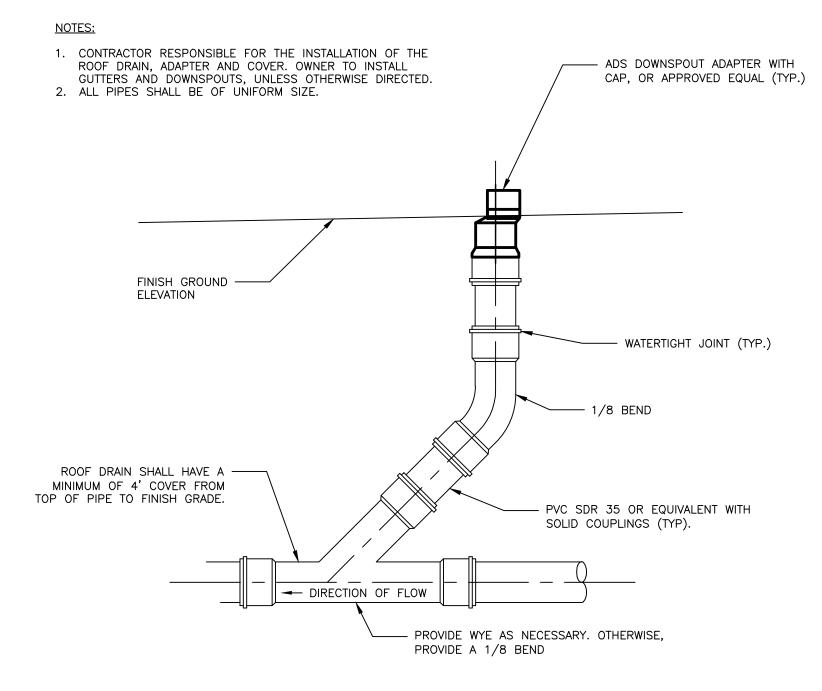


4'-0" DIAMETER PRECAST CATCH BASIN/MANHOLE

NOT TO SCALE

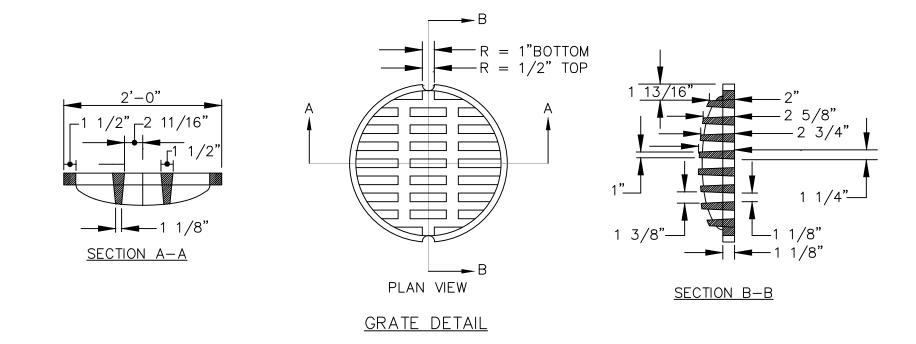
GENERAL NOTES FOR MANHOLES AND CATCH BASINS

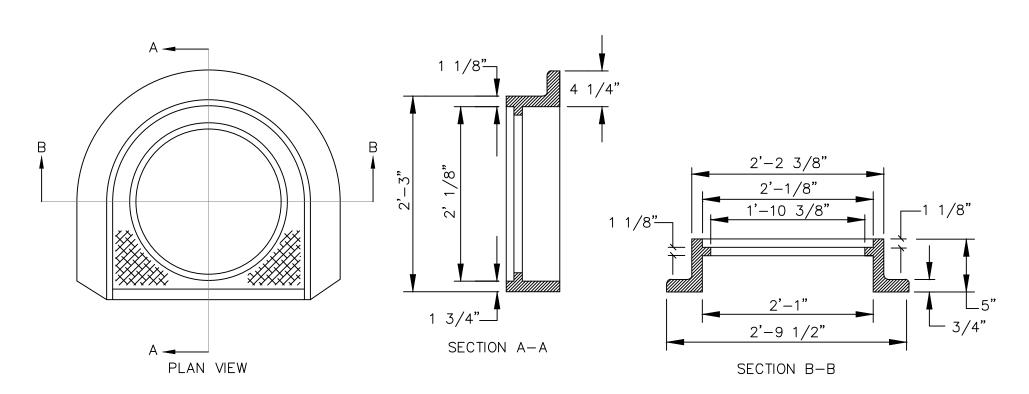
- 1. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- 2. MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
- 3. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
- 4. ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLD AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
- 5. ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
- 6. ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVAL
- 7. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
- 8. ALL SANITARY MANHOLES SHALL HAVE A WATERPROFFING COATING APPLIED TO THE EXTERIOR SURFACE.
- 9. CATCH BASIN FRAMES FOR TYPE A4 CATCH BASIN CURB INLETS SHALL BE ETHERIDGE DR5A OR APPROVED EQUAL.
- 10. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
- 11. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.



