

8-02 ROADSIDE RESTORATION

8-02.1 Description

This Work consists of furnishing and placing topsoil, compost, and soil amendments, and furnishing and planting bare root plants, container plants, balled and burlapped plants, cuttings, fascines, live stakes, live poles, rhizomes, tubers, lawn installation, controlling weeds, performing plant establishment activities, and soil bioengineering in accordance with these Specifications and as shown in the Plans or as directed by the Engineer.

Trees, whips, shrubs, ground covers, cuttings, live stakes, live poles, rhizomes, tubers, rootstock, and seedlings will hereinafter be referred to collectively as “plants” or “plant material.”

8-02.2 Materials

Materials shall meet the requirements of the following sections:

Soil	9-14.1
Fertilizer	9-14.3
Erosion Control Blanket	9-14.5
Plant Materials	9-14.6
Stakes, Guys, and Wrapping	9-14.7
Irrigation Water	9-25.2

Botanical identification and nomenclature of plant materials shall be based on descriptions by Hitchcock and Cronquist in “Flora of the Pacific Northwest”. Botanical identification and nomenclature of plant material not found in "Flora" shall be based on Bailey in “Hortus Third” or superseding editions and amendments or as referenced in the Plans.

8-02.3 Construction Requirements

8-02.3(1) Responsibility During Construction

The Contractor shall ensure adequate and proper care of all plant material and Work done on this project until all plant establishment periods required by the Contract are complete or until Physical Completion of the project, whichever is last. Existing vegetation shall not be disturbed unless required by the Contract or approved by the Engineer.

Adequate and proper care shall include, but is not limited to, keeping all plant material in a healthy, growing condition by watering, cultivating, pruning, and spraying. Plant material crowns, runners, and branches shall be kept free of mulch at all times. This Work shall include keeping the planted areas free from insect infestation, weeds or unwanted vegetation, litter, and other debris along with retaining the finished grades and mulch in a neat uniform condition.

The Contractor shall have sole responsibility for the maintenance and appearance of the roadside restoration.

8-02.3(2) Roadside Work Plan

Before starting any Work that disturbs the earth and as described in Sections 8-01, 8-02 and 8-03, the Contractor shall submit a roadside work plan for approval by the Engineer. The roadside work plan shall define the Work necessary to provide all Contract requirements, including: clearing and grubbing, Roadway excavation and embankment, wetland excavation, soil preparation, habitat Structure placement, planting area preparation, seeding area preparation, bark mulch and compost placement, seeding, planting, plant replacement, irrigation, and weed control in narrative form.

The Roadside Work Plan shall also include the following:

Progress Schedule

In accordance with Section 1-08.3, the Progress Schedule shall include the planned time periods for Work necessary to provide all Contract requirements covered in Sections 8-01, 8-02, and 8-03. Where appropriate, notes on the schedule shall indicate the calendar dates during which these activities must occur.

Weed and Pest Control Plan

The Weed and Pest Control Plan shall be submitted and approved prior to starting any Work defined in Sections 2-03, 8-01, and 8-02.

The weed and pest control plan shall include scheduling and methods of all control measures required under the Contract or proposed by the Contractor including soil preparation methods to meet the required soil surface conditions in the planting , bark mulch, and wetland areas. The weed control plan shall show general weed control including hand, mechanical and chemical methods, timing, application of herbicides including type, rate, use and timing, mowing, and noxious weed control. Target weeds and unwanted vegetation to be removed shall be identified and listed in the weed control plan.

The plan shall be prepared and signed by a licensed Commercial Pest Control Consultant when chemical pesticides are proposed. The plan shall include methods of weed control; dates of weed control operations; and the name, application rate, and Material Safety Data sheets of all proposed herbicides. In addition, the Contractor shall furnish the Engineer with a copy of the current product label for each pesticide and spray adjuvant to be used. These product labels shall be submitted with the weed control plan for approval.

