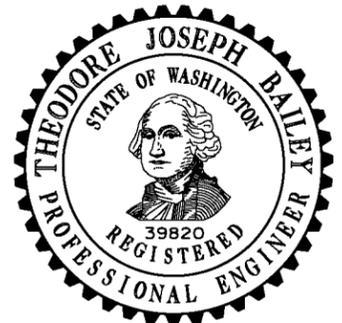
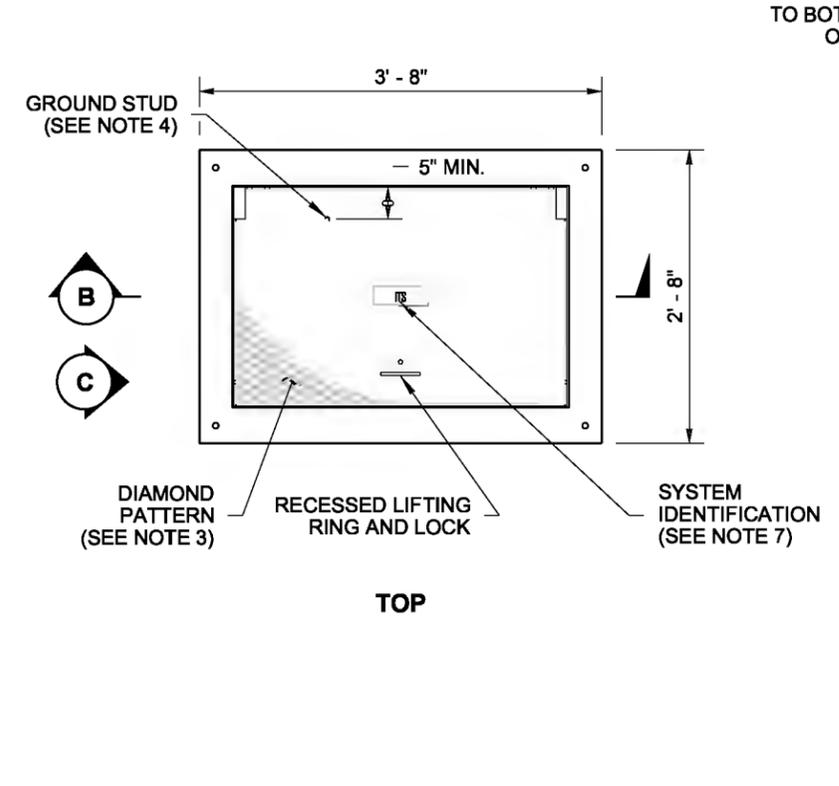
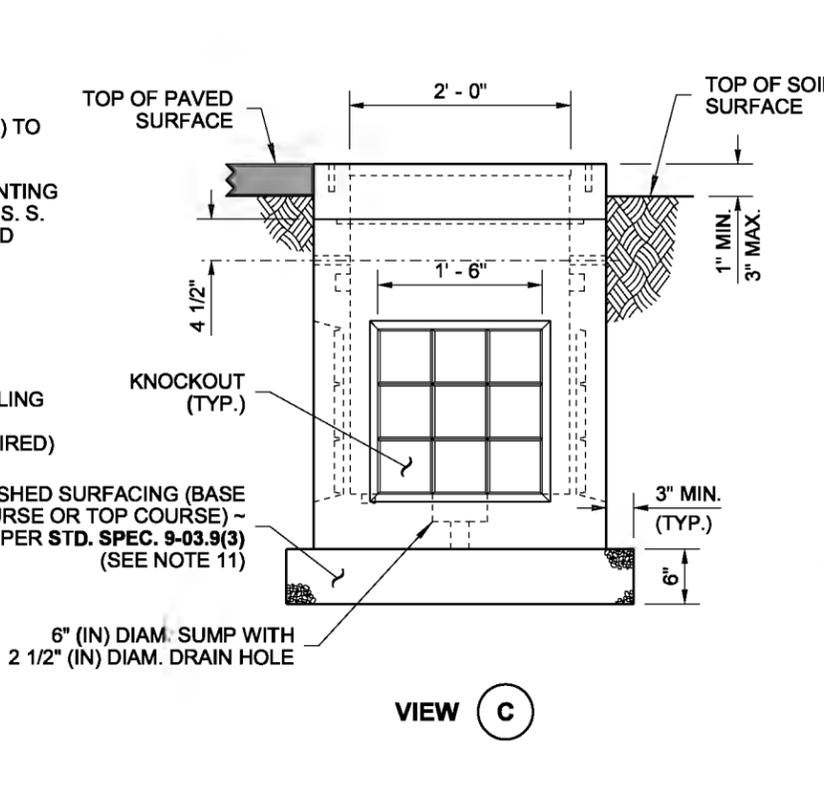
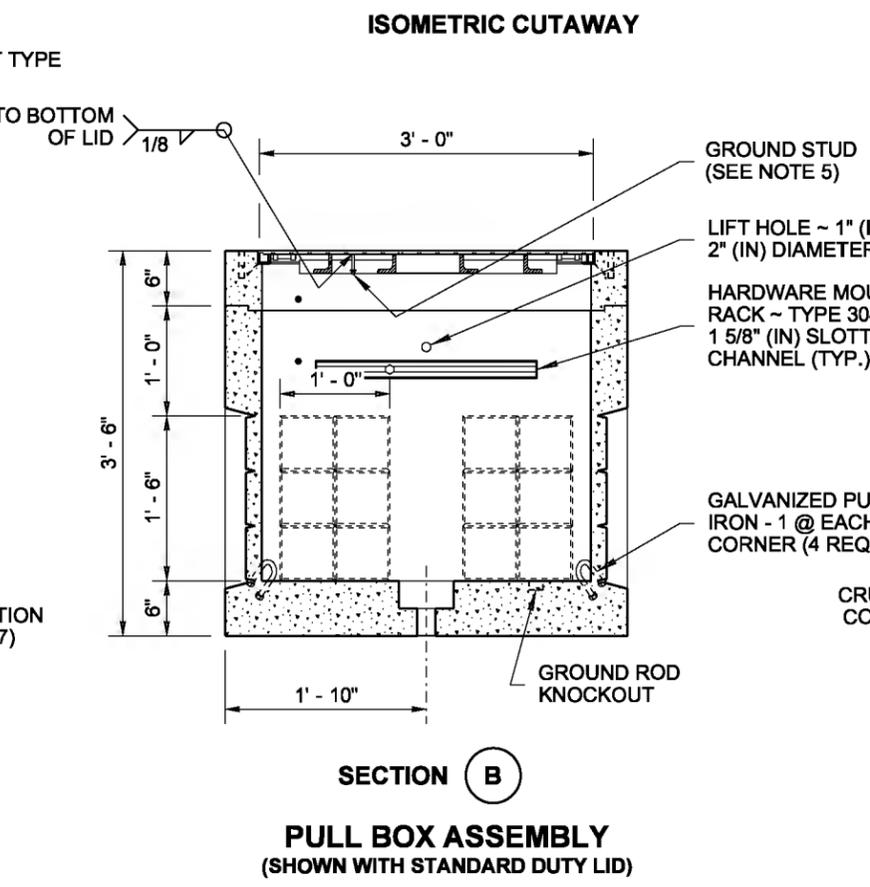


