

**LANDSCAPE NOTES**

CONTRACTOR SHALL STAKE ALL TREE LOCATIONS AND BED CONFIGURATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ALLOW A MINIMUM OF 48 HOURS NOTICE TO THE OWNER.

CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONTRACTOR OR SUBCONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED IN A TIMELY MANNER AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL ADVISE THE OWNER OF ANY CONDITION FOUND ON-SITE OR OFF-SITE WHICH PROHIBITS INSTALLATION AS SHOWN ON THESE PLANS.

ALL SHRUB AND GROUND COVER BEDS SHALL HAVE A MINIMUM OF FOUR INCHES (4") HARDWOOD BARK MULCH. SEE LANDSCAPE DETAILS.

TREES SHALL BE LOCATED A MINIMUM OF EIGHT FEET (8') FROM ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF FIVE FEET (5') FROM ALL PAVED AREAS. TREES SHALL NOT BE LOCATED IN UTILITY EASEMENTS. TREES SHALL BE LOCATED A MINIMUM OF FIVE FEET (5') FROM ALL FIRE HYDRANTS.

CONTRACTOR SHALL MAINTAIN LANDSCAPE AREAS IN A NEAT AND ORDERLY MANNER UNTIL FINAL ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL CONSIST OF WEEDING, WATERING, MOWING AND EDGING, SPRAYING, FERTILIZING, GARBAGE AND DEBRIS REMOVAL, TEMPORARY EROSION CONTROL, AND EROSION REPAIR AT A MINIMUM.

MINIMUM ONE PUNCH LIST WALK THROUGH SHALL BE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT. CONTACT LANDSCAPE ARCHITECT MINIMUM 1 WEEK PRIOR TO SITE VISIT.

CONTRACTOR SHALL REPLACE WITHIN TWO WEEKS OF WRITTEN NOTICE BY THE OWNER ANY PLANT MATERIAL WHICH IS CONSIDERED TO BE DAMAGED, DESTROYED, REMOVED OR DEAD. CONTRACTOR SHALL REPLACE PLANT MATERIAL WITH SIMILAR SIZE AND VARIETY PLANT MATERIALS.

PLANTS SHALL CONFORM WITH THE STATE OF TEXAS REGULATIONS FOR NURSERY INSPECTIONS, RULES AND RATINGS.

ALL PLANTS SHALL BE FREE OF DISEASE AND INSECT INFESTATION WITH A NORMAL GROWTH HABIT. ALL TRUNKS SHALL BE FREE OF EXCESSIVE ABRASIONS OR FRESH ABRASIONS.

CONTRACTOR SHALL GUARANTEE PLANTS FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND ACCEPTANCE. CONTRACTOR SHALL PROVIDE ONE YEAR MAINTENANCE ON PLANT MATERIALS.

CONTRACTOR SHALL NOTIFY OWNER/LANDSCAPE ARCHITECT 48 HOURS PRIOR TO SCHEDULED START OF PLANT INSTALLATION.

STEEL EDGING SHALL BE PLACED BETWEEN TURF AND GROUND COVER OR SHRUB BEDS AS INDICATED ON THE DRAWINGS.


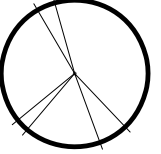
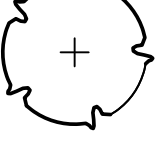
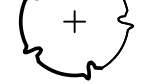





INSTALL STEEL EDGING PER MANUFACTURER'S RECOMMENDATIONS.

THERE IS AN EXISTING SEATING AREA LOCATED APPROXIMATELY 100 FEET SOUTH OF EXPERIAN WAY ALONG STONEBRIDGE DRIVE.

THERE ARE EXISTING TREES IN THE RIGHT-OF-WAY AND MEDIAN AT STONEBRIDGE DRIVE. THERE ARE NO EXISTING TREES ON SITE.

SEE SHEET L-2 FOR ADDITIONAL NOTES AND PLANT LEGEND.

**PLANT KEY**

-  REQ'D CANOPY PARKING LOT TREE - MIN. 4" CALIPER, MIN. 12' HT.
-  REQ'D FRONTAGE TREE, SHUMARD OAK, 4" CALIPER, MIN. 12' HT.
-  ADDITIONAL CANOPY TREE - MIN. 4" CAL., MIN. 12' HT.
-  ADDITIONAL ORNAMENTAL/SMALL TREE - MIN. 2" CAL.
-  5-10 GAL. EVERGREEN/DECIDUOUS SHRUB (5" OC.)
-  5-7 GAL. EVERGREEN/DECIDUOUS SHRUB (3" OC.)
-  3 GAL. ORNAMENTAL/EVERGREEN SHRUB (2" OC.)
-  GROUND COVER - 4" POTS TO 1 GAL. (8"-12" OC.)
-  SEASONAL COLOR - 4" POTS TO 1 GAL. (8"-12" OC.)

**GRASS ESTABLISHMENT NOTES**

CONTRACTOR SHALL ESTABLISH BERMUDAGRASS IN ALL NEWLY DEVELOPED AND DISTURBED AREAS NOT OTHERWISE PLANTED WITH TREES, SHRUBS OR GROUND COVER.

CONTRACTOR SHALL HYDROSEED WITH MULCH OR SOD AS DIRECTED.

CONTRACTOR SHALL PROVIDE AN ESTABLISHED STAND OF BERMUDAGRASS AT TIME OF POSSESSION BY OWNER.

DISTURBED AREAS OUTSIDE OF THE PROPERTY LINE REGARDLESS OF LOCATION SHALL BE SODDED. PROVIDE TEMPORARY IRRIGATION AS REQUIRED TO ESTABLISH OFF-SITE GRASS. SEE GRADING PLANS FOR LIMITS OF DISTURBED AREA/GRADING.

