

SECTION 605 – PLANTING

605.01--Description

This work shall consist of furnishing and planting trees, shrubs, vines, and other plants of the kinds, sizes, and quantities specified on the plans or by the Engineer and maintaining and replacing plants as specified herein.

605.02--Materials

- (a) **Plants** shall conform to the requirements of Section 244.02(i).
- (b) **Drainage stone** shall conform to the requirements of Section 204.
- (c) **Composted Yard Waste** shall conform to the requirements of Section 244.02 (j).
- (d) **Geotextile Drainage Fabric** shall conform to the requirements of Section 245.
- (e) **Topsoil** shall conform to the requirements of Section 244.02(b)
- (f) **Horticultural Grade Perlite** shall conform to the requirements of Section 244.02(j).
- (g) **Tree Tubes** shall conform to the requirements of Section 244.02(j)
- (h) **Tree Anchors, Staking and Guying Materials** shall conform to the requirements of Section 244.02(j)
- (i) **All other Misc. Planting Materials** shall conform to the requirements of Section 244.02(j) and 244.02(k).

605.03--Procedures

- (a) **Documentation of Confirmed Order:** The Contractor shall submit documentation to the Engineer of a confirmed order of all plant materials 60 days in advance of the proposed planting operation. The documentation shall list the source(s) of supply, all species by common and botanical name, specific variety, and cultivar in the sizes reserved. When special requirements are listed on the planting summary sheet, such as “Specimen Quality,” or “Specimen Street Tree”, etc., the documentation shall certify that the species reserved meet those specific requirements. Once the Documentation of Confirmed Order is received, the Engineer reserves the right to require sample photographs of materials to be supplied. The Engineer also reserves the right to inspect and approve the selection of plant materials at the source of supply prior to delivery. In the event that specific materials are not available, the Contractor shall submit a request for substitutions in accordance with the requirements of (e) herein.
- (b) **Planting Season:** The Planting Season shall be from November 1, through March 31, unless otherwise identified on the plans. The Contractor shall notify the Engineer 48 hours prior to beginning work. All sources of supply, materials, construction schedule, and methods of construction shall be approved by the Engineer prior to beginning work on the project. Plants requiring either spring or fall planting only will be designated on the plans.
- (c) **Sources of Supply:** All plants shall be obtained from a nursery certified by a “Certificate of Registration” in accordance with The Virginia Department of Agriculture and Consumer Services (VDACS), or by a comparable agency responsible for nursery inspection and issuance of a “Certificate of Registration” from the State of origin. A copy of the certification shall accompany each separate delivery of plant materials to the project site, and shall be submitted to the Engineer.
- (d) **Inspecting and Identifying Plants:** Plants will be inspected and identified in accordance with the *Standardized Plant Names* prepared by the Editorial Committee of the American Joint Committee on Horticultural Nomenclature. The Engineer may inspect plants at any time and place. Plants will be inspected immediately prior to being planted. If plants are installed prior to inspection and found to be unsatisfactory, they shall be replaced with approved plants at the Contractor's expense.
- (e) **Substitutions:** No change in the quantity, size, kind, or quality of plants from those specified will be permitted without the written approval of the Engineer. When requesting permission to substitute, the Contractor shall submit to the Engineer written evidence in accordance with the requirements of (a) herein that the specified plants are not available and shall suggest substitute plants that conform to the requirements of the Contract. The Contractor shall indicate the reduced cost, if any, that will accrue to the Department as a result of the substitution. The Engineer may delete plants from the Contract in lieu of approving substitutions.
- (f) **Layout:** Plant locations and outlines of bed areas to receive plants shall be staked or marked by the Contractor and will be inspected by the Engineer for approval prior to plant installation. The

