STATE DEPARTMENT OF HIGHWAYS
DIVISION OF HIGHWAYS — STATE OF COLORADO

P.E. ROW AND UTILITIES UNDER IXFU 470-1(2)

FEDERAL ROAD PROJECT NO.	DIVISION	PROJECT NO.	SHEET NO.
FR	COLORADO	IXFU 470-1(11)	1
REVISIONS			
7-5-83	Sht. 14, 9 & 19	E.B.	

PLAN AND PROFILE OF ~~PROPOSED~~ AS CONSTRUCTED

FEDERAL AID PROJECT NO. IXFU 470-1(11)

STATE HIGHWAY NO. 470

DOUGLAS COUNTY

AS CONSTRUCTED

NO REVISIONS ☐ REVISED 6-8-84 VOID ☐

TABULATION OF LENGTH

STATION	ROADWAY LIN. FT.	ROADWAY MILES	STRUCTURE LIN. FT.	STRUCTURE MILES	NO WORK SECTION LIN. FT.	NO WORK SECTION MILES
SH 470						
Sta. 1139+90 Begin Project IXFU 470-1(11) = Sta. 1139+90 On Project IXFU 470-1(12) Mile Marker No. 21.00						
Sta. 1141+71.25 Str. No. F-17-HP & F-17-HQ Sta. 1143+80.85 To	181.25	0.034	189.60	0.036		
Sta. 1145+10	149.15	0.028				
Sta. 1145+10 Begin No Work Section						
To Sta. 1155+00 End No Work Section					990.00	0.188
Sta. 1155+00 To Sta. 1162+50 End Proj. IXFU 470-1(11) Mile Marker No. 21.43	750.00	0.142				
TOTALS	1,080.40	0.204	189.60	0.036	990.00	0.188

SUMMARY

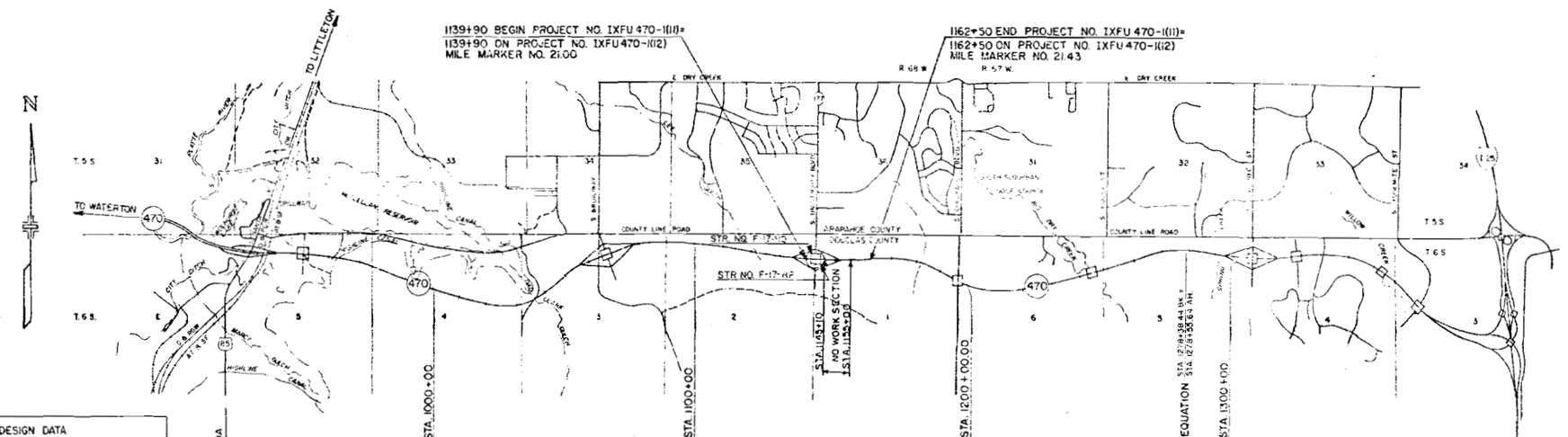
	LIN. FT.	MILES
ROADWAY (Net Length)	1,080.40	0.204
STRUCTURE	189.60	0.036
NO WORK SECTION	990.00	0.188
PROJECT GROSS LENGTH	2,260.00	0.428

INDEX OF SHEETS

1. TITLE SHEET, PROJECT LOCATION MAP, TABULATION OF LENGTH AND INDEX OF SHEETS
2. STANDARD PLANS LIST
3. TYPICAL SECTIONS AND GENERAL NOTES
4. SUMMARY OF APPROXIMATE QUANTITIES
5. SUMMARY OF EARTH-WORK AND TRAFFIC DIAGRAM
6-8 ALIGNMENT PLAN AND PROFILE
9-29 DETAILS OF STRUCTURE NO. F-17-HP AND F-17-HQ

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

9.01
51.2



DESIGN DATA

MAXIMUM DEGREE OF CURVE	0°45'
MAXIMUM GRADE	2.56%
MINIMUM SSD HORIZONTAL	N.A.
MINIMUM SSD VERTICAL	>600'
MAXIMUM DESIGN SPEED	>70 MPH
2000 DESIGN VOLUME ADT =	36,900
DDHV =	2,625

P.E. STAMP & SIGNATURE

3/24/82
DATE

PHILLIPS, FEISTER, FALEY, INC.
CONSULTING ENGINEERS, PLANNERS
DENVER, COLORADO

DIVISION OF HIGHWAYS

APPROVED:

4-5-83
DATE

L.E.G./OB 6 B E 8

AS CONSTRUCTED INFORMATION

CONTRACTOR Lawrence Construction Co.
RESIDENT ENGINEER C. L. McKenzie
(Name of Resident)
PROJECT STARTED September 1, 1983
WORK COMPLETED June 2, 1984
AS CONSTRUCTED PLANS APPROVED 8-6-84
Asst. Engr. II
TITLE DATE

DIVISION OF HIGHWAYS - STATE OF COLORADO
DOH Form No. 113 (Major)
REV. MAY 1978

(R-1) July 5, 1983 Rev. Quantities on E.B.

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

AS CONSTRUCTED
NO REVISIONS ☐ REVISED ☐ VOID ☐

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	IXFU 470-1(11)	4	24

INDEX BOOK	INDEX COMP. PROJ. NO.	INDEX SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT			ROADWAY	AS CONSTRUCTED		STR. NO. F-17-HQ PLAN	AS CONSTRUCTED		STR. NO. F-17-HP PLAN	AS CONSTRUCTED		PROJECT TOTALS	AS CONSTR. PROJECT TOTALS	DIFF. + OR -	% PLAN
1	1	5	203	EMBANKMENT MATERIAL (COMPLETE IN PLACE)	CU.YD.			26,720	41,118								26,720	41,118	- 14,398	154
	2	9	206	STRUCTURE EXCAVATION (R-1)	CU.YD.						123.6	124		127.4	124		251	248	- 3	99
	3	9	206	STRUCTURE BACKFILL (CLASS 1)	CU.YD.						605	605		667	667		1272	1272	—	100
	4	9	206	STRUCTURE BACKFILL (CLASS 2)	CU.YD						32	32		32	32		64	64	—	100
	5	3	207	STOCKPILE TOPSOIL (HAUL)	CU.YD.			215	3664								215	3664	+3449	1704
	6	5	209	WETTING	M GAL			115	174								115	174	+ 59	151
	7	9	502	STEEL PILING (HP12x74)	LIN.FT.						717.2	516		743.8	504		1461	1020	- 441	70
	8	9	507	CONCRETE SLOPE AND DITCH PAVING (REINFORCED)	CU.YD.						73.6	72.08		77.4	75.92		151	148	-3	98
	9	9	518	BRIDGE COMPRESSION JOINT SEALER	LIN. FT.						28	28		28	28		56	56	—	100
	10	9	601	CONCRETE CLASS A (BRIDGE)	CU.YD.						202.6	204.32		213.1	134.30		415.7	398.62	- 17.08	96
	11	9	601	CONCRETE CLASS D (BRIDGE)	CU.YD						309.1	330.41		310.9	332.30		620	662.71	+42.71	107
	12	9	602	REINFORCING STEEL	LB.						52,660	52,660		53,370	53,370		106,030	106,030	—	100
	13	9	602	REINFORCING STEEL (EPOXY COATED)	LB.						41,829	41,829		41,968	41,968		83,797	83,797	—	100
	14		607	FENCE BARRIER WITH METAL POSTS	LIN. FT.			166	166								166	166	—	100
	15	9	613	3/4 INCH ELECTRICAL CONDUIT	LIN. FT.						6	6		6	6		12	12	—	100
	16	9	613	1 1/2 INCH ELECTRICAL CONDUIT	LIN. FT.						208	267		212	271		420	538	+ 118	128
	17	9	618	PRESTRESSED CONCRETE UNIT (1 SECTION) (90-95 FEET)	EACH						5	5		5	5		10	10	—	100
	18	9	618	PRESTRESSED CONCRETE UNIT (1 SECTION) (95-100 FEET)	EACH						5	5		5	5		10	10	—	100
	19		620	FIELD OFFICE (CLASS 1) (DELETED MCR 1-8)	EACH			1	0								1	0	-1	0
	20		620	FIELD LABORATORY (CLASS 1) (DELETED MCR 1-9)	EACH			1	0								1	0	-1	0
	21		620	SANITARY FACILITY	EACH			1	1								1	1	—	100
			626	MOBILIZATION	L.S.			0.3	.3		0.35	.35		0.35	.35		1.0	1.0	—	100
				~~FORCE ACCOUNT~~ SEE PAGE 4AX																
			F/A 01	~~MINOR CONTRACT REVISIONS~~	~~F.A.~~			~~0.3~~			~~0.35~~			~~0.35~~			~~1.0~~			
			F/A 02	~~ON THE JOB TRAINEE~~	~~EACH~~									1			2			
			F/A 03	~~MBE INCENTIVES~~	~~F.A.~~			~~1~~									1			

DIVISION OF HIGHWAYS - STATE OF COLORADO
DOH Form No. 113 (Reprint)
REV. MAY 1978

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

AS CONSTRUCTED — NO REVISIONS ____ REVISED 6-8-84 VOID ____

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	IXFJ 470-1(1)	4 AX	79

INDEX BOOK	INDEX COMP. UNIT NO.	INDEX SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT			ROADWAY	AS CONSTRUCTED		Str. No. F 17 HQ Plan	As Constructed		Str. No. F 17 HP Plan	As Constructed		PROJECT TOTALS	As Constructed Project Totals	DIFF + OR −	% Plan
1	22		607	FENCE BARBED WIRE (METAL POSTS) MCR1-1	LIN. FT.			—	1572								—	1572	+1572	—
	23		607	CORNER AND LINE BRACE POST MCR1-3	EACH			—	6								—	6	+ 6	—
	24		614	BARRICADE (TYPE 3M-B) (TEMPORARY) MCR1-4	EACH			—	1								—	1	+ 1	—
	25		210	RESET FENCE MCR1-6	LIN. FT.			—	280								—	280	+280	—
	26		105	PRICE REDUCTION - CLASS D. CONCRETE	L.S.			—	1								—	1	1	—
			F/A01	FORCE ACCOUNT MINOR CONTRACT REVISION ORDER No. 1	F/A			0.3	0.3		0.35	0.35		0.35	0.35		1	1	—	100%
FORM #	10's			ITEM # 7 - CONSTRUCT YARD	F/A				$5418.19								—	$5418.19	+$5418.19	—
FORM #	10's			ITEM # 10 - REPAIR RETAINING WALL	F/A				$3152.97								—	$3152.97	+$3152.97	—
1	F/A1		F/A02	ON THE JOB TRAINEE	F/A						($800.00) 1	.5		($800.00) 1	.5		($1600.00) 2	($104.00) 1	($1496.00) -1	50
1	F/A1		F/A03	MBE INCENTIVES	F/A			($21,000.00) 1	($1691.56) 1								($21,000.00) 1	($1691.56) 1	(-19308.44) —	100

5-5-87

9 29

(R-1) 7-5-83 Rev. Str. Exc. Quants. E.B.

BRIDGE STANDARD 0

GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE SPECIFICATIONS OF THE DIVISION OF HIGHWAYS, STATE OF COLORADO, APPLICABLE TO THE PROJECT.

FOR CONSTRUCTION DETAILS OF STRUCTURE EXCAVATION AND STRUCTURE BACKFILL, SEE SEE DRAWING NUMBER B-19.

EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213.

ALL STRUCTURAL STEEL NOT OTHERWISE NOTED SHALL BE AASHTO M-183 (ASTM A-36).

FOR STRUCTURE NUMBER INSTALLATION, SEE STANDARD M-614-12.

CLASS B COLORED COATING FINISH WILL BE [illegible] SHALL BE [illegible] DESIGNATED AS CLASS B AND WILL BE RED CERISE NO. 30077 AND THE COLOR WILL BE AS DIRECTED BY THE ENGINEER AND WILL BE SELECTED FROM TEST PANELS SUPPLIED BY THE CONTRACTOR.

GRADE 60 REINFORCING STEEL IS REQUIRED FOR #8 BARS AND LARGER. GRADE 40 MAY BE USED FOR #6 BARS. EPOXY COATED REINFORCING STEEL IS NOTED ON THE DRAWINGS.

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR REINFORCING BARS:

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
SPLICE LENGTH FOR CLASS A CONCRETE	1'-8"	2'-1"	2'-6"	3'-0"	3'-5"	3'-10"	4'-3"	4'-8"
SPLICE LENGTH FOR CLASS B CONCRETE	1'-10"	2'-4"	2'-9"	3'-3"	3'-9"	4'-2"	4'-8"	5'-1"

THE ABOVE SPLICE LENGTHS SHALL BE INCREASED BY 20 PERCENT FOR 3 BAR BUNDLES AND 33 PERCENT FOR 4 BAR BUNDLES.

APPLIED LIVE LOADS AND BRAKING FORCE WERE NOT CONSIDERED ADEQUATE FOR STRUCTURE FOR STABILITY DURING THE CONSTRUCTION STAGES.

EP = EACH PACE
PP = PAIR PACE
NP = ENTIRE PACE
TP = TOP PACE
BP = BOTTOM PACE

DESIGN DATA

CURRENT AASHTO DESIGN SPECIFICATIONS

LIVE LOAD: AASHTO H-20-44 AND INTERSTATE ALTERNATE SEMI-LOAD 45 LBS. PER SQ. FT. FOR BITUMINOUS PAVEMENT

REINFORCED CONCRETE: #6 BARS AND LARGER f_y = 60,000 P.S.I.
#5 BARS AND SMALLER f_y = 40,000 P.S.I.
f'_c = 3,000 P.S.I. BACKFILL f'_c = 2,500

P.S.I. IN TRANSITION SLAB BETWEEN BRIDGE AND APPROACH

CLASS D CONCRETE f'_c = 4,000 P.S.I.
CLASS A CONCRETE f'_c = 3,000 P.S.I.

