

SECTION 02830

TREES SHRUBS, AND GROUNDCOVERS

PART I GENERAL

1.01 DESCRIPTION OF WORK

A. Scope

1. Bed prep
2. Metal edging
3. Topsoil
4. Planting
5. Mulching
6. Guarantee

B. Related Work Specified Elsewhere

1. General Requirements ? All locations
2. Section 02740 ? Irrigation Trenching
3. Section 02750 ? Irrigation
4. Section 02600 - Lawns

1.02 QUALITY ASSURANCE

A. Contractor Qualifications

Minimum of three (3) years experience on projects of similar characteristics and size.

B. Reference Standards:

1. American Joint Committee Of Horticultural Nomenclature: Standardized Plant Names, Second Edition, 1942;
2. American Association Of Nurserymen: American Standard For Nursery Stock, 1973

C. Substitutions

1. Substitutions accepted only upon written approval of Landscape Architect and Owner.
2. Submit substitutions possessing same characteristics as indicated on plans and specifications.

D. Inspection and Testing

1. The project Owner's representative reserves the right to inspect and tag plants at the place of growth with the Contractor.
2. Inspection at place of growth does not preclude the right of rejection due to improper digging or handling.
3. Owner's representative reserves the right to request soil samples and analysis of soil and plant mix. Remove or correct unacceptable soil. Cost of testing by Contractor.

1.03 SUBMITTALS

A. Certificates

1. Submit State and Federal certificates of inspection with invoice. (Only if required by Landscape Architect.)
2. File certificates with Owner's representative prior to material acceptance.

1.04 PRODUCT DELIVERY, STORAGE, & HANDLING

A. Preparation of Delivery

1. Balled & Burlaped (B&B) Plants

- a. Dig and prepare for shipment in manner that will not damage roots, branches, shape, and future development after replanting.
- b. Ball with firm, natural ball of soil, wrapped tightly with burlap covering entire ball.
- c. Ball size and ratios: conform to American Association of Nurserymen standards unless otherwise shown on plant list.

2. Pack plant material to protect against climatic & seasonal damage, as well as breakage injuries during transit.
3. Securely cover plant tops with ventilated tarpaulin or canvas to minimize wind-whipping and drying in transit.
4. Pack and ventilate to prevent sweating of plants during transit. Give special attention to insure prompt delivery and careful handling to point of delivery at job site.

B. Delivery

1. Deliver fertilizer, fertilizer tablets, peat, mulch, soil additives, and amendment materials to site in original, unopened containers, bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark, and conformance to State law.
2. Deliver plants with legible identification and size labels on example plants.
3. Protect during delivery to prevent damage to root ball or desiccation of leaves.
4. Notify Owner's representative of delivery schedule in advance so plant material may be inspected upon arrival at job site.
5. Deliver plants to job site only when areas are prepared.

C. Storage

1. Protect roots of plant material from drying or other possible injury with wetted mulch or other acceptable material.
2. Protect from weather.
3. Maintain and protect plant material not to be planted immediately upon delivery.

D. Handling

1. Do not drop plants.
2. Do not damage ball, trunk, or crown.
3. Lift and handle plants from bottom of container or ball.

1.05 JOB CONDITIONS

E. Planting Season - Perform actual planting only when weather and soil conditions are suitable in accordance with locally acceptable practices.

F. Protection - Before excavations are made, take precautionary measures to protect areas trucked over and where soil is temporarily stacked.

1.06 GUARANTEE

A. Guarantee new plant material for one year after acceptance of final installation (ie Final Acceptance of project).

B. Make replacement (one per plant) during one year guarantee period at appropriate season with original plant type, size and planting mixture.

C. Repair damage to other plants, lawns, & irrigation caused during plant replacement at no cost to Owner.

D. Use only plant replacements of indicated size and species.

E. Ten days before end of guarantee period, notify Owner's representative in writing for year end inspection. Failure to do so, shall automatically extend guarantee until notification is received.

