TOWN OF HILTON HEAD ISLAND, S.C.

ROADWAY AND DRAINAGE IMPROVEMENTS

BLAZING STAR LANE

SHEET NO.	TOTAL SHEETS
1	30

INDEX OF SHEETS

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1	TITLE SHEET	1
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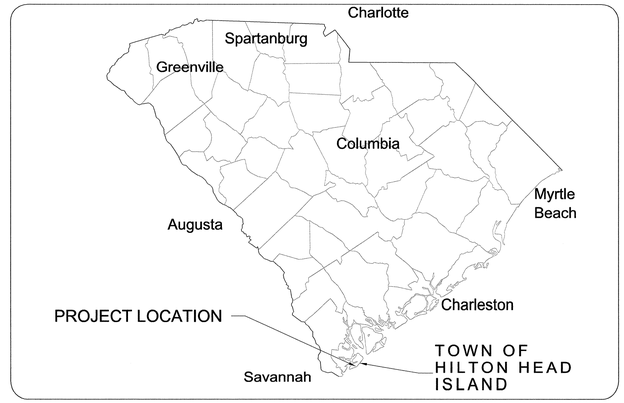
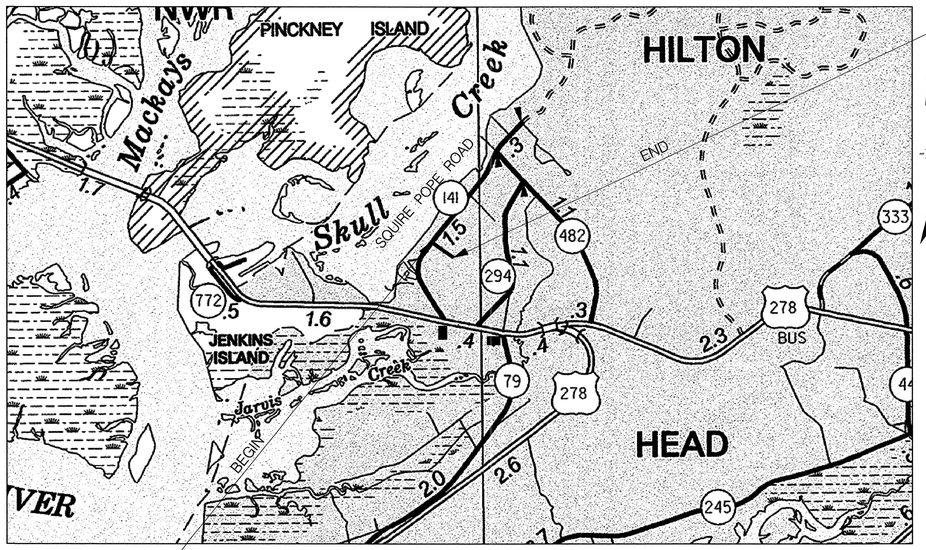
6, 7	PLAN SHEETS	2
6E, 7E	EROSION CONTROL PLAN SHEETS	2
8	PROFILE SHEET	1
PM1	PAVEMENT MARKING /SIGNING PLAN SHEET	1
TC1–TC2	TRAFFIC CONTROL PLANS	2
D1–D3	DRAINAGE DETAILS	3
EC1	EROSION CONTROL DATA SHEET	1
EC2–EC6	EROSION CONTROL DETAILS	5
X1–X6	CROSS SECTIONS	6
	TOTAL	30



LOCATION MAP

N.T.S.



SURVEY STA. 10+10.39 BEGIN
PROJECT BLAZING STAR LANE

SURVEY STA. 16+27.56 END
PROJECT BLAZING STAR LANE

LAYOUT
NOT TO SCALE

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.

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"

NPDES PERMIT INFORMATION		
DISTURBED AREA =	0.40	ACRES
PERMITTED AREA =	0.90	ACRES

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

APPROXIMATE LOCATION OF ROADWAY IS

BEGIN
LATITUDE 32° 13'22.92"N
LONGITUDE 80° 45'21.68"W

END
LATITUDE 32° 13'20.39"N
LONGITUDE 80° 45'19.31"W

Hydraulic and NPDES Design provided by:

Designs may be obtained from the SCDOT Regional Production Group

South Carolina 811 Call 811 Before You Dig

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 CONSTRUCTION ACTIVITIES

The point of contact for this project is:
James W. Cook, E.I., CPESC
Town of Hilton Head Island
One Town Center Court
Hilton Head Island, SC 29928
Office 843-341-4778

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

PROPOSED PROJECT

	TOTAL	
NET LENGTH OF ROADWAY	0.117	MILES
NET LENGTH OF PROJECT	0.117	MILES
GROSS LENGTH OF PROJECT	0.117	MILES

EQUALITIES IN STATIONING
NONE

ESTIMATED TRAFFIC DATA

N/A ADT N/A

N/A ADT N/A

TRUCKS N/A %

RESIDENTIAL

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.

MAY 2016

CONSULTING ENGINEERING FIRM

INFRASTRUCTURE CONSULTING & ENGINEERING

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 D. LIVINGSTON

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

FOR CONSTRUCTION : _____ 5/25/16 DATE

Z:\Projects\14-37.12 Blazing Star Ln\Roadway\Plans sheets\SHT_01-Title Sheet.dgn
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	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" COMPACTED THICKNESS STABILIZED GRADED AGGREGATE.
   D. WEARING SURFACE: HOT PLANT MIX ASPHALT CONCRETE, TYPE C OR CM, 220 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 PLACEMENT 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" X 24") AND (24" X 36")
804-305-02	OUTLET PROTECTION
804-310-00	OUTLET PROTECTION
815-000-00	EROSION CONTROL
815-001-01	TYPE 'A' INLET FILTER STRUCTURE
815-205-00	SEDIMENT TUBE DITCH APPLICATION
815-505-00	STABILIZED CONSTRUCTION ENTRANCE
815-605-00	TEMPORARY EROSION & SEDIMENTATION CONTROL (SILT FENCE)

ALL INLET PROTECTION TO TO SCDOT TYPE G

EXISTING SURVEY LEGEND

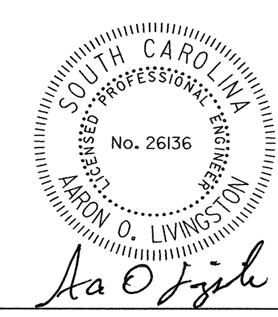
SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
	BM	SURVEY BENCHMARK		TBX	TELEPHONE BOX
	RWMON	RIGHT-OF-WAY MONUMENT		TPED	TELEPHONE PEDESTAL
	CONMON	CONCRETE MONUMENT	G	GAS	POINT ON GAS LINE
E. I. P.	EIP	EXIST. IRON PIN		FH	FIRE HYDRANT
	CB	EXIST. CATCH BASIN	W	WP	WITNESS POST
	DI	EXISTING DROP 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)

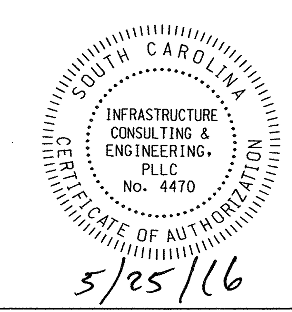
WATER LINE	-W——W——
ELECTRIC WIRE (UNDERGROUND)	—— UE ——
ELECTRIC WIRE (OVERHEAD)	-E——E——E
TELEPHONE LINE (UNDERGROUND)	—— T ——
TELEVISION LINE (UNDERGROUND)	—— UTV ——
FIBER OPTIC CABLE LINE	·FOL—— FOL—— FOL——
GAS LINE	—— — — G — — — G ——
SANITARY SEWER LINE	- SS —— SS ——
EXISTING PROPERTY LINE	—— - ——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





5/25/16

INFRASTRUCTURE
CONSULTING & ENGINEERING

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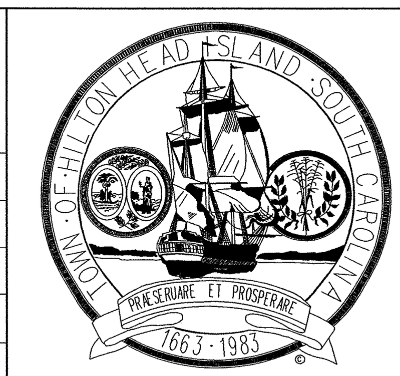

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

GENERAL NOTES

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	2A

SCDOT Additional Special Provisions

0002 –ALL REPAVING IS TO CONFORM TO STANDARD DEPARTMENT SPECIFICATIONS. THE ROAD, AT DROP INLETS, SHALL BE MILLED TO MAKE A SMOOTH TRANSITION WHEN PAVED. PAVEMENT WITH CURB AND/OR SIDEWALK WILL BE PAVED FULL DEPTH FROM OUTER EDGE TO GUTTER EDGE.

0003 –WHEN ROADS ARE RESURFACED, SHOULDERS SHALL BE REGRADED TO THE EDGE OF PAVEMENT TO CONFORM TO THE DEPARTMENT SPECIFICATIONS.

0004 –SCDOT SHALL BE NOTIFIED WHEN WORK DEFINED IN THE PERMIT STARTS AS WELL AS WHEN THE WORK IS COMPLETED. REFERENCE SHALL BE MADE BY PERMIT NUMBER.

0005 –APPLICANT SHALL PROVIDE TO THE DEPARTMENT THE OPPORTUNITY OF ATTENDING ANY PRE–CONSTRUCTION MEETING PRIOR TO THE BEGINNING OF WORK.

0101 –SHOULDER SOD DESTROYED BY THIS INSTALLATION TO BE REPLACED FOR THE ENTIRE AREA. THE AREA SHALL BE RE–SHAPED AND ROLLED TO THE CROSS SECTION EXISTING PRIOR TO THIS WORK.

0123 –ALL WORK PERFORMED IN CONNECTION WITH THIS PERMIT SHALL CONFORM TO THE SCDOT "A POLICY FOR ACCOMMODATING TING UTILITIES ON HIGHWAY RIGHT–OF–WAY" MOST CURRENT EDITION.

0208 – REINFORCED CONCRETE PIPE SHALL BE USED FOR DRIVEWAY DRAINAGE.

0207 – PIPE USED IN THIS INSTALLATION SHALL BE IN ACCORDANCE WITH SCDOT SPECIFICATION SC–M–714 AND COMPLY WITH CURRENT SCOOT POLICY.

0301 – THE DITCHES AND/OR SHOULDERS DISTURBED DURING THE INSTALLATION SHALL BE RE–ESTABLISHED TO PROPER GRADE, ORIGINAL CROSS SECTION, STABILIZED, AND ALL DRAIN PIPES CLEARED.

0209 – DISTURBED VEGETATION SHALL BE RESEEDED ACCORDING TO THE SPECIFICATION FOR HIGHWAY CONSTRUCTION.

0305 – FLASHING ARROW BOARDS SHALL BE USED FOR ALL LANE CLOSURES ON PRIMARY ROUTES AND/OR ROADS WITH HIGH TRAFFIC VOLUMES.

0306 – TRAFFIC CONTROL, LIGHTS, SIGNS AND FLAG–MEN WILL BE FURNISHED BY APPLICANT AND WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

0310 – FIELD CHANGES, IF NECESSARY, MUST BE APPROVED IN WRITING BEFORE ACTUAL CONSTRUCTION OF PROPOSED CHANGES.

0311 – SEDIMENT AND EROSION CONTROL DEVICES SHALL BE USED TO MINIMIZE THE MOVEMENT OF SEDIMENT.

0312 – THE PERMITTEE SHALL HOLD THE DEPARTMENT HARMLESS FOR DAMAGES TO BOTH UPSTREAM AND DOWNSTREAM PROPERTIES.

0318 – THE APPLICANT SHALL BE RESPONSIBLE FOR IMMEDIATE REMOVAL OF SUCH TRAFFIC HAZARDS AS MUD, DEBRIS, LOOSE STONE, AND TRASH AS MAYBE WASHED OR SPILLED ON THE TRAVELED ROADWAY AS A RESULT OF THE PROPOSED WORK.

App# 2000318859
Permit# 192238

Application for Encroachment Permit

S.C. Department of Transportation
Form 637 (Rev 09/2015)

Contact Information

Applicant: Town of Hilton Head Island
Street: 1 Town Center Court
City: Hilton Head Island
State: SC Zip Code: 29928
Phone: (843)341-4778 Fax: (843)842-8587
Email: jamesc@hiltonheadislandsc.gov
Contact: James Cook

Project Location

Primary County: Beaufort

County	Road Name
Beaufort	Squire Pope Rd

1. Type of Encroachment: ROAD CONNECTION (NON DRIVEWAY)
Improvements to roadway connection for Blazing Star Lane.

2. Description of Location:
Approximately 1/2 mile north of US278 along Squire Pope Rd. (S-141) and 1 mile south of Gum Tree Rd. (S-482) along Squire Pope Road (S-141).

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

Customer Agreement

3. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the SCDOT's "A Policy for Accommodating Utilities on Highways Rights of way", "Standard Specifications for Highway Construction", the "General Provisions" and "Special Provisions", attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way. DISCHARGES OF STORM WATER AND NON-STORM WATER: Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit(s) issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The encroachment permit will not be issued until the applicant has received an NPDES construction permit from SC Department of Health and Environmental Control.

The applicant agrees to comply with all current SCDOT Standards Specifications for Highway Construction including all Supplemental Technical Specifications. The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein, and the applicant agrees to indemnify and hold SCDOT harmless from and against any and all claims for personal injury and/or property damage which may be sustained by reason of the construction, maintenance or existence of said encroachment on the SCDOT's right of way.

Applicant's Name: Scott Liggett (Please print or type) Date: 3/31/2016
Applicant's Sig: Title: Chief Engineer

For Office Use Only

For Office Use Only

In accordance with your request and subject to all the provisions, terms, conditions, and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to:

■ See Attached Special Provision and/or Permit Requirements

NPDES Permit Nbr:
(Date received by res. Maint. Engr.) (SCDOT Approval) 4-15-16 (Date)

PROVIDED BY SCDOT

INFRASTRUCTURE CONSULTING & ENGINEERING

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

GENERAL NOTES

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	ROAD ROUTE NO.	PROJECT ID NO.	SHEET NO.
3	S.C.	BEAUFORT	BLAZING STAR LN		2B

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	
2025000	REMOVAL & DISPOSAL OF EXISTING ASPHALT PAVEMENT	200	SY	
2031000	UNCLASSIFIED EXCAVATION	1100	CY	
3050106	GRADED AGGREGATE BASE COURSE (6" UNIFORM)	2100	SY	
4011004	LIQUID ASPHALT BINDER PG64–22	13	TON	
4030340	HOT MIX ASPHALT SURFACE COURSE TYPE C OR CM	210	TON	
6020005	PERMANENT CONSTRUCTION SIGNS (GROUND MOUNTED)	368	SF	
6271025	24" WHITE SOLID LINES (STOP/DIAG LINES)–THERMO.–125 MIL	16	LF	
6271020	12" WHITE SOLID LINES (PATHWAY) – THERMO. – 125 MIL	10	LF	
6271074	4" YELLOW SOLID LINES (PATHWAY) THERMO–90 MIL.	80	LF	
6510105	FLAT SHEET, TYPE III, FIXED SZ. & MSG. SIGN	16.0	SF	
6531210	U–SECTION POST FOR SIGN SUPPORTS – 3P	44	LF	
7141112	15" RC PIPE CUL.–CLASS III	120	LF	
7141113	18" RC PIPE CUL.–CLASS III	300	LF	
7192020	DROP INLET(24" X 36")	5	EA	
7197120	ADJUST EXISTING MANHOLE TOPS	NEC	LS	
7197141	ADJUST UTILITY VALVE BOX COVERS	NEC	LS	
7204100	CONCRETE FOR APRONS AT CROSSWALKS (4" UNIFORM)	25	SY	
7204900	DETECTABLE WARNING SURFACE	30	SF	
8041030	RIP–RAP (CLASS C)	21.5	TON	
8048110	GEOTEXTILE FOR EROSION CONTROL UNDER RIPRAP(CLASS 1)TYPE C	18	SY	
8114011	TREE PROTECTION	NEC	LS	
8111178	WILLOW OAK 3"–4" CAL. (10–12')	2	EA	
8111377	SOUTHERN WAXMYRTLE 7 GAL.	12	EA	
8111161	LOBLOLLY PINE 3"–4" CAL. (10–12')	3	EA	
8151110	TEMP. EROSION CONTROL BLANKET	1802	SF	
8152007	SEDIMENT TUBES FOR DITCH CHECKS	40	LF	
8153000	SILT FENCE	500	LF	
8156200	CLEANING INLET STRUCTURE FILTERS	5	EA	
8156220	INLET STRUCTURE FILTER – TYPE G	5	EA	
PLANS	NEW STOP SIGNS AT PATHWAY	2	EACH	
PLANS	REMOVAL AND DISPOSAL OF EXISTING DEBRIS	NEC	LS	
PLANS	REMOVAL AND RESETTING EXISTING MAILBOXES	NEC	LS	
PLANS	FLARED END SECTION (GEORGIA DOT)	3	EA	

ITEM NO.	PAY ITEM	COMPUTED QUANTITY	PAY UNIT	INCIDENTAL QUANTITY

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON G. LIVINGSTON

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

5/25/16

INFRASTRUCTURE CONSULTING & ENGINEERING

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

SUMMARY OF ESTIMATED QUANTITIES

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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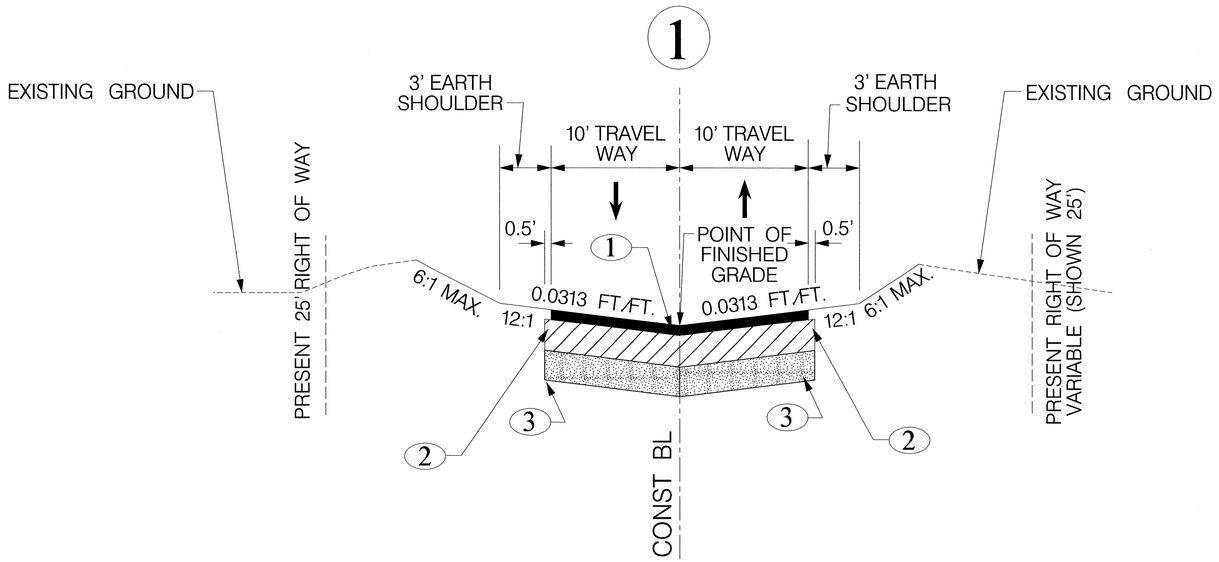
Blazing_Star Ln\Roadway\Plans sheets\SHT_02b- Quantity.dgn
5/23/2016