STRUCTURAL STEEL: ASTM A-36 f_y = 36,000 P.S.I.
ALL BOLTS USED TO CONNECT STRUCTURAL STEEL SHALL BE ASTM A-325 HIGH STRENGTH BOLTS.

Final SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	STRUCTURE NO. F-17-HR					STRUCTURE NO. F-17-HP					TOTAL
			SUPERSTRUCTURE	ABUT 1	PIER 2	ABUT 3	TOTAL	SUPERSTRUCTURE	ABUT 1	PIER 2	ABUT 3	TOTAL	
(1) 203	STRUCTURAL EXCAVATION	CU YD		~~37~~ 37	~~50.0~~	~~37~~ 37	~~124~~ 124	~~366~~ 366	~~50.0~~	~~408~~ 37	~~123~~ 123	~~248~~ 248	~~251~~
206	STRUCTURAL BACKFILL (CLASS B)	CU YD		291.9		319.1	611	322.5		344.7	667	1,272	
209	STRUCTURAL BACKFILL (CLASS 2)	CU YD		~~31.5~~ 32		~~31.5~~ 32	~~63~~ 64	~~31.5~~ 32		~~31.5~~ 32	~~63~~ 64	~~126~~ 128	
208	HOT BITUMINOUS PAVEMENT (FUTURE)	TON	~~89~~			~~89~~		~~89~~			~~89~~	~~178~~	
602	STEEL PILING "HP 10x42"	LIN FT		~~153~~ 153	~~187~~ 187	~~175~~ 175	~~516~~ 516	~~165~~ 165	~~198~~ 198	~~141~~ 141	~~504~~ 504	1020	
				~~212.1~~ 212.1	~~301.4~~	~~293.7~~	~~817.2~~	~~219.3~~	~~314.2~~	~~210.2~~	~~743.8~~	~~1,461~~	
601	CONCRETE CLASS D (BRIDGE) APPROACH SLAB REINFORCED	CU YD		24.7		68.4	72.08 73.0		39.0		49.3	75.92 77.4	148 151
618	WATERPROOFING FOR CONCRETE (FUTURE)	SQ YD	~~800~~				~~800~~	~~800~~				~~800~~	~~1,616~~
618	BRIDGE COMPRESSION JOINT SEALER	LIN FT		14		14	28		14		14	28	56
601	CONCRETE CLASS D (BRIDGE)	CU YD	~~289.4~~	~~9.5~~		~~10.2~~	~~309.1~~ 330.41	~~289.4~~	~~16.2~~		~~11.2~~	~~316.8~~ 332.30	~~662.71~~ 670.9
(3) 601	CONCRETE CLASS A (BRIDGE)	CU YD		~~65.2~~ 69.05	~~63.5~~ 64.57	~~70.9~~ 70.66	~~202.6~~ 204.32		~~72.3~~ 64.50	~~64.4~~ 63.58	~~75.8~~ 66.22	~~210.1~~ 194.30	~~412.7~~ 398.62
(4) 602	REINFORCING STEEL	LB	20,405	7731	10,052	7872	82,060	20,405	7943	10,797	8225	53,370	106,030
602	REINFORCING STEEL (EPOXY COATED)	LB	39,271	1,252		1,300	41,824	39,271	1,320		1,377	41,968	83,792
618	1½ INCH ELECTRICAL CONDUIT	LIN FT	~~267~~ 200				~~267~~ 200	~~271~~ 212				~~271~~ 212	~~538~~ 412
618	3½ INCH ELECTRICAL CONDUIT	LIN FT	0				0	0				0	12
618	PREFORMED CONCRETE UNIT [illegible]	EACH	5				5	5				5	10
618	PREFORMED CONCRETE UNIT [illegible]	EACH	5				5	5				5	10
626	MOBILIZATION	L.S.					035					035	0.70
(2)	½" EXPANSION JOINT MATERIAL	SQ FT		45.9	59.3	46.0	151.2		46.1	59.3	46.4	151.8	303

(R-1) (1) INCLUDES 151 cu. YDS. FOR CONCRETE SLOPE AND DITCH PAVING.

(2) TO BE INCLUDED IN THE BID PRICE FOR ITEM 601, CONCRETE CLASS D (BRIDGE).

(3) Includes 102.7 Cu. Yds. For 4 Approach Slabs.

(4) Includes 12,873 lbs. for 4 Approach Slabs.

INDEX OF DRAWINGS

DWG. NO. B-1	GENERAL INFORMATION - SUMMARY OF QUANTITIES
DWG. NO. B-2	GENERAL LAYOUT
DWG. NO. B-3	ENGINEERING GEOLOGY
DWG. NO. B-4	CONSTRUCTION LAYOUT
DWG. NO. B-5	PILING LAYOUT
DWG. NO. B-6	ABUTMENT DETAILS
DWG. NO. B-7	WINGWALL DETAILS
DWG. NO. B-8	RETAINING WALL DETAILS
DWG. NO. B-9	PIER 2 DETAILS
DWG. NO. B-10	PIER 2 DETAILS
DWG. NO. B-11	SUPERSTRUCTURE DETAILS
DWG. NO. B-12	COLORADO 65G GIRDER
DWG. NO. B-13	SLOPE PAVING DETAILS
DWG. NO. B-14	BRIDGE DECK ELEVATIONS
DWG. NO. B-15	BRIDGE DECK ELEVATIONS
DWG. NO. B-16	BRIDGE DECK ELEVATIONS
DWG. NO. B-17	BRIDGE DECK ELEVATIONS
DWG. NO. B-18	ROADWAY APPROACHES
DWG. NO. B-19	EXCAVATION AND BACKFILL FOR STRUCTURES
DWG. NO. B-20	BENCH MARK
DWG. NO. B-21	APPROACH SLAB DETAILS

BRIDGE DESCRIPTION

2-SPANS (82'-0" AND 82'-0") CONTINUOUS CONCRETE SLAB AND PRESTRESSED CONCRETE GIRDER ON SKEW.

OVER UNIVERSITY BOULEVARD, 28'-0" CLEAR ROADWAY WIDTH TO CURB, AND 2'-0" CURB TO CURB AT EAST END OF BRIDGE.

NO SIDEWALKS. SPECIAL BRIDGE RAILING.

Reviewed 5 Schieler 5-6-92

DIVISION OF HIGHWAYS

GENERAL INFORMATION

SUMMARY OF QUANTITIES

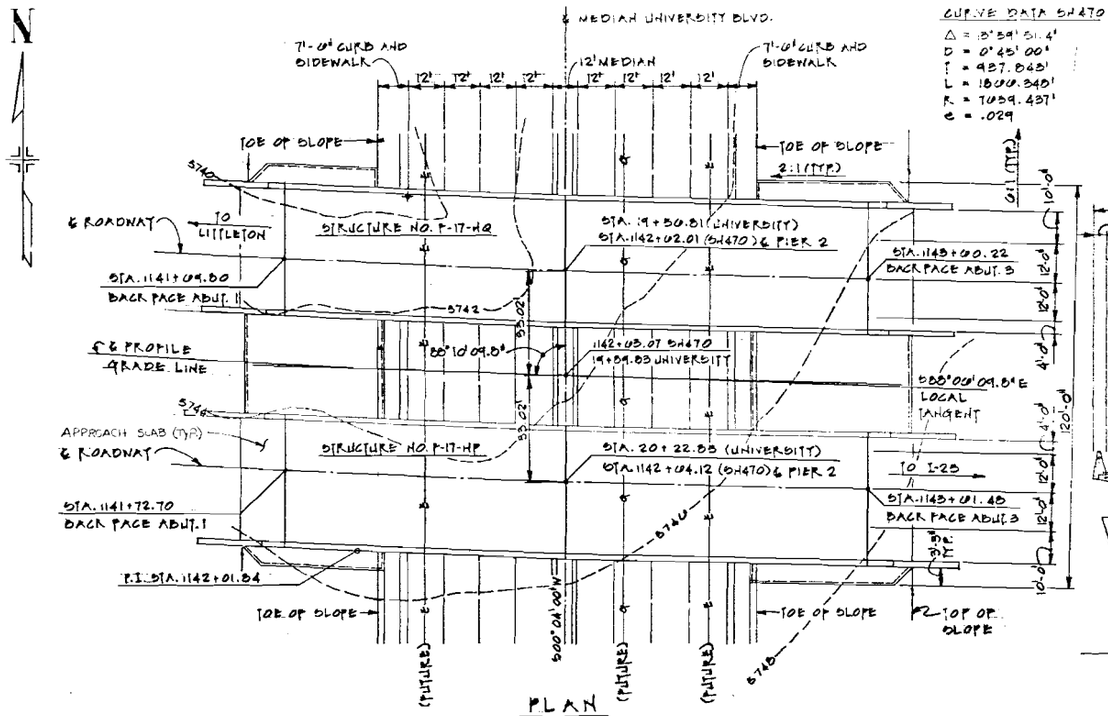
LITTLETON

21

AS CONSTRUCTED			
NO REVISIONS 6-8-84	REVISED		VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	[illegible]	10	[illegible]

REVISIONS

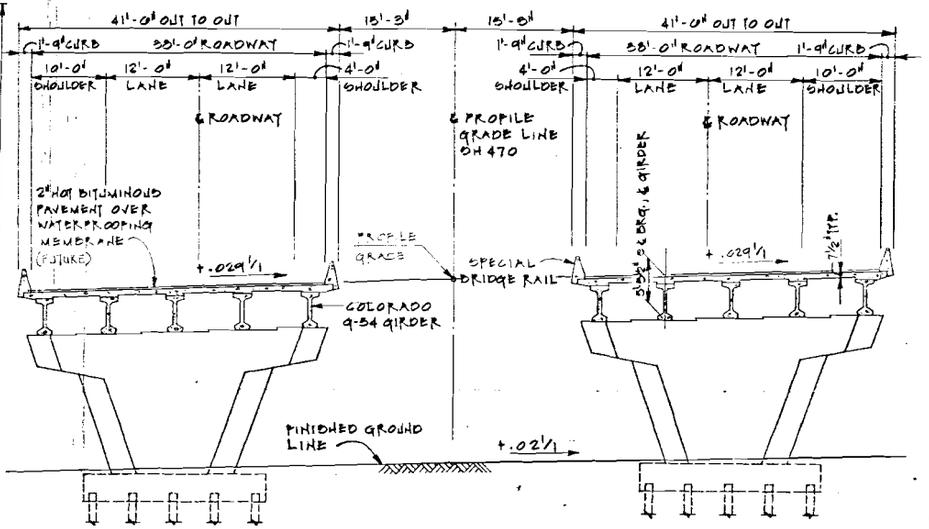


PLAN

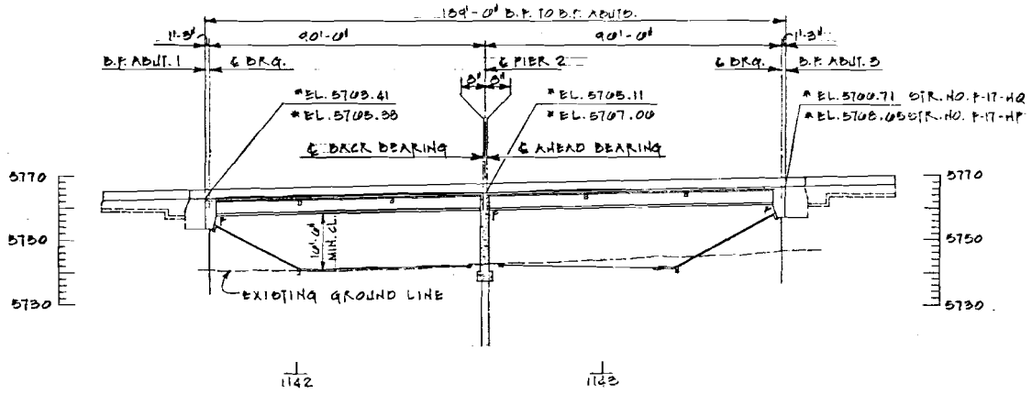
+ POINT OF MINIMUM VERTICAL CLEARANCE

CURVE DATA SH470

Δ = 13°59'51.4"
D = 0°45'00"
T = 937.848'
L = 1800.348'
R = 7639.437'
e = .029



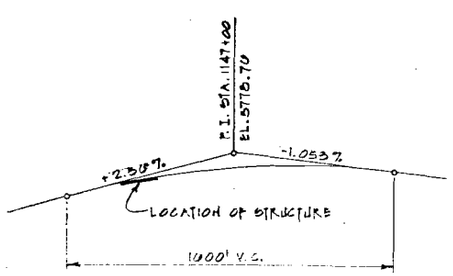
TYPICAL SECTION



SECTION

TAKEN PERPENDICULAR TO UNIVERSITY BLVD. @ STA. 19+50.81, STRUCTURE NO. F-17-HQ. STRUCTURE NO. F-17-HP SIMILAR EXCEPT AS NOTED.

* ELEVATIONS ARE AT FINISHED GRADE AT ℄ ROADWAY.



PROFILE GRADE

LIVE LOADING: HS 20-44 AND INTERSTATE ALTERNATE.

