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Town of Summerville

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Hutchinson Square Improvements -Phase II

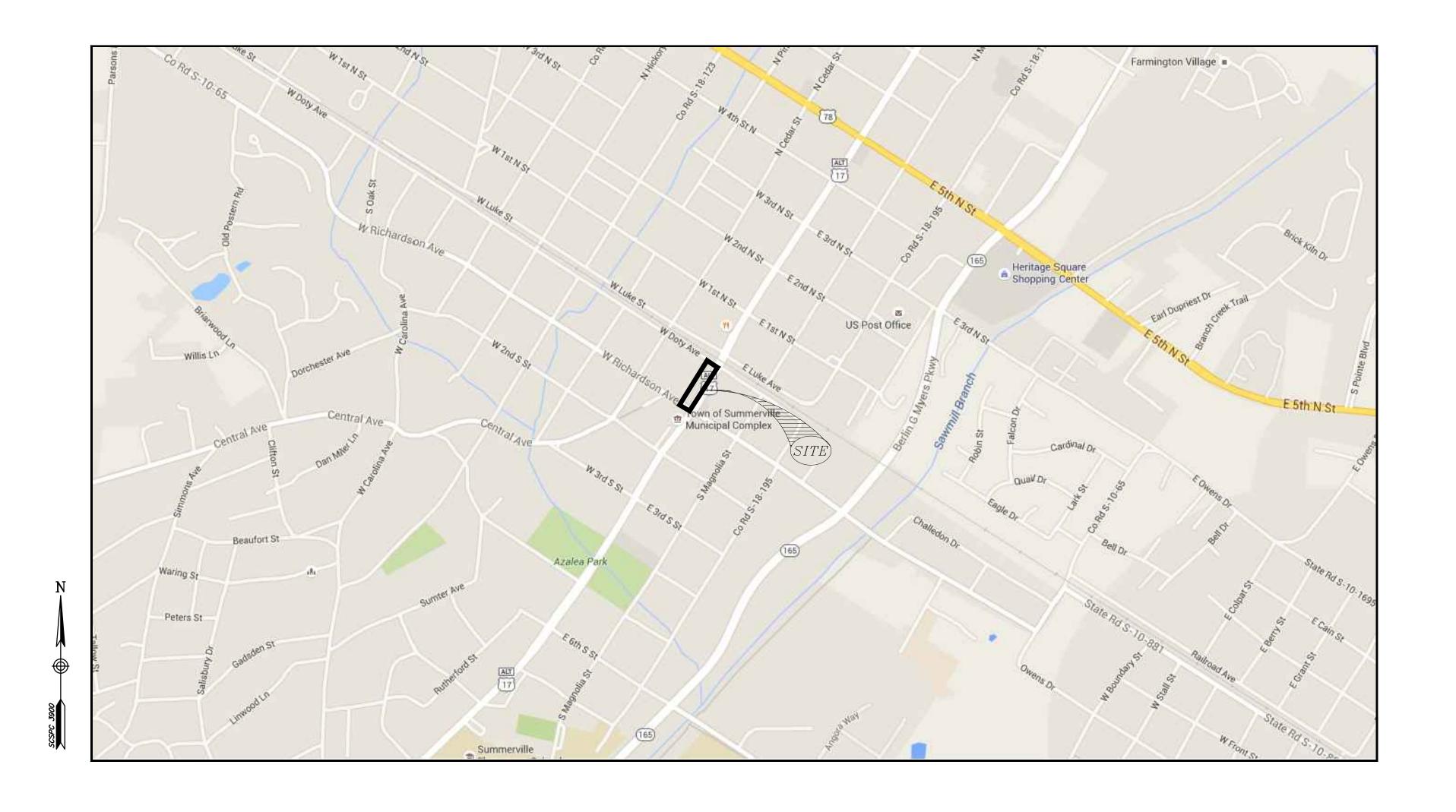
BID SET - PARK

January 24, 2018 Project Number: 178420699



PROJECT CONTACTS				
<u>SUBJECT</u>	MUNICIPALITY / UTILITY PROVIDER	<u>CONTACT</u>	TELEPHONE:	
PARKS DEPARTMENT PLANNING & ZONING ROADS AND DRAINAGE WATER SEWER ELECTRICAL POWER	TOWN OF SUMMERVILLE TOWN OF SUMMERVILLE TOWN OF SUMMERVILLE SUMMERVILLE CPW SUMMERVILLE CPW SCF&G	DOYLE BEST JESSI SHULER RUSSELL CORNETTE R. CHRISTOPHER KAHLER R. CHRISTOPHER KAHLER WILLIAM SEILGER	(843) 851-521 (843) 851-421 (843) 851-422 (843) 875-876 (843) 875-876 (843) 851-4976	
NPDES LAND DIST.	SCDHEC - OCRM	RICHARD GEER	(843) 953-023	

NOTE: Contractor shall retain an Arborist during construction to advise on any tree conflicts or required care during construction activities to preserve in good health existing trees to remain. All roots encountered during construction greater than 1" in diameter shall be coordinated with the Arborist for appropriate avoidance, care, pruning, hand digging, or similar measures.



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This drawing is not to be used for construction purposes unless signed and sealed by the Engineer of Record and stamped "Approved For Construction." Use of this drawing for quantity take-offs and pricing is preliminary until all applicable permits have been obtained.

Revision		Ву	Appd.	MM.DD.YY
FOR BID		KV	JLL	01.24.18
BID SET FOR REVIEW		KV	JJL	12.01.17
DESIGN DEVELOPMENT		KV	JJL	08.24.17
Issued		Ву	Appd.	MM.DD.YY
File Name: 699_pk_cover_notes.dwg	JJL/KV	CJH	JJL/KV	08.24.17
	_		_	144 00 144

GENERAL NOTES:

TOWN OF SUMMERVILLE DOYLE BEST 515 W. BOUNDARY ST SUMMERVILLE, SC 29485 TEL: (843) 851-5211

2. ENGINEER: STANTEC CONSULTING SERVICES, INC JOSHUA J. LILLY, P.E. 4969 CENTRE POINTE DR. SUITE 200 NORTH CHARLESTON, SC 29418 TEL: (843) 740-7700

3. VERTICAL DATUM USED WAS NAVD 88.

TOPOGRAPHIC INFORMATION AND ALL EXISTING CONDITIONS ARE BASED ON TOPOGRAPHIC SURVEY BY CORNERSTONE SURVEYING AND ENGINEERING, DATED DECEMBER, 2015. WETLANDS, CRITICAL AREAS, OTHER INDICATED ENVIRONMENTALLY SENSITIVE AREAS AND UNDISTURBED BUFFERS SHALL NOT BE DISTURBED EXCEPT WHERE SPECIFICALLY INDICATED WITHIN THESE CONSTRUCTION DOCUMENTS AND/OR AS AUTHORIZED BY THE USACE AND SCDHEC-OCRM.

5. THIS PROPERTY IS NOT LOCATED WITHIN A FEMA FLOOD ZONE F.E.M.A. INSURANCE RATE MAP (F.I.R.M.) PANEL NUMBER 450073005D.

6. CONTRACTOR IS TO VERIFY ALL INFORMATION CONTAINED HEREIN PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OR OWNER OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.

9. ALL CONSTRUCTION, METHODS, MATERIALS, AND WORKMANSHIP, NOT OTHERWISE INDICATED IN THESE PLANS, SHALL CONFORM TO STANTEC CONSULTING, INC. DIVISION II SPECIFICATIONS, LATEST EDITION. WHFRE CONFLICT OCCURS BETWEEN CONSTRUCTION PLANS. SPECIFICATIONS, AND/OR FIELD CONDITIONS, CONTRACTOR IS TO CONTACT ENGINEER OR OWNER FOR CLARIFICATION PRIOR TO CONSTRUCTION.

10. CONTRACTOR TO COORDINATE WITH OWNER AND ENSURE ALL APPLICABLE CONSTRUCTION AND LAND DISTURBANCE PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING ANY WORK.

II. CONTRACTOR AND/OR OWNER IS RESPONSIBLE FOR COORDINATING CONSTRUCTION WITH UTILITY COMPANIES, ADJACENT LAND DEVELOPMENTS OR OTHER EFFECTED THIRD PARTIES.

12. CONSULT WITH ARBORIST FOR ALL UTILITY AND CONDUIT INSTALLATION WITHIN THE DRIPLINE OF GRAND TREES TO DETERMINE AREAS THAT REQUIRE HAND DIGGING/ TRENCHING TO LIMIT DISTURBANCE TO GRAND TREE ROOT ZONES. CONSULT WITH ARBORIST FOR ANY ROOT CUTTING OVER 1 4" IN

SHOP AND SUBMITTALS DRAWINGS

1.0 SUBMITTALS

A. SCALE AND MEASUREMENTS: MAKE SHOP DRAWINGS ACCURATELY TO A SCALE SUFFICIENTLY LARGE TO SHOW ALL PERTINENT ASPECTS OF THE ITEM AND ITS METHOD OF CONNECTION TO THE WORK.

B. LARGE PRINTS (11" X 17" OR LARGER):

. SUBMIT SHOP DRAWINGS IN THE FORM OF WHITE COPIES. 2. BLUEPRINTS WILL NOT BE ACCEPTABLE.

C. MANUFACTURER'S LITERATURE:

D. NUMBER OF COPIES:

1. WHERE CONTENTS OF SUBMITTED LITERATURE FROM MANUFACTURERS INCLUDES DATA NOT PERTINENT TO THE SUBMITTAL, CLEARLY SHOW WHICH PORTIONS OF THE CONTENTS ARE BEING SUBMITTED FOR REVIEW. a. CROSS OUT OR STRIKE THROUGH ALL DATA NOT PERTINENT TO THE SUBMITTAL

2. SUBMIT THE NUMBER OF COPIES WHICH ARE REQUIRED TO BE RETURNED, PLUS FOUR COPIES OF ELECTRICAL AND THREE COPIES OF ALL OTHER SUBMITTALS WHICH WILL BE RETAINED BY THE ENGINEER.

1. SUBMIT THE NUMBER OF COPIES WHICH ARE REQUIRED TO BE RETURNED, PLUS THREE COPIES WHICH WILL BE RETAINED BY THE 6. FNGINFFR. 2. ELECTRICAL SHOP DRAWINGS: SUBMIT THE NUMBER OF COPIES WHICH ARE REQUIRED TO BE RETURNED, PLUS FOUR COPIES

WHICH WILL BE RETAINED BY THE ENGINEER.

E. DO NOT BEGIN FABRICATION OF EQUIPMENT OR MATERIALS PRIOR TO ENGINEER'S APPROVAL OF SHOP DRAWINGS.

2.0 VARIATIONS

A. WITH EACH SUBMITTAL, PROVIDE SPECIFIC WRITTEN NOTICE OF ANY VARIATIONS, THAT THE SHOP DRAWING OR SAMPLE MAY HAVE FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THIS NOTICE SHALL BE BOTH A WRITTEN COMMUNICATION SEPARATE FROM THE SHOP DRAWINGS OR SAMPLE SUBMITTAL; AND, IN ADDITION, BY A SPECIFIC NOTATION MADE ON EACH SHOP DRAWING OR SAMPLE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL OF EACH SUCH VARIATION.

B. PROVIDE AN EXPLANATION OF WHY THE ITEM(S) SUBMITTED ARE CONSIDERED TO BE EQUAL TO THE ITEM(S) SPECIFIED.

C. FAILURE TO SUBMIT A WRITTEN NOTICE WILL RESULT IN REJECTION OF THE SUBMITTAL.

A. PROVIDE SAMPLE OR SAMPLES IDENTICAL TO THE PRECISE ARTICLE PROPOSED TO BE PROVIDED. IDENTIFY AS DESCRIBED UNDER "IDENTIFICATION OF SUBMITTALS" BELOW.

B. NUMBER OF SAMPLES REQUIRED

1. UNLESS OTHERWISE SPECIFIED, SUBMIT SAMPLES IN THE QUANTITY WHICH IS REQUIRED TO BE RETURNED, PLUS ONE WHICH WILL 2. BY PREARRANGEMENT IN SPECIFIC CASES, A SINGLE SAMPLE MAY BE SUBMITTED FOR REVIEW AND, WHEN APPROVED, BE

INSTALLED IN THE WORK AT A LOCATION AGREED UPON BY THE ENGINEER. 4.0 COLORS AND PATTERNS

A. UNLESS THE PRECISE COLOR AND PATTERN IS SPECIFICALLY CALLED OUT IN THE CONTRACT DOCUMENTS, AND WHENEVER A CHOICE OF COLOR OR PATTERN IS AVAILABLE IN THE SPECIFIED PRODUCTS, SUBMIT ACCURATE COLOR AND PATTERN CHARTS TO THE ENGINEER FOR SELECTION.

5.0 CONTRACTOR'S REVIEW OF SUBMITTALS

A. BEFORE SUBMITTING A SHOP DRAWING OR ANY RELATED MATERIAL. CONTRACTOR SHALL:

1. DETERMINE AND VERIFY ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE AND DESIGN CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS, AND SIMILAR INFORMATION WITH RESPECT THERETO. 2. DETERMINE AND VERIFY THE SUITABILITY OF ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING,

STORAGE, ASSEMBLY, AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK 3. REVIEW EACH SUCH SUBMISSION FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF

CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY

APPROVE EACH SUCH SUBMISSION BEFORE SUBMITTING IT. 5. STAMP AND SIGN EACH SUCH SUBMISSION BEFORE SUBMITTING IT.

B. SHOP DRAWINGS AND RELATED MATERIALS SHALL BE RETURNED WITH COMMENTS PROVIDED THAT EACH SUBMISSION HAS BEEN SPECIFIED AND IS STAMPED BY THE CONTRACTOR.

C. SHOP DRAWINGS OR MATERIAL NOT SPECIFIED OR WHICH HAVE NOT BEEN APPROVED BY THE CONTRACTOR SHALL BE RETURNED WITHOUT COMMENT

D. ENGINEER'S REVIEW AND APPROVAL SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS COMPLIED WITH THE REQUIREMENTS OF THE GENERAL CONDITIONS AND ENGINEER HAS GIVEN WRITTEN APPROVAL OF EACH SUCH VARIATION BY SPECIFIC WRITTEN NOTATION THEREOF INCORPORATED IN OR ACCOMPANYING THE SHOP DRAWING OR SAMPLE. ENGINEER'S REVIEW AND APPROVAL SHALL NOT RELIEVE

CONTRACTOR FROM RESPONSIBILITY FOR COMPLYING WITH THE REQUIREMENTS OF THE GENERAL CONDITIONS.

6.0 IDENTIFICATION OF SUBMITTALS

A. CONSECUTIVELY NUMBER ALL SUBMITTALS.

1. WHEN MATERIAL IS RESUBMITTED FOR ANY REASON, TRANSMIT UNDER A NEW LETTER OF TRANSMITTAL AND WITH A NEW 2. ON RESUBMITTALS, CITE THE ORIGINAL SUBMITTAL NUMBER FOR REFERENCE.

B. ACCOMPANY EACH SUBMITTAL WITH A LETTER OF TRANSMITTAL SHOWING ALL INFORMATION REQUIRED FOR IDENTIFICATION AND

C. ON AT LEAST THE FIRST PAGE OF EACH SUBMITTAL, AND ELSEWHERE AS REQUIRED FOR POSITIVE IDENTIFICATION, SHOW THE

SUBMITTAL NUMBER IN WHICH THE ITEM WAS INCLUDED. D. MAINTAIN AN ACCURATE SUBMITTAL LOG FOR THE DURATION OF THE WORK, SHOWING CURRENT STATUS OF ALL SUBMITTALS AT ALL

7.0 GROUPING OF SUBMITTALS

A. UNLESS OTHERWISE SPECIFIED, MAKE SUBMITTALS IN GROUPS CONTAINING ALL ASSOCIATED ITEMS TO ASSURE THAT INFORMATION IS AVAILABLE FOR CHECKING EACH ITEM WHEN IT IS RECEIVED.

1. PARTIAL SUBMITTALS MAY BE REJECTED AS NOT COMPLYING WITH THE PROVISIONS OF THE CONTRACT. 2. THE CONTRACTOR MAY BE HELD LIABLE FOR DELAYS SO OCCASIONED.

TIMES. MAKE THE SUBMITTAL LOG AVAILABLE TO THE ENGINEER FOR HIS REVIEW UPON REQUEST.

8.0 TIMING OF SUBMITTALS

A. MAKE SUBMITTALS FAR ENOUGH IN ADVANCE OF SCHEDULED DATES FOR INSTALLATION TO PROVIDE TIME REQUIRED FOR REVIEWS. FOR SECURING NECESSARY APPROVALS, FOR POSSIBLE REVISIONS AND RESUBMITTALS, AND FOR PLACING ORDERS AND SECURING

B. IN SCHEDULING, ALLOW AT LEAST TWENTY-FIVE WORKING DAYS FOR REVIEW BY THE ENGINEER FOLLOWING HIS RECEIPT OF THE

9.0 RESUBMITTAL SCHEDULE

ORIGINAL SHEET - ARCH D

A. FOR SUBMITTALS MARKED "FURNISH AS CORRECTED" BY THE ENGINEER, RESUBMITTAL SHALL BE WITHIN NINETY (90) DAYS OF THE REVIEW DATE SHOWN ON THE ENGINEER'S SHOP DRAWING REVIEW STAMP.

B. FOR SUBMITTALS MARKED "REVISE AND RESUBMIT", "SUBMIT SPECIFIED ITEM", OR "REJECTED", RESUBMITTAL SHALL BE WITHIN THIRTY

TOWN OF SUMMERVILLE STANDARD NOTES

- SWPPP MUST BE KEPT ONSITE OR WITHIN THIRTY (30) MINUTES OF THE SITE AT ALL TIMES AND IN A DESIGNATED AREA THAT IS ACCESSIBLE TO THE INSPECTORS.
- 2. THE TOWN OF SUMMERVILLE SHALL NOT MAINTAIN STORMWATER DETENTION OR RETENTION PONDS. THE PROPERTY OWNER SHALL MAINTAIN ALL STORMWATER DETENTION FACILITIES SHOWN HEREIN.
- 3. SWPPP SHOULD INCLUDE A CONCRETE WASHOUT STAGING AREA FOR SITE AND BUILDING CONSTRUCTION AND ALL OTHER PURPOSES OF THE DEVELOPMENT TO INCLUDE BUT NOT BE LIMITED TO PAINTERS.
- 4. A CERTIFIED STORMWATER AS-BUILT MUST BE SUBMITTED TO DCPW PRIOR TO LETTER OF OCCUPANCY,

CLOSEOUT PACKAGE, AND TO SCDHEC PRIOR TO RECEIVING A NOTICE OF TERMINATION.

THE PROJECT/SITE MUST BE BUILT ACCORDING TO APPROVED TOWN AND SCDHEC PLANS UNLESS SWPPP DOCUMENTS ARE UPDATED BY THE ORIGINAL SWPPP PREPARER, OTHERWISE PERMITS AND APPROVALS WILL

CLEARING AND DEMOLITION:

REGISTER OF THE DEPARTMENT OF TRANSPORTATION.

1. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.

2. THE TOP 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER OR THE OWNER'S ENGINEER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. THE REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.

3. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS OR AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER.

SAFETY:

DURING THE CONSTRUCTION AND MAINTENANCE OF THE THIS PROJECT, ALL SAFETY REGULATIONS SHALL BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL. 2. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL

CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH AND SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING IT'S EMPLOYEES AND SUB-CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE

ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AN REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926,

THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES. WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT

THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE US DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION. ALL SOUTH CAROLINA AMENDMENTS SHALL APPLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATION. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S

INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFFTY REGULATION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES.

THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES. ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

PAVING AND GRADING

- ALL GRADING, MATERIALS & METHODS SHALL COMPLY WITH SCDOT STANDARDS. 2. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER. THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL
- FROM THE SITE. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE
- AND APPURTENANCES ARE BEING PLACED. 4. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER
- AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS 5. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE
- UNLESS OTHERWISE NOTED ON DRAWINGS UNLESS OTHERWISE NOTED, ALL GRADING, ROCKING AND PAVING TO CONFORM TO SCDOT STANDARD SPECIFICATIONS, LATEST EDITION. CLEAR AND GRUB WITHIN WORK LIMITS ALL SURFACE VEGETATION. TREES, STUMPS, BRUSH,
- APPROPRIATE MUNICIPAL AUTHORITY OR AS SHOWN ON THE DRAWINGS. PROTECT ALL 8. STRIP WORK LIMITS, REMOVING ALL ORGANIC MATTER WHICH CANNOT BE COMPACTED INTO A STABLE MASS. ALL TREES, BRUSH AND DEBRIS ASSOCIATED WITH CLEARING, STRIPPING

OR GRADING SHALL BE REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.

ROOTS, ETC. DO NOT DAMAGE OR REMOVE TREES EXCEPT AS APPROVED BY THE

- IMMEDIATELY FOLLOWING FINE GRADING OPERATIONS, COMPACT SUBGRADE TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180. 10. ALL FILLS WITHIN PUBLIC RIGHT-OF-WAYS AND EASEMENTS SHALL BE ENGINEERED ADDITIONALLY, ANY FILLS OUTSIDE OF PUBLIC RIGHT-OF-WAYS WHICH ARE OVER 2 FEET IN DEPTH SHALL BE ENGINEERED. ENGINEERED FILLS SHALL BE CONSTRUCTED IN 6" LIFTS. EACH LIFT SHALL BE COMPACTED TO 95 % OF THE MAXIMUM DRY DENSITY PER AASHTO
- T-180 TEST METHOD (MODIFIED PROCTOR). 11. CRUSHED ROCK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 02630 (BASE AGGREGATE) SCDOT STANDARD SPECIFICATIONS. COMPACT TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR). A.C. PAVEMENT SHALL CONFORM TO SECTION 00745 (ASPHALT CONCRETE PAVEMENT) SCDOT STANDARD
- SPECIFICATIONS FOR STANDARD DUTY MIX. A.C. PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 91% OF MAXIMUM DENSITY AS DETERMINED BY THE RICE STANDARD METHOD. 12. ALL EXISTING OR CONSTRUCTED MANHOLES, CLEANOUTS, MONUMENTS, GAS VALVES, WATER VALVES AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE
- PAVEMENT SIDEWALK LANDSCAPED AREA WHEREIN THEY LIE 13. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS
- 14. ENGINEERED FILL MATERIAL SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE AND OTHER UNSUITABLE MATERIALS.
- 15. IMPORTED SOILS FOR USE AS ENGINEERED FILL SHALL BE NON-EXCLUSIVE MATERIALS AND SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. 16 AGGREGATE BASE MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

о.	AGGREGATE BASE MATERIAL SHALL MEET THE	FOLLOWING GRADATION REQUIREMENTS:
	SIEVE SIZE (PER ASTM D422)	PERCENT PASSING BY WEIGHT
	1 INCH	100
	3/4	90–100
	NO. 8	35–55
	NO. 200	0–8

- 17. ALL AREAS TO RECEIVE FILL, AND AREAS OF STRUCTURES AND PAVEMENTS, SHALL BE STRIPPED OF VEGETATION, ORGANIC MATER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. STRIPPED SOILS SHALL NOT BE USED IN ENGINEERED FILL, BUT MAY BE USED IN LANDSCAPE AREAS.
- ENGINEERED FILL MATERIAL SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER ASTM D698 (STANDARD PROCTOR)

MINIMUM PERCENT COMPACTION	MOISTURE CONTENT (RANGE)
90%	OPTIMUM TO OPTIMUM PLUS 3%
95%	OPTIMUM TO OPTIMUM PLUS 3%
95%	OPTIMUM TO OPTIMUM PLUS 2%
95%	2 TO 5% ABOVE OPTIMUM
	PERCENT COMPACTION 90% 95%

AGGREGATE BASE COURSE SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER AASHTO T180 (MODIFIED PROCTOR)

ENGINEERED FILL MATERIAL	MINIMUM PERCENT COMPACTION	MOISTURE CONTENT (RANGE)
AGGREGATE BASE MATERIAL OR IMPORTED GRANULAR SOIL IN BUILDING AND PAVEMENT AREAS	100%	OPTIMUM PLUS OR MINUS 2%

 NOTE: MOISTURE CONTENT OF ENGINEERED FILL MATERIAL MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION TO PREVENT SOIL PUMPING.

- 18. ENGINEERED FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 6 INCHES THICK (LOOSE). 19. THE TOP 6 INCHES OF SOIL EXPOSED AT THE BOTTOM OF THE EXCAVATIONS SHALL BE COMPACTED, SCARIFIED AND COMPACTED AS ENGINEERED FILL PRIOR TO PLACEMENT OF ADDITIONAL FILL.
- 20. IF SOFT OR LOOSE SOIL IS PRESENT AT THE BASE OF EXCAVATIONS, IT SHALL BE EXCAVATED AND/OR COMPACTED AS ENGINEERED FILL OR AS RECOMMENDED BY THE ENGINEER'S FIELD REPRESENTATIVE.
- 21. IF SUBGRADE SOILS EXHIBIT PUMPING DURING COMPACTION, THE AREA SHALL BE ALLOWED TO DRY UNTIL THE SOLIDS BECOME WORKABLE WITHOUT PUMPING. THE MOISTURE CONTENT OF THE SOILS SHALL BE ADJUSTED TO PREVENT PUMPING.
- 22. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN. FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES EXPOSURE TO THE ENVIRONMENT MAY REDUCE THE STRENGTH OF SOILS IN PAVED AREAS. IF THIS OCCURS, THE SOFTENED SOILS SHALL BE REMOVED AND REWORKED IMMEDIATELY PRIOR TO CONCRETE PLACEMENT. IF RAINFALL IS EXPECTED AT A TIME WHEN BEARING SOILS IN FOOTING AREAS ARE EXPOSED, A 2 TO 4 INCH THICK LAYER OF LEAN CONCRETE MAY BE PLACED IN SUCH AREA.
- 23.THE SITE SHALL BE GRADED TO TRANSPORT SURFACE RUNOFF AWAY FROM THE PAVED AREAS. WATER SHALL NOT BE ALLOWED TO ACCUMULATE (POND) ON PAVED AREAS. 24.BACKFILL AND FILL SHALL CONFORM TO THE GENERAL REQUIREMENTS FOR SOIL MATERIALS ABOVE AND SHALL BE CLASSIFIED AS GW, GP, GM, GC, SW, SP, SM, SC, ML, CL BY ASTM
- D2487 AND SHALL CONFORM TO THE FOLLOWING: 1. SHALL BE CAPABLE OF BEING COMPACTED TO THE SPECIFIED DEGREE OF COMPACTION WHEN THE MOISTURE CONTENT IS WITHIN 3 PERCENTAGE POINTS OF THE OPTIMUM PERCENT MOISTURE.
- 2. LIQUID LIMIT SHOULD NOT EXCEED 40 PERCENT WHEN TESTED IN ACCORDANCE WITH 3. PLASTICITY INDEX SHOULD NOT BE GREATER THAN 30 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.

4. NO MORE THAN 75 PERCENT BY WEIGHT SHALL BE FINER THAN NO. 200 SIEVE WHEN

- TESTED IN ACCORDANCE WITH ASTM D1140. 25.UNSUITABLE SOIL SHALL BE ANY SOIL MATERIALS DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY AS NOT CONFORMING TO THE REQUIREMENTS DESCRIBED ABOVE FOR BACKFILL AND FILL. A MOISTURE CONTENT WHICH IS MORE THAN 3 PERCENTAGE POINTS FROM OPTIMUM SHALL NOT BE CONSIDERED UNSUITABLE IF SUCH MATERIALS WOULD OTHERWISE BE SUITABLE IF THE MOISTURE CONTENT WERE ADJUSTED. ADJUSTMENTS TO THE SOIL MOISTURE CONTENT BY DRYING, MIXING, ADDING WATER, OR
- OTHER MEANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 26.MEASUREMENT OF UNSUITABLE MATERIAL: THE VOLUME OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY A LICENSED SURVEYOR BY THE AVERAGE END AREA METHOD. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCALED PLAN WITH SUFFICIENT ELEVATION POINTS TO ACCURATELY DEFINE THE VOLUME OF UNSUITABLE MATERIAL EXCAVATED. THE EXTENT OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY.
- 27.ALL PAINTED ARROWS AND OTHER SYMBOLS TO BE PER MUTCD AND SCDOT STANDARD SPECIFICATIONS. 28.BUILDING PADS SHALL BE STRIPPED AND COMPACTED TO 95% MODIFIED PROCTOR OR PER GEOTECHNICAL RECOMMENDATION, THE MORE STRINGENT OF THE TWO.

EROSION CONTROL NOTES:

SLOPE IS BROUGHT TO GRADE.

- 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
- 2. 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 MEASURE 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. 3. 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

4. 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.

INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR

MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.

- 5. 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 SITE IS STABILIZED.
- 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
- 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.
- 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.

9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY

- 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 SOURCE IN
- 11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY 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 TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

Know what's below.

Call before you dig.

DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

- 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT 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,
- 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 OTHER CONSTRUCTION MATERIALS -FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND
- -SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING. 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON
- 18. IF EXISTING BMP'S NEED TO BE MODIFIED OR IF ADDITIONAL BMP'S ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST E 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 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.

4969 Centre Pointe Dr, Suite 200 North Charleston, SC 29418

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Legend

Notes

Appd. YY.MM.DD Revision KV JLL 18.01.24 DESIGN DEVELOPMEN By Appd. YY.MM.DD Issued File Name: 680 COVER NOTES.dwg

Chkd. Dsgn. YY.MM.DD

Permit-Seal

Client/Project Town of Summerville

STANTEC

CONSULTING

SERVICES, INC.

No. C02310 /

HUTCHINSON SQUARE IMPROVEMENTS-PHASE II BID SET - PARK

Summerville, SC

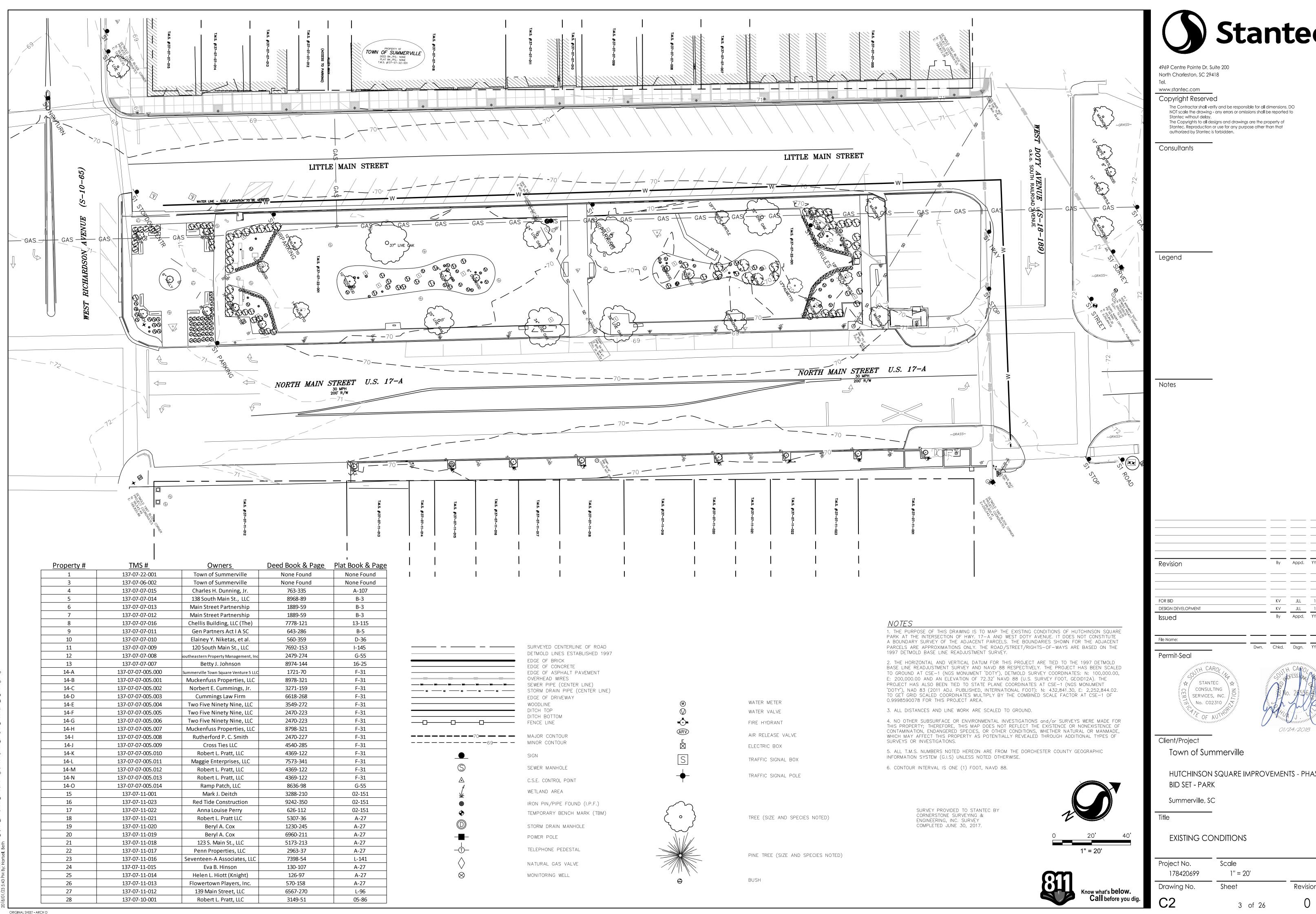
Title

PROJECT NOTES

Project No. Scale 178420699 Drawing No. Sheet Revision

2 of 26

(30) DAYS OF THE REVIEW DATE SHOWN ON THE ENGINEER'S SHOP DRAWING REVIEW STAMP.

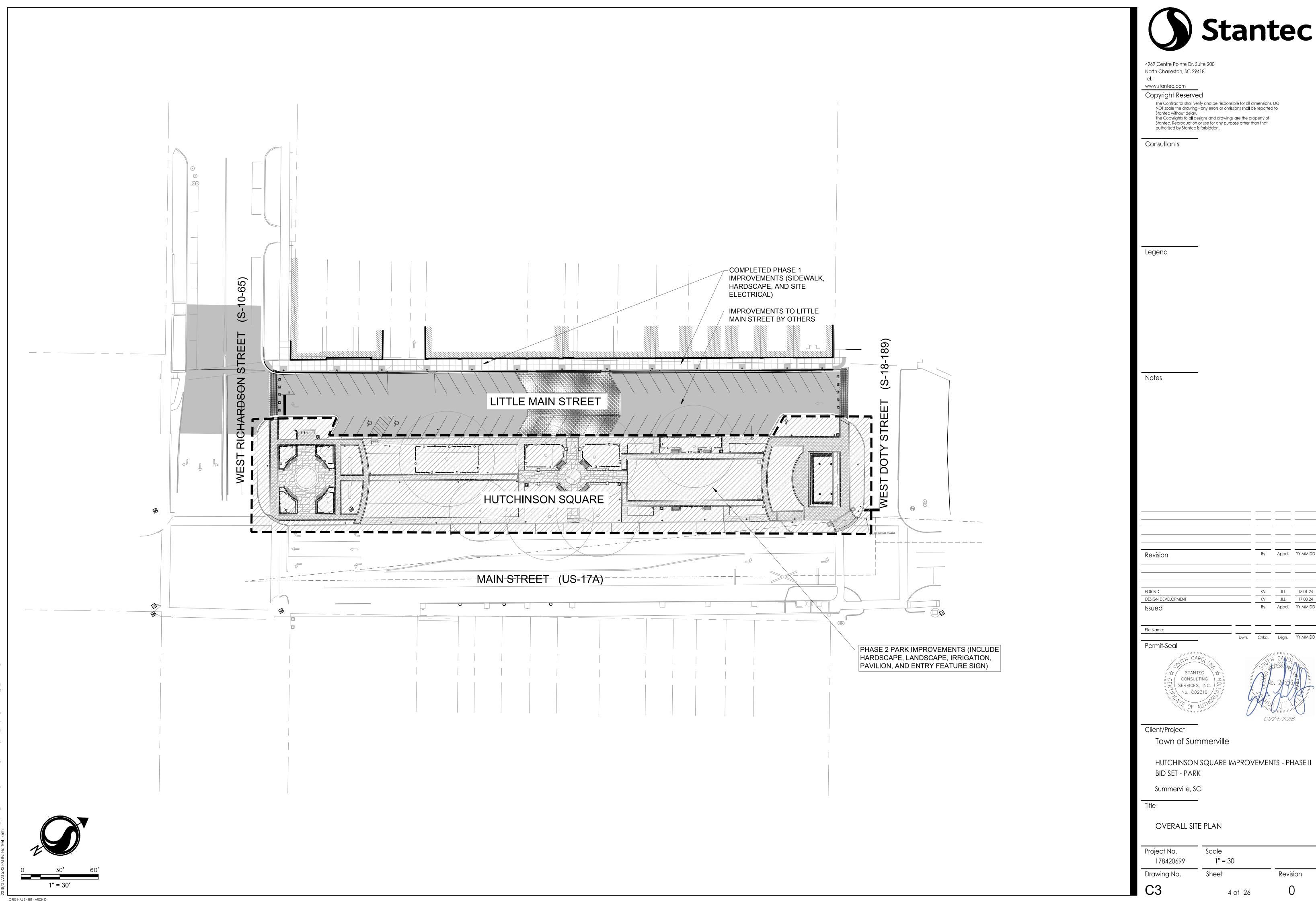


By Appd. YY.MM.DD KV JLL 18.01.24 KV JLL 17.08.24 By Appd. YY.MM.DD Dwn. Chkd. Dsgn. YY.MM.DD

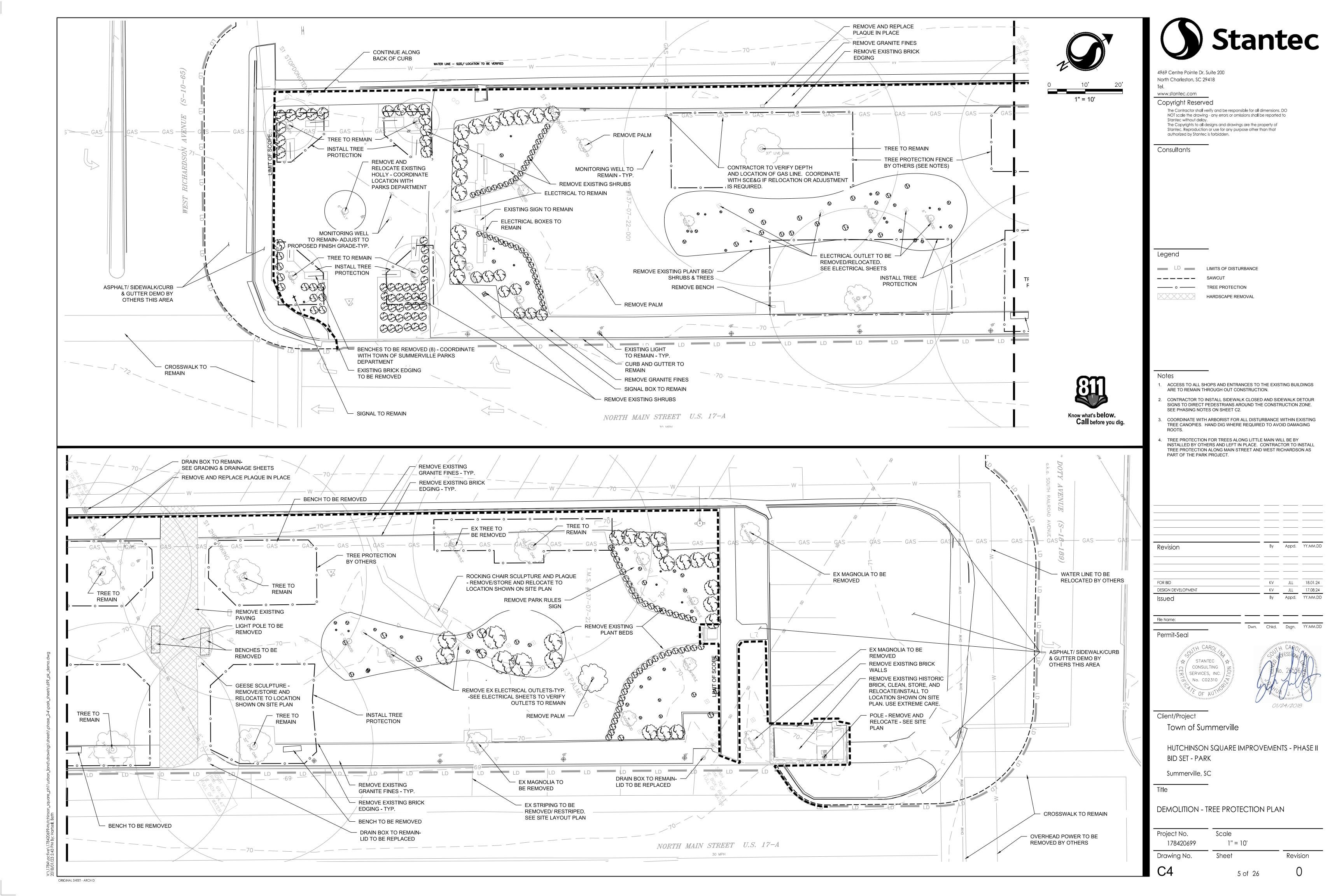


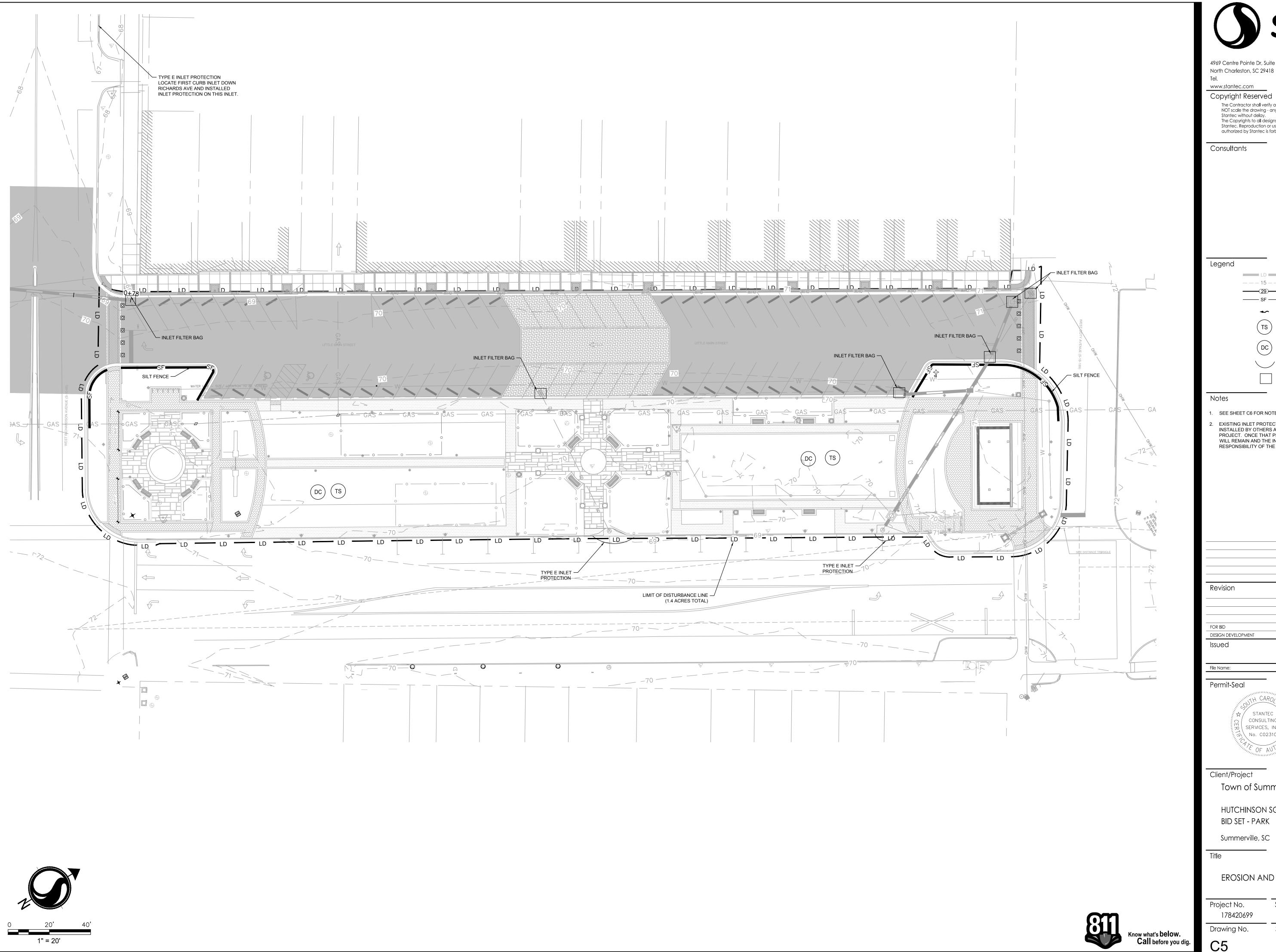
HUTCHINSON SQUARE IMPROVEMENTS - PHASE II

Project No.	Scale	
178420699	1" = 20'	
Drawing No.	Sheet	Revision
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Project No. 178420699	Scale 1" = 30'	
Drawing No.	Sheet	Revision
C3	4 of 26	0







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LIMITS OF DISTURBANCE ---15--- EXISTING CONTOURS PROPOSED CONTOUR —— SF —— SILT FENCE DRAINAGE FLOW ARROW TEMPORARY SEEDING

DUST CONTROL TYPE E INLET PROTECTION

INLET FILTER BAG

SEE SHEET C6 FOR NOTES AND DETAILS.

EXISTING INLET PROTECTION ON BOXES IN LITTLE MAIN WILL BE INSTALLED BY OTHERS AS PART OF THE LITTLE MAIN IMPROVEMENT PROJECT. ONCE THAT PROJECT IS COMPLETE, THE INLET PROTECTION WILL REMAIN AND THE INSPECTION AND MAINTENANCE WILL BE THE RESPONSIBILITY OF THE PARK CONTRACTOR.

CONSULTING 另 SERVICES, INC. [元] No. C02310 /

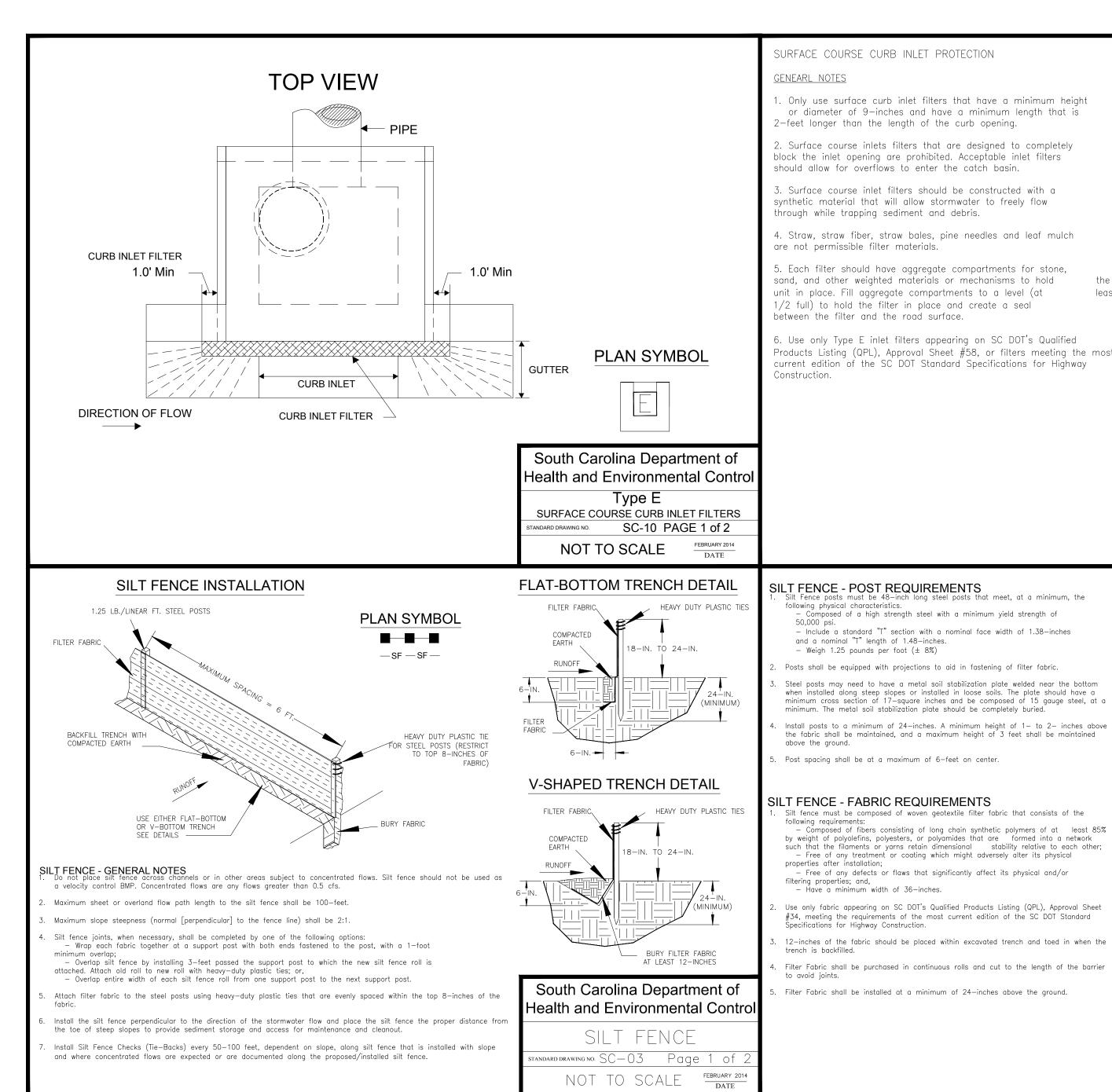


Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

EROSION AND SEDIMENT CONTROL PLAN

Project No. 178420699	Scale 1" = 20'	_
Drawing No.	Sheet	Revision
C5	6 of 26	0



4. Straw, straw fiber, straw bales, pine needles and leaf mulch are not permissible filter materials. 5. Each filter should have aggregate compartments for stone, sand, and other weighted materials or mechanisms to hold unit in place. Fill aggregate compartments to a level (at 1/2 full) to hold the filter in place and create a seal between the filter and the road surface.

6. Use only Type E inlet filters appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #58, or filters meeting the most current edition of the SC DOT Standard Specifications for Highway Construction.

Fence posts must be 48-inch long steel posts that meet, at a minimum, the

- Composed of a high strength steel with a minimum yield strength of

Posts shall be equipped with projections to aid in fastening of filter fabric.

minimum. The metal soil stabilization plate should be completely buried.

- Include a standard "T" section with a nominal face width of 1.38-inches

Steel posts may need to have a metal soil stabilization plate welded near the bottom

Silt fence must be composed of woven geotextile filter fabric that consists of the

- Free of any treatment or coating which might adversely alter its physical

- Free of any defects or flaws that significantly affect its physical and/or

#34, meeting the requirements of the most current edition of the SC DOT Standard

— Composed of fibers consisting of long chain synthetic polymers of at least 85%

minimum cross section of 17-square inches and be composed of 15 gauge steel, at a

following physical characteristics.

following requirements:

properties after installation:

filtering properties; and,

trench is backfilled.

- Have a minimum width of 36-inches.

Specifications for Highway Construction.

and a nominal "T" length of 1.48—inches.

- Weigh 1.25 pounds per foot (± 8%)

INSPECTION AND MAINTENANCE

- 1. The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
- 2. Regular inspections of all inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- 3. Attention to sediment accumulations in front of the inlet protection is extremely important. Accumulated sediment should
- be continually monitored and removed when necessary. 4. Remove accumulated sediment when silt and/or debris has
- 5. Removed sediment shall be placed in stockpile storage areas or

built up around the filter preventing stormwater to flow through

spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.

South Carolina Department of

Health and Environmental Control

Type E

SURFACE COURSE CURB INLET FILTERS

GENERAL NOTES FEBRUARY 2014
DATE

South Carolina Department of

Health and Environmental Control

SILT FENCE

TANDARD DRAWING NO. SC-03 PAGE 2 of 2

1. SWPPP, INSPECTION RECORDS, AND RAINFALL DATA MUST BE KEPT ONSITE OR WITHIN THIRTY (30) MINUTES OF THE SITE AT ALL TIMES FROM THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO

2. A CERTIFIED STORMWATER AS-BUILT MUST BE SUBMITTED TO THE TOWN OF SUMMERVILLE PRIOR TO LETTER OF OCCUPANCY, CLOSEOUT PACKAGE, AND TO SCDHEC PRIOR TO RECEIVING A NOTICE

3. THE PROJECT/SITE MUST BE BUILT ACCORDING TO APPROVED TOWN AND SCDHEC PLANS UNLESS

SWPPP DOCUMENTS ARE UPDATED BY THE ORIGINAL SWPPP PREPARER, OTHERWISE PERMITS AND

THE DATE THAT FINAL STABILIZATION IS ACHIEVED. THESE ITEMS ARE TO BE IN A DESIGNATED AREA

GENERAL NOTES

SC-10 PAGE 2 of 2

6. Inlet protection structures should be removed after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

SILT FENCE - INSPECTION & MAINTENANCE

regular sediment removal.

1/2-inch or more of precipitation.

The key to functional silt fence is weekly inspections, routine maintenance, and

and, as recommended, within 24-hours after each rainfall even that produces

2. Regular inspections of silt fence shall be conducted once every calendar week

3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when

Removed sediment shall be placed in stockpile storage areas or spread thinly

overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence,

across disturbed area. Stabilize the removed sediment after it is relocated.

6. Check for areas where stormwater runoff has eroded a channel beneath the

silt fence, or where the fence has sagged or collapsed due to runoff

7. Check for tears within the silt fence, areas where silt fence has begun to

ineffective. Removed damaged silt fence and reinstall new silt fence

decompose, and for any other circumstance that may render the silt fence

and once it is removed, the resulting disturbed area shall be permanently

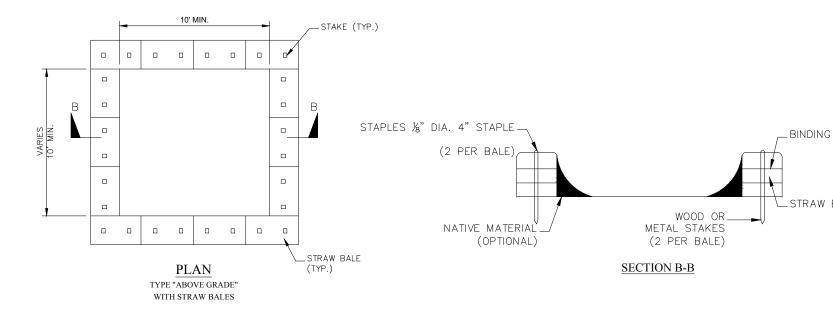
TOWN OF SUMMERVILLE SWPPP STANDARD NOTES

THAT IS ACCESSIBLE TO THE INSPECTORS.

APPROVALS WILL BE INVALIDATED.

Silt fence should be removed within 30 days after final stabilization is achieved

4. Remove accumulated sediment when it reaches 1/3 the height of the silt



LETTERS A MINIMUM _ OF 5" IN HEIGHT CONCRETE WASHOUT CONCRETE WASHOUT SIGN DETAIL

1. ACTUAL LAYOUT DETERMINED IN FIELD. 6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA 2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER

5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS

REGULAR CLEAN OUT. 6. LOCATION TO BE DETERMINED BY OWNER / ENGINEER.

7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

South Carolina Department of Health and Environmental Contro CONCRETE WASHOUT STRAW BALES OR ABOVE GROUND

RC-07 PAGE 1 of 1 NOT TO SCALE

EROSION CONTROL NOTES:

NOTES:

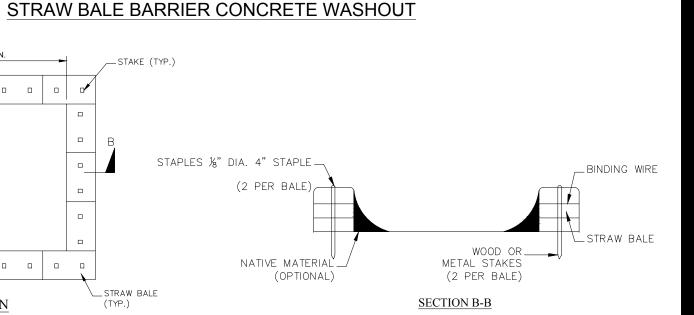
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-WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURE MUST BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED. AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

- 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.
- BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- 7. 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. 72-300 ET SEQ.
- 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
- 9. 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
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- THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS
- 13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
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- 16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:

-SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

- ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- 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.



EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT. 4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50%

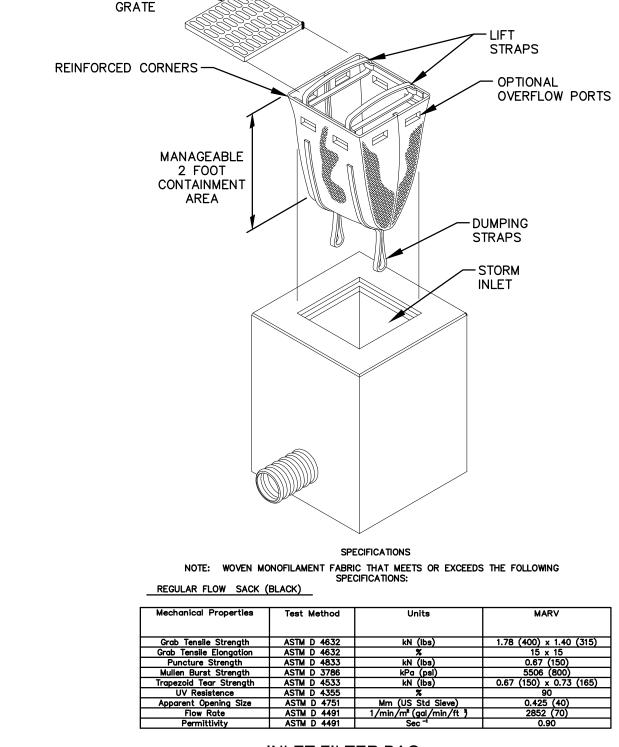
WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND

3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF

- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION
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- APPROPRIATE TRAPS OR STABLE OUTLETS.
- MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- 11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM
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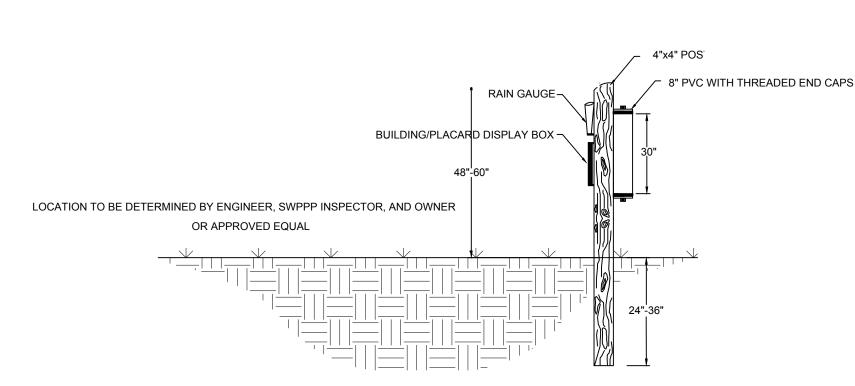
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- 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST
- 18. IF EXISTING BMP'S NEED TO BE MODIFIED OR IF ADDITIONAL BMP'S ARE NECESSARY TO COMPLY WITH THE



SEWER

- 1. STORM WATER POLLUTION PREVENTION PLAN MUST BE KEPT ON SITE OR WITHIN THIRTY MINUTES OF THE
- SITE AT ALL TIMES, AND IN A DESIGNATED AREA THAT IS ACCESSIBLE TO THE INSPECTORS. 2. THE PROPERTY OWNER SHALL MAINTAIN ALL STORM WATER DETENTION FACILITIES SHOWN HEREON.
- 3. SWPPP SHOULD INCLUDE A CONCRETE WASHOUT/STAGING AREA FOR SITE AND BUILDING CONSTRUCTION AND ALL OTHER PURPOSES OF THE DEVELOPMENT TO INCLUDE BUT NOT LIMITED TO PAINTERS.
- 4. A CERTIFIED STORM WATER AS-BUILT MUST BE SUBMITTED TO DHEC PRIOR TO RECEIVING A NOTICE OF
- SITE MUST BE BUILT ACCORDING TO APPROVED DHEC PLANS UNLESS SWPPP DOCUMENTS ARE UPDATED BY THE ORIGINAL SWPPP PREPARER, OTHERWISE, PERMITS WILL BE INVALIDATED.
- NO OBSTRUCTIONS, INCLUDING BUT NOT LIMITED TO FENCES, DIRT MOUNDS, AND/OR THE LANDSCAPING OF BUSHES, SHRUBS AND TREES, MAY BE PERMITTED AND/OR BUILT WITHIN ANY SWALE AND/OR DRAINAGE
- 7. WETLAND BUFFERS WILL BE MAINTAINED IN THEIR UNDISTURBED STATE.



SWPPP MOUNTING POST

* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN

TEMPORARY VEGETATION SCHEDULE

BROWNTOP MILLET

RYE GRAIN

RYE GRAS

THIS SEEDING SCHEDULE IS FOR ONLY TEMPORARY STABILIZATION IF REQUIRED. FOR PERMANENT STABILIZATION, SEE LANDSCAPE PLANS. UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES. SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND LOCAL

TEMPORARY SEEDING SCHEDULE

OPTIMUM DATES TO PLANT

APRIL 20 - AUGUST 15

APRIL 20 - AUGUST 15

FEBRUARY - MARCH, AUGUST 15 - NOVEMBER 20

AUGUST 10 - OCTOBER 10

AUGUST 10 - OCTOBER 10

REMARKS

QUICK, DENSE COVER

QUICK, DENSE COVER

COMPETITIVE, DENSE

COMPETITIVE, DENSE

QUICK COVER





North Charleston, SC 29418

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Legend

Notes

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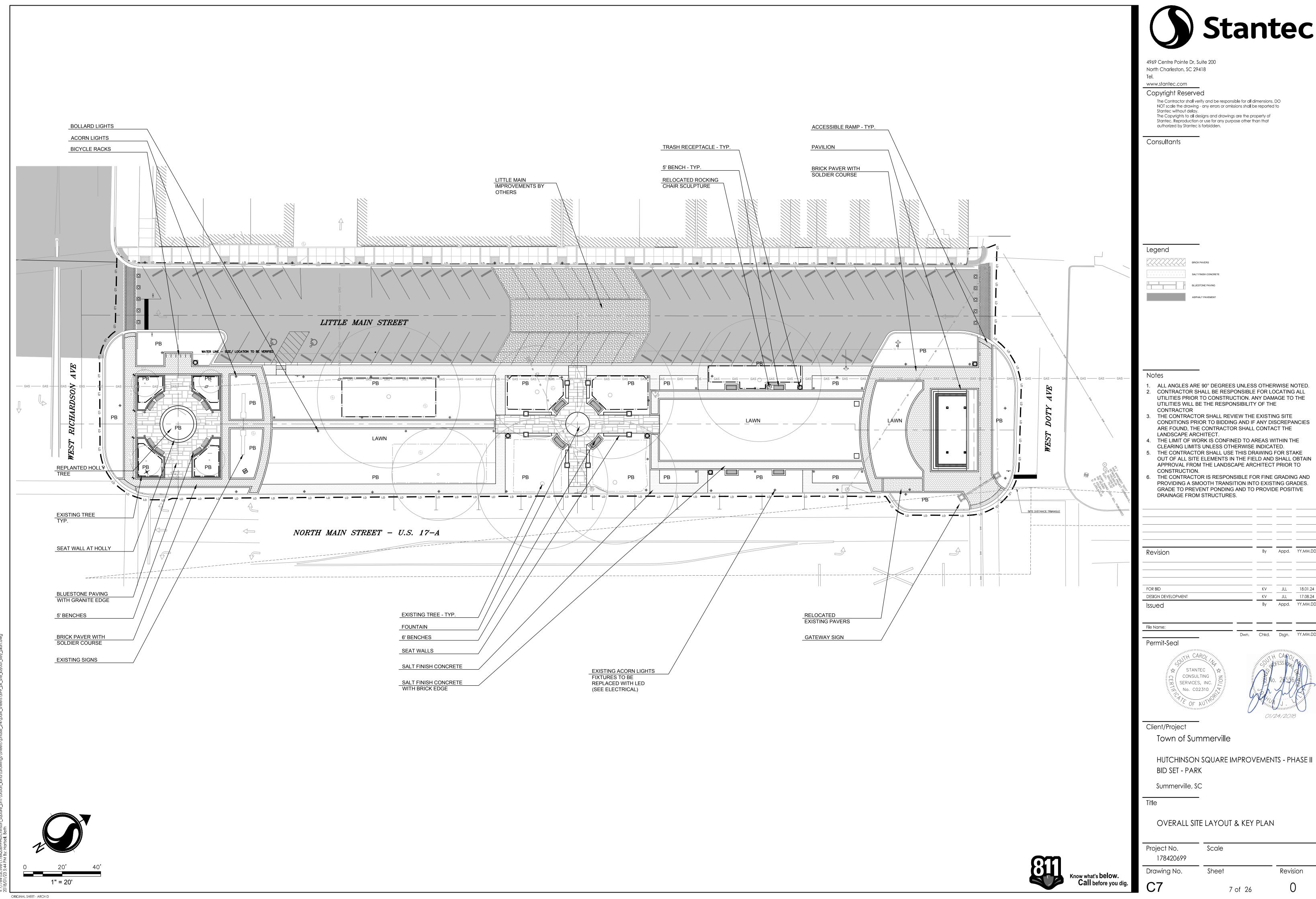
Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

EROSION & SEDIMENT CONTROL DETAILS AND NOTES

Project No. 178420699 Sheet Drawing No. Revision 7 of 26

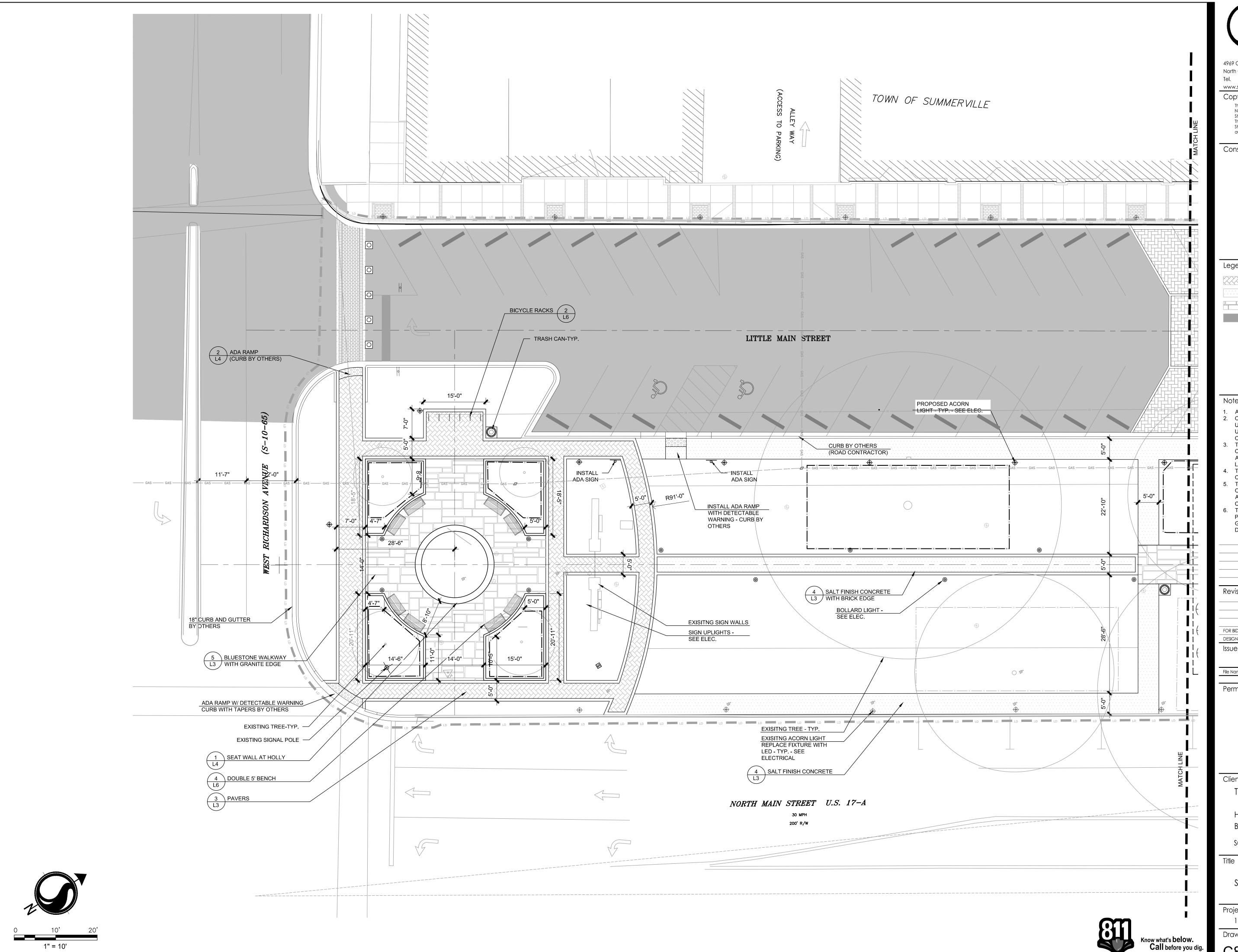


- CONDITIONS PRIOR TO BIDDING AND IF ANY DISCREPANCIES
- THE CONTRACTOR SHALL USE THIS DRAWING FOR STAKE OUT OF ALL SITE ELEMENTS IN THE FIELD AND SHALL OBTAIN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO
- THE CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND PROVIDING A SMOOTH TRANSITION INTO EXISTING GRADES. GRADE TO PREVENT PONDING AND TO PROVIDE POSITIVE

KV JLL 18.01.24
 KV
 JLL
 17.08.24

 By
 Appd.
 YY.MM.DD
 Dwn. Chkd. Dsgn. YY.MM.DD

Revision

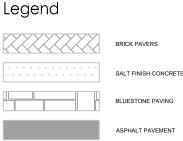




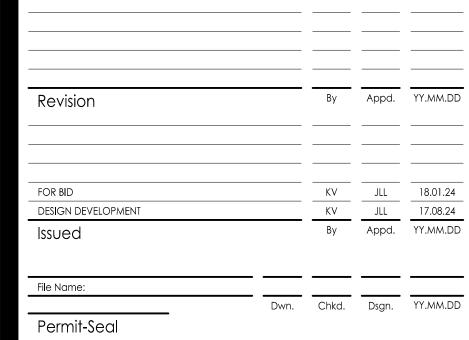
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- ALL ANGLES ARE 90° DEGREES UNLESS OTHERWISE NOTED. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGE TO THE UTILITIES WILL BE THE RESPONSIBILITY OF THE
 - THE CONTRACTOR SHALL REVIEW THE EXISTING SITE CONDITIONS PRIOR TO BIDDING AND IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT.
- THE LIMIT OF WORK IS CONFINED TO AREAS WITHIN THE CLEARING LIMITS UNLESS OTHERWISE INDICATED.
- THE CONTRACTOR SHALL USE THIS DRAWING FOR STAKE OUT OF ALL SITE ELEMENTS IN THE FIELD AND SHALL OBTAIN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
 THE CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND
- PROVIDING A SMOOTH TRANSITION INTO EXISTING GRADES. GRADE TO PREVENT PONDING AND TO PROVIDE POSITIVE DRAINAGE FROM STRUCTURES.







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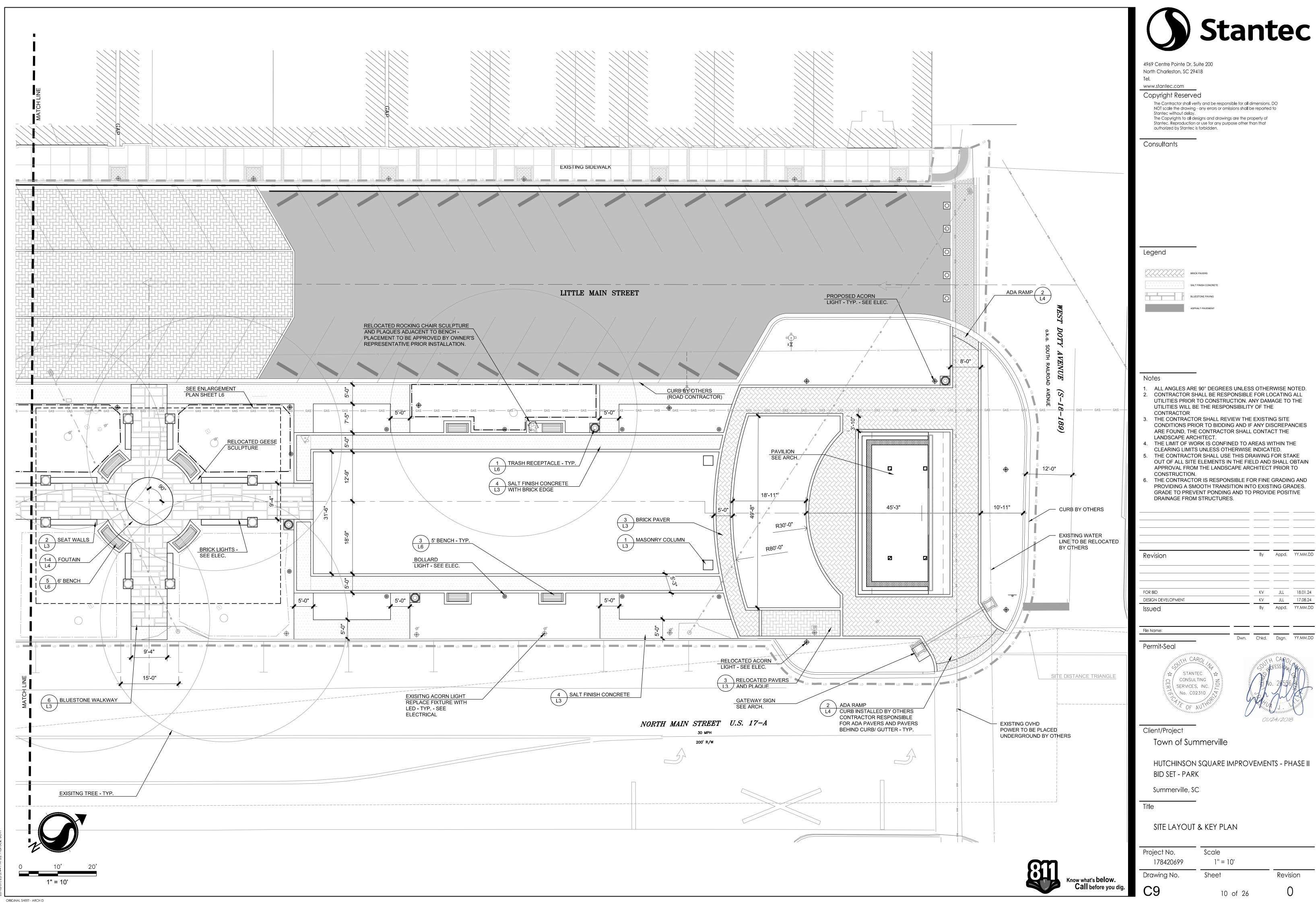
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HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

SITE LAYOUT & KEY PLAN

Project No. 178420699	Scale 1" = 10'	
Drawing No.	Sheet	Revision
C8	9 of 26	0

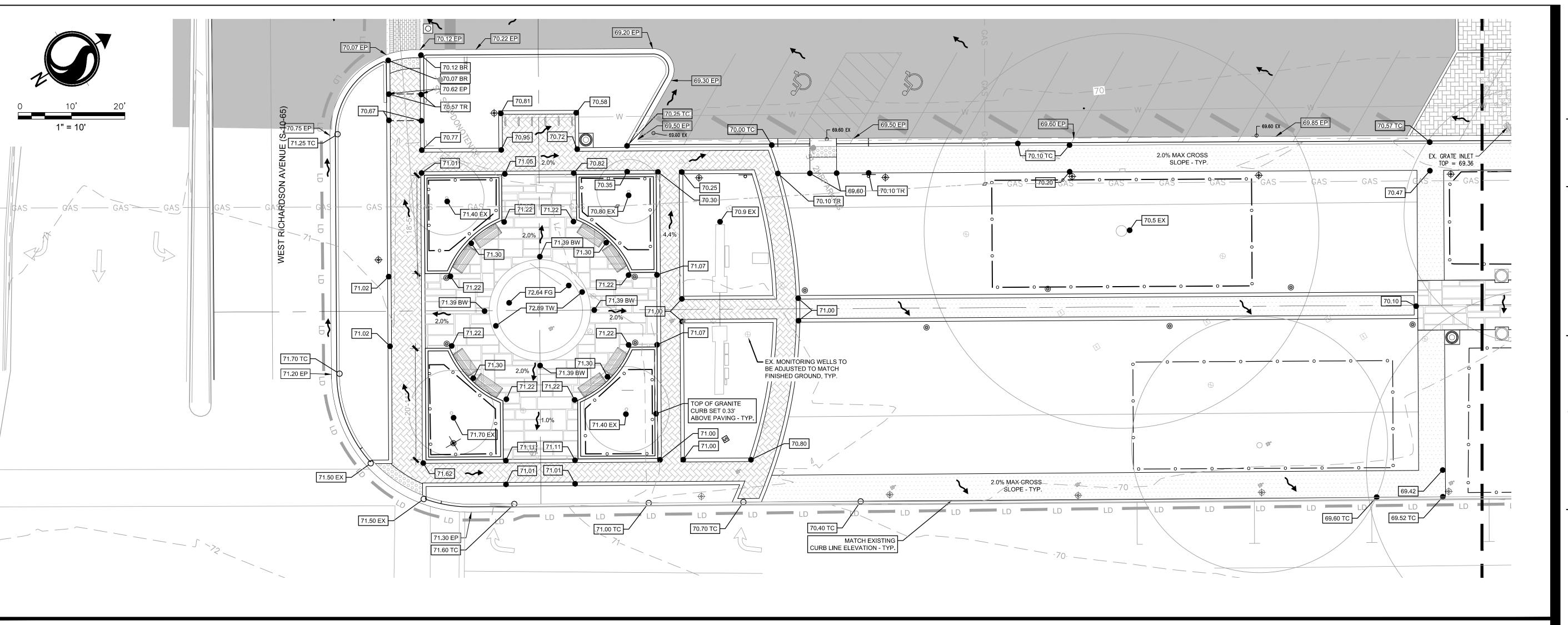


- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGE TO THE
- CONDITIONS PRIOR TO BIDDING AND IF ANY DISCREPANCIES
- THE CONTRACTOR SHALL USE THIS DRAWING FOR STAKE OUT OF ALL SITE ELEMENTS IN THE FIELD AND SHALL OBTAIN
- PROVIDING A SMOOTH TRANSITION INTO EXISTING GRADES.

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Project No.	Scale	
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egend

XEP - EXISTING PAVEMENT ELEVATION TC - TOP OF CURB

TR - TOP OF RAMP
BR - BOTTOM OF RAMP
BS - BOTTOM OF STEP

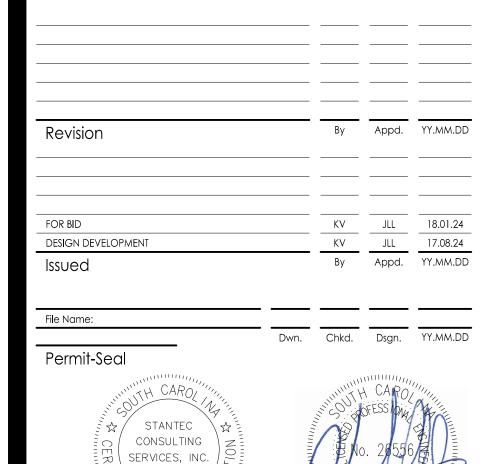
BS - BOTTOM OF STEP TW - TOP OF WALL BW - BOTTOM OF WALL

⊕YI - YARD INLET

Notes

1. NEW SIDEWALK IS TO COMPLY WITH THE MOST RECENT VERSION OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN. THE CROSS SLOPE OF THE SIDE WALK SHALL NOT EXCEED 1:48 (2%) THE HORIZONTAL SLOPE SHALL NOT EXCEED 1:20 (5%).

2. ALL AREAS SHALL HAVE POSITIVE DRAINAGE. SLOPE AS NEEDED TO AVOID PONDING. NOTIFY CIVIL ENGINEER OF ANY DISCREPANCY BETWEEN SITE CONDITIONS AND CONSTRUCTION PLANS.



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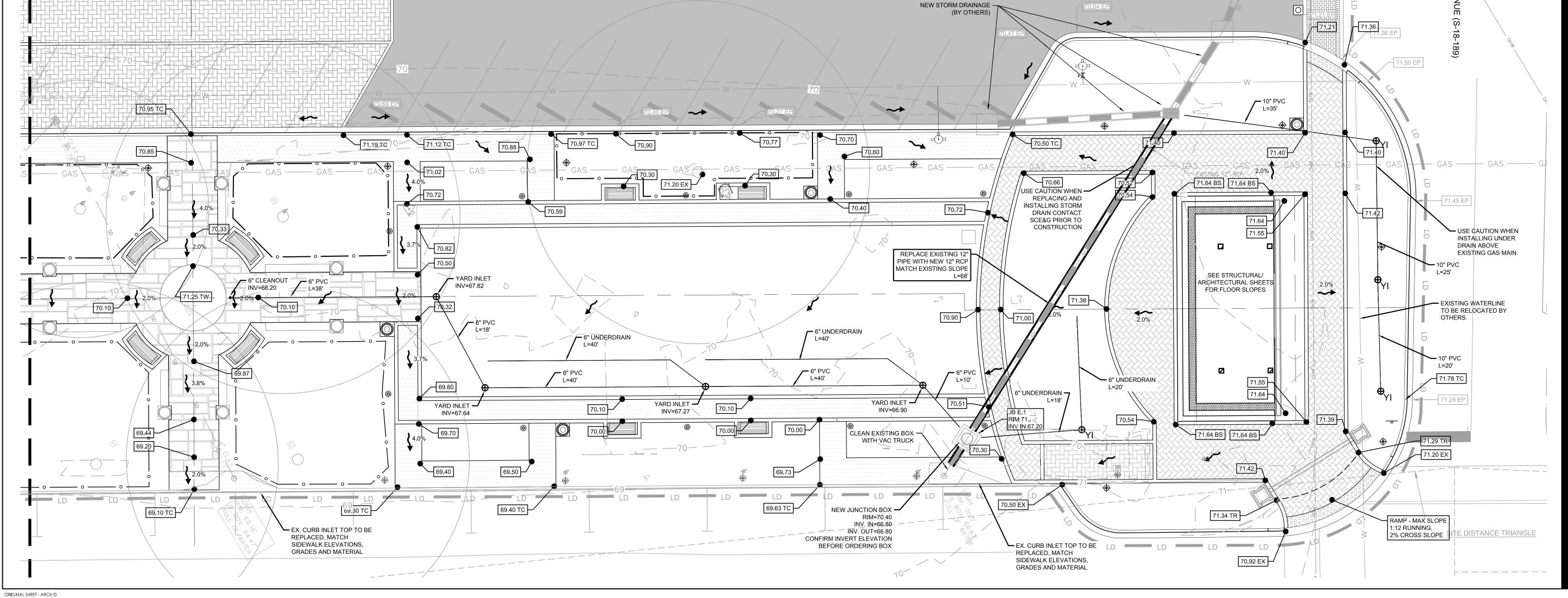
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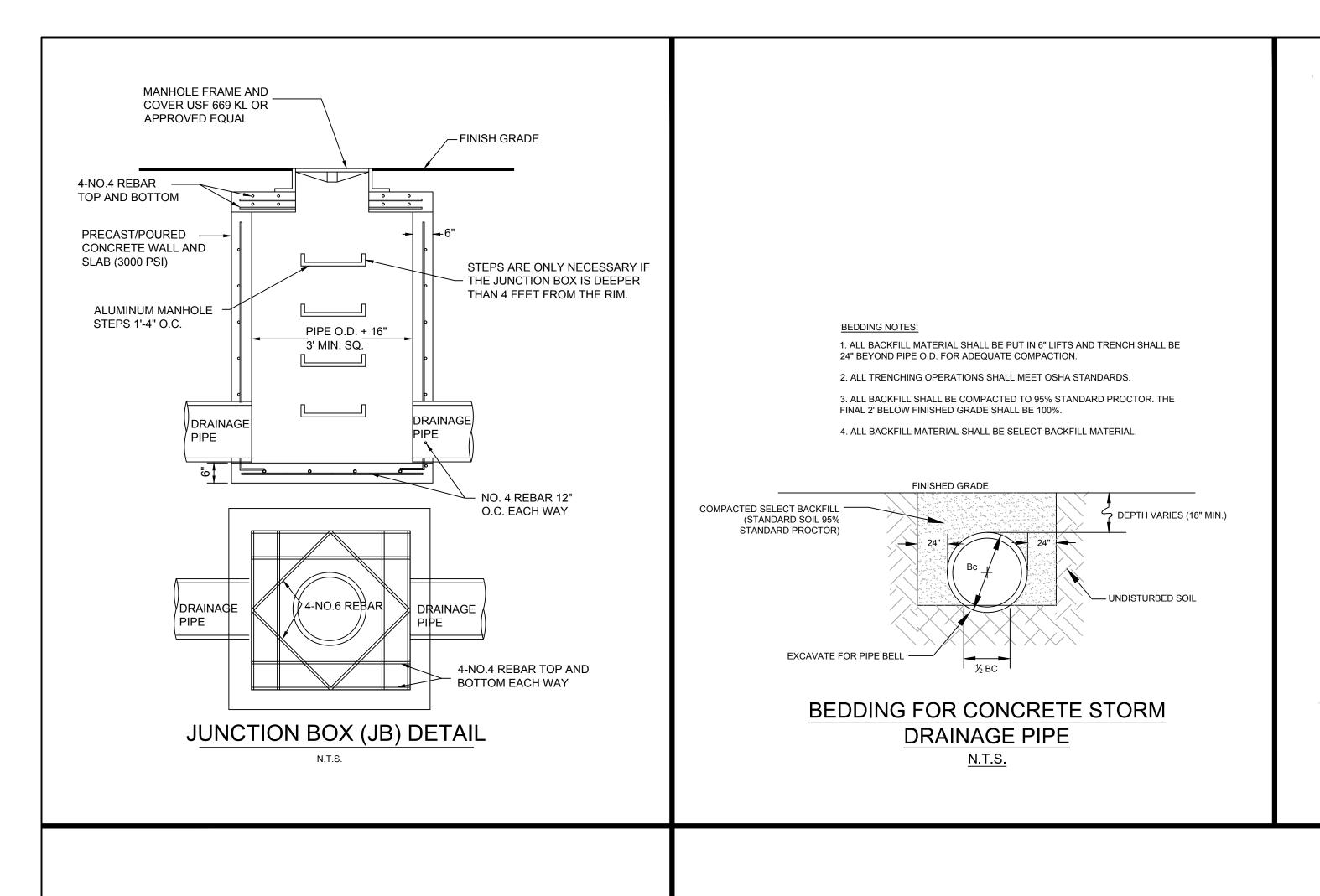
GRADING PLAN

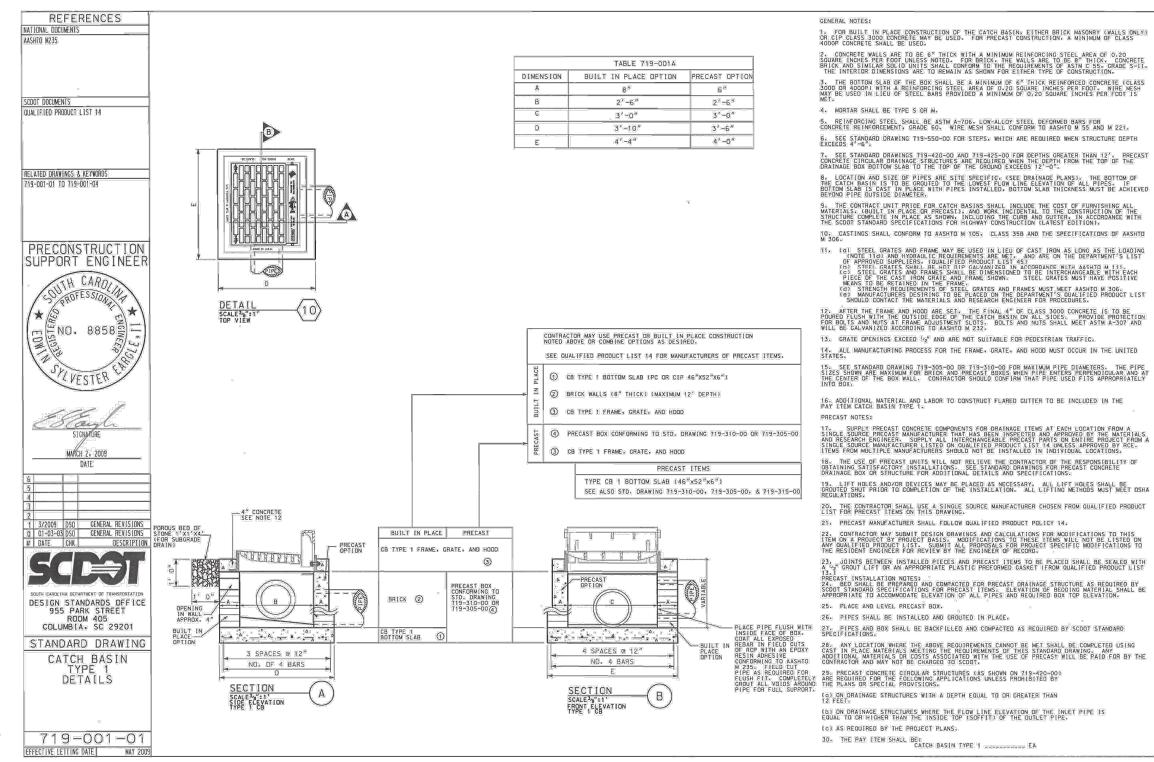
Project No. Scale
178420699 1" = 10'

Drawing No. Sheet Revision

C10 11 of 26 0









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XEP - EXISTING PAVEMENT ELEVATION XBL - EXISTING BUILDING ELEVATION TOC - NEW TOP OF CONCRETE CURB ELEVATION FC - FLUSH CONCRETE CURB

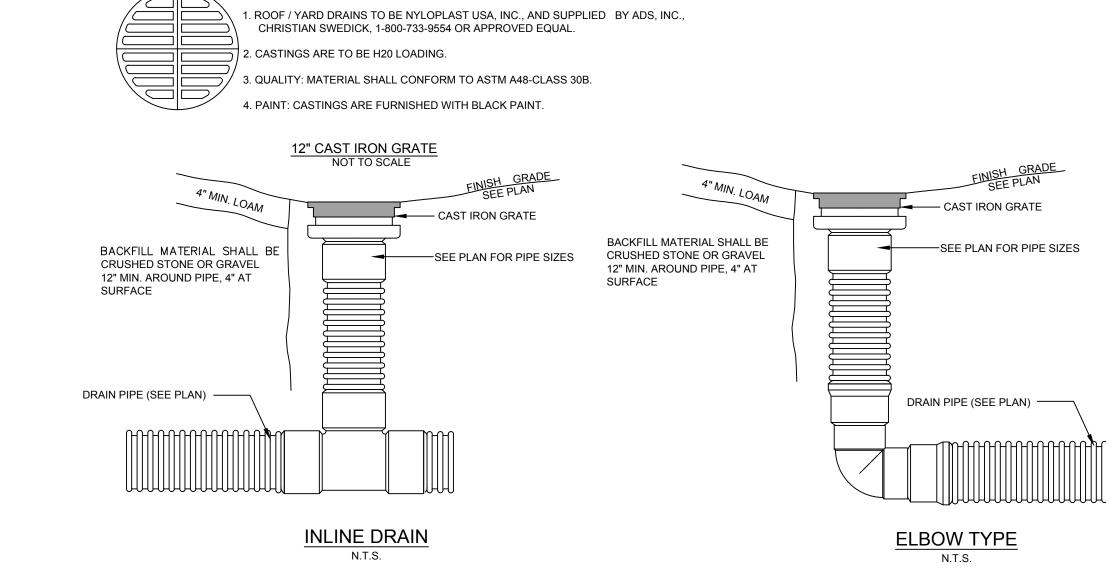
Notes

NEW SIDEWALK IS TO COMPLY WITH THE MOST RECENT VERSION OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN. THE CROSS SLOPE OF THE SIDE WALK SHALL NOT EXCEED 1:48 (2%) FROM THE EXISTING BUILDING TO THE TOP OF CURB ELEVATION. THE HORIZONTAL SLOPE SHALL NOT EXCEED 1:20 (5%).

GEOTEXTILE FABRIC FOR DRAINAGE FILTRATION (UNPROTECTED) CLASS 2 TO BE LAPPED A MINIMUM OF TWELVE (12") INCHES ON TOP. AGGREGATE NO. 57 GEOTEXTILE FABRIC FOR DRAINAGE FILTRATION (UNPROTECTED) CLASS 2 6" PERFORATED PIPE UNDER WITH GEOTEXTILE – 4"——— Ď ———— 4"— ---- VARIABLE-----D = O.D. OF UNDERDRAIN

UNDER DRAIN DETAIL

N.T.S.



12" YARD INLET DETAIL N.T.S.

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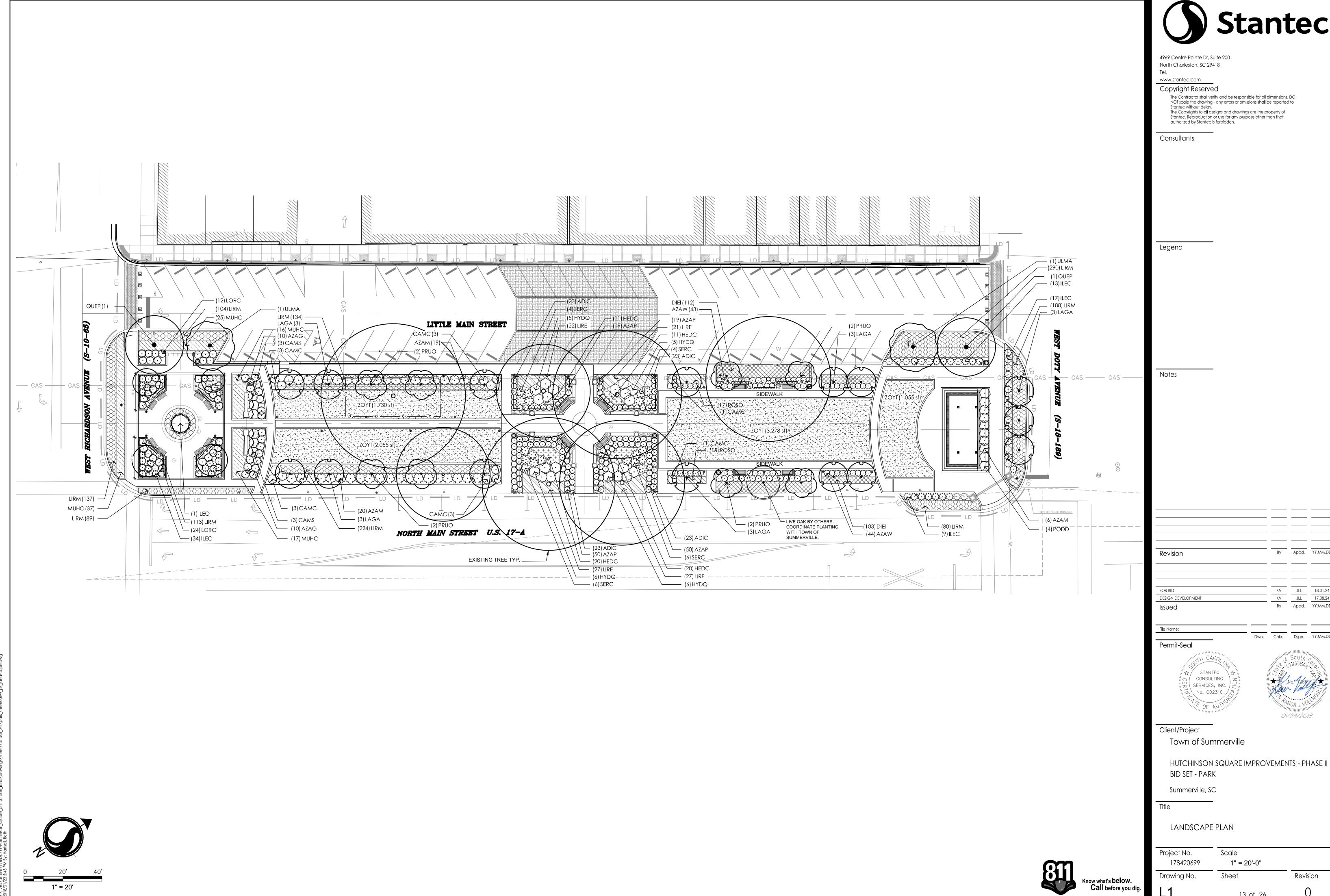
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Summerville, SC

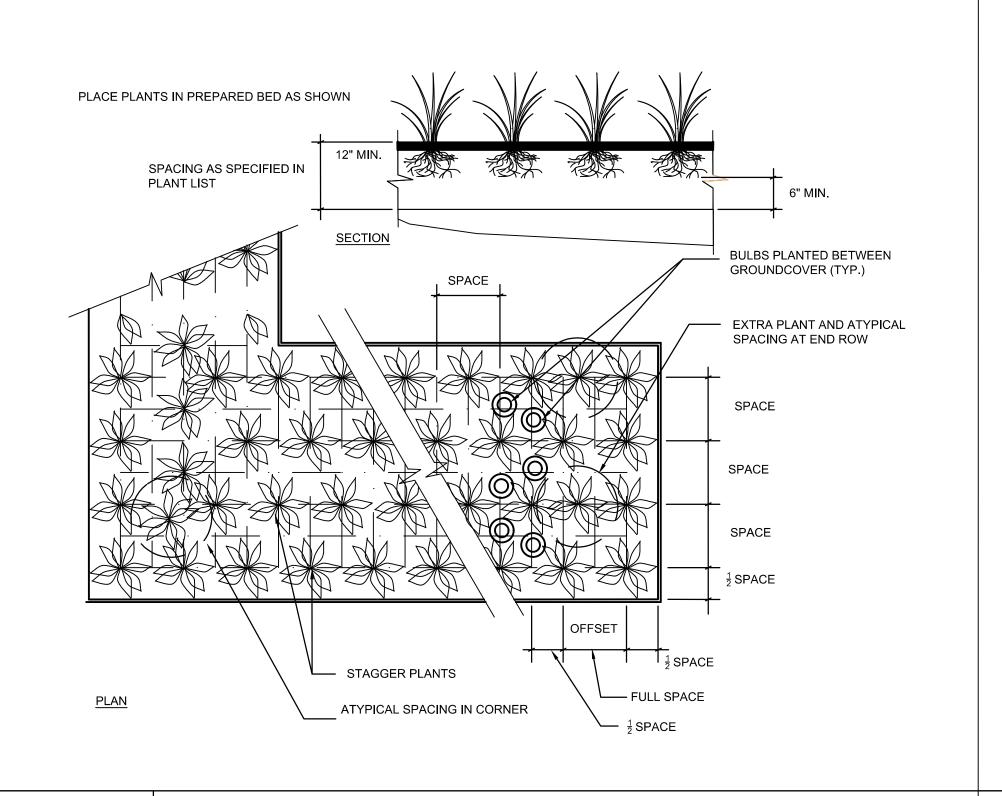
GRADING AND DRAINAGE DETAILS

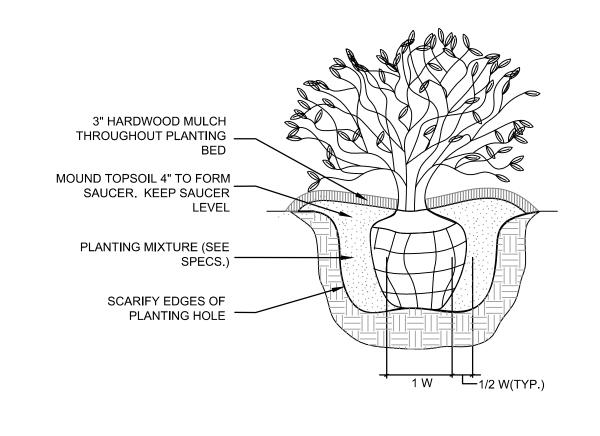
Scale Project No. 178420699 Drawing No. Sheet Revision 12 of 26



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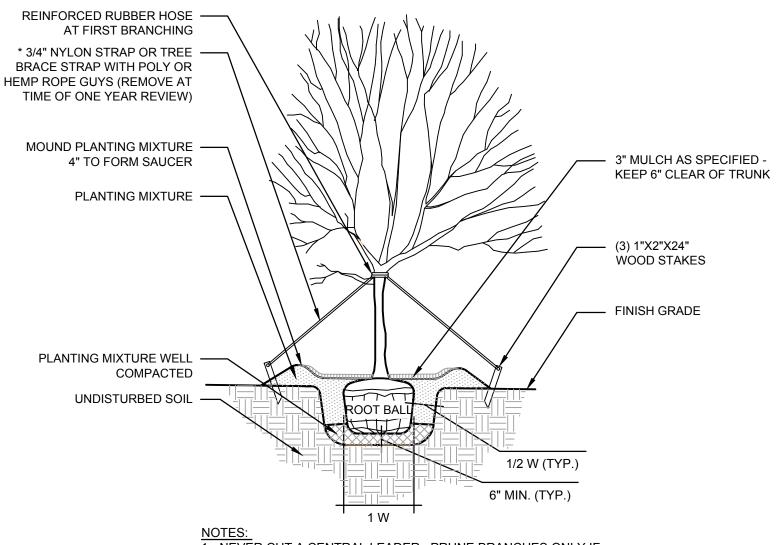
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178420699	1" = 20'-0"	
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- 1. REMOVE CONTAINERIZED PLANTS FROM THEIR CONTAINER. 2. REMOVE BURLAP, TWINE, ROPE AND BASKET FROM 1/3 TOP OF ROOTBALL IF BOUND IN
- 'PRUNE ROOTS IF ROOTBOUND.
- REMOVE ALL CONTAINERS AND NON-BIODEGRADEABLE BURLAP. WHEN BACKFILLING PLANT PIT, PLACE PLANTING SOIL IN TWO LIFTS. AFTER FIRST LIFT, PUDDLE SOIL IN WITH WATER TO REMOVE ALL AIR POCKETS. PLACE SECOND LIFT AND REPEAT. CONTINUE TO PUDDLE AND FILL AS NECESSARY.

CONT CAL SIZE SPREAD



NOTES:

1. NEVER CUT A CENTRAL LEADER. PRUNE BRANCHES ONLY IF BROKEN OR DAMAGED.

- 2. REMOVE TOP $\frac{1}{3}$ OF BURLAP, TWINE, ROPE, AND LOOSEN TOP OF BASKET FROM ROOT BALL
- 3. TOP OF ROOT BALL TO BE 2" ABOVE FINISHED GRADE. DO NOT
- PLACE ADDITIONAL SOIL ON TOP OF ROOT BALL. 4. DO NOT STAKE TREE UNLESS SLOPE REQUIRES STABILIZATION.

GROUNDCOVER PLANTING DETAIL SHRUB PLANTING DETAIL SINGLE STEM PLANTING DETAIL SCALE: NTS SCALE: NTS SCALE: NTS

| CODE | QTY | BOTANICAL NAME / COMMON NAME

PLANT SCHEDULE

TEMPORARILY BRACE TREE W/ (3) CLEAR PVC COATED 1/16" GALV. STEEL CABLES. SET & MAINTAIN TREE IN A SECURE CABLE TO TREE W/ BLACK (PLUMB) VERTICAL POSITION. WOVEN FABRIC STRAPS W/ LOOPED ENDS. SECURE TO GROUND W/ (3) METAL REMOVE ALL DEAD & UNDERGROUND EARTH ANCHORS. DAMAGED BRANCHES & ALL REMOVE ALL TEMPORARY ANCHORS, SUCKER GROWTH, DO NOT STRAPS, AND GUYS AFTER (1) YEAR. CUT CENTRAL LEADER. FOR B&B TREES, - CUT BACK -WHITE FLAGGING TAPE (TYP) WIRE AND ROPE. PULL BACK TOP THIRD OF BURLAP & SET TOP OF ROOTBALL FLUSH W/ FINISH REMOVE. FOR CONTAINERS-GRADE, OR 2" HIGHER FOR AREAS THAT SEPARATE & SPREAD OUT HAVE HEAVY SOILS OR ARE POORLY ENCIRCLING ROOTS. DRAINED. SET BOTTOM OF ROOTBALL ON SOLID GROUND. 3" THICK MULCH, KEEP 6" AWAY FROM TRUNK LOOSEN SOIL MIN. 12" DEEP W/ ROTO-TILER OR SHOVEL. ADD NECESSARY SOIL AMENDMENTS AND FERTILIZER. USE ONLY WATER TO SETTLE MULCH AND PLANTING MIX MIN. 2 X BALL DIA. CULTIVATED SOIL 3 X BALL DIAM. (5 X BALL DIAM. FOR AREAS NOT TO RECEIVE TOPSOIL) 1. IF TREE IS MULT-STEM, MORE THAN ONE STEM MAY NEED

MULTI-TRUNK PLANTING DETAIL

TREES	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	SPREA
0	ILEO	1	ILEX OPACA `SATYR HILL` / SATYR HILL AMERICAN HOLLY	B & B	5"CAL	14`-16`	8`-10`
(·)	LAGA	15	LAGERSTROEMIA FAURIEI 'ARAPAHO' / CRAPE MYRTLE	B & B	MULTI	12`-14`	4-5`
$\overline{\bigcirc}$	PRUO	8	PRUNUS X OKAME / OKAME CHERRY	B & B	3"CAL	10`-12`	4-5`
$\overline{(\cdot)}$	QUEP	2	QUERCUS PHELLOS / WILLOW OAK	B & B	3"CAL	12`-14`	5-6`
$\overline{\left(\cdot\right)}$	ULMA	2	ULMUS PARVIFOLIA `ALLEE` / ALLEE LACEBARK ELM	B & B	3"CAL	12`-14`	5-6`
SHRUBS	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	SIZE	SPREAD	
<u> </u>	AZAG	19	AZALEA INDICA `GEORGE TABOR` / GEORGE TABOR AZALEA	7 GAL	24-30"	24-30"	
\odot	AZAM	45	AZALEA INDICA `MRS. G.G. GERBING` / MRS. G.G. GERBING AZALEA	7 GAL	24-30"	24-30"	
\odot	AZAP	138	AZALEA SATSUKI HYBRID `GUMPO PINK` / SATSUKI AZALEA	3 GAL	15-18"	15-18"	
\odot	AZAW	87	AZALEA SATSUKI HYBRID `GUMPO WHITE` / SATSUKI AZALEA	3 GAL	15-18"	15-18"	
\odot	CAMC	14	CAMELLIA SASANQUA `CHANSONETTE` / CAMELLIA	7 GAL	1.5` - 2`	3-4`	
①	CAMS	6	CAMELLIA SASANQUA `SETSUGEKKA` / WHITE CAMELLIA	25 GAL	4`-5`	3-4`	
\odot	HYDQ	22	HYDRANGEA QUERCIFOLIA / OAKLEAF HYDRANGEA	7 GAL	3`-4`	24-30"	
<i>(</i> *)	ILEC	73	ILEX CORNUTA `CARISSA` / CARISSA HOLLY	7 GAL	24-30"	24-30"	
\odot	LORC	36	LOROPETALUM CHINENSE `DARUMA` / DARUMA DWARF LOROPETALUM	7 GAL	18"-24"	24-30"	
\odot	PODD	4	PODOCARPUS MACROPHYLLUS 'DWARF PRINGLES' / DWARF PODOCARPUS	7 GAL	3`-4`	24-30"	
£;;3	SERC	20	SERENOA REPENS `CINEREA` / SILVER SAW PALMETTO	7 GAL	3`-4`	3-4`	
GROUND COVERS	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT			
	ADIC	93	ADIANTUM CAPILLUS-VENERIS / MAIDENHAIR FERN	3 GAL			
	DIEI	215	DIETES IRIDIOIDES / FORTNIGHT LILY	3 GAL			
	HEDC	62	HEDYCHIUM CORONARIUM / WHITE GINGER	3 GAL			
	LIRE	97	LIRIOPE MUSCARI 'EVERGREEN GIANT' / EVERGREEN GIANT LIRIOPE	3 GAL			
	LIRM	1,359	LIRIOPE MUSCARI 'SUPER BLUE' / SUPER BLUE LILYTURF	1 GAL			
	MUHC	95	MUHLENBERGIA CAPILLARIS / PINK MUHLY	3 GAL			
	ROSO	32	ROSMARINUS OFFICINALIS `PROSTRATUS` / CREEPING ROSEMARY	1 GAL			
	ZOYT	8,118 SF	ZOYSIA TENUIFOLIA / KOREAN GRASS	SOD			

GENERAL LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR (CONTRACTOR) SHALL VISIT SITE, INSPECT 14. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT EXISTING CONDITIONS, AND REVIEW PROPOSED PLANTINGS AND RELATED WORK. LANDSCAPE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS ON PROPERTY WITH THE GENERAL CONTRACTOR AND BY 15. CALLING LOCAL ONE-CALL OR DIG-RITE PRIOR TO STAKING PLANT
- IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE WITH ANY CONCERNS.
- LANDSCAPE CONTRACTOR TO COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATIONS WITH OTHER CONTRACTORS WORKING ON SITE.
- FOUND ON SITE, WHETHER SHOWN ON THE DRAWING OR NOT, THEY SHALL BE PROTECTED AND SAVED UNLESS NOTED TO BE REMOVED AND/OR ARE IN AN AREA TO BE GRADED. ANY QUESTIONS REGARDING WHETHER PLANT MATERIAL SHOULD REMAIN OR NOT SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- ALL EXISTING TREES TO REMAIN TO BE FERTILIZED AND PRUNED TO REMOVE DEAD WOOD AND DAMAGED OR RUBBING BRANCHES.
- NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION.
- ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. WARRANTY FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED. LANDSCAPE CONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR THE OWNER'S ACCEPTANCE INSPECTION. REMOVE AND REPLACE DEAD PLANT MATERIAL (25% + DEAD) IMMEDIATELY UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON. A LIMIT OF ONE REPLACEMENT OF EACH TREE AND SHRUB WILL BE REQUIRED, EXCEPT FOR LOSSES CAUSED BY CONTRACTOR'S ERRORS.
- 10. CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY 4" TOPSOIL DEPTH IN ALL PLANTING BEDS AND 4" TOPSOIL DEPTH IN ALL LAWN AREAS. BACKFILL AND CROWN PARKING LOT ISLANDS 6" ABOVE ADJACENT CURBS WITH TOPSOIL. BACKFILL DIRECTLY BEHIND ALL CURBS AND ALONG SIDEWALKS AND COMPACT TO TOP OF CURB OR WALK TO SUPPORT VEHICLE AND PEDESTRIAN WEIGHT WITHOUT SETTLING.
- 11. ACCEPTANCE OF GRADING AND SOD SHALL BE BY LANDSCAPE ARCHITECT AND/OR PROJECT REPRESENTATIVE. THE LANDSCAPE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITY UNTIL FINAL ACCEPTANCE HAS BEEN RECEIVED. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REPLACEMENT OF WASH-OUTS AND OTHER OPERATIONS NECESSARY TO KEEP SOD IN A THRIVING CONDITION. UPON FINAL ACCEPTANCE BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE, THE OWNER WILL ASSUME ALL MAINTENANCE RESPONSIBILITIES.

SPACING

18" o.c.

18" o.c.

24" o.c.

- 12. LANDSCAPE CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL 27. CONTRACTOR SHALL FIELD ADJUST PLANT MATERIAL TO AVOID THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER'S ACCEPTANCE WITH ALL REPLACEMENTS TO BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- 13. PLANT MATERIAL LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY BE AND LAWN AREAS. CONTRACTOR TO COORDINATE CONTROLLER SUBJECT TO CHANGE IN THE FIELD AS REQUIRED. CONTRACTOR TO VERIFY QUANTITIES SHOWN ON PLAN.

- NO COST TO THE OWNER.
- OWNER OR OWNER'S REPRESENTATIVE SHALL INSPECT LANDSCAPE INSTALLATION AND HAVE THE RIGHT TO REJECT AND WITHHOLD PAYMENT ON ANY PLANT MATERIAL(S) OF DAMAGED OR POOR QUALITY OR NOT MEETING SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL, EROSION, AND DUST CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION. THE LANDSCAPE CONTRACTOR SHALL PREVENT EROSION OF SOIL AND ENTRY OF SOIL-BEARING WATER AND AIRBORNE DUST ONTO ADJACENT PROPERTIES AND INTO THE PUBLIC STORM WATER
- WHERE EXISTING TREES AND/OR SIGNIFICANT SHRUB MASSINGS ARE 17. ALL LANDSCAPE BEDS AND TREE RINGS TO BE MULCHED WITH HARDWOOD MULCH TO A DEPTH OF NO LESS THAN 3". SUBMIT SAMPLE
 - 18. NO PLANTING TO BE INSTALLED UNTIL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
 - 19. IF THE LANDSCAPE CONTRACTOR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT MATERIAL ESTABLISHMENT, SURVIVAL, OR GUARANTEE, THEY SHALL BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
 - 20. PRIOR TO ANY LAND CLEARING OR CONSTRUCTION, TREE PROTECTION FENCING IS TO BE INSTALLED BY THE CONTRACTOR. THIS FENCING SHALL BE INSTALLED AT THE DRIP LINE OF ALL TREES AND SHRUBS (TO BE PROTECTED) ACCORDING TO THE TREE PROTECTION DETAIL AND MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT. NO CUTTING, FILLING OR TRESPASSING SHALL OCCUR INSIDE THE FENCED AREAS WITHOUT APPROVAL.
 - 21. ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. PLANT MATERIALS ARE TO BE PLANTED IN THE SAME RELATIONSHIP TO GRADE AS WAS GROWN IN NURSERY CONDITIONS. IF WET, CLAY SOILS OR POOR DRAINING SOILS ARE EVIDENT, PLANT HIGHER. REMOVE ALL TWINE, WIRE AND BURLAP FROM TOP 1/3 OF ROOT BALL AND FROM TREE TRUNKS.
 - ONE SHRUB PER TYPE AND SIZE IN EACH PLANTING BED AND EVERY TREE SHALL BE CLEARLY IDENTIFIED (COMMON OR LATIN NOMENCLATURE) WITH A PLASTIC TAG WHICH SHALL NOT BE REMOVED PRIOR TO OWNER ACCEPTANCE.
 - 23. SEED AND/OR SOD ALL AREAS DISTURBED DUE TO GRADING AND CONSTRUCTION ACTIVITIES. WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND.
 - PRUNE, THIN AND SHAPE TREES AND SHRUBS ACCORDING TO STANDARD HORTICULTURAL PRACTICES. APPLY MINIMUM 4" MULCH CUP AT ALL TREES NOT PLANTED IN PLANTING BEDS.
 - 25. ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESS WATER FROM STANDING AROUND TREES AND
 - IMMEDIATELY MULCH WITH HARDWOOD MULCH AND WATER ALL PLANTS AND TREES OR COMPLETE WITHIN 16 HOURS AFTER INSTALLATION.
 - CONFLICTS WITH UTILITIES. PLANTS SHALL NOT OBSTRUCT TRANSFORMERS, DRAINAGE INLETS, HYDRANTS, ETC.
 - 28. 100% IRRIGATION COVERAGE FOR ALL TREE, SHRUB, GROUND COVER, LOCATION WITH OWNER.
 - 29. PLANTING MIX SHALL BE 20% PEAT MOSS, 40% TOPSOIL, AND 40%





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STANTEC \ CONSULTING 另 SERVICES, INC.

Client/Project

Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

LANDSCAPE DETAILS

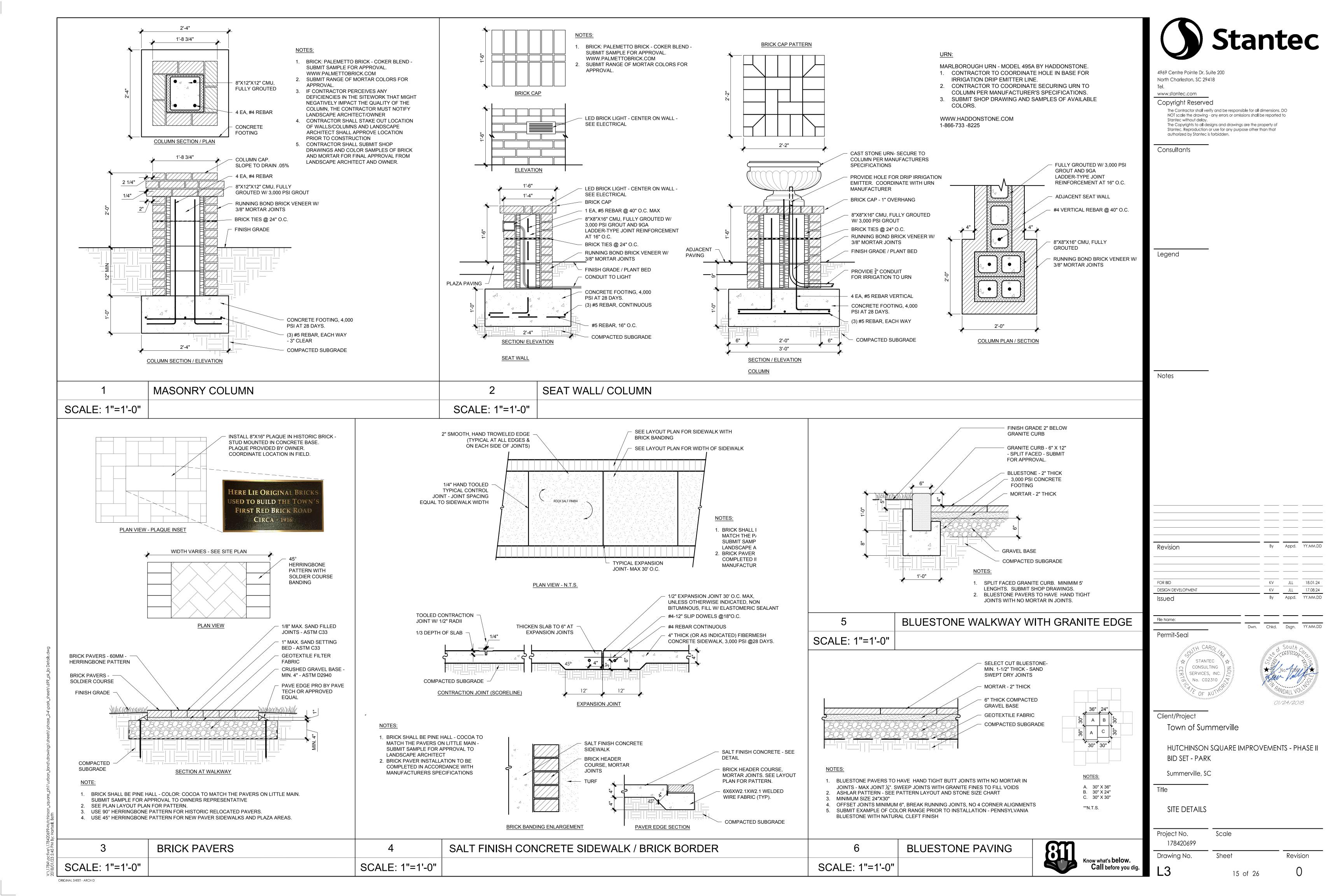
Scale Project No. NTS 178420699 Drawing No. Sheet Revision

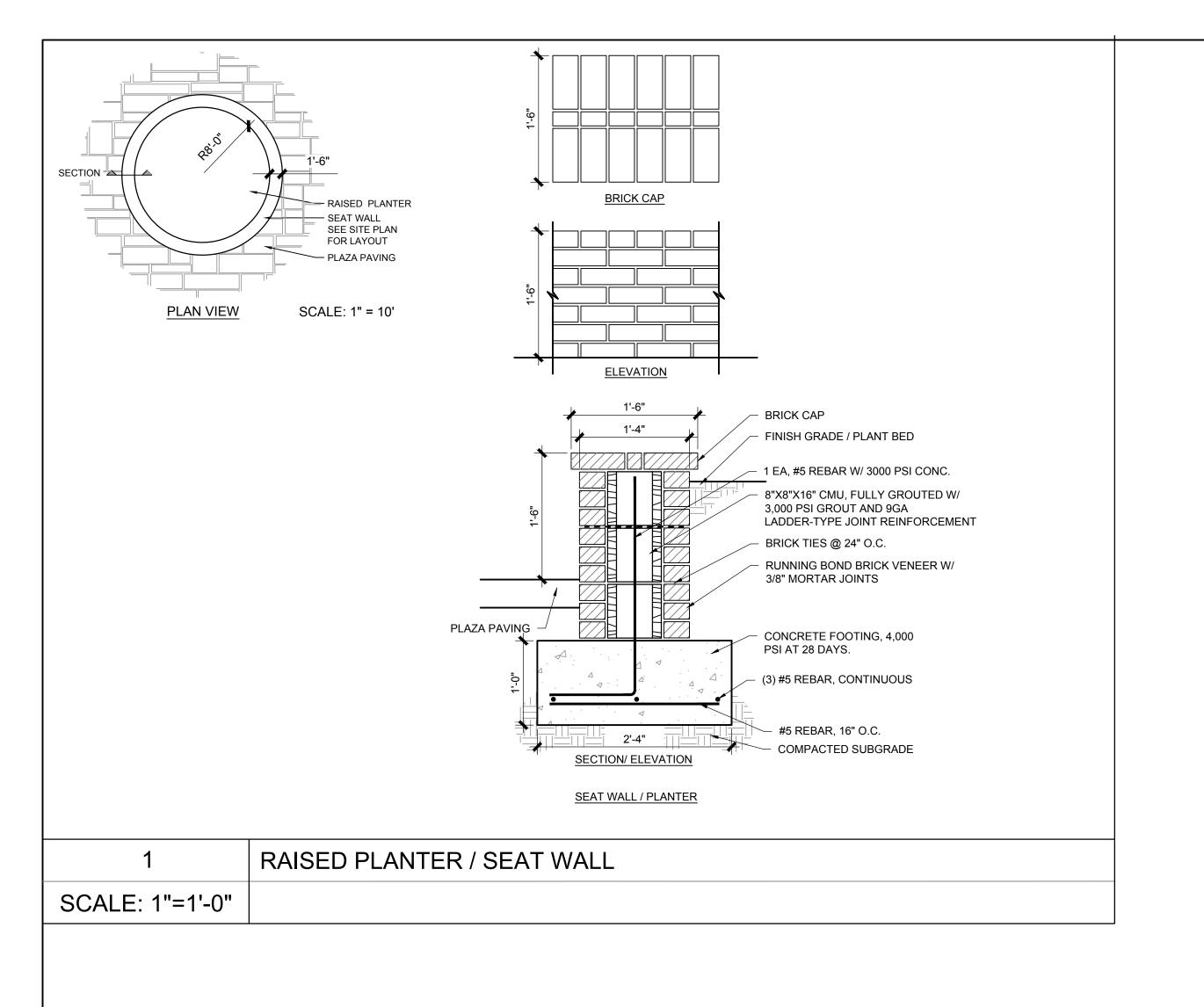
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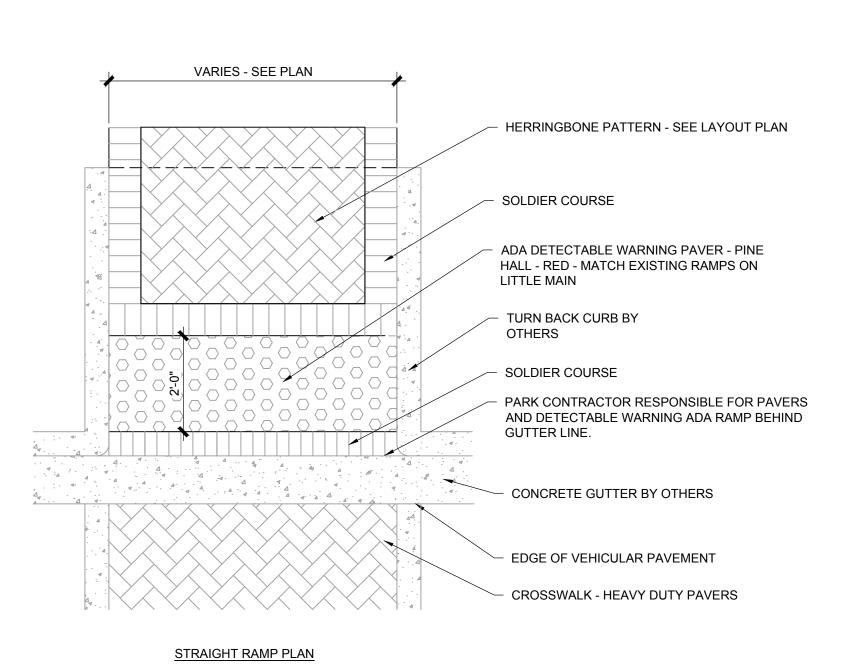
2. LOCATE GUYS WITHIN PLANT BED.

3. ALL CABLE CLAMPS & BOLTS SHALL BE RUST RESISTANT.

14 of 26



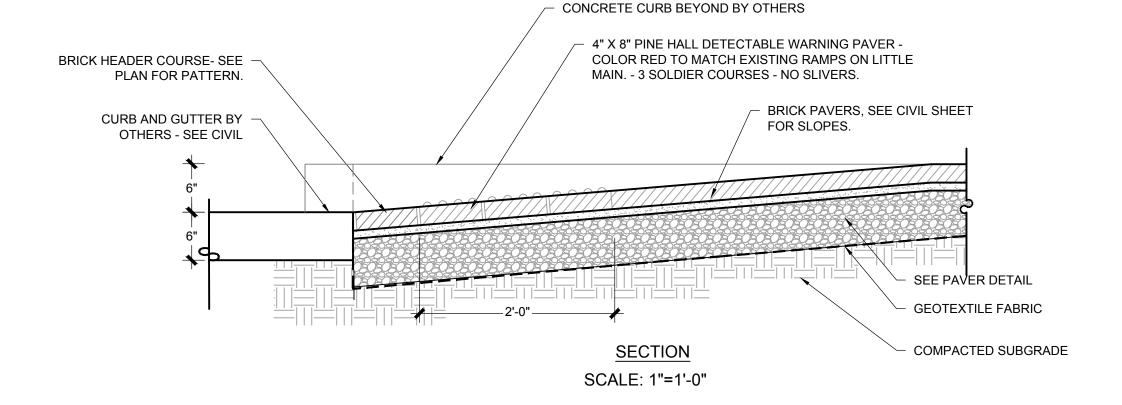


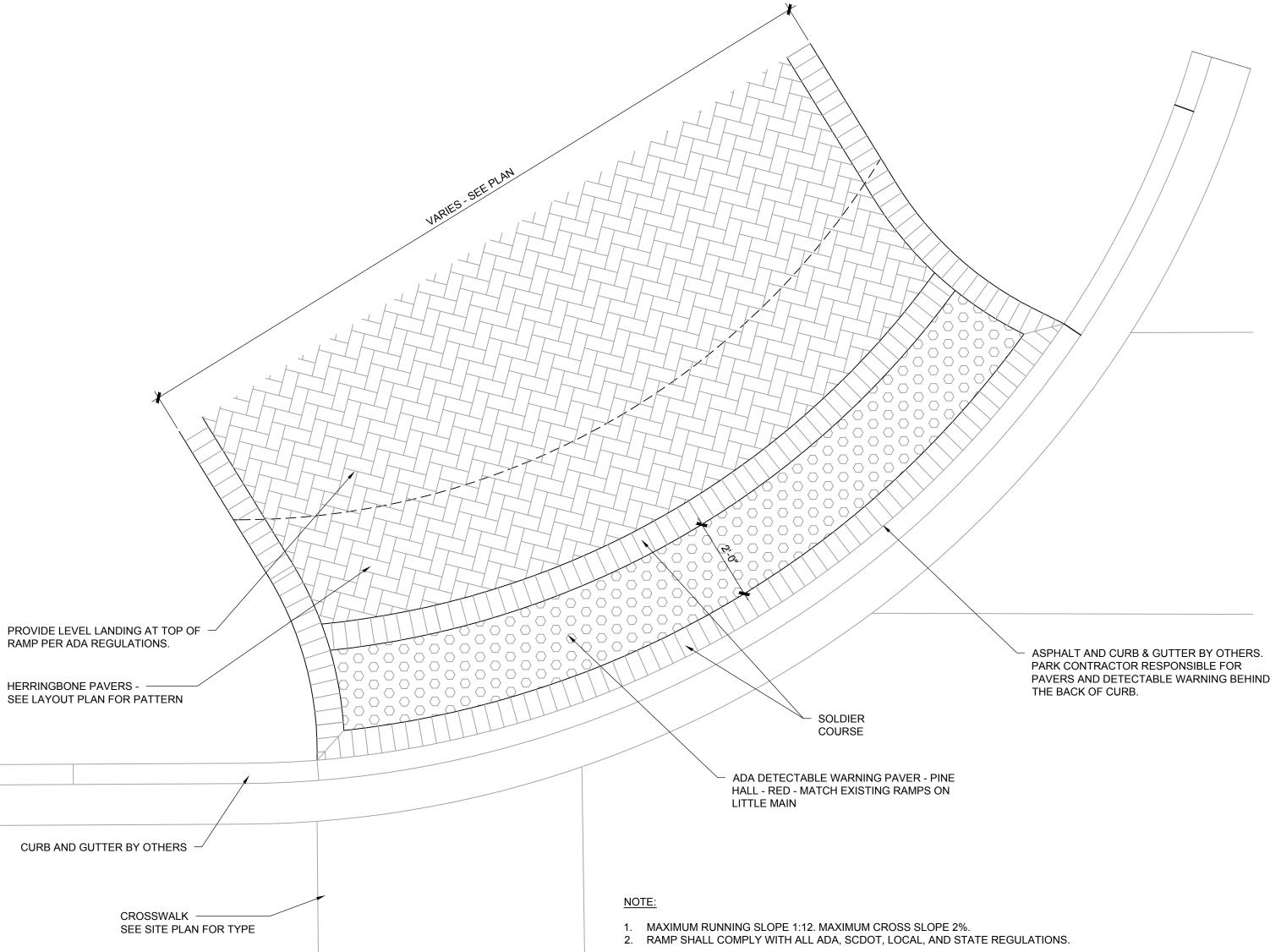


NOTES

- 1. FOLLOW DETECTABLE WARNING MATERIAL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SCDOT STANDARD DRAWINGS.
- USE PAVERS ONLY IN LOCATIONS OUTSIDE OF VEHICULAR TRAFFIC.
 MINIMIZE THE USE OF FIELD CUT PIECES UNLESS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS. INSTALL ALL FIELD CUT EDGES ALONG ONLY ONE SIDE OF
- THE WARNING PATTERN. CUT WARNING SURFACE TO THE MEET THE REQUIRED GEOMETRY OF THE RAMP WHILE MINIMIZING THE CUTTING OF DOMES.

 4. THE BASE OF EACH PAVER IS TO BE TIGHT AGAINST THE ADJOINING PAVER.
- APPLY SEALANT SPECIFIED BY MANUFACTURER AROUND ALL JOINTS AND PERIMETER OF WARNING PATTERN.
 MAX RUNNING SLOPE 1:12. MAX CROSS SLOPE 2%. RAMP AND LANDING SHALL MEET ALL ADA, LOCAL AND STATE REGULATIONS.







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Legend

Notes

Revision

By Appd. YY.MM.DD

FOR BID

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EVAN DESIGN DEVELOPMENT

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○ CONSULTING

另 SERVICES, INC.

系 No. C02310 / No

Client/Project

Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

Title

SITE DETAILS

 Project No.
 Scale

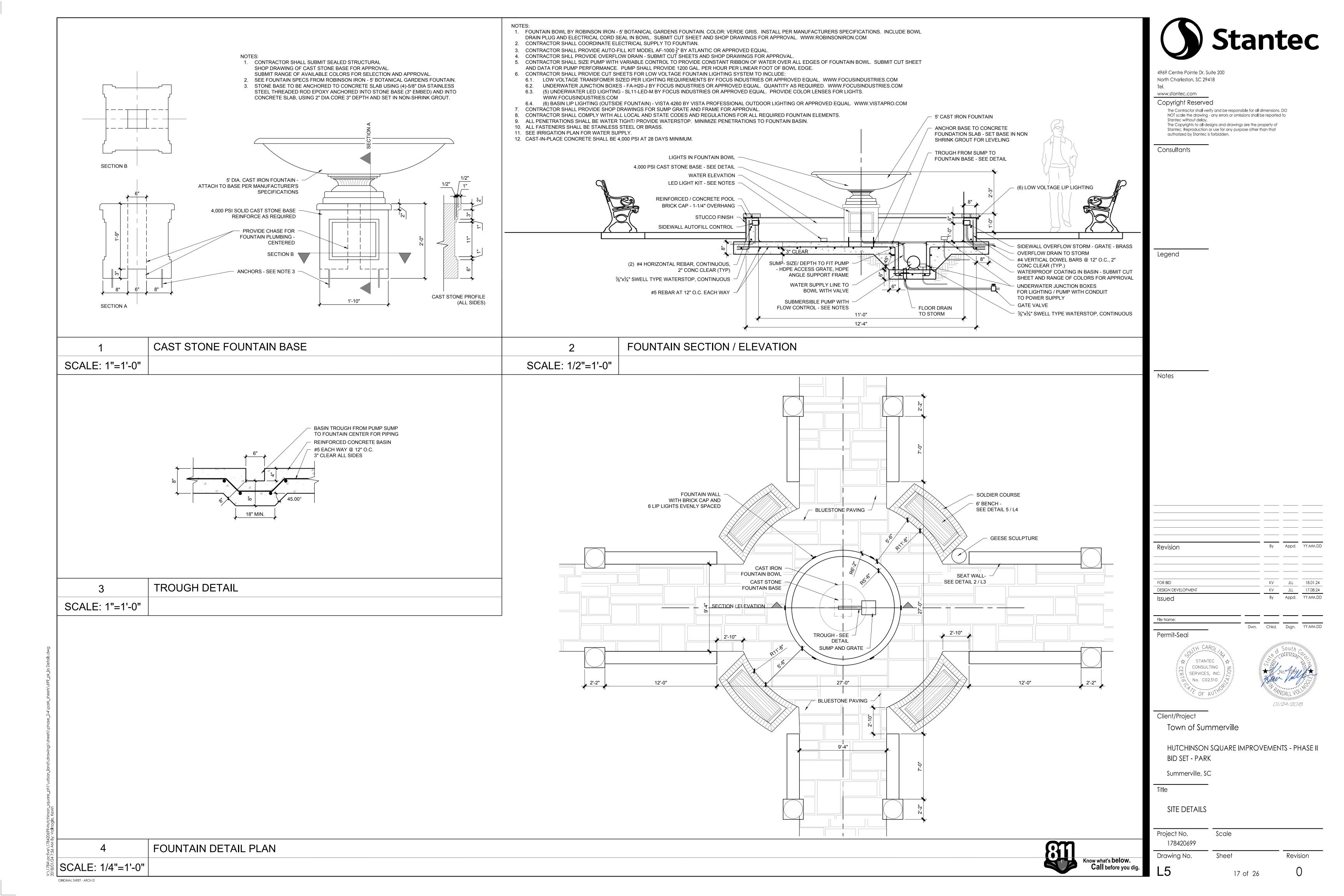
 178420699
 Revision

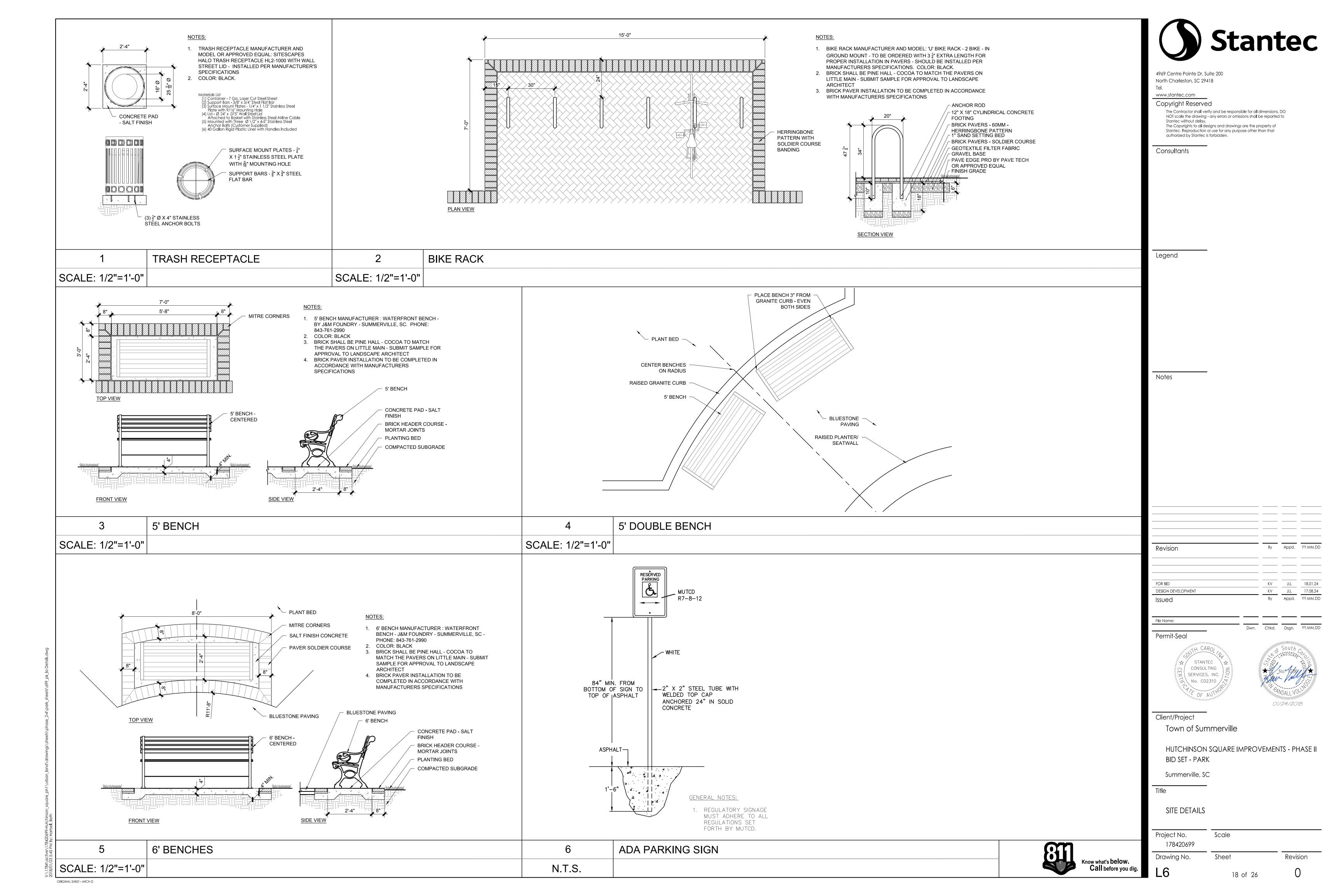
 Drawing No.
 Sheet
 Revision

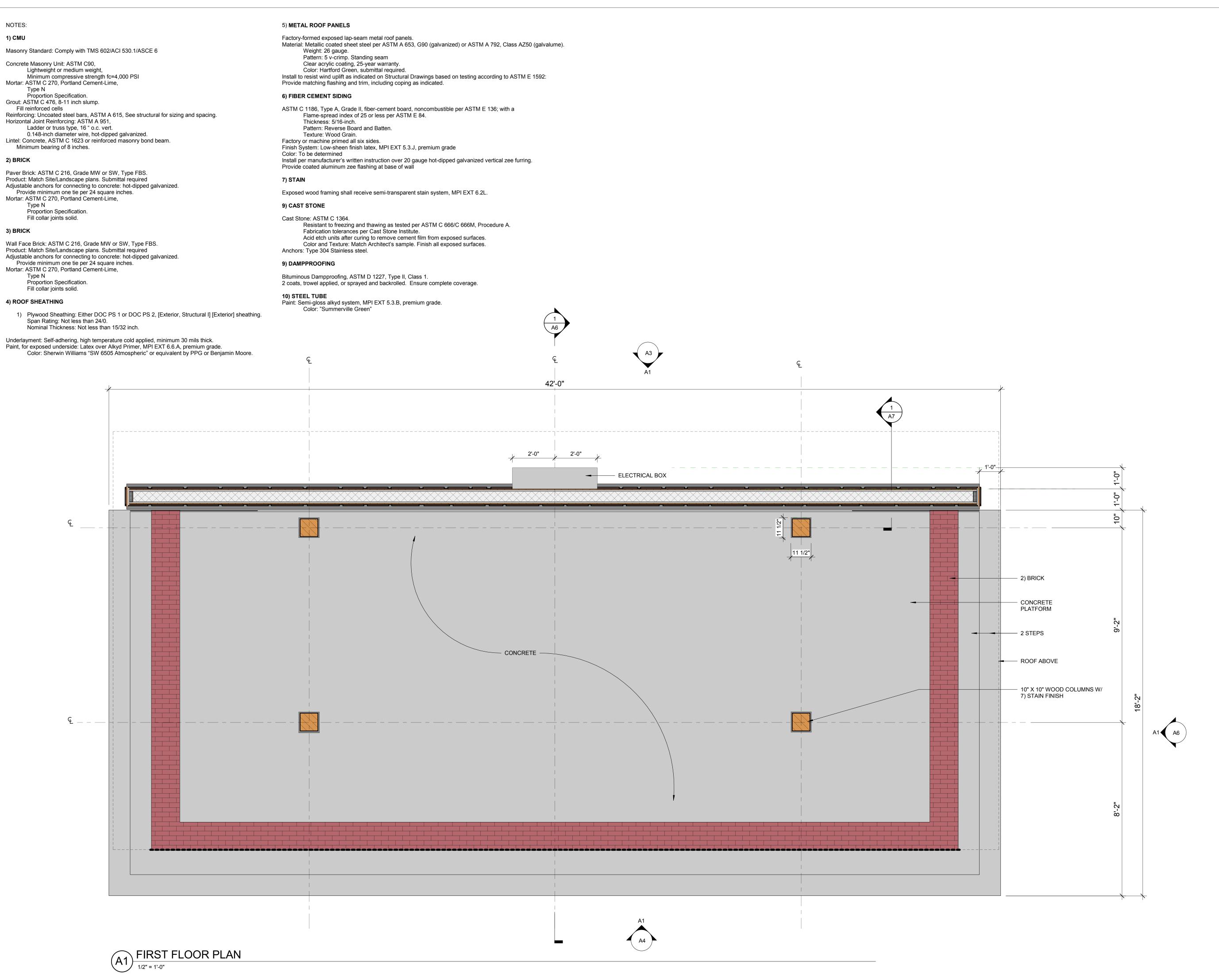
 L4
 16 of 26
 0

RAMP DETAILS

Know what's below.
Call before you dig.









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Legend

Notes

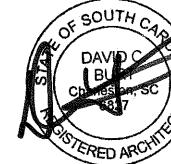
SUBMITTALS: SUBMIT THE FOLLOWING
PRODUCT DATA FOR ALL MATERIAL
SAMPLES FOR BRICK, METAL ROOFING, SIDING, STAINS, AND PAINT
SHOP DRAWINGS: FOR ROOFING

INSTILLATION: INSTALL IN ACCORDANCE WITH REFERENCE STANDARDS, MANUFACTURER'S WRITTEN INSTRUCTIONS AND APPROVED SHOP DRAWINGS

Revision By Appd. YY.MM.I.

Construction DocumentsJDDB17.10.24Design DevelopmentJDDB17.08.24IssuedByAppd.YY.MM.DD





Dwn. Chkd. Dsgn. YY.MM.DD

Lilent/Project

Town of Summerville

Hutchinson Square Improvements

Summerville, SC

Title

Floor Plan

Phase II

Project No. Scale
178420699

Drawing No. Sheet Revision

Pattern: 5 v-crimp. Standing seam
Clear acrylic coating, 25-year warranty.
Color: Hartford Green, submittal required. Install to resist wind uplift as indicated on Structural Drawings based on testing according to ASTM E 1592: Provide matching flashing and trim, including coping as indicated. 6) FIBER CEMENT SIDING ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible per ASTM E 136; with a Flame-spread index of 25 or less per ASTM E 84. Thickness: 5/16-inch. Pattern: Reverse Board and Batten. Texture: Wood Grain. Factory or machine primed all six sides. Finish System: Low-sheen finish latex, MPI EXT 5.3.J, premium grade Color: To be determined Install per manufacturer's written instruction over 20 gauge hot-dipped galvanized vertical zee furring. Provide coated aluminum zee flashing at base of wall 7) STAIN Exposed wood framing shall receive semi-transparent stain system, MPI EXT 6.2L. 9) CAST STONE Cast Stone: ASTM C 1364. Resistant to freezing and thawing as tested per ASTM C 666/C 666M, Procedure A. Fabrication tolerances per Cast Stone Institute. Acid etch units after curing to remove cement film from exposed surfaces.

5) **METAL ROOF PANELS**

Weight: 26 gauge.

Factory-formed exposed lap-seam metal roof panels.

Material: Metallic coated sheet steel per ASTM A 653, G90 (galvanized) or ASTM A 792, Class AZ50 (galvalume).

Anchors: Type 304 Stainless steel.

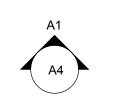
9) DAMPPROOFING

Bituminous Dampproofing, ASTM D 1227, Type II, Class 1. 2 coats, trowel applied, or sprayed and backrolled. Ensure complete coverage.

Color and Texture: Match Architect's sample. Finish all exposed surfaces.

10) STEEL TUBE
Paint: Semi-gloss alkyd system, MPI EXT 5.3.B, premium grade.
Color: "Summerville Green"

42'-0" 32'-4 1/2" 5) METAL ROOF PANELS



ROOF PL
1/2" = 1'-0"



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Legend

Notes

Revision

By Appd. YY.MM.DD

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Design Development

Issued

JD DB 17.10.24

By Appd. YY.MM.DD

YY.MM.DD

B 74003

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Dwn. Chkd. Dsgn. YY.MM.DD

Client/Project

Town of Summerville

Hutchinson Square Improvements Phase II

Summerville, SC

Title

Roof Plan

Project No. Scale
178420699

Drawing No. Sheet Revision

0



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Legend

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By Appd. YY.MM.DD Revision Construction Documents Design Development Appd. YY.MM.DD





Dwn. Chkd. Dsgn. YY.MM.DD

Client/Project

Town of Summerville

Hutchinson Square Improvements Phase II

Summerville, SC

North Elevation

Project No. Scale 178420699 Sheet Drawing No. Revision

NOTES: 5) **METAL ROOF PANELS** 1) CMU Factory-formed exposed lap-seam metal roof panels. Material: Metallic coated sheet steel per ASTM A 653, G90 (galvanized) or ASTM A 792, Class AZ50 (galvalume). Masonry Standard: Comply with TMS 602/ACI 530.1/ASCE 6 Weight: 26 gauge. Pattern: 5 v-crimp. Standing seam Concrete Masonry Unit: ASTM C90, Clear acrylic coating, 25-year warranty. Lightweight or medium weight, Color: Hartford Green, submittal required. Minimum compressive strength fc=4,000 PSI Install to resist wind uplift as indicated on Structural Drawings based on testing according to ASTM E 1592: Mortar: ASTM C 270, Portland Cement-Lime, Provide matching flashing and trim, including coping as indicated. Proportion Specification. 6) FIBER CEMENT SIDING Grout: ASTM C 476, 8-11 inch slump. ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible per ASTM E 136; with a Fill reinforced cells Reinforcing: Uncoated steel bars, ASTM A 615, See structural for sizing and spacing. Flame-spread index of 25 or less per ASTM E 84. Horizontal Joint Reinforcing: ASTM A 951, Ladder or truss type, 16 " o.c. vert. Thickness: 5/16-inch. Pattern: Reverse Board and Batten. 0.148-inch diameter wire, hot-dipped galvanized. Texture: Wood Grain. Lintel: Concrete, ASTM C 1623 or reinforced masonry bond beam. Factory or machine primed all six sides. Minimum bearing of 8 inches. Finish System: Low-sheen finish latex, MPI EXT 5.3.J, premium grade Color: To be determined Install per manufacturer's written instruction over 20 gauge hot-dipped galvanized vertical zee furring. Provide coated aluminum zee flashing at base of wall 2) BRICK Paver Brick: ASTM C 216, Grade MW or SW, Type FBS. Product: Match Site/Landscape plans. Submittal required 7) STAIN Adjustable anchors for connecting to concrete: hot-dipped galvanized. Provide minimum one tie per 24 square inches. Mortar: ASTM C 270, Portland Cement-Lime, Exposed wood framing shall receive semi-transparent stain system, MPI EXT 6.2L. 9) CAST STONE Proportion Specification. Fill collar joints solid. Cast Stone: ASTM C 1364. Resistant to freezing and thawing as tested per ASTM C 666/C 666M, Procedure A. 3) BRICK Fabrication tolerances per Cast Stone Institute. Acid etch units after curing to remove cement film from exposed surfaces. Wall Face Brick: ASTM C 216, Grade MW or SW, Type FBS. Color and Texture: Match Architect's sample. Finish all exposed surfaces. Product: Match Site/Landscape plans. Submittal required Anchors: Type 304 Stainless steel. Adjustable anchors for connecting to concrete: hot-dipped galvanized. Provide minimum one tie per 24 square inches. 9) DAMPPROOFING Mortar: ASTM C 270, Portland Cement-Lime, Bituminous Dampproofing, ASTM D 1227, Type II, Class 1. Proportion Specification. 2 coats, trowel applied, or sprayed and backrolled. Ensure complete coverage. Fill collar joints solid. 4) ROOF SHEATHING Paint: Semi-gloss alkyd system, MPI EXT 5.3.B, premium grade. Color: "Summerville Green" 1) Plywood Sheathing: Either DOC PS 1 or DOC PS 2, [Exterior, Structural I] [Exterior] sheathing. Span Rating: Not less than 24/0. Nominal Thickness: Not less than 15/32 inch. Underlayment: Self-adhering, high temperature cold applied, minimum 30 mils thick. Paint, for exposed underside: Latex over Alkyd Primer, MPI EXT 6.6.A, premium grade. Color: Sherwin Williams "SW 6505 Atmospheric" or equivalent by PPG or Benjamin Moore. 42'-0" 9'-5" EQ. EQ. 9'-5" 10' ESSENCE (BIG ASS FANS) CEILING FAN "ASS-LESS" PACKAGE 5) METAL ROOFING PANELS 12 SOFTENED RAFTER TAIL DETAILING - CURVED WOOD BRACKETS W/ 7) STAIN FINISH CORBEL PIECE W/ 7) STAIN FINISH - WOOD COLUMNS W/ 7) STAIN FINISH - METAL COPING TO MATCH **ROOF PANELS** - 6) FIBER CEMENT SIDING - 3) BRICK SOLDIER COURSE STACKED - CONCRETE PLATFORM METAL CONNECTORS W/ EXPOSED FASTENERS: SOUTH ELEVATION

1/2" = 1'-0" SEE STRUCTURAL DRAWINGS



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Legend

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Revision

By Appd. YY.MM.DD

Construction Documents
Design Development
JD DB 17.10.24

JD DB 17.08.24

Issued

By Appd. YY.MM.DD

File Name:
Dwn. Chkd. Dsgn. YY.MM.DD





Client/Project

Town of Summerville

Hutchinson Square Improvements Phase II

Summerville, SC

Title

South Elevation

Project No. Scale
178420699

Drawing No. Sheet Revision

ORIGINAL SHEET - ARCH D

of

NOTES: 5) METAL ROOF PANELS Factory-formed exposed lap-seam metal roof panels.

Material: Metallic coated sheet steel per ASTM A 653, G90 (galvanized) or ASTM A 792, Class AZ50 (galvalume). 1) CMU Masonry Standard: Comply with TMS 602/ACI 530.1/ASCE 6 Weight: 26 gauge. Pattern: 5 v-crimp. Standing seam Concrete Masonry Unit: ASTM C90, Clear acrylic coating, 25-year warranty. Lightweight or medium weight, Color: Hartford Green, submittal required. Minimum compressive strength fc=4,000 PSI Install to resist wind uplift as indicated on Structural Drawings based on testing according to ASTM E 1592: Mortar: ASTM C 270, Portland Cement-Lime, Provide matching flashing and trim, including coping as indicated. Type N Proportion Specification. 6) FIBER CEMENT SIDING Grout: ASTM C 476, 8-11 inch slump. Fill reinforced cells ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible per ASTM E 136; with a Reinforcing: Uncoated steel bars, ASTM A 615, See structural for sizing and spacing. Flame-spread index of 25 or less per ASTM E 84. Horizontal Joint Reinforcing: ASTM A 951, Thickness: 5/16-inch. Ladder or truss type, 16 " o.c. vert. Pattern: Reverse Board and Batten. 0.148-inch diameter wire, hot-dipped galvanized. Texture: Wood Grain. Lintel: Concrete, ASTM C 1623 or reinforced masonry bond beam. Factory or machine primed all six sides. Finish System: Low-sheen finish latex, MPI EXT 5.3.J, premium grade Minimum bearing of 8 inches. Color: To be determined Install per manufacturer's written instruction over 20 gauge hot-dipped galvanized vertical zee furring. Provide coated aluminum zee flashing at base of wall 2) BRICK Paver Brick: ASTM C 216, Grade MW or SW, Type FBS. Product: Match Site/Landscape plans. Submittal required Adjustable anchors for connecting to concrete: hot-dipped galvanized. Provide minimum one tie per 24 square inches. Exposed wood framing shall receive semi-transparent stain system, MPI EXT 6.2L. Mortar: ASTM C 270, Portland Cement-Lime, Type N 9) CAST STONE Proportion Specification. Fill collar joints solid. Cast Stone: ASTM C 1364. Resistant to freezing and thawing as tested per ASTM C 666/C 666M, Procedure A. 3) BRICK Fabrication tolerances per Cast Stone Institute. Acid etch units after curing to remove cement film from exposed surfaces. Wall Face Brick: ASTM C 216, Grade MW or SW, Type FBS. Color and Texture: Match Architect's sample. Finish all exposed surfaces. Product: Match Site/Landscape plans. Submittal required Anchors: Type 304 Stainless steel. Adjustable anchors for connecting to concrete: hot-dipped galvanized. Provide minimum one tie per 24 square inches. 9) DAMPPROOFING Mortar: ASTM C 270, Portland Cement-Lime, Type N Bituminous Dampproofing, ASTM D 1227, Type II, Class 1. Proportion Specification. 2 coats, trowel applied, or sprayed and backrolled. Ensure complete coverage. Fill collar joints solid. 4) ROOF SHEATHING Paint: Semi-gloss alkyd system, MPI EXT 5.3.B, premium grade. Color: "Summerville Green" 1) Plywood Sheathing: Either DOC PS 1 or DOC PS 2, [Exterior, Structural I] [Exterior] sheathing. Span Rating: Not less than 24/0. Nominal Thickness: Not less than 15/32 inch. Underlayment: Self-adhering, high temperature cold applied, minimum 30 mils thick. Paint, for exposed underside: Latex over Alkyd Primer, MPI EXT 6.6.A, premium grade. Color: Sherwin Williams "SW 6505 Atmospheric" or equivalent by PPG or Benjamin Moore. 42'-0" EQ EQ EQ 10' ESSENCE (BIG ASS FANS) CEILING FAN "ASS-LESS" PACKAGE - DIRECTIONAL SCONCE LIGHTS — 4) PAINTED HAINT BLUE CEILING - CURVED WOOD BRACKETS W/ 7) STAIN A1) REFLECTED CEILING PLAN

1/2" = 1'-0"

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Legend

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Revision

By Appd. YY.MM.DD

Construction Documents
Design Development

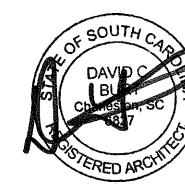
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JD DB 17.10.24

DB 17.08.24

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B 74003



Client/Project

Town of Summerville

Hutchinson Square Improvements Phase II

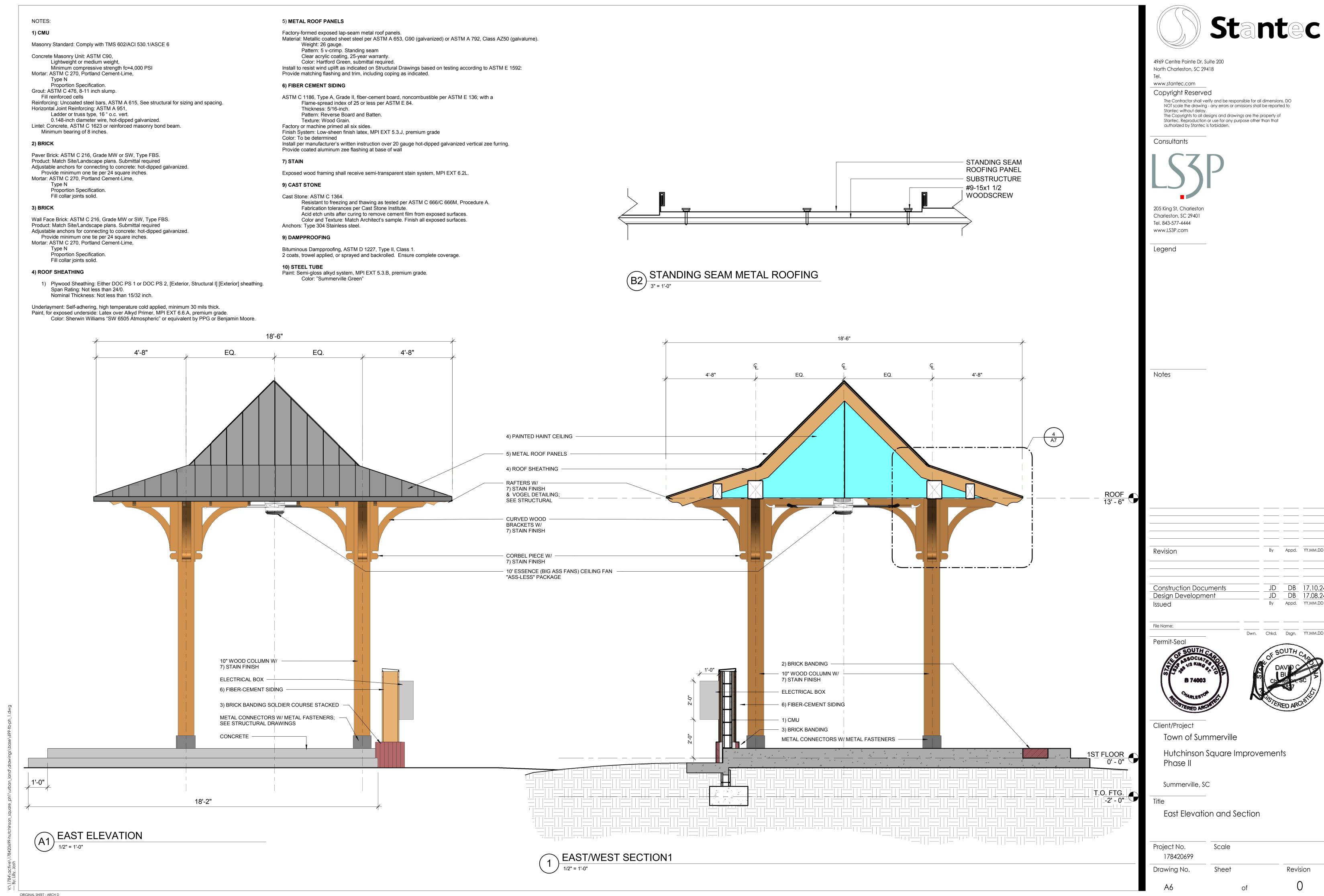
Summerville, SC

Title

Reflected Ceiling Plan

Project No. Scale
178420699

Drawing No. Sheet Revision



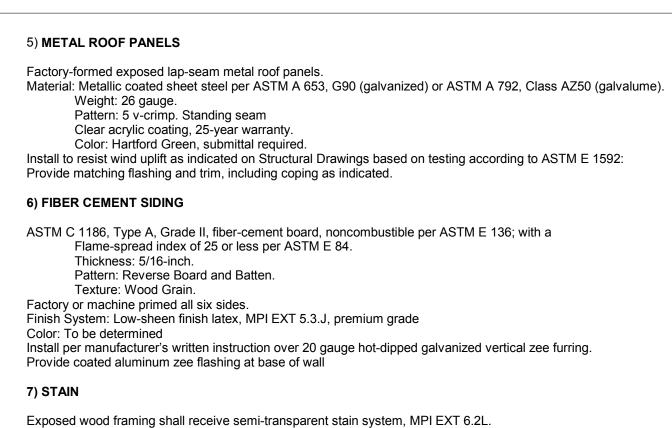
Revision

Product: Match Site/Landscape plans. Submittal required Adjustable anchors for connecting to concrete: hot-dipped galvanized. Provide minimum one tie per 24 square inches. Mortar: ASTM C 270, Portland Cement-Lime, Proportion Specification. Fill collar joints solid.

4) ROOF SHEATHING

1) Plywood Sheathing: Either DOC PS 1 or DOC PS 2, [Exterior, Structural I] [Exterior] sheathing. Span Rating: Not less than 24/0. Nominal Thickness: Not less than 15/32 inch.

Underlayment: Self-adhering, high temperature cold applied, minimum 30 mils thick. Paint, for exposed underside: Latex over Alkyd Primer, MPI EXT 6.6.A, premium grade. Color: Sherwin Williams "SW 6505 Atmospheric" or equivalent by PPG or Benjamin Moore.



Exposed wood framing shall receive semi-transparent stain system, MPI EXT 6.2L.

Cast Stone: ASTM C 1364. Resistant to freezing and thawing as tested per ASTM C 666/C 666M, Procedure A. Fabrication tolerances per Cast Stone Institute.

Acid etch units after curing to remove cement film from exposed surfaces.

Color and Texture: Match Architect's sample. Finish all exposed surfaces. Anchors: Type 304 Stainless steel.

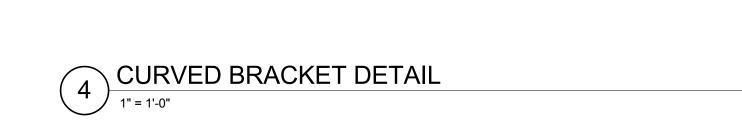
9) DAMPPROOFING

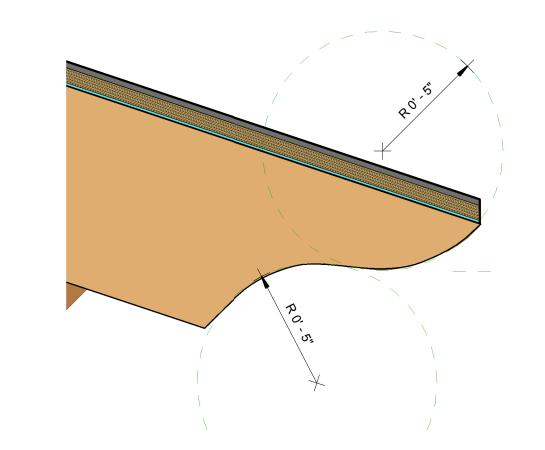
9) CAST STONE

Bituminous Dampproofing, ASTM D 1227, Type II, Class 1. 2 coats, trowel applied, or sprayed and backrolled. Ensure complete coverage.

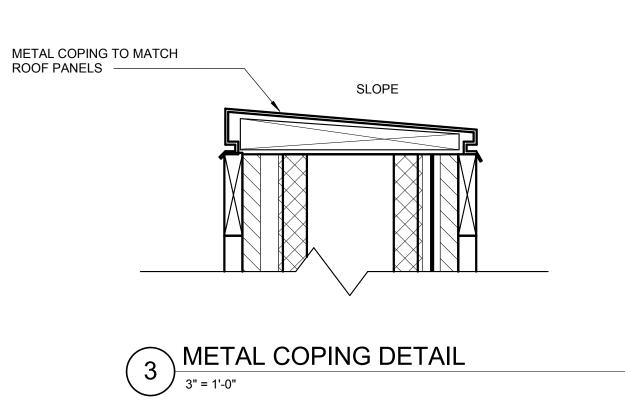
10) STEEL TUBE Paint: Semi-gloss alkyd system, MPI EXT 5.3.B, premium grade.

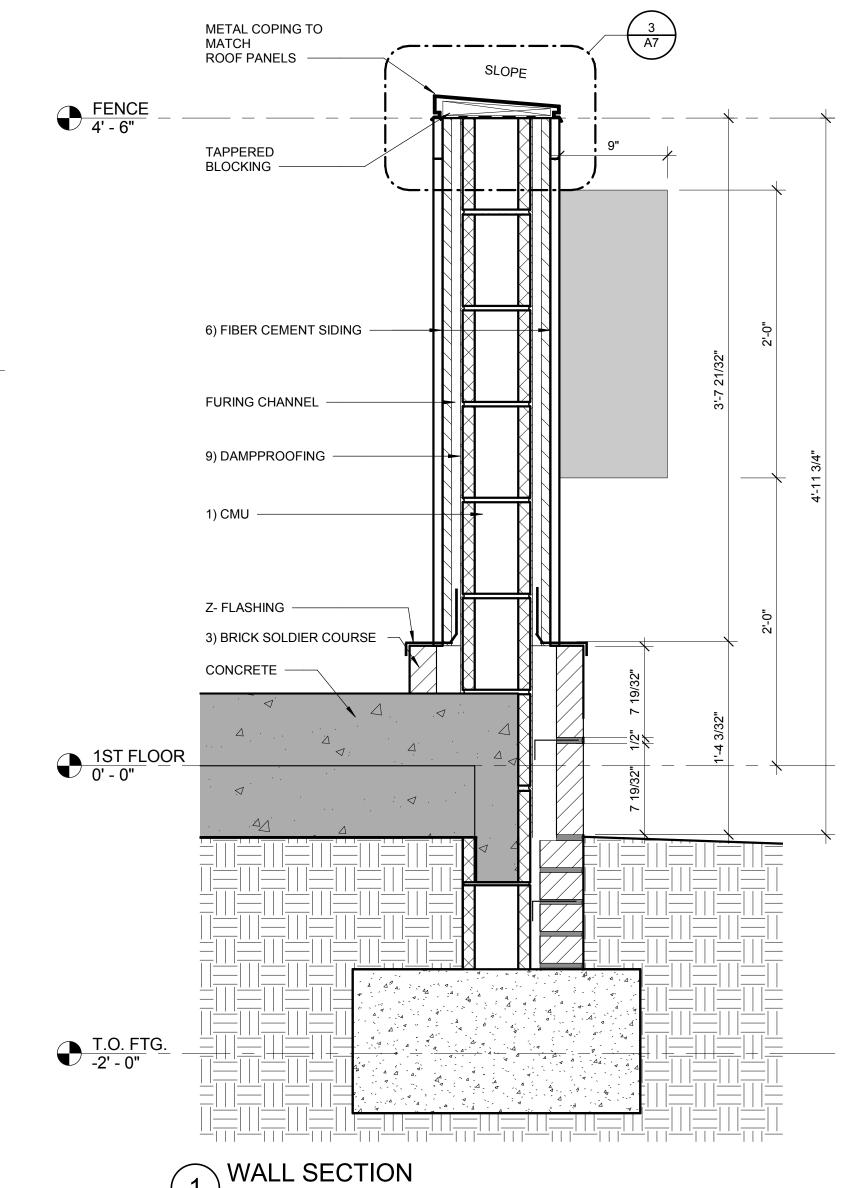
Color: "Summerville Green"





VOGEL DETAIL







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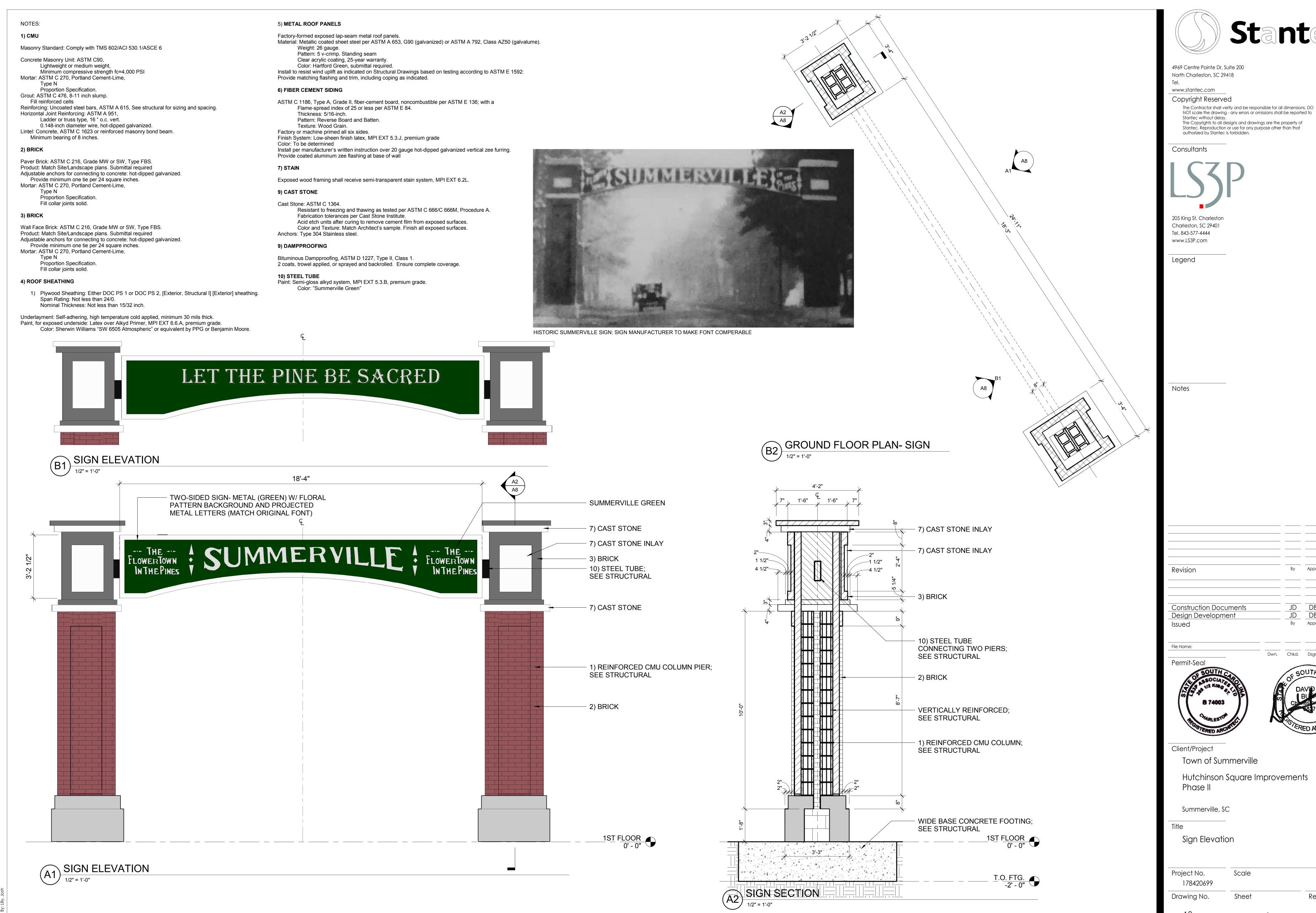
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Town of Summerville

Hutchinson Square Improvements Phase II

Summerville, SC

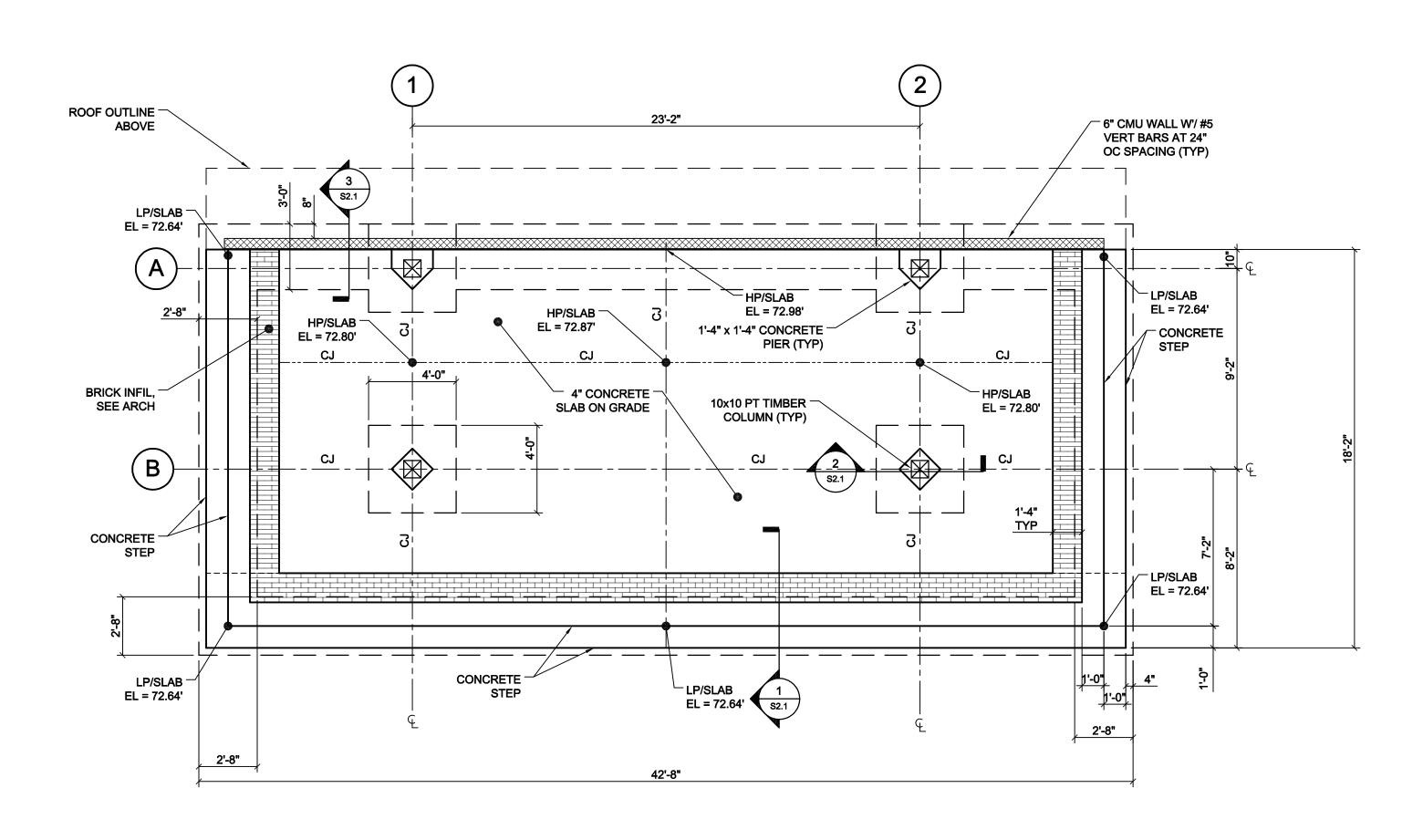
Project No. Scale 178420699 Sheet Drawing No. Revision

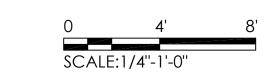


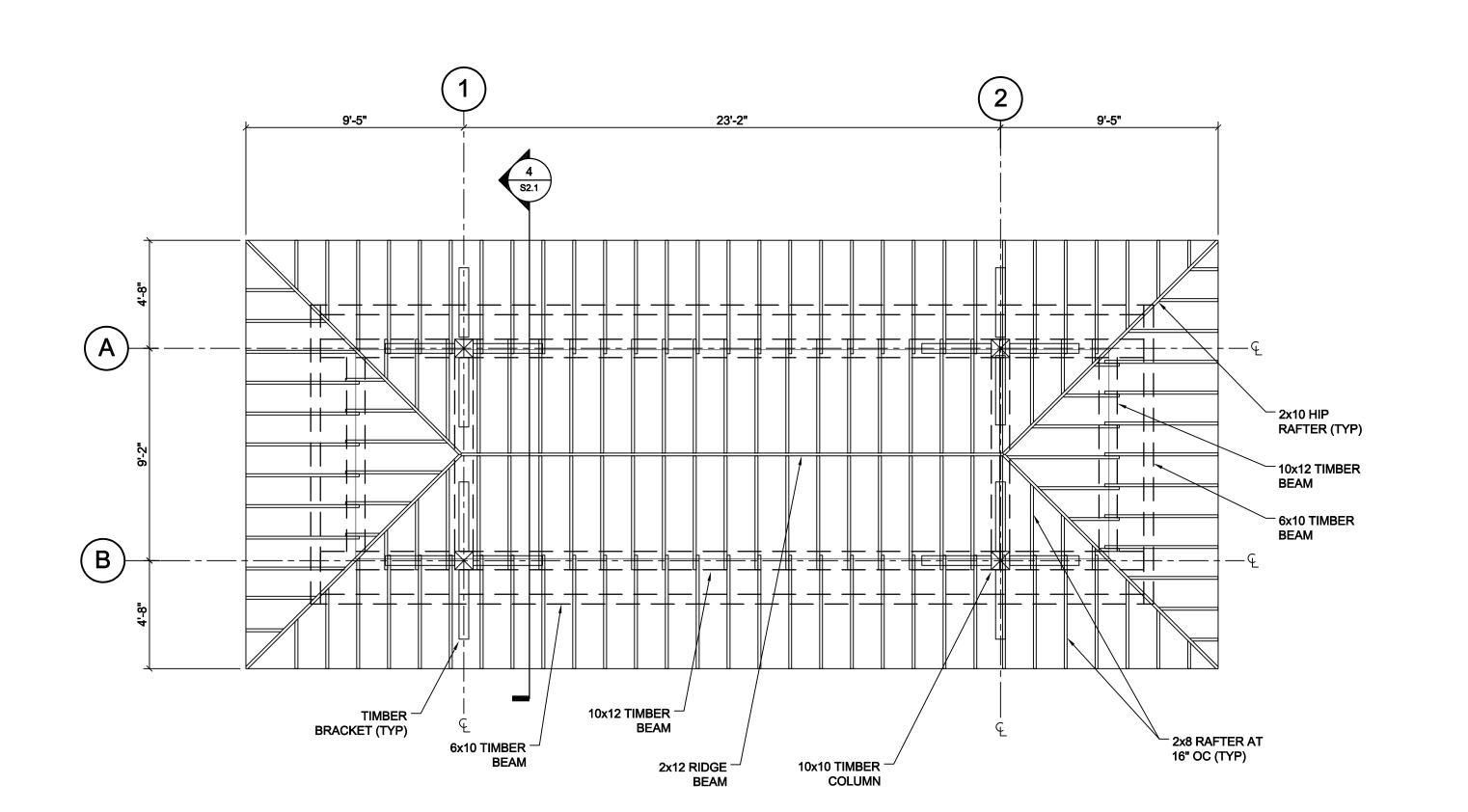
ORIGINAL SHEET - ARCH D

Revision

Dwn. Chkd. Dsgn. YY.MM.DD







SCALE:1/4"-1'-0"

STRUCTURAL GENERAL NOTES

- THE FOLLOWING NOTES APPLY, UNLESS OTHERWISE NOTED OR SHOWN ON
- 1. SECTIONS AND DETAILS SHOWN ON DRAWINGS ARE TYPICAL. USE SIMILAR CONSTRUCTION AT LOCATIONS NOT SPECIFICALLY DETAILED.
- 2. EXAMINE AND COMPARE STRUCTURAL DRAWINGS WITH CIVIL ARCHITECTURAL AND ELECTRICAL DRAWINGS. VERIFY LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, DEPRESSIONS. AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON THE STRUCTURAL
- 3. VERIFY LOCATION OF EXISTING UNDERGROUND SITE UTILITIES PRIOR TO THE START OF WORK AND COORDINATE LOCATION WITH STRUCTURAL DRAWINGS. NOTIFY THE ENGINEER OF ANY CONFLICTS IN WRITING. DO NOT PROCEED WITH AFFECTED WORK UNTIL CONFLICTS HAVE BEEN RESOLVED.
- 4. ADEQUATE TEMPORARY BRACING OF CONSTRUCTION ELEMENTS SHALL BE PROVIDED FOR FOUNDATIONS, ABOVE GRADE WALLS AND OTHER STRUCTURAL SYSTEMS, FOR WIND AND/OR CONSTRUCTION LOADS. BRACING SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION OPERATIONS PRIOR TO STRUCTURAL ELEMENTS REACHING THEIR SPECIFIED DESIGN STRENGTH AND/OR REACHING THEIR COMPLETED FORM AS SHOWN ON THE CONTRACT DRAWINGS. DESIGN AND MAINTENANCE OF
- SAID BRACING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. INSTALL MATERIALS PER MANUFACTURERS' RECOMMENDATIONS AND SPECIFICATIONS.

100 PSF

20 PSF

 $P_a = 5 PSF$ $P_{\rm f}^{\rm s} = 5.4 \, {\rm PSF}$

 $C_{e} = 0.9$

ls = 1.0

 $C_t = 1.2$

18 FEET ±

STRUCTURAL DESIGN CRITERIA (I.B.C.)

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE.
- 2. STRUCTURAL DESIGN CRITERIA DESIGN RISK CATEGORY (ASCE 7-10, TABLE 1.5-1)
- LIVE LOADS: (ASCE 7-10, TABLE 4-1) TYPICAL FLOOR LIVE LOAD
- C. ROOF LIVE LOADS: (ASCE 7-10, TABLE 4-1) TYPICAL UNLESS NOTED OTHERWISE
- D. <u>SNOW LOADS:</u> (ASCE 7-10, CHAPTER 7) GROUND SNOW LOAD: FLAT ROOF SNOW LOAD:

RISK CATEGORY

- SNOW EXPOSURE FACTOR: SNOW LOAD IMPORTANCE FACTOR THERMAL FACTOR:
- WIND LOADS: (ASCE 7-10, CHAPTERS 26-30) MEAN ROOF HEIGHT

SEISMIC DESIGN CATEGORY

- 140 MPH BASIC WIND SPEED (3 SECOND GUST): **EXPOSURE CATEGORY:** OPEN **ENCLOSURE CATEGORY** COMPONENTS AND CLADDING: (ASCE 7-10 FIG 30.5-1)
- F. EARTHQUAKE LOADS: (ASCE 7-10, CHAPTERS 11-14) SEISMIC ANALYSIS PROCEDURE: EQUIVALENT LATERAL-FORCE SITE CLASSIFICATION

SEISMIC IMPORTANCE FACTOR (IE		1.0
MAPPED ACCELERATIONS:		
	$S_s = 1.642g$	$S_1 = 0.557g$
	Sms = 1.642	Sm1 = 0.835
DESIGN SPECTRAL RESPONSE AC	CELERATIONS AT	5% DAMPEN

 $S_{DS} = 1.095$

STRUCTURAL FOUNDATION NOTES

- 1. FOUNDATION DESIGN IS BASED ON ALLOWABLE SOIL BEARING CAPACITY 2,000 PSF TO BE VERIFIED PRIOR TO CONSTRUCTION.
- 2. SITE PREPARATION SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS PROVIDED IN GEOTECHNICAL ENGINEER. 3. COMPACTED BACKFILL: BACKFILL SHALL BE COMPACTED TO NOT LESS
- THAN 98% OF MAXIMUM DENSITY ACCORDING TO A.S.T.M. D698. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH.
- 4. BACKFILL TO TOP OF FOOTINGS AS SOON AS POSSIBLE AFTER PLACING CONCRETE.
- 5. TOPSOIL, ORGANIC MATERIAL AND ANY NATURAL OR MANMADE DEBRIS SHALL BE STRIPPED FROM THE SITE TO THE DEPTHS REQUIRED OR NOTED. THESE AND OTHER DELETERIOUS MATERIAL SHALL NOT BE USED AS BACKFILL UNDER ANY STRUCTURAL AREA & SHALL BE REMOVED FROM THE SITE.
- 6. UNSUITABLE SUBGRADE, IF ENCOUNTERED, WILL BE UNDERCUT AND REPLACED WITH LEAN CONCRETE OR SELECT GRANULAR FILL MATERIAL
- AS ORDERED BY THE GEOTECHNICAL ENGINEER 7. FOUNDATIONS OR SLABS SHALL NOT BE PLACED IN WATER, ON SATURATED SUBGRADES, NOR ON FROZEN SUBGRADES. IN-PLACE FOUNDATIONS AND SLABS SHALL BE PROTECTED FROM FROST
- 8. ALL FOUNDATIONS ARE TO BEAR ON COMPACTED "RESIDUAL SOIL" OR ON TESTED, STRUCTURAL BACKFILL (98% MODIFIED PROCTOR VALUE FOR BACKFILL).

STRUCTURAL STEEL NOTES

PENETRATION UNTIL PROJECT IS COMPLETE

1. FABRICATE AND ERECT STRUCTURAL STEEL SYSTEMS IN ACCORDANCE WITH AISC "SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".

ASTM A500 GRADE B (Fy=46KSI)

ASTM A36 (Fy=36KSI)

ASTM F1554

- 2. STEEL MEMBERS HAVE BEEN PROPORTIONED UTILIZING ALLOWABLE STRESS DESIGN (ASD) METHODS AS PRESCRIBED BY AISC.
- 3. STRUCTURAL STEEL SHALL BE DETAILED IN ACCORDANCE WITH
- "DETAILING FOR STEEL CONSTRUCTION (AISC)" AND WHERE REQUIRED, DESIGNED IN ACCORDANCE WITH CITED REFERENCES.
- 4. STRUCTURAL STEEL SHALL BE NEW AND CONFORM TO: ASTM A992 (FY=50KSI)
- A. UNLESS OTHERWIES NOTED B. HOLLOW STRUCTURAL SECTIONS ASTM A500 GRADE B (Fy=42KSI)
- SQUARE/RECTANGLE C. MISC. STRUCTURAL SHAPES D. ANCHOR BOLTS
- E. HIGH STRENGTH BOLTS ASTM A325 WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1 AND SHALL BE PERFORMED BY APPROVED AND CERTIFIED PERSONS.
- WELDED CONNNECTIONS SHALL UTILIZE E70 ELECRODES. WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIALS BEING WELDED, UNLESS NOTED OTHERWISE, EXCEPT THAT FILLET WELDS SHALL
- BE A MINIMUM OF 1/4" UON. 8. STRUCTURAL STEEL SHALL BE COATED WITH AN EXTERIOR 3-COAT SYSTEM WITH A ZINC RICH PRIMER, WATER BASED EPOXY INTERMEDIATE COAT AND POLYURETHANE TOP COAT (TOTAL DRY FILM THICKNESS 8.5-12.5 MILS).

STRUCTURAL CONCRETE NOTES

C-150 FOR TYPE I/II CEMENT.

- CONCRETE WORK SHALL CONFORM TO REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE" & ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
- ALL STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
- A. MINIMUM 28-DAY COMPRESSIVE STRENGTH, f'c = 4,000 PSI B. UNIT DENSITY = 145 PCF
- C. MAXIMUM WATER-CEMENT RATIO = 0.48 PORTLAND CEMENT USED FOR CONCRETE WORK SHALL COMPLY WITH ASTM
- NORMAL WEIGHT CONCRETE SHALL CONTAIN FINE AND COARSE AGGREGATES COMPLYING WITH ASTM C-33. THE MAXIMUM SIZE OF COARSE AGGREGATES SHALL BE OF SIZES SUITABLE FOR PLACEMENT IN STRUCTURAL ELEMENTS CONSIDERING THEIR SIZE AND REINFORCEMENT
- CONFIGURATION. CONCRETE SHALL BE MOIST CURED USING A LIQUID MEMBRANE-FORMING COMPOUND OR MOISTURE BARRIER. ALL INTERIOR SLABS TO RECEIVE A
- STEEL TROWEL FINISH ALL OTHER SLABS TO RECEIVE WOOD FLOAT FINISH ADMIXTURES MAY BE ADDED TO THE MIX TO ENHANCE VARIOUS PROPERTIES OF THE CONCRETE PROVIDED THE MINIMUM PROPERTIES AS INDICATED ARE
- PROPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP AT POINT OF PLACEMENT NOT LESS THAN 2" AND NOT MORE THAN 4" BEFORE THE ADDITION OF WATER REDUCING ADMIXTURES. MAXIMUM SLUMP OF ADMIXED CONCRETE SHALL NOT EXCEED 8". ADDITION OF WATER TO READY-MIX CONCRETE IN THE FIELD ABOVE THE AMOUNT HELD BACK AT THE PLANT SHALL NOT BE ALLOWED.
- CONTROL JOINTS SHOWN ON THE DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST. CONSTRUCTION JOINTS SHALL BE PLACED AT CONTROL JOINT LOCATIONS AS REQUIRED.
- ALL SAWN CONTROL JOINTS ARE TO BE CUT BETWEEN 4 TO 12 HOURS AFTER THE FLOOR SLAB IS POURED, SUCH THAT NO SURFACE DEFECTS ARE MADE FROM FLOOR TRAFFIC. SAW CUTS SHALL BE EXACTLY 1/4 OF THE SLAB THICKNESS AS INDICATED ON THE DRAWINGS.
- CONCRETE SLABS ON GRADE SHALL BE PLACED SO THAT THE SLAB THICKNESS IS AT NO POINT LESS THAN THAT INDICATED ON THE CONTRACT DRAWINGS. ADJUST SUBGRADE ELEVATIONS TO ACCOUNT FOR SLOPED SLAB ON GRADE SURFACES.
- CHAMFER EXPOSED CORNERS OF CONCRETE 3/4 INCH, UNLESS NOTED OTHERWISE.
- FABRICATE FORMS FOR EASY REMOVAL WITHOUT HAMMERING OR PRYING AGAINST CONCRETE SURFACES. FORMS TO REMAIN IN PLACE FOR A MINIMUM OF 72 HOURS AFTER PLACING CONCRETE.
- DEPOSIT CONCRETE IN A CONTINUOUS OPERATION UNTIL THE PLACING OF CONCRETE IS COMPLETE. IF THE POUR IS TO BE DISCONTINUOUS, CONTRACTOR SHALL USE CONSTRUCTION JOINTS, AS DETAILED ON THE DRAWINGS.
- REPAIR ALL SURFACE DEFECTS INCLUDING MINOR HONEYCOMBING, AND OTHER VISUAL IRREGULARITIES WITH CEMENT MORTAR. MORTAR FOR PATCHING SHALL BE THE SAME COMPOSITION AS THAT USED IN THE CONCRETE. PATCHING SHALL BE DONE AS SOON AS THE FORMS ARE
- COORDINATE WITH ELECTRICAL FOR GROUNDING REQUIREMENTS.

CONCRETE REINFORCEMENT NOTES

- REINFORCEMENT WORK OF DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO ACI 318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI SP-66: "ACI DETAILING MANUAL - 2004", CRSI MSP I: "CRSI MANUAL OF STANDARD PRACTICE", AND AWS D1.4: "STRUCTURAL WELDING CODE - REINFORCING STEEL".
- 2. STEEL REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL CONFORM TO THE FOLLOWING:
- A. BARS, TIES, AND STIRRUPS......ASTM A615 GRADE 60, (Fy = 60 KSI) B. WELDED WIRE REINFORCEMENT...ASTM A185, GRADE 65, (Fy = 65 KSI)
- MINIMUM CONCRETE PROTECTION COVER FOR REINFORCEMENT OF CONCRETE STRUCTURES SHALL BE AS FOLLOWS UON: A. SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
 - B. SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER, #6 THROUGH #18 BARS #5 BARS AND SMALLER
 - C. SURFACES NOT IN CONTACT WITH OR EXPOSED TO WEATHER #11 BAR AND SMALLER
- 4. WHERE CONTINUOUS REINFORCEMENT IS CALLED FOR, IT SHALL BE LAPPED
- AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. ALL LAP SPLICES SHALL BE CLASS B TENSION LAP SPLICES, UNLESS NOTED
- OTHERWISE. 6. WHERE REINFORCEMENT IS NOT SHOWN ON THE CONTRACT DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE DETAILS. IN NO
- CASE SHALL REINFORCEMENT BE LESS THAN THE MINIMUM REINFORCEMENT PERMITTED BY THE APPLICABLE CODES. WHERE REINFORCEMENT IS SHOWN IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE
- SECTION APPLIES. 7. CLEAN REINFORCING OF LOOSE RUST, MILL SCALE, DIRT, OR ANY OTHER FOREIGN MATERIAL.
- 8. AT CONTRACTORS OPTION, STEEL WIRE MESH REINFORCEMENT OF CONCRETE SLABS ON GRADE, MAY BE REPLACED WITH FIBER REINFORCEMENT. FIBER REINFORCEMEN SHALL BE 3/4" COLLATED, FIBRILLATED POLYPROPLENE FIBERS BY GRACE CONSTRUCTION PRODUCTS OR APPROVED EQUAL. FIBERS SHALL BE ADDED TO THE CONCRETE IN A RATIO OF 1.5 POUNDS PER CUBIC YARD OF CONCRETE.

STRUCTURAL LUMBER NOTES

USE CATEGORY UC2 REQUIREMENTS.

Fcp = 680 PSI

Fv = 400 PSI

- 1. STRUCTURAL WOOD MEMBERS SHALL BE NO. 1 SOUTHERN YELLOW PINE OR BETTER & KILN DRIED TO A 19% MAXIMUM MOISTURE CONTENT.
- 2. ALL PLYWOOD SHEAR WALL AND ROOF SHEATHING SHALL BE APA RATED
- STRUCTURAL SHEATHING, EXPOSURE 1 AS PER US PRODUCT STANDARD PS 1-83. 3. ALL WOOD MEMBERS EXPOSED TO WEATHER OR EARTH OR CONNECTED TO CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED USING WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPA STANDARD U1 AND
- 4. ALL JOIST HANGERS, HURRICANE TIES, STRAPPING, HOLDDOWNS, EXTERIOR NAILS AND OTHER METAL CONNECTORS SHALL BE GALVANIZED AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL
- 5. SIMPSON CONNECTORS SHALL HAVE A MINIMUM STANDARD COATING G90. SIMPSON HOLDOWNS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE ZMAX/HDG CONNECTORS WITH FASTENERS HOT-DIPPED GALVANIZED PER
- A.S.T.M. A153. 6. TYPICAL WOOD FASTENING TO BE MADE USING 10d COMMON WIRE NAILS (0.148"x3") UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS OR IBC
- TABLE 2304.9.1. 7. SEE IBC TABLE 2304.9.1 FOR ALL TYPICAL WOOD FASTENING REQUIREMENTS
- UNLESS OTHERWISE NOTED ON PLAN. 8. ENGINEERED LUMBER MINIMUM DESIGN SPECIFICATIONS (TRUS JOIST OR EQUAL): A. MICROLLAM LVL (1.9E) B. TIMBERSTRAND LSL

E = 1.900 KSIE = 1,700 KSIFb = 2,600 PSIFb = 2,600 PSIFv = 285 PSIFv = 400 PSIC. TIMBERSTRAND LSL/TJ STRAND RIM BOARD D. TIMBERSTRAND LSL E = 800 KSI E =1,300 KSI Fb = 1,200 PSIFb = 1,700 PSI

Fv = 400 PSI



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Consultants **ARCHITECT**

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STRUCTURAL ENGINEER

ENGINEERING

Vail Engineering, LLC. 1939 Palmetto Isle Drive, Mount Pleasant, SC 29466 (843) 819-3239 www.vailengineeringllc.com

Client/Project

Revision

File Name:

Permit-Seal

ISSUED FOR CONSTRUCTION

Town of Summerville

ENGINEERING

No.C05345

Hutchinson Square Improvements Phase II

Summerville, SC

Structural Notes, Pavilion Foundation & Roof Framing Plan

Project No.	Scale	
178420699	As Noted	
Drawing No.	Sheet	Revision
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FOUNDATION PLAN

SCALE: 1/4"=1'-0"

ORIGINAL SHEET - ARCH D

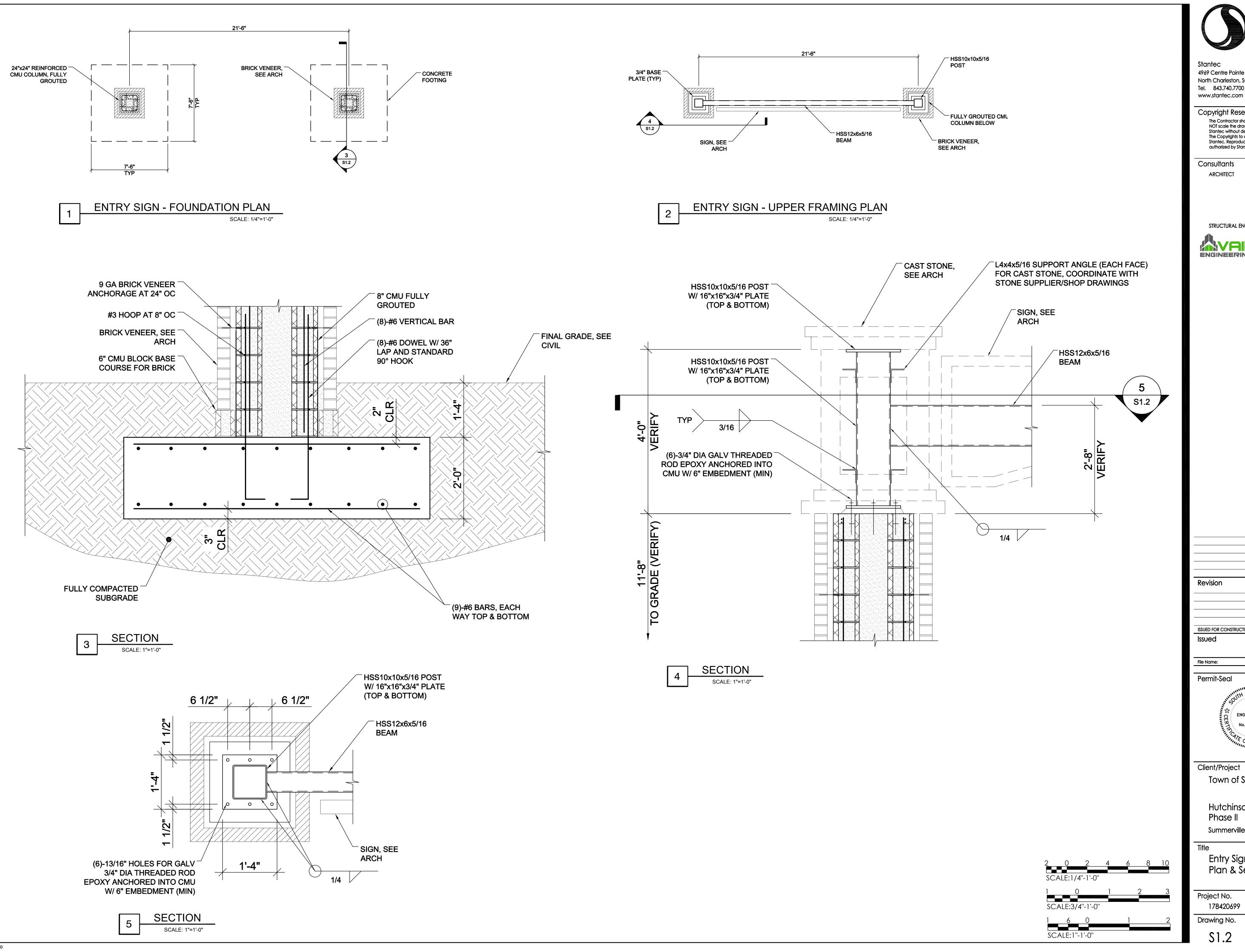


CTV CTV 17/12/05

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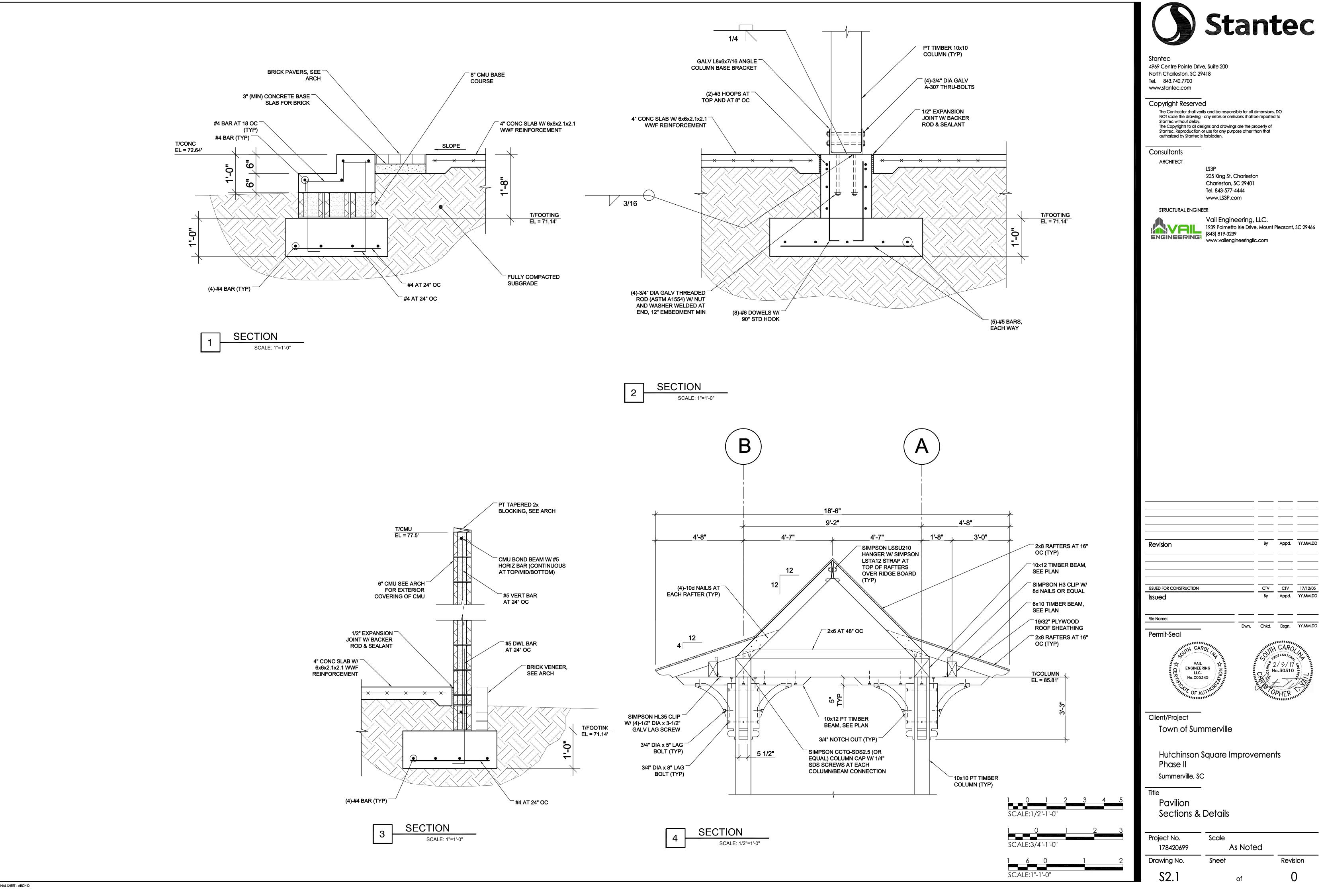
Town of Summerville

Hutchinson Square Improvements Phase II

Summerville, SC

Entry Sign Plan & Sections

Project No. 178420699	Scale As Noted	
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\$1.2	of	0

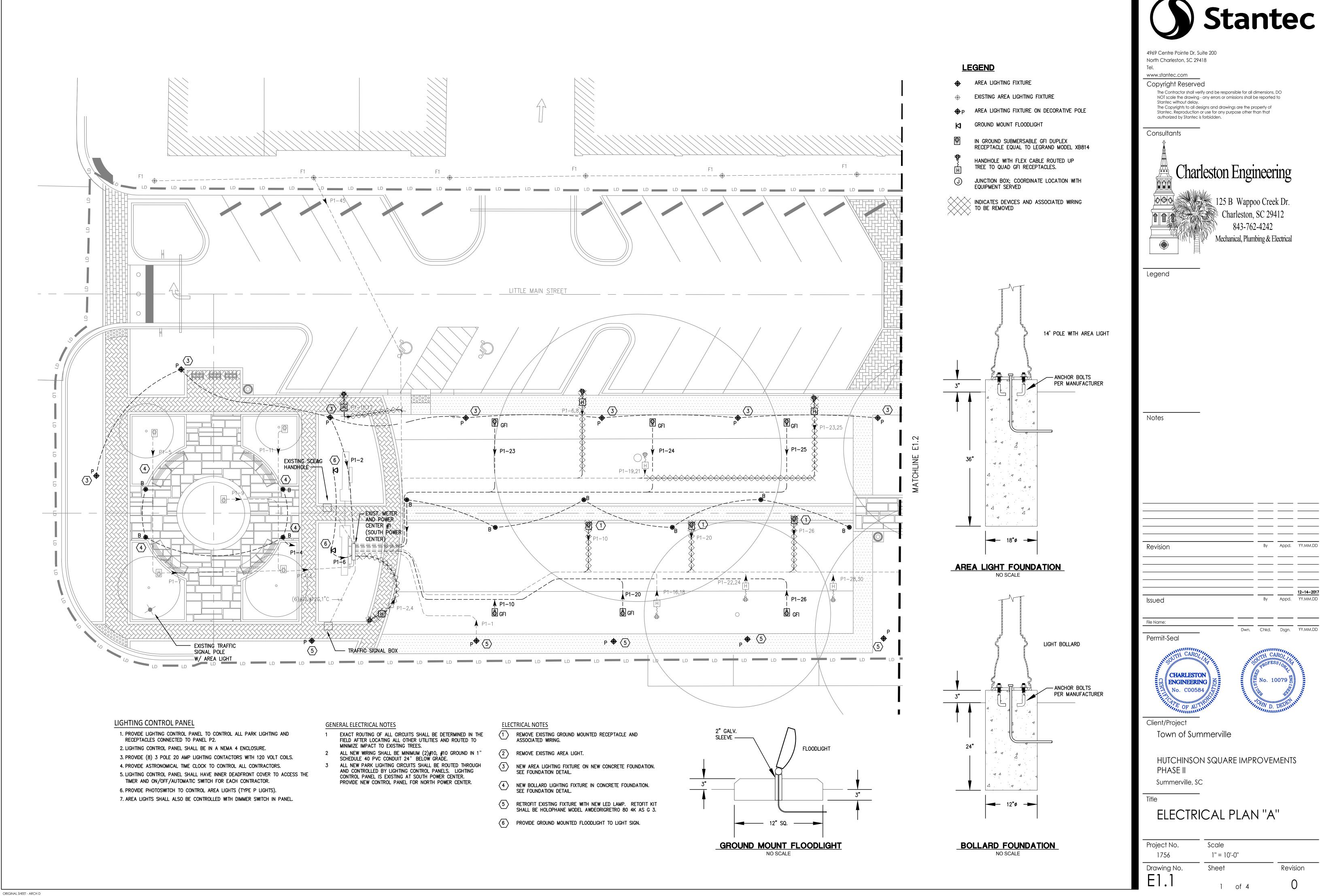




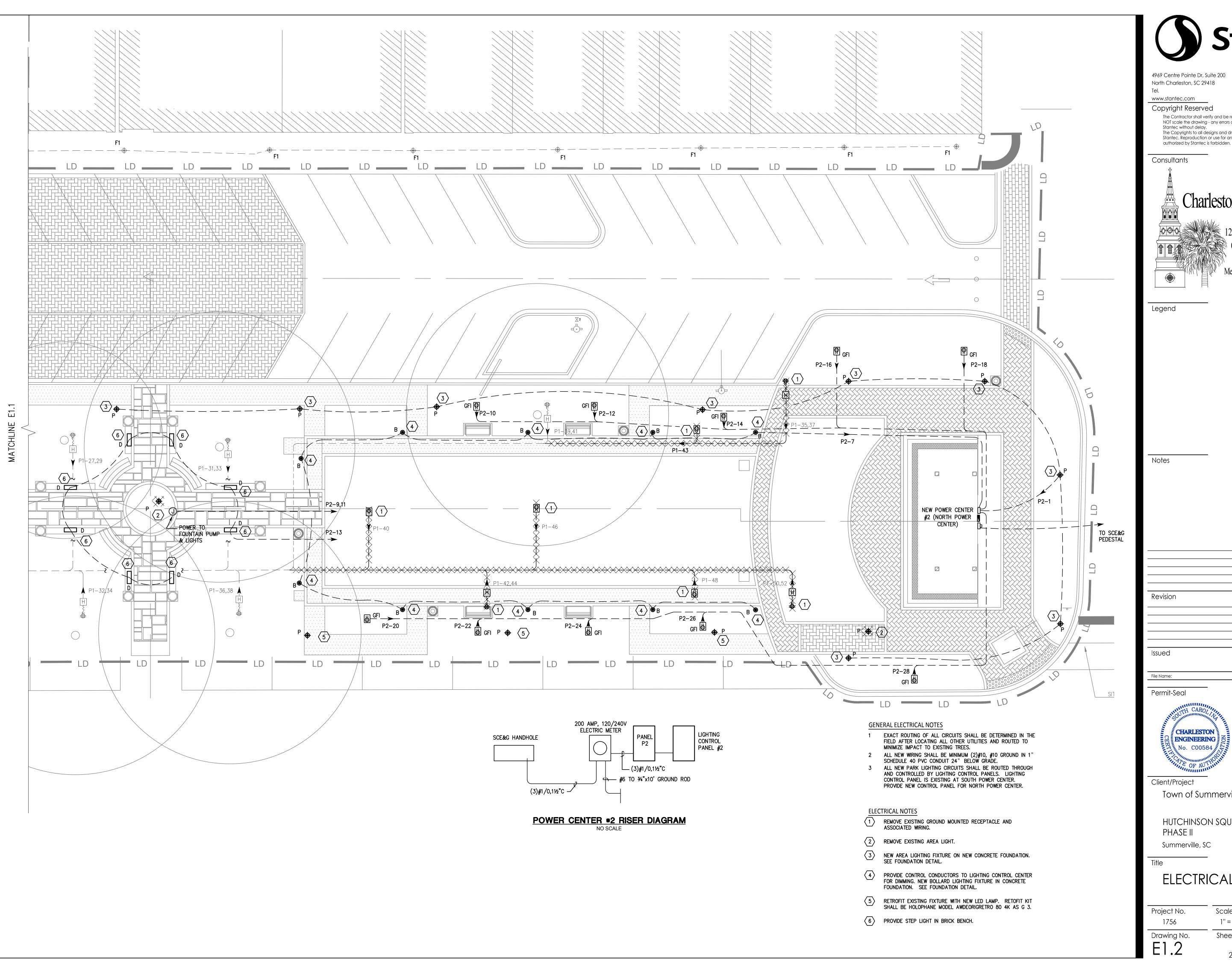
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Revision



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Mechanical, Plumbing & Electrical

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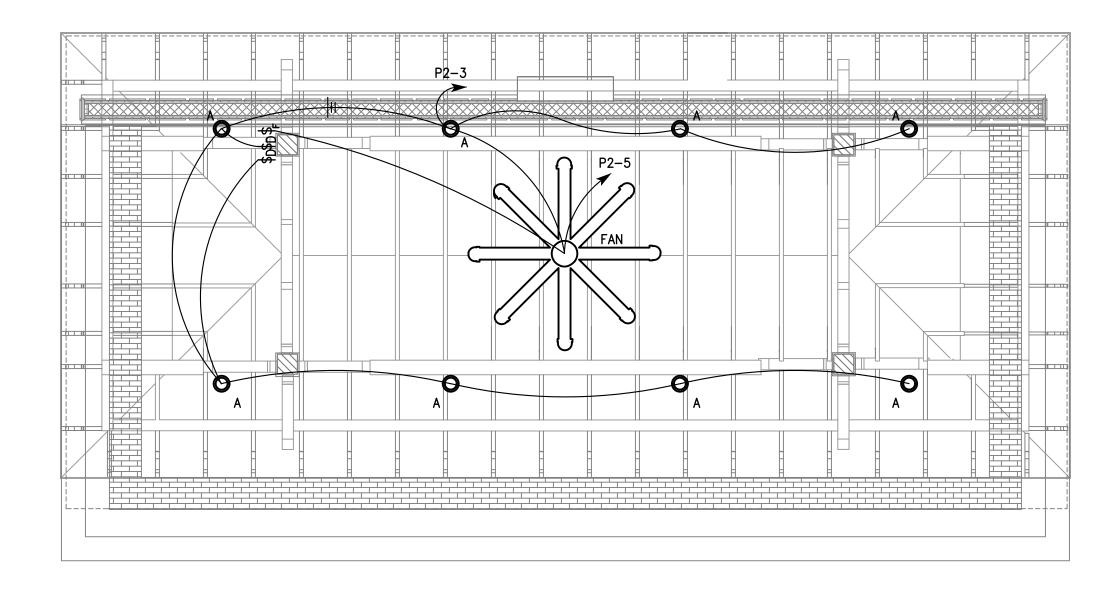
Client/Project Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS PHASE II

Summerville, SC

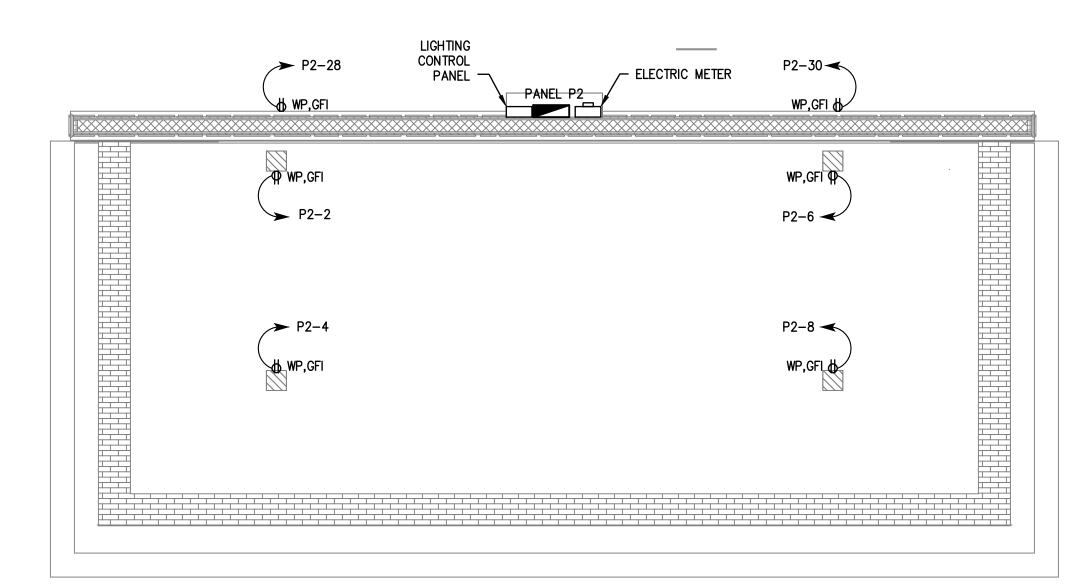
ELECTRICAL PLAN "B"

Project No. Scale 1756 1'' = 10'-0'' Sheet Drawing No. Revision 2 of 4



ELECTRICAL LIGHTING PLAN

SCALE: 1/4" = 1'-0"



ELECTRICAL POWER PLAN

SCALE: 1/4" = 1'-0"

LEGEND (THIS SHEET ONLY)

DUPLEX RECEPTACLE

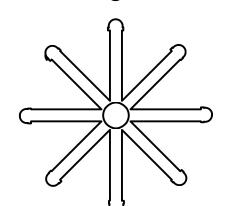
ELECTRICAL PANEL; SEE PANEL SCHEDULE

SINGLE POLE SWITCH; 20 AMP

DIMMER SWITCH

FAN SWITCH

LIGHTING FIXTURES; SEE SCHEDULE



INDICATES "GROUND FAULT INTERRUPTER"

INDICATES WEATHER PROOF COVER



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Notes

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CHARLESTON **ENGINEERING**



Client/Project

Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS PHASE II

Summerville, SC

ELECTRICAL PLANS

Scale Project No. 1/4" = 1'-0" Sheet Drawing No.

3 of 4

Revision

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

1.01 SCOPE:

FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THESE MAJOR ITEMS.

LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON PLANS. 2. ELECTRICAL PANELS, CONTROLS, SERVICE, DISCONNECTS, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT.

1.02 CODES, REGULATIONS AND STANDARDS:

A. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, INCLUDING THE REGULATIONS OF THE

AMERICANS WITH DISABILITIES ACT - 1990 W/ 2008 AMENDMENT

INTERNATIONAL BUILDING CODE - 2015

NATIONAL ELECTRIC CODE - 2014

INTERNATIONAL ENERGY CONSERVATION CODE - 2009

LOCAL BUILDING CODES AND ORDINANCES B. THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS ARE ALSO MINIMUM REQUIREMENTS:

THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS (NEMA). THE MANUFACTURER'S RECOMMENDATION.

UNDERWRITER LABORATORIES INCORPORATED STANDARDS (UL).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

1.03 PERMITS

A. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTION FEES.

1.04 INSPECTION OF SITE:

A. PRIOR TO SUBMITTING A BID, VISIT THE SITE OF THE PROPOSED CONSTRUCTION TO BECOME THOROUGHLY ACQUAINTED WITH EXISTING UTILITIES, WORKING CONDITIONS, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING.

1.05 CLEAN-UP:

A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATION. AT THE COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES "BROOM-CLEAN". REMOVE ALL TEMPORARY WIRING UPON PROJECT COMPLETION.

1.06 DRAWINGS:

- A. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK. DATA PRESENTED ON THE THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE. BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, MECHANICAL EQUIPMENT, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS; USE ACTUAL BUILDING DIMENSIONS.
- B. IN ALL CASES SWITCHES CONTROLLING LIGHTING ARE TO BE LOCATED ON THE STRIKE SIDE OF DOORS. LOCATION INDICATED FOR SWITCHES AND OUTLETS ARE APPROXIMATE. OWNER MAY MAKE MINOR RELOCATIONS AT NO ADDITIONAL CHARGE.
- C. SHOULD STRUCTURAL ELEMENTS PREVENT RUNNING OF CONDUITS, INSTALLATION OF OUTLETS OR CABINETS AS SHOWN ON THE DRAWINGS, THE NECESSARY MINOR CHANGE, AS DETERMINED BY THE ARCHITECT SHALL BE PERMITTED.

1.07 CUTTING AND FITTING:

A. PERFORM CORING, CUTTING, CHOPPING, FITTING, REPAIRING AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBER SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT AND LANDLORD. PROPERLY FILL SEAL, FIREPROOF AND WATERPROOF ALL OPENINGS, SLEEVES, AND HOLES IN SLABS. FURNISH AND INSTALL ALL REQUIRED SLEEVES AND INSERTS.

1.08 COORDINATION WITH OTHER TRADES:

- A. COOPERATE WITH OTHER TRADES SO THAT INSTALLATION OF ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CHECK CONDUIT, FIXTURE, AND OTHER EQUIPMENT LOCATIONS WITH THE OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL,
- PIPING, BEAMS, OR OTHER OBSTRUCTIONS. B. CAREFULLY CHECK THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN DISTURBED DURING THE INSTALLATION OF MATERIAL OF OTHER TRADES.

1.09 UTILITY COMPANIES

A. COORDINATE ALL INCOMING SERVICES WITH RESPECTIVE UTILITY COMPANIES. INCLUDE ALL CHARGES IN BID.

PART 2 - PRODUCTS AND EXECUTION

2.01 MATERIALS:

A. ALL MATERIAL SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

2.02 CONDUIT:

- A. RIGID GALVANIZED STEEL (RGS) MAY BE USED IN ALL AREAS. INTERMEDIATE METALLIC CONDUIT (IMC) MAY BE USED IN INDOOR LOCATIONS. USE ELECTRICAL METALLIC TUBING (EMT) IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE SLABS OR CONCRETE WALLS AND NOT SUBJECT TO DAMAGE. USE FLEXIBLE STEEL CONDUIT NOT EXCEEDING 36" FOR INDOOR FINAL CONNECTIONS TO MECHANICAL EQUIPMENT AND NOT EXCEEDING 72" AND RECESSED REMOVABLE FLUORESCENT LIGHT FIXTURES. USE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT NOT EXCEEDING 36" FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT OR IN WET LOCATIONS. USE SCHEDULE 40 PVC BELOW GRADE & IN
- WHERE THE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN BY DOUBLE LOCKNUTS AND BUSHINGS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUITS PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T&B OR APPLETON) FROM STRUCTURE. SUPPORT CONDUITS ON 5 FOOT INTERVALS AND WITHIN 3 FEET OF ANY BOX OR FITTING. DO NOT SUPPORT CONDUITS FROM CEILING, PIPING, CEILING SUPPORTS, DUCTWORK, OR OTHER CONDUITS.
- CONDUIT CONNECTORS SHALL BE DOUBLE LOCKNUT TYPE, UL LISTED AND LABELED, WITH COMPRESSION FITTINGS.
- CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED HEREIN. MINIMUM CONDUIT SIZE 1/2". ALL EMPTY CONDUIT SYSTEMS SHALL HAVE 200 LB. TEST PULL CORD TO FACILITATE INSTALLATION OF FUTURE WIRE.
- CONCEAL CONDUITS AND OUTLETS WITHIN THE BUILDING STRUCTURE; EXCEPT THAT CONDUITS MAY BE RUN EXPOSED AT PANELS AND ON CEILING. RUN CONDUIT SHOWN TO BE INSTALLED IN CABINETS, AND CASEWORK DIRECTED BY ARCHITECT.

2.03 OUTLET, PULL AND JUNCTION BOXES:

A. EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLETS SHALL BE PROVIDED WITH A CODE GAUGE, GALVANIZED STEEL OUTLET BOX. JUNCTION AND PULLBOXES SHALL BE CODE GAUGE, GALVANIZED STEEL. OUTLET BOXES SHALL BE OF THE ONE PIECE, KNOCKOUT TYPE, IN GENERAL 4" SQUARE WITH PLASTER RING. PLASTER RINGS SHALL BE SET TO PROVIDE NOT MORE THAN 1/8" FROM WALL SURFACE TO RING. IN NO CASE SHALL PLASTER RING PROJECT BEYOND SURFACE OF WALL. SINGLE GANG RINGS SIMILAR TO STEEL CITY 52020 SHALL BE USED FOR BOXES IN UNFINISHED BRICK.

2.04 CONDUCTORS:

UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE THW, THWN OR XHHW COPPER. THE WIRES SHALL BE COLOR CODED INDICATING PHASE & VOLTAGE. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES, GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE

WHITE. CONDUCTORS SHALL BE #12 AWG, UNLESS OTHERWISE INDICATED. DO NOT INSTALL CONDUCTORS UNTIL CONDUIT SYSTEM IS COMPLETE. USE MINERALAC #100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE

THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM. C. ALL BRANCH CIRCUITS SHALL CONTAIN A GROUND CONDUCTOR. ALL 3 PH BRANCH CIRCUITS SHALL CONSIST OF 3 PHASE CONDUCTORS AND GROUND CONDUCTOR.

2.05 WIRING DEVICES:

- A. 20A, 125 VOLT. WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE, NEMA 5-20R, 20 AMPERE, 125 VOLT GROUNDED TYPE. DEVICE PLATES SHALL BE STANDARD SIZE SMOOTH FINISH, UNBREAKABLE NYLON.
- PROVIDE TYPE OF FACEPLATES TO MATCH DEVICES. C. COLOR OF DEVICES SHALL BE SELECTED BY ARCHITECT.

2.06 PANELBOARDS:

A. PROVIDE BRANCH CIRCUIT PANELBOARD(S) AS SHOWN ON DRAWINGS AND AS SPECIFIED HEREIN. PROVIDE TIN-PLATED ALUMINUM BUS BARS. MULTIPLE POLE BREAKERS SHALL HAVE HANDLE TIES SO ALL POLES ACT SIMULTANEOUSLY. MAIN BREAKER SHALL BE CENTER MOUNTED. EQUIPMENT RATINGS SHALL EXCEED AVAILABLE FAULT CURRENT (PANELS MAY BE SERIES FAULT RATED). PROVIDE TYPED CIRCUIT DIRECTORY UNDER PLASTIC COVER IN EACH PANEL DOOR. CIRCUIT BREAKERS SHALL BE SWITCH RATED BOLT-ON TYPE. BALANCE FINAL LOADS WITHIN 10% OF ALL THREE PHASES. MOUNT PANELS 6'-6" TO TOP.

2.07 LIGHTING FIXTURES:

A. PROVIDE LIGHTING FIXTURES, COORDINATE PROCUREMENT OF THESE FIXTURES WITH OWNER'S REPRESENTATIVE IN A TIMELY MANNER TO MEET JOB SCHEDULES. RECEIVE, UNCRATE, INSPECT, STORE AND PROTECT ALL MATERIAL. INSTALL AND LAMP FIXTURES AS NOTED ON DRAWINGS. B. SUBMIT ALL LIGHTING FIXTURES FOR APPROVAL.

A. PROVIDE NAMEPLATES TO IDENTIFY PANELBOARDS, DISCONNECT SWITCHES, STARTERS, AND OTHER MAJOR EQUIPMENT.

2.09 GUARANTEE

A. GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE CORRECTED AT NO EXPENSE TO THE OWNER.

2.10 CONDITIONS PRECEDENT TO FINAL ACCEPTANCE:

A. UPON COMPLETION OF PROJECT, PREPARE AND SUBMIT ONE COMPLETE SET OF ELECTRICAL RECORD DRAWING OF "AS-BUILT" CONDITIONS SHOWING ALL WIRING AS ACTUALLY INSTALLED. PRINTS SHALL ALSO SHOW, AS INDICATED BY MARKED-UP NOTATIONS, ALL DEVIATIONS AND CHANGES OF WIRING AND CIRCUIT NUMBER FROM THE ORIGINAL CONTRACT DRAWINGS.

U/24U V	OLT, 1 PHASE, 3 WIRE, 10,000 A	AIG, 200 A MAIN (JINGUII BREF	1	7. / A	<u> </u>	1	T	NEMA 3R
CKT	DESCRIPTION	VA	TRIP	TRIP KV		TRIP	VA	DESCRIPTION	CKT
				A	В				
1	AREA LIGHTS	720	20/1	0.90		20/1	180	RECEPTACLES	2
3	LIGHTING	528	20/1		0.71	20/1	180	RECEPTACLES	4
5	FAN	200	20/1	0.38		20/1	180	RECEPTACLES	6
7	BOLLARDS	250	20/1		0.43	20/1	180	RECEPTACLES	8
9	FOUNTAIN PUMP	1500	20/1	1.68		20/1	180	GROUND RECEPTACLE	10
11	FOUNTAIN LIGHT	100	20/1		0.28	20/1	180	GROUND RECEPTACLE	12
13	BENCH LIGHTS	32	20/1	0.21		20/1	180	GROUND RECEPTACLE	14
15	SPARE		20/1		0.18	20/1	180	GROUND RECEPTACLE	16
17	SPARE		20/1	0.18		20/1	180	GROUND RECEPTACLE	18
19	SPARE		20/1		0.18	20/1	180	GROUND RECEPTACLE	20
21	SPARE		20/1	0.18		20/1	180	GROUND RECEPTACLE	22
23	SPARE		20/1		0.18	20/1	180	GROUND RECEPTACLE	24
25	SPACE			0.18		20/1	180	GROUND RECEPTACLE	26
27	SPACE				0.18	20/1	180	GROUND RECEPTACLE	28
29	SPACE			0.18		20/1	180	RECEPTACLES	30
31	SPACE				0.18	20/1	180	RECEPTACLES	32
33	SPACE							SPACE	34
35	SPACE							SPACE	36
37	SPACE							SPACE	38
39	SPACE							SPACE	40

TOTAL CONNECTED KVA TOTAL CONNECTED AMPS

LIGHTING FIXTURE SCHEDULE							
FIXTURE LETTER	DESCRIPTION	MANUFACTURER (0R EQUAL)	CATALOG NUMBER	VOLTAGE	LAMPS		
А	SURFACE MOUNTED ADJUSTABLE LED FLOOD LIGHT	LSI	XBAL FL40 LED HD WW UE BLK JB1	120	1,862 LUMEN LED		
В	BOLLARD	HOLOPHANE	BOL/CH47/12/BLT CA/BK	120	LED		
С	GROUND MOUNTED FLOODLIGHT	HE WILLIAMS	VF1-L20/740-HF-SR-BLK-PC-120	120	1,900 LUMEN LED		
D	STEP LIGHT	HE WILLIAMS	S10 G L3/835 FTG BLK 120	120	300 LUMEN LED		
Р	14' POLE AND AREA LIGHT	HOLOPHANE	CH A 09 F5J 14 P05 ABG GN/ AWDE 80 4K AS L N 3 N S G	208	80 WATT LED		



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Mechanical, Plumbing & Electrical

Legend

Notes

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Permit-Seal

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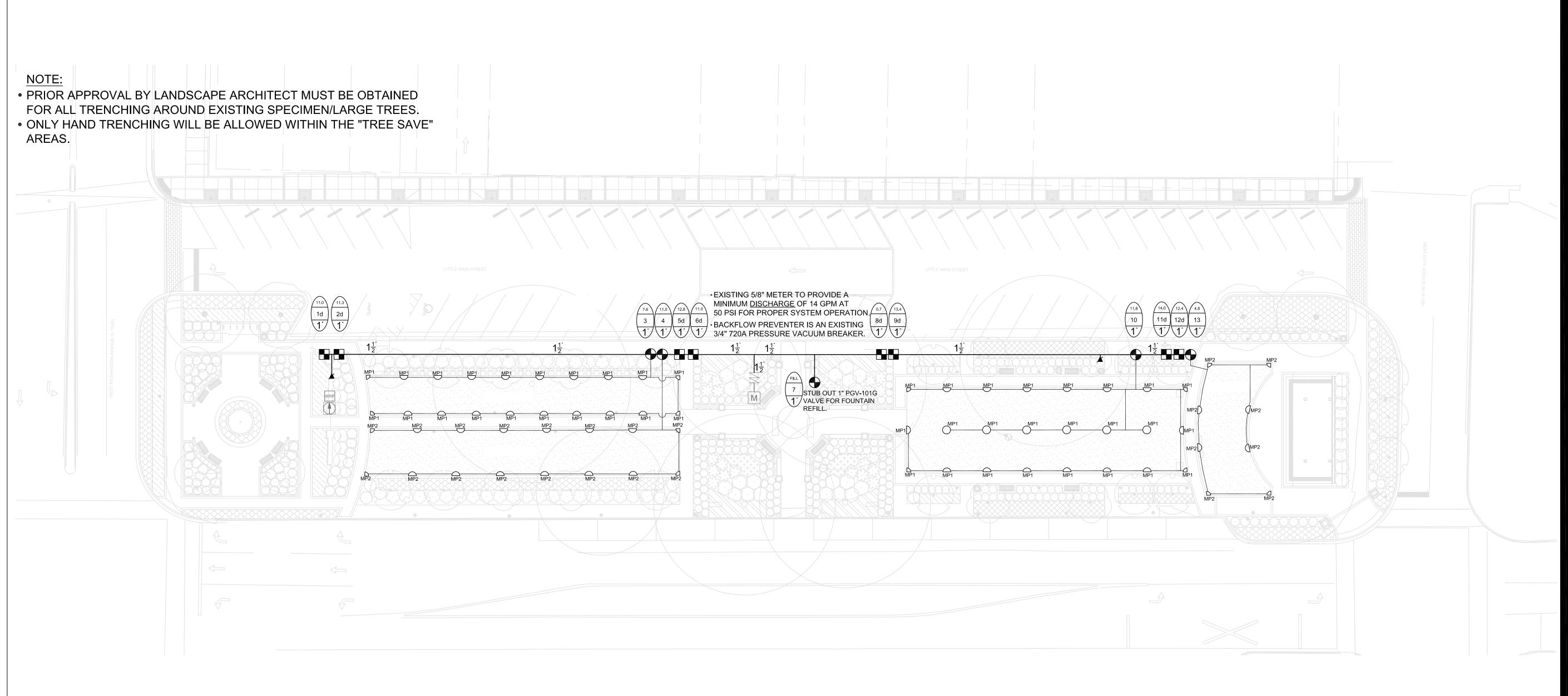
Client/Project Town of Summerville

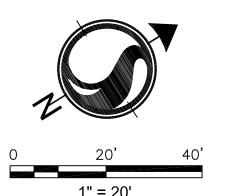
HUTCHINSON SQUARE IMPROVEMENTS

PHASE II Summerville, SC

ELECTRICAL SPECS. & SCHEDS.

Project No. Scale NO SCALE Sheet Revision Drawing No.





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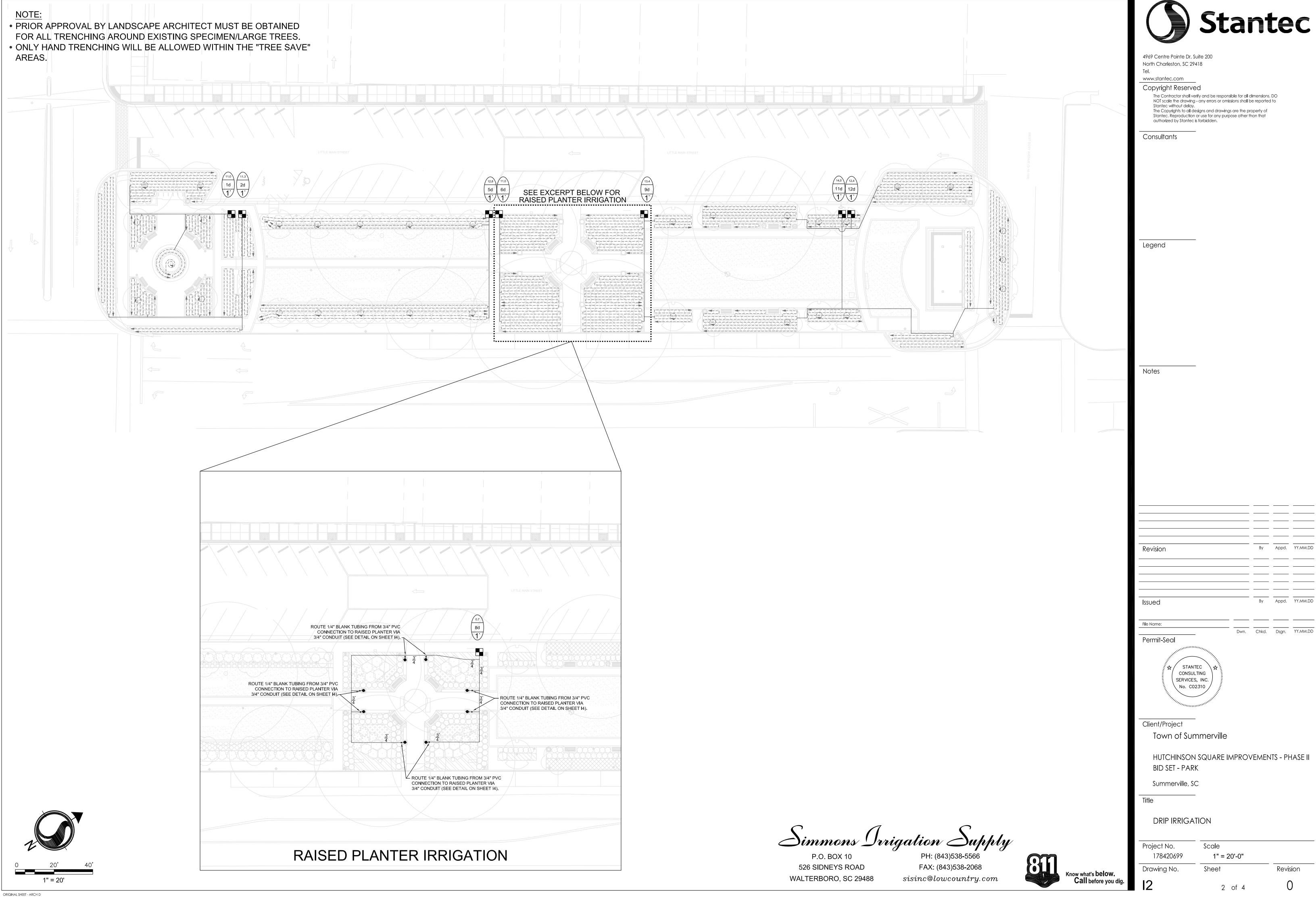
Client/Project Town of Summerville

> HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

SPRAY IRRIGATION

Project No. 178420699	Scale 1" = 20'-0"	
Drawing No.	Sheet	Revision
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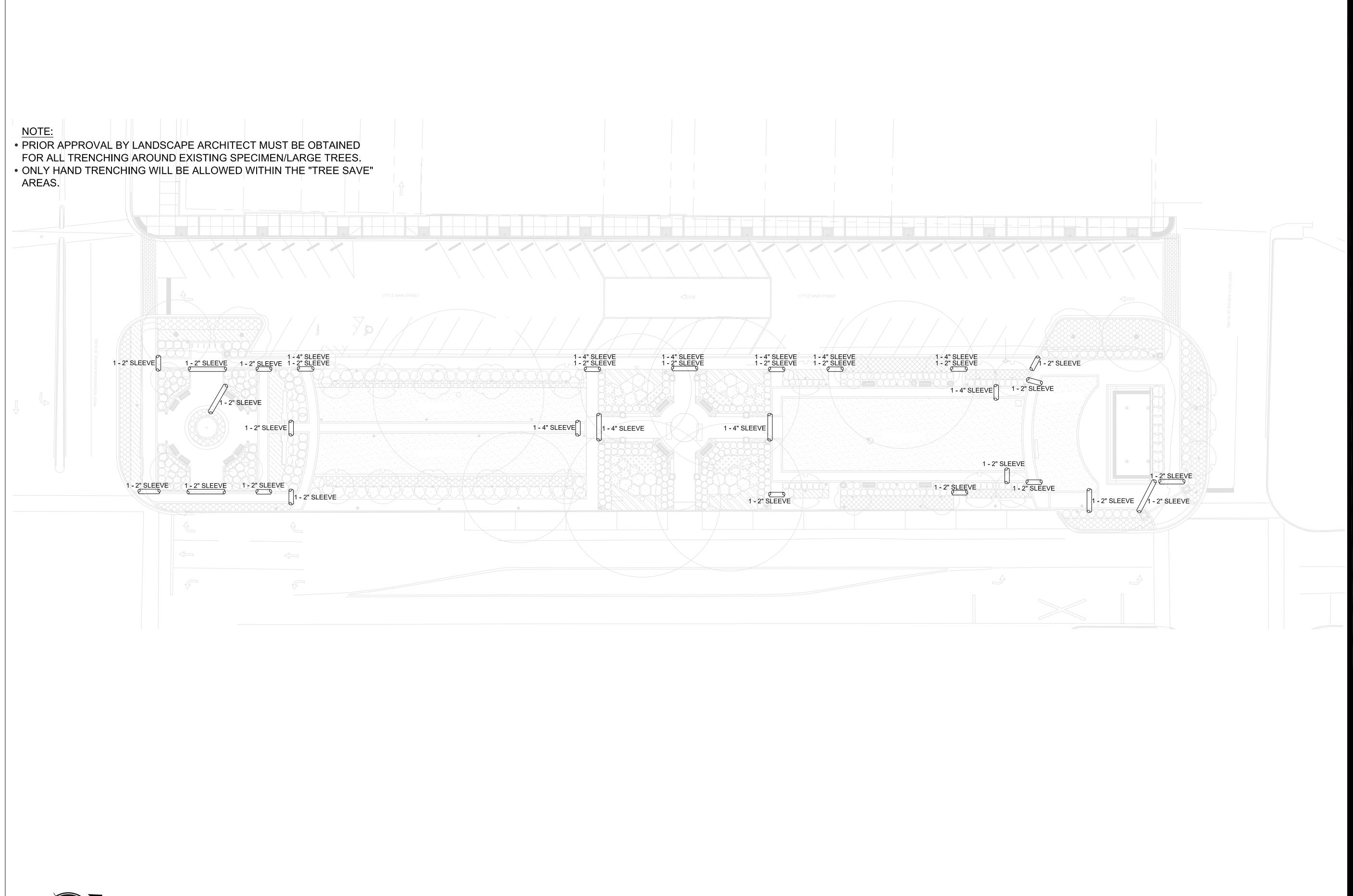




Revision	By	Appd.	YY.MM.D
Issued	Ву	Appd.	YY.MM.D

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II

	Project No.	Scale	
	178420699	1" = 20'-0"	
	Drawing No.	Sheet	Revision
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Client/Project

Town of Summerville

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

IRRIGATION SLEEVES

	Project No.	Scale	
	178420699	1" = 20'-0"	
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re you dig.	13	3 of 4	0

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VERSATILE MODULAR DESIGN SIMPLIFIES INVENTORY MANAGEMENT; EASILY CUSTOMIZE UNIT TO DESIRED NUMBER OF STATIONS.

THREE PROGRAMS (A, B, C) WITH MULTIPLE START TIMES. INDEPENDENT PROGRAMMING HANDLES MANY DIFFERENT WATERING REQUIREMENTS.

CHOICE OF INDEPENDENT DAY SCHEDULING OPTIONS — DAYS OF THE WEEK, ODD/EVEN OR 31-DAY INTERVAL FOR MAXIMUM FLEXIBILITY.
GLOBAL WATER BUDGET/SEASONAL ADJUSTMENT EASILY

SPACE TO WORK. NON-VOLATILE MEMORY HOLDS PROGRAMS INDEFINITELY; EXCELLENT INSURANCE AGAINST SUPERIOR SURGE PROTECTION AND SELF—DIAGNOSTIC SHORT CIRCUIT PROTECTION. MICROCIRCUITS ARE PROTECTED FROM ELECTRICAL SPIKES, NO FUSES TO WORRY ABOUT.

*REMOTE CONTROL READY — SUPPLIED WITH CONNECTION FOR SRR ANC ICR REMOTE CONTROL AND SRP PC PROGRAMMER.

PROGRAMMABLE PUMP/MASTER VALVE CIRCUIT BY STATION.

PROGRAMMABLE DELAY BETWEEN STATIONS OF ZERO SECONDS TO 4 HOURS FOR WELL RECOVERY OR SLOW—CLOSING VALVES.

RUN TIME: UP TO SIX HOURS ON EACH STATION. • START TIMES: 4 PER PROGRAM, FOR REPEAT WATERING NEEDS.
• CAPABLE OF OPERATING EQUIVALENT OF 3 SOLENOIDS SIMULTANEOUSLY.
• TRANSFORMER OUTPUT: 24VAC, 1.0 AMPS.

WRF HUNTER WIRELESS RAIN/FREEZE-CLIK SYSTEM

*STATION OUTPUT: 24VAC, 0.56A PER STATION

•MODELS: RAIN-CLIK, RAIN/FREEZE-CLIK, WIRELESS RAIN-CLIK, WIRELESS RAIN/FREEZE-CLIK •QUICK RESPONSE FEATURÉ SHUTS OFF THE SYSTEM AS SOON AS IT STARTS RAINING. •MAINTENANCE-FREE DESIGN WITH 10-YEAR BATTERY LIFE. •ADJUSTABLE VENT RING ALLOWS FOR SETTING OF RESET DELAY. *RUGGED POLYCARBONATE HOUSING AND METAL EXTENSION ARM. *RAIN-CLIK INCLUDES 25' OF 20 GAUGE SHEATHED, TWO-CONDUCTOR, UL-APPROVED WIRE. *WIRE-FREE OPERATION ALLOWS EASY INSTALLATION ON NEW OR EXISTING SYSTEMS. *SENSOR OPERATES UP TO 800 FEET FROM RECEIVER UNIT.

*BUILT-IN BYPASS SWITCH ON RECEIVER PANEL. *WIRELESS RAIN/FREEZE-CLIK SENSOR PROTECTS AGAINST ICE CAUSED BY IRRIGATION ON LANDSCAPES, ROADS, AND WALKWAYS. •COMPATIBLE WITH MOST CONTROLLERS. •GENERAL WARRANTY: 5 YEARS.

*BATTERY WARRANTY (WIRELESS MODEL): 10 YEARS. •WIRING: NORMALLY CLOSED OR NORMALLY OPEN. *TIME TO TURN OFF IRRIGATION SYSTEM: 2 TO 5 MINUTES APPROX. FOR QUICK RESPONSE. •TIME TO RESET QUICK RESPONSE: 4 HOURS APPROX. UNDER DRY, SUNNY CONDITIONS. •TIME TO RESET WHEN FULLY WET: 3 DAYS APPROX. UNDER DRY, SUNNY CONDITIONS.

OPERATING TEMPERATURE: 32°F TO 130°F OPTIONAL USER INSTALLED GUTTER MOUNT FOR RAIN-CLIK (ORDER SGM). •SWITCH RATING: 24 VAC, 3 A. FREEZE SENSOR SHUTS SYSTEM OFF WHEN TEMPERATURES FALL BELOW 37°F (RAIN/FREEZE-CLIK MODEL).

SYSTÉM OPERATING FREQUÉNCY: 433 MHz. •COMMUNICATION RANGE UP TO 800 FEET LINE OF SIGHT. ·WIRELESS RAIN/FREEZE-CLIK SHUTS SYSTEM OFF WHEN TEMPERATURES FALL BELOW 37°F. *RECEIVER INPUT POWER: 24 VAC (FROM CONTROLLER).

HUNTER PGV SERIES ELECTRIC VALVE

•1", 1 1/2" & 2". • HEAVY-DUTY SOLENOID PROVIDES DEPENDABLE OPERATION AND LONG LIFE. · HIGH GRADE CONSTRUCTION, 150 PSI RATING; MADE OF DURABLE MATERIALS • INTERNAL MANUAL BLEED - EASY TO USE AND KEEPS VALVE BOX DRY. • FLOW CONTROL WITH NON-RISING HANDLE - ADJUST THE FLOW OF EACH ZONE · RIGID DIAPHRAGM SUPPORT THAT WORKS TO PREVENT STRESS FAILURE IN • GLOBE AND ANGLE CONFIGURATIONS THAT ARE EASY TO USE IN ANY APPLICATION. • CAPTIVE BONNET BOLTS AND SOLENOID PLUNGER - NO LOST PARTS DURING SERVICING. • ACCU-SET PRESSURE REGULATOR COMPATIBLE - DIAL SETTING PRESSURE REGULATION FOR PRECISE SYSTEM CONTROL. PRESSURE: 20 TO 150 PSI. • FLOW: .2 TO 120 GPM. • POWER: 24VAC.

---- AGRIFIM DURA-FLO PC DRIPPERLINE

•BUILT-IN FILTER SLITS AND RAISED INLET TO MINIMIZE CLOGGING. SILICONE DIAPHRAGM. . OUTSTANDING EMISSION UNIFORMITY •DUAL, 180° APART, WATER OUTLET HOLES.
•EMITTERS COLOR CODED FOR EASY FLOW RATE IDENTIFICATION. • WIDE VARIETY OF SPACINGS AVAILABLE. •UV STABILIZED. • AVAILABLE IN BLACK, BROWN OR PURPLE.

• PRESSURE COMPENSATING FROM 10 TO 60 PSI. •1/2, 1 OR 2 GPH FLOW RATES AVAILABLE. 700" OD, WALL = .045" AND .550" ID RECOMMENDED FILTRATION (140 MESH FOR 1/2 GPH, 120 MESH FOR 1 GPH, AND 80 MESH FOR 2 GPH EMITTER).

SHUNTER PRO-SPRAY SERIES POPUP SPRAYHEAD

• 4", 6", 12", & SHRUB. • HEAVY-DUTY BODY AND CAP CONSTRUCTION - MULTI-THREAD BUTTRESS DESIGN WITHSTANDS THE HARSHEST ENVIRONMENTS. *PRESSURE ACTIVATED, MULTI-FUNCTION, NO FLOW-BY WIPER SEAL IS EASY TO REMOVE AND CLEAN; TREATED WITH UV INHIBITORS TO ENSURE LONG LIFE. · COMPATIBLE WITH ALL FEMALE THREADED NOZZLES. ACCEPTS ADJUSTABLE, FIXED AND SPECIALTY NOZZLES FROM HUNTER AND ALL MAJOR BRANDS. OPTIONAL FACTORY-INSTALLED DRAIN CHECK VALVE FOR UP TO 7 FEET ELEVATION CHANGE; ELIMINATES LANDSCAPE DAMAGE FROM FLOODING AND EROSION. *RATCHETING RISER FOR QUICK ARC ALIGNMENT MAKES ADJUSTMENTS WHILE SPRINKLER

• HEAVY-DUTY SPRING FOR POSITIVE RETRACTION UNDER ANY CONDITION. • INNOVATIVE "PULL—UP" FLUSH PLUG DESIGN ALLOWS LIMITED FLOW PERMITTING CONTROLLED DIRECTIONAL FLUSHING. • PRESSURE: 15 TO 70 PSI • 1/2" FEMALE INLET NPT.

MP ROTATOR NOZZLE

• MULTIPLE STREAMS: WORK TOGETHER TO PROMOTE UNIFORMLY GREEN • MATCHED APPLICATION RATES: WORK WITH ANY ARC, ANY RADIUS. WIND-RESISTANT, MULTI-TRAJECTORY STREAMS: APPLY WATER MORE SLOWLY AND UNIFORMLY THAN CONVENTIONAL SPRAYS; USE 30 PERCENT LESS WATER AND GREATLY REDUCE RUNOFF.

PATENTED "DOUBLE-POP" DESIGN: FLUSHES ON START-UP AND SHUT-DOWN TO KEEP SPRINKLER FREE FROM DEBRIS. **REMOVARIE IN ET SUITED. PROTECTS SERVICED. *REMOVABLE INNET FILTER: PROTECTS SPRINKLER FROM INTERNAL DEBRIS.

*OPTIONS FROM A 4' STRIP TO A 30' RADIUS. OFFER BALANCED SYSTEM WITH UTMOST DESIGN FLEXIBILITY.

*FITS PERFECTLY ON ALL THE AVAILABLE HUNTER SPRAY BODIES.

*SIZES: MP 1000, MP 2000, MP 3000, STRIPS AND CORNERS.

K RAIN BIRD QUICK-COUPLING VALVES • RED BRASS CONSTRUCTION FOR LONG LIFE AND RUGGED PERFORMANCE. • YELLOW THERMOPLASTIC COVER FOR DURABILITY. OPTIONAL LOCKING COVER ON MODELS 33DLRC, 44LRC, AND 5LRC (USE 2049 KEY TO UNLOCK). METAL COVER ON MODEL 7 ONLY. ONE-PIECE BODY DESIGN (MODELS 3RC, 5RC, AND 7).

TWO-PIECE BODY DESIGN FOR EASY SERVICING (MODELS 33DRC, 44LRC, AND 44RC).

STRONG CORROSION-RESISTANT STAINLESS STEEL SPRING PREVENTS LEAKAGE. • PRESSURE: 5 TO 125 PSI.

•FLOW: 10 TO 125 GPM. • 3RC: 3/4" RUBBER COVER, 1—PIECE BODY. • 33DRC: 3/4" DOUBLE TRACK KEY LUG, RUBBER COVER, 2—PIECE BODY. • 33DLRC: 3/4" DOUBLE TRACK KEY LUG, LOCKING RUBBER COVER, 2—PIECE BODY. • 44RC: 1" RUBBER COVER, 2-PIECE BODY. • 44LRC: 1" LOCKING RUBBER COVER, 2-PIECE BODY. • 5RC: 1" RUBBER COVER, 1-PIECE BODY. • 5LRC-: 1" LOCKING RUBBER COVER, 1-PIECE BODY. • 7: 1 1/2" METAL COVER, 1-PIECE BODY.

RAIN BIRD IN-LINE WYE FILTER

1" UNITS: 0.20 TO 18.0 GPM.

•POLYPROPYLENE CONSTRUCTION PROVIDES 150 PSI PRESSURE RATING AND PERMITS FILTER INSTALLATION UPSTREAM OF IRRIGATION CONTROL VALVE. •REPLACEMENT FILTER ELEMENTS ARE CONSTRUCTED OF POLYESTER MESH WELDED TO A COLOR-CODED POLYPROPYLENE FRAME •FILTER ELEMENTS ARE AVAILABLE IN 200-MESH (75-MICRON) AND 150-MESH (100 MICRON) · CAP, WITH SEALING O-RING, UNTHREADS TO PROVIDE ACCESS TO FILTER ELEMENT FOR EASY CLEANING. 3/4" UNITS: 0.20 TO 12.0 GPM.

• PRESSURE: 20 TO 150 PSI.

SENNINGER SERIES PRESSURE REGULATORS •PRESSURE MASTER PRE-SET REGULATORS MAINTAIN A CONSTANT OUTLET PRESSURE WHILE HANDLING INLET PRESSURES UP TO 150 PSI. •PROTECTS LINE AND EMITTION DEVICES FROM UPSTREAM PRESSURE FLUCTUATION. DAMPENS WATER HAMMER. · CAN BE INSTALLED EITHER ABOVE OR BELOW GRADE. •FACTORY PRE-SET NO ADJUSTMENTS EVER NEEDED. • REACTS QUICKLY TO CHANGES IN LINE PRESSURE (VERY LOW HYSTERESIS PROPERTIES). *STRONG, DURABLE CONSTRUCTION OF HIGH-IMPACT ENGINEERING-GRADE THERMOPLASTICS

•100% WATER TESTED FOR ACCURACY. . TWO-YEAR WARRANTY ON MATERIALS, WORKMANSHIP AND PERFORMANCE.

WITH STAINLESS STEEL COMPRESSION SPRING AND SECURING SCREWS

GENERAL NOTES

PROJECT CONDITIONS *PERFORM SITE SURVEY, RESEARCH PUBLIC UTILITY RECORDS, AND VERIFY EXISTING UTILITY LOCATIONS. VERIFY THAT IRRIGATION SYSTEM PIPING MAY BE INSTALLED IN COMPLIANCE WITH ORIGINAL DESIGN AND

WATER SOURCE

•INSTALLER SHOULD CONFIRM THE MINIMUM DISCHARGE REQUIREMENTS OF THE WATER SOURCE AS INDICATED ON THE DRAWING LEGEND PRIOR TO INSTALLATION. *IF SOURCE IS LESS THAN MINIMUM REQUIREMENT, CONSULT WITH A DESIGNER FOR POSSIBLE HYDRAULIC CHANGES.

BACKFLOW PREVENTER

•DESIGN UTILIZES A PRESSURE VACUUM BREAKER BACKFLOW PREVENTER DEVICE, MOUNTED 1' ABOVE THE HIGHEST SPRINKLER ON THE SITE. INSTALLER MUST CONFORM WITH THE LOCAL WATER AUTHORITY, THEIR APPROVED TYPE DEVICE AND INSTALLATION METHODS IN ORDER TO CONFORM WITH LOCAL CODES. IF A DIFFERENT TYPE DEVICE IS USED, CONSULT WITH A DESIGNER FOR POSSIBLE HYDRAULIC CHANGES.

SLEEVING

•A MINIMUM OF PR-200 PVC SLEEVES SHOULD BE USED UNDER ANY HARDSCAPING. (EXAMPLE: SIDEWALKS AND DRIVES). SLEEVES TO BE A MINIMUM OF (2) PIPE SIZES LARGER THAN THE PIPE • A SEPARATE SLEEVE IS RECOMMENDED FOR WIRE. · WHERE MAINLINE AND WIRE ARE ROUTED THROUGH A COMMON SLEEVE/BORE, WIRE TO BE INSTALLED IN A SEPARATE INNER CONDUIT.

PIPE AND FITTINGS

•ALL PIPE 1" OR SMALLER TO BE PR-200 SDR-21 SOLVENT WELD PVC PIPE.
•ALL PIPE 1 1/4" OR LARGER TO BE PR-160 SDR-26 SOLVENT WELD PVC PIPE. •ALL PVC PIPE FITTINGS TO BE SCHEDULE 40, SOCKET-TYPE. •PVC PIPING AND FITTINGS SOLVENT-CEMENTED JOINTS TO BE CONSTRUCTED UTILIZING CLEANER, PURPLE PRIMER, AND SOLVENT CEMENTS. •GENERAL LOCATIONS AND ARRANGEMENTS: DRAWINGS INDICATED GENERAL LOCATION AND ARRANGEMENT OF PIPING SYSTEMS. INDICATED LOCATIONS AND ARRANGEMENTS WERE USED FOR DESIGN LEGIBILITY, TO SIZE PIPE AND CALCULATE FRICTION LOSS, AND OTHER DESIGN CONSIDERATIONS. • MINIMUM COVER: PROVIDE THE FOLLOWING MINIMUM COVER OVER TOP OF BURIED PIPING OR 12" BELOW THE AVERAGE LOCAL FROST DEPTH, WHICHEVER IS THE GREATER DEPTH. • PRESSURE PIPING: 18" OF COVER FOR PIPE 2 1/2" AND SMALLER; 24" FOR PIPE 3" AND 4"; AND 30" FOR PIPE 6" AND LARGER. · CIRCUIT PIPING: 18" OF COVER FOR CIRCUIT PIPE. *DRAIN PIPING: 18" OF COVER FOR PIPE 4" AND SMALLER; 24" FOR PIPE 6" AND LARGER. SIFFVES: 24" OF COVER FOR PIPE 6" AND SMALLER; 30" FOR PIPE 8" AND LARGER. PRIOR APPROVAL BY LANDSCAPE ARCHITECT MUST BE OBTAINED FOR ALL TRENCHING AROUND EXISTING SPECIMEN/LARGE TREES. ONLY HAND TRENCHING WILL BE ALLOWED WITHIN THE "TREE SAVE" AREAS.

SCHEDULING

• ADJUST SETTINGS OF CONTROLLERS AND AUTOMATIC CONTROL VALVES, AND PROVIDE WRITTEN SCHEDULE TO OWNER.

· SOLID COPPER CONDUCTOR, INSULATED CABLE, SUITABLE FOR DIRECT BURIAL. · LOW-VOLTAGE, BRANCH CIRCUIT CABLES: TYPE PE, NO. 14 AWG MINIMUM. BETWEEN CONTROLLERS AND AUTOMATIC CONTROL VALVES. JACKET COLOR IS OTHER THAN FEEDER-CIRCUIT-CABLE JACKET COLOR. · SPLICING MATERIALS: 3M DBR/Y OR APPROVED EQUAL.

VALVE/ZONE IDENTIFICATION

30.0 GALLONS PER MINUTE 30.0 GALLONS PER MINUTE 1 = ZONE #VALVE SIZE VALVE SIZE

SPRINKLER INSTALLATION

· LOCATION OF SPRINKLERS AND DEVICES: DESIGN LOCATION IS APPROXIMATE. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY TO AVOID PLANTINGS AND OBSTRUCTIONS SUCH AS SIGNS AND LIGHT STANDARDS. •SPRINKLERS TO BE SPACED NO GREATER THAN 50% - 55% OF DIAMETER OF THROW AT OPTIMUM PERFORMANCE PRESSURE. THIS WILL ACHIEVE "HEAD TO HEAD" COVERAGE PERFORMANCE. ·FLUSH CIRCUIT PIPING WITH FULL HEAD OF WATER AND INSTALL SPRINKLERS AFTER HYDROSTATIC TEST IS COMPLETE. ·INSTALL LAWN SPRINKLERS AT MANUFACTURE'S RECOMMENDED HEIGHTS. •INSTALL SHRUBBERY SPRINKLERS AT HEIGHTS INDICATED. ·LOCATE PART-CIRCLE SPRINKLERS TO MAINTAIN A MINIMUM DISTANCE OF 6" FROM WALLS AND 3" FROM OTHER BOUNDARIES (SIDEWALKS, CURBS) UNLESS OTHERWISE INDICATED. ·CAREFULLY ADJUST LAWN SPRINKLERS SO THEY WILL BE FLUSH WITH, OR NOT MORE THAN 1/2" ABOVE, FINISH GRADE AFTER COMPLETION OF LANDSCAPE WORK. ·CAREFULLY ADJUST ALL SPRINKLERS IN MULCH AREAS SO THEY WILL BE PLUMB AND ·ALL SPRAYHEAD NOZZLES INDICATED ON PLAN. ·USE VANS (VARIABLE ARC NOZZLE) WHERE INDICATED ON PLAN.

VALVE INSTALLATION

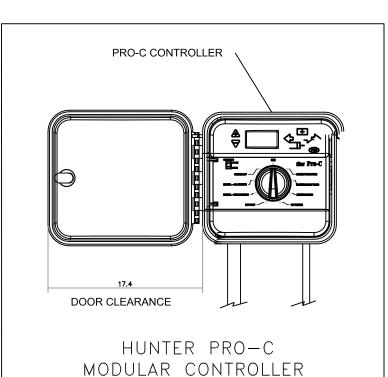
• ALL VALVES (MANUAL AND ELECTRIC) TO BE INSTALLED IN A NDS #212BC 10" ROUND PRO SERIES VALVE BOX WITH LID (UNLESS OTHERWISE NOTED).
• CONTRACTOR TO ADJUST THE FLOW CONTROL HANDLE IN ORDER TO ACHIEVE PROPER VALVE OPERATION AND OPTIMUM SPRINKLER PERFORMANCE. · VALVES SHALL NOT BE PLACED WITHIN 5 FEET OF ANY DRIVEWAY, OR WHERE THEY CAN

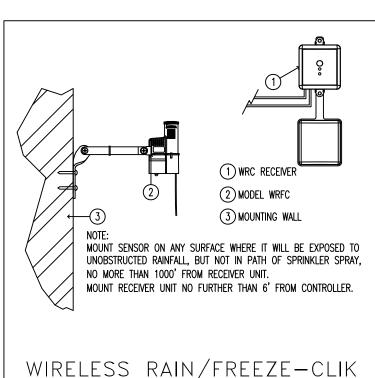
DRIP INSTALLATION

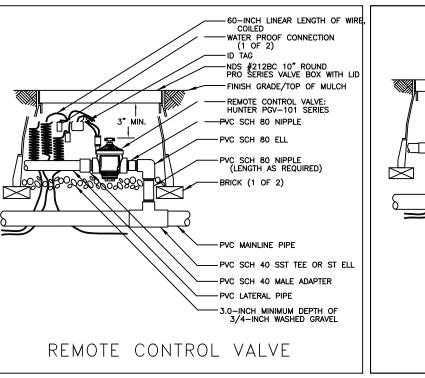
•THIS DESIGN UTILIZES AN INLINE PRESSURE COMPENSATING DRIPPERLINE IN A GRID LAYOUT. THE EMITTERS ARE INCORPORATED AT 18" INTERVALS ALONG THE TUBING AND THE LINES ARE SPACED 18" BETWEEN ROWS (SEE DETAIL). EACH EMITTER OUTPUT IS 1.0 GPH. THIS GRID LAYOUT TO BE USED WITH LOAM AND CLAY SOIL TYPES. SPACING MAY NEED TO BE REDUCED OR SOIL NEEDS TO BE AMENDED FOR SANDY SOIL IN ORDER TO INCREASE THE MOVEMENT OF THE WATER IN THE SOIL PROFILE AND WATER •NO DRIPPERLINE RUN TO EXCEED 225' FROM CONNECTION TO PVC LATERAL HEADER PIPE. •ZONES BASED ON A MINIMUM OF 30 PSI.

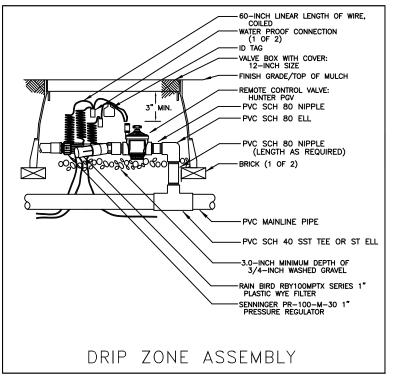
ELEVATION

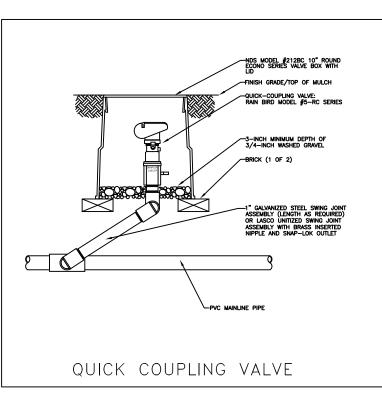
•THE PRESSURE REQUIREMENT OF THE WATER SOURCE IS BASED ON NO MORE THAN 2 FEET OF RISE IN ELEVATION FROM WATER SOURCE THROUGHOUT THE IRRIGATION COVERAGE AREA. IF SITE HAS GREATER ELEVATION CHANGE, CONSULT WITH DESIGNER FOR POSSIBLE HYDRAULIC CHANGE.

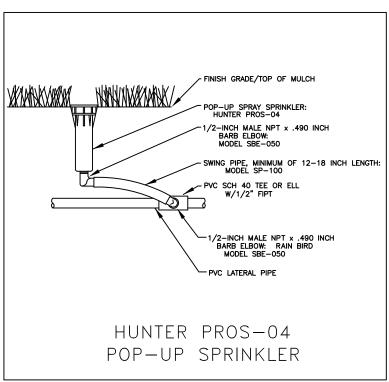


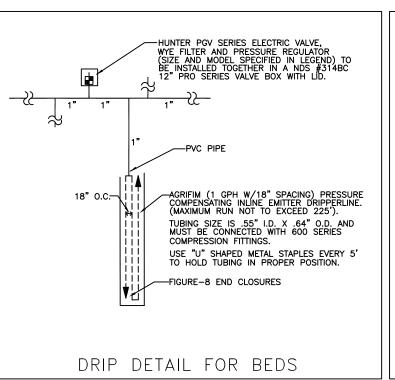


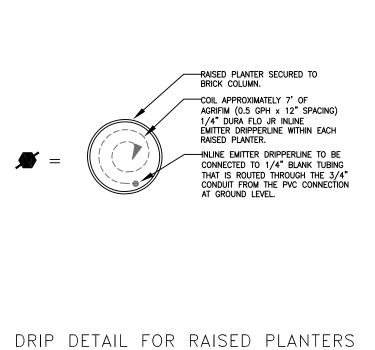


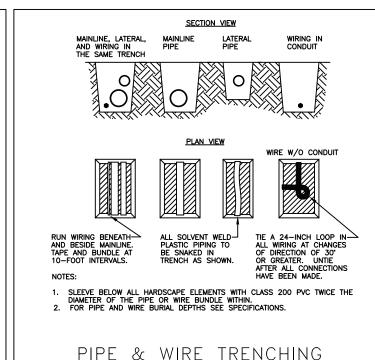


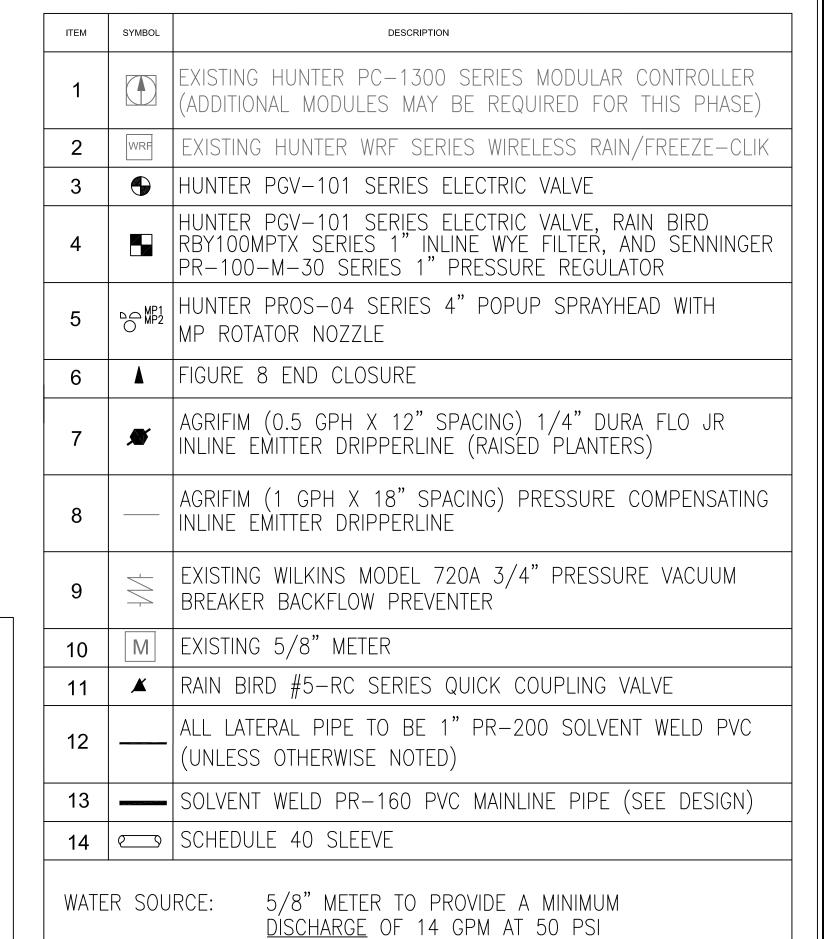












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Consultants

Legend

Notes

Revision Appd. YY.MM.DD Issued Dwn. Chkd. Dsgn. YY.MM.DD Permit-Seal

STANTEC CONSULTING

SERVICES, INC.

No. C02310

Town of Summerville

Client/Project

HUTCHINSON SQUARE IMPROVEMENTS - PHASE II BID SET - PARK

Summerville, SC

IRRIGATION DETAILS

Project No. 178420699	Scale 1" = 20'-0"	
Drawing No.	Sheet	Revision
14	4 of 4	0