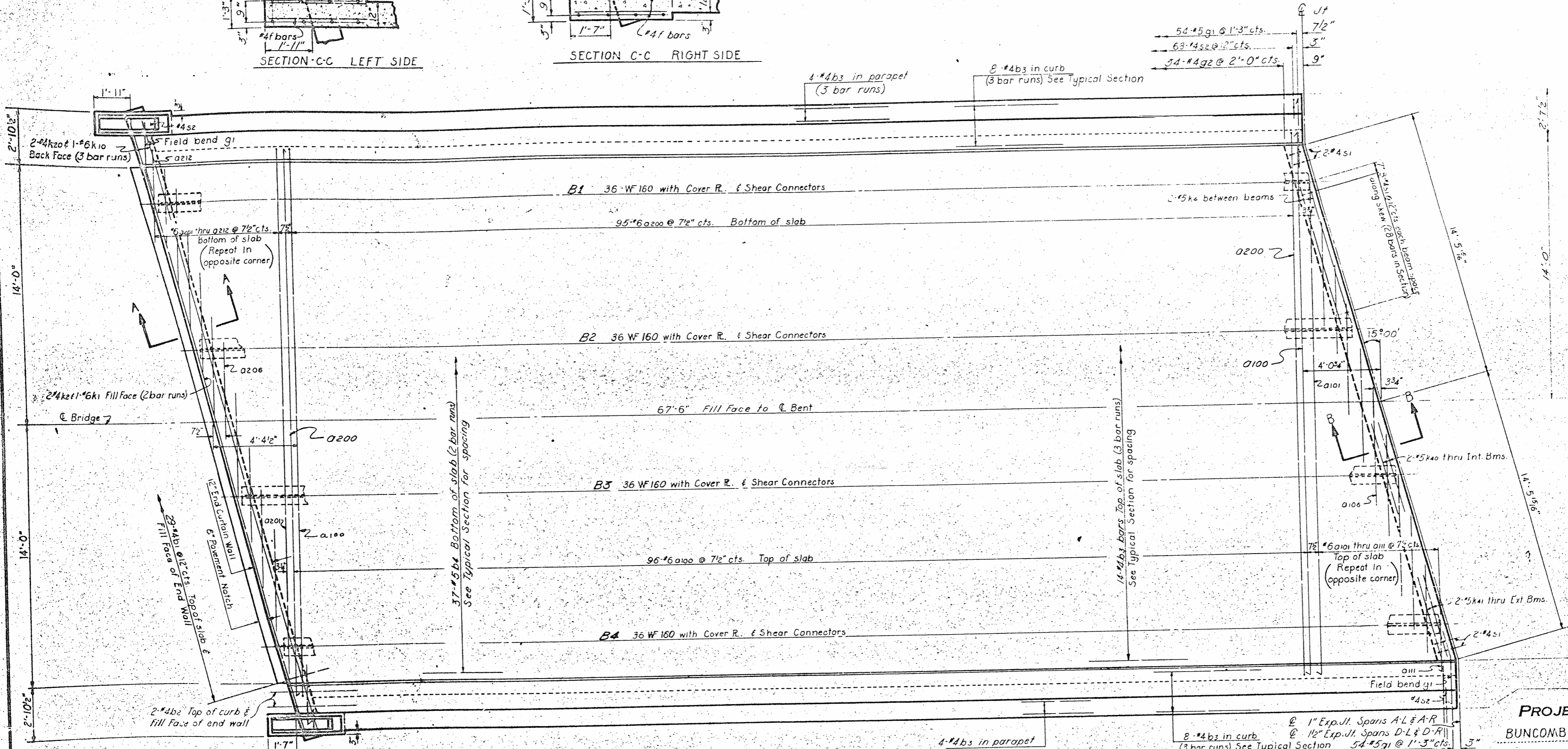
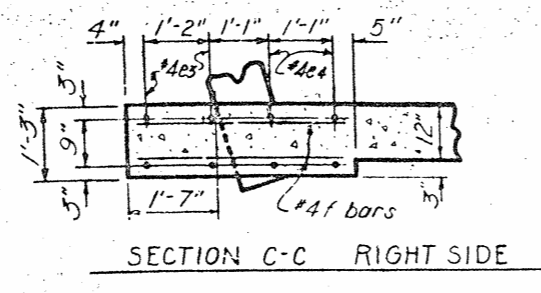
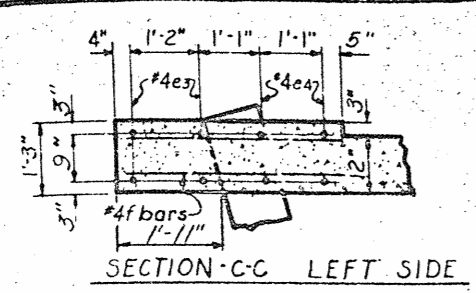
STANDARD TYPICAL SECTIONS  
 28' ROADWAY ~ 18" CURBS ~ 15° R.H. SKEW  
 4-STEEL BEAMS ~ H20-S16 L.L.  
 1-BAR METAL RAIL-FOR CONVENTIONAL WINGS

AUGUST 1961

SPECIAL	DRAWN BY <i>Wm Kenneth Creech</i>	DATE <i>January 1962</i>
	CHECKED BY <i>Alvin L. Ligon</i>	DATE <i>April 1962</i>
STANDARD	DRAWN BY <i>Earl J. Smith</i>	DATE <i>October 1961</i>
	CHECKED BY <i>Earl J. Smith</i>	DATE <i>July 1961</i>

S-87

228 F66



NOTE: For End Post Details, see Typical Section Standard.

DEAD LOAD DEFLECTION

	INT.	EXT.
Deflection due to weight of beams	4"	4"
Deflection due to superimposed dead load	1 1/8"	1 5/8"
Total dead load deflection	1 7/8"	1 9/8"

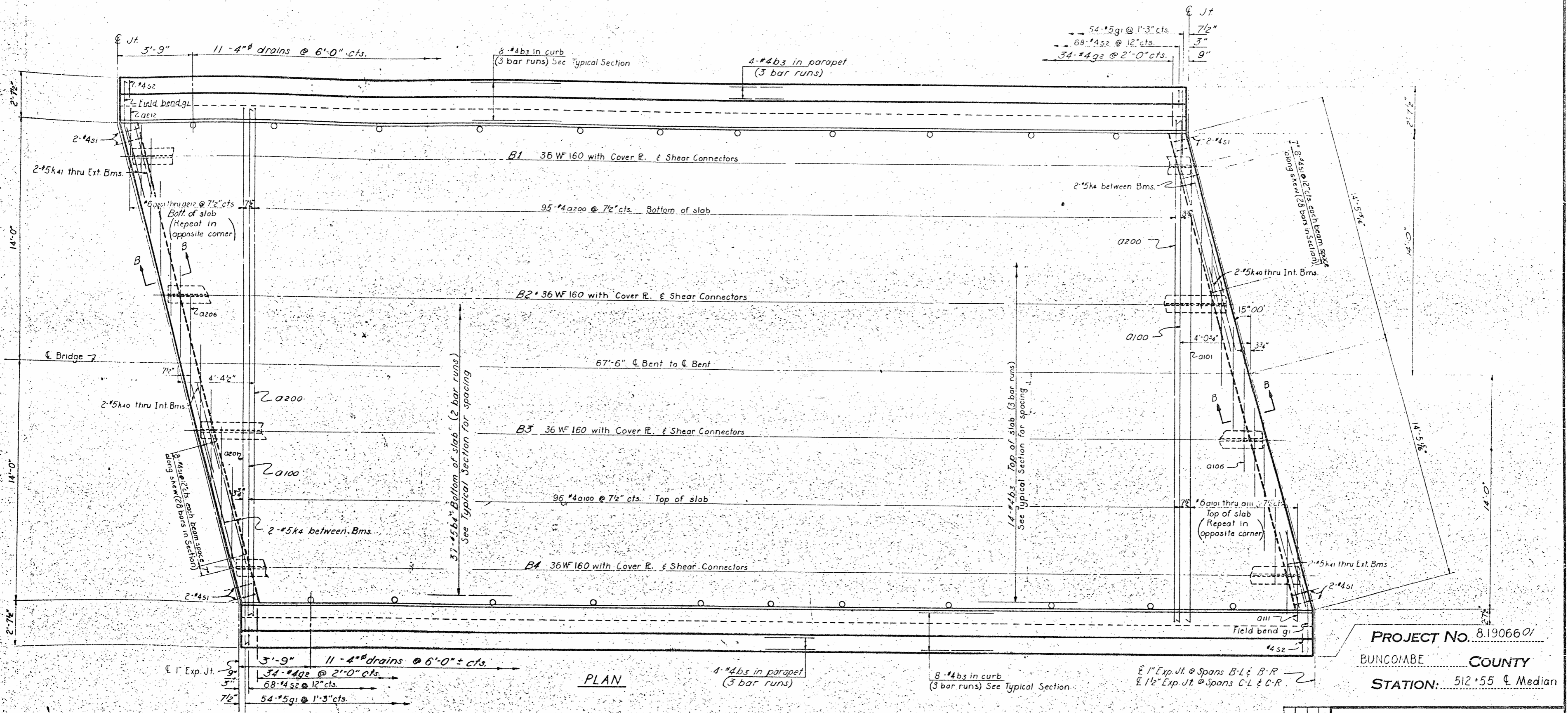
All beams to be shop cambered

PROJECT No. 8.1906601  
BUNCOMBE COUNTY  
STATION: 512+55 @ Median

STATE OF NORTH CAROLINA  
STATE HIGHWAY COMMISSION  
RALEIGH  
SUPERSTRUCTURE  
PLAN  
SPANS A-L, A-R; D-L & D-R  
JANUARY 1962

REVISION	DATE

228 #66



PLAN

DEAD LOAD DEFLECTION

Deflection due to weight of beam	4"	4"
Deflection due to weight of superimposed dead load	1 1/8"	1 5/16"
Total dead load deflection	1 3/8"	1 9/16"

All beams to be shop cambered

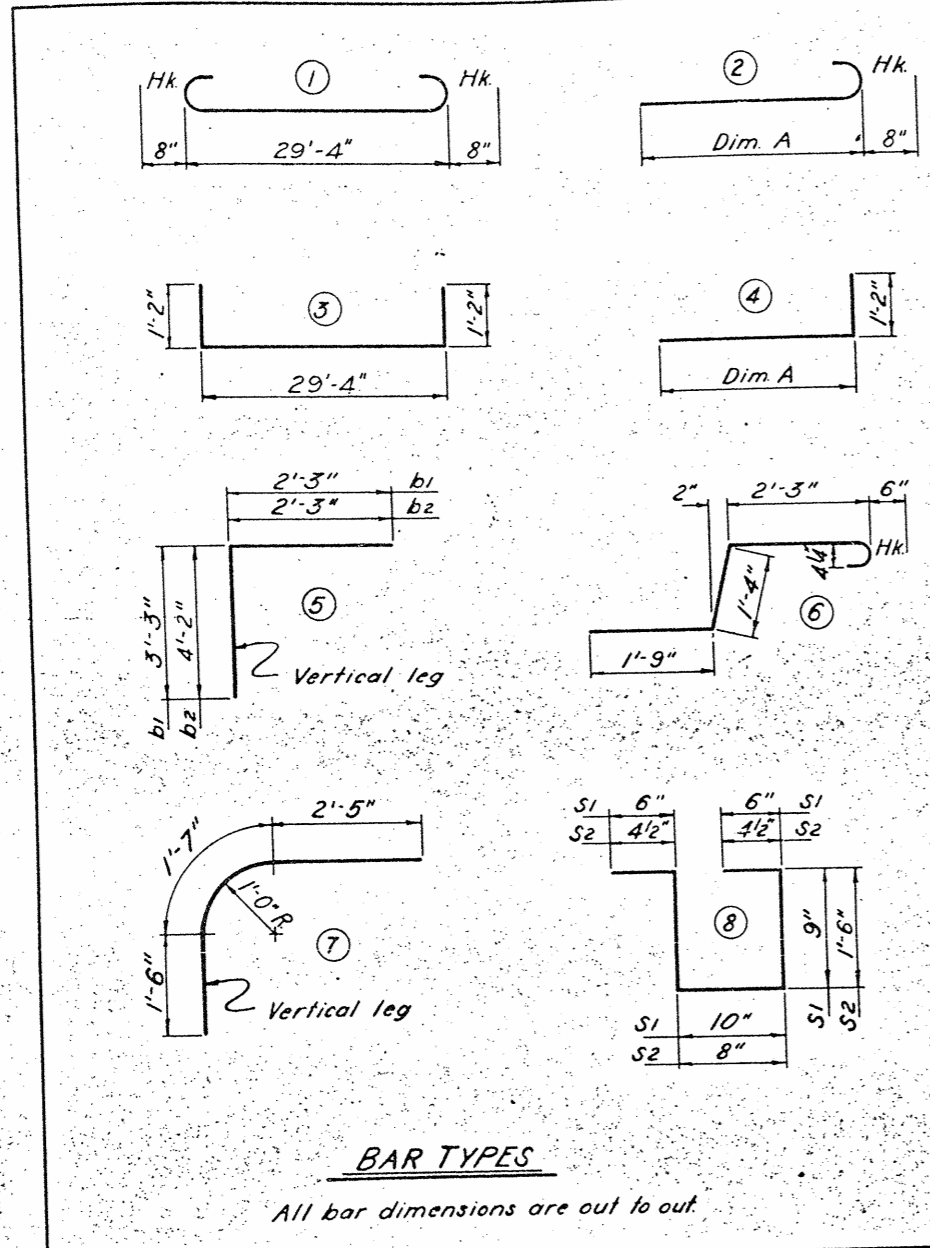
PROJECT NO. 8.1906601  
 BUNCOMBE COUNTY  
 STATION: 512+55 & Median