DESIGNED BY	INITIAL	DATE	CHECKED BY	
	P.B.K.	1/82		E.R.W. 4/82
CHECKED BY	E.R.W.	4/82	QUANTITIES BY	P.B.K. 5/82
DETAILED BY	P.E.H.	2/82	CHECKED BY	E.R.W. 4/82

DIVISION OF HIGHWAYS

GENERAL LAYOUT

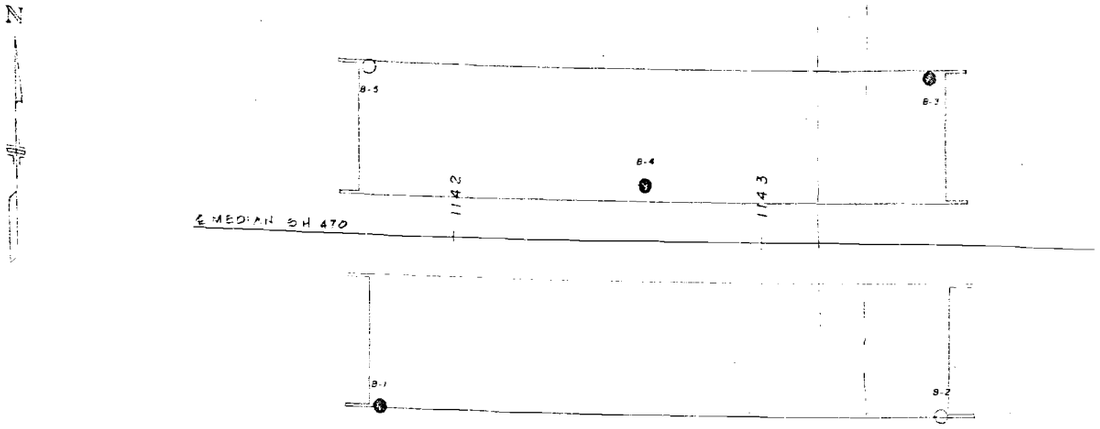
Designer	E. WHITE	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number B-2		of	Drawings

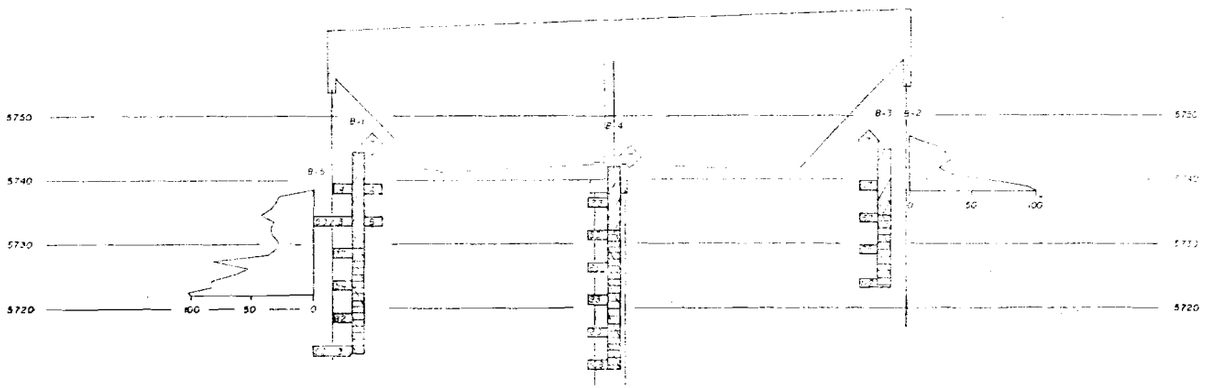
Revision Dates (Preliminary Stage Only)

		11	29

AS CONSTRUCTED

NO REVISIONS 6-8-84 REVISED ____ VOID ____





SUMMARY OF TEST RESULTS

TYPE OF MATERIAL

SHALE

CLAYEY SHALE

LEGEND

DIVISION OF HIGHWAYS

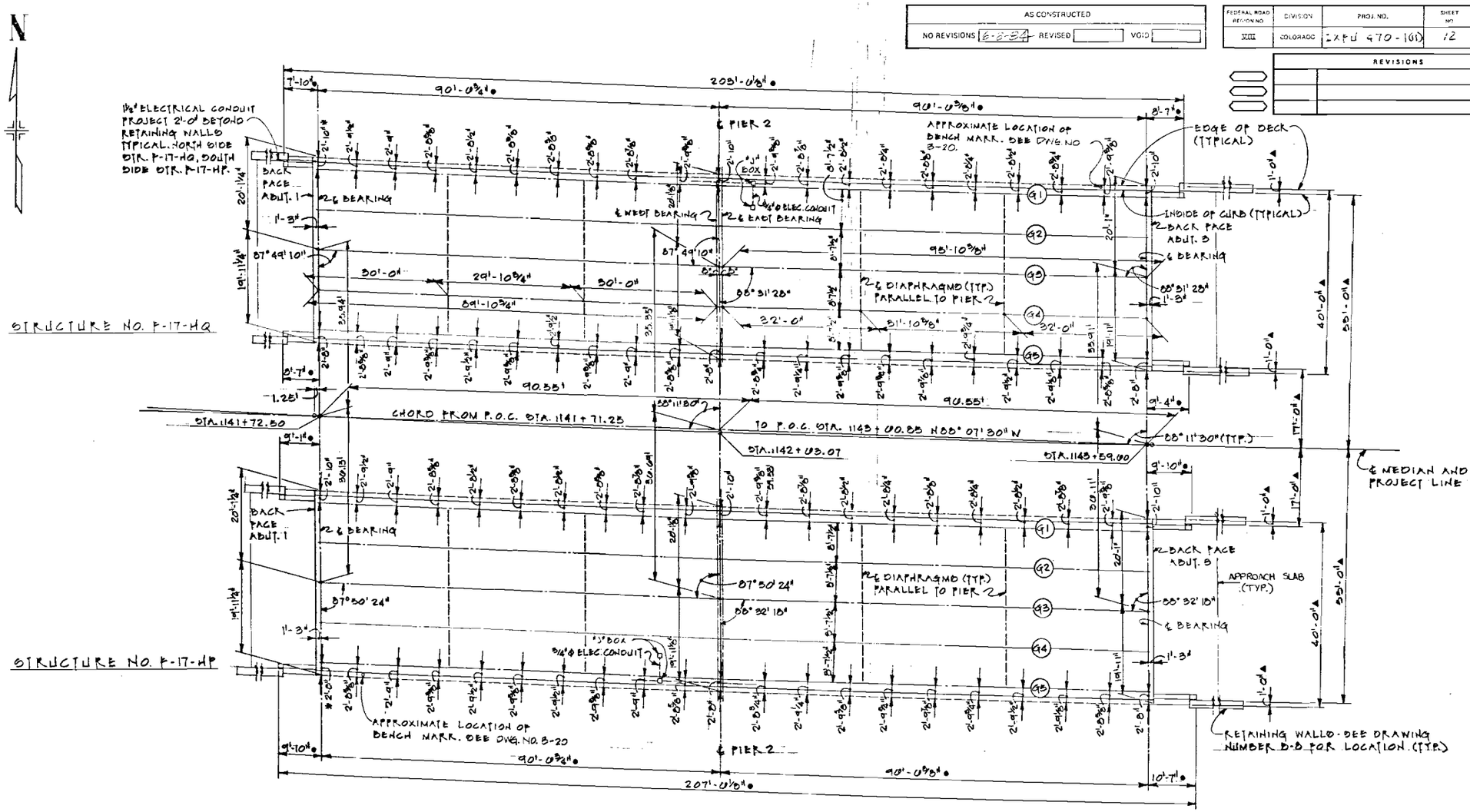
ENGINEERING GEOLOGY

21

AS CONSTRUCTED			
NO REVISIONS	6-8-84	REVISED	VOID

FEDERAL ROAD REGION NO	DIVISION	PROJ. NO.	SHEET NO	TOTAL SHEETS
VIII	COLORADO	IXFU 470-1(11)	12	39

REVISIONS



	INITIAL	DATE		
DESIGNED BY	P.B.K.	1/82	CHECKED BY	E.R.W. 4/82
CHECKED BY	E.R.W.	4/82	QUANTITIES BY	P.B.K. 3/82
DETAILED BY	P.E.H.	2/82	CHECKED BY	E.R.W. 4/82

1½" = 0" × 0" × 4" JUNCTION BOX FLUSH WITH BOTTOM OF SLAB. DRAIN FOR INTERIOR CONDENSATION.

* OFFSETS ARE FROM ℄ OF EXTERIOR GIRDER TO EDGE OF DECK AT 10TH POINTS BETWEEN GIRDER BEARINGS. (EXCEPT AT ℄ OF PIER)

▲ RADIAL DIMENSIONS.

• DIMENSIONS ALONG CURVE AT OUTSIDE EDGE OF DECK.

DIVISION OF HIGHWAYS

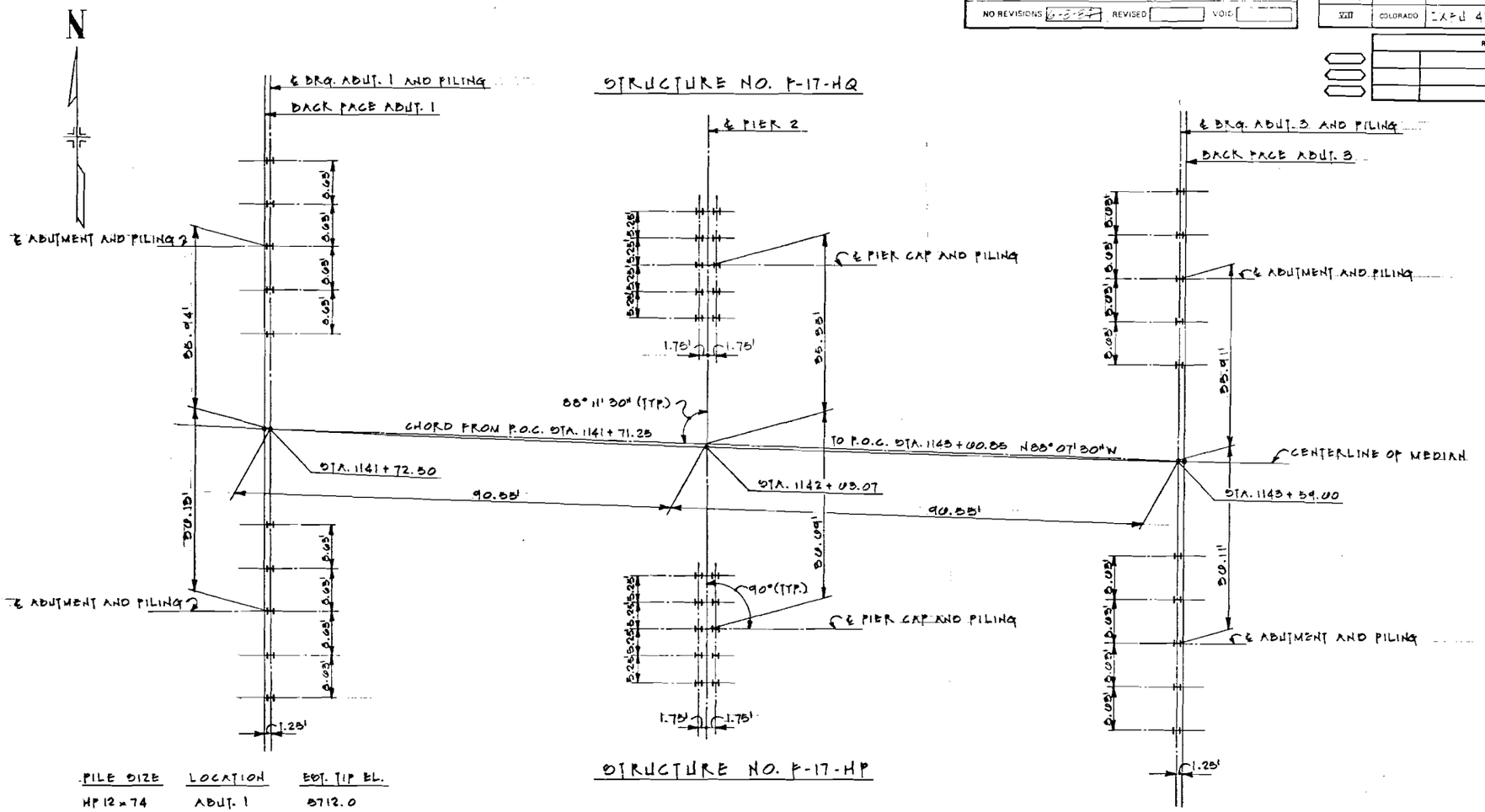
CONSTRUCTION LAYOUT

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number B-4		of 21	Drawings

AS CONSTRUCTED					
NO REVISIONS	6-3-82	REVISED		VOID	

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	IXFU 470-1(11)	13	27

REVISIONS



PILE SIZE	LOCATION	EST. TIP EL.
HP 12 x 74	ABUT. 1	5712.0
HP 12 x 74	PIER 2	5709.0
HP 12 x 74	ABUT. 3	5717.0

NOTES:

1. THE PILING DIMENSIONS SHOWN ARE AT THE BOTTOM OF CONCRETE.
2. ALL PILING SHALL BE DRIVEN VERTICAL.
3. ALL PILING SHALL BE END BEARING HP 12 x 74 WITH THE FOLLOWING MAXIMUM PILE LOADS:

ABUT. 1 = 91.4 T.
PIER 2 = 98.0 T.
ABUT. 3 = 95.3 T.

