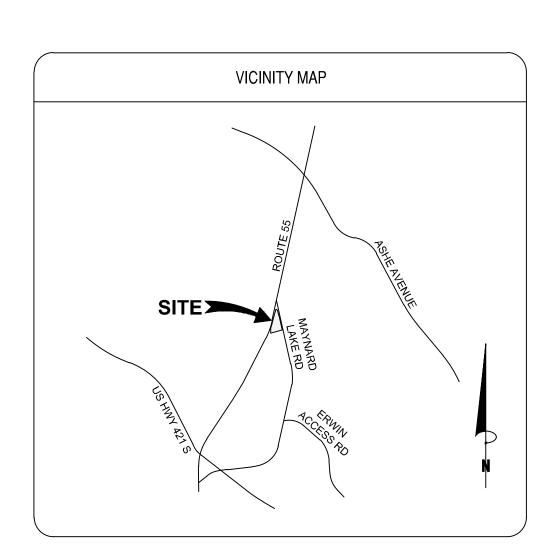
DOLLAR GENER



DEVELOPMENT DATA				
DEVELOPMENT NAME:	DOLLAR GENERAL			
STREET ADDRESS:	NC HIGHWAY 55			
	TOWN OF ERWIN			
	HARNETT COUNTY			
PROPERTY IDENTIFICATION #(PIN):	0598-92-2261			
PARCEL ID NUMBER (PID)	070598 0150			
DEED BOOK/PAGE:	2408/0828			
PLAT BOOK/PAGE:				
EXISTING ZONING:	B2 HIGHWAY BUSINESS (ZONING CASE ZT-2024-007)			
WATERSHED DISTRICT:	NONE			
OVERLAY DISTRICT:	PHASE II STORMWATER			
TOTAL SITE ACRES:	107,507 SF (2.47 AC) PROPOSED DOLLAR GENERAL PARCEL			
	TROFOSED DOLLAR GENERAL FARCEL			
INSIDE TOWN LIMITS:	NO			
EXISTING USE:	VACANT			
PROPOSED BUILDING USE:	RETAIL SALES			
PROPOSED TOTAL BUILDING AREA:	10,640 SF			
MAX BUILDING HEIGHT:	35 FT			
MIN LOT AREA:	20,000 SF			
MIN LOT WIDTH:	100 FT			
FRONT SETBACK:	30 FT			
SIDE SETBACK(RESIDENTIAL):	20 FT			
REAR SETBACK:	20 FT			
LANDSCAPE REQUIREMENTS:				
PERIMETER BUFFER	20 FT ADJACENT TO RURAL DISTRICT			
STREET FRONTAGE	5 FT			
PARKING REQUIREMENTS:				
TOTAL REQUIRED:				
TOTAL PROVIDED:	42			
ACCESIBLE SPACES PROVIDED:	2			
PARKING SPACE DIMENSIONS:	8'X20' MIN			
LOADING AREA:	1 PROVIDED 12'X55' MIN			
	12 7.00 191111			

IMPERVIOUS SUMMARY TABLE				
DOLLAR GENERAL SITE AREA = 107,507 SF (2.47 AC)				
BUILDINGS	10,640 SF	0.24 ACRES	9.90 % OF AREA	
PAVEMENT	21,745 SF	0.50 ACRES	20.23 % OF AREA	
SIDEWALK	2,080 SF	0.05 ACRES	1.93 % OF AREA	
TOTAL IMPERVIOUS AREA	34,465 SF	0.79 ACRES	32.06 % OF AREA	
GREEN/OPEN SPACE	73,042 SF	1.68 ACRES	67.94 % OF AREA	
EXISTING IMPERVIOUS AREA	5,175 SF	0.12 ACRES		
INCREASE IN IMPERVIOUS AREA	29,290 SF	0.67 ACRES		

HARNETT REGIONAL WATER NOTES:

CURRENT/FUTURE CAPACITY MAY NOT BE AVAILABLE. THIS DEVELOPMENT MAY REQUIRE ADDITIONAL IMPROVEMENTS TO THE EXISTING WATER AND WASTEWATER SYSTEM TO MEET FUTURE WATER AND WASTEWATER DEMANDS PRIOR TO A PRELIMINARY PLAT, CONSTRUCTION PLAN AND/OR FINAL PLAT

WATER AND SEWER CONSTRUCTION & TIE-IN WILL NEED TO BE COORDINATED AND INSPECTED BY

Proposed Dollar General Store

NC Highway 55 Town of Erwin Harnett County, NC

TENANT & DEVELOPER

Dollar General Corporation

Rhetson Companies, Inc. Attn. Greg Stewart 2075 Juniper Lake Road West End, NC 27376 (910) 944-0881 permits@rhetson.com

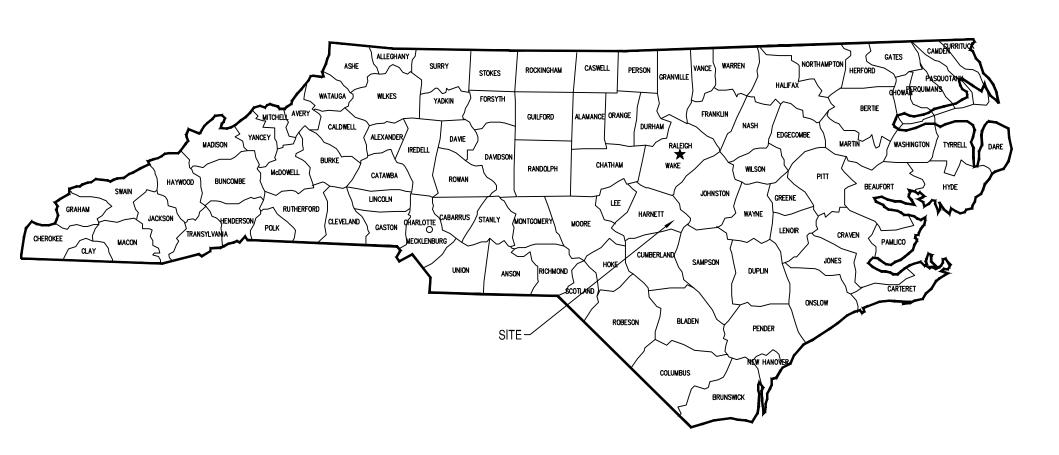


CIVIL ENGINEER

Bowman North Carolina, Ltd. 4006 Barrett Drive Suite 104 Raleigh, NC 27609 (919) 553-6570 mlowder@bowman.com FIRM# F-1445

CURRENT PROPERTY OWNERS

Dayna Bayless & Steve Wilford Murphy 175 Drum Inlet Morehead City, NC 28557



Index of Drawings				
SHEET NUMBER	SHEET TITLE			
C1.0	COVER SHEET			
C1.1	GENERAL NOTES, ABBREVIATIONS. AND LEGEND			
C2.0	DEMOLITION PLAN			
C2.1	EROSION CONTROL PLAN — INITIAL			
C2.2	EROSION CONTROL PLAN — FINAL			
C2.3	EROSION CONTROL NOTES			
C2.4 NORTH CAROLINA GENERAL PERMIT (NCGO				
C2.5 NCG01 SELF—INSPECTION FORM				
C3.0	SITE PLAN			
C3.1	VEHICLE EXHIBIT PLAN			
C4.0	GRADING PLAN			
C5.0	UTILITY PLAN			
C5.1	UTILITY DETAIL			
C6.0	EROSION CONTROL DETAILS			
C6.1	EROSION CONTROL DETAILS			
C6.2	CONSTRUCTION DETAILS			
C6.3	CONSTRUCTION DETAILS			
C6.4	STORMWATER MANGEMENT DETAILS (1 OF 3)			
C6.5	STORMWATER MANGEMENT DETAILS (2 OF 3)			
C6.6	STORMWATER MANGEMENT DETAILS (3 OF 3)			
C7.0	LANDSCAPING PLAN			
DDX	PRE-DEVELOPMENT DRAINAGE AREA			
DDP	POST-DEVELOPMENT DRAINAGE AREA			
DDP-BYPASS	POST-DEVELOPMENT BYPASS DRAINAGE AREA			
DDP-INLETS	POST-DEVELOPMENT DRAINAGE AREA TO INLETS			
PAGE 1 OF 1 LIGHTING PLAN				

EROSION CONTROL NOTES:
AN EROSION AND SEDIMENTATION CONTROL PERMIT SHALL BE REQUIRED BY NCDEQ PRIOR TO START OF CONSTRUCTION.

ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: BOWMAN NORTH CAROLINA LTD.

STREAM/WETLAND NOTE: THERE ARE NO EXISTING STREAM/AND OR WETLAND FEATURES ON THE PROPOSED PARCEL.

FLOOD ZONE NOTE: THE PROPERTY IS LOCATED IN FLOOD ZONE X AS SHOWN ON FEMA FLOOD PANEL 3720059800J, DATED OCTOBER 3, 2006. MAPS SUBJECT TO CHANGE BY FEMA.







DOLLAR

COVER SHEET

ISSUED FOR CONSTRUCTION

10/2025 IST SUBMITTAL 6/5/2025 REVISIONS PER NCDOT COMME

KXO ML DESIGN | DRAWN | CHKD SCALE

JOB No. 220154-01-001 DATE FEBRUARY 10, 202

SHEET

C1.0

Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-COV.dwg

1. THIS IS A STANDARD SHEET, THEREFORE SOME ABBREVIATIONS MAY APPEAR ON THIS SHEET AND

THESE LEGENDS AND NOTES ARE TO BE REFERENCED IN ADDITION TO THIS STANDARD SHEET.

ADDITIONAL LEGENDS AND NOTES MAY BE FOUND ON OTHER SHEETS ASSOCIATED WITH THIS PLAN.

Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-NTS.dwg

NOT BE USED ON THE PROJECT.

GENERAL NOTES

ARE NECESSARY TO PERFORM THE PROPOSED WORK.

SIGHT DISTANCE COEFFICIENT OR

LIMITS OF CLEARING & GRADING

CULVERT ENTRANCE LOSS COEFFICIENT

RATE OF VERTICAL CURVATURE

LATERAL

LINEAR FEFT

LIP OF PAN

LOWER LEVE

LINE OF SIGHT

LOADING SPACE

MONUMENT FOUND

MATCH EXISTING

MISCELLANEOUS

MEDIAN STRIP

MEAN SEA LEVEL

NORTHING/NORTH

NOT APPLICABLE

NORTH BOUND LANF

NOW OR FORMERLY

OUTSIDE DIAMETER

OVERHEAD CABLE

OVERHEAD ELECTRIC

OVERHEAD TELEPHONE

NET FLOOR AREA

NOT TO SCALE

ON CENTER

OVERHANG

OVERHEAD

PERIMETER

PROPERTY LINE

PLAN AND PROFILE

POINT OF CURVATURE

POINT OF CURB RETURN

POINT OF INTERSECTION

POINT OF GRADE LINE

POINT OF TANGENCY

PUBLIC UTILITY EASEMENT

POLYVINYL CHLORIDE PIPE OR

POINT OF VERTICAL CURVATURE

POINT OF VERTICAL INTERSECTION

POINT OF VERTICAL TANGENCY

POINT OF VERTICAL REVERSE CURVE

AMOUNT OF RUNOFF (FLOW RATE)

