PROJECT: 8.1161704

BOARD OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

NASH COUNTY

LOCATION: I-95 From approx. 230' North of S.R. 1707, Northeasterly to approx. 317' South of S.R. 1604

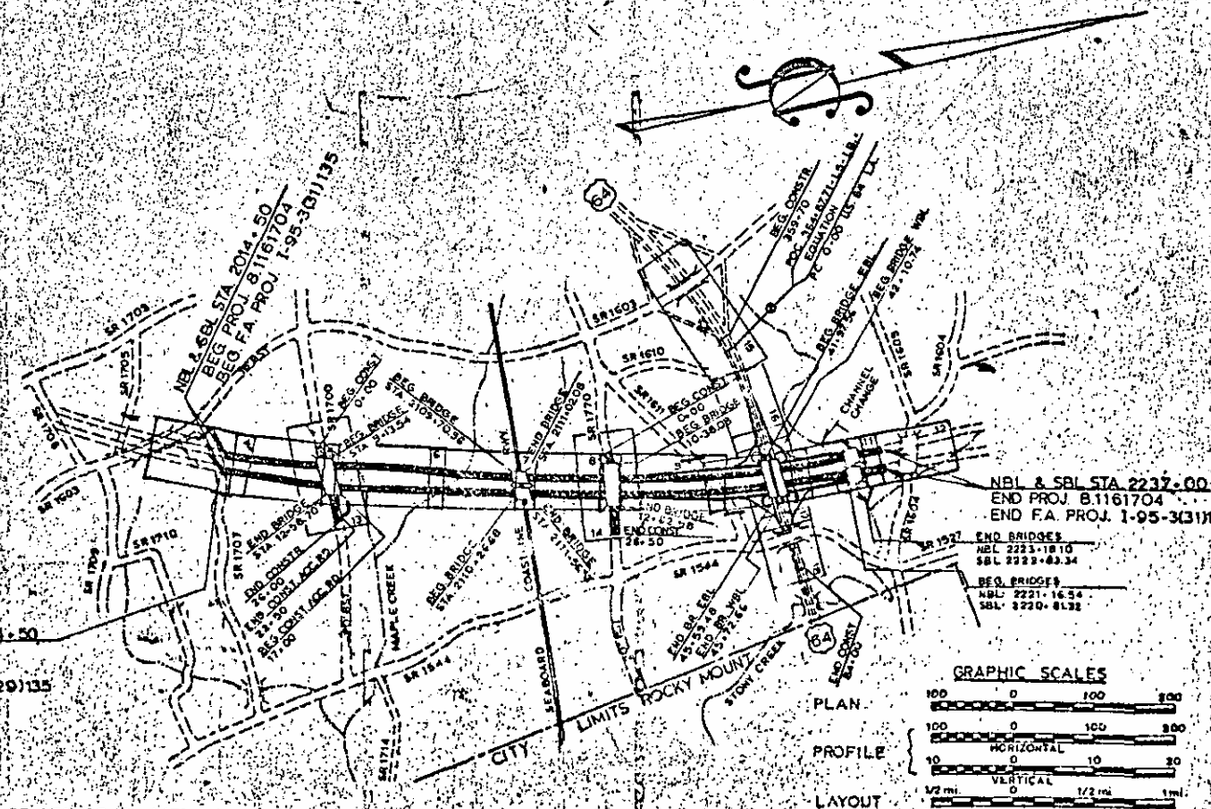
TYPE OF WORK: Grading, Drainage, Paving & Structures

END PROJECT

BEGIN PROJECT

VICINITY MAP

SHIPPING POINT
ROCKY MOUNT



GRAPHIC SCALES

PLAN 100 0 100 200

PROFILE { 100 0 100 200 HORIZONTAL; 10 0 10 20 VERTICAL

LAYOUT 1/2 mi 0 1/2 mi 1 mi

PREPARED IN OFFICE OF
DEPARTMENT OF TRANSPORTATION
AND HIGHWAY SAFETY
DIVISION OF HIGHWAYS
RALEIGH, N.C.
ROADWAY DESIGN UNIT C.E. BIETLER (Signature)

PLANS PREPARED BY: RUMMEL, KLEPPER & KAHL, CONSULTING ENGINEERS

LENGTH OF ROADWAY F.A. PROJECT I-95-3(31)135 4.151 miles
LENGTH OF STRUCTURES F.A. PROJECT I-95-3(31)135 0.063 miles

8.1161703
8.1161704

CONVENTIONAL SIGNS

- County Line
- City or Town Line
- Exist. Right of Way Line
- Right of Way Line
- Survey Line
- Property Line
- Exist. Fence
- Proposed Road
- Existing Road
- Railroad
- Control of Access Line
- Slope Stake Line
- Bridge
- Culvert
- Woods
- Telephone or Telegraph Pole
- Tower Pole and Line
- Power Pole
- Proposed Right of Way Marker
- Existing Right of Way Marker
- Guard Rail
- Sanitary Sewer Line
- Water Line
- Gas Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Easement Line
- Brush Barrier
- Silt Check Dam-Type A
- Silt Basin-Type A
- Temporary Lateral Silt Ditch
- Temporary Silt Fence
- Galvanized Pipe (For Future Lighting)
- Bridge Approach Slab
- Median Uncleared Area

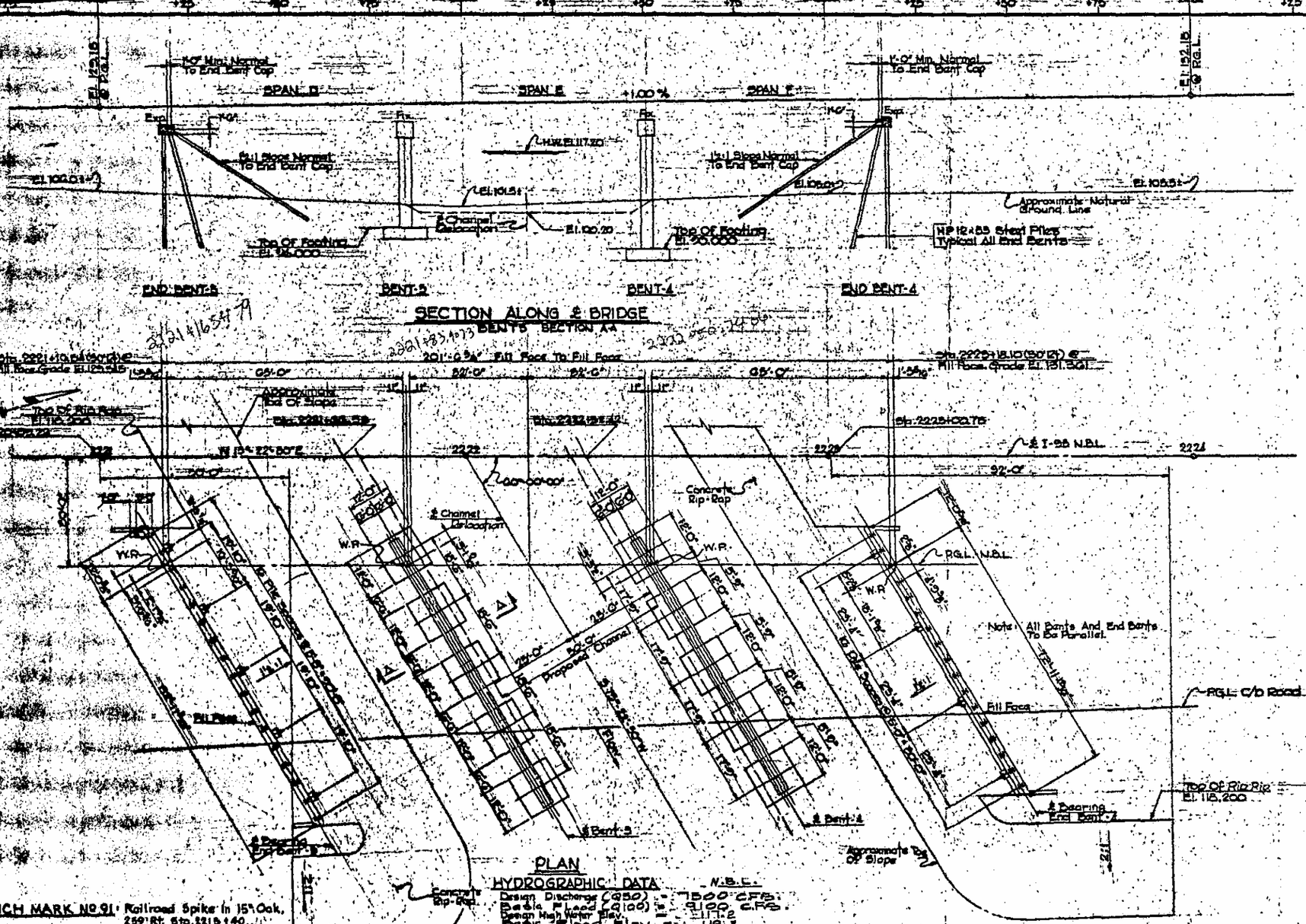
DESIGN DESIGNATION

1975	ADT	15600 - 16400
1995	ADT	30200 - 31400
	DHV	12 %
	D	60%
	T	20%
	V	70 MPH

APPROVED:

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

4	N.C.	B.1161704
F.A. PROJECT		2-95-3(51)136



HYDROGRAPHIC DATA N.B.L.

Design Discharge (Q50) = 7500 CFS.
Basic Flood (Q100) = 9100 CFS.
Design High Water Elev. = 111.2
Basic Flood Elev. = 111.3

BENCH MARK NO. 91: Railroad Spike in 15" Oak, 259' Rt. Sta. 2215+40. ELEV. 107.10.

NOTES

ASSUMED LIVE LOAD: HS-20-44 Or Alternate Loading.

REFERENCE TO SHEET S-N: For Other Design Data And General Notes See Sheet S-N.

PILES CAPACITIES: Piles Are Designed For Bearing Capacities Of 30 Tons Per Pile.

BARRIER RAIL: For Concrete Barrier Rail See Special Provisions.

COFFERDAMS: For Cofferdams See Special Provisions.

COMPUTED FOUNDATION LOAD: Computed Foundation Loads For Bents Equals 3 Tons Per Square Foot.

SCHEDULE OF WORK: Boulders In The Vicinity Of End Bent 4 Shall Be Removed To A Depth Of 5 Feet Prior To Placing The Fill To Allow The Driving Of Steel Piles.

PILES: Piles For End Bent 5 Shall Be Augured And Driven Through Fill In Accordance With The Specifications. Piles For End Bent 4 Shall Be Driven Through Fill, No Augering For These.

Footings: Footings To Be Carried At Least 6' Into Rock With Minimum Thickness As Shown On Plans.

Work Is Not To Be Started On Bents 4&4 until channel change has been excavated.

REINFORCING STEEL LENGTHS ARE BASED ON FOLLOWING MINIMUM SPLICE LENGTHS.

BAR SIZE	SPLICE DISTANCE
#4	1'-3"
#5	1'-6"
#6	2'-0"
#7	2'-3"
#8	2'-6"
#9	2'-6"
#10	2'-9"
#11	3'-0"

TOTAL BILL OF MATERIALS - N.B.L.

