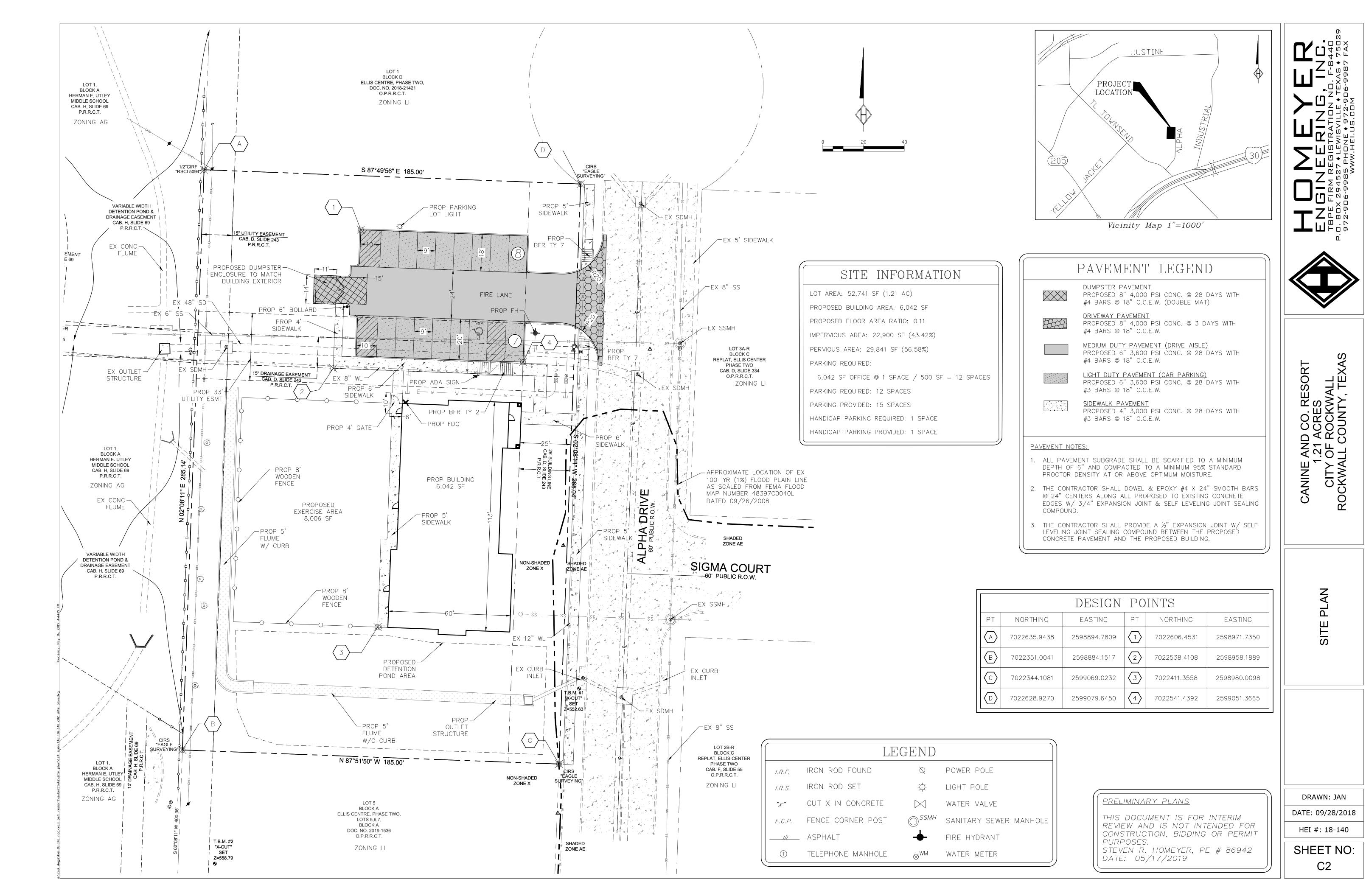


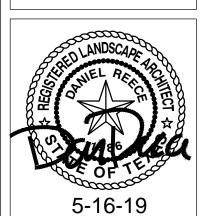


City of Rockwall

Planning & Zoning Department 385 S. Goliad Street Rockwall, Texas 75032 (P): (972) 771-7745 (W): www.rockwall.com The City of Rockwall GIS maps are continually under development and therefore subject to change without notice. While we endeavor to provide timely and accurate information, we make no guarantees. The City of Rockwall makes no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. Use of the information is the sole responsibility of the user.







DRAWN: JAN

DATE: 09/28/2018 HEI #: 18-140

SHEET NO: LP-1

PLANT_	SCHEDUI
TREES	CODE
•	EX

SHRUB AREAS

Existing Tree to Remain Reference TS sheets for additional info Live Oak / Quercus virginiana parking lot tree Cedar Elm / Ulmus crassifolia CODE COMMON NAME / BOTANICAL NAME

COMMON NAME / BOTANICAL NAME

CONT. 2"Cal 10-12` ht. 6 SIZE Glossy Abelia / Abelia grandiflora

Southern Wax Myrtle / Myrica cerfera 60" o.c.; 60" ht.

CODE COMMON NAME / BOTANICAL NAME <u>SPACING</u> <u>QTY</u> Aztec Grass / Liriope muscari `Aztec` 15" o.c.

CONT CAL

EXIST. EXIST. EXIST.

CONT. 2"Cal 10-12` ht. 2

SIZE

QTY

13

11

QTY

7,939 sf

GROUND COVERS CODE COMMON NAME / BOTANICAL NAME

install per manufacturer Bermuda Grass / Cynodon dactylon `Tif 419` sod 28,574 sf

Artificial Turf - submit for owner apporval

GENERAL PLANTING NOTES

- 1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING VEGETATION (EXCEPT WHERE NOTED TO REMAIN). BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION. 2. CONSTRUCT AND MAINTAIN FINISH GRADES IN LANDSCAPE AREAS AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS
- RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
- ENSURE THAT THE GRADE IN SHRUB AREAS SHALL BE 2" BELOW FINISH GRADE AFTER INSTALLING SOIL AMENDMENTS, AND 1" BELOW FINISH GRADE IN SOD AREAS AFTER INSTALLING SOIL AMENDMENTS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF
- 4. INSTALL 5 OUNCE, WOVEN, NEEDLE-PUNCHED POLYPROPYLENE FABRIC (DeWITT "PRO-5" OR EQUAL) UNDER ALL MULCHED AREAS AND INDIVIDUAL TREE RINGS 5. INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING BEDS AND TREE RINGS. DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE.
- INSTALL 14G, GREEN STEEL EDGING BETWEEN ALL PLANTING BEDS AND TURF AREAS, AND BETWEEN GROUNDCOVERS AND OTHER PLANTS (WHERE INDICATED ON THE PLAN).
- HYDROMULCH ALL DISTURBED AREAS OUTSIDE OF PROPERTY LIMITS (UNLESS SHOWN AS SOD). ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL REQUIREMENTS OF THE PERMITTING AUTHORITY ARE MET (I.E., MINIMUM
- PLANT QUANTITIES, PLANTING METHODS, TREE PROTECTION METHODS, ETC.). 9. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PLANT QUANTITIES; PLANT QUANTITIES SHOWN ON LEGENDS AND CALLOUTS ARE FOR GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER PATTERNS) SHALL TAKE PRECEDENCE.
- NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT. IF SOME OF THE PLANTS ARE NOT AVAILABLE, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING (VIA PROPER PLANTS MAY BE INSPECTED AND APPROVED OR REJECTED ON THE JOBSITE BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, RESEEDING AREAS WHICH HAVE NOT GERMINATED WELL, TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
- SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHAL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD. ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
- A. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
- SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED OR RESEEDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED. 15. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

LANDSCAPE CALCULATIONS

CURRENT ZONING: GR (GENERAL RETAIL) TOTAL SITE AREA: 52,741 SF LANDSCAPE AREA REQUIRED: 7,911 SF (15% OF SITE AREA) 37,808 SF (71% OF SITE AREA) LANDSCAPE AREA PROVIDED:

LANDSCAPE BUFFER STRIP LANDSCAPE BUFFER STRIP REQUIRED @ ALPHA DR.: 25' LANDSCAPE BUFFER STRIP PROVIDED @ ALPHA DR.:

STREET LANDSCAPING ALPHA DR.: TREES REQUIRED (1 PER 50 LF): TREES PROVIDED:

6 (285 LF / 50 = 6) 6 (3" CAL.) *

RIGHT-OF-WAY LANDSCAPING R/W LANDSCAPE REQUIRED (GRASS OR GROUNDCOVER) PROVIDED

PARKING LOT LANDSCAPING TOTAL PARKING SPACES REQUIRED: TOTAL PARKING SPACES PROVIDED: PARKING LOT LANDSCAPING REQUIRED:

16 SPACES 20 SPACES N/A (LESS THAN 20,000 SF / 2 ROWS)

IRRIGATION PROPOSED IRRIGATION DESIGN WILL MEET THE REQUIREMENTS OF THE UDC. * UNDERSTORY TREES PROVIDED ADJACENT TO EXISTING OVERHEAD UTILITIES.