REINFORCED CONCRETE PIPE

ROAD OR ROOF DRAIN

ROUGH GRADING PLAN

RESOURCE MANAGEMENT AREA REMOTE OUTSIDE MONITO

RESOURCE PROTECTION AREA

SANITARY SEWER MANHOLE

PRELIMINARY

PROPOSED

PAVFMFNT

RFDUCFR

RFINFORCED

REQUIRED

RETAINING

REVISION

RAII ROAD

SCHFDULF

SECTION

SEWER

RIGHT OF WAY

SPEED OR SLOPE

SANITARY SEWER

SIGHT DISTANCE

SQUARE FEET

SPECIFICATIONS

STORM SEWER

SHOULDER

STATION

STACK

STANDARD

STRUCTURE

SERVICE

SIDEWALK

CROSS SLOPE SQUARE YARD

TO BE REMOVED

TOP OF CURB

TEMPORARY

TEST HOLE

TOP OF PIPF

SOUTH BOUND LANE

SPACE OR SITE PLAN

STORM SEWER MANHOLE

STORM WATER MANAGEMENT

TOP OF BANK OR TEST BORING

TEST PIT OR TREE PROTECTION

TOP OF WALL OR TAILWATER

TIME OF CONCENTRATION

TOP OF FOUNDATION

UTILITY EASEMENT

UNDERGROUND FLECTRIC

UNDERGROUND CABLE

US GEOLOGICAL SURVEY

HANDICAPPED VAN PARKING SPACE

UNDERGROUND TELEPHONE

UNDERGROUND

UNDFRDRAIN

UTILITY POLE

UTILITY

VFI OCITY

VERTICAL BEND

VERTICAL CURVE

VERTICAL FOOT

WEIGHT OR WIDTH

WEST BOUND LANE

WITH THRUST BLOCK

WATER VALVE

TRANSFORMER

YARD INLET

YEAR

WATER SURFACE ELEVATION

WATER LINE WATER METER

WATER MAIN

CROSSING

IRON PIPE SET

JUNCTION BOX

IRRIGATION

JOINT

UPPER LEVEL

RIGHT

ROUTE

POINT OF COMPOUND CURVATURE

POINT OF REVERSE CURVATURE

POINT OF CURVE EDGE OF PAVEMENT

POINT OF CURVATURE TOP OF CURB

NUMBER

NORTH CAROLINA DEPT. OF TRANSPORTATION

MILES PER HOUR

MECHANICAL

MANHOLE

MINIMUM

- 1. UTILITY CONFLICTS: ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND FIELD OBSERVATION. BOWMAN CONSULTING INC. DOES NOT GUARANTEE THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION OF AND PROTECTING ALL EXISTING UTILITIES, INCLUDING THOSE NOT SHOWN OR SHOWN INCORRECTLY ON THE PLANS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED IN A TIMELY FASHION TO THE SATISFACTION OF THE APPROPRIATE GOVERNING AGENCY AND THE OWNER OF THE IMPACTED UTILITY AT THE CONTRACTOR'S EXPENSE.
- 2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS FOR THE APPROPRIATE GOVERNING AGENCY. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT THE JOB SITE AT ALL TIMES THE APPROPRIATE GOVERNING AGENCY'S PUBLIC WORKS MANUAL, ALL APPROVED EASEMENT AGREEMENTS, AND ONE (1) SIGNED COPY OF THE PLANS AS APPROVED BY THE APPROPRIATE GOVERNING AGENCY. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY FOR ANY VARIANCE TO THE 42.
- 3. CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARDS, SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH
- 4. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND MUST COMPLY WITH OSHA REGULATIONS.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER/DEVELOPER AND ENGINEER OF ANY PROBLEM CONFORMING TO THE APPROVED PLANS FOR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO ITS CONSTRUCTION.
- THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS/HER CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL MATERIALS WITHIN DEDICATED RIGHT-OF-WAY AND ALL MATERIALS AND WORKMANSHIP SHALL MEET THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS OF THE APPROPRIATE GOVERNING AGENCY.
- 8. THE CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION. THE APPROPRIATE FIRE DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSURES AND IN THE EVENT THAT ANY FIRE HYDRANTS ARE TO BE TEMPORARILY REMOVED FROM SERVICE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING AT LEAST 48 HOURS ADVANCED NOTICE OF ANY NEED TO SHUT DOWN ANY PORTION OF THE EXISTING WATER SYSTEM AND FOR OBSERVATIONS AND/OR INSPECTIONS REQUIRED.
- 9. THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAGMEN, LIGHTS OR OTHER DEVICES NECESSARY FOR SAFE TRAFFIC CONTROL IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AS MODIFIED BY THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE APPROPRIATE GOVERNING AGENCY PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT FOR WORK WITHIN THE RIGHT-OF-WAY.
- 10. THE CONTRACTOR SHALL CONTACT NC811 AT 1-800-632-4949 AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ANY AFFECTED UTILITY COMPANY.
- 11. THE CONTRACTOR SHALL OBTAIN COPIES OF THE "SOILS AND INVESTIGATION" REPORT FROM GEOTECHNICAL ENGINEER ALONG WITH THE "PAVEMENT THICKNESS DESIGN REPORT". THE CONTRACTOR MUST HAVE COPIES OF SAME ON THE SITE AT ALL TIMES.
- 12. THE CONTRACTOR IS REQUIRED TO PROVIDE AS-CONSTRUCTED HORIZONTAL AND VERTICAL CONSTRUCTION INFORMATION, INCLUDING THE LOCATIONS OF ALL SANITARY LINES AND SERVICES, WATER LINES AND SERVICES, AND OTHER UTILITY LINES AND SERVICES TO THE ENGINEER FOR PREPARATION
- 13. LIMITS OF CONSTRUCTION EASEMENTS AND RIGHTS-OF-WAY SHALL BE DELINEATED WITH TEMPORARY STAKING BY THE CONTRACTOR. SAFETY FENCING 55. ALL SIDEWALKS TO BE 4" THICK CONCRETE UNLESS OTHERWISE SHOWN ON THE PLAN. SHALL BE PER APPROPRIATE GOVERNING AGENCY.
- 14. WHERE EXCAVATION IS REQUIRED UNDER EXISTING ASPHALT OR CONCRETE PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAW CUT IN A MANNER TO EFFECT A SMOOTH, STRAIGHT-CUT EDGE. ASPHALT PATCH SHALL BE PER APPROPRIATE GOVERNING AGENCY STANDARDS.
- 15. REFER TO FINAL RECORDED PLAT FOR ACTUAL LOT, TRACT, PARCEL, AND EASEMENT LOCATIONS AND DESIGNATIONS.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL MATERIALS WITHIN DEDICATED RIGHT-OF-WAYS AND ALL MATERIALS AND WORKMANSHIP SHALL MEET THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS OF THE APPROPRIATE GOVERNING AGENCY.
- 17. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY TO THE PROJECT WORK SITE (SEE THE EROSION CONTROL PLAN). THE CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY (IF APPLICABLE) TO COMPLETE THE CONSTRUCTION AND SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- 18. WATER WILL BE PROVIDED BY THE CONTRACTOR TO KEEP WIND EROSION IN CHECK. USE OF WATER AS A DUST PREVENTATIVE SHALL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE WORK.
- 20. ANY CONSTRUCTION DEBRIS OR MUD TRACKING IN THE PUBLIC RIGHT-OF-WAY RESULTING FROM THIS DEVELOPMENT SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL IMMEDIATELY FIX ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY THE DEVELOPMENT AND SHALL PROPERLY BARRICADE THE SITE UNTIL CLEAN UP OR REPAIR IS COMPLETE.
- 21. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO GRADE STREET CORES, RIGHT-OF-WAY TEMPLATES, AND LOTS ACCORDING TO GRADING
- 22. STREET CONTOURS SHOWN AT PROPOSED STREET LOCATIONS REPRESENT FINISHED GRADE ELEVATION TO TOP OF ASPHALT.
- 23. COMPACTION FILL MATERIAL SHALL BE COMPACTED ACCORDING TO THE APPROPRIATE GOVERNING AGENCY REGULATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- 24. TOLERANCE ROUGH GRADING: TOLERANCE SHALL BE +/- 0.1 FEET.
- 25. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ALL APPROPRIATE PERMITS FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY HAVE BEEN OBTAINED PRIOR TO GRADING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL TEMPORARY WATER DIVERSION/CONTROL DEVICES AND EROSION CONTROL DEVICES NECESSARY TO PROTECT ADJACENT PROPERTIES, WATERWAYS AND PUBLIC RIGHT-OF-WAY. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF SAID DEVICES THROUGHOUT CONSTRUCTION AND UNTIL THE PERMANENT PROTECTION NECESSARY HAS BEEN COMPLETED.
- 26. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE MOST CURRENT APPROVED ARCHITECTURAL/ MECHANICAL/ELECTRICAL/PLUMBING/STRUCTURAL PLANS AND COORDINATE SAME WITH THE SITE PLAN, PRIOR TO BEGINNING CONSTRUCTION
- 27. WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED. THE CONTRACTOR SHALL CEASE WORK IN THAT AREA AND IMMEDIATELY NOTIFY THE OWNER. APPROPRIATE GOVERNING AGENCY. AND/OR THE ARCHITECT/ENGINEER.
- 28. THE EXISTING UNDERGROUND UTILITIES SHOW HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN IN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
- 29. ALL STEPS WITH THREE OR MORE RISERS SHALL HAVE HAND RAILS, PER LOCAL CODE.
- 30. A SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF EXISTING ROAD TO PROPOSED CURB AND GUTTER AND/OR PROPOSED EDGE OF PAVEMENT TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER IN THE ROADWAY. REMOVE AND RECONSTRUCT EXISTING PAVEMENT AND/OR CURB AS DICTATED BY FIELD CONDITIONS TO PROVIDE POSITIVE DRAINAGE AT TIE-IN-POINTS.
- 31. OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1 1/2 INCH DEPTH; ANY COST ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH. SHALL BE ASSUMED BY THE CONTRACTOR.
- 32. ALL RIGHT-OF-WAY DEDICATED FOR PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
- 33. AN AIR QUALITY PERMIT SHALL BE OBTAINED IF REQUIRED.
- 34. ANY LIGHTING SHOWN HEREON IS AS SPECIFIED BY THE CLIENT AND IS INCLUDED FOR INFORMATION PURPOSES ONLY, AS DIRECTED BY THE OWNER AND/OR PUBLIC AGENCY REQUIREMENTS. BOWMAN CONSULTING GROUP, LTD. HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THIS PROJECT.
- 35. THE CONTRACTOR WILL BE REQUIRED TO NOTIFY ALL RESIDENCES WITHIN VICINITY OF THE PROPERTY BOUNDARY TEN (10) DAYS PRIOR TO ANY BLASTING IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY REQUIREMENTS.
- 36. NO BLASTING SHALL BE PERMITTED WITHIN 25' OF EXISTING UTILITY LINES OR STRUCTURES. BLASTING TO BE EXTENDED 25' BEYOND PROPOSED STRUCTURES IF CONDITIONS WARRANT FUTURE EXTENSIONS.
- 37. ALL RETAINING WALLS 4' IN HEIGHT AND OVER (MEASURED FROM BOTTOM OF FOOTER TO TOP OF WALL) REQUIRE A SEPARATE BUILDING PERMIT.
- 38. THE APPROVAL OF THIS PLAN DOES NOT CONSTITUTE THE APPROVAL OF FUTURE WORK.
- 39. ALL HANDICAPPED SPACES SHALL HAVE AN ABOVE GRADE IDENTIFICATION SIGN MEETING APPROPRIATE GOVERNING AGENCY STANDARDS.
- 40. WHERE A PROPOSED PIPE CROSSES OR PARALLELS A STREET OR DRIVE AISLE. THE ASPHALT SHALL BE NEATLY SAWCUT TO FULL DEPTH. AFTER INSTALLATION OF THE PIPE, THE ROADWAY SHALL BE PATCHED IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY STANDARDS.

GENERAL NOTES (CONT.)

- THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF WORK REQUIRED TO MAKE THE PROPOSED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL SATISFY HIMSELF AS I THE NATURE AND LOCATION OF THE WORK, CONDITIONS, AND CONFIRMATION AND CONDITION OF EXISTING GROUND SURFACE AND THE CHARACTER O THE EQUIPMENT AND FACILITIES NEEDED PRIOR TO AND DURING EXECUTION OF THE WORK. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE CHARACTER, QUANTITY AND QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED. ANY INACCURACIES OR DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS MUST BE BOUGHT TO THE OWNER'S ATTENTION IN ORDER TO CLARIFY THE EXACT NATURE OF THE WORK TO BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING ROADS AND UTILITIES WHICH OCCURS AS A RESULT OF THE PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE EXISTING RIGHT-OF-WAY.
- 43. ALL STREET CUT AND PATCH WORK IN PUBLIC RIGHT-OF-WAY REQUIRED FOR UTILITIES INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH CITY, COUNTY, AND/OR APPROPRIATE GOVERNING AGENCY STANDARDS AND SPECIFICATIONS.
- 44. THE APPROVAL OF THIS PLAN SHALL IN NO WAY GRANT PERMISSION FOR THE CONTRACTOR TO TRESPASS ON OFF-SITE PROPERTIES.
- 45. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 46. THESE PLANS MAKE NO REPRESENTATION AS TO THE SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
- 47. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL NECESSARY INSPECTIONS.
- 48. EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- 49. ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER.
- THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS. METHODS. TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIGGING OF TEST HOLES PRIOR TO BEGINNING OF ANY CONSTRUCTION ON THE PROJECT. IF CONFLICTS ARE DISCOVERED AS A RESULT OF TEST HOLE FINDINGS, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- 52. EXCAVATION SUPPORT SYSTEMS SHALL CONFORM TO THE PROVISIONS OF OSHA CONSTRUCTION STANDARD 29 CFR PART 1926 SUBPART P, OR CURRENT EDITION.
- 53. AT LOCATIONS WHERE THE FINAL SURFACE COURSE OF ASPHALT PAVEMENT IS TO BE FEATHERED INTO THE EXISTING SURFACE COURSE. THE EXISTING SURFACE COURSE IS TO BE SCABBLED TO A MINIMUM DEPTH OF 1" AND A TACK COAT APPLIED PRIOR TO FINAL PAVING TO INSURE A SMOOTH, WELL BONDED JOINT.
- 54. ANY NEW PAVEMENT OPENED TO TRAFFIC SHALL RECEIVE A TACK COAT PRIOR TO PLACEMENT OF ANY OVERLYING ASPHALT COURSE.
- 56. ALL DEMOLITION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE APPROPRIATE GOVERNING AGENCY.
- 57. ALL APPLICABLE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING DEMOLITION.
- 58. ITEMS SHOWN TO BE RELOCATED SHALL BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR UNTIL SUCH TIME AS THEY CAN BE PLACED IN THEIR NEW LOCATION. CONTRACTOR SHALL VERIFY THESE ITEMS WITH THE OWNER, PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE REMOVAL OR RELOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD ELECTRICAL, TELEPHONE AND CABLE 1 LINES AND REMOVAL OF UTILITY POLES, PEDESTALS AND TRANSFORMERS WITH UTILITY COMPANIES AND WITH DEVELOPER PRIOR TO DEMOLITION.
- 60. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS AND/OR RECONSTRUCTION OF ALL UTILITY COVER (MANHOLE FRAMES AND COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES OF THE AREAS EFFECTED BY THE CONSTRUCTION.
- THE CONTRACTOR MUST HAVE THE APPROVED CONSTRUCTION DRAWINGS IN POSSESSION PRIOR TO THE START OF CONSTRUCTION. AT LEAST ONE (1 COPY OF THE APPROVED PLANS, WITH REVISIONS, MUST BE KEPT ON-SITE AT ALL TIMES.
- 19. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE PROPERTY LIMITS DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE 62. ALL HANDICAP RAMPS SHALL BE BUILT IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE APPROPRIATE GOVERNING AGENCY STANDARDS, NCDOT STANDARDS, AND CURRENT ADA REQUIREMENTS.
 - THE STORM DRAIN, STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES MUST BE MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THEY ARE NOT ONLY 100% COMPLETE, BUT ALSO THAT 100% OF THE DRAINAGE AREA TO EACH FACILITY IS PERMANENTLY STABILIZED. SEED AND MULCH DOES NOT CONSTITUTE STABILIZATION IN TERMS OF THE CONTRACTOR MAINTENANCE OF THE STORM DRAIN, STORMWATER MANAGEMENT, AND WATER QUALITY FACILITIES. ALL STORM DRAIN, STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES SHALL BE TURNED OVER TO THE OWNER COMPLETELY CLEAN AND FREE FROM ANY CONSTRUCTION RELATED SEDIMENT OR DEBRIS.
 - 64. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL ADA ACCESSIBLE SIDEWALKS MAINTAIN SLOPES NOT TO EXCEED 5% LONGITUDINALLY AND 2% CROSS SLOPES. SLOPES AT ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL BE A MAXIMUM OF 2%, AND THE MANEUVERING CLEARANCE AT EXTERIOR ENTRANCES SHALL HAVE A MAXIMUM SLOPE OF 2%.
 - 65. DURING CONSTRUCTION, NO TEMPORARY CONNECTIONS TO FIRE HYDRANTS MAY BE MADE WITHOUT THE EXPRESS AUTHORIZATION OF THE UTILITY

GENERAL EROSION CONTROL NOTES

- 1. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOWLINES AND PUBLIC RIGHTS-OF-WAY OF THE APPROPRIATE GOVERNING AGENCY AS A RESULT OF THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED I A TIMFLY MANNER.
- 2. THE CONTRACTOR SHALL PREVENT SEDIMENT. DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION AND CONSTRUCTION OPERATIONS THAT ARE A PART OF THIS PROJECT. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS A PART OF THIS PROJECT.
- ALL DISTURBED AREAS MUST BE HYDRO-MULCHED W/ TACKIFIER AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE NOT OTHERWISE PERMANENTLY STABILIZED.
- THE CONTRACTOR SHALL INSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS-OF-WAY.
- 5. THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS TO STAKE DOWN STRAW OR HAY BALES; OR TO SUPPORT SILT FENCE USED AS AN EROSION CONTROL MEASURE; IS PROHIBITED. THE USE OF OSHA APPROVED COLORED WARNING CAPS ON REBAR OR FENCE POSTS USED WITH EROSION CONTROL MEASURES IS NOT ACCEPTABLE.
- IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF A DRAINAGE WAY, ADDITIONAL SEDIMENT CONTROLS SUCH AS TEMPORARY DIKES OR SILT FENCE SHALL BE REQUIRED.
- APPROVED EROSION AND SEDIMENT CONTROL "BEST MANAGEMENT PRACTICES" SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THE PROJECT. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL BMP'S WEEKLY AND AFTER SIGNIFICANT PRECIPITATION EVENTS. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR, AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP. A BUILDUP OF EXCESSIVE SEDIMENT OCCURRING IN FLAT AREAS, BEHIND STRAW BALES, AND BEHIND SILT FENCES WILL BE REMOVED PROMPTLY. DISLOCATED STRAW BALES AND COLLAPSED OR TORN SILT FENCES WILL BE IMMEDIATELY
- THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL OCCUR IN A PREDEFINED CONTAINMENT AREA. THE DISCHARGE OF WATER CONTAINING CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED.
- EROSION BALES SHALL BE PLACED SUCH THAT RUNOFF WILL NOT FLOW BETWEEN, AROUND OR UNDER BALES. BALES TO BE ANCHORED WITH 2" X 2" X 3' WOODEN STAKES OR TWO PER BALE.
- WHEN TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE REMOVED, ANY SILT AND SEDIMENT DEPOSITS SHALL BE REMOVED AND SPREAD EVENLY IN OPEN AREAS.
- BEST MANAGEMENT PRACTICES (BMP) DETAILS SHOWN ON THESE PLANS ARE CONCEPTUAL ONLY. ADJUST AS NECESSARY TO FIT FIELD CONDITIONS.
- 13. TEMPORARY SEDIMENT BASINS SHALL BE USED DURING CONSTRUCTION TO CONTAIN ALL RUNOFF FROM THE SITE. IF TRENCH DEWATERING OR GROUND WATER REMOVAL IS REQUIRED, THE SEDIMENT POND OR OTHER APPROVED MEANS SHALL BE USED TO DETAIN ALL WATER PUMPED BY THESE
- THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF CONSTRUCTION, GRADING AND LANDSCAPING, INCLUDING THE NAME AND 24 HOUR PHONE NUMBER OF THE RESPONSIBLE PARTY TO CONTACT REGARDING ANY EROSION OR SEDIMENT PROBLEM TO THE APPROPRIATE GOVERNING AGENCY PRIOR TO
- 15. EROSION CONTROL MEASURES TO BE COORDINATED WITH CONSTRUCTION MANAGER.
- 16. EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE APPROPRIATE GOVERNING AGENCY.