	CLASS AA CONCRETE	CLASS A CONCRETE	REINFORCING STEEL	45" PRESTRESSED CONCRETE GIRDERS		HP 12 X 53 STEEL PILES		FOUNDATION EXCAVATION	COFFERDAMS FOR BENTS	5" CONCRETE RIPRAP	LINSEED OIL CONCRETE PROTECTION	CONCRETE BARRIER RAIL	BRIDGE APPROACH SLABS
	CU. YDS.	CU. YDS.	LBS.	NO.	LIN. FT.	NO.	LIN. FT.	CU. YDS.	LUMP SUM	SQ. YDS.	GALONS	LIN. FT.	LUMP SUM
SUPERSTRUCTURE	482.2		119,882	33	2180.38						35	403.30	
END BENT NO. 5		29.2	6,111			23	945			833			
BENT NO. 5		182.6	25,123			1		375	LUMP SUM				
BENT NO. 4		190.5	25,428					730	LUMP SUM	473			
END BENT NO. 4		28.5	5,209			21	900						
CURVED END BLOCKS	0.9		189										
TOTALS	483.1	469.4	180,459	33	2180.38	44	1,845	1,105	LUMP SUM	1,308	35	403.30	LUMP SUM

CHECKED BY: DATE: Dec. 78
DRAWN BY: DATE: Dec. 78

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

PROJECT NO. 8.1161704
NASH COUNTY
STATION: 2222+00 NBL I-95

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

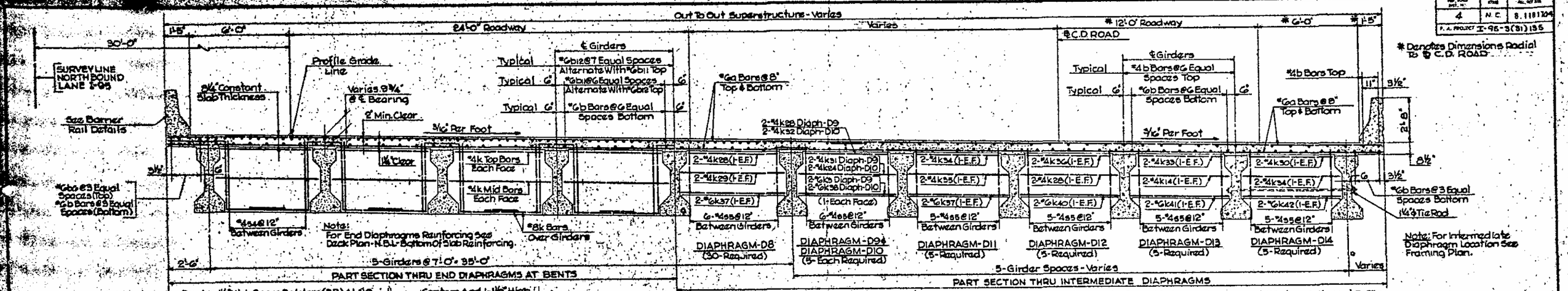
GENERAL DRAWING FOR BRIDGE
ON N. C. I-95 N.B.L.
OVER STONY CREEK
BETWEEN N. C. 97 AND GOLD ROCK

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-3
1			3			TOTAL SHEETS
2			4			129

4	N.C.	B-1161704

F.A. PROJECT I-95-3(31)135

Out To Out Superstructure - Varies



PART SECTION THRU END DIAPHRAGMS AT BENTS

PART SECTION THRU INTERMEDIATE DIAPHRAGMS

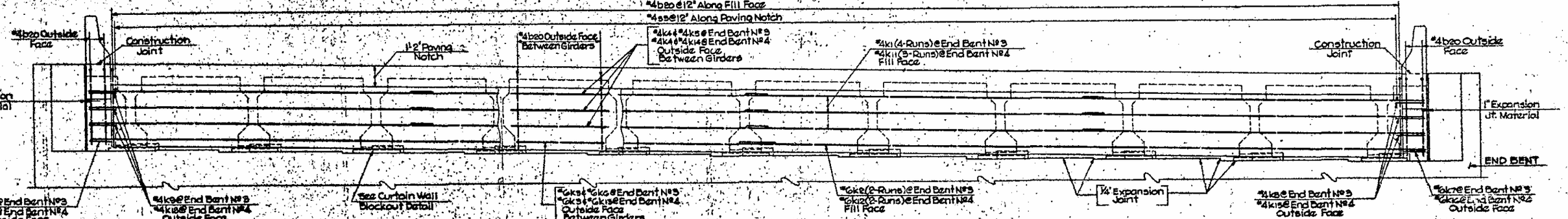
Provide 1½" High Beam Bolsters (BB) At 4'-0" Centers And 1-1½" High Beam Bolster For Each Overhang. Also Provide Beam Bolster Upper (B.B.U.) At 5'-0" Centers Between 'b' Bars. Use Straight Beam Bolster Upper (B.B.U.) Where 'b' Bars Are *6 Top And Bottom, And 1¼" High Beam Bolster Upper (B.B.U.) Where 'b' Bars Are *4 Top And *6 Bottom.

TYPICAL SECTION THRU SUPERSTRUCTURE

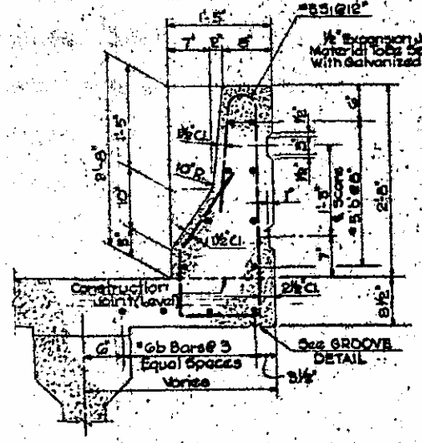
Notes: Temporary Struts Shall Be Placed Between Prestressed Girders Adjacent To The Diaphragms And The Nuts On The 1¼"ϕ Tie Rods Shall Be Fully Tightened Before Diaphragms Are Cast. Struts Shall Remain In Place 3 Days After Concrete Is Placed. The Tie Rods Shall Be Retightened After The Struts Have Been Removed.

* Denotes Dimensions Radial To ℄ C.D. ROAD

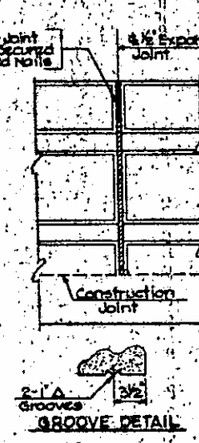
Note: For Intermediate Diaphragm Location See Framing Plan.



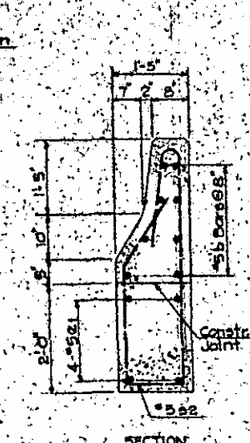
END ELEVATION



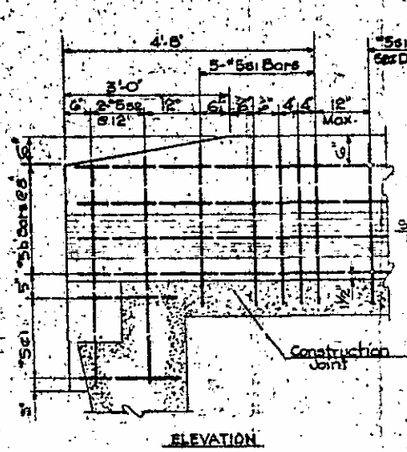
BARRIER RAIL DETAILS



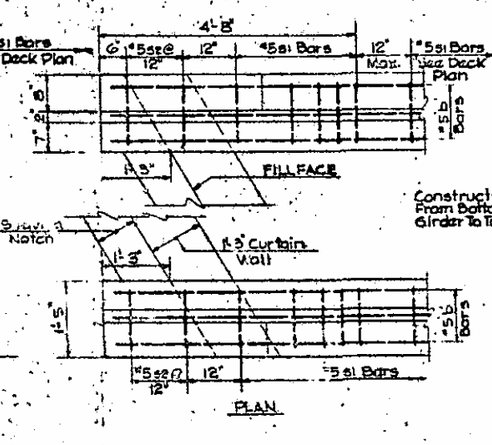
GROOVE DETAIL



SECTION



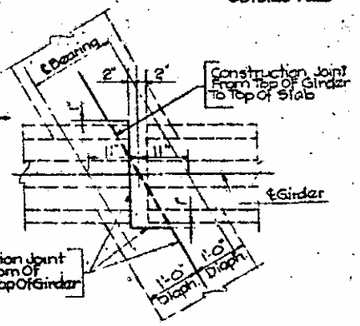
ELEVATION



PLAN

BARRIER RAIL END DETAILS
(4-REQUIRED)

NOTE: See Standard Guard Rail Anchorage Sheet for location of 'C' bars.



PLAN OF JOINT AT BENT DIAPHRAGMS

PROJECT NO. B-1161704

NASH COUNTY

STATION: 2222 80 NBL I-95

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

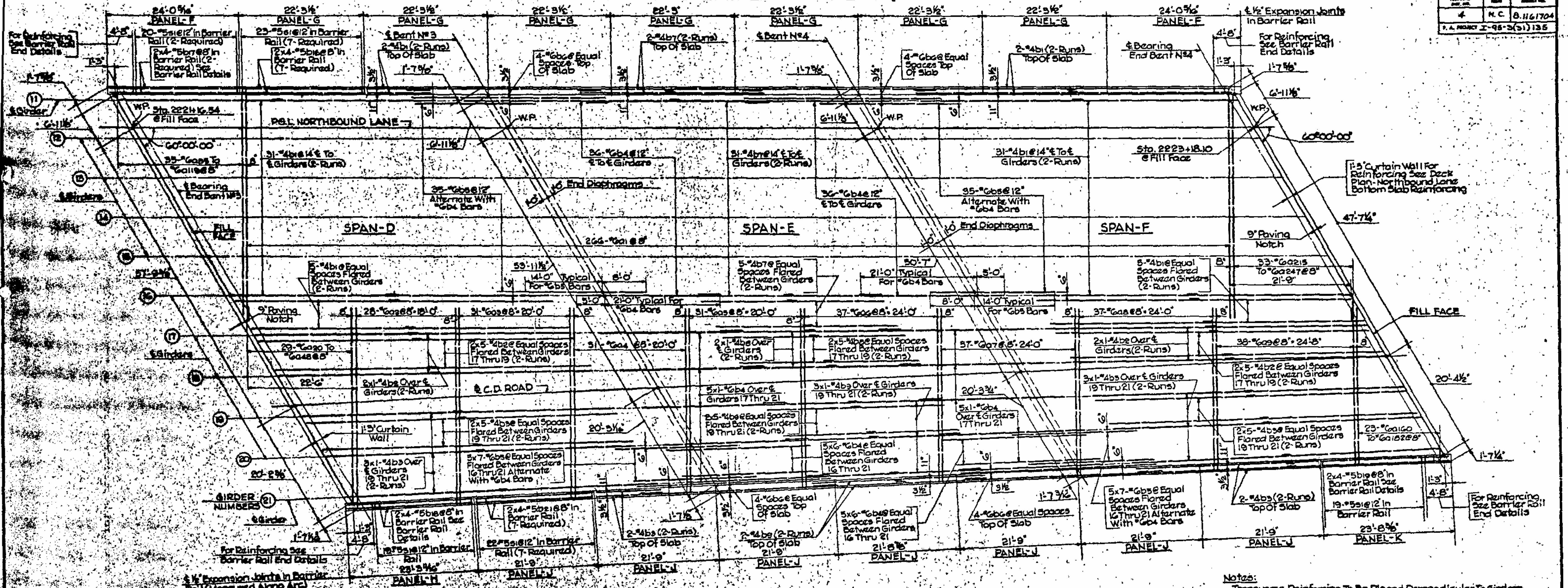
STINY CREEK OVERPASS N.B.L.
SUPERSTRUCTURE
DETAILS

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						SHEET NO.
NO	BY	DATE	NO	BY	DATE	S-116
1			3			TOTAL SHEETS
2			4			10

CHECKED BY [illegible] DATE March 73
DRAWN BY [illegible] DATE Sept 72

4	N.C.	8.1161704
F.A. PROJECT	I-95-3(31)135	



DECK PLAN - NORTHBOUND LANE
TOP OF SLAB REINFORCING

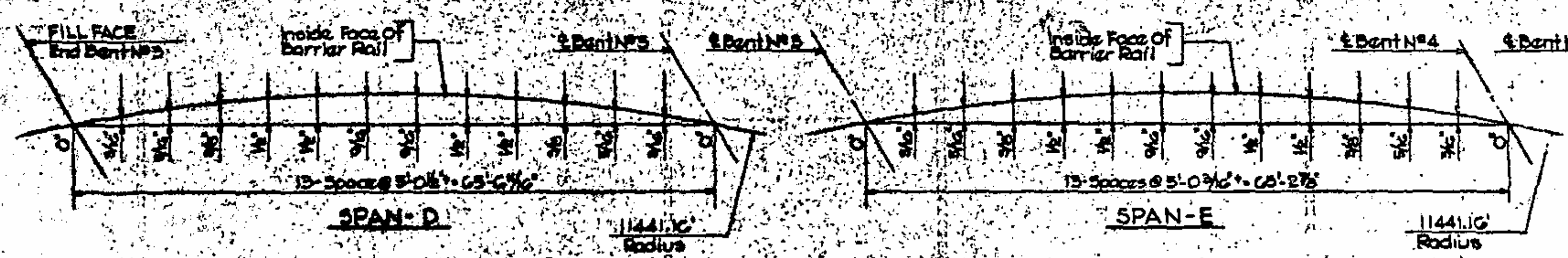
Notes:

Transverse Reinforcing To Be Placed Perpendicular To Girders 11 Thru 16.