- Contractor shall notify the Engineer a minimum of 48 hours prior to scheduling the inspection. Planting shall not be permitted until the Engineer has approved the staking layout. Unforeseen conditions such as the location of traffic signs, utilities and drainage items may necessitate adjustments in plant locations, and such adjustments will only be permitted when approved in writing by the Engineer.
- (g) **Delivery:** The Contractor shall notify the Engineer at least 48 hours in advance of the anticipated delivery date for plants. A legible copy of the invoice showing the kinds and sizes of plants in each shipment shall be submitted to the Engineer. A copy of the current Certificate of Nursery Inspection from the State of origin shall accompany each shipment of plants.
- (h) **Labeling:** Plant material delivered to the project shall be legibly identified with a waterproof label as to the genus, species, and size of the plants. When plants are in bales, bundles, boxes, or other containers, a legible label indicating the genus, species, size, and quantity of the plants shall be attached to each container. A minimum of 10 percent of each species in each shipment shall be so labeled. Failure to comply with this identification labeling will be cause for rejection.
- (i) **Transporting and Protecting:** Plants transported to the project in open vehicles shall be covered with suitable covers securely fastened to the body of the vehicle. Closed vehicles shall be adequately ventilated to prevent overheating plants. Plants shall be kept moist, fresh, and protected at all times.
- (j) **Storing:** When plants are to be stored, they shall be stored at a location approved by the Engineer. Plants stored for more than 30 days shall not be used unless approved by the Engineer. Unless the Engineer approves other methods of storage, bare-root plants that are not planted within 24 hours after delivery shall be heeled-in in a moist trench dug in the ground. Bundles shall be opened, and plants shall be separated and placed singly in the trench with the roots spread in a natural position. Roots of each layer of plants shall be immediately covered in a manner satisfactory to the Engineer with moist, pulverized soil; moist sawdust; or other approved material. Root-covering materials shall be kept moist at all times. Shade shall be provided as directed by the Engineer. At the discretion of the Engineer, balled material, container-grown material, and plants in plantable pots that are not planted within 48 hours of delivery shall have their root zone protected by wet sawdust or other approved material. Rejected plants shall be removed from the storage area within 24 hours of rejection or, with the written approval of the Engineer, may be marked with yellow paint or otherwise made readily identifiable. If rejected plants have not been removed or acceptably marked within 24 hours, the use of plants from the storage area will not be allowed until rejected plants have been removed or identified by marking.
- (k) **Planting:**
- 1 **Underground and Aboveground Conditions:** It shall be the responsibility of the Contractor to have marked, the location of all underground utilities with Ticket Information Exchange (TIE) / (Miss Utility) and all other applicable underground utility providers such as sewer and water service, and VDOT traffic signal cable prior to digging. The Contractor shall be responsible for locating and working around aboveground utilities. If underground obstructions or any other unforeseen subsurface or above surface conditions that could interfere with a utility or become detrimental to plant growth are encountered, the Engineer may require that plant pits be enlarged or relocated or that the plants be deleted from the contract.
 - 2 **Planting Trees or Shrubs on Slopes Steeper than 3:1:** Drainage requirements for trees or shrubs on slopes steeper than 3:1 will be determined by percolation tests, with no more than 3 tests per slope, as designated by the Engineer. Slopes for this test are determined from cut and fill slopes shown on the cross sections. Percolation testing shall consist of the following: The Contractor shall auger holes that are 12 inches in diameter and 24 inches in depth. Three holes shall be distributed across the slopes vertically and horizontally. The Contractor shall fill the holes with water and allow them to drain. If soil is extremely dry, fill holes twice and allow to drain. Fill holes again and measure rate at which water percolates into the soil. Water in holes should recede at the rate of 2 inches per hour (minimum) or pit modification for improving drainage shall be required.
 - 3 **Preparing Planting Pits for Trees and Shrubs:** Planting pits shall be excavated to meet the minimum requirements VDOT Road and Bridge Standards unless otherwise indicated on the plans by detailed drawings. Sides of pits that become plastered or glazed shall be scarified. Surplus excavation and unsuitable material shall be disposed of in accordance with the requirements of Section 106.04 or as otherwise approved in writing by the Engineer. Preparation

of the planting medium (soil mix) shall utilize 3 parts of the original excavated soil from the digging operation thoroughly mixed with 1 part composted yard waste, except where linear or oversize planting pits are specified on the plans.

