CONSTRUCTION PLANS FOR:

FIFTH THIRD

MAY RIVER CROSSING

2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

2

PROJECT TEAM

PROPERTY OWNER:
FIRST CHATHAM BANK
111 BARNARD STREET
SAVANNAH, GEORGIA 31401

DEVELOPER:
FIFTH THIRD BANK
MD 10ATA1 CORP FAC
38 FOUNTAIN SQUARE PLZ
CINCINNATI, OHIO 45202-3102
PH: (513) 579-5203

SURVEYORS:
GEO SURVEY
1660 BARNES MILL ROAD
MARIETTA, GEORGIA 30062
PH: (770) 795-9900
CONTACT: TRENTON TURK
EMAIL: INFO@GEOSURVEY.COM

GEOTECHNICAL:
INTERTEK PSI
5021-A W. WT HARRIS BOULEVARD
CHARLOTTE, NORTH CAROLINA 28269
PH: (704) 598-2234
CONTACT: ROBERT PRICE

CIVIL ENGINEER:
INFINITY ENGINEERING GROUP, LLC
1208 EAST KENNEDY BOULEVARD
SUITE 230
TAMPA, FLORIDA 33602
PH: (813) 434-4770
CONTACT: BRETT NEVARIL

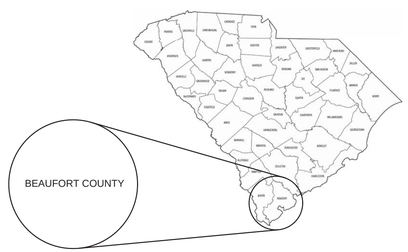
ARCHITECT:
BDG ARCHITECTS
400 NORTH ASHLEY DRIVE
SUITE 600
TAMPA, FLORIDA 33602
CONTACT: AMALIA BAMIS
EMAIL: AMALIA.BAMIS@BDGLLP.COM

VICINITY MAP

AERIAL MAP

PARCEL ID: R610 036 000 3213 0000
BEAUFORT COUNTY, SOUTH CAROLINA

DRAWING INDEX



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INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No. 4573

IEG JOB NO. 15-360.00

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:34:39 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/2025
DATE

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SHEET

C00.00

GENERAL NOTE

1. ALL CONSTRUCTION SHALL BE EXECUTED AS SHOWN ON THESE PLANS. ANY REVISIONS AND/OR DEVIATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD AND MAY RESULT IN ADDITIONAL PERMITTING EFFORTS THROUGH THE RELATED PERMITTING AGENCY. THE CONTRACTOR SHALL ACKNOWLEDGE THAT REVISIONS AND/OR DEVIATIONS MAY RESULT IN ADDITIONAL PERMITTING REQUIREMENTS AND POSSIBLY AFFECT SCHEDULING OF WORK.
2. UNLESS OTHERWISE NOTED ON PLANS, OR WITHIN THE PROJECT SPECIFICATIONS, ALL MATERIALS AND CONSTRUCTION ARE TO BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION STANDARDS OF THE PERMITTING AGENCY HAVING JURISDICTION. THE LOCALLY ADOPTED BUILDING CODE; AND ALL APPLICABLE LOCAL AND STATE CODES AND ORDINANCES.
3. PERMITS MAY BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS TO ACKNOWLEDGE AND SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR WORK IN THE PUBLIC RIGHT-OF-WAY.
4. THIS PARCEL OF LAND MAY BE SUBJECT TO ANY AND ALL RECORDED (AND POSSIBLY UNRECORDED) EASEMENTS, RESTRICTIONS, AND COVENANTS.
5. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR VERIFICATION OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. CALL AREA ONE CALL SYSTEM 48 HOURS PRIOR TO ANY EXCAVATION.
6. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN A TIMELY MANNER.
7. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS AND BENCHMARKS FROM DISTURBANCE. SURVEY MONUMENTS DISTURBED BY CONSTRUCTION ARE TO BE REPLACED AND ADJUSTED VIA A LAND SURVEYOR REGISTERED IN THE STATE FOR WHICH THE PROJECT IS LOCATED.
8. THE CONTRACTOR SHALL COORDINATE WORK EFFORTS WITH THE OWNER TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF THE FACILITIES.
9. NO BLASTING OR BURNING IS ALLOWED ON THE PROJECT, UNLESS OTHERWISE DIRECTED OR NOTED BY THE ENGINEER.
10. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED. HOWEVER IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. HAZARDOUS MATERIALS WILL BE REMOVED BY OWNER UNDER A SEPARATE CONTRACT.

REGULATORY STANDARDS AND REQUIREMENTS

1. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
2. COMPLY WITH ANSI A10.6, "SAFETY REQUIREMENTS FOR CONSTRUCTION AND DEMOLITION."
3. COMPLY WITH NFPA 241, "SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS."

DEMOLITION AND CLEARING

1. DEMOLITION AND CLEARING OPERATIONS SHALL CONFORM TO APPLICABLE REGULATIONS RELATING TO ENVIRONMENTAL REQUIREMENTS DISPOSAL OF DEBRIS, BURNING OF DEBRIS ON SITE, AND USE OF HERBICIDES.
2. DEMOLITION WASTE SHALL BE DISPOSED OF IN A LEGAL MANNER. REMOVED DEMOLITION WASTE MATERIALS FROM PROJECT SITE AND DISPOSE OF WASTE IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. DO NOT BURY OR BURN DEMOLITION WASTE ON-SITE.
3. HISTORIC ITEMS, RELICS, ANTIQUES, AND SIMILAR OBJECTS, INCLUDING, BUT NOT LIMITED TO CORNERSTONES AND THEIR CONTENTS, COMMEMORATIVE PLAQUES AND TABLETS, AND OTHER ITEMS OF INTEREST OF VALUE TO OWNER THAT MAY BE UNCOVERED DURING DEMOLITION REMAIN THE PROPERTY OF THE OWNER.
4. ARRANGE DEMOLITION SCHEDULE SO AS NOT TO INTERFERE WITH OWNER'S ON-SITE OPERATIONS OR OPERATIONS OF ADJACENT OCCUPIED BUILDINGS.
5. CONDUCT BUILDING DEMOLITION AND DEBRIS REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, WALKWAYS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION.
6. AUTHORITY FOR PERFORMING SITE CLEARING INDICATED ON PROPERTY ADJOINING OWNER'S PROPERTY MUST BE OBTAINED BY OWNER PRIOR TO COMMENCEMENT OF CLEARING. DO NOT PROCEED WITH WORK ON ADJOINING PROPERTY UNTIL DIRECTED BY ENGINEER.
7. PRIOR TO COMMENCEMENT OF DEMOLITION OPERATIONS:
   a. VERIFY THAT HAZARDOUS MATERIALS, IF PRESENT, HAVE BEEN REMEDIATED.
   b. REVIEW PROJECT RECORD DRAWINGS OF EXISTING BUILDING AND EXISTING SITE IMPROVEMENTS.
   c. INVENTORY AND RECORD THE CONDITION OF ITEMS TO BE REMOVED AND SALVAGED. TAKE DIGITAL PHOTOGRAPHS OR VIDEO OF PROJECT SITE AND SURROUNDING PROPERTIES, INCLUDING EXISTING ITEMS TO REMAIN DURING CONSTRUCTION OPERATIONS, RECORD CONDITIONS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY SALVAGE OPERATIONS.
   d. CLEAN, PACK, IDENTIFY, AND TRANSPORT SALVAGED ITEMS TO STORAGE AREA DESIGNATED BY OWNER.
   e. REMOVE REFRIGERANT FROM THE MECHANICAL EQUIPMENT ACCORDING TO 40 CFR 82 AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
   f. COORDINATE ANY ADDITIONAL REQUIREMENTS FOR DEMOLISHING OR RELOCATING SITE MECHANICAL AND ELECTRICAL ITEMS WITH OWNER AND OTHER AUTHORITIES HAVING JURISDICTION.
   g. ASSURE THAT ANY REQUIRED INITIAL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND IN WORKING ORDER.
   h. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP-OFF EXISTING UTILITIES SERVING BUILDINGS AND STRUCTURES TO BE DEMOLISHED. CUT AND REMOVE PIPE OR CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE. CAP, VALVE, PLUG AND SEAL REMAINING PORTION OF PIPE OR CONDUIT.
   i. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTION AND SEALING HAVE BEEN COMPLETED AND VERIFIED IN WRITING.
8. PRIOR TO COMMENCEMENT OF SITE CLEARING OPERATIONS, VERIFY THE FOLLOWING:
   a. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND IN WORKING ORDER.
   b. UTILITY LOCATOR SERVICE HAS DETERMINED AND FLAGGED THE LOCATION OF UNDERGROUND UTILITIES.
   c. EXISTING SITE IMPROVEMENTS AND UTILITIES TO REMAIN HAVE BEEN PROTECTED.
   d. BENCHMARKS AND SURVEY CONTROL POINTS HAVE BEEN PROTECTED FROM DISTURBANCE.
   e. TREES AND VEGETATION TO REMAIN (OR TO BE RELOCATED) HAVE BEEN LOCATED AND CLEARLY FLAGGED IN ACCORDANCE WITH TREE PROTECTION AND TRIMMING REQUIREMENTS.
9. COORDINATE UTILITY DEMOLITION AND ABANDONMENT WITH UTILITY COMPANY OR AUTHORITY HAVING JURISDICTION.
10. IN THE EVENT BUILDINGS IMMEDIATELY ADJACENT TO THE DEMOLITION AREA WILL BE OCCUPIED, CONDUCT SITE DEMOLITION SO OPERATIONS OF OCCUPIED BUILDINGS WILL NOT BE DISRUPTED. MAINTAIN ACCESS TO AND FROM EXISTING WALKWAYS, EXITS, AND OTHER FACILITIES USED BY OCCUPANTS OF ADJACENT BUILDINGS.
11. PROTECT EXISTING FACILITIES AND ADJACENT WALKWAYS, LOADING DOCKS, BUILDING ENTRIES, AND OTHER BUILDING FACILITIES DURING DEMOLITION OPERATIONS. MAINTAIN EXITS FROM EXISTING BUILDINGS.
12. ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, AS NECESSARY, AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. REMOVE TEMPORARY BARRIERS AND PROTECTIONS WHERE HAZARDS NO LONGER EXIST. WHERE OPEN EXCAVATIONS OR OTHER HAZARDOUS CONDITIONS REMAIN, LEAVE TEMPORARY BARRIERS AND PROTECTIONS IN PLACE.
13. PROTECT EXISTING UTILITIES FROM DAMAGE DURING DEMOLITION OPERATIONS. MAINTAIN OPERATION OF UTILITY SERVICES TO REMAIN. PROVIDE AT LEAST 72 HOURS' NOTICE TO OCCUPANTS OF AFFECTED BUILDINGS IF SHUTDOWN OF SERVICE IS REQUIRED.
14. IF REMOVAL, RELOCATION, OR ABANDONMENT OF UTILITY SERVICES WILL AFFECT ADJACENT OCCUPIED BUILDINGS, MAINTAIN CONTINUITY OF SERVICE TO ADJACENT BUILDINGS BY PROVIDING TEMPORARY UTILITIES THAT BYPASS BUILDINGS AND STRUCTURES TO BE DEMOLISHED. TEMPORARY BYPASS SERVICES SHALL BE PROVIDED IN ACCORDANCE WITH UTILITY COMPANY OR AUTHORITIES HAVING JURISDICTION.
15. TEMPORARY SHORING: PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF EXISTING IMPROVEMENTS BEING DEMOLISHED. ALL SHORING OPERATIONS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL AND INSTALLED PER OSHA REQUIREMENTS.
16. DEMOLITION OF STRUCTURAL FRAMING MEMBERS SHALL PROCEED SYSTEMATICALLY, FROM HIGHER TO LOWER LEVEL. COMPLETE BUILDING DEMOLITION OPERATIONS ABOVE EACH FLOOR OR TIER BEFORE DISTURBING SUPPORTING MEMBERS ON THE NEXT LOWER LEVEL. REMOVE DEBRIS FROM ELEVATED PORTIONS OF THE BUILDING BY CHUTE, HOIST, OR OTHER DEVICE THAT WILL CONVEY DEBRIS TO GRADE LEVEL IN A CONTROLLED DESCENT.
17. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE BUILDING DEMOLITION OPERATIONS BEGAN.
18. CLEARING AND GRUBBING:
   a. REMOVE OBSTRUCTIONS, TREES, SHRUBS, GRASS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION. DO NOT REMOVE TREES, SHRUBS, AND OTHER VEGETATION INDICATED TO REMAIN OR TO BE RELOCATED.
   b. CUT MINOR ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER AND ONLY WHERE SUCH ROOTS AND BRANCHES OBSTRUCT INSTALLATION OF NEW CONSTRUCTION.
   c. CLEAR UNDERGROWTH AND DEADWOOD WITHOUT DISTURBING SUBSOIL.
   d. GRIND STUMPS AND REMOVE ROOTS, OBSTRUCTIONS, AND DEBRIS EXTENDING TO A DEPTH BELOW EXPOSED SUBGRADE AS FOLLOWS:
      - FOOTINGS, SLABS ON GRADE AND BOTTOM SLABS OF STRUCTURES: 36 INCHES.
      - ROADS AND PAVEMENT AREAS: 18 INCHES.
      - AREAS TO BE GRASSED OR LANDSCAPED: 8 INCHES.
      - AREAS TO BE FILLED: 12 INCHES.
   e. USE ONLY HAND METHODS FOR GRUBBING WITHIN TREE PROTECTION ZONES.
   f. CHIP REMOVED TREE BRANCHES AND DISPOSE OF OFF-SITE.
   g. UNLESS FURTHER EXCAVATION OF EARTHWORK IS INDICATED, FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
19. TOPSOIL STRIPPING:
   a. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
   b. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS. REMOVE SUBSOIL AND NON-SOIL MATERIALS FROM TOPSOIL, INCLUDING TRASH, DEBRIS, WEEDS, ROOTS, AND OTHER WASTE MATERIALS.
   c. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST. LIMIT HEIGHT OF TOPSOIL STOCKPILES TO 72 INCHES. DO NOT STOCKPILE TOPSOIL WITHIN TREE PROTECTION ZONES. STOCKPILE SURPLUS TOPSOIL TO ALLOW FOR RESPREADING DEEPER TOPSOIL.
20. SITE IMPROVEMENTS:
   a. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. REMOVE SLABS, PAVING, CURBS, GUTTERS, AND AGGREGATE BASE AS INDICATED.
   b. UNLESS EXISTING FULL-DEPTH JOINTS COINCIDE WITH LINE OF DEMOLITION, NEATLY SAW-CUT LENGTH OF EXISTING PAVEMENT TO REMAIN BEFORE REMOVING EXISTING PAVEMENT. SAWCUT ALL FACES VERTICALLY.
   c. PAINT CUT ENDS OF STEEL REINFORCEMENT IN CONCRETE TO REMAIN TO PREVENT CORROSION.
21. DISPOSAL:
   a. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS, INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
   b. REMOVE AND TRANSPORT DEBRIS AND RUBBISH IN A MANNER THAT WILL PREVENT SPILLAGE ON STREETS OR ADJACENT AREAS. CLEAN UP SPILLAGE FROM STREETS AND ADJACENT AREAS.
   c. COMPLY WITH FEDERAL, STATE AND LOCAL HAULING AND DISPOSAL REGULATIONS.
   d. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NON-RECYCLABLE STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

TREE PROTECTION AND TRIMMING

1. INSTALL TEMPORARY FENCING AROUND TREE PROTECTION ZONES TO PROTECT TREES AND VEGETATION DESIGNATED TO REMAIN FROM CONSTRUCTION DAMAGE. MAINTAIN TEMPORARY FENCING AROUND TREE PROTECTION ZONES. AND REMOVE WHEN CONSTRUCTION IS COMPLETE.
2. KEEP TREE PROTECTION ZONES FREE OF WEEDS AND TRASH.
3. DO NOT STORE CONSTRUCTION MATERIALS, DEBRIS, OR EXCAVATED MATERIAL INSIDE TREE PROTECTION ZONE; OR PERMIT VEHICLES OR FOOT TRAFFIC WITHIN TREE PROTECTION ZONE, OR ALLOW FIRES WITHIN TREE PROTECTION ZONE.
4. PROTECT TREE ROOT SYSTEMS FROM THE FOLLOWING:
   a. DAMAGE CAUSED BY RUNOFF OR SPILLAGE OF NOXIOUS MATERIALS WHILE MIXING, PLACING, OR STORING CONSTRUCTION MATERIALS;
   b. DAMAGE CAUSED BY PONDING, ERODING, OR EXCESSIVE WETTING FROM DEWATERING OPERATIONS.
5. UNLESS OTHERWISE INDICATED, DO NOT EXCAVATE WITHIN TREE PROTECTION ZONES. WHERE EXCAVATION FOR NEW CONSTRUCTION IS UNAVOIDABLE, HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS.
6. WHERE UTILITY TRENCHES ARE UNAVOIDABLE WITHIN TREE PROTECTION ZONES, TUNNEL UNDER OR AROUND ROOTS BY DRILLING, AUGER BORING, PIPE JACKING, OR DIGGING BY HAND. DO NOT CUT MAIN LATERAL ROOTS OR TAPROOTS.
7. PROMPTLY REPAIR TREES DAMAGED BY CONSTRUCTION OPERATIONS WITHIN 24 HOURS. TREAT DAMAGED TRUNKS, LIMBS, AND ROOTS ACCORDING TO ARBORIST'S WRITTEN INSTRUCTIONS.
8. TREE PRUNING: PRUNE TREES ACCORDING TO ANSI A300 (PART 1), "TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE - STANDARD PRACTICES (PRUNING)."

EROSION AND SEDIMENTATION CONTROL

1. PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.
2. PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATIVE MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.
4. THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS: AND ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.
5. ALL BEST MANAGEMENT EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY OPERATIONS; OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST EVERY OTHER WEEK AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR GREATER.
6. ALL BEST MANAGEMENT CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

EARTHWORK

1. IN THE EVENT OF ANY UNFORESEEN CONDITIONS THAT ARE ENCOUNTERED AND NOT COVERED BY THESE NOTES DURING GRADING OPERATIONS, THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND RELATED OFF-SITE WORK SO AS TO ESTABLISH THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SPECIFIED WITHIN THE PLANS.
3. ADEQUATE SHORING IS TO BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION. ALL SHORING AND ASSOCIATED TEMPORARY STRUCTURES SHALL BE DESIGNED BY A LICENSED PROFESSIONAL AND INSTALLED PURSUANT TO OSHA REQUIREMENTS.

SOIL MATERIALS:

1. UNSATISFACTORY SOILS CONSIST OF SOIL CLASSIFICATION GROUPS ML, OL, CH, MH, OH, AND PT, OR A COMBINATION OF THESE GROUPS. UNSATISFACTORY SOILS ALSO INCLUDE SATISFACTORY SOILS NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.
2. SATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS AS IDENTIFIED ON THE DRAWINGS, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATERIAL.

SUBGRADE INSPECTION:

1. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES.
   a. COMPLETELY PROOF-ROLL SUBGRADE IN TWO DIRECTIONS, REPEATING PROOF ROLLING IN DIRECTION PERPENDICULAR TO FIRST DIRECTION. LIMIT VEHICLE SPEED TO 3 MPH,
   b. PROOF-ROLL WITH A LOADED 10-WHEEL, TANDEM-AXLE DUMP TRUCK WEIGHING NOT LESS THAN 15 TONS.
   c. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS. AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY ENGINEER AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
2. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES AS DIRECTED BY ENGINEER, WITHOUT ADDITIONAL COMPENSATION.

BACKFILL:

1. THE CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN EXCAVATIONS PROMPTLY, BUT NOT BEFORE COMPLETING THE FOLLOWING:
   a. CONSTRUCTION BELOW FINISH GRADE INCLUDING, WHERE APPLICABLE, SUBDRAINAGE, DAMP PROOFING, WATERPROOFING, AND PERIMETER INSULATION.
   b. SURVEYING LOCATIONS OF UNDERGROUND UTILITIES FOR RECORD DRAWINGS.
   c. TESTING AND INSPECTING UNDERGROUND UTILITIES.
   d. REMOVING CONCRETE FORMWORK.
   e. REMOVING TRASH AND DEBRIS.
   f. REMOVING TEMPORARY SHORING AND BRACING, AND SHEETING.
   g. INSTALLING PERMANENT OR TEMPORARY HORIZONTAL BRACING ON HORIZONTALLY SUPPORTED WALLS.

COMPACTION OF SOIL BACKFILLS AND FILLS:

1. CONTRACTOR SHALL PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8-INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4-INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
2. PLACE BACKFILL AND FILL SOIL MATERIALS EVENLY ON ALL SIDES OF STRUCTURES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE.
3. COMPACT SOIL MATERIALS TO NOT LESS THAN THE PLAN SPECIFIED PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 OR ASTM D 1557. (SEE CIVIL DETAILS FOR SUMMARY OF TRENCH BACKFILL AND BEDDING MATERIALS AND PLACEMENT SPECIFICATIONS).

GRADING:

1. GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE. FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO DETAILED/INDICATED CROSS-SECTIONS. LINES, AND ELEVATIONS INDICATED IN PLANS. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES. CUT OUT SOFT SPOTS, FILL LOW SPOTS, AND TRIM HIGH SPOTS TO COMPLY WITH REQUIRED SURFACE TOLERANCES.
2. SITE GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
   a. LAWN OR UNPAVED AREAS: PLUS OR MINUS ONE (1) INCH.
   b. WALKS: PLUS OR MINUS ONE (1) INCH.
   c. PAVEMENTS: PLUS OR MINUS ONE-HALF (1/2) INCH.
   d. GRADING INSIDE BUILDING LINES: FINISH SUBGRADE TO A TOLERANCE OF ONE-HALF (1/2) INCH WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE.
3. SUBBASE AND BASE COURSES:
   a. PLACE SUBBASE AND BASE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
   b. PLACE SUBBASE AND BASE COURSE 6 INCHES OR LESS IN COMPACTED THICKNESS IN A SINGLE LAYER.
   c. PLACE SUBBASE AND BASE COURSE EXCEEDING 6 INCHES IN COMPACTED THICKNESS IN LAYERS OF EQUAL THICKNESS, WITH NO COMPACTED LAYER MORE THAN 6 INCHES THICK OR LESS THAN 3 INCHES.
4. COMPACT SUBBASE AND BASE COURSE AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS. AND THICKNESS ACCORDING TO ASTM D 698 OR ASTM D 1557, AS INDICATED ON THE DRAWING DETAILS.

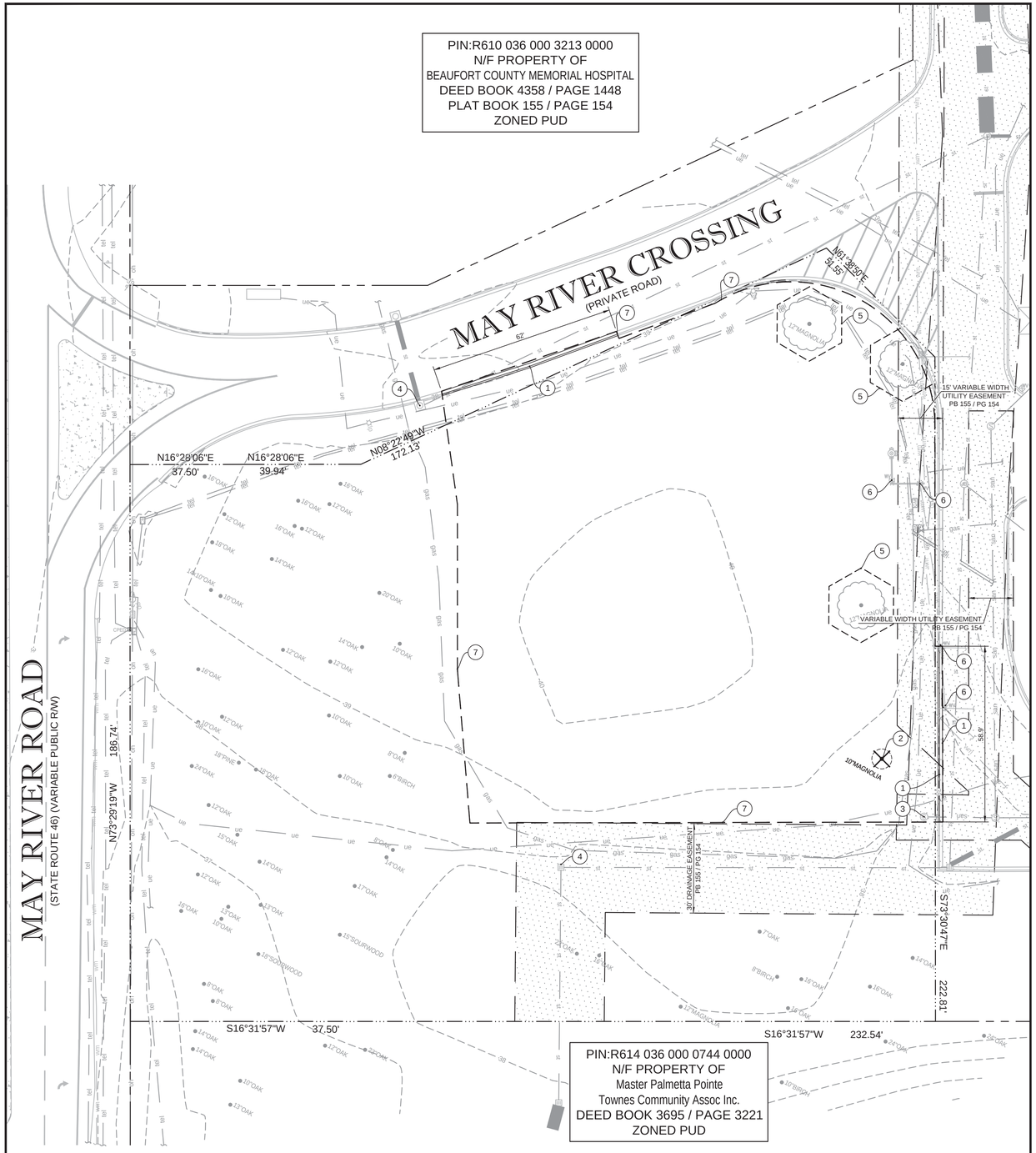
FIELD QUALITY CONTROL:

1. THE TESTING AGENCY WILL INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. CONTRACTOR SHALL PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.
2. FOOTING SUBGRADE: AT FOOTING SUBGRADES, AT LEAST ONE TEST OF EACH SOIL STRATUM WILL BE PERFORMED TO VERIFY DESIGN BEARING CAPACITIES. SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF SUBGRADE WITH TESTED SUBGRADE WHEN APPROVED BY ENGINEER.
3. THE TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922, AND ASTM D 2937, AS APPLICABLE. TESTS WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES:
   a. PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST FOR EVERY 10,000 SQ. FT. OR LESS OF PAVED AREA OR BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
   b. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
   c. TRENCH BACKFILL: AT EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 150 FEET OR LESS OF TRENCH LENGTH, BUT NO FEWER THAN 2 TESTS.
5. IF THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
6. ALL FIELD QUALITY CONTROL TESTS THAT FAIL TO MEET THE SPECIFIED COMPACTION DENSITY SHALL BE REPORTED TO THE ENGINEER.

GENERAL UTILITY NOTES

1. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR VERIFICATION OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. CALL THE AREA ONE CALL SYSTEM 48 HOURS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
3. THE CONTRACTOR SHALL COORDINATE WORK EFFORTS WITH THE OWNER TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF THE FACILITIES.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEYING MONUMENTS AND BENCHMARKS FROM DISTURBANCE. SURVEY MONUMENTS DISTURBED BY CONSTRUCTION ARE TO BE REPLACED AND ADJUSTED VIA A LAND SURVEYOR REGISTERED IN THE STATE FOR WHICH THE PROJECT IS LOCATED.
5. EXISTING UTILITIES SHOWN HEREIN ARE BASED ON AVAILABLE RECORDS AND FIELD INVESTIGATIONS. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO EXCAVATION WITHIN WORK AREAS. THE ENGINEER SHALL BE NOTIFIED UPON DISCOVERY OF ANY DISCREPANCIES THAT WILL AFFECT INSTALLATION OF WORK OR DISCOVERY OF UNCHARTED UTILITIES WHICH MAY REQUIRE RELOCATION. NOTIFICATION SHALL BE DONE IN A TIMELY MANNER.
6. WHERE APPLICABLE, THE CONTRACTOR SHALL MAINTAIN ALL FENCING, SIGNS, DETOURS, FLAGMEN, SIGNALS, ETC., FOR ANY OPEN TRENCHES, HOLES OR PITS. ALL TRENCHES, HOLES OR PITS SHALL BE CLOSED OR PROTECTED BY BARRICADES AT THE END OF THE DAY.
7. PERMITS MAY BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS TO ACKNOWLEDGE AND SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR WORK WITHIN PUBLIC RIGHT-OF-WAY.
8. THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS DURING CONSTRUCTION WHICH SHOW THE CONSTRUCTED CONDITIONS OF ALL WORK INSTALLED. SEE "AS-BUILT" REQUIREMENTS FOR ADDITIONAL INFORMATION.
9. ALL VALVE BOXES, METER BOXES, VAULTS, CLEANOUTS, HOLE COVERS, FIRE HYDRANTS AND OTHER APPURTENANCES THAT ARE TO REMAIN IN SERVICE WITHIN THE PROJECT AREA SHALL BE ADJUSTED TO CONFORM TO FINISHED GRADE.
10. ALL UNDERGROUND UTILITIES MUST BE IN PLACE, TESTED AND INSPECTED AS REQUIRED PRIOR TO BASE AND SURFACE CONSTRUCTION.
11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.

    ALL UTILITIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING SHOULD BE CONTACTED BY THE CONTRACTOR:
    1. GAS
    2. TELEPHONE
    3. CABLE
    4. POWER
    5. CITY/COUNTY WATER AND SEWER
    6. CITY/COUNTY/STATE TRAFFIC SIGNAL UTILITY (FIBER, HARDWIRE TRAFFIC SIGNAL INTERCONNECT)
13. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FROM THE BEST INFORMATION AVAILABLE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS ACCURACY. UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE OF THESE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR L



KEYED NOTES

1	EXISTING CURB AND GUTTER TO BE REMOVED.
2	EXISTING TREE TO BE REMOVED.
3	EXISTING SANITARY MANHOLE TO REMAIN.
4	EXISTING STORM STRUCTURE TO REMAIN.
5	TREE BARRICADE.
6	EXISTING WATER VALVE TO REMAIN.
7	LIMITS OF CONSTRUCTION (0.62 AC).

LEGEND

- PROPERTY LINE
- EXISTING CONCRETE TO REMAIN
- EXISTING TO REMAIN
- EXISTING ASPHALT/CONCRETE TO BE REMOVED
- EXISTING SIDEWALK/CONCRETE TO BE REMOVED
- EXISTING TO BE REMOVED
- EXISTING TREE TO BE REMOVED
- TREE BARRICADE
- gas — EXISTING GAS
- san — EXISTING SANITARY
- tel — EXISTING TELEPHONE
- ue — EXISTING UNDERGROUND ELECTRIC
- oh — EXISTING OVERHEAD LINE
- wm — EXISTING WATER
- 29 — EXISTING CONTOUR
- 428.33 — EXISTING GRADE ELEVATION
- LIMITS OF DISTURBANCE

DEMOLITION NOTES

1. CONTRACTOR TO ESTABLISH AND PROPERLY FLAG PROPERTY LINES PRIOR TO DEMOLITION.
2. ALL ABOVE AND BELOW GROUND HARDWARE, EQUIPMENT AND MATERIALS TO BE DISPOSED OF IN ACCORDANCE WITH LOCAL MUNICIPALITY REQUIREMENTS.
3. UTILITIES TO BE PLUGGED SHALL BE FILLED WITH A MINIMUM 1.0 CUBIC FT. OF NON SHRINK GROUT OR AS OTHERWISE APPROVED BY ENGINEER.
4. TREES SHOWN TO REMAIN SHALL MAINTAIN PROTECTIVE BARRIERS DURING DEMOLITION. THESE BARRIERS SHALL BE IN ACCORDANCE WITH CURRENT LOCAL MUNICIPALITY STANDARDS.
5. THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF EXISTING UTILITIES WITH THE OWNER OF SAID UTILITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO WATER, SEWER, GAS, CABLE TV, POWER AND TELEPHONE.
6. THE CONTRACTOR SHALL UTILIZE SUITABLE EROSION CONTROL DURING DEMOLITION, SEE "EROSION & SEDIMENT CONTROL DETAILS".
7. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO DEMOLITION AND WILL BE RESPONSIBLE FOR THE DAMAGE OF ANY ON-SITE OR OFF-SITE UTILITIES THAT ARE NOT A PART OF THIS PROJECT OR ARE NOT IDENTIFIED TO BE REMOVED.
8. ALL DISTURBED AREA WITH THE RIGHT OF WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED.

TREE NOTE:

CONTRACTOR TO INSTALL TREE BARRICADES SURROUNDING ALL TREES TO REMAIN. IRRIGATE ALL LANDSCAPING AS NEEDED.

SC811

PLAN VIEW | SCALE: AS NOTED | -

SCALE

0' 20' 40' 60'

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573
IEG JOB NO. 15-360.00

SEAL
NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

INFINITY ENGINEERING GROUP, LLC
No. 4573
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29128
NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:35:09 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

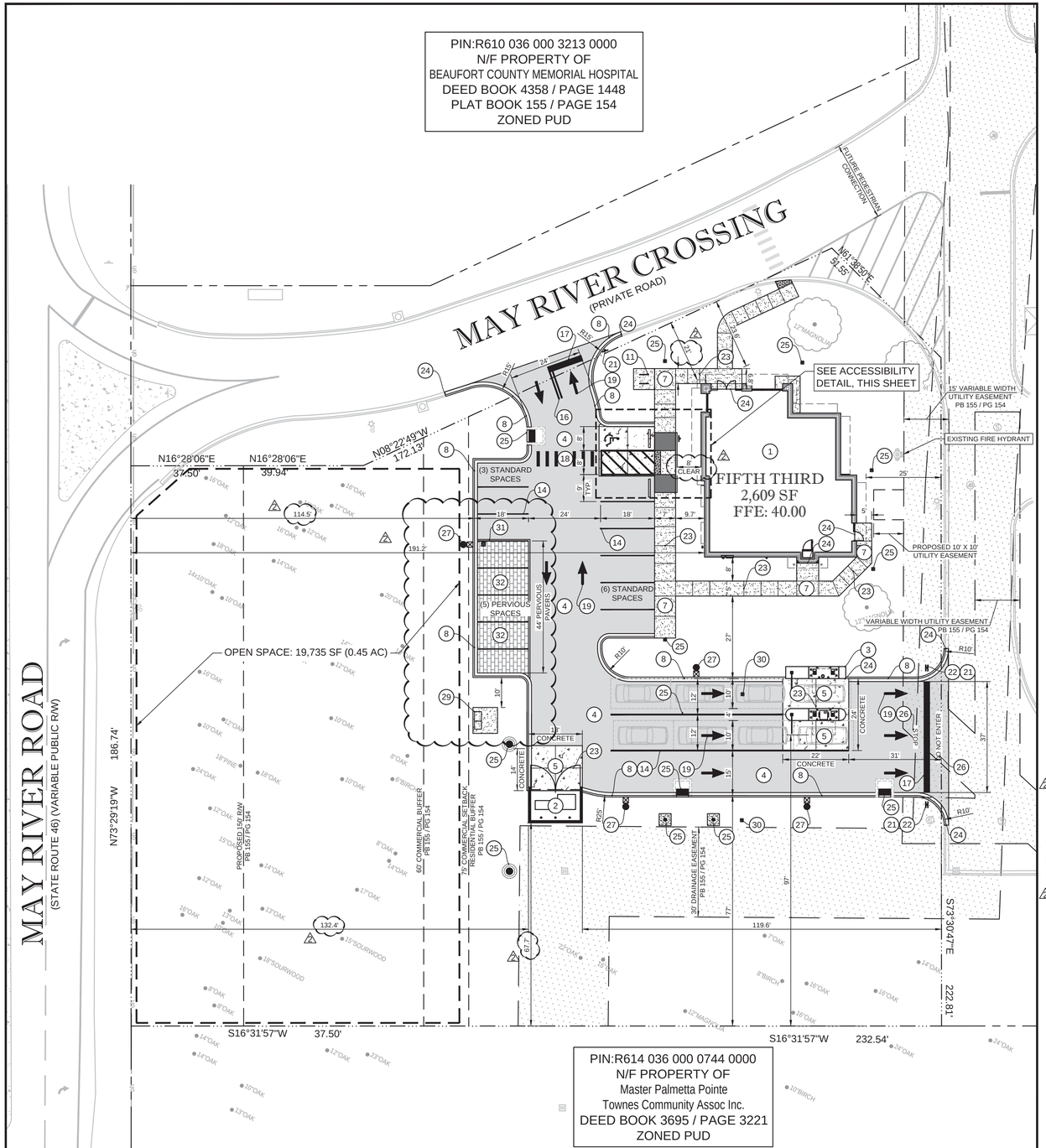
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

DEMOLITION PLAN

SHEET NUMBER

C01.01



PRE VS POST SITE AREAS

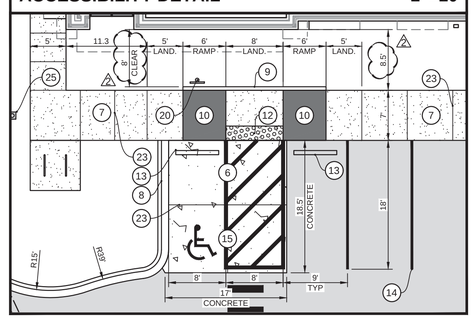
	SQUARE FEET (SF)	ACRE (AC)	PERCENT %
GROSS SITE	58,061	1.33	100%
BUILDING	2,609	0.06	4.49%
TOTAL IMPERVIOUS (INCLUDES BUILDING)	14,978	0.34	25.8%
TOTAL PERVIOUS (LS + DRY POND AREA)	43,083	0.99	74.2%

PLAN VIEW — SCALE: AS NOTED — -

KEYED NOTES

1	NEW BUILDING (SEE ARCHITECTURAL DRAWINGS)
2	NEW ROLL CART TRASH ENCLOSURE (SEE ARCHITECTURAL DRAWING).
3	NEW FREE STANDING ATM, VAT ISLANDS, AND CANOPY. SEE ARCHITECTURAL PLANS FOR DETAILS.
4	NEW ASPHALT PAVEMENT. SEE DETAILS, SHEET C05.01.
5	NEW 6" CONCRETE PAVEMENT. SEE DETAILS, SHEET C05.01.
6	NEW 6" BLACK TINTED CONCRETE PAVEMENT. SEE DETAILS, SHEET C05.01.
7	NEW 4" CONCRETE SIDEWALK, SEE PLAN FOR WIDTH. SEE DETAILS, SHEET C05.01.
8	NEW 18" CURB AND GUTTER. SEE DETAILS, SHEET C05.01.
9	NEW 6" X 18" VERTICAL CURB, 3-FOOT CURB TRANSITION AT PATHWAYS. SEE DETAILS, SHEET C05.01.
10	NEW ADA RAMP. SEE DETAILS, SHEET C05.01.
11	NEW BICYCLE RACK. SEE DETAILS, SHEET C05.01.
12	NEW DETECTABLE WARNING. SEE DETAILS, SHEET C05.01.
13	NEW WHEEL STOP (TYPICAL OF 2). SEE DETAILS, SHEET C05.01.
14	NEW 6-INCH "WHITE" PARKING/AISLE STRIPE (CONTINUOUS PAINT)
15	NEW ACCESSIBLE PARKING SPACES AND ACCESS AISLE. SEE DETAILS, SHEET C05.01.
16	NEW 6-INCH "DOUBLE YELLOW" LANE STRIPE (CONTINUOUS PAINT)
17	NEW 24-INCH "WHITE" STOP BAR (CONTINUOUS PAINT)
18	5-FOOT WIDE CROSSWALK, 12-INCH "WHITE" STRIPE @ 36" O.C. (CONTINUOUS PAINT)
19	NEW "WHITE" DIRECTIONAL ARROW (CONTINUOUS PAINT)
20	NEW ACCESSIBLE PARKING SIGN(S). SEE DETAILS, SHEET C05.02.
21	NEW 30" R1-1 "STOP" SIGN (TYPICAL OF 3). SEE DETAILS, SHEET C05.02.
22	NEW 30" R5-1 "DO NOT ENTER" SIGN (TYPICAL OF 2). SEE DETAILS, SHEET C05.02.
23	NEW CONTROL JOINT. SEE DETAILS, SHEET C05.01.
24	NEW EXPANSION JOINT. SEE DETAILS, SHEET C05.01.
25	NEW STORMWATER STRUCTURE. SEE STORM PIPING PLAN, SHEET C03.02.
26	NEW "STOP" AND "DO NOT ENTER" 18" WHITE PAINTED LETTERS.
27	NEW AREA LIGHT POLE.
28	NOT USED
29	NEW TRANSFORMER PAD. SEE UTILITY PLAN, SHEET C04.01.
30	NEW SANITARY CLEANOUT. SEE UTILITY PLAN, SHEET C04.01.
31	NEW 6" x 12" RIBBON CURB. SEE DETAILS, SHEET C05.02.
32	NEW FIVE PERVIOUS PAVERS PARKING SPACES. SEE DETAILS, SHEET C05.02.

ACCESSIBILITY DETAIL 1"=10'



LEGEND

- PROPERTY LINE
- EXISTING TO REMAIN
- EXISTING CONCRETE TO REMAIN
- PROPOSED CONCRETE LESS THAN 6"
- PROPOSED CONCRETE 6" OR GREATER
- NEW ASPHALT PAVEMENT
- SETBACK/BUFFER
- PROPOSED CURB
- PROPOSED CURB AND GUTTER
- PROPOSED OPEN SPACE

SITE DATA

SITE ADDRESS:	2500 MAY RIVER CROSSING BLUFFTON, SOUTH CAROLINA 29910
PIN:	R610 036 000 3213 0000
BUILDING AREA:	2,609 SF BUILDING
ZONING:	PLANNED UNIT DEVELOPMENT (PUD)
SITE AREA:	58,061 SF / 1.33 AC
EXISTING USE:	VACANT
FUTURE USE:	BANK WITH DRIVE THRU
PARKING DATA	
BANK PARKING REQUIRED:	4.5 SPACE PER 1,000 SF OF G.F.A. 2,609 SF x (4.5 / 1,000 SF) = 12 SPACES
TOTAL PARKING PROVIDED:	STANDARD PARKING = 9 SPACES PERVIOUS PARKING = 5 SPACES ACCESSIBLE PARKING = 1 SPACE TOTAL PARKING PROVIDED = 15 SPACES
PARKING SPACE SIZE:	9' x 18' MINIMUM
DRIVE THROUGH QUEUE:	4 SPACES PER ATM LANE 4 SPACES PER TELLER LANE 10' x 20' QUEUE SIZE
LOADING ZONE:	*NOTE-FINANCIAL INSTITUTIONS DO NOT USE LOADING ZONES FOR SECURITY PURPOSES DELIVERY TRUCK WILL PARK DIRECTLY IN FRONT OF MAIN ENTRANCE.

LANDSCAPE REQUIREMENTS:	REQUIRED
LANDSCAPE BUFFER - SC HIGHWAY 46	= 75'
LANDSCAPE BUFFER - MAY RIVER CROSSING	= 0'
LANDSCAPE BUFFER - SIDE (EAST /RESIDENTIAL)	= 0'
LANDSCAPE BUFFER - REAR (NORTH)	= 50'

BUILDING REQUIREMENTS:	REQUIRED
BUILDING SETBACK - SC HIGHWAY 46	= 60'
BUILDING SETBACK - MAY RIVER CROSSING	= 0'
BUILDING SETBACK - SIDE (EAST /RESIDENTIAL)	= 0'
BUILDING SETBACK - REAR (NORTH)	= 50'

OPEN SPACE:

REQUIRED: 20% MINIMUM OF GROSS ACREAGE
TOTAL GROSS ACREAGE: 58,061 SF (1.33 AC) X 0.20 = 11,612 SF (0.26 AC).
PROVIDED: 19,735 SF (0.45 AC)

FLOOD ZONE:

ACCORDING TO F.I.R.M MAP NO. 450025, PANEL 0050D80080D. REVISED SEPTEMBER 29, 1986. THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN FLOOD HAZARD ZONE C.