PLANTING AND IRRIGATION GUARANTEE

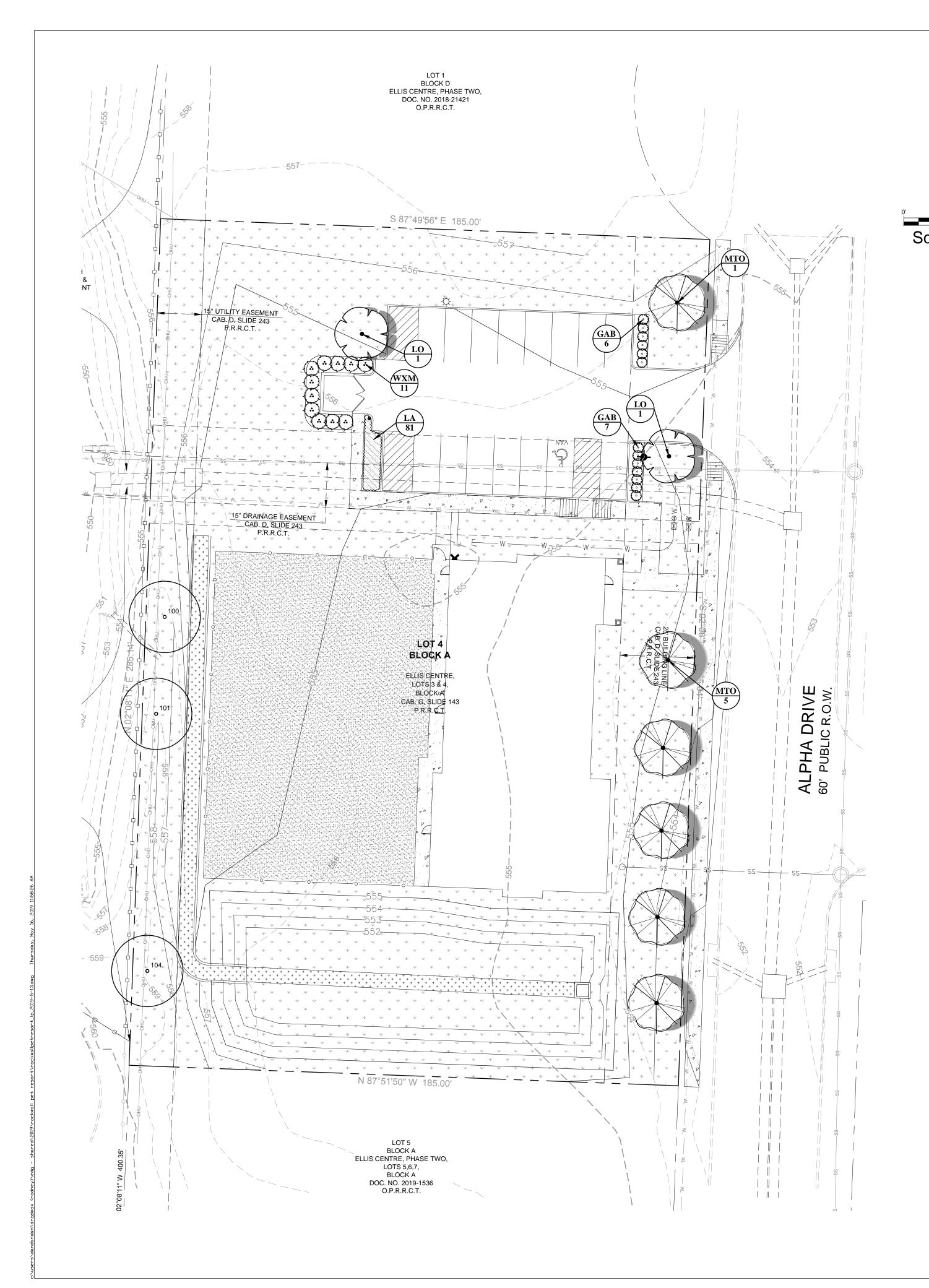
THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL NEWLY INSTALLED AND EXISTING PLANTS SHALL SURVIVE FOR ONE YEAR AFTER FINAL OWNER ACCEPTANCE OF THE INSTALLATION WORK. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR APPROPRIATE WATERING OF THE LANDSCAPE THROUGH INSTALLATION OF A PROPERLY DESIGNED IRRIGATION SYSTEM. THE OWNER SHALL APPROVE THE SYSTEM DESIGN BEFORE INSTALLATION OF PLANTS OR IRRIGATION.

ROOT BARRIERS

THE CONTRACTOR SHALL INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS. ROOT BARRIERS SHALL BE "CENTURY" OR "DEEP-ROOT" 24" DEEP PANELS (OR EQUAL). BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. INSTALL PANELS PER MANUFACTURER'S RECOMMENDATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

MULCHES

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL 3" THICK LAYER OF 1-1/2" SHREDDED WOOD MULCH OVER LANDSCAPE FABRIC IN ALL PLANTING AREAS. CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCHES TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER MULCH HAS BEEN INSTALLED.



- A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR
- ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
- A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID NURSERY AND FLORAL
- CERTIFICATE ISSUED BY THE TEXAS DEPARTMENT OF AGRICULTURE, AS WELL AS OPERATE UNDER A COMMERCIAL PESTICIDE APPLICATOR LICENSE ISSUED BY EITHER THE TEXAS DEPARTMENT OF AGRICULTURE OR THE TEXAS STRUCTURAL PEST CONTROL BOARD
- B. SCOPE OF WORK WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE
- LANDSCAPE PLANS, NOTES, AND DETAILS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS. CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
- 3. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK.

PRODUCTS

- A. ALL MANUFACTURED PRODUCTS SHALL BE NEW. CONTAINER AND BALLED-AND-BURLAPPED PLANTS
 - FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2004. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMACTIC CONDITIONS.
- ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).
- 3. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTBLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT
- 4. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
- 5. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.
- MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT
- BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE C. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH
- PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD. SEED: PROVIDE BLEND OF SPECIES AND VARIETIES AS NOTED ON THE PLANS, WITH
- MAXIMUM PERCENTAGES OF PURITY, GERMINATION, AND MINIMUM PERCENTAGE OF WEED SEED AS INDICATED ON PLANS. EACH BAG OF SEED SHALL BE ACCOMPANIED BY A TAG FROM THE SUPPLIER INDICATING THE COMPOSITION OF THE SEED.
- TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN ½ INCH, FOREIGN MATTER, PLANTS, ROOTS, AND SEEDS.
- COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE: SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M: NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE USED.
- FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A QUALIFIED SOIL-TESTING AGENCY (SEE
- MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS.
- WEED FABRIC: 5 OUNCE, WOVEN, NEEDLE-PUNCHED FABRIC, SUCH AS DEWITT PRO5
- TREE STAKING AND GUYING
- STAKES: 6' LONG GREEN METAL T-POSTS. GUY AND TIE WIRE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND,
- TWISTED, 0.106 INCH DIAMETER. STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH
- WIDE, WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE STEEL EDGING: PROFESSIONAL STEEL EDGING, 14 GAUGE THICK X 4 INCHES WIDE, FACTORY PAINTED DARK GREEN. ACCEPTABLE MANUFACTURERS INCLUDE COL-MET OR
- APPROVED EQUAL PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE
- HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT MANUFACTURER'S LABELED RATES.

