

Standard Drawing Guidance (do not show on plans):

In the available space, draw the elevation of the left barrier showing:  
 - Span ranges.  
 - All horizontal #5-R bars in each span with all specified by bar marks.  
 - First & last vertical #5-R bars dimensioned with total number in barrier.  
 - All joints (as joint-filler joints) and centerlines with one centerline labeled as:

④ 1/4" Joint (Barrier only) (Typ.)

If slip forming is allowed then add the following two items:  
 - All #5-C bars in each span with all specified by bar marks (include asterisk)  
 - All fiberglass bars with bars at one location labeled as:

#4 Textured Fiberglass Bars (Typ.) \*

Adjust longitudinal dimensions note under elevation title as necessary.

If right barrier differs from left (typical with curved bridges), show both Elevation of Left Barrier and Elevation of Right Barrier. The longitudinal dimensions note can be relocated as the first note under the General Notes.

Dimensions are based on a 2.0%-sloped deck. Modify accordingly the outside dimensions in R-Bar Permissible Alternate Shape and Section A-A, and the 3.52 sq. ft. area in Section A-A for superelevated decks.

If conduit is required, indicate left or right or both barriers in a note.

① For barrier ending at end of slab:

Exclude "(except at end bents)" in first note.

Revise measurement to "end of slab to end of slab" in second note.

② Plastic waterstop detail and notes are required for all grade separations except over railroads and county roads. Remove if not required.

③ List C bars in the Bill of Reinforcing Steel and note that bars are for the slip-formed option only.

Refer to EPG 751.12.1.2.1 for lengths of C bars.

④ Subtract 1/8" for a 3/16"-per-foot sloped deck.

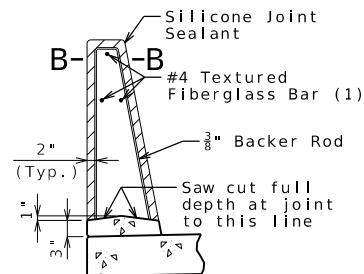
⑤ Based on 8 1/2" slab. Adjust for different slab thickness.

⑥ Remove for CIP slab.

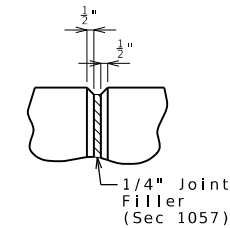
**ELEVATION OF BARRIER**

(Left barrier shown, right barrier similar)

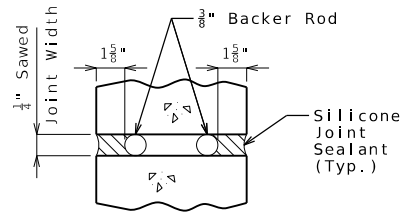
Longitudinal dimensions are horizontal.