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 RALEIGH  
 SUPERSTRUCTURE  
 PLAN  
 SPANS B-L, B-R, C-L, & C-R  
 JANUARY 1962

DRAWN BY Wm Kenneth Creech DATE January 1962  
 CHECKED BY Mack Underwood DATE April 1962

REVISION	DATE	BY	DESCRIPTION

228



**BAR SCHEDULE FOR ONE SUPERSTRUCTURE (2 Reqd)**

Bar	No.	Size	Type	Dim. A	Length	Weight	Bars Per Span			
							A	B	C	D
a100	384	#6	1	—	30'-8"	17,688	96	96	96	96
a101	8	#6	2	26'-8"	27'-4"	328	2	2	2	2
a102	8	#6	2	24'-4"	25'-0"	300	2	2	2	2
a103	8	#6	2	22'-0"	22'-8"	272	2	2	2	2
a104	8	#6	2	19'-8"	20'-4"	244	2	2	2	2
a105	8	#6	2	17'-4"	18'-0"	216	2	2	2	2
a106	8	#6	2	15'-0"	15'-8"	188	2	2	2	2
a107	8	#6	2	12'-8"	13'-4"	160	2	2	2	2
a108	8	#6	2	10'-4"	11'-0"	132	2	2	2	2
a109	8	#6	2	8'-0"	8'-8"	104	2	2	2	2
a110	8	#6	2	5'-8"	6'-4"	76	2	2	2	2
a111	8	#6	2	3'-4"	4'-0"	48	2	2	2	2
a200	380	#6	3	—	31'-8"	18,074	95	95	95	95
a201	8	#6	4	27'-10"	28'-11"	347	2	2	2	2
a202	8	#6	4	25'-6"	26'-8"	320	2	2	2	2
a203	8	#6	4	23'-2"	24'-4"	292	2	2	2	2
a204	8	#6	4	20'-10"	22'-0"	264	2	2	2	2
a205	8	#6	4	18'-6"	19'-8"	236	2	2	2	2
a206	8	#6	4	16'-2"	17'-4"	208	2	2	2	2
a207	8	#6	4	13'-10"	15'-0"	180	2	2	2	2
a208	8	#6	4	11'-6"	12'-8"	152	2	2	2	2
a209	8	#6	4	9'-2"	10'-4"	124	2	2	2	2
a210	8	#6	4	6'-10"	8'-0"	96	2	2	2	2
a211	8	#6	4	4'-6"	5'-8"	68	2	2	2	2
a212	8	#6	4	2'-2"	3'-4"	40	2	2	2	2
b1	58	#4	5	—	5'-6"	213	29	—	—	29
b2	8	#4	5	—	6'-5"	34	4	—	—	4
b3	456	#4	Str.	—	23'-4"	7,108	114	114	114	114
b4	296	#5	Str.	—	34'-7"	10,677	74	74	74	74
e1	24	#4	Str.	—	2'-6"	40	12	—	—	12
e2	8	#4	7	—	5'-6"	29	4	—	—	4
e3	16	#4	Str.	—	3'-10"	41	8	—	—	8
e4	16	#4	Str.	—	5'-8"	61	8	—	—	8
f1	48	#4	Str.	—	3'-6"	112	24	—	—	24
f2	16	#4	Str.	—	1'-11"	20	8	—	—	8
g1	432	#5	6	—	5'-10"	2,628	108	108	108	108
g2	272	#4	Str.	—	2'-0"	363	68	68	68	68
k1	4	#6	Str.	—	18'-5"	111	2	—	—	2
k10	6	#6	Str.	—	13'-0"	117	3	—	—	3
k2	8	#4	Str.	—	18'-1"	97	4	—	—	4
k20	12	#4	Str.	—	12'-6"	100	6	—	—	6
k4	36	#5	Str.	—	7'-11"	297	6	12	12	6
k40	24	#5	Str.	—	3'-9"	94	4	8	8	4
k41	24	#5	Str.	—	4'-0"	100	4	8	8	4
s1	168	#4	8	—	3'-4"	374	28	56	56	28
s2	542	#4	8	—	4'-5"	1,599	135	136	136	135

**SUPERSTRUCTURE QUANTITIES**  
FOR ONE BRIDGE (2 Required)

Reinforcing Steel	64,372 Lbs.
Class "A" Concrete	272.9 Cu Yds.
Structural Steel	216,450 Appar Lbs.
1 Bar Metal Rail	530.83 L.F.

PROJECT NO. 81906601  
BUNCOMBE COUNTY  
STATION: 512+55 E. Median

DRAWN BY: Wm. Kenneth Creech DATE: Febr., 1962  
CHECKED BY: Mack Underwood DATE: April, 1962

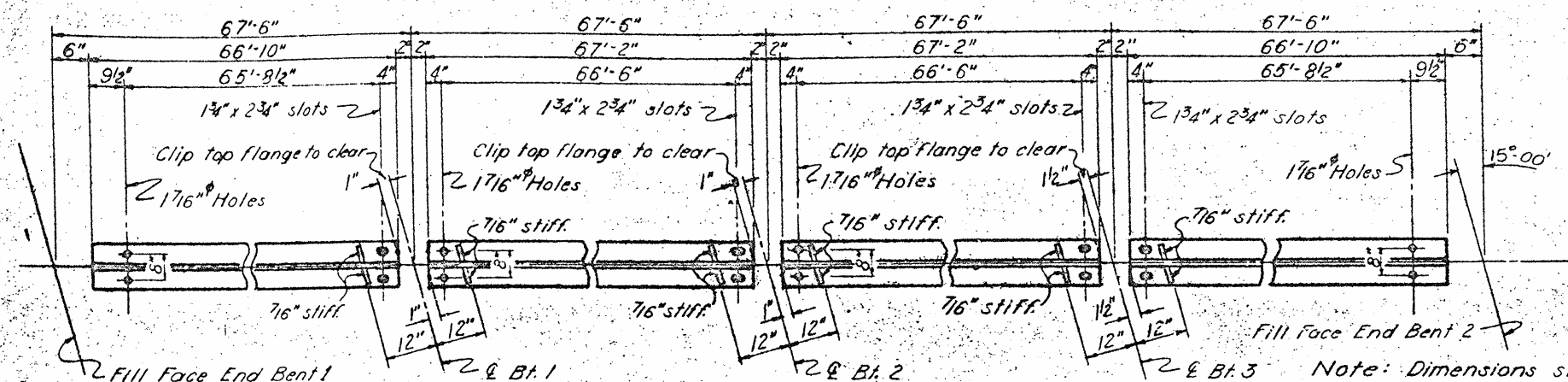
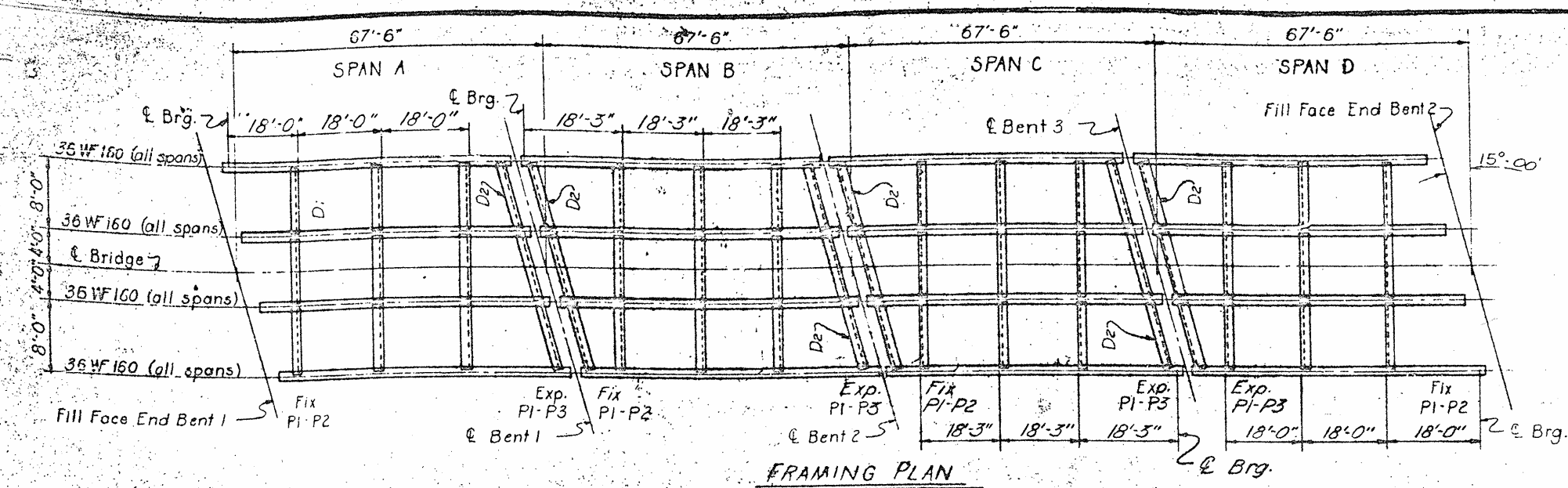
STATE OF NORTH CAROLINA  
STATE HIGHWAY COMMISSION  
RALEIGH

**SUPERSTRUCTURE**

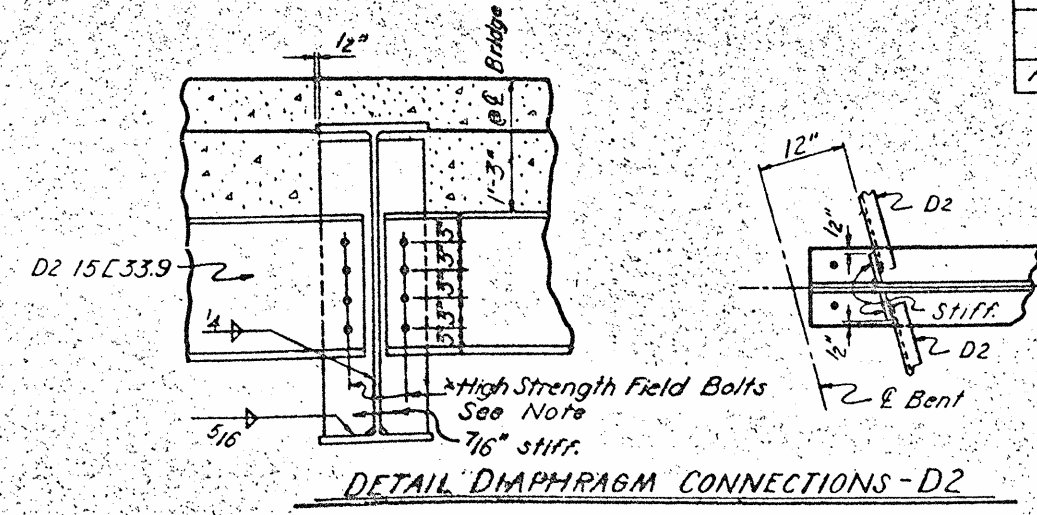
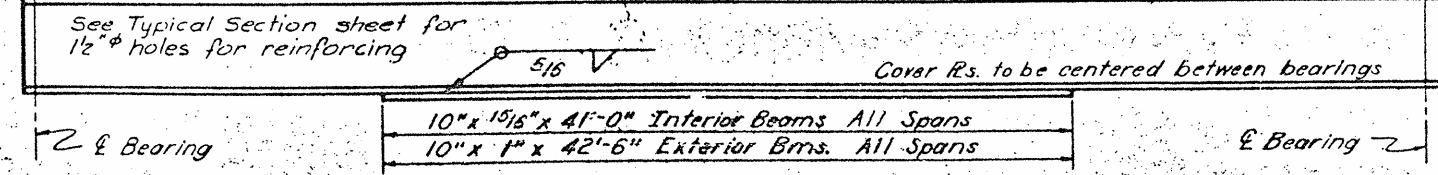
BILL OF MATERIAL  
RIGHT LANE & LEFT LANE

FEBRUARY 1962

SHEET NO. S-90  
TOTAL SHEETS 765  
228

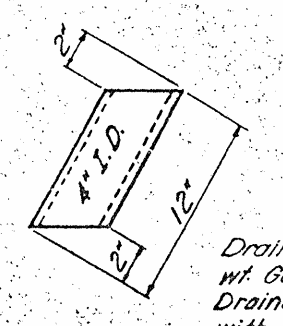


No. Studs Per Bm.	Span A	Span B	Span C	Span D	Notes	
(408)	5 spa @ 5"	8 spa @ 6"	8 spa @ 7 1/2"	7 spa @ 9"	4 spa @ 10 1/2"	Int. SPANS A-L, A-R, D-L, & D-R
(364)	13 spa @ 5"	5 spa @ 9"	5 spa @ 10 1/2"	7 spa @ 12"	8 spa @ 1 1/2"	Ext. SPANS B-L, B-R, C-L, & C-R
(412)	5 spa @ 5"	8 spa @ 6"	8 spa @ 7 1/2"	7 spa @ 9"	4 spa @ 10 1/2"	Int.
(364)	13 spa @ 5"	5 spa @ 9"	5 spa @ 10 1/2"	7 spa @ 12"	8 spa @ 1 1/2"	Ext.

