

LANDSCAPING

PART 1 - GENERAL

1.1 SCOPE:

Provide all labor, materials and equipment for complete installation of landscaping, as indicated on the drawings and specified herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. Irrigation System
B. Lawns

1.3 QUALITY ASSURANCE:

- A. Provide plant materials in compliance with applicable State and Federal laws relating to inspection for diseases and insect infestation at growing site.
B. Observation at growing site does not preclude right of rejection at job site. Plants damaged in transit or at job site may be rejected.

1.4 REFERENCED STANDARDS:

- A. American Standard for Nursery Stock, approved 1986 by American National Standards Institute, Inc. - Plant materials.
B. Hortus Third, 1976 - Cornell University - Plant nomenclature.
C. ASTM - American Standard Testing Material - Sharp sand.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Delivery:
1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer.
2. Do not deliver more plant materials than can be planted in one day unless adequate storage and watering facilities are available on job site.
3. If balled plants cannot be planted within 24 hours after delivery to site, protect root balls by heeling in with saw dust or other approved material.
4. Protect during delivery to prevent damage to root ball or desiccation of leaves.

1.6 JOB CONDITIONS:

- A. Planting Restrictions:
Perform actual planting only when weather and soil conditions are suitable in accordance with locally accepted practice.
B. Utilities:
1. Determine locations of underground utilities and perform work in a manner which will avoid possible damage.
2. Coordinate work with irrigation contractor to prevent damage to underground sprinkler system.

1.7 WARRANTY:

- A. Warranty for plants and trees shall be for one year after final acceptance.
B. Replace plants and trees with same kind and size as originally planted, at no cost to the Owner.
C. Warranty excludes replacement of plants after final acceptance because of injury by storm, drought, drowning, hail, freeze, insects or diseases.
D. At the end of the warranty period, staking and guying materials if required shall be removed from the site.

1.8 MAINTENANCE:

- A. Water: Will be available on site. Provide necessary hoses and other watering equipment required to complete work.
C. Following final acceptance, maintenance of plant material will become the Owner's responsibility.

PART 2 - PRODUCTS

2.1 PLANTS:

- A. Quantities: The drawings and specifications are complementary.
B. Plants shall be equal to well formed No. 1 grade of better, symmetrical, heavily branched with an even branch distribution, densely foliated and/or balled, and a strong, straight, distinct leader.
C. Plants shall be healthy and vigorous, free of disease, insect pests and their eggs, and larvae.
D. Plants shall have a well-developed fibrous root system.
E. Plants shall be free of physical damage such as scrapes, broken or split branches, scars, bark abrasions, sun scalds, fresh limb cuts, disfiguring knots, or other defects.
F. Plants shall meet the sizes indicated on the Plant List.
G. Plants indicated "B&B" shall be balled and burlapped.
H. Container grown plants shall be well rooted and established in the container in which they are growing.

2.2 SOIL PREPARATION MATERIALS:

- A. Peat Moss: Commercial sphagnum moss or hyphum peat, or decomposed gin trash with pH between 5 and 7.
B. Pre mixed soils will be considered as "approved equals" when samples are submitted with manufacturer's data and laboratory test reports.
C. Sandy Loam:
1. Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones, and other extraneous material.
2. Physical properties as follows:
Clay - between 7-27 percent
Silt - between 28-50 percent
Sand - less than 52 percent

2.3 COMMERCIAL FERTILIZER:

- A. Fertilizer shall be delivered in manufacturer's standard container printed with manufacturer's name, material weight, and guaranteed analysis.
B. Commercial Fertilizer for Planting Beds: Complete fertilizer 5-10-5 element ratio with minimum 8% sulfur and 4% iron plus micro-nutrients.
C. Controlled-Release Fertilizer planting tablets for trees planting pits, shall be equal to Agriform 22-12-12 planting tablets as manufactured by Sierra Chemical Co., Milpitas, California 95095 or approved equal.

2.4 MULCH AND WEED BARRIER MAT:

Weed barrier mat shall be provided for full coverage of all shrub, groundcover, and bed areas. Bark mulch shall be hardwood mulch chips, ranging in size from 1/4-inch to 1-inch in size, medium fine texture, shredded.

PART 3 - EXECUTION

3.1 CONDITION OF SURFACES:

- A. New bed areas will be left within one tenth of a foot of finish grade by other trades. Contractor will be responsible for raking and smoothing of grade.