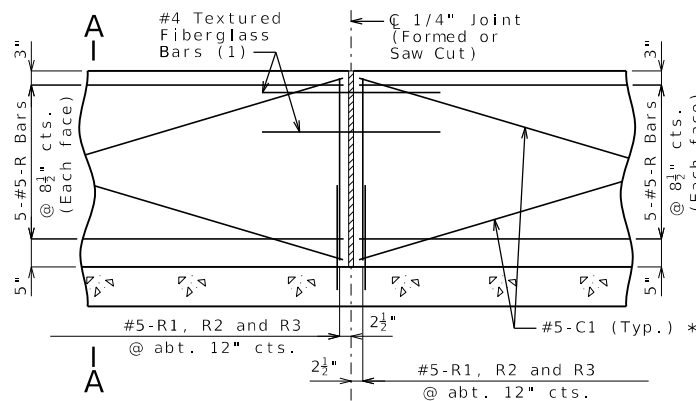
SECTION THRU SAW CUT JOINT



PART ELEVATION AT FORMED JOINT

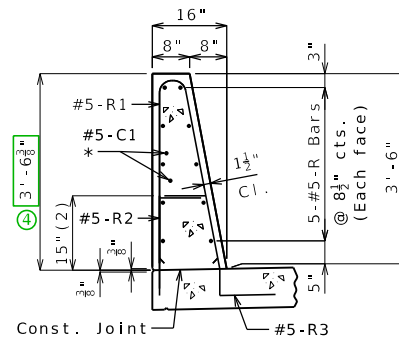


SECTION B-B



PART ELEVATION OF BARRIER

(1) Four feet long, centered on joint, slip-formed option only

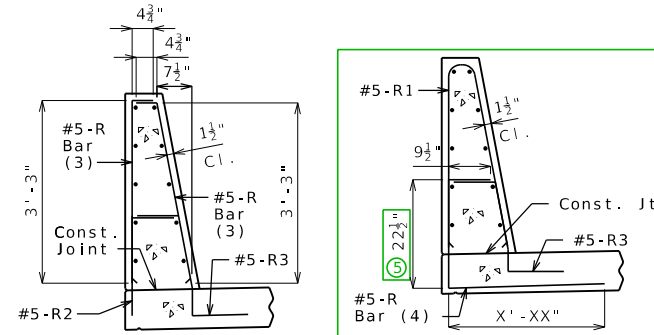


SECTION A-A

Use a minimum lap of 2'-6" for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.52 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

(3) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)

(4) The R2 bar and #5 bottom transverse slab bar in cantilever (prestressed panels only) combination may be furnished as one bar as shown, at the contractor's option.

**General Notes:**

\* Slip-formed option only.

Conventional forming or slip forming may be used. Saw cut joints may be used with conventional forming.

① Top of barrier shall be built parallel to grade and barrier joints (except at end bents) normal to grade.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Type D Barrier per linear foot.

Concrete in barrier shall be Class B-1.

② Measurement of barrier is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Joint sealant and backer rods shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

For slip-formed option, both sides of barrier shall have a vertically broomed finish and the top shall have a transversely broomed finish.

③ Plastic waterstop shall not be used with saw cut joints.

DESCRIPTION	DATE

DATE PREPARED 4/18/2025	
ROUTE	STATE
	MO
DISTRICT	SHEET NO.
	000
COUNTY	
JOB NO.	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MdDOT

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MDOTT (1-888-275-6636)

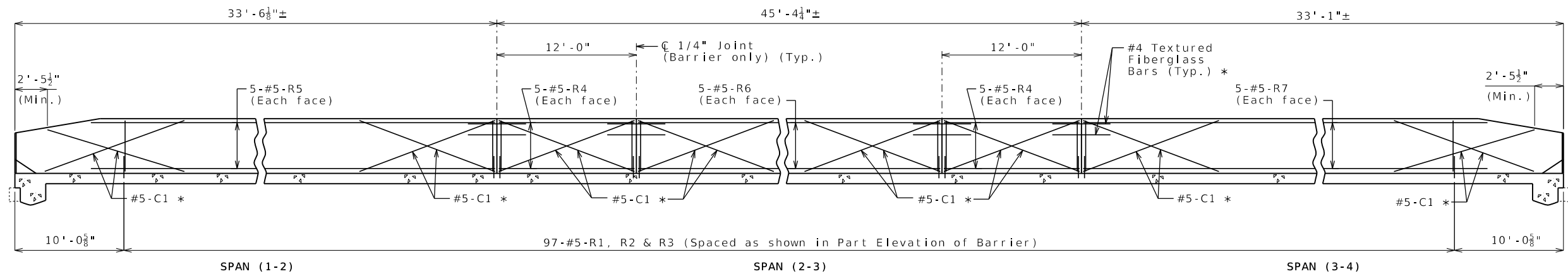
Detailed  
Checked

Note: This drawing is not to scale. Follow dimensions.