ROOF DRAIN DETAIL NOT TO SCALE

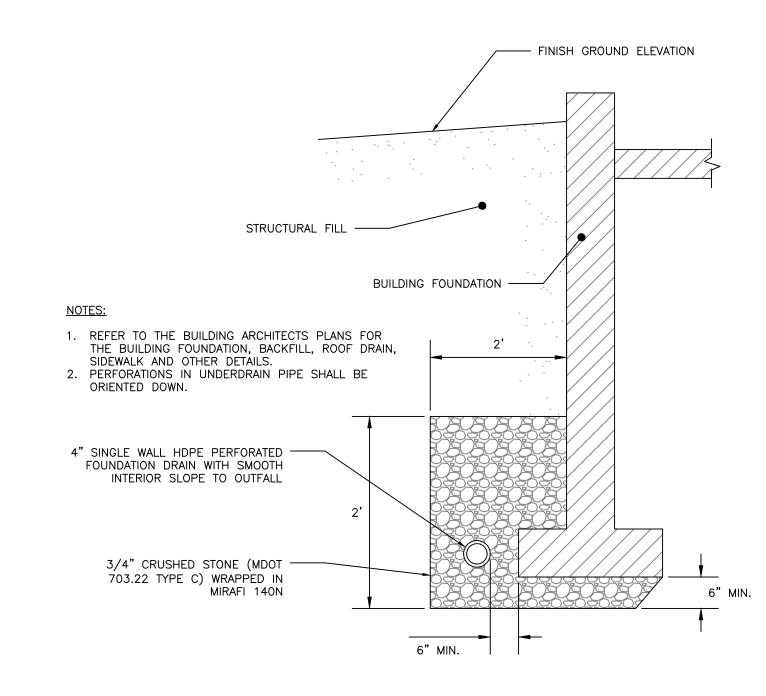
- 1. APPROVED CATCH BASIN FRAMES:
 - 1.1. EAST JORDAN = 7375Z
 - 1.2. NEENAH = R 3248
 - 1.3. OR APPROVED EQUAL
- APPROVED CATCH BASIN GRATES 2.1. EAST JORDAN = 2440M
 - 2.2. NEENAH = R 3248
 - 2.3. OR APPROVED EQUAL





FRAME DETAIL

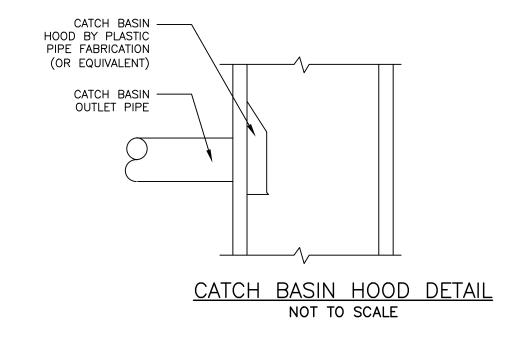
CATCH BASIN FRAME & GRATE NOT TO SCALE



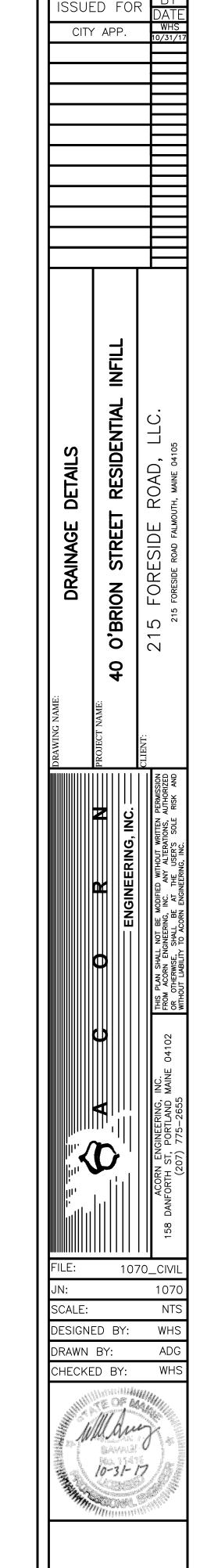
FOUNDATION DRAIN DETAIL NOT TO SCALE

- 1. INSTALL CATCH BASIN HOODS IN ALL CATCH BASINS WITH A 12"
- OR 15" OUTLET PIPE.

 2. PREFERRED STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP.
- 3. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION REQUIREMENTS



PERMIT LEVEL NOT ISSUED FOR CONSTRUCTION



DRAWING NO.