

SECTION 02711 - LANDSCAPE PLANTING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The WORK under this Section includes providing all labor, materials, tools, and equipment necessary to furnish and install all trees and shrubs called for in the Contract Documents, all in reasonably close conformity with these Specifications and at locations shown on the Drawings or established by the ENGINEER.

PART 2 - PRODUCTS

2.1 PLANTS

- A. Plants shall be nursery-grown unless otherwise specifically permitted in each instance. American Association of Nurserymen Standard ASA Z 60.1 shall apply.
- B. Upon completion of the WORK and prior to the final acceptance invoices or written statements from the suppliers showing the name of materials received or shipped, shall be presented to the ENGINEER for a final check as to conformance to these Specifications.
- C. Plant material shall conform to state and federal laws relating to inspection for diseases and insect infestation, and shall conform to the American Standard for Nursery Stock. Plant materials shall be first class representatives of their species or variety.
- D. Plants shall have normal, well-developed branches and be densely foliated when in leaf. Plants shall be vigorous and free from defects, disease, insect pests, eggs or larvae, sun-scaled, injuries and abrasions of the bark. Plants shall have well-developed root systems.
- E. Plants shall be container grown or burlap balled. Freshly dug plants, heeled in plants or plants from cold storage shall not be accepted. Trees that have their leader cut, or are so damaged that cutting is necessary, shall not be accepted.
- F. Plants shall not be pruned prior to delivery except upon written approval from the ENGINEER

2.2 TREES AND SHRUBS

- A. Measurements of trees and shrubs shall be taken when their branches are in normal position. Height and spread dimensions specified refer to the main body of the plant, not from branch or root tip to tip. Caliper of trees shall be taken twelve inches above ground level.

2.3 GROUND COVER

- A. Ground cover plants shall be furnished in pots. Unless otherwise specified. The plants shall be at least one year-old, and have been growing in pot long enough to ensure sufficient root growth to hold soil in place when removed from the pot.

SECTION 02711 - LANDSCAPE PLANTING

2.4 PLANT SIZE

- A. Plant sizes shall conform to the measurements specified in the plant list. Exceptions are as follows:
 - 1. Plants larger than specified in the plant list may be used if approved. Use of such plants shall not increase the Contract Price. If larger plants are approved, the spread of roots or ball of earth shall be increased in proportion to the increased size of the plant.
 - 2. Up to 10% of undersized plants in any one variety or species may be used, provided that there are sufficient plants above size to make the average equal to or above specified grade. Acceptable undersize plants shall be larger than average size of the net smaller grade.

2.5 SUBSTITUTIONS

- A. Substitutions will be permitted only if proof is submitted that specific plants or sizes are unobtainable. A proposal will be considered for the nearest equivalent size or variety with equitable adjustment of Contract Price.

2.6 BALLED AND BURLAPPED PLANTS

- A. Balled and burlapped plants shall be contained in firm natural balls of earth, of sufficient diameter and depth to include all fibrous and feeding roots. Plants in which the ball has been broken or cracked, either before or during planting operations, will not be accepted.
- B. Balled and burlapped plants which cannot be planted immediately upon delivery shall be set on the ground and shall be well protected with soil, wet peat moss, wet sawdust, or wet ground bark.
- C. Roots or balls of plants shall be protected from sun and drying winds.
- D. Bundles of plants shall be opened and the plants separated before the roots are covered. Care shall be taken to prevent air pockets among the roots. During planting operations, bare roots shall be covered with canvas, hay, or other approved material.

2.7 PLANTING SOIL

- A. Planting soil shall be composed of a mixture of one part topsoil and one part rotted manure or peat.

2.8 FERTILIZER

- A. Fertilizer shall be a standard commercial grade of organic or inorganic fertilizer containing the following percentage of total nitrogen, available phosphoric acid and water soluble potash: 14-14-14, furnished in standard unopened containers with weight, name of plant nutrients, and manufacturer's guaranteed statement of analysis clearly marked in accordance with state and federal laws. Fertilizer shall be Osmocote 14-14-14, or approved equal.

