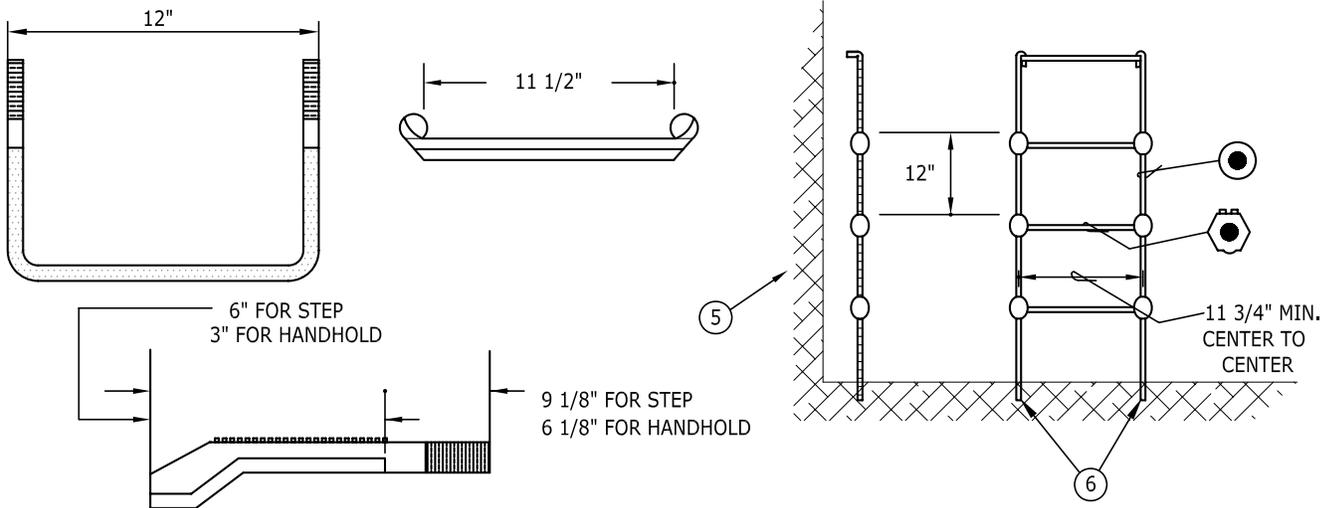


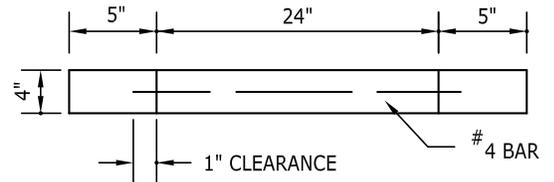
**GALVANIZED DROP RUNG MANHOLE STEP AND PREFABRICATED LADDER**



**POLYPROPYLENE DROP RUNG MANHOLE STEP AND PREFABRICATED LADDER**

**NOTES:**

1. MANHOLE STEPS CONFORMING TO SECTION R, ASTM C-478. AASHTO M-199 REQUIREMENTS AND REQUIREMENTS OF ASTM D-4101 FOR POLYPROPYLENE AND ASTM A-615 FOR 1/2" GRADE 60 DEFORMED REINFORCING BAR FOR POLYPROPYLENE STEPS, AND ALL WISHA AND OSHA SPECIFICATIONS, ARE ACCEPTABLE PROVIDED THEY ARE PRE-APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
2. DROP RUNG STEPS ARE TO BE #8 GALVANIZED DEFORMED REBAR.
3. PREFABRICATED LADDERS ARE TO BE #7 GALVANIZED SMOOTH STEEL.
4. MANHOLE PREFABRICATED LADDER STEPS SHALL BE PARALLEL OR APPROXIMATELY RADIAL AT THE OPTION OF THE MANUFACTURER, EXCEPT THAT ALL STEPS IN ANY MANHOLE SHALL BE THE SAME.
5. PENETRATION OF OUTER WALL BY A STEP LADDER OR LADDER LEG IS PROHIBITED. USE FLANGED END FOR BOLTING TO WALL IN STORM DRAINAGE APPLICATIONS.
6. EMBED FOOT OF LADDER IN CONCRETE IN POURED AND/OR CHanneled FLOOR.
7. MANHOLE STEPS OR LADDERS ARE NOT REQUIRED WHEN THE COVER TO BOTTOM OF MANHOLE IS LESS THAN 4'.



**GRADE RING**

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION IS KEPT ON FILE AT THE CITY OF KENT. A COPY MAY BE OBTAINED UPON REQUEST.



		<b>CITY OF KENT</b> ENGINEERING DEPARTMENT	
		<b>MANHOLE GRADE RING, SAFETY STEPS &amp; LADDER</b>	
DESIGNED <u>DMW</u>	SCALE <u>NONE</u>	STANDARD PLAN	
DRAWN <u>BB</u>	DATE _____		
CHECKED _____	ENGINEER _____	<b>4-5</b>	
APPROVED _____			