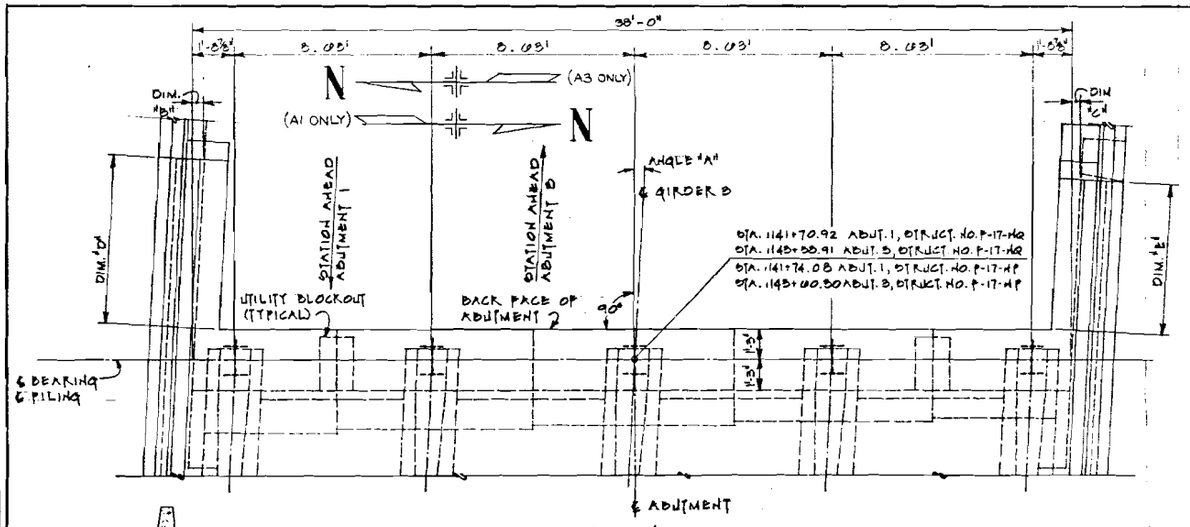
	INITIAL	DATE		
DESIGNED BY	P.B.K.	1/82	CHECKED BY	E.R.W. 4/82
CHECKED BY	E.R.W.	4/82	QUANTITIES BY	P.B.K. 5/82
DETAILED BY	P.E.H.	2/82	CHECKED BY	E.R.W. 4/82

DIVISION OF HIGHWAYS

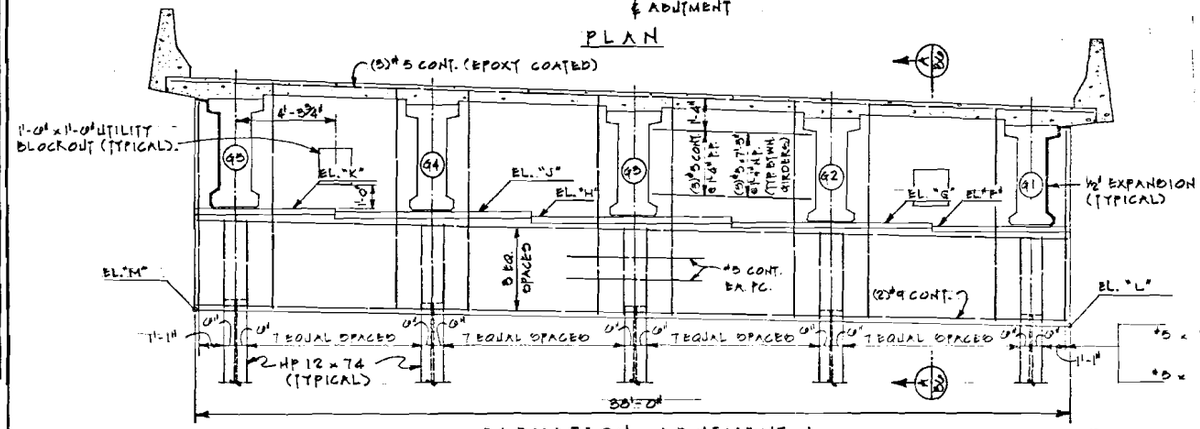
PILING LAYOUT

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number B-5		of	21 Drawings

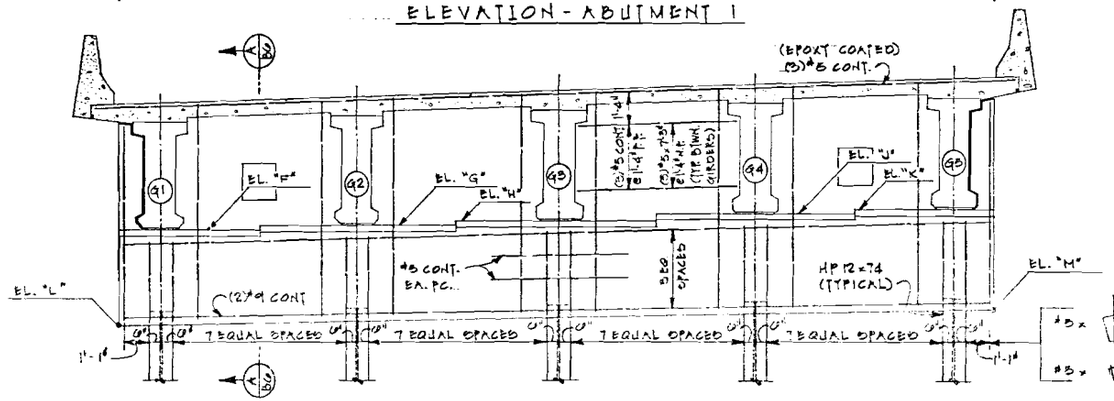
Revision Dates (Preliminary Stage Only)



PLAN

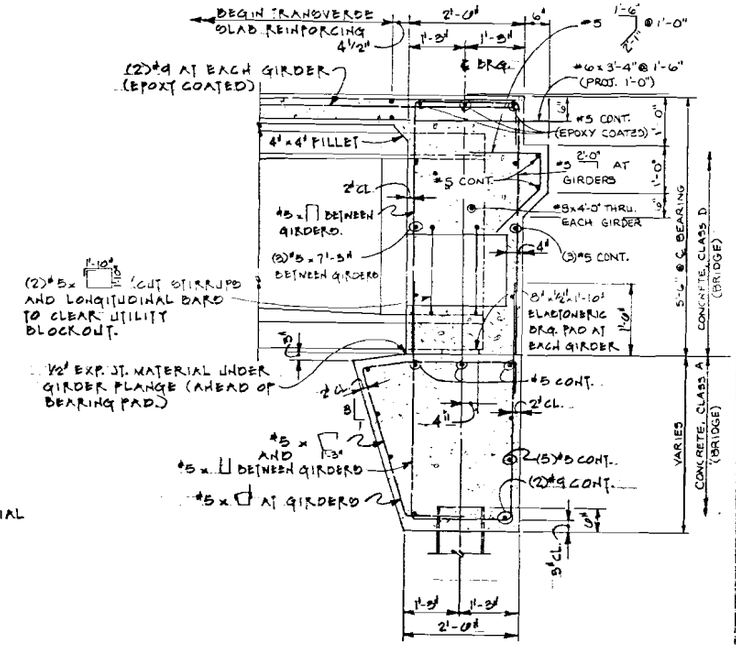


ELEVATION - ABUTMENT 1

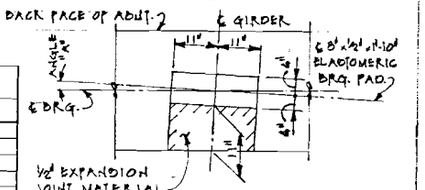


ELEVATION - ABUTMENT 3

STR. #	F-17-HQ		F-17-HP	
ABUTMENT	A1	A3	A1	A3
ANGLE "A"	2° 10' 50"	1° 28' 32"	2° 09' 36"	1° 27' 42"
DIM. "B"	4"	1 3/8"	4 5/8"	2"
DIM. "C"	5 5/8"	1 7/8"	4 1/4"	2 1/8"
DIM. "D"	0'-3"	0'-3"	7'-6"	7'-6"
DIM. "E"	5'-0"	7'-0"	0'-9"	8'-3"
EL. "E"	5757.17	5760.44	5759.32	5762.55
EL. "G"	5757.43	5760.69	5759.58	5762.80
EL. "H"	5757.68	5760.96	5759.83	5763.08
EL. "J"	5757.94	5761.20	5760.09	5763.31
EL. "K"	5758.20	5761.46	5760.35	5763.59
EL. "L"	5753.53	5756.65	5754.97	5758.09
EL. "M"	5754.29	5757.41	5755.73	5758.35



SECTION (A B/6)



PLAN AT BEARINGS

INITIAL	DATE	CHECKED BY	E. R. W. & P. B. K.
P. B. K.	11/82	QUANTITIES BY	P. B. K. & E. R. W.
E. R. W.	4/82	CHECKED BY	E. R. W.
E. R. W.	4/82		

DESIGNED BY
CHECKED BY
DETAILED BY

AS CONSTRUCTED			
NO REVISIONS	REVISED	VOID	

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	EXPU 470-1(10)	14	21

REVISIONS			

DIVISION OF HIGHWAYS

ABUTMENT DETAILS

Designer P. KISSLER		Structure Numbers	F-17-HP
Detailer P. HAAS			F-17-HQ
Drawing Number B-6	of 21 Drawings		

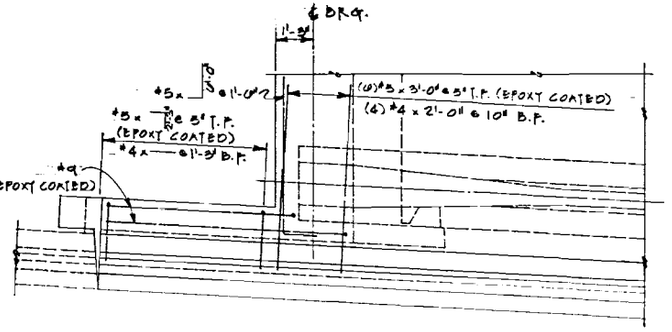
Revision Dates (Preliminary Stage Only)

AS CONSTRUCTED			
NO REVISIONS 5-2-97	REVISED	VOID	

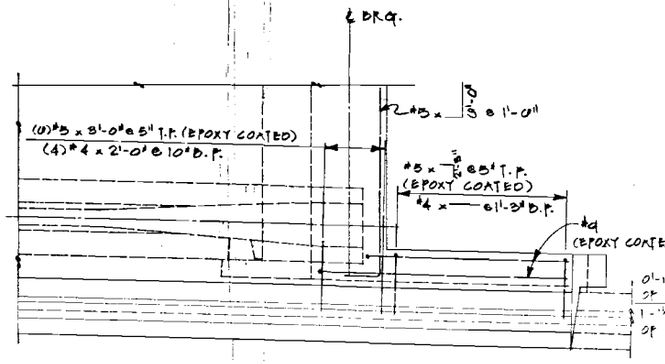
FEDERAL ROAD DESIGN NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	IXPU 470-101	15	19

REVISIONS			

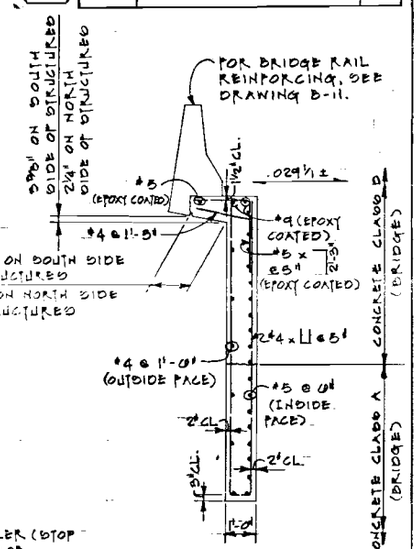
INITIAL	DATE	CHECKED BY	DATE
DESIGNED BY P.D.K.	1/82	QUANTITIES BY P.D.K.	5/82
DRAWN BY K.W.	4/82	CHECKED BY E.K.W.	4/82
DETAILED BY P.E.H.	2/82		



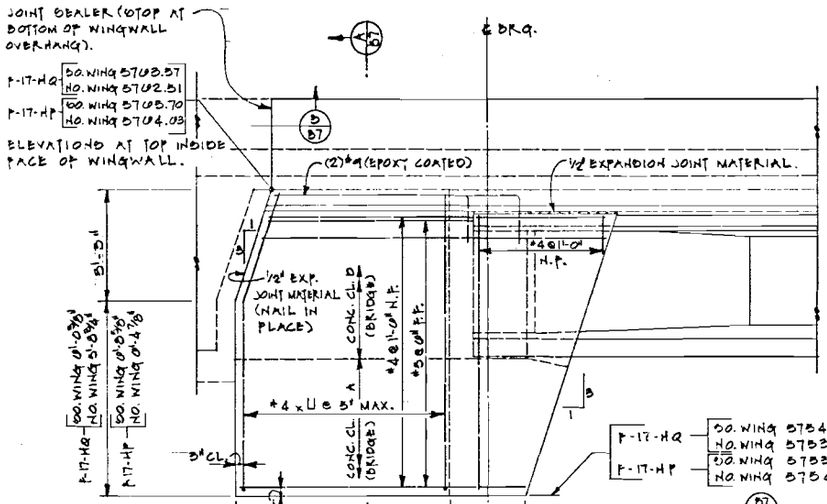
PLAN - ABUTMENT 1



PLAN - ABUTMENT 3

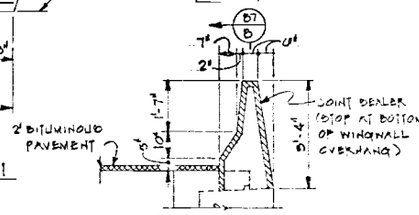


SECTION (B7/A)

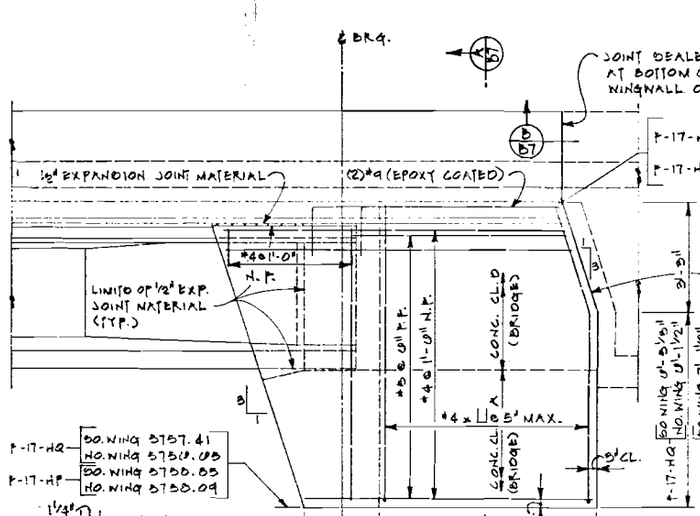


ELEVATION - ABUTMENT 1

SOUTH WINGWALL SHOWN
NORTH WINGWALL OPPOSITE HAND

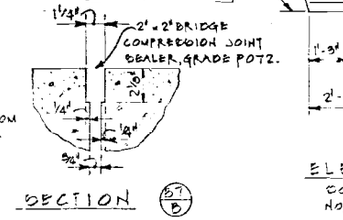


VIEW AT END OF WING



ELEVATION - ABUTMENT 3

SOUTH WINGWALL SHOWN
NORTH WINGWALL OPPOSITE HAND



SECTION (B7/B)

DIVISION OF HIGHWAYS

WINGWALL DETAILS

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number B-7		of 21	Drawings

Section Corner (Preliminary Survey Only)

AS CONSTRUCTED			
NO REVISIONS	6-8-84	REVISED	VOID

FEDERAL ROAD REGION NO	DIVISION	PROJ. NO.	SHEET NO	TOTAL SHEETS
VIII	COLORADO	IXFJ 670-10(3)	16	23

REVISIONS		

INITIAL	DATE	
P.B.K.	1/82	
E.K.W.	4/82	
P.E.H.	4/82	

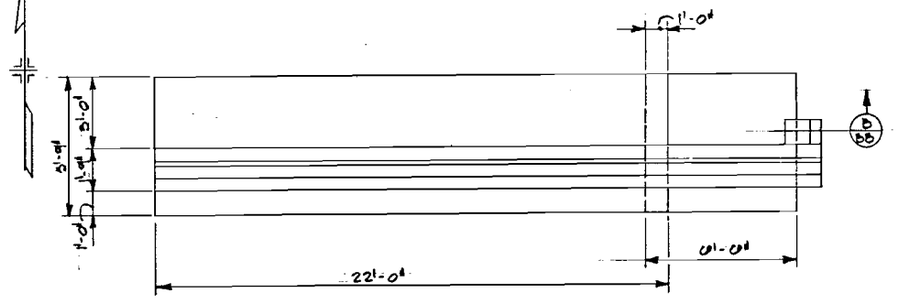
	CHECKED BY	
E.K.W.	4/82	
P.B.K.	5/82	
QUANTITIES BY		
CHECKED BY		
E.K.W.	4/82	

DESIGNED BY
DRAWN BY
CHECKED BY
DETAILED BY

N

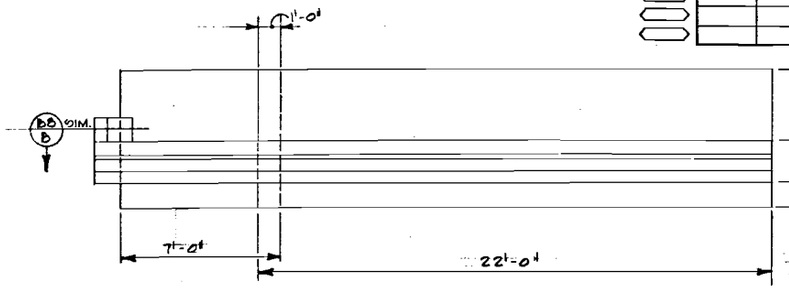
PLAN - ABUTMENT 1

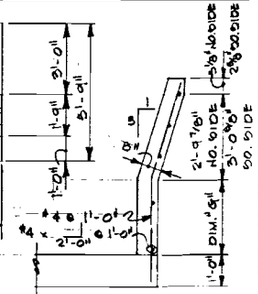
SOUTH RAIL SHOWN, NORTH RAIL OPPOSITE HAND.



