

#### PLAN REVIEW COMMENTS FOR DP-03-25-019666

Town of Bluffton

Department of Growth Management
20 Bridge Street P.O. Box 386 Bluffton, South Carolina 29910
Telephone 843-706-4522
TOWNE CENTRE AT NEW RIVERSIDE

Plan Type: Development Plan Apply Date: 03/24/2025

Plan Status: Active Plan Address: 2901 May River Xing Crossing

BLUFFTON, SC 29910

Case Manager: Dan Frazier Plan PIN #: R610 036 000 3213 0000

Plan Description: A request by Angelina Makowski of BDG Architects on behalf of property owner, Paul Scott, for approval of a

Preliminary Development Plan application. The project consists of the construction of a new freestanding 2,400 SF bank facility with associated parking, landscaping, and infrastructure. The property is within the Jones Estate Planned Unit Development (PUD) consists of 1.33 acres identified by tax map number R610 036 000 3213 0000 within the May River Crossing Master Plan north of May River Road east of May River Crossing

STATUS: This application will be heard at the April 30, 2025 Development Review Committee meeting.

#### **Technical Review**

**Submission #: 1** Received: 03/24/2025 Completed: 04/25/2025

Reviewing Dept.Complete DateReviewerStatusPlanning Review - Principal04/25/2025Dan FrazierApproved with Conditions

#### **Comments:**

- 1. An approval letter from the May River Crossing Declarant or associated ARB will be required prior to development plan approval.
- 2. Consider relocating the crosswalk to the north side of the bank access drive to May River Crossing to increase the distance from May River Road. The installation of the crosswalk and the tie to the future sidewalk will need to be coordinated with future New Riverside Medical Office Building development on the opposite side of May River Crossing.
- 3. The subject property is within the Highway Corridor Overlay District and will require a Certificate of Appropriateness reviewing landscaping, lighting and architecture prior to Final Development Plan approval.

Watershed Management Review DRC	04/25/2025	Samantha Crotty	Approved with Conditions
Comments:			

1. All development shall disconnect impervious surfaces with vegetative surfaces to the maximum extent practicable. (UDO 5.10.3.A.4) Reroute the downspouts to a vegetated area

5.10.3.A.4) Reroute the downspouts to a vegetated area.					
Beaufort Jasper Water and Sewer Review	04/25/2025	Matthew Michaels	Approved		
Building Safety Review	04/25/2025	Marcus Noe	Approved		
Fire Department Review	04/25/2025	Dan Wiltse	Approved		
Planning Commission Review	04/25/2025	Angie Castrillon	Approved		
Planning Review - Address	04/25/2025	Diego Farias	Approved		
Planning Review - Senior	04/25/2025	Dan Frazier	Approved		
Police Department Review	04/25/2025	Bill Bonhag	Approved		

04/25/2025 Page 1 of 2

ATTACHMENT 5

Mark Maxwell Approved

Transportation Department Review

No comments

Comments:

03/24/2025

Plan Review Case Notes:

04/25/2025 Page 2 of 2

### CONSTRUCTION PLANS FOR:



# MAY RIVER CROSSING

2500 MAY RIVER CROSSING BLUFFTON, SOUTH CAROLINA 29910

#### PROJECT TEAM

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

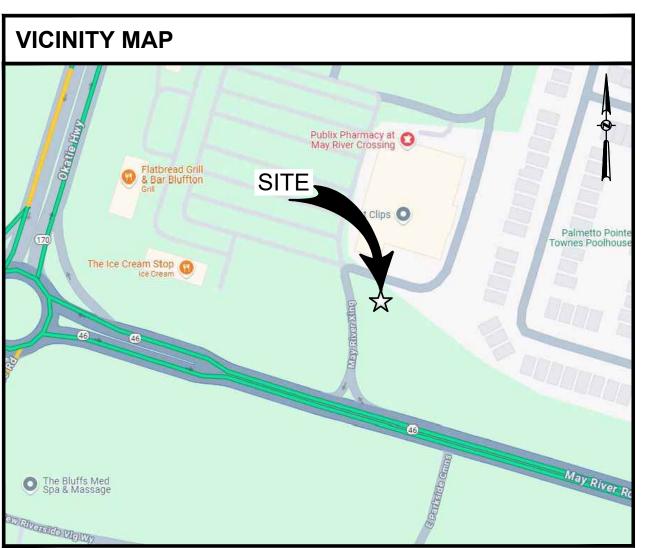
DEVELOPER: FIFTH THIRD BANK MD 10ATA1 CORP FAC 38 FOUNTAIN SQUARE PLZ CINCINNATI, OHIO 45202-3102 PH: (513) 579-5203

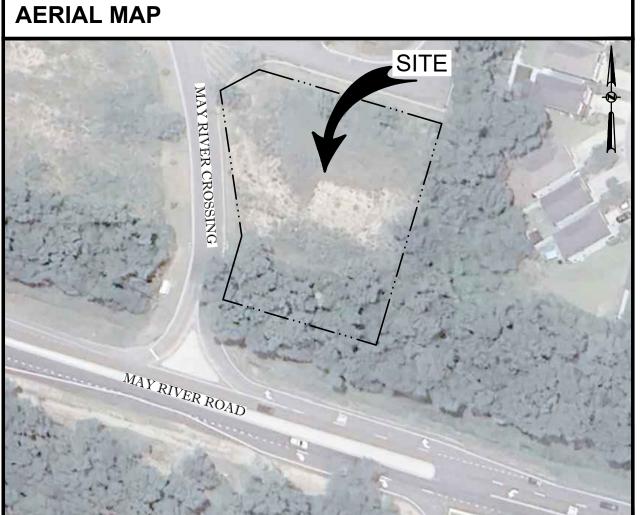
SURVEYORS: GEO SURVEY 1660 BARNES MILL ROAD MARIETTA, GEORGIA 30062 PH: (770) 795-9900 CONTACT: TRENTON TURK EMAIL: INFO@GEOSURVEY.COM CHARLOTTE, NORTH CAROLINA 28269

INFINITY ENGINEERING GROUP, LLC 1208 EAST KENNEDY BOULEVARD PH: (813) 434-4770 **CONTACT: BRETT NEVARIL** 

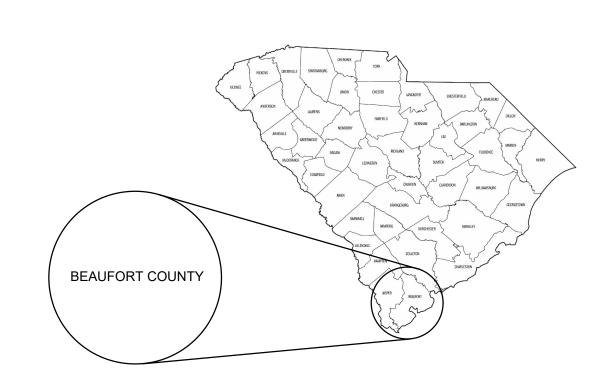
CONTACT: ROBERT PRICE

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





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

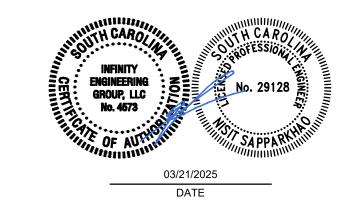




INFINITY ENGINEERING GROUP, LLC

> 1208 East Kennedy Boulevard Suite 230 Tampa, Florida 33602 [f]: 813.445.4211 www.iegroup.net Cert. of Auth. No. 4573

IEG JOB NO. 15-360.00



C00.00	COVER SHEET		
C00.01	CIVIL SPECIFICATIONS		
C01.01	DEMOLITION PLAN		
C02.01	SITE PLAN		
C03.01	GRADING PLAN		
C03.02	STORM PIPING PLAN		
C03.03	CROSS SECTIONS		
C04.01	UTILITY PLAN		
C05.01	DETAILS		
C05.02	DETAILS		
C05.03	BEAUFORT - JASPER COUNTY DETAILS		
C05.04	BEAUFORT - JASPER COUNTY DETAILS		
C05.05	SCDOT DETAILS		
C05.06	SCDOT DETAILS		
C05.07	SCDOT DETAILS		
C05.08	SCDOT DETAILS		
C05.09	UNDERGROUND VAT TUBE DETAILS		
C06.01	SWPPP GENERAL REQUIREMENTS		
C06.02	EROSION CONTROL PLAN PHASE I		
C06.03	EROSION CONTROL PLAN PHASE II		
C06.04	EROSION AND SEDIMENTATION CONTROL DETAILS		
GL-010	IRRIGATION SPECIFICATIONS		
GL-011	LANDSCAPE SPECIFICATIONS		
L-100	IRRIGATION PLAN		
L-110	LANDSCAPE PLAN		
L-500	IRRIGATION DETAILS		
L-510	LANDSCAPE DETAILS		
1 OF 1	BOUNDARY & TOPOGRAPHIC SURVEY		
E-010	ELECTRICAL SIT PLAN AND REMOTE DRIVE THRU		
E-011	ELECTRICAL PHOTOMETRIC SITE PLAN		
E-012	ELECTRICAL SITE DETAILS		
E-601	EXTERIOR LIGHTING CUTSHEETS		
E-602	EXTERIOR LIGHTING CUTSHEETS		
E-603	EXTERIOR LIGHTING CUTSHEETS		

**DRAWING INDEX** 

SHEET TITLE

SHEET NO.

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.
- 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
- 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

- 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.
- 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
- 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
- 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.
- 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
- 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

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

TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

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:

PREVENT CORROSION

- 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

- 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

- 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.
- 2. KEEP TREE PROTECTION ZONES FREE OF WEEDS AND TRASH.

AND REMOVE WHEN CONSTRUCTION IS COMPLETE.

- 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
- 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.
- 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.
- PROMPTLY REPAIR TREES DAMAGED BY CONSTRUCTION OPERATIONS WITHIN 24 HOURS. TREAT DAMAGED TRUNKS, LIMBS, AND ROOTS ACCORDING TO

- ARBORIST'S WRITTEN INSTRUCTIONS.
- TREE PRUNING: PRUNE TREES ACCORDING TO ANSI A300 (PART 1), 'TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE - STANDARD PRACTICES

#### **EROSION AND SEDIMENTATION**

- 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.
- PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FIELD QUALITY CONTROL: FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
- 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.
- 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.
- 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
- 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.

- 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.
- 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.
- 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.
- 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.

- 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.
- RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST. RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES AS DIRECTED BY ENGINEER, WITHOUT ADDITIONAL COMPENSATION.

- 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:

- 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.
- 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).

- 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.
- 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.

- 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.
- 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.

- 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.
- 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.
- 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
- 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. ALL FIELD QUALITY CONTROL TESTS THAT FAIL TO MEET THE SPECIFIED

COMPACTION DENSITY SHALL BE REPORTED TO THE ENGINEER.

#### **GENERAL UTILITY NOTES**

FEWER THAN 2 TESTS.

- 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
- THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE WORK EFFORTS WITH THE OWNER TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF THE FACILITIES.
- 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.
- 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 JNCHARTED UTILITIES WHICH MAY REQUIRE RELOCATION. NOTIFICATION SHALL BE DONE IN A TIMELY MANNER.
- 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.
- 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

CONTRACTOR IS TO ACKNOWLEDGE AND SECURE ALL PERMITS AND

- 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
- 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.
- SHOULD BE CONTACTED BY THE CONTRACTOR: GAS

BE ALLOWED.

- TELEPHONE CABLE
- POWER
- CITY/COUNTY WATER AND SEWER 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 LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFACE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL
- 14. COLOR CODE FOR MARKING UNDERGROUND UTILITY LINES

WHITE - PROPOSED EXCAVACTION. PINK - TEMPORARY SURVEY MARKINGS. RED - ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES. YELLOW - GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS. ORANGE - COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT. BLUE - POTABLE WATER. PURPLE - RECLAIMED WATER, IRRIGATION AND SLURRY LINES. GREEN - SEWERS AND DRAIN LINES.

#### WATER SYSTEM NOTES

- A VERTICAL CLEARANCE OF 18 INCHES SHALL BE MAINTAINED BETWEEN SANITARY SEWERS AND WATER MAINS. IF CLEARANCE CANNOT BE ACHIEVED BY ADJUSTING WATER MAINS THE SANITARY SEWER SHALL BE CONSTRUCTED PER SANITARY NOTE No. 1 BELOW.
- A HORIZONTAL SEPARATION OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER
- ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- ALL WATER SYSTEM WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- CONFLICTS BETWEEN WATER AND STORM OR SANITARY SEWER TO BE RESOLVED BY ADJUSTING THE WATER LINES AS NECESSARY.
- ALL BURIED DUCTILE IRON PIPE SHALL BE CLASS 53 IN ACCORDANCE WITH ANSI A 21.50 (AWWA C150) AND ANSI A 21.51 (AWWA C151) AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8 OR A 21.51 AND SHALL BE MORTAR LINED, STANDARD THICKNESS, AND BITUMINOUS SEALED IN ACCORDANCE WITH ANSI A (AWWA C 104-71).
- ALL BURIED FITTINGS LARGER THAN 2" SHALL BE DUCTILE IRON CLASS 53 IN ACCORDANCE WITH AWWA C-110 WITH A PRESSURE RATING OF 350 PSI. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA
- CONTRACTOR TO INSTALL TEMPORARY BLOW-OFFS AT THE END OF WATER SERVICE LATERALS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.
- THRUST BLOCKING AND/OR RESTRAINED JOINTS SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS IN ACCORDANCE WITH AWWA STANDARDS.
- ALL PVC WATER MAINS 4" THROUGH 12" SHALL BE IN ACCORDANCE WITH AWWA C-900. PIPE SHALL BE CLASS 150 AND MEET THE REQUIREMENTS OF SDR 18 IN

ACCORDANCE WITH ASTM D-2241, AND COLOR CODED BLUE.

UNDERDRAIN SHALL MAINTAIN 18" SEPARATION.

- SLEEVE TYPE JOINTS. 12. ALL WATER MAINS AND WATER SERVICES TO BE INSTALLED UNDER ROAD
- 13. MATERIALS AND CONSTRUCTION METHODS FOR WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL POTABLE WATER SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY DEPARTMENT OF PUBLIC UTILITIES.
- ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH WATER DEPARTMENT AND AWWA SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND WATER DEPARTMENT INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
- CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING REQUIRED TO OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM THROUGH LOCAL REGULATORY AGENCIES. COPIES OF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER

#### SANITARY SEWER NOTES

A HORIZONTAL SEPARATION OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER.

POLYVINYL CHLORIDE PIPE, SDR 26 AND COLOR CODED GREEN.

ALL SANITARY SEWER WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.

PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO

ALL SANITARY SEWER MAINS & SERVICE LATERALS SHALL BE CONSTRUCTED OF

EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. PERMITS MAY BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE 5. PVC PIPE AND FITTINGS SHALL CONFORM WITH A.S.T.M. SPECIFICATIONS

DESIGNATION D-3034-77C, MA SDR 26. INSTALLATION OF SDR PIPE SHALL BE IN

STRICT ACCORDANCE WITH THE REQUIREMENTS OF A.S.T.M. SPECIFICATION

- DESIGNATION D2321. ALL SANITARY SEWER PIPELINES SHALL BE SOLID GREEN IN ALL PVC FORCE MAINS WITHIN PUBLIC R/W SHALL BE CLASS 200, SDR 18, WITH MECHANICAL JOINTS, AND HAVE A GREEN MAGNETIC TAPE A MINIMUM OF 3"
- TAPE SHOULD READ "FORCE MAIN". ALL SANITARY SEWER GRAVITY MAINS OR SANITARY SEWER FORCE MAINS THAT

WIDE, PLACED 24" BELOW THE PROPOSED GRADE.THE PRINT ON THE MAGNETIC

- REQUIRE D.I.P. ARE TO BE POLYLINED OR EPOXY LINED. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
- BE INSTALLED ACCOMPANIED BY A METAL TAPE SIMILAR TO "TERRATAPE" COLORED GREEN AND LAID ONE FOOT ABOVE THE PIPE. ALL UTILITIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE
  - OWNER'S ENGINEER. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION. 11. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL

GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING

JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER AND

SANITARY SEWERS SHALL HAVE A MINIMUM COVER OF THREE (3) FEET AND SHALL

NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY. 12. ALL FORCE MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL COORDINATION AND NOTIFICATION OF ALL

SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND

#### GEOTECHNICAL NOTE

PARTIES IS CONTRACTOR'S RESPONSIBILITY.

CONTRACTOR TO REVIEW AND FOLLOW CONSTRUCTION TECHNIQUES OUTLINED IN THE SITE GEOTECHNICAL REPORT

#### STORM DRAINAGE

c. PIPE JOINTS SHALL BE WATER-TIGHT.

- UNLESS OTHERWISE SHOWN ON PLANS, ALL PVC PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING:
- a. PVC SEWER PIPE AND FITTINGS, NPS 15-INCH AND SMALLER ASTM D 3034, SDR 35, WITH BELL-AND-SPIOT ENDS FOR GASKETED JOINTS USING ASTM F
- 477, ELASTOMERIC SEALS. b. PVC SEWER PIPE AND FITTINGS, NPS 18-INCH AND LARGER: ASTM F 679, T-1 WALL THICKNESS, WITH BELL-AND-SPIGOT ENDS FOR GASKETED JOINTS USING ASTM F 477, ELASTOMERIC SEALS.
- 2. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL REINFORCED CONCRETE PIPE (RCP) AND FITTINGS SHALL CONFORM TO THE FOLLOWING: a. ASTM C 76, WITH BELL-AND-SPIGOT OR GROOVE AND TONGUE ENDS AND
- GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS. b. RCP PIPE SHALL BE CLASS III, WALL B.
- c. WHEN LOCATED IN TRAFFIC AREAS WITH LESS THAN 2 FEET OF COVER, RCP PIPE SHALL BE CLASS IV WALL B
- d. WHEN LOCATED UNDER AIRCRAFT RAMPS OR RAILROAD OPERATIONS, RCP PIPE SHALL BE CLASS V, WALL B WITH O-RING JOINTS. e. PIPE CLASS SHALL BE CLEARLY "STAMPED" ON EACH SEGMENT OF RCP PIPE
- DELIVERED TO THE PROJECT. f. PIPE JOINTS SHALL BE WATER-TIGHT.

CONTRACTOR SHALL HANDLE AND STORE PIPE, FITTINGS, GASKETS, AND

- RELATED APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. 4. CONTRACTOR SHALL HANDLE MANHOLES. DROP INLETS, CURB INLETS, PIPE END
- MANUFACTURER'S WRITTEN RIGGING INSTRUCTIONS. 5. PVC PLASTIC PIPE AND FITTINGS SHALL NOT BE STORED IN DIRECT SUNLIGHT.
- 6. ALL PIPE. FITTINGS, GASKETS, AND SEALS SHALL BE PROTECTED FROM DIRT

COMPONENTS AND RELATED APPURTENANCES ACCORDING TO

- ALL STORM SEWER LINES SHALL BE TELEVISED AND THE VIDEO REPORTS SUBMITTED TO THE ENGINEER FOR REVIEW 11. ALL FITTINGS 3" AND SMALLER SHALL BE CLASS 160 PVC WITH SOLVENT WELDED
  - a. VIDEO REPORTS ARE TO BE SUBMITTED ON CD-ROM OR DVD COMPACT DISKS. b. ALL LINES MUST BE FLUSHED AND CLEANED WITH POTABLE WATER PRIOR TO
  - c. FOR SUBMERGED SYSTEMS, POND WATER LEVELS SHALL BE LOWERED (PUMPED DOWN) BELOW THE LOWEST PIPE ENTRANCE INVERT. d. VIDEO REPORTS WILL BE USED TO VIEW THE CONDITION OF THE STORM SEWER PIPE PRIOR TO ACCEPTANCE. WORKMANSHIP AND CLEANLINESS OF THE INSTALLATION WILL BE CHECKED.
  - AS-BUILT SURVEY: THE CONTRACTOR SHALL VERIFY STORM SEWER IMPROVEMENTS ALIGNMENT BY PROVIDING AN "AS-BUILT" SURVEY OF CONSTRUCTED CONDITIONS FROM A LICENSED SURVEYOR REGISTERED IN THE STATE OF PROJECT LOCATION. THE "AS-BUILT" SURVEY SHALL INCLUDE VERTICAL AND HORIZONTAL INFORMATION PERTAINING TO THE INSTALLATION OF THE STORM SEWER SYSTEM PIPING AND STRUCTURES. DATUM ELEVATION AND BENCHMARK LOCATIONS SHALL BE INDICATED. INFORMATION TO BE
  - INCLUDED IS AS FOLLOWS: a. PIPE TYPE, SIZE, AND INVERT ELEVATIONS. b. MANHOLE, DROP INLET, CURB INLET, YARD DRAIN, AND POND CONTROL STRUCTURE LOCATIONS WITH ELEVATIONS OF BOTTOM, RIM OR GRATE

c. POND CONTROL STRUCTURES: SHOW INFORMATION ON ALL FLOW CONTROL

#### APPURTENANCES AND OUTLET PIPING. ASPHALT PAVING

ELEVATION SHOWN.

- 1. THE CONTRACTOR IS TO PROVIDE BARRICADES, SIGNS, FLASHERS, AND FLAG PERSONNEL AS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION IS TO CONFORM TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES": LATEST EDITION.
- 2. ALL ASPHALT PAVING MATERIALS, WORKMANSHIP, AND INSTALLATION REQUIREMENTS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS OF THE STATE DEPARTMENT OF TRANSPORTATION (D.O.T.) FOR THE STATE IN WHICH THE WORK OCCURS WITH SOME EXCLUSIONS. THE DOT PAYMENT PROCEDURES
- AND SAFETY REQUIREMENTS SHALL GENERALLY NOT APPLY. a. COARSE AGGREGATE. FINE AGGREGATE AND MINERAL FILLERS: IN ACCORDANCE WITH D.O.T. MATERIAL STANDARDS AND ASSOCIATED CONSTRUCTION SPECIFICATIONS.
- ACCORDANCE WITH D.O.T. MATERIAL STANDARDS AND ASSOCIATED CONSTRUCTION SPECIFICATIONS. c. JOINT SEALANT: ASTM 0 6690 OR AASHTO M 324. TYPE II OR III, HOT APPLIED, SINGLE COMPONENT, POLYMER-MODIFIED BITUMINOUS SEALANT.

b. ASPHALT BINDER, ASPHALT CEMENT, PRIME COAT, AND TACK COAT: IN

STANDARDS AND ASSOCIATED CONSTRUCTION SPECIFICATIONS. COLORS AS 3. DO NOT APPLY ASPHALT MATERIALS IF SUBGRADE IS FROZEN, WET, OR EXCESSIVELY DAMP: OR IF RAIN IS IMMINENT OR EXPECTED BEFORE TIME

d. PAVEMENT-MARKING PAINT: IN ACCORDANCE WITH D.O.T. MATERIAL

- REQUIRED FOR ADEQUATE CURE. APPLY ONLY AT D.O.T. RECOMMENDED SURFACE TEMPERATURE.
- 4. INSTALLATION TOLERANCES: a. PAVEMENT THICKNESS: THE AVERAGE OF THE MEASURED THICKNESS OF THE
- PAVEMENT LAYERS SHALL MEET OR EXCEED THE REQUIRED THICKNESS FOR THOSE LAYERS, AND THE MINIMUM THICKNESS IN ANY ONE AREA SHALL NOT BE LESS THAN 0.25 INCHES BELOW THE REQUIRED THICKNESS. b. PAVEMENT SURFACE SMOOTHNESS: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS
- DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS:
- BASE COURSE: 1/4 -INCH SURFACE COURSE: 1/4 -INCH c. CROWNED SURFACES: TEST WITH CROWNED TEMPLATE CENTERED AND AT RIGHT ANGLE TO CROWN. MAXIMUM ALLOWABLE VARIANCE FROM TEMPLATE
- PAVEMENT MARKINGS SHALL BE MADE WITH NON-THERMOPLASTIC ACRYLIC MARKING PAINT MEETING THE DOT MATERIAL REQUIREMENTS. ALLOW PAVING TO AGE FOR 30 DAYS BEFORE STARTING PAVEMENT MARKING. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS AND COLORS INDICATED, WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES TO PROVIDE A MINIMUM WET FILM

THICKNESS OF 15 MILS AND ONLY AT MANUFACTURER'S RECOMMENDED

#### AMBIENT AND SURFACE TEMPERATURES.

b. ALL SANITARY SEWER

c. ALL STORM SEWER

IS 1/4 -INCH.

**AS-BUILT SURVEY** UPON COMPLETION OF THE WORK, THE SITEWORK SUB-CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL LAND SURVEYOR TO PERFORM AN "AS-BUILT" SURVEY. THE "AS-BUILT" SURVEY SHALL INCLUDE LOCATION AND ELEVATION DATA FOR ALL CONSTRUCTED IMPROVEMENTS. SPECIFIC INFORMATION INCLUDED IN THE SURVEY SHALL BE AS FOLLOWS:

a. ALL PAVEMENT SURFACES INCLUDING CURBS, WALKS, RAMPS, PADS, ETC.

- d. ALL STORM DETENTION, RETENTION, AND WATER QUALITY POND GRADING e. EMBANKMENT AND LAWN AREA GRADING
- g. BUILDING CORNER LOCATIONS h. OUT BUILDINGS, IF APPLICABLE
- i. WATER, GAS, BURIED ELECTRIC AND BURIED TELECOM LINES j. LIGHT POLE LOCATIONS k. STRIPING AND PAVEMENT MARKINGS

f. BUILDING FINISH FLOOR ELEVATION

I. TREE LOCATIONS WITH SIZE AND SPECIES



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

 $\mathbf{\Omega}$ 



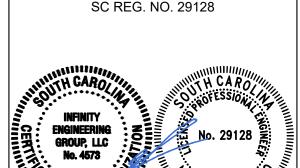
Tampa, Florida 33602 [p]: 813.434.4770 [f]: 813.445.4211 www.iegroup.net Cert. of Auth. No 4573

SEAL NISIT SAPPARKHAO, P.E

INFINITY ENGINEERIN GROUP, LLC

1208 East Kennedy Boulevard

IEG JOB NO. 15-360.00



ISSUE BY DATE DESCRIPTION SJ 03/21/25 ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK JOB#

02/12/2025

SHEET TITLE

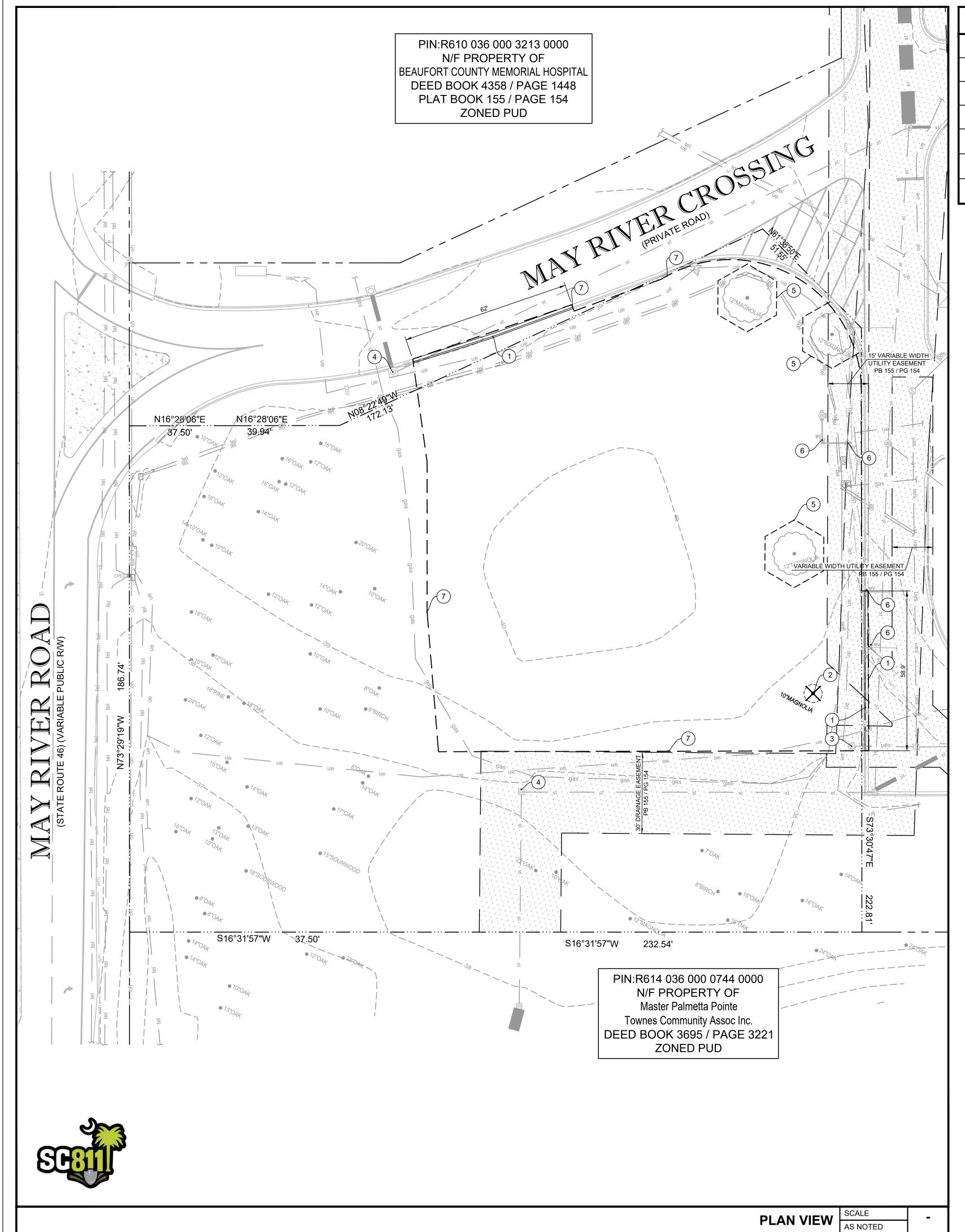
CIVIL SPECIFICATIONS

**SHEET NUMBER** 

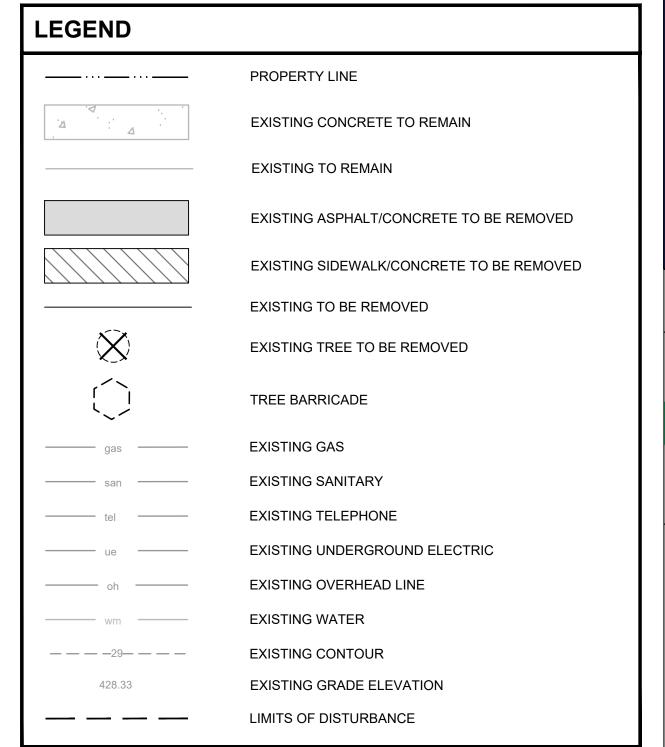
DATE:

DRAWN BY:

CHECKED BY:



KEYED	KEYED NOTES				
1	1) EXISTING CURB AND GUTTER TO BE REMOVED.				
2	EXISTING TREE TO BE REMOVED.				
3	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).				



#### **DEMOLITION NOTES**

- 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.
- 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
- 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
- . 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.

