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16.12

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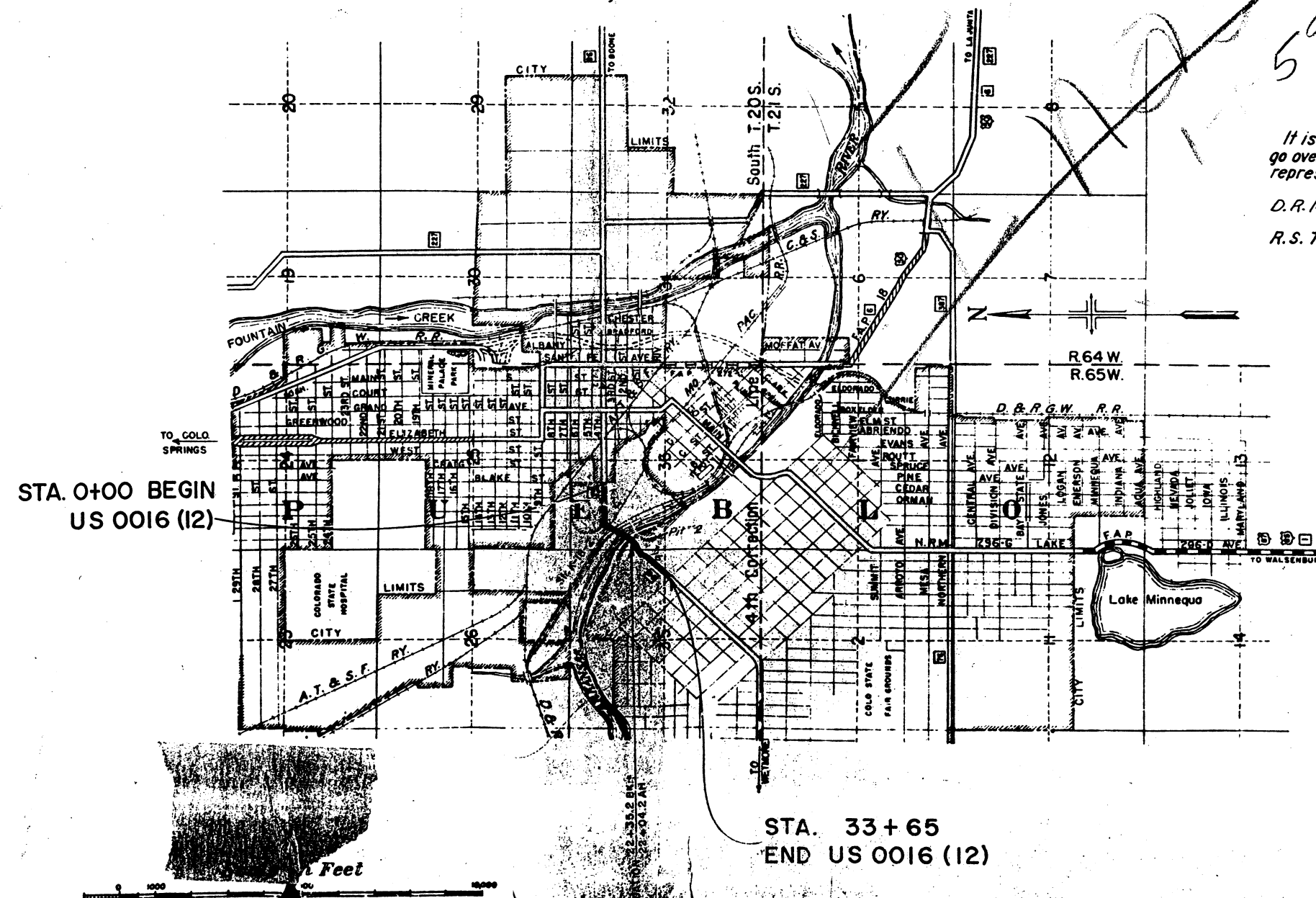
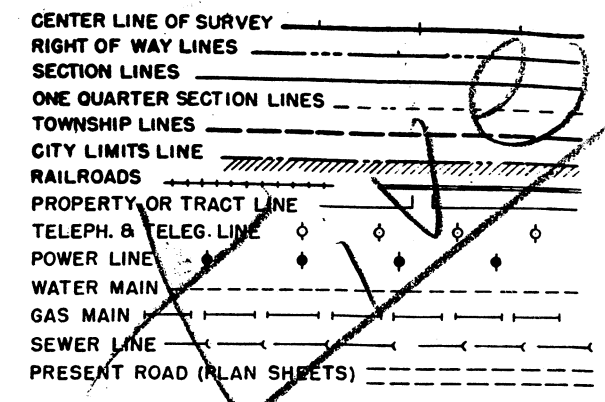
TABULATION OF LENGTH & DESIGN

STATION	OUTSIDE PUEBLO		INSIDE PUEBLO	
	Roadway Lin. Ft.	Bridge Lin. Ft.	Roadway Lin. Ft.	
0+00 Begin US 0016 (12) (City Limit)	840.6			
1+40.6 Bridge End (18+50 City Limits)		1069.0		
9+09.6 Bridge End			325.6	
2+35.2 BK. = EQUATION				
2+04.2 Ah.			1160.8	
33+65 End US 0016 (12)				
TOTALS	840.6	1069.0	1486.4	
SUMMARY				
Total Roadway Outside Pueblo US 0016 (12)	Lin. Ft.	840.6	Miles	0.159
Total Bridge Outside Pueblo US 0016 (12)	Lin. Ft.	1069.0	Miles	0.202
Total Roadway Inside Pueblo US 0016 (12)	Lin. Ft.	1486.4	Miles	0.282
TOTAL US 0016 (12)		3396.0		0.643
DESIGN DATA				
Maximum Grade		4.32 %		
Maximum Degree of Curve		10°		
Minimum N.P.S.D. Horizontal		550'		
Minimum N.P.S.D. Vertical		500'		
Maximum Design Speed		40 M.P.H.		
Bridge Loading		H-20, S-16-44		

COLORADO
DEPARTMENT OF HIGHWAYS
PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. US 0016 (12)
STATE HIGHWAY NO. 96
PUEBLO COUNTY

SCALES OF ORIGINAL TRACINGS
ON PLAN 1"=50'
ON PROFILE 1"=50' HORIZONTAL
1"=10' VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
GROSS LENGTH OF PROJECT } 3396.0 FEET = 0.643 MILES
NET LENGTH OF PROJECT }

CONVENTIONAL SIGNS



59

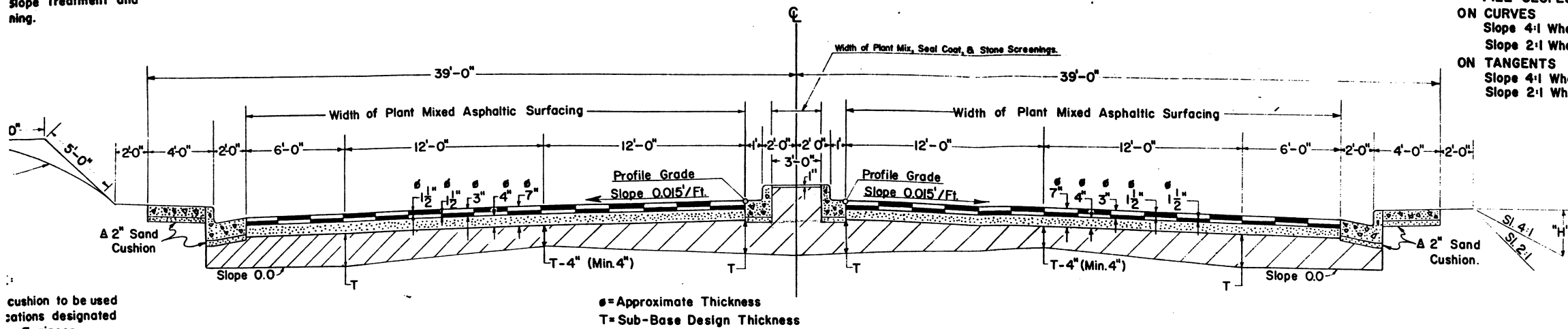
NOTICE TO BIDDERS
It is recommended that bidders on this Project go over the plan details with one of the following field representatives of the Department.
D.R. Mitchell, Construction Engineer, Pueblo, Colorado.
R.S. Tillson, Resident Engineer, Pueblo, Colorado.
Home Phone Lincoln 4-0649

COLORADO
DEPARTMENT OF HIGHWAYS

APPROVED:
Mark B. Waters 3/25/44
CHIEF ENGINEER DAY

TYPICAL SECTION (MAIN ROADWAY)

Standard M-2-EM For Slope Treatment and Ring.



FILL SLOPES:
ON CURVES
 Slope 4:1 Where "H" is 5' or less
 Slope 2:1 Where "H" is over 5'
ON TANGENTS
 Slope 4:1 Where "H" is 3' or less
 Slope 2:1 Where "H" is over 3'

APPROXIMATE 6" (RAMP) AND 7" (MAIN ROADWAY) COMPACTED THICKNESS OF GRAVEL OR CRUSHED ROCK SURFACING SHALL BE PLACED IN SEPARATE COURSES AT THE FOLLOWING RATES PER 100 LIN. FT. OF ROADWAY:

	TOP LAYER PLANT MIX	BOTTOM LAYER PLANT MIX	BOTTOM COURSE SURFACING	SURFACING FOR SHOULDER AREAS
MAIN ROADWAY	*54.5 tons	*54.5 tons	134 tons	-
RAMP	*37 tons	-	82 tons	19 tons

* INCLUDES ASPHALT.

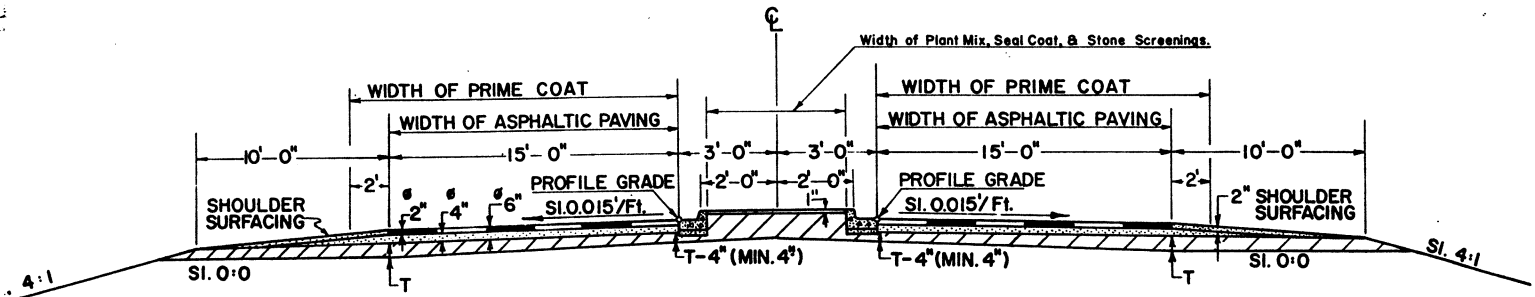
cushion to be used at locations designated by the Engineer.

• = Approximate Thickness
 T = Sub-Base Design Thickness

MATERIAL ABOVE THE SUBGRADE IS TO BE CONSTRUCTED OF SUB-BASE MATERIAL AT LOCATIONS DESIGNATED IN SUB-BASE MATERIAL TABULATION. ESTIMATED QUANTITIES INVOLVED IN THIS OPERATION AND THICKNESS OF MATERIAL REQUIRED ARE TABULATED IN THE SUB-BASE MATERIAL PLAN.

NOTE: BOTTOM LAYER OF BITUMINOUS SURFACING SHALL BE COMPLETED FOR FULL WIDTH BEFORE TOP LAYER OF BITUMINOUS SURFACING IS PLACED. PAVING JOINTS IN TOP LAYER WILL OVERLAP MINIMUM ONE (1) FOOT OVER JOINTS IN BOTTOM LAYER.

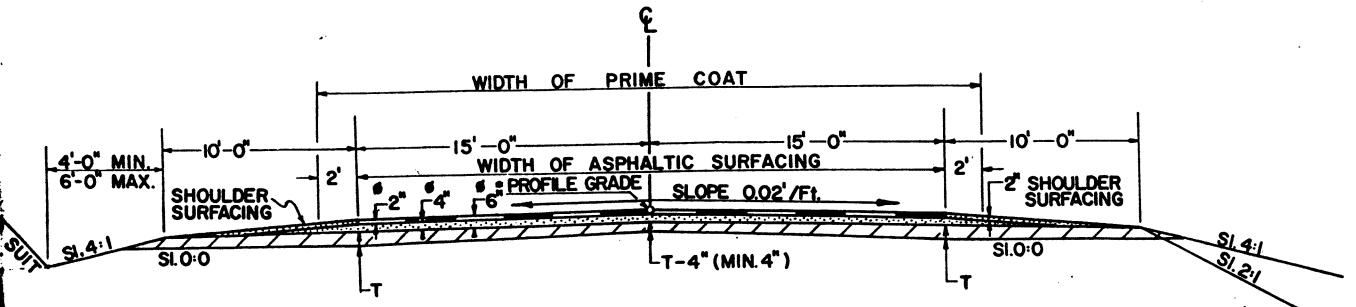
TYPICAL SECTION RAMP LEFT OF STA. 3+33 (MAIN ROADWAY) STA. 0+60 TO 2+50*



* UNIFORM TRANSITION BETWEEN STA. 2+50 & STA. 6+50

DEPTH AND WIDTH OF THE SIDE DITCH SHALL BE DETERMINED WHERE NECESSARY IN ORDER TO PROVIDE PROPER DRAINAGE AND/OR ENTRANCE TO DRAINAGE STRUCTURES.

TYPICAL SECTION RAMP STA. 6+50* TO 11+



EXCAVATION OR BORROW BELOW 4:1 AND/OR 10:1 WILL NOT BE PERMITTED.

* SUPERELEVATION TO BE ROTATED AT CENTER LINE. PROFILE GRADE (SEE CROSS SECTIONS).

GENERAL NOTES

THIS PROJECT IS TO BE CONSTRUCTED IN CONFORMITY WITH THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS, ADOPTED JUNE 1, 1952.

ALL QUANTITIES ON PRELIMINARY PLANS ARE TO BE CONSIDERED APPROXIMATE ONLY.

ALL SIGNS, UTILITY POLES, GAS LINES, SEWER LINES, AND WATER LINES, MANHOLES, & VALVES, WHICH ENCR OACH ON OR INTERFERE WITH CONSTRUCTION, SHALL BE RELOCATED OR ADJUSTED BY THE OWNERS.

ALL CURVES ARE TO BE SUPERELEVATED AS PROVIDED BY THE STANDARD SUPERELEVATION SHEETS INCLUDED WITH THE PLANS EXCEPT AS FOLLOWS:

ALL CURVES ON THE RAMP SHALL BE SUPERELEVATED FOR 5 DEGREES. THE CURVES ON THE MAIN ROADWAY SHALL BE SUPERELEVATED AS FOLLOWS:

LOCATION	DEGREE OF CURVE	USE SUPERELEVATION FOR:
3+ TO 9+	10 DEGREE	5 DEGREE
18+ TO 22+	6 "	5 "
22+ TO 27+	8 "	REVERSE CROWN SLOPE RT. NORMAL CROWN, LT. NORMAL CROWN
27+ TO 31+	5 "	

THE FORCE ACCOUNT ITEM, "CLEARING OF BUILDING SITES, INCLUDING REMOVAL OF FOUNDATIONS AND APPURTENANCES," SHALL INCLUDE REMOVAL OF ALL FOUNDATIONS, WELLS, OUTHOUSES AND OTHER APPURTENANCES NOT REMOVED BY THE OWNERS, AND ANY NECESSARY BACKFILLING OF CELLARS, CESE POOLS, WELLS, ETC., TO PROVIDE NEAT ROADSIDE CONDITIONS. IT IS ESTIMATED THAT THIS ITEM APPLIES AT THE FOLLOWING LOCATIONS:

0+50	RT. & LT.
5+50	LT.
19+50 TO 20+50	LT.
22+30 TO 25+10	RT. & LT.
27+70 TO 28+90	LT.

FOR PRELIMINARY PLAN QUANTITIES OF ASPHALTIC ROAD MATERIALS, THE FOLLOWING RATES OF APPLICATION WERE USED:

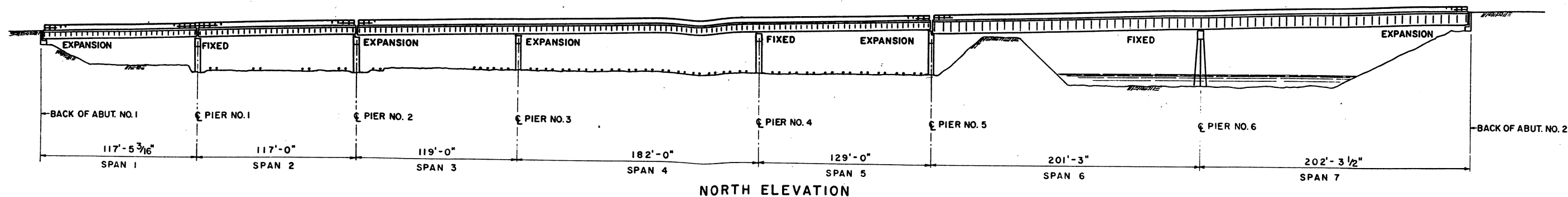
PRIME COAT MC (OVER CONCRETE DECK)	0.10 Gals per Sq. Yd.
PRIME COAT MC	0.40 Gals per Sq. Yd.
PAVING ASPHALT (100-120 PENETRATION)	0.008 by Weight
SEAL COAT RC	0.20 Gals. per Sq. Yd.
STONE SCREENINGS	16 Lbs. per Sq. Yd.

RATE OF APPLICATION AND GRADE OF ASPHALTIC MATERIAL SHALL BE AS DETERMINED BY THE ENGINEER AT TIME OF APPLICATION.

STREET INTERSECTIONS SHALL BE ASPHALTIC PAVED AS SHOWN ON SHEET NO. 7

* REQUIRED FOR DESIGNATED PIT

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	12	



DESIGN SPECIFICATIONS

1953 AASHO AND SUBSEQUENT REVISIONS
 LIVE LOAD: H20-S16-44
 f_c : 1200 P.S.I., $n=10$
 f_s (STRUCTURAL) 18,000 P.S.I.
 WEIGHT OF EARTH: 120 LBS. PER CU. FT.
 EQUIVALENT FLUID PRESSURE: 30 LBS. PER CU. FT.
 f_s : (REINFORCING) 20,000 P.S.I.
 MAX. PILE LOAD=35 TONS
 SOIL PRESSURE=4.5 TONS PER SQ. FT. ON SHALE

GENERAL NOTES

- ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS ADOPTED JUNE 1, 1952.
- SOUNDINGS AND DEPTH OF FOOTINGS SHOWN ACCORDING TO THE BEST AVAILABLE DATA. IF ESSENTIALLY DIFFERENT CONDITIONS ARE ENCOUNTERED, THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF RE-DESIGN IS NECESSARY.
- THAT PORTION OF FOOTINGS WHICH EXTEND INTO SOUND ROCK OR SHALE SHALL BE PLACED WITHOUT FORMING
- ALL CONCRETE SHALL BE CLASS "A" AND AIR ENTRAINED AS SPECIFIED.
- CHAMFER ALL EXPOSED CORNERS $3/4$ " EXCEPT AS NOTED.
- ALL REINFORCING SHALL BE INTERMEDIATE GRADE DEFORMED BARS CONFORMING TO AASHO SPECIFICATIONS M31 & M137 (ASTM DESIGNATIONS AIS & A305).
- ALL REINFORCING BARS SHALL BE TAGGED WITH THE STRUCTURE NUMBER AND MARK.
- ALL DIMENSIONS ON BAR DETAILS ARE OUT TO OUT.
- ALL HOOKS AND BENDS IN BARS SHALL CONFORM TO A.C.I. STANDARD 315A-53.
- MAIN BARS SHALL NOT BE SPLICED EXCEPT WHERE SPECIFIED ON PLANS.
- REINFORCING STEEL CLEARANCE:
 1" CLEAR IN DECK
 3" CLEAR IN SUBSTRUCTURE EXCEPT AS NOTED.
- ALL STEEL RAILINGS SHALL RECEIVE ONE SHOP COAT OF ZINC CHROMATE AND TWO FIELD COATS OF ALUMINUM PAINT.
- SPECIFICATIONS: DESIGN, MATERIALS, AND WORKMANSHIP SHALL BE DONE ACCORDING TO THE AASHO SPECIFICATIONS FOR 1953 AND ANY SUBSEQUENT REVISIONS THEREOF.
- ALL RIVETS SHALL BE $7/8$ " ϕ AND POWER DRIVEN.
- HOLES: FIELD SPLICE CONNECTIONS TO BE SUBPUNCHED $1 1/16$ " AND REAMED TO $1 5/16$ " WITH ADJACENT SECTIONS ASSEMBLED AND BLOCKED TO DESIGNATE CAMBER.
- WELDING: ARC WELDING SHALL BE DONE IN ACCORDANCE WITH THE CURRENT A.W.S. SPECIFICATIONS FOR HIGHWAY AND RAILWAY BRIDGES.
- FIELD CONNECTIONS: HIGH STRENGTH BOLTS MAY BE USED IN PLACE OF FIELD RIVETS BUT AT NO ADDITIONAL EXPENSE TO THE COLORADO DEPT. OF HIGHWAYS. THE BOLTS SHALL BE HIGH TENSILE STEEL AND SHALL BE ASSEMBLED IN ACCORDANCE WITH SPECIFICATIONS APPROVED BY THE RESEARCH COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS OF THE ENGINEERING FOUNDATION JAN. 31, 1951 OR THE LATEST REVISION THEREOF. BOLTS SHALL BE ASSEMBLED WITH A HARDENED STEEL WASHER UNDER EACH HEAD AND NUT.
- PAINT: ALL STRUCTURAL STEEL, EXCEPT STEEL PILES, SHALL RECEIVE ONE SHOP COAT OF ZINC CHROMATE AND TWO FIELD COATS OF ALUMINUM PAINT ACCORDING TO THE COLORADO DEPT. OF HIGHWAY SPECIFICATIONS. NO PAINT TO BE USED BETWEEN SHOP RIVETED MEMBERS.
- CONCRETE SURFACES ON BOTH FACES OF ALL CURBS SHALL RECEIVE CLASS "I" SURFACE FINISH
- FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIPLAP OR TONGUE AND GROOVE LUMBER S 3S UNLESS FACED WITH PANEL BOARD.
- WHEN EXCAVATING FOR FOOTINGS, THE FINAL ONE FOOT IN DEPTH SHALL BE DONE BY HAND LABOR.
- ALL PILING SHALL BE DRIVEN TO A MINIMUM RESISTANCE OF 70 TONS.
- 12 BP 53 MAY BE SUBSTITUTED FOR THE PILING SHOWN BUT AT NO ADDITIONAL EXPENSE TO THE COLORADO DEPT. OF HIGHWAYS. ALL PILING IN ANY ONE PILE GROUP SHALL BE THE SAME.

SUMMARY OF BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	AMOUNT
11 a	REMOVAL OF PRESENT BRIDGE STA. 9+ TO STA. 18+ RT.	LUMP SUM	•
14 f	STRUCTURAL EXCAVATION, ROCK	CU. YD	53
14 g	STRUCTURAL EXCAVATION, COMMON	CU. YD	1848
16 ax	STRUCTURAL BACKFILL, CLASS I	CU. YD	1279
16 c	MECHANICAL TAMPING	HR	321
46 a	CLASS "A" CONCRETE	CU. YD	3340
47	REINFORCING STEEL	LB	452,682
48	STRUCTURAL STEEL	LB	4,887,020
61 ay	STEEL PIPE PILING (12 1/4" O.D. x 0.179" THICK)	LIN. FT.	3724
44 a	MISCELLANEOUS UNTREATED TIMBER	M ft. bm.	.496
60 x v	DRILLING HOLES TO FACILITATE PILE DRIVING	LIN. FT.	865
90 a	1/4" ELECTRICAL CONDUIT WITH JUNCTION BOXES	LIN. FT.	1475
80 c	SHEET COPPER (32 oz.)	LB.	136
89 a	DRAIN PIPE (CONCRETE FLOOR) (4" ϕ X 4'-0")	EA.	46
•	1/2" EXPANSION JOINT MATERIAL, TYPE III	SQ. FT.	1200
•	3/4" EXPANSION JOINT MATERIAL, TYPE III	SQ. FT.	53
91 c	PIPE RAILING (1 1/2")	LIN. FT.	301

- INCLUDES 85,600 LBS. FOR BRIDGE STEEL RAILING.
- EXPANSION JOINT MATERIAL SHALL BE ACCORDING TO A.A.S.H.O. SPECIFICATION M-153-54 AND OF THE TYPE SHOWN & TO BE INCLUDED IN THE BID PRICE OF CLASS A CONCRETE.
- HOLES TO FACILITATE PILE DRIVING SHALL NOT BE DRILLED UNTIL DEFINITELY DETERMINED BY THE ENGINEER THAT THEY ARE NECESSARY.

17 c	ROLLING WITH FLAT WHEELED ROLLER (TANDEM)	hour	15
17 e	ROLLING WITH RUBBER TIRED ROLLER (ONE (1) UNIT)	hour	2
17 h	FURNISHING FLAT WHEELED ROLLER (TANDEM)	EACH	0.6
17 j	FURNISHING RUBBER TIRED ROLLER (ONE (1) UNIT)	EACH	0.3
30 x	ASPHALTIC ROAD MATERIAL MC (PRIME)	GAL	665
32 ax	PLANT MIXED ASPHALTIC SURFACING	TON	724

*** INDEX TO DRAWINGS**

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7	ABUTMENT NO. 2
8	PIER NO. 1
9	PIER NO. 2
10	PIER NO. 3 AND 4
11	PIER NO. 5
12	PIER NO. 6
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25	BEARING DEVICES
26	EXPANSION DEVICES
27	RAILING DETAILS
28	STAIRWAY DETAILS

* USE SHEET NUMBERS AT BOTTOM OF RIGHT SIDE OF BRIDGE SHEETS

Reviewed by *Ch. Roedel* 3-5-58

COLORADO DEPARTMENT OF HIGHWAYS
 PUEBLO, COLORADO

4 TH ST BRIDGE

INDEX, SUMMARY AND NOTES

STRUCTURE NO. K-16-2

Ken R. White

KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO

SHEET 1 OF 28 SHEETS

NOTE: PLACE DECK DRAINS SO THEY WILL NOT DISCHARGE INTO THE RAILROAD FACILITIES BELOW.

Rev. JVG. 12-16-57 Footing Elev. Piers #3+4

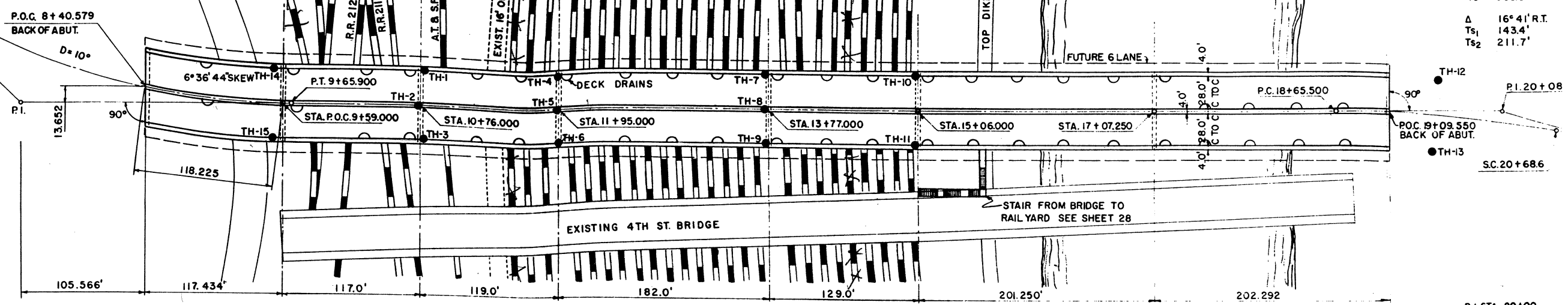
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	13	

Ac 32° 59'
Dc 10° 00'
Tc 169.6'
Lc 329.8'
Rc 573.0'

Δ 42° 59' L.T.
Ts1 322.4'
Ts2 229.9'

Δc 12° 11'
Dc 6°
Tc 101.9'
Lc 203.1'
Rc 955.0'

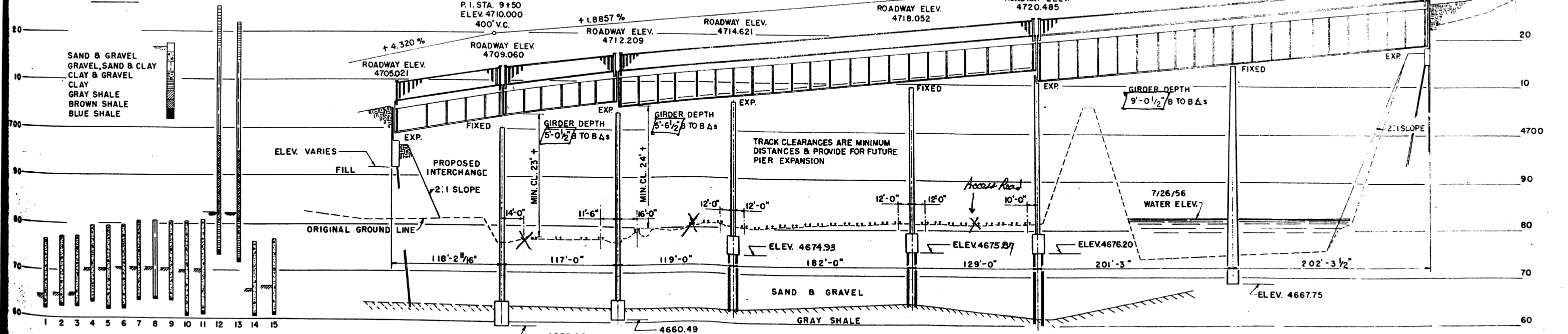
Δ 16° 41' R.T.
Ts1 143.4'
Ts2 211.7'



GENERAL PLAN
SCALE: 1" = 50'-0"

LEGEND

- SAND & GRAVEL
- GRAVEL, SAND & CLAY
- CLAY & GRAVEL
- CLAY
- GRAY SHALE
- BROWN SHALE
- BLUE SHALE



ELEVATION
HORIZONTAL SCALE: 1" = 50'-0"
VERTICAL SCALE: 1" = 10'-0"

LOG OF TEST HOLES

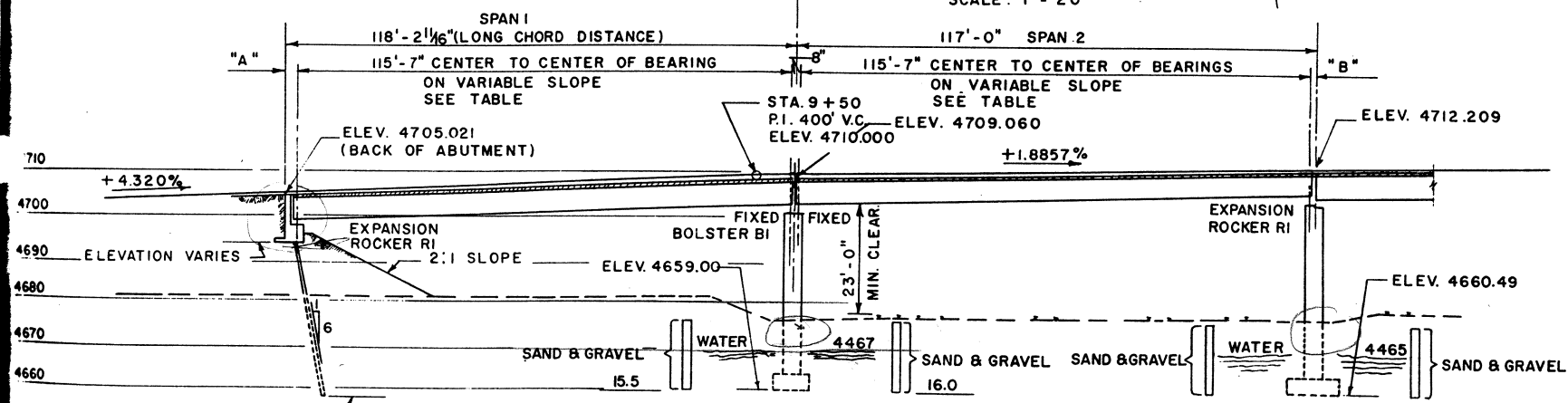
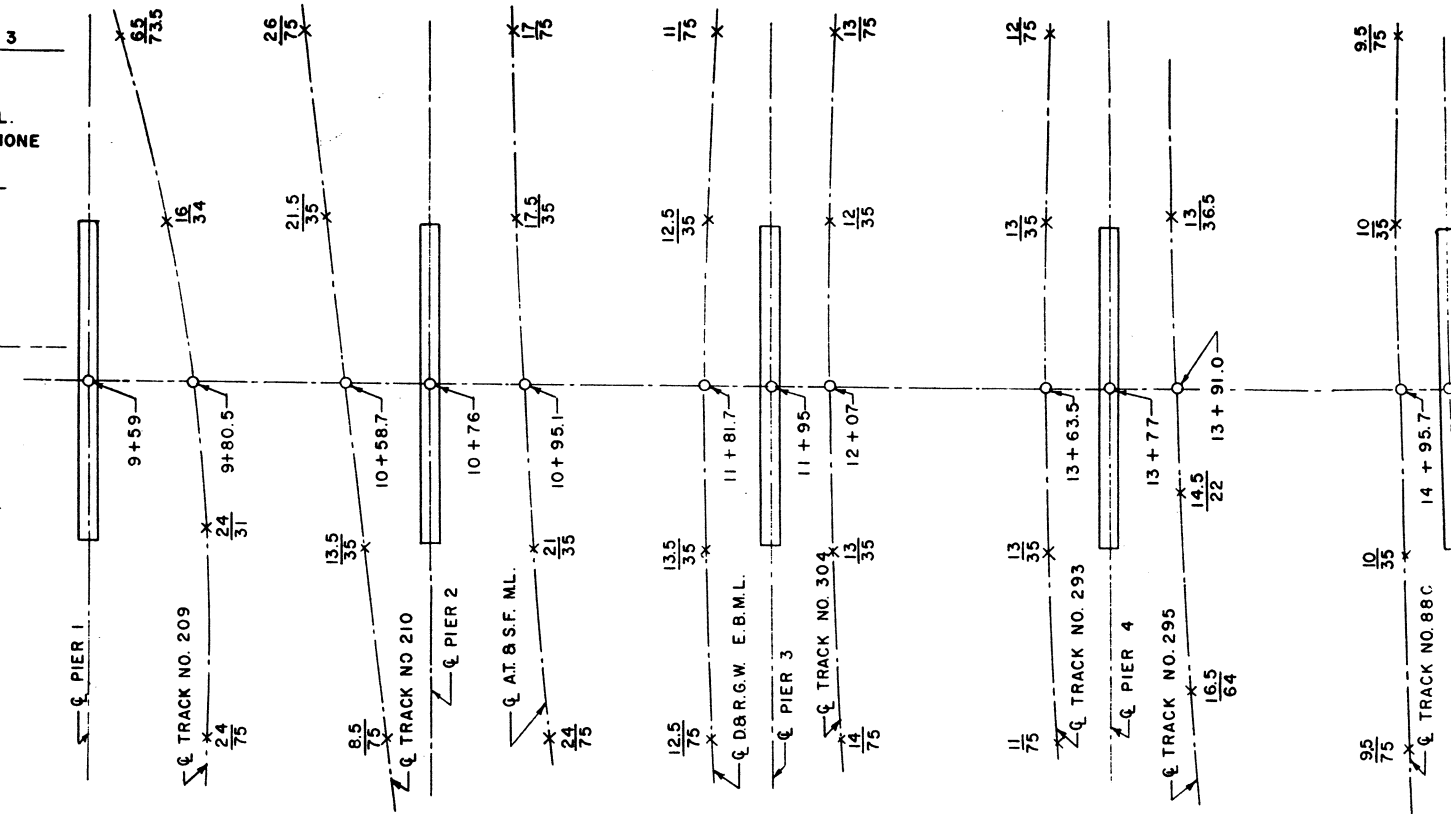
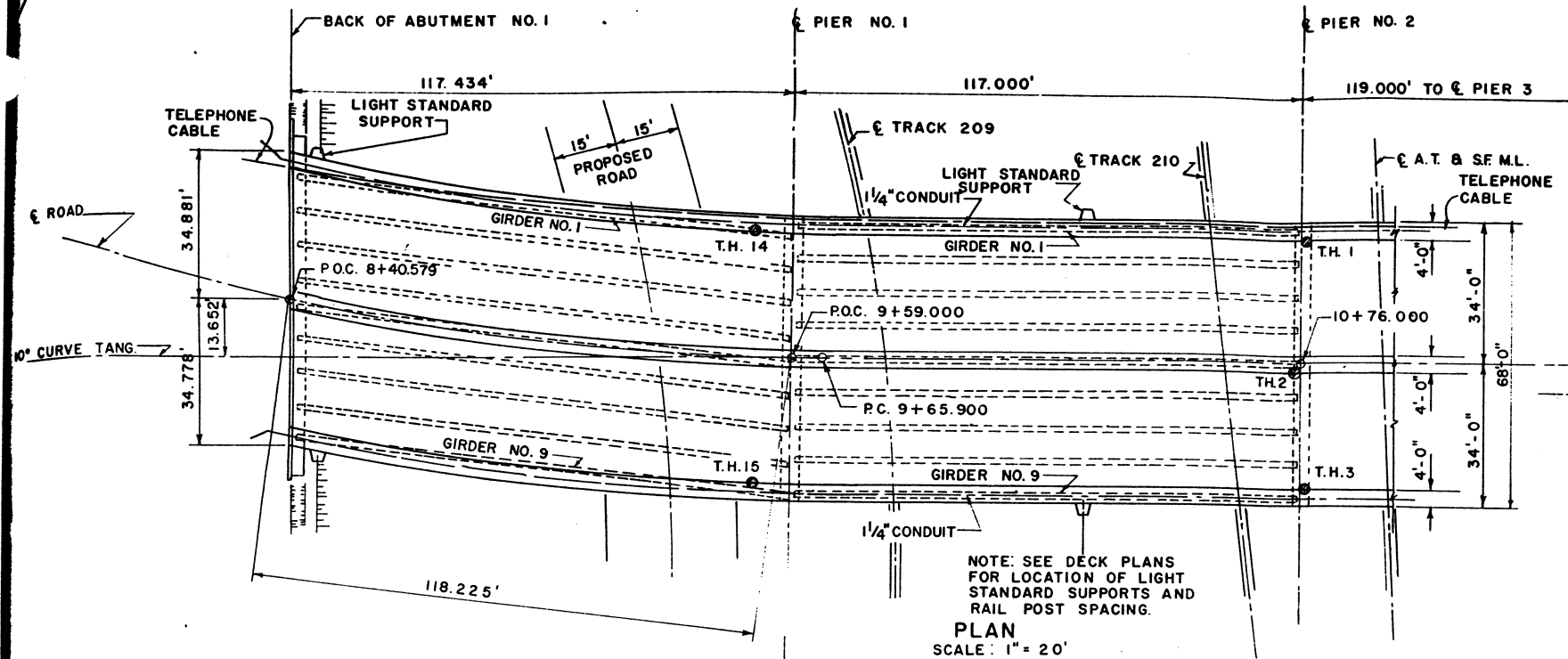
NOTE: LOG 12 & 13 OBTAINED BY TRENCHING THE EMBANKMENT.

COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

4TH ST. BRIDGE
GENERAL PLAN AND ELEVATION
STRUCTURE NO. K-18
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

SHEET 2 OF 20 SHEETS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	14	

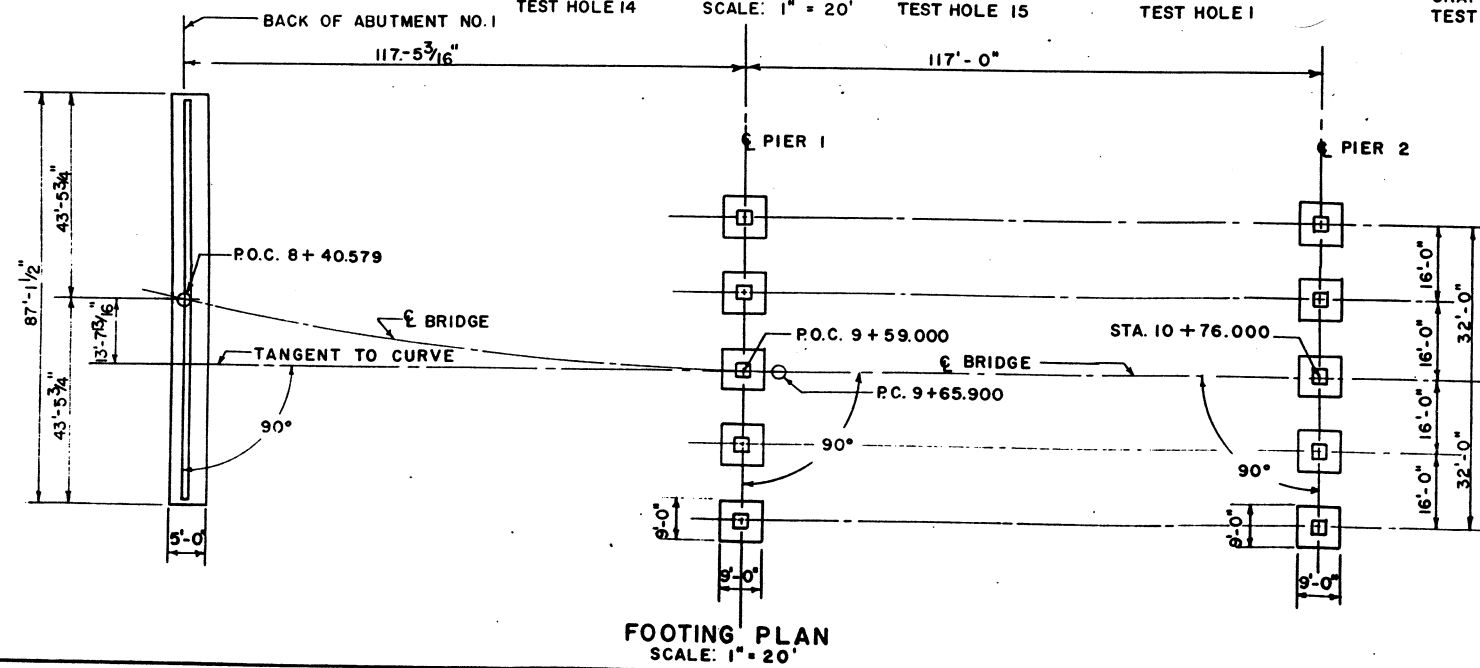


GIRDER NO.	DIMENSION "A"	GIRDER SLOPE
1	2'-0 ⁵ / ₈ "	4.024%
2	2'-0 ⁹ / ₁₆ "	3.895%
3	2'-0 ¹ / ₂ "	3.666%
4	2'-0 ¹ / ₁₆ "	3.488%
5	2'-0 ³ / ₈ "	3.417%
6	2'-0 ⁵ / ₁₆ "	3.211%
7	2'-0 ¹ / ₄ "	2.950%
8	2'-0 ¹ / ₈ "	2.689%
9	2'-0"	2.429%

GIRDER NO.	DIMENSION "B"	GIRDER SLOPE
1	9 ¹ / ₁₆ "	3.146%
2	9 ⁵ / ₈ "	3.020%
3	9 ³ / ₈ "	2.916%
4	9 ⁹ / ₁₆ "	2.767%
5	9 ¹ / ₂ "	2.689%
6	9 ¹ / ₁₆ "	2.539%
7	9 ³ / ₈ "	2.300%
8	9 ⁵ / ₁₆ "	2.061%
9	9 ¹ / ₄ "	1.822%

SPAN 1 DATA
"A" = BACK OF ABUTMENT TO CENTER OF BEARING

SPAN 2 DATA
"B" = PIER 2 TO CENTER OF BEARING



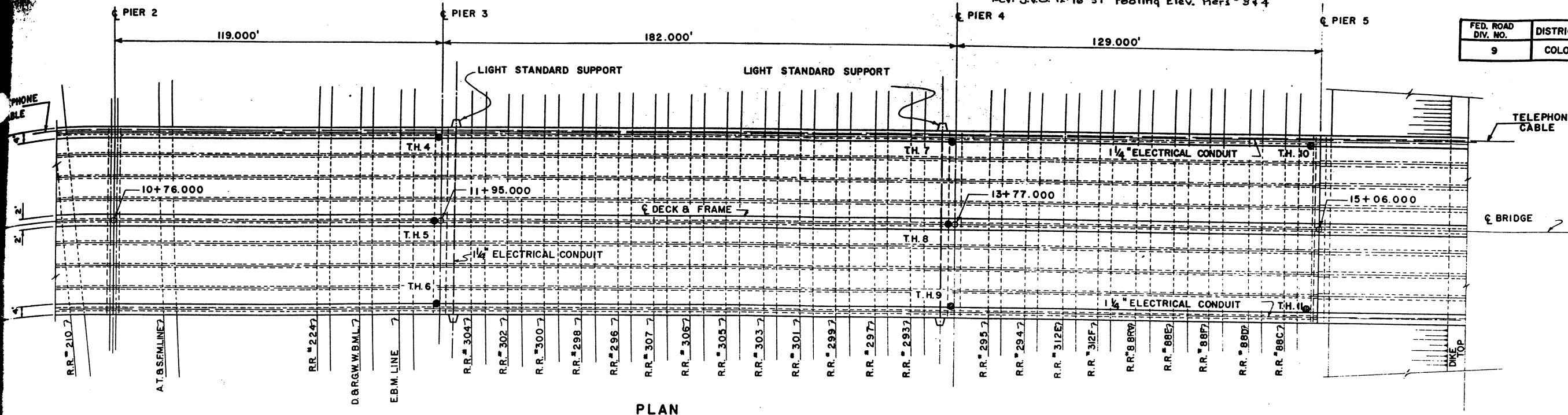
COLORADO DEPARTMENT OF HIGHWAY
PUEBLO, COLORADO

4 TH ST. BRIDGE
LAYOUT PLAN & ELEVATIC
SPANS 1-2

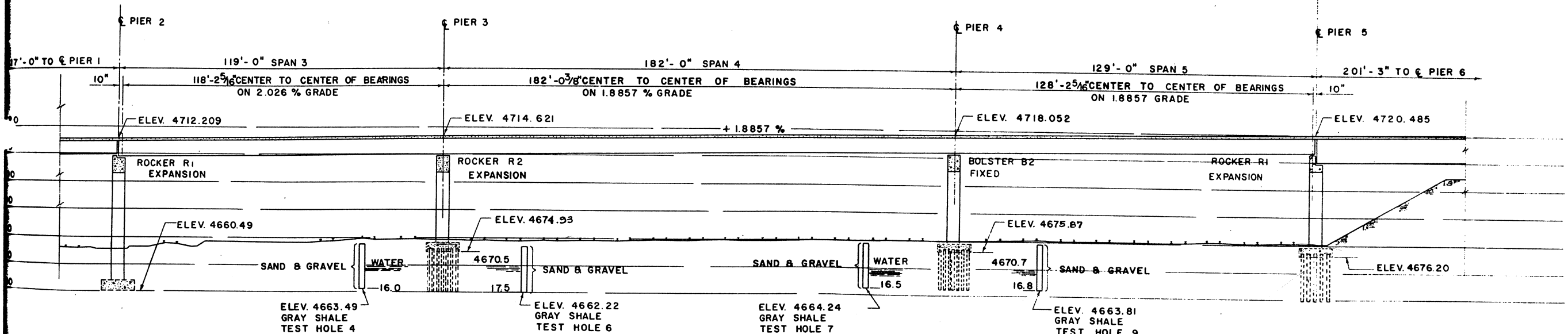
STRUCTURE NO. K-10-2

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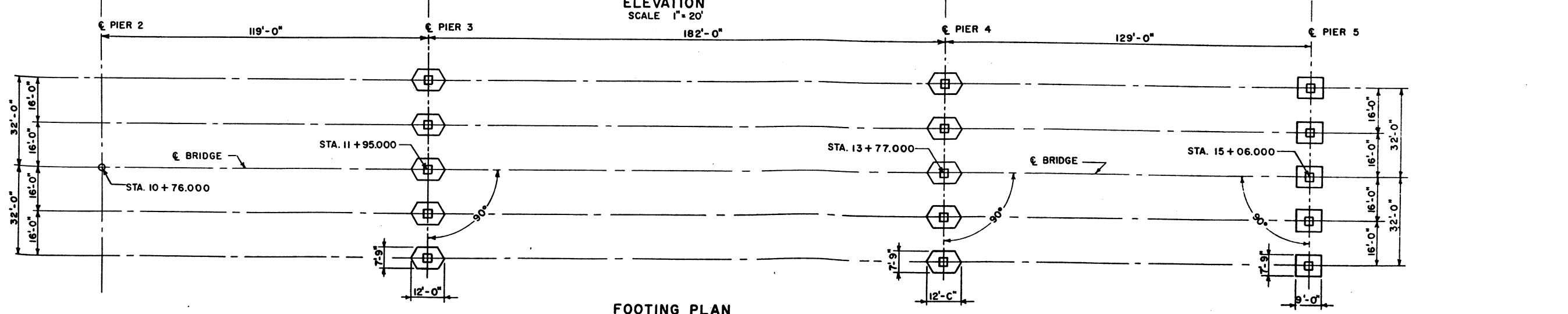
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9	COLO.	US 00 16 (12)	15	



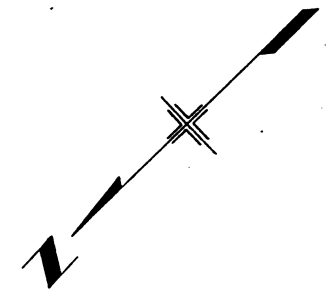
PLAN



ELEVATION
SCALE 1" = 20'



FOOTING PLAN
SCALE 1" = 20'



COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

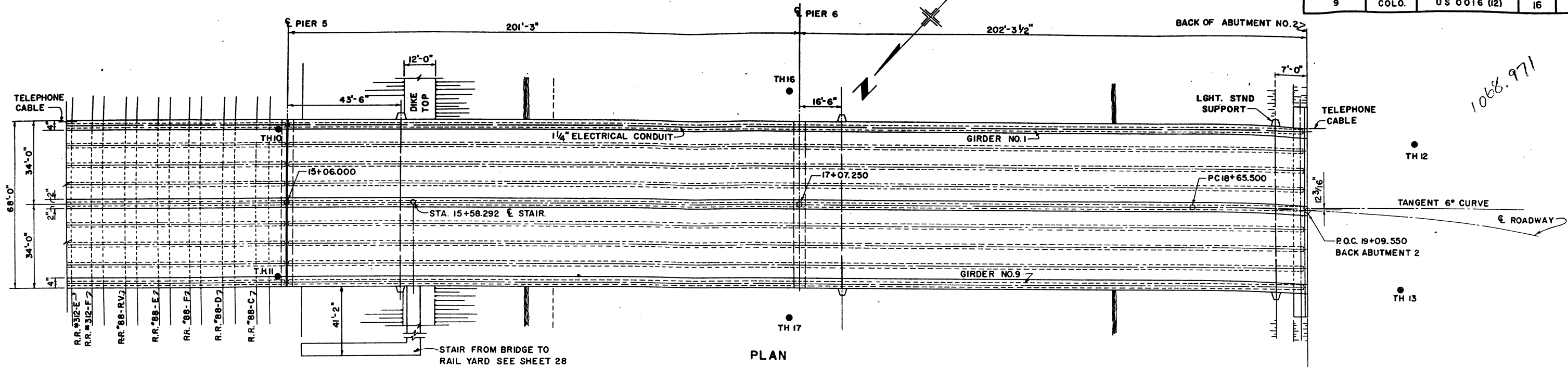
4 TH ST. BRIDGE
LAYOUT PLAN & ELEVATION
SPANS 3-4-5

STRUCTURE NO. K-18-2

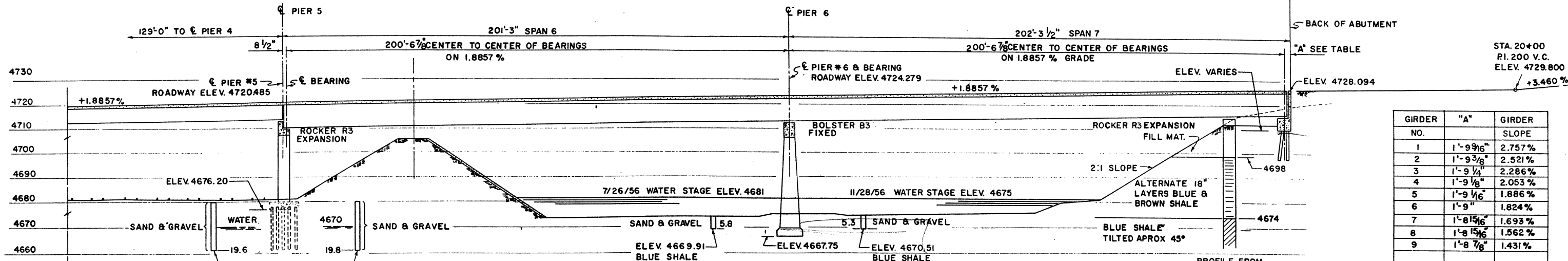
KEN R. WHITE
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SHEET 4 OF 15

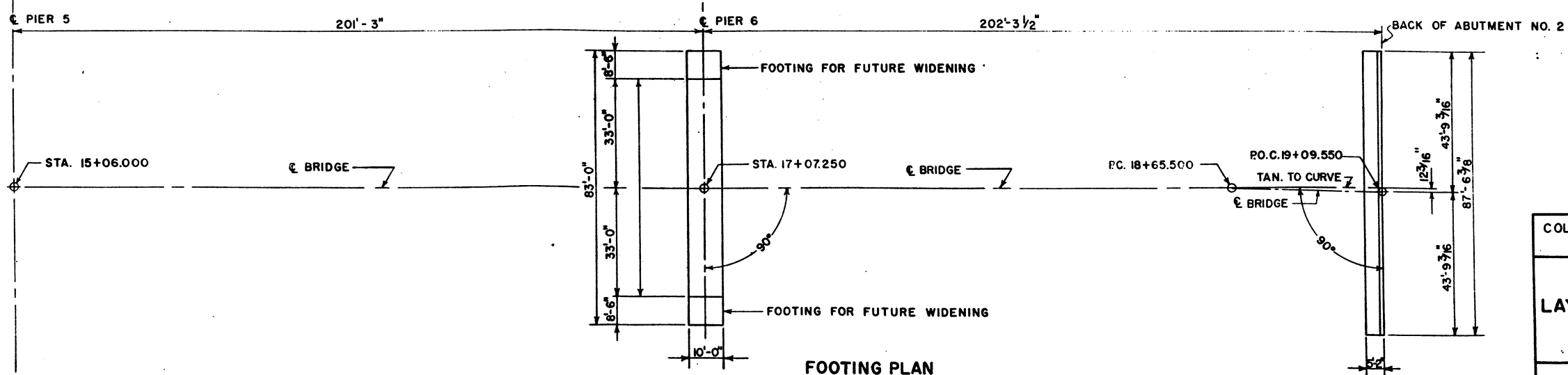
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	16	



PLAN



ELEVATION
SCALE 1" = 20'



FOOTING PLAN
SCALE 1" = 20'

COLORADO DEPARTMENT OF HIGH PUEBLO, COLORADO

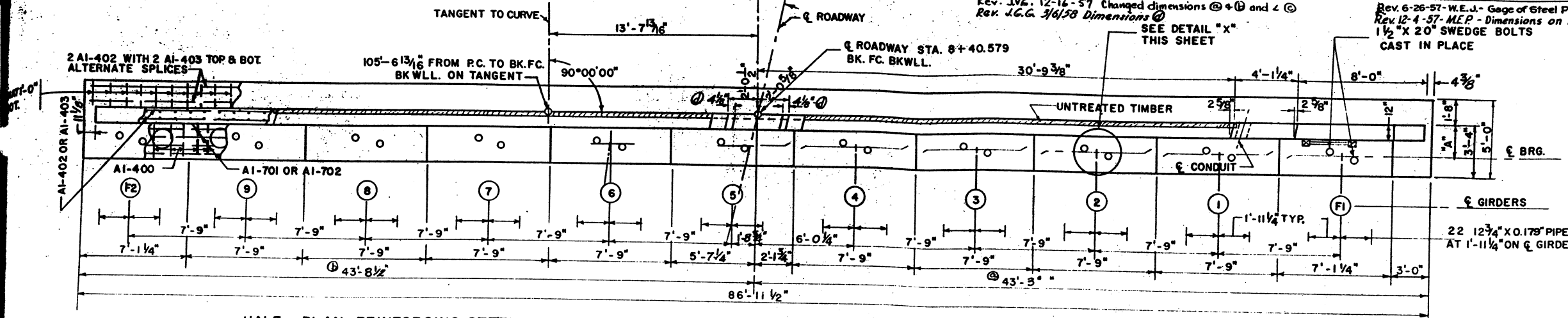
4TH ST. BRIDGE
LAYOUT PLAN & ELEV
SPANS 6-7
STRUCTURE NO. K-18-

KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

Rev. 116. 12-16-57 Changed dimensions @ 4 & 2
 Rev. J.C.G. 3/6/58 Dimensions @
 SEE DETAIL "X"
 THIS SHEET

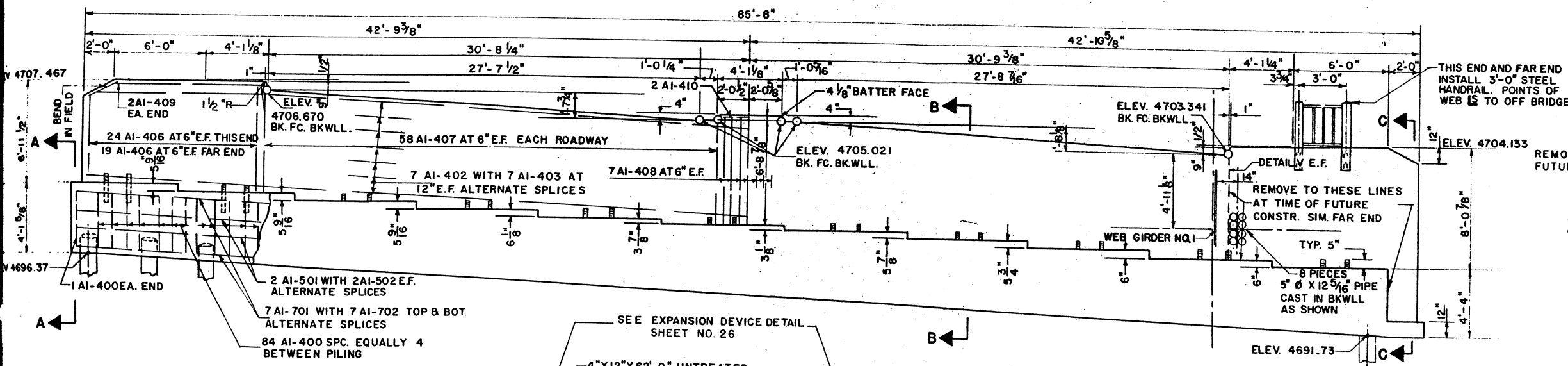
Rev. 6-26-57-W.E.J.- Gage of Steel Piling.
 Rev. 12-4-57-MER - Dimensions on Plan View
 1 1/2" X 20" SWEDGE BOLTS
 CAST IN PLACE

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 00 16 (12)	17	

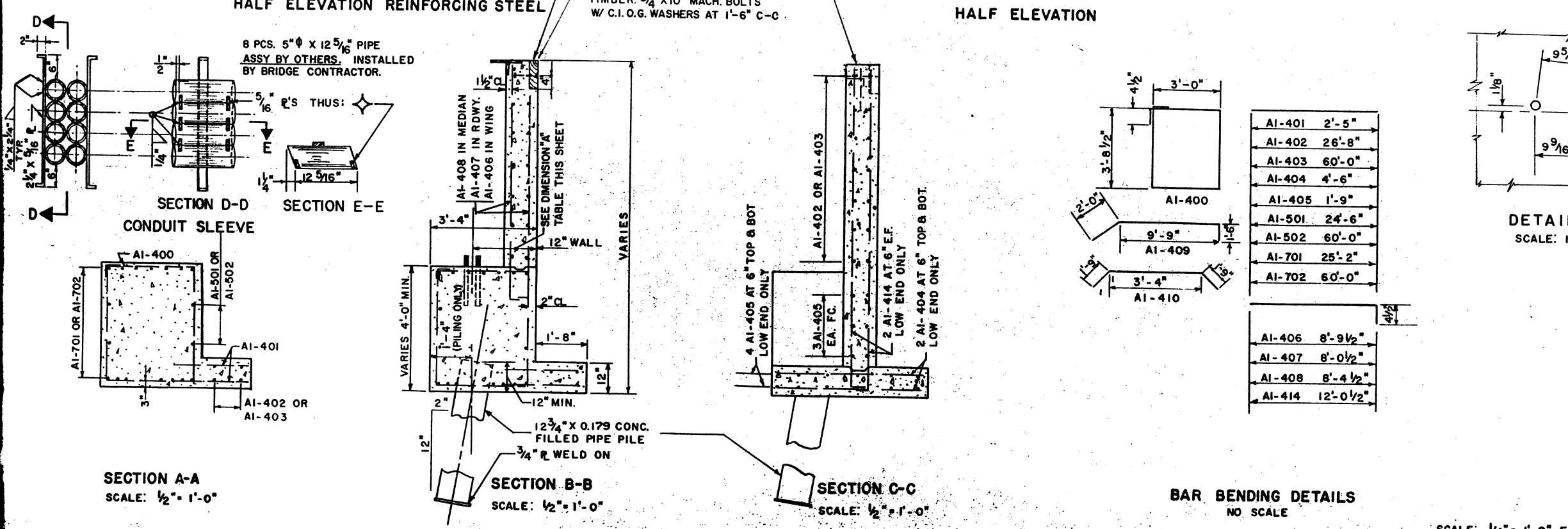


BRG. NO.	ELEV.	"A"
F1	4696.059	
1	96.559	2'-0 5/8"
2	97.059	2'-0 9/16"
3	97.538	2'-0 1/2"
4	98.026	2'-0 7/16"
5	98.284	2'-0 7/8"
6	98.606	2'-0 5/16"
7	99.116	2'-0 1/4"
8	99.579	2'-0 1/8"
9	4700.042	2'-0"
F2	00.505	

BAR LIST			
MARK	SHAPE	LENGTH	NO. REQ'D
AI-400		13'-8"	86
AI-401		2'-5"	172
AI-402		26'-8"	18
AI-403		60'-0"	18
AI-404		4'-6"	4
AI-405		1'-9"	14
AI-406		9'-1"	86
AI-407		8'-4"	232
AI-408		8'-8"	14
AI-409		13'-2"	4
AI-410		6'-10"	2
AI-414		12'-4"	4
AI-501		24'-6"	4
AI-502		60'-0"	4
AI-701		24'-6"	14
AI-702		60'-0"	14

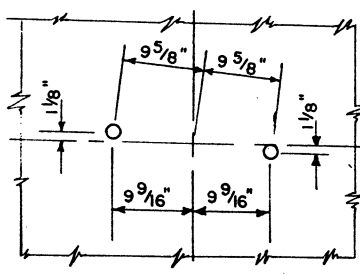
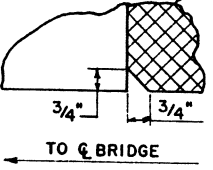


BRG. NO.	PILE LENGTH
F1	34'
1	35'
2	35'
3	35'
4	36'
5	36'
6	37'
7	37'
8	38'
9	38'
F2	38'



BAR BENDING DETAILS
 NO SCALE

SCALE: 1/4" = 1'-0" EXCEPT AS NOTED.

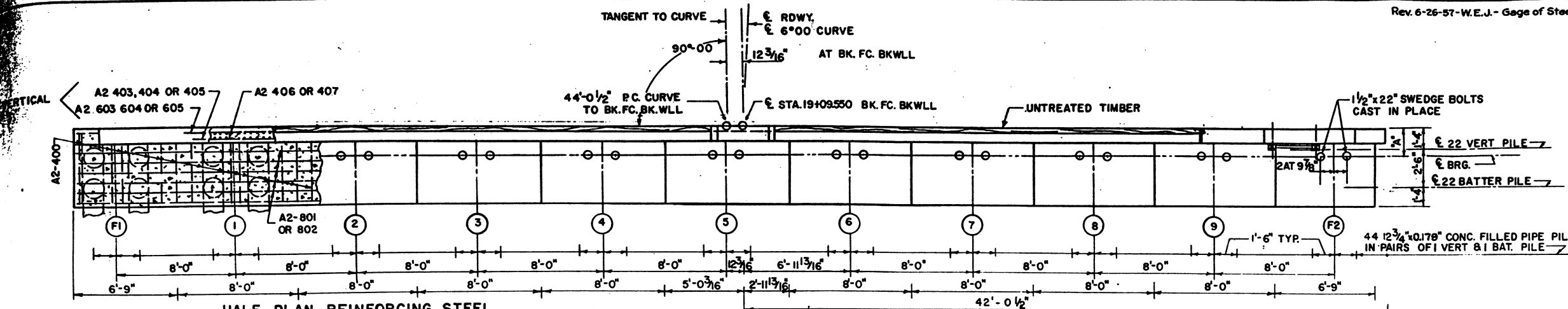


BAR SUMMARY	
6142 LF #4 AT .668	= 4100 LBS.
338 LF #5 AT 1.043	= 353 LBS.
1183 LF #7 AT 2.044	= 2418 LBS.
1 % OVERRUN	= 69 LBS.
TOTAL	= 6940 LBS.

SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	AMT.
46a	CLASS "A" CONCRETE	70.2 C.Y.
47	REINFORCING STEEL	6940 LB.
14g	STRUCT. EXCAVATION	98.0 C.Y.
16a	STRUCT. BACKFILL	105.0 C.Y.
16c	MECHANICAL TAMPING	26 HR.
61ay	PIPE PILING (12 3/4" X 0.179)	798 LF
60x	DRILLING HOLES TO FACIL.	
	PILE DRIVE	293 LF.
α	STEEL HANDRAIL	6 L.F.
44a	UNTRTD. TIMBER	0248 MB.

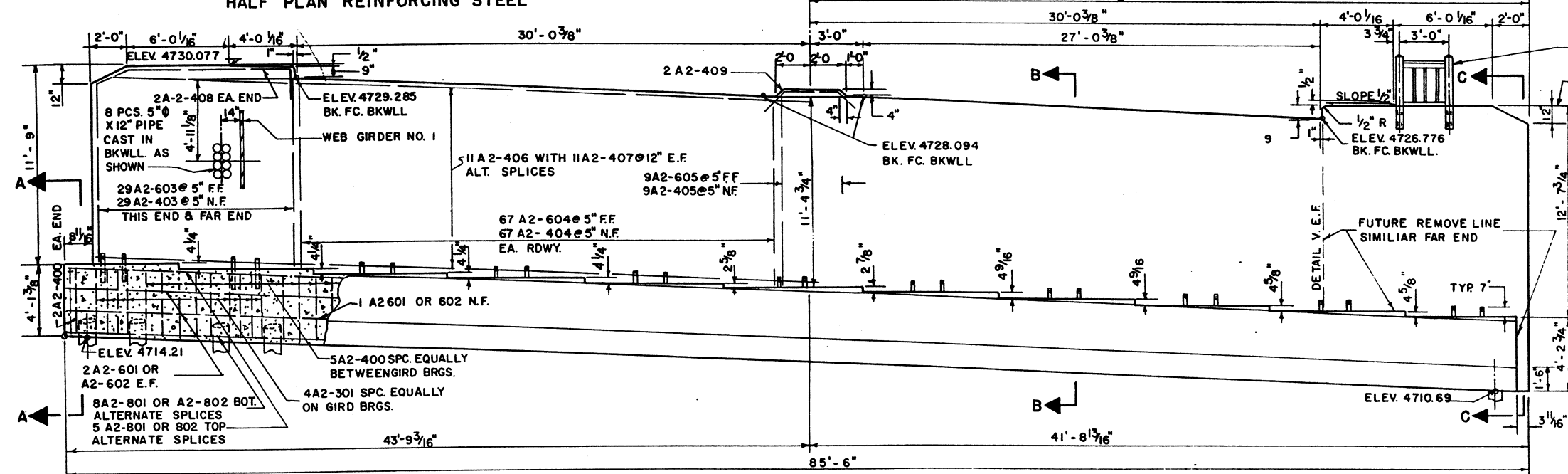
INCLUDE IN ITEM 48
 COLORADO DEPARTMENT OF HIGHWAYS
 PUEBLO, COLORADO
4TH ST. BRIDGE
ABUTMENT NO. I
 STRUCTURE NO. K-18-Z
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO
 SHEET 6 OF 28 SHEETS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 00 16 (12)	18	



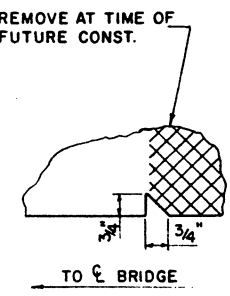
HALF PLAN REINFORCING STEEL

BRG. NO.	ELEV.	"A"	BAR LIST			
MARK	SHAPE	LENGTH	NO. REQ.			
F1	4718.326	1'-9 3/4"	A2-400	□	15'-7"	98
1	17.974	1'-9 3/16"	A2-401	—	1'-6"	8
2	17.622	1'-9 3/16"	A2-402	—	14'-9"	2
3	17.269	1'-9 1/4"	A2-403	—	13'-10"	58
4	16.917	1'-9 1/8"	A2-404	—	13'-1"	134
5	16.697	1'-9 1/8"	A2-405	—	13'-6"	9
6	16.457	1'-9"	A2-406	—	60'-0"	22
7	16.075	1'-8 15/16"	A2-407	—	25'-0"	22
8	15.692	1'-8 15/16"	A2-408	—	12'-7"	4
9	15.308	1'-8 7/8"	A2-409	—	6'-10"	2
F2	14.924	1'-8 7/8"	A2-601	—	60'-0"	3
			A2-602	—	26'-8"	3
			A2-603	—	13'-10"	58
			A2-604	—	13'-1"	134
			A2-605	—	13'-6"	9
			A2-801	—	60'-0"	13
			A2-802	—	26'-8"	13



HALF ELEVATION REINFORCING STEEL

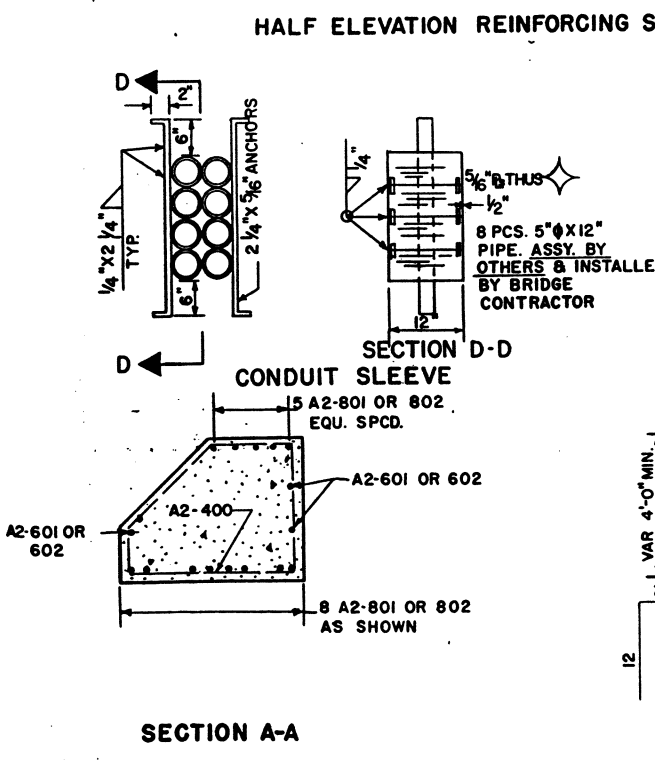
INSTALL 3'-0" STEEL HANDRAIL THIS END & FAR END. POINT OF WEB IS TO OFF BRIDGE. ELEV. 4727.568



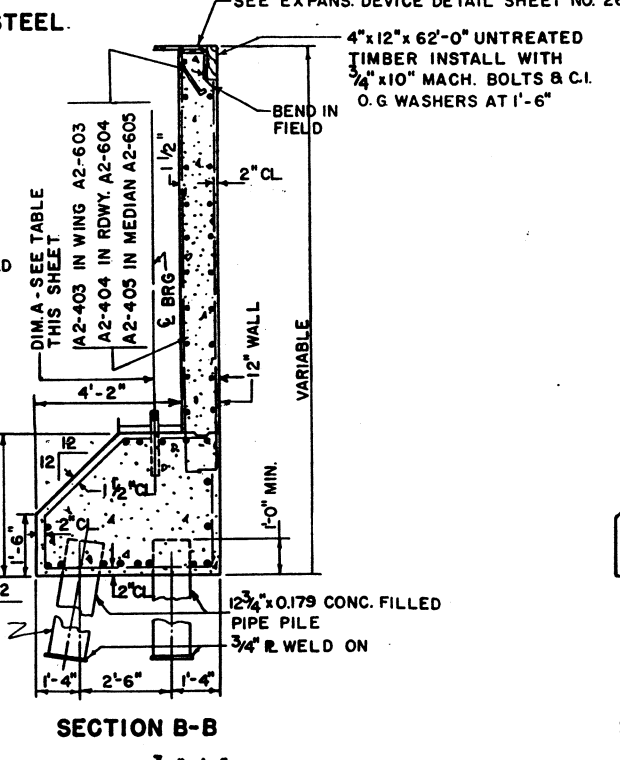
BAR SUMMARY				
6275	L.F.	*4	AT .668	= 4190
2934	L.F.	*6	AT 1.502	= 4405
1127	L.F.	*8	AT 2.670	= 3005
			1% OVERAGE	116
TOTAL				11,716

SUMMARY OF QUANTITIES		
NO.	DESCRIPTION	AMOUNT
14 g	STRUCT. EXCAV.	356
16-a	STRUCT. BK.FLL.	56
16 c	MECH. TAMPING.	14
46 a	CONC. CLASS "A"	9420
47	REINF. STEEL	11716
61ay	STEEL PIPE PILING	656
60x	DRILLING HOLES TO FACILITATE PILE DRIVING	572
α	STEEL RAILING	6

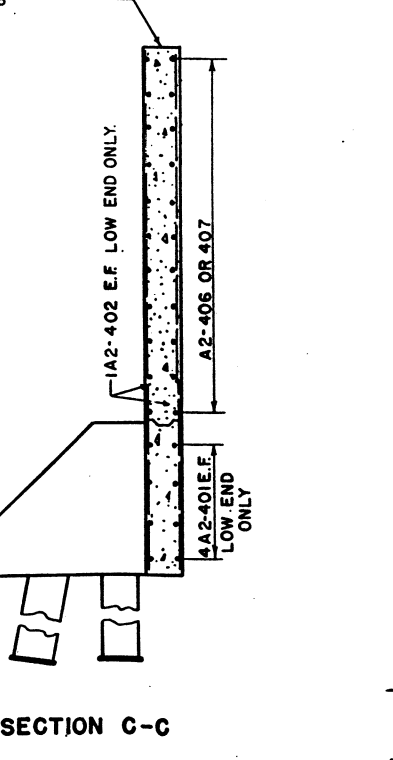
α INCLUDE IN ITEM 48
44a Miscellaneous Untreated Timber



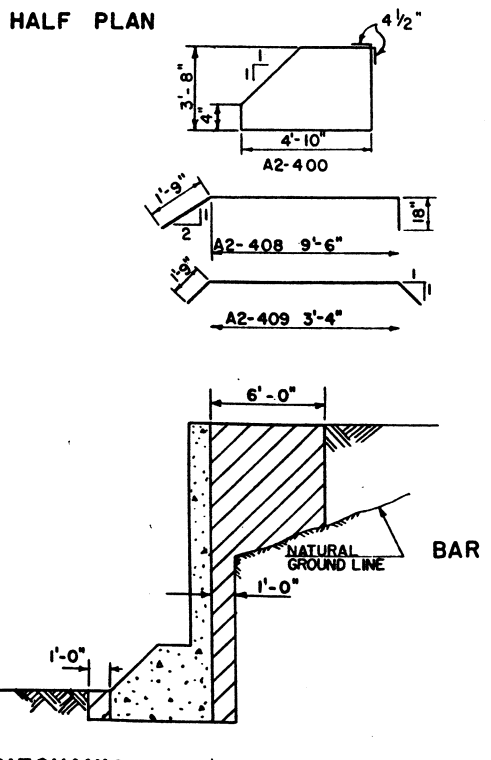
SECTION A-A



SECTION B-B
SCALE: 3/8"=1'-0"



SECTION C-C



MECHANICAL TAMP DIAGRAM

- A2-401 1'-6"
- A2-402 14'-9"
- A2-406 60'-0"
- A2-407 25'-0"
- A2-601 60'-0"
- A2-602 26'-8"
- A2-801 60'-0"
- A2-802 26'-8"

BAR BENDING DETAILS
NO SCALE

PILING LENGTHS		
BRG. NO.	LENGTH & NO. PILE	TOT
F1&1	8 @ 17'-0"	134
2&3	8 @ 16'-0"	128
4&5	8 @ 15'-0"	120
6-7-8&8	12 @ 14'-0"	168
9&F2	8 @ 13'-0"	104

