

SOIL COMPOSITION

Soil shall consist of fertile, friable soil of loamy character that contains organic matter in quantities natural to the region and be capable of sustaining healthy plant life. Soil shall be free from deleterious substances such as road base, litter, refuse, toxic waste, stones larger than 1 inch in size, coarse sand, heavy or stiff clay, brush, sticks, grasses, roots, noxious weed seed, weeds, and other substances detrimental to plant, animal, and human health.

Planting soil must be derived from a combination of the following types of materials:

1. Nutrient rich topsoil that promotes long-term plant growth
2. US Composting Council STA Program Approved compost
3. Added minerals, nutrients or fertilizers following the specific job requirements

Topsoil shall contain materials that maintain or improve soil organic matter content in a manner that does not contribute to the contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances.

The quality characteristics of the planting soil must have the values shown in the following table unless written consent from the City of Reno Urban Forester to accept soil with qualities outside of this range:

Table 1

Quality Characteristic	Planting Soil Requirement
pH	5.8–8.5
Sodium	< 200 ppm
Nitrogen	Min 50 ppm
Phosphorus	Min 50 ppm
Potassium	Min 50 ppm
Calcium	Min 1,000 ppm
Trace Minerals Sufficient For Plant Growth	
Boron	< 5 ppm
C.E.C. meq/100g	12–24
Organic matter content (% available)	Min 2%
Physical contaminants (% volume)	combined total:
Plastic, glass, metal, rocks < 1”	< .1



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

DRAWING No.

**SOIL COMPOSITION  
SPECIFICATIONS**

**R-500L**

APPROVED BY: MB | DATE: 12/2019