**IF GRASS IS TO BE ESTABLISHED DURING A SEASON WHEN THE BERMUDAGRASS IS DORMANT (APPROXIMATELY MID-SEPTEMBER TO LATE MARCH), CONTRACTOR SHALL SOD WITH BERMUDAGRASS**

NO SPECIES OF GRASS SHALL BE INSTALLED WHEN THE GROUND IS FROZEN NOR WHEN THE TEMPERATURE REMAINS OR IS FORECASTED TO REMAIN 32°F OR LOWER FOR A 48 HOUR PERIOD OR LONGER.

**akm la**  
LANDSCAPE ARCHITECT

P.O. BOX 17850 / FORT WORTH, TEXAS 76102  
2328 PRIMROSE AVENUE / FORT WORTH, TEXAS 76111  
ALIS@AKMLA.COM / 817.875.1839

THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS  
8213 SHOAL CREEK BOULEVARD, SUITE 107  
AUSTIN, TEXAS 78758  
TELEPHONE: 512.458.4126  
HAS JURISDICTION OVER THE INDIVIDUAL LICENSED UNDER THE LANDSCAPE ARCHITECTS REGISTRATION LAW, ARTICLE 249C, VERNON'S TEXAS CIVIL STATUTES.

LANDSCAPE DATA		
TOTAL SITE AREA: ±6.75 ACRES (±294,045 SF)		
PARKING SPACES PROVIDED: 98		
	REQUIRED	PROVIDED
STREET YARD LANDSCAPE (12,015 SF) (146-135(f)(1).	15%	89%
	1,802 SF	10,722 SF
SITE LANDSCAPE (146-135(f)(3).	10%	16%+
	29,405 SF	47,949+ SF
STREET TREES (1 TREE PER 40 LF FRONTAGE) 481.1 LF FRONTAGE (146-135(f)(5).	12.02	14
PARKING LOT TREE WITHIN 65' OF ALL P. SPACES (146-135(f)(8)(a).	YES	YES
P. LOT ISLANDS MIN. 10' WIDE (DG:6.13.3.)	YES	YES
DOUBLE STAGGERED ROWS OF TREES, MIN. 5' FROM SIDEWALK EDGE (DG:6.12.B.A).	YES	YES
20' LANDSCAPE SETBACK AT STONEBRIDGE DRIVE (146-135(f)(8)(b).	YES	YES
PARKING LOT ISLAND (1/10 SPACES) (DG:6.13.2.)	YES	YES
5' SETBACK AT (GENERALLY) NORTH AND WEST PROPERTY LINE (146-135(f)(15).	YES	YES

NOTE:

146-135 REFERS TO THE ZONING REGULATIONS OF THE CITY OF MCKINNEY.

DG REFERS TO THE STONEBRIDGE RANCH MASTER DESIGN GUIDELINES, REV. 11.2004.

CANOPY TREES SHALL BE A MINIMUM OF 4" CALIPER, AT 12" ABOVE FINISH GRADE, AND 12' HEIGHT AT TIME OF PLANTING (146-135(e)(1)e).

ORNAMENTAL TREES SHALL BE A MINIMUM OF 2" CALIPER MEASURED 12" ABOVE FINISH GRADE AND MINIMUM 8' HEIGHT AT INSTALLATION (146-135(e)(1)d).

EVERGREEN SHRUBS ACCEPTABLE FOR 6' SCREENING SHALL BE PROVIDED AROUND DUMPSTER SCREENING WALL UNLESS DUMPSTER IS NOT VISIBLE FROM PUBLIC R-O-W OR PUBLIC USE AREA (146-135(f)(18).

SHRUBS ACCEPTABLE FOR 6' SCREENING SHALL BE 3' HEIGHT AT PLANTING AND MAXIMUM 3' ON CENTER (146-135(e)(1)f).

AT LEAST 75% OF THE FRONTAGE OF PARKING LOTS ADJACENT TO PUBLIC R-O-W SHALL BE SCREENED FROM PUBLIC STREETS WITH EVERGREEN SHRUBS A MINIMUM 3' HEIGHT (146-135(f)(12).

SHRUBS (NOT DWARF) SHALL BE MINIMUM OF 2' HEIGHT AT INSTALLATION (146-135(e)(1)g).

MINIMUM OF 50% OF THE SITE TREES SHALL BE LARGE CANOPY TREES MINIMUM 4" CALIPER (146-135(f)(13).

LANDSCAPE MATERIALS EXCEPT GRASS OR GROUND COVER SHALL NOT BE LOCATED CLOSER THAN 3' FROM EDGE OF ANY PARKING SPACE (146-135(e)(1)i).

30' LANDSCAPE BUFFER SHALL BE PROVIDED PARALLEL TO THE CORNER CLIP R-O-W DEDICATION (146-135(f)(2).

GRASS AREA SHALL BE ESTABLISHED WITH 100% COVERAGE AND 70% DENSITY PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY (146-135(e)(1)k).

NO TREE SHALL BE PLANTED CLOSER THAN 4' TO A R-O-W LINE, NOR CLOSER THAN 8' TO A PUBLIC UTILITY (146-135(e)(5).

PARKING SCREENING SHALL BE INSTALLED AT A MINIMUM OF 3' HEIGHT IN A MINIMUM 5' WIDE BED WHERE ADJACENT TO PARKING (DG:4.10.D).

DEVELOPERS SHALL PLANT, IRRIGATE AND MAINTAIN ALL AREAS IN ADJACENT RIGHT-OF-WAY (DG:6.12).

FOR THE DUMPSTER ENCLOSURE, SHRUBS SHALL BE INSTALLED ALONG A MINIMUM OF 30% OF EACH WALL (DG:4.10.E).

ALL LANDSCAPE AREAS SHALL BE FULLY IRRIGATED WITH OVERLAPPING COVERAGE DESIGNED BY A TEXAS LICENSED IRRIGATOR OR LANDSCAPE ARCHITECT (DG:6.12.B.7.).

ALL CONTROLLERS SHALL BE RAINBIRD ESP-MC SERIES WITH RAIN CHECK AND PENN A-19 TEMPERATURE SENSOR (DG:6.12.B.7.).

STREET TREE FOR STONEBRIDGE DRIVE: SHUMARD OAK (DG:6.12.C).

