SHEET NO.	TOTAL SHEETS
1	38

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PM1,PM2	PAVEMENT MARKING /SIGNING PLAN SHEETS	2
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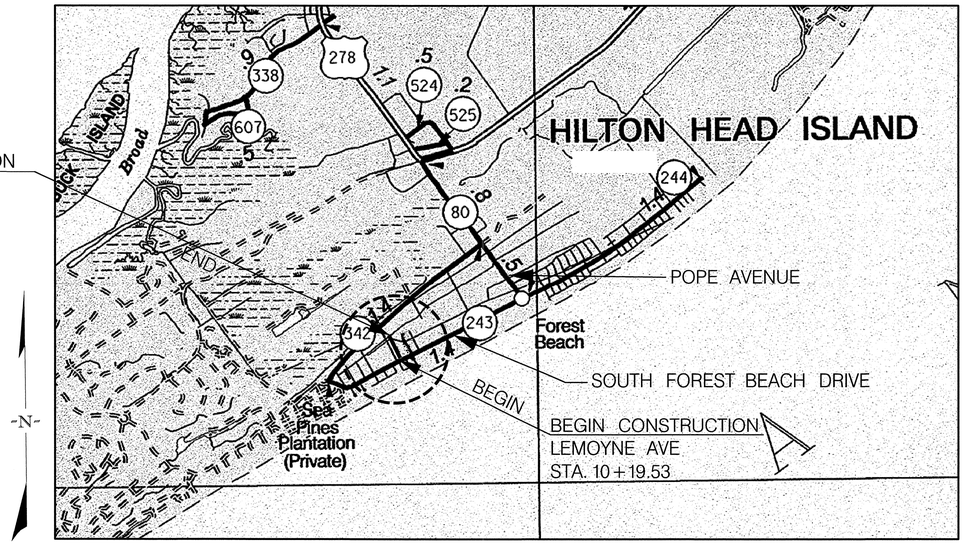
	TOTAL	38

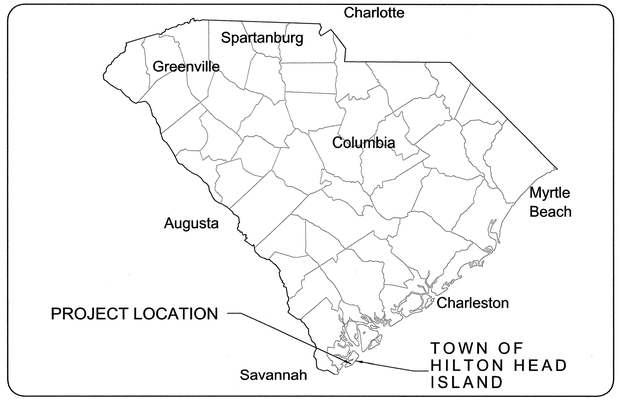
TOWN OF HILTON HEAD ISLAND, S.C.

ROADWAY AND DRAINAGE IMPROVEMENTS

LEMOYNE AVENUE



LAYOUT
NOT TO SCALE



LOCATION MAP
N.T.S.

Note: Before any clearing, tree removal, soil removal, or any other site work begins, Town staff must inspect the site to ensure the required erosion control fence has been installed correctly. Please contact Anne Cyran, Senior Planner, at 843–341–4697 or at annec@hiltonheadislandsc.gov to schedule the pre–clear inspection. Please allow for two full business days for the pre–clear inspection and any required re–inspections.

PROPOSED PROJECT

	TOTAL	
NET LENGTH OF ROADWAY	0.202	MILES
NET LENGTH OF PROJECT	0.202	MILES
GROSS LENGTH OF PROJECT	0.202	MILES

EQUALITIES IN STATIONING
NONE

NOTE:
EXCEPT AS MAY BE OTHERWISE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF FINAL RFP.

Design Reference for these plans is the:
2001
AASHTO "A Policy on Geometric Design of Highways and Streets"

Hydraulic Design Reference for these plans is the:
2009
Edition of SCDOT's "Requirements for Hydraulic Design Studies"

ENVIRONMENTAL PERMIT INFORMATION

USACE PERMIT	___YES	X NO
NEPA DOCUMENT	___YES	X NO
401 CERTIFICATION	___YES	X NO
OCRM CAP	X YES	___NO
NAVIGABLE WATERS ___SC ___USCG ___USACE		X N/A

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA
CALL 811
SOUTH CAROLINA 811 (SC811)
WWW.SC811.COM
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

BEFORE YOU DIG
S.C. ONE CALL NUMBER:
1 - 888 - 721- 7877
THE PRESENCE, SIZE AND LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON INFORMATION OBTAINED FROM PREVIOUS CONSTRUCTION PLANS AND VISIBLE ABOVE GROUND STRUCTURES. THE ACTUAL SIZE, LOCATION AND TYPE OF MATERIAL MAY VARY UPON EXCAVATION. THERE MAY BE OTHER EXISTING UTILITIES ON THIS SITE NOT SHOWN ON THIS PLAN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO ANY DEMOLITION, EXCAVATION AND/OR CONSTRUCTION. THE CONTRACTOR IS ADVISED TO CONTACT THE LOCAL UNDERGROUND UTILITY PRIOR TO ANY DEMOLITION, EXCAVATION AND CONSTRUCTION.

The point of contact for this project is:
Jeff Buckalew, P.E.
Town of Hilton Head Island
One Town Center Court
Hilton Head Island, SC 29928
Office: 843.341.4600

Developer: Town of Hilton Head Island
One Town Center Court
Hilton Head Island, SC 29928

Owner: Town of Hilton Head Island
One Town Center Court
Hilton Head Island, SC 29928

NPDES PERMIT INFORMATION
DISTURBED AREA = 0.90 ACRES
PERMITTED AREA = 1.700 ACRES

APPROXIMATE LOCATION OF ROADWAY IS
BEGIN
LATITUDE 32° 08'19.98"N
LONGITUDE 80° 45'36.27"W
END
LATITUDE 32° 08'29.31"N
LONGITUDE 80° 45'40.79"W

Hydraulic and NPDES Design provided by:
INFRASTRUCTURE CONSULTING & ENGINEERING
Designs may be obtained from the Consultant

MARCH 2016

PLANS PREPARED BY
INFRASTRUCTURE CONSULTING & ENGINEERING
1691 TURNBULL AVENUE
CHARLESTON, S.C. 29405
PH. (843) 266-3581
http://www.ice-eng.com

ENGINEER OF RECORD
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON
SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION
FOR CONSTRUCTION : 3/15/16 DATE

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_01-Title Sheet.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	2

GENERAL NOTES

THE CONTRACTOR SHALL SUBMIT ALL SITE CONSTRUCTION SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. ANY REQUESTS FOR INFORMATION (RFI), SUBSTITUTIONS, OR REVISIONS SHALL BE REQUESTED IN WRITING AND APPROVED BY THE ENGINEER PRIOR TO MODIFICATION.

THE CONTRACTOR SHALL SUBMIT PROPER NOTIFICATION FOR REQUIRED INSPECTIONS. IN NO CASE SHALL NOTIFICATION BE LESS THAN 24 HOURS.

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL REQUIRED PERMITS ARE IN HAND PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

PROPOSED ELEVATIONS:
THE CONTRACTOR SHALL SET AND ADJUST PROPOSED ELEVATIONS AS NECESSARY TO ENSURE PROPER LONGITUDINAL GRADE FOR DRAINAGE.

DRAINAGE STRUCTURES:
GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE. AS DIRECTED BY THE ENGINEER, THEY MAY BE ADJUSTED, TO ACCOMMODATE UNFORESEEN CONDITIONS. STATIONS, OFFSETS AND ELEVATIONS REFER TO THE CENTER OF DROP INLETS, MANHOLES AND JUNCTION BOXES, AND THE MIDPOINT OF THE LIP FOR CATCH BASINS.

BARRICADES, DANGER AND WARNING SIGNS:
ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" LATEST EDITION. THE CONTRACTOR SHALL INSTALL AND MAINTAIN BARRICADES, SUITABLE AND SUFFICIENT LIGHTS, DANGER SIGNALS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF THE WORK AND SAFETY OF THE PUBLIC. LANES CLOSED TO TRAFFIC SHALL BE PROTECTED BY EFFECTIVE BARRICADES, LIGHTED DURING HOURS OF DARKNESS. SUITABLE WARNING SIGNS SHALL BE PROVIDED TO CONTROL, DIRECT TRAFFIC AND WARN PEDESTRIANS. UPON COMPLETION, ALL BARRICADES, SIGNS AND THE LIKE SHALL BE REMOVED.

SUBSURFACE PLANS:
SUBSURFACE INVESTIGATIONS ARE NOT AVAILABLE FOR THIS PROJECT. IT IS THE OBLIGATION OF THE CONTRACTOR TO MAKE THEIR OWN INTERPRETATION OF ALL SURFACE AND SUBSURFACE DATA THAT IS AVAILABLE AS TO THE NATURE AND EXTENT OF THE MATERIALS TO BE EXCAVATED, WASTED, GRADED, AND COMPACTED. THE INFORMATION SHOWN ON THESE PLANS IN NO WAY GUARANTEES THE AMOUNT OR NATURE OF THE MATERIAL TO BE ENCOUNTERED.

SANITARY PROVISIONS:
THE CONTRACTOR SHALL PROVIDE TEMPORARY SANITARY FACILITIES FOR THE USE OF THE WORKERS DURING THE PROGRESS OF THE WORK. THE SANITARY FACILITIES SHALL CONFORM TO THE REQUIREMENTS OF THE SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL. ALL FACILITIES SHALL BE REMOVED AT THE COMPLETION OF THE CONTRACT.

INCIDENTAL ITEMS:
THE CONTRACTOR SHALL REMOVE AND RESET ANY INCIDENTAL ITEMS SUCH AS MAILBOXES OR FENCES AS NOTED ON THE PLANS, AS DIRECTED BY THE ENGINEER, AND/OR ARE DISTURBED DURING CONSTRUCTION.

RESPONSIBILITY REGARDING EXISTING UTILITIES AND STRUCTURES:
THE CONTRACTOR SHALL CONTACT "PALMETTO UTILITY PROTECTION SERVICE" AT 1-888-721-7877, AT LEAST 72 HOURS PRIOR TO BEGINNING EXCAVATION. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES WILL BE INVESTIGATED AND LOCATED / VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE STARTING WORK. EXCAVATION IN THE VICINITY OF EXISTING STRUCTURES AND UTILITIES SHALL BE CAREFULLY DONE BY HAND. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES FOR LOCATIONS, ANY RELOCATION, ADJUSTMENT OR REPLACEMENT OF UTILITY FACILITIES. VERTICAL ALIGNMENT OF WATERLINE TO BE ALTERED BY INSERTION OF VERTICAL BENDS WHICH ALLOW SEPARATION AS REQUIRED BY LOCAL JURISDICTION.

INTERRUPTION OF UTILITY SERVICE:
THE CONTRACTOR'S OPERATIONS SHALL BE SO CONDUCTED AS TO INTERFERE AS LITTLE AS POSSIBLE WITH UTILITY SERVICES. ANY PROPOSED INTERRUPTION BY THE CONTRACTOR MUST BE ACCEPTED IN ADVANCE BY THE ENGINEER AND RESPECTIVE UTILITY OWNER.

UTILITIES:
PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND VERIFY THE SIZE AND INVERT OF ALL EXISTING UTILITIES. WHERE CONFLICTS EXIST BETWEEN THE UTILITY AND NEW CONSTRUCTION, THE UTILITY SHALL BE RELOCATED BY THE APPROPRIATE UTILITY PROVIDER(S). THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY PROVIDER. REPAIR OF ANY AND ALL DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION ARE THE CONTRACTORS RESPONSIBILITY.

THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO COMMENCING WORK, VERIFY UTILITIES WITHIN THE PROJECT LIMITS AND NOTIFY THE ENGINEER OF CONFLICTS OR VARIANCES TO THE PLANS PRIOR TO BEGINNING WORK OR PURCHASE OF MATERIALS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE CAUSED BY HIS OPERATIONS OR THOSE OF HIS AGENTS.

THE EXISTING UTILITIES SHOWN ARE BASED ON AVAILABLE RECORDS AND FIELD EXAMINATIONS. ALL LOCATIONS AND POSITIONS ARE APPROXIMATE. THE CONTRACTOR SHALL INDEPENDENTLY DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND PURCHASING CONSTRUCTION MATERIALS AND SHOULD NOTIFY THE ENGINEER OF ANY UNCHARTED UTILITIES. THE CONTRACTOR SHALL PROTECT ALL UTILITIES TO REMAIN AND SHALL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR AS A RESULT OF THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES IN THE PROJECT AREA.

THE TOWN WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF UTILITY LOCATIONS, SIZES, DEPTHS, OR FOR COMPLETENESS OF UTILITY INFORMATION.

THE CONTRACTOR SHALL HOLD THE TOWN HARMLESS FOR ANY THIRD-PARTY INCONVENIENCE CREATED BY WORK OF HIS OWN FORCES OR THAT OF HIS AGENTS. AS NEEDED, THE CONTRACTOR SHALL ADJUST/RELOCATE THE SANITARY SEWER AND WATER LINES ONLY. ALL OTHER ADJUSTMENTS/RELOCATIONS WILL BE PERFORMED BY THE VARIOUS UTILITY OWNERS. THE CONTRACTOR SHALL COORDINATE WORK WITH UTILITY OWNERS SO AS NOT TO ADVERSELY AFFECT THE PROJECT SCHEDULE. THE CITY WILL NOT BE HELD RESPONSIBLE FOR ANY DELAYS OR DISRUPTIONS IN THE SCHEDULE DUE TO THE WORK OF OTHER UTILITY OWNERS.

EXISTING SANITARY SEWER AND WATER LINE:
THE CONTRACTOR SHALL USE CARE WHEN WORKING AROUND SANITARY SEWERS AND WATER LINES. SHOULD THE CONTRACTOR DAMAGE EXISTING SEWER OR WATER LINES, HE SHALL IMMEDIATELY REPLACE THE LINE, AT HIS EXPENSE, WITH DUCTILE IRON PIPE. SEWER LATERALS IN CONFLICT WITH PROPOSED STORM DRAINAGE IMPROVEMENTS SHALL BE REPLACED WITH DUCTILE IRON PIPE FROM SEWER MAIN TO EASEMENT LINE OR RIGHT-OF-WAY FARTHEST FROM THE SEWER MAIN.

THE CONTRACTOR SHALL ADJUST ALL WATER VALVES, WATER METER BOXES AND WATER VAULTS TO FINISHED GRADE. WATER METERS LOCATED IN SIDEWALKS OR CONCRETE DRIVEWAYS SHALL BE INSTALLED WITHIN CONCRETE BOXES. ALL WATER LATERALS SHALL ALSO BE CONNECTED TO PROP. WATER LINE WHERE THERE IS AN EXISTNG WATER METER.

PATHWAY PAVING, GRADING, AND DRAINAGE NOTES

1. WHERE EXISTING PAVEMENT IS SHOWN TO BE MATCHED, EDGE OR CONTACT FACE WITH EXISTING PAVEMENT SHALL BE SAW CUT TO A NEAT VERTICAL LINE.
2. THE CONTRACTOR SHALL SAWCUT EXISTING ASPHALT AND/OR CONCRETE SURFACES PRIOR TO REMOVAL, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. A ONE FOOT MINIMUM WIDTH FOR ALL SAWCUTS.
3. CONTRACTOR SHALL COORDINATE DEMOLITION AND IMPROVEMENTS TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF FACILITIES.
4. TEMPORARY CONTROL OF STORM WATER DRAINAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. SEQUENCING AND CONSTRUCTION TECHNIQUES SHALL PREVENT OBSTRUCTION OF STORM SEWERS, PONDING IN TRAFFIC AREAS OR RAISING OF WATER LEVELS WHICH WOULD ENTER ADJACENT BUILDINGS OR STRUCTURES.
5. ELEVATION OF TOP OF EXISTING MANHOLES, INLETS, WATER VALVE BOXES, ETC., SHALL BE ADJUSTED TO MATCH NEW PAVING OR RESURFACING GRADES. PRICE TO BE CONSIDERED INCIDENTAL TO THE WORK.
6. PREPARATION, GRADING, PAVING AND OTHER SITE IMPROVEMENTS SHALL CONFORM TO THE FOLLOWING:
   A. SUBGRADE PREPARATION: TOP SOIL SHALL BE REMOVED FROM PAVED AREAS TO A MINIMUM DEPTH OF 4". ALL EXCAVATION SHALL BE TO SUBGRADE LIMITS. SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 95% (ASTM D1556) DENSITY FOR A DEPTH OF 12 INCHES.
   B. CONCRETE: MINIMUM 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS (5-1/2 BAGS CEMENT PER. CU. YD.; ENTRAINED AIR 5% ± 1%).
   C. BASE COURSE: 6" UNIFORM GRADED AGGREGATE BASE COURSE.
   D. WEARING SURFACE: HOT PLANT MIX ASPHALT CONCRETE, TYPE C, 200 LBS/SY COMPACTED THICKNESS. (PRIME AS INDICATED BY PAVING SECTION DETAILS).
7. ALL CONSTRUCTION MUST CONFORM TO APPLICABLE STATE, BEAUFORT COUNTY AND/OR TOWN OF HILTON HEAD STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND SOIL EROSION CONTROL AS MAY BE REQUIRED BY SC DHEC/OCRM. THE CONTRACTOR MUST INSTALL SILT BARRIERS AS SHOWN, OR DIRECTED, BY THE PROJECT ENGINEER AND/OR THE OCRM INSPECTOR.
9. ALL PIPES BEING SHOWN AS ABANDONDED WILL BE FILLED WITH FLOWABLE FILL. CONTRACTOR CAN ELECT TO LEAVE IN PLACE AND FILL WITH FLOWABLE FILL WITH THE TOWN'S APPROVAL AT NO ADDITIONAL COST.
10. CONTRACTOR TO ENSURE POSITIVE DRAINAGE ON ROADS, CURBS, SIDEWALKS AND GRASSED LINED DITCHES BEING REPLACED OR CONSTRUCTED.
11. PIPE LENGTHS AND SLOPE SHOWN IN PLAN AND PROFILE WERE DETERMINED USING CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

SCDHEC STANDARD 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 MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
   - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
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 CAN?T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT 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; AND
   - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC?S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

GENERAL CONSTRUCTION NOTES

1. CLEARING AND GRUBBING
   THE CONTRACTOR WILL BE REQUIRED TO CLEAR ALL AREAS NECESSARY FOR THE CONSTRUCTION OF ANY SEDIMENT DAMS AND INSTALL THE SEDIMENT DAMS AND ALL OTHER PERIMETER EROSION CONTOL MEASURES PRIOR TO CLEARING AND GRUBBING ACTIVITIES. ALSO, THE CONTRACTOR SHALL STAGE HIS CLEARING AND GRUBBING WORK ALONG WITH HIS ROADWAY CONSTRUCTION WORK TO MINIMIZE THE AMOUNT OF EROSION AND SEDIMENTATION. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING ALL STAGES OF CONSTRUCTION.
2. SEEDING
   SEEDING SHALL BE ACCOMPLISHED ACCORDING TO S.C.D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 2007 EDITION, SECTION 810.
3. EROSION CONTROL MEASURES
   ALL EROSION CONTROL MEASURES ON THIS PROJECT SHALL BE IMPLEMENTED AS DETAILED ON THE PLANS AND SHALL COMPLY WITH S.C.D.O.T. STANDARD DRAWINGS, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2007 EDITION, AND THE SUPPLEMENTAL SPECIFICATIONS. SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN PLACE PRIOR TO GROUND DISTURBING ACTIVITY BEGINS. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING ALL STAGES OF CONSTRUCTION.
4. PERIMETER EROSION CONTROL DEVICES
   SILT FENCE AND SEDIMENT TUBES MAY BE PLACED AT LOCATIONS WHERE SEDIMENT LEAVES THE PROJECT LIMITS ESPECIALLY AT THE TOE OF FILL SLOPES THAT SLOPE AWAY FROM THE PROJECT. SILT FENCE SHALL NOT BE PLACED IN A POSITION SUCH THAT IT BLOCKS DRIVEWAYS OR POINTS OF ACCESS TO PROPERTY. SEDIMENT TUBES (STAKED) SHALL BE UTILIZED, IN LIEU OF SILT FENCE, WITHIN TWELVE (12) FEET OF A TREE TO BE RETAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF SEDIMENT TUBES THROUGHOUT THE EXTENT OF CONSTRUCTION.
5. INTERIOR EROSION CONTROL DEVICES
   INLET PROTECTION SHOULD BE PLACED WHEN PRACTICAL, AROUND EXISTING AND NEW CATCH BASINS SO AS TO PREVENT SEDIMENT FROM ENTERING THE STORM SEWER SYSTEM. REFER TO THE PLAN SHEETS FOR PLACEMENT OF EROSION CONTROL MEASURES AND REFER TO THE SCDOT EROSION CONTROL STANDARD DRAWINGS FOR OTHER DETAILS ON OTHER EROSION CONTROL MEASURES.
6. INSPECTION AND IMPLEMENTATION
   ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED ACCORDING TO THE REQUIREMENTS OF THE NPDES GENERAL CONSTRUCTION PERMIT. STABILIZATION MEASURES SHALL BE IMPLEMENTED AS SOON AS PRACTICABLE WITHIN THE ALLOWABLE TIMEFRAME STATED WITHIN THE NPDES GENERAL CONSTRUCTION PERMIT IN PORTIONS OF THE SITE WHERE ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.
7. MAINTENANCE OF DRIVEWAYS
   MAINTENANCE STONE HAS BEEN PROVIDED FOR MAINTAINING DRIVEWAYS THAT ARE DISTURBED BY CONSTRUCTION AND IN AREAS WHERE CONSTRUCTION TRAFFIC WILL ENTER A PAVED ROADWAY. MAINTENANCE STONE SHALL BE PLACED TO MINIMIZE THE TRACKING OF MUD/SOIL FROM CONSTRUCTION AND PUBLIC TRAFFIC ONTO PAVED ROADWAYS. STONE SHALL REMAIN IN PLACE UNTIL DRIVEWAYS ARE STABILIZED.
8. SILT FENCE ALONG PIPE INSTALLATION
   IN AREAS OF PIPE INSTALLATION OUTSIDE OF THE CONSTRUCTION LIMITS SHOWN ON THE PLANS, USE SILT FENCE AS NEEDED TO MINIMIZE SOIL LOSS FROM THE PROJECT. IMMEDIATELY AFTER COMPLETION OF PIPE INSTALLATION, APPLY PERMANENT VEGETATION TO DISTURBED AREAS.

CLEARING NOTES

1. CLEARED AREAS TO BE COMPLETELY CLEARED IN ACCORDANCE WITH THE SPECIFICATIONS.
2. NO CLEARING SHALL OCCUR WITHIN DESIGNATED BUFFER/TREE PROTECTION AREAS, OUTSIDE OF THE PROPERTY LINES OR BEYOND CLEARING LIMITS EXCEPT AS OTHERWISE SHOWN.
3. THE CONTRACTOR SHALL INSTALL A CONTINUOUS LINE OF FLAGGING OR FENCING ALONG THE LIMITS OF CLEARING PRIOR TO ANY CONSTRUCTION WORK BEGINNING.
4. CAUTION SHOULD BE TAKEN DURING CLEARING OPERATIONS TO AVOID FELLING TREES INTO THE DESIGNATED TREE PROTECTION ZONES. NO BURNING SHALL OCCUR WITHIN 50 FEET OF A TREE PROTECTION ZONE.
5. NO MATERIALS STORAGE, EARTH STORAGE, GAS FUELING, CONCRETE WASHOUT, DUMPING, OR CONSTRUCTION TRAFFIC IS ALLOWED WITHIN THE TREE PROTECTION ZONES.
6. SELECTIVE CLEARING AREAS SHALL BE CLEARED OF ALL BRUSH AND UNDERSTORY GROWTH. ALL TREES OVER 6" IN DIAMETER WILL BE RETAINED AND PROTECTED FROM DAMAGE, UNLESS APPROVED FOR REMOVAL BY THE OWNER OR ENGINEER.
7. ALL TREES SHOWN ON THE PLANS TO REMAIN SHALL BE CONSIDERED SPECIMEN TREES AND SHALL BE PROTECTED EVEN IF LOCATED WITHIN CLEARING AREAS. PROTECTION WILL INCLUDE, BUT IS NOT LIMITED TO, THE MEASURES DESCRIBED IN NOTES 4 AND 5 ABOVE. AN AREA 1 1/2 TIMES THE DIAMETER OF THE TREE TRUNK MEASURED 4 FEET FROM EXISTING GRADE WILL BE CONSIDERED THE TREE PROTECTION ZONE FOR AN INDIVIDUAL TREE.
8. WHEN TREE ROOTS ARE SEVERED OR EXPOSED DURING TRENCHING OR GRADING OPERATIONS, RECUT CLEANLY WITH A SHARP SAW BELOW FINISHED GRADE.

GENERAL SEQUENCE OF CONSTRUCTION

1. RECEIVE NPDES COVERAGE FROM SC DHEC.
2. CONDUCT PRE-CONSTRUCTION MEETING INCLUDING TOWN, ASSOCIATED CONTRACTORS, ENGINEER, SC DHEC, AND OTHER AFFECTED PARTIES AS NECESSARY.
3. NOTIFY DHEC EQC REGIONAL OFFICE OR OCRM OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.
4. OBTAIN TREE PROTECTION APPROVAL LETTER AND COORDINATE PLACEMENT OF TREE PROTECTION FENCING WITH TOWN OF HILTON HEAD ISLAND NATURAL RESOURCES.
5. INSTALL PERIMETER EROSION CONTROL MEASURES (SILT FENCE AND INLET PROTECTION). CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
7. CLEARING & GRUBBING OF SITE OR DEMOLITION (SEDIMENT * EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED).
8. PERFORM ROUGH GRADING OPERATIONS.
9. INSTALL STORM DRAIN SYSTEM AND PLACEMETN OF INLET PROTECTION AS EACH INLET IS INSTALLED.
10. PERFORM FINE GRADING AND PAVING OPERATIONS IN A MANNER AND SEQUENCE SO AS TO REDUCE UNNECESSARY DISTURBANCE OF SURFACE COVER.
11. PERMANENTLY OR TEMPORARILY VEGETATE AREAS AS COMPLETED OR LEFT IDLE.
12. EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
13. ONCE PERMANENT VEGETATION AND EROSION CONTROL MEASURES ARE ESTABLISHED, THE CONTRACTOR SHALL SCHEDULE A FINAL INSPECTION IN ORDER TO OBTAIN A CERTIFICATE OF COMPLETION.
14. SUBMIT NOTICE OF TERMINATION (NOT) TO DHEC AS APPROPRIATE.

EROSION CONTROL NOTES

1. ALL DISTURBED EARTH AREAS, NOT DESIGNATED TO BE PAVED, SHALL BE GRASSED USING FERTILIZER, MULCH, AND GRASS SEED OR SOD AS SHOWN ON THE PLAN. APPLY WATER AND MAINTAIN ACCORDING TO APPLICABLE PROVISIONS OF THE SCDOT'S "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION," LATEST EDITION.
2. ALL SOIL EROSION CONTROL FEATURES SHALL COMPLY WITH THE STATE MANUAL FOR SOIL EROSION AND SEDIMENTATION CONTROL AND SHALL BE MAINTAINED BY CONTRACTOR AND INSPECTED DAILY UNTIL DISTURBED AREAS ARE COMPLETELY STABILIZED.
3. REFER TO "SOUTH CAROLINA STORMWATER MANAGEMENT AND SEDIMENT CONTROL HANDBOOK FOR LAND DISTURBANCE ACTIVITIES" AND SCDOT'S "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION," LATEST EDITION FOR MINIMUM STANDARDS AND SPECIFICATIONS FOR DESIGN AND INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES.
4. IMMEDIATELY FOLLOWING ALL LAND DISTURBING ACTIVITIES THE CONTRACTOR SHALL SOW GRASS AS FOLLOWS:
   A. PREPARATION: GRADE ALL SEED BEDS, THOROUGHLY REMOVING ALL RIDGES AND DEPRESSIONS AND MAKING AREAS INTO SMOOTH, CONTINUOUS, FIRM PLANES THAT ENSURE PROPER DRAINAGE. REMOVE ALL SOIL LUMPS, ROCKS, STICKS AND OTHER DELETERIOUS MATERIAL.
   B. ALL DISTURBED OPEN EARTH AREAS NOT COVERED BY WALKS OR PAVING SHALL BE GRASSED AS FOLLOWS:

COMMON BERMUDA (HULLED)	30 LBS/ACRE
CARPETGRASS	35 LBS/ACRE
RESEEDING CRIMSON CLOVER	20 LBS/ACRE
ANNUAL RYEGRASS	15 LBS/ACRE

5. SEEDS SHALL BE PROPORTIONED ACCORDING TO RESPECTIVE APPLICATION RATES. RESEEDING CRIMSON CLOVER AND ANNUAL RYEGRASS SHALL BE ELIMINATED FROM THE MIX IF SEEDING OCCURS BETWEEN MARCH 1 AND AUGUST 15.
6. SEED SHALL BE APPLIED AS A HYDROMULCH OF FERTILIZER, MULCH AND GRASS SEED. IF A HYDROMULCH TECHNIQUE IS NOT USED, AFTER SOWING THE FERTILIZER AND SEED, THE ENTIRE AREA SHALL BE LIGHTLY RAKED OR DRAGGED TO COVER ALL SEED TO A MAXIMUM DEPTH OF APPROXIMATELY ONE-QUARTER INCH.
7. APPLY WATER AND MAINTAIN SEEDED AREA. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE SOUTH CAROLINA LAND RESOURCES CONSERVATION COMMISSION "EROSION AND SEDIMENT CONTROL PRACTICES FOR DEVELOPING AREAS".
8. FERTILIZING: APPLY 15-0-15 FERTILIZER AT THE RATE OF 10 POUNDS PER 1,000 SQUARE FEET RAKING LIGHTLY INTO THE SOIL.
9. MULCHING: WHEAT STRAW IS TO BE SPREAD LIGHTLY OVER SEEDED AREA AT THE RATE OF 1 BALE PER 500 SQUARE FEET.
10. WATERING: WATER IMMEDIATELY AFTER MULCHING.
11. ALL SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.
12. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
13. COPIES OF THE SCDHEC/OCRM APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
14. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE NPDES GENERAL PERMIT SCR100000. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRICT COMPLIANCE WITH PERMIT SCR100000.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING WRITTEN WEEKLY INSPECTION REPORTS, AS MAY BE REQUIRED BY SCDHEC/OCRM NPDES GENERAL PERMIT SCR100000.
16. THE CONTRACTOR WILL GRASS ALL DISTURBED AREAS NOT PAVED AS PER THE SEEDING SCHEDULE OR SC DHEC/OCRM REQUIREMENTS.
17. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT AS MAY BE REQUIRED.

