87851

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR 9020(6)	B1

PREPARED BY W.A.B. 10-22-85 CHECKED BY S.D.K. 10-23-85

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

BRIDGE PLANS & QUANTITIES

FEDERAL AID PROJECT NO. BR 9020(6) P.E. & CONSTR.

BRIDGE OVER THE CLARK FORK - N.E. OF BEARMOUTH

GRANITE COUNTY

LIST OF DRAWINGS

SHEET NO.	DWG. NO.	TITLE
B 2	13690	GENERAL LAYOUT
B 3	13691	FOOTING PLAN
B 4	13692	BENTS NO. 1 & NO. 4
B 5	13693	PIERS NO. 2 & NO. 3
B 6	13694	ERECTION PLAN
B 7	13695	BEAM DETAILS

~~ESTIMATED~~ BRIDGE ~~PLAN~~ QUANTITIES

LOCATION	LENGTH IN FEET	REINFORCING STEEL LBS.	STRUCTURAL STEEL LUMP SUM	CLASS "AD" CONCRETE CU. YDS.	PRESTRESSED CONC. BULB TEE BEAM 55'-0" EACH	STRUCTURAL EXC. TYPE I CU. YDS.	STEEL PIPE PILES 16" O.D. x .375 WALL TH. LIN. FT. FURNISH	STEEL PIPE PILES 16" O.D. x .375 WALL TH. LIN. FT. DRIVE	STEEL PIPE PILES 20" O.D. x .500 WALL TH. LIN. FT. **FURNISH	STEEL PIPE PILES 20" O.D. x .500 WALL TH. LIN. FT. DRIVE	BRIDGE RAIL LIN. FT.
BENT NO. 1		1132	1.0 = ~~$3000~~	12.7		~~15~~ 14.6	~~116~~ 113.5	~~114~~ 111.5			
PIER NO. 2		933		9.5					~~180~~ 165.1	~~132~~ 115.6	
PIER NO. 3		933		9.5					~~180~~ 184.9	~~132~~ 137.5	
BENT NO. 4		1132		12.7		~~15~~ 14.6	~~116~~ 120.0	~~114~~ 118.0			
SUPERSTRUCTURE	168.0	694			12						350.0
TOTAL	168.0	4824	1.0 = ~~$3000.00~~	44.4	※ 2	~~30~~ 29.2	~~232~~ 233.5	~~228~~ 229.5	~~360~~ 350 **	~~264~~ 253.1	350.0

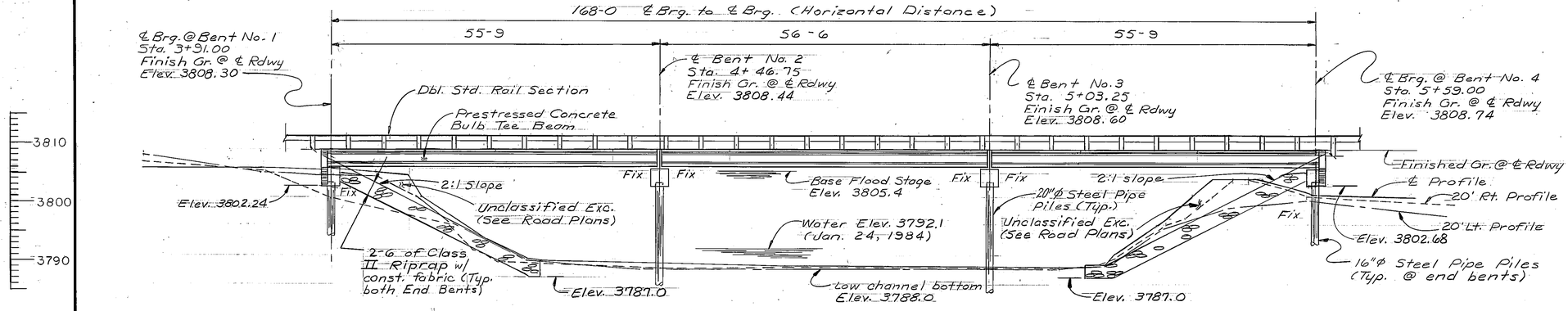
TRAFFIC CONTROL DEVICES	448 UNITS
MOBILIZATION	1.0 LUMP SUM $15,700.
CONTRACT BOND	.83757 LUMP SUM $1,175.40
BRIDGE SURVEY CONTROL	1.0 LUMP SUM $3,500.00

※ SEE CHANGE ORDER NO. 1 (WORK BY AGREEMENT) - 1 EACH
** SEE CHANGE ORDER NO. 1 (WORK BY AGREEMENT) - 350 LIN. FT.

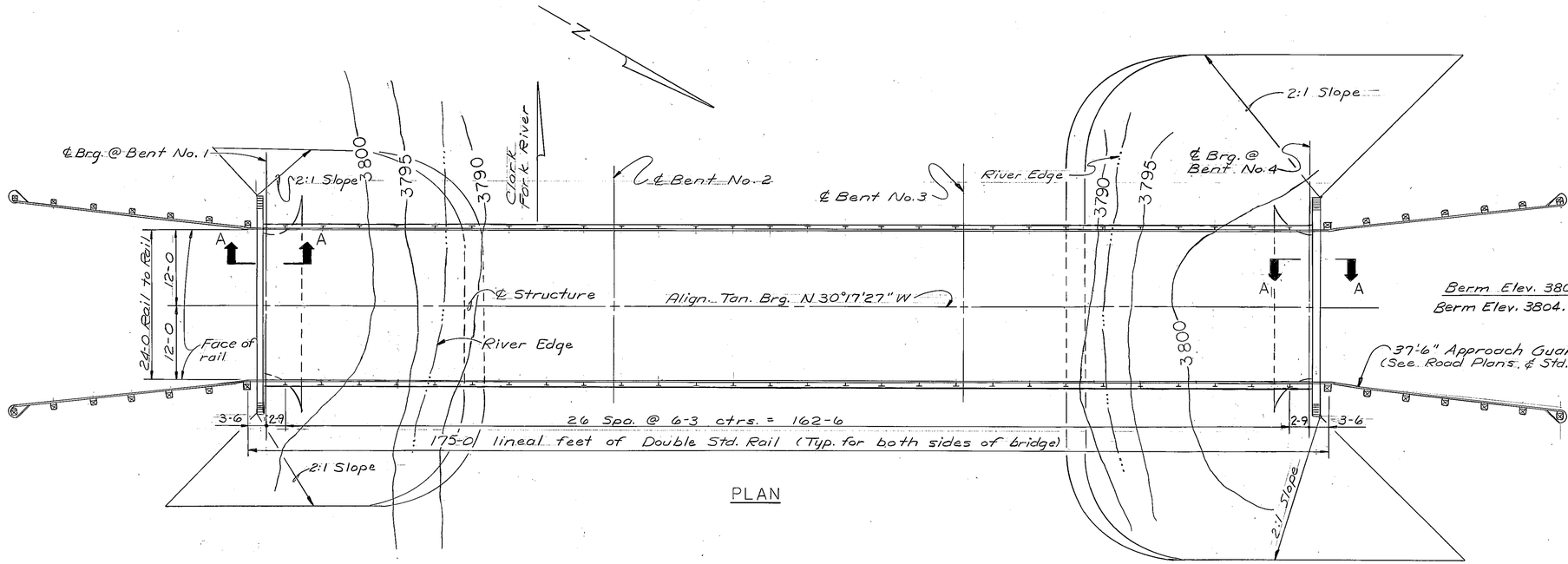
DRAWING NO. 13690 Q

K&E HERCULENE®

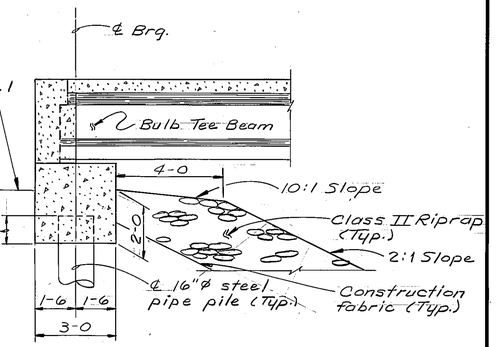
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR 9020(6)	B2