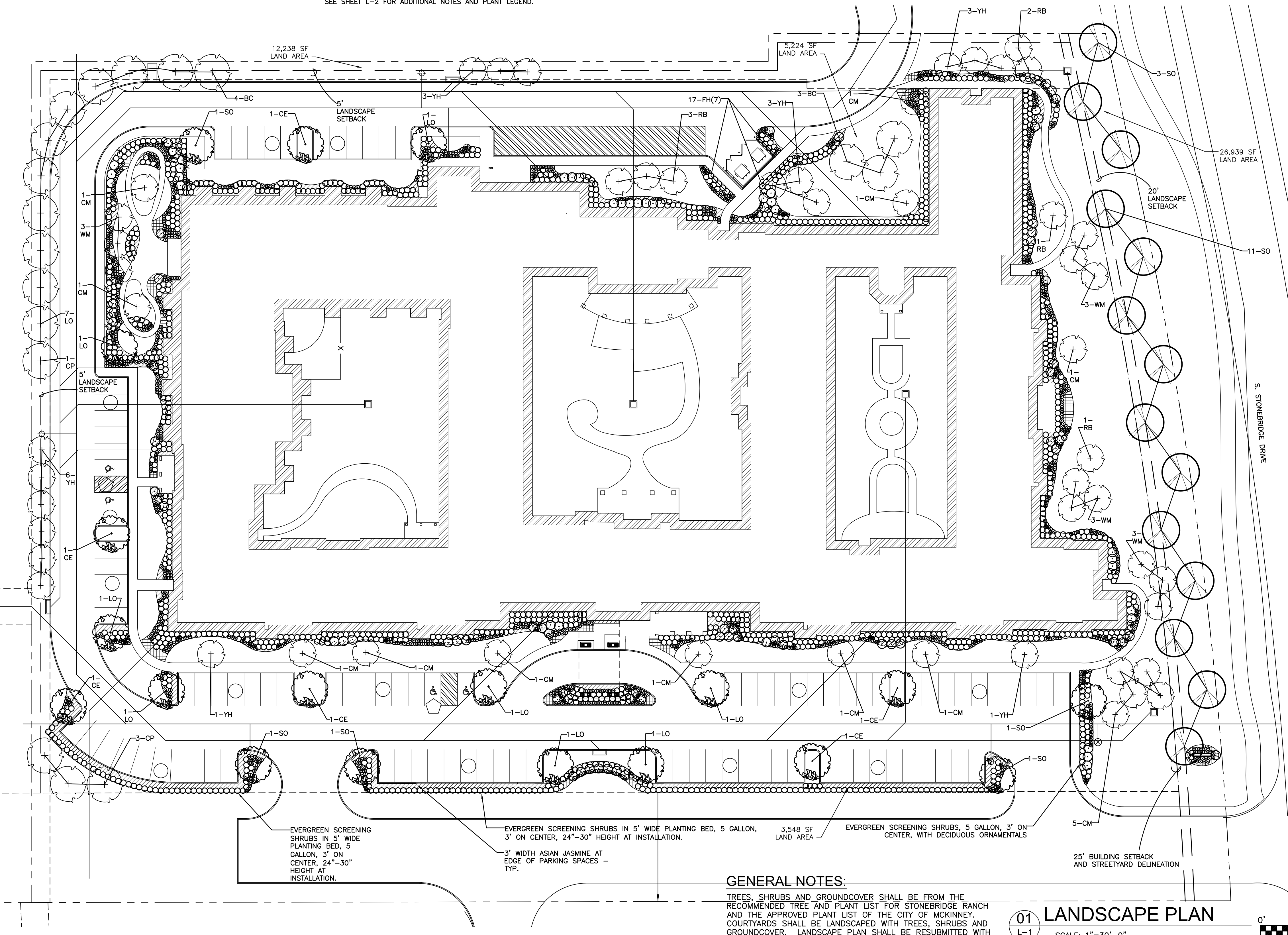
ALL STREET TREES SHALL HAVE A MINIMUM CALIPER SIZE OF 3.5"-4" AND A MINIMUM HEIGHT OF 13'-15' WITH A MINIMUM SPREAD OF 9'-10' AT INSTALLATION (DG:6.12.C.2.).

FOUNDATION PLANTING AND ACCENT PLANTINGS ARE ENCOURAGED THROUGHOUT THE SITE (DG:6.14).

**IRRIGATION NOTES**

SEE SHEET L-2 FOR IRRIGATION NOTES.

Received by sgleinser 12/21/12 2:50pm



**01 LANDSCAPE PLAN**  
L-1  
SCALE: 1" = 30'-0"

NORTH

0' 30' 60'

SCALE: 1" = 30'





DATE: 12-21-12

ISSUE:

DRAWN BY:

SHEET TITLE:

LANDSCAPE NOTES AND DETAILS

**akm la**  
 LANDSCAPE ARCHITECT  
 P.O. BOX 17850 / FORT WORTH, TEXAS 76102  
 2328 PRIMROSE AVENUE / FORT WORTH, TEXAS 76111  
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 LANDSCAPE ARCHITECTS REGISTRATION LAW, ARTICLE 249C,  
 VERNON'S TEXAS CIVIL STATUTES.

**GENERAL NOTES:**

ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AND THE OWNER BEFORE, DURING, AND AFTER INSTALLATION AND SHALL BE REPLACED WITH ACCEPTABLE PLANT MATERIAL. CONTRACTOR SHALL NOT SUBSTITUTE PLANTS WITHOUT PRIOR AUTHORIZATION BY THE LANDSCAPE ARCHITECT OR OWNER.

PRIOR TO CONSTRUCTION, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC., WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.

THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS, BEFORE PRICING THE WORK.

THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, TEMPORARY EROSION CONTROL AND EROSION REPAIR, ETC.) OF PLANTING AREAS AND LAWNS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE LANDSCAPE ARCHITECT, AND OWNER.

THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF FINAL ACCEPTANCE. THE LANDSCAPE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD (AS PER DIRECTION OF THE OWNER).

THE OWNER AGREES TO IRRIGATE ALL LANDSCAPE AREAS THROUGHOUT THE ONE-YEAR GUARANTEE PERIOD UNLESS OTHERWISE DETERMINED.

THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKED LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION. STAKE LOCATION OF TREES AND PLANTING BEDS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. NOTIFY LANDSCAPE ARCHITECT AT LEAST 48 HOURS IN ADVANCE OF TREE STAKING.

ANY PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO FINAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE, AND MEETING ALL PLANT LIST SPECIFICATIONS.

STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" ARE ONLY GUIDELINE SPECIFICATIONS AND SHALL BE CONSIDERED MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL. THE SIZE AND SHAPE OF PLANT MATERIALS SHALL CORRESPOND WITH THAT NORMALLY EXPECTED FOR SPECIES AND VARIETY OF COMMERCIALY AVAILABLE NURSERY STOCK OR AS SPECIFIED ON PLANS. PLANTS SHALL CONFORM WITH THE STATE OF TEXAS REGULATIONS FOR NURSERY INSPECTIONS, RULES AND RATINGS.

SEE SHEET L-1 FOR ADDITIONAL LANDSCAPE NOTES.

**PLANTING NOTES:**

ALL PLANTS SHALL BE FREE OF DISEASE AND INSECT INFESTATION WITH A HEALTHY, AND VIGOROUS NORMAL GROWTH HABIT. ALL TRUNKS SHALL BE FREE OF EXCESSIVE ABRASIONS OR FRESH ABRASIONS.

ALL PLANTS SHALL BE CONTAINER-GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.

ALL PLANTS AND PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SHOWN IN DETAILS. MINIMUM DEPTH TO BE ACHIEVED AFTER SETTLEMENT. SEE DETAIL FOR DEPTH. WATER IMMEDIATELY AFTER MULCHING.

ALL TREES SHALL BE FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.

TREES WITH WEAK, THIN TRUNKS NOT CAPABLE OF SUPPORT SHALL NOT BE ACCEPTED.

SINGLE TRUNK TREES SHALL HAVE SINGLE, STRAIGHT TRUNK WITH NO VISIBLE SCARS OR FRESH ABRASIONS. SINGLE TRUNK TREES SHALL BEGIN BRANCHING A MINIMUM OF 5' ABOVE FINISH GRADE.

TREE TRUNKS SHALL BE PLUMB. STAKE AND GUY ALL TREES ACCORDING TO THE DETAIL IMMEDIATELY AFTER PLANTING.

PROVIDE CONTROLLED RELEASE FERTILIZER PER MANUFACTURER'S RECOMMENDATIONS AT THE FOLLOWING RATES:

SHRUBS, 5 GAL. OR LARGER, 2 EACH  
 TREES, 1 TABLET PER 1/2" TRUNK CALIPER MEASURED 12" ABOVE TOP OF ROOTBALL.

BACKFILL FOR TREES AND SHRUBS SHALL BE TOPSOIL FROM STOCKPILED ON SITE MATERIALS, FREE OF WEEDS, ROOTS, ROCKS AND OTHER NOXIOUS MATERIALS. IF NO STOCKPILED TOPSOIL EXISTS ON SITE, BACKFILL FOR TREE PITS SHALL BE 2/3 EXISTING SOIL AND 1/3 COMPOST, THOROUGHLY BLENDED. BACKFILL FOR SHRUB BEDS SHALL BE 1/2 EXISTING SOIL AND 1/2 COMPOST THOROUGHLY BLENDED.

THOROUGHLY SETTLE PLANTS BY WATERING.

FOR BALLED PLANTS, DO NOT PULL WRAPPING FROM UNDER BALL. DO NOT PLANT IF BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING PROCESS OR IF STEM IS LOOSE.

ALL AREAS TO BE SEEDED OR SODDED SHALL BE BLADED AND GRADED SMOOTH. SOIL SHALL BE WATERED TO A MINIMUM OF 4" DEEP AT LEAST 48 HOURS PRIOR TO LAYING SOD.

SOIL SHALL BE FREE OF WEEDS, ROCKS LARGER THAN 1/2" IN DIAMETER, AND OTHER FOREIGN MATERIAL IMMEDIATELY BEFORE SEEDING. RE-SOD ALL BARE SPOTS NOT HAVING A UNIFORM STAND OF GRASS AT NO ADDITIONAL EXPENSE TO THE OWNER.

PLANTING BEDS AND TREE PITS SHALL BE FREE OF WEEDS AND FOREIGN MATERIAL PRIOR TO PLANTING.

RAKE PLANTING BEDS TO CONFORM TO ESTABLISHED GRADES BEFORE AND AFTER PLANTING. PLANTING BEDS ADJACENT TO BUILDINGS SHALL DRAIN AWAY FROM BUILDINGS AT A MINIMUM 2 PERCENT SLOPE FOR A MINIMUM OF 10 FEET. PLANTING BEDS AND TREE PITS SHALL NOT COLLECT WATER FROM ADJACENT TURF OR PAVED AREAS. LANDSCAPE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM PLANTING AREAS IN ACCORDANCE WITH FINAL GRADES. REFERENCE GRADING PLAN FOR FINE GRADING.

TREES, SHRUBS AND GROUNDCOVER SHALL NOT BE INSTALLED WHEN THE TEMPERATURE IS 32 DEGREES FAHRENHEIT OR LESS, OR IS FORECASTED TO BE 32 DEGREES FAHRENHEIT OR LESS 24 HOURS PRIOR TO BEGINNING INSTALLATION.

**HYDROMULCH SEEDING NOTES:**

ALL AREAS TO BE SEEDED OR SODDED SHALL BE BLADED AND GRADED SMOOTH. SOIL SHALL BE WATERED TO A MINIMUM OF 4" DEEP AT LEAST 48 HOURS PRIOR TO LAYING SOD.

SOIL SHALL BE FREE OF WEEDS, ROCKS LARGER THAN 1/2" IN DIAMETER, AND OTHER FOREIGN MATERIAL IMMEDIATELY BEFORE SEEDING.

SEED SHALL BE COMMON BERMUDAGRASS, 98% PURITY, 85% PURE LIVE SEED, FREE OF WEEDS.

