

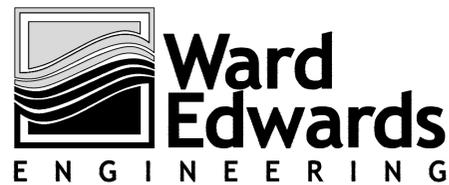
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# SITE DEVELOPMENT PLANS FOR LOVEJOY SANITARY SEWER REALIGNMENT BEAUFORT, SC

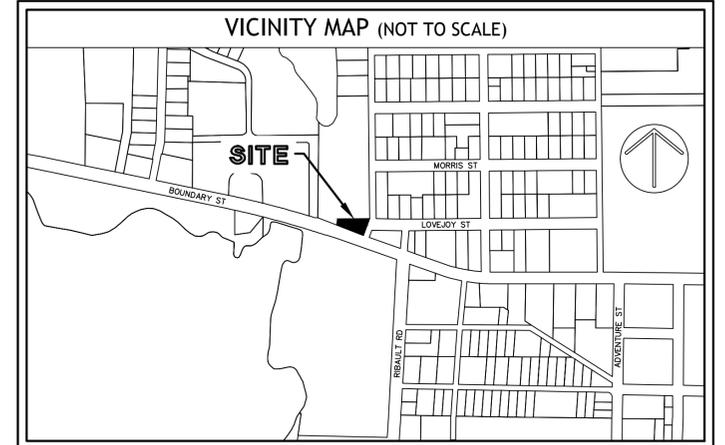
## PREPARED FOR CITY OF BEAUFORT

### PROJECT NUMBER 130215H

PREPARED BY



P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910  
PH (843) 837-5250 / FAX (843) 837-2558  
WWW.WARDEDWARDS.COM

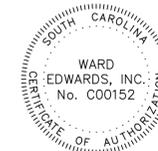


PROJECT DATA	
DEVELOPER:	CITY OF BEAUFORT PUBLIC WORKS 16 BURTON HILL ROAD BEAUFORT, SC 29906
24 HOUR CONTACT:	LAMAR TAYLOR, OPERATIONS OFFICER
TELEPHONE:	(843)-525-7054
FAX:	(843)-525-7095
JURISDICTION:	BEAUFORT, SC
TAX MAP #:	R122 001 000 0012 0000
911 /STREET ADDRESS:	2015 BOUNDARY STREET SUITE 300
PROPERTY OWNER OF RECORD:	TOWN CENTER INN LLC
FEMA FLOOD ZONE:	11-A & C
FEMA FLOOD PANEL:	COMMUNITY NO. 450026, PANEL 0005D, DATED: 09/29/1986
NPDES DISTURBED AREA:	0.05 ACRES
APPROXIMATE LOCATION OF SITE:	INTERSECTION OF RIBAUT ROAD AND BOUNDARY STREET
LONGITUDE:	W 80° 41' 11"
LATITUDE:	N 32° 26' 26"
<input checked="" type="checkbox"/> NOT FOR CONSTRUCTION <input type="checkbox"/> RELEASED FOR CONSTRUCTION	

SCHEDULE OF DRAWINGS	
SHEET NO.	DESCRIPTION
C101	COVER SHEET (THIS SHEET)
C102	CONSTRUCTION LEGENDS
C103	EXISTING CONDITIONS & DEMOLITION PLAN
C104	UTILITY PLAN
C105-6	CONSTRUCTION DETAILS & SANITARY SEWER PROFILE

RELEASE SCHEDULE		
RELEASE NO.	DESCRIPTION	DATE
A.	RELEASED FOR PERMITTING	10-03-14
B.	RELEASED FOR BIDDING	11-11-14
C.	RELEASED FOR BIDDING REVISIONS	12-31-14

SCDHEC-OCRM CERTIFICATION:  
 "I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCRI00000."



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**GENERAL NOTES:**

- BOUNDARY INFORMATION TAKEN FROM TREE AND TOPO SURVEY PREPARED FOR 303 ASSOCIATES, LLC, CITY OF BEAUFORT, R120-001-000-0012-000, DATED 10-19-1978 REVISED 11-4-2013, BEAUFORT SURVEYING, INC.
- TOPOGRAPHIC DATA PROVIDED BY BEAUFORT SURVEYING, INC., DATED 10-19-1978 REVISED 11-4-2013.
- APPROXIMATE LOCATION OF CERTAIN EXISTING UNDERGROUND UTILITY LINES AND STRUCTURES ARE SHOWN ON THE PLANS FOR INFORMATION ONLY ADDITIONAL UNDERGROUND LINES OR STRUCTURES MAY EXIST THAT ARE NOT SHOWN. CALL PALMETTO UTILITY PROTECTION SERVICE AT 1-888-721-7877 BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THRU FRIDAY AT LEAST THREE WORKING DAYS BEFORE COMMENCING CONSTRUCTION. REQUEST UNDERGROUND UTILITIES TO BE LOCATED AND MARKED WITHIN AND NEAR THE CONSTRUCTION SITE.
- COMPLY WITH SOUTH CAROLINA UNDERGROUND UTILITY DAMAGE PREVENTION ACT (S.C. CODE ANN. 58-35-10, CT-SEQ, SUPP. 1978). NOTIFICATION OF INTENT TO EXCAVATE MAY BE GIVEN BY CALLING THE TOLL FREE NUMBER 1-800-222-0985.
- PROTECT BENCH MARKS AND PROPERTY MONUMENTS FROM DAMAGE DURING CONSTRUCTION OPERATIONS. REPLACE ANY BENCH MARKS OR MONUMENTS DAMAGED OR DESTROYED AS A RESULT OF CONTRACTOR'S OPERATIONS AT NO COST TO THE OWNER.
- OFF-STREET PARKING FOR THE CONTRACTOR'S EMPLOYEES AND AUTHORIZED VISITORS TO THE SITE MUST BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO WEIGHT LIMITS PRESCRIBED FOR ALL PUBLIC ROADS WHEN HAULING EQUIPMENT AND MATERIALS TO AND FROM THE PROJECT SITE. DAMAGES TO EXISTING PAVEMENT DUE TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS OR IMPROPER TRANSPORTATION OF MATERIALS AND EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- AT LEAST ONE DRIVING LANE ON PUBLIC ROADS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. TRAFFIC LANES WILL ONLY BE CLOSED WITH THE EXPRESS WRITTEN CONSENT OF THE AGENCY HAVING JURISDICTION OVER THE ROADWAY. NOTIFY AGENCY HAVING JURISDICTION AT LEAST 5 DAYS BEFORE CLOSING ANY DRIVING LANES TO TRAFFIC. PROVIDE TRAFFIC CONTROL DEVICES, SIGNS AND FLAGMEN AS REQUIRED TO ENSURE PUBLIC SAFETY.
- CONTRACTOR SHALL COORDINATE DEMOLITION, CLEARING AND CONSTRUCTION OF IMPROVEMENTS TO MINIMIZE INTERFERENCE WITH VEHICULAR AND PEDESTRIAN TRAFFIC AND WITH OPERATIONS OF EXISTING FACILITIES.

