ENGINEERING CONSTRUCTION CONTRACTING SECTION
MONTANA DEPARTMENT OF TRANSPORTATION

As-Built Drawings

The following are as-built drawings for the structures. MDT provides them for informational purposes only. They do not include drawings for modifications to the structures, such as joint replacements and guardrail revisions and may not completely represent current conditions. Thus, some of the information contained in these documents may be out of date or not applicable with regard to the advertised project. The contractor should not rely solely on the as-built drawings provided for bidding purposes nor does any data in these files supersede the data in the contract documents.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.		SHEET NO.	TOTAL SHEETS
8	MONT.				

STATE OF MONTANA

STATE HIGHWAY COMMISSION

BRIDGE PLANS & QUANTITIES

FEDERAL AID PROJECT NO. I-94-1(2)6 P.E. I-94-1(13)7 CONSTR.

HUNTLEY TO BALLANTINE

YELLOWSTONE COUNTY

LIST OF DRAWINGS

SHEET NO.	DWG. NO.	TITLE
1	8033	GENERAL LAYOUT
2	8034	LOG OF BORINGS & FOOTING PLAN
3	8035	ABUTMENT NO. 1, E.B. RDWY., ABUTMENT NO. 4. W.B. RDWY.
4	8036	ABUTMENT NO. 1, W.B. RDWY., ABUTMENT NO. 4. E.B. RDWY.
5	8037	BENTS NO. 2 & NO. 3
6	SL-2	STANDARD FLAT SLAB & CURB DETAILS
7	SBR-T5 (Rev. 9-15-65)	STANDARD STEEL BRIDGE RAIL TYPE NO. 5
8	D-1 (Rev. 10-7-65)	STANDARD BRIDGE DRAIN DETAILS

ESTIMATED BRIDGE PLAN QUANTITIES

15% ~~Swell~~ in Structure Excavation

	LOCATION	LENGTH IN FEET	REINFORCING STEEL LBS.	STRUCTURAL STEEL LUMP SUM	CLASS "AD" CONCRETE CU. YDS.	STEEL BRIDGE RAIL TYPE NO. 5 LIN. FT.	STRUC. EXC. TYPE I CU. YDS.	STEEL BEARING PILES FURNISHING LIN. FT.	STEEL BEARING PILES DRIVING LIN. FT.	STEEL BEARING TEST PILES LUMP SUM	BRIDGE DRAINS EACH
WESTBOUND ROADWAY	ABUTMENT NO. 1		1705 ~~1,706~~		20.05 ~~21.8~~		5.5 ~~6.5~~	136.0 ~~152.0~~	~~148.0~~ 138.7		
	BENT NO. 2		3,154		17.86 ~~16.3~~		30.2 ~~45~~	198.0 ~~207.0~~	~~202.5~~ 193.4		
	BENT NO. 3		3,154	0.50 L.S.	17.86 ~~16.3~~		30.0 ~~48~~	180.0 ~~207.0~~	~~202.5~~ 169.2	0.53 L.S.	
	ABUTMENT NO. 4		1705 ~~1,706~~		20.05 ~~21.8~~		2.7 ~~6.5~~	112.0 ~~136.0~~	~~132.0~~ 108.4		
	SUPERSTRUCTURE	78.0	33,889		1609/~~164.1~~	194.0					4
	SUB-TOTAL	78.0	9360/~~43,609~~	0.50 L.S.	236.78 ~~240.3~~	194.0	63.4 ~~22.0~~	626.0 ~~702.0~~	~~685.0~~ 601.7	0.53 L.S.	4
EASTBOUND ROADWAY	ABUTMENT NO. 1		1705 ~~1,706~~		20.05 ~~21.8~~		8.1 ~~6.5~~	120.0 ~~140.0~~	~~136.0~~ 113.2		
	BENT NO. 2		3,154		17.86 ~~16.3~~		30.5 ~~45~~	162.0 ~~171.0~~	~~166.5~~ 138.6		
	BENT NO. 3		3,154	0.50 L.S.	17.86 ~~16.3~~		30.1 ~~45~~	162.0 ~~171.0~~	~~166.5~~ 136.8	0.47 L.S.	
	ABUTMENT NO. 4		1705 ~~1,706~~		20.05 ~~21.8~~		4.5 ~~6.5~~	96.0 ~~112.0~~	~~108.0~~ 94.3		
	SUPERSTRUCTURE	78.0	33,889		1609/~~164.1~~	194.0					4
	SUB-TOTAL	78.0	9360/~~43,609~~	0.50 L.S.	236.78 ~~240.3~~	194.0	73.2 ~~22.0~~	540.0 ~~594.0~~	~~577.0~~ 447.7	0.47 L.S.	4
GRAND TOTAL		156.0	~~87,218~~ 87214	1.00 L.S.	~~480.6~~ 473.46	388.0	141.6 ~~44.0~~	1166.0 ~~1,296.0~~	~~1,262.0~~ 1073.6	1.00 L.S.	8

Made by J.J.Z. # F.L.S. 4-22-66 Checked by K.G.R. 4-25-66

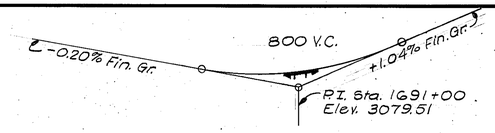
STATE OF MONTANA
STATE HIGHWAY COMMISSION

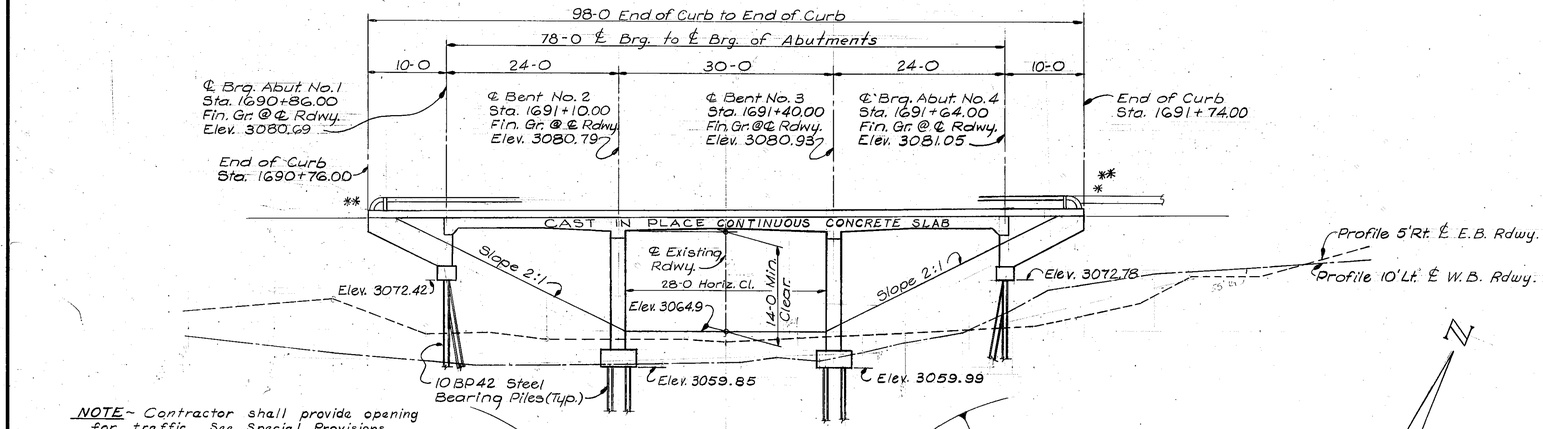
DESIGNED			
DRAWN			
TRACED			
CHECKED			
REVISED			
REVISED			

DRAWING NO. 8033 Q

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	MONT.	I-94-1(13)7	1	8
		IR94-1(48)7	B3	

Note:
For utilities see appropriate Road Plans sheet.

