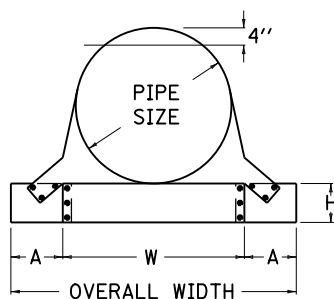
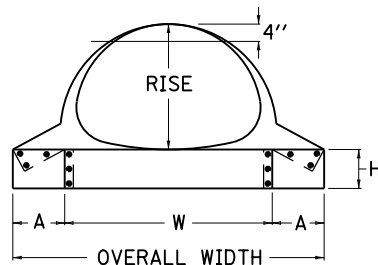


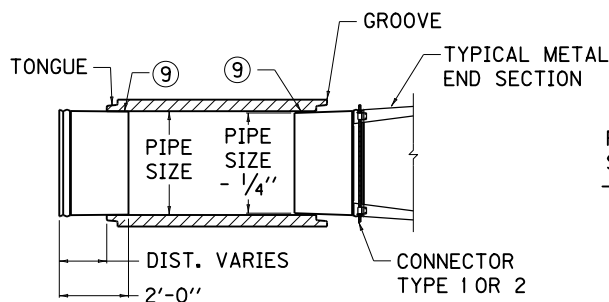
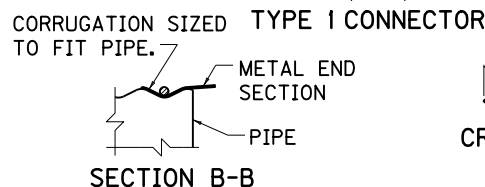
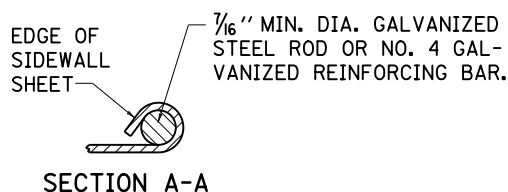
SIDE ELEVATION



END SECT. FRONT VIEW
CIRCULAR PIPE

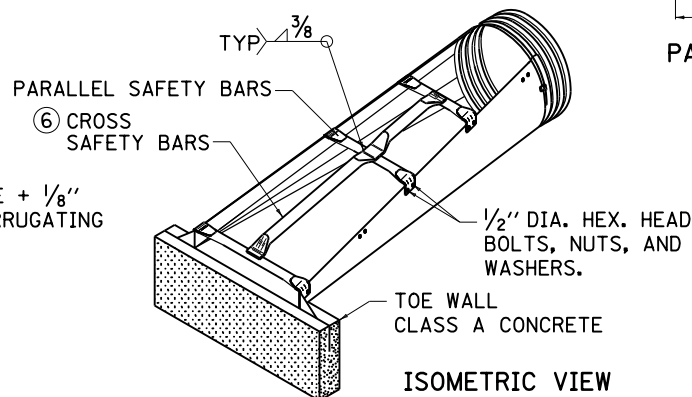
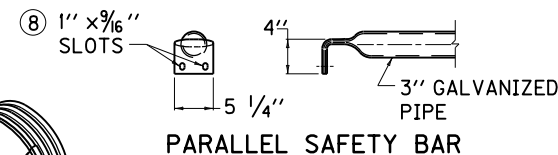
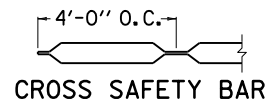
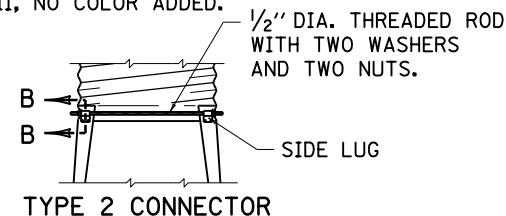