APPLICABLE SCDOT STANDARD DRAWINGS

100-105-00	SYMBOLS AND ABBREVIATIONS (ROAD)
100-110-00	SYMBOLS AND ABBREVIATIONS (UTILITY)
601-110-00	MATERIALS STORAGE PRIMARY & SECONDARY RURAL ROADWAYS
601-115-00	MATERIALS STORAGE PRIMARY & SECONDARY URBAN ROADWAYS
601-205-01	PROTECTION OF EXCAVATIONS ADJACENT TO ROADWAY
610-005-00	FLAGGING OPERATION TWO-LANE TWO-WAY PRIMARY & SECONDARY ROUTES
610-205-00	RIGHT SHOULDER CLOSURE (CASE I/ CASE II) PRIMARY ROUTES
610-210-00	LEFT SHOULDER CLOSURE (CASE I/ CASE I) PRIMARY ROUTES
610-215-00	LEFT SHOULDER CLOSURE (CASE I/ CASE II) PRIMARY ROUTES
625-305-00	STANDARD MARKINGS FOR INTERSECTIONS
714-000-00	PIPE CULVERTS
719-000-00	DRAINAGE STRUCTURES
719-201-00	DROP INLET (24"x24")
720-105-01	CURB & GUTTER (CONCRETE)
720-105-02	CURB & GUTTER (CONCRETE) TRANSITION CURB
804-310-00	RIPRAP (PIPE & DITCH LINING)
815-000-00	EROSION CONTROL
815-605-00	TEMPORARY EROSION & SEDIMENTATION CONTROL (SILT FENCE)

ALL INLET PROTECTION TO TO SCDOT TYPE F

EXISTING SURVEY LEGEND

SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
	BM	SURVEY BENCHMARK		TBX	TELEPHONE BOX
	RWMON	RIGHT-OF-WAY MONUMENT		TPED	TELEPHONE PEDESTAL
	CONMON	CONCRETE MONUMENT	G	GAS	POINT ON GAS LINE
E. I. P.	EIP	EXIST. IRON PIN		FH	FIRE HYDRANT
	CB	EXIST. CATCH BASIN	W	WP	WITNESS POST
	DI	EXISTING DROP INLET		WM	WATER/GAS METER
JB	JB	EXIST. JUNCTION BOX		WV	WATER/GAS VALVE
	MH/SMH	MANHOLE/SEWER MANHOLE	M	WMW	WATER MONITORING WELL
	GP	GUY POLE		CATV	CABLE TELEVISION BOX
	GUY	GUY WIRE		——	SHRUB
	MSP	METER/SERVICE POLE	MB	MB	MAILBOX
	PP	POWER POLE		FLAG	FLAGPOLE
P	EPED	ELECTRIC PEDESTAL	A/C	AC	AIR CONDITIONING UNIT
	ETB	ELECTRIC TRANSFORMER BOX		SIGN	SIGN
LP	LP	LIGHT POLE		COL	COLUMN
	FLT	FLOOD LIGHT	F	FC	FILL CAP
—	TP	TELEPHONE POLE	VAC	VAC	VACUUM (COMMERCIAL)

WATER LINE	-W ——— W ———
ELECTRIC WIRE (UNDERGROUND)	——— UE ———
ELECTRIC WIRE (OVERHEAD)	-E ——— E ——— E
TELEPHONE LINE (UNDERGROUND)	——— T ———
TELEVISION LINE (UNDERGROUND)	——— UTV ———
FIBER OPTIC CABLE LINE	·FOL ——— FOL ——— FOL ———
GAS LINE	—— — — G — — — G ——
SANITARY SEWER LINE	- SS ——— SS ———
EXISTING PROPERTY LINE	——— - ——— - ——— - ———
FENCE LINE	X — X — X — X — X — X —
STORM SEWER	================

PROPOSED IMPROVEMENTS LEGEND

PS	PERMANENT SEEDING	TS	TEMPORARY SEEDING
	OUTLET PROTECTION		TREE REMOVAL

STORM SEWER	—►—►—►—►—
TREE PROTECTION	— — — — — — — —
SILT FENCE	— — — NPDES — — — — — NPDES — — — — — NPDES —
LIMITS OF DISTURBANCE	— — — — — — — —

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON
3-14-2016

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION
3/15/16

INFRASTRUCTURE CONSULTING & ENGINEERING

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
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TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA PRAESERUARE ET PROSPERARE 1663 · 1983

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

GENERAL NOTES

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

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3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	ROAD ROUTE NO.	PROJECT ID NO.	SHEET NO.
3	S.C.	BEAUFORT	LEMOYNE AVE.		2A

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	PAY ITEM	COMPUTED QUANTITY	PAY UNIT	INCIDENTAL QUANTITY
1031000	MOBILIZATION	NEC.	LS	
1050800	CONSTRUCTION STAKES, LINES & GRADES	1	EA	
1071000	TRAFFIC CONTROL	NEC	LS	
2012000	CLEARING & GRUBBING WITHIN ROADWAY	NEC	LS	
2016000	SELECTED REMOVAL OF MARKED TREES	NEC	LS	
2024100	REMOVAL & DISPOSAL OF EXISTING CURB	150	LF	
2025000	REMOVAL & DISPOSAL OF EXISTING ASPHALT PAVEMENT	520	SY	
2031000	UNCLASSIFIED EXCAVATION (INCLUDES PONDS)	7160	CY	
2103000	FLOWABLE FILL CY 15			
3050106	GRADED AGGREGATE BASE COURSE (6" UNIFORM)	1000	SY	
3100320	HOT MIX ASPHALT BASE COURSE – TYPE B	200	TON	
4011004	LIQUID ASPHALT BINDER PG64-22	80	TON	
4013990	MILLING EXISTING ASPHALT PAVEMENT (VARIABLE)	700	SY	
4030340	HOT MIX ASPHALT SURFACE COURSE TYPE C or CM	1165	TON	
6020005	PERMANENT CONSTRUCTION SIGNS (GROUND MOUNTED)	304	SF	
6271020	12" WHITE SOLID LINES – THERMO. – 125 MIL	60	LF	
6271010	4" WHITE SOLID LINES (PVT. EDGE LINES) THERMO.– 90 MIL.	2460	LF	
6271025	24" WHITE SOLID LINES (STOP/DIAG LINES)–THERMO.–125 MIL	125	LF	
6271030	WHITE SINGLE ARROWS (LT, STRGHT, RT) THERMO.–125 MIL	2	EA	
6271050	HANDICAP SYMBOL – THERMOPLASTIC – 125 MIL.	1	EA	
6271074	4" YELLOW SOLID LINES(PVT.EDGE LINES) THERMO–90 MIL.	2360	LF	
6510105	FLAT SHEET, TYPE III, FIXED SZ. & MSG. SIGN	44.00	SF	
6531210	U–SECTION POST FOR SIGN SUPPORTS – 3P	100	LF	
7141141	14"X 23" HORIZONTAL ELLIPTICAL(HE) RC PIPE CUL.–CLASS HE–III	90	LF	
7141112	15" RC PIPE CUL.–CLASS III	670	LF	
7141113	18" RC PIPE CUL.–CLASS III	152	LF	
7141114	24" RC PIPE CUL.–CLASS III	32	LF	
7191250	CATCH BASIN –TYPE 9 MH (POND OUTLET STRUCTURES)	2	EA	
7192020	DROP INLET(24" X 36")	5	EA	
7192105	MANHOLE	2	EA	
7192260	48" X 48" JUNCTION BOX	1	EA	
719228Z	JUNCTION BOX (SPECIAL)	1	EA	
7197120	ADJUST EXISTING MANHOLE TOPS	NEC	LS	
7197141	ADJUST UTILITY VALVE BOX COVERS	NEC	LS	
7198420	MANHOLE – CONVERT EXISTING DROP INLET 24"X 36"	1	EA	
7198530	DROP INLET 24" X 36" – CONVERT EXIST. CATCH BASIN (ROOF/GRATE)	2	EA	
7207001	CONCRETE FLUME (AT BIO–SWALE)	4	EA	
7203110	CONCRETE CURB AND GUTTER(1*–6") VERTICAL FACE	280	LF	
7204100	CONCRETE FOR APRONS AT CROSSWALKS (4" UNIFORM)	25	SY	
7204900	DETECTABLE WARNING SURFACE	45	SF	
8072000	RESET CHAIN LINK FENCE	65	LF	
8114011	TREE PROTECTION	NEC	LS	
8132000	SODDING – CENTIPEDE GRASS	15	SY	

ITEM NO.	PAY ITEM	COMPUTED QUANTITY	PAY UNIT	INCIDENTAL QUANTITY
8151110	TEMP. EROSION CONTROL BLANKET	1.135	MSY	
8151101	TURF REINFORCEMENT MATTING (TRM) TYPE 1	0.113	MSY	
8152004	INLET STRUCTURE FILTER – TYPE F (WEIGHTED)	150	LF	
8152007	SEDIMENT TUBES FOR DITCH CHECKS	40	LF	
8152006	INLET STRUCTURE FILTER– TYPE F (NON–WEIGHTED)	150	LF	
8153000	SILT FENCE LF 300			
DETAIL	GRAVEL FILTER RING AT OUTLET STRUCTURES	2	EA	
DETAIL	GRAVEL FILTER UNDER ELLIPTICAL PIPES – #57 STONE	48	TN	
DETAIL	FILTER FABRIC FOR GRAVEL UNDER ELLIPTICAL PIPES (MIRAFI 140N)	1180	SF	
DETAIL	FLARED END SECTION (GEORGIA DOT)	3	EA	
DETAIL	CONCRETE WHEEL STOPS	12	EA	
SPECIAL	RECONSTR. ASPHALT FOR REPLACEMENT OF EXIST. RCP	NEC	LS	
DETAIL	REMOVAL AND RELOCTION OF EXISTING PATHWAY SIGNS	NEC	LS	
SP–1	RELOCATION OF EXISTING RR TIE WALLS	100	LF	
SP–2	NEW MORTARLESS BLOCK RETAINING WALLS	180	LF	
SP–3	TRAFFIC PATTERN XD IMPRINTED CROSSWALK	260	SF	

INFRASTRUCTURE CONSULTING & ENGINEERING

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON D. LIVINGSTON 3/15/16

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
7			
6			
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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

SUMMARY OF ESTIMATED QUANTITIES

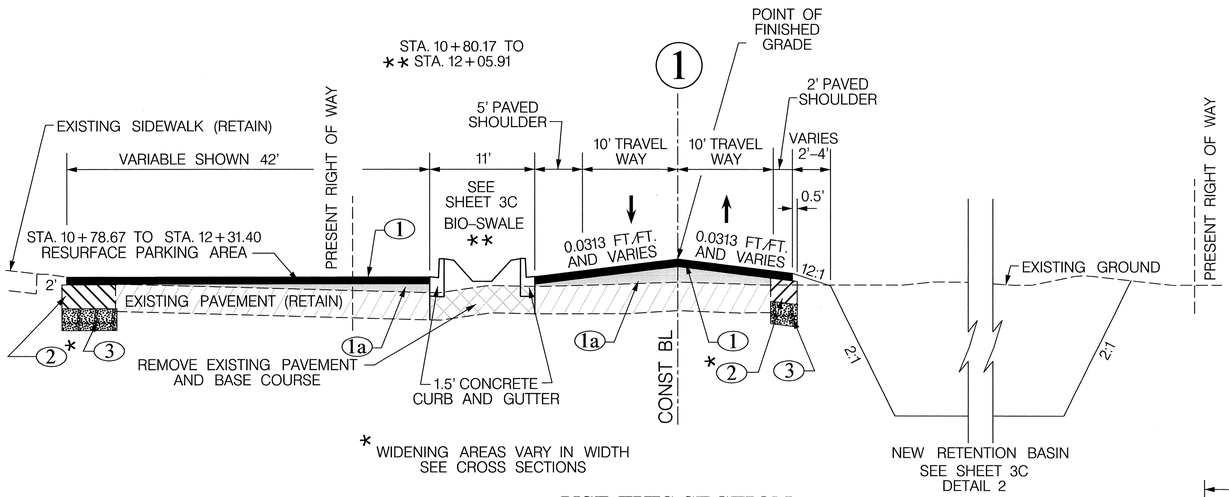
LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

$$user$$
0 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_02a- Quantity.dgn
3/15/2016

cpr_SEQ.dgn

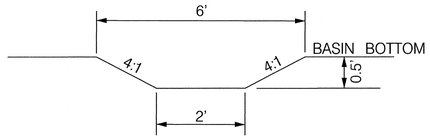
TYPICAL SECTIONS OF IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3

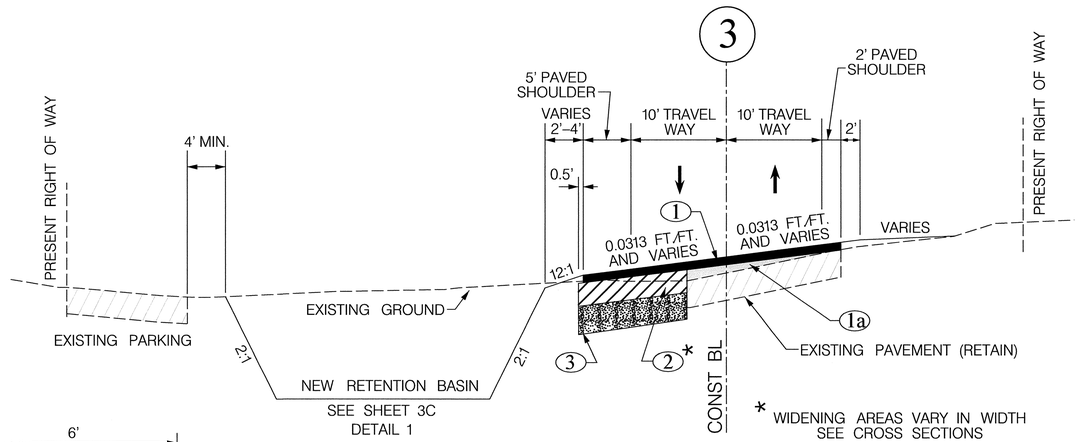


USE THIS SECTION
FROM STA. 10+19.53 TO STA. 12+40

MILLING OF EXISTING PAVEMENT TO BE AS NECESSARY TO MEET PROPOSED GRADES

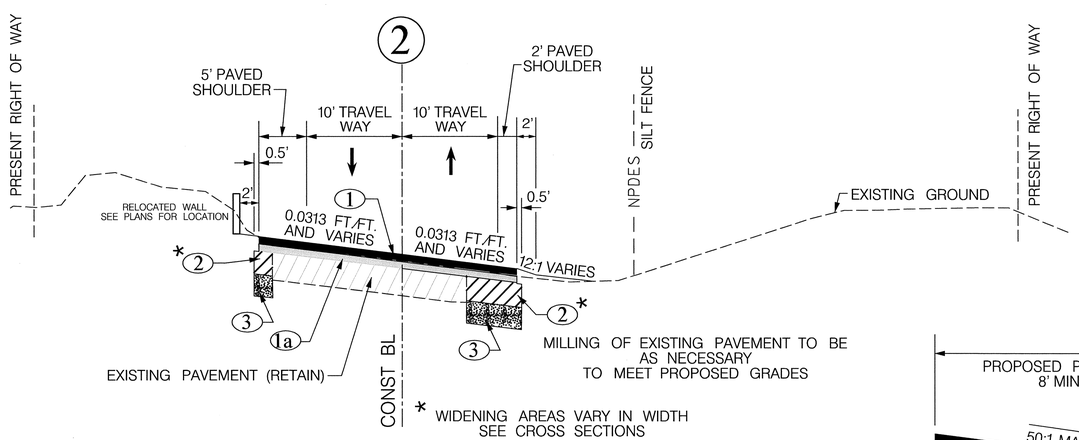


PILOT CHANNEL DETAIL



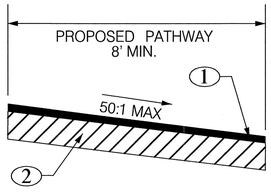
USE THIS SECTION
FROM STA. 13+50 TO STA. 16+00

MILLING OF EXISTING PAVEMENT TO BE AS NECESSARY TO MEET PROPOSED GRADES

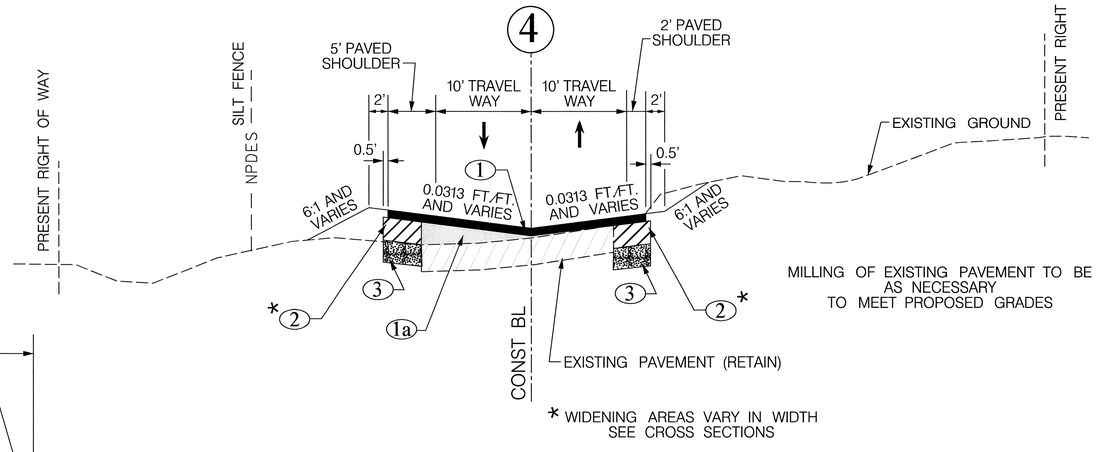


USE THIS SECTION
FROM STA. 12+40 TO STA. 13+50

NOTE: IF AREAS OF WIDENING ARE LESS THAN 6' IN WIDTH, USE 450 LBS ASPHALT AGREGATE BASE COURSE IN PLACE OF GRADED AGGREGATE



PATHWAY TYPICAL



USE THIS SECTION
FROM STA. 16+00 TO STA. 20+87.44

LEGEND

1	HOT MIX ASPHALT SURFACE COURSE TYPE C OR CM - 200 LBS/SY
1a	HOT MIX ASPHALT SURFACE COURSE TYPE C OR CM - FOR BUILD UP (VARIES)
2	GRADED AGGREGATE BASE COURSE (6" UNIFORM)
3	COMPACTED SUBBASE (24" SAND SUBBASE)

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26636 AARON O. LINKSTON 3-14-2016

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

NOT TO SCALE

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
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TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

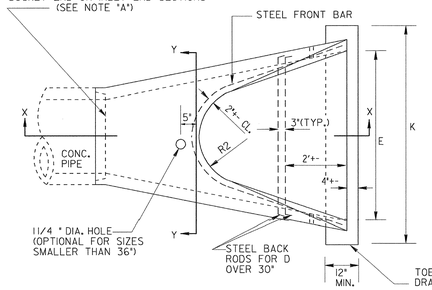
Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03_TYPSEC.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD /ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3A

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

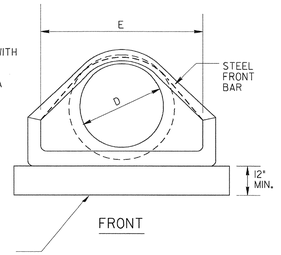
CONCRETE FLARED END SECTION

END SECTION TO PIPE JOINT SHOWN AS TYPICAL:
HUB END ON OUTLET END SECTIONS;
SOCKET END ON INLET END SECTIONS
(SEE NOTE "A")



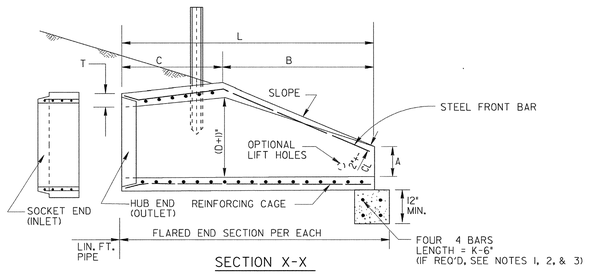
PLAN

INSTALLATION: (D OVER 30") CABLE, CHAIN, OR LIFTING PIN WILL EXTEND THRU 1 1/4 " HOLE WITH A PLATE OR REBAR CONNECTED INSIDE THE CONC. SECTION TO PROVIDE ADEQUATE BEARING AREA OR A LIFTING ASSEMBLY DEVICE MAY BE USED TO GIVE 3 LIFT POINTS. HOOKS CONNECTED DIRECTLY TO CONCRETE IS NOT PERMITTED. DAMAGE FROM IMPROPER HANDLING SHALL BE CAUSE FOR REJECTION.

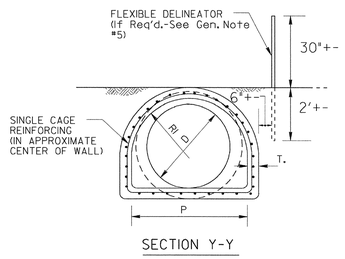


FRONT

NOTE: DO NOT CUT CONCRETE PIPE. USE FULL LENGTH SECTIONS ONLY. WARP SLOPE TO CONFORM WITH PIPE LENGTH AND END SECTION.



SECTION X-X



SECTION Y-Y

REINFORCING CAGE:

(1.) WIRE FABRIC HAVING EQUAL STEEL AREA AS INNER CAGE FOR CLASS II PIPE, AASHTO M-170.
(2.) ALTERNATE: * 3 BARS SPACED 12"+LONGITUDINALLY WITH * 2 BARS TRANVERSELY AT 6' O.C. MAX. SPACING, SPOT WELDED OR TIED TO FORM CAGE. (BACK RODS MAY BE OMITTED.)

NOTE "A":

CONTRACTOR WILL INFORM PRODUCER IF CONCRETE FLARED END SECTION IS FOR INLET OR FOR OUTLET END. SOCKET (TONGUE OR SPIGOT) END IS REQUIRED FOR INLETS. HUB (GROOVE OR BELL) END IS REQUIRED FOR OUTLETS. SOCKET TO SOCKET OR HUB TO HUB JOINT WILL NOT BE ACCEPTED UNLESS A REINFORCED CONCRETE COLLAR IS BUILT AROUND THE JOINT WITH NO PAYMENT BEING MADE FOR THE COLLAR.

FLARED END SECTIONS SHALL BE JOINTED TO PIPE WITH ALL SPACE IN THE JOINT FILLED WITH EITHER BITUMINOUS PLASTIC CEMENT OR PREFORMED PLASTIC GASKET (SEC. 848).

WALL THICKNESS (T) IS SHOWN AS NOMINAL AND MAY BE INCREASED AT PRODUCER'S OPTION FOR DESIRED JOINT DESIGN OR TO ALLOW A FLAT OUTSIDE BOTTOM ON THE FLARE, WITH INSIDE DIMENSIONS OF FLARE RETAINED AS SHOWN.

T = PIPE WALL THICKNESS (0.0833D + 1"+- TYPICAL)

DIMENSIONS AND REINFORCING FOR CONCRETE FLARED END SECTIONS (+- 1" TOLERANCE)

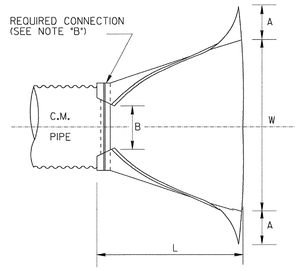
PIPE DIA	FRONT BAR	BACK RODS	SLOPE +-	A	B	C *	L *	E	P	R1	R2	OUTLET TOEWALL (IF REQ'D) K= E + 2'	OUTLET TOEWALL (IF REQ'D) CU.YDS. CONC.
12"	1-#3 x 5'-4"	NOT REQ'D.	2.2d	4"	2'-0"	4'-1"	6'-1"	2'-0"	1'-8"	1'-0"	9"	4'-0"	.148
15"	1-#3 x 6'-0"	NOT REQ'D.	2.2d	6"	2'-3"	3'-10"	6'-1"	2'-6"	2'-0"	1'-0"	11"	4'-6"	.167
18"	1-#3 x 7'-2"	NOT REQ'D.	2.2d	9"	2'-3"	3'-10"	6'-1"	3'-0"	2'-5"	1'-4"	1'-0"	5'-0"	.185
24"	1-#3 x 9'-10"	NOT REQ'D.	2.4d	10"	3'-8"	2'-6"	6'-2"	4'-0"	2'-9"	1'-5"	1'-2"	6'-0"	.222
30"	1-#4 x 11'-8"	NOT REQ'D.	2.4d	12"	4'-6"	1'-8"	6'-2"	5'-0"	3'-1"	1'-6"	1'-3"	7'-0"	.259
36"	1-#4 x 13'-10"	2-#4 x 6'-3"	2.4d	15"	5'-3"	2'-11"	8'-2"	6'-0"	4'-0"	2'-0"	1'-8"	8'-0"	.296
42"	1-#4 x 13'-10"	2-#4 x 7'-4"	2.4d	21"	5'-3"	2'-11"	8'-2"	6'-6"	4'-6"	2'-4"	1'-10"	8'-6"	.315

NOTE: SPECIFIED REINFORCING IS MINIMAL AND MAY BE INCREASED AT PRODUCERS OPTION TO AID CASTING & HANDLING. ALTERNATE REINFORCEMENT PERMITTED IF APPROVED.

* NOTE: "C" AND "L" DIMENSION MAY BE MEASURED TO EITHER END OF JOINT CONNECTION AT PIPE.

METAL FLARED END SECTION

(USE ONLY WITH COR. METAL PIPE)



PLAN

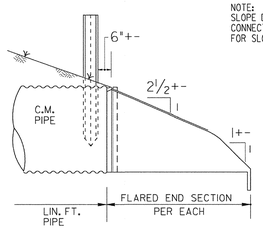
NOTE: GALVANIZED STEEL FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED STEEL PIPE AND ALUMINUM FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED ALUMINUM PIPE UNLESS OTHERWISE APPROVED BY D.O.T. OFFICE OF MATERIALS AND TESTS.

FLARED END SECTION DIMENSIONS

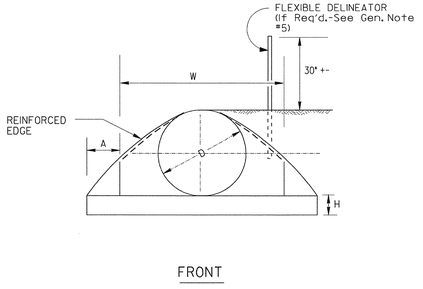
PIPE SIZE "D"	THICKNESS GALV. STEEL	THICKNESS ALUM.	A A= 0.4D +- 1"	B B=0.5 D +- 1"	H H=0.25D +- 1" (MIN.6")	L L=1.67D +- 1/2"	W W=2.0D +- 2"
12"	.064"	.060"	5"	6"	6"	1'-8"	2'-0"
15"	.064"	.060"	6"	7"	6"	2'-3"	2'-6"
18"	.064"	.060"	7"	9"	6"	2'-6"	3'-0"
24"	.064"	.060"	9"	1'-0"	6"	3'-4"	4'-0"
30"	.079"	.105"	1'-0"	1'-3"	7"	4'-2"	5'-0"
36"	.079"	.105"	1'-2"	1'-6"	9"	5'-0"	6'-0"
42"	.109"	.164"	1'-5"	1'-9"	10"	5'-10"	7'-0"

NOTE: WHERE METAL FLARED END SECTIONS ARE USED WITH MULTIPLE PIPE LINES, THE STANDARD SPACING BETWEEN PIPES (S=D OR 3 FT.) MAY HAVE TO BE INCREASED (S=1.75 D TYPICAL). TO PREVENT OVER-LAP OF END SECTION WINGTIPS. SEE ALSO STD. 1030D.

NOTE: SLOPE DRAIN PIPES WILL REQUIRE AN ELBOW FOR CONNECTION TO THE FLARED END SECTION. PAYMENT FOR SLOPE DRAIN PIPE WILL INCLUDE THIS ELBOW.



SIDE



FRONT

NOTE "B":

THE CONNECTION BETWEEN METAL FLARED END SECTION AND C.M. PIPE WILL BE ONE OF THE FOLLOWING:

(a) A STRAP BAND OR THREADED ROD PROVIDED BY THE MANUFACTURER WILL LOCK END SECTION ONTO PIPE. A CORRUGATION AT THE PIPE AND WILL BE NON-SPIRALED (PERPENDICULAR TO CL OF PIPE)

(b) A DIMPLE BAND COLLAR WILL BE SHOP BOLTED TO END SECTION. PIPE WILL BE INSERTED INTO BAND COLLAR TO MEET THE END SECTION.

(c) A STUB PIPE WILL BE RIVITED TO THE END SECTION AND THE MAIN PIPE CONNECTED TO THE STUB WITH A NORMAL CONNECTING BAND.

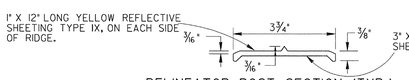
(d) OTHER TYPE CONNECTION IF RECOMMENDED BY MANUFACTURER AND APPROVED BY THE D.O.T.

SPECIAL NOTE:
FLARED END SECTIONS ARE NORMALLY LIMITED TO USE OUTSIDE THE CLEAR ZONE OR BEHIND BARRIER AND WHERE HYDRAULICS PERMIT. SEE OTHER STANDARDS OR DETAILS FOR TAPERED HEADWALLS, SAFETY SLOPE END SECTIONS OR OTHER PIPE END STRUCTURES.

GENERAL NOTES :

1. TOEWALLS ARE REQ'D. FOR OUTLETS OF CONC. STORM DRAINS, EXCEPT WHERE DITCH PAVING OR OTHER EROSION PROTECTION IS PROVIDED OR WHERE THE OUTLET VELOCITY IS LESS THAN 8 FT./SEC. TOEWALLS ARE NOT REQUIRED FOR SIDE DRAINS. SLOPE DRAINS OR INLETS OF STORM DRAINS THIS CRITERIA MAY BE VARIED WHERE SPECIFIED BY THE DESIGNER OR THE ENGINEER.
2. TOEWALLS WILL BE PAID FOR AS CU. YDS. OF CLASS "A" OR "B" CONCRETE. CONTRACTOR MAY ELECT TO CONSTRUCT TOE WALL WITH SAND CEMENT BAG RIPRAP OR STONE RIPRAP TO SAME MINIMUM DIMENSIONS WITH NO ADDITIONAL PAYMENT.
3. PRECAST TOEWALLS SHALL BE CL. "A" CONCRETE; CAST-IN-PLACE TOEWALLS MAY BE CL "A" OR "B" CONCRETE AND MAY BE TRENCH FORMED. WHERE PLANS ITEMIZE ONE CLASS OF CONCRETE AND CONTRACTOR ELECTS TO USE OTHER CLASS, NO ADDITIONAL PAYMENT IS MADE. NO PAYMENT IS MADE FOR STEEL IN TOEWALL.
4. CENTERLINE OF FLARED END SECTION WILL ALIGN WITH CENTERLINE OF PIPE, IF PIPE IS SKEWED, THE EMBANKMENT SLOPE WILL BE WARPED TO CONFORM WITH END SECTION.
5. FLEXIBLE DELINEATORS SHALL BE REQUIRED AT CROSS DRAIN FLARED END SECTIONS, BOTH INLET AND OUTLET. PAYMENT FOR FLARED END SECTION WILL INCLUDE DELINEATORS, SEE DETAIL AND NOTES BELOW. DELINEATORS NOT REQ'D. FOR SIDE DRAIN, SLOPE DRAIN, OR LONG PIPE.

1" X 12" LONG YELLOW REFLECTIVE SHEETING TYPE IX, ON EACH SIDE OF RIDGE.



3" X 12" LONG YELLOW REFLECTIVE SHEETING TYPE IX.

DELINEATOR POST SECTION (TYP.)

NOTE:
DELINEATOR POST SHALL CONFORM TO SEC. 911 FOR FLEXIBLE DELINEATOR POST EXCEPT REFLECTIVE SHEETING IS NOT REQUIRED AND LENGTH IS 4'-6" FROM TOP TO BOTTOM POINT. ALTERNATES PERMITTED IF APPROVED BY D.O.T. LABORATORY.

SPECIAL NOTE :
PIPE SIZES (D) ARE "NOMINAL-MINIMUM" INSIDE DIAMETERS IN ACCORDANCE WITH GEORGIA STANDARD FOR PIPE CULVERTS. "D" DIMENSION FOR FLARED END SECTION SHALL EQUAL THE "D" DIMENSION FOR CONNECTING PIPE CULVERT.

6-5-06	REV. REFLECTIVE SHEETING	GLO	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

STANDARD
FLARED END SECTIONS
FOR PIPES

NO SCALE — REV. & REDR. SEPT., 1999

DES. ____ (SUBMITTED) STATE ROAD & AIRPORT DESIGN ENGINEER
REV. ____
RETR. ____ (APPROVED) CHIEF ENGINEER
CHK. ____

NUMBER 1120

NOTE: ALL MATERIALS AND WORKMANSHIP SHOWN ON THIS DRAWING TO CONFORM TO GEORGIA DOT STANDARDS

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

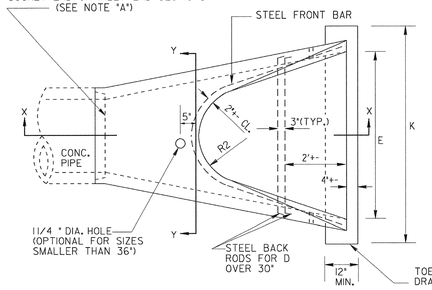
Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03A_DETAILS.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3A

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

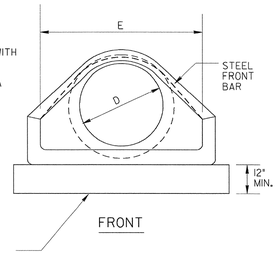
CONCRETE FLARED END SECTION

END SECTION TO PIPE JOINT SHOWN AS TYPICAL:
HUB END ON OUTLET END SECTIONS;
SOCKET END ON INLET END SECTIONS
(SEE NOTE "A")



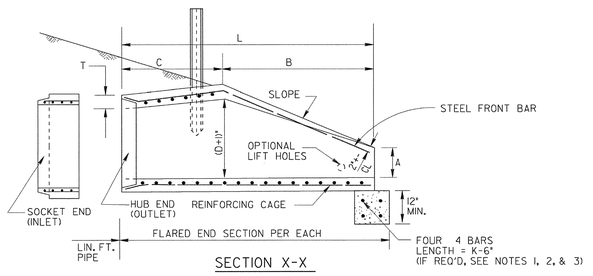
PLAN

INSTALLATION: (D OVER 30") CABLE, CHAIN, OR LIFTING PIN WILL EXTEND THRU 1 1/4 " HOLE WITH A PLATE OR REBAR CONNECTED INSIDE THE CONC. SECTION TO PROVIDE ADEQUATE BEARING AREA OR A LIFTING ASSEMBLY DEVICE MAY BE USED TO GIVE 3 LIFT POINTS. HOOKS CONNECTED DIRECTLY TO CONCRETE IS NOT PERMITTED. DAMAGE FROM IMPROPER HANDLING SHALL BE CAUSE FOR REJECTION.