Intermediate Diaphragms Not Shown, For Locations See Framing Plan.

All Reinforcing Shown Is Top Of Slab Reinforcing Unless Otherwise Noted.

For Reinforcing Of End Diaphragms See Deck Plan - Northbound Lane Bottom Of Slab Reinforcing.



BARRIER RAIL OFFSETS NORTHBOUND LANE
LEFT BARRIER RAIL ONLY

PROJECT NO. 8.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

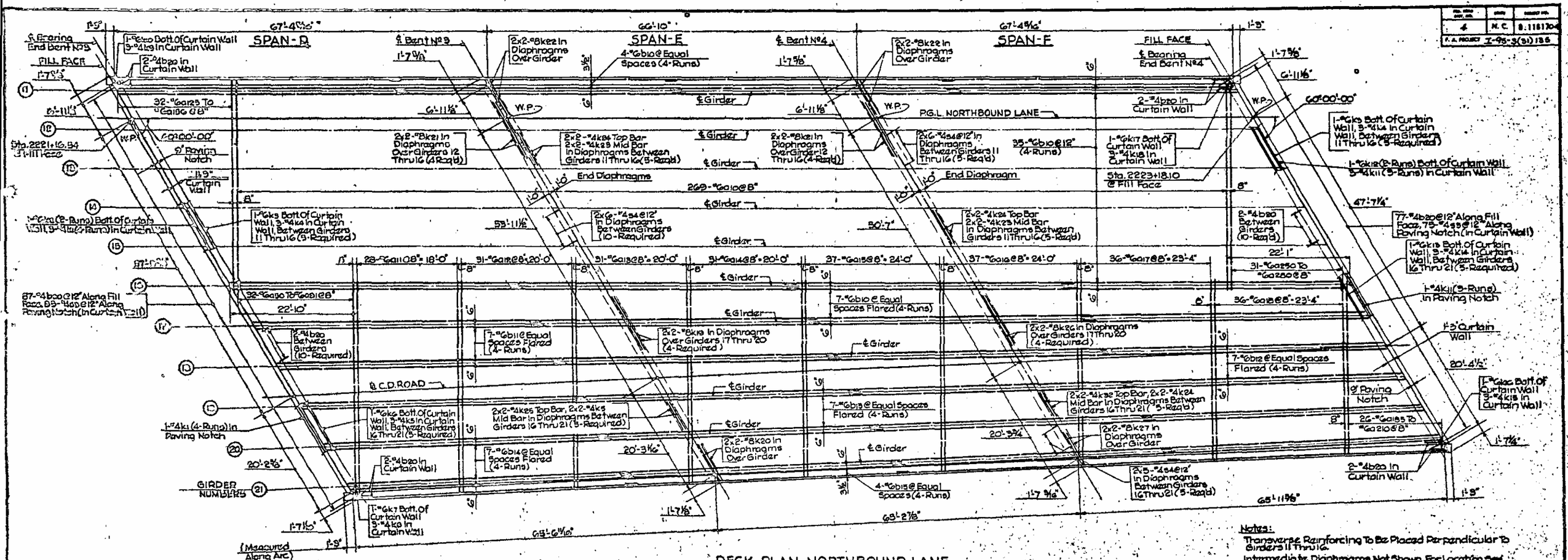
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

STONY CREEK OVERPASS N.B.L.
SUPERSTRUCTURE
DECK PLAN - TOP OF SLAB REINFORCING

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

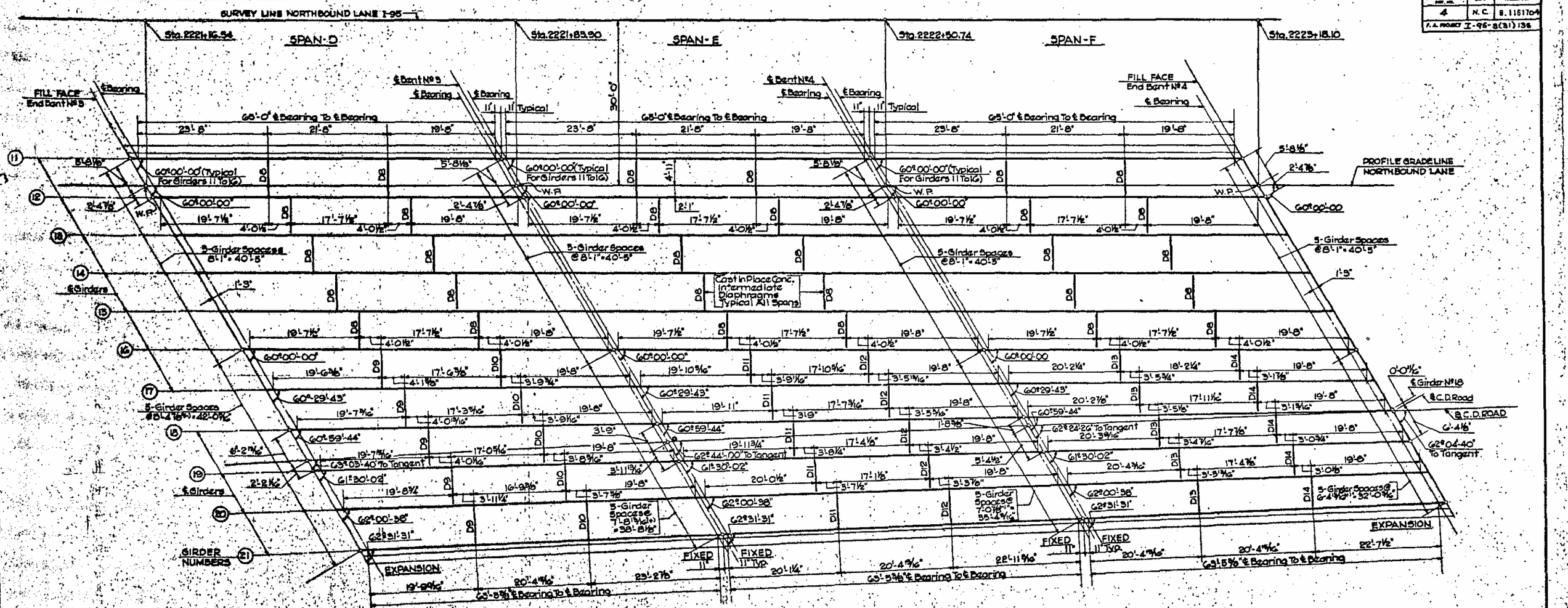
REVISIONS						
NO.	BY	DATE	NO.	BY	DATE	SHEET NO.
1			3			S-1/7
2			4			TOTAL SHEETS 127

CHECKED BY: [illegible] DATE [illegible]
DRAWN BY: [illegible] DATE [illegible]


SPAN-D
SPAN-E
SPAN-E
℄ Bearing End Bent No.3
℄ Bent No.3
℄ Bent No.4
℄ Bearing End Bent No.4
FILL FACE
67'-4 5/16"
66'-10"
67'-4 5/16"
℄ Girder
W.P.
P.G.L. NORTHBOUND LANE
End Diaphragm
End Diaphragms
269-"Ga10@8"
Sta. 2221+16.84 ℄ Fill Face
Sta. 2223+18.10 ℄ Fill Face
60'-00'-00"
47'-7 1/4"
55'-11 5/8"
50'-7"
22'-10"
22'-1"
20'-2 5/8"
20'-3 1/16"
20'-3 3/4"
20'-4 1/2"
65'-11 5/8"
65'-2 7/8"
65'-6 9/16"
(Measured Along Arc)
℄ C.D. ROAD
GIRDER NUMBERS
28-"Ga11@8"=18'-0"
31-"Ga12@8"=20'-0"
31-"Ga13@8"=20'-0"
31-"Ga14@8"=20'-0"
37-"Ga15@8"=24'-0"
37-"Ga16@8"=24'-0"
36-"Ga17@8"=23'-4"
36-"Ga18@8"=23'-4"
31-"Ga19@8"=20'-0"
32-"Ga20@8"=21'-4"
32-"Ga20 To "Ga21@8"
31-"Ga22@8"=20'-8"
31-"Ga23@8"=20'-8"
26-"Ga24@8"=17'-4"
26-"Ga25 To "Ga21@8"
1'-9"
1'-7 5/8"
1'-7 7/16"
1'-7 15/16"
1'-8"
6'-11 5/8"
6'-11 1/8"
8"
1'-5"
1'-3"
1'-2"
1'-7 3/4"
1'-8"
1'-9"
1'-5 3/8"
1'-7 5/8"
1'-7 9/16"
1'-7 15/16"
1'-7 7/16"
1'-7 3/4"
1'-8"
1'-9"
1'-7 5/8"
1'-7 7/16"
1'-7 15

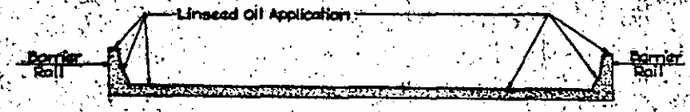
4	N.C.	B.1161704

F.A. PROJECT I-95-3(31) 136



FRAMING PLAN - NORTHBOUND LANE

Note: All End Bents And Bents Are Parallel



SKETCH SHOWING LIMIT OF LINSEED OIL APPLICATION

PROJECT NO. 8.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

STONY CREEK OVERPASS N. B. L.
SUPERSTRUCTURE
FRAMING PLAN

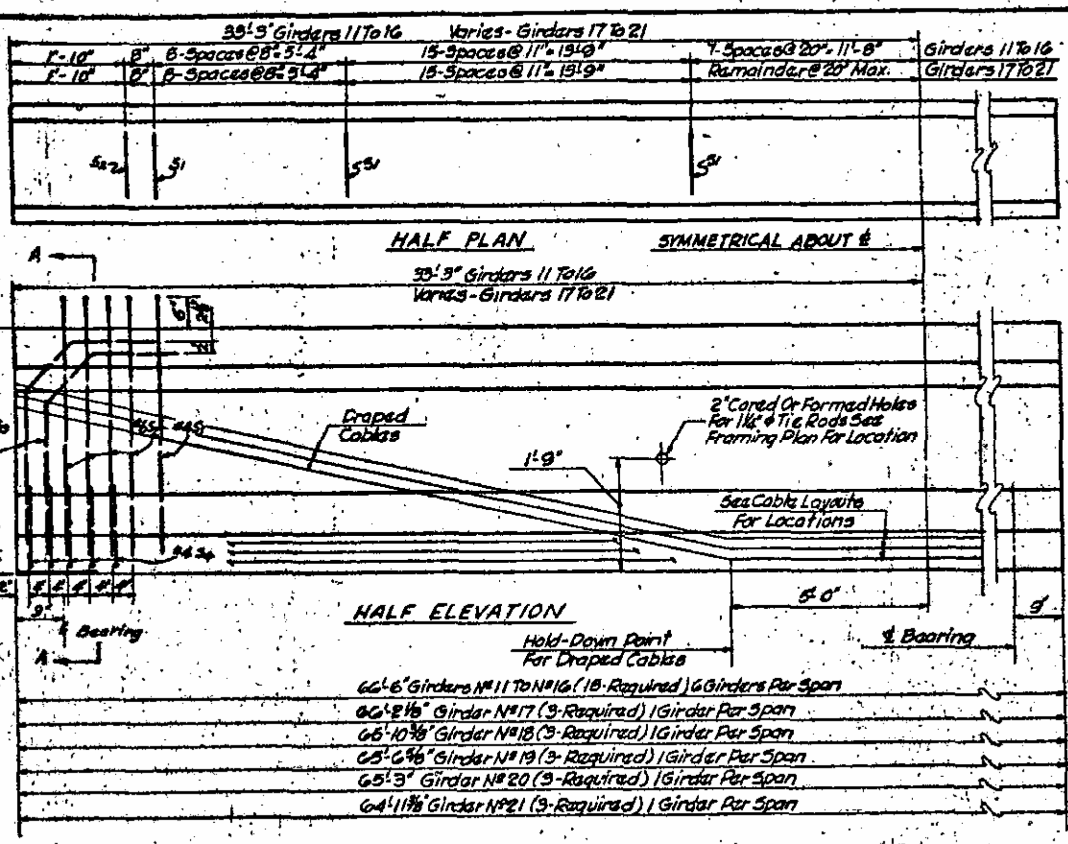
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-220
1			3			TOTAL SHEETS
2			4			127

