

VICINITY MAP
NTS

LEGEND

- Proposed Firelane
- Proposed Turn Lane
- Display Area
- Striped Pavement (not firelane)
- Proposed Wheel Stop Typical
- Existing Fire Hydrant
- Proposed Fire Hydrant
- Barrier Free Ramp

SYNOPSIS

Location: US Hwy 75 & Wilmeth Road
McKinney, Texas

Zoning: Zoned: C Planned Center

Proposed Use: Automobile Dealership

Lot Area: 14,076 Acres (613,148 sf)

Building Area: 70,684 sf

Loading Space: 2 Spaces

Lot Coverage: 9.34% (Total Bldg Area 57,270 sf)

Floor Area Ratio: .09 : 1

Building Height: 26'

Required Parking:

Display Area	1/1000 284555/1000	285 Spaces
Repair Bay	2/Bay + 1/Bay For Overnight (47 Bays x 2 + 47 Overnight)	141 Spaces
Office Employees	1/400	
First Floor	(24988/400)	63 Spaces
Second Floor	(13425/400)	34 Spaces
Showroom	1/500 (23,294/500)	47 Spaces
Parts	1/4000 (8977/4000)	3 Space
		573 Spaces

Parking Required Total:	573 Parking Spaces
Parking Provided Total:	952 Parking Spaces (4 HC)

NOTE: THIS IS NOT A CONSTRUCTION DOCUMENT.
THIS DOCUMENT IS FOR CONCEPTUAL PLANNING PURPOSES ONLY.

ENGINEER:
Cross Engineering Consultants, Inc.
131 S. Tennessee St.
McKinney, Texas 75069
Phone (972) 562-4409
Fax (972) 562-4471
Contact: Jon David Cross, P.E.

ARCHITECT:
Redline Design Group, PA
925 Tuckaseegee Rd., Suite 110
Charlotte, NC 25208
Phone (704) 377-2990
Cell (704) 618-4229
Contact: David Eve

SURVEYOR:
Ringley & Associates
701 S. Tennessee St.
McKinney, TX. 75069
Phone (972) 542-1266
Fax (972) 542-8682
Contact: Lawrence Ringley

REMOTE FDC GENERAL COMMENTS:

Shall be protected by bollards.

Shall be located a minimum of 3 ft. from the face to any landscaping and provided a clear pathway to the fire lane and adjacent fire hydrant. Parking, screening and landscaping are considered obstructions.

Shall be located 8 ft. to 10 ft. from the center of the fire hydrant, and adjacent to. Shall be located 3 ft. from back of curb. Remote FDC and FH shall be located 8 ft. from landscaping.