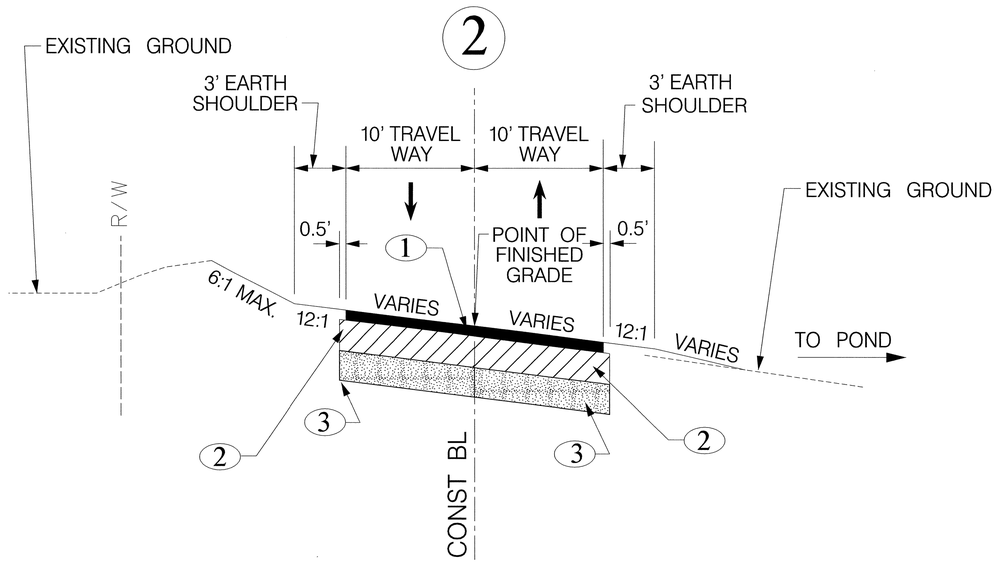
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	3

TYPICAL SECTIONS OF IMPROVEMENTS



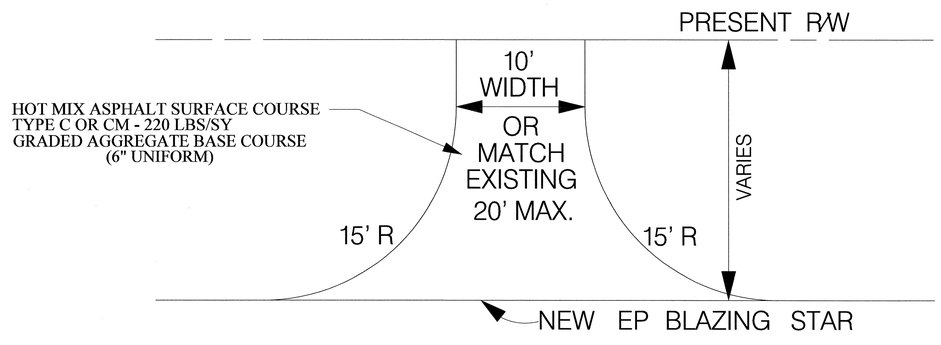
USE THIS SECTION - BLAZING STAR LANE FROM STA. 10+10.39 TO STA. 15+06.56

NTS



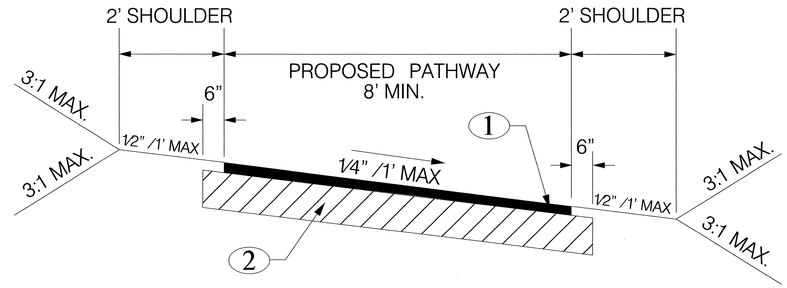
USE THIS SECTION - HAMMERHEAD TURN-AROUND FROM STA. 100+00 TO STA. 101+21.35

NTS



TYPICAL DRIVEWAY DETAIL

NTS



PATHWAY TYPICAL

NTS

LEGEND

1	HOT MIX ASPHALT SURFACE COURSE TYPE C OR CM - 220 LBS/SY
2	GRADED AGGREGATE BASE COURSE (6" UNIFORM)
3	COMPACTED SUBBASE

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON D. LIVINGSTON 5/25/16

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 5/25/16

INFRASTRUCTURE CONSULTING & ENGINEERING

REV.NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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1			

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

TYPICAL SECTIONS AND DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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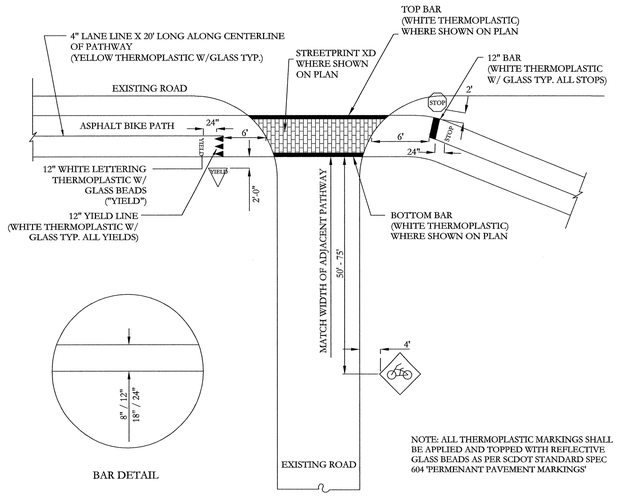
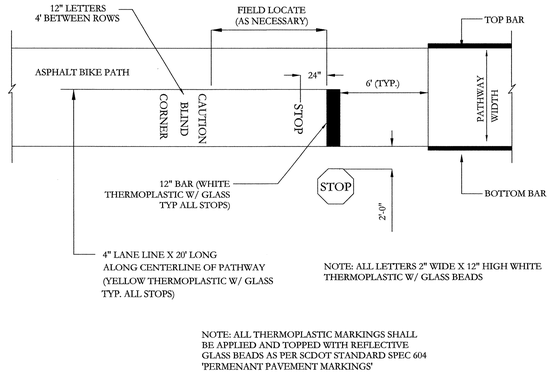
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	3A

TYPICAL SECTIONS OF IMPROVEMENTS

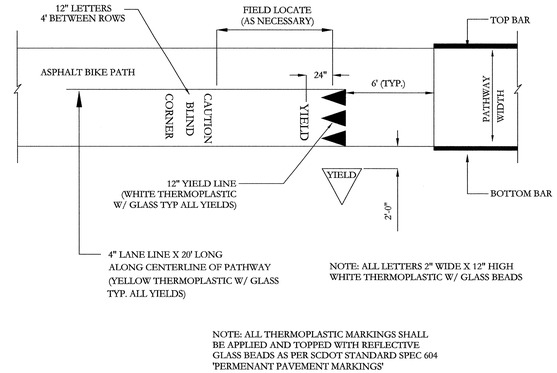


STRIPING AT ROADWAY CROSSING
NOT TO SCALE



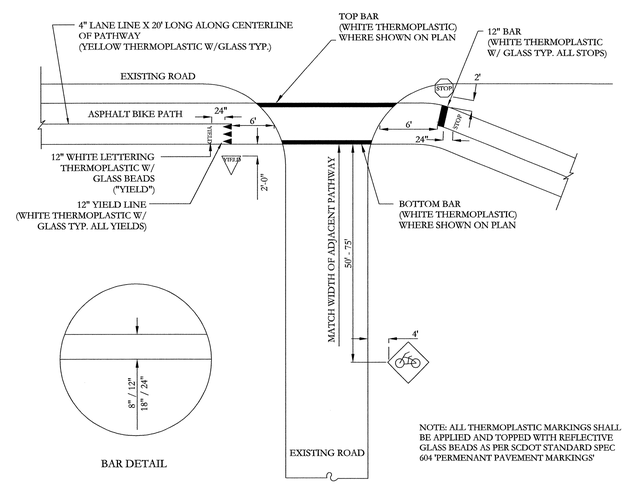
NOTE: ALL THERMOPLASTIC MARKINGS SHALL BE APPLIED AND TOPPED WITH REFLECTIVE GLASS BEADS AS PER SCDOT STANDARD SPEC 604 'PERMENANT PAVEMENT MARKINGS'

SIGNAGE - STOP GRAPHIC DETAIL
NOT TO SCALE

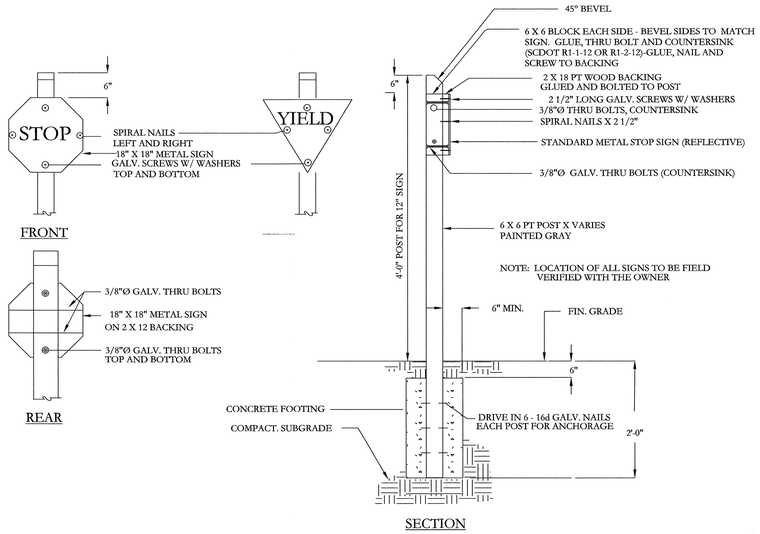


NOTE: ALL THERMOPLASTIC MARKINGS SHALL BE APPLIED AND TOPPED WITH REFLECTIVE GLASS BEADS AS PER SCDOT STANDARD SPEC 604 'PERMENANT PAVEMENT MARKINGS'

SIGNAGE - YIELD GRAPHIC DETAIL
NOT TO SCALE



STRIPING AT DRIVEWAY CROSSING
NOT TO SCALE



SIGNAGE -STOP/YIELD 18"
NOT TO SCALE

TOWN PROVIDED DETAILS

INFRASTRUCTURE CONSULTING & ENGINEERING

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

PATH DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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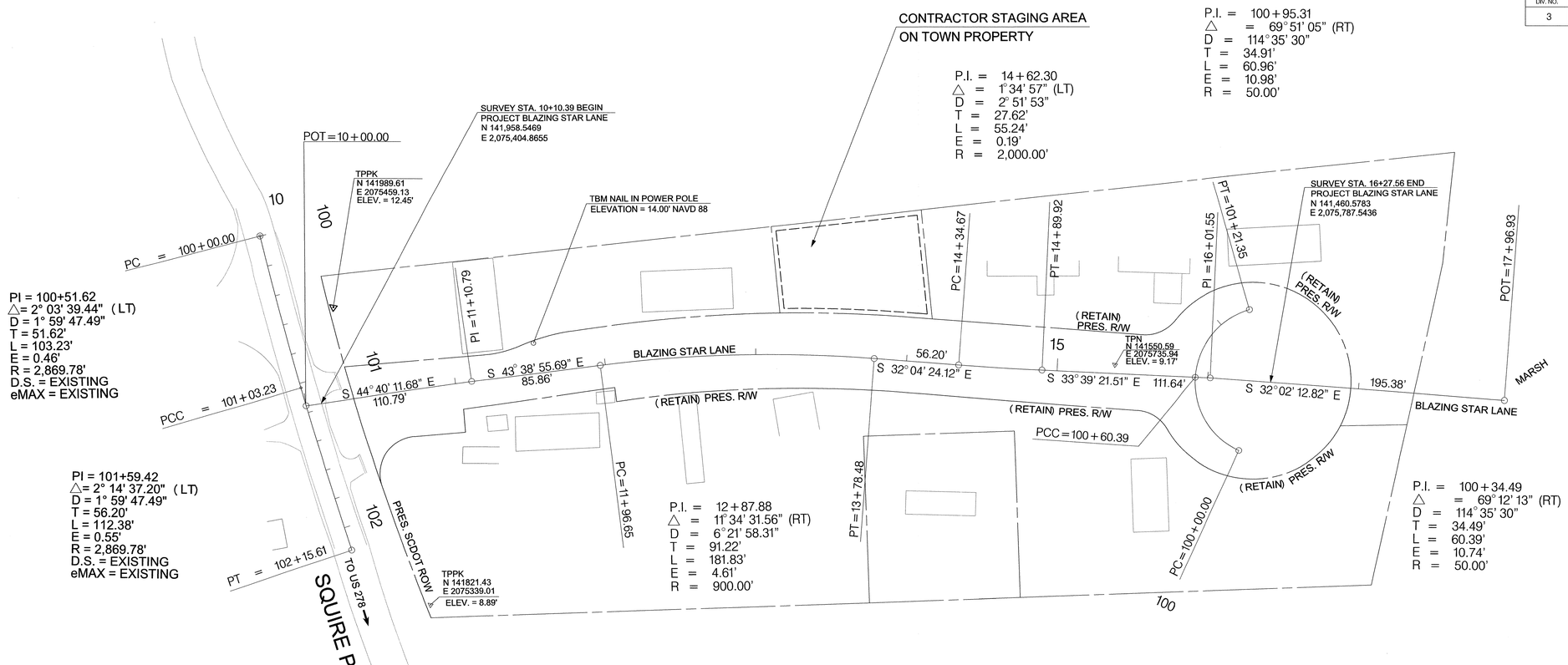
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	4



Beginning chain SQUIRE description

Curve Data

Curve SQUIRE-1
PI = 100+51.62
Delta = 2° 03' 39.44" (LT)
Degree = 1° 59' 47.49"
Tangent = 51.6192
Length = 103.2272
Radius = 2,869.7767
External = 0.4642
Long Chord = 103.2217
Mid. Ord. = 0.4641

Back = S 39° 26' 40.51" W
Ahead = S 37° 23' 01.07" W
Chord Bear = S 38° 24' 50.79" W

Curve Data

Curve SQUIRE-2
PI = 101+59.42
Delta = 2° 14' 37.20" (LT)
Degree = 1° 59' 47.49"
Tangent = 56.1965
Length = 112.3786
Radius = 2,869.7767
External = 0.5502
Long Chord = 112.3714
Mid. Ord. = 0.5501

Back = S 37° 23' 01.07" W
Ahead = S 35° 08' 23.87" W
Chord Bear = S 36° 15' 42.47" W

Ending chain SQUIRE description

Chain BLAZING contains:
1000000 1000001 CUR BLAZING-1 CUR BLAZING-2 1000002 1000003

Beginning chain BLAZING description

Point 1000000 N 141,965.6586 E 2,075,396.0777 Sta 10+00.000

Course from 1000000 to 1000001 S 44° 40' 11.6792" E Dist 110.7924

Point 1000001 N 141,886.8665 E 2,075,473.9671 Sta 11+10.792

Course from 1000001 to PC BLAZING-1 S 43° 38' 55.6875" E Dist 85.8600

Curve Data

Curve BLAZING-1
P.I. Station 12+87.876 N 141,758.7315 E 2,075,596.1967
Delta = 11° 34' 31.5631" (RT)
Degree = 6° 21' 58.3118"
Tangent = 91.2237
Length = 181.8265
Radius = 900.0000
External = 4.6114
Long Chord = 181.5174
Mid. Ord. = 4.5879
P.C. Station 11+96.652 N 141,824.7396 E 2,075,533.2308
P.T. Station 13+78.479 N 141,681.4314 E 2,075,644.6370
C.C. N 141,203.5271 E 2,074,882.0050
Back = S 43° 38' 55.6875" E
Ahead = S 32° 04' 24.1244" E
Chord Bear = S 37° 51' 39.9060" E

Course from PT BLAZING-1 to PC BLAZING-2 S 32° 04' 24.1244" E Dist 56.1960

Curve Data

Curve BLAZING-2
P.I. Station 14+62.298 N 141,610.4054 E 2,075,689.1455
Delta = 1° 34' 57.3834" (LT)
Degree = 2° 51' 53.2403"
Tangent = 27.6235
Length = 55.2434
Radius = 2,000.0000
External = 0.1908
Long Chord = 55.2416
Mid. Ord. = 0.1907
P.C. Station 14+34.675 N 141,633.8127 E 2,075,674.4773
P.T. Station 14+89.918 N 141,587.4122 E 2,075,704.4545
C.C. N 142,695.8222 E 2,077,369.2150
Back = S 32° 04' 24.1244" E
Ahead = S 33° 39' 21.5079" E
Chord Bear = S 32° 51' 52.8162" E

Course from PT BLAZING-2 to 1000002 S 33° 39' 21.5079" E Dist 111.6365

Point 1000002 N 141,494.4882 E 2,075,766.3240 Sta 16+01.555

Course from 1000002 to 1000003 S 32° 02' 12.8225" E Dist 195.3793

Point 1000003 N 141,328.8638 E 2,075,869.9660 Sta 17+96.934

Ending chain BLAZING description

0 40 80 120 160
SCALE IN FEET

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON
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5/25/16

SCALE: 1" = 40'

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

GEOMETRIC DATA SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.12 Blazing Star Ln\Roadway\Plans sheets\SHT_04_GEOMETRIC_LAYOUT.dgn
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	6

NOTES:
1) SEE SHEET 4 FOR GEOMETRIC LAYOUT.
2) USE INLET FILTER TYPE 'G' ON ALL NEW DROP INLETS.
3) INSTALL TEMPORARY EROSION CONTROL BLANKET ON POND FILL SLOPES

TIE TO EXISTING

SURVEY STA. 10+10.39 BEGIN
PROJECT BLAZING STAR LANE

PC = 100+00.00

PLACE FLARED END
PLACE 7.5 TONS RIP-RAP CLASS "C"

SQUIRE POPE ROAD

PRESENT R/W (RETAIN)

RECONSTRUCT PATHWAY

PRESENT R/W (RETAIN)

PI = 11+10.79

30' R

+37.05

10'

REMOVE TREES

50'

PCC = 101+03.23

+48.80

10'

30' R

RECONSTRUCT PATHWAY

PRESENT R/W (RETAIN)

POT = 10+00.00

EXISTING MAILBOXES TO BE REMOVE AND RELOCATED DURING CONSTRUCTION

10' R

12'

10' R

SQUIRE POPE ROAD

TO US 278

PT = 102+15.61

PLACE 120 LF - 15" RCP MATCH EXISTNG DITCH GRADES

RELOCATE DRIVE

TIE TO EXISTING

TRIM OVERHANGING BRANCHES AT RIGHT OF WAY OBTAIN PERMISSION

PLACE FLARED END
PLACE 7.5 TONS RIP-RAP CLASS "C"

PRESENT R/W (RETAIN)

R511 007 000 005A 0000
ABDUL-MALIK IBRAHIM MUMTAHANAH JTR
131 SQUIRE POPE RD
HILTON HEAD ISLAND SC 29926

R511 007 000 004F 0000
BRYAN DORIS FRAZER
134 SQUIRE POPE RD
HILTON HEAD ISLAND SC 29926-1202
0.39 AC. 16,892 S.F.