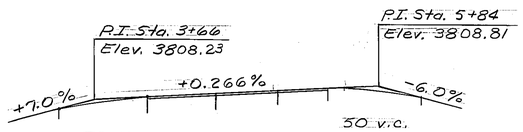
ELEVATION



PLAN



SECTION A-A
Scale: 3/8" = 1'-0"



PROFILE GRADE
No Scale

NOTES

LIVE LOAD: Standard H520-44 loading.

SPECIFICATIONS: Montana Department of Highways and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1981 edition and any amendments thereto, and Special Provisions shall govern unless otherwise noted. Design prepared in accordance with A.A.S.H.T.O. Specifications, 1983 edition, and any amendments thereto.

FINISHED GRADE: Finished grade of bridge at ℄ Rdwy is the same as the profile grade shown on the Road Plans.

CAST IN PLACE CONCRETE: Unless otherwise approved all cast in place concrete shall be Class "AD".

STRUCTURAL STEEL: All structural steel shall be measured and paid for on a lump sum basis as set forth in the standard specifications.
Estimated Weight = 1821 lbs.

REINFORCING STEEL: All reinforcing steel shall be of the deformed type and shall meet the requirements of A.S.T.M. Specifications A615, Grade 60 (A.A.S.H.T.O. M-31).

UTILITIES: For location of utilities, see appropriate Road Plans sheet.

STRUCTURE EXCAVATION: Structure excavation for the end bents shall be calculated from the berm elevation.

TRAFFIC CONTROL PLAN & SEQUENCE OF OPERATIONS: See "Special Provisions".

STREAM DATA

ICE: Moderate
DRIFT: Light
SCOUR: Moderate
DRAINAGE AREA: 2405 sq. mi.
BASE FLOOD FLOW (100 yr.): 21,160 cfs
BASE FLOOD STAGE: 3805.4
BASE FLOOD VELOCITY: 11.9 fps
SUBSOIL: See Log of Borings, Dwg. No. 13691
Also see Hydraulic Data Summary Sheet.

Class of Concrete	Minimum Reqd Cylinder Strength to achieve a 1.0 pay factor (p.s.i.) *	Strength for Design Purposes (p.s.i.)
"AD"	3400	3000

* See Supplemental Specifications Article 40.06 (c)

DESIGNED	8-10-84	SAN
DRAWN	8-27-84	WAB
CHECKED	9-30-85	SDK
APPROVED	11-18-85	NHR
REVISED		
REVISED		

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

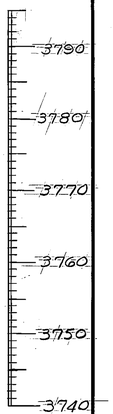
BRIDGE OVER THE CLARK FORK
AT STA. 4+75.00
FEDERAL AID PROJECT NO. BR 9020 (6)
GRANITE COUNTY
GENERAL LAYOUT

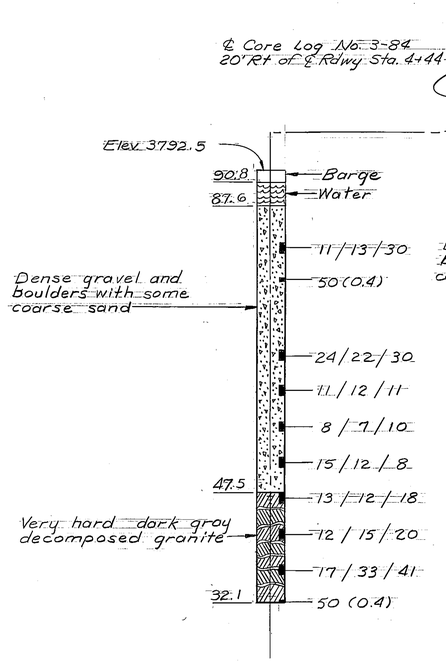
Scale: 1" = 10'-0" except as noted
DRAWING NO. 13690

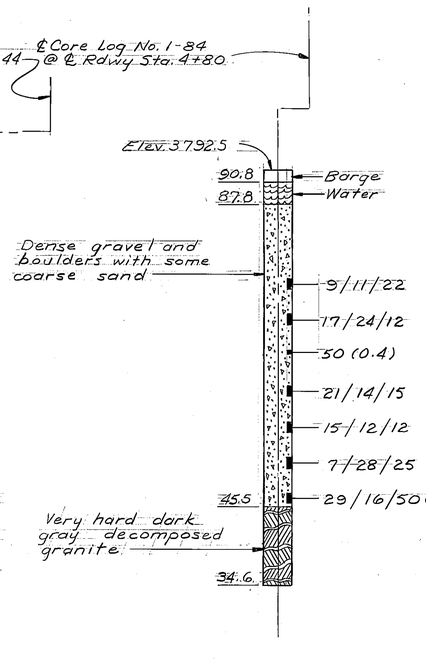
Plastic Lead Used

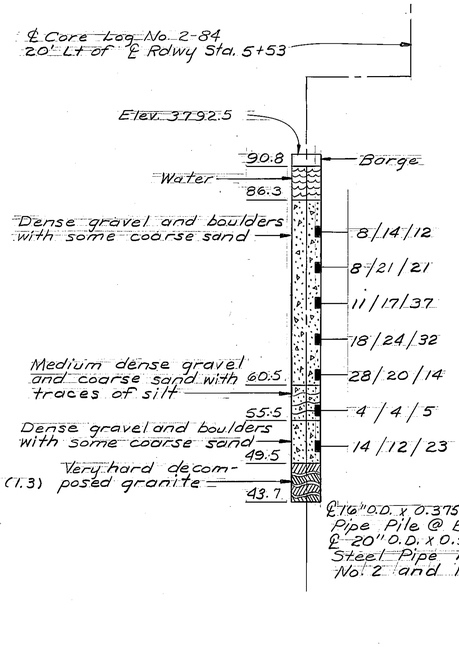
87851

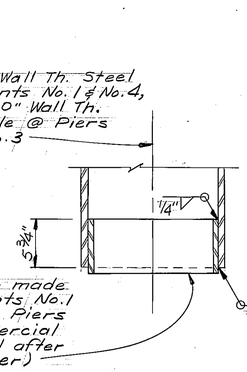
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR 9020(6)	B3