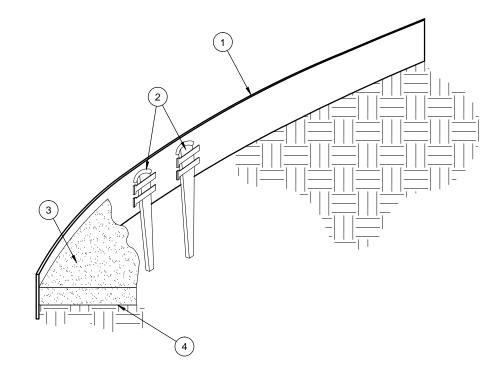
<u>METHODS</u>

- - BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST
- 2. SOIL TESTING:
- a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. EACH SAMPLE SUBMITTED SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL.
- CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.
- THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): GENERAL SOIL PREPARATION AND BACKFILL MIXES, PRE-PLANT FERTILIZER APPLICATIONS, AND ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD
- AND FOR LONG-TERM MAINTENANCE. 3. THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT
- FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE
- TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
- NITROGEN STABILIZED ORGANIC AMENDMENT 4 CU. YDS. PER 1,000 S.F.
- AMMONIUM PHOSPHATE 16-20-0 15 LBS PER 1,000 S.F. AGRICULTURAL GYPSUM - 100 LBS PER 1,000 S.F.
- TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING
- AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F.
- 12-12-12 FERTILIZER 10 LBS. PER CU. YD. AGRICULTURAL GYPSUM - 10 LBS. PER CU. YD.
- IRON SULPHATE 2 LBS. PER CU. YD.
- 5. CONTRACTOR SHALL ENSURE THAT THE GRADE IN SOD AREAS SHALL BE 1" BELOW FINISH GRADE BEFORE INSTALLING SOIL AMENDMENTS, AND 2" BELOW FINISH GRADE IN SHRUB AREAS BEFORE INSTALLING SOIL AMENDMENTS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.
- ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.

- B. GENERAL PLANTING
 - REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS. EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT
 - HERBICIDES AT THE MANUFACTURER'S RECOMMENDED RATE. TRENCHING NEAR EXISTING TREES:
 - CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK
 - DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE GRADE AT THE TRUNK) ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE
 - ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS, WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.
 - ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.
- C. TREE PLANTING TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS
- TWO TO FOUR INCHES. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE
- EXCAVATION OF THE HOLE. 3. FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL OF ALL TREES JUST BEFORE PLACING INTO THE PLANTING PIT. DO NOT "TEASE" ROOTS OUT FROM THE ROOTBALL
- INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS
- TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE. 5. BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1" DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKELL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK. USE STORED TOPSOIL FROM ON-SITE OR IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL.
- 6. THE TOTAL NUMBER OF TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION. SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED. TREE STAKING SHALL ADHERE TO THE FOLLOWING **GUIDELINES:**
 - 1"-2" TREES TWO STAKES PER TREE 2-1/2"-4" TREES
 - THREE STAKES PER TREE TREES OVER 4" CALIPER GUY AS NEEDED
- THREE STAKES PER TREE MINIMUM, QUANTITY AND MUI TI-TRUNK TREES POSITIONS AS NEEDED TO STABILIZE THE TREE 7. UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE. COVER THE INTERIOR OF THE TREE RING WITH MULCH (TYPE AND DEPTH PER
- SHRUB, PERENNIAL, AND GROUNDCOVER PLANTING
 - DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST RECOMMENDATIONS.
- WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA.
- SOD VARIETY TO BE AS SPECIFIED ON THE LANDSCAPE PLAN.
- LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND
- SIDES OF SOD STRIPS DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. 4. ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL
- 5. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD.
- 1. TURF HYDROMULCH MIX (PER 1,000 SF) SHALL BE AS FOLLOWS:
 - WINTER MIX (OCTOBER 1 MARCH 31) 50# CELLULOSE FIBER MULCH
 - 2# UNHULLED BERMUDA SEED
 - 2# ANNUAL RYE SEED 15# 15-15-15 WATER SOLUBLE FERTILIZER
 - SUMMER MIX (APRIL 1 SEPTEMBER 30)
- 50# CELLULOSE FIBER MULCH 2# HULLED BERMUDA SEED 15# 15-15-15 WATER SOLUBLE FERTILIZER
- 2. SEED HYDROMULCH MIX (PER 1,000 SF) SHALL BE AS FOLLOWS:
 - 50# CELLULOSE FIBER MULCH 15# 15-15-15 WATER SOLUBLE FERTILIZER
- SEED RATE PER LEGEND
- 1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION.
- DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE H. INSPECTION AND ACCEPTANCE
- UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
- 2. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS.
- THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE. LANDSCAPE MAINTENANCE
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS. WEEDING. RESEEDING AREAS WHICH HAVE NOT GERMINATED WELL TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER. WITH SCHEDULING
- ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION. 2. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER
- 3. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR: THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE
- FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
- ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED OR RESEEDED (AS APPROPRIATE) PRIOR TO FINAL
- WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, SEEDED/HYDROMULCHED AREAS, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY

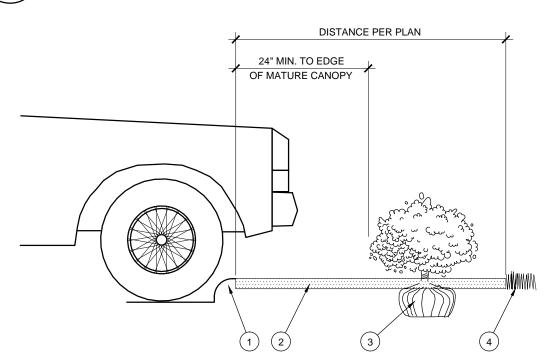
ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.

- PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY. AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS.
- PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.



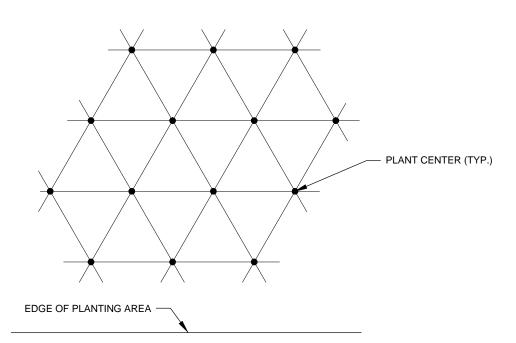
- (1) ROLLED-TOP STEEL EDGING PER PLANS.
- (2) TAPERED STEEL STAKES.
- (3) MULCH, TYPE AND DEPTH PER PLANS
- (4) FINISH GRADE.
- 1) INSTALL EDGING SO THAT STAKES WILL BE ON INSIDE OF PLANTING BED. BOTTOM OF EDGING SHALL BE BURIED A MINIMUM OF 1" BELOW FINISH GRADE. 3) TOP OF MULCH SHALL BE 1" LOWER THAN TOP OF EDGING.

STEEL EDGING SCALE: NOT TO SCALE



- 2) MULCH LAYER.
- (4) TURF (WHERE SHOWN ON PLAN).



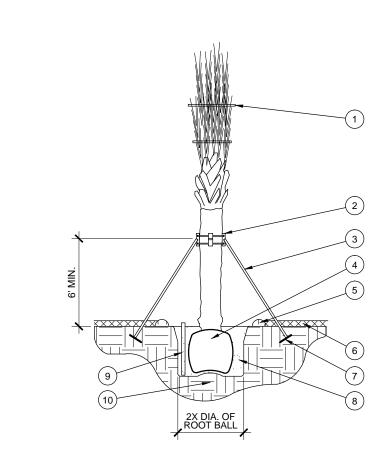


NOTE: ALL PLANTS SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING (EXCEPT WHERE SHOWN ON PLANS AS INFORMAL GROUPINGS). REFER TO PLANT LEGEND FOR SPACING DISTANCE BETWEEN PLANTS.