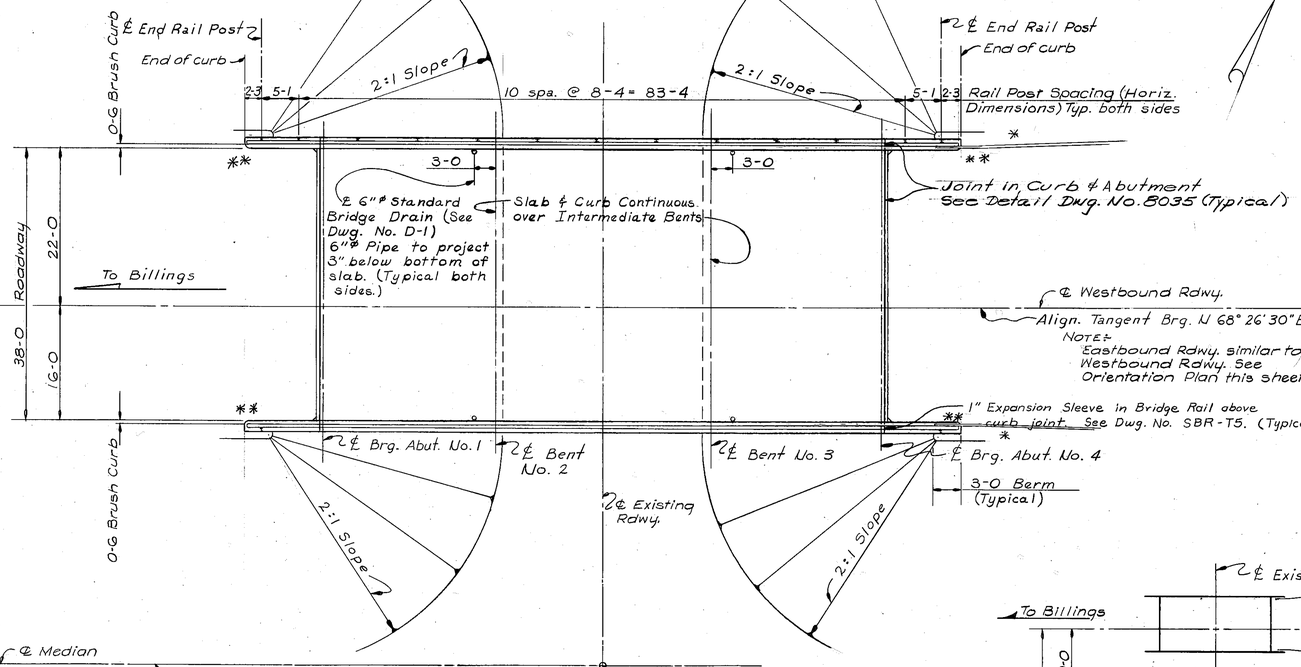




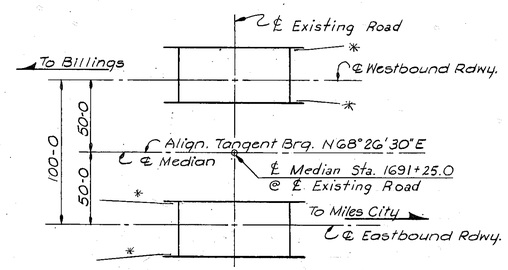
DATUM 3065.00

NOTE~ Contractor shall provide opening for traffic. See Special Provisions.

ELEVATION



PLAN



ORIENTATION PLAN
No Scale

NOTES

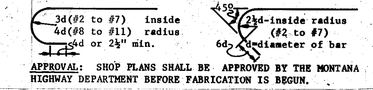
LIVE-LOAD :— STANDARD HS20-44 OR ALTERNATE LOADING. ALTERNATE LOADING FOR BRIDGE AND FLOOR SYSTEMS WITH SPANS UNDER 40 FEET CONSISTS OF TWO AXLES FOUR FEET APART WITH EACH AXLE WEIGHING 24,000 LBS.

FINISHED GRADE :— FINISHED PLAN GRADE OF BRIDGE AT CENTERLINE ROADWAY AS SHOWN ON ELEVATION IS SAME AS PROFILE GRADE SHOWN ON ROAD PLANS.

SPECIFICATIONS: MONTANA STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1966 EDITION, AND ANY AMENDMENTS THERETO, AND SPECIAL PROVISIONS SHALL GOVERN UNLESS OTHERWISE NOTED. DESIGN PREPARED IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATIONS, 1961 EDITION, AND ANY AMENDMENTS THERETO.

CAST IN PLACE CONCRETE: UNLESS OTHERWISE NOTED, ALL CONCRETE IN SUPERSTRUCTURE SHALL BE CLASS "AD" AND ALL CONCRETE IN SUBSTRUCTURE SHALL BE CLASS "AD". AN "AIR ENTRAINING AGENT" SHALL BE ADDED TO ALL CONCRETE EXCEPT CLASS "S". CHAMFER ALL EXPOSED EDGES OF CONCRETE WITH ENCLOSED ANGLE LESS THAN 120°, 3/4" AND FILLET ENTRANT ANGLES 3/4" UNLESS OTHERWISE NOTED.

REINFORCING STEEL: BENDS IN REINFORCING STEEL SHALL BE MADE TO A RADIUS OF NOT LESS THAN FOUR (4) DIAMETERS OF THE BAR EXCEPT FOR STIRRUPS AND TIE BARS, WHICH SHALL BE BENT AROUND A PIN HAVING A DIAMETER OF NOT LESS THAN TWO (2) BAR DIAMETERS. HOOKS SHALL CONFORM TO THE DIMENSIONS SHOWN IN THE FOLLOWING SKETCHES, EXCEPT AS OTHERWISE NOTED.



APPROVAL: SHOP PLANS SHALL BE APPROVED BY THE MONTANA HIGHWAY DEPARTMENT BEFORE FABRICATION IS BEGUN.

BACKFILL : SUPERSTRUCTURE SHALL BE IN PLACE BEFORE ANY BACKFILL IS PLACED AGAINST THE ABUTMENTS. FILLS AT THE TWO ENDS OF THE STRUCTURE SHALL BE KEPT AT ABOUT THE SAME ELEVATION DURING THE PROCESS OF BACKFILLING. SEE ART. 11.04(B) OF THE STANDARD SPECIFICATIONS.

FOOTINGS: ELEVATIONS SHOWN FOR BOTTOM OF FOOTINGS ARE APPROXIMATE ONLY. FINAL ELEVATIONS TO BE DETERMINED BY THE ENGINEER.

SEQUENCE OF WORK : THE APPROACH ROADWAY EMBANKMENTS AT ABUTMENTS NO.1 AND NO.4 AND THE EMBANKMENT FOR THE COUNTY ROAD MUST BE COMPLETE BEFORE THE CONTRACTOR WILL BE PERMITTED TO BEGIN WORK ON THIS STRUCTURE.

