Attachment B

Scope of Work- Project Summary

Landscape Installation – Interstate – Entrances to Macon-Bibb

Goal – Macon-Bibb is seeking proposals for the landscape planting at two interstate entrances to Macon-Bibb. This planting will be undertaken within the GDOT right of way of I-75. Macon-Bibb is seeking all required GDOT approvals.

Locations – There are 2 locations for this work. One is the Interchange located at the intersection of Eisenhower Parkway and I-75. The next is the Interchange at the intersection of Bass Road and I-75.

Summary of Scope of Work – This is a landscape project where the installation of plant material and the installation of mulch is the complete scope of work. In addition, the scope of the project includes the installation of all trees and plant material. All planting areas and trees shall be covered with pine straw mulch at the completion of the installation. All planting is included on the landscape plans in this bid package.

LANDSCAPE PLANTI NG

- 1.0 A. General Requirements:
 - 1. Plant Material Photographs:
 - a. At least 14 days prior to submittal of plant material location data, submit color photographs each of representative plants of each type of plant material.
 - b. Include a scale object in each photograph such as a ruler or person.
 - B. Plant Material Location Data Including the Following:
 - 1 Quantities of each plant material type at each nursery or other place of growth.
 - 2. Address, phone number, and contact person for each nursery or other place of growth.
 - C. Test Reports: Soil percolation test results keyed to location plan.
- 1.01 B. QUALITY ASSURANCE
 - A. Regulatory Requirements:

- 1. Meet requirements of applicable laws, codes, and regulations required by authorities having jurisdiction over Work.
- 2. Provide for inspections and permits required by federal, state and local authorities in furnishing, transporting, and installing materials.

1.02 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Handling Plants:

- 1. Do not lift or handle container plants by tops, stems, or trunks at any time.
- 2. Do not bind or handle plants with wire or rope at any time.
- B. Digging Plants: Dig ball and burlap plants with firm, natural balls of earth of diameter meeting requirements of ANSI Z60.1 and of sufficient depth to include the fibrous and feeding roots.

C. Plant Storage Prior to Installation:

- 1. Protect plant root balls from sun and drying, winds.
- 2. Keep root balls moist.
- 3. Keep sun-sensitive plants shaded.
- 4. Anchor plants to prevent damage from strong winds.

1.03 SITE CONDITIONS

A. Existing Conditions:

- 1. Review and clearly mark in field horizontal and vertical locations of public existing underground utilities and structures with respective utility companies.
- 2. Review and clearly mark in field horizontal and vertical locations of private underground utilities and structures with the Owner.

1.04 MAINTENANCE

A. Contractor shall maintain all plant material for the construction period.

1.05 SUBSTITUTIONS

A. Plant Substitutions:

- 1. Accepted substituted plants shall be true to species and variety and shall conform to measurements specified except that plants larger than specified may be used if accepted. All substitutions must be approved by the Engineer in writing.
- 2. Use of such plants shall not increase Contract price.
- 3. If larger plants are accepted, increase the ball of earth in proportion to the size of the plant.

1.06 MATERIALS

A. Plants:

- 1. Growing Practices: Nursery grown in accordance with good horticultural industry practices.
- 2. Nomenclature: Meet requirements of ICBN and ICNCP.
- 3. Climatic Growing Conditions: Grown under climatic conditions like those of project for at least two years unless otherwise accepted.
- 4. Container Growth Limitations: Container stock shall have been grown in the containers in which delivered for at least six months, but not over two years.
- 5. Root Ball Size: Meet requirements of ANSI 260.1 and the American Association of Nurserymen.
- 6. Appearance: Exceptionally heavy, symmetrical, tightly knit, so trained or favored in development and appearance as to be superior in form, number of branches, compactness, and symmetry.
- 7. Vigor: Sound, healthy and vigorous, well branched and densely foliated when in leaf
- 1. Disease and Pests: Free of disease, insect pests, eggs, or larvae.
- 9. Condition of Root System: Healthy well-developed root system, free of kinked; circling, girdling and center roots, root-bound condition and cracked or broken -root balls.
- 10. Measurements: Measure plants when branches are in their normal upright position.

- 11. Height and Spread Dimensions: Height and spread dimensions specified refer to main body of plant and not branch tip to tip.
- 12. Caliper: Take caliper measurement at a point on the trunk 6 inches above natural ground line for trees up to 4 inches in caliper, and at a point 12 inches above the natural ground line for trees over 4 inches in caliper.
- 13. Pruning: Do not prune, thin or shape plants before delivery without acceptance.
- 14. Unacceptable Conditions: Multiple leaders, unless specified, damaged or crooked leaders, bark abrasions, sun-scalds, disfiguring knots, or fresh cuts of limbs over 3/4 inch diameter which have not completely callused.
- A. Water: Clean, fresh and potable. Available at the site.
- B. Mulch: Pine Straw.
- C. Amended Backfill Mix: 1/3 native soil, 1/3 cow manure and 1/3 Nature's Helper or an approved equal.