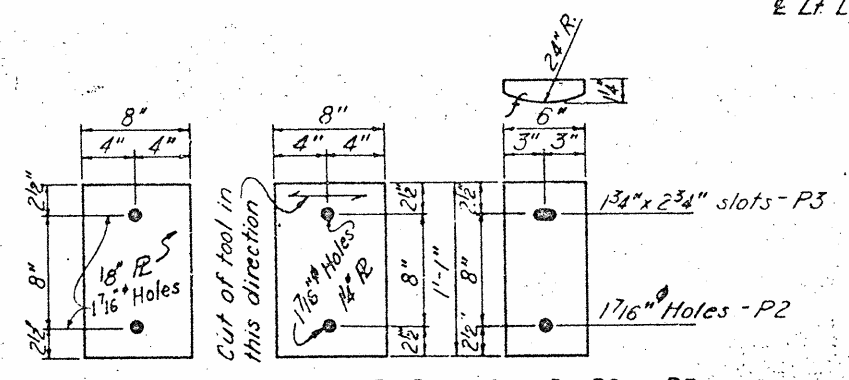
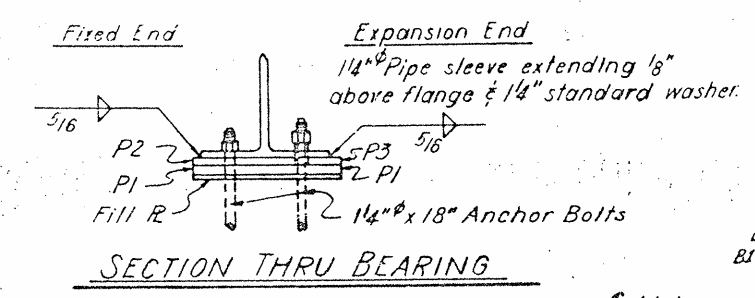
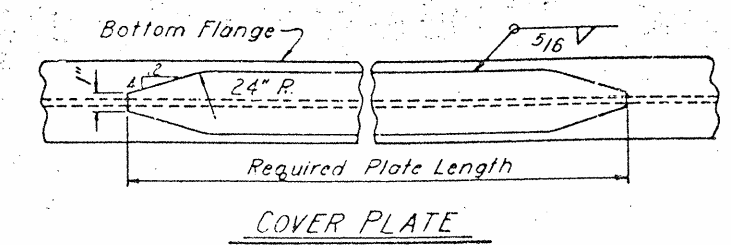


NOTE: Omit stiffeners on outside of exterior beam and at End Bents. Stiffeners to be vertical and parallel to bent &.

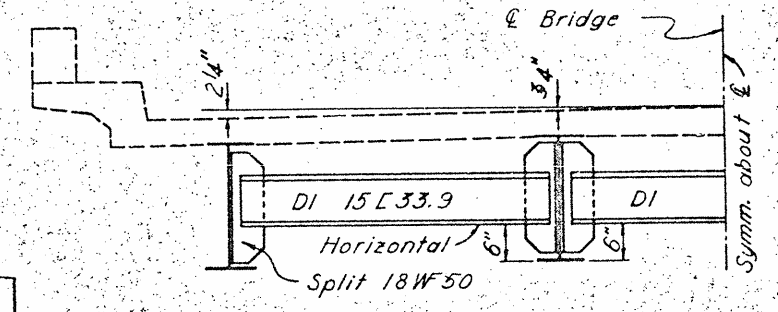
SPANS A,B,C,&D LEFT & Right Lanes	Total Dead Load Deflection	
	Int.	Ext.
All beams to be shop camber as follows:	1 3/8"	1 9/16"



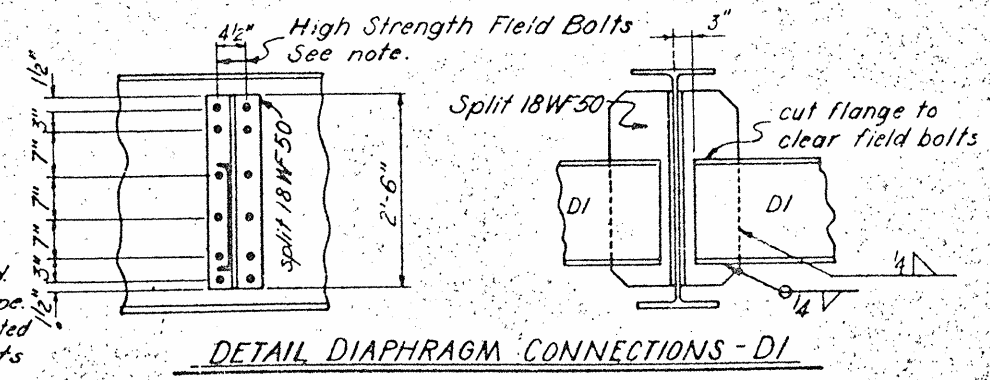
Drains to be std. w/ Galv. Steel Pipe. Drains to be painted with 2 field coats Alum. paint.  
Required: (For One Lane) - 22



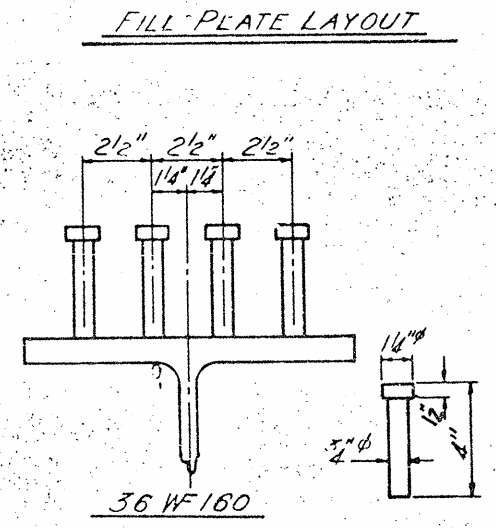
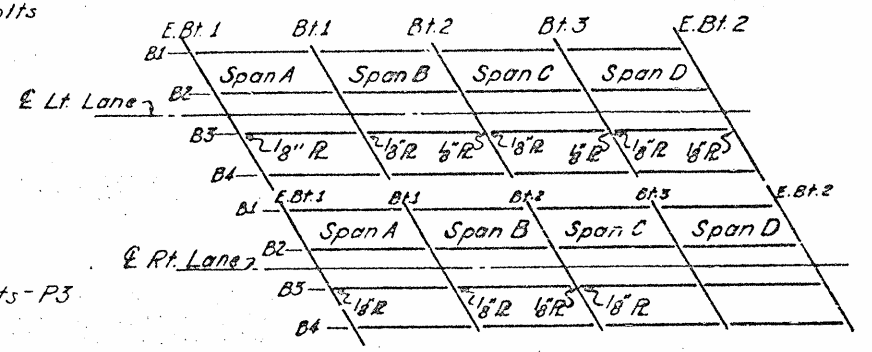
Required: (For One Lane)  
 P1 32'-8" x 14" x 1'-1" Plane finish to 14"  
 P2 18'-6" x 14" x 1'-1" As detailed  
 P3 15'-6" x 14" x 1'-1" As detailed  
 64 1 1/4" x 18" Anchor Bolts with hex nuts  
 Fill Rs. may be combined with masonry plates