PART II PRODUCTS

2.01 MATERIALS

A. Plant Materials

1. Hardy under climatic conditions similar to locality of project.
2. True to botanical and common name variety.
3. Sound, healthy, vigorous, well branched, and densely foliated when in leaf; with healthy well-developed root system.
4. Free from disease, insects, and defects such as knots, sun-scald, windburn, injuries, disfigurement, or abrasions.
5. Conform to measurements after pruning with branches in normal positions.
6. Conform to American Association of Nurserymen standards unless shown differently on plant list.
7. Trees:
 - a. Single, straight trunks, unless indicated otherwise
 - b. Trees with weak, thin trunks not capable of support will not be accepted.
 - c. All multi-stem trees are to have a minimum of three stems, similar in size and shape, with a spread of approximately 2/3 of the height. All yaupons to be female. Grape myrtle color selection by Landscape Architect.
 8. Nursery grown stock only.
 9. Subject to approval of Landscape Architect.
 10. Seasonal color
8. Annuals in 4? pots or as specified
9. Perennials in 4? pots, clumps, bulbs as specified

B. Topsoil

1. Natural, fertile, friable soils having a textural classification of loam or sandy loam possessing characteristics of soils in vicinity which produce heavy growth of crops, grass, or other vegetation.
2. Free of subsoil, brush, organic litter, objectionable weeds, clods, shale, stones ?? diameter or larger, stumps, roots or other material harmful to grading, planting, plant growth, or maintenance operations.
3. Presence of vegetative parts of Bermuda grass (Cynodon dactylon), Johnson grass, nut grass (Cyperus rotundus), and other hard to eradicate weeds or grass will be cause for rejection of topsoil.
4. Test topsoil (cost by Contractor):
 - a. Available nitrogen
 - b. Available phosphorus
 - c. Available potash
 - d. Iron
 - e. Ph: 5.5 to 7.0
 - f. Decomposed organic matter: 6-10%

C. Mulch

1. Top Dressing Mulch ? Shredded cypress or hard wood only
2. Mulch for soil prep ? Shredded pine bark
3. In pre-packaged bags only; bulk shredded material is unacceptable.

D. Peat Moss Commercially available baled peat moss or approved equivalent.

E. Staking Material

1. Stakes for tree support

- a. Construction grade yellow pine, stain brown
- b. Size as noted on plans

2. Wires

- a. Padded with rubber hose to protect tree
- b. Galvanized
- c. With galvanized turnbuckle
- d. Evenly tighten turnbuckles with plant in vertical position.

F. Water

1. Free of oils, acids, alkali, salt, and other substances harmful to plant growth
2. Location: Furnish temporary hoses and connections on site.

G. Sand Washed builders sand

H. Antidesicant - "Wilt-proof" or equal.

1. Edging ? 3/16" X 4" green, new and unused; with stakes.

2.02 MIXES

A. Planting Mixture

- Existing topsoil ? 50%
3. Shredded pine bark ? 50%
4. Fertilizer 10:20:10 at 30 lb./1000 SF

B. Planting Mix for Annuals/Perennials

1. Prepare above mix
2. Add 2? of sand

- C. Azalea mix: solid peat moss in hole 9" wider than root ball each direction. Plant in solid peat moss and provide mound at base of plant to allow for drainage.
- D. Japanese maple, dogwood, camellias: Provide 50/50 peat moss to topsoil mix, raise for drainage.

PART III - EXECUTION

3.01 UTILITIES - verify location of all utilities prior to initiating construction; repair any damage caused by construction at no cost to owner.

3.02 INSPECTION

- A. Inspect plants for injury and insect infestation; prune prior to installation.
- B. Inspect site to verify suitable job conditions.

3.03 FIELD MEASUREMENTS

- A. Location of all trees and shrubs to staked in the field and approved by Owner's representative prior to installation.
- B. Location of all groundcover and seeding limits as shown on plans.

3.04 EXCAVATION FOR PLANTING

A. Pits

1. Shape - Vertical hand scarified sides and flat bottom.
2. Size for trees ? 2 feet wider or twice the root ball, whichever is greater.
3. Size for shrubs ? Size of planting bed as shown on drawings.
4. Retain soil mix thoroughly, full depth.
5. NOTE: If beds are proposed beneath drip line of existing tree canopy, pocket prep plants. Do not rotate-till beneath existing trees.

