

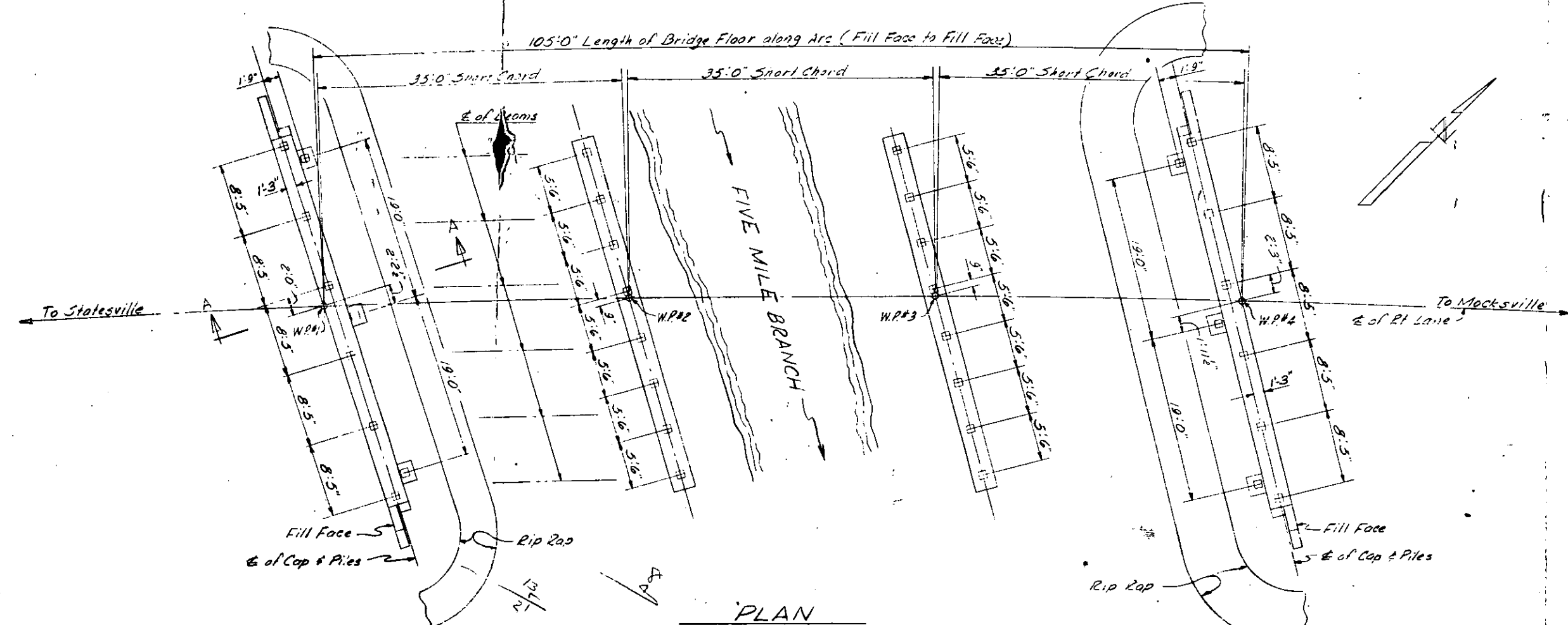
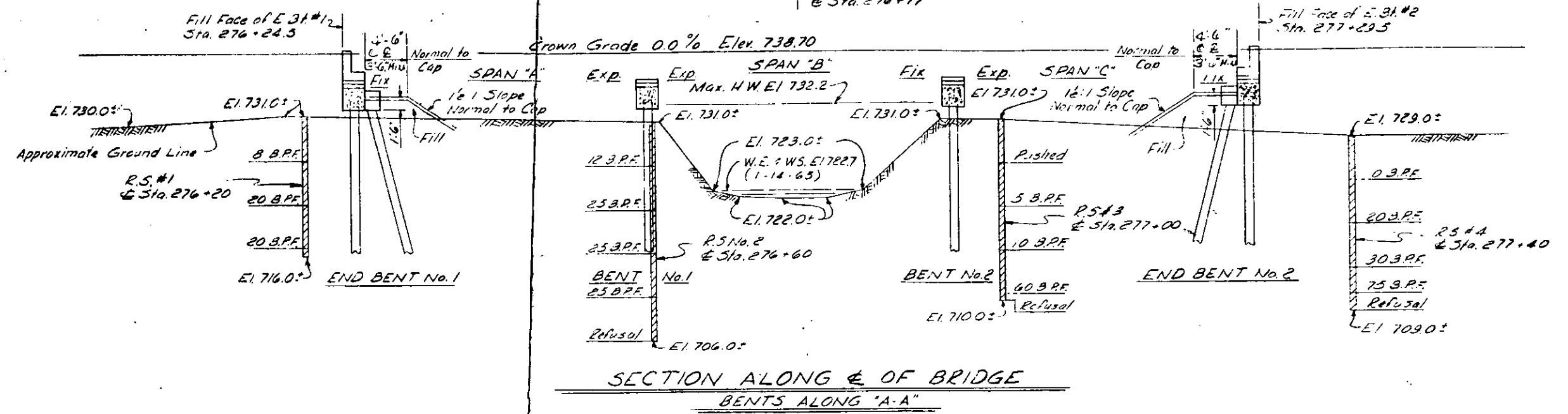
276+00 +10 +20 +30 +40 +50 +60 +70 +80 +90 277+00 +10 +20 +30 +40 +50 +60 +70

PROJECT 3-60

**NOTES**

Assumed Live Load - HS 20-44 or Alternate Loading.  
 For other design data and general notes see sheet S-N.  
 All piles for End Bents and Interior Bents shall be driven to a minimum bearing capacity of 30 tons per pile.  
 Piles for End Bents #1 and #2 to be driven through the roadway fill.  
 The contractor shall be responsible for determining the lengths of the piles required. See Special Provisions.

40-82 510  
 IREDELL



I HEREBY CERTIFY THAT THIS STRUCTURE WAS BUILT ACCORDING TO PLAN'S EXCEPT AS NOTED HEREIN  
 J. L. L...  
 RESIDENT ENGINEER

# 174

SEE PAGE'S 57 THROUGH 62, STA. PAY RECORD BOOK # 1

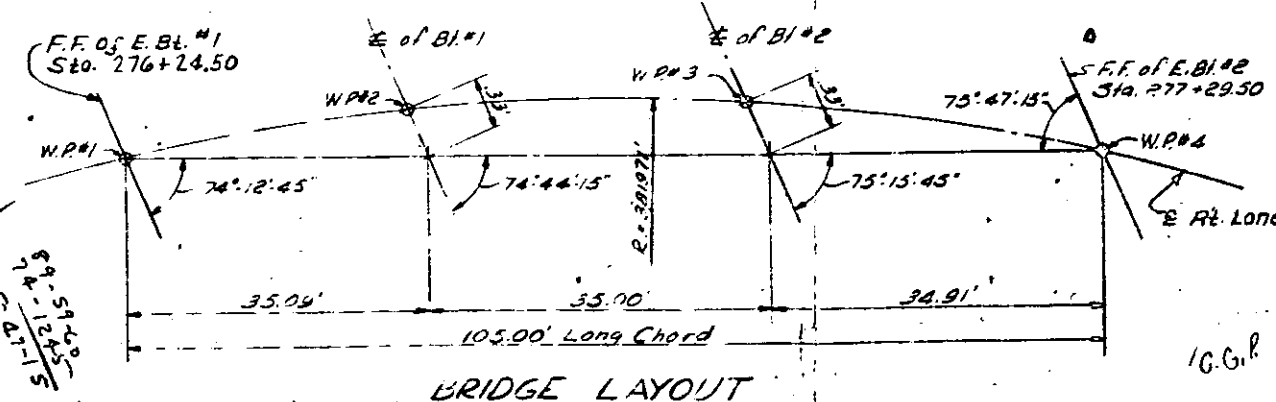
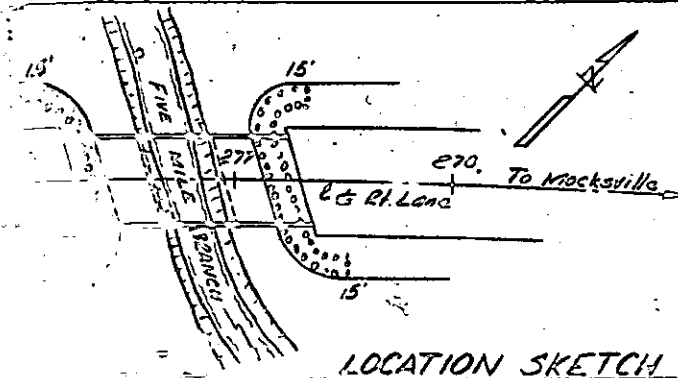
PROJECT NO. 8164100