HALF TYPICAL SECTION  
Showing Intermediate Diaphragm-D1



DETAIL DIAPHRAGM CONNECTIONS-D1



DETAIL SHEAR STUDS

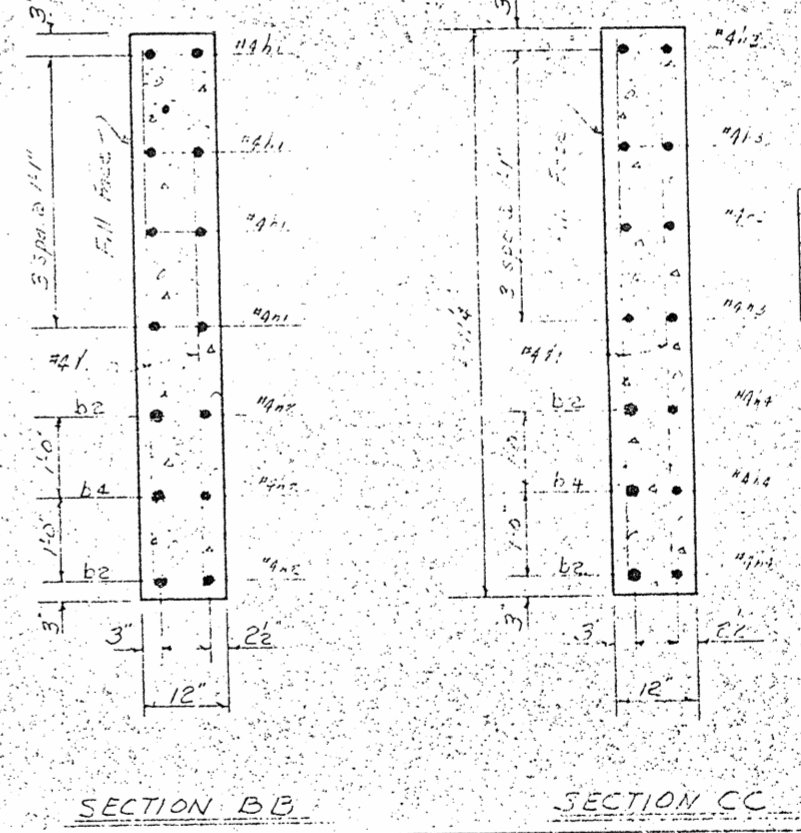
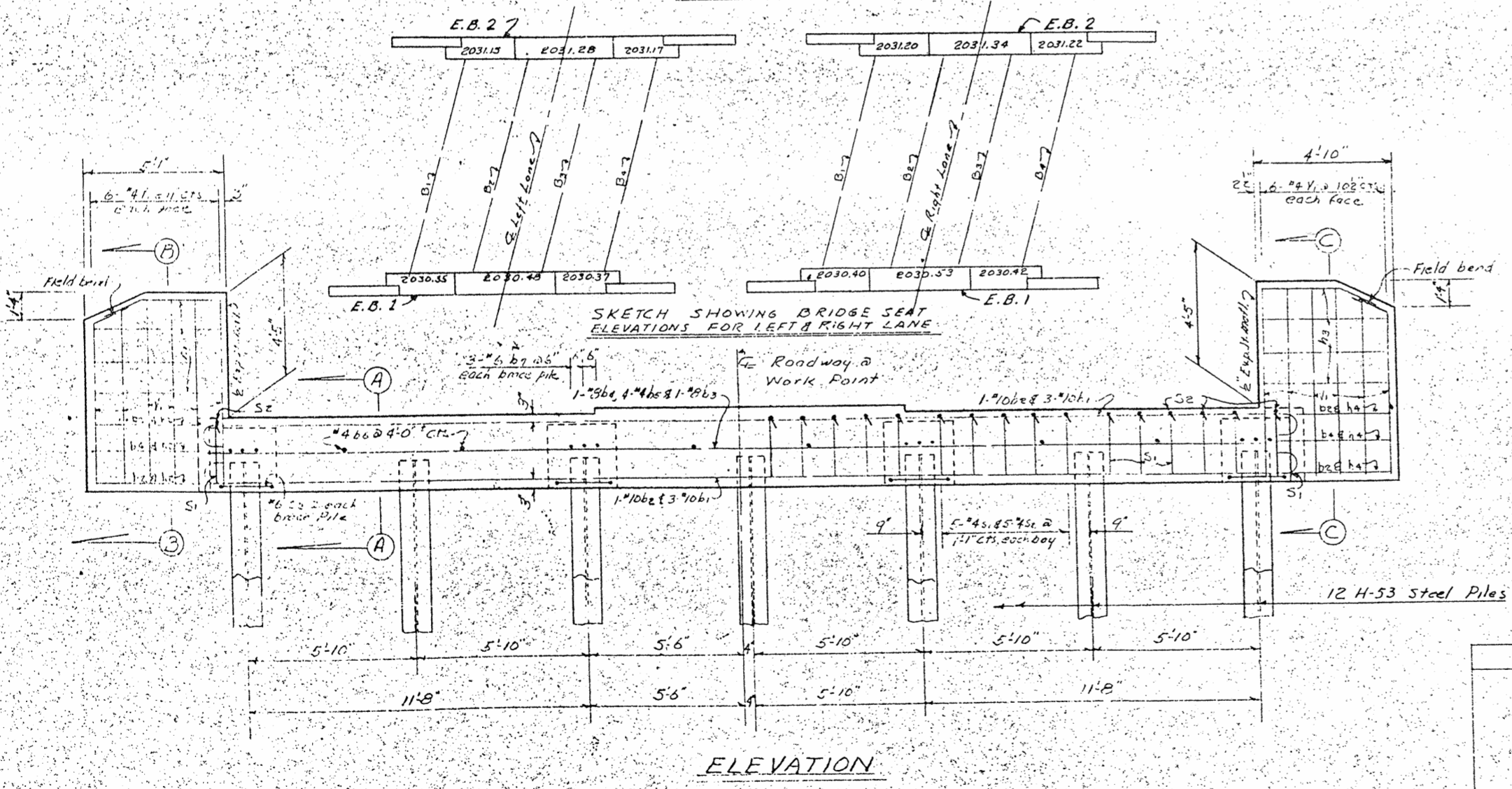
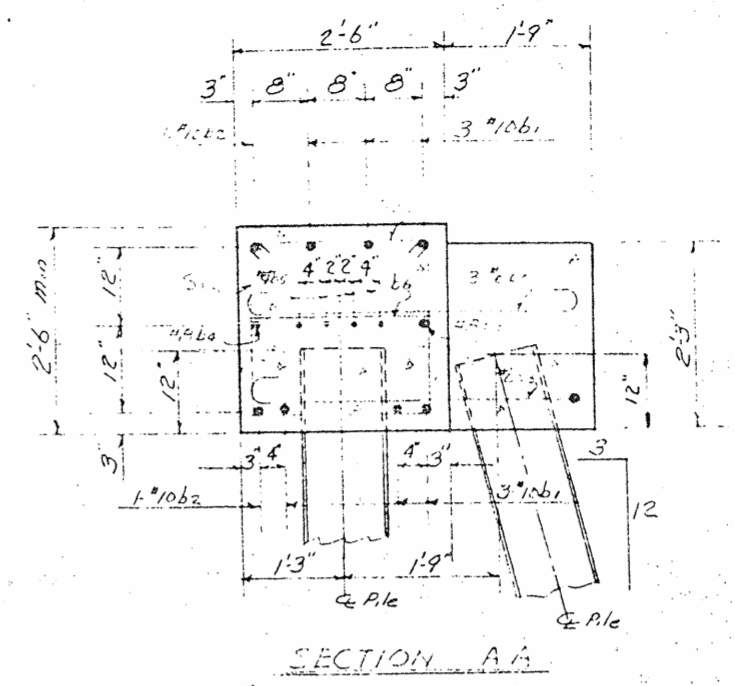
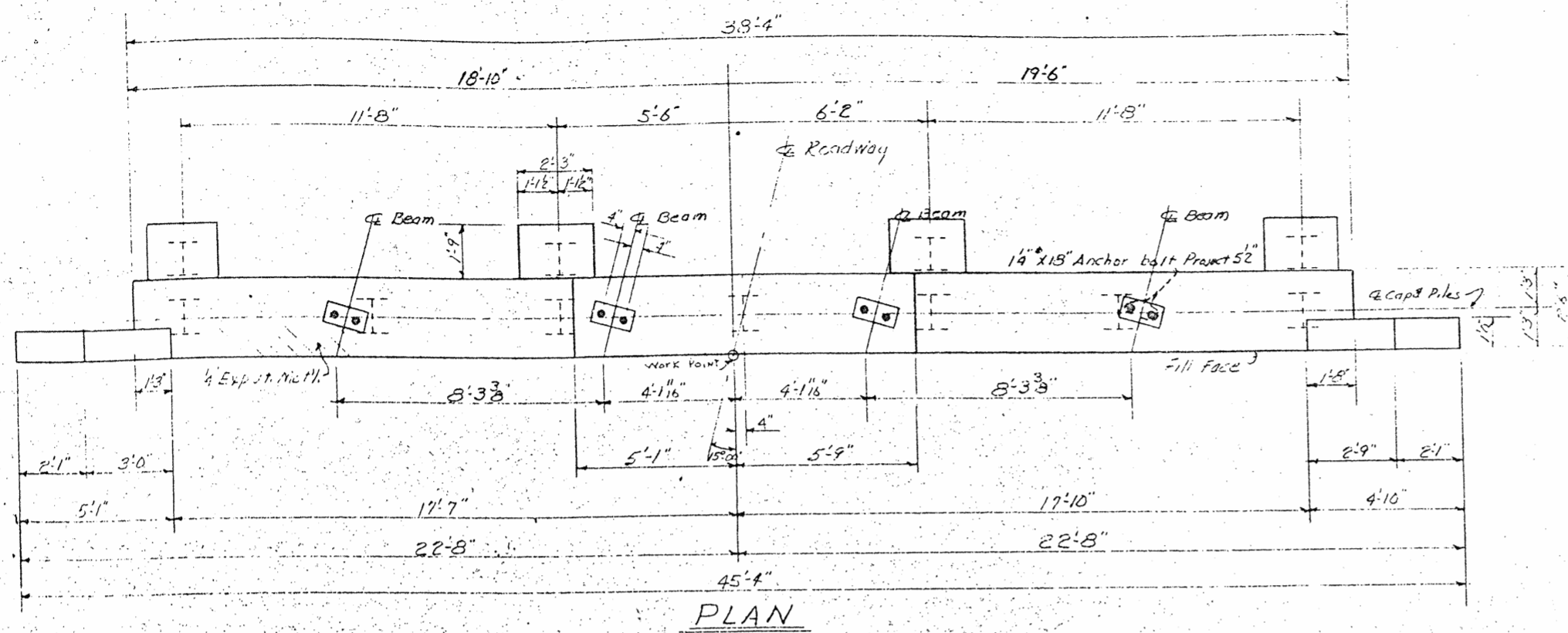
NOTES:  
 All beams & cover plates shall be of ASTM A36 grade structural steel. See S-N Sheet.  
 Field connections of diaphragms to beams shall be bolted using 3/4" high strength bolts in accordance with the Specifications and the Special Provisions.  
 See concrete sections for location of web holes in beams.

PROJECT No. 81906601  
 BUNCOMBE COUNTY  
 STATION: 512+55 @ Median

DATE		BY		CHECKED		APPROVED	

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 RALEIGH  
 STRUCTURAL STEEL DETAILS  
 FOR LEFT OR RIGHT LANES  
 FEBRUARY 1962

SHEET NO. 5-91  
 TOTAL SHEETS 7-68  
 228



BILL OF MATERIAL					
FOR ONE END BENT 4 REQD					
BAR NO	NO	SIZE	TYPE	LENGTH	WEIGHT
a1	6	#12	1	40'-8"	1050
b1	2	#10	STR	44'-10"	386
b2	1	#8	STR	37'-10"	101
b3	1	#8	STR	44'-10"	120
b5	8	#4	STR	19'-7"	105
b6	10	#4	STR	8'-2"	14
b7	12	#6	1	5'-3"	95
s1	32	#4	2	7'-3"	155
s2	32	#4	3	2'-11"	62
s3	4	#6	4	11'-7"	67
a1	8	#4	STR	4'-9"	25
a2	3	#4	STR	5'-2"	10
a3	8	#4	STR	4'-6"	24
a4	3	#4	STR	4'-9"	10
l1	24	#4	STR	6'-6"	104

- Class A concrete C.Y. 12.5
- Paint Steel Lbs 2328
- Pight Long
- E.B No 1 12 H-53 Steel Piles No 11 LF 32
- E.B No 2 12 H-53 Steel Piles No 11 LF 27
- Left Lane
- E.B No 1 12 H-53 Steel Piles No 11 LF 32
- E.B No 2 12 H-53 Steel Piles No 11 LF 27

**NOTE**  
 12 H-53 steel Piles to be driven to a minimum bearing capacity of 27 tons each  
 If pile splice is required, use detail shown for End Bent 1 Left Lane for Bridge at Station 454+65.0

PROJECT No. 8.1906601  
 BUNCOMBE COUNTY  
 STATION: 512+55 & Median

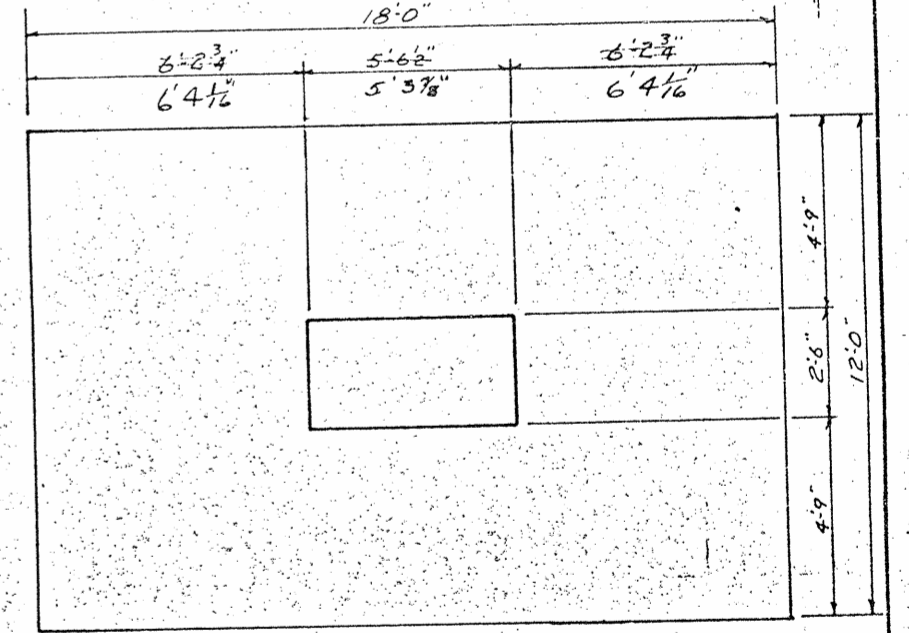
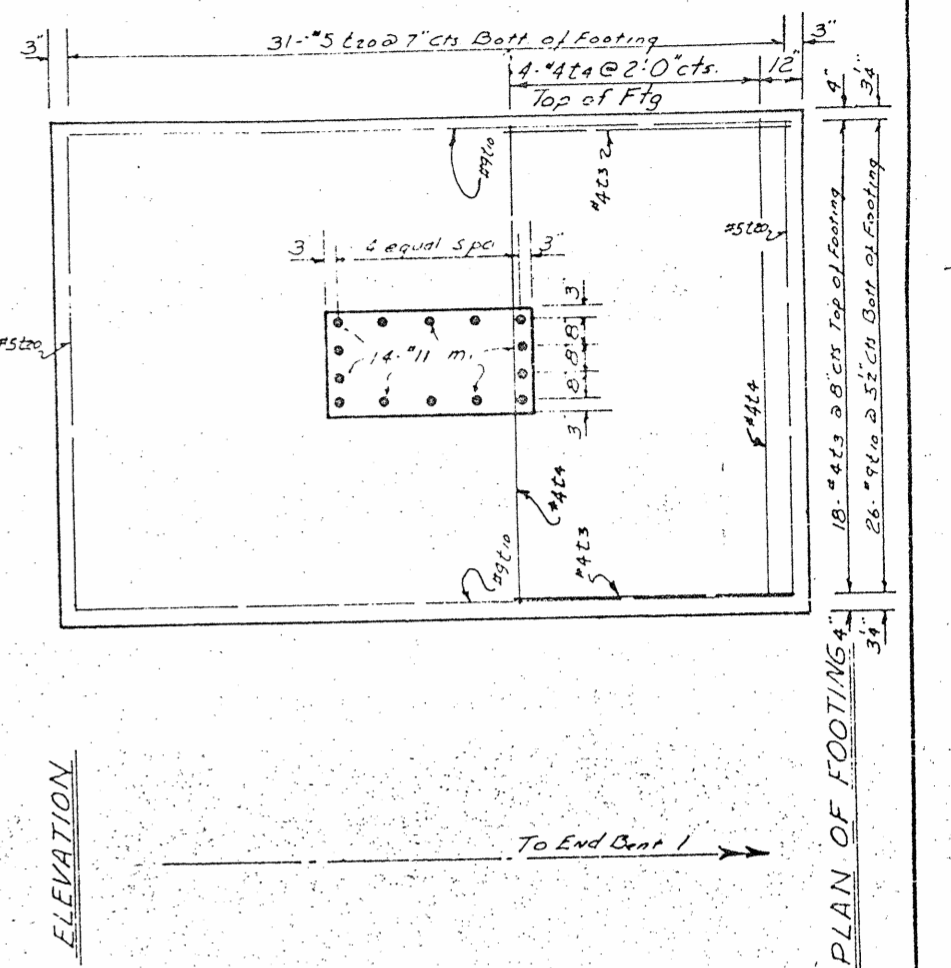
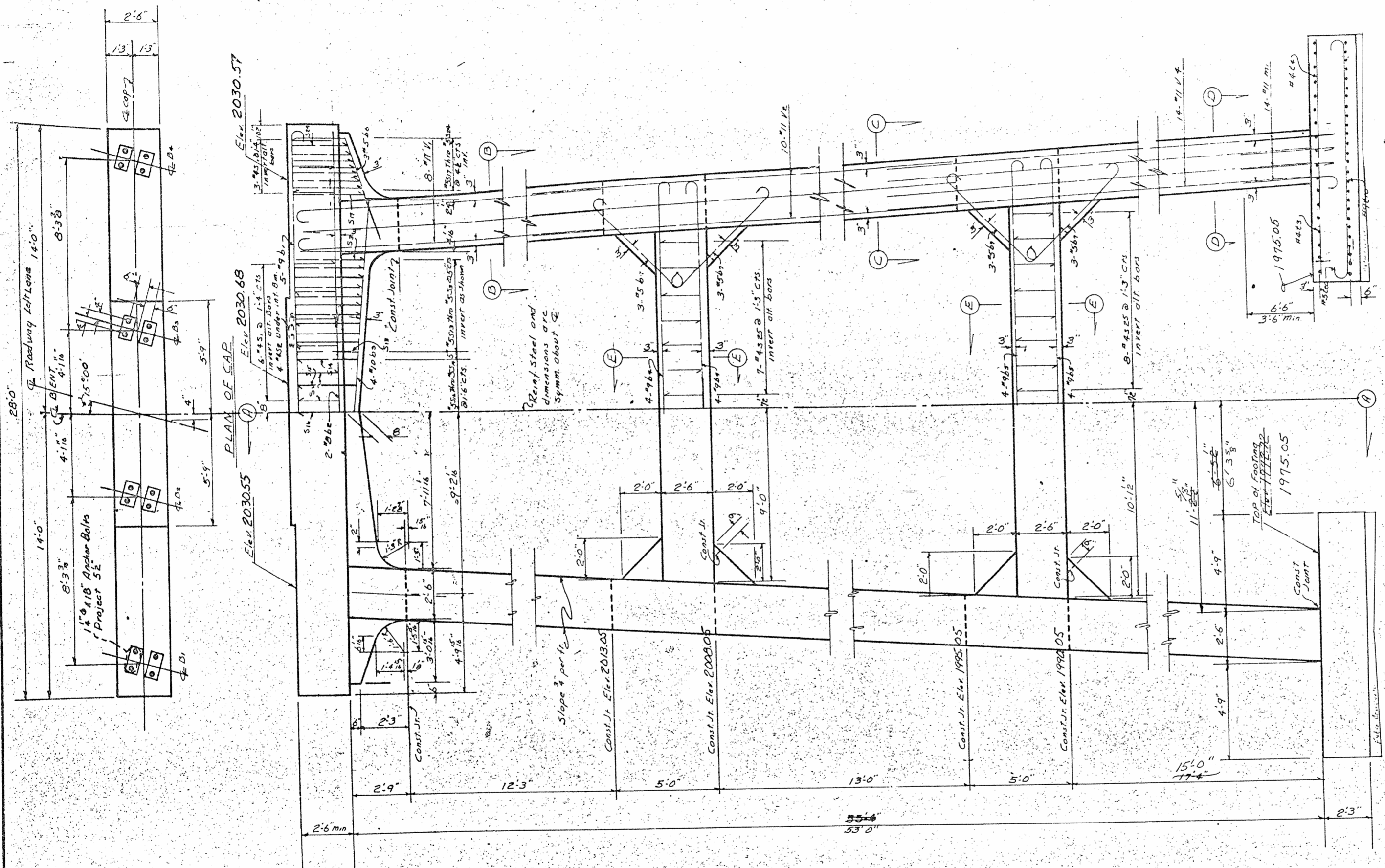
STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 RALEIGH  
 SUBSTRUCTURE  
 LEFT & RIGHT LANE  
 END BENTS No 1 & No 2

