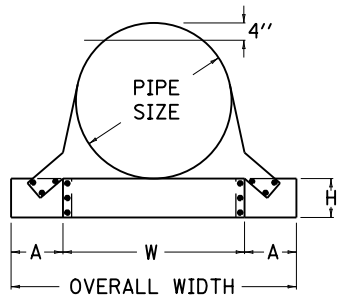
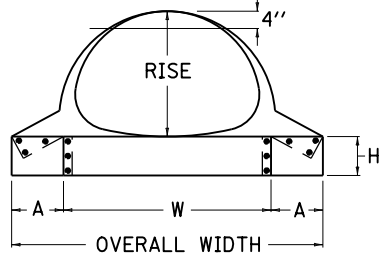


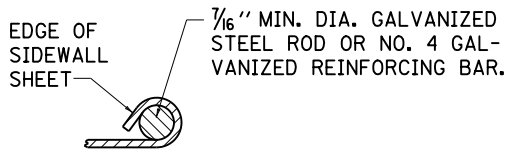
SIDE ELEVATION



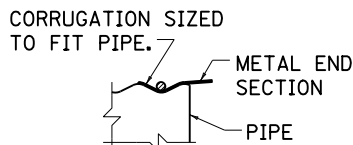
END SECT. FRONT VIEW
CIRCULAR PIPE



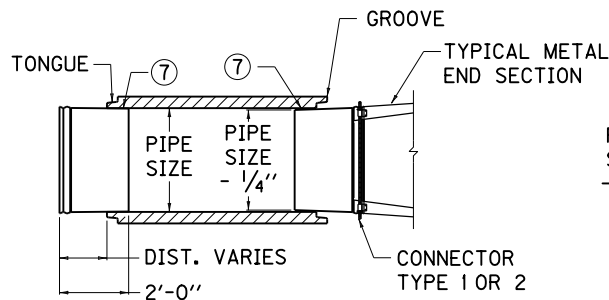
END SECT. FRONT VIEW
ARCHED PIPE



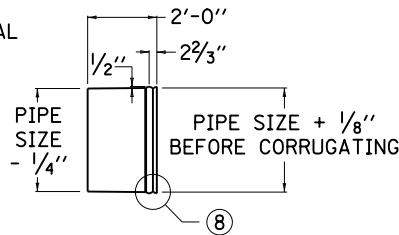
SECTION A-A



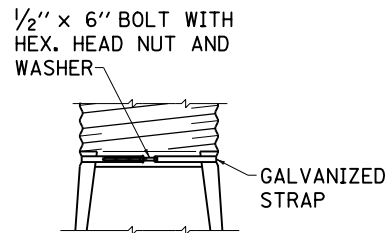
SECTION B-B



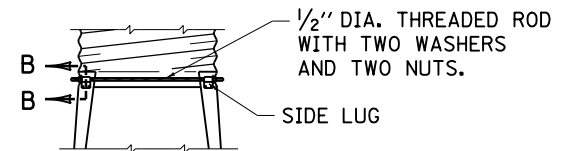
SMOOTH TAPERED SLEEVE FOR USE WITH CONCRETE PIPE



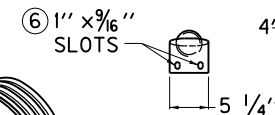
⑧



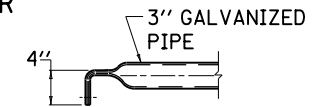
TYPE 1 CONNECTOR



TYPE 2 CONNECTOR

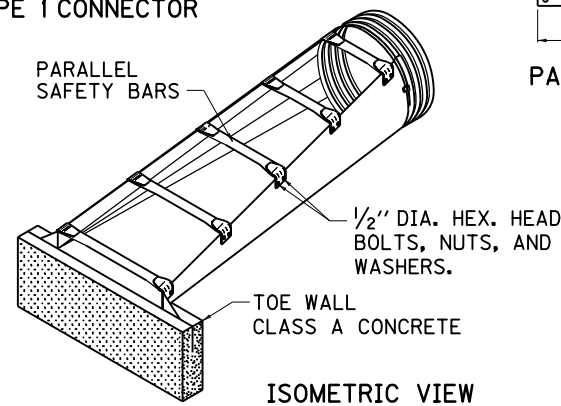


PARALLEL SAFETY BAR



NOTES

- BID ITEM:
METAL END SECT. TY. \otimes - \triangle INCH
 \otimes 1 = PARALLEL STRUCTURE ON 6:1 SLOPE, 2 = PARALLEL STRUCTURE ON 10:1 SLOPE
 \triangle SIZE IN INCHES
 BID ITEM EXAMPLE: METAL END SECT. TY. 1 - 15 INCH.
 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.
- METAL END SECTIONS SHALL BE FABRICATED FROM GALVANIZED SHEETS, CONFORMING TO AASHTO M218.
 - METAL END SECTIONS & TAPERED SLEEVES SHALL BE ASPHALT COATED IN ACCORDANCE WITH SECTION 806 OF THE CURRENT KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ASPHALT COATING IS NOT REQUIRED ON SAFETY BARS.
 - SAFETY BARS SHALL BE REQUIRED ON ALL METAL END SECTIONS CONSTRUCTED PARALLEL TO THE ROADWAY.
 - SAFETY BARS SHALL BE CONSTRUCTED OF SCHEDULE 40 GALVANIZED STEEL PIPE (COMMERCIAL GRADE).
 - 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".
 - SLOTTED HOLES FOR SAFETY GRATE ATTACHMENT SHALL BE PUNCHED PRIOR TO GALVANIZING. FIELD DRILLING OF HOLES SHALL NOT BE PERMITTED.
 - WATERPROOF MASTIC CONFORMING TO 807.02.03 OF THE STD. SPECS. SHALL BE PLACED IN THE VOID BETWEEN THE TAPERED SLEEVE AND CONCRETE PIPE.
 - FORM 1/2" x 2 2/3" CORRUGATIONS. MAINTAIN INSIDE DIAMETER OF SLEEVE. FINISHED END TO BE THE SAME DIAMETER AS CORRUGATED STEEL PIPE DIAMETER.
 - ALL MISCELLANEOUS HARDWARE SHALL COMPLY WITH AASHTO M36.
 - THE WELDS USED IN THE MANUFACTURE OF THE TAPERED SLEEVE FOR ELLIPTICAL CONC. 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.
 - TYPE 1 = 6", TYPE 2 = 4"



ISOMETRIC VIEW

USE WITH CUR. STD. DWG.
RDB-160

KENTUCKY DEPARTMENT OF HIGHWAYS		
METAL END SECTION TYPE 1 AND 2 (PARALLEL STRUCTURES)		
STANDARD DRAWING NO. RDB-150-01		
SUBMITTED	John B. Sackett DIRECTOR DIVISION OF DESIGN	12-1-99 DATE
APPROVED	J. M. Howell STATE HIGHWAY ENGINEER	12-1-99 DATE