OTHER NOTES : FOR OTHER NOTES SEE DWG. NO. 8034.

**THIS CONTRACT: IR 94-1(48)7

Thrie Beam Rail to be blocked out and made continuous with Bridge Approach Rail. Curb Tapers to be added to approach end only. See Details on Dwg. No. 14249.

*Note: For Roadway Approach Guard Rail connections See Alternate No.3 on Dwg. No 11409.

REFERENCES	
DWG. NO.	DESCRIPTION
8034	Log of Borings & Footing Plan
8035	Abutment No. 1 E.B. Rdwy. & Abutment No. 4 W.B. Rdwy.
8036	Abutment No. 1 W.B. Rdwy. & Abutment No. 4 E.B. Rdwy.
8037	Bents No. 2 & No. 3
SL-2	Standard Flat Slab & Curb Details
SBR-T5 (Rev 9-15-65	Standard Steel Bridge Rail ~ Type No. 5
D-1 (Rev. 10-7-65)	Standard Bridge Drain Details

STATE OF MONTANA
STATE HIGHWAY COMMISSION

COUNTY ROAD SEPARATION
AT STA. 1691+25.00
FEDERAL AID PROJECT NO. I-94-1(13)7
YELLOWSTONE COUNTY

GENERAL LAYOUT

Scale: 1"=10'-0" Except As Noted

DESIGNED		
DRAWN	L.E.R.	3-8-66
TRACED		
CHECKED	K.G.R.	4-21-66
REVISED	N.H.R.	5-1-70
** REVISED	W.A.B.	5-11-88

APPROVED BY _____ BRIDGE ENGINEER

DRAWING NO. 8033

FREDERICK POST CO., SEATTLE

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	MONT.	I-94-1(13)7	2	8

℄ Core Log No. 548
70' Lt. ℄ Median Sta. 1690+88.0

Elev. 3059.9		Sandy silt
Elev. 3057.8		Very dense medium coarse
Elev. 3052.2	50/50/50	sandy gravel
Elev. 3051.4		Ground water
Elev. 3048.7	4/4/6	Strata very soft gravelly
	6/12/20	clay
	12/20/30	Very stiff clay
Elev. 3041.1	27/50(1.0)	Very hard shale
Elev. 3037.5		Strata of Bentonite
	29/45/36	Very hard shale
	50(.4)	
Elev. 3024.9	50(.3)	
		Bottomed hole in hard shale

℄ Core Log No. 547
35' Rt. ℄ Median Sta. 1691+29.0

Elev. 3062.9		Sandy silt
Elev. 3061.9		Slightly compact medium
	13/50(0.9)	coarse sandy gravel
Elev. 3054.0		Medium coarse sandy
Elev. 3052.2	24/50 1.0	gravel traces of clay
Elev. 3051.1		Ground water
Elev. 3048.2	48/50(.8)	Very hard clay;
Elev. 3044.4		traces shale
		Very hard shale
Elev. 3042.9	16/50(1.0)	Strata soft Bentonite
Elev. 3040.5		Very hard shaley mudstone
Elev. 3038.1	50(.2)	layer; fractured
		Very dense sandy shale
Elev. 3033.8	50(.1)	Very dense sandy shale
		Bottomed hole in very hard shale.

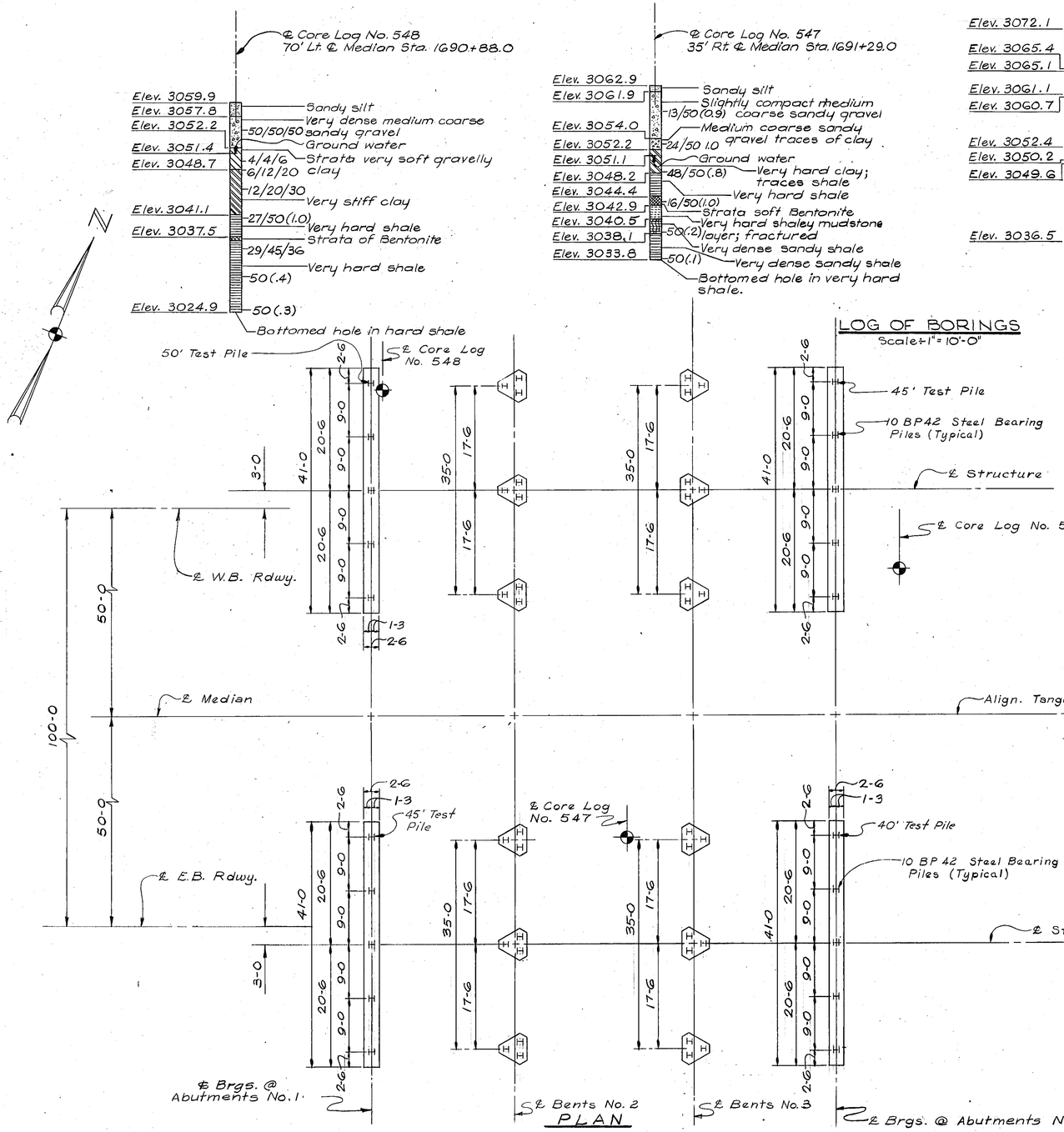
℄ Core Log No. 549
40' Lt. ℄ Median Sta. 1691+75.0