Plant Establishment Plan

The Plant Establishment Plan shall be prepared in accordance with Section 8-02.3(13), submitted and approved prior to initial planting acceptance in accordance with Section 8-02.3(12). The Plan shall show the proposed scheduling of activities, materials, equipment to be utilized for the first-year plant establishment, and an emergency contact person. The Plan shall include the management of the irrigation system, when applicable. Should the plan become unworkable at any time during the first-year plant establishment, the Contractor shall submit a revised plan prior to proceeding with further Work

Before starting any Work described in Sections 8-02 and 8-03, the Contractor shall submit a roadside work plan for approval by the Engineer. The roadside work plan shall define the Work necessary to provide all Contract requirements, including: planting area preparation, seeding, planting, plant replacement, irrigation, and weed control in narrative form.

8-02.3(2)A Chemical Pesticides

Application of chemical pesticides shall be in accordance with the label recommendations, the Washington State Department of Ecology, local sensitive area ordinances, and Washington State Department of Agriculture laws and regulations. Only those herbicides listed in the table *Herbicides Approved for Use on WSDOT Rights of Way* (http://www.wsdot.wa.gov/maintenance/pdf/Herbicide_List.pdf) may be used. The applicator shall be licensed by the State of Washington as a Commercial Applicator or Commercial Operator with additional endorsements as required by the Special Provisions or the proposed weed control plan. The Contractor shall furnish the Engineer evidence that all operators are licensed with appropriate endorsements, and that the pesticide used is registered for use by the Washington State Department of Agriculture. All chemicals shall be delivered to the job site in the original containers. The licensed applicator or operator shall complete a Commercial Pesticide Application Record (DOT Form 540-509) each day the pesticide is applied, and furnish a copy to the Engineer by the following business day.

The Contractor shall use extreme care to ensure confinement of the chemicals within the areas designated. The use of spray chemical pesticides shall require the use of anti-drift and activating agents, and a spray pattern indicator unless otherwise allowed by the Engineer.

The Contractor shall assume all responsibility for rendering any area unsatisfactory for planting by reason of chemical application. Damage to adjacent areas, either on or off the Highway Right of Way, shall be repaired to the satisfaction of the Engineer or the property owner, and the cost of such repair shall be borne by the Contractor.

8-02.3(2)B Weed Control

Those weeds specified as noxious by the Washington State Department of Agriculture, the local Weed District, or the County Noxious Weed Control Board and other species identified by the Contracting Agency shall be controlled on the project in accordance with the weed control plan.

Weed control will be required for all areas within the project limits designated by the Engineer including, but not limited to, planting areas, erosion control seeding areas, bark mulch areas and bark mulch rings, preservation areas, and mitigation areas.

8-02.3(3) Planting Area Weed Control

All planting areas shall be prepared so that they are weed and debris free at the time of planting and until completion of the project. The planting areas shall include the entire ground surface, regardless of cover, all planting beds, areas around plants, and those areas shown in the Plans.

Weed control will be required for all areas within the project limits designated by the Engineer including, but not limited to, planting areas, erosion control seeding areas, bark mulch areas and bark mulch rings, preservation areas, and mitigation areas.

All applications of post-emergent herbicides shall be made while green and growing tissue is present. Should unwanted vegetation reach the seed stage, in violation of these Specifications, the Contractor shall physically remove and bag the seed heads. All physically removed vegetation and seed heads shall be disposed of off site at no cost to the Contracting Agency.

8-02.3(4) Topsoil

Topsoil shall be evenly spread over the specified areas to the depth shown in the Plans or as otherwise ordered by the Engineer. The soil shall be cultivated to a depth of 1-foot or as specified in the Special Provisions or the Plans. After the topsoil has been spread, all large clods, hard lumps, and rocks 3-inches in diameter and larger, and litter shall be raked up, removed, and disposed of by the Contractor.

Topsoil shall not be placed when the ground or topsoil is frozen, excessively wet, or in the opinion of the Engineer, in a condition detrimental to the Work.

8-02.3(4)A Topsoil Type A

Topsoil Type A shall be as specified in the Special Provisions.

8-02.3(4)B Topsoil Type B

Topsoil Type B shall be native topsoil taken from within the project limits and shall meet the requirements of Section 9-14.1(2).