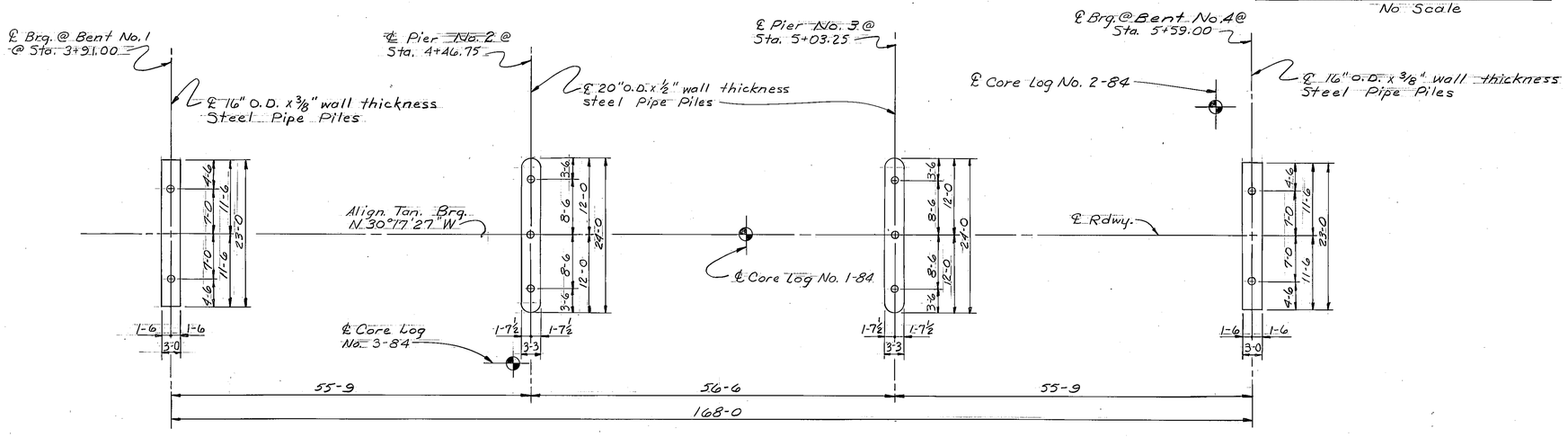






PILE POINT REINFORCING DETAIL
No Scale

LOG OF BORINGS



FOOTING PLAN

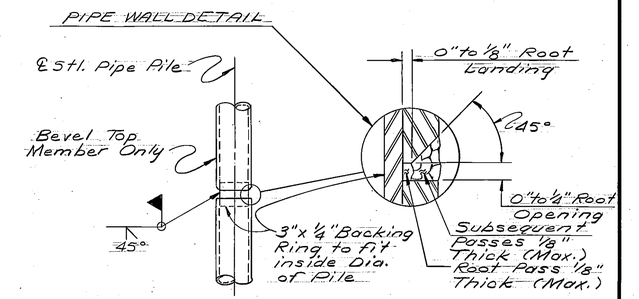
NOTES

SOILS AND FOUNDATION MATERIALS: Borings were taken by the State of Montana, Department of Highways at the points shown on the Footing Plan.

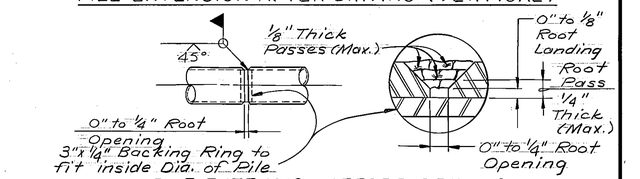
The series of numbers shown on the Log of Borings indicates the number of blows per 6" penetration for each number of the series of a 2" sample tube which was driven in accordance with the Standard Penetration Test made with a 2" split tube sampler using a 140 pound hammer having a 30" drop. The total 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 of Montana, Department of Highways, 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.

FOUNDATION PILES: For bidding purposes only, Pile lengths have been estimated as shown on drawings.



PILE EXTENSION AFTER DRIVING (VERTICAL)



PILE EXTENSION BEFORE DRIVING
(Rotate Pile so that all welding is done in a flat position)

PERMISSIBLE WELDED SPLICE DETAILS
FOR 16" OR 20" DIA. STEEL PIPE PILES
No Scale

NOTE: Only E7018 or E7028 series electrodes shall be used. Maximum electrode size shall be 3/16". Surfaces to be welded shall be smooth, uniform and free from fins, tears, loose scale, slag, rust, grease, moisture or other material that would prevent proper welding.

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

BRIDGE OVER THE CLARK FORK
AT STA. 4+75.00
FEDERAL AID PROJECT NO. BR 9020 (6)
GRANITE COUNTY
FOOTING PLAN

Scale: 1"=10'-0" except as noted
DRAWING NO. 13691

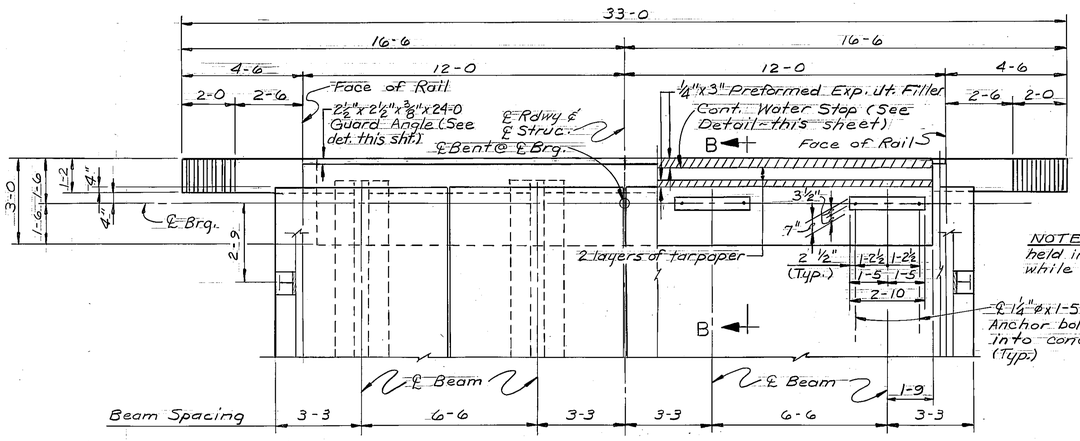
DESIGNED	11-7-84	T.L.B.
DRAWN	11-7-84	W.A.B.
CHECKED	9-30-85	S.D.K.
REVISED		
REVISED		
REVISED		

Plastic Lead Used

HERCULENE®

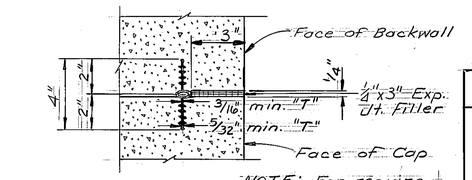
87851

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR 9020(6)	B4



PLAN

Bent No.1 (Back on Line)
Bent No.4 (Ahead on Line)

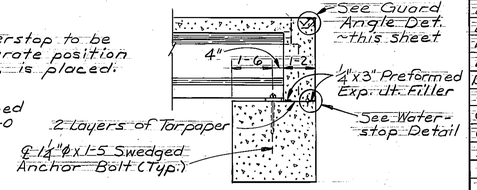


WATERSTOP DETAIL

Scale: 3"=1'-0"

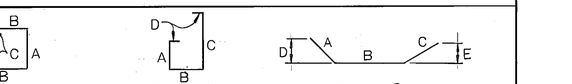
NOTE: For requirements of waterstop material see Supplemental Specifications.