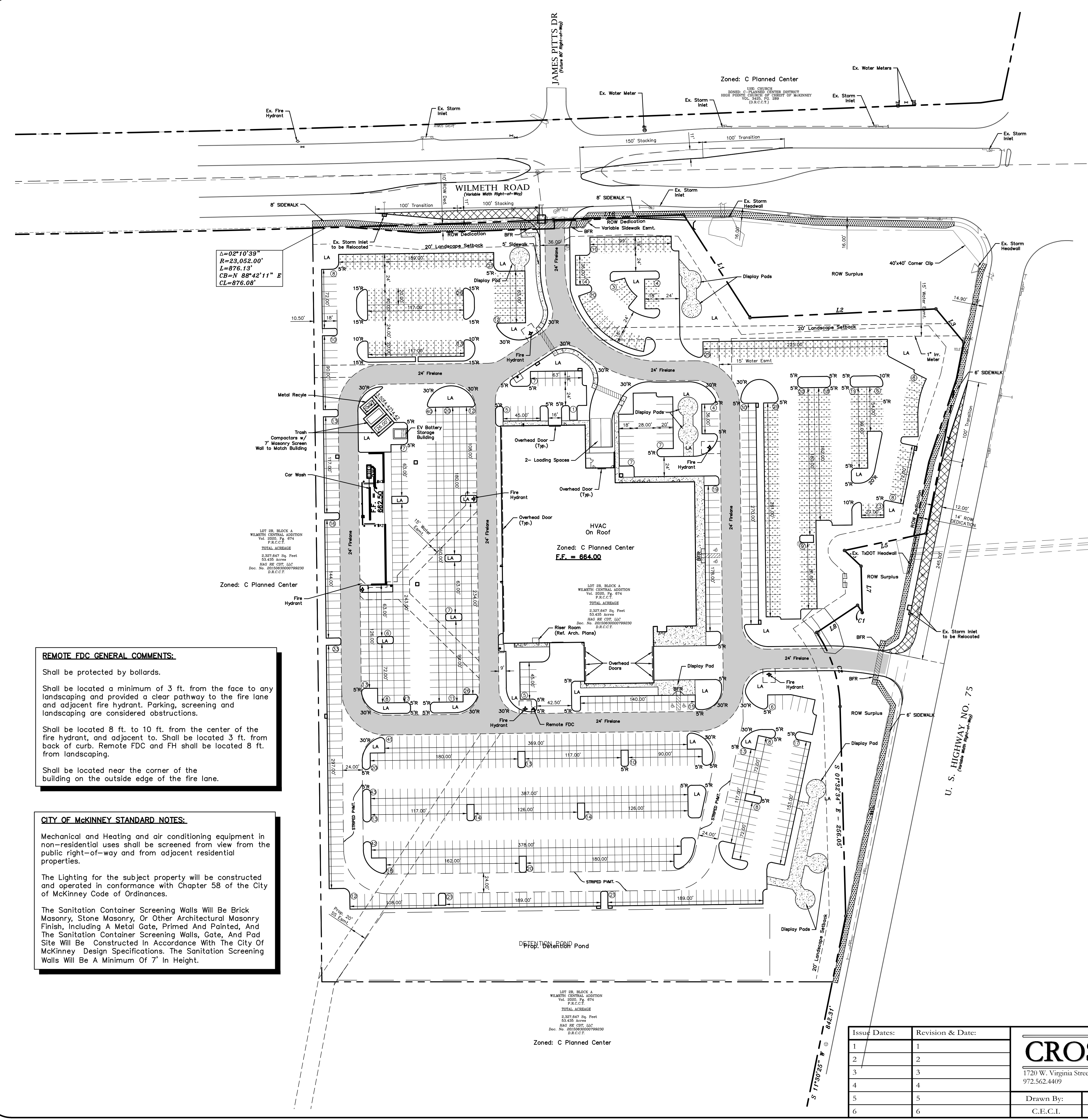
Shall be located near the corner of the building on the outside edge of the fire lane.

CITY OF MCKINNEY STANDARD NOTES:

Mechanical and Heating and air conditioning equipment in non-residential uses shall be screened from view from the public right-of-way and from adjacent residential properties.

The Lighting for the subject property will be constructed and operated in conformance with Chapter 58 of the City of McKinney Code of Ordinances.

The Sanitation Container Screening Walls Will Be Brick Masonry, Stone Masonry, Or Other Architectural Masonry Finish, Including A Metal Gate, Primed And Painted, And The Sanitation Container Screening Walls, Gate, And Pad Site Will Be Constructed In Accordance With The City Of McKinney Design Specifications. The Sanitation Screening Walls Will Be A Minimum Of 7' In Height.