Topsoil Type B shall be taken from areas designated by the Engineer to the designated depth and stockpiled at locations that will not interfere with the construction of the project, as approved by the Engineer. Areas beyond the slope stakes shall be disturbed as little as possible in the above operations.

When topsoil Type B is specified, it shall be the Contractor's responsibility to perform the excavation operations in such a manner that sufficient material is set aside to satisfy the needs of the project.

Upon Physical Completion of the Work, topsoil Type B remaining and not required for use on the project shall be disposed of by the Contractor at no expense to the Contracting Agency in accordance with Section 2-03.3(7)C.

Should a shortage of topsoil Type B occur, and the Contractor has wasted or otherwise disposed of topsoil material, the Contractor shall furnish topsoil Type C at no expense to the Contracting Agency.

Topsoil Type B will not be considered as selected material, as defined in Section 2-03.3(10), and the conditions of said section shall not apply.

Materials taken from Roadway excavation, borrow, stripping, or other excavation items, and utilized for topsoil, will not be deducted from the pay quantities for the respective items.

8-02.3(4)C Topsoil Type C

Topsoil Type C shall be native topsoil obtained from a source provided by the Contractor outside of the Contracting Agency-owned Right of Way. Topsoil Type C shall meet the requirements of Section 8-02.3(4)B and Section 9-14.1(2).

8-02.3(5) Planting Area Preparation

The Work involved in preparing planting areas shall be conducted so the flow lines in drainage channels are maintained. Material displaced by the Contractor's operations, which interferes with drainage, shall be removed from the channel and disposed of as approved by the Engineer.

Before planting and final grading takes place, the area shall be cultivated when specified in the Plans or the Special Provisions.

The areas shall be brought to a uniform finished grade, 1-inch, or the specified depth of mulch plus 1-inch, below walks, curbs, junction and valve boxes, catch basins, and driveways, unless otherwise specified. All excess material and debris, stumps, and rocks larger than 3-inches, shall be removed and disposed of off the project site or as approved by the Engineer.

8-02.3(6) Soil Amendments

Soil amendments of the type, quality, and quantities specified shall be applied where shown in the Plans or as specified in the Special Provisions. Areas receiving soil amendments shall be bare soil or vegetation free prior to application. Compost used for soil amendments shall be Fine Compost. All soil amendments shall be installed as shown in the Plans within 30 calendar days after delivery to the project site.

8-02.3(7) Layout of Planting

The Contractor shall stake the location of all trees larger than 1-inch caliper and the perimeter of all planting areas for approval by the Engineer prior to any installation activities.

The Engineer will make only the field measurements necessary to calculate and verify quantities for payment.

All trees to be planted in mowable grass areas shall be located a minimum of 10-feet from the edge of planting beds, other trees, fence lines, and bottom of ditches unless otherwise specified.

Tree locations shown in the Plans shall be considered approximate unless shown with stationing and offset distance. In irrigated areas, trees shall be located so their trunk is a minimum of $\frac{1}{3}$ of the spray radius away from the nearest sprinkler head.

Unless otherwise shown, planting beds located adjacent to Roadways shall begin at the Shoulder Subgrade.

8-02.3(8) Planting

No plant material shall be planted until it has been inspected and approved for planting by the Engineer. Rejected material shall be removed from the project site immediately. All plants for the project or a sufficient quantity to plant 1-acre of the site, whichever is less, shall be received on site prior to the Engineer beginning inspection of the plants.

Under no circumstances will planting during freezing weather or in frozen ground be permitted during unsuitable soil or weather conditions as determined by the Engineer. Unsuitable conditions may include, frozen soil, saturated soil, standing water, high winds, heavy rains, and high water levels. All planting shall be accomplished during the following periods:

1. Non-irrigated Plant Material
October 1 to March 1.
2. Irrigated Plant Material

In irrigated areas, plant material shall not be installed until the irrigation system is fully operational. Trees and shrubs may be planted in irrigated areas during the non-irrigated planting window before the irrigation system is functional with the written approval of the Engineer only if the irrigation system is guaranteed to be operational prior to the end of the non-irrigated planting window.