- ALL WATER AND SEWER LINE CONSTRUCTION SHALL CONFORM TO APPLICABLE STATE AND BEAUFORT JASPER WATER AND SEWER AUTHORITY STANDARDS AND SPECIFICATIONS.
- BUNSA WILL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF ALL WATER AND SEWER SYSTEM CONSTRUCTION AND FOR ACCEPTANCE FOR OPERATION AND MAINTENANCE.
- ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION OF ALL UTILITY OWNERS AND FOR FIELD VERIFICATION OF BOTH HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO COMMENCING CONSTRUCTION. ANY DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- NOTIFY THE PROJECT ENGINEER, IF CONFLICTS WITH EXISTING STRUCTURES REQUIRE THAT PROPOSED UTILITIES BE RELOCATED.
- THE CONTRACTOR MUST NOTIFY BUNSA FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION, INSPECTION OR TESTING OF THE WATER DISTRIBUTION SYSTEM.
- PIPE, FITTINGS, VALVES AND APPURTENANCES FOR WATER AND SEWER LINES SHALL ALL BE IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN THE BEAUFORT-JASPER WATER AND SEWER AUTHORITY TECHNICAL SPECIFICATIONS.
- INSTALLATION OF WATER AND SEWER LINES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE BEAUFORT-JASPER WATER AND SEWER AUTHORITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
- CONTRACTOR SHALL INSTALL MECHANICAL RESTRAINTS ON ALL BENDS, PLUGS AND TEES, 2" OR LARGER, ON WATER LINES AND SANITARY SEWER FORCE MAINS.
- ALL WATER MAINS SHALL BE STERILIZED AND PRESSURE TESTED IN ACCORDANCE WITH BUNSA SPECIFICATIONS.
  - PARALLEL INSTALLATION: UNLESS OTHERWISE SPECIFICALLY SHOWN IN A SPECIAL DETAIL ON THIS PLANS, INSTAL MANS AT LEAST 10'-FT HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER OR SANITARY SEWER FORCE MAIN, THE DISTANCE BEING MEASURED IN A HORIZONTAL PLANE BETWEEN THE OUTSIDE SURFACES OF THE PIPES.
  - CROSSINGS: UNLESS OTHERWISE SPECIFICALLY SHOWN IN A SPECIAL DETAIL ON THE PLANS, INSTALL WATER LINES CROSSING SANITARY SEWERS OR SANITARY SEWER FORCE MAINS TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN THE OUTSIDE SURFACES OF THE PIPES. THIS SHALL BE THE CASE WHETHER THE WATER LINE IS ABOVE OR BELOW THE SANITARY SEWER LINE. WHENEVER POSSIBLE LOCATE THE WATER LINE ABOVE THE SEWER LINE. WHERE A NEW WATER LINE CROSSES A NEW SEWER LINE, PLACE A FULL LENGTH OF DUCTILE IRON PIPE FOR BOTH THE WATER AND THE SEWER LINE AT THE CROSSING WITH BOTH PIPES POSITIONED SO THAT THE JOINTS ON EACH ARE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING. WHERE A NEW WATER LINE CROSSES AN EXISTING SEWER LINE, PLACE ONE FULL LENGTH OF DUCTILE IRON PIPE WATER LINE SO THAT THE JOINTS ARE AS FAR FROM THE POINT OF CROSSING AS POSSIBLE.
- THE CONTRACTOR SHALL CUT AND PATCH EXISTING PAVEMENT AS REQUIRED FOR THE INSTALLATION OF UTILITY MANHOLES.
- SANITARY MANHOLE RIM GRADES SHOWN ARE APPROXIMATE. ADJUST RIM ELEVATIONS TO BE FLUSH WITH FINISHED GRADE.
- THE CONTRACTOR UNDER THIS CONTRACT SHALL NOT MAKE ANY CONNECTIONS TO THE EXISTING WATER OR SANITARY SEWER SYSTEMS UNLESS EXPRESSLY AUTHORIZED TO DO SO BY THE BEAUFORT-JASPER WATER AND SEWER AUTHORITY. ALL WATER AND SEWER IMPROVEMENTS UNDER THIS CONTRACT MUST BE CONSTRUCTED COMPLETE, TESTED, INSPECTED AND APPROVED BY THE BEAUFORT-JASPER WATER AND SEWER AUTHORITY BEFORE ANY AUTHORIZATION TO CONNECT WILL BE GIVEN. COORDINATION OF TESTING, INSPECTION AND CONNECTIONS WITH THE BEAUFORT-JASPER WATER AND SEWER AUTHORITY IS THE RESPONSIBILITY OF THE CONTRACTOR UNDER THIS CONTRACT.
- ALL WATER MAINS SHALL BE INSTALLED WITH THIRTY-SIX INCHES (36") MINIMUM COVER (FROM FINISHED GRADE). MAXIMUM DEPTH SHALL BE FIVE FEET (5') WHERE WATER MAINS MAY CONFLICT WITH OTHER UTILITIES. THE WATER MAIN CROSSING SHALL BE CONSTRUCTED WITH DUCTILE IRON PIPE, MECHANICAL JOINT 45-DEG. BENDS AND MECHANICAL RESTRAINTS.

**SITE CLEARING AND DEMOLITION:**

- NO CLEARING SHALL OCCUR WITHIN DESIGNATED BUFFER ZONES, TREE PROTECTION ZONES, OUTSIDE OF THE PROPERTY LINES OR BEYOND THE CLEARING LIMITS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE PLANS.
- ONLY THOSE TREES DESIGNATED ON THE DRAWINGS FOR REMOVAL ARE TO BE REMOVED AS PART OF THE SITE CLEARING OPERATIONS.
- THE CONTRACTOR SHALL INSTALL A CONTINUOUS LINE OF FLAGGING OR FENCING ALONG THE LIMITS OF CLEARING PRIOR TO COMMENCING ANY CLEARING, DEMOLITION OR CONSTRUCTION WORK ON THE PROJECT.
- EXERCISE CAUTION DURING CLEARING OPERATIONS TO AVOID FELLING TREES INTO DESIGNATED TREE PROTECTION ZONES.
- NO BURNING WILL BE ALLOWED WITHIN 50 FEET OF A TREE PROTECTION ZONE OR TREE DRIP LINE.
- SELECTIVE CLEARING AREAS SHALL BE CLEARED OF ALL BRUSH AND UNDERSTORY GROWTH.

**TREE PROTECTION-BEAUFORT:**

- ALL TREES HAVING A TRUNK DIAMETER OF 8-INCHES (8db) OR LARGER, AND SPECIMEN TREES MUST BE PRESERVED UNLESS SPECIFICALLY APPROVED FOR REMOVAL IN ACCORDANCE WITH THE CITY OF BEAUFORT ZONING AND DEVELOPMENT STANDARDS AND INDICATED ON THE PLANS TO BE REMOVED.
- PRIOR TO COMMENCING ANY CLEARING OR CONSTRUCTION OPERATIONS ON THE SITE, THE CONTRACTOR SHALL ERECT TREE PROTECTION BARRIERS AROUND EACH TREE OR GROUP OF TREES DESIGNATED FOR PRESERVATION IN ACCORDANCE WITH THE DETAILS ON THE PLANS AND THE REQUIREMENTS CONTAINED IN ARTICLE 7, SECTION 7.1, PAR. D.3 OF THE CITY OF BEAUFORT, SOUTH CAROLINA UNIFORM DEVELOPMENT ORDINANCE.
- A TREE PROTECTION ZONE SHALL BE ESTABLISHED IN ACCORDANCE WITH THE PROVISIONS CONTAINED IN ARTICLE 7, SECTION 7.1, PAR. D.3 OF THE CITY OF BEAUFORT, SOUTH CAROLINA UNIFORM DEVELOPMENT ORDINANCE FOR EACH INDIVIDUAL TREE OR GROUPING OF TREES DESIGNATED FOR PRESERVATION. THE MINIMUM TREE PROTECTION ZONE AS DEFINED IN THE ORDINANCE IS A CIRCULAR AREA CENTERED ON THE TREE AND HAVING A RADIUS OF THE GREATER OF 6-FT, OR ONE-HALF FOOT PER INCH DBH (DIAMETER AT BREAST HEIGHT) THE SIZE OR CONFIGURATION OF THE TREE PROTECTION ZONE MAY BE ADJUSTED AT THE DISCRETION OF THE CITY'S ADMINISTRATOR OF THE ORDINANCE.
  - PLACEMENT OR STORAGE OF ANY SOIL, DEBRIS, OILS, FUEL, PAINTS, BUILDING MATERIALS OR ANY OTHER MATERIALS.
  - BURNING.
  - VEHICLE PARKING.
  - PAVING.
  - TRENCHING FOR UTILITIES.
- WHERE UTILITY LINES MUST PASS THRU THE TREE PROTECTION ZONE, THEY SHALL BE INSTALLED BY HORIZONTAL BORING BENEATH THE ROOTS OF THE TREE.
- WHERE IT IS NECESSARY FOR MACHINERY AND EQUIPMENT TO PASS WITHIN THE TREE PROTECTION ZONE, APPROVAL MUST BE OBTAINED FROM THE DISTRICT ENGINEER. SPECIAL MEASURES WILL BE REQUIRED TO PROTECT THE ROOTS FROM EXCESSIVE COMPACTION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL TREE REMOVAL PERMITS AND FOR COORDINATING ALL INSPECTIONS REQUIRED BY BEAUFORT COUNTY IN CONNECTION WITH TREE PRESERVATION AND REMOVAL ACTIVITIES DURING CONSTRUCTION.