PLAN - ABUTMENT 3

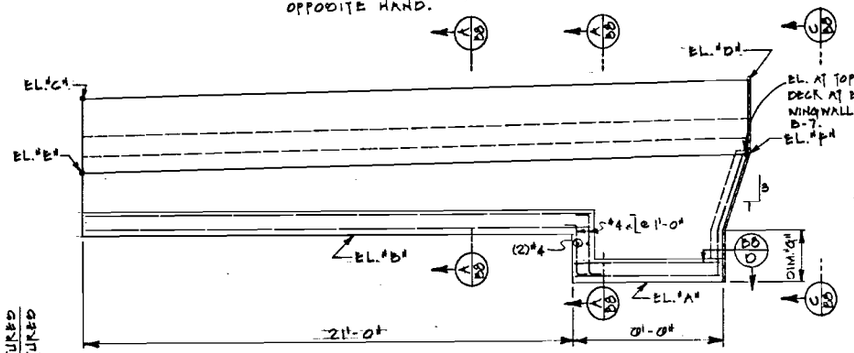
SOUTH RAIL SHOWN, NORTH RAIL OPPOSITE HAND.



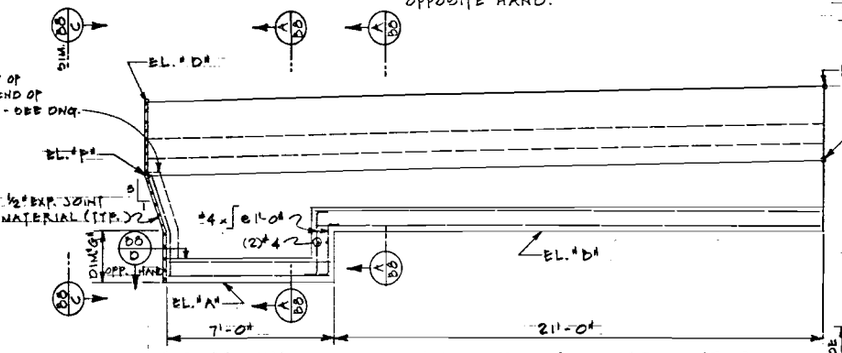


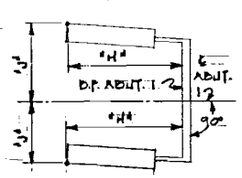
SECTION (BB/B)

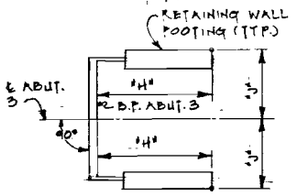
ELEVATION - ABUTMENT 1

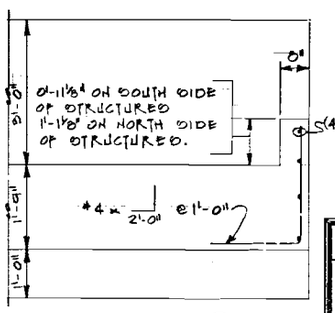


ELEVATION - ABUTMENT 3



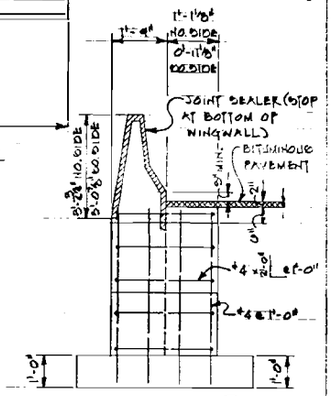




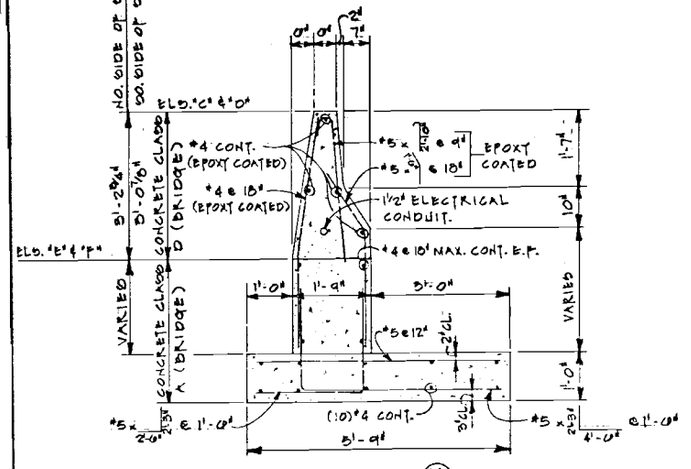


SECTION (BB/D)

NOTE: MAXIMUM FOOTING PRESSURE = 1.5 T.S.F.



SECTION (BB/C)



SECTION (BB/A)

TABLE OF ELEVATIONS

	STR. NO. F-17-HQ				STR. NO. F-17-HP			
	ABUT. 1		ABUT. 3		ABUT. 1		ABUT. 3	
	SO. WING	NO. WING	SO. WING	NO. WING	SO. WING	NO. WING	SO. WING	NO. WING
EL. "A"	5787.98	5790.82	5701.40	5700.32	5700.02	5788.88	5703.52	5702.39
EL. "B"	5700.19	5789.37	5704.39	5703.27	5702.32	5701.20	5700.52	5705.39
EL. "C"	5705.60	5704.74	5770.58	5709.20	5707.98	5700.87	5772.50	5771.39
EL. "D"	5700.42	5705.51	5,09.95	5705.83	5708.55	5707.43	5772.08	5770.96
EL. "E"	5702.79	5701.51	5707.31	5709.03	5704.91	5703.84	5709.43	5708.10
EL. "F"	5703.36	5702.08	5709.88	5705.60	5705.48	5704.20	5709.01	5707.73
DIM. "G"	2'-4½"	2'-5¼"	2'-4½"	2'-5½"	2'-5⅛"	2'-0"	2'-5⅜"	2'-0¼"
DIM. "H"	34'-1⅛"	33'-10⅝"	30'-0¼"	35'-4¾"	30'-2¼"	35'-1⅜"	97'-3¾"	30'-7¾"
DIM. "J"	20'-0⅛"	23'-5⅞"	22'-3⅝"	21'-2½"	19'-11⅝"	23'-6⅜"	22'-3¾"	21'-2⅜"

DIVISION OF HIGHWAYS

RETAINING WALL DETAILS

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number	B-8	of 21	Drawings

Revision Dates

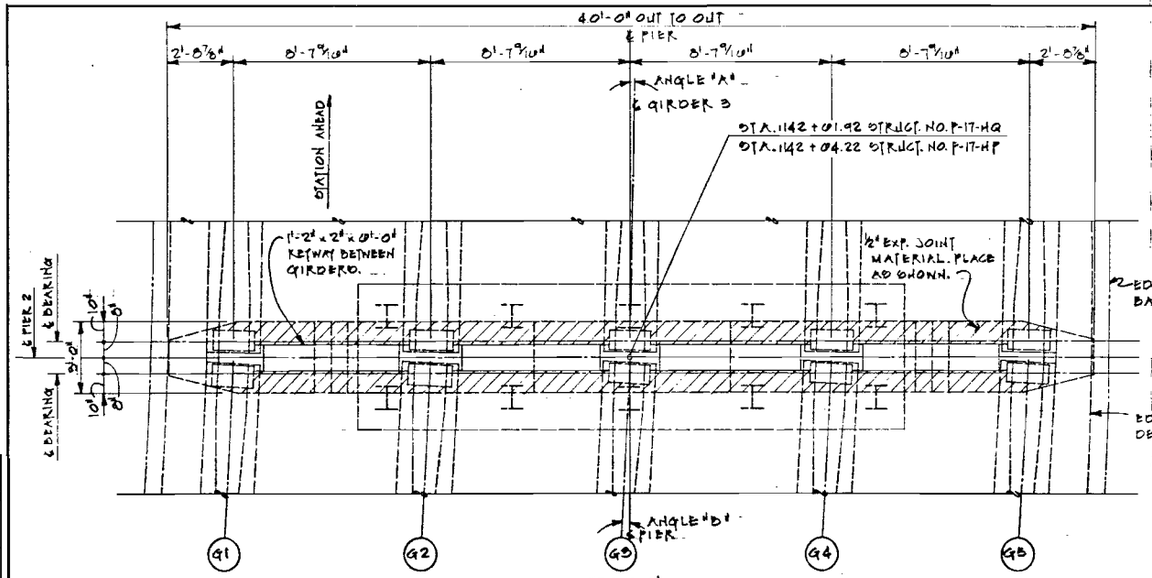
(Preliminary Stage Only)

AS CONSTRUCTED			
NO REVISIONS	6-8-64	REVISED	VOID

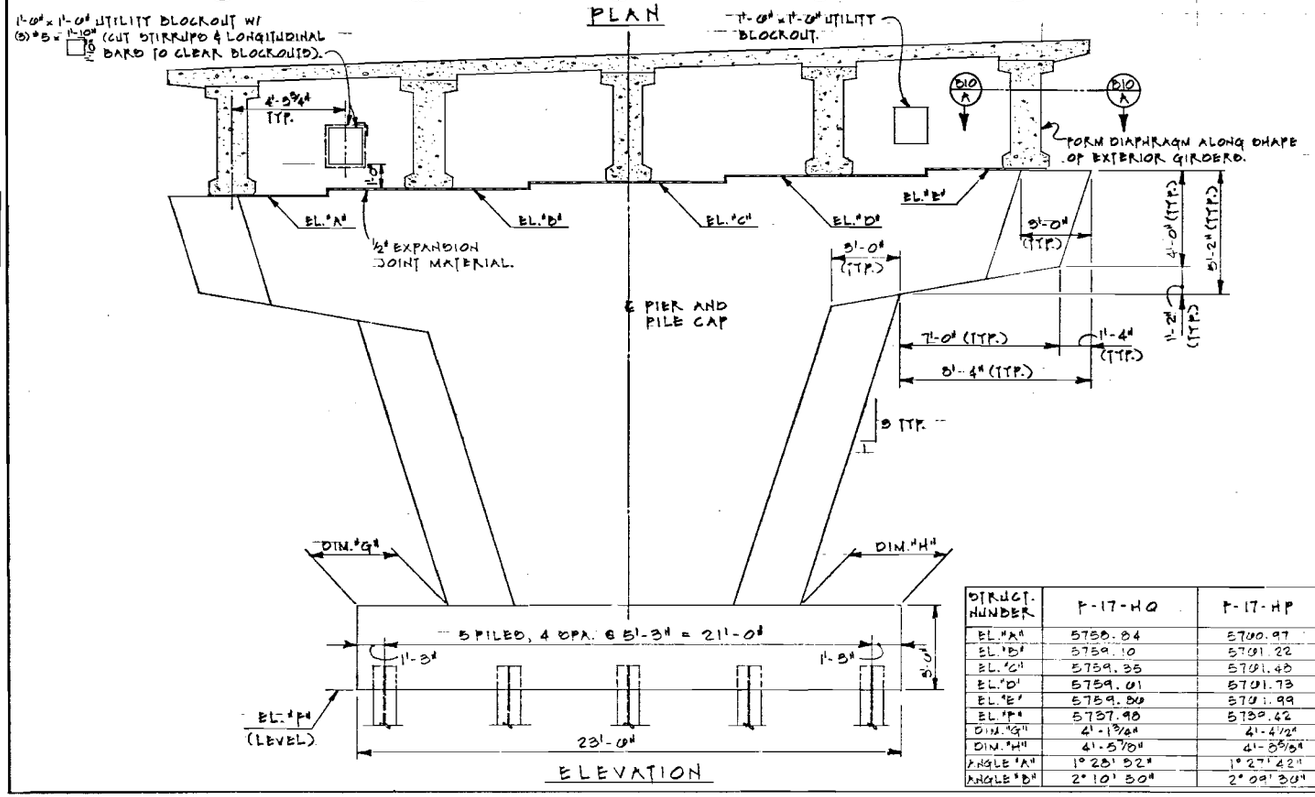
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	IXFU 470-1(11)	17	39

REVISIONS			

	INITIAL	DATE	CHECKED BY	DATE
DESIGNED BY	P.D.K.	1/62	P.D.K.	5/62
CHECKED BY	E.R.W.	4/62	QUANTITIES BY	E.R.W. 4/62
DETAILED BY	P.E.H.	2/62	CHECKED BY	

