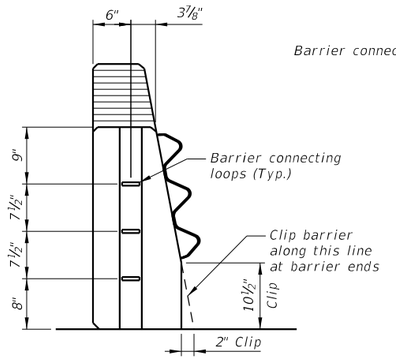
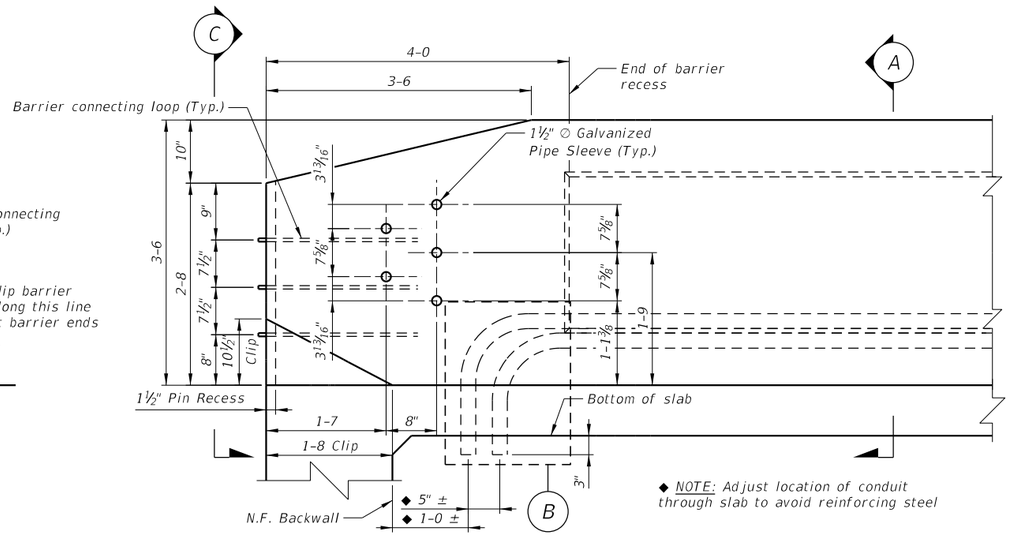
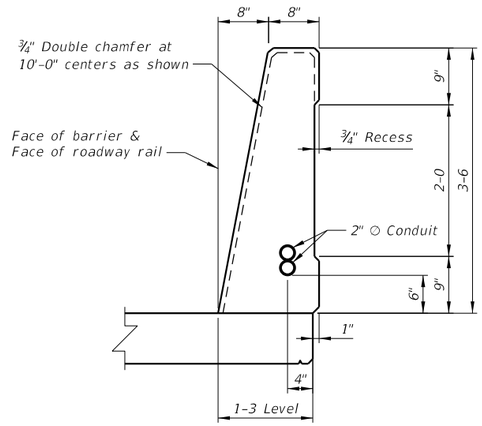


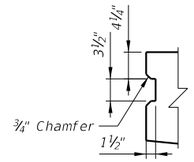
VIEW C



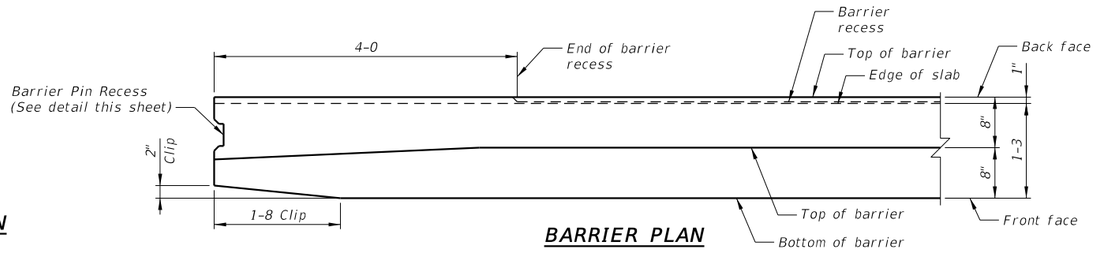
BARRIER INSIDE ELEVATION



SECTION A



BARRIER PIN RECESS PLAN



BARRIER PLAN

NOTES

PLACEMENT: Do not disturb the deck cure to construct the concrete barrier.

CONCRETE STRENGTH: Do not place construction vehicles or equipment on the deck until the concrete has reached 90% of its specified 28-Day compressive strength or without approval from the Project Manager.

Do not open bridge to traffic for at least 14 days after placement of concrete barrier or until concrete in barrier has reached 90% of its specified 28-Day compressive strength.

CONTROL JOINT: Do not place ¾" double chamfer in the barrier recess or the bottom outside edge of the barrier.

REFLECTOR: Place a white reflector on the top of barrier rail at 30-foot spacing between the barrier ends. See Dtl. Dwg. No. 605-00 for reflector detail.