	AREA DIVIDER
LANT SPACING	TO DETERMINE NO. OF PLANTS
6"	0.25
8"	0.45
10"	0.69
12"	1
15"	1.56
18"	2.25
24"	4
30"	6.25
36"	9

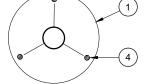
EXAMPLE: PLANTS AT 18" O.C. IN 100 SF OF PLANTING AREA = 100/2.25 = 44

PLANT SPACING



PALM PLANTING SCALE: NOT TO SCALE

NON-CONIFEROUS



BRACING - PLAN VIEW

SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING PALM. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL **RESTS ON UNDISTURBED SOIL**

AND THE ZONE OF ROOT INITIATION IS 3"-5" BELOW FINISH DO NOT REMOVE ANY LIVE FRONDS PRIOR TO DIGGING AT

THE NURSERY. AFTER PLANTING, LOOSEN THE TWINE SO THAT THE FRONDS MAY MOVE, BUT THE TERMINAL BUD IS PROTECTED.

PREVAILING

(1) BIODEGRADEABLE TWINE. (2) PALM BRACE SYSTEM.

DO NOT NAIL TO PALM.

(5) 4" HIGH TEMPORARY WATERING BASIN.

MULCH WITHIN 12" OF TRUNK

RECOMMENDATIONS

PLACES AROUND PALM.

(10) UNDISTURBED SUBGRADE.

(4) ROOT BALL.

(3) 2" X 4" SUPPORT, TOENAILED TO BRACE SYSTEM (3)

(6) MULCH PER PLANS. DO NOT ALLOW MORE THAN 1" OF

(7) 2" X 4" X 12" DEADMAN, BURIED 12" MIN. BELOW GRADE

WRAPPED IN FILTER FABRIC (ANY APPROVED) - TWO

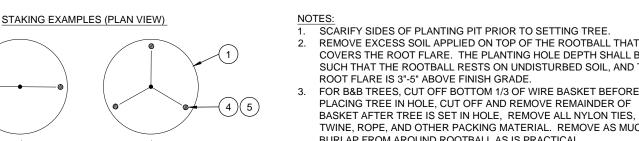
(8) BACKFILL MIX PER SPECIFICATIONS AND SOIL TEST

(9) 4" PERFORATED PVC WATER MONITORING TUBE

(1) TREE CANOPY.

2 CINCH-TIES (24" BOX TREES AND SMALLER) OR 12 GAUGE GALVANIZED WIRE WITH NYLON TREE STRAPS AT TREE AND STAKE (36" BOX TREES AND LARGER). SECURE TIES OR STRAPS TO TRUNK JUST ABOVE LOWEST MAJOR BRANCHES.

- (3) 24" X 3/4" P.V.C. MARKERS OVER WIRES.
- (4) GREEN STEEL T-POSTS. EXTEND POSTS 12" MIN. INTO UNDISTURBED SOIL.
- (5) PRESSURE-TREATED WOOD DEADMAN, TWO PER TREE (MIN.). BURY OUTSIDE OF PLANTING PIT AND 18" MIN. INTO UNDISTURBED SOIL.
- (6) TRUNK FLARE.
- 7) MULCH, TYPE AND DEPTH PER PLANS. DO NOT PLACE MULCH WITHIN 6" OF TRUNK
- 8 FINISH GRADE
- 9 ROOT BALL.
- BACKFILL. AMEND AND FERTILIZE ONLY AS
- (11) UNDISTURBED NATIVE SOIL.
- (12) 4" HIGH EARTHEN WATERING BASIN



ROOT FLARE IS 3"-5" ABOVE FINISH GRADE. FOR B&B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE BASKET AFTER TREE IS SET IN HOLE, REMOVE ALL NYLON TIES, TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL. 4. REMOVE ALL NURSERY STAKES AFTER PLANTING. 5. FOR TREES OVER 3" CALIPER AND TREES 36" BOX AND LARGER, USE

THREE STAKES OR DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE. 6. STAKING SHALL BE TIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT

(1) SHRUB, PERENNIAL, OR ORNAMENTAL GRASS

MULCH, TYPE AND DEPTH PER PLANS. PLACE NO MORE THAN 1" OF MULCH WITHIN 6" OF PLANT CENTER.

PREVAILING

TREE PLANTING

SCALE: NOT TO SCALE

3X ROOTBALL DIA.

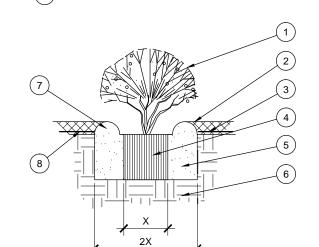
(4) ROOT BALL.

(3) FINISH GRADE.

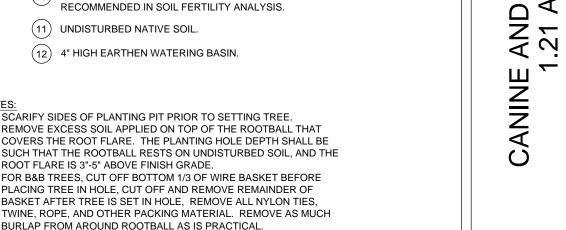
PREVAILING

WINDS

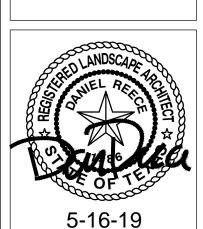
- (5) BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
- (6) UNDISTURBED NATIVE SOIL.
- (7) 3" HIGH EARTHEN WATERING BASIN. (8) WEED FABRIC UNDER MULCH.



SHRUB/PERENNIAL PLANTING







Addison, TX 75001

www.landscape-consultants.net

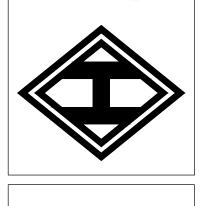
DRAWN: JAN

DATE: 09/28/2018 HEI #: 18-140

SHEET NO:

LANDSCAPE DETAILS

LP-2



CANINE AND CO. RESORT 1.21 ACRES CITY OF ROCKWALL ROCKWALL COUNTY, TEXAS





DRAWN: JAN DATE: 09/28/2018

SHEET NO: TS-1

HEI #: 18-140

LEGEND	
•	EXISTING TREE TO BE RETAINED
	EXISTING TREE TO BE REMOVED
TREE F	PROTECTIVE FENCING

SIZE/TYPE

12" CEDAR

12" CEDAR

10" <u>CEDAR</u>

10" CEDAR

12" CEDAR

REMOVED

NO

NO

YES

YES

NO

MITIGATION

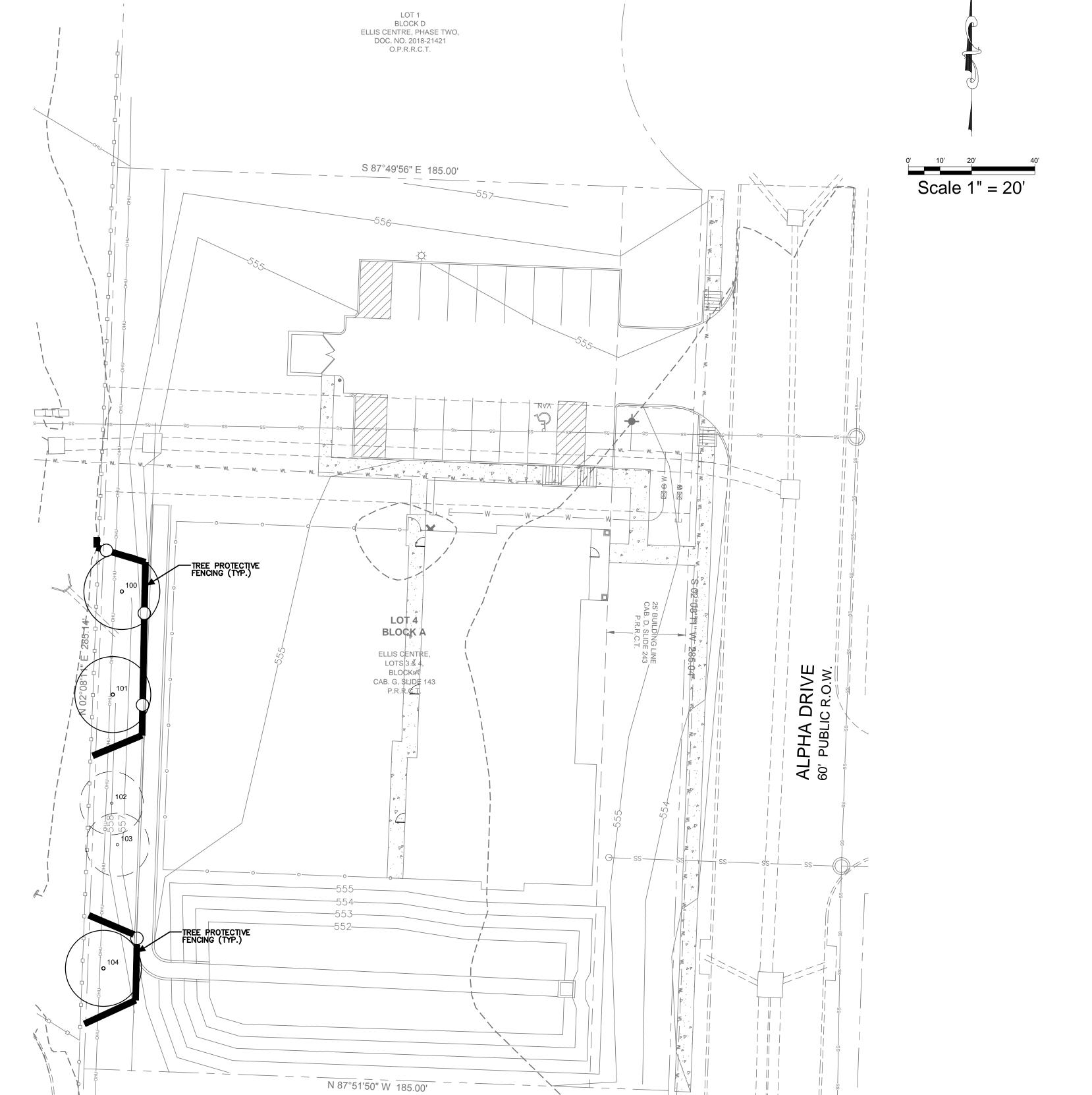
NO

NO

NO

NO

NO



LOT 5
BLOCK A
ELLIS CENTRE, PHASE TWO,
LOTS 5,6,7,
BLOCK A
DOC. NO. 2019-1536
O.P.R.R.C.T.

| || |

iiii

FABRIC: 4 FOOT HIGH ORANGE PLASTIC FENCING AS SHOWN ON THE PLANS AND SHALL BE WOVEN WITH 2 INCH MESH OPENINGS SUCH THAT IN A VERTICAL DIMENSION OF 23 INCHES ALONG THE DIAGONALS OF THE OPENINGS THERE SHALL BE AT LEAST 7 MESHES.

- POSTS: POSTS SHALL BE A MINIMUM OF 72 INCHES LONG AND STEEL 'T' SHAPED WITH A MINIMUM WEIGHT OF 1.3 POUNDS PER LINEAR
- 3. TIE WIRE: WIRE FOR ATTACHING THE FABRIC TO THE T-POSTS SHALL BE NOT LESS THAN NO. 12 GAUGE GALVANIZED WIRE, 4. USED MATERIALS: PREVIOUSLY-USED MATERIALS, MEETING THE ABOVE REQUIREMENTS AND WHEN APPROVED BY THE OWNER, MAY

ALL TREES AND SHRUBS (SHOWN TO REMAIN) WITHIN THE PROXIMITY OF THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO BEGINNING ANY DEVELOPMENT ACTIVITY.

EMPLOY THE SERVICES OF AN ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) CERTIFIED ARBORIST (AND OBTAIN ALL REQUIRED PERMITS) TO PRUNE THE EXISTING TREES FOR CLEANING, RAISING AND THINNING. ENSURE ALL TREES RECEIVE A COMMERCIAL-GRADE ROOT STIMULATOR APPLICATION AFTER PRUNING.

PROTECTIVE FENCING SHALL BE ERECTED OUTSIDE THE DRIPLINE AT LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE LANDSCAPE CONSULTANT AND/OR CITY ARBORIST OR IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS AT THE DRIP LINE OF TREES (ROOT PROTECTION ZONE, RPZ) AND/OR LANDSCAPE PLANT MATERIAL INCLUDING NATURAL AREAS. FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.

PROTECTIVE FENCE LOCATIONS IN CLOSE PROXIMITY TO STREET INTERSECTIONS OR DRIVES SHALL ADHERE TO THE APPLICABLE JURISDICTION'S SIGHT DISTANCE CRITERIA.

THE PROTECTIVE FENCING SHALL BE ERECTED BEFORE SITE WORK COMMENCES AND SHALL REMAIN IN PLACE DURING THE ENTIRE

THE INSTALLATION POSTS WILL BE PLACED EVERY 6 FEET AROUND THE DRIP LINE OR RPZ AND EMBEDDED TO 18 INCHES DEEP. FABRIC ATTACHMENT SHALL BE ATTACHED TO THE INSTALLATION POSTS BY THE USE OF SUFFICIENT WIRE TIES TO SECURELY FASTEN THE FABRIC TO THE 'T-POSTS' TO HOLD THE FABRIC IN A STABLE AND UPRIGHT POSITION.

- 1. DO NOT CLEAR, FILL OR GRADE IN THE RPZ OF ANY TREE.
- 2. DO NOT STORE, STOCKPILE OR DUMP ANY JOB MATERIAL, SOIL OR RUBBISH UNDER THE SPREAD OF THE TREE BRANCHES.
- 3. DO NOT PARK OR STORE ANY EQUIPMENT OR SUPPLIES UNDER THE SPREAD OF THE TREE BRANCHES.
- 4. DO NOT SET UP ANY CONSTRUCTION OPERATIONS UNDER THE SPREAD OF THE TREE BRANCHES (EX. PIPE CUTTING AND THREADING, MORTAR MIXING, PAINTING OR LUMBER CUTTING).
- 5. DO NOT NAIL OR ATTACH TEMPORARY SIGNS METERS, SWITCHES, WIRES, BRACING OR ANY OTHER ITEM TO THE TREES.
- 6. DO NOT PERMIT RUNOFF FROM WASTE MATERIALS INCLUDING SOLVENTS, CONCRETE WASHOUTS, ASPHALT TACK COATS (MC-30 OIL), ETC. TO ENTER THE RPZ. BARRIERS ARE TO BE PROVIDED TO PREVENT SUCH RUNOFF SUBSTANCES FROM ENTERING THE RPZ WHENEVER POSSIBLE, INCLUDING IN AN AREA WHERE RAIN OR SURFACE WATER COULD CARRY SUCH MATERIALS TO THE ROOT

ROUTE UNDERGROUND UTILITIES TO AVOID THE RPZ. IF DIGGING IS UNAVOIDABLE, BORE UNDER THE ROOTS, OR HAND DIG TO AVOID SEVERING THEM.

THE CONTRACTOR SHOULD AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATION OCCURS NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION.

REMOVE ALL TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS BY HAND.

TREES DAMAGED OR LOST DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED AT THE CONTRACTOR'S EXPENSE AND TO THE PROJECT OWNER'S SATISFACTION.

ANY TREE REMOVAL SHALL BE APPROVED BY THE OWNER PRIOR TO ITS REMOVAL.

COVER EXPOSED ROOTS AT THE END OF EACH DAY WITH SOIL, MULCH OR WET BURLAP.

IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DUING CONSTRUCTION AND WHERE HEAVY TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH EIGHT INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. THIS EIGHT INCH DEPTH OF MULCH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

WATER ALL TREES, MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES, DEEPLY ONCE A WEEK DURING PERIODS OF HOT DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.

WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.