If the Contractor determines that the original excavated soil is not suitable for reusing with amendments for achieving an acceptable growing medium, the Contractor shall notify the Engineer. The Engineer shall make a determination as to the quality of the soil, and if found to be unacceptable; will direct the Contractor to use topsoil or composted yard waste for use in the soil mix. In such cases, the planting pit, and unsuitable soils surrounding the pit shall be removed as directed by the Engineer. The Engineer reserves the right to have the original soil tested prior to making a determination for replacement.

- 4 **Preparing Plant Beds:** Plant beds shall be prepared by the Contractor in accordance with the following:
 - a. Plant bed preparation shall only be required on slopes of 3:1 or flatter. Where grass and weeds are present, the Contractor shall treat the designated bed area(s) with a broad spectrum grass and weed killing herbicide at least two weeks prior to beginning bed preparation, or physically remove turf and weeds immediately before bed preparation. The entire area of the plant bed shall be cultivated to a depth of 4 inches by a rotary cultivator or other approved method. The Contractor shall then apply composted yard waste at a depth of three inches over the entire plant bed and re-till to form a homogenous soil medium. Soil shall be cultivated so that there are no clods larger than 2 inches in diameter.
 - b. Any remaining grass, sod, and weeds shall be removed from the bed. Rocks over 3 inches in diameter, clods, roots, and other objectionable material remaining on the surface shall be removed and disposed of in accordance with the requirements of Section 106.04 or as approved in writing by the Engineer. Individual planting pits shall not be dug until after the bed is prepared to the satisfaction of the Engineer.
 - c. Upon completion of planting, the bed shall be hand raked to an even surface and neatly edged with a "V" cut edge located a minimum of 12 inches from the root ball of plants along the outer edge of the bed. Mulch shall be applied to the entire bed area. On certain projects where mulched beds around large quantities of plant materials are used to control weed growth and are not intended as a prepared soil medium, tilling and application of composted organic material throughout the plant bed shall be waived when beds are labeled on the plans as "Bed Preparation Not Required".
- 5 **Linear Planting Pit:** Areas labeled on the plans and details as "Linear Planting Pit" shall be excavated to the horizontal and vertical dimensions indicated on the plans to receive soil mixture. Soil mixture shall consist of 1 part composted yard waste, and 1 part horticultural grade perlite, unless otherwise indicated in the contract documents, and shall include any necessary excavation required for installation of plant underdrain systems. Plant underdrain system(s), as applicable, shall be indicated on the plans, listed as a pay item and installed in accordance with plan details.

Soil mix for linear planting pits shall be installed in 6 inch lifts, lightly compacted by foot or other approved method, and moistened prior to proceeding with next lift. If settlement occurs prior to planting, additional soil mix shall be added at the direction of the Engineer. Prior to planting the Contractor shall till the linear planting pit to a depth of 4 inches, hand rake the area and adjust the grade adjacent to curb or sidewalk to receive 3 inches of mulch.
- 6 **Oversize Planting Pit:** shall be prepared in accordance with the plan details at locations shown on the plans. Backfill shall consist of one-half part native soil excavated from the plant pit, and one-half part composted yard waste. If native soil is determined by the Engineer to be unsuitable, 100 percent composted yard waste shall be used. If settlement occurs prior to planting, additional soil mix shall be added at the direction of the Engineer. After planting the planting pit shall be neatly edged except when the planting pit falls within a larger bed area.
- 7 **Installing Trees and Shrubs:** Balled and burlapped and containerized plant materials shall be installed in plant pits in accordance with the requirements of the VDOT Road and Bridge Standards, unless otherwise indicated on the plans. Bare roots of plants shall be spread out in a natural position. Broken or bruised roots shall be pruned. After positioning plants in the planting pit and prior to backfilling, root ball wrapping materials, except metal root ball cages shall be cut and dropped to the bottom of the pit. Root ball wrapping materials shall not be removed from