3.2 SHRUB PLANTING:

- A. All shrubs to be pocket planted. Excavate planting hole 3" larger than the width and height of the root ball.
B. Plant where located, setting plants with tops of balls even with tops of beds, and compact soil carefully around each plant ball.
C. Water each plant thoroughly with hoses to eliminate air pockets.
D. Carefully prune plants to remove dead or broken branches, various tags, and hand-rake bed areas to smooth even surfaces, and mulch bed areas 1 inch deep.

3.3 GROUND-COVER PLANTING:

- A. Till 2 inches minimum of thoroughly mixed prepared soil or equal in all planting bed areas as follows:
1. 1 part sandy loam
1 part peat moss
1 part sharp sand
Add 4 pounds commercial fertilizer per 100 SF of bed area and mix thoroughly.
B. Plant where located, setting plants with tops of balls even with tops of beds, and compact soil carefully around each plant ball.
C. Water each plant thoroughly with hoses to eliminate air pockets.
D. Carefully prune plants to remove dead or broken branches and hand-rake bed areas to smooth even surfaces, and mulch bed areas 1 inch deep.

3.4 TREE PLANTING:

- A. Plant ornamental trees in pits 12-inches larger than the root ball.
B. After excavation of tree pits, review water percolation.
C. In the event rock or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this section, alternate locations may be selected by the Landscape Architect.
D. Prepare soil for planting by thoroughly mixing two parts sandy loam and one part peatmoss or other approved organic matter.
E. Backfill tree pits with a mixture of 1/2 prepared soil and 1/2 existing site soil.
F. Completely fill each tree saucer with mulch to a depth of two inches.
G. Contractor shall keep trees plumb until established.
H. Contractor shall keep trees plumb until established.
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3.5 SEASONAL COLOR PLANTING:

- A. Beds shall be excavated to a depth of 2 inches.
B. Plant where located, setting plants with tops of balls even with tops of beds, and compact soil carefully around each plant ball.
C. Water each plant thoroughly with hoses to eliminate air pockets.
D. Carefully prune plants to remove dead or broken branches and hand-rake bed areas to smooth even surfaces and mulch bed areas 1 inch deep.

3.6 CLEANUP:

During work, keep premises neat and orderly including organization of storage areas. Remove trash, including debris resulting from removing weeds or rocks from planting areas, preparing beds, or planting plants from site daily as work progresses.

END OF LANDSCAPING SECTION

LAWNS

PART 1 - GENERAL

1.1 SCOPE:

Furnish all labor, tools, transportation, materials, equipment, supervision, etc., required to adequately establish a dense lawn of permanent grasses, free from lumps and depressions as indicated by plans and specifications.
Raze any part of the area failing to show uniform cover until a dense lawn is established.
The cost of miscellaneous labor and materials for topsoil, seeding, tilling, pest control, fertilizing, etc., are not separate pay items and shall be included in the bid price for grassing.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. Irrigation System
B. Landscaping

1.3 MAINTENANCE OF GRASS:

The contractor shall maintain the grass until final acceptance. Such maintenance shall include spraying, weeding, cultivation, fertilizing, watering, disease and insect control, top dressing low spots, plus any procedures consistent with horticultural practice necessary to insure normal, vigorous, and healthy grass.

1.4 JOB CONDITIONS:

- A. Water: Will be available on site. Provide necessary hoses and other watering equipment required to complete work.
B. Lawn areas will be left within 1/10 of a foot of finish grade by other trades. Fine grading, raking and smoothing will be the responsibility of the contractor.

1.5 SCHEDULE:

- A. Seeding/hydrumulching - Bermudagrass: Complete only between May 1 to August 31 under favorable conditions. (warm season)
B. Seeding/hydrumulching - Perennial Ryegrass: Complete only between September 1 to April 30, except at front of project, as determined by owner, under favorable climatic conditions.
C. Sodding: Sod bermuda between March 15 and September 30. Between October 1 and March 14 overseed sod with Perennial rye under favorable conditions.
D. Qualifications: Due to unseasonable weather, the above dates may vary; however, do not proceed with grassing operations beyond these dates without assuming full responsibility for a stand of grass.

1.6 ACCEPTANCE:

The work will be accepted when a completed, undamaged stand of grass is achieved, as approved by the Owner's Representative.