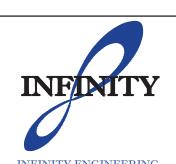
SCALE

20'





 $\Delta$ 



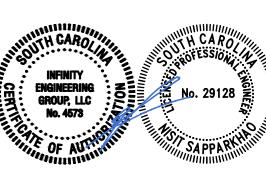
INFINITY ENGINEERING
GROUP, LLC

1208 East Kennedy Boulevard
Suite 230

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



ISSUE	BY	DATE	DESCRIPTION	
	SJ	03/21/25	ISSUE FOR PERMIT	
PROJECT INFORMATION BLOCK				

JOB # 240634

DATE: 02/12/2025

DRAWN BY: IEG

CHECKED BY: IEG

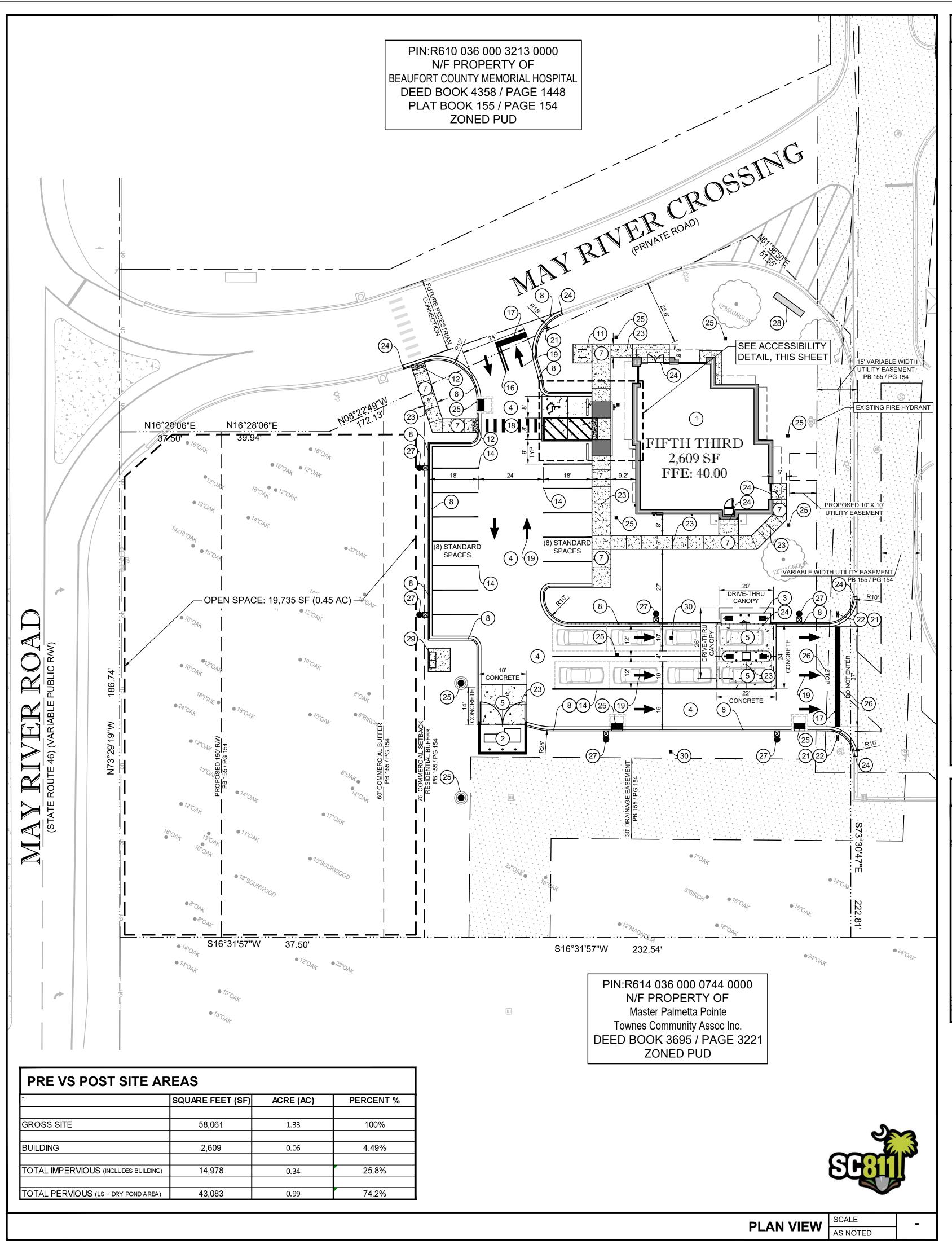
SHEET TITLE

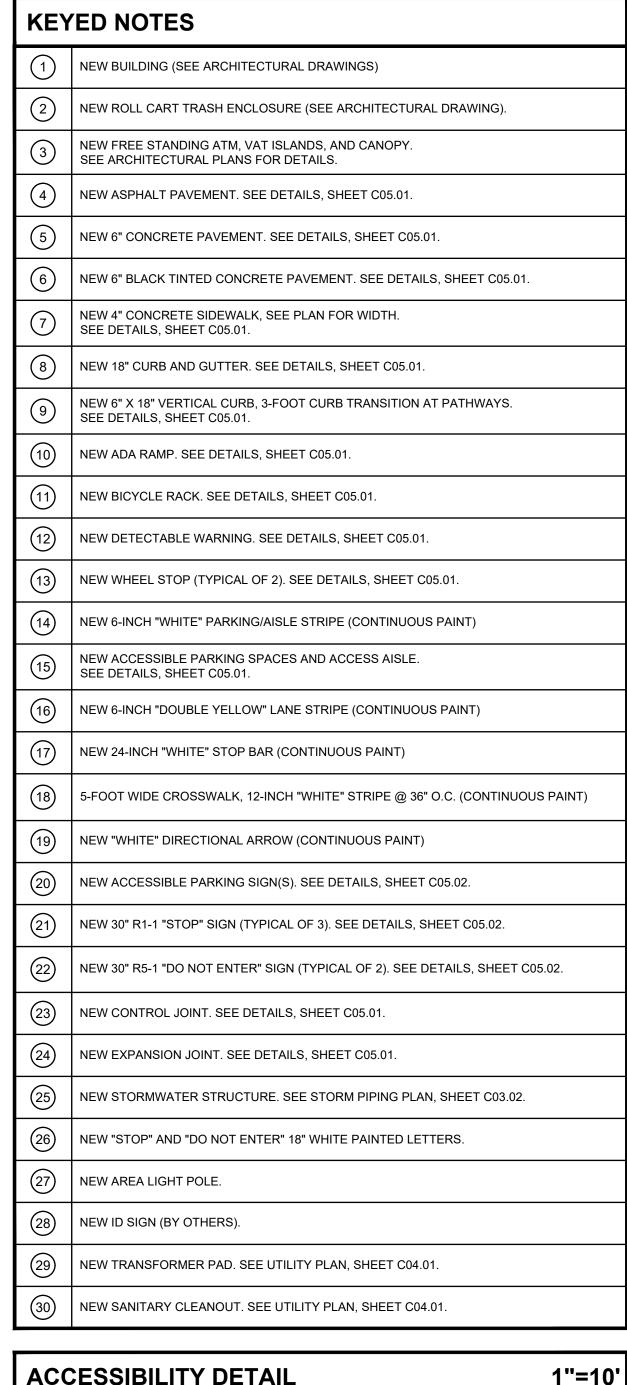
DEMOLITION PLAN

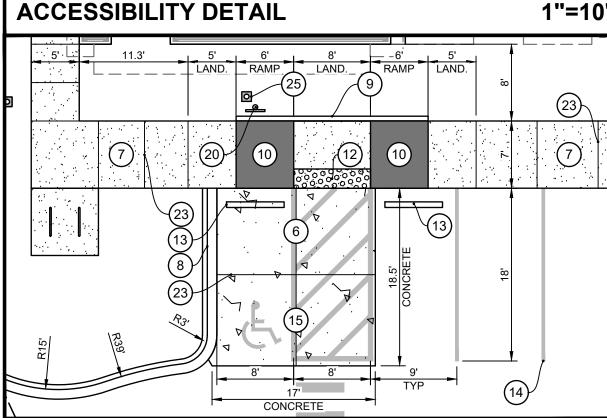
SHEET NUMBER

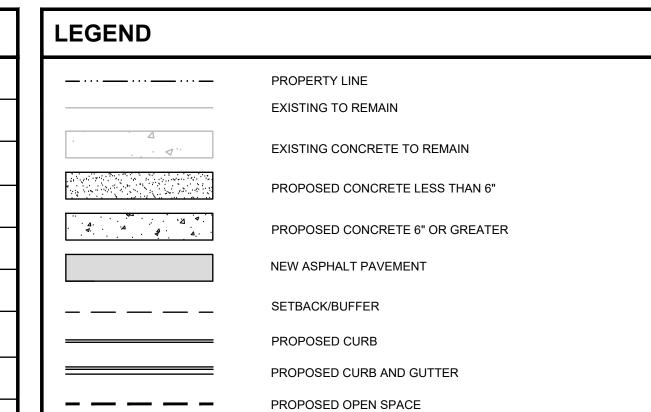
60'

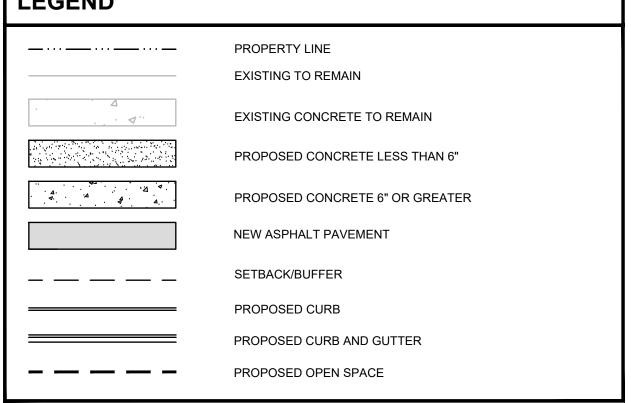
C01.01













SITE ADDRESS: 2500 MAY RIVER CROSSING BLUFFTON, SOUTH CAROLINA 29910 R610 036 000 3213 0000 **BUILDING AREA:** 2,609 SF BUILDING

VACANT

ZONING: PLANNED UNIT DEVELOPMENT (PUD) SITE AREA: 58,061 SF / 1.33 AC

**FUTURE USE:** BANK WITH DRIVE THRU

**PARKING DATA** 

**EXISTING USE** 

4.5 SPACE PER 1,000 SF OF G.F.A. BANK PARKING REQUIRED: 2,400 SF x (4.5 / 1,000 SF) = 11 SPACES

STANDARD PARKING

TOTAL PARKING PROVIDED:

ACCESSIBLE PARKING TOTAL PARKING PROVIDED = 15 SPACES

= 14 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

\*NOTE-FINANCIAL INSTITUTIONS DO NOT USE LOADING ZONES FOR SECURITY PURPOSES

DELIVERY TRUCK WILL PARK DIRECTLY IN FRONT OF MAIN ENTRANCE.

LANDSCAPE REQUIREMENTS:

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

BUILDING REQUIREMENTS:

**BUILDING SETBACK - SC HIGHWAY 46** BUILDING SETBACK - MAY RIVER CROSSING BUILDING SETBACK - SIDE (EAST /RESIDENTIAL) = 0' BUILDING SETBACK - REAR (NORTH)

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.

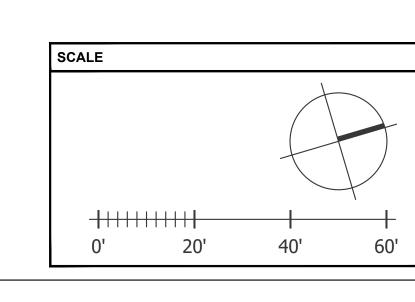
#### **SITE PLAN GENERAL NOTES**

- 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

- 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

3.	IRRIGATION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.





550 S. Caldwell Street P: 704.981.8951

Charlotte, NC 28202 | www.bdgllp.com



Lic. #: AA - 0003590

 $\Delta$ 

R D

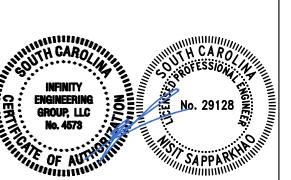


INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard 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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT

•	·				
PROJECT INFORMATION BLOCK					
JOB # 240634					
DATE:	02/12/2025				
D D A 14/11 D 1/					

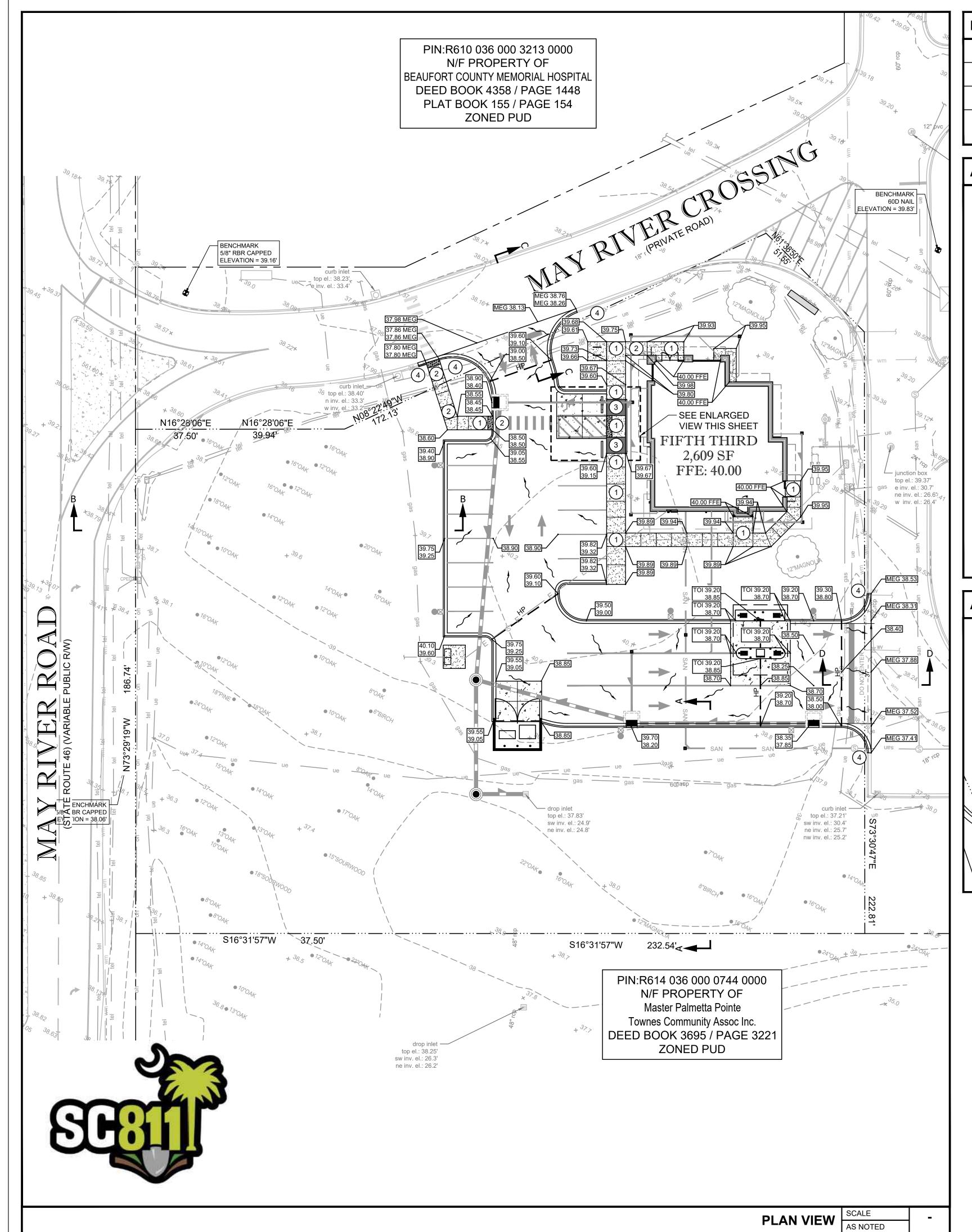
DRAWN BY: CHECKED BY:

SHEET TITLE

SITE PLAN

SHEET NUMBER

C02.01



#### **KEYED NOTES:**

- SURFACE SLOPES NOT TO EXCEED 1:48 IN ALL DIRECTIONS.
- SURFACE SLOPES NOT TO EXCEED 1:48 CROSS SLOPES AND 1:20 RUNNING.
- SURFACE SLOPES NOT TO EXCEED 1:48 CROSS SLOPES AND 1:12 RUNNING.
- 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**

- THE DRAWINGS ARE DESIGNED TO MEET ACCESSIBILITY STANDARDS AT MINIMUM. LOCAL AND STATE REQUIREMENTS OR CODES MAY HAVE ADDITIONAL STANDARDS.
- 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).
- ACCESSIBLE PARKING SIGNAGE ON POST. BOTTOM OF SIGNAGE TO BE MINIMUM 60" ABOVE GRADE. VERIFY ALL REQUIREMENTS WITH ACCESSIBILITY REQUIREMENTS AND
- CONCRETE WHEEL STOP. ALL ACCESSIBLE SPACES- LOCATE FIXED WHEEL STOP SO AS NOT TO REDUCE THE WIDTH OF THE ADJOINING ACCESSIBLE ROUTE.
- 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.
- 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.
- (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)
- 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
- 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.
- ). 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 39.67 39.22 39.67 39.67 39.67 \_\_\_\_39.22 38.95

#### **LEGEND**

**ELEVATION** CLEANOUT INVERT ELEVATION EXISTING ELEVATION PROPOSED PAVEMENT ELEVATION TOP OF SIDEWALK/CURB EDGE OF PAVEMENT

**CURB INLET** 

FINISH FLOOR ELEVATION REINFORCED CONCRETE PIPE

MATCH EXISTING GRADE

TOP OF ISLAND BUILDING DOWN SPOUT

12" OR GREATER STORMWATER PIPE LESS THAN 12" STORMWATER PIPE

PROPOSED SURFACE STORMWATER FLOW **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.

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

- 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.
- ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY TO BE RETURNED TO MATCH EXISTING CONDITION.
- 6. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.
- 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.

SCALE

20'

# architects

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



 $\Delta$ 



INFINITY ENGINEERING GROUP, LLC 1208 East Kennedy Boulevard 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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
PRC	)JE(	CT INFOR	RMATION BLOCK
IOR	#		240434

02/12/2025

DRAWN BY: CHECKED BY:

SHEET TITLE

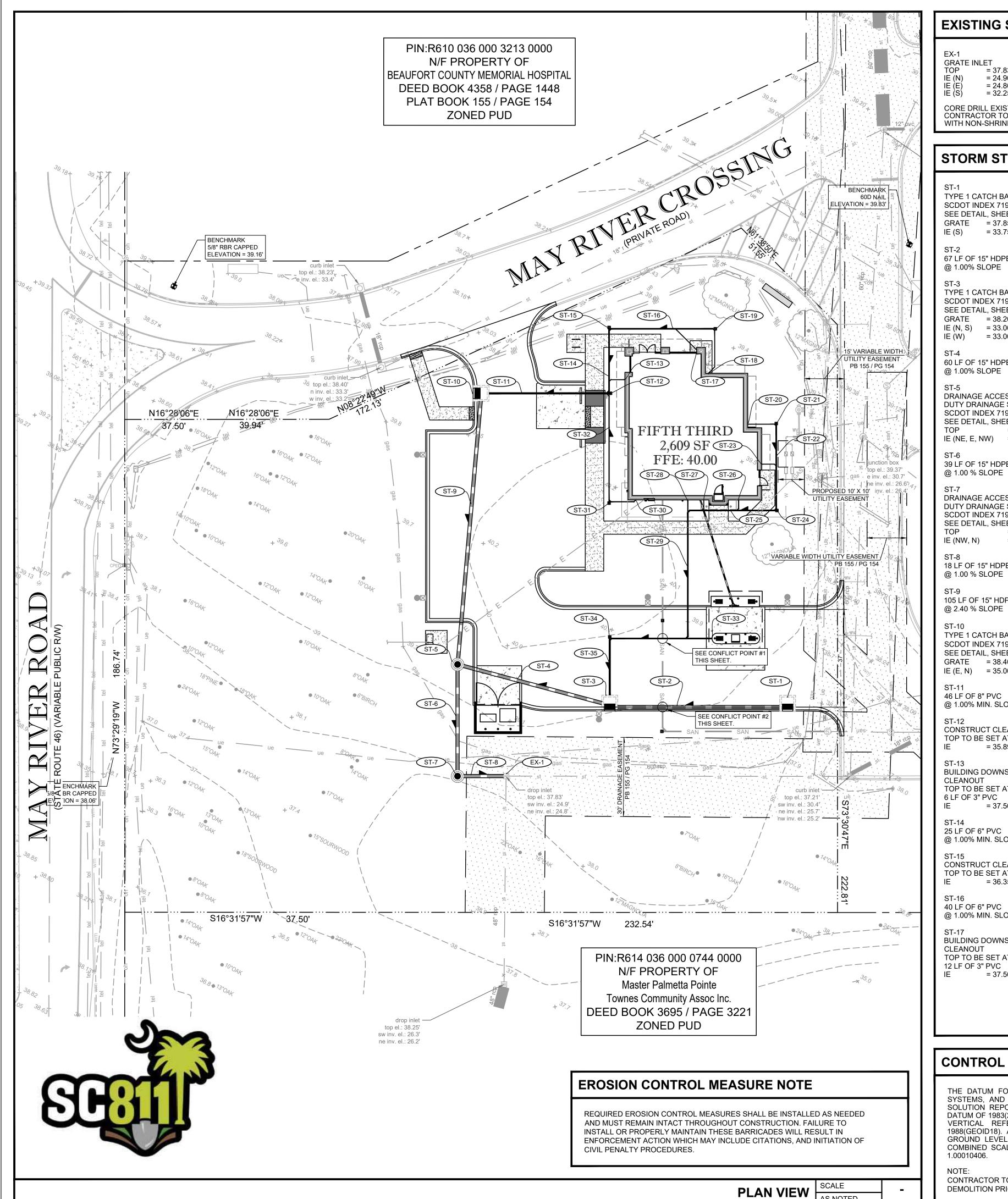
GRADING PLAN

SHEET NUMBER

60'

DATE:

C03.01



#### **EXISTING STORM STRUCTURE/PIPING DATA**

GRATE INLET TOP = 3

= 24.90' (EXISTING 60" RCP) IE (N) = 24.80' (EXISTING 60" RCP) = 32.25' (PROPOSED 15" HDPE)

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

#### STORM STRUCTURE/PIPING DATA

TYPE 1 CATCH BASIN SCDOT INDEX 719-001-01 SEE DETAIL, SHEET C05.05 GRATE = 37.85' = 33.75' IE (S)

67 LF OF 15" HDPE @ 1.00% SLOPE

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

= 33.00' 60 LF OF 15" HDPE

DRAINAGE ACCESS MANHOLE HEAVY DUTY DRAINAGE STRUCTURE SCDOT INDEX 719-505-01 SEE DETAIL, SHEET C05.06

= 39.50'

IE (NE, E, NW) = 32.45'39 LF OF 15" HDPE

DRAINAGE ACCESS MANHOLE HEAVY DUTY DRAINAGE STRUCTURE SCDOT INDEX 719-505-01 SEE DETAIL, SHEET C05.06

IE (NW, N) = 32.40' 18 LF OF 15" HDPE

105 LF OF 15" HDPE @ 2.40 % SLOPE

TYPE 1 CATCH BASIN SCDOT INDEX 719-001-01 SEE DETAIL, SHEET C05.05 GRATE = 38.40'

IE (E, N) = 35.00'46 LF OF 8" PVC @ 1.00% MIN. SLOPE

CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE

= 35.89'

**BUILDING DOWNSPOUT AND** CLEANOUT TOP TO BE SET AT GRADE 6 LF OF 3" PVC = 37.50'

25 LF OF 6" PVC @ 1.00% MIN. SLOPE

CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE = 36.35'

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

**BUILDING DOWNSPOUT AND** CLEANOUT TOP TO BE SET AT GRADE 12 LF OF 3" PVC = 37.50'

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

ST-19 CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE = 37.15

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

CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE = 37.20

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

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

CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE = 36.35'

ST-25 34 LF OF 6" PVC @ 1.00% MIN. SLOPE

**BUILDING DOWNSPOUT AND** CLEANOUT TOP TO BE SET AT GRADE 5 LF OF 4" PVC @ 1.00% MIN. SLOPE = 37.50'

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

**BUILDING DOWNSPOUT AND** CLEANOUT TOP TO BE SET AT GRADE 5 LF OF 4" PVC @ 1.00% MIN. SLOPE = 37.50'

48 LF OF 6" PVC @ 1.00% MIN. SLOPE

**BUILDING DOWNSPOUT AND** CLEANOUT TOP TO BE SET AT GRADE 11 LF OF 4" PVC @ 1.00% MIN. SLOPE = 37.50'

CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE = 37.15

ST-32 42 LF OF 4" PVC @ 1.00% MIN. SLOPE'

ST-33 BUILDING DOWNSPOUT AND CLEANOUT TOP TO BE SET AT GRADE 39 LF OF 6" PVC @ 1.00% MIN. SLOPE IE = 37.50'

CONSTRUCT CLEANOUT TOP TO BE SET AT GRADE = 33.55'

22 LF OF 8" PVC @ 1.00% MIN. SLOPE

#### **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

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

#### **LEGEND**

**ELEVATION TYPICAL** 

CLEANOUT INVERT ELEVATION

EXISTING ELEVATION

CURB INLET FINISH FLOOR ELEVATION

REINFORCED CONCRETE PIPE

STORM SEWER STRUCTURE NUMBER **BUILDING DOWN SPOUT** 

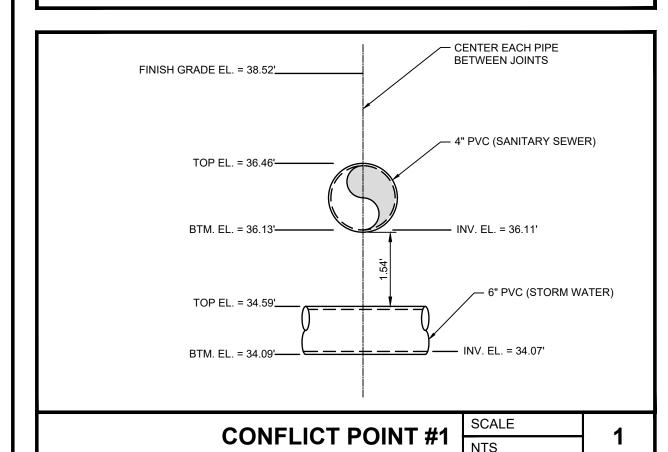
12" OR GREATER STORMWATER PIPE LESS THAN 12" STORMWATER PIPE

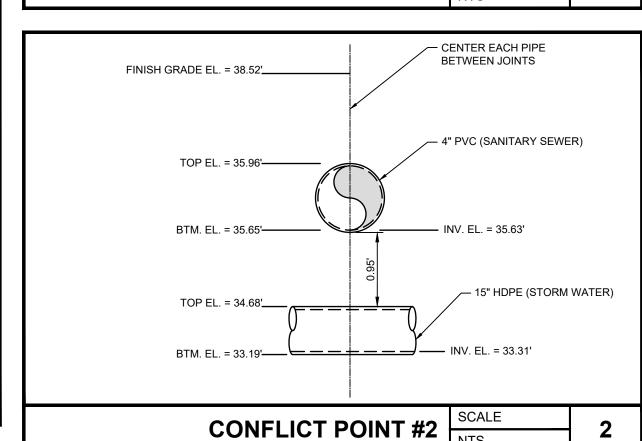
DIRECTION OF PIPE FLOW — −29— EXISTING CONTOUR

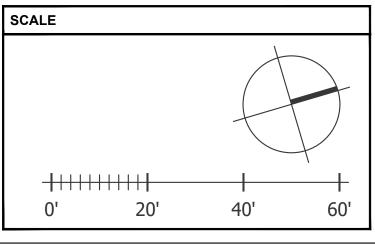
——29—— PROPOSED CONTOUR

#### PAVING AND GRADING GENERAL NOTES

- 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.
- 1. 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.
- 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.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO ANY CONSTRUCTION IF ANY PROBLEMS OR DISCREPANCIES EXIST.









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



<u></u>

 $\Delta$ 

 $\Delta$ 

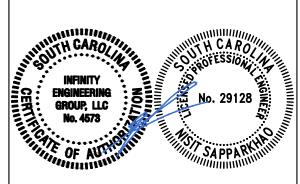


INFINITY ENGINEERIN GROUP, LLC 1208 East Kennedy Boulevard Tampa, Florida 33602 [p]: 813.434.4770

[f]: 813.445.4211

SC REG. NO. 29128

www.iegroup.net Cert. of Auth. No 4573 IEG JOB NO. 15-360.00 SEAL NISIT SAPPARKHAO, P.E



03/21/2025

		03/2	03/21/2025		
ISSUE	BY	DATE	DESCRIPTION		
	SJ	03/21/25	ISSUE FOR PERMIT		

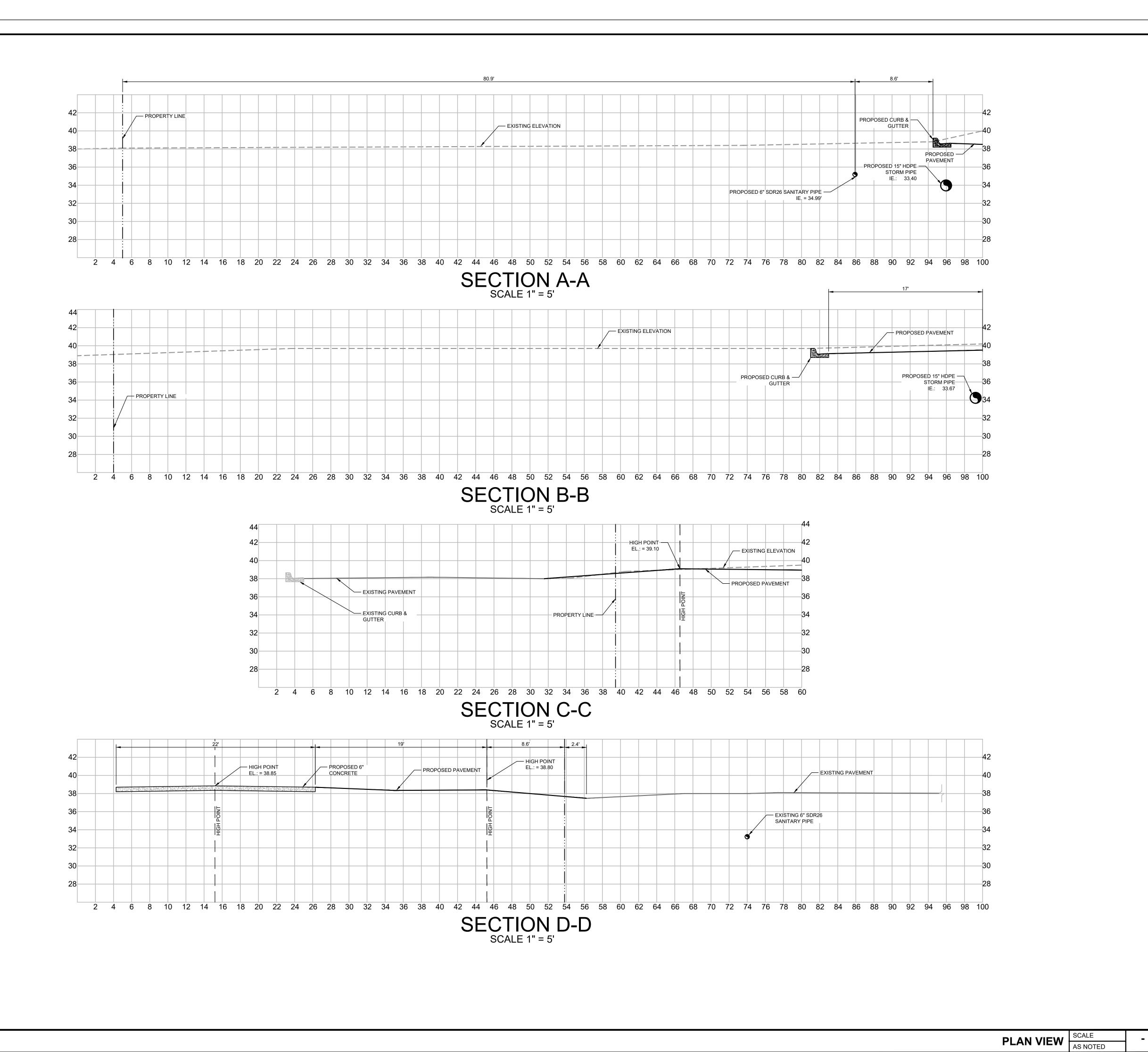
PROJECT INFORMATION BLOCK 240634 DATE: 02/12/2025 DRAWN BY:

CHECKED BY: SHEET TITLE

**SHEET NUMBER** 

STORM PIPING PLAN

C03.02





550 S. Caldwell Street Suite 1800 P: 704.981.8951 Lic. #: AA - 0003590 www.bdgllp.com

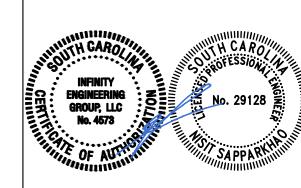


I THIRD BANK VER CROSSING FIFTH



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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK JOB#

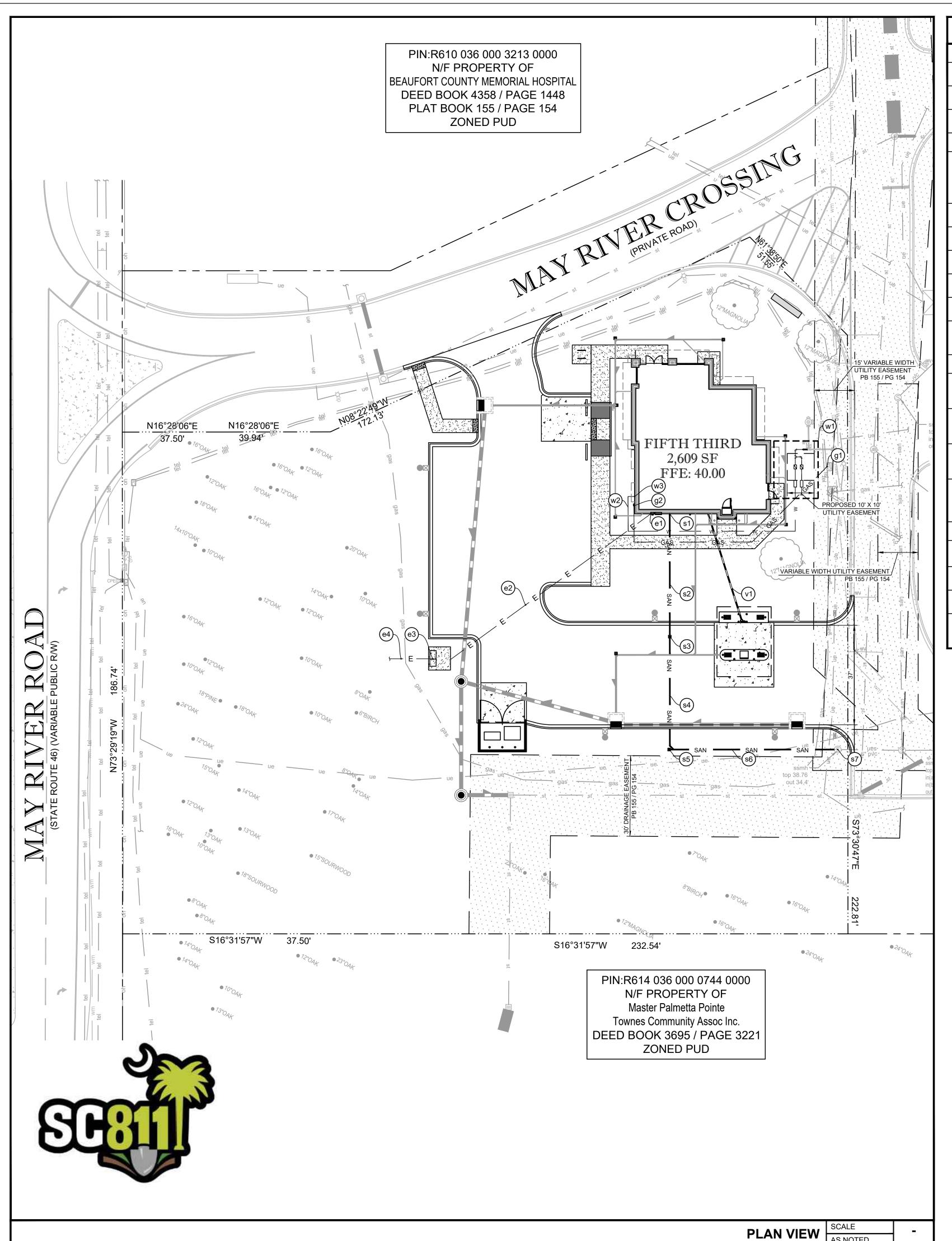
02/12/2025 DATE: DRAWN BY: CHECKED BY:

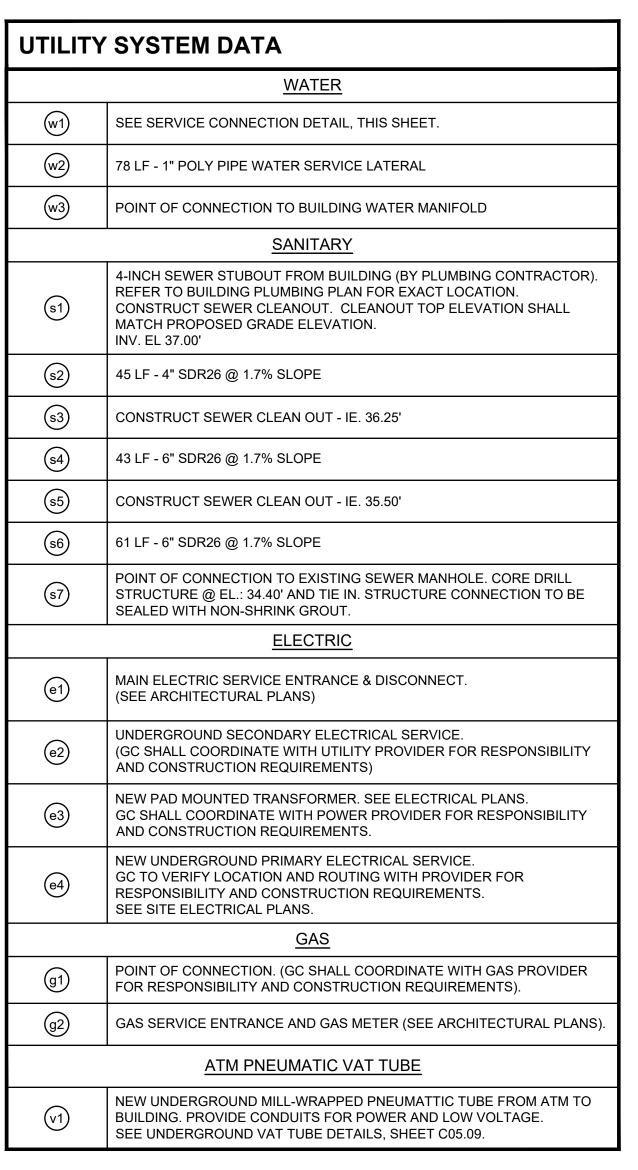
SHEET TITLE

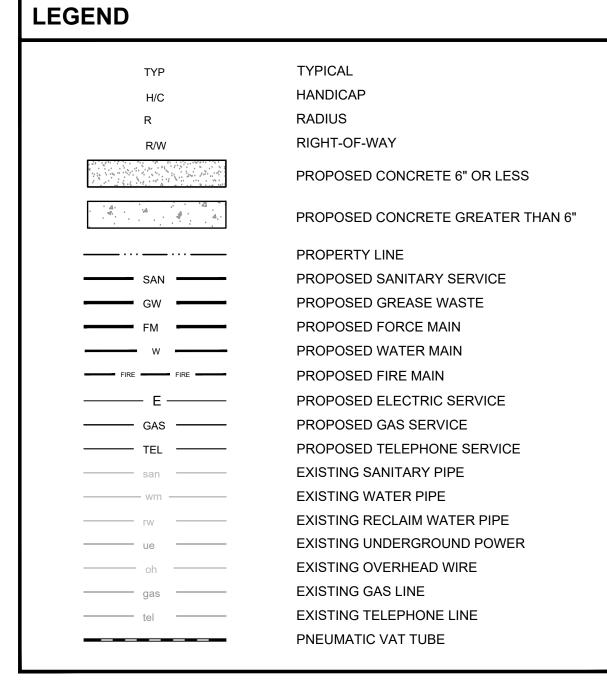
CROSS SECTIONS

SHEET NUMBER

C03.03

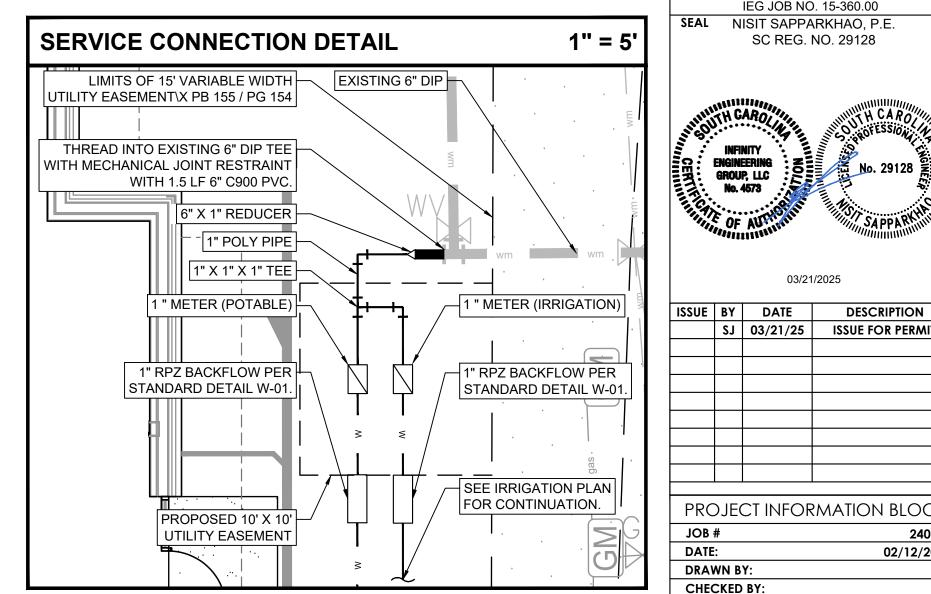


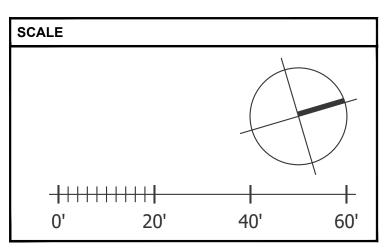




#### **UTILITY NOTES**

- 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.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WATER SERVICE WITH LOCAL MUNICIPALITIES UTILITIES DEPARTMENT.
- CONTRACTOR SHALL NOTIFY AND COORDINATE SEWER SERVICE WITH LOCAL MUNICIPALITIES UTILITIES DEPARTMENT.
- CONTRACTOR TO COORDINATE INSTALLATION OF ELECTRICAL POWER SERVICE WITH LOCAL ELECTRIC COMPANY.
- 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.
- . SEE CIVIL SPECIFICATIONS AND REFERENCE DRAWING SHEETS FOR ADDITIONAL UTILITY NOTES.
- 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.