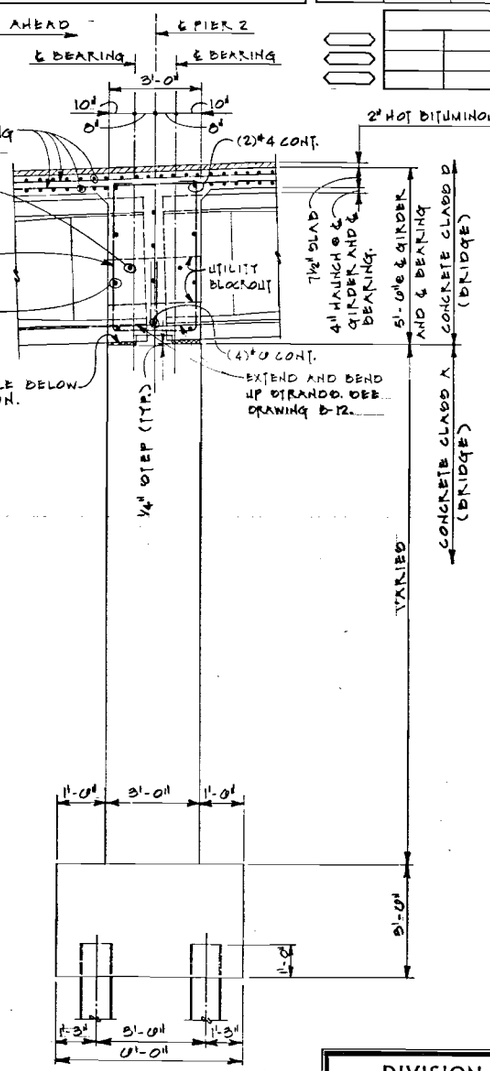


PLAN



ELEVATION

STRUCT. NUMBER	F-17-HQ	F-17-HP
EL. "A"	5750.84	5700.97
EL. "B"	5759.10	5701.22
EL. "C"	5759.35	5701.48
EL. "D"	5759.01	5701.73
EL. "E"	5759.80	5701.99
EL. "F"	5737.98	5739.62
DIM. "G"	4'-1 3/8"	4'-4 1/8"
DIM. "H"	4'-5 7/8"	4'-8 5/8"
ANGLE "A"	1° 25' 52"	1° 27' 42"
ANGLE "B"	2° 10' 30"	2° 09' 30"



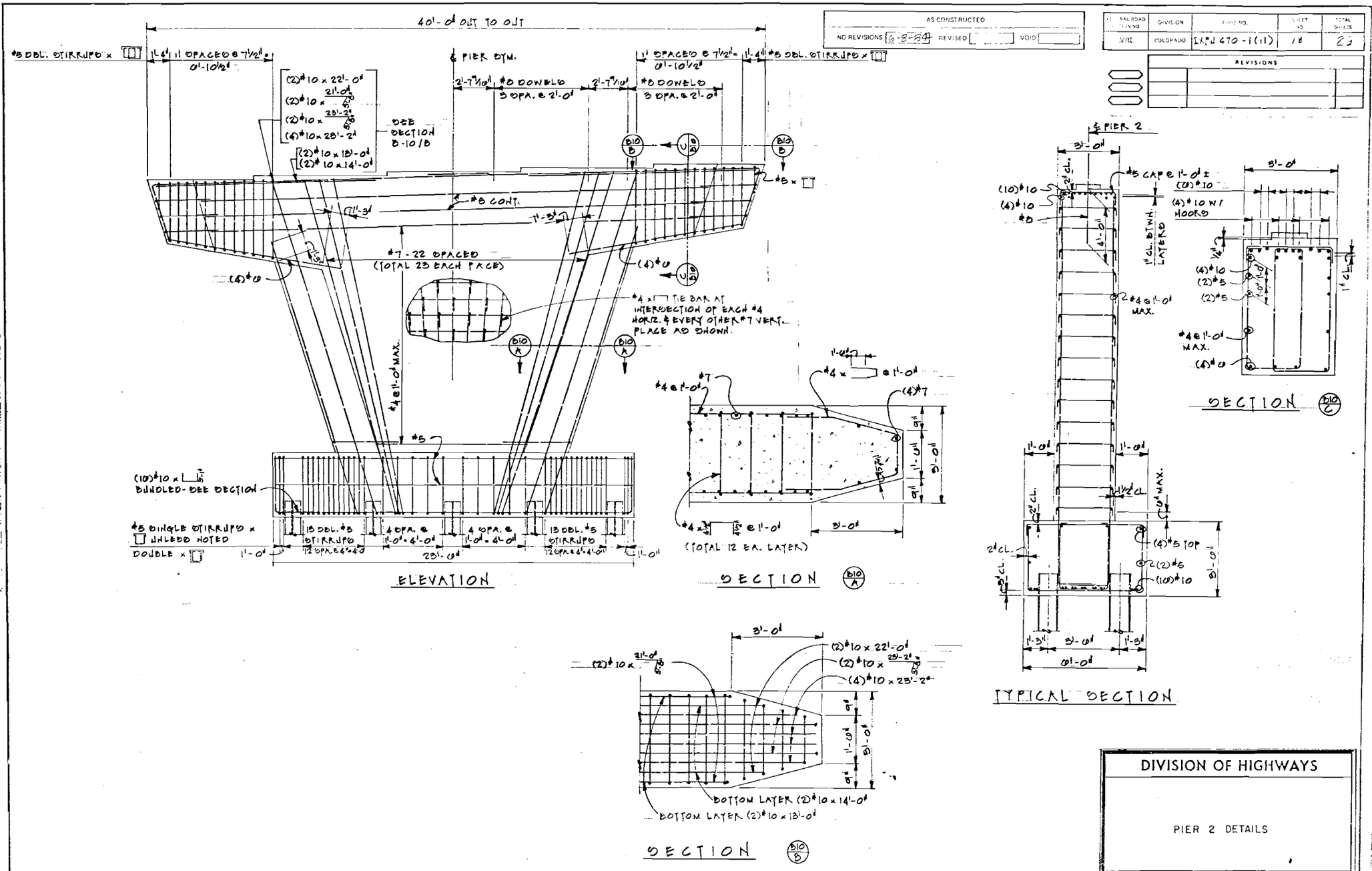
TYPICAL SECTION

NOTES:
FOR ADDITIONAL REINFORCING DETAILS, SEE DRAWING NUMBER B-10.

DIVISION OF HIGHWAYS

PIER 2 DETAILS

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number B-9		of 21	Drawings



AS CONSTRUCTED
NO REVISIONS 6-8-84 REVISED VOID

U.S. RAIL ROAD ADMIN NO	DIVISION	PROJECT NO.	SHEET NO	TOTAL SHEETS
WIL	COLORADO	IXPJ 470-1(11)	18	23

REVISIONS

INITIAL	DATE	DRAWN BY	TRACED BY	DESIGNED BY	CHECKED BY	ENTERED BY
P.D.K.	1/82	E.R.W.	P.D.K.	E.R.W.	P.D.K.	E.R.W.
E.R.W.	2/82	QUANTITIES BY	CHECKED BY			
P.E.H	2/82					

DIVISION OF HIGHWAYS

PIER 2 DETAILS

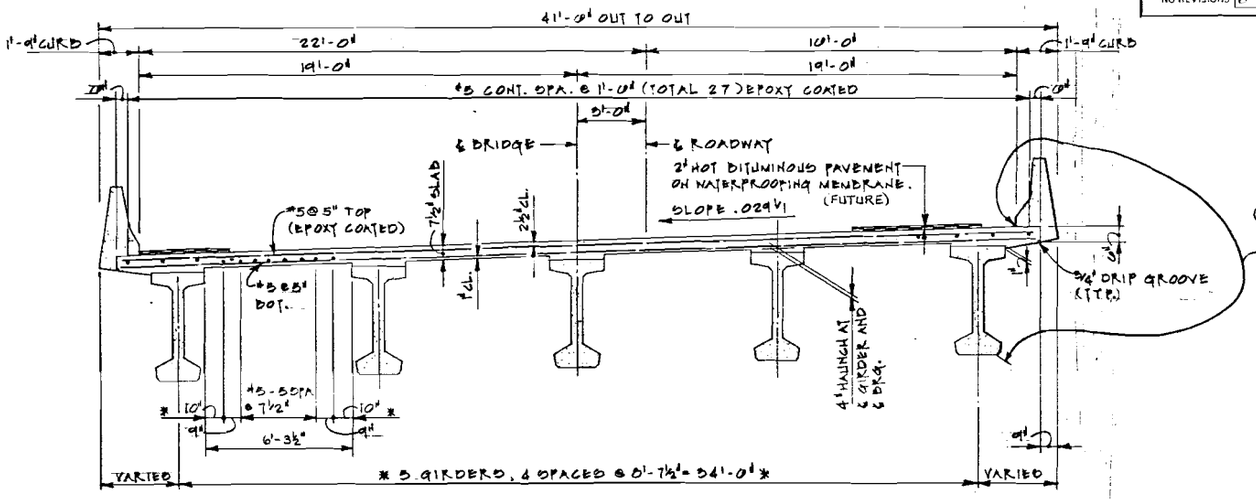
Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number	B-10	of	21 Drawings

AS CONSTRUCTED			
NO REVISIONS 6-3-94	REVISED	VOID	

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	IXFU 470-1(11)	19	25

REVISIONS		
R-1	7-5-83	Added Finish Note	E.B.

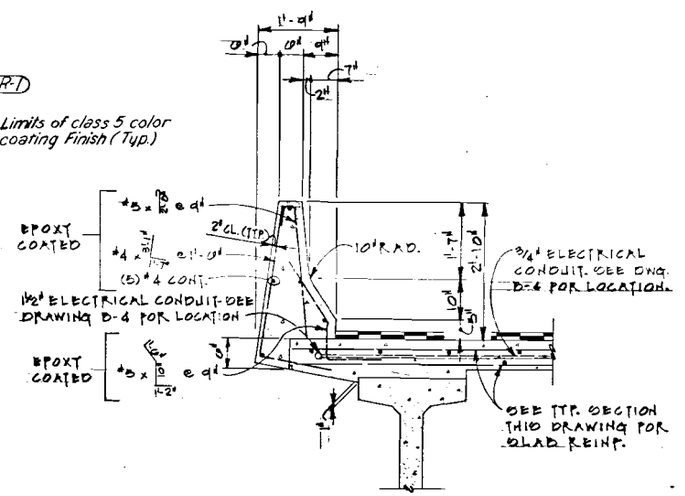
INITIAL	DATE	
DESIGNED BY P.B.K.	1/82	CHECKED BY E.R.W. 4/82
DRAWN BY E.R.W.	4/82	QUANTITIES BY P.B.K. 3/82
DETAILED BY E.A.H.	12/82	CHECKED BY E.R.W. 4/82



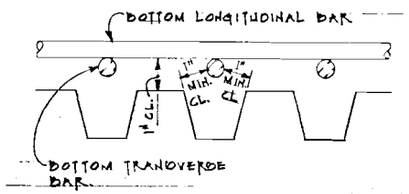
TYPICAL SECTION THRU SUPERSTRUCTURE

* DIMENSIONS PERPENDICULAR TO GIRDERS

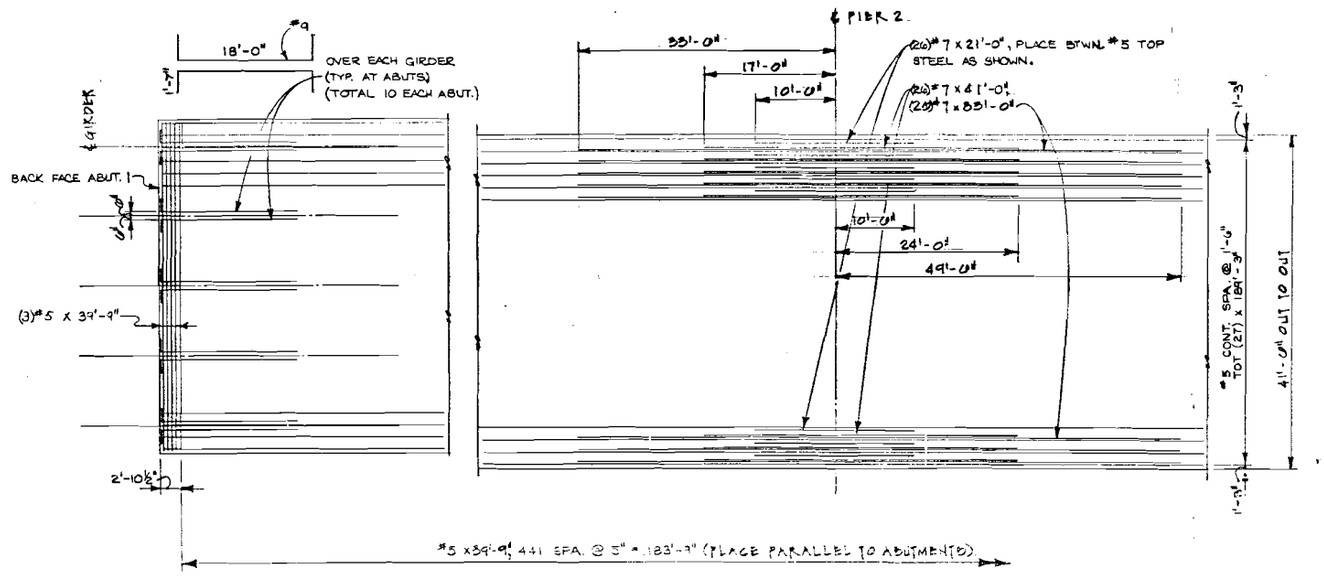
(R-1) Limits of class 5 color coating Finish (Typ.)



TYPICAL RAIL DETAIL



STAY-IN-PLACE FORM DETAIL



PART SLAB PLAN

REINFORCING FOR TOP OF SLAB

NOTE: ALL REINFORCING ON THIS PLAN IS EPOXY COATED.