- NOTES**
1. A Heavy Duty Lid is required for all Pull Boxes placed in the traveled way or paved shoulder. A Standard Duty Lid shall be used for all other locations, including boxes placed in sidewalks (does not include driveways), walkways, or shared use paths.
 2. The Heavy Duty Lid thickness shall be 9" (in) for all new installations. Where an existing Pull Box is to have a new Heavy Duty Lid installed, the lid thickness shall either be 6" (in), where no overlay is called for in the Contract, or it shall be fabricated such that the lid is flush with the top of the new overlay.
 3. Minimum lid thickness shown. The diamond pattern shall be a minimum of 3/32" (in) thick.
 4. Standard Duty Pull Boxes installed in sidewalks, walkways, or shared-use paths shall have a slip-resistant coating on lid and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, or shared-use paths. The non-slip lid shall be identified with permanent marking on the underside indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" (in) line thickness formed with a weld bead and shall be placed prior to hot-dip galvanizing.
 5. For Standard Duty Lids, attach a 1/4-20 UNC x 1" (in) S. S. ground stud, coated with anti-sieze compound. For Heavy Duty Lids, install a 1/2-13 UNC x 1 1/4" (in) S. S. bolt in a 5/8" (in) diameter cored hole in the ductile iron lid gusset as a ground stud. All ground studs shall include (3) S. S. nuts and (2) S. S. flat washers.
 6. See Contract Plans and **Standard Plan J-60.05** for bonding jumper requirements. Bonding jumper between lid and frame shall be #8 AWG (min.) x 4' (ft) tinned braided copper.
 7. The system identification letters shall be 1/8" (in) line thickness formed by casting or with a mild steel weld bead. See **COVER MARKING DETAIL**. See **Standard Specification 9-29.2(4)**. Ductile iron lid lettering shall be recessed.
 8. Cement concrete shall be Class 4000.
 9. Plastic plugs shall be put into the lid inserts after fabrication and the lid installation.
 10. Capacity - conduit diameter = 40" (in).
 11. Excavate material, place 6" (in) crushed surfacing pad per **Standard Specification Section 8-20.3(6)**.
 12. This drawing depicts a typical Pull Box assembly. Reinforcing not shown. Each manufacturer's Pull Box assembly will vary. Refer to the approved manufacturer's shop drawings for all dimensions and the actual arrangement.
 13. The lid is an assembly consisting of the metal lid(s) and frame, reinforcing steel, brass ground inserts, and concrete.
 14. Field bend #3 reinforcing bar to allow conduit into the Pull Box. Field bend reinforcing bar back into place, wire tie in (2) places, and cast in commercial concrete (commercial concrete only allowed for box bottom/wall completion).