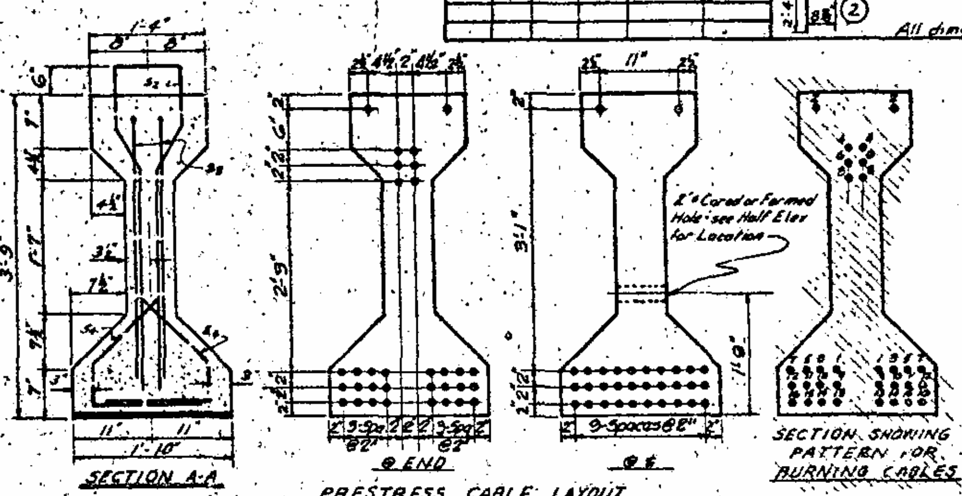
CHECKED BY: [illegible] DATE: Sept. 79
DRAWN BY: Jay Capps DATE: Sept. 79

FED. ROAD DIV. NO.	STATE	PROJECT NO.
4	N.C.	8.1161704

F.A. PROJECT I-95-3(81)135



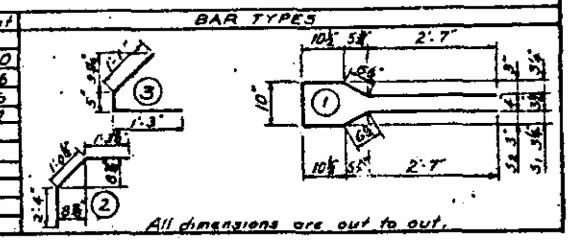
GIRDER DETAILS



Note: For Release of Strands See Special Provisions.

REINFORCING STEEL FOR ONE GIRDER

Bar	No.	Size	Type	Length	Weight
S1	61	#4	1	8'-10"	360
S2	8	#6	1	8'-10"	106
S3	8	#6	2	4'-8"	56
S4	20	#4	3	2'-9"	37



NOTES

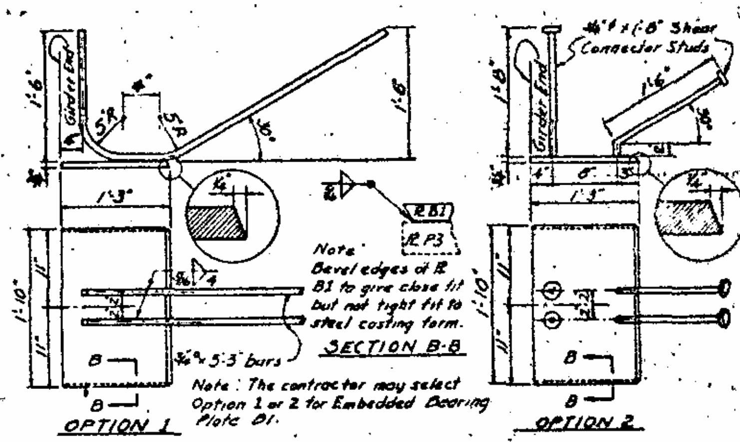
All prestressing strand shall meet the requirements of A.S.T.M.-A416.

Cables to be cut off flush with end of girder.

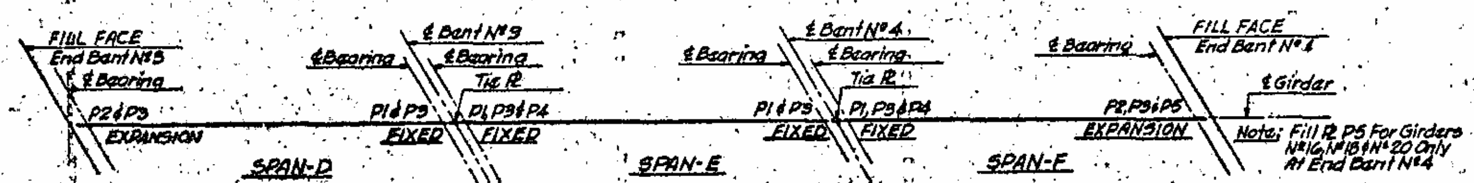
No surface finish will be required for prestressed concrete girders. However the outside face of the exterior girders shall be carefully cleaned of drippings and other discolorations. See Specifications.

All prestressing strands shall be ⅜" 7-wire stress relieved high strength cables in accordance with the Specifications.

TYPE	AREA	ULTIMATE STR.	APPLIED PRESTRESS
⅜" High Str.	0.1152"	31,000 Lbs per cable	21,700 Lbs per cable



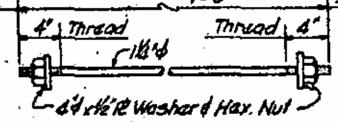
EMBEDDED BEARING PLATE B1 (2 Required For Each Girder)



BEARING PLATE LAYOUT

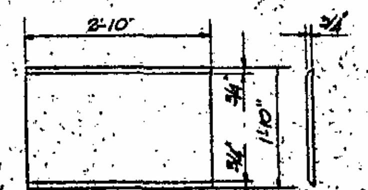
Diaphragm	Length	Required
Diaphragm-D8	8'-1"	30 Required
Diaphragm-D9	8'-4"	5-Required
Diaphragm-D10	8'-2"	5-Required
Diaphragm-D11	7'-9"	5-Required
Diaphragm-D12	7'-7"	5-Required
Diaphragm-D13	7'-2"	5-Required
Diaphragm-D14	7'-0"	5-Required

Note: For Diaphragm Locations See Framing Plan



1¼" φ TIE ROD

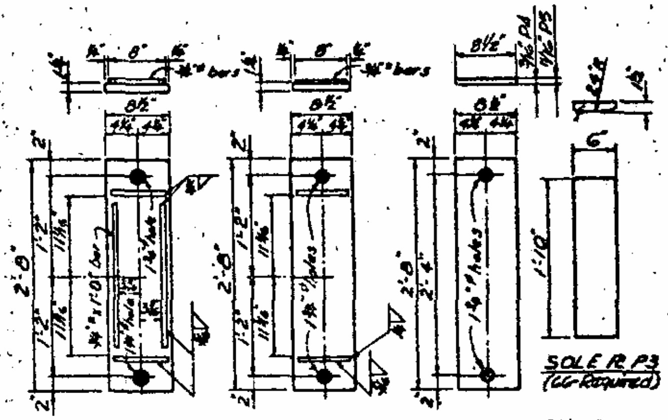
Tie Rod Assembly Shall Be ASTM A-36 Grade Structural Steel.



TIE PLATE (22-Required) 11 Tie Plates Per Bent

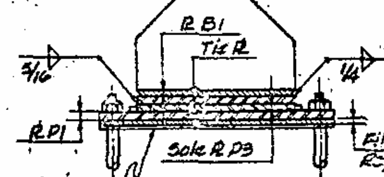
DEAD LOAD DEFLECTIONS

	SPAN-D Int.	SPAN-D Ext.	SPAN-E Int.	SPAN-E Ext.	SPAN-F Int.	SPAN-F Ext.
Camber (Girder Alone In Place)	¾" ↑	¾" ↑	¾" ↑	¾" ↑	¾" ↑	¾" ↑
Superimposed Dead Load	1⁄16" ↓	5⁄8" ↓	1⁄16" ↓	5⁄8" ↓	1⁄16" ↓	5⁄8" ↓
Final Deflection	1⁄16" ↑	⅛" ↑	1⁄16" ↑	⅛" ↑	1⁄16" ↑	⅛" ↑



BEARING PLATE DETAILS

Note: Each Girder Requires 4-1½" φ x 15" Anchor Bolts With Hex. Nuts In Addition To The Plates As Shown On BEARING PLATE LAYOUT.



TIE PLATE DETAIL

Note: Masonry plates shall be smooth and straight on both sides. No surface finish required.

All bearing assemblies shall be galvanized.

QUANTITIES FOR GIRDERS

	Reinforcing Steel Lbs	5000 psi Concrete Cu Yds.	High Strength ⅜" S.R. Cables Nº
GIRDERS Nº 11 To Nº 16	559 Each	9.58 Each	32 Each
GIRDER Nº 17	559	9.53	32
GIRDER Nº 18	559	9.49	32
GIRDER Nº 19	559	9.44	32
GIRDER Nº 20	559	9.40	32
GIRDER Nº 21	559	9.36	32

GIRDERS REQUIRED

No.	Length	Total Length
33	Varies	2180.88'

SPECIAL

Assembled By [signature] Date [illegible]
Checked By [signature] Date [illegible]

STANDARD

Drawn by: W. M. Andrews Date Feb. 11, 1965
Checked by: [illegible] Date Feb. 1965

(Reworked May 1972)