IREDELL COUNTY

STATION: 276+77 R.L. LOC.

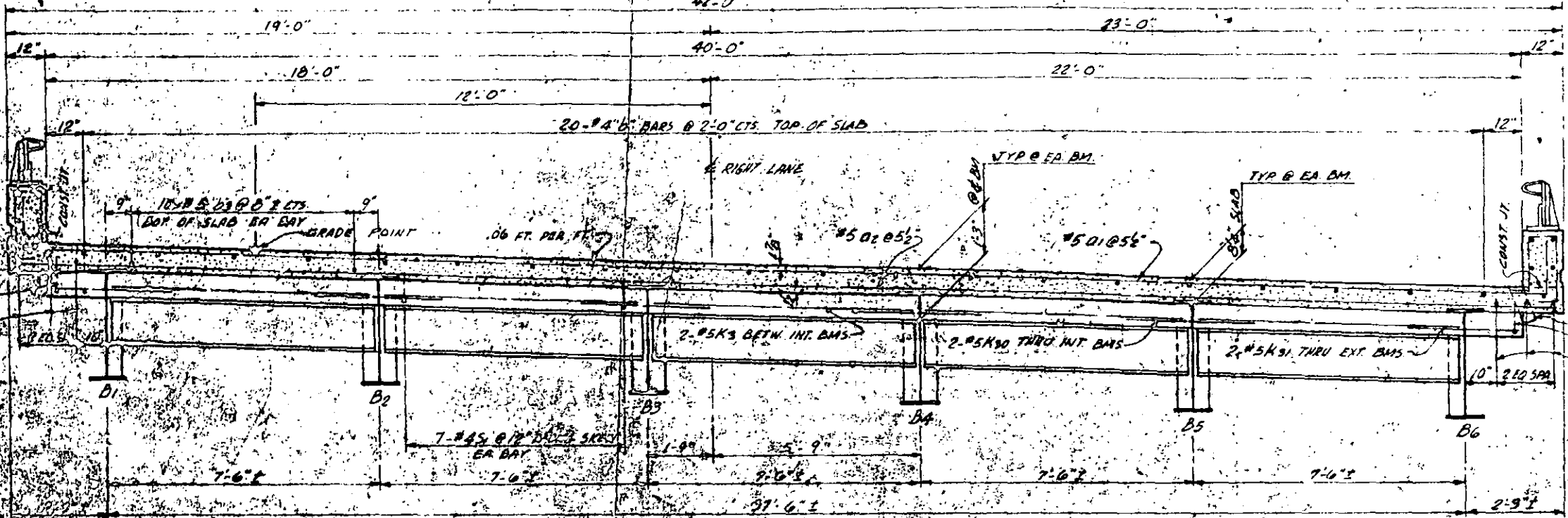
PAY RECORD BOOK	1	1	1	6	3	1	1
PAGE No.	57 Thru 62	57 Thru 62	61 & 62	42 Thru 45	18 Thru 20	61 & 62	61 & 62
<b>TOTAL BILL OF MATERIAL</b>							
Class "A" Concrete	140.4 Cu. Yds.	31,770 Lbs.	77,800 Approx. Lbs.	12' Prest. Conc. Piles	9 No. Lin. Ft.	Concrete RIP RAP	59 Yds.
Reinforcing Steel				One Bar Metal Rail	198.09 Lin. Ft.	Linseed Oil* Conc. Protect.	607 lbs
Structural Steel						# 10.55	
Superstructure	140.4	31,770	77,800	204.75	198.09	# 10.55	
End Bent No. 1	10.3	2,016					
Bent No. 2	10.3	2,016					
End Bent No. 2	10.4	2,715					
<b>TOTALS</b>	<b>189.8</b>	<b>41,831</b>	<b>77,800</b>	<b>204.75</b>	<b>198.09</b>	<b># 10.55</b>	

\* See Special Provisions for method of curing bridge deck and mixing and applying the linseed oil solution.

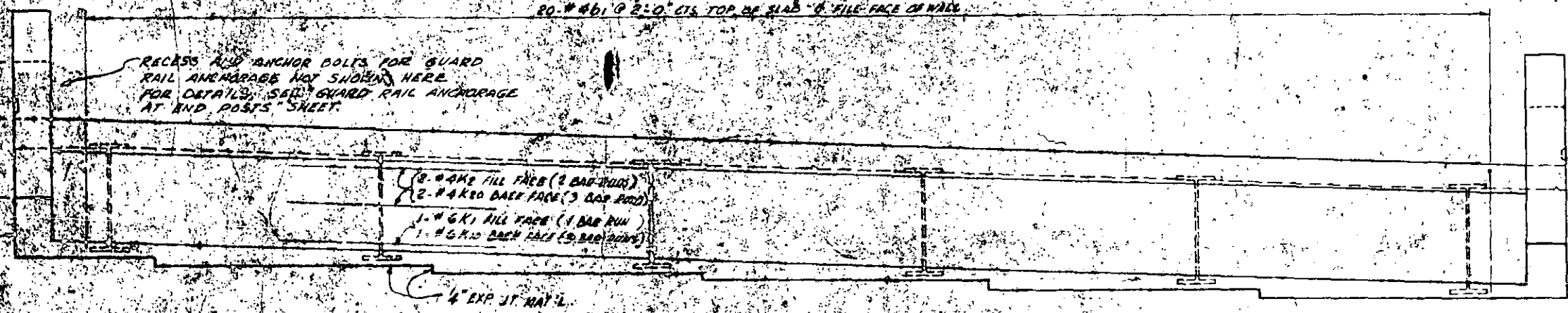


STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 GENERAL DRAWING  
 FOR BRIDGE OVER FIVE MILE BRANCH ON L.R.T. LANE BETWEEN STATESVILLE AND MOCKSVILLE  
 APRIL 1926

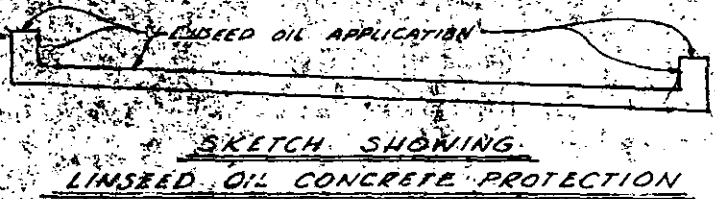
CD.	CI.	CS.	CT.
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TYPICAL SECTION  
(SHOWING DIAPHRAGMS AT INTERVALS)