 \ll

 \triangleleft

 \mathbf{m}

 \triangleleft

 α

Ш

DOLLAR



ISSUED FOR CONSTRUCTION

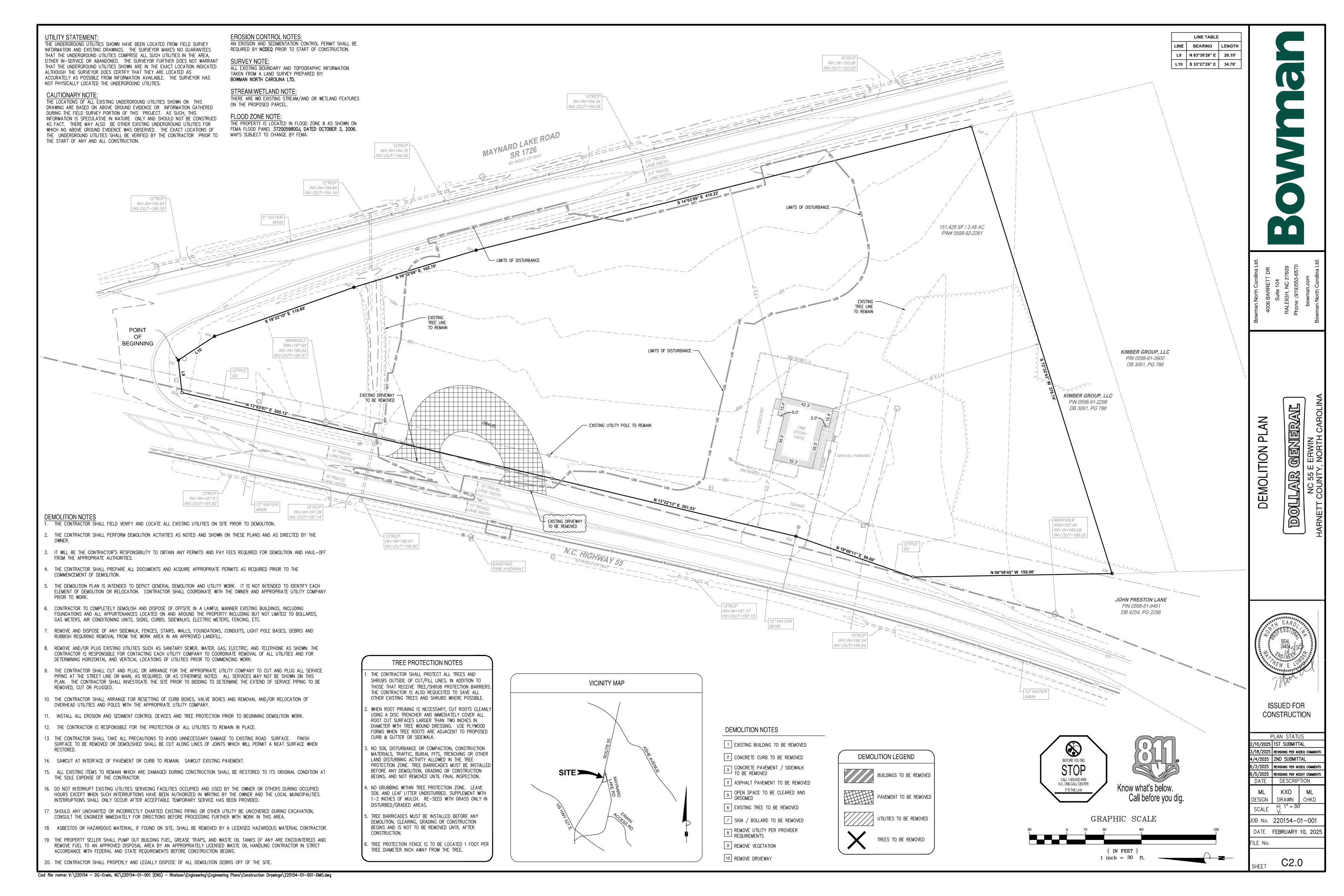
PLAN STATUS 10/2025 | 1ST SUBMITTAL /18/2025 | revisions per ncdeq commen /4/2025 |2ND SUBMITTAL 3/2025 | revisions per nodeq comme 6/5/2025 | REVISIONS PER NCDOT COMMEN

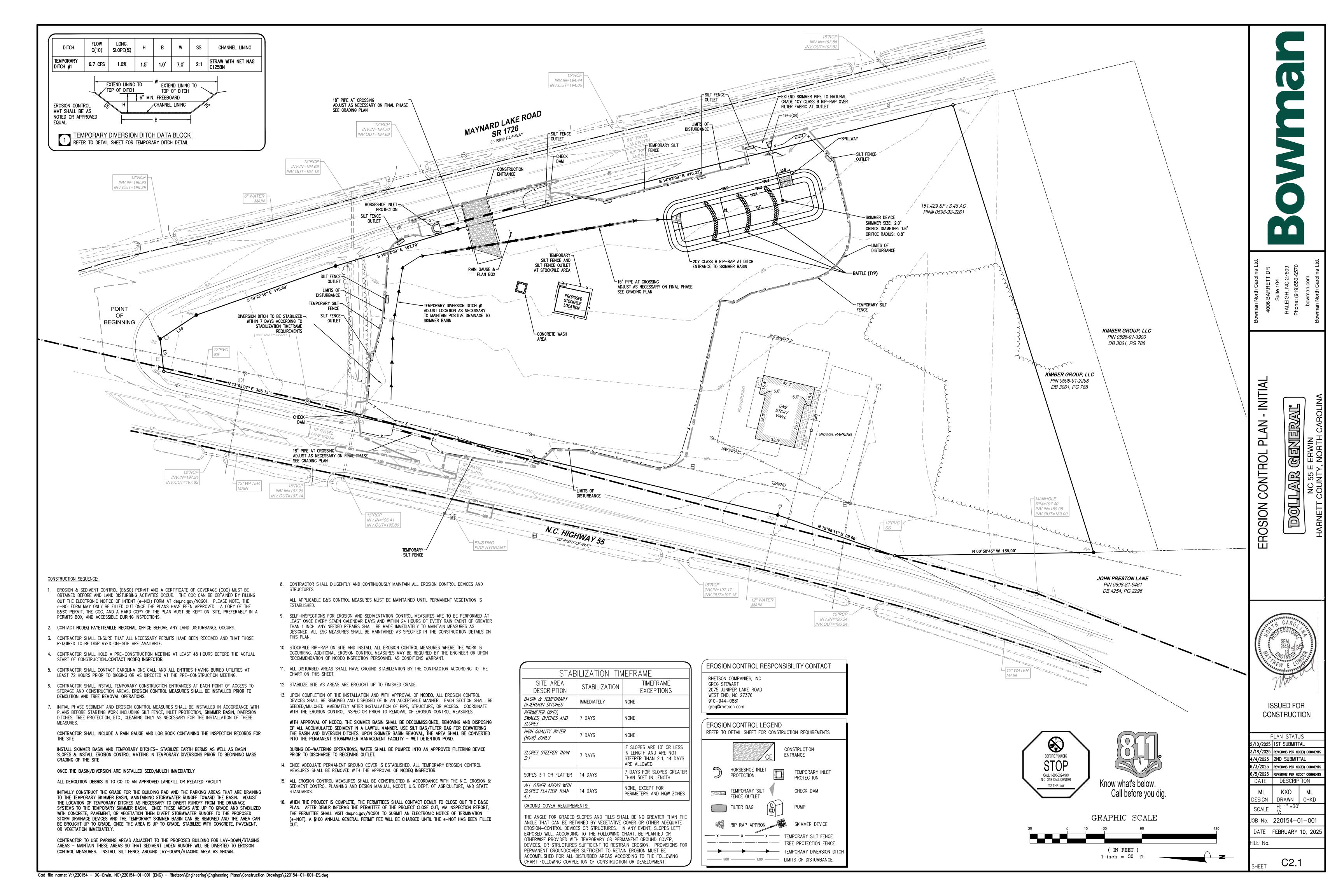
DESCRIPTION KXO | ML DESIGN | DRAWN | CHKD

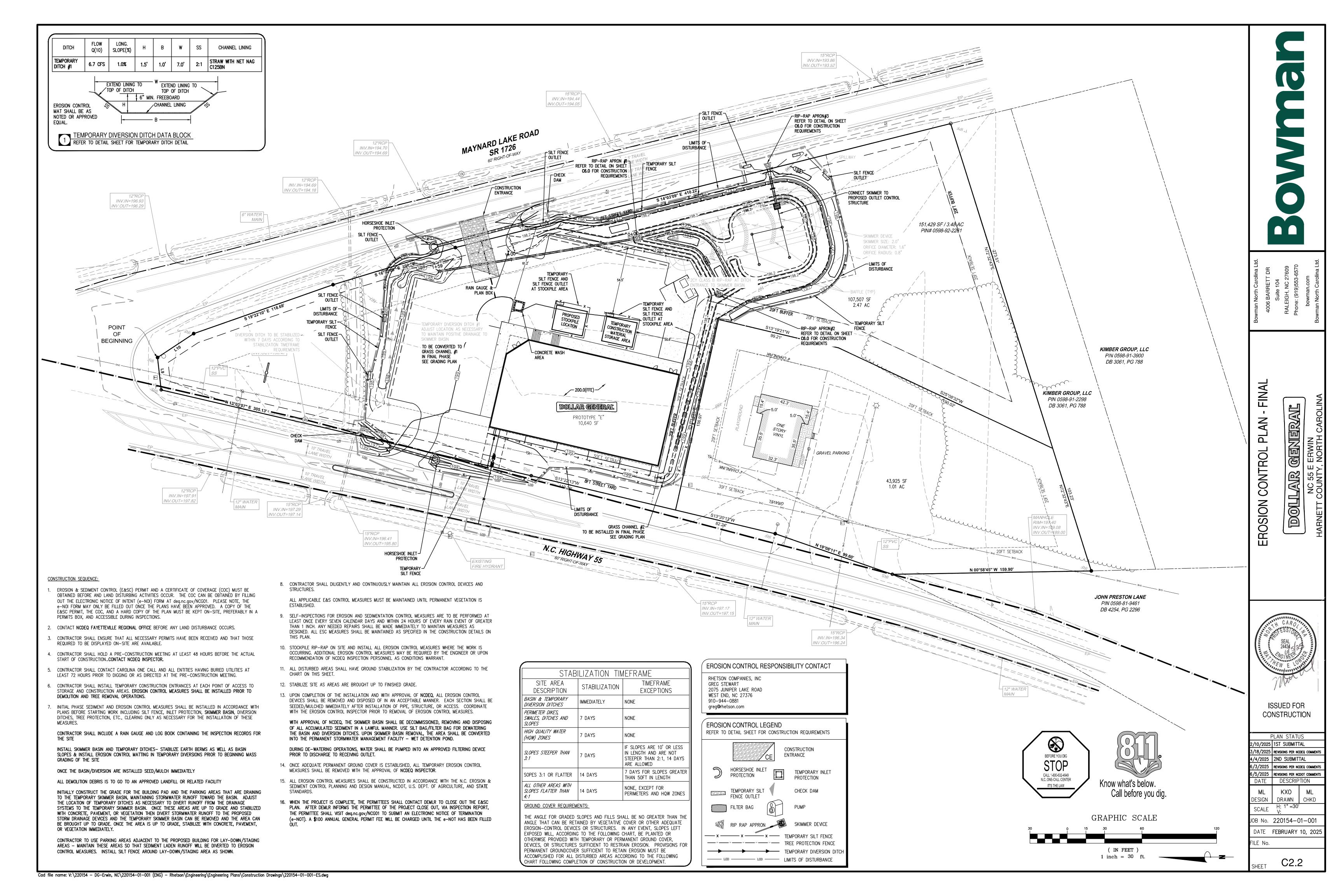
IOB No. **220154-01-001**

DATE FEBRUARY 10, 202

C1. SHEET







REFER TO DETAIL SHEETS FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER THE FOR THE DEVELOPMENT.

BASIN NOTES:

SKIMMER BASIN DESIGN BASED ON 3 DAYS TO DRAIN.

BASIN AND DIVERSIONS SHALL BE SEEDED, MULCHED AND ANCHORED/LINED AND PINNED UPON INSTALLATION OF MEASURES.

EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL

NOTE TO CONTRACTOR

IHE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE EROSION CONTROL INSPECTOR OF THE LOCATION OF ANY OFF-SITE BORROW SOURCE OR OFF-SITE WASTE MATERIAL DISPOSAL SITE. OFF-SITE DISTURBANCES COUNT TOWARDS THE OVERALL PROJECT DISTURBED AREA AND MUST BE COVERED BY THE PERMIT FOR THIS PROJECT AND/OR THE PERMIT FROM ANOTHER ACTIVE NCDEQ PERMITTED SITE THAT IS APPROPRIATE FOR THE INTENDED USE (I.E. APPLICABLE MINING REQUIREMENTS). NO OFF-SITE ACTIVITIES SHALL OCCUR UNTIL THE PERMIT FOR THIS PROJECT HAS BEEN MODIFIED TO INCLUDE THE AFFECTED AREAS OR IT HAS BEEN VERIFIED WITH THE EROSION CONTROL INSPECTOR THAT THE OFF-SITE AREAS ARE COVERED UNDER ACTIVE APPLICABLE NCDEQ PERMITS.

EROSION CONTROL NOTES

TOTAL AREA DISTURBED = 1.65 ACRES TOTAL SITE AREA = 2.47 ACRES

SOIL TYPES =

Co - COXVILLE LOAM MaA - MARLBORO SANDY LOAM NoB - NORFOLK SANDY LOAM

- 2. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NCDEQ EROSION AND SEDIMENT CONTROL HANDBOOK
- 3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS IN ACCORDANCE WITH APPLICABLE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS.
- 4. CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER GENERAL PERMIT.
- 5. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.
- 6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCDEQ EROSION CONTROL INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
- 8. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS. A REVISED PLAN SHOWING OFF-SITE IMPACTS SHOULD BE SUBMITTED AND APPROVED PRIOR TO ANY OFF-SITE GRADING. CONTACT PROJECT ENGINEER AND PROJECT EROSION CONTROL INSPECTOR TO ENSURE ADDITIONAL EROSION CONTROL MEASURES ARE INSTALLED PRIOR TO OFF-SITE GRADING.
- 9. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS, STAGING OR STORAGE AREAS), THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO NCDEQ FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE AMENDED PERMIT.
- 10. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED AREAS SHALL BE CHECKED REGULARLY AND SHALL BE WATERED, FERTILIZED, RE-EEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.
- 11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDED, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE NCDEQ SEDIMENT CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
- 12. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.
- 13. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA. SIX INCHES OF STONE SHALL BE USED FOR THE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
- 14. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF
- TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.

15. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED

- 16. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS COMPLETED.
- 17. DURING DE-WATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.
- 18. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

EROSION CONTROL NARRATIVE:

DOLLAR GENERAL, TOWN OF ERWIN, HARNETT COUNTY

CONTRACTOR WILL FIRST INSTALL THE CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL THEN MOBILIZE ON SITE AND INSTALL THE TEMPORARY EROSION CONTROL DEVICES INCLUDING SILT FENCE, INLET PROTECTION, SKIMMER BASIN, AND OTHER DEVICES IN ACCORDANCE WITH THE PLANS (CLEARING ONLY AS NECESSARY TO INSTALL THESE ITEMS). BEGIN DEMOLITION, CLEARING AND SITE GRADING OPERATIONS. STABILIZATION OF EARTHEN STRUCTURES IS REQUIRED IMMEDIATELY AFTER INSTALLATION. THE ON-SITE STORM SEWER SYSTEM CAN NOW BE INSTALLED. IMMEDIATELY AFTER AN INLET IS INSTALLED. INLET PROTECTION SHALL BE PROPERLY INSTALLED ON THE STRUCTURE. THE ON-SITE SANITARY SEWER AND WATER SYSTEMS MAY ALSO BE INSTALLED ONCE THE SITE IS BROUGHT UP TO GRADE. THE SITE PAD WILL BE PREPARED FOR THE PROPOSED BUILDING. THE ROUGH GRADE WILL THEN BE ESTABLISHED FOR THE SITE. INSTALLATION OF CURB AND GUTTER WILL THEN BE PERFORMED. BASE STONE WILL THEN BE PLACED AND FINE GRADED. ALL DISTURBED AREAS WILL BE DRESSED AND SEEDED. REMOVE ALL INLET PROTECTION FROM STORM STRUCTURES WHEN PAVING IS TO BEGIN. PAVING AND STRIPING WILL THEN BE COMPLETED. FINALIZE STORMWATER POND STRUCTURE ONCE UPSTREAM AREAS HAVE BEEN STABILIZED (REMOVE ACCUMULATED SEDIMENT). ALL LANDSCAPING WILL BE COMPLETED. THE ON-SITE STORM SEWER SYSTEM SHALL BE CLEANED OF ANY ACCUMULATED SEDIMENT WHICH SHALL BE DISPOSED OF IN A LAWFUL MANNER. ALL ACCUMULATED SEDIMENT BEHIND SILT FENCE AND OTHER SEDIMENT DEVICES SHALL BE REMOVED AND DISPOSED OF IN A LAWFUL MANNER. ACCORDING TO THE GROUND STABILIZATION REQUIREMENTS ON THIS SHEET, REMOVE ALL REMAINING SEDIMENT CONTROL MEASURES FROM THE SITE. CONTRACTOR SHALL MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL LAND DISTURBANCE AND FINAL VEGETATION STABILIZATION OF THE SITE.

THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES ARE INTENDED TO TRAP ANY STORMWATER RUNOFF FROM THE CONSTRUCTION SITE AND DETAIN IT LONG ENOUGH FOR SEDIMENT AND POLLUTANTS TO SETTLE OUT OF THE STORMWATER BEFORE DISCHARGE. VARIOUS EROSION CONTROL MEASURES ARE USED TO PREVENT POLLUTANT-LADEN STORMWATER RUNOFF FROM FLOWING ONTO ADJACENT PROPERTIES.

- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC. THAT MAY BE REQUIRED.
- 2. THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED FOR A COMPLETE AND WORKING
- 3. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- 4. CONTRACTOR SHALL MAINTAIN AN "AS BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
- 5. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
- 6. THE CONTRACTOR MUST, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY HIM, HIS EMPLOYEES OR HIS WORK. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.