PART 2 - MATERIALS

2.1 GRASS:

- A. Bermuda Grass: Extra fancy, hulled and treated, lawn type seed, delivered to site in original, unopened containers meeting requirements of Texas State Seed Law. Minimum purity germination 90 percent.
B. Annual Ryegrass: Extra fancy, hulled and treated, lawn type seed, delivered to site in original, unopened containers meeting requirements of Texas State Seed Law. Minimum purity germination 90 percent.

2.2 FERTILIZER:

Fertilizer shall be organic base, uniform in composition, dry and free flowing. Deliver fertilizer to be in original, unopened containers, each bearing manufacturer's guaranteed statement of analysis.
A. First application: 12-12-12 element percentage with minimum 8% sulfur and 4% iron, plus micro nutrients.
B. Second application: 3-11-2 element ratio. Nitrogen source to be a minimum 50% slow release organic nitrogen (SCU or UF) plus minimum 8% sulfur and 4% iron plus micro nutrients.

PART 3 - EXECUTION

3.1 PREPARATION:

- A. Scarify lawn areas where excessive compaction is greater than 85% Standard Proctor to a depth of 4-inches by disking or rototilling. Repeat cultivation as required to thoroughly loosen soil.
B. Leave areas free of weeds and ready for final grading.
C. Provide barricades around scarified areas to prevent compaction by construction vehicles.

3.2 FINAL GRADING:

- A. Remove from site and legally dispose of stones 3/4-inch and larger, sticks and other debris exposed during this operation.
B. Provide finish grading leaving surface uniform without depressions and undulations, graded approximately 1-inch below paving.

3.3 HERBICIDES:

Apply herbicide to remove any remaining weeds. This work is to be performed by a licensed applicator following the manufacturer's recommendations.

3.4 FERTILIZER:

- A. Place first application with hydromulch at rate of 12 pounds per 1,000 square feet.
B. Uniformly distribute second application using a rotary type fertilizer spreader 3-4 weeks after first application at 12 pounds per 1,000 square feet.

3.5 HYDROMULCH/SEEDING:

- A. At the time of hydromulch/seeding, soil shall be moist but not muddy, and wind velocity shall not exceed ten (10) miles per hour. Add water if required to moisten soil.
B. Hydromulch seed uniformly at the rate of 2 pounds of Bermudagrass seed per 1,000 square feet.
C. Add tackifier to hydromulch mix for slopes 5:1 or greater at the rate of 1 lb. per bag of mulch.
D. Use a 4' x 8' batter board against bed areas.

3.6 MECHANICAL SEEDING:

Seed uniformly at a rate of 125 pounds of Bermudagrass seed per acre or 350 pounds of Ryegrass per acre. Use grass drill, brilliant seeder, or viking roller.

3.7 SOLID SOD:

- A. Solid Sod: Plant grass by hand, edge to edge with staggered joints. Topdress with sharp sand raked in carefully to fill joints. Roll to eliminate undulations and provide complete soil contact.
B. Fertilizing: Fertilize immediately after grass is planted at rate of 4 lbs. per 1,000 square foot. Repeat fertilizing at the same rate 3-4 weeks later.