END ELEVATION

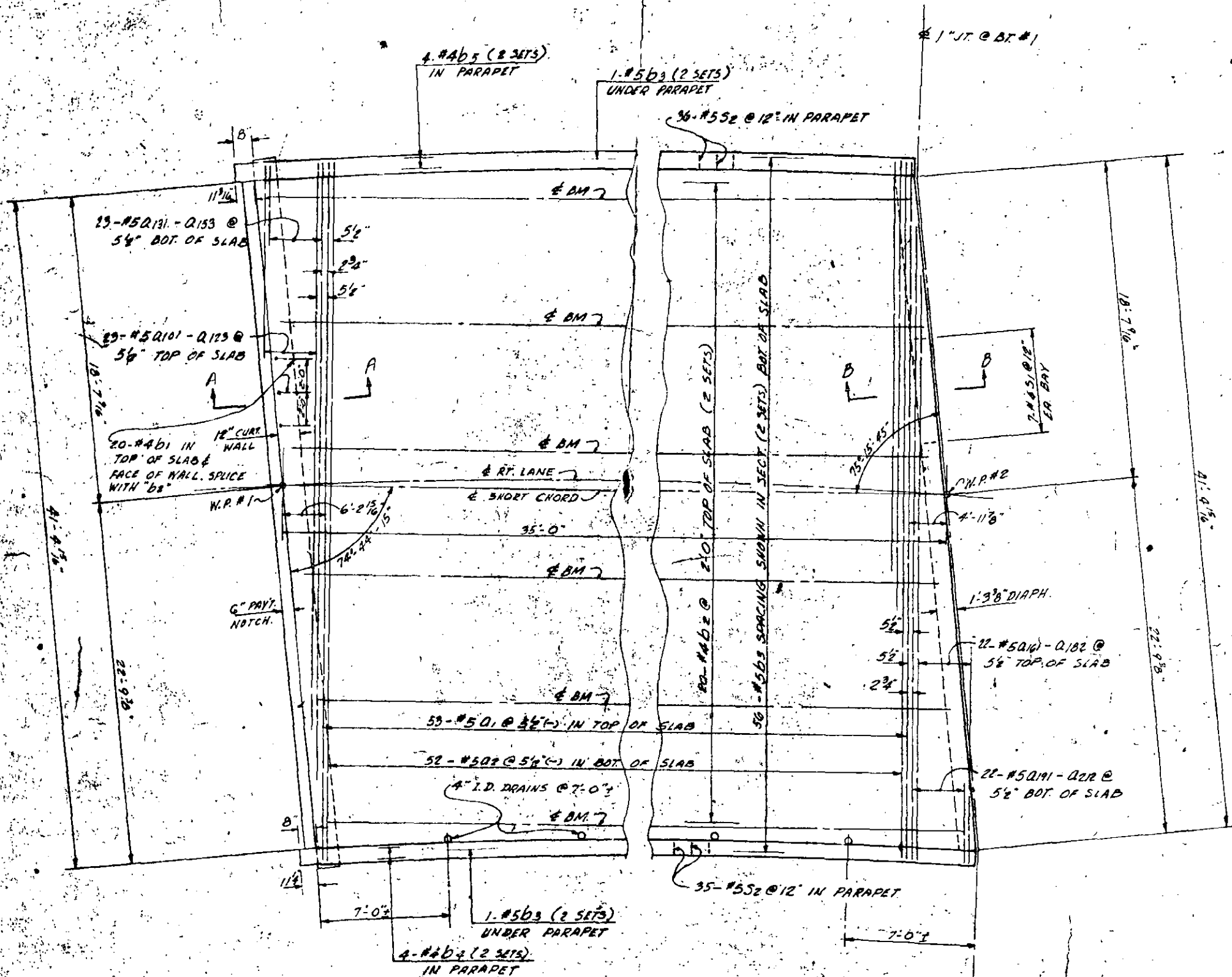


PROJECT NO. B.164140  
 T. PEDELL COUNTY  
 STATION: 276+77  
 RT. LANE

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 RALEIGH  
 SUPERSTRUCTURE  
 STANDARD TYPICAL SECTION  
 40' ROADWAY - 6 STEEL BEAMS  
 MARCH 1965

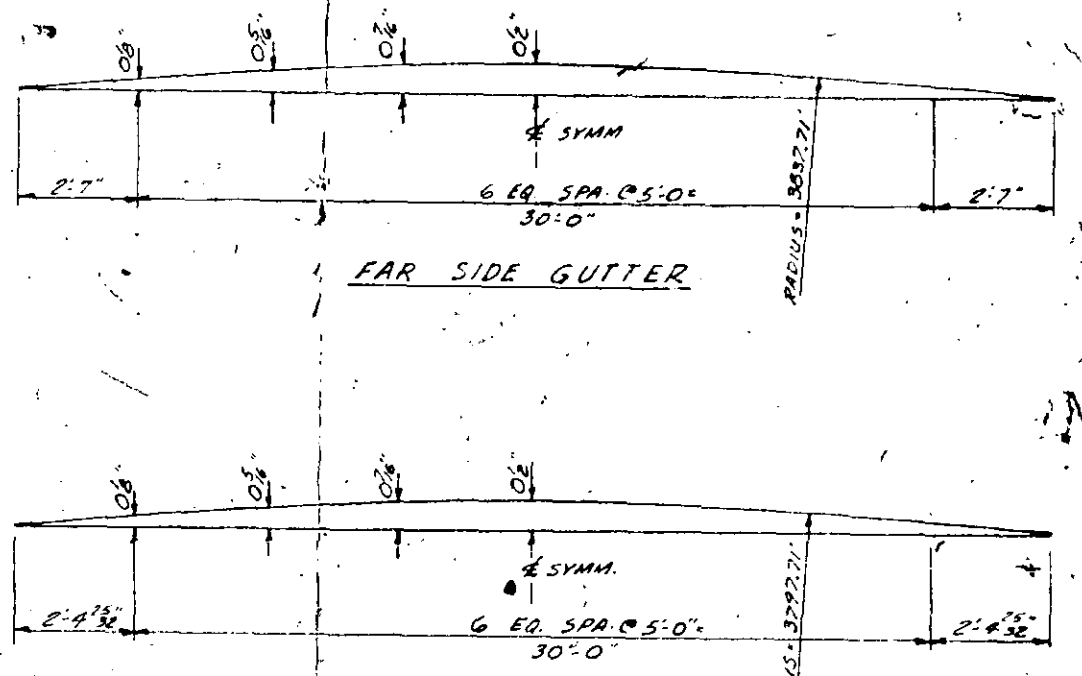
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1					
2					

DATE 10/25/66  
 DATE 11/27/66



**PLAN**  
**SPAN A - RT. LANE**

NOTE: POSTS AND RAIL ARE NOT SHOWN



**CURVE OFFSETS**

NOTE: SHORT CHORD IS MEASURED FROM FILL FACE OF E. BT. #1 TO E. OF BT. #1.

PROJECT NO. B.1641404  
 IREDELL COUNTY  
 STATION: 276+27

NOTE: "O" BARS SHALL BE PLACED PERPENDICULAR TO THE RT. LANE SHORT CHORD & SPACED ALONG THE SHORT CHORD.