under the root ball. Metal root ball cages shall be cut and removed to a minimum of 6 inches below finished grade. Wrapping materials within root ball cages shall be cut or unwrapped to the same elevation as the cage. All other wrapping materials such as tags, twine and colored marking ribbon shall be removed from the plant unless otherwise directed by the Engineer. The soil mixture shall then be filled in around roots and lightly tamped. Light tamping around root balls shall be performed using a method approved by the Engineer. Foot tamping will be permitted in the bottom of pits before plants are installed, around root balls when there is ample room to accommodate the foot without damage to the ball, and in the planting of bare-root plants after roots have been covered with the soil.

Backfill material in pits shall be saturated with water. The amount of water applied and method of application shall be approved by the Engineer. Failure to water properly at the time each plant is installed will be cause for rejection of the plant. Frozen backfill material shall not be used.

Potted plants shall not be removed from their container until immediately before planting. Containers shall be removed by approved methods that will not damage roots or loosen soil balls. The sides of containerized materials shall be scarified prior to planting.

When planted, watered, and fully settled, plants shall be vertical and shall stand at a height flush with the height of which they were growing.

- 8 **Handling Plants during Planting:** Roots of bare-root plants shall be kept covered with moist burlap or other approved material prior to planting. Forest tree seedlings and forest tree transplants shall be carried in a container filled with sufficient mud to puddle roots. When seedling roots have been coated with a protective material, the seedlings shall be protected in accordance with the U.S. Forest Service's recommendations relative to treatment of seedling roots while seedlings are being planted. Plants will be rejected if their roots are exposed to drying conditions at any time.
 - (l) **Forming Water Rings and Saucers:** Immediately after the installation of each plant, a saucer shall be formed around the plant pit. Soil used to form the saucer shall be compacted by tamping to prevent runoff of water from the pit. Saucers shall measure 4 to 6 inches in width, and 2 to 3 inches in height after tamping. Saucers will not be required for forest tree seedlings, or forest tree transplants. Water rings and saucers shall be formed on the wetland trees and shrubs planted on slopes and upland areas adjacent to the wetland.
 - (m) **Applying Mulch:** Mulch shall be applied uniformly to a 3-inch depth over the entire area of the plant pit or plant bed within 48 hours after completion of planting. Re-mulching at the terminus of the establishment period shall be applied at a depth of 1-1/2 inches. Mulch shall be anchored in a manner satisfactory to the Engineer. Mulch shall not be required for wetland trees and shrubs, or upland forest tree seedlings. Mulch shall be applied to wetland trees and shrubs on slopes and upland areas adjacent to the wetland.
 - (n) **Staking, Guying, Anchoring:** Each plant shall be staked and guyed or secured with below ground tree anchors immediately following planting, unless otherwise indicated in the Planting Plan Summary and General Notes. Below ground tree anchors shall be used when specified on detailed drawings in the plans. Staking and guying shall be required for wetland trees and shrubs on slopes and upland areas adjacent to the wetland.
 - (o) **Pruning:** Plants that have been freshly pruned before delivery will be rejected. If necessary, plants shall be pruned either immediately before or within 48 hours after they are planted. Pruning of trees and shrubs to be planted on projects shall consist of removing dead, diseased, broken or other branches deemed injurious to the health of the plant, and for removal of sprouts and sucker growth. Care shall be taken to preserve the natural character of the plant. Pruning shall be performed with tools and equipment in excellent working condition that are specifically designed for the appropriate work. All pruning shall be performed in accordance with the current American National Standards Institute (ANSI A300) and as directed by the Engineer. All debris removal including disposal from the pruning operation shall be the responsibility of the Contractor.
 - (p) **Pit Drains:** Pit drains or plant underdrain systems shall be installed as shown on the plans.
 - (q) **Tree Tubes:** This work shall consist of installing tree tubes on all seedling trees in accordance with the manufacturer's recommendations, the plans and product specifications.