NOTE: Waterstop to be held in accurate position while conc. is placed.

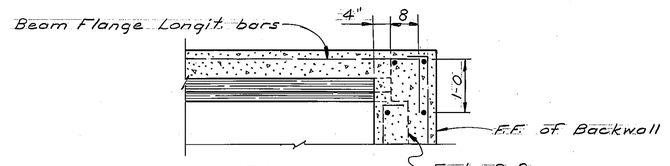


SECTION B-B

BILL OF REINFORCING STEEL (FOR ONE BENT ONLY)

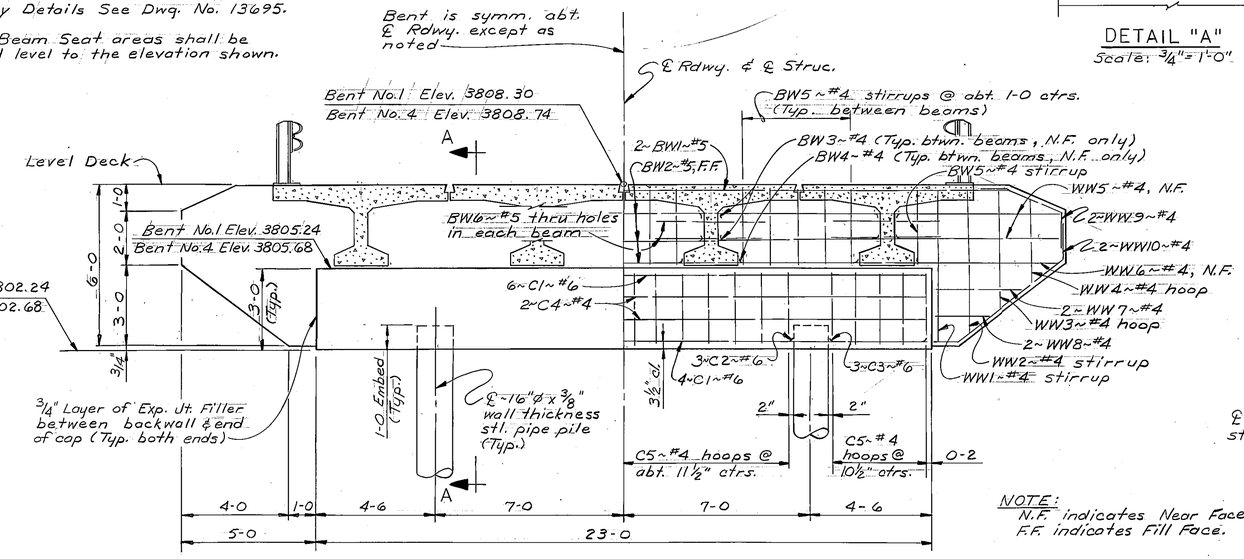


Straight Bars				Bent Bars (All dimensions are Out to Out)								
Mark	Size	No.	Length	Mark	Size	No.	Type	Length	A	B	C	D	E
BW1	#5	2	28'-8"	BW5	#4	17	2	6'-4"	2'-1"	0'-10"	2'-8"	0'-4½"	
BW2	5	3	32-8										
BW3	4	6	5-8	C5	4	24	1	11-3	2'-7	2-8	0-4½		
BW4	4	3	4-2										
BW6	5	8	4-0	WW1	4	2	2	12-5	5-2	0-10	5-8	0-4½	
C1	6	11	22-8	WW2	4	2	2	11-9	4-10	0-10	5-4	0-4½	
C2	6	3	12-4	WW3	4	2	1	11-5	4-6	0-10	0-4½		
C3	6	6	3-6	WW4	4	2	1	8-11	3-3	0-10	0-4½		
C4	4	4	22-8										
				WW9	4	4	3	4-10	1-4	2-2	1-4	0'-5	1'-0"
WW5	4	4	6-2	WW10	#4	4	3	7'-5"	0'-9"	4'-11"	1'-9"	0'-7"	1'-7"
WW6	4	2	5-5										
WW7	4	4	3-5										
WW8	#4	4	2'-2"										



DETAIL "A"

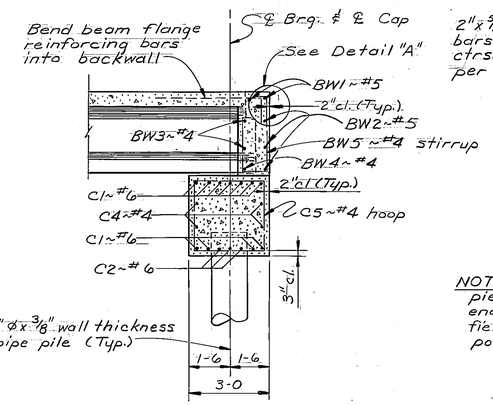
Scale: ¾"=1'-0"



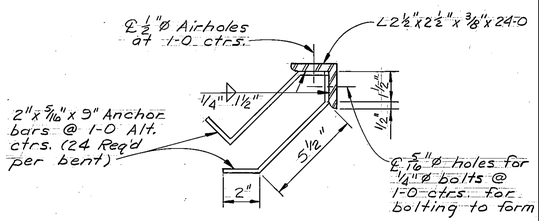
ELEVATION

Bent No. 1 (Back on Line)
Bent No. 4 (Ahead on Line)

NOTE: N.F. indicates Near Face; F.F. indicates Fill Face.



SECTION A-A



GUARD ANGLE DETAIL

Scale: 3"=1'-0"

NOTE: Guard Angle shall be set 1/8" below concrete surface.

NOTE: Guard Angle may be furnished in two pieces with end anchor bars 6" max from each end. If furnished in two pieces they shall be field welded together and held in accurate position while placing concrete.

NOTE: Slab and beam reinforcing steel omitted for clarity.

NOTE: All concrete in backwall and cap shall be Class "AD".

NOTE: Maximum Pile Pressure Under D.L.+L.L.= 76.4 Tons per pile. For concrete filling of piles see Dwg. No. 13693.

NOTE: Estimated pile length = 58 ft. The piles are to be driven to practical refusal. In this case practical refusal shall be considered to be 110 tons.

NOTE: Cost of furnishing and placing Exp. Jt. Filler, Tarpaper and waterstop to be included in the unit price bid for Class "AD" concrete.

NOTE: Exp. Jt. Filler to be securely nailed to conc. and held in accurate position while placing concrete.

NOTE: For Fixed Shoe and Guard Rail Assembly Details See Dwg. No. 13695.

NOTE: Beam Seat areas shall be finished level to the elevation shown.

DESIGNED	11-15-84	T.L.B.
DRAWN	2-8-85	W.A.B.
CHECKED	9-30-85	S.D.K.
REVISED		
REVISED		
REVISED		

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

BRIDGE OVER THE CLARK FORK

AT STA. 4+75.00

FEDERAL AID PROJECT NO. BR9020(6)

GRANITE COUNTY

BENTS NO.1 & NO. 4

Scale: ⅜"=1'-0" except as noted.

