SECTION 02270 - EROSION CONTROL (VEGETATIVE)

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

A. The WORK of this Section includes providing vegetative erosion control including fertilizing, seeding, planting and mulching for all areas as indicated.

1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
 - 1. Section 02200 Earthwork
 - 2. Section 02900 Landscaping

1.3 STANDARD SPECIFICATIONS

A. Except as otherwise indicated in this Section of the Specifications, the CONTRACTOR shall comply with the Standard Specifications for Public Works Construction (SSPWC), as specified in Section 01090 - REFERENCE STANDARDS.

1.4 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:
 - 1. Catalogue information on fertilizer, seed, plants and mulch.

PART 2 -- PRODUCTS

2.1	MATERIAL	_S

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NTS: Use materials that will produce the desired results under the local climatic conditions. One source of information is the local U.S. Soil Conservation Service office. Another is the California Department of Transportation.

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- A. **General**: Materials shall comply with SSPWC Subsection 212-1 and as indicated herein.
- B. **Fertilizer:** Fertilizer shall be a commercial, chemical type, uniform in composition, free-flowing, conforming to state and federal laws and suitable for application with equipment designed for that purpose. Fertilizer shall have a guaranteed analysis showing not less than [11] percent nitrogen, [8] percent available phosphoric acid, and [4] percent water soluble potash.

- C. Seed: Seed shall be delivered in original unopened packages bearing an analysis of the contents. Seed shall be guaranteed 95 percent pure with a minimum germination rate of 80 percent.
 - Seed mix shall be [equal parts by weight of [fescue and perennial ryegrass] [perennial ryegrass and barley].]
- [D. **Mulch**: Mulch shall be a fibrous, wood cellulose product produced for this purpose. It shall be dyed green and shall contain no growth or germination inhibiting substances, and shall be manufactured so that when thoroughly mixed with seed, fertilizer, and water in the proportions indicated, it will form a homogenous slurry which is capable of being sprayed.]
- [D. **Mulch**: Mulch shall be Type 6 mulch complying with SSPWC Subsection 212-1.2.5.]

2.2 MANUFACTURERS

- A. Materials shall be of the following manufacture and type, or equal:
 - 1. Mulch:

Weyerhauser Company's "Silva Fiber"
Consolidated Wood Conversion Corp., "Conwood Fiber"

PART 3 -- EXECUTION

3.1 GENERAL

- A. **Weather Conditions:** Fertilizing, seeding, or mulching operations shall not be conducted when wind velocities exceed 15 miles per hour or when the ground is unduly wet or otherwise not in a tillable condition.
- B. **Soil Preparation:** The ground to be seeded or planted shall be graded in conformance with the Drawings and shall be loose and reasonably free of large rocks, roots, and other material which will interfere with the WORK.
- C. **Method of Application:** Fertilizer, seed, and mulch may be applied separately (Method A), or they may be mixed together with water and the homogeneous slurry applied by spraying (Method B), as specified in SSPWC Subsection 308-4.8.2, except that all slopes steeper than 3 units horizontal to 1 unit vertical shall be stabilized by Method B.

3.2 METHOD A

- A. **Fertilizing:** The fertilizer shall be spread uniformly at the rate of [800] lbs per acre (approximately 1 lb per [55] square feet). The fertilizer shall be raked in and thoroughly mixed with the soil to a depth of approximately two inches prior to the application of seed or mulch.
- B. **Seeding:** The seed shall be broadcast uniformly at the rate of [60] lbs/acre (approximately 1 lb per [730] sq ft). After the seed has been distributed, it shall be incorporated into the soil by raking or by other approved methods.

C. **Mulch Application:** Mulch shall be applied at the rate of [1,500] lb (air dried weight) per acre (approximately 1 lb per [30] sq ft).

3.3 METHOD B

A. Method B consists of the uniform application by spraying of a homogeneous mixture of water, seed, fertilizer, and mulch. The slurry shall be prepared by mixing the ingredients in the same proportions per acre as indicated above for Method A. The slurry shall have the proper consistency to adhere to the earth slopes without lumping or running. Mixing time of materials shall not exceed 45 minutes from the time the seeds come into contact with the water in the mixer to the complete discharge of the slurry onto the slopes, otherwise the batch shall be recharged with seed. The mixture shall be applied using equipment containing a tank having a built-in, continuous agitation and recirculation system, and a discharge system which will allow application of the slurry to the slopes at a continuous and uniform rate. The application rates of the ingredients shall be the same as those indicated for the Method A. The nozzle shall produce a spray that does not concentrate the slurry nor erode the soil.

3.4 WATERING

A. The seeded and planted areas shall be watered so as to provide optimum growth conditions for the establishment of the vegetative ground cover. In no case, however, shall the period of maintaining such moisture be less than two weeks after the application of the seed or after sprigging.

3.5 MAINTENANCE

A. The CONTRACTOR shall maintain the planted areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include the filling, leveling, and repairing of any washed or eroded areas, as may be necessary, and sufficient watering to maintain the plant materials in a healthy condition. The CONSTRUCTION MANAGER may require replanting of any areas in which the establishment of the vegetative ground cover does not develop satisfactorily.

** END OF SECTION **