3.8 ESTABLISHMENT AND MAINTENANCE OF LAWN AREAS:

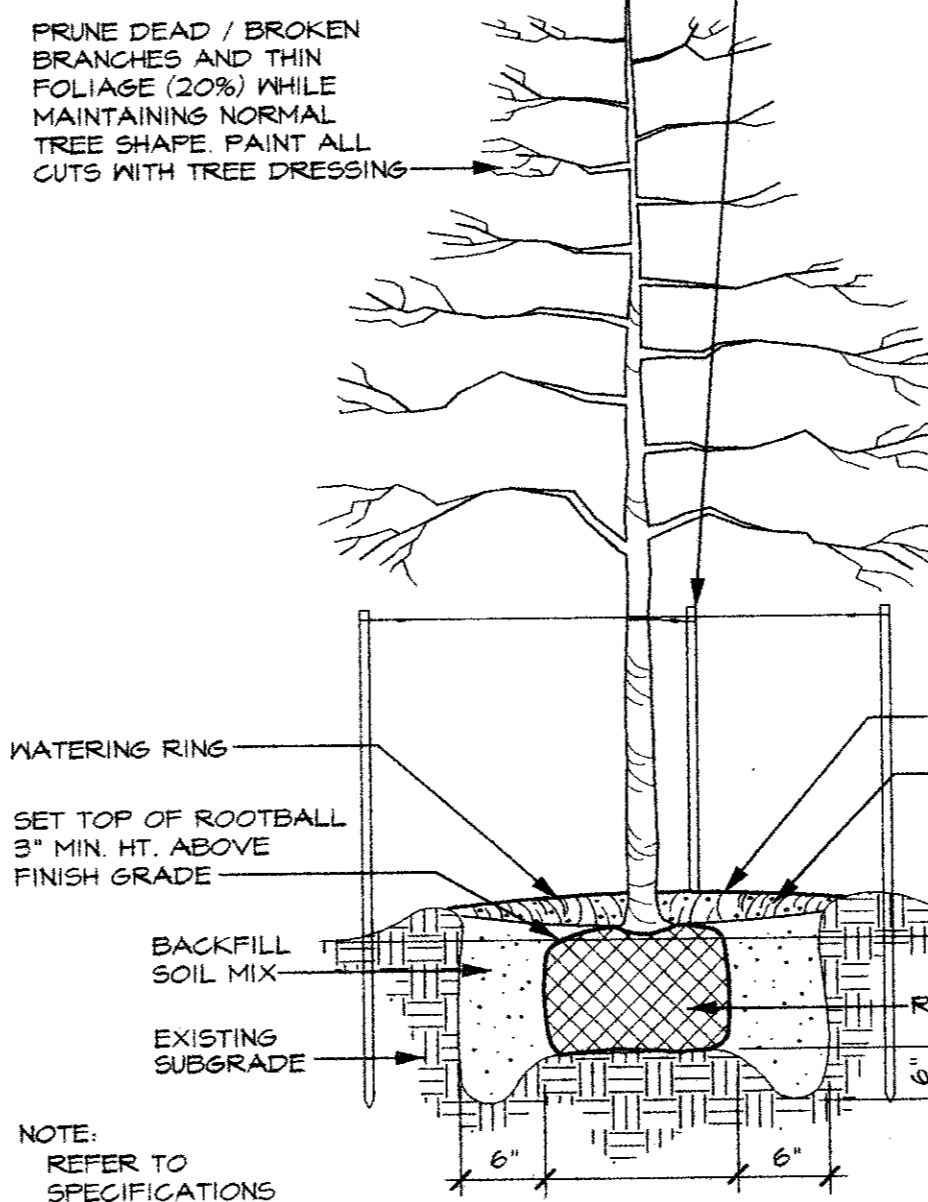
- A. Watering:
1. Water lawn areas immediately after grassing operation.
2. Continue watering as required to keep soil uniformly moist to a minimum depth of 4-inches.
3. Be alert to over-watering newly planted grass, particularly in heavy clay soils.
B. Replanting/Erosion Control:
1. Correct any erosion that may occur during the establishment of grass.
2. Reseed (sod) any areas not showing sufficient growth within 3 weeks after initial grassing. Continue seeding (sodding) until a stand of grass is achieved.
3. A stand of grass will be defined as a uniform cover of actively growing turf.
C. Mowing/Weed Control:
1. Mow lawn areas weekly until a stand of grass is achieved. Begin mowing when the lawn reaches a height of 3-inches; set mower to cut at 2-inches. A minimum of two mowings is required.
2. Weed lawn areas until acceptance, removing all foreign vegetation, either by hoeing or pulling. If approved, herbicide spot treatments may be used.

