SECTION 2102

PLANTS

2102.1 DESCRIPTION

Material requirements for Plants.

2102.2 REQUIREMENTS

a. General.

(1) Referenced Specifications and Standards:

(a) DataScape Guide to Commercial Nomenclature, latest edition, American Nurseryman Publishing Co.

(b) American Standard for Nursery Stock, latest edition, American National Standards Institute, Inc.: ANSI Z60.1

(2) Quality and Size. Provide plants that comply with all applicable portions of ANSI Z60.1. Only plants free of noxious weeds, insect infestations, mechanical injury, diseases, or defects are acceptable for use under this specification. Plant growth is to be vigorous, symmetrical and typical for the species.

Provide the minimum acceptable size specified in the Contract Documents, measured before pruning and with branches in normal position. Larger plants may be substituted, at no change in the Contract unit price, if approved by the Engineer.

(3) Container Plants. Container grown nursery plants may be substituted for balled and burlapped plants if approved by the Engineer.

(4) Inspection of Plants. Plants must comply with any permits, certifications or inspections required by State, Federal or other authorities. Inspection by the Engineer of all plants may be done at any time before final planting. Immediately remove rejected plants from the project site.

Identify the plant's genus, species, cultivar and common name with a tag attached to each plant or attached randomly in groups of smaller plants.

Plants held in storage will be rejected if they show signs of shriveled and dry tops or roots, or if the plant has new growth that developed while in storage. Move deciduous plants from the nursery field before leaf buds have opened. Deciduous plants moved after leaf buds have opened will be rejected, unless written approval is provided by the Engineer.

b. Balled and Burlapped Plants (B & B). Balls must be firm, natural and completely wrapped with jute, flax or hemp burlap. Do not wrap using plastic or polyethylene fabric wrapping. Secure the burlap with rope, twine or wire to hold the ball in a firm, rigid condition. Balls that are crushed, deformed or broken will be rejected. Only nursery stock that has been harvested during the current planting season is acceptable.

The Engineer may accept plants with root balls smaller than specified if the plants were grown in "root control, in-ground containers." Remove the fabric bag for root controlled plants and secure the earth ball with burlap before planting.

c. Container Plants. Provide only plants grown in the container for a minimum of 4 months. When the plant is removed from the container for planting, the soil mixture must remain intact with the root system reaching the sides of the container. Do not use plants with a heavy, twisted root mass circling the bottom of the container.

d. Bare Root Plants. Provide nursery grown plants with well branched root systems which are characteristic of the species presented. Saturate the root system with an anti-transpirant gel or treat with acrylates and protect from moisture loss with a suitable covering.

e. Transplanting Established Materials. All established trees, shrubs, and other plants on a project that are to be transplanted are indicated in the Contract Documents. The method of moving will be shown, such as B & B. Use the ball and burlap method when transplanting out of season or when the plants are leafed out. B & B is always used when transplanting evergreen plants.

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During the planting season, small plants and trees, 2 inch caliper or less, may be transplanted "bare-root." Exceptions to "bare root" planting are shown in the Contract Documents. When transplanting "bare root," dig the plant with a root spread $\frac{1}{3}$ greater than that required for nursery grown plants of the same type, kind and size.

f. Native or Collected Plants. When collected plants are to be supplied, notify the Engineer not less than 5 days before beginning to dig. Dig only inspected and approved plants. The "bare root" requirements of **subsection 2102.2 e**. will apply.

g. Anti-Desiccant (Anti-Transpirant). Treat all evergreens or plants in partial or total leaf with an antidesiccant at the nursery before digging or in the case of potted plants, before delivery. A certification of treatment by the nursery or the treating agency is to accompany the treated plants. Treat all deciduous plants that break dormancy after delivery but before planting. Apply the polyvinyl chloride complex liquid by dipping or spraying according to the manufacturer's recommendation.

2102.3 TEST METHODS

None Specified.

2102.4 PREQUALIFICATION

None Required.

2102.5 BASIS OF ACCEPTANCE

a. Initial Acceptance. Visual inspection and measurement of plants by the Engineer and compliance with all applicable provisions of this Section. Additionally, provide the Engineer with the certificate of treatment for plants treated with an anti-desiccant.

b. Final Acceptance. Compliance with the "plant establishment" provisions of **DIVISION 900.**