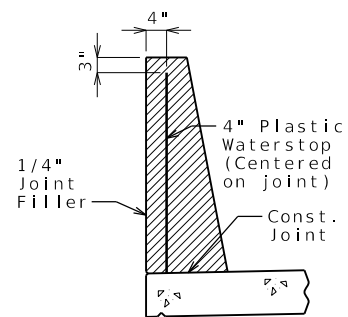
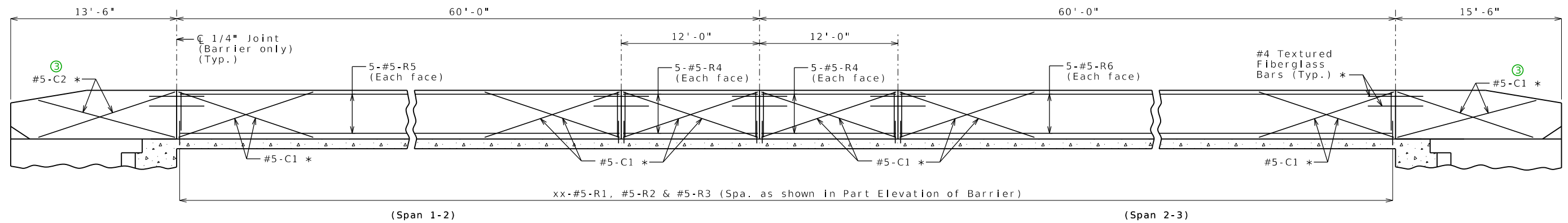
**TYPE D BARRIER**

Sheet No. of

EXAMPLE - REDECK



EXAMPLE - NEW BRIDGE

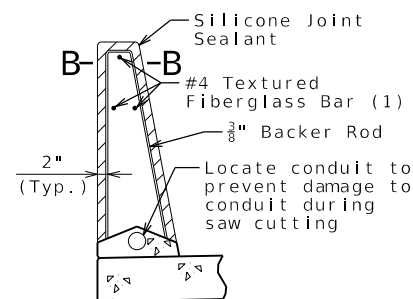


WATERSTOP DETAIL

Plastic waterstop shall be placed in all formed joints, except structures with superelevation, use on lower joints only.

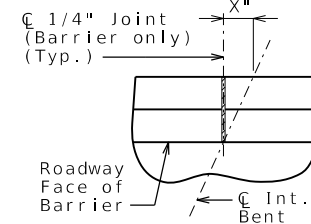
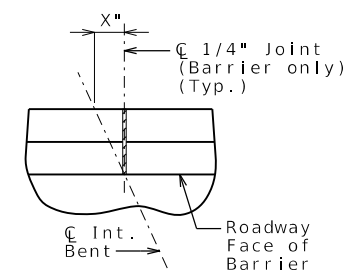
Cost of plastic waterstop, complete in place, will be considered completely covered by the contract unit price for Type D Barrier.

(Use for grade separation)



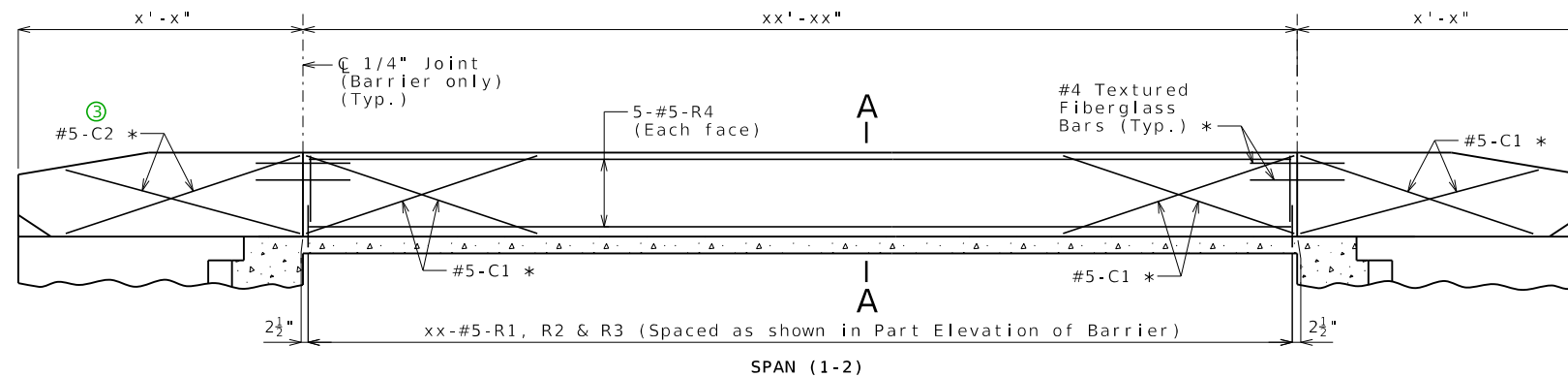
SECTION THRU SAW CUT JOINT

(Use when conduit is required)