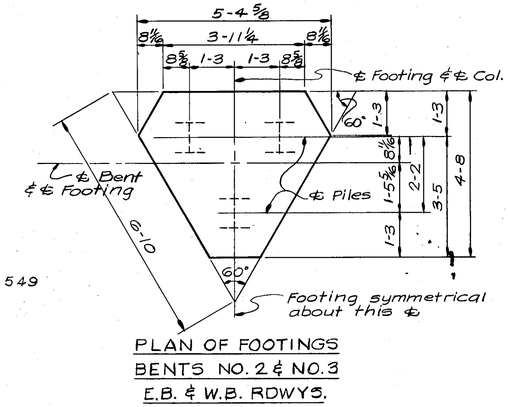
Elev. 3072.1		Loose medium-coarse, sandy
Elev. 3065.4	21/14/15	gravel; traces of clay
Elev. 3065.1		Soft clay & gravel
Elev. 3061.1	8/23/25	Very stiff clay
Elev. 3060.7	19/33/35	Ground water
Elev. 3052.4	8/38/46	Hard clay; traces
Elev. 3050.2		of shale
Elev. 3049.6		Strata of Bentonite to clay
	43/50(.7)	Strata of Bentonite
	50(.2)	Hard shale
Elev. 3036.5	50(.3)	
		Bottomed hole in hard shale

℄ Core Log No. 550
70' Rt. ℄ Median Sta. 1692+12.0

Elev. 3072.6		Medium coarse sandy gravel
Elev. 3065.6		
Elev. 3064.8	50/36/16	
Elev. 3064.2		Soft clay; some gravel
	19/35/48	Ground water
Elev. 3058.1	50(.4)	Very hard clay
Elev. 3056.1		Hard clayey shale
		Small strata bentonite
Elev. 3050.7	50(.2)	Hard clayey shale
Elev. 3049.1		Soft strata bentonite
		Very hard shalely sandstone
Elev. 3043.2		
Elev. 3042.0		Strata soft friable clay
Elev. 3038.2		Hard sandstone & shale
		Bottomed hole in very hard sandy shale

LOG OF BORINGS
Scale: 1" = 10'-0"





NOTES

SOILS AND FOUNDATION MATERIALS: BORINGS WERE TAKEN BY THE MONTANA STATE HIGHWAY DEPARTMENT AT THE POINTS SHOWN ON THE GENERAL LAYOUT OR FOOTING PLAN.

THE SERIES OF NUMBERS SHOWN ON THE LOG OF BORINGS INDICATES THE NUMBER OF BLOWS PER 6" PENETRATION FOR EACH NUMBER OF THE SERIES OF A 2" SAMPLE TUBE WHICH WAS DRIVEN IN ACCORDANCE WITH THE STANDARD PENETRATION TEST MADE WITH A 2" SPLIT TUBE SAMPLER USING A 140# HAMMER HAVING A 30" DROP. THE TOTAL PENETRATION OF THE SAMPLER TUBE IS INDICATED ON THE CORE LOGS AFTER EACH SERIES IF 6" PENETRATION WAS NOT ACHIEVED IN 50 BLOWS.

THE STATE HIGHWAY DEPARTMENT DOES NOT ASSUME ANY RESPONSIBILITY FOR ANY VARIATION OR MISINTERPRETATION OF THE CLASSES OF MATERIALS AND ADJUSTMENT IN BID PRICES WILL NOT BE MADE IF THE MATERIALS FOUND DO NOT AGREE WITH THOSE SHOWN IN THE LOG OF BORINGS.

STRUCTURAL STEEL: ALL STRUCTURAL STEEL SHALL BE MEASURED AND PAID FOR AS SET FORTH IN THE SPECIAL PROVISIONS.

FOR REQUIREMENTS GOVERNING THE FABRICATION OF "STRUCTURAL STEEL" SEE THE STANDARD SPECIFICATIONS. TO AVOID OVERSIGHT THESE REQUIREMENTS SHALL BE CLEARLY NOTED ON THE SHOP DRAWINGS.

STRUCTURAL STEEL SHALL RECEIVE ONE (1) SHOP COAT OF RED LEAD OR ZINC CHROMATE PRIMER AND TWO (2) FIELD COATS CONSISTING OF FIRST FIELD OR PRIMER COAT AND ONE (1) COAT OF ALUMINUM PAINT AS SPECIFIED IN THE STANDARD SPECIFICATIONS.

STEEL BEARING PILES: FOR BIDDING PURPOSES ONLY, PILE LENGTHS HAVE BEEN ESTIMATED AS NOTED ON THE BENT AND ABUTMENT DETAILS. SEE SPECIAL PROVISIONS.

OTHER NOTES:—FOR OTHER NOTES SEE DWG. NO. 8033.

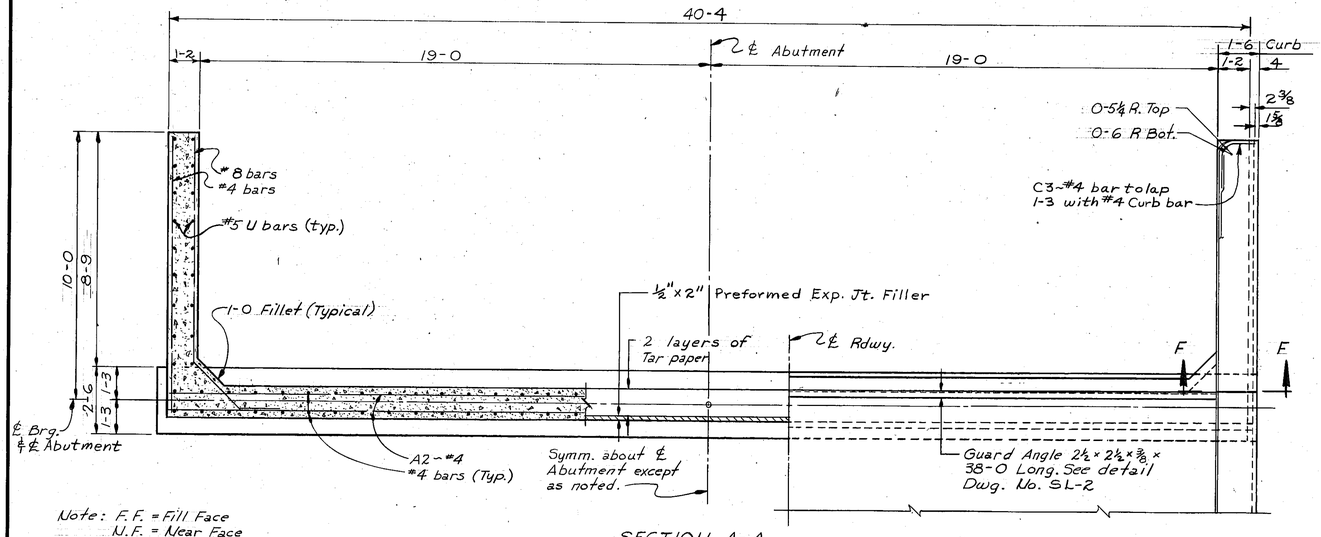
STATE OF MONTANA
STATE HIGHWAY COMMISSION

COUNTY ROAD SEPARATION
AT STA. 1691+25.00
FEDERAL AID PROJECT NO. I-94-1(13)7
YELLOWSTONE COUNTY
LOG OF BORINGS & FOOTING PLAN
Scale: 1" = 10'-0"

DESIGNED		
DRAWN	L.E.P	
TRACED		
CHECKED	K.G.R.	421-66
REVISED		
REVISED		

DRAWING NO. 8034

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	MONT.	I94-1(13)7	3	8



Note: F.F. = Fill Face
N.F. = Near Face

SECTION A-A

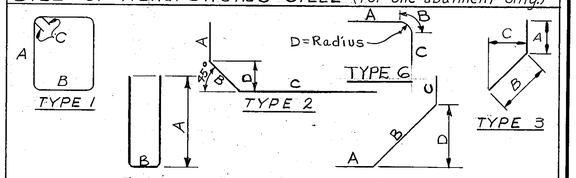
TABLE OF ELEVATIONS		
Abutment No. 1 Eastbound	Point	Abutment No. 4 Westbound
3080.69	A	3081.05
3080.37	B	3080.73
3080.25	C	3080.61
3072.42	D	3072.78

Note: Cost of furnishing and placing Preformed Expansion Joint Filler, Tar Paper, Poured Concrete Joint Sealer and Continuous Copper Water Stop to be included in the unit price bid for Class "AD" Concrete.