605.04—Care of Plants

Plant care shall begin immediately after each plant is satisfactorily installed and shall continue until final acceptance. Care shall include but not be limited to replacing displaced mulch, repairing and reshaping water rings or saucers, maintaining stakes and guys as originally installed, watering when needed or as directed by the Engineer, and performing any other work required to keep plants in a healthy condition. Dead, defective, or rejected plants shall be immediately removed and replaced in accordance with the requirements of Section 605.05(b)4.

605.05--Establishment Period

- (a) **Beginning of Establishment Period:** The establishment period shall begin on a date following completion of the planting (spring or fall), when the Contractor receives written confirmation from the Engineer, that all work has been completed in accordance with the requirements of this Section and the plans, and that all plants are living, healthy and in a viable growing condition as determined by the Engineer. Plants that are replaced in order to meet these initial specifications are not considered as “plant replacements.”
- (b) **Establishment Period:** The establishment period shall continue through a minimum of one growing season, and shall terminate on the date determined in writing by the Engineer. During the establishment period, the Contractor shall do all work necessary to keep the plants in a healthy growing condition, including, but not limited to the following:
 - 1 **Watering:** The Contractor shall prepare and submit to the Engineer a schedule for watering in accordance with the frequency listed on the project summary sheet. However, the Contractor shall be responsible for watering as frequently as is necessary to maintain an adequate supply of moisture within the root zone of all plantings at all times or if there is less than 1 inch of rainfall in a seven day period during the months of April through September. Water shall not be applied at a force that will displace soil or mulch. Quantities and frequency of watering shown on the plans are for minimum estimating purposes only.
 - a. The Engineer may require the use of watering needles or other approved methods to prevent displacement of soil, mulch and runoff of water. The Engineer may make periodic inspections to ascertain the adequacy of the Contractor’s watering and the moisture content of the soil.
 - b. The quantity of water supplied shall not be in excess of that normally required to ensure optimum growing conditions. Watering shall not commence until methods and equipment have been approved by the Engineer. The Engineer may require or suspend watering at any time.
 - 2 **Notification and Scheduling:** When notified by the Engineer that watering is required, the Contractor shall begin watering within 48 hours with sufficient labor and equipment and shall continue to water daily where and as directed, without delays or interruptions, to ensure that the root zone does not become dry at any time. In the event the Contractor fails to begin watering operations within 48 hours after notification, the Engineer may proceed with adequate forces, equipment, and materials to perform the watering operations and the entire cost of the watering operations will be deducted from monies due the Contractor.
 - 3 **All establishment period maintenance work**, except watering, shall begin within 7 working days after the Engineer notifies the Contractor that the establishment period has begun.
 - 4 **Plant Replacements:** Between the beginning and ending dates of the establishment period, plants that are dead, defective, or otherwise not in a healthy growing condition as determined by the Engineer shall be removed immediately at the Contractor’s expense. Plant replacements shall be made once in the spring if required (Between March 1 and March 31), and once in the fall if required (Between November 1 and December 31), as necessary to replace dead or defective plant materials as directed by the Engineer. For each plant replaced, the first replacement, if required, shall be at the Contractor’s expense. The second replacement, if required, will be paid for at 35 percent of the original contract unit price per each plant replaced.
 - 5 **Stakes, and Guys, and/or Below Ground Tree Anchors** shall be repaired or replaced immediately as needed. Stakes and Guys shall be removed when no longer required as directed by the Engineer. Tree anchors shall remain in place.