TOLERANCES: Construct the concrete bridge rail to the same tolerances specified for concrete barrier rail, see Section 564 of the Standard Specifications.

REINFORCING STEEL: See Std. Dwg. No. SBR-SS42R for reinforcing steel locations.

GALVANIZING: Galvanize pipe sleeves in accordance with AASHTO M 111.

RADIUS: A ¾" radius may be substituted for the ¾" chamfers and fillets shown.

PAYMENT: Include all costs associated with the barrier as shown on this sheet in the unit price bid for 42 IN SS Concrete Barrier Rail-Br. See Std. Dwg. No. SBR-SS42R for reinforcing steel payment.

EXCEPTIONS: Use details shown on this drawing only as they apply to the project. Refer to other drawings for variations in these details.

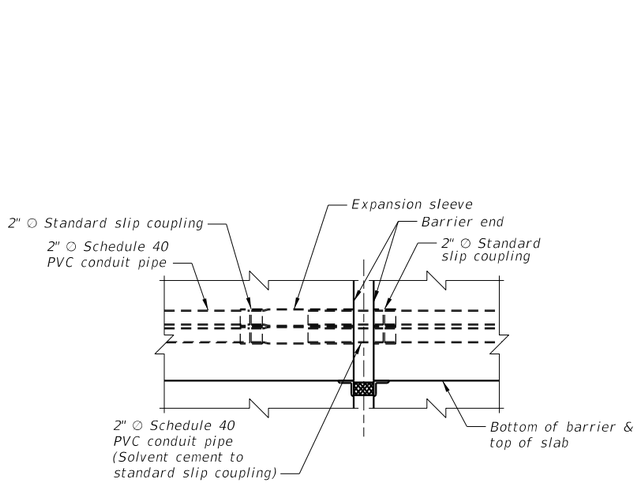
CONDUIT: Omit conduit in any barrier not located at the edge of slab.

RAIL WEIGHT: For informational purposes only and based on Section A dimensions.
Rail weight = 505 lb/ft
Rail Volume = 3.36 cu. ft / ft

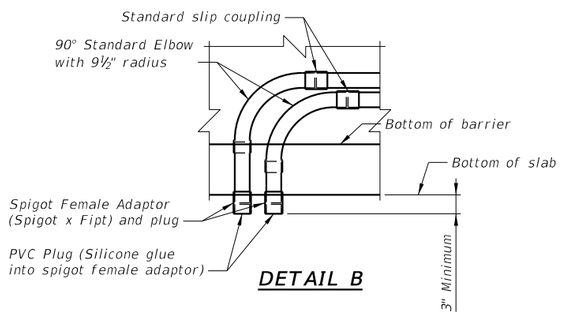
CRASH TEST: This rail has been evaluated and approved to be of equal strength to railings with like geometry, which have been crash tested to meet MASH TL-4 criteria.

RAIL DESIGN CAPACITY

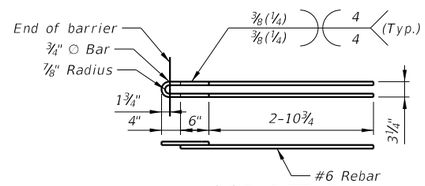
	Interior Region	End Region
Rw	115 kips	86 kips
Lc	14'-0"	6'-2"
Mc	173 kip*in/ft	292 kip*in/ft



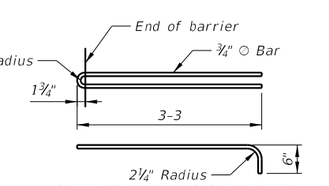
CONDUIT EXPANSION JOINT DETAIL



DETAIL B



LOOP DETAIL



OPTIONAL LOOP DETAIL

NOTE: Use reinforcing steel conforming to ASTM A 706, Grade 60 for rebar being welded to loops.

NOTE: Loop ends and the optional loop detail consist of smooth round bars conforming to AASHTO M 270, Grade 36.

NOTE: Cold bend the loops by using a jig that will produce an accurate radius without marring the bar. Do not heat the bar to facilitate bending.

NOTE: Weld rebar to loops using ⅛" ∅ E8018 rod. Do not tack weld the pieces together prior to welding. Use a certified welder in accordance with the current edition of AWS D1.4. Do not place the welded assembly in the form until it has been inspected.

NOTE: No additional welding is permitted on the smooth round bars or reinforcing steel.

STANDARD BRIDGE RAIL TYPE SINGLE SLOPE 42"

No Scale

MONTANA DEPARTMENT OF TRANSPORTATION — BRIDGE BUREAU

REVISED							
REVISED							
REVISED							
APPROVED	6-27-19	N.A.H.					
CHECKED	2-7-19	L.M.M.					
DRAWN	1-8-19	T.J.B.					
7/1/2019	12:32:43 PM	...\ENGLISH_REF\SS42062719.STD					

DRAWING NO.
SBR-SS42