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



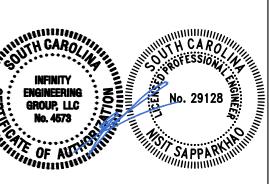
 $\Delta$ HIRD



1208 East Kennedy Boulevard

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



	SJ	03/21/25	ISSUE FOR PERMIT			
ROJECT INFORMATION BLOCK						
OB :	DB # 240634					

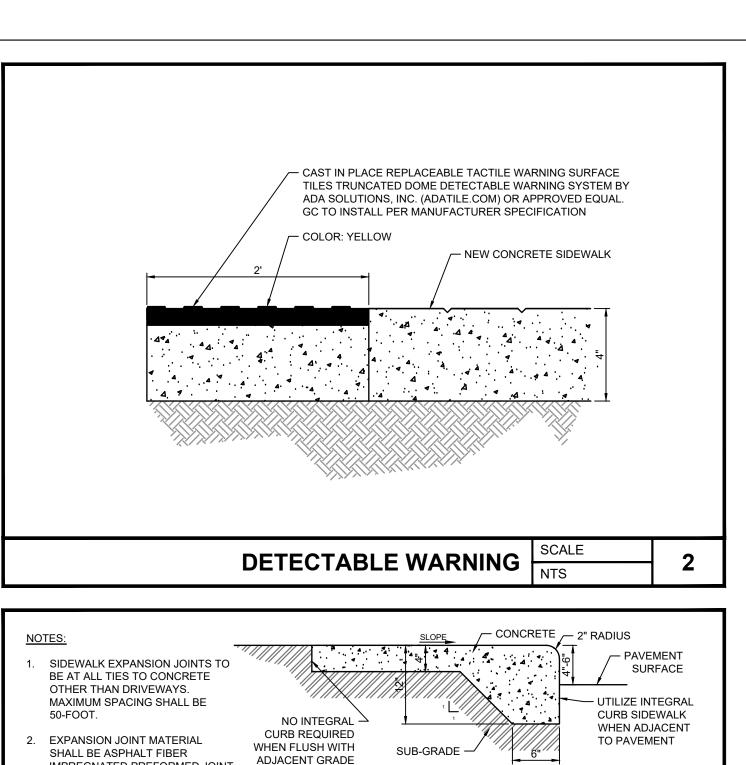
DATE: 02/12/2025 DRAWN BY: CHECKED BY:

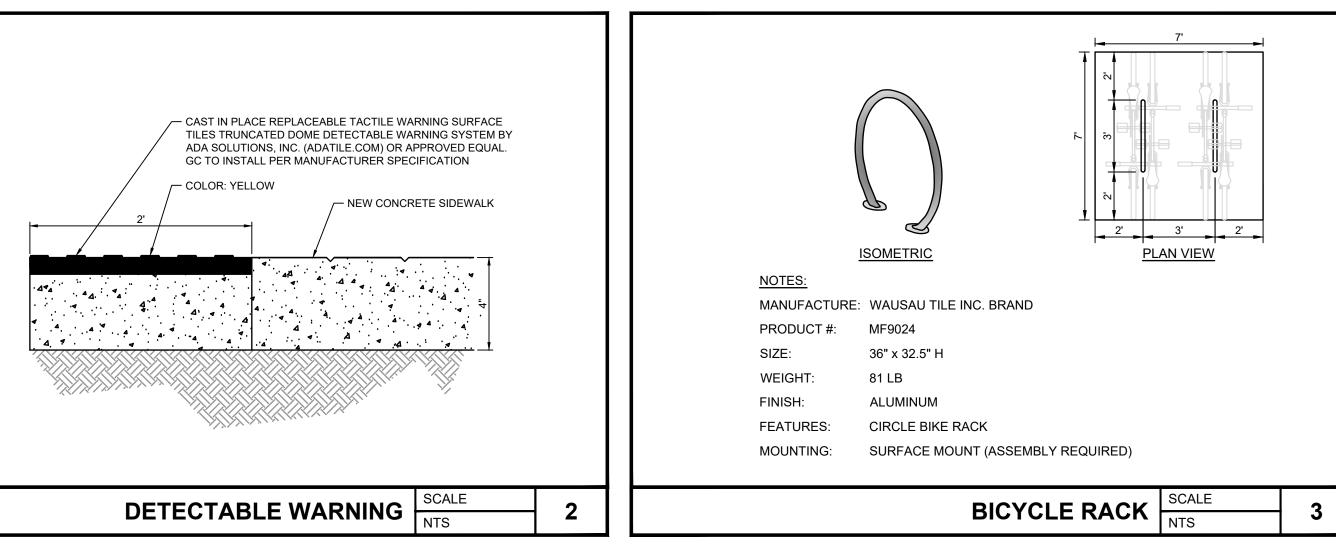
SHEET TITLE

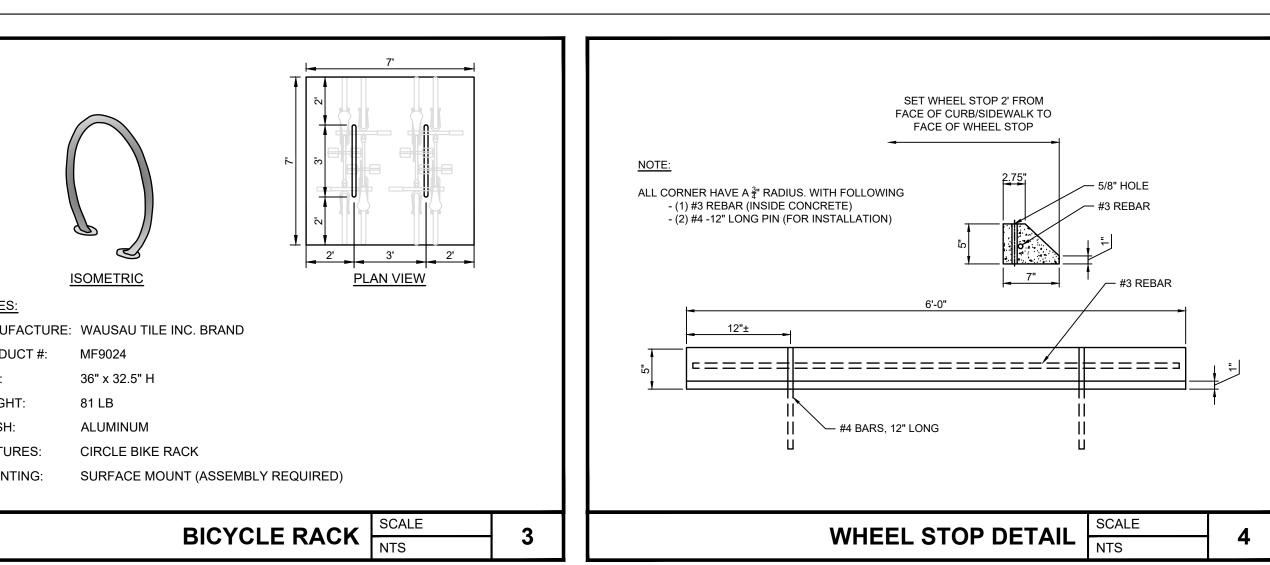
UTILITY PLAN

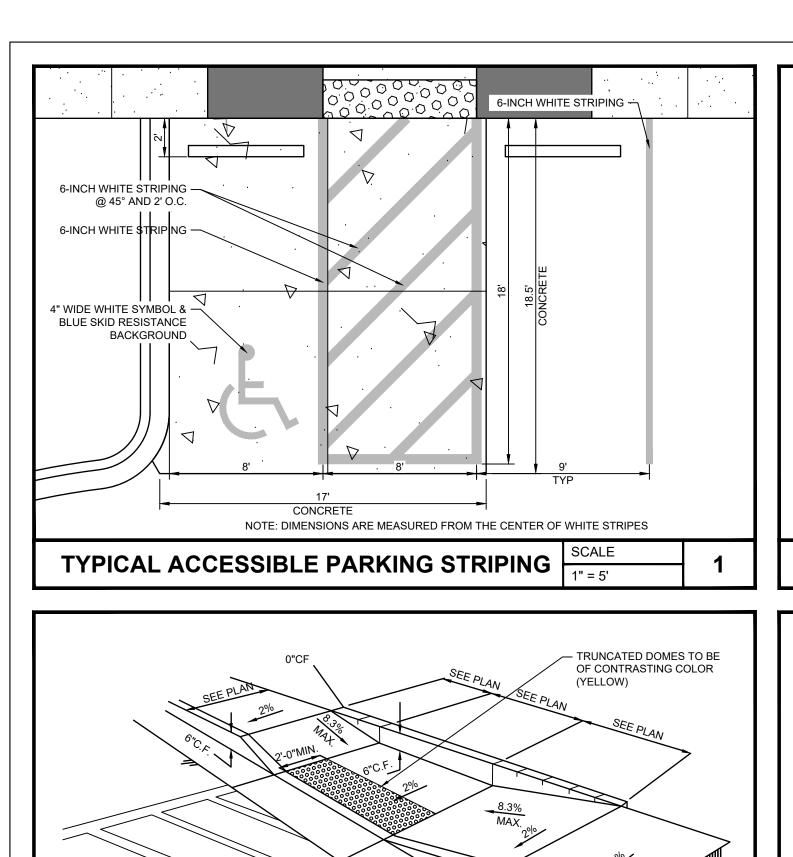
SHEET NUMBER

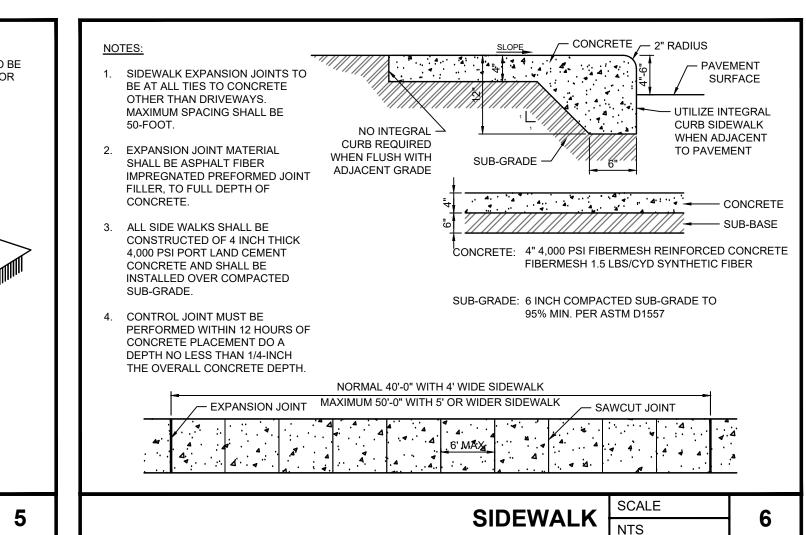
C04.01

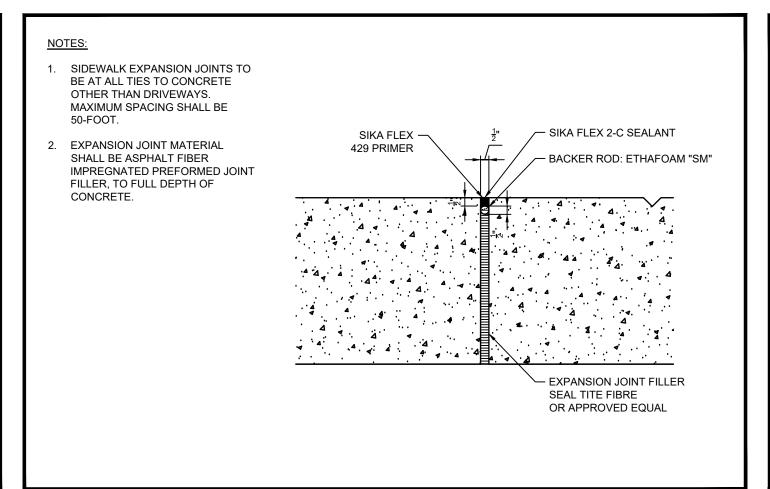


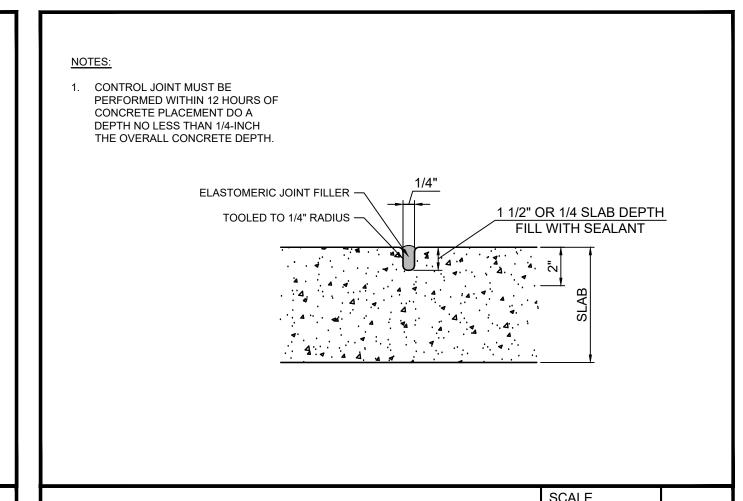


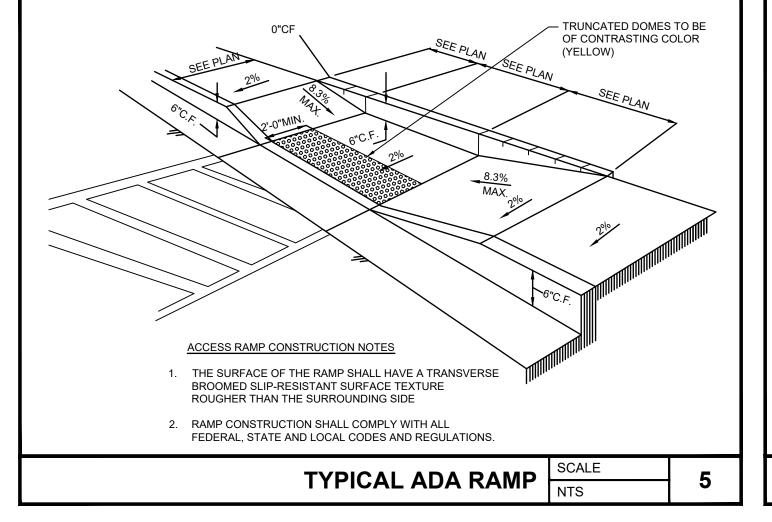


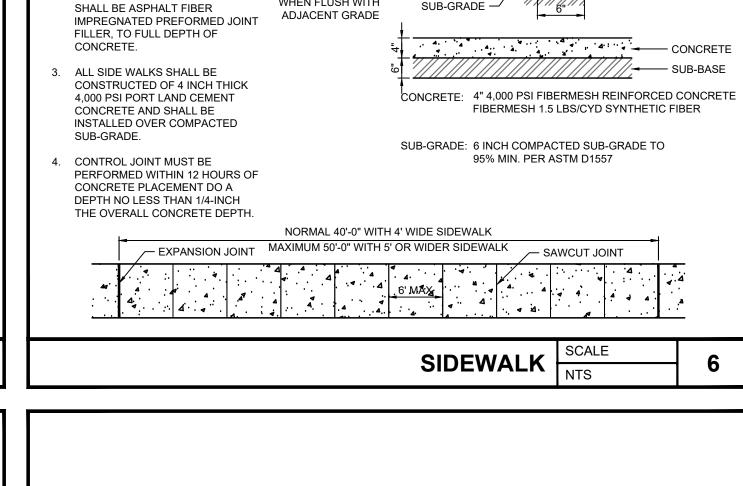


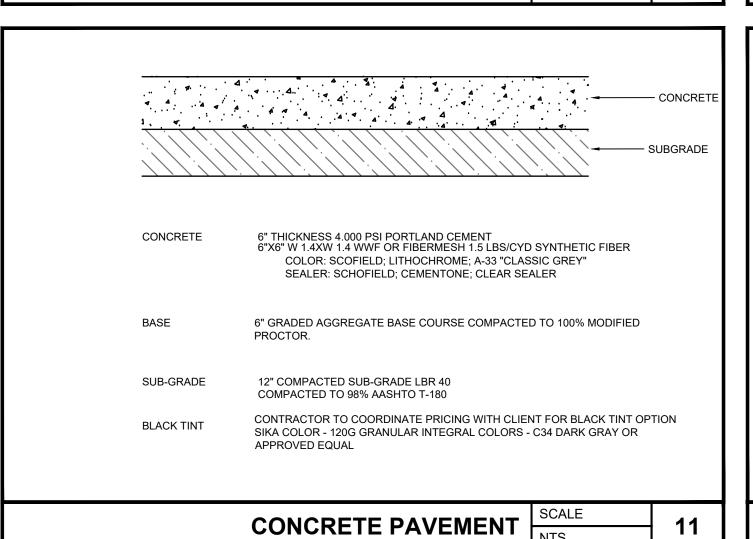




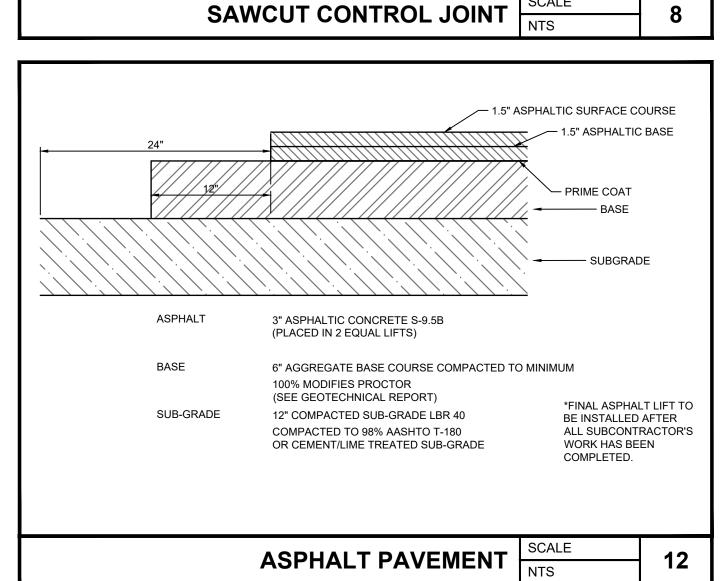


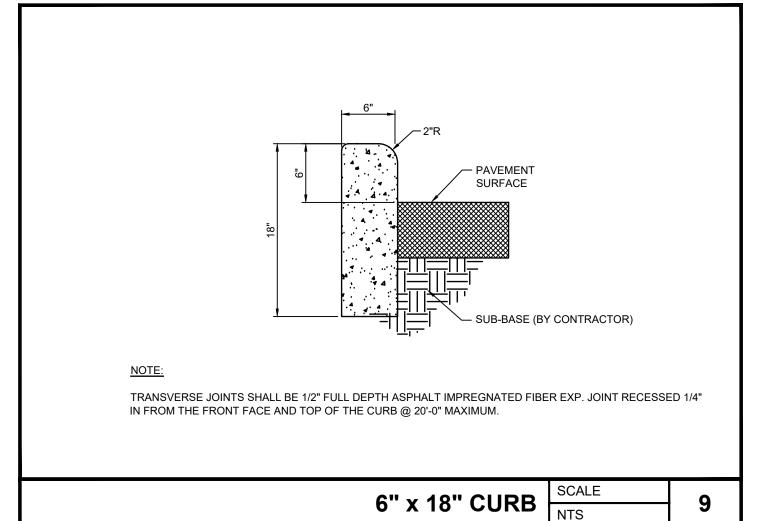


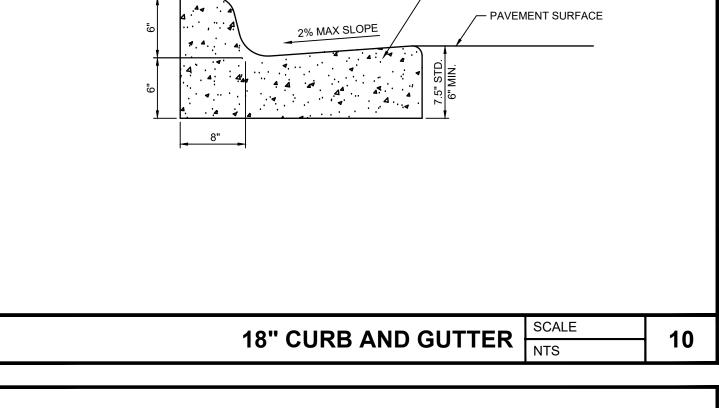




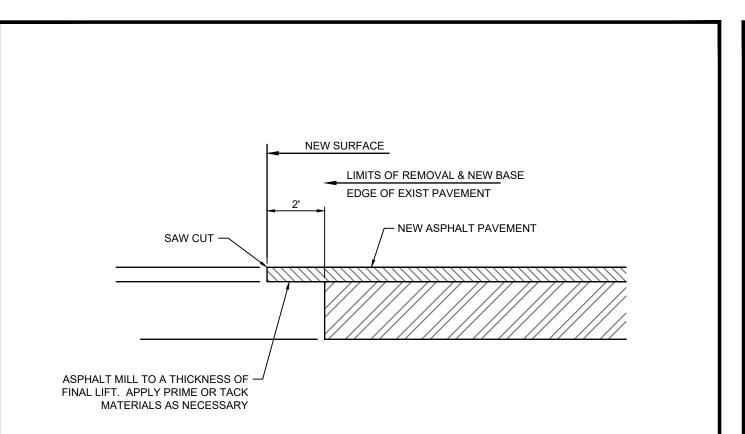
**EXPANSION JOINT** 



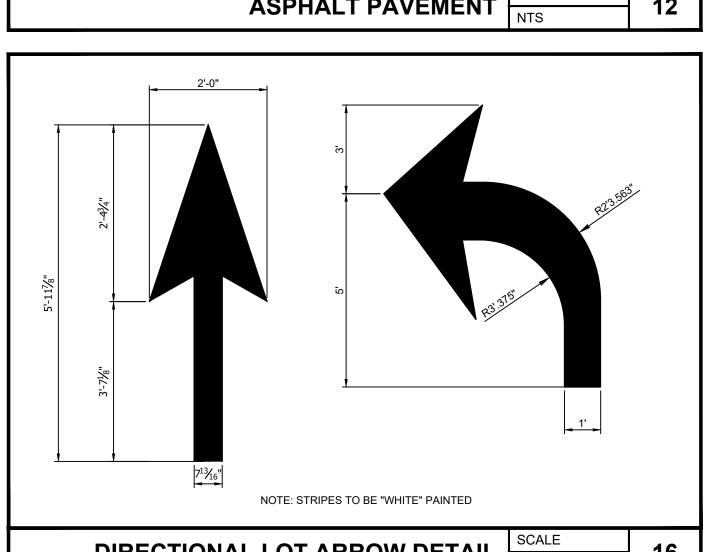


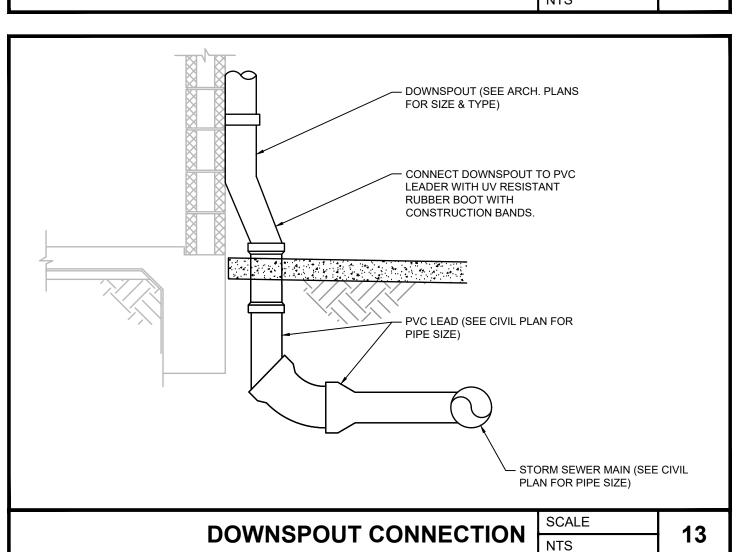


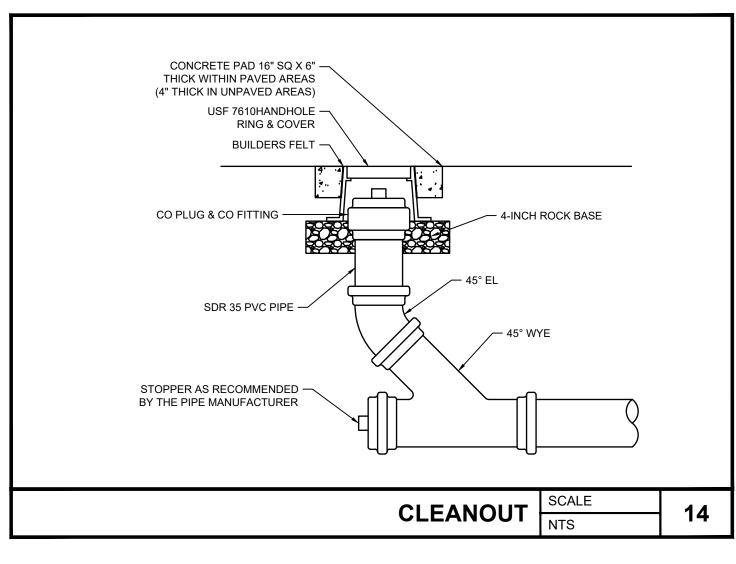
- 4,000 PSI CONCRETE

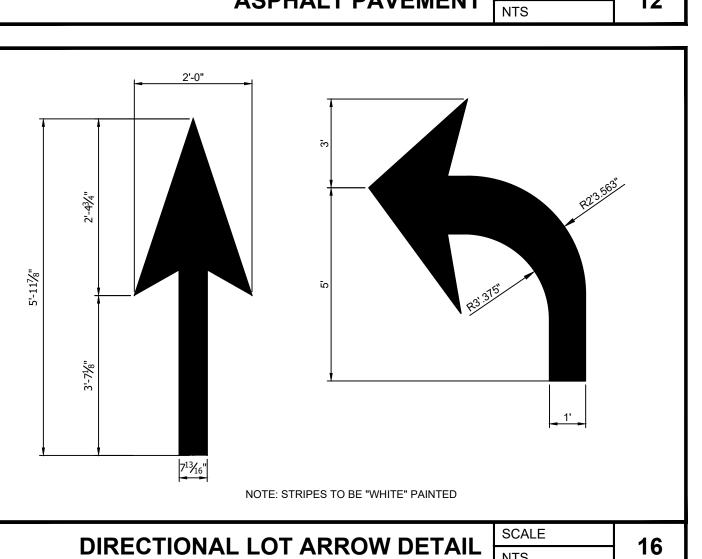


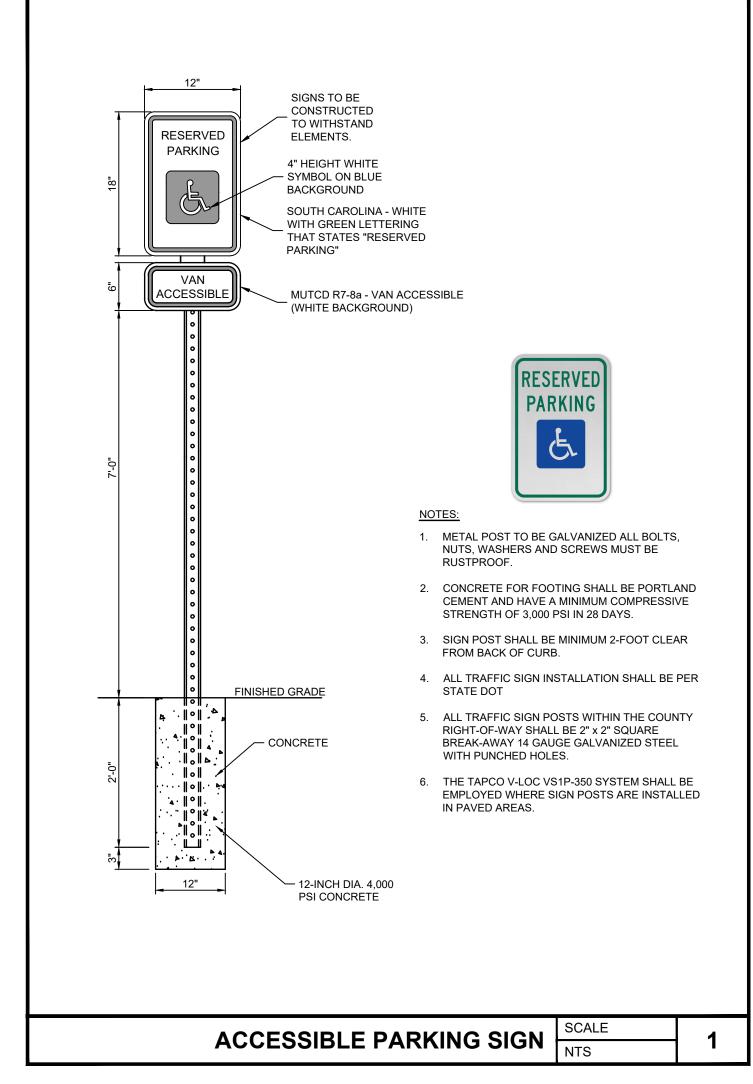
EXISTING ASPHALT PAVEMENT CONNECTION | NTS

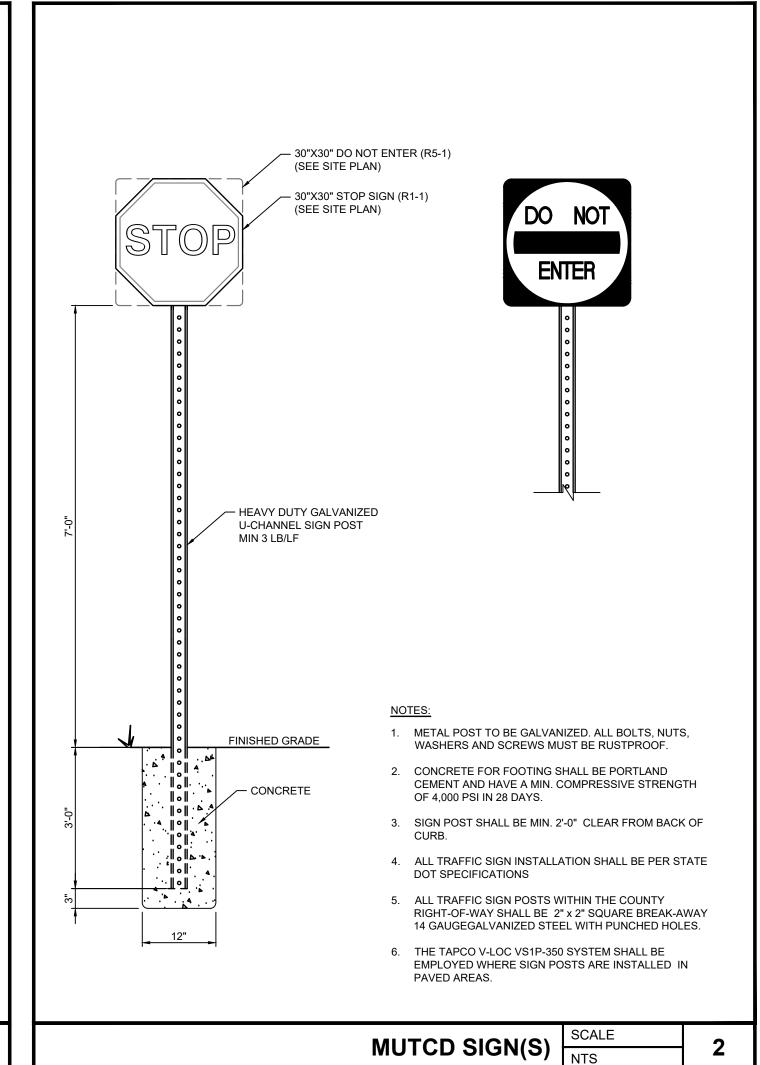














| 550 S. Caldwell Street | P: 704.981.8951 | Suite 1800 | Lic. #: AA - 0003590 | Charlotte, NC 28202 | www.bdgllp.com



# FIFTH THIRD BANK MAY RIVER CROSSING



GROUP, LLC

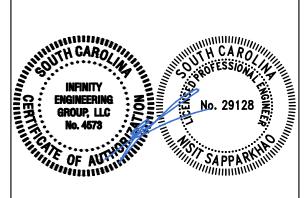
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211

www.iegroup.net
Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E.