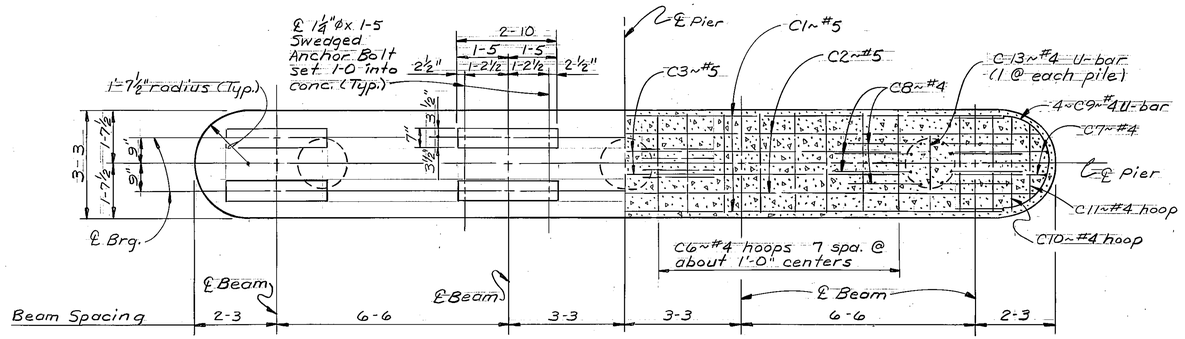
DRAWING NO. 13692

Plastic Lead Used

K&E HERCULENE®

87881

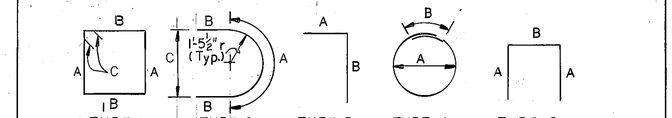
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR.9020(6)	B5



PLAN

NOTE: For shoe details see Dwg. No. 13695.

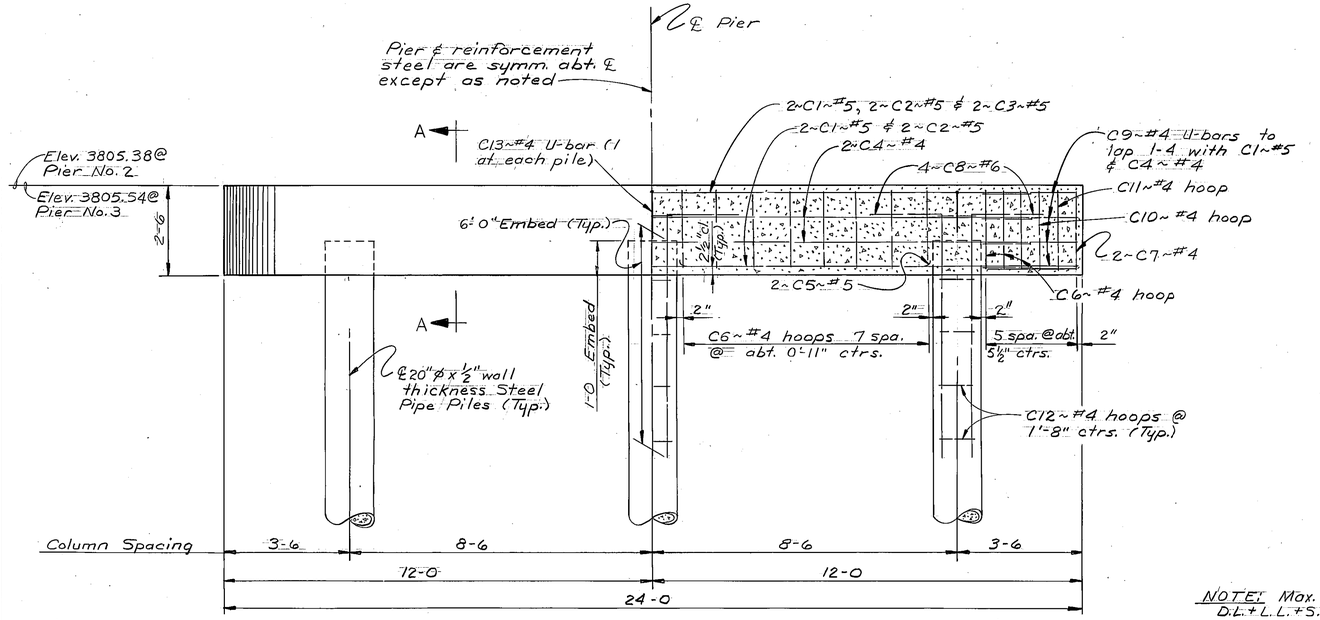
BILL OF REINFORCING STEEL (FOR ONE PIER ONLY)



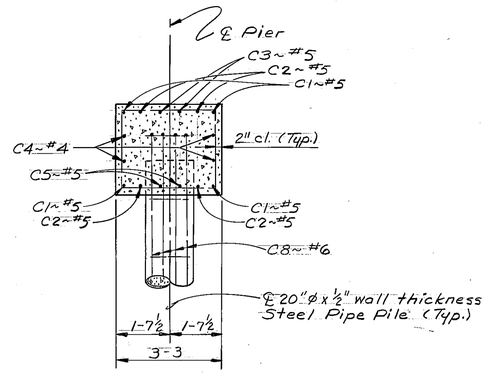
STRAIGHT BARS				BENT BARS (All Dimensions are Out to Out)							
Mark	Size	No.	Length	Mark	Size	No.	Type	Length	A	B	C
C1	#5	4	21'-0"	C6	#4	22	1	10'-11"	2'-2"	2'-11"	0'-4½"
C2	5	4	23-0	C7	4	4	3	4-6	2-4	2-2	
C3	5	2	23-6	C8	6	24	3	8-8	2-0	6-8	
C4	4	4	21-0	C9	4	8	2	7-3	4-7	1-4	2-11
C5	#5	4	6'-6"	C10		2	1	10-9	2-2	2-10	0-4½"
				C11		2	1	9-9	2-2	2-4	0'-4½"
				C12		15	4	5-6	1-4	1-4	
				C13	#4	3	5	5'-4"	1'-4"	2'-8"	

NOTE: Steel Pipe Piles are to be painted in accordance with article 46.08(R) in the Standard Specifications. All costs incidental to painting the piles are to be included in the Unit Price Bid for "Furnish Steel Pipe Piles.".

Steel Pipe Piles are to be filled from the natural ground line to elevation of the bottom of the cap with Class "AD" Concrete. The cap concrete shall not be placed until the concrete in the pipe piles has taken its initial set, or as directed by the engineer. The cost of the concrete fill in the steel pipe piles shall be included in the Unit Price Bid for "Drive Steel Pipe Piles".



ELEVATION
(Ahead on Line)



SECTION A-A

NOTE: Max. Pile Pressure under: D.L.+L.L.+S.F. = 77.0 Tons per Pile.

NOTE: Estimated Pile Length = 60 feet. The piles are to be driven to practical refusal. In this case practical refusal shall be considered to be 115 tons.

