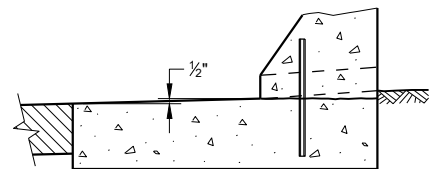
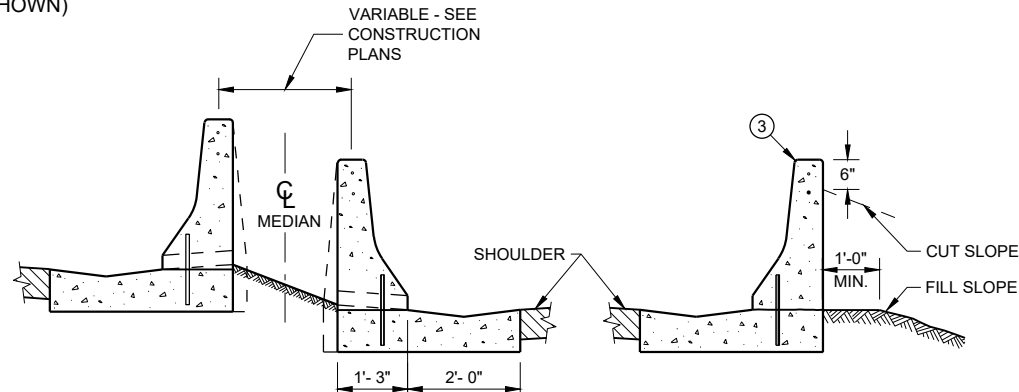


PLAN VIEW
TRANSITION DETAILS OF DOUBLE FACED
TO SINGLE FACED CONCRETE MEDIAN BARRIER

(FOOTINGS ARE NOT SHOWN)

