

Worksheet B1

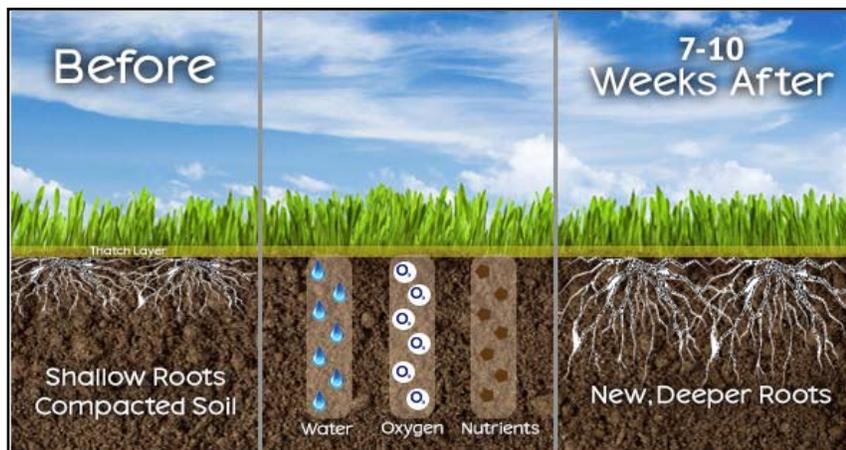
Post Construction Soil Quality and Depth



This worksheet is to help applicants comply with compost amended soils for pervious areas that will be disturbed during construction.

{ Why does my project have to amend soils that are disturbed? }

Establishing soil quality and depth regains greater stormwater functions in the post development landscape, providing increased treatment of pollutants and sediments that result from development and habitation, and minimizes the need for some landscaping chemicals, thus reducing pollution through prevention.



{ Benefits of Soil Amendment }

When it comes to amending soils, you have options...

Option 1: Leave undisturbed native vegetation and soil and protect from compaction during construction.

Option 2: Amend existing site topsoil or subsoil either at pre-approved default rates or custom calculated rates based on tests of the soil and amendment.

Option 3: Stockpile existing topsoil during grading, and replace it prior to planting. Stockpiled topsoil must also be amended if needed to meet the organic matter or depth requirements, either at a pre-approved default rate or at a custom calculated rate.

Option 4: Import topsoil mix of sufficient organic content and depth to meet the requirements.

{ Option 1 }

If you do not intend to remove vegetation, strip the soil, or drive on lawn or landscape areas during construction, the soils do not need to be amended. Mark areas of the site that are not to be disturbed during construction with flags or silt fence. A detail for silt fence can be downloaded [here](#).

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{ Options 2 & 3 }

Scarify or till soil to 8 inches depth or depth needed to achieve a total depth of 12 inches of uncompacted soil after soil amendment is added. Entire surface of soil to be amended must be scarified. Do not scarify within drip line of existing trees to remain.

If stockpiling, cover soil with weed barrier material that sheds moisture yet allows air flow. Follow erosion and sediment control plan for stabilizing unworked soils. Replace stockpiled topsoil prior to planting.

Planting Beds:

- Rake beds to smooth and remove surface rocks larger than 2 inches diameter
- Mulch planting beds with 2 inches of organic mulch

Turf Areas:

- Water or roll to compact to 85% of maximum dry density
- Rake to level and remove surface woody debris and rocks larger than 1 inch diameter

If Using Pre-Approved Soil Amendment Rates

Planting Beds:

- Place 3 in of composted material and rototill into 5 in of replaced soil (a total amended depth of 9.5 in, for a settled depth of 8 in) Use conversion calculation below to determine the amount of material to purchase

Compost Material:

_____ SF disturbed planting area x 0.00926 conversion factor = _____ CY compost material required

Mulch:

_____ SF disturbed planting area x 0.00617 conversion factor = _____ CY mulch required

Turf Areas:

- Place 1.75 in of composted material and rototill into 6.25 in of replaced soil (a total amended depth of 9.5 in, for a settled depth of 8 in) Use conversion calculation below to determine the amount of material to purchase

Compost Material:

_____ SF disturbed planting area x 0.00540 conversion factor = _____ CY compost material required

If Using Custom Soil Amendment Rates

Planting Beds:

- Place calculated amount of compost material or approved organic material and rototill into depth of replaced soil needed to achieve 8 inches or settled soil at 10% organic content
- Attach laboratory results to this worksheet showing bulk density, percent organic matter, moisture content, C:N ratio, and a heavy metals analysis to support custom amendment rate and scarification depth

Turf Areas:

- Place calculated amount of compost material or approved organic material and rototill into depth of replaced soil needed to achieve 8 inches or settled soil at 5% organic content
- Attach laboratory results to this worksheet showing bulk density, percent organic matter, moisture content, C:N ratio, and a heavy metals analysis to support custom amendment rate and scarification depth

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{ Option 4 }

Import Topsoil Mix of Sufficient Organic Content and Depth to Meet Requirements

Scarify or till subgrade in two directions to 6 inches depth. Entire surface of soil to be amended must be scarified. Do not scarify within drip line of existing trees to remain

Planting Beds:

- Use imported topsoil mix containing 10% organic matter (typically around 40% compost). Soil portion must be sand or sandy loam as defined by the USDA
- Place 3 inches of imported topsoil mix on surface and till into 2 inches of soil
- Place 3 inches of imported topsoil mix on surface and till into 2 inches of soil
- Place second lift of 3 inches topsoil mix on surface
- Rake beds to smooth, and remove r=surface rocks over 2 inches diameter.
- Mulch planting beds with 2 inches of organic mulch

Turf Areas:

- Use imported topsoil mix containing 5% organic matter (typically around 25% compost). Soil portion must be sand or sandy loam as defined by the USDA
- Place 3 inches of imported topsoil mix on surface and till into 2 inches of soil
- Place second lift of 3 inches topsoil mix on surface
- Water or roll to compact to 85% of maximum dry density
- Rake to level and remove surface woody debris and rocks larger than 1 inch diameter

{ Information on where to purchase compost materials }