Plastic Lead Used

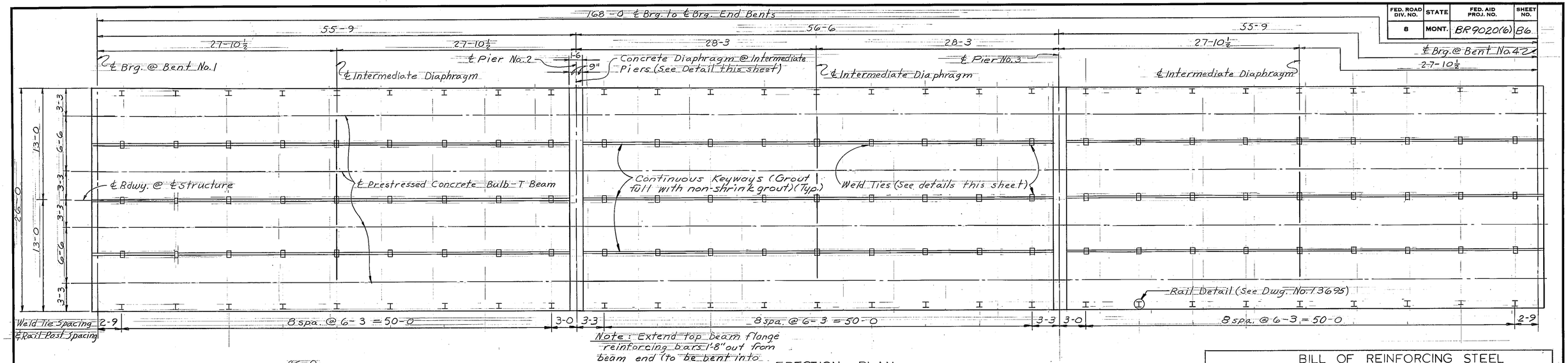
STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

BRIDGE OVER THE CLARK FORK
AT STA. 4+75.00
FEDERAL AID PROJECT NO. BR 9020(6)
GRANITE COUNTY
PIERS NO. 2 & NO. 3
Scale: ½"=1'-0" except as noted
DRAWING NO. 13693

DESIGNED	11-9-84	T.L.B.
DRAWN	2-15-85	W.A.B.
CHECKED	9-30-85	S.D.K.
REVISED		
REVISED		
REVISED		

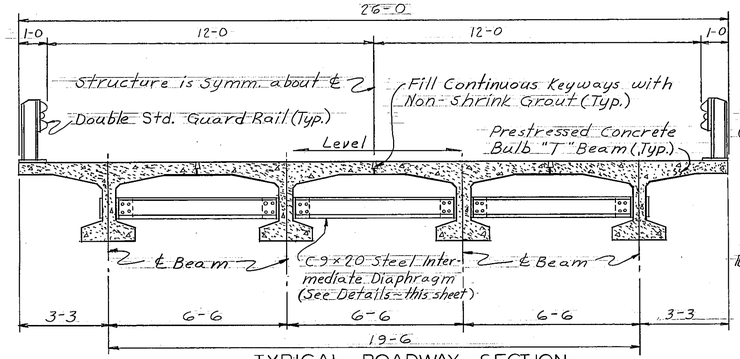
HOS HERCULENE®

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR 9020(6)	B6



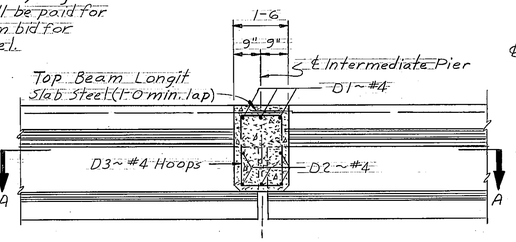
Note: Extend top beam flange reinforcing bars 1'-8" out from beam end (to be bent into backwall, See Section A-A Dwg. No. 13692). (Typ.)

ERECTION PLAN
Scale: 3/16" = 1'-0"



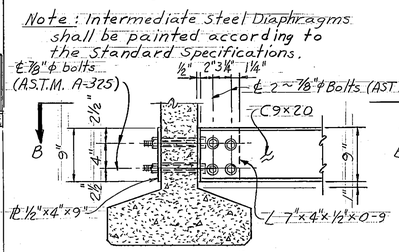
TYPICAL ROADWAY SECTION
Scale: 3/8" = 1'-0"

Note: Cost of furnishing and placing of Diaphragm Channels, Plates, Angles and Bolts shall be paid for in the lump sum bid for Structural Steel.

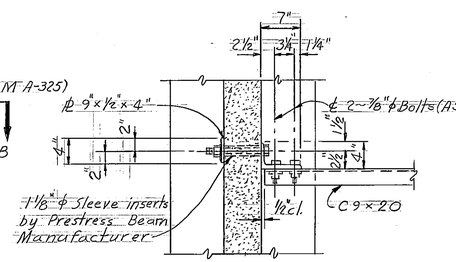


INTERMEDIATE PIER DIAPHRAGM ~ ELEVATION
Scale: ½" = 1'-0"

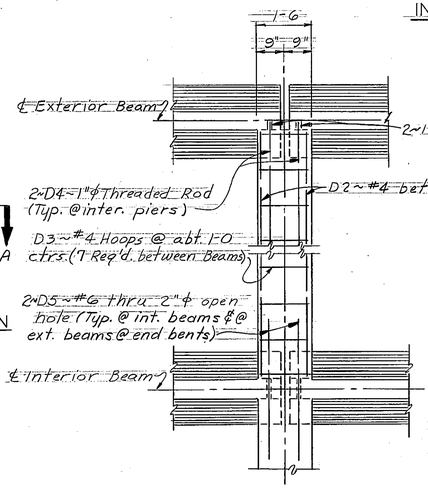
Note: Intermediate Steel Diaphragms shall be painted according to the Standard Specifications.



END SECTION



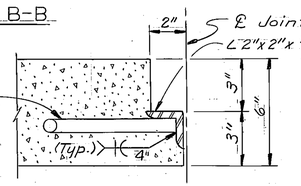
SECTION B-B



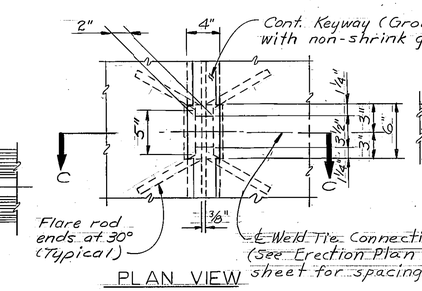
SECTION A-A
Scale: ½" = 1'-0"

INTERMEDIATE STEEL DIAPHRAGM
Scale: 1" = 1'-0"

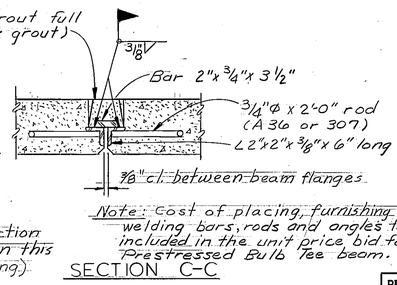
3/4" ϕ x 2'-0" rod (A36 or 307)



BULB "T" JOINT CONNECTION DETAIL
Scale: 3" = 1'-0"



PLAN VIEW



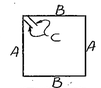
Note: Cost of placing, furnishing and welding bars, rods and angles to be included in the unit price bid for Prestressed Bulb Tee beam.

SECTION C-C

WELD TIE CONNECTION
Scale: 1½" = 1'-0"

Note: Non-shrink grout to be used in grouting of beam keyways shall be non-metallic and non-gaseous. Cost of non-shrink grout to be included in the unit price bid for Class "AD" concrete.