R511 007 000 0003 0000
WALTERS BEN HRS OF
6 SUGAREE DR
BLUFFTON SC 29910

R510 007 000 0004 0000
GADSON HANNAH BRYAN BRYAN BERNARD F
1945 LORING PLACE S APT 4E
BRONX NY 10453
1.60 AC. 70,664 S.F.

R510 007 000 0005 0000
BRYAN JAMES JULIA
13 GUMTREE RD
HILTON HEAD ISLAND SC 29926

STA. 12+80
CONSTRUCT
DROP INLET (24' X 36")
INV: 7.12

CONST. B/L

PRESENT R/W (RETAIN)

PRESENT R/W (RETAIN)

PI = 11+96.65

PLACE 60 LF 18" RCP

STA. 12+65
CONSTRUCT
DROP INLET (24' X 36")
INV: 7.22

PLACE 24 LF 18" RCP

STA. 12+20
CONSTRUCT
DROP INLET (24' X 36")
INV: 7.37

CONTRACTORS STAGING AREA

RETAIN TRANSFORMER

PROTECT AND RETAIN EXISTING TREE

PRESENT R/W (RETAIN)

BLAZING STAR LANE

40.8'

ADJUST TOP GRADE ON EXISTING MANHOLE

ABANDON PVC STUB

R510 007 000 0277 0000
TOWN OF HILTON HEAD ISLAND
1 TOWNE CENTER CT
HILTON HEAD ISLAND SC 29928
0.14 AC. 6,296 S.F.

STA. 14+60
CONSTRUCT
DROP INLET (24' X 36")
INV: 6.58

RETAIN UTILITY PEDESTALS

PC = 14+34.67

PT = 14+89.92

50'

10'

10'

PRESENT R/W (RETAIN)

PLACE 180 LF 18" RCP

PT = 13+78.48

PLACE 132 LF 18" RCP

R510 007 000 005B 0000
DRAYTON MARY J NATHANIEL
PO BOX 1121
HILTON HEAD ISLAND SC 29928
0.25 AC. 11,000 S.F.

R510 007 000 0005 0000
BRYAN JAMES JULIA
13 GUMTREE RD
HILTON HEAD ISLAND SC 29926

MATCHLINE STA. 15+00 SEE SHEET NO. 7

0 20 40 60 80
SCALE IN FEET

LEGEND

EXISTING TREES TO BE REMOVED

TREE PROTECTION FENCE

SCALE: 1" = 20'

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON

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5/25/16

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

PLAN SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

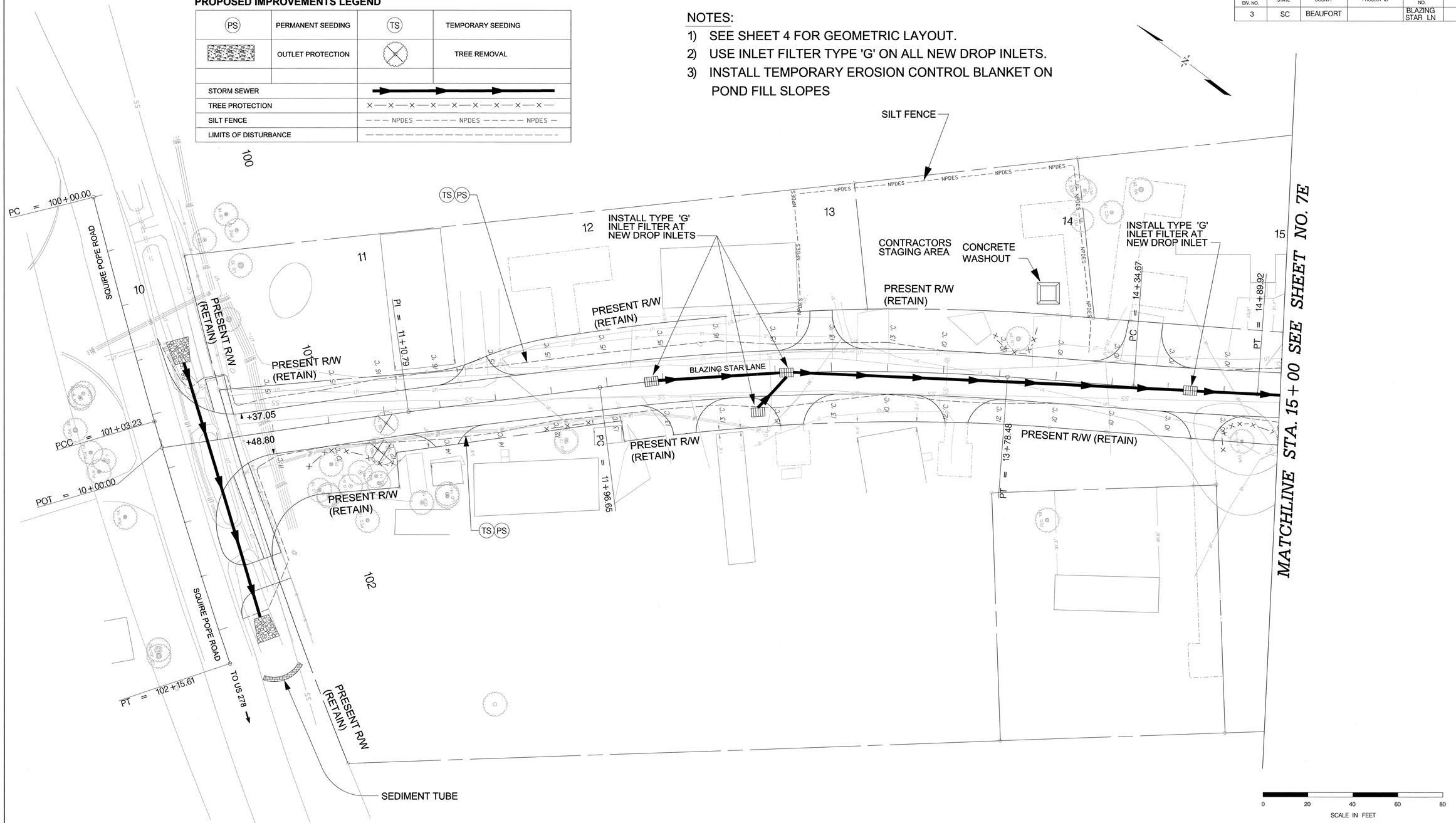
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	6E

PROPOSED IMPROVEMENTS LEGEND

(PS)	PERMANENT SEEDING	(TS)	TEMPORARY SEEDING
	OUTLET PROTECTION		TREE REMOVAL
STORM SEWER			
TREE PROTECTION			
SILT FENCE			
LIMITS OF DISTURBANCE			

NOTES:

1) SEE SHEET 4 FOR GEOMETRIC LAYOUT.
2) USE INLET FILTER TYPE 'G' ON ALL NEW DROP INLETS.
3) INSTALL TEMPORARY EROSION CONTROL BLANKET ON POND FILL SLOPES



0 20 40 60 80

SCALE IN FEET

SCALE: 1" = 20'

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 5/25/16

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL PLAN SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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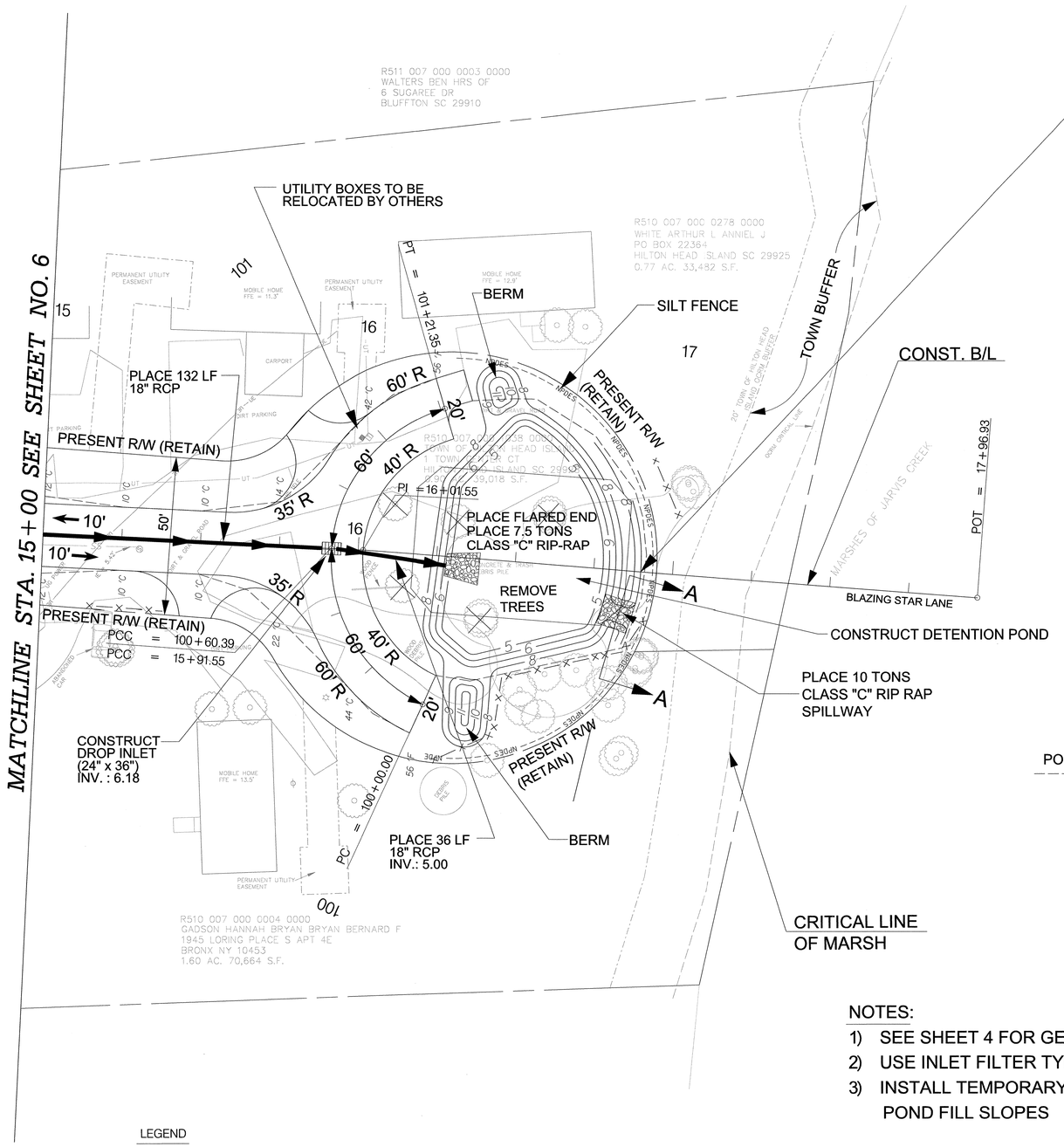
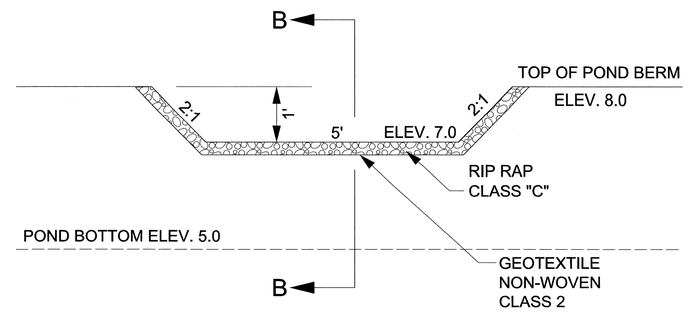
5/23/2016

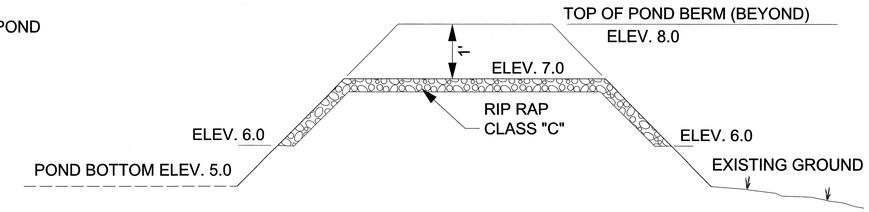
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	7





SECTION A-A

NTS



SECTION B-B

NTS

SPILLWAY DETAILS

NTS

NOTES:

1) SEE SHEET 4 FOR GEOMETRIC LAYOUT.
2) USE INLET FILTER TYPE 'G' ON ALL NEW DROP INLETS.
3) INSTALL TEMPORARY EROSION CONTROL BLANKET ON POND FILL SLOPES

0 20 40 60 80

SCALE IN FEET

LEGEND

EXISTING TREES TO BE REMOVED

TREE PROTECTION FENCE

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON

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SCALE: 1" = 20'

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

PLAN SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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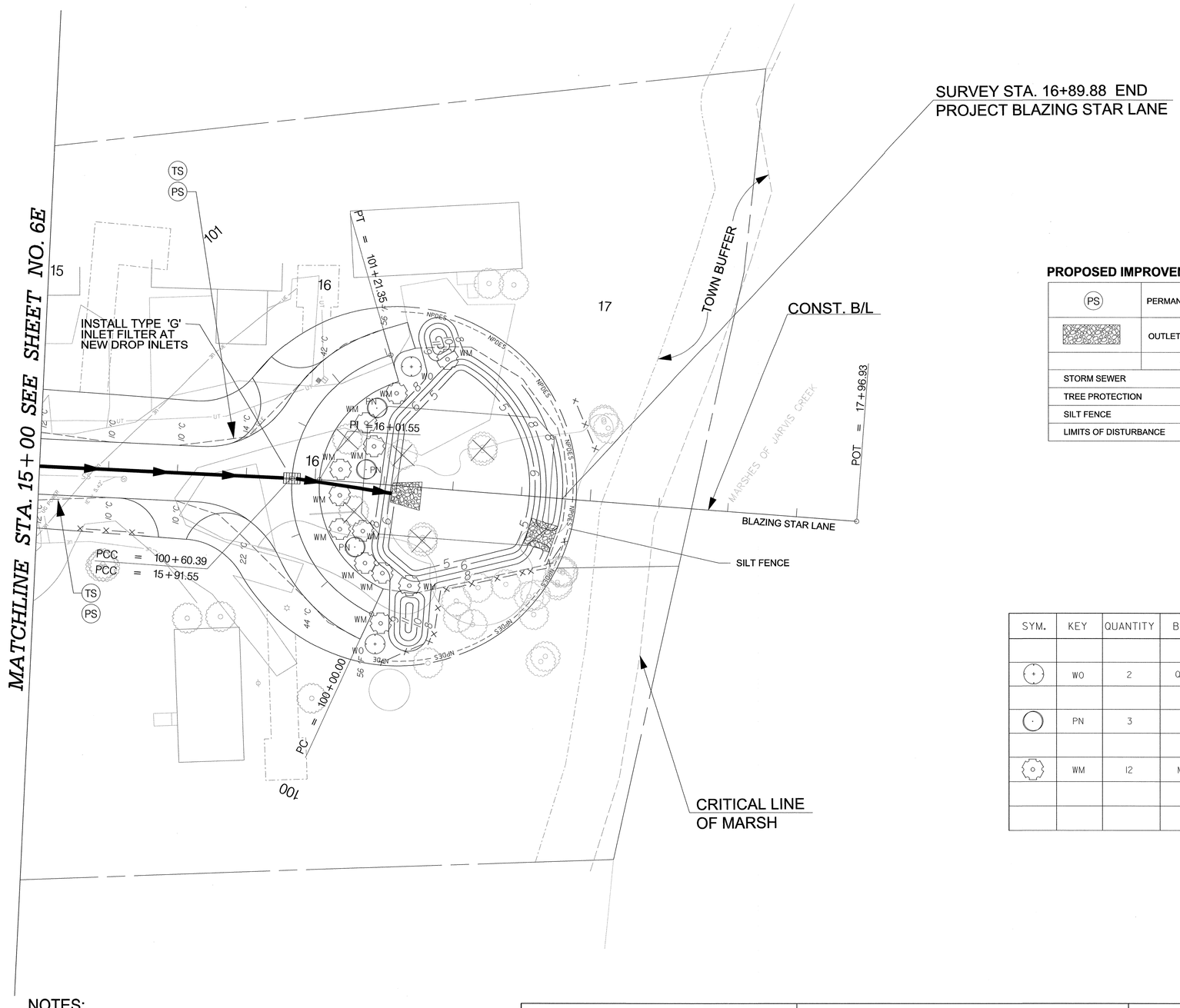
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	7E



PROPOSED IMPROVEMENTS LEGEND

PS	PERMANENT SEEDING	TS	TEMPORARY SEEDING
	OUTLET PROTECTION		TREE REMOVAL
STORM SEWER			
TREE PROTECTION			
SILT FENCE			
LIMITS OF DISTURBANCE			

PLANT LIST

SYM.	KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
	WO	2	QUERCUS PHELLOS	WILLOW OAK	3-4" CAL.	10-12' TALL
	PN	3	PINUS	LOBLOLY PINE	3-4" CAL.	10-12' TALL
	WM	12	MYRICA CERIFERA	WAX MYRTLE	7 GAL.	MULTI-STEM

0 20 40 60 80
SCALE IN FEET

NOTES:
1) SEE SHEET 4 FOR GEOMETRIC LAYOUT.
2) USE INLET FILTER TYPE 'A' ON ALL NEW DROP INLETS.
3) INSTALL TEMPORARY EROSION CONTROL BLANKET ON POND FILL SLOPES

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON 5/25/16

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC CERTIFICATE OF AUTHORIZATION No. 4470 5/25/16

SCALE: 1" = 20'