SC REG. NO. 29128



03/21/202

ISSUE BY DATE DESCRIPTION

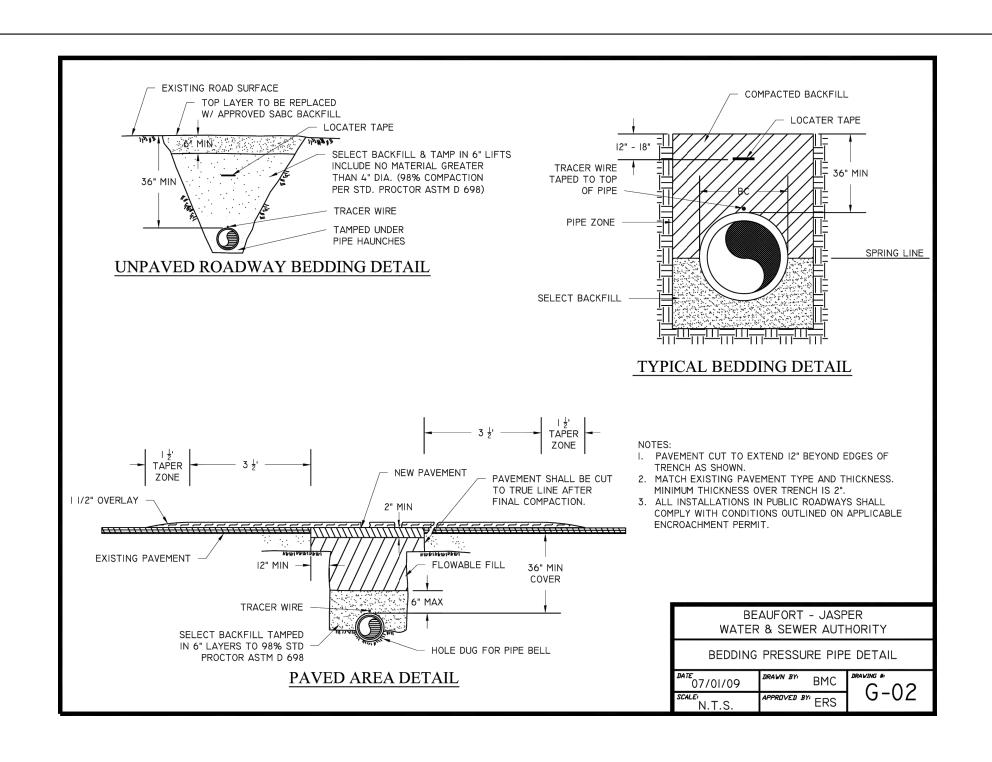
	SJ	03/21/25	ISSUE FOR PERMIT		
PROJECT INFORMATION BLOCK					
JOB :	#		240634		
DATE	:		02/12/2025		
DRAV	NN B	Y:	IEG		

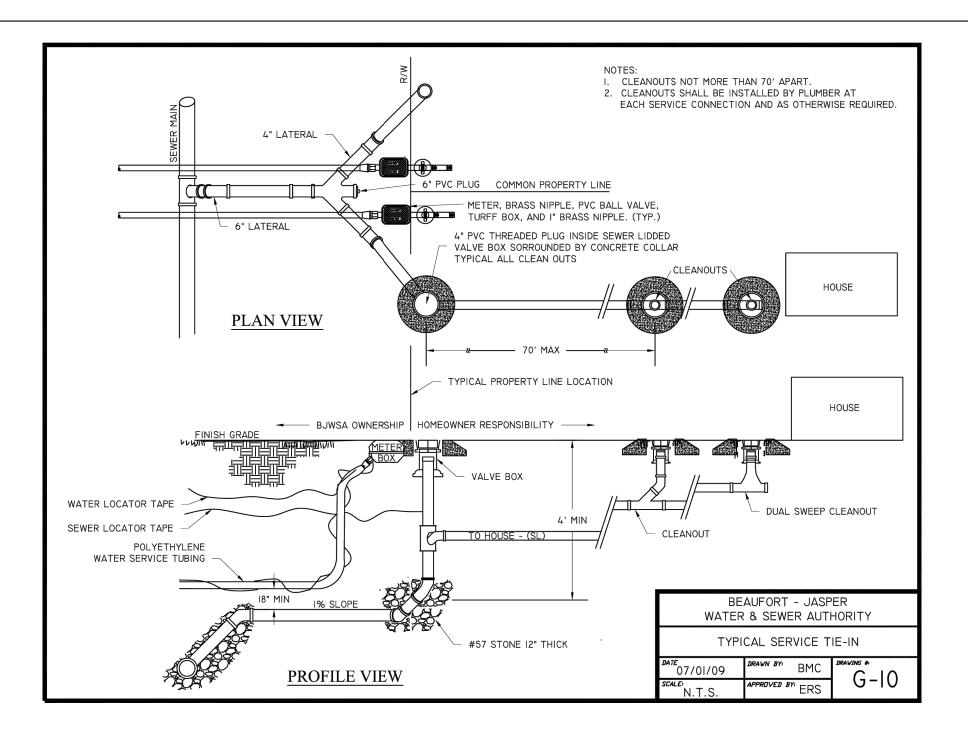
SHEET TITLE

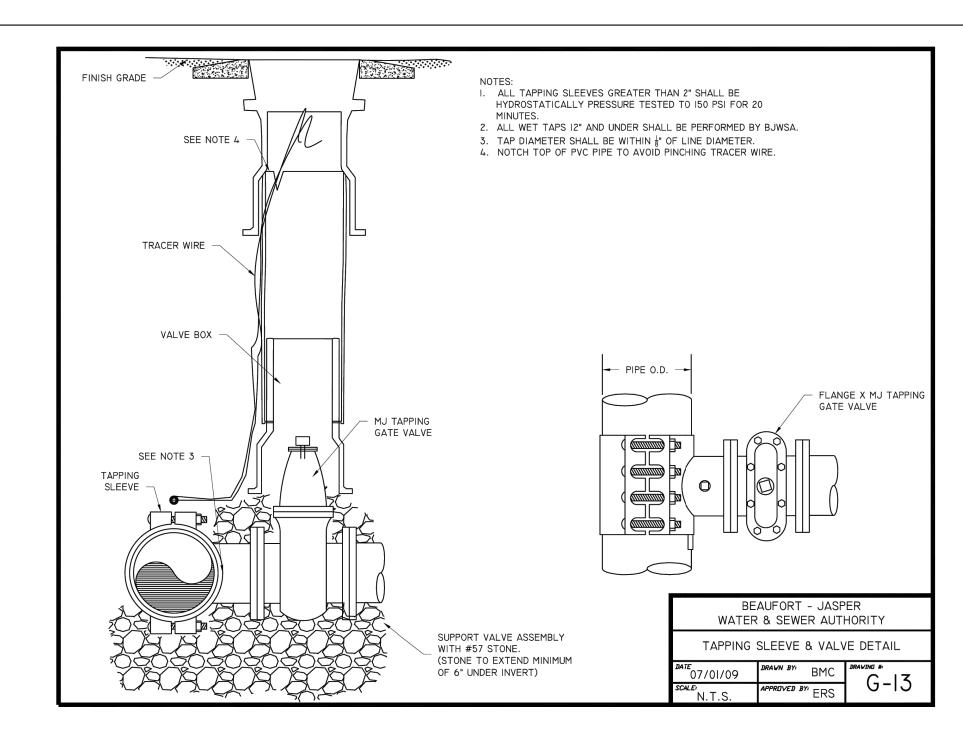
CHECKED BY:

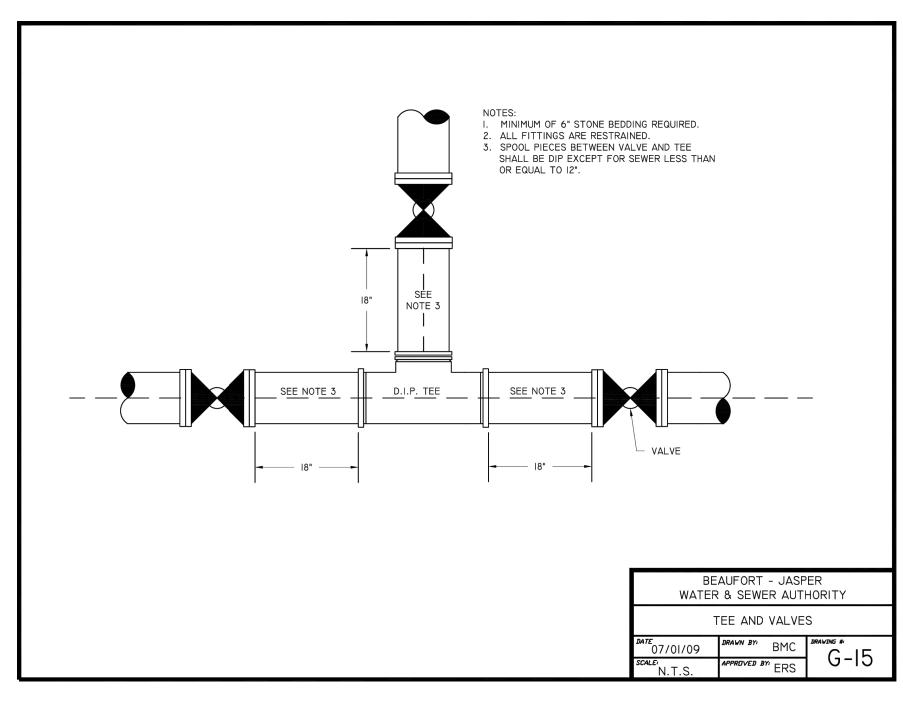
DETAILS

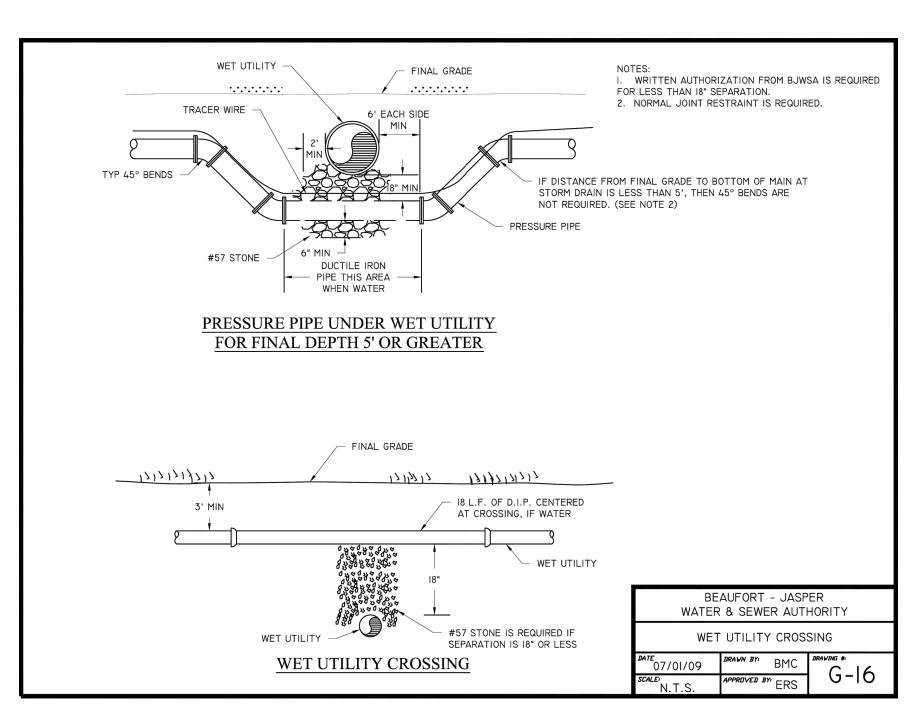
SHEET NUMBER

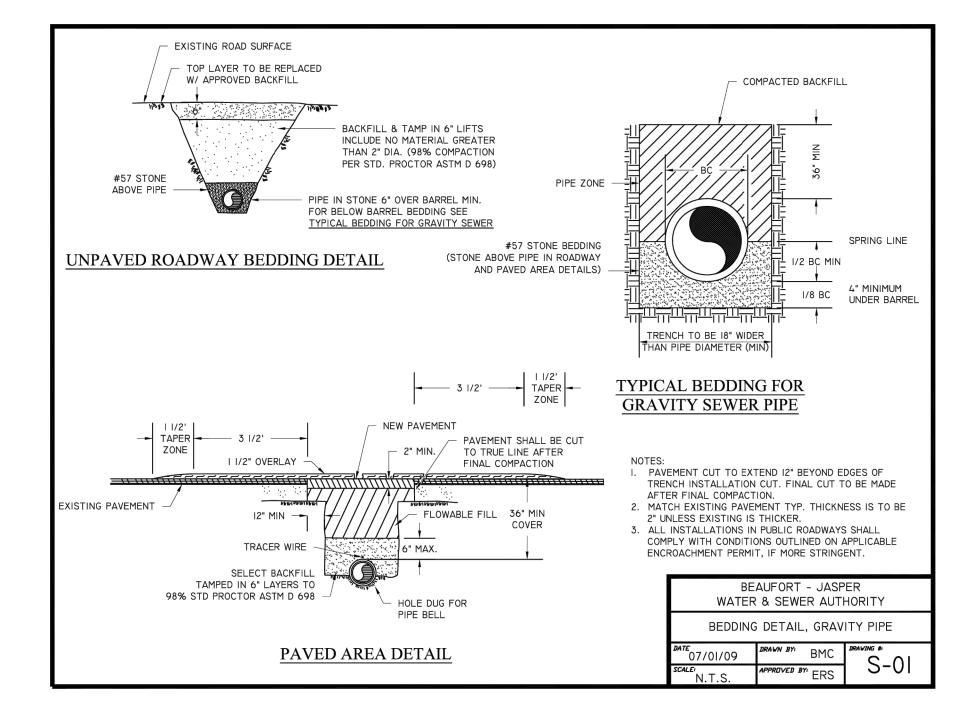


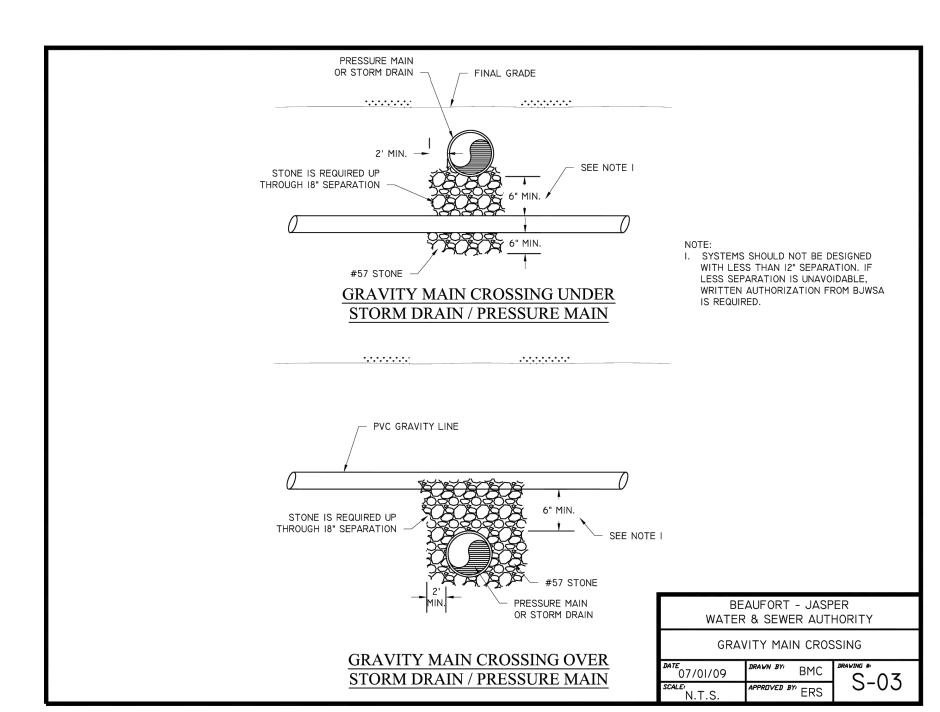


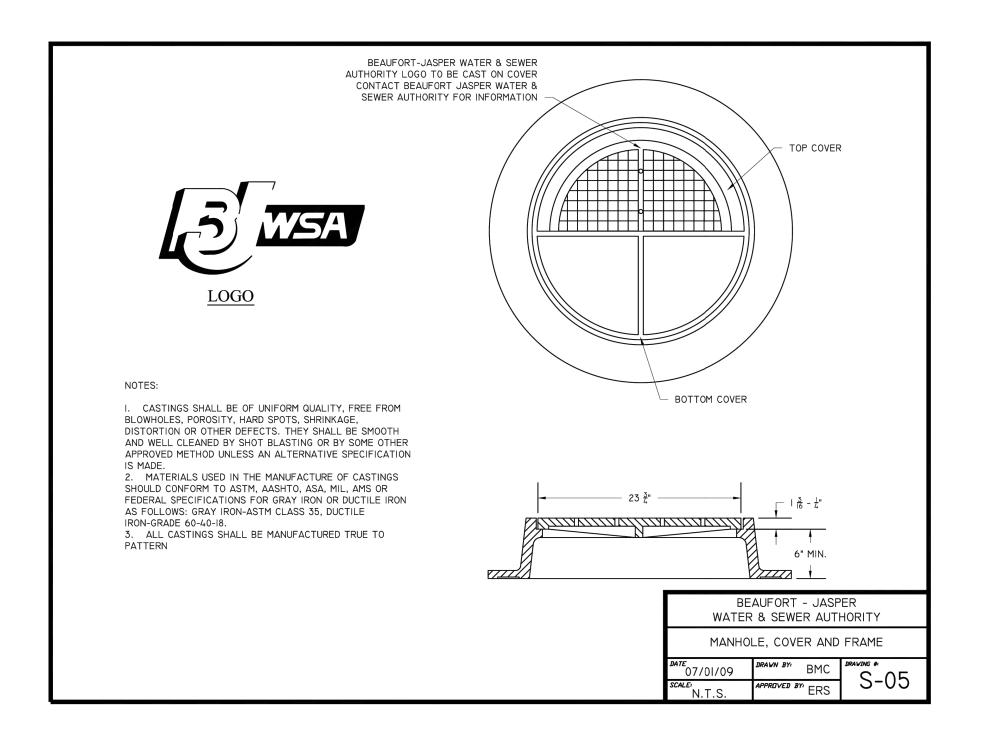


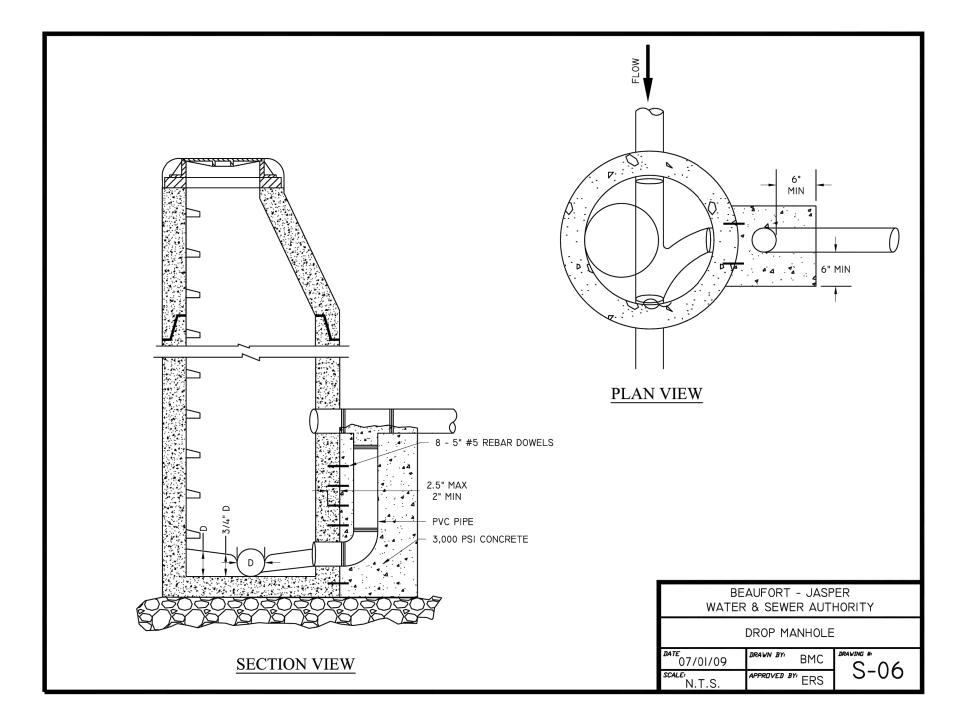








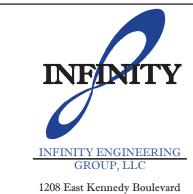








HETH THIRD BANK
MAY RIVER CROSSING

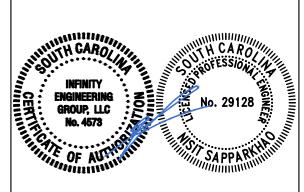


1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net

Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

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



03/21/2025

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
PRC	)JE	CT INFOR	MATION BLOCK
JOB	#		24063

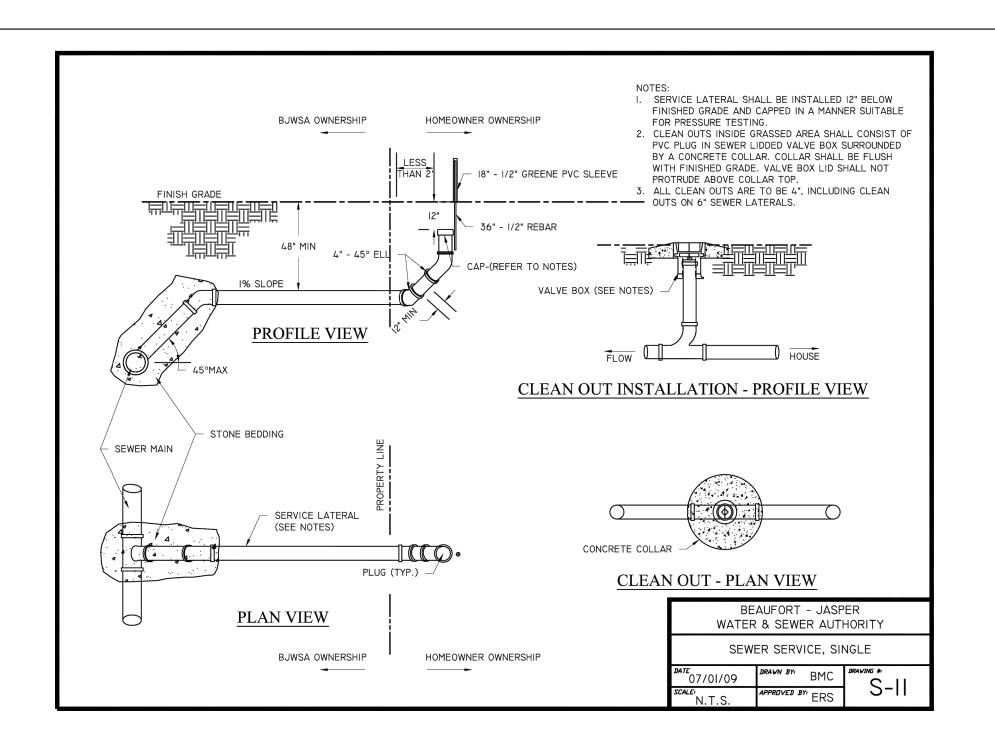
02/12/2025

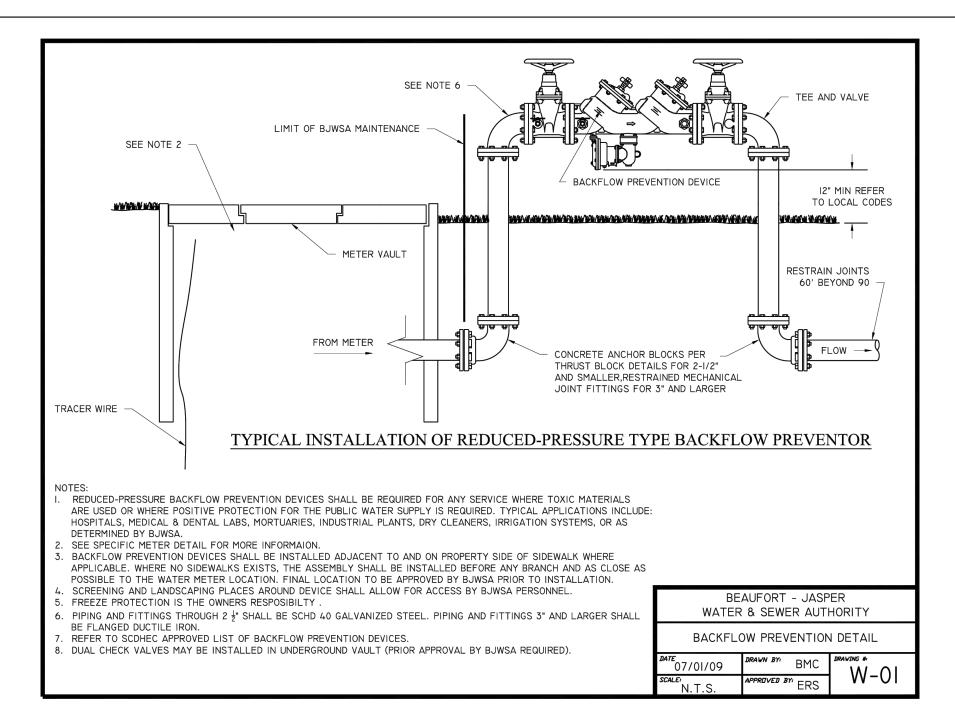
DATE:
DRAWN BY:
CHECKED BY:

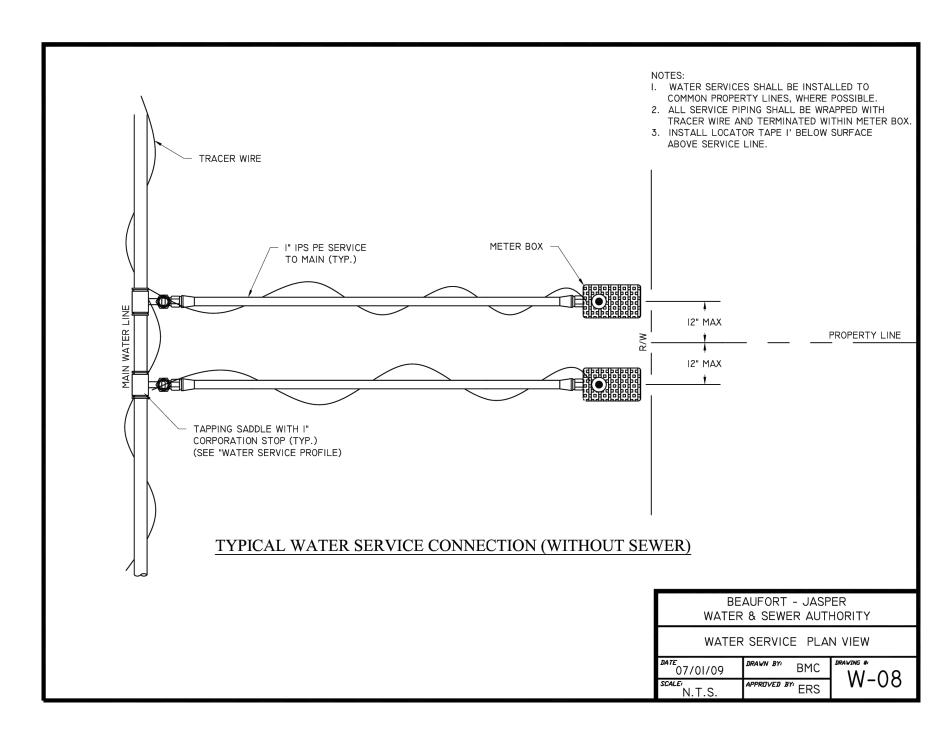
SHEET TITLE

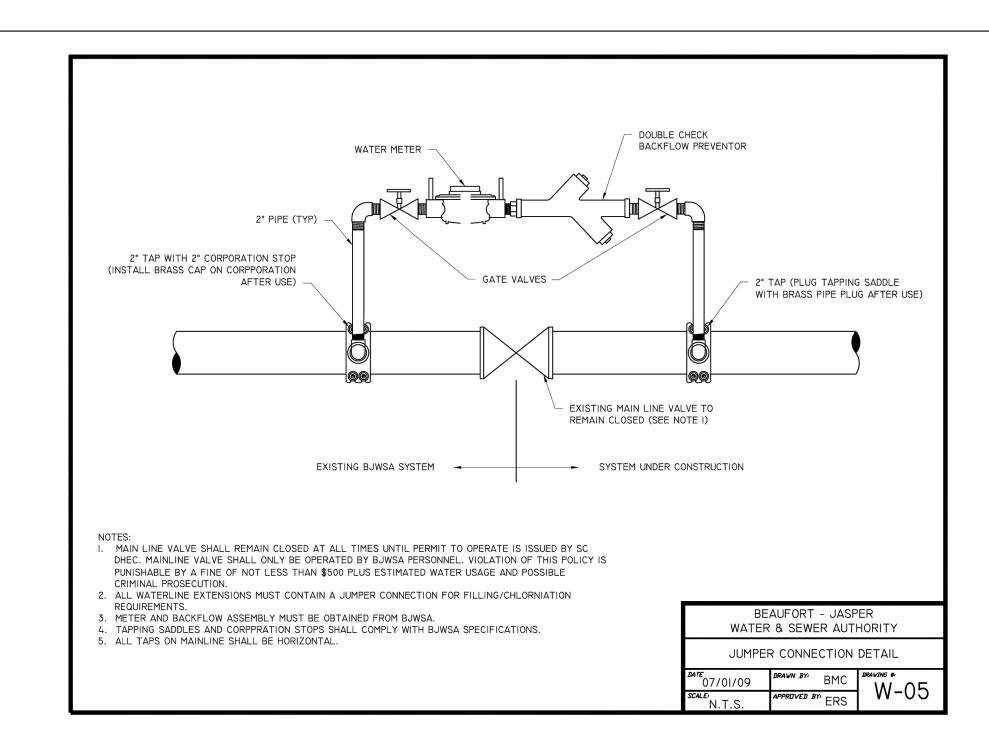
BEAUFORT - JASPER COUNTY DETAILS

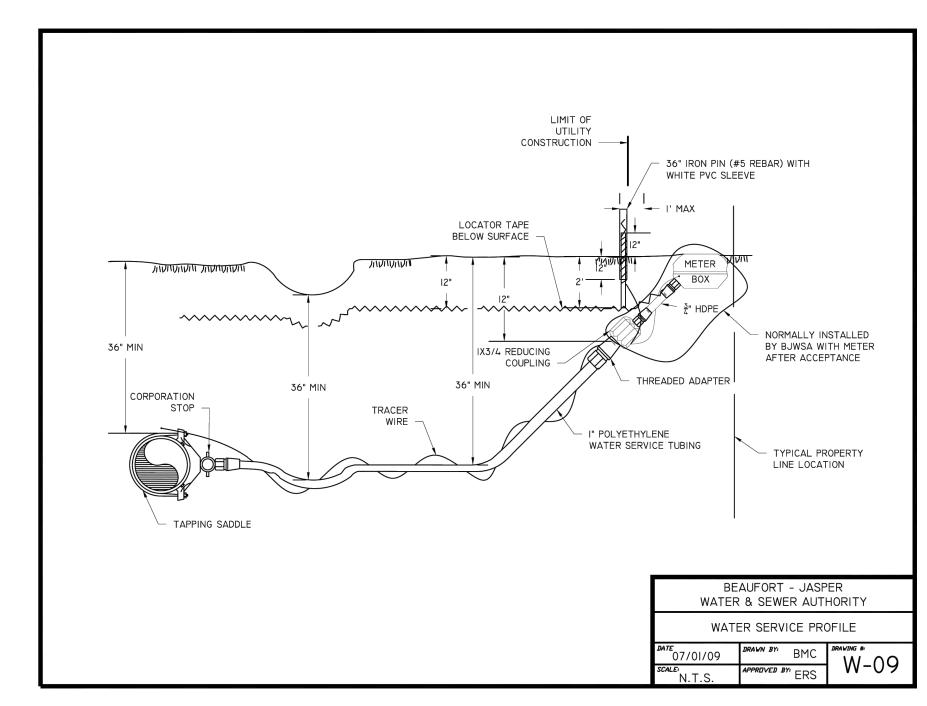
SHEET NUMBER

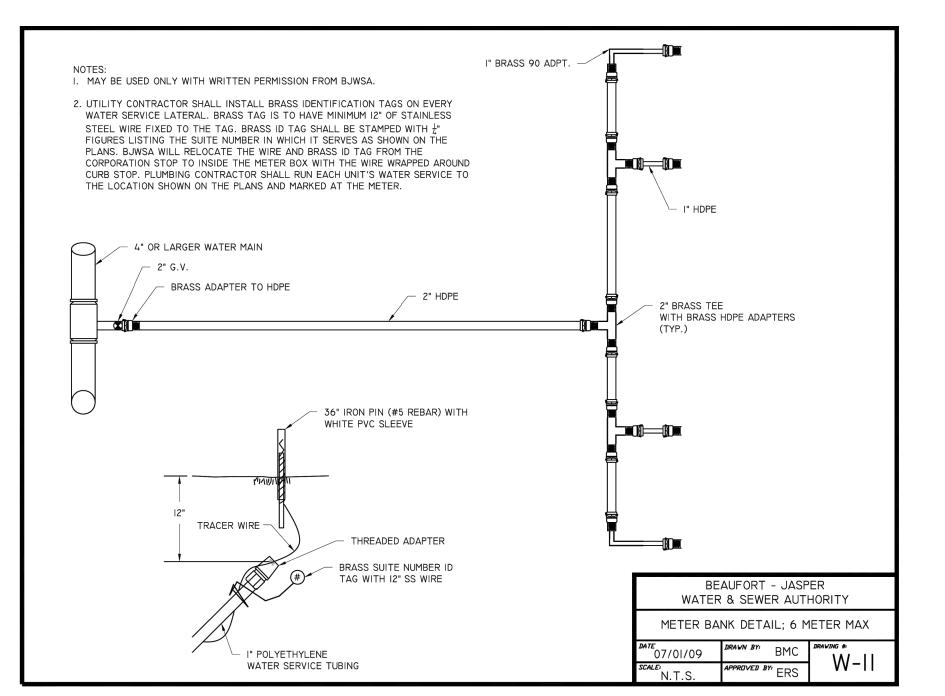














550 S. Caldwell Street
Suite 1800
Charlotte, NC 28202
P: 704.981.8951
Lic. #: AA - 0003590
www.bdgllp.com

FIFTH THIRD

AAY RIVER CROSSING

INFINITY

INFINITY ENGINEERING
GROUP, LLC

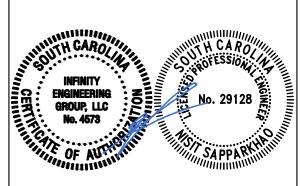
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770

[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



03/21/2025

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
		·	·

240634

02/12/2025

DRAWN BY: CHECKED BY:

JOB#

DATE:

SHEET TITLE

BEAUFORT - JASPER

SHEET NUMBER

C05.04

COUNTY DETAILS



Suite 1800 Lic. #: AA - 0003590 Charlotte, NC 28202 www.bdgllp.com



4Y RIVER CROSSING 2500 MAY RIVER CROSSING JEFTON, SOUTH CAROLINA 29910

 $\mathbf{\Omega}$ 

THIRD

FIFTH

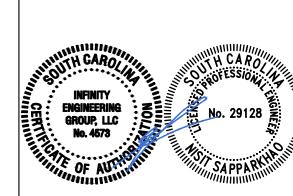


INFINITY ENGINEERING GROUP, LLC

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



03/21/2025

		03/21	172023
ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK

JOB # 240634

DATE: 02/12/2025

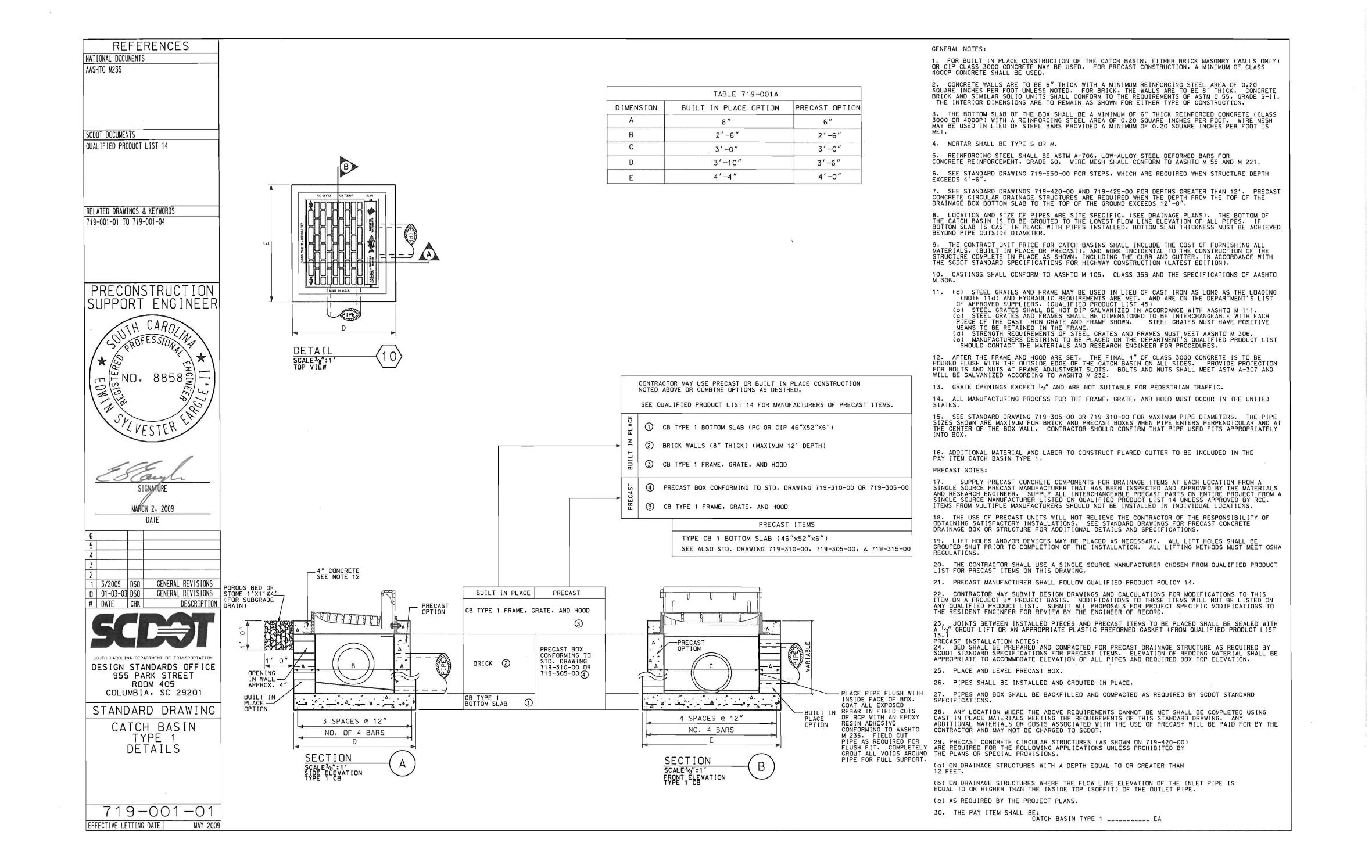
IEG

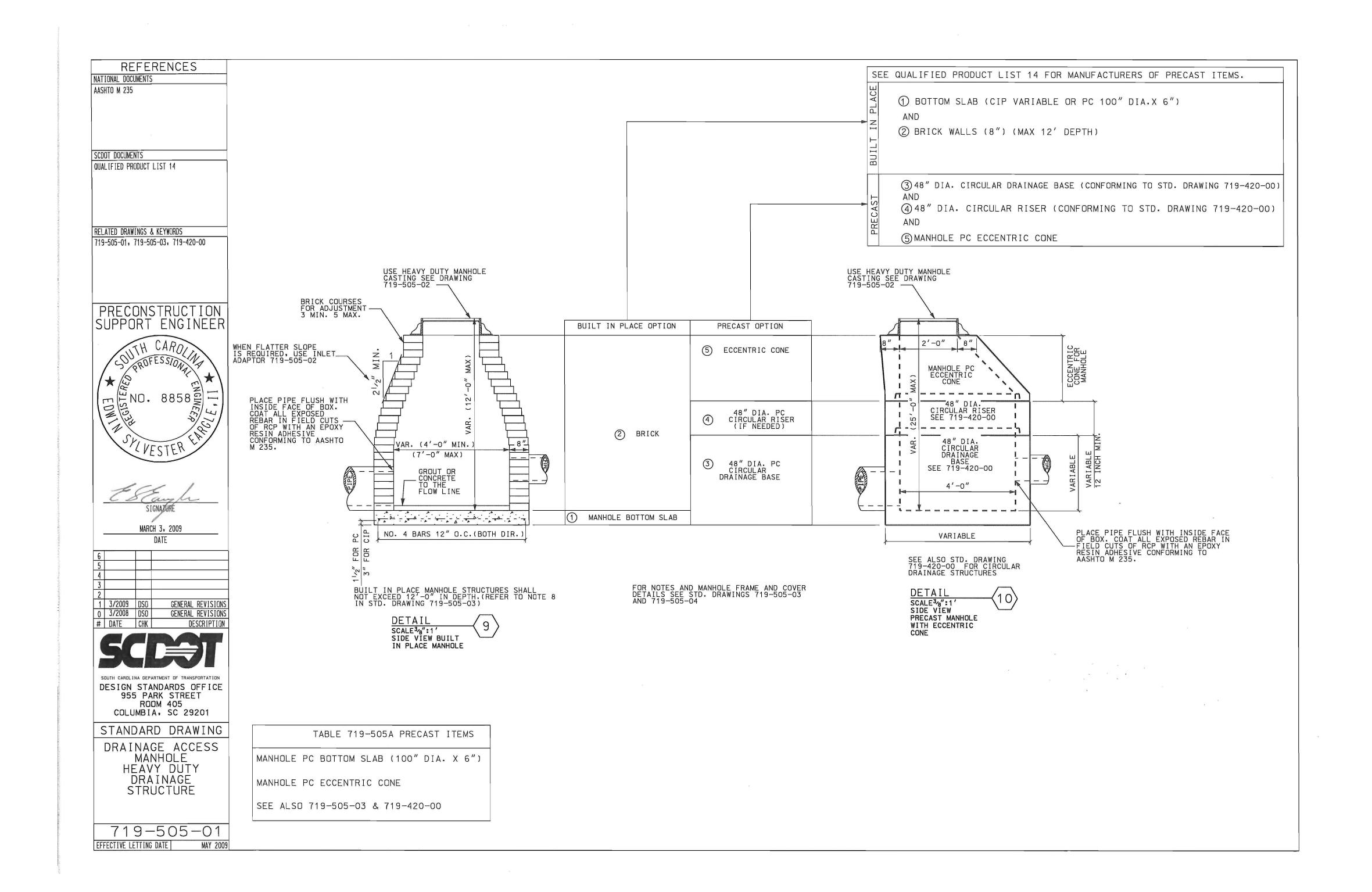
DATE:
DRAWN BY:
CHECKED BY:

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER







550 S. Caldwell Street Suite 1800 P: 704.981.8951 Lic. #: AA - 0003590 www.bdgllp.com



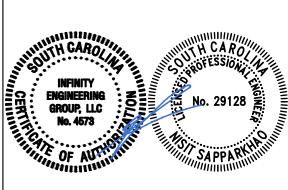
# BANK THIRD



INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard 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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
PRC	)JE(	CT INFOR	RMATION BLOCK

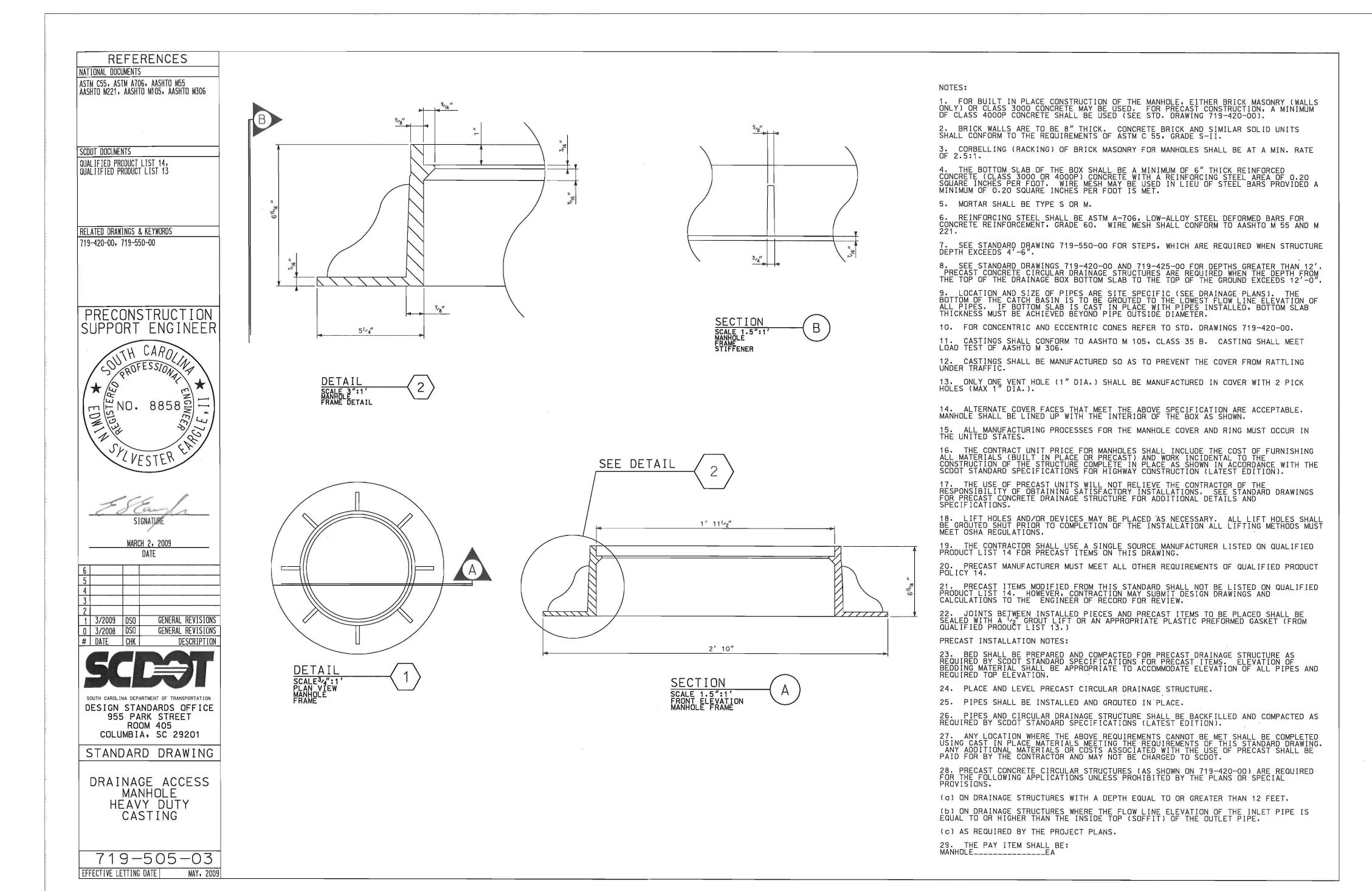
JOB# 240634 02/12/2025

DATE: DRAWN BY: CHECKED BY:

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER





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



# OSSING R CROSSING CAROLINA 29910 BANK THIRD FIFTH

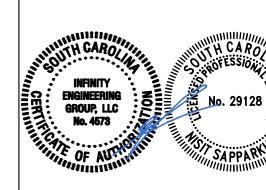


INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard 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



03/21/2025

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
PRC	)JE	CT INFOR	RMATION BLOCK
IOB	#		240424

JOB# DATE: 02/12/2025

IEG

DRAWN BY: CHECKED BY:

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER



550 S. Caldwell Street Suite 1800 P: 704.981.8951 Lic. #: AA - 0003590 www.bdgllp.com

FIFTH THIRD

FIFTH THIRD BANK
AY RIVER CROSSING
2500 MAY RIVER CROSSING
UFFTON, SOUTH CAROLINA 29910



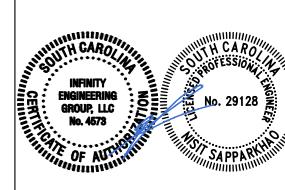
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net

Cert. of Auth. No 4573

IEG JOB NO. 15-360.00

SEAL NISIT SAPPARKHAO, P.E

SC REG. NO. 29128



03/21/2025

ISSUE	BY	DATE	DESCRIPTIO
	SJ	03/21/25	ISSUE FOR PER

PROJECT INFORMATION BLOCK

JOB # 240634

DATE: 02/12/2025

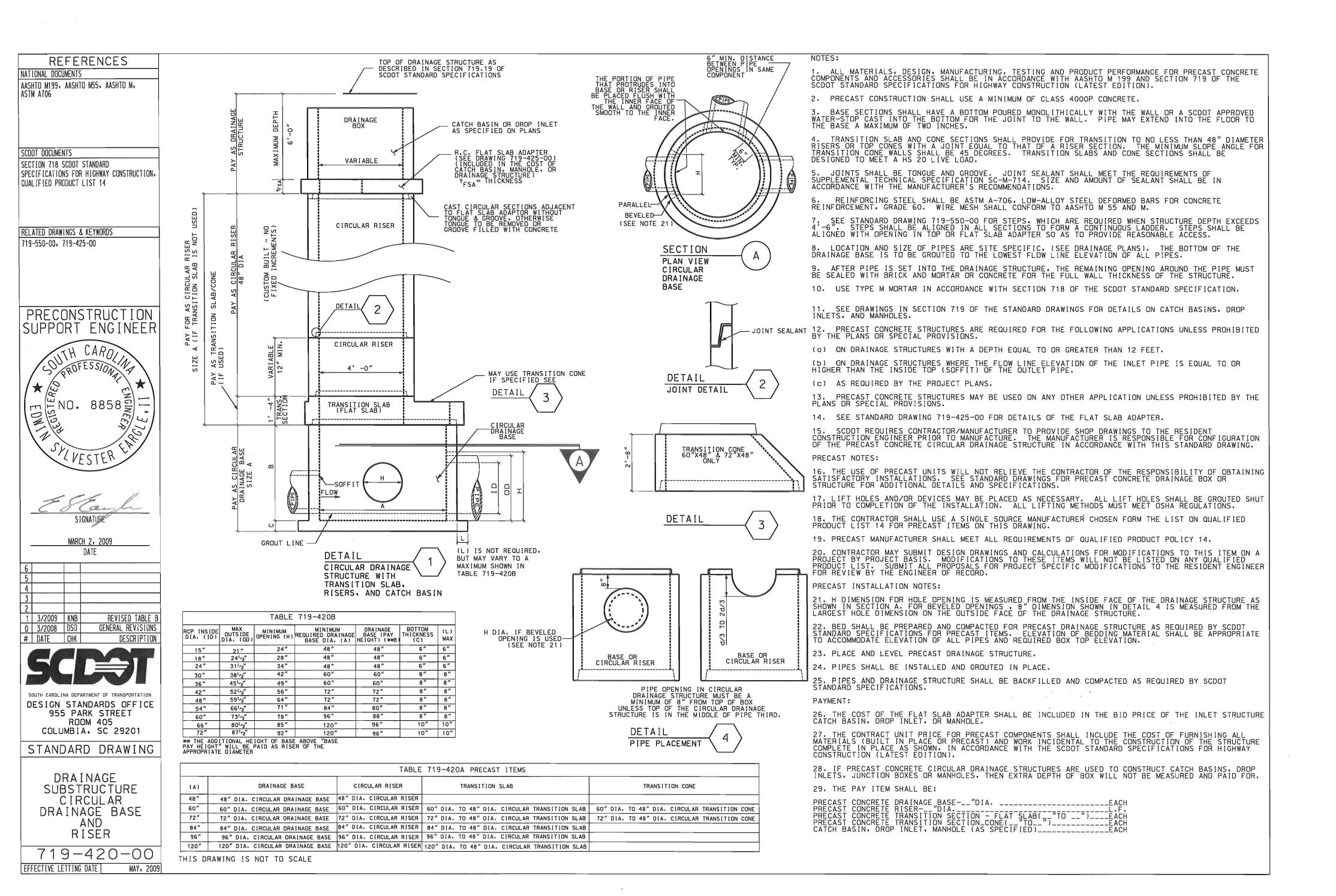
IEG

DRAWN BY: CHECKED BY:

SHEET TITLE

SCDOT DETAILS

SHEET NUMBER



Lic. #: AA - 0003590

architects

 $\leq$ 

 $\Delta$ 

HIRD

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)

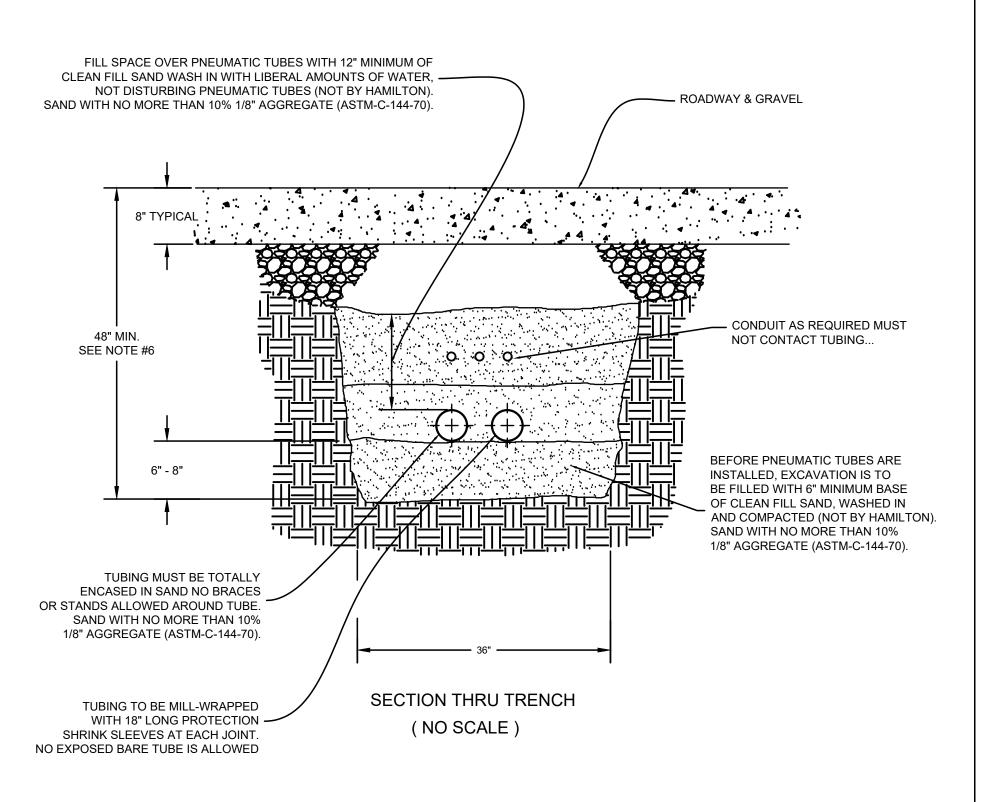
4) BEFORE CONDUIT IS INSTALLED, COVER PNEUMATIC TUBE WITH 3" TO 4" OF CLEAN FILL SAND (NOT BY HAMILTON). SAND WITH NO MORE THAN 10% 1/8" AGGREGATE ( ASTM-C-144-70).

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.



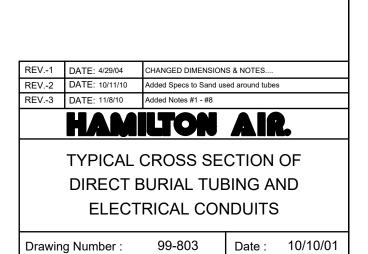
TUBE PRESSURE TEST PROCEDURES:

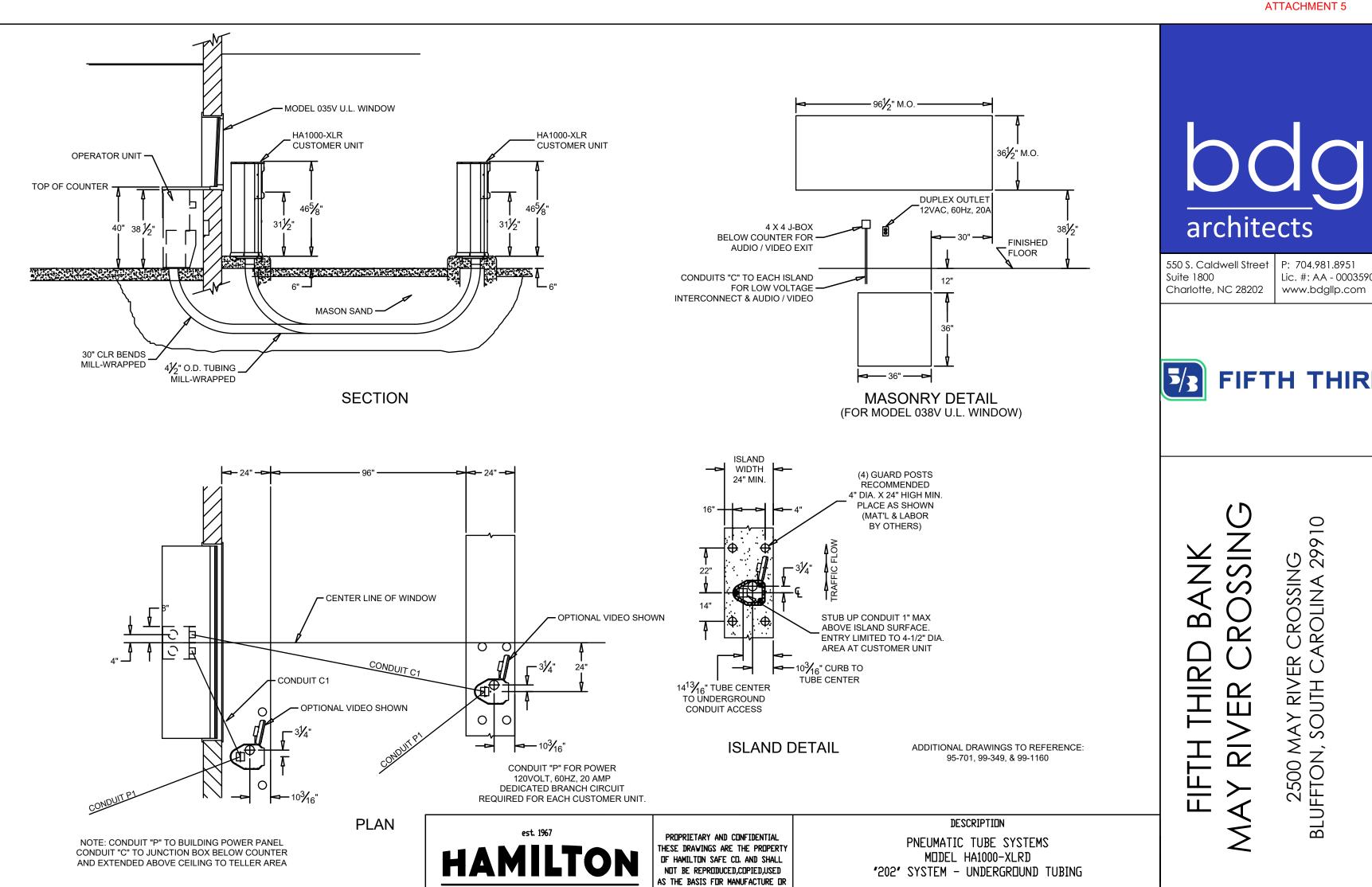
1)\_\_\_\_ PRESSURE TEST TUBES BEFORE THEY ARE COVERED

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)





CUSTOM MADE SECURITY

SALE OF APPARATUS WITHOUT PERMISSION

99-1164

10/8/2021



1208 East Kennedy Boulevard 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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT
PRC	) IF(	CT INFOR	MATION BLOC

PROJECT INFORMATION BLOCK JOB# 02/12/2025 DRAWN BY:

SHEET TITLE

CHECKED BY:

UNDERGROUND VAT TUBE DETAILS

SHEET NUMBER

MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF

HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED

GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR

TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING,

PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.

THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A

MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA

MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED

AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT

SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

WILL BE REWORKED AND ADDITIONAL SEED APPLIED

SHALL BE MAINTAINED DURING THE LIFE OF THE

ORIGINALLY DESIGNED AND CONSTRUCTED.

OR SODDED.

CONSTRUCTION SO AS TO FUNCTION AS THEY WERE

PERMANENT EROSION CONTROL: THE EROSION CONTROL

FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO

MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN

DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE

SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM

SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED

VEGETATION AND RAPID GROWTH SEASONAL VEGETATION.

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

TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE

ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY

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.

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

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

ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS

\* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS

THE ORIGINAL MANUFACTURER'S LABEL.

RECOMMENDED BY THE MANUFACTURER.

BEFORE DISPOSING OF THE CONTAINER.

\* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

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

STORMWATER RUNOFF.

REQUIRED TO DO THE JOB.

\* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT,

POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

\* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS

\* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP

\* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE

- BLOCK & GRAVEL SEDIMENT FILTER THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLO CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.
- 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.
- 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.
- 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.
- 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 US 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 C 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.

#### 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
- \* 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

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

**NON-STORMWATER DISCHARGES** 

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

WATER FROM WATER LINE FLUSHING

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

UNCONTAMINATED GROUNDWATER (FROM DEWATERING

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

#### CONTRACTOR'S CERTIFICATION

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

	SARGON AMERICAN SARINGIA	
SIGNATURE	OF CONTRACTOR & ALL SUBS	RESPONSIBLE FOR/DUTIES
		GENERAL CONTRACTOR
		SUB-CONTRACTOR

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

DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL

RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE

STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER

PHASE OF PREVENTION AND CLEANUP. THE NAMES OF

ONSITE.

PRACTICES

CONTROLS.

THE GROUND.

THE SPILL PREVENTION AND CLEANUP COORDINATOR, HE/SHE WILL

INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR

RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL

MAINTENANCE/INSPECTION PROCEDURES

**EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE** 

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES

\* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE

SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO

SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY

\* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN

GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE

\* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT

FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN

THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT

TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

\* ALL CONTROL MEASURES WILL BE INSPECTED BY THE

DAY SITE OPERATION OR SOMEONE APPOINTED BY THE

HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

\* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT,

\* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY

TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE

STORM EVENT OF 0.25 INCHES OR GREATER.

INITIATED WITHIN 24 HOURS OF REPORT.

BREACHES PROMPTLY REPAIRED.

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



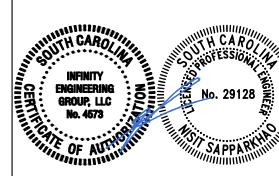
 $\mathbf{\Omega}$ 

 $\Delta$ 



1208 East Kennedy Boulevard Tampa, Florida 33602 [p]: 813.434.4770 If1: 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



03/21/2025

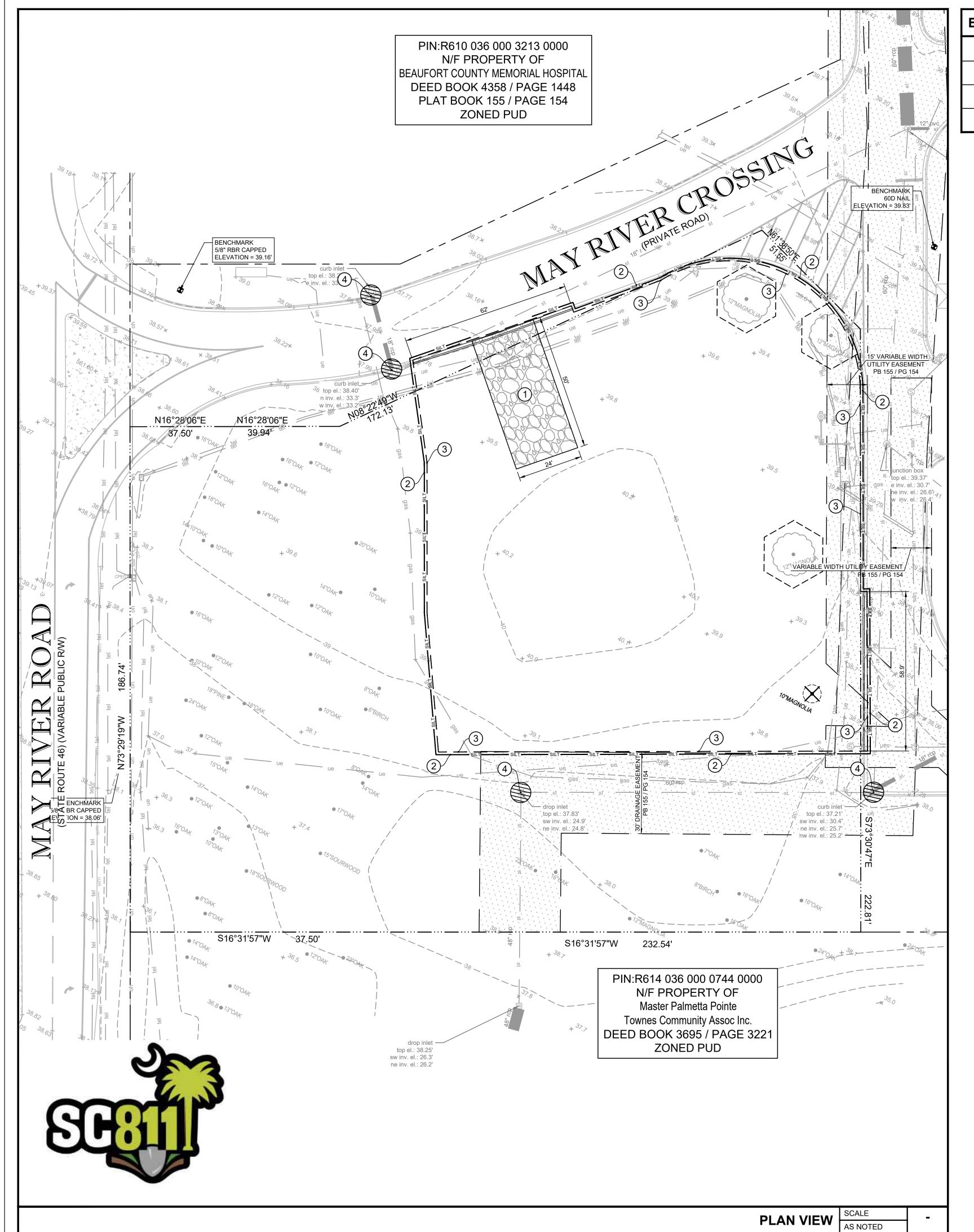
ISSUE BY DATE DESCRIPTION SJ 03/21/25 ISSUE FOR PERMIT

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

SHEET TITLE

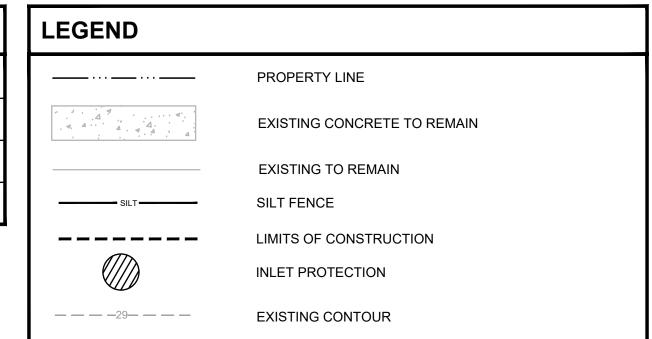
SWPPP GENERAL REQUIREMENTS

**SHEET NUMBER** 



#### **EROSION CONTROL KEYED NOTES** CRUSHED STONE CONSTRUCTION ENTRANCE AND CONCRETE TRUCK SILT FENCE LIMITS OF CONSTRUCTION (0.62 AC)

INLET PROTECTION



# ×428.33 **EXISTING GRADE ELEVATION**

#### **GENERAL NOTES**

• ALL MATERIALS INCLUDING FILL STOCKPILES SHALL NOT BE PERMANENTLY LOCATED ON THE UNDEVELOPED AREA OF PROPOSED DEVELOPMENT.

SCALE

20'

 ALL DISTURBED AREAS OF UNDEVELOPED PROPERTY SHALL BE HYDROMULCHED WITH SEED TO ESTABLISH TURN AND PREVENT SILT RUNOFF INTO THE STREETS.



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

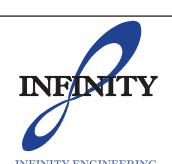


BANK

HIRD

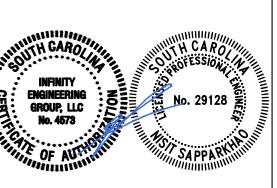
FIFTH

FIFTH THIRD



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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT

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

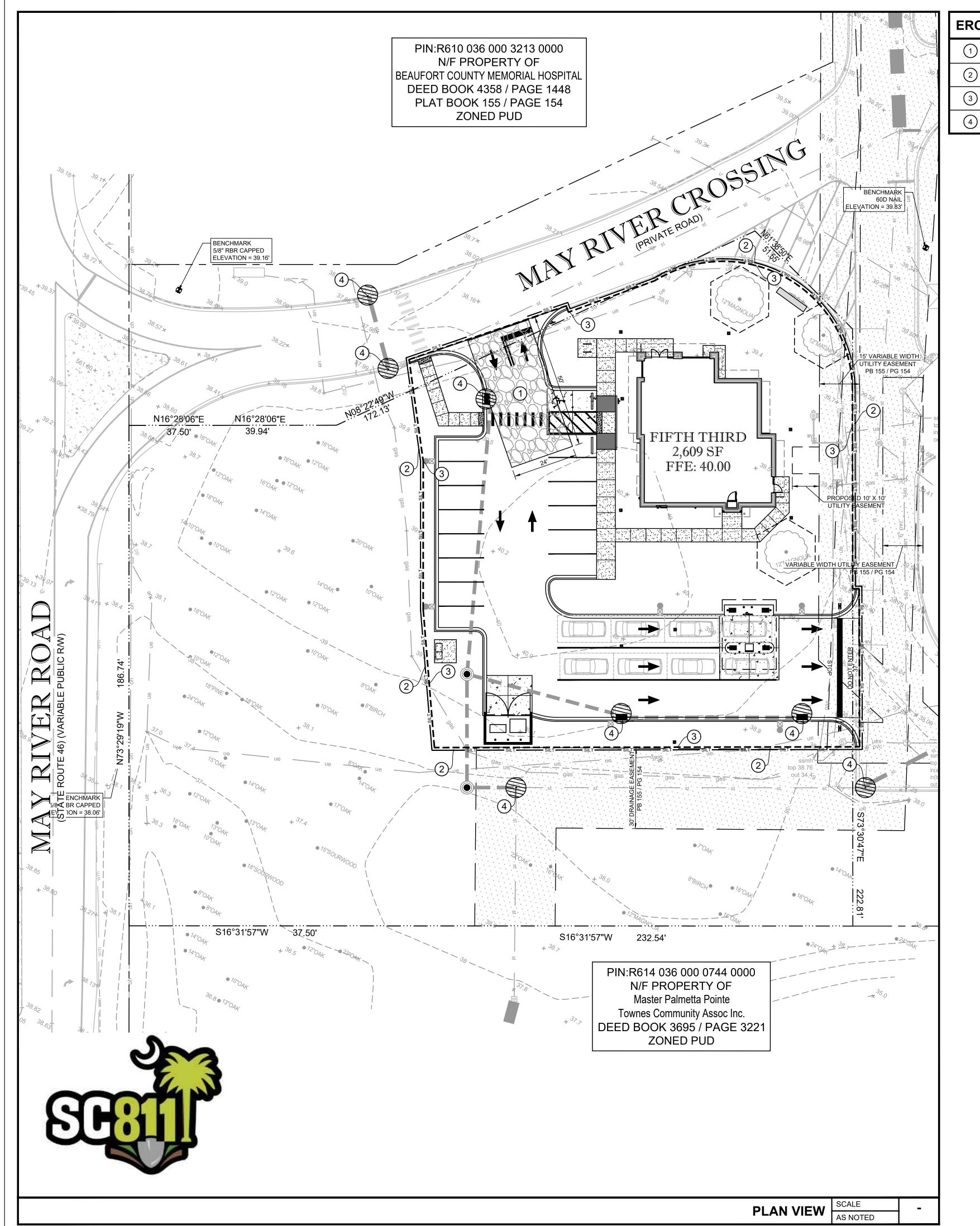
SHEET TITLE

**EROSION CONTROL** PLAN PHASE I

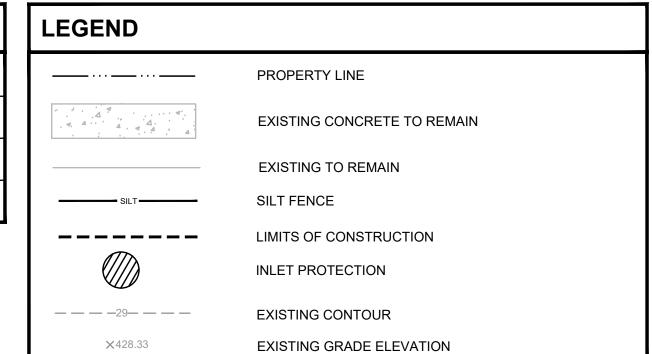
SHEET NUMBER

60'

C06.02



#### **EROSION CONTROL KEYED NOTES** CRUSHED STONE CONSTRUCTION ENTRANCE AND CONCRETE TRUCK SILT FENCE LIMITS OF CONSTRUCTION (0.62 AC) INLET PROTECTION



#### **GENERAL NOTES**

• ALL MATERIALS INCLUDING FILL STOCKPILES SHALL NOT BE PERMANENTLY LOCATED ON THE UNDEVELOPED AREA OF PROPOSED DEVELOPMENT.