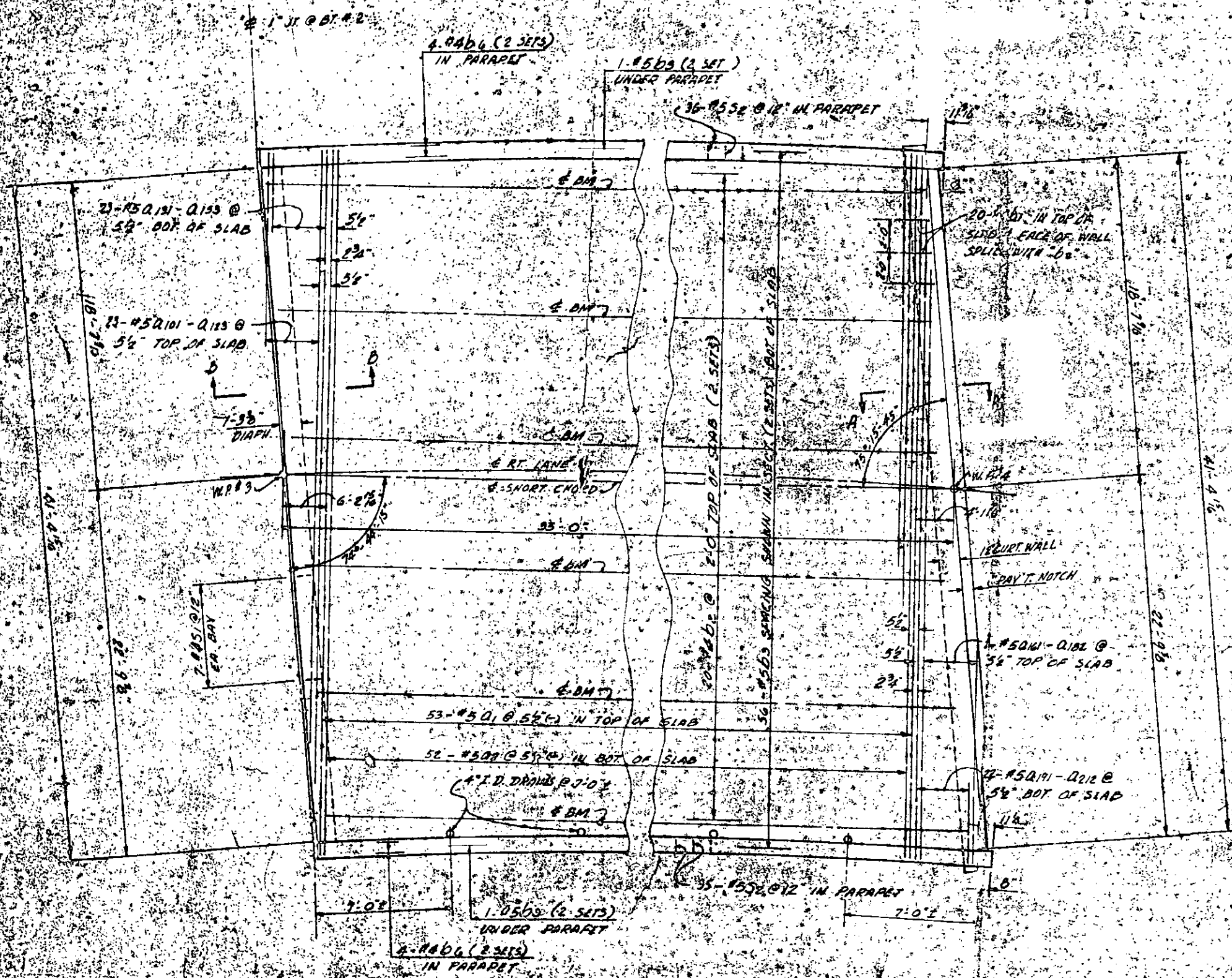
STATE OF NORTH CAROLINA  
**STATE HIGHWAY COMMISSION**  
 RALEIGH  
**SUPERSTRUCTURE**  
 SPAN A  
 RT. LANE  
 APRIL 1966

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

SOCKET NO. 5-123  
 TOTAL NO. SHEETS 257

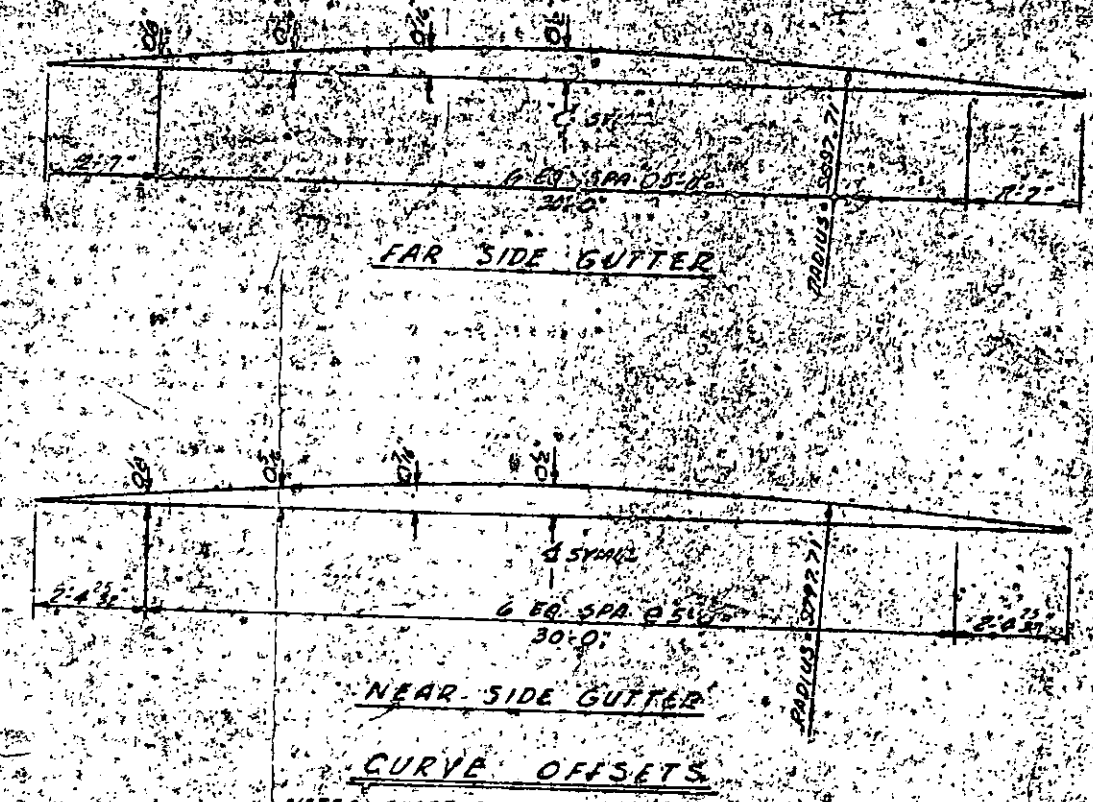
DATE APR '66  
 DATE APR '66





PLAN  
 SPAN C - RT. LANE

NOTE: POSTS AND BARS ARE NOT SHOWN



PROJECT NO. 81641A01  
 TREDELL COUNTY  
 STATION 276+77

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 RALPH  
 SUPERSTRUCTURE  
 SPAN C  
 RT. LANE

APRIL 1966

REVISIONS					
NO.	BY	DATE	REASON	DATE	BY

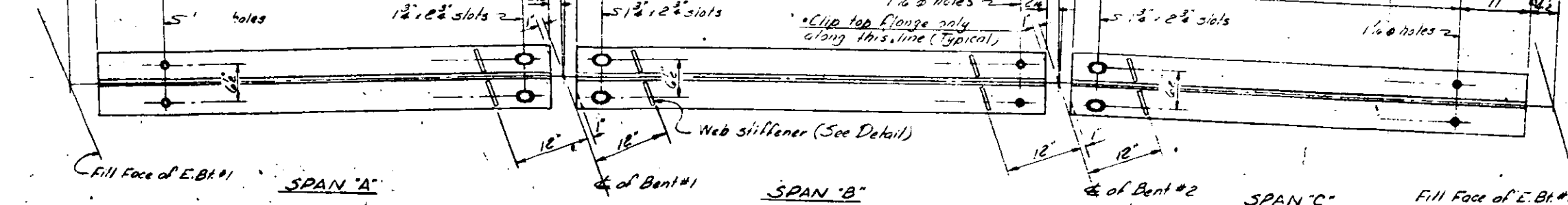
DATE: APR 16 1966  
 DRAWN BY: [unclear]

NOTE: "O" BARS SHALL BE PLACED PERPENDICULAR TO THE 3 LANE SHORT CHORD & SPACED ALONG THE SHORT CHORD.