B. Obstructions Below Ground

1. Remove rock or underground obstructions to depth necessary to permit planting.
2. If underground obstructions cannot be removed, notify Owner's representative for instruction.

C. Excess Soil - Dispose of unacceptable or excess soil away from the project site at Contractor's expense.

3.05 PLANTING

A. General

1. Set plants 2? above existing grade to allow for settling.
2. Set plants plumb and rigidly braced in position until planting mixture has been tamped solidly around ball.
3. Apply soil in accordance with standard industry practice for the region.
4. Thoroughly settle by water jetting and tamping soil in 6? lifts.
5. Prepare 3? dish outside root ball after planting.
6. Thoroughly water all beds and plants.
7. Stake trees and large shrubs as indicated on plans.
8. Apply anti-desicant according to manufacturer's instructions.
9. Apply commercially manufactured root stimulator as directed by printed instruction.
10. Plant and fertilize bedding plants per trade standards.
11. Apply 3? mulch top dressing.

B. Balled Plants

1. Place in pit of planting mixture that has been hand tamped prior to placing plant.
2. Place with burlap intact to ground line. Top of ball to be 2? above surrounding soil to allow for settling.
3. Remove binding at top of ball and lay top of burlap back 6?.
4. Do not pull wrapping from under ball, but cut all binding cord.
5. Do not plant if ball is cracked or broken before or during planting process or if stem or trunk is loose.
6. Backfill with planting mixture in 6? lifts.

C. Container Grown Plants

1. Place in pit on planting mixture that has been hand tamped prior to placing plant.
2. Cut cans on two sides with an acceptable can cutter, and remove root ball from can.

Do not injure root ball.

3. Carefully remove plants without injury or damage to root balls.
4. Backfill with planting mixture in 6? lifts.

D. Mulching

1. Cover planting bed evenly with 3? of mulch.
2. Water immediately after mulching.
3. Where mulch has settled, add additional mulch to regain 3? thickness.
4. Hose down planting area with fine spray to wash leaves of plants.

D. Pruning

1. Prune minimum necessary to remove injured twigs and branches, dead wood, and succors; remove approximately 1/3 of twig growth as directed by landscape architect; do not cut leaders or other major branches of plant unless directed by landscape architect.
2. Make cuts flush, leaving no stubs.
3. Paint cuts over 1? diameter with approved tree wound paint.
4. Do not prune evergreens except to remove injured branches.

3.06 EDGING

- A. Stake edging alignment with string line prior to installation. Use framing square to insure right angles are true.
- B. Install all edging straight and true as indicated on drawings. Where edging layout is circular in design, maintain true and constant radii as shown.
- C. When required on slopes, make vertical cuts (approximately 6? on center) on bottom of edging to allow bending without crimping edging.
- D. Install edging so that approximately 1? is exposed on lawn side. Edging should not be visible from bed side after application of mulch.
- E. Align edging with architectural features (ie pavement joints, windows, columns, wall, etc.) when drawings indicate.
- F. Bend all corners, do not cut corners.
- G. Interlock all pieces with pre-fabricated connectors.
- H. Install with all stakes on inside of planting bed.
- I. Remove, file off all sharp corners and burrs.

3.07 CLEAN-UP

A. Sweep and wash all paved surfaces.

Remove all planting and construction debris from site, including rocks, trash and all other miscellaneous materials.

3.08 MAINTENANCE

A. Contractor responsible for routine, and regular maintenance of site until Final Acceptance is awarded by Owner. Work includes:

1. Weeding (weekly)
2. Watering (as required)
3. Pruning
4. Spraying
5. Fertilizing
6. Mulching
7. Mowing (weekly)

B. Provide Owner and Landscape Architect with preferred maintenance schedule in writing. Schedule shall include the above-listed tasks and shall address all frequencies, rates, times, levels, etc.



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PLANTING SPECS

RANCH TRAIL CORNERS

LOT 5R - RAINBOW ACRES ADDITION

N.E.C. HORIZON ROAD (F.M. 3097) AND RANCH TRAIL DR.

CITY OF ROCKWALL, TEXAS

DESIGN	DRAWN	CHECKED	SCALE	DATE	FILE	SHEET
Walls	Lovecchio	Barragan	1" = 40'	05/28/09	9005	L-3