SITE PLAN GENERAL NOTES

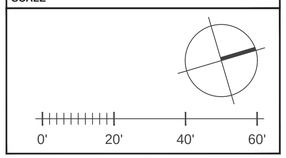
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF BUILDING.
2. EXISTING IMPROVEMENTS SHOWN ARE TAKEN FROM THE SURVEY.
3. BUILDING AND SIDEWALK DIMENSIONS ARE TO OUTSIDE EDGE OF WALL
4. ALL TIES TO THE PROPERTY LINE ARE BASED ON THE SURVEY.
5. ALL CURB RADIUS ARE 3' UNLESS OTHERWISE NOTED

LANDSCAPE NOTE

1. CONTRACTOR TO RE-GRADE SURROUNDING GRADE ELEVATION AND RE-SOD AS NEED TO MEET PROPOSED TOP OF SIDEWALK ELEVATIONS.
2. CONTRACTOR SHALL REPLACE ALL DISTURBED LANDSCAPING TO MATCH EXISTING.
3. CONTRACTOR SHALL TIE INTO EXISTING IRRIGATION SYSTEM AND EXTEND NEW DRIP IRRIGATION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — INFINITY ENGINEERING GROUP, LLC No. 4573

SCALE



bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL — NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 29128 — NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:35:21 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
1	DR	05/28/25	DRC ROUND 1
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

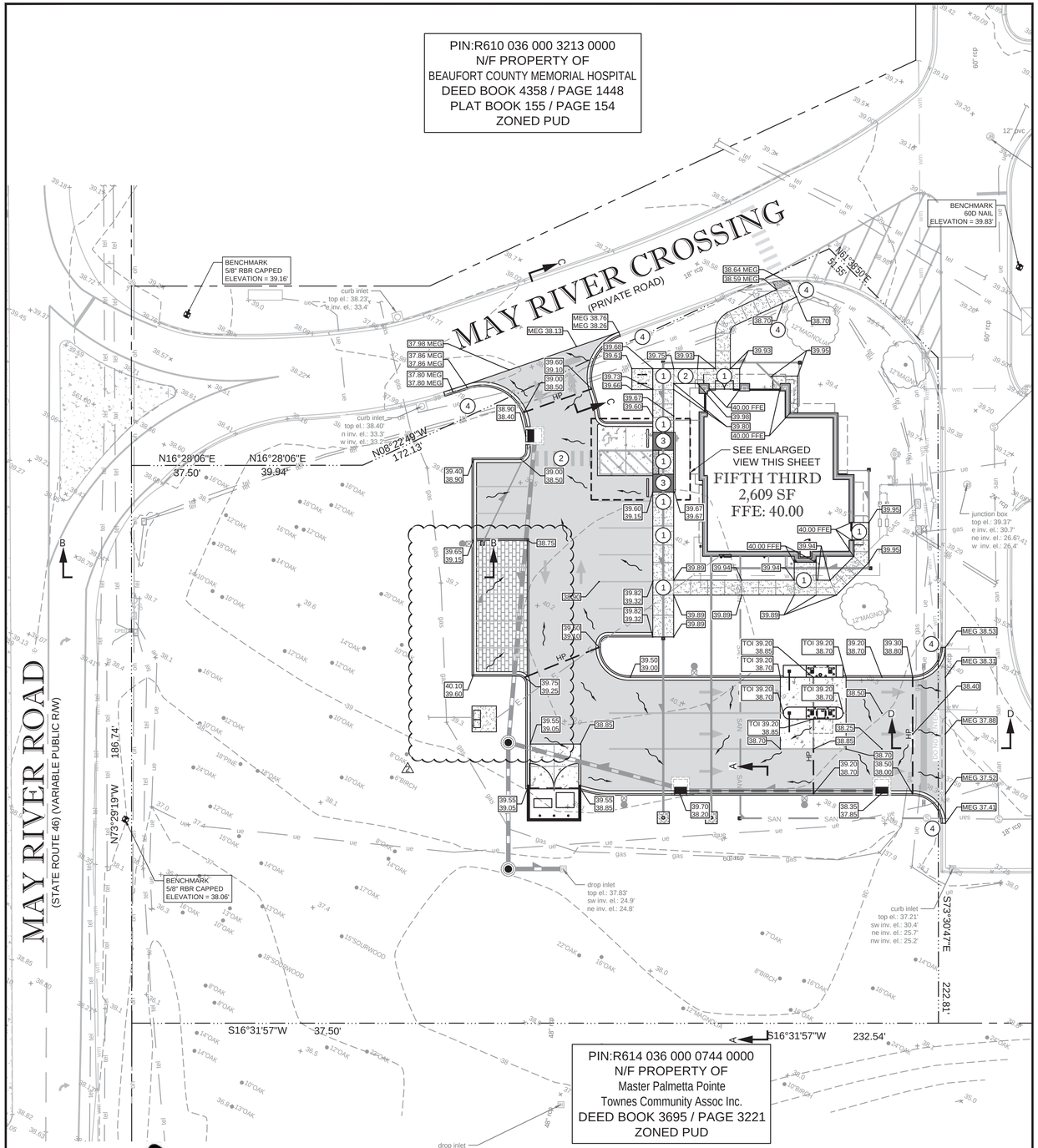
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

SITE PLAN

SHEET NUMBER

C02.01



PLAN VIEW | SCALE: AS NOTED | -

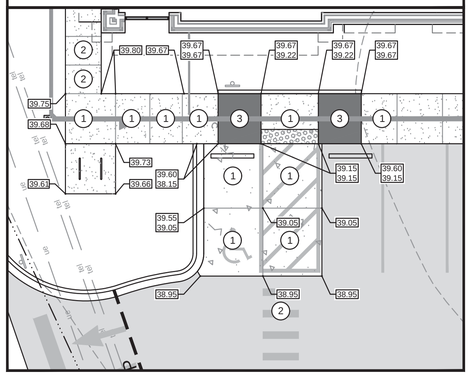
KEYED NOTES:

1	SURFACE SLOPES NOT TO EXCEED 1:48 IN ALL DIRECTIONS.
2	SURFACE SLOPES NOT TO EXCEED 1:48 CROSS SLOPES AND 1:20 RUNNING.
3	SURFACE SLOPES NOT TO EXCEED 1:48 CROSS SLOPES AND 1:12 RUNNING.
4	RE-GRADE SURROUNDING LANDSCAPING GRADE ELEVATION AND RE-SOD/RE-MULCH AS REQUIRED TO MATCH EXISTING GRADE ELEVATIONS, SLOPES NOT TO EXCEED 4:1.

ACCESSIBILITY NOTES

1. THE DRAWINGS ARE DESIGNED TO MEET ACCESSIBILITY STANDARDS AT MINIMUM. LOCAL AND STATE REQUIREMENTS OR CODES MAY HAVE ADDITIONAL STANDARDS.
2. ACCESSIBLE PARKING SPACES, SIGNAGE, LOGOS, WHEEL STOPS AND ACCESSIBLE AISLES TO MEET ALL OF THE 2010 ADA STANDARDS REQUIREMENTS - PROVIDE SPACES IN SIZE, QUANTITY AND LOCATIONS REQUIRED BY THE ADA STANDARDS AND APPLICABLE CODES AS DETERMINED BY LOCAL JURISDICTION. PROVIDE A MAXIMUM SLOPE IN EITHER DIRECTION OF 1:48 (1:64 RECOMMENDED).
3. ACCESSIBLE PARKING SIGNAGE ON POST. BOTTOM OF SIGNAGE TO BE MINIMUM 60" ABOVE GRADE. VERIFY ALL REQUIREMENTS WITH ACCESSIBILITY REQUIREMENTS AND LOCAL CODE.
4. CONCRETE WHEEL STOP. ALL ACCESSIBLE SPACES- LOCATE FIXED WHEEL STOP SO AS NOT TO REDUCE THE WIDTH OF THE ADJOINING ACCESSIBLE ROUTE.
5. ACCESSIBLE ROUTE TO PUBLIC RIGHT OF WAY (1 REQUIRED). MAXIMUM RUNNING SLOPE OF 1:20 AND MAXIMUM CROSS SLOPE OF 1:48 (1:64 RECOMMENDED). ALL PAVED SURFACES, CURB RAMPS AND TRANSITIONS ALONG PATH TO MEET ACCESSIBILITY REQUIREMENTS.
6. ACCESSIBLE PATH/WALKWAY TO BE 5'-0" MINIMUM, RUNNING SLOPE 1:20 MAXIMUM, CROSS SLOPE 1:48 MAXIMUM, SLOPE AWAY FROM BUILDING - BROOM FINISH CONCRETE.
7. CURB RAMP TO MEET ALL ACCESSIBILITY REQUIREMENTS, MAXIMUM SLOPE OF RUN 1:12 (1:14 RECOMMENDED), MAXIMUM CRISS SLOPE 1:48 (1:64 RECOMMENDED). REFER TO SITE DETAILS SHEET FOR ADDITIONAL INFORMATION. PROVIDE 36" LONG MINIMUM LANDDING AT TOP AND 60: MINIMUM LANDING AT BOTTOM OF RAMP WITH MAXIMUM SLOPE IN EITHER DIRECTION OF LANDING TO BE 1:48 (1:64 RECOMMENDED)
8. SURFACE CONDITIONS AT ACCESSIBLE WALKWAYS AND ACCESSIBLE AREAS (PAVERS SYSTEMS AND/OR CONCRETE SURFACES) SHALL NOT INCLUDE GAPS GREATER THAT 1/2" OR VERTICAL CHANGES AT JOINTS OR BETWEEN UNITS GREATER THAN 1/4" - UNLESS THE OVERALL LEVEL CHANGE DOES NOT EXCEED 1/2" AND THE LEVEL CHANGE IS BEVELED AT 1:2.
9. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALK/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
10. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

ACCESSIBILITY DETAIL 1"=10'



LEGEND

EL	ELEVATION
TYP	TYPICAL
CO	CLEANOUT
IE	INVERT ELEVATION
×49.58	EXISTING ELEVATION
0.00	PROPOSED PAVEMENT ELEVATION
0.00 / 0.00	TOP OF SIDEWALK/CURB EDGE OF PAVEMENT
	CURB INLET
FFE	FINISH FLOOR ELEVATION
RCP	REINFORCED CONCRETE PIPE
HP	HIGH POINT
MEG	MATCH EXISTING GRADE
TOI	TOP OF ISLAND
DS	BUILDING DOWN SPOUT
	12" OR GREATER STORMWATER PIPE
	LESS THAN 12" STORMWATER PIPE
	PROPOSED SURFACE STORMWATER FLOW
—29—	EXISTING CONTOUR
—29—	PROPOSED CONTOUR

CONTROL BENCHMARKS

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS, AND BASED ON POSITIONAL VALUES ESTABLISHED BY NGS OPUS-RS SOLUTION REPORTS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983(2011)-STATE PLANE COORDINATE SYSTEM OF SOUTH CAROLINA. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988(GEOID18). ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM. THE COMBINED SCALE FACTOR FOR CONVERTING GPS TO GROUND COORDINATES IS 1.00010406.

NOTE:
CONTRACTOR TO ESTABLISH CONTROL BENCHMARKS BEYOND LIMITS OF DEMOLITION PRIOR TO CONSTRUCTION.

EROSION CONTROL MEASURE NOTE

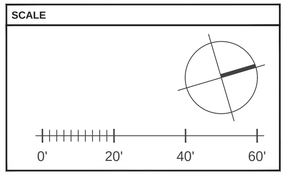
REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED AS NEEDED AND MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AND INITIATION OF CIVIL PENALTY PROCEDURES.

PAVING AND GRADING GENERAL NOTES

1. SEE GENERAL NOTES SHEET FOR EROSION AND SILTATION CONTROL ALONG WITH GENERAL NOTES.
2. SEE SITE PLAN SHEET FOR SITE DATA.
3. SEE SURVEY FOR TEMPORARY BENCH MARK (TBM) LOCATIONS.
4. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS FOR LOCAL MUNICIPALITY AND THE DEPARTMENT OF TRANSPORTATION WITH REGARD TO IMPROVEMENTS WITHIN THEIR RESPECTIVE RIGHTS-OF-WAY.
5. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY TO BE RETURNED TO MATCH EXISTING CONDITION.
6. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.
7. CONTRACTOR SHALL INSTALL EROSION CONTROL SILT FENCE AROUND THE PERIMETER OF THE SITE AND MUST MAINTAIN THE SILT FENCE IN GOOD REPAIR UNTIL ALL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO ANY CONSTRUCTION IF ANY PROBLEMS OR DISCREPANCIES EXIST.

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SCALE



bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
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IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:35:33 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
1	DR	05/28/25	DRC ROUND 1
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

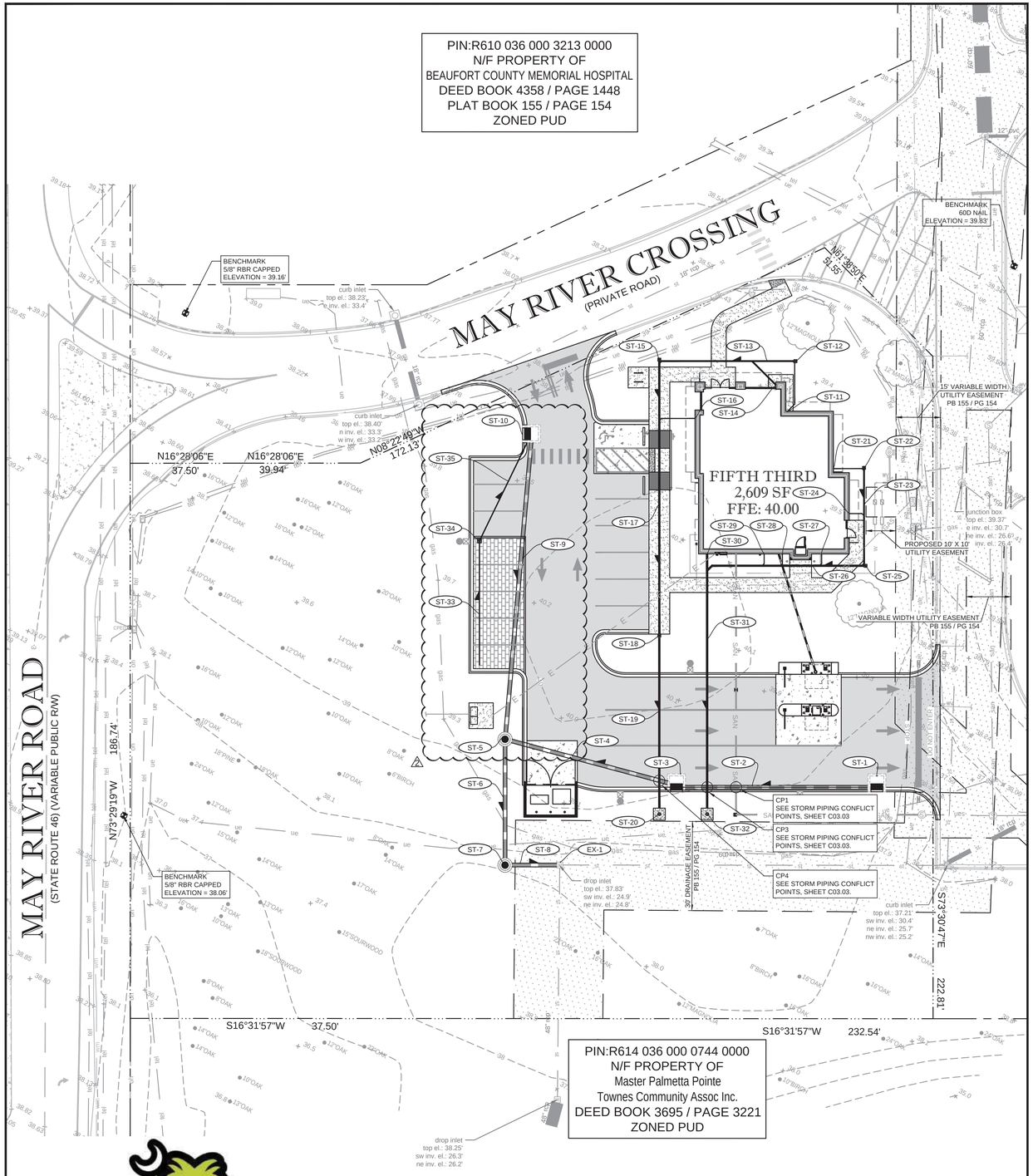
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

GRADING PLAN

SHEET NUMBER

C03.01



EXISTING STORM STRUCTURE/PIPING DATA

EX-1
GRATE INLET
TOP = 37.83'
IE (N) = 24.90' (EXISTING 60" RCP)
IE (E) = 24.80' (EXISTING 60" RCP)
IE (S) = 32.25' (PROPOSED 15" HDPE)

CORE DRILL EXISTING STRUCTURE @ IE 32.25'
CONTRACTOR TO SEAL STRUCTURE
WITH NON-SHRINK GROUT.

STORM STRUCTURE/PIPING DATA

ST-1
TYPE 1 CATCH BASIN
SCDOT INDEX 719-001-01
SEE DETAIL, SHEET C05.05
GRATE = 37.85'
IE (S) = 33.75'
IE (SW) = 34.65' (4" PVC) 2

ST-2
67 LF OF 15" HDPE
@ 1.00% SLOPE

ST-3
TYPE 1 CATCH BASIN
SCDOT INDEX 719-001-01
SEE DETAIL, SHEET C05.05
GRATE = 38.20'
IE (N, S) = 33.00'

ST-4
60 LF OF 15" HDPE
@ 1.00% SLOPE

ST-5
DRAINAGE ACCESS MANHOLE HEAVY
DUTY DRAINAGE STRUCTURE
SCDOT INDEX 719-505-01
SEE DETAIL, SHEET C05.06
TOP = 39.50'
IE (NE, E, NW) = 32.45'

ST-6
39 LF OF 15" HDPE
@ 1.00 % SLOPE

ST-7
DRAINAGE ACCESS MANHOLE HEAVY
DUTY DRAINAGE STRUCTURE
SCDOT INDEX 719-505-01
SEE DETAIL, SHEET C05.06
TOP = 38.50'
IE (NW, N) = 32.40'

ST-8
18 LF OF 15" HDPE
@ 1.00 % SLOPE

ST-9
105 LF OF 15" HDPE
@ 2.40 % SLOPE

ST-10
TYPE 1 CATCH BASIN
SCDOT INDEX 719-001-01
SEE DETAIL, SHEET C05.05
GRATE = 38.40'
IE (E) = 35.00'

ST-11
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
18 LF OF 3" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-12
CONSTRUCT CLEANOUT
TOP TO BE SET AT GRADE
IE = 37.30'

ST-13
40 LF OF 6" PVC
@ 1.00% MIN. SLOPE

ST-14
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
12 LF OF 6" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-15
CONSTRUCT CLEANOUT
TOP TO BE SET AT GRADE
IE = 36.90'

ST-16
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
12 LF OF 6" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-17
92 LF OF 6" PVC
@ 1.00% MIN. SLOPE

ST-18
CONSTRUCT CLEANOUT
TOP TO BE SET AT GRADE
IE = 35.98'

ST-19
58 LF OF 8" PVC
@ 1.00% SLOPE

ST-20
12" ADS NYLOPLAST DRAIN BASIN
WITH STANDARD GRATE AND 4-FOOT
CONCRETE PAD.
SEE DETAILS, SHEET C05.02
GRATE = 38.50'
IE = 35.40'

ST-21
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
11 LF OF 3" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-22
CONSTRUCT CLEANOUT
TOP TO BE SET AT GRADE
IE = 37.25'

ST-23
33 LF OF 6" PVC
@ 1.00% MIN. SLOPE

ST-24
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
6 LF OF 3" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-25
BUILDING DOWN SPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
IE = 36.20'

ST-26
58 LF OF 8" PVC
@ 1.00% MIN. SLOPE

ST-27
BUILDING DOWN SPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
5 LF OF 3" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-28
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
5 LF OF 3" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-29
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
6 LF OF 3" PVC @ 1.00% MIN. SLOPE
IE = 37.50'

ST-30
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
IE = 37.50'

ST-31
82 LF OF 8" PVC
@ 1.00% MIN. SLOPE

ST-32
12" ADS NYLOPLAST DRAIN BASIN
WITH STANDARD GRATE AND 4-FOOT
CONCRETE PAD.
SEE DETAILS, SHEET C05.02
GRATE = 38.50'
IE = 34.80' 1

ST-33
42 LF OF 4" PERFORATED PIPE
WRAPPED IN FILTER FABRIC
IE = 35.50

ST-34
CONSTRUCT CLEANOUT WITH
CONCRETE PAD
TOP TO BE SET AT GRADE
IE = 35.05

ST-35
37 LF OF 4" PVC
@ 1.0% SLOPE

LEGEND

EL	ELEVATION
TYP	TYPICAL
CO	CLEANOUT
IE	INVERT ELEVATION
×49.58	EXISTING ELEVATION
	CURB INLET
FFE	FINISH FLOOR ELEVATION
RCP	REINFORCED CONCRETE PIPE
ST-23	STORM SEWER STRUCTURE NUMBER
DS	BUILDING DOWN SPOUT
	12" OR GREATER STORMWATER PIPE
	LESS THAN 12" STORMWATER PIPE
	DIRECTION OF PIPE FLOW
—29—	EXISTING CONTOUR
29	PROPOSED CONTOUR

PAVING AND GRADING GENERAL NOTES

1. SEE GENERAL NOTES SHEET FOR EROSION AND SILTATION CONTROL ALONG WITH GENERAL NOTES.
2. SEE SITE PLAN SHEET FOR SITE DATA.
3. SEE SURVEY FOR TEMPORARY BENCH MARK (TBM) LOCATIONS.
4. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS FOR LOCAL MUNICIPALITY AND THE DEPARTMENT OF TRANSPORTATION WITH REGARD TO IMPROVEMENTS WITHIN THEIR RESPECTIVE RIGHTS-OF-WAY.
5. ALL DISTURBED AREAS WITHIN RIGHTS-OF-WAY TO BE RETURNED TO MATCH EXISTING CONDITION.
6. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.
7. CONTRACTOR SHALL INSTALL EROSION CONTROL SILT FENCE AROUND THE PERIMETER OF THE SITE AND MUST MAINTAIN THE SILT FENCE IN GOOD REPAIR UNTIL ALL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO ANY CONSTRUCTION IF ANY PROBLEMS OR DISCREPANCIES EXIST.

CONTROL BENCHMARKS

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS, AND BASED ON POSITIONAL VALUES ESTABLISHED BY NGS OPUS-RS SOLUTION REPORTS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983(2011)-STATE PLANE COORDINATE SYSTEM OF SOUTH CAROLINA. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988(GEOID18). ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM. THE COMBINED SCALE FACTOR FOR CONVERTING GPS TO GROUND COORDINATES IS 1.00010406.

NOTE:
CONTRACTOR TO ESTABLISH CONTROL BENCHMARKS BEYOND LIMITS OF DEMOLITION PRIOR TO CONSTRUCTION.

EROSION CONTROL MEASURE NOTE

REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED AS NEEDED AND MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AND INITIATION OF CIVIL PENALTY PROCEDURES.

SOUTH CAROLINA
INFINITY ENGINEERING GROUP, LLC
No. 4573
CERTIFICATE OF AUTHORIZATION

PLAN VIEW | SCALE: AS NOTED | -

SCALE
0' 20' 40' 60'

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

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MAY RIVER CROSSING
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NISIT SAPPARKHAO

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Adobe Acrobat DC version: 2015.006.30527
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	SJ	03/21/25	ISSUE FOR PERMIT
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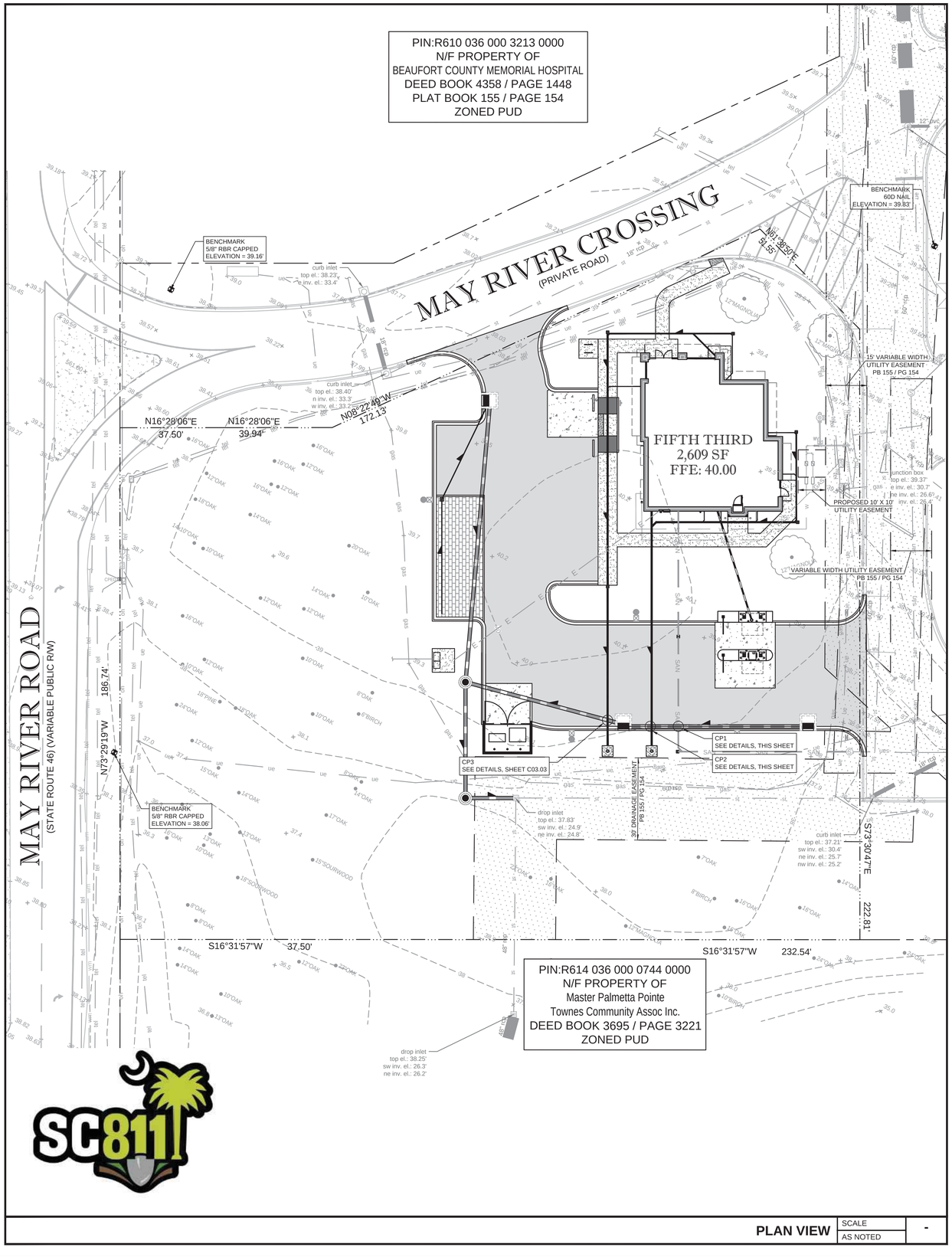
PROJECT INFORMATION BLOCK

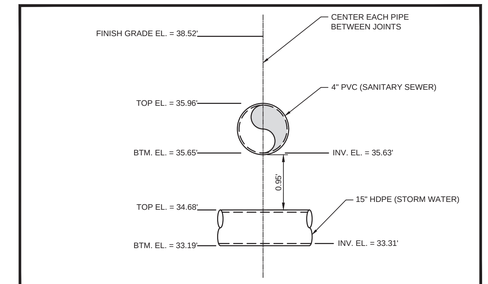
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE
STORM PIPING PLAN

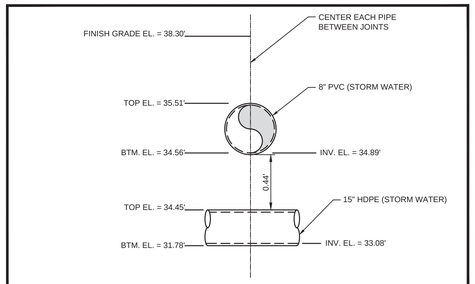
SHEET NUMBER
C03.02



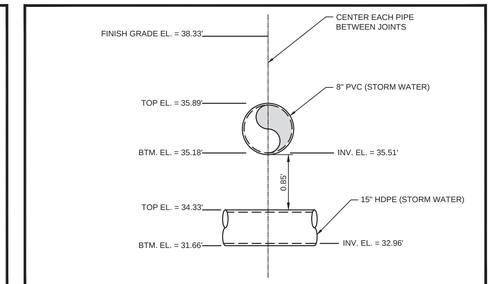
PLAN VIEW | SCALE: AS NOTED | -



CONFLICT POINT #2 | SCALE: NTS | 1



CONFLICT POINT #3 | SCALE: NTS | 2



CONFLICT POINT #4 | SCALE: NTS | 3

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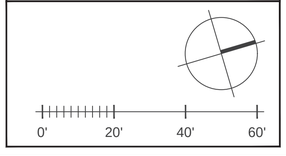
SCALE



bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
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2901 MAY RIVER CROSSING
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Suite 230
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[p]: 813.434.4770
[f]: 813.445.4211
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SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA CERTIFICATE OF AUTHORITY INFINITY ENGINEERING GROUP, LLC No. 4573

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
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Adobe Acrobat DC version: 2015.006.30527

06/27/25

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PROJECT INFORMATION BLOCK

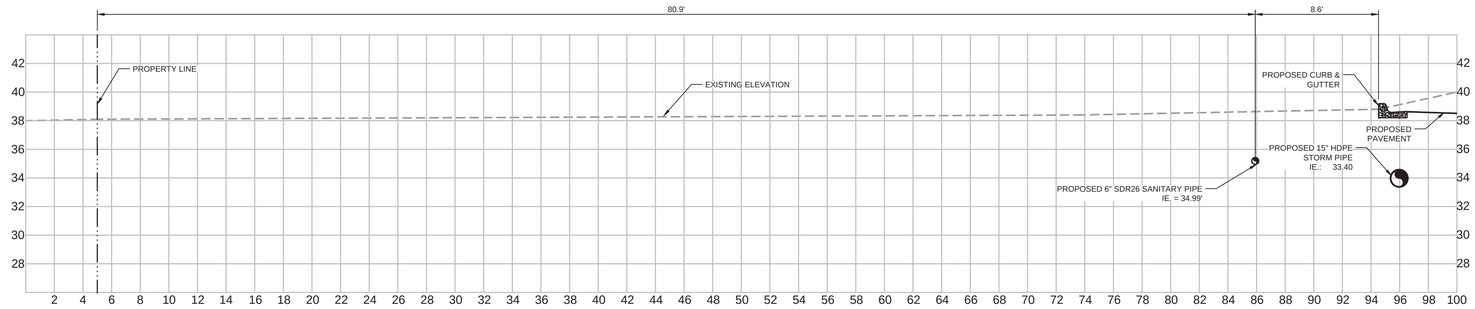
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

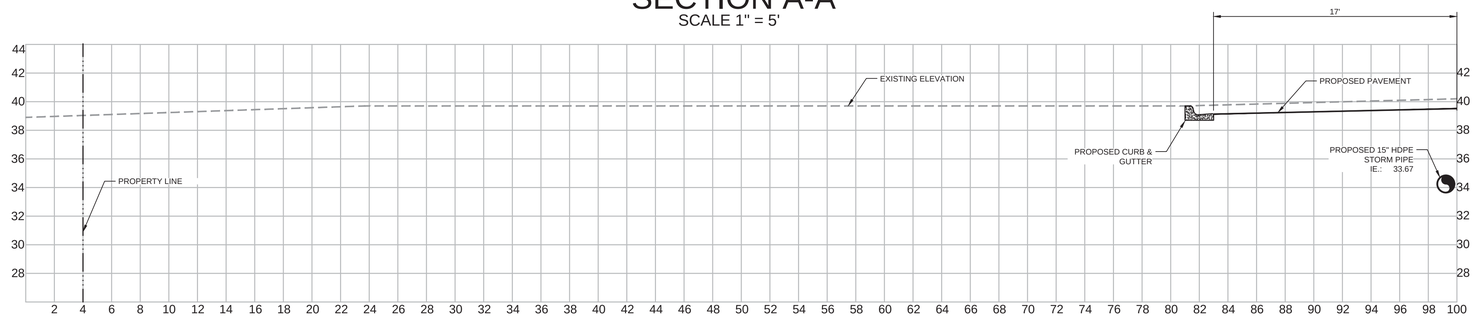
STORM PIPING CONFLICT POINTS

SHEET NUMBER

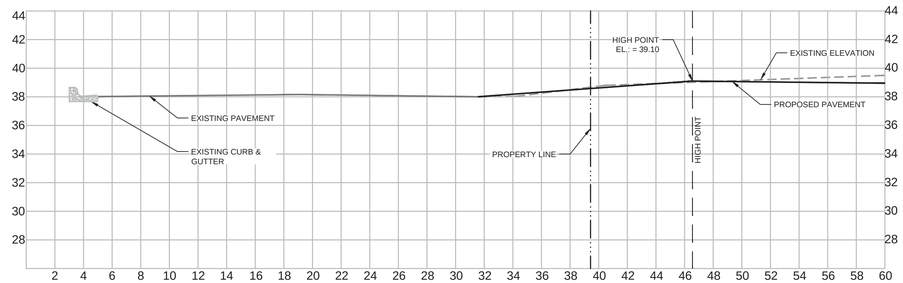
C03.03



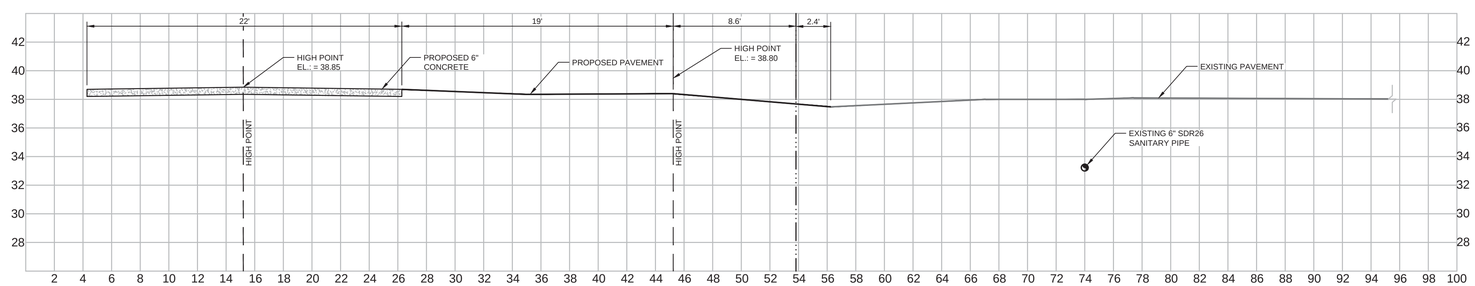
SECTION A-A
SCALE 1" = 5'



SECTION B-B
SCALE 1" = 5'



SECTION C-C
SCALE 1" = 5'



SECTION D-D
SCALE 1" = 5'

PLAN VIEW | SCALE: AS NOTED | -

bdg architects

550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202

P: 704.981.8951
Lic. #: AA - 0003590
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FIFTH THIRD

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INFINITY

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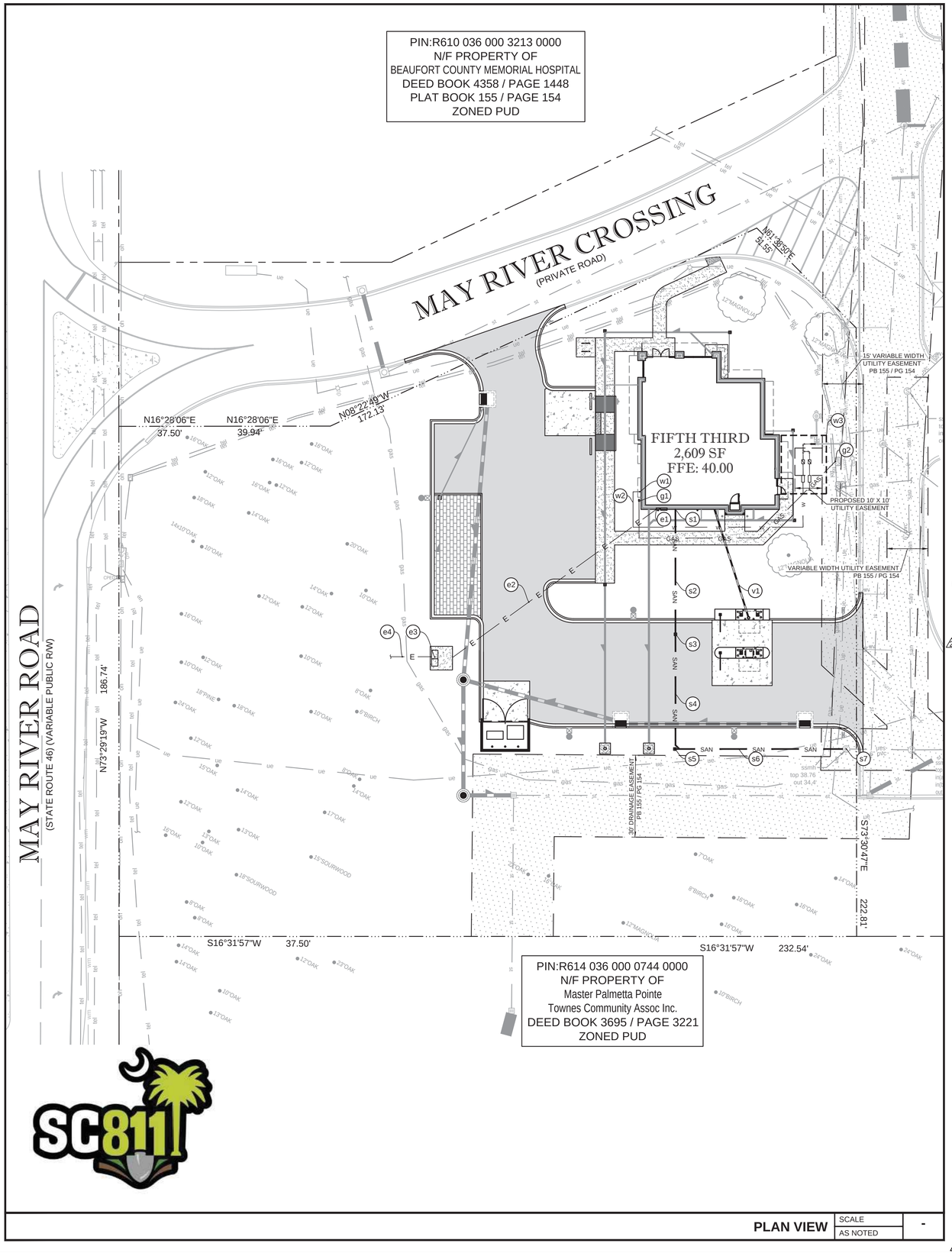
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

CROSS SECTIONS

SHEET NUMBER

C03.04



PLAN VIEW | SCALE: AS NOTED | -

UTILITY SYSTEM DATA

	WATER
w1	POINT OF CONNECTION TO BUILDING WATER MANIFOLD
w2	78 LF - 1" POLY PIPE WATER SERVICE LATERAL
w3	SEE SERVICE CONNECTION DETAIL, THIS SHEET.
	SANITARY
s1	4-INCH SEWER STUBOUT FROM BUILDING (BY PLUMBING CONTRACTOR). REFER TO BUILDING PLUMBING PLAN FOR EXACT LOCATION. CONSTRUCT SEWER CLEANOUT. CLEANOUT TOP ELEVATION SHALL MATCH PROPOSED GRADE ELEVATION. INV. EL 37.00'
s2	45 LF - 4" SDR26 @ 1.1% SLOPE
s3	CONSTRUCT SEWER CLEAN OUT - IE. 36.50'
s4	43 LF - 6" SDR26 @ 1.1% SLOPE
s5	CONSTRUCT SEWER CLEAN OUT - IE. 36.03'
s6	61 LF - 6" SDR26 @ 2.67% SLOPE
s7	POINT OF CONNECTION TO EXISTING SEWER MANHOLE. CORE DRILL STRUCTURE @ EL.: 34.40' AND TIE IN. STRUCTURE CONNECTION TO BE SEALED WITH NON-SHRINK GROUT.
	ELECTRIC
e1	MAIN ELECTRIC SERVICE ENTRANCE & DISCONNECT. (SEE ARCHITECTURAL PLANS)
e2	UNDERGROUND SECONDARY ELECTRICAL SERVICE. (GC SHALL COORDINATE WITH UTILITY PROVIDER FOR RESPONSIBILITY AND CONSTRUCTION REQUIREMENTS)
e3	NEW PAD MOUNTED TRANSFORMER. SEE ELECTRICAL PLANS. GC SHALL COORDINATE WITH POWER PROVIDER FOR RESPONSIBILITY AND CONSTRUCTION REQUIREMENTS.
e4	NEW UNDERGROUND PRIMARY ELECTRICAL SERVICE. GC TO VERIFY LOCATION AND ROUTING WITH PROVIDER FOR RESPONSIBILITY AND CONSTRUCTION REQUIREMENTS. SEE SITE ELECTRICAL PLANS.
	GAS
g1	GAS SERVICE ENTRANCE AND GAS METER (SEE ARCHITECTURAL PLANS).
g2	POINT OF CONNECTION. (GC SHALL COORDINATE WITH GAS PROVIDER FOR RESPONSIBILITY AND CONSTRUCTION REQUIREMENTS).
	ATM PNEUMATIC VAT TUBE
v1	NEW UNDERGROUND MILL-WRAPPED PNEUMATIC TUBE WITH 8-INCH PVC SLEEVE FROM ATM TO BUILDING. PROVIDE CONDUITS FOR POWER AND LOW VOLTAGE. SEE UNDERGROUND VAT TUBE DETAILS, SHEET C05.09.

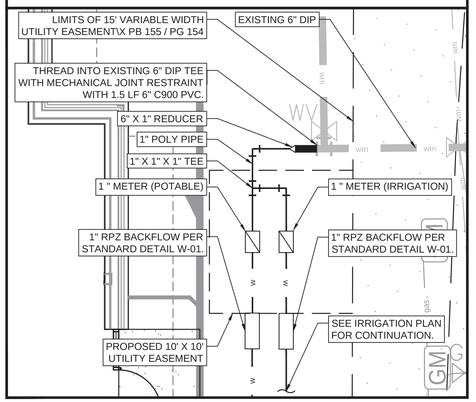
LEGEND

TYP	TYPICAL
H/C	HANDICAP
R	RADIUS
R/W	RIGHT-OF-WAY
	PROPOSED CONCRETE 6" OR LESS
	PROPOSED CONCRETE GREATER THAN 6"
	PROPERTY LINE
SAN	PROPOSED SANITARY SERVICE
GW	PROPOSED GREASE WASTE
FM	PROPOSED FORCE MAIN
w	PROPOSED WATER MAIN
FIRE	PROPOSED FIRE MAIN
E	PROPOSED ELECTRIC SERVICE
GAS	PROPOSED GAS SERVICE
TEL	PROPOSED TELEPHONE SERVICE
san	EXISTING SANITARY PIPE
wm	EXISTING WATER PIPE
rw	EXISTING RECLAIM WATER PIPE
ue	EXISTING UNDERGROUND POWER
oh	EXISTING OVERHEAD WIRE
gas	EXISTING GAS LINE
tel	EXISTING TELEPHONE LINE
	PNEUMATIC VAT TUBE

UTILITY NOTES

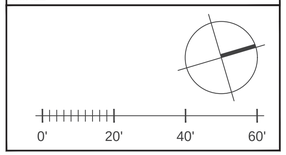
1. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND ADVISE THE ENGINEER OF RECORD OF ANY CONFLICTS IMMEDIATELY.
2. CONTRACTOR SHALL NOTIFY AND COORDINATE WATER SERVICE WITH LOCAL MUNICIPALITIES UTILITIES DEPARTMENT.
3. CONTRACTOR SHALL NOTIFY AND COORDINATE SEWER SERVICE WITH LOCAL MUNICIPALITIES UTILITIES DEPARTMENT.
4. CONTRACTOR TO COORDINATE INSTALLATION OF ELECTRICAL POWER SERVICE WITH LOCAL ELECTRIC COMPANY.
5. CONTRACTOR TO INSTALL PVC CONDUIT FOR TELEPHONE SERVICE (TO PROPERTY LINE) AND COORDINATE INSTALLATION OF SERVICE WITH TELEPHONE OPERATIONS.
6. SEE SURVEY FOR LOCATION OF OTHER EXISTING UTILITIES.
7. SEE CIVIL SPECIFICATIONS AND REFERENCE DRAWING SHEETS FOR ADDITIONAL UTILITY NOTES.
8. ALL ON-SITE PVC WATER SERVICE AFTER METER SHALL BE SCHEDULE 80 OR PRESSURE RATED HDPE (POLY PIPE).
9. ALL CROSSINGS OF WATER AND SEWER LINES MUST MAINTAIN PROPER CLEARANCE (SEE CIVIL SPECIFICATIONS AND REFERENCE DRAWING SHEETS).
10. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY/TOWNS STANDARD CONSTRUCTION AND UTILITY REQUIREMENTS.
11. TREES SHALL NOT BE PLANTED WITHIN 10 FEET FROM THE WATER MAIN.
12. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.