**SITE GRADING AND DRAINAGE:**

- ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 72-HOUR NOTICE TO ALL RESPECTIVE UTILITY COMPANIES FOR FIELD VERIFICATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TEMPORARY CONTROL OF STORM WATER DRAINAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SEDIMENT AND CONSTRUCTION TECHNOLOGY ON THE PROTECTION OF WATER OBSTRUCTION OF STORM SEWERS, PONDING IN TRAFFIC AREAS OR RISING OF WATER LEVELS WHICH WOULD ENTER ADJACENT BUILDINGS OR STRUCTURES.
- FULL WIDTH OF STREET AND DRIVE RIGHTS-OF-WAY MUST BE LARDED AND GRADED AS SHOWN IN THE DETAILS ON THE DRAWINGS.
- SUBGRADE PREPARATION: TOP SOIL SHALL BE REMOVED FROM PAVED AREAS TO A MINIMUM DEPTH OF 4". ALL EXCAVATION SHALL BE TO SUBGRADE LIMITS.
- ALL UTILITY PIPE LINES, CONDUITS AND SLEEVES UNDER PAVED AREAS MUST BE IN PLACE PRIOR TO COMPLETION OF THE ROADWAY SUBGRADE COMPACTION.
- FINISH GRADING SHALL INCLUDE THE PLACEMENT OF TOPSOIL OVER ALL UNPAVED AREAS NOT OCCUPIED BY BUILDINGS OR STRUCTURES AND FINE GRADING AROUND BUILDINGS, ADJACENT TO WALKS, CURBS, GUTTERS AND STRUCTURES TO ASSURE POSITIVE DRAINAGE.

**SD/DEC/OCRM SEDIMENT AND EROSION CONTROL STANDARD NOTES (REVISED DEC-2012):**

- 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.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
  - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
  - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED UNTIL THE PORTION OF THE SITE IS Brought back into use.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION, FILL COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. WHEN ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENT. WHEN TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED. RESIDENTIAL SUBURBS REQUIRE SPECIAL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDUSTRIAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-30-300 ET SEQ. AND SCR100000.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEWAGE/LADEN WATER TO APPROPRIATE COLLECTION OR STABLE OUTLET.
- 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 SHANT 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.
- 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.
- A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION CASUALLY ACCESSIBLE TO THE PUBLIC DURING BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 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.
- MINIMIZE SOIL COMPACTION AND, UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE PLANS, 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.
- 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.
- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
  - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
  - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS.
  - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE, AND
  - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 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.
- IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC 629-2-100, THE CONTRACTOR SHALL 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.
- 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.

**WORK ON SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY:**

- COMPLY WITH ALL SPECIAL PROVISIONS CONTAINED IN THE DEPARTMENT OF TRANSPORTATION ENFORCEMENT PERMIT ISSUED FOR THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION AND COORDINATION OF ALL WORK ON DOT RIGHTS-OF-WAY WITH THE DISTRICT ENGINEERING REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A DOT APPROVED TRAFFIC CONTROL PLAN FOR SITE ACCESS AND FOR CONSTRUCTION ON DEPARTMENT OF TRANSPORTATION RIGHTS-OF-WAY. ALL TRAFFIC CONTROL PROVISIONS MUST COMPLY WITH DEPARTMENT OF TRANSPORTATION MINIMUM REQUIREMENTS, LIGHTS, SIGNS, FLAGMEN AND ALL OTHER TRAFFIC CONTROL DEVICES MUST CONFORM TO THE REQUIREMENTS CONTAINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- PROVIDE ALL REGULATORY SIGNS, PAVEMENT STRIPING AND MARKINGS, AS REQUIRED BY THE SOUTH CAROLINA DOT DISTRICT ENGINEERING INSPECTOR. ALL SIGNS MUST CONFORM TO THE REQUIREMENTS CONTAINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND TO THE SOUTH CAROLINA DOT STANDARD DETAILS WITH RESPECT TO COLOR, SIZE, REFLECTIVITY, HEIGHT AND PLACEMENT.
- ALL PAVEMENT MARKINGS ON DOT RIGHTS-OF-WAY SHALL BE THERMOPLASTIC (125 MIL THICKNESS) AND MUST COMPLY WITH THE REQUIREMENTS IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PLACEMENT SHALL BE IN ACCORDANCE WITH SOUTH CAROLINA DOT STANDARD DRAWINGS 603-3 AND 603-4, AS APPLICABLE.
- ALL PAVEMENT MARKINGS TO BE REMOVED MUST BE ERADICATED BY GRINDING.

**DRY UTILITY CONDUITS FOR ELECTRIC, TELEPHONE AND CABLE TV:**

- ALL DRY UTILITY CONDUIT ENDS SHALL BE CAPPED AND MARKED WITH A STEEL REBAR STAKE IMBEDDED ONE (1) FOOT BELOW GROUND SURFACE.
- 48" MINIMUM DEPTH FOR ALL ELECTRICAL CONDUITS.
- MAINTAIN MINIMUM 12" VERTICAL CLEARANCE WHEN CROSSING WATER, SEWER, AND STORM DRAIN LINES.
- MAINTAIN MINIMUM 18" HORIZONTAL CLEARANCE WHEN PARALLELING WATER, SEWER AND STORM DRAIN LINES.
- EXTEND CONDUIT BEYOND PAVEMENT, CURB, AND SIDEWALKS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE INSTALLATION OF ALL UTILITY SERVICE CONNECTIONS. REFER TO APPROVED BUILDING PLANS FOR THE EXACT LOCATION OF ALL SERVICE CONNECTIONS. THE CONTRACTOR MUST INSTALL CONDUITS, AS SHOWN ON THE PLANS OR AS REQUIRED BY RESPECTIVE UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS WITH REGARDS TO THE INSTALLATION OF UTILITIES AND CONDUIT.
- LOCATIONS SHOWN ON THE PLANS FOR PROPOSED DRY UTILITY CONDUITS ARE APPROXIMATE ONLY. ALL DIMENSIONING AND STAKING SHOULD BE BASED ON ECONOMIC AND PRACTICAL CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE RESPECTIVE UTILITY REPRESENTATIVES, PRIOR TO ANY CONDUIT INSTALLATION.
- TRANSFORMER PADS SHALL BE LOCATED AS DIRECTED BY THE RESPECTIVE UTILITY REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS.
- NOTIFY THE ENGINEER IF CONFLICTS WITH EXISTING OR PROPOSED STRUCTURES REQUIRE THAT PROPOSED UTILITIES BE RELOCATED.

**LEGEND**

DESCRIPTION	EXISTING	PROPOSED
<b>LINE TYPES:</b>		
CENTERLINE		
CONTOUR LINE		
CURB & GUTTER (standard)		
CURB & GUTTER (roll curb)		
DRAIN LINE		
EASEMENT		
FORCE MAIN		
PAVEMENT		
PROPERTY LINE		
SEWER LINE		
WATER LINE		

TREE	TO BE REMOVED	TO REMAIN
○ 9 P	○ 9 P	○ 9 P
<b>TREE PROTECTION</b>		
SPOT ELEVATION	x15.0	⊗ P15.0
TOP OF PAVING	x15.0	⊗ P15.00
TOP OF CURB	x15.0	⊗ TC15.00
TOP OF WALK	x15.0	⊗ TW15.00
<b>DIRECTION OF FLOW</b>		

STRUCTURE SYMBOLS:	EXISTING	PROPOSED
WEIR INLET		
CATCH BASIN		
CURB INLET		
CURB INLET (WITH GRATE)		
STORM DRAIN JUNCTION BOX		
STORM DRAIN MANHOLE		
STORM GRADE INLET		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEANOUT		
SANITARY SEWER WYE		

WATER SYSTEM SYMBOLS:	EXISTING	PROPOSED
WATER METER		
WATER VALVE		
REDUCER		
POST INDICATOR VALVE		
FIRE HYDRANT		
BLOWOFF HYDRANT		
YARD HYDRANT		
FIRE DEPART. CONNECT. (FDC)		
CAP		
PLUG		

MATERIAL SYMBOLS:	EXISTING	PROPOSED
PROPOSED DEMOLITION		
PROPOSED SIDEWALK/ CONCRETE		
EXISTING WETLANDS		
PROPOSED AGGREGATE/ STONES		
PROPOSED ASPHALT (STANDARD ASPHALT)		
PROPOSED ASPHALT (HEAVY DUTY)		
PERVIOUS PAVERS		