PROJECT NO. 8.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

STONY CREEK OVERPASS N.B.L.
STANDARD
45" PRESTRESSED CONCRETE GIRDER

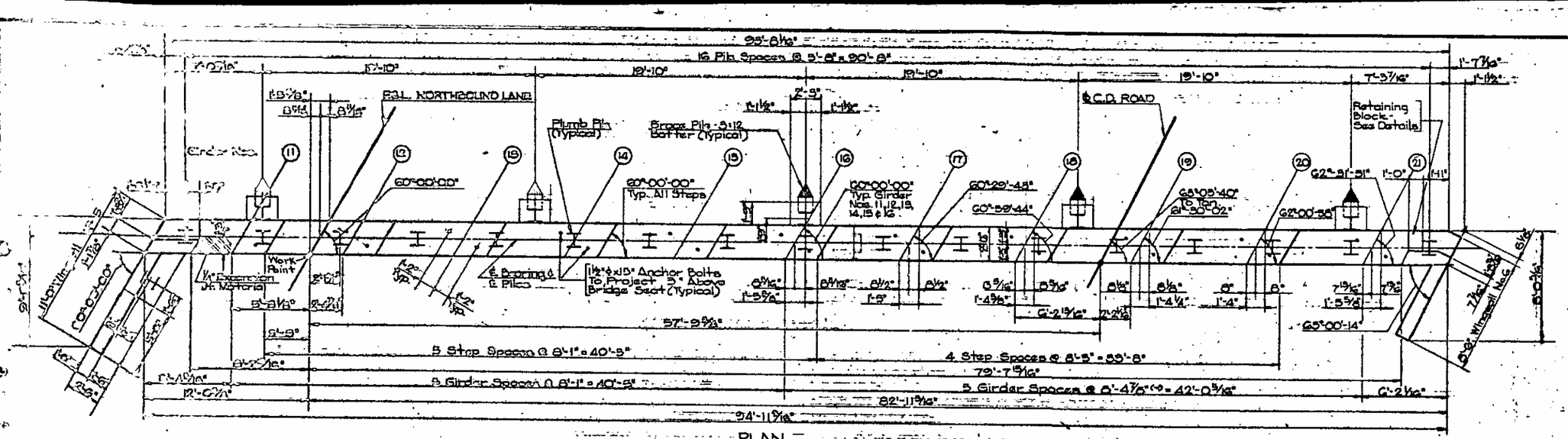
FEBRUARY, 1965

REVISIONS

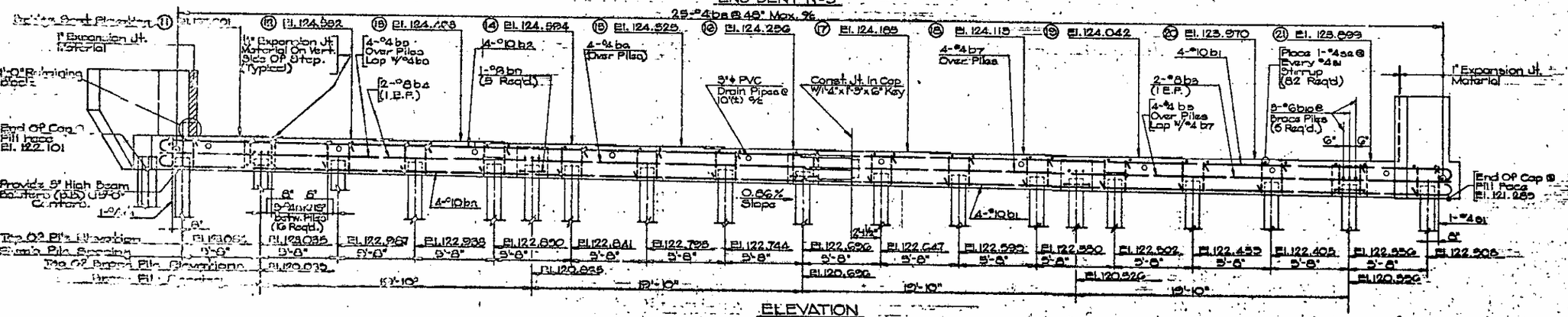
NO.	BY	DATE	NO.	BY	DATE

SHEET NO. S-121
TOTAL SHEETS 129

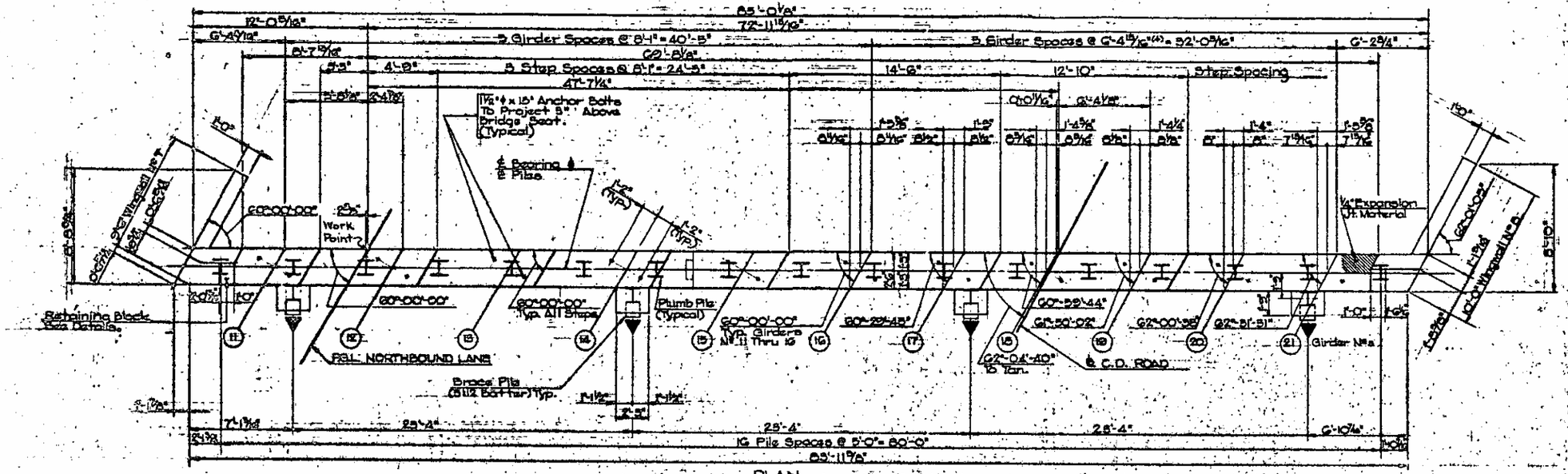
4	N.C.	8.1181704
F. A. PROJECT	I-95-8(81)135	



PLAN
END BENT Nº 3

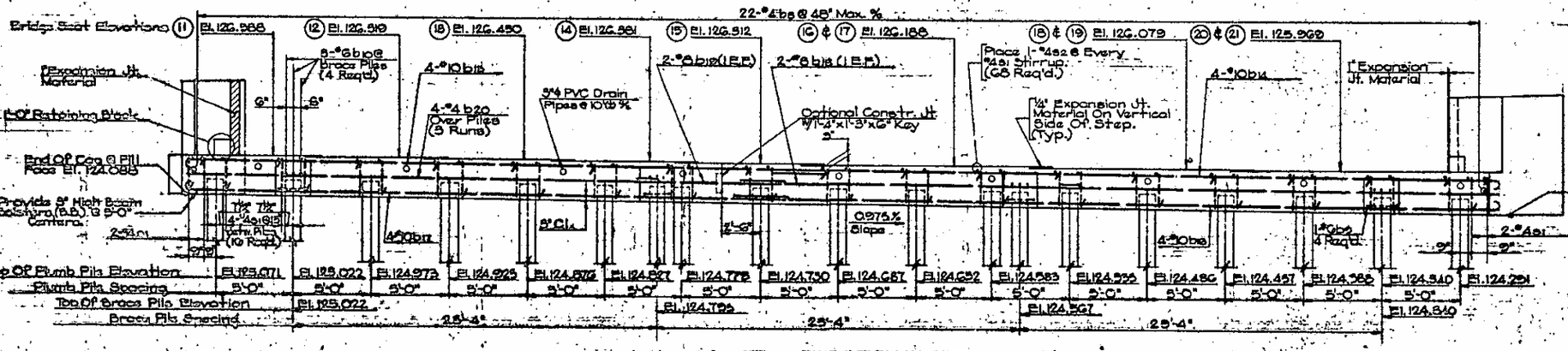

25-#4 bas @ 48" Max. Ctrs.
1" Expansion Jt. Material
1" Expansion Jt. Material On Vert. Face Of Step. (Typical)
1" Expansion Jt. Material
End Of Cap 11 Fill Face El. 122.101
Provide 5' High Beam Guiderail (BBS) Under C. Ahead.
Top Of Pile Elevation
Bottom Of Pile Elevation
Pile Spacing
Top Of Proposed Pile Elevations
Bottom Of Pile Elevations
11 El. 124.592
12 El. 124.484
13 El. 124.384
14 El. 124.284
15 El. 124.525
16 El. 124.256
17 El. 124.185
18 El. 124.115
19 El. 124.042
20 El. 123.970
21 El. 123.899
4-#4 ba Over Piles Lap W/#4 ba
2-#8 ba (1 E.P.)
4-#10 ba
1-#8 bn (5 Req'd)
4-#4 ba (Over Piles)
3" ϕ PVC Drain Pipes @ 10'(±) ϱ
Const. Jt. In Cap W/1'-4" x 1'-9" x 6" Key
4-#4 ba Over Piles
4-#10 b1
2-#8 ba (1 E.P.)
4-#4 ba Over Piles Lap W/#4 b7
Place 1-#4 sa @ Every #4 si Stirrup (82 Req'd)
5-#6 b16 e Brace Piles (5 Req'd.)
6"
6"
End Of Cap 19 Fill Face El. 121.989
1-#4 b1
6"
0.66% Slope
4-#10 b1
12 1/2"
5'-8" Batter Pile (6 Req'd.)
8" 8"
El. 130.102
El. 129.035
El. 122.967
El. 122.938
El. 122.890
El. 122.841
El. 122.798
El. 122.744
El. 122.690
El. 122.647
El. 122.593
El. 122.550
El. 122.502
El. 122.453
El. 122.405
El. 122.350
El. 122.306
El. 120.035
El. 120.035
El. 120.690
El. 120.520
El. 120.520
5'-8"
5'-8"
5'-8"

4	N.C.	B.1161704
F.A. PROJECT I-95-3(31)139		

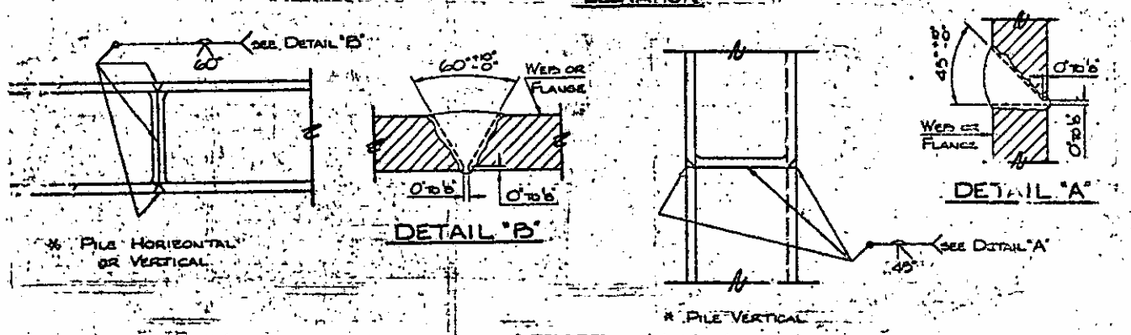


PLAN

END BENT Nº 4



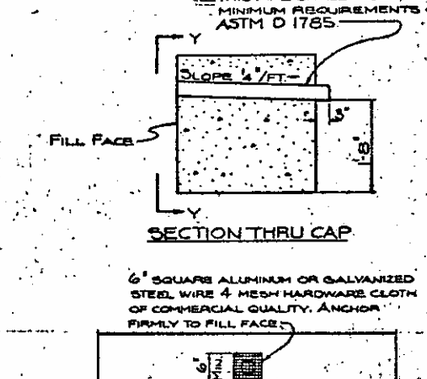
ELEVATION



* Position of Pile during welding

PILE SPLICE DETAILS

(If Req'd.)



NOTE: No separate payment will be made for furnishing and installing the PVC plastic pipe drains, hardware cloth and fasteners. The entire cost of this work shall be included in the unit contract price bid for the several pay items.

For Bill of Material, Sheet 3 of 3.

PROJECT NO. 8.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

SHEET 2 OF 3

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

STONY CREEK OVERPASS N.B.L.