SERVICE CONNECTION DETAIL 1" = 5'



SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SCALE



bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

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FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:36:23 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
1	DR	05/28/25	DRC ROUND 1
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

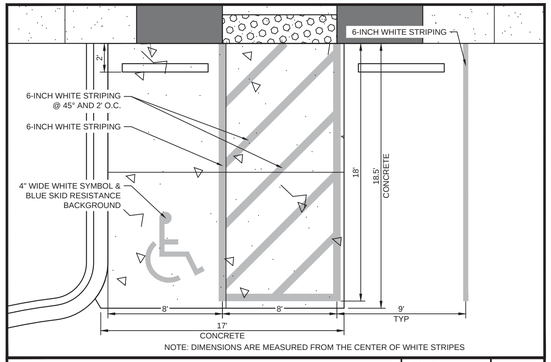
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

UTILITY PLAN

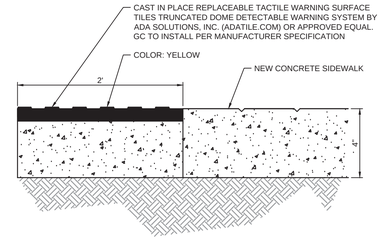
SHEET NUMBER

C04.01

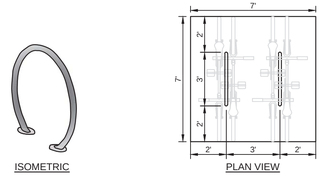


NOTE: DIMENSIONS ARE MEASURED FROM THE CENTER OF WHITE STRIPES

TYPICAL ACCESSIBLE PARKING STRIPING | SCALE 1" = 5' | 1



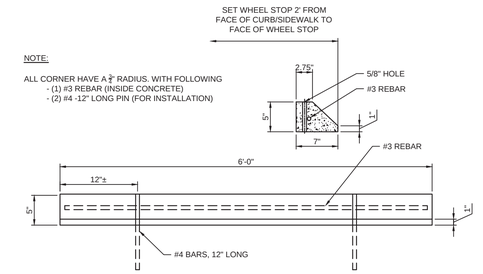
DETECTABLE WARNING | SCALE NTS | 2



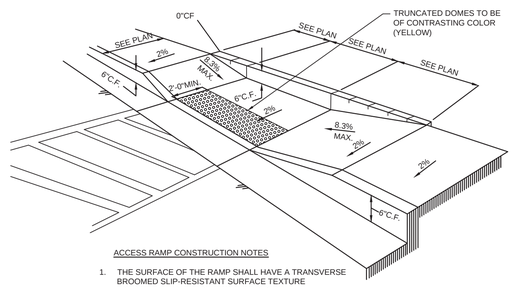
NOTES:

MANUFACTURE:	WAUSAU TILE INC. BRAND
PRODUCT #:	MF9024
SIZE:	36" x 32.5" H
WEIGHT:	81 LB
FINISH:	ALUMINUM
FEATURES:	CIRCLE BIKE RACK
MOUNTING:	SURFACE MOUNT (ASSEMBLY REQUIRED)

BICYCLE RACK | SCALE NTS | 3



WHEEL STOP DETAIL | SCALE NTS | 4



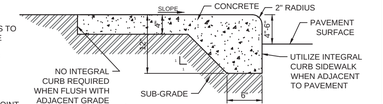
ACCESS RAMP CONSTRUCTION NOTES

1. THE SURFACE OF THE RAMP SHALL HAVE A TRANSVERSE BROOMED SLIP-RESISTANT SURFACE TEXTURE ROUGHER THAN THE SURROUNDING SIDE
2. RAMP CONSTRUCTION SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.

TYPICAL ADA RAMP | SCALE NTS | 5

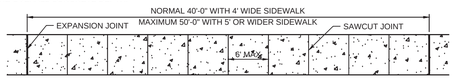
NOTES:

1. SIDEWALK EXPANSION JOINTS TO BE AT ALL TIES TO CONCRETE OTHER THAN DRIVEWAYS. MAXIMUM SPACING SHALL BE 50-FOOT.
2. EXPANSION JOINT MATERIAL SHALL BE ASPHALT FIBER IMPREGNATED PREFORMED JOINT FILLER, TO FULL DEPTH OF CONCRETE.
3. ALL SIDE WALKS SHALL BE CONSTRUCTED OF 4 INCH THICK 4,000 PSI PORT LAND CEMENT CONCRETE AND SHALL BE INSTALLED OVER COMPACTED SUB-GRADE.
4. CONTROL JOINT MUST BE PERFORMED WITHIN 12 HOURS OF CONCRETE PLACEMENT DO A DEPTH NO LESS THAN 1/4-INCH THE OVERALL CONCRETE DEPTH.



CONCRETE: 4" 4,000 PSI FIBERMESH REINFORCED CONCRETE FIBERMESH 1.5 LBS/CYD SYNTHETIC FIBER

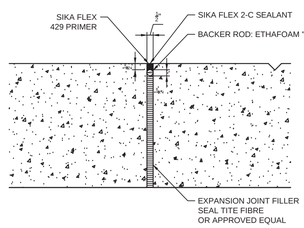
SUB-GRADE: 6 INCH COMPACTED SUB-GRADE TO 95% MIN. PER ASTM D1557



SIDEWALK | SCALE NTS | 6

NOTES:

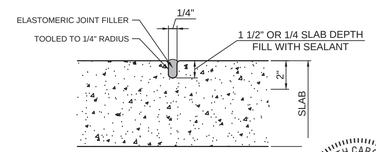
1. SIDEWALK EXPANSION JOINTS TO BE AT ALL TIES TO CONCRETE OTHER THAN DRIVEWAYS. MAXIMUM SPACING SHALL BE 50-FOOT.
2. EXPANSION JOINT MATERIAL SHALL BE ASPHALT FIBER IMPREGNATED PREFORMED JOINT FILLER, TO FULL DEPTH OF CONCRETE.



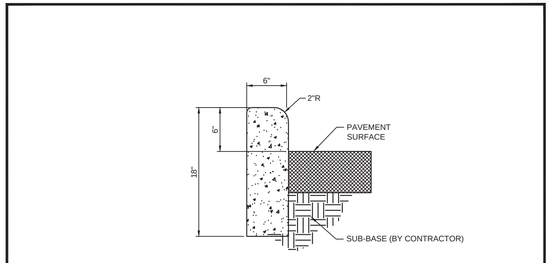
EXPANSION JOINT | SCALE NTS | 7

NOTES:

1. CONTROL JOINT MUST BE PERFORMED WITHIN 12 HOURS OF CONCRETE PLACEMENT DO A DEPTH NO LESS THAN 1/4-INCH THE OVERALL CONCRETE DEPTH.



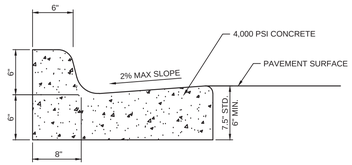
SAWCUT CONTROL JOINT | SCALE NTS | 8



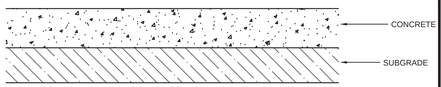
NOTE:

TRANSVERSE JOINTS SHALL BE 1/2" FULL DEPTH ASPHALT IMPREGNATED FIBER EXP. JOINT RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF THE CURB @ 20'-0" MAXIMUM.

6" x 18" CURB | SCALE NTS | 9

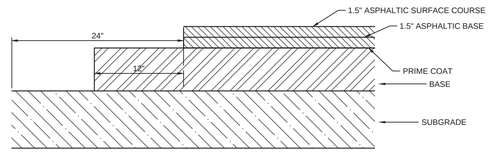


18" CURB AND GUTTER | SCALE NTS | 10



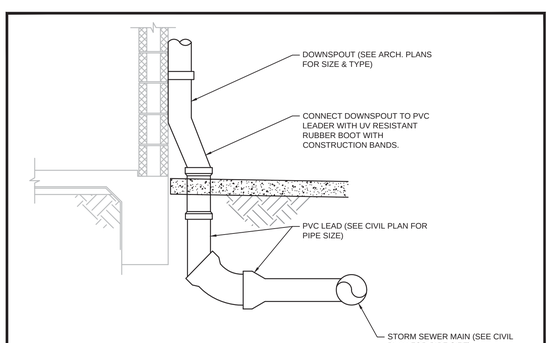
CONCRETE	6" THICKNESS 4.000 PSI PORTLAND CEMENT 6"X6" W 1.4XW 1.4 WWF OR FIBERMESH 1.5 LBS/CYD SYNTHETIC FIBER COLOR: SCOFIELD; LITHOCHROME; A-33 "CLASSIC GREY" SEALER: SCHOFIELD; CEMENTONE; CLEAR SEALER
BASE	6" GRADED AGGREGATE BASE COURSE COMPACTED TO 100% MODIFIED PROCTOR.
SUB-GRADE	12" COMPACTED SUB-GRADE LBR 40 COMPACTED TO 98% AASHTO T-180
BLACK TINT	CONTRACTOR TO COORDINATE PRICING WITH CLIENT FOR BLACK TINT OPTION SIKA COLOR - 120G GRANULAR INTEGRAL COLORS - C34 DARK GRAY OR APPROVED EQUAL

CONCRETE PAVEMENT | SCALE NTS | 11

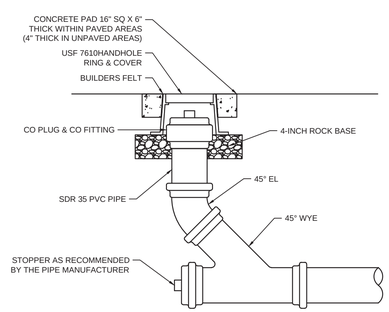


ASPHALT	3" ASPHALTIC CONCRETE S-9.5B (PLACED IN 2 EQUAL LIFTS)	
BASE	6" AGGREGATE BASE COURSE COMPACTED TO MINIMUM 100% MODIFIES PROCTOR (SEE GEOTECHNICAL REPORT)	
SUB-GRADE	12" COMPACTED SUB-GRADE LBR 40 COMPACTED TO 98% AASHTO T-180 OR CEMENT/LIME TREATED SUB-GRADE	*FINAL ASPHALT LIFT TO BE INSTALLED AFTER ALL SUBCONTRACTOR'S WORK HAS BEEN COMPLETED.

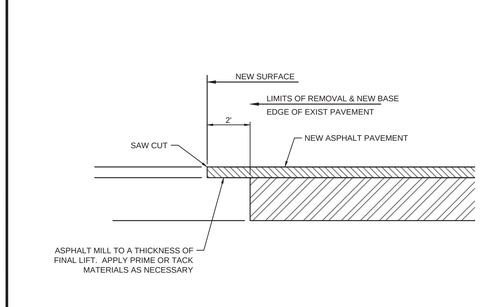
ASPHALT PAVEMENT | SCALE NTS | 12



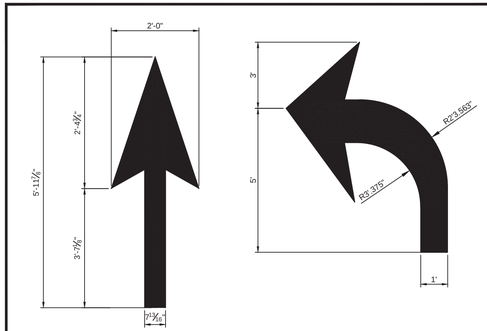
DOWNSPOUT CONNECTION | SCALE NTS | 13



CLEANOUT | SCALE NTS | 14



EXISTING ASPHALT PAVEMENT CONNECTION | SCALE NTS | 15



NOTE: STRIPES TO BE "WHITE" PAINTED

DIRECTIONAL LOT ARROW DETAIL | SCALE NTS | 16

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

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FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
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1208 East Kennedy Boulevard
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IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

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DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:36:36 -04'00'
Adobe Acrobat DC version: 2015.006.30527

05/14/2025

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

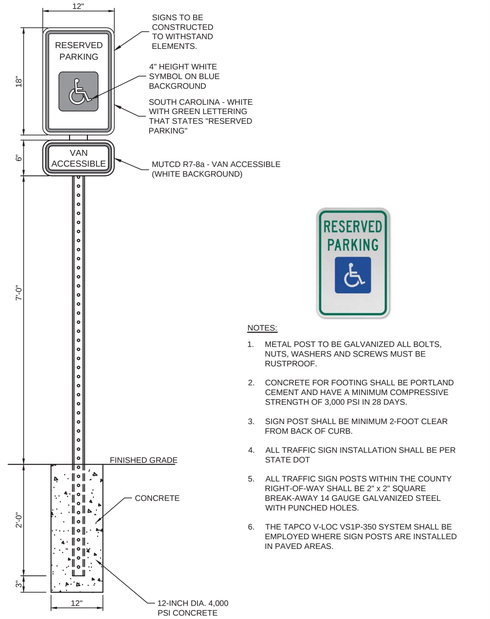
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

DETAILS

SHEET NUMBER

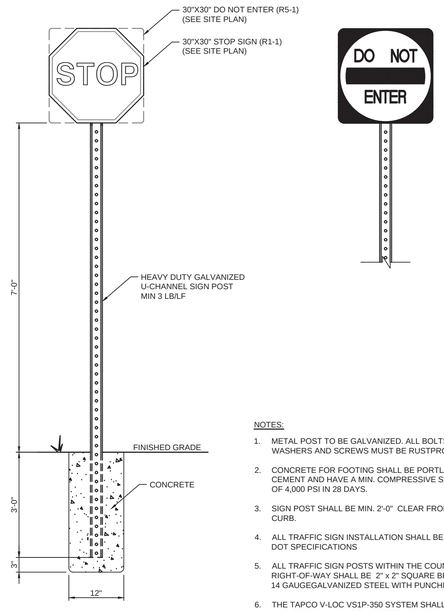
C05.01



NOTES:

1. METAL POST TO BE GALVANIZED ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
2. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.
3. SIGN POST SHALL BE MINIMUM 2-FOOT CLEAR FROM BACK OF CURB.
4. ALL TRAFFIC SIGN INSTALLATION SHALL BE PER STATE DOT
5. ALL TRAFFIC SIGN POSTS WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE 2" x 2" SQUARE BREAK-AWAY 14 GAUGE GALVANIZED STEEL WITH PUNCHED HOLES.
6. THE TAPCO V-LOC VS1P-350 SYSTEM SHALL BE EMPLOYED WHERE SIGN POSTS ARE INSTALLED IN PAVED AREAS.

ACCESSIBLE PARKING SIGN	SCALE	1
	NTS	



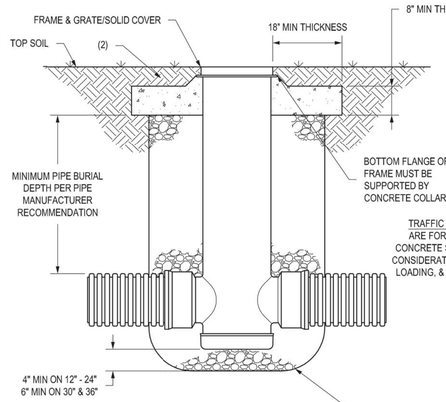
NOTES:

1. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
2. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MIN. COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS.
3. SIGN POST SHALL BE MIN. 2'-0" CLEAR FROM BACK OF CURB.
4. ALL TRAFFIC SIGN INSTALLATION SHALL BE PER STATE DOT SPECIFICATIONS
5. ALL TRAFFIC SIGN POSTS WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE 2" x 2" SQUARE BREAK-AWAY 14 GAUGEGALVANIZED STEEL WITH PUNCHED HOLES.
6. THE TAPCO V-LOC VS1P-350 SYSTEM SHALL BE EMPLOYED WHERE SIGN POSTS ARE INSTALLED IN PAVED AREAS.

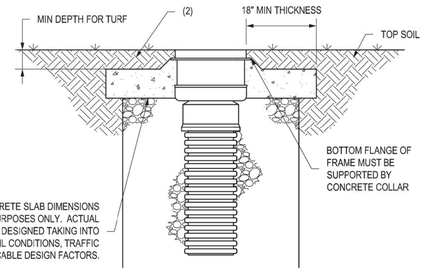
MUTCD SIGN(S)	SCALE	2
	NTS	

NYLOPLAST TURF TRAFFIC INSTALLATION

12" - 36" DRAIN BASIN



12" - 30" INLINE DRAIN



TRAFFIC LOADS: CONCRETE SLAB DIMENSIONS ARE FOR GUIDELINE PURPOSES ONLY. ACTUAL CONCRETE SLAB MUST BE DESIGNED TAKING INTO CONSIDERATION LOCAL SOIL CONDITIONS, TRAFFIC LOADING, & OTHER APPLICABLE DESIGN FACTORS.

1. GRATES/SOLID COVERS SHALL MEET H-20 LOAD RATING FOR 30" PEDESTRIAN & 12" - 30" STANDARD & SOLID
2. DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS DO NOT FORM.
3. 36" DRAIN BASIN REQUIRES 36"X30" REDUCING CONE. REDUCING CONE REQUIRES 2.25FT MINIMUM FROM GRADE TO TOP OF PIPE.

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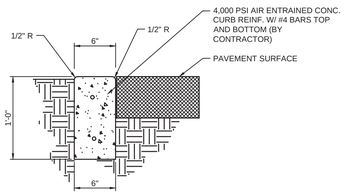
DATE	01-05-09		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	06-12-18		
DWG SIZE	A	SCALE 1:25	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: DRAIN BASIN & INLINE DRAIN TURF TRAFFIC INSTALLATION

DWG NO. 7001-110-340 REV G

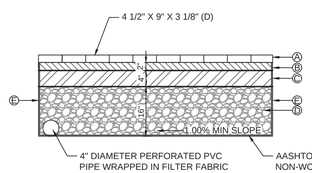
ADS YARD DRAIN DETAIL	SCALE	3
	NTS	



NOTE:

TRANSVERSE JOINTS SHALL BE 1/2" FULL DEPTH ASPHALT IMPREGNATED FIBER EXP. JOINT RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF THE CURB @ 20'-0" MAXIMUM.

6" RIBBON CURB	SCALE	4
	NTS	



Ⓐ BELGARD AQUALINE PERMEABLE PAVER. COLOR: VICTORIAN OR APPROVED EQUAL.
Ⓑ 2" ASTM WASHED NO. 8 STONE
Ⓒ 4" ASTM WASHED NO. 57 STONE
Ⓓ 16" NO. 3 ASTM WASHED STONE
Ⓔ AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE FILTER FABRIC

ASTM NO. 8 - 3/8" TO 1/2"
ASTM NO. 57 - 3/4" TO 1"
ASTM NO. 3 - 1-3" STONES

PERMEABLE PAVERS DETAIL	SCALE	5
	NTS	

Section 2721

Engineered Surface Drainage Products

GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for structure sizes 8", 10", 12", 15", 18", 24", 30" and 36" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

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DATE	3-10-00		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	02-21-18		
DWG SIZE	A	SCALE 1:1	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 8 IN - 36 IN DRAIN BASIN SPECIFICATIONS

DWG NO. 7001-110-011 REV J

ADS SPECIFICATIOINS	SCALE	6
	NTS	

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bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
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INFINITY ENGINEERING GROUP, LLC
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06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634
DATE:	02/12/2025
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CHECKED BY:	IEG

SHEET TITLE

DETAILS

SHEET NUMBER

C05.02

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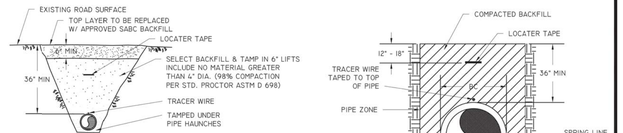
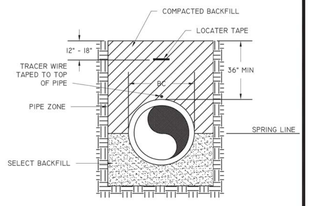
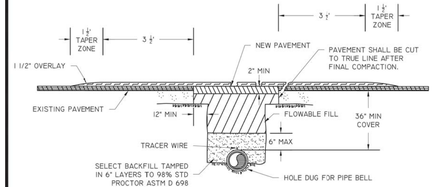
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910



UNPAVED ROADWAY BEDDING DETAIL



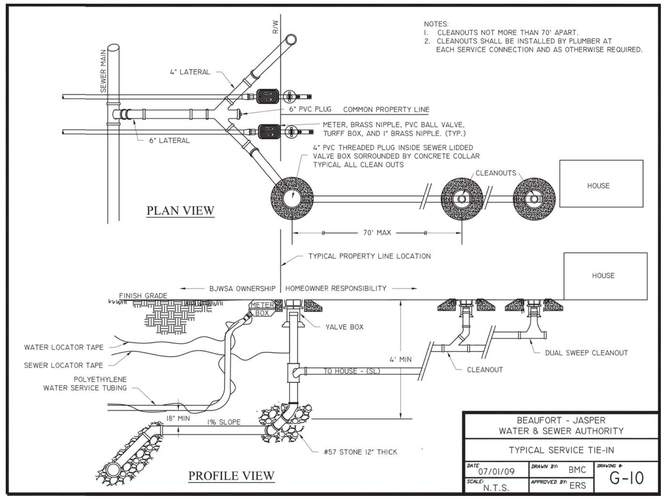
TYPICAL BEDDING DETAIL



PAVED AREA DETAIL

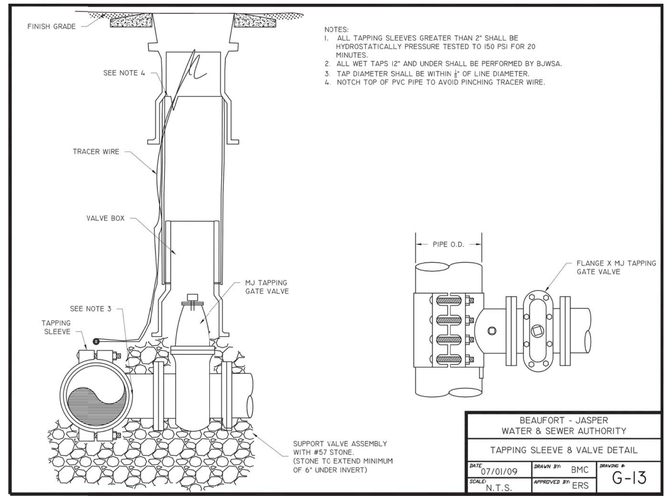
NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MATCH EXISTING PAVEMENT TYPE AND THICKNESS. MINIMUM THICKNESS OVER TRENCH IS 2".
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
BEDDING PRESSURE PIPE DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-02
SCALE: N.T.S.	APPROVED BY: ERS	



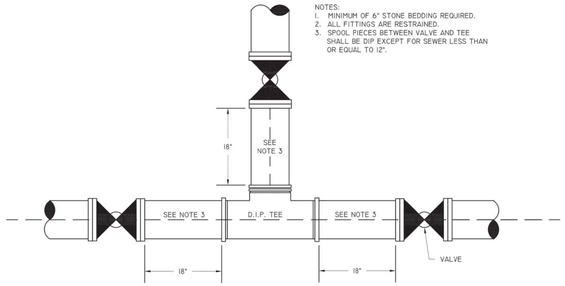
NOTES:
1. CLEANOUTS NOT MORE THAN 70' APART.
2. CLEANOUTS SHALL BE INSTALLED BY PLUMBER AT EACH SERVICE CONNECTION AND AS OTHERWISE REQUIRED.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
TYPICAL SERVICE TIE-IN		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-10
SCALE: N.T.S.	APPROVED BY: ERS	



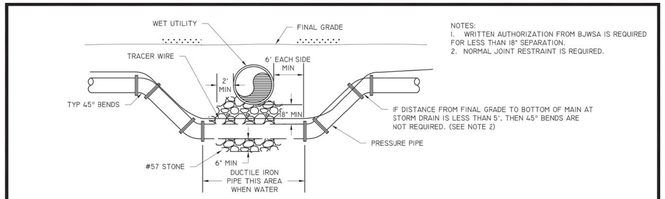
NOTES:
1. ALL TAPPING SLEEVES GREATER THAN 2" SHALL BE HYDROSTATICALLY PRESSURE TESTED TO 150 PSI FOR 20 MINUTES.
2. ALL WET TAPS 12" AND UNDER SHALL BE PERFORMED BY BJWSA.
3. TAP DIAMETER SHALL BE WITHIN ½" OF LINE DIAMETER.
4. NOTCH TOP OF PVC PIPE TO AVOID PINCHING TRACER WIRE.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
TAPPING SLEEVE & VALVE DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-13
SCALE: N.T.S.	APPROVED BY: ERS	



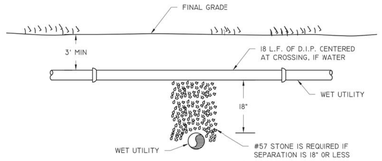
NOTES:
1. MINIMUM OF 6" STONE BEDDING REQUIRED.
2. ALL FITTINGS ARE RESTRAINED.
3. SPOOL PIECES BETWEEN VALVE AND TEE SHALL BE DIP EXCEPT FOR SEWER LESS THAN OR EQUAL TO 12".

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
TEE AND VALVES		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-15
SCALE: N.T.S.	APPROVED BY: ERS	



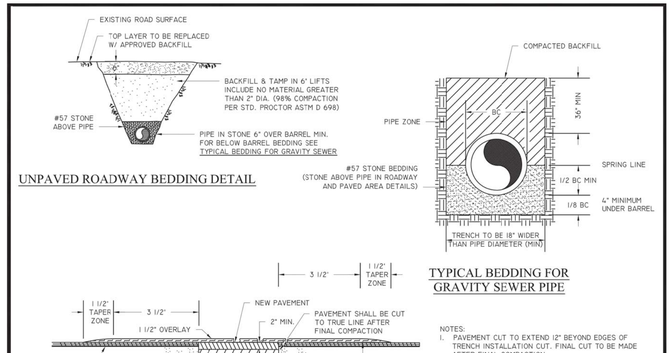
PRESSURE PIPE UNDER WET UTILITY FOR FINAL DEPTH 5' OR GREATER

NOTES:
1. WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED FOR LESS THAN 18" SEPARATION.
2. NORMAL JOINT RESTRAINT IS REQUIRED.



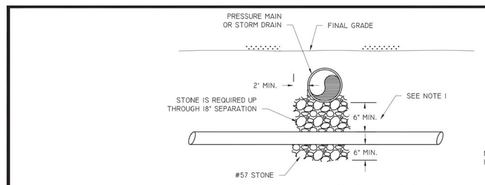
WET UTILITY CROSSING

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
WET UTILITY CROSSING		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-16
SCALE: N.T.S.	APPROVED BY: ERS	



NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH INSTALLATION CUT. FINAL CUT TO BE MADE AFTER FINAL COMPACTION.
2. MATCH EXISTING PAVEMENT TYP. THICKNESS IS TO BE 2" UNLESS EXISTING IS THICKER.
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT, IF MORE STRINGENT.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
BEDDING DETAIL, GRAVITY PIPE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-01
SCALE: N.T.S.	APPROVED BY: ERS	

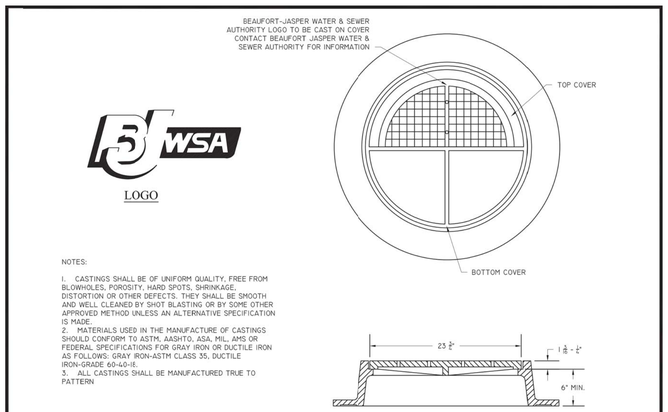


GRAVITY MAIN CROSSING UNDER STORM DRAIN / PRESSURE MAIN

GRAVITY MAIN CROSSING OVER STORM DRAIN / PRESSURE MAIN

NOTE:
1. SYSTEMS SHOULD NOT BE DESIGNED WITH LESS THAN 12" SEPARATION. IF LESS SEPARATION IS UNAVOIDABLE, WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED.

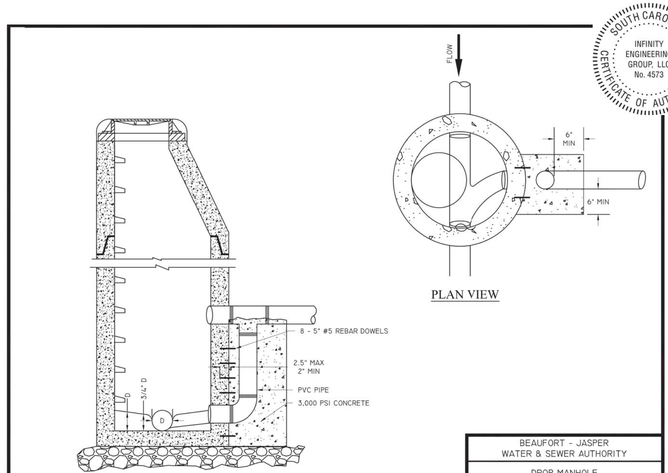
BEAUFORT - JASPER WATER & SEWER AUTHORITY		
GRAVITY MAIN CROSSING		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-03
SCALE: N.T.S.	APPROVED BY: ERS	



NOTES:

1. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD UNLESS AN ALTERNATIVE SPECIFICATION IS MADE.
2. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS: GRAY IRON-ASTM CLASS 35, DUCTILE IRON-GRADE 60-40-18.
3. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
MANHOLE, COVER AND FRAME		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-05
SCALE: N.T.S.	APPROVED BY: ERS	



BEAUFORT - JASPER WATER & SEWER AUTHORITY		
DROP MANHOLE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-06
SCALE: N.T.S.	APPROVED BY: ERS	

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:37:07 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK	
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

BEAUFORT - JASPER COUNTY DETAILS

SHEET NUMBER

C05.03

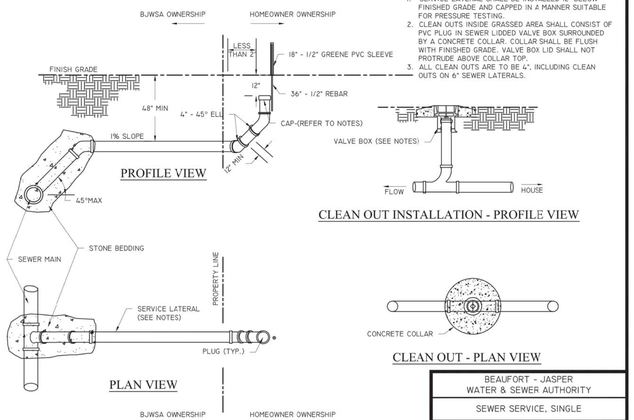
bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

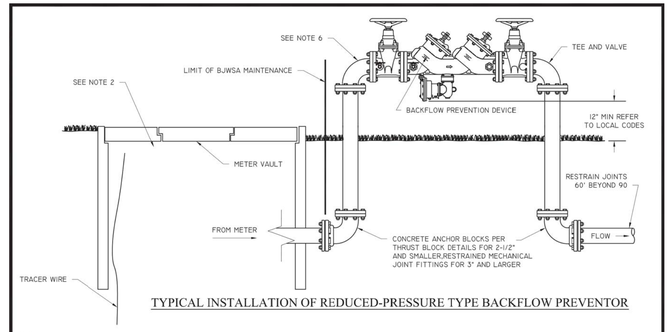
INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00
SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128



NOTES:
1. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
2. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
3. ALL CLEAN OUTS ARE TO BE 6", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.

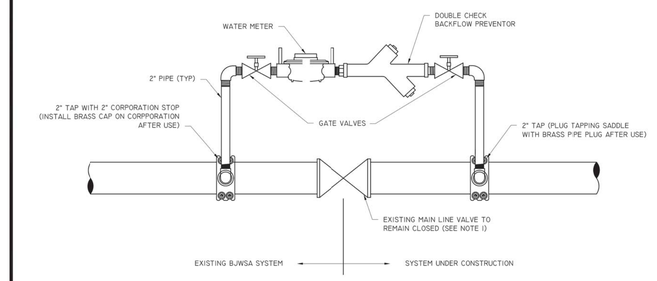
BEAUFORT - JASPER WATER & SEWER AUTHORITY		
SEWER SERVICE, SINGLE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-11
SCALE: N.T.S.	APPROVED BY: ERS	



TYPICAL INSTALLATION OF REDUCED-PRESSURE TYPE BACKFLOW PREVENTOR

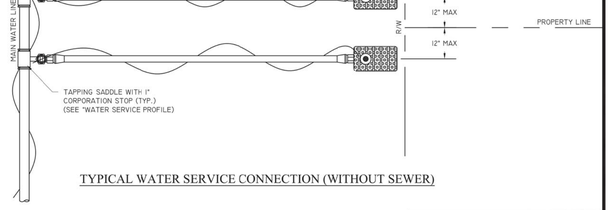
NOTES:
1. REDUCED-PRESSURE BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED FOR ANY SERVICE WHERE TOXIC MATERIALS ARE USED OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE: HOSPITALS, MEDICAL & DENTAL LABS, MORTUARIES, INDUSTRIAL PLANTS, DRY CLEANERS, IRRIGATION SYSTEMS, OR AS DETERMINED BY BJWSA.
2. SEE SPECIFIC METER DETAIL FOR MORE INFORMATION.
3. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ADJACENT TO AND ON PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. WHERE NO SIDEWALKS EXISTS, THE ASSEMBLY SHALL BE INSTALLED BEFORE ANY BRANCH AND AS CLOSE AS POSSIBLE TO THE WATER METER LOCATION. FINAL LOCATION TO BE APPROVED BY BJWSA PRIOR TO INSTALLATION.
4. SCREENING AND LANDSCAPING PLACES AROUND DEVICE SHALL ALLOW FOR ACCESS BY BJWSA PERSONNEL.
5. FREEZE PROTECTION IS THE OWNERS RESPOSIBILITY .
6. PIPING AND FITTINGS THROUGH 2 ½" SHALL BE SCHD 40 GALVANIZED STEEL. PIPING AND FITTINGS 3" AND LARGER SHALL BE FLANGED DUCTILE IRON.
7. REFER TO SCDHEC APPROVED LIST OF BACKFLOW PREVENTION DEVICES.
8. DUAL CHECK VALVES MAY BE INSTALLED IN UNDERGROUND VAULT (PRIOR APPROVAL BY BJWSA REQUIRED).

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
BACKFLOW PREVENTION DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W-01
SCALE: N.T.S.	APPROVED BY: ERS	



NOTES:
1. MAIN LINE VALVE SHALL REMAIN CLOSED AT ALL TIMES UNTIL PERMIT TO OPERATE IS ISSUED BY SC DHEC. MAIN LINE VALVE SHALL ONLY BE OPERATED BY BJWSA PERSONNEL. VIOLATION OF THIS POLICY IS PUNISHABLE BY A FINE OF NOT LESS THAN $500 PLUS ESTIMATED WATER USAGE AND POSSIBLE CRIMINAL PROSECUTION.
2. ALL WATER LINE EXTENSIONS MUST CONTAIN A JUMPER CONNECTION FOR FILLING/CHLORINIATION REQUIREMENTS.
3. METER AND BACKFLOW ASSEMBLY MUST BE OBTAINED FROM BJWSA.
4. TAPPING SADDLES AND CORPPRATION STOPS SHALL COMPLY WITH BJWSA SPECIFICATIONS.
5. ALL TAPS ON MAINLINE SHALL BE HORIZONTAL.

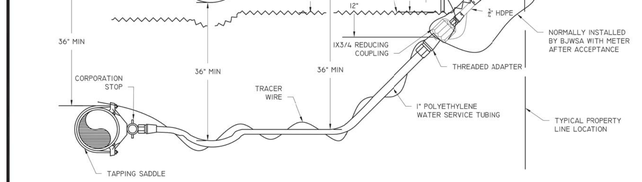
BEAUFORT - JASPER WATER & SEWER AUTHORITY		
JUMPER CONNECTION DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W-05
SCALE: N.T.S.	APPROVED BY: ERS	



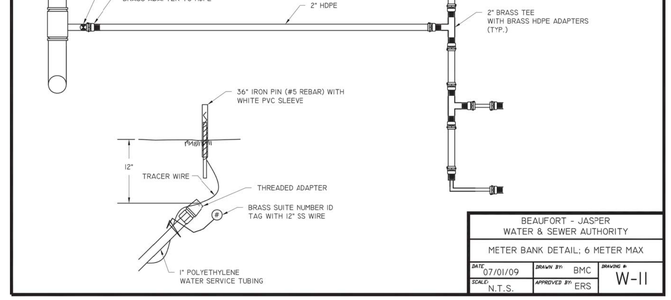
TYPICAL WATER SERVICE CONNECTION (WITHOUT SEWER)

NOTES:
1. WATER SERVICES SHALL BE INSTALLED TO COMMON PROPERTY LINES, WHERE POSSIBLE.
2. ALL SERVICE PIPING SHALL BE WRAPPED WITH TRACER WIRE AND TERMINATED WITHIN METER BOX.
3. INSTALL LOCATOR TAPE 1' BELOW SURFACE ABOVE SERVICE LINE.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
WATER SERVICE PLAN VIEW		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W-08
SCALE: N.T.S.	APPROVED BY: ERS	



BEAUFORT - JASPER WATER & SEWER AUTHORITY		
WATER SERVICE PROFILE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W-09
SCALE: N.T.S.	APPROVED BY: ERS	



NOTES:
1. MAY BE USED ONLY WITH WRITTEN PERMISSION FROM BJWSA.
2. UTILITY CONTRACTOR SHALL INSTALL BRASS IDENTIFICATION TAGS ON EVERY WATER SERVICE LATERAL. BRASS TAG IS TO HAVE MINIMUM 12" OF STAINLESS STEEL WIRE FIXED TO THE TAG. BRASS ID TAG SHALL BE STAMPED WITH ½" FIGURES LISTING THE SUITE NUMBER IN WHICH IT SERVES AS SHOWN ON THE PLANS. BJWSA WILL RELOCATE THE WIRE AND BRASS ID TAG FROM THE CORPORATION STOP TO INSIDE THE METER BOX WITH THE WIRE WRAPPED AROUND CURB STOP. PLUMBING CONTRACTOR SHALL RUN EACH UNIT'S WATER SERVICE TO THE LOCATION SHOWN ON THE PLANS AND MARKED AT THE METER.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
METER BANK DETAIL; 6 METER MAX		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W-11
SCALE: N.T.S.	APPROVED BY: ERS	

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — INFINITY ENGINEERING GROUP, LLC No. 4573

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573
IEG JOB NO. 15-360.00

SEAL
NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 29128 — NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:37:23 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

PROJECT INFORMATION BLOCK

JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

BEAUFORT - JASPER COUNTY DETAILS

SHEET NUMBER

C05.04

REFERENCES

NATIONAL DOCUMENTS
AASHTO M235

SCDOT DOCUMENTS
QUALIFIED PRODUCT LIST 14

RELATED DRAWINGS & KEYWORDS
719-001-01 TO 719-001-04

PRECONSTRUCTION SUPPORT ENGINEER

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

SIGNATURE

MARCH 2, 2009
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	3/2009	DSO	GENERAL REVISIONS
0	01-03-03	DSO	GENERAL REVISIONS

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

STANDARD DRAWING

CATCH BASIN TYPE 1 DETAILS

719-001-01

EFFECTIVE LETTING DATE | MAY 2009

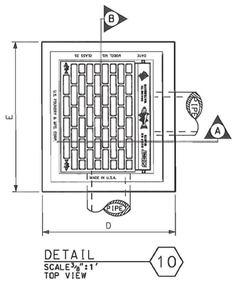


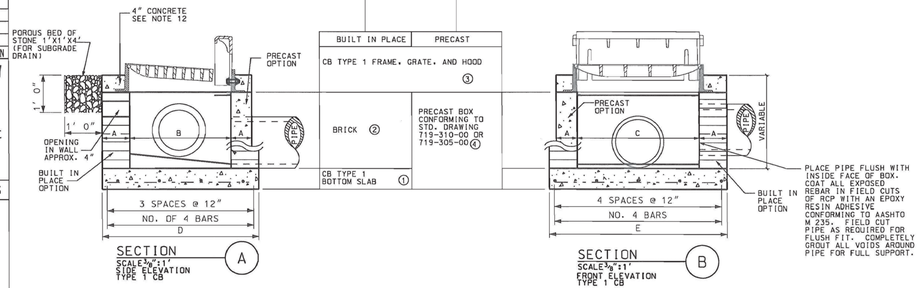
TABLE 719-001A		
DIMENSION	BUILT IN PLACE OPTION	PRECAST OPTION
A	8"	6"
B	2'-6"	2'-6"
C	3'-0"	3'-0"
D	3'-10"	3'-6"
E	4'-4"	4'-0"

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

SEE QUALIFIED PRODUCT LIST 14 FOR MANUFACTURERS OF PRECAST ITEMS.

BUILT IN PLACE	①	CB TYPE 1 BOTTOM SLAB (PC OR CIP 46"X52"X6")
	②	BRICK WALLS (8" THICK) (MAXIMUM 12' DEPTH)
	③	CB TYPE 1 FRAME, GRATE, AND HOOD
PRECAST	④	PRECAST BOX CONFORMING TO STD. DRAWING 719-310-00 OR 719-305-00
	⑤	CB TYPE 1 FRAME, GRATE, AND HOOD

PRECAST ITEMS
TYPE CB 1 BOTTOM SLAB (46"x52"x6")
SEE ALSO STD. DRAWING 719-310-00, 719-305-00, & 719-315-00



GENERAL NOTES:

1. FOR BUILT IN PLACE CONSTRUCTION OF THE CATCH BASIN, 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 OF 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-II. 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 MAY BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQUARE INCHES PER FOOT IS 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 221.

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 THE 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. IF BOTTOM SLAB IS CAST IN PLACE WITH PIPES INSTALLED, BOTTOM SLAB THICKNESS MUST BE ACHIEVED BEYOND PIPE OUTSIDE DIAMETER.

9. THE CONTRACT UNIT PRICE FOR CATCH BASINS 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).

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

11. (a) STEEL GRATES AND FRAME MAY BE USED IN LIEU OF CAST IRON AS LONG AS THE LOADING (NOTE 11d) 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.

12. AFTER THE FRAME AND HOOD ARE SET, THE FINAL 4" OF CLASS 3000 CONCRETE IS TO BE POURED FLUSH WITH THE OUTSIDE EDGE OF THE CATCH BASIN ON ALL SIDES. PROVIDE PROTECTION FOR BOLTS AND NUTS AT FRAME ADJUSTMENT SLOTS. BOLTS AND NUTS SHALL MEET ASTM A-307 AND WILL BE GALVANIZED ACCORDING TO AASHTO M 232.

13. GRATE OPENINGS EXCEED ½" AND ARE NOT SUITABLE FOR PEDESTRIAN TRAFFIC.

14. ALL MANUFACTURING PROCESS FOR THE FRAME, GRATE, AND HOOD MUST OCCUR IN THE UNITED STATES.

15. 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.

16. ADDITIONAL MATERIAL AND LABOR TO CONSTRUCT FLARED GUTTER TO BE INCLUDED IN THE PAY ITEM CATCH BASIN TYPE 1.

PRECAST NOTES:

17. SUPPLY PRECAST CONCRETE COMPONENTS FOR DRAINAGE ITEMS AT EACH LOCATION FROM A SINGLE SOURCE PRECAST MANUFACTURER THAT HAS BEEN INSPECTED AND APPROVED BY THE MATERIALS AND RESEARCH ENGINEER. SUPPLY ALL INTERCHANGEABLE PRECAST PARTS ON ENTIRE PROJECT FROM A SINGLE SOURCE MANUFACTURER LISTED ON QUALIFIED PRODUCT LIST 14 UNLESS APPROVED BY RCE. ITEMS FROM MULTIPLE MANUFACTURERS SHOULD NOT BE INSTALLED IN INDIVIDUAL LOCATIONS.

18. 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.

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

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

21. PRECAST MANUFACTURER SHALL FOLLOW QUALIFIED PRODUCT POLICY 14.

22. 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.

23. JOINTS BETWEEN INSTALLED PIECES AND PRECAST ITEMS TO BE PLACED SHALL BE SEALED WITH A ½" GROUT LIFT OR AN APPROPRIATE PLASTIC PREFORMED GASKET (FROM QUALIFIED PRODUCT LIST 13.)

PRECAST INSTALLATION NOTES:

24. 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.

25. PLACE AND LEVEL PRECAST BOX.

26. PIPES SHALL BE INSTALLED AND GROUTED IN PLACE.

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

28. 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 WILL BE PAID FOR BY THE CONTRACTOR AND MAY NOT BE CHARGED TO SCDOT.

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 WITH 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:
CATCH BASIN TYPE 1 _____ EA

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910
2

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL
NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:37:40 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634
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CHECKED BY:	IEG

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER

C05.05

REFERENCES

NATIONAL DOCUMENTS

AASHTO M 235

SCDOT DOCUMENTS

QUALIFIED PRODUCT LIST 14

RELATED DRAWINGS & KEYWORDS

719-505-01, 719-505-03, 719-420-00

PRECONSTRUCTION SUPPORT ENGINEER

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

SIGNATURE

MARCH 3, 2009

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
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2			
1	3/2009	DSO	GENERAL REVISIONS
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

DRAINAGE ACCESS MANHOLE HEAVY DUTY DRAINAGE STRUCTURE

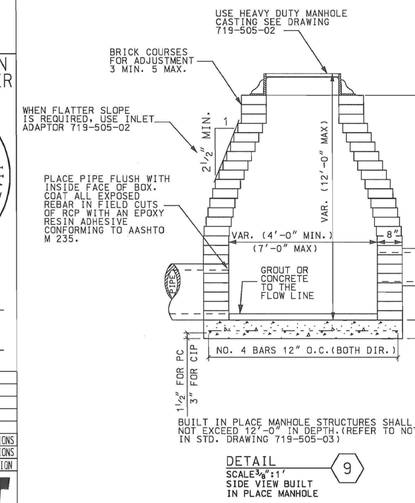
719-505-01

EFFECTIVE LETTING DATE | MAY 2009

SEE QUALIFIED PRODUCT LIST 14 FOR MANUFACTURERS OF PRECAST ITEMS.