**SEQUENCE OF CONSTRUCTION ACTIVITIES PROJECT PHASING**

ESTIMATED START DATE: 01/2015 ESTIMATED COMPLETION DATE: 02/2015

- RECEIVE NPDES COVERAGE FROM DHEC.
- PRE-CONSTRUCTION MEETING (ON-SITE IF MORE THAN 10 DISTURBED & NON-LINEAR)
- NOTIFY DHEC EDC REGIONAL OFFICE OR OCRM OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.
- INSTALLATION OF CONSTRUCTION ENTRANCE(S).
- CLEARING & GRUBBING ONLY AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS.
- INSTALLATION OF PERIMETER CONTROLS (E.G. SILT FENCE).
- CLEARING & GRUBBING ONLY IN AREAS OF BASINS / TRAPS / PONDS.
- INSTALLATION OF BASINS / TRAPS / PONDS AND INSTALLATION OF DIVERSIONS TO THOSE STRUCTURES (OUTLET STRUCTURES MUST BE COMPLETELY INSTALLED AS SHOWN ON THE DETAILS BEFORE PROCEEDING TO NEXT STEP; AREAS DRAINING TO THESE STRUCTURES CANNOT BE DISTURBED UNTIL THE STRUCTURES & DIVERSIONS TO THE STRUCTURES ARE COMPLETELY INSTALLED).
- CLEARING & GRUBBING OF SITE OR DEMOLITION (SEDIMENT & EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED).
- ROUGH GRADING.
- INSTALLATION OF STORM DRAIN SYSTEM AND PLACEMENT OF INLET PROTECTION AS EACH INLET IS INSTALLED.
- FINE GRADING, PAVING, ETC.
- PERMANENT / FINAL STABILIZATION.
- CLEAN-OUT OF DETENTION BASINS THAT WERE USED AS SEDIMENT CONTROL STRUCTURES AND RE-GRADING OF DETENTION POND BOTTOMS; IF NECESSARY, MODIFICATION OF SEDIMENT BASIN RISER TO CONVERT TO DETENTION BASIN OUTLET STRUCTURE.
- REMOVAL OF TEMPORARY SEDIMENT & EROSION CONTROL MEASURES AFTER ENTER AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER / OPERATOR HAVE THE SWPPP PREPARED OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES).
- PERFORM AS-BUILT SURVEYS OF ALL DETENTION STRUCTURES AND SUBMIT TO DHEC OR MSA FOR ACCEPTANCE.
- SUBMIT NOTICE OF TERMINATION (NOT) TO DHEC AS APPROPRIATE.

NOTE: IF FLOWS FROM OFFSITE AREAS WILL BE DIVERTED AROUND THE SITE AND THE ON-SITE STRUCTURES ARE NOT DESIGNED TO HANDLE FLOWS FROM THE OFFSITE AREAS, THEN THE DIVERSIONS / PIPING FOR THE OFFSITE FLOWS MUST BE INSTALLED BEFORE LAND-DISTURBING ACTIVITIES BEGON ON THE SITE; INCLUDE THIS IN SEQUENCE. SEDIMENT AND EROSION CONTROL MEASURES FOR THE DISTURBED AREAS FOR THE DIVERSION / PIPING MUST BE INSTALLED BEFORE THOSE AREAS ARE DISTURBED AND SHOULD BE SHOWN ON THE PLANS.

NOTE: IF AN EXISTING DETENTION / SEDIMENT BASIN IS BEING MODIFIED TO HANDLE THE FLOWS FROM THE PROPOSED STRUCTURES, THEN IT MUST BE MODIFIED BEFORE LAND-DISTURBING ACTIVITIES BEGON ON THE SITE. THIS SHOULD BE INCLUDED IN THE SEQUENCE.

NOTE: INCLUDE INDIVIDUAL LOT DEVELOPMENT / CONSTRUCTION IN THE SEQUENCE IF THE SITE WILL BE MASS-GRADED. NOTE: IF AN EXISTING DETENTION / SEDIMENT BASIN IS BEING MODIFIED TO HANDLE THE FLOWS FROM THE PROPOSED STRUCTURES, THEN IT MUST BE MODIFIED BEFORE LAND-DISTURBING ACTIVITIES BEGON ON THE SITE. THIS SHOULD BE INCLUDED IN THE SEQUENCE.

NOTE: MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.

\*B/E SURE TO NUMBER AND LIST ALL ITEMS IN NUMERICAL ORDER FOR YOUR CONSTRUCTION SEQUENCE.

**EROSION & SEDIMENT CONTROL LEGEND**

DESCRIPTION	SYMBOL
<b>EROSION PREVENTION</b>	
LAND GRADING:	
SURFACE ROUGHENING:	
TOPSOILING:	
DITCH CENTERLINE:	
TEMPORARY SEEDING:	
MULCHING:	
ECB OR TRM:	
FGM:	
BFM:	
PERMANENT SEEDING:	
SOODING:	
RIPRAP:	
OUTLET PROTECTION:	
DUST CONTROL:	
POLYACRYLAMIDE (PAM):	
<b>SEDIMENT CONTROL</b>	
SEDIMENT BASIN:	
TEMPORARY SEDIMENT TRAP:	
ROCK SEDIMENT DIKE:	
ROCK CHECK DAM:	
SEDIMENT TUBE:	
SILT FENCE:	
REINFORCED SILT FENCE:	
TYPE A-FABRIC INLET PROTECTION:	
TYPE A-SEDIMENT TUBE INLET PROTECTION:	
TYPE B - WIRE MESH AND STONE DROP INLET PROTECTION:	
TYPE C - BLOCK AND GRAVEL INLET PROTECTION:	
TYPE D - RIGID INLET FILTERS:	
TYPE E - SURFACE COURSE CURB INLET FILTER:	
TYPE F - INLET TUBE:	
<b>RUNOFF CONVEYANCE MEASURES:</b>	
VEGETATED CHANNELS:	
RIPRAP-LINED CHANNELS:	
ECB OR TRM-LINED CHANNELS:	
PAVED CHANNELS:	
PIPE SLOPE DRAINS:	
TEMPORARY STREAM CROSSING:	
TEMPORARY DIVERSION DITCH OR SWALE:	
PERMANENT DIVERSION DITCH:	
DIVERSION DIKE OR BERM:	
LEVEL SPREADER:	
SUBSURFACE DRAIN:	

**STANDARD ABBREVIATIONS**

AC	ACRE	MJ	MECHANICAL JOINT
ADT	AVERAGE DAILY TRAFFIC	N	NORTH
ASPH	ASPHALT	NBR	NORTH BOUND ROADWAY
BEG	BEGIN	NC	NORMAL CROWN
BL	BASELINE	NGVD	NATIONAL GEODETIC VERTICAL DATUM
BN	BENCHMARK	NOT IN CONTRACT	NOT IN CONTRACT
BOB	BOTTOM OF BANK	OD	OUTSIDE DIAMETER
BOIT	BOTTOM	OH	OVERHEAD
BEG	BEARING	OSP	OVERHEAD POWER
BT	BURIED TELEPHONE	PAVT	PAVEMENT
B/C	BACK OF CURB	PC	POINT OF CURVATURE
PC	RATE OF CHANGE IN SLOPE	PC	POINT OF COMING CURVATURE
C & G	CURB AND GUTTER	PERF	PERFORATED
CATV	CABLE TELEVISION	PG	PROFILE GRADE
CB	CATCH BASIN	PROF	PROFILE GRADE ELEVATION
CI	CURB INLET	PGL	PROFILE GRADE LINE
CONST	CLEARANCE OR CENTERLINE	PI	POINT OF INTERSECTION
CORR	CORRECTION	PRC	POINT OF REVERSE CURVATURE
CP	CUBIC FEET	PRCST	PRECAST
CY	CUBIC YARD	PT	POINT

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TREE & TOPO SURVEY  
PREPARED FOR  
**303 ASSOCIATES, LLC**

PORTION OF LOT 61 AND 52, SECTION 31, 1N-1W  
BEAUFORT TAX MAP 1, PARCEL 12  
BEAUFORT COUNTY SOUTH CAROLINA

3.960 ACRES  
+0.021 ACRES  
3.981 ACRES TOTAL

- LEGEND:**
- IPS - IRON PIN SET
  - IPF - IRON PIN FOUND
  - CMF - CONCRETE MONUMENT FOUND
  - PP - POWER POLE
  - LP - LIGHT POLE
  - WV - WATER VALVE
  - WM - WATER METER
  - SSMH - SEWER MANHOLE
  - SDCB - STORM CATCH BASIN
  - VM - VALVE MARKER
  - PBOX - POWER BOX
  - TRAN - TRANSFORMER
  - PLM - PIPELINE MARKER