COLORADO DEPARTMENT OF HIGHWAY
PUEBLO, COLORADO

4 TH ST. BRIDGE

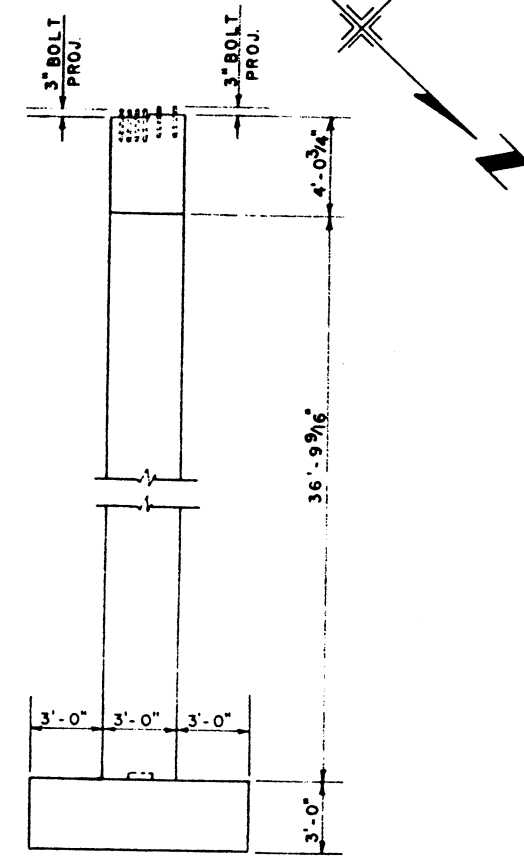
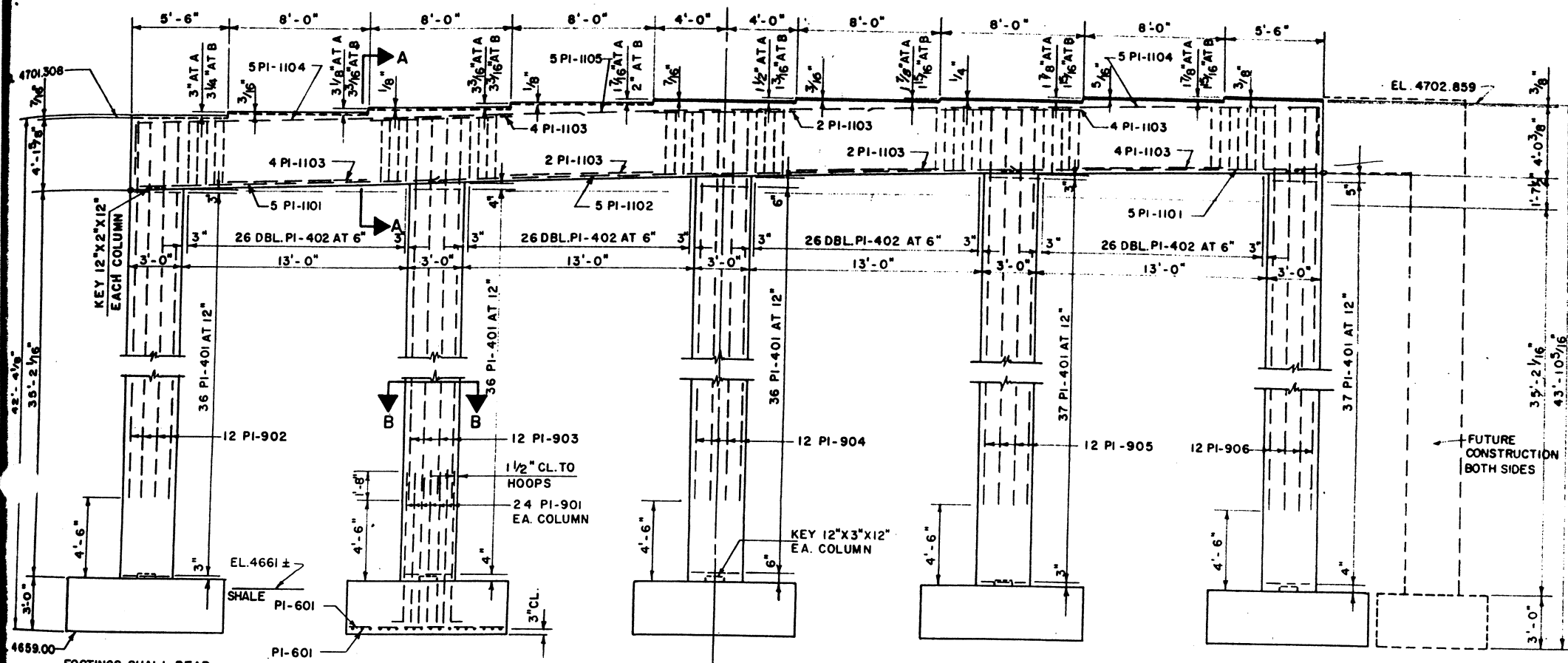
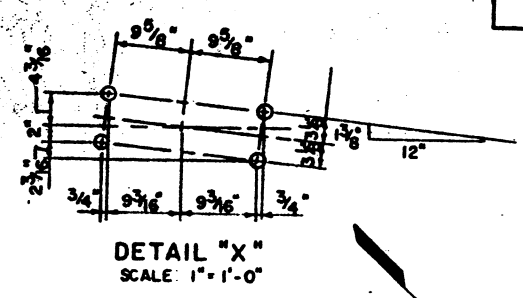
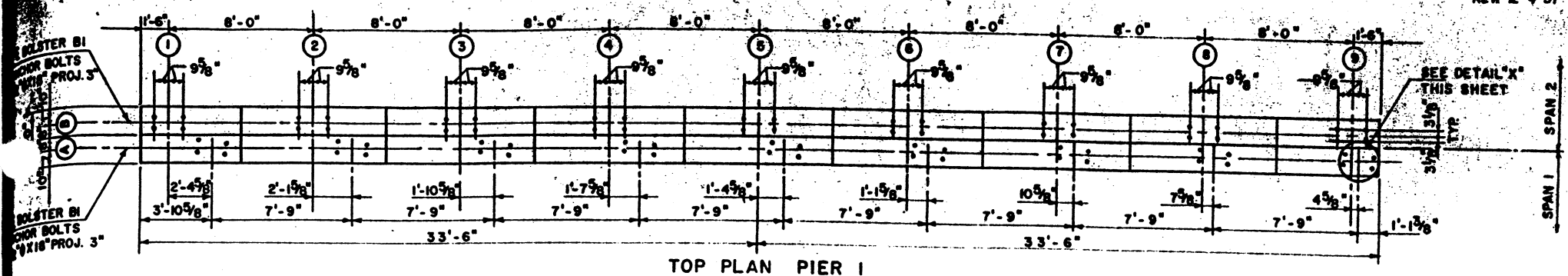
ABUTMENT NO. 2

STRUCTURE NO K-18-Z

KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

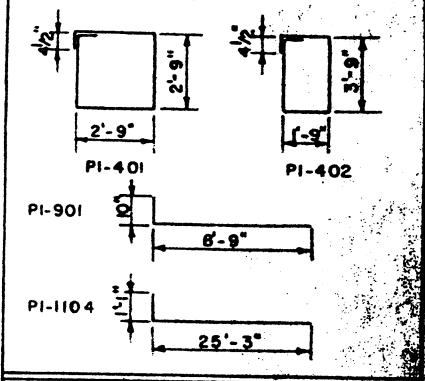
SHEET 7 OF 28 SHEETS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (2)	6	6



REINFORCING BAR LIST

MARK	SHAPE	LENGTH	NO. REQ'D
PI-401	[Symbol]	11'-2"	162
PI-402	[Symbol]	11'-2"	208
PI-601	[Symbol]	8'-6"	180
PI-901	[Symbol]	9'-4"	120
PI-902	[Symbol]	34'-8"	12
PI-903	[Symbol]	35'-2"	12
PI-904	[Symbol]	35'-7"	12
PI-905	[Symbol]	35'-10"	12
PI-906	[Symbol]	36'-2"	12
PI-1101	[Symbol]	17'-3"	10
PI-1102	[Symbol]	32'-0"	5
PI-1103	[Symbol]	8'-0"	22
PI-1104	[Symbol]	26'-0"	10
PI-1105	[Symbol]	16'-0"	6



BAR SUMMARY

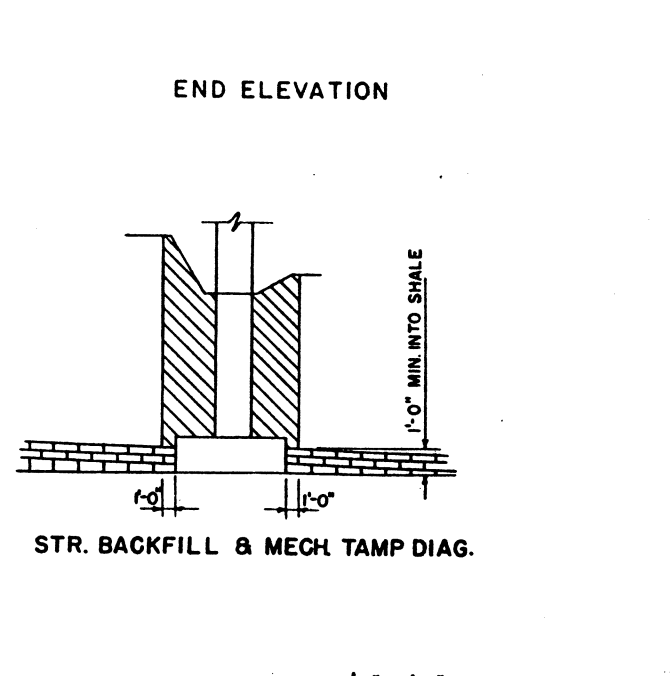
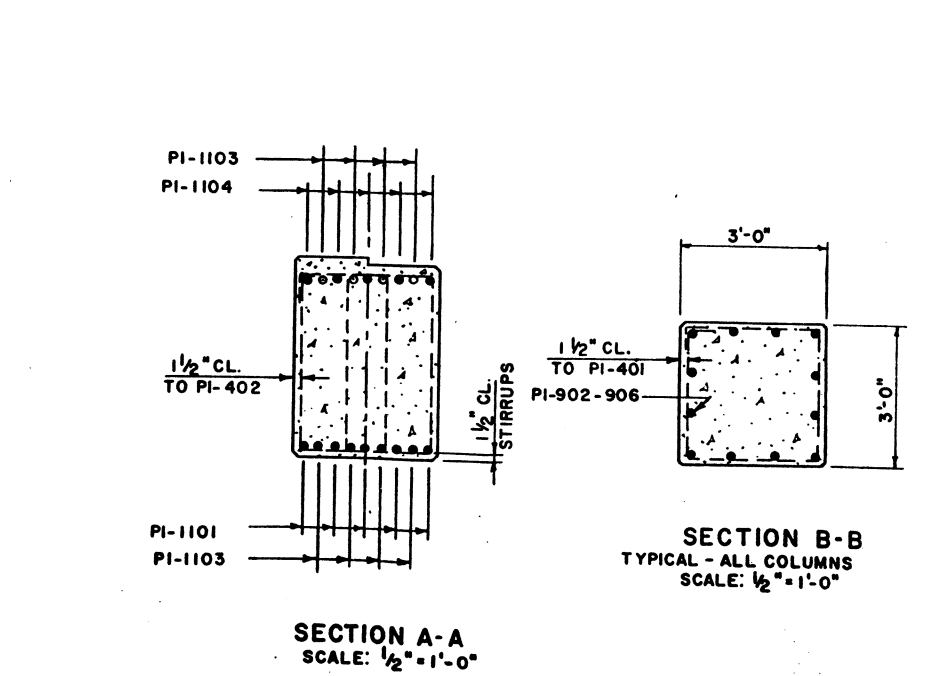
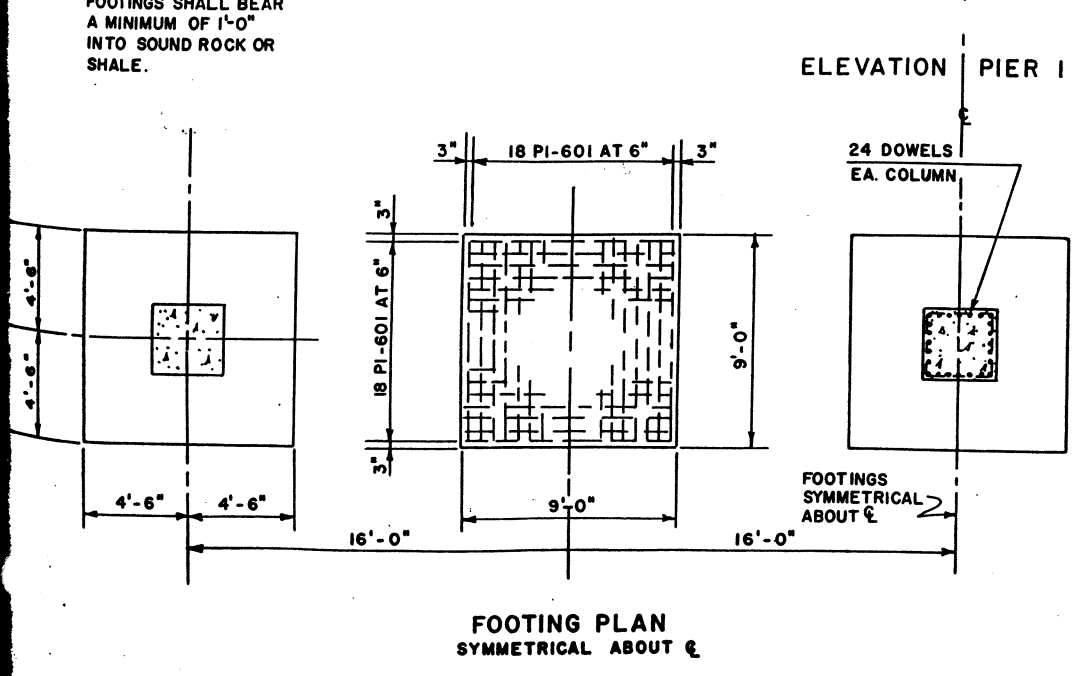
4360 LF = 4 AT 0.668 =	2910 LBS
1530 LF = 6 AT 1.502 =	2300
3250 LF = 9 AT 3.400 =	11060
849 LF = 11 AT 5.313 =	4500
1% OVERRUN =	208
TOTAL	20,978 LBS

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY
46a	CONCRETE (CLASS)	135 CY
47	REINF. STEEL	20,978 LBS
14g	STRUCT. EXC. COMMON	357 CY
14f	STRUCT. EXC. (ROCK)	30 CY
16a	BACKFILL	300 CY
16c	MECH. TAMPING	75 HR

TABLE OF GIRDER ELEVATIONS

SPAN 1		SPAN 2	
BRG. PT.	ELEVATION	BRG. PT.	ELEVATION
1	4701.342	1	4701.308
2	4701.594	2	4701.578
3	4701.851	3	4701.843
4	4702.119	4	4702.112
5	4702.238	5	4702.276
6	4702.363	6	4702.370
7	4702.518	7	4702.538
8	4702.673	8	4702.699
9	4702.828	9	4702.858



COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

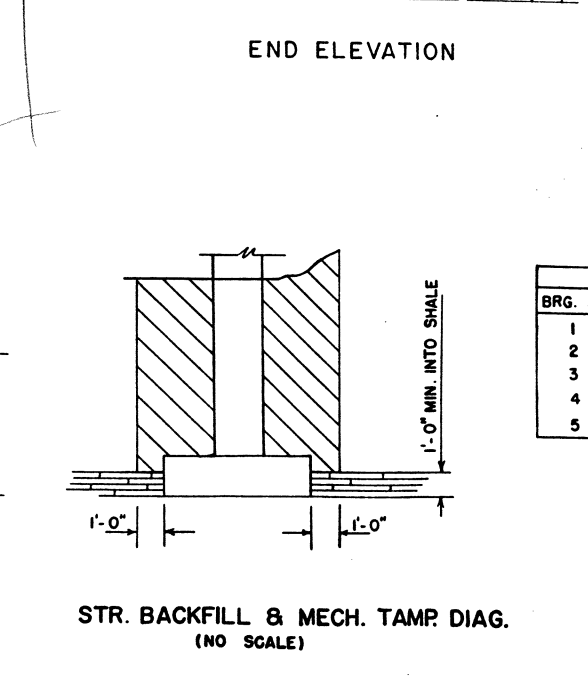
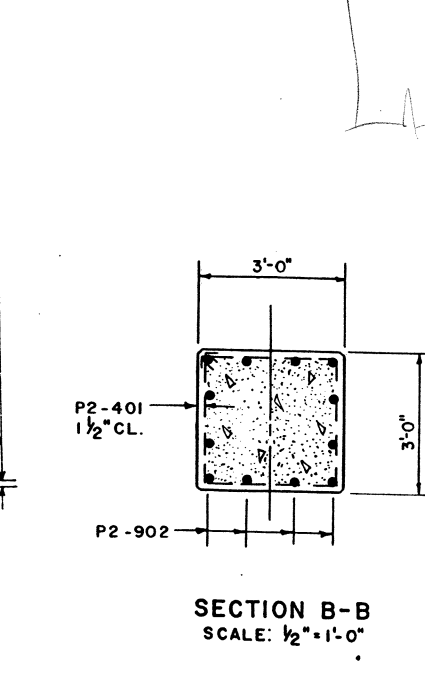
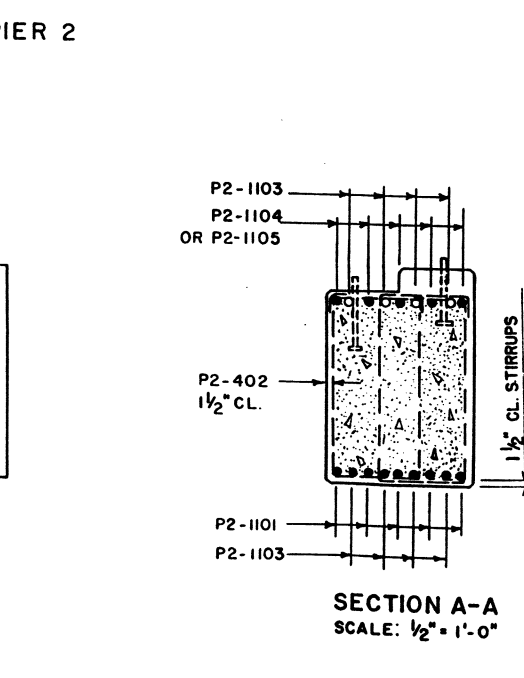
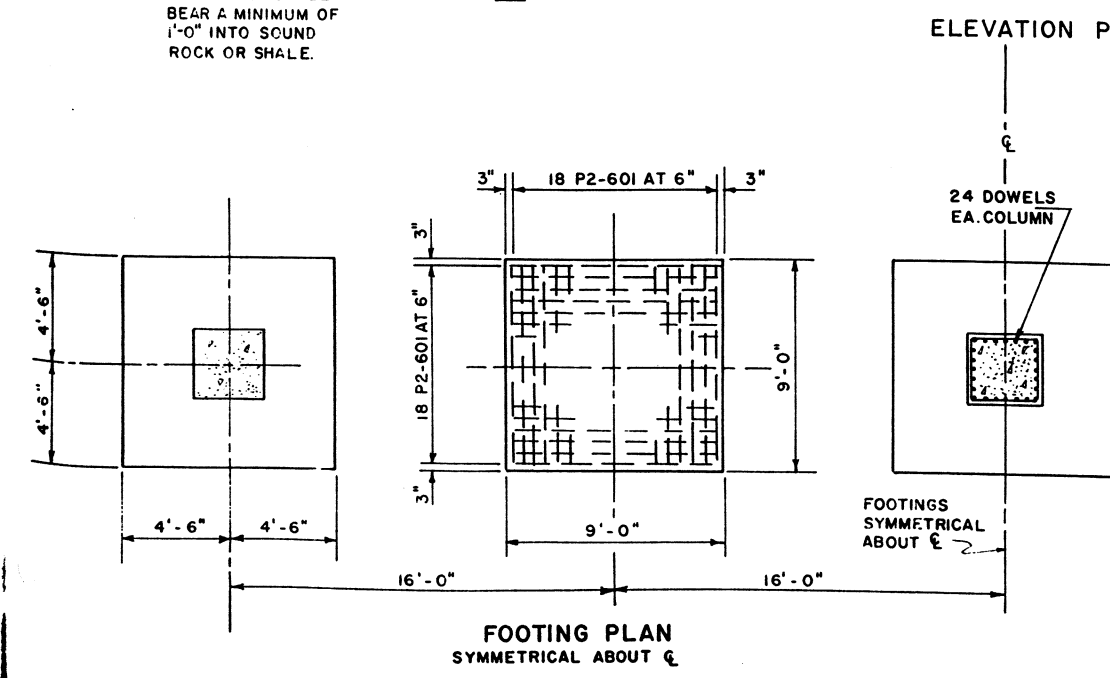
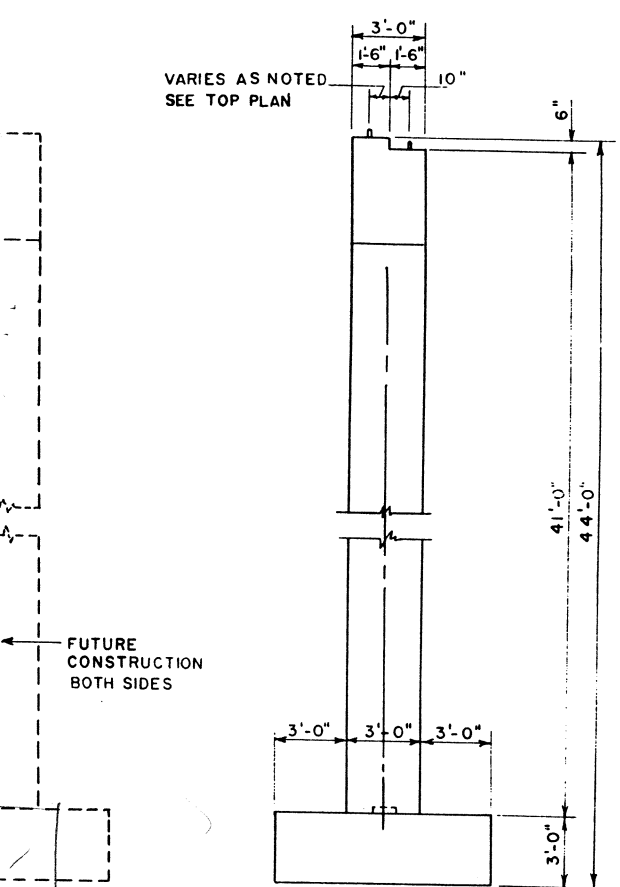
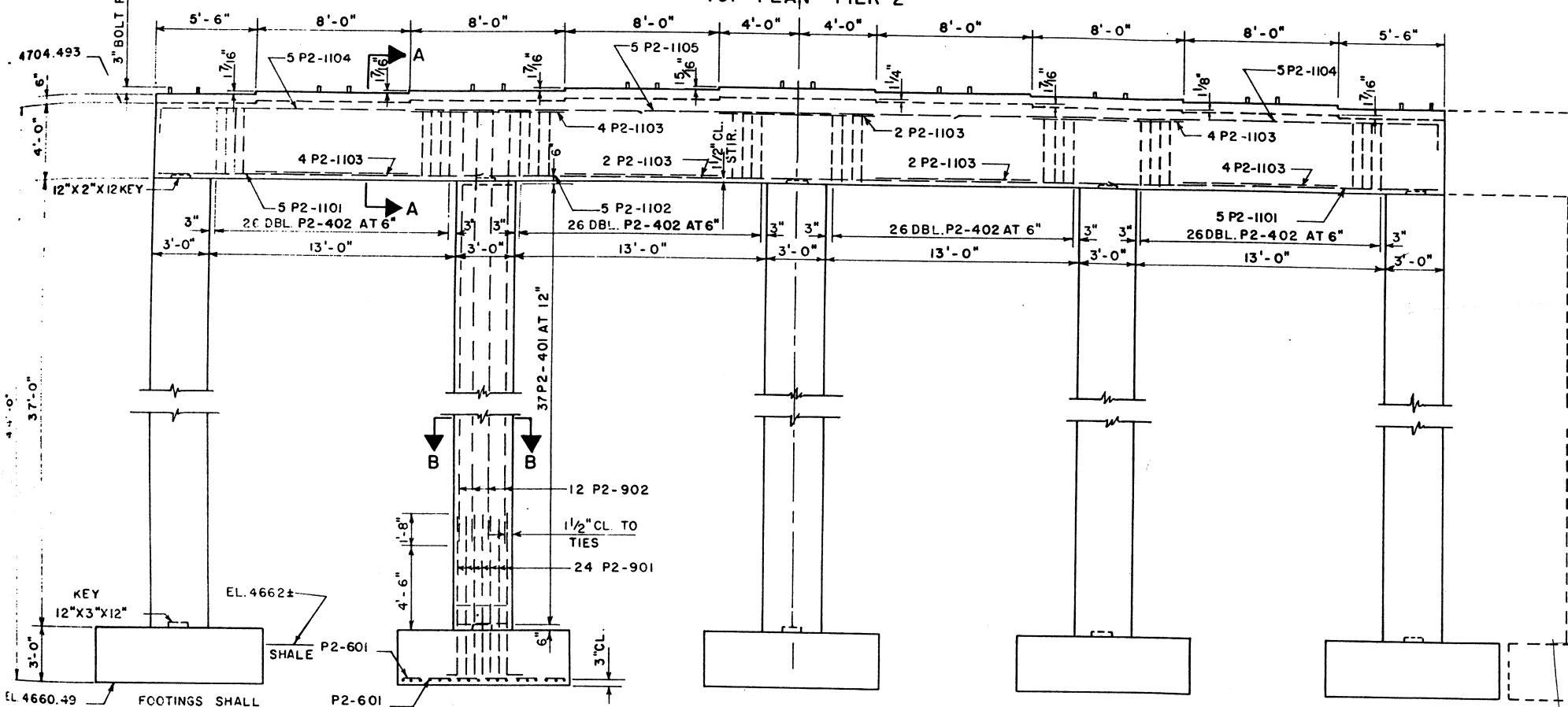
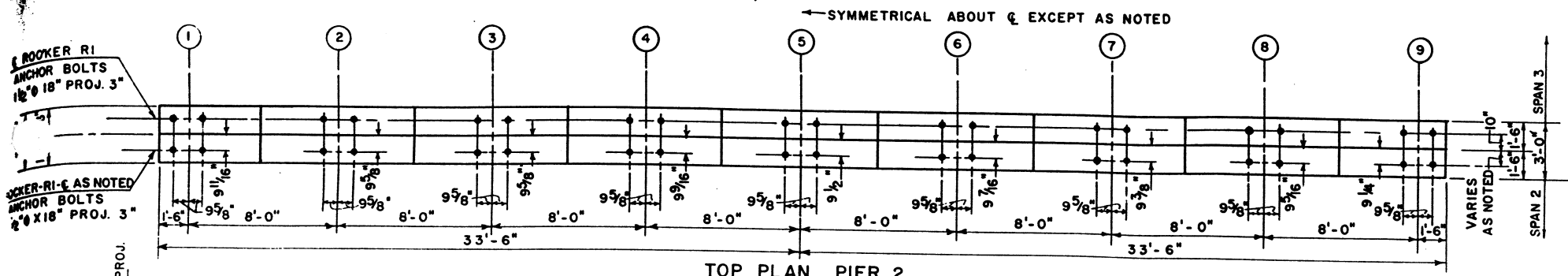
4TH ST. BRIDGE

PIER NO. 1

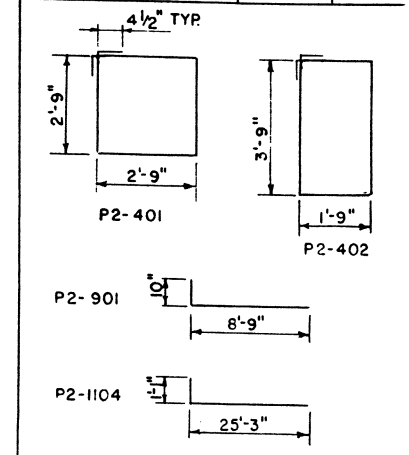
STRUCTURE NO. 1

KEY
CONC.
DETAILED

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	20	



MARK	SHAPE	LENGTH	NO. REQ.
P2-401		11'-2"	185
P2-402		11'-2"	208
P2-601		8'-6"	180
P2-901		9'-4"	120
P2-902		36'-3"	60
P2-1101		17'-3"	10
P2-1102		32'-0"	5
P2-1103		8'-0"	22
P2-1104		26'-0"	10
P2-1105		16'-0"	5



4360 L.F. NO. 4 AT 0.668 =	2,920 LBS.
1530 L.F. NO. 6 AT 1.502 =	2,300
3340 L.F. NO. 9 AT 3.400 =	11,350
849 L.F. NO. 11 AT 5.313 =	4,510
1% OVERRUN	211
TOTAL	21,291 LBS.

ITEM	DESCRIPTION	AMOUNT
14g	STR. EXCAVATION, COM.	314 CU. YDS.
14f	STR. EXCAVATION, ROCK	23 CU. YDS.
16a	STR. BACKFILL	265 CU. YDS.
16c	MECH. TAMPING	66 HRS.
46c	CLASS "A" CONCRETE	139 CU. YDS.
47	REINFORCING STEEL	21,291 LBS.

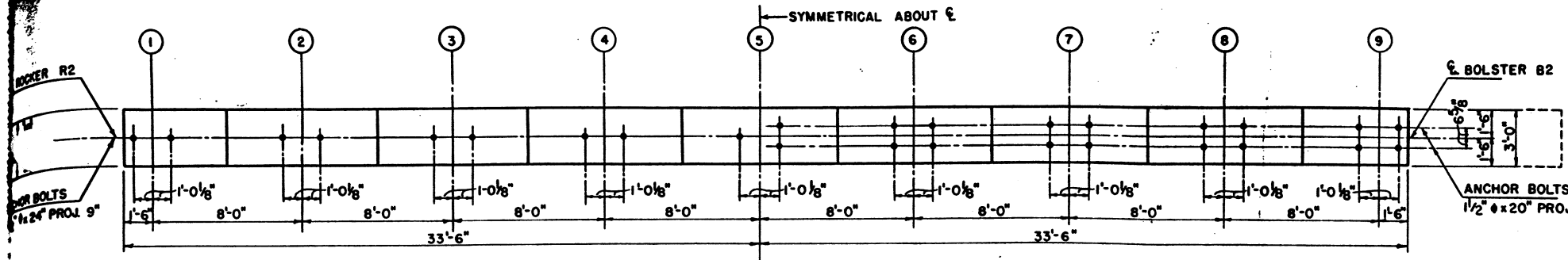
SPAN 2		SPAN 3	
BRG. PT.	ELEVATION	BRG. PT.	ELEVATION
1	4704.962	6	4705.322
2	05.082	7	05.202
3	05.202	8	05.048
4	05.322	9	04.886
5	05.397		

COLORADO DEPARTMENT OF HIGHWAY
 PUEBLO, COLORADO
 4 TH ST. BRIDGE
 PIER 2
 STRUCTURE NO. K-18-Z
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO

SCALE: 1/4" = 1'-0" EXCEPT AS NOTED

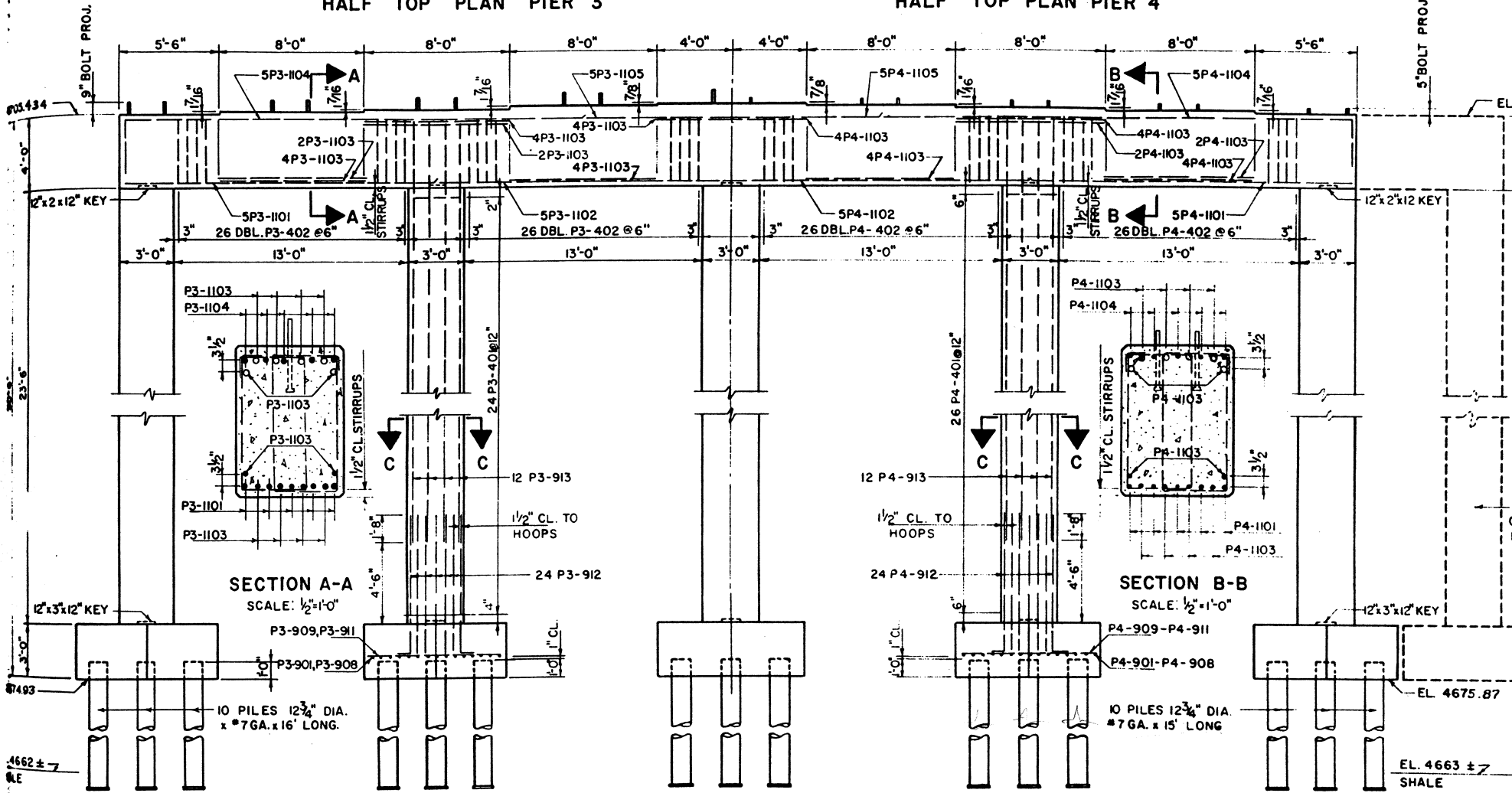
Rev. 12-4-57 M.E.P. Footing & Girder Elevations.
 Rev. 12-16-57 J.X.G. Top of Cap Elevations

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	21	



HALF TOP PLAN PIER 3

HALF TOP PLAN PIER 4

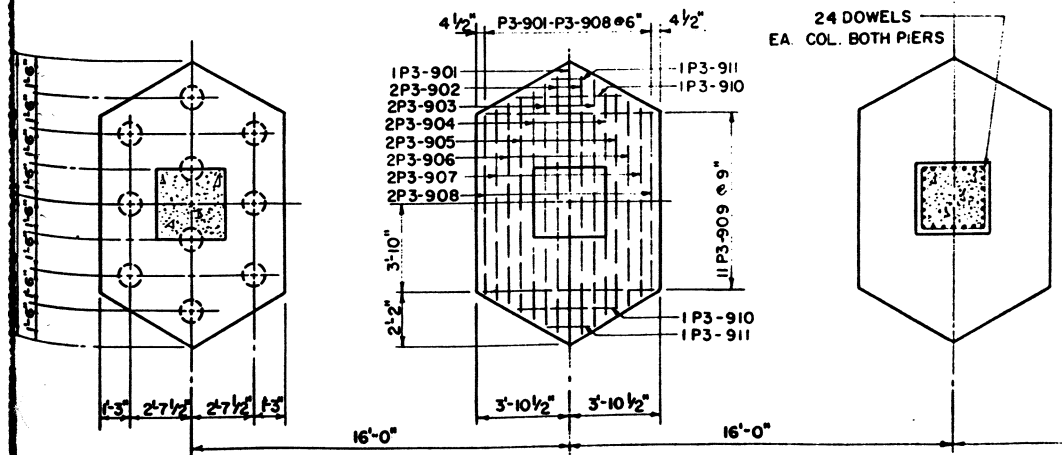


SECTION A-A
SCALE: 1/2" = 1'-0"

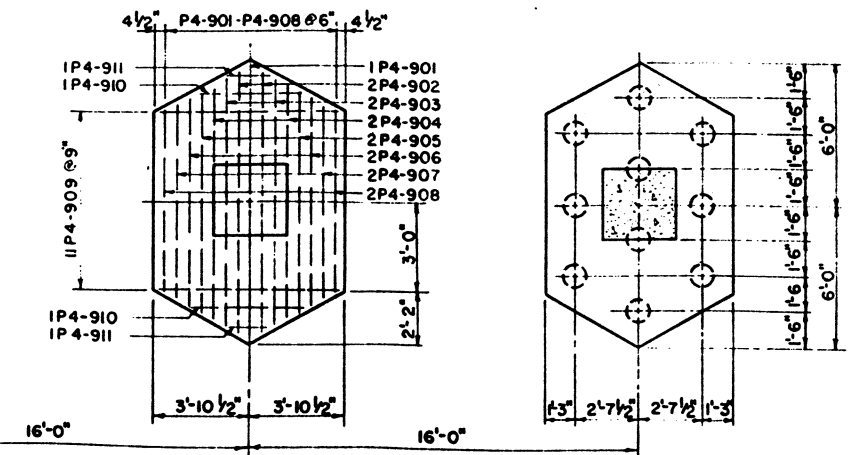
SECTION B-B
SCALE: 1/2" = 1'-0"

HALF ELEVATION PIER 3

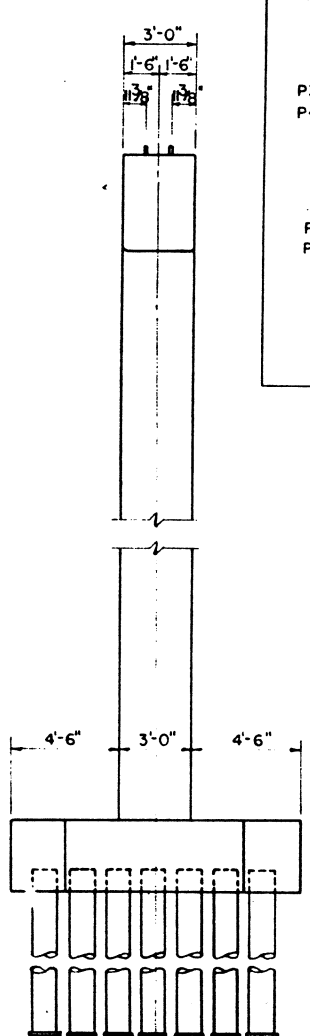
HALF ELEVATION PIER 4



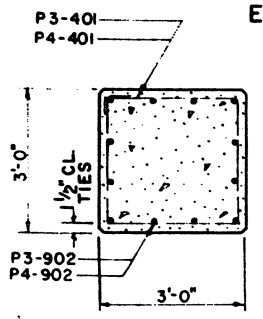
HALF FOOTING PLAN PIER 3



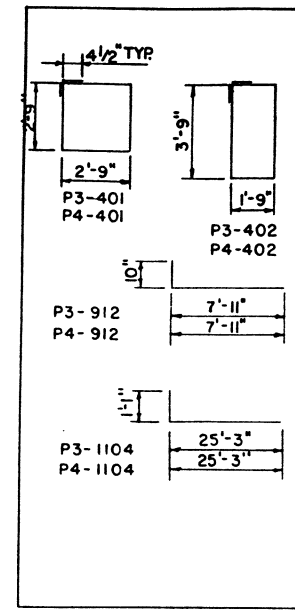
HALF FOOTING PLAN PIER 4



END ELEVATION



SECTION C-C
SCALE 1/2" = 1'-0"



REINFORCING BAR LIST - PIER 3

MARK	SHAPE	LENGTH	NO. REQ'D
P3-901		11'-6"	5
P3-902		10'-11"	10
P3-903		10'-4"	10
P3-904		9'-9"	10
P3-905		9'-2"	10
P3-906		8'-7"	10
P3-907		8'-0"	10
P3-908		7'-5"	10
P3-909		7'-3"	55
P3-910		4'-8"	10
P3-911		2'-1"	10
P3-912		8'-6"	120
P3-913		22'-9"	60
P3-1101		17'-3"	10
P3-1102		32'-0"	5
P3-1103		8'-0"	36
P3-1104		26'-0"	10
P3-1105		16'-0"	5
P3-401		11'-2"	120
P3-402		11'-2"	208

REINFORCING BAR LIST - PIER 4

MARK	SHAPE	LENGTH	NO. REQ'D
P4-901		11'-6"	5
P4-902		10'-11"	10
P4-903		10'-4"	10
P4-904		9'-9"	10
P4-905		9'-2"	10
P4-906		8'-7"	10
P4-907		8'-0"	10
P4-908		7'-5"	10
P4-909		7'-3"	55
P4-910		4'-8"	10
P4-911		2'-1"	10
P4-912		8'-6"	120
P4-913		25'-3"	60
P4-1101		17'-3"	10
P4-1102		32'-0"	5
P4-1103		8'-0"	36
P4-1104		26'-0"	10
P4-1105		16'-0"	5
P4-401		11'-2"	130
P4-402		11'-2"	208

BAR SUMMARY PIER 3

3660 L.F. NO. 4 AT 0.668 = 2440
3650 L.F. NO. 9 AT 3.400 = 12400
961 L.F. NO. 11 AT 5.313 = 5106
1% OVERRUN = 200
TOTAL = 20146

BAR SUMMARY PIER 4

3770 L.F. NO. 4 AT 0.668 = 2520
3900 L.F. NO. 9 AT 3.400 = 13300
961 L.F. NO. 11 AT 5.313 = 5106
1% OVERRUN = 209
TOTAL = 21135

SUMMARY OF QUANTITIES			
ITEM	DESCRIPTION	AMOUNT PIER 3	AMOUNT PIER 4
47	REINFORCING STEEL	20146 LBS.	21135 LBS.
46a	CONCRETE	115 CU.YD.	119 CU.YD.
14g	STRUCT. EXCAVAT.	146 CU.YD.	150 CU.YD.
16a	BACKFILL	94 CU.YD.	96 CU.YD.
16c	MECH. TAMPING	23.5 HRS.	24 HRS.
61ay	PILING	800 LIN.FT.	750 LIN.FT.