Plants shall not be placed in areas that are below the finished grade.

Planting hole sizes for plant material shall be in accordance with the details shown in the Plans. Any glazed surface of the planting hole shall be removed by hand methods.

Plant material supplied in containers shall not be removed from the containers until the time of planting at the planting location. Roots of bare root stock shall not be bunched, curled, twisted, or unreasonably bent when placed in the planting hole. Root balls shall be loosened prior to planting. All bare root plant material shall be dormant at the time of planting.

All burlap, baskets, string, wire and other such materials shall be removed from the hole when planting balled and burlapped plants. The plant material shall be handled in such a manner that the root systems are kept covered and damp at all times. The root systems of all bare root plant material shall be dipped in a slurry as specified in the Special Provisions immediately prior to planting. The root systems of container plant material shall be moist at the time of planting. In their final position, all plants shall have their top true root (not adventitious root) no more than 1-inch below the soil surface, no matter where that root was located in the original root ball or container. The backfill material and root ball shall be thoroughly watered on the same day that planting occurs regardless of season.

8-02.3(9) Pruning, Staking, Guying, and Wrapping

Plants shall be pruned at the time of planting, only to remove minor broken or damaged twigs, branches or roots. Pruning shall be done with a sharp tool and shall be done in such a manner as to retain or to encourage natural growth characteristics of the plants. All other pruning shall be performed only after the plants have been in the ground at least 1-year.

Trees shall only be staked when so noted in the Plans. Each tree shall be staked or guyed before completion of the backfilling in accordance with the details shown in the Plans.

All staking and guying shall be completely removed at the end of the first year of plant establishment, unless otherwise approved by the Engineer.

8-02.3(10) Fertilizers

Fertilizers shall be applied in the form specified in the Special Provisions. Application procedures shall be in accordance with the manufacturer's recommendations or as specified in the Special Provisions. The Contractor shall submit for approval a guaranteed fertilizer analysis label for the selected product.

8-02.3(11) Bark or Wood Chip Mulch

Bark or wood chip mulch of the type and depth specified shall be applied where shown in the Plans or as specified in the Special Provisions. Any contamination of the mulch due to the Contractor's operations shall be corrected to its former condition at the Contractor's expense. Mulch shall be feathered to the base of the plant and 1-inch below the top of junction and valve boxes, curbs, and pavement edges. All plant crowns shall be free of mulch. Mulch placed to a thickness greater than specified shall be at no additional cost to the Contracting Agency.

Areas receiving bark mulch shall be bare soil or vegetation free before application.

8-02.3(12) Completion of Initial Planting

Upon completion of the initial planting within a designated area, the Engineer will make an inspection of all plant material and notify the Contractor, in writing, of any replacements or corrective action necessary to meet the Contract Provisions. The Contractor shall replace all materials rejected or missing and correct unsatisfactory conditions.

Completion of the initial planting within a designated area includes the following:

1. 100-percent of each of the plant material categories shall be installed as shown in the Contract Plans.
2. Planting Area cleanup.
3. Repairs completed for the entire project, including but not limited to full operation of the irrigation system, complete mulch coverage, and all weeds controlled.
4. Approval of plant establishment plan.

8-02.3(13) Plant Establishment

Plant establishment shall consist of caring for all plants planted on the project and caring for the planting areas within the project limits. The provisions of Section 1-07.13(2) and 1-07.13(3) do not apply to this section.

The Contractor shall submit a first-year plant establishment plan, for approval by the Engineer. The first year of plant establishment shall begin immediately upon written notification from the Engineer of the completion of initial planting for the project. The first-year plant establishment period shall be a minimum of 1-calendar year.

During the first-year plant establishment period, it shall be the Contractor's responsibility to perform all Work necessary to ensure the resumption and continued growth of the transplanted material. This care shall include, but not be limited to, labor and materials necessary for removal of foreign, dead, or rejected plant material, maintaining a weed-free condition, and the replacement of all unsatisfactory plant material planted under the Contract. If plants are stolen or damaged by the acts of others, the Contracting Agency will pay invoice cost only for the replacement plants with no mark-up and the Contractor will be responsible for the labor to install the replacement plants.