- TREE LEGEND:**
- LO - LIVE OAK
  - G - GUM
  - CH - CHERRY
  - MB - MULBERRY
  - SB - SUGAR BERRY
  - PAL - PALMETTO
  - MAG - MAGNOLIA
  - LrO - LAUREL OAK

NO.	BEARING	DISTANCE
AA	N51°13'50"E	23.90'
AB	N89°11'40"E	7.55'
AC	S69°25'43"W	20.99'

NO.	DELTA	RADIUS	ARC	TANGENT	C.BEARING	CHORD
1	8°18'58"	1437.55'	208.65'	104.51'	N70°26'29"W	208.44'
2	0°43'42"	1462.70'	18.59'	9.30'	N76°20'10"W	18.53'

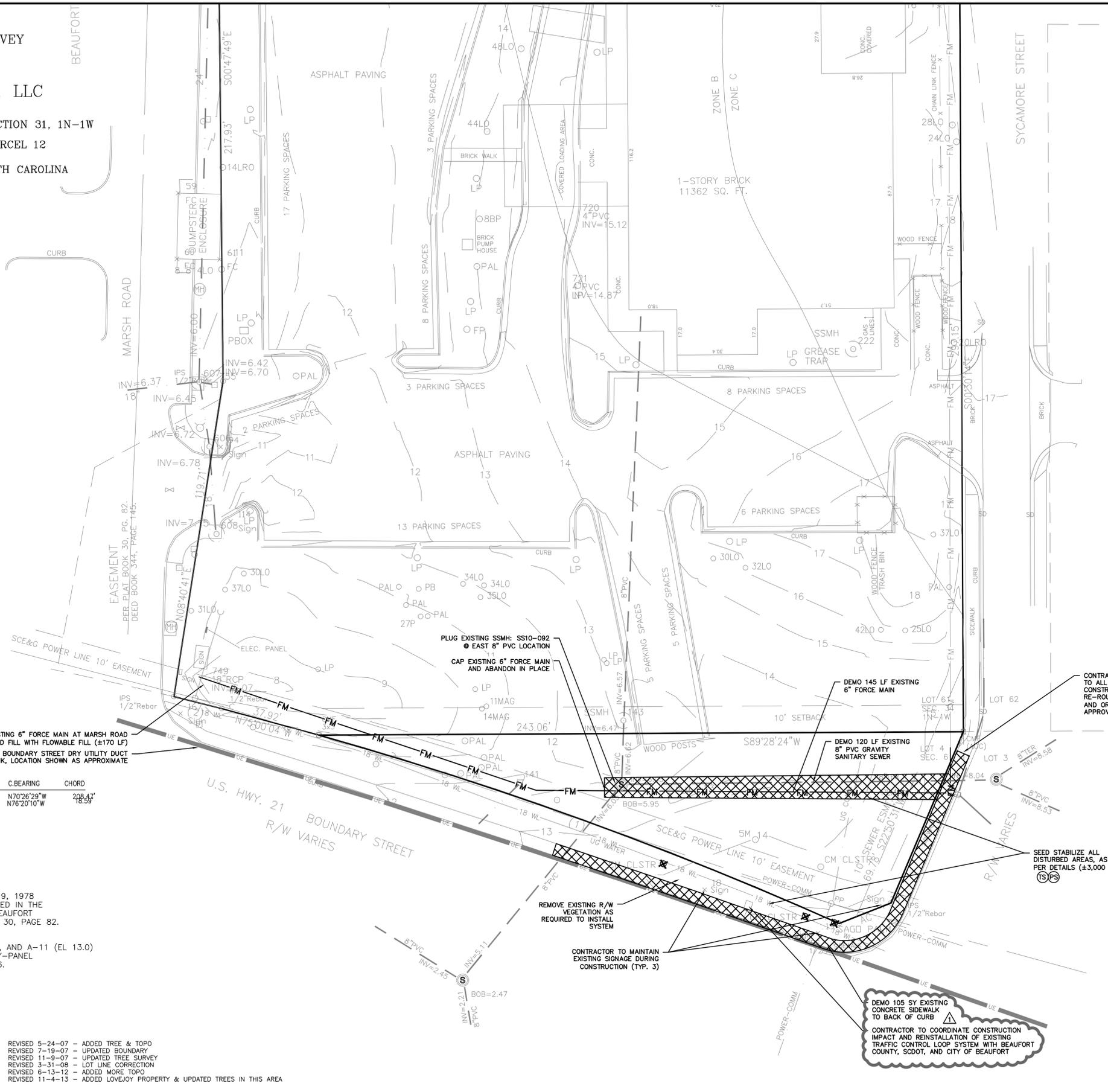
**REFERENCE PLAT:**  
PLAT BY R.D. TROGDON, JR. DATED OCT. 19, 1978  
AND REVISED NOV. 2, 1981 AND RECORDED IN THE  
OFFICE OF THE CLERK OF COURT FOR BEAUFORT  
COUNTY, SOUTH CAROLINA IN PLAT BOOK 30, PAGE 82.

THIS PROPERTY IS LOCATED IN ZONE C, B, AND A-11 (EL 13.0)  
AS DETERMINED BY FEMA, FIRM COMMUNITY-PANEL  
NUMBER 450026 0005 D, DATED 9-29-86.

R120-001-000-0012-0000

- REVISED 5-24-07 - ADDED TREE & TOPO
- REVISED 7-19-07 - UPDATED BOUNDARY
- REVISED 11-9-07 - UPDATED TREE SURVEY
- REVISED 3-31-08 - LOT LINE CORRECTION
- REVISED 6-13-12 - ADDED MORE TOPO
- REVISED 11-4-13 - ADDED LOVEJOY PROPERTY & UPDATED TREES IN THIS AREA

P1333972/MMA

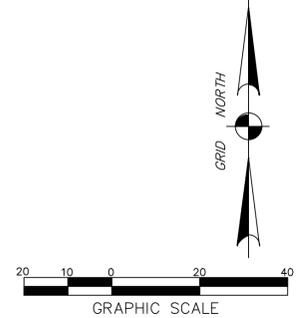


CONTRACTOR TO MAINTAIN SEWER SERVICE TO ALL EXISTING SERVICES DURING CONSTRUCTION BY TEMPORARY RE-ROUTING. CONSTRUCTION SEQUENCE AND OR PUMP/HAUL METHODS TO BE APPROVED BY BJWSA AND ENGINEER.

SEED STABILIZE ALL DISTURBED AREAS, AS PER DETAILS (±3,000 SF)  
(TS)FS

CONTRACTOR TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION (TYP. 3)

CONTRACTOR TO COORDINATE CONSTRUCTION IMPACT AND REINSTALLATION OF EXISTING TRAFFIC CONTROL LOOP SYSTEM WITH BEAUFORT COUNTY, SCDOT, AND CITY OF BEAUFORT



I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS A SURVEY AS SPECIFIED THEREIN.  
ALSO THERE ARE NO VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.



DAVID S. YOUMANS RLS 9765  
BEAUFORT SURVEYING, INC.  
1613 PARIS AVENUE  
PORT ROYAL, S.C. 29935  
PHONE (803) 524-3261



NO.	DESCRIPTION	DATE
1	MOVED PRO. SAN. SEWER TO CENTER OF EASEMENT	12/31/14
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7		

**Ward Edwards**  
ENGINEERING  
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910  
PH: (803) 837-5500 FAX: (803) 837-2536  
WWW.WARDEDWARDS.COM