TABLE OF GIRDER ELEVATIONS			
PIER 3		PIER 4	
BRG. PT.	ELEVATION	BRG. PT.	ELEVATION
1 & 9	4705.436	1 & 9	4708.867
2 & 8	05.556	2 & 8	08.987
3 & 7	05.676	3 & 7	09.107
4 & 6	05.796	4 & 6	09.227
5	05.871	5	09.302

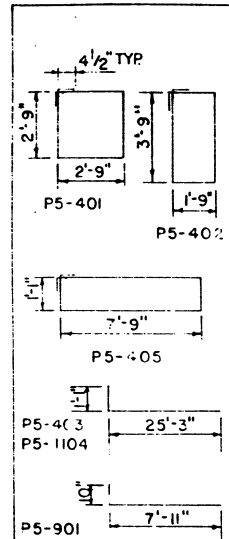
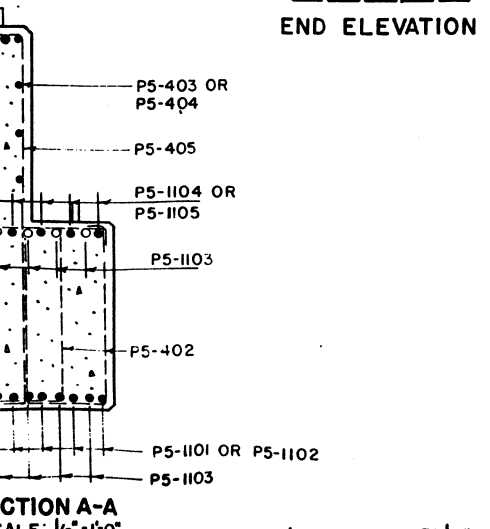
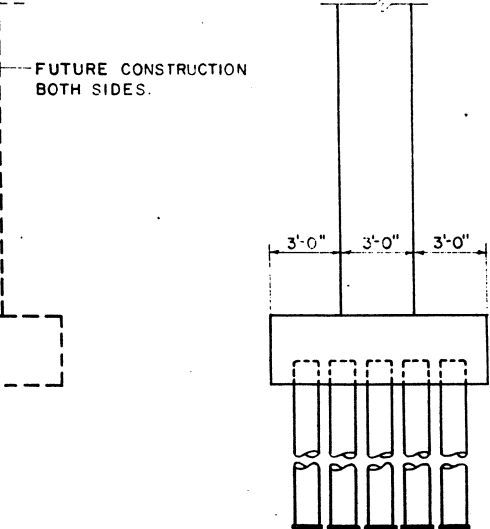
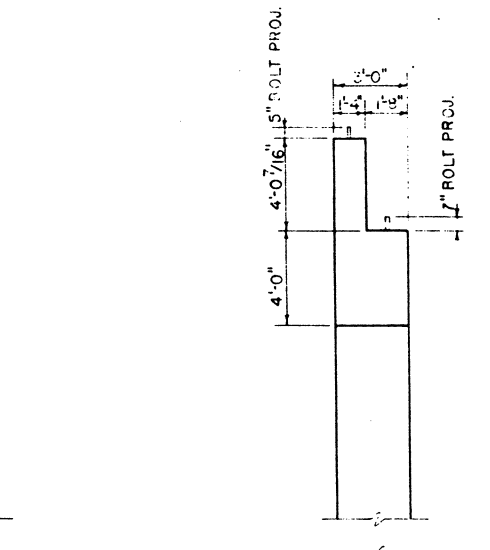
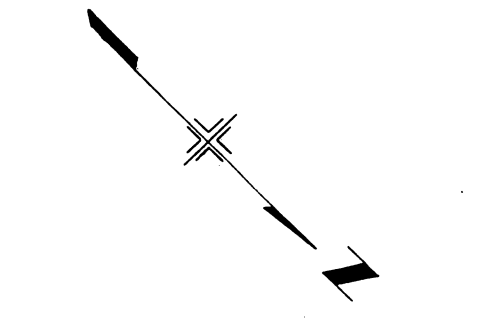
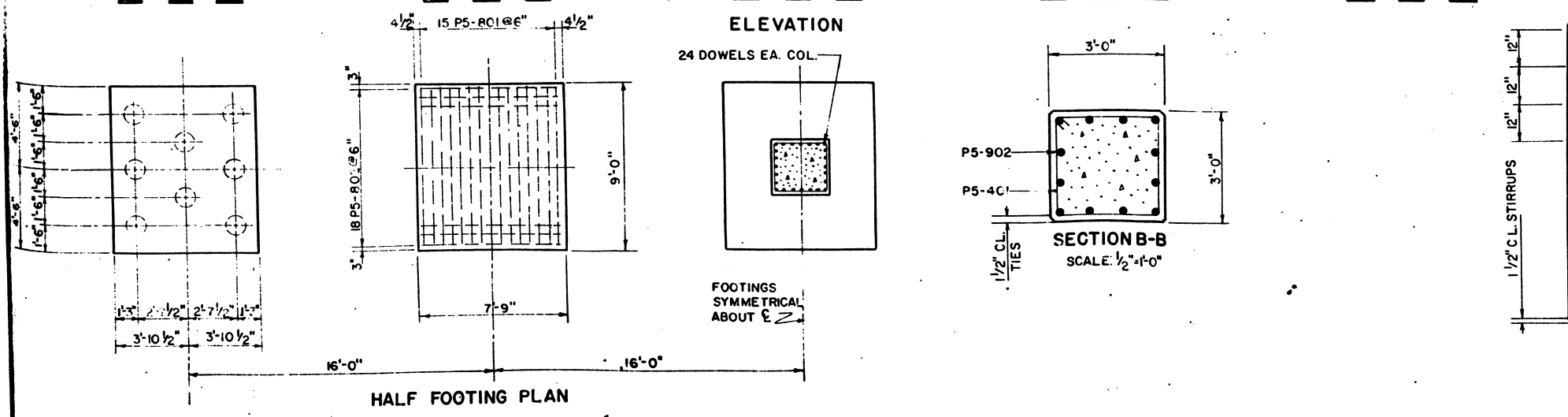
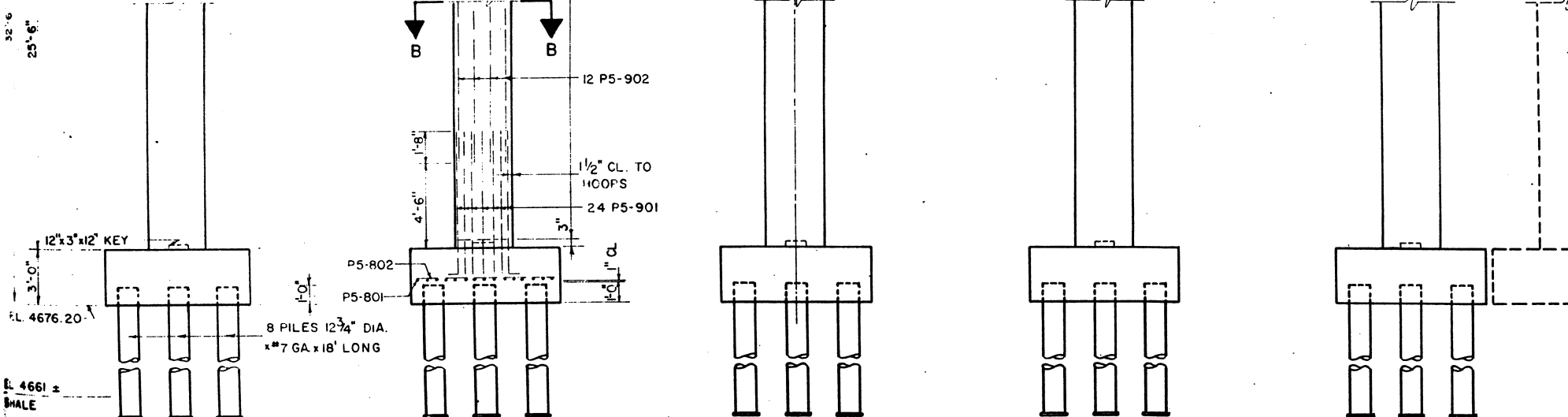
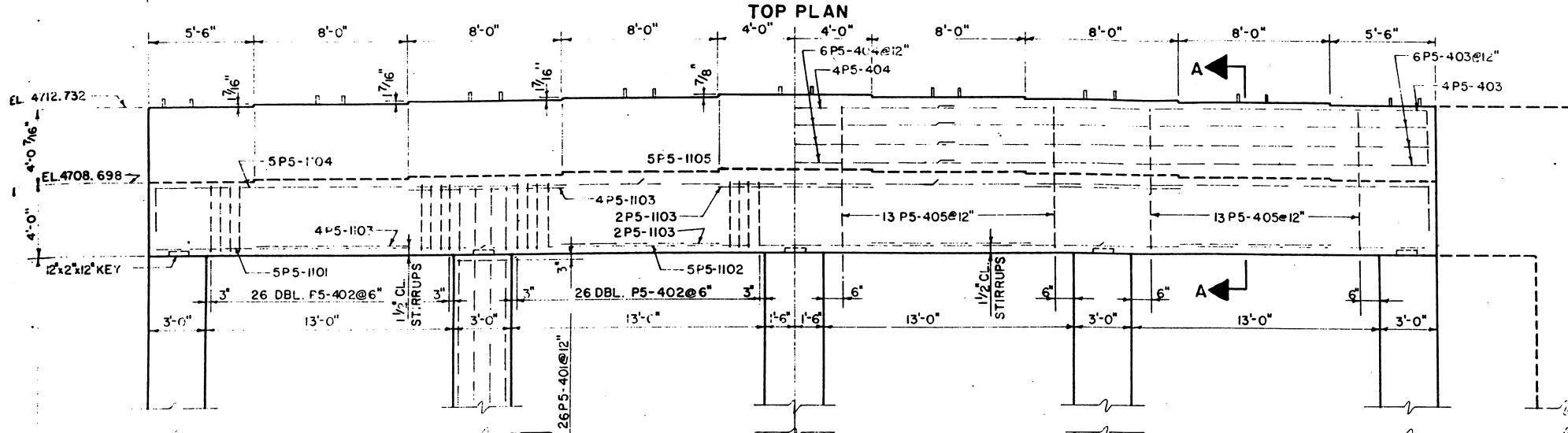
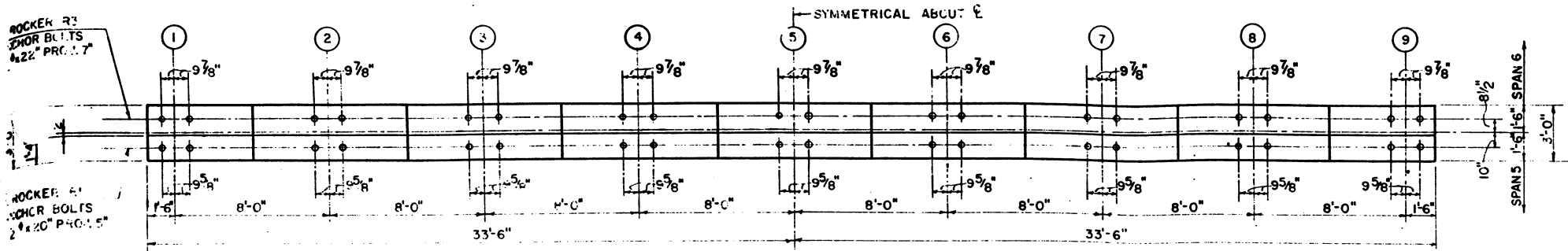
COLORADO DEPARTMENT OF HIGHWAYS
 PUEBLO, COLORADO

4TH ST. BRIDGE
 PIERS 3 AND 4

STRUCTURE NO. K-18-F
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO

SCALE 1/4" = 1'-0" EXCEPT AS NOTED

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	22	



REINFORCING BAR LIST			
MARK	SHAPE	LENGTH	NO. REQ'D.
P5-401		11'-2"	130
P5-402		11'-2"	208
P5-403		25'-11"	2C
P5-404		16'-0"	10
P5-405		17'-10"	52
P5-901		8'-6"	75
P5-902		7'-3"	90
P5-1101		6'-6"	120
P5-1102		24'-0"	60
P5-1103		17'-3"	10
P5-1104		32'-0"	5
P5-1105		6'-0"	22
P5-1106		26'-0"	10
P5-1107		16'-0"	5

BAR SUMMARY	
5398	L.F. NO. 4 AT 0.668 = 3600 LB
1291	L.F. NO. 8 AT 2.670 = 3447 LB
2505	L.F. NO. 9 AT 3.400 = 8520 LB
849	L.F. NO. 11 AT 5.313 = 4520 LB
	1% OVER RUN = 201 LB
	TOTAL = 20288 LB

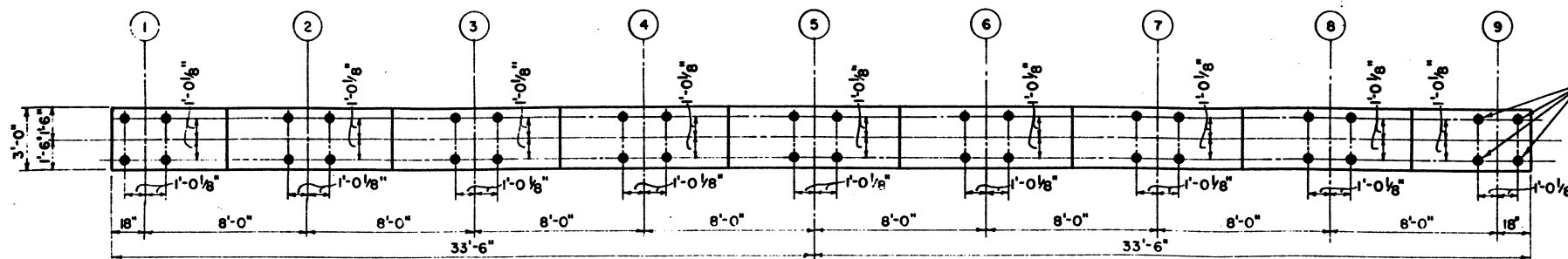
SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	AMOUNT
46a	CONCRETE	127 CU. YD.
47	REINFORCING STEEL	20288 LBS.
14g	STRUCTURAL EXCAVATION	119 CU. YD.
16a	BACKFILL	79 CU. YD.
16c	MECHANICAL TAMPING	20 HRS.
6lay	PILING	720 LIN. FT.

TABLE OF GIRD. ELEVATIONS			
SPAN 5		SPAN 6	
BRG. PT.	ELEVATION	BRG. PT.	ELEVATION
189	4712.732	189	4708.698
288	12.852	288	08.818
387	12.972	387	08.938
486	13.092	486	09.058
5	13.167	5	09.133

COLORADO DEPARTMENT OF HIGHWAYS
 P. E. S. L. COLORADO
 474 ST. BRIDGE
PIER 5
 STRUCTURE NO. 4-5-2
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO

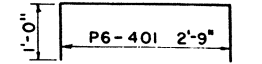
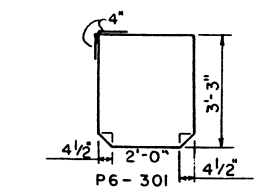
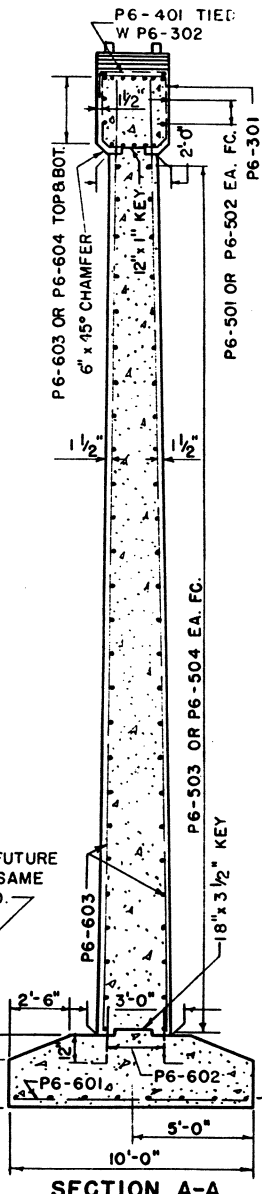
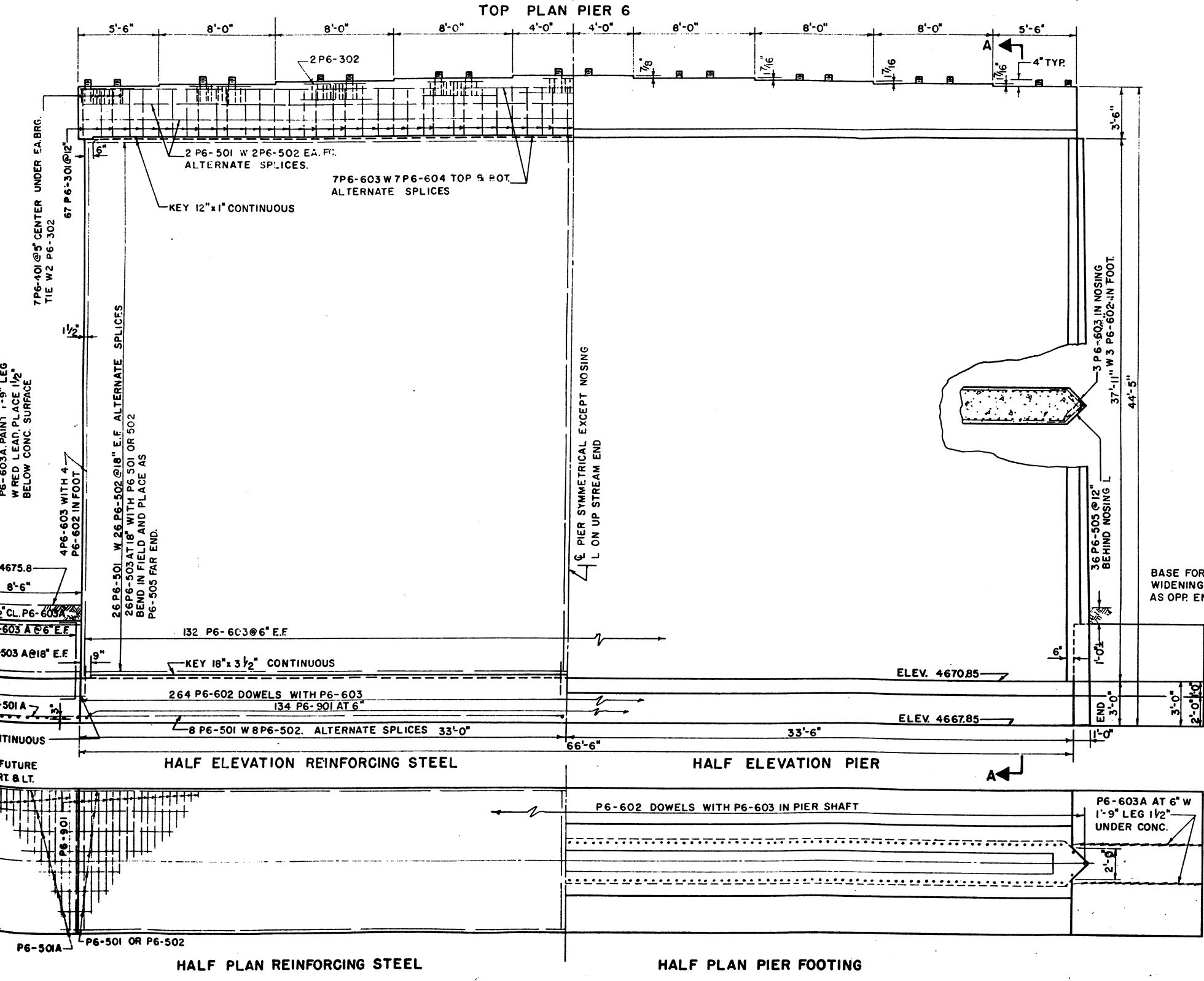
SCALE: 1/4" = 1'-0" EXCEPT AS NOTED

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (I2)	23	



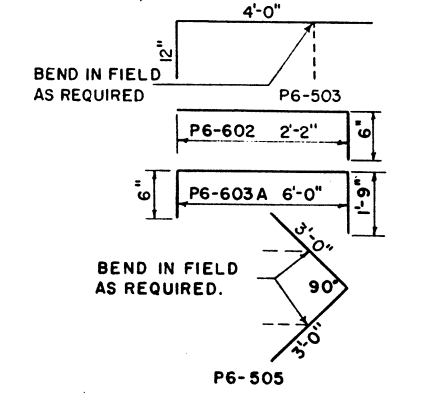
BRG. NO.	ELEV.
1 & 9	4712.262
2 & 8	4712.382
3 & 7	12.502
4 & 6	12.622
5	4712.697

BAR LIST			
MARK	SHAPE	LENGTH	REQ'D.
P6-301	U	12'-1"	67
P6-302	—	2'-9"	18
P6-401	U	4'-6"	63
P6-501	—	40'-0"	64
P6-502	—	27'-8"	64
P6-503	B.I.F.	4'-10"	26
P6-505	>	6'-0"	36
P6-901	—	9'-6"	168
P6-602	U	2'-6"	269
P6-603	—	40'-0"	283
P6-604	—	28'-8"	14
P6-501A	—	8'-0"	16
P6-503A	—	8'-0"	12
P6-603A	U	7'-11"	68



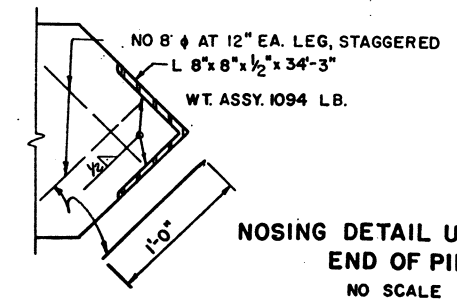
BAR	LENGTH
P6-302	2'-9"
P6-501	40'-0"
P6-502	27'-8"
P6-501A	8'-0"
P6-503A	8'-0"
P6-901	9'-6"
P6-603	40'-0"
P6-601A	
P6-604	28'-8"

BAR SUMMARY		
860	L. FT. NO. 3 @ 0.376	= 323 LB
284	L. FT. NO. 4 @ 0.668	= 190 LB
4895	L. FT. NO. 5 @ 1.043	= 5105 LB
12,932	L. FT. NO. 6 @ 1.502	= 19,408 LB
1,596	L. FT. NO. 9 @ 3.400	= 5,426 LB
1% OVERRUN		305 LB
TOTAL		30,757 LB



SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	AMOUNT
14 g	STRUCT. EXCAV.	306 CY
16 a	STRUCT. BKFL CL. I	277 CY
16 c	MECH. TAMPING	70 HRS
46 a	CONC. CLASS "A"	356 CY
47	REINF. STEEL	30,757 LB
48	STRUCT. STEEL	1094

⊕ INCLUDES 74 # 8 ♂ ON NOSING ASSY.



COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

4TH ST. BRIDGE

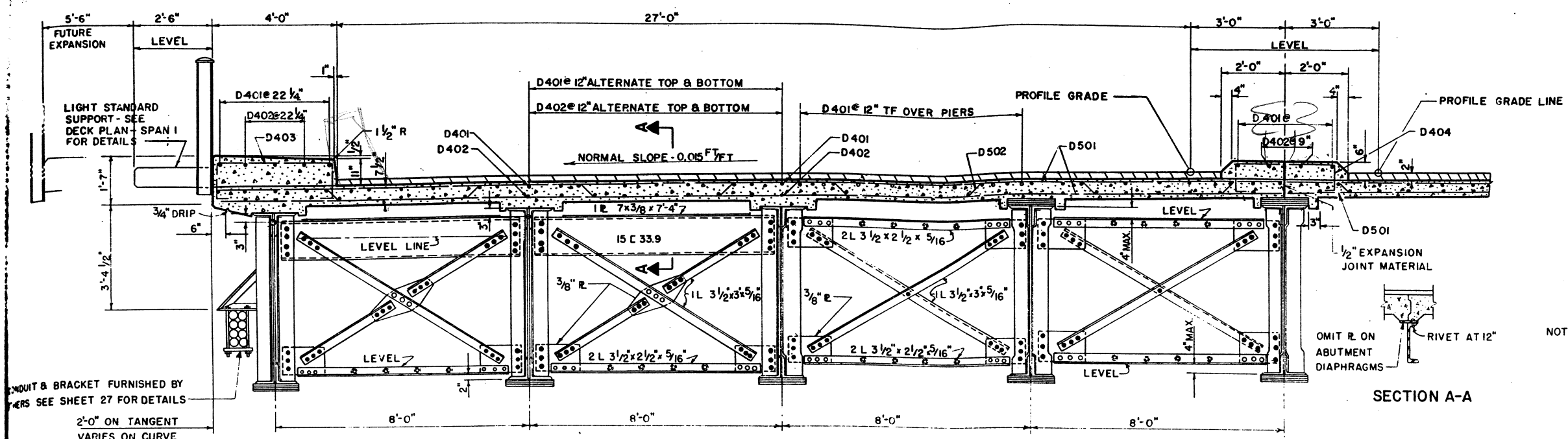
PIER NO. 6

STRUCTURE NO. K-18-Z

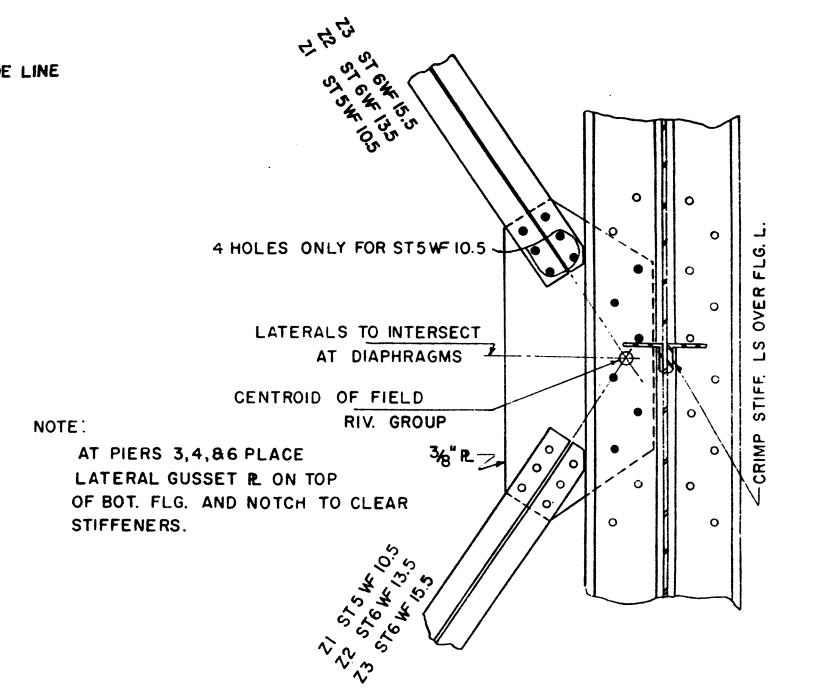
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

SCALE: 1/4" = 1'-0" EXCEPT AS NOTED

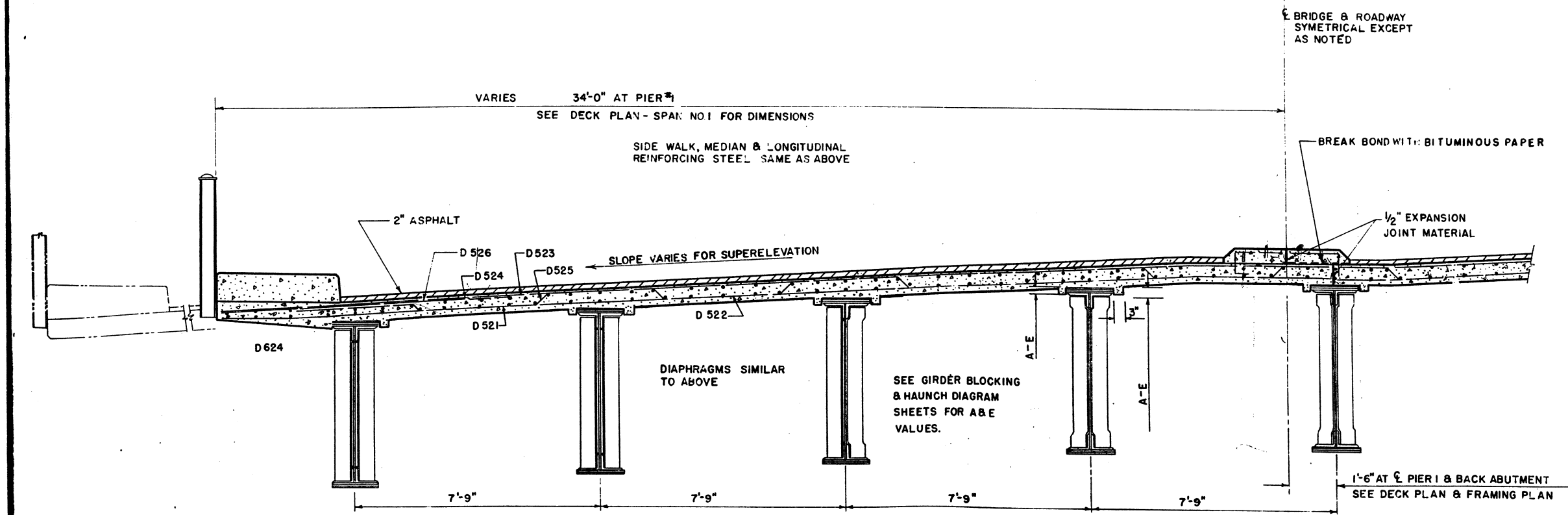
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	24	



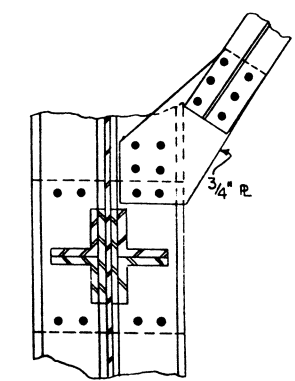
DIAPHRAGMS AT SUPPORTS MARK D1
 INTERIOR DIAPHRAGMS MARK D2
 TYPICAL HALF-SECTION
 SCALE: 1/2" = 1'-0"



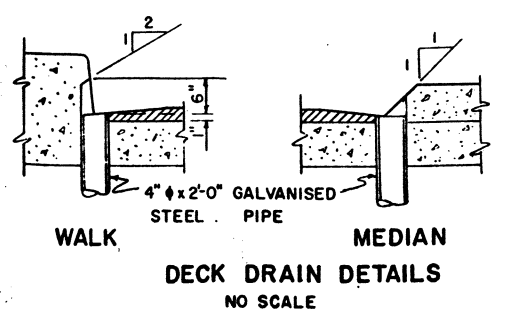
TYPICAL ATTACHMENT AT INTERIOR DIAPHS



TYPICAL SKEW HALF SECTION
 PARALLEL TO PIERS



BRACING DETAILS



DECK DRAIN DETAILS
 NO SCALE

COLORADO DEPARTMENT OF HIGHWAYS
 PUEBLO, COLORADO

4TH ST. BRIDGE

TYPICAL DECK SECTION

STRUCTURE NO. K-18-2
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO

SHEET 13 OF 28 SHEETS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US0016 (12)	25	

BAR LIST			
MARK	SHAPE	LENGTH	REQ'D
D401		40'-0"	234
D402		30'-4"	300
D403		7'-3"	164
D405		3'-0"	164
D521		24'-3"	166
D522		13'-9"	166
D523		28'-1"	166
D524		9'-11"	166
D525		32'-1"	162
D526		8'-0"	162
L701		5'-6"	36
L702		2'-10"	8
L703		2'-4"	8
L704		2'-1"	4

BAR SUMMARY		
20141 LIN. FT. #4 AT 668 7/8 FT.	=	13,454
19245 LIN. FT. #5 AT 1.043 7/8 FT.	=	20,072
248 LIN. FT. #7 AT 2.044 7/8 FT.	=	507
1% OVERRUN	=	304
TOTAL		34,337

SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	AMOUNT
46a	CLASS A CONCRETE	237 C.Y.
47	REINFORCING STEEL	34,337 LBS.
*	1/2" EXPANSION JNT. MATL.	131 SF.
α	STEEL RAILING	232 LIN. FT.

* INCLUDE IN ITEM 46a
α INCLUDE IN ITEM 48

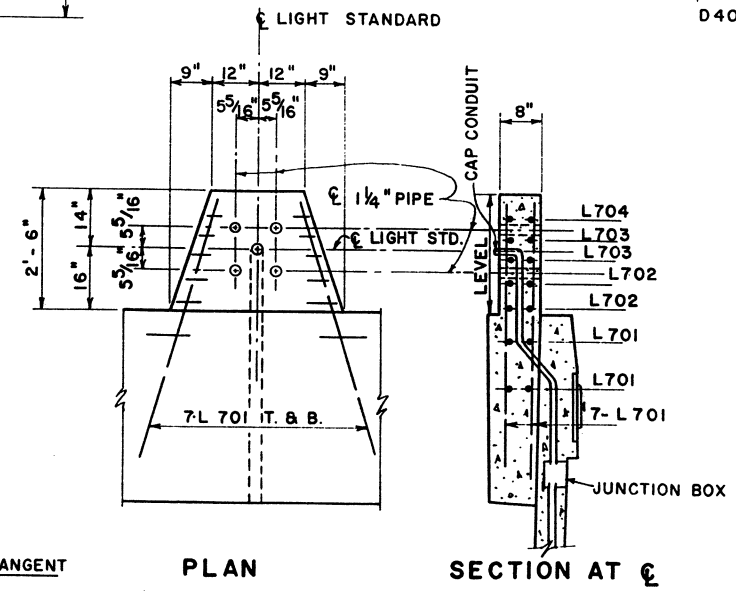
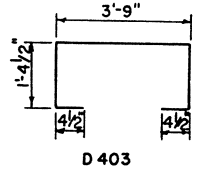
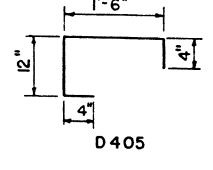
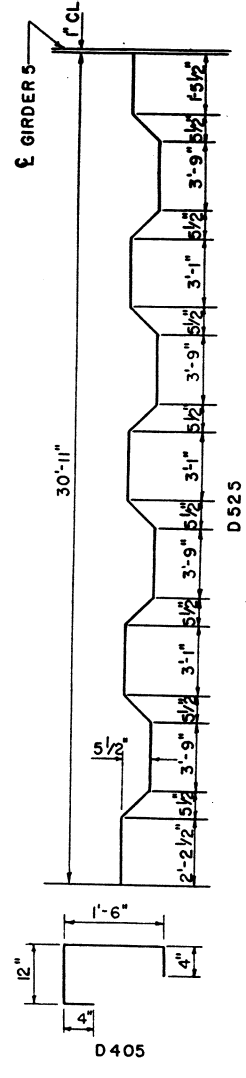
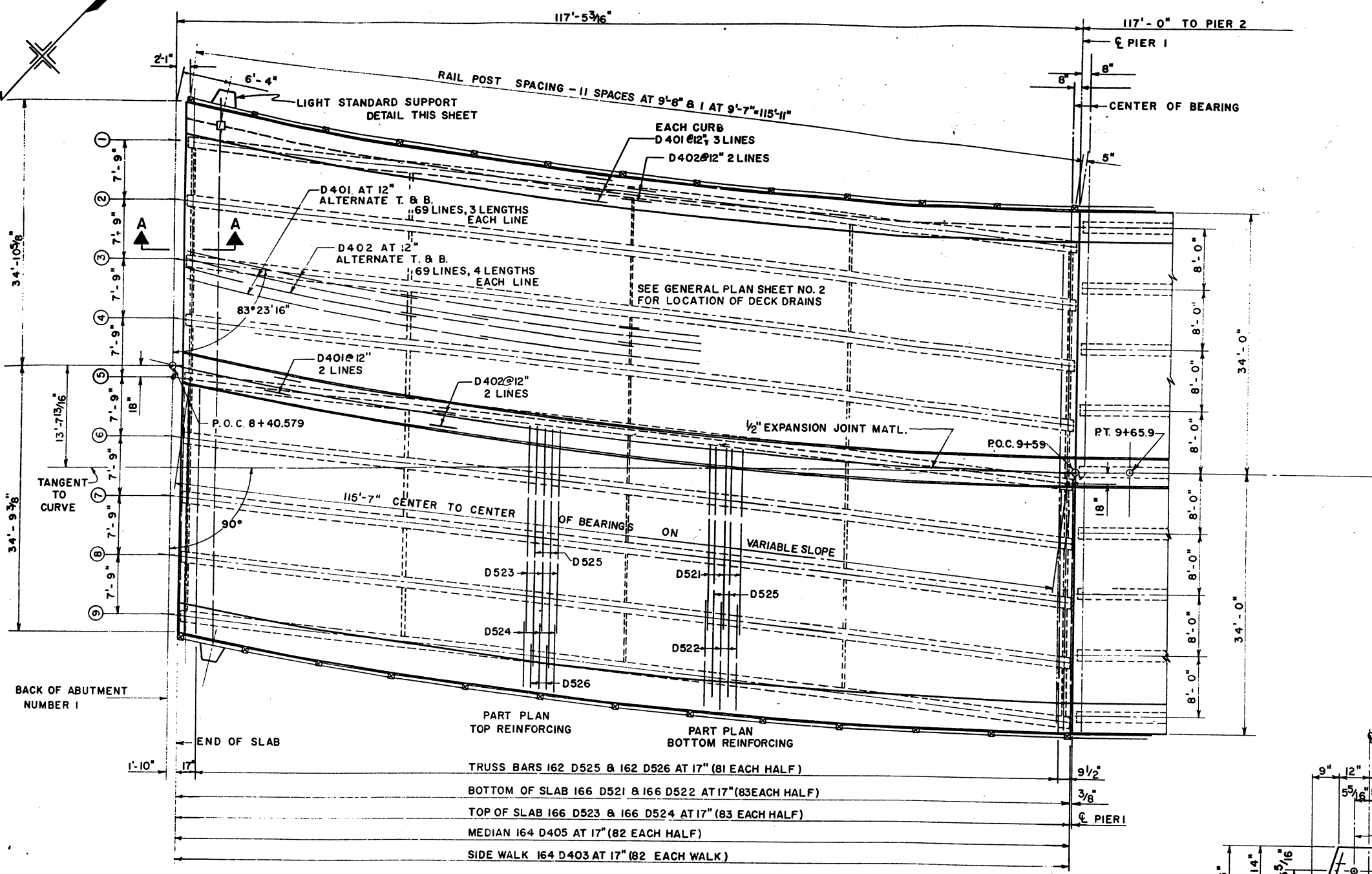
- SPECIAL NOTES**
- SEE SHEET NO. 13 FOR TYPICAL DECK SECTION.
 - SEE SHEET NO. 27 FOR RAILING DETAILS.
 - LAP ALL BARS 18"
 - ALL BARS 1" CLEAR
 - CHAMFER ALL CORNERS 3/4" UNLESS OTHERWISE NOTED.

COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

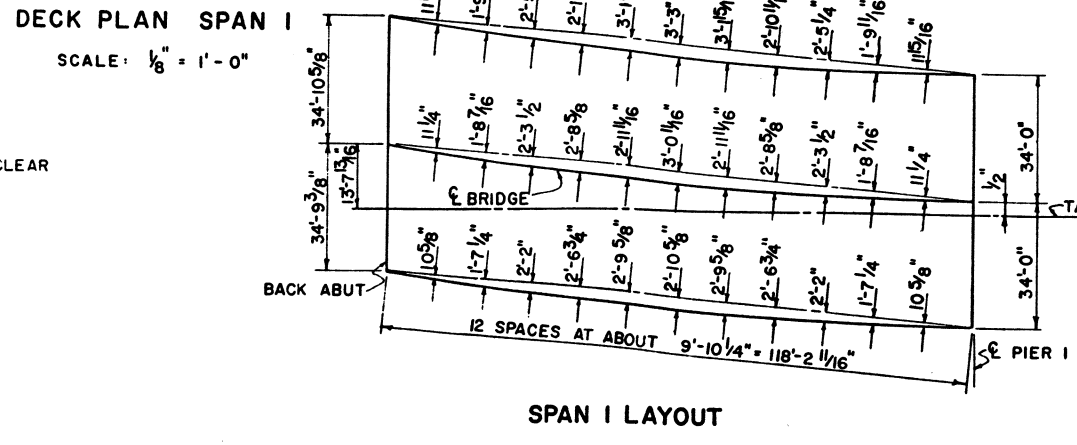
4 TH ST. BRIDGE
DECK PLAN
SPAN 1

STRUCTURE NO. K-18-Z

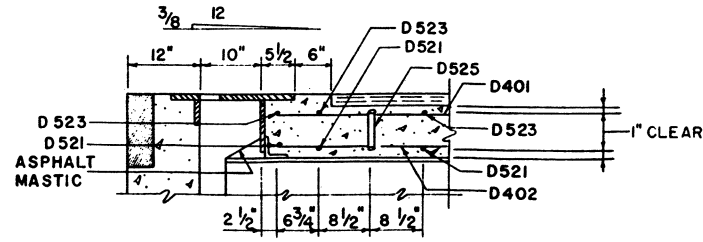
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO



LIGHT STANDARD SUPPORT
SCALE: 1/2" = 1'-0"



SPAN I LAYOUT



SECTION A-A
SCALE: 3/4" = 1'-0"

DECK PLAN SPAN I
SCALE: 1/8" = 1'-0"

BACK OF ABUTMENT NUMBER 1

END OF SLAB

PART PLAN TOP REINFORCING
PART PLAN BOTTOM REINFORCING

TRUSS BARS 162 D525 & 162 D526 AT 17" (81 EACH HALF)
BOTTOM OF SLAB 166 D521 & 166 D522 AT 17" (83 EACH HALF)
TOP OF SLAB 166 D523 & 166 D524 AT 17" (83 EACH HALF)
MEDIAN 164 D405 AT 17" (82 EACH WALK)
SIDE WALK 164 D403 AT 17" (82 EACH WALK)

17-23
1-10
7-3

117'-5 3/16" TO BACK OF ABUTMENT #1

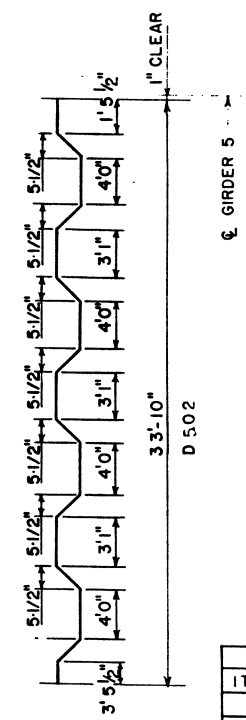
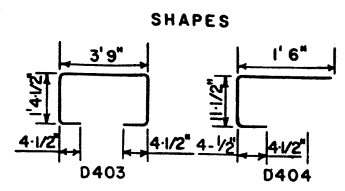
117'-0"

PIER 2

119'-0" TO PIER 3

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	26	

REINFORCING BAR LIST				
MARK	SHAPE	LENGTH	NO. REQ'D	
D401		40' 0"	231	
D402		30' 4"	300	
D403		7' 3"	166	
D404		2' 9"	166	
L701		5' 6"	36	
L702		2' 10"	8	
L703		2' 4"	8	
L704		2' 1"	4	
D501		33' 10"	332	
D502		35' 2"	164	



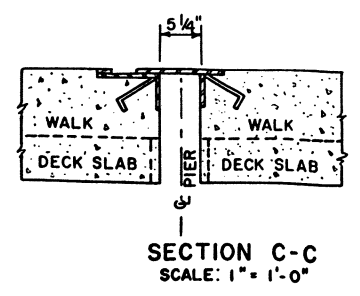
BAR SUMMARY	
20,000 L.F. NO. 4 AT 0.6687/FT.	= 13,360
17,000 L.F. NO. 6 AT 1.0437/FT.	= 17,731
248 L.F. NO. 7 AT 2.0447/FT.	= 507
1% OVERRUN = 316	
TOTAL = 31,915	

SUMMARY OF QUANTITIES		
ITEM NO.	DESCRIPTION	AMOUNT
46 a	CLASS "A" CONCRETE	239 C.Y.
47	REINFORCING STEEL	31,915 LBS.
α	STEEL RAILING	234 FT.
*	1/2" EXPANSION JOINT MATL.	132 SF.
*	3/4" EXPANSION JOINT MATL.	53 SF.
80c	32 OZ. COPPER SHEET	136 LBS.

* INCLUDE IN ITEM 46 a
α INCLUDE IN ITEM 48

SPECIAL NOTES

- SEE SHEET NO. 13 FOR TYPICAL DECK SECTION.
- LATERAL REINFORCING AS SHOWN FROM STA. 9+59 TO 18+65. SEE DECK PLANS FOR CURVED DECK REINFORCEMENT.
- LAP ALL BARS 18".
- ALL BARS 1" CLEAR.
- CHAMFER ALL CORNERS 3/4" UNLESS OTHERWISE NOTED.

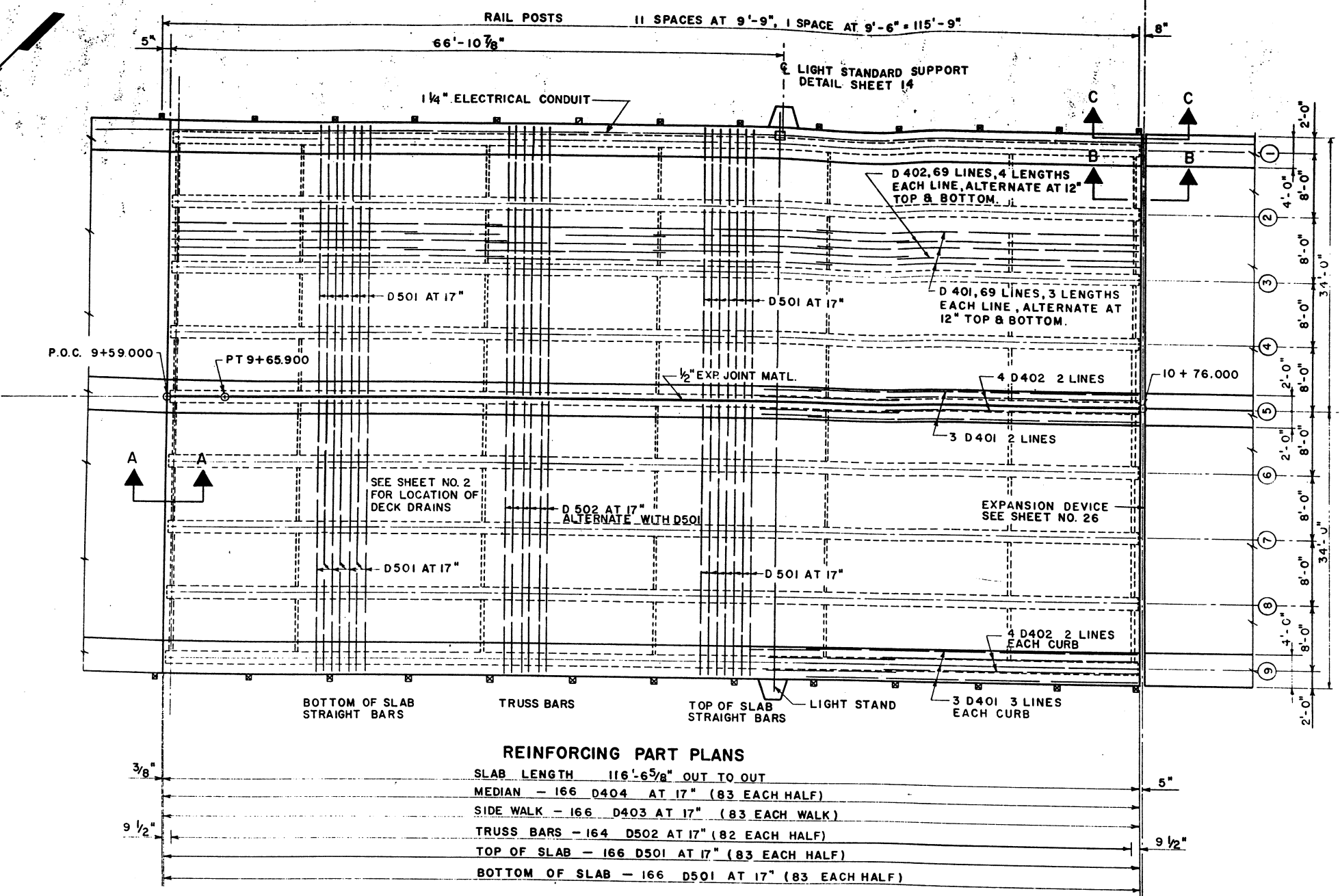


SECTION C-C
SCALE: 1" = 1'-0"

COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

4TH ST. BRIDGE
DECK PLAN
SPAN 2
STRUCTURE NO. K-18-Z

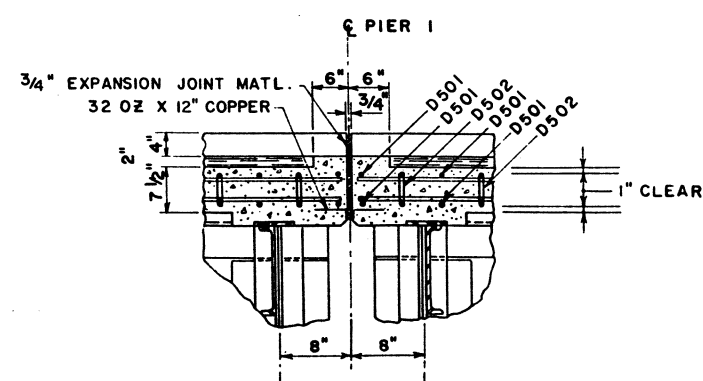
KEN R. WHITE
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DENVER, COLORADO



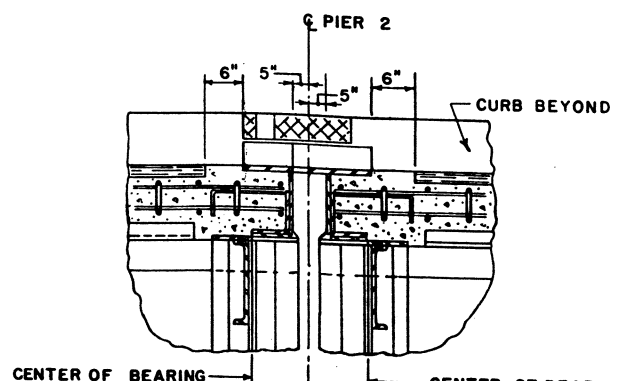
REINFORCING PART PLANS

3/8"	SLAB LENGTH 116'-6 5/8" OUT TO OUT	5"
	MEDIAN - 166 D404 AT 17" (83 EACH HALF)	
	SIDE WALK - 166 D403 AT 17" (83 EACH WALK)	
	TRUSS BARS - 164 D502 AT 17" (82 EACH HALF)	
9 1/2"	TOP OF SLAB - 166 D501 AT 17" (83 EACH HALF)	9 1/2"
	BOTTOM OF SLAB - 166 D501 AT 17" (83 EACH HALF)	

DECK PLAN SPAN 2
SCALE 1/8" = 1'-0"

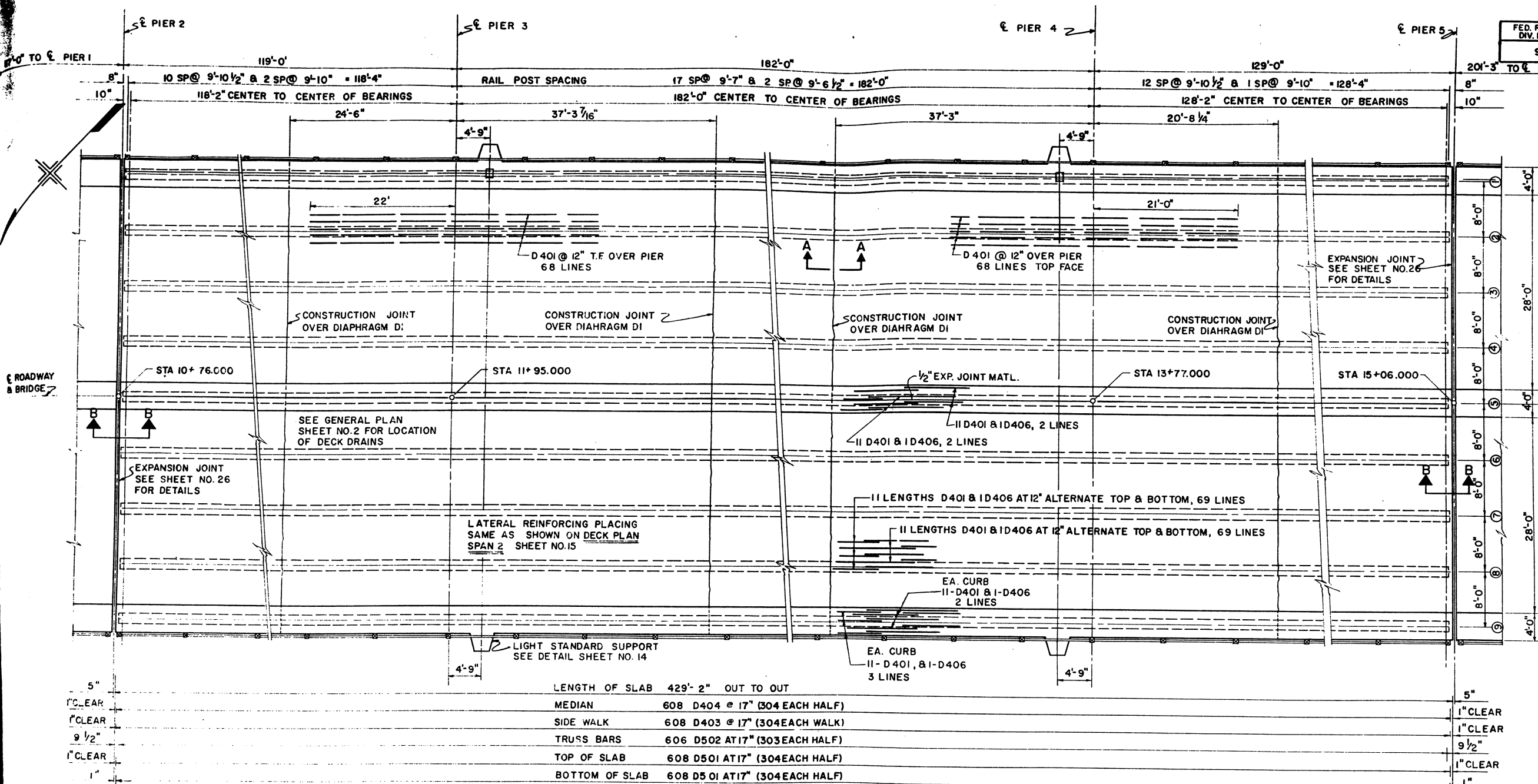


SECTION A-A
SCALE 3/4" = 1'-0"



SECTION B-B

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016(6)	27	



REINFORCING BAR LIST			
MARK	SHAPE	LENGTH	NO. REQD
D401		40'-0"	1808
D406		6'-0"	152
D403		7'-3"	608
D404		2'-9"	608
D501		33'-10"	1216
D502		35'-2"	606
L701		5'-6"	72
L702		2'-10"	16
L703		2'-4"	16
L704		2'-1"	8

SEE DECK PLAN SPAN 2 FOR SHAPE DIMENSIONS. SHEET 15

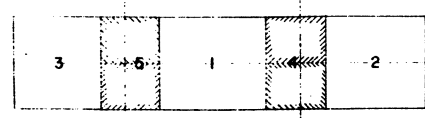
BAR SUMMARY	
78400 LIN. FT. #4 AT 0.668	= 52372 LB.
62452 LIN. FT. #5 AT 1.043	= 65138 LB.
495 LIN. FT. #7 AT 2.044	= 1012 LB.
1% OVERRUN	= 1185 LB.
TOTAL	= 119,707 LB.

SUMMARY OF QUANTITIES		
ITEM NO.	DESCRIPTION	AMOUNT
46 a	CLASS A CONCRETE	877 C.Y.
47	REINFORCING STEEL	119,707 LBS.
∞	STEEL RAILING	858 LIN. FT.
*	1/2" EXP. JNT. MATL.	281 S.F.

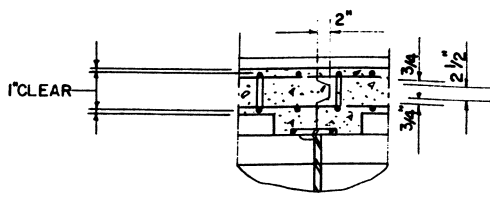
* INCLUDE IN ITEM 46 a
 ∞ INCLUDE IN ITEM 48

- SPECIAL NOTES
- SEE SHEET NO. 13 FOR TYPICAL DECK SECTION
 - SEE SHEET NO. 15 FOR PLACING LATERAL REINFORCING
 - LAP ALL BARS 18"
 - ALL BARS 1" CLEAR

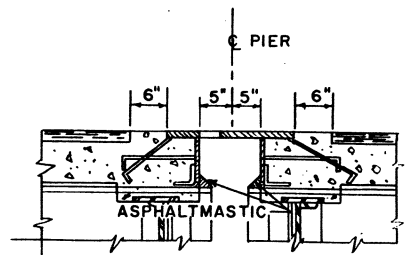
	LENGTH OF SLAB	429'-2" OUT TO OUT
MEDIAN	608 D404 @ 17"	(304 EACH HALF)
SIDE WALK	608 D403 @ 17"	(304 EACH HALF)
TRUSS BARS	606 D502 AT 17"	(303 EACH HALF)
TOP OF SLAB	608 D501 AT 17"	(304 EACH HALF)
BOTTOM OF SLAB	608 D501 AT 17"	(304 EACH HALF)



CONCRETE PLACING SCHEDULE



SECTION A-A
NO SCALE



SECTION B-B
SCALE: 3/4" = 1'-0"

COLORADO DEPARTMENT OF HIGHWAYS
 PUEBLO, COLORADO

4 TH ST. BRIDGE
 DECK PLAN
 SPANS 3-4-5

STRUCTURE NO. K-18-Z
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO

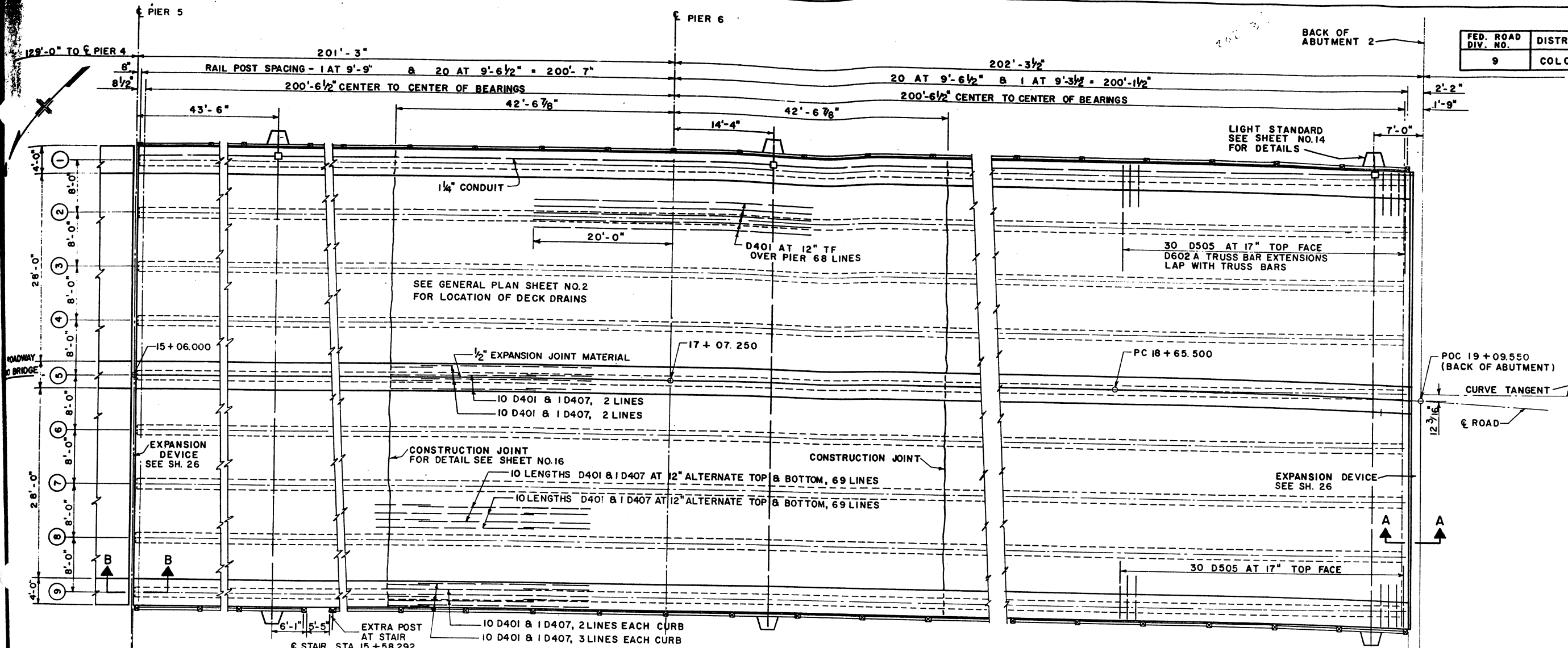
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	28	

BAR LIST				
MARK	SHAPE	LENGTH	REQ'D	
D401		40'-0"	1588	
D407		16'-6"	152	
D403		7'-3"	570	
D404		2'-9"	570	
D501		33'-10"	1080	
D502		35'-2"	538	
D503		34'-2"	30	
D504		32'-10"	60	
D505		4'-8"	60	
L701		5'-6"	108	
L702		2'-10"	24	
L703		2'-4"	24	
L704		2'-1"	12	

BAR SUMMARY	
71728 LIN. FT. #4 AT 0.668*/FT. = 47914	
58732 LIN. FT. #5 AT 1.043*/FT. = 61257	
743 LIN. FT. #7 AT 2.044*/FT. = 1519	
1% OVER RUN = 1107	
TOTAL	111797

SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	AMOUNT
46	CLASS A CONCRETE	821 CU. YD.
47	REINFORCING STEEL	111797
α	STEEL RAILING	804 L.F.
*	1/2" EXP. JNT. MATL.	470 SF

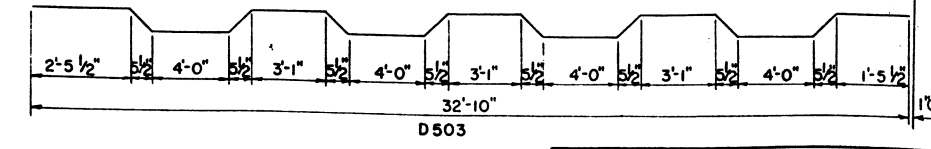
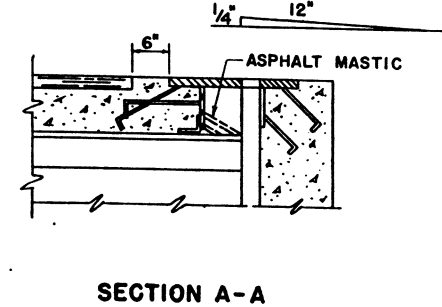
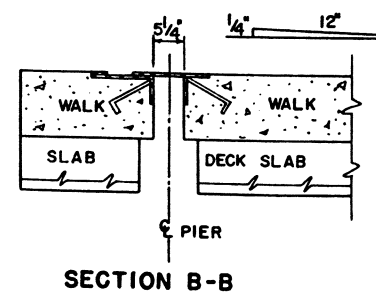
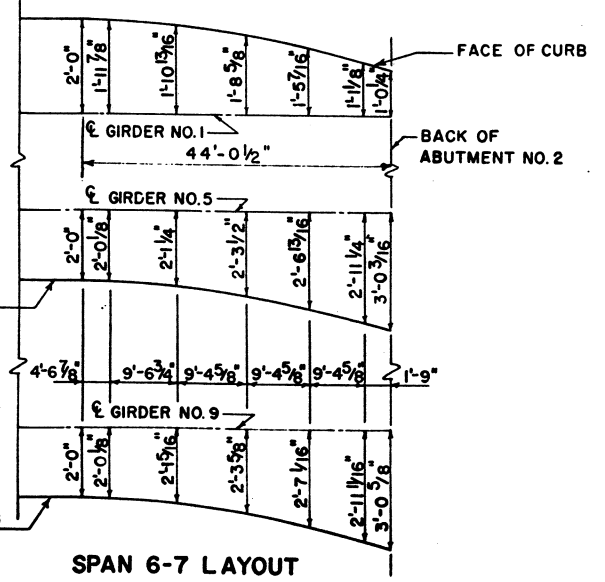
* INCLUDE IN ITEM 46
α INCLUDE IN ITEM 48



	LENGTH OF SLAB	401'-3 1/2" OUT TO OUT	
1" CLEAR	MEDIAN	570 D404 AT 17" (285 EACH HALF)	1'-10"
1" CLEAR	SIDEWALK	570 D403 AT 17" (285 EACH WALK)	1" CLEAR
9 1/2"	TRUSS BARS	508 D502 AT 17" (254 EACH HALF)	1" CLEAR
1" CLEAR	TOP OF SLAB	510 D501 AT 17" (255 EACH HALF)	9 1/2"
1"	BOTTOM OF SLAB	510 D501 AT 17" (255 EACH HALF)	1" CLEAR

CONCRETE PLACING DIAGRAM

- SPECIAL NOTES
- SEE SHEET NO.13 FOR TYPICAL DECK SECTION.
 - SEE SHEET NO.15 FOR PLACING LATERAL REINFORCING.
 - LAP ALL BARS 18".
 - ALL BARS 1" CLEAR.

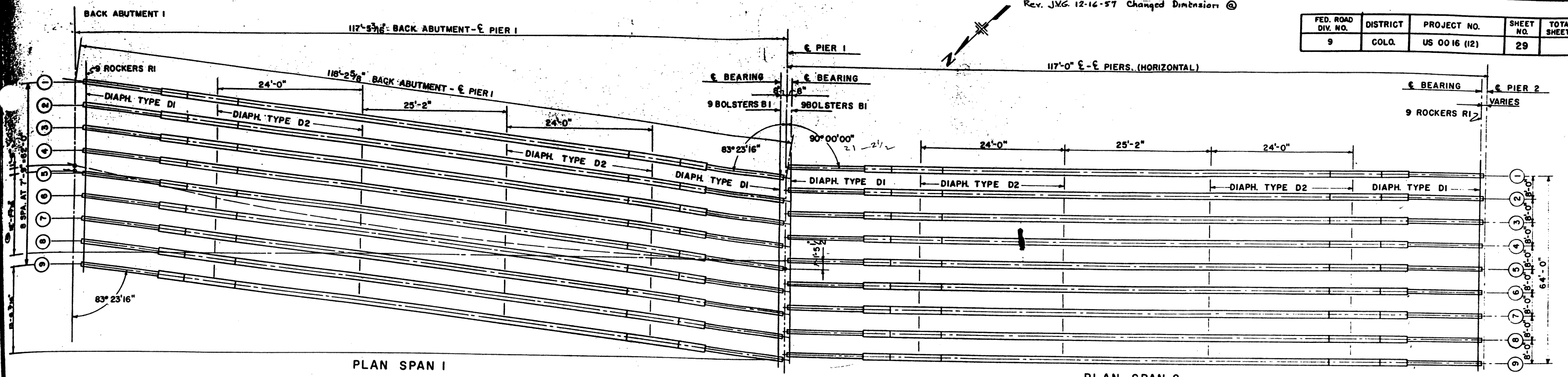


COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

4TH ST. BRIDGE
DECK PLAN
SPANS 6-7
STRUCTURE NO. K-18-Z

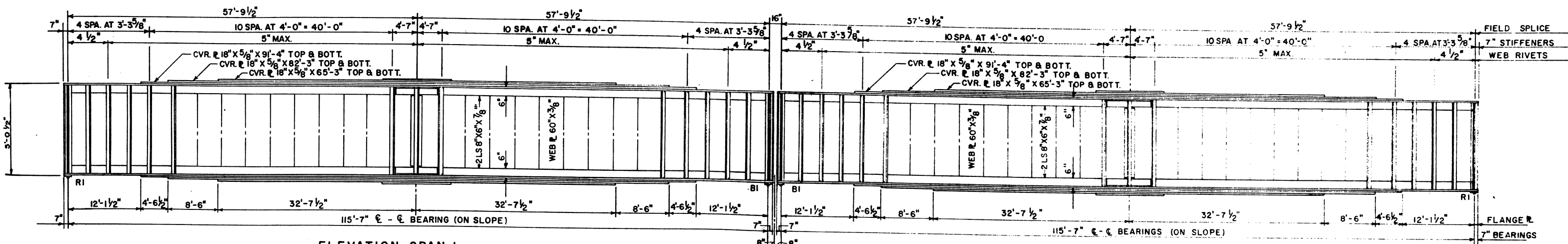
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	29	



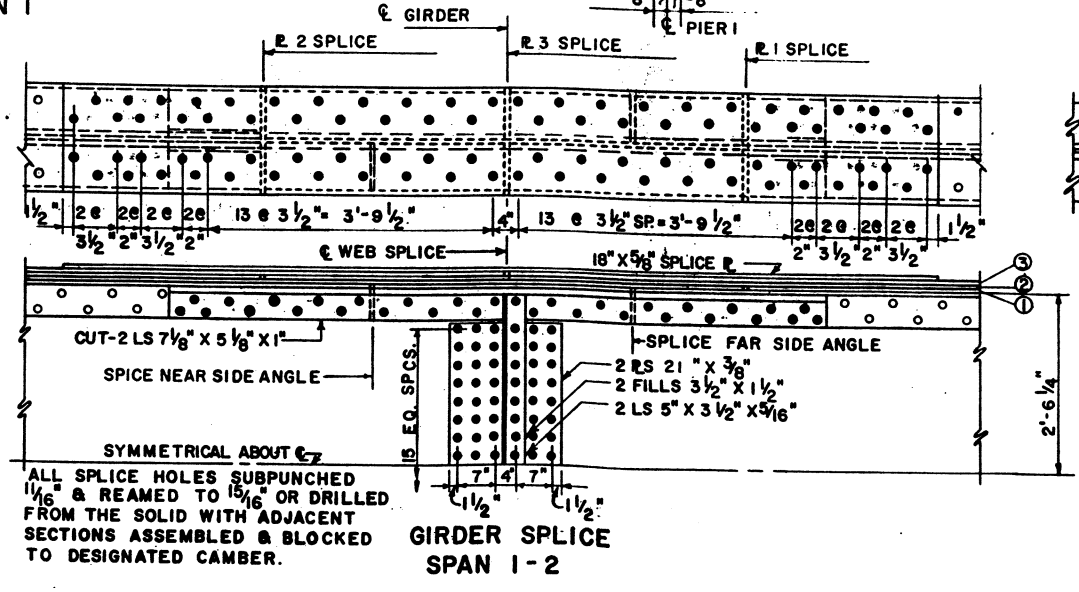
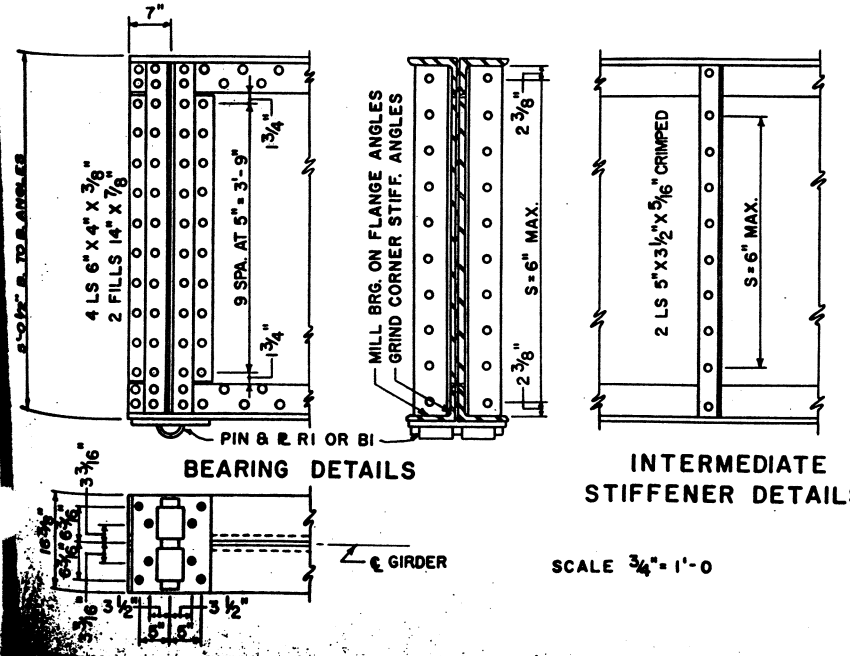
PLAN SPAN 1

PLAN SPAN 2

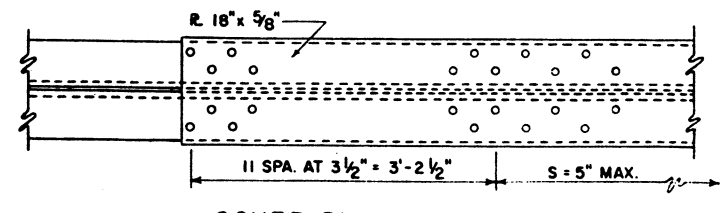


ELEVATION SPAN 1

ELEVATION SPAN 2



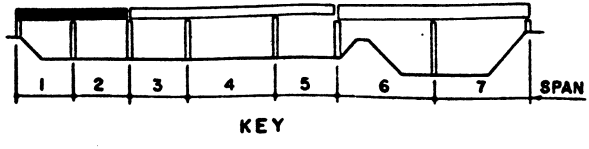
GIRDER SPLICE SPAN 1-2



COVER PLATE RIVET SPACING

- NOTES: 1. COVER PLATES TO BE U.M.P.
 2. SEE SHEET NO. 25 FOR BEARING DEVICES
 3. SEE SHEET NO. 13 FOR DIAPHRAGMS
 4. SEE SHEET NO. 22 FOR BLOCKING

QUANTITIES		
STRUCTURAL STEEL	UNIT	QUANT.
SPAN 1	L.B.	496.6
SPAN 2	L.B.	496.8
SPAN 3-4-5	L.B.	1,643.0
SPAN 6-7	L.B.	2,134.7
EXPANSION DEVICE	L.B.	24.5
TOTAL	L.B.	4,795.6