BUILT IN PLACE
① BOTTOM SLAB (CIP VARIABLE OR PC 100" DIA.X 6")
AND
② BRICK WALLS (8") (MAX 12' DEPTH)

PRECAST
③ 48" DIA. CIRCULAR DRAINAGE BASE (CONFORMING TO STD. DRAWING 719-420-00)
AND
④ 48" DIA. CIRCULAR RISER (CONFORMING TO STD. DRAWING 719-420-00)
AND
⑤ MANHOLE PC ECCENTRIC CONE

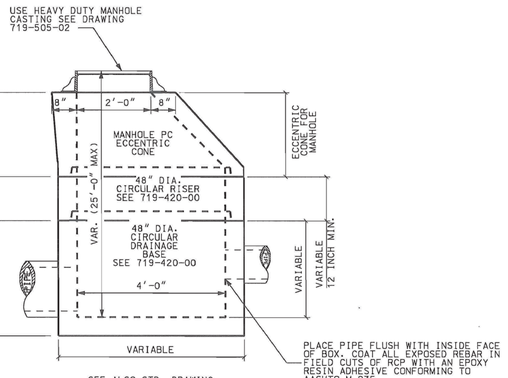


BUILT IN PLACE OPTION	PRECAST OPTION
	⑤ ECCENTRIC CONE
② BRICK	④ 48" DIA. PC CIRCULAR RISER (IF NEEDED)
	③ 48" DIA. PC CIRCULAR DRAINAGE BASE
① MANHOLE BOTTOM SLAB	

BUILT IN PLACE MANHOLE STRUCTURES SHALL NOT EXCEED 12'-0" IN DEPTH.(REFER TO NOTE 8 IN STD. DRAWING 719-505-03)

DETAIL 9
SCALE ¾"=1'
SIDE VIEW BUILT IN PLACE MANHOLE

FOR NOTES AND MANHOLE FRAME AND COVER DETAILS SEE STD. DRAWINGS 719-505-03 AND 719-505-04



SEE ALSO STD. DRAWING 719-420-00 FOR CIRCULAR DRAINAGE STRUCTURES

DETAIL 10
SCALE ⅜"=1'
SIDE VIEW
PRECAST MANHOLE WITH ECCENTRIC CONE

TABLE 719-505A PRECAST ITEMS

MANHOLE PC BOTTOM SLAB (100" DIA. X 6")
MANHOLE PC ECCENTRIC CONE
SEE ALSO 719-505-03 & 719-420-00

bdg architects

550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202

P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
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INFINITY

INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
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SEAL NISIT SAPPARKHAO, P.E.
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INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:37:58 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

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CHECKED BY:	IEG

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SCDOT DETAILS

SHEET NUMBER

C05.06

REFERENCES

NATIONAL DOCUMENTS

ASTM C55, ASTM A706, AASHTO M55
AASHTO M221, AASHTO M105, AASHTO M306

SCDOT DOCUMENTS

QUALIFIED PRODUCT LIST 14,
QUALITIFED PRODUCT LIST 13

RELATED DRAWINGS & KEYWORDS

719-420-00, 719-550-00

PRECONSTRUCTION SUPPORT ENGINEER

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

SIGNATURE

MARCH 2, 2009
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
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2			
1	3/2009	DSO	GENERAL REVISIONS
0	3/2008	DSO	GENERAL REVISIONS

SCDOT

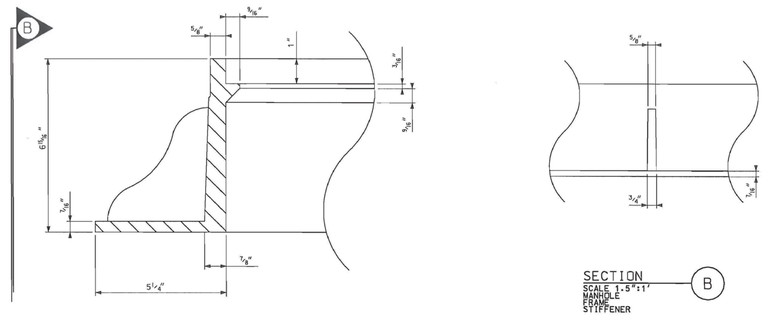
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

DRAINAGE ACCESS MANHOLE HEAVY DUTY CASTING

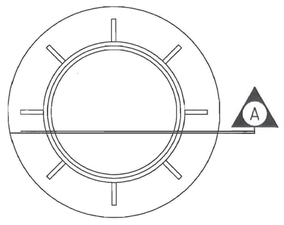
719-505-03

EFFECTIVE LETTING DATE | MAY, 2009

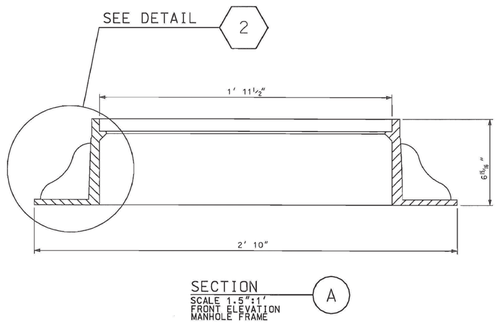


DETAIL 2
SCALE 3"=1'
MANHOLE
FRAME DETAIL

SECTION B
SCALE 1.5"=1'
MANHOLE
FRAME
STIFFENER



DETAIL 1
SCALE 3/4"=1'
PLAN VIEW
MANHOLE
FRAME



SECTION A
SCALE 1.5"=1'
FRONT ELEVATION
MANHOLE FRAME

NOTES:

1. FOR BUILT IN PLACE CONSTRUCTION OF THE MANHOLE, EITHER BRICK MASONRY (WALLS ONLY) OR CLASS 3000 CONCRETE MAY BE USED. FOR PRECAST CONSTRUCTION, A MINIMUM OF CLASS 4000P CONCRETE SHALL BE USED (SEE STD. DRAWING 719-420-00).

2. BRICK WALLS ARE TO BE 8" THICK. CONCRETE BRICK AND SIMILAR SOLID UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 55, GRADE S-II.

3. CORBELLING (RACKING) OF BRICK MASONRY FOR MANHOLES SHALL BE AT A MIN. RATE OF 2:5:1.

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

5. MORTAR SHALL BE TYPE S OR M.

6. 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 221.

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

8. 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 THE DRAINAGE BOX BOTTOM SLAB TO THE TOP OF THE GROUND EXCEEDS 12'-0".

9. 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. IF BOTTOM SLAB IS CAST IN PLACE WITH PIPES INSTALLED, BOTTOM SLAB THICKNESS MUST BE ACHIEVED BEYOND PIPE OUTSIDE DIAMETER.

10. FOR CONCENTRIC AND ECCENTRIC CONES REFER TO STD. DRAWINGS 719-420-00.

11. CASTINGS SHALL CONFORM TO AASHTO M 105, CLASS 35 B. CASTING SHALL MEET LOAD TEST OF AASHTO M 306.

12. CASTINGS SHALL BE MANUFACTURED SO AS TO PREVENT THE COVER FROM RATTLING UNDER TRAFFIC.

13. ONLY ONE VENT HOLE (1" DIA.) SHALL BE MANUFACTURED IN COVER WITH 2 PICK HOLES (MAX 1" DIA.).

14. ALTERNATE COVER FACES THAT MEET THE ABOVE SPECIFICATION ARE ACCEPTABLE. MANHOLE SHALL BE LINED UP WITH THE INTERIOR OF THE BOX AS SHOWN.

15. ALL MANUFACTURING PROCESSES FOR THE MANHOLE COVER AND RING MUST OCCUR IN THE UNITED STATES.

16. THE CONTRACT UNIT PRICE FOR MANHOLES 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 IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

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 STRUCTURE FOR ADDITIONAL DETAILS AND SPECIFICATIONS.

18. LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. 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 LISTED ON QUALIFIED PRODUCT LIST 14 FOR PRECAST ITEMS ON THIS DRAWING.

20. PRECAST MANUFACTURER MUST MEET ALL OTHER REQUIREMENTS OF QUALIFIED PRODUCT POLICY 14.

21. PRECAST ITEMS MODIFIED FROM THIS STANDARD SHALL NOT BE LISTED ON QUALIFIED PRODUCT LIST 14. HOWEVER, CONTRACTION MAY SUBMIT DESIGN DRAWINGS AND CALCULATIONS TO THE ENGINEER OF RECORD FOR REVIEW.

22. JOINTS BETWEEN INSTALLED PIECES AND PRECAST ITEMS TO BE PLACED SHALL BE SEALED WITH A ½" 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 TOP ELEVATION.

24. PLACE AND LEVEL PRECAST CIRCULAR DRAINAGE STRUCTURE.

25. PIPES SHALL BE INSTALLED AND GROUTED IN PLACE.

26. PIPES AND CIRCULAR DRAINAGE STRUCTURE SHALL BE BACKFILLED AND COMPACTED AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS (LATEST EDITION).

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. 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 WITH 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.

29. THE PAY ITEM SHALL BE:
MANHOLE_____EA

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
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SEAL NISIT SAPPARKHAO, P.E.
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SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:38:17 -04'00'
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PROJECT INFORMATION BLOCK

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CHECKED BY:	IEG

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER

C05.07

REFERENCES

NATIONAL DOCUMENTS

AASHTO M199, AASHTO M55, AASHTO M, ASTM A706

SCDOT DOCUMENTS

SECTION 718 SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, QUALIFIED PRODUCT LIST 14

RELATED DRAWINGS & KEYWORDS

719-550-00, 719-425-00

PRECONSTRUCTION SUPPORT ENGINEER

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

SIGNATURE

MARCH 2, 2009
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
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1	3/2009	KNB	REVISED TABLE B
0	3/2008	DSO	GENERAL REVISIONS

SCDOT

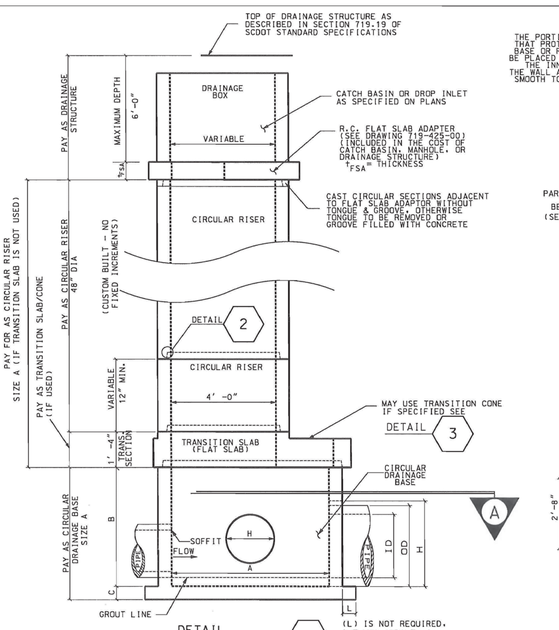
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

DRAINAGE SUBSTRUCTURE CIRCULAR DRAINAGE BASE AND RISER

719-420-00

EFFECTIVE LETTING DATE | MAY, 2009



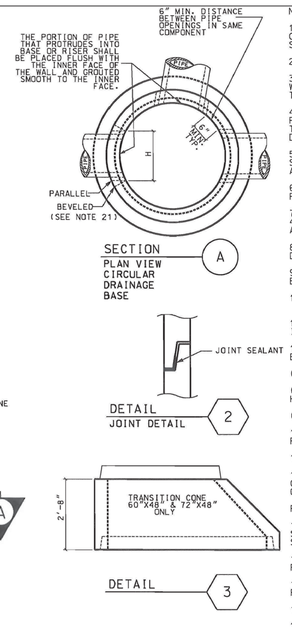
DETAIL
CIRCULAR DRAINAGE STRUCTURE WITH TRANSITION SLAB, RISERS, AND CATCH BASIN
1

(L) IS NOT REQUIRED, BUT MAY VARY TO A MAXIMUM SHOWN IN TABLE 719-420B

TABLE 719-420B

RCP INSIDE DIA. (ID)	MAX. OUTSIDE DIA. (OD)	MINIMUM OPENING (H)	MINIMUM REQUIRED DRAINAGE BASE DIA. (A)	DRAINAGE BASE (PAY HEIGHT) (##B)	BOTTOM THICKNESS (C)	(L) MAX
15"	21"	24"	48"	48"	6"	6"
18"	24½"	28"	48"	48"	6"	6"
24"	31½"	34"	48"	48"	6"	6"
30"	38½"	42"	60"	60"	8"	8"
36"	45½"	49"	60"	60"	8"	8"
42"	52½"	56"	72"	72"	8"	8"
48"	59½"	64"	72"	72"	8"	8"
54"	66½"	71"	84"	80"	8"	8"
60"	73½"	78"	96"	88"	8"	8"
66"	80½"	85"	120"	96"	10"	10"
72"	87½"	92"	120"	96"	10"	10"

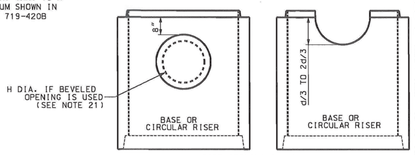
THE ADDITIONAL HEIGHT OF BASE ABOVE "BASE PAY HEIGHT" WILL BE PAID AS RISER OF THE APPROPRIATE DIAMETER



SECTION A
PLAN VIEW CIRCULAR DRAINAGE BASE

DETAIL 2
JOINT DETAIL

DETAIL 3



PIPE OPENING IN CIRCULAR DRAINAGE STRUCTURE MUST BE A MINIMUM OF 8" FROM TOP OF BOX UNLESS TOP OF THE CIRCULAR DRAINAGE STRUCTURE IS IN THE MIDDLE OF PIPE THIRD.

DETAIL
PIPE PLACEMENT
4

TABLE 719-420A PRECAST ITEMS

(A)	DRAINAGE BASE	CIRCULAR RISER	TRANSITION SLAB	TRANSITION CONE
48"	48" DIA. CIRCULAR DRAINAGE BASE	48" DIA. CIRCULAR RISER		
60"	60" DIA. CIRCULAR DRAINAGE BASE	60" DIA. CIRCULAR RISER	60" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB	60" DIA. TO 48" DIA. CIRCULAR TRANSITION CONE
72"	72" DIA. CIRCULAR DRAINAGE BASE	72" DIA. CIRCULAR RISER	72" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB	72" DIA. TO 48" DIA. CIRCULAR TRANSITION CONE
84"	84" DIA. CIRCULAR DRAINAGE BASE	84" DIA. CIRCULAR RISER	84" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB	
96"	96" DIA. CIRCULAR DRAINAGE BASE	96" DIA. CIRCULAR RISER	96" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB	
120"	120" DIA. CIRCULAR DRAINAGE BASE	120" DIA. CIRCULAR RISER	120" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB	

THIS DRAWING IS NOT TO SCALE

NOTES:

1. ALL MATERIALS, DESIGN, MANUFACTURING, TESTING AND PRODUCT PERFORMANCE FOR PRECAST CONCRETE COMPONENTS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH AASHTO M 199 AND SECTION 719 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

2. PRECAST CONSTRUCTION SHALL USE A MINIMUM OF CLASS 4000P CONCRETE.

3. BASE SECTIONS SHALL HAVE A BOTTOM POURED MONOLITHICALLY WITH THE WALL OR A SCDOT APPROVED WATER-STOP CAST INTO THE BOTTOM FOR THE JOINT TO THE WALL. PIPE MAY EXTEND INTO THE FLOOR TO THE BASE A MAXIMUM OF TWO INCHES.

4. TRANSITION SLAB AND CONE SECTIONS SHALL PROVIDE FOR TRANSITION TO NO LESS THAN 48" DIAMETER RISERS OR TOP CONES WITH A JOINT EQUAL TO THAT OF A RISER SECTION. THE MINIMUM SLOPE ANGLE FOR TRANSITION CONE WALLS SHALL BE 45 DEGREES. TRANSITION SLABS AND CONE SECTIONS SHALL BE DESIGNED TO MEET A HS 20 LIVE LOAD.

5. JOINTS SHALL BE TONGUE AND GROOVE. JOINT SEALANT SHALL MEET THE REQUIREMENTS OF SUPPLEMENTAL TECHNICAL SPECIFICATION SC-M-714. SIZE AND AMOUNT OF SEALANT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. 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.

7. SEE STANDARD DRAWING 719-550-00 FOR STEPS, WHICH ARE REQUIRED WHEN STRUCTURE DEPTH EXCEEDS 4'-6". STEPS SHALL BE ALIGNED IN ALL SECTIONS TO FORM A CONTINUOUS LADDER. STEPS SHALL BE ALIGNED WITH OPENING IN TOP OR FLAT SLAB ADAPTER SO AS TO PROVIDE REASONABLE ACCESS.

8. LOCATION AND SIZE OF PIPES ARE SITE SPECIFIC. (SEE DRAINAGE PLANS). THE BOTTOM OF THE DRAINAGE BASE IS TO BE GROUTED TO THE LOWEST FLOW LINE ELEVATION OF ALL PIPES.

9. AFTER PIPE IS SET INTO THE DRAINAGE STRUCTURE, THE REMAINING OPENING AROUND THE PIPE MUST BE SEALED WITH BRICK AND MORTAR OR CONCRETE FOR THE FULL WALL THICKNESS OF THE STRUCTURE.

10. USE TYPE M MORTAR IN ACCORDANCE WITH SECTION 718 OF THE SCDOT STANDARD SPECIFICATION.

11. SEE DRAWINGS IN SECTION 719 OF THE STANDARD DRAWINGS FOR DETAILS ON CATCH BASINS, DROP INLETS, AND MANHOLES.

12. PRECAST CONCRETE STRUCTURES ARE REQUIRED FOR THE FOLLOWING APPLICATIONS UNLESS PROHIBITED BY THE PLANS OR SPECIAL PROVISIONS.

(a) ON DRAINAGE STRUCTURES WITH 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.

13. PRECAST CONCRETE STRUCTURES MAY BE USED ON ANY OTHER APPLICATION UNLESS PROHIBITED BY THE PLANS OR SPECIAL PROVISIONS.

14. SEE STANDARD DRAWING 719-425-00 FOR DETAILS OF THE FLAT SLAB ADAPTER.

15. SCDOT REQUIRES CONTRACTOR/MANUFACTURER TO PROVIDE SHOP DRAWINGS TO THE RESIDENT CONSTRUCTION ENGINEER PRIOR TO MANUFACTURE. THE MANUFACTURER IS RESPONSIBLE FOR CONFIGURATION OF THE PRECAST CONCRETE CIRCULAR DRAINAGE STRUCTURE IN ACCORDANCE WITH THIS STANDARD DRAWING.

PRECAST NOTES:

16. 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.

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

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

19. PRECAST MANUFACTURER SHALL MEET ALL REQUIREMENTS OF QUALIFIED PRODUCT POLICY 14.

20. 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.

PRECAST INSTALLATION NOTES:

21. H DIMENSION FOR HOLE OPENING IS MEASURED FROM THE INSIDE FACE OF THE DRAINAGE STRUCTURE AS SHOWN IN SECTION A. FOR BEVELED OPENINGS, 8" DIMENSION SHOWN IN DETAIL 4 IS MEASURED FROM THE LARGEST HOLE DIMENSION ON THE OUTSIDE FACE OF THE DRAINAGE STRUCTURE.

22. 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.

23. PLACE AND LEVEL PRECAST DRAINAGE STRUCTURE.

24. PIPES SHALL BE INSTALLED AND GROUTED IN PLACE.

25. PIPES AND DRAINAGE STRUCTURE SHALL BE BACKFILLED AND COMPACTED AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS.

PAYMENT:

26. THE COST OF THE FLAT SLAB ADAPTER SHALL BE INCLUDED IN THE BID PRICE OF THE INLET STRUCTURE CATCH BASIN, DROP INLET, OR MANHOLE.

27. THE CONTRACT UNIT PRICE FOR PRECAST COMPONENTS 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, IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

28. IF PRECAST CONCRETE CIRCULAR DRAINAGE STRUCTURES ARE USED TO CONSTRUCT CATCH BASINS, DROP INLETS, JUNCTION BOXES OR MANHOLES, THEN EXTRA DEPTH OF BOX WILL NOT BE MEASURED AND PAID FOR.

29. THE PAY ITEM SHALL BE:

PRECAST CONCRETE DRAINAGE BASE-__"DIA. _____EACH
PRECAST CONCRETE RISER-___"DIA. _____L.F.
PRECAST CONCRETE TRANSITION SECTION-"FLAT SLAB(__"TO __")_____EACH
PRECAST CONCRETE TRANSITION SECTION-CONE(__"TO__")_____EACH
CATCH BASIN, DROP INLET, MANHOLE (AS SPECIFIED)_____EACH

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573
IEG JOB NO. 15-360.00

SEAL
NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:38:38 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER

C05.08

NOTES:

1) OWNER'S GENERAL CONTRACTOR TO PROVIDE OSHA APPROVED TRENCH FROM UNDERSIDE OF OPERATORS AREA TO CUSTOMER UNIT ISLANDS. ACTUAL ROUTING OF TRENCH TO BE DETERMINED BY THE OWNER'S GENERAL CONTRACTOR. DEPTH OF TRENCH MAY VARY TO AVOID OBSTRUCTIONS BUT MUST NOT BE LESS THAN THE MINIMUM AS SHOWN IN THE DETAIL SECTION

2) BEFORE PNEUMATIC TUBES ARE INSTALLED; OWNER'S GENERAL CONTRACTOR TO CONSTRUCT ISLAND TEMPLATE SUPPORT SYSTEM, SET TEMPLATES IN PROPER RELATIONSHIP TO THE BUILDING AND SET TOP OF TEMPLATE LEVEL TO TOP OF ISLAND (STEEL TEMPLATE PROVIDED BY HAMILTON).

3) ELECTRICAL CONDUIT, LOW VOLTAGE CONTROL AND AUDIO CABLE CONDUIT AND OPTIONAL TELL-R-TV CONDUIT TO BE BURIED ABOVE THE PNEUMATIC TUBES AND MUST NOT INTERFERE WITH THE PNEUMATIC TUBES. (ALL BY OWNER'S ELECTRICAL CONTRACTOR)

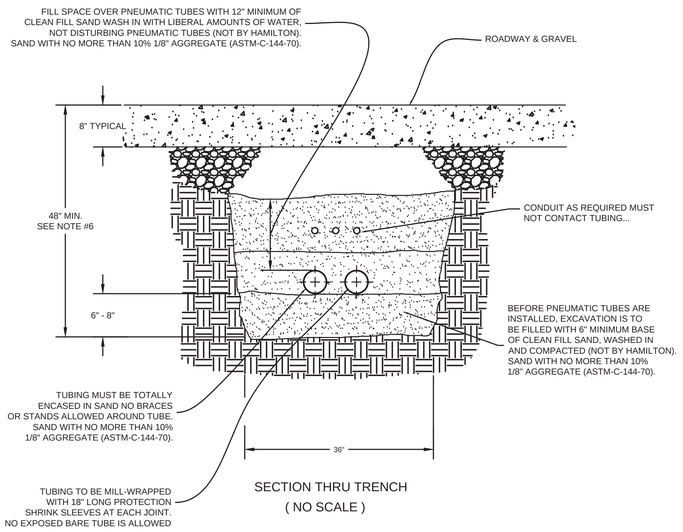
4) BEFORE CONDUIT IS INSTALLED, COVER PNEUMATIC TUBE WITH 3" TO 4" OF CLEAN FILL SAND (NOT BY HAMILTON). SAND WITH NO MORE THAN 10% 1/8" AGGREGATE (ASTM-C-144-70).

5) BEFORE PNEUMATIC TUBES ARE INSTALLED, EXCAVATION IS TO BE FILLED WITH 6" TO 8" MINIMUM BASE OF CLEAN FILL SAND, WASHED IN AND COMPACTED (NOT BY HAMILTON). SAND WITH NO MORE THAN 10% 1/8" AGGREGATE (ASTM-C-144-70).

6) 48" MINIMUM TRENCH DEPTH USING 30" RADIUS BENDS. ACTUAL DEPTH DETERMINED BY ARCHITECT BASED ON JOB SITE, SOIL, FROST LINE, CODE, ETC. ALWAYS LOCATE TUBES BELOW FROST LINE.

7) THE FOLLOWING NOT FURNISHED BY HAMILTON: CANOPY, SUPPORTS, ISLANDS, CONDUIT, HOLE OPENINGS, GUARD POST, SAND FILL, CHIPPING AND EXCAVATION. ALL FINISH BY OWNER'S GENERAL CONTRACTOR

8) THE OWNERS GENERAL CONTRACTOR IS TO SIGN BELOW BEFORE TUBING IS COVERED TO SHOW PRESSURE TEST WAS PERFORMED ONLY, NOT TO VERIFY TEST RESULTS.



SECTION THRU TRENCH
(NO SCALE)

TUBE PRESSURE TEST PROCEDURES:

1)____ PRESSURE TEST TUBES BEFORE THEY ARE COVERED

2)____ PRESSURE TEST TUBES AT 5 P.S.I. FOR 1 HOUR WITHOUT LEAKAGE

3)____ PULL OR BLOW A CARRIER THROUGH THE TUBING

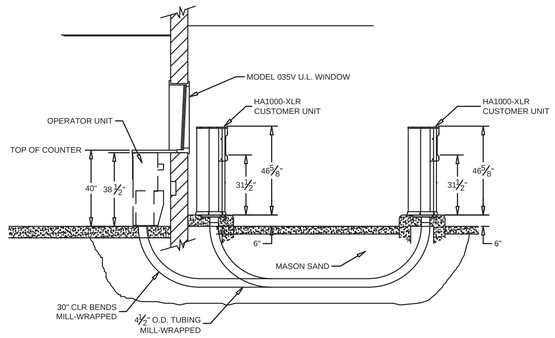
SIGNATURE: (OWNERS GENERAL CONTRACTOR TO SIGN TEST WAS PERFORMED)

REV.-1	DATE: 4/29/04	CHANGED DIMENSIONS & NOTES....
REV.-2	DATE: 10/11/10	Added Specs to Sand used around tubes
REV.-3	DATE: 11/8/10	Added Notes #1 - #8

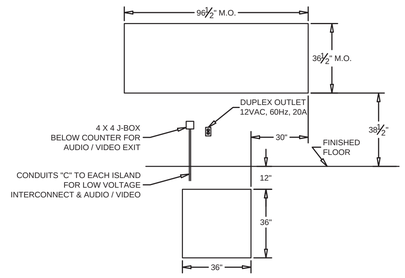
HAMILTON AIR.

TYPICAL CROSS SECTION OF DIRECT BURIAL TUBING AND ELECTRICAL CONDUITS

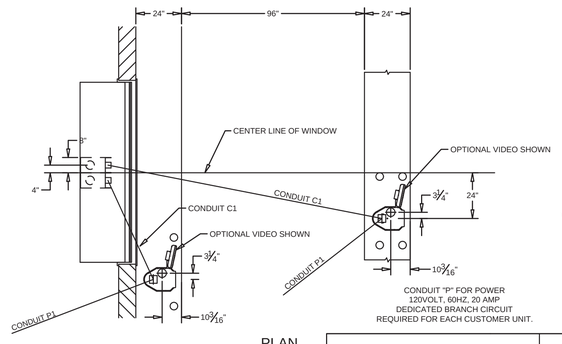
Drawing Number : 99-803 | Date : 10/10/01



SECTION



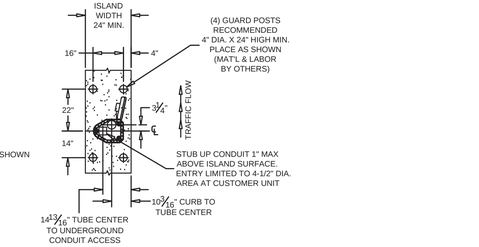
MASONRY DETAIL
(FOR MODEL 038V U.L. WINDOW)



PLAN

NOTE: CONDUIT "P" TO BUILDING POWER PANEL
CONDUIT "C" TO JUNCTION BOX BELOW COUNTER AND EXTENDED ABOVE CEILING TO TELLER AREA

CONDUIT "P" FOR POWER 120VOLT, 60HZ, 20 AMP DEDICATED BRANCH CIRCUIT REQUIRED FOR EACH CUSTOMER UNIT.



ISLAND DETAIL

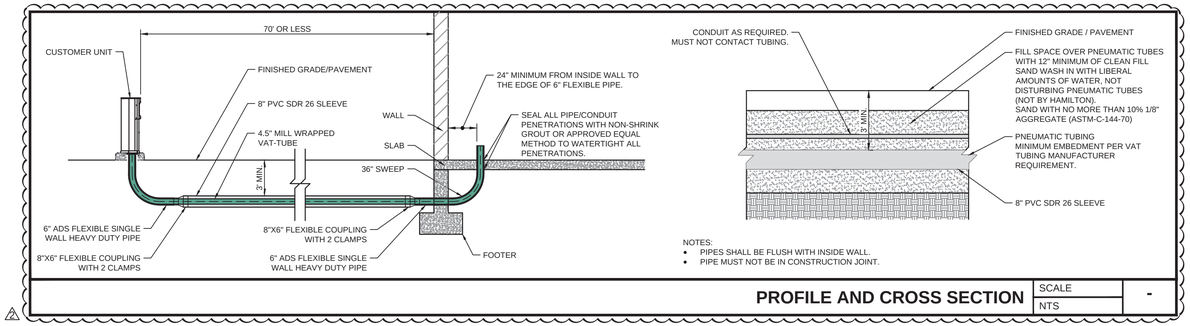
ADDITIONAL DRAWINGS TO REFERENCE:
95-701, 99-349, & 99-1160

est. 1967
HAMILTON
CUSTOM MADE SECURITY

PROPRIETARY AND CONFIDENTIAL
THESE DRAWINGS ARE THE PROPERTY OF HAMILTON SAFE CO. AND SHALL NOT BE REPRODUCED,COPIED,USED AS THE BASIS FOR MANUFACTURE OR SALE OF APPARATUS WITHOUT PERMISSION

DESCRIPTION
PNEUMATIC TUBE SYSTEMS
MODEL HA1000-XLRD
'202' SYSTEM - UNDERGROUND TUBING

DRAWING/MODEL NUMBER 99-1164 | DATE 10/8/2021



NOTES:
- PIPES SHALL BE FLUSH WITH INSIDE WALL.
- PIPE MUST NOT BE IN CONSTRUCTION JOINT.

PROFILE AND CROSS SECTION | SCALE NTS | -

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

bdg architects
550 S. Caldwell Street Suite 1800 Charlotte, NC 28202
P: 704.981.8951 Lic. #: AA - 0003590 www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard Suite 230 Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:38:57 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

UNDERGROUND VAT TUBE DETAILS

SHEET NUMBER

C05.09

OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:

FIFTH THIRD - MAY RIVER CROSSING

PROPERTY OWNER:

FIRST CHATHAM BANK
111 BARNARD STREET
SAVANNAH, GEORGIA 31401

SITE ADDRESS:

2500 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

DESCRIPTION:

CONSTRUCT NEW BUILDING AND PARKING LOT.
MODIFY EXISTING SMS AS REQUIRED TO ACCOMMODATE IMPROVEMENTS PER AUTHORITIES WITH JURISDICTION.

SOIL DISTURBING ACTIVITIES WILL INCLUDE: RE-GRADING, CONSTRUCTION OF FACILITY.

SOILS:

SEE SOIL REPORT

SITE MAPS:

* SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORMWATER DISCHARGE POINTS.

* SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS

* SEE GENERAL NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

NAME OF RECEIVING WATERS:

EXISTING INLETS

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORMWATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORMWATER MANAGEMENT

STORMWATER DRAINAGE WILL BE PROVIDED BY (DESCRIPTION:)

MODIFIED COLLECTION, CONVEYANCE, TREATMENT & ATTENUATION SYSTEM FOR THE PROJECT. AREAS WHICH ARE NOT TO BE CONSTRUCTED ON, BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE, WHEN CONSTRUCTION IS COMPLETE. THE SITE DISCHARGES TO AN UNDERGROUND DETENTION SYSTEM. WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN. THE DRY DETENTION SYSTEM IS DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THIS TYPE OF DEVELOPMENT AT THE TIME IT WAS CONSTRUCTED.

TIMING OF CONTROLS/MEASURES

REFER TO " CONTRACTORS RESPONSIBILITY" FOR THE TIMING OF CONTROL/MEASURES.

CONTRACTOR'S REQUIREMENTS

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND HAY BALES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
4. CONSTRUCT SEDIMENTATION BASIN
5. CONTINUE CLEARING AND GRUBBING
6. STOCK PILE TOP SOIL IF REQUIRED
7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
9. INSTALL STORM SEWER AND IRRIGATION.
10. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
11. REMOVE ACCUMULATED SEDIMENT FROM BASINS
12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

STABILIZATION PRACTICES EROSION AND SEDIMENT CONTROLS

1. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2. ACRES.
3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.
5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

☐ Concrete	☐ Fertilizers	☐ Wood
☐ Asphalt	☐ Petroleum Based Products	☐ Masonry Blocks
☐ Tar	☐ Cleaning Solvents	☐ Roofing Materials
☐ Detergents	☐ Paints	☐ Metal Studs
☐ _____	☐ _____	☐ _____

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.
2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA. THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION

DIKE:

1. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.
2. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS.
3. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS.
4. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
5. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORMWATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.

* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

MAINTENANCE/INSPECTION PROCEDURES

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.

* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORMWATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING

*PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORMWATER DISCHARGE WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND THAT AUTHORIZES THE STORM CONDITIONS OF THE DEP GENERIC PERMIT WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

RESPONSIBLE FOR/DUTIES	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	SIGNATURE
GENERAL CONTRACTOR		
SUB-CONTRACTOR		
SUB-CONTRACTOR		
SUB-CONTRACTOR		
SUB-CONTRACTOR		

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:39:17 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

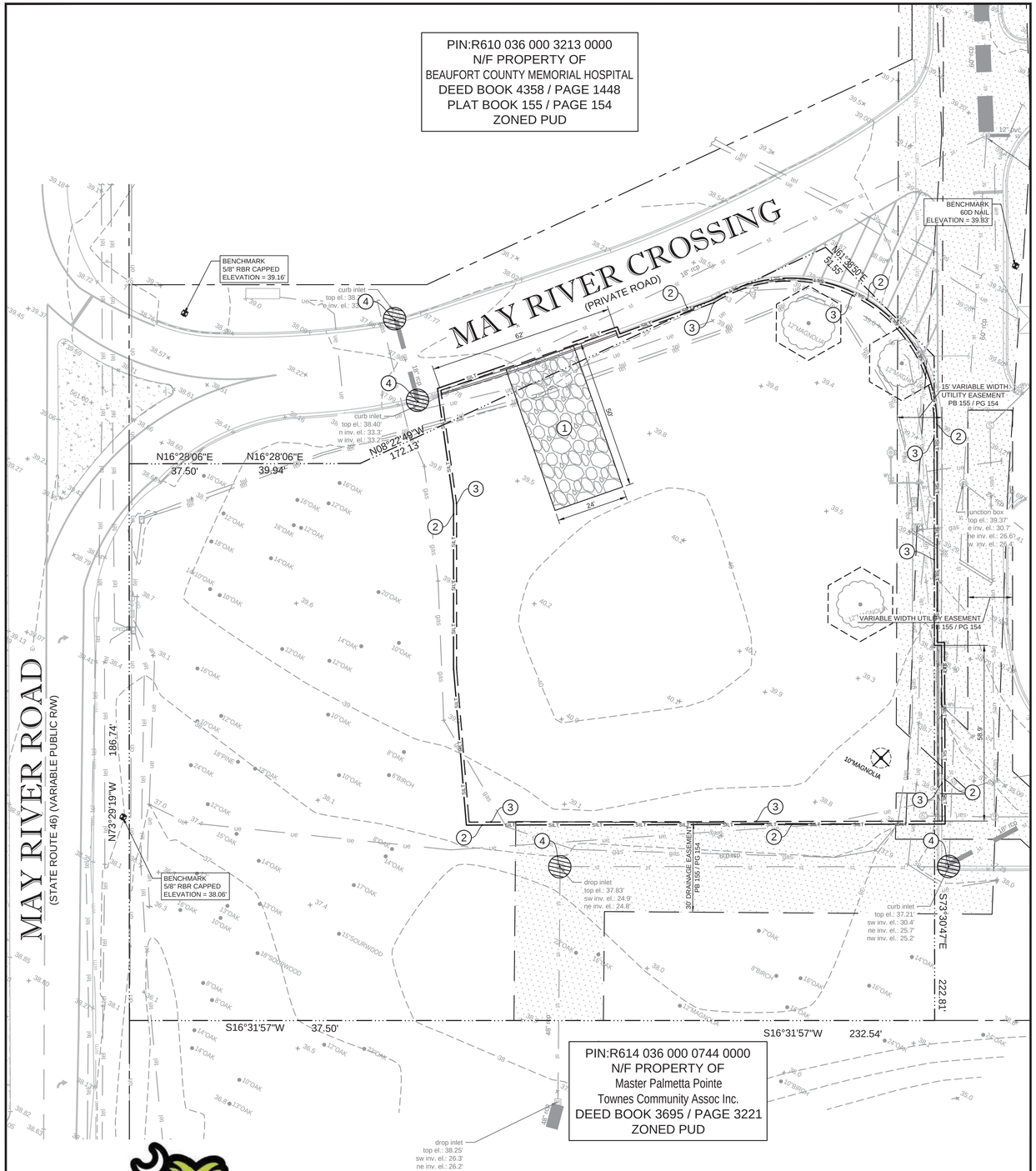
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

SWPPP GENERAL REQUIREMENTS

SHEET NUMBER

C06.01



EROSION CONTROL KEYED NOTES

1	CRUSHED STONE CONSTRUCTION ENTRANCE AND CONCRETE TRUCK WASHOUT AREA
2	SILT FENCE
3	LIMITS OF CONSTRUCTION (0.62 AC)
4	INLET PROTECTION

LEGEND

- PROPERTY LINE
- EXISTING CONCRETE TO REMAIN
- EXISTING TO REMAIN
- SILT FENCE
- LIMITS OF CONSTRUCTION
- INLET PROTECTION
- EXISTING CONTOUR
- EXISTING GRADE ELEVATION

GENERAL NOTES

- ALL MATERIALS INCLUDING FILL STOCKPILES SHALL NOT BE PERMANENTLY LOCATED ON THE UNDEVELOPED AREA OF PROPOSED DEVELOPMENT.
- ALL DISTURBED AREAS OF UNDEVELOPED PROPERTY SHALL BE HYDROMULCHED WITH SEED TO ESTABLISH TURN AND PREVENT SILT RUNOFF INTO THE STREETS.

PLAN VIEW — SCALE: AS NOTED — -

SCALE: 0' 20' 40' 60'

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING

2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4270
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL — NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

INFINITY ENGINEERING GROUP, LLC
SOUTH CAROLINA
CERTIFICATE OF AUTHORIZATION
No. 4573

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 29128
NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
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Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

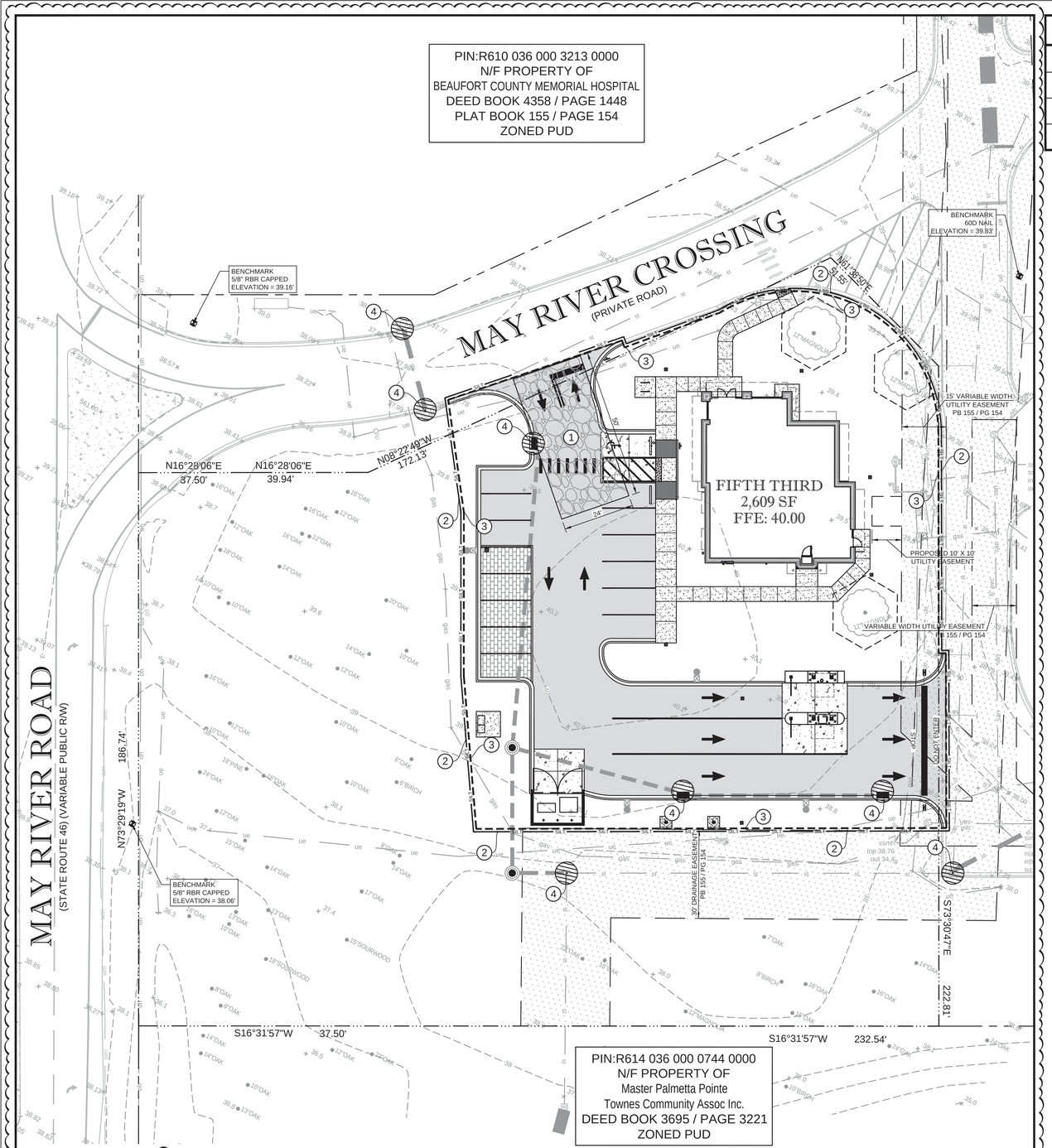
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

EROSION CONTROL PLAN PHASE I

SHEET NUMBER

C06.02



EROSION CONTROL KEYED NOTES

1	CRUSHED STONE CONSTRUCTION ENTRANCE AND CONCRETE TRUCK WASHOUT AREA
2	SILT FENCE
3	LIMITS OF CONSTRUCTION (0.62 AC)
4	INLET PROTECTION

LEGEND

- PROPERTY LINE
- EXISTING CONCRETE TO REMAIN
- EXISTING TO REMAIN
- SILT FENCE
- LIMITS OF CONSTRUCTION
- INLET PROTECTION
- EXISTING CONTOUR
- EXISTING GRADE ELEVATION

GENERAL NOTES

- ALL MATERIALS INCLUDING FILL STOCKPILES SHALL NOT BE PERMANENTLY LOCATED ON THE UNDEVELOPED AREA OF PROPOSED DEVELOPMENT.
- ALL DISTURBED AREAS OF UNDEVELOPED PROPERTY SHALL BE HYDROMULCHED WITH SEED TO ESTABLISH TURN AND PREVENT SILT RUNOFF INTO THE STREETS.

SC811

PLAN VIEW | SCALE: AS NOTED | -

SCALE: 0' 20' 40' 60'

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
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MAY RIVER CROSSING

2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

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SEAL
NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

INFINITY ENGINEERING GROUP, LLC
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SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 29128
NISIT SAPPARKHAO

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DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:40:03 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
1	DR	05/28/25	DRC ROUND 1
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

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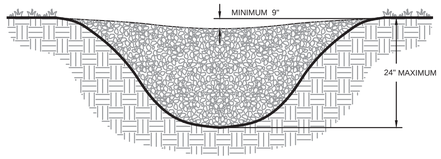
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE

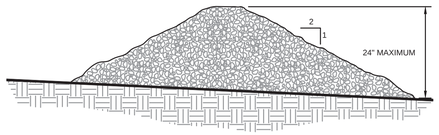
EROSION CONTROL PLAN PHASE II

SHEET NUMBER

C06.03



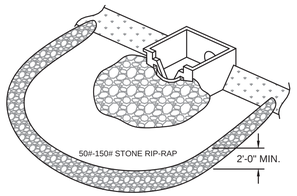
CROSS SECTION



PROFILE VIEW

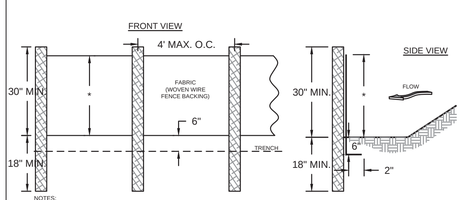
NOTES:
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS)
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

STONE CHECK DAM



A TEMPORARY STONE BARRIER CONSTRUCTED AT STORM DRAIN INLETS AND POND OUTLETS TO REDUCE FLOW VELOCITIES, PREVENT FAILURE OF OTHER SEDIMENT CONTROL DEVICES AND TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING DRAINAGE SYSTEMS.