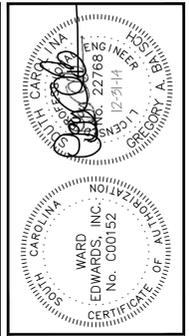
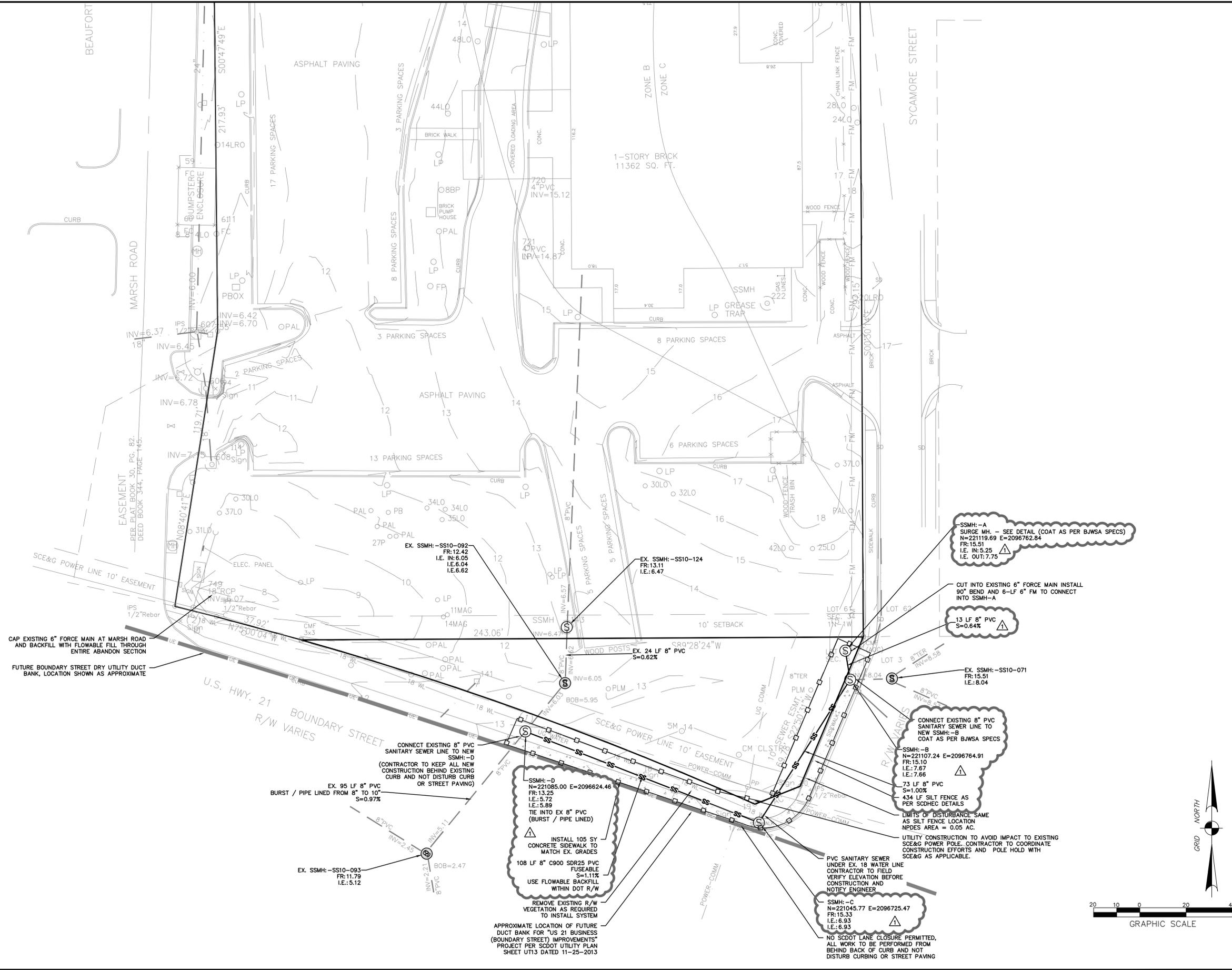
**LOVEJOY SANITARY SEWER REALIGNMENT**  
BEAUFORT COUNTY, SOUTH CAROLINA  
**CITY OF BEAUFORT PUBLIC WORKS**  
BEAUFORT, SOUTH CAROLINA  
**EXISTING CONDITIONS & DEMOLITION PLAN**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #:	150215H
DATE:	12/31/14
DESIGNED BY:	RB
CHECKED BY:	GAB
SCALE:	1"=20'

**SHEET C103**

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ENGINEERING

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WWW.WARDEDWARDS.COM

**LOVEJOY SANITARY SEWER REALIGNMENT**  
BEAUFORT COUNTY, SOUTH CAROLINA

**CITY OF BEAUFORT PUBLIC WORKS**  
BEAUFORT, SOUTH CAROLINA

**UTILITY PLAN**

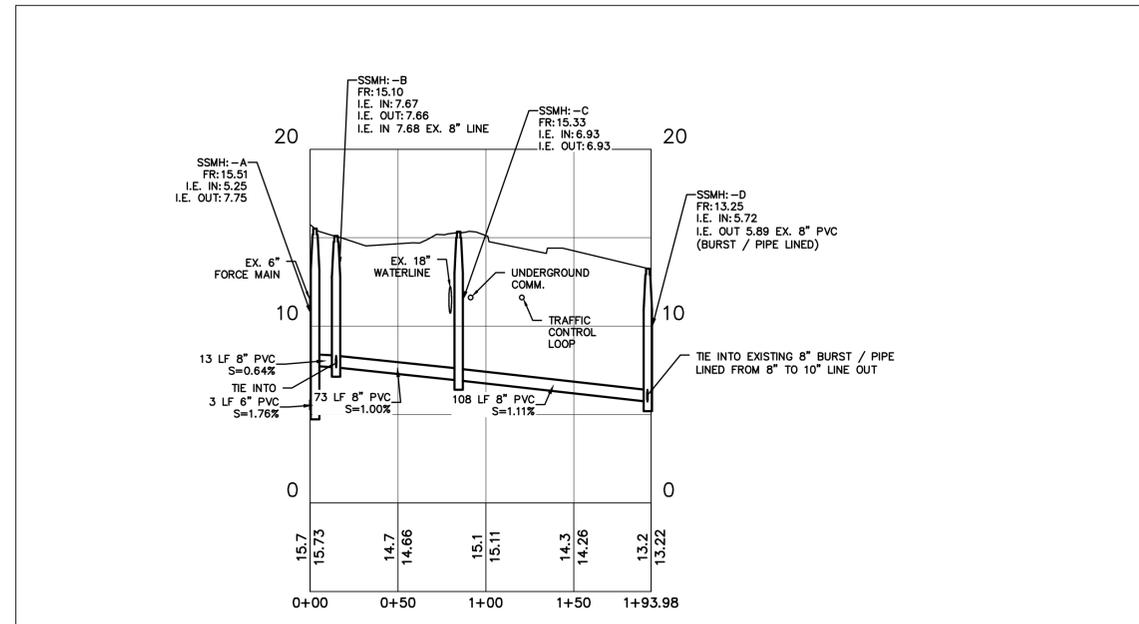
NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #:	150215H
DATE:	12/31/14
DESIGNED BY:	RB
CHECKED BY:	GAB
SCALE:	1"=20'

SHEET  
**C104**

IF THIS SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY.

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**SANITARY SEWER PROFILE**

SCALE: 1" = 50' HORIZ  
1" = 5' VERT

**PERMANENT SEEDING - COASTAL**

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	10 LBS/AC												
BAHIA GRASS	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BAHIA GRASS	30 LBS/AC												
SERICA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
ATLANTIC COASTAL PANICGRASS	15 LBS/AC PLS												
BROWNTOP MILLET	10 LBS/AC												
SWITCHGRASS (ALAMO)	8 LBS/AC PLS												
LITTLE BLUESTEM	4 LBS/AC												
SERICA LESPEDEZA	20 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
WEeping LOVEGRASS	8 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	10 LBS/AC												
BAHIA GRASS	40 LBS/AC												
RYE, GRAIN	10 LBS/AC												
BAHIA GRASS	40 LBS/AC												
CLOVER, CRIMSON (ANNUAL)	5 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BAHIA GRASS	30 LBS/AC												
SERICA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BERMUDA, COMMON	10 LBS/AC												
SERICA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BERMUDA, COMMON	12 LBS/AC												
KOBE LESPEDEZA (ANNUAL)	10 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
BAHIA GRASS	20 LBS/AC												
BERMUDA, COMMON	6 LBS/AC												
SERICA LESPEDEZA	40 LBS/AC												
BROWNTOP MILLET	10 LBS/AC												
SWITCHGRASS	8 LBS/AC PLS												
LITTLE BLUESTEM	5 LBS/AC PLS												
INDIAN GRASS	3 LBS/AC PLS												