**STRUCTURAL STEEL PLAN**

Beam	Span A	Span B	Span C
B <sub>1</sub>	35:1 <sup>13</sup> / <sub>16</sub> "	35:1 <sup>13</sup> / <sub>16</sub> "	35:1 <sup>12</sup> / <sub>16</sub> "
B <sub>2</sub>	35:1"	35:1"	35:1"
B <sub>3</sub>	35:0 <sup>3</sup> / <sub>16</sub> "	35:0 <sup>3</sup> / <sub>16</sub> "	35:0 <sup>7</sup> / <sub>16</sub> "
B <sub>4</sub>	34:11 <sup>3</sup> / <sub>8</sub> "	34:11 <sup>3</sup> / <sub>8</sub> "	34:11 <sup>3</sup> / <sub>8</sub> "
B <sub>5</sub>	34:10 <sup>1</sup> / <sub>2</sub> "	34:10 <sup>1</sup> / <sub>2</sub> "	34:10 <sup>1</sup> / <sub>2</sub> "
B <sub>6</sub>	34:9 <sup>1</sup> / <sub>16</sub> "	34:9 <sup>1</sup> / <sub>16</sub> "	34:10 <sup>1</sup> / <sub>2</sub> "
B <sub>7</sub>	34:7 <sup>1</sup> / <sub>16</sub> "	34:9 <sup>1</sup> / <sub>16</sub> "	34:9 <sup>1</sup> / <sub>16</sub> "
B <sub>8</sub>	34:6 <sup>1</sup> / <sub>4</sub> "	34:8 <sup>3</sup> / <sub>8</sub> "	34:7 <sup>1</sup> / <sub>8</sub> "
B <sub>9</sub>	34:5 <sup>1</sup> / <sub>16</sub> "	34:7 <sup>1</sup> / <sub>2</sub> "	34:6 <sup>5</sup> / <sub>16</sub> "
B <sub>10</sub>	34:4 <sup>5</sup> / <sub>8</sub> "	34:6 <sup>1</sup> / <sub>2</sub> "	34:5 <sup>1</sup> / <sub>16</sub> "
B <sub>11</sub>	34:3 <sup>1</sup> / <sub>2</sub> "	34:6 <sup>1</sup> / <sub>8</sub> "	34:4 <sup>5</sup> / <sub>8</sub> "
B <sub>12</sub>	34:2 <sup>1</sup> / <sub>2</sub> "	34:6 <sup>1</sup> / <sub>8</sub> "	34:4 <sup>5</sup> / <sub>8</sub> "
B <sub>13</sub>	33:4 <sup>1</sup> / <sub>16</sub> "	34:5 <sup>1</sup> / <sub>4</sub> "	34:3 <sup>1</sup> / <sub>16</sub> "
B <sub>14</sub>	33:3 <sup>1</sup> / <sub>4</sub> "	34:1 <sup>1</sup> / <sub>16</sub> "	34:2 <sup>1</sup> / <sub>16</sub> "
B <sub>15</sub>	33:2 <sup>1</sup> / <sub>16</sub> "	34:0 <sup>3</sup> / <sub>8</sub> "	33:4 <sup>1</sup> / <sub>16</sub> "
B <sub>16</sub>	33:2 <sup>1</sup> / <sub>16</sub> "	33:11 <sup>1</sup> / <sub>2</sub> "	33:3 <sup>5</sup> / <sub>16</sub> "
B <sub>17</sub>	33:1 <sup>3</sup> / <sub>8</sub> "	33:10 <sup>1</sup> / <sub>2</sub> "	33:2 <sup>1</sup> / <sub>16</sub> "
B <sub>18</sub>	33:0 <sup>13</sup> / <sub>16</sub> "	33:10 <sup>1</sup> / <sub>2</sub> "	33:1 <sup>3</sup> / <sub>8</sub> "
B <sub>19</sub>	32:11 <sup>1</sup> / <sub>16</sub> "	33:9 <sup>1</sup> / <sub>4</sub> "	33:0 <sup>13</sup> / <sub>16</sub> "
B <sub>20</sub>	32:11 <sup>1</sup> / <sub>16</sub> "	33:9 <sup>1</sup> / <sub>4</sub> "	32:11 <sup>1</sup> / <sub>16</sub> "



**NOTE**  
The contractor may, at his option, but without change in the contract price of structural steel, use split 10W30 connections bolted to the beam web and welded to the channel diaphragm in lieu of the welded plate intermediate diaphragm connections shown.

**NOTE**  
In lieu of the welding procedure for shop and field welds indicated for the interior diaphragm connections, the contractor may, at his option, shop weld the connector plates to the beam webs and field weld the channels to the connector plates. Special care in handling the beams must be observed if connector plates are shop welded to the beam webs.