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

EROSION CONTROL PLAN SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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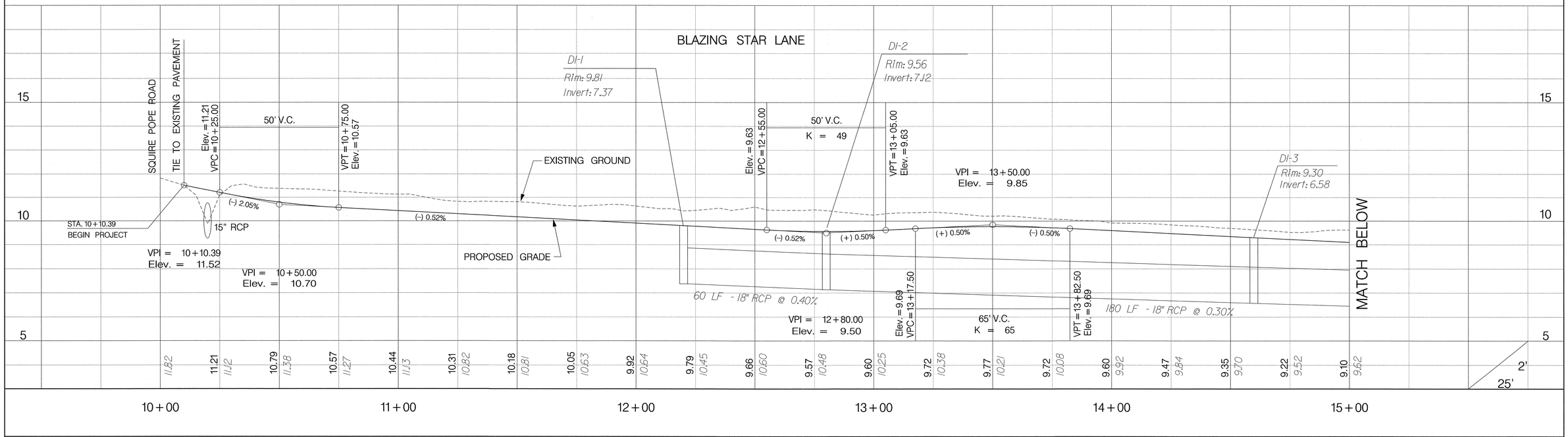
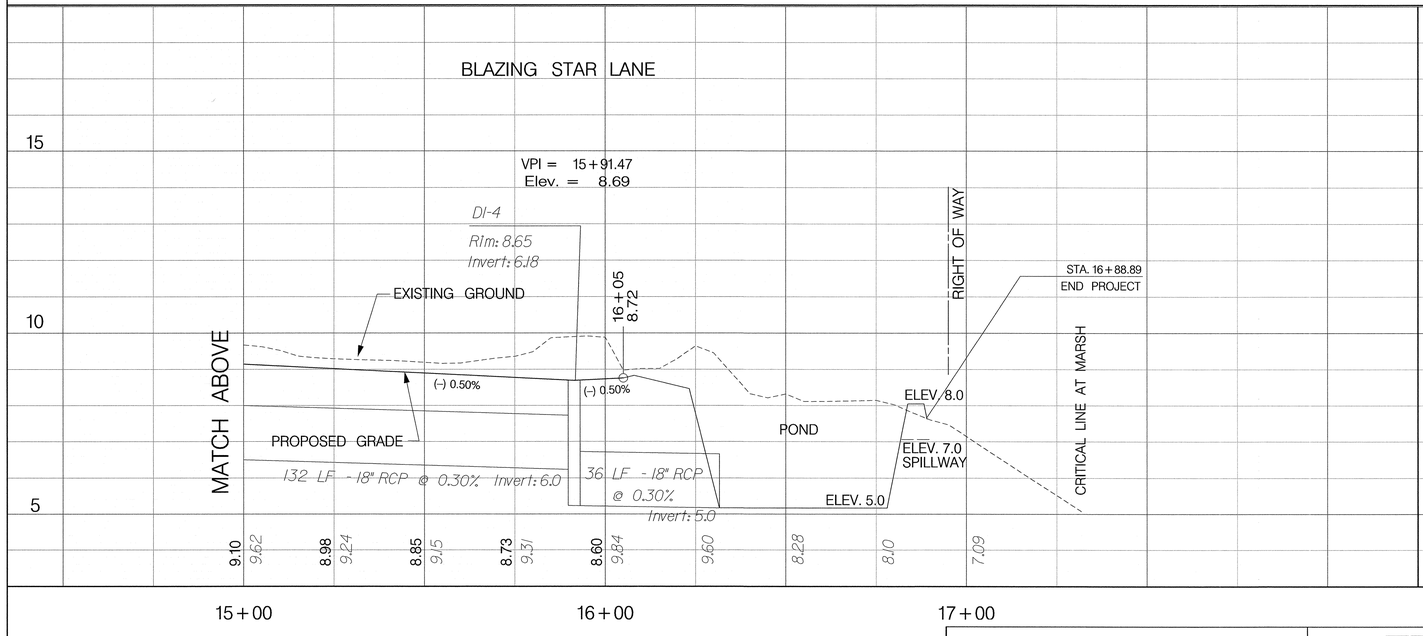
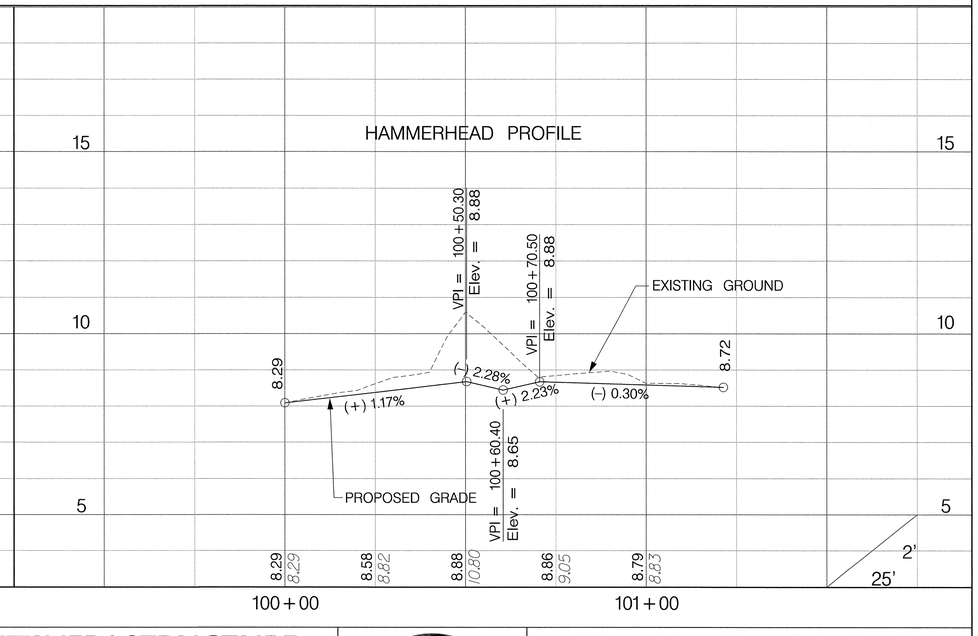
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	8







SCALE: 1" = 20'

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 5/25/16

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

PROFILE SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	D1

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 EUGENE SYLVESTER EAGLE, II

E S Eagle
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

DROP INLET (24"X36") DETAILS

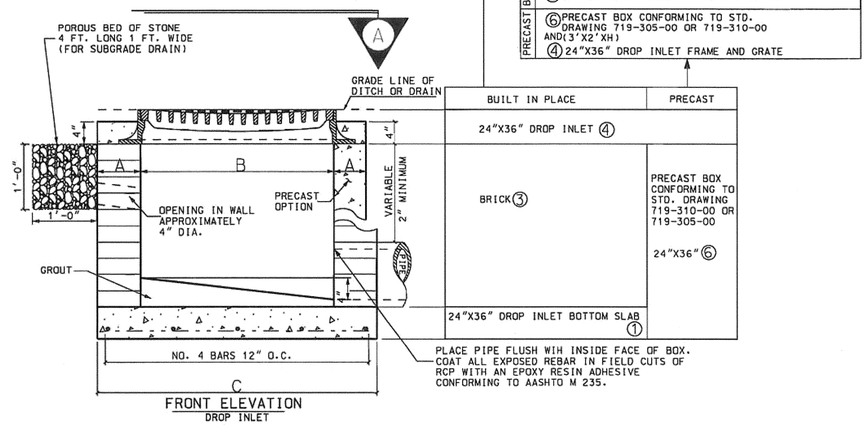
719-110-01

EFFECTIVE LETTING DATE: MAY 2008

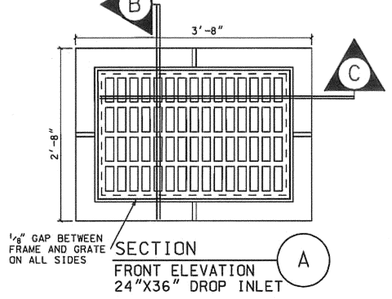
THIS DRAWING IS NOT TO SCALE

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.

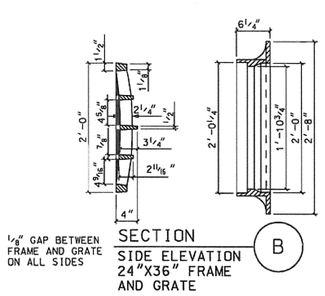
	24"X36" DROP INLET
BUILT IN PLACE	① 24"X36" DROP INLET BOTTOM SLAB (PC OR CIP 40"X52"X6") AND ③ BRICK WALLS (8") AND ④ 24"X36" DROP INLET FRAME AND GRATE
PRECAST	⑥ PRECAST BOX CONFORMING TO STD. DRAWING 719-305-00 OR 719-310-00 AND(3'X2'XH) ④ 24"X36" DROP INLET FRAME AND GRATE



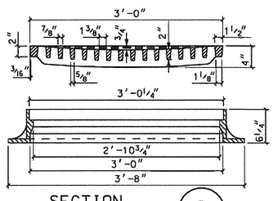
FRONT ELEVATION
DROP INLET



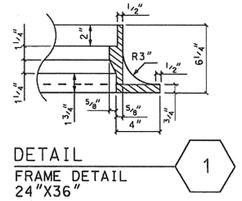
SECTION
FRONT ELEVATION
24"X36" DROP INLET
A



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 A1/2" 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

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INFRASTRUCTURE CONSULTING & ENGINEERING

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

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

DRAINAGE DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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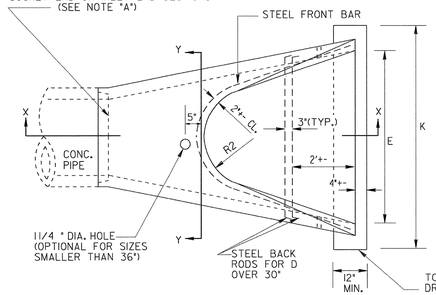
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	D2

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

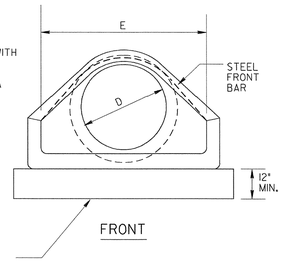
CONCRETE FLARED END SECTION

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



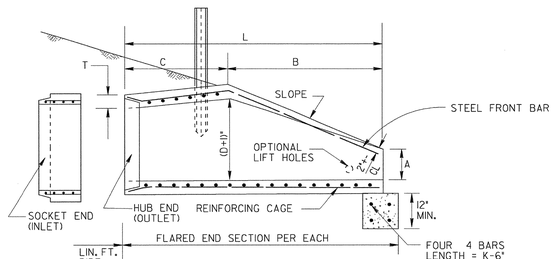
PLAN

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.

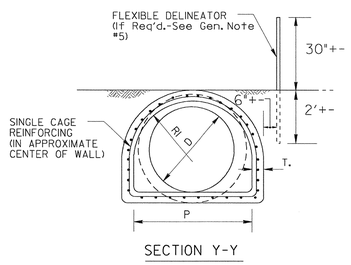


FRONT

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 (.08D + 3/4" + TYPICAL)

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

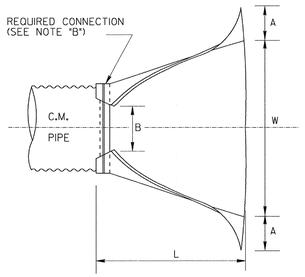
PIPE DIA	FRONT BAR	BACK RODS	SLOPE +-	A	B	C *	L *	E	P	RI	R2	OUTLET TOEWALL (IF REQ'D) K= E + 2'	CU.YDS. CONC.
12"	1-#3 x 5' 4"	NOT REQ'D.	2.2:1	4"	2'0"	4' 1"	6'1"	2'0"	1'8"	10"	9"	4'-0"	.148
15"	1-#3 x 6' 0"	NOT REQ'D.	2.2:1	6"	2'3"	3'10"	6'1"	2'6"	2'0"	1'0"	11"	4'-6"	.167
18"	1-#3 x 7' 2"	NOT REQ'D.	2.2:1	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.	2.4:1	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.	2.4:1	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"	2.4:1	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"	2.4:1	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

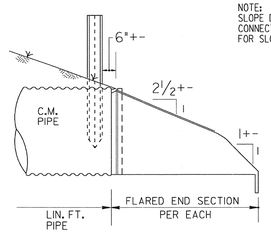
NOTE: GALVANIZED STEEL FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED STEEL PIPE AND ALUMINUM FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED ALUMINUM PIPE UNLESS OTHERWISE APPROVED BY D.O.T. OFFICE OF MATERIALS AND TESTS.

FLARED END SECTION DIMENSIONS

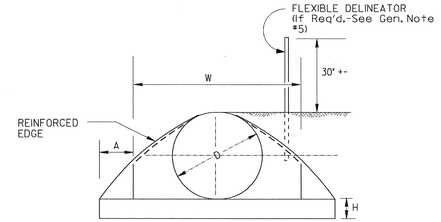
PIPE SIZE "D"	THICKNESS GALV. STEEL	THICKNESS ALUM.	A A= 0.4D +- 1"	B B=0.5 D +- 1"	H H=0.25D +- 1" (MIN.6")	L L=1.67D +- 1 1/2"	W W=2.0D +- 2"
12"	.064"	.060"	5"	6"	6"	1'8"	2'0"
15"	.064"	.060"	6"	7"	6"	2'3"	2'6"
18"	.064"	.060"	7"	9"	6"	2'6"	3'0"
24"	.064"	.060"	9"	1'0"	6"	3'4"	4'0"
30"	.079"	.105"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

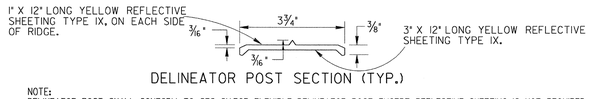
(c) A STUB PIPE WILL BE RIVITED TO THE END SECTION AND THE MAIN PIPE CONNECTED TO THE STUB WITH A NORMAL CONNECTING BAND.

(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. PAY-MENT FOR FLARED END SECTION WILL INCLUDE DELINEATORS, SEE DETAIL AND NOTES BELOW. DELINEATORS NOT REQ'D. FOR SIDE DRAIN, SLOPE DRAIN, OR LONG PIPE.



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.

6-9-06	REV. REFLECTIVE SHEETING	GLO	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
			STANDARD FLARED END SECTIONS FOR PIPES	
			NO SCALE	REV. & REDR. SEPT., 1999
DATE	REVISION	BY	DES. ____ (SUBMITTED) STATE ROAD & AIRPORT DESIGN ENGINEER; REV. ____; RETR. ____; CHK. ____ (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

DRAINAGE DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	D3

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
NO. 21242
JAMES W. KENDALL, JR.

SIGNATURE

2-9-2015
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

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

STANDARD DRAWING

OUTLET PROTECTION WITH DEFINED CHANNEL

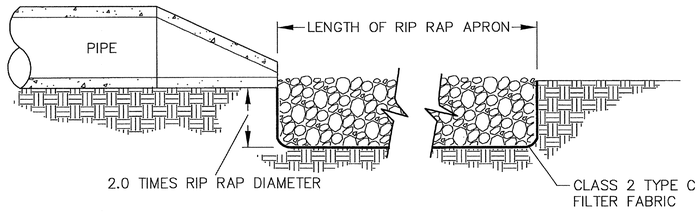
804-310-00

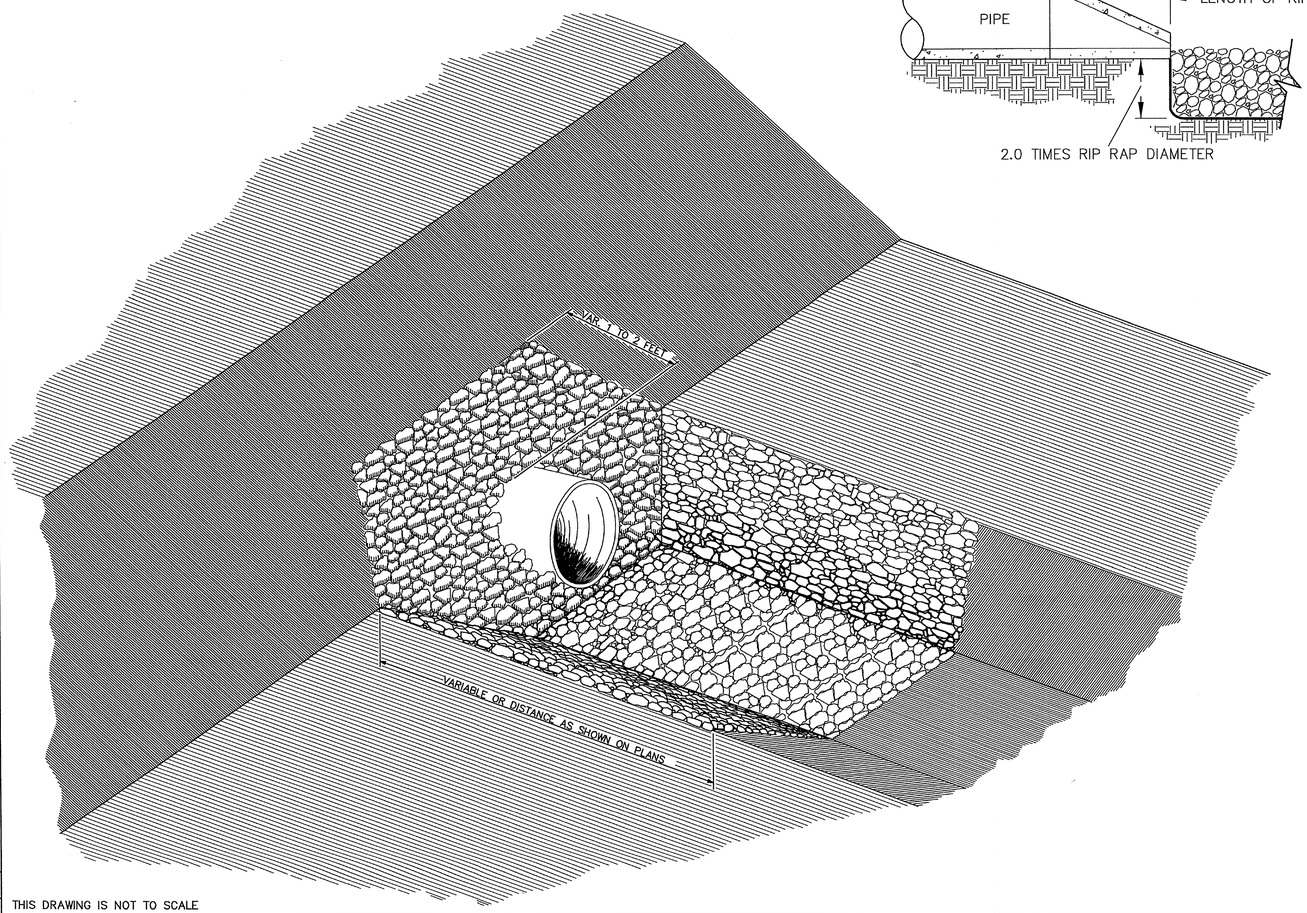
EFFECTIVE LETTING DATE | MAY 2015

NOTES:
1. GEOTEXTILE FABRIC TO BE USED UNDER RIPRAP.
2. SEE STANDARD DRAWINGS SECTION 719-600-00 FOR ADDITIONAL PIPE END TREATMENT OPTIONS.
3. THE PAY ITEMS SHALL BE:
   RIPRAP CLASS ___ - ___ TON
   GEOTEXTILE FOR EROSION CONTROL UNDER RIPRAP CLASS 2 TYPE C S.Y.