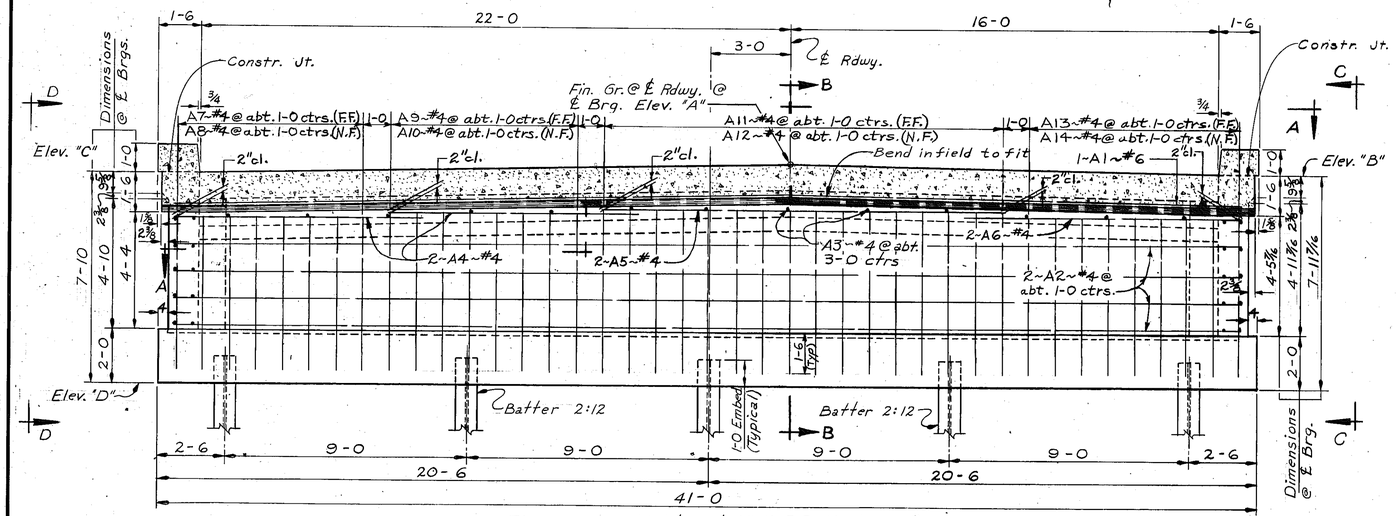
Note ÷ Curbs on wing walls shall not be poured until after backfill has been placed to subgrade elevation and curbs on slab spans have been poured.

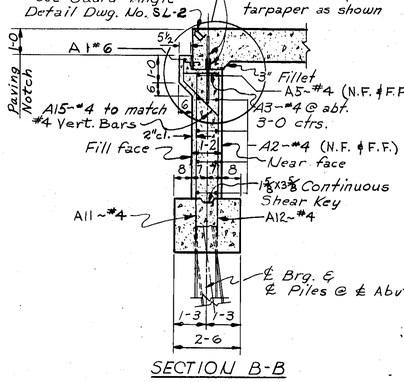
Note: Forms under abutment wing walls shall remain in place until after forms for slab spans have been removed.

BILL OF REINFORCING STEEL (For one abutment only.)



STRAIGHT BARS				BENT BARS (All dimensions are out to out.)								
Mark	Size	No.	Length	Mark	Size	No.	Type	Length	A	B	C	D
A1	#6	1	40'-0"									
A2	4	8	40-0	A15	#4	41	3	2'-7"	0-9	1-10	1'-4"	
A3	4	13	1-4									
A4	4	4	9-3									
A5	4	2	15-0									
A6	4	2	10-3	C1	4	26	1	6-4	1-1	1-8	0-5	
				C2	4	8	1	3-0	0-6½	0-8	0-3½	
D1	4	27	2-6	C3	4	2	6	2-6	0-10	0-5	1-3	0-3"
AW1	4	6	9-1	AW12	8	2	2	13-0	2-0	2-8	8-4	1-11
↑2	6	4	9-1	↑13	↑	↑	↑	12-2	↑	↑	7-6	↑
3	4	2	9-1	14				10-9			6-1	
4	↑	↑	10-3	15				9-3			4-7	
5			9-5	16				7-10			3-2	
6			8-0	17				6-5			1-9	
7			6-6	18	8	2	2	5-0	2-0	2-8	0-4	1-11
8			5-1	19	6	4	5	12-0	1-8	9-4	1-0	3-9
9			3-8	20	5	2	4	11-7	5-5½	0-8½		
↓10	4	↓	2-3	21	↓	↓	↓	10-9	5-0½	↓	↓	↓
AW11	8	2	9-1	22				9-11	4-7½			
				23				9-1	4-2½			
A7	4	8	5-8	24				8-3	3-9½			
A8	↑	8	5-8	25				7-5	3-4½			
A9		8	5-11	26				6-7	2-11½			
A10		8	5-11	27				5-9	2-6½			
A11		16	6-1	28	↓	↓	↓	4-11	2-1½			
A12		16	6-1	AW29	#5	2	4	4-1	1-8½	0-8½		
A13	↓	9	5-10									
A14	#4	9	5-10									



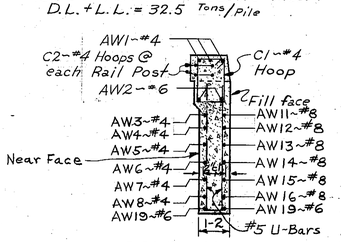


SECTION B-B

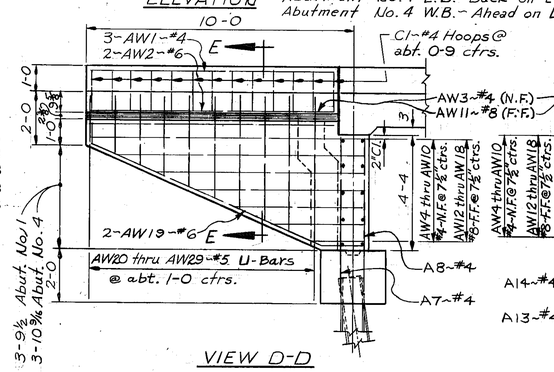
Note: Estimated Pile Length = 35' Abutment No. 1 E.B.; 34' Abutment No. 4 W.B.

