SITE DEVELOPMENT PLANS FOR

2101 MIDDLE STREET PARKING

2101 MIDDLE STREET SULLIVAN'S ISLAND, SOUTH CAROLINA

SITE CONTACTS				
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ADA COMPLIANCE

THE PUBLIC RIGHT-OF-WAY MUST REMAIN ADA COMPLIANT DURING CONSTRUCTION OR AN ALTERNATIVE ROUTE MUST BE PROVIDED. IT IS THE OWNERS RESPONSIBILITY TO REPAIR ALL DAMAGED SIDEWALKS TO REINSTATE AN ADA ACCESSIBLE ROUTE.

PROJECT DESCRIPTION

SITE IMPROVEMENTS WILL CONSIST OF THE INSTALLATION OF GRAVEL PARKING AND LANDSCAPING.

SHEET DESCRIPTION

G-1 COVER

G-2 GENERAL NOTES

G-3 GENERAL NOTES

V-1 SITE CONDITIONS

C-1 SITE PLAN

C-2 DEMOLITION, TREE PROTECTION, SWPPP

C-3 GRADING AND DRAINAGE PLAN

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SHEET NUMBER

- TOPOGRAPHIC AND BOUNDARY SURVEY BY OTHERS AND PROVIDED TO CLINE ENGINEERING BY CLIENT
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATION OF ALL UNDERGROUND UTILITIES, AND VERIFY PROPERTY CORNERS AND TOPOGRAPHY BEFORE ANY CONSTRUCTION IS BEGUN. CALL UTILITY COMPANIES BEFORE EXCAVATION TO LOCATE ALL BURIED CABLES AND UNDERGROUND UTILITIES. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL VERIFY THE INVERTS OF EXISTING STRUCTURES AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION
- THE CONTRACTOR SHOULD NOTIFY THE ENGINEERS FOR A REVIEW SHOULD DISCREPANCIES BE DISCOVERED AT THE SITE OR ON THE DRAWINGS BEFORE 52. THE CONTRACTOR SHALL VERIFY BENCH MARK LOCATION AND ELEVATION WITH SURVEYOR BEFORE BEGINNING CONSTRUCTION. AND DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE BETWEEN ALL CIVIL DRAWINGS WITH GRADING AND UTILITY CONTRACTORS IN ORDER TO AVOID PROBLEMS DURING CONSTRUCTION.
- CONTRACTOR TO SCHEDULE A PRECONSTRUCTION MEETING WITH ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER AND UTILITY COMPANIES DURING CONSTRUCTION OF WATER AND SEWER SO PERIODIC OBSERVATIONS CAN BE MADE. CONTRACTOR WILL CERTIFY TO THE ENGINEER IN WRITING THAT WATER AND SEWER LINES HAVE BEEN TESTED AND CONSTRUCTED ACCORDING TO THE ENGINEER'S AND UTILITY COMPANY'S DRAWINGS AND SPECIFICATIONS.
- EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS. ALL REFERENCE TO SPECIFICATIONS FOR HIGHWAY CONSTRUCTION OR MATERIALS ARE MADE FROM SOUTH CAROLINA STATE HIGHWAY DEPARTMENT'S
- ALL DIMENSIONS SHOWN ARE MEASURED FROM OUTSIDE FACE OF BUILDING WALL AND TO FACE OF CURB LINE. MIDDLE LINE IS THE FACE OF CURB. FARTHWORK SHALL BE TO THE LINES AND GRADES SHOWN, PROOF ROLLING AND COMPACTION TEST SHALL BE ACCOMPLISHED IN THE FIELD TO TEST ALL AREAS. THE OWNER SHALL RETAIN THE SERVICES OF A TESTING COMPANY TO TEST ALL AREAS. MASS AREAS OF FILL SHALL BE PLACED IN LOOSELY MEASURED LIFTS NOT EXCEEDING 8" THICKNESS. ISOLATED AREAS OF FILL (SUCH AS TRENCH BACKFILL) SHALL BE PLACED IN LIFTS NOT EXCEEDING 6"
- CONTRACTOR SHALL PROTECT ALL TREES THAT ARE TO REMAIN AS MARKED IN THE FIELD BY OWNER'S REPRESENTATIVE.

CONTRACTOR IS TO COMPLY WITH ALL OSHA REGULATIONS, REQUIREMENTS, AND SAFETY MEETING REQUIREMENTS.

- THE GRADING CONTRACTOR SHALL PROOF-ROLL THE CONSTRUCTION AREA WITH A FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, BY MAKING 2 COMPLETE PASSES IN EACH OF 2 PERPENDICULAR DIRECTIONS. ALL SOFT SPOTS SHALL BE UNDERCUT AND RE-COMPACTED WITH SUITABLE STRUCTURAL FILL MATERIAL. MINIMUM AXLE WEIGHT = 10 TONS.
- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK, THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS, AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION, THE
- ALL NEW ELEVATIONS SHOWN ARE FINISH GRADE ELEVATION. THE GRADING CONTRACTOR SHALL DEDUCT THE FOLLOWING FOR SUBGRADE ELEVATION:
- **BUILDING FLOOR SEE ARCHITECTURAL PLANS**
- HEAVY DUTY PAVEMENT 11 LIGHT DUTY PAVEMENT - 8
- PCC PAVEMENT 12
- SIDEWALKS 4"
- TURF AREAS 4
- THE CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION THAT ARE WITHIN 5 FEET OF NEW CONSTRUCTION. REMOVE DEBRIS FROM SITE OR BURN IN ACCORDANCE WITH LOCAL LAWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY BURNING PERMITS. PROTECT ALL TREES THAT
- TOPSOIL SHALL BE STRIPPED TO A DEPTH AS REQUIRED BY OWNER OR GEOTECH AND STOCKPILED AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

THE TOP 18" OF FILL SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY BY THE STANDARD PROCTOR METHOD ASTM D-698. ALL OTHER FILL SHALL BE

- COMPACTED TO 95% MAXIMUM DRY DENSITY. MOISTURE SHALL BE CONTROLLED TO WITHIN ±2% OF OPTIMUM.
- ALL EXCAVATION SHALL BE "CLASSIFIED EXCAVATION". EXCAVATION SHALL BE "CLASSIFIED" AS "COMMON EXCAVATION" OR "ROCK EXCAVATION". ROCK EXCAVATION SHALL BE CLASSIFIED AS FOLLOWS:
- MASSIVE ROCK EXCAVATION ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A SINGLE TOOTH RIPPER DRAWN BY A CRAWLER TRACTOR HAVING A MINIMUM DRAW BAR RATED AT NOT LESS THAN 53,000 POUNDS (CATERPILLAR D-8 OR EQUIVALENT) AND OCCUPYING AN ORIGINAL VOLUME OF AT LEAST ONE
- TRENCH EXCAVATION ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A POWER SHOVEL HAVING THE CAPACITY OF AT LEAST THAT OF A CATERPILLAR 225 AND OCCUPYING AN ORIGINAL VOLUME OF AT LEAST 1/2 CUBIC YARD OR MORE.
- COMMON EXCAVATION SHALL INCLUDE ALL MATERIALS THAT CAN BE RIPPED, BOULDERS, AND ALL OTHER MATERIALS THAT DO NOT FALL IN THE CATEGORY
- THE CLASSIFICATION OF SOILS INCLUDE: TOPSOIL, FILL MATERIAL, UNSUITABLE MATERIAL, AND ROCK EXCAVATION. THE CLASSIFICATION OF SOILS IS THE
- ALL FILL MATERIAL SHALL CONSIST OF AN APPROVED MATERIAL AND BE FREE OF ORGANIC MATTER AND DEBRIS. IMPORTED FILL SHALL HAVE A MINIMUM STANDARD PROCTOR MAXIMUM DRY DENSITY OF 95 PCF. CLAY/SILT FINES CONTENT NOT GREATER THAN 25%. AND A PLASTICITY INDEX LESS THAN 15%.
- ALL EXISTING SLOPES STEEPER THAN 4:1 THAT WILL RECEIVE FILL SHALL BE PLOWED AND SCARIFIED SO NEW FILL WILL BOND WITH EXISTING SURFACE
- CONTRACTOR SHALL SCARIFY ALL EXISTING ASPHALT PAVEMENT BEFORE PLACING FILL, UNLESS OVERLAYING ASPHALT ONTO EXISTING ASPHALT. THE GRADING CONTRACTOR SHALL CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF PLUS OR MINUS 0.05 FEET. (FINAL GRADED
- SURFACE UNDER BUILDING SLABS SHALL BE WITHIN A TOLERANCE OF 3/8" WHEN MEASURED WITH A 10' STRAIGHT EDGE). (FINAL PAVEMENT WEARING COURSE SURFACE SHALL BE WITHIN A TOLERANCE OF 3/16" WHEN MEASURED WITH A 10' STRAIGHT EDGE.) (PAVEMENT VARIATION FROM TRUE DESIGN FLEVATION SHALL BE 1/4" OR LESS) SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SPOT ELEVATIONS
- WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND **GUTTER AND UTILITIES.**
- IF GRADE ADJUSTMENTS ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE THE ENGINEER TO INVESTIGATE SUCH ADJUSTMENT GRADES SHOWN AT ALL ENTRANCES ARE DESIGN GRADES. CONTRACTOR SHALL COORDINATE GRADING IN THESE AREAS WITH THE EXISTING FEATURES IN
- THE FIELD AND/OR CURRENT DESIGN DRAWINGS.
- SITE CONTRACTOR SHALL EXTEND UNDERGROUND ROOF DRAINAGE PIPING TO WITHIN 5 FT OF BUILDING FOR CONNECTION TO ROOF DOWNSPOUTS.
- CONNECTIONS SHALL BE COORDINATED WITH BUILDING CONTRACTOR.
- ALL ROADS AND PARKING LOTS SHALL HAVE A MINIMUM 3'-0" WIDE GRASSED SHOULDER. A 5'-0" WIDE SHOULDER IS PREFERRED AND SHALL BE PROVIDED WHERE POSSIBLE
- ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III, UNLESS NOTED ON DRAWINGS WITH BELL & SPIGOT ENDS AND SHALL CONFORM TO ALL REQUIREMENTS OF ASTM C 76, LATEST EDITION, INSTALLED WITH FLEXIBLE PLASTIC (BITUMEN) GASKETS AT ALL JOINTS. GASKETS SHALL COMPLY WITH AASHTO M-198 751, TYPE B, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.
- ALL CORRUGATED PLASTIC PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M-294, TYPE S, SHALL BE SMOOTH INTERIOR WITH ANNULAR CORRUGATED EXTERIOR HI-Q SURE-LOCK 10.8 PIPE ADS N-12 OR APPROVED FOUAL ALL JOINTS SHALL BE BELL AND SPIGOT AND SHALL MEET THE REQUIREMENTS OF AASHTO M-294, SHALL BE WATERTIGHT, MEETING THE REQUIREMENTS OF ASTM D 3212. THE GASKETS SHALL BE MADE OF POLYISOPRENE MEETING THE REQUIREMENTS OF ASTM F 477. INSTALLATION SHALL CONFORM TO AASHTO M-294, ASTM D-2321, AND MANUFACTURERS INSTALLATION PROCEDURES.
- ANY REINFORCED CONCRETE PIPE WITH MORE THAN 15 FOOT OF COVER SHALL BE CLASS IV WITH O-RING JOINTS. ALL STORM PIPE LENGTH AND ELEVATIONS (TOPS AND INVERTS) OF STORM DRAINAGE STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE.

THICKNESS ALL PAVING WORK (MATERIALS AND CONSTRUCTION) SHALL COMPLY WITH STATE SPECIFICATIONS.

PRIOR TO COMMENCING CONSTRUCTION.

- CONTRACTOR MAY HAVE TO FIELD ADJUST AS NECESSARY DURING CONSTRUCTION. THE CONTRACTOR MAY USE PRE-CAST DRAINAGE STRUCTURES AS AN ALTERNATE FOR STRUCTURES SPECIFIED ON THIS PLAN. HOWEVER, THE OWNER AND CLINE ENGINEERING, INC. ASSUME NO RESPONSIBILITY FOR THESE STRUCTURES. AS FIELD CONDITIONS DURING CONSTRUCTION OFTEN DICTATE ADJUSTMENTS STORM DRAINAGE STRUCTURES. THE CONTRACTOR RETAINS ALL RESPONSIBILITY AND EXPENSE FOR MODIFYING THESE PRE-CAST STRUCTURES TO ACCOMMODATE THESE ADJUSTMENTS
- ANY REINFORCED CONCRETE PIPE STEEPER THAN 10 PERCENT MUST HAVE CONCRETE COLLARS. CORRUGATED METAL PIPE WITH HUGGER BANDS MAY BE SUBSTITUTED. THE NUMBER OF CONCRETE COLLARS AND TYPE OF STORM PIPE WILL BE DETERMINED TOGETHER BY THE CONTRACTOR AND THE ENGINEER. ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED TO LINES AND GRADES SHOWN AND AS DETAILED ON THE DRAWINGS. ALL MANHOLE/CLEANOUT TOP ELEVATIONS ON CIVIL DRAWINGS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MANHOLE/CLEANOUT TOPS ARE FLUSH WITH PAVEMENT FINISHED GRADE THROUGHOUT THE PROJECT.
- THE CONTRACTOR SHALL PROVIDE STANDARD CLEAN-OUTS OR MANHOLES AT ALL BENDS AND CHANGES IN GRADE IN SEWER LINES AND CONNECTIONS TO EXISTING SEWER LINES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. ALL SANITARY SEWER WORK SHALL COMPLY WITH LOCAL CODES AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING WITH THE LOCAL AND STATE SEWER APPROVAL AUTHORITIES TO INSURE THAT
- ALL MATERIALS, INSTALLATION, TESTING, AND AS-BUILT DRAWING REQUIREMENTS WILL BE TO THE SATISFACTION OF THE LOCAL AND STATE AUTHORITIES. ALL WATER LINES SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ALL PIPES, VALVES, AND FITTINGS SHALL COMPLY WITH AWWA STANDARDS, ALL LOCAL AND STATE CODES AND ORDINANCES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. WATER LINES SHALL BE PRESSURE TESTED, AND
- DISINFECTED AS REQUIRED. ALL NECESSARY AS-BUILTS SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE LOCAL AUTHORITY ALL UTILITY TRENCHES SHALL BE THOROUGHLY COMPACTED AND TESTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES. ASPHALT PAVING FOR LIGHT DUTY AREAS SHALL BE CONSTRUCTED ON A PREPARED AND WELL-DRAINED SUBGRADE COMPACTED AS SPECIFIED. THE BASE COURSE SHALL BE CONSTRUCTED WITH 6" COMPACTED THICKNESS STONE BASE. THE SURFACE COURSE SHALL BE CONSTRUCTED WITH 2" COMPACTED
- ASPHALT PAVING FOR HEAVY DUTY AREAS SHALL BE CONSTRUCTED ON A PREPARED AND WELL-DRAINED SUBGRADE COMPACTED AS SPECIFIED. THE BASE COURSE SHALL BE CONSTRUCTED WITH 8" COMPACTED THICKNESS STONE BASE. THE BINDER COURSE SHALL BE CONSTRUCTED WITH 1.5" COMPACTED THICKNESS ASPHALT CONCRETE. THE SURFACE COURSE SHALL BE CONSTRUCTED WITH 1.5" COMPACTED THICKNESS ASPHALT CONCRETE. ALL PAVING WORK (MATERIALS AND CONSTRUCTION) SHALL COMPLY WITH STATE SPECIFICATIONS.
- CONCRETE TRUCK PAVEMENT SHALL BE CONSTRUCTED WITH 4,000 PSI CONCRETE, 6" THICK REINFORCED WITH 6" X 6" W2.9 X W2.9 W.W.M. JOINTS SHALL BE CONSTRUCTED AS SHOWN ON DETAILS.
-). CONCRETE SIDEWALKS SHALL BE CONSTRUCTED WITH 3,000 PSI CONCRETE, 4" THICK NON-REINFORCED WITH JOINTS AS SHOWN ON DETAILS.
- 40. ALL AREAS NOT COVERED BY BUILDINGS AND PAVEMENT SHALL RECEIVE TOPSOIL AND BE GRASSED IN ACCORDANCE WITH SPECIFICATIONS
- CONCRETE CURB AND GUTTER SHALL BE 18" WIDE WITH 6" CURB CONSTRUCTED WITH 3,000 PSI CONCRETE WITH EXPANSION JOINTS AND CONTRACTION JOINTS INSTALLED TO COMPLY WITH S.C.D.O.T. STANDARD SPECIFICATION FOR MATERIALS AND CONSTRUCTION OF CURB AND GLITTER
- THE GRADING CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING AT ALL TIMES. CONTRACTOR SHALL BRING TO THE ATTENTION OF
- THE ENGINEER ANY AREAS THAT MAY NOT DRAIN PROPERLY DURING CONSTRUCTION. GRADING CONTRACTOR SHALL INCLUDE IN COST ALL CUT/FILL AND IMPORT/EXPORT NECESSARY FOR EARTHWORK BALANCE. CONTRACTOR SHALL INCLUDE IN COST ALL WETTING/DRYING OF SOILS NECESSARY TO ACHIEVE COMPACTION PER SPECIFICATIONS.
- THE CONTRACTOR SHALL CONFORM TO THE CONSTRUCTION SEQUENCE. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT TRAPS BEFORE OTHER SITE GRADING AND SITEWORK IS BEGUN. THE SEDIMENT TRAPS AND SEDIMENT CONTROL DURING CONSTRUCTION SHALL COMPLY WITH ALL LOCAL CODES AND REGULATIONS. AFTER ALL SITEWORK IS COMPLETED AND
- GRASSING ESTABLISHED, THE GRADING CONTRACTOR SHALL REMOVE ALL SILT FROM THE SITE AND LEGALLY DISPOSE OF ALL SILT OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE WHEN INSTRUCTIONS FROM REGULATORY AGENCIES ARE RECEIVED AND COMPLY WITH
- INSTRUCTIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONSTRUCTION DOCUMENTS AND SHALL AT ONCE REPORT TO THE ENGINEER ANY INCONSISTENCIES OR OMISSIONS DISCOVERED. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS TO VERIFY THAT ALL LOCATIONS ARE CORRECT
- THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON ANY UTILITIES OR IN ANY PUBLIC RIGHT-OF-WAYS UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS ANY FIFI D CHANGES WITHIN SCHOT R/W OR CHANGES THAT WOULD IMPACT SCHOT R/W WILL REQUIRE WRITTEN SCDOT APPROVAL PRIOR TO CHANGES BEING IMPLEMENTED IN THE FIELD. (E.G. DRAINAGE, GRADING, ACCESS DESIGN ETC..).

- 9. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR ALL LANE AND SHOULDER CLOSURES WILL NEED TO BE SUBMITTED FOR ALL WORK WITHIN PERMANENT SEEDING THE R/W PRIOR TO CONSTRUCTION. NIGHT WORK COULD BE REQUIRED FOR ANY AND ALL LANE CLOSURES.
- 50. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF DRIVEWAYS AND OTHER ACCESS POINTS, INCLUDING ANY NEW DRAINAGE STRUCTURES, FOR AREAS WITHIN THE RIGHTS-OF-WAYS OF STATE MAINTAINED FACILITIES IN PERPETUITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING ANY EXISTING UTILITIES NECESSARY FOR SITE CONSTRUCTION INCLUDING ALL PERMITS AND
- 53. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EASEMENTS ON THE SITE BEFORE PROCEEDING WITH CONSTRUCTION.
- 54. ALL PARKING LOT STRIPING IS TO BE PER SOUTH CAROLINA D.O.T. SPECIFICATIONS AND HAVE TWO (2) COATS OF PAINT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING FIRE LANE STRIPING AND SIGNAGE TO MEET LOCAL REQUIREMENTS. THE BASES OF ALL LIGHT POLES, ALL SPEED BUMPS, ALL BOLLARDS, AND ALL FACES OF SIDEWALK THAT ARE NOT FLUSH WITH ASPHALT ARE TO BE PAINTED TRAFFIC YELLOW.
- 55. IN THE CASE OF A CONFLICT IN SPECIFICATIONS, NOTES, OR DETAILS, THE STRICTER SHALL GOVERN.

- 1. DEMOLITION INCLUDES THE REMOVAL AND DISPOSAL OF DEMOLISHED MATERIALS, AS SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED.
- 2. CONDITIONS EXISTING AT THE TIME OF INSPECTION FOR BIDDING PURPOSES WILL BE MAINTAINED BY THE OWNER IN SO FAR AS PRACTICABLE, HOWEVER, VARIATIONS MAY OCCUR.
- 3. STORAGE OR SALE OF DEMOLISHED MATERIAL ON THE SITE WILL NOT BE PERMITTED.
- 4. THE USE OF EXPLOSIVES WILL BE PERMITTED ONLY WHEN AUTHORIZED BY THE CONSTRUCTION PROJECT MANAGER. 5. CONDUCT DEMOLITION OPERATIONS AND THE REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER
- ADJACENT OCCUPIED OR USED FACILITIES OR ADJACENT CONSTRUCTION PROCESSES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM THE CONSTRUCTION PROJECT MANAGER AND THE AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY
- 7. ENSURE THE SAFE PASSAGE OF PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES, AND PERSONS
- PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION OPERATIONS AT NO COST TO THE OWNER.
- 9. MAINTAIN EXISTING UTILITIES, INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL FIELD LOCATE AND VERIFY ALL UTILITIES ON SITE.
- 10. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING FROM THE CONSTRUCTION PROJECT MANAGER AND THE AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO THE GOVERNING AUTHORITIES. NOTIFY ALL BUSINESSES IMPACTED IN ADVANCE OF ALL SCHEDULED UTILITY INTERRUPTIONS.
- 11. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 12. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
- 13. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES BELOW GRADE.
- 14. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6" IN LOOSE DEPTH. COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF THE FILL MATERIAL TO A DENSITY EQUAL TO THE ORIGINAL ADJACENT GROUND, UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED. AFTER FILL PLACEMENT AND COMPACTION, GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE FLOW TO SURFACE DRAINAGE STRUCTURES.
- REMOVE FROM THE SITE DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS, OR AS DIRECTED BY THE CONSTRUCTION PROJECT MANAGER AND LEGALLY DISPOSE OF DEBRIS "OFF-SITE".
- 16. ALL PIPING, FENCING AND OTHER MATERIALS THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED OR ABANDONED AS DIRECTED BY THE CONSTRUCTION PROJECT MANAGER.
- 17. ALL SALVAGEABLE MATERIALS WILL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL REMOVE AND STORE THIS MATERIAL AS DIRECTED BY
- 18. TRANSPORT MATERIALS REMOVED FROM DEMOLISHED STRUCTURES AND DISPOSE OF "OFF" SITE AS REQUIRED. DEBRIS SHALL NOT BE "BURIED" OR LEFT ON
- SITE EXCEPT AS ALLOWED BY ALL APPLICABLE LAWS AND BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR IS TO MAINTAIN MINIMUM COVER OVER ALL UTILITY LINES THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR
- REPAIRING ANY DAMAGE TO UTILITY LINES AT NO ADDITIONAL COST TO THE OWNER. 20. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SITE OR TO THE BUILDING AND IMPROVEMENTS ON THE SITE THAT OCCUR DURING
- 21. THE CONTRACTOR MUST VISIT SITE PRIOR TO SUBMITTING BID AND INCLUDE IN HIS PRICE ALL DEMOLITION AND DISPOSAL COSTS TO REMOVE/RELOCATE ANY AND ALL ITEMS THAT MAY INTERFERE WITH NEW CONSTRUCTION.
- 22. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND COORDINATE THE DEMOLITION, REMOVAL, RELOCATION, ABANDONMENT, ETC. OF ALL UTILITIES THAT INTERFERE WITH NEW CONSTRUCTION. ANY DEMOLITION AND RELOCATION SHOWN IS SCHEMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE
- FOR COORDINATING THE DESIGN, CONSTRUCTION, AND EASEMENTS OF ALL UTILITY WORK WITH THE APPROPRIATE UTILITIES. 23. DEMOLISH ALL EXISTING UTILITIES THAT LIE UNDER AND 10' OUTSIDE OF NEW BUILDING. THE EXISTING UTILITIES 10' OR MORE OUTSIDE NEW BUILDINGS MAY BE DRAINED AND FILLED WITH FLOWABLE FILL IF TESTING COMPANY APPROVES EXISTING BACKFILL.

TEMPORARY SEEDING

THE PURPOSE OF TEMPORARY SEEDING IS TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WOULD OTHERWISE LAY BARE FOR LONG PERIODS OF TIME BEFORE THEY ARE WORKED OR STABILIZED. TEMPORARY SEEDING IS ALSO USED WHERE PERMANENT VEGETATION GROWTH IS NOT NECESSARY OR APPROPRIATE

EMPORARY SEEDING IS USED ON EXPOSED SOIL SURFACES SUCH AS DENUDED AREAS, SOIL STOCKPILES, DIKES, DAMS, BANKS OF SEDIMENT BASINS, BANKS OF SEDIMENT TRAPS, AND TEMPORARY ROAD BANKS, TEMPORARY SEEDING PREVENTS AND LIMITS COSTLY MAINTENANCE OPERATIONS ON OTHER SEDIMENT SEEDED WHEN GRADING AND CONSTRUCTION OPERATION ARE NOT TAKING PLACE.

TEMPORARY STABILIZATION IS REQUIRED WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IS COMPLETE UNLESS CONSTRUCTION ACTIVITY IS GOING TO RESUME WITHIN 21 DAYS. COVER SEEDED AREAS WITH AN APPROPRIATE MULCH TO PROVIDE PROTECTION FROM THE WEATHER. WHEN THE TEMPORARY VEGETATION DOES NOT GROW QUICKLY OR THICK ENOUGH TO PREVENT EROSION, RE-SEED AS SOON AS POSSIBLE. KEEP SEEDED AREAS ADEQUATELY MOIST. IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFE RUNOFE OF IRRIGATION WATER WASTES WATER AND CAN CAUSE

SEED SELECTION

SEED SELECTION IS BASED ON GEOGRAPHICAL LOCATION, SOIL TYPE AND THE SEASON OF THE YEAR IN WHICH THE PLANTING IS TO BE DONE. USE THE TABLES IN APPENDIX C AS A GUIDE FOR CONVENTIONAL TILLAGE METHODS (PLOWING, SEEDBED PREPARATION, HYDROSEEDING, ETC). IF A FAST GROWING CROP TO NURSE THE PERMANENT SPECIE OR SPECIES IS REQUIRED. THEN USE THE MIX RATE. FAILURE TO CAREFULLY FOLLOW AGRONOMIC RECOMMENDATIONS RESULTS IN AN INADEQUATE STAND OF TEMPORARY VEGETATION THAT PROVIDES LITTLE OR NO EROSION CONTROL.

INSTALLATION

- TILLAGE: IF THE AREA HAS BEEN RECENTLY PLOWED, NO TILLAGE IS REQUIRED OTHER THAN RAKING OR SURFACE ROUGHENING TO BREAK ANY CRUST THAT HAS FORMED LEAVING A TEXTURED SURFACE. DISK THE SOIL FOR OPTIMAL GERMINATION WHEN THE SOIL IS COMPACTED LESS THAN 6-INCHES.
- SOIL TESTING: SOIL TESTING IS AVAILABLE THROUGH CLEMSON UNIVERSITY COOPERATIVE EXTENSION SERVICE LIME: LIME IS NOT REQUIRED FOR TEMPORARY SEEDING UNLESS A SOIL TEST SHOWS THAT THE SOIL PH IS BELOW 5.0. IT MAY BE DESIRABLE TO APPLY LIME DURING THE TEMPORARY SEEDING OPERATION TO BENEFIT THE LONG-TERM PERMANENT SEEDING.
- FERTILIZER: APPLY A MINIMUM OF 1.5 TONS OF LIME/ACRE (70 POUNDS PER 1000 SQUARE FEET) IF IT IS TO BE USED.APPLY A MINIMUM OF 500 POUNDS PER ACRE OF 10-10-10 FERTILIZER (11.5 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING TEMPORARY SEEDING UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW
- SEEDING: LOOSEN THE SOIL SURFACE BEFORE BROADCASTING THE SEED, APPLY SEED EVENLY BY THE MOST CONVENIENT METHOD AVAILABLE FOR THE TYPE OF SEED USED AND THE LOCATION OF THE TEMPORARY SEEDING. TYPICAL APPLICATION METHODS INCLUDE BUT ARE NOT LIMITED TO CYCLONE SEEDERS, ROTARY SPREADERS, DROP SPREADERS, BROADCAST SPREADERS, HAND SPREADERS, CULTIPACKER SEEDER, AND HYDRO-SEEDERS. COVER APPLIED SEED BY RAKING OR DRAGGING A CHAIN, AND THEN LIGHTLY FIRM THE AREA WITH A ROLLER OR CULTIPACKER.
- MULCHING: USE MULCH WITH TEMPORARY SEED APPLICATIONS TO RETAIN SOIL MOISTURE AND REDUCE EROSION DURING THE ESTABLISHMENT OF VEGETATION. TYPICAL MULCH APPLICATIONS INCLUDE STRAW. WOOD FIBER. HYDROMULCHES. BFM AND FGM. USE HYDROMULCHES WITH A MINIMUM BLEND OF 70% WOOD FIBERS. THE MOST COMMONLY ACCEPTED MULCH USED IN CONJUNCTION WITH TEMPORARY SEEDING IS SMALL GRAIN STRAW. THIS STRAW SHOULD BE DRY AND FREE FROM MOLD DAMAGE AND NOXIOUS WEEDS. THE STRAW MAY NEED TO BE ANCHORED WITH NETTING OR EMULSIONS TO PREVENT IT FROM BEING BLOWN OR WASHED AWAY. APPLY THE STRAW MULCH BY HAND OR MACHINE AT THE RATE 1.5-2 TONS PER ACRE (90 POUNDS PER 1000 SQUARE FEET). FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.
- IRRIGATION: SEEDED AREAS SHOULD BE KEPT ADEQUATELY MOIST, IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF. RUNOFF OF IRRIGATION WATER WASTES WATER AND CAN CAUSE EROSION.
- RE-SEEDING: RE-SEED AREAS WHERE SEEDING DOES NOT GROW QUICKLY, THICK ENOUGH, OR ADEQUATELY TO PREVENT EROSION. BASE SEED SELECTION SHOULD ON THE REQUIREMENTS OF LOCAL SPECIFICATIONS.

INSPECTION AND MAINTENANCE

- INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½-INCHES OR MORE OF PRECIPITATION.
- SUPPLY TEMPORARY SEEDING WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY IN ABNORMALLY HOT OR DRY WEATHER OR ON ADVERSE SITES. CONTROL WATER APPLICATION RATES TO PREVENT RUNOFF

COVER SEEDED WITH MULCH TO PROVIDE PROTECTION. FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.

- BASE SEED SELECTION ON LOCAL SPECIFICATIONS.
- RE-SEED AREAS WHERE THE PLANTS DO NOT GROW QUICK ENOUGH, THICK ENOUGH, OR ADEQUATELY ENOUGH TO PREVENT EROSION SHOULD BE RE-SEEDED.

TEMPORARY SEEDING - COASTAL				
SPECIES	RATES PER ACRE	PLANTING DATES		
SANDY, DROUGHTY SITES				
BROWNTOP MILLET	40 LBS.	MAR. 10 - SEPT. 1		
RYE, GRAIN	56 LBS.	SEPT. 1 - MAR. 15		
RYEGRASS	50 LBS.	SEPT. 1 - APR. 15		
WELL DRAINED, CLAYEY/LOAMEY SITES				
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS.	MAR. 15 - SEPT. 1		
RYE, GRAIN OR OATS	56 LBS. 75 LBS.	SEPT. 1 - MAR. 15		
RYEGRASS	50 LBS.	SEPT. 1 - APR. 15		

CONTROLLING RUNOFF AND PREVENTING EROSION BY ESTABLISHING A PERENNIAL VEGETATIVE COVER WITH SEED.

- A MAJOR CONSIDERATION IN THE SELECTION OF THE TYPE OF PERMANENT GRASS TO ESTABLISH IS THE INTENDED USE OF THE LAND. LAND USE IS SEPARATED IN TO TWO CATEGORIES, HIGH-MAINTENANCE AND LOW-MAINTENANCE.
- HIGH-MAINTENANCE: HIGH MAINTENANCE AREAS ARE MOWED FREQUENTLY, LIME OR FERTILIZED ON A REGULAR BASIS, AND REQUIRE MAINTENANCE TO AN AESTHETIC STANDARD. LAND USES WITH HIGH MAINTENANCE GRASSES INCLUDE HOMES, INDUSTRIAL PARKS, SCHOOLS, CHURCHES, AND RECREATIONAL AREAS SUCH AS PARKS, ATHLETIC FIELDS, AND GOLF COURSES
- LOW-MAINTENANCE: LOW MAINTENANCE AREAS ARE MOWED INFREQUENTLY, IF AT ALL, AND LIME AND FERTILIZER MAY NOT BE APPLIED ON A REGULAR SCHEDULE. THESE AREAS ARE NOT SUBJECT TO INTENSE USE AND DO NOT REQUIRE A UNIFORM APPEARANCE. THE VEGETATION MUST BE ABLE TO SURVIVE WITH LITTLE MAINTENANCE OVER LONG PERIODS OF TIME. GRASS AND LEGUME MIXTURES ARE FAVORED IN THESE AREAS BECAUSE LEGUMES ARE CAPABLE OF FIXING NITROGEN IN THE SOIL FOR THEIR OWN USE AND THE USE OF THE GRASSES AROUND THEM. LAND USES REQUIRING LOW-MAINTENANCE GRASSES INCLUDE STEEP SLOPES, STREAM AND CHANNEL BANKS, ROAD BANKS, AND COMMERCIAL AND INDUSTRIAL AREAS WITH LIMITED ACCESS

THE USE OF NATIVE SPECIES IS PREFERRED WHEN SELECTING VEGETATION. BASE PLANT SEED SELECTION ON GEOGRAPHICAL LOCATION, THE TYPE OF SOIL, THE SEASON OF THE YEAR IN WHICH THE PLANTING IS TO BE DONE, AND THE NEEDS AND DESIRES OF THE PERMANENT LAND USER. FAILURE TO CAREFULLY FOLLOW AGRONOMIC RECOMMENDATIONS RESULTS IN AN INADEQUATE STAND OF PERMANENT VEGETATION THAT PROVIDES LITTLE OR NO EROSION CONTROL.

- TOPSOIL: APPLY TOPSOIL IF THE SURFACE SOIL OF THE SEEDBED IS NOT ADEQUATE FOR PLANT GROWTH.
- TILLAGE: IF THE AREA HAS BEEN RECENTLY PLOWED, NO TILLAGE IS REQUIRED OTHER THAN RAKING OR SURFACE ROUGHENING TO BREAK ANY CRUST THAT HAS FORMED LEAVING A TEXTURED SURFACE. DISK THE SOIL FOR OPTIMAL GERMINATION WHEN THE SOIL IS COMPACTED LESS THAN 6-INCHES. IF THE SOIL IS COMPACTED MORE THAN 6-INCHES, SUB-SOILED AND DISK THE AREA.
- SOIL TESTING: SOIL TESTING IS AVAILABLE THROUGH CLEMSON UNIVERSITY COOPERATIVE EXTENSION SERVICE.

SQUARE FEET). FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.

- LIME: UNLESS A SPECIFIC SOIL TEST INDICATES OTHERWISE, APPLY 1½ TONS OF GROUND COURSE TEXTURED AGRICULTURAL LIMESTONE PER ACRE (70
- FERTILIZER: APPLY A MINIMUM OF 1000 POUNDS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (23 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING PERMANENT SEEDING OF GRASSES UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. DO NOT MIX THE LIME AND THE FERTILIZER PRIOR TO THE FIELD
- SEEDING: LOOSEN THE SURFACE OF THE SOIL JUST BEFORE BROADCASTING THE SEED. EVENLY APPLY SEED BY THE MOST CONVENIENT METHOD AVAILABLE FOR THE TYPE OF SEED APPLIED AND THE LOCATION OF THE SEEDING. TYPICAL APPLICATION METHODS INCLUDE BUT ARE NOT LIMITED TO CYCLONE SEEDERS, ROTARY SPREADERS, DROP SPREADERS, BROADCAST SPREADERS, HAND SPREADERS, CULTIPACKER SEEDER, AND HYDRO-SEEDERS. COVER APPLIED SEED BY RAKING OR DRAGGING A CHAIN OR BRUSH MAT, AND THEN LIGHTLY FIRM THE AREA WITH A ROLLER OR CULTIPACKER. DO NOT ROLL SEED THAT IS APPLIED WITH A HYDRO-SEEDER AND HYDRO-MULCH
- MULCHING: COVER ALL PERMANENT SEEDED AREAS WITH MULCH IMMEDIATELY UPON COMPLETION OF THE SEEDING APPLICATION TO RETAIN SOIL MOISTURE AND REDUCE FROSION DURING ESTABLISHMENT OF VEGETATION, APPLY THE MULCH EVENLY IN SUCH A MANNER THAT IT PROVIDES A MINIMUM OF 75% COVERAGE. TYPICAL MULCH APPLICATIONS INCLUDE STRAW, WOOD FIBER, HYDROMULCHES, BFM AND FGM. USE HYDROMULCHES WITH A MINIMUM BLEND OF 70% WOOD FIBERS. THE MOST COMMONLY ACCEPTED MULCH USED IN CONJUNCTION WITH PERMANENT SEEDING IS SMALL GRAIN STRAW. SELECT STRAW. THAT IS DRY AND FREE FROM MOLD DAMAGE AND NOXIOUS WEEDS. THE STRAW MAY NEED TO BE ANCHORED WITH NETTING OR ASPHALT EMULSIONS TO PREVENT IT FROM BEING BLOWN OR WASHED AWAY, APPLY STRAW MULCH BY HAND OR MACHINE AT THE RATE 2 TONS PER ACRE (90 POUNDS PER 1000
- IRRIGATION: KEEP PERMANENT SEEDED AREAS ADEQUATELY MOIST, ESPECIALLY LATE IN THE SPECIFIC GROWING SEASON. IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS
- THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF. RUNOFF OF IRRIGATION WATER WASTES WATER AND CAN CAUSE EROSION RE-SEEDING: INSPECT PERMANENTLY SEEDED AREAS FOR FAILURE, MAKE NECESSARY REPAIRS AND RE-SEED OR OVERSEED WITHIN THE SAME GROWING SEASON IF POSSIBLE. IF THE GRASS COVER IS SPARSE OR PATCHY, RE-EVALUATE THE CHOICE OF GRASS AND QUANTITIES OF LIME AND FERTILIZER APPLIED. FINAL STABILIZATION BY PERMANENT SEEDING OF THE SITE REQUIRES THAT IT BE COVERED BY A 70% COVERAGE RATE.

INSPECTION AND MAINTENANCE FOR PERMANENT SEEDING

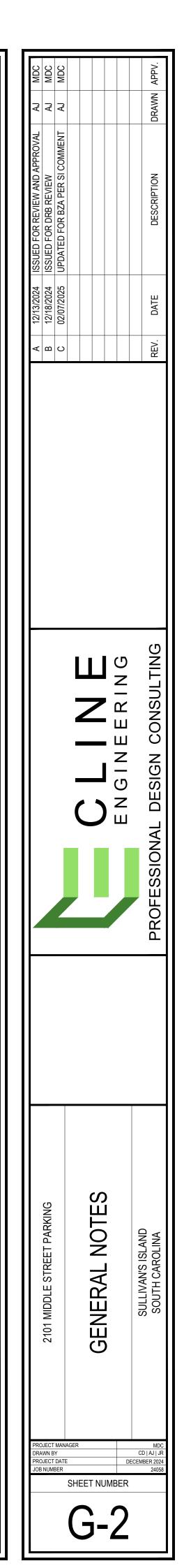
- INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RE-SEED IMMEDIATELY. CONDUCT A FOLLOW-UP SURVEY AFTER ONE YEAR AND REPLACE FAILED PLANTS WHERE NECESSARY.
- IF VEGETATIVE COVER IS INADEQUATE TO PREVENT RILL EROSION, OVERSEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST RESULTS
- IF A STAND OF PERMANENT VEGETATION HAS LESS THAN 40 PERCENT COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND
- RE-ESTABLISH THE STAND FOLLOWING SEED BED PREPARATION AND SEEDING RECOMMENDATIONS, OMITTING LIME AND FERTILIZER IN THE ABSENCE OF SOIL TEST RESULTS.
- IF THE SEASON PREVENTS RE-SOWING, MULCH IS AN EFFECTIVE TEMPORARY COVER.

INDIANGRASS

 FINAL STABILIZATION OF THE SITE REQUIRES A 70 PERCENT OVERALL COVERAGE RATE. THIS DOES NOT MEAN THAT 30 PERCENT OF THE SITE CAN REMAIN BARE. THE COVERAGE IS DEFINED AS LOOKING AT A SQUARE YARD OF COVERAGE, IN WHICH 70 PERCENT OF THAT SQUARE YARD IS COVERED WITH

PERMANENT SEEDING - COASTAL			
SPECIES	RATES PER ACRE	PLANTING DATES	
SANDY, DROUGHTY SITES			
BROWNTOP MILLET BAHIAGRASS	10 LBS. 40 LBS.	MAR. 10 - SEPT. 1	
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS. 30 LBS. 40 LBS.	MAR. 10 - SEPT. 1	
BROWNTOP MILLET ATLANTIC COASTAL PANICGRASS	10 LBS. 15 LBS. PLS	MAR. 10 - JUN. 25	
BROWNTOP MILLET SWITCHGRASS (ALAMO) LITTLE BLUESTEM SERICEA LESPEDEZA	10 LBS. 8 LBS. PLS 4 LBS. 20 LBS.	MAR. 10 - JUN. 25	
BROWNTOP MILLET WEEPING LOVEGRASS	10 LBS. 8 LBS.	MAR. 10 - JUN. 25	
WELL DRAINED, CLAYEY/LOAMEY S	ITES	•	
BROWNTOP MILLET BAHIAGRASS	10 LBS. 40 LBS.	MAR. 15 - SEPT. 1	
RYE, GRAIN BAHIAGRASS CLOVER, CRIMSON (ANNUAL)	10 LBS. 40 LBS. 5 LBS.	SEPT. 1 - NOV. 10	
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS. 30 LBS. 40 LBS.	MAR. 15 - SEPT. 1	
BROWNTOP MILLET BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS. 10 LBS. 40 LBS.	MAR. 15 - SEPT. 1	
BROWNTOP MILLET BERMUDA, COMMON KOBE LESPEDEZA (ANNUAL)	10 LBS. 12 LBS. 10 LBS.	MAR. 15 - SEPT. 1	
BROWNTOP MILLET BAHIAGRASS BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS. 20 LBS. 6 LBS. 40 LBS.	MAR. 15 - SEPT. 1	
BROWNTOP MILLET SWITCHGRASS LITTLE BLUESTEM	10 LBS. 8 LBS. PLS 3 LBS. PLS	MAR. 15 - SEPT. 1	

3 LBS. PLS



WATER LINES ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DETAILS ALL MATERIALS AND PRODUCTS THAT CONTACT POTABLE WATER MUST BE THIRD PARTY CERTIFIED AS MEETING THE SPECIFICATIONS OF ANSI/NSF STANDARD 61. ALL PIPING MATERIALS AND INSTALLATION SHALL MEET THE APPROVAL OF THE LOCAL AUTHORITY AND THE STATE HEALTH AUTHORITY. ALL DUCTILE IRON PIPE (DIP) SHALL BE PRESSURE CLASS "350" CONFORMING TO AWWA C151. ALL FITTINGS SHALL BE EITHER MECHANICAL OR PUSH-ON JOINT 2. AND SHALL COMPLY WITH AWWA C110. ALL POLY-VINYL CHLORIDE WATER LINES 4" AND SMALLER SHALL BE CLASS 200 -SDR21 CONFORMING TO ASTM D-2241 AND ASTM D-1784. WATER LINES 6" AND LARGER SHALL BE 235, DR18, JM EAGLE OR APPROVED EQUAL CONFORMING TO AWWA C-900 AND N.S.F. APPROVED. A DETECTABLE TAPE WITH THE WORDS "CAUTION: WATERLINE BURIED BELOW" SHALL BE INSTALLED 6" TO 12" ABOVE THE PIPE. SEAMLESS COPPER TUBING, 3" AND SMALLER SHALL BE TYPE "K" ROLL FORM TO COMPLY WITH ASTM B-88, LATEST REVISION AND SHALL BE INSTALLED WITH WROUGHT COPPER (95-5 TIN ANTIMONY SOLDER JOINT) FITTINGS IN ACCORDANCE WITH ASTM B16.22. ALL WATER LINES SHALL BE PRESSURE TESTED TO 1.5 TIMES THE MAXIMUM WORKING PRESSURE 150 PSIG (MINIMUM) CLEANED. STERILIZED, AND ELUSHED UNTIL TWO SUCCESSIVE SATISFACTORY WATER BACTERIOLOGICAL SAMPLES TAKEN AT LEAST 24 HOURS APART ARE OBTAINED. THE SAMPLES SHALL BE ANALYZED BY A STATE APPROVED LABORATORY. THE RESULTS SHALL INCLUDE BOTH COLIFORM AND NON-COLIFORM GROWTH. ALL BACKFLOW PREVENTION DEVICES SHALL BE INSPECTED AND CERTIFIED BY A LICENSED INSPECTOR. ALL FIRE HYDRANTS SHALL COMPLY WITH AWWA C502 AND MEET THE APPROVAL OF THE LOCAL WATER AUTHORITY. ALL GATE VALVES SHALL COMPLY WITH AWWA C500, 175 PSI WORKING PRESSURE AND MEET THE APPROVAL OF THE LOCAL WATER AUTHORITY. A MINIMUM OF A DOUBLE CHECK VALVE (BACKELOW PREVENTOR) ASSEMBLY SHALL BE INSTALLED ON ALL LINES DEDICATED FOR FIRE LINE SPRINKLER SYSTEMS IN A MANNER ACCEPTABLE TO THE LOCAL AUTHORITY. A BACKFLOW PREVENTION DEVICE MEETING STATE AND LOCAL REQUIREMENTS SHALL BE INSTALLED ON ALL DOMESTIC WATER LINES. ALL PIPE MATERIAL, SOLDER AND FLUX SHALL BE LEAD FREE (LESS THAN 0.2% LEAD IN SOLDER AND FLUX AND LESS THAN 8.0% LEAD IN PIPES AND FITTINGS) LUBRICANTS WHICH WILL SUPPORT MICROBIOLOGICAL GROWTH SHALL NOT BE USED FOR SLIP ON JOINTS, VEGETABLE SHORTENING SHALL NOT BE USED TO LUBRICATE JOINTS. NATURAL RUBBER OR OTHER MATERIAL WHICH WILL SUPPORT MICROBIOLOGICAL GROWTH MAY NOT BE USED FOR ANY GASKETS. O-RINGS, AND OTHER PRODUCTS USED FOR JOINTING PIPES, SETTING METERS OR VALVES, OR OTHER APPURTENANCES WHICH WILL EXPOSE THE MATERIAL ALL WATER LINES SHALL BE INSPECTED BY THE UTILITY COMPANY AND THE ENGINEER AND CERTIFIED TO THE STATE HEALTH AUTHORITY BEFORE ACCEPTANCE AND A PERMIT TO OPERATE WILL BE ISSUED AS REQUIRED. ALL WATER LINE SHALL HAVE A MINIMUM 3'-0" COVER. WATER LINE SHALL BE INSTALLED AFTER SANITARY SEWER LINES ARE COMPLETE WHERE THEY CROSS. CONTRACTOR SHALL MAINTAIN A 10' HORIZONTAL AND 2' VERTICAL CLEARANCE OF WATER AND SEWER LINES. ALL WATER LINES SHALL CROSS ABOVE SEWER LINES. CONTRACTOR SHALL INCLUDE COST OF METER AND TAP FEES IN PROPOSAL. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL EXCAVATION, COORDINATION AND SCHEDULING OF TAPS. THE CONTRACTOR WILL INSTALL WATER METER AND BOX AS FURNISHED BY THE LOCAL AUTHORITY AND INSTALL SERVICES LINES TO WITHIN 5' OF BUILDING AS INDICATED ON THE DRAWINGS THE CONTRACTOR WILL FOLLOW PROCEDURES AS DIRECTED TO FLUSH, STERILIZE AND FURNISH WATER SAMPLES FOR TESTING AS PER AWWA 651 UNTIL APPROVAL IS GRANTED BY THE STATE HEALTH AUTHORITY AND THE LOCAL WATER SYSTEM. A PERMIT TO OPERATE WILL NOT BE ISSUED UNTIL THE COMPLETED WATER SYSTEM MEETS ALL REQUIRED STATE AND LOCAL APPROVALS. THE CONTRACTOR IS RESPONSIBLE TO FURNISH THE OWNER WITH A COMPLETED AND APPROVED WATER SYSTEM ALONG WITH A SET OF APPROVED AS-BUILT DRAWINGS IN A FORMAT ACCEPTABLE TO THE LOCAL UTILITY THE CONTRACTOR SHALL NOT PERFORM ANY WORK UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE LOCAL WATER AUTHORITY AND DETERMINING THE REQUIREMENTS AND PROCEDURES FOR OBTAINING THE AUTHORITY'S APPROVAL OF THE WATER SYSTEM PRIOR TO SUBMITTING A PRICE TO THE OWNER. THE DETAILS AND SPECIFICATIONS OF THE LOCAL WATER AUTHORITY SHALL GOVERN SANITARY SEWER LINES ALL CONSTRUCTION SHALL BE PER THE LOCAL SEWER UTILITY'S REQUIREMENTS AND SPECIFICATIONS. THE PLUMBER IS RESPONSIBLE FOR SETTING INVERT ELEVATIONS, PIPE SLOPES, ETC MEETING ALL LOCAL AND STATE CODES. EACH JOINT SHALL BE CLEARLY AND LEGIBLY MARKED WITH THE MANUFACTURER'S NAME OR IDENTIFYING SYMBOL WITH THE LETTERS E.S. APPEARING ON THE EXTERIOR OF THE PIPE NEAR THE SOCKET. A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER ALL PVC PIPE LINES. WATER LINES SHALL BE INSTALLED AFTER ALL GRAVITY SEWER LINES ARE INSTALLED. THIS CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTACT WATER, TELEPHONE, POWER AND GAS COMPANY BEFORE EXCAVATION IS BEGUN. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY WORK NECESSARY TO STAKE SEWER LINES. THE CENTERLINE AND ALL CLEANOUT LOCATIONS SHALL BE STAKED IN THE FIELD. THE OWNER'S SURVEYOR WILL SET ALL LOT CORNERS. THE CONTRACTOR SHALL PROTECT ALL PROPERTY MARKERS. ALL UTILITY TRENCHES SHALL BE THOROUGHLY COMPACTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES. FROM HIGHWAY AND NOT ALLOW DUST TO BECOME A NUISANCE OR SAFETY HAZARD. BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. ALL SANITARY SEWER WORK SHALL COMPLY WITH LOCAL CODES AN ORDINANCES. THE ENGINEER, THE LOCAL AUTHORITY AND THE STATE HEALTH AUTHORITY MUST INSPECT ALL SEWER WORK AS REQUIRED BEFORE BEING PUT IN SERVICE. ALL WORK SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND INSTRUCTIONS GIVEN BY THE OWNER'S REPRESENTATIVE, THE STATE HEALTH AUTHORITY AND THE LOCAL GOVERNING AUTHORITY. CONTRACTOR TO ASSUME CLASS "B" BEDDING FOR SDR-26 PVC IN HIS BID PROPOSAL. CLASS "A" BEDDING WILL BE PAID FOR AS AN "EXTRA" SHOULD FIELD

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO EXISTING ROADS USED BY HIS OPERATION. THE CONTRACTOR SHALL REMOVE MUD AND DEBRIS ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED TO LINES AND GRADES SHOWN AS DETAILED ON THE DRAWING. THE CONTRACTOR SHALL PROVIDE STANDARD MANHOLES OR CLEAN-OUTS AT ALL BENDS AND CHANGES IN GRADE IN SEWER LINES AND CONNECTIONS TO EXISTING SEWER LINES. PIPE

ALL SEWER LINES IN RELATION TO WATER LINES MUST CONFORM TO "TEN STATES STANDARDS", SECTION 38.3, 1990 EDITION, AT A MINIMUM. MAINTAIN A MINIMUM OF 10' HORIZONTAL AND 2' VERTICAL SEPARATION BETWEEN THE WATER AND SANITARY SEWER LINES. WATER LINES SHALL CROSS OVER SANITARY

(8640) 0410-704 (0636), OR 0412-6250 (2636), OR AS MANUFACTURED BY FERNCO JOINT SEALER CO., FERNDALE, MICHIGAN, OR APPROVED EQUAL.

SANITARY SEWER SERVICES SHALL BE INSTALLED PER DETAILS LOCATION OF SERVICE LINES SHALL BE MEASURED FROM MANHOLES AND FURNISHED WITH "AS-BUILT" DRAWINGS TO THE ENGINEER. EACH BUILDING SHALL HAVE (1) 6" OR 4" SERVICE LINE, AS SPECIFIED FOR ON THE DRAWINGS, BROUGHT TO WITHIN 5' OF THE BUILDING. SERVICE LINES SHALL BE INSTALLED AS REQUIRED ON PLANS. MINIMUM SLOPE AND CLEANOUT SPACING SHALL 1.04% FOR 6" AND 2.08%

ALL WATER AND SEWER LINE BACKFILL SHALL BE COMPACTED TO 95% STD. PROCTOR BY CONTRACTOR. THE OWNER SHALL TEST COMPACTION. THE OWNER SHALL PAY ALL SEWER TAP FEES TO THE LOCAL GOVERNING AUTHORITY. THE CONTRACTOR SHALL COORDINATE WITH LOCAL AUTHORITY ON

THIS CONTRACTOR SHALL SHORE TRENCH EXCAVATION AND USE PIPE BOX TO COMPLY WITH ALL OSHA SAFETY REGULATIONS. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO PROVIDE JOB SITE SAFETY AND COMPLY WITH ALL SAFETY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR HIS MEANS

POLYVINYL CHLORIDE (PVC) 8" AND LARGER SHALL CONFORM TO ASTM D-3034, SDR-26, INSTALLED IN ACCORDANCE WITH ASTM D-2321. ELASTOMERIC JOINTS SHALL COMPLY WITH ASTM D-3212, SDR-26 SHALL BE INSTALLED IN CLASS "B" BEDDING AS DETAILED ON THE DRAWINGS, PVC SEWER 6" AND SMALLER SHALL

DUCTILE IRON SHALL BE PRESSURE CLASS "350", CONFORMING TO AWWA C151, FURNISHED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS. JOINTS IN DIP AT THE CREEK CROSSING SHALL BE RESTRAINED FROM MOVEMENT (LOK-TIGHT OR APPROVED EQUAL).

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE LOCAL SEWER AUTHORITY AND DETERMINING THE REQUIREMENTS AND PROCEDURES FOR OBTAINING THE AUTHORITY'S APPROVAL OF THE SEWER SYSTEM PRIOR TO SUBMITTING A PRICE TO THE OWNER. THE DETAILS AND SPECIFICATIONS OF THE LOCAL SEWER AUTHORITY SHALL GOVERN.

MANHOLE FRAME AND COVER SHALL BE MF-11 AND MC-18 RESPECTIVELY AS MANUFACTURED BY SUMTER MACHINERY COMPANY OR SEWER AUTHORITY APPROVED EQUAL. FRAME SHALL WEIGH 208 POUNDS AND COVER SHALL WEIGH 120 POUNDS. ALL SURFACES OF FRAME AND COVER SHALL BE BITUMINOUS

8. STEPS SHALL BE COPOLYMER POLYPROPYLENE PLASTIC, REINFORCED WITH 1/2" GRADE 60 REINFORCEMENT OR SEWER DISTRICT APPROVED (IF ALLOWED

ALL SANITARY SEWER LINES SHALL BE AIR TESTED AND MUST CONFORM TO ASTM C828, LATEST REVISION.

ALL FLEXIBLE AND SEMI-RIGID PIPE SHALL BE TESTED BY PULLING A MANDREL, GO/NO GO, DEVICE BY HAND NO EARLIER THAN 30 DAYS AFTER THE TRENCHING HAS BEEN COMPLETELY BACKFILLED. THE MAXIMUM ALLOWABLE DEFLECTION SHALL NOT EXCEED 5 PERCENT OF NOMINAL INSIDE DIAMETER.

6. CONTRACTOR SHALL NOT TIE NEW SEWER LINE TO EXISTING MANHOLE UNTIL ALL CONSTRUCTION IS APPROVED, TESTED AND ACCEPTED BY THE LOCAL

A PRE-CONSTRUCTION CONFERENCE WITH THE CONTRACTOR, SEWER AUTHORITY, STATE HEALTH AUTHORITY, AND THE ENGINEER WILL BE HELD PRIOR TO SEWER LINE CONSTRUCTION. CONTRACTOR SHALL SET UP PRE-CONSTRUCTION CONFERENCE WITH CITY.

THE CONTRACTOR SHALL GRASS ALL RIGHT-OF-WAY IN ACCORDANCE WITH SPECIFICATIONS FOR GRASSING. 9. ALL SEWER LINE WORK SHALL BE "APPROVED" BY THE STATE HEALTH AND LOCAL AUTHORITY, AND "APPROVED" AS-BUILT DRAWINGS SHALL BE FURNISH TO THE OWNER BEFORE CONTRACTOR RECEIVES FINAL PAYMENT.

THE CONTRACTOR SHALL NOT PERFORM ANY WORK UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS.

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE

INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.

PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.

ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE

6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C REG.

8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.

10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT

ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR

. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY

EMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL

14 MINIMIZE THE DISCHARGE OF POLLUTANTS FROM FOLIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS, WASH WATERS. MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE;

15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).

16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED

WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;

WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;

FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND

 SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING. 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS, AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE

18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE

19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

1. ALL RIP RAP FOR CHECK DAMS, EMERGENCY SPILLWAYS, AND OUTLET STABILIZATION PROTECTION TO BE UNDERLAIN WITH FILTER FABRIC. ALL RIP-RAP SHALL BE DUMPED RIP-RAP IN ACCORDANCE WITH THE SOUTH CAROLINA STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION. PIECES SHALL BE NO LARGER THAN 24 INCHES.

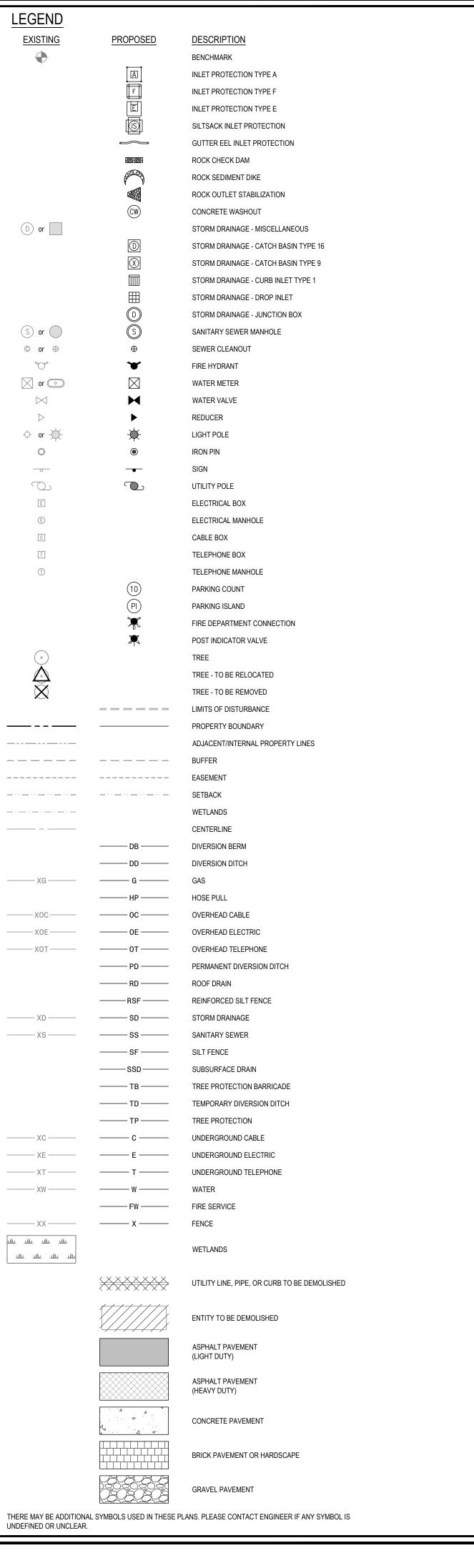
ASPHALT DESIGN SHALL BE DONE BY GEOTECHICAL ENGINEER. CONTRACTOR TO COORDINATE WITH OWNER FOR ASPHALT SPECIFICATION.

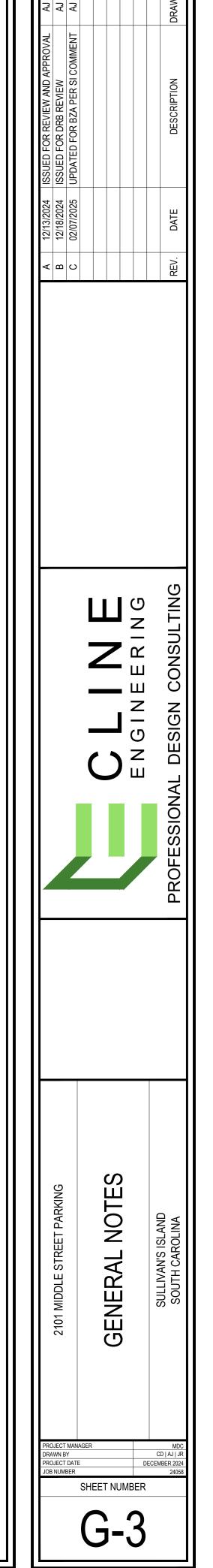
THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS HIS REQUIRED FOR BORROW AREA (IF NEEDED). 4. ALL EROSION CONTROL FOR STOCKPILING OF DIRT SHALL COMPLY WITH SCDHEC STANDARDS.

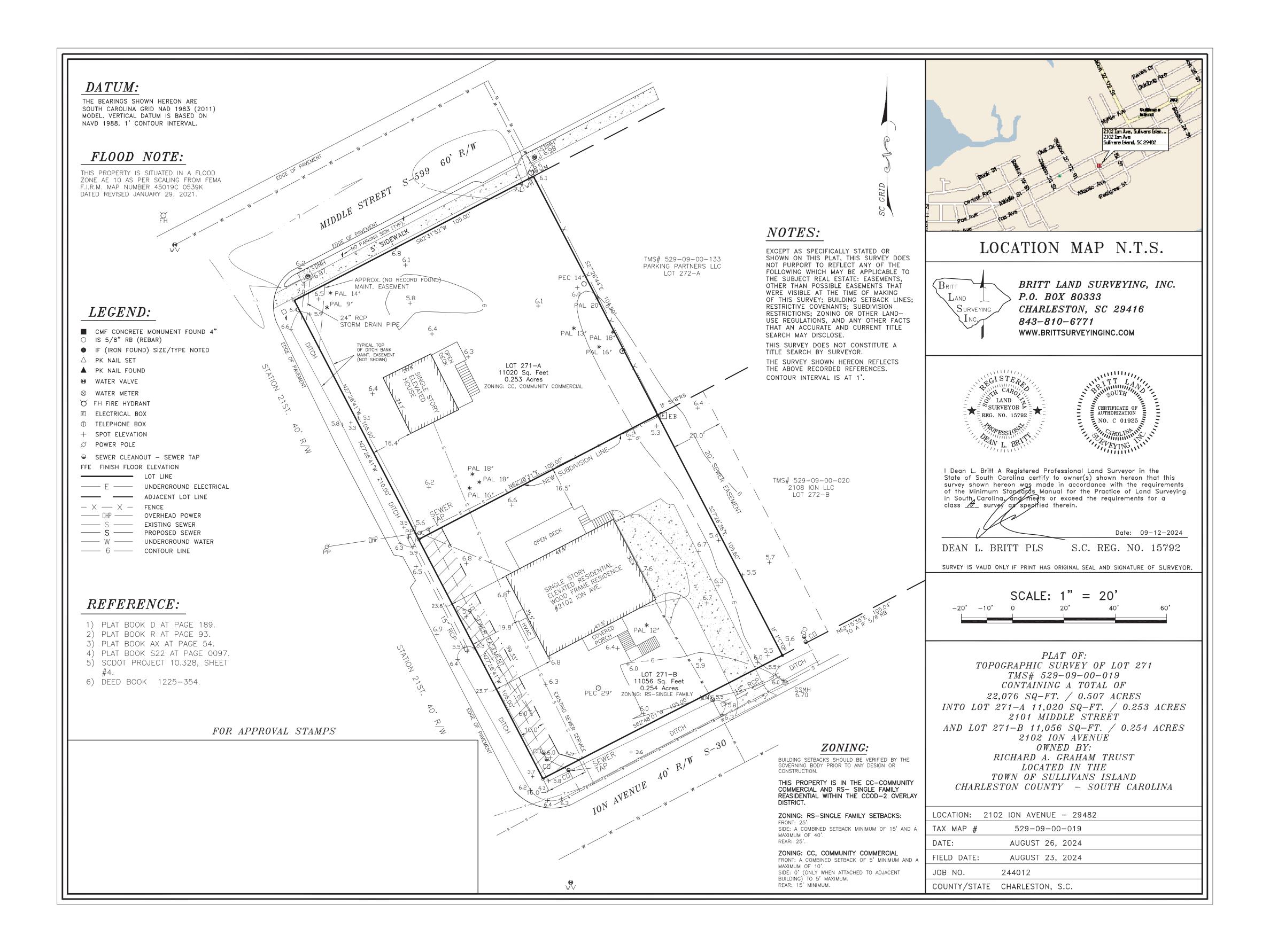
5. SEDIMENT MUST BE REMOVED FROM SEDIMENT CONTROL DIKE WHEN SEDIMENT REACHES 50% OF THE SEDIMENT STORAGE VOLUME OR THE TOP OF THE

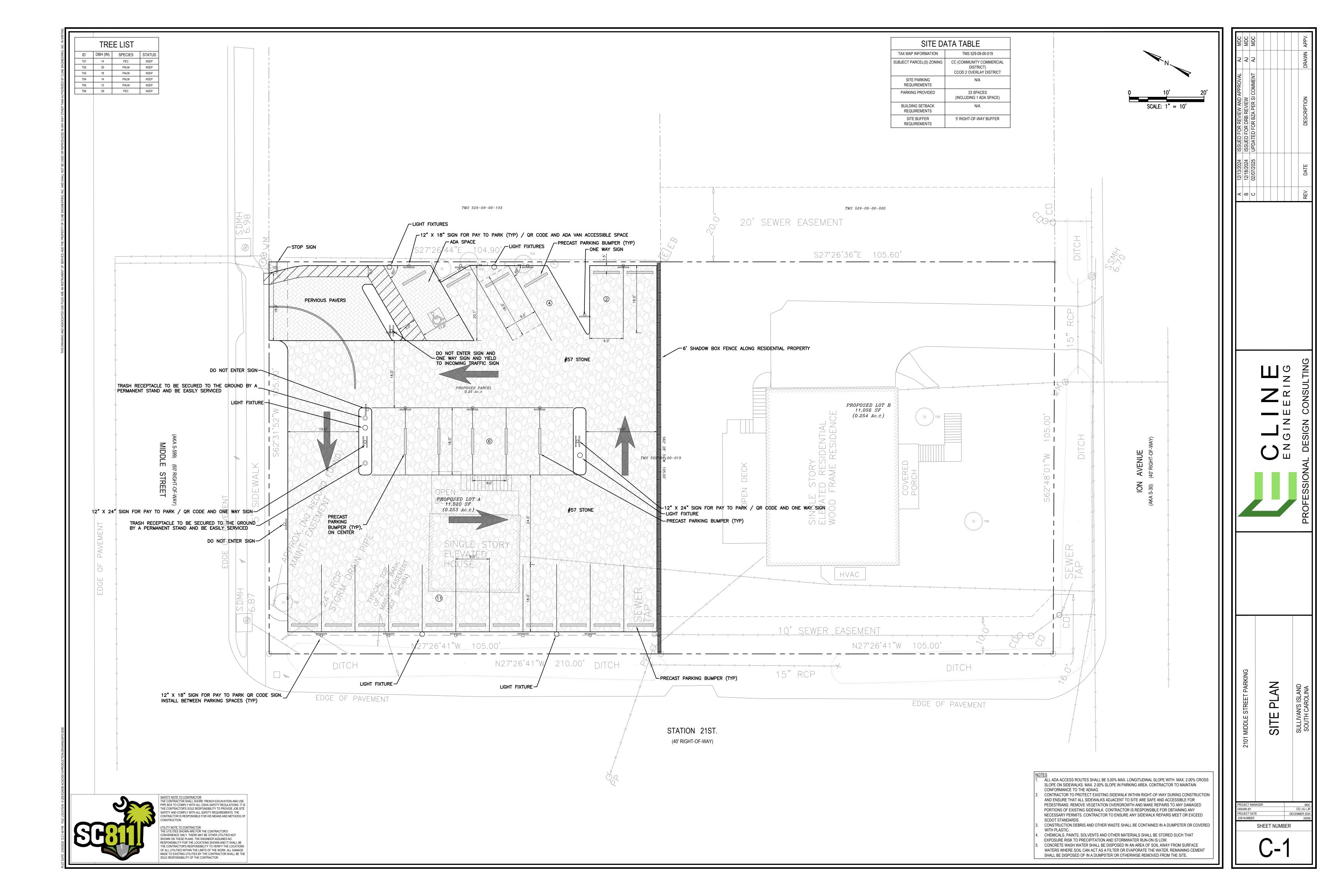
CLEAN-OUT STAKE, WHICHEVER IS LESS. 6. ALL SLOPES DRAINING OFF-SITE, (NOT THROUGH POND) TO BE GRASSED AND STABILIZED WITH EROSION CONTROL BLANKETS.

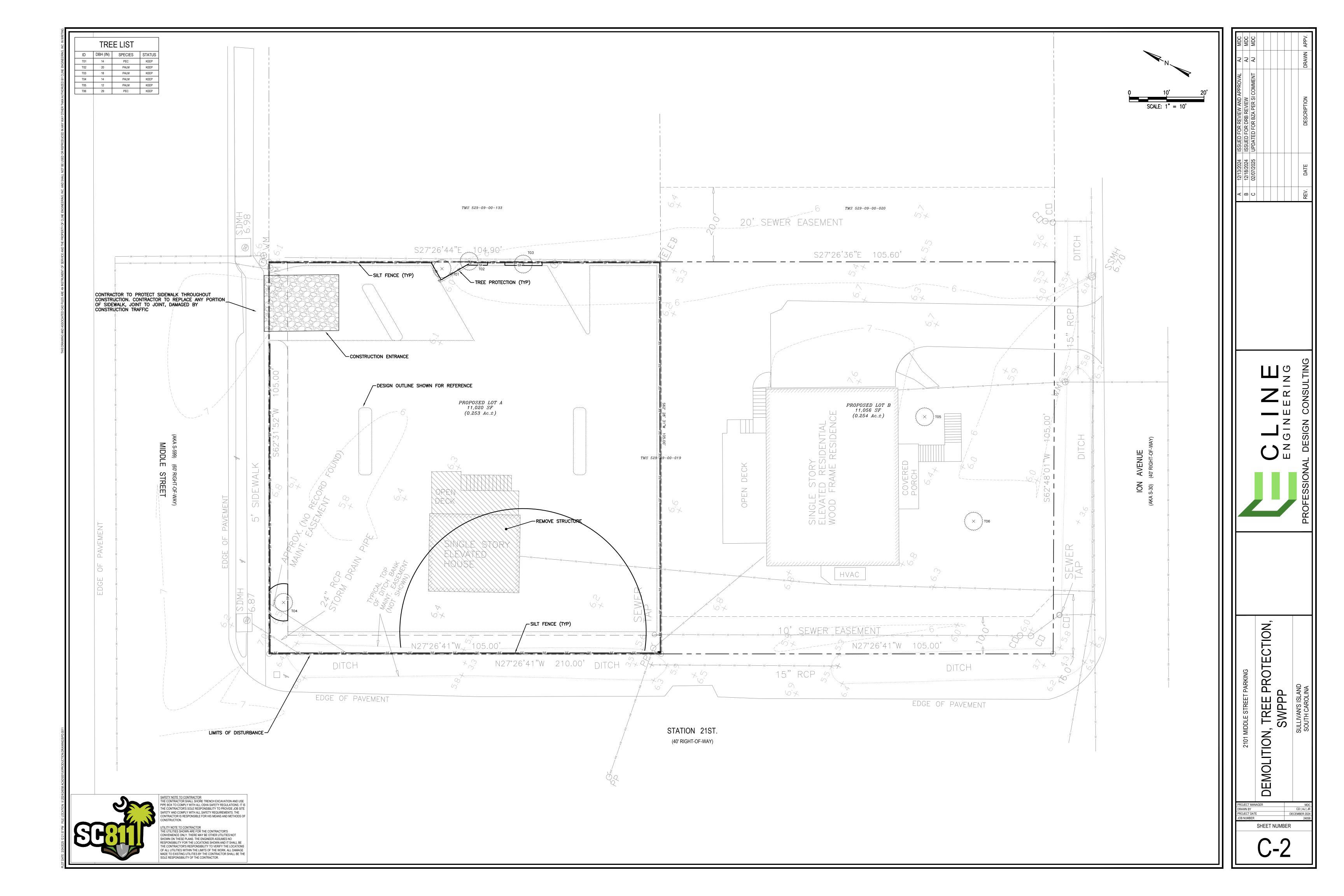
ABBREVIATIONS MORE OR LESS DIAMETER AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS AASHTO ACRE AMERICANS WITH DISABILITY ACT ANSI AMERICAN NATIONAL STANDARDS INSTITUTE ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS AMERICAN WATER WORKS ASSOCIATION BENCHMARK EROSION CONTROL BEST MANAGEMENT PRACTICES BOW BOTTOM OF WALL C&G **CURB AND GUTTER** CATCH BASIN CIP CAST IN PLACE CENTERLINE CUBIC YARD DIAMETER BREAST HEIGHT DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL DUCTILE IRON PIPE **EXAMPLE GIVEN ELEVATION** ETC ETCETERA FIRE DEPARTMENT CONNECTION FINISHED FLOOR ELEVATION FEDERAL HIGHWAY ADMINISTRATION FLOOD INSURANCE RATE MAP FINISHED PAD ELEVATION FEET (LENGTH) HORIZONTAL HIGH-DENSITY POLYETHYLENE HDPE HIGH POINT INTERNATIONAL BUILDING CODE INVERT ELEVATION INVERT POUNDS LINEAR FEET (LENGTH) LOW POINT MAXIMUN MINIMUM MPCE MATCH PRE-CONSTRUCTION ELEVATION STORMWATER DISCHARGE FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES MUTCD NORTH NORTHEAST NUMBER NATIONAL SANITATION FOUNDATION NOT TO SCALE NORTHWEST ON CENTER OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PRECAST POLYVINYLCHLORIDE RADIUS REINFORCED CONCRETE PIPE RIGHT OF WAY POUNDS PER SQUARE FOOT (PRESSURE) POUNDS PER SQUARE INCH (PRESSURE) PSIG POUNDS PER SQUARE INCH GUAGE SOUTH SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL SCDHEC SCDOT SOUTH CAROLINA DEPARTMENT OF TRANSPORATION SOUTHEAST SQUARE FEET STA STATION STANDARD SOUTHWEST TOP OF CURE TOP OF PAVEMENT TOP OF WALL **TYPICAL** VITRIFIED CLAY PIPE WEST WELDED WIRE FABRIC THERE MAY BE ADDITIONAL ABBREVIATIONS USED IN THESE PLANS. PLEASE CONTACT ENGINEER IF ANY ABBREVIATION IS UNDEFINED OR UNCLEAR

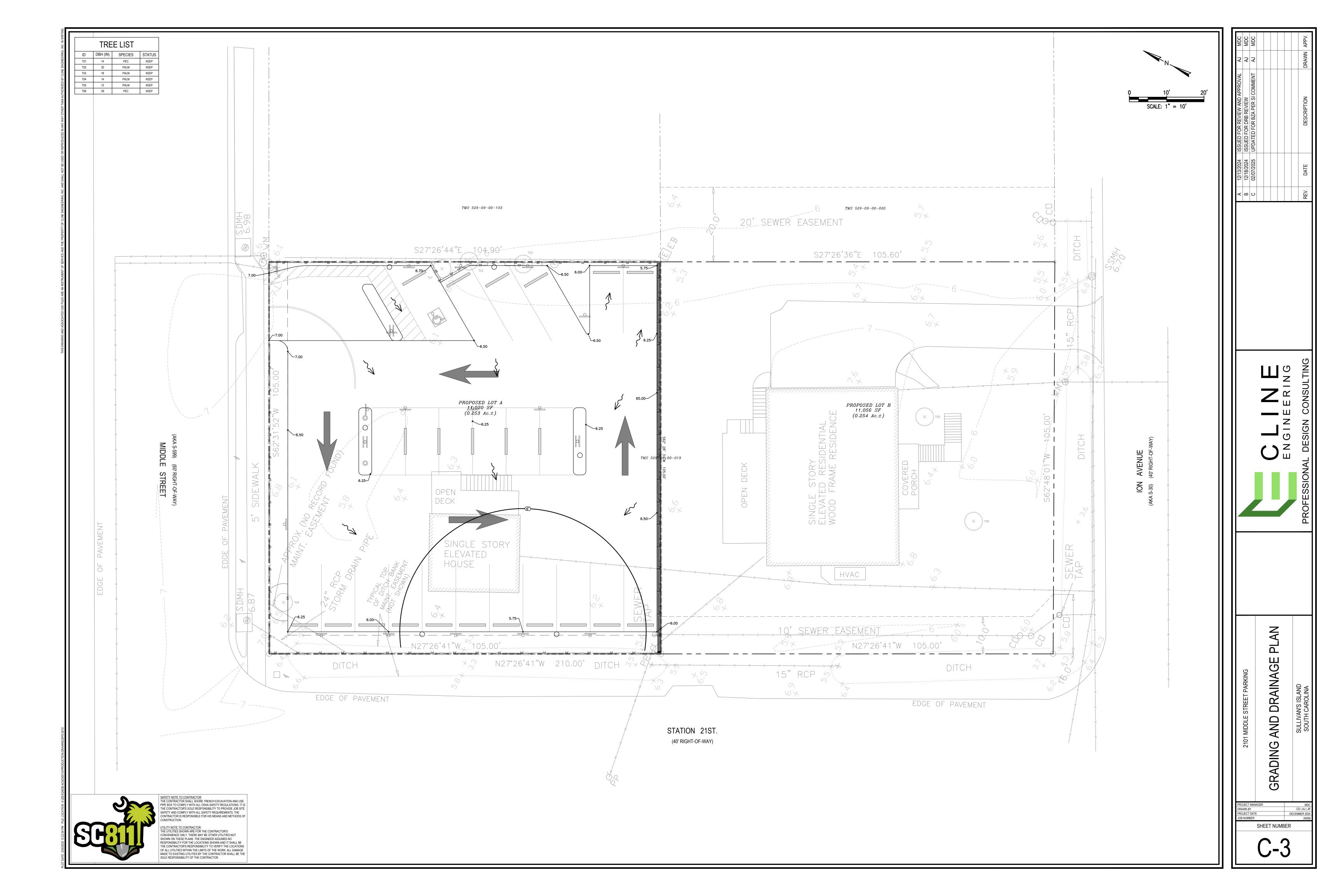


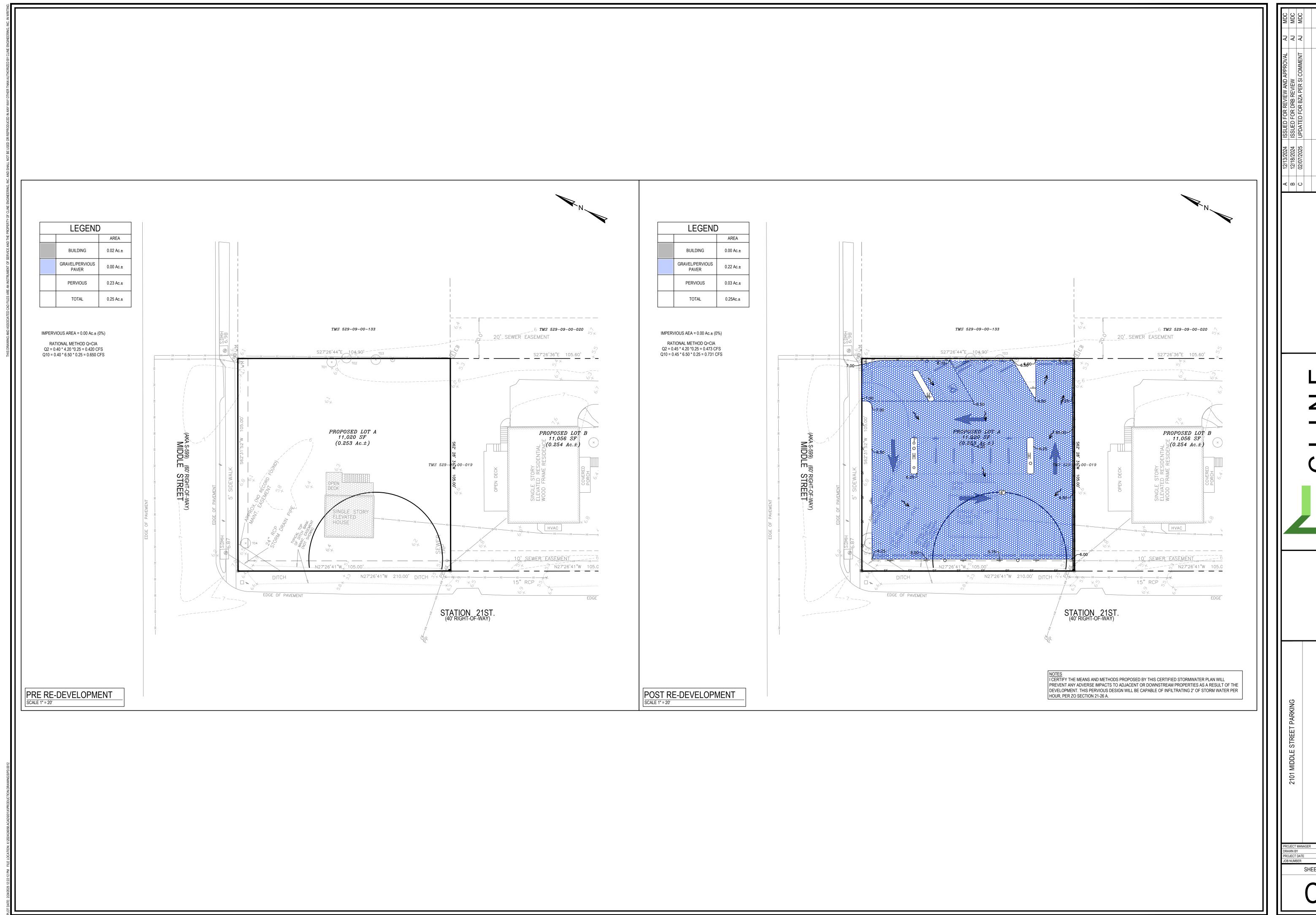


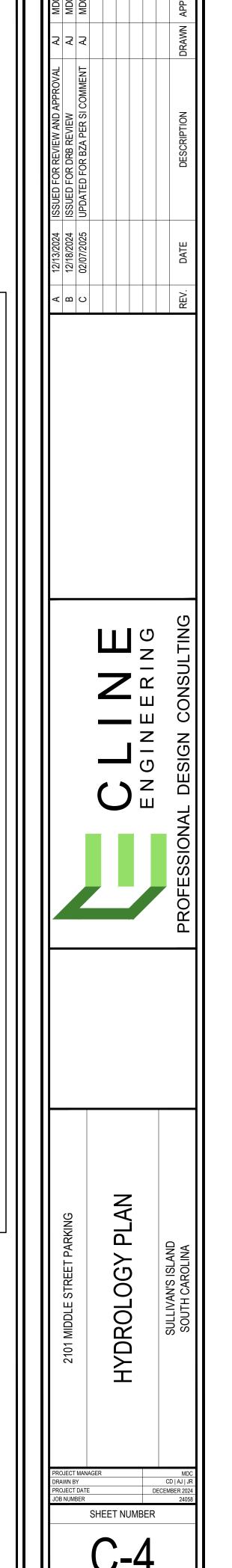


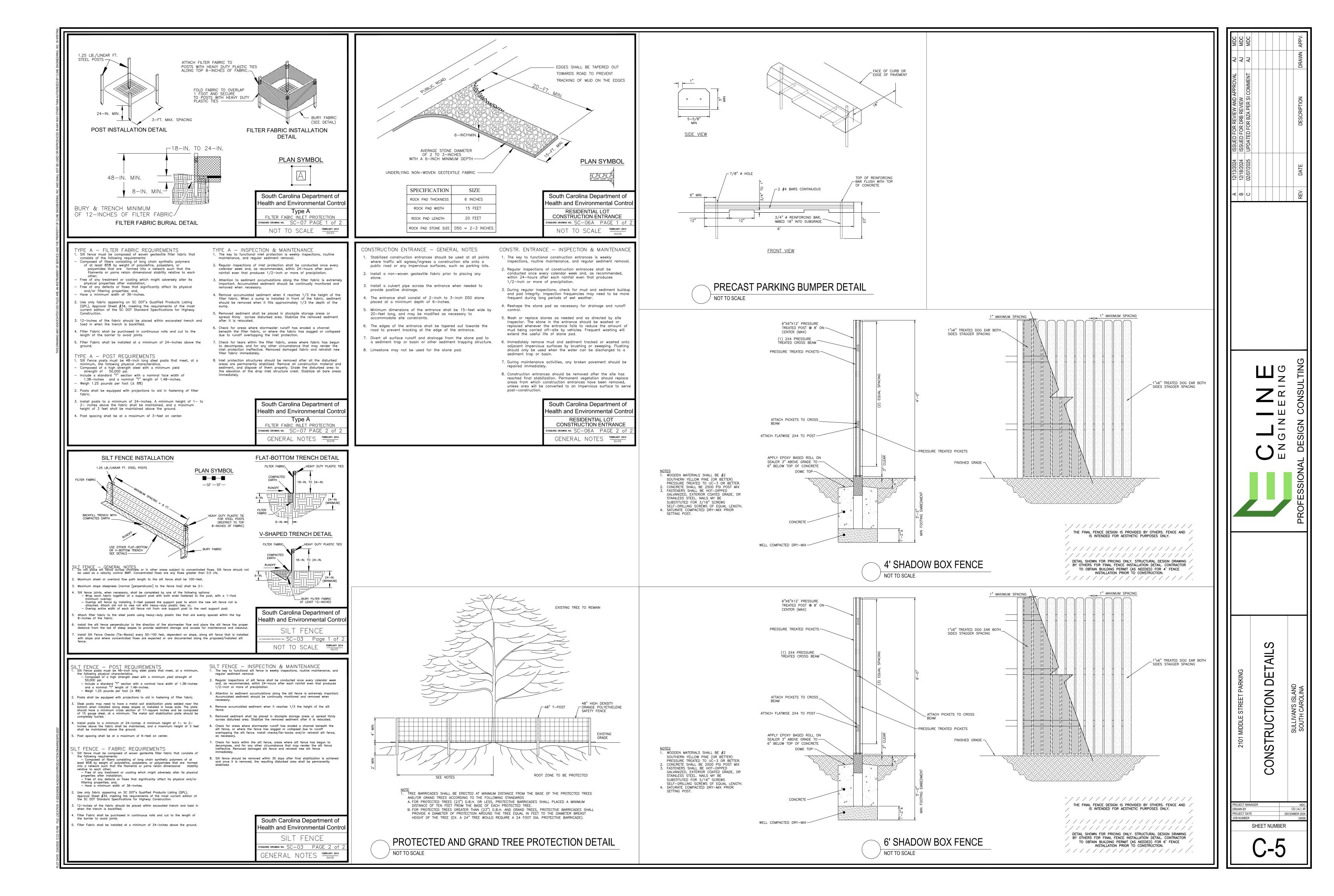


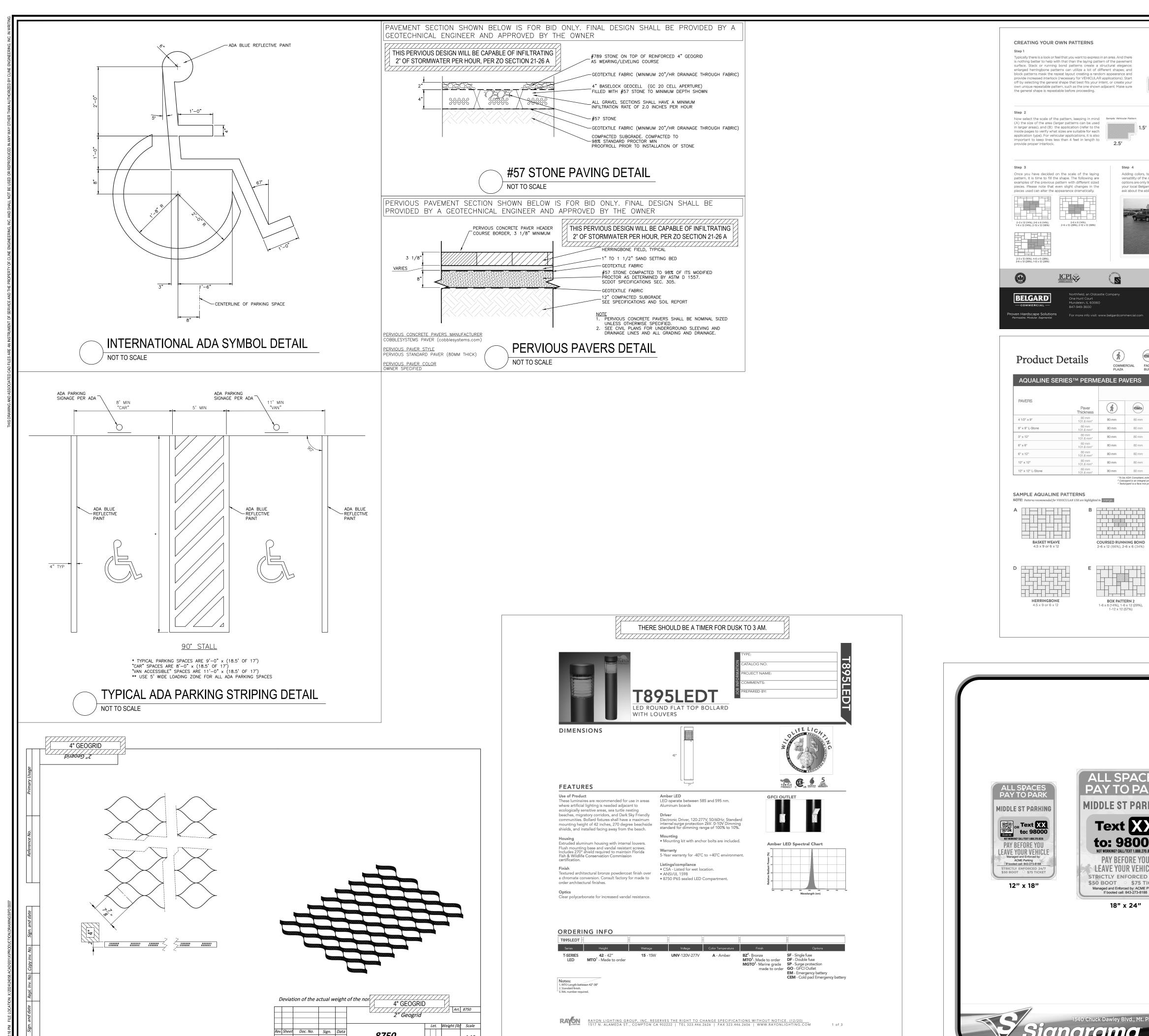








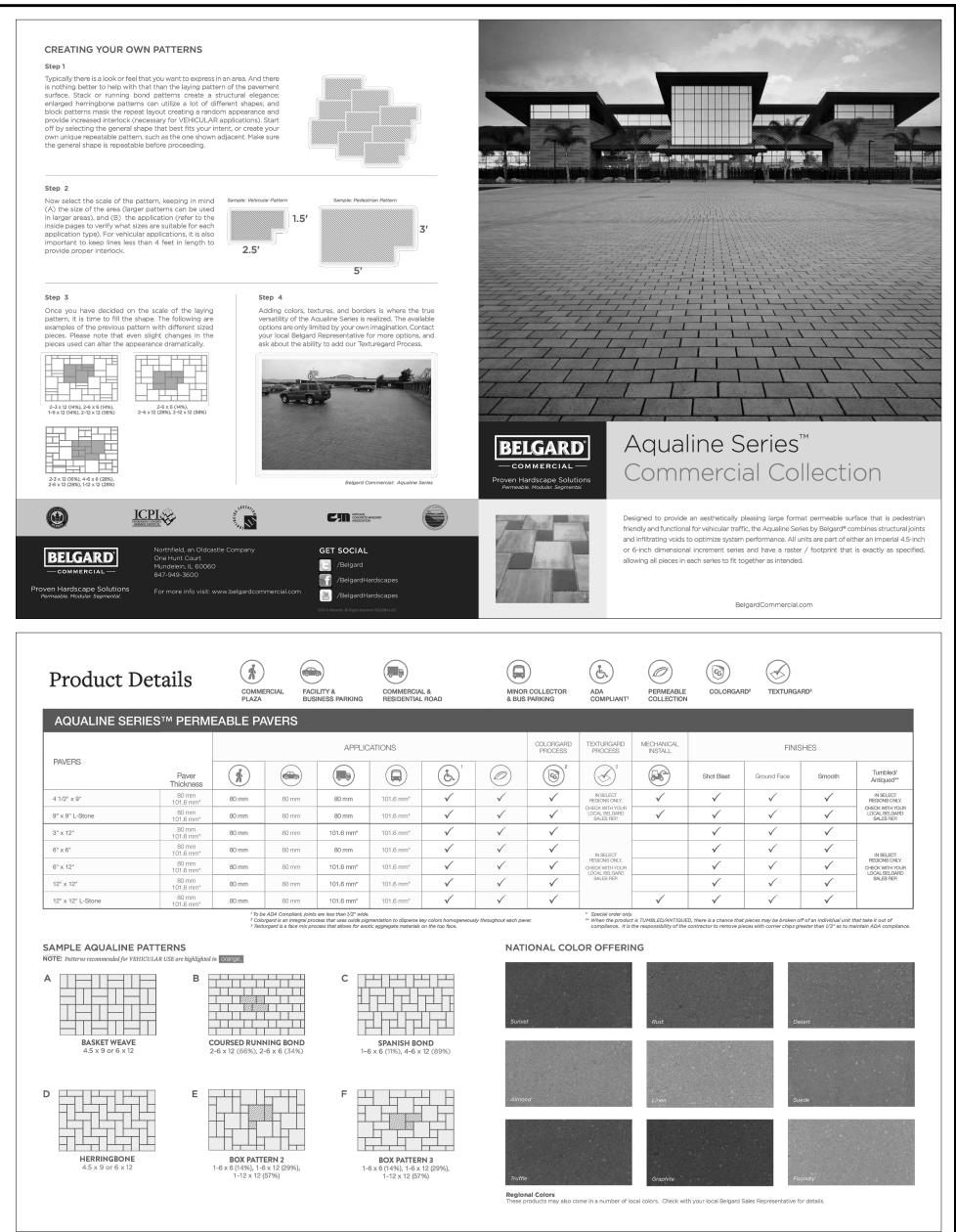


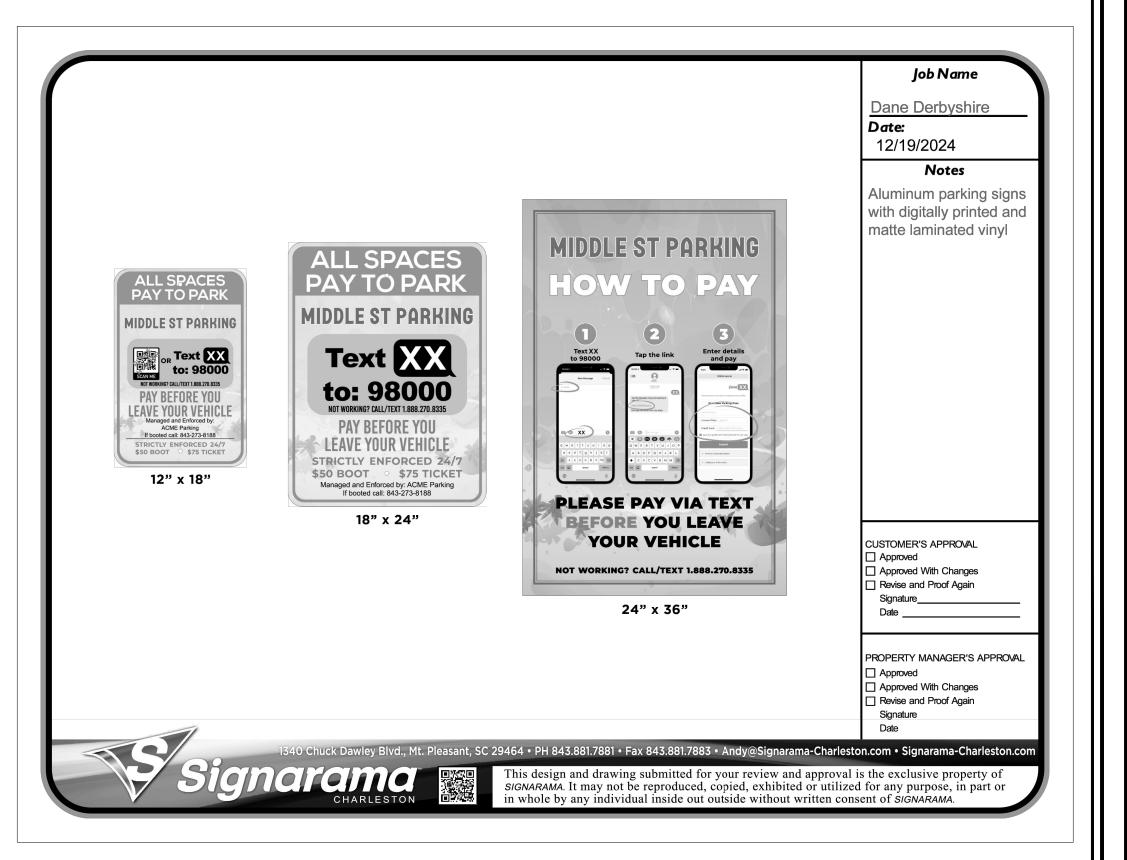


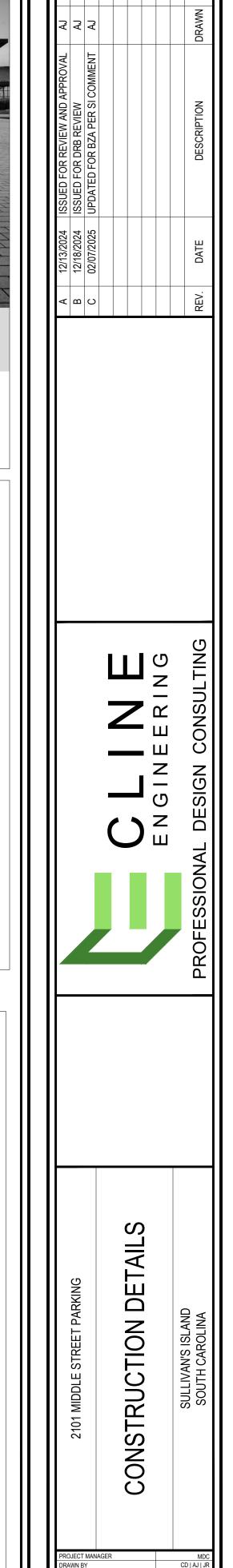
Load Class A

LIGHT FIXTURE DETAIL

NOT TO SCALE

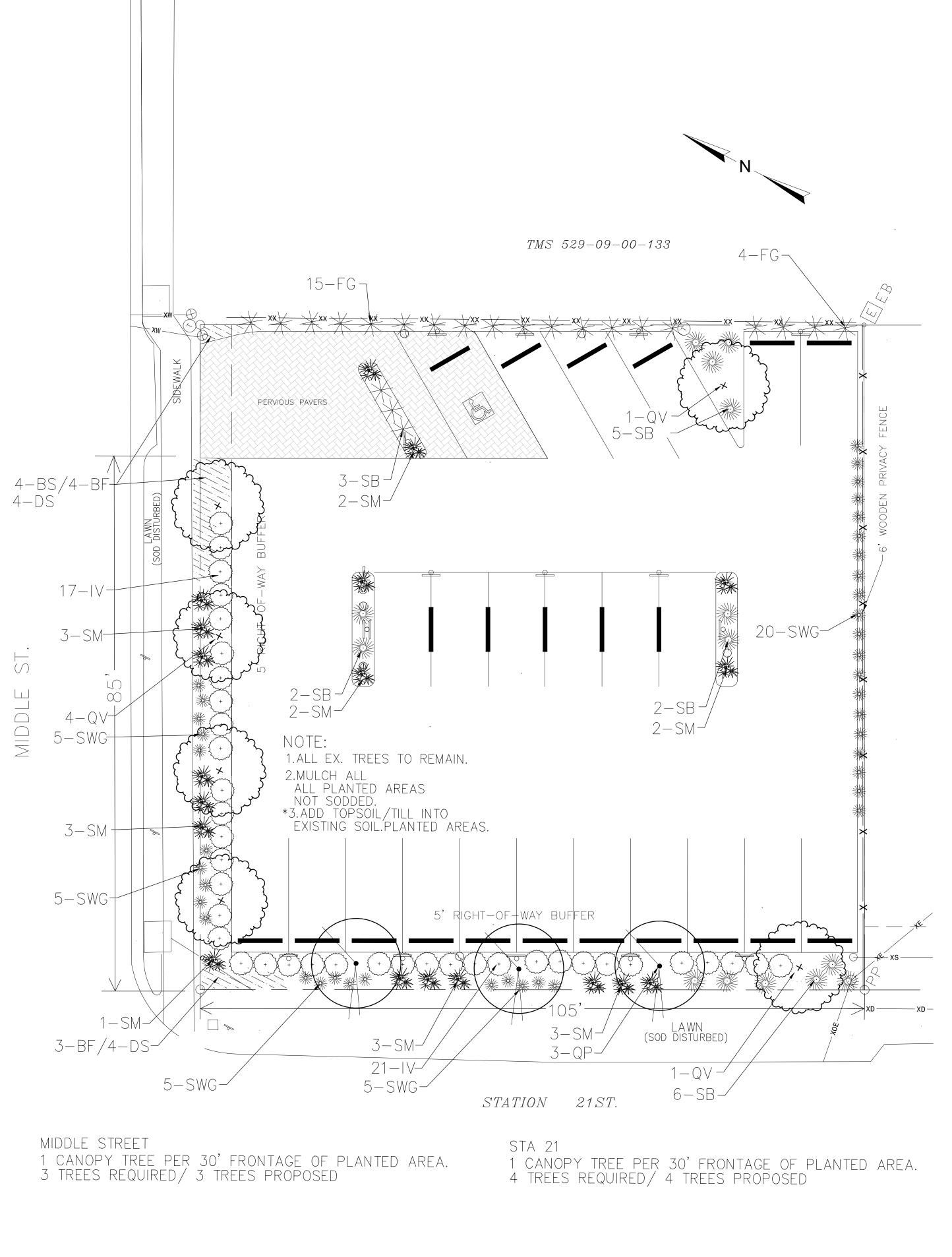


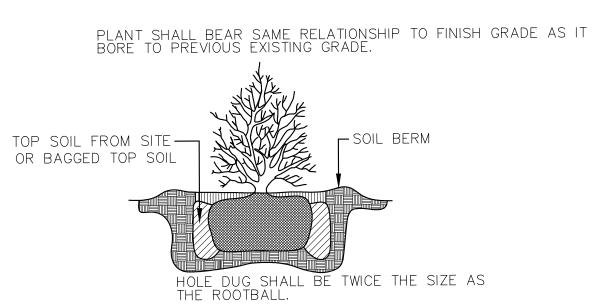




DECEMBER 20

SHEET NUMBER

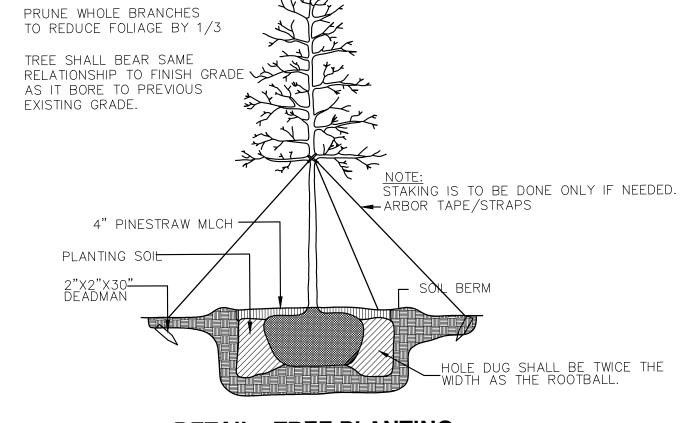




DETAIL - SHRUB PLANTING NO SCALE

LAWN(BERMUDA SOD) MULCH — 4" PINESTRAW MULCH

SPREAD EVENLY 1"-2" TOPSOIL AT ALL NEWLY PLANTED AREAS IN CONSTRUCTION AREAS.



NEVER CUT TERMINAL BUD -

DETAIL - TREE PLANTING		
NO SCALE		

CODE	BOTANICAL NAME	COMMON NAME	HEIGHT/SIZE	QUANTITY
	TREES			
QV	QUERCUS VIRGINIANA	LIVE OAK	3" CAL./5' CLI	EAR TRUNK/8' MIN HT
QP	QUERCUS PHELLOS	WILLOW OAK		AR TRUNK/8' MIN HT
	UNDERSTORY TREES			
JV	JUNIPERUS BRODIE	BRODIE CEDAR	6'HT.	
	SHRUBS			
SM	SABAL MINOR	DWF. PALMETTO	3 GAL.	
SB	SPARTINA BAKERI	SPARTINA GRASS	3 GAL.	
FG	FAKAHATCHIE GRASS	FAK. GRASS	3 GAL.	
IV	ILEX VOMITORIA	YAUPON HOLLY	15 GAL.	
SWG	MUHLY GRASS	SWEETGRASS	3 GAL.	
	POLLINATOR PLANTS			
BS	RUDBECKIA	BLACK-EYED SUSAN	6"POTS	
BF	GAILLARDIA	BLANKET FLOWER	6"POTS	
DS	HELIANTHUS DEBILUS	DUNE SUNFLOWER	6"POTS	

SODDING NOTES:

- 1. COORDINATE SODDING WORK WITH SECTION 'SODDING'
- 2. SOD WITH NETTING OR MESH NOT PERMITTED.
- 3. SOD SHALL BE CERTIFIED BY EMPIRE ZOYSIA, CENTIPEDE OR BERMUDA.
- 4. ALL ROCKS AND DEBRIS SHALL BE REMOVED BEFORE SODDING.
- 5. APPLY FERTILIZER AT A RATE THAT SHALL PROVIDE 1 —1/2 LBS OF ACTUAL NITROGEN PER 1000 S.F. RAKE STARTER FERTILIZER INTO SOIL TO A DEPTH OF 1-2".
- 6. CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION TO SOD ON A REGUALAR BASIS UNTIL FULLY STABILIZED OR UNTIL FINAL ACCEPTANCE BY OWNER.

TOPSOIL(REQUIRED)
SPREAD EVENLY 1"-2" TOPSOIL AT ALL NEWLY
PLANTED AREAS. TILL INO EXISTING SAND/SOIL.

PLANT GUARANTEE

LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR NEW PLANT MATERIAL'S HEALTH UNTIL FINAL ACCEPTANCE BY OWNER. OWNER RESERVES THE RIGHT TO REJECT ANY DEAD OR DECLINING PLANT MATERIAL AT FINAL INSPECTION.

CLEARING OF DEBRIS

LANDSCAPE CONTRACTOR SHALL CLEAR ALL PROPOSED PLANTED AREAS OF ALL ROCKS AND DEBRIS BEFORE PLANTING.

UNDERGROUND UTILITIES

SEE CONSTRUCTION PLANS

DEMOLITION

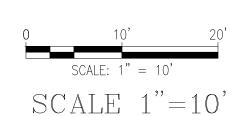
ALL DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED TO OFF—SITE LOCATIONS. DEMOLITION SHALL INCLUDE REMOVAL OF SLABS, FOUNDATIONS, & UNUSED UTILITIES. CONTRACTOR TO PROTECT ALL ITEMS TO REMAIN.

GENERAL CONTRACTOR CLEAN-UP

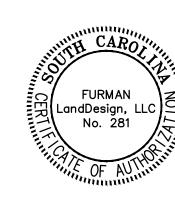
CONTRACTOR IS RESPONSIBLE FOR FINAL CLEAN-UP OF SITE AFTER CONSTRUCTION.

TEMPORARY IRRIGATION

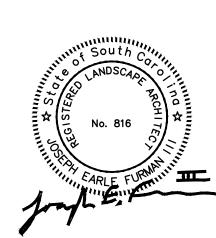
CONTRACTOR IS RESPONSIBLE FOR WATERING PLANTS TILL FINAL ACCEPTANCE AND APPROVAL.







2101



SOLL

Revision:	Date:
•	12/19/24
•	2/24/25
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•	

LANDSCAPE **BUFFER PLAN**