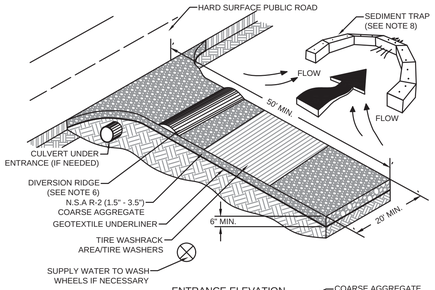
STONE FILTER RING



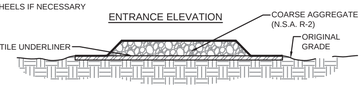
NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
3. DOT ALTERNATIVE

Sd1-S SILT FENCE - TYPE SENSITIVE

EXIT DIAGRAM

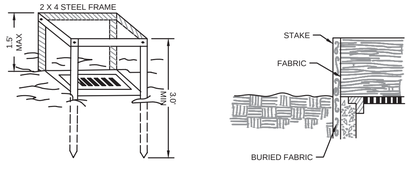


ENTRANCE ELEVATION



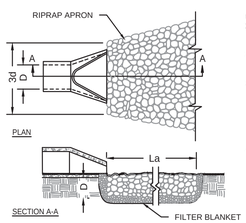
NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CRUSHED STONE CONSTRUCTION EXIT



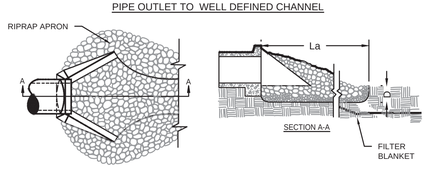
Sd2-F INLET SEDIMENT TRAP-FILTER FABRIC

PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL

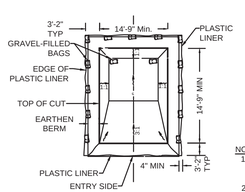


NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6"
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

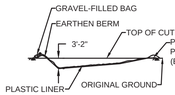
PIPE OUTLET TO WELL DEFINED CHANNEL



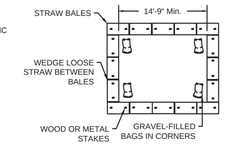
St STORM OUTLET PROTECTION



BELOW GRADE PLAN



SECTION A-A



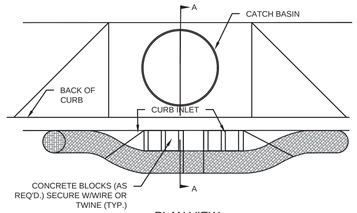
NOTES:
1. STRAW BALES ARE TO BE STACKED 2 HIGH WITH TWO METAL OR WOOD STAKES PER BALE. STAKES ARE TO BE DRIVEN INTO THE GROUND A MINIMUM OF 1 FOOT.
2. PLASTIC LINER TO BE PLACED SO THAT AN EXCESS OF 6 INCHES WILL BE OVER THE OUTSIDE EDGE OF THE BALES.
3. A MINIMUM OF TWO 8"x2"x8" 16 GAUGE STEEL ANCHOR PINS (OR LARGER) ARE TO BE USED PER BALE TO ANCHOR THE PLASTIC LINER IN PLACE.

ON GRADE PLAN

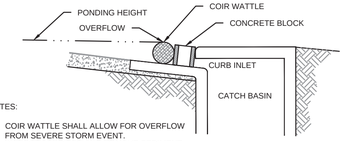
EARTHEN BERM SECTION

NOTES:
1. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.
2. A SUITABLE WASHOUT FACILITY MUST BE PROVIDED FOR THE CLEANING OF CHUTES, MIXERS, AND HOPPERS OF THE DELIVERY VEHICLES UNLESS SUCH A FACILITY WILL BE USED AT THE SOURCE OF THE CONCRETE.UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS.
3. A 4'X2' WHITE SIGN WITH 6" BLACK LETTERS STATING "CONCRETE WASHOUT" IS TO BE PROVIDED SO DRIVERS ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES.
4. WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS. THEY SHOULD BE IN A CONVENIENT LOCATION FOR THE TRUCKS, PREFERABLY NEAR THE PLACE WHERE THE CONCRETE IS BEING POURED, BUT FAR ENOUGH FROM OTHER VEHICULAR TRAFFIC TO MINIMIZE THE POTENTIAL FOR ACCIDENTAL DAMAGE OR SPILLS.
5. THE CONTRACTOR SHALL INSPECT THE WASH DOWN AREA INTERMITTENTLY TO ENSURE PROPER CONTAINMENT IS ACCOMPLISHED.
6. IN THE EVENT OF A SPILL OR LEAK THE CONTRACTOR SHALL IMMEDIATELY REPORT & REMEDIATE SAME IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS.

Cw TEMPORARY CONCRETE WASHOUT FACILITY



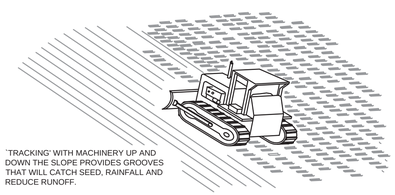
PLAN VIEW



NOTES:
1. COIR WATTLE SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT.
2. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

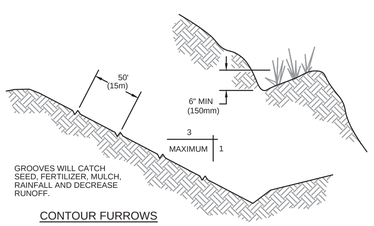
SECTION A - A

Sd2-P CURB INLET SEDIMENT BARRIER (COIR WATTLE)



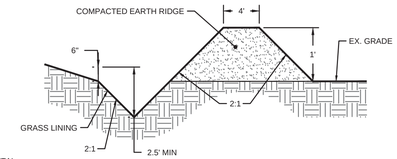
'TRACKING' WITH MACHINERY UP AND DOWN THE SLOPE PROVIDES GROOVES THAT WILL CATCH SEED, RAINFALL AND REDUCE RUNOFF.

TRACKING

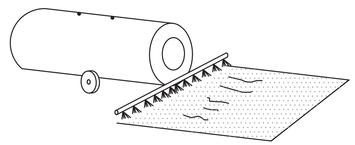


CONTOUR FURROWS

Su SURFACE ROUGHENING



Di DIVERSION



TEMPORARY METHODS
- MULCHES
- TEMPORARY VEGETATIVE COVER
- SPRAY ON ADHESIVES
- TILLAGE
- IRRIGATION
- BARRIERS
- CALCIUM CHLORIDE

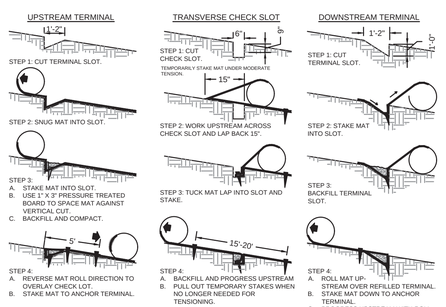
PERMANENT METHODS
- PERMANENT VEGETATION
- TOPSOILING
- STONE COVER

CHEMICAL CONTROL

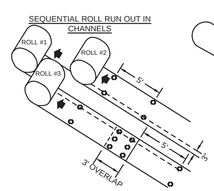
ADHESIVE	WATER DILUTION	TYPE OF NOZZLE	APPLICATION RATE (GAL/AC)
ANIOIC ASPHALT EMULSION	7.1*	SPRAY	1200
LATEX EMULSION	12 1/2:1*	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1*	FINE SPRAY	300

*USE MANUFACTURER'S RECOMMENDATIONS WHEN AVAILABLE

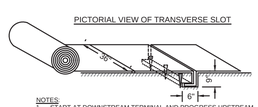
Du DUST CONTROL ON DISTURBED AREAS



SEQUENTIAL ROLL RUN OUT IN CHANNELS



PICTORIAL VIEW OF TRANSVERSE SLOT



NOTES:
1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
5. USE 3' OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.
6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

RECP ROLLED EROSION CONTROL PRODUCT

Ss EROSION BLANKETS & TURF REINFORCEMENT MATS
INSTALL NORTH AMERICAN GREEN SC-150 EROSION BLANKET OR EQUAL U.N.O. INSTALL PER MANUFACTURES SPECIFICATIONS.

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDTIONAL PROTECTION - ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES. ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST MANAGEMENT PRACTICES (BMP) AND MOST CURRENT EROSION AND SEDIMENT CONTROL PRACTICES. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.

PRE-Construction SITE PROTECTION:

8. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
9. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
10. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
11. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD (1/3) THE HEIGHT OF THE BARRIER OR INLET. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
12. ALL DISTURBED AREAS ARE TO BE STABILIZED THROUGH COMPACTION. SILT SCREENS, SYNTHETIC BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.

SITE PROTECTION:

13. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED PROPERLY. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 6 INCHES. BARRIER IS STAKED, THE EXCAVATED SOIL OR GRAVEL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER. USING WIRE BACKING FOR SUPPORT IS DISCOURAGED DUE TO DISPOSAL PROBLEMS.
14. WATER OR SLURRY USED TO CONTROL DUST SHALL BE RETAINED ON THE SITE AND NOT ALLOWED TO RUN DIRECTLY INTO WATERCOURSE OR STORMWATER CONVEYANCE SYSTEMS.
15. SPECIAL AREAS SHALL BE DESIGNATED AS VEHICLE AND EQUIPMENT WASHING AREAS AND SUCH AREAS SHALL NOT ALLOW RUNOFF TO FLOW DIRECTLY INTO WATERCOURSE OR STORMWATER CONVEYANCE SYSTEMS.
16. SILT FENCE BARRIERS ARE NOT TO BE USED WHERE CONCENTRATED FLOWS OF WATER ARE ANTICIPATED SUCH AS DRAINAGE DITCHES. AROUND INLETS OR ABOVE/ BELOW WHERE CULVERTS DISCHARGE.
17. SYNTHETIC BALES, SANDBAGS OR OTHER APPROVED DEVICE FACED WITH FILTER FABRIC SHALL BE USED IN HIGH VOLUME AREAS TO DECREASE THE RUNOFF VELOCITY AND SHALL BE SECURELY ANCHORED.
18. ALL DEVICES INCLUDING SILT FENCE. FILTER BARRIERS. SYNTHETIC BALES AND/OR SANDBAGS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BARRIERS. END RUNS AND UNDERCUTTING BENEATH BARRIERS.
19. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
20. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

STORM DRAIN INLET PROTECTION:

21. FILTER FABRIC SHALL BE LAID OVER INLETS SO THAT THE FABRIC EXTEND A MINIMUM OF 1 FOOT BEYOND EAST SIDE OF THE INLET STRUCTURE. IF MORE THAN ONE STRIP OF FABRIC IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
22. 2 INCH - 3 INCH COARSE AGGREGATE SHALL BE PLACED OVER THE FILTER FABRIC. THE DEPTH OF STONE SHALL BE AT LEAST 6 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
23. IF STONE FILTERS BECOME CLOGGED WITH SEDIMENT SO THAT THEY NO LONGER ADEQUATELY PERFORM THEIR FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

POST-CONSTRUCTION SITE PROTECTION:

24. ALL DEWATERING, EROSION AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.
25. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER TEMPORARY BARRIERS ARE. NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.
26. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
27. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL
NISIT SAPPARKHAO, P.E.
SC REG. NO. 29128

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 29128 NISIT SAPPARKHAO

Digitally signed by Nisit Sapparkhao
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Nisit Sapparkhao, email=nisit@iegroup.net
Date: 2025.06.27 13:40:27 -04'00'
Adobe Acrobat DC version: 2015.006.30527

06/27/25

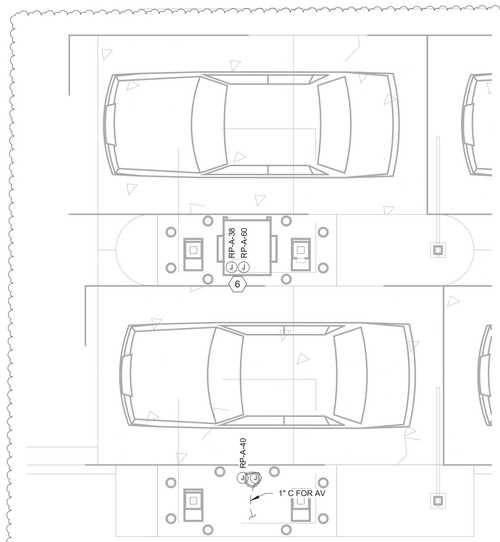
ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
2	PV	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

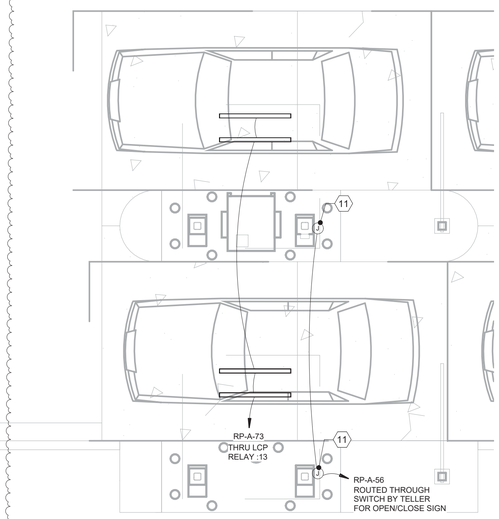
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	IEG
CHECKED BY:	IEG

SHEET TITLE
EROSION AND SEDIMENTATION CONTROL DETAILS

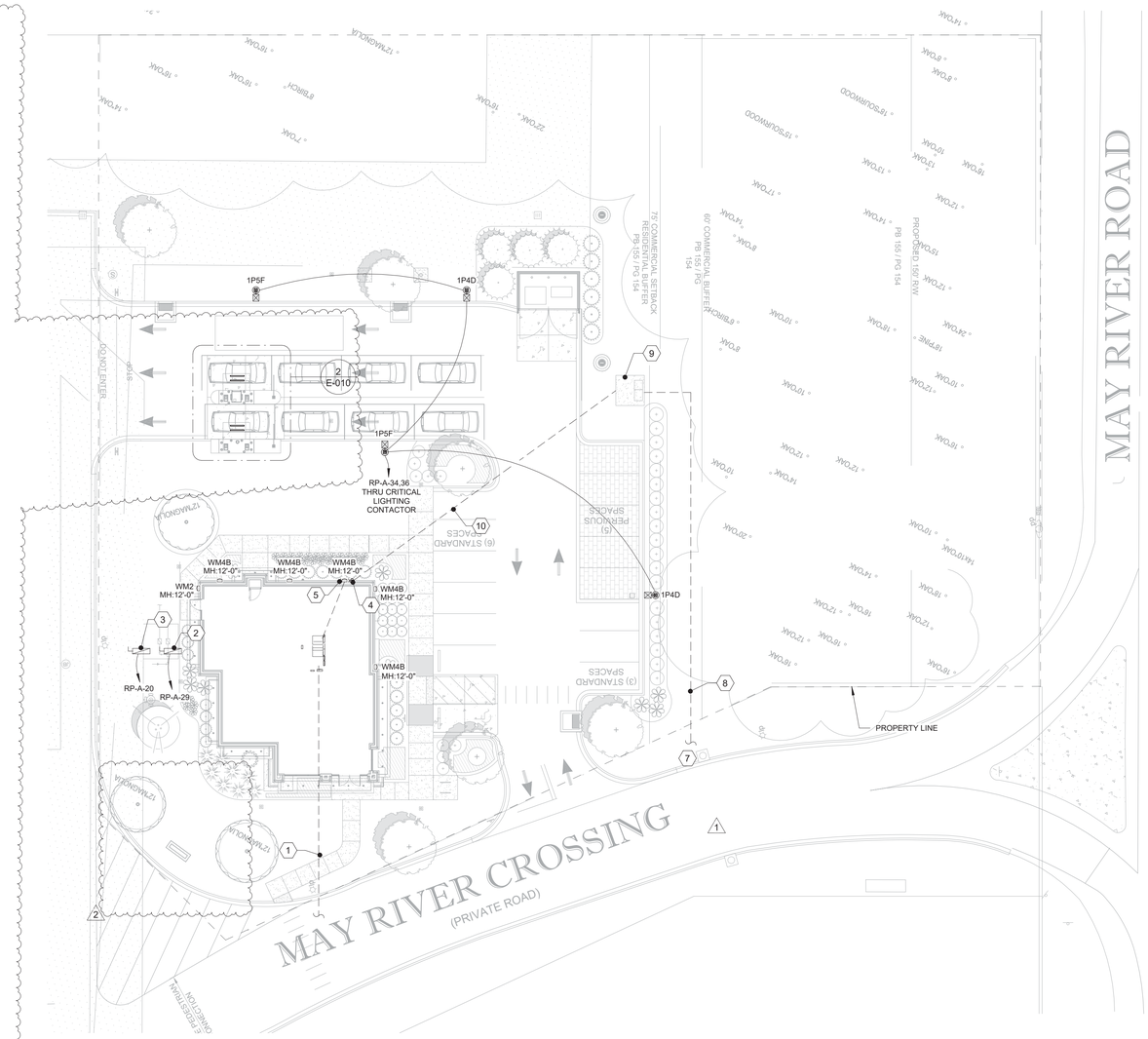
SHEET NUMBER
C06.04



2 ELECTRICAL POWER & AUXILIARY RDT PLAN
1/4" = 1'-0"



3 ELECTRICAL LIGHTING PLAN - RDT PLAN
1/4" = 1'-0"



1 ELECTRICAL SITE PLAN
1" = 20'-0"

LIGHTING FIXTURE SCHEDULE (SITE)

LABEL	DESCRIPTION	MFG.	MODEL NUMBER	MOUNTING	LAMP QTY AND TYPE	DIMMING	VOLTS	TOTAL FIXTURE WATTS	NOTES (REFER TO GENERAL AND LAMP AND BALLAST NOTES BELOW)
1P4D	LED FULL CUTOFF AREA LUMINAIRE, 10000 LUMENS, FORWARD DISTRIBUTION, ALUMINUM HOUSING, UL LISTED FOR WET LOCATION. 1-HEAD	GE / LSI(POLE)	FIXTURE: EALS 03 2 D4 AF 7 40 X D D1 BLCK POLE: 5RP B5 S07G ** S BLK	POLE MOUNT, **SEE DETAIL FOR POLE HEIGHT	LED	-	208 V	70 VA	
1P5F	LED FULL CUTOFF AREA LUMINAIRE, 15000 LUMENS, TYPE 5 DISTRIBUTION, ALUMINUM HOUSING, UL LISTED FOR WET LOCATION. 1-HEAD	GE / LSI(POLE)	FIXTURE: EALS 03 2 F5 SW 7 40 X D D1 BLCK POLE: 5RP B5 S07G ** S BLK	POLE MOUNT, **SEE DETAIL FOR POLE HEIGHT	LED	-	208 V	101 VA	
WM2	WALL BRACKET LED LUMINAIRE, DIE CAST ALUMINUM HOUSING, TYPE 2 DISTRIBUTION, BLACK FINISH. FULL CUTOFF	LSI	XWM 2 LED 3L 40 UE BLK	WALL MOUNTE. SEE PLAN FOR MOUNTING HEIGHT	LED	-	120 V	23 VA	SEE THIS SHEET OR E-130 FOR CONNECTION
WM4B	WALL BRACKET LED LUMINAIRE, DIE CAST ALUMINUM HOUSING, TYPE 4 DISTRIBUTION, BLACK FINISH. FULL CUTOFF	LSI	XWM 4 LED 4L 40 UE BLK	WALL MOUNTED AT 12'-0" ABOVE FINISHED GRADE TO CENTERLINE OF FIXTURE	LED	-	120 V	30 VA	SEE E-130 FOR CONNECTION

LIGHTING FIXTURE SCHEDULE NOTES:
1. MANUFACTURER CATALOG NUMBERS ARE SHOWN FOR GENERAL DESCRIPTIVE PURPOSES AND TO ESTABLISH STANDARD OF QUALITY ONLY. CONTACT CHRIS YOUNG (cyoung@southernlightingsource.com) OR ADAM MAGGIO (amaggio@southernlightingsource.com) (770-242-4000) (53lights@southernlightingsource.com) SOUTHERN LIGHTING SOURCE ON LIGHTING AND LIGHTING CONTROLS. GC/EC SHALL PROVIDE LUMINAIRES COMPLETE WITH ALL OPTIONS AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. ALL PRODUCTS SHALL BE UL LISTED. POLE MOUNTED LIGHT FIXTURES SHALL MATCH EXISTING DEVELOPMENT AS SPECIFIED. NO EQUALS FOR POLE MOUNTED FIXTURES.
2. POLE MANUFACTURER SHALL COORDINATE WITH LUMINAIRE MANUFACTURER TO PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FIXTURE. PROVIDE APPROPRIATE MOUNTING HARDWARE, ANCHOR BOLTS, BOLT/BASEPLATE COVERS AND GROUNGING LUG. MANUFACTURER SHALL FURNISH AN ANCHOR BOLT TEMPLATE TO ENSURE PROPER MOUNTING AND LUMINAIRE ORIENTATION FOR CORRECT LIGHT DISTRIBUTION. APPROVED EQUAL POLE MANUFACTURERS: DURAGUARD AND VALMONT.
3. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT NECESSARILY BE REFLECTED IN CATALOG NUMBER AND/OR DESCRIPTION IN THIS SCHEDULE

SHEET NOTES:

1. COORDINATE ALL SITE CONDUIT ROUTINGS WITH GENERAL CONTRACTOR.
2. REFER TO CIVIL PLANS FOR FINAL LOCATION AND ELECTRICAL REQUIREMENTS OF ALL SIGNAGE, UTILITY CONNECTION POINTS, AND SITE UTILITIES/EQUIPMENT SUCH AS LIFT STATIONS, IRRIGATION PUMPS/CONTROLLERS, HOT BOXES, ETC.
3. ALL UNDERGROUND WIRING SHALL BE LOCATED WITHIN 12" OF BACK OF CURB IN ALL LOCATIONS.
4. BACKFILL, TAMP, AND RESURFACE ALL EXISTING PAVEMENT/ASPHALT AND RESTORE ALL EXISTING LANDSCAPING DISTURBED AS A RESULT OF TRENCHING AND/OR DIRECTIONAL BORING TO ITS ORIGINAL CONDITION.
5. ALL UTILITY SERVICE SHALL BE VERIFIED WITH THE UTILITY COMPANIES PRIOR TO BIDDING AND ALL RESULTING COSTS SHALL BE INCLUDED IN BID
6. ACTUAL INSTALLATION OF ALL UTILITY SERVICES SHALL BE ACCORDING TO FINAL UTILITY COMPANY PLANS.
7. PROVIDE PULLWIRE IN ALL EMPTY CONDUITS.
8. USE JOINT TRENCHING WHEREVER POSSIBLE.

ELECTRICAL UTILITY CONTACT:
TBD

TELEPHONE UTILITY CONTACT:
TBD

KEYED NOTES:

1. ROUTE (2)-4"C TO MAIN TELEPHONE SERVICE ENTRANCE. ROUTE TO CLEAR STRUCTURAL FOOTING. CONDUITS SHALL BE STUBBED UP AND CAPPED 12" A.F.F. IN BUILDING. AS-BUILT DRAWINGS MUST SHOW CONDUIT LENGTH AND ROUTE.
2. IRRIGATION BACKFLOW. VERIFY LOCATION - DISCONNECT SHALL BE NEMA 3R.
3. DDCV HOTBOX(ONLY NORTHERN PROJECT-REMOVE ON FL PROJECT). VERIFY LOCATION - DISCONNECT SHALL BE NEMA 3R.
4. ELECTRIC UTILITY METER. PROVIDE ELECTRIC UTILITY METER PER POWER COMPANY REQUIREMENTS. REFER TO ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION. EXACT LOCATION TO BE DETERMINED BY UTILITY COMPANY REPRESENTATIVE IN FIELD.
5. MANUAL TRANSFER SWITCH(MTS). PROPOSED ELECTRICAL SERVICE DISCONNECT MOUNTED ON BUILDING EXTERIOR. REFER TO ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.
6. DRIVE-THRU ATM: PROVIDE CONDUIT AND WIRING FOR ATM. REFER TO DETAIL ON SHEET E-500 FOR ADDITIONAL INFORMATION.
7. STUB-OUT AND TERMINATE PER UTILITY COMPANY REQUIREMENTS. VERIFY LOCATION OF HIGH VOLTAGE SERVICE POINT PRIOR TO BIDDING AND INCLUDE ALL COST IN BID.
8. (2)-5"C FOR HIGH VOLTAGE SERVICE FROM PROPERTY LINE TO TRANSFORMER SLABS - VERIFY LOCATION AND ROUTING. HIGH VOLTAGE CONDUIT SHALL BE 48" DEEP. TERMINATE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS INCLUDING TRENCHING AND BACKFILL TO 90% COMPACTION.
9. TRANSFORMER SLAB-BOX WITH TRAFFIC GUARDS PER UTILITY COMPANY REQUIREMENTS. VERIFY SIZE, LOCATION AND ORIENTATION WITH UTILITY COMPANY. CONTRACTOR WILL PROVIDE TRANSFORMER SLABS INSTALLED COMPLETE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. PROVIDE ADEQUATE GUARD RAILING AROUND POWER TRANSFORMERS IN PARKING AREAS.
10. SECONDARY FROM TRANSFORMER TO MAIN DISCONNECT. VERIFY ROUTING WITH UTILITY COMPANY AND ROUTE TO CLEAR STRUCTURAL FOOTING. SEE RISER DIAGRAM. TERMINATE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
11. OPEN/CLOSE SIGN FOR REMOTE DRIVE-UP CANOPY. PROVIDE CONSTANT HOT & NEUTRAL. LCP SHALL NOT CONTROL OPEN/CLOSE/ATM SIGNS. SEE DETAIL 9 ON E-500. COORDINATE PLACEMENT WITH ARCHITECT PRIOR TO ROUGH-IN. REMOVE IF IT IS NOT REQUIRED BY THE MANUFACTURER.
12. NOT USED.
13. NOT USED.

bdg architects
400 N Ashley Drive, Suite. 600
Tampa, FL 33602
P: 813 - 323 - 9233
Lic. #: AA - 0003590
W: www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING,
BLUFFTON, SOUTH CAROLINA 29910

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SEAL
ANDREW MOHR
SC PE# ELS.32784 E

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION INFINITY ENGINEERING GROUP, LLC No. 4573

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 32784 ANDREW MOHR

Digitally signed by Andrew Mohr
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Andrew Mohr, email=andrew.mohr@iegroup.net
Date: 2025.06.27 13:41:02 -04'00'
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INFINITY ENGINEERING GROUP, LLC
Infinity Engineering Group
1208 East Kennedy Boulevard, Suite 230
Tampa, Florida 33602
Phone: 813.434.4770
SC Cert. of Auth# 4573

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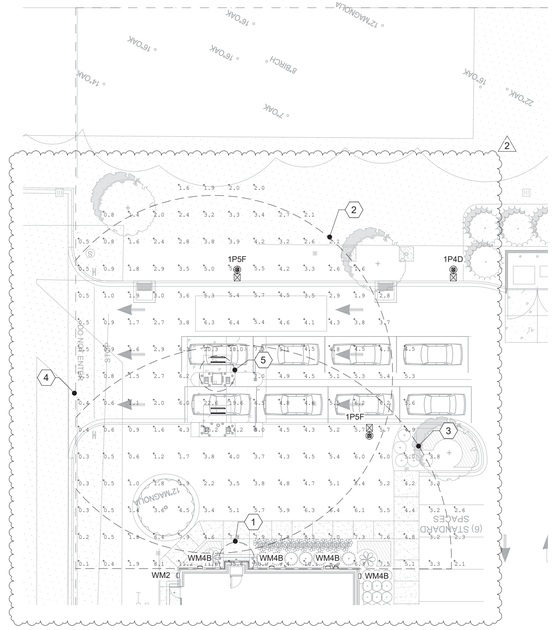
2	K	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

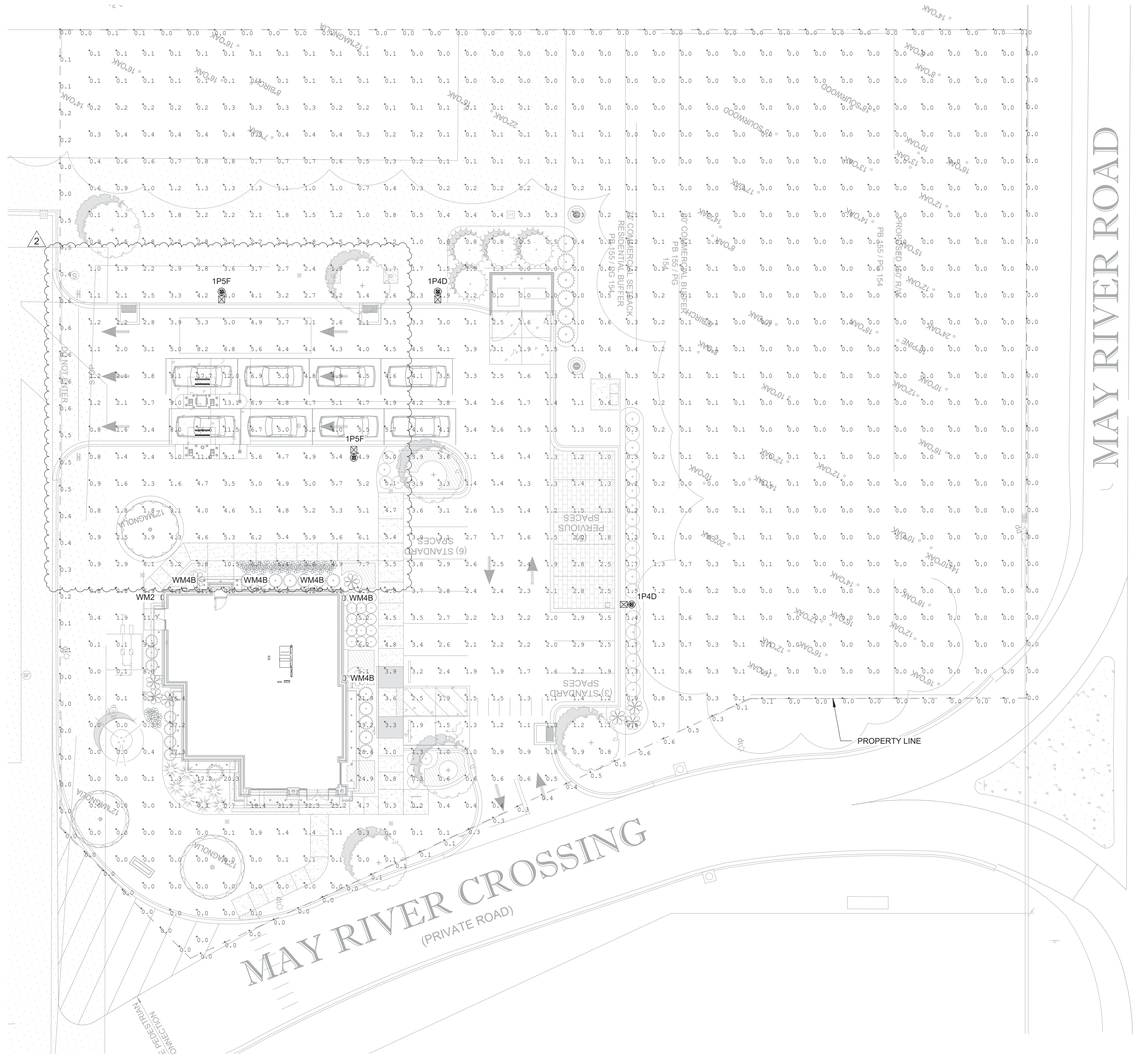
JOB #	240634/15-360.00
DATE:	06/26/2025
DRAWN BY:	KL
CHECKED BY:	AM

SHEET TITLE
ELECTRICAL SITE PLAN AND REMOTE DRIVE THRU

SHEET NUMBER
E-010



2 ELECTRICAL PHOTOMETRIC SITE PLAN AT 3'-0"
1" = 20'-0"



1 ELECTRICAL PHOTOMETRIC SITE PLAN AT GRADE
1" = 20'-0"

NOTE:
1. THE PROJECT WON'T MEET BANK LIGHTING STANDARD DUE TO THE CITY REQUIREMENTS
2. EXISTING LIGHT POLES ARE NOT TAKEN INTO CONSIDERATION FOR PHOTOMETRIC. ONLY LIGHT POLES THAT ARE CONTRIBUTED BY BANK ARE CONTRIBUTED INTO PHOTOMETRIC.

CALCULATION SUMMARY AT 36" AFG

LABEL	CALCTYPE	UNIT	AVG	MAX	MIN	AVG/MIN	MAX/MIN
DRIVE-UP ATM - 5FT COMPLIANCE	ILLUMINANCE	FC	PROVIDED BY CANOPY MANUFACTURER				
DRIVE-UP ATM - 50FT COMPLIANCE	ILLUMINANCE	FC	4.45	36.2	0.3	14.83	120.67
NIGHT DEPOSITORY - 5FT COMPLIANCE	ILLUMINANCE	FC	40.45	58.8	13.2	3.06	4.45
NIGHT DEPOSITORY - 60FT COMPLIANCE	ILLUMINANCE	FC	5.77	58.8	0.1	57.70	588.00

CALCULATION SUMMARY AT GRADE

LABEL	CALCTYPE	UNIT	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PARKING LOTS AREA	ILLUMINANCE	FC	1.97	3.9	0.5	3.94	7.80
ROAD WAY/PAVEMENT/DRIVE THRU	ILLUMINANCE	FC	3.22	17.7	0.5	6.44	35.40
PROPERTY LINE	ILLUMINANCE	FC	0.11	0.6	0.0	N.A.	N.A.

SHEET NOTES:

1. PHOTOMETRY CALCULATION: PHOTOMETRIC VALUES SHOWN HEREIN ARE INTENDED FOR DESIGN AND EVALUATION PURPOSES ONLY. THE CALCULATED POINT-BY-POINT VALUES SHOWN ON THIS SHEET ARE BASED ON A COMPUTER LIGHTING PROGRAM WITH APPROXIMATED PARAMETERS. AS A RESULT, PHOTOMETRIC VALUES MAY VARY FROM ACTUAL FIELD MEASUREMENTS.

LIGHTING STANDARDS:

MINIMUM BANK STANDARD

- A MINIMUM OF TEN (10) FOOT CANDLE POWER AT THE FACE OF THE ATM OR AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS.
- A MINIMUM OF TWO (2) FOOT CANDLE POWER EXTENDING OUTWARDS IN ALL UNOBSTRUCTED DIRECTIONS FIFTY (50) FEET FROM THE FACE OF THE ATM AND AFTER-HOUR DEPOSITORY.
- A MINIMUM OF TWO (2) FOOT CANDLE POWER IN DEFINED PARKING AREAS WITHIN SIXTY (60) FEET OF THE ATM AND AFTER-HOUR DEPOSITORY. IN THE EVENT THE ATM OR AFTER-HOUR DEPOSITORY IS LOCATED WITHIN TEN (10) FEET OF THE CORNER OF THE BUILDING AND IS GENERALLY ACCESSIBLE FROM THE ADJACENT SIDE, THERE SHALL BE A MINIMUM OF TWO (2) FOOT CANDLE POWER ALONG THE FIRST FORTY (40) UNOBSTRUCTED FEET OF THE ADJACENT SIDE OF THE BUILDING.
- IF THE ATM OR AFTER-HOUR DEPOSITORY IS LOCATED INSIDE A ACCESSIBLE VESTIBULE DURING ANY HOURS OF DARKNESS, A MINIMUM OF 10 FOOT CANDLE POWER AT THE FACE OF THE ATM OR AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS. THERE WILL BE A MINIMUM OF TWO (2) FOOT CANDLE POWER AT THE INSIDE OF THE VESTIBULE ENTRY/EXIT DOOR(S). A MINIMUM OF TWO (2) FOOT CANDLE POWER EXTENDING OUTWARDS IN ALL UNOBSTRUCTED DIRECTIONS FIFTY (50) FEET FROM THE VESTIBULE ENTRY/EXIT DOOR. A MINIMUM OF TWO (2) FOOT CANDLE POWER IN DEFINED PARKING AREAS WITHIN SIXTY (60) FEET OF THE VESTIBULE ENTRY/EXIT DOOR. IN THE EVENT THE VESTIBULE ENTRY/EXIT DOOR IS LOCATED WITHIN TEN (10) FEET OF THE CORNER OF THE BUILDING AND IS GENERALLY ACCESSIBLE FROM THE ADJACENT SIDE, THERE SHALL BE A MINIMUM OF TWO (2) FOOT CANDLE POWER ALONG THE FIRST FORTY (40) UNOBSTRUCTED FEET OF THE ADJACENT SIDE OF THE BUILDING. IN URBAN SETTINGS FOR WHICH THERE IS NO DEFINED BANK PARKING AND THE ONLY ACCESS AREA IS A PUBLIC SIDEWALK, A MINIMUM 2 FOOT CANDLE POWER SHALL BE FOR THE FIRST 5 UNOBSTRUCTED FEET FROM THE DOOR. THE MINIMUM FOOT CANDLE READING WILL ALSO BE LIMITED TO BANK CONTROLLED PROPERTY LINES.
- A MINIMUM OF TWO (2) FOOT CANDLE POWER IN THE IMMEDIATE AREA OF THE DESIGNATED ASSOCIATE ENTRANCE/EXIT TO THE FACILITY.
- ALL LIGHTING MEASUREMENTS ARE TO BE TAKEN AT 36 INCHES ABOVE THE GROUND ON A HORIZONTAL PLANE, **UNLESS OTHERWISE SPECIFIED BY STATE LAW OR REGULATION (3/07).**
- THE MINIMUM STANDARD SHALL APPLY UNLESS A GREATER STANDARD IS REQUIRED BY AN APPLICABLE LAW FOR A PARTICULAR FACILITY LOCATION.

KEYED NOTES:

1. AFTER-HOUR DEPOSITORY FIVE FOOT COMPLIANCE AREA: A MINIMUM OF TEN (10) FOOT CANDLE POWER AT THE FACE OF THE AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS.
2. ATM FIFTY FOOT COMPLIANCE AREA: A MINIMUM OF TWO (2) FOOT CANDLE POWER EXTENDING OUTWARD IN ALL UNOBSTRUCTED DIRECTIONS FIFTY (50) FEET FROM THE FACE OF THE ATM.
3. AFTER-HOUR DEPOSITORY SIXTY FOOT COMPLIANCE AREA: A MINIMUM OF TWO (2) FOOT CANDLE POWER EXTENDING OUTWARD IN ALL UNOBSTRUCTED DIRECTIONS SIXTY (60) FEET FROM THE FACE OF THE AFTER-HOUR DEPOSITORY.
4. BANK CONTROLLED PROPERTY LINES: THE MINIMUM FOOT CANDLE READING WILL BE LIMITED TO BANK CONTROLLED PROPERTY LINES.
5. ATM FIVE FOOT COMPLIANCE AREA: A MINIMUM OF TEN (10) FOOT CANDLE POWER AT THE FACE OF THE ATM EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED DIRECTIONS TO BE PROVIDED BY OWNER'S PREMANUFACTURED ATM CANOPY.

bdg architects
400 N Ashley Drive, Suite 600 Tampa, FL 33602
P: 813 - 323 - 9233
Lic. #: AA - 0003590
W: www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING,
BLUFFTON, SOUTH CAROLINA 29910

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SC PE# ELS.32784 E

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 32784 ANDREW MOHR

Digitally signed by Andrew Mohr
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Date: 2025.06.27 13:41:27 -04'00'
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INFINITY ENGINEERING GROUP, LLC
Infinity Engineering Group
1208 East Kennedy Boulevard, Suite 230
Tampa, Florida 33602
Phone: 813.434.4770
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2	K	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634/15-360.00
DATE:	06/26/2025
DRAWN BY:	KL
CHECKED BY:	AM

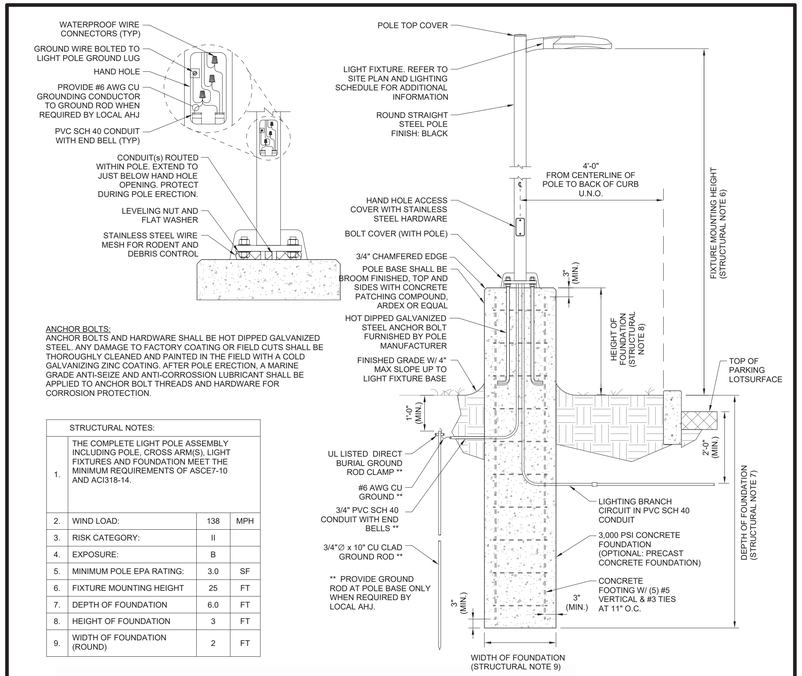
SHEET TITLE

ELECTRICAL PHOTOMETRIC SITE PLAN

SHEET NUMBER

E-011

1



ANCHOR BOLTS:
ANCHOR BOLTS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL. ANY DAMAGE TO FACTORY COATING OR FIELD CUTS SHALL BE THOROUGHLY CLEANED AND PAINTED IN THE FIELD WITH A COLD GALVANIZING ZINC COATING. AFTER POLE ERECTION, A MARINE GRADE ANTI-SEIZE AND ANTI-CORROSION LUBRICANT SHALL BE APPLIED TO ANCHOR BOLT THREADS AND HARDWARE FOR CORROSION PROTECTION.

	STRUCTURAL NOTES:		
1.	THE COMPLETE LIGHT POLE ASSEMBLY INCLUDING POLE, CROSS ARM(S), LIGHT FIXTURES AND FOUNDATION MEET THE MINIMUM REQUIREMENTS OF ASCE7-10 AND ACI318-14.		
2.	WIND LOAD:	138	MPH
3.	RISK CATEGORY:	II	
4.	EXPOSURE:	B	
5.	MINIMUM POLE EPA RATING:	3.0	SF
6.	FIXTURE MOUNTING HEIGHT	25	FT
7.	DEPTH OF FOUNDATION	6.0	FT
8.	HEIGHT OF FOUNDATION	3	FT
9.	WIDTH OF FOUNDATION (ROUND)	2	FT

DESIGN CRITERIA:
INPUT DATA:

Project Location	South Carolina	
Basic Wind Speed, V	145	mph
Exposure Category	**B**	
Topographic Factor, K_{zt}	**1**	(Flat Terrain)
Velocity Pressure Exposure Coefficient, K_h	0.66	
Wind Directionality Factor, K_d	**0.85**	
Gust Effect Factor, G	**0.85**	
Net Force Coefficient, C_f	**1.8**	(Case A)
Wind Effective Sign Area, A_s	**20**	ft^2
Mean Height, H	**11.9**	ft
Number of Support, Ns	**1**	
Diameter (Round Post) or Diagonal (Square Pos:), b	2	ft
Proposed Depth of Foundation, $D_{proposed}$	6	**ft (MINIMUM EMBEDMENT)**

ANALYSIS:

Velocity Pressure
$q_h = 0.00256\ K_h\ K_{zt}\ K_d\ V^2$ = **30.195264** psf

Wind Force (per support)
$F = q_h\ G\ C_f\ A_s\ /\ Ns$ = **923.975078** lb.