SUBSTRUCTURE

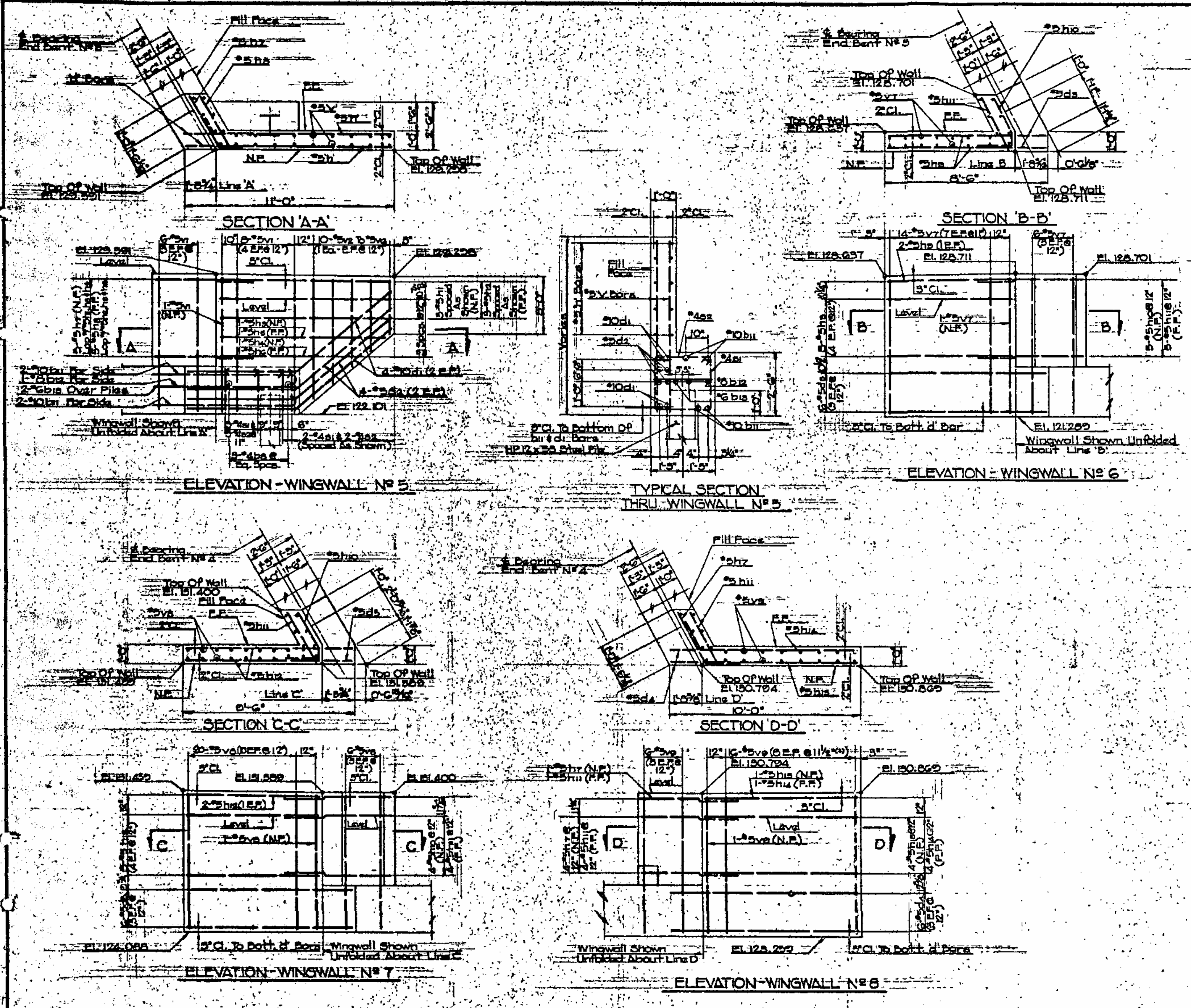
END BENT NO. 4

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

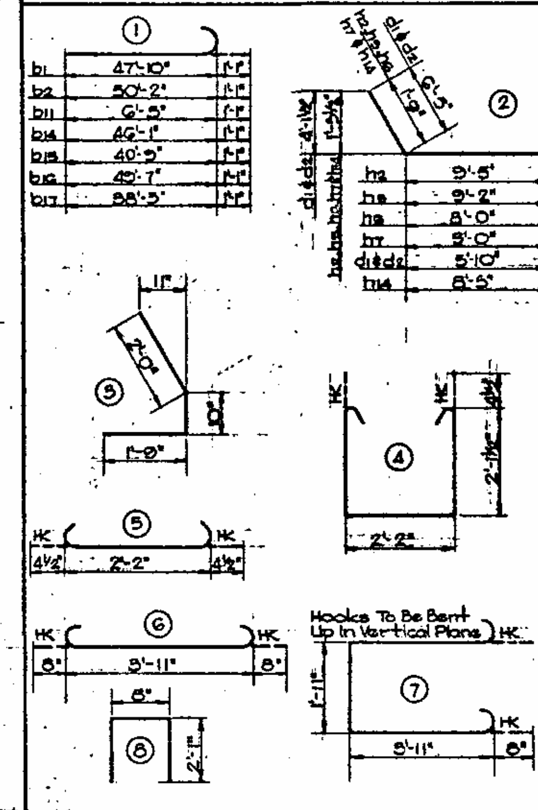
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5/23
1			3			TOTAL SHEETS
2			4			729

CHECKED BY: [illegible] DATE 3-07-73
DRAWN BY: [illegible] DATE 2-27-73

FED. ROAD DIST. NO.	STATE	PROJECT NO.
4	N. C.	8.1161704
F. A. PROJECT I-95-3(31)135		



BAR TYPES



BILL OF MATERIAL
END BENTS Nº3 & Nº4

BAR	NUMBER EB.#3	NUMBER EB.#4	SIZE	TYPE	LENGTH	WEIGHT EB.#3	WEIGHT EB.#4
b1	8		#10	1	48'-11"	1684	
b2	8		#10	1	51'-8"	1764	
b3	2		#8	Str.	47'-2"	252	
b4	2		#8	Str.	50'-2"	268	
b5	8		#4	Str.	25'-0"	134	
b6	4		#4	Str.	26'-10"	72	
b7	4		#4	Str.	21'-0"	56	
b8	28	22	#4	Str.	2'-2"	41	32
b9	5	4	#6	7	11'-1"	83	67
b10	15	12	#6	6	5'-3"	118	95
b11	4		#10	1	7'-4"	126	
b12	1		#8	Str.	6'-6"	17	
b13	2		#6	Str.	5'-8"	17	
b14		4	#10	1	48'-2"		829
b15		4	#10	1	41'-10"		720
b16		4	#10	1	50'-8"		872
b17		4	#10	1	39'-4"		677
b18		2	#8	Str.	49'-5"		263
b19		2	#8	Str.	37'-10"		202
b20		12	#4	Str.	29'-2"		234
h1	3		#5	Str.	9'-1"	28	
h2	3		#5	2	11'-2"	35	
h3	1		#5	Str.	8'-10"	9	
h4	1		#5	Str.	7'-8"	8	
h5	1		#5	2	10'-11"	11	
h6	1		#5	2	9'-9"	10	
h7	5	5	#5	2	4'-9"	25	25
h8	5		#5	Str.	3'-0"	16	
h9	10		#5	Str.	6'-6"	68	
h10	5	5	#5	3	4'-7"	24	24
h11	5	10	#5	Str.	2'-10"	15	30
h12		10	#5	Str.	7'-6"		78
h13		5	#5	Str.	8'-1"		42
h14		5	#5	2	10'-2"		53
s1	87	68	#4	4	7'-2"	416	326
s2	87	68	#4	5	2'-11"	170	132
v1	15		#5	Str.	6'-10"	107	
v2	2		#5	Str.	6'-4"	13	
v3	2		#5	Str.	5'-6"	11	
v4	2		#5	Str.	4'-7"	10	
v5	2		#5	Str.	3'-9"	8	
v6	2		#5	Str.	2'-11"	6	
v7	21		#5	Str.	7'-1"	155	-
v8		27	#5	Str.	7'-0"		197
v9		23	#5	Str.	7'-2"		172

BILL OF MATERIAL - CONT'D
END BENTS Nº 3 & Nº 4

BAR	NUMBER EB.#3	NUMBER EB.#4	SIZE	TYPE	LENGTH	WEIGHT EB.#3	WEIGHT EB.#4
d1	4		#10	2	12'-3"	211	
d2	4		#5	2	12'-3"	51	
d3	6		#5	Str.	8'-0"	50	
d4		6	#5	Str.	9'-8"		60
d5		6	#5	Str.	9'-0"		56
RB1	6	6	#4	8	4'-10"	19	19
RB2	4	4	#4	Str.	1'-2"	3	3
Reinforcing Steel					Lbs.	6,111	5,208
Class 'A' Concrete					C.Y.	29.2	26.5
H.P. 12x53 Steel Piles					Nº	23	21
					L.F.	945	900

PROJECT NO. 8.1161704

NASH **COUNTY**

STATION: 2222+00 NBL I-95

SHEET 3 OF 3

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

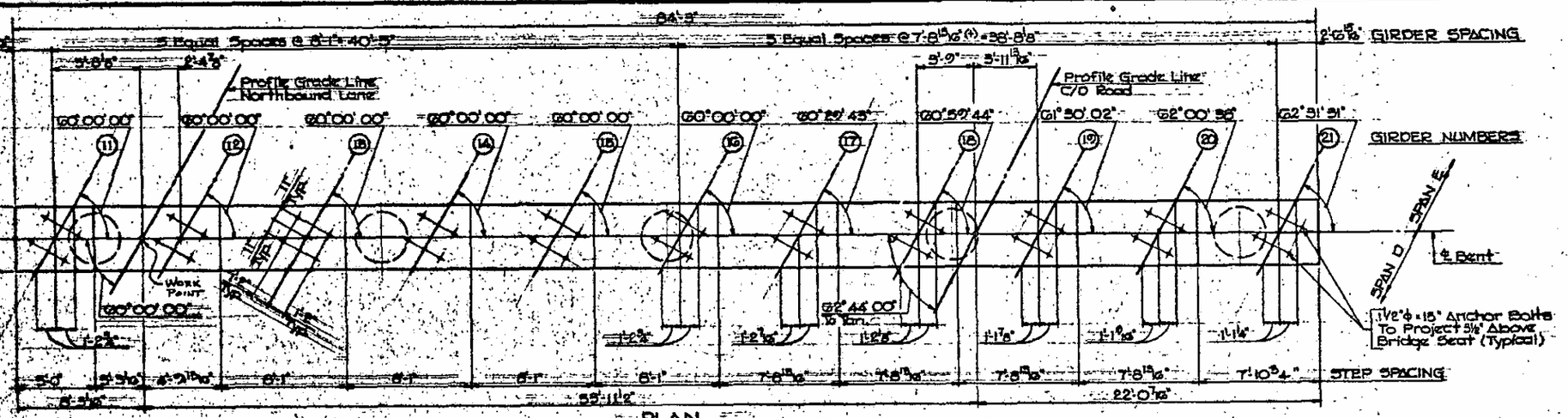
STONY CREEK OVERPASS N.B.L.
SUBSTRUCTURE
END BENT DETAILS

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

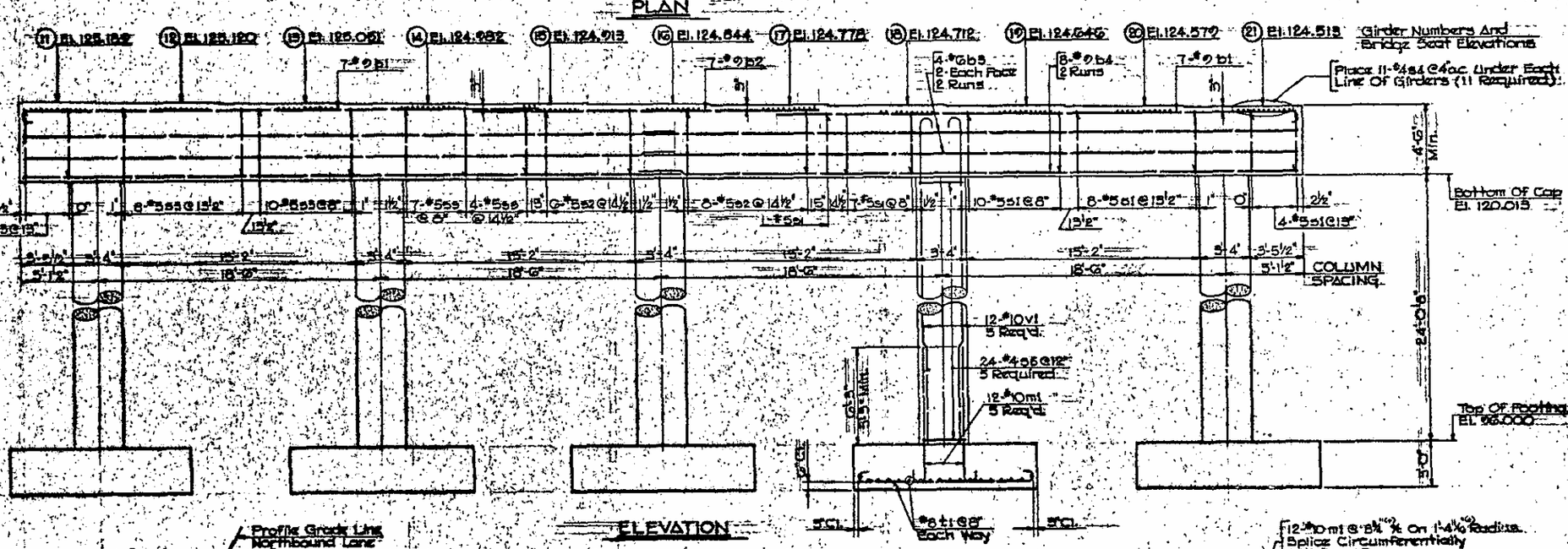
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-124
1			3			TOTAL SHEETS
2			4			/129