NO.	BY	DATE	REVISIONS			SHEET NO.	TOTAL SHEETS
			NO.	BY	DATE		
1			3			5-93	7
2			4			22A	7

All bar dimensions are out to out



FED. ROAD DIV. NO.	STATE	PROJECT NO.
3	N.C.	B.190660
F. A. PROJECT SF-13-1(101)		



PROJECT No. B.1906601  
 BUNCOMBE COUNTY  
 STATION: 512+55 & MED  
 Sheet 1 of 2

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 RALEIGH  
 SUBSTRUCTURE  
 LEFT LANE  
 BENT No 1

REVISED		NO.		BY		DATE	
1		3					
2		4					

DRAWN BY James N. Palmer DATE 19 Dec 1962  
 CHECKED BY Mack Underwood DATE April 1962

**BILL OF MATERIAL**  
BENT NO 1 LT. LANE

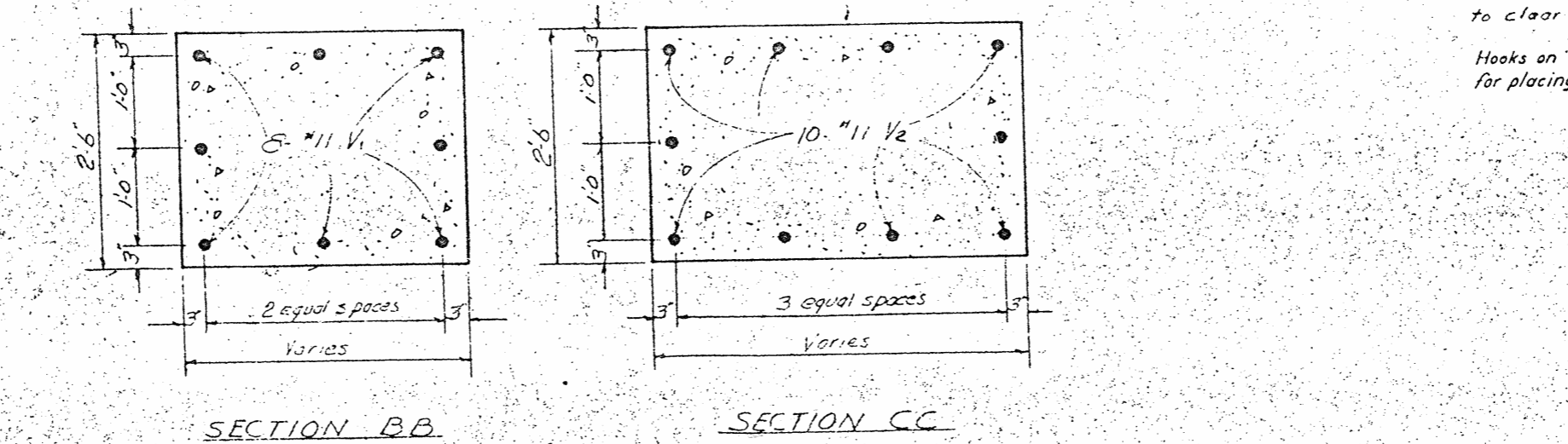
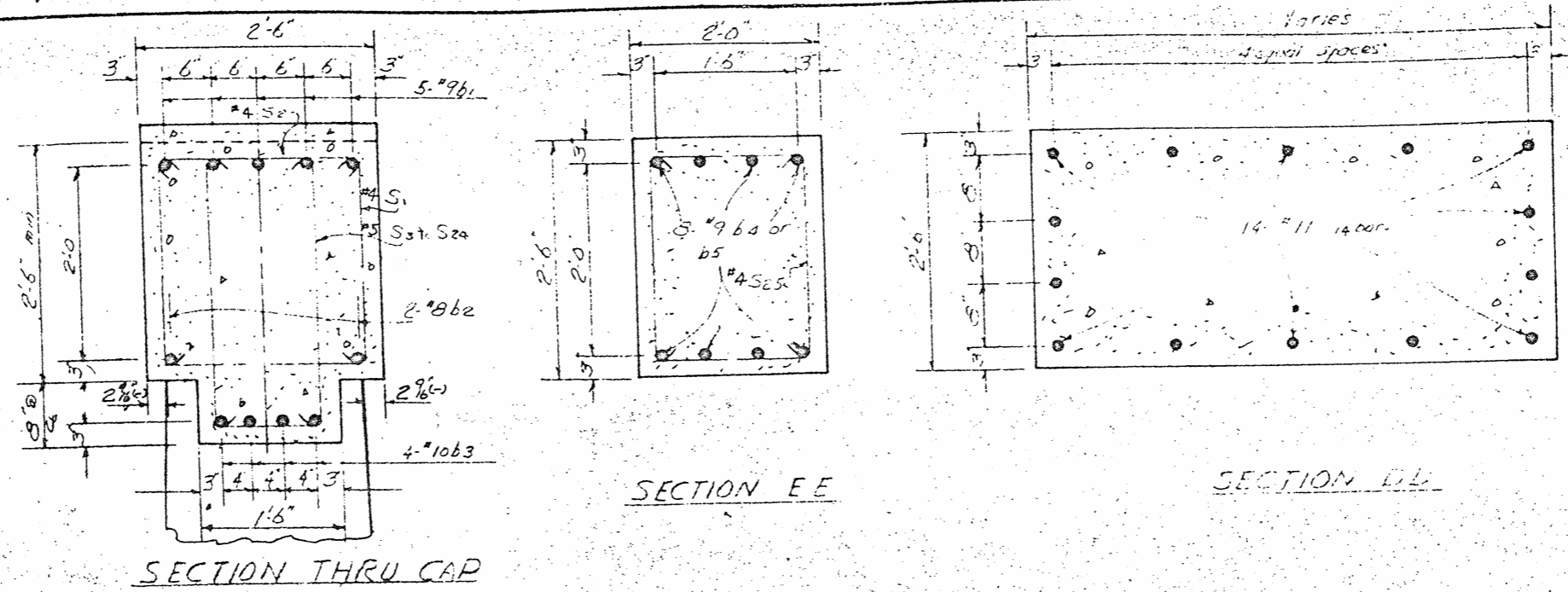
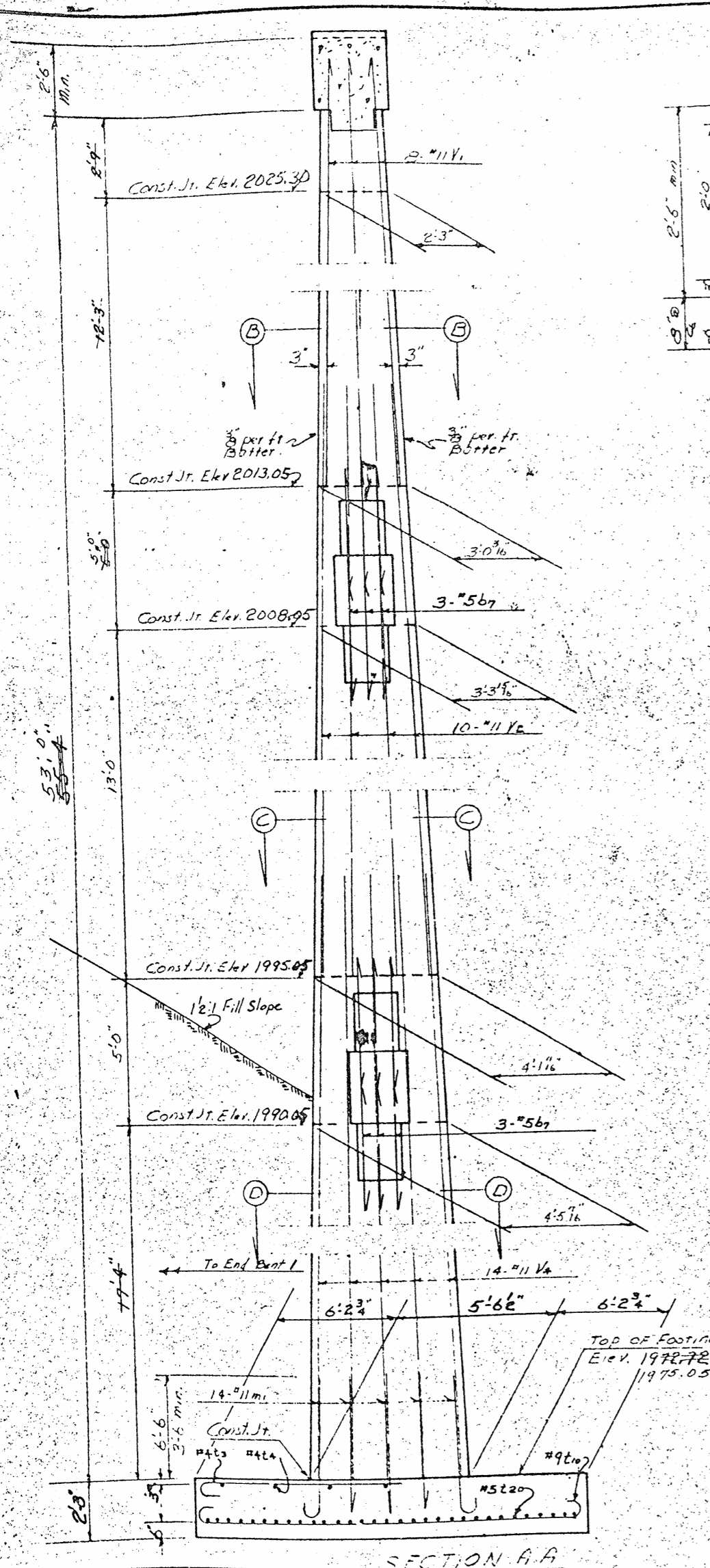
BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
b1	5	"9	1	35.0	515
b2	2	"5	Str	27.6	147
b3	4	"10	4	23.2	394
b4	8	"9	1	24.6	666
b5	8	"9	1	26.6	721
b6	6	"5	3	8.7	51
b7	24	"5	1	7.0	175
s1	18	"4	5	7.3	87
s2	9	"4	6	2.11	15
s3	2	"5	5	9.10	21
s4	2	"5	5	9.9	20
s5	2	"5	5	9.5	20
s6	2	"5	5	9.8	20
s7	2	"5	5	9.5	20
s8	2	"5	5	9.4	19
s9	2	"5	5	9.3	19
s10	2	"5	5	7.2	19
s11	2	"5	5	9.0	19
s12	2	"5	5	8.11	19
s13	2	"5	5	6.8	18
s14	2	"5	5	8.9	18
s15	2	"5	5	8.2	17
s16	1	"5	5	7.0	8
s17	2	"5	5	9.7	20
s18	2	"5	5	9.4	20
s19	2	"5	5	7.5	19
s20	2	"5	5	8	18
s21	2	"5	5	8.6	17
s22	2	"5	5	8.2	17
s23	2	"5	5	8.0	16
s24	2	"5	5	7.9	16
s25	30	"4	5	6.9	135
v1	16	"11	2	14.7	1520
v2	20	"11	Str	21.6	2285
v4	28	"11	Str	23.10	3043
m1	28	"11	2	9.7	1426
m3	36	"4	2	9.6	228
e4	8	"4	Str	11.6	61
e10	52	"9	1	20.0	3536
e20	62	"5	1	12.8	819

