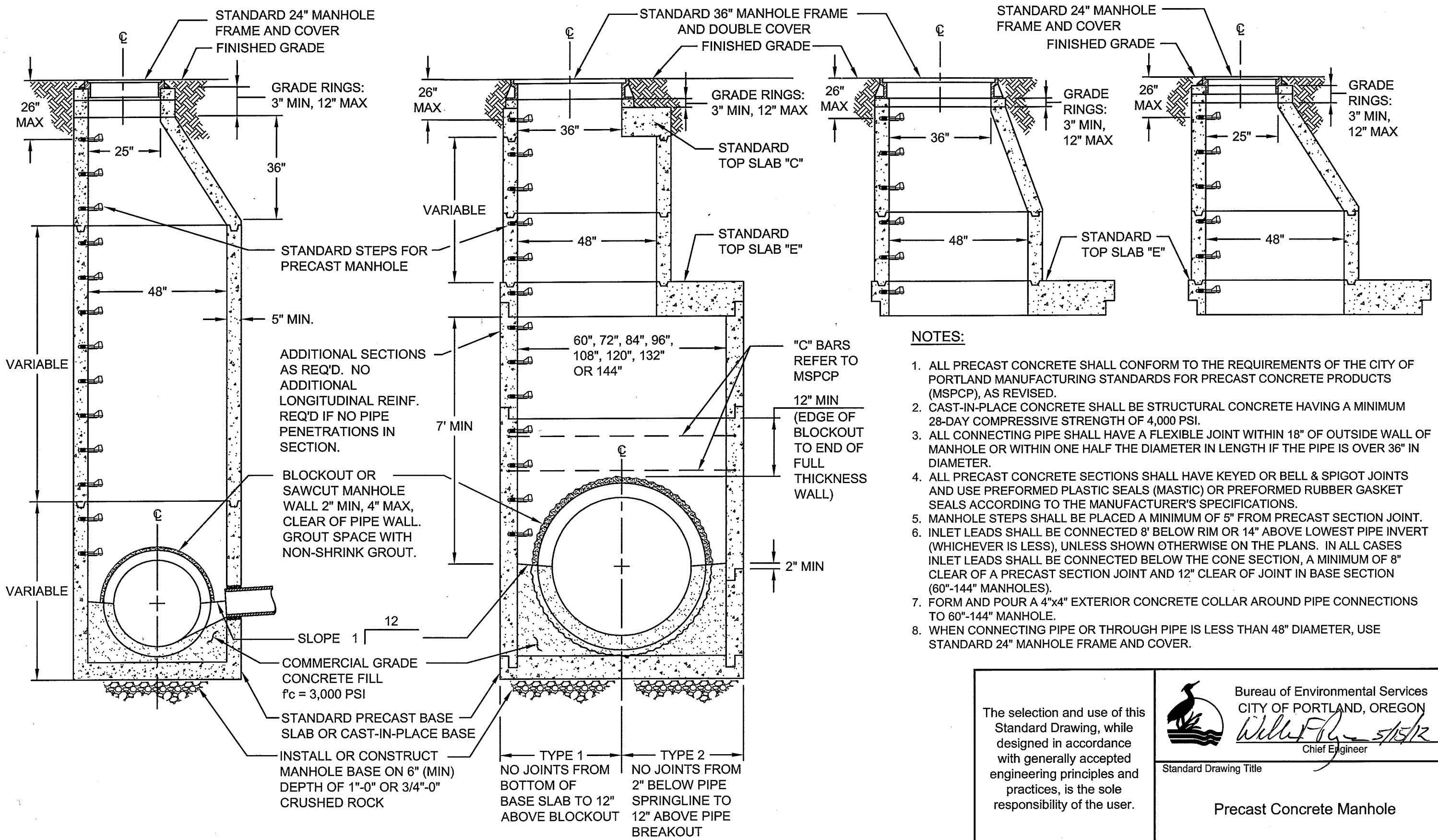



P-150_PRECAST_CONC_MANHOLE.DWG 5/10/12 4:18 PM RICKS



NOTES:

1. ALL PRECAST CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PORTLAND MANUFACTURING STANDARDS FOR PRECAST CONCRETE PRODUCTS (MSPCP), AS REVISED.
2. CAST-IN-PLACE CONCRETE SHALL BE STRUCTURAL CONCRETE HAVING A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
3. ALL CONNECTING PIPE SHALL HAVE A FLEXIBLE JOINT WITHIN 18" OF OUTSIDE WALL OF MANHOLE OR WITHIN ONE HALF THE DIAMETER IN LENGTH IF THE PIPE IS OVER 36" IN DIAMETER.
4. ALL PRECAST CONCRETE SECTIONS SHALL HAVE KEYED OR BELL & SPIGOT JOINTS AND USE PREFORMED PLASTIC SEALS (MASTIC) OR PREFORMED RUBBER GASKET SEALS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
5. MANHOLE STEPS SHALL BE PLACED A MINIMUM OF 5" FROM PRECAST SECTION JOINT.
6. INLET LEADS SHALL BE CONNECTED 8" BELOW RIM OR 14" ABOVE LOWEST PIPE INVERT (WHICHEVER IS LESS), UNLESS SHOWN OTHERWISE ON THE PLANS. IN ALL CASES INLET LEADS SHALL BE CONNECTED BELOW THE CONE SECTION, A MINIMUM OF 8" CLEAR OF A PRECAST SECTION JOINT AND 12" CLEAR OF JOINT IN BASE SECTION (60"-144" MANHOLES).
7. FORM AND POUR A 4"x4" EXTERIOR CONCRETE COLLAR AROUND PIPE CONNECTIONS TO 60"-144" MANHOLE.
8. WHEN CONNECTING PIPE OR THROUGH PIPE IS LESS THAN 48" DIAMETER, USE STANDARD 24" MANHOLE FRAME AND COVER.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.	 Bureau of Environmental Services CITY OF PORTLAND, OREGON <i>Willie F. Ricks</i> 5/15/12 Chief Engineer	
	Standard Drawing Title	
	Precast Concrete Manhole	
Note: All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.	Effective Date: 01-01-09	Standard Drawing No. P-150
	Calc. Book No.: 001	
	Baseline Report Date: 03-24-09	