COLORADO DEPARTMENT OF HIGHWAY
 PUEBLO, COLORADO

4TH ST. BRIDGE

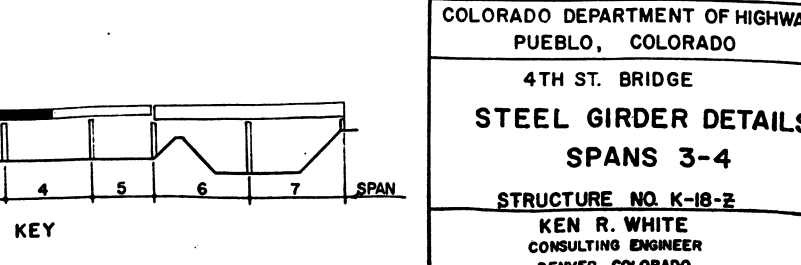
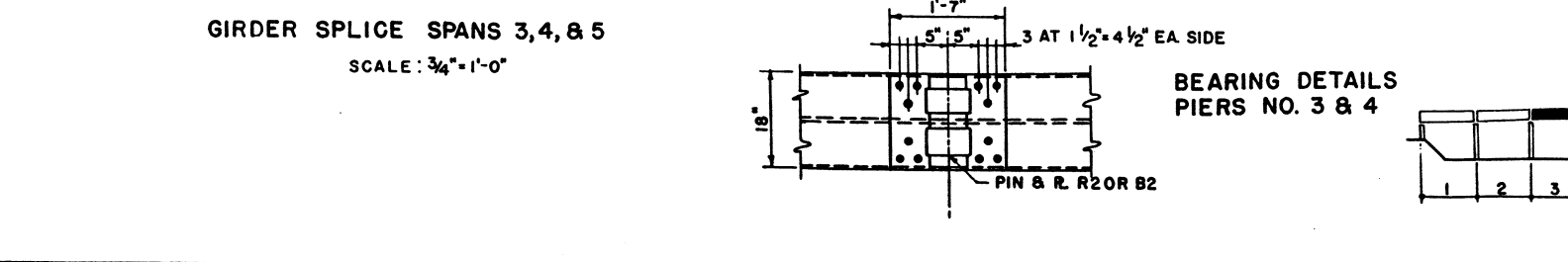
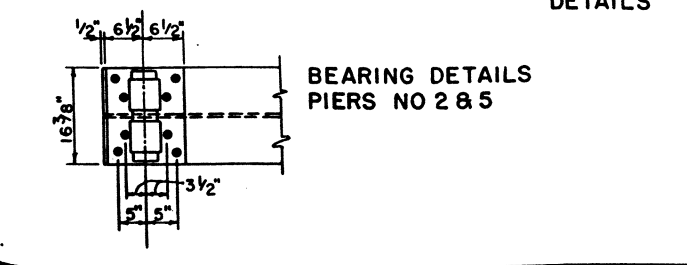
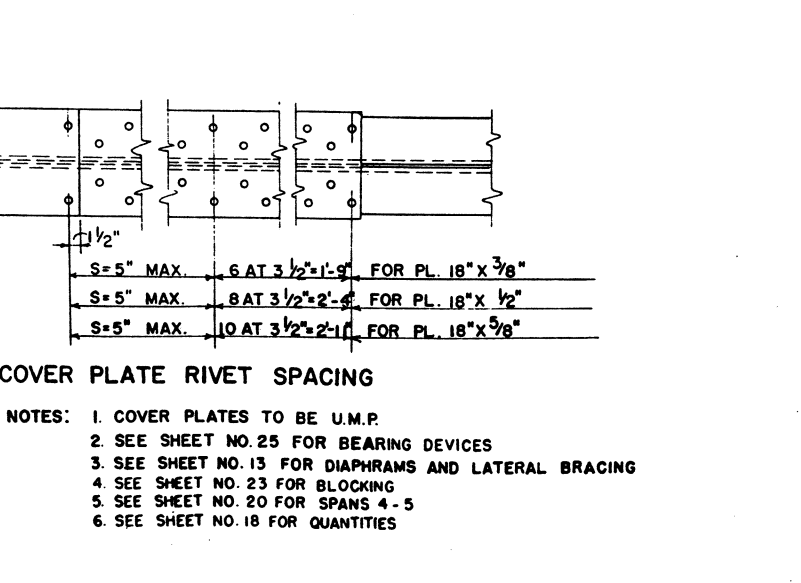
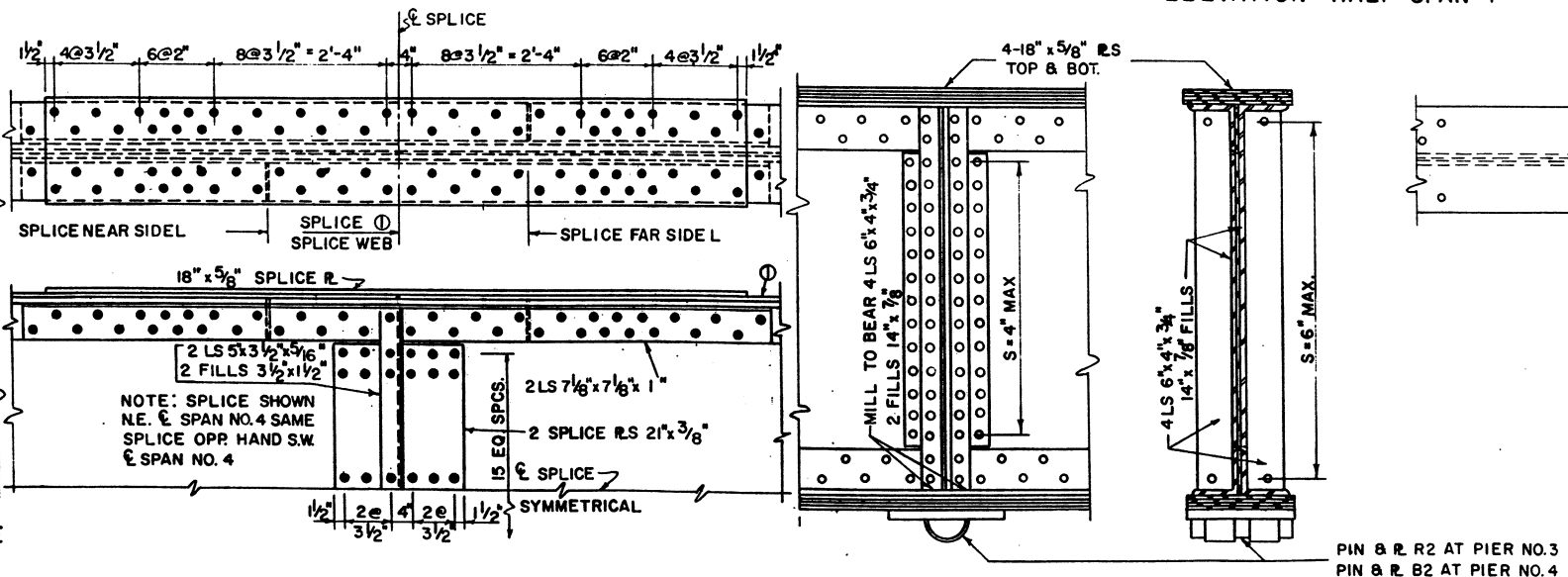
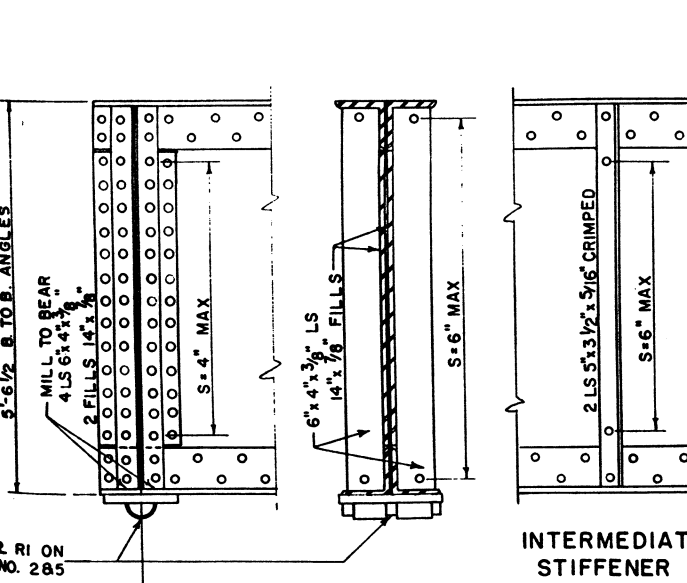
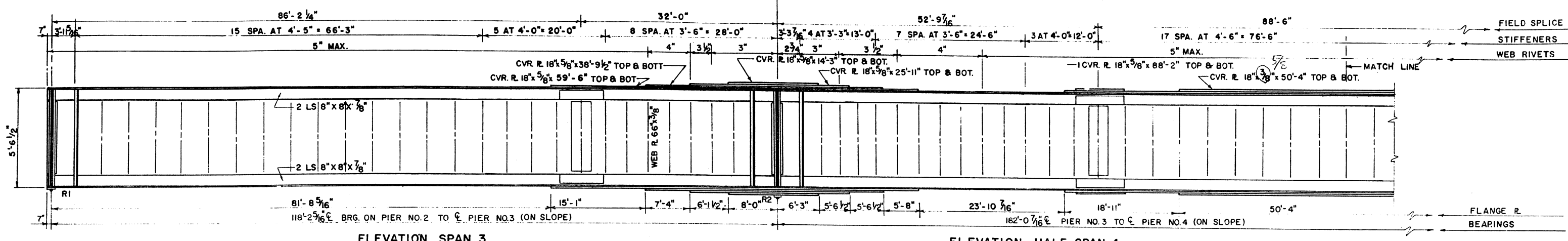
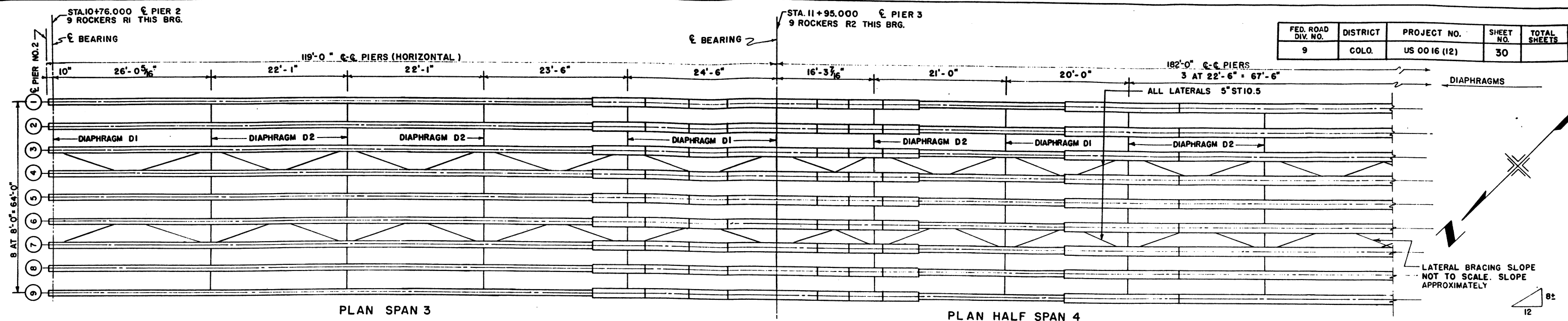
STEEL GIRDER DETAILS
 SPANS 1-2

STRUCTURE NO. K-18-Z

KEN R. WHITE
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 DENVER, COLORADO

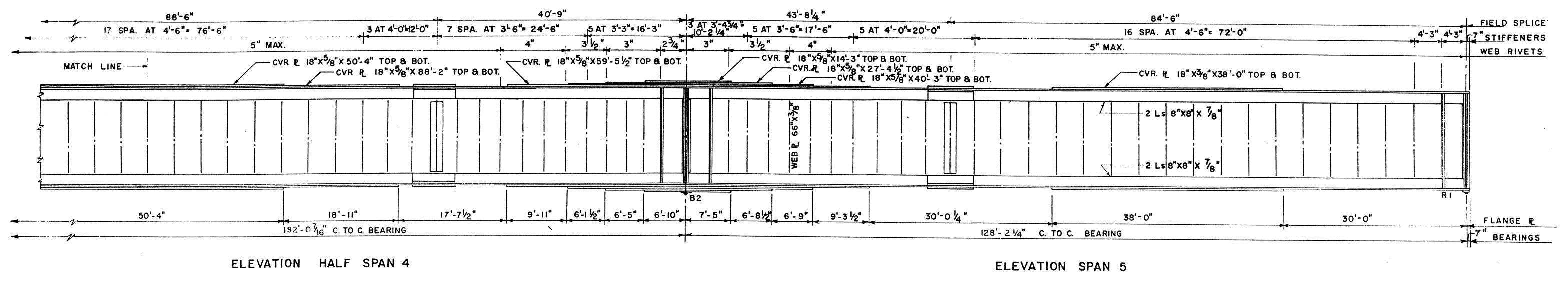
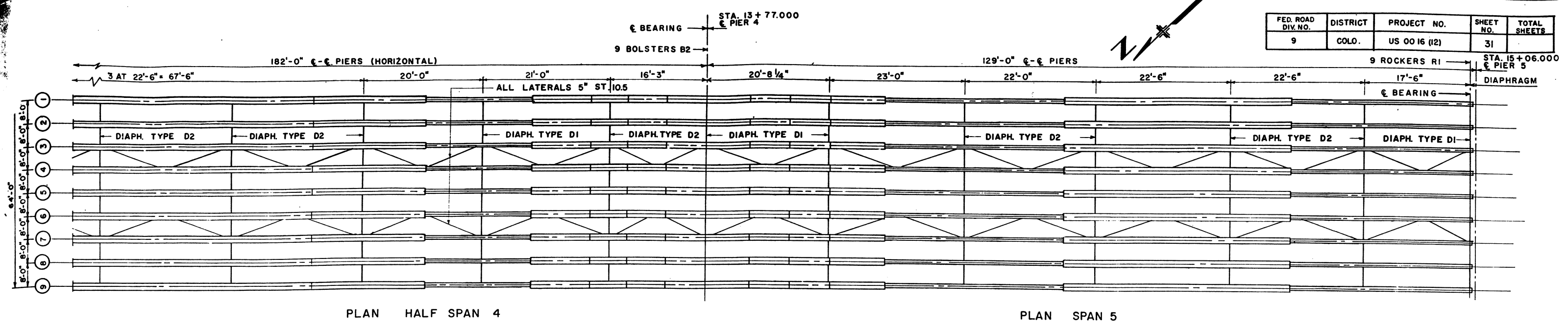
SHEET 18 OF 29

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	30	

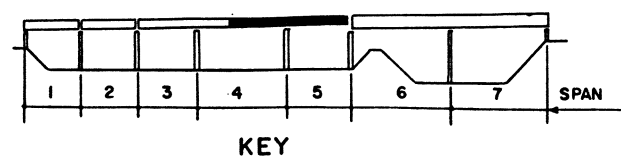


COLORADO DEPARTMENT OF HIGHWAYS
 PUEBLO, COLORADO
 4TH ST. BRIDGE
STEEL GIRDER DETAILS
 SPANS 3-4
 STRUCTURE NO. K-18-Z
 KEN R. WHITE
 CONSULTING ENGINEER
 DENVER, COLORADO
 SHEET 19 OF 28 SHEETS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 00 16 (12)	31	



NOTES:
1. FOR DETAILS AND NOTES, SEE SHEET NO. 19



COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

4 TH ST. BRIDGE

STEEL GIRDER DETAILS
SPANS 4 - 5

STRUCTURE NO. K-18-Z

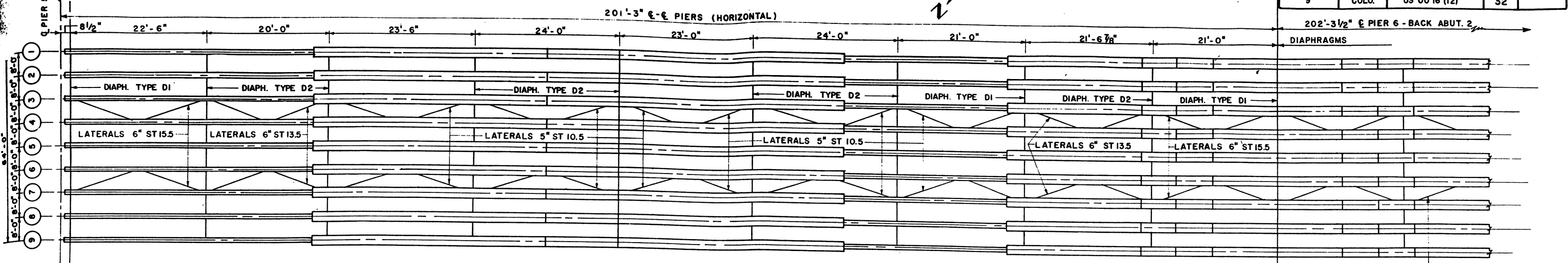
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

SHEET 20 OF 28 SHEETS

STA. 15 + 06.000 @ PIER 5
9 ROCKERS R3 THIS BRG.

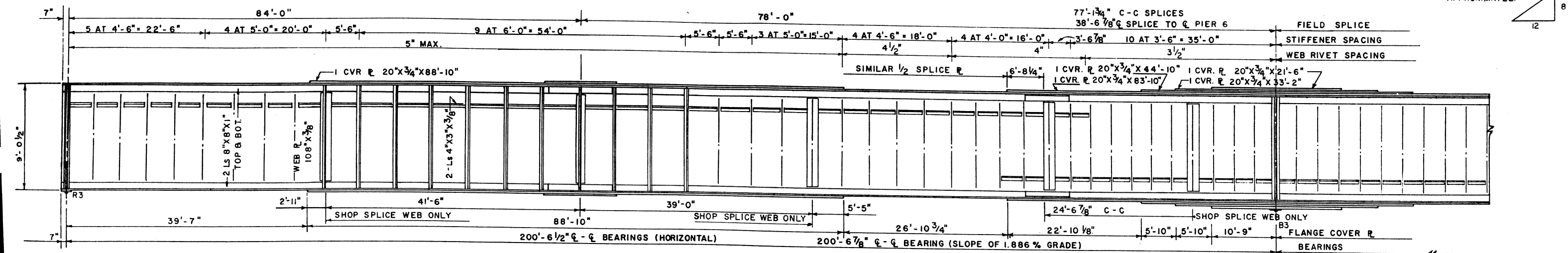
STA. 17 + 07.250 @ BRG. PIER 6
9 BOLSTENS B3 THIS BRG.

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 00 16 (12)	32	

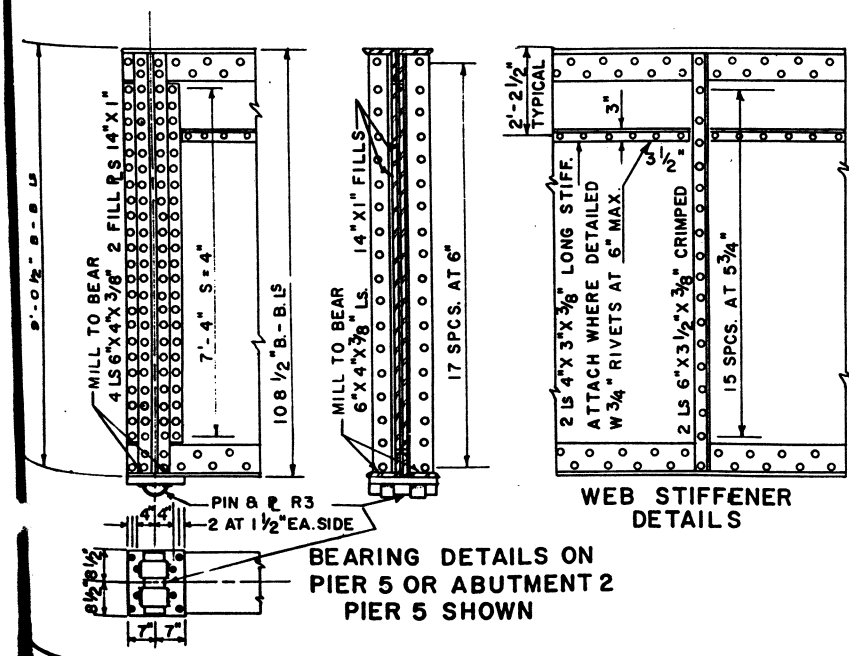


STEEL FRAMING PLAN

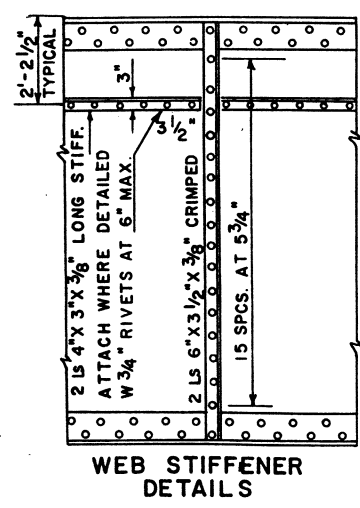
LATERAL BRACING SLOPE NOT TO SCALE. SLOPE APPROXIMATELY 8/12



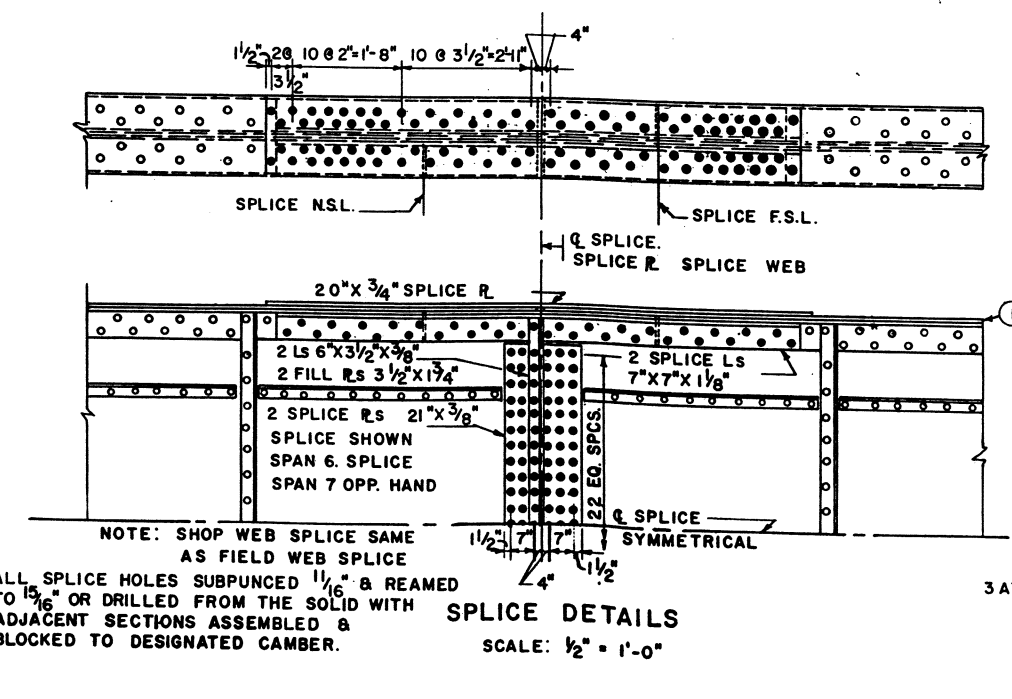
ELEVATION



BEARING DETAILS ON PIER 5 OR ABUTMENT 2 PIER 5 SHOWN

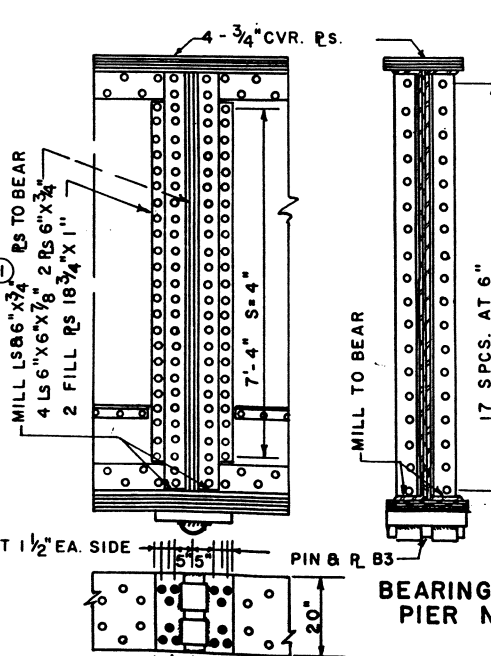


WEB STIFFENER DETAILS

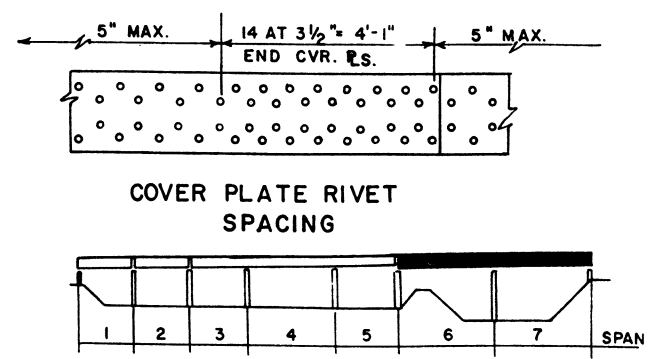


NOTE: SHOP WEB SPLICE SAME AS FIELD WEB SPLICE
ALL SPLICE HOLES SUBPUNCHED 1/16" & REAMED TO 1/16" OR DRILLED FROM THE SOLID WITH ADJACENT SECTIONS ASSEMBLED & BLOCKED TO DESIGNATED CAMBER.
SCALE: 1/2" = 1'-0"

SPLICE DETAILS



BEARING DETAILS PIER NO. 6



- NOTES:
- COVER @ TO BE U.M.P.
 - BEARING DEVICES - SH. 25
 - DIAPHRAGMS - SH. 13
 - BLOCKING - SH. 24
 - QUANTITIES - SH. 18

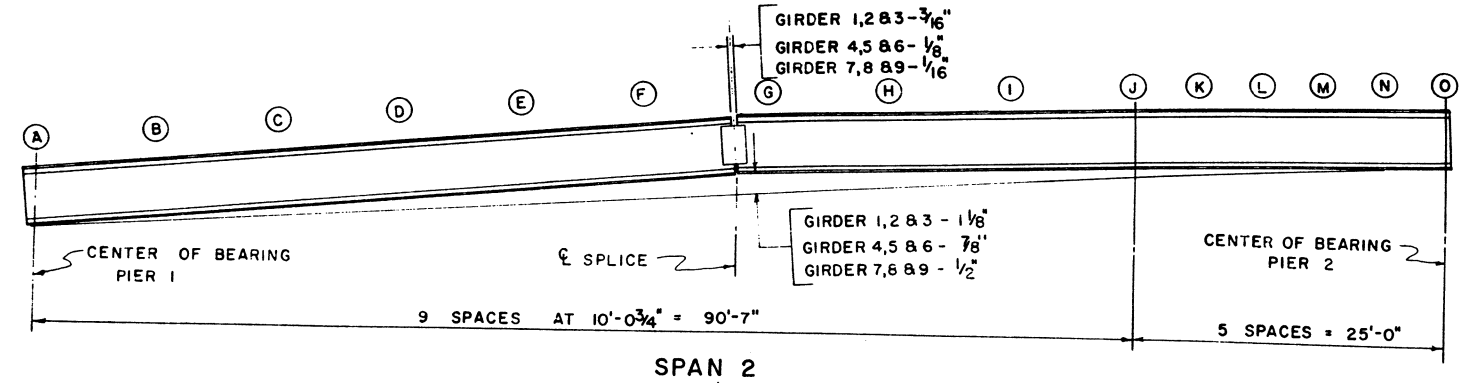
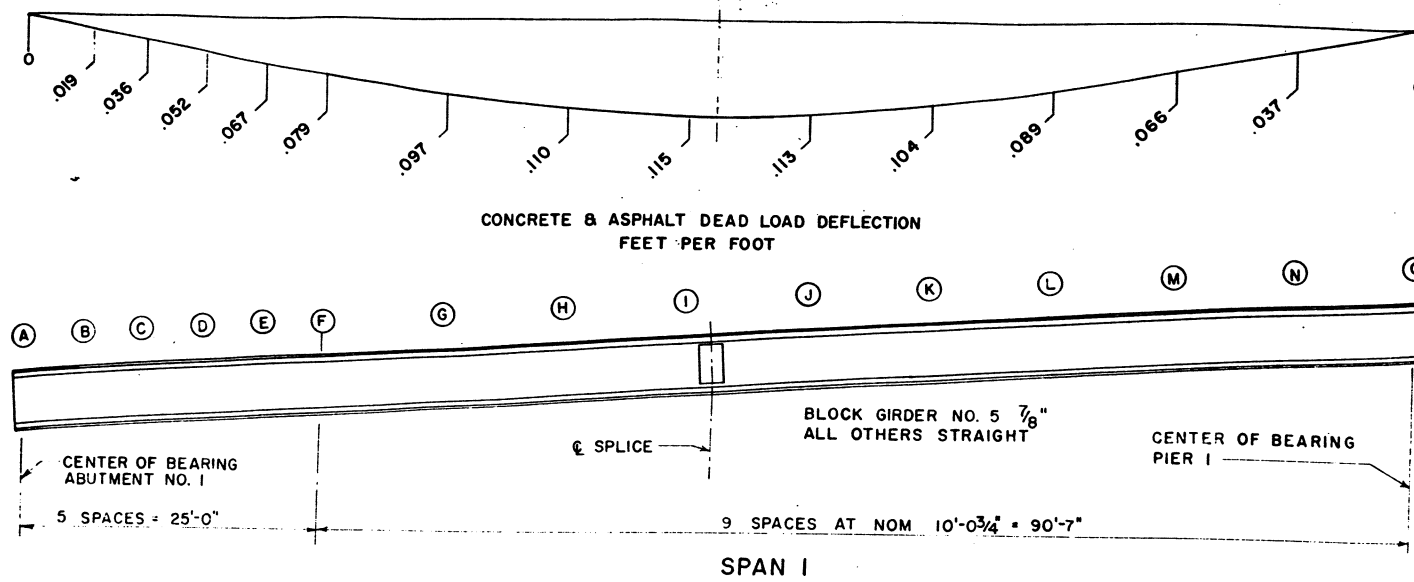
KEY

COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO

4TH ST. BRIDGE
STEEL GIRDER DETAILS
SPANS 6-7

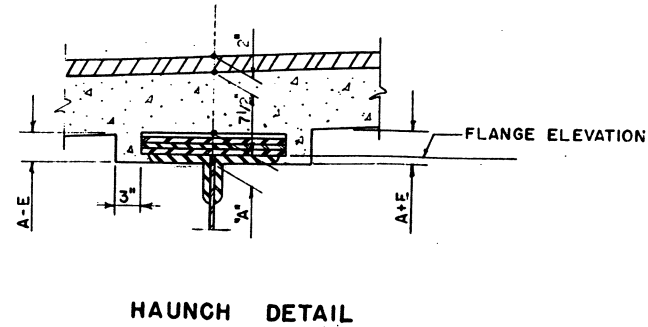
STRUCTURE NO. K-18-Z
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016(12)	33	



POINT	A	B	C	D	E	F	G	H	I	SPLICE	J	K	L	M	N	O	
GRINDER 1																	
GRINDER 2																	
GRINDER 3																	
GRINDER 4																	
GRINDER 5																	
GRINDER 6																	
GRINDER 7																	
GRINDER 8																	
GRINDER 9																	

POINT	A	B	C	D	E	F	SPLICE	G	H	I	J	K	L	M	N	O
GRINDER 1																
GRINDER 2																
GRINDER 3																
GRINDER 4																
GRINDER 5																
GRINDER 6																
GRINDER 7																
GRINDER 8																
GRINDER 9																



- NOTES:
- FLANGE ELEVATIONS ARE ERECTION ELEVATIONS. ELEVATIONS ARE TO BACK OF FLANGE ANGLES.
 - ROADWAY ELEVATIONS ARE FINISHED GRADE AT TOP OF ASPHALT.
 - ELEVATIONS ARE DESIGNATED IN FEET.

COLORADO DEPARTMENT OF HIGHWAY
PUEBLO, COLORADO

4TH ST. BRIDGE
**GIRDER BLOCKING & HAUNCH
DIAGRAMS SPANS 1-2**

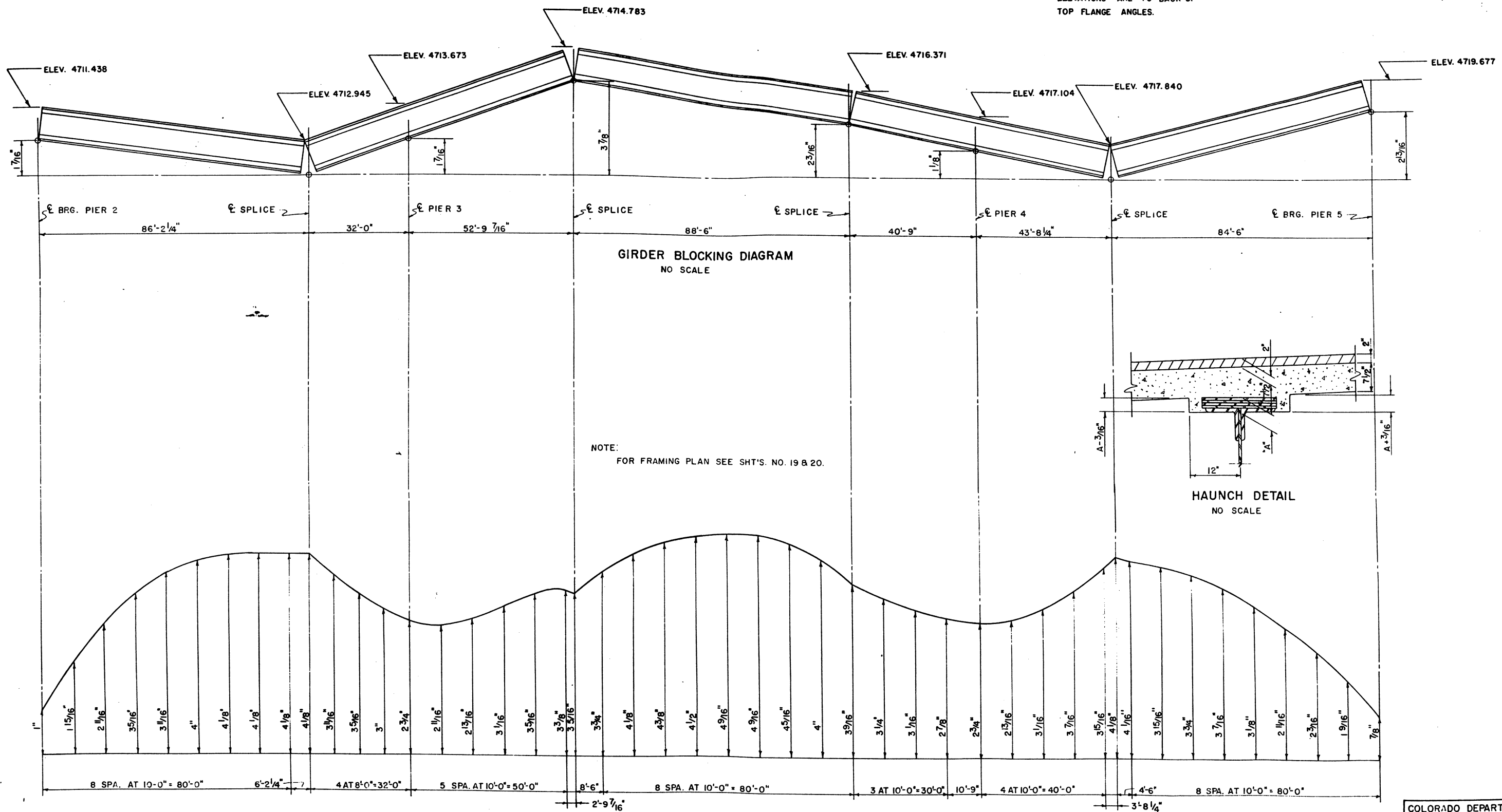
STRUCTURE NO. K-18-Z

KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

SHEET 22 OF 28 SHEETS

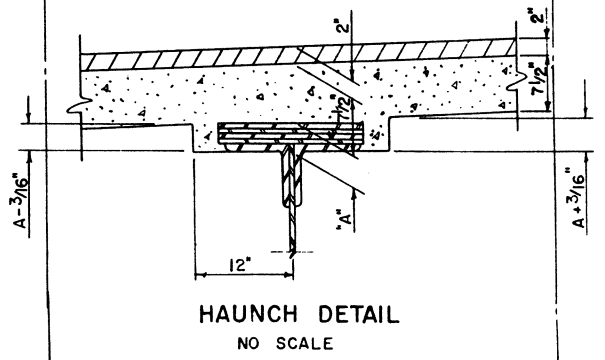
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 00 16 (12)	34	

ELEVATIONS ARE TO BACK OF TOP FLANGE ANGLES.



GIRDER BLOCKING DIAGRAM
NO SCALE

NOTE:
FOR FRAMING PLAN SEE SHT'S. NO. 19 & 20.



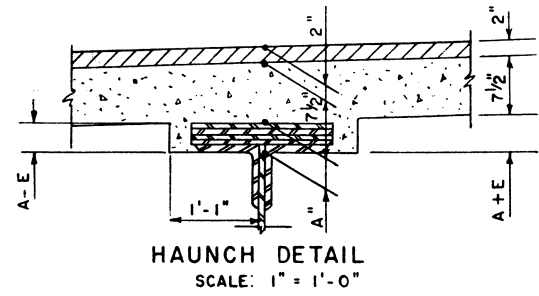
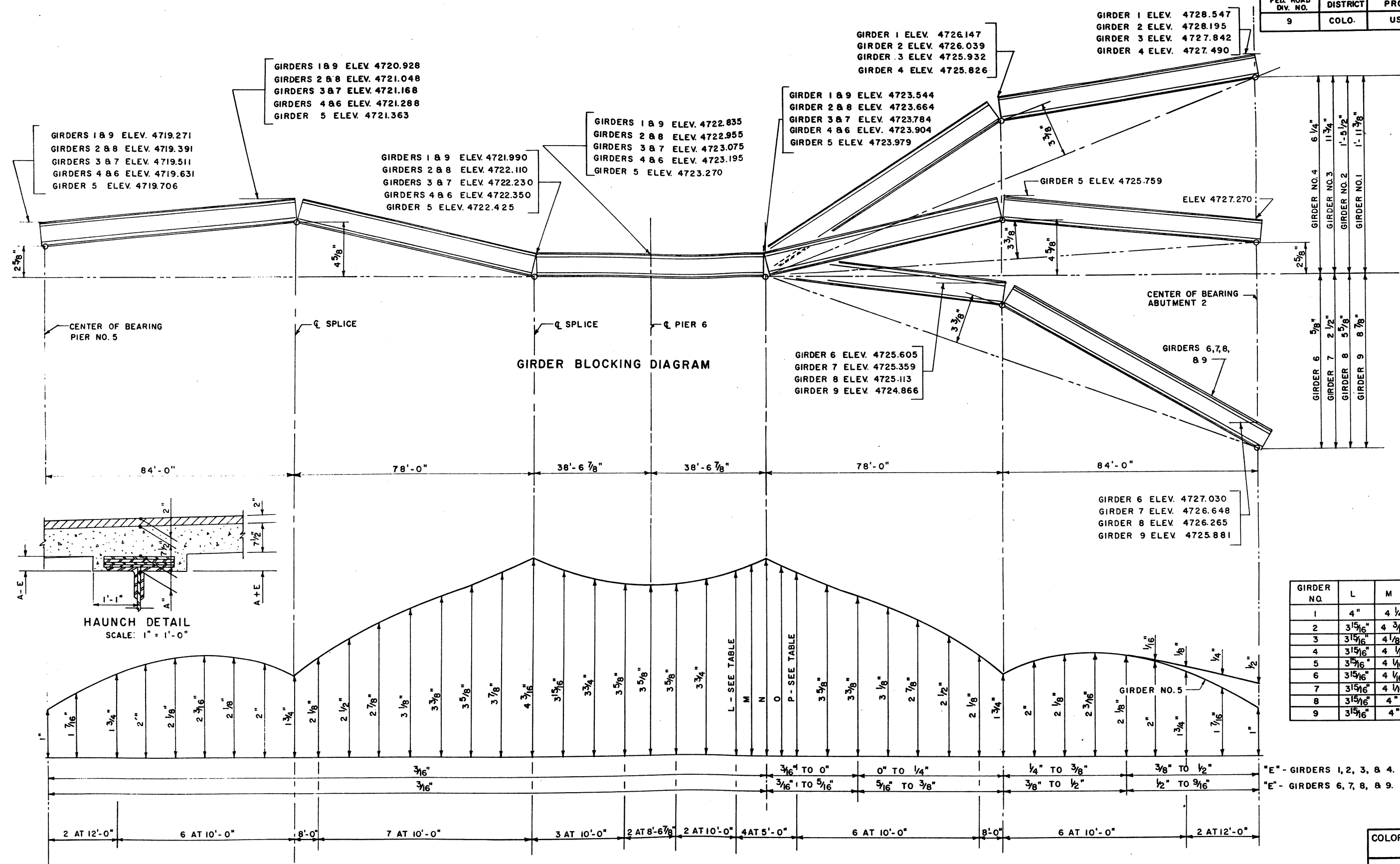
HAUNCH DETAIL
NO SCALE

"A" VALUES
VERT. SCALE: FULL SCALE
HORIZ. SCALE: 1/16"=1'-0"

NOTE:
ERECTION ELEVATIONS GIVEN ARE FOR GIRDER NO. 5;
GIRDERS NO. 4 & 6 - 0.075' LOWER
GIRDERS NO. 3 & 7 - 0.195' LOWER
GIRDERS NO. 2 & 8 - 0.315' LOWER
GIRDERS NO. 1 & 9 - 0.435' LOWER

COLORADO DEPARTMENT OF HIGHWAYS
PUEBLO, COLORADO
4 TH ST. BRIDGE
**GIRDER BLOCKING AND
HAUNCH DIAGRAMS, SPANS 3-4**
STRUCTURE NO. K-18-Z
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	35	



GIRDER NO.	L	M	N	O	P
1	4"	4 1/4"	4 5/8"	4 3/16"	3 7/16"
2	3 5/16"	4 3/16"	4 1/2"	4 1/8"	3 7/8"
3	3 5/16"	4 1/8"	4 3/8"	4 1/16"	3 7/8"
4	3 5/16"	4 1/16"	4 1/4"	4"	3 7/8"
5	3 5/16"	4 1/16"	4 3/16"	4"	3 7/8"
6	3 5/16"	4 1/16"	4 3/16"	4"	3 7/8"
7	3 5/16"	4 1/16"	4 1/8"	4"	3 7/8"
8	3 5/16"	4"	4"	3 5/16"	3 7/8"
9	3 5/16"	4"	4"	3 5/16"	3 7/8"

"A" & "E" VALUES

- NOTES:
- SEE FRAMING PLAN FOR GIRDER DETAILS.
 - ELEVATIONS ARE TO BACK OF TOP FLANGE ANGLE.