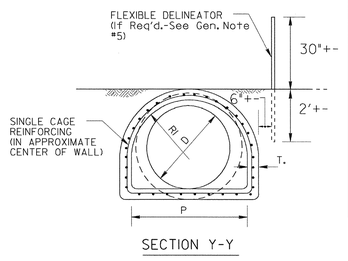


FRONT

NOTE: DO NOT CUT CONCRETE PIPE. USE FULL LENGTH SECTIONS ONLY. WARP SLOPE TO CONFORM WITH PIPE LENGTH AND END SECTION.



SECTION X-X



SECTION Y-Y

REINFORCING CAGE:

(1.) WIRE FABRIC HAVING EQUAL STEEL AREA AS INNER CAGE FOR CLASS III PIPE, AASHTO M-170.
(2.) ALTERNATE: * 3 BARS SPACED 12"+ LONGITUDINALLY WITH * 2 BARS TRANVERSELY AT 6' O.C. MAX. SPACING, SPOT WELDED OR TIED TO FORM CAGE. (BACK RODS MAY BE OMITTED.)

NOTE "A":
CONTRACTOR WILL INFORM PRODUCER IF CONCRETE FLARED END SECTION IS FOR INLET OR FOR OUTLET END. SOCKET (TONGUE OR SPIGOT) END IS REQUIRED FOR INLETS. HUB (GROOVE OR BELL) END IS REQUIRED FOR OUTLETS. SOCKET TO SOCKET OR HUB TO HUB JOINT WILL NOT BE ACCEPTED UNLESS A REINFORCED CONCRETE COLLAR IS BUILT AROUND THE JOINT WITH NO PAYMENT BEING MADE FOR THE COLLAR.
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T = PIPE WALL THICKNESS (0.0833D + 1"+- TYPICAL)

DIMENSIONS AND REINFORCING FOR CONCRETE FLARED END SECTIONS (+- 1" TOLERANCE)

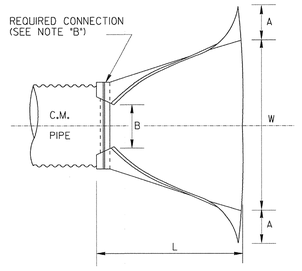
PIPE DIA	FRONT BAR	BACK RODS	SLOPE +-	A	B	C *	L *	E	P	R1	R2	OUTLET TOEWALL (IF REQ'D) K= E + 2'	OUTLET TOEWALL (IF REQ'D) CU.YDS. CONC.
12"	1-#3 x 5'-4"	NOT REQ'D.	2.2d	4"	2'0"	4'-1"	6'1"	2'0"	1'8"	10"	9"	4'-0"	.148
15"	1-#3 x 6'-0"	NOT REQ'D.	2.2d	6"	2'3"	3'10"	6'1"	2'6"	2'0"	1'0"	11"	4'-6"	.167
18"	1-#3 x 7'-2"	NOT REQ'D.	2.2d	9"	2'3"	3'10"	6'1"	3'0"	2'5"	1'4"	1'0"	5'-0"	.185
24"	1-#3 x 9'-10"	NOT REQ'D.	2.4d	10"	3'8"	2'-6"	6'2"	4'0"	2'9"	1'5"	1'2"	6'-0"	.222
30"	1-#4 x 11'-8"	NOT REQ'D.	2.4d	12"	4'6"	1'-8"	6'2"	5'0"	3'1"	1'6"	1'3"	7'-0"	.259
36"	1-#4 x 13'-10"	2-#4 x 6'3"	2.4d	15"	5'3"	2'11"	8'2"	6'0"	4'0"	2'0"	1'8"	8'-0"	.296
42"	1-#4 x 13'-10"	2-#4 x 7'4"	2.4d	21"	5'3"	2'11"	8'2"	6'6"	4'6"	2'4"	1'10"	8'-6"	.315

NOTE: SPECIFIED REINFORCING IS MINIMAL AND MAY BE INCREASED AT PRODUCERS OPTION TO AID CASTING & HANDLING. ALTERNATE REINFORCEMENT PERMITTED IF APPROVED.

* NOTE: "C" AND "L" DIMENSION MAY BE MEASURED TO EITHER END OF JOINT CONNECTION AT PIPE.

METAL FLARED END SECTION

(USE ONLY WITH COR. METAL PIPE)



PLAN

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FLARED END SECTION DIMENSIONS

PIPE SIZE "D"	THICKNESS GALV. STEEL	THICKNESS ALUM.	A A= 0.4D +- 1"	B B=0.5 D +- 1"	H H=0.25D +- 1" (MIN.6")	L L=1.67D +- 1/2"	W W=2.0D +- 2"
12"	.064"	.060"	5"	6"	6"	1'8"	2'0"
15"	.064"	.060"	6"	7"	6"	2'3"	2'6"
18"	.064"	.060"	7"	9"	6"	2'6"	3'0"
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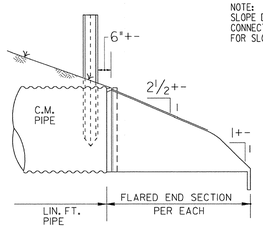
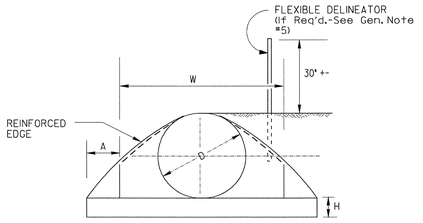
30"	.079"	.105"	1'0"	1'3"	7"	4'2"	5'0"
36"	.079"	.105"	1'2"	1'6"	9"	5'0"	6'0"
42"	.109"	.164"	1'5"	1'9"	10"	5'10"	7'0"

NOTE: WHERE METAL FLARED END SECTIONS ARE USED WITH MULTIPLE PIPE LINES, THE STANDARD SPACING BETWEEN PIPES (S=D OR 3 FT.) MAY HAVE TO BE INCREASED (S=1.75 D TYPICAL). TO PREVENT OVER-LAP OF END SECTION WINGTIPS. SEE ALSO STD. 1030D.



SIDE

NOTE:
SLOPE DRAIN PIPES WILL REQUIRE AN ELBOW FOR CONNECTION TO THE FLARED END SECTION. PAYMENT FOR SLOPE DRAIN PIPE WILL INCLUDE THIS ELBOW.



FRONT

NOTE "B":

THE CONNECTION BETWEEN METAL FLARED END SECTION AND C.M. PIPE WILL BE ONE OF THE FOLLOWING:

(a) A STRAP BAND OR THREADED ROD PROVIDED BY THE MANUFACTURER WILL LOCK END SECTION ONTO PIPE. A CORRUGATION AT THE PIPE AND WILL BE NON-SPIRALED (PERPENDICULAR TO CL OF PIPE)

(b) A DIMPLE BAND COLLAR WILL BE SHOP BOLTED TO END SECTION. PIPE WILL BE INSERTED INTO BAND COLLAR TO MEET THE END SECTION.

(c) A STUB PIPE WILL BE RIVITED TO THE END SECTION AND THE MAIN PIPE CONNECTED TO THE STUB WITH A NORMAL CONNECTING BAND.

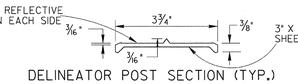
(d) OTHER TYPE CONNECTION IF RECOMMENDED BY MANUFACTURER AND APPROVED BY THE D.O.T.

SPECIAL NOTE:
FLARED END SECTIONS ARE NORMALLY LIMITED TO USE OUTSIDE THE CLEAR ZONE OR BEHIND BARRIER AND WHERE HYDRAULICS PERMIT. SEE OTHER STANDARDS OR DETAILS FOR TAPERED HEADWALLS, SAFETY SLOPE END SECTIONS OR OTHER PIPE END STRUCTURES.

GENERAL NOTES :

1. TOEWALLS ARE REQ'D. FOR OUTLETS OF CONC. STORM DRAINS, EXCEPT WHERE DITCH PAVING OR OTHER EROSION PROTECTION IS PROVIDED OR WHERE THE OUTLET VELOCITY IS LESS THAN 8 FT./SEC. TOEWALLS ARE NOT REQUIRED FOR SIDE DRAINS, SLOPE DRAINS OR INLETS OF STORM DRAINS THIS CRITERIA MAY BE VARIED WHERE SPECIFIED BY THE DESIGNER OR THE ENGINEER.
2. TOEWALLS WILL BE PAID FOR AS CU. YDS. OF CLASS "A" OR "B" CONCRETE. CONTRACTOR MAY ELECT TO CONSTRUCT TOE WALL WITH SAND CEMENT BAG RIPRAP OR STONE RIPRAP TO SAME MINIMUM DIMENSIONS WITH NO ADDITIONAL PAYMENT.
3. PRECAST TOEWALLS SHALL BE CL. "A" CONCRETE; CAST-IN-PLACE TOEWALLS MAY BE CL "A" OR "B" CONCRETE AND MAY BE TRENCH FORMED. WHERE PLANS ITEMIZE ONE CLASS OF CONCRETE AND CONTRACTOR ELECTS TO USE OTHER CLASS, NO ADDITIONAL PAYMENT IS MADE. NO PAYMENT IS MADE FOR STEEL IN TOEWALL.
4. CENTERLINE OF FLARED END SECTION WILL ALIGN WITH CENTERLINE OF PIPE, IF PIPE IS SKEWED, THE EMBANKMENT SLOPE WILL BE WARPED TO CONFORM WITH END SECTION.
5. FLEXIBLE DELINEATORS SHALL BE REQUIRED AT CROSS DRAIN FLARED END SECTIONS, BOTH INLET AND OUTLET. PAYMENT FOR FLARED END SECTION WILL INCLUDE DELINEATORS, SEE DETAIL AND NOTES BELOW. DELINEATORS NOT REQ'D. FOR SIDE DRAIN, SLOPE DRAIN, OR LONG PIPE.

1" X 12" LONG YELLOW REFLECTIVE SHEETING TYPE IX, ON EACH SIDE OF RIDGE.



DELINEATOR POST SECTION (TYP.)

NOTE:
DELINEATOR POST SHALL CONFORM TO SEC. 911 FOR FLEXIBLE DELINEATOR POST EXCEPT REFLECTIVE SHEETING IS NOT REQUIRED AND LENGTH IS 4'-6" FROM TOP TO BOTTOM POINT. ALTERNATES PERMITTED IF APPROVED BY D.O.T. LABORATORY.

SPECIAL NOTE :
PIPE SIZES (D) ARE "NOMINAL-MINIMUM" INSIDE DIAMETERS IN ACCORDANCE WITH GEORGIA STANDARD FOR PIPE CULVERTS. "D" DIMENSION FOR FLARED END SECTION SHALL EQUAL THE "D" DIMENSION FOR CONNECTING PIPE CULVERT.

	6-3-06	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
	REV. REFLECTIVE SHEETING	REVISION	STANDARD FLARED END SECTIONS FOR PIPES
			NO SCALE — REV. & REDR. SEPT., 1999
	CLD BY	DES. ____ REV. ____ RETR. ____ CHK. ____	(SUBMITTED) STATE ROAD & AIRPORT DESIGN ENGINEER (APPROVED) CHIEF ENGINEER — NUMBER 1120

NOTE: ALL MATERIALS AND WORKMANSHIP SHOWN ON THIS DRAWING TO CONFORM TO GEORGIA DOT STANDARDS

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03A_DETAILS.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3B

REFERENCES

NATIONAL DOCUMENTS
AASHTO M235

SCDOT DOCUMENTS
QUALIFIED PRODUCT LIST 14

RELATED DRAWINGS & KEYWORDS
719-310-00, 719-305-00, 719-009-01 TO 719-009-05

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EAGLE, II

SIGNATURE

MARCH 3, 2008
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	3/2008	DSO	GENERAL REVISIONS

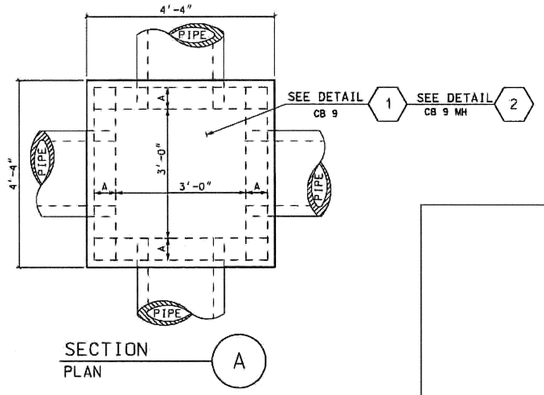
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

CATCH BASIN TYPE 9 & 9MH DETAILS

719-009-01

EFFECTIVE LETTING DATE | MAY, 2008

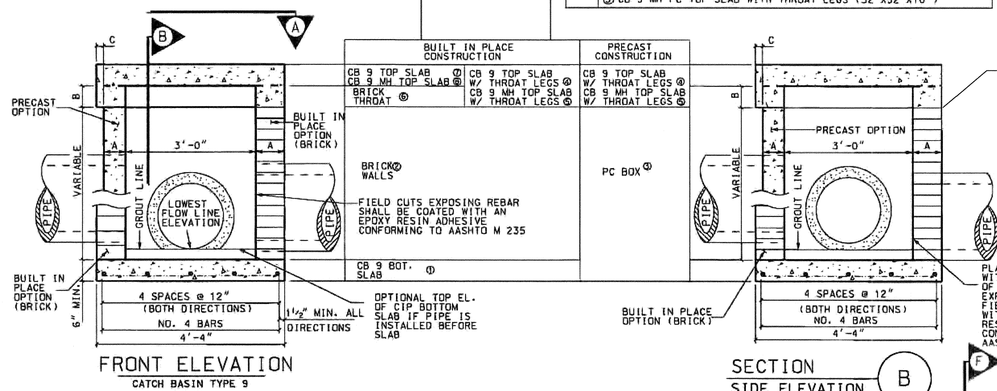


SECTION
PLAN
A

CONTRACTOR MAY USE PRECAST OR BUILT IN PLACE CONSTRUCTION NOTED ABOVE OR COMBINE OPTIONS AS DESIRED.

SEE QUALIFIED PRODUCT LIST 14 FOR MANUFACTURERS OF PRECAST ITEMS.

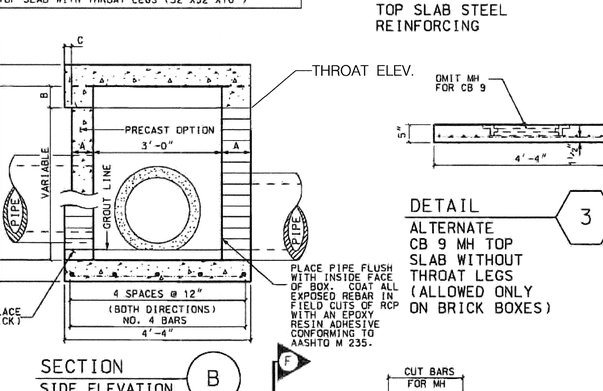
BUILT IN PLACE	① CB 9 BOTTOM SLAB (PC OR CIP 52"X52"X6") AND ② BRICK WALLS (8") AND ④ CB 9 PC TOP SLAB WITH THROAT LEGS (52"X52"X10") OR ⑤ CB 9 MH PC TOP SLAB WITH THROAT LEGS (52"X52"X10")
ALTERNATE BUILT IN PLACE	① CB 9 BOTTOM SLAB (PC OR CIP 52"X52"X6") AND ② BRICK WALLS (8") AND ⑥ BRICK THROAT (2 COARSE) AND ⑦ CB 9 PC TOP SLAB WITHOUT THROAT LEGS (52"X52"X5") OR ⑧ CB 9 MH PC TOP SLAB WITHOUT THROAT LEGS (52"X52"X5")
PRECAST	③ PC DRAINAGE BOX CONFORMING TO 719-310-00 OR 719-305-00 (3'X3'X__) (MAX 12' DEPTH) AND ④ CB 9 PC TOP SLAB WITH THROAT LEGS (52"X52"X10") OR ⑤ CB 9 MH PC TOP SLAB WITH THROAT LEGS (52"X52"X10")



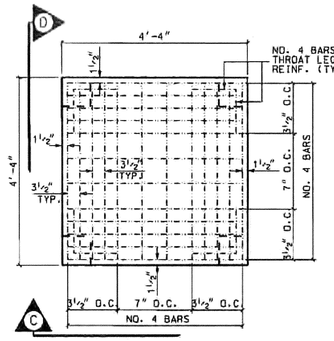
BUILT IN PLACE CONSTRUCTION	PRECAST CONSTRUCTION
CB 9 TOP SLAB ⑦ CB 9 MH TOP SLAB ⑧	CB 9 TOP SLAB W/ THROAT LEGS ④ CB 9 MH TOP SLAB W/ THROAT LEGS ⑤
BRICK ② THROAT ⑥	PC BOX ③
CB 9 BOT. SLAB ①	

FIELD CUTS EXPOSING REBAR SHALL BE COATED WITH AN EPOXY RESIN ADHESIVE CONFORMING TO AASHTO M 235

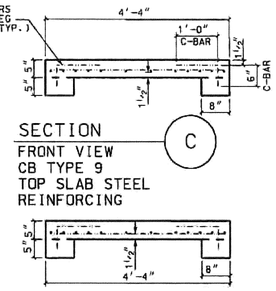
FRONT ELEVATION
CATCH BASIN TYPE 9



SECTION
SIDE ELEVATION
B

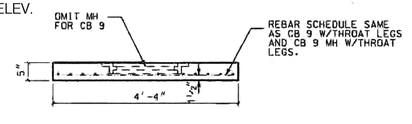


DETAIL
PLAN VIEW
CB TYPE 9
TOP SLAB STEEL
REINFORCING
1

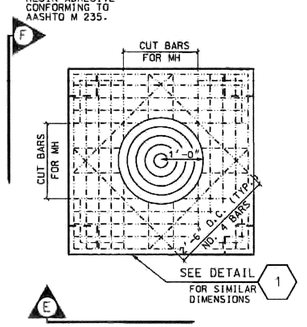


SECTION
FRONT VIEW
CB TYPE 9
TOP SLAB STEEL
REINFORCING
C

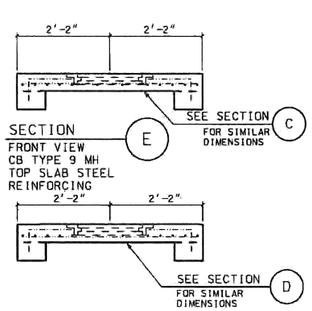
SECTION
SIDE VIEW
CB TYPE 9
TOP SLAB STEEL
REINFORCING
D



DETAIL
ALTERNATE
CB 9 MH TOP SLAB WITHOUT THROAT LEGS (ALLOWED ONLY ON BRICK BOXES)
3



DETAIL
PLAN VIEW
CB TYPE 9 MH
TOP SLAB STEEL
REINFORCING
2



SECTION
FRONT VIEW
CB TYPE 9 MH
TOP SLAB STEEL
REINFORCING
E

SECTION
SIDE VIEW
CB TYPE 9 MH
TOP SLAB STEEL
REINFORCING
F

PRECAST ITEMS
CB 9 BOTTOM SLAB (52"X52"X6")
CB 9 TOP SLAB WITH THROAT LEGS (52"X52"X10")
CB 9 MH TOP SLAB WITH THROAT LEGS (52"X52"X10")
ALTERNATE CB 9 TOP SLAB WITHOUT THROAT LEGS (52"X52"X5")
SEE ALSO STD. DRAWING 719-310-00 & 719-305-00

TABLE 719-009A

DIMENSION LABEL	PRECAST OPTION	BUILT IN PLACE OPTION
A	6"	8"
B	5"	2 COURSE OF BRICK
C	2"	0

USE SHEETS 719-009-01 THROUGH 719-009-05 FOR THIS ITEM
THIS DRAWING IS NOT TO SCALE

RETENTION STRUCTURE DETAILS

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

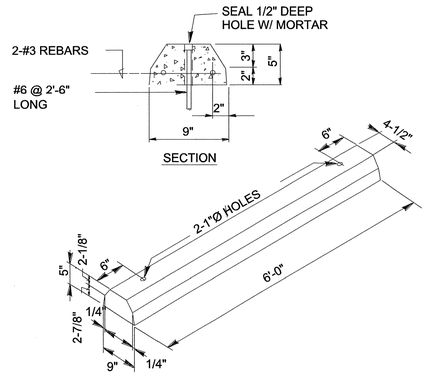
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

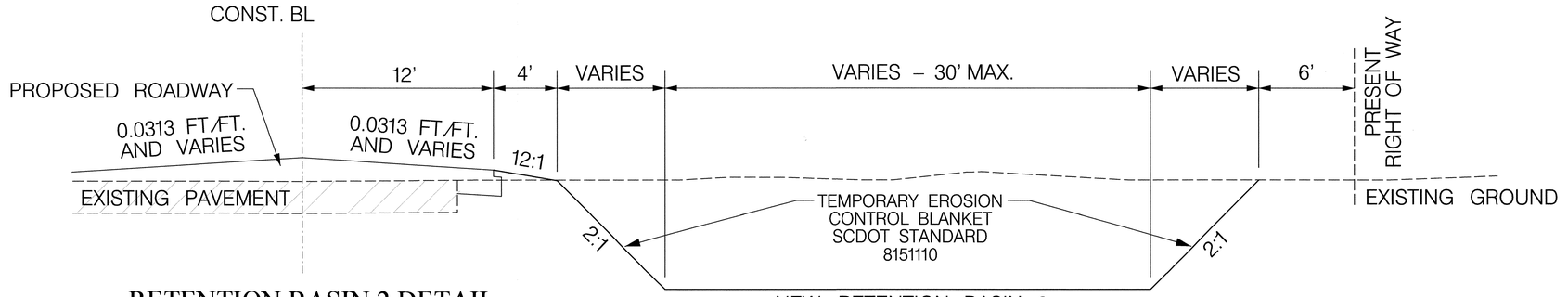
Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03B_DETAILS.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3C



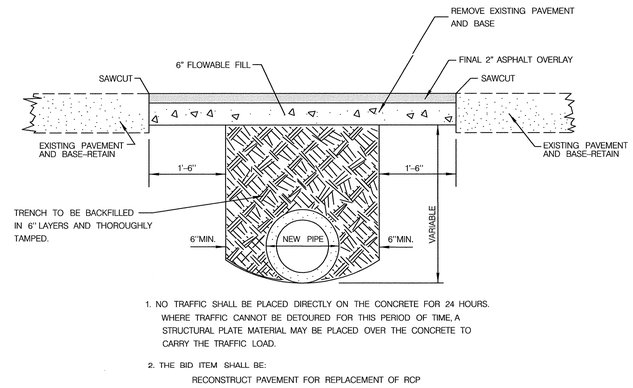
PRECAST CONCRETE WHEEL STOP

NTS



RETENTION BASIN 2 DETAIL
STA. 10+70 RT. TO STA. 11+76 RT.

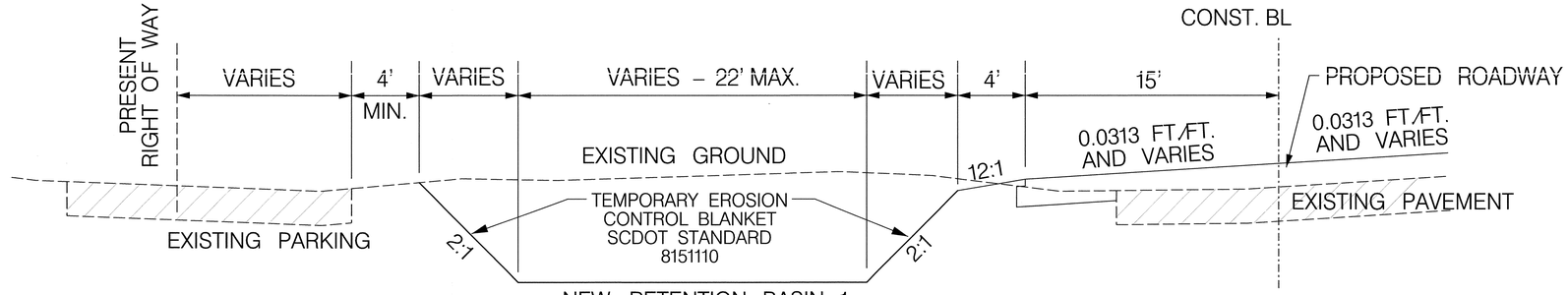
NTS



1. NO TRAFFIC SHALL BE PLACED DIRECTLY ON THE CONCRETE FOR 24 HOURS. WHERE TRAFFIC CANNOT BE DETOURED FOR THIS PERIOD OF TIME, A STRUCTURAL PLATE MATERIAL MAY BE PLACED OVER THE CONCRETE TO CARRY THE TRAFFIC LOAD.
2. THE BID ITEM SHALL BE: RECONSTRUCT PAVEMENT FOR REPLACEMENT OF RCP

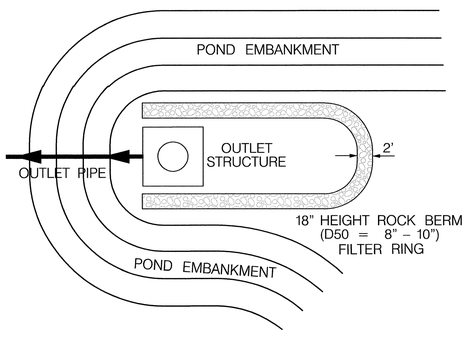
PAVEMENT REPAIR DETAIL - PARKING

NTS



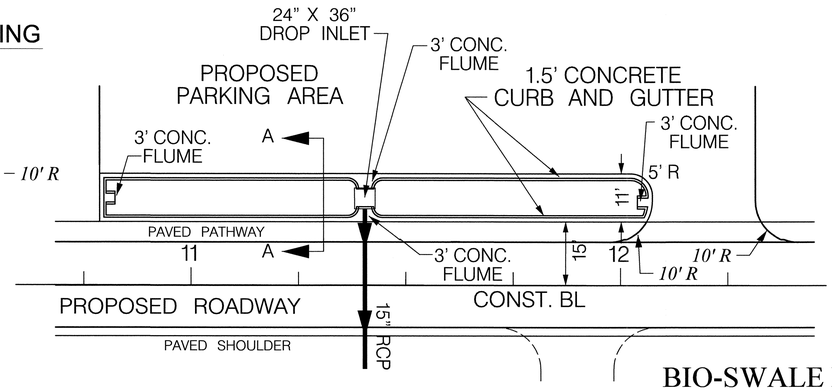
RETENTION BASIN 1 DETAIL
STA. 13+76 LT. TO STA. 15+92 LT.

NTS



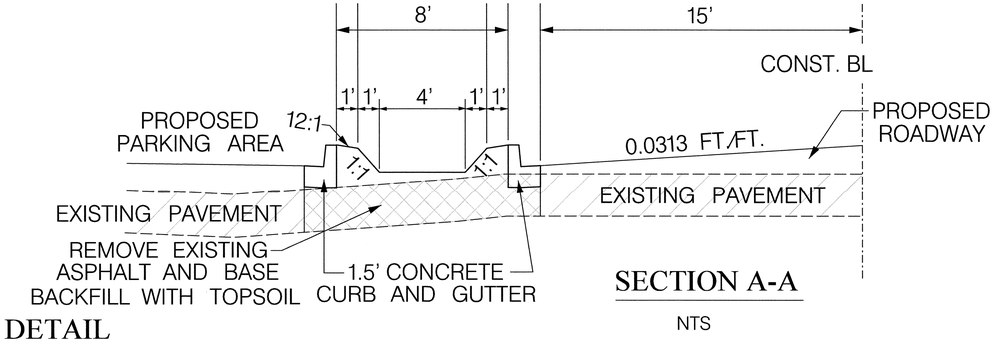
FILTER RING DETAIL

NTS



BIO-SWALE DETAIL

NTS



SECTION A-A

NTS

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON 3-14-2016

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

INFRASTRUCTURE CONSULTING & ENGINEERING

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

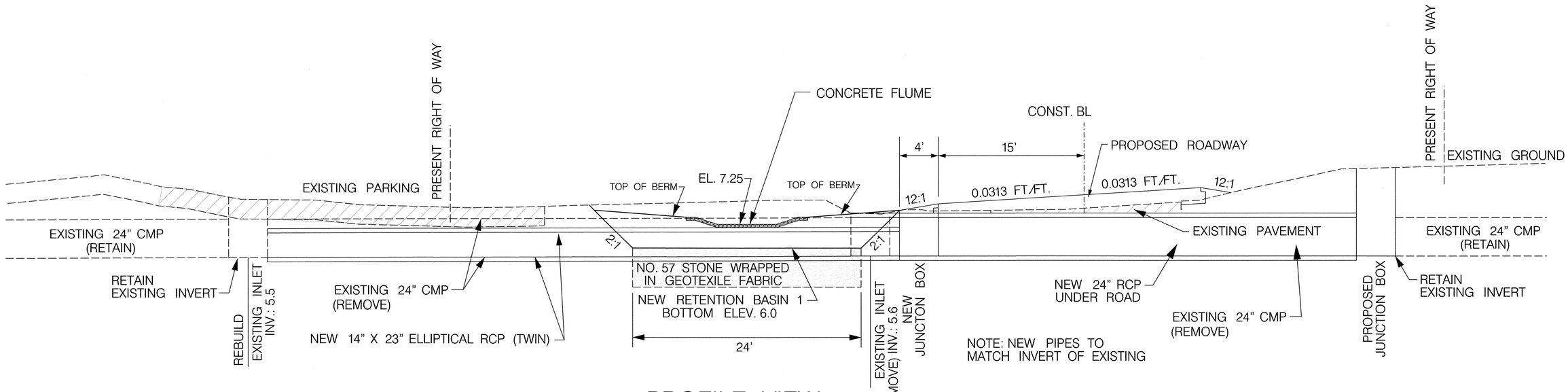
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

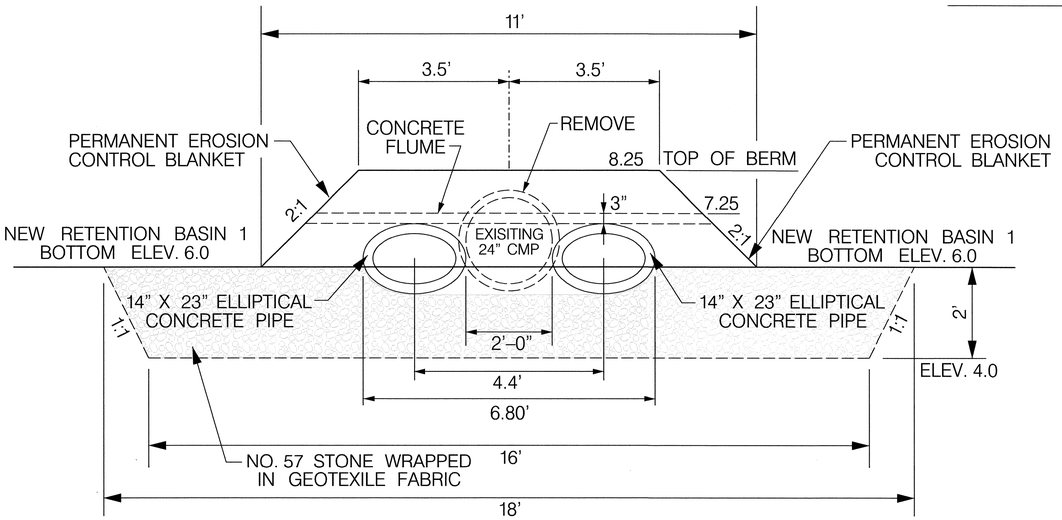
Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03C_DETAILS.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3D



PROFILE VIEW

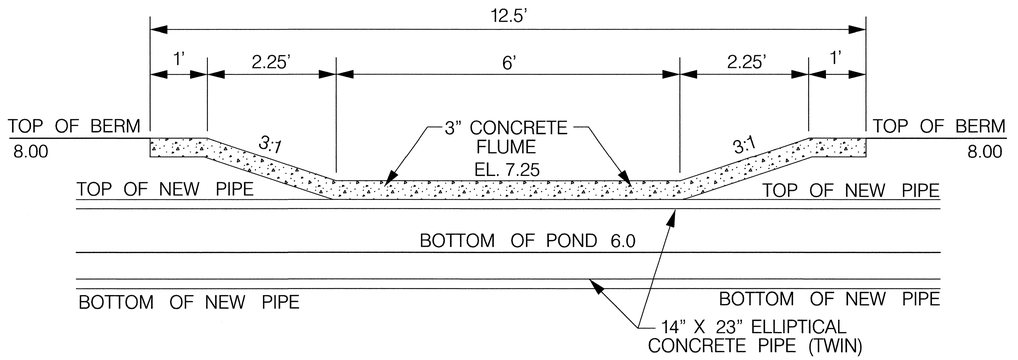
NTS



NOTE: NEW PIPES TO MATCH INVERT OF EXISTING

SECTION VIEW

NTS



FLUME DETAIL

NTS

PROPOSED BERM OVER TWIN ELLIPTICAL PIPES

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 MARION O. LIVINGSTON 2016

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

INFRASTRUCTURE CONSULTING & ENGINEERING

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03D_DETAILS.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3E