CHART 804-310A
RIPRAP PLACEMENT WITH MINIMUM TAILWATER

MINIMUM CLASS	D_{50} (FT)	MINIMUM THICKNESS (FT)	PIPE DIAMETER
A	0.50	1.00	UP TO 24"
B	0.75	1.50	UP TO 84"
C	1.30	2.60	LARGER THAN 84"





THIS DRAWING IS NOT TO SCALE

OUTLET PROTECTION

FOR INFORMATION ONLY	INFRASTRUCTURE CONSULTING & ENGINEERING	TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA
	DRAINAGE DETAILS	
	BLAZING STAR LANE ROADWAY AND DRAINAGE IMPROVEMENTS	

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

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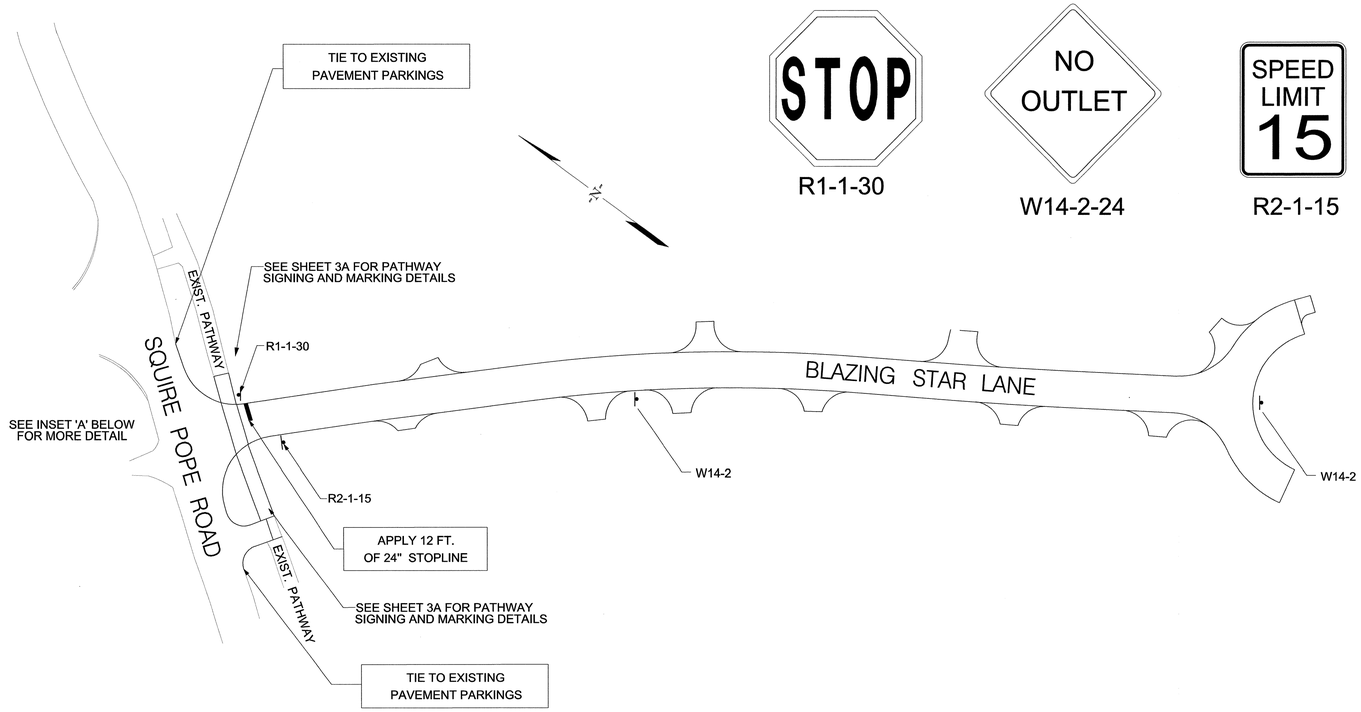
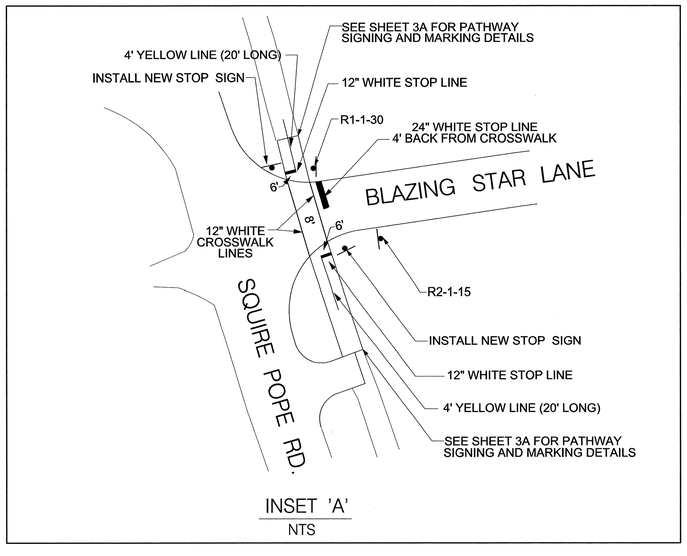
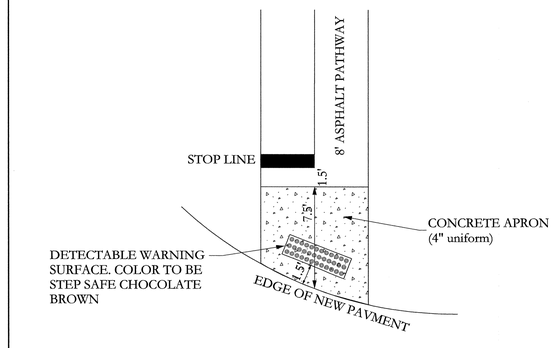
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	PM 1





INSET 'A'
NTS



DECTECTABLE WARNING SURFACE DETAIL
NTS

0 40 80 120 160
SCALE IN FEET

SCALE: 1" = 40'

SOUTH CAROLINA No. 26136 PROFESSIONAL ENGINEER AARON O. LIVINGSTON
SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION
5/25/16

INFRASTRUCTURE CONSULTING & ENGINEERING

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

TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

PAVEMENT MARKING AND SIGNING SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

CASTEK A TRANSPO INDUSTRIES COMPANY, INC.

Technical Data Sheet

STEP-SAFE®

Precast Polymer Concrete Tactile Dome Safety Tile

Step-Safe® is a pre-cast polymer concrete tile that is designed to alert visually impaired pedestrians of impending hazards in pedestrian travel routes in public buildings and/or public rights-of-way. Step-Safe® complies with the minimum requirements as established by the Access Board and those of the US Department of Justice and the US Department of Transportation as defined in the American with Disabilities Act. Step-Safe® has a proven history of resistance to the effects of abrasion, weather and other environmental conditions. The reverse side of the Step-Safe® tiles has a uniform application of a coarse exposed aggregate to enhance adhesion of the tiles to the Portland cement concrete substrate using an exterior latex-based adhesive material.

Material Design

Step-Safe® tiles are comprised of a polymer concrete composed of specially blended polyester resins, promoters, initiators, and inert aggregate that provide high strength and resistance to corrosive agents such as de-icing chemicals, etc. Step-Safe® polymer concrete has the appropriate coloring agent and or pigment mixed uniformly throughout so color will not fade due to exposure to abrasion or UV radiation. The aggregate component shall be a gap-graded combination of silica sand and appropriate fillers.

Step-Safe® tiles are available in 300mm x 300mm (11.8" x 11.8") square size and are installed at 12" x 12" with gap for expansion. Tiles are also available in 600mm x 600mm (23.9" x 23.9") square size and are installed at 24" x 24" with gap for expansion. Step-Safe® tiles are available in a variety of standard colors including safety yellow, charcoal gray, forest green, bright white, chocolate brown and brick red. Custom colors are also available as per specific project requirement. Step-Safe® tiles can be custom fit to various radii using standard tile saws. For dome size and configuration details, please see Step-Safe® Drawing.

Installation Procedure

Installation in Freshly Poured Concrete:

1. Pour and place new concrete and finish the surface using trowels as per project requirements.
2. Prior to setting Step-Safe® tiles, remove approx. ¼" to ½" of the fresh concrete in the area where tiles are to be set. This can be done with a hand trowel and will help reduce problems in forcing the tiles into the fresh concrete.
3. Place the Step-Safe® tiles into the freshly poured concrete, evenly in lines parallel to existing edge conditions, or as directed by the architect or engineers drawing. Leave approximately 1/8" gap between adjacent tiles on all sides to accommodate expansion. Tiles should be pressed into the concrete, taking care to assure that the edges of the tile surface are not higher than the surrounding finished concrete surface; only the Truncated Domes should be above the finished concrete surface per ADA specifications. **Do not use hammers to install the tiles.**
4. To assist in the proper installation and uniform elevation of tiles, if necessary, place a piece of plywood over the entire surface and add weight until the concrete has cured.
5. Allow concrete to cure before opening the surface to pedestrian traffic.

Installation on Existing Concrete Surfaces:

1. All contact surfaces should be free of hydrostatic pressure, paint, membranes, oils, curing compounds or any other material, which could impede tile/grout adhesion. Concrete surface must be at least 28 days old. Surfaces must be even, free of projections and in sound condition.
2. Remove the concrete in the area where the Step-Safe® tiles are to be installed. This can be done with grinders, mills or light chipping hammers. The depth of the removal should be equal to the thickness of the Step-Safe® tile (½") plus the thickness of the tile setting/bonding grout.

3. Follow setting/bonding grout manufacturer's recommendations and instructions for mixing and application. Apply the specified setting/bonding material and maintain uniform thickness to assure proper tile elevation with surrounding concrete surfaces.
4. Place the Step-Safe® tiles evenly in lines parallel to existing edge conditions or as directed by the architect or engineers drawing. Leave approximately 1/8" gap between adjacent tiles on all sides to accommodate expansion. Tiles should be pressed into the setting/bonding grout taking care to assure that the edges of the tile surface are not higher than the surrounding concrete surface; only the Truncated Domes should be above the concrete surface as per ADA specifications.
   Do not use hammers to install the tiles.
5. To assist in the proper installation and uniform elevation of tiles, if necessary, place a piece of plywood over the entire tile surface and add weight until the setting/bonding grout has cured.
6. Allow the setting/bonding grout to cure before opening to traffic.

Note: Alternatively, retrofit applications can also be installed by cutting a 2' x 4' full-depth section of the existing concrete ramp (where ADA tiles would be installed) and pouring/placing new concrete with Step-Safe tiles. This would not only ensure faster construction but also eliminate the need for repairing the entire sidewalk.

Properties*

Property	Value	Method
Compressive Strength	10,000 psi min.	ASTM C579 Method B
Flexural Strength	3,000 psi min.	ASTM C384
Tensile Strength	1,800 psi min.	ASTM C307
Impact Strength	100 ft. lbs. min.	ASTM D2444
Water Absorption	0.2% max.	ASTM D570
Slip Resistance	0.80 min. wet/dry	ASTM C1028
Freeze-Thaw Resistance	No Change	ASTM C666
Fire Test	Flame Spread < 50, Smoke Developed < 70 Class A Rating	ASTM E84-87, UL723, NFPA255, UBC 42 1

* To be used as general guidelines only

Packaging

Step-Safe® 12" x 12" tiles are packaged in a box of 10 tiles. Each tile weighs approximately 6 pounds. The gross weight of the 10-tile box is approximately 65 pounds. A pallet consists of 36 boxes. Step-Safe® 24" x 24' tiles are packaged in a crate of 8 tiles. Each tile weighs approximately 24 pounds. The gross weight of the 8-tile crate is approximately 210 pounds.

Storage

Step-Safe® tiles shall be stored indoors in a cool, dry environment in its original packaging. Care must be taken to ensure that tiles are not damaged during inventory.

Warranty

The following warranty is made in lieu of all other warranties, either expressed or implied. Step-Safe® is warranted for a period of five (5) years from the date of shipment. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product that proves to be defective. Neither seller nor manufacturer assumes any liability for injury, loss or damage resulting from the use of this product.

* See full manufacturer's warranty. 02/13

20 Jones Street, New Rochelle, NY 10801
Tel: 914-636-1000 Fax: 914-636-1282
Web: http://www.transpo.com Email: info@transpo.com

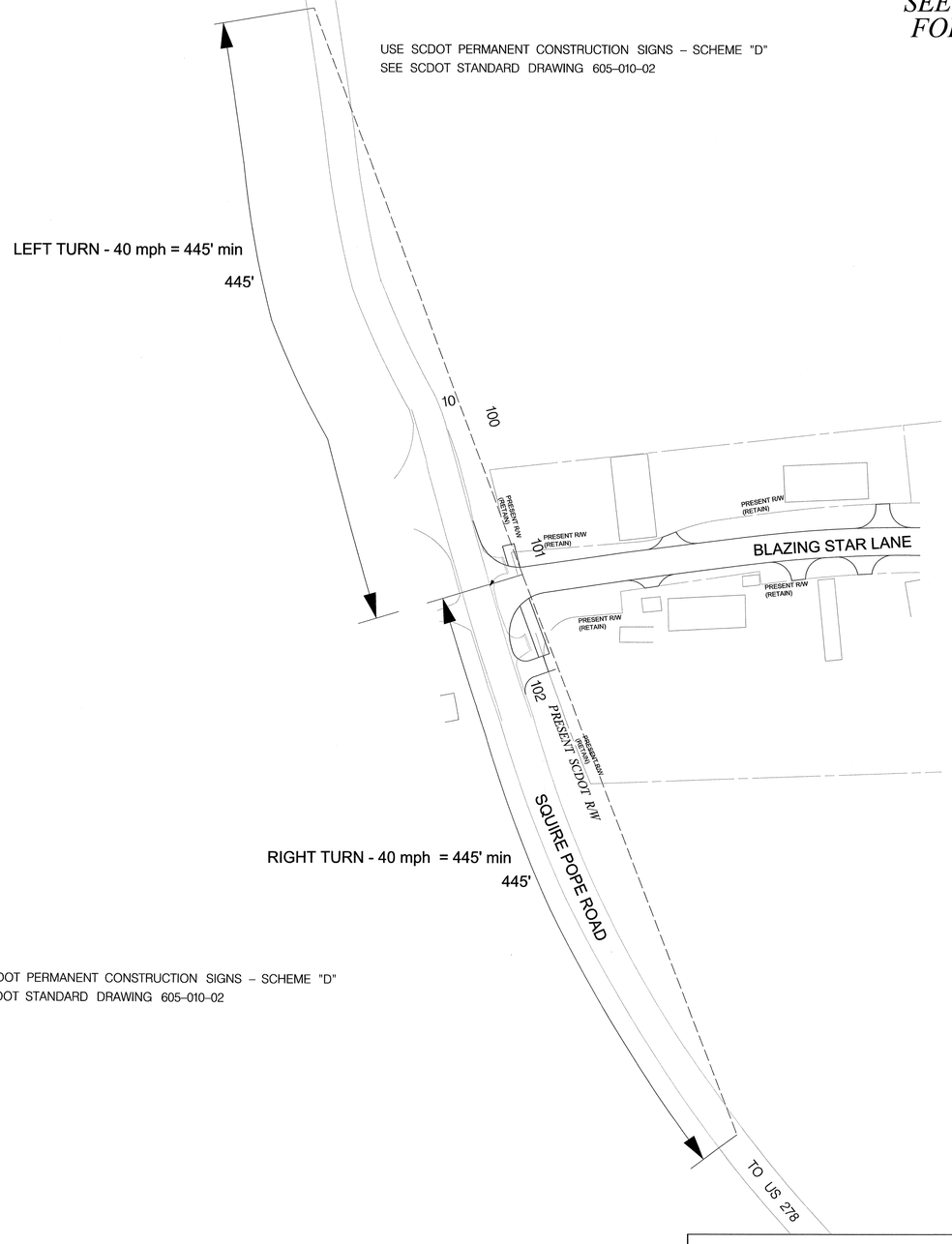
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	TC1

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

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

LEFT TURN - 40 mph = 445' min

445'



RIGHT TURN - 40 mph = 445' min

445'

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

N

0 50 100 150 200
SCALE IN FEET

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON

SOUTH CAROLINA INFRASTRUCTURE CONSULTING & ENGINEERING, PLLC No. 4470 CERTIFICATE OF AUTHORIZATION 5/25/16

SCALE: 1" = 50'

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

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	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

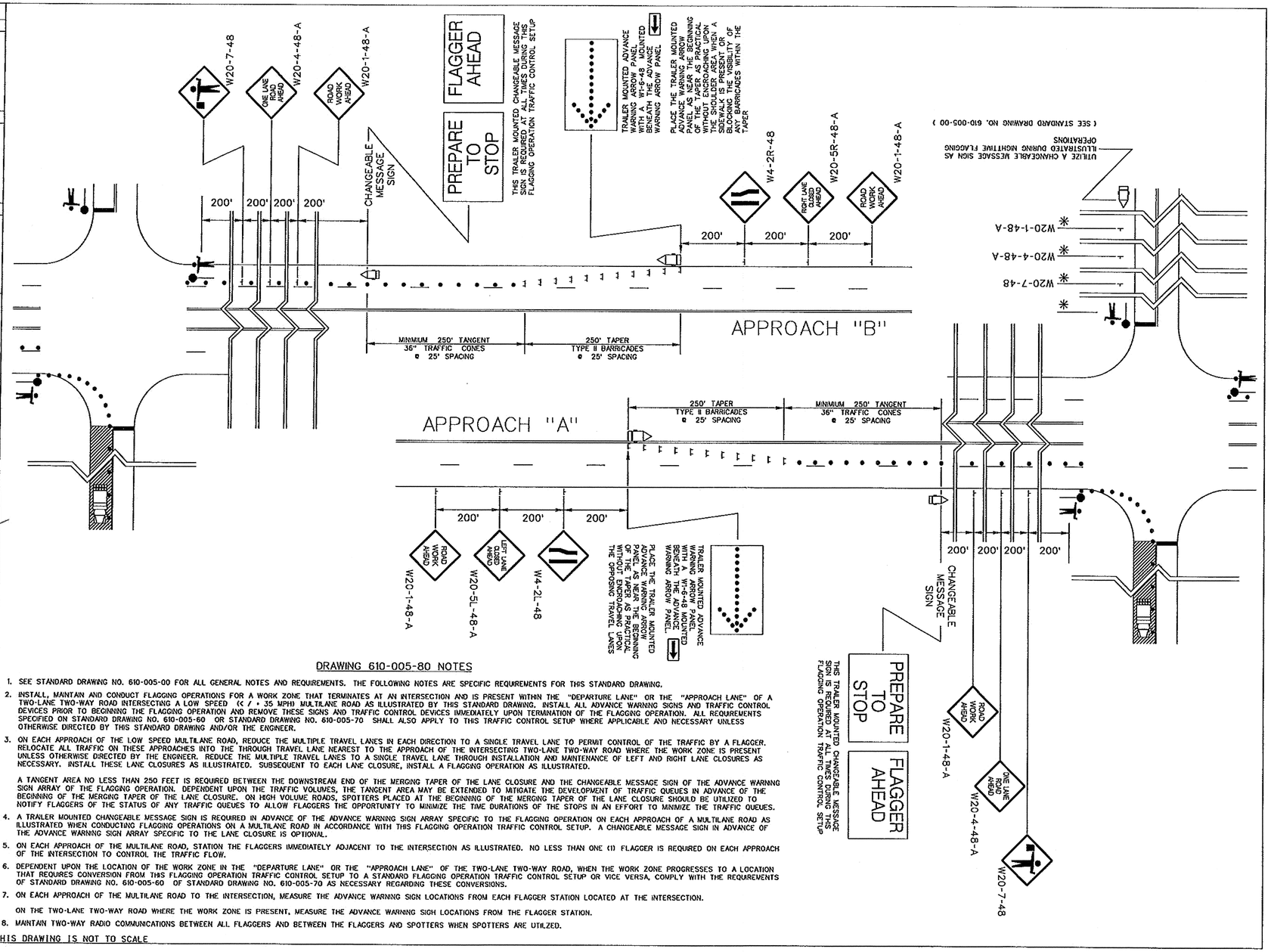
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