BILL OF REINFORCING STEEL



TYPE 1

	STRAIGHT BARS			BENT BARS (All dimensions are out to out)						
	Mark	Size	No.	Length	Mark	Size	No.	Type	Length	A	B	C
	D1	#4	6	25'-8"	D3	#4	42	1	6'-9"	1'-10"	1'-2"	0'-4½"
	D2	4	30	5'-8"								
**	D4	1" ϕ	16	2'-3"								
	D5	#6	32	4'-0"								

** Threaded Rod

Note: PRESTRESSED CONCRETE BEAMS: Prestressed Concrete Beams shall be fabricated in accordance with the details shown on this sheet and on Dwg. No. 13695. Maximum f'c (compressive strength of concrete at 28 days) for design shall be 6000 p.s.i. Design stresses without prestress are as indicated in the table below.

Span Length (℄ Brg. to ℄ Brg.)		55'-0"
Beam D.L. Stress (P.S.I.)	+ft	402
	-fb	-817
D.L.+L.L. Design Stress (P.S.I.)	+ft	1209
	-fb	-2474
* Req'd Ultimate Mom. Capacity		1844 ft.-k.

* 1.3 [D.L. + 5/3 (L.L. + I.)] Ft. Kip

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

BRIDGE OVER THE CLARK FORK
AT STA. 4+75.00
FEDERAL AID PROJECT NO. BR 9020(6)
GRANITE COUNTY
ERECTION PLAN

Scale: As Noted

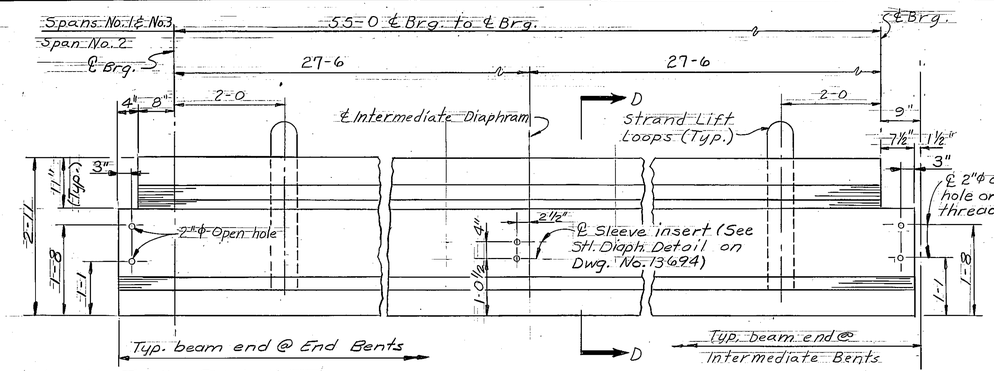
DRAWING NO. 13694

DESIGNED	8-10-84	T.L.B.
DRAWN	8-24-84	J.L.P.
CHECKED	9-30-85	S.D.K.
REVISED		
REVISED		
REVISED		

PLASTIC LEAD USED

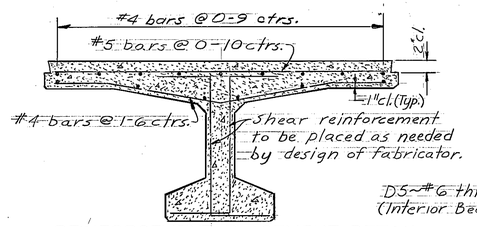
K&E HERCULENE®

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
8	MONT.	BR9020(6)	B7



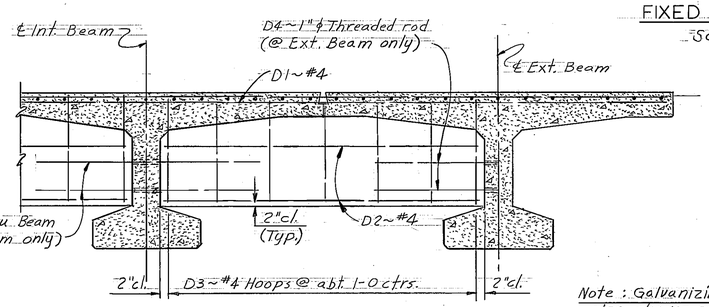
BULB-TEE BEAM — ELEVATION

Note: Beam Length: To allow for elastic shortening, shrinkage and creep the over-all beam length shall be increased by 0.0075 in/ft. of length.



REINFORCEMENT PLACEMENT DETAIL

Note: The fabricator's design of shear reinforcing shall include allowance for 0.2 feet of asphalt surfacing in lieu of the usual 10 lbs. per sq. ft. Two inch clearance shall be provided to top reinforcing steel with no deduction for wearing surface & the rail load shall be applied to the exterior beams only.

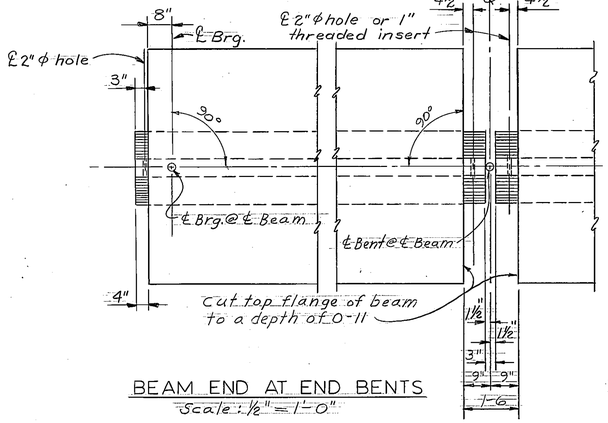


DIAPHRAGM STEEL PLACEMENT AT INTERMEDIATE PIER DETAIL

Note: Prestressing Steel: Prestressing steel shall be 7/16"ϕ or ½"ϕ. Maximum stress for design before transfer shall be 0.70 f's unless otherwise approved.

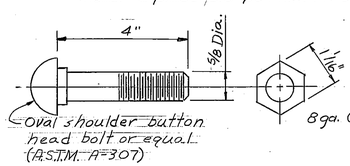
Note: Variations: Variations in general shape or in deck width or span lengths from those shown on the bridge drawings shall not be allowed without the approval of the Engineer. Variations requiring the alteration of backwall, diaphragm, and rail post connections shown on the bridge drawings shall be approved by the Engineer before fabrication is begun.

Note: Reflectors: A reflector shall be placed on each end rail post & at approx. equal spacing (25' max. ctrs. or on every fourth rail post) btwn. end rail posts. Mount reflectors with reflectorized face toward oncoming traffic. Cost of the reflectors shall be included in the unit price bid per lin. ft. of rail.