REFERENCES

NATIONAL DOCUMENTS

ASTM C55, ASTM A706, AASHTO M55, AASHTO M105, AASHTO M306, AASHTO M111

SCDOT DOCUMENTS

QUALIFIED PRODUCT LIST 14, QUALIFIED PRODUCT LIST 13

RELATED DRAWINGS & KEYWORDS

719-110-01 TO 719-11-02, 719-105-01, 719-550-00, 719-420-00, 719-425-00, 719-305-00, 719-310-00

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
NO. 8858
EDWIN SYLVESTER EAGLE, II

SIGNATURE

MARCH 3, 2008
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	3/2008	DSO	GENERAL REVISIONS

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

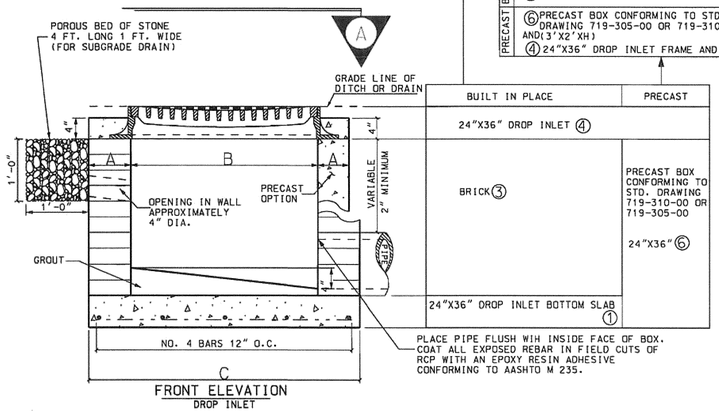
DROP INLET (24"X36") DETAILS

719-110-01

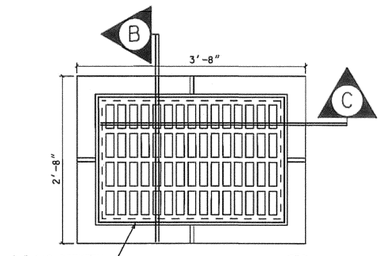
EFFECTIVE LETTING DATE: MAY 2008

THIS DRAWING IS NOT TO SCALE

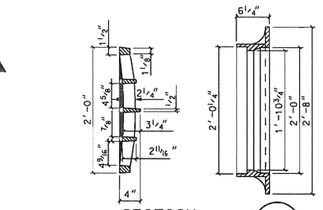
CONTRACTOR MAY USE PRECAST OR BUILT IN PLACE CONSTRUCTION AS NOTED OR COMBINE OPTIONS AS DESIRED. SEE QUALIFIED PRODUCT LIST 14 FOR MANUFACTURERS OF PRECAST ITEMS.	
24"X36" DROP INLET	
BUILT IN PLACE	① 24"X36" DROP INLET BOTTOM SLAB (PC OR CIP 40"X52"X6") AND ③ BRICK WALLS (8") AND ④ 24"X36" DROP INLET FRAME AND GRATE
PRECAST	⑥ PRECAST BOX CONFORMING TO STD. DRAWING 719-305-00 OR 719-310-00 AND(3'X2'XH) ④ 24"X36" DROP INLET FRAME AND GRATE



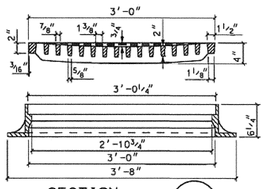
FRONT ELEVATION
DROP INLET



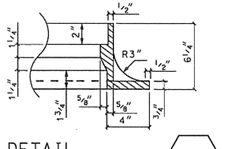
SECTION
FRONT ELEVATION
24"X36" DROP INLET
A



SECTION
SIDE ELEVATION
24"X36" FRAME AND GRATE
B



SECTION
FRONT ELEVATION
24"X36" FRAME AND GRATE
C



DETAIL
FRAME DETAIL
24"X36" GRATE
1

TABLE 719-110B			
DESCRIPTION	ADA	NON ADA BICYCLE	VEHICLE
(24"X36") DROP INLET	NO	YES	YES

USE ANYWHERE OUTSIDE OF DESIGNATED PEDESTRIAN PATHS. (OUTSIDE OF SIDEWALKS & CROSSWALKS)

TABLE 719-110A STANDARD PC ITEMS FOR DROP INLET
(24"X36") DROP INLET BOTTOM SLAB (PC OR CIP 40"X52"X6") SEE ALSO STD. DRAWING 719-310-00 OR 719-305-00

24"X36" DROP INLET		
DIMENSION	BUILT IN PLACE OPTION	PRECAST
A	8"	6"
B	36"	SEE STD. DRAWING 719-305-00 AND 719-310-00 (2'X3'XH) PRECAST BOX
C	4'-4"	SEE STD. DRAWING 719-305-00 AND 719-310-00 (2'X3'XH) PRECAST BOX

NOTES:

1. SEE 719-105-01 FOR DROP INLET (24X24). FOR BUILT IN PLACE CONSTRUCTION OF THE CATCH BASIN WALLS, EITHER BRICK MASONRY (WALLS ONLY) OR CIP CLASS 3000 CONCRETE MAY BE USED. FOR PRECAST CONSTRUCTION, A MINIMUM OF CLASS 4000P CONCRETE SHALL BE USED.

2. CONCRETE WALLS ARE TO BE 6" THICK WITH A MINIMUM REINFORCING STEEL AREA 0.20 SQUARE INCHES PER FOOT UNLESS NOTED. FOR BRICK, THE WALLS ARE TO BE 8" THICK CONCRETE BRICK AND SIMILAR SOLID UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 55, GRADE S-11. THE INTERIOR DIMENSIONS ARE TO REMAIN AS SHOWN FOR EITHER TYPE OF CONSTRUCTION.

3. THE BOTTOM SLAB OF THE BOX SHALL BE A MINIMUM OF 6" THICK REINFORCED CONCRETE (CLASS 3000 OR 4000P) WITH A REINFORCING STEEL AREA OF 0.20 SQUARE INCHES PER FOOT. WIRE MESH BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQUARE INCHES PER FOOT I S MET.

4. MORTAR SHALL BE TYPE S OR M.

5. REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M.

6. SEE STANDARD DRAWING 719-550-00 FOR STEPS, WHICH ARE REQUIRED WHEN STRUCTURE DEPTH EXCEEDS 4'-6".

7. SEE STANDARD DRAWINGS 719-420-00 AND 719-425-00 FOR DEPTHS GREATER THAN 12', PRECAST CONCRETE CIRCULAR DRAINAGE STRUCTURES ARE REQUIRED WHEN THE DEPTH FROM THE TOP OF TH E DRAINAGE BOX BOTTOM SLAB TO THE TOP OF THE GROUND EXCEEDS 12'-0".

8. LOCATION AND SIZE OF PIPES ARE SITE SPECIFIC. (SEE DRAINAGE PLANS). THE BOTTOM OF THE CATCH BASIN IS TO BE GROUTED TO THE LOWEST FLOW LINE ELEVATION OF ALL PIPES. BOTTOM SLAB IS CAST IN PLACE WITH PIPES INSTALLED, BOTTOM SLAB THICKNESS MUST BE ACHIEVED BEYOND PIPE OUTSIDE DIAMETER.

9. THE FLOOR OF THE BASIN MUST SLOPE IN THE DIRECTION OF THE OUTLET PIPE AS SHOWN AND THE INSIDE OF OUTLET PIPE SHALL BE FLUSH WITH FLOOR OF BASIN.

10. SEE STANDARD DRAWING 719-305-00 OR 719-310-00 FOR MAXIMUM PIPE DIAMETERS. THE PIPE SIZES SHOWN ARE MAXIMUM FOR BRICK AND PRECAST BOXES WHEN PIPE ENTERS PERPENDICULAR AND AT THE CENTER OF THE BOX WALL. CONTRACTOR SHOULD CONFIRM THAT PIPE USED FITS APPROPRIATELY INTO BOX.

FRAME AND GRATE NOTES:

11. ALL CASTINGS SHALL CONFORM TO AASHTO M 105, CLASS 35B AND THE SPECIFICATIONS OF AASHTO M 306

12. (a) STEEL GRATES AND FRAME MAY BE USED IN LIEU OF CAST IRON AS LONG AS THE LOADING (NOTE 12d) AND HYDRAULIC REQUIREMENTS ARE MET, AND ARE ON THE DEPARTMENT'S LIST OF APPROVED SUPPLIERS. (QUALIFIED PRODUCT LIST 45)
(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. STEEL GRATES MUST HAVE POSITIVE MEANS TO BE RETAINED IN THE FRAME.
(d) STRENGTH REQUIREMENTS OF STEEL GRATES AND FRAMES MUST MEET AASHTO M 306
(e) MANUFACTURERS DESIRING TO BE PLACED ON THE DEPARTMENT'S QUALIFIED PRODUCT LIST SHOULD CONTACT THE MATERIALS AND RESEARCH ENGINEER FOR PROCEDURES.

13. THE LONGEST DIMENSIONS OF THE OPENING IN THE IRON GRATE SHOULD BE ORIENTED IN THE DIRECTION OF FLOW, IF PRACTICABLE. THIS GRATE IS NOT SUITABLE FOR PEDESTRIAN TRAFFIC BECAUSE GRATE OPENINGS EXCEED 1/2".

14. AS SHOWN BY THIS DRAWING, THE FRAME IS SET LEVEL, BUT THE RESIDENT CONSTRUCTION ENGINEER MAY SET SAME ON SLOPE AS REQUIRED BY LOCAL DRAINAGE CONDITIONS.

15. AFTER THE FRAME IS SET IN ITS FINAL POSITION, IT IS TO BE ENCASED WITH CONCRETE AS SHOWN BY DRAWING.

16. ALL MANUFACTURING PROCESSES FOR THE FRAME AND GRATE MUST OCCUR IN THE UNITED STATES.

PRECAST NOTES:

17. THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE STANDARD DRAWINGS FOR PRECAST CONCRETE DRAINAGE BOX OR STRUCTURE FOR ADDITIONAL DETAILS AND SPECIFICATIONS.

18. LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSRY. ALL LIFT HOLES SHALL BE GROUTED SHUT PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.

19. THE CONTRACTOR SHALL USE A SINGLE SOURCE MANUFACTURER CHOSEN FROM THE LIST ON QUALIFIED PRODUCT LIST 14 FOR PRECAST ITEMS ON THIS DRAWING.

20. FOLLOW QUALIFIED PRODUCT POLICY 14 IN ORDER TO BE LISTED ON QUALIFIED PRODUCT LIST 14.

21. CONTRACTOR MAY SUBMIT DESIGN DRAWINGS AND CALCULATIONS FOR MODIFICATIONS TO THIS ITEM ON A PROJECT BY PROJECT BASIS. MODIFICATIONS TO THESE ITEMS WILL NOT BE LISTED ON ANY QUALIFIED PRODUCT LIST. SUBMIT ALL PROPOSALS FOR PROJECT SPECIFIC MODIFICATIONS TO THE RESIDENT ENGINEER FOR REVIEW BY THE ENGINEER OF RECORD.

22. JOINTS BETWEEN INSTALLED PIECES AND PRECAST ITEMS TO BE PLACED SHALL BE SEALED WITH A 1/2" GROUT LIFT OR AN APPROPRIATE PLASTIC PREFORMED GASKET (FROM QUALIFIED PRODUCT LIST 13.)

PRECAST INSTALLATION NOTES:

23. BED SHALL BE PREPARED AND COMPACTED FOR PRECAST DRAINAGE STRUCTURE AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS FOR PRECAST ITEMS. ELEVATION OF BEDDING MATERIAL SHALL BE APPROPRIATE TO ACCOMMODATE ELEVATION OF ALL PIPES AND REQUIRED BOX TOP ELEVATION.

24. PLACE AND LEVEL PRECAST BOX OR SLAB.

25. PIPES SHALL BE INSTALLED AND GROUTED IN PLACE.

26. PIPES AND BOX SHALL BE BACKFILLED AND COMPACTED AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS.

27. ANY LOCATION WHERE THE ABOVE REQUIREMENTS CANNOT BE MET SHALL BE COMPLETED USING CAST IN PLACE MATERIALS MEETING THE REQUIREMENTS OF THIS STANDARD DRAWING. ANY ADDITIONAL MATERIALS OR COSTS ASSOCIATED WITH THE USE OF PRECAST SHALL BE PAID FOR BY THE CONTRACTOR AND MAY NOT BE CHARGED TO SCDOT.

28. THE CONTRACT UNIT PRICE FOR DROP INLETS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS, (BUILT IN PLACE OR PRECAST), AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN, INCLUDING THE CURB AND GUTTER, IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

29. PRECAST CONCRETE CIRCULAR STRUCTURES (AS SHOWN ON 719-420-00) ARE REQUIRED FOR THE FOLLOWING APPLICATIONS UNLESS PROHIBITED BY THE PLANS OR SPECIAL PROVISIONS.

(a) ON DRAINAGE STRUCTURES WITHA A DEPTH EQUAL TO OR GREATER THAN 12 FEET.

(b) ON DRAINAGE STRUCTURES WHERE THE FLOW LINE ELEVATION OF THE INLET PIPE IS EQUAL TO OR HIGHER THAN THE INSIDE TOP (SOFFIT) OF THE OUTLET PIPE.

(c) AS REQUIRED BY THE PROJECT PLANS.

30. THE PAY ITEM SHALL BE:
DROP INLET (24"X36")_____EA

USE SHEETS 719-110-01 THROUGH 719-110-02 FOR THIS ITEM.

24" X 36" DROP INLET DETAIL

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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2			
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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

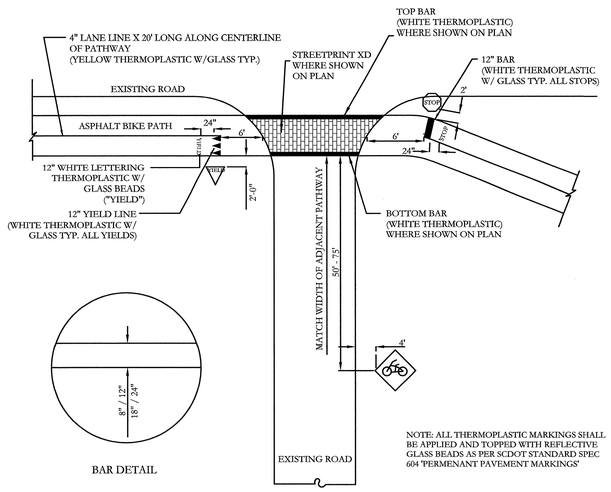
TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

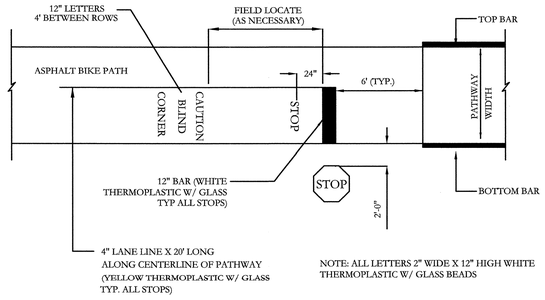
Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03E_DETAILS.dgn
3/15/2016

TYPICAL SECTIONS OF IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3F

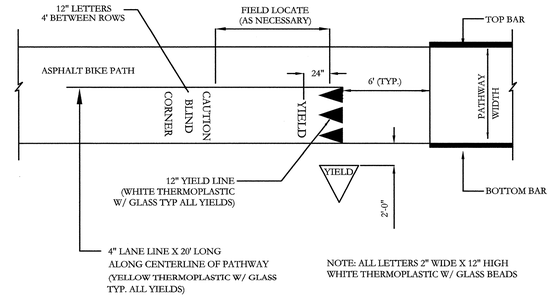


STRIPING AT ROADWAY CROSSING
NOT TO SCALE



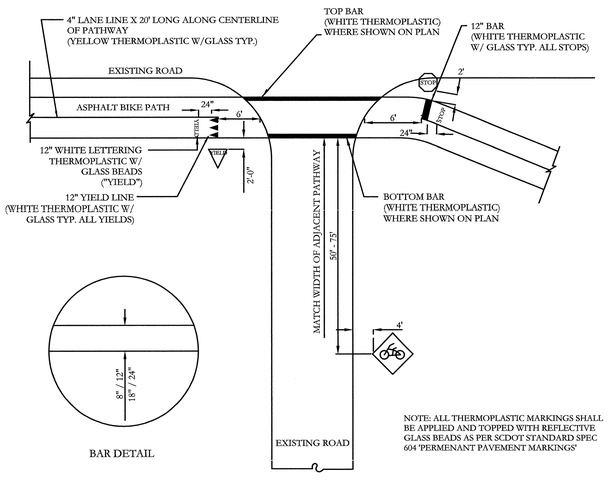
NOTE: ALL THERMOPLASTIC MARKINGS SHALL BE APPLIED AND TOPPED WITH REFLECTIVE GLASS BEADS AS PER SCDOT STANDARD SPEC 604 'PERMENANT PAVEMENT MARKINGS'

SIGNAGE - STOP GRAPHIC DETAIL
NOT TO SCALE



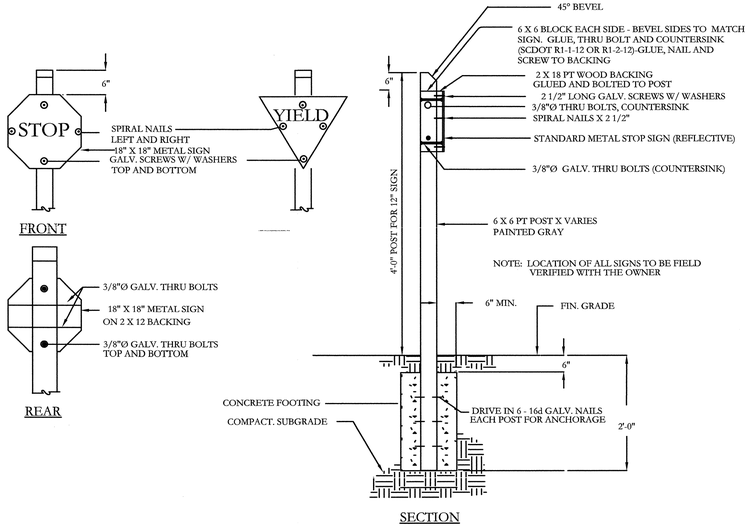
NOTE: ALL THERMOPLASTIC MARKINGS SHALL BE APPLIED AND TOPPED WITH REFLECTIVE GLASS BEADS AS PER SCDOT STANDARD SPEC 604 'PERMENANT PAVEMENT MARKINGS'

SIGNAGE - YIELD GRAPHIC DETAIL
NOT TO SCALE

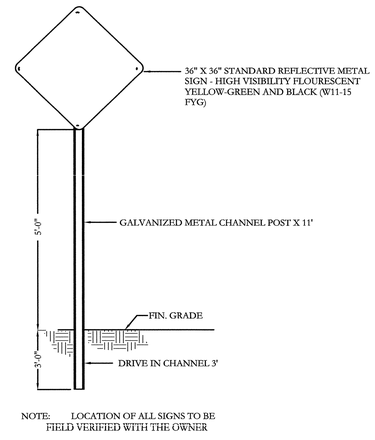


STRIPING AT DRIVEWAY CROSSING
NOT TO SCALE

NOTE: CONTRACTOR TO REMOVE, STORE, PROTECT, AND REINSTALL EXISTING SIGNS AS SHOWN ON PM1



SIGNAGE -STOP/YIELD 18"
NOT TO SCALE



SIGNAGE - VEHICULAR TRAFFIC WARNING SIGN
NOT TO SCALE

TOWN PROVIDED DETAILS

INFRASTRUCTURE CONSULTING & ENGINEERING

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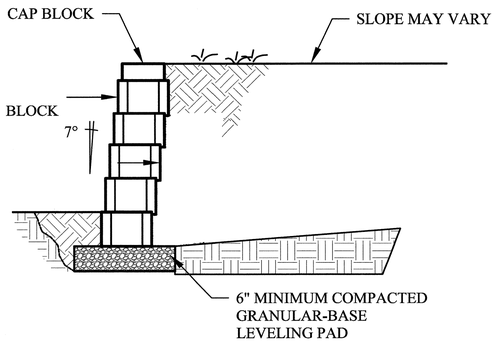
TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

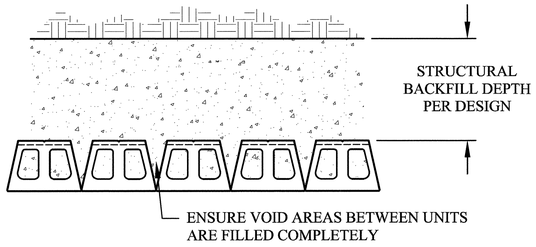
LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_03F_DETAILS PATH.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	3G



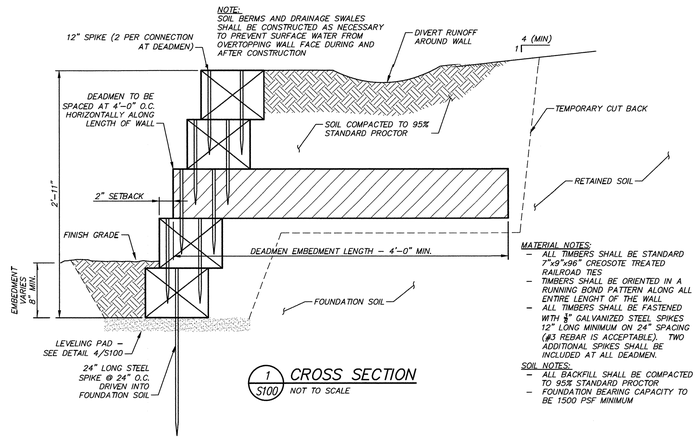
NOTES:
1. STRUCTURAL BACKFILL IS TO BE PLACED IN 8- TO 24-INCH (TYPICAL) LIFTS
2. STRUCTURAL BACKFILL MUST BE MANIPULATED INTO ALL VOIDS BETWEEN BLOCKS TO ENSURE ADEQUATE BOND BETWEEN BLOCK AND CONCRETE MASS.



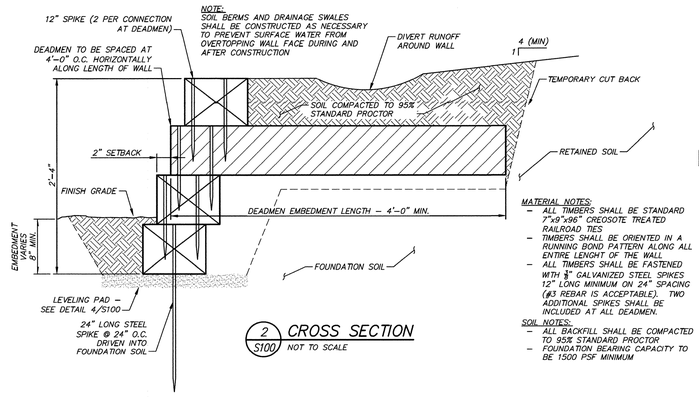
MORTARLESS BLOCK RETAINING WALL
NTS

STRUCTURAL BACKFILL MIX COMPONENTS

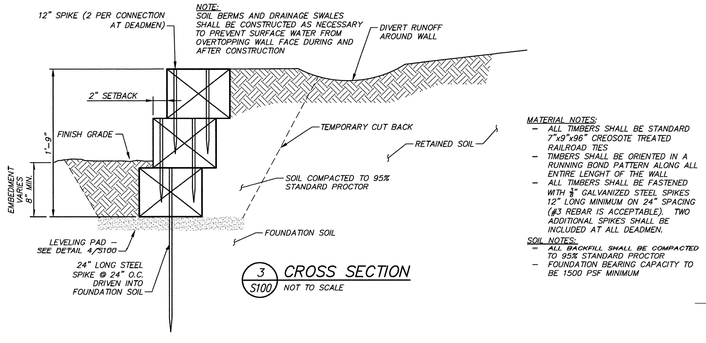
	Concrete Mix Data	Batch Weight/Cubic Yard
Specifications	Water/cement ratio (lb./lbs.) Air voids Slump	0.41 25% 1 to 2 in.
Cement Alternative	Portland type 1 cement Fly ash Portland type 1 cement	400 lbs. Specific gravity 3.15 200 lbs. Specific gravity 2.50 200 lbs. Specific gravity 3.15
Aggregates	Concrete Sand SSD Coarse aggregates #6, #8 or #57 (1/2or 3/4 in.) Unit weight 98.88 lbs./ft.3 rodded	0 lbs. 2,540 lbs. Specific gravity 2.62
Water	Maximum total weight	166 lbs. Specific gravity 1.00
Admixture	Pozzolith 100x, retarder	8.0 oz./yd.



1 S100 CROSS SECTION
NOT TO SCALE



2 S100 CROSS SECTION
NOT TO SCALE



3 S100 CROSS SECTION
NOT TO SCALE

TIMBER RR TIE RETAINING WALL
NTS

STRUCTURAL NOTES

GENERAL REQUIREMENTS
1. WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY TO ALL SIMILAR CONDITIONS.
2. SOIL INSTALLED IN SLOPES BOTH ABOVE AND BELOW THE STRUCTURE SHALL BE COMPACTED TO WITHIN 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D-698).
3. EXCAVATION NEAR THE TIMBER DEADMEN FOR THE PURPOSE OF PLANTING TREES OR INSTALLATION OF UTILITIES SHALL NOT OCCUR WITHOUT APPROVAL BY THE ENGINEER OF RECORD.
4. CONSTRUCTION ACTIVITIES WHICH OCCUR ON THE SITE AFTER COMPLETION OF THE RETAINING WALL, SHOULD BE MONITORED BY THE OWNER'S REPRESENTATIVE TO INSURE THAT THEY DO NOT RESULT IN DAMAGE TO THE DEADMEN OR THE WALL FOUNDATION. HEAVY CONSTRUCTION EQUIPMENT SHOULD NOT BE PERMITTED TO OPERATE WITHIN 10.0 FEET BEHIND A WALL FACE.
5. THE OWNER OR OWNER'S REPRESENTATIVE HAS NOT PROVIDED SPECIFIC SOIL PARAMETERS FOR THE PROPOSED EARTH STRUCTURE AND TESTING OF THE PROPOSED SOILS HAS NOT BEEN PERFORMED PRIOR TO THE DESIGN, IN PREPARATION OF THE DESIGN, ASSUMED SOIL PARAMETERS WERE USED. THEREFORE, CONSTRUCTION VERIFICATION OF THE ASSUMED SOIL PARAMETERS CAN RESULT IN STRUCTURE FAILURE.
6. FILL SHALL BE COMPACTED TO MINIMUM OF 95% OF THE MAXIMUM DENSITY AND WITHIN +3/–3 PERCENT OF OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR DENSITY, WHICHEVER IS GREATER.
7. ALL RAILROAD TIES MUST BE INSPECTED BY THE CONTRACTOR AND FOUND TO BE IN GOOD CONDITION WITH NO CRACKING OR ROT WHICH WOUL COMPROMISE THE STRUCTURAL CAPACITY OF THE UNIT.

SUBGRADE PREPARATION
1. CONTRACTOR SHALL STRIP AND REMOVE ALL VEGETATION, TOPSOIL, ROOTS, AND ORGANIC SOILS FROM THE CONSTRUCTION AREA FOR A DISTANCE OF AT LEAST 5' BEYOND THE EXTENT OF THE STRUCTURE LIMITS. THE DEPTH OF STRIPPING SHALL BE THAT REQUIRED TO REMOVE SIGNIFICANT ROOT ZONES, SMALL TREE STUMPS, AND OTHER UNACCEPTABLE MATERIALS, BUT IN NO CASE SHALL IT BE LESS THAN 12".
2. AFTER TOPSOILS, ETC. WITHIN AND TO A POINT 5' OUTSIDE THE WALL CONSTRUCTION AREA HAVE BEEN REMOVED FROM THE SITE, THE UPPER 24" OF EXPOSED SOILS SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698).
3. COMPACTION TESTING SHALL BE PERFORMED UNDER THE OBSERVATION OF AN APPROVED TESTING LABORATORY SUPERVISED BY A GEOTECHNICAL ENGINEER. UNDERCUT, BACKFILL, AND COMPACT AREAS WHICH PUMP, DEFLECT, OR RUT EXCESSIVELY OR WHICH DO NOT STABILIZE AFTER SUCCESSIVE PASSES OF COMPACTION EQUIPMENT.
4. AFTER COMPLETION OF DENSIFICATION OF EXISTING SOILS, PLACE STRUCTURAL FILL FOR BUILDING AND PAVEMENT AREAS IN THIN (8" TO 10") LIFTS COMPACT TO A MINIMUM DENSITY OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-689). MATERIAL USED AS STRUCTURAL FILL SHALL BE NON-PLASTIC GRANULAR MATERIAL CONTAINING LESS THAN 15% FINES PASSING THROUGH THE NO. 200 SIEVE AND FREE OF ORGANICS, BOULDERS, OR OTHER DELETERIOUS MATERIALS.

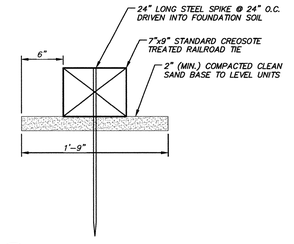
DRAINAGE
1. BACKFILL SHALL BE GRADED AWAY FROM THE WALL FACE AND COMPACTED TO 95% STANDARD PROCTOR AT THE END OF EACH WORK DAY TO PREVENT PONDING OF WATER ON THE SURFACE OF SOIL MASS.
2. PERMANENT DRAINAGE AND SITE GRADING SHALL BE PERFORMED TO PREVENT RUNOFF FROM BEING DIRECTED OVER THE WALL FACE OR ALLOWED TO POND ABOVE THE SOIL MASS.
3. SURFACE WATER FLOW EITHER TEMPORARY OR PERMANENT, SHALL NOT BE ALLOWED TO RUN ALONG TOE OF EARTH STRUCTURE AT ANY TIME. CONCENTRATED WATER FLOW ALONG THE WALL TOE CAN UNDERMINE AND DAMAGE THE EARTH STRUCTURE FOUNDATION.