NOTES

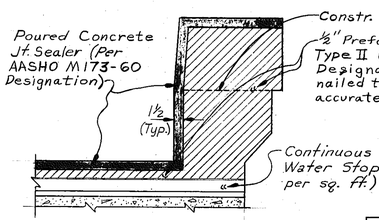
OTHER NOTES: For other notes see Dwg. No. 8033 & 8034.



SECTION E-E



Note: Max. Pile Pressure under: D.L.+L.L. = 32.5 Tons/Pile



SECTION F-F
Scale: 1"=1'-0"

DESIGNED	J. G. B.	3-16-66
DRAWN	J.J.Z. & R.L.H.	4-7-66
TRACED		
CHECKED	K. G. R.	4-21-66
REVISED		
REVISED		

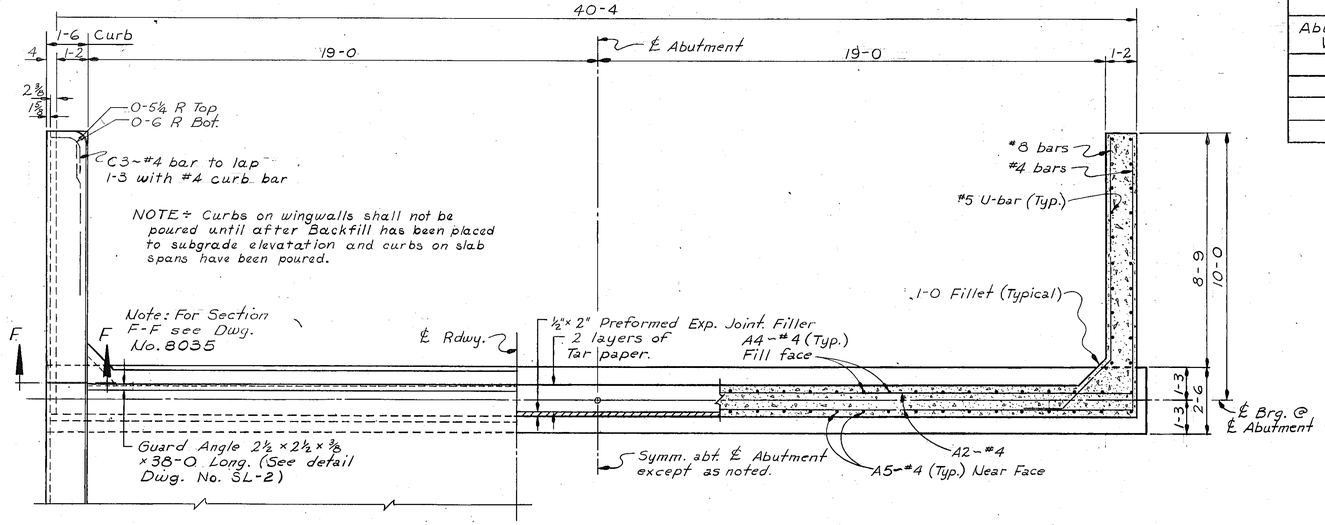
STATE OF MONTANA
STATE HIGHWAY COMMISSION

COUNTY ROAD SEPARATION
AT STA. 1691+25.0
FEDERAL AID PROJECT NO. I-94-1(13)7
YELLOWSTONE COUNTY
ABUTMENT NO. 1 E.B. RDWY.
ABUTMENT NO. 4 W.B. RDWY.
Scale: ⅜"=1'-0" Except as noted.

DRAWING NO. 8035

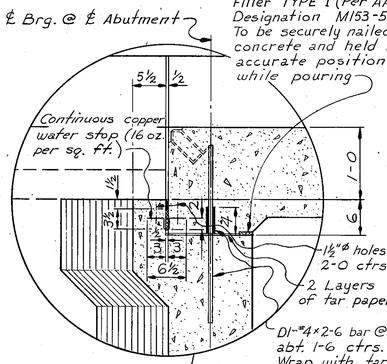
FREDERICK POST CO., SEATTLE

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	MONT.	I-94-1(13)7	4	8



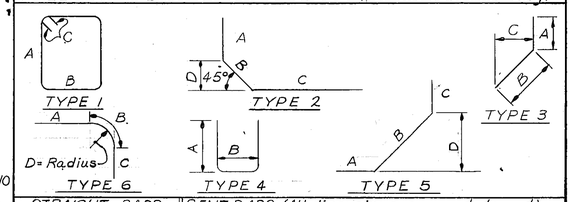
SECTION A-A

TABLE OF ELEVATIONS		
Abutment No. 1 Westbound	Point	Abutment No. 4 Eastbound
3080.69	A	3081.05
3080.37	B	3080.73
3080.25	C	3080.61
3072.42	D	3072.78

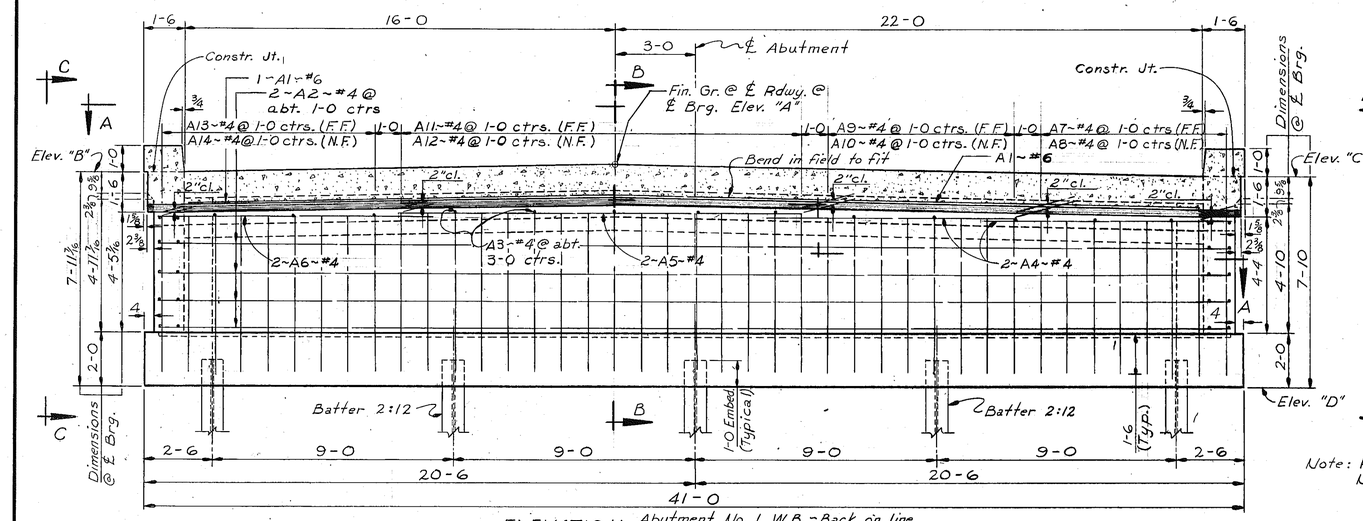


DETAIL "G"
Scale: 1"=1'-0"

