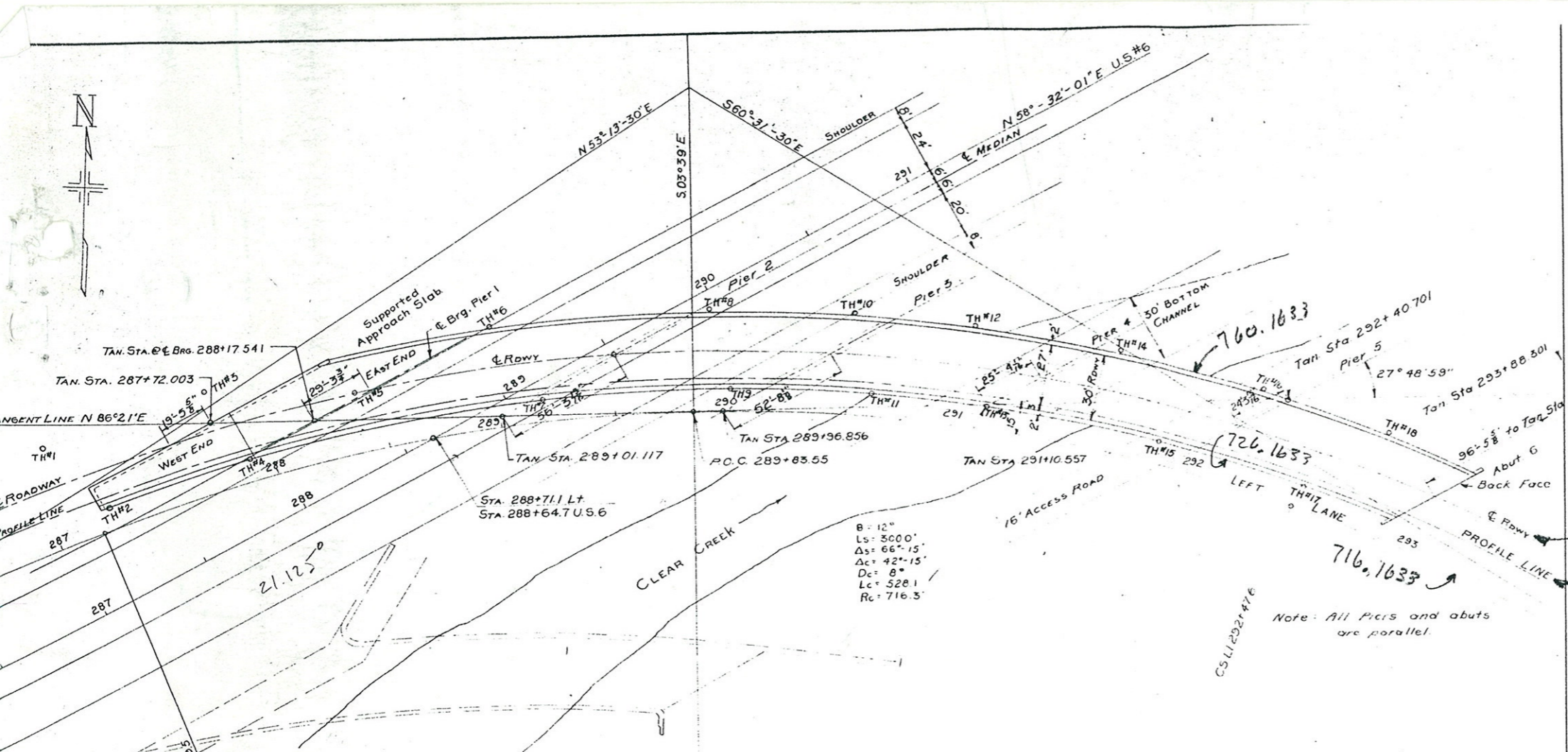


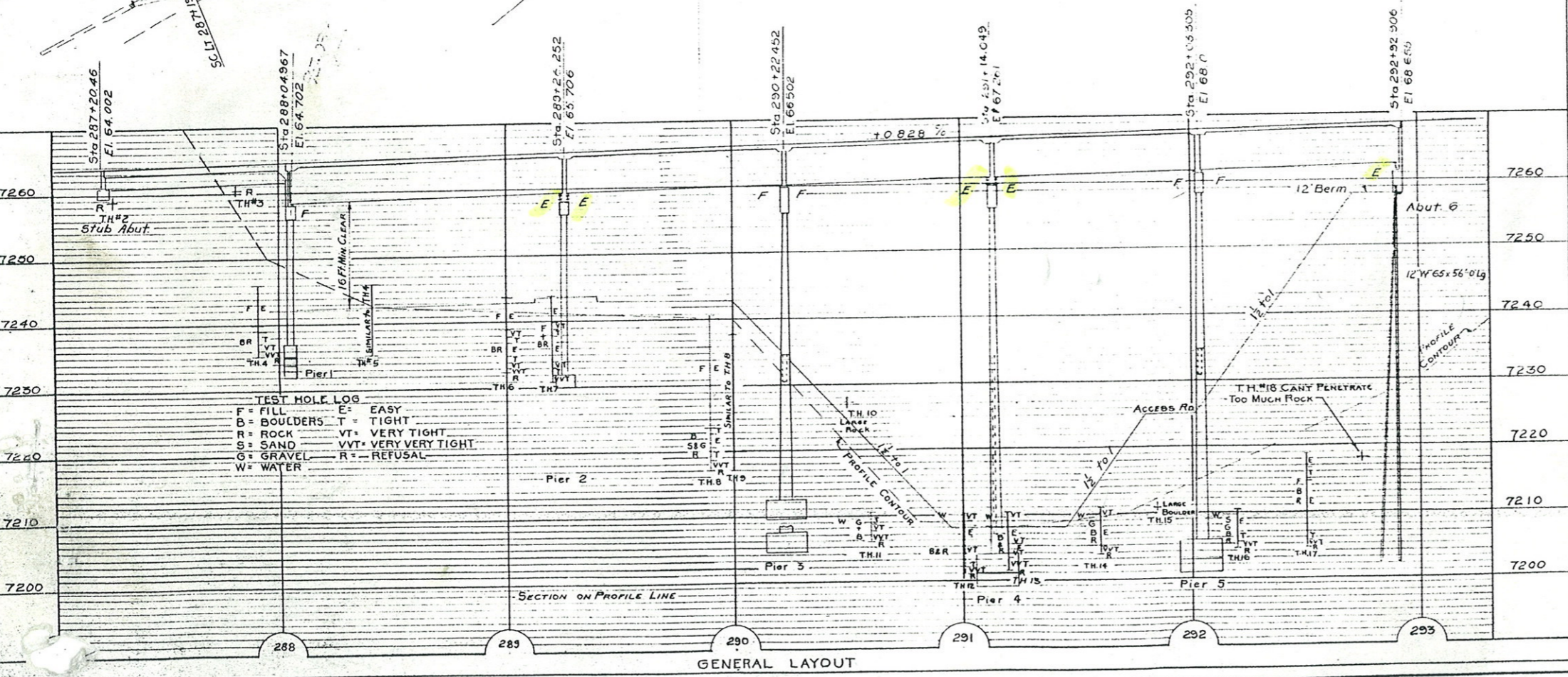
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(1)250	7	



S=OR
716.1633

743.1633
731.1633

Note: All piers and abuts are parallel.



TEST HOLE LOG
 F = FILL E = EASY
 B = BOULDERS T = TIGHT
 R = ROCK VT = VERY TIGHT
 S = SAND VVT = VERY VERY TIGHT
 G = GRAVEL R = REFUSAL
 W = WATER

GENERAL NOTES
 ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS APPLICABLE TO THE PROJECT.
 ALL CONCRETE SHALL BE CLASS 'A' AND AIR ENTRIES AS SPECIFIED.
 ALL CONCRETE SURFACES MARKED WITH THE SYMBOL 'Y' AS SHOWN ON SHEET NO. 44 SHALL RECEIVE CLASS 1 SURFACE FINISH.
 CONCRETE GIRDERS AND FLOOR SLABS SHALL BE POURED MONOLITHICALLY.
 JOINTS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHEAR OR TONGUE AND GROOVE LUMBER 3" x 3" UNLESS FACED WITH PANEL BOARD.
 FOOTINGS IN ROCK SHALL BE POURED OUT TO ROCK AND NOT FORMED.
 SOUNDINGS AND DEPTH OF FOOTING SHOWN ARE IN ACCORDANCE WITH THE BEST AVAILABLE DATA AND WHEN DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL IN SPECIFY AND DETERMINE IF REDESIGN IS NECESSARY.
 ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A 305 S07 OR THE LATEST REVISION THEREOF, AND SHALL BE INTERMEDIATE GRADE STEEL OF A DEFORMED TYPE. EACH BAR SHALL BE TAGGED WITH THE NUMBER DESIGNATION AND THE STATION NUMBER OF THE PROJECT.
 SECONDARY BARS WHEN SPICED SHALL LAP 17 DIAMETERS OF THE BAR. DIMENSIONS FOR REINFORCING STEEL NOT SHOWN AS CLEAR SHALL BE TO THE CENTER LINE OF THE BAR.
 ALL STRUCTURAL STEEL SHALL BE PAINTED ONE SHOP COAT OF ZINC CHROMATE AND TWO FIELD COATS OF ALUMINUM UNLESS OTHERWISE NOTED, EXCEPT THE UNEXPOSED PORTION OF STEEL PILING NEED NOT BE PAINTED.
 HANDRAIL BOLTS SHALL HAVE HEX HEADS, NUTS AND LOCK WASHERS UNLESS OTHERWISE SPECIFIED AND ALL RIVETS, EXCEPT AS NOTED ARE 1/2" DIA AND SHALL BE POWER DRIVEN.
 WHEN TREATED TIMBER OR PILING IS SHOWN ON THE DRAWING THE PRESERVATIVE FOR TREATMENT SHALL BE CREOSOTE OIL.
 WHEN EXCAVATING FOR FOOTINGS THE FINAL ONE FOOT IN DEPTH SHALL BE DONE BY HAND LABOR METHODS.
 FOR DETAILS OF STRUCTURAL EXCAVATION AND STRUCTURE BACKFILL, SEE STANDARD M-80-18.
 IF BY PERMISSION OF THE ENGINEER PRIMARY BARS ARE SPICED, THEY SHALL LAP A MIN. OF 28 DIAM FOR BARS NEAR TOP OF BEAMS HAVING MORE THAN 12 INCHES OF CONCRETE UNDER THE BARS AND 17 DIAM FOR BARS NEAR BOTTOM OF MEMBERS.
 NIGHT TENSILE STRENGTH BOLTS MAY BE SUBSTITUTED FOR FIELD RIVETS, BUT AT NO ADDITIONAL EXPENSE TO THE STATE. THE BOLTS SHALL BE ASSEMBLED IN ACCORDANCE WITH SPECS. APPROVED BY THE RESEARCH COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS OF THE ENGINEERING FOUNDATION DATED JAN 31, 1951.

LOADING DATA
 LIVE LOAD A.A.S.H.O. (H20-516-44)
 (Interstate Alternate Loading)

DESIGNING DATA
 A.A.S.H.O. 1953 UNIT STRESSES, EXCEPT AS NOTED.
 Reinforcing Steel $f_s = 20000$ lbs. per sq. in.
 Structural Steel $f_s = 18000$ lbs. per sq. in.
 $f_c = 1200$ lbs. per sq. in.
 $n = 10$

COLORADO
DEPARTMENT OF HIGHWAYS
 55 SPAN FROM 80' to 120'
 60" COMPOSITE STEEL GIRDER BRIDGE
 30' RDWY 2' CURBS 8" CURVE
 GEN'L LAYOUT, NOTES & SUMMARY OF QUANTITIES

Across U.S. 6 AND CLEAR CREEK
 Sta. 287+20.46 to 292+92.906
 Near DAMO SPRING, Sec. 34 T. 35 R. 72W

Designed by *West Bound*
 Made by
 Checked by

Approved by *W. H. Newell*
 Bridge Engineer
 Date: *Apr. 17, 1958*

STRUCTURE NO. F-15-BL

SUMMARY OF QUANTITIES

Table with columns: Item, Description, Unit, Super-Structure, Pier No. 1-5, Abut. No. 6, Total. Includes items like Unclassified Excavation, Asphaltic Road Material, Reinforcing Steel, etc.

- 1 Figs for Approach Span.
2 Includes Approach Span Quantities
3 Includes 42,535 lb. of Handrail Steel.
4 To be included in the Bid Price for Item 46.
5 Expn. Joint Mat'l shall be in accordance to AASHTO specification M-153-54 and of the type shown and shall be included in the Bid Price for Item 46.

BAR LIST ~ PIER NO. 3 (CONT.)

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 8210, 925, 920, 927, 928, 929, 1101, 1102, 1103, 1105, 1106, 1107, 1108, 1109, 1110.

BAR LIST ~ PIER NO. 5 (CONT.)

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m). Includes bars 625, 730, 731, 950, 951, 952, 953, 954, 955, 956, 1121, 1122, 1123, 1124, 1125, 1126.

BAR SUMMARY ~ PIER NO.

3056 Lin Ft 1/2" @ 0.668"/Lin Ft = 20
1684 Lin Ft 3/8" @ 1.043"/Lin Ft = 17.
33 Lin Ft 3/4" @ 1.502"/Lin Ft =
778 Lin Ft 1" @ 2.044"/Lin Ft = 15
2645 Lin Ft 1 1/8" @ 2.670"/Lin Ft = 70
Plus 1% Overrun = 1
Total = 12,4

BAR SUMMARY ~ PIER NO.

1859 Lin Ft 1/2" @ 0.668"/Lin Ft = 12.
411 Lin Ft 3/8" @ 1.043"/Lin Ft = 4.
510 Lin Ft 3/4" @ 1.502"/Lin Ft = 7.
685 Lin Ft 1" @ 2.044"/Lin Ft = 14
1740 Lin Ft 1 1/8" @ 2.670"/Lin Ft = 46
Plus 1% Overrun =
Total = 85

BAR LIST ~ PIER NO. 4

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 4125, 4159, 4160, 4190, 4191, 4192, 4193, 5090, 5091, 5092, 5093, 529, 731, 732, 940, 941, 942, 943, 944.

BAR LIST ~ ABUT. NO. 6

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m). Includes bars 4370, 4371, 4372, 4373, 4374, 4375, 4376, 4377, 4378, 4379, 4380, 4381, 4382, 4383, 4384, 4385, 4386, 4387, 4388, 4389, 5825, 5826, 1115, 1116.

BAR SUMMARY ~ PIER NO.

3331 Lin Ft 1/2" @ 0.668"/Lin Ft = 22
445 Lin Ft 3/8" @ 1.043"/Lin Ft = 4.
279 Lin Ft 3/4" @ 1.502"/Lin Ft = 4.
1105 Lin Ft 1" @ 2.044"/Lin Ft = 22.
588 Lin Ft 1 1/8" @ 2.670"/Lin Ft = 14.
3410 Lin Ft 1 1/2" @ 3.400"/Lin Ft = 115.
951 Lin Ft 1 3/4" @ 5.313"/Lin Ft = 50
Plus 1% Overrun = 2
Total = 233

BAR SUMMARY ~ PIER NO.

4774 Lin Ft 1/2" @ 0.668"/Lin Ft = 33
572 Lin Ft 3/8" @ 1.043"/Lin Ft = 5
2511 Lin Ft 3/4" @ 1.502"/Lin Ft = 51
4702 Lin Ft 1" @ 2.044"/Lin Ft = 15
956 Lin Ft 1 1/8" @ 2.670"/Lin Ft = 50
Plus 1% Overrun =
Total = 36

BAR SUMMARY ~ PIER NO.

5419 Lin Ft 1/2" @ 0.668"/Lin Ft = 2
525 Lin Ft 3/8" @ 1.043"/Lin Ft =
315 Lin Ft 3/4" @ 1.502"/Lin Ft = 4
973 Lin Ft 1" @ 2.044"/Lin Ft = 15
4796 Lin Ft 1 1/8" @ 2.670"/Lin Ft = 16
701 Lin Ft 1 1/2" @ 3.400"/Lin Ft = 3
Plus 1% Overrun =
Total = 25

BAR LIST ~ PIER NO. 1

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 407, 408, 409, 410, 411, 412, 413, 551, 552, 553, 554, 605, 710, 711, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8192, 8193.

BAR LIST ~ PIER NO. 1 (CONT.)

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 8194, 8195, 8196, 8197, 8198, 8199.

BAR LIST ~ PIER NO. 2

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 416, 417, 418, 5440, 5441, 610, 713, 714, 715, 716, 717, 718.

BAR LIST ~ PIER NO. 2 (CONT.)

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 8201, 8202.

BAR LIST ~ PIER NO. 3

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 436, 437, 443, 444, 487, 488, 489, 5670, 5671, 5672, 620, 720, 721.

BAR LIST ~ PIER NO. 5

Table with columns: Mark, Size, No. Req'd, Length, Type, Dimensions (l, m, n, p). Includes bars 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1351, 5820, 5821, 5822.

BAR SUMMARY ~ ABUT. NO. 6

2271 Lin Ft 1/2" @ 0.668"/Lin Ft = 1517 Lbs
93 Lin Ft 3/8" @ 1.043"/Lin Ft = 97 Lbs
435 Lin Ft 3/4" @ 1.502"/Lin Ft = 2411 Lbs
Plus 1% Overrun = 39 Lbs
Total = 4070 Lbs

COLORADO DEPARTMENT OF HIGHWAY SUMMARY OF QUANTITIES & BAR LIST

Across U.S. 6, E. CLEAR CR. Sta. 287+20.46 to 292+ Near Idaho Springs Sec. 34 T. 3S. Designed by Checked by Approved by Bridge Engineer Date: 6/17/71.

BAR LIST - APPROACH SPAN

Mark	Size	No. Reqd.	Length	Type	Dimensions		
					l	m	n
401	3/4"	70	5'-0"	IX	1'-8"	1'-8"	
402	1/2"	16	4'-2"	I	6"	1'-3"	
403	1/2"	119	9'-6"	I	1'-9"	2'-8"	
404	3/8"	36	7'-8"	I	9"	2'-9"	
405	3/8"	70	5'-8"	I	1'-3"	1'-3"	
406	3/8"	60	4'-8"	IX	1'-8"	1'-6"	
41	3/8"	14	3'-10"	I	6"	1'-1"	
501	3/8"	27	35'-7"	Str.			
502	3/8"	7	35'-7"	Str.	34'-1"	1'-6"	6"
503	3/8"	2	32'-0"	Str.			
504	3/8"	1ea.	57'-0"	Str.			
512	3/8"	1ea.	9'-0"	Str.			
513	3/8"	10	36'-0"	Str.			
514	3/8"	133	2'-0"				
515	3/8"	2	20'-6"				
516	3/8"	5	10'-6"				
517	3/8"	3	11'-1"				
518	3/8"	48	3'-6"				
519	3/8"	86	2'-6"				
520	3/8"	8	3'-3"				
525	3/8"	2	19'-3"				
526	3/8"	20	60'-0"				
527	3/8"	3	59'-4"				
528	3/8"	8	52'-2"				
529	3/8"	5	49'-2"				
530	3/8"	1	52'-6"				
531	3/8"	2	55'-6"	Str.			
532	3/8"	1ea.	5'-3"	Str.			
541	3/8"	1ea.	33'-0"	Str.			
542	3/8"	2	35'-0"	Str.			
543	3/8"	1	38'-0"	Str.			
544	3/8"	2	41'-0"	Str.			
601	3/8"	24	3'-0"	Str.			
602	3/8"	16	22'-3"	Str.			
603	3/8"	8	27'-7"	Str.			
701	3/8"	109	8'-0"	Str.			
702	3/8"	1ea.	8'-0"	Str.	4'-0"	4'-0"	
707	3/8"	1ea.	8'-5 1/2"	Str.	4'-0"	4'-5 1/2"	
801	1"	6	9'-7"	Str.	8'-1"		
823	1"	13	13'-3"	Str.	11'-9"		
824	1"	13	13'-4"	Str.	11'-10"		
855	1"	17	17'-2 1/2"	Str.	15'-8 1/2"		
856	1"	17	17'-3"	Str.	15'-7"		
892	1"	21	21'-0"	Str.	19'-6"		
8101	1"	6	36'-6"	Str.			
8102	1"	4	15'-0"				
8103	1"	6	10'-0"				
8104	1"	3	23'-11"				
8105	1"	3	48'-0"				
8107	1"	2	19'-5"				
8108	1"	2	19'-0"				
8109	1"	2	17'-6"				
8110	1"	2	9'-0"				
8111	1"	2	11'-0"	Str.			
8120	1"	80	19'-11"	Str.	18'-5"	1'-6"	5"
8121	1"	19	19'-9"	Str.	18'-5"		
8131	1"	1ea.	16'-1"	Str.	16'-7"		

BAR SUMMARY

2,554	Lin. Ft.	3/8" @ 0.668'	Lin. Ft.	1,706	Lb.
5,357	Lin. Ft.	3/8" @ 1.043'	Lin. Ft.	5,587	Lb.
649	Lin. Ft.	3/8" @ 1.502'	Lin. Ft.	975	Lb.
921	Lin. Ft.	3/8" @ 2.044'	Lin. Ft.	1,883	Lb.
4,461	Lin. Ft.	1" @ 2.670'	Lin. Ft.	11,911	Lb.
586	Lin. Ft.	1" @ 3.400'	Lin. Ft.	1,992	Lb.
121	Lin. Ft.	1" @ 4.303'	Lin. Ft.	521	Lb.
Plus 1% ± for overrun				245	Lb.
Total				24,820	Lb.

BAR LIST - SUPERSTRUCTURE, SPAN No. 1

Mark	Size	No. Reqd.	Length	Type	Dimensions			
					l	m	n	p
8152	1"	1ea.	17'-10"	Str.	16'-4"			
8171	1"	1ea.	14'-1"	Str.	12'-7"			
8148	1"	1ea.	13'-10"	Str.	12'-4"			
8156	1"	1ea.	11'-2"	Str.	9'-8"			
8157	1"	1ea.	11'-0"	Str.	9'-6"			
8172	1"	1ea.	4'-9"	Str.	3'-3"			
901	1 1/2"	2	50'-3"	Str.				
902	1 1/2"	1	47'-3"					
903	1 1/2"	1	13'-3"					
904	1 1/2"	1	14'-1"					
905	1 1/2"	1	17'-4"					
906	1 1/2"	2	20'-0"					
907	1 1/2"	6	11'-0"					
908	1 1/2"	2	37'-2"					
909	1 1/2"	1	35'-11"					
910	1 1/2"	1	25'-2"					
911	1 1/2"	1	27'-5"					
912	1 1/2"	1	30'-1"					
913	1 1/2"	1	26'-4"					
914	1 1/2"	1	25'-1"					
915	1 1/2"	1	19'-6"					
916	1 1/2"	1	23'-9"	Str.				
1001	1 1/2"	3	20'-6"	Str.				
1002	1 1/2"	3	19'-11"	Str.				
5101	3/8"	4	3'-3"	Str.	2'-8"			
5102	3/8"	1	5'-4"	Str.	2'-9"			
5132	3/8"	1	7'-1"	Str.	6'-6"			
5133	3/8"	1	7'-7"	Str.	2'-5"	1'-10"	1'-8"	
5134	3/8"	1	7'-9"	Str.	2'-5"	1'-11"	1'-9"	
5135	3/8"	1	8'-1"	Str.	2'-6"	2'-2"	1'-9"	
5136	3/8"	1	8'-4"	Str.	2'-7"	2'-4"	1'-9"	
5137	3/8"	1	8'-7"	Str.	2'-7"	2'-6"	1'-10"	
5138	3/8"	1	8'-10"	Str.	2'-8"	2'-8"	1'-10"	
5139	3/8"	1	9'-1"	Str.	2'-8"	2'-10"	1'-11"	
5140	3/8"	1	9'-4"	Str.	2'-9"	3'-0"	1'-11"	
5141	3/8"	1	9'-7"	Str.	2'-9"	3'-2"	2'-0"	
5142	3/8"	1	9'-10"	Str.	2'-9"	3'-5"	2'-0"	
5143	3/8"	1	10'-0"	Str.	2'-10"	3'-6"	2'-0"	
5144	3/8"	1	10'-4"	Str.	2'-11"	3'-9"	2'-0"	
5145	3/8"	1	10'-7"	Str.	3'-0"	3'-10"	2'-1"	
5146	3/8"	1	10'-10"	Str.	3'-1"	4'-0"	2'-1"	
5147	3/8"	1	11'-2"	Str.	3'-2"	4'-2"	2'-2"	
5148	3/8"	1	11'-5"	Str.	3'-3"	4'-4"	2'-2"	
5149	3/8"	1	11'-1"	Str.	3'-4"	4'-2"	2'-6"	
5150	3/8"	1	11'-4"	Str.	3'-4"	4'-1"	2'-10"	
5151	3/8"	1	11'-8"	Str.	3'-4"	4'-0"	3'-3"	
5152	3/8"	1	12'-0"	Str.	3'-4"	3'-11"	3'-8"	
5153	3/8"	1	12'-5"	Str.	3'-4"	3'-10"	2'-2"	1'-5 1/2"
5154	3/8"	1	12'-8"	Str.	3'-5"	3'-9"	2'-2"	1'-10 1/2"
5155	3/8"	1	12'-11"	Str.	3'-8"	2'-1"	2'-3 1/2"	
5156	3/8"	1	13'-2"	Str.	3'-7"	2'-1"	2'-7 1/2"	
5157	3/8"	1	13'-5"	Str.	3'-5"	2'-0"	3'-1 1/2"	
5158	3/8"	1	13'-8"	Str.	3'-4"	2'-0"	3'-5 1/2"	
5159	3/8"	1	13'-11"	Str.	3'-3"	2'-0"	3'-9 1/2"	
5160	3/8"	1	14'-3"	Str.	3'-2"	1'-11"	4'-3 1/2"	
5161	3/8"	1	14'-7"	Str.	3'-0"	1'-11"	1'-6"	
5162	3/8"	1	14'-11"	Str.	2'-11"	1'-11"	1'-11"	
5163	3/8"	1	15'-2"	Str.	2'-10"	1'-11"	2'-3"	
5164	3/8"	1	15'-6"	Str.	2'-9"	1'-11"	2'-8"	
5165	3/8"	1	15'-9"	Str.	2'-8"	1'-10"	3'-1"	
5166	3/8"	1	16'-0"	Str.	2'-7"	1'-10"	3'-5"	
5167	3/8"	1	16'-4"	Str.	2'-6"	1'-10"	3'-10"	
5168	3/8"	1	16'-9"	Str.	2'-5"	1'-9"	1'-5 1/2"	
5169	3/8"	1	17'-0"	Str.	2'-4"	1'-9"	1'-9"	
5170	3/8"	1	17'-4"	Str.	2'-3"	1'-9"	2'-2 1/2"	
5171	3/8"	1	17'-7"	Str.	2'-1"	1'-8"	2'-8 1/2"	
5172	3/8"	1	17'-10"	Str.	2'-0"	1'-8"	3'-0 1/2"	
5173	3/8"	1	18'-2"	Str.	1'-11"	1'-8"	3'-5 1/2"	
5174	3/8"	1	18'-5"	Str.	3'-3"	1'-10"	1'-7"	3'-10 1/2"
5175	3/8"	1	18'-5"	Str.	7'-3"	4'-4 1/2"		
5176	3/8"	1	18'-8"	Str.	7'-2"	4'-8 1/2"		
5177	3/8"	1	18'-11"	Str.	7'-1"	5'-0 1/2"		
5178	3/8"	1	19'-3"	Str.	7'-0"	5'-5 1/2"		
5179	3/8"	1	19'-9"	Str.	6'-11"	1'-5"		
5180	3/8"	1	20'-1"	Str.	6'-9"	1'-11"		
5181	3/8"	1	20'-4"	Str.	6'-8"	2'-3"		
5182	3/8"	1	20'-8"	Str.	6'-7"	2'-8"		
5183	3/8"	1	21'-0"	Str.	6'-6"	3'-1"		
5184	3/8"	1	21'-3"	Str.	6'-4"	3'-6"		
5185	3/8"	1	21'-6"	Str.	6'-3"	3'-10"		
5186	3/8"	1	21'-10"	Str.	6'-2"	4'-3"		
5187	3/8"	1	22'-3"	Str.	6'-1"	1'-4 1/2"		
5188	3/8"	1	22'-8"	Str.	6'-0"	1'-10 1/2"		
5189	3/8"	1	22'-10"	Str.	5'-10"	2'-2 1/2"		
5190	3/8"	1	23'-2"	Str.	5'-9"	2'-7 1/2"		
5191	3/8"	1	23'-6"	Str.	5'-8"	3'-0 1/2"		
5192	3/8"	1	23'-9"	Str.	5'-7"	3'-4 1/2"		
5193	3/8"	1	24'-1"	Str.	5'-6"	3'-9 1/2"		
5194	3/8"	1	24'-5"	Str.	5'-5"	4'-2 1/2"		
5195	3/8"	1	24'-8"	Str.	5'-4"	4'-6 1/2"		
5197	3/8"	1	25'-4"	Str.	5'-3"	4'-11 1/2"		
5198	3/8"	1	25'-10"	Str.	5'-2"	5'-4 1/2"		
5199	3/8"	1	26'-2"	Str.	5'-0"	1'-9"		
5200	3/8"	1	26'-5"	Str.	4'-11"	2'-1"		
5201	3/8"	1	26'-9"	Str.	4'-10"	2'-6"		
5202	3/8"	1	27'-2"	Str.	4'-9"	3'-0"		
5203	3/8"	1	27'-5"	Str.	4'-8"	3'-4"		
5204	3/8"	1	27'-8"	Str.	4'-7"	3'-8"		
5205	3/8"	1	28'-0"	Str.	4'-6"	4'-1"		
5206	3/8"	1	28'-7"	Str.	4'-5"	1'-4 1/2"		
5207	3/8"	1	28'-11"	Str.	4'-4"	1'-9 1/2"		
5208	3/8"	1	29'-3"	Str.	4'-4"	2'-1 1/2"		
5209	3/8"	1	29'-7"	Str.	4'-3"	2'-6 1/2"		
5210	3/8"	1	29'-11"	Str.	4'-2"	2'-11 1/2"		
5211	3/8"	1	30'-3"	Str.	4'-1"	3'-4 1/2"		
5212	3/8"	1	30'-7"	Str.	4'-0"	3'-9 1/2"		
5213	3/8"	1	30'-11"	Str.	3'-11"	4'-2 1/2"		
5214	3/8"	1	31'-3"	Str.	3'-10"	4'-7 1/2"		
5215	3/8"	1	31'-7"	Str.	3'-9"	5'-0 1/2"		
5216	3/8"	1	32'-1"	Str.	3'-9"	11"		
5217	3/8"	1	32'-5"	Str.	3'-8"	1'-4"		
5218	3/8"	1	32'-10"	Str.	3'-7"	1'-10"		
5219	3/8"	1	33'-1"	Str.	3'-6"	2'-2"		
5220	3/8"	12	35'-2"	Str.	3'-2"	4'-7"		
5221	3/8"	13	35'-1"	Str.	2'-8"	5'-0"		
5222	3/8"	13	35'-0"	Str.	2'-3"	5'-4"		
5223	3/8"	1	32'-4"	Str.	2'-10"	5'-4 1/2"		
5224	3/8"	1	32'-0"	Str.	2'-6"	5'-4 1/2"		
5225	3/8"	1	31'-6"	Str.	2'-0"	5'-4 1/2"		

BAR LIST, SUPERSTRUCTURE - SPAN No. 2

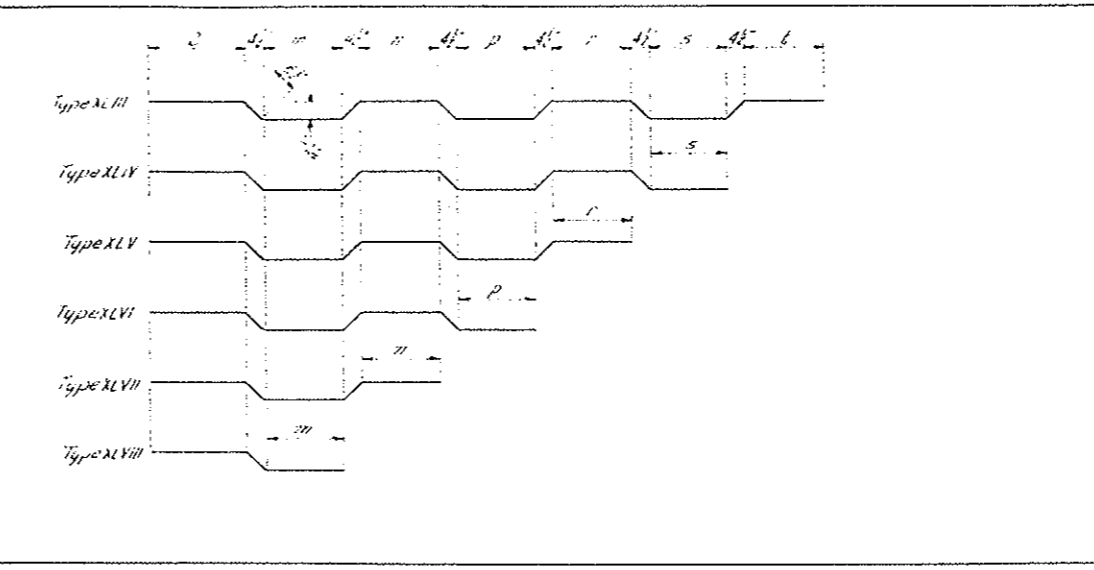
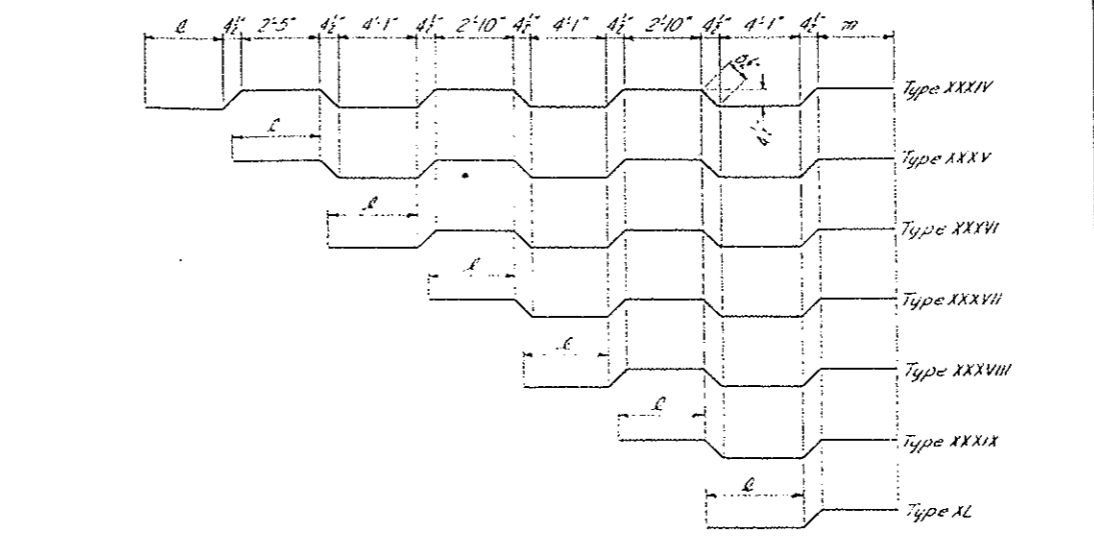
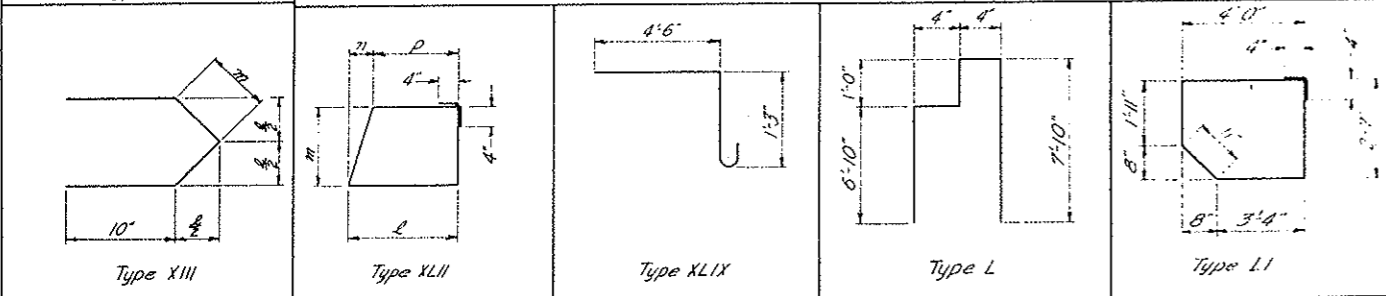
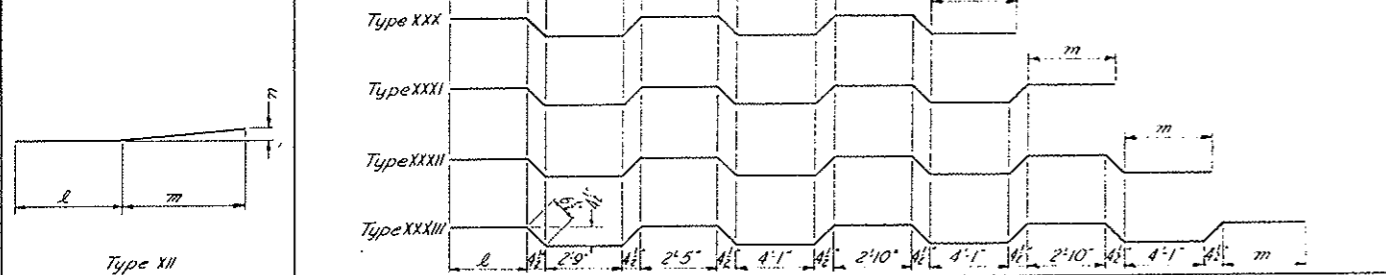
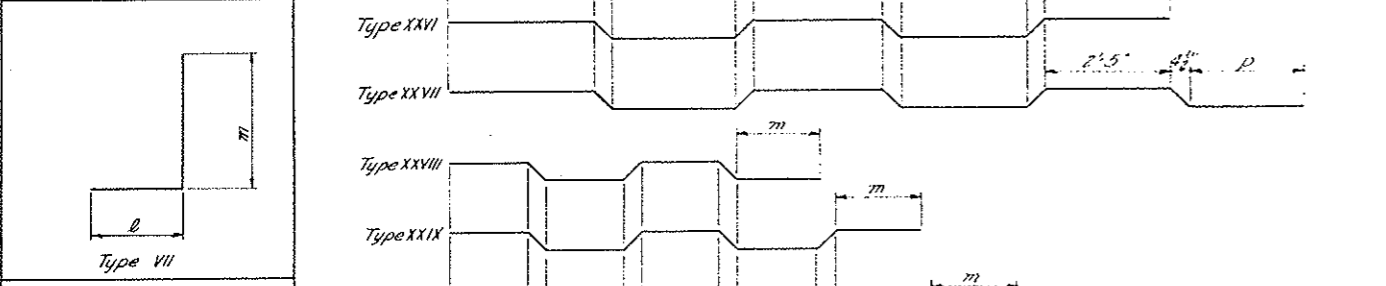
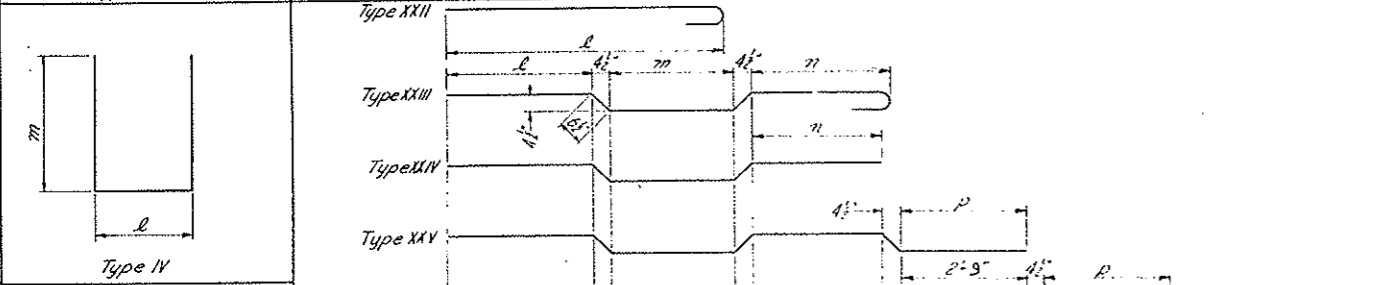
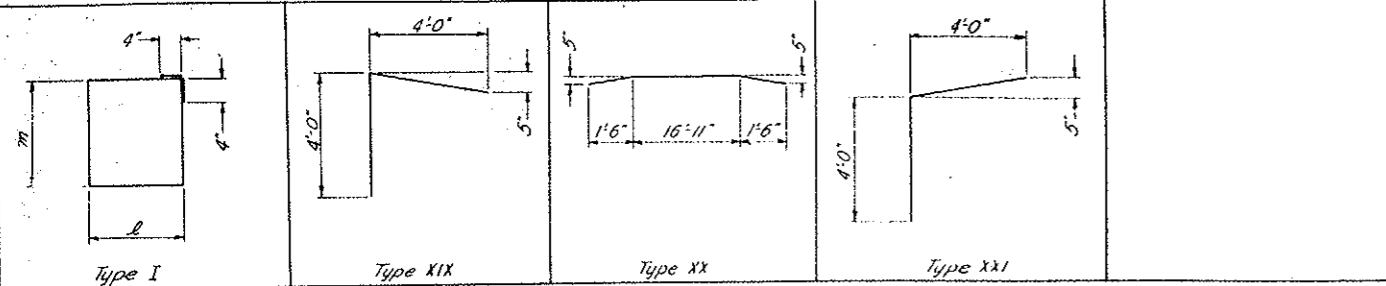
Mark	Size	No. Reqd.	Length	Type	Dimensions									
					ℓ	m	n	p	r	s	t			
421	1/2" φ	100	4'-0"	II	1'-8"	1'-2"								
422		20	3'-10"	I	6"	1'-1"								
426		22	4'-2"	I	6"	1'-3"								
427		88	3'-8"	IV	1'-8"	1'-0"								
430		190	20'-9"	Str.										
43		24	33'-3"											
4-2		2	36'-0"											
4100		1	4'-0"											
4101		1	3'-0"											
4102		1	2'-0"	Str.										
4103	1/2" φ	6	6'-3"	XLIX										
5450	3/8" φ	3	34'-8"	XLIII	4'-11"	3'-11 1/2"	4'-2"	4'-4 1/2"	4'-4 1/2"	4'-4 1/2"	5'-3"			
5451					4'-9 1/2"						5'-4 1/2"			
5452					4'-8"						5'-6"			
5453					4'-7"						5'-7"			
5454					4'-6"						5'-8"			
5455					4'-5"						5'-9"			
5456					4'-4"						5'-10"			
5457					4'-3 1/2"						5'-10 1/2"			
5458					4'-3"						5'-11"			
5459		3			4'-2"						6'-0"			
5460		14	34'-8"	XLIII	4'-1"	3'-11 1/2"	4'-2"	4'-4 1/2"	4'-4 1/2"	4'-4 1/2"	6'-1"			
5461		1	31'-11"	XLIV	6'-1"	4'-4 1/2"	4'-4 1/2"	4'-2"	5'-10"					
5462			31'-3"						5'-2"					
5463			30'-10"						4'-9"					
5464			30'-5"						4'-2"					
5465			29'-10"						3'-7"					
5466			29'-3"						3'-1"					
5467			28'-9"						3'-6"					
5468			28'-3"	XLIV			4'-2"	2'-0"						
5469			27'-7"	XLV			6'-2 1/2"							
5470			27'-1"				5'-8 1/2"							
5471			26'-7"				5'-2 1/2"							
5472			26'-0"	XLV	6'-1"		4'-4 1/2"	4'-7 1/2"						
5473			25'-3"	XLVI	6'-0"		8'-10 1/2"							
5474			24'-8"				8'-3 1/2"							
5475			24'-3"				7'-10 1/2"							
5476			23'-7"				7'-2 1/2"							
5477			23'-1"				6'-8 1/2"							
5478			22'-7"				6'-2 1/2"							
5479			22'-0"		6'-0"		5'-7 1/2"							
5480			21'-4"		5'-10"		5'-1 1/2"							
5481			20'-11"				4'-8 1/2"							
5482			20'-5"				4'-0 1/2"							
5483			19'-7"				3'-4 1/2"							
5484			19'-2"	XLVI			4'-4 1/2"	2'-11 1/2"						
5485			18'-5"	XLVII	5'-10"		7'-1 1/2"							
5486			17'-9"		5'-9"		6'-6 1/2"							
5487			17'-2"		5'-8"		6'-0 1/2"							
5488			16'-7"				5'-5 1/2"							
5489			16'-0"				4'-10 1/2"							
5490			15'-6"				4'-4 1/2"							
5491			14'-10"				3'-8 1/2"							
5492			14'-4"				3'-2 1/2"							
5493			13'-10"	XLVII		4'-4 1/2"	2'-8 1/2"							
5494			13'-2"	XLVIII		6'-11 1/2"								
5495			12'-7"				6'-4 1/2"							
5496			12'-0"				5'-9 1/2"							
5497			11'-6"				5'-3 1/2"							
5498	3/8" φ	1	10'-10"	XLVIII	5'-8"	4'-7 1/2"								

BAR LIST, SUPERSTRUCTURE - SPAN No. 3

Mark	Size	No. Reqd.	Length	Type	Dimensions									
					ℓ	m	n	p	r	s	t			
421	1/2" φ	94	4'-0"	II	1'-8"	1'-2"								
422		18	3'-10"	I	6"	1'-1"								
426		20	4'-2"	I	6"	1'-3"								
427		86	3'-8"	IV	1'-8"	1'-0"								
430		174	20'-9"	Str.										
4300		8	40'-0"	Str.										
4201	1/2" φ	20	31'-9"	Str.										
5685	3/8" φ	56	10'-0"	Str.										
5686			10'-8"											
5687	10	2ea.	31'-0"	Str.										
5718			30'-8"											
5719	3/8" φ	110	33'-8"	Str.										
5720			31'-4"											
5720	10	2ea.	31'-0"	Str.										
5750			9'-5 1/2"											
5751	3/8" φ	34	8'-9"	Str.										
5752		1	10'-3"	XLVIII	7'-1"	2'-2 1/2"								
5753			10'-11"		7'-0 1/2"	3'-4"								
5754			11'-8"		7'-0"	4'-1 1/2"								
5755			12'-3"	XLVIII	6'-11"	4'-9 1/2"								
5756			13'-0"	XLVII	6'-10"	3'-11 1/2"	1'-1 1/2"							
5757			13'-8"		6'-9 1/2"		1'-10"							
5758			14'-2"		6'-9"		2'-4 1/2"							
5759			14'-11"		6'-8"		3'-2 1/2"							
5760			15'-6"		6'-7"		3'-10 1/2"							
5761			16'-1"	XLVII	6'-6 1/2"		4'-6"							
5762			16'-10"	XLVI	6'-6"		4'-2"							
5763			17'-5"		6'-5"		1'-3"							
5764			18'-1"		6'-4"		2'-0"							
5765			18'-9"		6'-3 1/2"		2'-8 1/2"							
5766			19'-4"		6'-3"		3'-4"							
5767			20'-0"		6'-2"		4'-1"							
5768			20'-8"	XLVI	6'-1"		4'-10"							
5769			21'-6"	XLV	6'-0 1/2"		4'-4 1/2"	9 1/2"						
5770			22'-0"		6'-0"			1'-4"						
5771			22'-7"		5'-11"			2'-0"						
5772			23'-2"		5'-10"			2'-8"						
5773			23'-10"		5'-9 1/2"			3'-4 1/2"						
5774			24'-6"		5'-9"			4'-1"						
5775			25'-1"	XLV	5'-8"			4'-9"						
5776			26'-2"	XLIV	5'-7"			4'-4 1/2"	1'-0"					
5777			26'-9"	XLIV	5'-6 1/2"			4'-4 1/2"	1'-7 1/2"					
5778	3/8" φ	1	27'-4"	XLIV	5'-6"	3'-11 1/2"	4'-2"	4'-4 1/2"	4'-4 1/2"	2'-3"				

COLORADO
DEPARTMENT OF HIGHWAYS
BAR LIST
SUPERSTRUCTURE
SPANS No. 2 & No. 3
Across U.S. 6 E. Clear Creek
Sta. 287+20.46 to 292+92.91
Near Idaho Springs Sec. 34, T. 34, R. 21W
Designed by G.H.W. Approved by J.H.P.
Made by M.E.P. Bridge Engineer
Checked by Date: 1-17-53

BENDING DIAGRAMS
Note: Dimensions are out to out of the bar.



