



**NOTES:**

1. CONCRETE SHALL BE PLACED 10' UPSTREAM FROM EVERY MANHOLE. ADDITIONAL CONCRETE COLLAR LOCATIONS INCLUDE ON EITHER SIDE OF A STREAM/DITCH LINE OR UPON RECOMMENDATIONS OF THE CITY OF PORTLAND UTILITY DEPARTMENT.
2. CONCRETE COLLAR SHALL PERTRUDE INTO NATIVE SOIL A MINIMUM OF 12" ON BOTTOM AND SIDE OF TRENCH AND EXTEND TO A MINIMUM OF 1' BELOW THE SURFACE ELEVATION.

**CONCRETE COLLAR**

N.T.S.



**CITY OF PORTLAND**

DEPARTMENT OF UTILITIES - SEWER  
STANDARD SEWER DETAILS

REVISION NO: 4  
DATE: 06/05/2024

WW-09