

CITY OF KIRKLAND

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DEPARTMENT OF PUBLIC WORKS PRE-APPROVED PLANS POLICY

Policy W-2: IRRIGATION SPECIFICATIONS FOR CITY MAINTAINED SYSTEMS

When an irrigation system is to be installed in the public right of way, whether in conjunction with a Capital Improvement Project or by Private Development, and that system is to be maintained by the City of Kirkland, the following specifications will need to be incorporated into the design of the system:

- *Pipe, Tubing and fitting* – All pipe and tubing shall be ¾" to 1" schedule 40 PVC or approved equal (all piping in median islands to be 1"). All fittings shall be schedule 80 PVC. All sleeving shall be 2" schedule 40 PVC. 1" water service lines shall use ¾" meter unless otherwise approved.
- *Polyvinyl Chloride Pipe and Fittings* – Pipe shall be schedule 40 PVC pipe for the main, laterals and sleeves.
- *Automatic Controller* – Battery operated controller shall be Hunter Battery Operated Node Controller. If using a fixed controller with a designated power source supply, a Hunter iCore Controller with wireless rain sensor shall be used. When possible, a Wireless Solar Sync sensor should also be installed. Controller shall be operable and fully functioning prior to final inspection.
- *Sprinkler Heads* – Pop-up spray heads, impact heads and bubblers shall be Hunter or approved equal. If installed along curbing, heads shall be flush and adjacent to top of curb. Nozzles shall be MP rotators.
- *Valve Boxes and Protective Sleeves* – Valve boxes for control valves shall be Carson 1419 Box, with locking lid or approved equal. Valve boxes for double check valve assembly shall be Carson 1324 with locking lid, or approved equal.
- *Automatic Control Valves* – Automatic control valves shall be Hunter PGV series (1"-2").
- *Quick Coupling Equipment* – Quick coupling equipment shall be Rainbird #44DLRC or approved equal.
- *Irrigation Service* – The Contractor shall install the appropriate size water service to meet the design of the system. The service shall be installed per specifications outlined in the current edition of the Public Works Department Pre-Approved Plans Manual. The Contractor shall coordinate with the City of Kirkland Public Works Department for the installation of the water meter (fees may apply).
- *Coverage* – There shall be full, uniform, and complete coverage of irrigation area and coverage test shall be performed under automatic operation.
- Appropriate backflow devices and or Pressure Reducing valves will be installed according to the latest version of the *Uniform Plumbing Code* as adopted by the City of Kirkland Building Department.