DESIGN PARAMETERS
1. DESIGN OF THE REINFORCED SOIL STRUCTURES IS BASED ON THE FOLLOWING PARAMETERS:
   RETAINED FILL: Φ = 30° C' = 0 PSF γ = 120 PCF
   FOUNDATION: Φ = 30° C' = 0 PSF γ= 120 PCF

EXTERNAL STABILITY:
   MINIMUM F.S. AGAINST BASE SLIDING = 1.5
   MINIMUM F.S. AGAINST OVERTURNING = 2.0

UNIFORM SURCHARGE = 0 PSF
HYDROSTATIC LOADING = NONE
SEISMIC LOADING: = NONE
REQUIRED BEARING CAPACITY = 1500 PSF

FOR RELOCATION AND NEW CONSTRUCTION



4 S100 LEVELING PAD CROSS-SECTION
NOT TO SCALE

TOWN PROVIDED DETAILS

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

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3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	4

SOUTH FOREST BEACH DRIVE (SCDOT R/W)

BEGIN PROJECT
STA. 10+19.53

POT = 10+00.00

TBM P.K. NAIL FOUND
ELEVATION = 8.81'

NEW PATHWAY

PROPOSED TEMPORARY
CONSTRUCTION EASEMENT

EXISTING SIDEWALK

+78.7
68.1'

+92
68.1'

+31.4
50.1'

ASPHALT
PARKING

68'

EXIST. GRAVEL DRIVE

100' EXISTING PUBLIC R/W

+60
10'

BIO-SWALE

BIO-SWALE

50'

15'

10'

10'

N 26° 11' 38.81" W

247.83'

CONSTRUCTION BL

NEW PATHWAY

FUTURE DRIVE

PC = 12+47.83

PRC = 13+02.17

100' EXISTING PUBLIC R/W

ASPHALT

ASPHALT

ASPHALT PARKING

ASPHALT DRIVE

EXIST. DRIVE

PT = 14+19.88

PC = 14+71.15

PRC = 15+48.03

10'

10'

N 30° 12' 19.13" W

51.27'

CONSTRUCTION BL

ASPHALT DRIVE

100' EXISTING PUBLIC R/W

ASPHALT PARKING

PT = 15+95.73

10'

10'

MATCH LINE STA. 16+00
(SEE THIS SHEET)

PROPOSED TEMPORARY
CONSTRUCTION EASEMENT

EXIST. DRIVE

15'

GRAVEL PARKING

PRC = 17+44.64

PC = 18+23.89

100' EXISTING PUBLIC R/W

N 22° 28' 00.55" W

87.28'

10'

10'

PT = 19+12.49

PC = 19+99.77

N 25° 08' 33.49" W

10'

10'

148.91'

CONSTRUCTION BL

ASPHALT DRIVE

ASPHALT DRIVE

N 63° 45' 56.88" E

27.47'

PT = 20+59.97

POT = 20+87.44

100' EXISTING PUBLIC R/W

ASPHALT PARKING

ASPHALT PARKING

100' EXISTING PUBLIC R/W

ASPHALT PARKING

PROPOSED TEMPORARY
CONSTRUCTION EASEMENT

TIE TO EXISTING
STA. 20+87.44

MATCH LINE STA. 16+00
(SEE THIS SHEET)

CURVE 1
PI = 12+75.55
Δ = 21° 48' 06.63" (RT)
D = 5° 09' 36.77"
T = 27.72'
L = 54.34'
E = 3.38'
R = 111.99'

CURVE 2
PI = 13+62.59
Δ = 31° 48' 46.89" (LT)
D = 27° 01' 34.72"
T = 60.42'
L = 117.71'
E = 8.44'
R = 212.00'

CURVE 3
PI = 15+09.66
Δ = 8° 36' 09.26" (LT)
D = 11° 11' 26.10"
T = 38.51'
L = 76.87'
E = 1.45'
R = 512.00'

CURVE 4
PI = 15+71.99
Δ = 13° 39' 54.91" (RT)
D = 28° 38' 52.40"
T = 23.96'
L = 47.70'
E = 1.43'
R = 200.00'

CURVE 5
PI = 17+84.79
Δ = 22° 42' 15.72" (LT)
D = 28° 38' 52.40"
T = 40.15'
L = 79.25'
E = 3.99'
R = 200.00'

CURVE 6
PI = 18+68.93
Δ = 25° 22' 48.66" (RT)
D = 28° 38' 52.40"
T = 45.04'
L = 88.59'
E = 5.01'
R = 200.00'

CURVE 7
PI = 20+37.22
Δ = 86° 13' 57.43" (RT)
D = 143° 14' 22.02"
T = 37.45'
L = 60.20'
E = 14.80'
R = 40.00'

0 20 40 60 80
SCALE IN FEET

SCALE: 1" = 20'

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
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INFRASTRUCTURE CONSULTING & ENGINEERING

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

GEOMETRIC LAYOUT SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

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3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	4A

Beginning chain LEMOYNE description

Point 200000 N 111,270.2035 E 2,074,279.8012 Sta 10+00.000

Course from 200000 to PC LEMOYNE-1 N 26° 11′ 38.873″ W Dist 247.8305

Curve Data

Curve LEMOYNE-1					
P.I. Station	12+75.548	N	111,517.4536	E	2,074,158.1706
Delta =	27° 48′ 06.626″ (RT)				
Degree =	51° 09′ 36.770″				
Tangent =	27.7173				
Length =	54.3427				
Radius =	111.9928				
External =	3.3789				
Long Chord =	53.8111				
Mid. Ord. =	3.2800				
P.C. Station	12+47.830	N	111,492.5827	E	2,074,170.4054
P.T. Station	13+02.173	N	111,545.1600	E	2,074,158.9482
C.C.		N	111,542.0179	E	2,074,270.8970
Back = N	26° 11′ 38.873″ W				
Ahead = N	1° 36′ 27.753″ E				
Chord Bear = N	12° 17′ 35.560″ W				

Curve Data

Curve LEMOYNE-2					
P.I. Station	13+62.589	N	111,605.5521	E	2,074,160.6433
Delta =	31° 48′ 46.887″ (LT)				
Degree =	27° 01′ 34.720″				
Tangent =	60.4158				
Length =	117.7113				
Radius =	212.0000				
External =	8.4406				
Long Chord =	116.2051				
Mid. Ord. =	8.1174				
P.C. Station	13+02.173	N	111,545.1600	E	2,074,158.9482
P.T. Station	14+19.884	N	111,657.7651	E	2,074,130.2480
C.C.		N	111,551.1079	E	2,073,947.0317
Back = N	1° 36′ 27.753″ E				
Ahead = N	30° 12′ 19.134″ W				
Chord Bear = N	14° 17′ 55.691″ W				

Course from PT LEMOYNE-2 to PC LEMOYNE-3 N 30° 12′ 19.135″ W Dist 51.2688

Curve Data

Curve LEMOYNE-3					
P.I. Station	15+09.662	N	111,735.3537	E	2,074,085.0808
Delta =	8° 36′ 09.257″ (LT)				
Degree =	11° 11′ 26.096″				
Tangent =	38.5090				
Length =	76.8733				
Radius =	512.0000				
External =	1.4461				
Long Chord =	76.8011				
Mid. Ord. =	1.4421				
P.C. Station	14+71.153	N	111,702.0731	E	2,074,104.4547
P.T. Station	15+48.027	N	111,765.3619	E	2,074,060.9468
C.C.		N	111,444.4858	E	2,073,661.9699
Back = N	30° 12′ 19.134″ W				
Ahead = N	38° 48′ 28.391″ W				
Chord Bear = N	34° 30′ 23.763″ W				

Curve Data

Curve LEMOYNE-4					
P.I. Station	15+71.991	N	111,784.0359	E	2,074,045.9282
Delta =	13° 39′ 54.905″ (RT)				
Degree =	28° 38′ 52.400″				
Tangent =	23.9641				
Length =	47.7007				
Radius =	200.0000				
External =	1.4306				
Long Chord =	47.5877				
Mid. Ord. =	1.4204				
P.C. Station	15+48.027	N	111,765.3619	E	2,074,060.9468
P.T. Station	15+95.727	N	111,805.7295	E	2,074,035.7465
C.C.		N	111,890.7041	E	2,074,216.7971
Back = N	38° 48′ 28.391″ W				
Ahead = N	25° 08′ 33.487″ W				
Chord Bear = N	31° 58′ 30.939″ W				

Course from PT LEMOYNE_REV-4 to PC LEMOYNE_REV-5 N 25° 08′ 33.4868″ W Dist 148.9121

Curve Data

Curve LEMOYNE_REV-5					
P.I. Station	17+84.793	N	111,976.8816	E	2,073,955.4177
Delta =	22° 42′ 15.7207″ (LT)				
Degree =	28° 38′ 52.4031″				
Tangent =	40.1534				
Length =	79.2532				
Radius =	200.0000				
External =	3.9909				
Long Chord =	78.7357				
Mid. Ord. =	3.9128				
P.C. Station	17+44.639	N	111,940.5326	E	2,073,972.4778
P.T. Station	18+23.893	N	112,003.8290	E	2,073,925.6497
C.C.		N	111,855.5580	E	2,073,791.4272
Back = N	25° 08′ 33.4868″ W				
Ahead = N	47° 50′ 49.2075″ W				
Chord Bear = N	36° 29′ 41.3471″ W				

Curve Data

Curve LEMOYNE_REV-6					
P.I. Station	18+68.928	N	112,034.0530	E	2,073,892.2623
Delta =	25° 22′ 48.6558″ (RT)				
Degree =	28° 38′ 52.4033″				
Tangent =	45.0356				
Length =	88.5935				
Radius =	200.0000				
External =	5.0078				
Long Chord =	87.8710				
Mid. Ord. =	4.8855				
P.C. Station	18+23.893	N	112,003.8290	E	2,073,925.6497
P.T. Station	19+12.486	N	112,075.6705	E	2,073,875.0521
C.C.		N	112,152.1001	E	2,074,059.8723
Back = N	47° 50′ 49.2075″ W				
Ahead = N	22° 28′ 00.5516″ W				
Chord Bear = N	35° 09′ 24.8796″ W				

Course from PT LEMOYNE_REV-6 to PC LEMOYNE_REV-7 N 22° 28′ 00.5517″ W Dist 87.2822

Curve Data

Curve LEMOYNE_REV-7					
P.I. Station	20+37.221	N	112,190.9381	E	2,073,827.3848
Delta =	86° 13′ 57.4316″ (RT)				
Degree =	143° 14′ 22.0156″				
Tangent =	37.4527				
Length =	60.2017				
Radius =	40.0000				
External =	14.7969				
Long Chord =	54.6785				
Mid. Ord. =	10.8013				
P.C. Station	19+99.768	N	112,156.3280	E	2,073,841.6973
P.T. Station	20+59.970	N	112,207.4937	E	2,073,860.9797
C.C.		N	112,171.6139	E	2,073,878.6614
Back = N	22° 28′ 00.5516″ W				
Ahead = N	63° 45′ 56.8800″ E				
Chord Bear = N	20° 38′ 58.1642″ E				

Course from PT LEMOYNE_REV-7 to 40000001 N 63° 45′ 56.8800″ E Dist 27.4726

Point 40000001 N 112,219.6378 E 2,073,885.6225 Sta 20+87.443

Ending chain LEMOYNE_REV description

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON 2016
SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

INFRASTRUCTURE CONSULTING & ENGINEERING

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

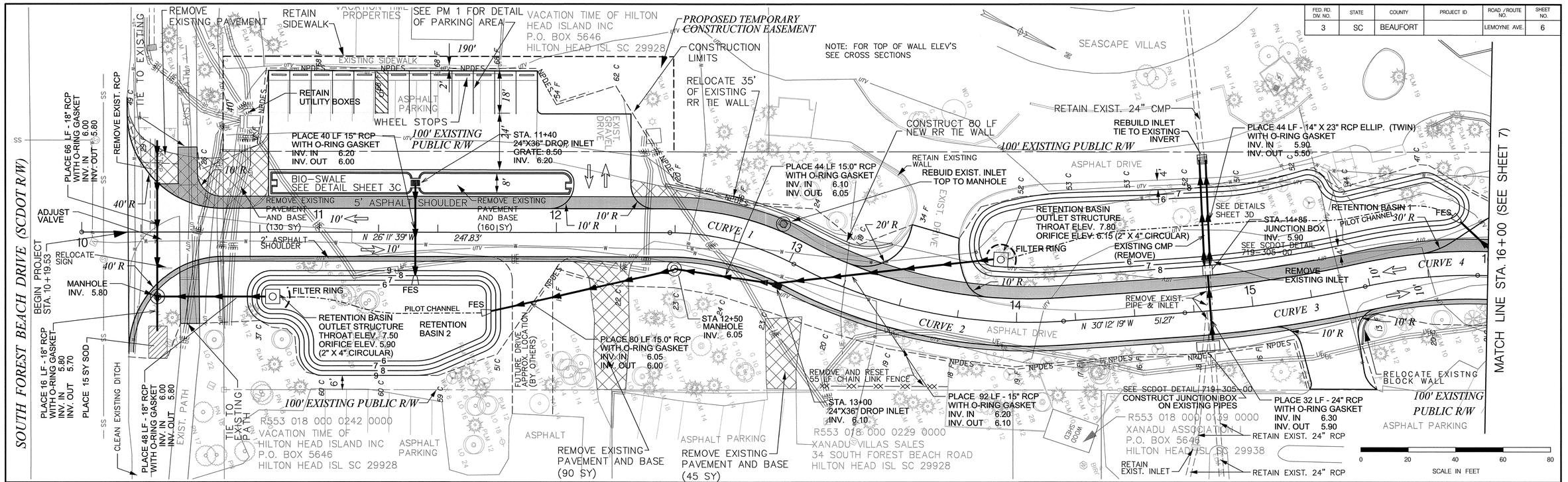
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

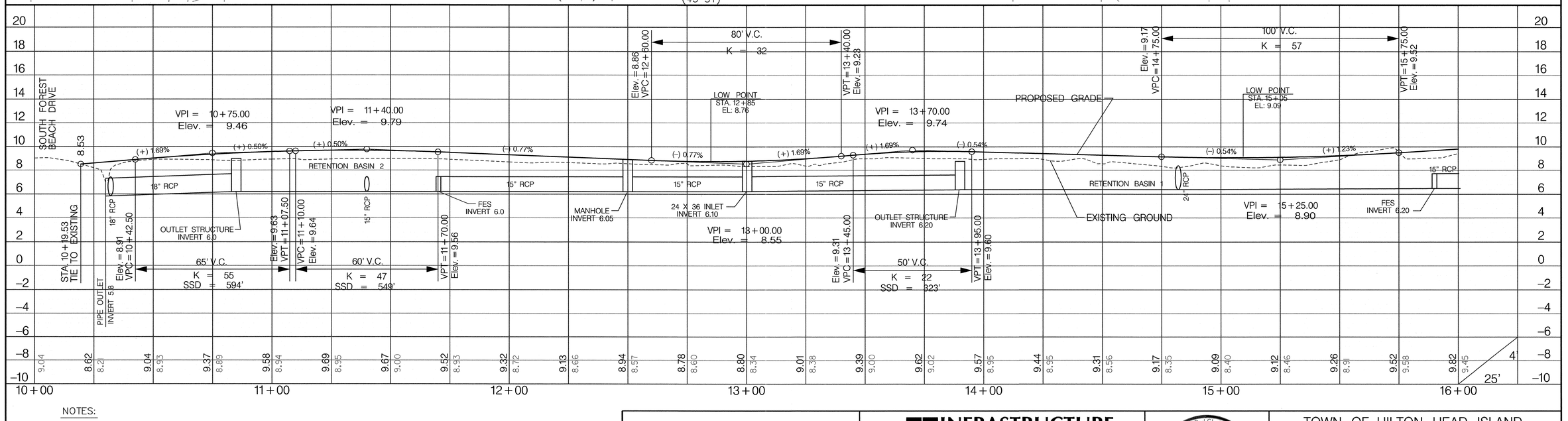
GEOMETRIC DATA SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_04A_Geom DATA.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	6





NOTES:

1) SEE SHEETS 4 AND 4A FOR ALIGNMENT DATA.

2) PLACE TYPE F WEIGHTED AND NON-WEIGHTED INLET FILTERS ON ALL CATCH BASINS, DROP INLETS, AND MANHOLES. SEE SCDOT STANDARD DWG. 815-001-01.

3) ALL EXISTING HIGHWAY SIGNS (STOP, SPEED LIMIT, ETC.) TO BE STORED AND RELOCATED AFTER CONSTRUCTION.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 HARON O. LIVINGSTON 3-14-2016

INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

SCALE: 1" = 20'

INFRASTRUCTURE CONSULTING & ENGINEERING

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

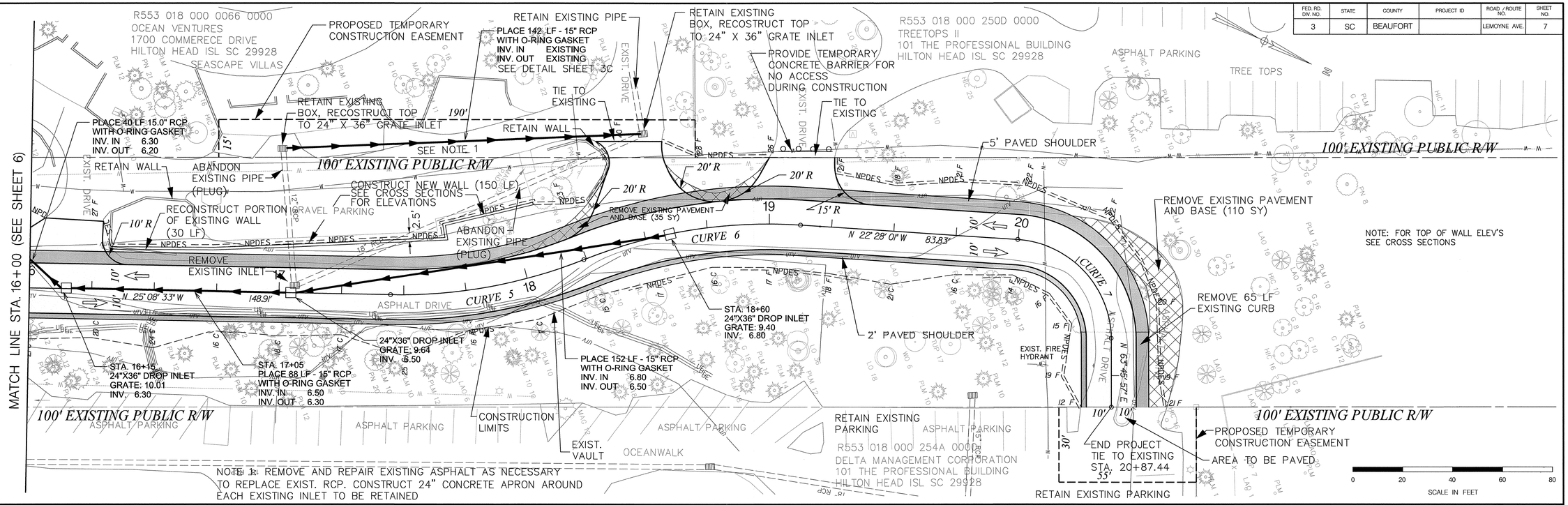
TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

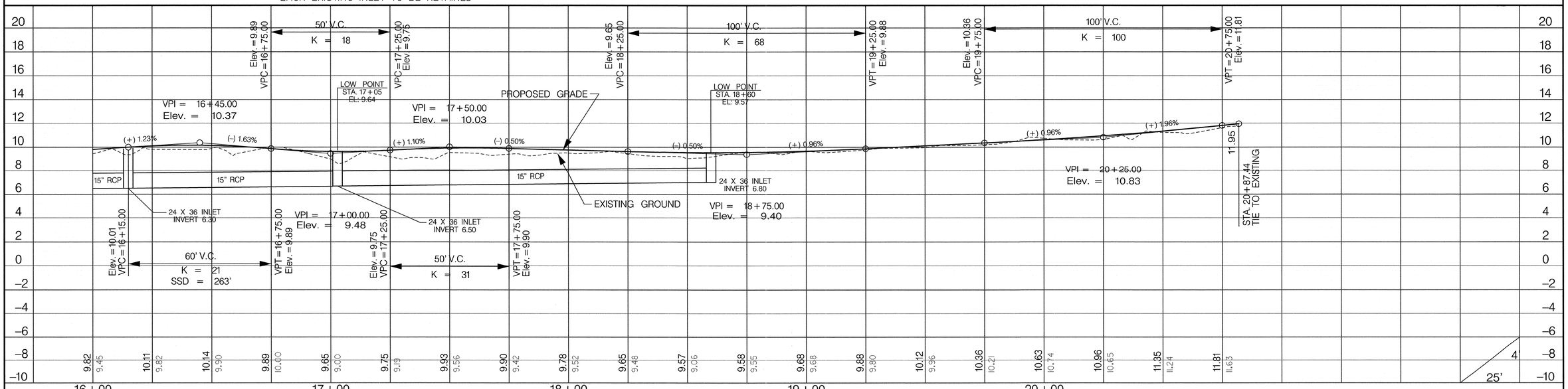
PLAN SHEET AND PROFILE SHEET

LEMOYNE AVENUE ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_06.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	7





NOTES:

1) SEE SHEETS 4 AND 4A FOR ALIGNMENT DATA.

2) PLACE TYPE F WEIGHTED AND NON-WEIGHTED INLET FILTERS ON ALL CATCH BASINS, DROP INLETS, AND MANHOLES. SEE SCDOT STANDARD DWG. 815-001-01

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 HAROLD O. LIVINGSTON 4-2016

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

SCALE: 1" = 20'

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

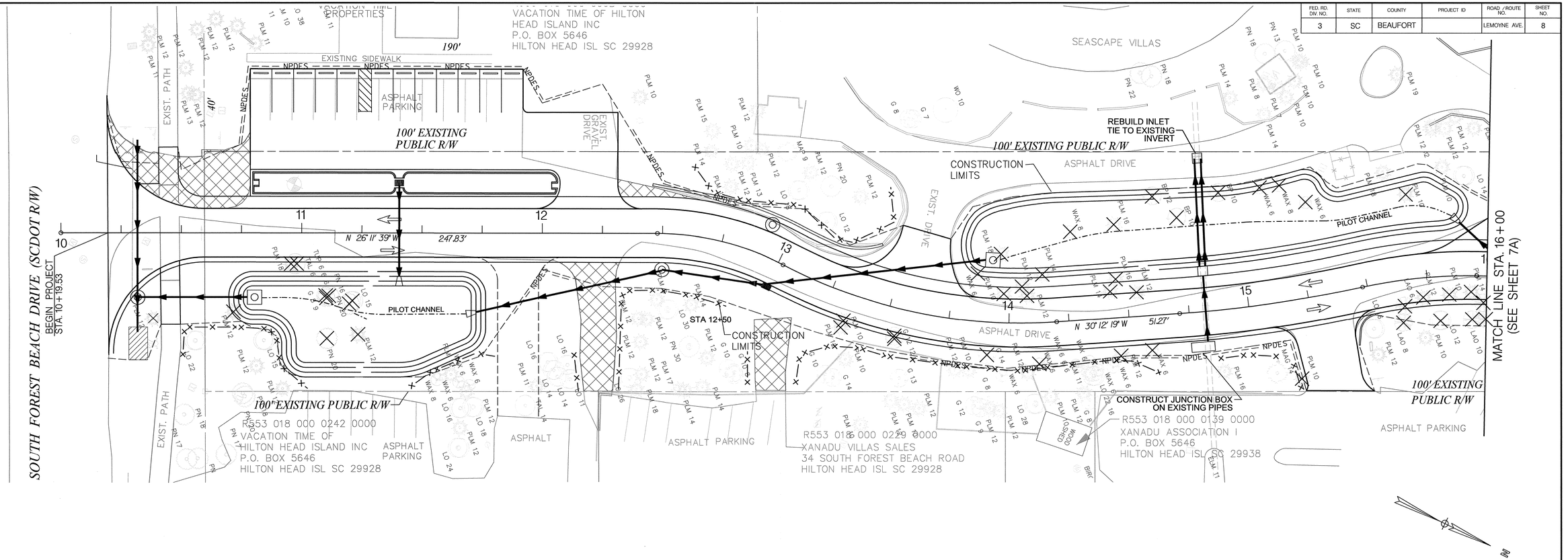
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

PLAN SHEET AND PROFILE SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_07.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	8



LEGEND

EXISTING TREES TO BE REMOVED

TREE PROTECTION FENCE

0 20 40 60 80

SCALE IN FEET

SCALE: 1" = 20'

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

INFRASTRUCTURE CONSULTING & ENGINEERING

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON 2016

INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

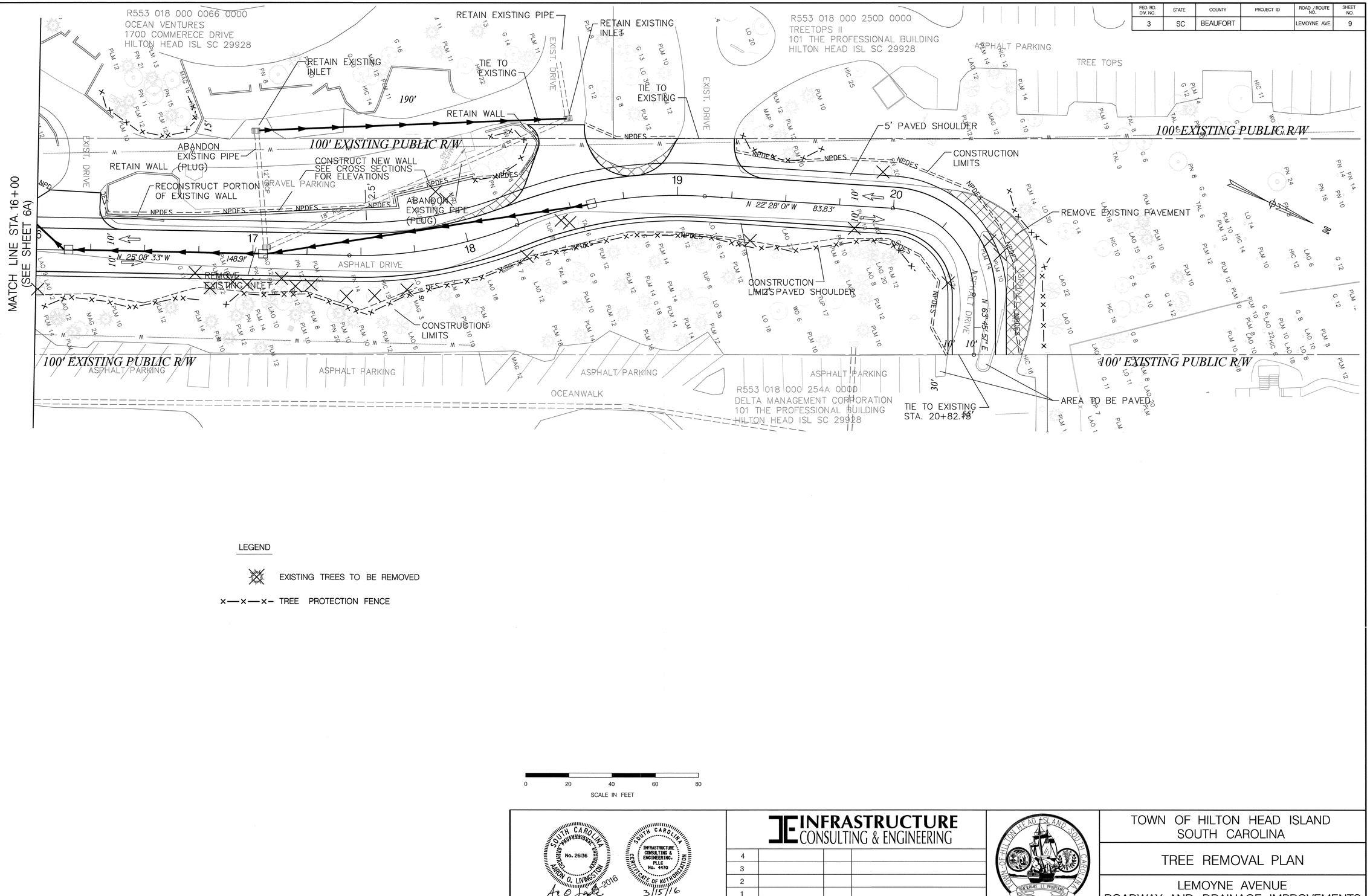
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TREE REMOVAL PLAN

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_08_tree removal.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	9



LEGEND

EXISTING TREES TO BE REMOVED

TREE PROTECTION FENCE

0 20 40 60 80

SCALE IN FEET

SCALE: 1" = 20'

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

INFRASTRUCTURE CONSULTING & ENGINEERING

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TREE REMOVAL PLAN

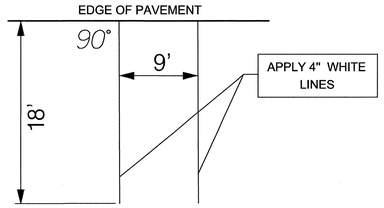
LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_09_tree removal.dgn
3/15/2016

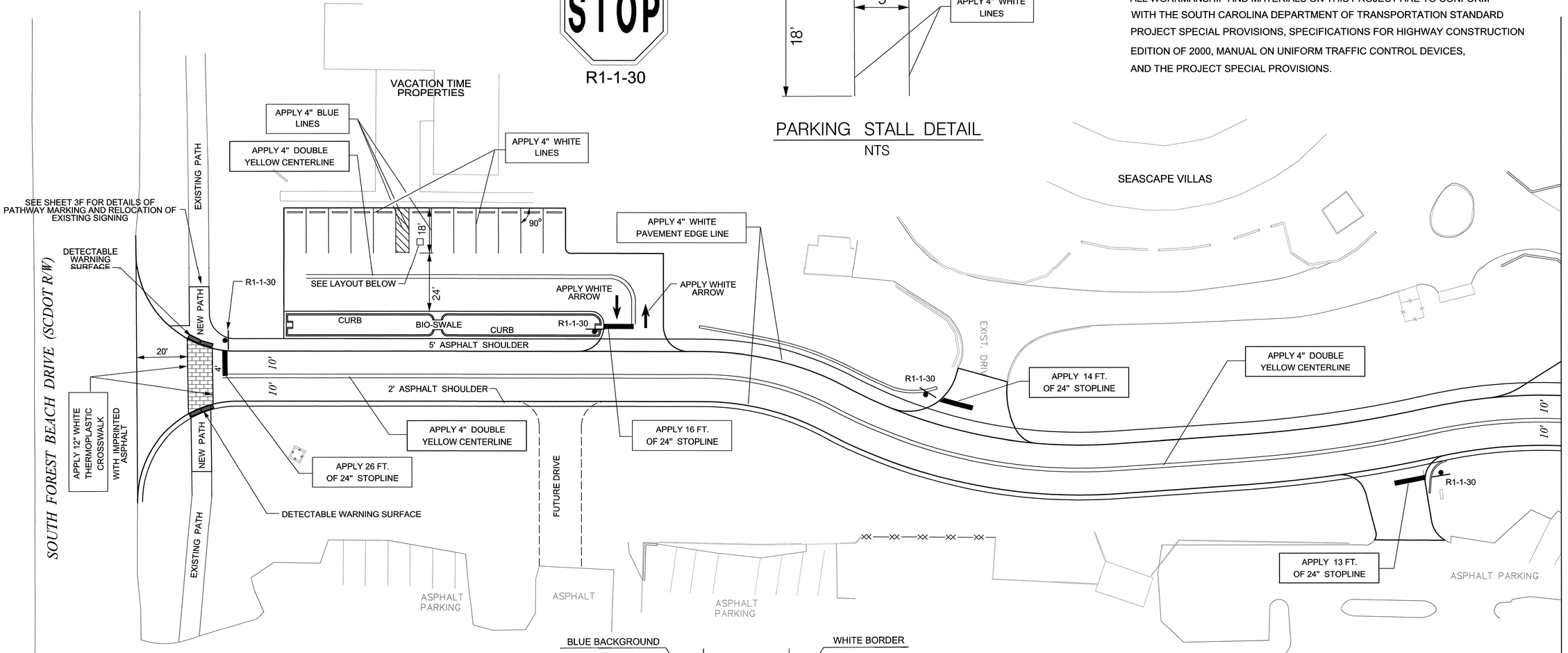
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	PM 1

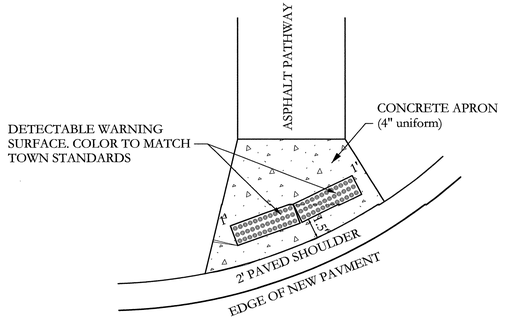
NOTE:
ALL WORKMANSHIP AND MATERIALS ON THIS PROJECT ARE TO CONFORM WITH THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD PROJECT SPECIAL PROVISIONS, SPECIFICATIONS FOR HIGHWAY CONSTRUCTION EDITION OF 2000, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE PROJECT SPECIAL PROVISIONS.