CHECKED BY [signature] DATE SEPT 73
DRAWN BY [signature] DATE SEPT 73

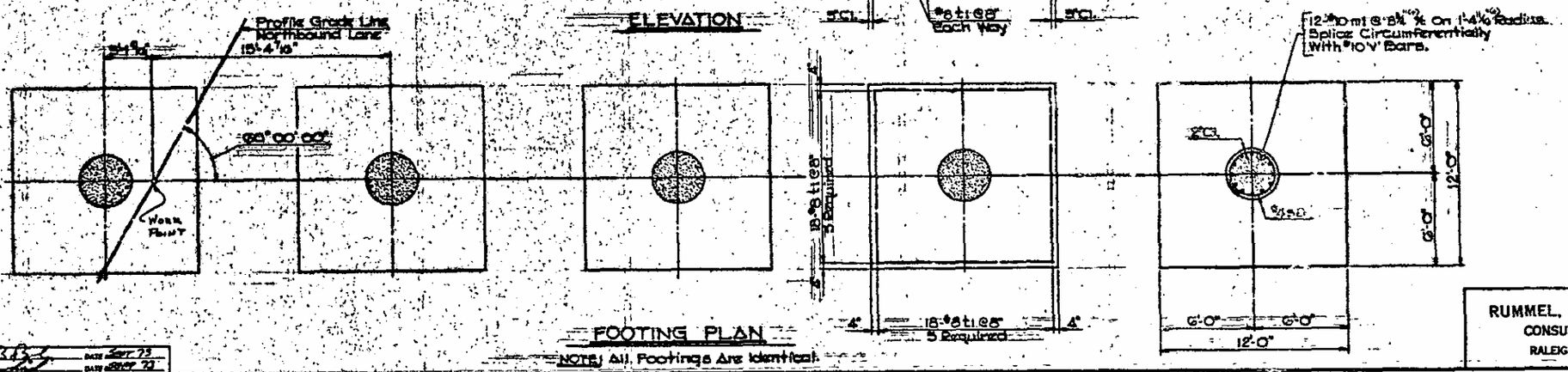
4	N.C.	8.1161704
F.A. PROJECT I-95-3(31)136		



PLAN



ELEVATION



FOOTING PLAN

NOTE: All Footings Are Identical.

Note: For Bill of Material, See Sheet 3 of 3.

PROJECT NO. 8.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

SHEET 1 OF 3

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

STONY CREEK OVERPASS N.B.L.

SUBSTRUCTURE

BENT NO. 3

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS							
NO.	BY	DATE	NO.	BY	DATE		
1			3				
2			4				

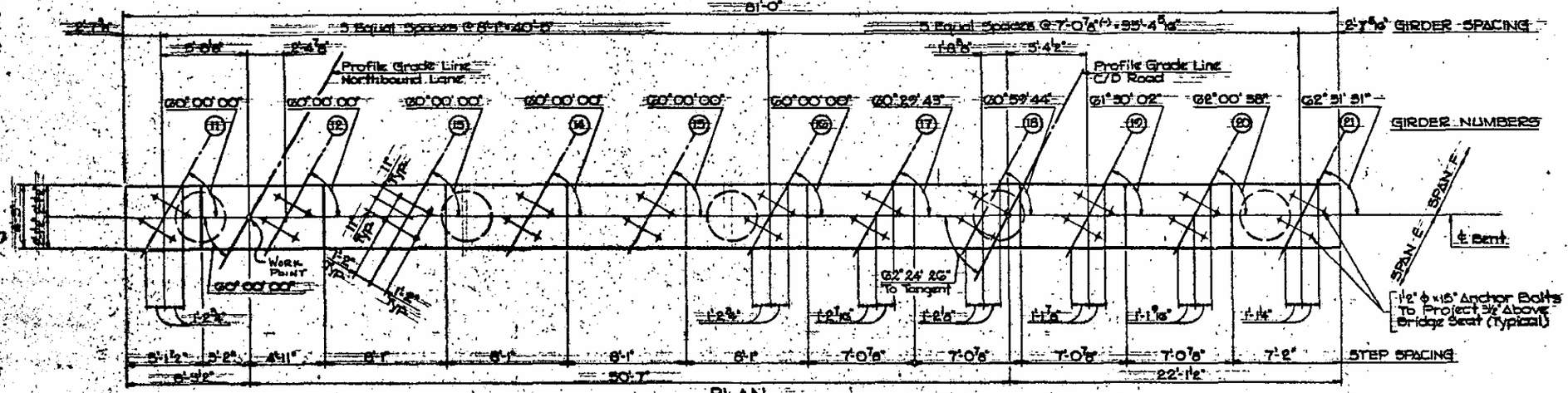
3-125

129

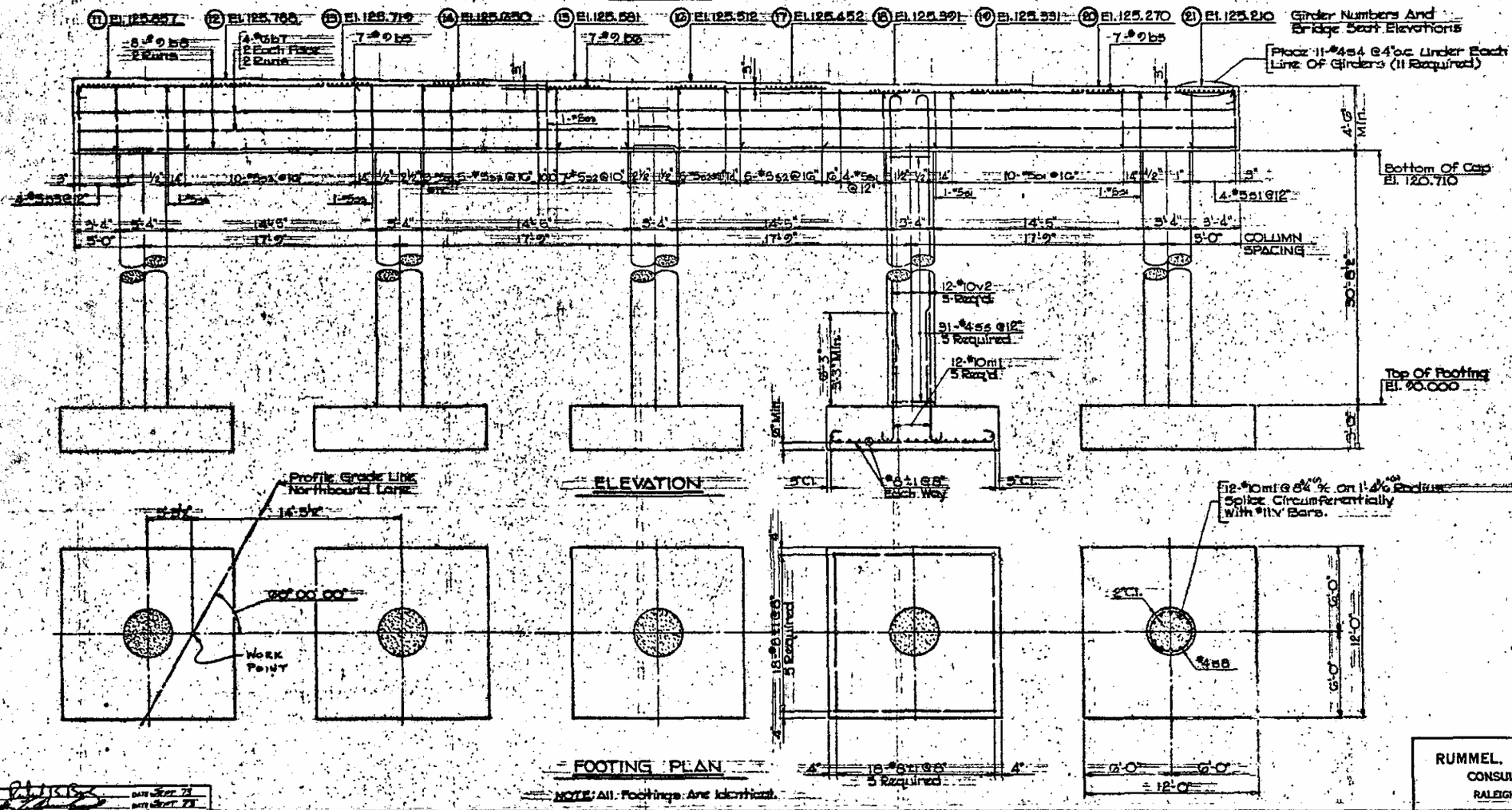
CHECKED BY [signature] DATE Sept. 73

DRAWN BY [signature] DATE Sept. 73

	N.C.	B.1161704
F.A. PROJECT	I-95-3(31)135	



PLAN



ELEVATION

FOOTING PLAN

NOTE: All Footings Are Identical.

Note: For Bill of Material, See Sheet 3 of 3.