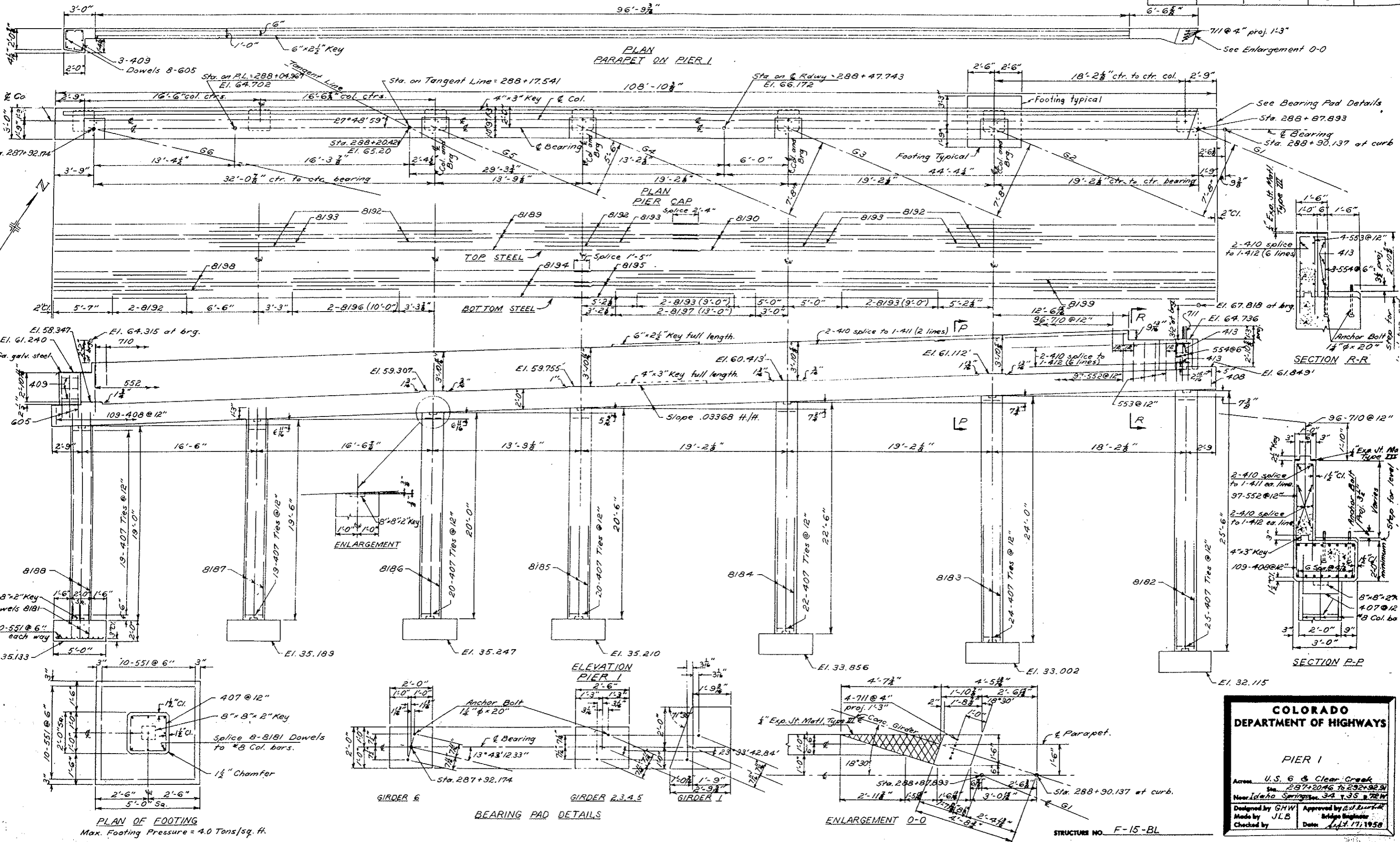
STRUCTURE NO. E-15-BL

COLORADO
DEPARTMENT OF HIGHWAYS

Across U.S. 6 @ Clear Creek
Sta. 227+20.46 to 232+92.91
Near Idaho Springs Sec. 34, T. 35, R. 27W

Designed by G.H.W. Approved by A.L.R. 11/17/55
Made by M.E.P. Bridge Engineer
Checked by Date: 11/17/55

NO. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(1)250	13	



COLORADO DEPARTMENT OF HIGHWAYS

PIER I

Across U.S. 6 & Clear Creek
 Sta. 287+20.46 to 292+92.31
 Near Idaho Springs, 3.4735 S. 28W

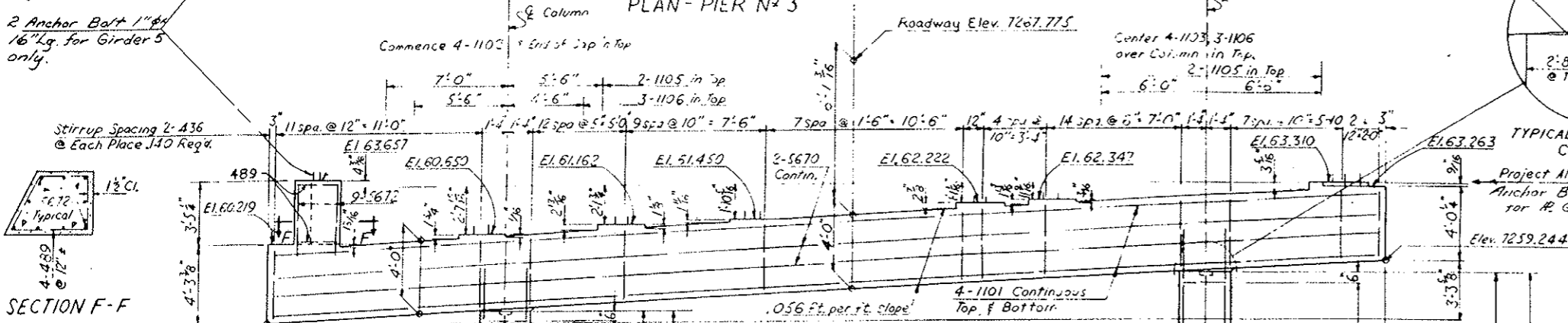
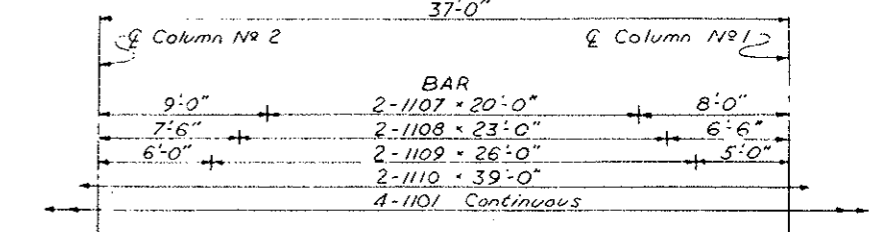
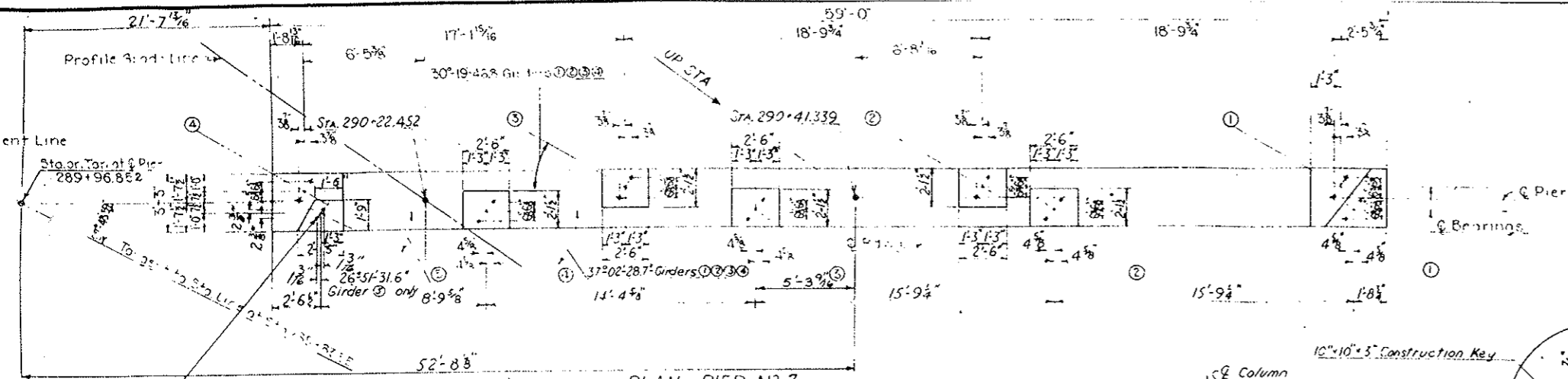
Designed by GHW
 Made by JLB
 Checked by [Signature]

Approved by [Signature]
 Bridge Engineer
 Date: July 17, 1956

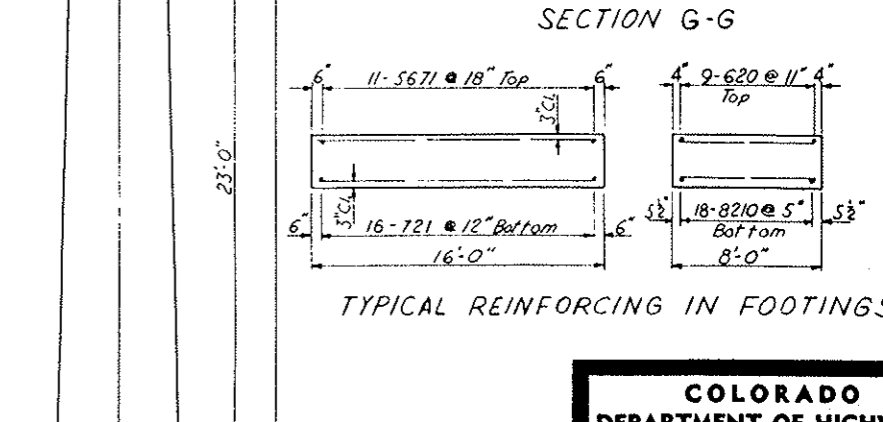
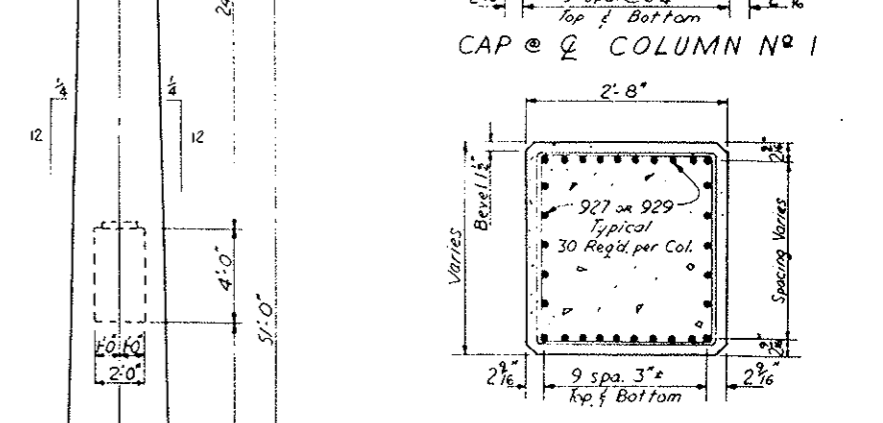
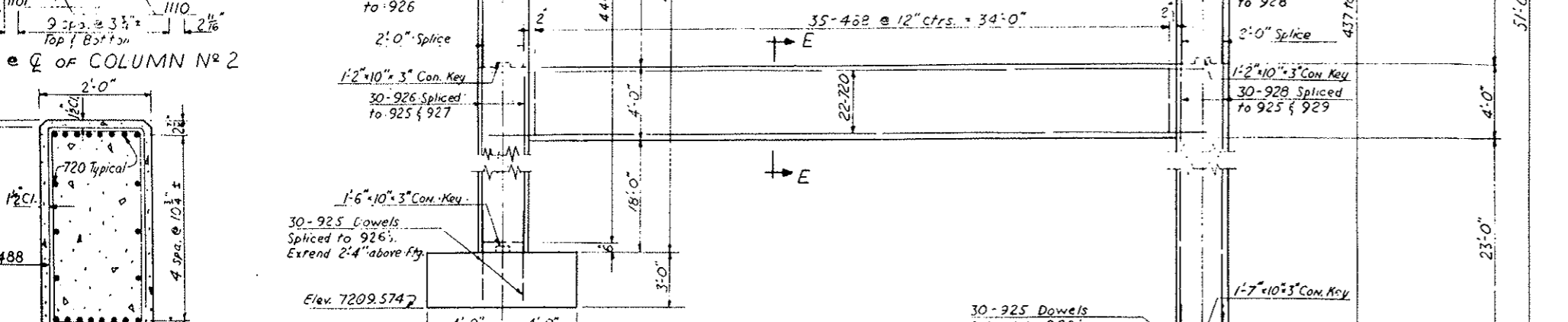
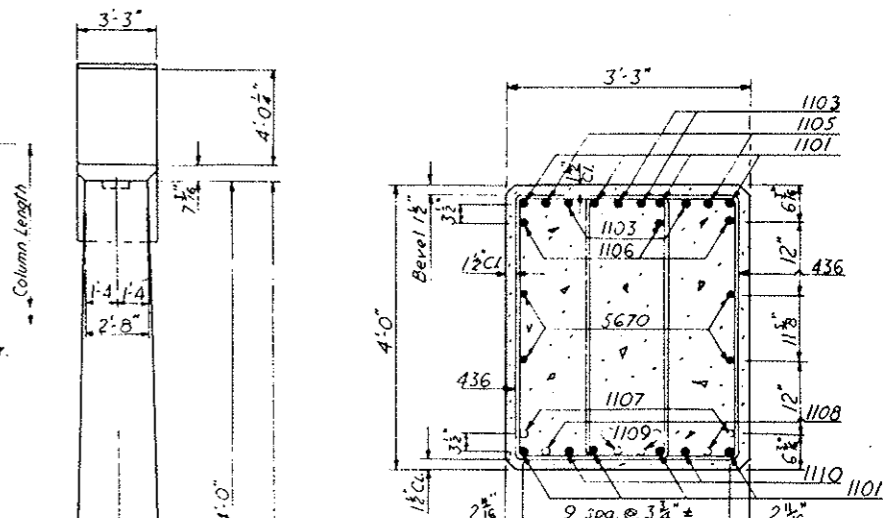
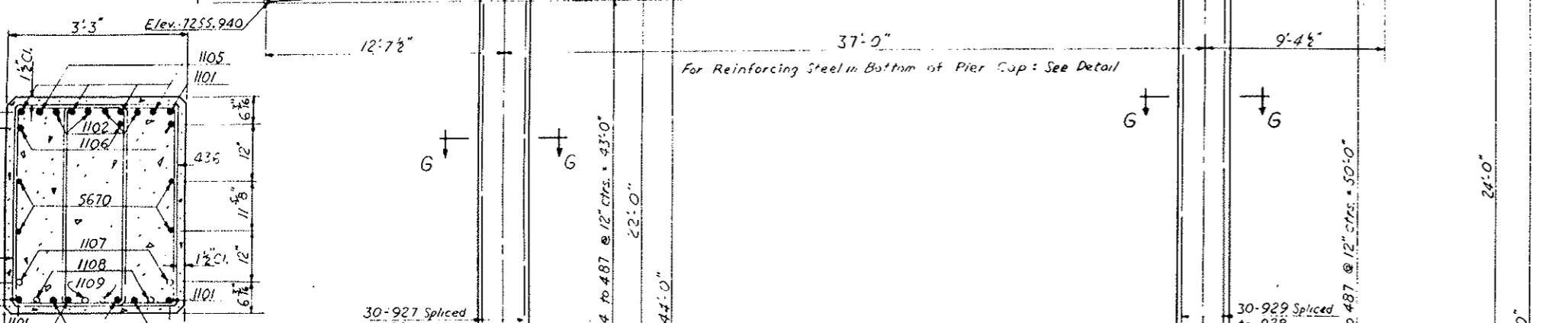
STRUCTURE NO. F-15-BL

Revised Aux. Girder Bolt Setting
by G.H.W. 3-16-59

PROJ. ROAD RES. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
7	COLO.	F-70-3(1)250	15	



DETAIL OF REINFORCING STEEL IN BOTTOM OF PIER CAP



ELEVATION PIER N° 3
DIMENSIONS OF BASE OF COLUMN N° 2
MAXIMUM FOOTING PRESSURE = 3.2 TONS/SQ. FT.



END ELEVATION
STRUCTURE NO. F-15-BL

COLORADO DEPARTMENT OF HIGHWAYS

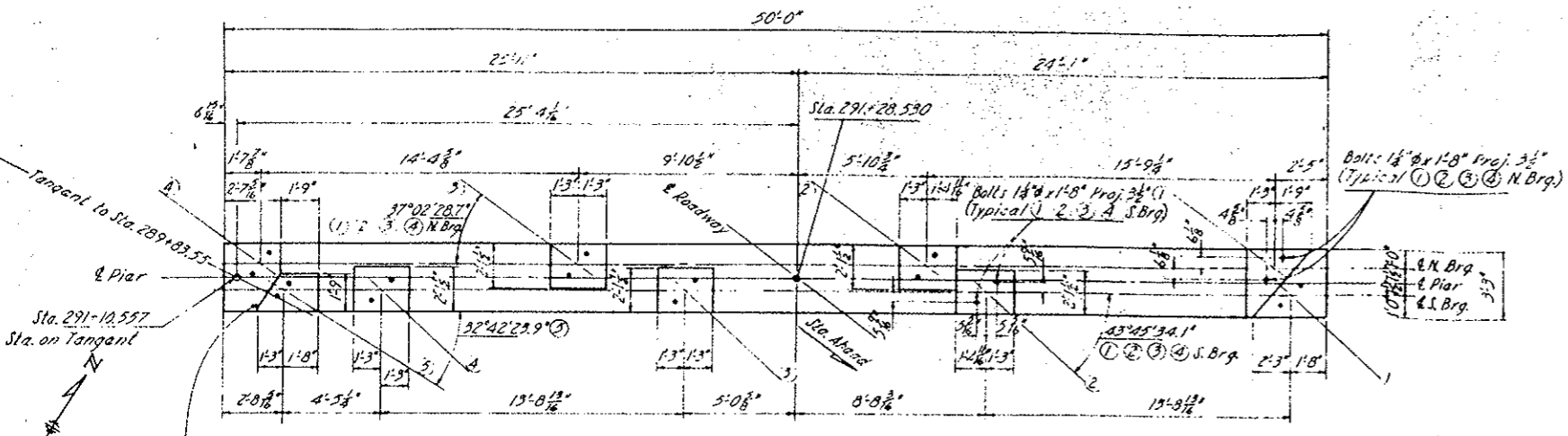
DETAILS OF PIER N° 3

Across U.S. 6 & CLEAR CREEK
Sta. 287+20.46 to 292+92.91
Near IDAHO SPRINGS, sec. 34, T. 35, R. 72W

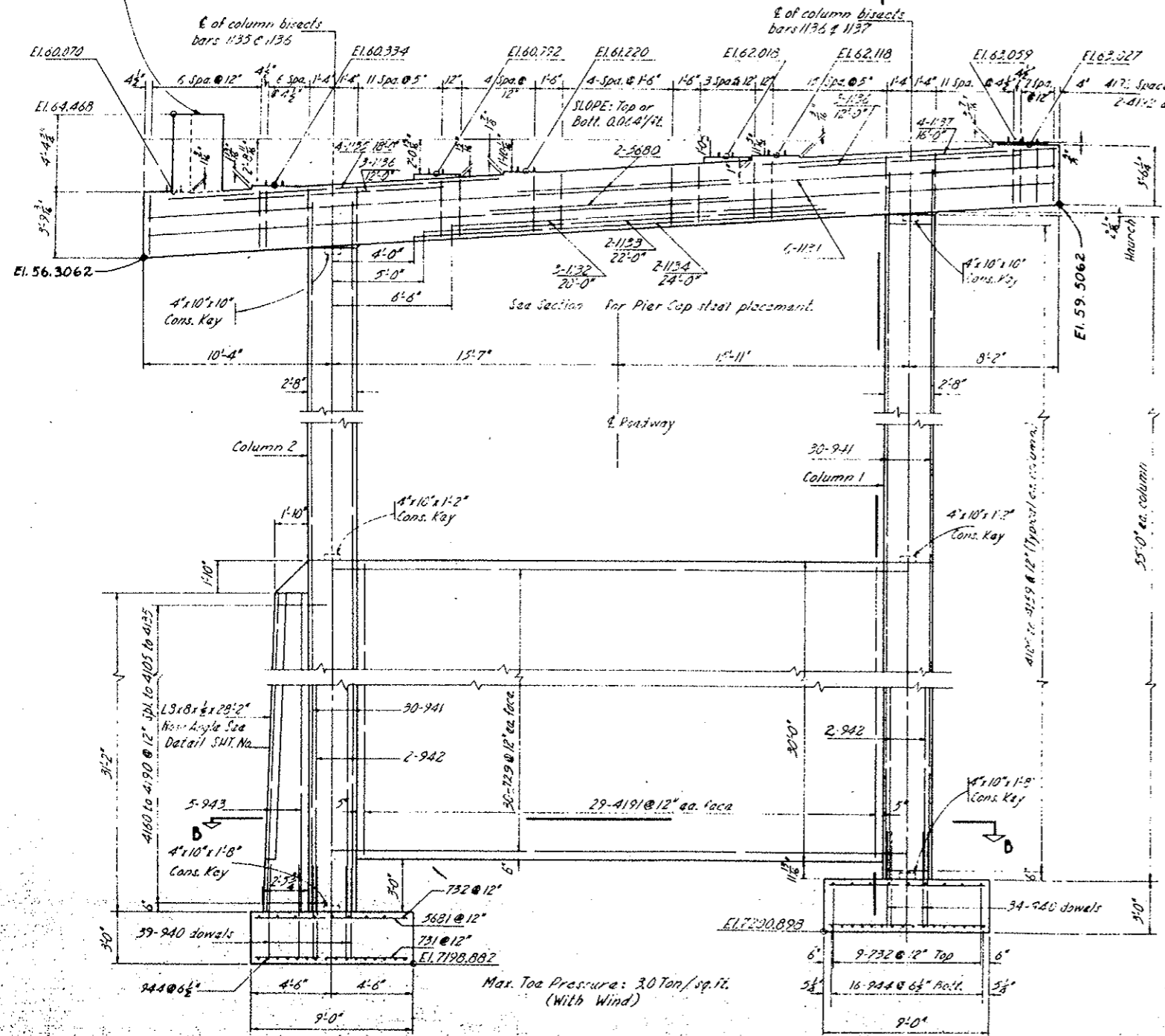
Designed by G.H.W.
Made by L.H.F.
Checked by

Approved by B. Newhall
Bridge Engineer
Date Sept. 17, 1958

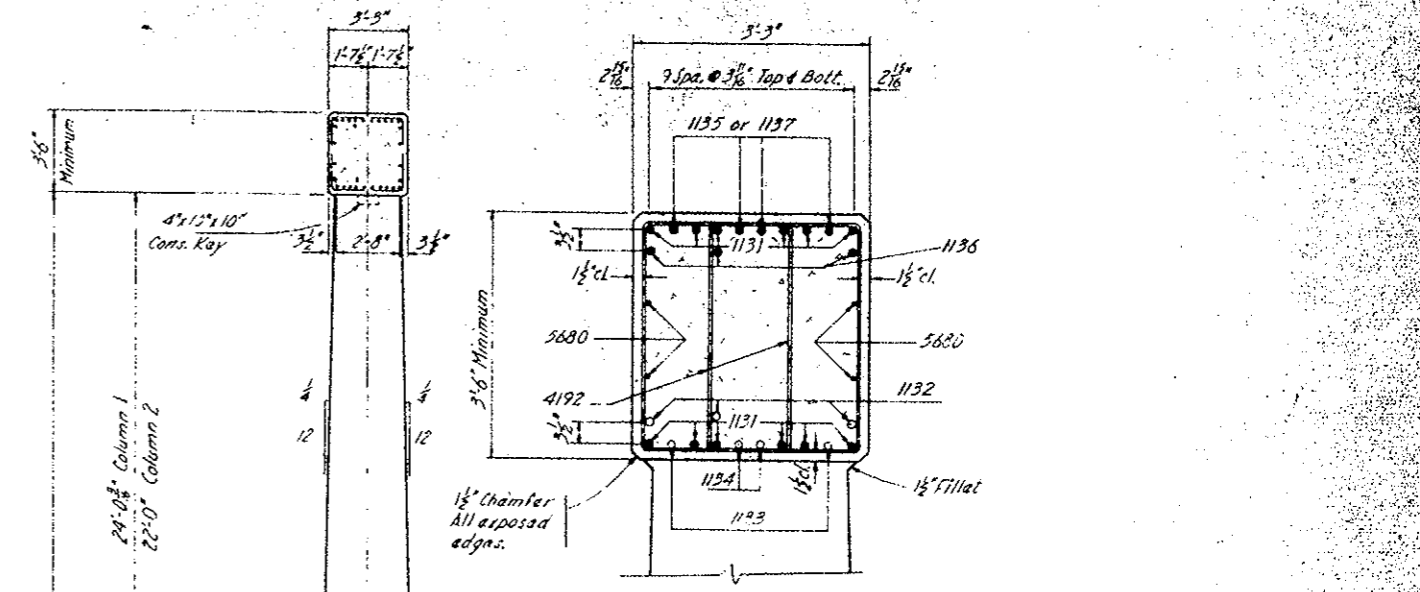
NO. DRAW	DIVISION	PROJECT NO.	DATE	SCALE
252. 10.	COLO.	1-70-3(1)250	16	



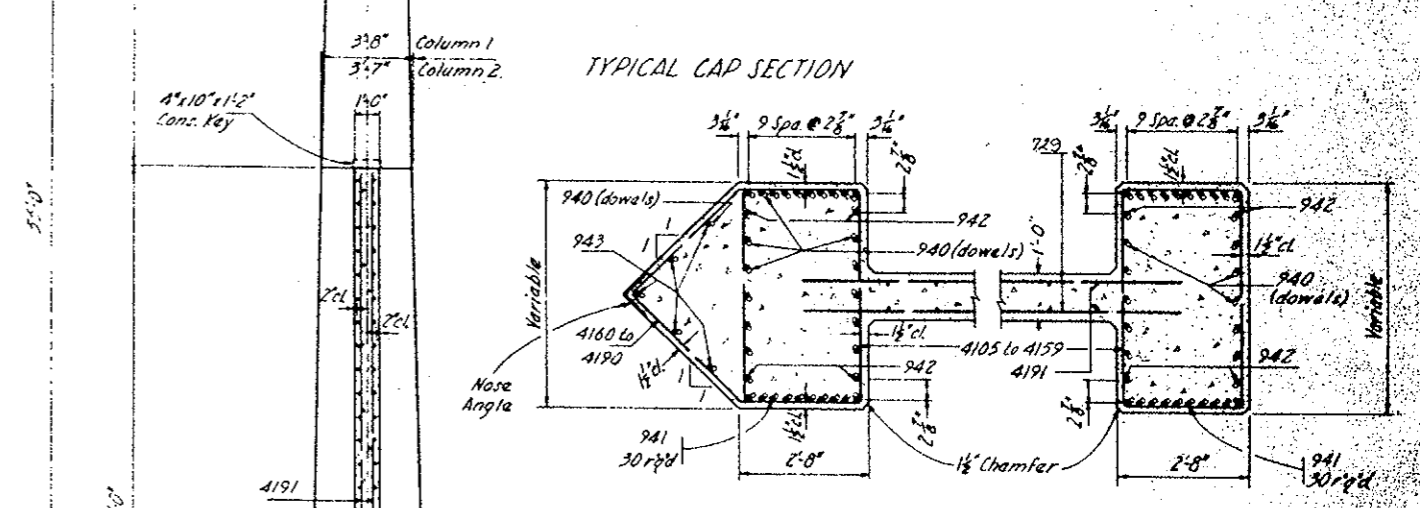
PLAN-PIER-4



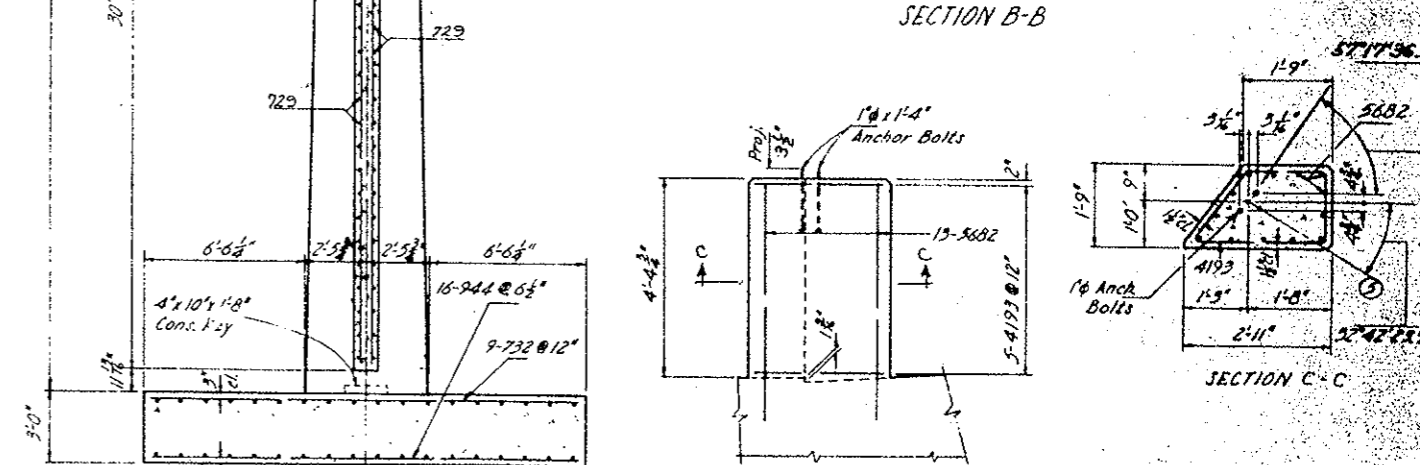
ELEVATION-PIER-A



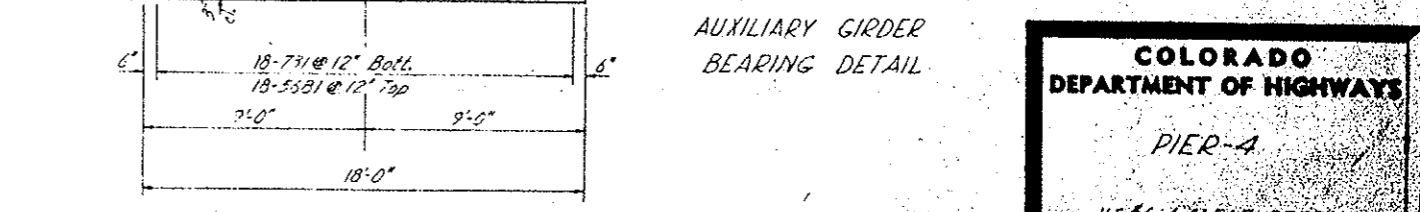
TYPICAL CAP SECTION



SECTION B-B



SECTION C-C



AUXILIARY GIRDER BEARING DETAIL



SECTION A-A

COLORADO DEPARTMENT OF HIGHWAYS

PIER-4

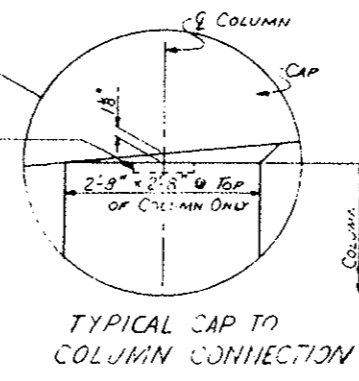
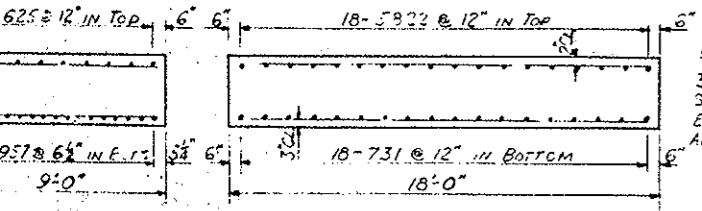
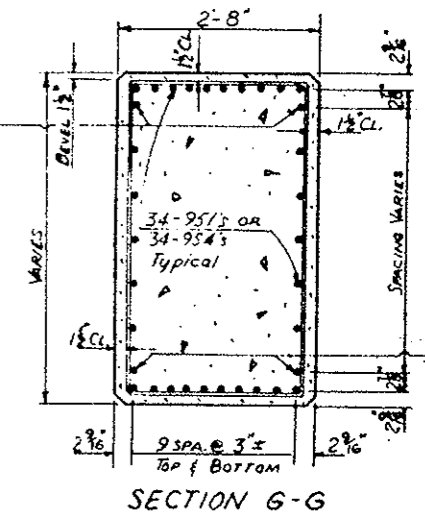
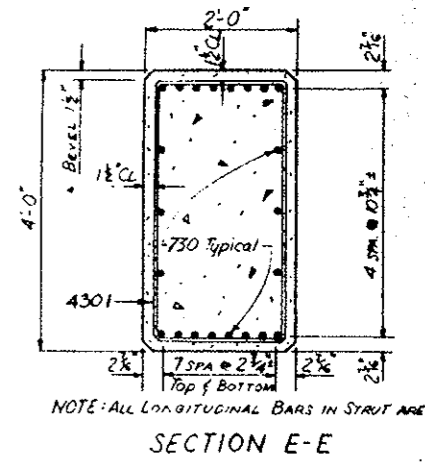
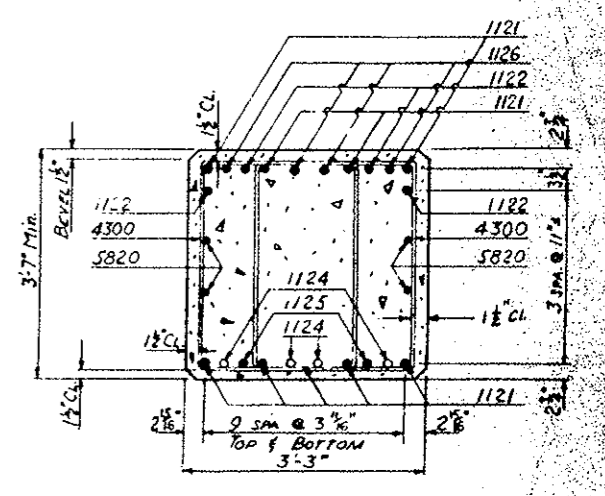
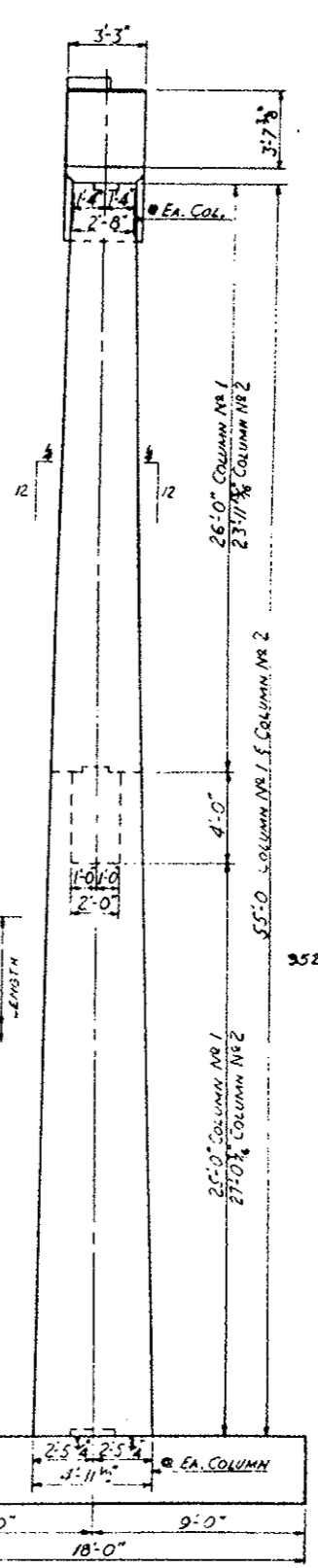
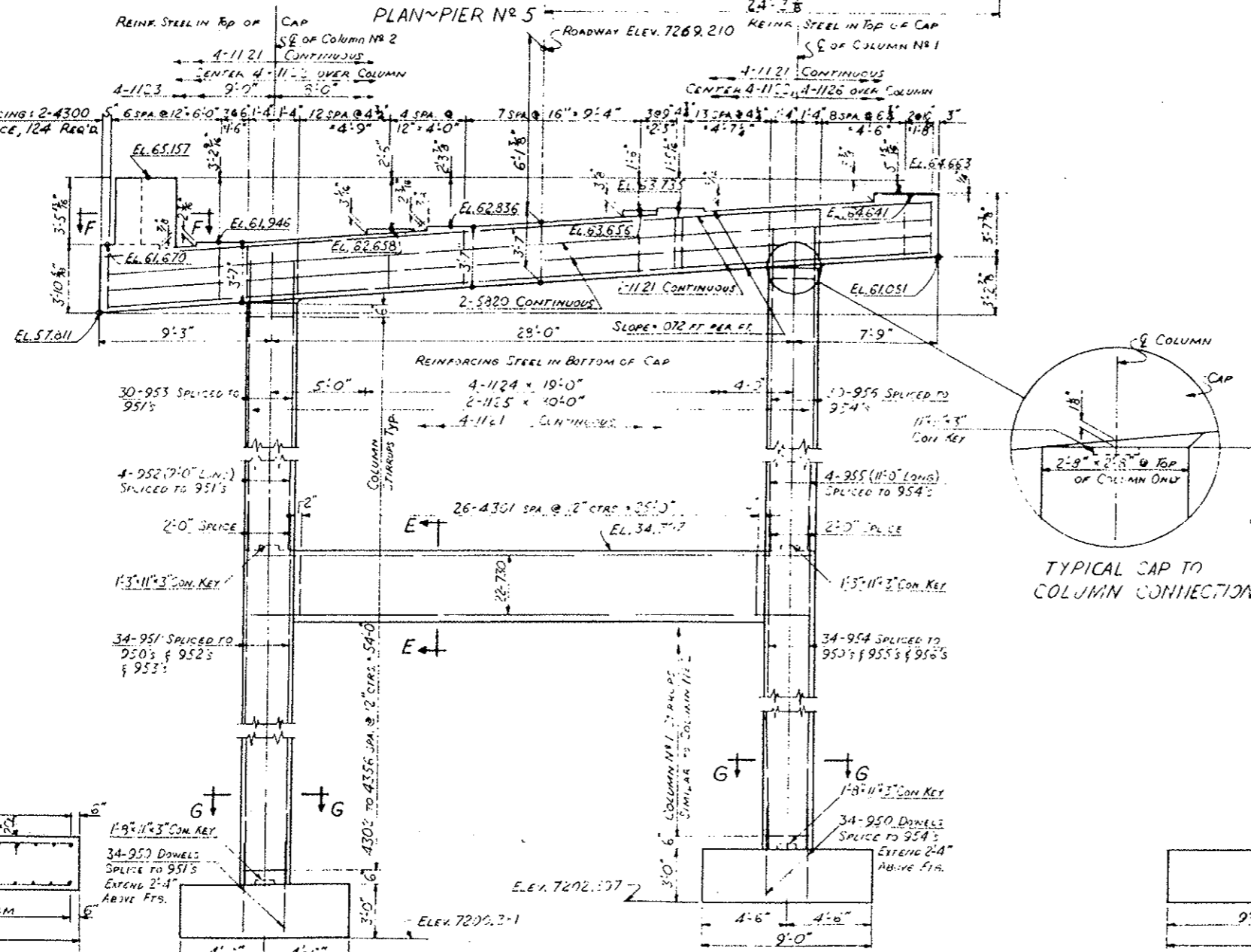
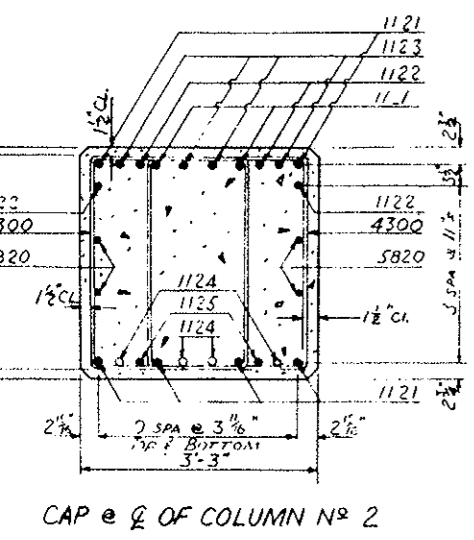
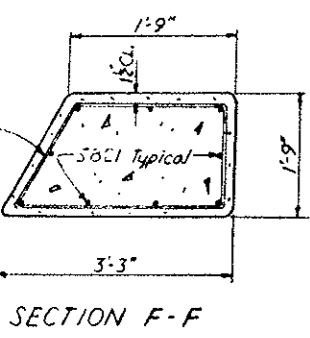
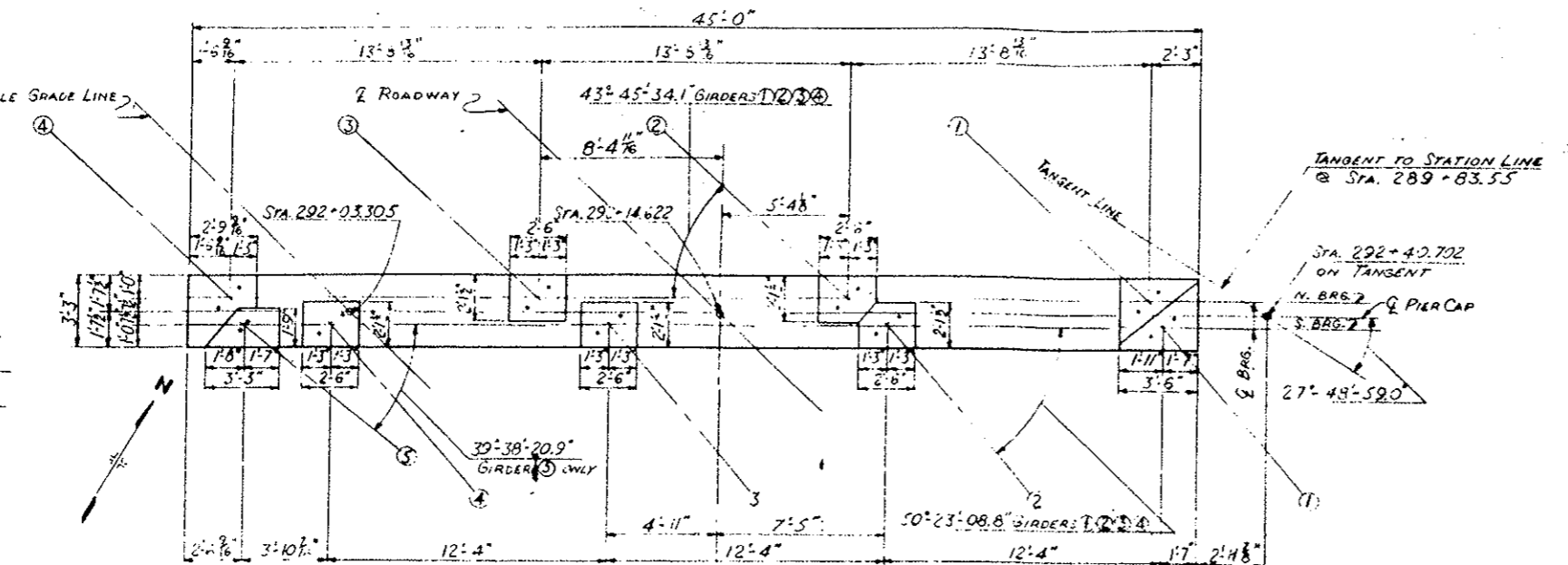
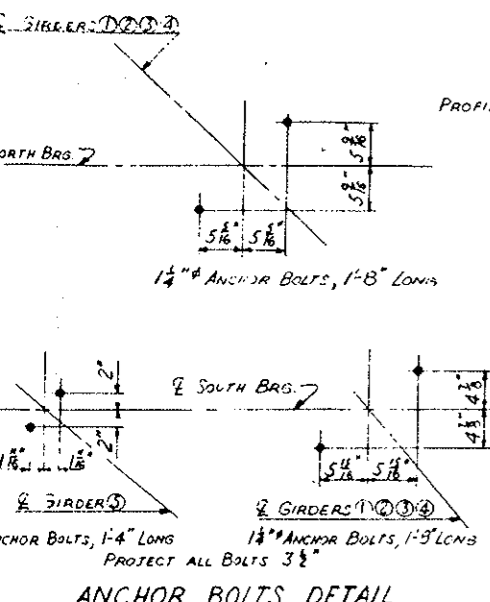
Across U.S. 6 & CLEAR CREEK
Sta. 287+20.00 to 292+30.00
Near Idaho Springs, Co. 70, V. 25, W. 72N

Designed by GHW
Checked by JGG

Approved by [Signature]
Date: [Date]

STRUCTURE NO. F-15-BL

RESISTANCE NO.	DIVISION	PROJECT NO.	NO. OF SHEETS	TOTAL SHEETS
9	COLO.	1-70-3(1)250	17	



COLORADO DEPARTMENT OF HIGHWAYS

DETAILS OF PIER NO 5

Across U.S. 6 & CLEAR CREEK
Sta. 287+20.46 to 292+92.91
Near IDAHO SPRINGS, CO. 34-735-322W

