



CITY OF COLORADO SPRINGS

IRRIGATION PLAN CHECKLIST

All submitted plans shall contain the following information however the completed checklist does not need to be submitted with the application, but is used as part of Staff plan review.

PROJECT NAME & CITY FILE #: _____

APPLICANT

PLANNER

_____ 1. Certification of Professional Qualifications (Appendix I) _____

Site Design Considerations:

_____ 2. Prevailing winds and _____

_____ 3. Slope aspects to include degree of slope (%) _____

_____ 4. Soil type and infiltration rate _____

_____ 5. Vegetation type _____

_____ 6. Microclimates _____

_____ 7. Expansive or hazardous soil conditions _____

_____ 8. Water harvesting potential _____

_____ 9. Available water supply, including non-potable and reclaimed water _____

All pertinent system information is indicated, including:

_____ 10. Irrigation zones substantially corresponding to hydrozones on the landscape plan and labeled by precipitation rates and method of application _____

_____ 11. Water meters _____

_____ 12. Call out the Tap-in location (and whether a stand-alone irrigation tap is anticipated) _____

_____ 13. Provide the Static water pressure at the point of connection _____

_____ 14. System controller _____

_____ 15. Rain sensors (and other water conservation technology, soil moisture sensor, etc) _____

_____ 16. Backflow preventers _____

_____ 17. Shut-off valves and zone control valves _____

_____ 18. Main line and lateral piping _____

_____ 19. Sprinkler heads _____

_____ 20. Drip irrigation tubing runs, and bubblers where necessary _____

_____ 21. Type and size of main irrigation system components _____

_____ 22. Graphic depiction of the locations of irrigation system components _____

_____ 23. Total required **operating pressure** for each control valve/zone
Recommend: Provide a worst case scenario or the 'critical calculations' of the system _____

IRRIGATION PLAN CHECKLIST, continued

APPLICANT

PLANNER

_____ 24. Utilization of any supplemental stormwater or irrigation run-off _____

System design is in conformance with the following standards:

_____ 25. Pedestrian surfaces located on plan; **avoid watering across hard surfaces.** _____

_____ 26. Equipment installed flush with grade for safety _____

_____ 27. Compliance with local codes _____

_____ 28. Overspray onto impervious areas minimized _____

_____ 29. Low volume and low trajectory spray nozzles used _____

_____ 30. Method of irrigation matched to size and shape of area, plant material for uniformity of coverage _____

_____ 31. System designed in conformance with manufacturer's recommendation for efficiency _____

_____ 32. Water pressure regulated with valves _____

_____ 33. Water hammer and line and head drainage prevented _____

_____ 34. Pressure compensating outlets used where pressure varies more than 20 percent (20%) or 20 p.s.i. (20 per square inch) from design operating pressure _____

_____ 35. Adequate backflow protection installed _____

_____ 36. Rain sensing device installed for automatically controlled system _____

_____ 37. Controller has accurate timer, multiple program capacity, multiple repeat cycle, a 7 to 14 day program calendar and *one remote control valve per station* _____

_____ 38. Irrigation lateral contains matched precipitation rates for sprinkler arcs _____

_____ 39. Irrigation tap sized to irrigate site in the maximum time allowed for operation of the zones _____

_____ 40. Irrigation component detail sheet provided _____

_____ 41. Separate zones provided for different equipment or water requirements based on exposure, plant selection and slope _____

_____ 42. Drainage not altered within existing plant communities to be conserved _____

_____ 43. Existing non-irrigated plant communities to be retained are not irrigated (non disturbed areas) _____

_____ 44. High water-use-turf areas zoned separately from shrubs and trees _____

_____ 45. 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.

_____ 46. Temporary irrigation may be proposed where plausible to support native vegetation. However, design techniques for water re-use must be exemplified such as grading (depressions or swales) to direct water, and supplying soil moisture to support vegetation.