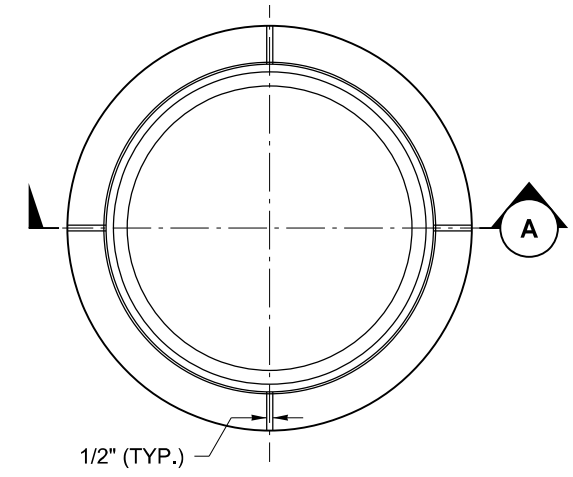
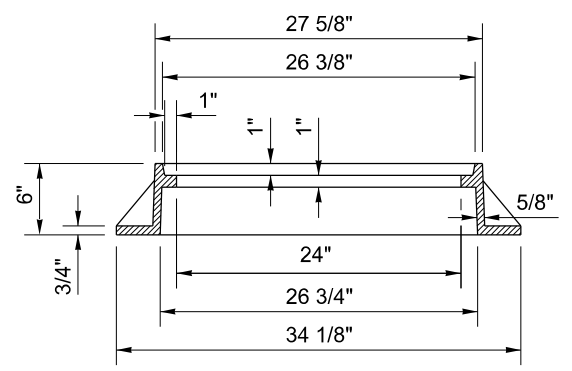