**PS PERMANENT SEEDING - COASTAL**

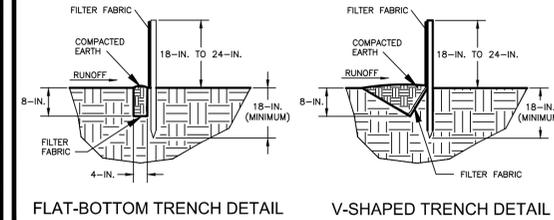
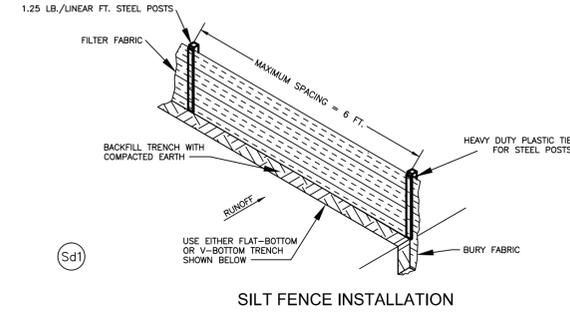
DETAIL 02370-010

**TEMPORARY SEEDING - COASTAL**

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40 LBS/AC												
RYE, GRAIN	56 LBS/AC												
RYEGRASS	50 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS/AC												
RYE, GRAIN OR OATS	56 LBS/AC												
RYEGRASS	75 LBS/AC												

**TS TEMPORARY SEEDING - COASTAL**

DETAIL 02370-011



**South Carolina Department of Health and Environmental Control**

**SILT FENCE**

STANDARD DRAWING NO. SC-03 Page 1 of 3

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**SILT FENCE DETAIL**

**When and Where to Use it**  
Silt fence is applicable in areas:

Where the maximum sheet or overland flow path length to the fence is 100-feet.  
Where the maximum slope steepness (normal [perpendicular] to fence line) is 2H:1V.  
That do not receive concentrated flows greater than 0.5 cfs.

**Do not** place silt fence across channels or use it as a velocity control BMP.

**Materials**

**Steel Posts**  
Use 48-inch long steel posts that meet the following minimum physical requirements:  
Composed of high strength steel with minimum yield strength of 50,000 psi.  
Have a standard "T" section with a nominal face width of 1.38-inches and nominal "T" length of 1.48-inches.  
Weigh 1.25 pounds per foot (± 8%).  
Have a soil stabilization plate with a minimum cross section area of 17-square inches attached to the steel posts.  
Painted with a water based baked enamel paint.

Use steel posts with a minimum length of 4-feet, weighing 1.25 pounds per linear foot (± 8%) with projections to aid in fastening the fabric. Except when heavy clay soils are present on site, steel posts will have a metal soil stabilization plate welded near the bottom such that when the post is driven to the proper depth, the plate will be below the ground level for added stability.

The soil plates should have the following characteristics:  
Be composed of minimum 15 gauge steel.  
Have a minimum cross section area of 17-square inches.

**Geotextile Filter Fabric**

**Filter fabric is:**  
Composed of fibers consisting of long chain synthetic polymers composed of at least 85% by weight of polyolefins, polyesters, or polyamides. Formed into a network such that the filaments or yarns retain dimensional stability relative to each other. Free of any treatment or coating which might adversely affect its physical properties after installation. Free of defects or flaws that significantly affect its physical and/or filtering properties. Cut to a minimum width of 36 inches.

Use only fabric appearing on SCDOT Approval Sheet #34 meeting the requirements of the most current edition of the SCDOT Standard Specifications for Highway Construction.

**South Carolina Department of Health and Environmental Control**

**SILT FENCE**

STANDARD DRAWING NO. SC-03 Page 2 of 3

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**SILT FENCE DETAIL**

**Installation**

Excavate a trench approximately 6-inches wide and 6-inches deep when placing fabric by hand. Place 12-inches of geotextile fabric into the 6-inch deep trench, extending the remaining 6-inches towards the upslope side of the trench. Backfill the trench with soil or gravel and compact. Bury 12-inches of fabric into the ground when pneumatically installing silt fence with a slicing method. Purchase fabric in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrapped the fabric together at a support post with both ends fastened to the post, with a 6-inch minimum overlap. Install posts to a minimum depth of 24-inches. Install posts a minimum of 1- to 2- inches above the fabric, with no more than 3-feet of the post above the ground. Space posts to maximum 6-foot centers. Attach fabric to wood posts using staples made of heavy-duty wire at least 1 1/2-inch long, spaced a maximum of 6-inches apart. Staple a 2-inch wide lathe over the filter fabric to securely fasten it to the upslope side of wooden posts. Attach fabric to the steel posts using heavy-duty plastic ties that are evenly spaced and placed in a manner to prevent sagging or tearing of the fabric. In call cases, ties should be affixed in no less than 4 places. Install the fabric a minimum of 24-inches above the ground. When necessary, the height of the fence above ground may be greater than 24-inches. In tidal areas, extra silt fence height may be required. The post height will be twice the exposed post height. Post spacing will remain the same and extra height fabric will be 4-, 5-, or 6-feet tall. Locate silt fence checks every 100 feet maximum and at low points. Install the fence perpendicular to the direction of flow and place the fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.

**Inspection and Maintenance**

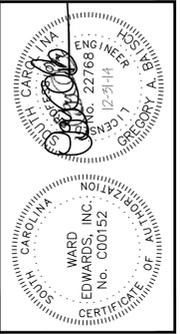
Inspect every seven calendar days and within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation. Check for sediment buildup and fence integrity. Check where runoff has eroded a channel beneath the fence, or where the fence has sagged or collapsed by fence overtopping. If the fence fabric tears, begins to decompose, or in any way becomes ineffective, replace the section of fence immediately. Remove sediment accumulated along the fence when it reaches 1/3 the height of the fence, especially if heavy rains are expected. Remove trapped sediment from the site or stabilize it on site. Remove silt fence within 30 days after final stabilization is achieved or after temporary best management practices (BMPs) are no longer needed. Permanently stabilize disturbed areas resulting from fence removal.

**South Carolina Department of Health and Environmental Control**

**SILT FENCE**

STANDARD DRAWING NO. SC-03 Page 3 of 3

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



NO.	DESCRIPTION	DATE
1	MOVED PROJ. SAN. SEWER TO CENTER OF EASEMENT	12/31/14
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**Ward Edwards**  
**ENGINEERING**

P.O. BOX 381, BLUEFORD, SOUTH CAROLINA 29910  
PH: (803) 837-5550 FAX: (803) 837-2536  
WWW.WARDEDWARDS.COM

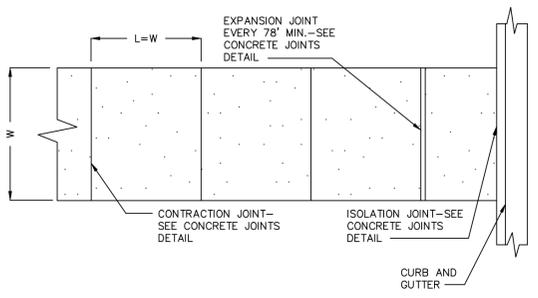
**LOVEJOY SANITARY SEWER REALIGNMENT**  
BEAUFORT COUNTY, SOUTH CAROLINA  
**CITY OF BEAUFORT PUBLIC WORKS**  
BEAUFORT, SOUTH CAROLINA  
**CONSTRUCTION DETAILS**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

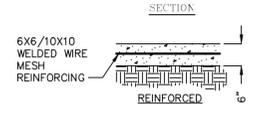
PROJECT #: 150215H  
DATE: 12/31/14  
DESIGNED BY: RB  
CHECKED BY: GAB  
SCALE: AS NOTED

**SHEET C105**

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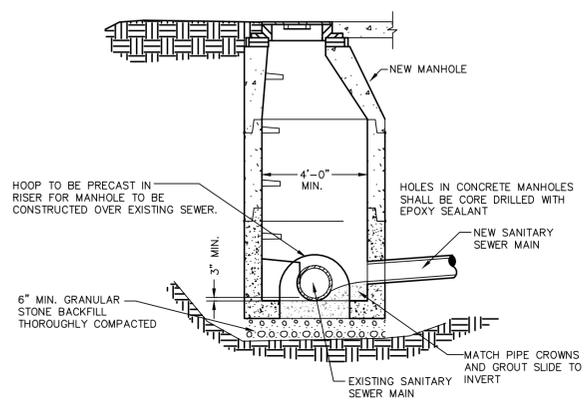


- NOTES:**
1. W = VARIES, REFER TO STAKING PLAN. FILL IN BASED ON SITE PLAN
  2. L = WIDTH OF PAVING UNLESS OTHERWISE INDICATED ON PLAN.
  3. SLOPE = AS INDICATED ON GRADING PLAN, NOT TO EXCEED 2% CROSS OR 8.33% LONGITUDINAL.
  4. ALL CONCRETE SHALL BE CLASS A 3000 PSI.
  5. FINISH: BROOM WITH HAND TOOLED JOINTS AND EDGES.