DIVISION OF HIGHWAYS

SUPERSTRUCTURE DETAILS

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HQ
Drawing Number B-11		of 21	Drawings

Revision Dates (Preliminary Stage Only)

STATE DEPARTMENT OF HIGHWAYS
DIVISION OF HIGHWAYS - STATE OF COLORADO
SUPERVISOR
APPROVED

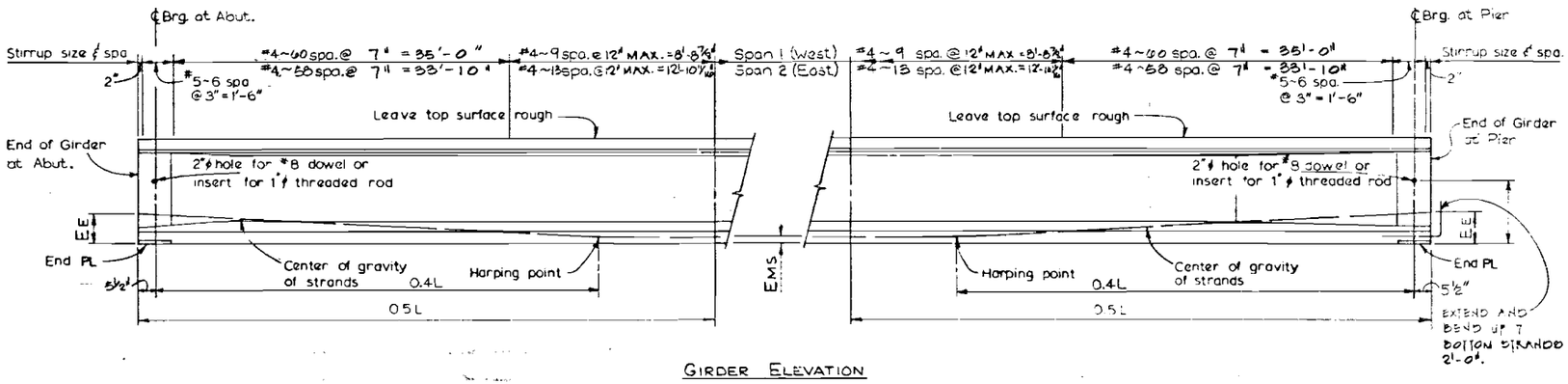
AS CONSTRUCTED			
NO REVISION	6-8-83	REVISED	DATE

FEDERAL ROAD REGION NO	DIVISION	PROJ NO	SHEET NO	TOTAL SHEETS
VIII	COLORADO	IXFE 470-1(11)	20	29

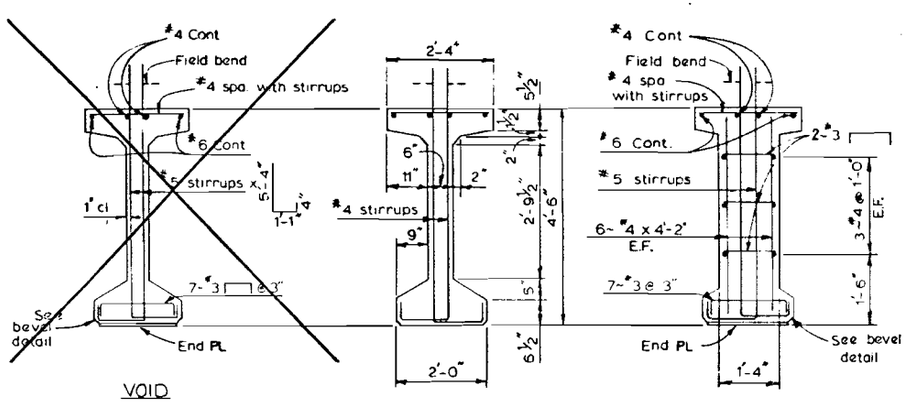
DESIGNED BY		INITIAL	DATE
CHECKED BY	E.K.N.		4/82
DETAILED BY	P.K.		1/82
CHECKED BY	E.K.N.		4/82
QUANTITIES BY	P.K.		5/82
CHECKED BY	E.K.N.		4/82

REVISIONS		

BRIDGE STANDARD 61

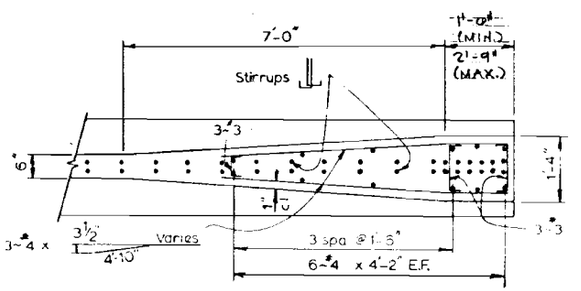


GIRDER ELEVATION



VOID @ END PL (No End Block) | @ MID SPAN | @ END PL (With End Block)

TYPICAL GIRDER SECTIONS



SECTION THRU END BLOCK

GENERAL NOTES

ALL WORK NECESSARY TO FABRICATE AND INSTALL THE INTEGRAL PARTS OF THE GIRDER, INCLUDING THE 1" ø x 7'-6" THREADED RODS AND ELASTOMERIC BEARING PADS AS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE BID PRICE FOR ITEM NO. ____ PRESTRESSED CONCRETE UNIT.

A MINIMUM OF TACK WELDING OF REBAR END STEEL MAY BE PERMITTED WHEN APPROVED BY THE ENGINEER.

USE 1/2" MINIMUM CHAMFER ON ALL CORNERS, EXCEPT AS NOTED.

PUT ALL STRANDS FROM WITH THE HOOKED ENDS UNLESS OTHERWISE NOTED. THE EXPOSED ENDS OF STRANDS IN A STAGE OF ADJOINING CONCRETE SHALL BE CUT TO END FLUSH WITH END OF FINISHED WALL (ROUGHING CUTTING).

ALL USED ♯ STRAND IS [illegible] STRESS-RELIEVED. ALTERNATE STRANDS ARE LOW-RELAXATION STRANDS MEETING THE REQUIREMENTS OF ASTM-A416-80 GRADE 270.

IF LOW-RELAXATION STRANDS ARE USED, THE NET COMPRESSIVE STRESS IN THE CONCRETE AFTER ALL LOSSES SHALL BE AT LEAST AS LARGE AS THAT PROVIDED BY THE STRESS-RELIEVED STRANDS. ALSO THE ULTIMATE STRENGTH OF THE STRUCTURE WITH THE LOW-RELAXATION STRANDS SHALL MEET THE REQUIREMENTS OF THE APPLICABLE AASHTO SPECIFICATIONS.

INITIAL PRESTRESS FORCE: THE JACKING FORCE PER GIRDER INCLUDING ALL LOSSES
SPAN 1 $F_i = 0.75 \quad A_s^1 \times A_s$
SPAN 2 $F_i = 0.75 \quad A_s^2 \times A_s$

FINAL PRESTRESS FORCE: THE FORCE REMAINING PER GIRDER AFTER ALL LOSSES
SPAN 1 $F_f = 0.610 \quad f_s^1 \times A_s$
SPAN 2 $F_f = 0.501 \quad f_s^2 \times A_s$

A_s = AREA OF PRESTRESSING STEEL

f_s = ULTIMATE STRENGTH OF PRESTRESSING STEEL

CONCRETE STRENGTH: f_{ci} — IS AT TIME OF RELEASE OF PRESTRESS FORCE.
f_c — IS AT 28 DAYS.

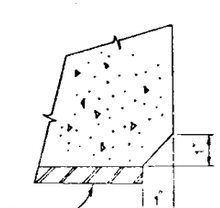
CLEARANCE: 1. THE MINIMUM CLEARANCE BETWEEN GROUPS OR INDIVIDUAL STRANDS IS 1-1/4" (MEASURED BETWEEN CENTERS OF ADJACENT STRANDS).
2. MINIMUM CONCRETE COVER FOR PRESTRESSING STEEL IS 1-1/2".

END BLOCKS ARE REQUIRED ON ALL GIRDERS UNLESS OTHERWISE NOTED.

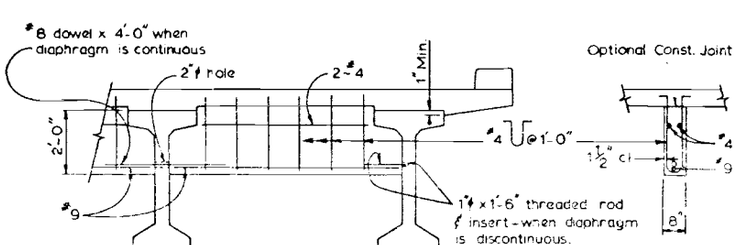
SEE DRAWINGS B-13 THRU B-19 FOR DEAD LOAD DEFLECTION DATA.

GIRDER SCHEDULE

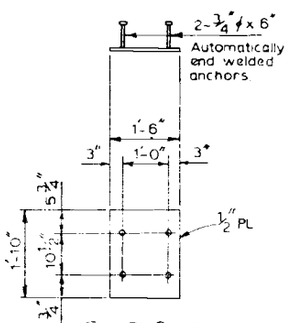
Span No.	Girder No	L (Feet)	EMS (Inch)	EE (Inch)	F_i (KIPS)	F_f (KIPS)	Concrete Strength f'_{ci} (PSI)	Concrete Strength f'_c (PSI)
1	1 thru 5	90'-9¾"	3.25	14	991.6	674.7	4800	5000
2	1 thru 5	96'-9⅜"	3.40	14	1115.4	744.4	5300	5300



BEVEL DETAIL
@ end PL only



INTERMEDIATE DIAPHRAGM DETAILS
(For diaphragm locations see Superstructure Plan)



END PL DETAIL

DIVISION OF HIGHWAYS

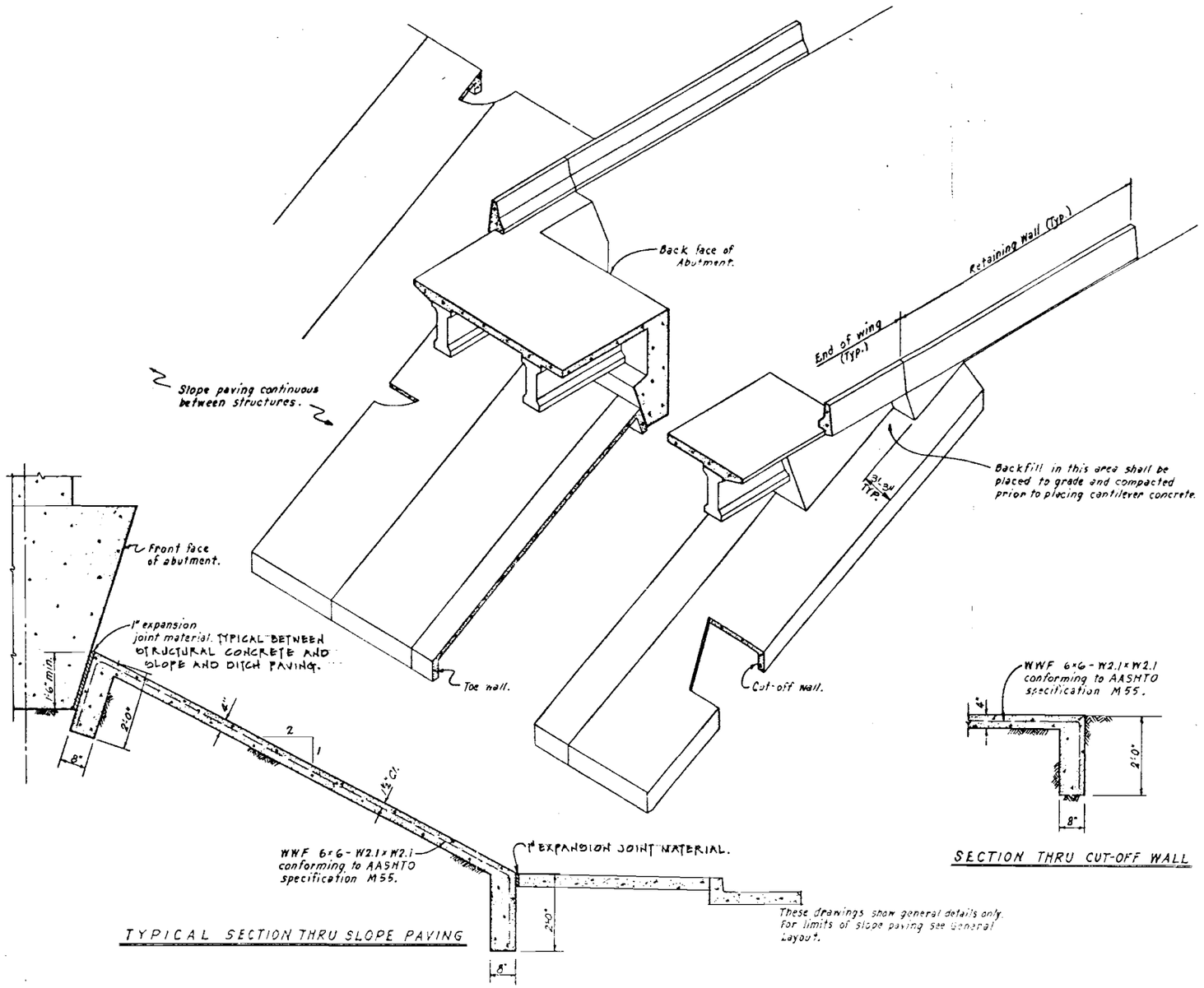
COLORADO G54 GIRDER

Designer	P. KISSLER	Structure numbers	F-17-HP
Detailer	W.R. TESSIER		F-17-HQ
Drawing Number B-12		of 21	Drawings

AS CONSTRUCTED			
NO REVISIONS	6-3-54	REVISED	VOID

FEDERAL ROAD REGION NO	DIVISION	PROJ. NO.	SHEET NO	TOTAL SHEETS
VIII	COLORADO	IXFU 470-1(11)	21	29

REVISIONS



TYPICAL SECTION THRU SLOPE PAVING

These drawings show general details only. For limits of slope paving see General Layout.

SECTION THRU CUT-OFF WALL

NOTES:

Slope paving shall be poured in 10 ft transverse sections with a tooled construction joint at each section.

Wire fabric shall be 2" from the end of the joint and shall lap 8" at splices.

Where slope paving butts against structural concrete, separate with 1" expansion joint material.

Expansion joint material and welded wire fabric shall not be paid for separately, but shall be included in item 507 Concrete Slope and Ditch Paving (Reinforced).

The surface of finished slope paving shall receive a ~~[illegible]~~, float finish of uniform appearance free of float marks and smoothly troweled construction joints.

STRUCTURE EXCAVATION FOR SLOPE AND DITCH PAVING SHALL BE LIMITED TO THE ACTUAL VOLUME OCCUPIED BY THE SLOPE PAVING CONCRETE.