1.07 SOURCE QUALITY CONTROL

- A. Plant Material Review and Tagging:
 - 1. Trees and shrubs will be reviewed, photographed, and tagged by the Contractor at the nursery, or other place of growth prior to delivery of trees to site.
 - 2. Tagging of plant material at the nursery or place of growth does not cancel the right of the Owner to reject plant material at the site, if damaged or unacceptable conditions are found that were not detected at the nursery, place of growth or in the submitted photographs.

1.08 EXAMINATION

- A. General: Examine site and verify that conditions are suitable to receive Work and that no defects or errors are present which would cause defective installation of products or cause latent defects in workmanship and function.
- B. Verification of Surface Drainage: Verify positive surface drainage of areas to be planted.

C. Notification: Before proceeding with Work, notify the Owner and Designer in writing of unsuitable conditions.

1.09 PREPARATION

A. Fine Grading and Soil Preparation: Landscape Contractor shall undertake all fine grading and soil preparation work needed for a complete project.

B. Protection of Existing Conditions:

- 1. Use every possible precaution to prevent damage to existing conditions to remain such as structures, utilities, plant materials and walks on or adjacent to the site of the Work.
- 2. Provide barricades, fences, or other barriers to protect existing conditions to remain from damage during construction.
- 3. Do not store materials or equipment, permit burning, or operate or park equipment under the branches of existing plants to remain.
- 4. Submit written notification of damaged plants and structures to the Owner immediately.

1.10 SOIL PERCOLATION TESTS

A. Tests Prior to Plant Pit Excavation: In areas of suspected poor drainage drill 8-inch diameter minimum, 4 feet deep holes and fill with water twice in succession. Submit to the Owner written notification of retention of water in holes for more than 24 hours with scale plan showing, locations of holes failing test.

1.11 SUBSURFACE OBSTRUCTIONS

A. Plant Pit Excavation: If rock, underground utilities, structures, tree roots or other obstructions are encountered in the excavation of plant pits, alternate locations may be accepted by the Engineer.

B. Cost for Removal of Obstructions: Where locations cannot be changed, submit cost estimate for Work to remove the obstructions to a depth of not less than 6 inches below the required pit depth, and proceed with Work after the Owner's approval.

1.12 EXCAVATION OF PLANT PITS

A. Equipment: Excavate pits with a backhoe, auger or hand digging.

B. Plant Pit Size: Minimum Standard

- 1. All plant pits must be excavated to a depth that is 12" below the depth of the root ball or container size of the plant.
- 2. The width of all plant pits is to be double the widest width size of the root ball or double the width of the container.

1.13 PLANTING AND BACKFILL OPERATIONS

- A. Protection of Plants Prior to Installation:
 - 1. Protect plant root balls from sun or drying winds.
 - 2. Keep root balls of plants that cannot be planted immediately upon delivery in the shade, well protected and well watered.

B. Removal of Containers:

- 1. Remove canned stock carefully after cans have been cut on two sides with accepted cutter.
 - 2: Do not use spade to cut containers.
- C. Scarification: After removing plant from container, scarify side of root ball to prevent root-bound condition.

D. Unamended Backfill Placement:

- 1. To allow for settlement, fill bottom of the pits with unamended topsoil to a level that will place the top of the root ball 1 inch above finish grade when the planting is installed.
- 2. Set plants higher if more settlement is anticipated.
- E. Unamended Backfill Compaction: Compact unamended topsoil by saturating the entire plant pit with water.
- F. Unamended Backfill Filling of Settlement: Fill settled topsoil as required to bring top of soil to a level that places the top of the root ball even with finish grade.
- G. Plant Placement: Handling plant carefully, set plant root ball on unamended topsoil. Set root ball so that when backfilled the top of the root ball will be even with or slightly above finished grade.

H. Removal of Root Ball Wrapping Materials: Remove burlap, nylon cord, twine and cut wire baskets back to below finished grade prior to backfilling.

I. Amended Backfill Mix Placement:

- 1. Complete filling pit until top of amended backfill mix is even with top of root ball.
- 2. Place mix carefully as not to damage the plant root ball, trunk, branches, or foliage.
- J. Settled Plant Adjustment: Raise plant root balls which settle below finish grade so that top of root balls is even with or slightly adjacent finish grade.
- K. Final Filling of Settlement: Fill settled backfill mix with additional soil mix as required to bring it even with top of root ball.
- L. Final Compaction: Compact soil mix by saturating with water.

1.14 MULCH INSTALLATION

- A. Depth: Install a 3-inch deep layer of mulch (pine straw) over tree watering basins, shrub, and ground cover areas.
- B. Woody Plant Stems: Slope mulch away from woody plant stems so that mulch does not touch stems.

END OF SECTION