

# Specifications for Bioswales and Bio Retention Basins

Bioswale soils need to meet or exceed the following 3 criteria's:

1. Must achieve long-term infiltration rate of 5" per hour or as dictated by storm water plan.
2. Soil must be able to support vigorous plant growth.
3. Remove silt and pollution from surface runoff.

(A typical mixture is 60% - 80% sand and topsoil, 20% - 40% compost)

**A. SAND and TOPSOIL:** See sand/topsoil manufacturer sieve analysis to meet the criteria.

**B. COMPOST:** Well decomposed, derived from plant waste materials, yard debris or other organic materials NOT including animal waste, manures or bio solids.

(Local topsoil companies may be able to supply the proper bioswale mix)

(Call Gro-Power® for a list of bioswale soil manufacturers)

**C. PLANT NUTRIENTS:** To ensure proper growth for new planting in vegetated swales nutrients are required. The humus, soil bacteria and mycorrhizae in Gro-Power will help to established microbial activity to assist in the purification of the polluted run-off water.

- *For bioswales mix incorporate Gro-Power® Plus 5-3-1 w/M (mycorrhizae) at a rate of 25 lbs. per cubic yard*
- *For individual planting in bioswales, add Gro-Life® tablets based on plant size. If no nutrients are in incorporated in soil mix, add Gro-Power® Plus 5-3-1 w/M (mycorrhizae) at a rate of 18 lbs. per cubic yard in backfill mix.*
- *For hydro-seeding in bioswales and/or bio retention basins use Gro-Power® Plus 5-3-1 w/M (mycorrhizae) at a rate of 1,000 lbs. per acre.*

**D. MULCH:** If mulch is recommended, apply a 2" layer of mulch to retain moisture, prevent weeds, and minimize weed growth.



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