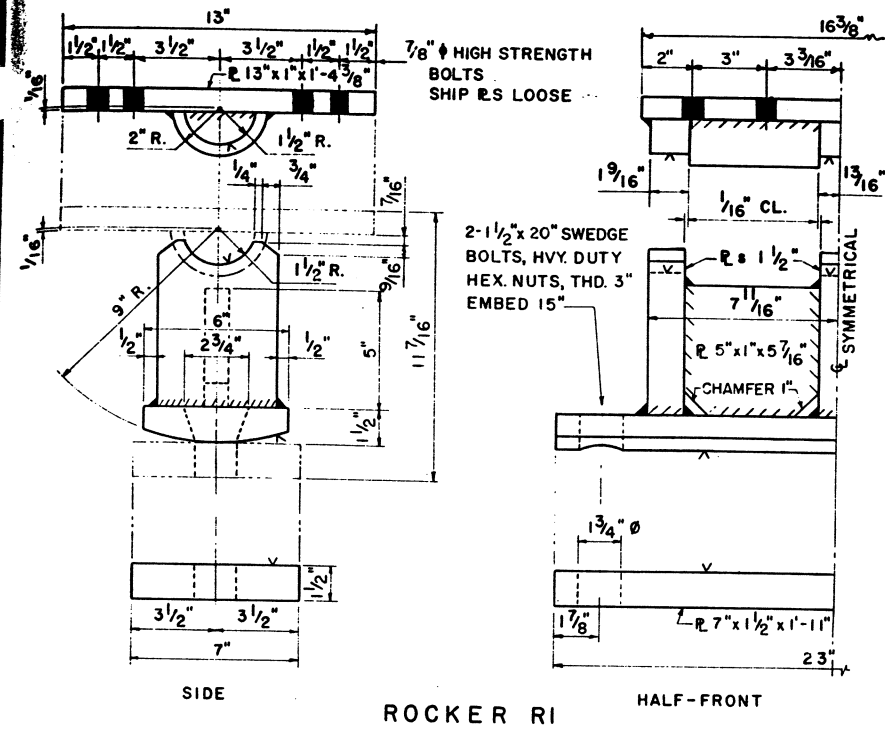
COLORADO DEPARTMENT OF HIGHWAY
PUEBLO, COLORADO

4 TH ST. BRIDGE
**GIRDER BLOCKING & HAUNCH
DIAGRAMS SPANS 6 -**

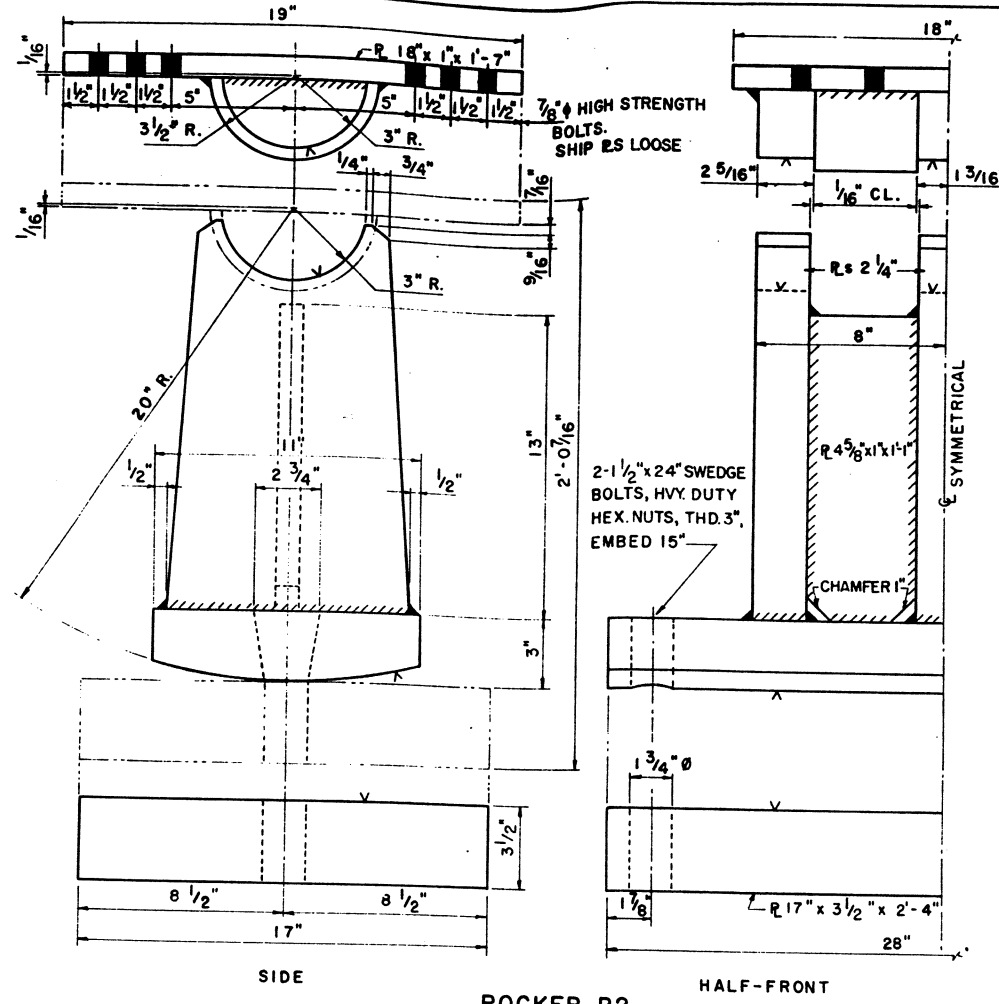
STRUCTURE NO. K-18-2

KEN R. WHITE
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DENVER, COLORADO

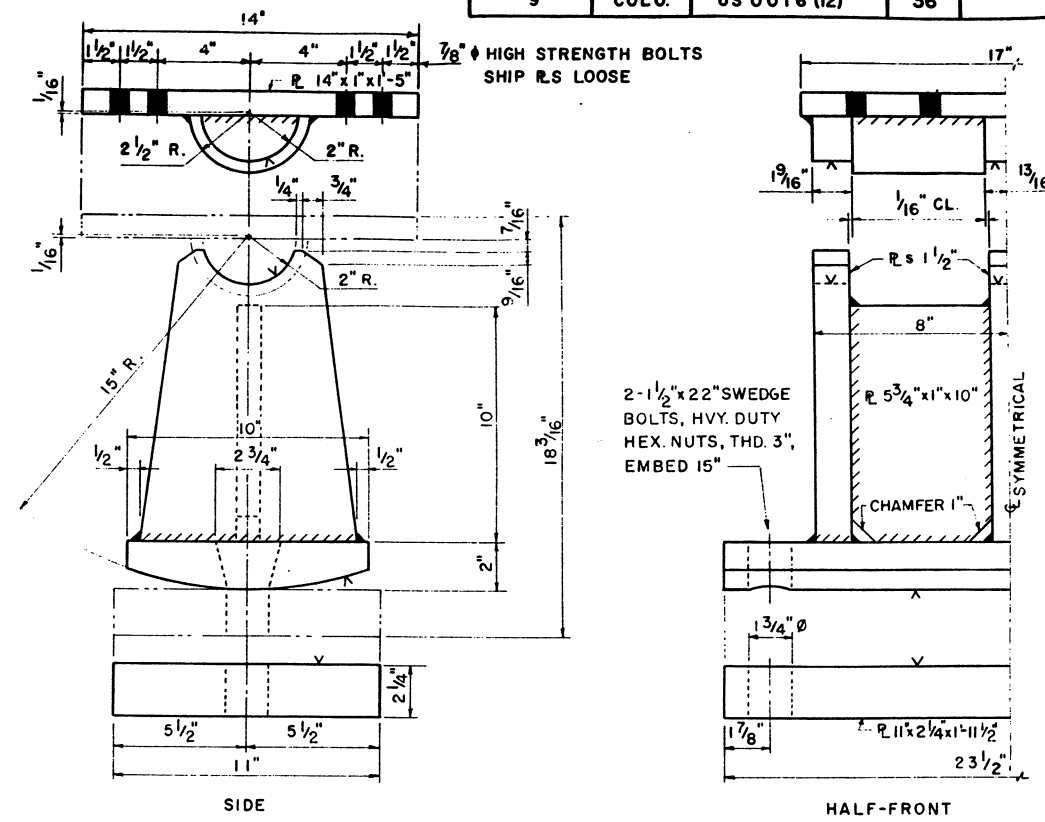
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	36	



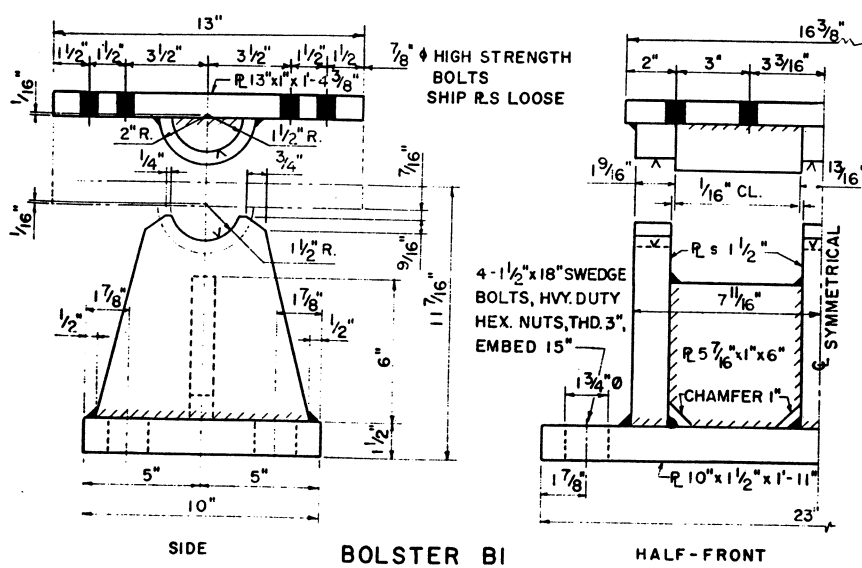
ROCKER R1



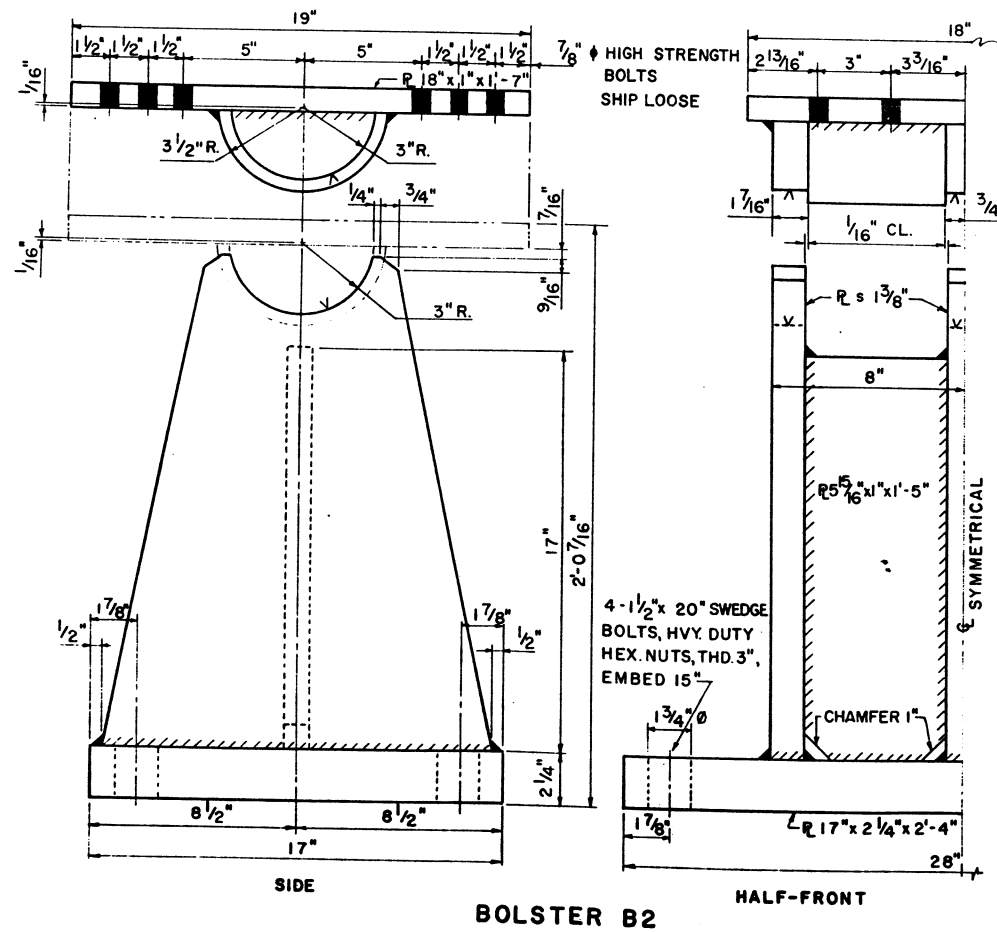
ROCKER R2



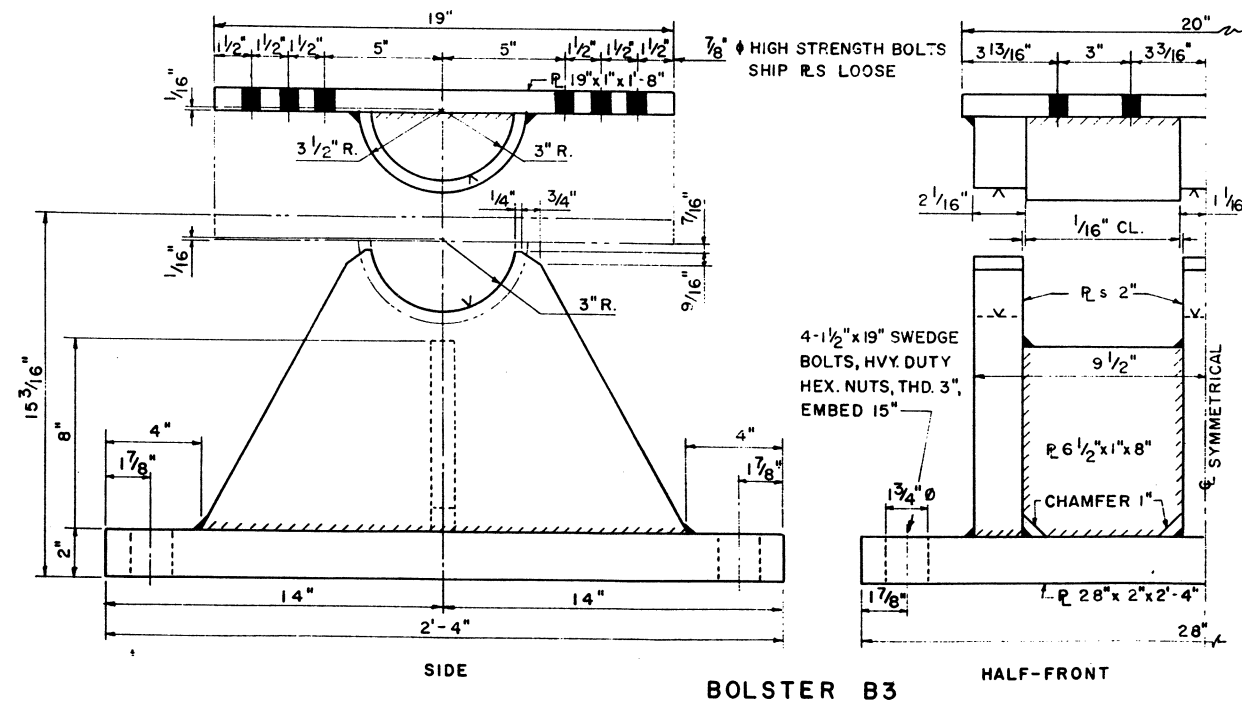
ROCKER R3



BOLSTER B1



BOLSTER B2



BOLSTER B3

1. ALL FINISHED SURFACES (MARKED ∇) SHALL BE MILLED
2. ALL WELDS $3/8$ " FILLET, AS SHOWN.
3. ROUGH-PLANE BOTTOM SIDE ALL MASONRY BEARING PLATES.

- R1 36 REQ'D
- B1 18 REQ'D
- R2 9 REQ'D
- B2 9 REQ'D
- R3 18 REQ'D
- B3 9 REQ'D

SCALE: 3" = 1'0"

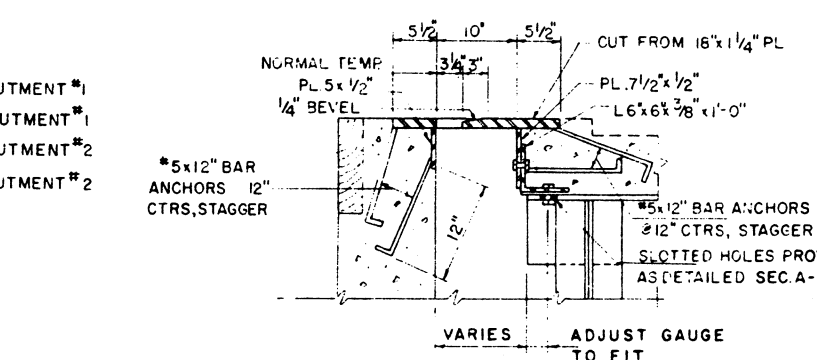
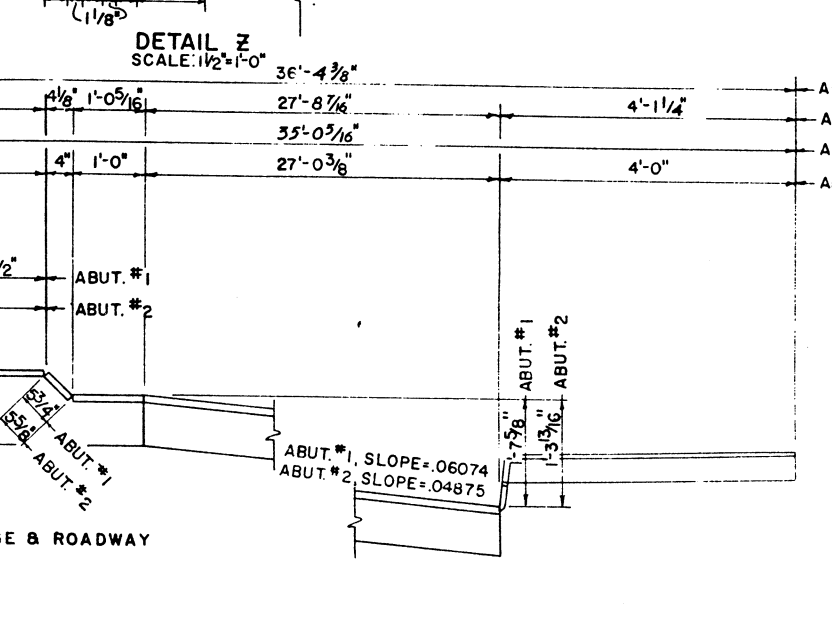
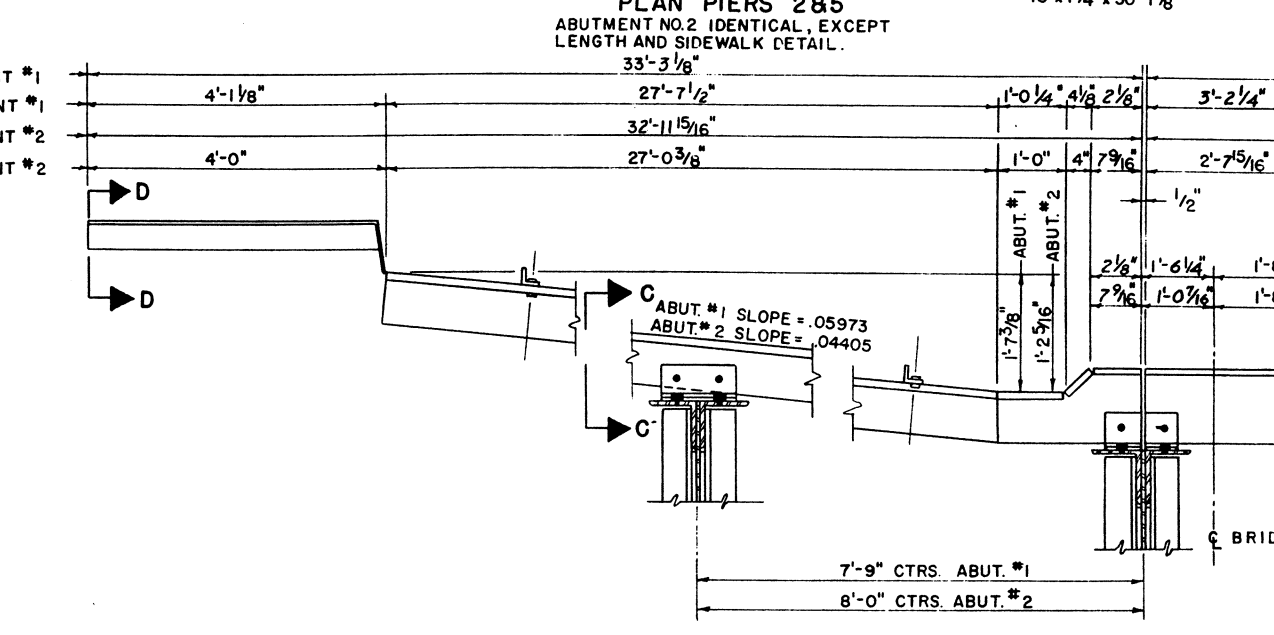
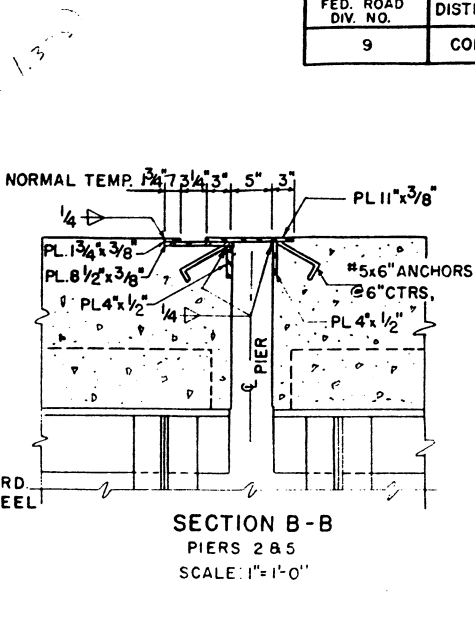
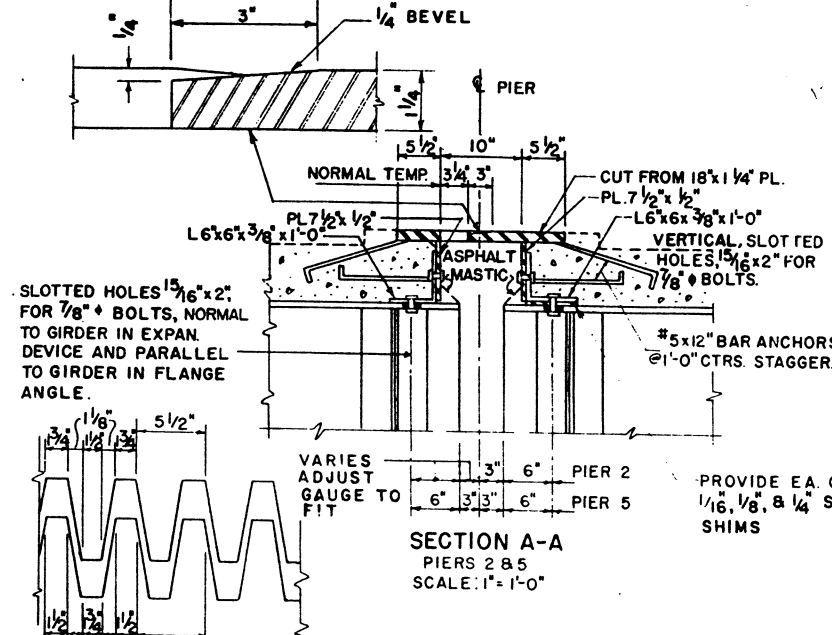
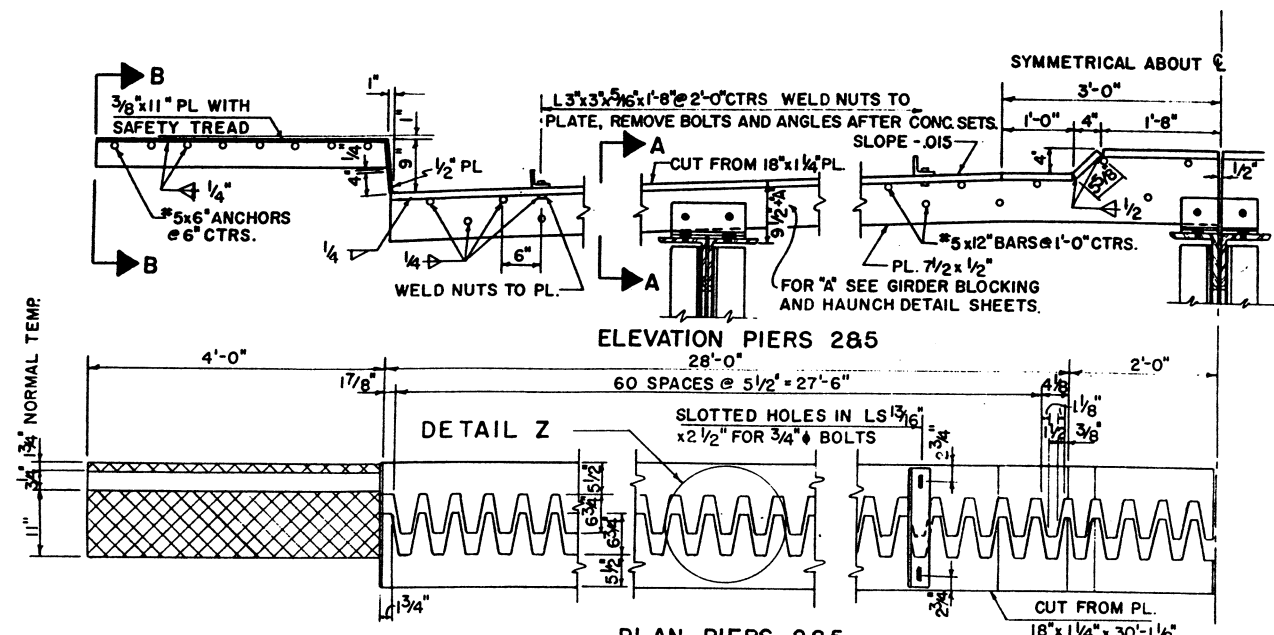
COLORADO DEPARTMENT OF HIGHWAY
PUEBLO, COLORADO

4TH ST. BRIDGE
BEARING DEVICES

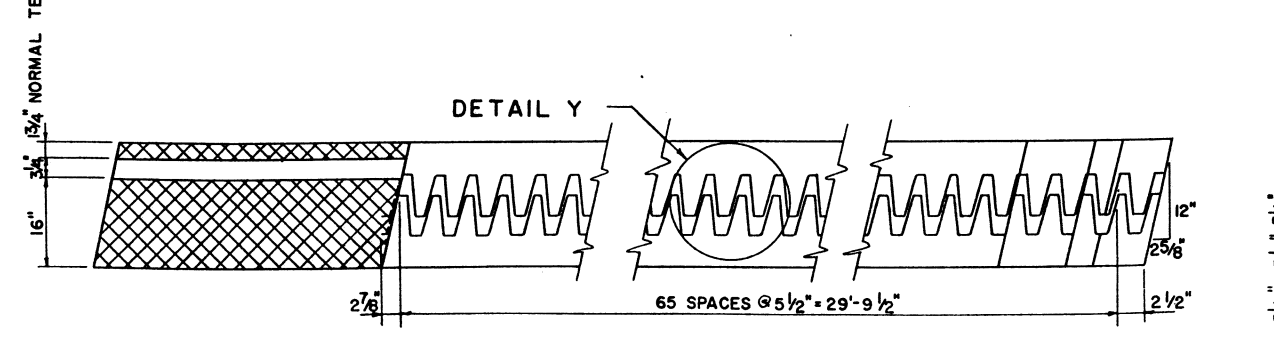
STRUCTURE NO. K-18-Z

KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

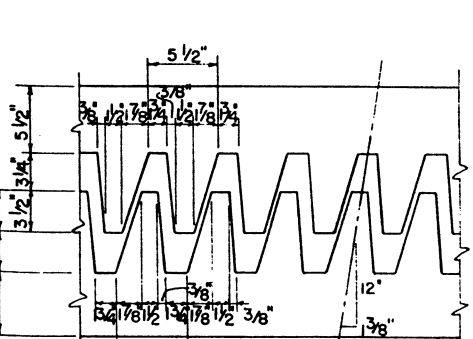
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TC SH
9	COLO.	US 00 16(12)	37	



ELEVATION-ABUTMENTS 1&2
VIEW F-F & G-G ON BRIDGE PLAN
THIS SHEET

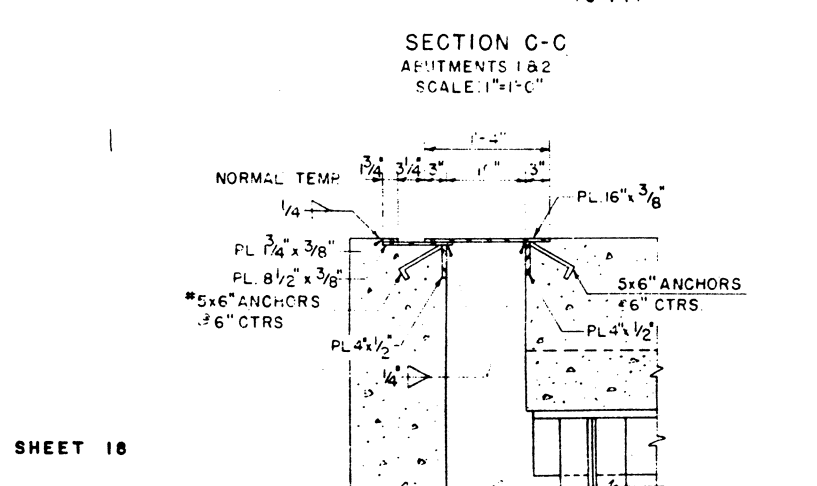


PLAN ABUTMENT #1
SCALE: 3/4\"/>

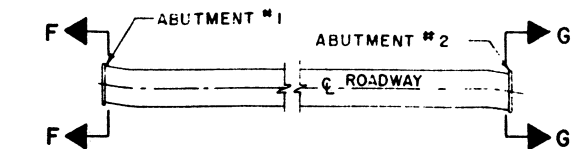


DETAIL "Y"
ABUTMENT #1
SCALE: 1/2\"/>

FOR QUANTITIES SEE SHEET 18



SECTION D-D
ABUTMENTS 1&2
SCALE: 1\"/>



BRIDGE PLAN
NO SCALE

SCALE: 3/4\"/>

COLORADO DEPARTMENT OF HIGHWAYS
PULBLO, COLORADO

4TH ST. BRIDGE

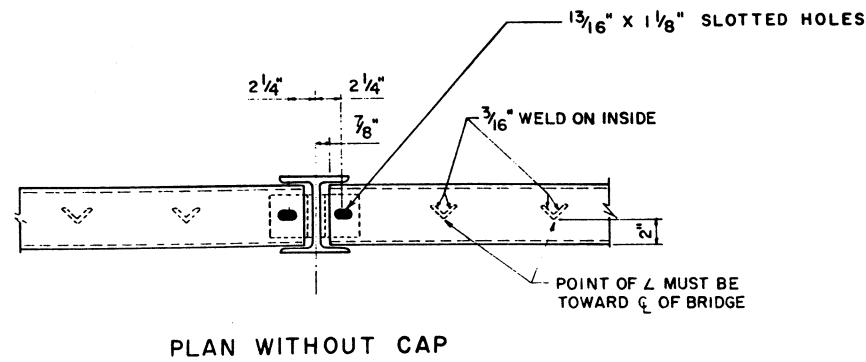
EXPANSION DEVICES

STRUCTURE NO. K-18-

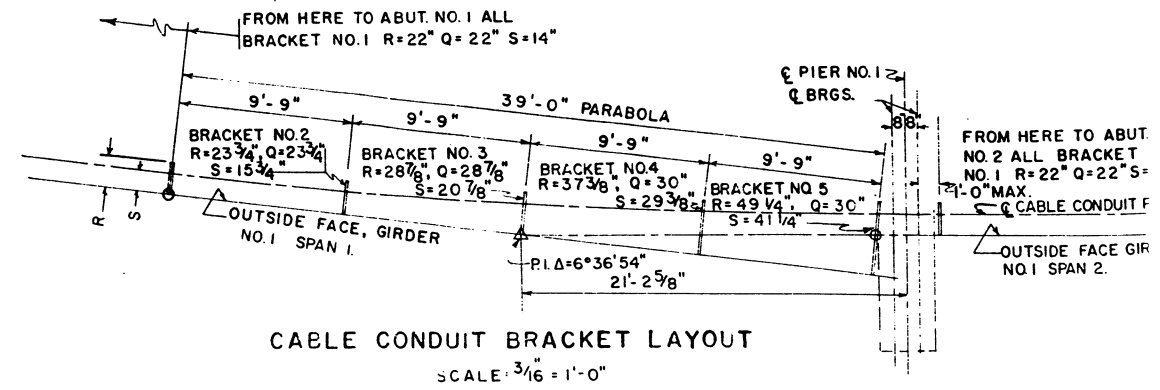
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO

SHEET 26 OF 28 SHEETS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	38	

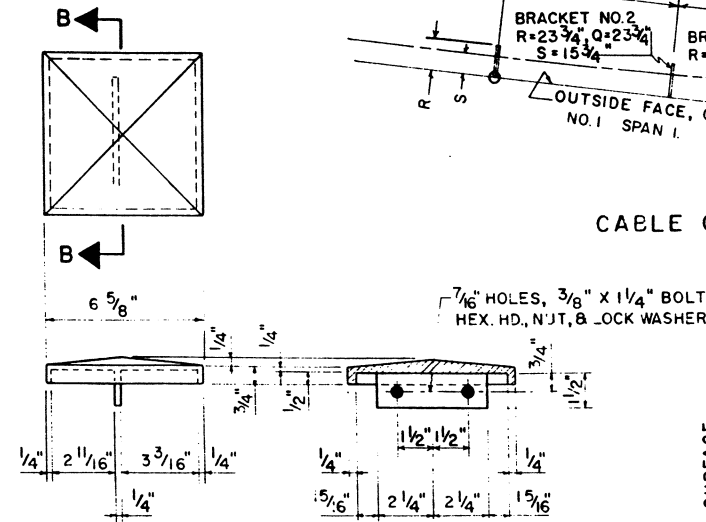


PLAN WITHOUT CAP



CABLE CONDUIT BRACKET LAYOUT

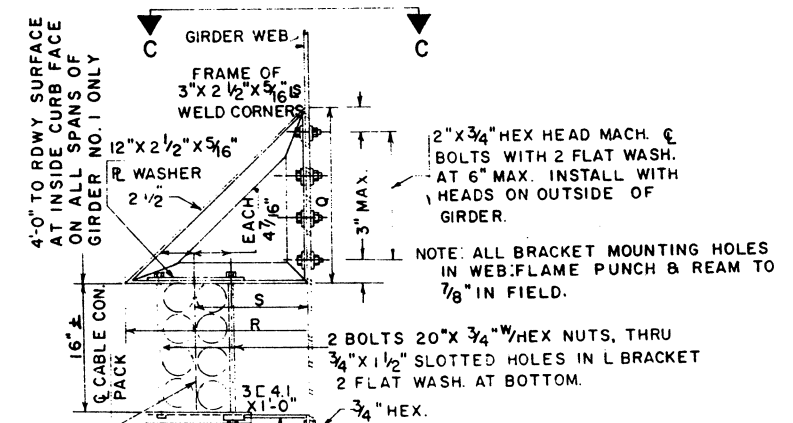
SCALE: 3/16" = 1'-0"



SECTION B-B

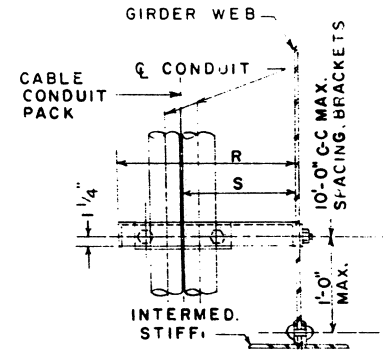
CAST IRON POST CAP

SCALE: 3" = 1'-0"



