

### 3.26 Inlet/Outlet Stormwater Pipe

The inlet and outlet stormwater pipes convey stormwater in, through, and out of stormwater facilities.

Storm sewer pipes convey stormwater. Pipes are built from many materials and are sometimes perforated to allow stormwater to infiltrate into the ground. Stormwater pipes are cleaned to remove sediment or blockages when problems are identified. Stormwater pipes must be clear of obstructions and breaks to prevent localized flooding. All stormwater pipes should be in proper working order and free of the possible defects listed below.

In addition, outlet stormwater pipes should be inspected to make sure stormwater exits the facility without causing any negative impacts to the drainage area, if applicable.

### Inlet/Outlet Storm Pipe Checklist

Frequency	Drainage System Feature	Date				Problem	Conditions to Check For	Conditions That Should Exist
		✓	✓	✓	✓			
M	General					Obstructions including roots	Storm pipe- root enters or deforms pipe, reducing flow.	Use mechanical methods to remove root. Do not put root-dissolving chemicals in storm sewer pipes. If necessary, remove the vegetation over the line.
M	General					Pipe dented or broken	Inlet/outlet piping damaged or broken and in need of repair.	Pipe repaired and/or replaced.
M	General					Pipe rusted or deteriorated	Any part of the piping that is crushed or deformed more than 20% or any other failure to the piping.	Pipe repaired and/or replaced.
M	Erosion					Erosion	Eroded or scoured areas due to flow channelization, high flows, or vehicular damage.	For ruts or bare areas less than 12 inches wide, repair the damaged area by filling with crushed gravel. If bare areas are large, generally greater than 12 inches wide, the damaged area should be re-graded and re-seeded. For smaller bare areas, overseed.
M	Pipe outfall					Missing or removed rock	Only one layer of rock exists above native soil in area five square feet or larger, or any exposure of native soil.	Rock pad replaced to design standards.
M	Pipe outfall					Erosion	Soil erosion in or adjacent to rock pad.	Rock pad replaced to design standards.

## Inlet/Outlet Storm Pipe Checklist (Continued)

Frequency	Drainage System Feature	Date				Problem	Conditions to Check For	Conditions That Should Exist
		✓	✓	✓	✓			
M	Pipe outfall					Erosion/Scouring	Eroded or scoured ditch or stream banks due to flow channelization, or higher flows.	For ruts or bare areas less than 12 inches wide, repair the damaged area by filling with crushed gravel. If bare areas are large, generally greater than 12 inches wide, damaged area should be re-graded and re-seeded. For smaller bare areas, overseed.
M	Pipe Outfall					Missing or Moved Rock	Only one layer of rock exists above native soil area in area five square feet or larger, or any exposure of native soil.	Rock pad replaced to design standards.
M	Pipe Outfall					Erosion	Soil erosion in or adjacent to rock pad.	Rock pad replaced to design standards.

If you are unsure whether a problem exists, please contact a Professional Engineer.

Comments:

Key:

(A) Annual (March or April preferred)

(M) Monthly (see schedule)

(S) After major storms (use 1-inch in 24 hours as a guideline)