3.9 CLEANUP:

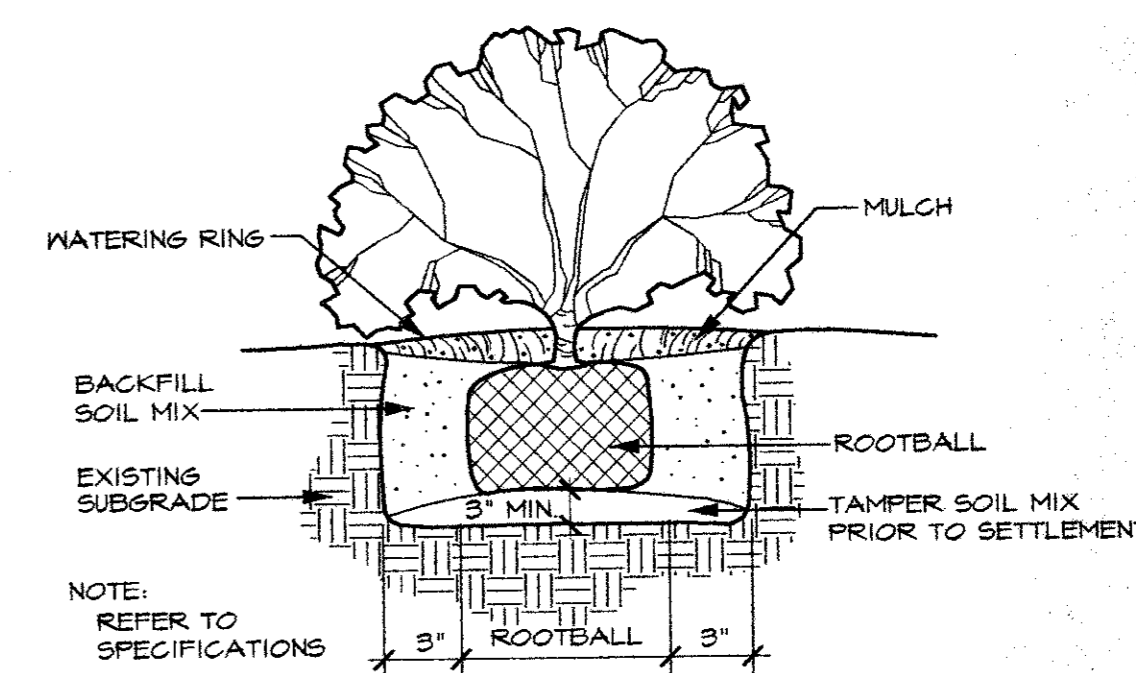
During work, keep premises neat and orderly, including organization of storage areas. Remove trash, including debris resulting from removing weeds and rocks from site daily as work progresses. Keep paved areas clean by sweeping or hosing.

END OF LAWN SECTION

- (3) PRESSURE TREATED HARDWOOD STAKES (2" X 2" X 8') WITH 12 GAUGE AND 3" TURNBUCKLE.
ENCASE LOOP IN REIN. RUBBER HOSE.
CANOPY TREES: SECURE AT LOWEST BRANCH.
EVERGREEN / ORNAMENTAL TREES: SECURE AT TOP OF STAKE HEIGHT.



TREE PLANTING DETAIL (TYPICAL) SCALE: N.T.S.



SHRUB PLANTING DETAIL (TYPICAL) SCALE: N.T.S.

RECORD DRAWINGS: THE INTENT OF THE OWNER AND ENGINEER WAS TO CONSTRUCT THESE FACILITIES ACCORDING TO THESE PLANS AS APPROVED BY THE CITY OF ADDISON. THE LINES AND GRADES WERE SET ON THE GROUND FOR CONSTRUCTION ACCORDING TO SAID PLANS. THE CITY OF ADDISON INSPECTED THE CONSTRUCTION. NEITHER THE OWNER NOR THE ENGINEER VERIFIED LINES OR GRADES AFTER CONSTRUCTION. WE ARE NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION. EXCEPT AS NOTED.
BY: [Signature] MICHAEL W. RAMSEY, R.L.A. DATE: 8/16/02

Table with columns for DATE and REVISIONS.

GRUBBS RAMSEY, INC. 17511 DALLAS PARKWAY, STE 230 DALLAS, TEXAS 75246 PHONE (412) 267-1231 FAX (412) 267-2414

RAYMOND HARRIS AND ASSOCIATES ARCHITECTS PROPOSED SAM'S CLUB BUILDING REMODEL BELTLINE ROAD ADDISON, TEXAS LANDSCAPE PLAN

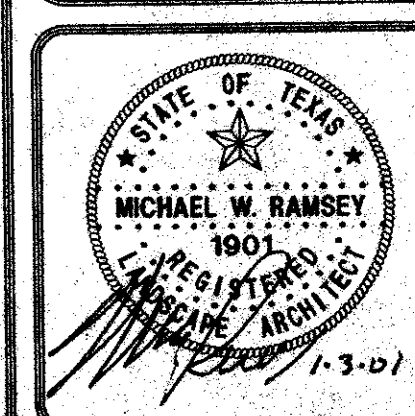


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