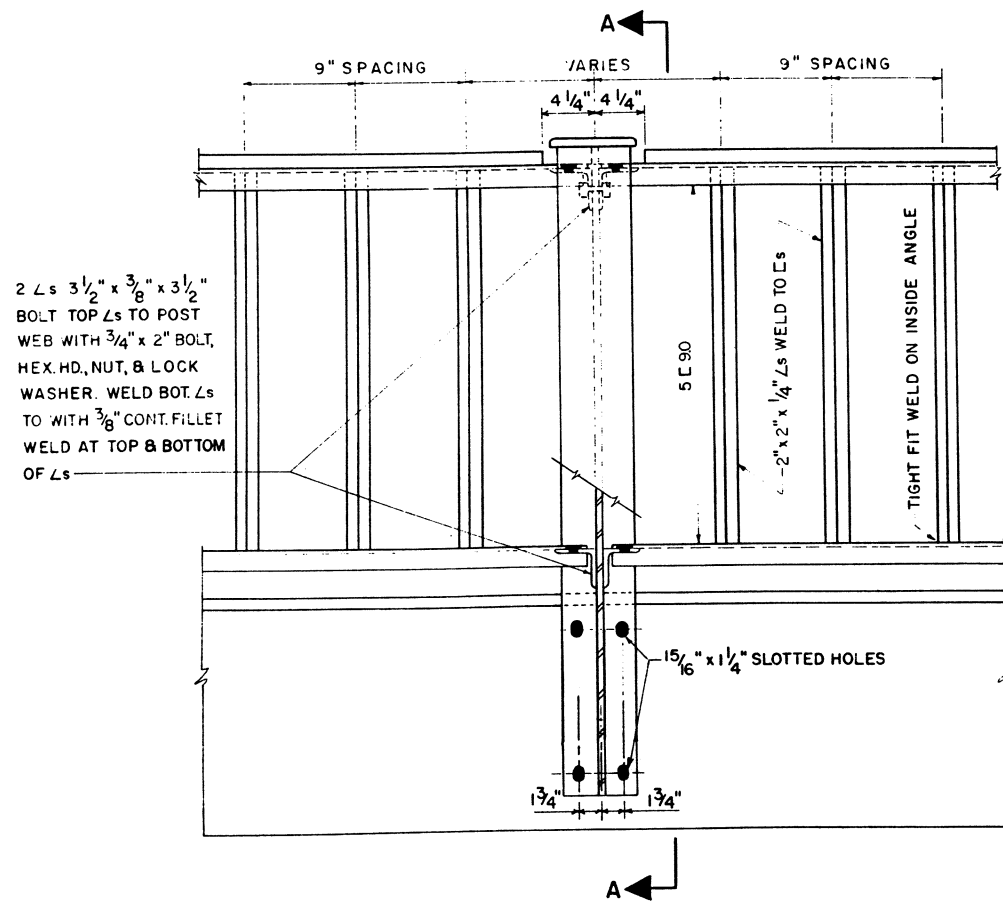
DETAIL OF CABLE CONDUIT BRACKET

SCALE: 1 1/2" = 1'-0"



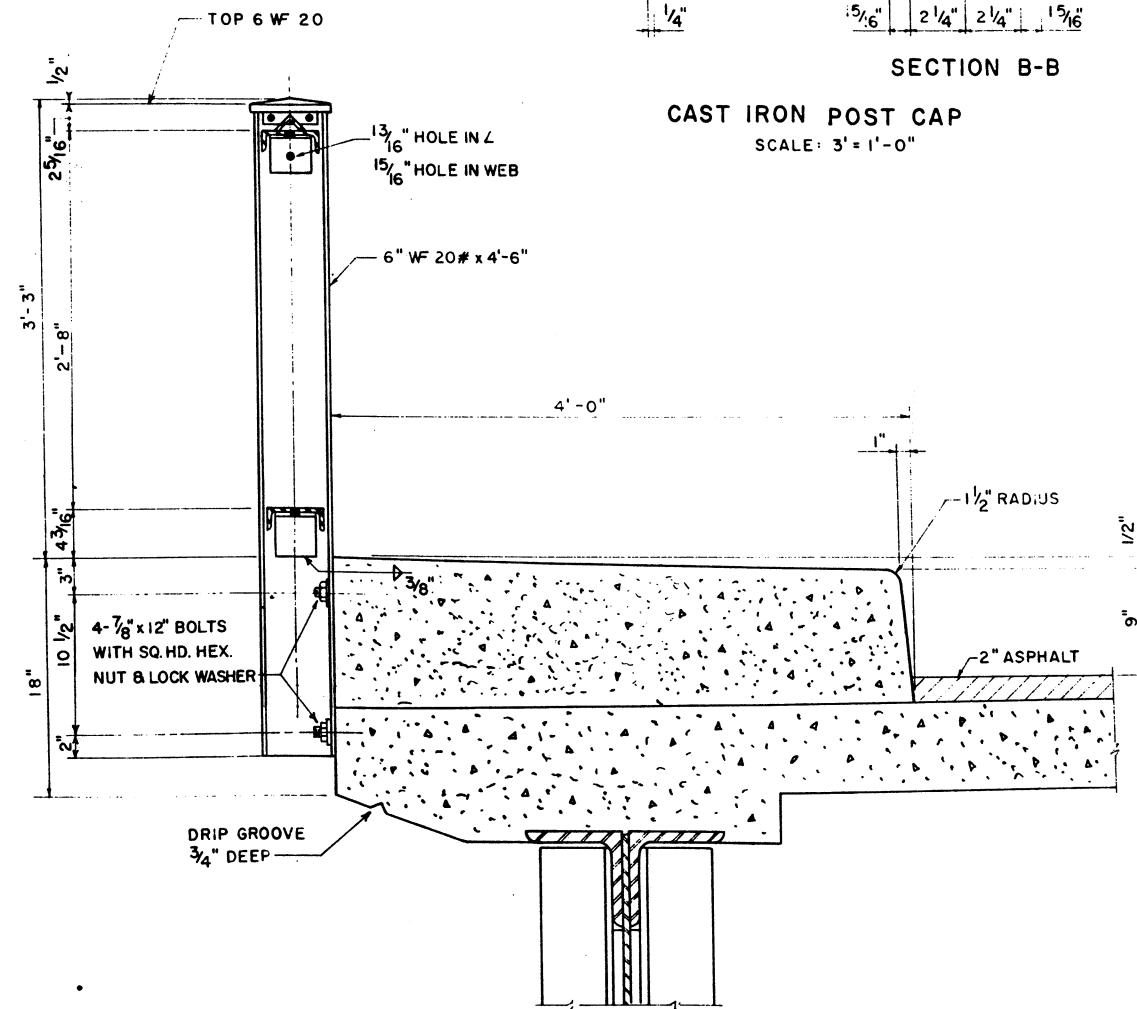
SECTION C-C

SCALE: 1 1/2" = 1'-0"



ELEVATION OF RAILING

SCALE: 1 1/2" = 1'-0"



SECTION A-A

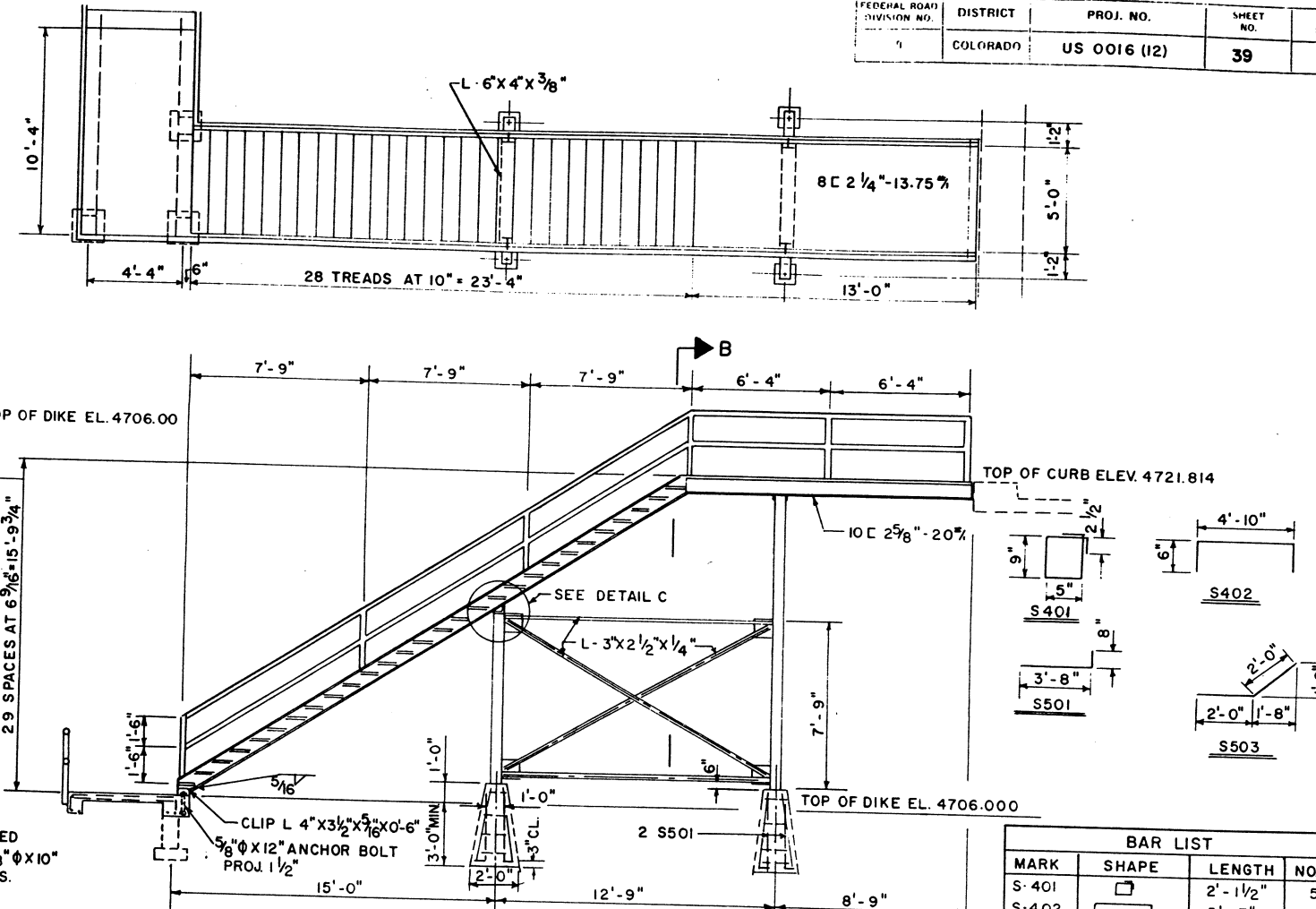
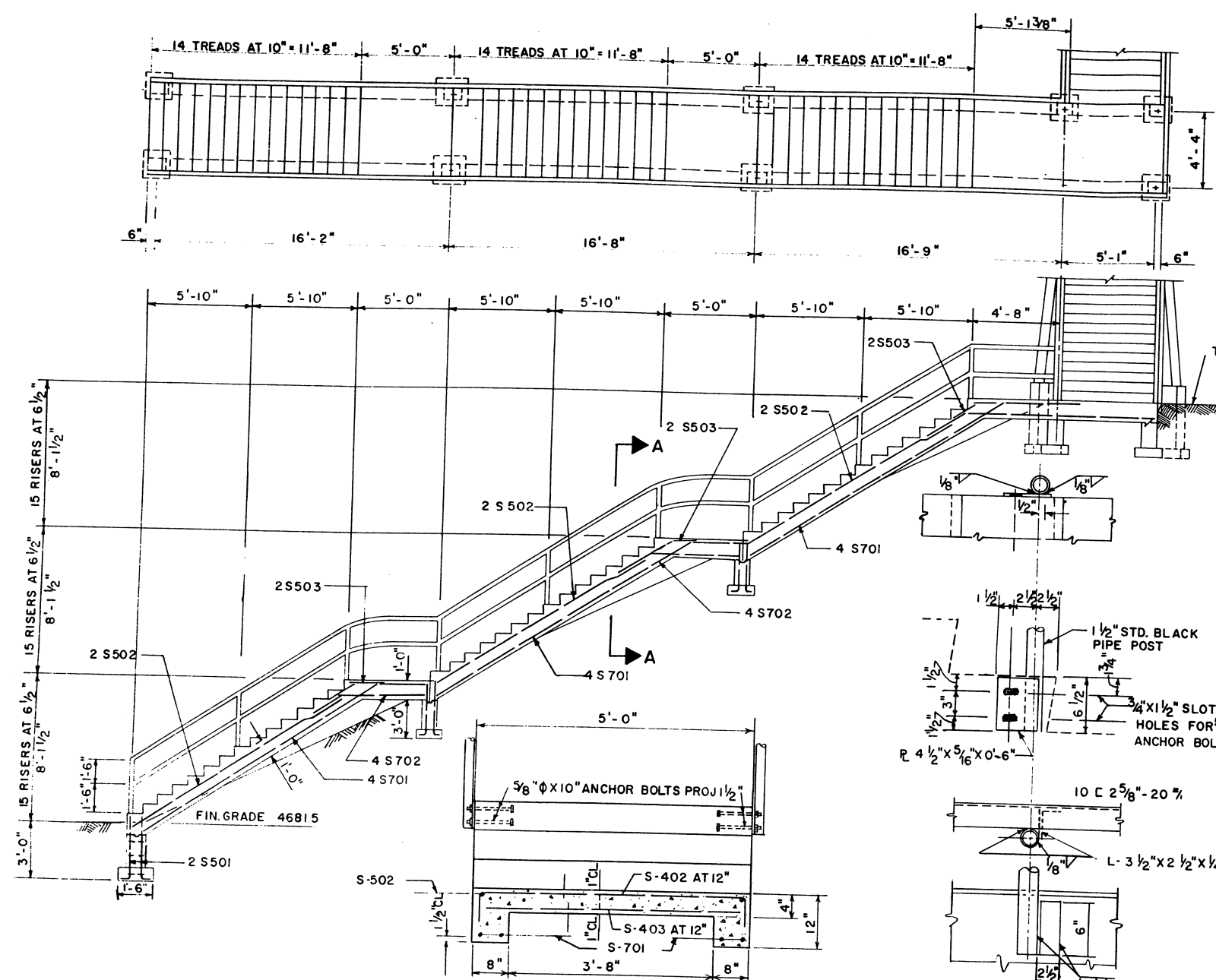
SCALE: 1 1/2" = 1'-0"

COLORADO DEPARTMENT OF HIGHWAY PUEBLO, COLORADO

4TH ST. BRIDGE
RAILING DETAILS

STRUCTURE NO. K-18-Z

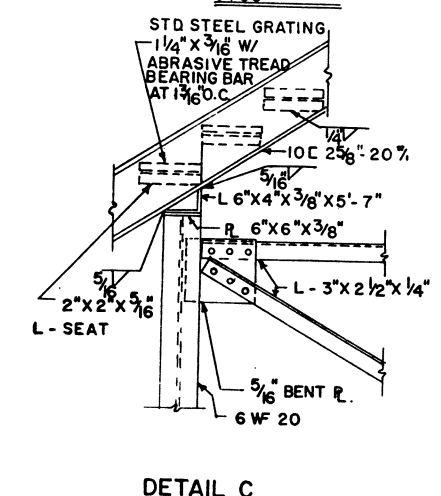
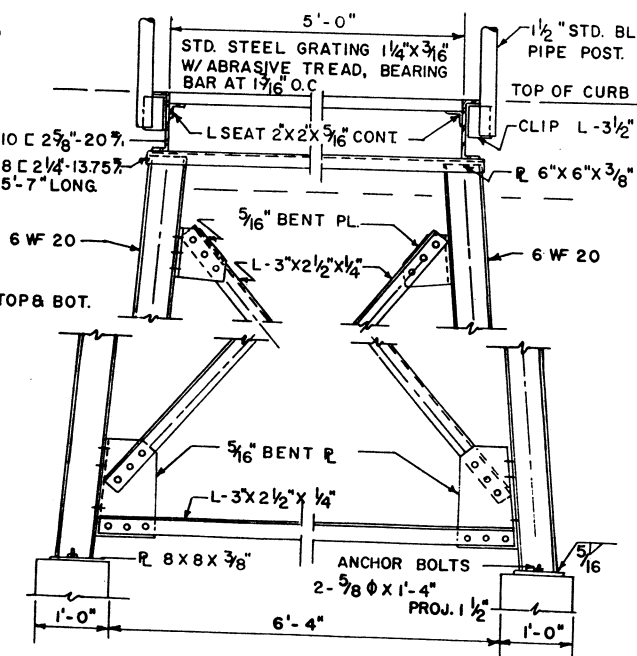
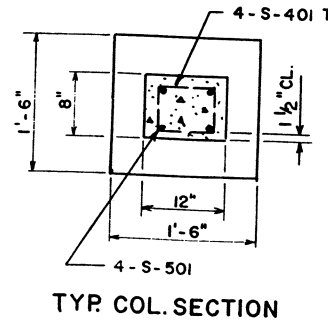
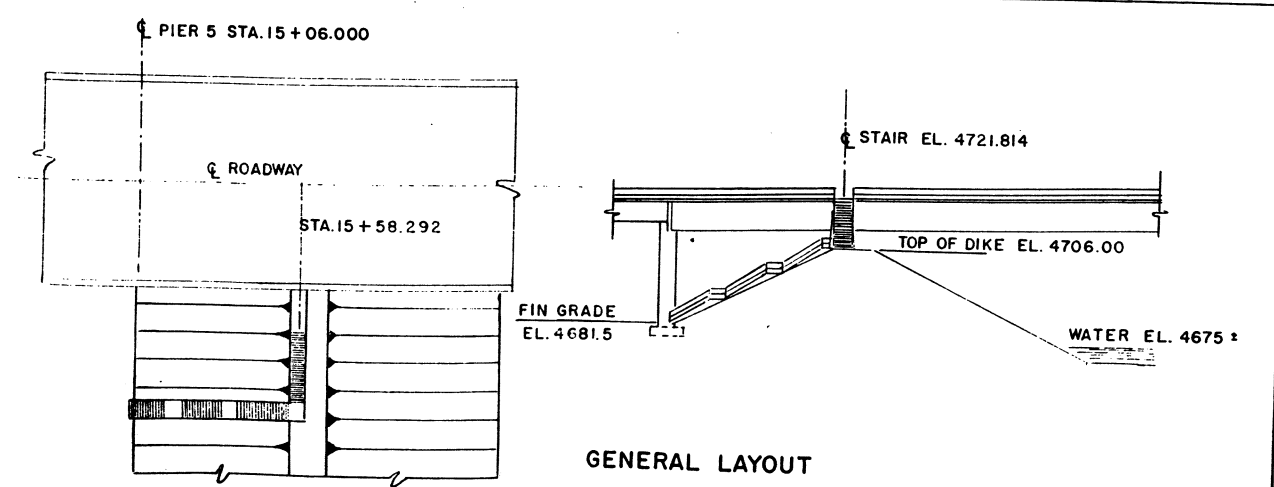
KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO



BAR LIST			
MARK	SHAPE	LENGTH	NO. OF
S-401	[Shape]	2'-1 1/2"	52
S-402	[Shape]	5'-7"	60
S-403	[Shape]	4'-10"	60
S-501	[Shape]	4'-3"	52
S-502	[Shape]	13'-6"	6
S-503	[Shape]	4'-0"	6
S-701	[Shape]	18'-10"	12
S-702	[Shape]	6'-9"	8
S-703	[Shape]	12'-8"	4

BAR SUMMARY		
734	L.F. OF #4 AT 6.68%	490
326	L.F. OF #5 AT 1.043%	340
3216	L.F. OF #7 AT 2.044%	655
	1% OVERRUN	15
	TOTAL	1504

SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	AMOUNT
46a	CLASS "A" CONCRETE	10 CU
47	REINFORCING STEEL	1504 L
14g	STRUCTURAL EXCAVATION	22 C.
18a	STRUCTURAL BACKFILL	7 C.
16c	MECHANICAL TAMPING	2 HRS
21c	PIPE RAILING	301 L.
48	STRUCTURAL STEEL	2348
48	STEEL GRATING	1705



NOTE: PIPE RAILING SHALL BE 1 1/2" STANDARD BLACK STEEL PIPE. ALL WELDED CONSTRUCTION.

NOTE: ALL DIMENSIONS ARE TO BE CHECKED IN FIELD BEFORE DETAILING.

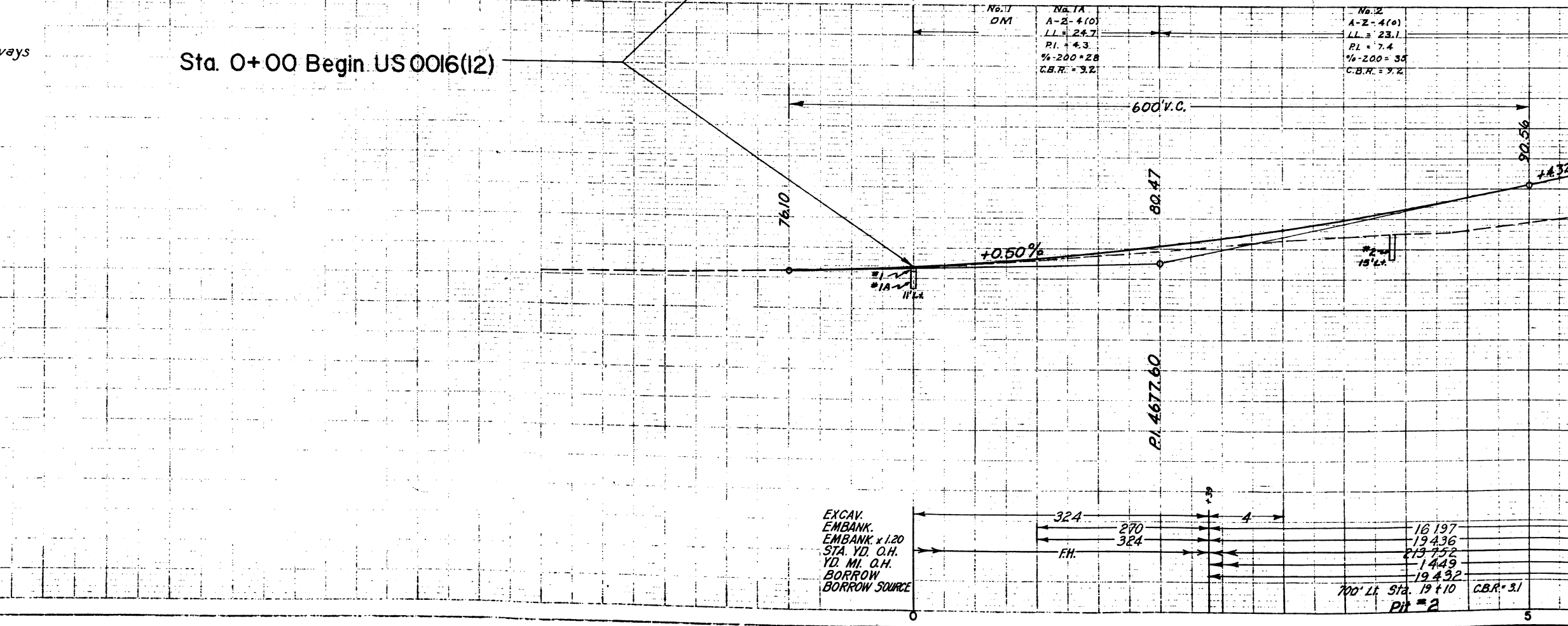
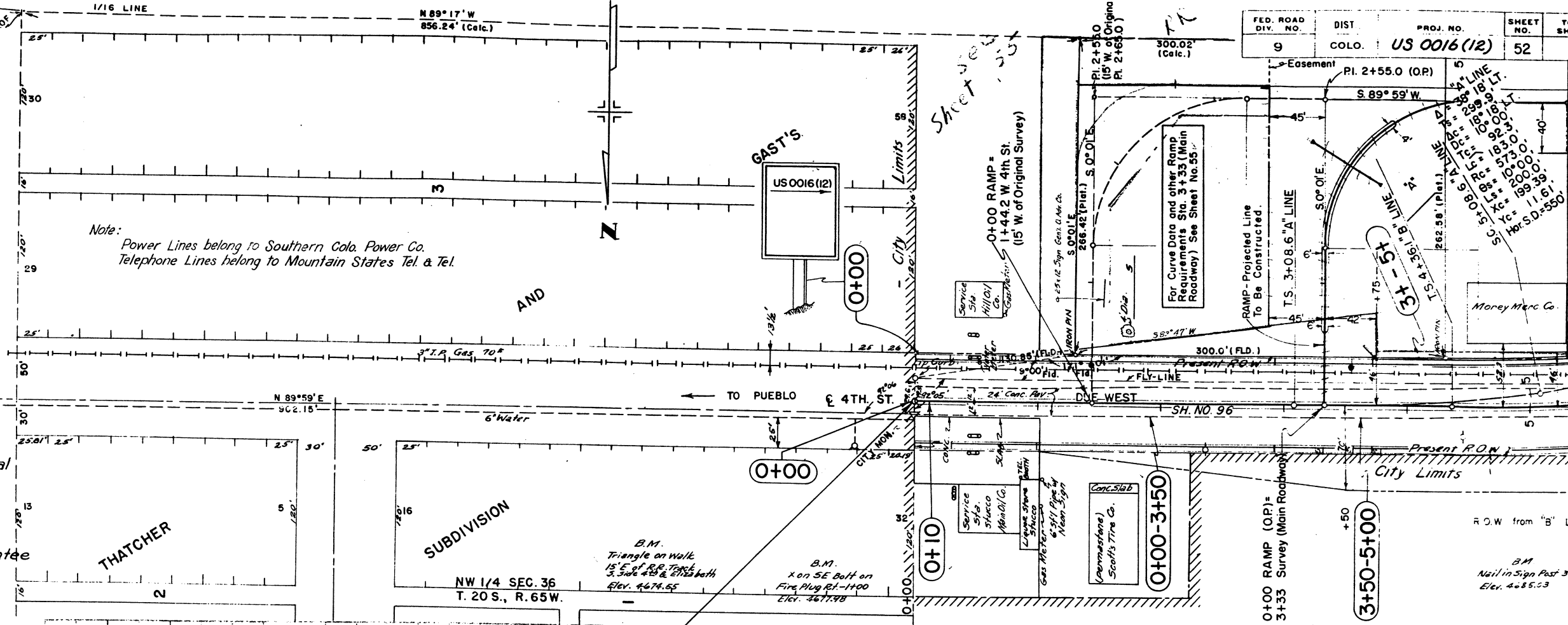
COLORADO DEPARTMENT OF HIGHWAY
PUEBLO, COLORADO

4TH. ST. BRIDGE

STAIRWAY DETAIL

STRUCTURE NO. K-18-Z

KEN R. WHITE
CONSULTING ENGINEER
DENVER, COLORADO



NOTE:
 Alignment and Grades as shown are subject to modification during construction after approval by the Denver Office.

Soil data shown on the plans is obtained from the best available testing laboratory information. This information is shown for the convenience of the contractor and the Department does not guarantee the accuracy of these tests. If materials not conforming to the data on plans are encountered during construction the grading plan shown on plans will be modified where necessary to secure dense, stable embankments.

Tabulation of Concrete Gutter, Combination Curb and Gutter, Sidewalk, Median Curb and Driveways is on Sheet 6.

Stations on Line Sheets indicate the approximate location of work called for on the List of Structures.

Note: Power Lines belong to Southern Colo. Power Co. Telephone Lines belong to Mountain States Tel. & Tel.

For Curve Data and other Ramp Requirements Sta. 3+35 (Main Roadway) See Sheet No. 55

Money Merc Co.

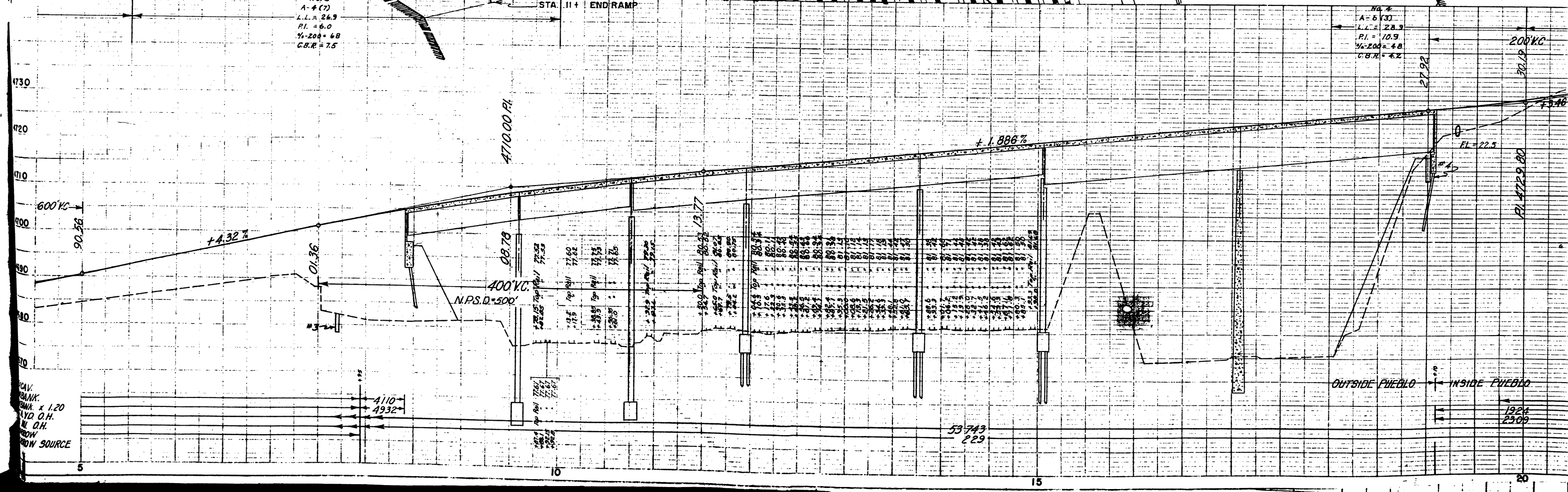
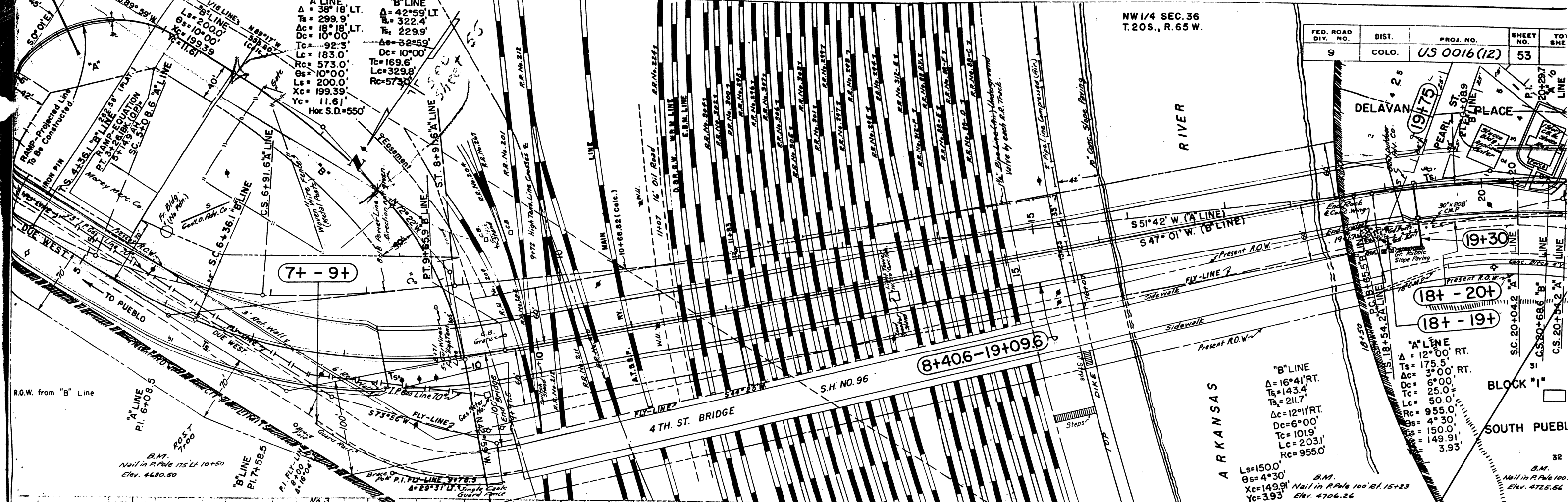
B.M. Nail in Sign Post 33 Elev. 4285.53

EXCAV. EMBANK. EMBANK. x 1.20 STA. YD. O.H. YD. MI. O.H. BORROW BORROW SOURCE

16 197
 19 436
 21 752
 1 449
 19 432
 100' Lt. Sta. 19+10
 Pit # 2
 C.B.R. = 3.1

NW 1/4 SEC. 36
T. 20S., R. 65 W.

FED. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	US 0016 (12)	53	60



CAV. BANK x 1.20
 AND O.H.
 IN O.H.
 FROM SOURCE

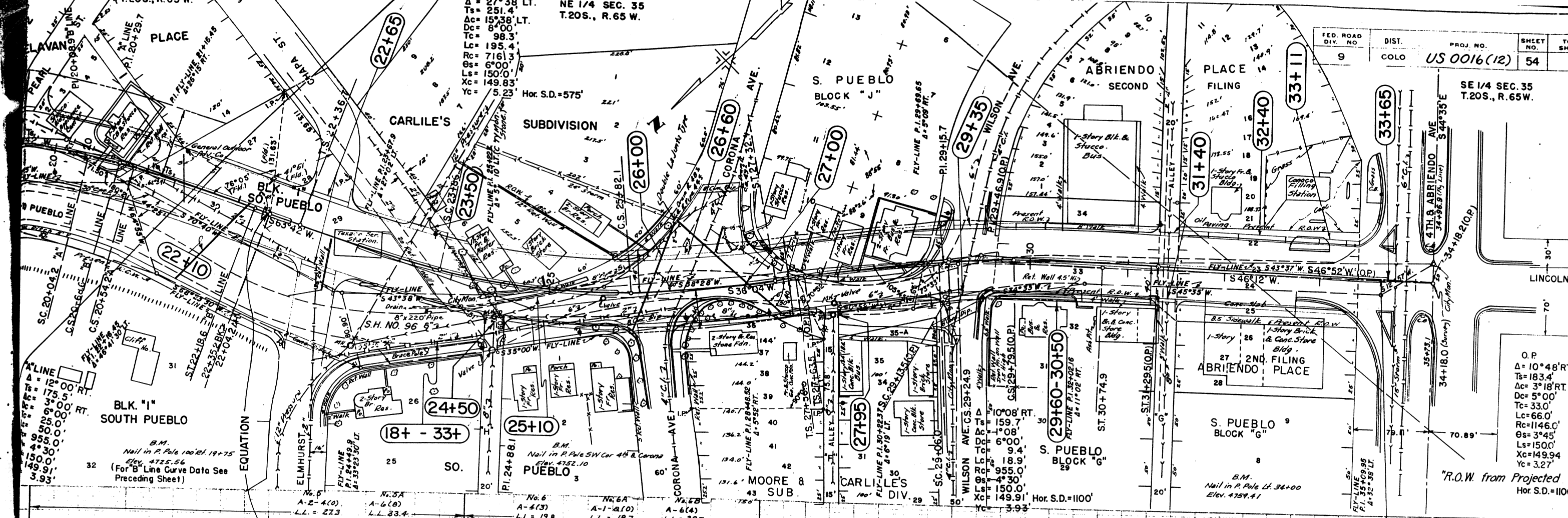
NE 1/4 SEC. 35
T.20S., R.65 W.

$\Delta = 27^\circ 38' \text{ LT.}$
 $T_s = 251.4$
 $\Delta c = 15^\circ 38' \text{ LT.}$
 $D_c = 8^\circ 00'$
 $T_c = 98.3$
 $L_c = 195.4$
 $R_c = 716.3$
 $G_s = 6^\circ 00'$
 $L_s = 150.0$
 $X_c = 149.83$
 $Y_c = 5.23$

Hor. S.D. = 575'

FED. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEET
9	COLO	US 0016(12)	54	

SE 1/4 SEC. 35
T.20S., R.65 W.



BLK. "I" SOUTH PUEBLO

B.M. Nail in P. Pole 100' Bl. 19+75
Elev. 4725.56
(For "B" Line Curve Data See Preceding Sheet)

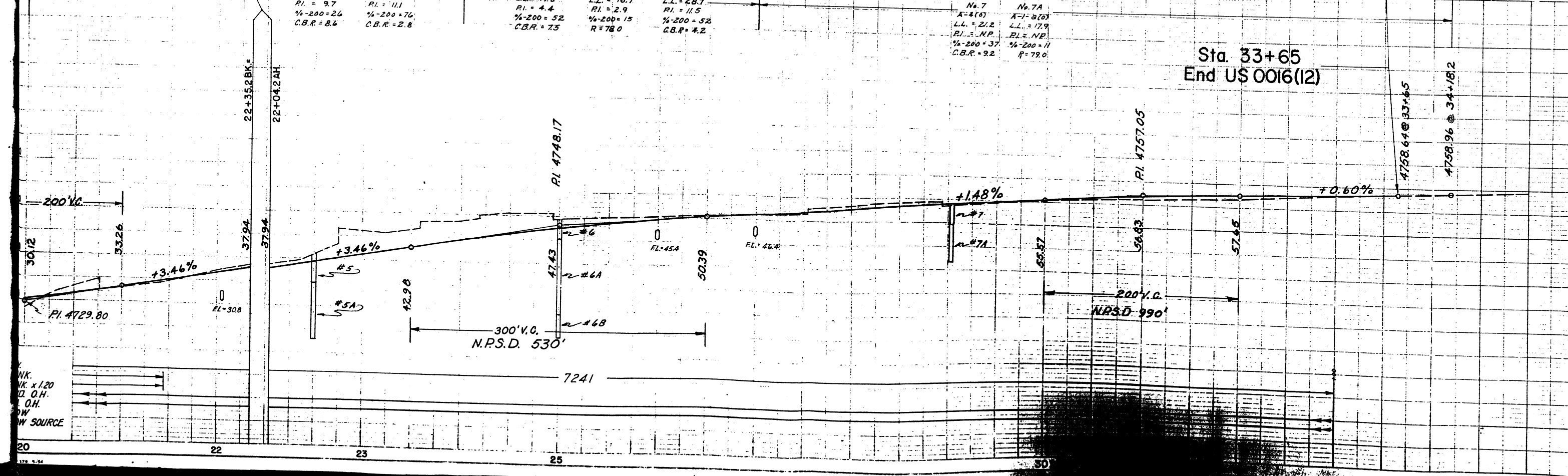
S. PUEBLO BLOCK "G"

B.M. Nail in P. Pole Lt. 34+00
Elev. 4759.41

"R.O.W. from Projected L.L.
Hor. S.D. = 1100'

No. 5	No. 5A	No. 6	No. 6A	No. 6B	No. 7	No. 7A
A-2-4(0)	A-6(0)	A-4(3)	A-1-2(0)	A-6(4)	A-4(5)	A-1-2(0)
L.L. = 27.3	L.L. = 33.4	L.L. = 19.8	L.L. = 18.7	L.L. = 28.7	L.L. = 21.2	L.L. = 17.9
P.I. = 9.7	P.I. = 11.1	P.I. = 4.4	P.I. = 2.9	P.I. = 11.5	P.I. = NP	P.I. = NP
1/4-200 = 24	1/4-200 = 76	1/4-200 = 52	1/4-200 = 15	1/4-200 = 52	1/4-200 = 37	1/4-200 = 11
C.B.R. = 8.6	C.B.R. = 2.8	C.B.R. = 7.5	R = 78.0	C.B.R. = 7.2	C.B.R. = 9.2	R = 72.0

Sta. 33+65
End US 0016(12)



NK x 1.20
D. O.H.
C.H.
W SOURCE