BEAM END AT END BENTS
Scale: ½"=1'-0"

BEAM JOINT AT INTERMED. BENT (Diaphragm Notch)
Scale: ½"=1'-0"



BOLT AND NUT DETAILS
No Scale

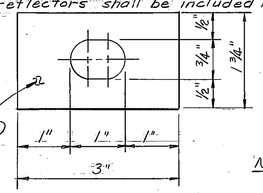
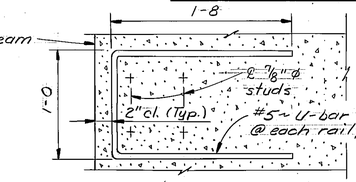


PLATE WASHER DETAIL



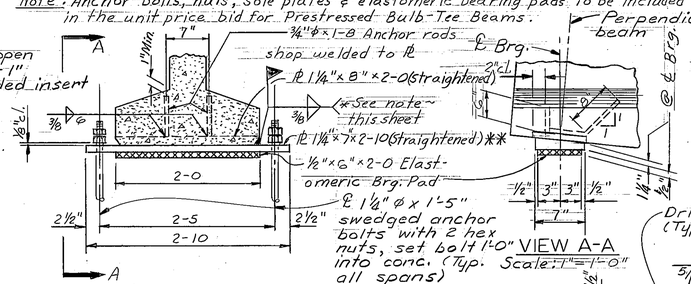
ANCHOR BOLT ASSEMBLY REINFORCEMENT
Scale: 1½"=1'-0" (By Prestressed Beam Manufacturer)

Note: Specifications: Design shall be in accordance with A.A.S.H.T.O. Std. Specifications for Highway Bridges, 1983 Edition; and any Amendments thereto. The Montana Dept. of Highways and the Montana Highway Commission Standard Specifications for Road and Bridge Construction, 1981 Edition and any Amendments thereto, and Special Provisions shall govern unless otherwise noted. See Section 42. The Fabricator's design calculations shall show stresses in the beam under each loading condition that is anticipated in the manufacture, handling and service life of the beam. The beam shall be designed and fabricated to support the dead load and live load stresses and provide a minimum ultimate moment capacity as shown on table on Dwg. No. 13694.

Note: Elastomeric Pads: For Specifications governing the material and manufacture of the Elastomeric Pads see Supplemental Specifications and/or Standard Specifications.

* Note: Contractor shall exercise care in placing this weld so as not to damage the Elastomeric Brg. Pad. Welding procedure must be approved before placing weld. Max. temp. of sole plate during welding shall be 300°F.

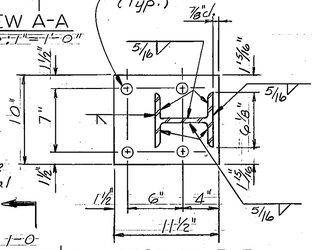
Note: Anchor bolts, nuts, sole plates & elastomeric bearing pads to be included in the unit price bid for Prestressed Bulb-Tee Beams.



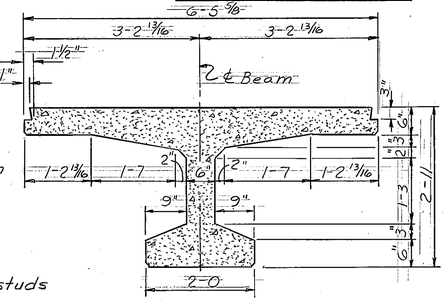
FIXED SHOE DETAIL
Scale: 1"=1'-0"

** Note: Bevel the Straightened PL to slope of beam on grade.

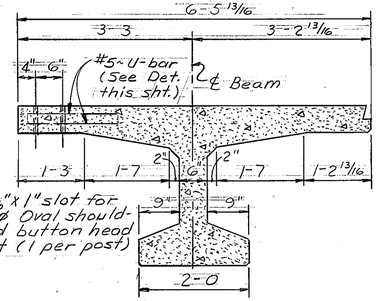
Note: Rail posts shall be set perpendicular to the roadway grade. To obtain proper alignment, galvanized pipe sleeves must be held in exact position while pouring the beam. To obtain proper grade, use vertical slots in rail posts for adjustment.



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



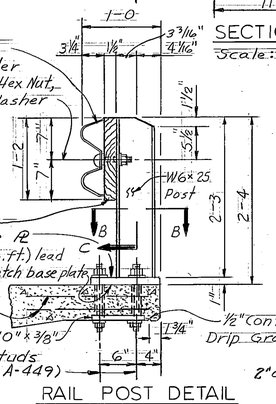
SECTION D-D ~ INTERIOR BEAM



SECTION D-D ~ EXTERIOR BEAM

Double Std. Rail
℄ ⅝"ϕ x 4" Oval shoulder Button-hd. Bolt w/1~Hex Nut, 1~Lock Washer & 1~PL Washer

Note: Galvanizing: All bolts, nuts, washers, and pipe sleeves shall be galvanized in accordance with A.S.T.M. Specifications A153. Bridge rail shall be galvanized in accordance with A.S.T.M. Specification A525 or A123.

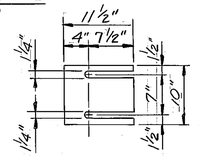


RAIL POST DETAIL
Scale: 1"=1'-0"

Note: All posts and plates shall conform to A.S.T.M. A-36. Bridge rail shall conform to A.A.S.H.T.O. M-180. Bridge rail shall be lapped in the direction of traffic.

Note: Top of slab under each rail post shall be finished to a smooth and uniform surface to assure a proper alignment of the post and a tight fit between the lead sheet and the concrete. Bush hammering will not be permitted except to remove high spots.

Note: Top surface of beam except under Rail Posts, shall be given a steel tine texture in conformance w/Article 4.1.04(L)(3)(b).

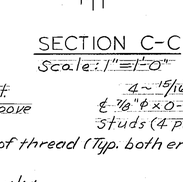


RAIL POST SHIM DETAILS
Scale: 1"=1'-0"

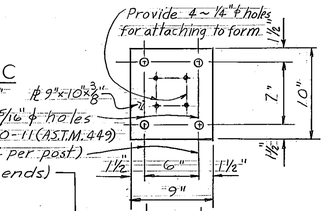
Note: Bridge Rail shall include the metal guard rail, oval-shouldered button-head bolt, hex nut, washer, plate washer, treated timber blockout, post, base plate, lead sheets and shims.

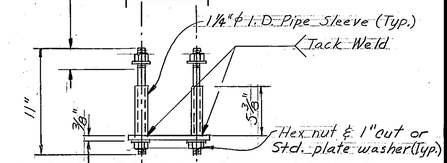
Note: Hardware: Embedded plates and anchors, angles and rods, anchor bolts, hold down devices, lifting devices and any other hardware which is to be incorporated in the beam shall be approved by the Engineer before fabrication is begun.

Note: Bridge rail shall be paid for by the lineal foot which shall be full compensation for furnishing all materials, equipment and labor necessary and incidental to complete the item. The number of lineal feet of bridge rail for payment shall be 350 ft. as shown on the Gen'l. Layout.



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





ANCHOR BOLT ASSEMBLY DETAILS
Scale: 1½"=1'-0" (By Prestressed Beam Mf'r.)

Note: Contractor shall furnish shims as req'd to adjust rail to grade. Place shims between lead sheet and base plate with slots toward ℄ Rdwy.

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

BRIDGE OVER THE CLARK FORK
AT STA. 4+75.00
FEDERAL AID PROJECT NO. BR 9020(6)
GRANITE COUNTY
BEAM DETAILS

Scale: ¾"=1'-0" except as noted
DRAWING NO. 13695

DESIGNED	8-10-84	T.L.B.
DRAWN	8-17-84	J.L.P.
CHECKED	9-30-85	S.D.K.
REVISED		
REVISED		
REVISED		

PLASTIC LEAD USED

K&E HERCULENE