DRAWN BY: LISA CYFORD



PULL BOX

STANDARD PLAN J-90.10-02

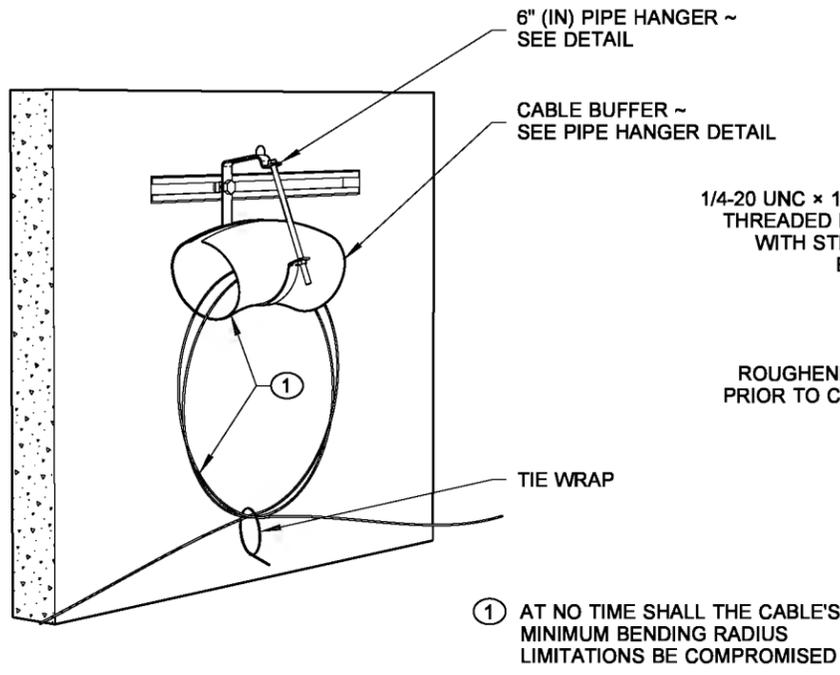
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER

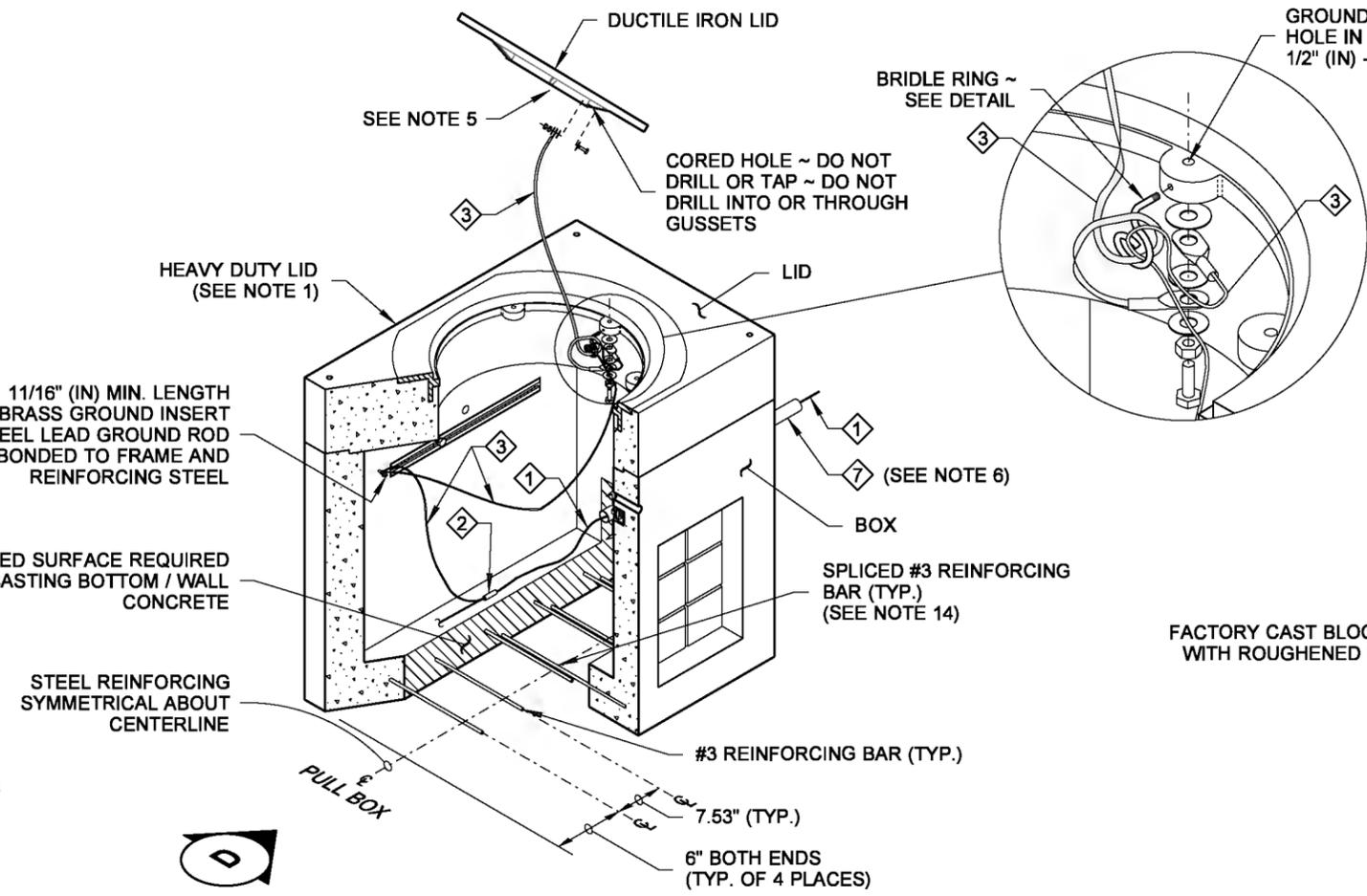
Washington State Department of Transportation

DRAWN BY: LISA CYFORD



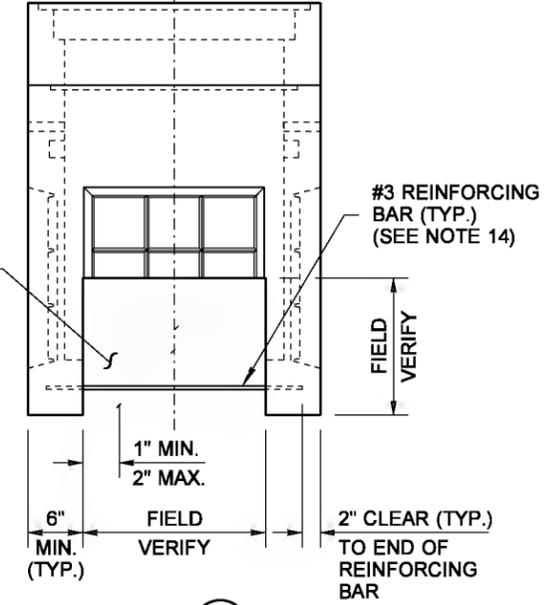
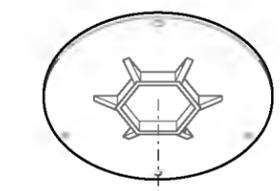
INTERNAL OBLIQUE VIEW
 COIL THE CABLE BY USING A "FIGURE 8"
 FOLDED IN THE MIDDLE TO FORM A LOOP