SEED BETWEEN CALENDAR DATES FROM APRIL 15 TO AUGUST 15. BEGIN SEEDING NO LATER THAN JUNE 15. DO NOT SEED WHEN EXCESSIVELY WET OR DRY. DO NOT PERFORM SEEDING OR HYDROMULCHING WHEN WIND EXCEEDS 15 MPH. SEEDING SHALL NOT BE DONE WHEN THE TEMPERATURE IS 32 DEGREES FAHRENHEIT OR LESS, OR IS FORECASTED TO BE 32 DEGREES FAHRENHEIT OR LESS 24 HOURS PRIOR TO BEGINNING INSTALLATION.

APPLY HYDROMULCH MATERIAL WITH AN APPROVED SPRAY APPLICATOR EQUIPMENT SUITABLE FOR THE SEED, MULCH AND STABILIZER SPECIFIED.

FOR AREAS WITHIN THE LIMITS OF CONSTRUCTION (ARTIFICIAL LOT LINE), APPLY MATERIALS AT THE FOLLOWING RATES OR AS APPROVED BY THE LANDSCAPE ARCHITECT:

MULCH WITH TACKIFIER 1,600 POUNDS PER ACRE (36.75 LBS/1000 SF).  
 FERTILIZER: 870 POUNDS PER ACRE (20.0 LBS/1000 SF).  
 HULLED COMMON BERMUDA GRASS: 130 POUNDS PER ACRE (3 LBS/1000 SF).  
 TACKIFIER: AS SPECIFIED BY MANUFACTURER.

MULCH SHALL BE DYED GREEN WITH A BIODEGRADABLE DYE THAT DOES NOT INHIBIT PLANT GROWTH.

WOOD FIBER MULCH SHALL BE PACKAGED IN UNITS NOT EXCEED 100 LBS. THE PACKAGE SHALL CONTAIN CURRENT LABELS, THE MANUFACTURER'S NAME AND THE NET WEIGHT.

TACKIFIER: TERRA TACK AR OR TERRA TACK II AS MANUFACTURED BY GRASS GROWERS, 424 COTTAGE PLACE, PLAINFIELD, NEW JERSEY, 02080. CONTRACTOR SHALL FURNISH TEMPORARY HOSES AND CONNECTIONS AS REQUIRED.

APPLY FERTILIZER TWICE. THE FIRST APPLICATION SHALL BE PERFORMED IN A NORTH-SOUTH DIRECTION. THE SECOND APPLICATION SHALL BE PERFORMED IN A EAST-WEST DIRECTION. BOTH FERTILIZER APPLICATIONS SHALL BE PERFORMED AT A RATE OF 870 LBS. PER ACRE (20 LBS/1,000 SF). DISC THE FIRST FERTILIZER APPLICATION MORE THAN 40% OF GRASS LEAF IN SINGLE MOWING. REMOVE GRASS CLIPPINGS AND DISPOSE OF OFF-SITE. RESEED DURING THIS PERIOD AS REQUIRED TO MEET MINIMUM STANDARDS AT NO ADDITIONAL EXPENSE TO THE OWNER.

RESTRICT FOOT AND VEHICULAR TRAFFIC FROM SEEDED AREAS AFTER PLANTING AND HYDROMULCHING UNTIL FINAL INSPECTION AND ACCEPTANCE.

PROVIDE TEMPORARY IRRIGATION FOR ALL SEEDED AREAS NOT COVERED BY AN AUTOMATIC IRRIGATION SYSTEM UNTIL FINAL ACCEPTANCE BY THE OWNER.

MAINTAIN NEW SEEDING UNTIL ENTIRE PROJECT IS ACCEPTED BY THE OWNER. WHEN GRASS REACHES 4 INCHES IN HEIGHT, MOW TO 2 TO 2-1/2 INCHES IN HEIGHT. DO NOT CUT OFF MORE THAN 40% OF GRASS LEAF IN SINGLE MOWING. REMOVE GRASS CLIPPINGS AND DISPOSE OF OFF-SITE. RESEED DURING THIS PERIOD AS REQUIRED TO MEET MINIMUM STANDARDS AT NO ADDITIONAL EXPENSE TO THE OWNER.

IF AFTER THREE SEEDING APPLICATIONS, BARE AREAS STILL PERSIST, SOD ALL BARE SPOTS NOT HAVING A UNIFORM STAND OF GRASS AT NO ADDITIONAL EXPENSE TO THE OWNER.

**TOPSOIL NOTES:**

1. TOPSOIL: TOPSOIL SHALL BE THE TOP 24" INCHES OF SOIL BELOW THE GROUND SURFACE, WITH NO ADMIXTURE OF REFUSE OR ANY MATERIAL TOXIC TO PLANT GROWTH OR HAZARDOUS TO HUMANS AND ANIMALS, AND IT SHALL BE FREE FROM SUBSOIL AND STUMPS, ROOTS, BRUSH, STONES 1/4 INCHES OR MORE IN DIAMETER, CLAY LUMPS OR SIMILAR OBJECTS, BRUSH AND OTHER VEGETATION WHICH WILL NOT BE INCORPORATED WITH THE SOIL DURING HANDLING OPERATIONS SHALL BE CUT AND REMOVED. ORDINARY SODS AND HERBACEOUS GROWTH SUCH AS GRASS AND WEEDS SHALL BE REMOVED AND DISPOSED OF OFF SITE. THE TOPSOIL OR SOIL MIXTURE, UNLESS OTHERWISE SPECIFIED OR APPROVED, SHALL HAVE A PH RANGE OF APPROXIMATELY 5.5 PH TO 7.6 PH WHEN TESTED IN ACCORDANCE WITH THE METHODS OF TESTING OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS IN EFFECT ON THE DATE OF INVIATION OF BIDS. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 1% NOR MORE THAN 10% AS DETERMINED BY THE WET-COMBUSTION METHOD (CHROMIC ACID REDUCTION). THERE SHALL BE NOT LESS THAN 20% NOR MORE THAN 80% OF THE MATERIAL PASSING THE 200 MESH SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH AASHTO T 11.