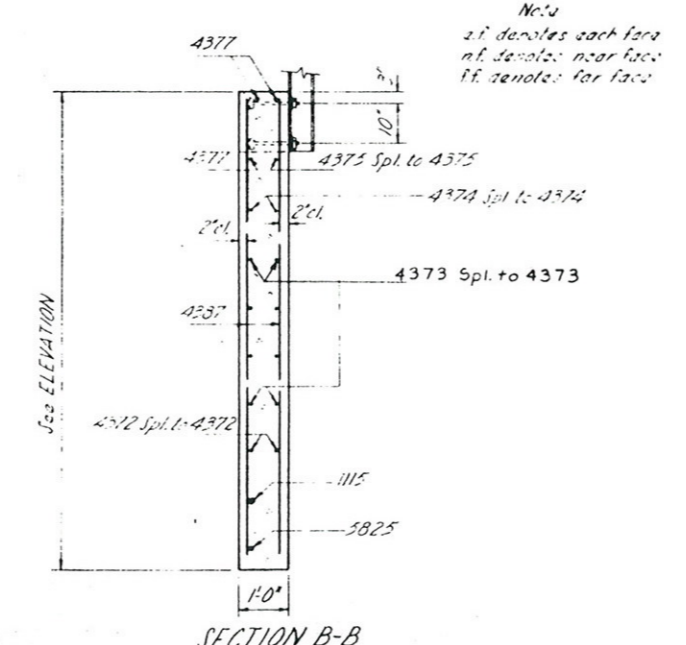
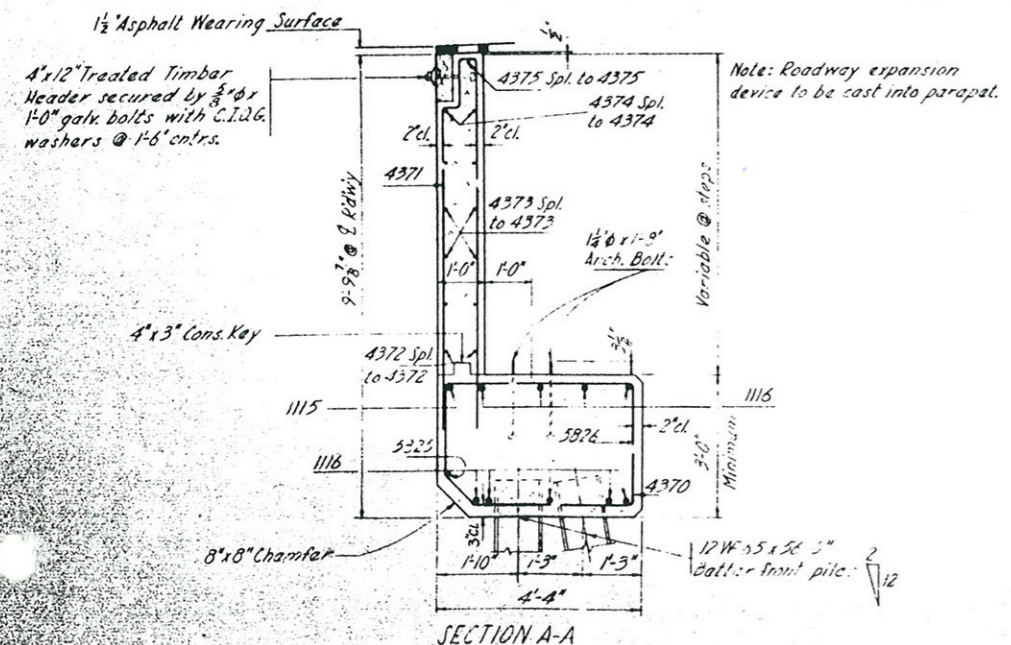
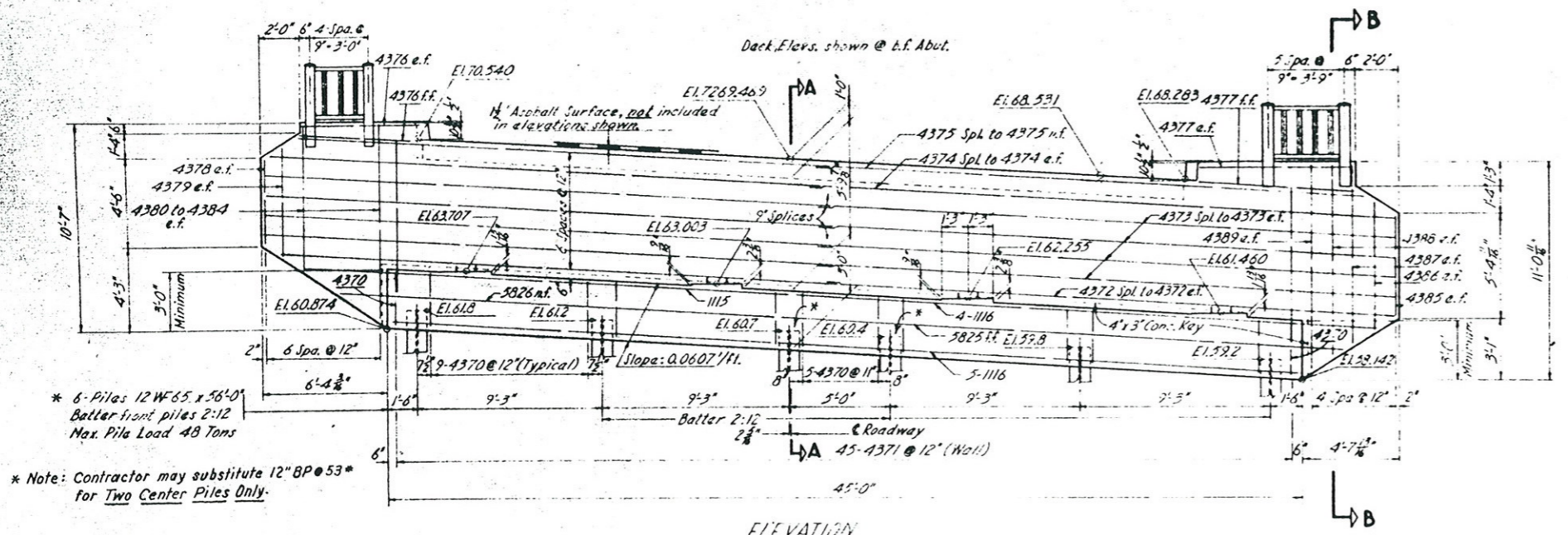
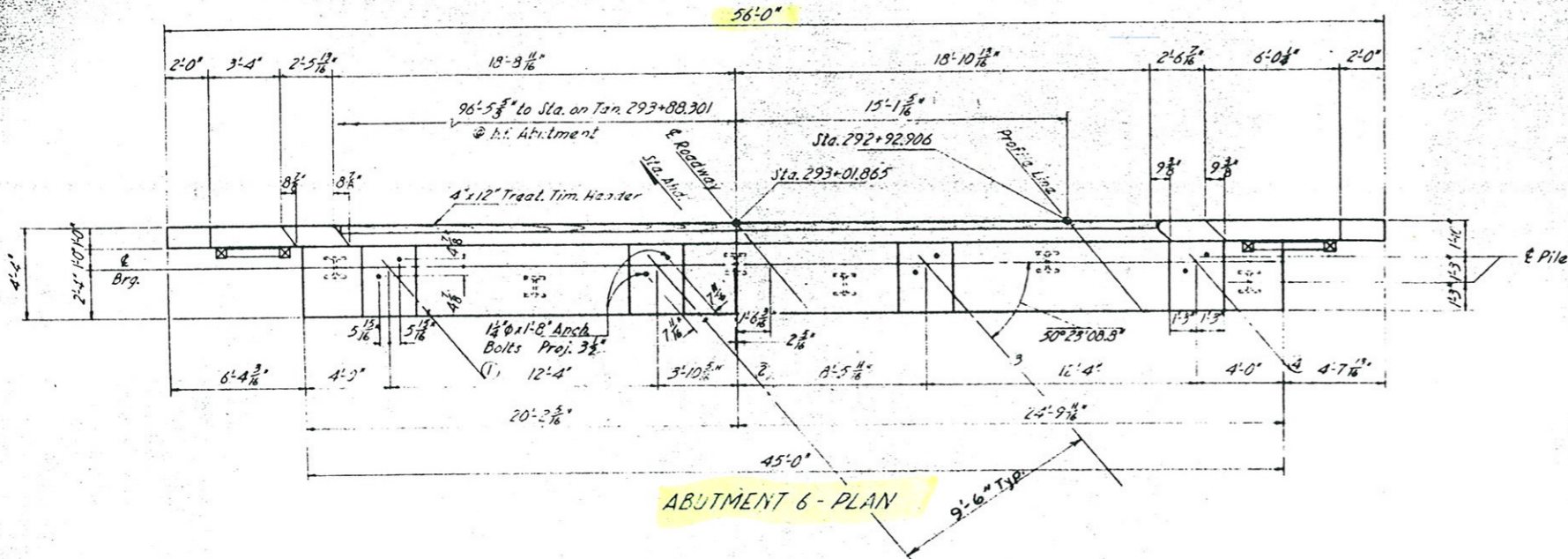
Designed by GHW
Made by LNF
Checked by

Approved by [Signature]
Bridge Engineer

Date: 1/17/1975

STRUCTURE NO. F-15-BL

RD. BRD. STA. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	F-70-3(1)250	18



COLORADO DEPARTMENT OF HIGH

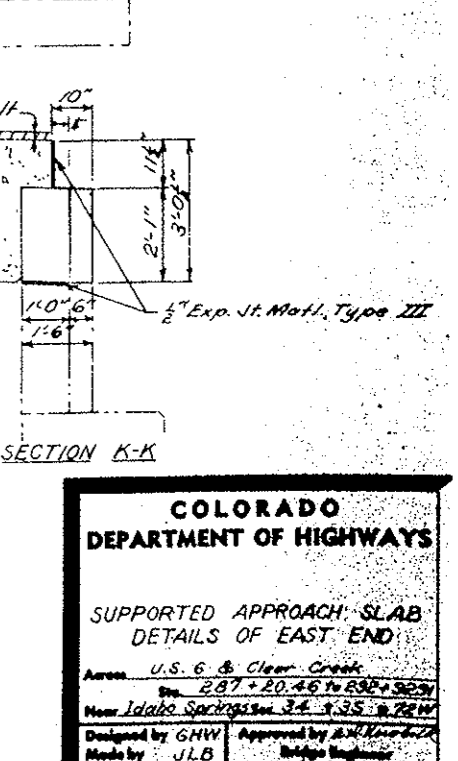
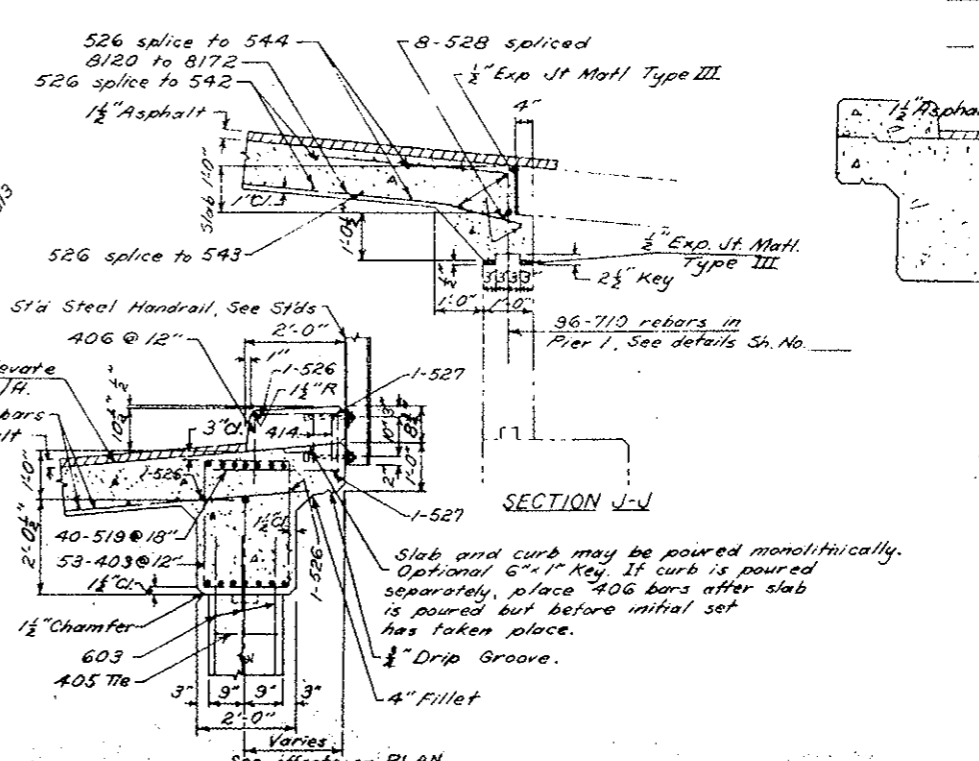
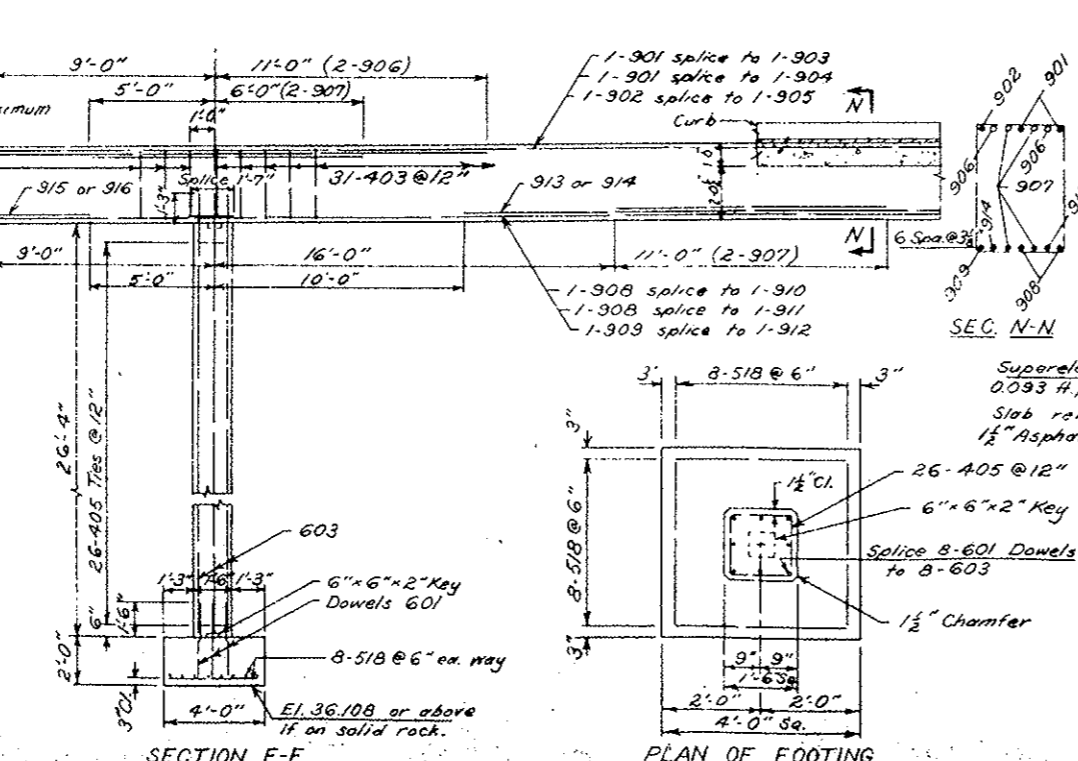
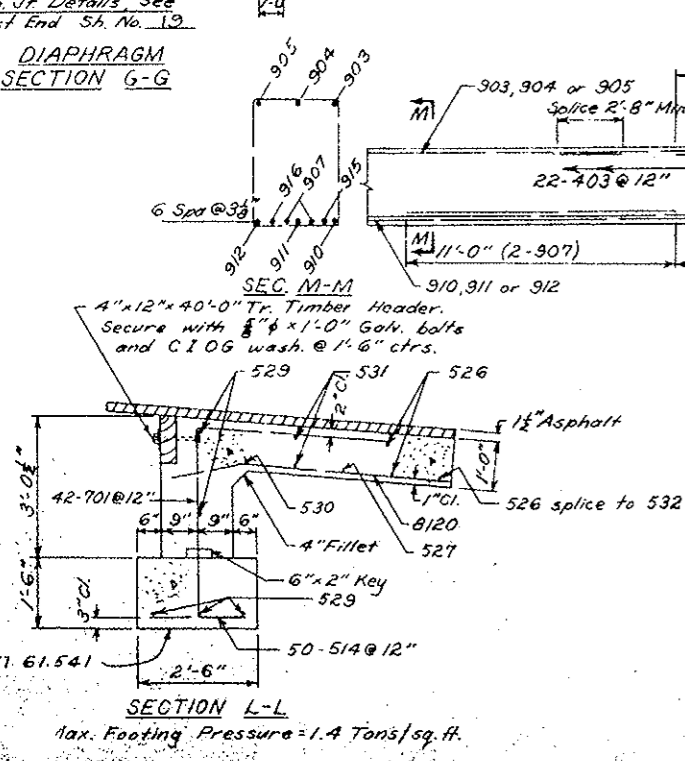
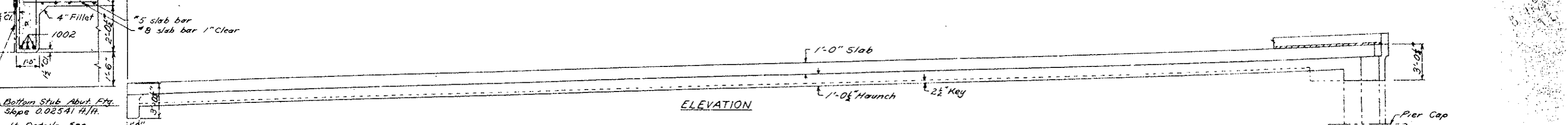
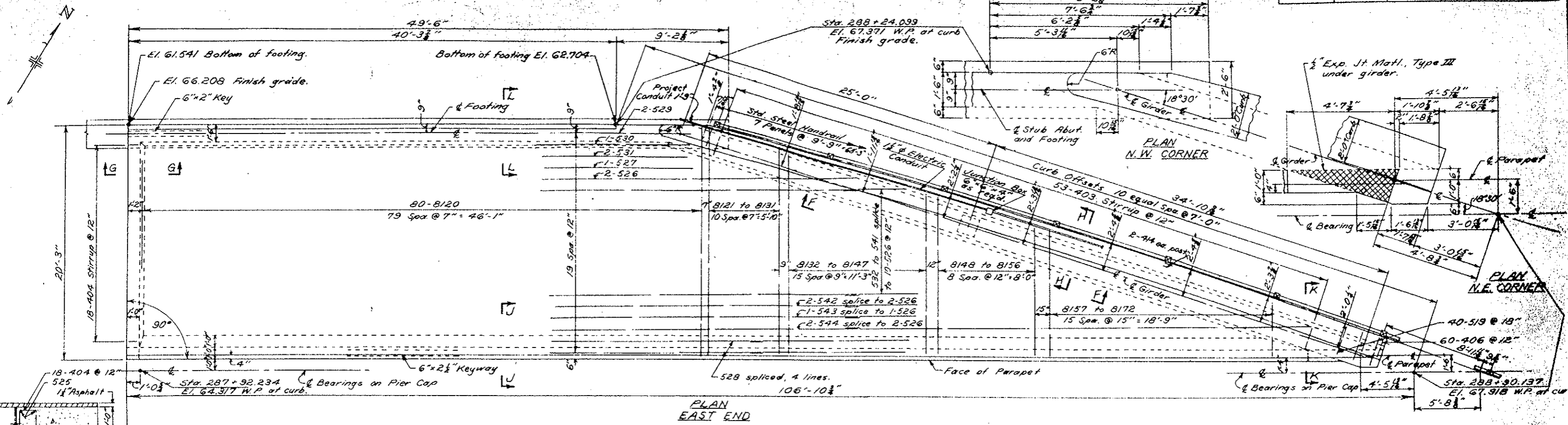
ABUTMENT-6

Across U.S. 6 & CLEAR CREEK
Sta. 291+20.46
Near Idaho Springs, Sec. 3-A T. 3

Designed by CHW
Checked by JCG

Approved by JCG
Bridge Eng
Date: 1/27/59

NO. 1000 REV. 1000	DIVISION CONA	PROJECT NO. I-70-3(1)250	DATE 20	SCALE AS SHOWN
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PLAN OF FOOTING

GIRDER AND CURB SECTION H-H

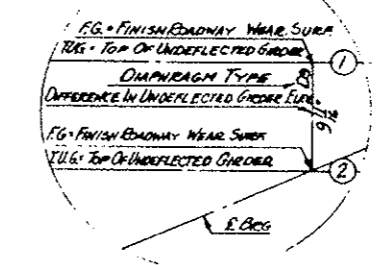
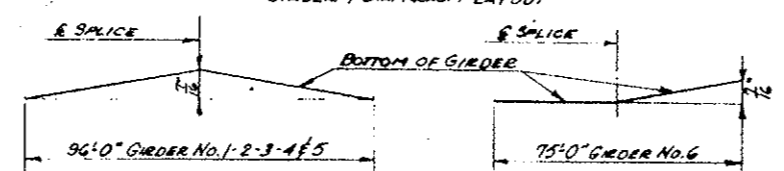
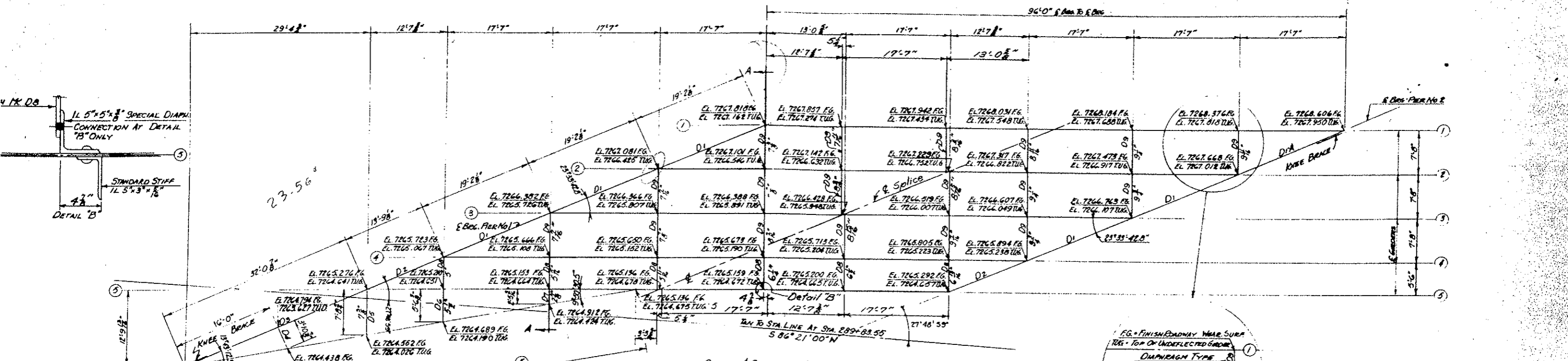
COLORADO DEPARTMENT OF HIGHWAYS

SUPPORTED APPROACH SLAB
DETAILS OF EAST END

Area: U.S. 6 & Clear Creek
Sta. 287+20.46 to 288+92.91
Near Idaho Springs Sec. 34, T. 35, R. 72 W

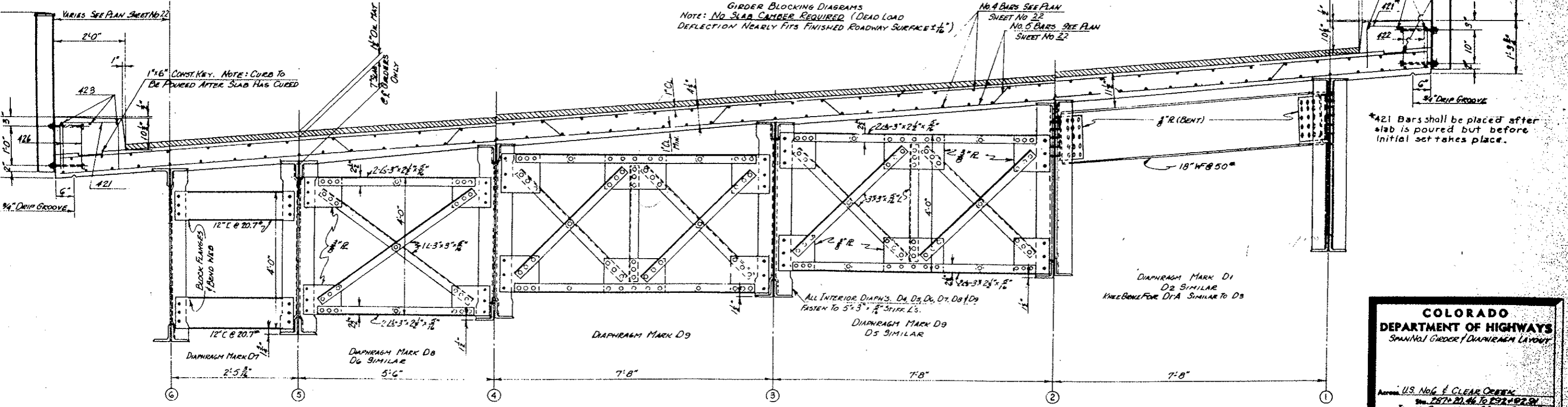
Designed by GHW Approved by JLB
Made by JLB Checked by JLB
Date: Sept. 17, 1958

STRUCTURE NO. F-15-BL



GIRDER BLOCKING DIAGRAMS
 NOTE: NO SLAB CAMBER REQUIRED (DEAD LOAD DEFLECTION NEARLY FITS FINISHED ROADWAY SURFACE $\pm \frac{1}{16}$ ")

No. 4 BARS SEE PLAN SHEET NO. 22
 No. 5 BARS SEE PLAN SHEET NO. 22



COLORADO DEPARTMENT OF HIGHWAYS
 SPANNING GIRDER / DIAPHRAGM LAYOUT

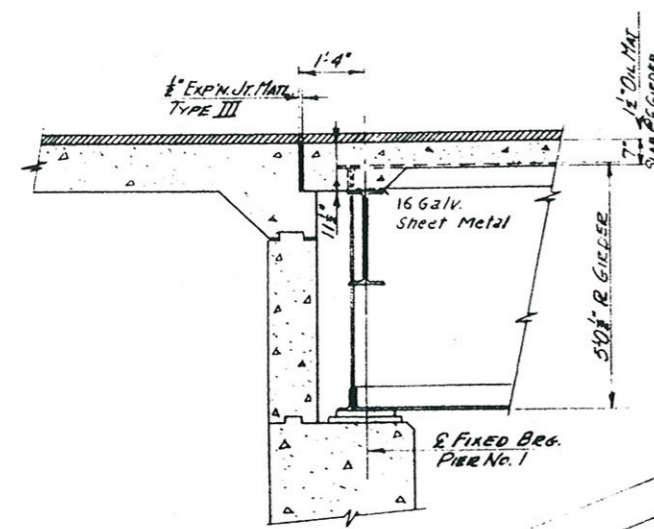
Across U.S. HIGHWAY CLEAR OPENING
 Sta. 287+20.46 TO 292+02.51
 Near IDAHO SPRINGS Sta. 34+35.8 TO 34+37.0

Designed by GHW
 Made by JRE
 Checked by

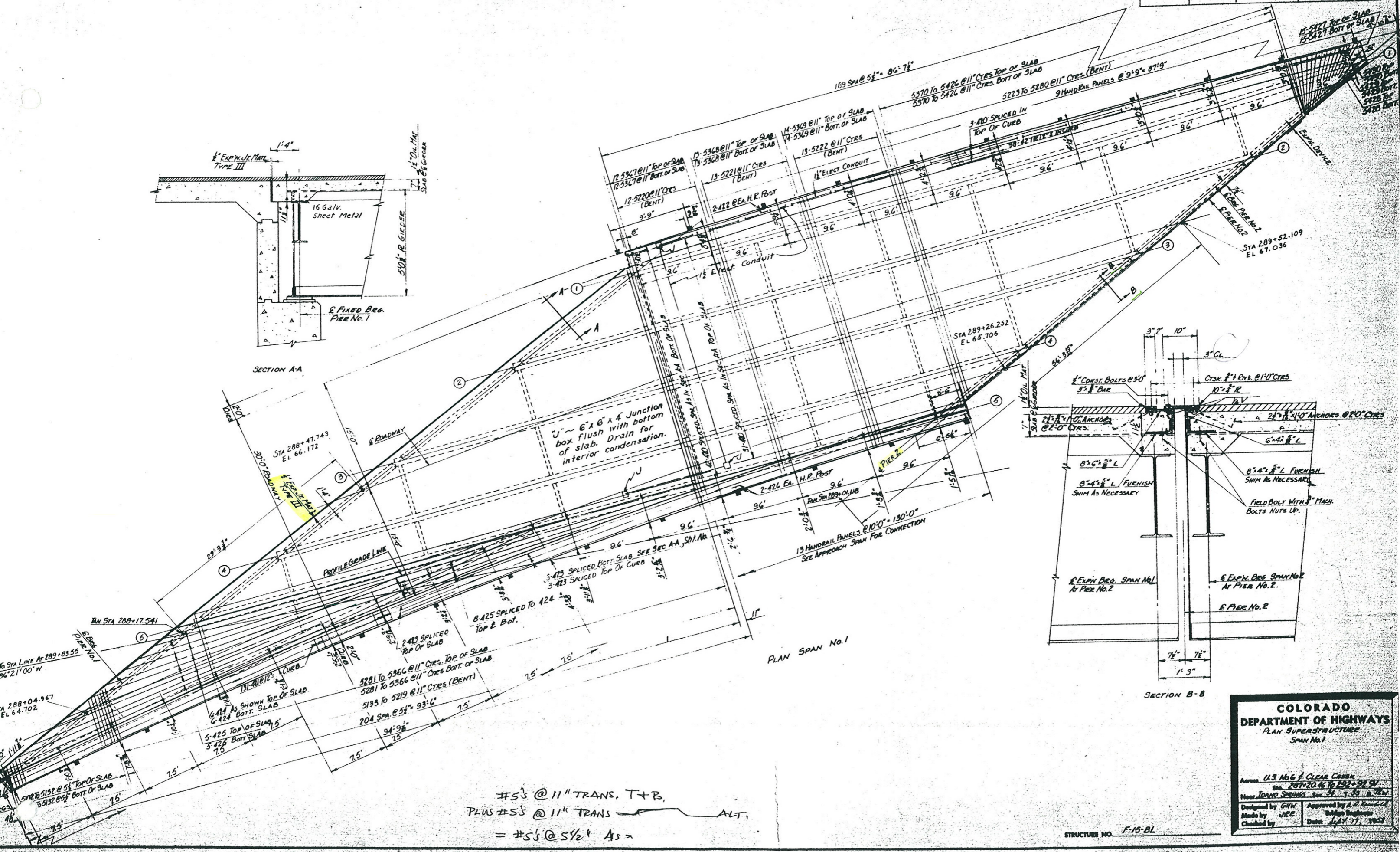
Approved by A. J. [Signature]
 Bridge Engineer
 Date: 11/17/1958

STRUCTURE NO. F-15-BL

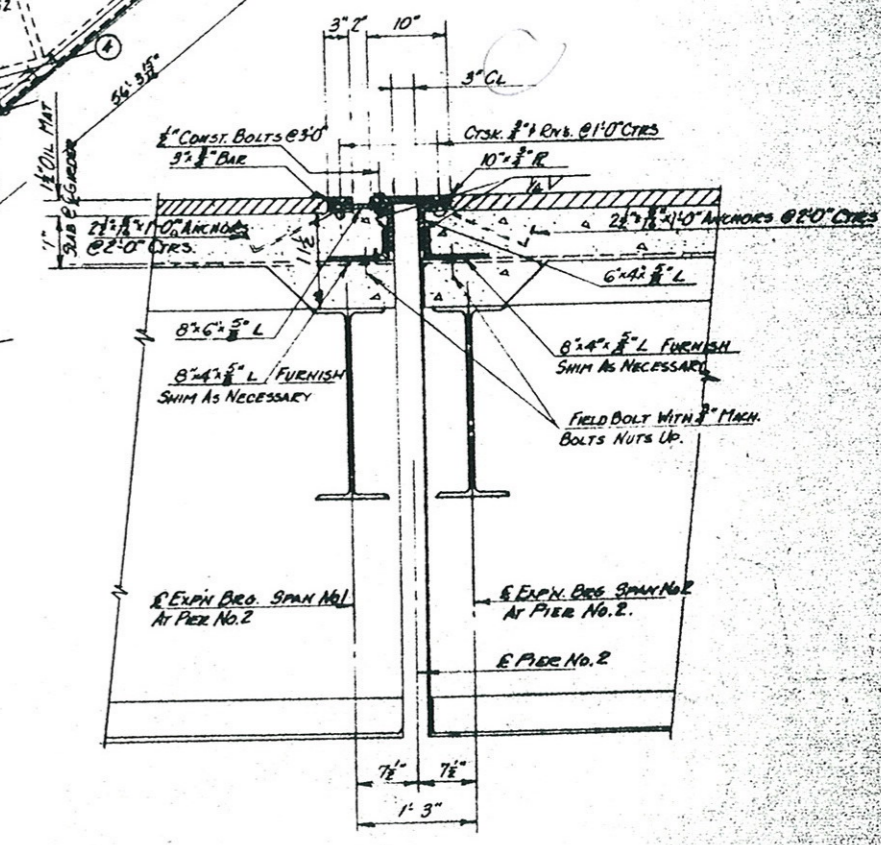
STATE ROAD DIST. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLD.	1-70-3(1)250	22	



SECTION A-A



PLAN SPAN No. 1



SECTION B-B

#5's @ 11" TRANS. T+B,
 PLUS #5's @ 11" TRANS ALT.
 = #5's @ 5 1/2" AS

COLORADO DEPARTMENT OF HIGHWAYS
 PLAN SUPERSTRUCTURE
 SPAN No. 1

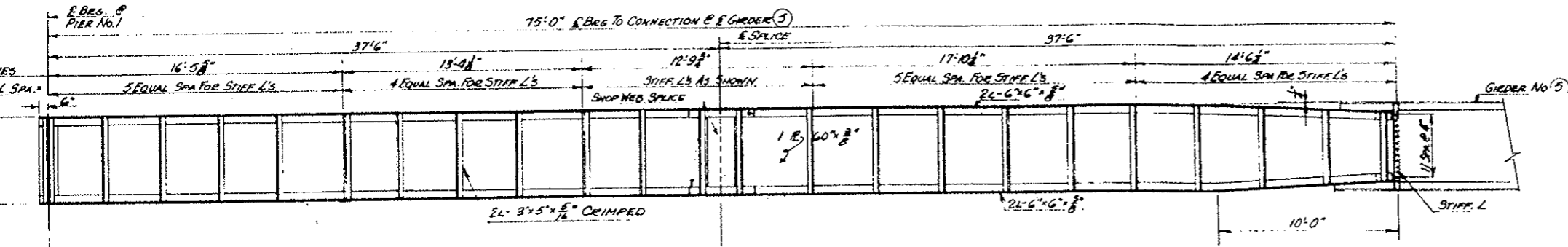
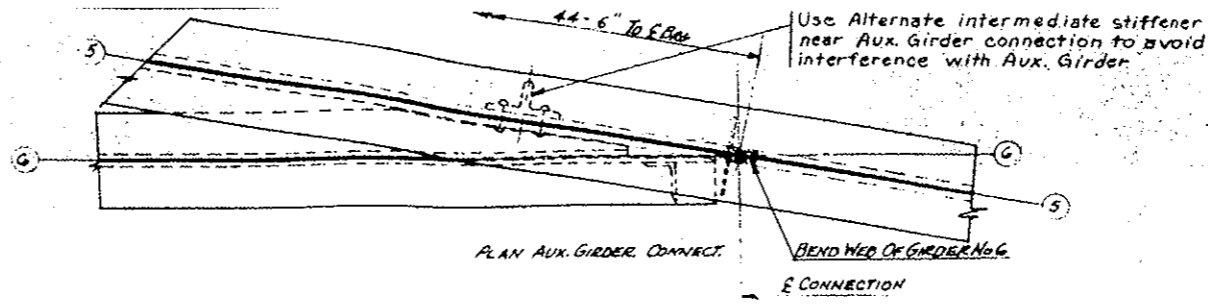
Across U.S. 66 & CLEAR CREEK
 Sta. 287+20.46 TO 292+38.51
 Near GRAND SPRING, CO. 81 1/2 MI. N. DENVER

Designed by GWH
 Made by JKE
 Checked by

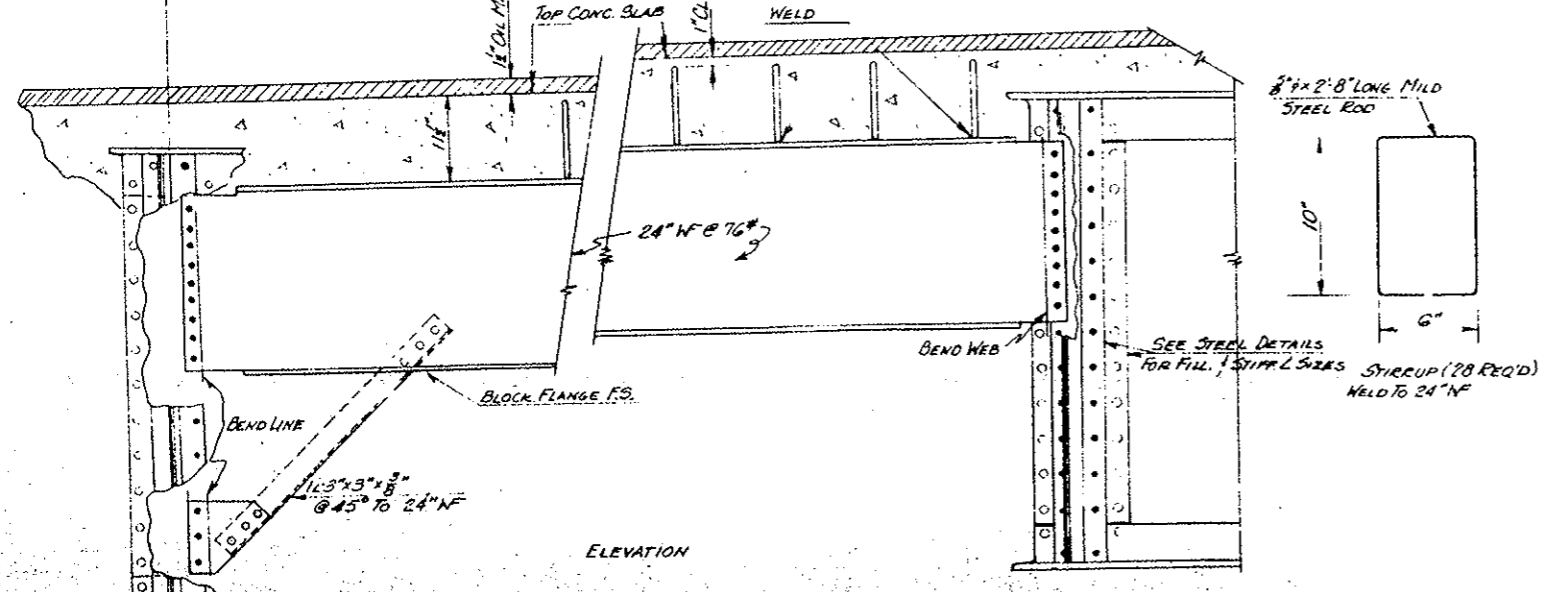
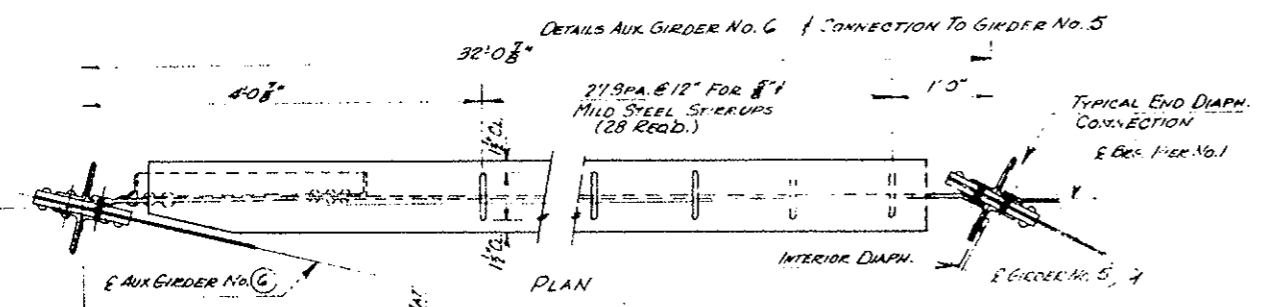
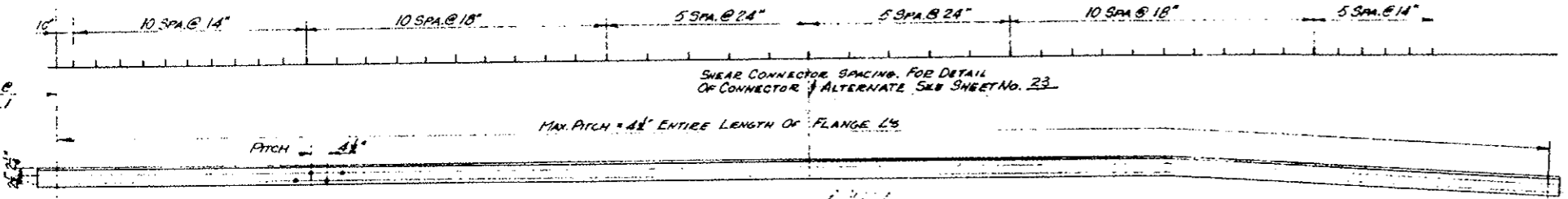
Approved by A. P. [Signature]
 Bridge Engineer
 Date: 1/24/77

STRUCTURE NO. F-15-BL

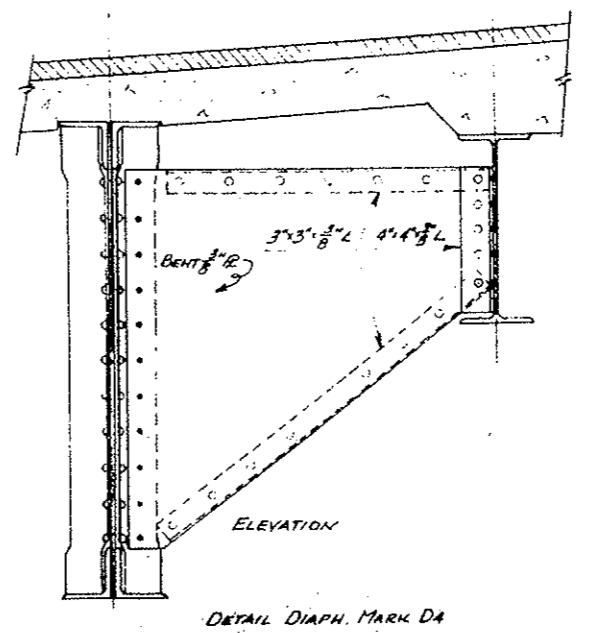
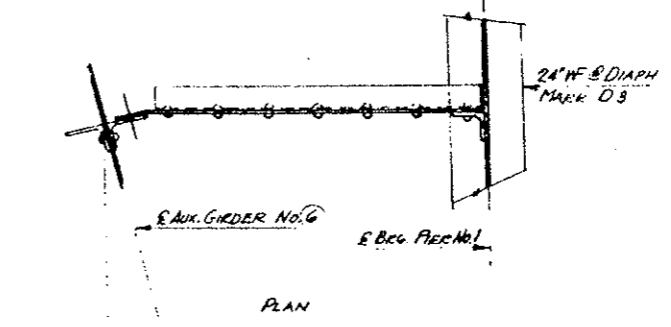
DISTRICT	SECTION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(1)250	24	



DETAIL AUXILIARY GIRDER NO. 6 (NO COVER PL.)
 FOR DETAIL OF STIFF. @ BEG., INTERMEDIATE STIFF. &
 SHOP WELD SPLICE SEE SHEET NO. 23.