PROJECT No. 8.164.404  
IREDELL COUNTY  
STATION: 276+77 Rt. Lane

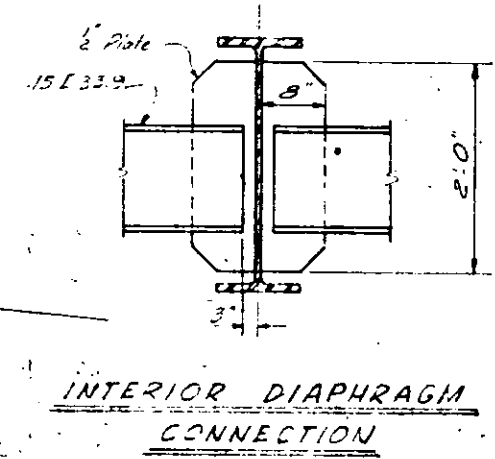
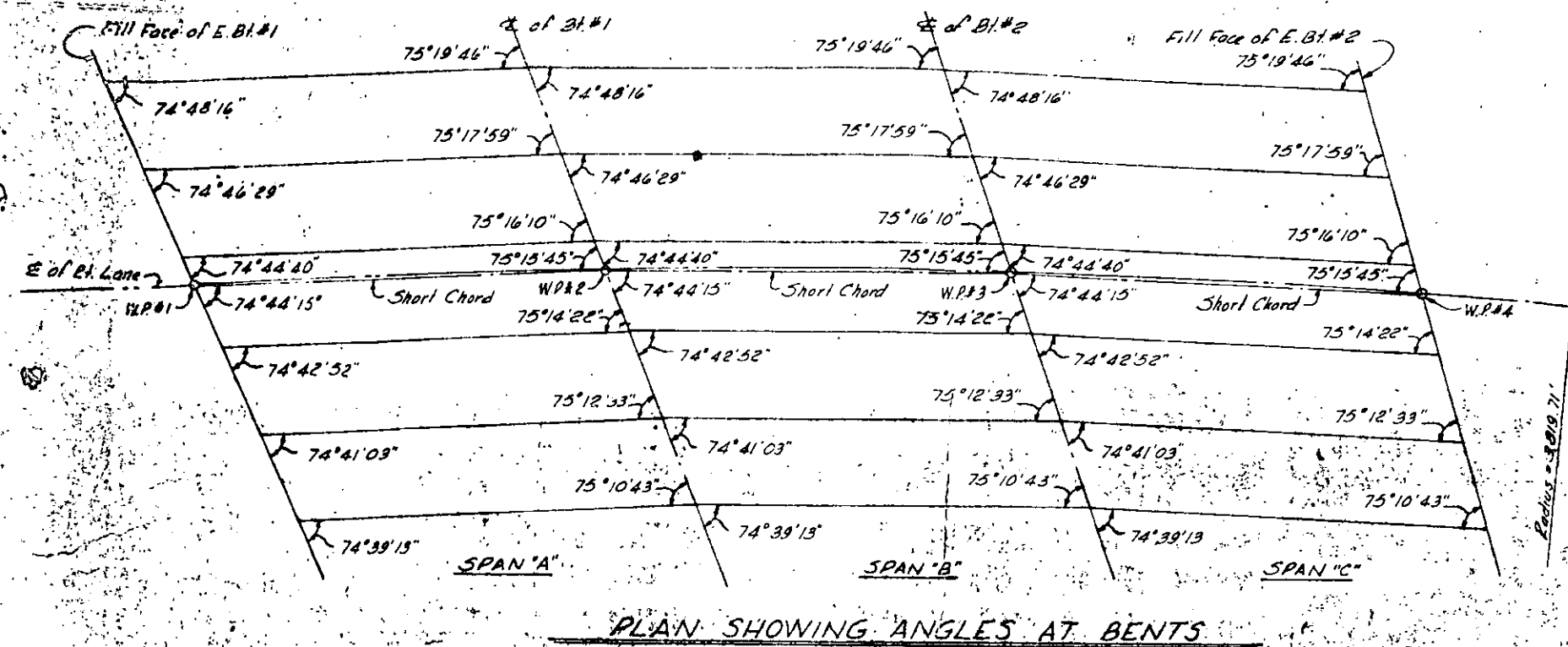
STATE OF NORTH CAROLINA  
**STATE HIGHWAY COMMISSION**  
RALEIGH

**SUPERSTRUCTURE  
STRUCTURAL STEEL**

APRIL 1966

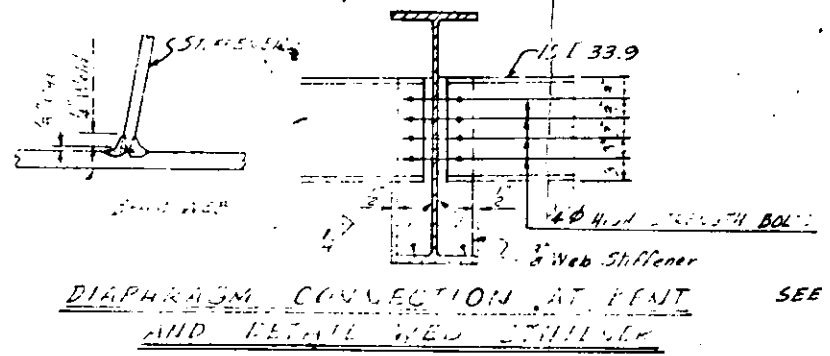
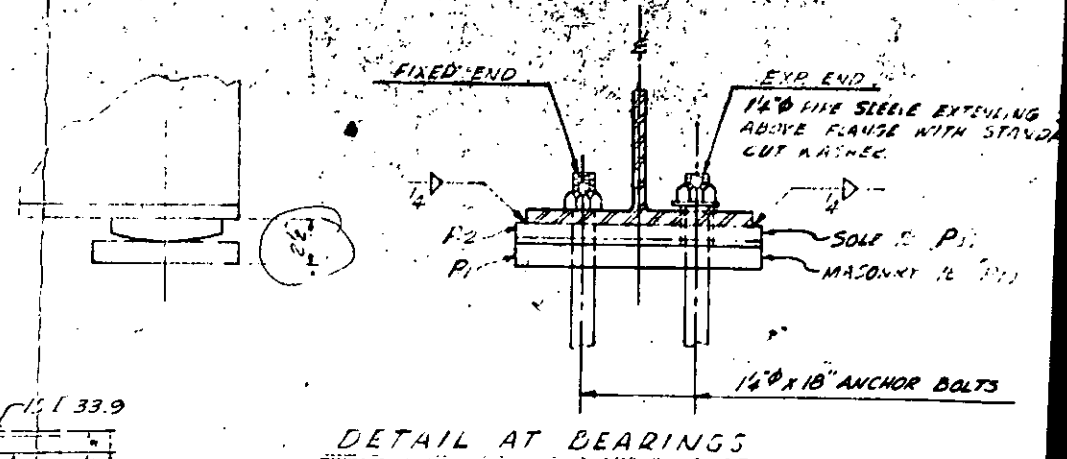
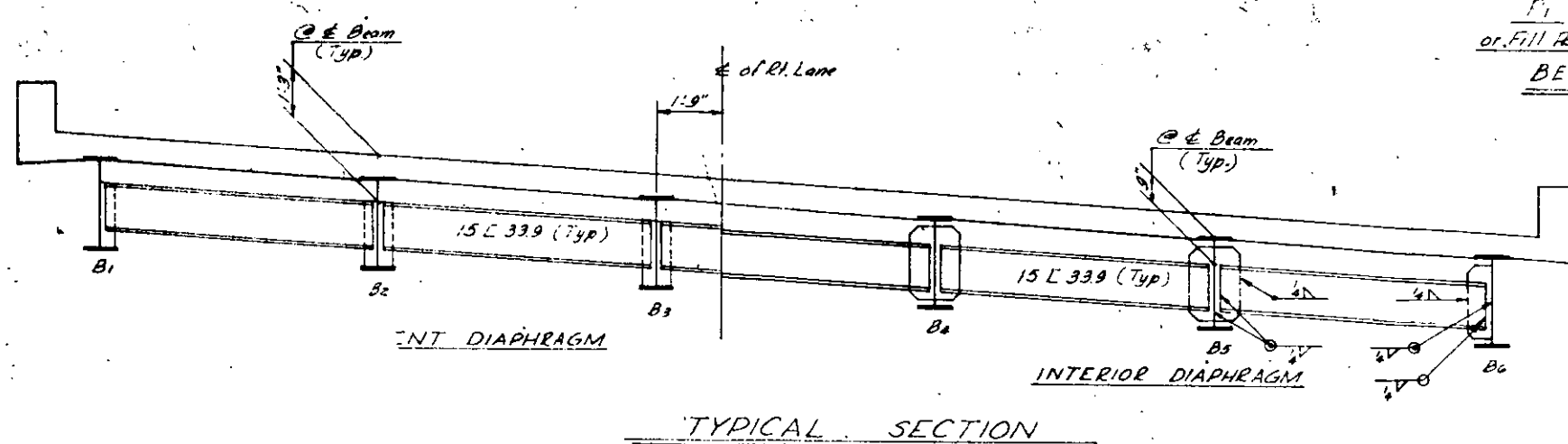
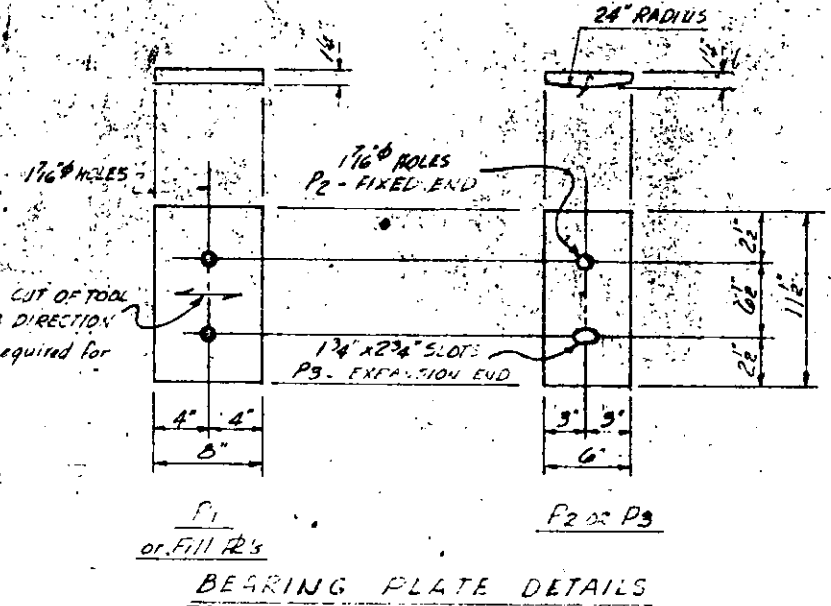
REVISIONS			
NO.	BY	DATE	DESCRIPTION
1			
2			

