

IX SLOPE STABILIZATION AND REVEGETATION

PART I – GENERAL

PART II – PRODUCTS

PART III – EXECUTION

BOARDWALK

ADDENDA

SLOPE STABILIZATION AND REVEGETATION

PART I - GENERAL

Work in this section includes the furnishing of all necessary materials and workmanship to competently and expeditiously execute the following work: fine grading, soil preparation, seeding, mulching, fertilizing, soil stabilization, and all related landscape operations to satisfactorily stabilize and re-vegetate the areas designated.

Prior to commencing construction on this project, the Contractor and the City will evaluate the existing slopes, erosion problems, and vegetation to set the standards for revegetation.

PART II – PRODUCTS

Topsoil – Topsoil shall consist of loose, friable loam reasonably free of admixtures of subsoil, refuse, stumps, roots, rocks, brush, weeds, heavy clay, hard clods, toxic substances, or other material which would be detrimental to the proper development of vegetative growth.

Fertilizer – Fertilizer shall be selected based on soil conditions.

Straw Mulch – Materials for straw mulching shall consist of straw from grasses and shall not contain seeds of noxious weeds.

Seed – All seed shall be furnished in sealed bags or containers showing the name and address of the supplier, the seed name, the lot number, net weight, the percent of weed seed content, and the guaranteed percentage of purity and germination. All seed furnished shall be free from such noxious weeds as Russian or Canadian Thistle, bindweed, Johnson grass, knapweeds, and Leafy Spurge. Seed which has become wet, moldy, or otherwise damaged will not be accepted. The seed shall include a signed certification that the seed is from a lot that has been tested by a recognized laboratory within six (6) months of date of delivery to the job.

The seed mix shall be appropriate to the field conditions and shall be subject to approval by the City.

Erosion Control Blankets – Blankets and nettings shall be biodegradable non-toxic to vegetation or humans. Unbleached, smolder-resistant jute shall consist of a heavy mesh with a uniform open weave. The yarn shall be of a sufficiently open weave to allow seedlings to push through, yet strong enough to contain the mulch and prevent erosion. Blankets consisting of straw and/or coconut fibers shall be reinforced with a photodegradable netting. The type of fiber and the netting pattern shall be designed for the type of slope, moisture intensity, and other field conditions. Under typical conditions. BonTerra S2 or approved equal is recommended for slopes 3.5:1 to 2.5:1. BonTerra CS2 or approved

equal is recommended for slopes 2.5:1 to 1.5:1. Materials for slopes steeper than 1.5:1 will be reviewed by the City on a case-by-case basis. In no case shall a blanket be used which does not meet or exceed the conditions for which the manufacturer approves of its use.

PART III – EXECUTION

Evaluate Existing Vegetation – Prior to commencing construction, it will be necessary to determine the amount and type of vegetation which naturally occurred on the areas to be disturbed. This will be done by counting the quantity of each type of vegetation in randomly selected representative quadrants of the site to be disturbed. Quadrants shall be either a square foot or a square yard, depending on the density of the vegetation.

Soil Preparation – Topsoil shall not be placed until the areas to be covered have been properly prepared and grading operations in the area have been completed. Topsoil shall be placed and spread in areas where there is less than six (6) inches of topsoil to achieve a total depth of six (6) inches in areas to be seeded or planted. A reasonably even, loose, moist seed bed, free of weeds, rocks, clods, construction debris, and other foreign and/or deleterious matter shall be established. Work in any organic or soil enhancement material prior to fine grading. Fine grade all areas to eliminate all visible surface undulations, rounding the tops and bottoms of all slopes, and provide positive drainage for all potential surface water runoff. On slopes steeper than 4:1, the surface shall be cat-tracked up and down the side slope prior to or just after seeding to create depressions to help hold seed and moisture.

Seeding – Broadcast or drill the seed at the coverage rate recommended by the seed supplier for the field conditions. Hydromulching will be allowed if adequate water will be applied to the seed to keep the mulch continuously moist until the seedlings are established.

Where shrubs were present prior to the disturbance, it is recommended that the same type shrubs be replanted at approximately the same density as originally present, unless the slope prohibits such plantings.

Mulching – Grass straw mulching shall be applied at a rate of two tons per acre. It shall be uniformly crimped in with a crimper or other approved means to a depth of at least three inches. Mulching and crimping shall occur within 24 hours of placing seed. If seeded area is disturbed prior to mulching, it shall be reseeded before the mulch is placed. Mulching activities shall not occur during windy weather.

Soil Retention Coverings – Jute or other suitable covering shall be secured to all slopes steeper than 3:1 as soon after mulching as practical. The material shall be applied smoothly but loosely on the soil surface without stretching. Workers shall minimize the amount of walking of the seedbed even after the jute is applied. The upslope end of each piece of jute mesh shall be buried in a narrow trench about six (6) inches deep. The jute shall be secured in the trench with compacted dirt fill. Where one roll of jute ends and a second begins, the upslope piece should be brought over the buried end of the second

roll with a twelve (12) inch overlap to form a junction slot. Where two or more widths are side-by-side, the overlap shall be at least four (4) inches.