SCALE

20'

 ALL DISTURBED AREAS OF UNDEVELOPED PROPERTY SHALL BE HYDROMULCHED WITH SEED TO ESTABLISH TURN AND PREVENT SILT RUNOFF INTO THE STREETS.



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



## FIFTH THIRD

BANK

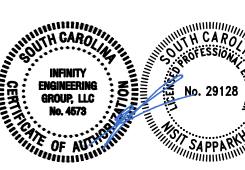
HIRD

FIFTH



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



ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK JOB# 02/12/2025 DRAWN BY:

CHECKED BY:

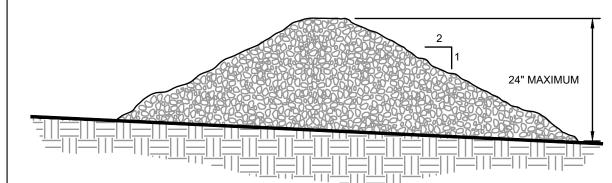
SHEET TITLE

**EROSION CONTROL** PLAN PHASE II

SHEET NUMBER

60'

C06.03



#### **PROFILE VIEW**

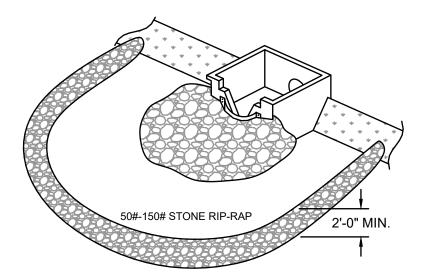
NOTES:

1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT

- TO BE USED IN LIVE STREAMS).
  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

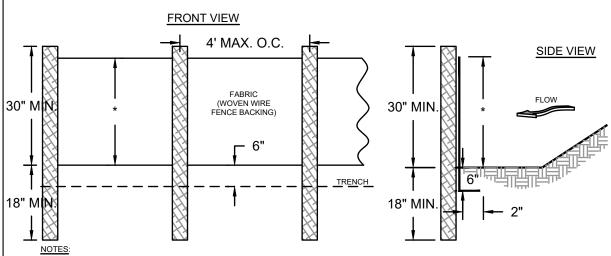
STONE CHECK DAM

#### PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).



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.

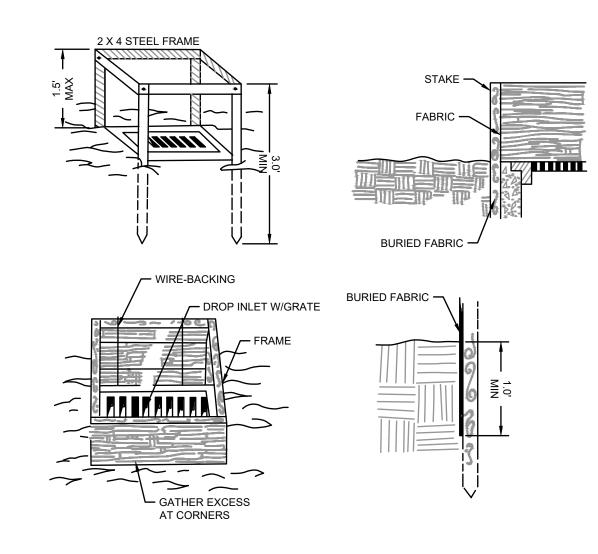


#### **EXIT DIAGRAM** (SEE NOTE 8) CULVERT UNDER -ENTRANCE (IF NEEDED) DIVERSION RIDGE -(SEE NOTE 6) N.S.A R-2 (1.5" - 3.5")— COARSE AGGREGATE GEOTEXTILE UNDERLINER -TIRE WASHRACK -AREA/TIRE WASHERS SUPPLY WATER TO WASH-WHEELS IF NECESSARY COARSE AGGREGATE **ENTRANCE ELEVATION** (N.S.A. R-2) GEOTEXTILE UNDERLINER -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%. 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

#### CRUSHED STONE CONSTRUCTION EXIT

CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.



#### **INLET SEDIMENT TRAP-FILTER FABRIC**

#### PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL

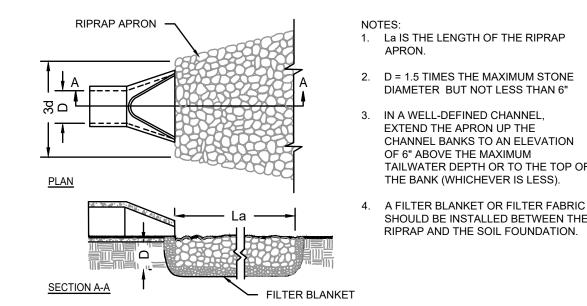
DIAMETER BUT NOT LESS THAN 6"

TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).

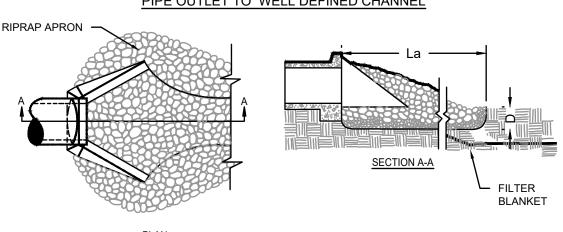
SHOULD BE INSTALLED BETWEEN THE

RIPRAP AND THE SOIL FOUNDATION.

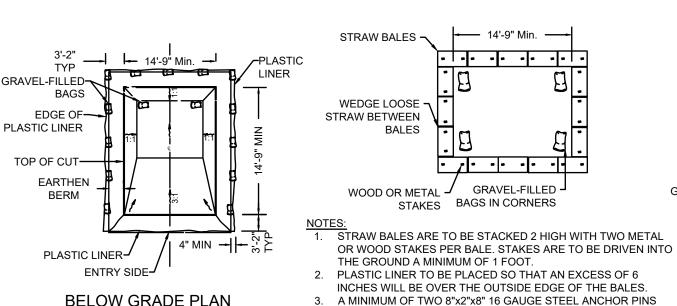
EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM



PIPE OUTLET TO WELL DEFINED CHANNEL



STORM OUTLET PROTECTION



**BELOW GRADE PLAN** (OR LARGER) ARE TO BE USED PER BALE TO ANCHOR THE PLASTIC LINER IN PLACE. GRAVEL-FILLED BAG ON GRADE PLAN EARTHEN BERM -PLASTIC LINER PLACED UNDER BERM (ENTRY SIDE ONLY)

ORIGINAL GROUND-PLASTIC LINER-SECTION A-A

EARTHEN BERM SECTION

-ORIGINAL GROUND

#### WASHO<u>UT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED</u> 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

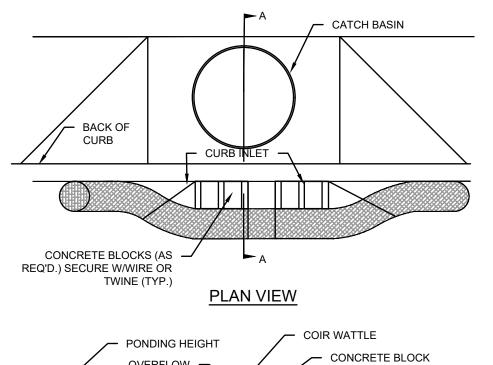
ENTER ANY SURFACE WATERS. 3. A 4'X2' WHITE SIGN WITH 6" BLACK LETTERS STATING "CONCRETE WASHOUT" IS TO BE PROVIDED SO DRIVERS ARE AWARE OF THE PRESENCE OF WASHOUT

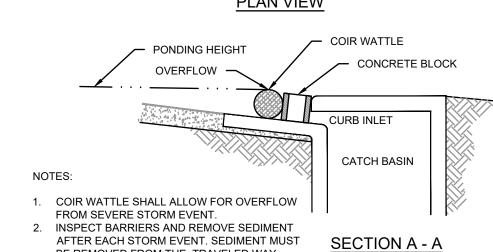
CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO

- 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.

#### TEMPORARY CONCRETE WASHOUT FACILITY





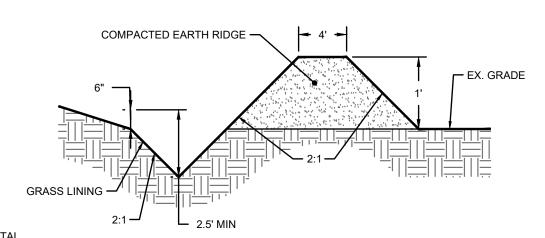
AFTER EACH STORM EVENT. SEDIMENT MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

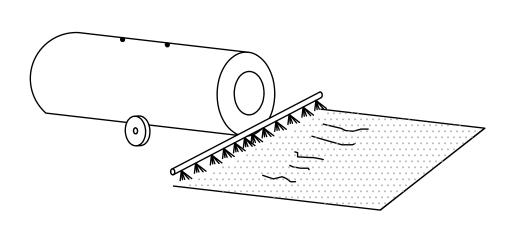
#### CURB INLET SEDIMENT BARRIER (COIR WATTLE)



MAXIMUM **GROOVES WILL CATCH** SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE RUNOFF.

**CONTOUR FURROWS** 





TEMPORARY METHODS
- MULCHES - TEMPORARY VEGETATIVE COVER - SPRAY ON ADHESIVES - TILLAGE - IRRIGATION

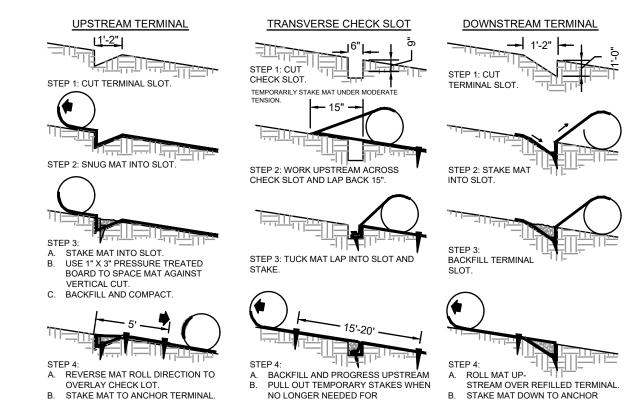
PERMANENT VEGETATION TOPSOILING STONE COVER

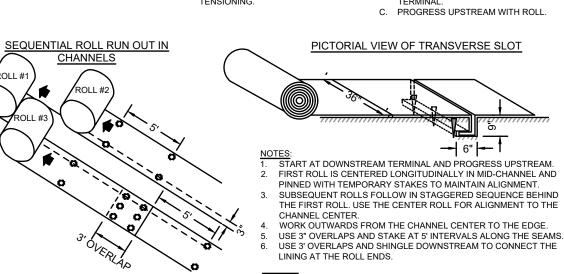
- BARRIERS - CALCIUM CHLORIDE

#### CHEMICAL CONTROL

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





RECP- ROLLED EROSION CONTROL PRODUCT EROSION BLANKETS & TURF REINFORCEMENT MATS

**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
- 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:

UNSEEN CONDITIONS OR ACCIDENTS.

- 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
- 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
- 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.



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



 $\Delta$ 

 $\Delta$ 

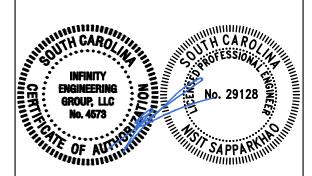
INFINITY

INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard 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



03/21/2025

ISSUE	BY	DATE	DESCRIPTION
	SJ	03/21/25	ISSUE FOR PERMIT

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

CHECKED BY:

SHEET TITLE **EROSION AND** SEDIMENTATION

CONTROL DETAILS **SHEET NUMBER** 

C06.04

#### PART 1 - GENERAL

- A. Extent of underground irrigation system is shown on Drawings and in the schedules.
- 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
- 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
- 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
- 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
- Coordinate and schedule all Work with General Contractor.
- Damages resulting from irrigation installation to Work of other trades must be repaired at the expense of Contractor in a timely fashion. 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.
- Repair unsatisfactory conditions promptly at no cost to Owner. Owner may make emergency repairs without relieving the Contractor of this
- warranty obligation. 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. 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
- Irrigation Contractor to coordinate sleeve through wall for irrigation controller (with General Contractor). General Contractor to provide power to controller.
- Coordinate with General Contractor. 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
- 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. 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

responsible for connection to 100V AC power to controller.

- interrupted without affecting the controller 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.

manual operation of the system.

- 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 3/4" 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 "builtin" 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
- 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
- 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. Prior to excavation, remove sod, preserve and replace after backfilling is
- 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. 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. 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. Backfill material evenly in lifts not to exceed 6" and compact to 100 percent of
- 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: <sup>3</sup>/<sub>4</sub>" – 1" pipe – minimum depth cover is 12"
- 1  $\frac{1}{2}$ " 1  $\frac{1}{2}$ " 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.
- PVC to metal connection, Work metal connection first then use Teflon pipe fitting 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,
- Lateral lines and risers shall be as follows:
  - 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 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.
- Plug lines immediately upon installation to minimize infiltration of foreign matter. 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
- 1 High pop-up heads: High pop-up shrub heads shall have the finished height determined by Landscape Architect
- Backfill around sprinkler head assembly in such a manner that sprinkler head is stabilized so that no lateral motion is exhibited during operation.
- 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
- 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.
- 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
- 7. Pass Wires under existing or future paving, construction, etc. through PVC sleeves
- K. Control Equipment: Install automatic valves and controller according to Manufacturer's
- 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
- 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
  - 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
- 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
- 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
  - during and after installation, until Date of Substantial Completion of the Work in
- 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

#### 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
- 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
- 1. Submit record drawings and maintenance manuals to Landscape Architect with
- Review "punch list" Work jointly with Owner and Landscape Architect for
- Completion and issue AIA Certificate of Substantial Completion if all items on 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
- 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
- 1. Guarantee all Work, products, equipment and materials for one year, beginning at Date of Substantial Completion as per Written letter of notification.
- shall be done promp0tly and at no additional cost to Owner. Repair damage to grade, plants and other Work or property as necessary.
- have a similar one-year guarantee from time of replacement. 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
- 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.
- Upon completion by Contractor of all required replacements, Owner and Landscape Architect will confirm the Date of Final Acceptance of Work.
- End of Section

- areas to be determined in the field by Landscape Architect.
- 5. Allow for contraction of wires by providing looped slack at directional changes in
- provided by Irrigation Contractor.
- Recommendations. Appropriate locations are shown on the drawings.
- areas wherever 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

- Landscape Architect.

instructions on how to make such changes are under the responsibility of the

- 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
- - 1. Contractor is responsible for theft of equipment and material at job site before,
- T. Inspection and Acceptance: Upon completion of Work, notify Landscape Architect and

- time no further applications for payment shall be approved for more than 85% of contract
- written request for inspection.
- Substantial Completion of total (contract) Work. Upon satisfactory completion of repairs and replacements and completion of "As -Built" drawings, Landscape Architect and Owner will verify system for Substantial "punch list" have been completed. If necessary another "punch list" will be written
- continuing maintenance.
- responsibilities and acceptance by Owner and Landscape Architect.
- Make good any damage, loss, destruction or failure. Repairs and replacements If replacement are not acceptable during or at end of Guarantee Period Owner
- may elect either subsequent replacement or credit. Replacement products shall
- at fifteen percent (15%) less than original contract price for the damaged Work.
- 1. At the end of Guarantee Period and upon request for inspection, jointly review all guaranteed Work for Final Acceptance. 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.

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



 $\Delta$ 

R D

王

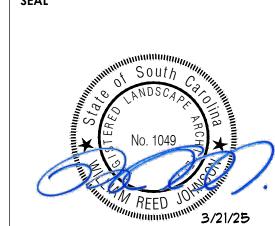


[p]: 813.434.4770 [f]: 813.445.4211 www.iegroup.net Cert. of Auth. No 4573

1208 East Kennedy Boulevard

Tampa, Florida 33602

IEG JOB NO. 15-360.00



ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMI

PROJECT INFORMATION BLOCK

240634

JCO

02/12/2025

JOB# DATE: DRAWN BY: CHECKED BY:

SHEET TITLE

IRRIGATION **SPECIFICATIONS** 

SHEET NUMBER

LAND PLANNERS

2115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203

PH: (205) 324-4447 • FAX: (205) 324-8068 WEB: JOHNSON-CO.NET

#### 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
- (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
- Specified Maintenance Period, and One-Year Guarantee Period.
- Verify plant count from plan, and provide and install all plant material on plan.
- 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.
- 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.
- 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.
- 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
  - (7) Guarantee plant materials and lawn areas for one year from the date of substantial completion. Contractor shall replace plants that fail to grow
  - following plant failure, without additional charges to the owner. (8) Replacement materials will be guaranteed for one year from the date of

properly with plants as originally specified at the earliest practical date

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

#### PART 2 - PRODUCTS

acceptance of the Work.

- 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. 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
- 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 97 - 99 percent ¼" mesh No. 100 mesh 40 - 60 percent No. 200 mesh 20 - 40 percent

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

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.
- 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.
- Fertilizer: Fertilizer for all trees, plants and ground covers shall be Sta-Green Nursery Special delivered to the site in unopened containers.
- Fertilize all areas according to the manufacturer's recommended rates in
- Cultivate and waterbeds or pits thoroughly after application.
- Adjust fertilizer in accordance with interim soil test reports. Fertilizer for sod: Fertilizer for sod shall be Sta-Green and sod fertilizer containing the following percentages by weight:

accordance with the monthly maintenance guideline herein.

- 18% nitrogen
- 24% phosphorous
- 10% potash
- Nursery Special or approved equal 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
- 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,
- 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

shall conform to sizes and descriptions in the plant list.

- 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.
- 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.
- Source of Plants: Plants shall be field nursery, container grown or collected material subject to the requirements of the Specifications.
- 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.
- 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
- 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.
- Balled and burlapped plant material are to be wrapped with organic burlap wrapping only. Synthetic material will not be accepted. Remove all nurseryloading straps once plant material is placed in the pit.
- 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
- 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
- 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.
- All necessary hand tools and materials typically used in planting operations. Plastic labels or tags on which identification can be made.
- MM. 'Nature's Helper' Soil conditioner
- Follar insecticide as needed to control damage OO. Anti-desiccant spray for minimizing transpiration during storage
- QQ. Burlap 36" wide, rolled.

#### PART 3 - EXECUTION

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 follar 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 bailing 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

#### Root Ball Si

risks due to weather.

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

- 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
- 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

- 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
- 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

for settling of soils.

- Shrub pit diameter shall be a minimum of one foot greater than the spread of the
- All transplanted material is to be replanted the same day it is dug.
- Test excavated plant pits to determine if sufficient drainage is present for proper 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

- 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. 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 4' 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.
- Drainage Test for Plants and Ground covers: Plants and ground cover beds shall be spot tested
- (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.

(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.

- (3) Gently loosen outer roots of container grown plants to encourage outward
- (4) Fertilizer shall be thoroughly mixed and soaked into the top two inches of soil for all plant pits.
- Setting plants: Set plants uniformly 2-4" higher than surrounding grade or as necessary to provide adequate positive drainage away from roots. Slope soil
- (1) Cut rope, wire or string from top of ball after plant has been set; turn down
- and bury burlap. 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 callused 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. 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

- Stockpile of trees: All plant material stored on site will be untied and/or cut loose for proper storing and inspections periodically.
- thin out heavy growth. (1) Do not top or remove terminal growing point or leader of any plant.

Pruning deciduous trees: Deciduous trees and shrubs shall be pruned only to

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

paint containing lead shall be permitted.

- 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.
- 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. 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.
- 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. 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
- 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

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

- Protect all work and materials from damage due to landscape operations and operations by other contractors, trades and trespassers. Maintain protection until
- 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
- PART 5 LANDSCAPE MAINTENANCE GUIDELINES

Date of Substantial Completion.

- Begin maintenance at commencement of Work of this section and continue until Substantial Completion, as part of Work of this section.
- Continue maintenance for a Maintenance Period of thirty calendar days after date of Substantial Completion
- Provide labor, materials, equipment and means for proper maintenance of all materials and workmanship
- Supervision: submit a written report and conduct joint inspection with Landscape Architect maintenance program and procedures, at inspection for Substantial
- 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
- Watering: Monitor owner's automatic watering system and schedule for proper watering of all plant material.
- Advise Landscape Architect immediately in writing of recommended alterations due to weather or other conditions.
- Water landscaped areas not covered by automatic watering system as frequently as necessary to maintain proper moisture level, using the following schedule as a
- Twice a month during March, April, May
- Once a week during June, July, August, September
- 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
- 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. 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.
- 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. 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
- Pruning: Remove dead wood as it becomes evident. Remove living portions of
- plants only at the direction of Landscape Architect. Wilt-proofing: Apply approved anti-desiccant to all evergreen trees during last two weeks of October (except pines).
- 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. 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 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.) 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. 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
- VI. PART 6 ACCEPTANCE & GUARANTEE
- 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. 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 "punchlist", the Landscape Architect will determine the job to be "Substantially
- Complete" or pending the completion of the "Punch-list". Submit Record Drawings and Maintenance manuals to the Landscape Architect
- with written request for inspection. 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)
- 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 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. Guarantee all work, products, equipment and materials for one year, beginning at
- the Date of Substantial Completion as per written notice. Make good any damage, loss destruction or failure. Repairs and replacements shall be done promptly and at no additional cost to the Owner.

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.

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

END OF SECTION



2115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203 PH: (205) 324-4447 • FAX: (205) 324-8068 WEB: JOHNSON-CO.NET



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



 $\mathbf{\Omega}$ 

 $\Delta$ 

I

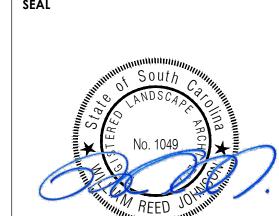
분



Tampa, Florida 33602 [p]: 813.434.4770 If1: 813.445.4211 www.iegroup.net Cert. of Auth. No 4573

1208 East Kennedy Boulevard

IEG JOB NO. 15-360.00



ISSUE BY DATE DESCRIPTION 03/21/25 ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK

240634

JCO

02/12/2025

DRAWN BY: CHECKED BY:

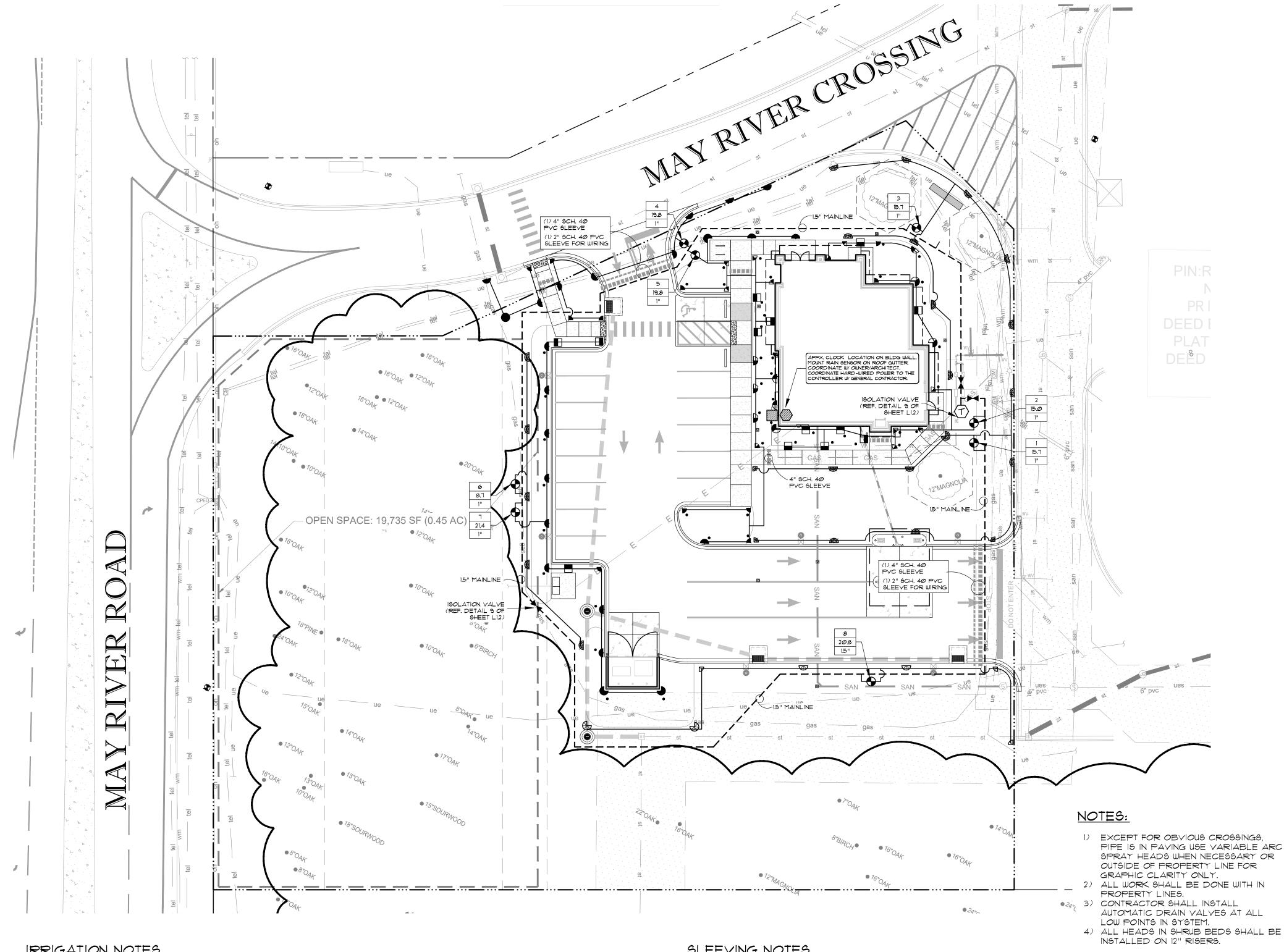
JOB#

DATE:

SHEET TITLE

SHEET NUMBER

LANDSCAPE **SPECIFICATIONS** 



#### IRRIGATION NOTES

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE ARE 9. OTHER ACTIVE UTILITIES AND SERVICES IN AND AROUND THE SITE. CONTRACTOR IS RESPONSIBLE FOR LOCATING THESE TO AVOID DAMAGE TO

THE CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS IN THE 10.

- PROPOSED IRRIGATION SYSTEM TO AVOID ANY DAMAGE TO EXISTING STRUCTURES, PAYING, AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ON-SITE II. UTILITIES, STRUCTURES, OR PAVING RESULTING FROM IRRIGATION
- CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL
- CODES AND ORDINANCES RELEVANT TO THE WORK UNDER THIS CONTRACT. ALL WORK, ADJUSTMENTS, AND INSPECTIONS SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT
- 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
- THE CONTRACTOR SHALL VERIFY ALL QUANTITIES TO ASSURE ADEQUATE 15. INSTALLATION OF THE SYSTEM.

ALSO AS PER INSTRUCTIONS OF THE LANDSCAPE ARCHITECT AND THE

- 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.
- 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. 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
- THE CONTRACTOR SHALL ADJUST THE RADIUS AND ARC OF EACH HEAD TO MINIMIZE "OVERTHROW" AND TO ELIMINATE "DRY SPOTS". 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. 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 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.

#### IRRIGATION DESIGNED TO PROVIDE SEPARATION BETWEEN LAWN AND SHRUB ZONES WHERE POSSIBLE. CONTRACTOR IS NOT TO CHANGE ZONE SEPARATION

#### 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

COMMISSIONING NOTES:

ARE PROPERLY INSTALLED.

ACTIVATION AND COMMISSIONING.

ARTIFICIAL HEAT SOURCES.

LONG NUMBER)

CONTROLLER NOTES:

ENTRANCE

CONTROLLER PLEASE DO THE FOLLOWING:

WHEN SHARING THIS INFORMATION WITH

CONTRACTOR TO CONTACT WEATHERMATIC

TO COMMISSION THE WEATHERMATIC SMART IRRIGATION

CONFIRM THAT ALL THREE PIECES OF EQUIPMENT

PROVIDE WEATHERMATIC THE AIRCARD NUMBER

THAT IS ON THE SIDE OF THE AIRCARD (20-DIGIT

WEATHERMATIC, YOU SHOULD ALSO NOTE THAT THIS

IS A FIFTH THIRD BANK CORPORATE LOCATION AND

PROVIDE THE SITE ID NUMBER AND ADDRESS.

REPRESENTATIVE KELSI VAQUERA WITH ANY QUESTIONS.

KELSI.YAQUERA@WEATHERMATIC.COM OR (316) 516-3625

MOUNT SENSOR ON THE EVE OF THE BUILDING SO IT

CONTACT PRIOR TO WORK FOR COORDINATION OF

 MOUNT CONTROLLER ON THE EXTERIOR OF THE BUILDING PREFERABLY NEAR THE UTILITY

HAS A CLEAR VIEW OF THE SKY FOR PROPER RAINFALL DETECTION AND IS AWAY FROM ANY

INSTALLATION AND SMART IRRIGATION ACCOUNT

(CONTROLLER, WEATHER STATION, AND AIRCARD)

- 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.M.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 IS" 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. 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

FROM PLANS UNLESS PRIOR APPROVAL IS MADE.

#### 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 OPERIND - DRIP SYSTEM OPERATION INDICATOR KIT POP-UP VISUAL INDICATOR

3/4" BRASS QUICK COUPLING VALVE IN VALVE BOXES AS PER

I 1/2" MANUAL ISOLATION VALVE IN MAINLINE, STOCKHAM CLASS 150, B-103 POINT OF CONNECTION - I" TAP, BACKFLOW PREVENTER AND WATER

MANUAL DRAIN VALVE AT LOW POINT IN MAINLINE

DRIP FLUSH VALVE - INSTALL AT ALL DRIP ZONES

METER BY GENERAL CONTRACTOR

RAINBIRD PRESSURE COMPENSATING FULL-CIRCLE BUBBLERS 1400 SERIES - 1402 (.5 GPM) FULL CIRCLE, TRICKLE PATTERN

WEATHERMATIC SLIGOO SMARTLINE CONTROLLER W/ SMARTLINK AIRCARD - COORDINATE HARD-WIRED POWER TO THE CONTROLLER W/ GENERAL CONTRACTOR

WEATHERMATIC SLW5 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 XF3-06-18 - 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:

- 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" PYC 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) YERIFY TAP: IRRIGATION CONTRACTOR TO TEST WATER CONDITIONS AS THEY EXIST IMMEDIATELY DOWN STREAM FROM TAP: IF THEY DO NOT MEET DESIGN DEMANDS,
- 1) 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.
- Ø) ANY DISCREPANCY BETWEEN THIS SHEET AND OTHERS IN THIS SET MUST BE TO THE IRRIGATION CONSULTANT BY THE CONTRACTOR FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- 11) ALL 24 YOLT 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.

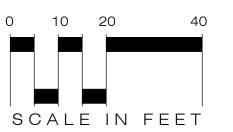
THIS REQUEST AND INFORMATION TO LANDSCAPE ARCHITECT.

- C. TWO QUICK COUPLER KEYS WITH MATCHING HOSE SWIVELS.
- 17) 24 YOLT 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

In-line Drip Guidelines										
	Groun	Groundcover areas Tree Rings								
Soil Type	Clay Loam Sandy C		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"				



Know what's below. Call before you dig.







LANDSCAPE ARCHITECTS LAND PLANNERS

2115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203 PH: (205) 324-4447 • FAX: (205) 324-8068 WEB: JOHNSON-CO.NET



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



 $\Delta$ 

 $\Delta$ 



INFINITY ENGINEERING GROUP, LLC 1208 East Kennedy Boulevard 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



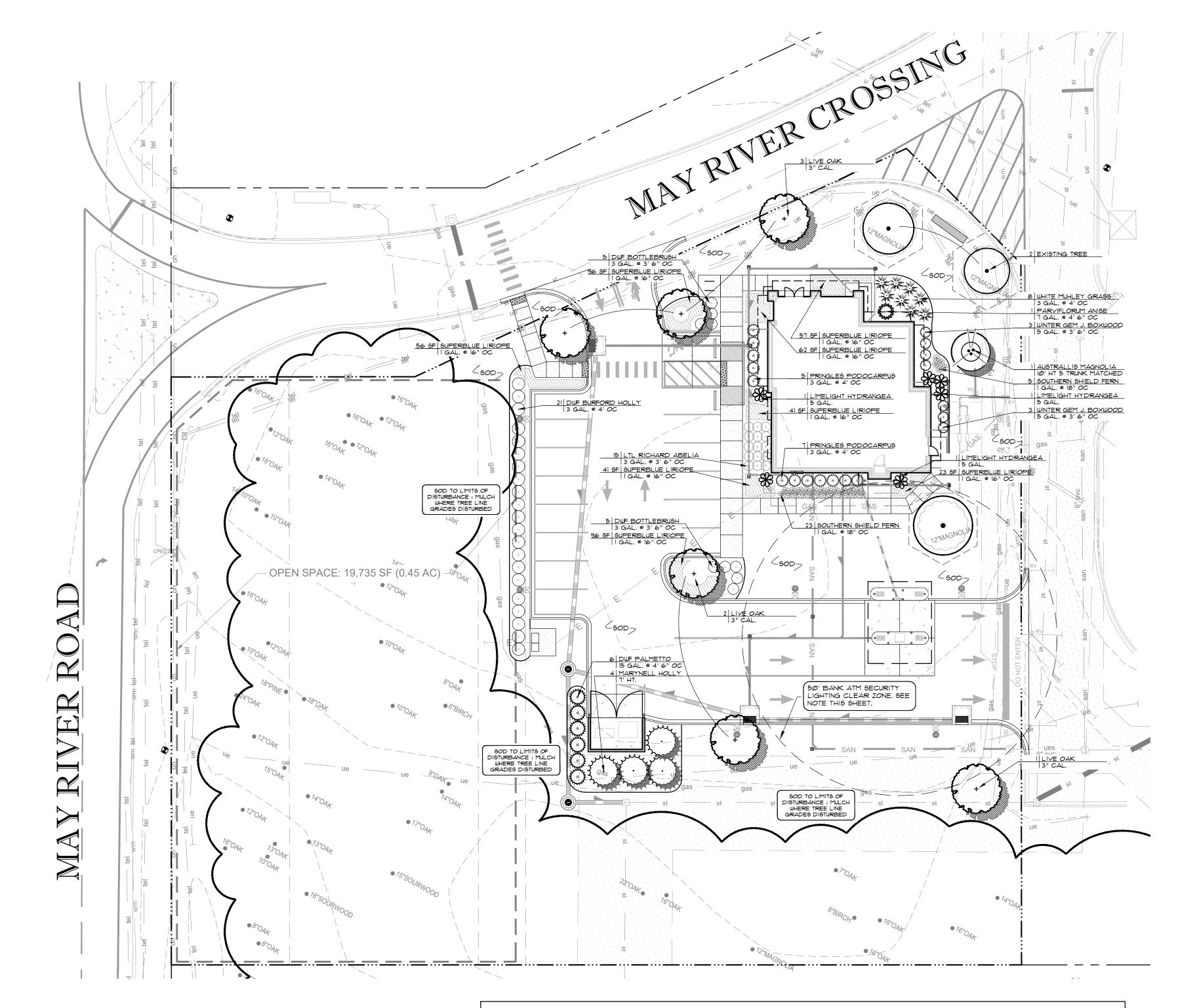
ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
PRC	)JE(	CT INFOR	RMATION BLOCK

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

SHEET TITLE

IRRIGATION PLAN

SHEET NUMBER



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

<del></del> / '									
ВО	OTANICAL NAME	COMMON NAME	CAL	ΗT	SPREAD	R.B./SIZE	SPACING	COMMENTS	
TRE	EES								
	₩ ₩ ₩ IERCUS VIRGINIANA	LIVE OAK	3"	15'	٦'	ANA STD		CENTRAL LEADER	
ILE	EX X 'MARY NELL'	MARY NELL HOLLY		7'	5'	B₫B		FULL PLANT	
MAG	AGNOLIA VIRGIANA AUSTRALIS	AUSTRALIS MAGNOLIA		10'	5'	B#B		5 TRUNK FULL PLAN	<b>1</b> T
SHF	RUBS								
HYI	DRANGEA PANICULATA	LIMELIGHT HYDRANGEA		24"	24"	7 GAL.	4'-6" OC	FULL PLANT	
MEL	ELALEUCA VIMINAKIS	DWF BOTTLEBRUSH		16"	18"	3 GAL.	3' 6" OC	FULL PLANT	
ILE:	EX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY		18"	16"	3 GAL.	4' OC	FULL PLANT	
SEF	RENOA REPENS	SAW PALMETTO				15 GAL.	5' OC	FULL PLANT	
PO	DDOCARPUS MACROPHYLLUS 'PRINGLES'	PRINGLES PODOCARPUS				3 GAL.	4' OC	FULL PLANT	
BU>	IXUS MICROPHYLLA WINTER GEM	WINTER GEM BOXWOOD				5 GAL.	3'6" OC	FULL PLANT	
ABI	BEKLIA X LTL RICHARD	LTL RICHARD ABELIA		14"	16"	3 GAL.		FULL PLANT	
MIS									
				10"	0.4"	2 - 41		F	
	IHLENBERGIA CAPILLARIS	PINK MUHLEY GRASS		18"	20"	3 GAL.	4' OC	FULL PLANT	
	RIOPE MUSCARI 'SUPER BLUE'	SUPER BLUE LILYTURF		14"	10"	1 GAL.	14" OC	FULL PLANT	
				16"	24"	3 GAL.	14" <i>OC</i>		
CYI	NODON DACTYLON X	BERMUDA 419 SOD						WHOLE PIECES - FU	+∟L
DR' MUH	RYOPTERIS IUDOVICIANA IHLENBERGIA CAPILLARIS WHITE CLOUD YNODON DACTYLON X	SOUTHERN SHIELD FERN WHITE MUGLEY GRASS BERMUDA 419 SOD		14" 16"	10" 24"	1 GAL. 3 GAL.	14" OC 14" OC	FULL PLANT FULL PLANT	- Fl



#### 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

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.