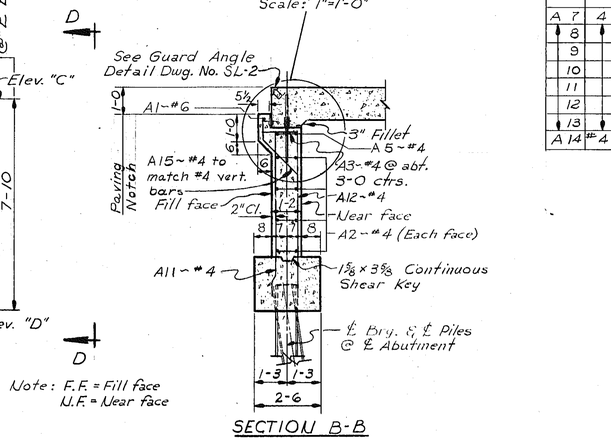
BILL OF REINFORCING STEEL (For one abutment only)



STRAIGHT BARS				BENT BARS (All dimensions are out to out)								
Mark	Size	No.	Length	Mark	Size	No.	Type	Length	A	B	C	D	E
A1	#6	1	40'-0"										
A2	4	8	40-0	A15	#4	41	3	2'-7"	0'-9"	1'-10	1'-4"		
A3	4	13	1-4										
A4	4	4	9-3										
A5	4	2	15-0										
A6	4	2	10-3	C1	4	26	1	6-4	1-1	1-8	0-5		
				C2	4	8	1	3-0	0-6½	0-8	0-3½		
D1	4	27	2-6	C3	4	2	6	2-6	0-10	0-5	1-3	0'-3"	
AW1	4	6	9~1	AW12	8	2	2	13-0	2-0	2-8	8-4	1-11	
2	9	4	9-1	13				12-2			7-6		
3	4	2	9-1	14				10-9			6-1		
4		2	10-3	15				9-3			4-7		
5			9-5	16				7-10			3-2		
6			8-0	17				6-5			1-9		
7			6-6	18	8	2	2	5-0	2-0	2-8	0-4	1-11	
8			5-1	19	6	4	5	12-0	1-8	9-4	1-0	3-9	
9			3-8	20	5	2	4	11-7	5-5½	0-8½			
10	4		2-3	21				10-9	5-0½				
AW11	8	2	9-1	22				9-11	4-7½				
				23				9-1	4-2½				
A 7	4	8	5-8	24				8-3	3-9½				
8	4	8	5-8	25				7-5	3-4½				
9		8	5-11	26				6-7	2-11½				
10		8	5-11	27				5-9	2-6½				
11		16	6-1	28				4-11	2-1½				
12		16	6-1	AW29	#5	2	4	4-1	1-8½	0-8½			
13		9	5-10										
A 14	#4	9	5-10										

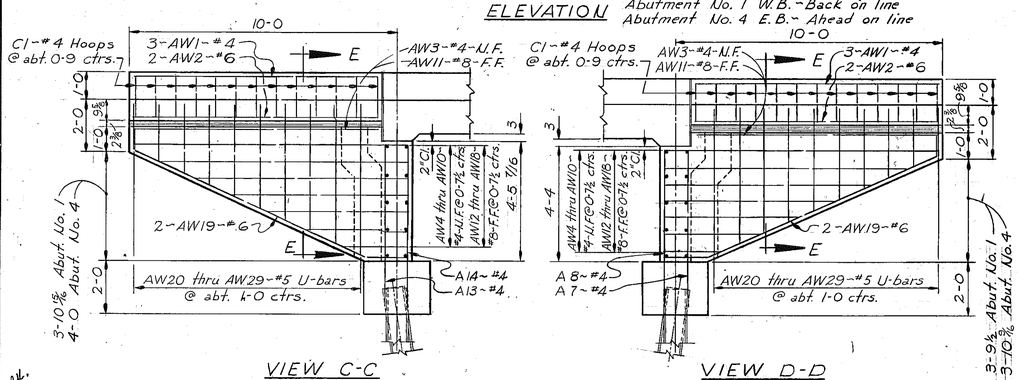


ELEVATION Abutment No. 1 W.B. - Back on line
Abutment No. 4 E.B. - Ahead on line



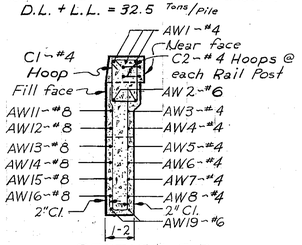
Note: F.F. = Fill face
N.F. = Near face

SECTION B-B



VIEW C-C VIEW D-D

Note: Max. Pile Pressure under: D.L. + L.L. = 32.5 Tons/pile



SECTION E-E

NOTE: Cost of furnishing and placing Preformed Expansion Joint Filler, Tar Paper, Poured Concrete Joint Sealer and Continous Copper Water Stop to be included in the unit Price Bid for Class "AD" Concrete.

NOTE: Estimated Pile Length — 38' Abutment No. 1 W.B.; 28' Abutment No. 4 E.B.

Note: Forms under abutment wingwalls shall remain in place until after forms for slab spans have been removed.

NOTES

OTHER NOTES: For other notes Dwg. No. 8033 & 8034.

DESIGNED	J. G. B.	3-16-66
DRAWN	JJZ. & RLF.	4-4-66
TRACED		
CHECKED	K.G.R.	4-21-66
REVISED		
REVISED		

STATE OF MONTANA
STATE HIGHWAY COMMISSION

COUNTY ROAD SEPARATION
AT STA. 1691 + 25.00

FEDERAL AID PROJECT NO. I-94-1(13)7

YELLOWSTONE COUNTY

ABUTMENT NO. 1 W.B. RDWY.
ABUTMENT NO. 4 E.B. RDWY.

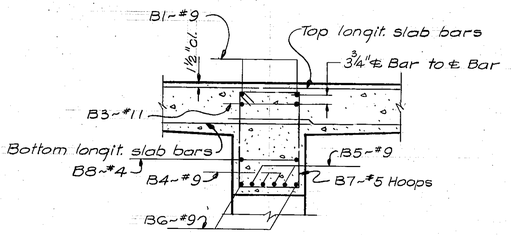
Scale: ⅜"=1'-0" Except as noted

DRAWING NO. 8036

FREDERICK POST CO., SEATTLE

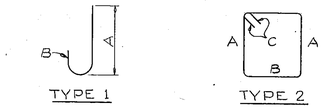
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	MONT.	I-94-1(13)7	5	8

NOTE: For additional slab and curb information see Dwg. No. 5L-2



SECTION B-B
Scale: ½"=1'-0"

BILL OF REINFORCING STEEL (One Bent Only)