Issue Dates:	Revision & Date:
1	1
2	2
3	3
4	4
5	5
6	6

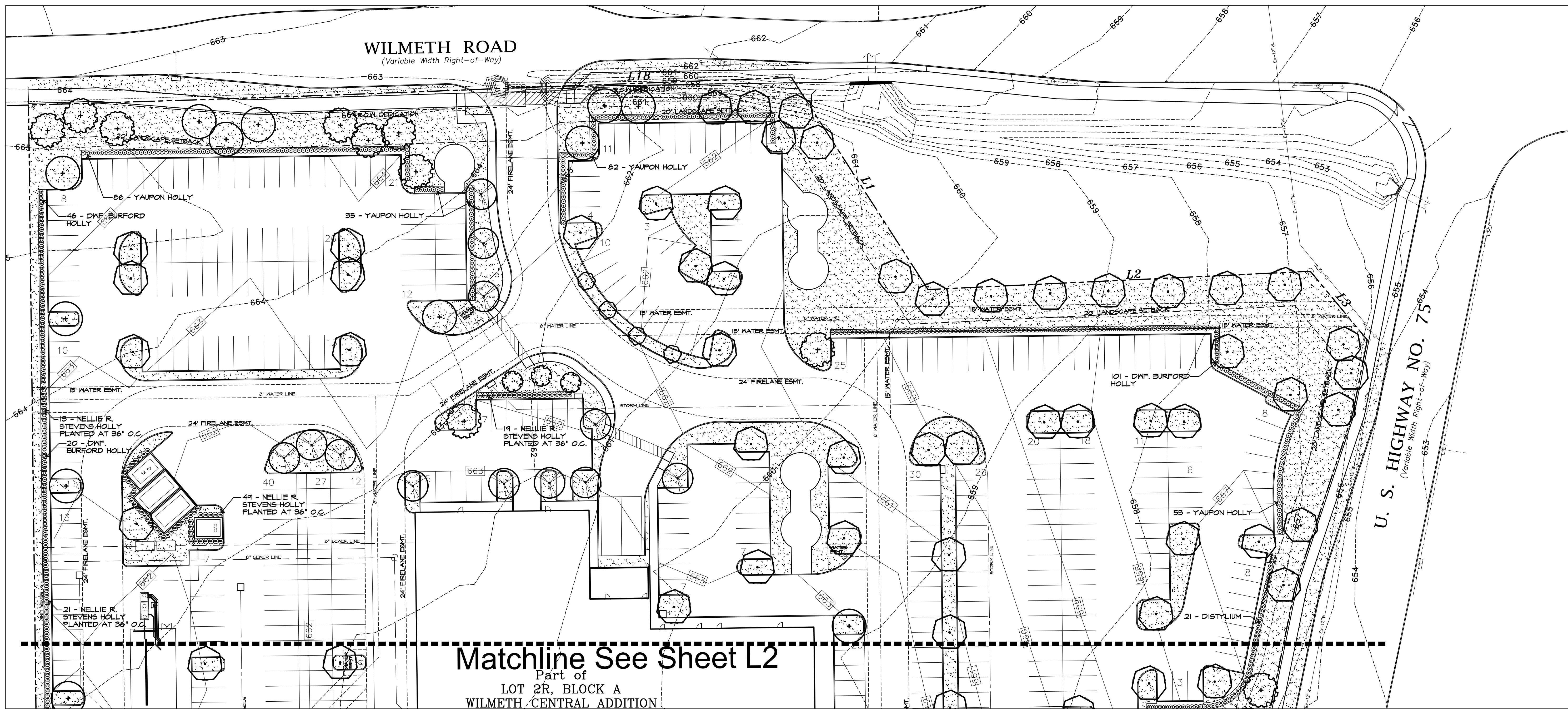
CROSS ENGINEERING CONSULTANTS
1720 W. Virginia Street
972.562.4409
McKinney, Texas 75069
Texas P.E. Firm No. F-5935

Drawn By: C.E.C.I.
Checked By: C.E.C.I.
Scale: 1"=60'

SUP SITE PLAN
BMW OF MCKINNEY
HENDRICK AUTOMOTIVE GROUP
CITY OF MCKINNEY, TEXAS

Sheet No.
SP
Project No.
22030

BMW OF MCKINNEY



Matchline See Sheet L2
 Part of
 LOT 2R, BLOCK A
 WILMETH CENTRAL ADDITION

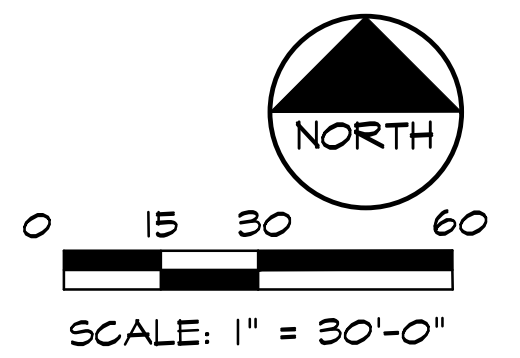
SHRUBS				
QUANTITY	SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION
261	⊙	BORDEAUX YAUPON HOLLY	Ilex vomitoria 'Condeaux'	3 gallon, 15"-17" Ht./18"-20" spread, full, bushy, specimen
185	⊙	NELLIE R. STEVENS HOLLY	Ilex cornuta 'Nellie R. Stevens'	7 gallon, 42" Ht./24"-30" spread, bushy, full to ground, planted @ 36" O.C.
264	⊙	DWARF BURFORD HOLLY	Ilex cornuta 'Burford Nana'	5 gallon, 24" Ht./20"-22" spread, bushy, full to ground.
274	⊙	BLUE CASCADE DISTYLUM	Distylium 'PIIDIST-II'	3 gallon, 18" Ht./18" spread, bushy, full to ground.
TURF GRASS				
178,635 S.F.		S.F. GRASS BERMUDA GRASS	Cynodon dactylon	Solid sod