DETAILS DIAPH. MARK D3

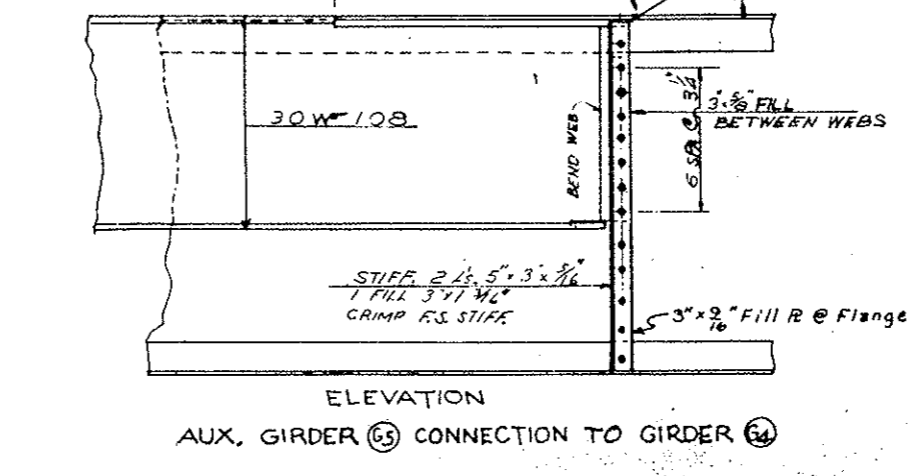
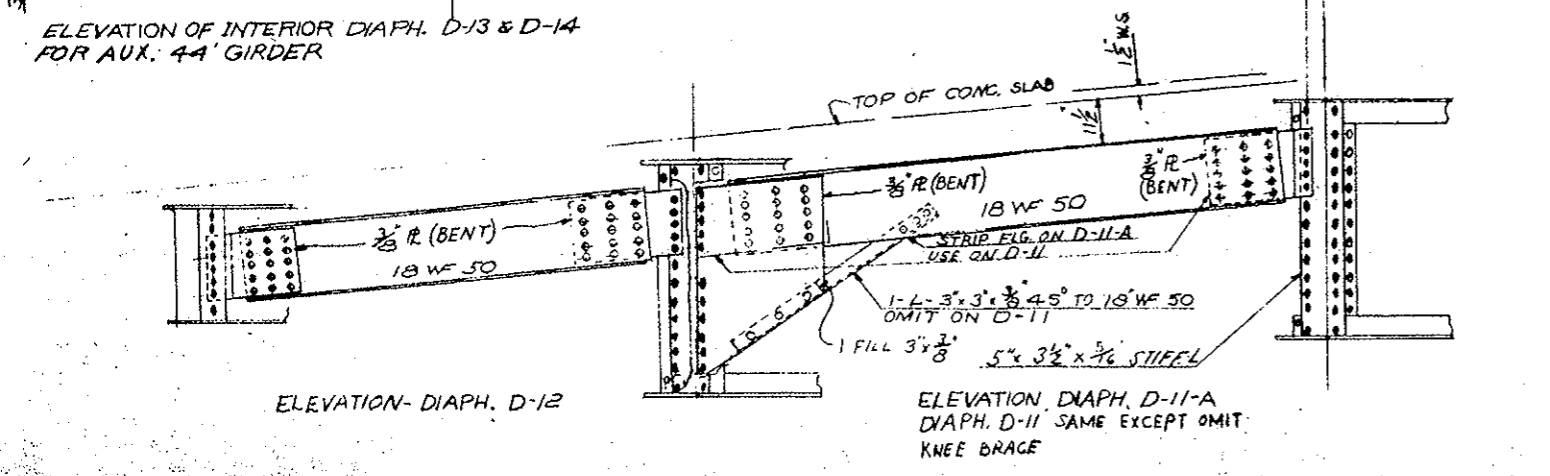
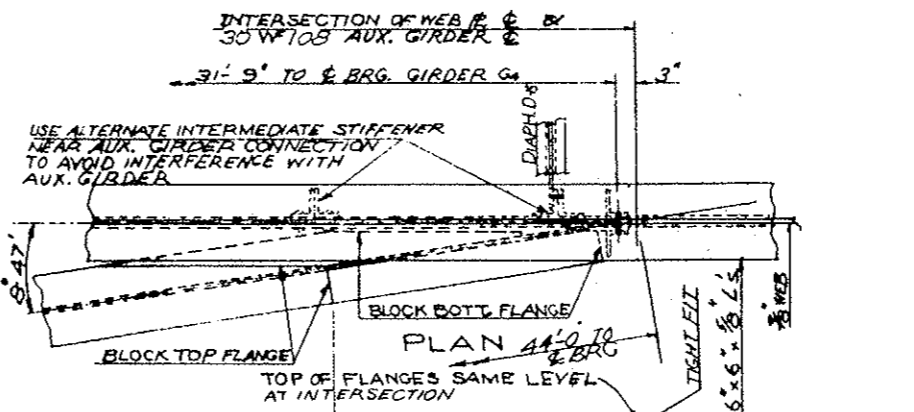
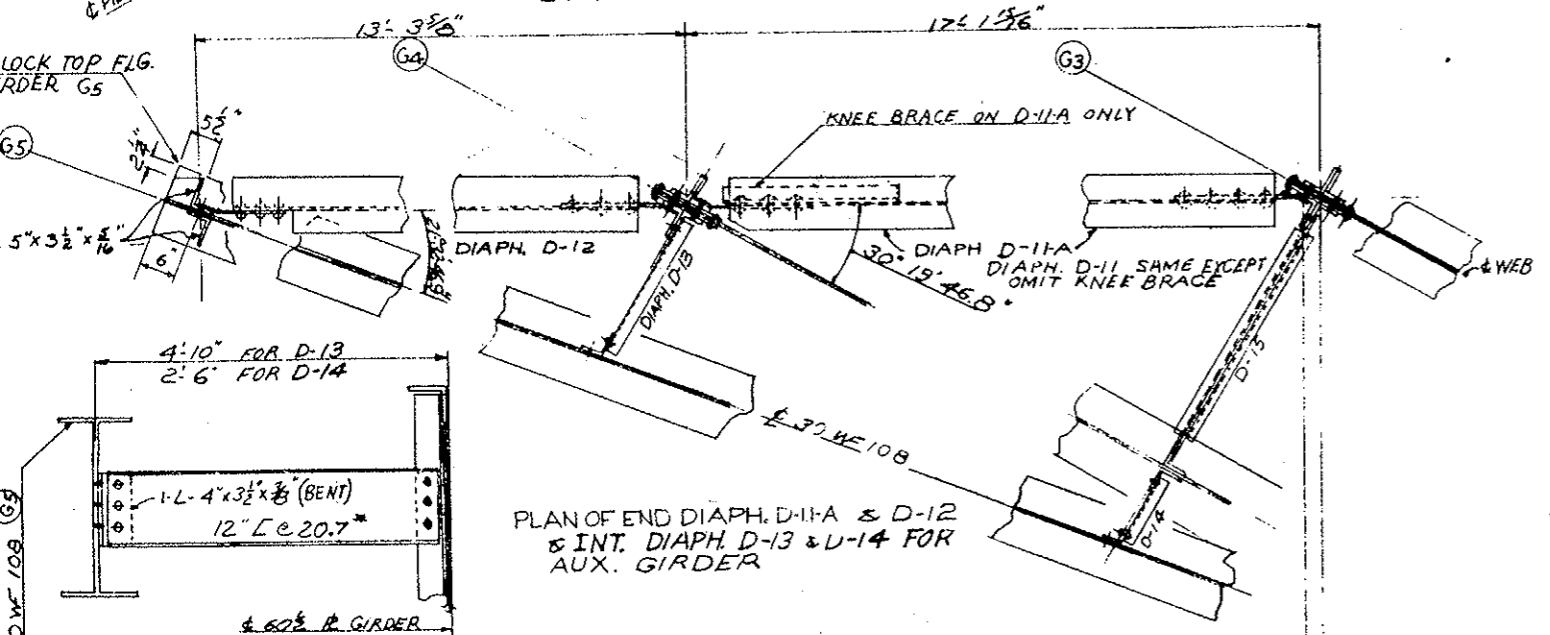
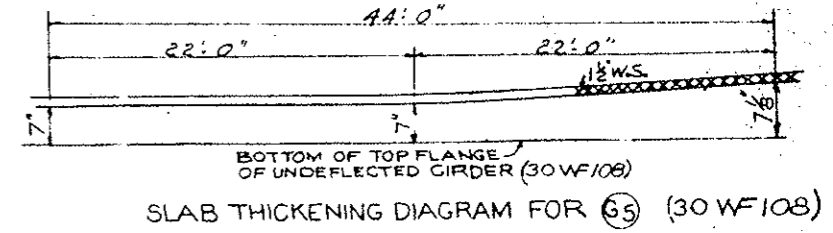
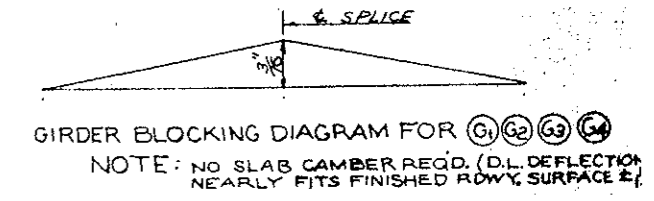
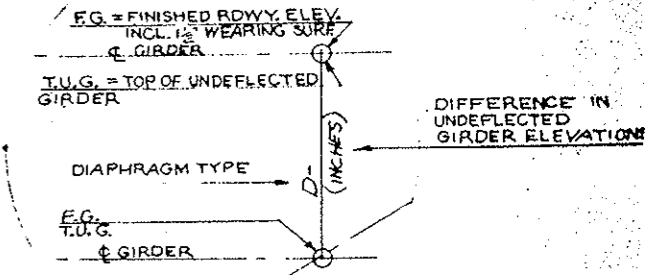
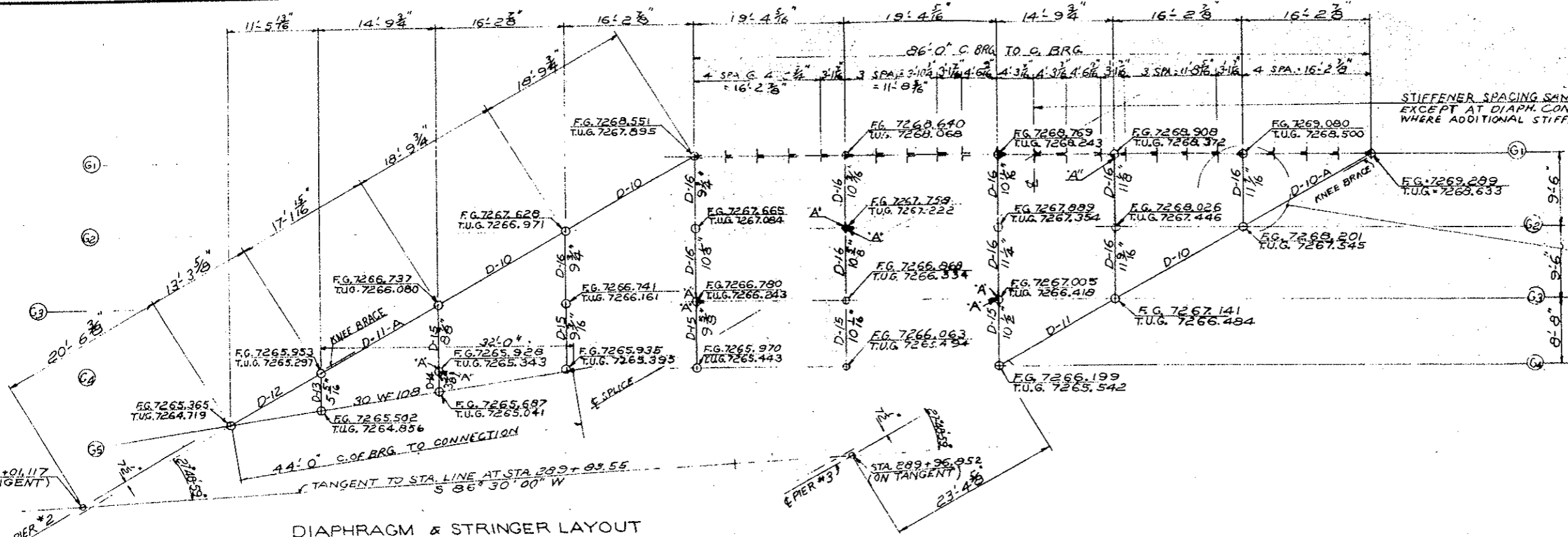


STRUCTURE NO. F-15-BL

COLORADO
 DEPARTMENT OF HIGHWAYS
 DETAILS AUXILIARY GIRDER NO. 6
 DIAPH. MARK D3 & DA
 SPAN NO. 1

Access: U.S. No. 6 - CLEAR CREEK
 Sta. 107+00.00 TO 107+92.91
 Near IGAHO Intersection 94 + 93.00 STA.

Designed by GHW Approved by J.C.E. (initials)
 Made by J.C.E. Bridge Engineer
 Checked by (initials) Date: Sept. 17, 1958



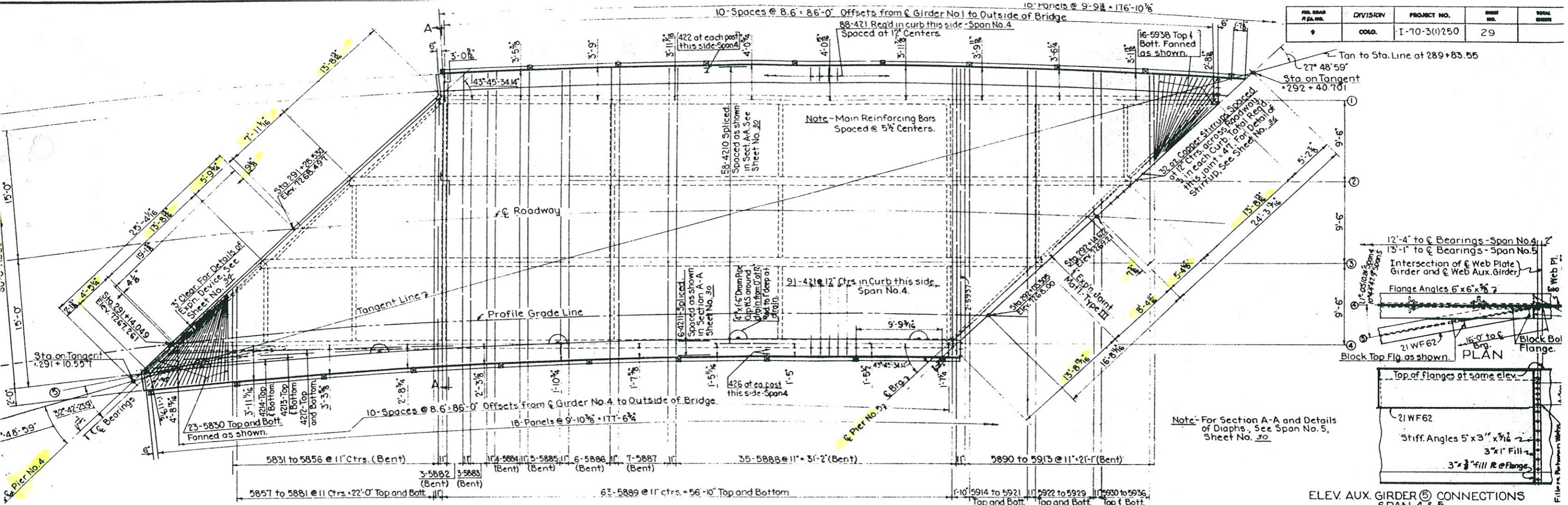
COLORADO DEPARTMENT OF HIGHWAYS
DETAILS OF SPAN NO. 2

Across CLEAR CREEK U.S. 6
 Sta. 287+20.46 to 292+92.91
 Near IDAHO SPRINGS, CO. 7.3.1964

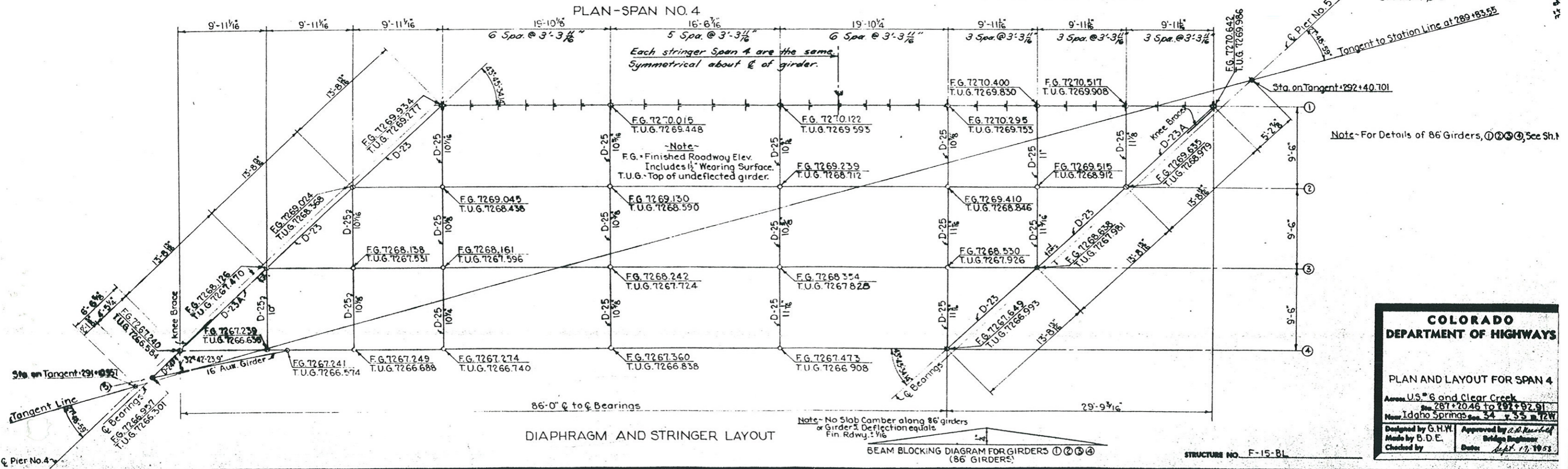
Designed by GHV
 Made by FL
 Checked by

Approved by S. L. Stewart
 Bridge Engineer
 Date: 1.17.1964

REL. ROAD R.F. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(1)250	29	



PLAN-SPAN NO. 4



DIAPHRAGM AND STRINGER LAYOUT

COLORADO DEPARTMENT OF HIGHWAYS

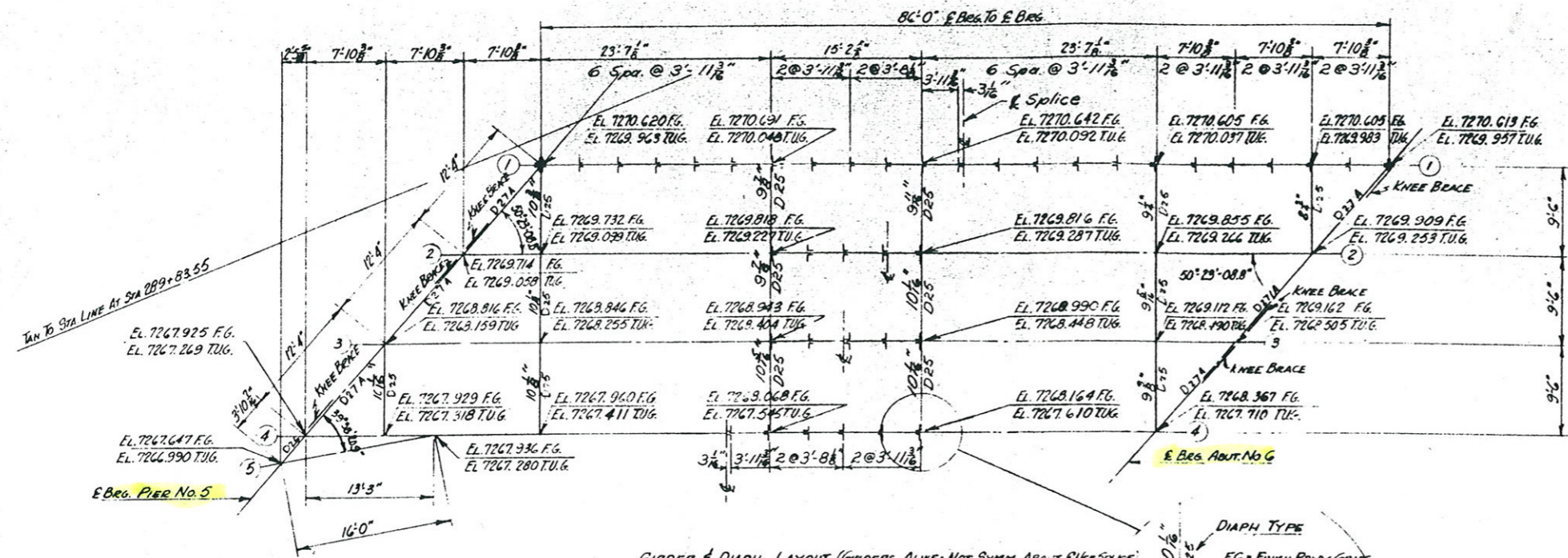
PLAN AND LAYOUT FOR SPAN 4

Across U.S. 6 and Clear Creek
Sta. 287+20.46 to 292+02.91
Near Idaho Springs, Sec. 34, T. 55 N. R. 12 W.

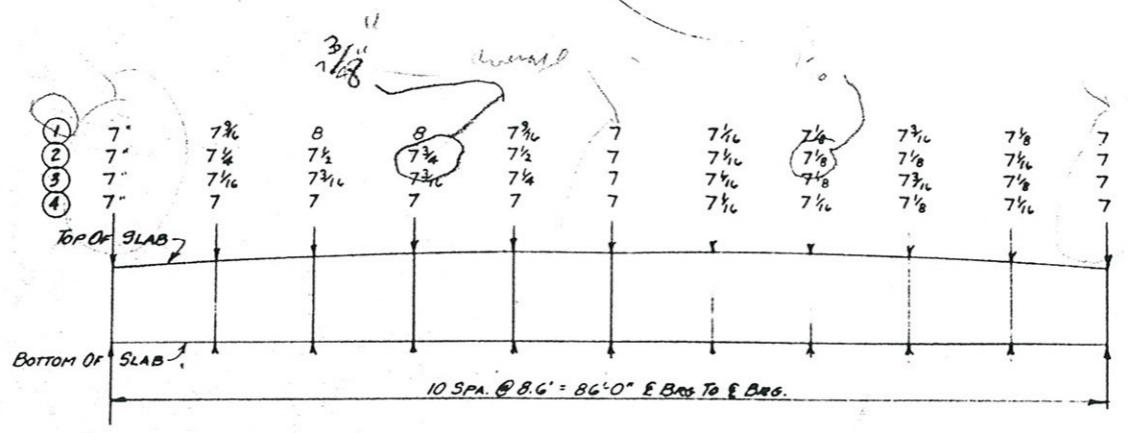
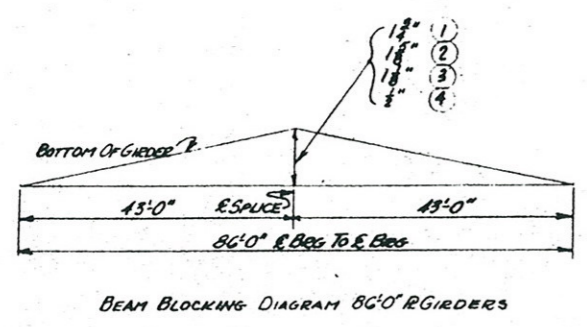
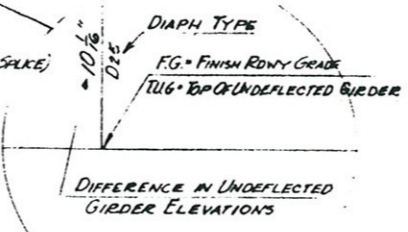
Designed by G.H.W.
Made by B.D.E.
Checked by

Approved by C.A. Rasmussen
Bridge Engineer
Date: Sept. 17, 1953

HW. ROAD R.F. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(1)250	31	



GIRDER & DIAPH. LAYOUT (GIRDERS ALIKE - NOT SYMM. ABOUT CENTERLINE)
 FOR GIRDER DETAILS SEE SHEET NO. 33
 FOR DIAPH. DETAILS SEE SHEET NO. 30



SLAB CAMBER DIAGRAM 86' R. GIRDERS SPAN 5
 NOTE: NO SLAB CAMBER REQUIRED FOR 16' AUX. GIRDER

gir. #2

COLORADO DEPARTMENT OF HIGHWAYS
 SPAN No 5 GIRDER & DIAPHRAGM LAYOUT

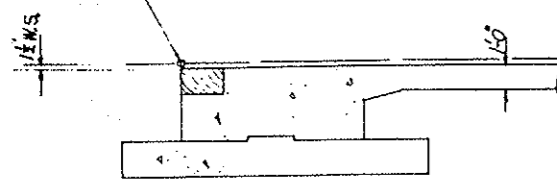
Across U.S. No. 6 & CLEAR CREEK
 Sta. 287+20.46 To 292+92.91
 Near IDAHO SPRINGS, Sec. 31, T. 35, R. 72E.

Designed by GHW
 Made by JKE
 Checked by

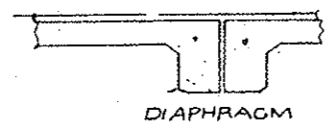
Approved by E.H. [Signature]
 Bridge Engineer
 Date: Sept. 17, 1958

NO. PROJ. ACCT. NO.	DIVISION	PROJECT NO.	DATE
1	COND.	F-70-3(1)250	32

STA. 287+59.456 (C.R.D.W.Y.)
EL. 65.441



WEST END



DIAPHRAGM

SUPPORTED APPROACH SLAB

10'-0" TYP. FOR APPR. SPAN
11 SPA. @ 9'-0" S.



EAST END

9'-9" NORTH SIDE
10'-0" SOUTH SIDE
11 SPA. @ 9" N. SIDE
11 SPA. @ 9" S. SIDE
TYP. FOR SPAN #1



PIER #1

9'-9 1/8" NORTH SIDE
9'-7 1/8" SOUTH SIDE
10 SPA. @ 9" N. SIDE
10 SPA. @ 9" S. SIDE
TYP. FOR SPAN #2 & SPAN #3



PIER #2

PIER #3

96'-0" ALONG G GIRDER SPAN #1

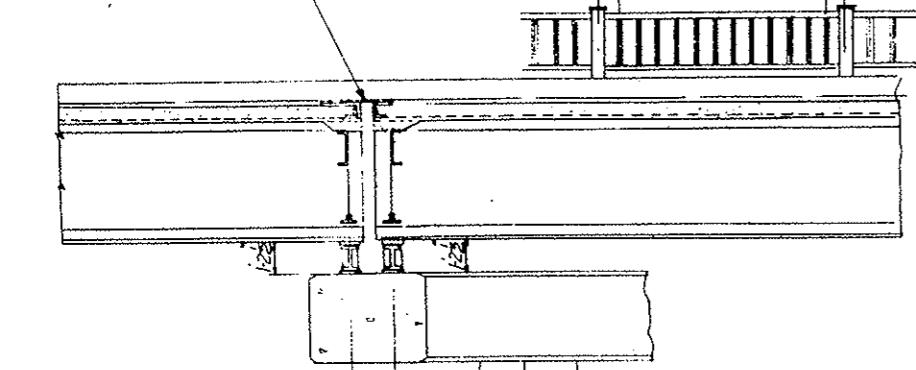
96'-0" ALONG G GIRDER SPAN #2

96'-0" ALONG G GIRDER SPAN #3

LONGITUDINAL SECTION

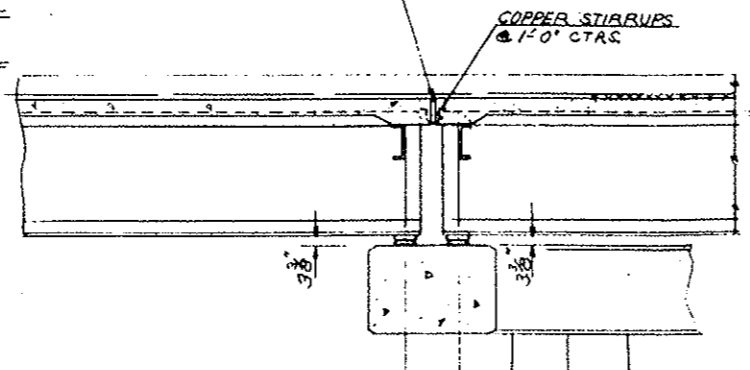
9'-9 1/8" NORTH SIDE
9'-10 3/8" SOUTH SIDE
11 SPA. @ 9" N. SIDE
11 SPA. @ 9" S. SIDE
TYP. FOR SPAN #4 & SPAN #5

EXPAN. DEVICE



PIER #4

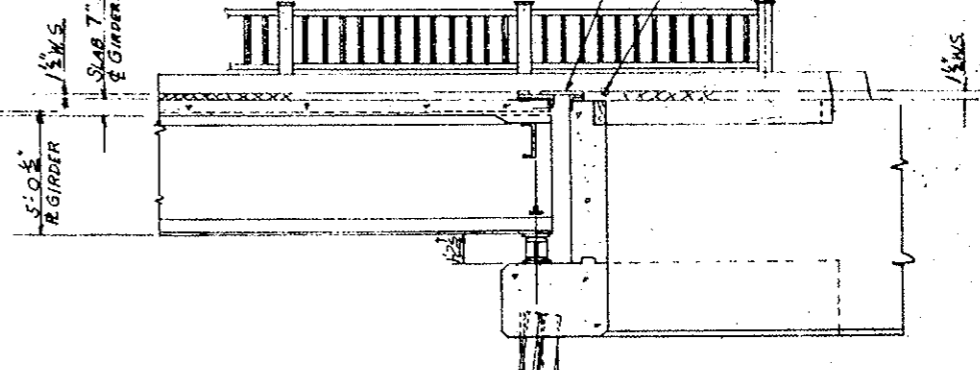
EXPAN. JT. MATL. TYPE III
COPPER STIRRUPS @ 1'-0" CTAS.



PIER #5

EXPAN. DEVICE

STA. 293+01.865 C.R.D.W.Y.



ABUT. #6

96'-0" ALONG G GIRDER SPAN #3

96'-0" ALONG G GIRDER SPAN #4

96'-0" ALONG G GIRDER SPAN #5

LONGITUDINAL SECTION

COLORADO DEPARTMENT OF HIGHWAYS

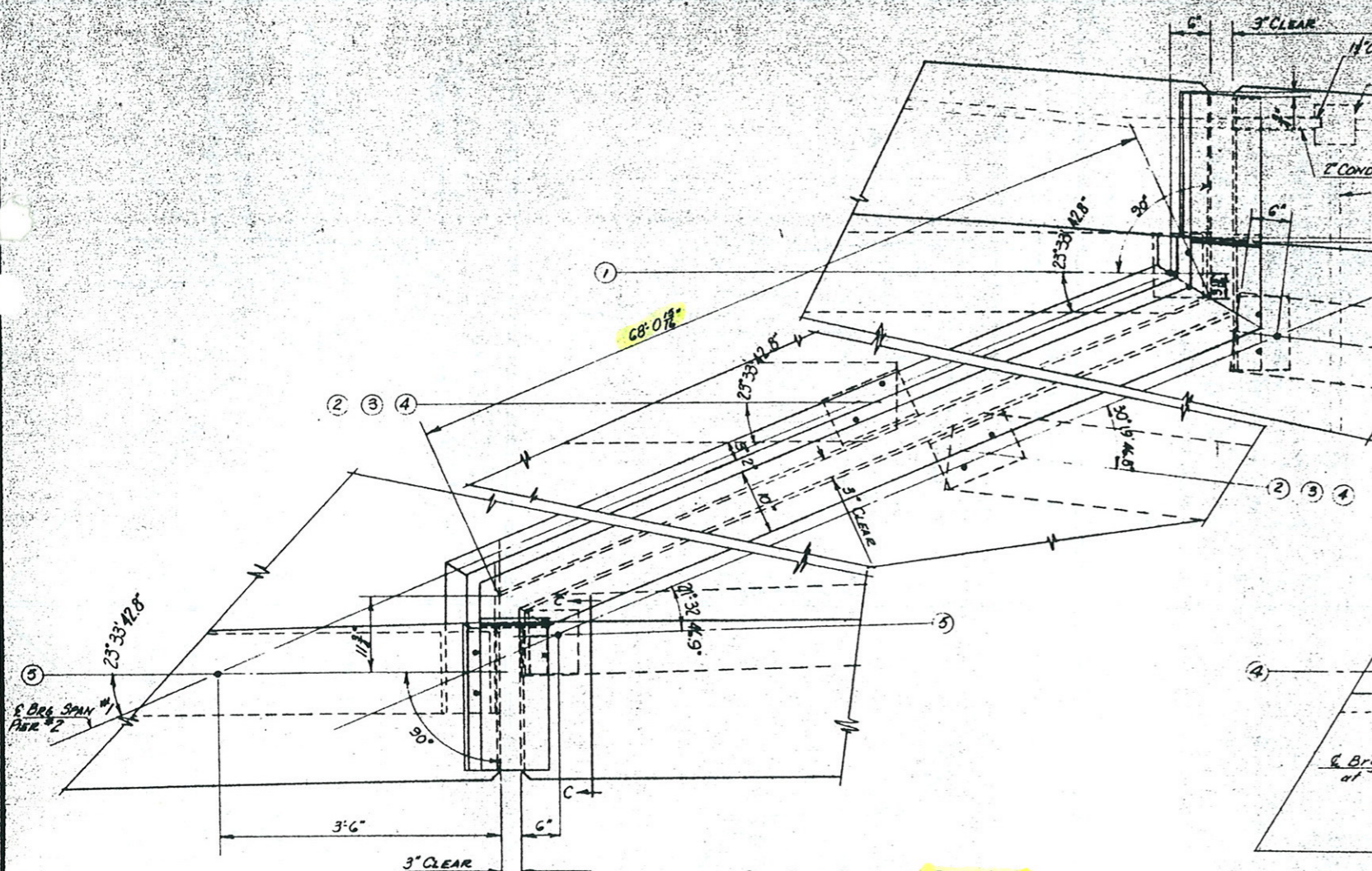
SUPERSTRUCTURE LONGITUDINAL SECTION

Across U.S.N.E.G. & CLEAR
Sta. 287+20.46 to
Near IDAHO SPRINGS Sta. 3+1

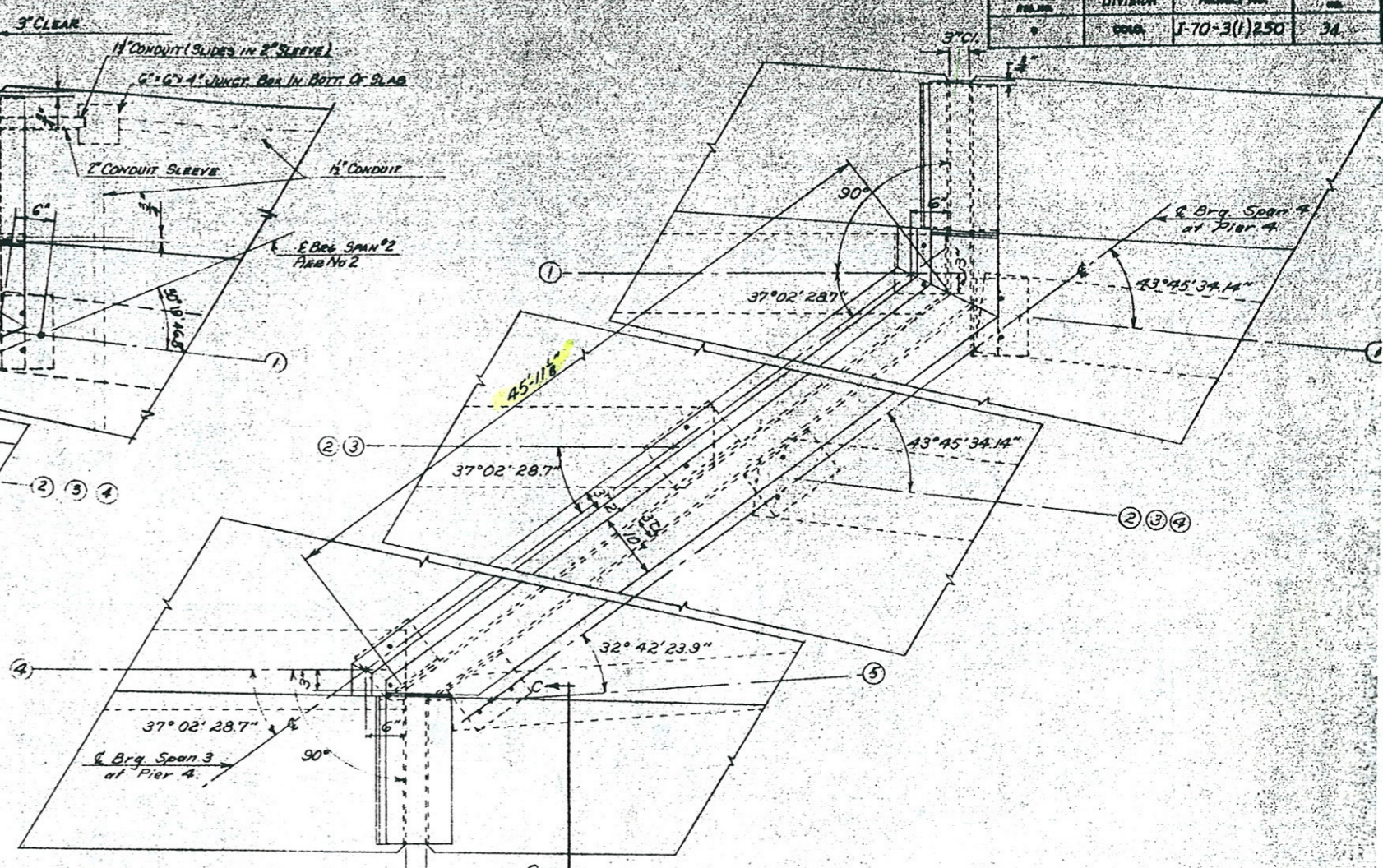
Designed by GHW
Made by FL
Checked by

Approved by
Signed
Date

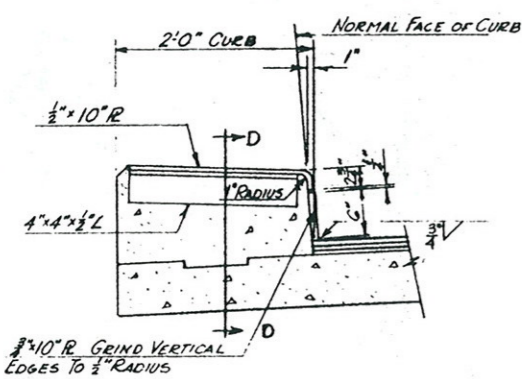
DESIGN NO.	DIVISION	PROJECT NO.	SHEET NO.
1-70-3(1)250	34		



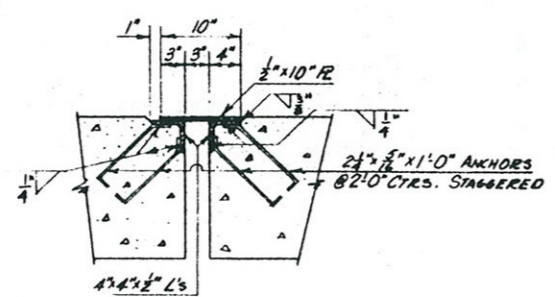
PLAN EXPN. DEVICE AT PIER No. 2
FOR SECTION THRU ROADWAY SEE SEC. B-B SHEET No. 22



PLAN EXPN. DEVICE AT PIER No. 4
FOR SECTION THRU ROADWAY SEE SECTION B-B SH. No. 22



SECTION C-C



SECTION D-D

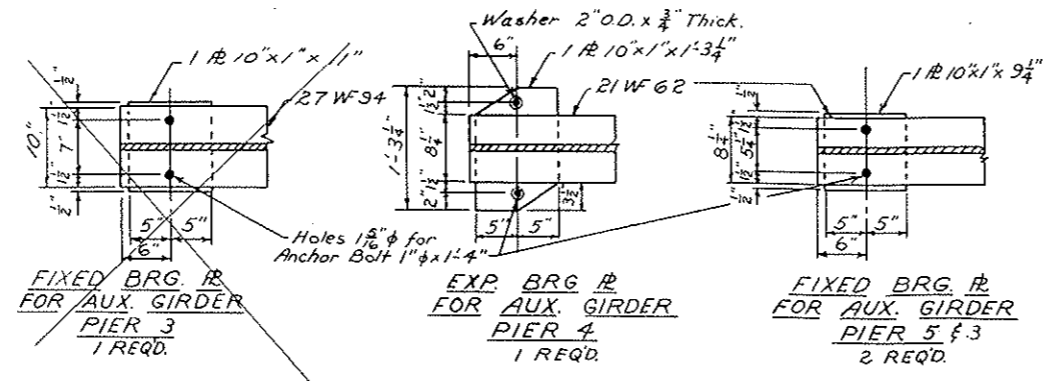
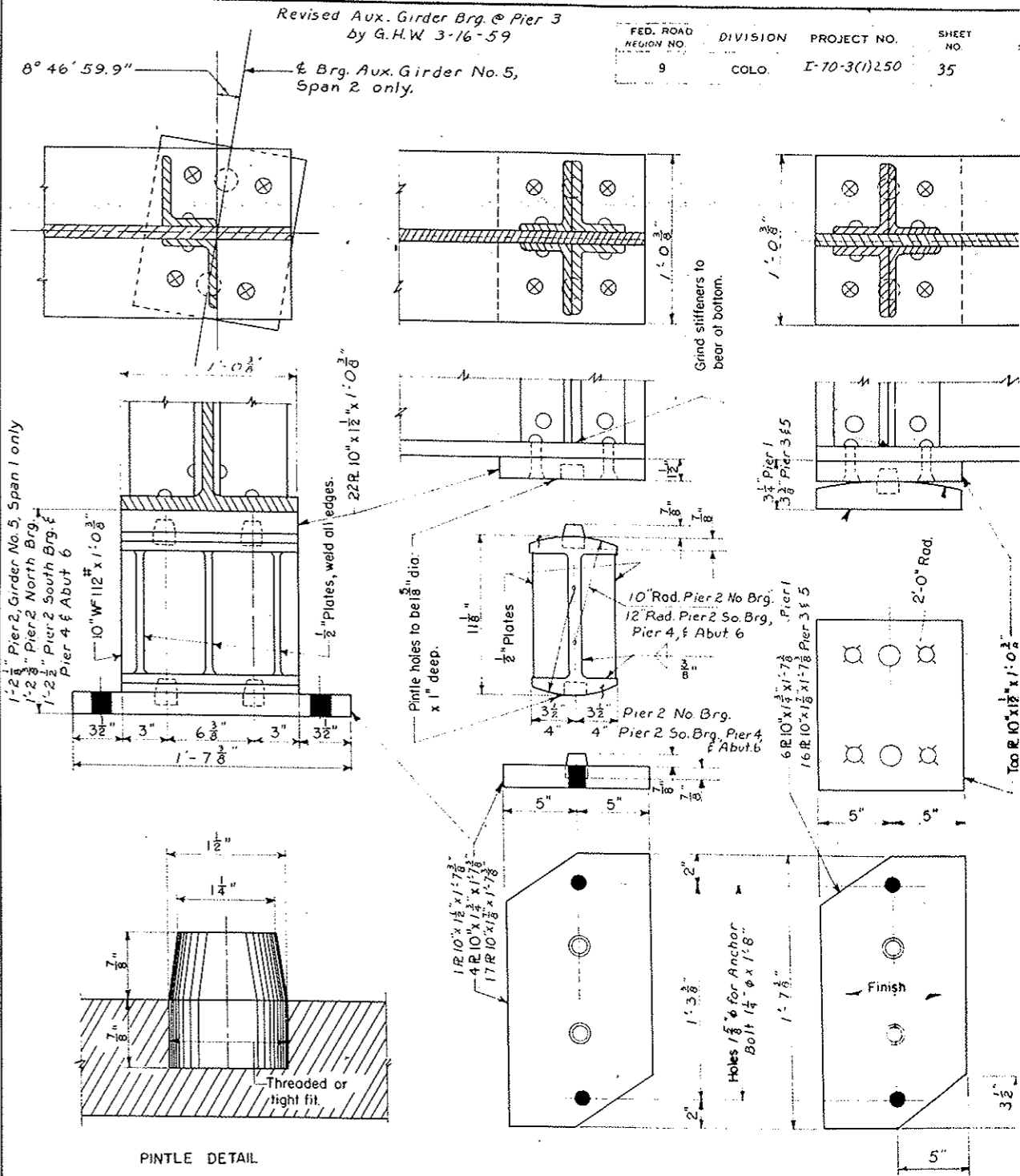
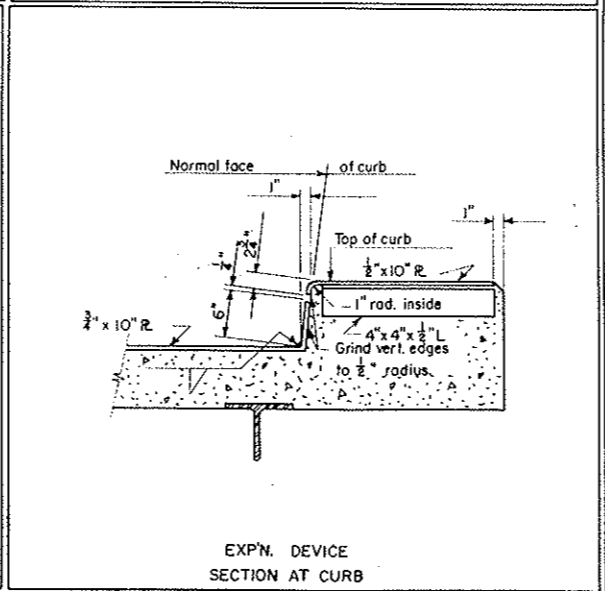
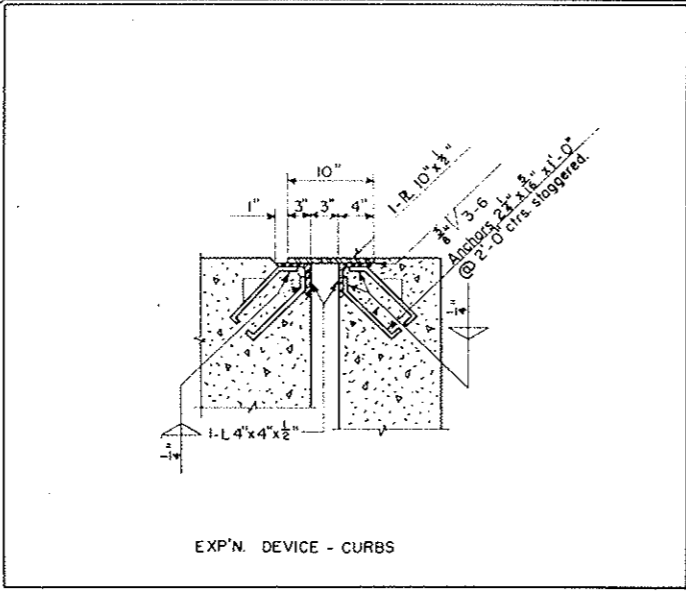
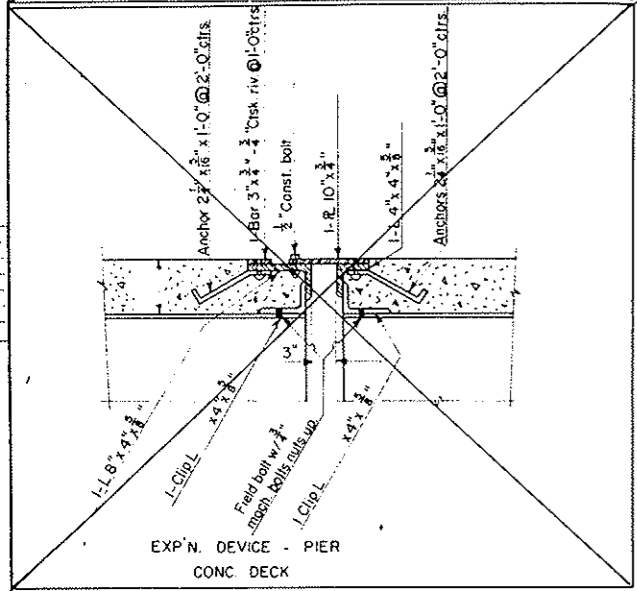
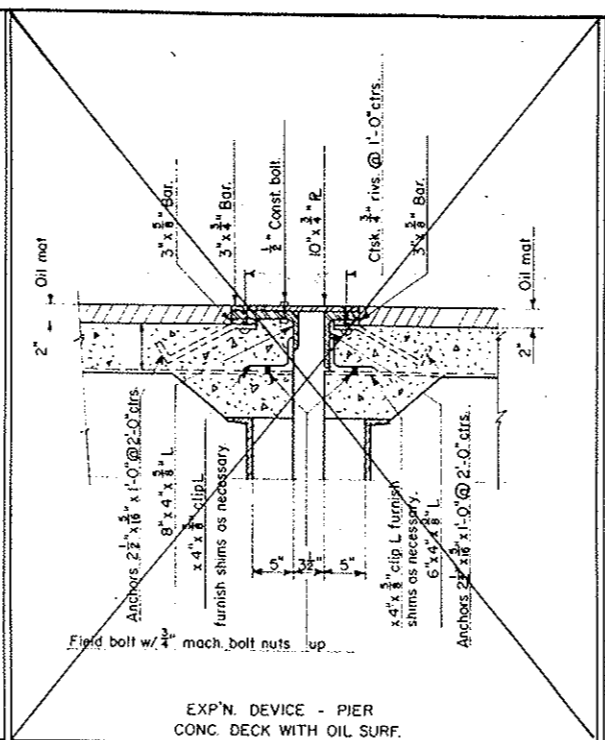
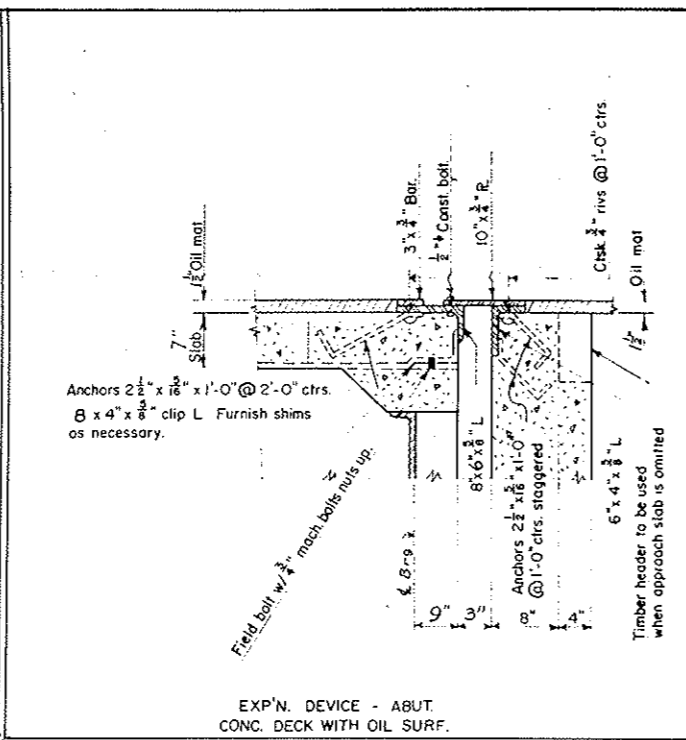
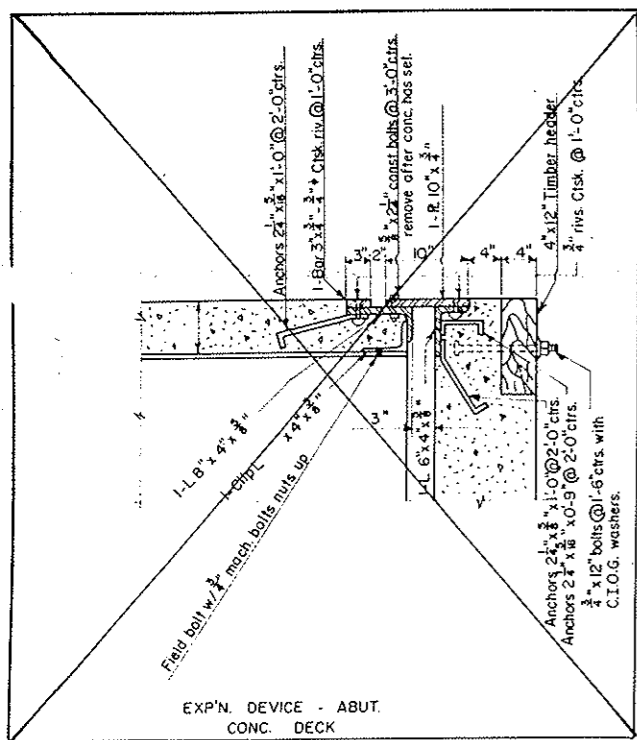
COLORADO
DEPARTMENT OF HIGHWAYS
DETAILS OF EXPN. DEVICE
AT PIER No. 2 AND 4

Across U.S. No. 6 F. CLEAR CREEK
Sta. 287+20.46 TO 29
Near IDAHO SPRINGS Sta. 34

Designed by: GHW
Made by: JCE
Checked by: JCE

Approved by: [Signature]
Date: 7/2

STRUCTURE NO. F-15-BL



EXPANSION BEARING No. Req'd. 22

FIXED BEARING No. Req'd. 22

DETAIL OF BEARINGS
Rocker may be built from plates equal in thickness to designated WF Section or may be made from cast steel.