SEDIMENT & EROSION CONTROL NOTES:

- THE EROSION AND SEDIMENTATION CONTROL MEASURES (BMPS) WERE DESIGNED USING THE NORTH CAROLINA NCDEQ REQUIREMENTS AND SHALL BE INSTALLED ACCORDINGLY. CONTRACTOR SHALL PERFORM ALL ACTIVITIES IN STRICT COMPLIANCE WITH THE NORTH CAROLINA NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (GENERAL PERMIT).
- 2. REFER TO THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS FOR EROSION CONTROL DETAILS AND DESIGN TABLES FOR SEDIMENT BASINS, DIVERSION DITCHES, AND CULVERTS, SLOPE DRAINS, RIP-RAP APRONS AND OTHER EROSION CONTROL MEASURES.
- 3. EXISTING BOUNDARIES, TOPOGRAPHY, 100-YR FLOODPLAIN, UTILITY AND ROAD INFORMATION TAKEN FROM AN EXISTING CONDITIONS SURVEY. ALL EXISTING INFORMATION IS TO BE FIELD VERIFIED BY THE
- 4. SEE THE LANDSCAPE PLAN FOR LOCATIONS OF PROPOSED PLANTINGS AND FINAL STABILIZATION.
- 5. TEMPORARY DIVERSION DITCHES AND BERMS SHALL BE MAINTAINED AS THE SITE IS BROUGHT TO
- 6. DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTORS SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF
- 7. SEE THE GENERAL NOTES SHEET AND THE GRADING AND DRAINAGE PLAN FOR OTHER NOTES REGARDING GRADING ACTIVITIES.
- 8. SEE SITE PLAN, GRADING AND DRAINAGE PLAN, UTILITY PLAN, PLANTING PLAN AND OTHER PLAN SHEETS FOR DETAILED DESIGN INFORMATION OF PERMANENT SITE APPURTENANCES SHOWN ON THIS
- 9. WHERE THE LIMITS OF DISTURBANCE AND TEMPORARY FENCE (SF. SF-PF, OR PF) LIMITS ARE ADJACENT, THE TEMPORARY FENCE LINE IS THE LIMITS OF DISTURBANCE. THE LINE TYPES ARE SHOWN SEPARATED FOR ILLUSTRATIVE PURPOSES ONLY.
- 10. CONTRACTOR SHALL NOT DISTURB ANY EXISTING VEGETATIVE GROUND COVER OR TREES OUTSIDE OF THE LIMITS OF DISTURBANCE OR WITHIN ANY REQUIRED BUFFER LIMITS UNLESS OTHERWISE NOTED OR ILLUSTRATED.
- 11. PROVIDE CONTROLS OF POLLUTANTS, INCLUDING, BUT NOT LIMITED TO DUST CONTROL, DE-WATERING, SOLID WASTE DISPOSAL, AND HAZARDOUS MATERIALS.
- 12. CLEAR ONLY AS REQUIRED TO INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES. MASS CLEARING AND GRUBBING CAN BEGIN ONLY AFTER ALL DOWNSTREAM MEASURES HAVE BEEN INSTALLED.
- 13. USE ROCK OR WASHED STONE TO BRING CONSTRUCTION EXIT TO GRADE. IMPLEMENT WHEEL WASHES AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION.
- 14. DIVERT STORM WATER RUNOFF OFF THE FACE OF THE SEDIMENT BASIN SLOPES USING DIVERSION DITCHES AND SLOPE DRAINS. CONTRACTOR SHALL MAINTAIN AND RELOCATE DIVERSION DITCHES AND

SLOPES DRAINS TO ENSURE STORM WATER RUNOFF DOES NOT ERODE THE FACE OF FINAL SLOPES.

- 15. MAINTAIN POSITIVE FLOW TO THE SEDIMENT BASINS THROUGHOUT ALL PHASES OF CONSTRUCTION. PLACE EXCAVATED SOILS ALONG DOWNSTREAM EDGE OF THE DIVERSION DITCHES TO PROVIDE
- 16. REFER TO THE GRADING AND DRAINAGE PLAN FOR FINAL SITE AND PAVEMENT GRADES AND ELEVATIONS OF THE PROPOSED STORM SEWER SYSTEMS.
- 17. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED EROSION AND SEDIMENT CONTROL DRAWINGS DURING CONSTRUCTION OPERATIONS.
- 18. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- 19. ALL WORK SHALL BE CONFINED TO PERMIT LIMITS SHOWN ON PLANS. UNLESS OTHERWISE NOTED, THE SITE PLAN PROPERTY LIMITS SHALL BE CONSIDERED THE PERMIT LIMITS.
- 20. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE.
- 21. ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.
- 22. FOR ALL CONSTRUCTION ALONG AND/OR ACROSS WATERWAYS, BANK PROTECTION AND STABILIZATION SHALL BE REQUIRED AS PER LOCAL JURISDICTIONAL EROSION CONTROL LAWS.
- 23. ALL TREE PROTECTION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND GROUND COVER IS ESTABLISHED. CONSTRUCTION ENTRANCE PADS SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.
- 24. ALL EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR TO ACCEPTANCE.
- 25. CONSTRUCTION LIMITS SHALL NOT BE EXCEEDED WITHOUT THE APPROVAL OF NCDEQ INSPECTOR.

NORTH CAROLINA CONSTRUCTION GENERAL PERMIT NOTE:

As of April 1, 2019, all new construction activities are required to complete and submit an electronic Stormwater General Permit. This form MUST be submitted prior to the commencement of any land disturbing activity on the above named project. The NOI form may be accessed at deq.nc.gov/NCG01. Paul.clark@ncdenr.gov.

After you submit a complete and correct NOI Form, a COC will be emailed to you within three business days. Initially, DEMLR will not charge a fee for coverage under the NCG01 permit. However, on or after May 1, 2019, a \$100 fee will be charged annually. This fee is to be sent to the DEMLR Stormwater Central Office staff in Raleigh.

Title 15A NCAC 4B .0118(a) and the NCG01 permit require that the following documentation be kept on file at the job site:

- The NCG01 permit and the COC, once it is received.
- Records of inspections made during the previous 30 days.
- 4. The Certificate of Approval

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM: THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.

TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, DWQ AND DEMLR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS

IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CALL THE APPLICABLE NCDENR REGIONAL OFFICE: (RALEIGH: 919-791-4200) (FAYETTEVILLE: 910-433-3300) (WILMINGTON: 910-796-7215) (WASHINGTON: 252-946-6481) (WINSTON-SALEM: 336-771-5000) (MOORESVILLE: 704-663-1699)

TREE PROTECTION NOTES:

- 1. THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES, IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUESTED
- WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER AND IMMEDIATELY
- NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED
- BEGINS AND IS NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION.
- 6. TREE PROTECTION FENCE IS TO BE LOCATED 1 FOOT PER TREE DIAMETER INCH AWAY FROM THE TREE.

Notice of Intent (NOI) form requesting a Certificate of Coverage (COC) under the NCG010000 Construction Please direct questions about the NOI form to Annette Lucas at Annette.lucas@ncdenr.gov or Paul Clark at

- The approved E&SC plan as well as any approved deviation.

ESTABLISHED. THE FORM CAN BE ACCESSED AT: http://portal.ncdenr.org/web/lr/erosion

(ASHEVILLE: 828-296-4500).

- TO SAVE ALL OTHER EXISTING TREES AND SHRUBS WHERE POSSIBLE
- COVER ALL ROOT CUT SURFACES LARGER THAN TWO INCHES IN DIAMETER WITH TREE WOUND DRESSING. USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK.
- UNTIL FINAL INSPECTION.
- 4. NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS.
- 5. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING, GRADING OR CONSTRUCTION

7111001

O

7

 \circ

NOISO

ď



ISSUED FOR CONSTRUCTION

PLAN STATUS /10/2025 | 1ST SUBMITTAL 3/18/2025 REVISIONS PER NCDEQ COMMEN 4/4/2025 | 2ND SUBMITTAL 6/3/2025 | revisions per nodeq comme 6/5/2025 | REVISIONS PER NCDOT COMMEN

KXO | ML DESIGN | DRAWN | CHKD H: n/a SCALE

JOB No. **220154-01-001** DATE FEBRUARY 10, 202

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCGO1 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

		Required Ground Stabi	lization Timeframes
Site Area Desc	ription	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter d ditches, and slopes	ikes, swales, I perimeter	7	None
(b) High Quality Zones	Water (HQV) 7	None
(c) Slopes steep 3:1	er than	7	
(d) Slopes 3:1 t	co 4:1	14	 7 days for slopes greater than 50' in length and with slopes steeper than 4:1 7 days for perimeter dikes, swales, ditches perimeter slopes and HQW Zones 10 days for Falls Lake Watershed
(e) Areas with s	lones flatte		-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shal be maintained in a manner to render the surface stable against accelerated erosion until permanent qround stabilization is achieved.

-10 days for Falls Lake Watershed unless the

GROUND STABILIZATION SPECIFICATION

(e) Areas with slopes flatter

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in

other mulches and tackifiers

Rolled erosion control products with grass seed

retaining walls

- Temporary grass seed covered with straw or | Permanent grass seed covered with straw or other mulches and tackifiers
- Hydroseeding Rolled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch
 Shrubs or other permanent plantings covered
- Geotextile fabrics such as permanent soil. Plastic sheeting.
 - reinforcement matting Hydroseeding with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or
- POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.

- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures. Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids. Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.
- LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE Never bury or burn waste. Place litter and debris in approved waste containers.
- 2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes. . Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless
- no other alternatives are reasonably available. . Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- . Cover waste containers at the end of each workday and before storm events or provide secondar containment. Repair or replace damaged waste containers. Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if containers
- Dispose waste off—site at an approved disposal facility. . On business days, clean up and dispose of waste in designated waste containers.

- Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Contain liquid wastes in a controlled area. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction

Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with

- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet
- from the toe of stockpile. Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

CLEARLY MARKED SIGNAGE NOTING DEVICE (18"X24" MIN.)

NOTES: 1. ACTUAL LOCATION DETERMINED IN FIELD 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES

75% OF THE STRUCTURES CAPACITY TO PROVIDE 75% OF THE STRUCTURES CAPACITY. ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD. 3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE. 3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE NOT TO SCALE

CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place th mixer and associated materials on impervious barrier and within lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. local standard details are not available, use one of the two types of temporary concrete
- washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of
- storm drain inlet(s) closest to the washout which could receive spills or overflow. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location. Remove leavings from the washout when at approximately 75% capacity to limit overflow events.
- Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions. 10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of

ERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- . Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- . Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

Create designated hazardous waste collection areas on—site. Place hazardous waste containers under cover or in secondary containment.

Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weeker holiday periods, and no individual-day rainfall informatio available, record the cumulative rain measurement for those attended days (and this will determine if a site inspection needed). Days on which no rainfall occurred shall be recorded "zero." The permittee may use another rain-monitoring dayproved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	 Identification of the measures inspected, Date and time of the inspection, Name of the person performing the inspection, Indication of whether the measures were operating properly, Description of maintenance needs for the measure, Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	Identification of the discharge outfalls inspected, Date and time of the inspection, Name of the person performing the inspection, Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, Indication of visible sediment leaving the site, Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a recoof the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has the site limits, 2. Description, evidence, and date of corrective actions taken, 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation o stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this per of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

SECTION B: RECORDKEEPING

. E&SC Plan Documentation

Item to Document

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up—to—date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during

SELF-INSPECTION, RECORDKEEPING AND REPORTING

Documentation Requirements

(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically—available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as

5. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

SELF-INSPECTION, RECORDKEEPING AND REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences: (a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:

- They are 25 gallons or more, • They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or • They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment	Within 24 hours, an oral or electronic notification.
deposition in a	Within 7 calendar days, a report that contains a description of the
stream or wetland	sediment and actions taken to address the cause of the deposition
	Division staff may waive the requirement for a written report on a
	case-by-case basis.
	 If the stream is named on the <u>NC 303(d) list</u> as impaired for sedime
	related causes, the permittee may be required to perform addition
	monitoring, inspections or apply more stringent practices if staff
	determine that additional requirements are needed to assure com
	with the federal or state impaired-waters conditions.

(b) Oil spills and Within 24 hours, an oral or electronic notification. The notification release of shall include information about the date, time, nature, volume and hazardous location of the spill or release. substances per Ite

1(b)-(c) above (c) Anticipated A report at least ten days before the date of the bypass, if possible bypasses [40 CFR The report shall include an evaluation of the anticipated quality and 122.41(m)(3)] effect of the bypass.

(d) Unanticipated Within 24 hours, an oral or electronic notification. bypasses [40 CFR Within 7 calendar days, a report that includes an evaluation of the 122.41(m)(3)] quality and effect of the bypass. (e) Noncompliance Within 24 hours, an oral or electronic notification. with the conditions Within 7 calendar days, a report that contains a description of the

of this permit that noncompliance, and its causes; the period of noncompliance, may endanger including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to environment[40 continue; and steps taken or planned to reduce, eliminate, and CFR 122.41(I)(7)] prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6). Division staff may waive the requirement for a written report on a

case-by-case basis.

health or the

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
- (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include
- (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above, (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

(NCG01)

PERMIT

RAL

CAROLINA GE

NORTH

INIERAL

DOLLAR

ISSUED FOR CONSTRUCTION

PLAN STATUS /10/2025 | 1ST SUBMITTAL 3/18/2025 REVISIONS PER NCDEQ COMMEN 4/4/2025 2ND SUBMITTAL 6/3/2025 REVISIONS PER NCDEQ COMMEN 6/5/2025 REVISIONS PER NCDOT COMMEN DATE | DESCRIPTION KXO | ML DESIGN | DRAWN | CHKD SCALE H: 1" = XXX' V: 1" = XXX'

JOB No. **220154-01-001** DATE FEBRUARY 10, 202

Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-ES.dwg

Page 5 of 5

FORM

SELF-IN

NCG01

6/5/2025 | REVISIONS PER NODOT COMMENT DATE | DESCRIPTION KXO ML DESIGN | DRAWN | CHKD

JOB No. **220154-01-001** DATE FEBRUARY 10, 2025

Page 2 of 5 DEMLR Monitoring Form Rev. 07012020 PART 2: STORMWATER PLANS AND CONTROLS: For each question below, mark the corresponding box as Yes, No or N/A. For all items marked "No", note in Part 3A the Reference letter and provide the Corrective Action and location of the deficiency, the original date noted, and the date it was noted as being corrected. NOTE: Reference letters may be used multiple times. Reference Part 2A: Storm Water Plans and Related Documents A | Is the approval letter or certificate, COC and a copy of the NPDES Construction General Permit (CGP) on site? (Readily available electronic copy of CGP is acceptable) Is the approved plan on site and current?

N/A Part 2B: Stormwater Pollutant Controls Yes No Reference Are erosion and sediment controls that are shown on the approved plan installed and operating properly with Are stormwater controls that are shown on the approved plan installed and operating properly with no repairs Vehicle Tracking: Are construction entrances operating properly with no repairs needed? Soil Stabilization: Are areas of the site where construction activities have ceased been properly stabilized Are earthen stockpiles stabilized or otherwise protected from sediment loss, and located at least 50 feet away or downhill from drain inlets and surface waters? Part 2C: Non-Storm Water Pollutant Controls Yes No N/A Reference Concrete, stucco, paint, etc. washouts: Are washouts installed, properly located, posted and operating with no Solid & hazardous wastes: Are trash, debris, and hazardous materials properly managed? Sanitary waste: Are portable toilets properly located and operating with no visible repairs needed? Equipment and stored fluids: Are fuels, lubricants, hydraulic fluids, etc. contained so as not to enter surface and ground waters? Report oil spills and the release of hazardous substances to the appropriate DEQ Regional Office via phone call or email within 24 hours of discovery. https://deq.nc.gov/contact/regional-offices

For any items listed in the section below, a full description of sedimentation is required in Part 3A. This includes, but may not be limited to: location, estimated amount of sediment that has left the site and/or entered waters, apparent causes of the sediment loss, and what corrective actions need to be taken to prevent this from recurring Part 2D: Sedimentation Reference No Are sediment or other pollutants noted beyond the approved or permitted limits of disturbance? Are BMPs detected as releasing sediment or other pollutants into receiving waters? Report visible sedimentation into streams or wetlands to the appropriate DEQ Regional Office via phone call or email

within 24 hours of discovery. https://deq.nc.gov/contact/regional-offices

Page 4 of 5

Page 1 of 5

Land Quality or Local

Program Project/Permit #

Expiration Date,

if applicable

Date of COC Issuance

Check ALL applicable box(es) that apply to

completed & current phases

Completion of all land-disturbing activity, construction or development

Permanent ground cover sufficient to restrain erosion has been established

Initial installation of erosion and sediment control measures

Completion of any grading that requires ground cover

Clearing and grubbing of existing ground cover

DEMLR Monitoring Form Rev. 07012020 PART 3C: GROUND STABILIZATION: Must be recorded, at a minimum, after each phase. Add rows as needed.