1) 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

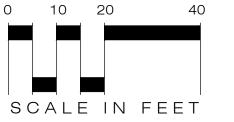
**4** Trees required 4 EXISTING TREES ON-SITE



2115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203 PH: (205) 324-4447 • FAX: (205) 324-8068 WEB: JOHNSON-CO.NET

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.







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



SSIN

 $\Delta$ 

THIRD

FIFTH

INFINITY INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard 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



DESCRIPTION

		03/21/25	ISSUE FOR PERMIT
PRC	)JE(	CT INFOR	RMATION BLOCK

ISSUE BY DATE

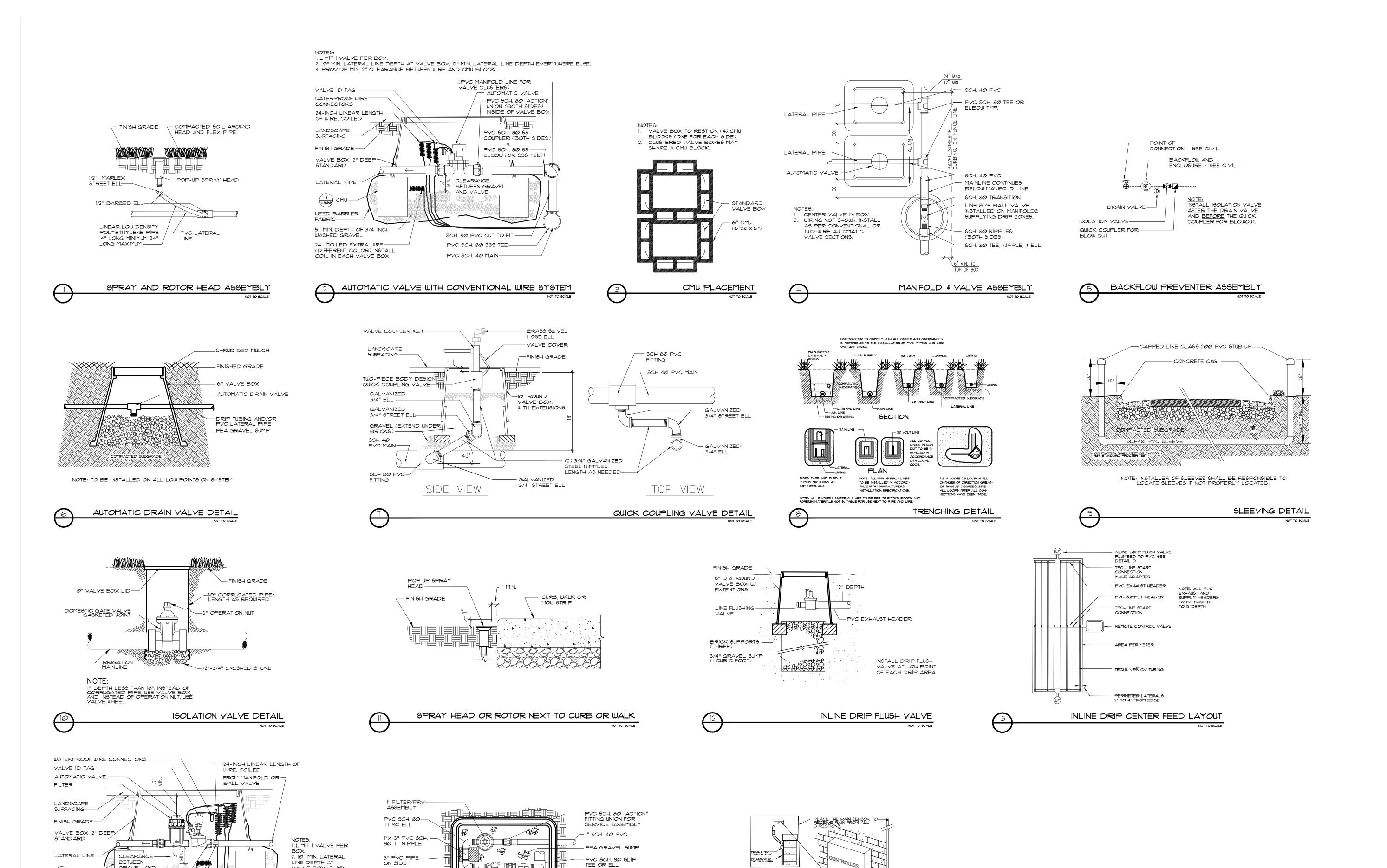
JOB# 240634 02/12/2025 DATE: DRAWN BY: JCO CHECKED BY:

SHEET TITLE

LANDSCAPE PLAN

SHEET NUMBER

L-110



— 1" PVC SCH. 80 TT90 W/ SCH. 80 TOE NIPPLE TO MAIN LINE

TT NIPPLE

VALVE BOX

DRIP VALVE ASSEMBLY

-MAIN SUPPLY LINE

-PVC BALL VALVE TT

JUMBO RECTANGULAR

6" OR PAST END EXTEND PAS END OF EAVE OF BLDG.

ELECTRICAL CONDUIT-

1/2" TEE (LEAVE BOTTOM OPEN)

CONTROLLER DETAIL

HARD WIRE TO A - JUCTION BOX.

VALVE BOX, 12" MIN.

BETWEEN WIRE AND

CLEARANCE

CMU BLOCK,

24" COILED EXTRA WIRE

DRIP VALVE ASSEMBLY - CONVENTIONAL SYSTEM

(DIFFERENT COLOR) INSTALL

COIL IN EACH VALVE BOX

LATERAL LINE DEPTH EVERYWHERE ELSE. 3. PROVIDE MIN. 2"

PVC SCH. 80 TT -

1"X 2" PVC SCH. 80 TT NIPPLE

I" AUTOMATIC VALVE

PVC SCH. 80 "ACTION" FITTING UNION FOR

SERVICE ASSEMBLY

90 ELL

GRAVEL AND

VALVE

WEED BARRIER

WASHED GRAVEL

5" MIN. DEPTH OF 3/4-INCH

SIDES) INSIDE OF VALVE BOX

PVC SCH. 80 'ACTION' UNION (BOTH-/

PVC SCH. 80 SS COUPLER (BOTH SIDES)-

FABRIC -



FIFTH THIRD

Charlotte, NC 28202 www.bdgllp.com

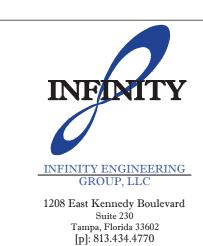
<u></u> S >

ANK

 $\mathbf{\Omega}$ 

 $\Delta$ 

〒



[f]: 813.445.4211 www.iegroup.net Cert. of Auth. No 4573 IEG JOB NO. 15-360.00



ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT
PRC	)JE	CT INFOR	MATION BLOC
IOR	#		2404

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

JCO

WRJ

SHEET TITLE

**IRRIGATION DETAILS** 

SHEET NUMBER

L-500



PH: (205) 324-4447 • FAX: (205) 324-8068

WEB: JOHNSON-CO.NET

MINIMUM 3" ABOVE FINISHED GRADE. -3" SHREDDED MULCH OVER Entire bed surface SET SHRUB PLUMB -- ROOT & SOIL MASS. CONTAINER REMOVED (LIGHTLY SCARIFY) FINISH GRADE -- PLANTING MIX BACKFILL COMPACT PLANT MIX TO PREVENT SETTLING LOOSEN SUBGRADE AND REMOVE IMPERVIOUS DEBRIS —

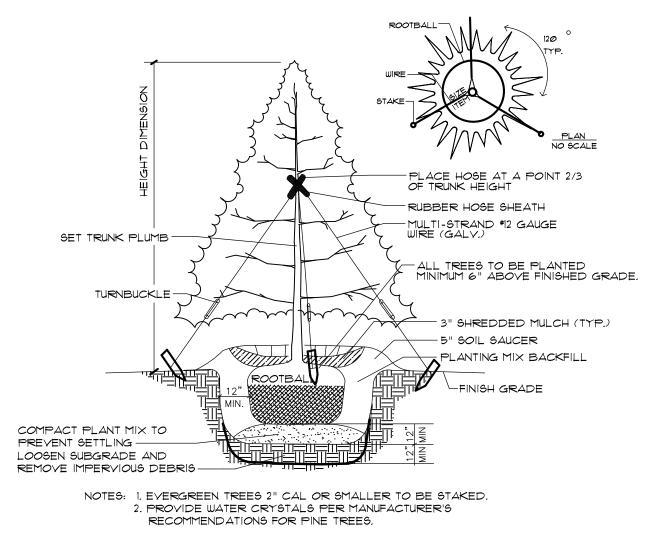
DETAIL TYPICAL CONTAINERIZED SHRUB PLANTING / NOT TO SCALE

ALL TREES AND SHRUBS NOT COVERED

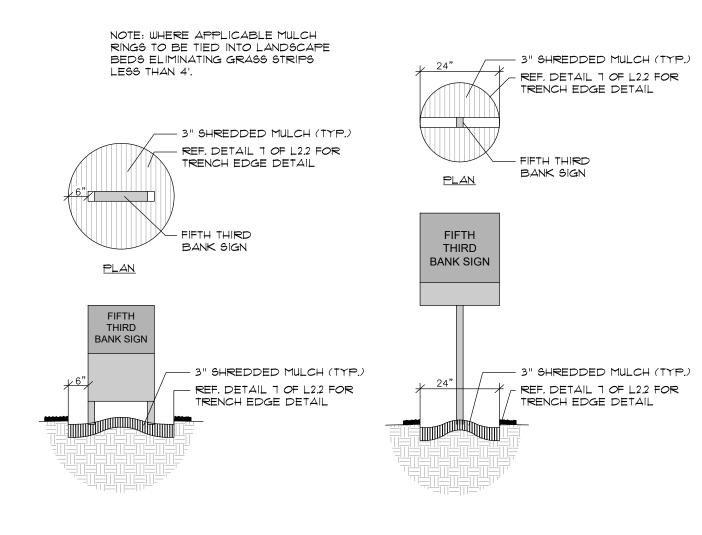
BY IRRIGATION TO BE AMMENDED WITH

TERRA SORB WATER RETAINING AGENT

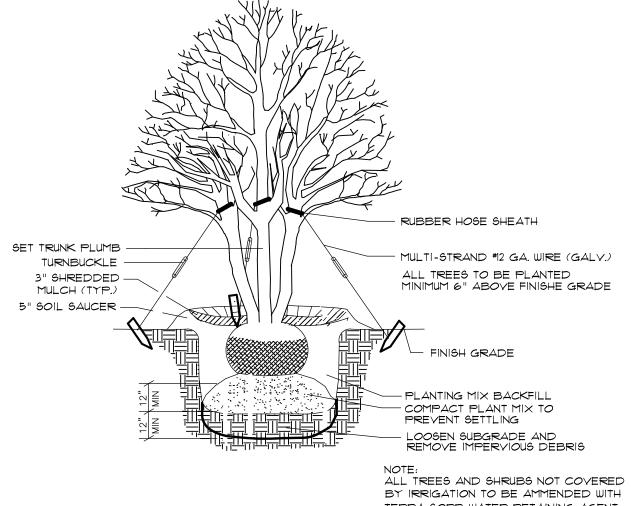
AS PER MANUFACTUERS RECOMENDATIONS.

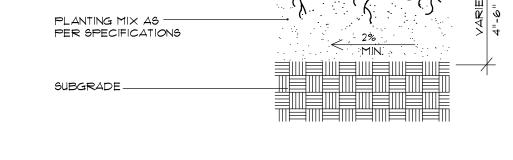


DETAIL EVERGREEN TREE PLANTING NOT TO SCALE



MULCH DETAIL FOR ALL SIGNS IN LAWN AREA NOT TO SCALE



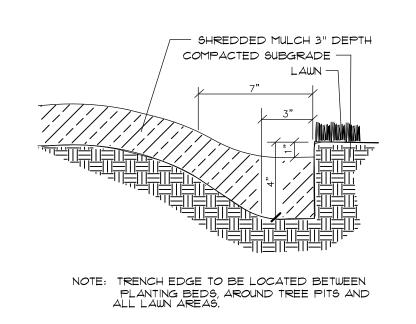


SPACING AS PER SPECS. —

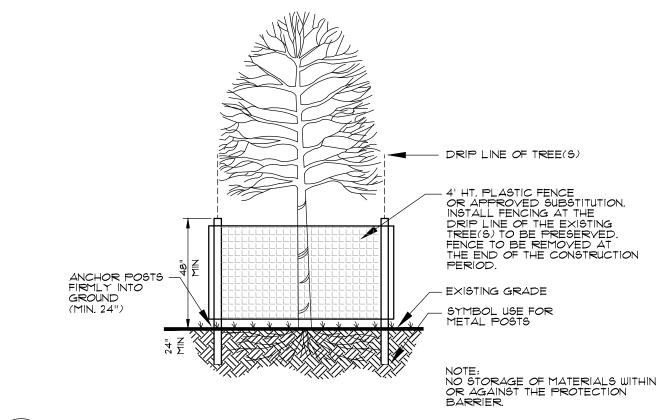
BEFORE INSTALLATION

3" SHREDDED MULCH INSTALLED -









10 TREE PROTECTION DETAIL NOT TO SCALE

JOHNSON & CO. LANDSCAPE ARCHITECTS LAND PLANNERS

> 2115 1ST AVENUE NORTH / BIRMINGHAM, AL 35203 PH: (205) 324-4447 • FAX: (205) 324-8068 WEB: JOHNSON-CO.NET



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 VARIEITES 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 CONTAIANER GROWN. 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 @ LAWNS 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 12" 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 50 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.



L-510

architects

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

FIFTH THIRD

 $\mathbf{\Omega}$ 

HIRD



1208 East Kennedy Boulevard 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



ISSUE	BY	DATE	DESCRIPTION
		03/21/25	ISSUE FOR PERMIT

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

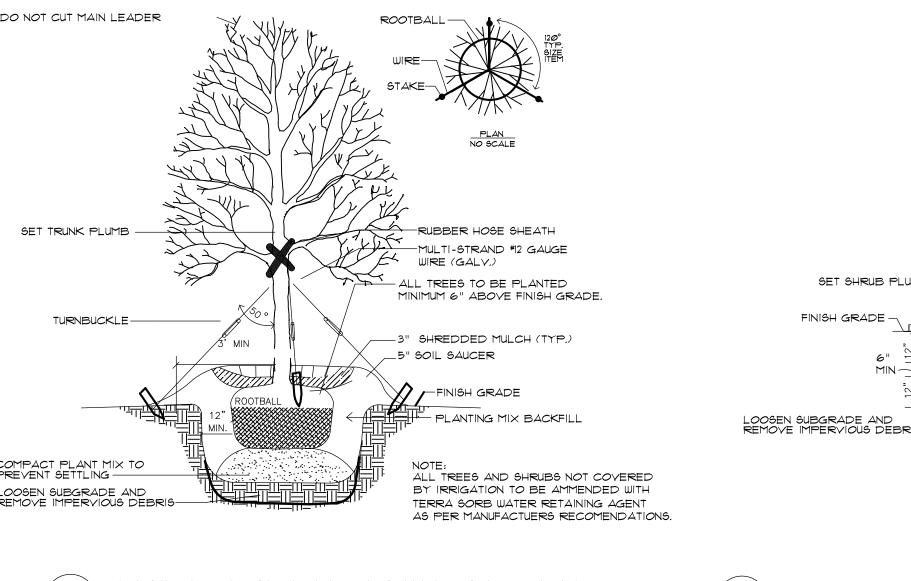
SHEET TITLE

CHECKED BY:

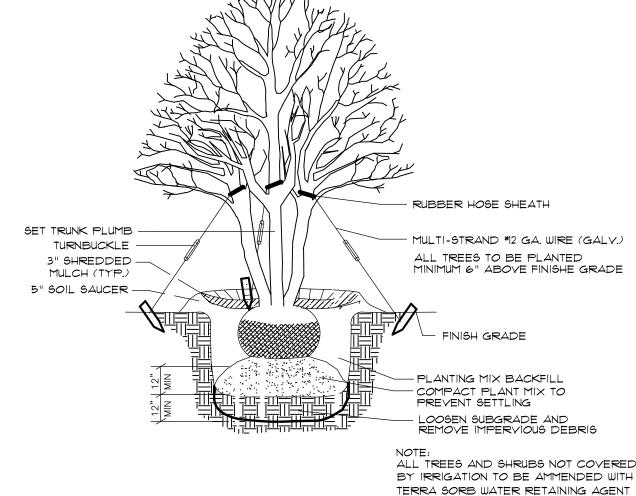
LANDSCAPE DETAILS

WRJ

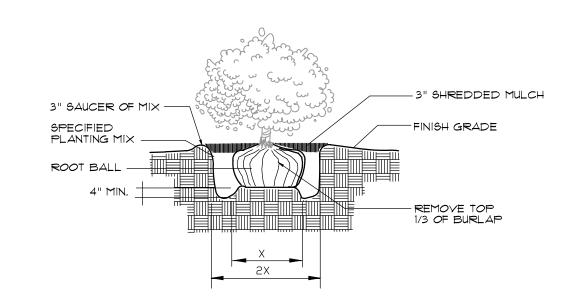
SHEET NUMBER



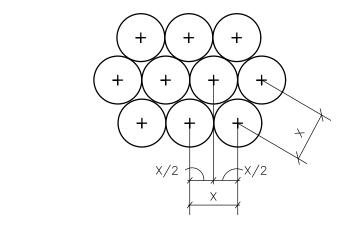






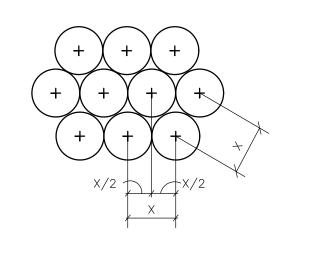


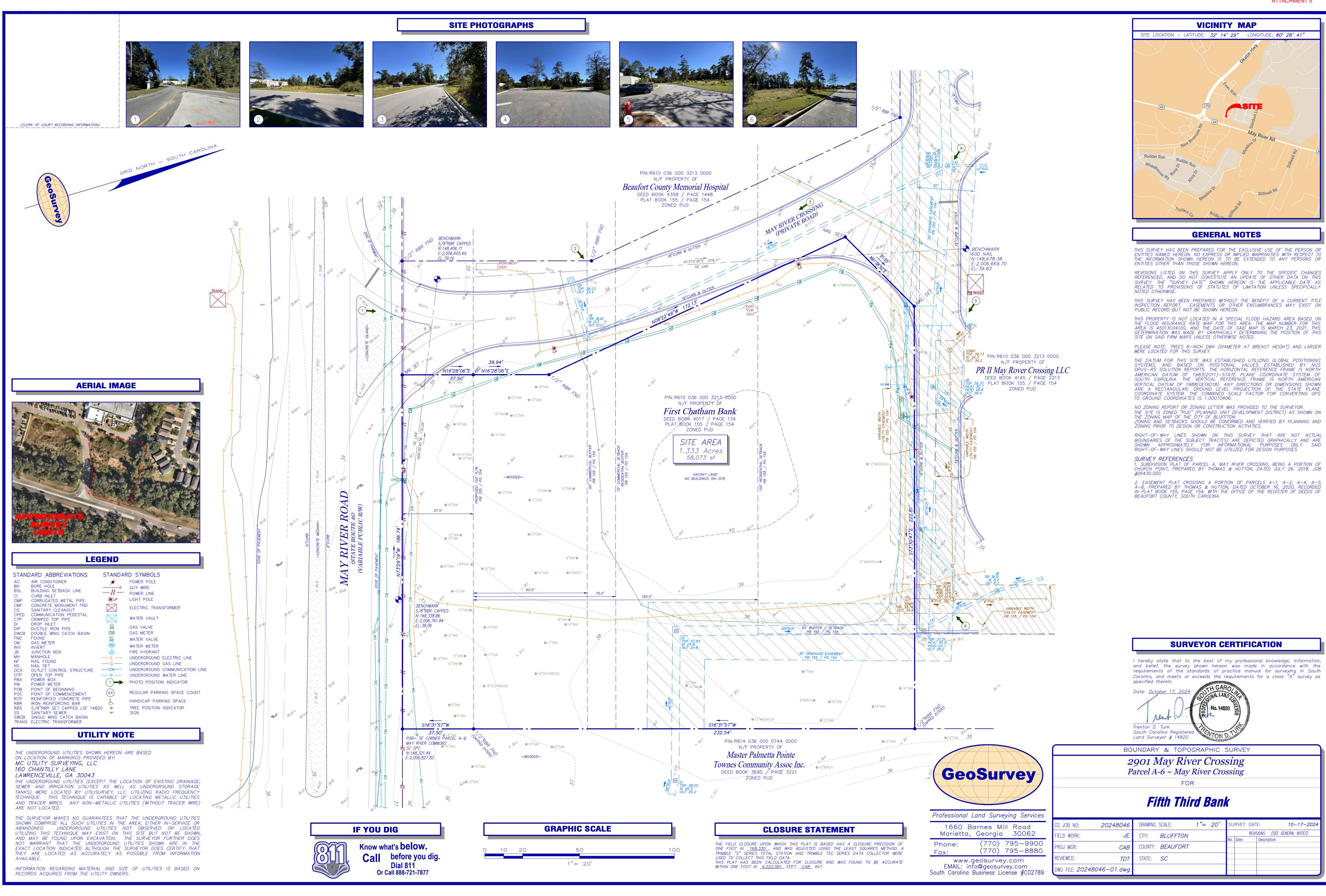
B&B SHRUB DETAIL NOT TO SCALE

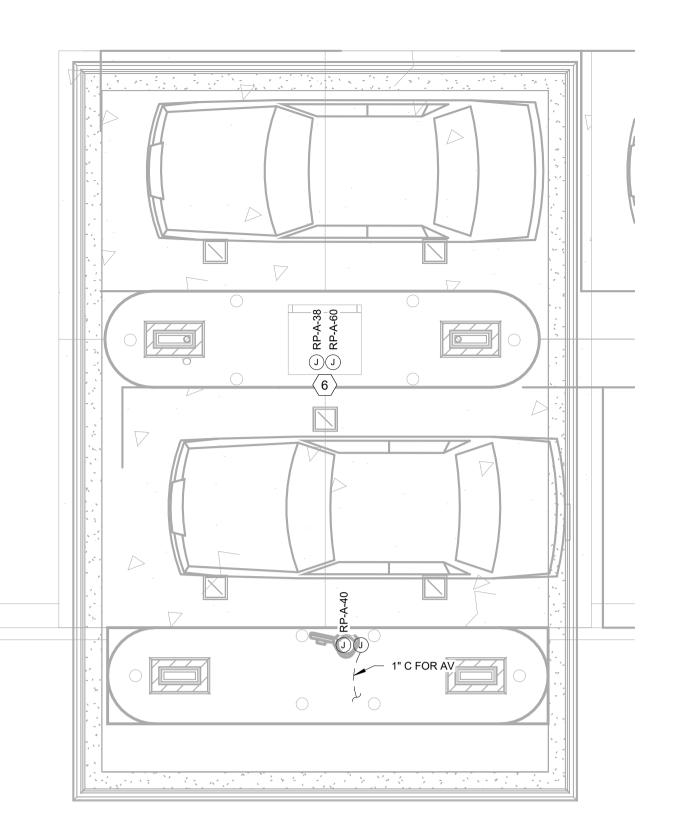


NOTES: 1. SEE PLANTING PLANS FOR SHRUB & GROUNDCOVER BED AREAS. 2. ROWS SHALL BE STRAIGHT & PARALLEL. 3. SPACING SHOWN ON PLANT SCHEDULE  $(\times)$ .

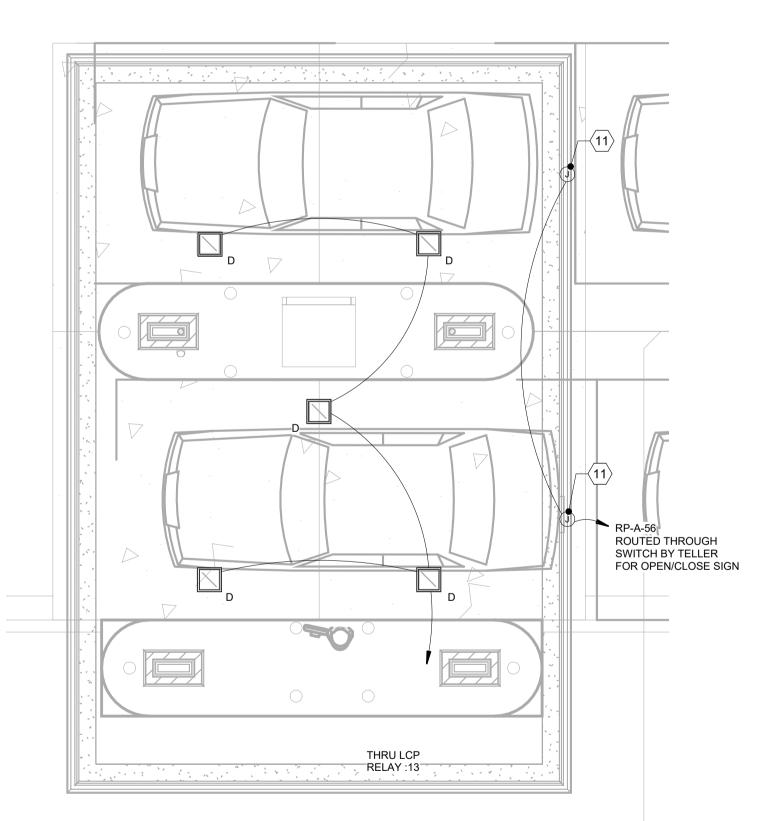
DETAIL TYPICAL STAGGERED ROW SPACING NOT TO SCALE



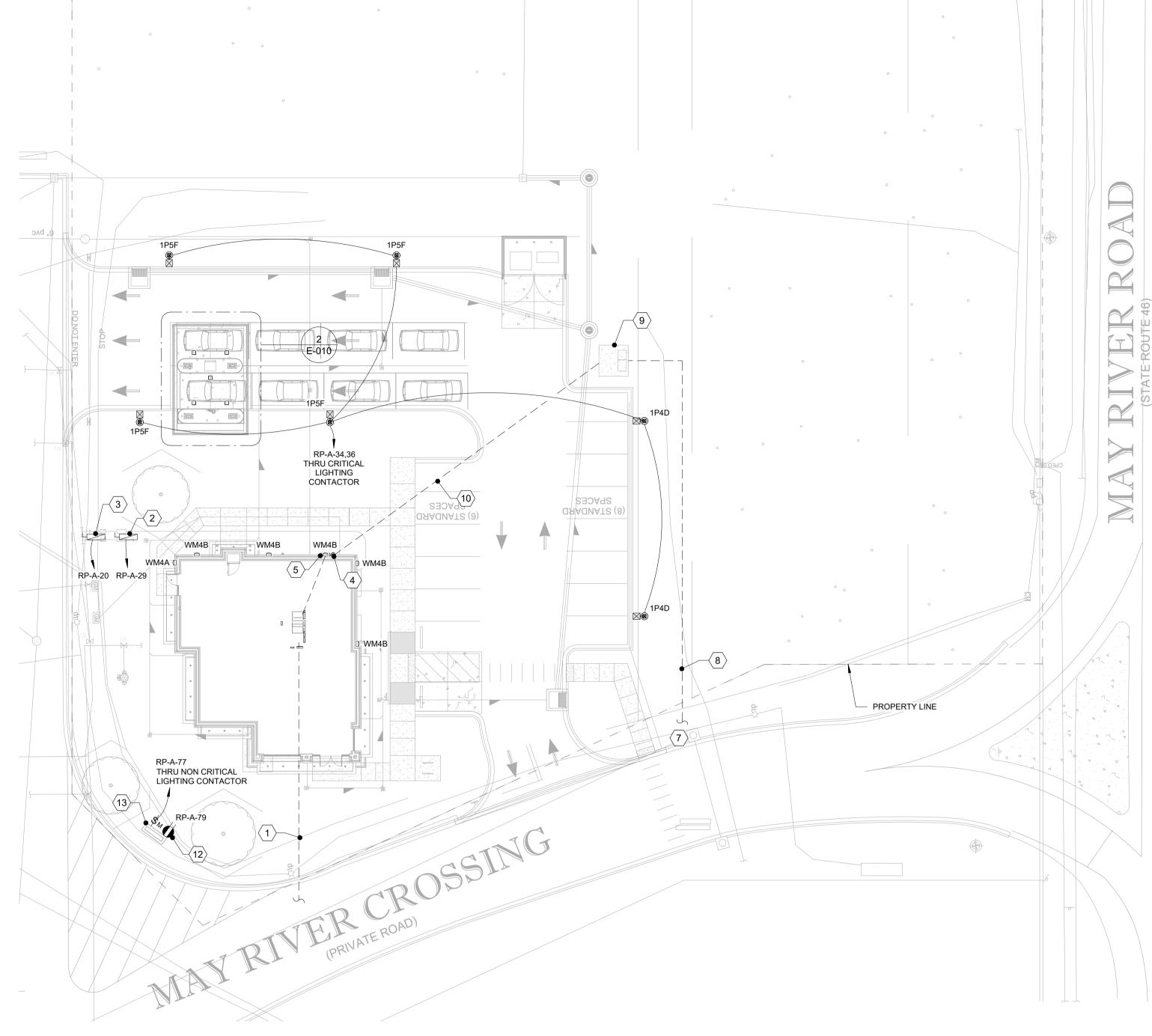




#### 2 ELECTRICAL POWER & AUXILIARY RDT PLAN 1/4" = 1'-0"



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



ELECTRICAL SITE PLAN ¹/ 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	
D	LED 12"X12" SQUARE LENSED RECESSED LUMINAIRE, TEMPERED GLASS LENS, TRIM FINISHED IN MATTE WHITE COLOR. U.L. LISTED WET LOCATION	LSI	XSPS-S-LED-SS-NW-120-GWT-DFL	RECESSED	LED	-	120 V	31 VA	
WM4A	WALL BRACKET LED LUMINAIRE, DIE CAST ALUMINUM HOUSING, TYPE 4 DISTRIBUTION, DARK BRONZE FINISH. FULL CUTOFF	LSI	XWM 4 LED 12L 40 UE BLK	WALL MOUNTED AT 12'-0" ABOVE FINISHED GRADE TO CENTERLINE OF FIXTURE		-	120 V	77 VA	SEE E-130 FOR CONNECTION
WM4B	WALL BRACKET LED LUMINAIRE, DIE CAST ALUMINUM HOUSING, TYPE 3 DISTRIBUTION, DARK BRONZE FINISH. FULL CUTOFF	LSI	XWM 4 LED 4L 40 UE BLK	WALL MOUNTED AT 12'-0" ABOVE FINISHED GRADE TO CENTERLINE OF FIXTURE		-	120 V	30 VA	SEE E-130 FOR CONNECTION

#### **LIGHTING FIXTURE SCHEDULE NOTES:**

- 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. 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.
- REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT NECESSARILY BE REFLECTED IN CATALOG NUMBER AND/OR DESCRIPTION IN THIS SCHEDULE

#### SHEET NOTES:

- COORDINATE ALL SITE CONDUIT ROUTINGS WITH GENERAL
  - CONTRACTOR. 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.
- ALL UNDERGROUND WIRING SHALL BE LOCATED WITHIN 12" OF BACK OF CURB IN ALL LOCATIONS.
- 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. ALL UTILITY SERVICE SHALL BE VERIFIED WITH THE UTILITY COMPANIES

PRIOR TO BIDDING AND ALL RESULTING COSTS SHALL BE INCLUDED IN

- ACTUAL INSTALLATION OF ALL UTILITY SERVICES SHALL BE ACCORDING
- TO FINAL UTILITY COMPANY PLANS. PROVIDE PULLWIRE IN ALL EMPTY CONDUITS.

USE JOINT TRENCHING WHEREVER POSSIBLE.

**ELECTRICAL UTILITY CONTACT: TELEPHONE UTILITY CONTACT:** 

#### **KEYED NOTES:**

- 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
- IRRIGATION BACKFLOW. VERIFY LOCATION DISCONNECT SHALL BE NEMA 3R.
- DDCV HOTBOX(ONLY NORTHERN PROJECT-REMOVE ON FL PROJECT). VERIFY LOCATION - DISCONNECT SHALL BE NEMA 3R.
- 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.
- MANUAL TRANSFER SWITCH(MTS). PROPOSED ELECTRICAL SERVICE DISCONNECT MOUNTED ON BUILDING EXTERIOR. REFER TO ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.
- DRIVE-THRU ATM: PROVIDE CONDUIT AND WIRING FOR ATM. REFER TO DETAIL ON SHEET E-500 FOR ADDITIONAL INFORMATION.
- STUB-OUT AND TERMINATE PER UTILITY COMPANY REQUIREMENTS. VERIFY LOCATION OF HIGH VOLTAGE SERVICE POINT PRIOR TO BIDDING AND INCLUDE ALL COST IN BID.
- (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.
- 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.
- 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. DRIVE THROUGH LANE OPEN/CLOSE GANG SWITCHES. PROVIDE CONSTANT HOT & NEUTRAL. LCP SHALL NOT CONTROL OPEN/CLOSE/ATM SIGNS. SEE DETAIL 9 ON E-500. COORDINATE PLACEMENT WITH ARCHITECT PRIOR TO
- MAINTENANCE RECEPTACLE: PROVIDE 120V, 20A, GFCI WEATHER-RESISTANT DUPLEX RECEPTACLE IN WEATHERPROOF SURFACE MOUNTED BELL BOX WITH "EXTRA DUTY WHILE-IN-USE" METALLIC COVER.
- MONUMENT SIGN POWER: COORDINATE EXACT LOCATION OF SIGNAGE STUB-UP WITH SIGN VENDOR AND MAKE FINAL ELECTRICAL CONNECTIONS. PROVIDE 120V, 20A, TOGGLE SWITCH IN METALLIC BELL BOX WITH METALLIC WEATHERPROOF COVER IF DISCONNECT IS NOT FURNISHED WITH MONUMENT SIGN. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS.