Overturning Moment at Base
M = F.H = **10995.3034** ft.lb

Required Buried Depth:
A = 2.34xP/(S1xb)
P = **923.975078** lb

S1 = **600** psf
Allowable Lateral Bearing (sand, Silty clay)
Segment below grade

0 ft -1 ft	**150** psf
1 ft - 2 ft	**300** psf
2 ft - 3ft	**450** psf

b = 2
A = 1.8017514
d = 0.5A(1+[1+(4.36h/A)]1/2) **5.91752931**
Design Evaluation Criteria: d < $D_{proposed}$ PASSED

Mean Heigh Calculation

Mean Height, H	**11.9**	ft
Area Base	6	sf
Area pole	11	sf
EPA fixture	3	sf
Centroid Height Base	1.5	ft
Centroid Height pole	14	ft
Centroid height fixture	25	ft

SITE POLE LIGHT DETAIL WITH CONCRETE BASE

SCALE N.T.S. | 1

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bdg architects
400 N Ashley Drive, Suite. 600
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DRAWN BY:	**KL**
CHECKED BY:	**AM**

SHEET TITLE

ELECTRICAL SITE DETAILS

SHEET NUMBER

E-012

EVOLVE

CUSTOMER NAME _____

PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

EALS Series
LED Outdoor Area Light

The EALS Area Light luminaire offers a wide range of optical patterns, color temperatures, lumen packages and mounting configurations to optimize area light applications, as well as provide versatility in lighting design within the same form-factor. They are ideal for commercial property site-lighting applications such as retail and commercial exteriors.

Construction

Housing:	Aluminum die cast enclosure. Integral heat sink for maximum heat transfer
Lens:	Impact resistant tempered glass
Paint:	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness Standard = Black, Dark Bronze Gray, White (RAL & custom colors available) Optional = Coastal Finish
Weight:	27 lbs

Optical System

Lumens:	7,000 - 30,300
Photometry:	Type II, III, IV & V
Efficacy:	126 - 160 LPW
CCT:	3000K, 4000K, 5000K
CRI:	>70
Upward Light Output Ration (ULOR):	0 Horizontal Orientation

Electrical

Input Voltage:	120-277V, 277-480V & 347-480V
Input Frequency:	50/60 Hz
Power Factor (PH):	> 90% at rated watts
Total Harmonic Distortion (THD):	< 20% at rated watts

Surge Protection

TYPICAL (120 STRIKES)		
☐ 6kV/3kA*	☐ 10kV/5kA*	☐ 20kV/10kA*

***Per ANSI C136.2-2015**

Lumen Maintenance

Projected Lxx per IES TM-21-11 at 25°C

OPTICS	LXX(10K) @ HOURS		
	25,000 HR	50,000 HR	60,000 HR
C2, C3, C4, C5, D2, D3, D4, D5	L96	L92	L91
F5, H2, H3, H4, H5	L95	L93	L92
F2, F3, F4, J3, J3, J4, J5	L95	L93	L92
K2, K3, K4, K5	L95	L93	L92

Note: Projected Lxx based on LM80 (> 10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements

Luminaire Ambient Temperature Factor

AMBIENT TEMP (°C)	INITIAL FLUX FACTOR	AMBIENT TEMP (°C)	INITIAL FLUX FACTOR
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00		

Ratings

Operating Temperature:	-40° C to 40° C
Vibration: LM-79:	3G per ANSI C136.31-2010 Testing in accordance with IESNA Standards

Controls

Dimming:	Standard - 0-10V ☐ Optional - DALI (Option U) ☐
Sensors:	Photo Electric Sensors (PE) available LightGrid and Daintree Compatible

Warranty

☐ 5 Year (Standard) ☐ 10 Year (Optional)

IP66 HOB

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EVOLVE

EALS Series
LED Outdoor Area Light

CUSTOMER NAME _____

PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

Ordering Information

EALS 03 _ _ _ _ _ _ 7 _ _ _ _ _ _

Catalog #: _____ Project: _____

Prepared By: _____ Date: _____ Type: _____

XSPS

LED Soffit Light

OVERVIEW	
Lumen Package	4000 - 8000
Wattage Range	43 -59
Efficacy Range (LPW)	96 -104
Weight lbs (kg)	7.6 (3.5)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Housing is die-formed aluminum with diffuse acrylic lens providing a water-resistant seal. Enclosure contains factory prewired driver and optical unit containing LEDs.
- Recess mount into an enclosed soffit with screws through the mounting frame. 8" clearance required for ease of installation.
- Finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard color is gloss white.
- Shipping weight: 7.6 lbs in carton.
- Suitable for wet locations.

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 70.

Electrical

- High-performance factory programmable driver features over-voltage, under voltage, short-circuit and over temperature protection with integral surge protection that meets IEEE C62.41.2 and ANSI C82.77. -5 Location Category C Low standards.
- 0-10 volt dimming (10% - 100%) standard.
- 120-347VAC 50/60Hz
- Thermal protector standard on 5000-8000 lumen versions.
- L80 Calculated Life: >100k Hours (See Lumen Maintenance chart)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to 40°C (-40°F to 104°F) for HO and VHO. -40°C to 45°C (-40°F to 113°F) for SS. -40°C to 35°C (-40°F to 95°F) for SHO .
- Power factor: >0.90
- Input power stays constant over life.
- High-efficacy LEDs with integrated circuit board mount to the housing to maximize heat dissipation and promote long life.
- Driver components are fully encased in potting material for moisture resistance. Driver complies with FCC standards.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750
- Suitable For Damp Locations
- Meets Buy American Act requirements.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- IDA compliant with 3000K or lower color temperature.

Type: _____

XSPS LED Soffit Light

Back to Quick Links

ORDERING GUIDE

TYPICAL ORDER EXAMPLE: **XSPS S LED SS CW 120 GWT DFL**

Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Lens	Options
XSPS - LED Soffit	**S** - Symmetric	**LED**	**SS** - 4,000 Lumens **HO** - 5,000 Lumens **VHO** - 8,000 Lumens	**CW** - 5000K 80 CRI **NW** - 4000K 80 CRI **WW** - 3000K 80 CRI	**120** - 120V **208** - 208V **240** - 240V **277** - 277V **347** - 347V	**GWT** - Gloss White	**DFL** - Diffused Acrylic Lens	**CMT** - Channel Bar Mounting Kit **BB** - Emergency Battery Pack[1]

1 - Emergency Battery Pack only available on the SS - 4000 lumen version (120, 208, 240 & 277V versions).

PERFORMANCE

DELIVERED LUMENS

Lumen Package	Distribution	Lens Type	CRI	3000K CCT			4000K CCT			5000K CCT			Wattage
				Delivered Lumens	Efficacy	Bug Rating	Delivered Lumens	Efficacy	Bug Rating	Delivered Lumens	Efficacy	Bug Rating	
SS	S	DFL	80	3816	123	B2-U0-G1	4022	129	B2-U0-G1	3966	128	B2-U0-G1	31
HO	S	DFL	80	4756	120	B2-U0-G1	5011	127	B2-U0-G1	4941	125	B2-U0-G1	40
VHO	S	DFL	80	5733	118	B2-U0-G1	6041	124	B2-U0-G1	5957	122	B2-U0-G1	49
SHO	S	DFL	80	7559	113	B3-U0-G1	7965	119	B3-U0-G1	7853	118	B3-U0-G1	67

LEDs are frequently updated therefore values are nominal.

Electrical Data (Amps)*

Lumen Package	Wattage	120V	208V	240V	277V	347V
SS	31	0.26	0.15	0.13	0.11	0.09
HO	40	0.33	0.19	0.16	0.14	0.11
VHO	49	0.41	0.23	0.2	0.18	0.14
SHO	67	0.56	0.32	0.28	0.24	0.19

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE

Ambient Temp C	Initial[1]	25K hrs.[1]	50K hrs.[1]	75K hrs.[2]	100K hrs.[2]
25 C	100%	95%	91%	86%	82%

1 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.
2 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing.

Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

Mirada Medium Wall Sconce (XWM)

Outdoor Wall Sconce

OVERVIEW	
Lumen Package	3,000 - 21,000
Wattage Range	23 - 175
Efficacy Range (LPW)	125 - 158
Weight lbs(kg)	27 (12.2)
Control Options	IMSBT, ALB, ALS, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Hinged die-cast aluminum wiring access door located underneath.
- Galvanized-steel universal wall mount bracket comes standard with hinging mechanism to easily access the junction box wire connections without removing the luminaire.
- Optional pole-mounting bracket (XPMA) permits mounting to standard poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Max shipping weight: 30lbs in carton

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 70.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours
- Total harmonic distortion (THD): <20%
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F)
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to + 95°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule.

Installation

- Universal wall mounting plate easily mounts directly to 4" octagonal or square junction box.
- 2 fasteners secure the hinged door underneath the housing and provide quick & easy access to the electrical compartment for installing/servcing.
- Optional terminal block accepts up to 12 ga wire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.
- 1 Year warranty on Battery Back-up option.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K or lower color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet Locations.
- IP65 rated luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications when pole mounted (using optional XPMA bracket) or wall mounted.
- IK08 rated luminaire per IEC 66262 mechanical impact code
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type : _____

Have questions? Call us at (800) 436-7800

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: **XWM 2 LED 03L 30 UE BRZ ALSC**

Family	Distribution	Light Source	Lumen Package	Color Temperature
XWM - Mirada Medium Wall Sconce	**2** - Type 2 **3** - Type 3 **4** - Type 4 **FT** - Type 4 Forward Throw	**LED**	**3L** - 3,000 **4L** - 4,000 **6L** - 6,000 **8L** - 8,000 **12L** - 12,000 **15L** - 15,000 **18L** - 18,000 **21L** - 21,000 **Custom Lumen Packages**[1]	**30** - 3000K **40** - 4000K **50** - 5000K **AMB** - Phosphor Converted Amber[2]
Voltage	**Finish**	**Controls**		**Options**
UE - Universal Voltage (120-277V) **HV** - High Voltage (347-480V)	**BLK** - Black **BRZ** - Dark Bronze **GMG** - Gun Metal Gray **GPT** - Graphite **MSV** - Metallic Silver **PLP** - Platinum Plus **SVG** - Satin Verde Green **WHT** - White	**Blank** - None **Wireless Controls** **ALSC** - Airlink Synapse Control System **ALSCS03** - AirLink Synapse Control System with 8-12' Motion Sensor **ALSCS02** - AirLink Synapse Control System with 12-20' Motion Sensor **ALBCS1** - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' MH)[3] **ALBCS2** - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' MH)[3] **Standalone Controls** **DIM** - 0-10v Dimming leads extended to housing exterior **IMSBT1** -Integral Bluetooth® Motion and Photocell Sensor (8-24' MH)[3,4] **IMSBT2** - Integral Bluetooth® Motion and Photocell Sensor (25-40' MH)[3,4] **Button Type Photocells** **PCI120** - 120V **PCI208-277** - 208 -277V **PCI347** - 347V	**Blank** - None **BB** - Battery Back-up (0°C)[5] **CWBB** - Cold Weather Battery Backup (-20°C)[5] **XPMA** - Pole Mounting Bracket **SP3** - 10kV Surge Protection **TB** - Terminal Block

Need more information? Click here for our glossary

Have additional questions? Call us at (800) 436-7800

FUSING ACCESSORY ORDERING INFORMATION[6]

Part Number	Description
FK120[7]	FK120 - Single Fusing
FK277[7]	FK277 - Single Fusing
FK347[7]	FK347 - Single Fusing
DFK208[8]	DFK - Double Fusing
DFK240[8]	DFK - Double Fusing (240V)
DFK480[8]	DFK - Double Fusing (480V)

MOUNTING ACCESSORY ORDERING INFORMATION[6]

Part Number[6]	Description
356915CLR	XWM Wet Location Surface Conduit/Wiring Box
751632	10' Linear Bird Spike Kit (2' Recommended per Luminaire)

1 Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.
2 Only available in 6L Lumen Package. Consult factory for lead time and availability.
3 IMSBT and ALBCS control options are not available in 3L or 4L lumen packages when high voltage (HV) is specified.
4 IMSBTx1 is field configurable via the Leviton app that can be downloaded from your smartphone's app store.
5 Not available in HV.
6 Accessories are shipped separately and field installed.
7 Fusing must be located in a hand hole for pole or in the junction box.
8 "DJB" to be replaced by paint finish selection. See Finish options for paint color selections.

CSL ECO DOWNLIGHTS™

SPEC-00273 NEW ECO, 5", V-8.0, UPDATED 05/19/2023

ECO 5" LED DOWNLIGHT

ED5AIC, ED5ANC, ED5NC, ED5RM
ED5LAIC, ED5LANC, ED5LNIC, ED5LRIC
ED5SNIC

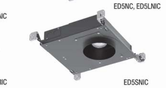
PROJECT: _____
TYPE: _____
NOTE: _____

ED5ANC, ED5LANC

ED5AIC, ED5LAIC

ED5NC, ED5LNIC

ED5RM, ED5LRIC



ED5SNIC

LED LIGHT ENGINE

RATED WATTAGE	**29.5W, 24W, 15.3W**
DELIVERED LUMENS	Up to 2657 lm
EFFICACY	Up to 104 LPW
CCT @ 90CRI	2700K, 3000K, 3500K, 4000K, Warm Dim
COLOR QUALITY	90+ CRI, 2-Step SDCM
LED LIFETIME	55,000 hours @ L90

SILENT VU™ OPTICS TECHNOLOGY

OPTICS	50° installed, 10°, 30°, 80° available
ADJUSTABLE	0° to 45° tilt (Adjustable housings only)
MEDIA	Clear, Solite, Frosted, Linear Spread

DELIVERED LUMENS MATRIX

ED5 (29.5W)	10° Optic	30° Optic	50° Optic	80° Optic
2700K (90CRI)	2275 lm	2403 lm	2139 lm	1624 lm
3000K (90CRI)	2458 lm	2597 lm	2311 lm	1755 lm
3500K (90CRI)	2516 lm	2657 lm	2366 lm	1796 lm
4000K (90CRI)	2590 lm	2735 lm	2435 lm	1849 lm

ED5 NIC, RIC (15.3W)	10° Optic	30° Optic	50° Optic	80° Optic
Warm Dim (98 CRI, R9>90)	1030 lm	1081 lm	992 lm	723 lm

ED5 AIC, ANC (24W)	10° Optic	30° Optic	50° Optic	80° Optic
Warm Dim (98 CRI, R9>90)	1472 lm	1545 lm	1418 lm	1033 lm

ED5L (15.3W)	10° Optic	30° Optic	50° Optic	80° Optic
2700K (90CRI)	1348 lm	1424 lm	1268 lm	963 lm
3000K (90CRI)	1457 lm	1539 lm	1370 lm	1040 lm
3500K (90CRI)	1491 lm	1575 lm	1402 lm	1065 lm
4000K (90CRI)	1535 lm	1621 lm	1443 lm	814 lm

ED5S (24W)	10° Optic	30° Optic	50° Optic	80° Optic
2700K (90CRI)	1953 lm	2063 lm	1836 lm	1394 lm
3000K (90CRI)	2110 lm	2229 lm	1984 lm	1507 lm
3500K (90CRI)	2160 lm	2282 lm	2031 lm	1542 lm
4000K (90CRI)	2223 lm	2348 lm	2090 lm	1587 lm
Warm Dim (98 CRI, R9>90)	1472 lm	1545 lm	1418 lm	1033 lm

TRIM OPTIONS

- Fixed or Adjustable
- Round or Square
- Standard or Trimless
- Wall Wash
- Wet Location

TRIM COLORS

- White
- Black
- Champagne
- Champagne w/ White Flange
- Black w/ White Flange
- Silver w/ White Flange

HOUSING INSTALLATION

- New Construction includes (2) galvanized steel adjustable hanger bars
- Remodel option available
- ⅝" – 2" ceiling thickness
- Min Plenum Height: 2½" Shallow
- Ceiling Material: Drywall, T-bar grid
- Steel junction box with up to (4) ½" knockouts
- AIC, NIC, RIC, SNIC models are Air Tight
- AIC, SNIC models are CCEA compliant. (Note: polycell spray-in foam insulation must be kept 3" from housing)

LISTINGS AND WARRANTY

cULus Listed	ASTM E283 Certified Airtight (AIC, NIC, RIC, SNIC Models)
UL Listed for Damp Location (All Styles)	UL Listed for Wet Location (Wet Location Trim Style)
IC Rated and Non IC Rated Available	CCEA (Chicago Plenum) Approved (AIC, SNIC Models)
Five (5) years limited warranty	CA Title 24-JA8 Compliant (AIC, NIC, RIC, SNIC Models)

cULus LISTED · WET LOCATION · IC RATED · AIRTIGHT · CCEA · DIMMABLE · JA8 TITLE 24 2022 COMPLIANT · WARM DIM · 5 YEAR LIMITED WARRANTY

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Patent: csllighting.com/patents

CSL CREATIVE SYSTEMS LIGHTING

CSL ECO DOWNLIGHTS™

SPEC-00273 NEW ECO, 5", V-8.0, UPDATED 05/19/2023

ECO 5" LED DOWNLIGHT

ED5AIC, ED5ANC, ED5NC, ED5RM
ED5LAIC, ED5LANC, ED5LNIC, ED5LRIC
ED5SNIC

PROJECT: _____
TYPE: _____
NOTE: _____

ORDER MATRIX

ED5

ECO 5" HOUSING + LIGHT ENGINE ORDER MATRIX (Example: ED5AIC-309050-30S)

HOUSING BASE			LED PERFORMANCE			DRIVER ASSEMBLY	
FAMILY APERTURE	INSTALLATION TYPE		CCT	CRI	OPTIC	WATTAGE	LED DIMMING DRIVER
☐ **ED5** ECO 5"	☐ **AIC**	(Adjustable New Construction, IC, CCEA)	☐ **-27** (2700K)	**90** (90 CRI)	**50** (50° Flood) Installed **10°, 30°, 80°** optics available from the Additional Optics Accessories table below	**-30** (29.5W)	**S** Universal Dimming Driver (1%-100% 0-10V, TRIAC, ELV, 120V/277V)
	☐ **ANC**	(Adj New Construction)	☐ **-30** (3000K)				
	☐ **NC**	(New Construction)	☐ **-35** (3500K)				
	☐ **RM**	(Remodel)	☐ **-40** (4000K)				
☐ **ED5** ECO 5" Warm Dim	☐ **AIC**[1]	(Adjustable New Construction, IC, CCEA)	**-WD**[2] (1800K–3000K)	**98** (98 CRI) Warm Dim	**50** (50° Flood) Installed **10°, 30°, 80°** optics available from the Additional Optics Accessories table below	**-16**[1] (15.3W) NIC or RIC Installation Typecarty	**S** Universal Dimming Driver (1%-100% 0-10V, TRIAC, ELV, 120V/277V)
	☐ **ANC**[1]	(Adj New Construction)		Warm Dim		**-25**[1,2] (24W) AIC or ANC Installation Typecarty	
	☐ **NIC**[1]	(New Construction IC)					
	☐ **RIC**[1]	(Remodel IC)					

1.. AIC or ANC Installation Type and Wattage Code -25.
NIC or RIC Installation Type and Wattage Code -16.

2. Wattage Code -25 Title 24 JA-8 compliant only with 10° , 30° or 50° optic installe

ED5L

ECO 5" HOUSING + LIGHT ENGINE ORDER MATRIX (Example: ED5LAIC-309050-16S2)

HOUSING BASE			LED PERFORMANCE			DRIVER ASSEMBLY	
FAMILY APERTURE	INSTALLATION TYPE		CCT	CRI	OPTIC	WATTAGE	LED DIMMING DRIVER
☐ **ED5L** ECO 5" LPD	☐ **AIC**	(Adjustable New Construction, IC, CCEA)	☐ **-27** (2700K)	**90** (90 CRI)	**50** (50° Flood) Installed **10°, 30°, 80°** optics available from the Additional Optics Accessories table below	**-16** (15.3W)	**S2** Phase Control Dimming Driver (1%-100% TRIAC, ELV, 120V/277V)
	☐ **ANC**	(Adj New Construction)	☐ **-30** (3000K)				
	☐ **NIC**	(New Construction IC)	☐ **-35** (3500K)				
	☐ **RIC**	(Remodel IC)	☐ **-40** (4000K)				

ED5S

ECO 5" HOUSING + LIGHT ENGINE ORDER MATRIX (Example: ED5SNIC-309050-25S)

HOUSING BASE			LED PERFORMANCE			DRIVER ASSEMBLY	
FAMILY APERTURE	INSTALLATION TYPE		CCT	CRI	OPTIC	WATTAGE	LED DIMMING DRIVER
☐ **ED5S** ECO 5" Shallow	**NIC**	(Shallow Plenum New Construction, IC, CCEA)	☐ **-27** (2700K)	**90** (90 CRI)	**50** (50° Flood) Installed **10°, 30°, 80°** optics available from the Additional Optics Accessories table below	**-25** (24W)	**S** Universal Dimming Driver (1%-100% 0-10V, TRIAC, ELV, 120V/277V)
			☐ **-30** (3000K)				
			☐ **-35** (3500K)				
			☐ **-40** (4000K)				
☐ **ED5S** ECO 5" Shallow Warm Dim	**NIC**	(Shallow Plenum New Construction, IC, CCEA)	**-WD** (1800K–3000K)	**98** (98 CRI) Warm Dim	**50** (50° Flood) Installed	**-25** (24W)	**S** Universal Dimming Driver

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400 N Ashley Drive, Suite 600, Tampa, FL 33602
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SEAL

ANDREW MOHR
SC PE# ELS.32784 E

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 32784
ANDREW MOHR

Digitally signed by Andrew Mohr
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Andrew Mohr, email=andrew.mohr@iegroup.net
Date: 2025.06.27 13:42:41 -04'00'
Adobe Acrobat DC version: 2015.006.30527

SOUTH CAROLINA INFINITY ENGINEERING GROUP, LLC No. 4573 CERTIFICATE OF AUTHORIZATION

INFINITY ENGINEERING GROUP, LLC
Infinity Engineering Group
1208 East Kennedy Boulevard, Suite 230
Tampa, Florida 33602
Phone: 813.434.4770
SC Cert. of Auth# 4573

ISSUE	BY	DATE	DESCRIPTION
	K.V	03/21/25	ISSUE FOR PERMIT
2	K	06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	**240634/15-340.00**
DATE:	**06/26/2025**
DRAWN BY:	**KL**
CHECKED BY:	**AM**

SHEET TITLE

EXTERIOR LIGHTING CUTSHEETS

SHEET NUMBER

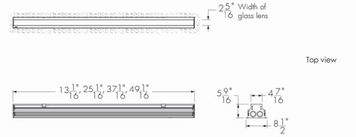
E-602

Specification Sheet

lumenfacade
Inground
LOI
WHITE AND STATIC COLORS

Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____



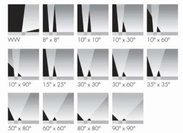
Front and side views

Photometric Summary

	Delivered output (lm)	Intensity (peak cd)
WW	3,634	10,795
8"x8"	4,512	59,238
10"x10"	4,410	33,872
10"x30"	4,586	25,296
10"x60"	3,876	12,062
10"x90"	4,077	6,927
15"x25"	4,346	19,773
30"x30"	4,730	16,886
30"x60"	4,035	5,317
35"x35"	4,612	11,616
50"x80"	4,656	3,904
60"x60"	3,868	3,368
80"x80"	4,548	2,992
90"x90"	4,070	2,132

Based on HO 40K full output, 4ft [1219mm].
DMX/RDM configuration.
2.5° factoryset tilt setting for WW optic, 0° tilt setting for all other optics.
Photometric performance is measured in compliance with IESNA LM79-08.

Optics



Description

The Lumenfacade Inground is an LED luminaire designed for ground-recessed lighting applications, including asymmetric wall washing, grazing, and linear wayfinding. An innovative, plug and play design simplifies installation, protecting the system from water infiltration and ensuring long-lasting performance. Featuring second generation LED technology, the Lumenfacade Inground is available in four different sizes (12 in, 24 in, 36 in or 48 in), with a wide choice of outputs, color temperatures, color-mixing systems, optics and controls. A unique asymmetric wallwash distribution is also available, providing exceptional uniformity and brightness for walls and signage.

Features

Construction	Walk over compliant up to 500 kg in any type of ground. Walk over compliant up to 1000 kg in concrete
Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Length (nominal)	12 in, 24 in, 36 in, 48 in
Optics	Asymmetric wallwash, 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 15° x 25°, 30° x 30°, 30° x 60°, 35° x 35°, 50° x 80°, 60° x 60°, 80° x 80°, 90° x 90°
Tilt Setting (factory set)	0 degrees, 2.5 degrees, 5 degrees, 20 degrees
Optical Option	Internal louver
Options	Anti-slip lens. CE (certification covers European Economic Area)
Power Consumption	5 W/ft (meets ASHRAE standards for linear lighting on building facades - not available for 12 in fixture lengths), 8.5 W/ft (RO version), 15.25 W/ft (HO version). Typically 20% higher for 12 in fixture lengths
Warranty	5-year limited warranty

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately
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Specification Sheet

lumenfacade
Inground
LOI
WHITE AND STATIC COLORS

Colors and Color Temperatures

2200K 2700K 3000K 3500K 4000K

Red Green Blue

Controls

ON/OFF 0-10V DALI

lumentalk DMXrdm EcoSystem Enabled

Ratings

IP68 IK10

Certifications

cULus CE RoHS

Performance

Maximum Delivered Output	4,730 lm (48 in fixture, 4000K, 30° x 30°, 0° tilt setting, DMX/RDM)
Maximum Delivered Intensity	59,238 cd at nadir (48 in fixture, 4000K, 8° x 8°, 0° tilt setting, DMX/RDM)
Illuminance at Distance	Minimum 1 fc at 243 ft (48 in fixture, 4000K, 8° x 8°, 0° tilt setting, DMX/RDM)
Color Consistency	2 SDCM, 3 SDCM (2200K)
Color Rendering	Minimum CRI 80
Lumen Maintenance	L70 280,000 hrs, L95 35,000 hrs

Physical

Optical Chamber Material	Aluminum
Blockout Material	Polymer recycled PVC reinforced with a stainless steel frame
Trim Material	Anodized aluminum
Lens Material	Tempered glass
End Cap Material	Die cast aluminum
Hardware Material	Stainless steel
Weight	12 in: 7.5 lbs, 24 in: 15.3 lbs, 36 in: 21.4 lbs, 48 in: 27 lbs

Electrical and control

Voltage	120 to 277 volts
Fixture Cable	Power and data in one cable
Leader Cable Conductor	SC #16-5
Connectors	IP68 push-lock
Control	On/Off control, Lumentalk, 0-10V dimming, DALI dimming, Lutron® EcoSystem® Enabled dimming, DMX/RDM enabled
Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-bit or 16-bit

Environmental

Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP68 rated for up to 1 ft, not suitable for permanent immersion applications
Impact Resistance Rating	IK10

Accessories (order separately)

Cables	Lumenfacade Inground Leader Cable, Lumenfacade Inground Jumper Cable
Electrical Accessories	Lumenfacade Inground Junction Box

lumenpulse™ 1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 F 514.937.6289
info@lumenpulse.com www.lumenpulse.com www.lumenpulse.com/products/2556

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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
INFINITY ENGINEERING GROUP, LLC
No. 4573

bdg architects
400 N Ashley Drive, Suite 600
Tampa, FL 33602
P: 813 - 323 - 9233
Lic. #: AA - 0003590
W: www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING

2901 MAY RIVER CROSSING,
BLUFFTON, SOUTH CAROLINA 29910

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SC PE# ELS.32784 E

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No. 32784
ANDREW MOHR

Digitally signed by Andrew Mohr
DN: c=US, st=Florida, l=Tampa, o=Infinity Engineering Group LLC, cn=Andrew Mohr, email=andrew.mohr@iegroup.net
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PROJECT INFORMATION BLOCK

JOB #	**240634/15-360.00**
DATE:	**06/26/2025**
DRAWN BY:	**KL**
CHECKED BY:	**AM**

SHEET TITLE

EXTERIOR LIGHTING CUTSHEETS

SHEET NUMBER

E-603

PART 1 – GENERAL

A. Extent of underground irrigation system is shown on Drawings and in the schedules.
   1. Provide all labor, materials and equipment required by or inferred from Drawings and Specifications to complete the Work of the Section.
   2. Provide additional Work and materials required by local authorities at no extra cost to Owner.
   3. Contractor shall provide all permits, applications, licenses and other qualifications to complete work at no additional cost to owner.
   4. Reference Standards: American Society for Testing and Materials, Annual Book of ASTM Standards, latest edition.

B. Codes and Standards: Perform Irrigation Work in compliance with applicable requirements of governing authorities having jurisdiction. Notify Landscape Architect in writing of all discrepancies immediately.

C. Do not make substitutions: If Contractor desires to make substitutions of materials; sufficient descriptive literature and material samples must be furnished to establish the material as an equal substitute. In addition, Contractor must state his reasons for desiring substitute materials. Submit this request and information to L. Architect.

D. Approval and Selection of Materials and Work: The selection of all materials and execution of all operations required under the Drawings and Specifications is subject to the approval of Owner and Landscape Architect. They have the right to reject any and all materials and any and all Work, which in their opinion does not meet requirements of the Contract Documents at any state of operations. Contractor to remove rejected work and or materials from project site and replace promptly.

E. "As-Built" Drawings: Any changes in layout and/or arrangements of the proposed irrigation system, or any other differences between proposed system and actual installed conditions are to be recorded by Irrigation Contractor in the form of an "As-Built" Drawing. All drawings are to be clearly and neatly drawn on a Mylar sepia base of original design. With accurate as-built drawn, contractor shall provide electronic PDF copy as part of closeout documents (landscape contractor shall obtain this service thru print house of their choosing). Provide Owner and Landscape Architect with a reproducible Mylar copy of the "As-Built" Drawings and electronic PDF before Work under this Contract will be considered for acceptance. All automatic and manual valves, hose bibs or quick couplers and wire splice shall be shown with actual dimensions to reference points so they may be located easily in the field. Submittal of approved "As-Built" Drawings will preclude any Application for Final Payment by Contractor.

F. Delivery, Storage and Handling: Deliver material and equipment in such a manner as to not damage parts or decrease the useful life of equipment.
   1. Store materials away from all detrimental elements. Coordinate with General Contractor to secure a safe staging area.
   2 Handle, load, unload, stack and transport materials for irrigation system carefully to avoid damage. Handle pipe in accordance with Manufacturer's recommendations.

H Verify Tap: Test water conditions, as they exist immediately down stream from tap: If they do not meet design demands, notify Landscape Architect immediately of existing conditions.

I The irrigation system is designed to operate under the following conditions; a minimum of 60 psi of water pressure at tap and at least 60# gpm available water supply. Tie to existing system and verify.

J Job Conditions: Insurance on irrigation materials or equipment stored or installed is the responsibility of Irrigation Contractor. Such insurance shall cover fire, theft and vandalism. Should Contractor elect not to provide for such insurance, he will in no way hold Owner responsible for any losses incurred by the aforementioned acts. The Contractor is responsible for all costs incurred in replacing damaged or stolen materials.
   1. Obtain all required permits and pay all required fees, at no additional cost to Owner. Any penalties imposed due to failure to obtain permits or pay fees are the responsibility of the Contractor.
   2. Provide and maintain all passageways, guard fences, warning lights and other protection devices required by local authorities.
   3. Existing site improvements shall be performed in a manner that will avoid possible damage. The Contractor is responsible for any damage of a mechanical nature as well as damage resulting from leaks in irrigation system whether due to negligence or otherwise.
   4. Keep project site clean and orderly at all times during construction.

K. Sleeves are to be installed by the Irrigation Contractor.
   Coordination and scheduling for excavation of sleeve ends is the responsibility of the Irrigation Contractor.
   1. Coordinate and schedule all Work with General Contractor.
   2. Damages resulting from irrigation installation to Work of other trades must be repaired at the expense of Contractor in a timely fashion.
   3. Make adjustments to system layout as may be required and requested to provide complete coverage at no additional cost to Owner.

L. Warranty: All Work for a period of one year, starting on Date of Substantial Completion, against defects in material, equipment, Workmanship and any repair required resulting from leaks or other defects of Workmanship, material or equipment.
   1. Repair unsatisfactory conditions promptly at no cost to Owner.
   2. Owner may make emergency repairs without relieving the Contractor of this warranty obligation.
   3. Irrigation Contractor to repair settling of backfilled trenches occurring during warranty period, including restoration of damaged plantings, paving or improvements resulting from settling of trenches or repair operations.
   4. Respond to Owner's request for repair Work within ten days. If not, Owner may proceed with such necessary repairs at Contractor's expense. In addition, Contractor shall be held responsible for replacement of any plant material (tree, shrubs, sod or seed) that becomes damaged or dies due to a lack of water during periods in which irrigation system is inoperable.

PART 1 - PRODUCTS:

A. Specific requirements concerning the various materials and arrangements which safe to be installed are shown on drawings.

B. Quality and Size: Material specified by name and/or model number in the Specifications, on the site or detailed drawings are used for the purpose of identification of materials and to insure specific use of that material in the construction of the system. No substitutions will be permitted without approval. (See Substitutions).
   1. Plastic pipe for all main lines is schedule 40 (PVC while laterals 1 ½" size and over is Class 200 PVC Type 1120 or 1220 as manufactured Cabot, John-Mansville (or approved equal) unless otherwise specified herein or on the drawings. All pipe, 1" size and less, is Class 160.
   2. PVC pipe is to be continuously marked with Manufacturer's identification, type, class and size and installed with these markings on the tope of the pipe.
   3. All fittings should be Schedule 40 PVC Type 1, of domestic manufacture and identified as to pressure rating or schedule.

C. Solvent Weld: Solvent weld for PVC pipe over 20' length must be installed with standard 20' length sections. Unnecessary joints or couplings are not acceptable.

D. Risers: Provide threaded Schedule 80 PVC risers. All risers above grade to be either dark gray or black PVC pipe.

E. Electric Wiring: All 110 volt AC wiring to controller must consist of three wires: one black, one white and one ground. Electrical service to be provided by General Contractor unless otherwise directed by Owner.
   1. All splices in controller wiring shall be waterproofed by using Rainbird "Snap-Tite" wire connectors.
   2. All control wiring shall be 24-volt solid wire U.L. approved for direct burial in ground. Minimum wire size: 14 gauge.
   3. All control wiring and wiring connections from controller to valves shall be included in this contract.

F. Sprinkler Heads: Provide as indicated on the plan. Heads perform to Manufacturer's specifications concerning radius of throw and volume in gallons per minute at given pressure. All sprinkler heads and hose bibs are to be on triple elbow swing joints.

G. Automatic Controller: Is to be installed in the location (shown on drawings/identified by owner's representative). The controller location will be accessible as shown on drawing for maintenance. Provide for the possibility of making minor timing adjustments to the controller in the field.
   1. Provide controller specified on drawing; fully automatic capability as well as manual operation of the system.
   2. Irrigation Contractor to coordinate sleeve through wall for irrigation controller (with General Contractor). General Contractor to provide power to controller. Coordinate with General Contractor.
   3. Provide controller specified on drawing that operates on a minimum of 110 volts AC power input and is capable of operation of 24-volt AC electric remote control valves, with a reset circuit breaker to protect from overload. Contractor is responsible for connection to 100V AC power to controller.

H Stations: Each station shall have a time setting knob that can be set for variable timing in increments from 6 to 60 minutes, or set to omit the station from irrigation cycle.
   1. The controller, Rainbird clock, pedestal mounted. (Refer to plan for station amounts) A master "on-off" switch shall allow the valve power output to be interrupted without affecting the controller.
   2. Controller Construction: The controller must be constructed so that all internal parts are accessible through controller door without disturbing cabinet installation.

I Water Meter: Type approved by local municipality, size shown on drawing.

J Backflow Preventer: To be installed by General Contractor – Reference Civil Plans.

K Pressure Regulator: Provide Wilkins #600 or equal.

L Mastervalve: Rainbird # electric remote control valve w/brass body and bonnet. Valve shall be wired to open and close with each circuit valve. Size based on mainline.

M Valve Boxes: Ametek 12" rectangular valve box with cover or jumbo mechanical box with cover and Ametec 10" round valve box with cover as indicated on drawings. Place a minimum of 6" depth of gravel under each valve box, meter, and pressure regular and backflow preventer box.

N Sleeves: Class 200 PVC Pipe Type 1120 or 1220: Size as indicated on Detail by Irrigation Contractor.

O Hose Bibs: Hose bibs shall have an all cast brass or bronze body. Hose bibs to be ¾" inside diameter and shall be installed below grade in Ametek 12" x 18" valve boxes. The cover over hose bib boxes shall be clearly marked with "non-potable water".

P Control Valves: Provide Rainbird Electric Remote Control Valve (size as indicated on Plan). Valve to conform to Manufacturer's Specifications concerning performance and at a given pressure.

Q Surge Protection Equipment: Provide General Electric Lightning Arrestor #GL 15 CC B 007 for controllers not equipped with primary surge protection.
   1. Provide secondary surge protection installed on the 24V AC valve control wiring for systems controlling 24V AC solenoid operated valves.
   2. The Irrigation Contractor is responsible for determining whether the above mentioned surge protection equipment is provided for in controller as a "built-in" unit or if it must be supplied and installed separately.

R Isolation Valves: Provide all gate valves for isolation purposes allowing full diameter opening when in full open position.
   1. Manually operated valves shall be same size as mainline.

S Automatic Drain Valves: Install at low point for each lateral line "Rainbird 16AP" drain valve in gravel sump 12" x 12" in size and with a minimum of 18" of cover over sump. Miscellaneous System Components: Provide risers, reducers, couplings, adapters, and fittings as necessary to complete irrigation system.

PART 2 - EXECUTION

A. Provide a competent superintendent and necessary assistants on the job while Work is progress. The Superintendent represents Contractor in all functions and directives given to him by Owner are binding as if given to Contractor in person.

B. During the installation Landscape Architect may make regular site visits and reject any Work and materials that do not meet the Standards called for in Contract Documents. Rejected work must be promptly corrected and no time extension will be allowed for this reason.

C. Inspection: Inspect project area prior to start of Work to determine that all site conditions are acceptable for irrigation Work to begin. Inform Landscape Architect of unsuitable conditions. Do not proceed with installation of irrigation system until unsatisfactory conditions have been corrected in a manner acceptable to installer.

D. Preparation: Flag all existing underground utilities prior to trenching and/or boring operations. Obtain utility locations from Owner an/or General Contractor and Utilize utility locating services when necessary.

E. Excavation: All excavation is unclassified and includes all materials encountered.
   1. Prior to excavation, remove sod, preserve and replace after backfilling is completed.
   2. After excavation and backfilling is completed, regrade trenched area consistent with surrounding area and re-establish with 100 percent pure of type grass existing. Maintain as necessary for establishment and survival of grass.
   3. Backfill material is to be free from rock, large stones and other unsuitable substances that could damage the pipe or create unusual settling problems. Back fill in 6" layers and tamp after each layer to prevent excessive settling.
   4. Backfill trenches containing plastic pipe when pipe is cool to avoid excessive contraction in cold weather. Such backfilling can be done in early morning hours or pipe may be water cooled prior to backfilling procedures.
   5. Backfill material evenly in lifts not to exceed 6" and compact to 100 percent of maximum density.
   6. Contractor is responsible for establishing compaction in trenches equal to or exceeding overall compaction of paving base. Leave top of trench ready for asphalt by others. Minimum depth of cover of all pipe is as follows:
      ¾" – 1" pipe – minimum depth cover is 12"
      1 ½" – 1 ½" pipe – minimum depth cover is 18".

F Sleeving: Location of sleeving shown on plans is schematic. Sleeving Contractor to make adjustments necessary to accommodate existing vegetation, utilities and other existing conditions. Repair of damage to existing utilities, structures or other construction resulting from installation of sleeves is the responsibility of Sleeving Contractor. Verify those installed previous by others. Install PVC sleeves according to detail.

G Pipe Joints: Follow Manufacturer's Recommendation.
   1. Solvent weld PVC pipe, assemble according to Manufacturer's Recommendations, using appropriate PVC pipe cleaner/primer and solvent cement.
   2. PVC to metal connection, Work metal connection first then use Teflon pipe fitting
   3. Main line shall be installed according to Manufacturer's Recommendations.

H Pipe and Fittings Installation: Install according to Manufacturer's Recommendations including snaking-in of PVC pipe to prevent excessive strain when contracting in cold weather. Solvent weld fittings must conform to Schedule 40 or Schedule 80 PVC dimensions and specifications for solvent weld fittings and as manufactured by Lasco, Inc.

I Lateral lines and risers shall be as follows:
   1 Install according to Manufacturer's Recommendations using standard techniques.
   2 Combine lateral lines and main supply lines in common trenches wherever possible with specified minimum depth of coverage over all pipe (see Backfilling).
   3 Install riser such that no excessive movement occurs while sprinkler head is in operation.
   4 Height of risers to be in accordance with planned and existing plant material. Height of all risers is subject to approval of Landscape Architect. Exchange of 4" pip-up to 12" high pop-in field by Landscape Architect is incidental.
   5 Plug lines immediately upon installation to minimize infiltration of foreign matter.
   6 Flush lateral lines and risers prior to installation of sprinkler heads.
   7 Above ground risers must be dark gray or black in color.

J Sprinkler Heads: Low pop-up sprinkler heads shall be installed in such a manner that tip is 1" above finished grade. Where finish grade has not been established, extend a riser a minimum of 12" above existing grade to mark location of head. After finish grade is established, install heads at specified height on trip elbow swing joint; no flex pip will be accepted.
   1 High pop-up heads: High pop-up shrub heads shall have the finished height determined by Landscape Architect.
   2. Backfill around sprinkler head assembly in such a manner that sprinkler head is stabilized so that no lateral motion is exhibited during operation.
   3. Sprinkler Heads on Risers: Sprinkler heads on risers should be maintained on a schedule 80 PVC riser coupled by a Schedule 40 F.I.P.T. coupling (Lasco #420007) to polyethylene riser first out of lateral fitting. Height of all heads in bed areas to be determined in the field by Landscape Architect.
   4. Install control wire in orderly fashion, locate in main line trench. Bundle wires together and tape at 10' intervals. Position wires under main line.
   5. Allow for contraction of wires by providing looped slack at directional changes in supply line.
   6. Keep wire splices to a minimum. All splices shall be waterproofed by using "Rainbird Snap-tite" wire connectors. All splice locations to be indicated on "as- built drawings".
   7. Pass Wires under existing or future paving, construction, etc. through PVC sleeves provided by Irrigation Contractor.

K. Control Equipment: Install automatic valves and controller according to Manufacturer's Recommendations. Appropriate locations are shown on the drawings.

L. Valve Boxes: All valves are to be housed in valve boxes. Install according to Manufacturer's Recommendations and according to details. Position boxes at a height that will not cause them to interfere with maintenance machinery (e.g., mowers) and such that soil and mulch do not wash into the box. Locate all valve boxes within plant bed areas wherever possible.

M. Install surge protection equipment on primary (110 VAC) power lines. Connect each surge protect unit to at least on 5/8" diameter by 9' long copper clad grounding electrode driven into the soil to its full depth. Place electrodes no closer than 2' from controller cabinet or any control or power wire. Be consistent in locating ground rods throughout installation with respect to controller position and not locations on "As-Built" Drawings.
   1. Ground wire between surge protection device and grounding electrode to be single to control unit. Route ground wire away from power and control wires where possible.
   2. When it is necessary to pass through controller cabinet wall use two #L-70 copper grounding lugs and brass bolt as noted in detailed drawings. Use #WE 5/8" ground rod clamp (single piece and bolt) to make connection between ground rod a minimum of 10". Cover the top of rod and clamp with a Toro #850-00 cover with lid at grade level.
   3. Balancing and Adjusting: Balance and adjust the various components of system so that overall operation of the system is most efficient. This includes synchronization of controllers, adjustment to pressure regulators, part circle sprinkler heads and individual station adjustments on controllers. The Contractor has the right to call in the Designer or Owner's Representative to aid in balancing and adjustment of system.

N. Operational Testing: Upon completion of irrigation system and after head installation, test entire system for proper operation. Flush all air from system and check components for proper operation.

O. "As-Built" Drawings: "As-Built" Drawings are to include locations of all wire splices, valves (automatic and manual) with triangulated measurements to each location as well a any deviations in location of piping and heads as represented by Contract Documents.

P. Owner Orientation: Upon completion of Work and final acceptance by Owner and Landscape Architect, Contractor is responsible for orientation of maintenance personnel in the operation, maintenance and repair of system. Furnish copies of all available parts lists, trouble-shooting lists and specification sheets to Owner prior to final payment.
   1. Set initial watering schedules and programming on automatic controllers at the direction of Landscape Architect. Changes in schedules and programming and instructions on how to make such changes are under the responsibility of the Landscape Architect.

Q. Winterizing the System: If Owner requires, irrigation piping must be winterized by first blowing system clear of water using compressed air (80 psi minimum) admitted into piping at a quick coupling valve or hose bib located at a higher elevation on the system piping. Activate individual zones; higher zones first, then proceed successively through the system towards lower elevations. Proceed through all zones twice. The air compressor used to winterize system must have an engine separate from compressor tanks to prevent high temperature air from being injected directly into PVC piping.

R. Clean Up: During Irrigation Work, keep project site clean and orderly. Upon completion of Work, clear grounds of debris, superfluous materials and all equipment. Remove from site to the satisfaction of Landscape Architect and Owner.

S. Protection: Protect Irrigation Work and materials from damage due to irrigation operations, operations by other contractors, trades and trespassers. Maintain protection until Date of Substantial Completion. Cover all openings into system as it is being installed to prevent obstructions in pipe and breakage, misuse or disfigurement of equipment.
   1. Contractor is responsible for theft of equipment and material at job site before, during and after installation, until Date of Substantial Completion of the Work in total.