Site area description and location where construction activities have temporarily or permanently ceased

Time Limit for Ground Cover been Stabilization been Stabilization to Restrain Date

Permanent Stabilization to Restrain Date Describe Actions Needed Corrective actions should be performed as Observed (see table below) installed? (Y/N) Erosion? (Y/N) soon as possible and before the next (T/P) storm event

INSPECTION AND MONITORING RECORDS FOR ACTIVITIES UNDER STORMWATER GENERAL PERMIT NCG010000

AND SELF-INSPECTION RECORDS FOR LAND DISTURBING ACTIVITIES PER G.S. 113A-54.1

Date of Plan

Approval

Coverage under the NCG010000 permit must be renewed annually, if issued after April 1, 2019 until Notice of Termination is filed and approved.

Rain Amount (inches)

Daily Rainfall Required. If no rain,

indicate with a "zero"

PART 1B: Phase(s) of the Plan

DEMLR Monitoring Form Rev. 07012020

Project Name

Approving Authority

NCG010000 Certificate of

Coverage Number

PART 1A: Rainfall Data

Sat (Inspection Optional)

Sun (Inspection Optional)

completion of inspection?

inaccessible.

Are there any site or project conditions that limit

If yes, explain conditions and areas of site that were

GROUND STABILIZATION TIMEFRAMES				
Site Area Description	Stabilization	Timeframe Variations		
Perimeter dikes, swales and slopes	7 Days	None		
High Quality Water (HQW) Zones	7 Days	None		
Slopes Steeper than 3:1	7 Days	7 days for perimeter dikes, swales, slopes and HWQ zones 14 days for slopes 10 ft or less in length and not steeper than 2:1 10 days for Falls Lake Watershed		
Slopes 3:1 to 4:1	14 Days	7 days for perimeter dikes, swales, slopes and HWQ zones 7 days for slopes greater than 50 ft in length 10 days for Falls Lake Watershed		
All other areas with slopes flatter than 4:1	14 Days	7 days for perimeter dikes, swales, slopes and HWQ zones 10 days for Falls Lake Watershed		

DEMLR Monitoring Form Rev. 07012020

PART 3A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 IOURS OF A RAINFALL EVENT EQUAL TO OR GREATER THAN 1.0 INCH PER 24 HOUR PERIOD. Add rows as needed. Eros

Erosion and Sedimentation Control Measures Inspected			Inspection Describe Actions Needed		
Measure ID or Location and Description	Reference(s)	Operating Properly? (Y/N)		Corrective actions should be performed as soon as possible and before the next storm event	Observed as Corrected

PART 3B: STORMWATER DISCHARGE OUTFALLS (SDOs): SDOs must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT EQUAL TO OR GREATER THAN 1.0 INCH PER 24 HOUR PERIOD. Add rows as needed.

Stormwater Discharge Outfalls Inspected Previous Stormwater Sedimentation In Stream Visible Any Visible oil Action(s) **Describe Actions Needed** Observed in Streams, Wetlands or from Erosion sheen, floating or below suspended solids or Corrective actions should be performed as soon as possible and as before the next storm event Corrected Outside Site Discharge? SDO? discoloration? (Y/N) Limits? (Y/N) (Y/N) Location

DEMLR Monitoring Form Rev. 07012020

Page 3 of 5

PART 3D: NEW OR REVISED MEASURES: Erosion and sedimentation control measures omitted or installed, at a minimum since the last inspection, shall be documented here or by initialing and dating each measure or practice shown on a copy of the approved erosion and sedimentation control plan. Alterations and relocations of measures shall also be documented if they significantly deviate from the approved plan. The removal of measures should also be documented. List dimensions of measures such as Sediment Basins and Dissipator Pads. Add rows as needed. Corrective actions should be included in Part 3A.

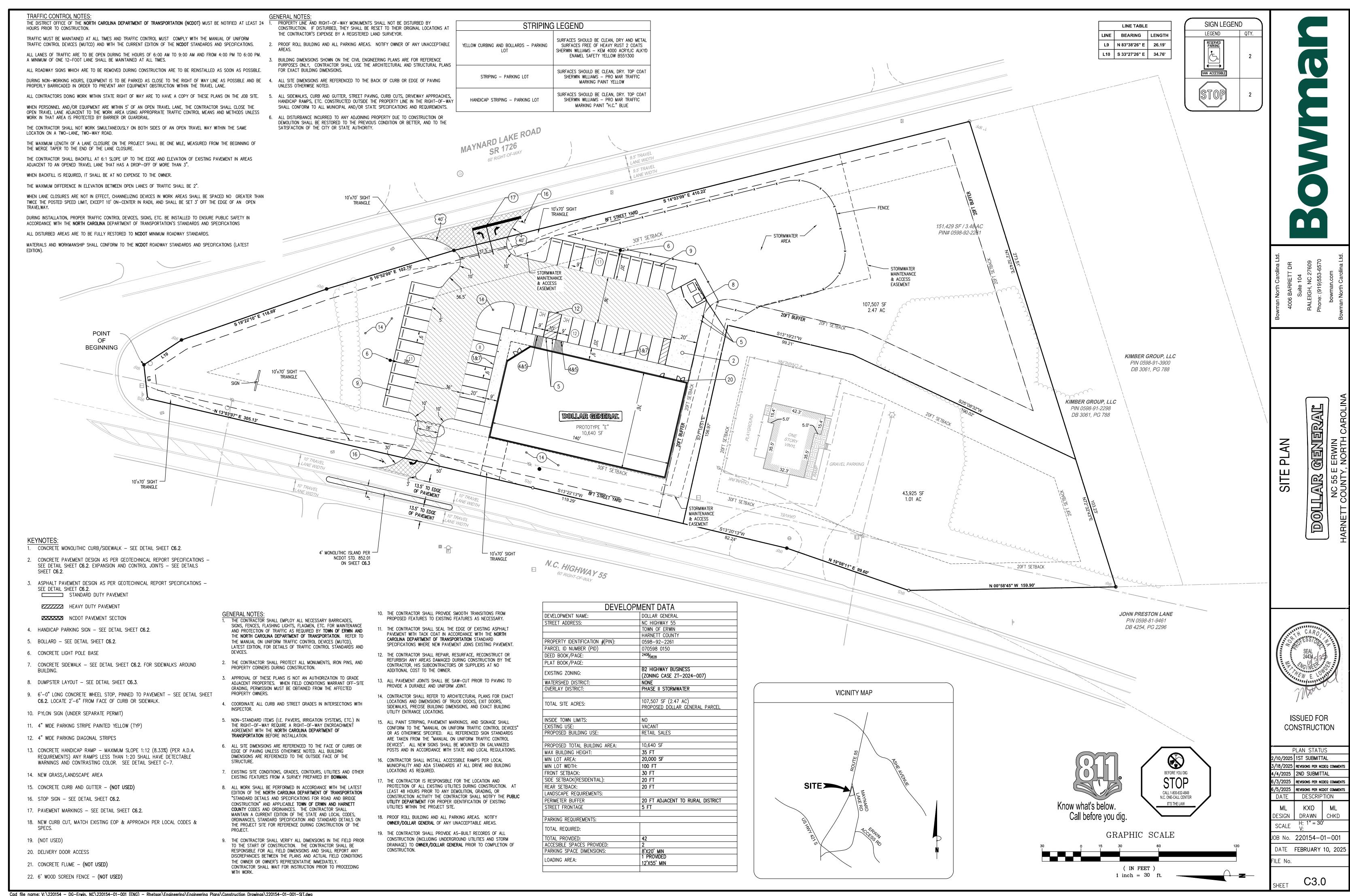
		1 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
8	ł .	
L		
		edimentation control measure that prevents it from po

PART 4: Signature of Inspector County Party (FRP) / Permittee INSPECTOR Inspector Type (Mark) X FRP/Permittee Email Address Agent/Designee By this signature, I certify in accordance with the NCG010000 permit & G.S. 113A-54.1 that this report is accurate and complete to the best of my knowledge. Date & Time of Inspection Financially Responsible Party / Permittee or Agent / Designee

SCALE H: 1" = XXX' V: 1" = XXX'

SHEET

Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-ES.dwg



SOLID WASTE TRUCK TURN DETAIL

NOT TO SCALE



GRAPHIC SCALE (IN FEET) 1 inch = 30 ft.

DESIGN DRAWN CHKD

SCALE H: 1" = 30'
V: JOB No. 220154-01-001 DATE FEBRUARY 10, 2025

ISSUED FOR CONSTRUCTION

PLAN STATUS

2/10/2025 1ST SUBMITTAL 3/18/2025 REVISIONS PER NCDEQ COMMEN

4/4/2025 2ND SUBMITTAL

6/3/2025 REVISIONS PER NCDEQ COMMEN 6/5/2025 REVISIONS PER NCDOT COMMEN

KXO ML

C3.1 SHEET

Know what's below.
Call before you dig.

WB-67 TRUCK TURN DETAIL

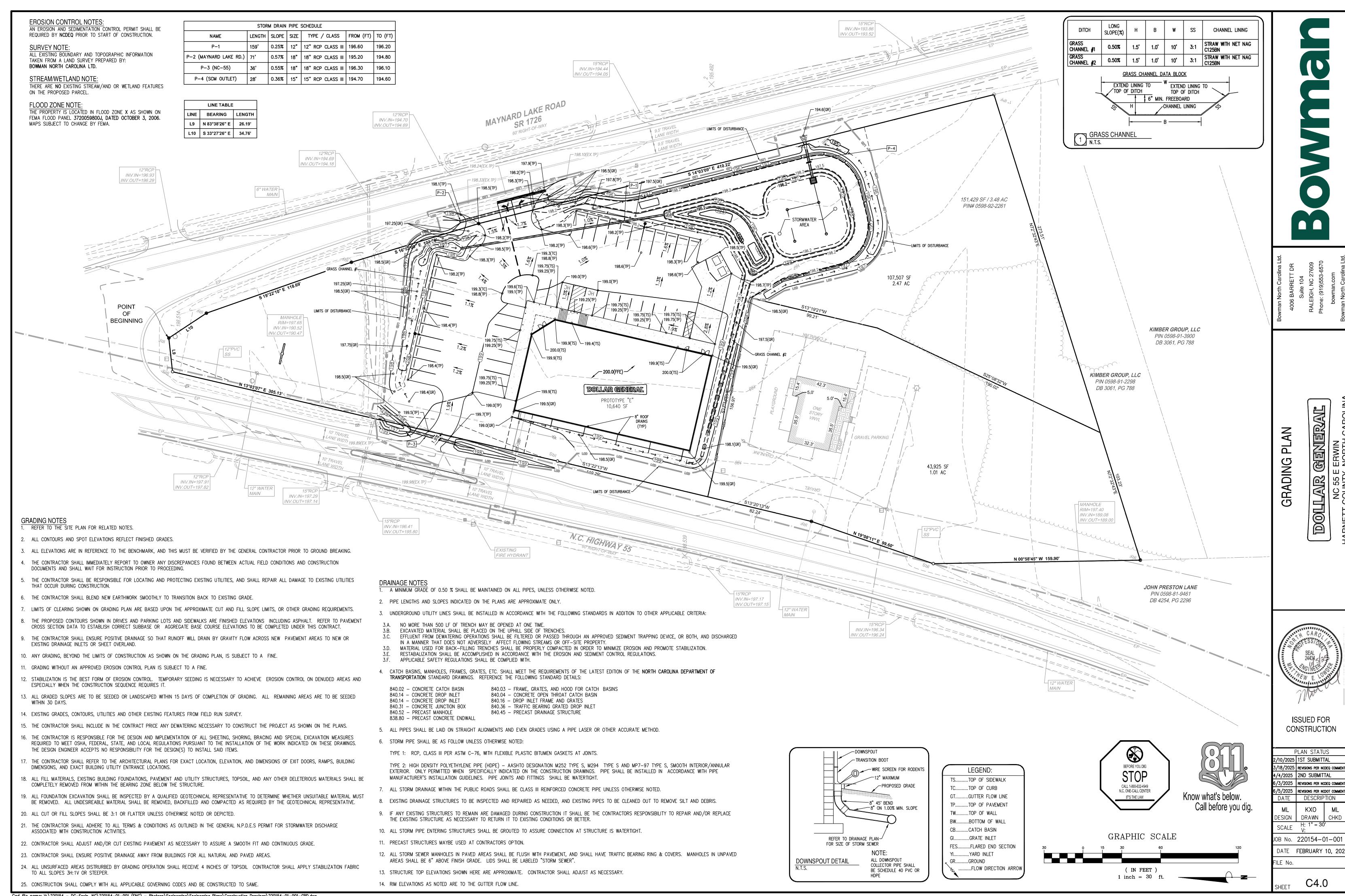
NOT TO SCALE

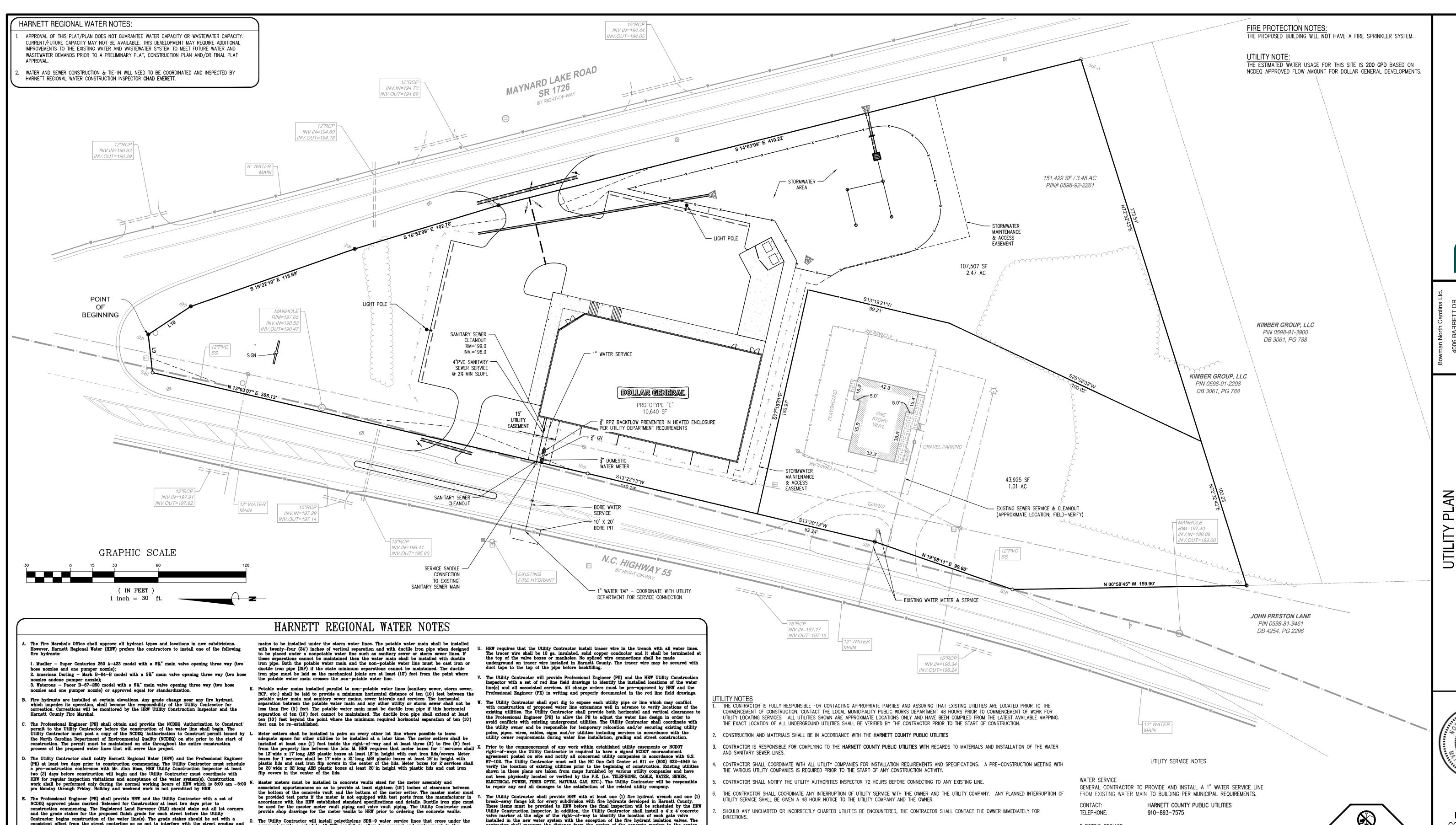
Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-TRUCK.dwg

VEHICLE EXHIBIT PLAN DOLLAR GENERAL PROTOTYPE "E" 10,640 SF

DOLLAR GENIERAL

NC 55 E ERWIN
HARNETT COUNTY, NORTH CAROLINA





contractor shall measure the distance from the center of the concrete marker to the center

of the valve box. This distance (in linear feet) shall be stamped on the brass plate located on the top of the concrete valve marker. In lieu of installing the concrete valve markers, the Utility Contractor may provide at least two measurements from two independent permanent above ground structures to the Professional Engineer (PE) in the red line drawings to ide ntify

the valve locations. The Professional Engineer (PE) must include these measurements in the As-Built Record Drawings submitted to HRW.