NO. BOLTS REQ'D. 88

STRUCTURE NO. F-15-BL

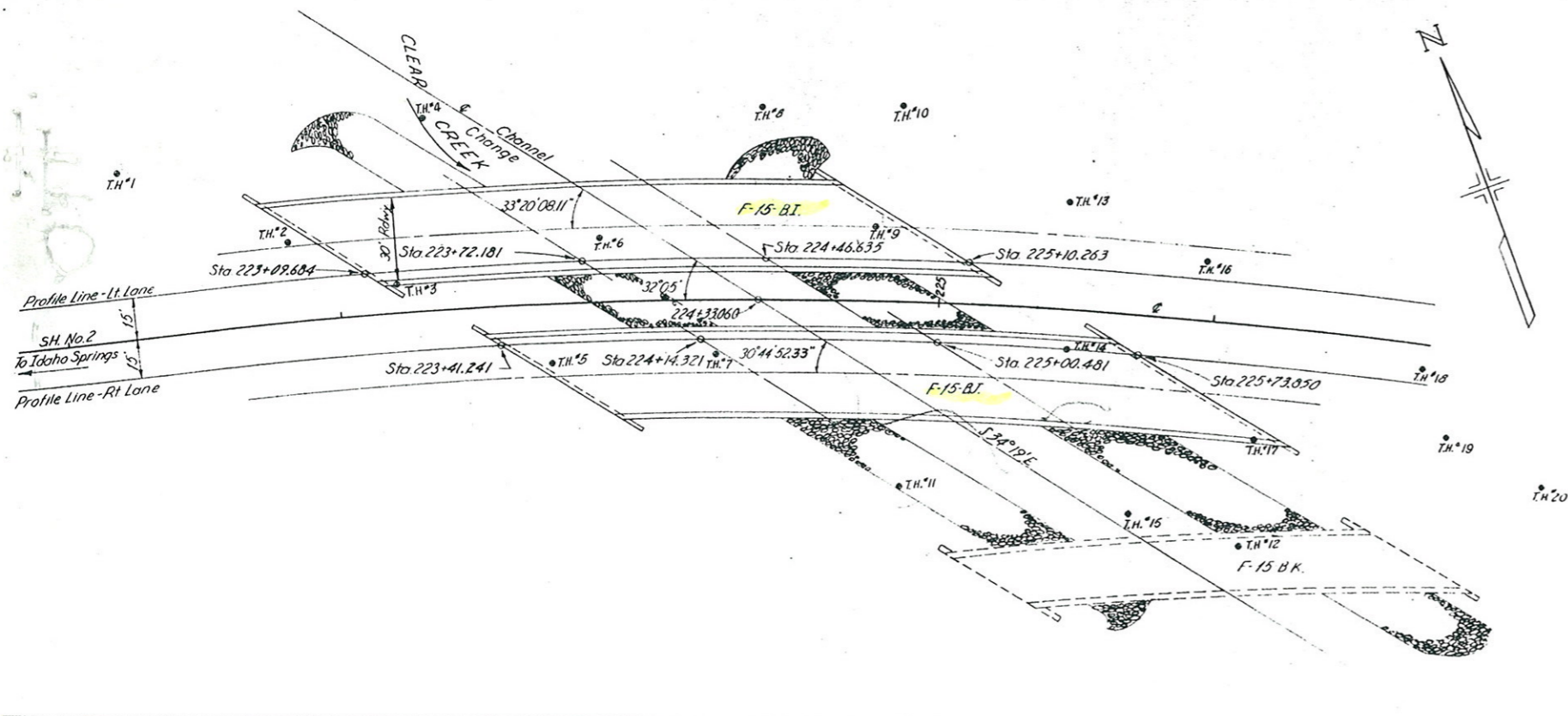
COLORADO
DEPARTMENT OF HIGHWAYS

MISCELLANEOUS BRIDGE DET.

Across U.S. 6 & Clear Creek
Sta. 287+20.46 to 29
Near Idaho Springs Sec. 34 T. 3 S

Designed by	Approved by
Made by J.B.	Bridge Eng.
Checked by	Date:

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	COLO.	I-70-3(4)250	33	



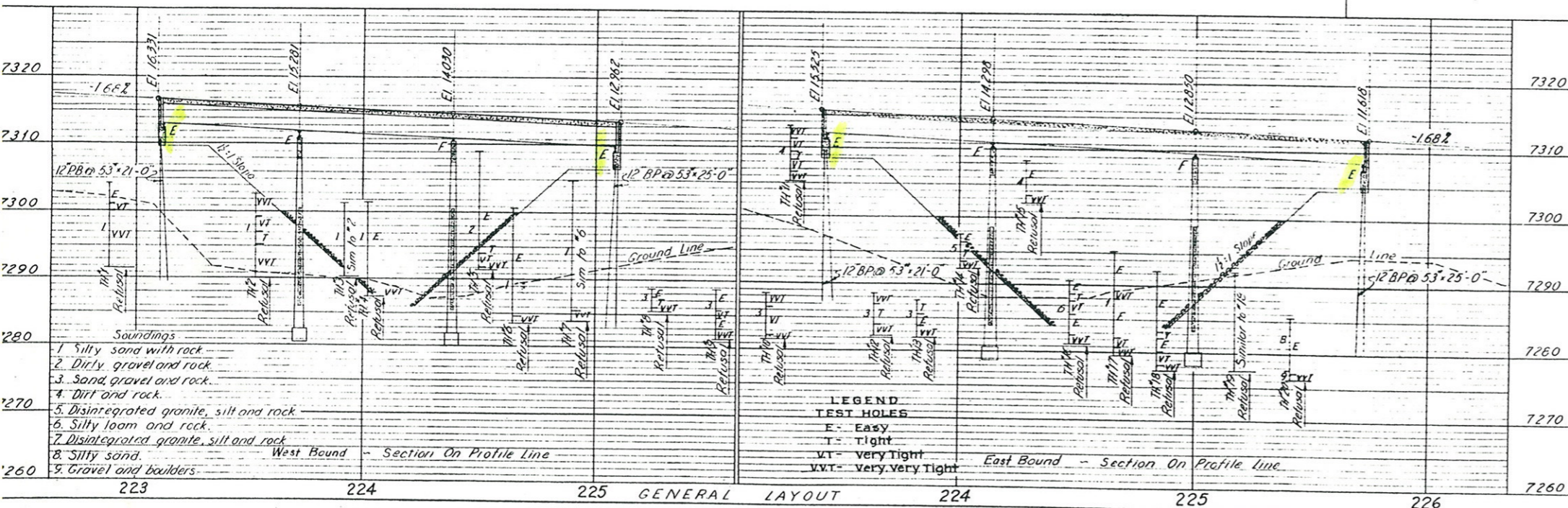
SUMMARY OF QUANTITIES - STRUCTURE F-15-BI

Item	Description	Unit	Super-structure	Abut. No. 1	Pier No. 2	Pier No. 3	Abut. No. 4	Totals
14	Unclassified Structural Excavation (Bridge)	Cu. Yd.		37	58	56	24	175
16	Structure Backfill (Class I)	Cu. Yd.			43	42		85
18	Station Yard Overhaul	Sta. Yd.						935
18	Yard Mile Overhaul	Yd. Mi.						87
42	Treated Bridge Timber	Mft. bm.		0.203			0.237	0.440
46	Class "A" Concrete	Cu. Yd.	178.3	33.6	63.5	64.3	35.3	375
47	Reinforcing Steel (Incl. 1% for Overrun)	Lb.	45,610	4645	8,660	8,740	4,770	72,425
48	Structural Steel (Incl. 1/2% for Paint)	Lb.	170,030	1380	1,520	990	1380	175,300
61	Steel Piling (12" BP @ 53")	Lin. Ft.		126			150	276
67	Riprap (1'-6" Thick)	Cu. Yd.		220			155	375
89	Drain Pipe (Conc. Floor 4" x 2'-0")	Ea.	9					9

SUMMARY OF QUANTITIES - STRUCTURE F-15-BJ

Item	Description	Unit	Super-structure	Abut. No. 1	Pier No. 2	Pier No. 3	Abut. No. 4	Totals
14	Unclassified Structural Excavation (Bridge)	Cu. Yd.		50	83	131	61	325
16	Structure Backfill (Class I)	Cu. Yd.			63	102		165
18	Station Yard Overhaul	Sta. Yd.						1815
18	Yard Mile Overhaul	Yd. Mi.						170
42	Treated Bridge Timber	Mft. bm.		0.213			0.263	0.476
46	Class "A" Concrete	Cu. Yd.	223.7	38.6	70.3	71.5	41.9	446
47	Reinforcing Steel (Incl. 1% for Overrun)	Lb.	51,195	5,705	9,930	10,020	5,950	82,800
48	Structural Steel (Incl. 1/2% for Paint)	Lb.	259,255	1,400	1,565	1,310	1,400	264,930
61	Steel Piling (12" BP @ 53")	Lin. Ft.		126			150	276
67	Riprap (1'-6" Thick)	Cu. Yd.		370			420	790
89	Drain Pipe (Conc. Floor 4" x 2'-0")	Ea.	11					11

- ① Includes 15,980 of Handrail Steel.
- ② Includes 18,435 of Handrail Steel.
- ③ Includes Riprap Quantities for Structure No. F-15-BK.



GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS APPLICABLE TO THE PROJECT.

ALL CONCRETE SHALL BE CLASS "A" AND AIR ENTRAINMENT AS SPECIFIED.

ALL CONCRETE SURFACES MARKED WITH THE SYMBOL I AS SHOWN ON SHEET NO. 32 SHALL RECEIVE CLASS I SURFACE FINISH.

CONCRETE CURBS AND FLOOR SLABS MAY BE POURED MONOLITHICALLY.

FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIP LAP OR TONGUE AND GROOVE LUMBER S 3 S UNLESS FACED WITH PANEL BOARD.

FOOTINGS IN ROCK SHALL BE POURED OUT TO ROCK AND NOT FORMED.

SOUNDINGS AND DEPTH OF FOOTING SHOWN ARE IN ACCORDANCE WITH THE BEST AVAILABLE DATA AND WHEN DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.

ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A 305-50T OR THE LATEST REVISION THEREOF, AND SHALL BE INTERMEDIATE GRADE STEEL OF A DEFORMED TYPE. EACH BAR SHALL BE TAGGED WITH THE NUMBER DESIGNATION AND THE STATION NUMBER OF THE PROJECT.

WHEN EXCAVATING FOR FOOTINGS THE FINAL ONE FOOT IN DEPTH SHALL BE DONE BY HAND LABOR METHODS.

1/2" DETAILS OF STRUCTURAL EXCAVATION AND STRUCTURE BACKFILL, SEE STANDARD M-60-B.

IF BY PERMISSION OF THE ENGINEER PRIMARY BARS ARE SPICED, THEY SHALL LAP A MIN. OF 20 DIAM. FOR BARS NEAR TOP OF BEAMS HAVING MORE THAN 12 INCHES OF CONCRETE UNDER THE BARS AND 17 DIAM. FOR BARS NEAR BOTTOM OF MEMBERS.

HIGH TENSILE STRENGTH BOLTS MAY BE SUBSTITUTED FOR FIELD RIVETS, BUT NO ADDITIONAL EXPENSE TO THE STATE. THE BOLTS SHALL BE ASSEMBLED IN ACCORDANCE WITH SPECS. APPROVED BY THE RESEARCH COUNCIL ON RIVETS AND BOLTED STRUCTURAL JOINTS OF THE ENGINEERING FOUNDATION DATED JAN. 31, 1951.

LOADING DATA INTERSTATE ALTERNATE

LIVE LOAD - A. A. S. H. O. (1420-S16-64)

DEAD LOAD ASSUMES 15 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 1/2" INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA

A. A. S. H. O. 1953 UNIT STRESSES, EXCEPT AS NOTED.

Reinforcing Steel fs - 20000 lbs. per sq. in.

Structural Steel fs - 18000 lbs. per sq. in.

fc - 1200 lbs. per sq. in.

n = 10

COLORADO
DEPARTMENT OF HIGHWAYS
 2 Conc Slab and I Beam Bridges
 3 Spans (59', 74', 59') North and
 3 Spans (70', 87', 70') South
 30 Rdwy 2' Curbs
 General Layout, Notes and
 Summary of Quantities
 Clear Creek
 Sta. *
 Near Idaho Springs Sec. 33 T. 35. R. 22W.
 Designed by *L. S. Kumbler*
 Made by *L. S. Kumbler*
 Checked by *L. S. Kumbler*
 Bridge Engineer
 Date: *6/1/59*

* Sta. 223+09.68 to 225+10.26 West Bound
 Sta. 223+41.24 to 225+73.85 East Bound

STRUCTURE NO. F-15-BI West Bound
 F-15-BJ East Bound

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I70-3(4)250	34	

BAR LIST - SUPERSTRUCTURE

Mark	Size	No. Req'd	Length	Type	Dimensions		Mark	Size	No. Req'd	Length	Type	Dimensions	
					L	m						L	m
401	1/2"	337	39'6"	Str.			6108	3/4"	1	31'9 1/2"	XXVIII	5'0 1/2"	3'2 1/2"
402	1/2"	386	4'4"	IV	1'4"	1'8"	6109			31'3"		5'1"	2'6"
403		82	4'2"	I	1'3"	0'6"	6110			30'8"			1'11"
404		36	34'3"	Str.			6111			30'1"			1'4"
405		32	40'0"	Str.			6112			29'6"	XXVIII		9"
406	1/2"	2	38'0"	Str.			6113			28'8 1/2"	XXIX		4'7"
							6114			28'8 1/2"			4'0"
							6115			27'7 1/2"			3'6"
602			4'2"				6116			27'0 1/2"			2'11"
to	1/2"	2ea	by 4' to	Str.			6117			26'5 1/2"			2'4"
625			11'10"				6118			25'10 1/2"			1'9"
626			12'6"				6119			25'3 1/2"	XXIX	5'1"	1'2"
to	1/2"	2ea	by 7 1/2 to	Str.			6120			24'11"	XXX	5'2"	5'4"
658			33'6"				6121			24'4"			4'9"
459			12'7 1/2"		2'8"		6122			23'9"			4'2"
to	1/2"	1ea	by 8' to	XIX	by 8' to	4'4 1/2"	6123			23'2"			3'7"
666			17'3 1/2"		7'4"		6124			22'7"			3'0"
667			18'0 1/2"		2'11"		6125			22'0"			2'5"
to	1/2"	1ea	by 7 1/2 to	XX	by 7 1/2 to	4'5 1/2"	6126			21'5"			1'10"
674			22'5"		7'3 1/2"		6127			20'10"	XXX	5'2"	1'3"
675			23'6 1/2"		3'3"		6128			19'11 1/2"	XXXI	5'3"	4'11"
to	1/2"	1ea	by 7 1/2 to	XXVIII	by 7 1/2 to	4'6 1/2"	6129			19'4 1/2"			4'4"
683			28'6 1/2"		8'3"		6130			18'9 1/2"			3'9"
684			20'5"		4'0"		6131			18'2 1/2"			3'2"
to	1/2"	1ea	by 7 1/2 to	XXI	by 7 1/2 to	4'7 1/2"	6132			17'7 1/2"			2'7"
691			33'9 1/2"		8'4 1/2"		6133			17'0 1/2"			2'0"
692	1/2"	30	34'8"	XVII	4'0 1/2"	4'8"	6134			16'5 1/2"	XXXI	5'3"	1'5"
693		9		XXXIII	4'3"	4'8"	6135			16'1 1/2"	XXXII	5'4 1/2"	5'7"
694		9		XXXIV	4'5"	4'7 1/2"	6136			15'6 1/2"			5'0"
695		9	34'8"	XXXV	4'7"	4'9"	6137			14'11 1/2"			4'5"
696		320	33'8"	Str.			6138	1/2"	1	14'4 1/2"	XXXII	5'4 1/2"	3'10"
697		21	34'8"	XXIII	4'9"	5'0"	6139			32'2"			
698		14		XXIII	4'10 1/2"	4'10 1/2"	to	1/2"	2ea	by 6 3/8 to	Str.		
699		7		XXIV	4'10"	5'1 1/2"	6173			13'0 1/2"			
6100		11		XXV	4'10"	5'4"	6301			12'9"			
6101		8		XXVI	4'11 1/2"	5'5"	to	1/2"	2ea	by 3 3/8 to	Str.		
6102		9		XXVII	5'0"	5'7"	6343			1'4 1/2"			
6103		13		XXVIII	5'2"	5'10"	6344	1/2"	4	33'0"	Str.		
6104		19	34'8"		5'0"	6'0"	6345			1'6"			
6105		1	33'6"		5'0"	4'10"	to	1/2"	2ea	by 4' to	Str.		
6106		1	32'11"		5'0"	4'3"	6352			3'10"			
6107	1/2"	1	32'4 1/2"	XXVIII	5'0 1/2"	3'8"							

SUMMARY

17,836 Lin. Ft. 1/2" @ 0.668 lb./Lin. Ft. = 11,914 Lb.
 22,133 Lin. Ft. 3/4" @ 1.502 lb./Lin. Ft. = 33,244 Lb.
 Plus 1% ± for overrun = 452 Lb.
 Total = 45,610 Lb.

BAR LIST - ABUTMENT No. 1

Mark	Size	No. Req'd	Length	Type	Dimensions	
					L	m
4140	1/2"	53	20'7"	III		
4141	1/2"	5	11'4"	I	2'3"	3'1 1/2"
4142	1/2"	12	6'3"	Str.		
4143	1/2"	2	8'0"			
4144	1/2"	3	7'9"			
4145	1/2"	4	7'3"			
4146	1/2"	2	6'9"			
4147	1/2"	6	7'9"			
4148	1/2"	1	10'6"			
4149	1/2"	2	3'1 1/2"			
4150	1/2"	16	35'6"			
4151	1/2"	2	25'0"	Str.		
4152	1/2"	2	6'0"	Str.		
4153	1/2"	2	8'0"	Str.		
6353	1/2"	2	6'8"	Str.		
6354	1/2"	2	8'1"	Str.		
1115	1 1/2"	10	60'0"	Str.		

SUMMARY

2,043 Lin. Ft. 1/2" @ 0.668 lb./Lin. Ft. = 1,365 Lb.
 30 Lin. Ft. 3/4" @ 1.502 lb./Lin. Ft. = 45 Lb.
 600 Lin. Ft. 1 1/2" @ 5.313 lb./Lin. Ft. = 3,188 Lb.
 Plus 1% ± for overrun = 47 Lb.
 Total = 4,645 Lb.

BAR LIST - PIERS No. 2 & No. 3

Mark	Size	No. Req'd	Length	Type	Dimensions	
					L	m
450	1/2"		8'0"		1'11"	
to	1/2"	3ea	3ea	by 1' to	I	by 1' to 1'0"
474	1/2"		10'0"		2'11"	
476	1/2"	36	40	21'11"	Str.	
477	1/2"	52		14'2"	Str.	
478	1/2"		52	14'8"	Str.	
479	1/2"			3'0 3/4"		2'2"
to	1/2"	1ea	1ea	by 11' to	XIII	by 1' to 1'0"
487	1/2"			4'8 3/4"		2'10"
488	1/2"	62	62	10'6"	I	1'11"
489	1/2"	4	4	27'6"	Str.	3'0"
501	1/2"	84	84	6'9"	Str.	
502	1/2"	1		16'9"	Str.	
503	1/2"		1	17'3"	Str.	
504	1/2"	1	1	3'6"	Str.	
806	1/2"	36	36	3'6"	Str.	
807	1/2"	36	36	26'11"	Str.	
808	1/2"	3	3	43'0"	Str.	
1105	1 1/2"	6	6	54'2"	Str.	
1106	1 1/2"	12	12	12'0"	Str.	
1107	1 1/2"	4	4	10'0"	Str.	

SUMMARY - PIER No. 2

3,000 Lin. Ft. 1/2" @ 0.668 lb./Lin. Ft. = 2,004 Lb.
 577 Lin. Ft. 3/4" @ 1.043 lb./Lin. Ft. = 602 Lb.
 1,224 Lin. Ft. 1" @ 2.670 lb./Lin. Ft. = 3,268 Lb.
 509 Lin. Ft. 1 1/2" @ 5.313 lb./Lin. Ft. = 2,704 Lb.
 Plus 1% ± for overrun = 82 Lb.
 Total = 8,660 Lb.

SUMMARY - PIER No. 3

3,114 Lin. Ft. 1/2" @ 0.668 lb./Lin. Ft. = 2,080 Lb.
 577 Lin. Ft. 3/4" @ 1.043 lb./Lin. Ft. = 602 Lb.
 1,224 Lin. Ft. 1" @ 2.670 lb./Lin. Ft. = 3,268 Lb.
 509 Lin. Ft. 1 1/2" @ 5.313 lb./Lin. Ft. = 2,704 Lb.
 Plus 1% ± for overrun = 86 Lb.
 Total = 8,740 Lb.

BAR LIST - ABUTMENT No. 4

Mark	Size	No. Req'd	Length	Type	Dimensions	
					L	m
4155	1/2"	58	20'7"	III		
4156	1/2"	4	4'4"	Str.		
4157	1/2"	4	5'1"	Str.		
4158	1/2"			5'10"		
to	1/2"	2ea	by 4' to	Str.		
4163	1/2"			7'6"		
4164	1/2"			5'9"		
to	1/2"	2ea	by 2 1/2 to	Str.		
4170	1/2"			7'0"		
4171	1/2"	2	6'3"	Str.		
4172	1/2"			6'6"		
4173	1/2"			12'0"		
4174	1/2"			9'0"		
4175	1/2"			3'1'3"		
4176	1/2"	2	34'9"			
4177	1/2"	14	40'0"			
4178	1/2"	7	2'0"			
4179	1/2"	2	30'1"			
4180	1/2"	1	11'9"			
4181	1/2"	1	8'0"	Str.		
4182	1/2"	2	6'0"	Str.		
4183	1/2"	2	9'0"	Str.		
6355	1/2"	1	10'9"	Str.		
6356	1/2"	1	9'9"	Str.		
1120	1 1/2"	10	60'0"	Str.		

SUMMARY

2,255 Lin. Ft. 1/2" @ 0.668 lb./Lin. Ft. = 1,506 Lb.
 21 Lin. Ft. 3/4" @ 1.502 lb./Lin. Ft. = 32 Lb.
 600 Lin. Ft. 1 1/2" @ 5.313 lb./Lin. Ft. = 3,188 Lb.
 Plus 1% ± for overrun = 44 Lb.
 Total = 4,770 Lb.

NOTE: Reinforcing bars on this bridge shall be marked with sta. number, number designation and marked BI.

COLORADO DEPARTMENT OF HIGHWAYS

BAR LISTS

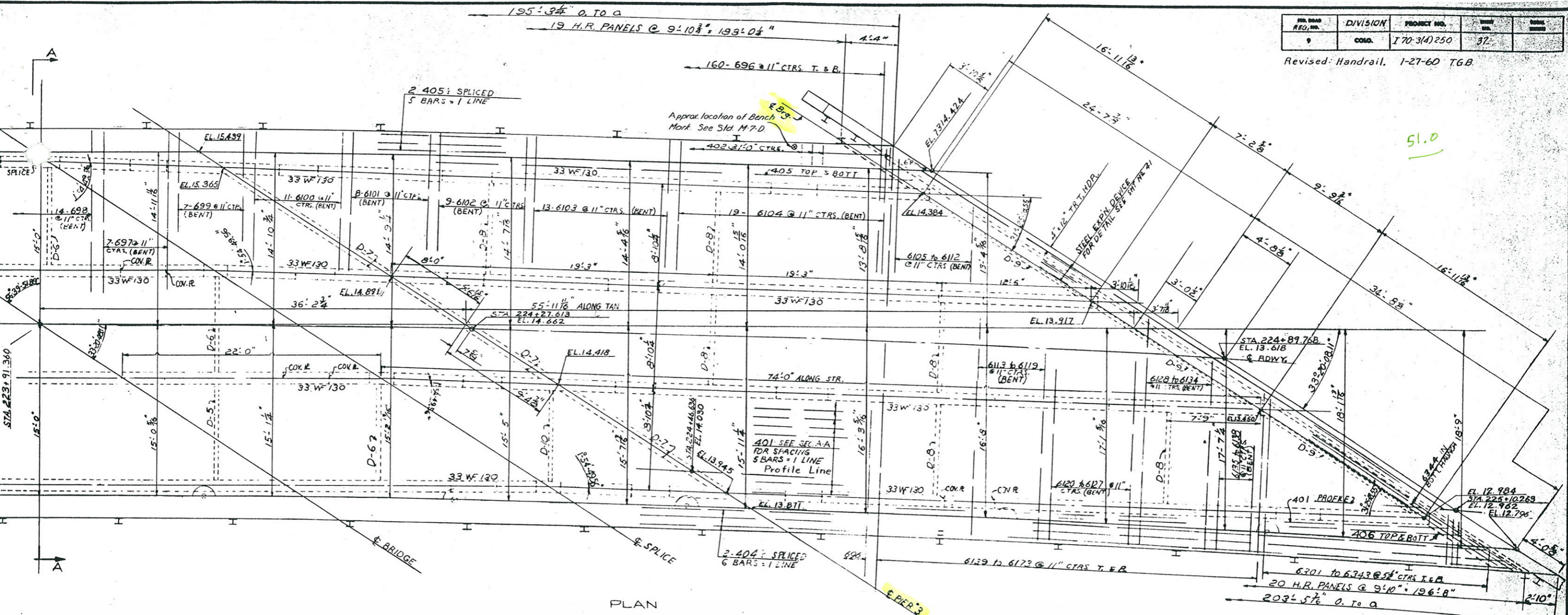
Across Clear Creek
 Sta. 223+09.68 to 225+10.26
 Near Idaho Springs Sec. 33, T. 35, R. 72W.

Designed by _____
 Made by _____
 Checked by _____

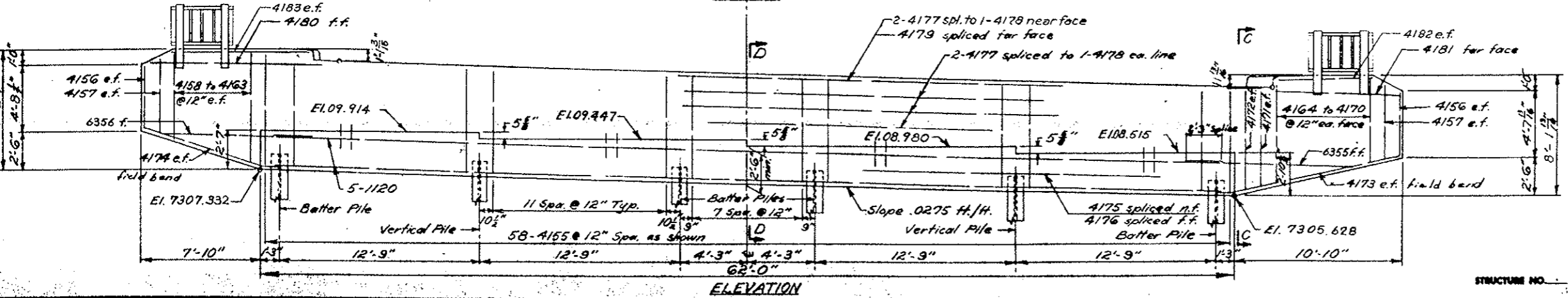
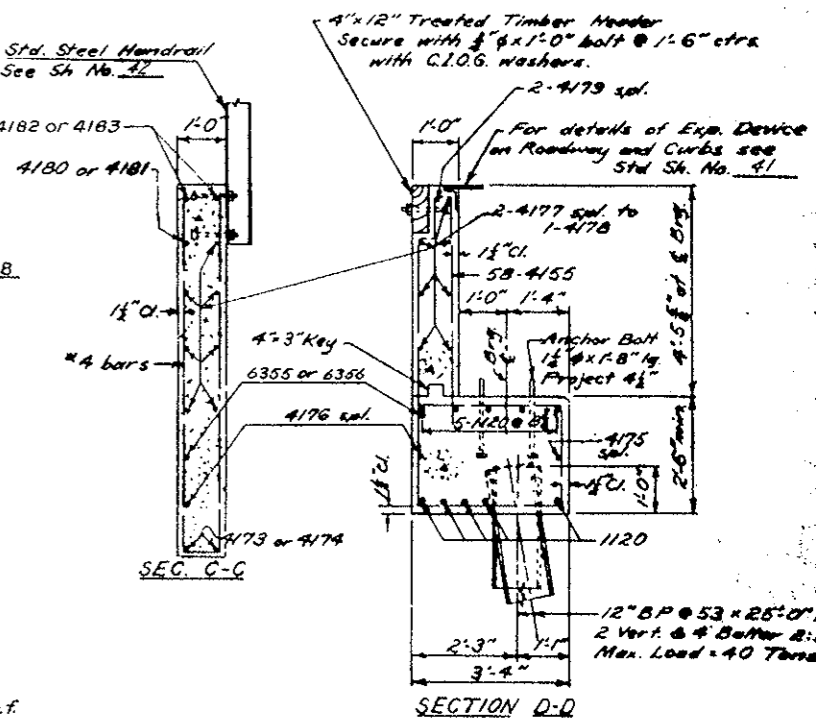
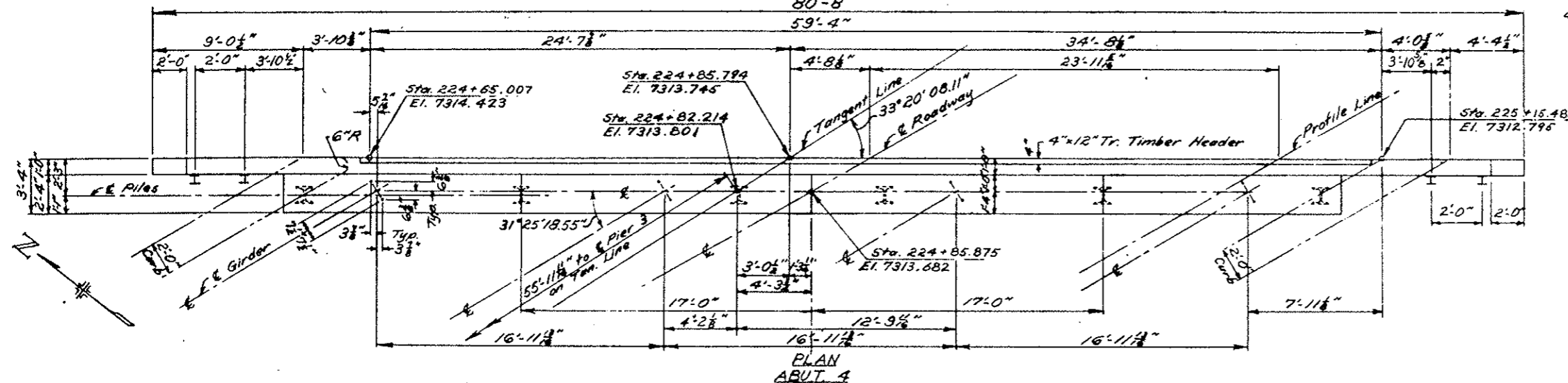
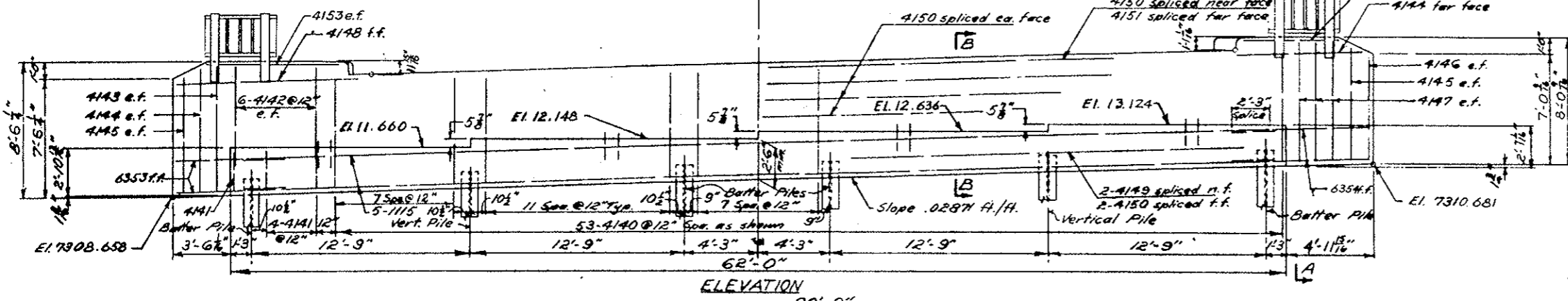
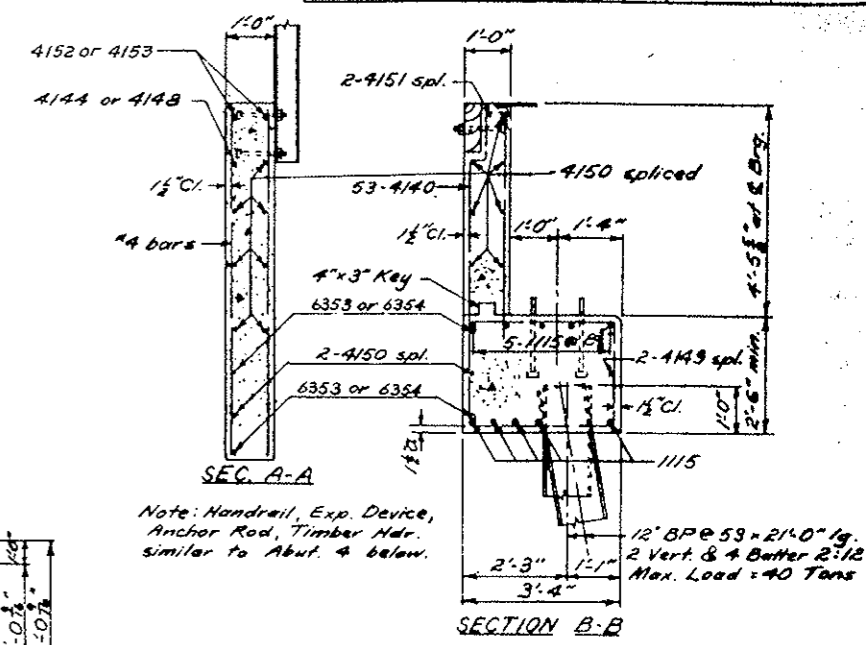
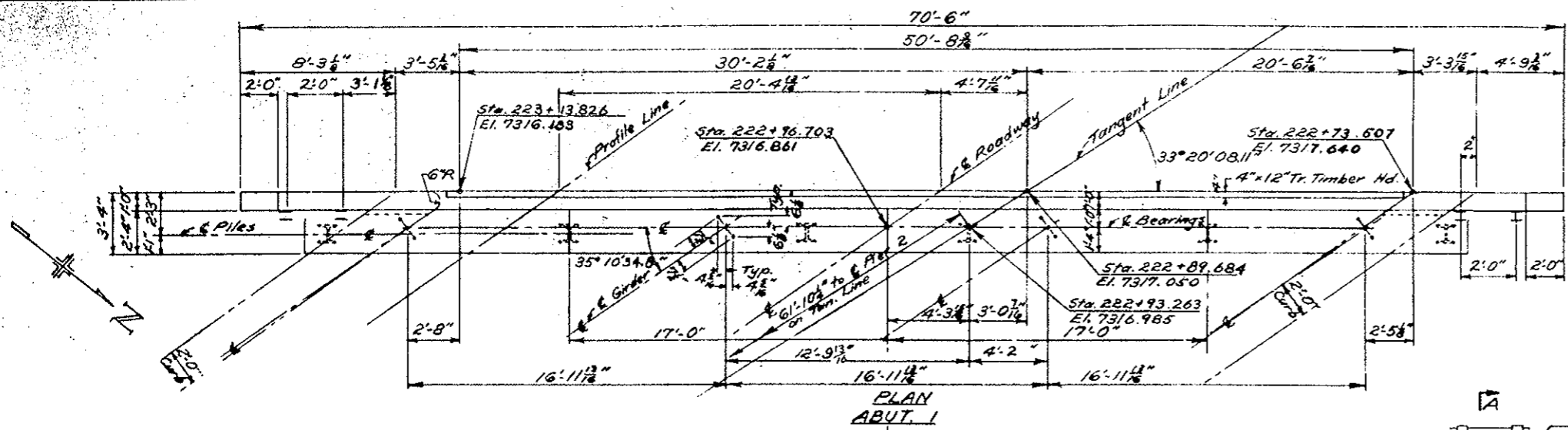
Approved by _____
 Bridge Engineer
 Date: 6/28/1967

FIG. NO.	DIVISION	PROJECT NO.	DATE	BY
9	COLO.	T 70-3(4)250	37	

Revised Handrail, 1-27-60 T.G.B.



NO. ROAD RES. NO.	DIVISION	PROJECT NO.	SCALE	DATE
9	CONG.	I-70-3(A)250	40	



COLORADO DEPARTMENT OF HIGHWAYS

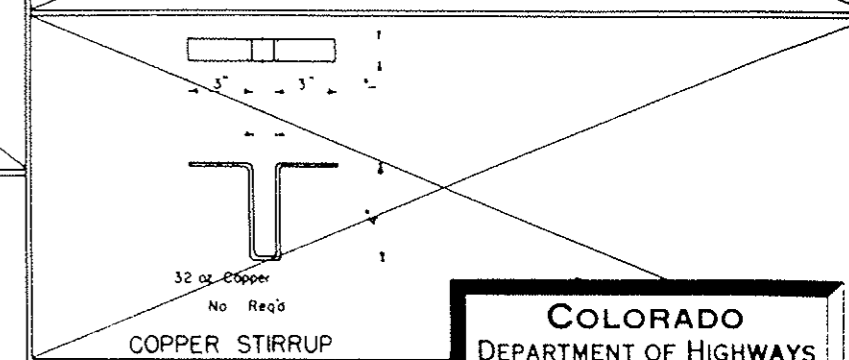
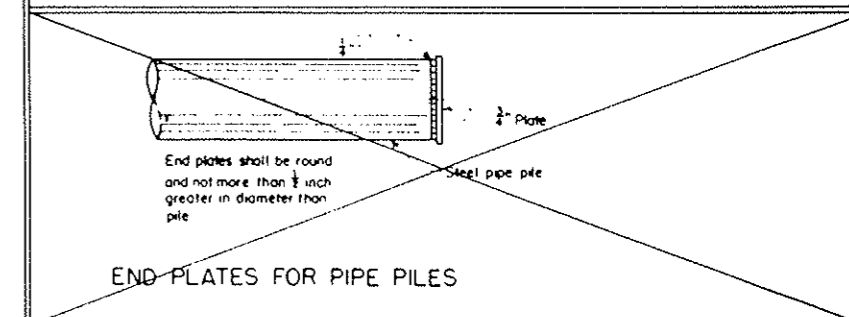
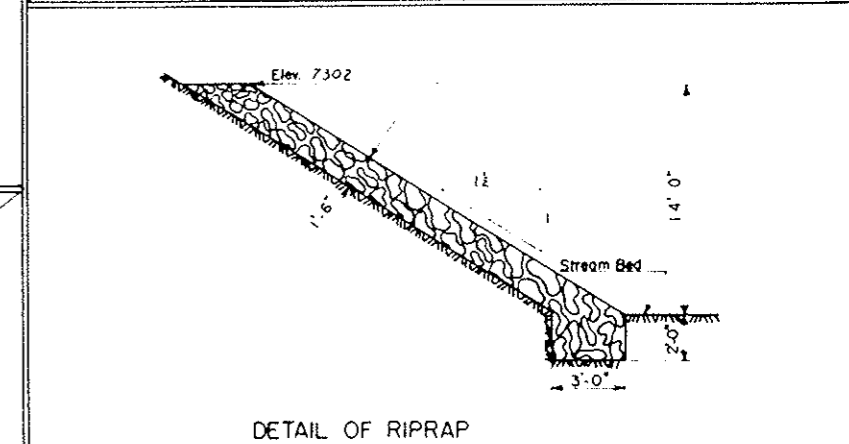
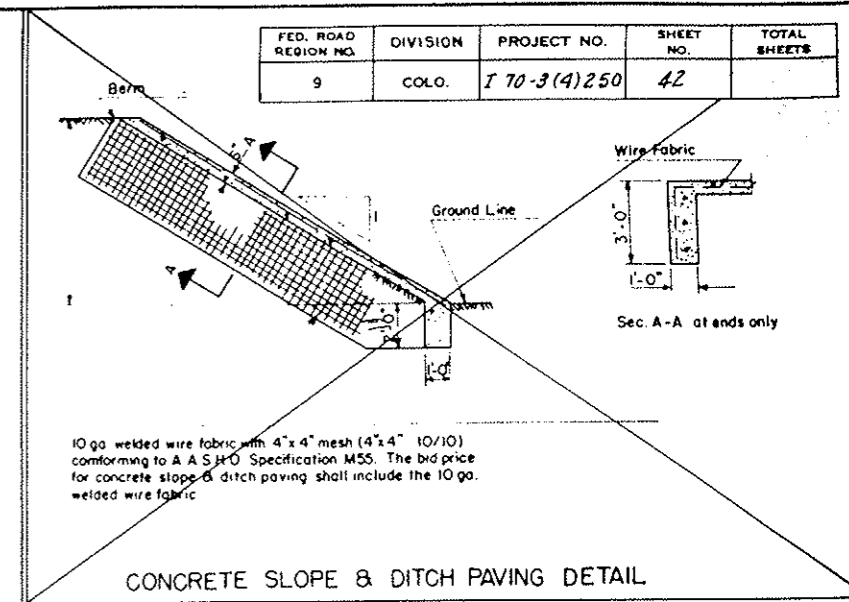
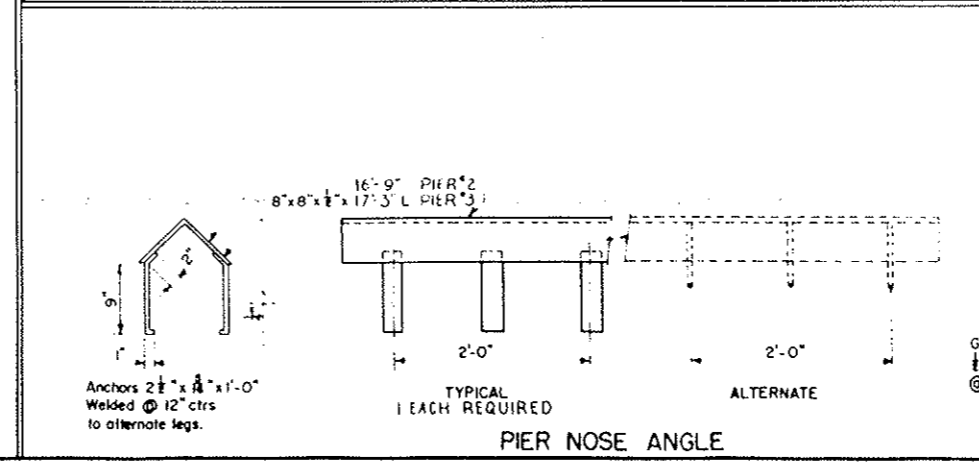
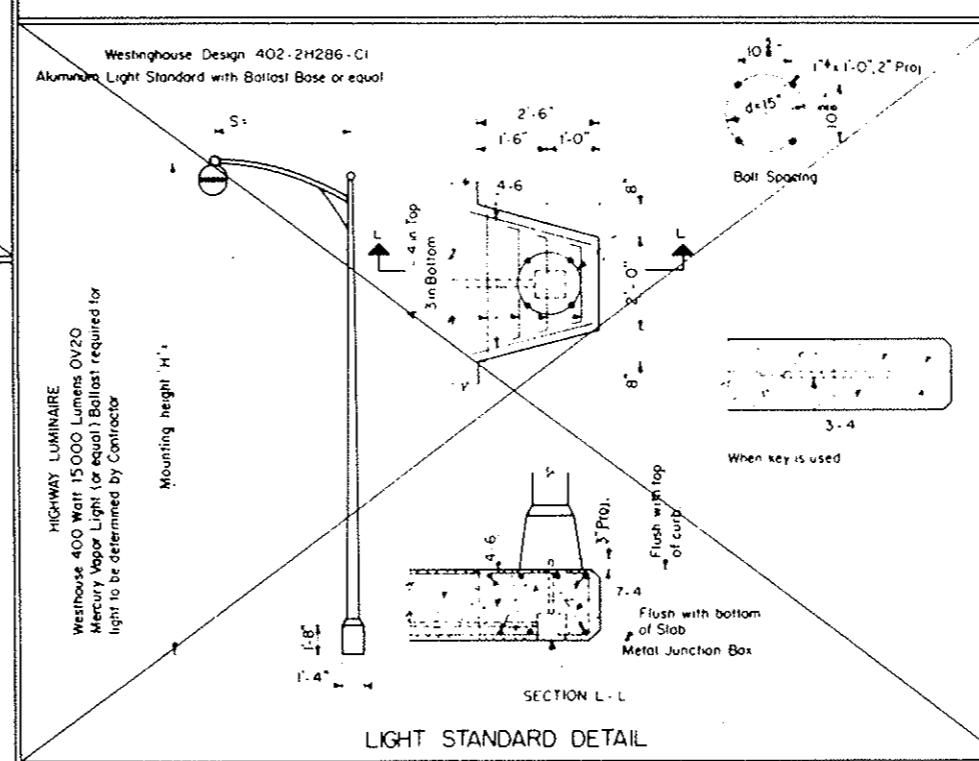
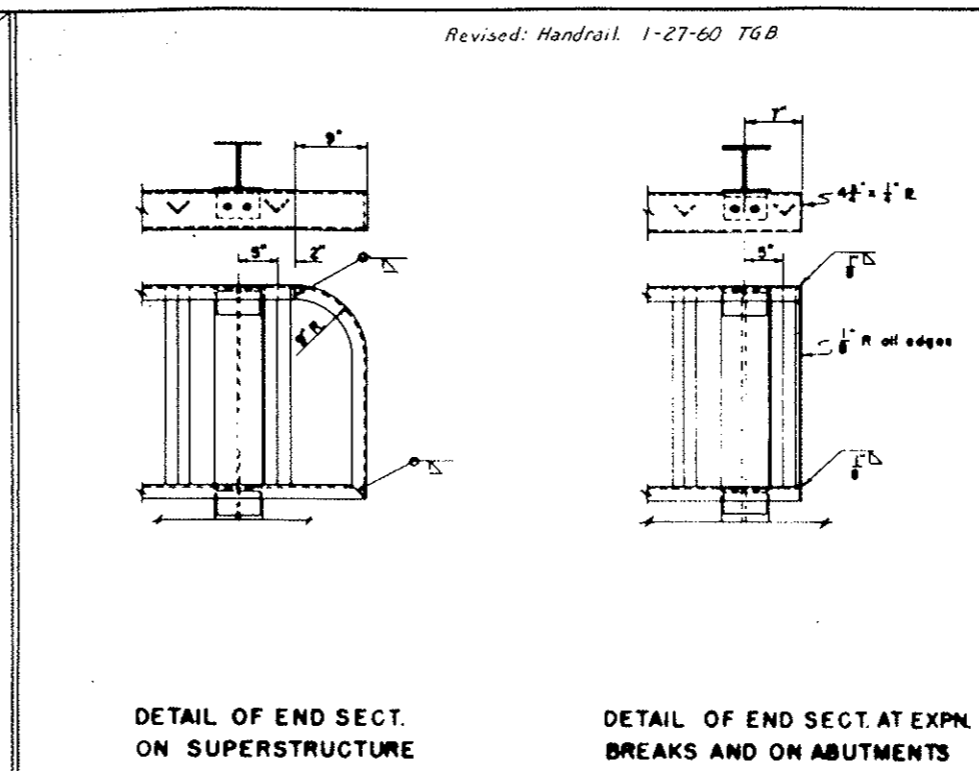
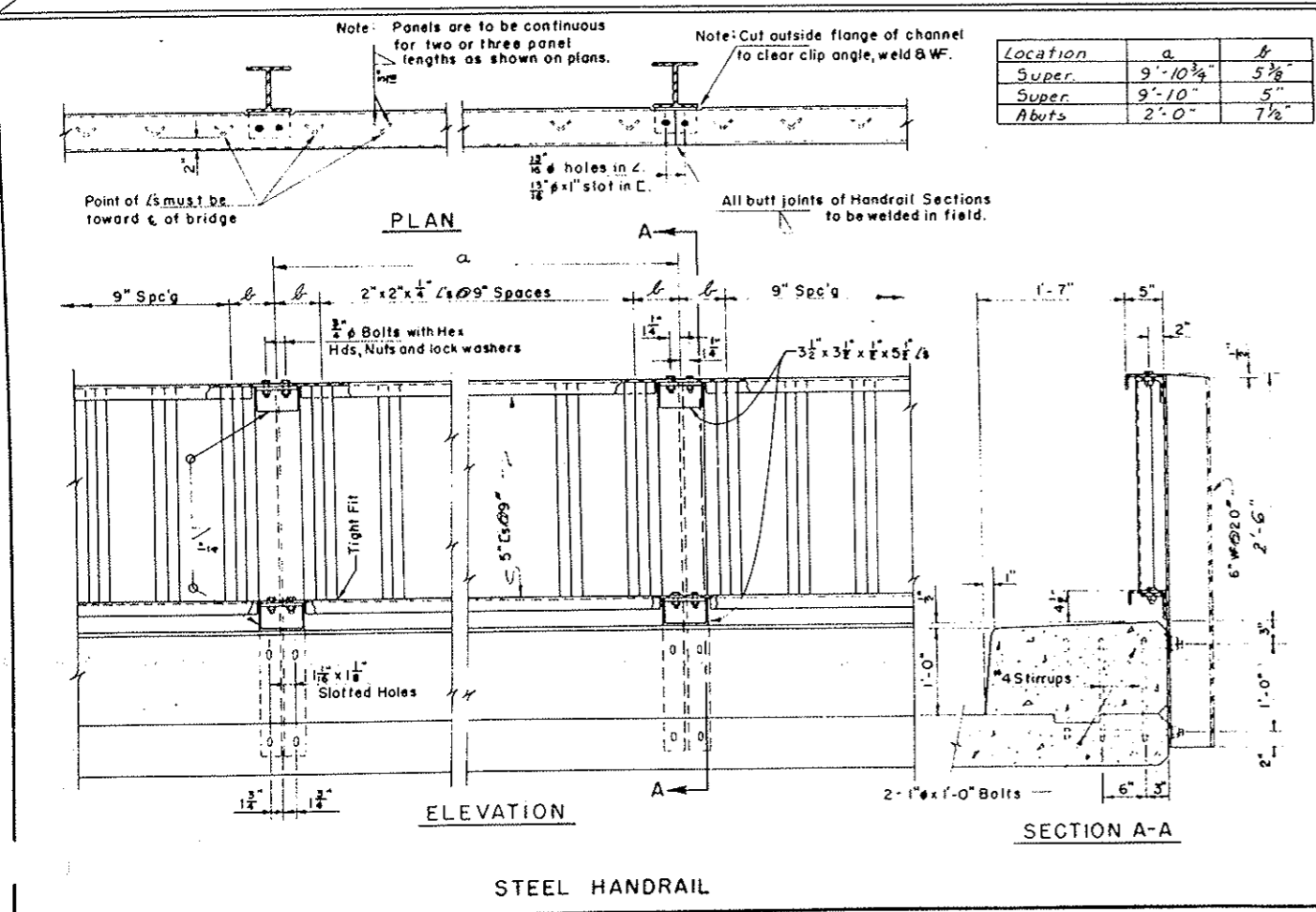
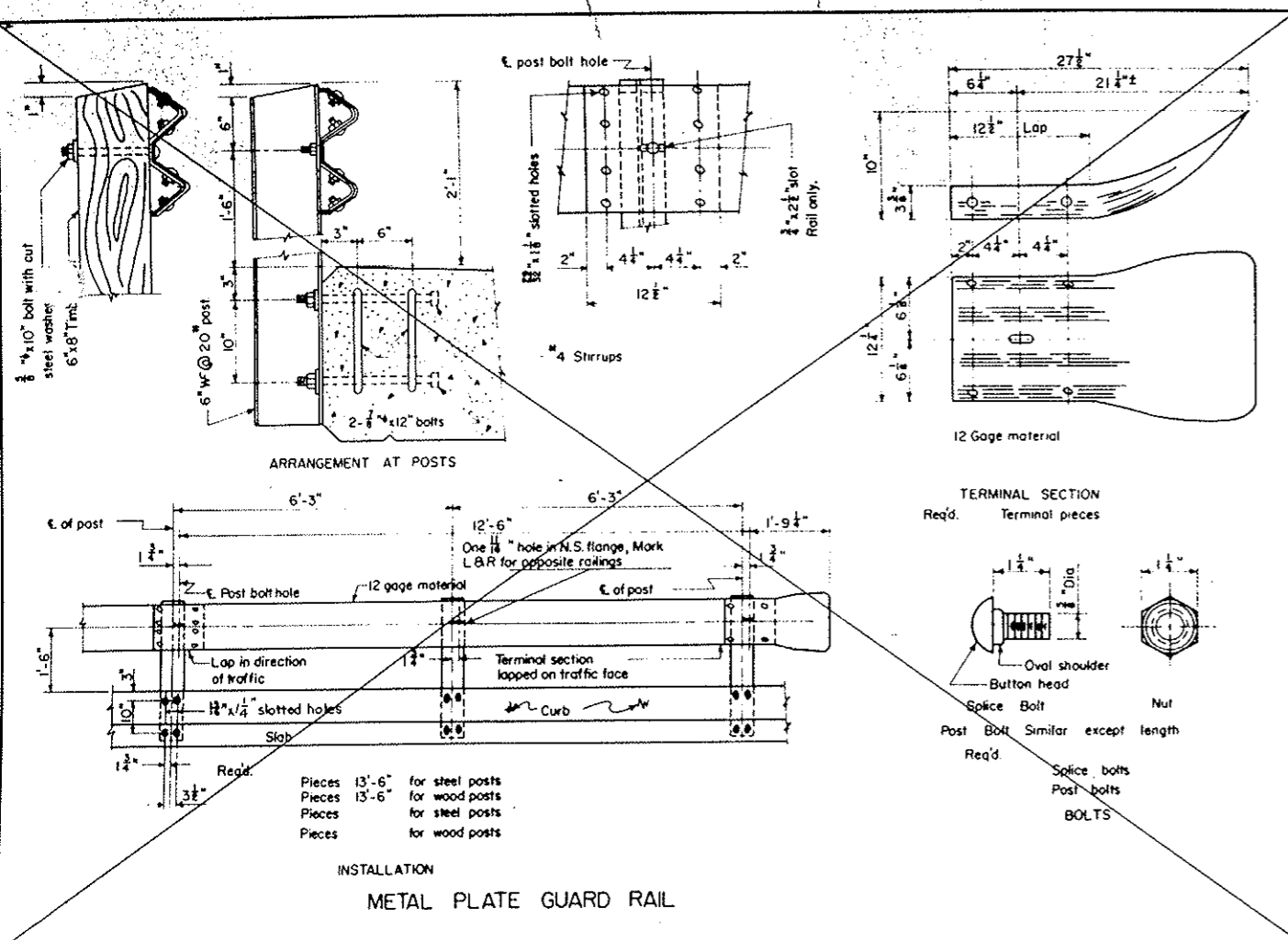
ABUT. 1 & ABUT. 4

Area: Clear Creek
 Sta. 223+02.66 to 225+10.26
 Near Idaho Springs, Sta. 935 872M

Designed by GET
 Made by JLB
 Checked by

Approved by [Signature]
 Bridge Engineer
 Date: Oct 1, 1957

STRUCTURE NO. F-15-B1
 West Bound



COLORADO DEPARTMENT OF HIGHWAYS

MISCELLANEOUS BRIDGE DETAILS

Across CLEAR CREEK
Sta. 223+00.68 to 225+10.26
Near IDAHO SPRINGS Sec. 33, T. 35, R. 72 W

Designed by G.E.T. Approved by J. H. Stewart
Made by F.L. Bridge Engineer
Checked by Date: 11/1/59

STRUCTURE NO. F-15-B1
West Bound

Granular flux filled concrete anchors
1/2" automatically end welded, spaced
@ 12" ctrs may be used as an alternate.