T. Inspection and Acceptance: Upon completion of Work, notify Landscape Architect and Owner at least three days prior to requested Date of Inspection for Substantial Completion. Prior to contacting Landscape Architect for the purpose of demonstrating all or any part of the system, thoroughly test the system for proper operation and make adjustments and replace any defective parts prior to inspection for Substantial Completion. Where inspected irrigation Work does not comply with requirements, replace rejected Work promptly, within two weeks of inspection. In unusual circumstances Owner may grant a longer time period. If such replacements are not completed within time specified, Contractor may be considered to be in default of Contract and Owner may use Contract Retainage to hire other Contractors to finish the Work.

PART 4- ACCEPTANCE AND GUARANTEE

A. Substantial Completion: Submit written requests for inspection for Substantial Completion to Landscape Architect at least three calendar days prior to anticipated Date of Inspection and Testing. Substantial Completion cannot be granted, and at the same time no further applications for payment shall be approved for more than 85% of contract

   until there has first been a walk-through for head coverage. At this time the Landscape Architect or Owner's Representative will prepare a "punch list" that consists of items to be addressed and corrected by Contractor immediately. Depending on the extent of the Work on the "punch list", the Landscape Architect will determine whether Substantial Completion is to be granted at that time or at a later date, pending the completion of the "punch list".
   1. Submit record drawings and maintenance manuals to Landscape Architect with written request for inspection.
   2. Review "punch list" Work jointly with Owner and Landscape Architect for Substantial Completion of total (contract) Work.
   3. Upon satisfactory completion of repairs and replacements and completion of "As – Built" drawings, Landscape Architect and Owner will verify system for Substantial Completion and issue AIA Certificate of Substantial Completion if all items on "punch list" have been completed. If necessary another "punch list" will be written to itemize any deficiencies still existing and will be attached to AIA Certificate. Contractor shall complete all "punch list" items if possible within 30 days while continuing maintenance.

B. Date of Substantial Completion: Date of Substantial Completion will constitute beginning Date of One-Year Guarantee. This Date also constitutes the beginning of the warranty responsibilities and acceptance by Owner and Landscape Architect.
   1. Guarantee all Work, products, equipment and materials for one year, beginning at Date of Substantial Completion as per Written letter of notification.
   2. Make good any damage, loss, destruction or failure. Repairs and replacements shall be done promptly and at no additional cost to Owner.
   3. Repair damage to grade, plants and other Work or property as necessary.
   4. If replacement are not acceptable during or at end of Guarantee Period Owner may elect either subsequent replacement or credit. Replacement products shall have a similar one-year guarantee from time of replacement.
   5. Guarantee applies to all unacceptable conditions or losses with exception of those due to acts of nature, vandalism or Owner neglect, as determined by Landscape Architect. Acts of Nature include, but nay not be limited to, high winds or hurricane or tornado force, sleet, hail, freezing rain and extreme cold (as determined by Landscape Architect). Contractor agrees to replace losses due to Acts of Nature at fifteen percent (15%) less than original contract price for the damaged Work.

C. Final Inspection and Acceptance: One year after the Date of Substantial Completion of Work in total, the Landscape Architect and Owner will inspect Work for Final Acceptance. Upon satisfactory completion of repairs and/or replacements Landscape Architect certifies, in writing, the Final Acceptance of Work.
   1. At the end of Guarantee Period and upon request for inspection, jointly review all guaranteed Work for Final Acceptance.
   2. Submit written request for inspection for Final Acceptance to Landscape Architect at least two weeks prior to anticipated Date of Inspection; include list of Work Substantially Complete and list of Work replaced during Guarantee Period.
   3. Upon completion by Contractor of all required replacements, Owner and Landscape Architect will confirm the Date of Final Acceptance of Work.

End of Section

JOHNSON & CO.
LANDSCAPE ARCHITECTS
LAND PLANNERS
3115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203
PH: (205) 324-4447 • FAX: (205) 324-8068
WEB: JOHNSON-CO.NET

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910
2

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573
IEG JOB NO. 15-360.00

SEAL

State of South Carolina
REGISTERED LANDSCAPE ARCHITECT
No. 1049
WILLIAM REED JOHNSON
6/27/25

ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
2		06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634
DATE:	02/12/2025
DRAWN BY:	JCO
CHECKED BY:	WRJ

SHEET TITLE

IRRIGATION SPECIFICATIONS

SHEET NUMBER

GL-010

PART 1 – GENERAL

A. Extent of the planting is shown on the drawings and in the schedules.

(1) Provide all labor, materials and equipment required by or inferred from the Drawings and Specifications to complete the work of this section.

(2) Providing, placing, grading topsoil for landscape grading as indicated in the Drawings.

(3) Providing and installing trees, shrubs, seeding and solid sod for landscape planting, as per details.

(4) To successfully dig existing plants and store them on or off-site during construction for replanting on-site per plans where they will reestablish and thrive.

B. Specified Maintenance Period, and One-Year Guarantee Period.

C. Verify plant count from plan, and provide and install all plant material on plan.

D. All plants shall conform to or surpass minimum quality standards as defined by the American Association of Nurserymen; current edition of American Standards for Nursery Stock published by American Association of Nurseryman, Inc. and in addition shall conform to sizes and descriptions in the plant list. All work to be performed by a firm specializing in Landscaping, not a subcontractor.

E. Substitution from the specified plant list will be accepted only when satisfactory evidence in writing is submitted to the Landscape Architect, prior to submitting bid – tree list, showing that the plant material is not available. This list shall be submitted prior to submitting bid.

(1) Requests for approval of substitute plant material shall include common and botanical names and the size of substitute material.

(2) Only those substitutions of at least equivalent size and having essential characteristics similar to the originally specified material will be approved. The Landscape Architect will issue acceptance or rejection of substitute plant material in writing.

F. Approval and selection of materials and work: The selection of all materials and the execution of all operations required under the Drawings and Specifications is subject to the approval of the owner and Landscape Architect. They have the right to reject any and all materials and any and all Work, which in their opinion does not meet the requirements of the Contract Documents at any stage of the operations. Remove rejected Work and or materials from the Project Site and replace promptly at no additional cost to the owner.

G. Workmanship: Install all plant materials neatly.

(1) Make minor adjustments to layout as may be required and requested by Landscape Architect at no additional cost to the owner.

(2) Coordinate delivery of all plant material with time of installation to prevent any plant material from being stockpiled on site longer than 24 hours.

(3) Deliver materials in such manner as to not damage or decrease the health and vigor of the plant materials.

(4) Store materials away from detrimental elements. Coordinate with General Contractor to secure a safe staging area.

(5) Handle, load, unload, and transport materials carefully to avoid damage.

(6) Maintain and protect plant materials as necessary to insure health and vigor.

(7) Guarantee plant materials and lawn areas for one year from the date of substantial completion. Contractor shall replace plants that fail to grow properly with plants as originally specified at the earliest practical date following plant failure, without additional charges to the owner.

(8) Replacement materials will be guaranteed for one year from the date of replacement.

(9) The Contractor shall not be responsible for replacing plants that are damaged by abuse or improper maintenance by Owner as reported by Contractor outlined below or by acts of nature occurring after acceptance.

H. Acts of nature may include, but may not be limited to high winds of hurricane or tornado force, sleet, hail, freezing rain and extreme cold (as determined by the Landscape Architect). Contractor agrees to replace losses due to Acts of Nature at fifteen percent (15%) less than the original contract price for the damaged work.

I. Contractor's Periodic Inspection: During guarantee period, Contractor shall make periodic inspections of the project to satisfy himself that maintenance by the owner is adequate.

(1) Any methods or products that he deems not normal or detrimental to good plant growth shall be reported to the Owner in writing.

(2) Failure to inspect and report shall be interpreted as approval and the Contractor shall be held responsible for any and all necessary replacements.

J. Soil Testing: Contractor shall have soil tested by a suitable laboratory chosen by the Contractor and subject to written approval of the Landscape Architect.

(1) Soil test shall be completed in all planting areas to determine lime and fertilizer requirements. Submit test results to Landscape Architect for approval. Contractor shall adjust pH and fertility based upon these results. No addition to or placement of soil is to be done prior to initial soil test report approval.

II. PART 2 - PRODUCTS

A. Topsoil: All topsoil shall be supplied from offsite stockpile and spread by the Landscape Contractor. The Landscape Contractor shall be responsible for fine grading. Topsoil shall be fertile, friable, sandy loam and a natural surface soil obtained from areas reviewed by Landscape Architect and possessing characteristics of representative soils in the project vicinity that produce heavy growths of crops, grass, or other vegetation.

B. Topsoil shall be free of subsoil, brush, organic litter, or objectionable weeds, clay, clots, stumps, stones, roots or other material harmful to plant growth or hindrance to planting or maintenance operations. Should regenerative materials be present in the soil, Contractor shall eradicate and remove such growth, both surface and root, which may appear in the imported materials within 1 year following acceptance of the Work.

C. Topsoil shall not be handled in a frozen muddy condition. The acidity range for topsoil in planting beds shall be between 5.0 and 7.0 inclusive. The acidity range for topsoil to be placed in areas to receive sod shall be 6.0 – 7.0. The mechanical analysis of the soil shall be as follows:

Sieve Size	Percent Passing
1" mesh	99 – 100 percent
¼" mesh	97 – 99 percent
No. 100 mesh	40 – 60 percent
No. 200 mesh	20 – 40 percent

D. Topsoil, regardless of source, shall meet all requirements of the paragraph above. Stockpile material that does not meet the requirements may, at the option of the Contractor, be improved by screening and the addition of organic matter and chemical admixtures.

E. Planting Soil Mixture: Provide soil mix amended as per laboratory recommendations. Basic planting soil mix consists of:

(1) 50% topsoil (as described above)

(2) 50% prepared additives (by volume as follows)

(3) 3 parts humus (forest peat or Nature's Helper)

(4) 1 part sterilized cow manure, commercial fertilizer and lime as recommended in soil test analysis.

F. The components shall be thoroughly mixed to uniform consistency by hand or machine methods prior to placement in and around plantings.

G. Trees: All large deciduous shade trees and ornamental trees are to be field grown from rooted cuttings true to variety and not grafted material. No grafted material will be accepted for the initial installation or as guarantee replacement material.

H. Alternate Growers – Will be considered by the Landscape Architect only if submitted with photographs of specified material within 10 days from date contract is awarded to General Contractor. The Landscape Architect will select and tag 100% of plant materials from acceptable alternate growers. The contractor will be responsible for all expenses related to tagging trips to alternate growers including usual fees charged by the Landscape Architect. The Contractor shall arrange for and provide transportation for the Landscape Architect. Contractor shall provide the Landscape Architect a minimum of three weeks advance notice. Contractor shall limit tagging trips to no more than two at a maximum of two days each. All tagging trips will be completed within 45 days from date contract is awarded to General Contractor.

I. Contractor will submit confirmed orders from acceptable alternate growers within ten days of tagging by the Landscape Architect. Contractor is responsible for payment of deposits required by acceptable alternate growers.

J. Fertilizer: Fertilizer for all trees, plants and ground covers shall be Sta-Green Nursery Special delivered to the site in unopened containers.

K. Fertilize all areas according to the manufacturer's recommended rates in accordance with the monthly maintenance guideline herein.

L. Cultivate and waterbeds or pits thoroughly after application.

M. Adjust fertilizer in accordance with interim soil test reports.

N. Fertilizer for sod: Fertilizer for sod shall be Sta-Green and sod fertilizer containing the following percentages by weight:

18% nitrogen

24% phosphorous

10% potash

O. Nursery Special or approved equal.

P. Fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original, unopened container, bearing the Manufacturer's guaranteed analysis. Fertilizer shall not have been exposed to weather prior to delivery to the site. After delivery, until used, it shall be completely protected at all times. It shall not be stored in direct contact with the ground.

Q. Plants: All plants shall conform to or surpass minimum quality standards as defined by the American Association of Nurserymen (AAN), current edition of American Standard for Nursery Stock published by the ANN, Inc. and in addition, shall conform to sizes and descriptions in the plant list.

R. Certificates of Inspection for Plant Material: All necessary Inspection certificates shall be supplied, if requested, to the Landscape Architect's representative for each shipment of plant material, as required by law. Certificates showing source of origin shall be filed with Landscape Architect prior to acceptance of the material.

S. Inspection: All plant materials shall be subject to inspection and approval. The Landscape Architect reserves the right to reject any and all plants that fail to meet this specification at any point during the installation of the job. The Contractor at no additional cost shall promptly remove all rejected materials from the site to the owner.

T. Quality and size: All plant materials furnished shall be well branched, proportioned width to height, or normal habit, sound, healthy and vigorous in growth. The minimum acceptable sizes of plants shall be measured before pruning with branches in normal position and shall conform to measurements specified. Plants used where symmetry is required shall be matched as closely as possible. It is the responsibility of the Landscape Contractor to determine from the planting plan where matching plants should be used. Ask for clarification by Landscape Architect when necessary and do so before bids are submitted. Plants shall meet all requirements as listed in the plant list.

U. Source of Plants: Plants shall be field nursery, container grown or collected material subject to the requirements of the Specifications.

V. Field Tagged Plants: All deciduous and evergreen trees are to be sourced by the contractor at any of the approved nurseries, of the provided list, or equal as approved by the Landscape Architect. The owner will pay the Landscape Architect for tree tagging trips. The contractor should anticipate accompanying the Landscape Architect on the tagging trips but is not required to do so.

W. Insect, Pests and Plant Diseases: All plants shall be of healthy stock, free from disease, insects, eggs, larvae and parasites of an objectionable or damaging nature.

X. Substitutions: Substitutions from the specified list will be accepted only when satisfactory evidence in writing is submitted to the Landscape Architect, showing that the plant specified is not available. Requests for approval of substitute material shall include common and botanical names and size of plant material. Only those substitutions or at least equivalent size and having the essential characteristics similar to the originally specified material will be approved. The Landscape Architect will issue acceptance or rejection of substitute plant materials in writing. Substitutions may be made only prior to bidding.

Y. Balled and burlapped plant material are to be wrapped with organic burlap wrapping only. Synthetic material will not be accepted. Remove all nursery-loading straps once plant material is placed in the pit.

Z. Guying of trees: Stakes for supporting trees shall be sound timber, straight, sized as shown in planting details and of sufficient length to adequately support the plant. All visible surfaces shall be painted flat black.

AA. Deadmen or stakes for anchoring guy wires in the ground shall be of size, material and strength adequate to hold guy taut and maintain tree firmly in an upright position.

BB. Wire shall be # 12 gauge galvanized wire in double twisted strand to adjust tension.

CC. Hose for encasing guy wires shall be new or suitable used 3/4" diameter rubber or plastic garden hose, black in color.

DD. Wrapping material for trees with 2" caliper trunks or larger shall be standard crinkled paper cemented together with bituminous material in strips 8 to 10"wide.

EE. Twine for tying wrapping material shall be lightly tarred, medium or sisal yarn; no synthetic cord shall be used.

FF. Mulch: Single shredded 2-3" long pinebark/hardwood mulch shall be clean, fresh, free of noxious weeds, seed, fire ants, Japanese beetles and/or fringed beetles. No nuggets will be accepted.

GG. Sod: Sod shall be 100% specified grass, free of weeds, freshly dug.

HH. Lime: Ground dolomitic limestone not less than 85 percent total carbonates and magnesium, ground so that 50 percent passes 100 mesh sieve and 90 percent 20 mesh sieve.

II. Inoculants: Pure culture of nitrogen-fixing bacteria prepared specifically for the legume species. A mixing medium as recommended by the manufacturer shall be used to bond the inoculant to the seed.

JJ. All necessary hand tools and materials typically used in planting operations.
KK. Plastic labels or tags on which identification can be made.
MM. 'Nature's Helper' Soil conditioner
NN. Insecticide as needed to control damage
OO. Anti-desiccant spray for minimizing transpiration during storage
PP. Bailing twine
QQ. Burlap – 36" wide, rolled.

PART 3 – EXECUTION

A. Execution of Digging and Holding: All transplanting work, and storage of plants is to be carefully coordinated with the General Contractor. Prior to digging, thoroughly water all plant material to be dug to moisten the root area. Root prune all plants using a sharpened shovel a minimum of one week in advance of the anticipated day when digging and storage will occur. Using a shovel, root prune by encircling the plant to be dug by pushing the shovel down at a 75-85° angle not less than 10" deep. Do not attempt to lift the plant or remove it from its current location at this time. Prune the circle around the plant per the following root size schedule. Deep water each plant and foliar mist in the first day to help the plant transition. Monitor the water and mist during the first week and until the digging occurs. Not less than one week after the root pruning carefully dig each plant by using the shovel to raise the plant slowly and onto a sheet of burlap cloth twice the size of the root ball. The plant should be then carried to the holding area supported equally on all four corners. When the plant is laid down in the holding area, the burlap is to be folded over the root ball/mass and secured with balling twine. Then cover the entire root ball with a soil conditioner. Clum's "Nature's Helper" or approved equal, and thoroughly water. Do not allow the rootball/mass dry out during the transplanting process. All dug plants are to be maintained and watered continuously where held until such time that they can be replanted. Maintenance should include pruning to thin, removal of dead branches, wilt-proof sprayings, insect treatments, etc., in addition to regular watering.

Root Ball Size:

Plant Height / Size	Minimum root ball diameter
10' – 12'	24" – 30"
8' – 10'	22" – 24"
4' – 8'	20" – 22"
12" – 4'	18" – 20"
1" – 12"	Spread of foliage

B. Layout of major plants: Before commencing planting operations, location of major plants and outlines of areas to be planted shall be marked out on the ground, by the Contractor for approval by the Landscape Architect. Contact the Landscape Architect a minimum of 24 hours in advance of the anticipated review of the layout.

C. Time and planting: Planting operations shall be during favorable weather in which conditions are neither extremely cold nor hot, nor to a point that the risk of loss is too great. The Contractor shall inform the Landscape Architect of high risks due to weather.

D. Preparation of planting beds: Landscape Contractor will provide and spread 4" topsoil and provide finish grades in all planting beds. The Landscape contractor will fine grade and provide minimum 3% positive drainage in all beds. This is to include debris removal and any grading required bringing the finished grade to the proper level for planting trees, shrubs and ground covers. Landscape Contractor shall grade for proper drainage. Contractor shall anticipate and allow for settling of soils.

E. Circular plant pits with vertical sides shall be dug by hand or machine methods for planting and transplanting of trees and shrubs. Sides of pits should be scarified to allow for water percolation.

F. Shrub pit diameter shall be a minimum of one foot greater than the spread of the root mass.

G. All transplanted material is to be replanted the same day it is dug.

H. Test excavated plant pits to determine if sufficient drainage is present for proper plant survival.

I. Fill the area between the pits, if the individual pits are arranged in a group, to the required grade with single shredded pinebark/hardwood mulch to a depth of 3". Plant beds shall be neatly edged and kept free of weeds until the work is accepted.

J. Excavation for planting ground covers: Ground cover beds shall be scarified by hand or machine method to a minimum depth of 8". 4" of pine bark additive and 20 lbs. / 1000 sq. ft. of Sta-Green Nursery Special fertilizer shall be uniformly incorporated into the soil to the full 6" of minimum depth.

K. Drainage test for trees: Tree pits shall be filled with water. If percolation is less than 100% within a period of twelve hours, drill a 12" auger to a depth of 6 below the bottom of the pit. Retest the pit. In case drainage is still unsatisfactory, notify Landscape Architect, in writing of the condition before planting the trees in the questionable areas. Contractor is fully responsible for warranty of the trees.

L. Drainage Test for Plants and Ground covers: Plants and ground cover beds shall be spot tested.

(1) Dispose of topsoil removed from landscape excavations. Do not mix with the planting soil. Do not use as back fill or to construct saucers around pits.

(2) Balled and container plants shall be placed firmly upon scarified sub-grade and back filled with planting soil mixture. Remove all wire, cords, and burlap from top of root ball. Hand tamp carefully around and under ball to fill all voids. Water during back filling. Form saucer from planting soil mixture in order to retain water.

(3) Gently loosen outer roots of container grown plants to encourage outward growth.

(4) Fertilizer shall be thoroughly mixed and soaked into the top two inches of soil for all plant pits.

M. Setting plants: Set plants uniformly 2-4" higher than surrounding grade or as necessary to provide adequate positive drainage away from roots. Slope soil gradually from saucer.

(1) Cut rope, wire or string from top of ball after plant has been set; turn down and bury burlap.

N. Tree transportation: The Contractor shall be responsible not only for the safe transportation of the plants to the site but also their condition upon arrival. Trees with abrasions of the bark, sunscalds, fresh cuts, or breaks of limbs that have not completely calloused will be rejected. The Contractor at no additional cost will replace trees that have been damaged during transit. All plant unit costs will reflect all above listed specifications.

O. Tree tags: All plants accepted at the nursery by the Landscape Architect shall be tagged with serialized self-locking tags. Trees delivered to the site without these tags or with broken tags will be rejected. The tags shall remain on the trees until the Landscape Architect for their removal has given the Contractor instructions.

(1) Tree tags shall be removed immediately following the final Punch-list. The Contractor will replace any trees on which tags remain and become in grown.

P. Stockpile of trees: All plant material stored on site will be untied and/or cut loose for proper storing and inspections periodically.

Q. Pruning deciduous trees: Deciduous trees and shrubs shall be pruned only to thin out heavy growth.

(1) Do not top or remove terminal growing point or leader of any plant.

(2) Cuts over 3/4" in diameter shall be painted with tree dressing paint. No paint containing lead shall be permitted.

R. Guy trees 2" caliper and over: Space three guys equally about each tree, attached at approximately two-fifths up the trunk. Guys should be at a 45-degree angle from the ground plane and anchored in the ground with stakes. Guy to trunks with wire loops and black rubber hose drawn snug in all directions. These guys shall be equally taut.

(1) Wrap trunks of deciduous trees larger than 2" caliper spirally with standard paper or fiber wrapping material from the base of the trunk to the second branch and the wrapping secured in place. Wrap the trunk with the plain side of wrapping to the outside with no writing visible. Tie off wrapping with sisal yarn at 24" intervals.

(2) Stake trees less than 2" caliper with two wood stakes driven two feet into the ground with the portion extending above the ground approximately ½ of the trunk height. Stake 12" from trunk, fastened at approximately two-fifths of trunk height with wire run through rubber hose.

S. Mulch all planting beds and other areas designated to be mulched, with 3" "settled" depth of specified mulch type. Individual plants are to be mulched as detailed. Mulch is to be measured after settlement and maintained as specified.

T. Preparation of lawn areas: Fine grade all lawn areas to finish grade. All areas shall have smooth and continual grade between the existing and fixed controls such as walks and curbs. Roll, scarify, rake and level as necessary to obtain true, even and firm lawn surfaces. All finished grades shall meet approval of the Landscape Architect before sodding or seeding operations begin.

U. Areas to receive sod: Landscape Contractor will provide 4" topsoil & grade to finish grade all areas to receive sod. The Landscape Contractor will be responsible for fine grading. This is to include debris removal and any grading required bringing the finished topsoil grade to the proper level for applying sod.

(1) On this grade spread specified fertilizer as per manufacturer's recommendations and lime at a rate of 50 lbs. / 1000 sq. ft. evenly over all areas to receive grass. A soil test shall be made prior to the beginning of fertilizing and liming and the quantities of the lime and fertilizer shall be adjusted, if necessary, to achieve a pH of 6.0 to 7.0.

(2) Scarify prepared grade to depth of 6" thoroughly incorporating fertilizer and lime into the top 6" of existing soil in all areas to be grassed. Caution shall be exercised to avoid damage to underground utilities. All building debris, vegetation, sticks and stones over 3/4" in any dimension shall be removed and the surface leveled and smoothed.

V. Sodding operations: Delivery of sod shall be scheduled so as to allow laying of sod without delay. No sod shall remain stacked longer than 24 hours. In the event that sod cannot be laid immediately upon delivery, Contractor shall lay sod on a designated site, to be approved by the Landscape Architect. No sod shall overlap and it shall be lightly watered as necessary to keep moist.

(1) Lay sod when bed is not excessively wet or frozen, but when soil is moist to the depth of 2" minimum.

(2) Lay sod so that no voids occur. Sod shall be tamped and rolled by hand methods. The completed surface shall be true to finish grade and even and firm at all points. Stagger the sod seams / joints.

(3) Do not move heavy objects over areas to be sodded after the soil has been prepared.

W. Removal of existing grass: The Landscape Contractor is to remove existing grass and weeds from all areas for planting and resodding as designated on the plans. The existing stands are to be removed to a maximum depth of 1" so as not to disturb existing tree roots where present in those areas.

(1) Aerate with a tined tiller to break up the upper 3" lightly not to damage tree roots. Pick up solids for discarding and cut cleanly any roots damaged.

(2) Spread a light layer of topsoil not more than 1" in depth over the aerated area and fine grade to meet acceptance by the Landscape Architect. Apply fertilizer and lime to these areas as specified previously under "Areas to receive sod" or "Preparation of planting beds" whichever the case may be.

IV. PART 4 - CLEANUP & PROTECTION

A. Keep project site clean and orderly during planting operations.

B. Clear grounds of debris, superfluous materials and all equipment upon completion of Work. Remove from site to the satisfaction of the Landscape Architect and Owner.

C. Protect all work and materials from damage due to landscape operations and operations by other contractors, trades and trespassers. Maintain protection until Date of Substantial Completion.

D. Contractor is responsible for theft of equipment and material at the job site before, during and after installation, until Date of Substantial Completion of Work in total.

V. PART 5 - LANDSCAPE MAINTENANCE GUIDELINES

A. Begin maintenance at commencement of Work of this section and continue until Substantial Completion, as part of Work of this section.

B. Continue maintenance for a Maintenance Period of thirty calendar days after date of Substantial Completion.

C. Provide labor, materials, equipment and means for proper maintenance of all materials and workmanship.

D. Supervision: submit a written report and conduct joint inspection with Landscape Architect maintenance program and procedures, at inspection for Substantial Completion.

E. Maintenance of trees, shrubs, sod and seed: Maintain all plants in a growing, well formed, healthy condition by watering, fertilizing, pruning, weeding, spraying, wrapping, straightening, replacement or by other necessary maintenance operations.

F. Watering: Monitor owner's automatic watering system and schedule for proper watering of all plant material.

G. Advise Landscape Architect immediately in writing of recommended alterations due to weather or other conditions.

H. Water landscaped areas not covered by automatic watering system as frequently as necessary to maintain proper moisture level, using the following schedule as a guide:

I. Twice a month during March, April, May

J. Once a week during June, July, August, September

K. No watering from October through February, except in drought conditions

L. Fertilizing:

Mid March application of 23-3-3 (slow release nitrogen)

April 1 application of iron chalet

Mid April application of 12-6-6

August 1 application of 15-0-15

M. Mowing: Mow grass to a height of 2-2 1/2" when it reaches a height of 3", or as directed by Landscape Architect. Seeded and sodded lawns shall have at least one mowing before receiving Substantial Completion.

N. Resodding: Rework and resod areas that fail to show a uniform stand of grass. Perform work with the same kind of sod applied and repeated until all areas are covered with a uniform stand of grass.

O. Reseeding: Rework and reseed areas, which fail to show a uniform stand of grass. Perform work with the same kind of seed applied and repeated until all areas are covered with a uniform stand of grass.

P. Site annual planting: Replace annual plantings according to schedule in Drawings. Blooming plants shall be in bloom at the time of planting and shall be replaced as necessary throughout specified Maintenance Period to maintain blooming condition.

Q. Pruning: Remove dead wood as it becomes evident. Remove living portions of plants only at the direction of Landscape Architect.

R. Wilt-proofing: Apply approved anti-desiccant to all evergreen trees during last two weeks of October (except pines).

S. Spraying: For each spraying combine approved insecticide and fungicide to provide maximum protection for all plant materials. Three sprayings annually; in March, May and August.

T. Weeding: Two applications (Spring and Fall) of chemical pre-emergent spray, approved. Two applications (during growing season) of chemical contact spray (Round-up, by Monsanto, or approved equal). Two days per month (every two weeks) manual weeding (by hand) during the period from March 1 through September 30; remove all visible weeds.

U. Mulching: Keep planting areas neat and uniformly mulched to specified depth on a continuous basis. In addition to replacing and re-spreading mulch as necessitated during the maintenance period completely replenish mulch in all planting areas one time (during the last month of the one-year guarantee period or as directed by the Landscape Architect.)

V. Straightening: Maintain plants in their stable upright position and at the proper grade by straightening and tightening staking and guying apparatus and as approved by the Architect.

W. Clean-up: Keep all planting areas neat, weeded and uniformly mulched on a continuous basis. Clean up adjacent walks and pavement where lettered as a result of maintenance operations, on a continuous basis.

(1) The 30-day maintenance period following Substantial Completion will be considered a lump sum item to be addressed as an item included in the contract.

VI. PART 6 - ACCEPTANCE & GUARANTEE

A. Substantial Completion: Submit written requests for inspection for Substantial Completion to the Landscape Architect at least three calendar days prior to anticipated date of inspection and testing.

B. Substantial Completion cannot be granted and at the same time no further applications for payment shall be for more than 85% or less if the owner requests of the Contract until there has been a walk-through for planting at which time a "punch-list" will be written consisting of items to be addressed and corrected by the Contractor immediately. Depending on the extent of work on the "punch-list", the Landscape Architect will determine the job to be "Substantially Complete" or pending the completion of the "Punch-list".

C. Submit Record Drawings and Maintenance manuals to the Landscape Architect with written request for inspection.

D. Review the "punch-list" work jointly with the Owner and Landscape Architect for Substantial Completion of the total (contract) work (See "General Conditions" Article No. 9).

E. Upon completion of repairs and replacements found necessary at the time of review, the Owner and Landscape Architect will confirm the date of Substantial Completion and issue the written notice if all items on the punch-list have been completed. If necessary, another punch list will be written to itemize any deficiencies still existing and will be attached to the written notice. The contractor shall complete all "punch-list" items if possible within 30 days while continuing maintenance.

F. The date of Substantial Completion will constitute the beginning date of the One-Year Guarantee. This date also constitutes the beginning of warranty responsibilities and acceptance by the Owner and Landscape Architect.

G. Guarantee all work, products, equipment and materials for one year, beginning at the Date of Substantial Completion as per written notice.

H. Make good any damage, loss destruction or failure. Repairs and replacements shall be done promptly and at no additional cost to the Owner.

I. Repair damage to grade, plants and other work as necessary.

J. If the replacement is not acceptable during or at the end of the Guarantee Period, the Owner may elect either subsequent replacement or credit. Replacement products shall have a similar one-year guarantee from the time of replacement.

END OF SECTION

JOHNSON & CO.
LANDSCAPE ARCHITECTS
LAND PLANNERS
3115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203
PH: (205) 324-4447 • FAX: (205) 324-9068
WEB: JOHNSON-CO.NET

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

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MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL

State of South Carolina
REGISTERED LANDSCAPE ARCHITECT
No. 1049
WILLIAM REED JOHNSON
6/21/25

ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
2		06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

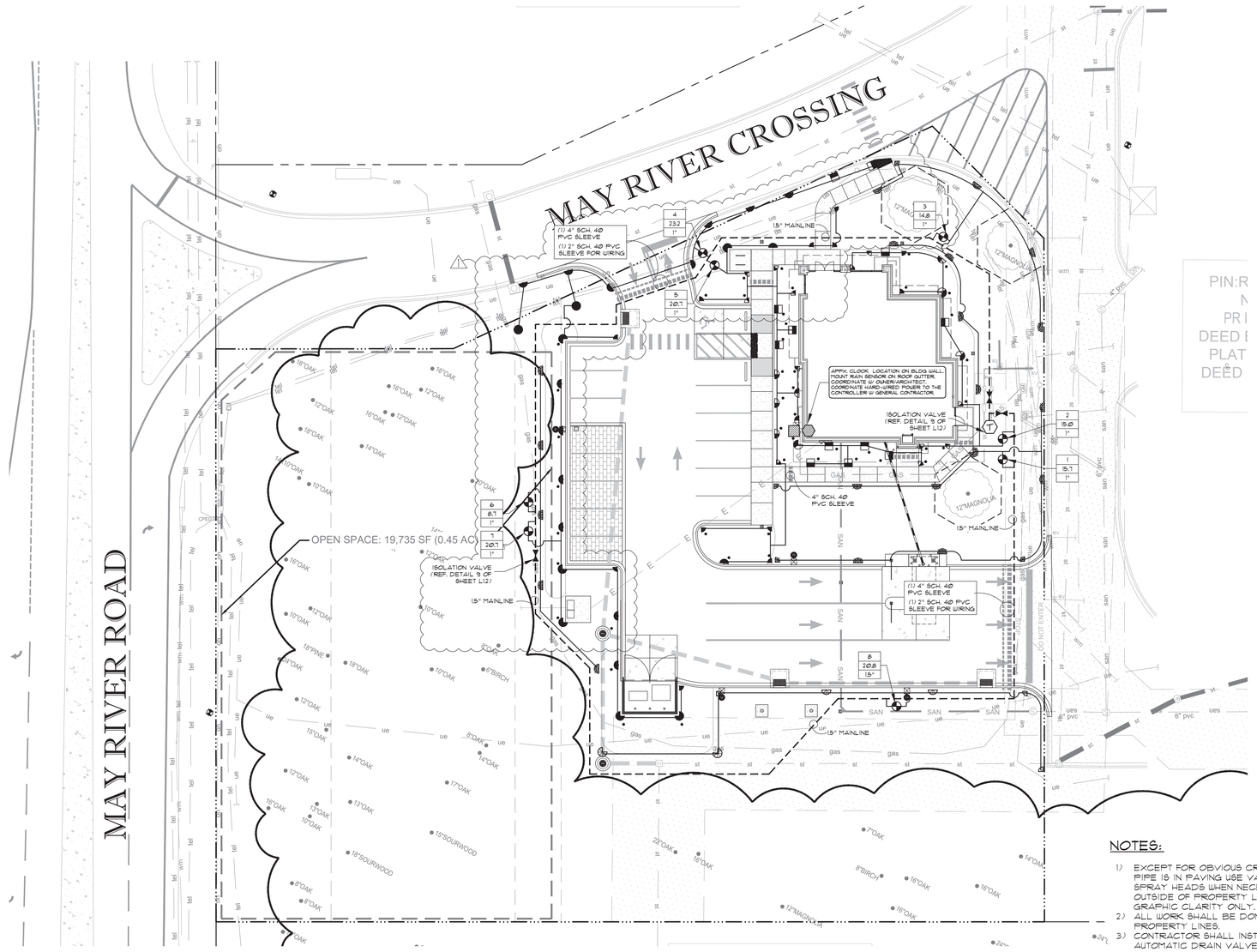
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	JCO
CHECKED BY:	WRJ

SHEET TITLE

LANDSCAPE SPECIFICATIONS

SHEET NUMBER

GL-011



IRRIGATION LEGEND

- RAINBIRD ROTORS - 5000-MPR PLUS-40 NOZZLE, 6" POP-UP, 360-90° ARCS
- RAINBIRD R-VAN-24-360 R-VAN SERIES ROTARY NOZZLES, 360-90° ARCS
- RAINBIRD SPRAYS - 15 SERIES MPR, 6" POP-UP, 360-90° ARCS
- RAINBIRD SPRAYS - 10 SERIES MPR, 6" POP-UP, 360-90° ARCS
- RAINBIRD SPRAYS - 15 STRIP SERIES, 6" POP-UP, END & SIDE STRIPS
- INDICATES HIGH POP
- RAINBIRD PGA SERIES / RAINBIRD XCZ-100-PRB-COM - SPRAY/DRIP ZONE ELECTRIC REMOTE CONTROL VALVE, SIZE AS PER DRAWINGS
- RAINBIRD OPERND - DRIP SYSTEM OPERATION INDICATOR KIT POP-UP VISUAL INDICATOR
- 3/4" BRASS QUICK COUPLING VALVE IN VALVE BOXES AS PER SPECIFICATIONS
- 1 1/2" MANUAL ISOLATION VALVE IN MAINLINE, STOCKHAM CLASS 150, B-103
- POINT OF CONNECTION - 1" TAP, BACKFLOW PREVENTER AND WATER METER BY GENERAL CONTRACTOR
- MANUAL DRAIN VALVE AT LOW POINT IN MAINLINE
- DRIP FLUSH VALVE - INSTALL AT ALL DRIP ZONES
- RAINBIRD PRESSURE COMPENSATING FULL-CIRCLE BUBBLERS 1400 SERIES - 1402 (.5 GPM) FULL CIRCLE, TRICKLE PATTERN
- WEATHERMATIC SL1600 SMARTLINE CONTROLLER W/ SMARTLINK AIRCARD - COORDINATE HARD-WIRED POWER TO THE CONTROLLER W/ GENERAL CONTRACTOR
- WEATHERMATIC SLWB WIRELESS ON SITE WEATHER SENSOR. COORDINATE LOCATION WITH ENGINEER/ARCHITECT
- MAINLINE SCH40 PVC, SIZE AS PER DRAWING
- LATERAL LINE CLASS 200 PVC SIZE AS PER DRAWING
- RAINBIRD XFS-06-18 - SUB SURFACE DRIP LINE
- SLEEVING SCH40 PVC BY IRRIGATION CONTRACTOR SIZE AS PER DRAWING. COORDINATE WITH GENERAL CONTRACTOR
- TOP LINE # INDICATES CONTROLLER CIRCUIT NUMBER
- MIDDLE LINE # IS CALCULATED FLOW IN GALLONS/MINUTE
- BOTTOM LINE # INDICATES SIZE OF VALVE REQUIRED
- SYSTEM DESIGN PRESSURE - 60 PSI

NOTES:

1) POWER TO CONTROLLER BY ELECTRICAL CONTRACTOR
2) USE VARIABLE ARC SPRAY HEADS WHEN NECESSARY
3) THERE IS TO BE (2) 4" PVC SLEEVES EACH TIME MAINLINE CROSSES HARDSCAPE:
   ONE (1) 4" PVC SLEEVE FOR MAINLINE CROSSING
   ONE (1) 2" PVC SLEEVE FOR WIRING AT MAINLINE CROSSING
4) THERE IS TO BE (1) 4" PVC SLEEVE AS REQUIRED FOR ALL LATERAL LINES CROSSING HARDSCAPE.
5) ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR.
6) VERIFY TAP. IRRIGATION CONTRACTOR TO TEST WATER CONDITIONS AS THEY EXIST, IMMEDIATELY DOWN STREAM FROM TAP; IF THEY DO NOT MEET DESIGN DEMANDS,
7) MATCH PRECIPITATION RATES ON ALL CIRCUITS.
8) ALL WORK MUST COMPLY WITH LOCAL CODES.
9) NO ELECTRICAL CONNECTIONS SHALL BE MADE IN THE FIELD EXCEPT AT A VALVE CONTROL BOX OR ANOTHER VALVE BOX SPECIFICALLY FOR CONNECTIONS.
10) ANY DISCREPANCY BETWEEN THIS SHEET AND OTHERS IN THIS SET MUST BE REFERRED TO THE IRRIGATION CONSULTANT BY THE CONTRACTOR FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
11) ALL 24 VOLT WIRE SHALL BE #12 UF/UL FOR COMMON WIRE, AND #14 UF/UL FOR CONTROL WIRES, DIRECT BURIAL, SOLID COPPER.
12) CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED. I.E. ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.
13) CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, I.E. VERIFY ROOTBALL SIZE FOR PLANTING.
14) CONTRACTOR SHALL PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 3/4" PIPE 12 TIMES).
15) CONTRACTOR TO UTILIZE APPROPRIATE AUTOMATIC DRAIN DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR
16) ALL MATERIAL TO BE SUPPLIED BY CONTRACTOR TO OWNER.
   A. TWO WRENCHES FOR DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER HEADS AND VALVE SUPPLIED.
   B. TWO KEYS FOR EACH OF THE AUTOMATIC CONTROLLERS.
   C. TWO QUICK COUPLER KEYS WITH MATCHING HOSE SWIVELS.
17) 24 VOLT WIRE SHALL BE COLOR CODED: COMMON-WHITE, CONTROL-RED.
18) CONTRACTOR TO ADD EXTENSION RISER TO POP-UP HEADS WHEN NEEDED FOR PROPER COVERAGE.
19) ELECTRIC VALVE CONTROL WIRE TO BE 14 GAUGE MINIMUM, IRRIGATION CONTRACTOR MUST PLACE ONE EXTRA "HOT" WIRE AND ONE EXTRA "COMMON" AT FURTHEST VALVE IN EACH DIRECTION FROM CLOCK.
20) ALL MAIN LINES SHALL BE INSTALLED A MAXIMUM OF 2' FROM THE BACK OF CURBS WHERE POSSIBLE. LATERAL LINES SHALL BE INSTALLED LIKEWISE WHERE POSSIBLE.
21) DO NOT MAKE SUBSTITUTIONS: IF CONTRACTOR DESIRES TO MAKE SUBSTITUTIONS OF MATERIALS, SUFFICIENT DESCRIPTIVE LITERATURE AND MATERIAL SAMPLES MUST BE FURNISHED TO ESTABLISH THE MATERIAL AS AN EQUAL SUBSTITUTE. IN ADDITION, THE CONTRACTOR MUST STATE HIS REASONS FOR DESIRING SUBSTITUTE MATERIALS. SUBMIT THIS REQUEST AND INFORMATION TO LANDSCAPE ARCHITECT.

In-line Drip Guidelines						
	Groundcover areas			Tree Rings		
Soil Type	Clay	Loam	Sandy	Clay	Loam	Sandy
Dripper Flow	.26 GPH	.4 GPH	.6 GPH	.26 GPH	.4 GPH	.6 GPH
Dripper Interval	18"	18"	12"	18"	18"	12"
Row Spacing	18"	18"	18"	18"	18"	18"

IRRIGATION NOTES

1. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE ARE OTHER ACTIVE UTILITIES AND SERVICES IN AND AROUND THE SITE. CONTRACTOR IS RESPONSIBLE FOR LOCATING THESE TO AVOID DAMAGE TO THEM.
2. THE CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS IN THE PROPOSED IRRIGATION SYSTEM TO AVOID ANY DAMAGE TO EXISTING STRUCTURES, PAVING, AND UTILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ON-SITE UTILITIES, STRUCTURES, OR PAVING RESULTING FROM IRRIGATION CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL CODES AND ORDINANCES RELEVANT TO THE WORK UNDER THIS CONTRACT.
5. ALL WORK, ADJUSTMENTS, AND INSPECTIONS SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND LABOR TO FULLY EXECUTE AND GUARANTEE, AS REQUIRED, THE TOTAL WORK SHOWN ON THIS PLAN IN ACCORDANCE WITH SPECIFICATIONS, AND ALSO AS PER INSTRUCTIONS OF THE LANDSCAPE ARCHITECT AND THE OWNER.
7. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES TO ASSURE ADEQUATE INSTALLATION OF THE SYSTEM.
8. THE LOCATION OF THE AUTOMATIC CONTROL CLOCK IS GENERALLY INDICATED ON THE DRAWING AND WILL BE SPECIFICALLY LOCATED ON-SITE BY THE LANDSCAPE ARCHITECT OR OWNER.
9. LINE LOCATIONS AS INDICATED ON THE PLAN ARE SCHEMATIC. THE CONTRACTOR SHALL LOCATE ALL LINES IN SUCH A WAY AS TO CAUSE THE LEAST CONFLICT WITH THE LOCATION OF PROPOSED PLANT MATERIALS (AS SHOWN ON THE LANDSCAPE PLANTING PLAN) AND OTHER SITE AMENITIES. ALL MAIN LINES SHALL BE INSTALLED A MAXIMUM OF 2' FROM THE BACK OF CURBS WHERE POSSIBLE. LATERAL LINES SHALL BE INSTALLED LIKEWISE WHERE POSSIBLE.
10. ALL MAINLINES SHALL BE INSTALLED AT A MINIMUM OF 18" DEEP AND ALL LATERAL LINES SHALL BE INSTALLED AT A MINIMUM OF 12" DEEP. ACTUAL HEAD PLACEMENT IN PARKING LOT ISLANDS IS TO BE 18" FROM BACK OF CURB FOR SHRUB PLANTINGS AND 6" FROM BACK OF CURB FOR LAWNS.
11. THE CONTRACTOR SHALL ADJUST THE RADIUS AND ARC OF EACH HEAD TO MINIMIZE 'OVERTHROW' AND TO ELIMINATE 'DRY SPOTS'.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPLY AND INSTALLATION OF ADDITIONAL HEADS NEEDED TO COVER "DRY SPOTS" OR SLIGHT VARIATIONS FROM THE PLAN TO THE SITE. THE LOCATION AND ARRANGEMENT OF THESE HEADS SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
13. THE ELECTRIC SUPPLY WILL BE STUBBED OUT AT THE CONTROL CLOCK LOCATION BY OTHERS. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL CONNECTIONS FROM CONTROL VALVES TO THE CONTROL CLOCK. COORDINATE ELECTRIC SUPPLY WITH GENERAL CONTRACTOR.
14. THE ENTIRE SYSTEM SHALL BE UNCONDITIONALLY GUARANTEED BY THE IRRIGATION CONTRACTOR AGAINST ALL DEFECTIVE WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE.