During the first year of plant establishment under PSIFE, the Contractor shall meet monthly with the Engineer for the purpose of joint inspection of the planting material on a mutually agreed upon schedule. The Contractor shall correct all conditions unsatisfactory to the Engineer within a 10-day period immediately following the inspection. If plant replacement is required, the Contractor shall, within the 10-day period, propose a plan and schedule for the plant replacement to occur immediately at the beginning of the planting period as designated in Section 8-02.3(8). Failure to comply with corrective steps as outlined by the Engineer shall constitute justification for the Contracting Agency to take corrective steps and to deduct all costs thereof from any monies due the Contractor. At the end of the plant establishment period, plants that do not show normal growth shall be replaced.

All automatic irrigation systems shall be operated fully automatic during the plant establishment period and until final acceptance of the Contract. Payment for water used to water in plants, or hand watering of plant material or lawn areas unless otherwise specified, is the responsibility of the Contractor during the first-year plant establishment period.

Subsequent year plant establishment periods, when included in the Contract, shall begin immediately at the completion of the preceding year's plant establishment period. Each subsequent year plant establishment period shall be 1 full calendar year in duration.

During the plant establishment period(s) after PSIPE, the Contractor shall perform all Work necessary for the continued healthy and vigorous growth of all plant material as directed by the Engineer.

8-02.3(14) Plant Replacement

The Contractor shall be responsible for growing or providing enough plants for replacement of all plant material rejected through first-year plant establishment. All replacement plant material shall be inspected and approved by the Engineer prior to installation. All rejected plant material shall be replaced at dates approved by the Engineer.

All replacement plants shall be of the same species and quality as the plants they replace. Plants may vary in size reflecting 1 season of growth should the Contractor elect to hold plant material under nursery conditions for an additional year to serve as replacement plants. Replacement plant material larger than specified in the Plans shall meet the applicable section requirements of the ASNS for container class, ball size, spread, and branching characteristics.

8-02.3(15) Live Fascines

Live fascines are constructed of live and dead cuttings bundled together with a minimum diameter of 8-inches. Live cuttings shall be as shown in the Plans. Dead branches may be cuttings from any woody, non-invasive plant, native to the project area. Dead branches may be placed on the inside of the live fascine and on the side exposed to the surface. Live branches shall be placed in contact with the soil along their entire length. Each live fascine must contain a minimum of 8 live branches. Dead branches shall constitute no more than 40-percent of the total fascine content.

The total length of each live fascine shall be a minimum of 5-feet. Branches shall be bound with biodegradable twine spaced at 1-foot intervals along the entire length of the live fascine. Twine shall meet the requirements of Section 9-33.1 Table 3. Live fascines shall be installed in a trench whose depth shall be $\frac{1}{2}$ the diameter of the live fascine. Secure the live fascine with live stakes 3-feet in length and $\frac{3}{4}$ -inch in diameter placed at 18-inch intervals. A minimum of 3 live stakes shall be used per fascine. Live stakes shall be driven through the live fascine vertically into the slope. The ends of live fascines shall be woven together so that no gap remains between the 2 sections of the live fascine.

8-02.3(16) Lawn Installation

8-02.3(16)A Lawn Installation

In irrigated areas, lawn installation shall not begin until the irrigation system is fully operational.

Seed mix and rate of application shall be as specified in the Special Provisions.

Unless otherwise approved by the Engineer, seeded lawn installation shall be performed during the following time periods at the location shown:

West of the summit of the Cascade Range - March 1 to October 1.

East of the summit of the Cascade Range - April 15 to October 1.

The Contractor shall have the option of sodding in lieu of seeding for lawn installation at no additional expense to the Contracting Agency. Seeding in lieu of sodding will not be allowed.

Topsoil for seeded or sodded lawns shall be placed at the depth and locations shown in the Plans. The topsoil shall be cultivated to the specified depth, raked to a smooth even grade without low areas to trap water and compacted, all as approved by the Engineer.

Sod strips shall be placed within 48-hours of being cut. Placement shall be without voids and have the end joints staggered. The sod shall be rolled with a smooth roller following placement.