	INITIAL	DATE			
DESIGNED BY	P.B.K.	1/52	CHECKED BY	E.R.N.	4/52
CHECKED BY	E.R.N.	4/52	QUANTITIES BY	P.B.K.	3/52
DETAILED BY	P.E.H.	2/52	CHECKED BY	E.R.N.	4/52

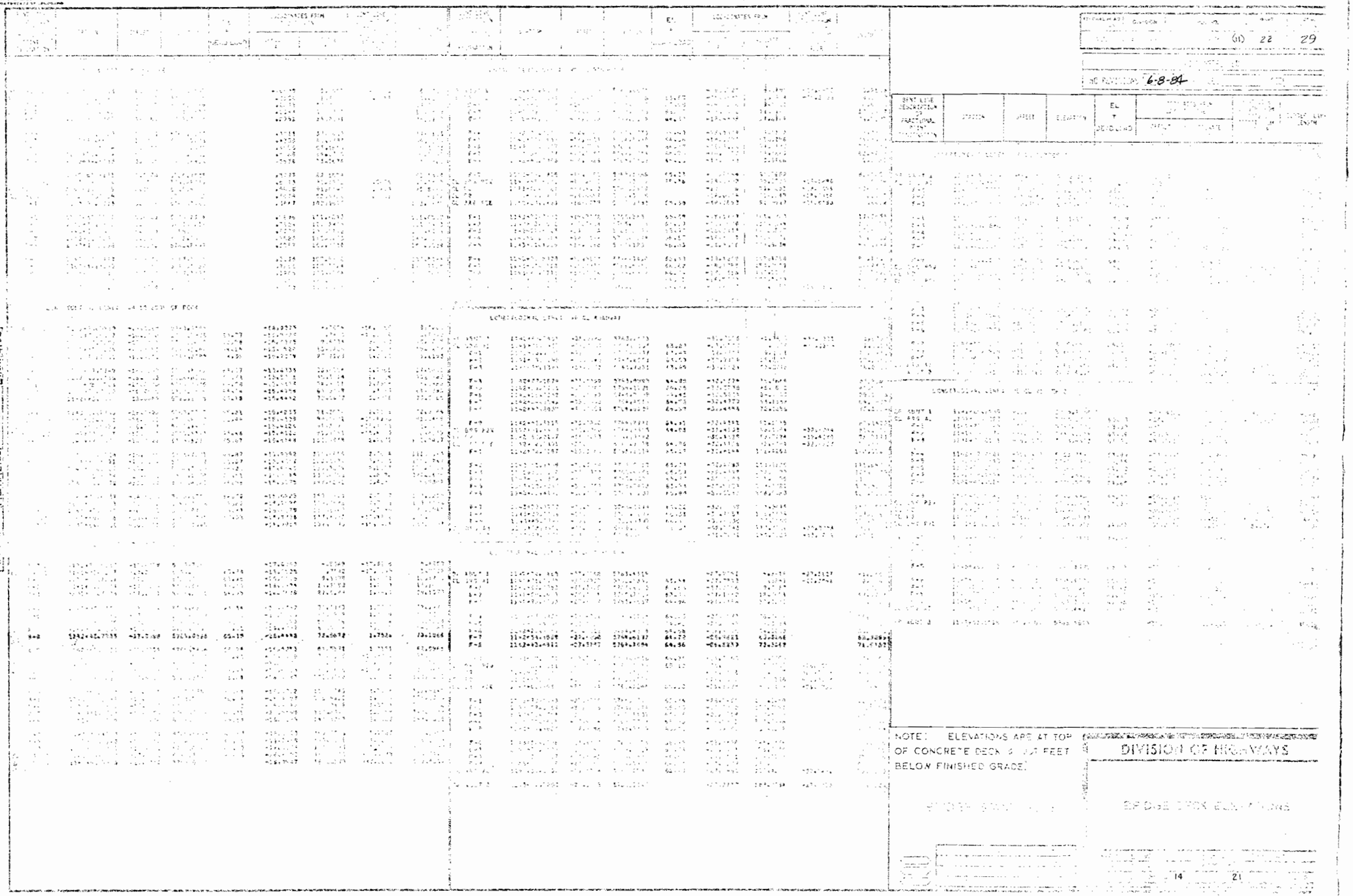
DIVISION OF HIGHWAYS

SH 470 OVER UNIVERSITY BOULEVARD

SLOPE PAVING DETAILS

Designer	P. KISSLER	Structure Numbers	F-17-HP
Detailer	P. HAAS		F-17-HO
Drawing Number B-13		of 21	Drawings

Revision Dates (Preliminary Stage Only)



NOTE: ELEVATIONS ARE AT TOP OF CONCRETE DECK 8.00 FEET BELOW FINISHED GRADE.

DIVISION OF HIGHWAYS

BRIDGE STRUCTURE ELEVATIONS

(11) 22 29

6-8-84

14 21

(1)	23	29

NO. REVISIONS 6-8-84

[illegible]

P.B.K.	1/82	CHECKED BY	E.R.W.	4/82
E.R.W.	4/82		P.B.K.	5/82
P.E.H.	2/82		E.R.W.	4/82

NOTE: ELEVATIONS ARE AT TOP OF CONCRETE DECK (0.1667 FEET BELOW FINISHED GRADE.)

DIVISION OF HIGHWAYS

BRIDGE DECK ELEVATIONS

15

21

						24	29

NO REVISIONS 6-8-84

DESIGNED BY	DATE
ERN	4/82
PBK	3/82
ERN	4/82
PBK	1/82
ERN	4/82
PEH	12/82

LONGITUDINAL LINE: PROFILE

Point	Station			EL. + DEAD LOAD				
ABUT 1	1141+71.3873	[illegible]	5764.2267		-.0197	0.2073	-.0939	[illegible]
CL BRG A1	1141+75.[illegible]	[illegible]	5764.3332		.0154	1.2503	.0154	[illegible]
F-1	1141+82.4543	[illegible]	5764.4249		.1289	10.0013		10.2411
F-2	1141+90.4942	[illegible]	5764.5070		.2144	19.0297		19.2439
F-3	1141+99.4746	0.0160	5764.7677		.2581	28.2194		[illegible]
F-4	1142+08.4529	[illegible]	5764.3317		.3711	37.2047		37.2[illegible]
F-5	1142+17.4927	[illegible]	5765.2223		.4136	[illegible]		[illegible]
F-6	1142+26.4476	[illegible]	[illegible]		.4655	[illegible]		55.1323
F-7	1142+35.4234	[illegible]	[illegible]		.5215	64.1777		[illegible]
F-8	1142+44.4253	[illegible]	5765.5332		.5576	[illegible]		73.1708
F-9	1142+53.4131	3.0080	5765.2595		.5777	82.1076		82.1576
CL BRG P2W	1142+62.[illegible]	[illegible]	[illegible]		.5873	91.1432	.5875	91.1497
CL P2	1142+63.2728	[illegible]	5765.0136		.5576	91.5143	.5875	91.2347
CL BRG P2E	1142+63.7169	[illegible]	5767.5312		.5878	92.4812	.5881	92.4836
F-1	1142+73.2259	[illegible]	5766.0567		.5947	102.1677		102.2762
F-2	1142+82.3146	0.8000	5766.2604		.5596	[illegible]		111.6557
F-3	1142+92.4466	[illegible]	[illegible]		.5424	121.2445		121.2432
F-4	1143+02.[illegible]	[illegible]	5766.5913		.4932	[illegible]		[illegible]
F-5	1143+11.[illegible]	[illegible]	5766.7396		.4529	[illegible]		[illegible]
F-6	1143+21.2162	[illegible]	[illegible]		.3987	[illegible]		153.0029
F-7	1143+31.7407	[illegible]	5767.0471		.3135	159.5662		159.5654
F-8	1143+40.4693	[illegible]	[illegible]		.2261	[illegible]		[illegible]
F-9	1143+50.3158	[illegible]	[illegible]		.1208	[illegible]		[illegible]
CL BRG A3	[illegible]	[illegible]	5767.4982		.0154	[illegible]	.0154	[illegible]
ABUT 3	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

LONGITUDINAL LINE: EB CL GIRDER 1

Point	Station			EL. + DEAD LOAD				
ABUT 1	1141+72.0894	19.4451	5764.7895		18.8539	.3352	19.4633	-1.2509
CL BRG A1	1141+75.[illegible]	18.9575	5764.9133	64.81	19.8616	[illegible]	18.8719	[illegible]
F-1	1141+82.2957	[illegible]	5764.9352	65.02	19.9157	[illegible]		8.3697
F-2	1141+91.2653	[illegible]	[illegible]	65.22	18.9719	[illegible]		17.3794
F-3	1142+00.[illegible]	[illegible]	5765.5245	65.42	[illegible]	[illegible]		[illegible]
F-4	1142+09.[illegible]	[illegible]	[illegible]	65.68	19.0823	37.0047		35.9869
F-5	1142+18.[illegible]	18.4708	[illegible]	65.77	19.1375	[illegible]		[illegible]
F-6	1142+27.3242	[illegible]	[illegible]	65.33	19.1727	[illegible]		[illegible]
F-7	1142+36.1329	[illegible]	5765.7339	65.07	19.2479	[illegible]		[illegible]
F-8	1142+45.2597	[illegible]	5765.1463	65.21	19.3531	73.1625		71.3177
F-9	1142+54.2373	18.7746	5766.2041	66.34	19.3593	[illegible]		[illegible]
CL BRG P2W	1142+63.[illegible]	[illegible]	[illegible]	66.46	[illegible]	[illegible]	19.4222	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		19.4175	92.4087	19.4273	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		19.4242	[illegible]	[illegible]	[illegible]
CL BRG P2E	1142+64.[illegible]	18.8327	[illegible]	66.49	19.4202	[illegible]	19.4259	[illegible]
F-1	1142+73.[illegible]	18.7781	[illegible]	66.69	[illegible]	102.6620		[illegible]
F-2	[illegible]	[illegible]	5766.8131	66.90	[illegible]	[illegible]		[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-6	[illegible]	[illegible]	[illegible]	67.53	[illegible]	[illegible]		[illegible]
F-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	[illegible]	[illegible]	67.54	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG A3	[illegible]	[illegible]	[illegible]	68.05	[illegible]	194.9186	18.8490	[illegible]
ABUT 3	[illegible]	[illegible]	[illegible]		18.8329	[illegible]	18.8622	[illegible]

LONGITUDINAL LINE: [illegible]

Point	Station			EL. + DEAD LOAD				
ABUT 1	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG A1	[illegible]	[illegible]	[illegible]	64.75	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-9	1142+48.[illegible]	[illegible]	5766.0569	66.13	16.5493	[illegible]	[illegible]	73.[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16.5787	[illegible]	[illegible]	[illegible]

LONGITUDINAL LINE: EB [illegible] CURB LINE

Point	Station			EL. + DEAD LOAD				
ABUT 1	[illegible]	[illegible]	5764.7342		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG A1	[illegible]	[illegible]	[illegible]	64.76	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	64.91	[illegible]	[illegible]	[illegible]	[illegible]
F-2	[illegible]	[illegible]	[illegible]	65.17	[illegible]	[illegible]	[illegible]	[illegible]
F-3	1142+05.2267	[illegible]	5765.2744	65.37	[illegible]	[illegible]	[illegible]	[illegible]
F-4	[illegible]	[illegible]	[illegible]	65.55	[illegible]	[illegible]	[illegible]	[illegible]
F-5	[illegible]	[illegible]	[illegible]	65.72	[illegible]	[illegible]	[illegible]	[illegible]
F-6	[illegible]	[illegible]	5765.7727	65.88	[illegible]	[illegible]	[illegible]	[illegible]
F-7	[illegible]	[illegible]	[illegible]	66.02	[illegible]	[illegible]	[illegible]	[illegible]
F-8	[illegible]	[illegible]	[illegible]	66.16	[illegible]	[illegible]	[illegible]	[illegible]
F-9	[illegible]	[illegible]	5766.2546	66.29	[illegible]	[illegible]	[illegible]	[illegible]
CL BRG P2W	[illegible]	[illegible]	[illegible]	66.41	[illegible]	[illegible]	[illegible]	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG P2E	[illegible]	[illegible]	[illegible]	66.43	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	5766.5396	66.64	[illegible]	[illegible]	[illegible]	[illegible]
F-2	[illegible]	[illegible]	5766.7426	66.85	[illegible]	[illegible]	[illegible]	[illegible]
F-3	[illegible]	[illegible]	[illegible]	67.04	[illegible]	[illegible]	[illegible]	[illegible]
F-4	[illegible]	[illegible]	[illegible]	67.22	[illegible]	[illegible]	[illegible]	[illegible]
F-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-6	[illegible]	[illegible]	[illegible]	67.54	[illegible]	[illegible]	[illegible]	[illegible]
F-7	1143+31.[illegible]	[illegible]	[illegible]	67.67	[illegible]	[illegible]	[illegible]	[illegible]
F-8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL BRG A3	[illegible]	[illegible]	[illegible]	67.95	[illegible]	[illegible]	[illegible]	[illegible]
ABUT 3	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	17.[illegible]	[illegible]

LONGITUDINAL LINE: [illegible] GIRDER 2

Point	Station			EL. + DEAD LOAD				
ABUT 1	[illegible]	[illegible]	5765.0467		[illegible]	[illegible]	27.4944	-1.2509
CL BRG A1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27.5021	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-7	[illegible]	27.3443	5766.2436	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	27.3599	5766.4317	[illegible]	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG P2W	[illegible]	27.4527	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG P2E	[illegible]	27.4557	5766.7426	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG A3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ABUT 3	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

LONGITUDINAL LINE: [illegible]

Point	Station			EL. + DEAD LOAD				
ABUT 1	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG A1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	33.0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	66.77	[illegible]	[illegible]		[illegible]

LONGITUDINAL LINE: [illegible]

Point	Station			EL. + DEAD LOAD				
ABUT 1	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG A1	[illegible]	[illegible]	[illegible]	65.13	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG P2W	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG P2E	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG A3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ABUT 3	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

LONGITUDINAL LINE: EB CL GIRDER 3

Point	Station			EL. + DEAD LOAD				
ABUT 1	[illegible]	[illegible]	5765.3941		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG A1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG P2W	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL P2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CL BRG P2E	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
F-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
CL BRG A3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ABUT 3	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

NOTE: ELEVATIONS ARE AT TOP OF CONCRETE DECK, [illegible] FEET BELOW FINISHED GRADE.

DIVISION OF HIGHWAYS

BRIDGE DECK ELEVATIONS

16 21

STATION	OFFSET	ELEVATION	EL.			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STRUCTURE NO. F-17-HQ

WEST BOUND

STRUCTURE NO. F-17-HP

EAST BOUND

PARTIAL PLAN

ENLARGED DETAIL

NOTE: ELEVATIONS ARE AT TOP OF CONCRETE DECK ... FEET BELOW FINISHED GRADE.

BRIDGE STANDARD 3

DIVISION OF HIGHWAYS

BRIDGE DECK ELEVATIONS

6-8-84

25 29

17 21