R1-1-30

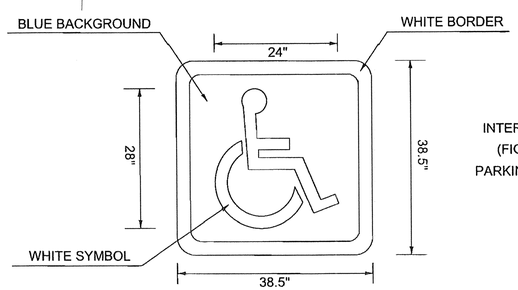


PARKING STALL DETAIL
NTS





DECTECTABLE WARNING SURFACE DETAIL
NTS



INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING (FIGURE 3B-22, MUTCD, 2009) TO BE CENTERED IN PARKING SPACE APPROX. 3.5' FROM THE ENTRANCE OF THE PARKING SPACE

HANDICAPPED PAVEMENT MARKING DETAIL
NTS

0 20 40 60 80
SCALE IN FEET

SCALE: 1" = 20'

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

INFRASTRUCTURE CONSULTING & ENGINEERING

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

PAVEMENT MARKING /SIGNING SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_PM1_Markings.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	PM 2

MATCH LINE – SEE SHEET PM 1

APPLY 24 FT. OF 24" STOPLINE

APPLY 16 FT. OF 24" STOPLINE

APPLY 16 FT. OF 24" STOPLINE

R1-1-30

R1-1-30

R1-1-30

EXIST. DRIVE

EXIST. DRIVE

EXIST. DRIVE

190'

15'

GRAVEL PARKING

ASPHALT PARKING

5' ASPHALT SHOULDER

10'

10'

5' ASPHALT SHOULDER

10'

10'

2' ASPHALT SHOULDER

APPLY 4" DOUBLE YELLOW CENTERLINE

APPLY 4" WHITE PAVEMENT EDGE LINE

ASPHALT PARKING

ASPHALT PARKING

RETAIN EXISTING PARKING

ASPHALT PARKING

RETAIN EXISTING PARKING

0 20 40 60 80

SCALE IN FEET

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_PM2_Markings.dgn
3/15/2016

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON 3-14-2016

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

SCALE: 1" = 20'

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

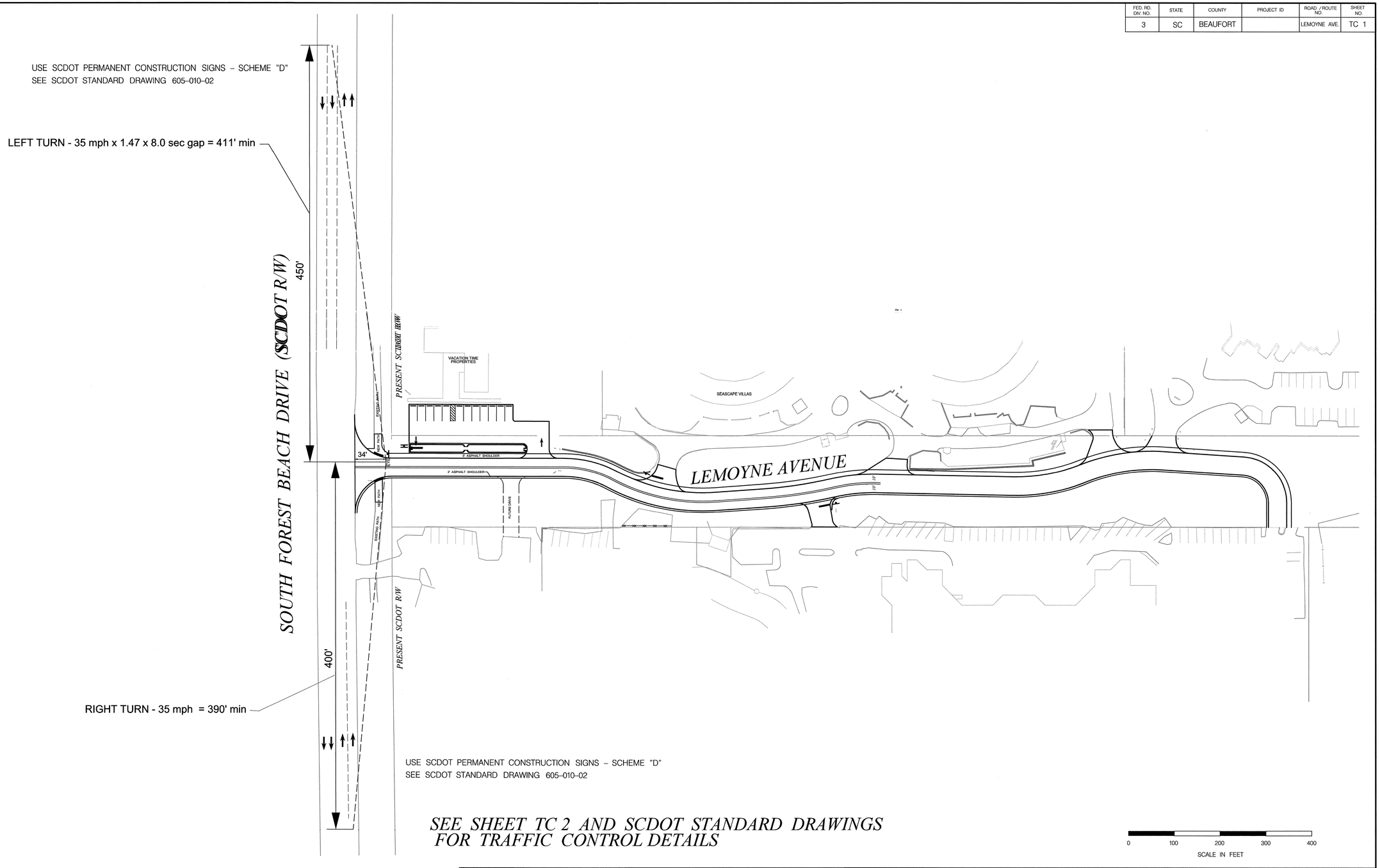
PAVEMENT MARKING /SIGNING SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	TC 1

USE SCDOT PERMANENT CONSTRUCTION SIGNS – SCHEME "D"
SEE SCDOT STANDARD DRAWING 605-010-02

LEFT TURN - 35 mph x 1.47 x 8.0 sec gap = 411' min



RIGHT TURN - 35 mph = 390' min

USE SCDOT PERMANENT CONSTRUCTION SIGNS – SCHEME "D"
SEE SCDOT STANDARD DRAWING 605-010-02

SEE SHEET TC 2 AND SCDOT STANDARD DRAWINGS FOR TRAFFIC CONTROL DETAILS

0 100 200 300 400
SCALE IN FEET

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 26136
AARON D. LIVINGSTON
3/15/2016

SOUTH CAROLINA
INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC
No. 4470
CERTIFICATE OF AUTHORIZATION
3/15/16

SCALE: 1" = 100'

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TRAFFIC CONTROL /SITE DISTANCE PLAN SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_TC 1.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	TC 2

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER NO. 24242 WILLIE E. McCONNELL, JR

SIGNATURE

7/27/15
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	8-12-14	JCS	NEW DRAWING

SCDOT

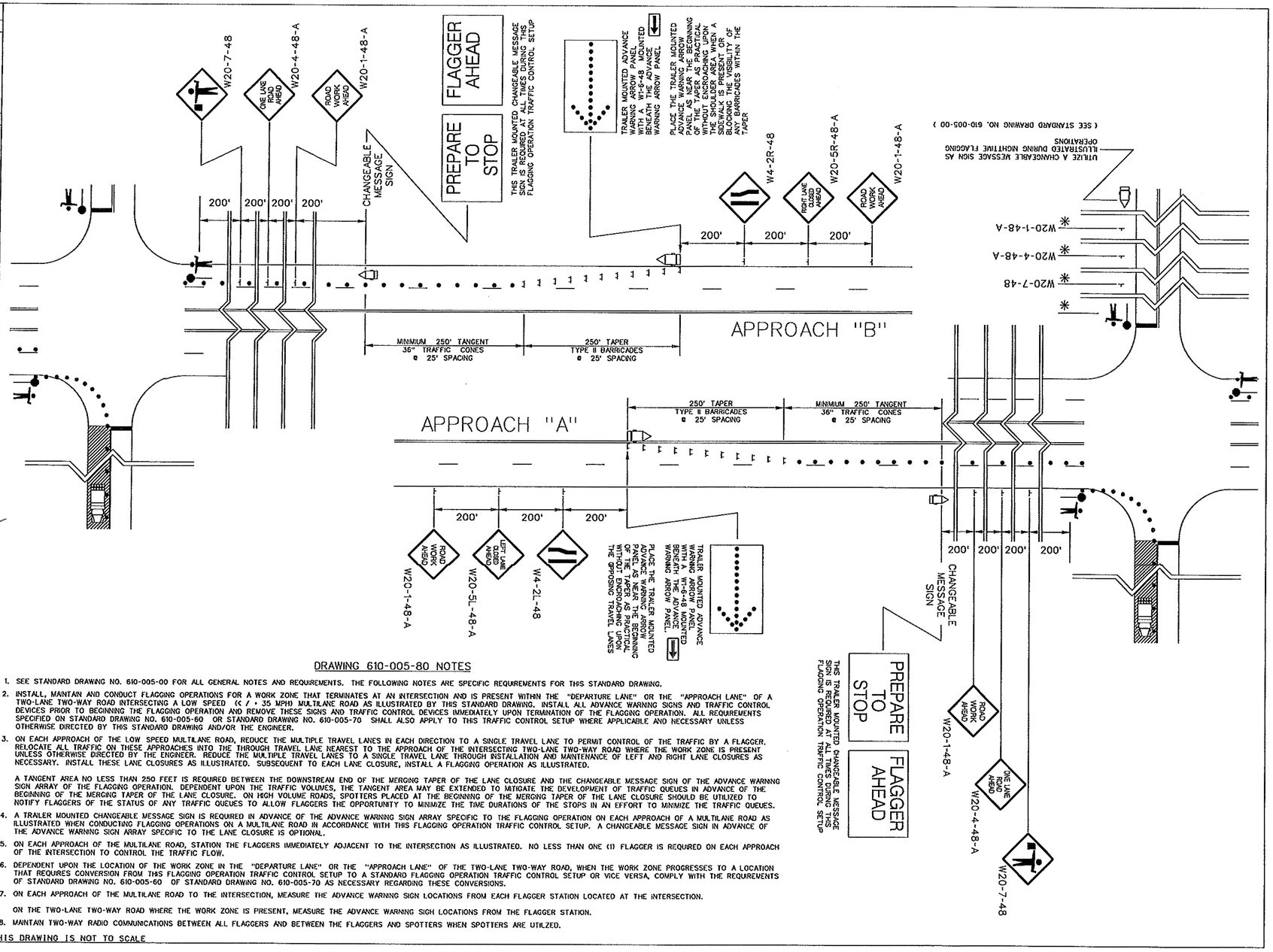
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

FLAGGING OPERATIONS STOP SIGN CONTROLLED INTERSECTIONS with LOW SPEED < / = 35 MPH MULTILANE ROADS

610-005-80

EFFECTIVE LETTING DATE | JAN 2016



DRAWING 610-005-80 NOTES

1. SEE STANDARD DRAWING NO. 610-005-00 FOR ALL GENERAL NOTES AND REQUIREMENTS. THE FOLLOWING NOTES ARE SPECIFIC REQUIREMENTS FOR THIS STANDARD DRAWING.
2. INSTALL, MAINTAIN AND CONDUCT FLAGGING OPERATIONS FOR A WORK ZONE THAT TERMINATES AT AN INTERSECTION AND IS PRESENT WITHIN THE "DEPARTURE LANE" OR THE "APPROACH LANE" OF A TWO-LANE TWO-WAY ROAD INTERSECTING A LOW SPEED (< / = 35 MPH) MULTILANE ROAD AS ILLUSTRATED BY THIS STANDARD DRAWING. INSTALL ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES PRIOR TO BEGINNING THE FLAGGING OPERATION AND REMOVE THESE SIGNS AND TRAFFIC CONTROL DEVICES IMMEDIATELY UPON TERMINATION OF THE FLAGGING OPERATION. ALL REQUIREMENTS SPECIFIED ON STANDARD DRAWING NO. 610-005-60 OR STANDARD DRAWING NO. 610-005-70 SHALL ALSO APPLY TO THIS TRAFFIC CONTROL SETUP WHERE APPLICABLE AND NECESSARY UNLESS OTHERWISE DIRECTED BY THIS STANDARD DRAWING AND/OR THE ENGINEER.
3. ON EACH APPROACH OF THE LOW SPEED MULTILANE ROAD, REDUCE THE MULTIPLE TRAVEL LANES IN EACH DIRECTION TO A SINGLE TRAVEL LANE TO PERMIT CONTROL OF THE TRAFFIC BY A FLAGGER. RELOCATE ALL TRAFFIC ON THESE APPROACHES INTO THE THROUGH TRAVEL LANE NEAREST TO THE APPROACH OF THE INTERSECTING TWO-LANE TWO-WAY ROAD WHERE THE WORK ZONE IS PRESENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER. REDUCE THE MULTIPLE TRAVEL LANES TO A SINGLE TRAVEL LANE THROUGH INSTALLATION AND MAINTENANCE OF LEFT AND RIGHT LANE CLOSURES AS NECESSARY. INSTALL THESE LANE CLOSURES AS ILLUSTRATED. SUBSEQUENT TO EACH LANE CLOSURE, INSTALL A FLAGGING OPERATION AS ILLUSTRATED.

   A TANGENT AREA NO LESS THAN 250 FEET IS REQUIRED BETWEEN THE DOWNSTREAM END OF THE MERGING TAPER OF THE LANE CLOSURE AND THE CHANGEABLE MESSAGE SIGN OF THE ADVANCE WARNING SIGN ARRAY OF THE FLAGGING OPERATION. DEPENDENT UPON THE TRAFFIC VOLUMES, THE TANGENT AREA MAY BE EXTENDED TO MITIGATE THE DEVELOPMENT OF TRAFFIC QUEUES IN ADVANCE OF THE BEGINNING OF THE MERGING TAPER OF THE LANE CLOSURE. ON HIGH VOLUME ROADS, SPOTTERS PLACED AT THE BEGINNING OF THE MERGING TAPER OF THE LANE CLOSURE SHOULD BE UTILIZED TO NOTIFY FLAGGERS OF THE STATUS OF ANY TRAFFIC QUEUES TO ALLOW FLAGGERS THE OPPORTUNITY TO MINIMIZE THE TIME DURATIONS OF THE STOPS IN AN EFFORT TO MINIMIZE THE TRAFFIC QUEUES.
4. A TRAILER MOUNTED CHANGEABLE MESSAGE SIGN IS REQUIRED IN ADVANCE OF THE ADVANCE WARNING SIGN ARRAY SPECIFIC TO THE FLAGGING OPERATION ON EACH APPROACH OF A MULTILANE ROAD AS ILLUSTRATED WHEN CONDUCTING FLAGGING OPERATIONS ON A MULTILANE ROAD IN ACCORDANCE WITH THIS FLAGGING OPERATION TRAFFIC CONTROL SETUP. A CHANGEABLE MESSAGE SIGN IN ADVANCE OF THE ADVANCE WARNING SIGN ARRAY SPECIFIC TO THE LANE CLOSURE IS OPTIONAL.
5. ON EACH APPROACH OF THE MULTILANE ROAD, STATION THE FLAGGERS IMMEDIATELY ADJACENT TO THE INTERSECTION AS ILLUSTRATED. NO LESS THAN ONE (1) FLAGGER IS REQUIRED ON EACH APPROACH OF THE INTERSECTION TO CONTROL THE TRAFFIC FLOW.
6. DEPENDENT UPON THE LOCATION OF THE WORK ZONE IN THE "DEPARTURE LANE" OR THE "APPROACH LANE" OF THE TWO-LANE TWO-WAY ROAD, WHEN THE WORK ZONE PROGRESSES TO A LOCATION THAT REQUIRES CONVERSION FROM THIS FLAGGING OPERATION TRAFFIC CONTROL SETUP TO A STANDARD FLAGGING OPERATION TRAFFIC CONTROL SETUP OR VICE VERSA, COMPLY WITH THE REQUIREMENTS OF STANDARD DRAWING NO. 610-005-60 OF STANDARD DRAWING NO. 610-005-70 AS NECESSARY REGARDING THESE CONVERSIONS.
7. ON EACH APPROACH OF THE MULTILANE ROAD TO THE INTERSECTION, MEASURE THE ADVANCE WARNING SIGN LOCATIONS FROM EACH FLAGGER STATION LOCATED AT THE INTERSECTION.

   ON THE TWO-LANE TWO-WAY ROAD WHERE THE WORK ZONE IS PRESENT, MEASURE THE ADVANCE WARNING SIGH LOCATIONS FROM THE FLAGGER STATION.
8. MAINTAIN TWO-WAY RADIO COMMUNICATIONS BETWEEN ALL FLAGGERS AND BETWEEN THE FLAGGERS AND SPOTTERS WHEN SPOTTERS ARE UTILIZED.

THIS DRAWING IS NOT TO SCALE

FOR INFOMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TRAFFIC CONTROL PLAN SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.10 Lemoyne Ave\Roadway\Dgn\Plan Sheets\SHT_TC 2.dgn
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	TC 3

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER NO. 24242 WILLIE E. McCONNELL, JR

SIGNATURE

8/2/12
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	2-15-11	JCS	GENERAL UPDATE
0	8-22-07	JCS	DRAWING NO. UPDATE

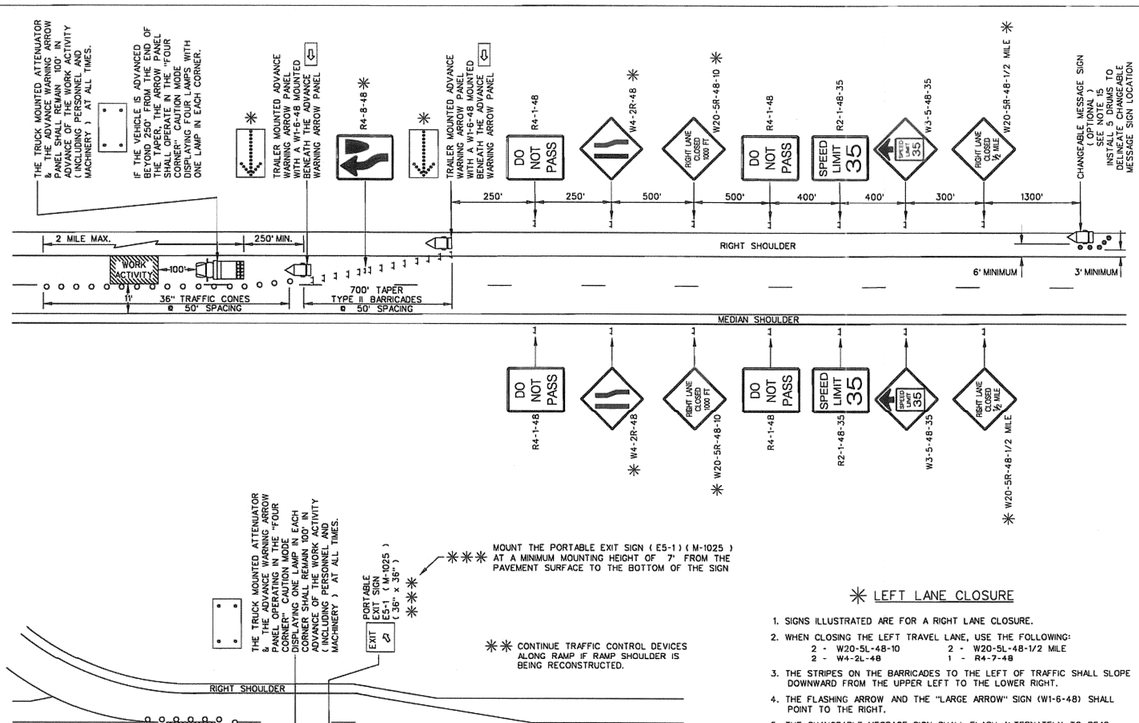
SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

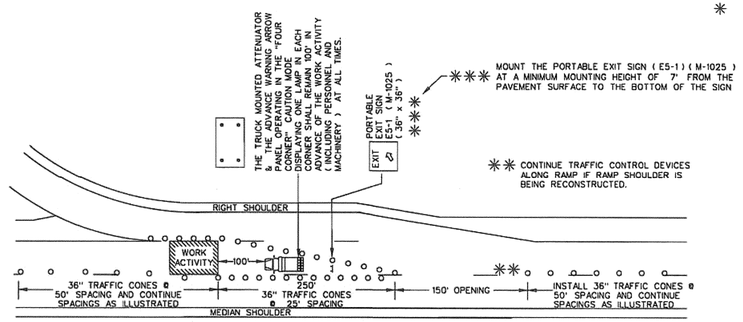
STANDARD DRAWING

LANE CLOSURE
DAYTIME
MULTILANE
PRIMARY ROUTES

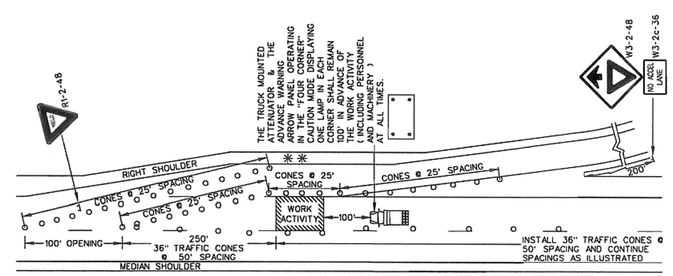
610-025-00

EFFECTIVE LETTING DATE | JAN. 2013 | THIS DRAWING IS NOT TO SCALE





"TYPICAL EXIT RAMP" APPLICATION (NO SCALE)



"TYPICAL ENTRANCE RAMP" APPLICATION (NO SCALE)

* LEFT LANE CLOSURE

1. SIGNS ILLUSTRATED ARE FOR A RIGHT LANE CLOSURE.
2. WHEN CLOSING THE LEFT TRAVEL LANE, USE THE FOLLOWING:
   2 - W20-5L-48-10 2 - W20-5L-48-1/2 MILE
   2 - W4-2L-48 1 - R4-7-48
3. THE STRIPES ON THE BARRICADES TO THE LEFT OF TRAFFIC SHALL SLOPE DOWNWARD FROM THE UPPER LEFT TO THE LOWER RIGHT.
4. THE FLASHING ARROW AND THE "LARGE ARROW" SIGN (W1-6-48) SHALL POINT TO THE RIGHT.
5. THE CHANGEABLE MESSAGE SIGN SHALL FLASH ALTERNATELY TO READ "LEFT LANE CLOSED", "MERGE RIGHT".

PORTABLE TRUCK MOUNTED ATTENUATOR

1. UTILIZE A TRUCK MOUNTED ATTENUATOR ATTACHED TO THE REAR OF A TRUCK WITH A MINIMUM GROSS VEHICULAR WEIGHT (GVM) OF 15,000 POUNDS (ACTUAL WEIGHT). IF THE ADDITION OF SUPPLEMENTAL WEIGHT TO THE VEHICLE AS BALLAST IS NECESSARY, CONTAIN THE MATERIAL WITHIN A STRUCTURE CONSTRUCTED OF STEEL. CONSTRUCT THIS STEEL STRUCTURE TO HAVE A MINIMUM OF FOUR SIDES AND A BOTTOM. A TOP IS OPTIONAL. BOLT THIS STRUCTURE TO THE FRAME OF THE TRUCK. UTILIZE A SUFFICIENT NUMBER OF FASTENERS FOR ATTACHMENT OF THE STEEL STRUCTURE TO THE FRAME OF THE TRUCK TO ENSURE THE STRUCTURE WILL NOT SEPARATE FROM THE FRAME OF THE TRUCK DURING AN IMPACT UPON THE ATTACHED TRUCK MOUNTED ATTENUATOR. UTILIZE EITHER DRY LOOSE SAND OR STEEL REINFORCED CONCRETE FOR BALLAST MATERIAL WITHIN THE STEEL STRUCTURE TO ACHIEVE THE NECESSARY WEIGHT. THE BALLAST MATERIAL SHALL REMAIN CONTAINED WITHIN THE CONFINES OF THE STEEL STRUCTURE AND SHALL NOT PROTRUDE FROM THE STEEL STRUCTURE IN ANY MANNER.
2. LOCATE THE TRUCK MOUNTED ATTENUATOR 100 FEET IN ADVANCE OF THE WORK AREA UNLESS OTHERWISE SPECIFIED.
3. PROVIDE, INSTALL AND MAINTAIN THE TRUCK MOUNTED ATTENUATOR AS SPECIFIED BY THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
4. DUE TO THE WEIGHT OF A TRUCK MOUNTED ATTENUATOR, THE TRUCK MOUNTED ATTENUATOR SUPPLEMENTED WITH AN ADVANCE WARNING ARROW PANEL MAY BE REPLACED WITH A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL WHEN THIS TRAFFIC CONTROL SETUP IS UTILIZED FOR ASPHALT CONCRETE PAVEMENT OPERATIONS. REPLACEMENT WITH A TRAILER MOUNTED ADVANCE WARNING ARROW PANEL SHALL REQUIRE THE ENGINEER'S APPROVAL.

GENERAL NOTES

1. ALL SIGN LOCATIONS ARE TO BE MEASURED FROM THE WORK AREA. WORK LIMITS FOR THE PROJECT WILL BE DETERMINED BY THE ENGINEER AND AS INDICATED IN THE CONTRACT.
2. INSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS NO LESS THAN 4 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. WHEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB.
3. SPACINGS INDICATED ARE FOR NORMAL CONDITIONS; ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.
4. ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED U-CHANNEL POSTS OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GRADE ELEVATION OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FACE OF THE SIGNS PERPENDICULAR TO THE SURFACE OF THE ROADWAY.
5. REFLECTORIZE ORANGE ADVANCE WARNING SIGNS AND ANY ORANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC RETROREFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING.
6. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH ALL NCHRP REPORT 350 REQUIREMENTS AND SHALL REQUIRE APPROVAL BY THE DEPARTMENT. ONLY THOSE TRAFFIC CONTROL DEVICES INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" ARE CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org .
7. THE CONTRACTOR SHALL PROVIDE AND UTILIZE ANY SPECIAL SIGN MOUNTING ASSEMBLIES AND HARDWARE THAT MAY BE NECESSARY FOR INSTALLING AND MOUNTING SIGNS IN AREAS OF CONCRETE MEDIAN BARRIER, BRIDGE PARAPET WALLS OR DOUBLEFACED GUARDRAIL.
8. REFLECTORIZATION OF 36" TRAFFIC CONES USED DURING DAYLIGHT HOURS IS NOT REQUIRED. IF THIS TRAFFIC CONTROL SETUP EXTENDS INTO THE NIGHTTIME HOURS, REPLACE ALL 36" TRAFFIC CONES WITH EITHER PORTABLE PLASTIC DRUMS OR 42" OVERSIZED TRAFFIC CONES. REFLECTORIZE ALL PORTABLE PLASTIC DRUMS AND 42" OVERSIZED TRAFFIC CONES WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
9. REFLECTORIZE ALL BARRICADES WITH A TYPE VIII OR IX PRISMATIC RETROREFLECTIVE SHEETING ON ALL PROJECTS LET TO CONTRACT AFTER MAY 1, 2012 UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
10. TYPE II BARRICADES SHALL HAVE A MINIMUM WIDTH OF 3 FEET UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
11. CONDUCT THE WORK IN SUCH A MANNER THAT WILL MINIMIZE ENCROACHMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES ONTO AN ADJACENT TRAVEL LANE OPEN TO TRAFFIC. INSTALL, MAINTAIN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NECESSARY TO ENSURE PROPER DELINEATION OF THE WORK AREA.
12. LANE CLOSURES ARE RESTRICTED TO MAXIMUM LENGTHS OF 2 MILES UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS AND/OR THE DEPARTMENT.
13. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS WITHIN THE SAME TRAVEL LANE UNDER TWO SEPARATE LANE CLOSURES ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 2 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE.
14. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS IN THE SAME DIRECTION BUT WITHIN DIFFERENT TRAVEL LANES UNDER TWO SEPARATE LANE CLOSURES ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 4 MILES FROM THE END OF THE FIRST CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CLOSURE.
15. UTILIZATION OF A CHANGEABLE MESSAGE SIGN IS OPTIONAL WITH THIS TRAFFIC CONTROL SETUP. HOWEVER, WHEN A CHANGEABLE MESSAGE SIGN IS UTILIZED, INSTALL THE SIGN AS ILLUSTRATED ON THIS STANDARD DRAWING UNLESS OTHERWISE DIRECTED BY THE SPECIAL PROVISIONS, THE PLANS AND/OR THE ENGINEER. INSTALL THE CHANGEABLE MESSAGE SIGN NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE ADJACENT TRAVEL LANE AND SUPPLEMENT THE SIGN LOCATION WITH NO LESS THAN 5 PORTABLE PLASTIC DRUMS FOR DELINEATION AS ILLUSTRATED. 36" STANDARD TRAFFIC CONES OR 42" OVERSIZED TRAFFIC CONES ARE PROHIBITED AS SUBSTITUTES FOR THE PORTABLE PLASTIC DRUMS IN THIS APPLICATION. DURING A RIGHT LANE CLOSURE, THE SIGN SHOULD FLASH ALTERNATELY TO READ "RIGHT LANE CLOSED", "MERGE LEFT" AT A RATE THAT WILL PERMIT MOTORISTS TO READ BOTH MESSAGES AT LEAST ONCE.
16. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHHOLD THE MONTHLY ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER.
17. THIS TYPICAL TRAFFIC CONTROL SETUP APPLIES TO THE INSTALLATION OF A LANE CLOSURE ON A PRIMARY ROADWAY WITH A POSTED REGULATORY SPEED LIMIT OF 40 MPH OR GREATER.

ADVANCE WARNING ARROW PANEL

ALL ADVANCE WARNING ARROW PANELS SHALL BE 48" x 96" WITH A MINIMUM LEGIBILITY DISTANCE OF 1 MILE. PLACEMENT OF AN ADVANCE WARNING ARROW PANEL MAY REQUIRE ADJUSTMENTS DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENT OR OTHER SIGHT DISTANCE RESTRICTIONS. THE PANEL FACE SHALL BE NONREFLECTIVE BLACK. ALL ADVANCE WARNING ARROW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

WHEN AN ADVANCE WARNING ARROW PANEL IS REQUIRED TO OPERATE IN THE CAUTION MODE, THE ADVANCE WARNING ARROW PANEL SHALL DISPLAY THE "FOUR CORNERS" CAUTION MODE, WITH ONE LAMP IN EACH CORNER. DISPLAY OF ANY OTHER TYPE OF CAUTION MODE OTHER THAN THE "FOUR CORNERS" CAUTION MODE SUCH AS THE "FLASHING BAR" OR THE "ALTERNATING DIAMOND" CAUTION MODES ARE UNACCEPTABLE AND PROHIBITED.