END SECT. FRONT VIEW
ARCHED PIPE



SMOOTH TAPERED SLEEVE FOR USE WITH CONCRETE PIPE

- ~ NOTES ~
- BID ITEM AND UNIT TO BID
METAL END SECTION TY \otimes \triangle IN EACH
- \otimes 3 = CROSSDRAIN STRUCTURE ON 4:1 SLOPE, 4 = CROSSDRAIN STRUCTURE ON 6:1 SLOPE
- \triangle SIZE IN INCHES
- BID ITEM EXAMPLE: METAL END SECTION TY 3-15 IN
- THE CONTRACT UNIT PRICE EACH FOR METAL END SECTION SHALL INCLUDE CLASS A CONCRETE, EXCAVATION, AND ALL INCIDENTALS NECESSARY TO COMPLETE ONE INSTALLATION AS DETAILED.
1. FABRICATE METAL END SECTIONS FROM GALVANIZED SHEETS CONFORMING TO AASHTO M218.
 2. METAL END SECTIONS & TAPERED SLEEVES SHALL BE ASPHALT COATED IN ACCORDANCE WITH SECT. 806 OF THE CURRENT KENTUCKY STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION. ASPHALT COATING IS NOT REQUIRED ON SAFETY BARS.
 3. SAFETY BARS SHALL BE REQUIRED ON ALL 30" ROUND PIPE AND LARGER.
 4. SAFETY BARS SHALL BE REQUIRED ON ALL 24" ELLIPTICAL EQUIVALENT PIPE AND LARGER.
 5. SAFETY BARS SHALL BE CONSTRUCTED OF SCHEDULE 40 GALVANIZED STEEL PIPE (COML. GRADE).
 6. CROSS SAFETY BARS SHALL BE SPACED A MAXIMUM OF 30" O.C. AND WELDED TO PARALLEL SAFETY BARS. GALVANIZING REQUIRED AFTER FABRICATION.
 7. THE TAPERED SLEEVE SHALL BE GALVANIZED SMOOTH METAL CONFORMING TO AASHTO M218, WITH A WALL THICKNESS AS FOLLOWS: 18" DIA. OR LESS = .079", 21" DIA. OR LARGER = .109".
 8. SLOTTED HOLES FOR SAFETY BAR ATTACHMENT SHALL BE PUNCHED PRIOR TO GALVANIZING. FIELD DRILLING OF HOLES SHALL NOT BE PERMITTED.
 9. WATERPROOF MASTIC CONFORMING TO 807.02.03 OF THE CURRENT KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHALL BE PLACED IN THE VOID BETWEEN THE TAPERED SLEEVE AND CONCRETE PIPE.
 10. FORM $\frac{1}{2}" \times 2\frac{2}{3}"$ CORRUGATIONS. MAINTAIN INSIDE DIAMETER OF SLEEVE. FINISHED END TO BE THE SAME DIAMETER AS CORRUGATED STEEL PIPE DIAMETER.
 11. ALL MISCELLANEOUS HARDWARE SHALL COMPLY WITH AASHTO M36.
 12. THE WELDS USED IN THE MANUFACTURE OF THE TAPERED SLEEVE FOR ELLIPTICAL CONCRETE PIPE SHALL BE REPAIRED IN ACCORDANCE WITH AASHTO M36 USING ZINC OXIDE-ZINC DUST PRIMER, FEDERAL SPECIFICATION TT-P-641, TYPE II, NO COLOR ADDED.



USE WITH CUR. STD. DWG.
RDB-160

KENTUCKY DEPARTMENT OF HIGHWAYS		
METAL END SECTION TYPE 3 AND 4 (CROSS STRUCTURES)		
STANDARD DRAWING NO. RDB-155-02		
SUBMITTED <i>William P. Gable</i>	DATE	12-01-15
DIRECTOR, DIVISION OF DESIGN		
APPROVED <i>[Signature]</i>	DATE	12-01-15
STATE HIGHWAY ENGINEER		