LARGE TREES				
QUANTITY	SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE & CONDITION
88	⊙	CEDAR ELM	Ulmus crassifolia	4" caliper, 12' Ht./ 5'-6' spread, B4B, straight trunk.
12	⊙	PISTACHE	Pistachia chinensis	4" caliper, 12' Ht./ 5'-6' spread, B4B, straight trunk.
25	⊙	LIVE OAK	Quercus virginiana	4" caliper, 12' Ht./ 5'-6' spread, B4B, straight trunk.
13	⊙	TEXAS RED OAK	Quercus buckleyi	4" caliper, 12' Ht./ 5'-6' spread, B4B, straight trunk.

ORNAMENTAL TREES				
QUANTITY	SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION
10	⊙	MUSKOGEE CRAPE MYRTLE	Lagerstroemia indica 'Muskogee'	8" Ht./3' spread min, 2" Caliper Total, 30 gallon, 3" trunk, Min. full, bushy tree formed, specimen.
3	⊙	VITEX	Vitex agnus-castus	8" Ht./3' spread min, 2" Caliper total, 30 gallon, limbed up 30" Ht. full, bushy tree formed, specimen.

IRRIGATION NOTE
 ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS, AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.

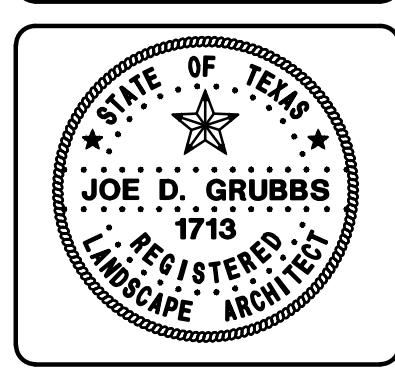
MCKINNEY LANDSCAPE TABULATIONS	
STREET YARD LANDSCAPING	
15% OF THE STREET YARD SHALL BE IN PERMANENT LANDSCAPE.	
U.S. HIGHWAY 75 SERVICE ROAD STREET YARD AREA	17,000 S.F.
15% STREET YARD AREA REQUIRED (17,000 x 15%) =	2,550 S.F.
STREET YARD AREA PROVIDED	+15,000 S.F.
WILMETH ROAD	
STREET YARD AREA	16,600 S.F.
15% STREET YARD AREA REQUIRED (16,600 x 15%) =	2,490 S.F.
STREET YARD AREA PROVIDED	+15,000 S.F.
SITE AREA LANDSCAPING	
10% OF THE SITE SHALL BE IN PERMANENT LANDSCAPING	
TOTAL SITE AREA UNDER DEVELOPMENT	613,148 S.F.
10% SITE LANDSCAPE AREA REQUIRED	61,315 S.F.
TOTAL SITE LANDSCAPE AREA PROVIDED	+120,000 S.F.
STREET FRONTAGE LANDSCAPE BUFFER	
20' LANDSCAPE BUFFER REQUIRED ALONG MAJOR THOROUGHFARES WITH 1 CANOPY TREE PER 40 L.F. OF BUFFER.	
U.S. HIGHWAY 75 SERVICE ROAD FRONTAGE L.F.	421.00 L.F.
REQUIRED THOROUGHFARE TREES (421 / 40 = 23.025) 23 TREES	23 TREES
THOROUGHFARE TREES PROVIDED	23 TREES
WILMETH ROAD FRONTAGE L.F.	844.00 L.F.
REQUIRED THOROUGHFARE TREES (844 / 40 = 22.35) 23 TREES	23 TREES
THOROUGHFARE TREES PROVIDED	23 TREES
PARKING LOT TREES	
ONE PARKING LOT TREE SHALL BE PROVIDED PER EACH 10 PARKING SPACES.	
PARKING SPACES	965 SPACES
REQUIRED PARKING TREES (965 / 10 = 96.5)	97 TREES
PARKING TREES PROVIDED	97 TREES



Date:	
Revisions:	
#	

Issued For:
CONSTRUCTION
 Job No.
 22119
 Scale
 1" = 30'-0"
 Drawn By:
 JDG
 Date
 11-16-2022

BMW of McKinney
 McKinney Texas



Sheet Title:
Landscape Plan
 Sheet Number:
L1
 of .. Sheets

Grubbs Design Group, P.L.L.C. - 403 South Tennessee Street - McKinney, Texas 75069 - Phone (972) 548-5020