LEGEND

o 36" TRAFFIC CONES

FOR INFOMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TRAFFIC CONTROL PLAN SHEET

LEMOYNE AVENUE ROADWAY AND DRAINAGE IMPROVEMENTS

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3/15/2016

EROSION CONTROL DATA

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	EC1

RECEIVING WATERS

ROAD / ROUTE	OUTFALL DITCH STATION	SIDE	NAME OF RECEIVING WATERS	NAME OF ULTIMATE RECEIVING WATERS
LEMOYNE AVE	10+30	RT	SCDOT DITCH	LAWTON CREEK

SOIL TYPES

ROAD / ROUTE	STATION TO STATION		SOIL PARTICLE SIZE (COARSE / FINE)	ZONE
LEMOYNE AVE	10+00	20+82	FINE	LOWER COASTAL PLAIN

TEMPORARY EROSION CONTROL BLANKET

ROAD / ROUTE	STATION TO STATION		SIDE	DEPTH OF BLANKET (FT)	DITCH BOTTOM WIDTH (FT)	SLOPES x : 1 FRONT	SLOPES x : 1 BACK	MSY
LEMOYNE AVE	10+50	12+00	RT	4	0	2	2.0	0.298
LEMOYNE AVE	11+00	12+50	LT	1	0	6	6.0	0.203
LEMOYNE AVE	12+25	13+25	RT	1.5	0	4	4.0	0.137
LEMOYNE AVE	13+50	16+00	LT	4	0	2	2.0	0.497
							TOTAL	1.135

TURF REINFORCED MATTING (TRM)

ROAD / ROUTE	STATION TO STATION		SIDE	DEPTH OF MAT (FT)	SLOPES (x : 1) FRONT	SLOPES (x : 1) BACK	DITCH BOTTOM WIDTH (FT)	TYPE	TYPE 1 (MSY)	TYPE 2 (MSY)	TYPE 3 (MSY)
POND BERM	14+50	15+00	LT	3	2	2	7	1	0.113		
								TOTALS	0.113		

SEDIMENT TUBES IN DITCHES

ROAD / ROUTE	STATION TO STATION		SIDE	AVERAGE LENGTH	SPACING (FT)	TOTAL	COMMENTS
LEMOYNE AVE	12+25	13+25	RT	10	100	20	
LEMOYNE AVE	17+50	18+00	LT	10	100	20	
					TOTAL	40	

SEDIMENT DAM

NO	ROAD / ROUTE	STATION	SIDE	DRAINED OR NOT DRAINED	LENGTH OF SILT BASIN	WIDTH OF SILT BASIN	DAM HEIGHT	SIDE SLOPE OF SILT BASIN	SPILLWAY BOTTOM WIDTH	DAM BOTTOM WIDTH	RIP RAP CLASS	TOTAL STORAGE VOLUME	SEDIMENT STORAGE HEIGHT	OUTFALL CHANNEL WIDTH	OUTFALL CHANNEL DEPTH	OUTFALL CHANNEL LENGTH

3-15-2016

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DATA SHEET

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

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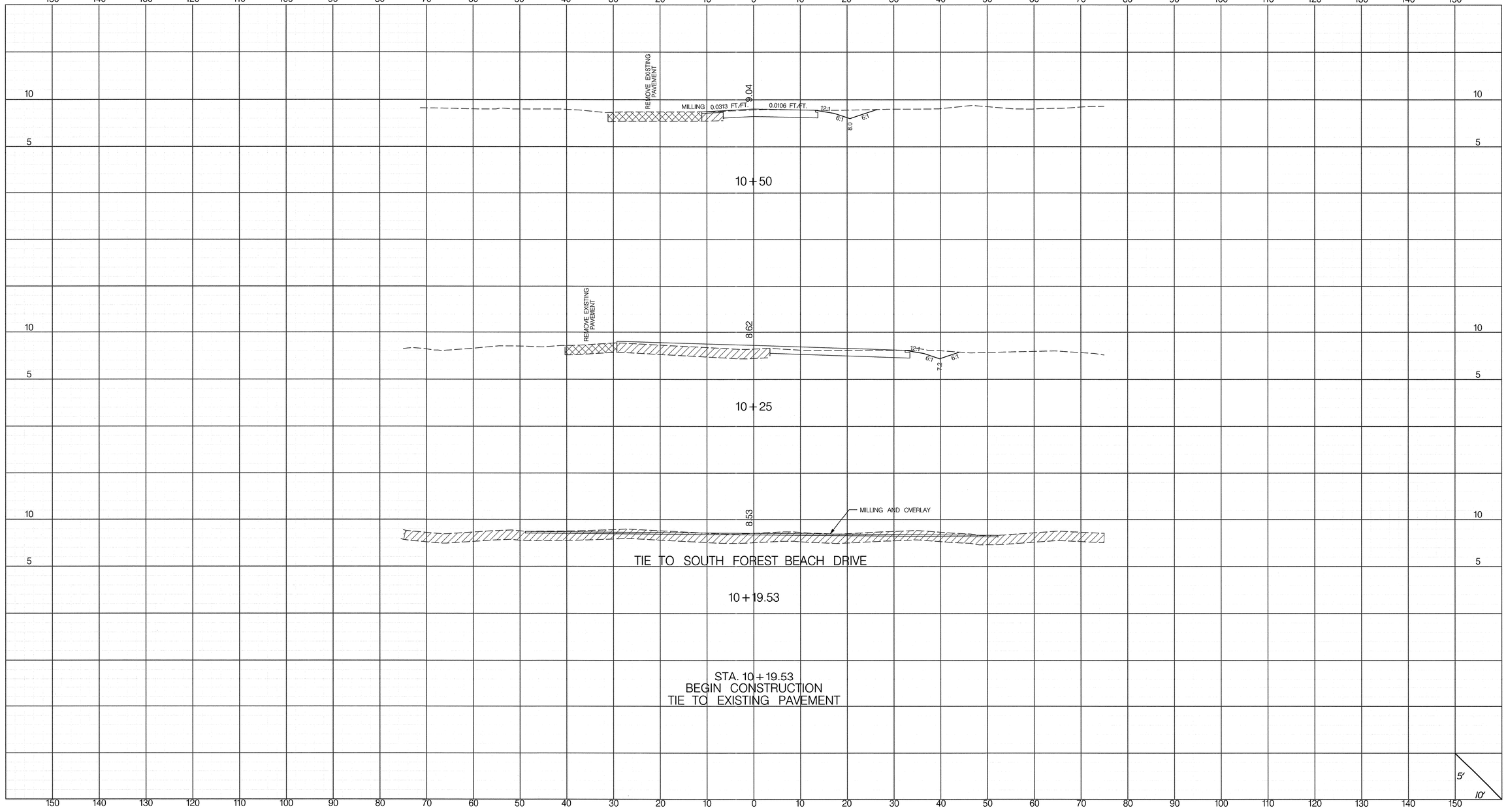
3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X1



SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 26136
AARON O. LIVINGSTON
3/15/16

SOUTH CAROLINA
INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC
No. 4470
CERTIFICATE OF AUTHORIZATION
3/15/16

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

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3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
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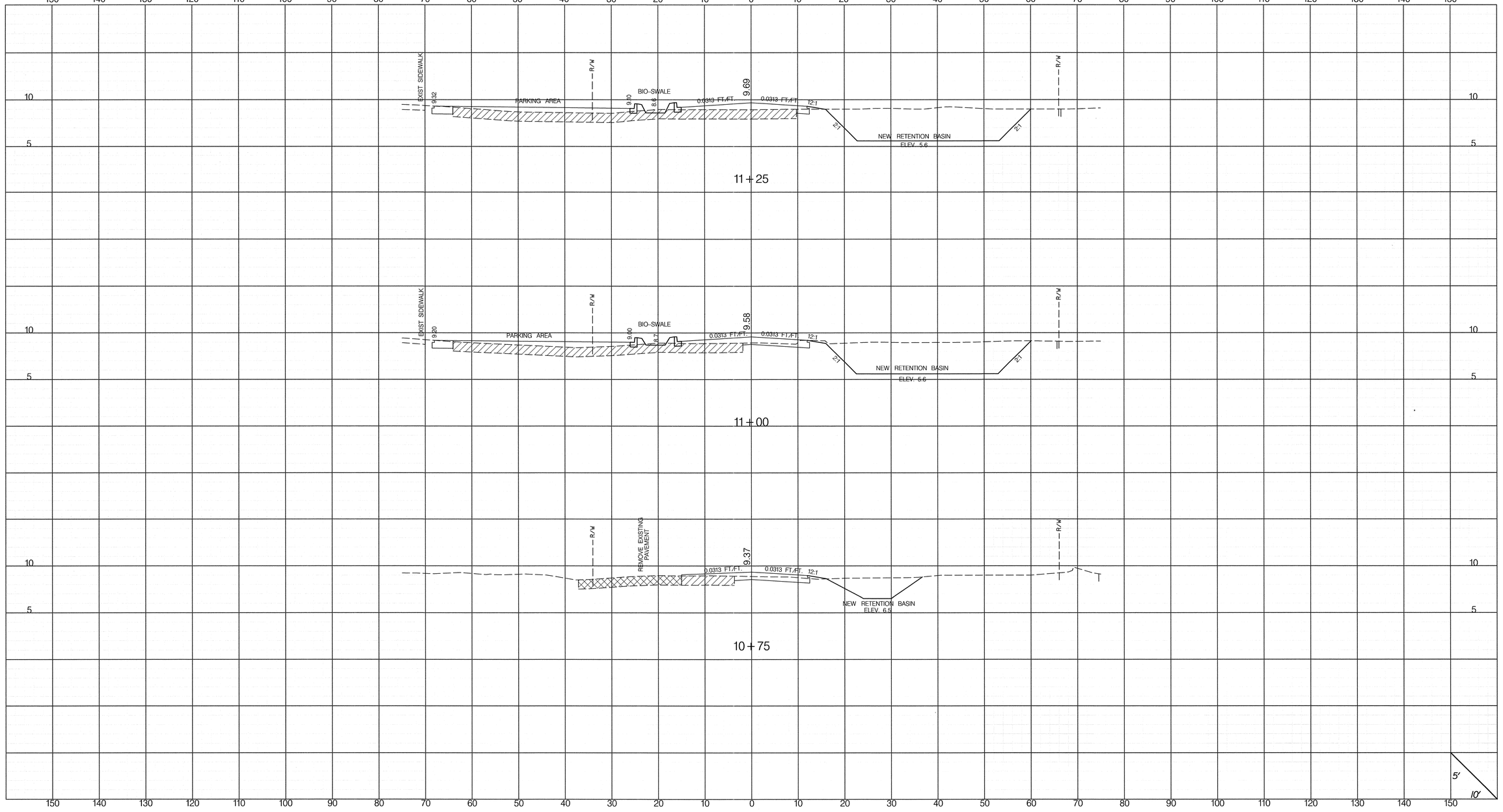

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 26136
JASON D. LIVINGSTON
3/15/16

SOUTH CAROLINA
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No. 4470
CERTIFICATE OF AUTHORIZATION

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SOUTH CAROLINA

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ROADWAY AND DRAINAGE IMPROVEMENTS

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3/15/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD /ROUTE NO.	SHEET NO.
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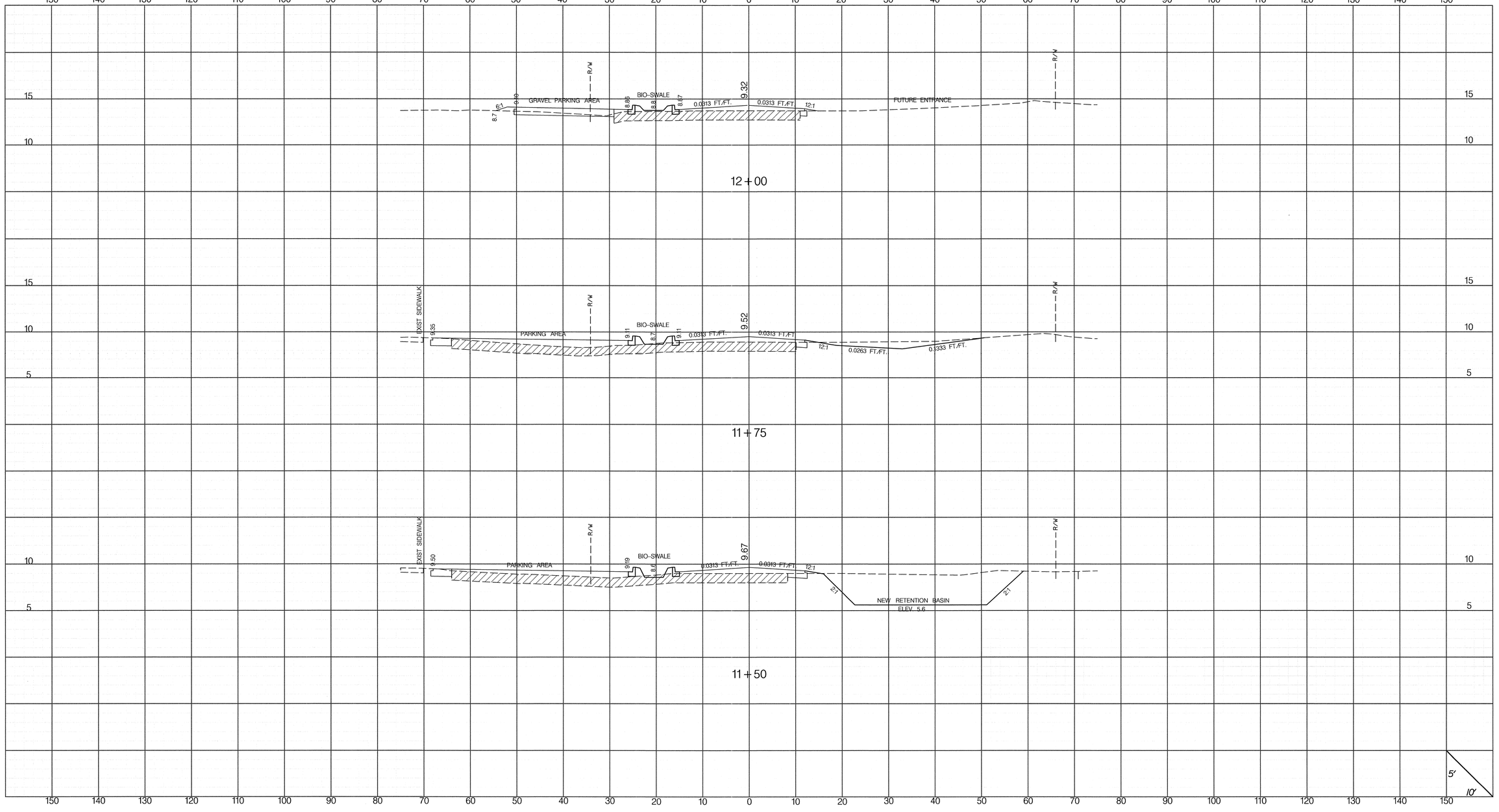

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SOUTH CAROLINA

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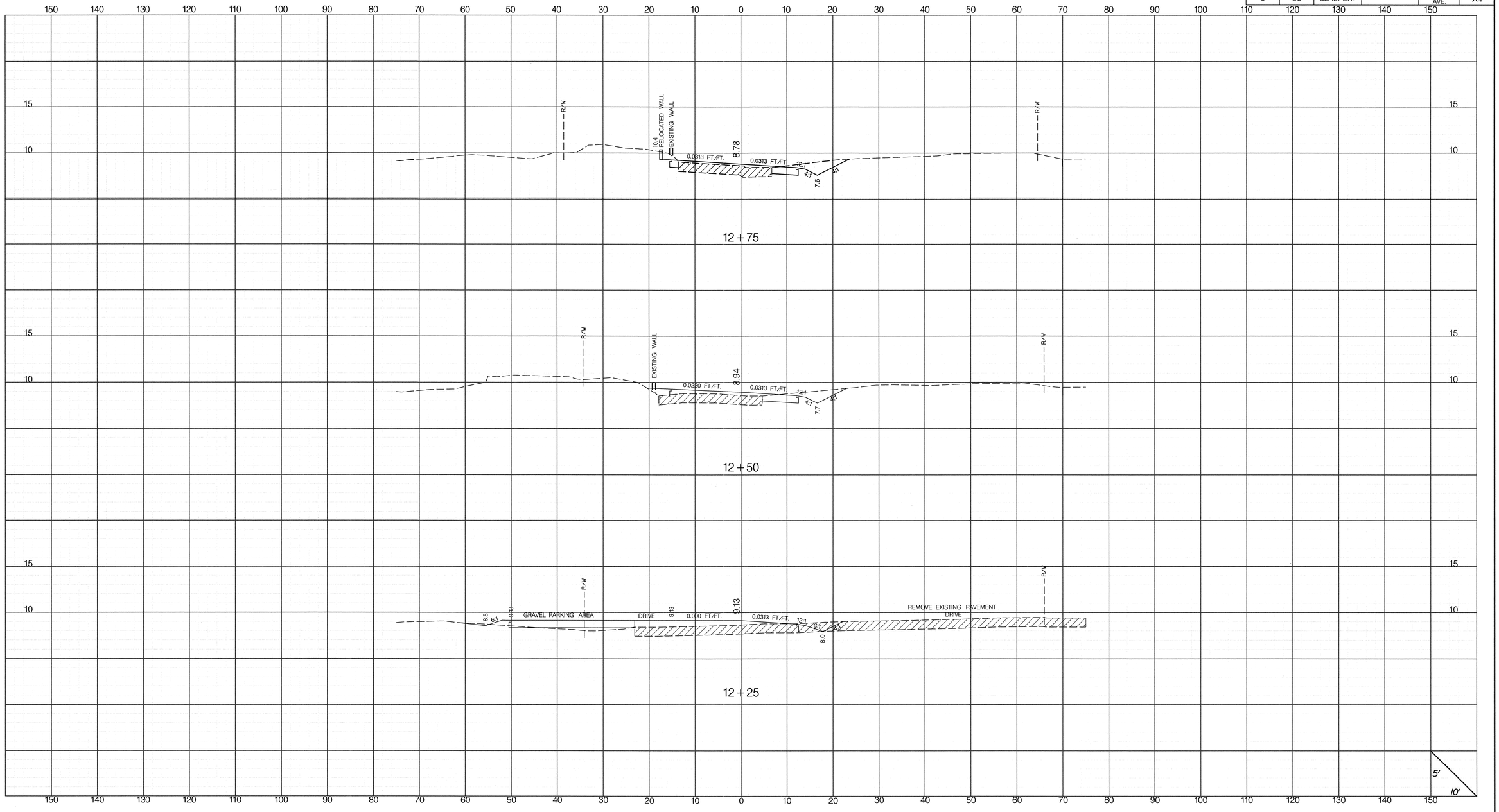

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON
Aaron O. Livingston

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING PLLC No. 4470 CERTIFICATE OF AUTHORIZATION
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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

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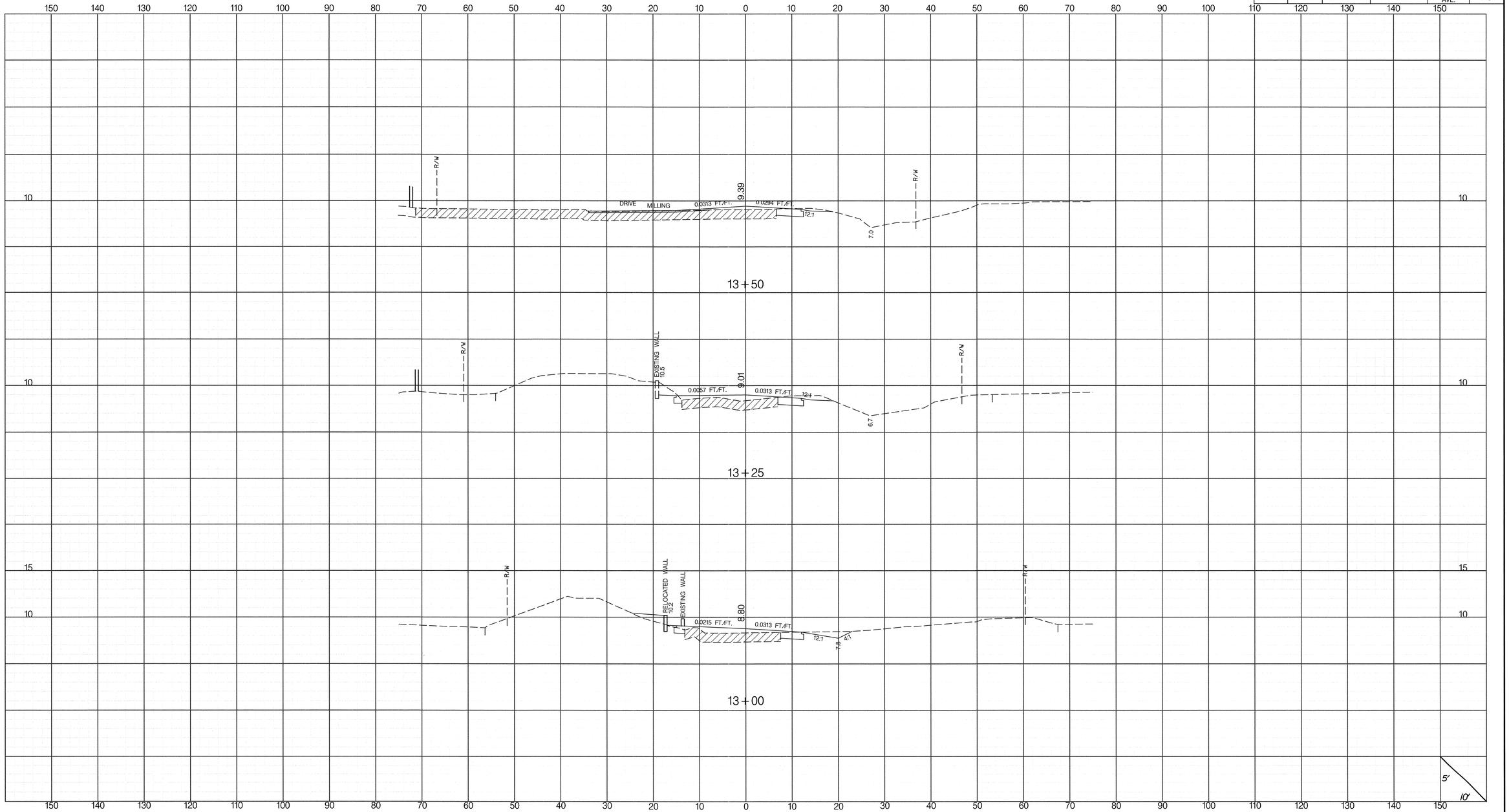
LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X5



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SOUTH CAROLINA PROFESSIONAL ENGINEER
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JASON O. LIVINGSTON
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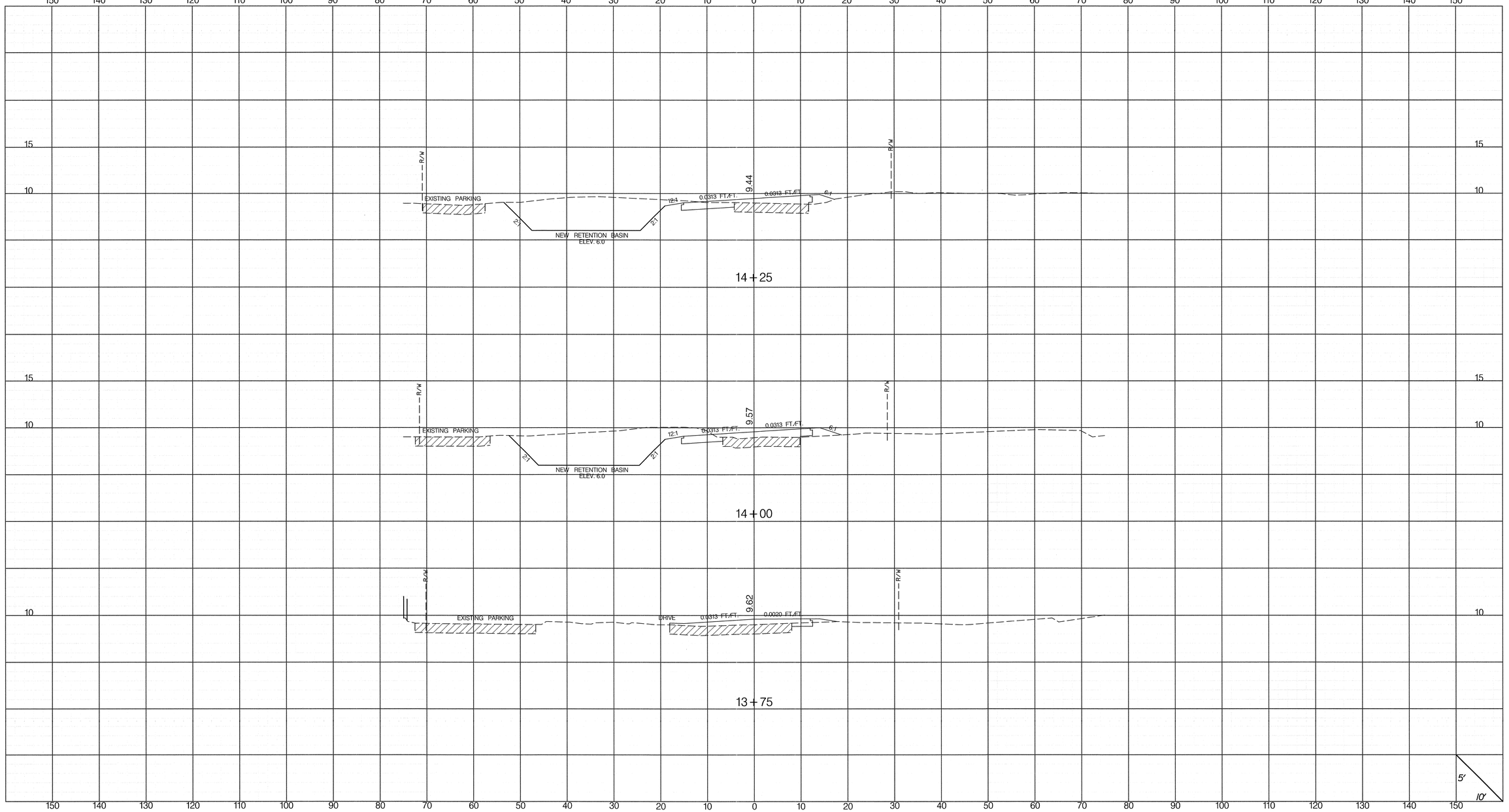
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD /ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X6



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TOWN OF HILTON HEAD ISLAND
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LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

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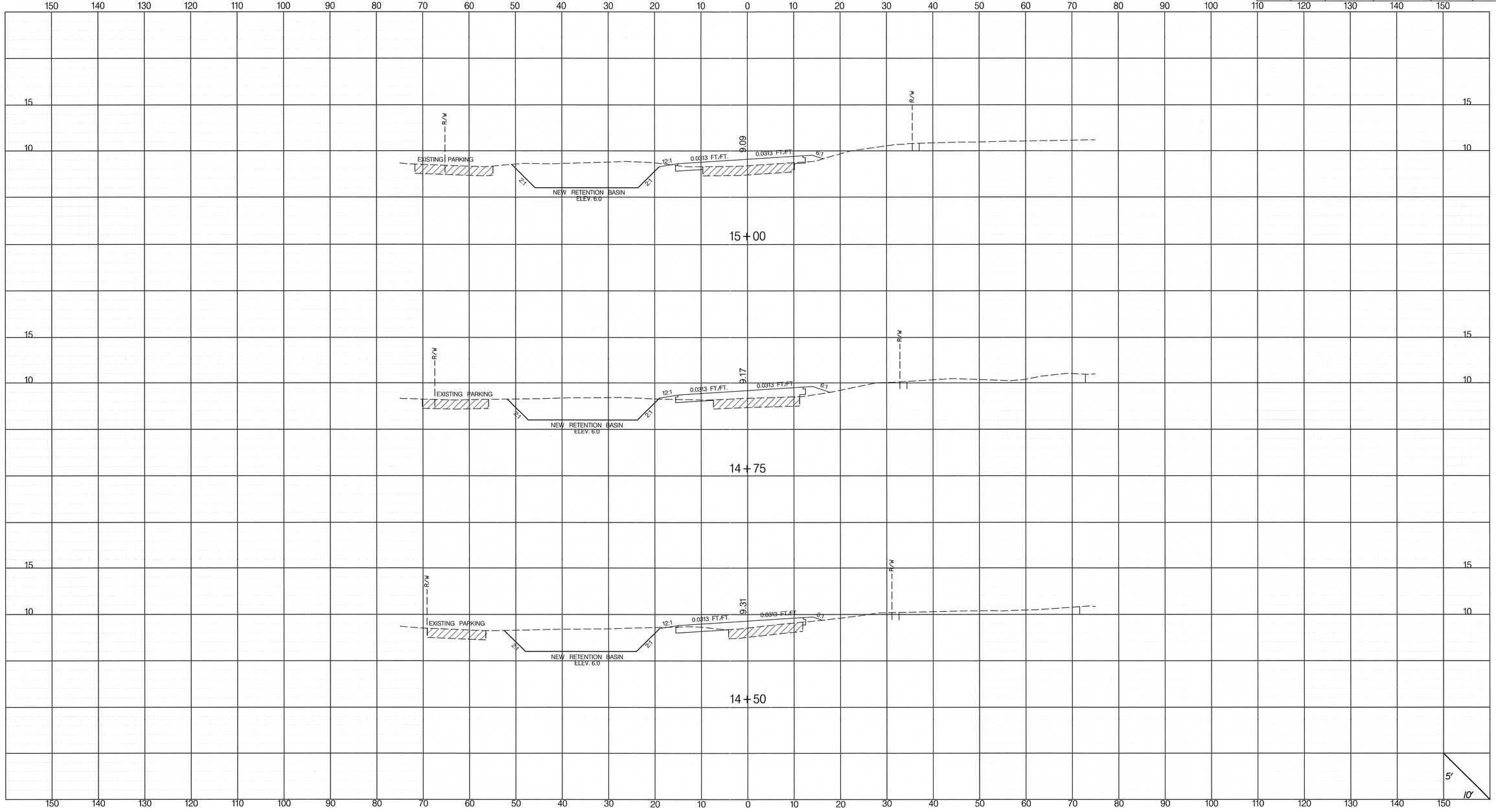

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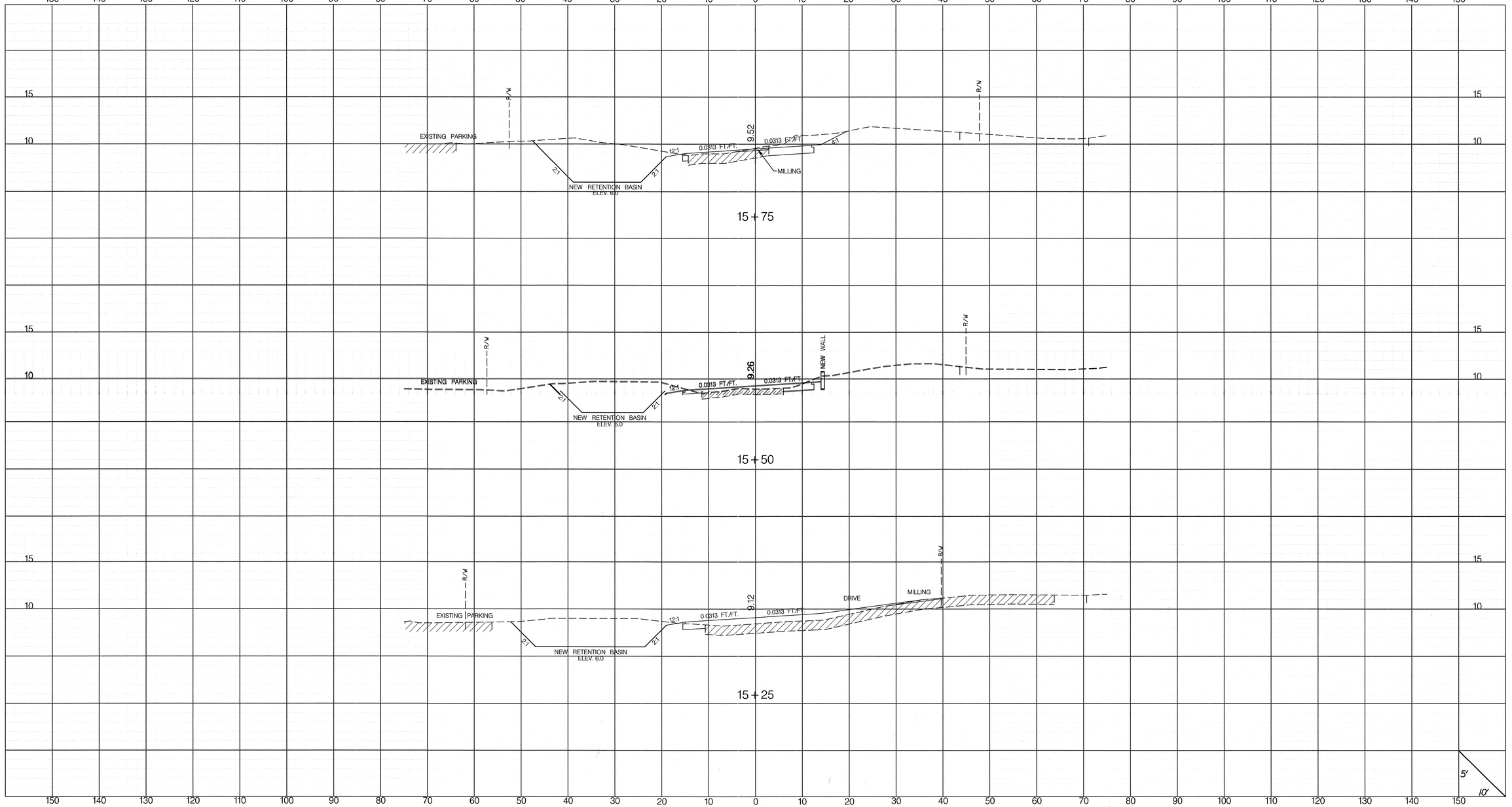

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TOWN OF HILTON HEAD ISLAND
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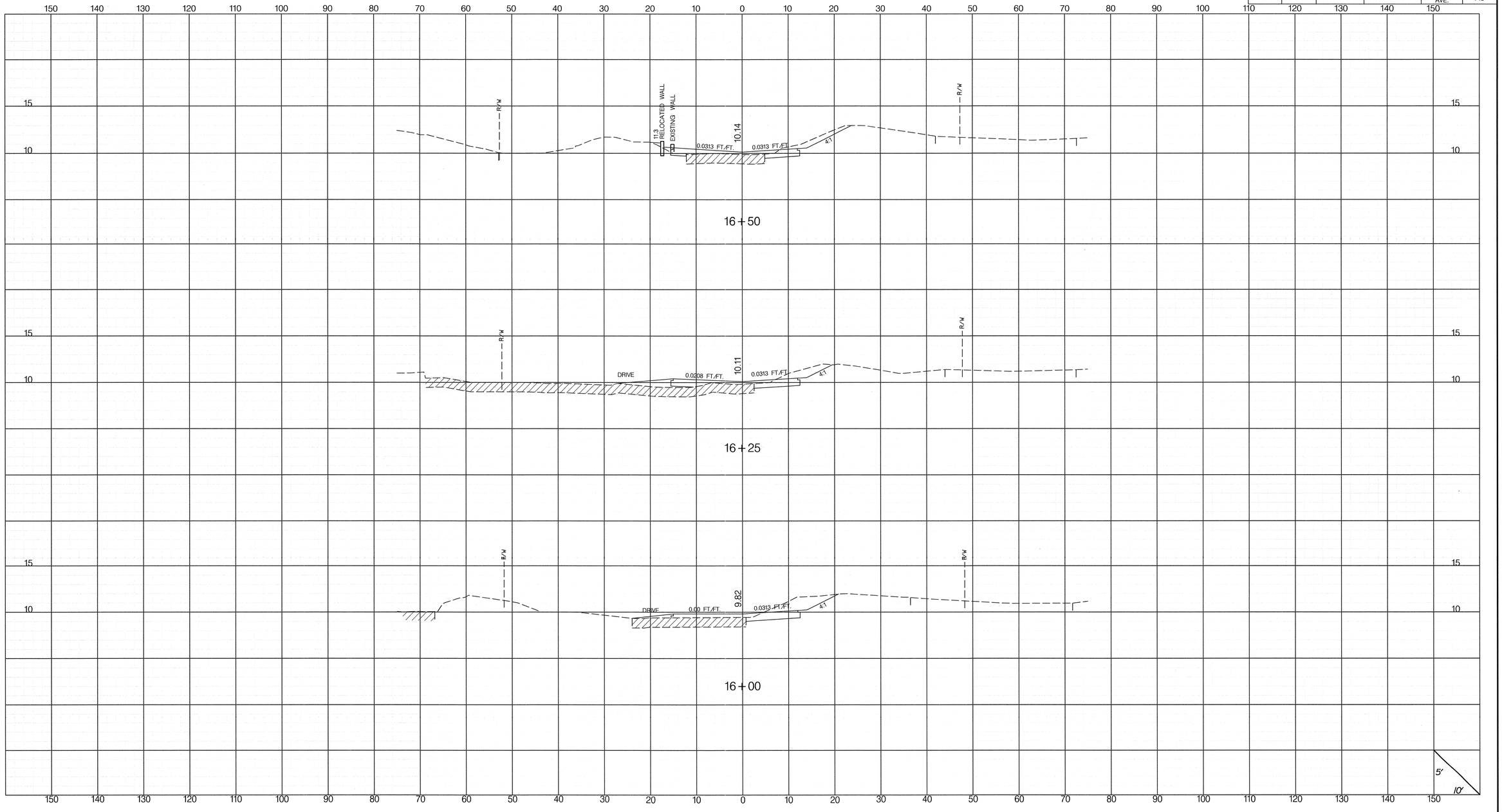