DATE: APRIL 1966  
DATE: APRIL 1966



NOTES:  
 ALL BEAMS AND COVER PLATES SHALL BE OF A.S.T.M. A 36 GRADE STRUCTURAL STEEL. SEE SHEET 3-N.  
 END STIFFENERS TO BE PARALLEL TO ENDS OF BEAMS. NO STIFFENERS ARE REQUIRED AT END BENTS OR ON OUTSIDE OF EXTERIOR BEAMS.  
 AT THE CONTRACTOR'S OPTION FILL PLATES, WHEN USED, MAY BE COMBINED WITH MASONRY PLATES.  
 DIMENSIONS SHOWN TO DIAPHRAGMS ARE FROM ENDS OF BEAMS. INTERIOR DIAPHRAGM TO BE PARALLEL TO ROADWAY DECK.

SEE SUPERSTRUCTURE DETAILS FOR LOCATION OF HOLES FOR REINFORCING STEEL.  
 FOR BEAM CAMBER, SEE DEAD LOAD DEFLECTION AND BEAM CAMBER TABLE.



PROJECT NO. 8164140  
 WREDELL COUNTY  
 STATION: 276+77 R.L.  
 SEE PAGES 61 & 62, STR. PAY RECORD BOOK # 1

BEARING PLATES REQUIRED  
 36 - P1 - 8' x 11 1/2" Plane Finish to 1/4"  
 18 - P2 - 6' x 11 1/2" As detailed  
 12 - P3 - 6' x 11 1/2" As detailed

STRUCTURAL STEEL APPROXIMATE WEIGHT = 77,800 LBS.

DEAD LOAD DEFLECTIONS AND BEAM CAMBER

	DEFLECTION DUE TO WEIGHT OF BEAMS	DEFLECTION DUE TO SUPERIMPOSED LOADS	TOTAL DEFLECTION	SUPERELEVATION ORDINATE	CAMBER
SPAN "A"	ENTER R. 0"	1/2"	1/2"	- 5/8"	0"
	ENTER X 0"	1/2"	1/2"	- 5/8"	0"
SPAN "B"	ENTER R. 0"	1/2"	1/2"	- 5/8"	0"
	ENTER X 0"	1/2"	1/2"	- 5/8"	0"
SPAN "C"	ENTER R. 0"	1/2"	1/2"	- 5/8"	0"
	ENTER X 0"	1/2"	1/2"	- 5/8"	0"

\* NOTE: No camber required other than regular mill camber.

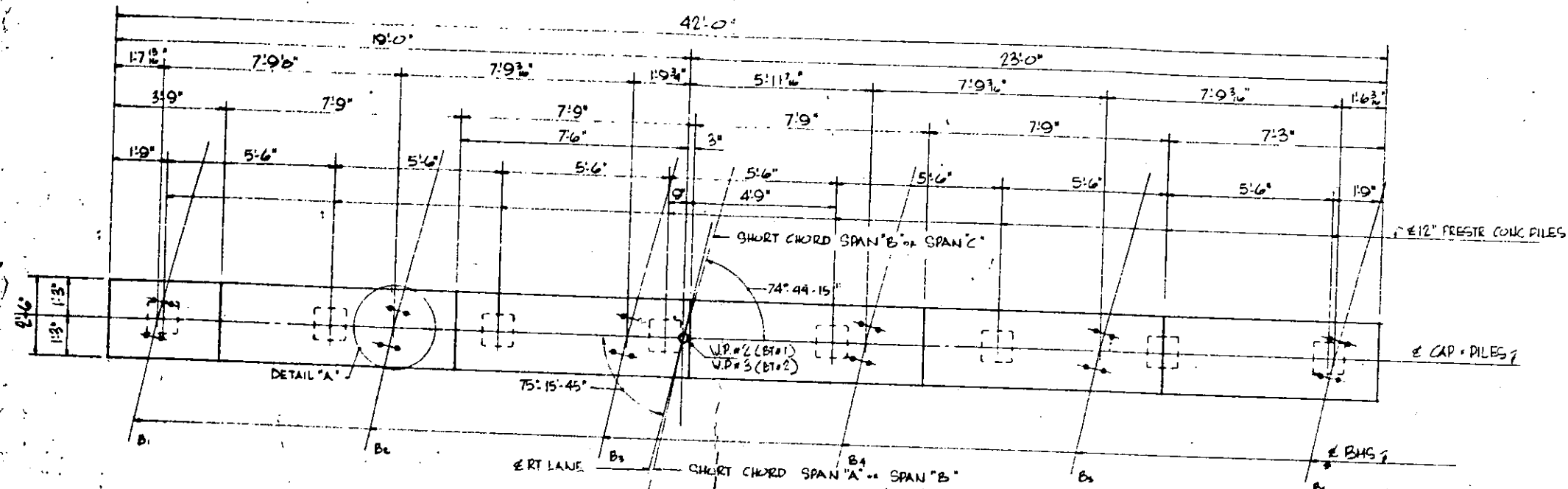
DESIGNED BY S. L. SANTO-TOMAS  
 DATE APRIL 1966  
 CHECKED BY GEORGE B. HANNON  
 DATE APRIL 1966

STATE OF NORTH CAROLINA  
 STATE HIGHWAY COMMISSION  
 PROJECT NO. 8164140  
 WREDELL COUNTY  
 STATION: 276+77 R.L.  
 STRUCTURAL STEEL