Class "A" Concrete 95.32 C.F. 9.92  
Reinf. Steel 26.17285  
Dry Excavation 334.65 C.F. 3.37  
Wet Excavation 11.15 C.F. 1.38

PROJECT No. 81906601  
BUNCOMBE COUNTY  
STATION: 512+55 E. Med.  
Sheet 2 of 2

STATE OF NORTH CAROLINA  
**STATE HIGHWAY COMMISSION**  
RALEIGH  
SUBSTRUCTURE  
LEFT LANE  
BENT NO 1

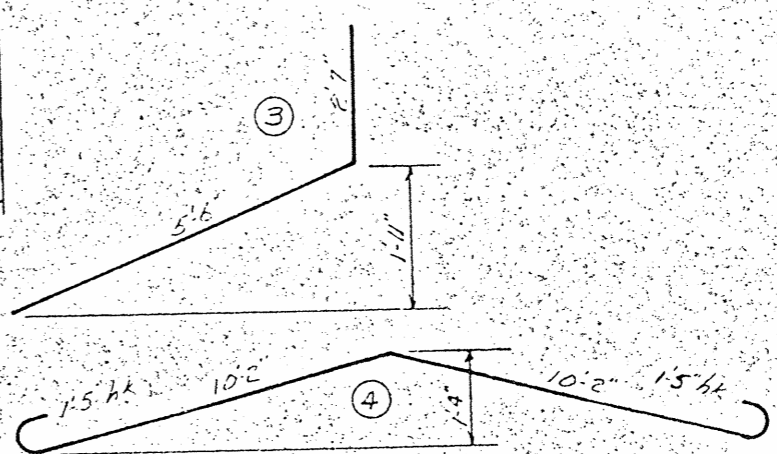
February 1962  
REVISIONS  
NO. BY DATE NO. BY DATE  
NO. BY DATE NO. BY DATE  
NO. BY DATE NO. BY DATE



**BAR TYPES**

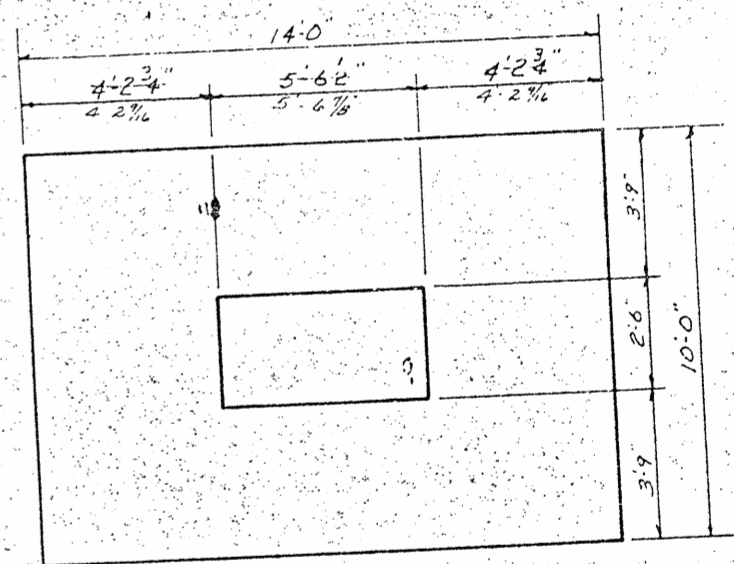
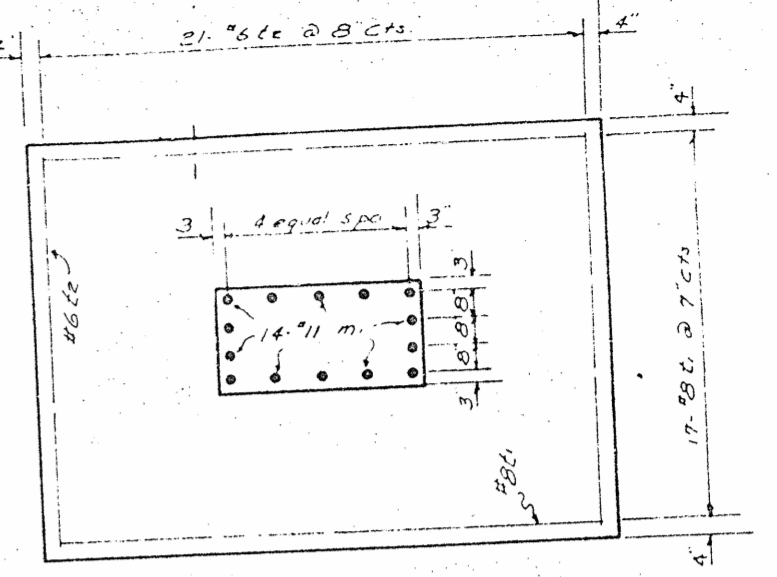
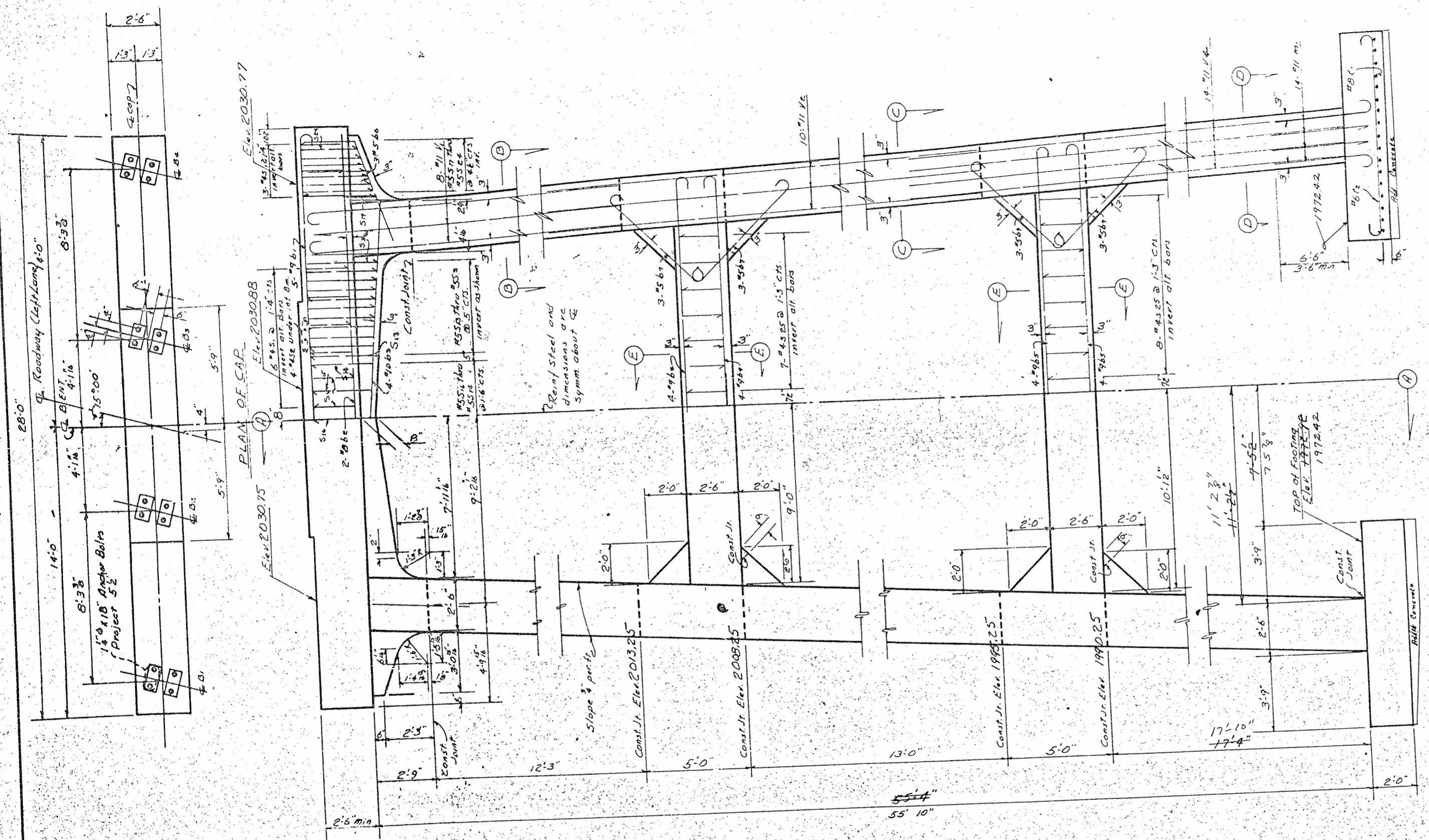
h1	27.6	h1	1.3
h2	22.0	b4	1.3
h3	24.0	b5	1.3
h4	5.10	b7	7
h5	17.6	e10	1.3
h6	11.6	e20	7

s1	2.8	s11	3.11
s2	3.12	s12	3.12
s3	3.12	s13	3.12
s4	3.12	s14	3.12
s5	3.12	s15	3.12
s6	3.12	s16	3.12
s7	3.12	s17	3.12
s8	3.12	s18	3.12
s9	3.12	s19	3.12
s10	3.12	s20	3.12
s21	3.12	s22	3.12
s23	3.12	s24	3.12
s25	3.12	s26	3.12
s27	3.12	s28	3.12
s29	3.12	s29	3.12
s30	3.12	s30	3.12
s31	3.12	s31	3.12
s32	3.12	s32	3.12
s33	3.12	s33	3.12
s34	3.12	s34	3.12
s35	3.12	s35	3.12
s36	3.12	s36	3.12
s37	3.12	s37	3.12
s38	3.12	s38	3.12
s39	3.12	s39	3.12
s40	3.12	s40	3.12
s41	3.12	s41	3.12
s42	3.12	s42	3.12
s43	3.12	s43	3.12
s44	3.12	s44	3.12
s45	3.12	s45	3.12
s46	3.12	s46	3.12
s47	3.12	s47	3.12
s48	3.12	s48	3.12
s49	3.12	s49	3.12
s50	3.12	s50	3.12
s51	3.12	s51	3.12
s52	3.12	s52	3.12
s53	3.12	s53	3.12
s54	3.12	s54	3.12
s55	3.12	s55	3.12
s56	3.12	s56	3.12
s57	3.12	s57	3.12
s58	3.12	s58	3.12
s59	3.12	s59	3.12
s60	3.12	s60	3.12
s61	3.12	s61	3.12
s62	3.12	s62	3.12
s63	3.12	s63	3.12
s64	3.12	s64	3.12
s65	3.12	s65	3.12
s66	3.12	s66	3.12
s67	3.12	s67	3.12
s68	3.12	s68	3.12
s69	3.12	s69	3.12
s70	3.12	s70	3.12
s71	3.12	s71	3.12
s72	3.12	s72	3.12
s73	3.12	s73	3.12
s74	3.12	s74	3.12
s75	3.12	s75	3.12
s76	3.12	s76	3.12
s77	3.12	s77	3.12
s78	3.12	s78	3.12
s79	3.12	s79	3.12
s80	3.12	s80	3.12
s81	3.12	s81	3.12
s82	3.12	s82	3.12
s83	3.12	s83	3.12
s84	3.12	s84	3.12
s85	3.12	s85	3.12
s86	3.12	s86	3.12
s87	3.12	s87	3.12
s88	3.12	s88	3.12
s89	3.12	s89	3.12
s90	3.12	s90	3.12
s91	3.12	s91	3.12
s92	3.12	s92	3.12
s93	3.12	s93	3.12
s94	3.12	s94	3.12
s95	3.12	s95	3.12
s96	3.12	s96	3.12
s97	3.12	s97	3.12
s98	3.12	s98	3.12
s99	3.12	s99	3.12
s100	3.12	s100	3.12



DRAWN BY James N. Palmer DATE 15 Feb. 1962  
CHECKED BY Albeck Underwood DATE April 1962

All bar dimensions are out to out



PROJECT NO. 8,190660  
 BUNCOMBE COUNTY  
 STATION: 512+55 & MED  
 Sheet 1 of 2

STATE OF NORTH CAROLINA  
**STATE HIGHWAY COMMISSION**  
 RALEIGH  
 SUBSTRUCTURE  
 LEFT LANE  
 BENT No 2

REVISIONS					1962	
NO.	BY	DATE	NO.	BY	DATE	SHEET NO.
1			3			5-96
2			4			228 760

DRAWN BY James N. Allmer DATE 19 Feb 1962  
 CHECKED BY Mack Underwood DATE April 1962

