



**CROSS SECTION**  
NTS

**NOTES:**

- 1) MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH AASHTO M-199 (ASTM C 478) UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
- 2) HANDHOLDS IN ADJUSTMENT SECTION SHALL HAVE 3" MIN. CLEARANCE. STEPS IN MANHOLE SHALL HAVE 6" MIN. CLEARANCE.
- 3) ALL REINFORCED CAST IN PLACE CONCRETE SHALL BE CLASS 4000. NON-REINFORCED CONCRETE IN CHANNEL AND SHELF SHALL BE COMMERCIAL. ALL PRECAST CONCRETE SHALL BE CLASS 4000.
- 4) PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS WITH A WALL THICKNESS OF 2" MIN.
- 5) KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAMETER PLUS MANHOLE WALL THICKNESS. MAXIMUM HOLE SIZE IS 36" FOR 48" MANHOLE, 42" FOR 54" MANHOLE; DISTANCE BETWEEN HOLES IS 8" MIN. MAXIMUM HOLE SIZE IS 60" FOR 72" MANHOLE, 84" FOR 96" MANHOLE; DISTANCE BETWEEN HOLES IS 12" MINIMUM.
- 6) ALL BASE REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 P.S.I. AND BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MINIMUM CLEARANCE FROM TOP OF BASE.
- 7) FOR ADDITIONAL MANHOLE DETAILS SEE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS B-15.20-01, B-15.40-01, OR B-15.60-02.

**SEWER MANHOLE**



APPROVED BY: *MN* DATE: 3/10/2020  
County Engineer: \_\_\_\_\_

REVISION:	DESCRIPTION:	DATE:
D.K.	STANDARD REVIEW	10-25-11
J.M.	STANDARD REVIEW	12-18-19

STANDARD PLAN  
**SS-4**  
SHEET 1 OF 1  
FILE NAME: