

Georgetown County, South Carolina

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ADDENDUM #3 TO BID #20-020

BID NUMBER: 20-020

ISSUE DATE: Tuesday, May 5, 2020

OPENING DATE: Wednesday, May 13, 2020

OPENING TIME: 3:30 PM ET

Pre-Bid Site Inspection and/or Conference: [None]

PROCUREMENT FOR: Garden City Drainage Improvements Sites 1, 5 and 8

This addendum will amend **Bid #20-020, Garden City Drainage Improvements Sites 1, 5 and 8** originally issued on Wednesday, April 8, 2020. This clarification is being provided to all known and registered correspondents in response to questions received. All addenda and original bid documents are also available online at: www.gtcounty.org, select "Bid Opportunities" from the Quick Links section and "View Current Bid Solicitations."

Question #1: FULL DEPTH ASPHALT PATCH: There is no Section on the existing Bid Drawings that indicates "full depth asphalt patch". Typically, SCDOT defines "full depth asphalt patch" at approximately 6" thick; typically includes _____ inches of binder and _____ inches of surface, or simply _____ inches of binder.

The only section that we can find on current bid drawings is "Asphalt Pavement in Right-of-Way Section". Is this the section that we are supposed to quote for "full depth asphalt patch" as indicated on the roadway plan and profile drawings?

If the paragraph above is not the section that you want us to use for "full depth asphalt patch", then please advise the thickness of binder, surface, etc. as indicated in paragraph #1.

Response: Full Depth Patch shall be 6" Type B Asphalt on existing compacted aggregate base course.

Question #2: TYPICAL DRAWING C0-01 – PAVING & GRADING NOTES – NOTE #10: Based on our interpretation, it appears that all milling and overlay areas shown on various drawings indicate that there will not be any “tapering”. In other words, it appears that the milled and overlay areas require a neat cut at the edges to tie in to existing paving areas. If “grades are to be feathered past joints”, please define where these areas are.

Response: Existing asphalt shall be saw cut and paving shall tie to saw cut.

Question #3: STRUCTURAL FILL REQUIRED: Reference is made to SCDOT Drawing 714-105-00. Various detail numbers 1, 3 & 4 indicate structural fill is applicable and should be installed. Note #7 indicates “if required, use structural backfill material or CLSM to prevent settlement”.

Please clarify exactly where, according to these SCDOT Details and Notes, where structural fill will be required.

Based on Details nos. 1, 3 & 4 at SCDOT drawing 714-105-00, there are notes concerning geo-textile fabric. As requested above with reference to structural fill, please identify where geo-textile fabric may be required. For example, Detail 1 shows the application, if required. Details 3 and 4 simply say “geo textile now shown”. Please clarify.

Response: All crossline installations will require flowable fill.

Question #4: O-RING VS. TONGUE & GROOVE RCP: Reference is made to Drainage Notes #4 & #5, Typical at all sites. Since we do not have any geo-technical information with reference to water tables, please clarify where o-ring pipe needs to be used versus tongue & groove storm pipe.

Response: All pipe shall be AHSTO M315 Rubber Profile Gasket Pipe.

Question #5: BID ITEM #17 – CURB INLETS (SCDOT TYPE 9): Drawing C4-00 indicates Type 16. Please clarify.

Response: Bid Item #17 should read “CURB INLETS (SCDOT TYPE 16).

Question #6: BID ITEM #13: Bid Item #13 indicates 8 LF of 15" RCP. Drawing C4-00 and C4-01 indicate 15" HDPE with cap. Please clarify.

Response: Bid Items #13 should read 8 LF of 15” HDPE.

Question #7: SITE 1 – EXISTING 18” PVC PIPE: Based on site visit, this is not PVC pipe. Can you confirm whether this is asbestos or not?

Response: We do not know the exact type of pipe, contractor shall verify and carry appropriate pipe and its disposal in their bid.

Question #8: SITE 5 – PAVEMENT MARKINGS: Addendum #1 only mentions markings for edge of pavement and centerlines. Drawings C4-01 through C4-03 indicate additional Stop Bars, arrows, stop details, etc. Please define what asphalt pavement markings are we to include in our bid for all sites.

Response: Pavements marking are inclusive of all pavement markings to include centerline, stop bars, stop details, handicapped parking, etc.

Question #9: SCOPE OF ASPHALT AT DRAINAGE STRUCTURES, ETC. – SITE 5: On Drawings C3-01 and C3-02, seems to indicate that there will be “turn outs” for asphalt to drainage structures. Road Plan and Profile Drawings such as C4-01 and C4-02 do not indicate same at paving. Please clarify.

Response: Concrete collars shall extend to edge of asphalt/travel way.

Question #10: PROJECT DOCUMENT PAGE 5 OF 151 – PARA. 3 – GRANT REQUIREMENTS: Since this is an SCDOT LPA funded project, please clarify the requirements as outlined below.

- Is this project subject to Davis Bacon wages?

Also, page 11 of 151, para. 20A, refers to Davis Bacon requirements and also highlights a web site at the end of para. 20A for actual wage rates in Georgetown County. At this time, we cannot access that web site. If Davis Bacon wage rates are required, please provide a list of Davis Bacon wage rates for Georgetown County.

- Based on our previous experience with Federally funded grants, and Davis Bacon requirements, we have been required to submit certified payroll for General Contractor, Subcontractors, etc. Please verify that this will be the requirement for this project.

Response: We anticipate Federal Funding and as such Davis Bacon Labor Rates shall apply to this project. Davis Bacon Labor Rates for Georgetown County can

be found at the following link:

https://beta.sam.gov/search?index=wd&keywords=Georgetown&sort=-relevance&wdType=dbra&page=1&date_filter_index=0&inactive_filter_values=false.

Question #11: SITE #1 – BID ITEM #21 – WATER SERVICE RELOCATION: Will these services require new wet taps to existing water main or tie to existing service line and relocate due to new storm drain line, catch basin obstructions, etc.?

Response: Contractor shall tie to existing service line since no water main relocation is required for Site 1.

Question #12: SITE #1 – BID ITEM #22 – SEWER FORCE MAIN RELOCATION: Is this going to be an obstruction bypass?

Response: Yes - the sewer Contractor will have to do an obstruction bypass.

Question #13: SITE #5 – BID ITEM #51 – WATER SERVICE RELOCATIONS: Are these new taps from new 8” waterline (Bid Item #50)? Not specified as new.

Response: Yes – This is a new 8” water main and will require new wet taps for the relocated line.

Question #14: SITE #1 – BID ITEM #23 – SANITARY SEWER RELOCATION: According to drawings, all manhole covers on the main gravity sewer line under Waccamaw Drive are sealed with no access. Can you provide us with any information as to the depths of the main sanitary sewer line? Otherwise, how will we know that the main line is deep enough to allow the sanitary sewer relocations as indicated on the storm drain profile C4-01?

Response: GCWS has provided as-builts and the plans have been updated accordingly.

Question #15: ADDENDUM #1 – QUESTION #4 AND RESPONSE: Response Item b indicates “the overlay thickness is minimum 2” and/or match proposed grades on the design drawings for all sites”.

It is almost impossible to determine where and how much additional asphalt/binder/surface course will be required to accomplish the final elevations as shown on the drawings versus existing elevations.

We would suggest that you provide an additional bid item for additional asphalt required above and beyond the 2" of surface course. We suggest that this "overrun" of asphalt will be priced on a per ton basis. Asphalt load tickets, etc. can be provided to prove any asphalt tonnage overrun beyond 2" thick.

Response: Contractor shall assume 2" surface course and document asphalt amount over the bid amount. Contractor will be compensated for additional asphalt over the bid amount based on the provided unit rate.

Question #16: RETAINING WALL AT AREA #5: Based on our site visit, it appears that the new storm drain will be in conflict with the lower existing 4 x 6 whaler. Please confirm that it is the General Contractor's responsibility to provide whatever reinforcement is required if the 4 x 6 whaler must be cut to allow new storm drain.

Response: Contractor is responsible for replacing and reinforcing any existing retaining walls.

Question #17: EXISTING IRRIGATION/LANDSCAPE:

- Based on site visit, it appears that there could be existing irrigation at homeowner's property. Please clarify if the General Contractor is responsible for replacing any irrigation at any location.
- Also, there are several areas that bushes, trees, etc. will be removed in order to place storm drain, etc. Please clarify whether the General Contractor is responsible for replacing these items, "in kind". For example, there are large crepe myrtles/wax myrtles/palmettos/etc. that cannot be replaced in the same size as existing.

Response: Yes, this will be the responsibility of the Contractor.

Question #18: SCOPE OF ASPHALT MILLING/OVERLAY/NEW PAVEMENT: As a typical example, referring to Site #5, Drwg. C2-00 through C2-02, and Drwg. Nos. C3-00 through C3-02, versus "asphalt paving drawings" C4-00 through C4-02, indicate different scopes as to the extent for new asphalt paving. The C4 drawings, basically, do not include turn outs. The turn outs are obviously more costly than the "straight line paving". Please clarify the extent of new asphalt pavement. Not only on Site #5, but entire project.

Response: Sheet C4-00-C4-02 reflect all required paving.

REVISIONS: See Revised Drawings from Engineers Attached.



STANTEC CONSULTING SERVICES INC.
4969 CENTRE POINTE DRIVE, SUITE 200
NORTH CHARLESTON, SC 29417
TEL 843.740.7700

CLIENT: GEORGETOWN COUNTY
108 SCREVEN STREET
GEORGETOWN, SC 29442
TRACY JONES | 843-545-3258

GARDEN CITY DRAINAGE IMPROVEMENTS

SITE 1
GEORGETOWN COUNTY,
SOUTH CAROLINA

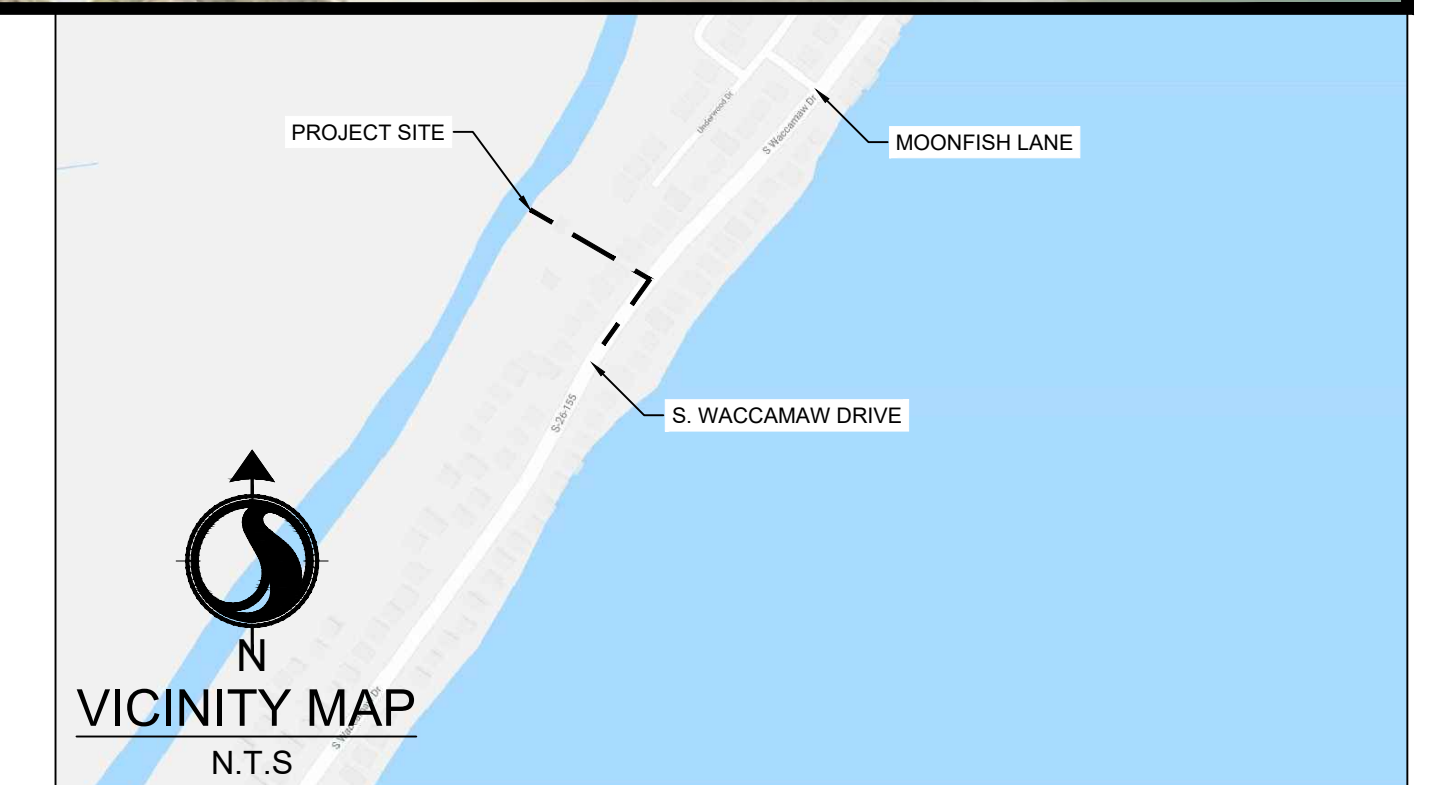


Know what's below.
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PROJECT NUMBER: 178420927



| SHEET INDEX | | |
|----------------|--|----------|
| SHEET NO. | TITLE | REVISION |
| C0-00 | COVER SHEET | 0 |
| C0-01 | PROJECT NOTES | 0 |
| C1-00 | EXISTING CONDITIONS - BY OTHERS | 0 |
| C2-00 | DEMOLITION AND TREE REMOVAL PLAN | 0 |
| C3-00 | TREE PROTECTION AND EROSION CONTROL PLAN | 0 |
| C3-01 to C3-02 | EROSION CONTROL DETAILS | 0 |
| C4-00 | GRADING AND DRAINAGE PLAN | 0 |
| C4-01 | GRADING AND DRAINAGE PROFILES | 0 |
| C4-02 to C4-04 | GRADING AND DRAINAGE DETAILS | 0 |
| C5-00 | TRAFFIC CONTROL PLAN | 0 |
| C5-01 | TRAFFIC CONTROL DETAILS | 0 |



| PROJECT CONTACTS | | | |
|-------------------|---|------------------|-------------------------|
| SERVICE | MUNICIPALITY/UTILITY PROVIDER | CONTACT | PHONE |
| PLANNING & ZONING | GEORGETOWN COUNTY DEPARTMENT OF PLANNING | BOYD JOHNSON | (843) - 545-3158 |
| STORMWATER | GEORGETOWN COUNTY STORMWATER DIVISION | TRACY JONES | (843) - 545-3524 |
| WATER AND SEWER | GEORGETOWN COUNTY WATER AND SEWER DISTRICT | ERNIE FUNDERBURK | (843) - 907-1535 |
| POWER | SANTEE COOPER | JIM POSTON | (843) - 347-3399 |
| IRRIGATION | WACCAMAW MANAGEMENT | MIKE JACOBS | (843)-241-6234 |
| ROAD | SCDOT | BENJI SMITH | (843)-661-4710 Ext. 201 |

Revision By Appd YYYY.MM.DD

BID SET
PER COUNTY COMMENTS
FOR PERMIT REVIEW
Issued
By Appd YYYY.MM.DD

File Name: C0_927_COVER
SGC SGC BK
Dwn. Dgth. Chkd. YYYY.MM.DD

Permit/Seal



GENERAL NOTES:

1. OWNER: GEORGETOWN COUNTY
TRACY JONES
108 SCREVEN STREET
GEORGETOWN, SC 29442
(843) 545-3258
2. ENGINEER: STANTEC CONSULTING SERVICES, INC
BRYAN KIZER, P.E.
4969 CENTRE POINTE DR, SUITE 200
NORTH CHARLESTON, SC 29418
TEL: (843) 740-7700
3. BOUNDARY, TOPOGRAPHIC & EXISTING CONDITIONS INFORMATION TAKEN FROM "TOPOGRAPHIC SURVEY OF A PORTION OF GARDEN CITY BEACH SITE 1, PREPARED FOR GEORGETOWN COUNTY, BY COX SURVEYING, DATED JANUARY, 2019. VERTICAL DATUM USED WAS NAVD 88.
4. CRITICAL LINE FLAGGED BY CYGNUS ENVIRONMENTAL.
5. 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.
6. GEORGETOWN COUNTY WILL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EASEMENTS.
7. ALL DRAINAGE EASEMENTS TO BE DEDICATED TO GEORGETOWN COUNTY.
8. 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 GEORGETOWN COUNTY SPECIFICATIONS, LATEST EDITION. WHERE 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.
11. CONTRACTOR TO NOTIFY GEORGETOWN COUNTY WATER & SEWER A MINIMUM OF 48 HOURS BEFORE ANY WATER OR SEWER WORK IS TO BEGIN.

TRAFFIC NOTES:

1. LANE CLOSURES ARE REQUIRED FOR ALL WORK WITHIN ONE FOOT OF THE TRAVEL WAY. SHOULDER CLOSURES ARE REQUIRED FOR ALL WORK FROM ONE FOOT TO FIFTEEN FEET FROM THE TRAVEL WAY.

SAFETY NOTES:

1. 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. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY THE SCDOT AND APPLICABLE LOCAL AGENCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
4. 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 ITS 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.
5. 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, SUBPART P.
6. 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.
7. 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.
8. 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 SAFETY REGULATION.
9. 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.
10. 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.

CLEARING AND DEMOLITION:

1. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SOODED 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. 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 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.

SHOP DRAWING SUBMITTAL:

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER'S ENGINEER; 2 SETS OF HARD COPIES AND 1 ELECTRONIC FOR REVIEW.
- 1.1. THE CONTRACTOR, OR THE CONTRACTORS SUPPLIER, MUST INCLUDE WITH THE SHOP DRAWING SUBMITTAL A REFERENCE TO THE GOVERNING MUNICIPALITIES STANDARDS SHOWING COMPLIANCE WITH SAID MUNICIPALITIES REQUIREMENTS.
- 1.1.1. **IN** SHOP DRAWING SUBMITTAL FOR A FIRE HYDRANT SHALL INCLUDE A REFERENCE TO "CHARLESTON WATER SYSTEM - MINIMUM STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITARY SEWER SYSTEM - SECTION 10.B.1.0". OR MORE SIMPLY "CWS - 10.B.1.0"
- 1.1.2. THIS SHALL BE COMPLETED FOR EVERY SUBMITTAL TO ASSURE AN EXPEDITED REVIEW OF SHOP DRAWINGS.
2. SHOP DRAWINGS WILL BE REVIEWED AND RETURNED TO THE CONTRACTOR WITHIN 15 BUSINESS DAYS FROM CONFIRMED RECEIPT BY THE OWNER OR THE OWNERS ENGINEER.
3. SHOP DRAWINGS NOT RECEIVED IN THE PROPER FORMAT WILL BE RETURNED TO THE CONTRACTOR FOR REVISIONS PRIOR TO REVIEW.

AS-BUILT NOTE:

THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF THE SITE (TIED TO THE STATE PLANE COORDINATE SYSTEM), TO INCLUDE ALL STORM DRAINAGE LINES, BOTH EXISTING AND NEWLY INSTALLED. SURVEY SHALL ALSO INCLUDE THE PIPE SIZE, MATERIAL, AND INVERT ELEVATIONS, IN COMPLIANCE WITH THE GEORGETOWN COUNTY REQUIREMENTS AND NPDES PERMIT.

NO GEOTECHNICAL REPORT:

1. ASPHALT/PAVEMENT SECTIONS SHOWN ON PLANS AND DETAILS ARE ASSUMED AND SHALL BE VERIFIED WITH GEOTECHNICAL ANALYSIS BY THE CONTRACTOR PRIOR TO INSTALLATION
2. CONTRACTOR TO ASSUME 12 INCHES OF UNDERCUT AND BACKFILL TO BRING TO GRADE.

PAVING AND GRADING

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAR, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNERS ENGINEER, OR OWNERS SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR THE OWNERS 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.
2. 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.
3. 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 REPORT.
4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
5. UNLESS OTHERWISE NOTED, ALL GRADING, ROOFING AND PAVING TO CONFORM TO SCOT STANDARD SPECIFICATIONS, LATEST EDITION.
6. CLEAR AND GRUB WITHIN WORK LIMITS ALL SURFACE VEGETATION, TREES, STUMPS, BRUSH, ROOTS, ETC. DO NOT DAMAGE OR REMOVE TREES EXCEPT AS APPROVED BY THE APPROPRIATE MUNICIPAL AUTHORITY OR AS SHOWN ON THE DRAWINGS. PROTECT ALL ROOTS.
7. 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.
8. IMMEDIATELY FOLLOWING FINE GRADING OPERATIONS, COMPACT SUBGRADE TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180.
9. 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).
10. 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 OR BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.
11. CRUSHED ROCK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 02030 (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 04745 (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 AND SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.
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:

| SIEVE SIZE (PER ASTM D422) | PERCENT PASSING BY WEIGHT |
|----------------------------|---------------------------|
| 1" INCH | 100 |
| 3/4 | 90-100 |
| No. 6 | 35-55 |
| No. 200 | 0-8 |

17. ALL AREAS TO RECEIVE FILL, AND AREAS OF STRUCTURES AND PAVEMENTS, SHALL BE STRIPPED OF VEGETATION, ORGANIC MATTER, 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).
- | ENGINEERED FILL MATERIAL | MINIMUM PERCENT COMPACTION | MOISTURE CONTENT (RANGE) |
|---|----------------------------|----------------------------|
| NATIVE SOIL | 90% | OPTIMUM TO OPTIMUM PLUS 3% |
| ENGINEERED FILL UNDER STRUCTURES AND BEHIND RETAINING WALLS | 95% | OPTIMUM TO OPTIMUM PLUS 3% |
| ENGINEERED FILL UNDER PAVEMENTS | 95% | OPTIMUM TO OPTIMUM PLUS 2% |
| FILL IN LANDSCAPE AREAS | 95% | 2 TO 5% ABOVE OPTIMUM |
- 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 8 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 GEOTECHNICAL FIELD REPRESENTATIVE.
21. IF SUBGRADE SOILS EXHIBIT PUMPING DURING COMPACTION, THE AREA SHALL BE ALLOWED TO DRY UNTIL THE SOILS BECOME WORKABLE WITHOUT PUMPING. THE MOISTURE CONTENT OF THE SOILS SHALL BE ADJUSTED TO PREVENT PUMPING.
22. 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:
- 24.1. 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.
- 24.2. LIQUID LIMIT SHOULD NOT EXCEED 40 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
- 24.3. PLASTICITY INDEX SHOULD NOT BE GREATER THAN 30 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
- 24.4. 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.

DRAINAGE NOTES:

1. ALL NEW STORM PIPES, BEDDING, TRENCHING, STORM BOXES, ETC. IN THE RIGHTS-OF-WAY AND/OR CITY OWNED AND MAINTAINED DRAINAGE EASEMENTS SHALL BE INSTALLED PER CURRENT SCDOT SPECIFICATIONS, LOCATED ON THE INTERNET AT http://www.scdot.org/sharing/construction_sharing.aspx. STANDARD SCDOT DETAIL DRAWINGS CAN BE LOCATED AT THE FOLLOWING WEBSITE: <http://www.scdot.org/sharing/look.aspx>.
2. ALL REINFORCED CONCRETE PIPE SHALL, AT A MINIMUM, BE ASTM C78, CLASS III.
3. REINFORCED CONCRETE PIPE INSTALLED UNDER PAVEMENT AND/OR PARALLEL TO THE EDGE OF PAVEMENT IN PUBLIC RIGHTS-OF-WAY SHALL HAVE O-RING JOINTS IN ACCORDANCE WITH ASTM C443 AND/OR AASHTO M315. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
4. SUBMERGED DRAINAGE SYSTEMS SHALL HAVE O-RING JOINTS IN ACCORDANCE WITH ASTM C 443 AND/OR AASHTO M315. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
5. WHERE TONGUE AND GROOVE STORM PIPE IS ALLOWED, REINFORCED CONCRETE PIPE SHALL BE PER ASTM C 78, CLASS III. JOINTS SHALL BE SEALED WITH RAMMECK OR EQUIVALENT PER AASHTO M198. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
6. ALL NEW STORM DRAINAGE LINES SHALL BE LAID UPGRADE AFTER CONFIRMATION OF EXISTING INVERT ELEVATION.
7. GEORGETOWN COUNTY MAINTAINS THE RIGHT TO ALLOW ALTERNATE PIPE INSTALLATIONS OR TYPE OF PIPE FOR ALL PROJECTS ON A CASE-BY-CASE BASIS FOR ANY PIPES TO BE INSTALLED IN AN EXISTING OR PROPOSED CITY ROAD RIGHT-OF-WAY AND OR DRAINAGE EASEMENT.
8. PIPE LENGTHS SHOWN ARE APPROXIMATE AND CENTER TO CENTER ON DRAINAGE STRUCTURES OR TO END OF PIPE. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO SUBMITTAL OF BID.
9. ALL STORM DRAIN PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNERS ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.
10. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RE-OPEN PIPES AND/LETS FOR THESE PURPOSES.
11. FOR CONSTRUCTION OF THE DROP INLET WALLS EITHER BRICK MASONRY OR CLASS 3000 CONCRETE MAY BE USED. FOR CONCRETE THE WALLS ARE TO BE 8" THICK WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. FOR BRICK THE WALLS ARE TO BE 8" THICK.
12. THE BOTTOM SLAB OF THE BOX SHALL BE A MINIMUM OF 6 IN. THICK CLASS 3000 CONCRETE WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. WIRE MESH MAY BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQ. IN. PER FT. IS MET.
13. MORTAR SHALL BE TYPE S OR M.
14. IF DESIRED THESE ITEMS MAY BE PRECAST PRIOR TO INSTALLATION IN LIEU OF BEING CAST IN PLACE. THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE SCDOT STANDARD DRAWINGS FOR PRECAST CONCRETE DRAINAGE BOX FOR ADDITIONAL DETAILS AND SPECIFICATIONS.
15. REINFORCING STEEL SHALL BE DEFORMED AND SHALL CONFORM TO AASHTO M 31, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
16. IF STRUCTURE DEPTH EXCEEDS 4'-6", METAL STEPS ARE TO BE PLACED ON WALL. SEE STEP STANDARD DRAWING 719-16.
17. CASTING SHALL CONFORM TO AASHTO M 105, CLASS 358 AND THE ALTERNATE LOAD TEST OF AASHTO M 306. CASTINGS SHALL ALSO MEET THE LOADING REQUIREMENTS OF FEDERAL SPECIFICATION RR-F-621 (LATEST EDITION).
- a. STEEL GRATES AND FRAME MAY BE USED IN LIEU OF CAST IRON AS LONG AS THE LOADING AND HYDRAULIC REQUIREMENTS ARE MET, AND ARE ON SCDOT LIST OF APPROVED SUPPLIERS.
- b. STEEL GRATES SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111.
- c. STEEL GRATES AND FRAMES SHALL BE DIMENSIONED TO BE INTERCHANGEABLE WITH EACH PIECE OF THE CAST IRON GRATE AND FRAME SHOWN. MUST HAVE A POSITIVE MEANS TO RETAIN THE GRATE IN THE FRAME.
- d. STRENGTH REQUIREMENTS OF STEEL GRATES AND FRAMES MUST MEET FEDERAL SPECIFICATION RR-F-621 (LATEST EDITION).
18. THE LONGEST DIMENSIONS OF THE OPENING IN THE IRON GRATE SHOULD BE ORIENTED IN THE DIRECTION OF FLOW IF PRACTICAL.
19. AS SHOWN BY THIS DRAWING THE FRAME IS SET LEVEL, BUT THE ENGINEER MAY SET SAME ON SLOPE AS REQUIRED BY LOCAL DRAINAGE CONDITIONS.
20. AFTER THE FRAME IS SET IN ITS FINAL POSITION, IT IS TO BE ENCASED WITH CONCRETE AS SHOWN BY DRAWING.
21. THE INSIDE OF THE OUTLET PIPE SHALL BE FLUSH WITH FLOOR OF BASIN, UNLESS OTHERWISE SHOWN ON PLANS (SUMP).
22. THE SOFFIT (INSIDE TOP OF PIPE) OF THE OUTLET PIPE SHOULD BE NO HIGHER THAN THE SOFFIT OF THE INLET PIPE, UNLESS OTHERWISE SHOWN ON PLANS.
23. SHOULD THE CONTRACTOR ENCOUNTER UNSUITABLE MATERIAL, THEN THE CONTRACTOR WILL ENGAGE AN INDEPENDENT GEOTECHNICAL ENGINEER TO VERIFY UNSUITABLE MATERIAL AND MAKE RECOMMENDATIONS ON THE REMOVAL AND THE PLACEMENT AND TYPE OF NEW BEDDING AND BACKFILL MATERIAL. THE RECOMMENDATIONS BY THE INDEPENDENT GEOTECHNICAL ENGINEER SHALL BE SUBMITTED TO THE OWNER AND CIVIL ENGINEER FOR CONCURRENCE PRIOR TO PROCEEDING WITH WORK.

EROSION CONTROL NOTES:

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 SLOPE IS BROUGHT TO GRADE.
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 INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
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.
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 DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
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. AND SCR100000.
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.
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 CANT. BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
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 STABILIZATION IS REACHED.
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.
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, ETC.).
16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS
- FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
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 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 BMP'S 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.



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Legend

Revision

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PER COUNTY COMMENTS
FOR PERMIT REVIEW

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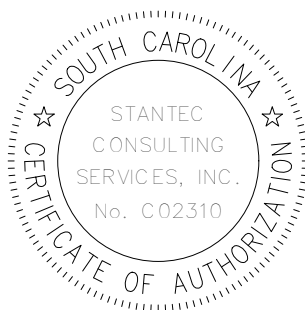
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Permit/Seal



Client/Project Logo

Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1
MURRELLS INLET, SOUTH CAROLINA

Title

Project No.

178420927

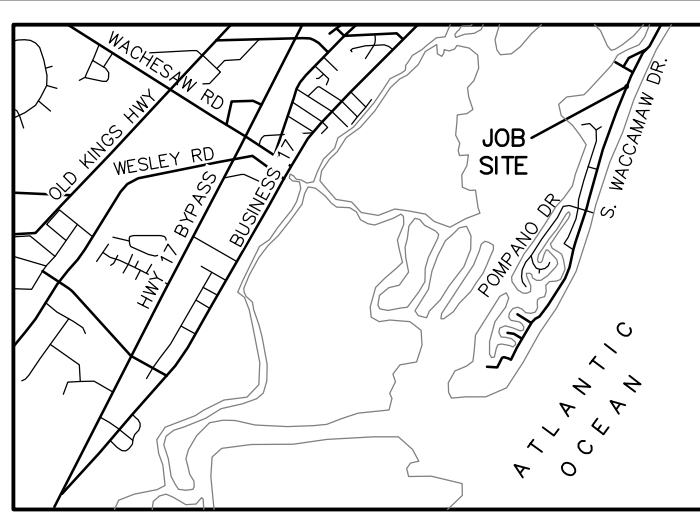
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Sheet

Drawing No.

X of 14



VICINITY MAP
(NOT TO SCALE)

- LEGEND**
- IRON PIPE FOUND
 - IRON REBAR FOUND
 - BOUNDARY POINT
 - ▲ CONTROL POINT
 - X 4.57 EXISTING ELEVATION
 - D.B. DEED BOOK
 - P.B. PLAT BOOK
 - PG. PAGE
 - ELECTRIC BOX
 - AIR CONDITIONER
 - TELEPHONE PEDESTAL
 - PUBLIC ACCESS SIGN
 - WATER VALVE
 - IRRIGATION CONTROL VALVE
 - ▲ VALVE MARKER
 - FIRE HYDRANT
 - CURB INLET MANHOLE
 - CATCH BASIN
 - SEWER CLEAN-OUT
 - SEWER MANHOLE
 - UTL- UNDERGROUND UTILITY LINE (APPROX.)
 - UGP- UNDERGROUND POWER (APPROX.)
 - W- WATER LINE (APPROX.)
 - X- FENCE
 - SS- SEWER LINE
 - OHP- OVERHEAD POWER LINE
 - FM- FORCE MAIN LINE (APPROX.)

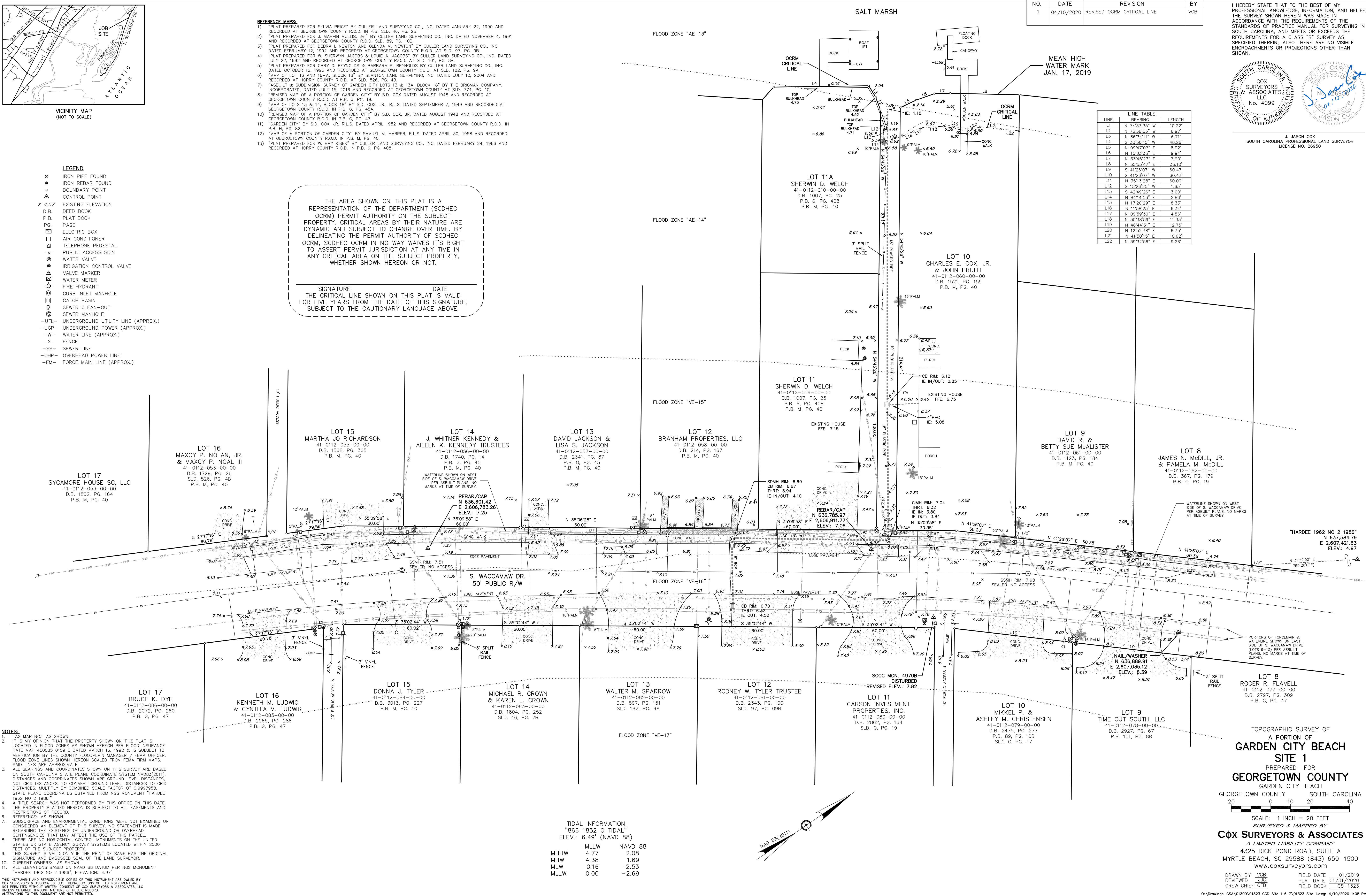
- NOTES:**
1. TAX MAP NO.: AS SHOWN.
 2. IT IS MY OPINION THAT THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN FLOOD ZONES AS SHOWN HEREON PER FLOOD INSURANCE RATE MAP 45008S 0159 E DATED MARCH 16, 1992 & IS SUBJECT TO VERIFICATION BY THE COUNTY FLOODPLAIN MANAGER / FEMA OFFICER. FLOOD ZONE LINES SHOWN HEREON SCALED FROM FEMA FIRM MAPS. SAID LINES ARE APPROXIMATE.
 3. ALL BEARINGS AND COORDINATES SHOWN ON THIS SURVEY ARE BASED ON SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM NAD83(2011) DISTANCES AND COORDINATES SHOWN ARE GROUND LEVEL DISTANCES, NOT GRID DISTANCES. TO CONVERT GROUND LEVEL DISTANCES TO GRID DISTANCES, MULTIPLY BY COMBINED SCALE FACTOR OF 0.9997958. STATE PLANE COORDINATES OBTAINED FROM NGS MONUMENT "HARDEE 1962 NO 2 1986".
 4. A TITLE SEARCH WAS NOT PERFORMED BY THIS OFFICE ON THIS DATE.
 5. THE PROPERTY PLATTED HEREON IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
 6. REFERENCE, AS SHOWN.
 7. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AN ELEMENT OF THIS SURVEY. NO STATEMENT IS MADE REGARDING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTINGENCIES THAT MAY AFFECT THE USE OF THIS PARCEL.
 8. THERE ARE NO HORIZONTAL CONTROL MONUMENTS ON THE UNITED STATES OR STATE AGENCY SURVEY SYSTEMS LOCATED WITHIN 2000 FEET OF THE SUBJECT PROPERTY.
 9. THIS SURVEY IS VALID ONLY IF THE PRINT OF SAME HAS THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE LAND SURVEYOR.
 10. CURRENT OWNERS: AS SHOWN.
 11. ALL ELEVATIONS BASED ON NAVD 88 DATUM PER NGS MONUMENT "HARDEE 1962 NO 2 1986", ELEVATION: 4.97'

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- REFERENCE MAPS:**
1. "PLAT PREPARED FOR SYLVIA PRICE" BY CULLER LAND SURVEYING CO., INC. DATED JANUARY 22, 1990 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. SLD. 46, PG. 28.
 2. "PLAT PREPARED FOR J. MARVIN MULLIS, JR." BY CULLER LAND SURVEYING CO., INC. DATED NOVEMBER 4, 1991 AND RECORDED AT GEORGETOWN COUNTY R.O.D. SLD. 89, PG. 108.
 3. "PLAT PREPARED FOR DEBRA I. NEWTON AND GLENDA M. NEWTON" BY CULLER LAND SURVEYING CO., INC. DATED FEBRUARY 12, 1992 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT SLD. 97, PG. 98.
 4. "PLAT PREPARED FOR W. SHERWIN JACOBS & LOUIE A. JACOBS" BY CULLER LAND SURVEYING CO., INC. DATED JULY 22, 1992 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT SLD. 101, PG. 88.
 5. "PLAT PREPARED FOR GARY G. REYNOLDS & BARBARA P. REYNOLDS BY CULLER LAND SURVEYING CO., INC. DATED OCTOBER 12, 1995 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT SLD. 182, PG. 3A.
 6. "MAP OF LOT 16 AND 16-A, BLOCK 18" BY BLANTON LAND SURVEYING, INC. DATED JULY 10, 2004 AND RECORDED AT Horry County R.O.D. AT SLD. 526, PG. 4B.
 7. "ASBUILT & SUBDIVISION SURVEY OF GARDEN CITY LOTS 13 & 13A, BLOCK 18" BY THE BRIGMAN COMPANY, INCORPORATED, DATED JULY 15, 2016 AND RECORDED AT GEORGETOWN COUNTY AT SLD. 774, PG. 10.
 8. "REVISED MAP OF A PORTION OF GARDEN CITY" BY S.D. COX DATED AUGUST 1948 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT P.B. G, PG. 19.
 9. "MAP OF LOTS 13 & 14, BLOCK 18" BY S.D. COX, JR., R.L.S. DATED SEPTEMBER 7, 1949 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. M, PG. 40.
 10. "REVISED MAP OF A PORTION OF GARDEN CITY" BY S.D. COX, JR. DATED AUGUST 1948 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. G, PG. 47.
 11. "GARDEN CITY" BY S.D. COX, JR. R.L.S. DATED APRIL 1952 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. M, PG. 82.
 12. "MAP OF A PORTION OF GARDEN CITY" BY SAMUEL M. HARPER, R.L.S. DATED APRIL 30, 1958 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. M, PG. 40.
 13. "PLAT PREPARED FOR W. RAY KISER" BY CULLER LAND SURVEYING CO., INC. DATED FEBRUARY 24, 1986 AND RECORDED AT Horry County R.O.D. IN P.B. 6, PG. 40B.

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF THE DEPARTMENT (SCDHEC OCRM) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME. BY DELINEATING THE PERMIT AUTHORITY OF SCDHEC OCRM, SCDHEC OCRM IN NO WAY WAIVES ITS RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY, WHETHER SHOWN HEREON OR NOT.

SIGNATURE _____ DATE _____
THE CRITICAL LINE SHOWN ON THIS PLAT IS VALID FOR FIVE YEARS FROM THE DATE OF THIS SIGNATURE, SUBJECT TO THE CAUTIONARY LANGUAGE ABOVE.





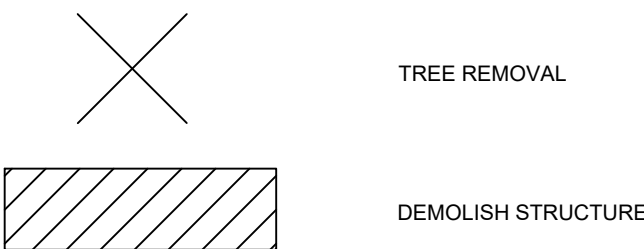
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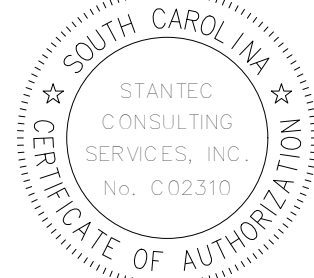
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Client/Project Logo

Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1
MURRELLS INLET, SOUTH CAROLINA

Title
DEMOLITION AND TREE REMOVAL PLAN

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| Project No. | Scale |
| 178420927 | |

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| Revision | Sheet | Drawing No. |
| | 4 of 14 | C2-00 |

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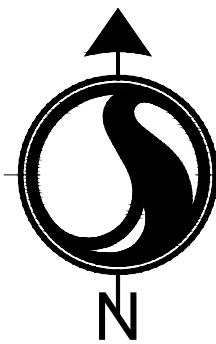
B

SEWER SERVICE NOTES:

- CONTRACTOR TO FIELD LOCATE GRAVITY SEWER SERVICES FOR EACH IMPACTED RESIDENCE AND NOTIFY OWNER/ENGINEER FOR POTENTIAL CONFLICTS WITH PROPOSED STORMWATER.

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.



0 20' 40'
1" = 20'



Know what's below.
Call before you dig.

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2020/03/24 4:16 PM By: Nelson, T
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Legend

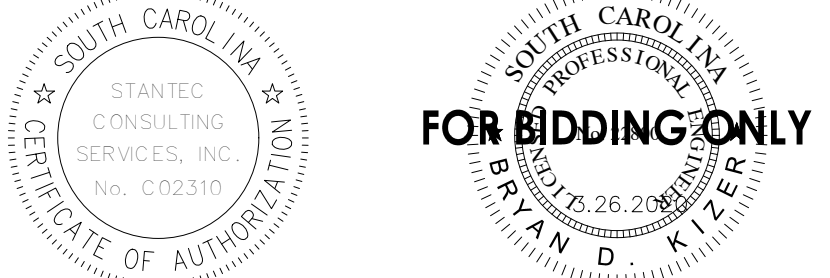
- PS PERMANENT STABILIZATION (SEE LANDSCAPE PLANS)
- TS TEMPORARY SEEDING
- M MULCHING
- DC DUST CONTROL
- LD LIMITS OF DISTURBANCE
- LD SF LIMITS OF DISTURBANCE AND SILT FENCE
- DSF LIMITS OF DISTURBANCE
- TP TREE PROTECTION
- SF SILT FENCE
- ST SEDIMENT TUBE
- A TYPE A INLET PROTECTION
- F FILTER BAG INLET PROTECTION

Revision By Appd YYYY.MM.DD

BID SET PER COUNTY COMMENTS FOR PERMIT REVIEW A8 TN/SC BK 2020.03.26
By Appd YYYY.MM.DD

Issued File Name: 927_ESC_SITE_01 SGC SOC BK
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Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1
MURRELLS INLET, SOUTH CAROLINA

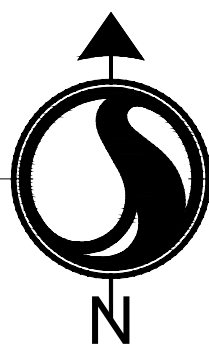
Title
TREE PROTECTION AND EROSION CONTROL PLAN

Project No. 178420927 Scale
Revision Sheet Drawing No.
5 of 14 C3-00

- NOTES:
- HYDRO-SEEDING WILL BE PLACED WITHIN LIMITS OF DISTURBANCE ON ALL AREA EXCLUDING THE PROPOSED PAVED AREA.

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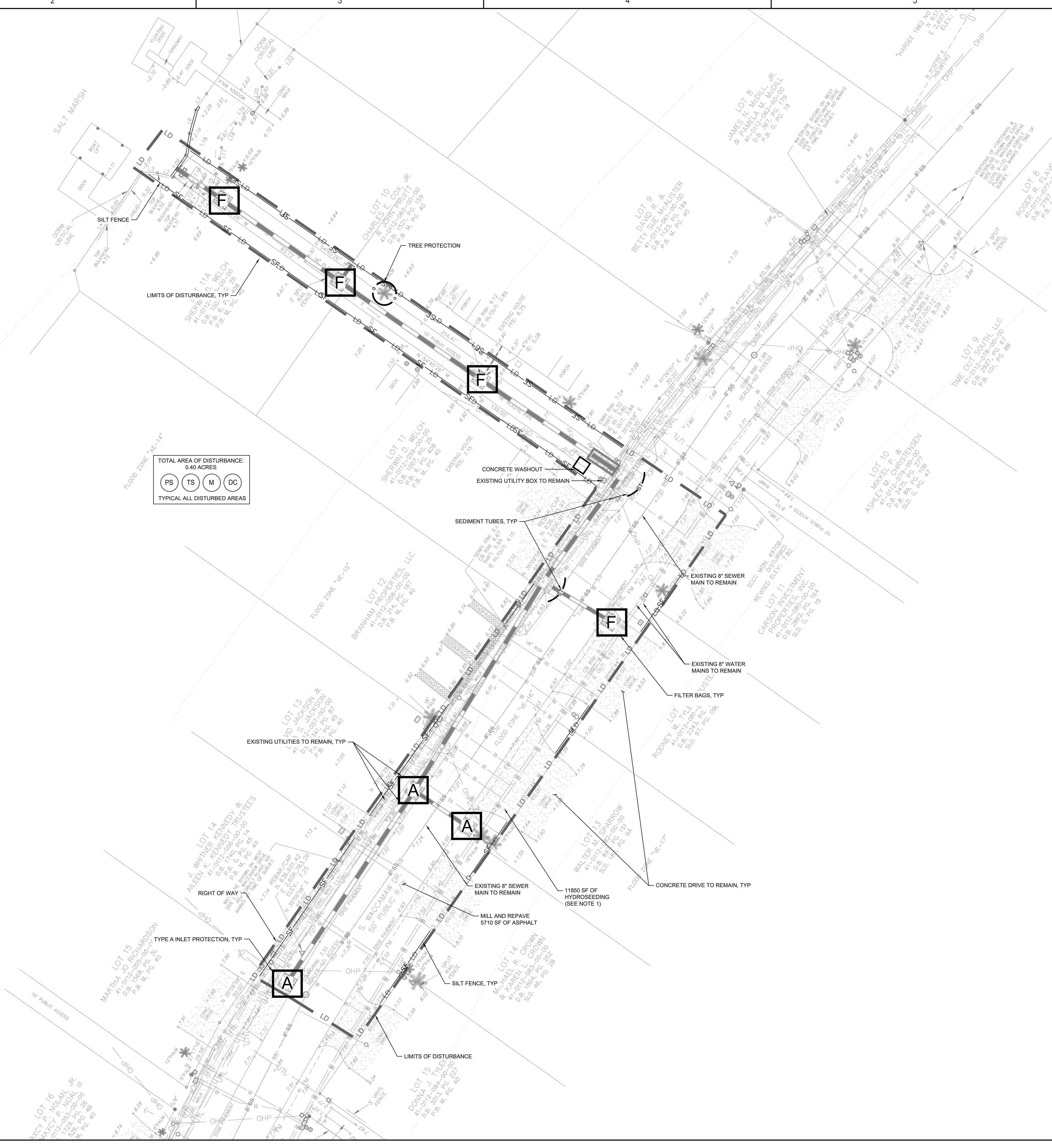
NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.



0 20' 40'
1" = 20'



Know what's below.
Call before you dig.



1

2

| TEMPORARY VEGETATION SCHEDULE | | | |
|-------------------------------|---------------|---|--------------------|
| SPECIES | RATE (LBS/AC) | OPTIMUM DATES TO PLANT | REMARKS |
| BROWNTOP MILLET (ALONE) | 40 | APRIL 20 - AUGUST 15 | QUICK, DENSE COVER |
| BROWNTOP MILLET (MIX)* | 10 | APRIL 20 - AUGUST 15 | QUICK, DENSE COVER |
| RYE GRAIN (ALONE) | 56 | FEBRUARY - MARCH, AUGUST 15 - NOVEMBER 20 | QUICK COVER |
| RYE GRAIN (MIX)* | 10 | FEBRUARY - MARCH, AUGUST 15 - NOVEMBER 20 | QUICK COVER |
| RYE GRASS (ALONE) | 50 | AUGUST 10 - OCTOBER 10 | COMPETITIVE, DENSE |
| RYE GRASS (MIX)* | 8 | AUGUST 10 - OCTOBER 10 | COMPETITIVE, DENSE |

* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN INFORMATION CENTER AT (888) 656-9988 OR AT HTTP://HGIC.CLEMSON.EDU.

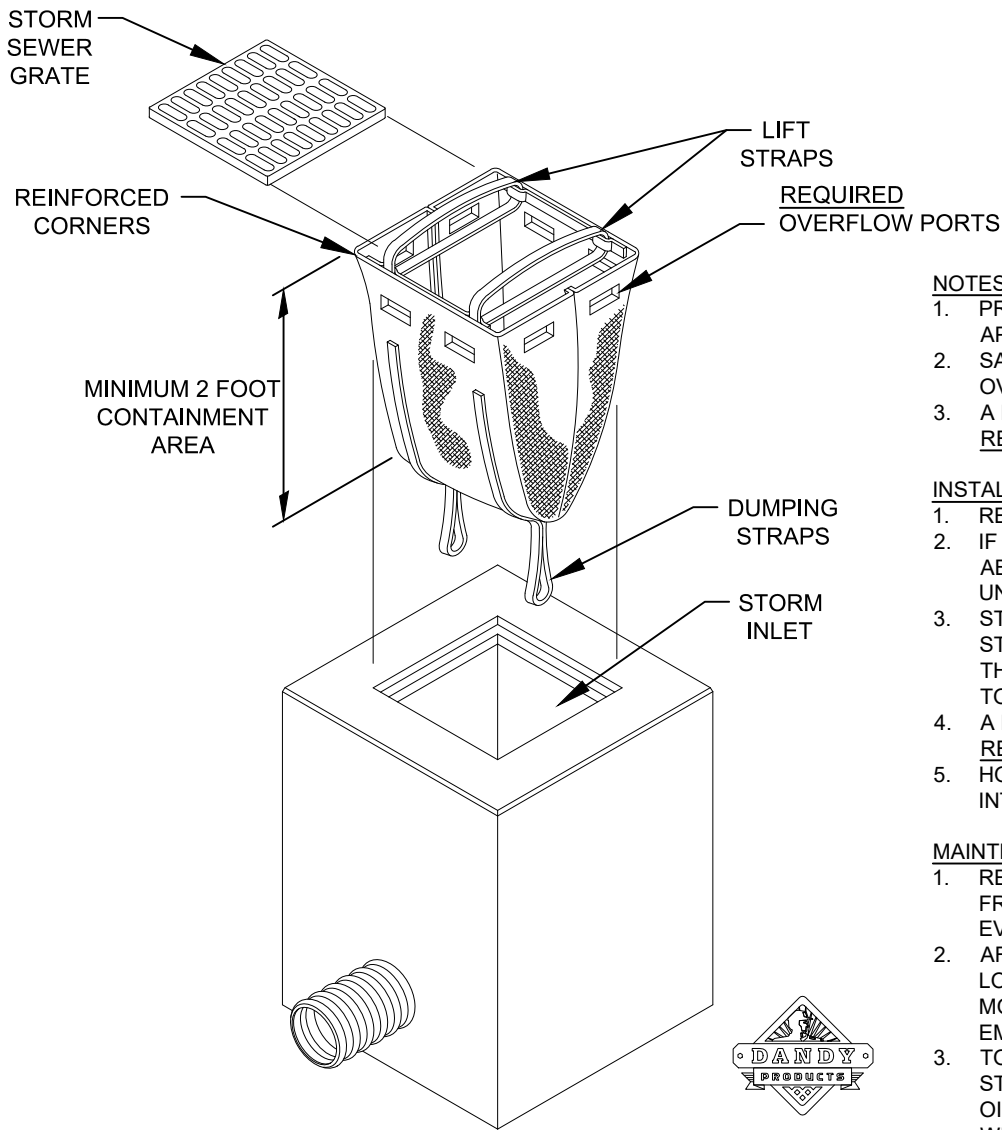
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| PERMANENT VEGETATION SCHEDULE | | | |
|--------------------------------|---------------|------------------------|---|
| SPECIES | RATE (LBS/AC) | OPTIMUM DATES TO PLANT | REMARKS |
| BERMUDA GRASS (HULLED) (ALONE) | 8-12 | APRIL - JULY 15 | QUICK COVER, SOD FORMING, PARTIAL WINTER KILL |
| BERMUDA GRASS (HULLED) (MIX)* | 4-6 | APRIL - JULY 15 | QUICK COVER, SOD FORMING, PARTIAL WINTER KILL |
| FESCUE, TALL (KY31) ALONE | 40 | AUGUST 15 - OCTOBER | SELDOM SEEDED ALONE, NOT FOR DRY OR WET SITES |
| FESCUE, TALL (KY31) MIX* | 20 | AUGUST 15 - OCTOBER | SELDOM SEEDED ALONE, NOT FOR DRY OR WET SITES |
| ANNUAL RYE GRASS | 15 | AUGUST 15 - FEBRUARY | GOOD FOR SUPPRESSING WEEDS. DO NOT USE ITALIAN RYE GRASS. |
| CENTPEDE | 10 | MARCH 1 - APRIL 15 | REQUIRES LOW MAINTENANCE AND FEWER CUTS. |

* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN INFORMATION CENTER AT (888) 656-9988 OR AT HTTP://HGIC.CLEMSON.EDU.

SEEDING SCHEDULE



- NOTES:
- PRODUCT SHALL BE HIGH FLOW DANDY SACK OR APPROVED EQUAL.
 - SACK SHALL HAVE REQUIRED OVERFLOW PORTS (OR OVERFLOW CAPABILITY) FOR LARGE STORM EVENTS.
 - A MINIMUM 2 FOOT SAG (CONTAINMENT AREA) IS REQUIRED.

- INSTALLATION:
- REMOVE THE GRATE FROM CATCH BASIN.
 - IF USING OPTIONAL OIL ABSORBENTS, PLACE ABSORBENT PILLOW IN POUCH ON BOTTOM OF THE UNIT.
 - STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS.
 - A MINIMUM 2 FOOT SAG (CONTAINMENT AREA) IS REQUIRED.
 - HOLDING THE LIFTING STRAPS, INSERT THE GRATE INTO THE INLET.

- MAINTENANCE:
- REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT.
 - AFTER STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO DANDY SACK. IF CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED.
 - TO EMPTY UNIT, SIMPLY LIFT THE UNIT USING LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS, REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

STORM GRATE FILTER BAG
N.T.S.



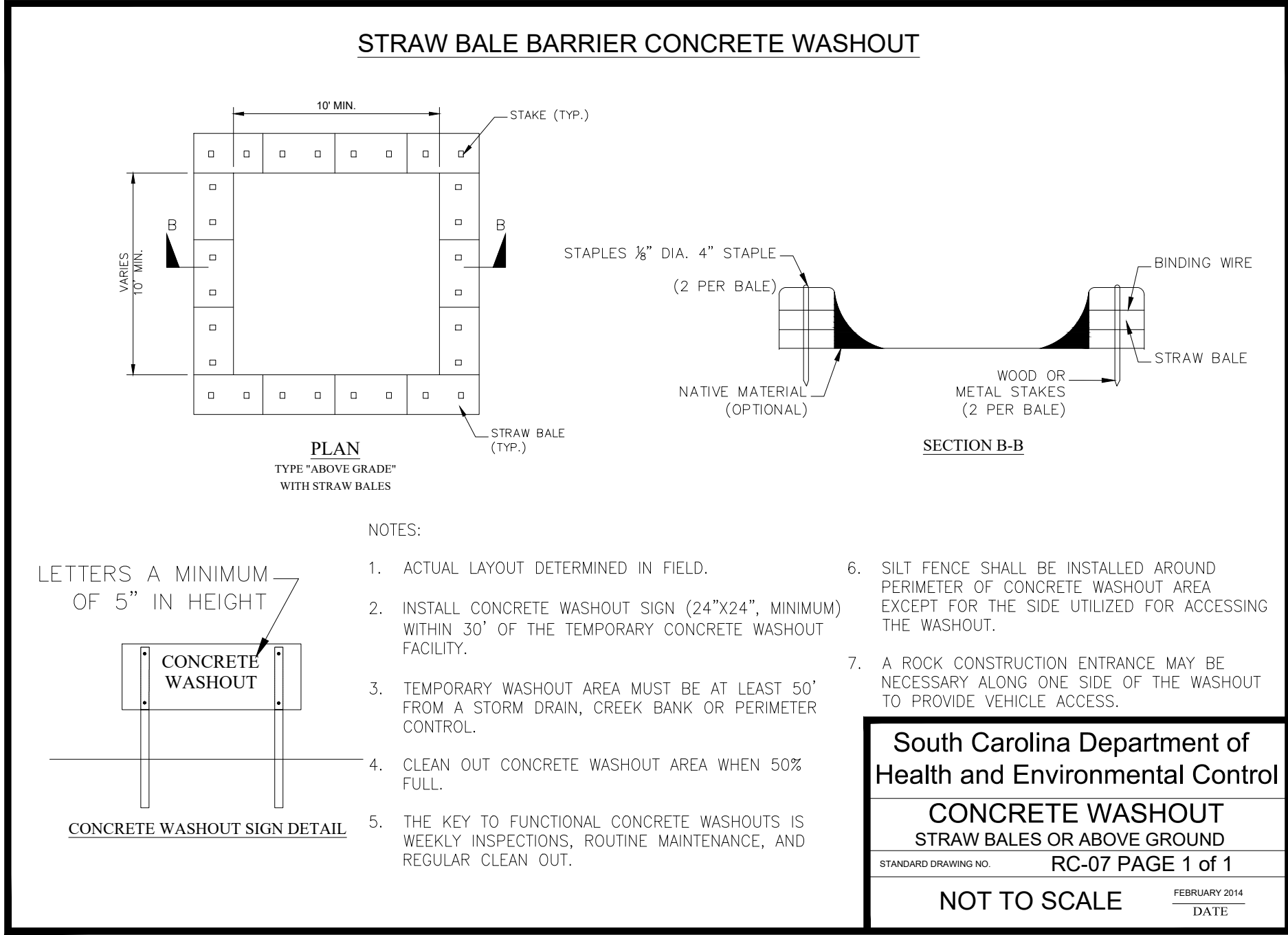
Stantec
4969 Centre Pointe Drive, Suite 200
North Charleston, SC, 29418
Tel: 843.740.7700
www.stantec.com

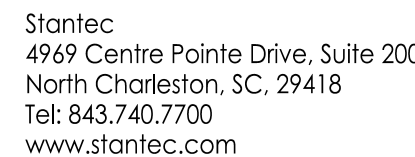
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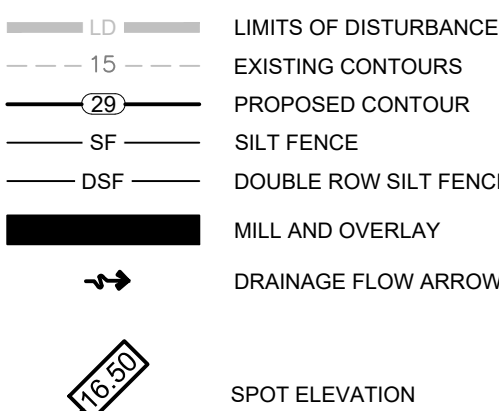




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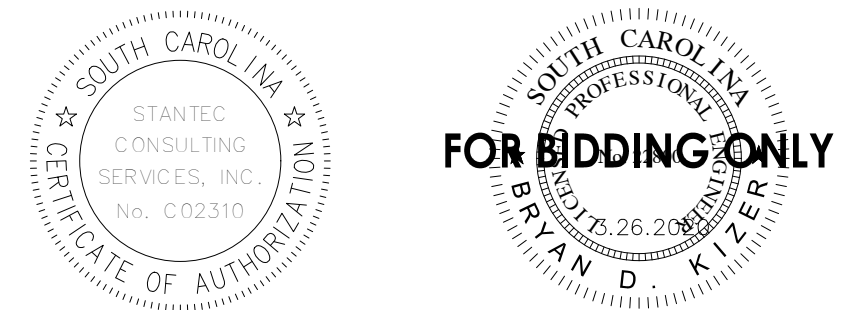
Legend



FG - FINISHED GRADE ELEVATION
CB - CATCH BASIN (SCDOT STANDARD DETAIL 719-110-01)
JB - JUNCTION BOX (SCDOT STANDARD DETAIL 719-110-02)

| | | | |
|--------------------------------|-------|-------|------------------|
| Revision | By | Appd | YYYY.MM.DD |
| BID SET | AB | BK | 2020.03.26 |
| PER COUNTY COMMENTS | TN/SC | BK | 2019.10.29 |
| FOR PERMIT REVIEW | TN | SC | 2019.09.18 |
| Issued | By | Appd | YYYY.MM.DD |
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| | Dwn. | Dsgn. | Chkd. YYYY.MM.DD |

Permit/Sea



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GEORGETOWN COUNTY

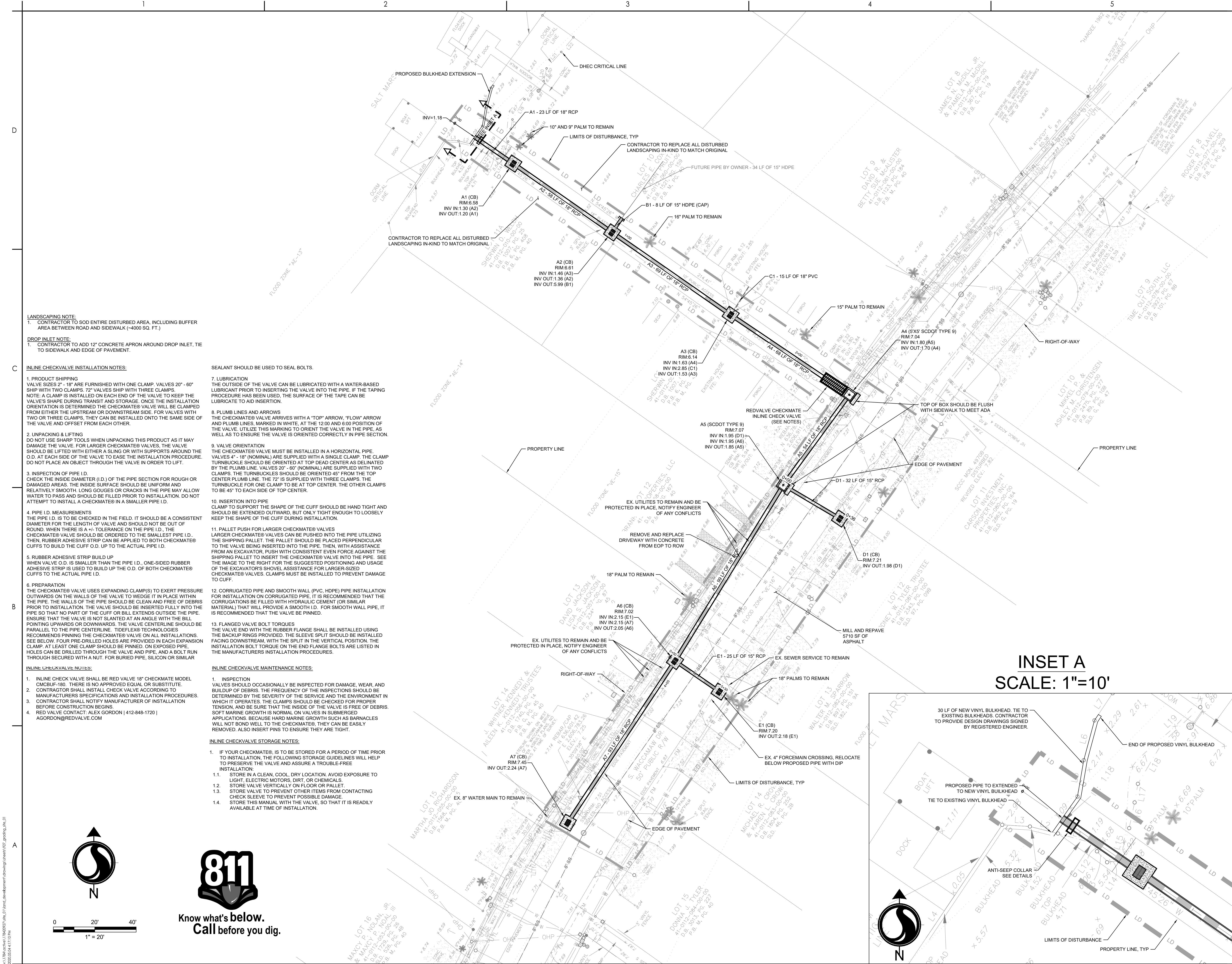
GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1

MURRELLS INLET, SOUTH CAROLINA

Title

GRADING AND DRAINAGE PLAN

| | | |
|--------------------------|-------------------------|-----------------------------|
| Project No. 178420927 | | Scale |
| Revision | Sheet 8 of 14 | Drawing No. C4-00 |



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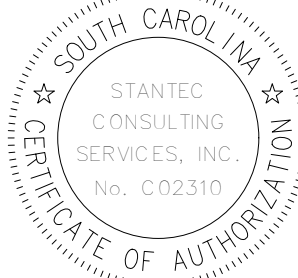
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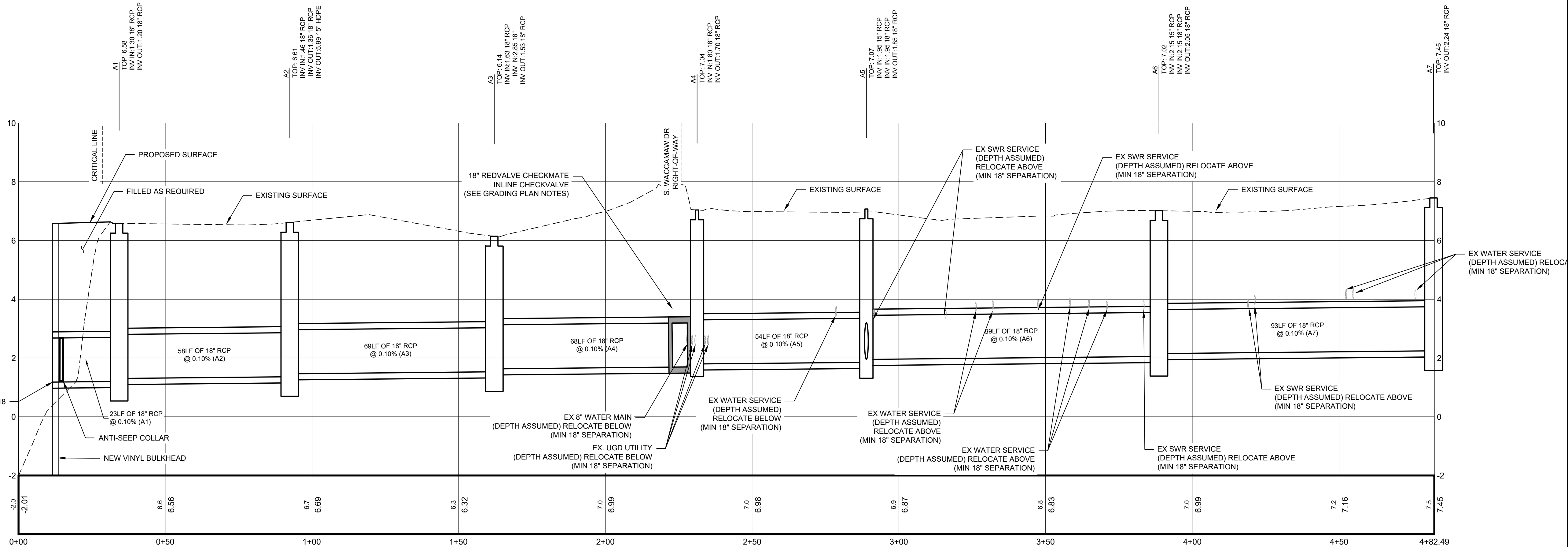
GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1

MURRELLS INLET, SOUTH CAROLINA

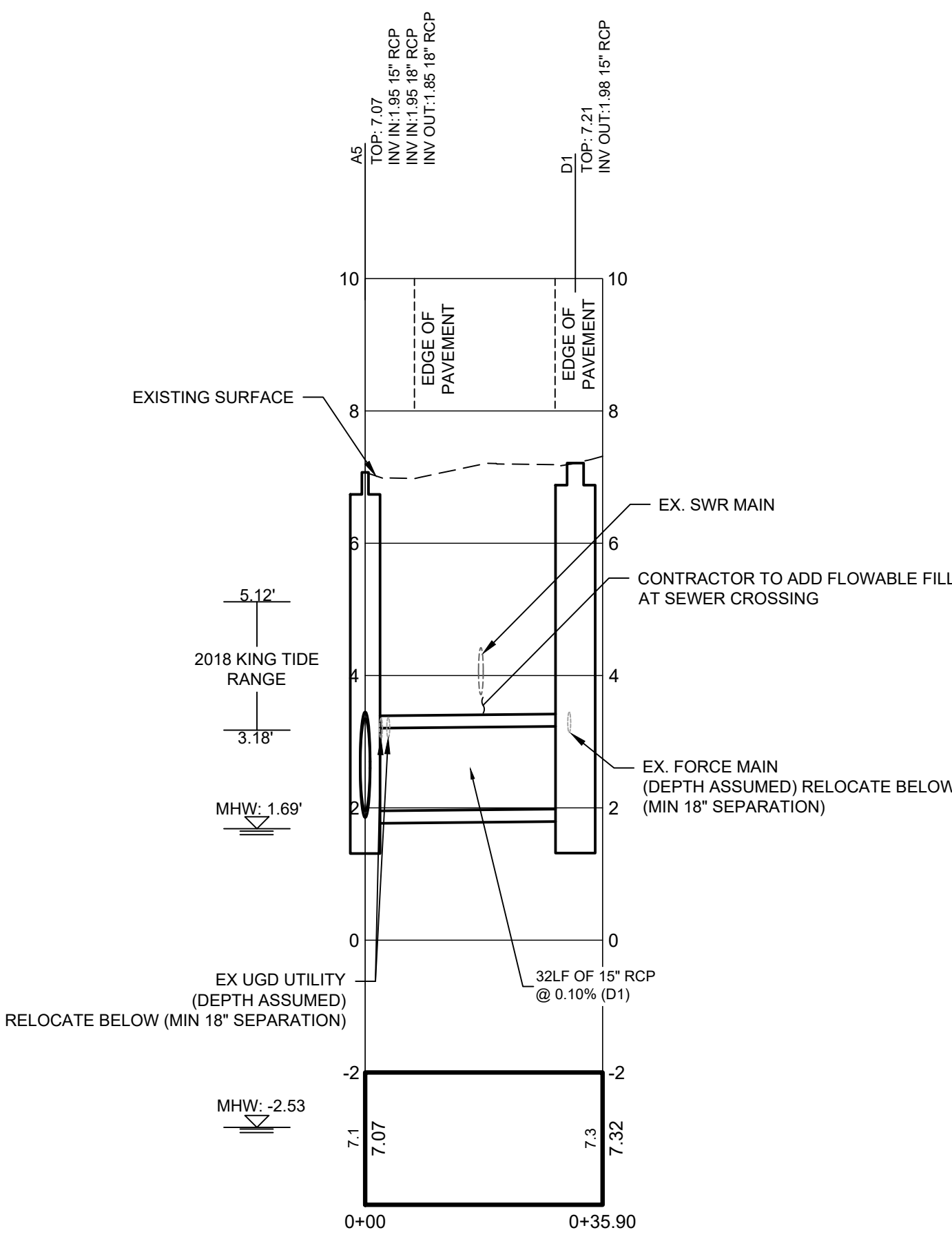
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GRADING AND DRAINAGE PROFILES

Project No. 178420927 Scale

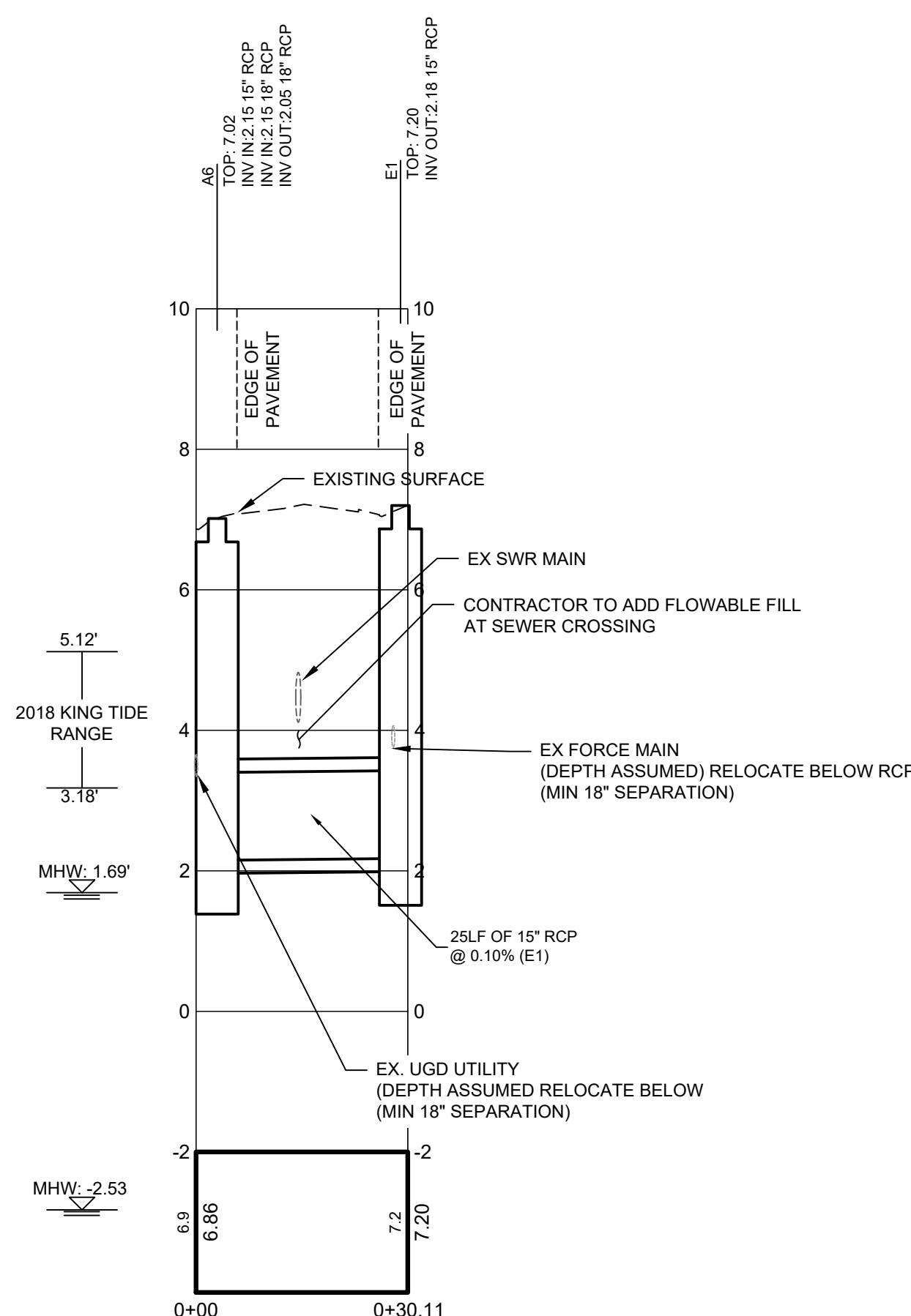
Revision Sheet 9 of 14 Drawing No. C4-01



A PROFILE
SCALE: H: 1"=30'
V: 1"=3'



D PROFILE
SCALE: H: 1"=30'
V: 1"=3'



E PROFILE
SCALE: H: 1"=30'
V: 1"=3'



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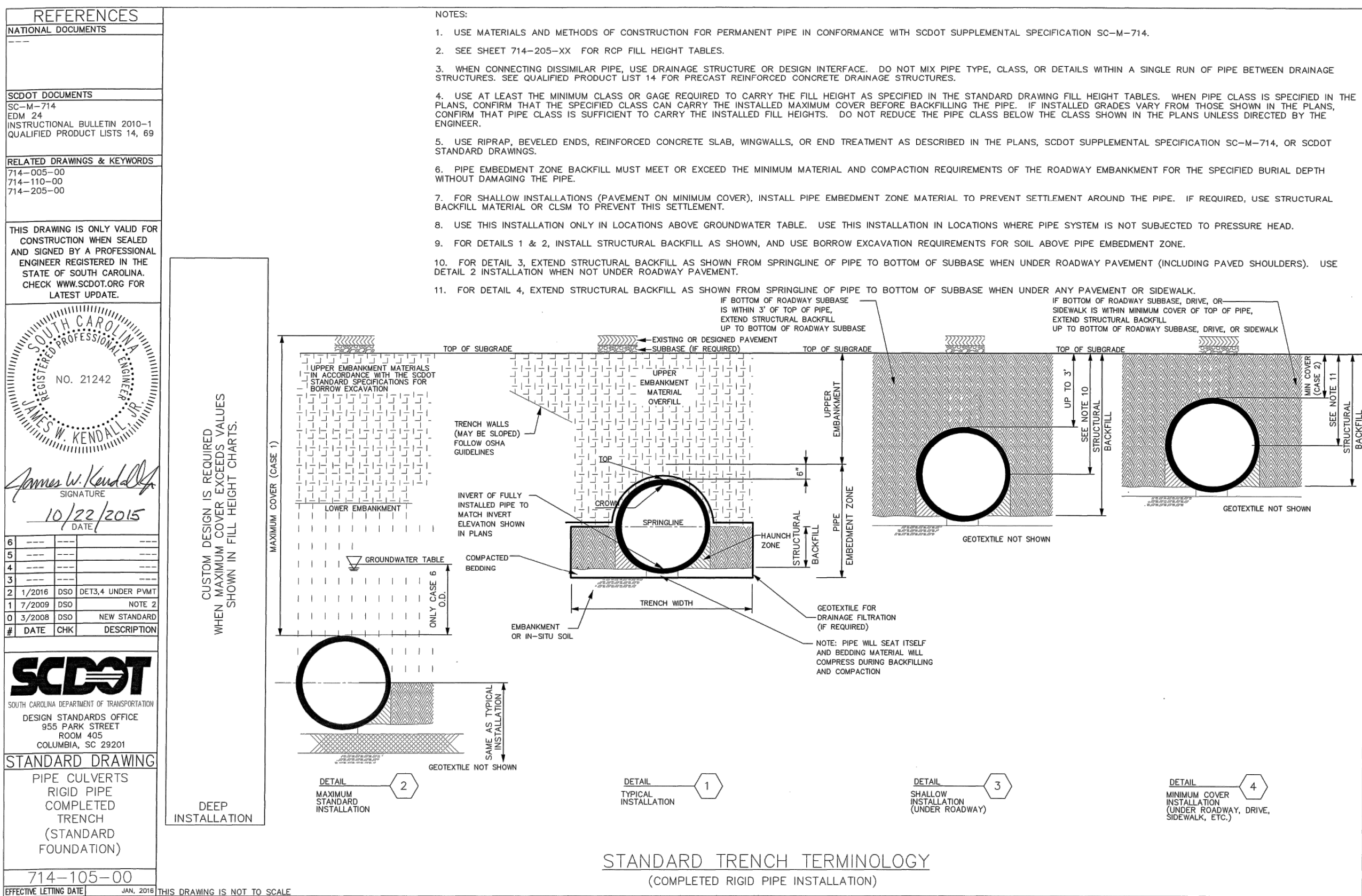
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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1
MURRELLS INLET, SOUTH CAROLINA

Title
GRADING AND DRAINAGE DETAILS

Project No. 178420927
Revision Sheet
Scale Drawing No. 10 of 14 C4-02



| | | | | |
|---------------|---------------|---|---|---|
| CUSTOMER: XXX | ORDER No: XXX | <p>AND REFERENCE PURPOSES. IT SHALL NOT BE USED OR CAUSED TO BE USED IN ANY WAY PREJUDICIAL TO THE INTERESTS OF TIDELUX TECHNOLOGIES. IT SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR PART, OR DISCLOSED TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF TIDELUX TECHNOLOGIES AND SHALL BE RETURNED UPON REQUEST.</p> | OR. BY: TLM DATE: 2-6-17 CAD SCALE: FULL PLOT SCALE: 1 = 1 DWG No: TTS-XXXX | CHKD. BY: _____ DATE: _____ REV _____ |
|---------------|---------------|---|---|---|

RECOMMENDED PINNING CONFIGURATION (SUPPLIED BY CUSTOMER) (SEE I.O.M.)

0.36" [9mm]

(4) - 0.63" [16mm]
DRILL AT FINAL ASSEMBLY

* PATENT PENDING *

OPPORTUNITY No: XXXXX SALES ORDER No: TXX-XXXX

Tideflex 600 N. BELL AVE.
CARPENTERS 1610

(4) - 0.50 [13mm] DIA.
 HEX HEAD BOLTS
 S/STEEL
 BILL NOTCH
 PRELIMINARY DRAWING

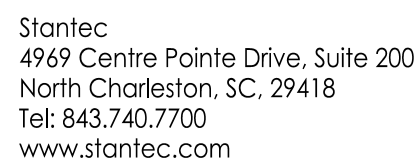
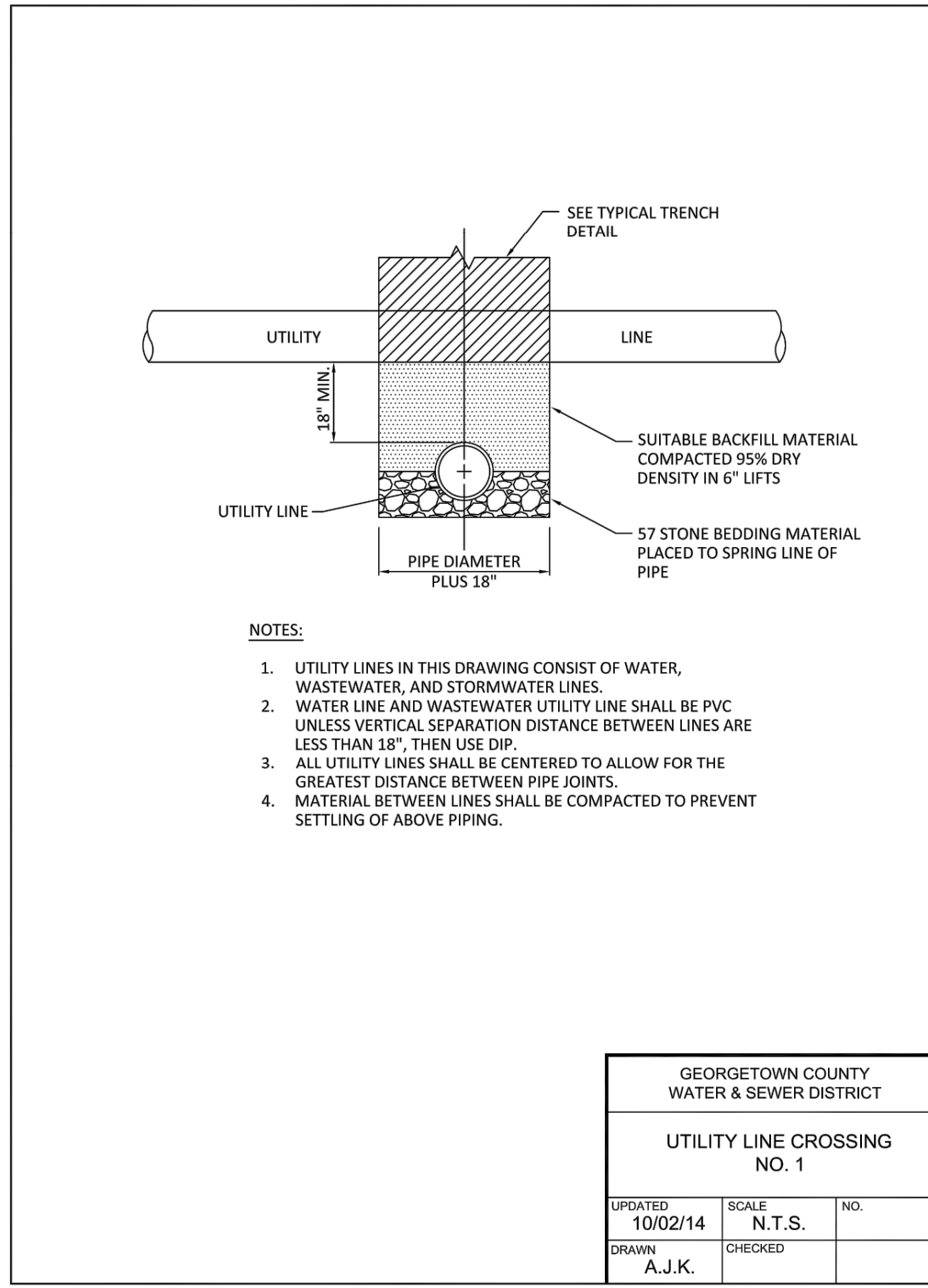
2. CLAMP INSTALLED IN UPSTREAM OR DOWNSTREAM CUFF
DEPENDING ON INSTALLATION ORIENTATION

3. MAXIMUM ALLOWABLE BACK PRESSURE - 45.0 FEET

2 2 CLAMP MUST BE SUPPLIED

NOTES:
1 PIPE INSIDE DIAMETER - MUST BE SUPPLIED

| ITEM | QTY. | DESCRIPTION | MAT'L |
|------|------|-------------|-------|
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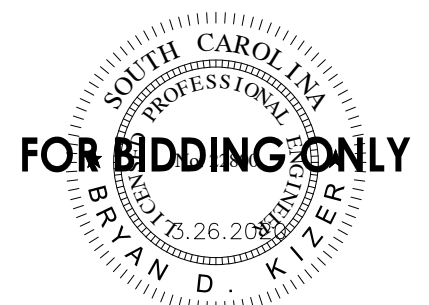
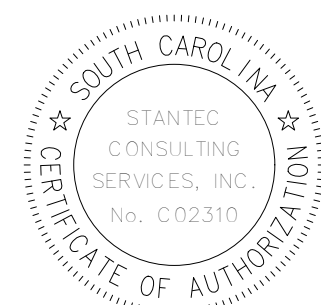
| Revision | By | Appd | YYYY.MM.DD |
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| WD SET | AB | BK | 2020.03.26 |
| PER COUNTY COMMENTS | TN/SC | BK | 2019.10.29 |
| FOR PERMIT REVIEW | TN | SC | 2019.09.18 |

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GARDEN CITY DRAINAGE IMPROVEMENTS

SITE 1

MURRELLS INLET, SOUTH CAROLINA

GRADING AND DRAINAGE DETAILS

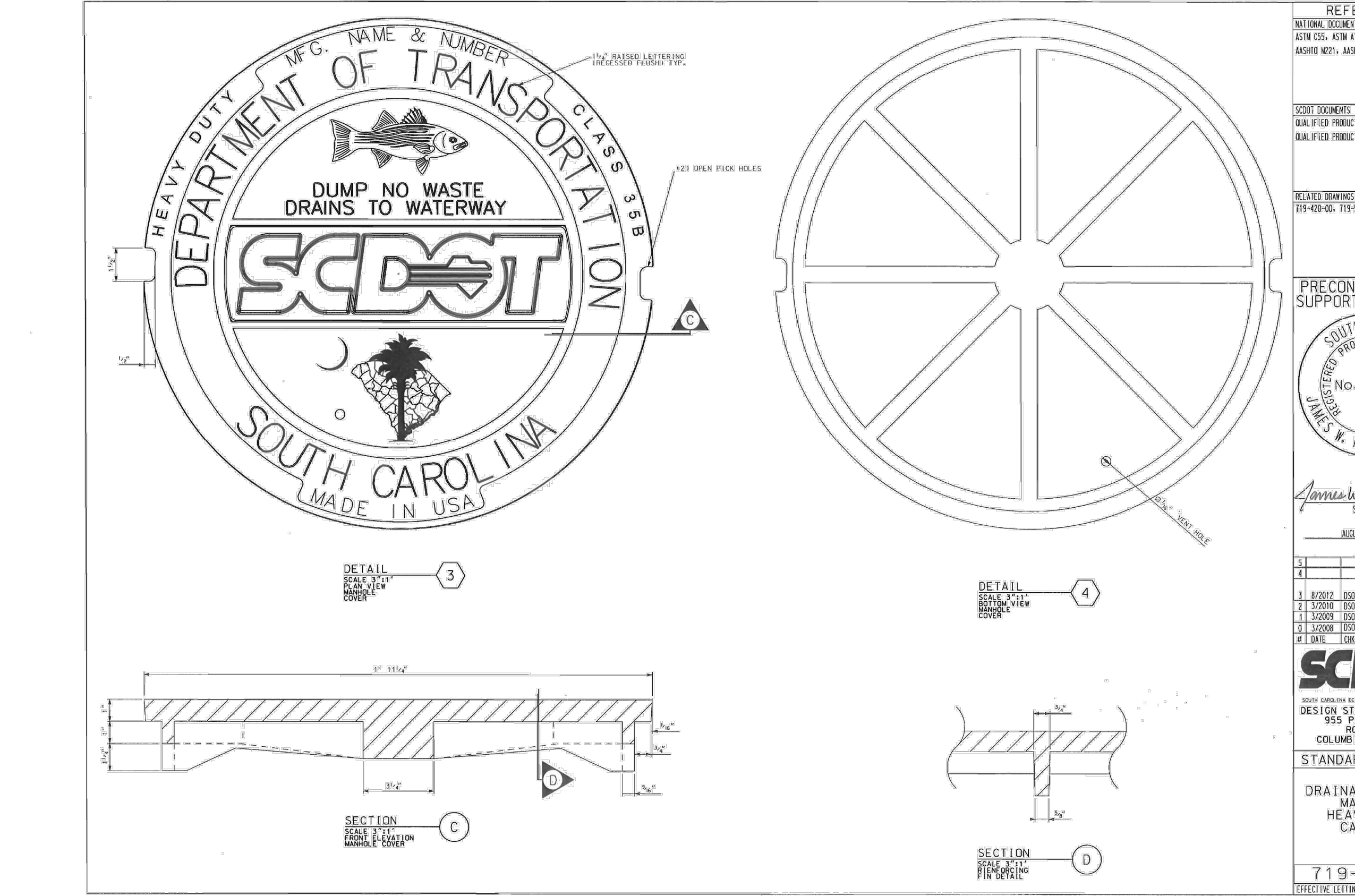
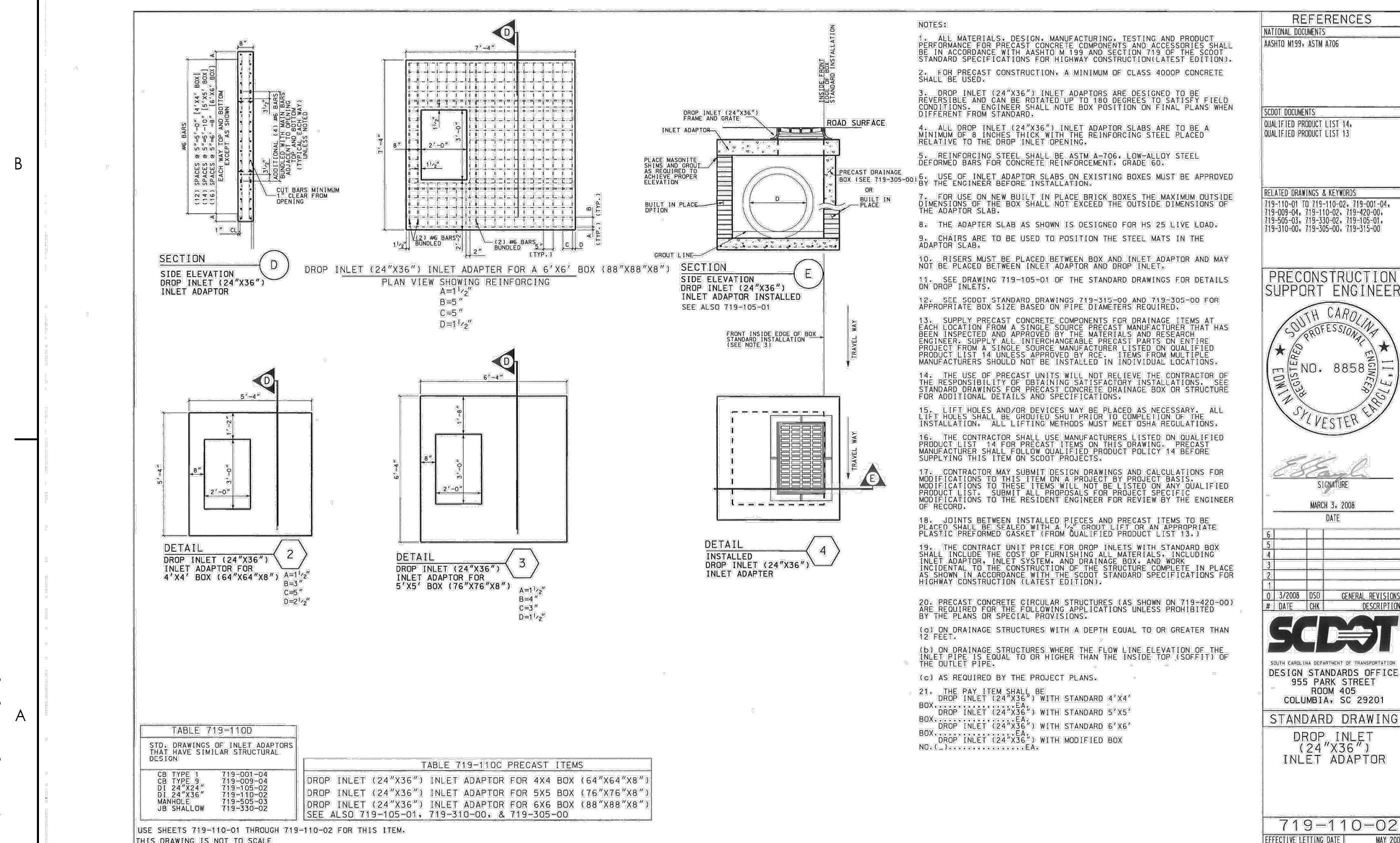
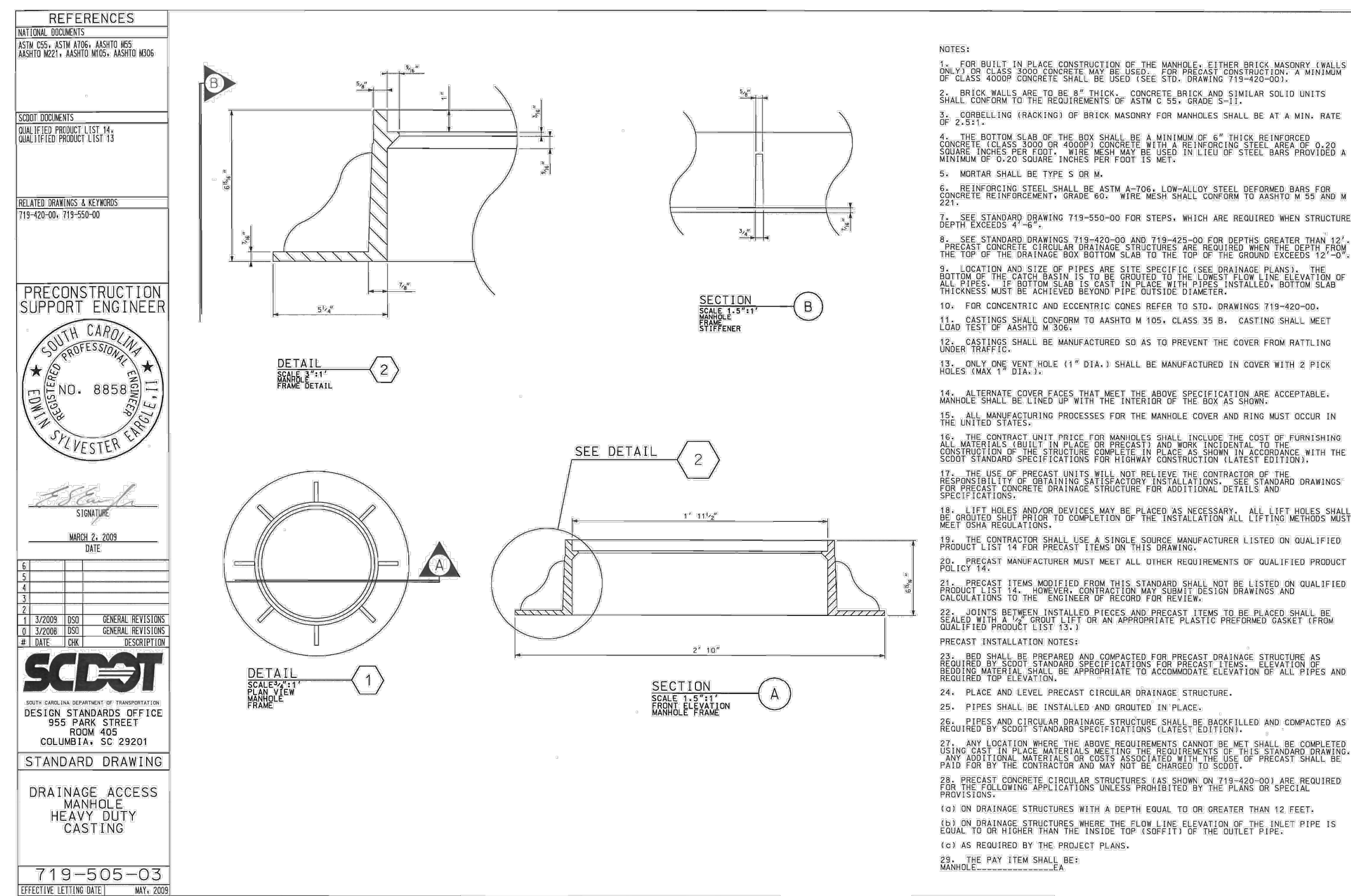
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178420927

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| Revisions | Sheet | Drawing No. |
|-----------|-------|-------------|

Revision sheet Drawing No.
13 of 14 0101

12 of 14 C4-04



CONSTRUCTION NOTES:

1. PORTABLE PLASTIC DRUMS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NUMBER 601-005-00, AND AS DIRECTED BY THE PLANS.
2. CONSTRUCTION OF THIS PROJECT REFERENCES THE FOLLOWING SCDOT STANDARD DRAWINGS:
 - 2.1. 601-005-00 WIDENING PROJECTS NEW ROADWAY CONSTRUCTION PRIMARY ROUTES
 - 2.2. 605-005-01 CONSTRUCTION SIGNING GROUND MOUNTED ASSEMBLY U CHANNEL POSTS - BREAKAWAY INSTALLATION
 - 2.3. 605-010-02 CONSTRUCTION SIGNING PERMANENT PRIMARY ROUTES
 - 2.4. 605-025-01 CONSTRUCTION SIGNING SPECIAL SIGNS LET 'EM WORK LET 'EM LIVE
 - 2.5. 605-030-02 CONSTRUCTION SIGNING "ROAD WORK" SIGNS "END ROAD WORK"
 - 2.6. 610-015-00 LANE CLOSURE NIGHT TIME URBAN LOW SPEED (<35 MPH)
 - 2.7. 610-205-00 RIGHT SHOULDER CLOSURE (CASE I/CASE II) PRIMARY ROUTES

CONSTRUCTION SEQUENCE:

1. INSTALL PERMANENT CONSTRUCTION SIGNS.
2. INSTALL PORTABLE PLASTIC DRUMS.
3. MAINTAIN MINIMUM ONE LANE OF TRAFFIC IN EACH DIRECTION ON EXISTING LANES, UTILIZING FLAGMEN.
4. INSTALL STORM DRAIN STRUCTURES AND UTILITY RELOCATIONS AS SHOWN ON SHEETS C3-00 AND C3-01.

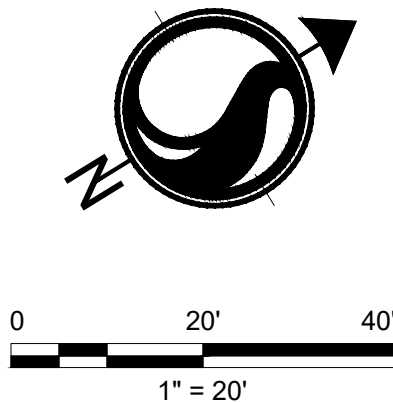
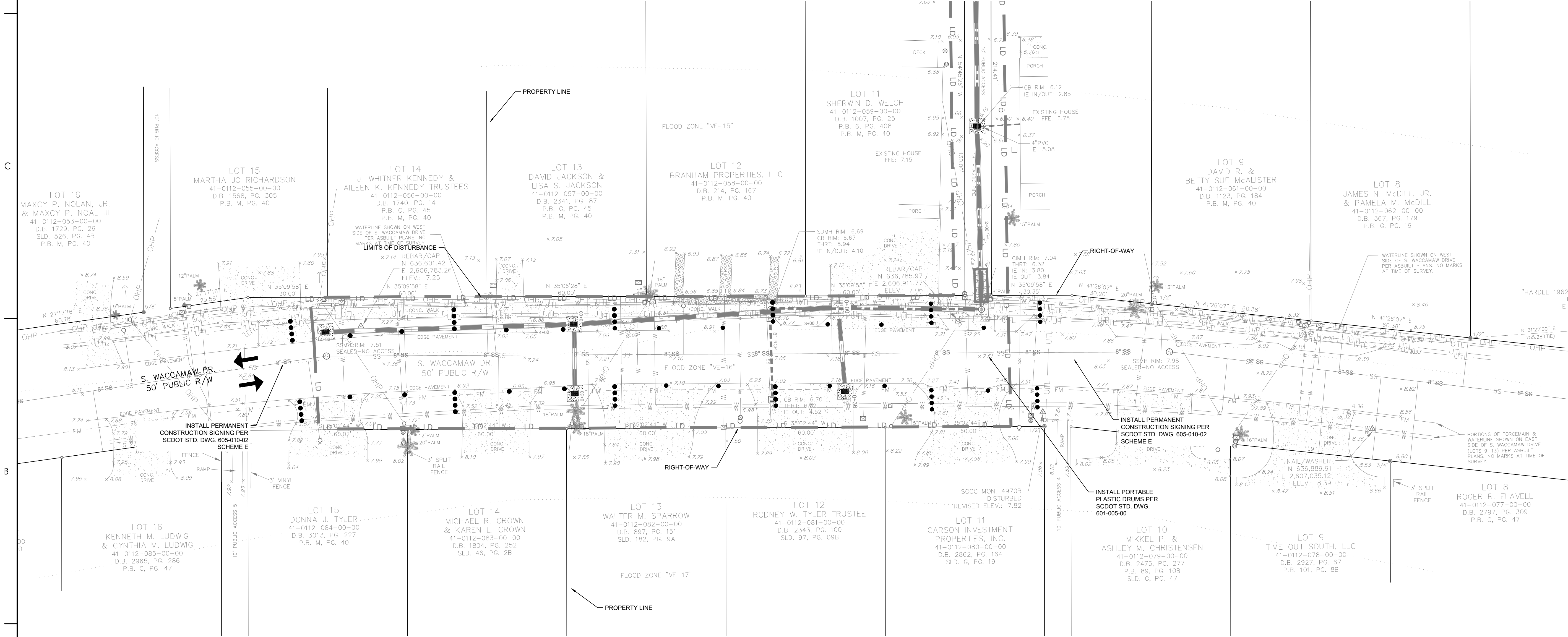
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CORONA/CREE: ARE310



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| PER COUNTY COMMENTS | A8 | BK | 2020.03.26 |
| FOR PERMIT REVIEW | TN | SC | 2019.10.29 |
| Issued | By | Appd | YYYY.MM.DD |

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| File Name: 916_TRAFFIC | SGC | BK | |
| | Dwn. | Dsgn. | Chkd. |

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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1

MURRELLS INLET, SOUTH CAROLINA

Title
TRAFFIC CONTROL PLAN

Project No.
178420927

Scale

Revision Sheet
13 of 14

Drawing No.

C5-00

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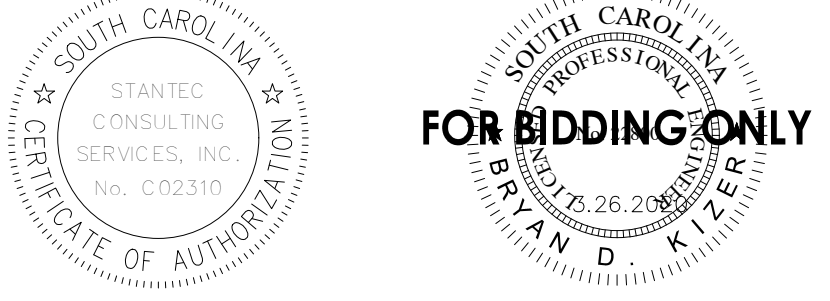
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PER COUNTY COMMENTS TN/SC BK 2019.10.29
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File Name: 916_TRAFFIC SOC SOC BK
Dwn. Dsgn. Chkd. YYYY.MM.DD

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GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 1

MURRELLS INLET, SOUTH CAROLINA

Title
TRAFFIC CONTROL DETAILS

Project No. 178420927 Scale
Revision Sheet Drawing No. 14 of 14 C5-01