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
C. Earthwork
D. General Requirements
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. Plants are subject to inspection and approval by the Landscape Architect.
C. Observation at growing site does not preclude right of rejection at job site.
D. Employ only qualified personnel familiar with required work.
E. Off-site topsoil and topsoil on-site Testing (paid by Landscape Contractor).
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 saw dust or other approved material.
4. Protect during delivery to prevent damage to root ball or desiccation of leaves.
5. Notify Landscape Architect of delivery schedule 48 hours in advance so plant material may be observed upon arrival at job site.
6. Remove rejected plant material immediately from site.
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. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.
3. 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.
B. Until final acceptance, maintain plantings and trees by watering, cultivating, mowing, weeding, spraying, cleaning and replacing as necessary to keep landscape in a vigorous, healthy condition and rake bed areas as required.
C. A written notice requesting final inspection and acceptance should be submitted to Landscape Architect or owner representative within seven (7) days prior to completion.
D. Following final acceptance, maintenance of plant material will become the Owner's responsibility. The Contractor shall provide Owner with a recommended maintenance program.

PART 2 - PRODUCTS

- 2.1 PLANTS:
A. Quantities: The drawings and specifications are complementary; anything called for on one and not the other is as binding as if shown and called for on both.
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 tufted and a strong straight, distinct leader where this is characteristic of species.
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 scapes, broken or split branches, scars, bark abrasions, sun scalds, fresh limb cuts, disfiguring knots, or other defects.
F. Pruning of all trees and shrubs, as directed by Landscape Architect, shall be executed by Landscape Contractor at no additional cost to the Owner.
G. Plants shall meet the sizes indicated on the Plant List. Where a size or caliper range is stated, at least 50% of the material shall be closer in size to the top of the range stated.
H. Plants indicated "B&B" shall be balled and burlapped. Plants shall be nursery grown unless otherwise specified in plant list.
I. Container grown plants shall be well rooted and established in the container in which they are growing. They shall have grown to the planting medium when taken from the container, but not long enough to become root bound.

- 2.2 SOIL PREPARATION MATERIALS:
A. Peat Moss: Commercial sphagnum moss or hynum peat.
B. Pre mixed soils can be used as long as 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 and reasonably free of weeds and foreign
2. Physical properties as follows:
Clay - between 7-27 percent
Silt - between 28-50 percent
Sand - less than 52 percent
D. Sharp Sand: Clean, washed sand, (fine aggregate) ASTM C-33.
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 tree planting pits, shall be equal to Agriform 20-10-15 planting tablets as manufactured by Sierra Chemical Co., Milpitas, California 45095 or approved equal.
2.4 MULCH:
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.
B. Examine subgrade upon which work is to be performed. Notify the Landscape Architect or owners representative of unsatisfactory conditions.
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 and hand-rake bed areas to smooth even surfaces, and mulch bed areas 1 inch deep.
3.3 GROUNDCOVER 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. Stake tree locations for Owners Representative approval prior to digging.
B. Plant ornamental trees in pits 12-inches larger than the root ball.
C. After excavation of tree pits, review water percolation.
D. 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.
E. Prepare soil for planting by thoroughly mixing two parts sandy loam and one part peatmoss or other approved organic matter.
F. Backfill tree pits with a mixture of 1/2 prepared soil and 1/2 existing site soil.
G. Completely fill each tree saucer with mulch to a depth of two inches.
H. Contractor shall keep trees plumb until established.
I. Pruning: Prune trees to preserve the natural character of the plant in a manner appropriate to its particular requirements in the landscape design as directed by the Landscape Architect.

- 3.5 SEASONAL COLOR PLANTING:
A. Beds shall be excavated to a depth of 2 inches. Soil shall be replaced with 100% Living Earth Technology Complete Mix or equal.
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 and rocks from site daily as work progresses. Keep walk and driveway areas clean by sweeping or hosing.