- 6 **Eroded Saucer Rings** shall be repaired or replaced as needed and/or as directed by the Engineer.
 - 7 **Mulch** shall be redressed as needed and/or as directed by the Engineer throughout the establishment period.
 - 8 **Re-mulching:** When established as a separate pay item, remulching shall be reapplied to all individual plants and plant beds prior to the terminus of the establishment period at a rate of approximately 1 1/2 inch depth, uniformly over all individual plant pits and plant beds, and/or as directed by the Engineer.
 - 9 **Vegetation Control** shall consist of the control and/or removal of weeds, grass and root growth from plant beds and mulched areas around individual plants. Such weeding shall be performed once in the month of May, June, July, August, and September for a total of five weeding operations over the duration of the establishment period. The Contractor shall submit a schedule for vegetation control for approval by the Engineer prior to the Contractor beginning vegetative control operations.
 - a. Removal of weeds, grass and root growth may be completed by hand or through the application of “pre-emergent” and “post emergent” herbicides as approved by the Engineer. All herbicide applications shall be performed by certified pesticide applicators in accordance with the requirements of Section 601. Additional weeding may be performed when requested by the Engineer and with written agreement from both parties. The Engineer also reserves the right to delete individual weeding cycles at no cost to the Department when necessary. The Contractor shall be responsible for replacing plants that are damaged or that die due to the application of herbicide treatments.
 - b. When herbicides are used for post emergent weed control, the weeds shall be cut to a height of 6 inches or as recommended by the manufacturer if necessary, prior to applying the herbicide. The Engineer reserves the right to change the frequency or delete specific areas scheduled for weed control. Other pesticides, adjuvants and plant growth regulators may be used when approved by the Engineer.
 - c. Turf maintenance which includes grass and other vegetation around individual plant pits, between groups of plant pits that are 15 feet on center or less, and around the perimeter of plant beds shall be cut to a height of approximately 4 inches. For each individual plant pit, group of plant pits, and plant beds, a perimeter extending 5 feet in width shall be maintained around the outermost plant pits and edge of beds where grass and other vegetation is present, and where such areas exist within the right-of-way or construction easement. Mowing shall be performed once in each month of May through September. Additional mowing may be performed when requested by the Engineer. The Engineer reserves the right to delete individual mowing cycles when deemed necessary by the Engineer.
 - 10 **Additional Work**, including pruning of dead, broken or diseased branches, and seasonal spraying with approved insecticides and fungicides, shall be performed to ensure plant survival as approved or directed by the Engineer.
- (c) **Termination of Establishment Period:** Any dead, missing, or defective plants shall be replaced as directed by the Engineer prior to termination of the establishment period. The Engineer shall be notified within 48 hours prior to beginning the replacement work.
- The establishment period shall end on a date established by the Engineer, when the Contractor receives written notification from the Engineer that confirms all the requirements of (b) herein have been satisfactorily completed.

605.06--Guarantee

The Contractor's performance bond, furnished in accordance with the requirements of Section 103.05, shall provide for necessary maintenance during the establishment period and replacements in kind, or with a substitute acceptable to the Engineer, for plants that are not in a healthy growing condition or that have died back to the crown or beyond the normal pruning limit.

605.07--Measurement and Payment

Plants will be measured by an actual count of living plants in a healthy growing condition and will be paid for at the contract unit price per each. Plants that the Engineer deleted from the Contract will not be measured for

payment. This price shall include furnishing and delivering plants and miscellaneous planting materials; preparing planting pits, except when established as a separate pay item, forming saucers; installing plant materials; watering, except during establishment period, applying fertilizer; back filling with approved soil mixture; staking; guying; anchoring; pruning; applying mulch, except to areas designated on the plans as plant beds, replacing dead or damaged plants; repairing, replacing and removing stakes and guys when no longer needed; and maintaining plants in a healthy growing condition until final acceptance.

Trees or shrubs planted on a slope steeper than 3:1 with pit modification as indicated in the Department's Road and Bridge Standard Section 1201.06 will be paid for at 125 percent of the price bid. Such price shall also include the cost of pit modification, stone and geotextile filter fabric. Percolation tests shall be included in the price bid for plants.