PROJECT NO. B.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

SHEET 2 OF 3

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

STONY CREEK OVERPASS N.B.L.
SUBSTRUCTURE
BENT NO. 4

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-126
1			3			TOTAL SHEETS
2			4			129

CHECKED BY: [illegible] DATE Sept. 71
DRAWN BY: [illegible] DATE Sept. 71

BILL OF MATERIAL

BENTS 3 & 4

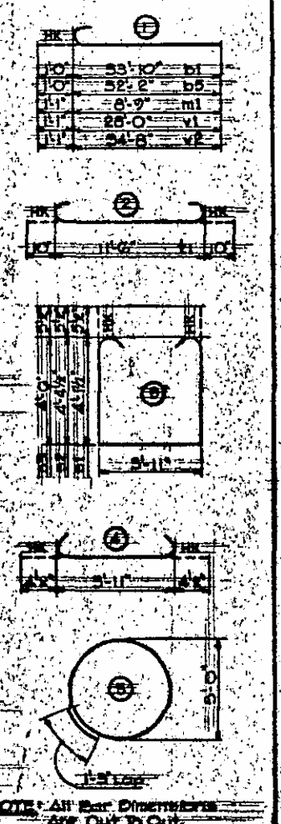
BAR	NUMBER St.3	NUMBER St.4	SIZE	TYPE	LENGTH	WEIGHT St.3	WEIGHT St.4
b1	14		#9	1	34'-10"	1658	
b2	7		#9	Str.	21'-7"	514	
b5	8		#6	Str.	43'-0"	517	
b4	16		#9	Str.	43'-4"	2357	
b5		14	#9	1	33'-2"		1579
b6		7	#9	Str.	22'-9"		541
b7		8	#6	Str.	41'-4"		497
b8		16	#9	Str.	41'-9"		2271
m1	60	60	#10	1	9'-10"	2559	2559
s1	30	20	#5	3	13'-1"	405	275
s2	14	17	#5	3	13'-7"	198	241
s3	52	24	#5	3	13'10"	402	340
s4	121	121	#4	4	4'-8"	377	377
s5	120	155	#4	5	10'-6"	555	1104
t1	180	180	#8	2	13'-2"	0928	0928
v1	60		#10	1	29'-1"	7509	
v2		60	#10	1	35'-9"		0230
Reinforcing Steel - Pounds						23,723	25,420

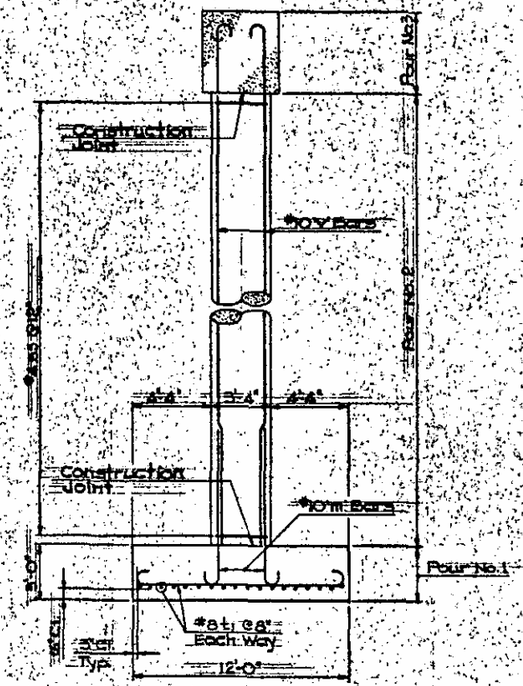
CLASS 'A' CONCRETE BREAKDOWN

Pour No.1 - Footings	C.Y.	80.0	80.0
Pour No.2 - Columns	C.Y.	38.5	42.0
Pour No.3 - Cap	C.Y.	04.0	01.9
TOTAL	C.Y.	122.5	120.9

NOTE: All Bar Dimensions Are Out To Out.

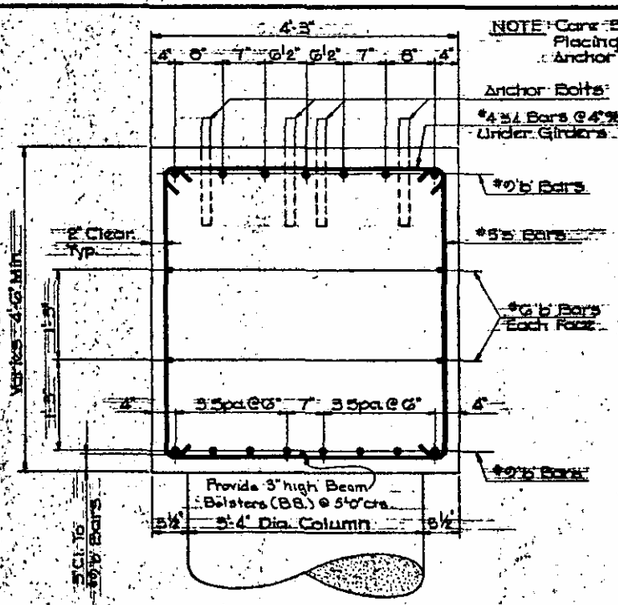
BAR TYPES





TYPICAL SECTION THRU BENT

NOTE: Hooks Of V Bars May Be Turned As Necessary For Placing Reinforcing



TYPICAL SECTION THRU CAPS

NOTE: Care Shall Be Taken In Placing Bars To Clear Anchor Bolts.

P.A. PROJECT	PAGE	PROJECT NO.
I-95-3(5)135	4	N.C. 8.1161704

PROJECT NO. 8.1161704

NASH COUNTY

STATION: 2222+00 NBL I-95

SHEET 3 OF 3

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

STONY CREEK OVERPASS N.B.L.
SUBSTRUCTURE
BENT DETAILS

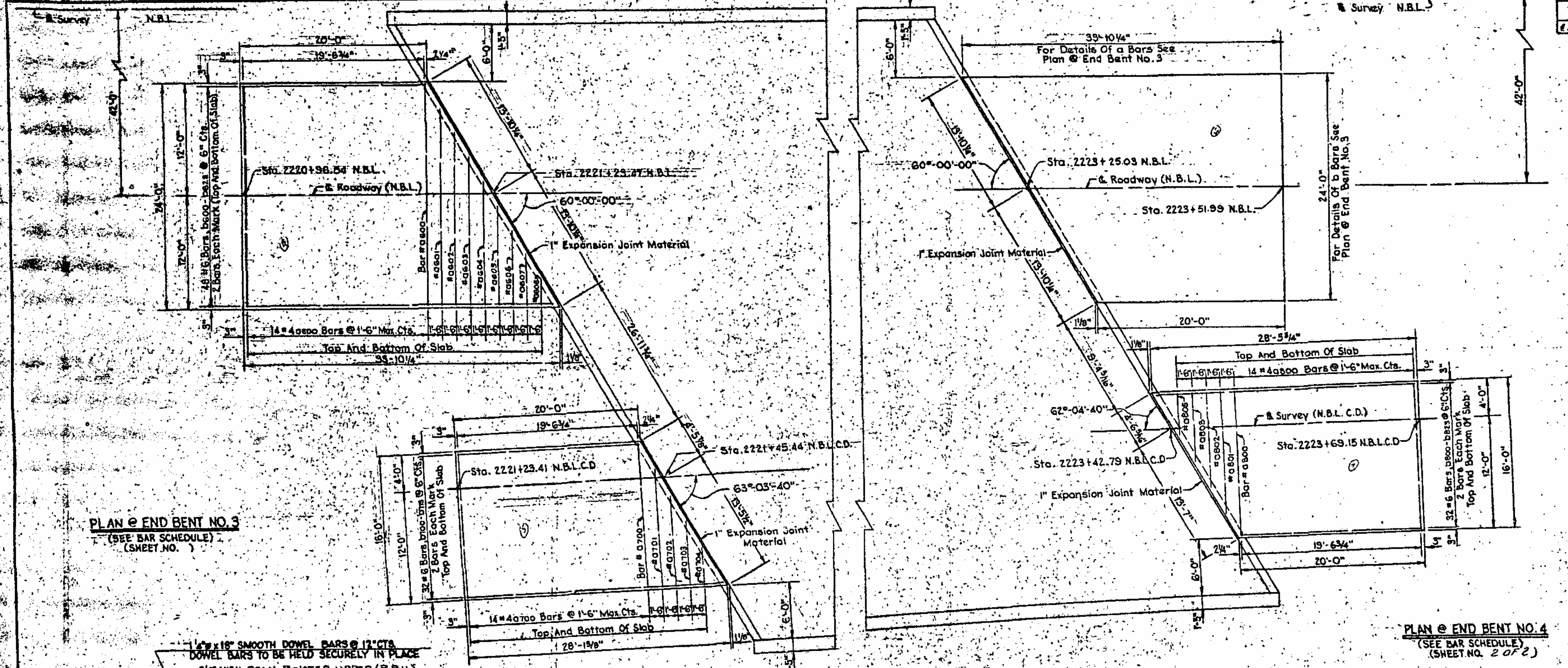
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
RALEIGH, NORTH CAROLINA

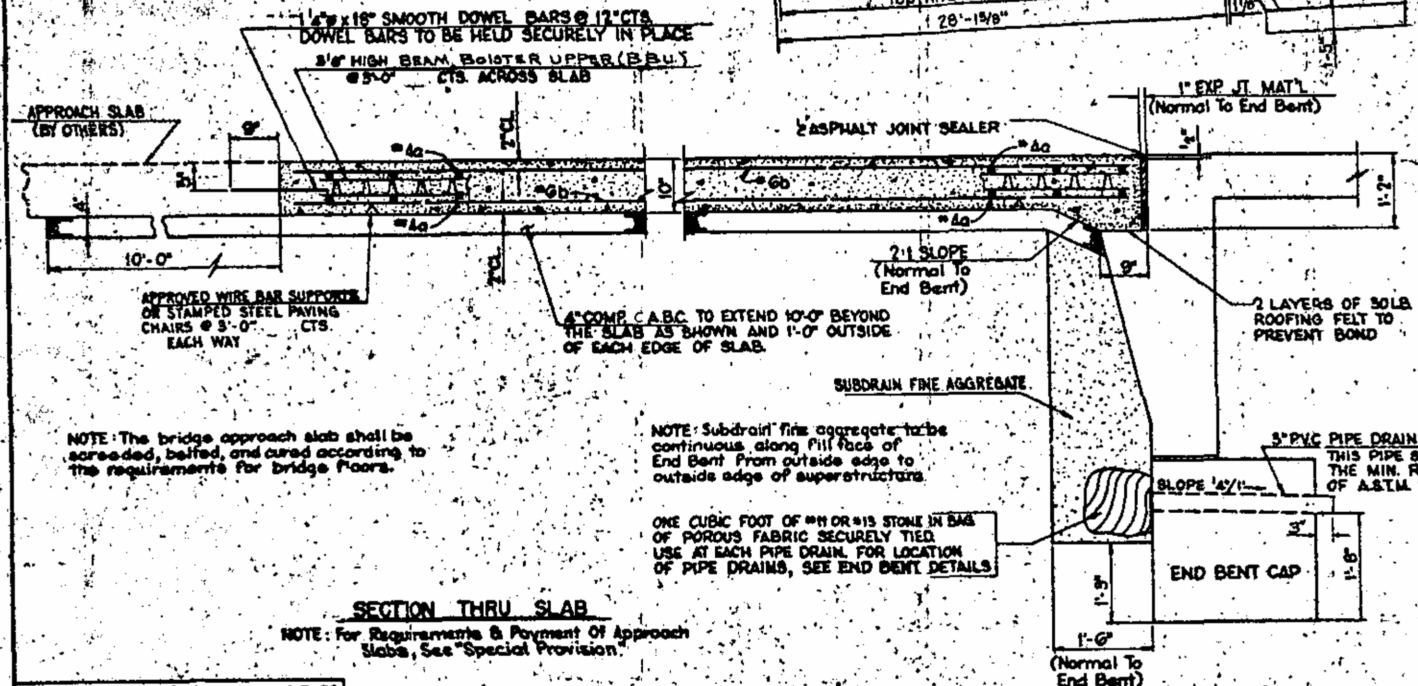
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-127
1			3			TOTAL SHEETS
2			4			129

CHECKED BY: DATE: Sept 73
DRAWN BY: DATE: Oct 73

FED. ROAD DIV. NO.	STATE	PROJECT NO.
4	N.C.	8.1161704

F.A. PROJECT I-95-3(31)135





NOTE: The bridge approach slab shall be screeded, belted, and cured according to the requirements for bridge floors.

NOTE: Subdrain fine aggregate to be continuous along fill face of End Bent from outside edge to outside edge of superstructure.

ONE CUBIC FOOT OF #11 OR #13 STONE IN BAG OF POROUS FABRIC SECURELY TIED. USE AT EACH PIPE DRAIN. FOR LOCATION OF PIPE DRAINS, SEE END BENT DETAILS.

SECTION THRU SLAB

NOTE: For Requirements & Payment Of Approach Slabs, See "Special Provision".

PROJECT NO. 8.1161704

NASH COUNTY

STATION 2222+00 (N.B.L.)

Sheet 1 of 2

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

BRIDGE APPROACH SLAB FOR RIGID PAVEMENT

REVISIONS								SHEET NO.
NO.	BY	DATE		NO.	BY	DATE		S-128
1				3				TOTAL SHEETS
2				4				129

DRAWN BY F.E. Hibbehren DATE 9-7-73
CHECKED BY A. Morris DATE 10-4-73