

STORM DRAINAGE NOTES

1. All pipe shall be placed on stable earth, or if in the opinion of the City Inspector, the existing foundation is unsatisfactory, then it shall be excavated below grade and back-filled per Standard Plan STM 01.
2. Trench back fill of new utilities and storm drainage facilities shall be compacted to 95% maximum density (modified proctor) under roadways and sidewalks and 90% maximum density (modified proctor) off roadways.
3. All catch basins to be Type I unless otherwise noted.
4. All catch basins with a depth over 5.0 feet to the flow line shall be Type II.
5. All Type II catch basins and all inlets and catch basins outside of public right of way shall have solid locking lids unless otherwise approved by the City. Catch basins outside the right of way collecting surface water shall have locking grates.
6. Standard ladder steps shall be provided in all catch basins/manholes extending 5 feet in depth.
7. Catch basin frame and grates shall be ductile iron (H2O rating) vaned grate (Olympic Foundry item number SM50VG or approved equal). Through curb inlets shall be 18" X 24" ductile iron – diagonal slot grate with 9" high diamond plate hood, and H2O rating (Olympic Foundry item number SM50VG or approved equal).
8. The contractor shall be responsible for adjusting all inlet, and catch basin frames and grates just prior to paving. During overlay projects, all manholes, valves, and monuments shall be adjusted after paving.
9. Prior to sidewalk construction, construct the lot drainage and/or stub outs behind sidewalk drains as required. Positive drainage is to be provided where feasible with connection to storm drain. Stub-outs shall be marked with 2" X 4" and labeled "storm."
10. Storm water retention/detention facilities, control structures, storm drainage pipes and catch basins shall be jetted and cleaned prior to acceptance.
11. Pipe Specification: All storm drain pipes shall be 12" min. diameter. Pipe material, joints and protective treatment, shall be in accordance with WSDOT Standard Specifications, Section 9.05 and AASHTO and ASTM designations as noted below.

Materials allowed for storm drain lines:

- Plain concrete pipe (CP)
- Reinforced concrete pipe (RCP)
- Aluminum spiral RI pipe (ASRP)
- ASTM D3034 PVC
- HDPE – High Density Polyethylene Pipe (outside public Right of Way only).

Materials allowed for 6" roof drain lines.

- ASTM D3034 PVC
- SDR35

Allowable Joints:

- Concrete pipe shall be rubber gasketed.
- Spiral rib pipe shall be "hat banded" with neoprene gaskets
- PVC pipe shall be rubber gasketed.



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