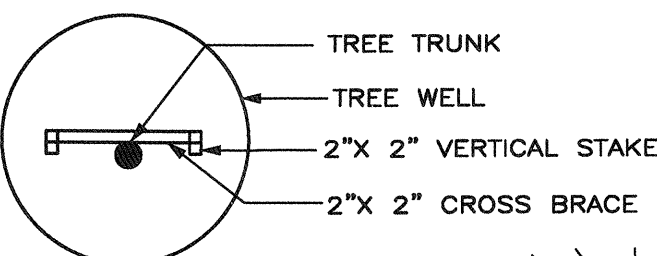
2. ALL NON-PAVED AREAS SHALL HAVE NO LESS THAN EIGHT (8) INCHES OF TOPSOIL. HOWEVER, GIVEN THE DEPTH OF EXISTING TOPSOIL, STRIP AND STOCKPILE ONLY THAT AMOUNT OF TOPSOIL REQUIRED TO PROVIDE AN EIGHT (8) INCH DEPTH IN AREAS WHERE THE EXISTING IN-PLACE MATERIALS ARE OF INSUFFICIENT DEPTH, OR IN AREAS OF FILL WHERE THE SUBGRADE CONSISTS OF MATERIALS OTHER THAN TOPSOIL.

3. PARKING LOT ISLANDS, ROADWAY MEDIANS, PLANTERS AND TREE WELLS SHALL HAVE A MINIMUM OF 12" OF TOPSOIL. SHRUB BEDS AND GROUNDCOVER BEDS SHALL HAVE A MINIMUM OF 12" OF TOPSOIL.

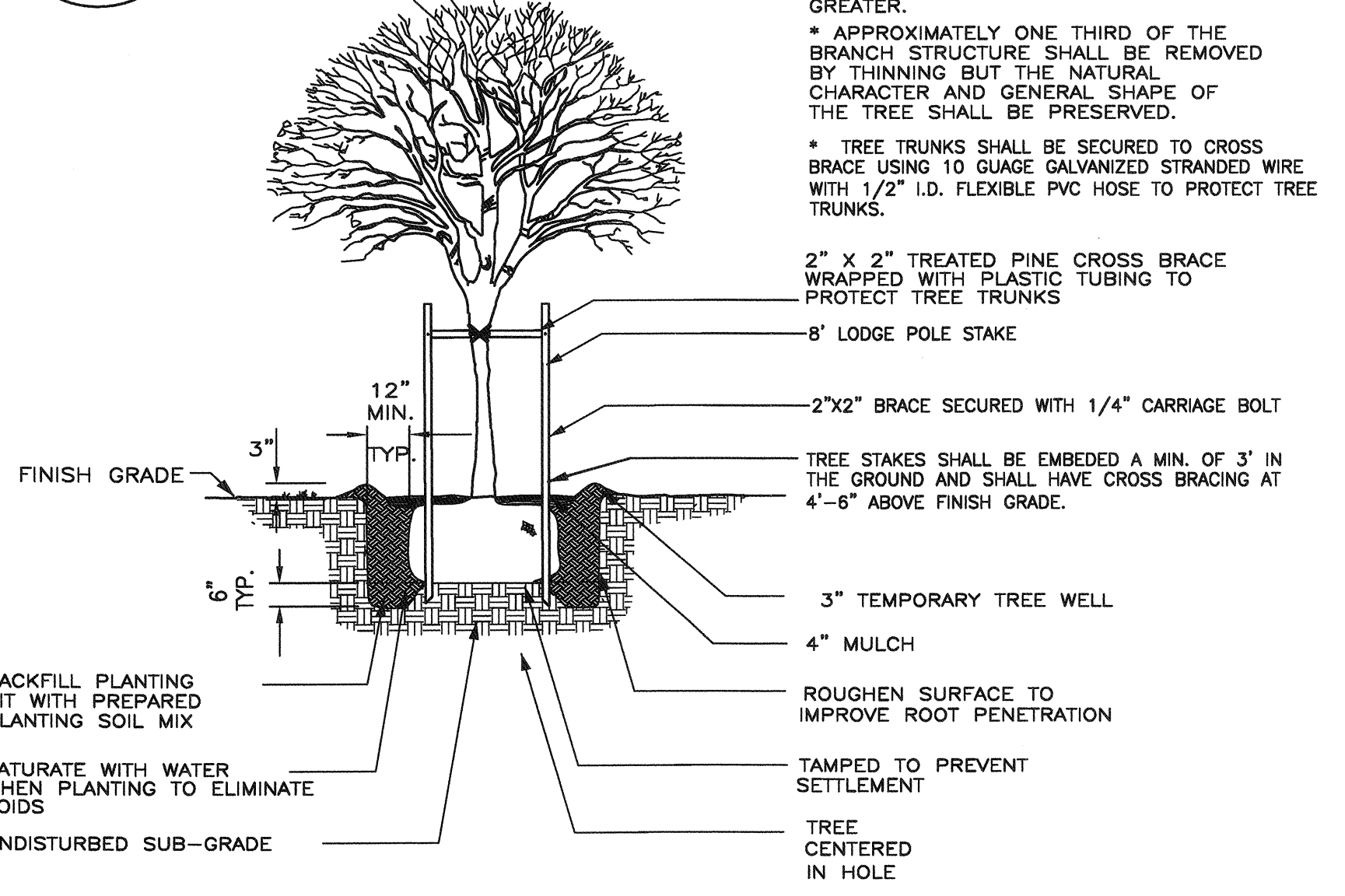
4. IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL ON ANY AREA, THE SURFACE SHALL BE LOOSENEED BY DISCS OR SPIKE-TOOTH HARROWS, OR BY OTHER MEANS APPROVED BY THE OWNER, TO A MINIMUM DEPTH OF 2 INCHES TO FACILITATE BONDING OF THE TOPSOIL TO THE COVERED SUBGRADE SOIL. THE SURFACE OF THE AREA TO BE TOPSOILED SHALL BE CLEARED OF ALL STONES LARGER THAN 1/4 INCHES IN ANY DIMENSION AND ALL LITTER OR OTHER MATERIAL WHICH MAY BE DETRIMENTAL TO PROPER BONDING, THE RISE OF CAPILLARY MOISTURE, OR THE PROPER GROWTH OF THE DESIRED PLANTING. LIMITED AREAS, AS SHOWN ON THE PLANS, WHICH ARE TOO COMPACT TO RESPOND TO THESE OPERATIONS SHALL RECEIVE SCARIFICATION BY THE USE OF SMALL TILLERS OR HAND TOOLS.

5. GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN ESTABLISHED BY OTHERS, AS SHOWN ON THE PLANS, SHALL BE MAINTAINED IN A TRUE AND EVEN CONDITION WHERE GRADES HAVE NOT BEEN ESTABLISHED, THE AREAS SHALL BE SMOOTH-GRADED AND THE SURFACE LEFT AT THE PRESCRIBED GRADES IN AN EVEN AND PROPERLY COMPACTED CONDITION TO PREVENT, INsofar AS PRACTICAL, THE FORMATION OF LOW PLACES OR POCKETS WHERE WATER WILL STAND.

- PRIOR TO THE STRIPPING OF TOPSOIL FROM DESIGNATED AREAS, ANY VEGETATION, BRIARS, STUMPS AND LARGE ROOTS, RUBBISH OR STONES FOUND ON SUCH AREAS WHICH MAY INTERFERE WITH SUBSEQUENT OPERATIONS SHALL BE REMOVED USING METHODS APPROVED BY THE OWNER. HEAVY SOD OR OTHER COVER WHICH CANNOT BE INCORPORATED INTO THE TOPSOIL BY DISCING OR OTHER MEANS SHALL BE REMOVED.
- WHEN SUITABLE TOPSOIL IS AVAILABLE ON THE SITE, THE CONTRACTOR SHALL REMOVE THIS MATERIAL FROM THE DESIGNATED AREAS AND TO THE DEPTH AS DIRECTED BY THE OWNER. THE TOPSOIL SHALL BE SPREAD ON AREAS ALREADY TILLED AND SMOOTH-GRADED, OR STOCKPILED IN AREAS APPROVED BY THE OWNER. ANY TOPSOIL THAT HAS BEEN STOCKPILED ON THE SITE SHALL BE PLACED BY THE CONTRACTOR. THE SITE OF ALL STOCKPILES AND AREAS ADJACENT THERETO WHICH HAVE BEEN DISTURBED BY THE CONTRACTOR SHALL BE GRADED IF REQUIRED AND PUT INTO A CONDITION ACCEPTABLE FOR SEEDING.
- WHEN SUITABLE TOPSOIL IS SECURED OFF THE SITE, THE CONTRACTOR SHALL LOCATE AND OBTAIN THE SUPPLY, SUBJECT TO THE APPROVAL OF THE OWNER. THE CONTRACTOR SHALL NOTIFY THE OWNER SUFFICIENTLY IN ADVANCE OF OPERATIONS IN ORDER THAT NECESSARY MEASUREMENTS AND TESTS CAN BE MADE. THE CONTRACTOR SHALL REMOVE THE TOPSOIL FROM APPROVED AREAS AND TO THE DEPTH AS DIRECTED. THE TOPSOIL SHALL BE HAULED TO THE SITE OF THE WORK AND PLACED FOR SPREADING, OR SPREAD AS REQUIRED. ANY TOPSOIL HAULED TO THE SITE OF THE WORK AND STOCKPILED SHALL BE REHANDLED AND PLACED WITHOUT ADDITIONAL COMPENSATION.
- THE TOPSOIL SHALL BE EVENLY SPREAD ON THE PREPARED AREAS TO A UNIFORM DEPTH OF 8" AFTER COMPACTION, EXCEPT WHERE OTHERWISE SHOWN ON THE PLANS OR NOTED HEREIN. SPREADING SHALL NOT BE DONE WHEN THE GROUND OR TOPSOIL IS FROZEN, EXCESSIVELY WET, OR OTHERWISE IN A CONDITION DETRIMENTAL TO THE WORK. SPREADING SHALL NOT BE DONE WHEN THE TEMPERATURE IS 32 DEGREES FAHRENHEIT OR LESS, OR IS FORECASTED TO BE 32 DEGREES FAHRENHEIT OR LESS 24 HOURS PRIOR TO BEGINNING INSTALLATION. SPREADING SHALL BE CARRIED ON SO THAT TURNING OPERATIONS CAN PROCEED WITH A MINIMUM OF SOIL PREPARATION OR TILLING.
- AFTER SPREADING, ANY LARGE STIFF CLODS AND HARD LUMPS SHALL BE BROKEN WITH A PULVERIZER OR BY OTHER EFFECTIVE MEANS, AND ALL STONES OR ROCKS 1/4 INCH OR MORE IN DIAMETER, ROOTS, LITTER OR ANY FOREIGN MATTER SHALL BE RAKED UP AND DISPOSED OF BY THE CONTRACTOR. AFTER SPREADING IS COMPLETED, THE TOPSOIL SHALL BE SATISFACTORILY COMPACTED BY ROLLING WITH A CULTIPACKER OR BY OTHER MEANS APPROVED BY THE OWNER. THE COMPACTED TOPSOIL SURFACE SHALL BE SMOOTH, FREE OF ROCKS, ROOTS AND DEBRIS, AND SHALL CONFORM TO THE REQUIRED LINES, GRADES AND CROSS SECTIONS. ANY TOPSOIL OR OTHER DIRT FALLING UPON PAVEMENTS AS A RESULT OF HAULING OR HANDLING OF TOPSOIL SHALL BE PROMPTLY REMOVED.



