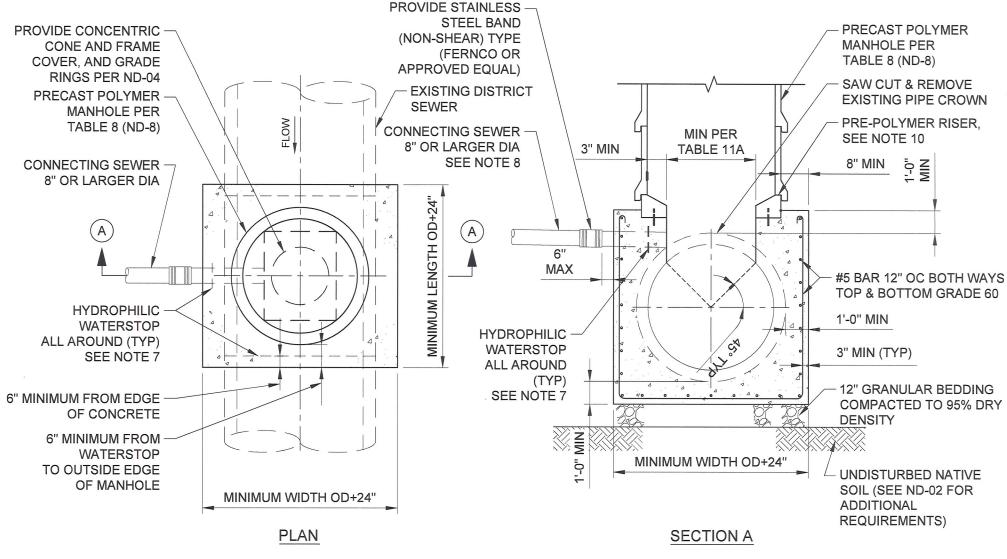
THIS STANDARD DRAWING SHALL BE USED FOR SETTING MANHOLES ON CONCRETE DISTRICT SEWERS WITH DIAMETERS 48" DIA OR LARGER. THIS DETAIL SHALL NOT APPLY TO NEW DISTRICT SANITARY SEWER AND MANHOLE CONSTRUCTION.





NORTH DAVIS SEWER DISTRICT

ND-08 Standard Manhole Detail 48" DIA Concrete Sewer or Larger 1 of 3

NOTES:

- CONTRACTOR MUST NOTIFY THE DISTRICT 48 HOURS BEFORE WORK BEGINS.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING SEWER AND OTHER UTILITIES, PROPER BACKFILLING, COMPACTING, AND SURFACE RESTORATION.
- 3. EXISTING DISTRICT SEWERS SHALL BE FULLY SUPPORTED AT ALL TIMES. CUT EXISTING SEWER TO NEAT STRAIGHT LINES WITH CUTTING TOOLS SUITABLE FOR THE PIPE MATERIAL. DAMAGED PIPE SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE DISTRICT.
- 4. WHERE DEPTH OF COVER OVER THE TOP OF PIPE EXCEEDS 10 FEET, REINFORCEMENT REQUIREMENTS SHALL BE REVIEWED AND APPROVED BY A UTAH LICENSED CIVIL OR STRUCTURAL ENGINEER.
- 5. CONCRETE SHALL BE TYPE I/II PORTLAND CEMENT PER ASTM C150 WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI PER ASTM C39. NO ADDITIVES SHALL BE PERMITTED WITHOUT PRIOR APPROVAL BY THE DISTRICT. ENCASEMENT SHALL BE CAST IN A SINGLE POUR. ALL EXPOSED CEMENTITIOUS CONCRETE MUST BE PROVIDED WITH CORROSION PROTECTION.
- 6. WHERE EXISTING DISTRICT PIPES HAVE BEEN REHABILITATED WITH CURED-IN-PLACE PIPE LINERS, CIPP LINERS SHALL BE CUT AND THE CIPP LINER ROUGHENED AND SEALED WITH AN EPOXY COATING AND SECURED BY AN END SEAL APPROVED BY THE DISTRICT.

- 7. HYDROPHILIC WATERSTOPS MUST BE PROVIDED BETWEEN THE PIPE AND CAST CONCRETE, BOTH SIDES, ALL AROUND (GREENSTREAK HYDROTITE OR APPROVED EQUAL). CLEAN PIPE USING WIRE BRUSH, POWER WASH, OR SAND BLAST TO PROVIDE A CLEAN, DURABLE SURFACE. SECURE WATERSTOP TO PIPE USING MANUFACTURER'S RECOMMENDED METHODS. APPLY LAYER OF GREENSTREAK LEAKMASTER OR APPROVED EQUAL BETWEEN WATERSTOP AND PIPE.
- 8. INVERTS OF CONNECTING PIPE SHALL MATCH THE CROWN OF EXISTING DISTRICT PIPE OR PROVIDED PER ND-17 OR ND-18. SAW CUT AND REMOVE EXISTING PIPE CROWN AS SHOWN OR AS OTHERWISE DIRECTED BY THE DISTRICT. CONSTRUCT SLOPING BENCH AND CHANNEL SHAPED TO FORM A SMOOTH FLOW SURFACE.
- 9. MINIMUM MANHOLE DIAMETER SHALL BE AS SHOWN IN TABLE 8 (ND-08). PRECAST MANHOLES COMPONENTS SHALL BE PROVIDED IN ACCORDANCE WITH ND-12.
- 10. PRE-POLYMER RISER TO BE SET AND TIED TO BASE. PROVIDE (8) #4 BARS EQUALLY SPACED DOWELS CAST INTO POLYMER RISER AT TIME OF FABRICATION. MIN 6" EMBEDMENT INTO CAST CONCRETE TIED TO ENCASEMENT REBAR. WET SET RISER SECTIONS SHALL NOT BE ALLOWED.
- 11. SEE ND-06 FOR ACCEPTANCE TESTING, FINAL COMPLETION, AND WARRANTY REQUIREMENTS.



NORTH DAVIS SEWER DISTRICT

ND-08 Standard Manhole Detail 48" DIA Concrete Sewer or Larger 2 of 3

TABLE 8. ND-08					
DISTRICT SEWER NOMINAL DIA (IN)	MANHOLE NOMINAL DIA (IN)	MIN ENCASEMENT WIDTH (IN)	MIN ENCASEMENT LENGTH (IN)	LENGTH CROWN REMOVAL (IN)	MANHOLE DETAIL * **
<48	PER ND-03	N/A	N/A	N/A	ND-12
54	60	90	90	48	ND-12
60	72	96	102	60	ND-12
66	72	104	102	60	ND-12
72	72	110	102	60	ND-12
78	72	118	102	60	ND-12
84	84	124	116	72	ND-14

^{*} Provide Manholes per ND-03, Polymer Concrete manhole with precast base unless otherwise directed by the District.



^{**}Doghouse manholes may only be provided where directed by the District.