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(4)250	43	

BAR LIST					SUPERSTRUCTURE								
Mark	Size	No. Req'd.	Length	Type	Dimensions		Mark	Size	No. Req'd.	Length	Type	Dimensions	
					l	m						l	m
401	1/2"	402	39'-0"	Str.			6112	3/8"	8	34'-6 1/2"	XXVII	4'-0 1/2"	5'-1 1/2"
402	1/2"	36	38'-0"	Str.			6113	1/2"	8	34'-6 1/2"	XXVIII	4'-11 1/2"	5'-5 1/2"
403	1/2"	36	40'-0"	Str.			6114	1/2"	8	34'-6 1/2"	XXIV	5'-0 1/2"	5'-5 1/2"
404	1/2"	462	4'-4"	IV	1'-4"	1'-8"	6115	1/2"	8	34'-6 1/2"	XXIV	5'-2"	5'-6"
405	1/2"	98	4'-2"	I	1'-3"	0'-6"	6116	1/2"	9	34'-6 1/2"	XXV	5'-1 1/2"	5'-6 1/2"
602	1/2"	1	11'-0"	XIX	1'-7"	3'-6"	6117	1/2"	9	34'-6 1/2"	XXVI	5'-2"	5'-8 1/2"
603	1/2"	1	11'-7"		2'-2"	3'-6"	6118	1/2"	1	13'-2"	XXVII	5'-6"	2'-6"
604	1/2"	1	12'-2"		2'-0"	3'-8"	6119	1/2"	1	13'-8"		5'-6"	3'-0"
605	1/2"	1	12'-9"		3'-4"	3'-8"	6120	1/2"	1	14'-2"		5'-6"	3'-6"
606	1/2"	1	13'-5"		3'-11"	3'-7"	6121	1/2"	1	14'-7 1/2"		5'-5 1/2"	4'-0"
607	1/2"	1	14'-0 1/2"		4'-7"	3'-6 1/2"	6122	1/2"	1	15'-1 1/2"		5'-5 1/2"	4'-0"
608	1/2"	1	14'-7 1/2"		5'-2"	3'-6 1/2"	6123	1/2"	1	15'-7 1/2"		5'-5 1/2"	5'-0"
609	1/2"	1	15'-3 1/2"		5'-9 1/2"	3'-7"	6124	1/2"	1	16'-2"		5'-5 1/2"	5'-7"
610	1/2"	1	16'-1"		6'-7"	3'-7"	6125	1/2"	1	16'-8"		5'-5 1/2"	6'-1"
611	1/2"	1	16'-6 1/2"	XIX	7'-0 1/2"	3'-7"	6126	1/2"	1	17'-3"	XXVII	5'-5"	6'-8"
612	1/2"	1	17'-3 1/2"	XX	2'-4 1/2"	3'-7 1/2"	6127	1/2"	1	17'-10"	XXVIII	5'-3 1/2"	2'-9"
613	1/2"	1	17'-11"		3'-0"	3'-7 1/2"	6128	1/2"	1	18'-4"		5'-3 1/2"	3'-3"
614	1/2"	1	18'-5 1/2"		3'-8 1/2"	3'-7 1/2"	6129	1/2"	1	18'-10"		5'-3 1/2"	3'-9"
615	1/2"	1	19'-1"		4'-1 1/2"	3'-8"	6130	1/2"	1	19'-4"		5'-3 1/2"	4'-3"
616	1/2"	1	19'-9"		4'-9 1/2"	3'-8"	6131	1/2"	1	19'-10"		5'-3 1/2"	4'-9"
617	1/2"	1	20'-5 1/2"		5'-3 1/2"	3'-8 1/2"	6132	1/2"	1	20'-5"		5'-3 1/2"	5'-4"
618	1/2"	1	21'-0 1/2"		6'-0 1/2"	3'-8 1/2"	6133	1/2"	1	20'-10 1/2"		5'-3"	5'-10"
619	1/2"	1	21'-8"	XX	6'-7 1/2"	3'-9"	6134	1/2"	1	21'-5 1/2"	XXVIII	5'-3"	6'-5"
620	1/2"	1	22'-6 1/2"	XXVIII	2'-1 1/2"	3'-9"	6135	1/2"	1	22'-1"	XXIX	5'-2 1/2"	2'-5 1/2"
621	1/2"	1	23'-2"		2'-9 1/2"	3'-9 1/2"	6136	1/2"	1	22'-8"		5'-2 1/2"	3'-0 1/2"
622	1/2"	1	23'-10"		3'-4 1/2"	3'-9 1/2"	6137	1/2"	1	23'-2"		5'-2 1/2"	3'-6 1/2"
623	1/2"	1	24'-5"		3'-11 1/2"	3'-9 1/2"	6138	1/2"	1	23'-8"		5'-2 1/2"	4'-0 1/2"
624	1/2"	1	25'-0"		4'-6 1/2"	3'-9 1/2"	6139	1/2"	1	24'-3"		5'-1 1/2"	4'-8 1/2"
625	1/2"	1	25'-8"		5'-2 1/2"	3'-9 1/2"	6140	1/2"	1	24'-8"		5'-1 1/2"	5'-1 1/2"
626	1/2"	1	26'-4"		5'-10 1/2"	3'-9 1/2"	6141	1/2"	1	25'-3"		5'-1 1/2"	5'-0 1/2"
627	1/2"	1	27'-0 1/2"		6'-5 1/2"	3'-9 1/2"	6142	1/2"	1	25'-9"		5'-1 1/2"	6'-0 1/2"
628	1/2"	1	27'-6 1/2"		7'-0 1/2"	3'-10"	6143	1/2"	1	26'-5"	XXXIX	5'-1 1/2"	6'-8 1/2"
629	1/2"	1	28'-1 1/2"	XXVIII	7'-7 1/2"	3'-10"	6144	1/2"	1	27'-1 1/2"	XL	5'-1 1/2"	2'-11 1/2"
630	1/2"	1	28'-11"	XXI	3'-0 1/2"	3'-10"	6145	1/2"	1	27'-6 1/2"		5'-1 1/2"	3'-4 1/2"
631	1/2"	1	29'-5"		3'-7 1/2"	3'-10"	6146	1/2"	1	28'-0 1/2"		5'-1 1/2"	3'-10 1/2"
632	1/2"	1	30'-1"		4'-2 1/2"	3'-10"	6147	1/2"	1	28'-7 1/2"		5'-1 1/2"	4'-5 1/2"
633	1/2"	1	30'-9"		4'-10 1/2"	3'-10"	6148	1/2"	1	29'-1 1/2"		5'-1 1/2"	4'-11 1/2"
634	1/2"	1	31'-4 1/2"		5'-5 1/2"	3'-10"	6149	1/2"	1	29'-7 1/2"		5'-1 1/2"	5'-5 1/2"
635	1/2"	1	31'-11 1/2"		6'-0 1/2"	3'-10 1/2"	6150	1/2"	1	30'-1 1/2"	XL	5'-1 1/2"	5'-11 1/2"
636	1/2"	1	32'-7 1/2"		6'-8 1/2"	3'-10 1/2"	6151	1/2"	1	30'-10 1/2"	XXVI	5'-1"	2'-1 1/2"
637	1/2"	1	33'-2 1/2"		7'-3 1/2"	3'-10 1/2"	6152	1/2"	1	31'-4 1/2"		5'-1"	2'-7 1/2"
638	3/4"	31	34'-6 1/2"	XVII	3'-4 1/2"	3'-9 1/2"	6153	1/2"	1	31'-9 1/2"		5'-1"	3'-0 1/2"
639	0	8	34'-6 1/2"	XXII	3'-7 1/2"	3'-11"	6154	1/2"	1	32'-3 1/2"		5'-1"	3'-6 1/2"
640	0	8	34'-6 1/2"	XXIII	3'-9"	4'-0"	6155	1/2"	1	32'-11 1/2"		5'-1"	4'-2 1/2"
641	0	8	34'-6 1/2"	XXIV	3'-9 1/2"	4'-2"	6156	1/2"	1	33'-5 1/2"		5'-1"	4'-8 1/2"
642	0	8	34'-6 1/2"	XXV	3'-10 1/2"	4'-3 1/2"	6157	3/4"	1	33'-11 1/2"	XXVII	5'-1"	5'-2 1/2"
643	0	8	34'-6 1/2"	XXVI	4'-0"	4'-4 1/2"	6158	3/4"	1	12'-10"			
649	3/8"	8	10'-11"	Str.			to	2ea.	by 8 3/8" to				
659	3/8"	to	2ea.	by 7 1/2" to			6196	3/4"	1	33'-0 1/2"			
6105	3/8"	8	33'-5"	Str.			6197	3/4"	1	1'-6 1/2"			
6106	3/8"	8	34'-6 1/2"	XXVII	4'-0 1/2"	4'-6 1/2"	to	2ea.	by 3 3/8" to				
6107	0	8	34'-6 1/2"	XXVIII	4'-1 1/2"	4'-5 1/2"	6226	3/4"	1	10'-7 1/2"			
6108	16	34'-6 1/2"	XXVIII	4'-4 1/2"	4'-7 1/2"		6227	3/4"	4	40'-0"			
6109	8	34'-6 1/2"	XXIX	4'-6"	4'-8 1/2"		6229	3/4"	358	33'-8"			
6110	8	34'-6 1/2"	XXX	4'-6 1/2"	4'-10 1/2"		6234	3/4"	1	1'-3"			
6111	3/8"	8	34'-6 1/2"	XXI	4'-7"	5'-0 1/2"	to	2ea.	by 3" to				
6299	3/8"	8	12'-8"										

SUMMARY
20897 Lin. Ft. 1/2" @ 0.668 Lb./Lin. Ft. = 13959 Lb.
24454 Lin. Ft. 3/8" @ 1.502 Lb./Lin. Ft. = 36730 Lb.
Plus 1% Overrun = 506 Lb.
Total = 51195 Lb.

BAR LIST - ABUTMENT-1						
Mark	Size	No. Req'd.	Length	Type	Dimensions	
					l	m
495	1/2"	51	22'-1"	III		
496	1/2"	12	11'-10"	I	2'-5"	3'-2"
497	1/2"	28	6'-9"	Str.		
498	1/2"	2	8'-1"			
499	1/2"	4	7'-7"			
4100	1/2"	2	9'-1"			
4101	1/2"	2	34'-9"			
4102	1/2"	20	37'-0"			
4103	1/2"	2	27'-0"			
4104	1/2"	1	8'-0"			
4105	1/2"	1	11'-5"	Str.		
4106	1/2"	2	6'-0"	Str.		
4107	1/2"	2	8'-0"	Str.		
644	1/2"	6	7'-6"	Str.		
645	1/2"	1	9'-0"	Str.		
646	1/2"	1	10'-6"	Str.		
705	3/8"	3	11'-10"	Str.		
1110	1 1/8"	6	60'-0"	Str.		
1111	1 1/8"	12	30'-9"	Str.		

SUMMARY
2401 Lin. Ft. 1/2" @ 0.668 Lb./Lin. Ft. = 1604 Lb.
65 Lin. Ft. 3/8" @ 1.502 Lb./Lin. Ft. = 98 Lb.
36 Lin. Ft. 1" @ 2.044 Lb./Lin. Ft. = 74 Lb.
729 Lin. Ft. 1 1/8" @ 5.313 Lb./Lin. Ft. = 3873 Lb.
Plus 1% Overrun = 56 Lb.
Total = 5705 Lb.

NOTE: Reinforcing bars on this bridge shall be marked Sta. No., number designation and marked BU

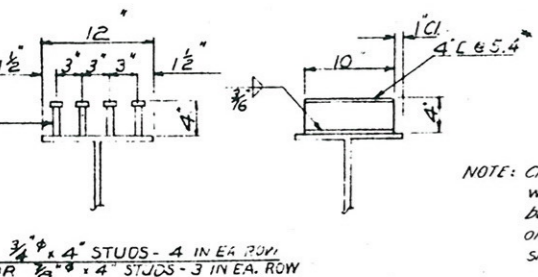
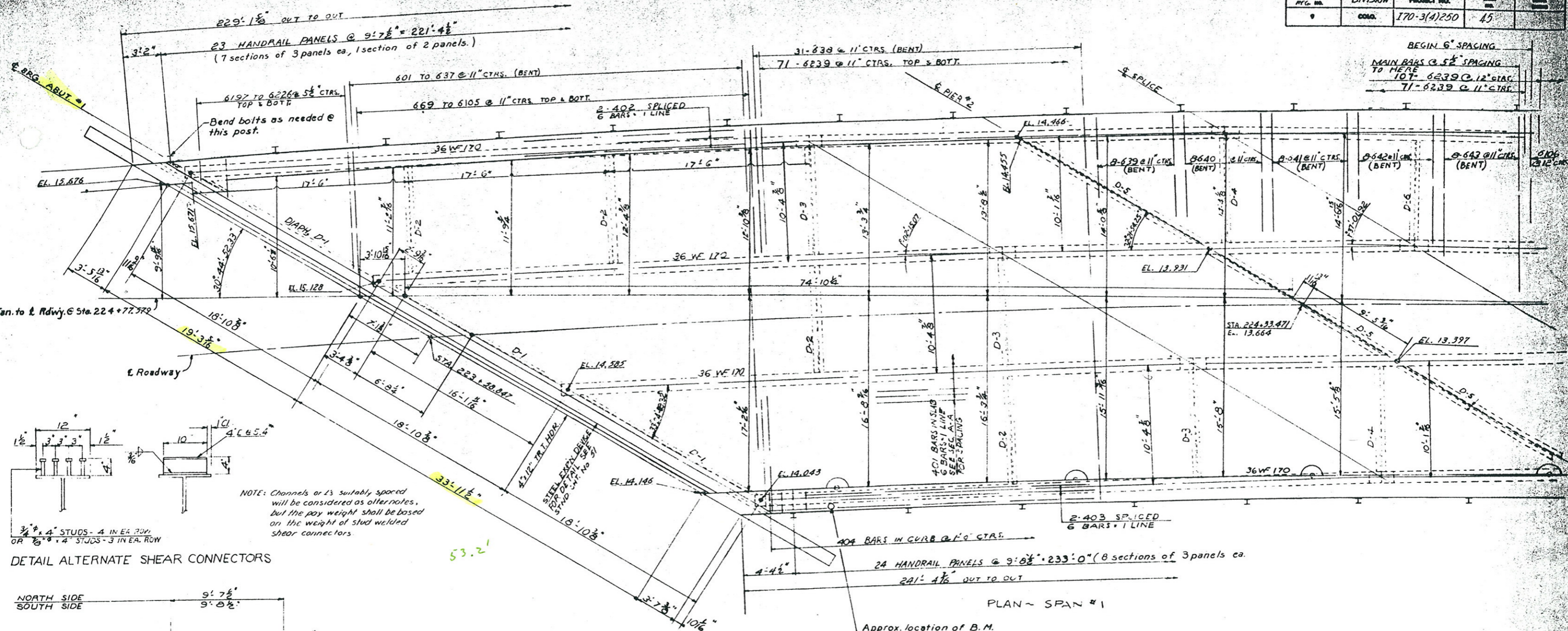
BAR LIST - ABUTMENT-4						
Mark	Size	No. Req'd.	Length	Type	Dimensions	
					l	m
4110	1/2"	63	22'-1"	III		
4111	1/2"	4	4'-10"	Str.		
4112	1/2"	4	5'-8"	Str.		
4113	1/2"	6	6'-6"	Str.		
to	2ea.	by 4" to				
4118	1/2"	8	8'-2"	Str.		
4119	1/2"	8	6'-3"	Str.		
to	2ea.	by 2 1/2" to				
4125	1/2"	2	7'-6"	Str.		
4126	1/2"	2	6'-8"			
4127	1/2"	2	6'-10"			
4128	1/2"	2	7'-0"			
4129	1/2"	2	8'-10"			
4130	1/2"	2	12'-8"			
4131	1/2"	2	34'-9"			
4132	1/2"	20	40'-0"			
4133	1/2"	1	38'-6"			
4134	1/2"	9	9'-4"			
4135	1/2"	1	26'-9"			
4136	1/2"	1	12'-0"			
4137	1/2"	1	8'-5"	Str.		
4138	1/2"	2	6'-0"	Str.		
4139	1/2"	2	8'-0"	Str.		
647	1/2"	6	7'-6"	Str.		
648	1/2"	1	15'-0"	Str.		
649	1/2"	1	17'-0"	Str.		
710	3/8"	3	11'-10"	Str.		
1115	1 1/8"	6	60'-0"	Str.		
1116	1 1/8"	12	30'-9"	Str.		

SUMMARY
2740 Lin. Ft. 1/2" @ 0.668 Lb./Lin. Ft. = 1830 Lb.
77 Lin. Ft. 3/8" @ 1.502 Lb./Lin. Ft. = 116 Lb.
36 Lin. Ft. 1" @ 2.044 Lb./Lin. Ft. = 74 Lb.
729 Lin. Ft. 1 1/8" @ 5.313 Lb./Lin. Ft. = 3873 Lb.
Plus 1% Overrun = 57 Lb.
Total = 5950 Lb.

BAR LIST - PIERS 2 & 3							
Mark	Size	PIER 2	PIER 3	Length	Type	Dimensions	
						l	m
411	1/2"			8'-0"	I	1'-11"	1'-9"
to	2ea.	3ea.	3ea.	by 1" to		by 1 1/2" to	
434	1/2"			9'-11"	I	2'-10 1/2"	1'-9"
435	1/2"	36	40	24'-5"	Str.		
436	1/2"	60	14'-9"	Str.			
437	1/2"	58	58	12'-0"	I	1'-11"	3'-9"
438	1/2"	48	40	10'-8"	I	1'-3"	3'-9"
439	1/2"	to	1ea.	3'-8 1/2"	XIII	2'-2"	1'-6 1/2"
to	2ea.	by 1 1/2" to				by 1" to	by 1 1/2" to
447	1/2"	to	1ea.	4'-8 1/2"	XIII	2'-10"	2'-0 1/2"
448	1/2"	60	14'-0"	Str.			
449	1/2"	4	4	30'-5"	Str.		
501	1/2"	84	84	6'-8"	Str.		
502	1/2"	1	1	16'-8"	Str.		
503	1/2"	1	1	17'-6"	Str.		
504	1/2"	1	1	3'-6"	Str.		
801	1"	3	3	48'-0"	Str.		
802	1"	36	36	3'-6"	Str.		
803	1"	36	36	25'-8"	Str.		
1101	1 1/8"	7	7	60'-0"	Str.		
1102	1 1/8"	12	12	13'-6"	Str.		
1103	1 1/8"	8	8	10'-9"	Str.		

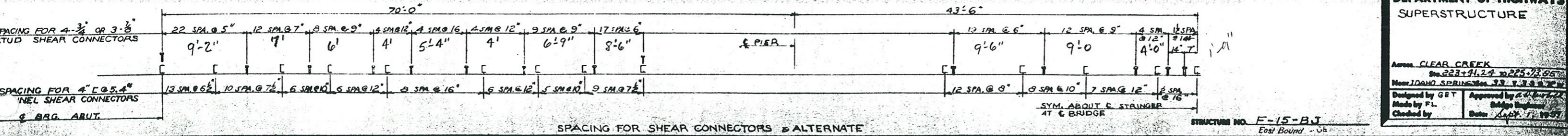
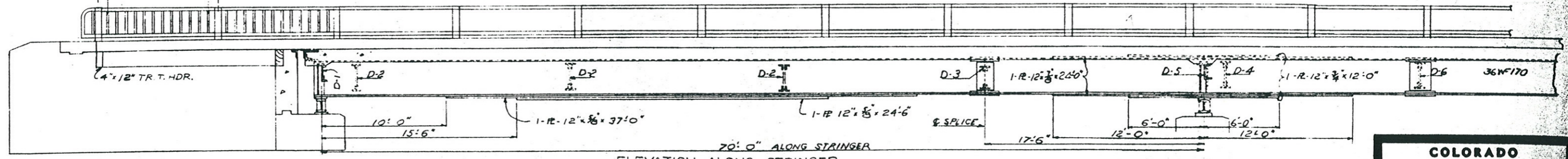
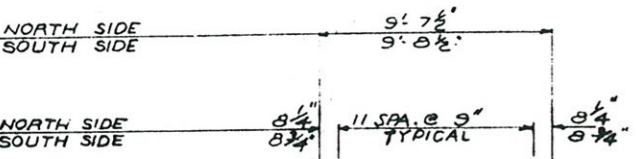
SUMMARY - PIER-2
3732 Lin. Ft. 1/2" @ 0.668 Lb./Lin. Ft. = 2493 Lb.
577 Lin. Ft. 3/8" @ 1.043 Lb./Lin. Ft. = 602 Lb.
1194 Lin. Ft. 1" @ 2.670 Lb./Lin. Ft. = 3188 Lb.
668 Lin. Ft. 1 1/8" @ 5.313 Lb./Lin. Ft. = 3549 Lb.
Plus 1% Overrun = 98 Lb.
Total = 9930 Lb.

NO. ROAD	DIVISION	PROJECT NO.	SHEET	TOTAL SHEETS
170-3(A)250	CONG.	170-3(A)250	45	



NOTE: Channels or I's suitably spaced will be considered as alter notes, but the pay weight shall be based on the weight of stud welded shear connectors.

DETAIL ALTERNATE SHEAR CONNECTORS



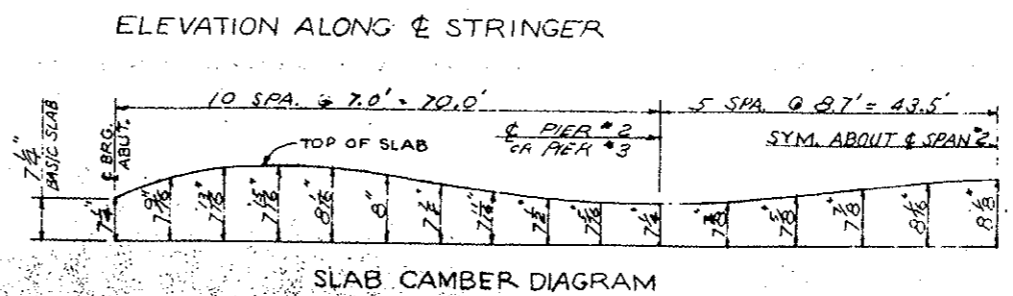
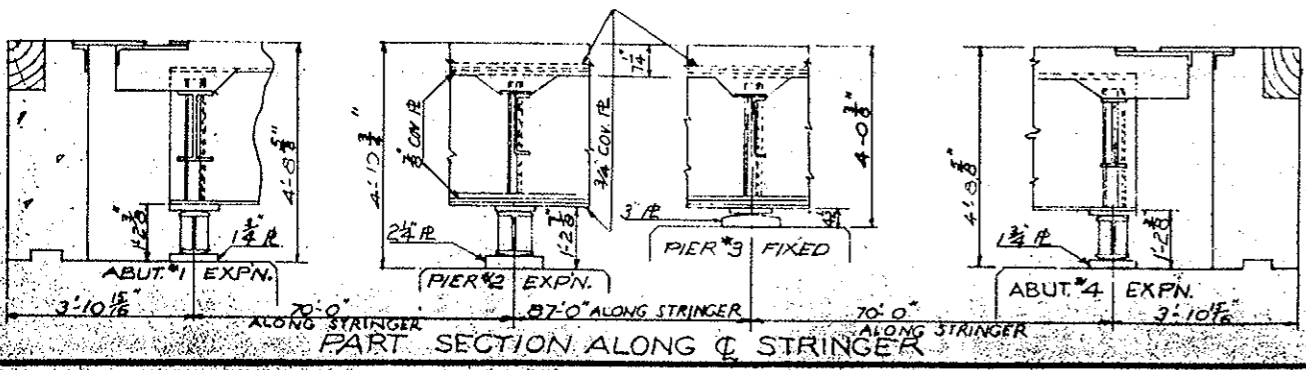
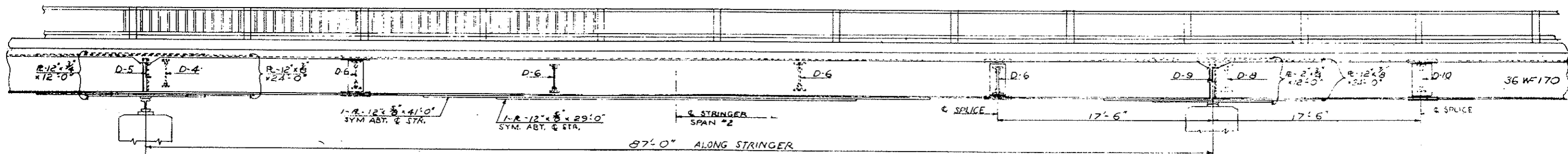
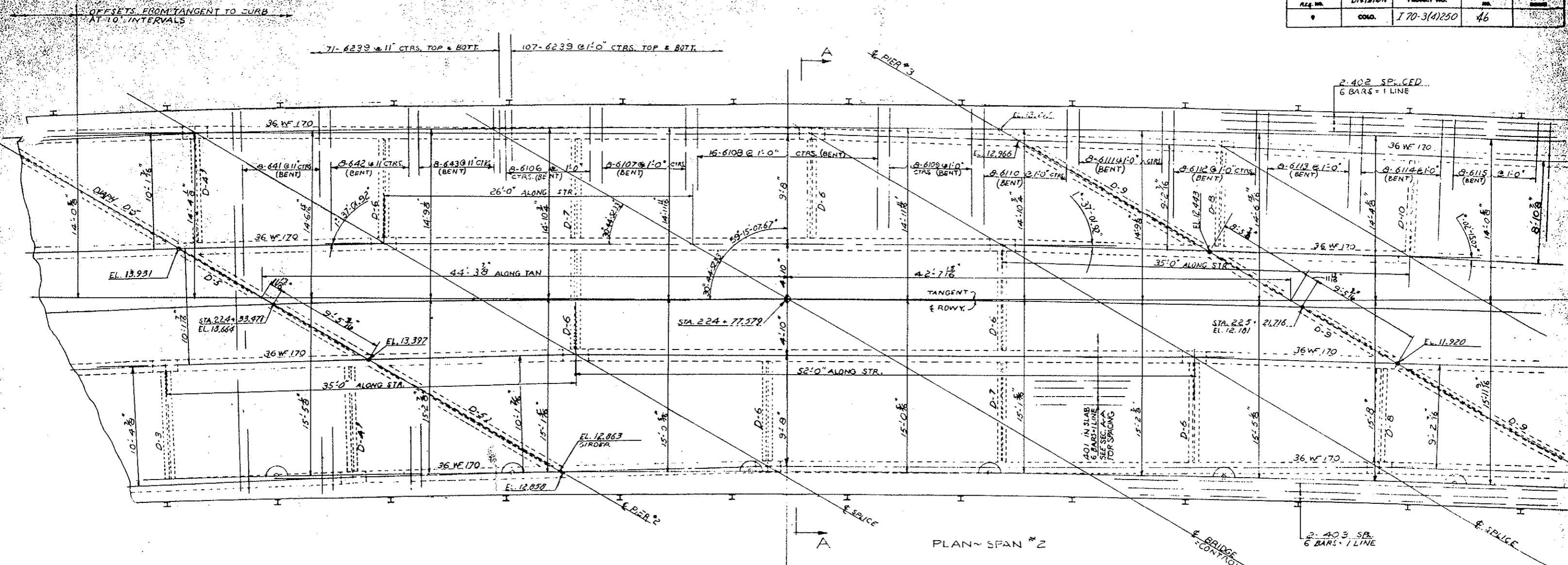
COLORADO DEPARTMENT OF HIGHWAYS SUPERSTRUCTURE

Across CLEAR CREEK
Sta. 223+41.24 to 225+73.65
Near IDAHO SPRINGS, CO. 807 1/2 S. 10th St.
Designed by GET
Made by P.L.
Checked by

Approved by
Checked by
Date: 1/17/60

STRUCTURE NO. F-15-BJ
East Bound - 05

NO. ROAD REG. NO.	DIVISION	PROJECT NO.	NO.	DATE
9	COLO.	I 70-3(4)250	46	



COLORADO DEPARTMENT OF HIGHWAYS

SUPERSTRUCTURE

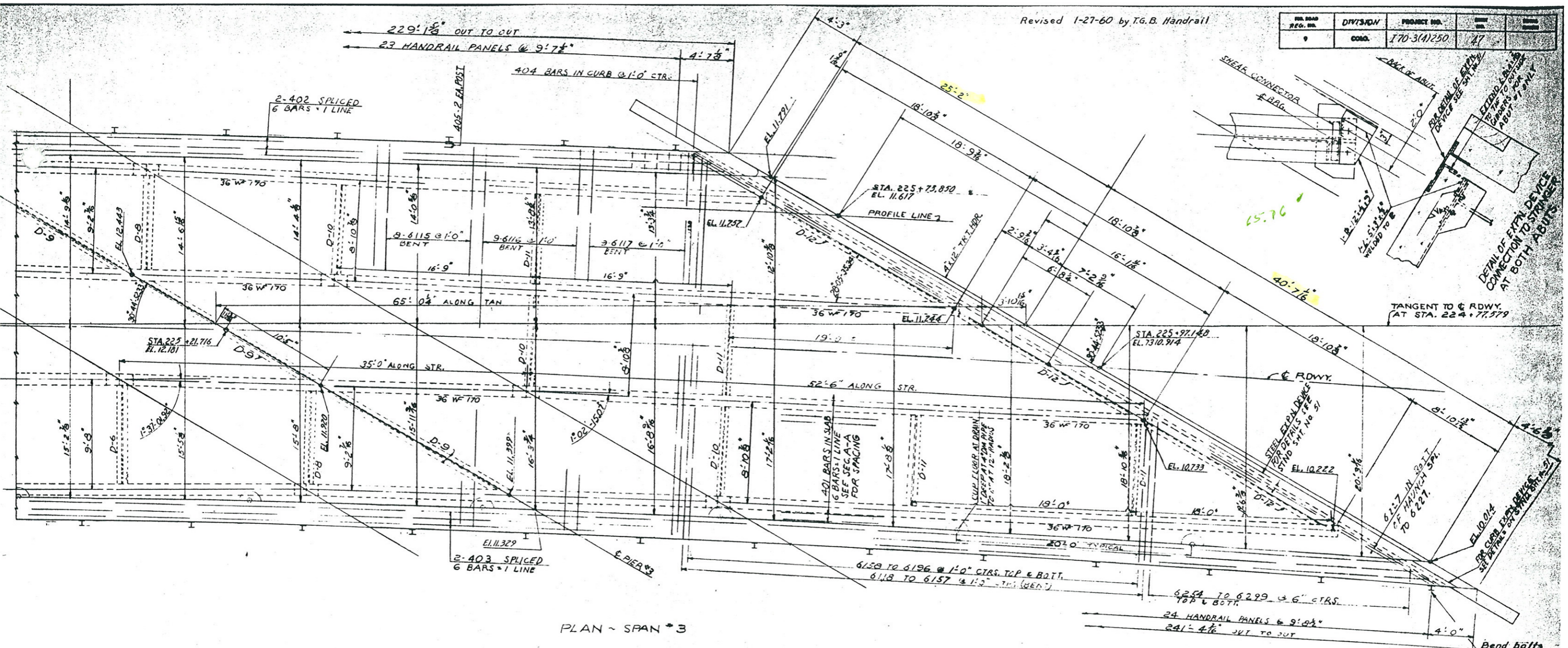
Across CLEAR CREEK
Sta. 223+97.24 to 225+72.16
Near SPASO SPRINGS, Sec. 33 T. 5 S. R. 14 W.

Designed by GET | Approved by J. W. [Signature]
Made by FL | Bridge Engineer
Checked by [Signature] | Date: APR. 1, 1957

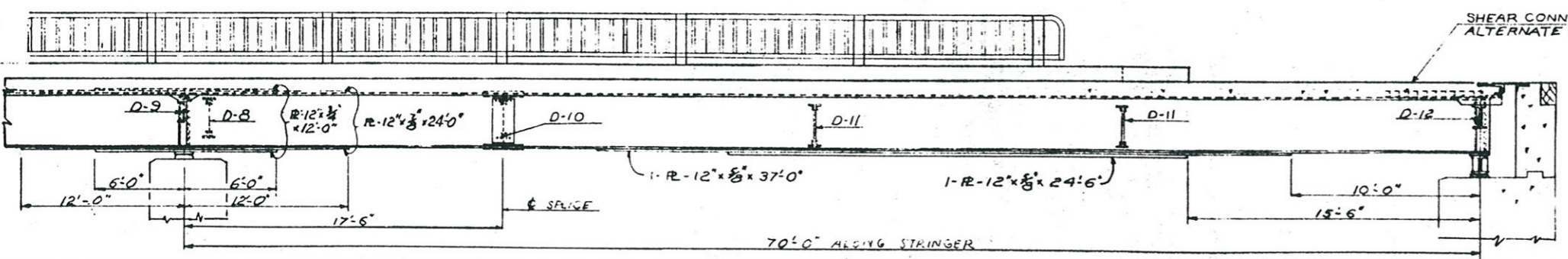
STRUCTURE NO. F-15-EJ
East Bound

Revised 1-27-60 by T.G.B. Handrail

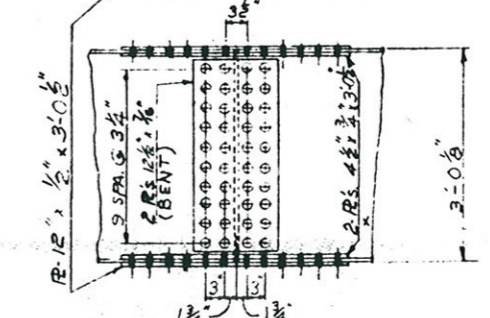
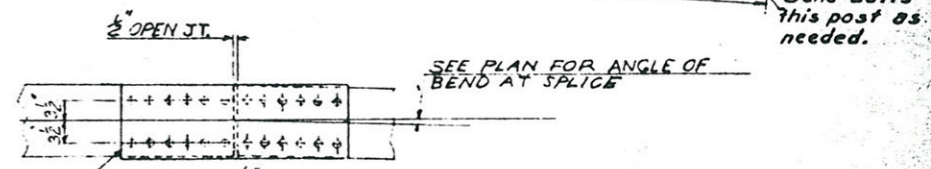
FILE NO.	DIVISION	PROJECT NO.	DATE	BY
9	CONG.	170-3(A)250	47	



PLAN - SPAN #3



ELEVATION ALONG STRINGER



DETAIL FIELD SPLICE
ALL SPLICE RIVETS 3/8"

COLORADO DEPARTMENT OF HIGHWAYS SUPERSTRUCTURE

Across CLEAR CREEK
Sta. 223+91.24 to 225+72.85
Near IDAHO SPRINGS, Sec. 33 T.33 N.72 W.

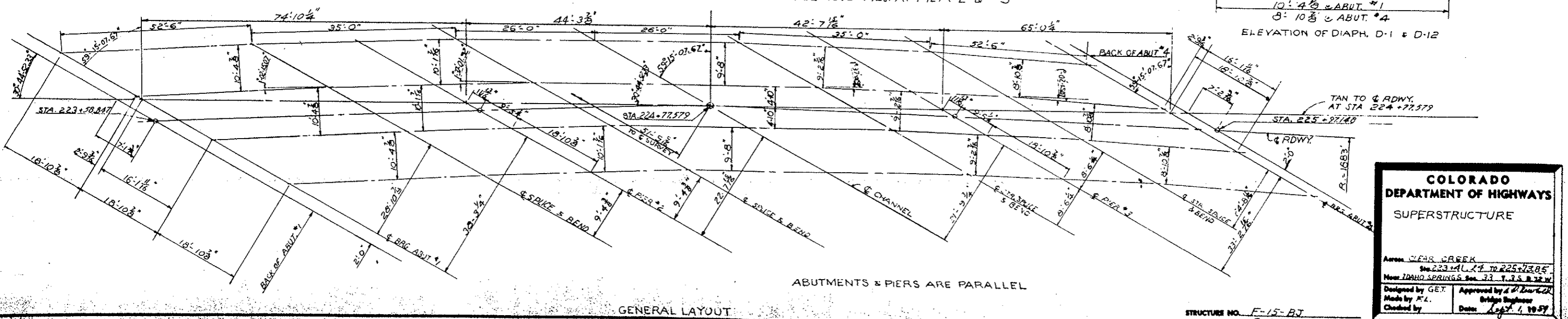
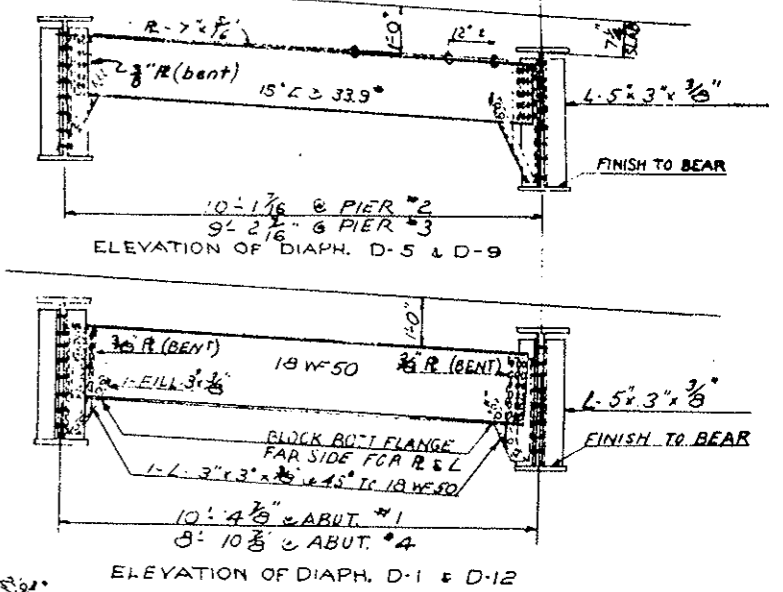
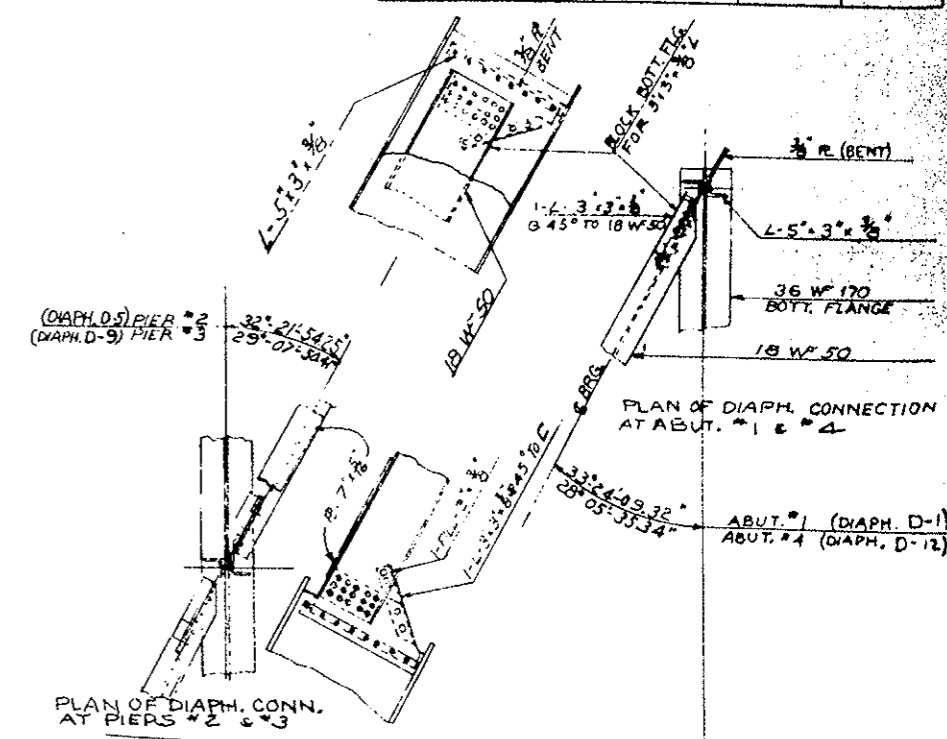
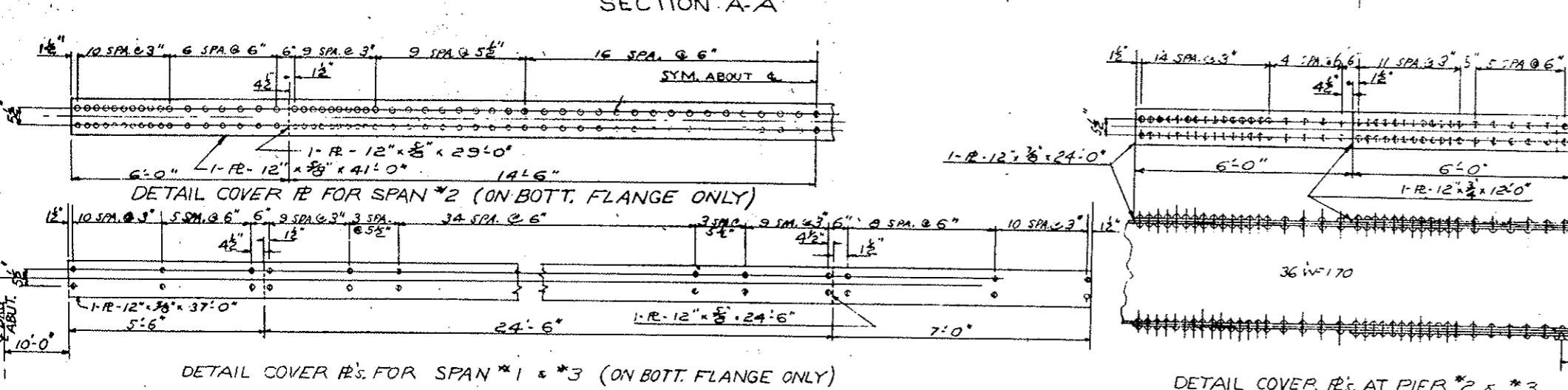
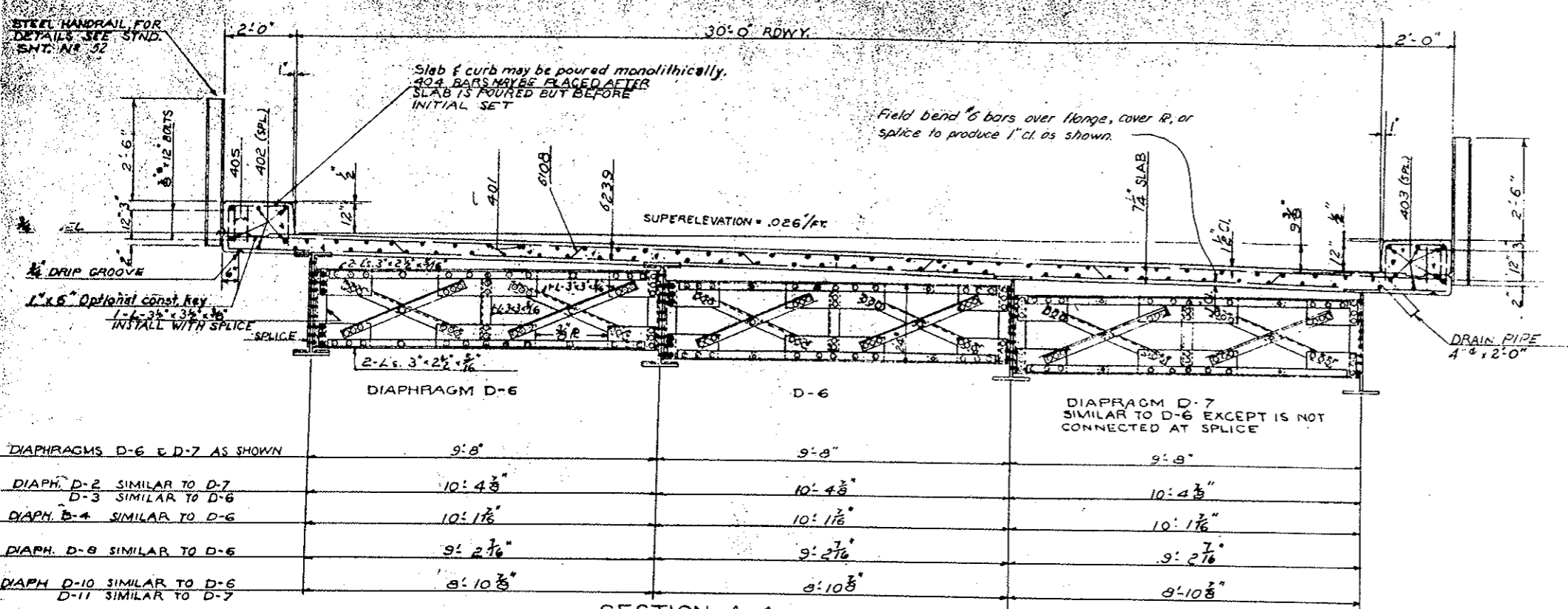
Designed by GET
Made by FL
Checked by

Approved by [Signature]
Bridge Engineer
Date 1-27-60

STRUCTURE NO. F-15-PJ
East Bound

Revised 1-27-60 by T.G.B. Handrail/curb depth

REV. NO.	DESCRIPTION	DATE
1	AS SHOWN	



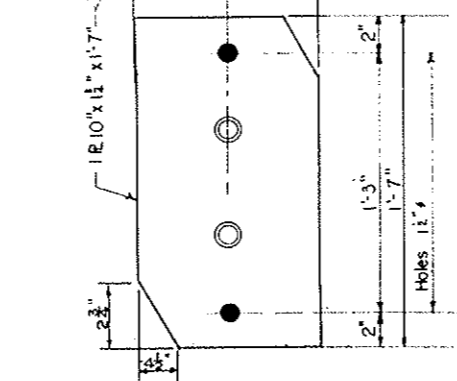
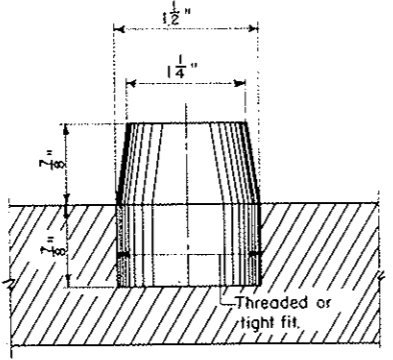
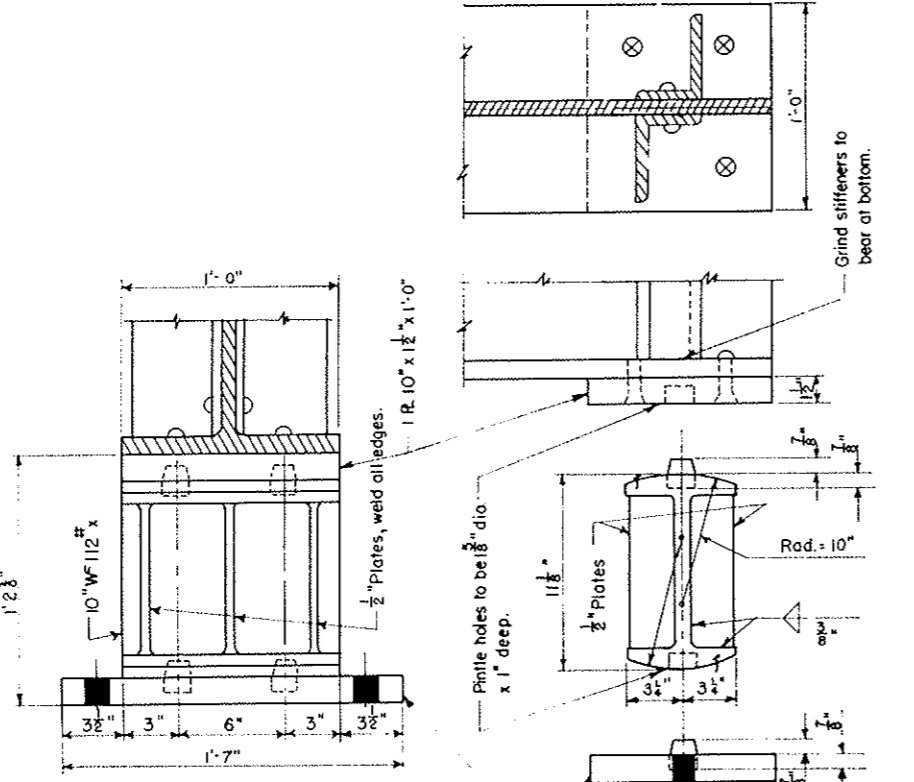
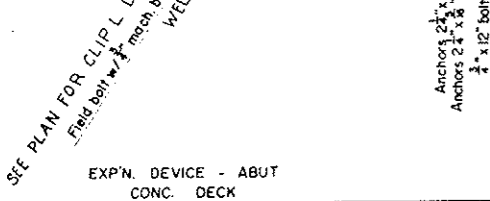
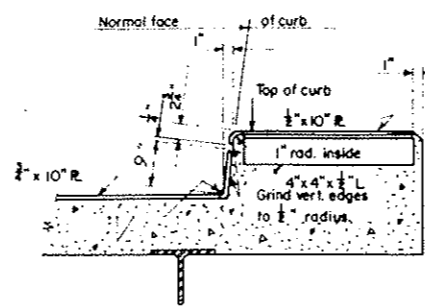
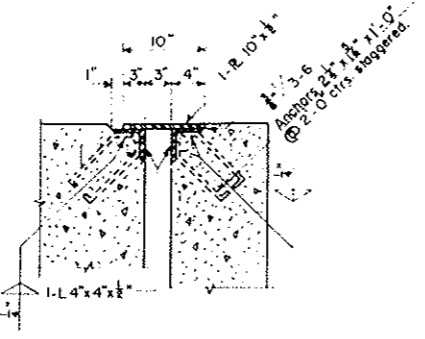
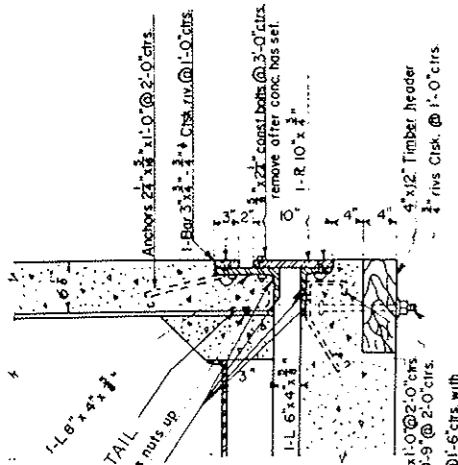
COLORADO DEPARTMENT OF HIGHWAYS
SUPERSTRUCTURE

Across CLEAR CREEK
 Sta. 223+50.847 to 225+27.140
 Near IDAHO SPRINGS, Sec. 33, T. 3 S. R. 72 W.

Designed by GET. Approved by J. H. ...
 Made by F.L. Bridge Engineer
 Checked by ... Date 1/1/59

STRUCTURE NO. F-15-BJ
 East Bound

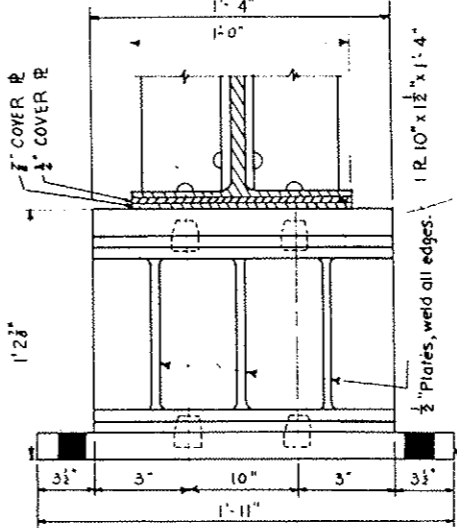
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(4)250	51	



NO. BOLTS REQ'D.
16 - 1 1/4" x 1-8"

EXPANSION BEARING
No. Req'd. 8 FOR ABUTMENTS * 1 1/4"

DETAIL OF BEARINGS
Rocker may be built from plates equal in thickness to designated WF Section or be made from cast steel.

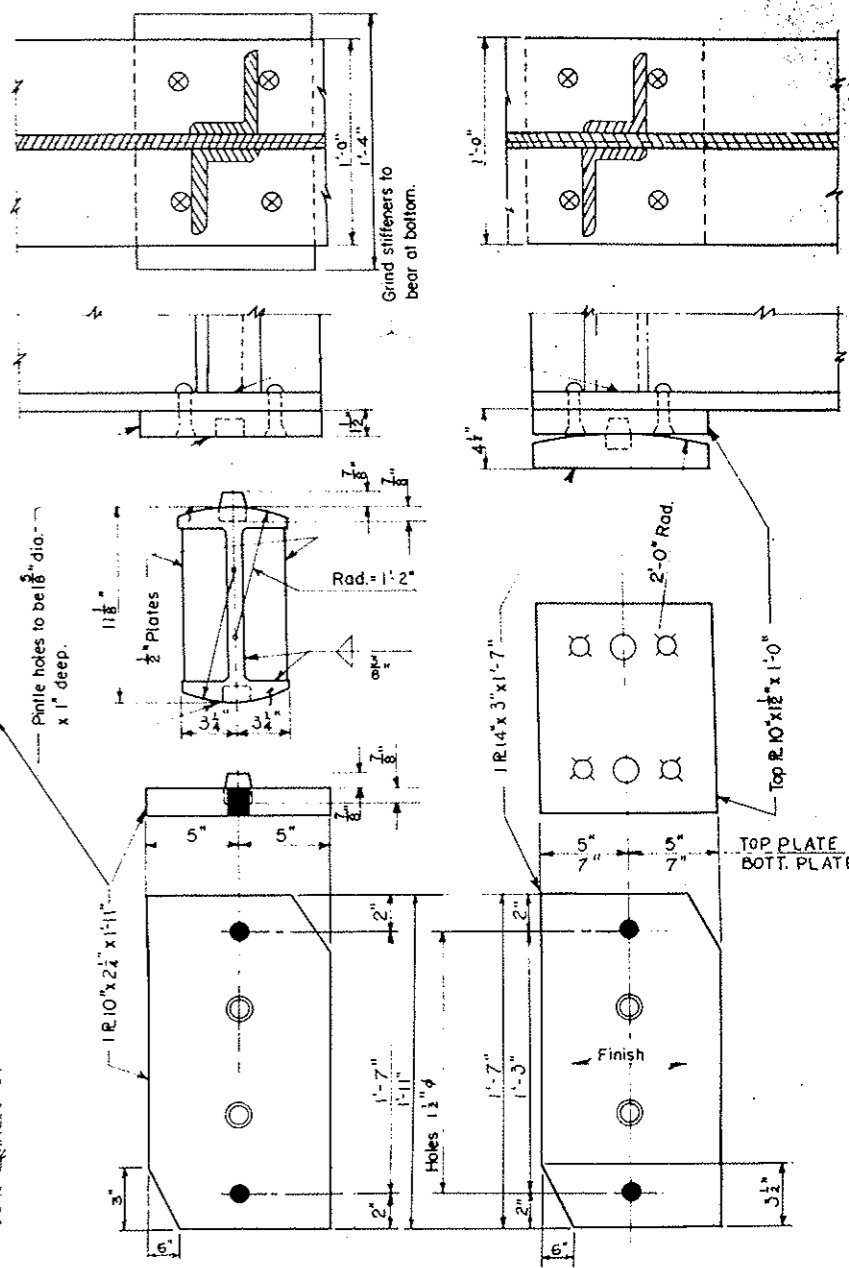


NO. BOLTS REQ'D.
16 - 1 1/4" x 1-8"

EXPANSION BEARING
No. Req'd. 4
PIER * 2

FIXED BEARING
No. Req'd. 4
PIER * 3

DETAIL OF BEARINGS
Rocker may be built from plates equal in thickness to designated WF Section or may be made from Cast Steel.



COLORADO
DEPARTMENT OF HIGHWAYS

MISCELLANEOUS BRIDGE DETAILS

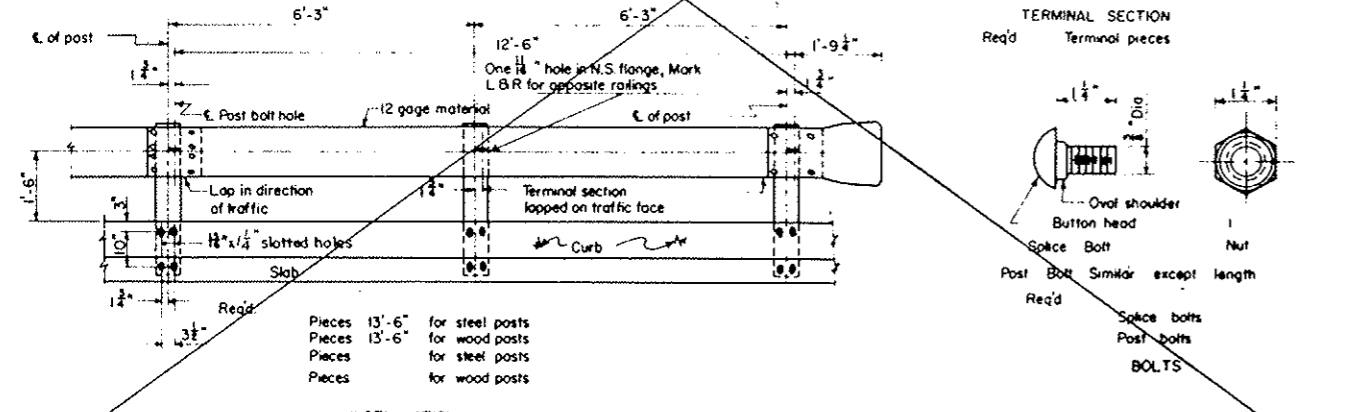
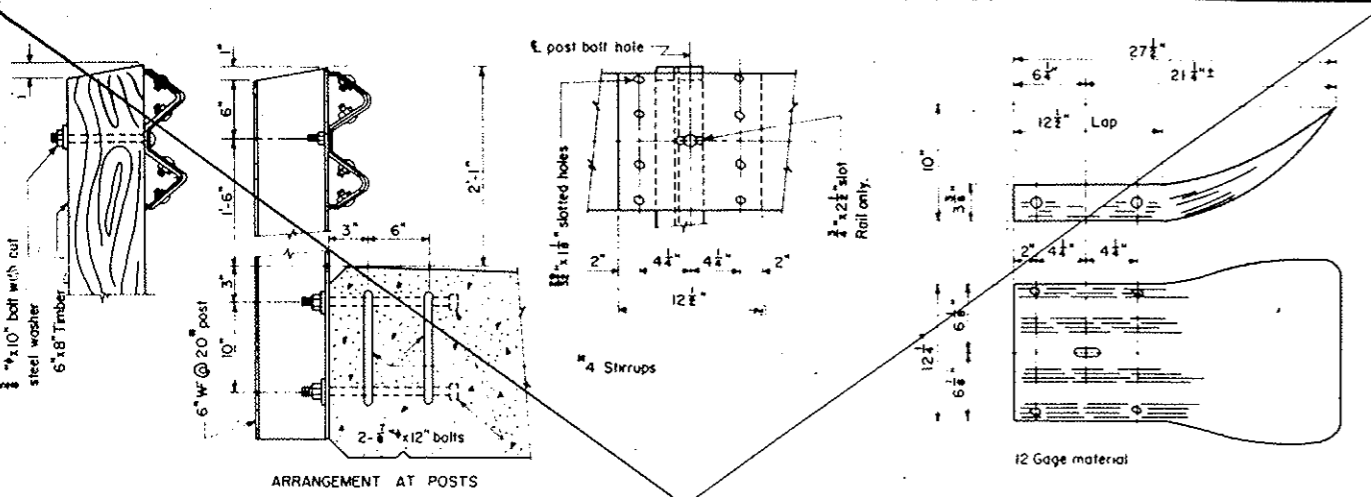
Across CLEAR CREEK
Sta. 223+41.27 to 225+73.85
Near IDAHO SPRINGS Sec. 33 T.35 R.72W

Designed by G.E.T. Approved by *[Signature]*
Made by *[Signature]* FL. Bridge Engineer
Checked by *[Signature]* Date: *[Signature]* 11 19 59

STRUCTURE NO. F-15-BJ
East Bound

Rev 1-27-60 Handrail DCL

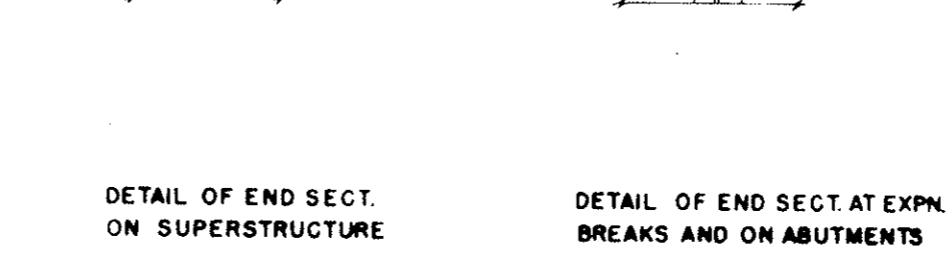
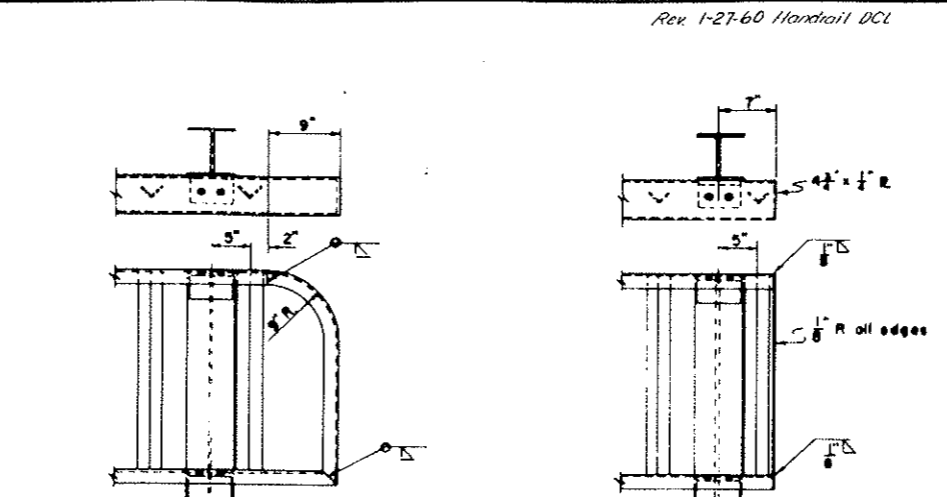
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9	COLO.	I 70-3(A)250	52	



ARRANGEMENT AT POSTS

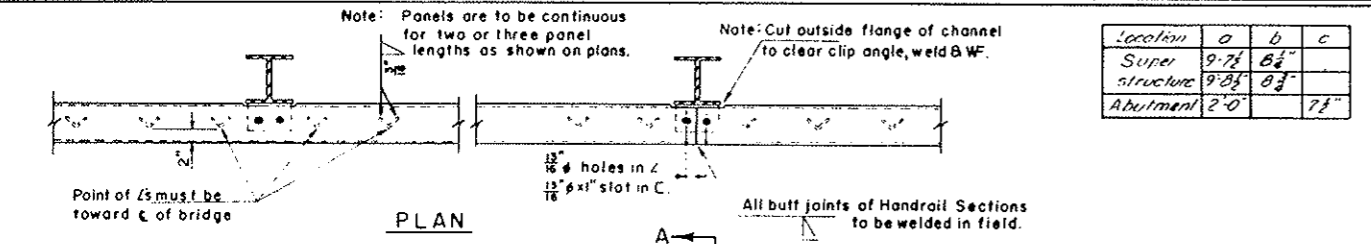
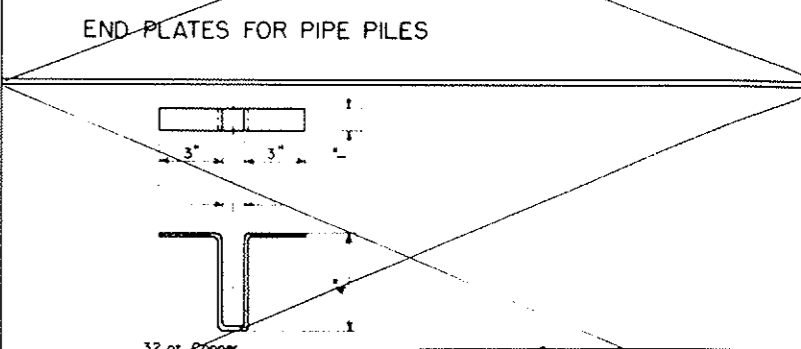
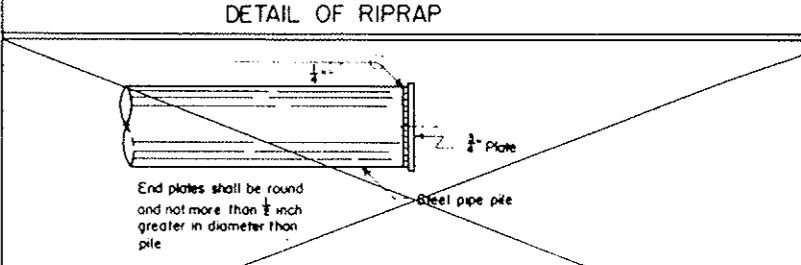
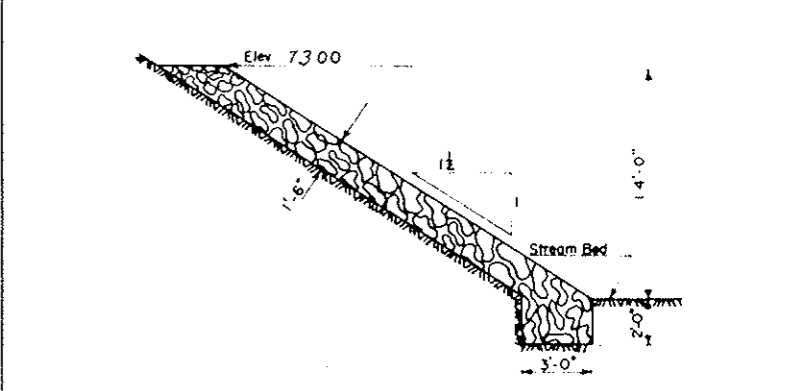
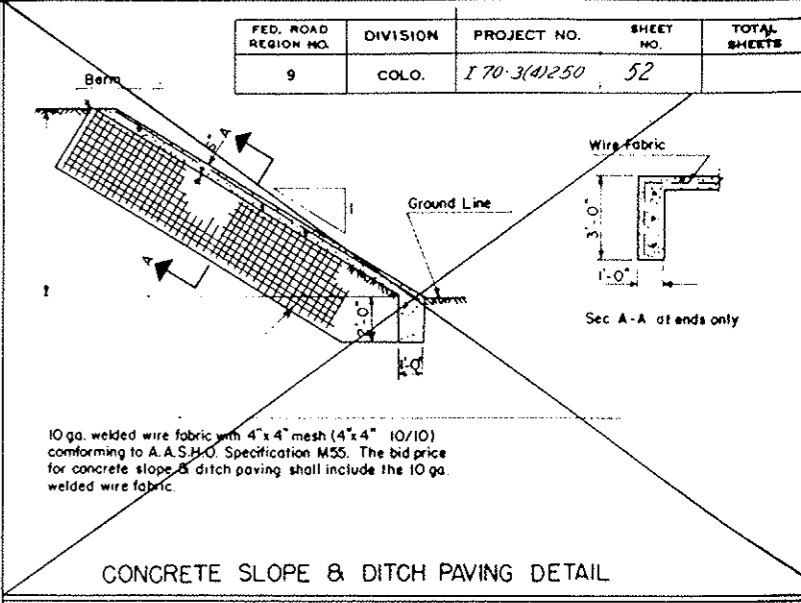
INSTALLATION METAL PLATE GUARD RAIL

Pieces 13'-6" for steel posts
 Pieces 13'-6" for wood posts
 Pieces for steel posts
 Pieces for wood posts

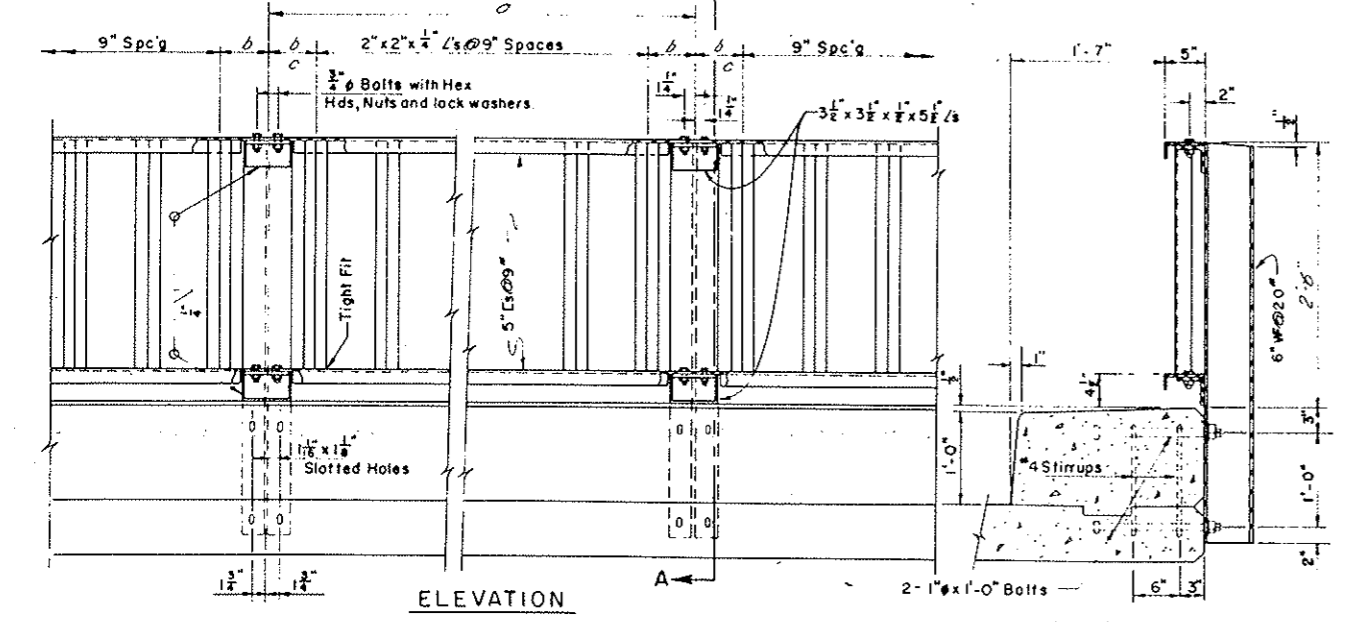


DETAIL OF END SECT. ON SUPERSTRUCTURE

DETAIL OF END SECT. AT EXPN. BREAKS AND ON ABUTMENTS



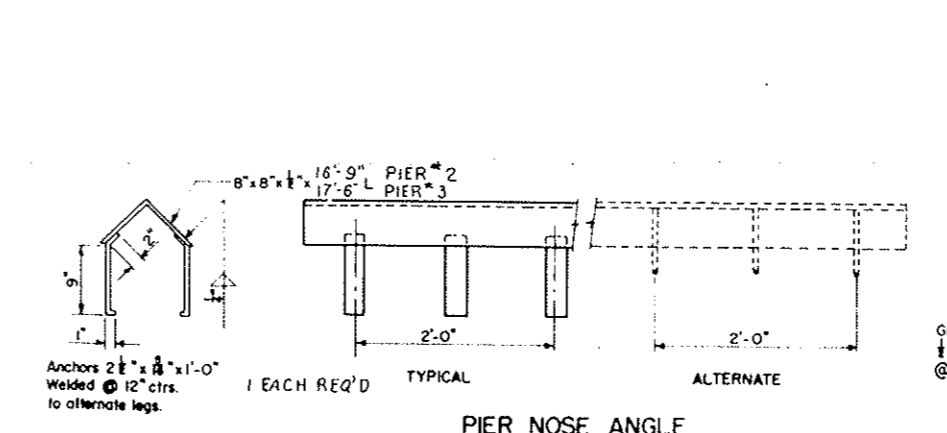
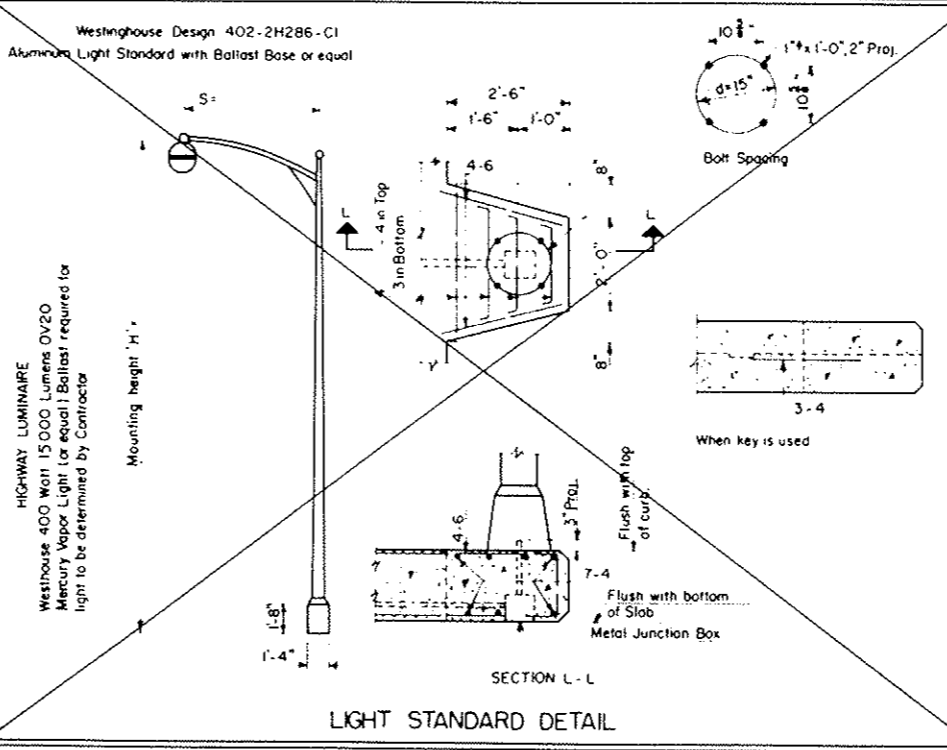
Location	a	b	c
Super	9'-7"	8'-6"	
Structure	9'-8"	8'-3"	
Abutment	2'-0"	7'-8"	



ELEVATION

SECTION A-A

STEEL HANDRAIL



PIER NOSE ANGLE

COLORADO DEPARTMENT OF HIGHWAYS

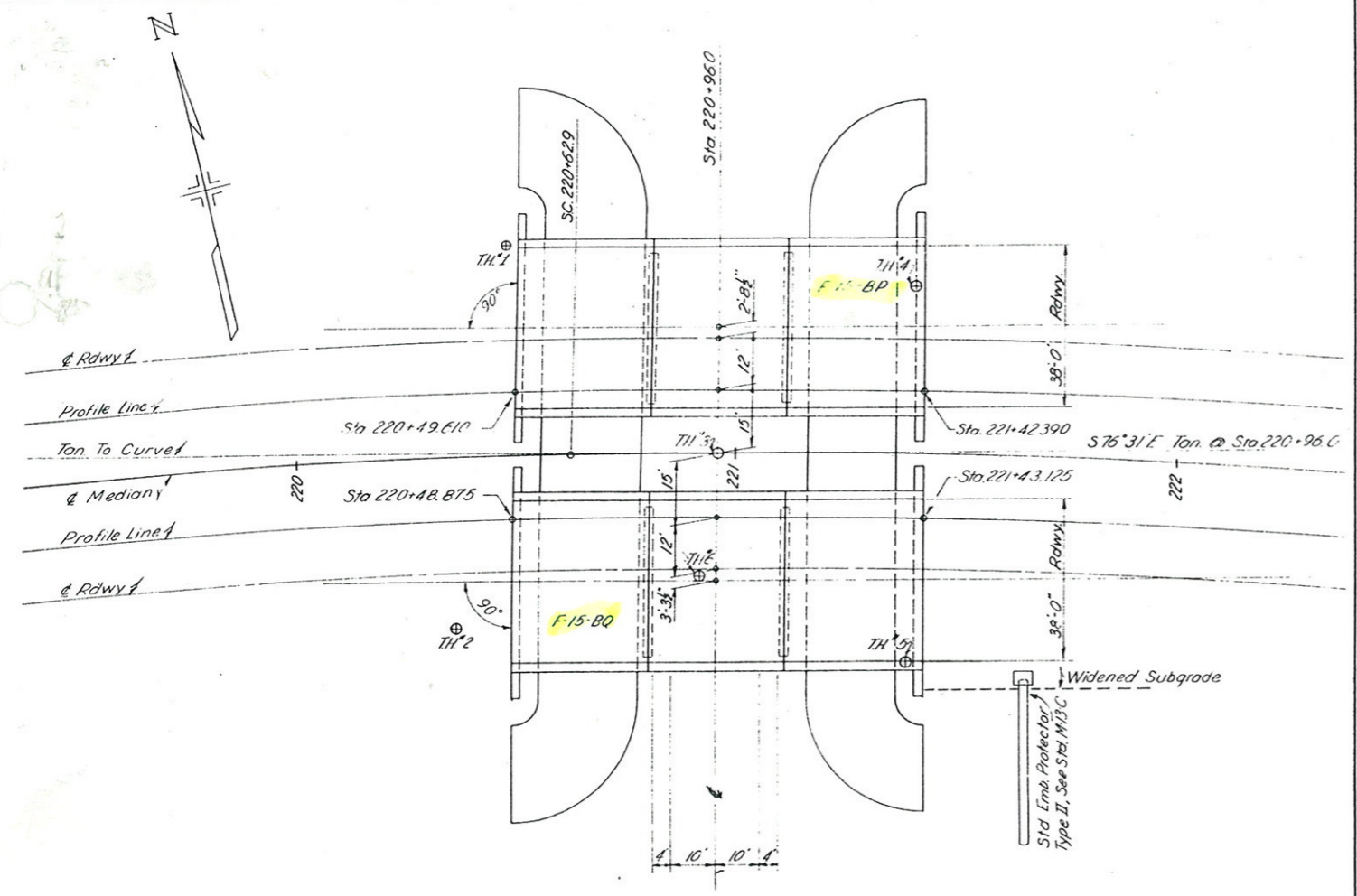
MISCELLANEOUS BRIDGE DETAILS

Across CLEAR CREEK
 Sta. 223+1.24 to 223+73.85
 Near IDAHO-SPRINGS Sec. 33, T.3S., R. 72W

Designed by G.E.T. Approved by B.W. [Signature]
 Made by D.J.S. Bridge Engineer
 Checked by [Signature] Date: Sept 1, 1959

STRUCTURE NO. F-15-BJ
 East Bound

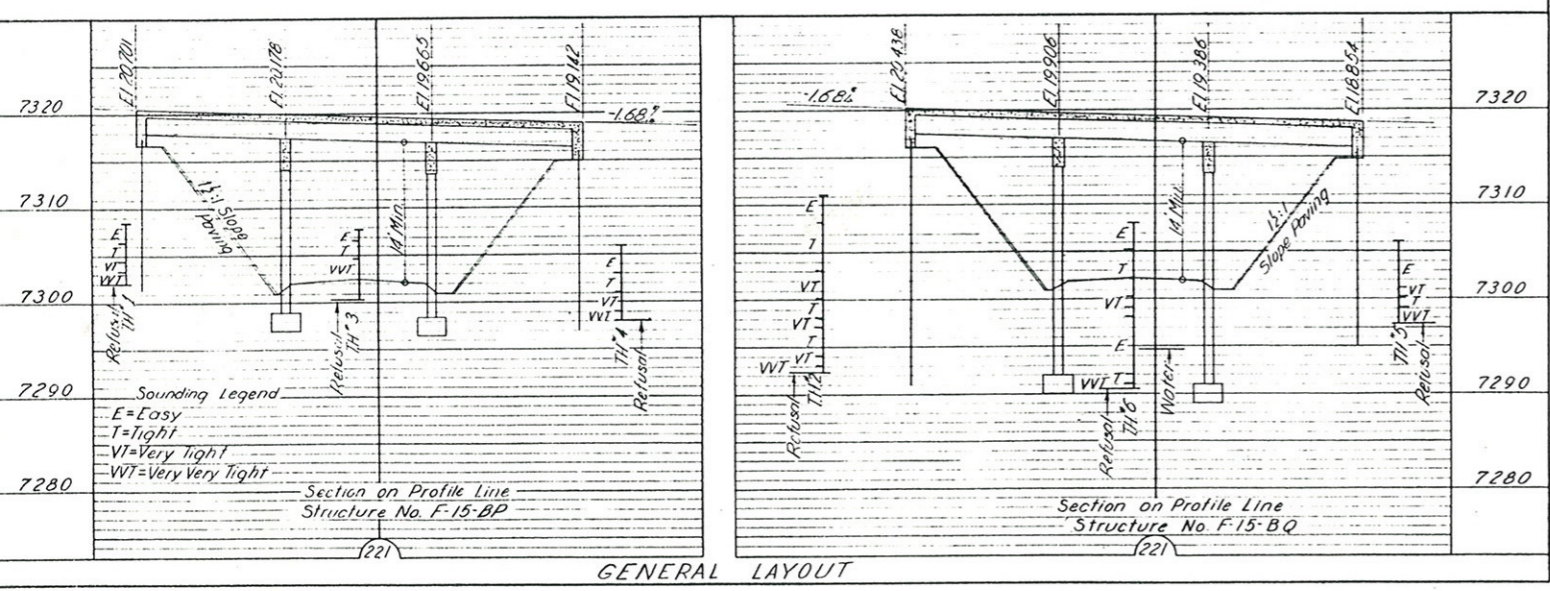
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	COLO.	F-70-3(4)250	25	



SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	SUPERSTRUCT		ABUT NO 1		PIER NO 2		PIER NO 3		ABUT NO 4		TOTAL	
			F-15-BP	F-15-BQ	F-15-BP	F-15-BQ	F-15-BP	F-15-BQ	F-15-BP	F-15-BQ	F-15-BP	F-15-BQ		
14	Unclassified Structural Excavation - Bridge	Cu Yd			5	5	21	12	24	17	5	1	55	119
16	Structural Backfill - Class 1	Cu Yd					15	44	12	49			33	93
18	Station Yard Overhaul	Sta Yd											363	1023
18	Yard Mile Overhaul	Yd Mi											32	90
42	Treated Sidge Lumber	MH Bm			0.152	0.152					0.152	0.152	0.304	0.304
46	Class A Concrete	Cu Yd	151.0	151.0	16.1	16.1	20.9	23.0	20.9	22.1	16.1	16.9	225	230
47	Reinforcing Steel - Includes 1/2" for Overrun	Lbs.	40,450	40,450	710	710	3,860	4,220	3,860	4,220	710	710	49,590	50,310
48	Structural Steel - Includes 3/8" for Overrun	Lbs.	6,850	6,850	645	645					645	645	6,140	6,140
53	8" Corrugated Metal Culvert Pipe	Lin Ft											42	42
61	Steel Piling - 10" BP 6 42"	Lin Ft			90	126					90	126	175	230
65	Concrete Slope & Ditch Fencing with wire mesh	Cu Yd.			33	33					33	33	65	65
132	Inlet Grating and Frame (Type 2)	Eq											1	1

- ① Includes 0.54 cu yd for Emb. Protector at Abut. #4, Struct No F-15-BQ.
- ② For Embankment Protector



GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS APPLICABLE TO THE PROJECT.

ALL CONCRETE SHALL BE CLASS "A" AND AIR ENTRAINMENT AS SPECIFIED.

ALL CONCRETE SURFACES MARKED WITH THE SYMBOL $\#$ AS SHOWN ON SHEET NO. 32 SHALL RECEIVE CLASS "T" SURFACE FINISH.

CONCRETE GRIDES AND FLOOR SLABS MAY BE TOLDED NONORTHOGONALLY.

FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIPLAP OR TONGUE AND GROOVE LUMBER 3" S UNLESS FACED WITH PANEL BOARD.

FOOTINGS IN ROCK SHALL BE POURED OUT TO ROCK AND NOT FORMED.

SOUNDINGS AND DEPTH OF FOOTING SHOWN ARE IN ACCORDANCE WITH THE BEST AVAILABLE DATA AND WHEN DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.

ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A 305-S07 OR THE LATEST REVISION THEREOF, AND SHALL BE INTERMEDIATE GRADE STEEL OF A DEFORMED TYPE. EACH BAR SHALL BE TAGGED WITH THE NUMBER DESIGNATION AND THE STATION NUMBER OF THE PROJECT.

SECONDARY BARS WHEN SPLICED SHALL LAP 12" DIAMETERS OF THE BAR. DIMENSIONS FOR REINFORCING STEEL NOT SHOWN AS CLEAR SHALL BE TO THE CENTER LINE OF THE BAR.

ALL STRUCTURAL STEEL SHALL BE PAINTED ONE SHOP COAT OF ZINC CHROMATE AND TWO FIELD COATS OF ALUMINUM, UNLESS OTHERWISE NOTED, EXCEPT THE UNEXPOSED PORTION OF STEEL PILING NEED NOT BE PAINTED.

HANDRAIL BOLTS SHALL HAVE HEX HEADS, NUTS AND LOCK WASHERS UNLESS OTHERWISE SPECIFIED AND ALL RIVETS, EXCEPT AS NOTED ARE 1/2" DIA. AND SHALL BE POWER DRIVEN.

WHEN TREATED TIMBER OR PILING IS SHOWN ON THE DRAWING THE PRESERVATIVE FOR TREATMENT SHALL BE CREOSOTE OIL.

WHEN EXCAVATING FOR FOOTINGS THE FINAL ONE FOOT IN DEPTH SHALL BE DONE BY HAND LABOR METHODS.

FOR DETAILS OF STRUCTURAL EXCAVATION AND STRUCTURAL BACKFILL, SEE STANDARD M-60-B.

IF BY PERMISSION OF THE ENGINEER PRIMARY BARS ARE SPLICED THEY SHALL LAP A MIN OF 28 DIAM FOR BARS NEAR TOP OF BEAMS HAVING MORE THAN 12 INCHES OF CONCRETE UNDER THE BARS AND 17 DIAM FOR BARS NEAR BOTTOM OF MEMBERS.

GIRDER SHORING SHALL REMAIN IN PLACE FULL LENGTH UNTIL ALL GIRDER AND SLAB REINFORCING HAVE REACHED A MINIMUM STRENGTH OF 2500 PSI.

* Sta 220+49.610 to 221+42.390 (F-15-BP)
* Sta 220+48.875 to 221+43.125 (F-15-BQ)

STRUCTURE NO. F-15-BQ East Bound
F-15-BP West Bound

LOADING DATA

LIVE LOAD - A.A.S.H.O. (1957) S16.44
DEAD LOAD ASSUMES 15 LBS PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 1/2" INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA

A.A.S.H.O. 1953 UNIT STRESSES, EXCEPT AS NOTED

Reinforcing Steel f_s - 20000 lbs. per sq. in.
Structural Steel f_c - 18000 lbs. per sq. in.
 f_c - 1200 lbs. per sq. in.
n - 10

COLORADO
DEPARTMENT OF HIGHWAYS

TWO - 3 SPANS @ 30' - CONCRETE
SLAB and GIRDER BRIDGES

38' ROADWAY 2' CURBS NO SKEW
GENERAL LAYOUT, NOTES &
SUMMARY OF QUANTITIES

Across Service Road

Sta. _____

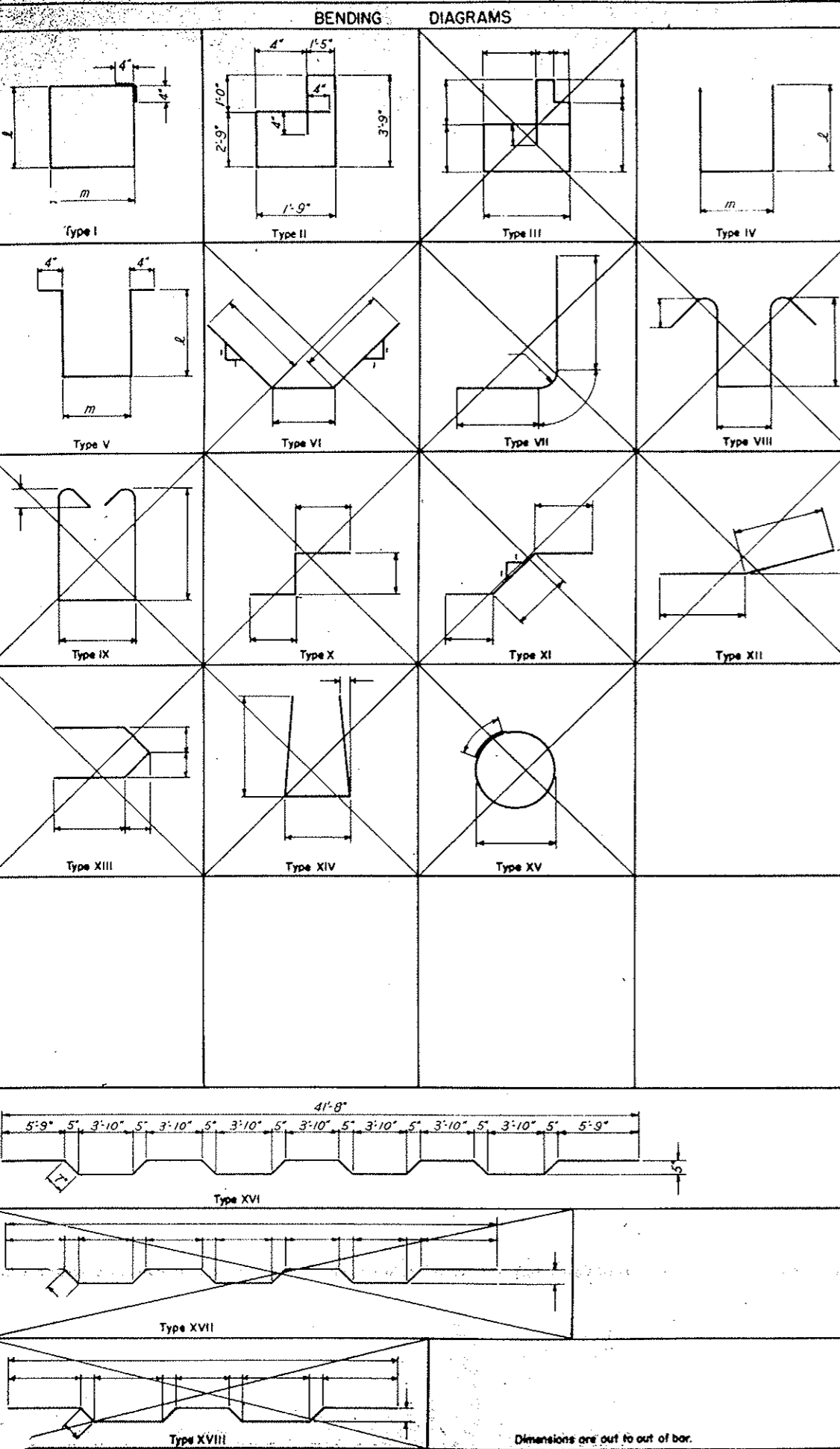
Near Idaho Springs Sec. 32/33 T. 3 S. R. 72 W.