- NOTES:
- \* TEMPORARY TREE WELL, AND WOOD STAKES TO BE REMOVED AFTER ONE FULL GROWING SEASON.
  - \* TREE CALIPER MEASURED ABOVE TOP OF ROOTBALL: 6" FOR TREES LESS THAN 4" CALIPER AND 12" FOR TREES 4" CALIPER AND GREATER.
  - \* APPROXIMATELY ONE THIRD OF THE BRANCH STRUCTURE SHALL BE REMOVED BY THINNING BUT THE NATURAL CHARACTER AND GENERAL SHAPE OF THE TREE SHALL BE PRESERVED.
  - \* TREE TRUNKS SHALL BE SECURED TO CROSS BRACE USING 10 GAUGE GALVANIZED STRANDED WIRE WITH 1/2" I.D. FLEXIBLE PVC HOSE TO PROTECT TREE TRUNKS.



**TREE PLANTING AND STAKING DETAIL**

NOT TO SCALE

NOTE:

MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE WHEN.

SET TOP OF ROOT BALL FLUSH TO GRADE OR 1-2 INCHES HIGHER IN SLOWLY DRAINING SOILS.

DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.

EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN 6 INCHES INTO PLANTING HOLE.

REMOVE ALL TWINE, ROPE AND WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL.

**SOLID SOD NOTES:**

IF SOLID SOD IS TO BE LAID DURING A SEASON WHEN BERMUDAGRASS IS DORMANT (APPROXIMATELY MID-SEPTEMBER TO MARCH), CONTRACTOR SHALL OVERSEED BERMUDAGRASS WITH ANNUAL RYE GRASS AT NO ADDITIONAL EXPENSE TO THE OWNER.

ALL AREAS TO BE SODDED SHALL BE BLADED AND GRADED SMOOTH. SOIL SHALL BE WATERED TO A MINIMUM OF 4" DEEP AT LEAST 48 HOURS PRIOR TO LAYING SOD.

SOD SHALL BE INSTALLED TO PROVIDE A SMOOTH AND UNIFORM SURFACE WITH NO RUTS, TRENCHES, RILLS OR GAPS.

MAINTAIN SOD AND LANDSCAPE AREAS UNTIL FINAL ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL CONSIST OF BUT NOT BE LIMITED TO: WEEDING, WATERING, MOWING AND EDGING, SPRAYING, FERTILIZING, TEMPORARY EROSION CONTROL AND EROSION REPAIR, AND REMOVAL OF REFUSE AND DEBRIS.

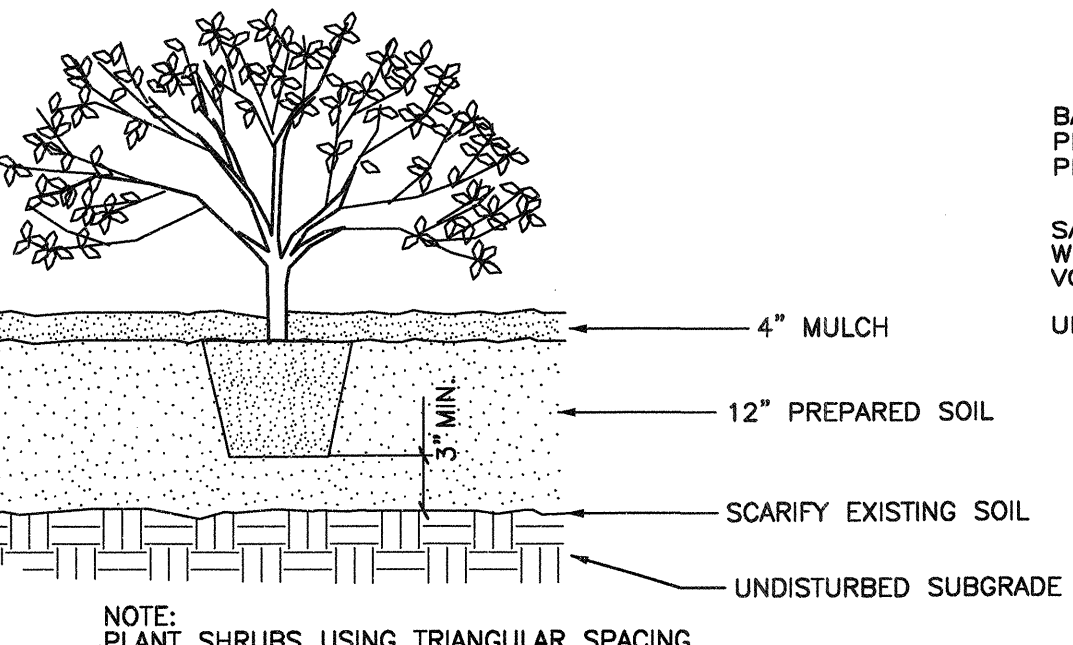
SOIL SHALL BE FREE OF WEEDS, ROCKS LARGER THAN 1/2" IN DIAMETER, AND OTHER FOREIGN MATERIAL IMMEDIATELY BEFORE LAYING SOD.

RE-SOD ALL BARE SPOTS NOT HAVING A UNIFORM STAND OF GRASS AT NO ADDITIONAL EXPENSE TO THE OWNER. SOD WITH EXCESSIVE WEEDS SHALL NOT BE INSTALLED.

PROVIDE GUARANTEE SOD FOR ONE (1) FULL YEAR FOLLOWING FINAL ACCEPTANCE BY THE OWNER.

SOD SHALL NOT BE INSTALLED WHEN THE TEMPERATURE IS 32 DEGREES FAHRENHEIT OR LESS, OR IS FORECASTED TO BE 32 DEGREES FAHRENHEIT OR LESS 24 HOURS PRIOR TO BEGINNING INSTALLATION.

FOR SOD AT END OF RIPRAP/BIOSWALE (SHEET L1.1): INSTALL SOD STAPLES, MINIMUM 2 PER SOD AT UPSTREAM END OF SOD; MINIMUM 3 PER SOD. STAPLE SPACING PER MANUFACTURER'S RECOMMENDATIONS. SOD STAPLES SHALL BE METAL, 1" WIDTH BY 8" LENGTH.



**SHRUB PLANTING**

NOT TO SCALE

NOTE:

SHRUB BEDS ADJACENT TO BUILDING FOUNDATION SHALL HAVE THE TOP OF MULCH 1"-2" BELOW THE BRICK LEDGE AFTER SETTLEMENT.

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