**BILL OF MATERIAL**  
**BENT NO. 2 LANE**

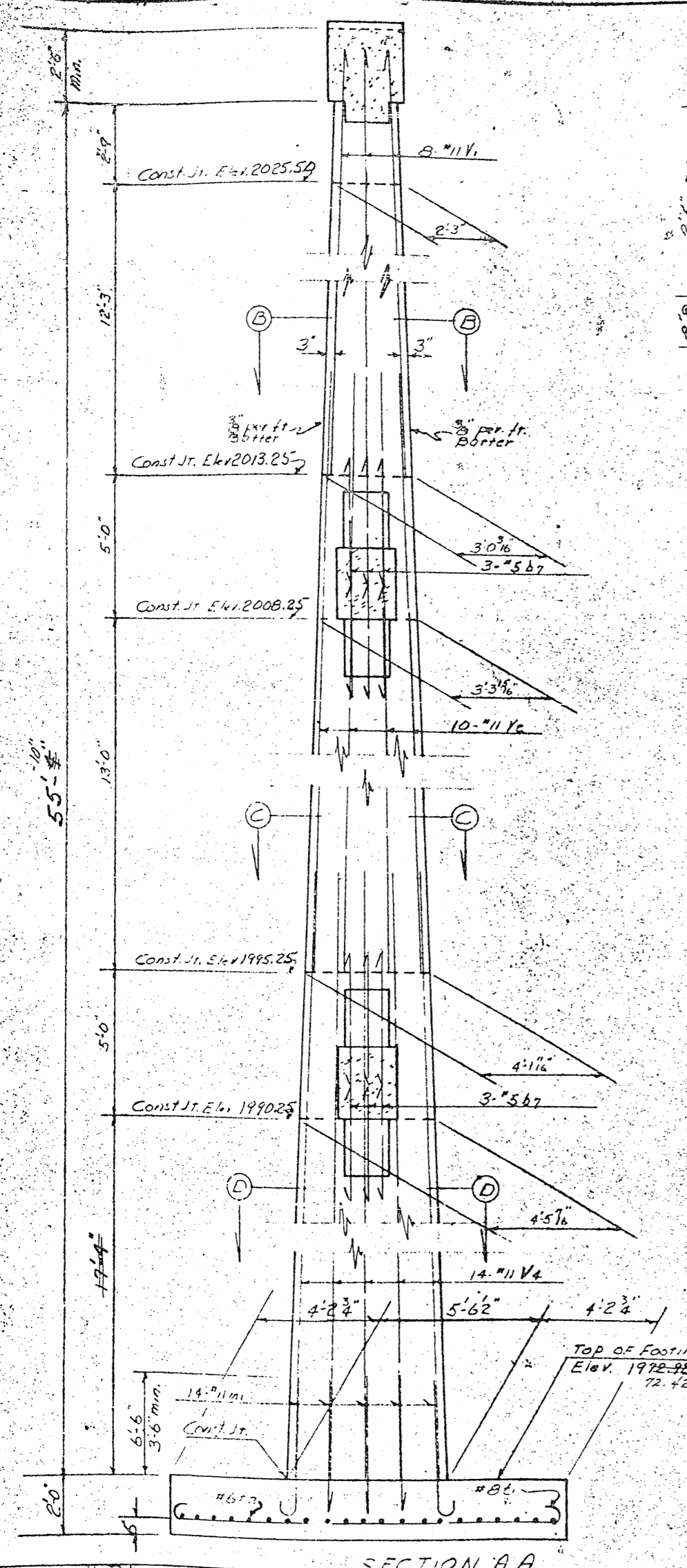
BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
b1	5	"9	1	30.0	5.0
b2	2	"9	S11	27.6	14.7
b3	4	"10	4	23.7	39.9
b4	8	"9	1	24.5	46.6
b5	8	"9	1	20.6	72.1
b6	6	"5	3	5.1	5.1
b7	24	"5	1	7.0	17.5
s1	18	"4	5	7.3	87
s2	9	"4	8	2.11	16
s3	2	"5	5	9.16	21
s4	2	"5	5	7.9	20
s5	2	"5	5	9.8	20
s6	2	"5	5	9.6	20
s7	2	"5	5	9.5	20
s8	2	"5	5	9.4	19
s9	2	"5	5	7.3	19
s10	2	"5	5	7.7	19
s11	2	"5	5	9.0	19
s12	2	"5	5	8.11	19
s13	2	"5	5	8.8	18
s14	2	"5	5	8.8	18
s15	2	"5	5	8.2	17
s16	1	"5	5	7.10	8
s17	2	"5	5	9.4	20
s18	2	"5	5	9.4	20
s19	2	"5	5	7.0	19
s20	2	"5	5	8.9	18
s21	2	"5	5	8.6	17
s22	2	"5	5	8.5	17
s23	2	"5	5	8.0	16
s24	2	"5	5	7.8	16
s25	30	"4	5	6.9	135
v1	16	"11	2	12.7	1580
v2	20	"11	S11	21.6	2285
v3	28	"11	S11	25.10	3843
m1	28	"11	2	9.7	1226
e1	34	"8	1	15.8	1422
e2	42	"6	1	10.10	18

Class A Concrete	CY	81.70
Reinf. Steel	Lbs	14,546
Dry Excavation	CY	411
Wet Excavation	CY	89

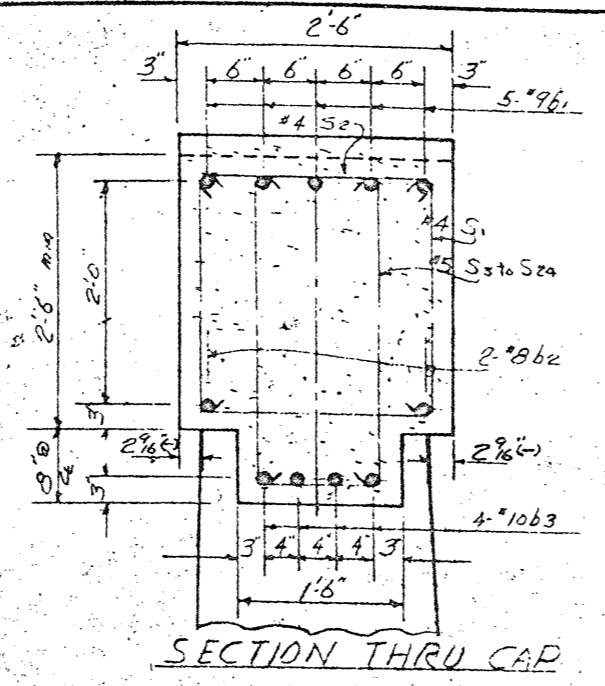
PROJECT No. 81906601  
BUNCOMBE COUNTY  
STATION: 512 + 55 E. Mod.

Sheet 2 of 2

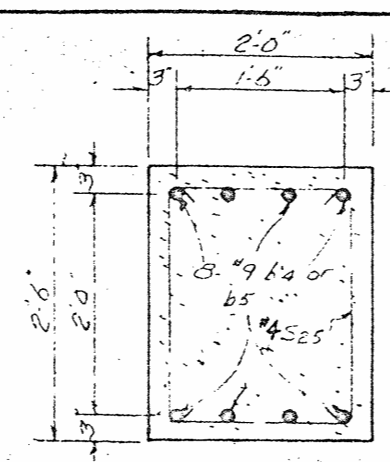
STATE OF NORTH CAROLINA		SHEET NO.	
STATE HIGHWAY COMMISSION		5.97	
RALEIGH		Total	
SUBSTRUCTURE		Steel	
LEFT LANE		228	
BENT NO. 2			
February			



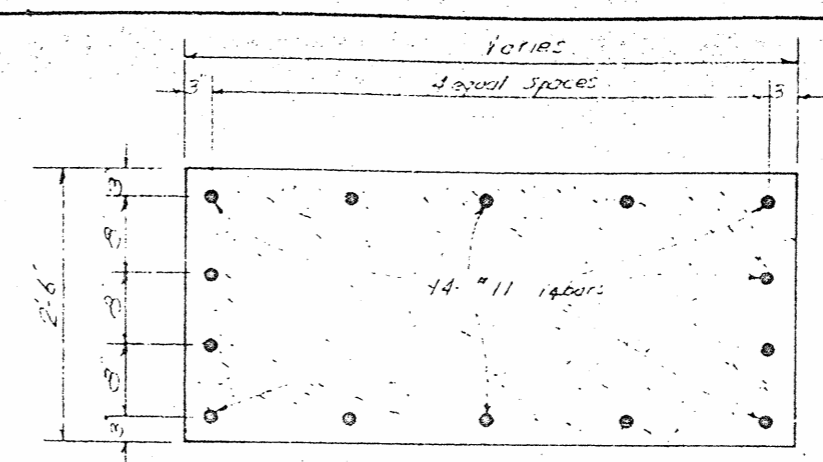
SECTION A-A



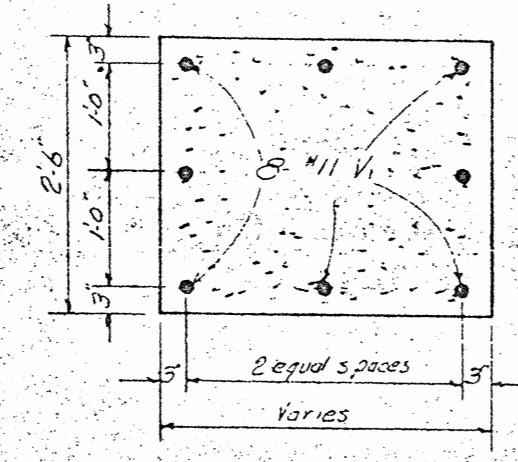
SECTION THRU CAP



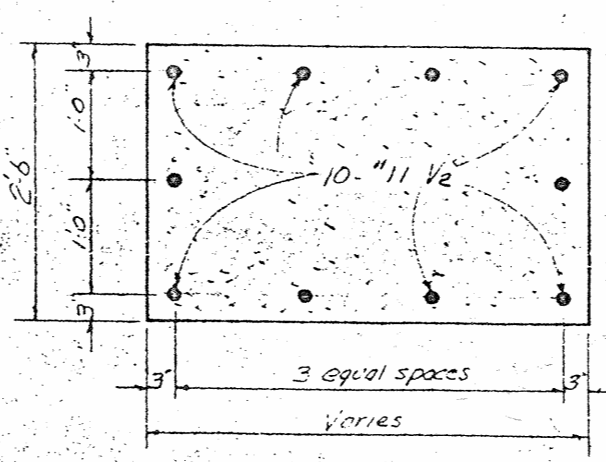
SECTION E-E



SECTION D-D



SECTION B-B



SECTION C-C

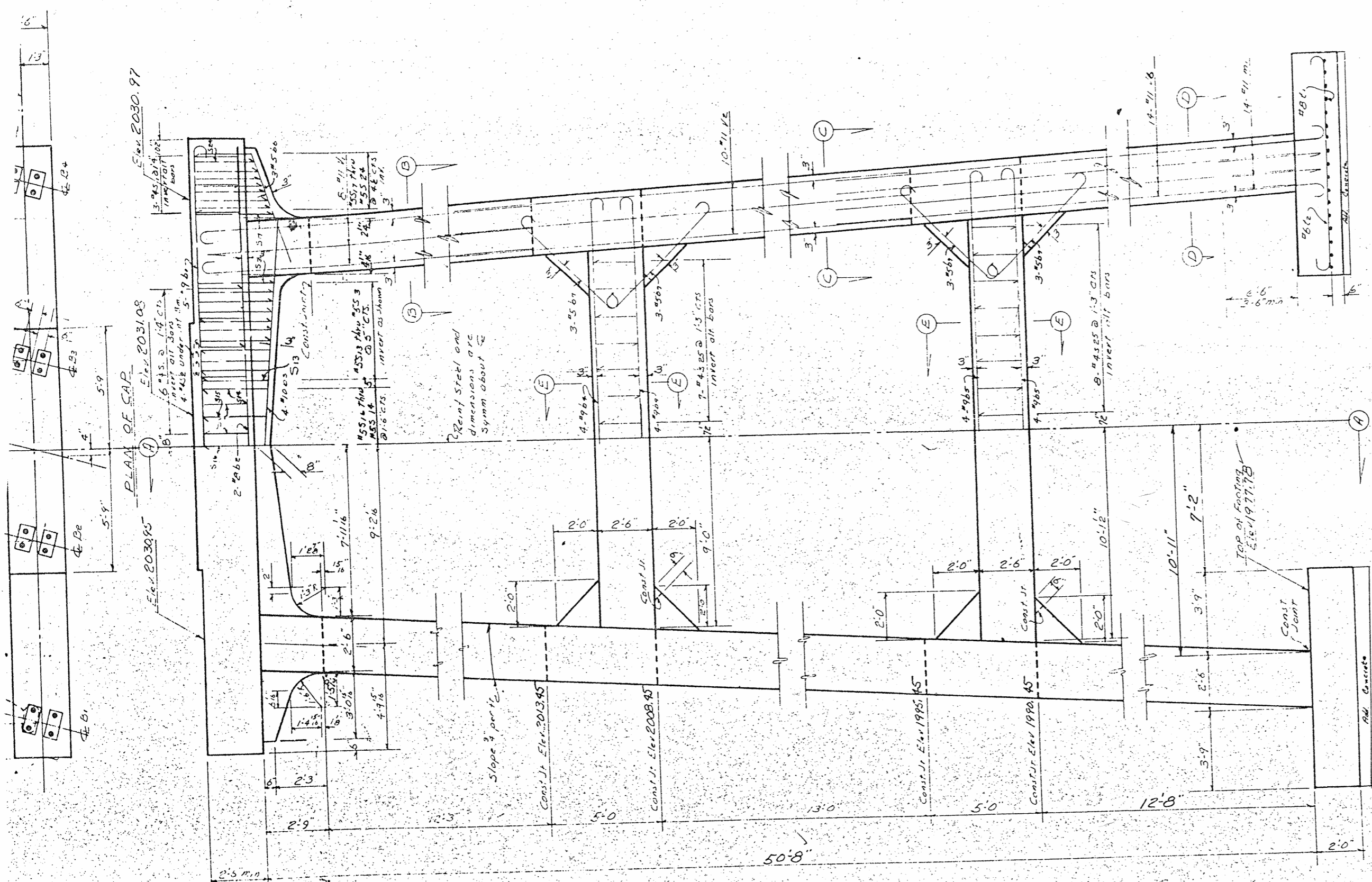
BAR TYPES

4k	27.6	b1	1.3
1.3	22.0	b4	1.3
1.3	24.0	b5	1.3
7	5.10	b7	7
11	13.6	e1	11
8	9.6	t2	8