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			
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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

TRAFFIC CONTROL
PLAN SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

EROSION CONTROL DATA

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	EC1

RECEIVING WATERS

ROAD / ROUTE	OUTFALL DITCH		NAME OF RECEIVING WATERS	NAME OF ULTIMATE RECEIVING WATERS
	STATION	SIDE		
BLAZING STAR LANE	10+30	RT	UNNAMED TRIB	SKULL CREEK

SOIL TYPES

ROAD / ROUTE	STATION TO STATION		SOIL PARTICLE SIZE (COARSE / FINE)	ZONE
BLAZING STAR LANE	10+00	16+50	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		MSY
						FRONT	BACK	
POND	00+00	02+50		4	0	2		0.248
							TOTAL	0.248

TURF REINFORCED MATTING (TRM)

ROAD / ROUTE	STATION TO STATION		SIDE	DEPTH OF MAT (FT)	SLOPES (x : 1)		DITCH BOTTOM WIDTH (FT)	TYPE	TYPE 1 (MSY)	TYPE 2 (MSY)	TYPE 3 (MSY)
					FRONT	BACK					
								TOTALS			

SEDIMENT TUBES IN DITCHES

ROAD / ROUTE	STATION TO STATION		SIDE	AVERAGE LENGTH	SPACING (FT)	TOTAL	COMMENTS
						TOTAL	

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

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 32453 RONALD D. SMOAK JR. 5-25-16

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

INFRASTRUCTURE CONSULTING & ENGINEERING

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2			
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TOWN OF HILTON HEAD ISLAND · SOUTH CAROLINA · INCORPORATED 1983

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DATA SHEET

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
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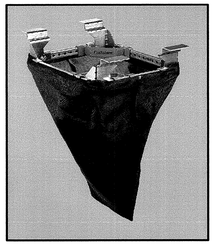
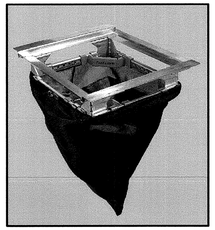
FLEXSTORM SOUTH CAROLINA PRODUCT SELECTION GUIDE

CAROLINA DOT STANDARDS



CATCH-IT® REUSABLE INLET PROTECTION

DOT Standard	Drawing Index	USF P/N	Inlet Type	Grate Size	Opening Size	Flexstorm Item Code	ADS P/N
Type 1	719-1	5125-6173	Curb Box	36.5 x 24.375	35.0 x 29.125	C-SQCB-365-244-350-291-FX	62LCBFX
Type 14	719-8	4646-6405	Square/Rect	24.0 Æ	24.0 Æ	C-HD2L-263-230-240-233-FX	62MSQFX
Type 15	719-9	4647-6264	Square/Rect	46.0 x 26.25	43.0 x 23.0	C-HD4-460-263-430-230-FX	62LSQFX
Drop Inlet (24 x 24)	719-10	4171-6249	Square/Rect	24.0 x 24.0	22.75 x 22.75	C-SQ-240-240-228-228-FX	62MSQFX
Drop Inlet (24 x 36)	719-10	4138-6218	Square/Rect	36.0 x 24.0	34.5 x 22.5	C-SQ-360-240-345-225-FX	62LSQFX
NC 840.03	--	5181	Curb Box	36.5 x 23.75	34.5 x 21.75	C-SQCB-365-234-345-218-FX	62LCBFX

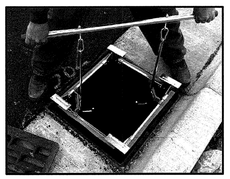


PURE PERMANENT INLET PROTECTION

DOT Standard	Drawing Index	USF P/N	Inlet Type	Grate Size	Opening Size	Flexstorm Item Code - Bag P/N	ADS P/N (FX)	ADS P/N (FXP)	ADS P/N (PC)	ADS P/N (PCP)
Type 1	719-1	5125-6173	Curb Box	36.5 x 24.375	35.0 x 29.125	P-SQCB-365-244-350-291-"Bag P/N"	62LHDCBFX	62LHDCBFXP	62LHDCBPC	62LHDCBPCP
Type 14	719-8	4646-6405	Square/Rect	26.25 x 23.0	24.0 x 23.25	P-HD2L-263-230-240-233-"Bag P/N"	62MHDFX	62MHDFXP	62MHDPC	62MHDPCP
Type 15	719-9	4647-6264	Square/Rect	46.0 x 26.25	43.0 x 23.0	P-HD4-460-263-430-230-"Bag P/N"	62LHDFX	62LHDFXP	62LHDPC	62LHDPCP
Drop Inlet (24 x 24)	719-10	4171-6249	Square/Rect	24.0 x 24.0	22.75 x 22.75	P-SQ-240-240-228-228-"Bag P/N"	62MHDFX	62MHDFXP	62MHDPC	62MHDPCP
Drop Inlet (24 x 36)	719-10	4138-6218	Square/Rect	36.0 x 24.0	34.5 x 22.5	P-SQ-360-240-345-225-"Bag P/N"	62LHDFX	62LHDFXP	62LHDPC	62LHDPCP
NC 840.03	--	5181	Curb Box	36.5 x 23.75	34.5 x 21.75	P-SQCB-365-234-345-218-"Bag P/N"	62LHDCBFX	62LHDCBFXP	62LHDCBPC	62LHDCBPCP

PURE BAG SELECTION GUIDE

Bag P/N	Description
FX	Flexstorm's standard woven bag for temporary or permanent applications where high flow rates and lower maintenance is desired.
FX+ (FXP)	FX bag + additional Hydrocarbon Removal media for low to moderate levels of hydrocarbon removal.
PC	'Post Construction' bag lined with Adsorb-it Filter fabric to specifically target small particle and hydrocarbon removal.
PC+ (PCP)	PC bag + additional Hydrocarbon Removal media for high levels of hydrocarbon removal.



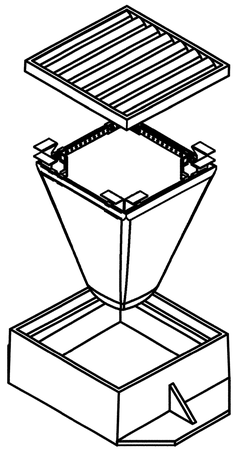
INSTALLATION:

1. REMOVE GRATE WITH UNIVERSAL MAINTENANCE TOOL.

2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING.

3. REPLACE GRATE

TO ORDER CONTACT YOUR LOCAL ADS SALES REP: JEFF HARTZOG
JEFF.HARTZOG@ADS-PIPE.COM
843-615-0731



SCDOT South Carolina Department of Transportation

APPROVED BY SCDOT FOR TYPE G SUSPENDED INLET FILTER (QPL 58)

FLEXSTORM® INLET FILTERS

ADS

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INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

Z:\Projects\14-37.12 Blazing Star Ln\Roadway\Plans sheets\SHT_EC DETAIL_1.dgn
5/23/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	EC3

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

SC-M-815-10

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21242 JAMES W. KENDALL, JR.

James W. Kendall Jr.
SIGNATURE

AUGUST 23, 2012
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	8/2012	DSO	ADDED CHART 815-505
0	3/2008	DSO	GENERAL REVISIONS

SCDOT

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

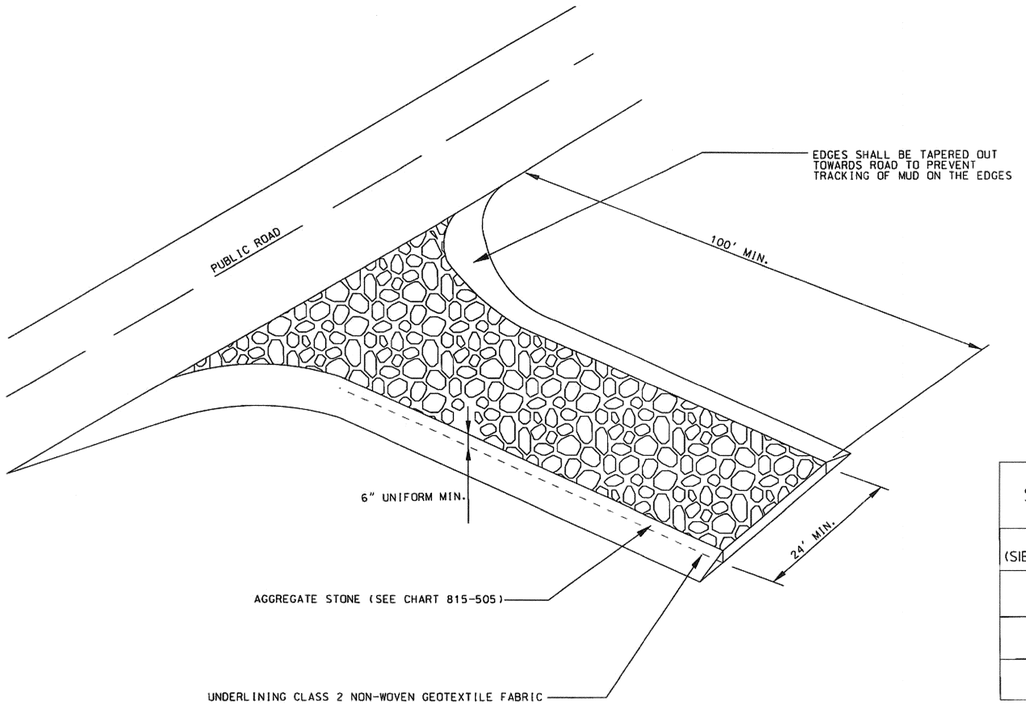
STANDARD DRAWING

STABILIZED CONSTRUCTION ENTRANCE

815-505-00

EFFECTIVE LETTING DATE: JAN 2013

THIS DRAWING IS NOT TO SCALE



NOTES:

1. STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD.

2. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF SITE. WASHDOWN FACILITIES SHALL BE REQUIRED AS DIRECTED BY SCDOT AS NEEDED. WASHDOWN AREAS IN GENERAL MUST BE ESTABLISHED WITH CRUSHED GRAVEL AND DRAIN INTO A SEDIMENT TRAP OR SEDIMENT BASIN. CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY VEHICLES.

3. REMOVE ALL VEGETATION AND ANY OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.

4. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM STONES TO A SEDIMENT TRAP OR BASIN.

5. INSTALL A CLASS 2 NON-WOVEN GEOTEXTILE FABRIC THAT MEETS THE REQUIREMENTS OF SECTION 804 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, PRIOR TO PLACING ANY STONE.

6. MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FT WIDE x 100-FT LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS.

7. INSPECT CONSTRUCTION ENTRANCES EVERY SEVEN (7) CALENDAR DAYS. CHECK FOR MUD AND SEDIMENT BUILDUP, AS WELL AS PAD INTEGRITY. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

8. WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY THE ENGINEER. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.

9. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.

10. REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

11. THE PAY ITEM SHALL BE:
STABILIZED CONSTRUCTION ENTRANCE_____ S.Y.

CHART 815-505
STABILIZED CONSTRUCTION ENTRANCE STONE AGGREGATE

NOMINAL SIZE (SIEVES WITH SQUARE OPENINGS)	PERCENT PASSING (%)
3"	100
1-½"	35 TO 100
¾"	0 TO 15

STABILIZED CONSTRUCTION ENTRANCE

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

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

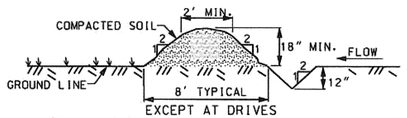
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

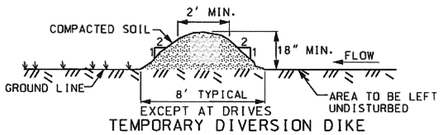
Z:\Projects\14-37.12 Blazing Star Ln\Roadway\Plans sheets\SHT_EC DETAIL_2.dgn
5/24/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD /ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	EC4



TEMPORARY DIVERSION DIKE WITH DITCH

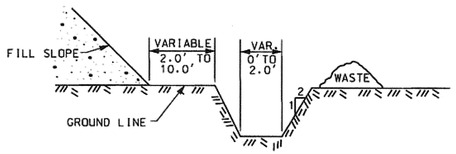
THE PAY ITEM SHALL BE TEMPORARY DIVERSION DIKE WITH DITCH_____L.F.



TEMPORARY DIVERSION DIKE

NOTES

1. THIS ITEM IS FOR DIVERTING CLEAN WATER AROUND A CONSTRUCTION AREA.
2. CLEAR AND GRUB ALL TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIAL.
3. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DIMENSIONS SHOWN.
4. IMMEDIATELY AFTER CONSTRUCTION ESTABLISH VEGETATION, PLACING TEMPORARY EROSION CONTROL BLANKET ON THE DIKE. (AS APPLICABLE).
5. PAYMENT FOR TEMPORARY DIVERSION DIKE INCLUDES ALL MATERIALS IN PLACE. REMOVAL AND DISPOSAL OF MATERIALS AND RESHAPING DIKE TO DRAIN. SEEDING TO BE PAID FOR SEPARATELY.
6. THE PAY ITEM SHALL BE: TEMPORARY DIVERSION DIKE_____L.F.

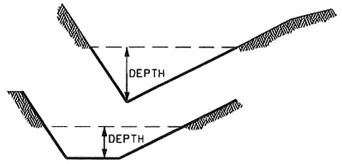


TEMPORARY SILT DITCH

NOTES

1. THIS ITEM IS TO MOVE SEDIMENT LADEN WATER FROM A CONSTRUCTION SITE TO A SEDIMENT CONTROL STRUCTURE.
2. SEED DITCH AND WASTE AREA WITH TEMPORARY SEEDING IMMEDIATELY AFTER CONSTRUCTION.
3. IMMEDIATELY AFTER CONSTRUCTION ESTABLISH VEGETATION, PLACING TEMPORARY EROSION CONTROL BLANKET ON THE DITCH (AS APPLICABLE).
4. THE PAY ITEM SHALL BE: SILT DITCHES_____C.Y.

ROLLED EROSION CONTROL PRODUCT



NOTES

1. THE DEPTH OF THE EROSION CONTROL PRODUCTS ARE TO BE DETERMINED BY DESIGN AND PLACED ON PLAN SHEETS.
2. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. COST OF INSTALLATION AND MATERIALS SHALL BE INCLUDED IN THE PAY ITEM FOR ROLLED EROSION CONTROL PRODUCT.
4. PAY ITEMS:
TEMPORARY EROSION CONTROL BLANKET _____SY
PERMANENT TURF REINFORCEMENT MAT_____SY

THIS DRAWING IS NOT TO SCALE

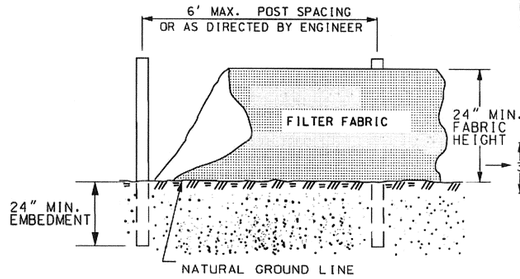
SILT FENCE

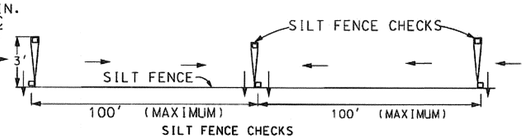
HEIGHT OF FILL (y) IN FEET	FILL SLOPE	MINIMUM SILT FENCE OFFSET FROM TOE OF SLOPE (x) IN FEET	MINIMUM RIGHT OF WAY OFFSET FROM TOE OF SLOPE (NPDES LINE) (z) IN FEET	CHECK LENGTH IN FEET**
<6	2:1 4:1 6:1	2	3	2
6-10	2:1	12*	13*	5
	4:1 6:1	3	4	3
>10	2:1	12*	13*	5
	4:1 6:1	4	5	4

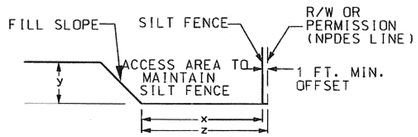
*THESE MINIMUM OFFSETS MAY BE REDUCED WHEN CURB AND GUTTER OR SOME OTHER FEATURE REDUCES THE FLOW OF WATER DOWN THE SLOPE. THE SMALL OFFSETS OF EACH GROUP OF HEIGHT OF FILL CANNOT BE REDUCED.

**SILT FENCE CHECKS WILL HAVE A MAXIMUM LENGTH OF FIVE (5) FEET OR UNTIL THEY TIE BACK INTO THE SLOPE.

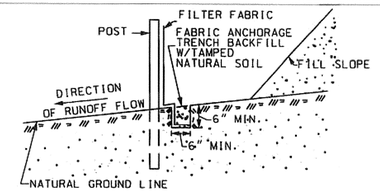
NOTES
1. SILT FENCE CHECKS MUST BE LOCATED EVERY 100 FT. MAXIMUM AND AT LOW POINTS. FILTER FABRICS SHALL CONFORM TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
2. USE POSTS CONFORMING TO SCDOT STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS. POSTS SHALL BE A MINIMUM OF 5 FEET LONG AND INSTALLED TO A MINIMUM DEPTH OF 24 INCHES WITH NO MORE THAN 3 FEET OF THE POST ABOVE GROUND. AT LEAST 1 TO 2 INCHES OF THE POSTS SHALL EXTEND ABOVE THE TOP OF THE FABRIC. POST SPACING WILL BE A MAXIMUM OF 6 FEET ON CENTER.
3. POSTS SHALL HAVE PROJECTIONS FOR FASTENING THE FABRIC TO THE POST. POSTS SHALL ALSO HAVE A SOIL PLATE NEAR THE BOTTOM OF THE POST, EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON-SITE.
4. ATTACH FABRIC TO POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN ALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES.
5. SILT SHALL BE REMOVED AND DISPOSED OF WHEN SILT ACCUMULATES TO 1/3 THE HEIGHT OF THE FENCE. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON-SITE. MAINTENANCE OF SILT FENCE WILL BE MEASURED AND PAID FOR BY THE ITEM OF SILT BASIN.
6. TYPICAL SILT FENCE APPLICATIONS REQUIRE 24 INCHES OF THE FABRIC TO BE ABOVE GROUND. WHEN NEEDED, THE HEIGHT OF SILT FENCE FABRIC ABOVE THE GROUND MAY BE GREATER THAN 24". SEE PLANS FOR APPLICATION OF HIGHER SILT FENCE. PAY ITEMS AND INSTALLATION METHODS.
7. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE LENGTH OF POST WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING AND BURIED DEPTHS WILL REMAIN AS SHOWN HEREON. EXTRA HEIGHT FABRIC WILL BE 4, 5 OR 6 FEET TOTAL WIDTH.
8. FOLLOW SPECIFICATIONS WHEN USING ALTERNATE SILT FENCE (BSRF) DETAILS.
9. THE PAY ITEMS SHALL BE: SILT FENCE_____L.F.
SILT BASIN_____C.Y.