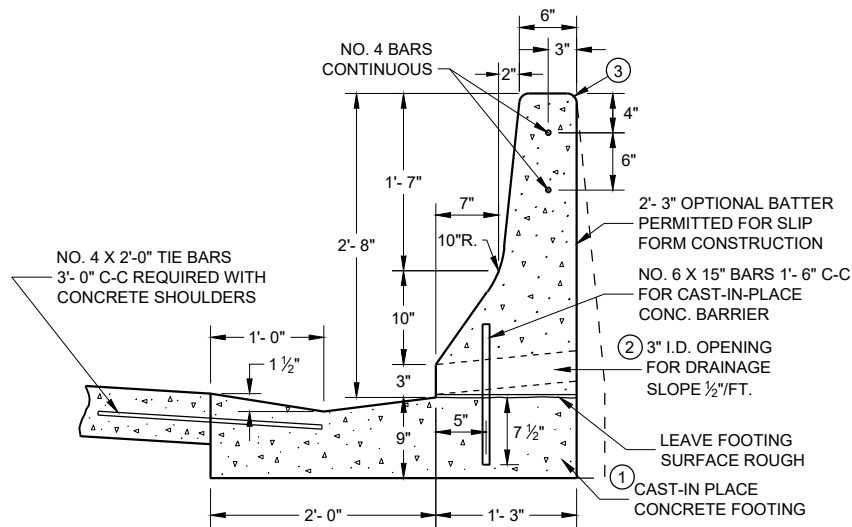


HIGH SIDE
CONCRETE BARRIER DETAIL

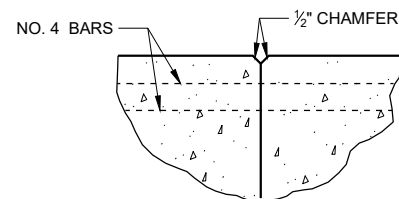


MEDIAN **SHOULDER**

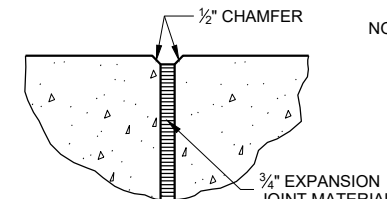
TYPICAL APPLICATIONS



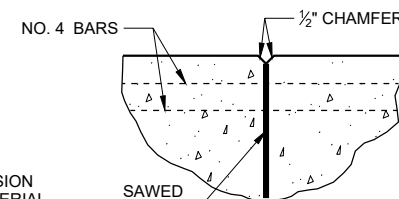
SECTION VIEW



CONSTRUCTION JOINT



EXPANSION JOINT
JOINT DETAILS



CONTRACTION JOINT

GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

4000 PSI AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

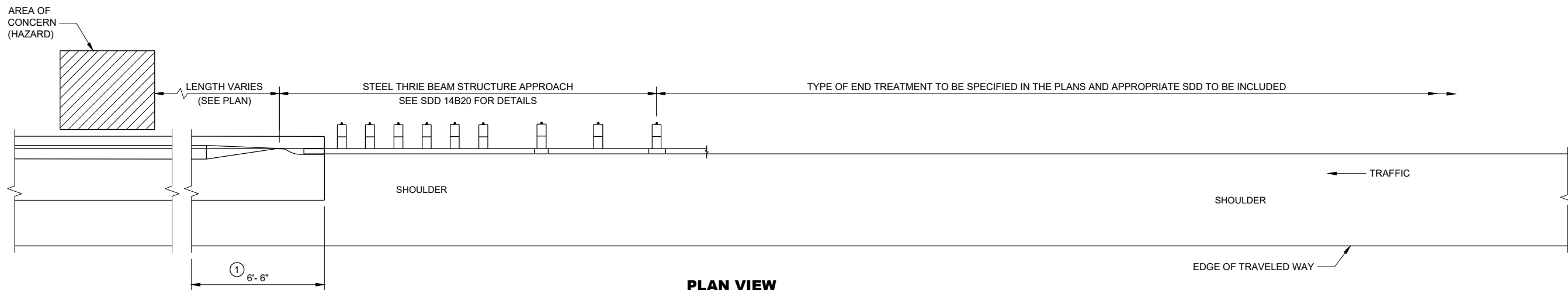
- BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN THE CONTRACT.
- OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.
- 3/4 -INCH BEVEL OR 1-INCH RADIUS (TYPICAL).
- NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.
- EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.
- SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.

CONCRETE BARRIER (DOUBLE FACED)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/16/2022
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

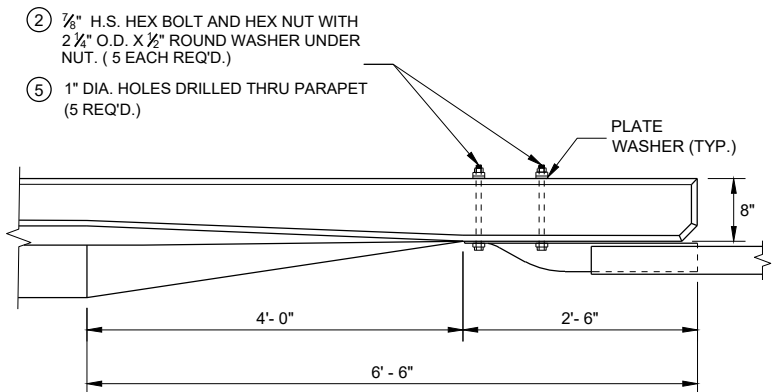


PLAN VIEW
TRANSITION TO STEEL PLATE BEAM GUARD
AND END TERMINAL

GENERAL NOTES

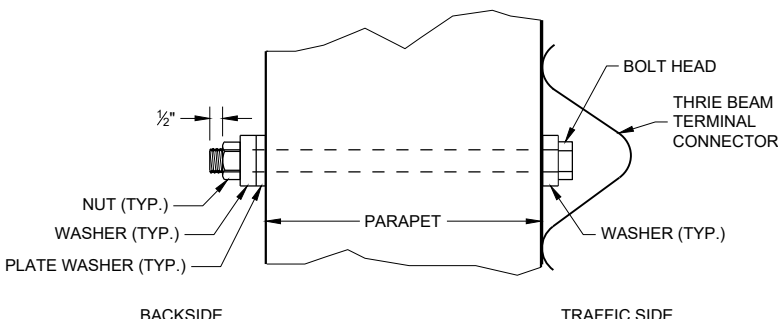
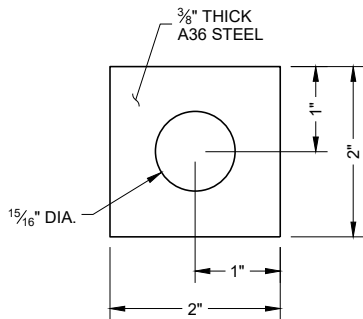
- ① A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ③ REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.
- ④ PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.
- ⑤ INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