SECTION 02711 - LANDSCAPE PLANTING

2.9 MULCH

- A. Mulch shall be ground fir, spruce, or hemlock, free from weed seeds, tannin, or other compounds detrimental to plant life. Mulch shall have a size range of one-fourth to one-inch, with a maximum of 50% passing a one-half-inch screen.

PART 3 -3 EXECUTION

3.1 PLANTING SEASONS

- A. All planting shall be performed between May 1 and August 15, unless otherwise authorized in writing by the ENGINEER.

3.2 LAYOUT OF PLANT MATERIAL

- A. The ENGINEER will stake the location of all planting pits.

3.3 INSPECTION OF PLANT MATERIAL.

- A. Plants shall be subject to inspection and approval upon delivery as to size, quality, species, and variety. Approval shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the WORK, for reasons of size, condition of ball or roots, diseases, insects, latent defects, or injuries. Plants that meet the measurements specified, but do not possess a normal balance between height and spread, shall be rejected. Rejected plants shall be removed from the site immediately.

3.4 PLANNTING PITS

- A. Excavate circular pits with vertical sides to a diameter at least two feet greater than the rootball and at least one foot greater in depth. Before any planting is done, the ENGINEER shall be notified of any soil conditions detrimental to the growth of plant materials that are encountered when excavating planting pits.

3.5 PLACEMENT AND BACKFILL

- A. Before plant placement, thoroughly mix fertilizer (Osmocote 14-14-14, or approved equal) with planting soil at the rate of one pound of fertilizer per ten cubic feet of planting soil. Backfill pit with one foot of planting soil or until original root crown soil line is flush with, or slightly above, finished grade when plant is set in pit. Place plant in center of pit in upright position. When pit has been backfilled approximately two thirds full, water thoroughly, saturating rootball and eliminating all air pockets. Complete backfill around rootball with soil mixture and bring to finish grade while flooding with water. After backfilling, apply fertilizer (Osmocote 14-14-14, or approved equal) to surface around periphery of plant rootballs at the rate of ten pounds per 1,000 square feet.

SECTION 02711 - LANDSCAPE PLANTING

3.6 TREE STAKING

- A. Stake all trees as recommended by the supplier.

3.7 PRUNING

- A. Pruning shall be done in accordance with standard horticultural practice to preserve the natural character of the plant.

3.8 MULCHING

- A. All planting pits shall be mulched to a two inch depth in a 30-inch circle. Mulch shall be applied within two days after planting.

3.9 MAINTENANCE

- A. Maintenance of all plants shall be required from the time of planting until the initial acceptance. Maintenance shall include watering, weeding, tightening and repairing of guys, resetting plants to proper grades or upright position and removal of dead materials. No plants will be accepted unless they show a healthy growth and satisfactory foliage condition.

3.10 GUARANTEE

- A. The CONTRACTOR shall provide 100% replacement guarantee for a period of one year, beginning at the date of initial acceptance by the ENGINEER. At the end of the guarantee period and upon written request from the CONTRACTOR, the ENGINEER will make final inspection. The ENGINEER will ensure the plants are healthy, showing satisfactory growth and, in general, show signs of developing into healthy, mature representatives of their species. The CONTRACTOR shall remove and replace promptly any plant material that is dead or not showing satisfactory growth.
- B. Any necessary repairs under the guarantee shall be made within thirty days after receiving notice of need, weather permitting. In the event the CONTRACTOR does not make repairs accordingly, the OWNER, without further notice, may provide materials and labor to make such repairs at the expense of the CONTRACTOR. The replacement shall be on the same variety, size and character as specified for original planting. If approved by the ENGINEER, trees may be replanted at start of next year's planting season. In such cases, the CONTRACTOR shall remove dead trees immediately.

END OF SECTION