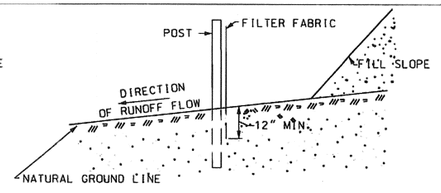




STANDARD SILT FENCE

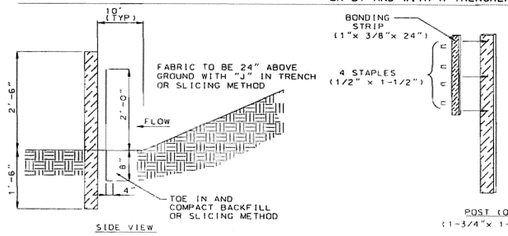


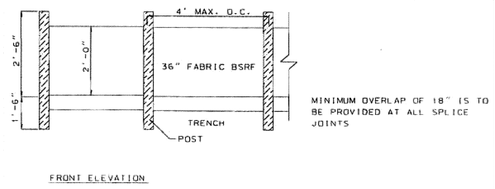
TRENCH METHOD



PNEUMATIC METHOD

12 INCHES OF THE FABRIC SHALL BE BURIED REGARDLESS, IF PLACED PNEUMATICALLY OR BY AND WITH A TRENCHER. BOTH METHODS SHOWN HERE.





MINIMUM OVERLAP OF 18" IS TO BE PROVIDED AT ALL SPLICE JOINTS

ALTERNATE SILT FENCE - BELTED SILT RETENTION FENCE (BSRF)

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS
SC-M-815-2, SC-M-815-9

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21242 JAMES W. KENDALL, JR.

SIGNATURE

AUGUST 23, 2012
DATE

#	DATE	CHK	DESCRIPTION
4			
3			
2			
1	8/2012	KNB	ADDED SCDOT DOCUMENTS, REMOVED STEEL, CHANGED NOTES
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

TEMPORARY EROSION & SEDIMENTATION CONTROL

815-605-00

EFFECTIVE LETTING DATE | JAN., 2013

SILT FENCE

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

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

TOWN OF HILTON HEAD ISLAND, SOUTH CAROLINA, INCORPORATED 1983

TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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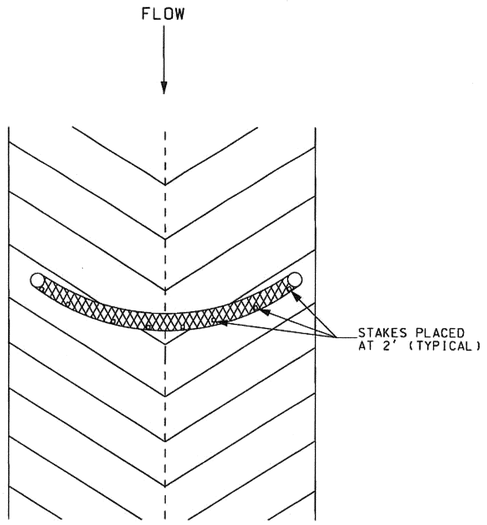
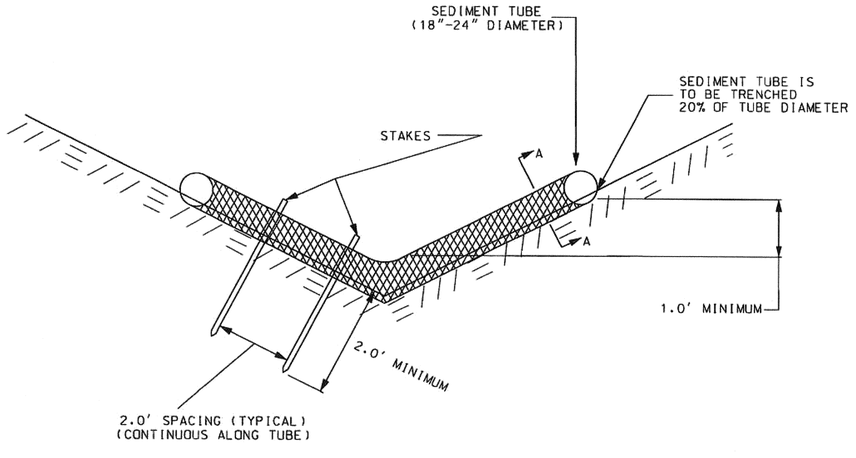
5/24/2016



TOP VIEW
OF DITCH



END VIEW
OF DITCH

THIS DRAWING IS NOT TO SCALE

NOTES:

1. SEDIMENT TUBE SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 815 OF THE SCDOT STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION (LATEST EDITION). AND MUST BE LISTED ON SCDOT QUALIFIED PRODUCT LIST NUMBER 57. SEDIMENT TUBES MUST MEET THE CRITERIA OUTLINED IN THE SUPPLEMENTAL SPECIFICATIONS BEFORE BEING LISTED ON QPL. AND BE FREE FROM DEFECTS OR TRANSPORTATION DAMAGE.

2. PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE SEDIMENT TUBES ARE IN COMPLETE CONTACT WITH UNDERLYING SOIL. SEDIMENT TUBES ARE TO BE 18-24 INCHES IN DIAMETER AND ARE TO BE TRENCHED TO A DEPTH OF 20% OF TUBE DIAMETER. LAY THE SEDIMENT TUBE FLAT IN THE U-SHAPED TRENCH AND COMPACT THE UPSTREAM SEDIMENT TUBER SOIL INTERFACE. PLACE AND ANCHOR THE SEDIMENT TUBE ENDS SO THEY ARE POSITIONED UPSTREAM OF THE SEDIMENT TUBE CENTER POINT. SEDIMENT TUBES FOR DITCH CHECKS WEIGHING MORE THAN 18 POUNDS PER FOOT DO NOT REQUIRE TRENCHING.

3. SEDIMENT TUBE SHALL BE INSTALLED IMMEDIATELY AFTER GRADING AND CONSTRUCTION. SEDIMENT TUBE SHALL BE MAINTAINED DURING SUBGRADE AND BASE PREPERATION UNTIL BASE COURSE IS COMPLETE. SEDIMENT TUBES MAY BE TEMPORARILY MOVED DURING CONSTRUCTION.

4. SEDIMENT TUBES ARE TO BE INSTALLED PERPENDICULAR TO WATER FLOW AND EXTEND UP SIDE SLOPES A MINIMUM OF 1 FOOT ABOVE DESIGN FLOW DEPTH. SPACE TUBES ACCORDING TO THE FOLLOWING TABLE:

SLOPE	MAXIMUM SEDIMENT TUBE SPACING
LESS THAN 2%	150 FEET
2%	100 FEET
3%	75 FEET
4%	50 FEET
5%	40 FEET
6%	30 FEET
GREATER THAN 6%	25 FEET

5. STAKE SEDIMENT TUBES FOR DITCH CHECKS USING STAKES WITH A MINIMUM MEASURED DIMENSION OF ¾" X ¾" AND A MAXIMUM MEASURED DIMENSION OF 2" X 2". OR USING STEEL POSTS(1.25lbs/linear foot)A MINIMUM OF 4' IN LENGTH. USE STEEL POSTS WITHOUT A KICK PLATE AND PAINTING IS NOT REQUIRED. SPACE POSTS OR STAKES ON 2' CENTERS AND DRIVE THEM INTO THE GROUND TO A DEPTH OF 2' OR TO THE MAXIMUM EXTENT PRACTIBLE. INSTALL THE STAKES ON THE DOWNSTREAM THIRD OF THE SEDIMENT TUBE. SEDIMENT TUBES FOR DITCH CHECKS WEIGHING MOR THEN 18 POUNDS PER FOOT DO NOT REQUIRE STAKING.

6. SELECT PROPER LENGTH OF TUBE TO MINIMIZE THE NUMBER NEEDED TO SPAN THE WIDTH OF DRAINAGE AREA. ONE CONTINUOUS LENGTH IS PREFERRED COMPARED TO TWO OVERLAPPING TUBES. IF NECESSARY, SEDIMENT TUBES CAN BE LAPPED A MINIMUM OF 6 INCHES TO PREVENT PASSAGE OF FLOW AND SEDIMENT THROUGH FIELD JOINT.

7. INSTALL SEDIMENT TUBES FOR DITCH CHECKS OVER BARE SOIL, MULCHED AREAS, OR EROSION CONTROL BLANKETS. KEEP SEDIMENT TUBES FOR DITCH CHECKS IN PLACE UNTIL FULLY ESTABLISHED VEGETATION AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.

8. INSPECT SEDIMENT TUBES AFTER INSTALLATION FOR GAPS UNDER THE SEDIMENT TUBES AND FOR GAPS BETWEEN THE JOINTS OF ADJACENT ENDS OF SEDIMENT TUBES. INSPECT SEDIMENT TUBES EVERY 7 DAYS. REPAIR ALL RILLS, GULLIES, AND UNDERCUTTING NEAR SEDIMENT TUBES. REMOVE ALL SEDIMENT DEPOSITS THAT IMPAIR THE FILTRATION CAPABILITY OF SEDIMENT TUBES WHEN THE SEDIMENT REACHES 1/3 THE HEIGHT OF THE EXPOSED SEDIMENT TUBE.

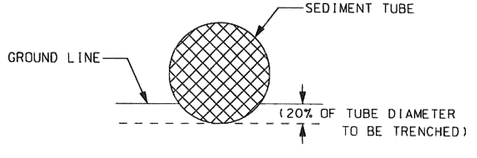
9. REMOVE AND/OR REPLACE INSTALLED SEDIMENT TUBES AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS. REMOVE SEDIMENT TUBES WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS DETERMINED BY THE ENGINEER, INSPECTOR, OR MANFACTURER'S REPRESENTATIVE. GATHER SEDIMENT TUBES AND DISPOSE OF THEM IN REGULAR MEANS AS NON-HAZARDOUS, INERT MATERIAL.

10. PRIOR TO FINAL STABILIZATION, BACKFILL ALL TRENCHES, DEPRESSIONS, AND OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF SEDIMENT TUBES.

11. CLEAN OUT OF TUBES WILL BE PAID FOR AS SILT BASIN IN C.Y.

12. PAYMENT SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, MAINTENANCE, AND INCEDENTALS NECESSARY TO COMPLETE WORK.

13. PAY ITEM SHALL BE:
SEDIMENT TUBE ..... LF



SECTION A-A

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

QUALIFIED PRODUCT LIST 57, SC-M-815-12

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21242 JAMES W. KENDALL, JR.

SIGNATURE

AUGUST 23, 2012
DATE

#	DATE	CHK	DESCRIPTION
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2			
1	8/2012	DSO	UPDATED NOTES, WOOD TEXT REMOVED
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

SEDIMENT TUBE DITCH APPLICATION

815-205-00

EFFECTIVE LETTING DATE | JAN 2013

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	EC5

SEDIMENT TUBES

FOR INFORMATION ONLY

INFRASTRUCTURE CONSULTING & ENGINEERING

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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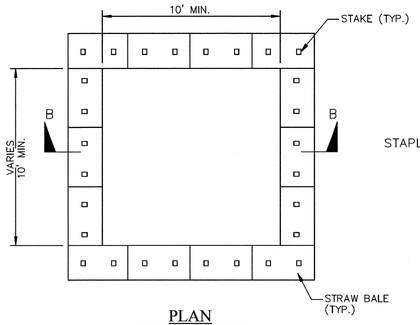
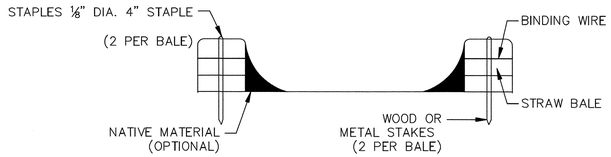
5/24/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN	EC6

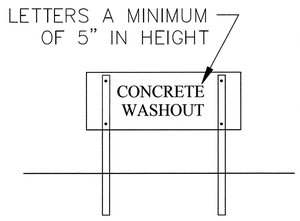
STRAW BALE BARRIER CONCRETE WASHOUT



PLAN
TYPE "ABOVE GRADE" WITH STRAW BALES



SECTION B-B



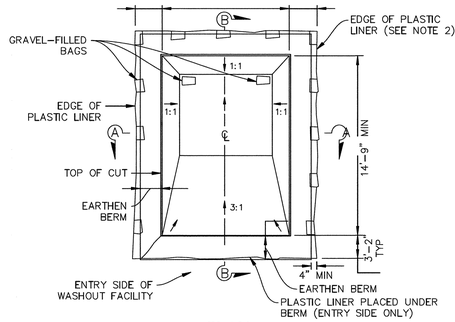
CONCRETE WASHOUT SIGN DETAIL

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

South Carolina Department of Health and Environmental Control	
CONCRETE WASHOUT	
STRAW BALES OR ABOVE GROUND	
STANDARD DRAWING NO.	RC–07 PAGE 1 of 1
NOT TO SCALE	FEBRUARY 2014 (DATE)

EXCAVATED PIT CONCRETE WASHOUT



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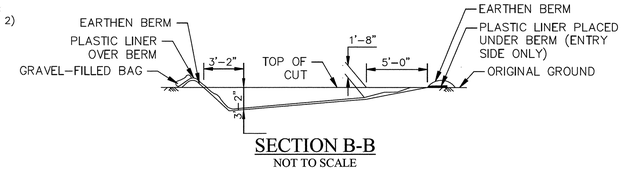

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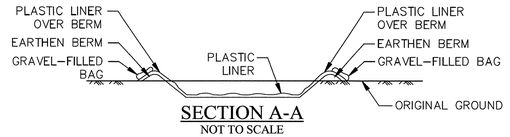

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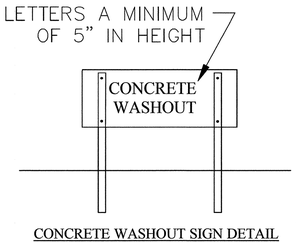

CONCRETE WASHOUT SIGN DETAIL

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
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7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

South Carolina Department of Health and Environmental Control	
CONCRETE WASHOUT	
EXCAVATED PIT	
STANDARD DRAWING NO.	RC–08 PAGE 1 of 1
NOT TO SCALE	FEBRUARY 2014 (DATE)

CONCRETE WASH–OUT DETAIL

FOR INFORMATION ONLY

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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

EROSION CONTROL DETAILS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

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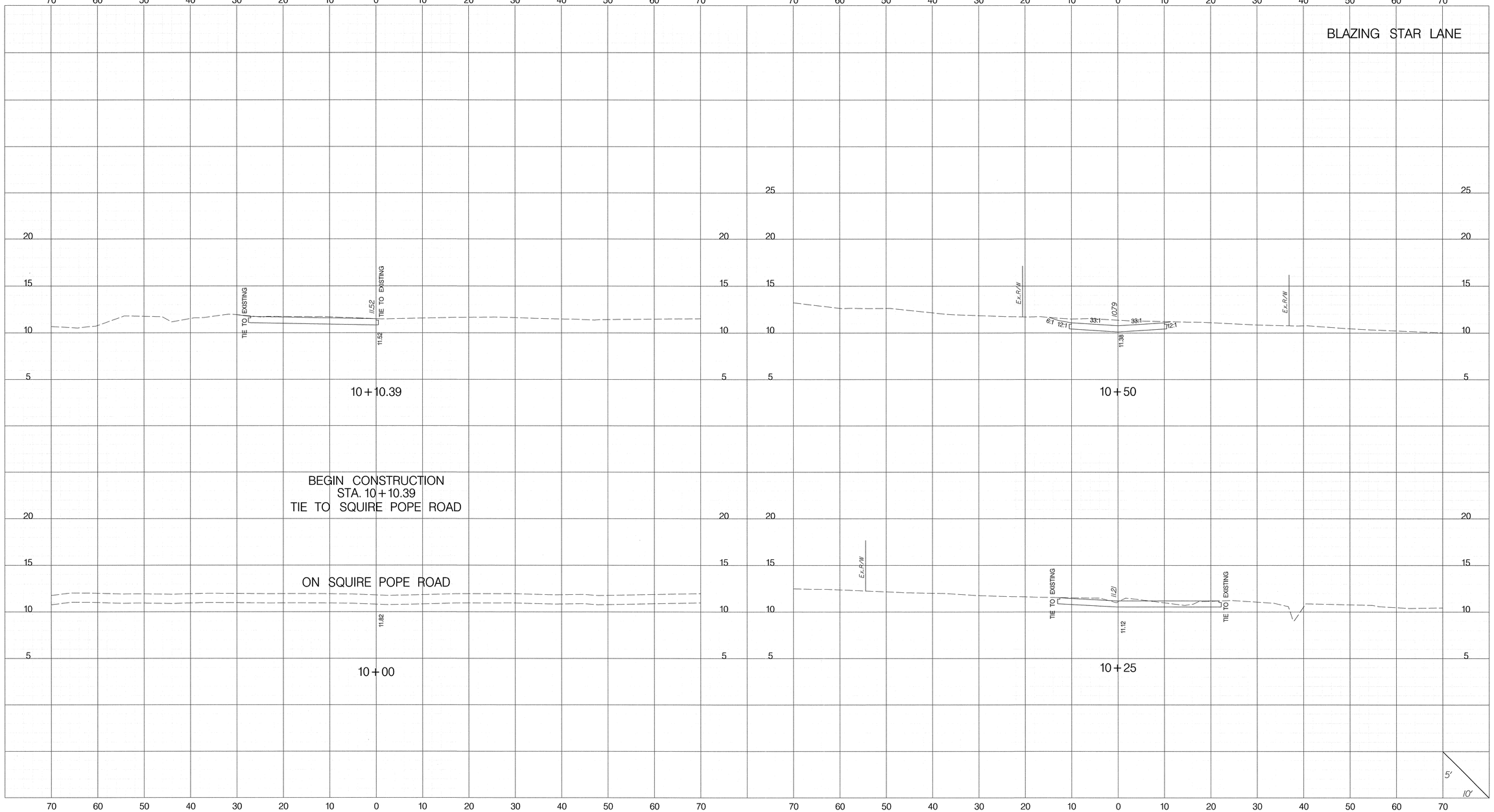
5/24/2016

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN.	X1

BLAZING STAR LANE



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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26136 AARON O. LIVINGSTON
5/25/16

