



PLANNING + NEIGHBORHOOD SERVICES

Land Use Review

Irrigation Plan Application Requirements

Irrigation Plan Checklist

This checklist is intended to assist in preparing a complete plan that will address all City Irrigation standards and requirements. The following information must be included with the plan submittal. The Land Use Review Division may require additional information in accordance with City Code Section 7.5.403: *All documents should be neat and legible; inaccurate, incomplete, and poorly completed documents may be rejected.*

Please visit the following webpage to submit an Irrigation Plan application which is not currently part of a Development Plan: <https://aca-prod.accela.com/COSPRINGS/Default.aspx>.

Submittal Checklist

General Requirements

- 1. [General Applicant and Owner Acknowledgement Form](#): (only if not part of a Development Plan submittal).
- 2. Certification of Professional Qualifications Form: (Per City Website).
- 3. Site Base Information: North arrow, vicinity maps, scale, street classification and match lines.
- 4. Title block information: Irrigation Plan title, date, and City file number.
- 5. Site design considerations to include: Prevailing wind, slope aspect to include degree of slope (%), soil type and infiltration rate, vegetation type, microclimates, expansive or hazardous soil condition, water harvesting potential, available water supply including non-potable and reclaimed water.
- 6. The irrigation plan shows graphically and through notes/details a water-efficient design consistent with the approved Final Landscape Plan and Hydro Diagram.
- 7. Irrigation zones are substantially corresponding to the hydro-zones on the landscape plan.
- 8. Label the water meter with a call out and the size of the proposed water meter for all irrigation connections. Call out the Tap-in location and indicate if a stand-alone irrigation meter or domestic sub-meter connection is anticipated.
- 9. Provide the static water pressure and designed/required pressure at the point of connection. Systems to be designed with a maximum of 80 PSI per Colorado Springs Utilities for all new projects.
- 10. System controller. Controller has accurate timer, multiple program capacity, multiple repeat cycle, a 7-to-14-day program calendar and one remote control valve per station.
- 11. Backflow preventers (Outdoor unit at least ten (10') feet away from source). No accessible access (I.E. drain / filter access ETC.) can be located before the backflow per Colorado Springs Utilities standards. Provide backflow detail.
- 12. Shut-off valves and zone control valves. Flow sensor/master valve incorporated into the design.
- 13. Main line and lateral piping.
- 14. Sprinkler/rotor heads, low volume and low trajectory nozzles used.
- 15. Drip Irrigation tubing runs, and bubblers where necessary.
- 16. Type and size of main irrigation system components.
- 17. Graphic depiction of the locations of irrigation system components.



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- 18. Total required operating pressure for each control valve / zone. Provide a worst-case scenario or the critical calculations of the system as required and recommended for all systems.

- 19. Pedestrian surfaces are shown on the plan, avoid watering across hard surfaces and any overspray onto impervious areas is minimized.

- 20. Equipment installed flush with grade for safety.

- 21. Existing non-irrigated plant communities to be retained are not irrigated (non-disturbed areas).

- 22. High water use / turf areas zoned separately from shrubs, trees, and native seed.

- 23. Method of irrigation matched to size and shape of area and plant material.

- 24. System designed in conformance with manufacturer's recommendation for efficiency and compliance with local code.

- 25. Water Pressure is regulated with valves. Water hammer and line and head drainage is prevented.

- 26. Pressure compensating outlets used where pressure varies more than 20% or 20 PSI from design operating pressure.

- 27. Adequate backflow protection installed. Irrigation tap is sized to irrigate site in the maximum time allowed per the current CSU Water Wise Rules.

- 28. Rain and freeze sensing device(s) installed for automatically controlled system.

- 29. Required Irrigation Notes: Appendix E format, provide required notes under a "Standard City of Colorado Springs Irrigation Notes" section

- 30. All proposed trees located within native seed areas irrigated by a dedicated drip valve.

- 31. Irrigation lateral contains matched precipitation rates (sprinkler arcs).

- 32. Temporary irrigation may be proposed where plausible to support native vegetation (see check list #36).

- 33. Irrigation component detail sheet provided.

- 34. Irrigation schedule provided and includes all required information shown in Appendix E.

- 35. Separate zones provided based on equipment, water requirements, exposure, plant selection, and slope.

- 36. Irrigation provided to ensure germination, establishment, and long-term care of native seed areas. In most cases, due to a lack of precipitation, strong weed competition, and the need for long term maintenance, permanent in-ground irrigation is necessary, particularly along commercial, and residential frontages and highly visible areas.