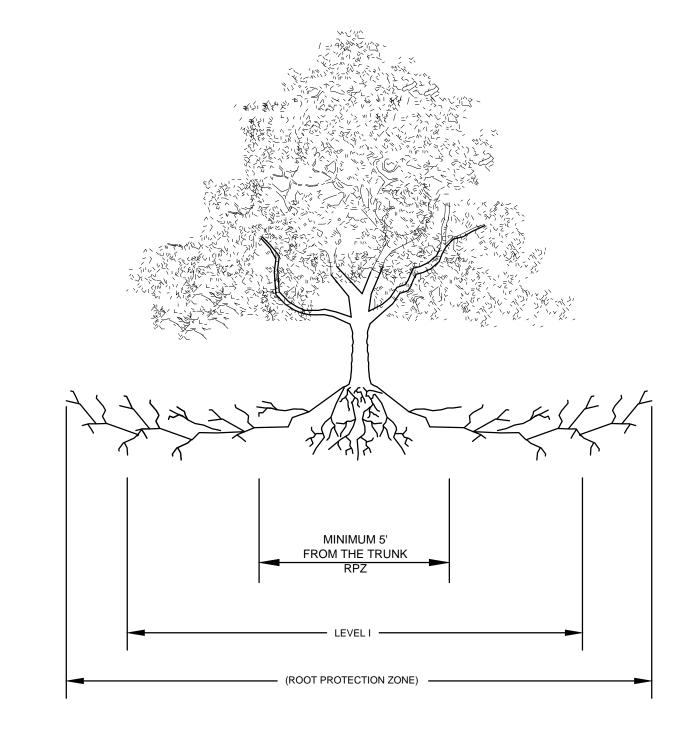
WHEN AN EXCAVATION OR EMBANKMENT IS PLACED WITHIN THE DRIPLINE OF ANY TREE GREATER THAN EIGHT INCHES IN DIAMETER, A TREE WELL SHALL BE CONSTRUCTED TO PROTECT THE TREE AS INDICATED, WHEN THE CUT OR FILL EXCEEDS EIGHT INCHES.

WHERE PAVING OR FILLING IS NECESSARY WITHIN THE DRIPLINE OF ANY TREE EIGHT INCHES OR GREATER, A PERMEABLE PAVEMENT AND AERATION SYSTEM MUST BE INSTALLED.

CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TREE PROTECTION FENCING WHEN ALL THREATS TO THE EXISTING TREES FROM CONSTRUCTION-RELATED ACTIVITIES HAVE BEEN REMOVED.

TREE PROTECTION REQUIREMENTS

- 1. A ROOT PROTECTION ZONE WILL BE ESTABLISHED AROUND EACH TREE OR ANY VEGETATION TO BE PRESERVED. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY THE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH INCH DIAMETER INCH AT BREAST HEIGHT (4.5') OF THE TREE. EXAMPLE: A 10-INCH DIAMETER TREE WILL HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE.
- 2. NO WORK SHALL BEGIN WERE TREE PROTECTION FENCING HAS NOT BEEN COMPLETED AND APPROVED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION. THE FENCING WILL BE A MINIMUM OF 4' HEIGHT.
- 3. ALL ROOTS LARGER THAN ONE-INCH IN DIAMETER ARE TO BE CUT CLEANLY. FOR OAKS ONLY, ALL WOUNDS SHALL BE PAINTED WITH WOUND
- 4. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET
- 5. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE ROOT PROTECTION ZONE. NO CLEAN-OUT AREAS WILL BE CONSTRUCTED SO THAT THE MATERIAL WILL BE IN OR MIGRATE TO THE ROOT PROTECTION ZONE.
- 6. NO GRADE CHANGE MORE THAN 3" IS ALLOWED WITHIN THE ROOT PROTECTION ZONE.
- 7. ROOTS OR BRANCHES IN CONFLICT WITH CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. ALL WOUNDS SHALL BE PAINTED WITHIN 30 MINUTES TO PREVENT OAK WILT INFECTION (OAK TREES ONLY).
- 8. ANY TREE REMOVAL SHALL BE APPROVED BY THE LOCAL JURISDICTION'S ARBORIST.
- TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE REPLACED WITH TREE QUANTITIES AND SIZES ACCEPTABLE TO THE LOCAL JURISDICTION.
- 10. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT PROTECTION ZONE AND/OR WASHING FOLIAGE.
- 11. NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED TREES.
- 12. THE ROOT PROTECTION ZONE SHALL BE PRESERVED AT NATURAL GRADE. NO CUTTING, FILLING, TRENCHING, ROOT DISTURBANCE, SOIL DISTURBANCE, OR CONSTRUCTION SHALL OCCUR CLOSER TO THE TRUNK THAN ONE-HALF (1/2) THE ROOT PROTECTION ZONE RADIUS EXCEPT I PARKING AREAS, WHERE APPROVED ALTERNATIVE MATERIALS AND METHODS MAY BE USED AND CONSTRUCTION MAY OCCUR AS CLOSE AS FIVE (5) FEET FROM THE ROOT FLARES ON ONE SIDE OF THE TREE. NATIVE UNDERSTORY VEGETATION WITHIN THE ROOT PROTECTION ZONE SHALL BE PRESERVED, HOWEVER THE REQUIREMENT DOES NOT APPLY TO ROOT PROTECTION ZONE AREAS THAT HAVE BEEN LANDSCAPED. THE ROOT PROTECTION ZONE MAY BE SHIFTED AND CLUSTERED AS LONG AS THERE IS NO CONSTRUCTION CLOSER TO THE TRUNK THAN ONE-HALF (1/2) THE ROOT PROTECTION ZONE RADIUS. THE CONSTRUCTION OF SIDEWALKS SHALL BE ALLOWED IN THE ROOT PROTECTION ZONE, AS LONG AS EXCAVATION DOES NOT EXCEED THREE (3) INCHES.
- 13. DURING CONSTRUCTION ACTIVITY ON SITE, AT LEAST A SIX-INCH LAYER OF A COARSE MULCH SHALL BE PLACED AND MAINTAINED OVER THE ROOT PROTECTION ZONE. THE IMPERVIOUS COVER MAY ENCROACH WITHIN THE ROOT PROTECTION ZONE IF SAID ENCROACHMENT IS APPROVED BY THE ARBORIST.





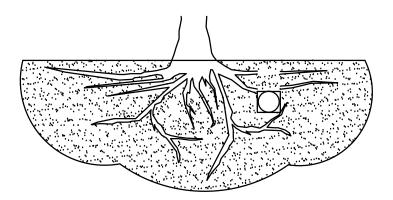
TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH

TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.

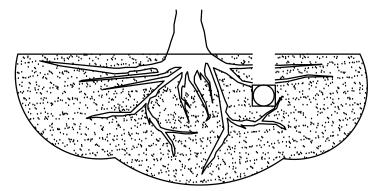
UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE

DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.



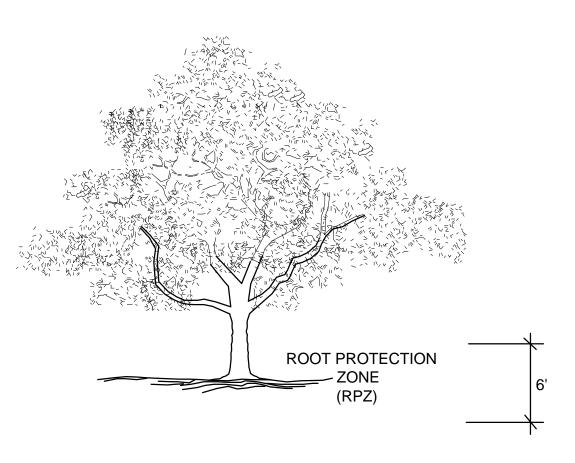
12" MIN & 48" MAX DEPTH

TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.



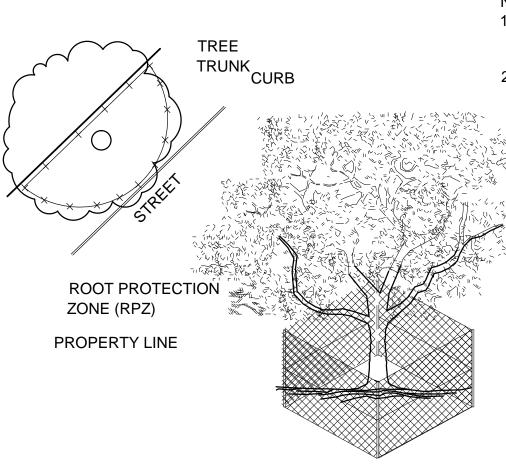


6" MULCH INSIDE RPZ

SPECIFICATIONS.

1. THE FENCING LOCATION SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND BE LIMITED TO PROJECT BOUNDARY. WHERE MULTIPLE ADJACENT TREES WILL BE ENCLOSED BY FENCING, THE FENCING SHALL BE CONTINUOUS AROUND ALL TREES. FOR ACCEPTABLE FENCING MATERIALS SEE

TREE PROTECTION FENCE SCALE: NOT TO SCALE



- OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
- FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

DRIP LINE

ESTABLISH FENCE PROTECTION MINIMUM 5' FROM TRUNK ROOT PROTECTION ZONE

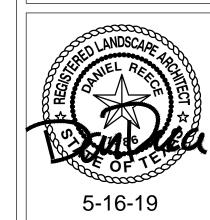
6" MULCH INSIDE RPZ IF BARE DIRT

8" MULCH OUTSIDE RPZ AND UNDER DRIP LINE AS MINIMAL PROTECTION FOR ROOTS FROM CONSTRUCTION ACTIVITIES

TREE PROTECTION FENCE - LEVEL 2 SCALE: NOT TO SCALE

ANIN



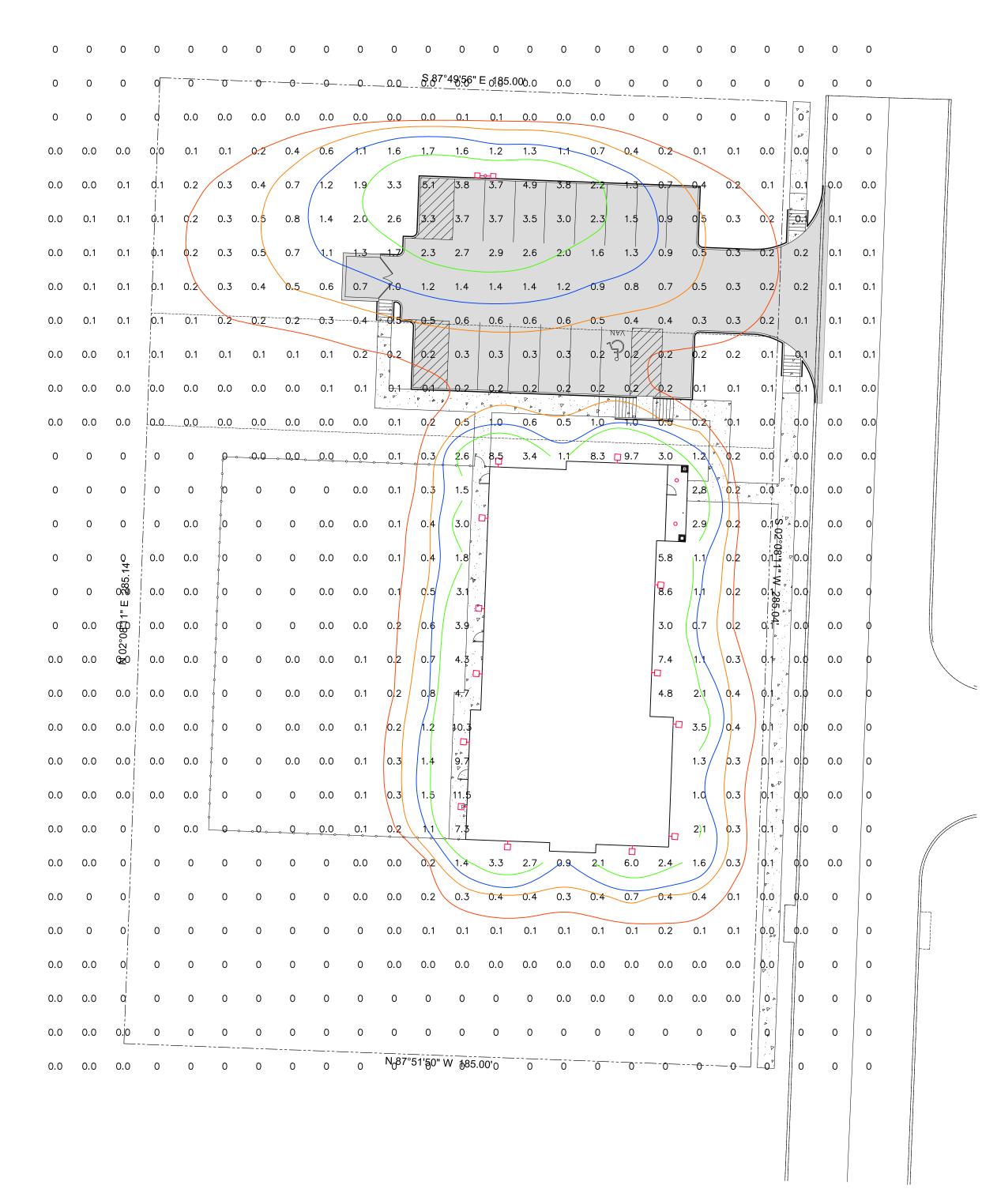


DRAWN: JAN DATE: 09/28/2018

HEI #: 18-140

SHEET NO: TS-2

TREE SURVEY



LUMINAIRE SCHEDULE							
CALLOUT	SYMBOL	DESCRIPTION	BALLAST	MOUNTING	OUNTING MODEL		QUANTITY
С	\bigcirc	1200 lumen RL56 LED Downlight	ELECTRONIC	CEILING	EATON — HALO, RL560WH12940	120V 1P 2W	2
S2	<u> </u>	PREVAIL AREA AND ROADWAY LUMINAIRE(2) 70 CRI, 3000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD, BRONZE PAINTED FINISH	ELECTRONIC	POLE	EATON - LUMARK, PRV-A40-D-UNV- T3-BZ-7030-HSS	120V 1P 2W	1
W	H	SAYLITE DCC150 SERIES	ELECTRONIC	WALL	SAYLITE - DCC150 DCC150L42W3424LMV50K	120V 1P 2W	13

GENERAL PHOTOMET	RIC SCHEDULE
AVERAGE FOOT-CANDLES	0.46
MAXIMUM FOOT-CANDLES	11.5
MINIMUM FOOT-CANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	11.47 / 0.00
AVERAGE TO MINIMUM FC RATIO	0.46 / 0.00

CITY OF ROCKWALL OUTDOOR LIGHTING FOR NONRESIDENTIAL PROPERTIES MINIMUM REQUIREMENTS:

- A. GLARE. IN ORDER TO PRESERVE THE NIGHT SKY AND TO REDUCE GLARE ON ROADWAYS, PEDESTRIAN AREAS AND ADJACENT DEVELOPMENT, LIGHT SOURCES (E.G. LIGHT BULBS) SHALL BE ORIENTED DOWN AND TOWARD THE CENTER OF THE SITE OR SHIELDED SO AS TO NOT BE VISIBLE FROM THE PROPERTY LINE. THIS APPLIES TO REFRACTORY LENSES WHICH EXTEND BEYOND THE LIGHTING FIXTURE AND ARE DESIGNED TO REDIRECT THE LIGHTING SOURCE HORIZONTALLY. THIS DOES NOT APPLY TO NEON OR INTERNALLY LIT SIGNS, OR TO DECORATIVE LIGHTING WITH 15 WATTS OR LESS PER BULB.
- B. LIGHT AT RESIDENTIAL PROPERTY LINE. THE ALLOWABLE MAXIMUM LIGHT INTENSITY MEASURED AT THE PROPERTY LINE OF A RESIDENTIALLY ZONED LOT SHALL BE 0.2 OF ONE FOOTCANDLE.
- C. LIGHT AT NONRESIDENTIAL PROPERTY LINE. THE ALLOWABLE MAXIMUM LIGHT INTENSITY MEASURED AT THE PROPERTY LINE OF ANY NONRESIDENTIALLY ZONED LOT SHALL BE 0.2 OF ONE FOOTCANDLE. FOR PLANNED SHOPPING CENTERS OR OTHER COMMERCIAL DEVELOPMENTS THAT CONTAIN MORE THAN ONE LOT, THE PLANNING AND ZONING COMMISSION MAY CONSIDER LIGHTING PLANS THAT ARE INTENDED TO INCREASE LIGHTING EFFICIENCY AND REDUCE THE NUMBER OF OVERALL LIGHT FIXTURES, BUT RESULT IN LIGHT SPILLOVER ACROSS COMMON LOT LINES WITHIN THE SAME DEVELOPMENT. HOWEVER, IN NO CASE SHALL LIGHT LEVELS EXCEED 0.2 FC AT THE PROPERTY LINES ADJACENT TO THE STREET AND/OR ALONG THE PERIMETER OF THE DEVELOPMENT.
- D. HEIGHT. NO LIGHT POLE, BASE OR COMBINATION THEREOF SHALL EXCEED 30 FEET, UNLESS FURTHER RESTRICTED WITHIN AN OVERLAY DISTRICT AS SPECIFIED IN ARTICLE V OF THIS [UNIFIED DEVELOPMENT]
- E. BUILDING AND POLE MOUNTED LIGHTING. ALL BUILDING AND POLE MOUNTED LUMINARIES EXCEEDING 15 WATTS SHALL BE DIRECTED DOWN WITH EITHER A PARTIAL CUT-OFF OR FULL CUT-OFF SOURCE.
- F. UNDER-CANOPY LIGHTING. ALL UNDER-CANOPY LIGHTING, INCLUDING, BUT NOT LIMITED TO, THOSE FIXTURES UTILIZED AT FUELING STATIONS, DRIVE-THROUGH LANES, AND COVERED PARKING STRUCTURES, SHALL BE FULLY RECESSED INTO THE CANOPY
- G. ILLUMINATION. THE MAXIMUM OUTDOOR MAINTAINED, COMPUTED AND MEASURED ILLUMINATION LEVEL WITHIN ANY NONRESIDENTIAL DEVELOPMENT SHALL NOT EXCEED 20 FC OUTDOORS AT ANY POINT ON THE SITE, WITH THE FOLLOWING EXCEPTIONS:
 - 1. UNDER-CANOPY LIGHTING (E.G., FUEL STATIONS, DRIVE-THROUGH LANES AND COVERED PARKING STRUCTURES) SHALL NOT EXCEED 35 FC. THE REMAINDER OF THE PROPERTY SHALL COMPLY WITH THE 20-FC MAXIMUM.
 - 2. LIGHTING FOR MOTOR VEHICLE DEALERSHIPS SHALL NOT EXCEED 30 FC WITHIN THE FRONT YARD(S) OF THE DEVELOPMENT. THE REMAINDER OF THE PROPERTY SHALL COMPLY WITH THE 20-FC MAXIMUM.
- H. EXEMPTIONS. HISTORIC OR ANTIQUE-STYLE PEDESTRIAN LIGHT FIXTURES APPROVED BY THE PLANNING AND ZONING COMMISSION ARE EXCLUDED FROM THESE STANDARDS.



PET RESORT

OCK A, ELLIS CENTRE

TX, 75087

Engin

TRISTAR ROCKWALL LOT 3 & 4 BL

J. MARTIN MONTGOMERY

J. MARTIN MONTGOMERY REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS - NO. 90427 RCS ENTERPRISES, LP F-2071

REVISION HISTORY	DESCRIPTION	-	-	-	-	
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ISSUE DATE: 05/09/2019

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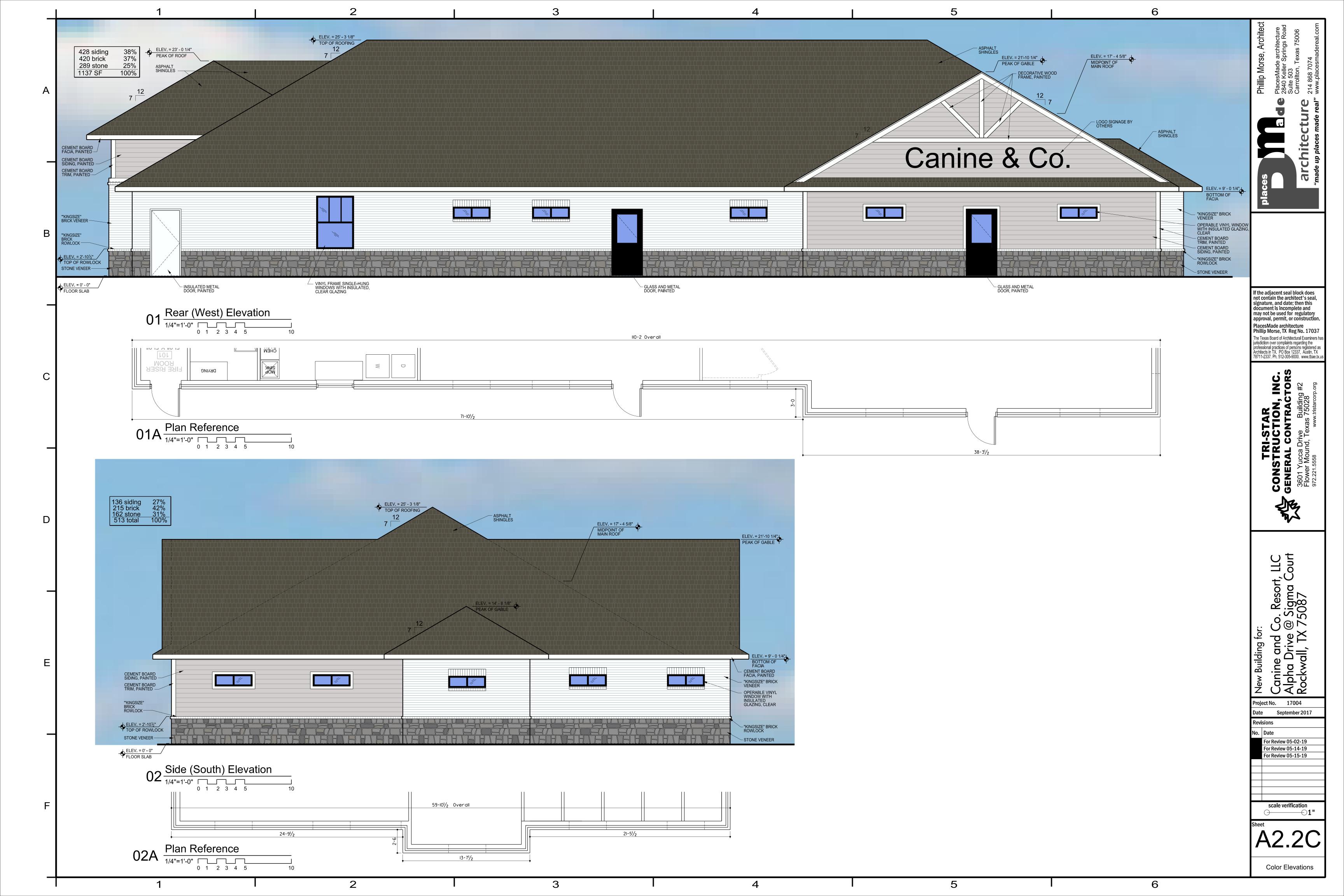
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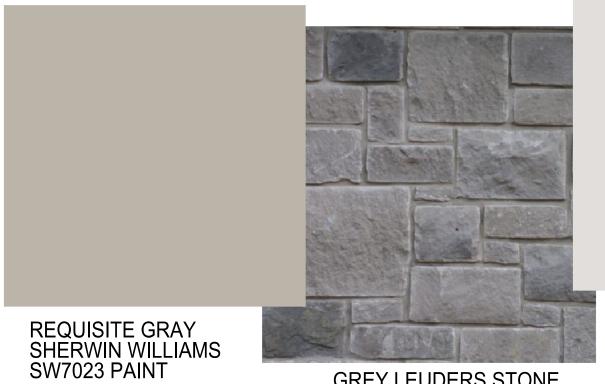
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E1.





Material Board



GREY LEUDERS STONE

ORIGINAL WHITE SHERWIN WILLIAMS SW7077 PAINT



ONYX BLACK OWENS CORNING ASPHALT SHINGLES



PAINTED BRICK TO MATCH SW7077



PLYGEM BLACK VINYL WINDOWS