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TOWN OF HILTON HEAD ISLAND
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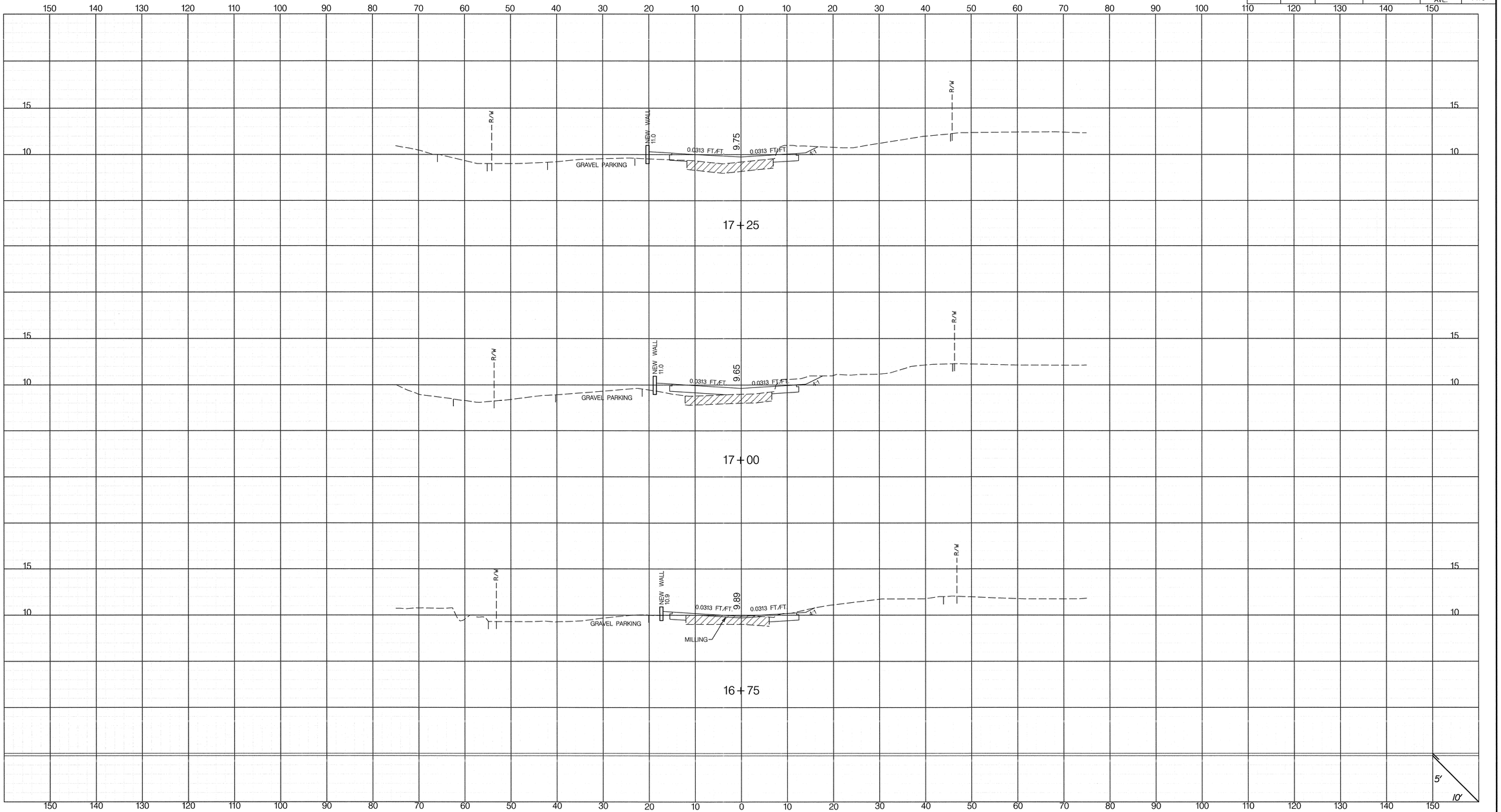
3	SC	BEAUFORT		LEMOYNE AVE.	X10



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INFRASTRUCTURE CONSULTING & ENGINEERING

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 HARON O. LIVINGSTON

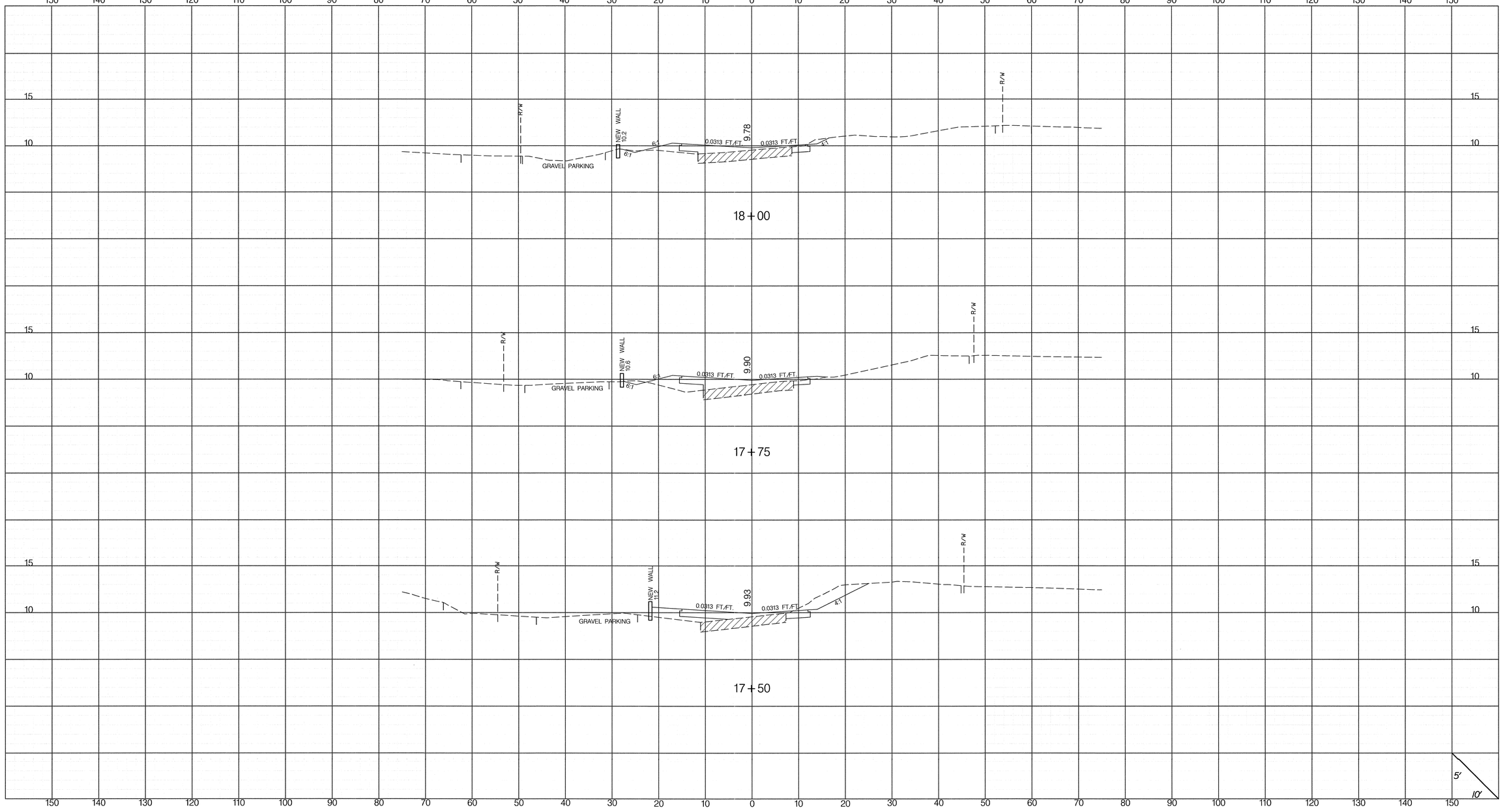
SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

CROSS SECTIONS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD /ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X11



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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 JASON O. LIVINGSTON

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 3/15/16

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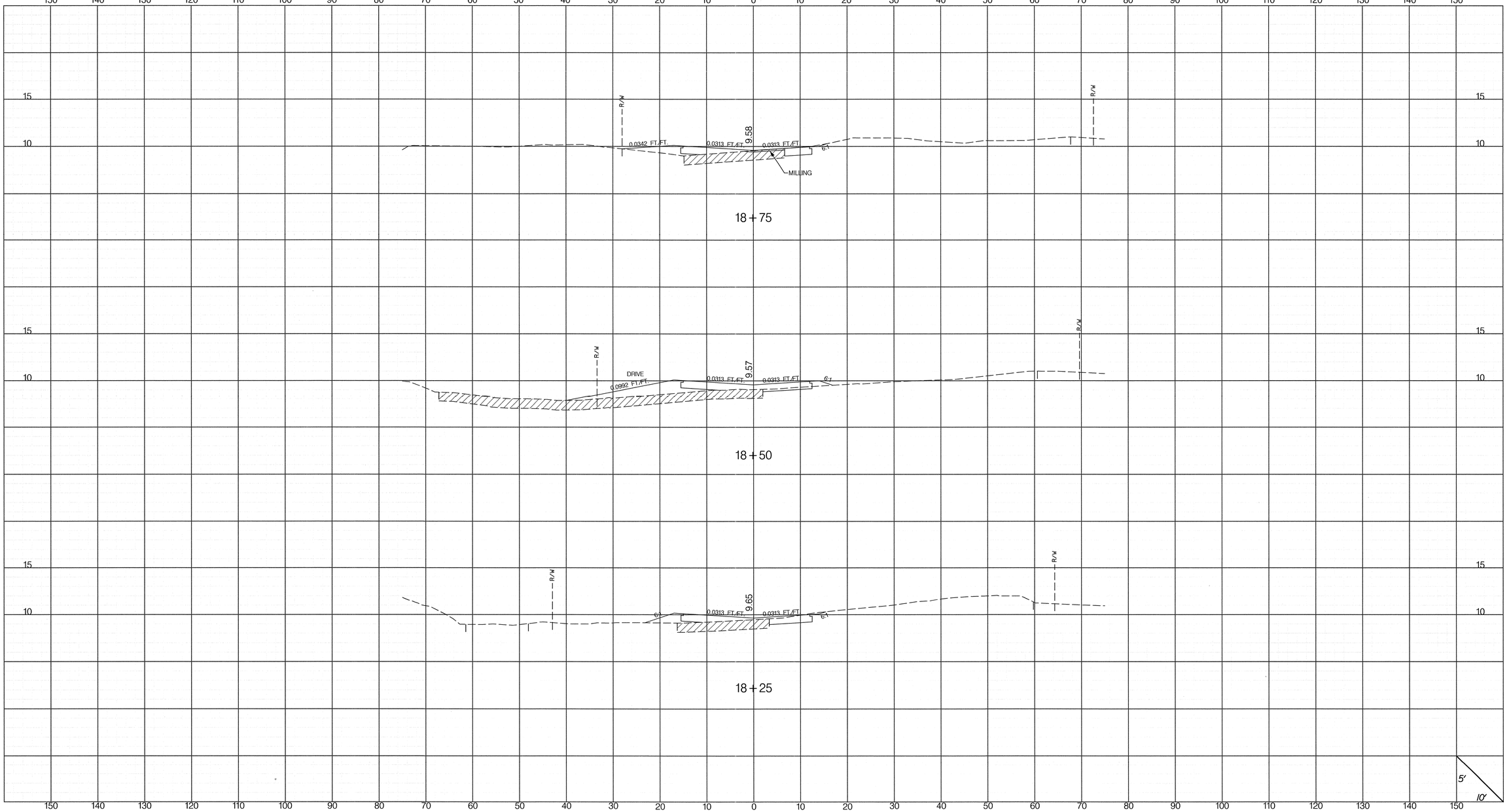
TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

CROSS SECTIONS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X12



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No. 26136
AARON D. LIVINGSTON
3/15/16

SOUTH CAROLINA
INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC
No. 4470
CERTIFICATE OF AUTHORIZATION
3/15/16

INFRASTRUCTURE CONSULTING & ENGINEERING

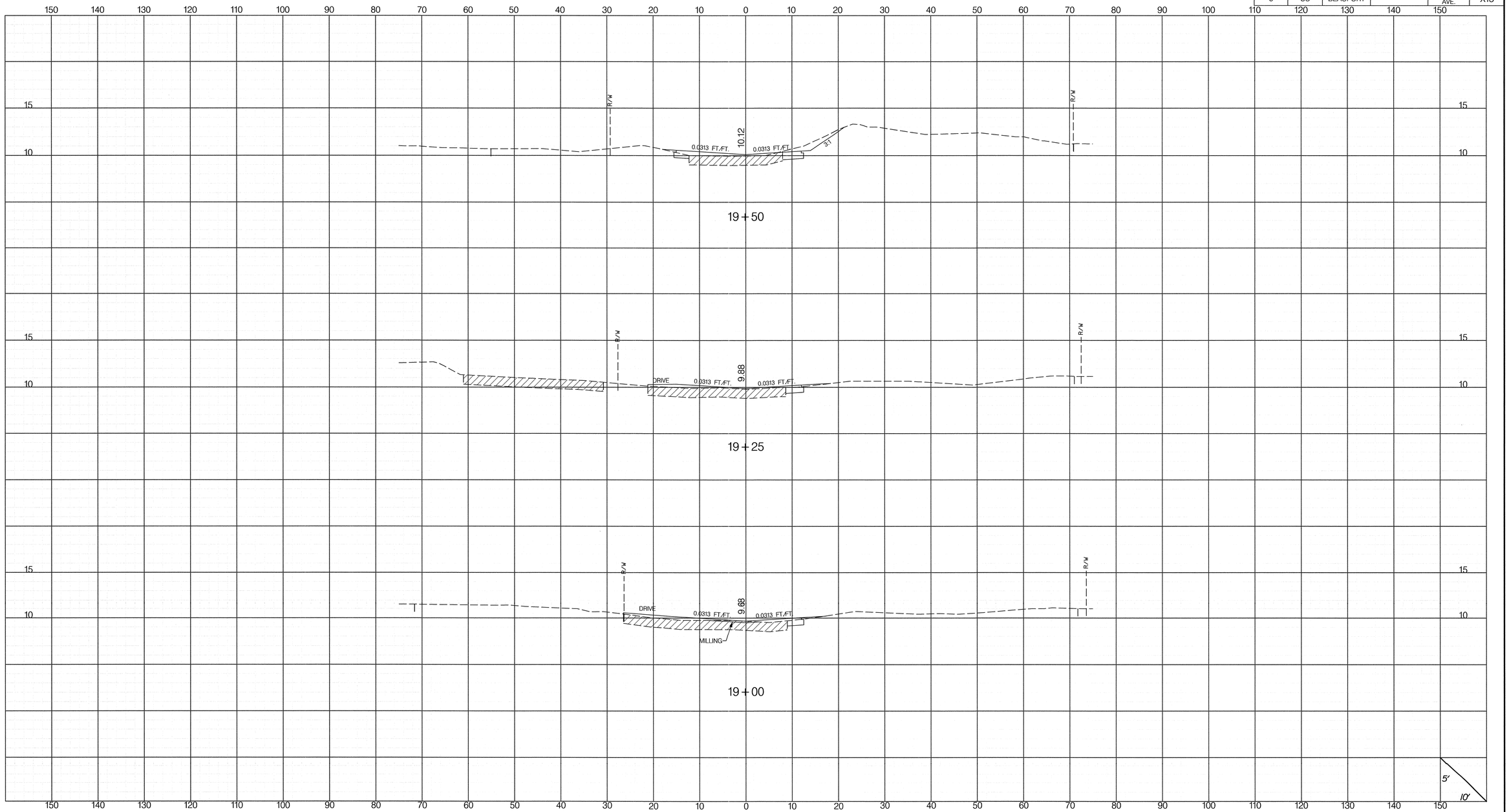
REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X13



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3/15/2016

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 26136
REGISTERED
AARON O. LIVINGSTON
3/15/16

SOUTH CAROLINA
INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC
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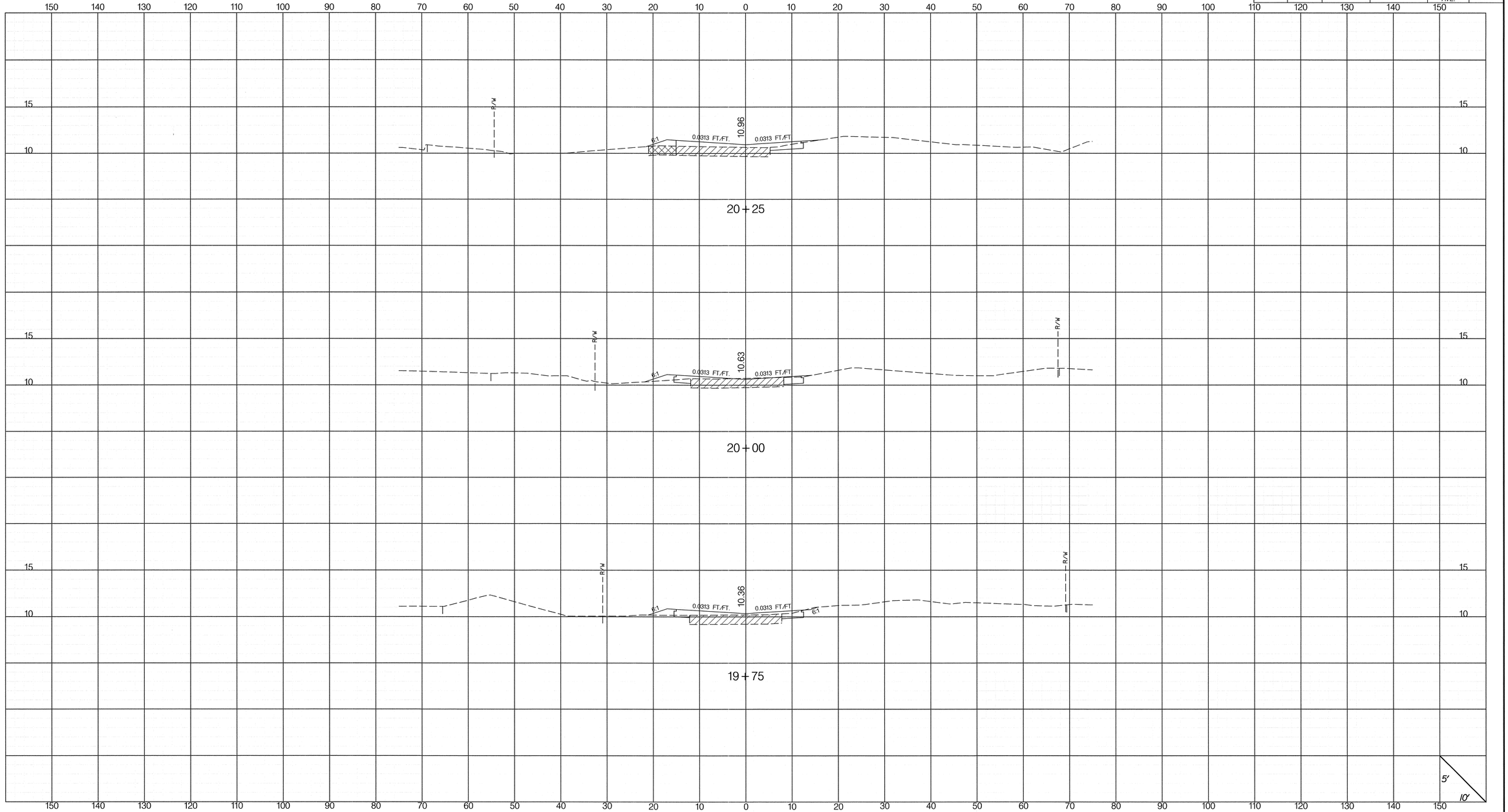
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X14



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3/15/2016

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 26136
MARION O. LIVINGSTON
3/15/16

SOUTH CAROLINA
INFRASTRUCTURE CONSULTING & ENGINEERING PLLC
No. 4470
CERTIFICATE OF AUTHORIZATION

INFRASTRUCTURE CONSULTING & ENGINEERING

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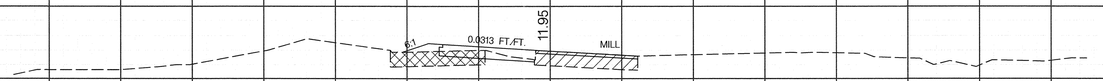
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

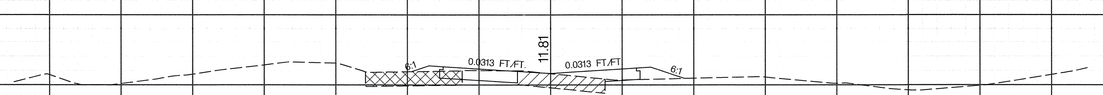
LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		LEMOYNE AVE.	X15

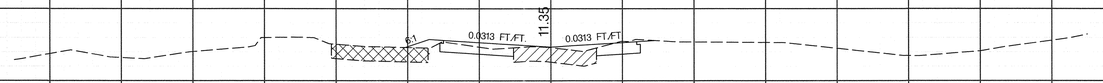
STA. 20+87.44
END CONSTRUCTION
TIE TO EXISTING PAVEMENT



20+87.44



20+75



20+50

5'
10'

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3/15/2016

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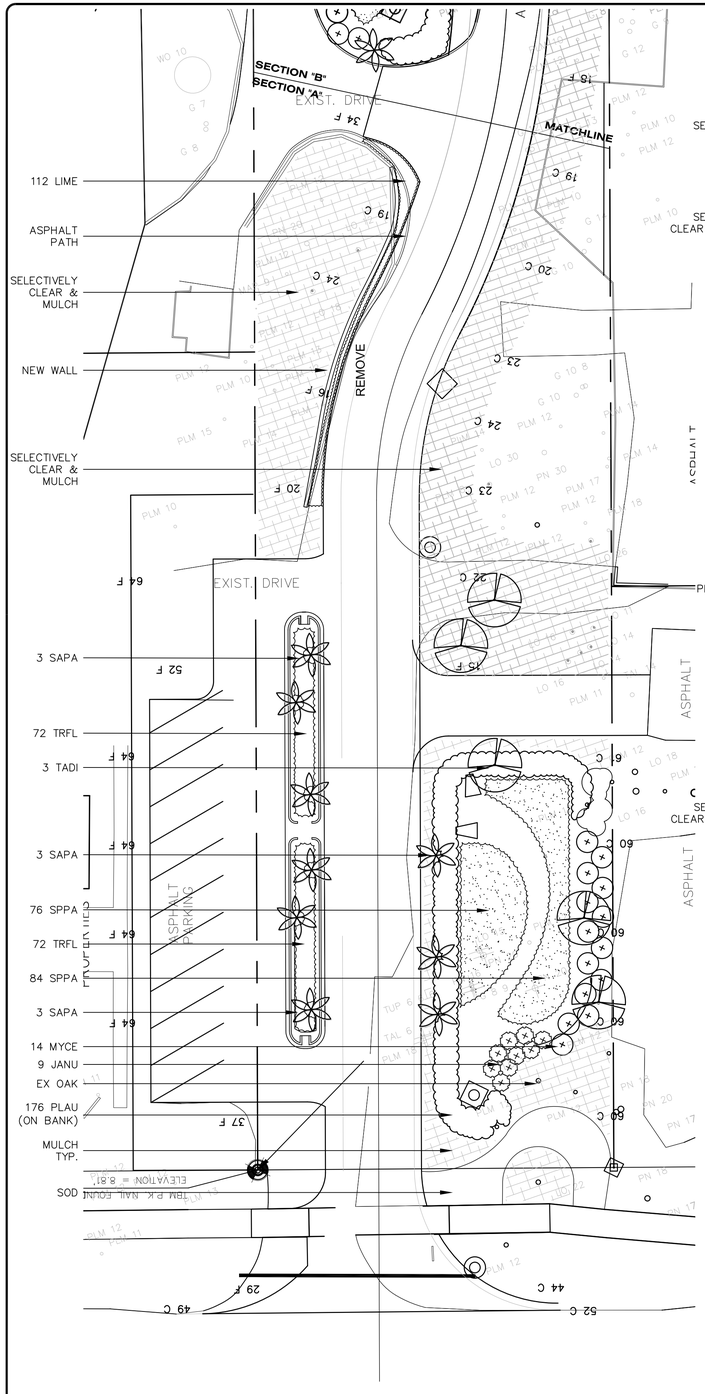
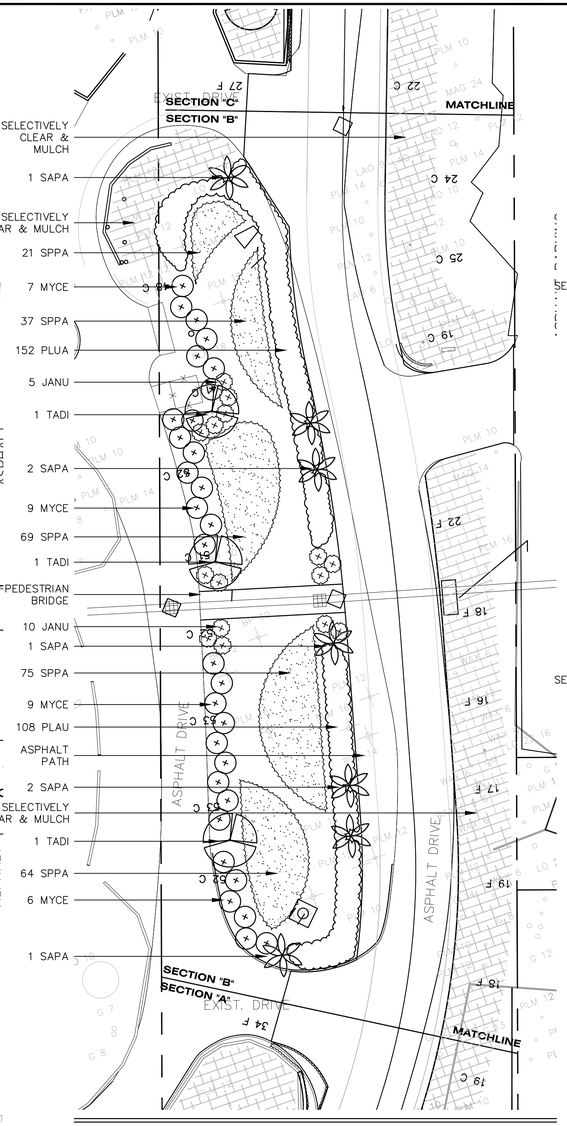
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

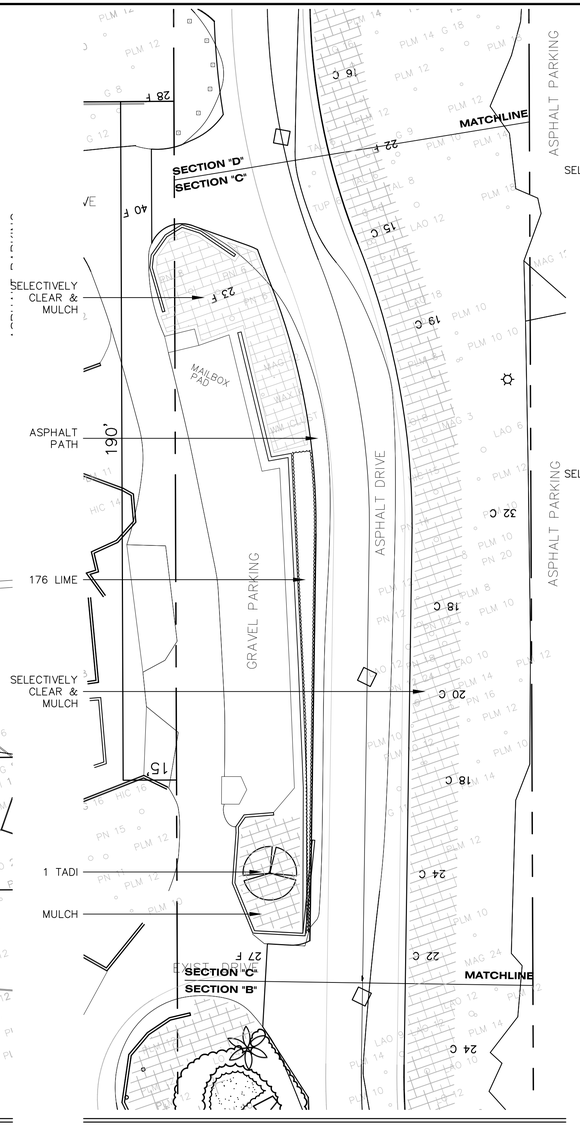
LEMOYNE AVENUE
ROADWAY AND DRAINAGE IMPROVEMENTS



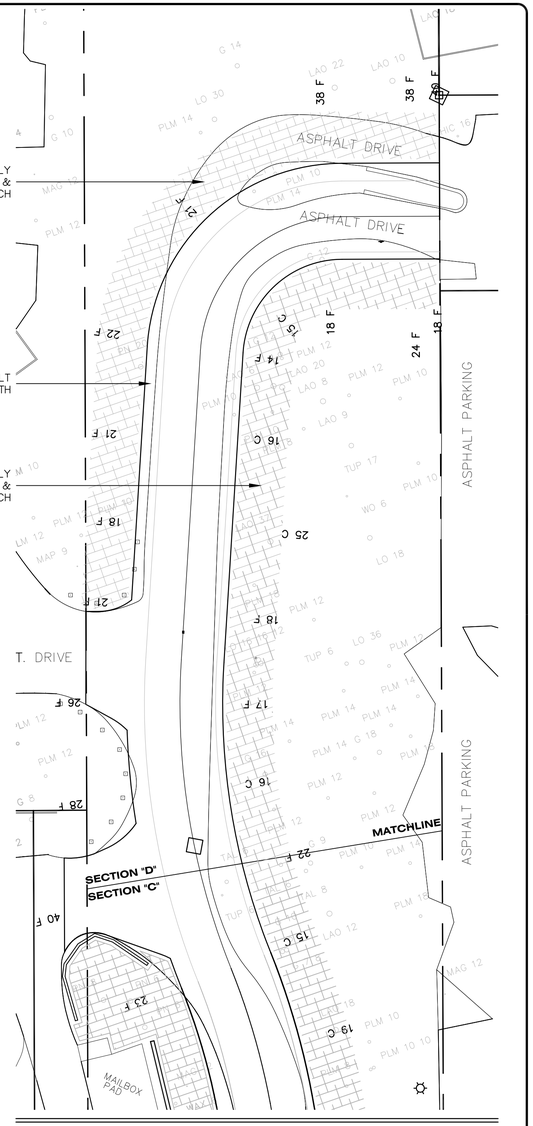
SECTION "A" SCALE 1" = 20'



SECTION "B" SCALE 1" = 20'



SECTION "C" SCALE 1" = 20'



SECTION "D" SCALE 1" = 20'

PLANT LIST

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	SPREAD	ROOTS	NOTES
TREES								
TADI	9	Taxodium disticum	Bald Cypress	2"–3"	10'–12'	4'–6'	Cont.	Full, central leader
SAPA	15	Sabal palmetto	Cabbage Palm	–	15'–16'	–	B&B	Clear trunk up to 12'
SHRUBS								
MYCE	31	Myrica cerifera	Wax Myrtle	–	2'–3'	2'–3'	7 Gal.	Cont. Full
PLAU	436	Plumbago auriculata	Blue Plumbago	–	1'–2'	1'–1.5'	3 Gal.	Cont. Full
GROUND COVERS								
SPPA	426	Spartina patens / bakeri	Cordgrass	–	12"–18"	12"–18"	3 Gal.	Cont. @ 3' O.C.
TRFL	144	Tripsacum floridana	Dwarf Fakahatchee	–	12"–18"	12"–18"	3 Gal.	Cont. @ 2' O.C.
LIME	288	Liriope muscari 'Evergreen Giant'	Evergreen Giant Liriope	–	12"–18"	12"–18"	1 Gal.	Cont. @ 18" O.C.
MULCH	+/– 30,800 SF		Pinestraw Mulch	–	–	–	–	clean
SOD	1637 SF		Centipede Sod	–	–	–	–	clean, weed free

LemoyneBackup.dwg

1/15/2004

jay.smith

DESCRIPTION REVISIONS	DATE

TOWN OF HILTON HEAD ISLAND
Dept. of Public Projects & Facilities
Engineering Division

RELEASED FOR	DATE
APPROVALS	
BIDDING	
CONSTRUCTION	
RECORD DWG.	

Lemoyne Ave

Planting Plan

SHEET **1** OF 1