Barriers shall be erected, with warning signs where necessary, to preclude pedestrian traffic access to the newly placed lawn during the establishment period.

8-02.3(16)B Lawn Establishment

Lawn establishment shall consist of caring for all new lawn areas within the limits of the project.

The lawn establishment period shall begin immediately after the lawn planting has been accepted by the Engineer and shall extend to the end of 4 mowings or 20-working days which ever is longer. The mowings shall be done in accordance with 8-02.3(16)C.

During the lawn establishment period, it shall be the Contractor's responsibility to ensure the continuing healthy growth of the turf. This care shall include labor and materials necessary to keep the project in a presentable condition, including but not limited to, removal of litter, mowing, trimming, removal of grass clippings, edging, fertilization, insecticide and fungicide applications, weed control, watering, repairing the irrigation system, and repair and reseeded any and all damaged areas. Lawn mowing shall be performed once each week, or as ordered by the Engineer, during the lawn establishment period with no additional compensation.

Temporary barriers shall be removed only on written permission from the Engineer.

All Work performed under lawn establishment shall comply with established turf management practices.

Acceptance of lawn planting as specified shall be based on a uniform stand of grass and a uniform grade at the time of final inspection. Areas that are bare or have a poor stand of grass, and areas not having a uniform grade through any cause before final inspection, shall be recultivated, regraded, reseeded, or resodded and refertilized as specified at no additional cost to the Contracting Agency.

8-02.3(16)C Lawn Mowing

Lawn mowing shall begin immediately after the lawn establishment period has been accepted by the Engineer and shall extend to the end of the Contract or the first-year plant establishment, whichever is last.

The Contractor shall accomplish the following minimum requirements:

1. Mowing, trimming, and edging shall be done as often as conditions dictate. Maximum height of lawn shall not exceed 3-inches. The cutting height shall be 2-inches. Cuttings, trimmings, and edgings shall be disposed of off the project site. When the Engineer approves the use of a mulching mower, trimmings may be left in place.
2. Watering shall be as often as conditions dictate depending on weather and soil conditions.
3. Provide fertilizer, weed control, and other measures as necessary to maintain a healthy stand of grass.

8-02.4 Measurement

Topsoil, mulch and soil amendments will be measured by the cubic yard in the haul conveyance at the point of delivery.

Brush layer will be measured by the linear foot along the ground slope line.

Live pole will be measured per each.

Live stake row will be measured by the linear foot along the ground slope line.

Fascine will be measured by the linear foot along the ground slope line.

Live brush mattress will be measured by the surface square yard along the ground slope line.

Compost will be measured by the cubic yard in the haul conveyance at the point of delivery.

The quantity of topsoil Type B used on the project will not be deducted from the total quantity of Roadway excavation, borrow, strippings, or other excavation for which haul is being paid.

The pay quantities for plant materials will be determined by count of the number of satisfactory plants in each category accepted by the Engineer.

Weed barrier mat will be measured per each.

Fertilizer will be measured in pounds.

Water will be measured in accordance with Section 2-07.4. Measurement will be made of only that water hauled in tank trucks or similar equipment.

Seeded lawn, sod installations, and lawn mowing will be measured along the ground slope and computed in square yards of actual lawn completed, established, and accepted.

8-02.5 Payment

Payment will be made in accordance with Section 1-04.1, for each of the following listed Bid items that are included in the Proposal:

“Topsoil Type ____”, per cubic yard.

The unit contract price per cubic yard for “Topsoil Type ____” shall be full pay for providing the source of material for topsoil Type A and C, for pre-excavation weed control, excavating, loading, hauling, intermediate windrowing, stockpiling, weed control on stockpiles or windrows, and removal, placing, spreading, processing, cultivating, and compacting topsoil Type A, Type B, and Type C.

“Plant Selection ____”, per each.

“PSIPE ____”, per each. (PSIPE is Plant Selection Including Plant Establishment.)