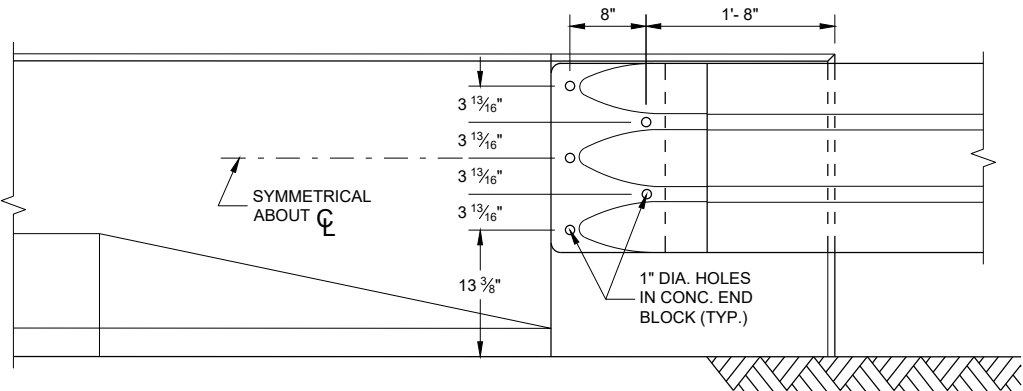


PLAN VIEW

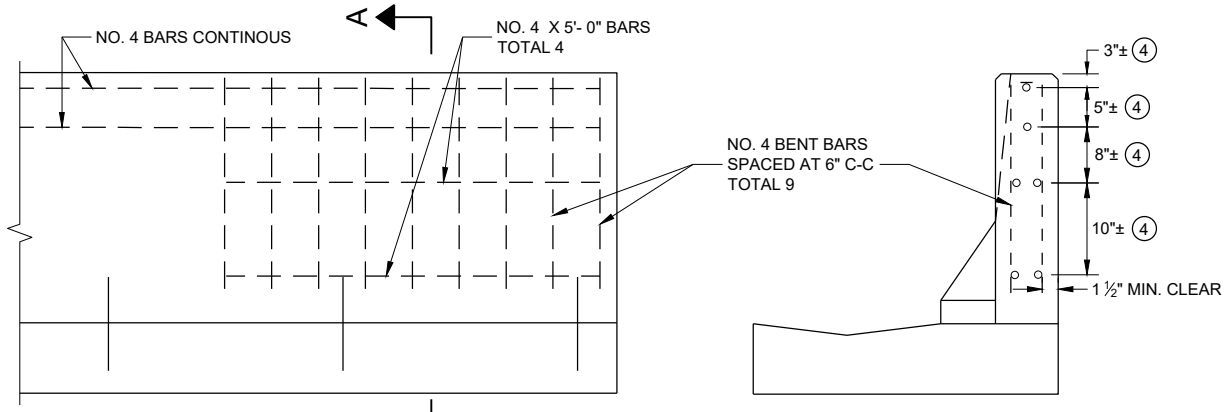
PLATE WASHER DETAIL



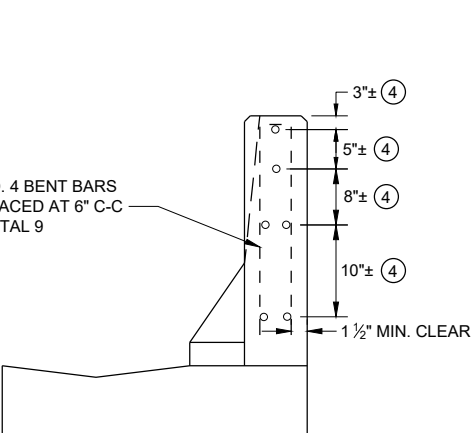
THRIE BEAM BOLT DETAIL



FRONT VIEW
CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW
REINFORCEMENT AT BARRIER END



BENT BAR DETAIL

CONCRETE BARRIER, SINGLE FACED (WITH ANCHORAGE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/16/2022 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

*Concrete Barrier, Single Faced (with Anchorage)***Reference:**[FDM 11-45-30](#)

AASHTO Roadside Design Guide

Bid items associated with this drawing:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
204.0157	Removing Concrete Barrier	LF
603.0105	Concrete Barrier Single-Faced 32 Inch	LF
603.0205	Concrete Barrier Double-Faced 32-Inch	LF
603.0405	Concrete Barrier Transition Section 32-Inch.....	LF
614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH
614.0200	Steel Thrie Beam Structure Approach	LF
614.0305	Steel Plate Beam Guard Class A.....	LF
614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH

Standardized Special Provisions associated with this drawing:STSP NUMBER TITLE

NONE

Other SDDs associated with this drawing:[SDD 14B11](#) Concrete Barrier (Double Faced) may be required with this drawing.[SDD 14B22](#) Concrete Barrier, Single Faced (with Anchorage) sheet "b" is required.**Design Notes:**

After August 2011, new installations of concrete barrier are to use single slope barrier. This SDD may be used to retrofit existing NJ concrete barrier. See [FDM 11-45-30](#) for more information.

Concrete barrier should be terminated with a Steel Thrie Beam Structure Approach, a crash cushion, or sand barrel array. Crash cushions and sand barrel arrays will require construction details and cross sections.

Contact Person:

Erik Emerson (608) 266-2842