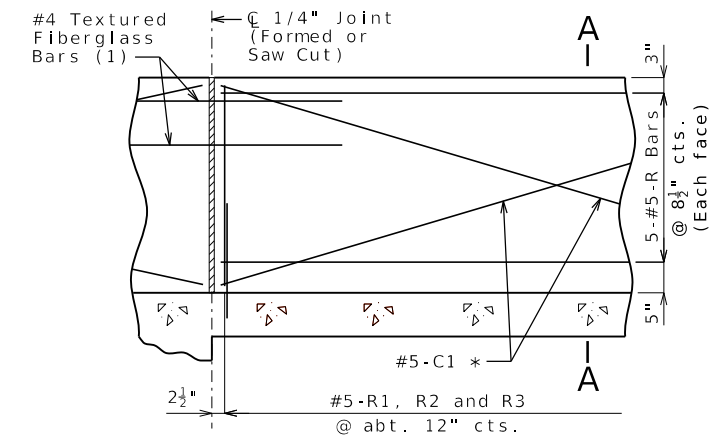
PART PLAN SHOWING JOINT LOCATION

(For skewed structures only)



**ELEVATION OF BARRIER**  
(Left barrier shown, right barrier similar)  
Longitudinal dimensions are horizontal.

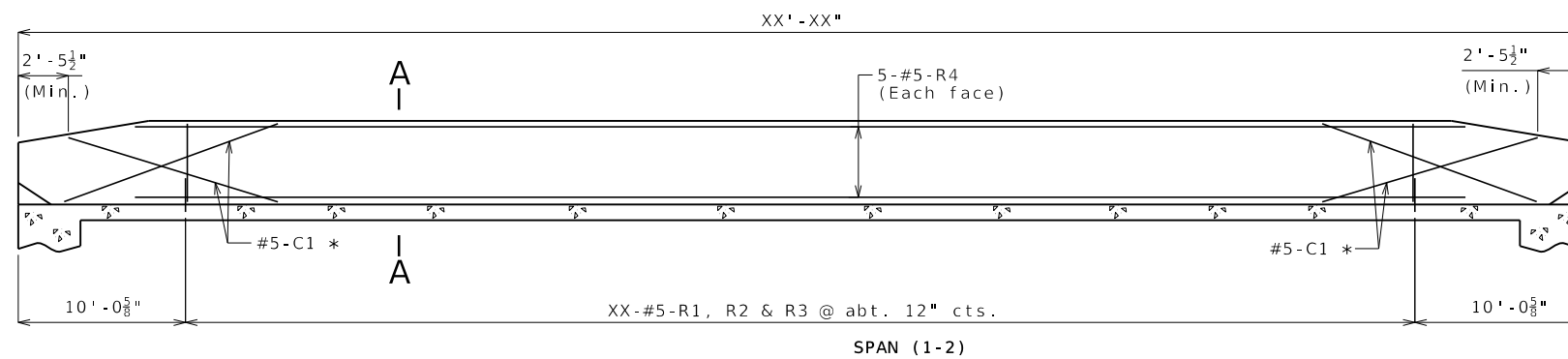
**(BARRIER ENDING ON WING)**



**PART ELEVATION OF BARRIER**

(1) Four feet long, centered on joint, slip-formed option only

ALTERNATE DETAIL FOR SINGLE SPAN ENDING ON WING



**ELEVATION OF BARRIER**  
(Left barrier shown, right barrier similar)  
Longitudinal dimensions are horizontal.

**(BARRIER ENDING AT END OF SLAB)**

When barrier ends at end of slab for single-span bridges, omit Part Elevation of Barrier, Section thru Saw Cut Joint, Part Elevation at Formed Joint, and Section B-B.

**General Notes:**

\* Slip-formed option only.

Conventional forming or slip forming may be used.

Top of barrier shall be built parallel to grade.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Type D Barrier per linear foot.

Concrete in barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot for each structure, measured along the outside top of slab from end of slab to end of slab.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

For slip-formed option, both sides of barrier shall have a vertically broomed finish and the top shall have a transversely broomed finish.