The unit Contract price for “Plant Selection ____”, per each, and “PSIPE ____”, per each, shall be full pay for all materials, labor, tools, equipment, and supplies necessary for weed control within the planting area, planting area preparation, fine grading, planting, cultivating, plant storage and protection, fertilizer and root dip, staking, cleanup, and water necessary to complete planting operations as specified.

As the plants that include plant establishment are obtained, propagated, and grown, partial payments shall be made as follows after inspection by the Engineer:

Payment of 5-percent of the unit Contract price, per each, when the plant materials have been contracted, propagated, and are growing under nursery conditions. The Contractor shall provide the Engineer with certification that the plant material has been procured or contracted for delivery to the project for planting within the time limits of the project. The certification shall state the location, quantity, and size of all material.

Payment shall be increased to 15-percent of the unit Contract price, per each, upon completion of the initial weed control Work.

Payment shall be increased to 60-percent of the unit Contract price per each for the contracted plant material in a designated unit area when planted.

Payment shall be increased to 70-percent of the unit Contract price per each for contracted plant material at the completion of the initial planting.

Payment shall be increased to the appropriate percentage upon reaching the following plant establishment milestones:

June 30 th	80-percent
September 30 th	90-percent
Completion of 1st-year plant establishment or after all replacement plants have been installed, whichever is later	100-percent

As the plants that do not include plant establishment are obtained, propagated, and grown, partial payments shall be made as follows:

Payment of 15-percent of the unit Contract price per each when the plant materials have been contracted, propagated, and are growing under nursery conditions. The Contractor shall provide the Engineer with certification that the plant material has been procured or contracted for delivery to the project for planting within the time limits of the project. The certification shall state the location, quantity, and size of all material.

Payment shall be increased to 90-percent of the unit Contract price per each for contracted plant material at the completion of the initial planting.

Payment shall be increased to 100-percent at the Physical Completion of the Contract.

All partial payments shall be limited to the actual number of healthy vigorous plants that meet the stage requirements, limited to plan quantity. Previous partial payments made for materials rejected or missing will be deducted from future payments due the Contractor.

“Live Pole”, per each.

“Live Stake Row”, per linear foot.

“Live Brush Mattress”, per square yard.

“Plant Establishment - ___ Year”, will be paid in accordance with Section 1-09.6.

“Brush Layer”, per linear foot.

“Fascines”, per linear foot.

“Weed Barrier Mat”, per each.

The unit Contract price per each for “Weed Barrier Mat” shall be full pay to provide and install the weed barrier mat as specified, to maintain the mat in place throughout the plant establishment period, and to remove the mat when ordered by the Engineer.

“Fine Compost”, per cubic yard.

“Coarse Compost”, per cubic yard.

The unit Contract price per cubic yard for “Fine Compost” or “Coarse Compost” shall be full pay for furnishing and spreading the compost onto the existing soil.

“Fertilizer”, per pound.

The unit Contract price per pound for “Fertilizer” shall be full pay for furnishing and applying the fertilizer.

“Weed Control”, when included as a separate Bid item, will be paid in accordance with Section 1-09.6.

“Pesticide Application”, will be paid in accordance with Section 1-09.6.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency entered an amount for “Plant Establishment - ___ Year”, “Weed Control”, and “Pesticide Application” in the Proposal to become a part of the total Bid by the Contractor.

“Soil Amendment”, per cubic yard.

“Bark or Wood Chip Mulch”, per cubic yard.

“Water”, per M Gal.

“Seeded Lawn Installation”, per square yard.

“Sod Installation”, per square yard.

“Lawn Mowing”, per square yard.

The unit Contract price per square yard for “Seeded Lawn Installation” or “Sod Installation” shall be full pay for all costs necessary for weed control within the seeding or sodding area, to prepare the area, plant or sod the lawn, erect barriers, and establish lawn areas and for furnishing all labor, tools, equipment, and materials necessary to complete the Work as specified and shall be paid in the following sequence for healthy, vigorous lawn:

Completion of Lawn Planting	60-percent of individual areas
Mid Lawn Establishment (after 2 mowings)	85-percent of individual areas
Completion of Lawn Establishment (after 4 mowings)	100-percent of individual areas