① AT NO TIME SHALL THE CABLE'S
 MINIMUM BENDING RADIUS
 LIMITATIONS BE COMPROMISED



ISOMETRIC CUTAWAY

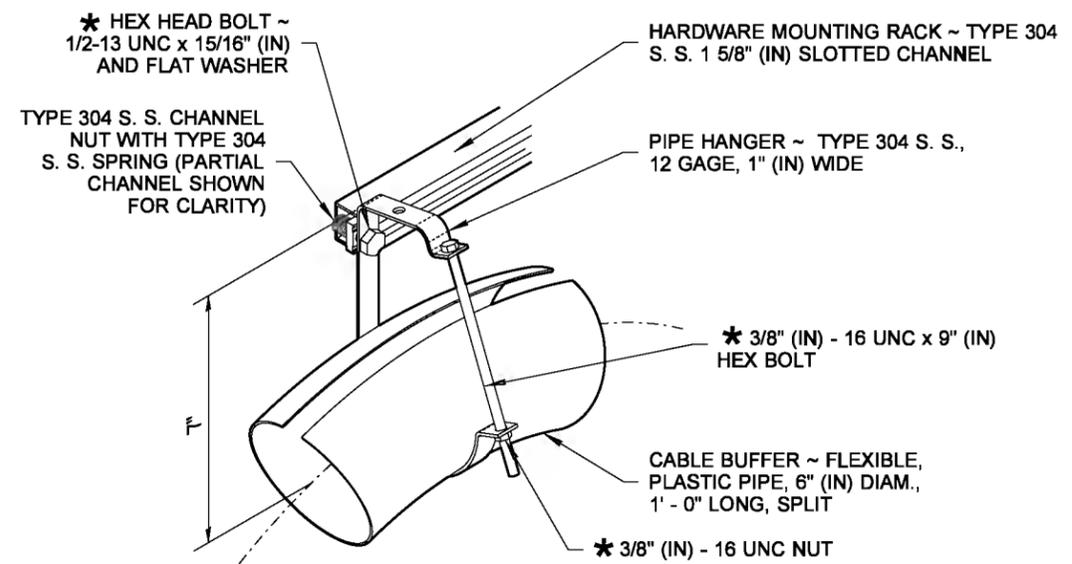
GROUND STUD - THREAD INTO PREDRILLED
 HOLE IN FRAME FLANGE, DRILL AND TAP
 1/2" (IN) - 13 (SEE NOTE 5)



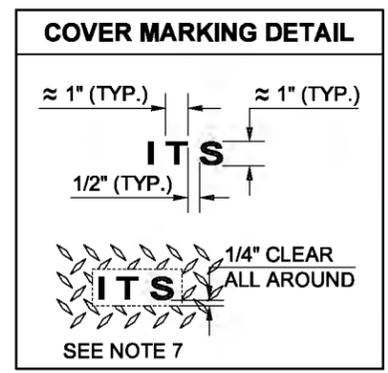
VIEW D

OPEN BOTTOM PULL BOX ASSEMBLY
 (SHOWN WITH HEAVY DUTY LID)
 SEE PULL BOX, SHEET 1, FOR DIMENSIONS NOT SHOWN

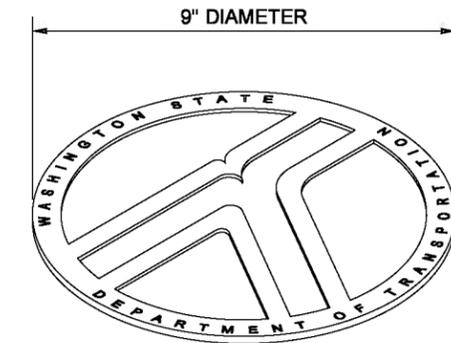
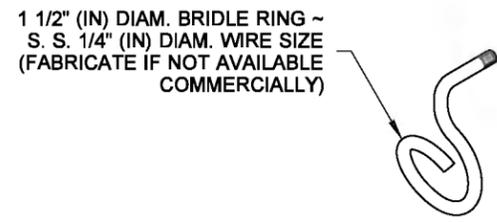
* BOLTS, NUTS AND WASHERS ~
 ASTM F593 OR A193,
 TYPE 304 OR TYPE 316
 STAINLESS STEEL (S.S.)



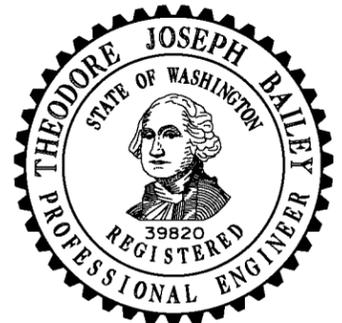
PIPE HANGER DETAIL
 FABRICATE IF NOT AVAILABLE COMMERCIALY



BRIDLE RING DETAIL



LOGO DETAIL



PULL BOX
STANDARD PLAN J-90.10-02

SHEET 2 OF 2 SHEETS
 APPROVED FOR PUBLICATION