The Utility Contractor will be responsible for any and all repairs due to leakage damage from

poor workmanship during the one (1) year warranty period once the water system improvements have been accepted by Harnett Regional Water. Harnett Regional Water will

provide maintenance and repairs when requested and bill the Developer and/or Utility Contractor if necessary due to lack of response within 48 hours of notification of warranty work. The Utility Contractor will be responsible for any and all repairs due to damages resulting from failure to locate the new water lines and associated appurtenances for other

utilities and their contractors until the water lines have been approved by NCDEQ and accepted by HRW. The final inspection of water system improvements cannot be scheduled with HRW until the streets have been paved; the rights-of-way and utility easements have been seeded and stabilized with an adequate stand of grass in place to prevent erosion issues on

AA The Engineer of Record is responsible to insure that construction is, at all times, in compliance with accepted sanitary engineering practices and approved plans and specifications. No field changes to the approved plans are allowed without prior written approval by HRW. A copy of each engineer's field report is to be submitted to HRW as each such inspection is made on system improvements or testing is performed by the contractor. Water and sewer infrastructure must pass all tests required by HRW specifications and those of all applicable regulatory agencies. These tests include, but are not limited to: air test, vacuum test, mandrel test, visual test, pressure test, bacteriological test, etc. A HRW inspector must be present during testing and all test results shall be submitted to HRW. All tests must be satisfied before the final inspection will be scheduled with the HRW inspector. The Engineer of Record must request in writing to schedule the final inspection once all construction is complete. The Developer's Engineer of Record and the HRW Utility Construction inspector shall prepare a written punch list of any defects or deficiencies noted during the final inspection, should any exist. Upon completion of the punch list, the Developer's Engineer of Record will schedule another inspection. In the event the number of inspections performed by the HRW exceeds two, additional fees may be accessed to the Developer.

ISSUED FOR CONSTRUCTION

PLAN STATUS /10/2025 | 1ST SUBMITTAL 3/18/2025 | revisions per ncdeq commen

Call before you dig.

NATURAL GAS GENERAL CONTRACTOR TO COORDINATE WITH NATURAL GAS UTILITY FOR SERVICE LINE TO PROPOSED BUILDING. CONTACT:

910-893-7575

(MIN. 1% SLOPE). PROVIDE CLEAN OUTS EVERY 75' (TYPICAL).

"DUKE ENERGY" TO PROVIDE UNDERGROUND 120/208/3 PHASE SERVICE.

DUKE ENERGY

"TELEPHONE CO." TO PROVIDE NEW UNDERGROUND SERVICE. GENERAL

(800) 769-3766

WIRE TO UTILITY COMPANY POINT OF CONNECTION.

CONTACT:

CONTACT:

TELEPHONE:

TELEPHONE:

TELEPHONE:

TELEPHONE:

TELEPHONE SERVICE

GENERAL CONTRACTOR TO PROVIDE AND INSTALL TWO 4" DIA. CONDUIT W/ PULL

CONTRACTOR TO PROVIDE AND INSTALL A 4" DIA. PVC CONDUIT W/ PULL WIRE

GENERAL CONTRACTOR TO PROVIDE AND INSTALL A 4" SCHEDULE 40 PVC FROM

PROPOSED SANITARY SEWER SYSTEM TO LAST CLEAN OUT OUTSIDE OF BUILDING.

HARNETT COUNTY PUBLIC UTILITIES

FROM PHONE PANEL BOARD TO UTILITY COMPANY POINT OF CONNECTION.

SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER IMMEDIATELY FOR

PRESSURE REDUCING VALVES WILL BE REQUIRED ON THE DOMESTIC WATERLINES FOR EACH BUILDING IF THE STATIC PRESSURE IN THE WATER MAIN EXCEEDS 80 PSI. SEE MECHANICAL/PLUMBING PLANS.

ROUTES SHOWN FOR WATER SERVICES, ELECTRIC, SANITARY SEWER BUILDING LATERALS AND ROOF DRAIN PIPING ARE SUBJECT TO CHANGE. THE CONTRACTOR SHALL SAW CUT, REMOVE, AND REPLACE ASPHALT PAVEMENT AS NECESSARY TO INSTALL UNDERGROUND ELECTRIC, TELEPHONE, SEWER,

THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SEWERS CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT OWNER IN THE EVENT OF ANY UNFORESEEN CONFLICTS BETWEEN EXISTING AND

PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE. THE CONTRACTOR SHALL INSURE THAT ALL UTILITY COMPANIES AND HARNETT COUNTY PUBLIC UTILITIES STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANY. THE CONTRACTOR SHALL

COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTION, RELOCATIONS, THIS PLAN DETAILS PIPES UP TO 5' FROM THE BUILDING FACE. REFER TO THE BUILDING DRAWINGS FOR BUILDING CONNECTIONS. SUPPLY AND INSTALL PIPE

ADAPTERS AS NECESSARY.

ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT AND REPLACED IN ACCORDANCE WITH THE PAVEMENT REPAIR REQUIREMENTS OF THE HARNETT COUNTY PUBLIC UTILITIES AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.

MAINTAIN MINIMUM 10'-0" HORIZONTAL SEPARATION BETWEEN ON-SITE SANITARY SEWER AND DOMESTIC OR IRRIGATION WATER PIPING WHENEVER POSSIBLE. WHERE WATER PIPING MUST CROSS OVER SANITARY SEWER PIPING, MAINTAIN A MINIMUM 18" VERTICAL SEPARATION. WHERE SANITARY SEWER PIPING MUST CROSS OVER WATER PIPING, MAINTAIN A MINIMUM 24" VERTICAL SEPARATION AND PROVIDE MIN. 4" THICK CONCRETE ENCASEMENT OR 4" CONTINUOUS CAST IRON PIPE SLEEVE ON WATER PIPING FOR A MINIMUM OF 10'-0" ON EACH SIDE OF THE SAN. SEWER CROSSING. WHERE PERMITTED BY LOCAL CODE, DOMESTIC WATER AND SANITARY SEWER SERVICE PIPING MAY BE INSTALLED IN A COMMON TRENCH. TRENCH AND PIPING PLACEMENT SHALL COMPLY WITH ALL GOVERNING CODES AND REGULATIONS.

mechanical joints be assembled with grip rings as 'Megalug' fittings are not approved by Harnett Regional Water for pipe sizes smaller than twelve inches (12') diameter. PVC pipe used for water mains shall be connected by slip joint or mechanical joint with grip rings. Glued pipe joints are not allowed on PVC pipe used for water mains in Harnett County. sewer, RCP, etc.) shall be laid to provide a minimum vertical distance of twenty-four (24') inches between the potable water main and all other utilities. NCDOT requires the new water

Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-UTL.dwg

The Utility Contractor will install polyethylene SDR-9 water service lines that cross under the pavement inside a schedule 40 PVC conduit to allow for removal and replacement in the

future. Two (2) independent % water service lines may be installed inside one (1) - two (2)

inside one (1) - three (3') inch schedule 40 PVC conduit, but each water service shall be tapped directly to the water main. Split services are not allowed by HRW. If sidewalks are

proposed, the conduit must extend past the sidewalk.

with Harnett Regional Water to witness all pressure testing.

inch schedule 40 PVC conduit or two (2) independent 1" water service lines may be installed

. The water main(s), fire hydrants, gate valves, service lines, meter setters and associated appurtenances must be rated for 200 psi and hydrostatically pressure tested to 200 psi. The hydrostatic pressure test(s) must be witnessed by the HRW Utility Construction Inspector. The

The Utility Contractor shall conduct a pneumatic pressure test using compressed air or other

inert gas on the stainless steel tapping sleeve(s) prior to making the tap on the existing water main. This pneumatic pressure test must be witnessed by the HRW Utility Construction

Inspector. The Utility Contractor shall use Romac brand stainless steel tapping sleeve(s) or approved equal for all taps made in Harnett County. All new water line extensions must begin with a resilient wedge type gate valve sized equal to the diameter of the new water line extension in order to provide a means of isolation between Harnett Regional Water's existing

All water mains will be constructed with SDR-21 PVC Pipe or Class 50 Ductile Iron Pipe rated for at least 200 psi or greater. All pipes must be protected during loading, transport, unloading, staging, and installation. PVC pipe must be protected from extended exposure to

All water mains will be flushed and disinfected in strict accordance with the standard specifications of the Harnett Regional Water. All water samples collected for bacteria testing will be collected by the HRW Utility Construction Inspector and tested in the HRW Laboratory.

All fittings larger than two (2") inches diameter shall be ductile iron. HRW requires that

Contractor begins construction of the water line(s). The grade stakes should be set with a consistent offset from the street centerline so as not to interfere with the street grading and

F. The Utility Contractor shall provide the HRW Utility Construction Inspector with material submittals and shop drawings for all project materials prior to the construction of any water line extension(s), and associated water services in Harnett County. The materials to be used on the project must meet the established specifications of HRW and be approved by the Engineer of Record prior to construction. All substandard materials or materials not approved for use in Harnett County found on the project site must be removed immediately when notified by the HRW Utility Construction Inspector.

. The water main(s), fire hydrants, service lines, meter setters and all associated appurtenanc shall be constructed in strict in accordance with the standard specifications of the Harnett

Regional Water (HRW). The Utility Contractor shall be responsible to locate the newly installed

utility companies and their contractors until the new water main(s) have been approved by the North Carolina Department of Environmental Quality, Division of Environmental Health,

. Prior to acceptance, all services will be inspected to insure that they are installed at the proper depth. All meter boxes must be flush with the ground level at finish grade and the meter setters must be a minimum of 8 below the meter box lid. Meter setters shall be

The Utility Contractor shall provide the Professional Engineer (PE) and HRW Utility Construction Inspector with a set of red line drawings identifying the complete water system installed for each project. The red line drawings should identify the materials, pipe sizes and approximate depths of the water lines as well as the gate valves, fire hydrants, meter setters, blow off

assemblies and all associated appurtenances for all water line(s) constructed in Harnett County. The red line drawings should clearly identify any deviations from the NCDEQ approved

Potable water mains crossing other utilities and non-potable water lines (sanitary sewer, storm

plans. All change orders must be approved by HRW and the Professional Engineer (PE) in writing and properly documented in the red line field drawings.

Public Water Supply Section (NCDEQ, DEH, PWS) and accepted by HRW.

centered in the meter box and supported by brick, block or stone.

water main(s), water service lines and all associated meter setters and meter boxes for other

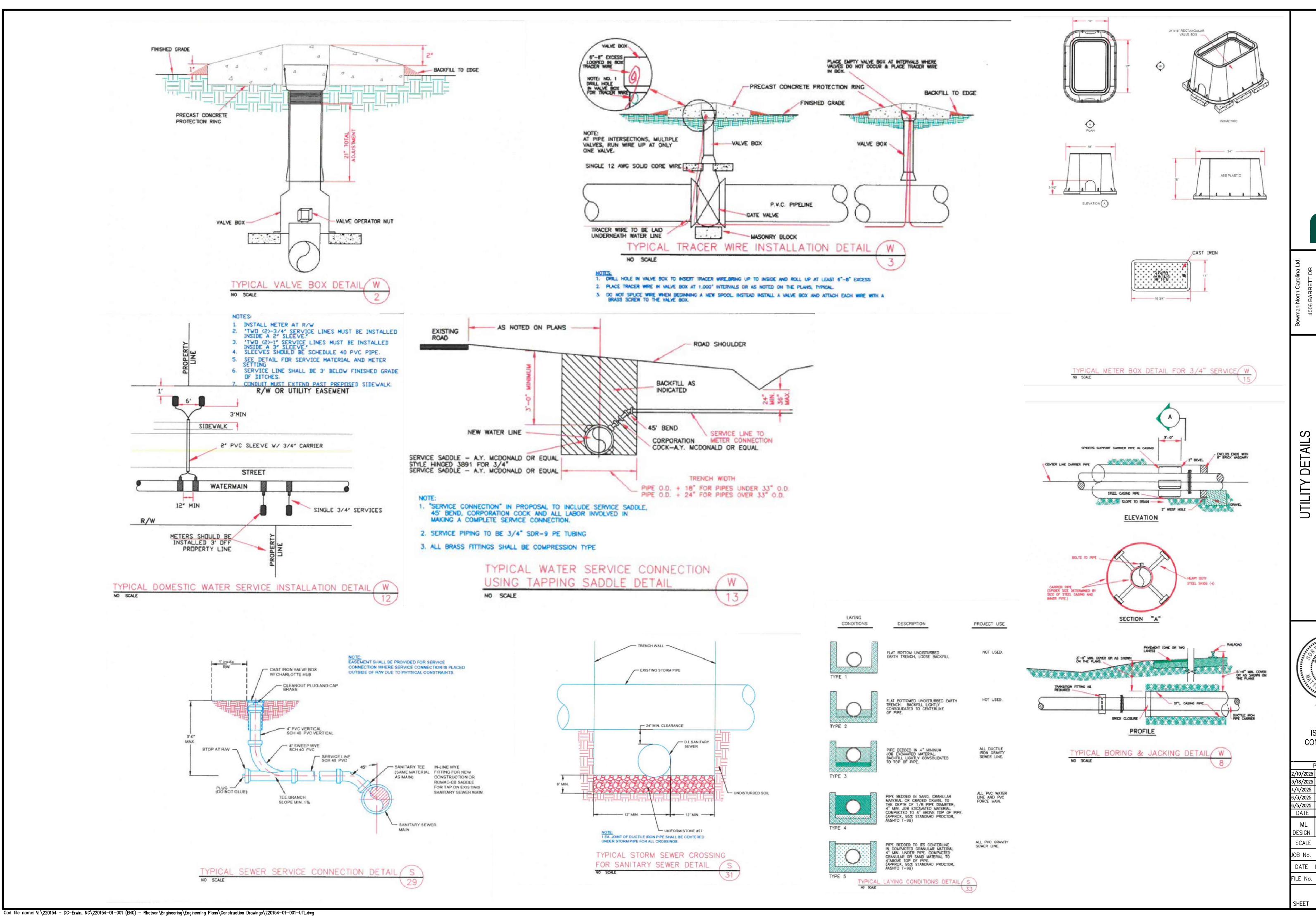
DOLLAR

BEFORE YOU DIG N.C. ONE-CALL CENTER IT'S THE LAW

4/4/2025 | 2ND SUBMITTAL 6/3/2025 | REVISIONS PER NCDEQ COMMI 6/5/2025 | REVISIONS PER NCDOT COMME DATE | DESCRIPTION KXO ML

DESIGN | DRAWN | CHKD SCALE JOB No. **220154-01-001**

DATE FEBRUARY 10, 202



GENERAL

DOLLAR (
NC 55 E
ARNETT COUNTY

ISSUED FOR CONSTRUCTION

PLAN STATUS /10/2025 1ST SUBMITTAL 3/18/2025 REVISIONS PER NCDEQ COMMEN 4/4/2025 | 2ND SUBMITTAL 6/3/2025 | REVISIONS PER NCDEQ COMMEN 6/5/2025 | REVISIONS PER NODOT COMMEN DATE DESCRIPTION

