

Drainage Infrastructure Maintenance Guidelines

The required maintenance interval for the drainage infrastructure is dependent upon the degree of pollutant loading from a particular drainage basin. Though each drainage infrastructure type has its own unique characteristics, **inspections** will generally consist of an assessment to assure functionality to design capacity and the general condition. Inspections should be performed following a rain event to ensure 36-hour water dissipation. **Routine maintenance** should consist of trash and vegetation removal, unclogging of drains, minor sediment removal and exchange of filter media where applicable. Major maintenance will be completed as required from inspections and would consist of reconstruction due to failures in the infrastructure. Examples of Major Maintenance include dredging, excavation, removal of existing media, replacing fabric, replacing the under-drain, and reestablishment of vegetation, etc. The following schedule is offered as a guideline for performing inspections and routine maintenance for a range of infrastructure. Optimum maintenance frequency is met when routine maintenance is performed more frequently than inspection intervals. If the maintenance threshold has been exceeded by the time the infrastructure is inspected, it has been operating at reduced capacity. Routine maintenance will also help avoid more costly rehabilitative maintenance to repair damages that may occur when infrastructure has not been adequately maintained on a routine basis.

Records must be kept and made available to the City of Tempe upon request. Records shall be kept for a period of at least five years.

Drainage Infrastructure	Routine Inspection and Maintenance Frequency*	Inspection Record Submittal (or sooner upon request)
Bioretention System	2 per year	Once every 5 years
Bubbler Boxes	1 per year	Once every 5 years
Cartridge or Module Media Filtration Structures	1-2 per year	Once every 5 years
Catch Basins/Trenches/Slotted Drain	1 per year	Once every 5 years
Catch Basin Inserts (long term)	3-4 per year	Once every 5 years
Channels	1 per year	Once every 5 years
Conduits/Culverts	1 per year	Once every 5 years
Detention/Retention Ponds/Basins	1 per year	Once every 5 years
Dry Pond	1 per year	Once every 5 years
Dry Wells	1 per year	Once every 5 years
Ditches	1 per year	Once every 5 years
Filter Strips or Swales	3-4 per year	Once every 5 years
Flumes	1 per year	Once every 5 years
Infiltration Trenches	3-4 per year	Once every 5 years
Permeable Pavement	1 per year	Once every 5 years
Rainwater Gardens	2-3 per year	Once every 5 years
Rainwater Harvesting	2-3 per year	Once every 5 years
Sand Filter	1-2 per year	Once every 5 years
Scupper	1 per year	Once every 5 years
Trash & Debris Screens	3-4 per year	Once every 5 years
Underground Storage Facilities	1 per year	Once every 5 years
Wetlands	2 per year	Once every 5 years

*Perform inspections within 36 hours of a rain event