Replacements for plants lost during the establishment period because of theft, damage, or destruction caused by persons or equipment belonging to persons or organizations other than those engaged in performing the work or during delivery of the plants, or plants lost due to damage from animals either wild or domestic, will be paid for at the rate of 35 percent the contract unit price per each. If vandalism or vehicle damage is determined by the Engineer to be the cause the rate will be 50 percent the contract unit price per each. This price shall include all costs associated with furnishing and installing the replacement. Replacements for plants that die due to other reasons shall be replaced and paid for in accordance with the requirements of Section 605.05(b)4.

Bed Preparation will be measured and paid for in units of 100 square feet of surface area. This price shall include herbicide spraying of areas to be prepared for planting or physically removing turf and weeds, restoring areas to original grade with topsoil (as applicable) as directed by the Engineer, tilling soil, furnishing, delivering, and applying composed yard waste at the specified depth, tilling in composted yard waste, hand raking, neatly edging bed, and all incidentals necessary to prepare a healthy growing medium for planting.

Pit drains when detailed and established as a separate pay item on the plans will be measured and paid for in units of each, complete-in-place, which price shall include drainage stone, pipe, pipe grate, prefabricated drainage core, drainage/aeration cloth, and geotextile drainage fabric as designated on the plans.

Linear Planting Pit will be measured and paid for in units of cubic yards of excavated material required to achieve the horizontal and vertical dimensions indicated on the plans to receive soil mixture, including furnishing, delivering and storage of soil mixture materials to be used, and disposal of surplus excavated materials. Such price shall also include the cost of mixing and installing all components of the soil mix (horticultural grade perlite and composted yard waste), bed preparation, hand raking and adjusting surface to receive mulch, and furnishing and installing underdrain system(s) if indicated on the plans, including drainage stone, drainage/aeration cloth, prefabricated drainage core, geotextile drainage fabric, pipe, and pipe grate in accordance with the plans and detailed drawings, and all necessary incidentals complete in place.

Oversize Planting Pit will be measured and paid for in units of each, which price bid shall include excavation and disposal of unsuitable material, provision, and installation of pit drain materials if shown as part of the plan details, installation of approved backfill material and mixing with composted yard waste.

Mulching will be measured in units of 100 square feet of surface area. Mulch for plant beds at the time of initial installation will be paid for at the contract unit price per 100 square feet. This price shall include furnishing, delivering, and applying mulch. No separate payment will be made for initial application or maintenance of mulch around plants that are not in continuous mulched plant beds. The cost thereof shall be included in the price for the plant.

Re-mulching, when established as a separate pay item, will be measured and paid for in cubic yards. This price shall include furnishing, delivering, and applying mulch to plant beds, and to plants in individual saucer rings prior to the terminus of the establishment period. Remulching does not include regular maintenance of individually mulched plants or plant beds for the duration of the establishment period.

Watering during the establishment period will be measured in units of 1000 gallons, and will be paid for at the contract unit price per unit, applied at the rates designated on the plans. This price shall include furnishing, delivering, and applying water and performing all other work in connection therewith and incidental thereto. No payment will be made for watering at the time of original planting or during the installation period until from plant installation until the start of the establishment period or whenever replacements are planted.

Vegetation Control will be measured and paid for on a unit basis. Compensation for weeding (removal of weeds, grass, and root growth) and turf maintenance shall be made on a Unit basis consisting of each complete project weeding and turf maintenance operation accomplished by the Contractor, including the removal and disposal of unwanted vegetation, application of pesticides, the performance of mowing around and between individual plants, and as reviewed and approved by the Engineer.

Tree Tubes will be measured and paid for at the contract unit price per each which shall include furnishing and installing the tube, including all incidentals necessary to complete the work. This price shall also include the removal and disposal of the tree tube at the end of the establishment period.

Payment will be made under:

Pay Item	Pay Unit
(Name of) Plant (Size)	Each
Bed Preparation	Unit (100 square feet)
Pit Drain	Each
Linear Planting Pit	Cubic Yard
Oversize Planting Pit	Each
Mulching	Unit (100 square feet)
Re-mulching	Cubic Yard
Watering	Unit (1,000 gallons)
Vegetation Control	Unit
Tree Tube	Each