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.
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.
1.4 JOB CONDITIONS:
A. Water: Will be available on site.
B. Lawn areas will be left within 1/10 of a foot of finish grade by other trades.
1.5 SCHEDULE:
A. Seeding/hydromulching - Bermudagrass: Complete only between May 1 to August 31 under favorable conditions.
B. Seeding/hydromulching - Perennial ryegrass: Complete only between September 1 to April 30, except at front of project, as determined by owner.
C. Sodding: Sod bermuda between March 15 and September 30.
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 TOPSOIL:
A. (If specified on the plans as a requirement) Friable, fertile, dark, loamy soil, free of clay lumps, sub-soil stones, and other extraneous material and reasonably free of weeds and foreign grasses.
B. Physical properties as follows:
Clay - between 7-27 percent
Silt - between 28-50 percent
Sand - less than 52 percent
2.2 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.
B. "Raleigh" St. Augustine Grass: Solid Sod, live, rich, dark green in color, free of foreign grasses, weeds, nutgrass, cut with a full 3/4 inch of heavy clay covering roots.
2.3 FERTILIZER:
Fertilizer shall be organic base, uniform in composition, dry and free flowing.
A. First application: 12-12-12 element percentage with minimum 8% sulfur and 4% iron plus micro nutrients.
B. Second application: 9-11-2 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. Security lawn areas where excessive compaction is greater than 95% Standard Proctor to a depth of 4-inches by discing or rototilling.
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 final grading leaving surface uniform without depressions and undulations, graded approximately 1-inch below paving.
C. Secure approval from the Landscape Architect prior to proceeding with grassing operation.
3.3 HERBICIDE:
Apply herbicide to remove any remaining weeds.
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/seedling, soil shall be moist but not muddy, and wind velocity shall not exceed ten (10) miles per hour.
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. 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.
B. Fertilizing: Fertilize immediately after grass is planted at rate of 4 lbs per 1,000 square foot.
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.
C. Mowing/Weed Control:
1. Mow lawn areas weekly until a stand of grass is achieved.
2. Weed lawn areas until acceptance, removing all foreign vegetation, either by hoeing or pulling.
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