KXO ML DESIGN DRAWN CHKD

JOB No. **220154-01-001** DATE FEBRUARY 10, 2025

C5.1

TAIL

VTROL

S

ROSION

ш

GENERAL

DOLLAR

ISSUED FOR CONSTRUCTION

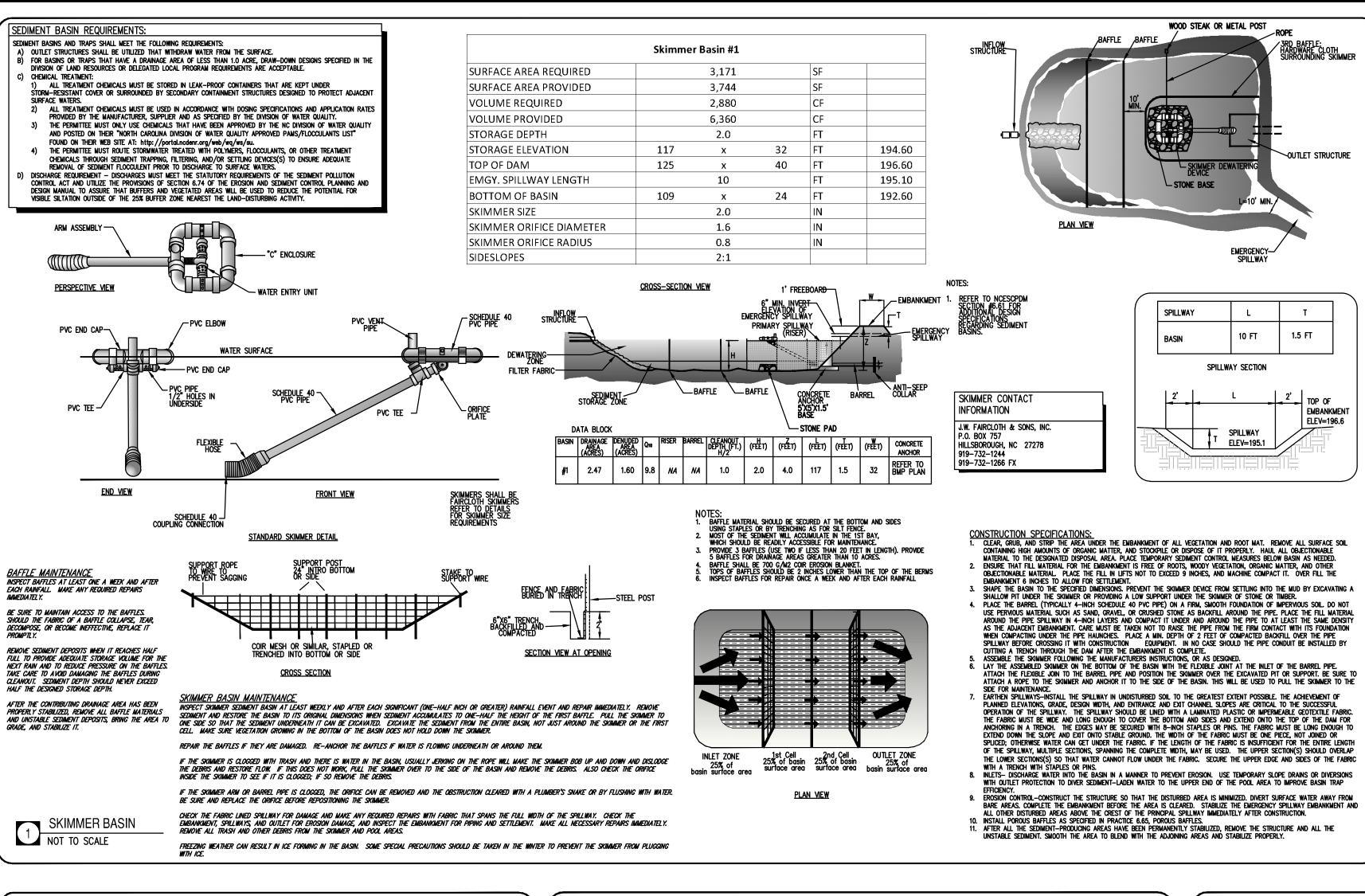
PLAN STATUS 10/2025 1ST SUBMITTAL 3/18/2025 REVISIONS PER NCDEQ COMME 4/4/2025 | 2ND SUBMITTAL 6/3/2025 | REVISIONS PER NCDEQ COMMI 6/5/2025 | REVISIONS PER NCDOT COMMEN DATE | DESCRIPTION

KXO | ML

DESIGN DRAWN CHKD H: n/a

SCALE JOB No. **220154-01-001** DATE FEBRUARY 10, 202

C6.0



ENTRANCE PERIODICALLY FOR

TOP-DRESS WITH NEW GRAVEL AS

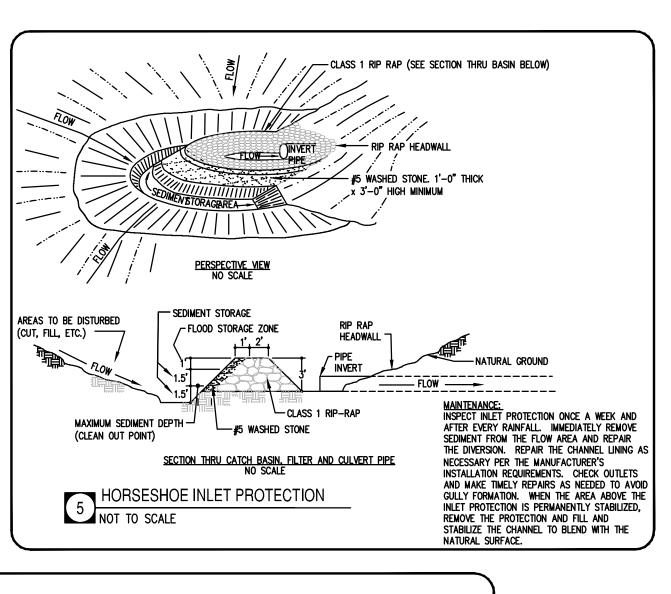
GAUGE LINE WIRES

SILT FENCE

NOT TO SCALE

CONDITION OF SURFACE.

PUBLIC_STREET



FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT

THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED

3' FILTER FABRIC

₀/ON GROUND

BOTTOM OF WIRE FENCE AND

HORIZONTALLY IN EXCAVATED

,SILT FENCE

FILTER FABRIC,

ND HARDWARE

CLOTH IN TRENCH

FILTER FABRIC BURIED 8"

VERTICALLY AND 4"

Steel Fence

SET MAX 2'

IAPART

IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY

SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE

BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

STEEL FENCE POS

HARDWARE CLOTH

WIRE FENCE <

FRONT VIEW

REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.

BURY WIRE FENCE AND HARDWARE CLOTH

TOP OF SILT FENCE MUST BE AT LEAST 1' ABOVE THE TOP OF

THE WASHED STONE

REMOVE SEDIMENT

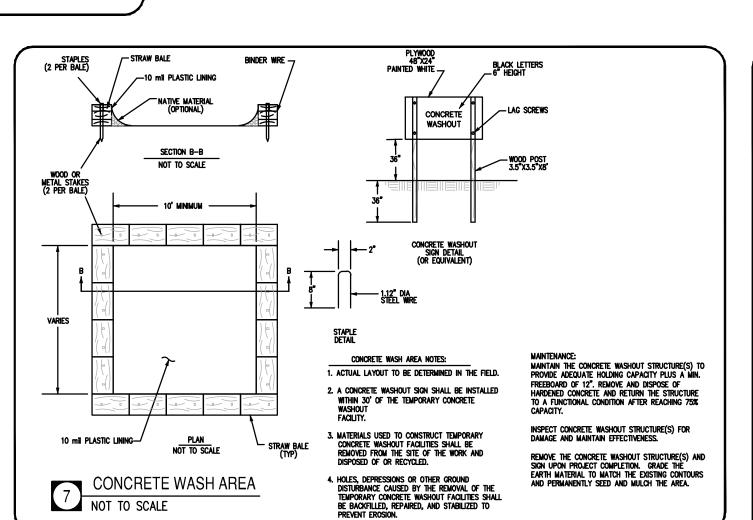
WHEN HALF OF STONE OUTLET IS COVERED.

REPLACE STONE AS

NEEDED TO ENSURE

NOT TO SCALE

SILT FENCE OUTLET



6'-0" MAXIMUM

-SILT FENCE FABRIC

INSTALLED TO SECOND

FRONT VIEW

MAINTENANCE NOTES: FILTER OUTLETS SHALL BE INSPECTED BY THE

SHALL BE MADE IMMEDIATELY.

PREPARED AND SEEDED.

FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY

2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY

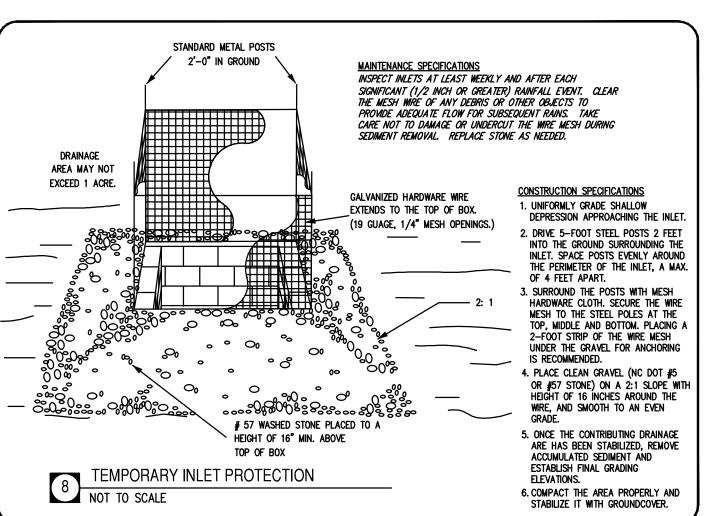
SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS

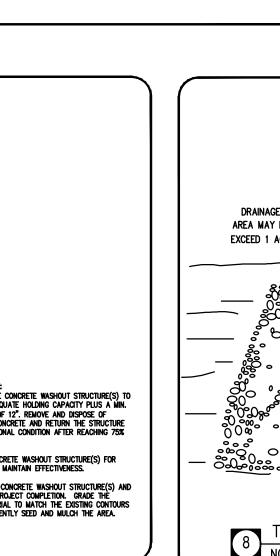
REACH 6 INCHES. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL

BE DRESSED TO CONFORM TO THE EXISTING GRADE,

EVENT THAT HAS CLOGGED OR REMOVED IT.

DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED





USE SILT FENCE ONLY WHEN DRAINAGE

AREA DOES NOT EXCEED 1/4 ACRE AND

NEVER IN AREAS OF CONCENTRATED FLOW

REMOVE SEDIMENT DEPOSITED AS NEEDED

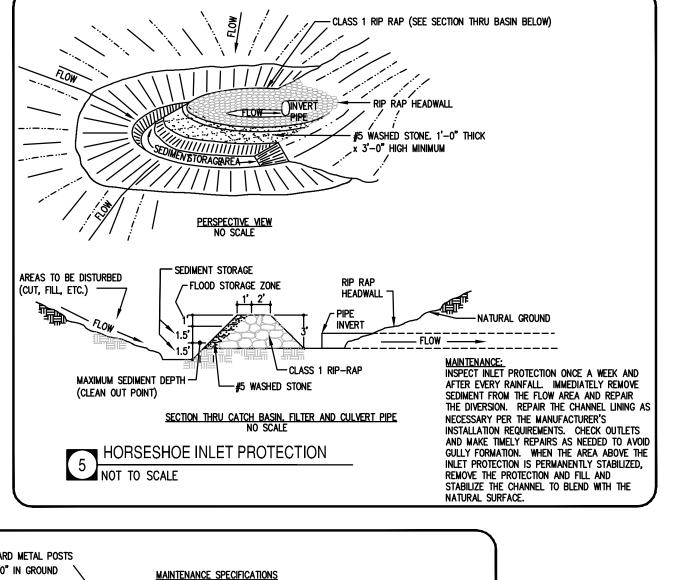
TO PROVIDE STORAGE VOLUME FOR THE

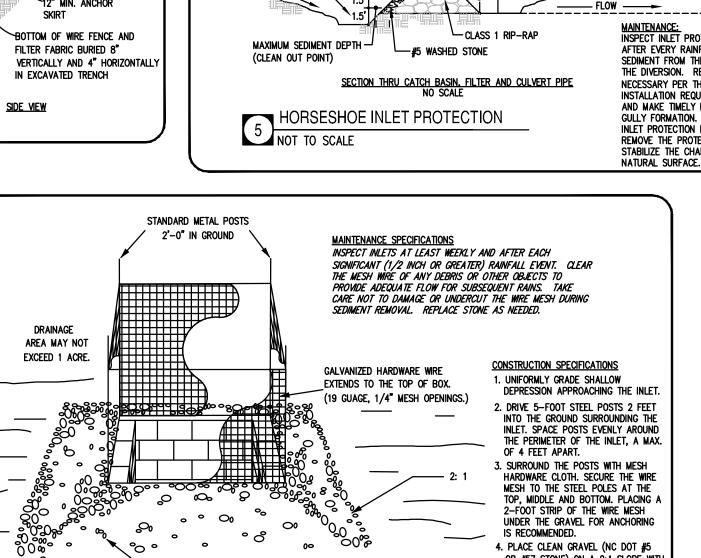
NEXT RAIN AND TO REMOVE PRESSURE ON

GRADE

----SILT FENCE FABRIC

-FILL SLOPE





STEEL BACK ROD-B—J NATURAL GRADE-└4" #5 WASHED STONE LAYER OF FILTER FABRIC

- HUB END ON OUTLET

END SECTIONS. SPIGOT END ON INLET

END SECTIONS.

RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.

THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIP—RAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.

MAXIMUM TAPER TO RECEIVING CHANNEL 5:1. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. $\label{eq:control}$ ALL SUBGRADE STRUCTURE TO BE COMPACTED TO 95% OR GREATER. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON

RIP-RAP APRON

WILL BE PERMITTED.

NOT TO SCALE

VOIDS. THE DESIRED DISTRIBUTION OF STONES THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE OADING AT THE QUARRY, AND CONTROLLED DUMPING DURING FINAL PLACEMENT. PLACE RIPRAP TO ITS FULL THICKNESS IN ONE OPERATION. DO NOT PLACE RIPRAP BY DUMPING THROUGH CHUTES OR OTHER METHODS THAT CAUSE SEGREGATION OF STONE SIZES. TAKE CARE NOT TO DISLODGE THE UNDERLYING BASE OR FILTER WHEN PLACING THE STONES. THE TOE OF THE RIPRAP SLOPE SHOULD BE KEYED TO A STABLE FOUNDATION AT ITS BASE AS SHOWN N FIGURE 6.15B. THE TOE SHOULD BE EXCAVATED TO A DEPTH ABOUT 1.5 TIMES THE DESIGN THICKNESS OF THE RIPRAP. AND SHOULD EXTEND HORIZONTALLY FROM THE SLOPE. THE FINISHED SLOPE SHOULD BE FREE OF POCKETS OF SMALL STONE OR CLUSTERS OF LARGE HAND PLACING MAY BE NECESSARY TO ACHIEVE THE PROPER DISTRIBUTION OF STONE SIZES TO PRODUCE A RELATIVELY SMOOTH, UNIFORM SURFACE. THE FINISHED GRADE OF THE RIPRAP SHOULD BLEND WITH THE SURROUNDING AREA. NO OVERFALL OR PROTRUSION OF RIPRAP SHOULD BE APPARENT

GRAVEL OR SAND MAY BE NEEDED TO PROTECT THE FILTER CLOTH.

N GENERAL, ONCE A RIPRAP INSTALLATION HAS BEEN PROPERLY DESIGNED AND INSTALLED IT REQUIRES VERY LITTLE MAINTENANCE. RIPRAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED

Rip-Rap Apron#1

Rip-Rap Apron#2

Rip-Rap Apron#3

SUBGRADE PREPARATION—PREPARE THE SUBGRADE FOR RIPRAP AND FILTER TO THE REQUIRED LINES

AND GRADES SHOWN ON THE PLANS. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY

APPROXIMATING THAT OF THE SURROUNDING UNDISTURBED MATERIAL OR OVERFILL DEPRESSIONS WITH

RIPRAP. REMOVE BRUSH, TREES, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. CUT THE SUBGRADE SUFFICIENTLY DEEP THAT THE FINISHED GRADE OF THE RIPRAP WILL BE AT THE ELEVATION OF THE SURROUNDING AREA. CHANNELS SHOULD BE EXCAVATED SUFFICIENTLY TO ALLOW PLACEMENT OF THE RIPRAP IN A MANNER SUCH THAT THE FINISHED INSIDE DIMENSIONS AND GRADE OF THE RIPRAP MEET

BURY THE UPSTREAM END OF THE CLOTH A MINIMUM OF 12 INCHES BELOW GROUND AND WHERE

WITH A MINIMUM OVERLAP OF 12 INCHES AROUND THE DAMAGED AREA. IF EXTENSIVE DAMAGE IS SUSPECTED, REMOVE AND REPLACE THE ENTIRE SHEET.
WHERE LARGE STONES ARE USED OR MACHINE PLACEMENT IS DIFFICULT, A 4-INCH LAYER OF FINE

STONE PLACEMENT—PLACEMENT OF RIPRAP SHOULD FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE

FILTER. PLACE RIPRAP SO THAT IT FORMS A DENSE, WELL-GRADED MASS OF STONE WITH A MINIMUM OF

SYNTHETIC FILTER FABRIC-PLACE THE CLOTH FILTER DIRECTLY ON THE PREPARED FOUNDATION. OVERLAP THE EDGES BY AT LEAST 12 INCHES, AND SPACE ANCHOR PINS EVERY 3 FT ALONG THE OVERLAP.

NECESSARY, BURY THE LOWER END OF THE CLOTH OR OVER LAP WITH THE NEXT SECTION AS REQUIRED.

SEE FIGURE 6.14A PAGE 6.14.6. TAKE CARE NOT TO DAMAGE THE CLOTH WHEN PLACING RIPRAP. IF DAMAGE OCCURS REMOVE THE RIPRAP, AND REPAIR THE SHEET BY ADDING ANOTHER LAYER OF FILTER

MIN. THICKNESS

EXIT WIDTH (P)

MIN. THICKNESS

ENTRY WIDTH (E

EXIT WIDTH (P) MIN. THICKNESS MIN. STONE DIAMETER STONE CLASS

CONSTRUCTION SPECIFICATIONS:

DESIGN SPECIFICATIONS.