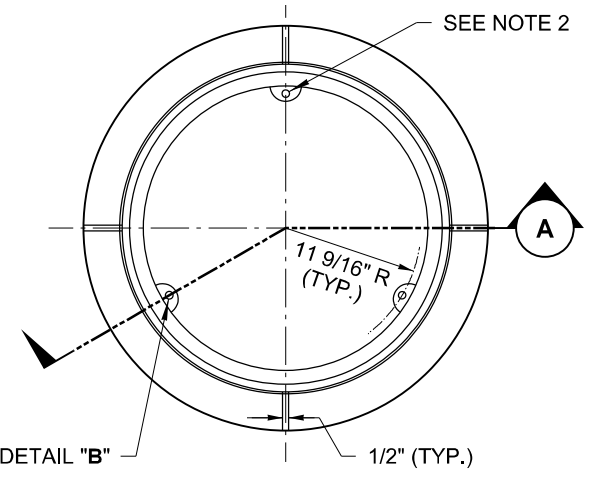
**BLIND PICK NOTCH
DETAIL "A"**



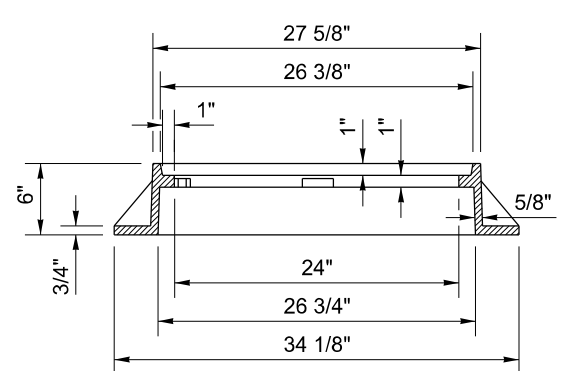
RING PLAN



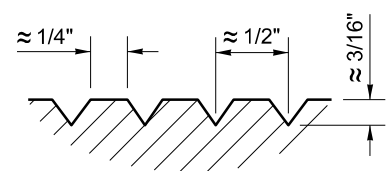
RING SECTION A



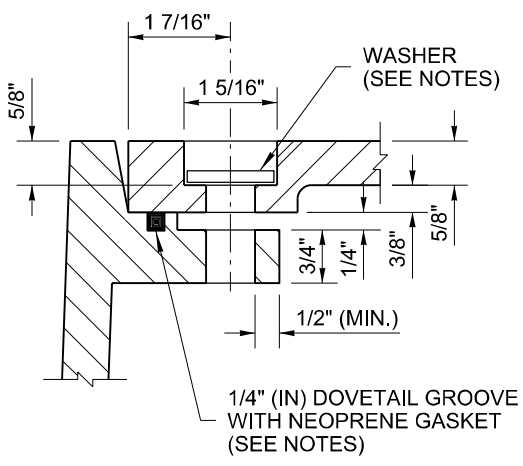
RING PLAN



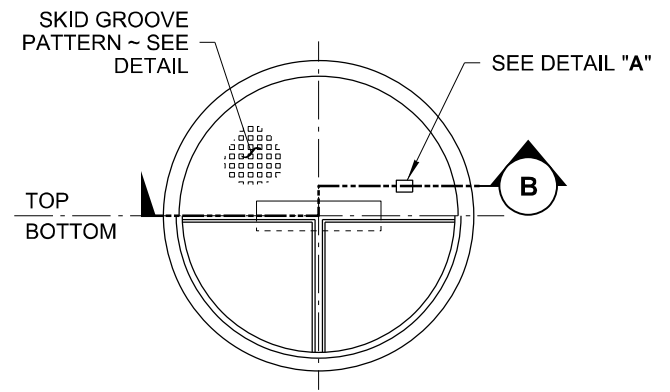
RING SECTION A



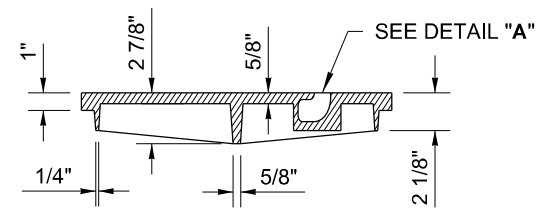
**SKID GROOVE PATTERN
DETAIL**



**BOLT-DOWN / WATERTIGHT
DETAIL "B"**

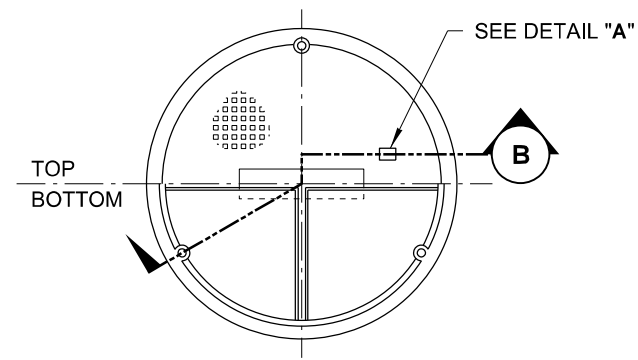


COVER PLAN

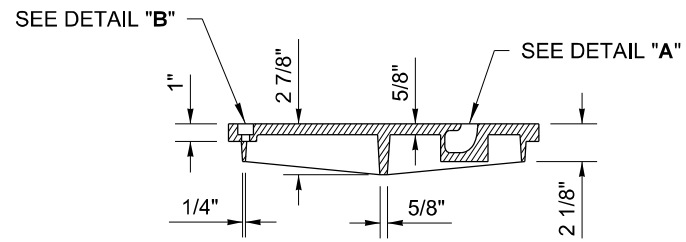


**COVER SECTION B
(SEE NOTE 7)**

**STANDARD
TYPE 1**

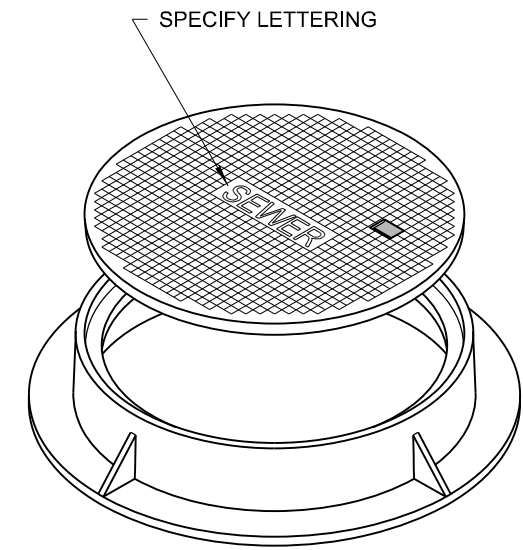


COVER PLAN



**COVER SECTION B
(SEE NOTE 7)**

**BOLT-DOWN / WATERTIGHT
TYPE 2**



ISOMETRIC VIEW

NOTES

1. The gasket and groove may be in the seat (frame) or in the underside of the cover. The gasket may be "T" shaped in section. The groove may be cast or machined.
2. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S) 5/8" - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt down holes varies by manufacturer.
3. For bolt-down manhole ring and covers that are not designated "Watertight," the neoprene gasket, groove, and washer are not required.
4. Washer shall be neoprene (Detail "B").
5. In lieu of blind pick notch for manhole covers, a single 1" (in) pick hole is acceptable. Hole location and number of holes may vary by manufacturer.
6. Alternative reinforcing designs are acceptable in lieu of the rib design.
7. For clarity, the vertical scale of the Cover Section has been exaggerated, it is 1.5 times the horizontal scale (1H:1.5V).



Julie Heilman
Heilman, Julie
Feb 20 2018 12:55 PM

**CIRCULAR FRAME (RING)
AND COVER**

STANDARD PLAN B-30.70-04

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Feb 27 2018 7:59 AM

STATE DESIGN ENGINEER
Washington State Department of Transportation

**SUPPLEMENTAL TO STANDARD PLAN
B-30.70-04**

Modify the Standard Plan as follows:

Notes:

1. Manhole covers shall have double 1" pick holes. The pick holes shall completely penetrate the cover.

2. Sanitary sewer covers shall be marked with the word "SANITARY".