**CONCRETE SIDEWALK**

DETAIL 03300-006



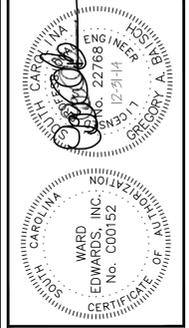
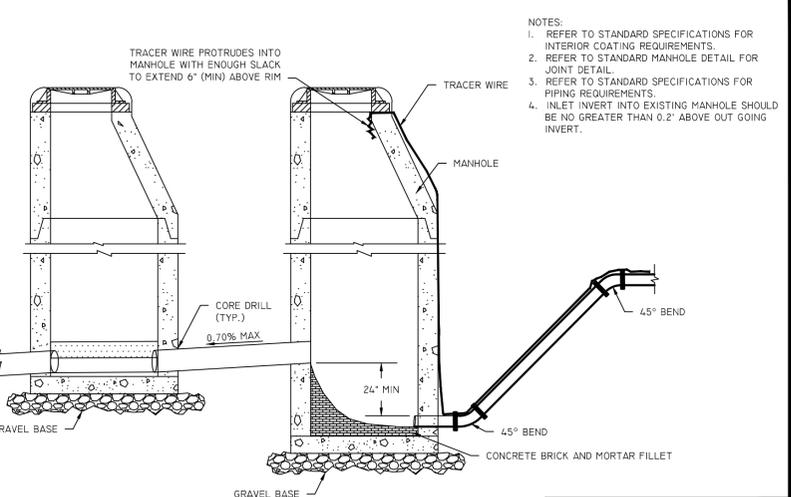
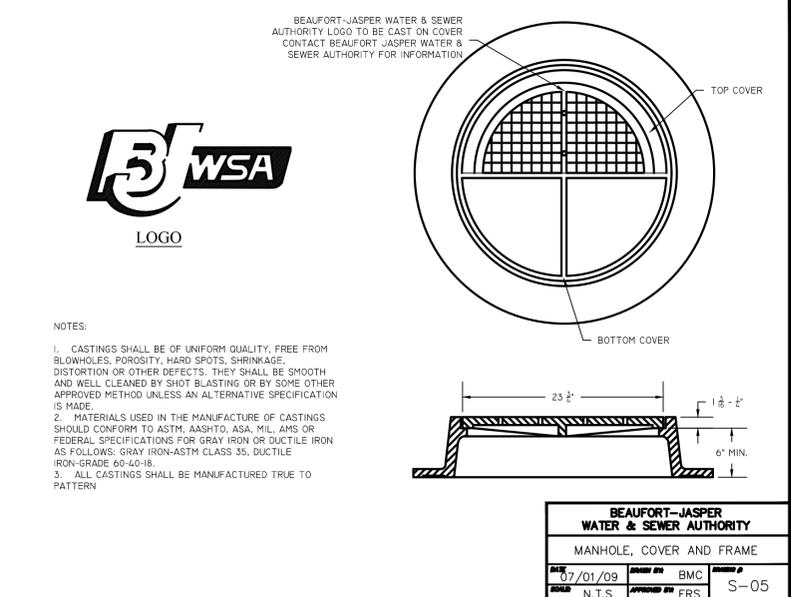
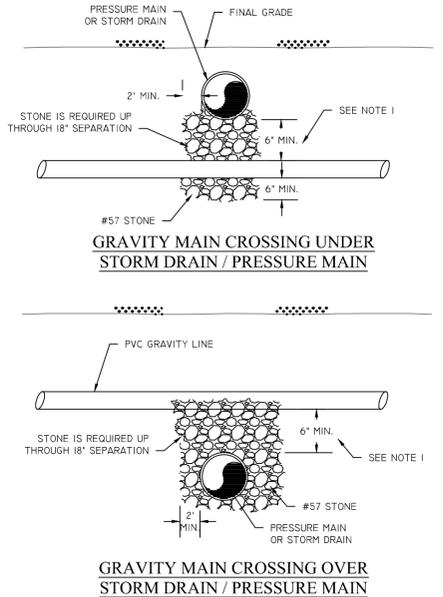
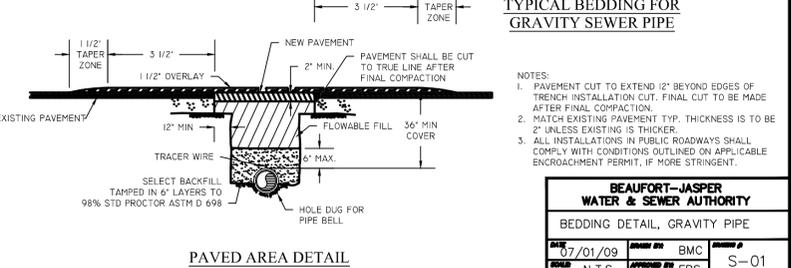
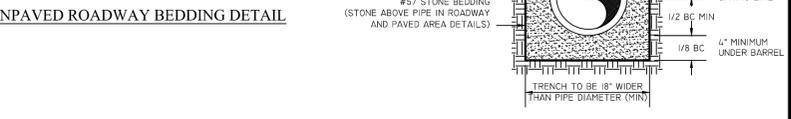
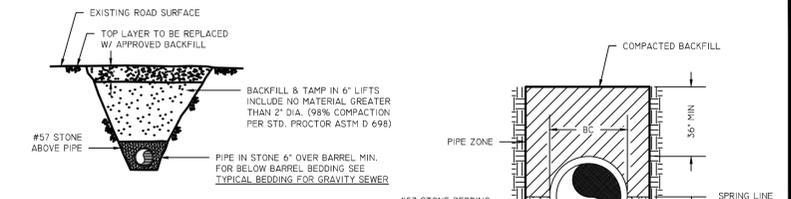
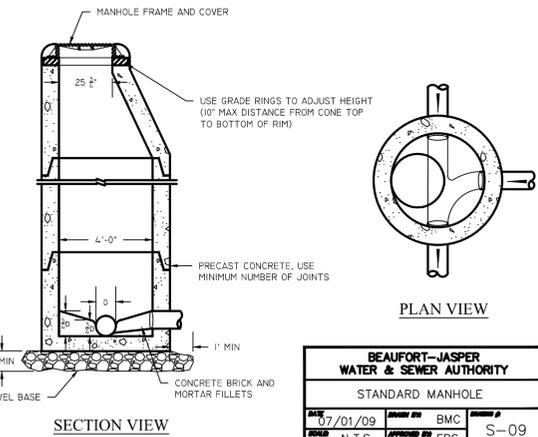
**NEW MANHOLE OVER EXISTING SEWER LINE**

DETAIL 02530-027



**RURAL MANHOLE PROTECTIVE COLLAR**

- NOTES:**
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
  2. CONCRETE GROUTING IS NOT ALLOWED INSIDE MANHOLES.
  3. RIM ELEVATION ON RURAL MANHOLES SHALL BE 6" HIGHER THAN NEAREST MANHOLE OUTSIDE THE RURAL AREA.



NO.	DESCRIPTION	DATE
1	MOVED PROJ. SAN. SEWER TO CENTER OF EASEMENT	12/31/14
2		
3		
4		
5		
6		
7		

**Ward Edwards**  
ENGINEERING

P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910  
PH: (803) 837-5550 FAX: (843) 837-2536  
WWW.WARDEDWARDS.COM

LOVEJOY SANITARY SEWER REALIGNMENT  
BEAUFORT COUNTY, SOUTH CAROLINA  
CITY OF BEAUFORT PUBLIC WORKS  
BEAUFORT, SOUTH CAROLINA  
**CONSTRUCTION DETAILS**

NOT FOR CONSTRUCTION  
 RELEASED FOR CONSTRUCTION

PROJECT #: 150215H  
DATE: 12/31/14  
DESIGNED BY: RB  
CHECKED BY: GAB  
SCALE: AS NOTED

BEAUFORT-JASPER WATER & SEWER AUTHORITY

DATE: 07/01/09 DRAWN BY: BMC CHECKED BY: N.T.S. APPROVED BY: ERS

S-08

**SHEET C106**