NOTES:

1) EXCEPT FOR OBVIOUS CROSSINGS, PIPE IS IN PAVING USE VARIABLE ARC SPRAY HEADS WHEN NECESSARY OR OUTSIDE OF PROPERTY LINE FOR GRAPHIC CLARITY ONLY.
2) ALL WORK SHALL BE DONE WITH IN PROPERTY LINES.
3) CONTRACTOR SHALL INSTALL AUTOMATIC DRAIN VALVES AT ALL LOW POINTS IN SYSTEM.
4) ALL HEADS IN SHRUB BEDS SHALL BE INSTALLED ON 12" RISERS.

SLEEVING NOTES

1. THE LOCATIONS OF SLEEVES, AS SHOWN ON THIS PLAN, ARE SCHEMATIC. THE CONTRACTOR SHALL MAKE ANY ADJUSTMENT NECESSARY TO ACCOMMODATE EXISTING VEGETATION, UTILITIES, NATURAL BARRIERS OR OTHER MAJOR CONSTRUCTION.
2. ANY DAMAGE TO EXISTING UTILITIES, STRUCTURES, OR OTHER CONSTRUCTION RESULTING FROM INSTALLATION OF SLEEVES IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. WHERE A JOINT BETWEEN PIPE SECTIONS IS NECESSARY, THE INSIDE DIAMETER OF THE PIPE SHALL NOT BE SIGNIFICANTLY REDUCED.
4. P.V.C. SLEEVES SHALL BE INSTALLED AT A DEPTH OF AT LEAST 18" BELOW PAVEMENT SURFACE, AND NO DEEPER THAN 24". END OF SLEEVE SHALL EXTEND 12" BEYOND CURB OR PAVEMENT EDGE.
5. BACKFILL MATERIAL PLACED AROUND THE SLEEVES SHALL BE FREE OF ROCKS OR OTHER FOREIGN MATTER THAT MAY CAUSE DAMAGE TO THE PIPE.
6. THE CONTRACTOR SHALL INSTALL A P.V.C. STUB THAT IS AT LEAST 18" ABOVE GRADE AT EACH END OF THE SLEEVE TO MARK ITS EXACT LOCATION. IRRIGATION SLEEVES SHALL BE INDICATED WITH BLUE RIBBON, ELECTRICAL SLEEVES SHALL BE INDICATED WITH ORANGE RIBBON. SEE SLEEVING DETAIL.
7. ONCE THE SLEEVE IS INSTALLED, THE CONTRACTOR SHALL INSTALL A TEMPORARY CAP ON EACH END OF THE PIPE ACCORDING TO THE DETAIL TO PREVENT SOIL OR OTHER DEBRIS FROM ENTERING THE PIPE.
8. ALL MODIFICATIONS OF THIS PLAN ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
9. THE CONTRACTOR SHALL SUPPLY THE LANDSCAPE ARCHITECT WITH AN "AS-BUILT" PLAN OF THE LOCATION OF ALL SLEEVES PRIOR TO ACCEPTANCE OF WORK.
10. ALL PVC SHOULD BE SCH40 P.V.C PIPE

IRRIGATION DESIGNED TO PROVIDE SEPARATION BETWEEN LAWN AND SHRUB ZONES WHERE POSSIBLE. CONTRACTOR IS NOT TO CHANGE ZONE SEPARATION FROM PLANS UNLESS PRIOR APPROVAL IS MADE.

COMMISSIONING NOTES:

TO COMMISSION THE WEATHERMATIC SMART IRRIGATION CONTROLLER PLEASE DO THE FOLLOWING:

1. CONFIRM THAT ALL THREE PIECES OF EQUIPMENT (CONTROLLER, WEATHER STATION, AND AIRCARD) ARE PROPERLY INSTALLED.
2. PROVIDE WEATHERMATIC THE AIRCARD NUMBER THAT IS ON THE SIDE OF THE AIRCARD (20-DIGIT LONG NUMBER).
3. WHEN SHARING THIS INFORMATION WITH WEATHERMATIC, YOU SHOULD ALSO NOTE THAT THIS IS A FIFTH THIRD BANK CORPORATE LOCATION AND PROVIDE THE SITE ID NUMBER AND ADDRESS.

CONTRACTOR TO CONTACT WEATHERMATIC REPRESENTATIVE KELSI VAQUERA WITH ANY QUESTIONS. CONTACT PRIOR TO WORK FOR COORDINATION OF INSTALLATION AND SMART IRRIGATION ACCOUNT ACTIVATION AND COMMISSIONING. KELSI.VAQUERA@WEATHERMATIC.COM OR (316) 516-3625

CONTROLLER NOTES:
- MOUNT CONTROLLER ON THE EXTERIOR OF THE BUILDING PREFERABLY NEAR THE UTILITY ENTRANCE
- MOUNT SENSOR ON THE EVE OF THE BUILDING SO IT HAS A CLEAR VIEW OF THE SKY FOR PROPER RAINFALL DETECTION AND IS AWAY FROM ANY ARTIFICIAL HEAT SOURCES.

Know what's below. Call before you dig.

0 10 20 40
SCALE IN FEET

NORTH

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
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[p]: 813.434.4720
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JOHNSON & CO.
LANDSCAPE ARCHITECTS
LAND PLANNERS
3115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203
PH: (205) 324-4447 • FAX: (205) 324-8068
WEB: JOHNSON-CO.NET

SEAL

State of South Carolina
REGISTERED LANDSCAPE ARCHITECT
No. 1049
WILLIAM REED JOHNSON
6/27/25

ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
1		05/15/25	DRC ROUND 1
2		06/27/25	REVIEW COMMENTS

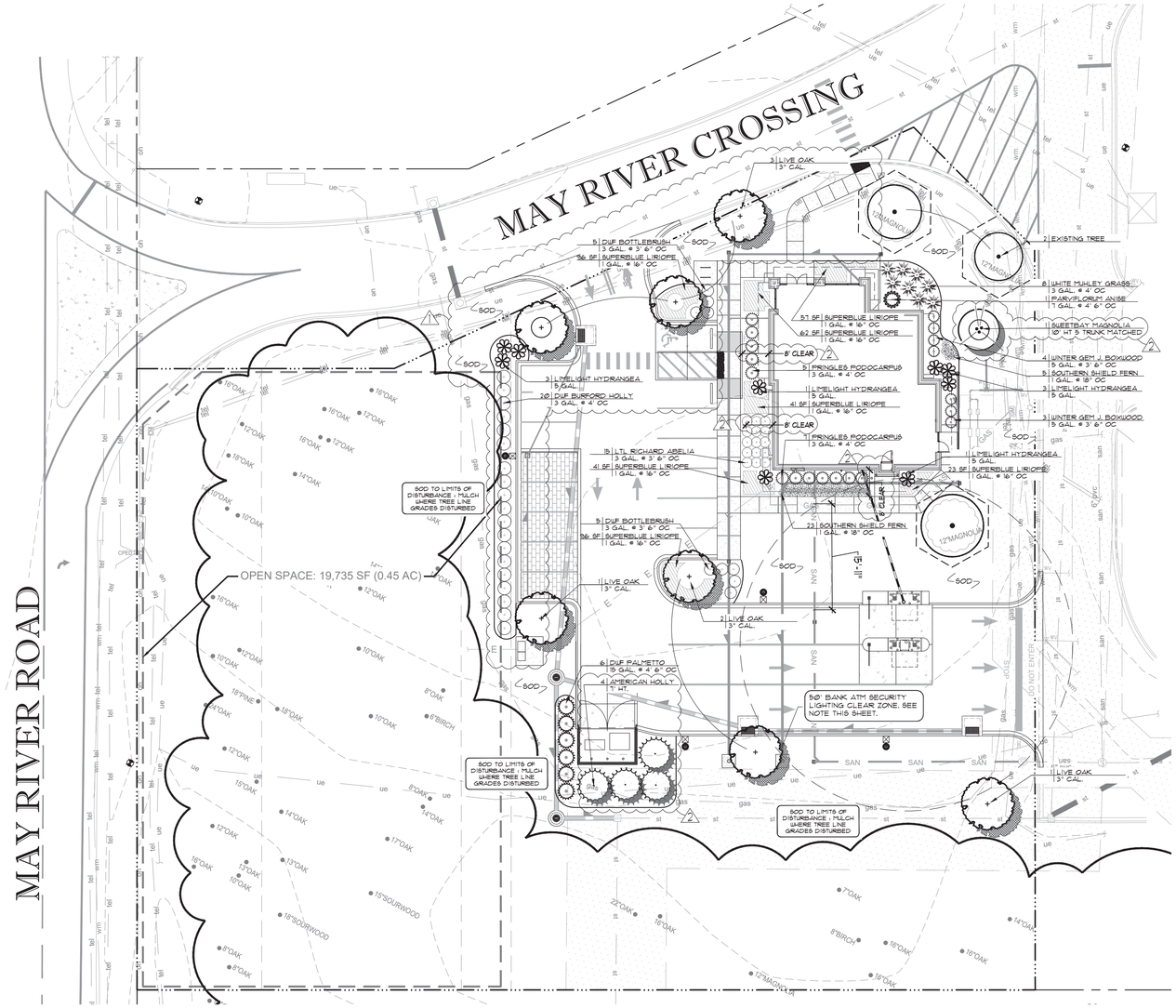
PROJECT INFORMATION BLOCK	
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	JCO
CHECKED BY:	WRJ

SHEET TITLE

IRRIGATION PLAN

SHEET NUMBER

L-100



ALL PLANTING BEDS AND TREE PITS SHALL BE MULCHED WITH A 3" SETTLED LAYER OF SINGLE SHREDDED MULCH - NO NUGGETS. IF WITHIN A DEVELOPMENT REQUIRING PARTICULAR MULCH, CONTRACTOR TO INSTALL AS REQUIRED WITH APPROVAL.

PLANT LIST

BOTANICAL NAME	COMMON NAME	CAL	HT	SPREAD	B&B/SIZE	SPACING	COMMENTS
TREES							
QUERCUS VIRGINIANA	LIVE OAK	3"	15'	7'	ANA STD		CENTRAL LEADER
ILEX OPACA	AMERICAN HOLLY		7'	5'	B&B		FULL PLANT
MAGNOLIA VIRGIANA	SWEET BAY MAGNOLIA		10'	5'	B&B		5 TRUNK FULL PLANT
SHRUBS							
HYDRANGEA PANICULATA	LIMELIGHT HYDRANGEA	24"		24"	7 GAL.	4'-6" OC	FULL PLANT
MELALEUCA VIMINALIS	DUF BOTTLEBRUSH	16"		18"	3 GAL.	3' 6" OC	FULL PLANT
ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	18"		16"	3 GAL.	4' OC	FULL PLANT
SERENOA REPENS	SAW PALMETTO				15 GAL.	5' OC	FULL PLANT
PODOCARPUS MACROPHYLLUS 'PRINGLES'	PRINGLES PODOCARPUS				3 GAL.	4' OC	FULL PLANT
BUXUS MICROPHYLLA WINTER GEM	WINTER GEM BOXWOOD				5 GAL.	3' 6" OC	FULL PLANT
ABEKLIA X LTL RICHARD	LTL RICHARD ABELIA	14"		16"	3 GAL.		FULL PLANT
MISC.							
MUHLENBERGIA CAPILLARIS	PINK MUHLEY GRASS	18"		20"	3 GAL.	4' OC	FULL PLANT
LIRIOPE MUSCARI 'SUPER BLUE'	SUPER BLUE LILYTURF	14"		18"	1 GAL.	14" OC	FULL PLANT
DRYOPTERIS LUDOVICIANA	SOUTHERN SHIELD FERN	14"		18"	1 GAL.	14" OC	FULL PLANT
MUHLENBERGIA CAPILLARIS WHITE CLOUD	WHITE MUGLEY GRASS	16"		24"	3 GAL.	14" OC	FULL PLANT
CYNODON DACTYLON X	BERMUDA 419 SOD						WHOLE PIECES - FULL

Know what's **below.** **Call** before you dig.

NOTES:

1) IF CONFLICTS EXIST BETWEEN PROPOSED LANDSCAPE AND SITE LIGHTING, UTILITIES OR OTHER LANDSCAPE, CONTRACTOR IS TO CONTACT LANDSCAPE ARCHITECT IMMEDIATELY. ADJUST AS NECESSARY AND COORDINATE WITH LANDSCAPE ARCHITECT WHERE INSTALLED LOCATION OF LIGHTING VARIES FROM PLANS.

2) IF SITE CONDITIONS EXIST, SUCH AS LOW AREAS THAT WILL POTENTIALLY HOLD WATER, OR ANY CONDITIONS THAT PROPOSE A THREAT TO THE LONG TERM SURVIVAL OF THE NEW LANDSCAPE, THE LANDSCAPE CONTRACTOR IS TO CONTACT THE LANDSCAPE ARCHITECT FOR CHANGES.

3) IF THESE CONDITIONS ARE NOT COORDINATED DURING CONSTRUCTION, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR RELOCATING NEW MATERIAL AT DIRECTIVE OF THE LANDSCAPE ARCHITECT AT TIME OF PUNCH LIST.

4) SIGNAGE SHOWN AS SCHEMATIC. IF VARIANCE OCCURS, LANDSCAPE AND IRRIGATION TO BE AND ADJUSTED TO ACTUAL LOCATION. COORDINATE WITH LANDSCAPE ARCHITECT FOR CHANGES.

5) ALL SHRUBS AT FRONT OF PARKING AREAS: CENTER OF PLANT TO BE LOCATED 42" FROM BACK OF CURB.

6) ALL SHRUBS ALONG DRIVES OR CURB: CENTER OF PLANT TO BE LOCATED 36" FROM BACK OF CURB.

7) CONTRACTOR RESPONSIBLE FOR OFF SITE DISTURBANCE AND REPLACEMENT OF LANDSCAPE / PLANT MATERIAL WITH LIKE KIND.

8) IF CONFLICTS EXIST BETWEEN PLANTINGS AND SITE ELEMENTS, CONTRACTOR SHALL COORDINATE TREE PLANTINGS WITH BUILDING AND MONUMENT SIGNAGE AND COORDINATE ALL ADJUSTMENTS AS NECESSARY TO ELIMINATE ANY CONFLICTS. IF COORDINATION IS NOT MADE WITH ARCHITECT / CBRE, CONTRACTOR WILL BE RESPONSIBLE FOR RELOCATION OF MATERIAL AND ADJUSTMENTS AT TIME OF PUNCH LIST AS DIRECTED.

9) ALL PLANTING BEDS AND TREE PITS SHALL BE MULCHED WITH A 3" SETTLED LAYER OF SINGLE SHREDDED MULCH - NO NUGGETS. IF WITHIN A DEVELOPMENT REQUIRING PARTICULAR MULCH, CONTRACTOR TO INSTALL AS REQUIRED WITH BANK APPROVAL.

LANDSCAPE REQUIREMENTS - UDO - 5.3.7
SPECIFIC LANDSCAPING STANDARDS

STREET TREES
INCLUDE LARGE CANOPY STREET TREES THAT ARE PLANTED NO GREATER THAN 50 FEET APART.

MAY RIVER CROSSING - 250 LF
250 / 50 = 5 TREES
5 TREES REQUIRED
5 TREES PROVIDED
2 PROPOSED TREES PROVIDED
3 EXISTING TREES ON-SITE

MAY RIVER ROAD - 187 LF
187 / 50 = (3.7) 4 TREES
4 TREES REQUIRED
4 EXISTING TREES ON-SITE

PROJECT WILL BE REVIEWED FOR PLAN CONFORMITY BY LANDSCAPE ARCHITECT. ALL MATERIAL TO BE 'GRADE A' MEETING NURSERY STANDARDS AND PLANT LIST SPECIFICATIONS. MATERIAL NOT MEETING SPECIFICATIONS OR NOT SUPERIOR QUALITY WILL BE REJECTED AT TIME OF PUNCH LIST AND SUBJECT TO REPLACEMENT BY CONTRACTOR AT HIS OR HER EXPENSE.

ANY LANDSCAPE WITHIN 50 FEET OF THE ATM OR NIGHT DROP SHALL BE NO HIGHER THAN 24" ABOVE GRADE AND SHALL BE MAINTAINED AT THIS HEIGHT THROUGHOUT THE LIFE OF THE PLANT.

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LANDSCAPE ARCHITECTS
LAND PLANNERS
2115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203
PH: (205) 324-4447 • FAX: (205) 324-9068
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0 10 20 40
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bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
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MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910
2

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
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IEG JOB NO. 15-360.00

SEAL

State of South Carolina
REGISTERED LANDSCAPE ARCHITECT
No. 1049
WILLIAM REED JOHNSON
6/27/25

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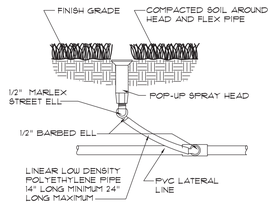
PROJECT INFORMATION BLOCK	
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	JCO
CHECKED BY:	WRJ

SHEET TITLE

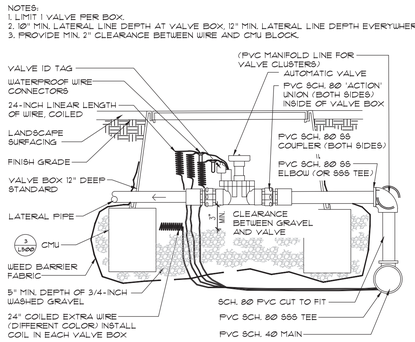
LANDSCAPE PLAN

SHEET NUMBER

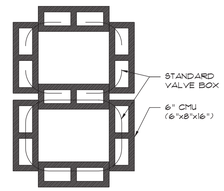
L-110



1 SPRAY AND ROTOR HEAD ASSEMBLY
NOT TO SCALE



2 AUTOMATIC VALVE WITH CONVENTIONAL WIRE SYSTEM
NOT TO SCALE



3 CMU PLACEMENT
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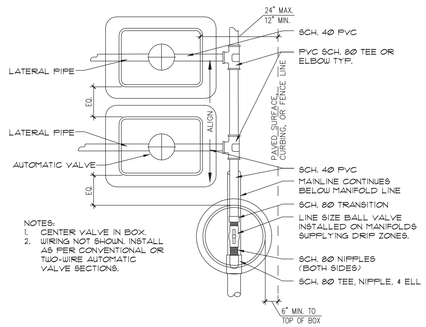
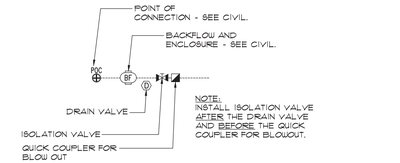
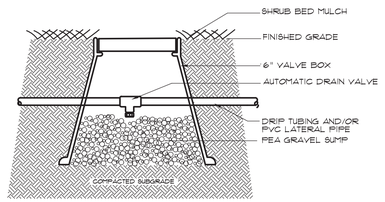


4 MANIFOLD & VALVE ASSEMBLY
NOT TO SCALE

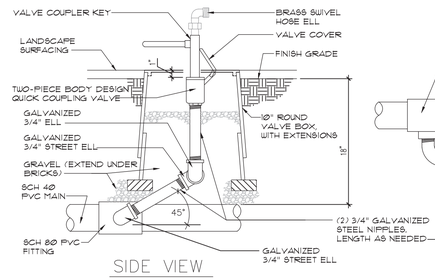


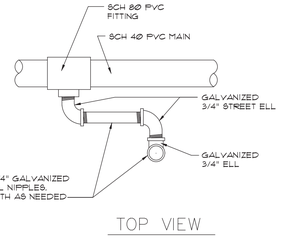
5 BACKFLOW PREVENTER ASSEMBLY
NOT TO SCALE



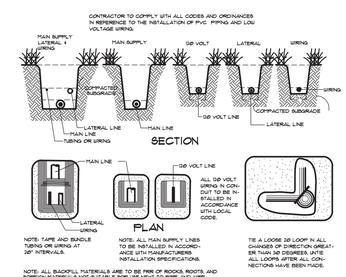
NOTE: TO BE INSTALLED ON ALL LOW POINTS ON SYSTEM

6 AUTOMATIC DRAIN VALVE DETAIL
NOT TO SCALE

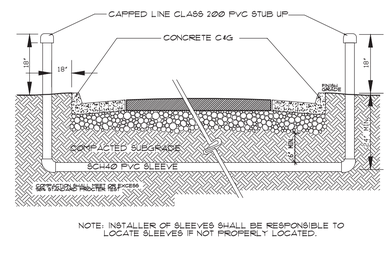




7 QUICK COUPLING VALVE DETAIL
NOT TO SCALE



8 TRENCHING DETAIL
NOT TO SCALE



9 SLEEVING DETAIL
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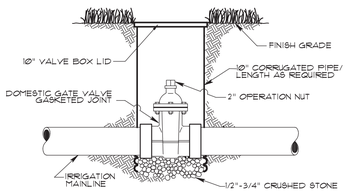
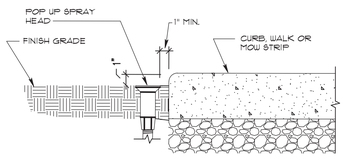
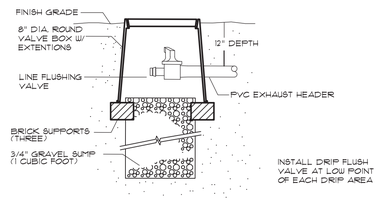


NOTE:
IF DEPTH LESS THAN 18" INSTEAD OF CORRUGATED PIPE USE VALVE BOX AND INSTEAD OF OPERATION NUT, USE VALVE WHEEL

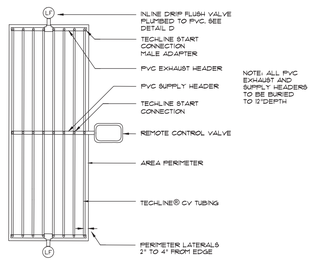
10 ISOLATION VALVE DETAIL
NOT TO SCALE



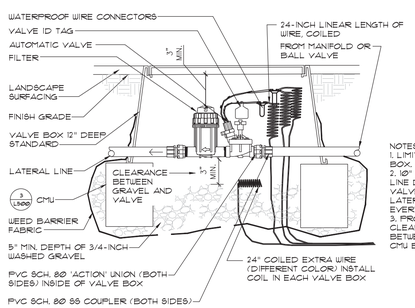
11 SPRAY HEAD OR ROTOR NEXT TO CURB OR WALK
NOT TO SCALE



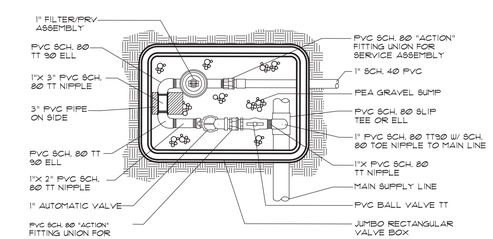
12 INLINE DRIP FLUSH VALVE
NOT TO SCALE



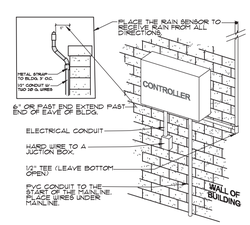
13 INLINE DRIP CENTER FEED LAYOUT
NOT TO SCALE



14 DRIP VALVE ASSEMBLY - CONVENTIONAL SYSTEM
NOT TO SCALE



15 DRIP VALVE ASSEMBLY
NOT TO SCALE



16 CONTROLLER DETAIL
NOT TO SCALE

JOHNSON & CO.
LANDSCAPE ARCHITECTS
LAND PLANNERS
3115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203
PH: (205) 324-4447 • FAX: (205) 324-8068
WEB: JOHNSON-CO.NET

bdg architects
550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

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MAY RIVER CROSSING
2901 MAY RIVER CROSSING
BLUFFTON, SOUTH CAROLINA 29910

INFINITY
INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL

State of South Carolina
REGISTERED LANDSCAPE ARCHITECT
No. 1049
WILLIAM REED JOHNSON
6/27/25

ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
2		06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

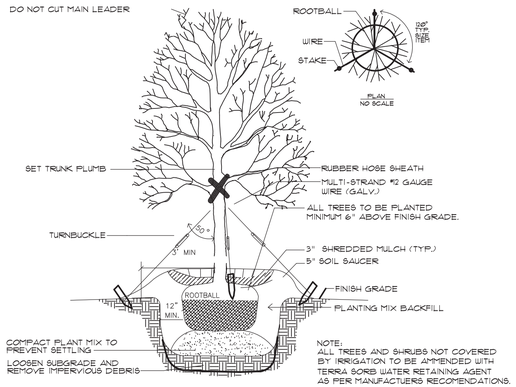
JOB #	240634
DATE:	02/12/2025
DRAWN BY:	JCO
CHECKED BY:	WRJ

SHEET TITLE

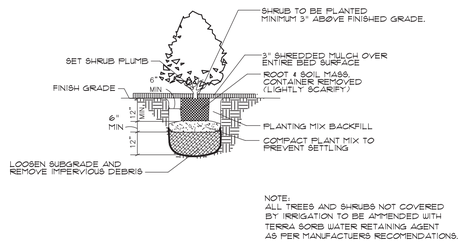
IRRIGATION DETAILS

SHEET NUMBER

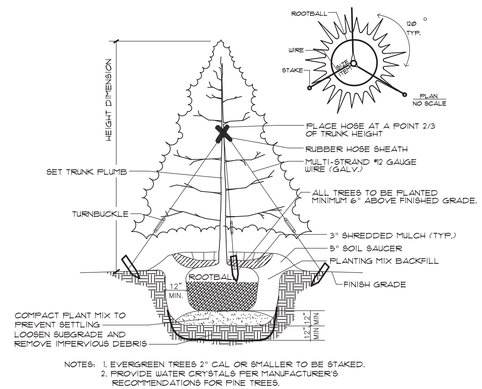
L-500



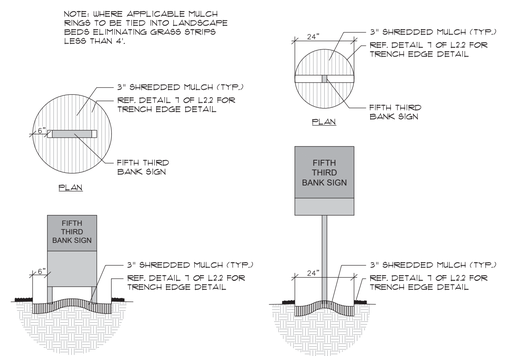
1 DETAIL TYPICAL TREE PLANTING AND GUYING
NOT TO SCALE



2 DETAIL TYPICAL CONTAINERIZED SHRUB PLANTING
NOT TO SCALE

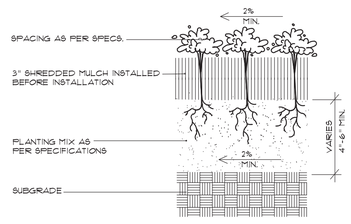


3 DETAIL EVERGREEN TREE PLANTING
NOT TO SCALE

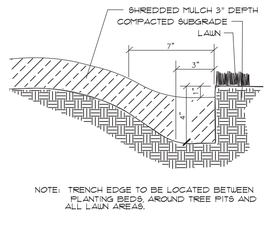


4 MULCH DETAIL FOR ALL SIGNS IN LAWN AREA
NOT TO SCALE

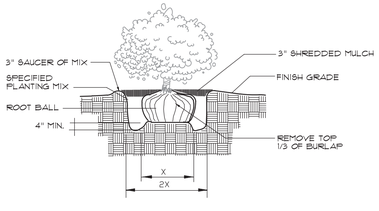
5 DETAIL MULTI-TRUNKED TREE PLANTING
NOT TO SCALE



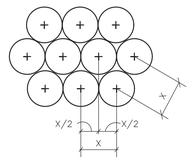
6 GROUND COVER DETAIL
NOT TO SCALE



7 TRENCH EDGER DETAIL FOR ALL BEDS
NOT TO SCALE

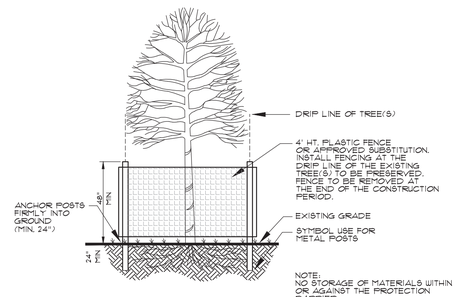


8 B&B SHRUB DETAIL
NOT TO SCALE



NOTES: 1. SEE PLANTING PLANS FOR SHRUB & GROUNDCOVER BED AREAS.
2. ROWS SHALL BE STRAIGHT & PARALLEL.
3. SPACING SHOWN ON PLANT SCHEDULE ('X').

9 DETAIL TYPICAL STAGGERED ROW SPACING
NOT TO SCALE



10 TREE PROTECTION DETAIL
NOT TO SCALE

GENERAL NOTES

CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE INSPECTION PRIOR TO LANDSCAPE CONSTRUCTION AND INSTALLATION IN ORDER TO ACQUAINT HIMSELF WITH EXISTING CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES BEFORE BEGINNING CONSTRUCTION.

CONTRACTOR SHALL VERIFY PLANT COUNT FROM PLAN AND REPORT DIFFERENCES.

ALL TREES AND SPECIMEN PLANT MATERIAL SHALL BE LOCATED BY THE CONTRACTOR AT APPROVED NURSERIES OR THEIR EQUAL APPROVED PRIOR TO BIDDING.

ALL PLANT MATERIALS ARE SUBJECT TO APPROVAL OR REFUSAL BY THE LANDSCAPE ARCHITECT AT THE JOB SITE.

CONTRACTOR SHALL LAYOUT TREES AND BED LINES FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO PLANTING. A MINIMUM 24 HOUR NOTICE SHOULD BE GIVEN AND ANTICIPATED BY THE CONTRACTOR FOR THIS REVIEW.

CONTRACTOR SHALL SUPPLY AND SPREAD 4" TOP-SOIL IN SHRUB BEDS AND ALL AREAS TO BE SEEDED UNLESS OTHERWISE NOTED IN SPECIFICATIONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 3% POSITIVE DRAINAGE IN ALL PLANT AREAS.

PLANTS SHALL BE WELL FORMED, VIGOROUS, GROWING SPECIMENS WITH GROWTH TYPICAL OF VARIETIES SPECIFIED AND SHALL BE FREE FROM INJURY, INSECTS AND DISEASES. PLANTS SHALL EQUAL OR SURPASS QUALITY AS DEFINED IN THE CURRENT ISSUE OF NURSERY "AMERICAN STANDARDS FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN NURSERYMEN, INC.

ALL PLANT MATERIAL SHALL BE BALLED AND BURLAPPED OR CONTAINER GROUN.

ALL SHRUBS, TREES AND GROUND COVERS SHALL BE PLANTED WITH A SOIL MIXTURE CONSISTING OF 50% TOPSOIL AND 50% ORGANIC MATERIAL AND PER SPECIFICATIONS.

FRONT ROW OR SHRUBS SHALL E PLANTED MINIMUM 24" BEHIND BED LINE @ LAUNS OR WALKS AND MINIMUM 36" BACK OR CURB @ PARKING SPACES.

BACK ROW OF SHRUB PLANTING SHALL BE PLANTED @ 36" OFF FACE OF BUILDING WALL. GROUND COVERS SHALL BE 1' OUT FROM BUILDING AS REQUIRED BY PLANT SPECIFICATIONS.

EXCAVATE EDGE OF ALL PLANTING BEDS TO 4" DEPTH TO FORM A NEAT CRISP DEFINITION.

ALL PLANTING BEDS AND TREE PITS SHALL BE MULCHED WITH A 3" SETTLED LAYER OF SINGLE SHREDDED MULCH - NO NUGGETS. IF WITHIN A DEVELOPMENT REQUIRING PARTICULAR MULCH, CONTRACTOR TO INSTALL AS REQUIRED WITH BANK APPROVAL.

GRASS: ALL AREAS TO BE GRASSED SHALL BE TILLED AND GRADED TO A DEPTH OF 6". SLAG OF LIME SHALL BE APPLIED AT A RATE OF 100 POUNDS PER 1000 SQ FT. ADD TURF GREEN OR EQUAL (12-5-8 SLOW RATE) AT A RATE OF 80 POUNDS PER 1000 SQ FT. SEEDED AREAS SHALL BE COVERED WITH A THIN LAYER OF WHEAT STRAW.

GRADE ALL AREAS FOR APPROVAL BY LANDSCAPE ARCHITECT BEFORE SODDING.

SEASONAL COLOR SHALL BE PLANTED IN FLOWERING STATE.

CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL, INCLUDING GRASS FOR ONE FULL YEAR FROM DATE OF SUBSTANTIAL COMPLETION.

REMOVE ALL GUY WIRES AND STAKES AT END OF GUARANTEE PERIOD.

WHEN TREES ARE PLANTED THE MONTHS OF MARCH THRU OCTOBER, THE LANDSCAPE CONTRACTOR SHALL AMEND THE SOIL MIX WITH A MOISTURE RETENTION AGENT AS "TERRA-SORB" OR EQUAL FOR EACH TREE INSTALLATION.

JOHNSON & CO.
LANDSCAPE ARCHITECTS
LAND PLANNERS
3115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203
PH: (205) 324-4447 • FAX: (205) 324-9068
WEB: JOHNSON-CO.NET

bdg architects
550 S. Caldwell Street
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P: 704.981.8951
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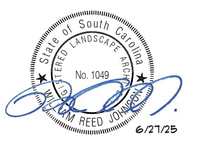
IEG JOB NO. 15-360.00

SEAL



ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
2		06/27/25	REVIEW COMMENTS

PROJECT INFORMATION BLOCK

JOB #	240634
DATE:	02/12/2025
DRAWN BY:	JCO
CHECKED BY:	WRJ

SHEET TITLE

LANDSCAPE DETAILS

SHEET NUMBER

L-510

(CLERK OF COURT RECORDING INFORMATION)

SITE PHOTOGRAPHS

GeoSurvey

GRID NORTH – SOUTH CAROLINA

AERIAL IMAGE

LEGEND

STANDARD ABBREVIATIONS

AC	AIR CONDITIONER
BH	BORE HOLE
BSL	BUILDING SETBACK LINE
CI	CURB INLET
CMP	CORRUGATED METAL PIPE
CMF	CONCRETE MONUMENT FND
CO	SANITARY CLEANOUT
CPED	COMMUNICATION PEDESTAL
CTP	CRIMPED TOP PIPE
DI	DROP INLET
DIP	DUCTILE IRON PIPE
DWCB	DOUBLE WING CATCH BASIN
FND	FOUND
GM	GAS METER
INV	INVERT
JB	JUNCTION BOX
MH	MANHOLE
NF	NAIL FOUND
NS	NAIL SET
OCS	OUTLET CONTROL STRUCTURE
OTP	OPEN TOP PIPE
PBX	POWER BOX
PM	POWER METER
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
RCP	REINFORCED CONCRETE PIPE
RBR	IRON REINFORCING BAR
RBS	5/8"RBR SET CAPPED LSF 14820
SS	SANITARY SEWER
SWCB	SINGLE WING CATCH BASIN
TRANS	ELECTRIC TRANSFORMER

STANDARD SYMBOLS

- POWER POLE
- GUY WIRE
- POWER LINE
- LIGHT POLE
- ELECTRIC TRANSFORMER
- WATER VAULT
- GAS VALVE
- GAS METER
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND GAS LINE
- UNDERGROUND COMMUNICATION LINE
- UNDERGROUND WATER LINE
- PHOTO POSITION INDICATOR
- REGULAR PARKING SPACE COUNT
- HANDICAP PARKING SPACE
- TREE POSITION INDICATOR
- SIGN

UTILITY NOTE

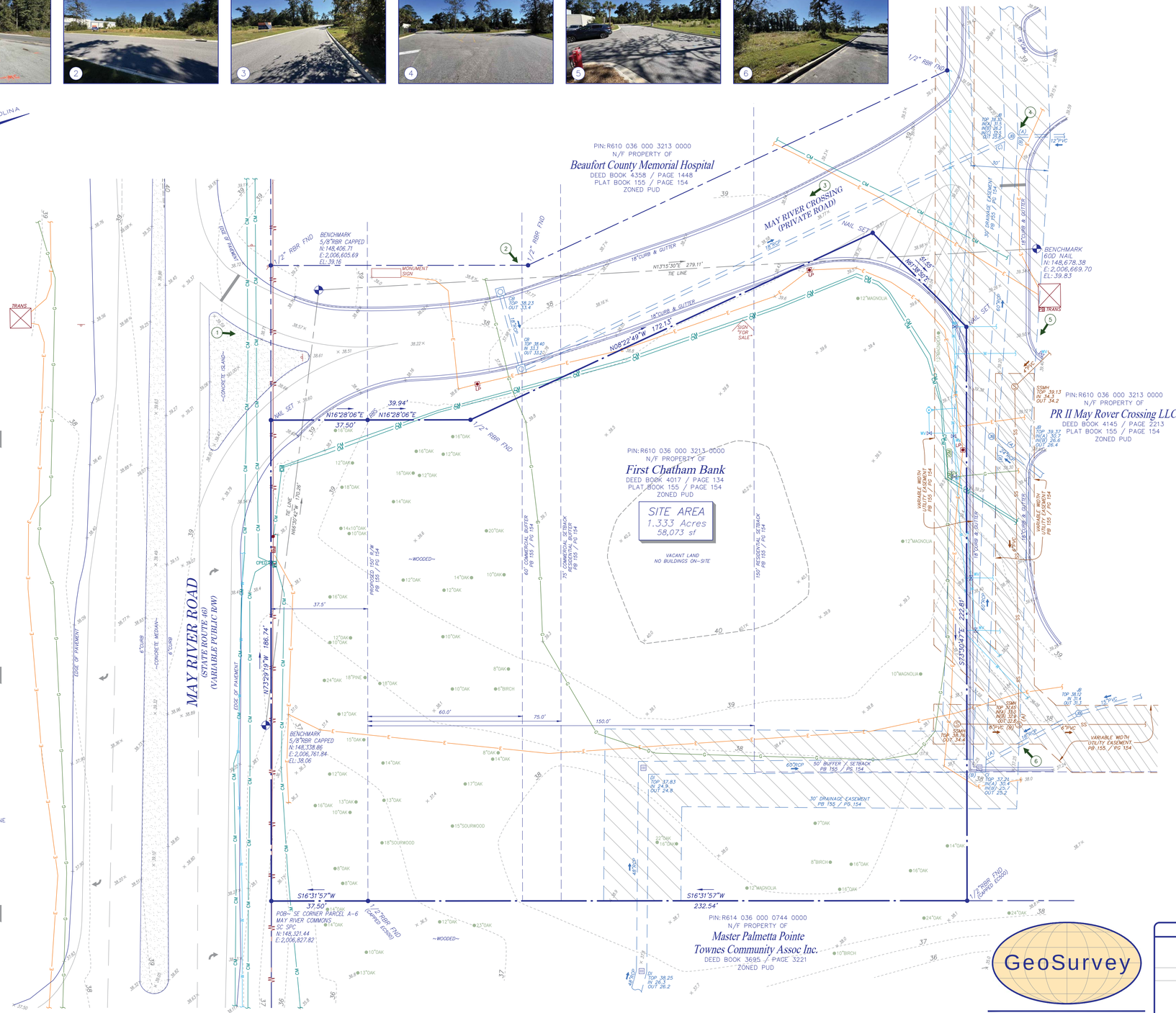
THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON LOCATION OF MARKINGS PROVIDED BY:

MC UTILITY SURVEYING, LLC
160 CHANTILLY LANE
LAWRENCEVILLE, GA 30043

THE UNDERGROUND UTILITIES (EXCEPT THE LOCATION OF EXISTING DRAINAGE, SEWER AND IRRIGATION UTILITIES AS WELL AS UNDERGROUND STORAGE TANKS) WERE LOCATED BY UTILISURVEY, LLC. UTILIZING RADIO FREQUENCY TECHNIQUE. THIS TECHNIQUE IS CAPABLE OF LOCATING METALLIC UTILITIES AND TRACER WIRES. ANY NON-METALLIC UTILITIES (WITHOUT TRACER WIRE) ARE NOT LOCATED.

THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. UNDERGROUND UTILITIES NOT OBSERVED OR LOCATED UTILIZING THIS TECHNIQUE MAY EXIST ON THIS SITE BUT NOT BE SHOWN, AND MAY BE FOUND UPON EXCAVATION. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.

INFORMATION REGARDING MATERIAL AND SIZE OF UTILITIES IS BASED ON RECORDS ACQUIRED FROM THE UTILITY OWNERS.



IF YOU DIG

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Or Call 888-721-7877

GRAPHIC SCALE

0 10 20 50 100
1" = 20'

CLOSURE STATEMENT

THE FIELD CLOSURE UPON WHICH THIS PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 168,330.; AND WAS ADJUSTED USING THE LEAST SQUARES METHOD. A TRIMBLE "S" SERIES TOTAL STATION AND TRIMBLE TSC SERIES DATA COLLECTOR WERE USED TO COLLECT THIS FIELD DATA.
THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND WAS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 4,022,561 FEET. CAB INIT.

VICINITY MAP

SITE LOCATION – LATITUDE: 32° 14' 29" LONGITUDE: 80° 28' 41"

GENERAL NOTES

THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE PERSON OR ENTITIES NAMED HEREON. NO EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE INFORMATION SHOWN HEREON IS TO BE EXTENDED TO ANY PERSONS OR ENTITIES OTHER THAN THOSE SHOWN HEREON.

REVISIONS LISTED ON THIS SURVEY APPLY ONLY TO THE SPECIFIC CHANGES REFERENCED, AND DO NOT CONSTITUTE AN UPDATE OF OTHER DATA ON THIS SURVEY. THE "SURVEY DATE" SHOWN HEREON IS THE APPLICABLE DATE AS RELATED TO PROVISIONS OF STATUTES OF LIMITATION UNLESS SPECIFICALLY NOTED OTHERWISE.

THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE INSPECTION REPORT. EASEMENTS OR OTHER ENCUMBRANCES MAY EXIST ON PUBLIC RECORD BUT NOT BE SHOWN HEREON.

THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 45013C0410G, AND THE DATE OF SAID MAP IS MARCH 23, 2021. THIS DETERMINATION WAS MADE BY GRAPHICALLY DETERMINING THE POSITION OF THIS SITE ON SAID FIRM MAPS UNLESS OTHERWISE NOTED.

PLEASE NOTE: TREES 6-INCH DBH (DIAMETER AT BREAST HEIGHT) AND LARGER WERE LOCATED FOR THIS SURVEY.

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS, AND BASED ON POSITIONAL VALUES ESTABLISHED BY NGS OPUS-RS SOLUTION REPORTS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983(2011)-STATE PLANE COORDINATE SYSTEM OF SOUTH CAROLINA. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988(GEOID18). ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM. THE COMBINED SCALE FACTOR FOR CONVERTING GPS TO GROUND COORDINATES IS 1.00010406.

NO ZONING REPORT OR ZONING LETTER WAS PROVIDED TO THE SURVEYOR. THE SITE IS ZONED "PUD" (PLANNED UNIT DEVELOPMENT DISTRICT) AS SHOWN ON THE ZONING MAP OF THE CITY OF BLUFFTON. ZONING AND SETBACKS SHOULD BE CONFIRMED AND VERIFIED BY PLANNING AND ZONING PRIOR TO DESIGN OR CONSTRUCTION ACTIVITIES.

RIGHT-OF-WAY LINES SHOWN ON THIS SURVEY THAT ARE NOT ACTUAL BOUNDARIES OF THE SUBJECT TRACT(S) ARE DEPICTED GRAPHICALLY AND ARE SHOWN APPROXIMATELY FOR INFORMATIONAL PURPOSES ONLY. SAID RIGHT-OF-WAY LINES SHOULD NOT BE UTILIZED FOR DESIGN PURPOSES.

SURVEY REFERENCES

1. SUBDIVISION PLAT OF PARCEL A, MAY RIVER CROSSING, BEING A PORTION OF CHURCH POINT, PREPARED BY THOMAS & HUTTON, DATED JULY 26, 2018, JOB #26430.000.

2. EASEMENT PLAT CROSSING A PORTION OF PARCELS A-1, A-2, A-4, A-5, A-6, PREPARED BY THOMAS & HUTTON, DATED OCTOBER 16, 2020, RECORDED IN PLAT BOOK 155, PAGE 154, WITH THE THE OFFICE OF THE REGISTER OF DEEDS OF BEAUFORT COUNTY, SOUTH CAROLINA.

SURVEYOR CERTIFICATION

I hereby state that to the best of my professional knowledge, information, and belief, the survey shown hereon was made in accordance with the requirements of the standards of practice manual for surveying in South Carolina, and meets or exceeds the requirements for a class "A" survey as specified therein.

Date: October 17, 2024

Trenton D. Turk
South Carolina Registered Land Surveyor # 14820

SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR No. 14820 TRENTON D. TURK

GeoSurvey
Professional Land Surveying Services
1660 Barnes Mill Road
Marietta, Georgia 30062
Phone: (770) 795-9900
Fax: (770) 795-8880
www.geosurvey.com
EMAIL: info@geosurvey.com
South Carolina Business License #C02789

BOUNDARY & TOPOGRAPHIC SURVEY

2901 May River Crossing

Parcel A-6 ~ May River Crossing

FOR

Fifth Third Bank

GS JOB NO:	20248046	DRAWING SCALE:	1"= 20'
FIELD WORK:	JE	CITY:	BLUFFTON
PROJ MGR:	CAB	COUNTY:	BEAUFORT
REVIEWED:	TDT	STATE:	SC
DWG FILE:	20248046-01.dwg	SURVEY DATE:	10-17-2024

REVISIONS (SEE GENERAL NOTES)

No.	Date	Description