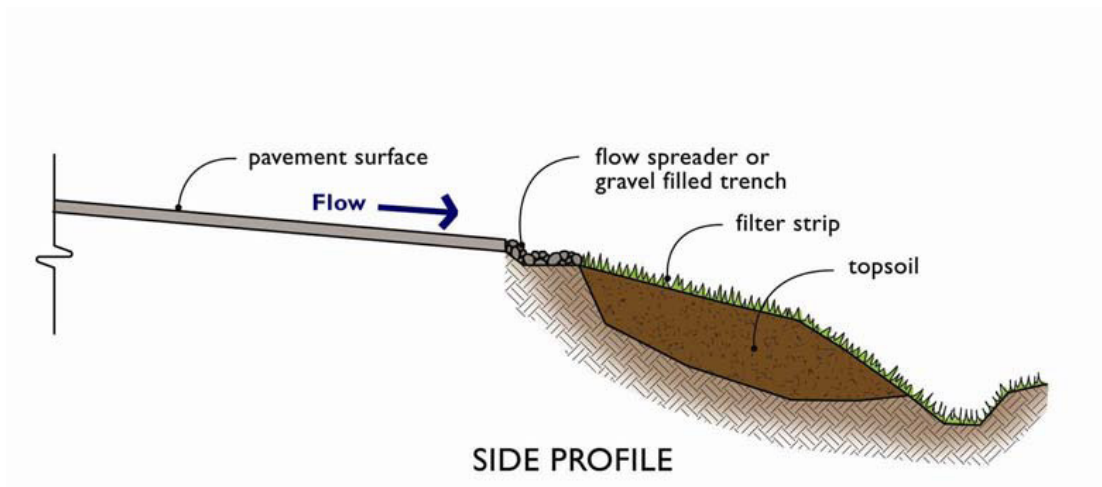
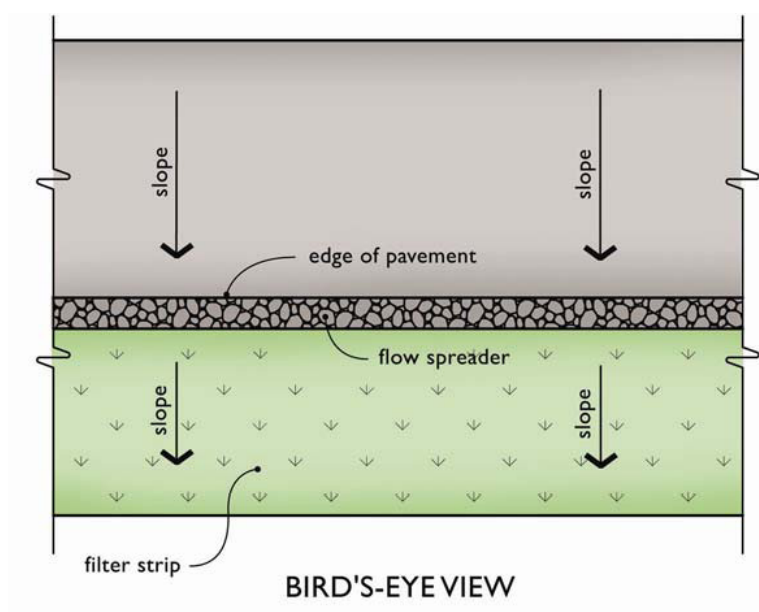


Filter Strip

A filter strip is a linear strip of grass that removes sediment and oils from stormwater by filtering it. Stormwater is treated as it runs across the filter. Usually, filter strips are placed along the edge of linear paved areas such as parking lots and roads. Where designed filter strips are installed, road shoulders should only be graded to maintain level flow off the road.

Facility objects that are often associated with a filter strip include:

- access road or easement
- fence, gate, and water quality sign
- energy dissipaters (flow spreaders)



Key Operations and Maintenance Considerations

- For filtration to be effective, the filter strip area must remain covered with well-established vegetation. Site uses should protect vegetation and avoid compaction.
- Inspect the filter strip frequently, especially after intense rainfall events and runoff events of long duration. Small breaks in the sod and small erosion channels quickly become large problems.
- Inspect flow spreader area for clogging and remove built-up sediment.
- Minimize the development of erosion channels within the filter. Even small channels may allow much of the runoff from the field to bypass the filter. These areas should be repaired and reseeded immediately to help ensure proper flow of runoff through the filter.
- Reseed or interseed bare areas of the filter. Since it may be difficult to re-establish vegetation in an established filter strip, the use of mulch or sod can help to reduce some problems.
- Mow and remove cuttings as required to maintain moderate vegetation height. Mowing two to three times per year may be necessary. The vegetation should not be mowed closer than 6 inches. More frequent mowing may be needed to prevent thatch buildup and smothering of vegetation. To avoid destruction of wildlife nesting areas, delay mowing until after mid-July. Fall mowing of the filter no closer than 6 inches will provide adequate winter habitat for wildlife.
- Control trees, brush and noxious weeds in the filter using either mechanical means or approved IPM practices.
- The most common tools for maintenance of filter strips are mowers and hand tools to remove built up debris at the edge of the filter strip and restore evenly distributed flow across the strip.

Filter Strip			
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Minimum Performance Standard
General	Sediment Accumulation on Grass	Sediment depth exceeds 2 inches.	Grass is free of accumulated sediment. Slope is even and water flows pass evenly through strip.
	Vegetation	Grass becomes excessively tall (greater than 10-inches); nuisance weeds and other vegetation starts to take over.	Vegetation is mowed to less than 3"-4" height. Nuisance vegetation has been removed such that flow is not impeded.
	Trash and Debris Accumulation	Trash and debris accumulated on the filter strip.	Filter strip is free of trash and debris.
	Erosion/Scouring	Eroded or scoured areas due to flow channelization, or higher flows.	Eroded/scoured areas have been repaired and facility filters stormwater per design function. (Ruts or bare areas less than 12 inches wide may be repaired filling damaged portion with crushed gravel; grass will creep in over the rock in time. For large bare areas [generally >12" wide], the filter strip should be re-graded and re-seeded. For smaller bare areas, over seed when bare spots are evident.)
	Flow spreader	Flow spreader uneven or clogged so that flows are not uniformly distributed through entire filter width.	Spreader is level and clean so that flows are spread evenly over entire filter width.