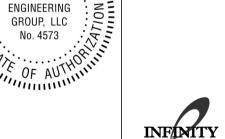
400 N Ashley Drive, P: 813 - 323 - 9233 Lic. #: AA - 0003590 Tampa, FL 33602 W: www.bdgllp.com

5/3 FIFTH THIRD

HESE DRAWINGS AND PLANS, ANY REPRODUCTION THEREOF, AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTORS SHALL NOT SUITABLET AND CONSTRUCTION THE FLANS. THE FLANS THE FLANS THE FLANS THE FLANS THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS, REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL
OF BDG ARCHITECTS; ANY CONSTRUCTION EXECUTED FROM THESE PLANS
WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY
CHANGE IN THE SCOPE, DESIGN, OR INTENT OF THESE PLANS FOR ANY
REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL
AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG
ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND
COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, OR
DAMAGES INCLUDING ERRORS AND OMISSIONS ARSINING OUT OF OR
PEL ATED TO THE PLANS ANY DISCREPANCIES OR CONFILICITS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CLARIFICATION PRIOR TO CONTINUING WITH THE WORK. FAILURE TO REFER DISCREPANCIES OR CONFLICTS TO BDG ARCHITECTS PRIOR TO PERFORMING WORK SHALL RESULT IN THE WAIVER OF ANY CLAIMS OR DAMAGES ASSOCIATED WITH THE DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY

ANDREW MOHR SC PE# ELS.32784 E

UBCONTRACTORS OR OTHER TRADES WITH THE DESIGN DOCUMENTS



INFINITY

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

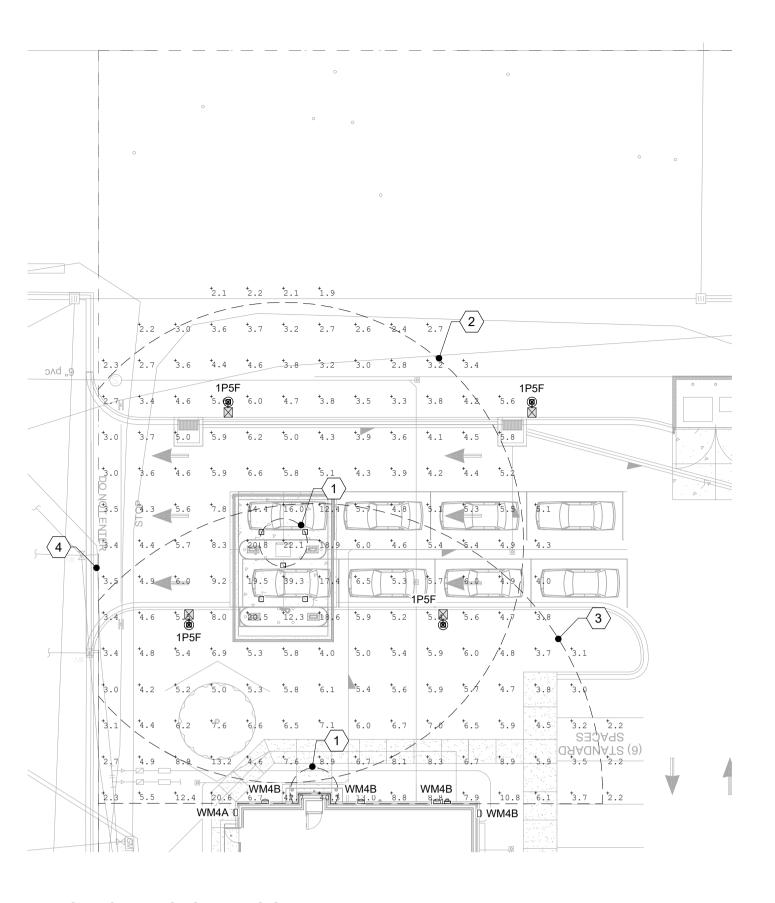
PROJECT INFORMATION BLOCK

JOB# 240634/15-360.00 DATE: 03/21/2025 **DRAWN BY:** CHECKED BY:

SHEET TITLE

ELECTRICAL SITE PLAN AND REMOTE DRIVE THRU





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

## | \$\dagged\_10 \dagged\_20 \dagged\_ $\begin{bmatrix} 4.1 & 5.6 & 5.0 & 6.3 & 6.2 & 6.9 & 6.1 & 5.6 & 6.0 & 5.6 & 5.4 & 4.5 & 3.8 & 3.0 & 2.6 & 2.8 & 2.6 & 2.4 & 3.2 & 3.2 & 3.2 & 5.3 & 5.2 & 5.1 & 5.1 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.0 & 5.$ 2.4 2 7.8 11.4 38.2 129 3 0.3 2.6 33. || to.o| | to.o| to.o to.o to.o to 0 \\ to .0 \\ to .0 to .2 to .3 0.0 to.0 to.1 to.5 to.0 to.3 25.6 2.3 0.3 0.8 0.8 1.0 1.0 0.9

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

CALCULATION SUMMARY AT 36" AFG								
LABEL	CALCTYPE	UNIT	AVG	MAX	MIN	AVG/MIN	MAX/MIN	
DRIVE-UP ATM - 5FT COMPLIANCE	ILLUMINANCE	FC	28.07	35.7	13.6	2.06	2.63	
DRIVE-UP ATM - 50FT COMPLIANCE	ILLUMINANCE	FC	6.59	38.6	2.4	2.75	16.08	
NIGHT DEPOSITORY - 5FT COMPLIANCE	ILLUMINANCE	FC	41.14	59.0	14.2	2.90	4.15	

NIGHT DEPOSITORY - 60FT COMPLIANCE | ILLUMINANCE | FC | 8.32 | 59.0 | 2.2 | 3.78 | 26.82

CALCULATION SUMMARY AT GRADE								
LABEL	CALCTYPE	UNIT	AVG	MAX	MIN	AVG/MIN	MAX/MIN	
PARKING LOTS	ILLUMINANCE	FC	4.20	28.5	0.9	4.67	31.67	
PROPERTY LINE	ILLUMINANCE	FC	0.46	3.4	0.0	N.A.	N.A.	

#### SHEET NOTES:

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.

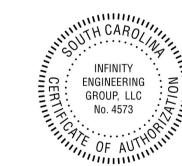
#### **LIGHTING STANDARDS:**

#### 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
- AREAS WITHIN SIXTY (60) FEET OF THE ATM AND AFTER-HOUR DEPOSITORY. IN THE EVENT THE ATM OR AFTER-HOUR DEPOSITORY IS IS GENERALLY ACCESSIBLE FROM THE ADJACENT SIDE, THERE SHALL BE A MINIMUM OF TWO (2) FOOT CANDLE POWER ALONG THE FIRST BUILDING.
- IF THE ATM OR AFTER-HOUR DEPOSITORY IS LOCATED INSIDE A SIDEWALK, A MINIMUM 2 FOOT CANDLE POWER SHALL BE FOR THE FIRST 5 UNOBSTRUCTED FEET FROM THE DOOR. THE MINIMUM FOOT
- A MINIMUM OF TWO (2) FOOT CANDLE POWER IN THE IMMEDIATE AREA
- 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

#### **KEYED NOTES:**

- ATM/AFTER-HOUR DEPOSITORY FIVE FOOT COMPLIANCE AREA: A MINIMUM OF TEN (10) FOOT CANDLE POWER AT THE FACE OF THE ATM/AFTER-HOUR DEPOSITORY EXTENDING OUTWARD FIVE (5) FEET IN ALL UNOBSTRUCTED
- 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.
- 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.
- BANK CONTROLLED PROPERTY LINES: THE MINIMUM FOOT CANDLE READING WILL BE LIMITED TO BANK CONTROLLED PROPERTY LINES.



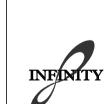


400 N Ashley Drive, P: 813 - 323 - 9233 Suite. 600 Lic. #: AA - 0003590 Tampa, FL 33602 W: www.bdgllp.com

5/3 FIFTH THIRD

HESE DRAWINGS AND PLANS, ANY REPRODUCTION THEREOF, AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OF ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTORS SHALL NOT BE SCALED OR MODIFIED FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS, REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY CHANGE IN THE SCOPE, DESIGN, OR INTENT OF THESE PLANS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, O DAMAGES INCLUDING ERRORS AND OMISSIONS ARISING OUT OF OR RELATED TO THE PLANS. ANY DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CLARIFICATION PRIOR TO CONTINUING WITH THE WORK, FAILURE TO REFER DISCREPANCIES OR CONFLICTS TO BDG ARCHITECTS PRIOR TO ERFORMING WORK SHALL RESULT IN THE WAIVER OF ANY CLAIMS OR DAMAGES ASSOCIATED WITH THE DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONTRACTORS OR OTHER TRADES WITH THE DESIGN DOCUMEN'

ANDREW MOHR SC PE# ELS.32784 E



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

PROJECT INFORMATION BLOCK

JOB# 240634/15-360.00 DATE: 03/21/2025 **DRAWN BY:** 

ΑM

SHEET TITLE

CHECKED BY:

ELECTRICAL PHOTOMETRIC SITE PLAN

**SHEET NUMBER** 

**ATTACHMENT 5** 

5/3 FIFTH THIRD

THESE DRAWINGS AND PLANS, ANY REPRODUCTION THEREOF, AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF BDG ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTION SHALL BY BY ANY PURPOSE WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS, RECARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS: ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY CHANGE IN THE SCOPE, DESIGN, OR INITENT OF THESE PLANS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, OR DAMAGES INCLUDING ERRORS AND OMISSIONS ARISING OUT OF OR RELATED TO THE PLANS. ANY DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CLARIFICATION PRIOR TO CONTINUING WITH THE WORK, FAILURE TO REFER DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS PRIOR TO PERFORMING WORK SHALL RESULT IN THE WAIVER OF ANY CLAIMS OR DAMAGES ASSOCIATED WITH THE DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONTRACTORS OR OTHER TRADES WITH THE DESIGN DOCUMENTS.

Infinity Engineering Group 1208 East Kennedy Boulevard, Tampa, Florida 33602 Phone: 813.434.4770 SC Cert. of Auth# 4573

AM

K,V 03/21/25 ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK 240634/15-360.00

ELECTRICAL SITE

SHEET NUMBER

CUSTOMER NAME PROJECT NAME \_\_\_ 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 formfactor. They are ideal for commercial property site-lighting applications such as retail and commercial exteriors.

#### **Lumen Maintenance**

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**

	7,000 - 30,300 Type II, III, IV & V
_	126 - 160 LPW 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	< 20% at rated watts

#### **Surge Protection**

	TYPICAL (120 STRIKES)	
6kV/3kA*	10kV/5kA*	20kV/10kA*
*Per ANSI C136.2-2015		

DLC	DLC LISTED	

Current @	LED.com
our one	© 2023 Current Lighting Solutions, LLC. All rights reserved, Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

OPTICS	LXX(10K) @ HOURS		
0, 1100	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

**Luminaire Ambient Temperature Factor** 

10	1.02	30	0.99
20	1.01	40	0.98
25	1.00		

Operating Temperature:	-40° C to 40° C
	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

#### 5 Year (Standard) 10 Year (Optional)

Warranty

		16 Not available with 20kV/10kA SI
66	IK08	,
	Page 1 of 9	Current @
(Re	v 06/26/23)	Current @

OLP3111\_R04

Note Standard Dimming is 0-10V
 Not available in 277-480V

Not available in 347V, 480V or 347-480V
 Only available with F,H,J,K optics

<sup>4</sup> Supplied with 3ft leads

<sup>5</sup> Supplied with 16/3 ft Cable

EVOLVE

LED Outdoor Area Light

Ordering Information

**EALS Series** 

EALS 03

\_\_\_\_

AL= Area Light

Page 2 of 9 (Rev 06/26/23) © 2023 Current Lighting Solutions, LLC. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions. OLP3111\_R04

CUSTOMER NAME PROJECT NAME

CATALOG NUMBER

D = ANSI C136.417-Pin Receptacle with Shorting Cap

 50 = X = Non dimming, no external dimming leads<sup>13</sup>
 E<sup>3</sup> = ANSI C136.41
 K14.6 = Knuckle C136.41
 Knuckle Slipfitter: For 1.9 in. - Dimming PE Control
 C0 Tenon

for round or

S1<sup>4, 6</sup> = Knuckle Slipfitter: For 2.3 in. -3.0 in OD Tenon

V1<sup>4, 6</sup> = Knuckle Wall Mount

\_ \_\_ \_\_ \_\_\_

DKBZ H = Motion Sensor<sup>3, 14, 16</sup>
= Dark (Sensor Switch)
Bronze

WHTE = H2 = Daintree enabled White motion sensor<sup>14,16</sup>

(WattStopper) 14

J = cUL/Canada

L = Tool-Less Entry

S112 = Rotated Left

S212 = Rotated Right

T = Extreme Surge Protection

U 7 = DALI Programmable

Y10 = Coastal Finish

XXX = Special Options

V = 3 Position Terminal Block

Protection (10kV/5kA)

DATE \_\_\_\_

40 = D = External 4000K Dimming 18/2 3 ft Cable

\_\_ \_ \_

RODUCT ID GENERATION VOLTAGE OPTICAL CODE DISTRIBUTION CRI CCT DIMMING<sup>2</sup>

Symmetric High Angle

AN = Asymmetric Narrow/Auto

E<sup>1,9</sup> = 277-480V Fx = 15000 lm SH =

2 = 208V Kx = 30000 lm AW =

3 = 240V

4 =277V

D = 347V

5 = 480V

<sup>1</sup> Not Available with Fusing, Must Choose a Discrete Voltage with "F" Option Code

<sup>13</sup> Required for Cx optical codes only, not available for other optic codes

<sup>15</sup> DALI option not available with 347V, 480V, or 347-480V

Restricted Aiming Angle of 0-45°
 Compatible with LightGrid Wireless Control Nodes, Not Compatible with Motion Sensor Control

<sup>10</sup> Recommended for installations within 750 feet from coast. Lead time varies, check with factory.

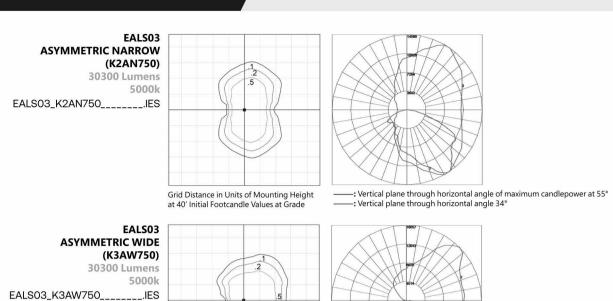
Select 3000K CCT for IDA approved fixtures.
 For aimed left of right light distribution orientation, as assembled in manufacturing. Not applicable for Symmetric Distributions

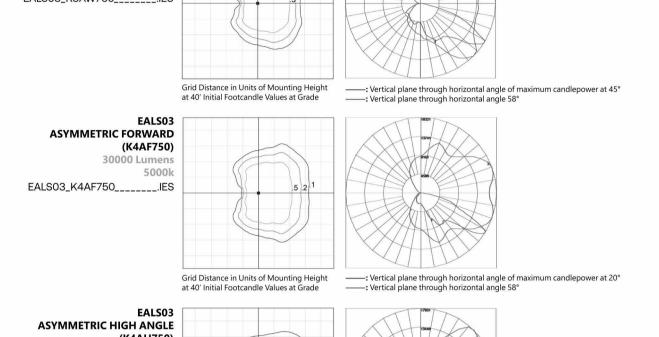
Hx = 20000 lm AF =

#### $E \lor \bigcirc L \lor E$ **EALS Series**

LED Outdoor Area Light

CUSTOMER NAME		
PROJECT NAME		
DATE	TYPE	
CATALOG NUMBER		





29000 Lumens 5000k EALS03_K4AH750IES	,5 2	
	Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade	: Vertical plane through horizontal angle of maximum candlepower at 45°: Vertical plane through horizontal angle 70°

Current @	LED.com
Odifolice	© 2023 Current Lighting Solutions, LLC. All rights reserved. Information and specifications subject to ci without notice. All values are design or typical values when measured under laboratory conditions.

Page 4 of 9 (Rev 06/26/23) OLP3111\_R04

INFINITY ENGINEERING GROUP, LLC No. 4573 ENGINEERING



**ATTACHMENT 5** 

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

5/3 FIFTH THIRD

THIRD 2500 MAY F BLUFFT

THESE DRAWINGS AND PLANS, ANY REPRODUCTION THEREOF, AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR USED IN ANIY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF BDG ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTABLITY OF THE PLANS. THE PLANS SHALL NOT BE SCALED OR MODIFIED FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS, REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY CHANGE IN THE SCOPE, DESIGN, OR INTENT OF THESE PLANS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, OR DAMAGES INCLUDING ERRORS AND OMISSIONS ARISING OUT OF OR RELATED TO THE PLANS. ANY DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CLARIFICATION PRIOR TO CONTINUING WITH THE WORK, FAILURE TO REFER DISCREPANCIES OR CONFLICTS TO BDG ARCHITECTS. THE PLANS OR DAMAGES ASSOCIATED WITH THE DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONTRACTORS OR OTHER TRADES WITH THE DESIGN DOCUMENTS.

ANDREW MOHR SC PE# ELS.32784 E



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

BY	DATE	DESCRIPTION			
K,V	03/21/25	ISSUE FOR PERMIT			

PRO	OJEC	T INFO	RMATION BLOCK			
JOB	#		240634/15-360.0			
DATI	E:		03/21/2025			
DRA	WN BY	<b>':</b>	KL			

AM

CHECKED BY: SHEET TITLE

> **EXTERIOR LIGHTING CUTSHEETS**

SHEET NUMBER

**XSPS** 





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

	QUICK LINKS	
-	QUICK LINKS	

QUICK	LINKS

**Electrical** 

• 120-347VAC 50/60Hz

Lumen Maintenance chart)

(-40°F to 95°F) for SHO.

Power factor: >0.90

Total harmonic distortion: <20%</li>

• L80 Calculated Life: >100k Hours (See

Operating temperature: -40°C to 40°C

• 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

Driver complies with FCC standards.

potting material for moisture resistance.

lumen versions.

59	QUICK LINKS			
04	GOICK LINKS			
7.5	_			
3.5)	Ordering Guide	Performance	Photometrics	Dimensions

#### **FEATURES & SPECIFICATIONS**

#### Construction

- Housing is die-formed aluminum with diffuse acrylic lens providing a waterresistant 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**

- · Symmetric distribution with excellent uniformity and a BUG rating of B2-UO-G1. Diffuse lens is standard to minimizing
- visibility of LEDs.
- Select high-brightness LEDs. Available in 5000K, 4000K and 3000K
- Color temperatures per ANSI C78.377.

- High-performance factory programmable LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/ driver features over-voltage, under voltage, short-circuit and over temperature resources/terms-conditions-warranty/ for protection with integral surge protection that meets IEEE C62.41.2 and ANSI C82.77.
- -5 Location Category C Low standards. Listed to UL 1598 and UL 8750 0-10 volt dimming (10% - 100%) standard.

Warranty

- Suitable For Damp Locations Meets Buy American Act requirements. Thermal protector standard on 5000-8000
  - 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
- (-40°F to 104°F) for HO and VHO. -40°C to IDA compliant with 3000K or lower color 45°C (-40°F to 113°F) for SS. -40°C to 35°C temperature.

#### **XSPS LED Soffit Light**

		Light		Color	Input	1/		
Prefix	Distribution	Source	Drive Current	Temperature	Voltage	Finish	Lens	Options
XSPS - LED Soffit	S - Symmetric	LED	SS - 4,000 Lumens HO - 5,000 Lumens VHO - 6,000 Lumens	CW - 5000K 80 CRI NW - 4000K 80 CRI WW - 3000K 80 CRI	120 - 120V 208 - 208V 240 - 240V 277 - 277V 347 - 347V	<b>GWT</b> - Gloss White	<b>DFL</b> - Diffused Acrylic Lens	<b>CMT</b> - Channel Bar Mounting Kit <b>BB</b> - Emergency Battery Pack <sup>1</sup>

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

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

#### **PERFORMANCE**

**ORDERING GUIDE** 

Lumen Package Distribution		Long			3000K CCT			4000K CCT			<b>5000K CCT</b>				
	Type	Lens Type				CRI	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		
НО	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		
SH0	S	DFL	80	7559	113	B3-U0-G1	7965	119	B3-U0-G1	7853	118	B3-U0-G1	67		

Electrical Data (Amps)*										
Lumen Package	Wattage	120V	208V	240V	277V	347V				
SS	31	0.26	0.15	0.13	0.11	0.09				
НО	40	0.33	0.19	0.16	0.14	0.11				
VHO	49	0.41	0.23	0.2	0.18	0.14				
SH0	67	0.56	0.32	0.28	0.24	0.19				

lectrical	data	at 25C	(77F).	Actual	wattage	may	differ b	oy +/-1	0%.

RECOMMENDED LUMEN MAINTENANCE					
Ambient Temp C	Initial <sup>1</sup>	25K hrs.1	50K hrs.1	75K hrs.²	100K hrs. <sup>2</sup>
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
- 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.

Minimum CRI of 80.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com (800) 436-7800 • ©LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice. Page 1/4 Rev. 08/22/22 SPEC.2036.A.0320 LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com (800) 436-7800 • @LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice.

Page 2/4 Rev. 08/22/22 SPEC.2036.A.0320

Back to Quick Links



#### Mirada Medium Wall Sconce (XWM)

Outdoor Wall Sconce



OVER	RVIEW
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. F

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, PC	

**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

#### • 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**

available.

• High-performance programmable driver features over-voltage, under-voltage, shortcircuit and over temperature protection. Custom lumen and wattage packages

- 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%</li>
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F)
- 15L operating temperature: -40°C to +45°C
- 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 stavs 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
- 2 fasteners secure the hinged door underneath the housing and provide quick &
- easy access to the electrical compartment for installing/servicing. • Optional terminal block accepts up to 12 ga

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

#### 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. IKO8 rated luminiare 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 **A Have questions?** Call us at (800) 436-7800 **ORDERING GUIDE**

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 <sup>1</sup>	<b>30</b> - 3000K <b>40</b> - 4000K <b>50</b> - 5000K <b>AMB</b> - Phosphor Converted Amber <sup>2</sup>		
Voltage	Finish	Controls		Options		
<b>UE</b> - Universal Voltage (120-277V) <b>HV</b> - 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		stem with 8-12' Motion Sensor stem with 12-20' Motion Sensor n & Photo Sensor Controller (8-24' MH) <sup>3</sup> n & Photo Sensor Controller (25-40' MH) <sup>3</sup> d to housing exterior and Photocell Sensor (8-24' MH) <sup>3,4</sup>	Blank - None BB - Battery Back-up (0°C) <sup>5</sup> CWBB - Cold Weather Battery Backup (-20°C) <sup>5</sup> XPMA - Pole Mounting Bracket SP1 - 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 <sup>6</sup>		MOUNTING ACCESSORY ORDERING INFORMATION		
Part Number	Description	Part Number <sup>8</sup>	Description	
FK120 <sup>7</sup>	FK120 - Single Fusing	356915CLR	XWM Wet Location Surface Conduit/Wiring Box	
FK277 <sup>7</sup>	FK277 - Single Fusing	751632	10' Linear Bird Spike Kit (2' Recommended per Luminaire)	
FK347 <sup>7</sup>	FK347 - Single Fusing			
DFK2087	DFK - Double Fusing			
DFK2407	DFK - Double Fusing (240V)			
DFK480 <sup>7</sup>	DFK - Double Fusing (480V)			

**PCI347** - 347V

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	IMSBTxL is field configurable via the Leviton app that can be downloaded from your smartphone's app store.

6 Accessories are shipped separately and field installed. Fusing must be located in a hand hole for pole or in the junction box. 8 "CLR" to be replaced by paint finish selection. See Finish options for paint color selections.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • (513) 372-3200 • www.lsicorp.com ©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

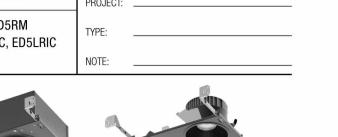


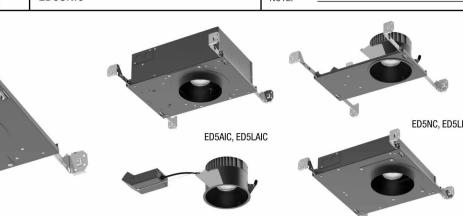
4000K (90CRI)

Patent: csllighting.com/patents

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





ED5ANC, ED5LANC				ED5RM, ED	D5LRIC To the state of the stat	
LED LIGHT ENGINE					SILENT VU™ OPTICS	TECHNOLOGY
RATED WATTAGE	29.5W, 24W,	29.5W, 24W, 15.3W			OPTICS	50° Installed, 10°, 30°, 80° availab
DELIVERED LUMENS	Up to 2657 In	n			ADJUSTABLE	0° to 45° tilt (Adjustable housings o
EFFICACY	Up to 104 LPW				MEDIA	Clear, Solite, Frosted, Linear Spread
CCT @ 90CRI	2700K, 3000	K, 3500K, 400	OK, Warm Dim		DOWED CHEDIN	
COLOR QUALITY	90+ CRI, 2-St	tep SDCM			POWER SUPPLY	
LED LIFETIME	55,000 hours	55,000 hours @ L90			INPUT VOLTAGE	120/277V, 50/60Hz
00,000 110013 © 200				DIMMING	TRIAC, ELV, 0-10V, dims to 1%	
DELIVERED LUMENS	MATRIX				SERVICABILITY	Below Ceiling Access
ED5 (29.5W)	10° Optic	30° Optic	50° Optic	80° Optic		-
2700K (90CRI)	2275 lm	2403 lm	2139 lm	1624 lm	TRIM OPTIONS	TRIM COLORS

					Billinia	1111/10, EEV, 0 10	v, diffic to 170
DELIVERED LUMENS N	IATRIX				SERVICABILITY	Below Ceiling Acc	cess
ED5 (29.5W)	10° Optic	30° Optic	50° Optic	80° Optic			
2700K (90CRI)	2275 lm	2403 lm	2139 lm	1624 lm	TRIM OPTIONS	TRIM COLORS	
3000K (90CRI)	2458 lm	2597 lm	2311 lm	1755 lm	<ul> <li>Fixed or Adjustable</li> </ul>	<ul> <li>White</li> </ul>	<ul> <li>Black w/ White Flange</li> </ul>
3500K (90CRI)	2516 lm	2657 lm	2366 lm	1796 lm	Round or Square	<ul> <li>Black</li> </ul>	<ul> <li>Silver w/ White Flange</li> </ul>
4000K (90CRI)	2590 lm	2735 lm	2435 lm	1849 lm	<ul><li>Standard or Trimless</li><li>Wall Wash</li></ul>	<ul> <li>Champagne</li> </ul>	
ED5 NIC, RIC (15.3W)	10° Optic	30° Optic	50° Optic	80° Optic	Wet Location	Champagne v	// White Flange
Warm Dim (98 CRI, R9>90)	1030 lm	1081 lm	992 lm	723 lm	HOUSING INSTALLATION	J	
ED5 AIC, ANC (24W)	10° Optic	30° Optic	50° Optic	80° Optic	New Construction include		adjustable hanger bars
Warm Dim (98 CRI, R9>90)	1472 lm	1545 lm	1418 lm	1033 lm	<ul> <li>Remodel option available</li> </ul>		
					<ul> <li>5/8" ~ 2" ceiling thicknes</li> </ul>	SS	
ED5L (15.3W)	10° Optic	30° Optic	50° Optic	80° Optic	Min Plenum Height: 2½"		
2700K (90CRI)	1348 lm	1424 lm	1268 lm	963 lm	Ceiling Material: Drywall.		
3000K (90CRI)	1457 lm	1539 lm	1370 lm	1040 lm	Steel junction box with up	3	
3500K (90CRI)	1491 lm	1575 lm	1402 lm	1065 lm	AIC, NIC, RIC, SNIC mode		
4000K (90CRI)	1535 lm	1621 lm	1443 lm	814 lm	<ul> <li>AIC, SNIC models are CCI</li> </ul>	3	
					(Note: polycell spray-in foam		3" from housing)
ED5S (24W)	10° Optic	30° Optic	50° Optic	80° Optic	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<i>5</i> /
2700K (90CRI)	1953 lm	2063 lm	1836 lm	1394 lm	LISTINGS AND WARRAN	TY	
3000K (90CRI)	2110 lm	2229 lm	1984 lm	1507 lm	cULus Listed	ASTM E283 (	Certified Airtight (AIC, NIC, RIC, SNIC Mo
3500K (90CRI)	2160 lm	2282 lm	2031 lm	1542 lm	UL Listed for Damp Location (Al	Styles) UL Listed for	Wet Location (Wet Location Trim Style)

14508 Nelson Ave. City of Industry, CA 91744 • tel: 626.336.4511 • fax: 626.330.4266 • www.csllighting.com

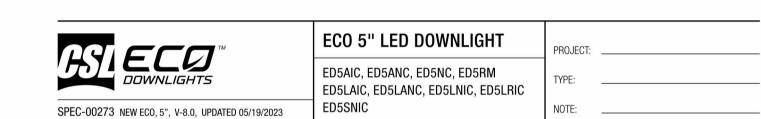


INFINITY ENGINEERING

GROUP, LLC No. 4573

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)



#### **ORDER MATRIX**

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

2223 lm 2348 lm 2090 lm 1587 lm

Warm Dim (98 CRI, R9>90) 1472 lm 1545 lm 1418 lm 1033 lm

©2023 Creative Systems Lighting, A Division of Troy-CSL Lighting, Inc. All rights reserved. Subject to change without notice.

	HOUSING BASE	LED PERFORMANCE			DRIVER ASSEMBLY		
FAMILY APERTURE	INSTALLATION TYPE	INSTALLATION TYPE CCT CRI OPTIC		OPTIC	WATTAGE	LED DIMMING DRIVER	
<b>ED5</b> ECO 5"	AIC (Adjustable New Construction, IC, CCEA)  ANC (Adj New Construction)  NC (New Construction)  RM (Remodel)	-27 (2700K) -30 (3000K) -35 (3500K) -40 (4000K)	<b>90</b> (90 CRI)	50 (50° Flood) Installed 10°, 30°, 80° optics additional Optics Accessories table below	<b>-30</b> (29.5W)	<b>S</b> Universal Dimming Drive (1%-100% 0-10V, TRIAC ELV, 120V/277V)	
ED5 ECO 5"	AIC¹ (Adjustable New Construction, IC, CCEA)  ANC¹ (Adj New Construction)  NIC¹ (New Construction IC)  RIC¹ (Remodel IC)	-WD² (1800K~3000K)  Warm Dim	<b>98</b> (98 CRI) Warm Dim	50 (50° Flood) Installed 10°, 30°, 80° optics available from the Additional Optics Accessories table below	-16¹ (15.3W)  NIC or RIC Installation Type only  -25¹² (24W)  AIC or ANC Installation Type only	S Universal Dimming Drive (1%-100% 0-10V, TRIAC ELV, 120V/277V)	

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

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

#### ED5S

Patent: csllighting.com/patents

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

14508 Nelson Ave. City of Industry, CA 91744 • tel: 626.336.4511 • fax: 626.330.4266 • www.csllighting.com ©2023 Creative Systems Lighting, A Division of Troy-CSL Lighting, Inc. All rights reserved. Subject to change without notice





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



THESE DRAWINGS AND PLANS ANY PERPODUCTION THEREOF AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OF USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF BDG ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTABILITY OF THE PLANS. THE PLANS SHALL NOT BE SCALED OR MODIFIED FOR ANY PURPOSE WITHOUT THE EXPRESS
WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS,
REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS: ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY CHANGE IN THE SCOPE, DESIGN, OR INTENT OF THESE PLANS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, O DAMAGES INCLUDING ERRORS AND OMISSIONS ARISING OUT OF OR RELATED TO THE PLANS. ANY DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CLARIFICATION PRIOR TO CONTINUING WITH THE WORK, FAILURE TO REFER DISCREPANCIES OR CONFLICTS TO BDG ARCHITECTS PRIOR TO PERFORMING WORK SHALL RESULT IN THE WAIVER OF ANY CLAIMS OR DAMAGES ASSOCIATED WITH THE DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY

> ANDREW MOHR SC PE# ELS.32784 E

SUBCONTRACTORS OR OTHER TRADES WITH THE DESIGN DOCUMEN'



Tampa, Florida 33602 Phone: 813.434.4770 SC Cert. of Auth# 4573 ISSUE BY DATE DESCRIPTION

K,V 03/21/25 ISSUE FOR PERMIT

PROJECT INFORMATION BLOCK JOB# 240634/15-360.00 DATE: 03/21/2025 **DRAWN BY: CHECKED BY:** 

**EXTERIOR LIGHTING CUTSHEETS** 

**SHEET NUMBER** 

SHEET TITLE

DLSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances, Specifications subject to change without notice.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • (513) 372-3200 • www.lsicorp.com

Page 2/7 Rev. 08/03/23

400 N Ashley Drive, P: 813 - 323 - 9233

5/3 FIFTH THIRD

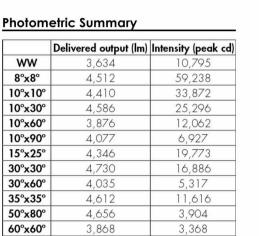
Lic. #: AA - 0003590

W: www.bdgllp.com

Suite. 600

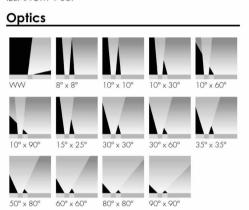
Tampa, FL 33602





90°x90° 4,070 2,132
Based on HO 40K full output, 4ft [1219mm], DMX/RDM configuration.
2.5° factory-set till setting for WW optic, 0° till setting for all other optics.

Photometric performance is measured in compliance with IESNA LM-79-08.



	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, Wal 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 6 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 Are
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 ir fixture lengths
Warranty	5-year limited warranty

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA info@lumenpulse.com www.lumenpulse.com www.lumenpulse.com www.lumenpulse.com www.lumenpulse.com www.lumenpulse.com/products/2556 F 514.937.6289 lumenpulse\* LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2022.12.19 copyright © 2022 LMPG Inc.
EM - R24

Performance

Weight

Maximum Delivered Output

#### Specification Sheet

Colors and Color Temperatures 2200K 2700K 3000K 3500K 4000K

ON/OFF DALI

IP68 IK10 Certifications

**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 L70 280,000 hrs, L95 35,000 hrs 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

**Electrical and control** 120 to 277 volts Fixture Cable Power and data in one cable Leader Cable Conductor 5C #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-**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 -40 °F to 122 °F

Inground Jumper Cable

Lumenfacade Inground Junction Box

Stainless steel

**Operating Temperature** Ingress Protection Rating IP68 rated for up to 1 ft, not suitable for permanent immersion applications Impact Resistance Rating IK10 Accessories (order separately) Lumenfacade Inground Leader Cable, Lumenfacade

**Electrical Accessories** 

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA info@lumenpulse.com | www.lumenpulse.com | www.lumenpulse.com | www.lumenpulse.com | www.lumenpulse.com | www.lumenpulse.com | www.lumenpulse.com | f 514.937.6289 | www.lumenpulse.com | lumenpulse<sup>™</sup> LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2022.12.19 copyright © 2022 LMPG Inc.
EM - R24

lumenfacade WHITE AND STATIC COLORS

Front and side views

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

4,730 lm (48 in fixture, 4000K, 30° x 30°, 0° tilt setting, DMX/RDM)

12 in: 7.5 lbs, 24 in: 15.3 lbs, 36 in: 21.4 lbs, 48 in: 27 lbs

THESE DRAWINGS AND PLANS, ANY REPRODUCTION THEREOF, AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF BDG ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTABILITY OF THE PLANS. THE PLANS SHALL NOT BE SCALED OR MODIFIED FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS, REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY CHANGE IN THE SCOPE, DESIGN, OR INTENT OF THESE PLANS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, OR DAMAGES INCLUDING ERRORS AND OMISSIONS ARISING OUT OF OR RELATED TO THE PLANS. ANY DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS FOR CLARIFICATION PRIOR TO CONFILING WITH THE WAVER, FAILURE TO REFER DISCREPANCIES OR CONFLICTS TO BDG ARCHITECTS PRIOR TO PERFORMING WORK SHALL RESULT IN THE WAVER OF ANY CLAIMS OR DAMAGES ASSOCIATED WITH THE DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONTRACTORS OR OTHER TRADES WITH THE DESIGN DOCUMENTS.

> ANDREW MOHR SC PE# ELS.32784 E



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

PROJECT INFORMATION BLOCK JOB# 240634/15-360.00 DATE: 03/21/2025 **DRAWN BY:** CHECKED BY: AM

SHEET TITLE

**EXTERIOR LIGHTING CUTSHEETS** 

SHEET NUMBER

2 / 11