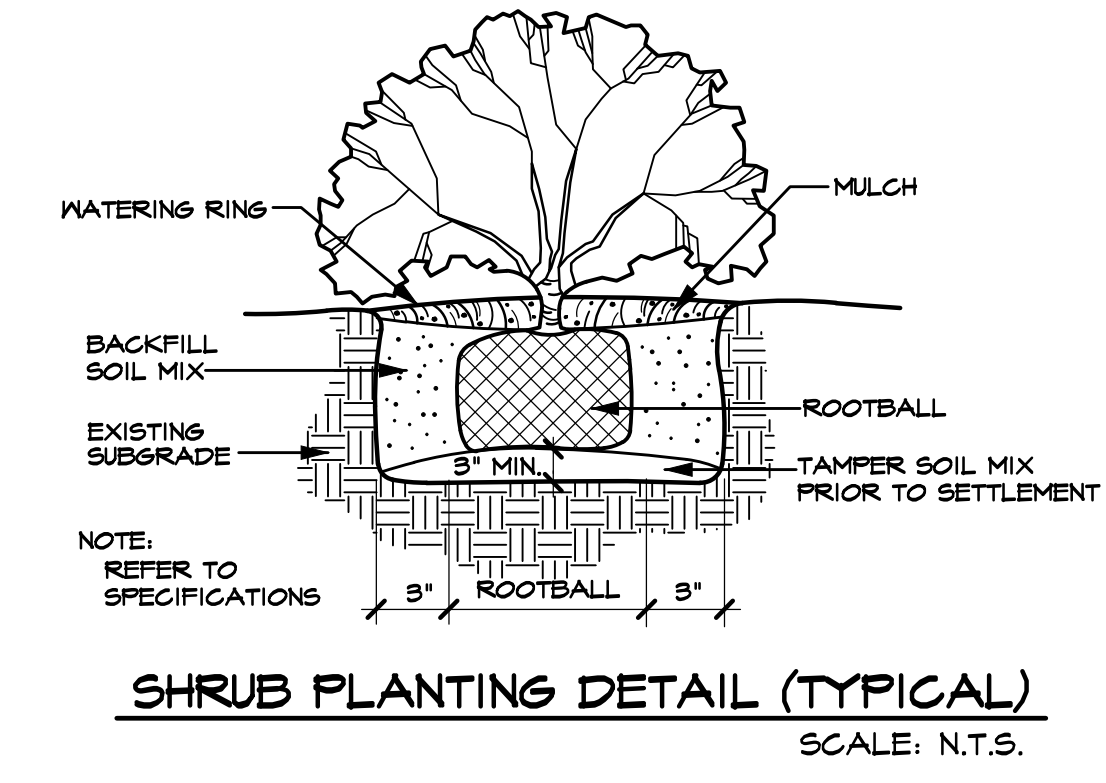
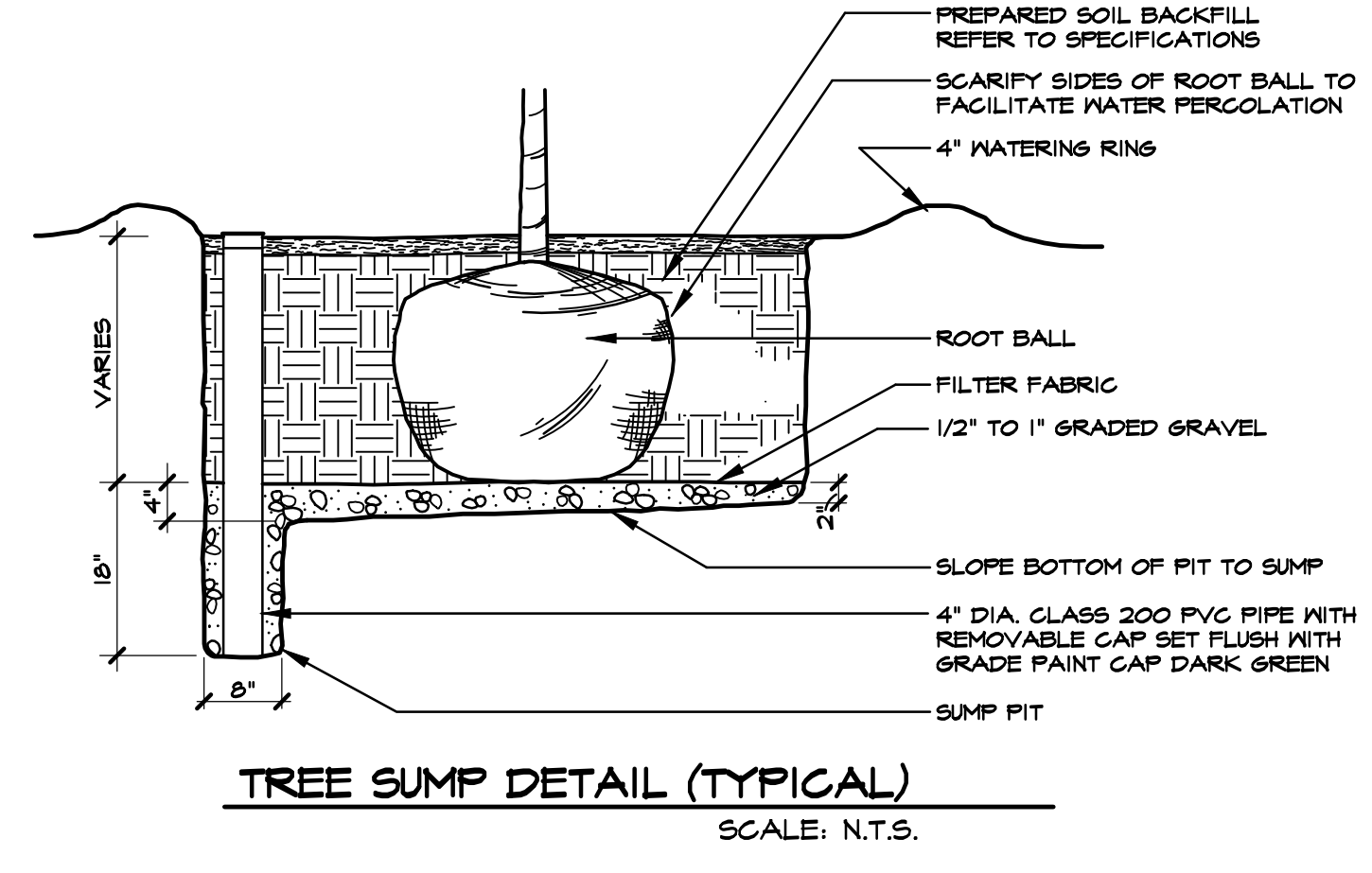
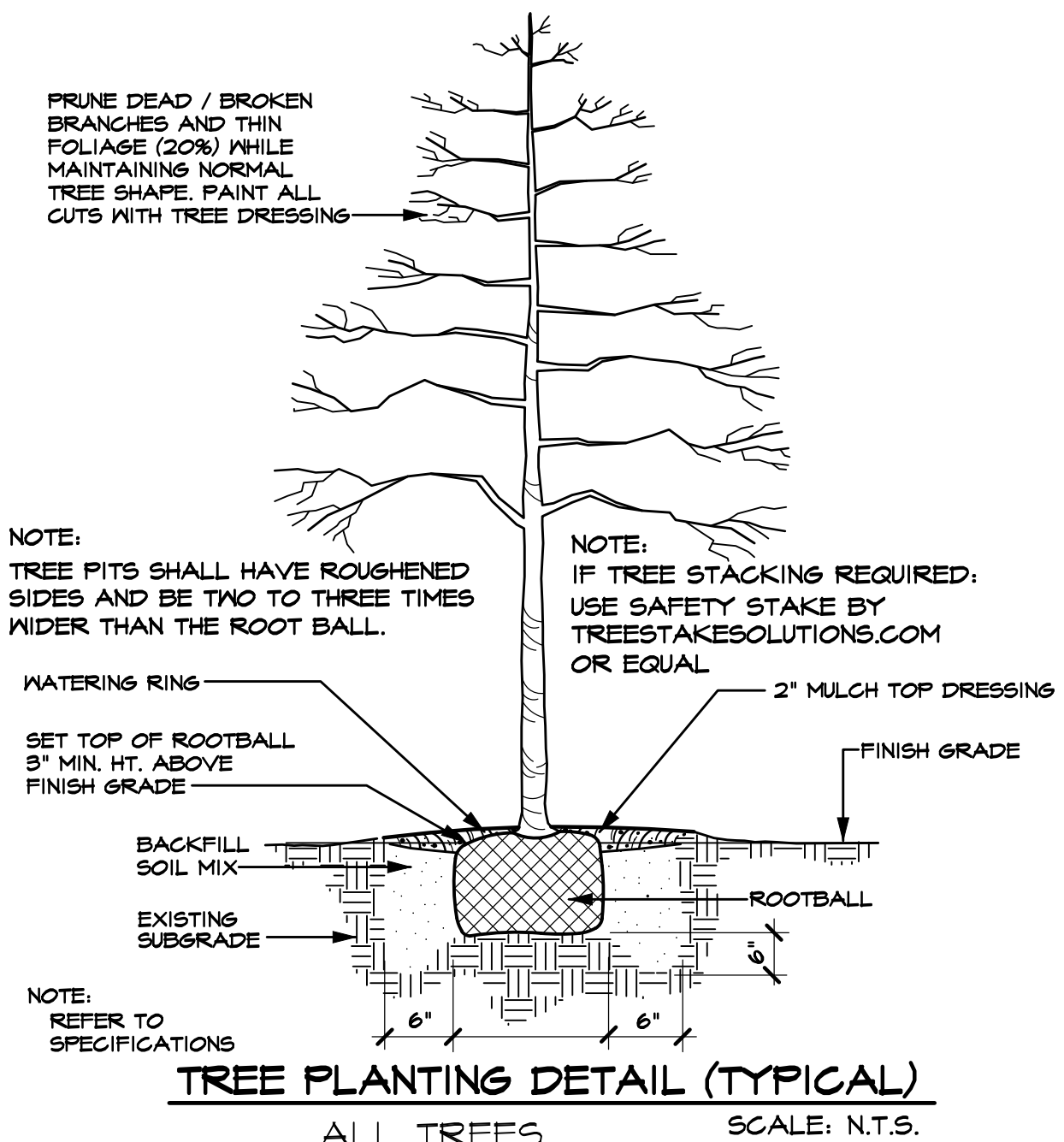
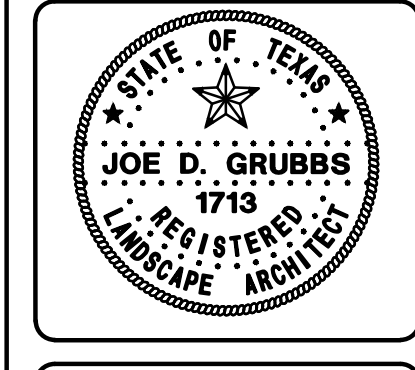


Table with 2 columns: Revisions, #. Includes a date field: Date: 11-16-2022.

Issued For: CONSTRUCTION
Job No. 22119
Scale N.T.S.
Drawn By: JDG
Date 11-16-2022

BMW of McKinney
McKinney Texas



Sheet Title: Landscape Specifications
Sheet Number: L3 of L3 Sheets