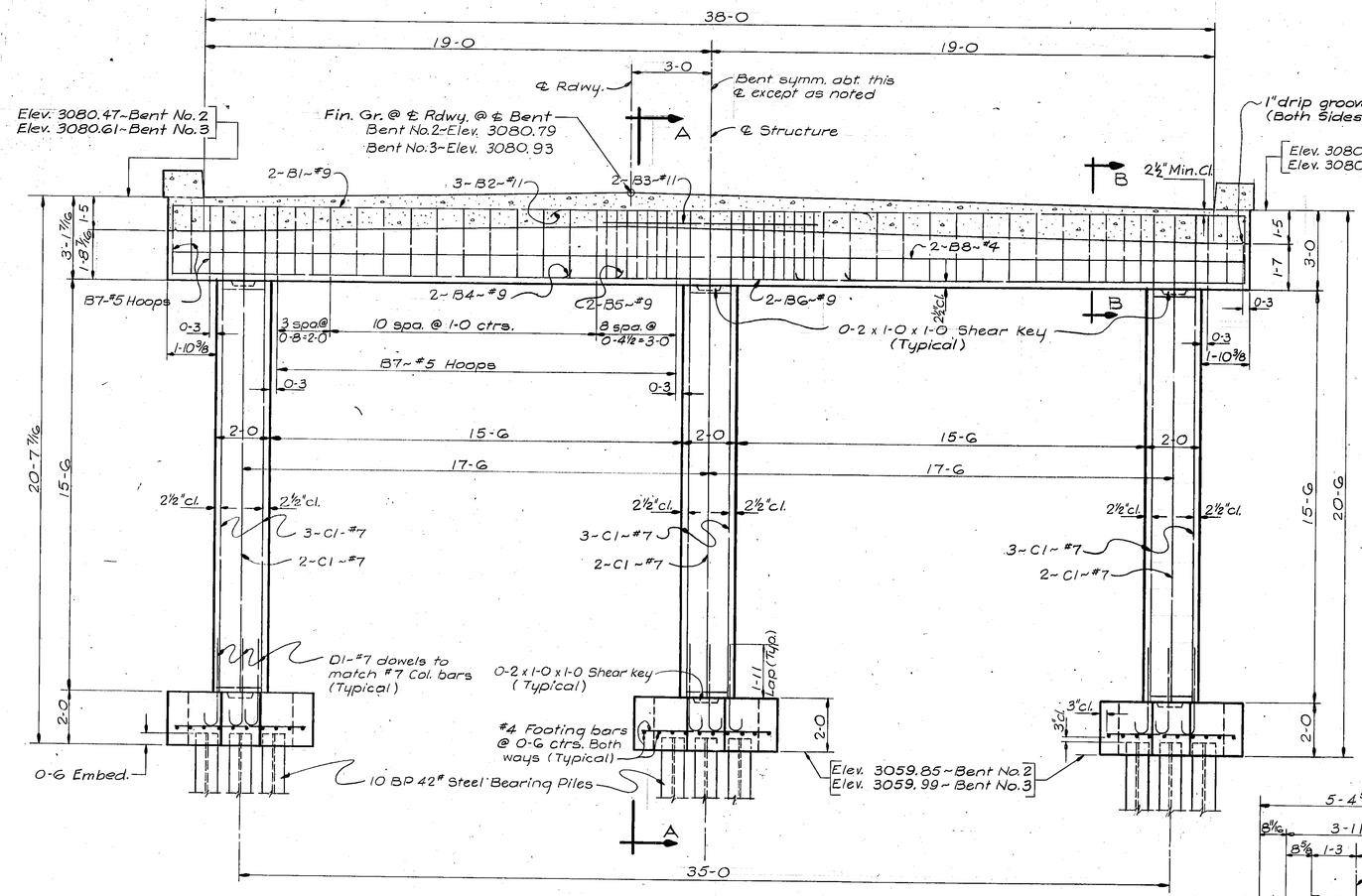


BENT BARS (All dimensions are out to out)

MARK	SIZE	No	TYPE	LENGTH	A	B	C
B7	#5	50	2	9'-8"	2'-8"	1'-8"	0'-6"
D1	7	24	1	4-0	3-2	0-10	
C2	#3	48	2	7-4	1-8	1-8	0-4

STRAIGHT BARS

MARK	SIZE	No	LENGTH
B1	#9	2	40'-5"
B2	11	3	12-0
B3	11	2	8-0
B4	9	4	14-11
B5	9	4	16-11
B6	9	2	40-5
B8	4	2	40-5
C1	7	24	18-4
F1	4	6	4-2
F2		6	3-9
F3		6	2-11
F4		6	2-0
F5		3	1-2
F6			1-10
F7			2-5
F8			3-0
F9			3-6
F10			4-1
F11			4-9
F12			4-3
F13	#4	3	3-7

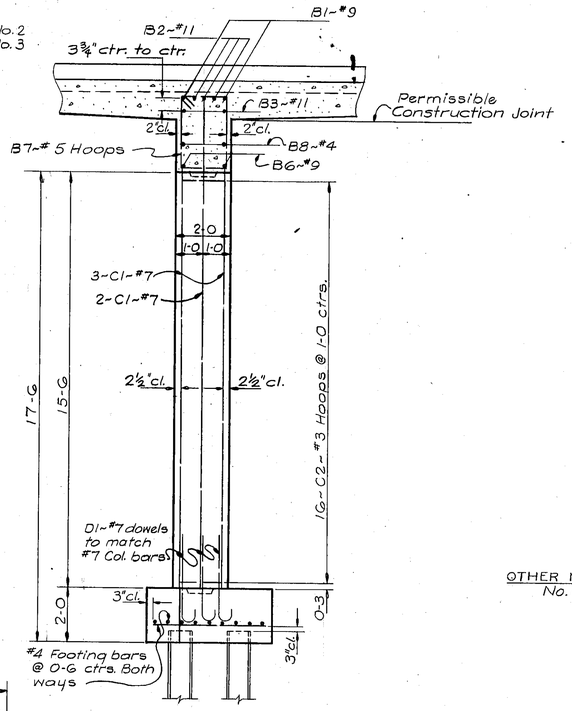


ELEVATION
(Bents No. 2 & No. 3 E.B. Ahead On Line)
Bents No. 2 & No. 3 W.B. Back On Line)

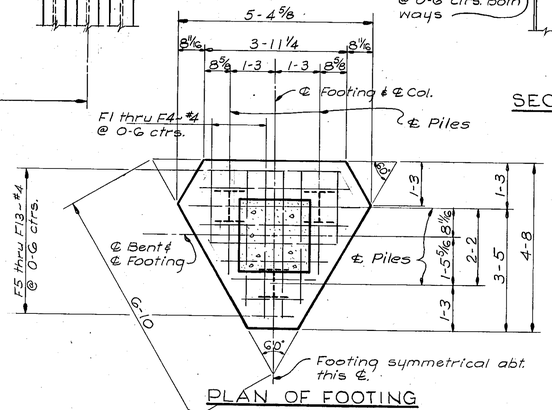
NOTE: Estimated Pile Length = 23' Bent No. 2 & No. 3 W.B.
19' Bent No. 2 & No. 3 E.B.

NOTE: Maximum Pile Pressure Under: D.L. + L.L. = 44.25 TONS/PILE

NOTE: Footing location as shown is for Bents No. 2 E.B. & No. 3 W.B. For location of footings for Bents No. 2 W.B. & No. 3 E.B. see "Footing Plan" Dwg. No.



SECTION A-A



PLAN OF FOOTING
Scale: ½"=1'-0"

NOTES

OTHER NOTES: For other notes see Dwg. No. 8033 & 8034.

STATE OF MONTANA
STATE HIGHWAY COMMISSION

COUNTY ROAD SEPARATION
AT STA. 1691+25.00
FEDERAL AID PROJECT NO. I-94-1(13)7
YELLOWSTONE COUNTY
BENTS NO. 2 & NO. 3
Scale: ⅜"=1'-0" (Except as Noted)

DESIGNED	R.L.H.	3-25-66
DRAWN	L.E.P.	3-28-66
TRACED		
CHECKED	K.G.R.	4-21-66
REVISED		
REVISED		

DRAWING NO. 8037

FREDERICK POST CO., SEATTLE