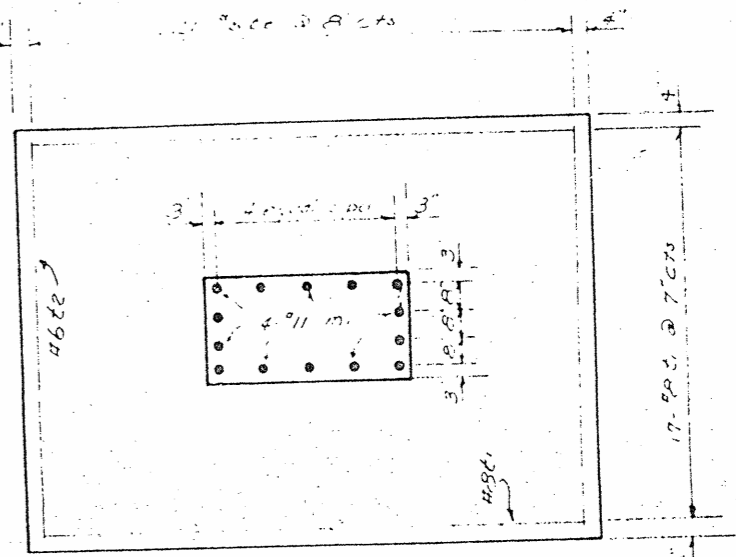
s1	2.2	s16	3.92
s2	3.11	s17	3.8
s3	3.102	s18	3.0
s4	3.10	s19	3.42
s5	3.4	s20	3.3
s6	3.82	s21	3.1
s7	3.8	s22	3.0
s8	3.78	s23	2.10
s9	3.7	s24	2.2
s10	3.6	s25	2.2
s11	3.52		
s12	3.4		
s13	3.4		
s14	3.4		
s15	3.1		
s16	2.11		
s17	3.92		
s18	3.8		
s19	3.0		
s20	3.42		
s21	3.3		
s22	3.1		
s23	3.0		
s24	2.10		
s25	2.2		

All bar dimensions are out to out

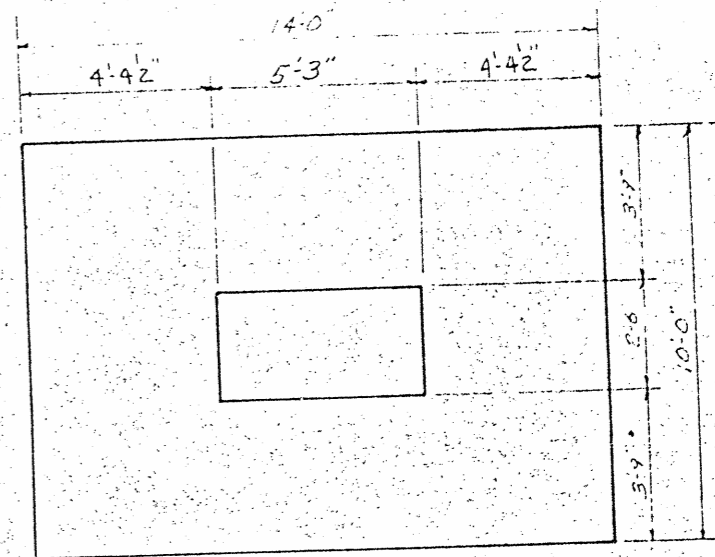
FED. ROAD DIV. NO.	STATE	PROJECT NO.
3	N.C.	8.1906601
F. A. PROJECT SF-13-1(10)		



ELEVATION



PLAN OF FOOTING



PROJECT No. 8.1906601  
 BUNCOMBE COUNTY  
 STATION: 512+55 G. MED.

STATE OF NORTH CAROLINA			
STATE HIGHWAY COMMISSION			
RALEIGH			
SUBSTRUCTURE			
LEFT LANE			
BENT No. 3			
1962			
REVISIONS			
NO.	BY	DATE	NO.
3			4
TOTAL SHEETS			5-98
228			766

**BILL OF MATERIAL**  
BENT NO 3 LEFT LANE

BAR NO	SIZE	TYPE	LENGTH	WEIGHT	
1	5	1	35.0	5.0	
2	8	Str	27.6	5.1	
3	4	10	4	23.2	34.4
4	8	1	24.6	4.6	
5	8	1	20.0	3.8	
6	6	5	8.4	1.5	
7	24	5	1	7.0	1.75
8	15	5	5	7.5	8.7
9	5	4	6	2.4	1.6
10	2	5	5	9.16	3.1
11	2	5	5	3.9	2.0
12	2	5	5	9.8	7.0
13	2	5	5	4.6	2.0
14	2	5	5	9.5	4.0
15	2	5	5	9.4	1.7
16	2	5	5	7.2	1.9
17	2	5	5	9.0	1.9
18	2	5	5	8.4	1.7
19	2	5	5	8.8	1.8
20	2	5	5	8.8	1.8
21	2	5	5	8.2	1.7
22	1	5	5	7.46	8
23	2	5	5	9.7	2.0
24	2	5	5	9.4	2.0
25	2	5	5	8.7	1.8
26	2	5	5	9.0	1.9
27	2	5	5	8.7	1.8
28	2	5	5	8.6	1.7
29	2	5	5	8.5	1.8
30	2	5	5	7.8	1.6
31	20	4	5	6.4	1.35
V1	16	7	2	18.7	1580
V2	20	7	Str	21.6	2285
V3	28	7	Str	21.2	3149
M1	28	11	2	4.7	1426
L1	34	8	1	15.8	1422
L2	42	6	1	1.70	1.83

Class "A" Concrete	77.61	C-4772
Reinf. Steel	26.13852	
Dry Excavation	262.47	C-4772
Wet Excavation	5.80	

PROJECT No. B.1906601  
BUNCOMBE COUNTY  
STATION: 512 +55 E. Med.

Sheet 2 of 2

STATE OF NORTH CAROLINA  
**STATE HIGHWAY COMMISSION**  
RALEIGH

SUBSTRUCTURE  
LEFT LANE  
BENT NO 3

February 1962

REVISIONS

NO.	DATE	BY

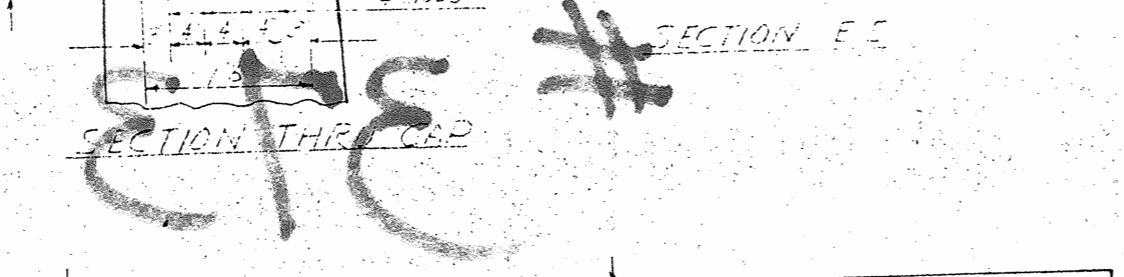
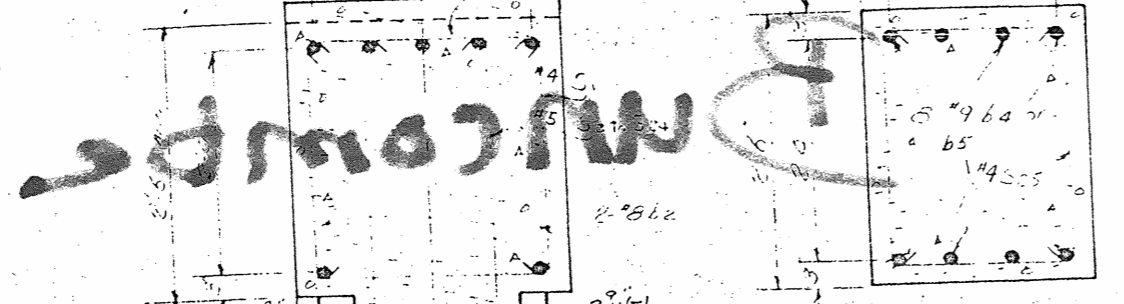
SHEET NO. S-99  
TOTAL SHEETS 166

**NOTES**

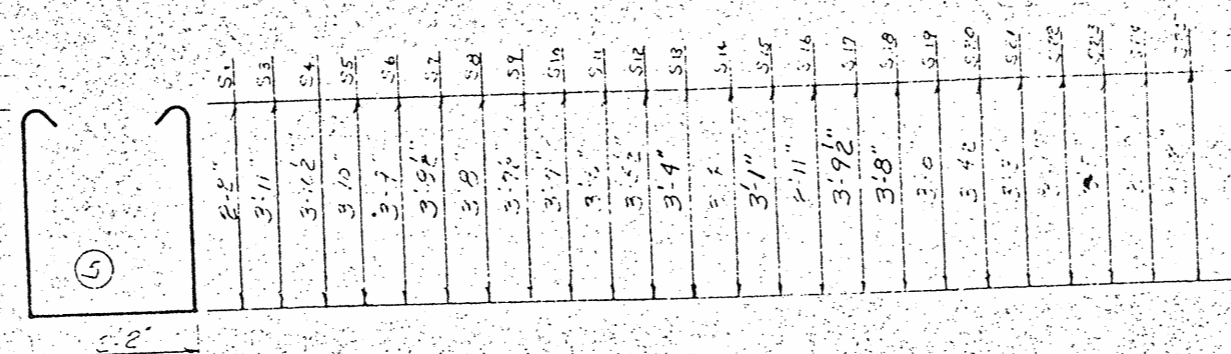
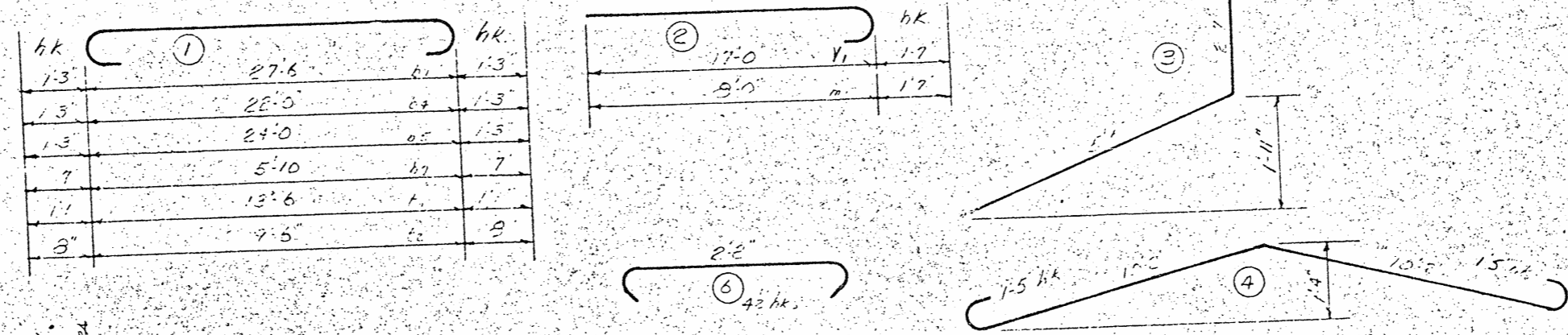
Computer to extend present limits 3/4 mile per sq ft.

Reinforcing steel to be placed in concrete to clear Anchor Bolts.

Hooks on "v" bars may be turned as necessary for placing reinforcement.



**BAR TYPES**



All bar dimensions are to center to center