Designed by _____
Made by _____
Checked by _____

Approved by _____
Bridge Engineer
Date: Jan 1, 1959

F-15-BP
F-15-BQ

Revised: #4 curb bars & abut wing bars. 1-27-60 TGB



BAR LIST- SUPERSTRUCT. ①

MARK	SIZE	NR REQ'D	LENGTH	TYPE	DIMENSIONS	
					l	m
401	1/2"	188	4'-2"	IV	1'-4"	1'-8"
402		40	4'-2"	I	1'-3"	0'-6"
403		279	30'-5"	Str.		
404		675	6'-6"	V	2'-4"	1'-1"
405	3/8"	96	5'-4"	I	1'-10"	0'-6"
501	3/8"	85	43'-0"	XVI		
502	3/8"	182	41'-8"	Str.		
801	1"	8	34'-0"	Str.		
1101	1 1/8"	40	31'-0"	Str.		
1102		20	30'-5"			
1103		30	20'-0"			
1104		30	26'-0"			
1105	1 1/8"	20	8'-0"	Str.		
BAR SUMMARY ①						
14,367 Lin. Ft. of 1/2" @ 0.6687/Lin. Ft. = 9597 Lb.						
11,238 Lin. Ft. of 3/8" @ 1.0437/Lin. Ft. = 11,727 Lb.						
272 Lin. Ft. of 1" @ 2.6707/Lin. Ft. = 726 Lb.						
3,388 Lin. Ft. of 1 1/8" @ 5.3137/Lin. Ft. = 18,000 Lb.						
Plus 1% ± for overrun = 400 Lb.						
Total = 404,506 Lb.						

BAR LIST- ABUT. NO. 1 (NO. 4 SIMILAR) ①

MARK	SIZE	NR REQ'D	LENGTH	TYPE	DIMENSIONS	
					l	m
406	1/2"	24	11'-8"	II		
407		8	13'-6"	I	4'-8"	1'-9"
408		1	10'-3"	I	3'-0 1/2"	1'-9"
409	1/2"	1	10'-8"	I	3'-3"	1'-9"
503	3/8"	4	53'-8"	Str.		
504	3/8"	4	50'-0"	Str.		
BAR SUMMARY ①						
409 Lin. Ft. of 1/2" @ 0.6687/Lin. Ft. = 273 Lb.						
415 Lin. Ft. of 3/8" @ 1.0437/Lin. Ft. = 433 Lb.						
Plus 1% ± for overrun = 9 Lb.						
Total = 715 Lb.						

BAR LIST- PIER NO. 2 (NO. 3 SIMILAR) ②

MARK	SIZE	NR REQ'D	LENGTH	TYPE	DIMENSIONS	
					l	m
410	1/2"	39	11'-0"	I	2'-11"	2'-3"
411	1/2"	30	7'-8"	I	1'-9"	1'-9"
507	3/8"	2	36'-0"	Str.		
602	3/8"	28	5'-8"	Str.		
803	1"	20	3'-0"	Str.		
901	1 1/8"	12	3'-6"	Str.		
905	1 1/8"	12	16'-6"	Str.		
1002	1 1/8"	6	36'-0"	Str.		
1003		4	10'-8"			
1004		6	21'-8"			
1005	1 1/8"	6	16'-2"	Str.		
BAR SUMMARY ②						
659 Lin. Ft. of 1/2" @ 0.6687/Lin. Ft. = 440 Lb.						
72 Lin. Ft. of 3/8" @ 1.0437/Lin. Ft. = 75 Lb.						
159 Lin. Ft. of 3/8" @ 1.5027/Lin. Ft. = 239 Lb.						
60 Lin. Ft. of 1" @ 2.6707/Lin. Ft. = 160 Lb.						
240 Lin. Ft. of 1 1/8" @ 3.4007/Lin. Ft. = 816 Lb.						
486 Lin. Ft. of 1 1/8" @ 4.3037/Lin. Ft. = 2091 Lb.						
Plus 1% ± for overrun = 39 Lb.						
Total = 3860 Lb.						

BAR LIST- ONE APPROACH SLAB (TWO REQ'D - EACH STRUCT.)

MARK	SIZE	NR REQ'D	LENGTH	TYPE	DIMENSIONS	
					l	m
505	3/8"	40	37'-6"	Str.		
701	3/8"	26	19'-11"	Str.		
802	1"	38	1'-0"	Str.		
BAR SUMMARY ③						
1500 Lin. Ft. of 3/8" @ 1.0437/Lin. Ft. = 1564 Lb.						
1514 Lin. Ft. of 3/8" @ 2.0447/Lin. Ft. = 3095 Lb.						
38 Lin. Ft. of 1" @ 2.6707/Lin. Ft. = 101 Lb.						
Plus 1% ± for overrun = 50 Lb.						
Total = 4810 Lb.						

③ Not included in Summary of Quantities or Bridge Totals.

BAR LIST- PIER NO. 2 (NO. 3 SIMILAR) ③

MARK	SIZE	NR REQ'D	LENGTH	TYPE	DIMENSIONS	
					l	m
410	1/2"	39	11'-0"	I	2'-11"	2'-3"
411	1/2"	44	7'-8"	I	1'-9"	1'-9"
507	3/8"	2	36'-0"	Str.		
602	3/8"	28	5'-8"	Str.		
803	1"	20	3'-0"	Str.		
901	1 1/8"	12	3'-6"	Str.		
906	1 1/8"	12	23'-6"	Str.		
1002	1 1/8"	6	36'-0"	Str.		
1003		4	10'-8"			
1004		6	21'-8"			
1005	1 1/8"	6	16'-2"	Str.		
BAR SUMMARY ③						
766 Lin. Ft. of 1/2" @ 0.6687/Lin. Ft. = 512 Lb.						
72 Lin. Ft. of 3/8" @ 1.0437/Lin. Ft. = 75 Lb.						
159 Lin. Ft. of 3/8" @ 1.5027/Lin. Ft. = 239 Lb.						
60 Lin. Ft. of 1" @ 2.6707/Lin. Ft. = 160 Lb.						
324 Lin. Ft. of 1 1/8" @ 3.4007/Lin. Ft. = 1102 Lb.						
486 Lin. Ft. of 1 1/8" @ 4.3037/Lin. Ft. = 2091 Lb.						
Plus 1% ± for overrun = 41 Lb.						
Total = 4220 Lb.						

① Bar Lists and Summaries are for Struct. No. F-15-BP
Bar Lists and Summaries for Struct. No. F-15-BQ are Similar
② Bar List and Summary for Struct. No. F-15-BP Only
③ Bar List and Summary for Struct. No. F-15-BQ Only

COLORADO
DEPARTMENT OF HIGHWAYS

BENDING DIAGRAMS & BAR LIST

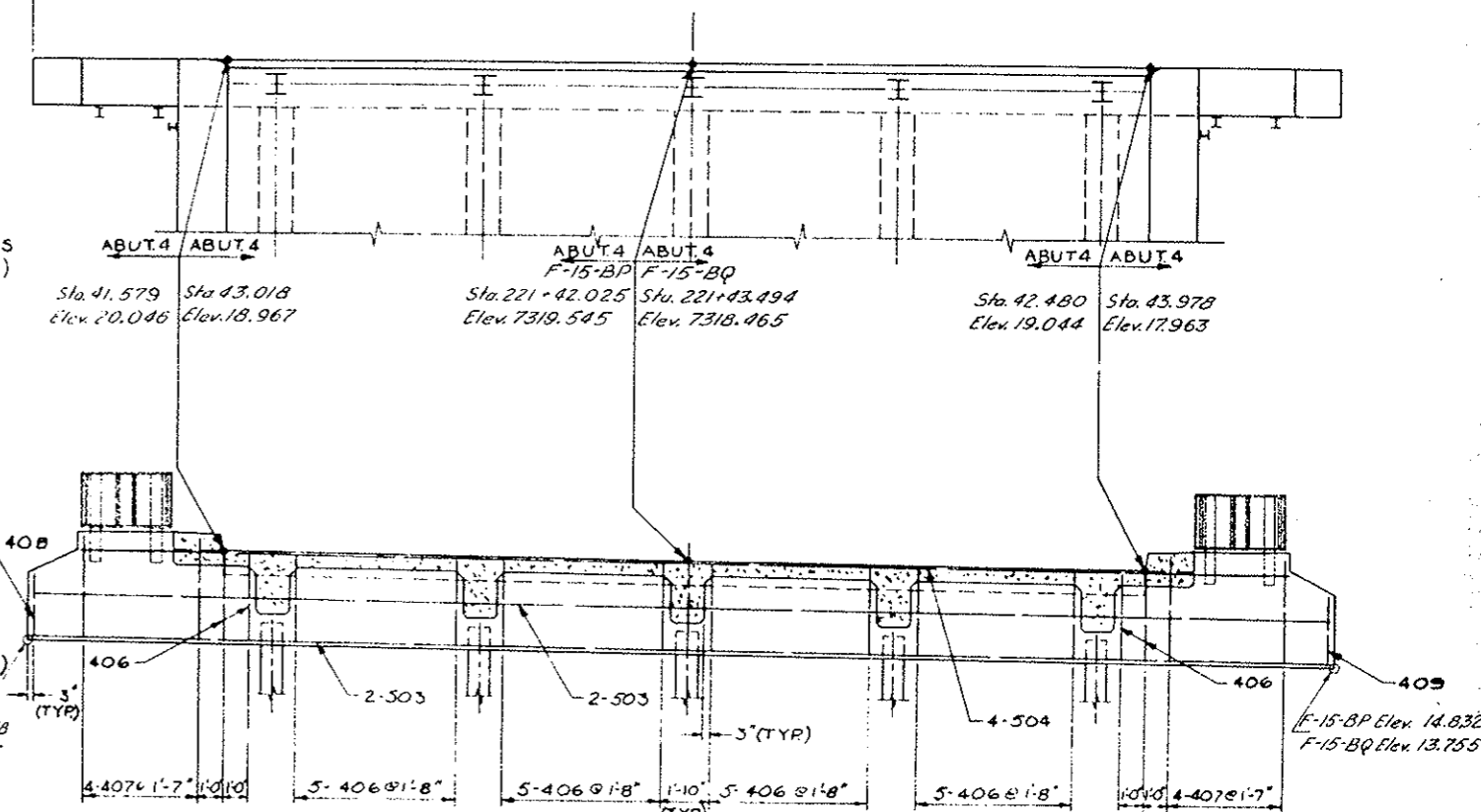
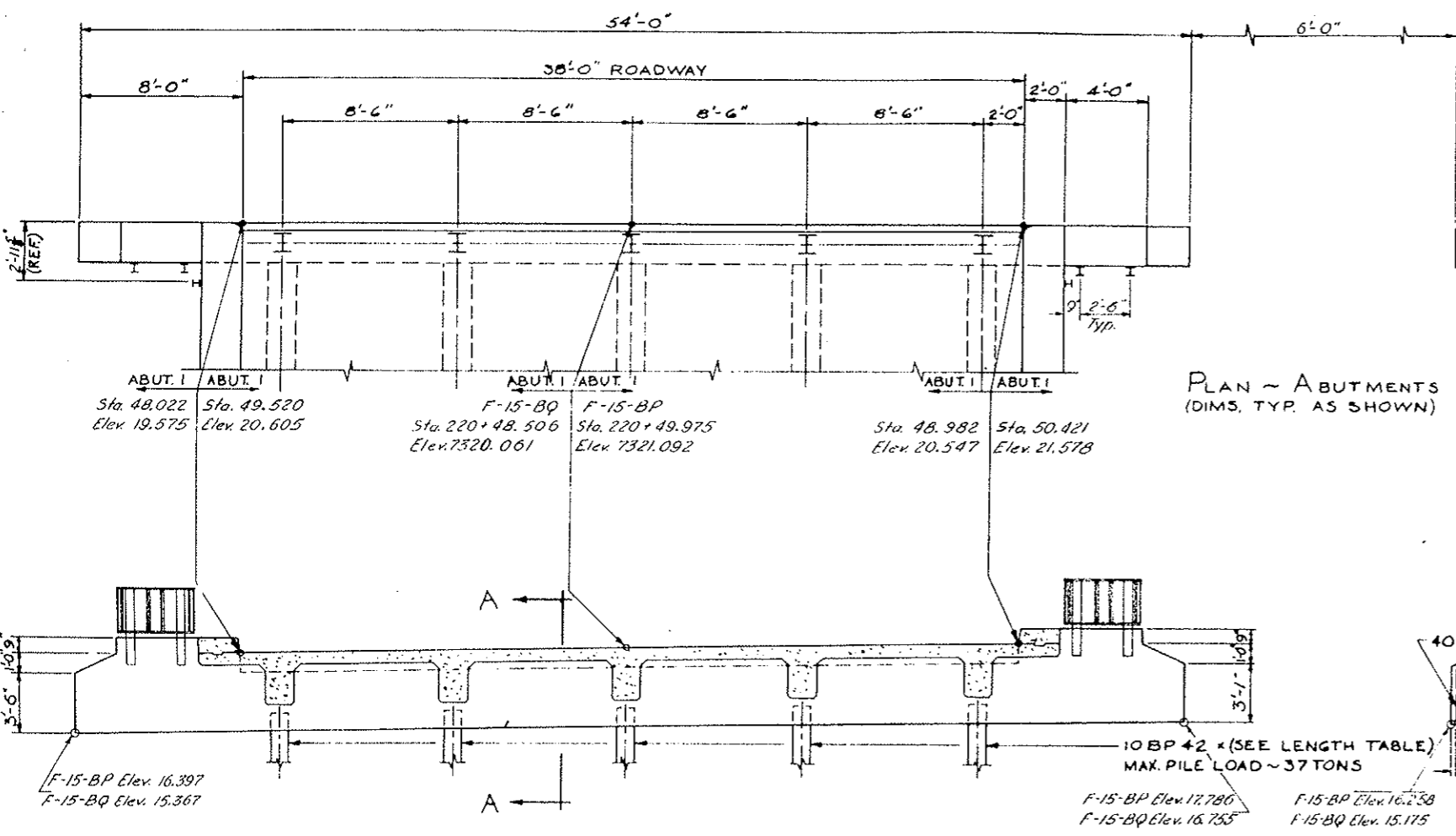
Across Summit Road
Sta. 221+42.390

Near Summit Springs Sec. 35 T. 35 R. 20W

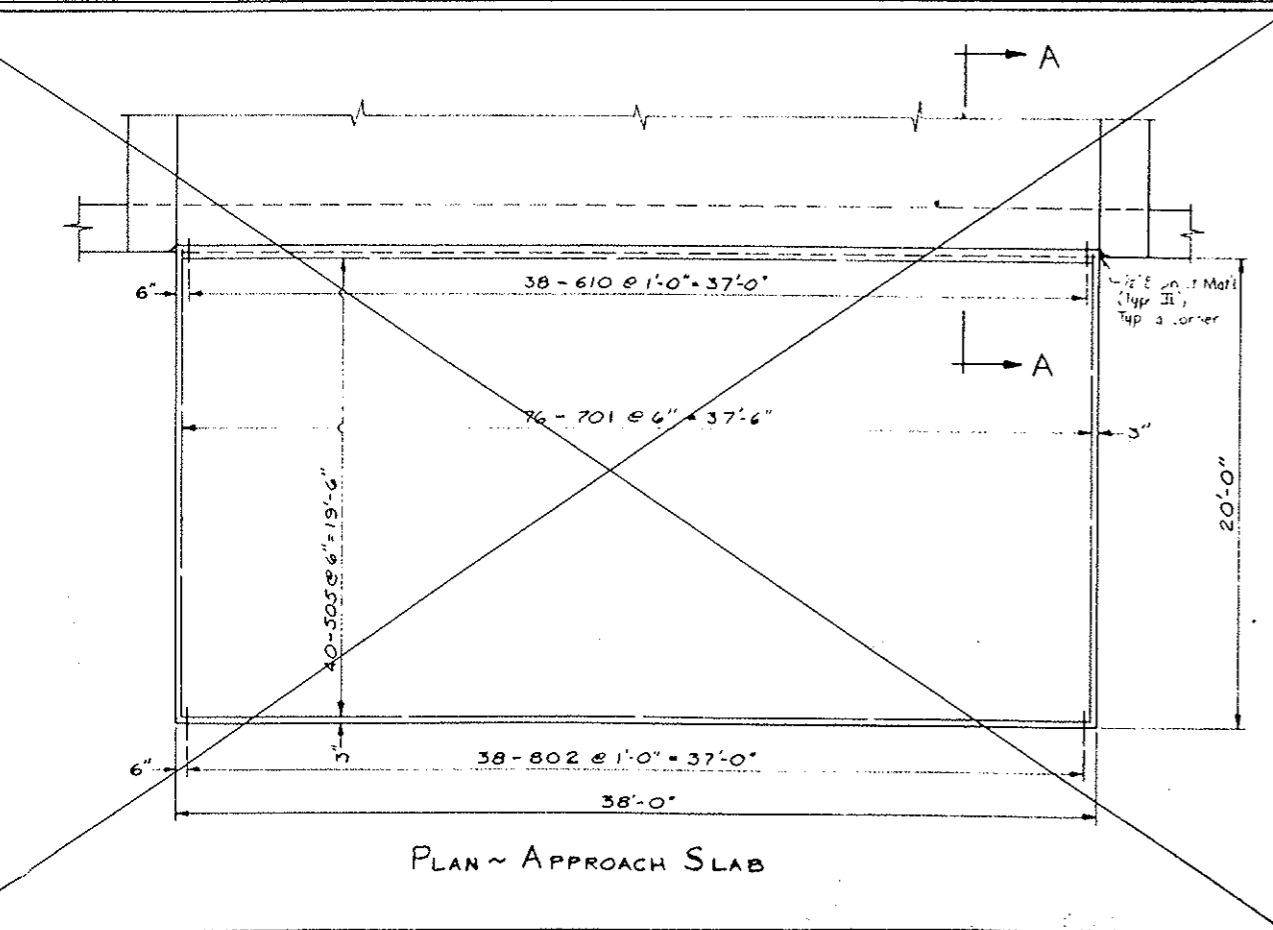
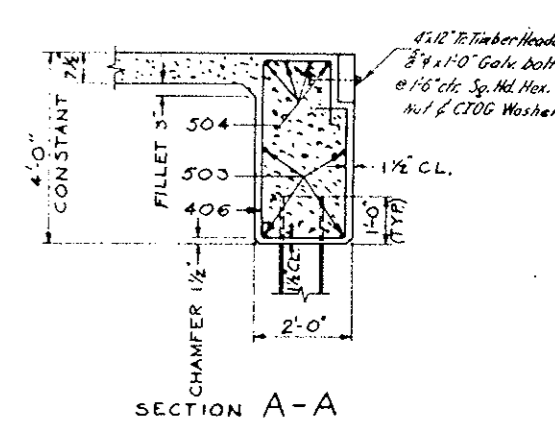
Designed by J.B. Approved by J.B. Lindell
Checked by J.B. Bridge Engineer
Date: April 1, 1957

* STATION 220+49.610 to 221+42.390 (F-15-BP)
STATION 220+48.875 to 221+43.125 (F-15-BQ)
STRUCTURE NO. F-15-BP West Bound
STRUCTURE NO. F-15-BQ East Bound

PUB. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	F-70-3(4) 250	29	



STR	ABUT	PILE LENGTH
F-15-BP	No. 1	16'-0"
F-15-BP	No. 4	19'-0"
F-15-BQ	No. 1	20'-0"
F-15-BQ	No. 4	20'-0"



Approved by *[Signature]*
Bridge Engineer

Checked by *[Signature]*
Date: *Sept. 1, 1957*

* STATION 220+49.610 to 221+42.390 (F-15-BP)
STATION 220+48.875 to 221+43.125 (F-15-BQ)
STRUCTURE No. F-15-BP West Bound
STRUCTURE No. F-15-BQ East Bound

COLORADO
DEPARTMENT OF HIGHWAYS
ABUTMENT DETAILS

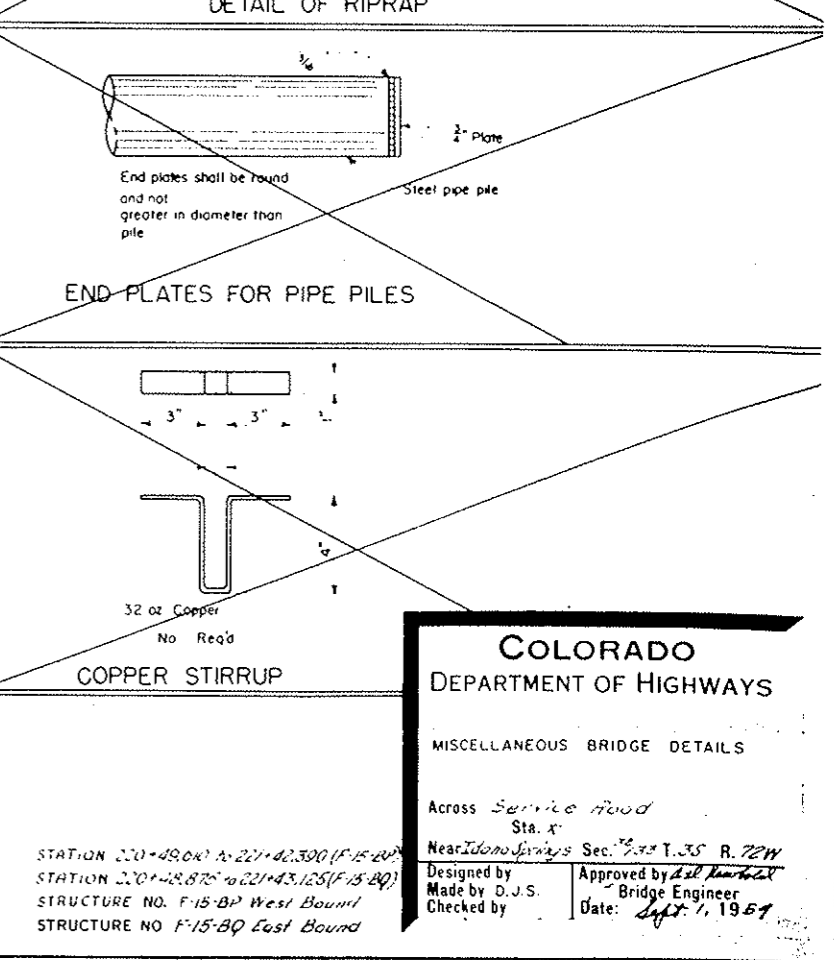
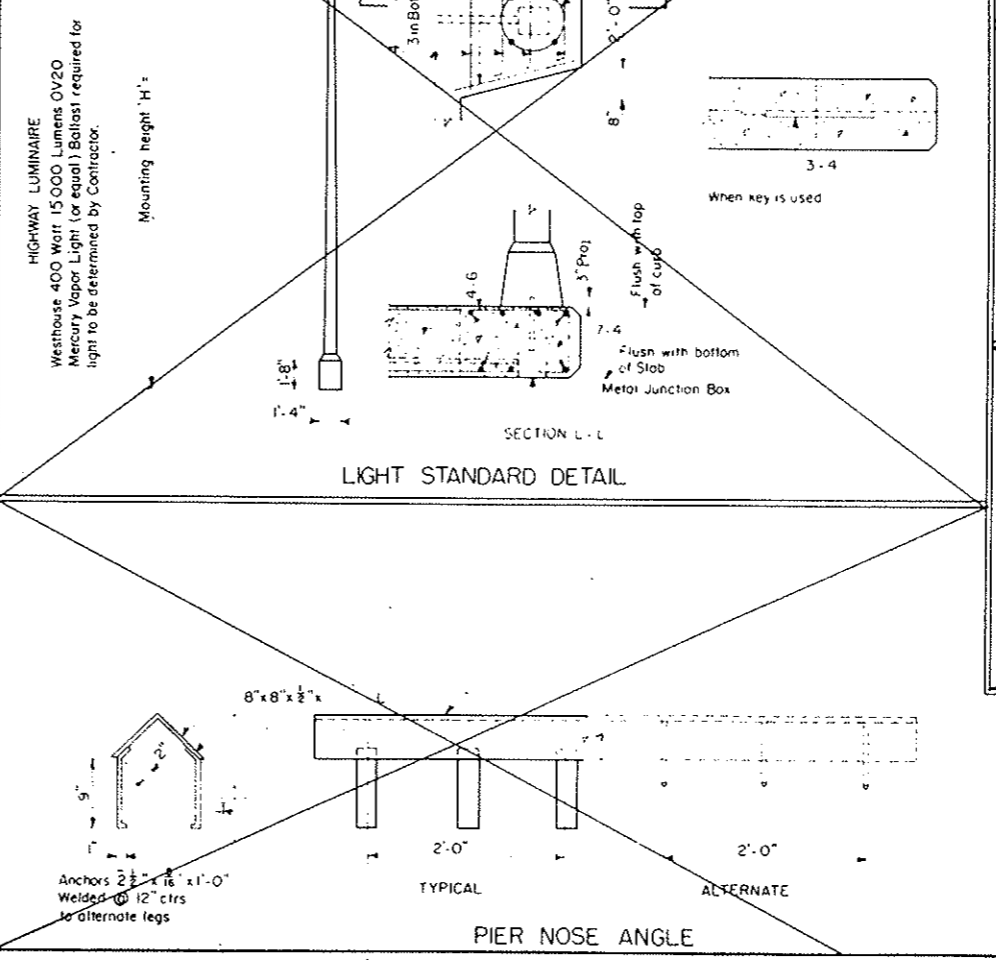
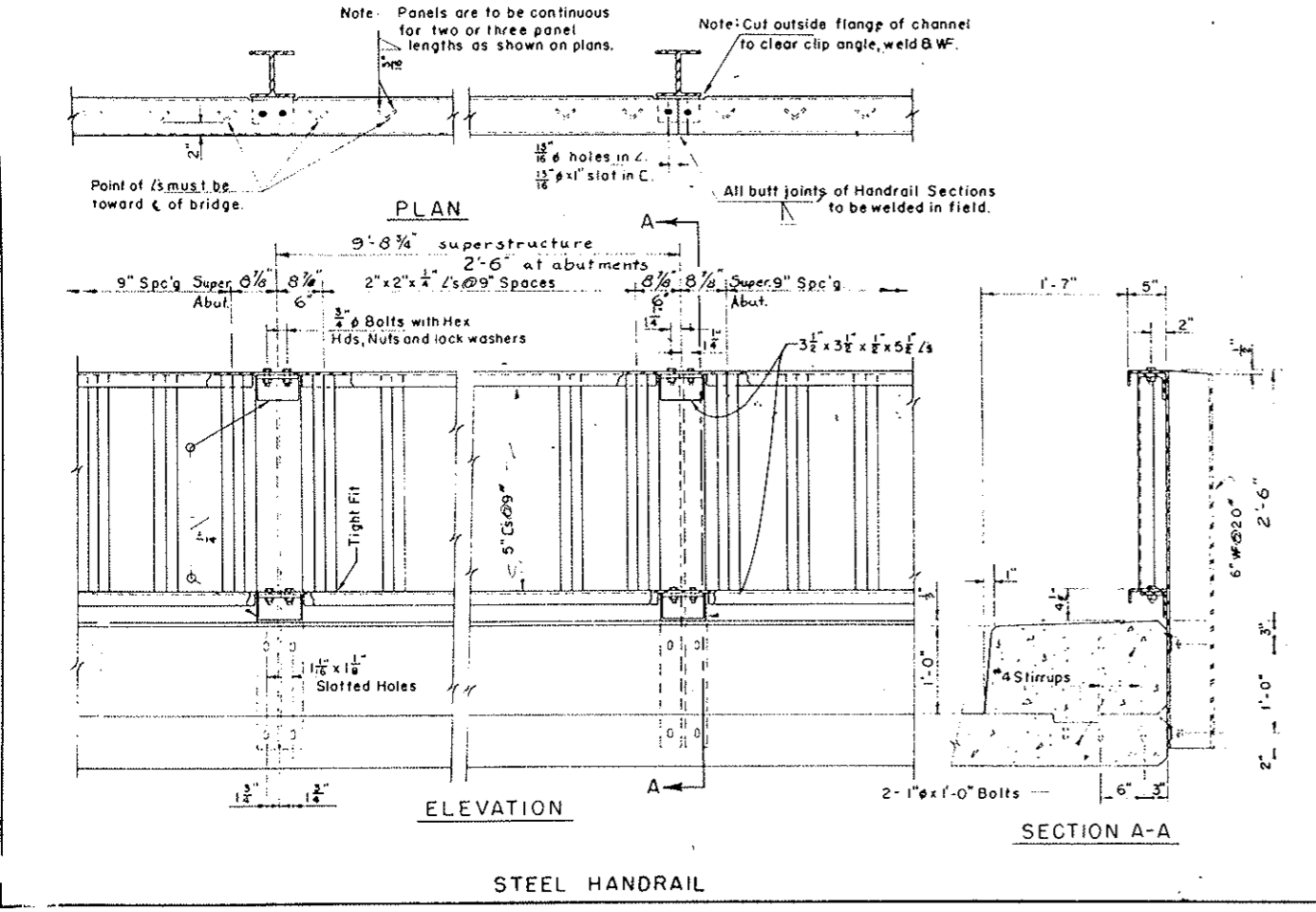
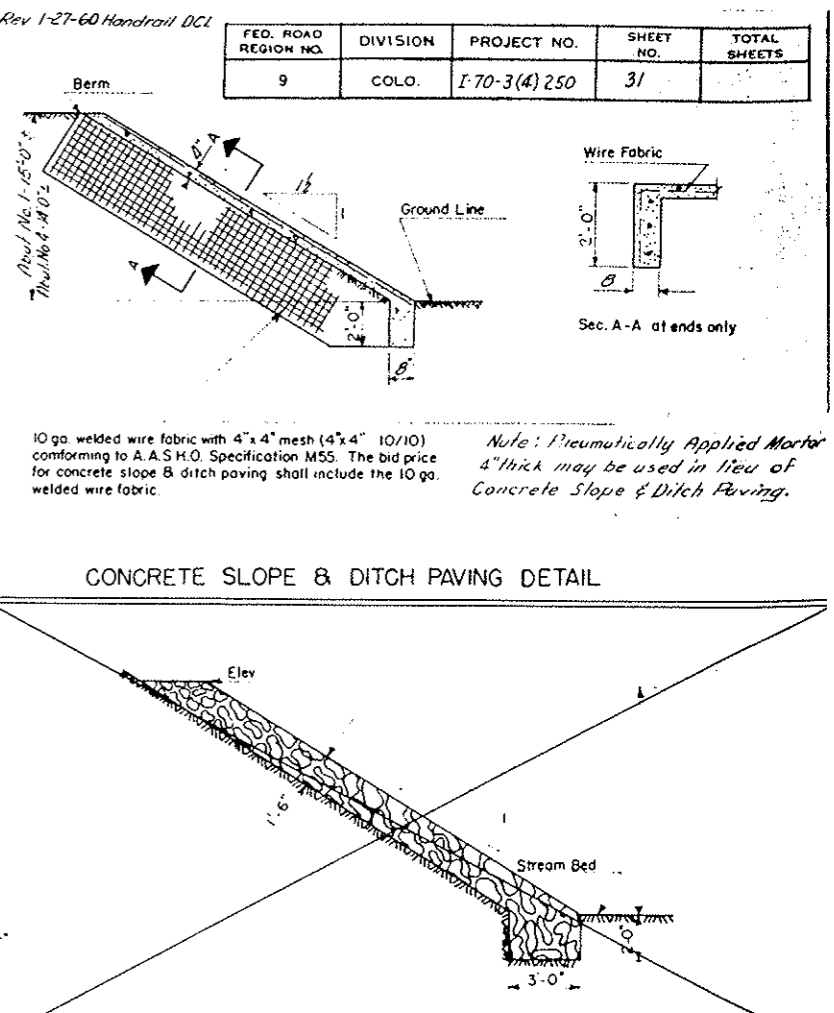
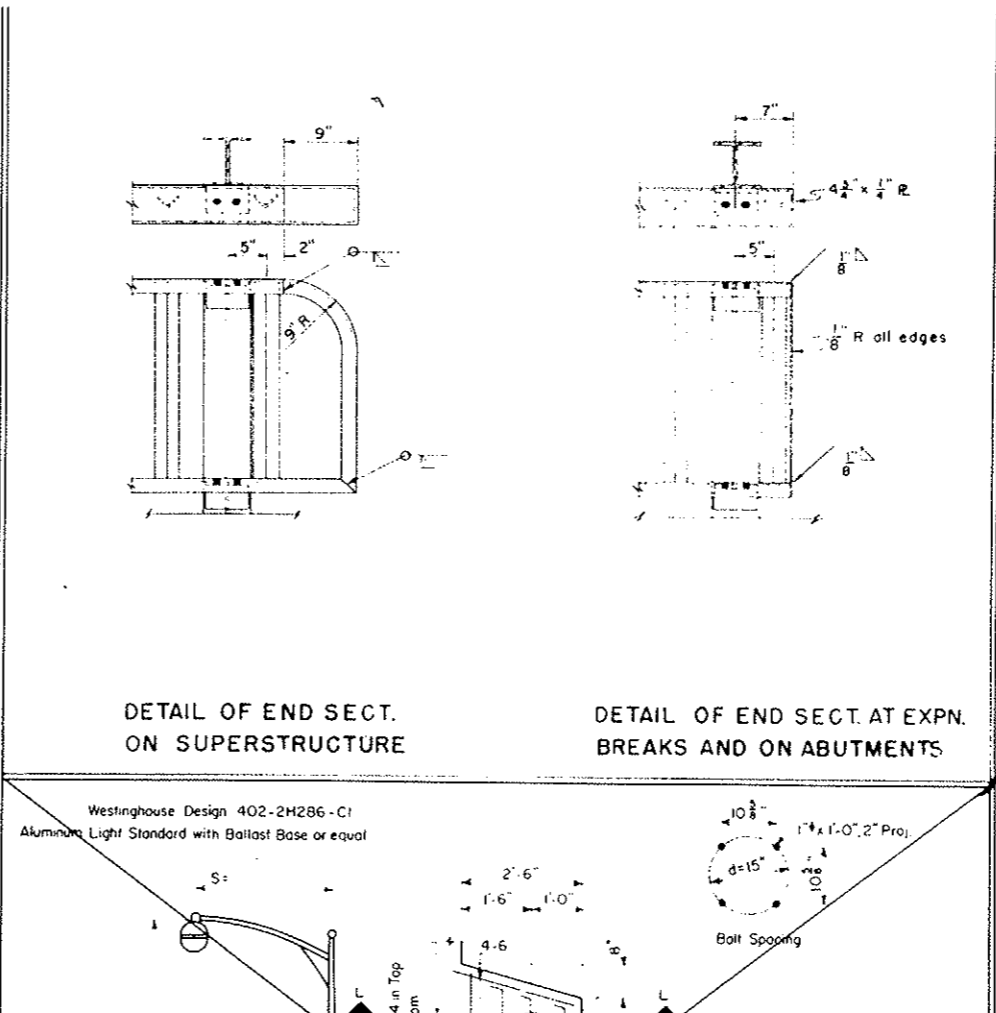
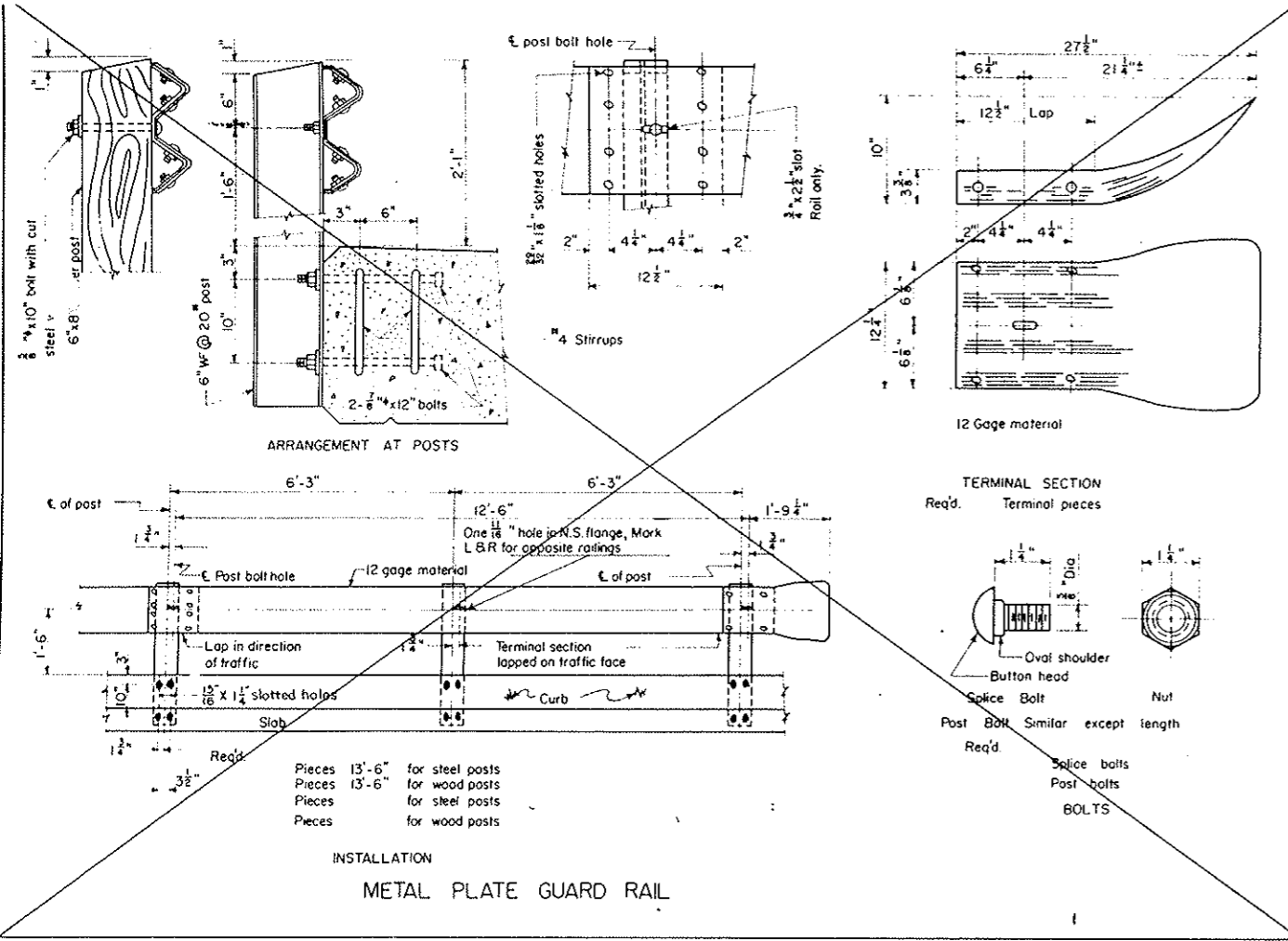
Across *Service Road*

Sta. *X*
Near *Idaho Springs* 3 1/2 mi. S. 221

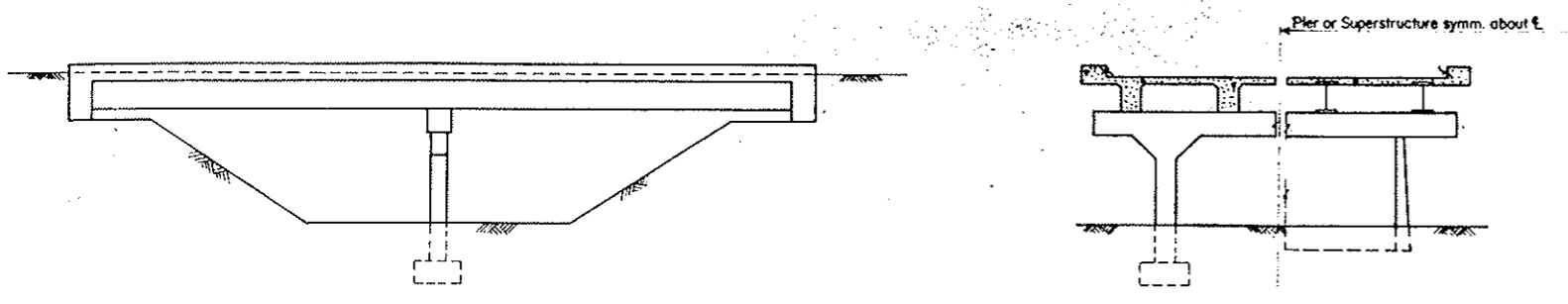
Designed by *[Signature]*
Made by *[Signature]*
Checked by *[Signature]*

Approved by *[Signature]*
Bridge Engineer

Date: *Sept. 1, 1957*

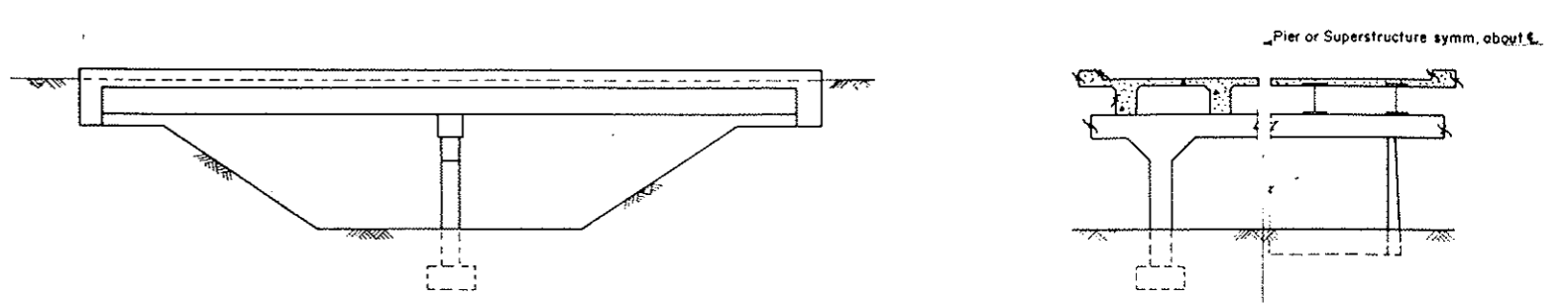


FED. ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	I-70-3(4) 250	32	



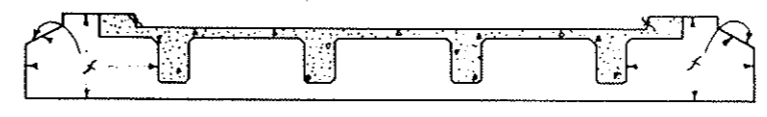
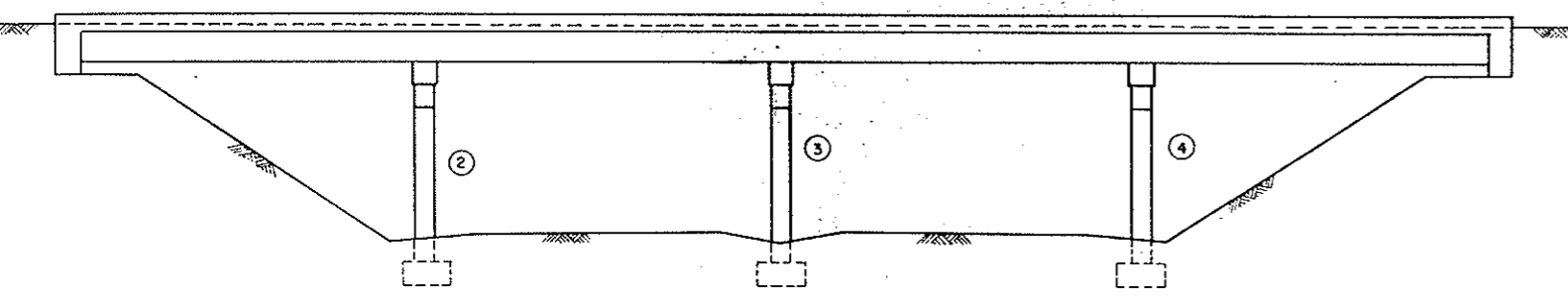
PIER AND SUPERSTRUCTURE

RURAL STREAM CROSSING

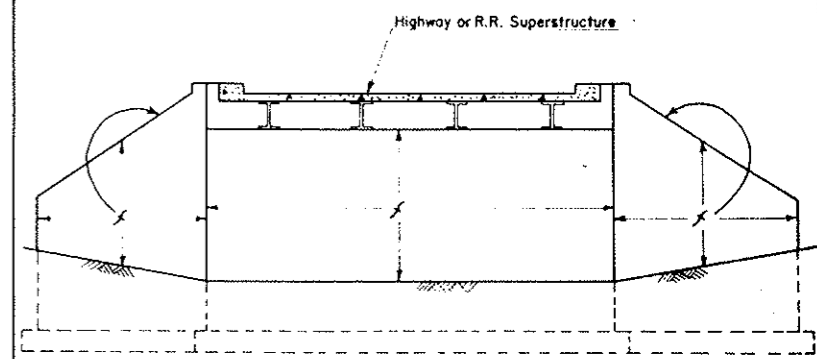


PIER AND SUPERSTRUCTURE

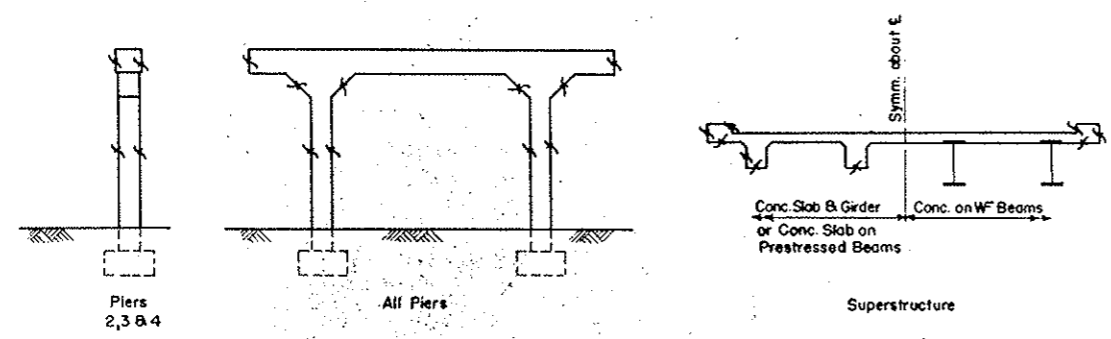
URBAN STREAM CROSSING OR NEAR URBAN AREA



STUB ABUTMENTS
(Underpass Only)



CANTILEVER ABUTMENTS
(Underpass Only)



In case of round columns the whole column shall receive Class "I" finish on all Piers.

UNDERPASS

COLORADO
DEPARTMENT OF HIGHWAYS

DETAILS SHOWING PORTIONS OF
STRUCTURE TO RECEIVE CLASS
"I" SURFACE FINISH.

Across: Various Locations

Near *Idaho Spgs.* Sec. T. R.

Designed by A.D.M. Approved by *W.D. Kautz*
Made by R.R.A.-J.B. Bridge Engineer
Checked by Date: *Sept. 1, 1957*

STRUCTURE NO. _____