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5/25/16

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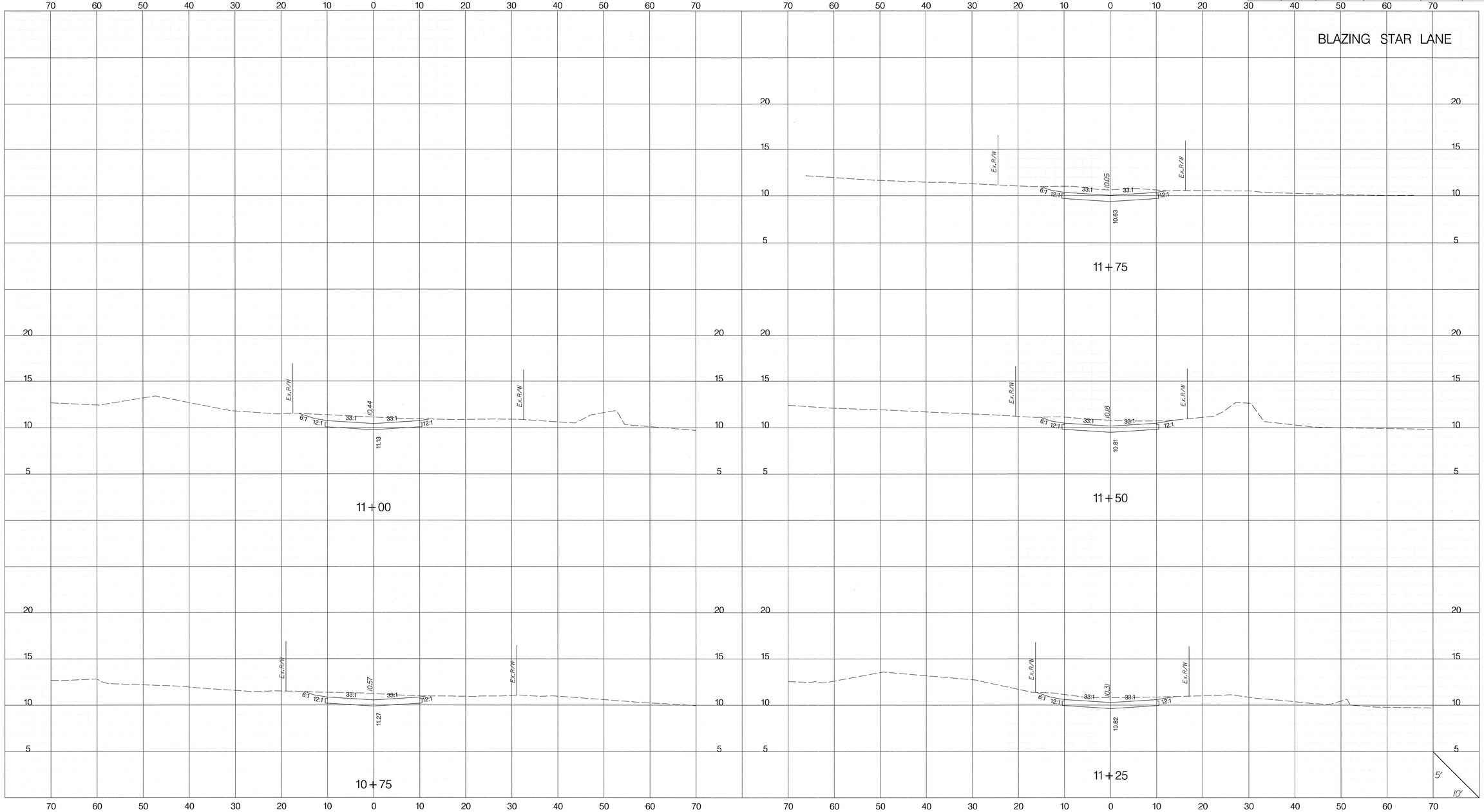
TOWN OF HILTON HEAD ISLAND SOUTH CAROLINA

CROSS SECTIONS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN.	X2

BLAZING STAR LANE



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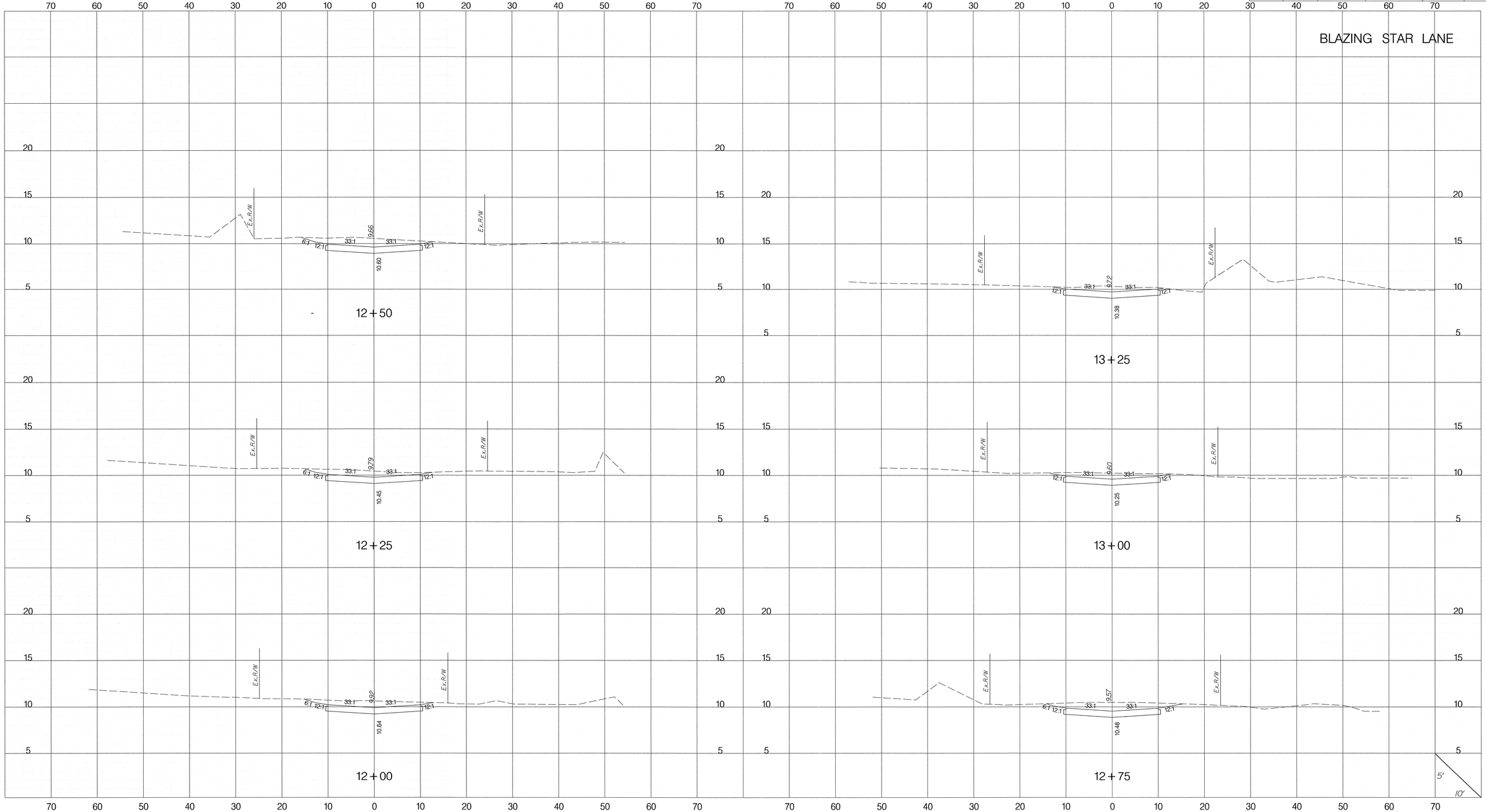
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN.	X3

BLAZING STAR LANE



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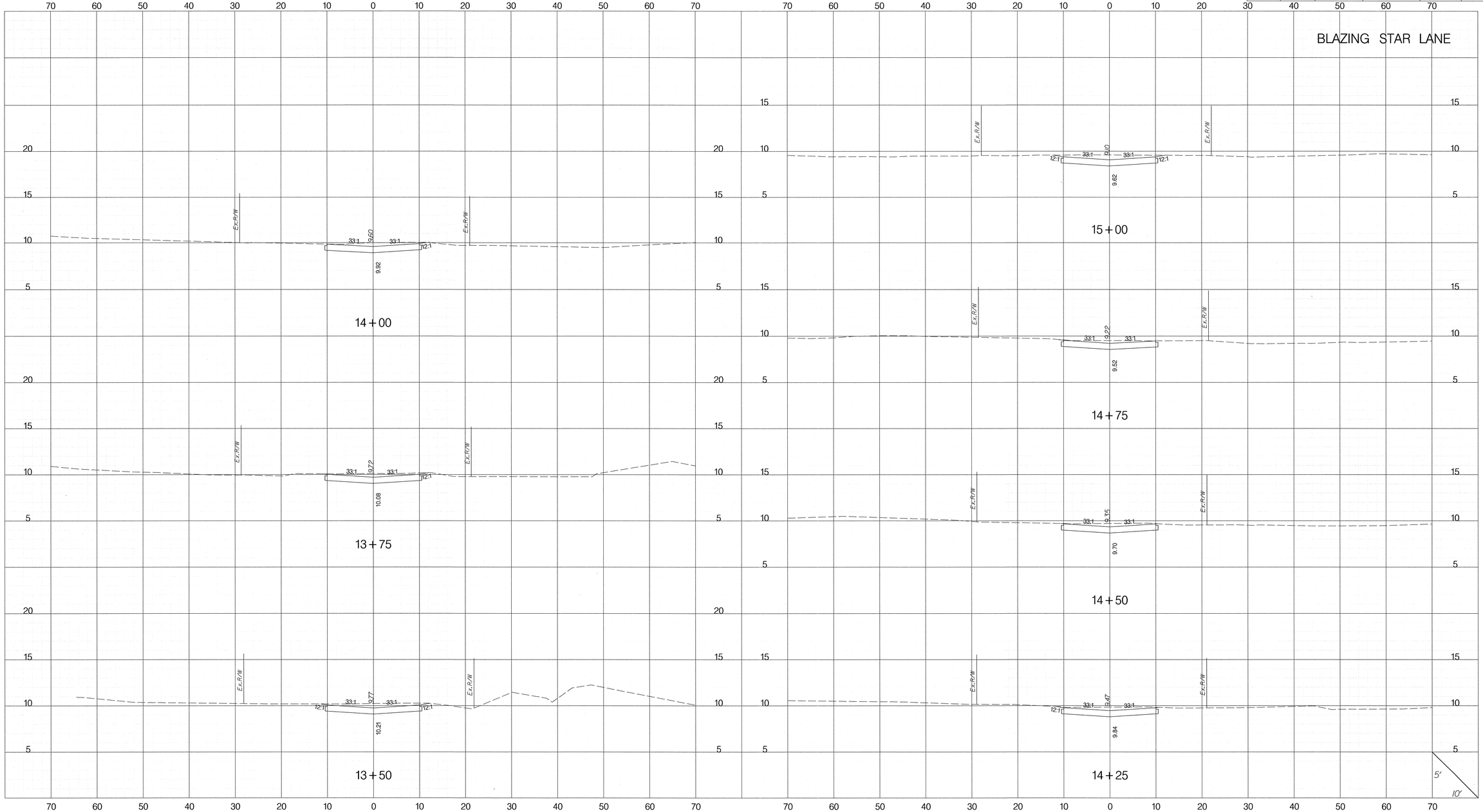
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN.	X4

BLAZING STAR LANE



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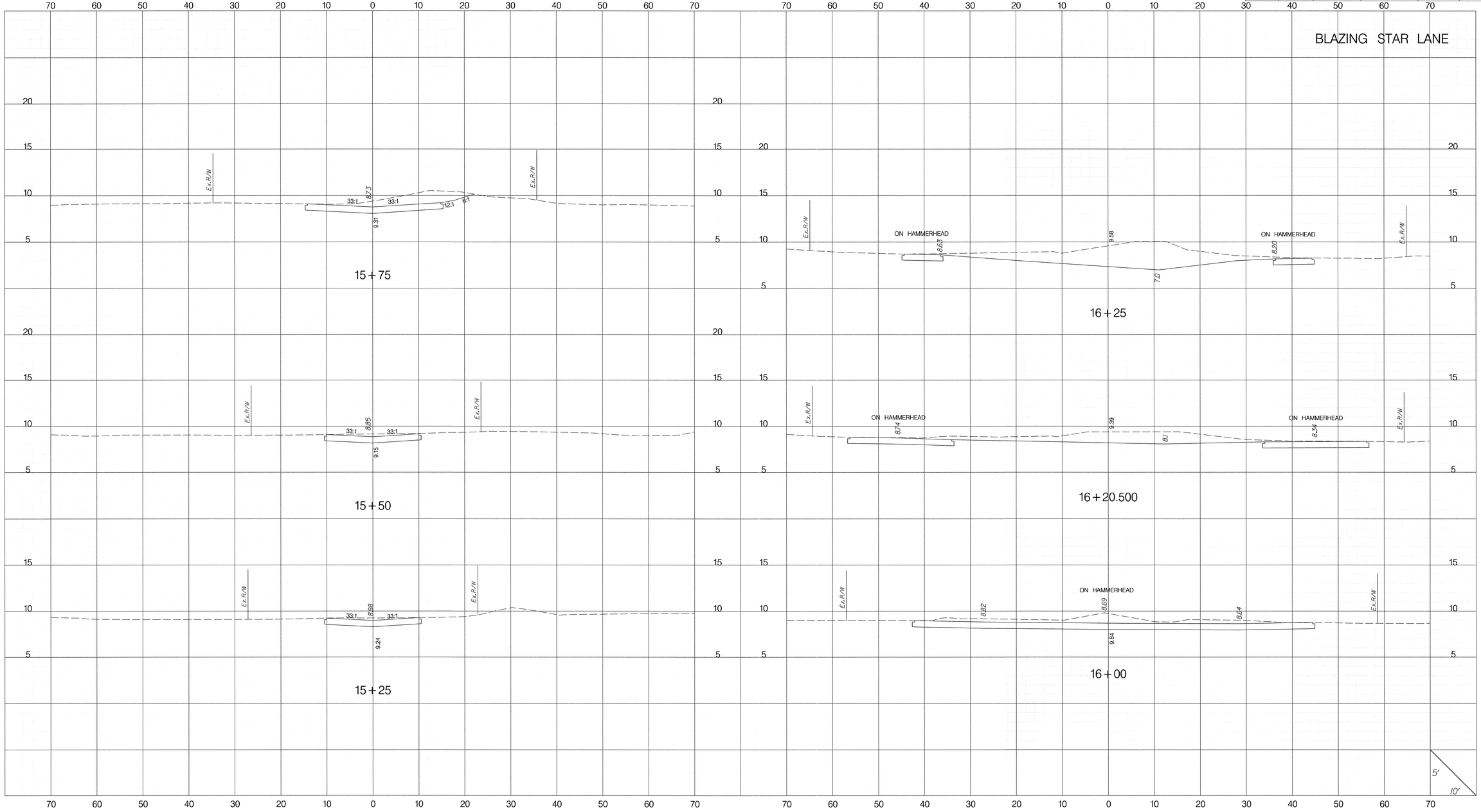
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD / ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN.	X5

BLAZING STAR LANE



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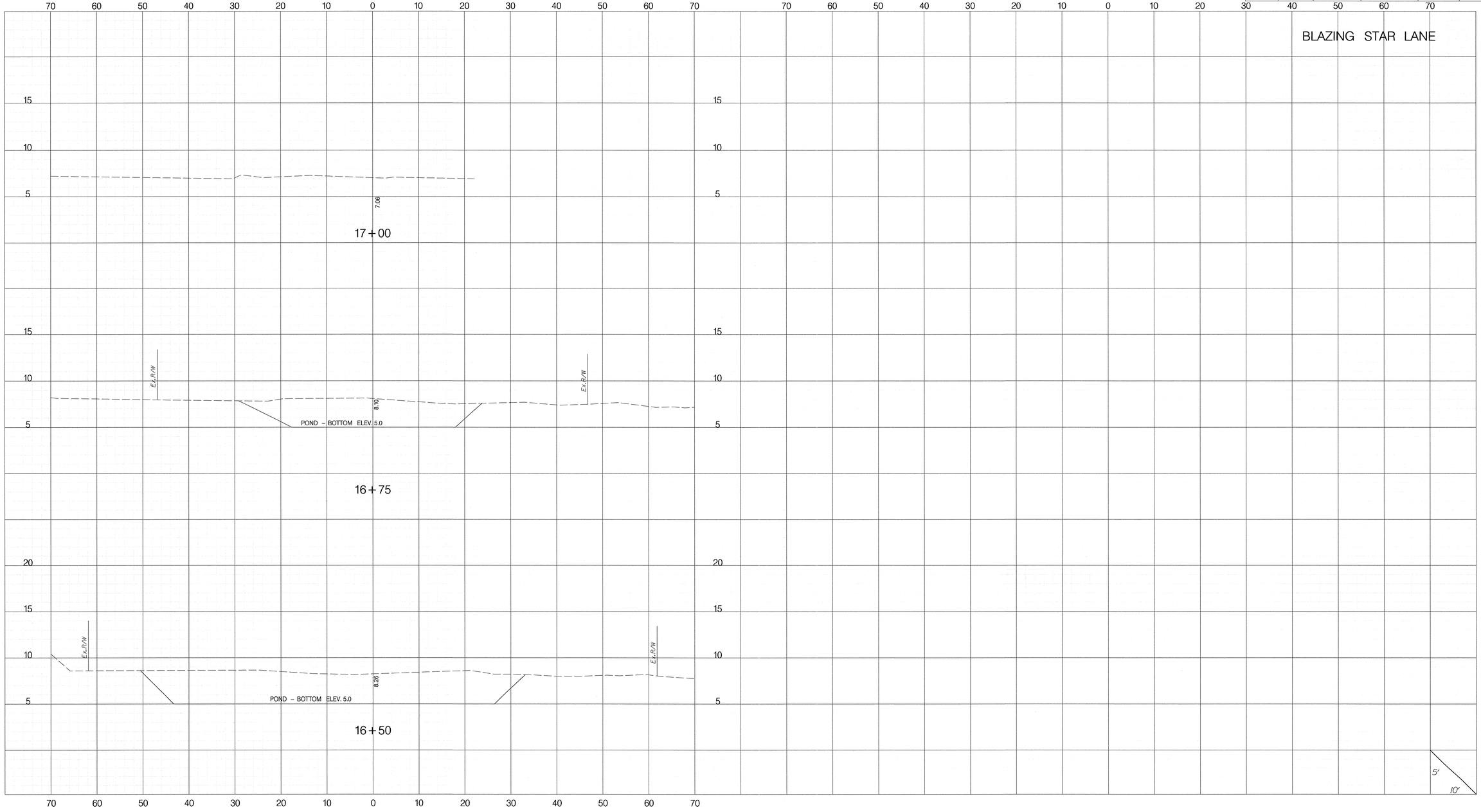
TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

BLAZING STAR LANE
ROADWAY AND DRAINAGE IMPROVEMENTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROAD /ROUTE NO.	SHEET NO.
3	SC	BEAUFORT		BLAZING STAR LN.	X6

BLAZING STAR LANE



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TOWN OF HILTON HEAD ISLAND
SOUTH CAROLINA

CROSS SECTIONS

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