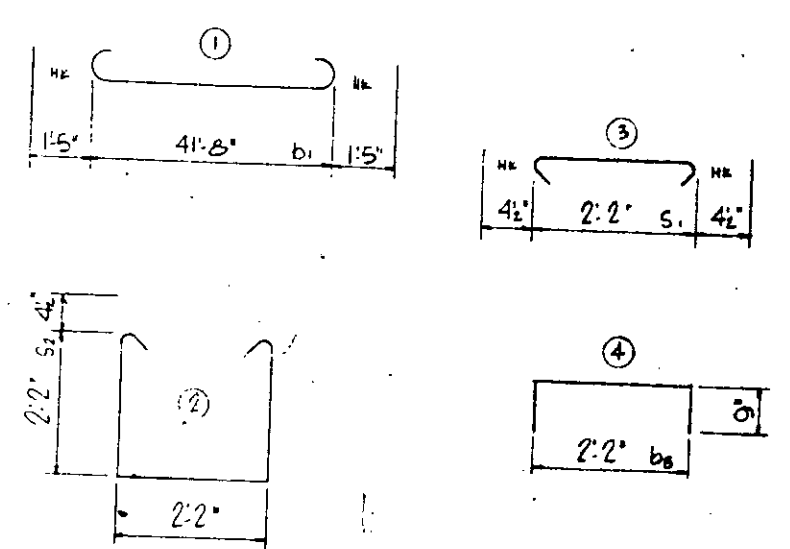
NO.	BY	DATE	NO.	BY	DATE
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2					



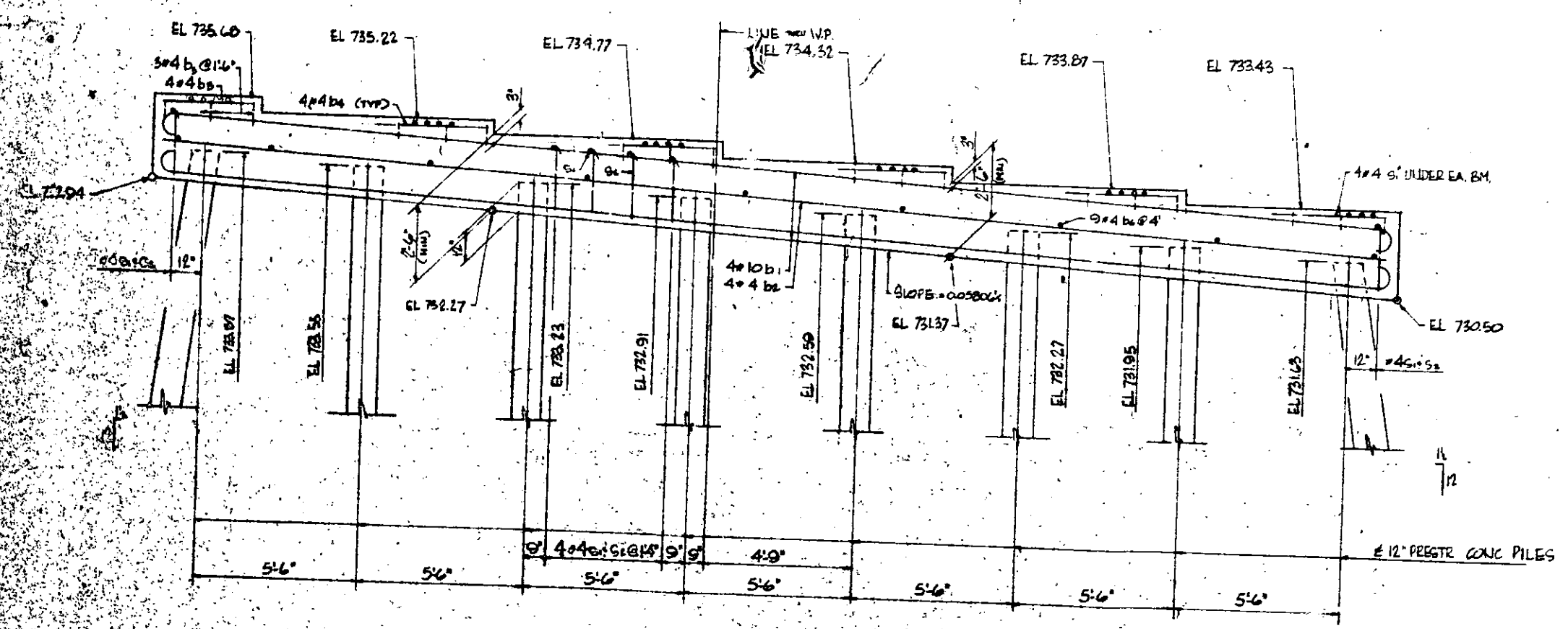




PLAN



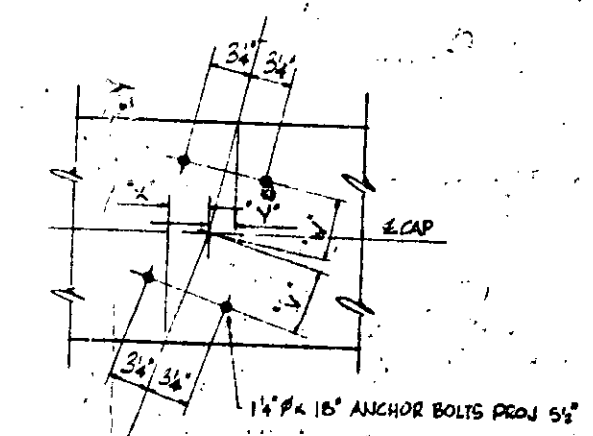
BAR TYPES ALL BAR DIMENSIONS OUT TO OUT



ELEVATION

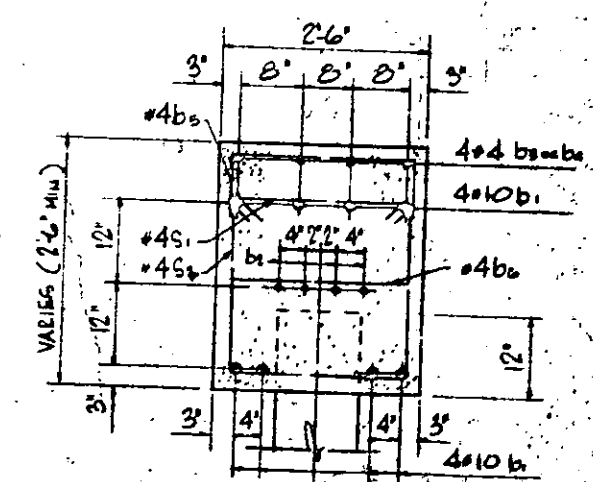
VARIABLE DIMENSIONS

BH	h	v	v	v
B1	2'	4'	2'	2'
B2	2'	4'	2'	2'
B3	2'	4'	2'	2'
B4	2'	4'	2'	2'
B5	2'	4'	2'	2'
B6	2'	4'	2'	2'



DETAIL 'A' BENT 1 & 2

PILES: SEE PAGES 43 & 44 STR. PLAN RECORD BOOK # 6



SECTION THRU CAP

**BILL OF MATERIAL**  
# ONE BENT ONLY

NO.	QTY	SIZE	TYPE	LENGTH	WEIGHT
b1	8	#10	I	2'-6"	193.2
b1	8	#4	STR	2'-6"	115
b3	4	#4	STR	5'-6"	8
b4	20	#4	STR	4'-0"	53
b5	12	#4	A	3'-8"	23
b6	8	#4	STR	2'-2"	13
g1	64	#4	3	2'-11"	325
g2	30	#4	2	7'-3"	145

REINFORCING STEEL LGS - 2016  
CLASS 'A' CONC. CU VBS 10.5  
12" PRESTR. CONC PILES  
BENT # 1 NO: B  
BENT # 2 NO: B

NOTE: CONC DISPLACED BY GLE HEADS

PROJECT NO. 216-17

TREDELL

STATION 216-17

BENT # 1 of 2