STONE CLASS

MIN. STONE DIAMETER

IN. STONE DIAMETER

RESEED AND MULCH AS SOON RAINFALL AND DECREASE SEDIMENT IN RUNOFF. AS POSSIBLE. SLOPE TRACKING DETAIL

MAINTENANCE:

PERIODICALLY CHECK THE

SEEDED SLOPES FOR RILLS

AND WASHES. FILL THESE

ORIGINAL GRADE, THEN

AREAS SLIGHTLY ABOVE THE

Cad file name: V: \220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-ES.dwg

A STABILIZED PAD OF CRUSHED STONE SHALL BE LOCATED WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A

CONSTRUCTION ENTRANCE

NOT TO SCALE

USE DOZER TRACKS TO

PERPENDICULAR TO THE

SEED. FERTILIZER. MULCH.

SLOPE. GROOVES WILL CATCH

CREATE GROOVES

PUBLIC STREET.

STONE TO BE 2"-3" WASHED STONE

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL

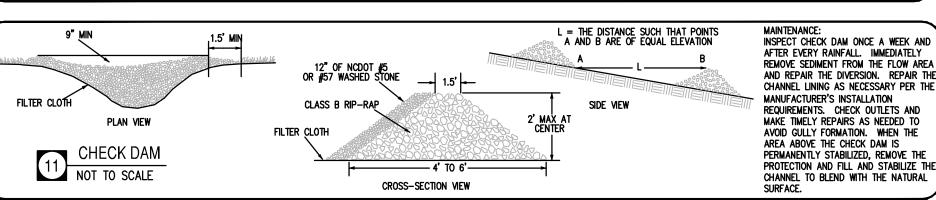
ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
WHEN NECESSARY WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN

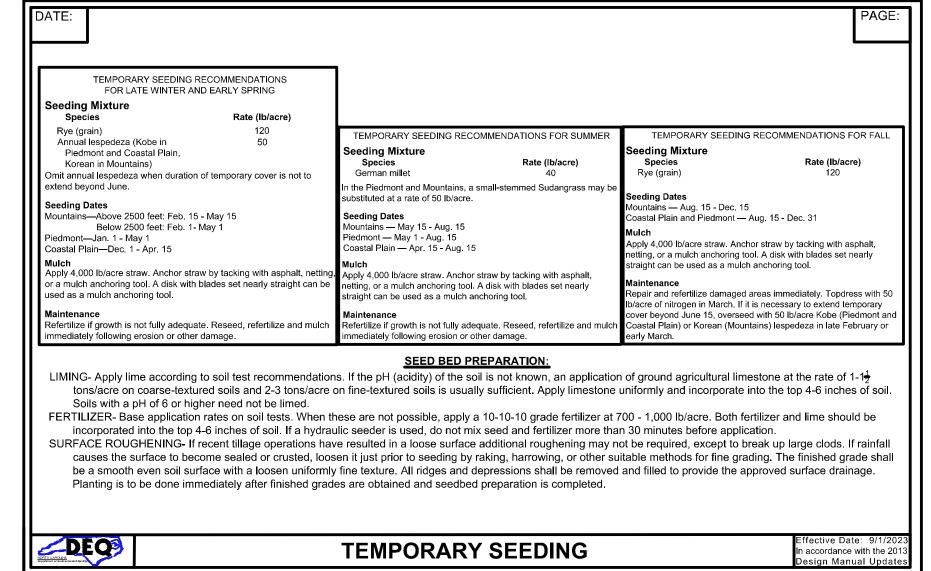
WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.

5. FILTER FABRIC SHALL BE MIRAFI 500 OR EQUAL.

6. ENTRANCE SHALL BE A MINIMUM OF 20' IN WIDTH OR THE WIDTH OF THE EXIT, WHICHEVER IS GREATER.

STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMEN





GENERAL E ERWIN 7, NORTH CAROI IN

DETAILS

NTROL

EROSION CON

NC 55 E HARNETT COUNTY

ISSUED FOR CONSTRUCTION

PLAN STATUS /10/2025 1ST SUBMITTAL 3/18/2025 REVISIONS PER NCDEQ COMMEN 4/4/2025 2ND SUBMITTAL 6/3/2025 REVISIONS PER NCDEQ COMMENT 6/5/2025 REVISIONS PER NCDOT COMMENT

DATE DESCRIPTION ML KXO ML

DESIGN DRAWN CHKD

SCALE H: 1" = XXX'
V: 1" = XXX' JOB No. **220154-01-001**

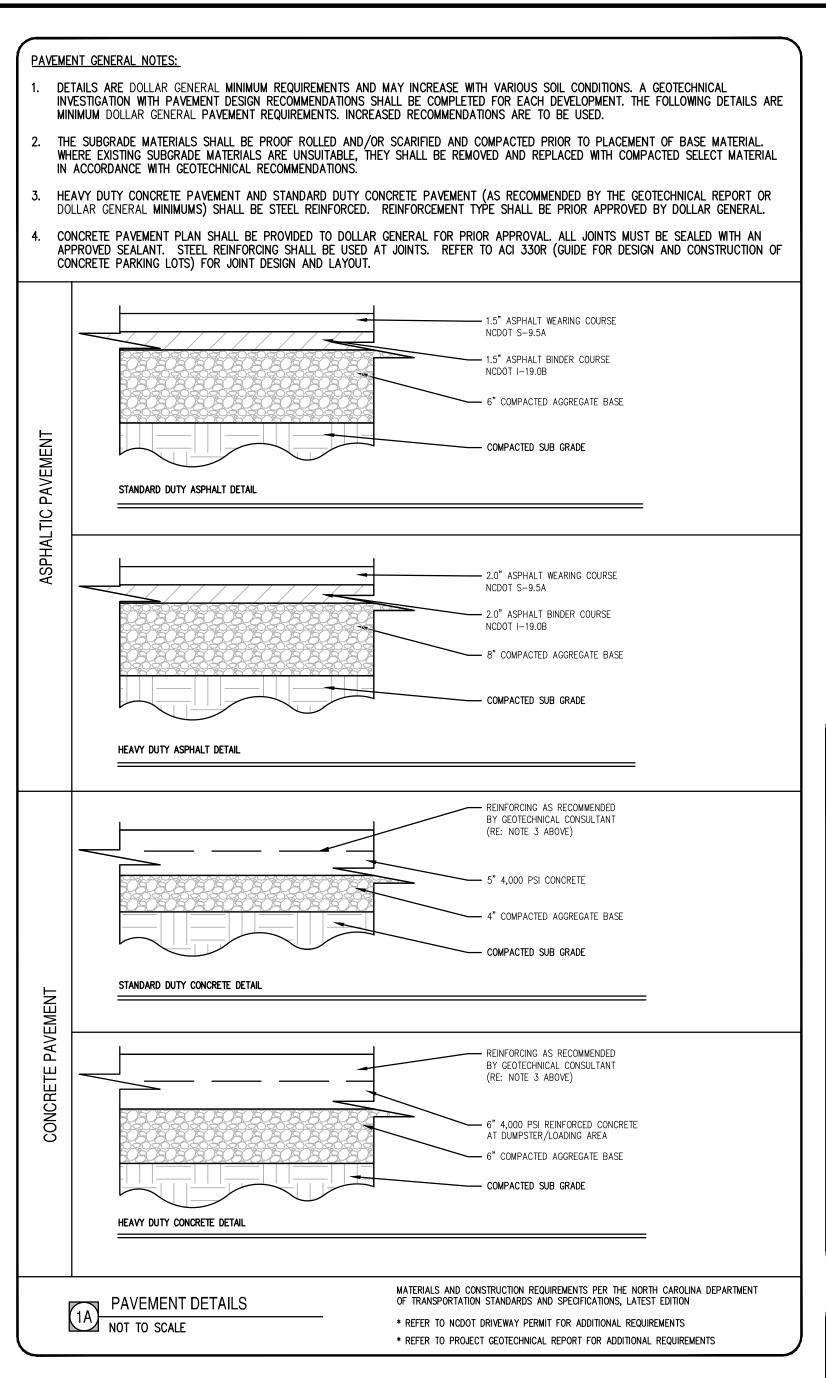
DATE FEBRUARY 10, 2025

C6.1

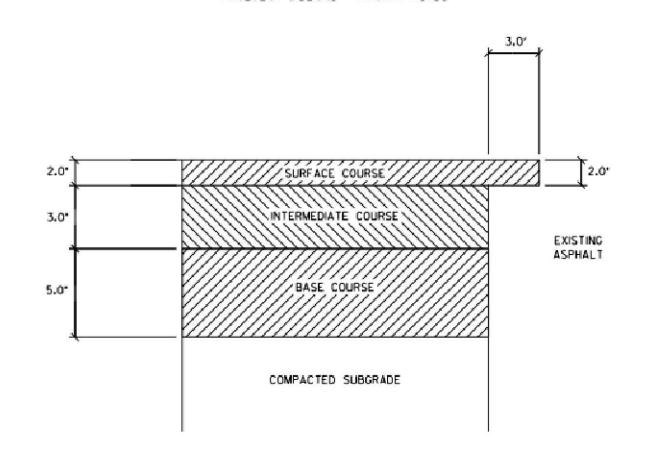
CONSTRUCTION SPECIFICATIONS

1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE. 2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM
SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF
12 INCHES FROM EDGES OF BAG.
CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG
IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS
WITH SEDIMENT, REDUCE PUMPING RATE. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED. FILTER BAG
NOT TO SCALE

Cad file name: V: \220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-ES.dwg



DIVISION SIX / DISTRICT TWO PAVEMENT WIDENING - PRIMARY ROADS



PAVEMENT SCHEDULE

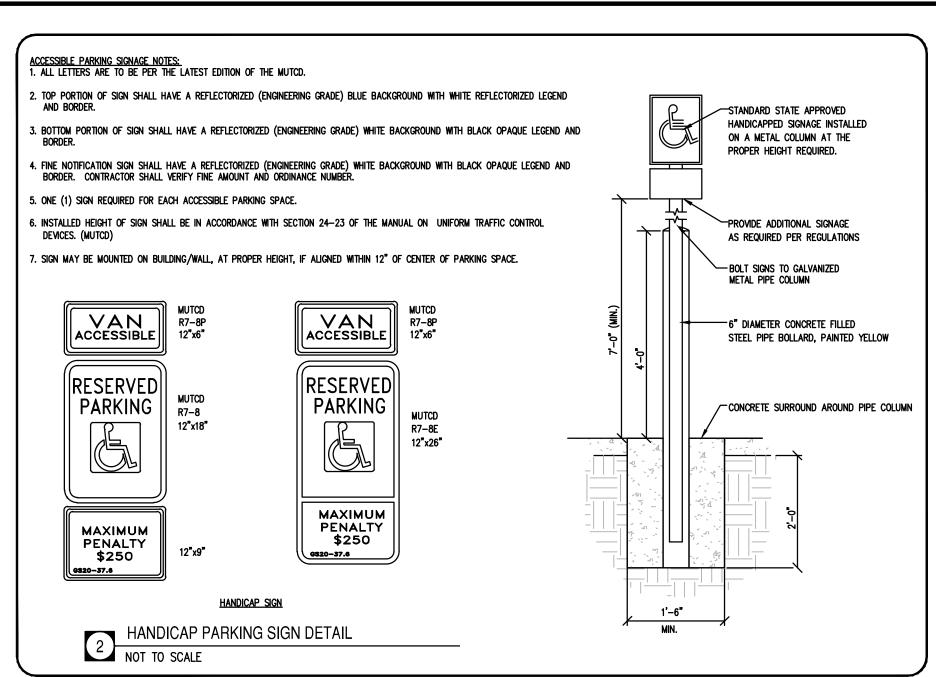
2.0° S 9.5 C

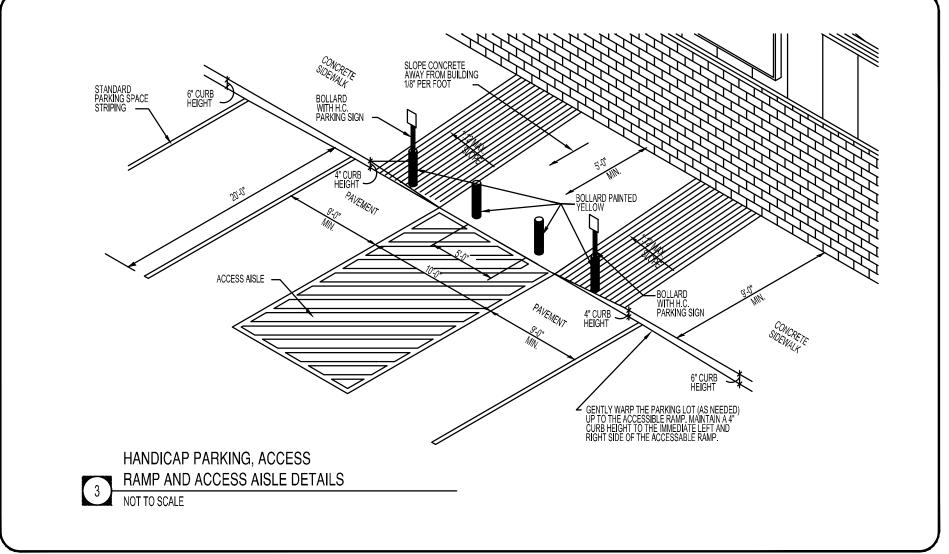
(MILLING REQUIRED THREE FEET AT DEPTH OF 2.0" ON EACH SIDE OF PAVEMENT CUT)

> 3.0°1 19.0 C 5.0°B 25.0 C

PAVEMENT DETAILS

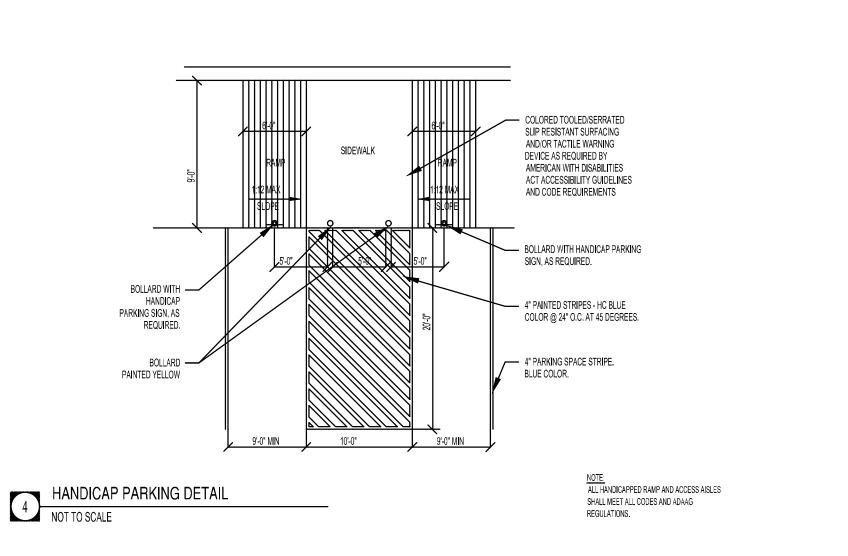
NOT TO SCALE





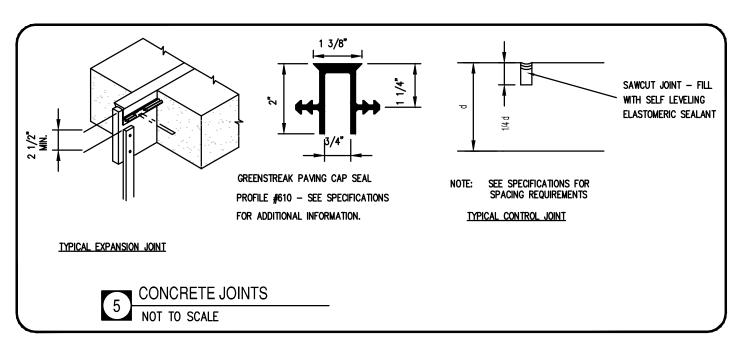
SITE ACCESSIBILITY DETAIL NOTES:

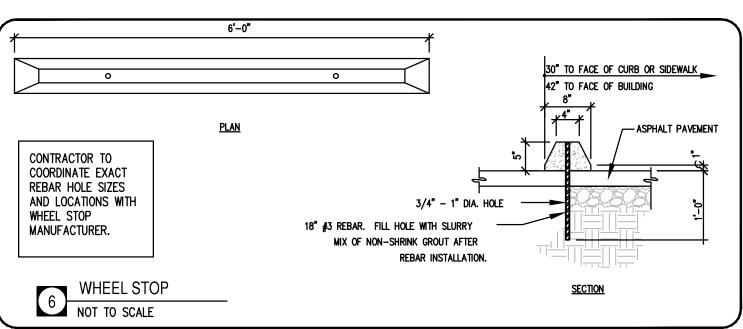
- 1. REFER TO SITE PLAN FOR EXACT LOCATION OF HANDICAP PARKING, WALKWAYS AND RAMPS.
- ALL WALKWAYS, RAMPS, AND HANDICAP PARKING SIGNAGE, ETC. SHALL MEET APPROVED AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS AND
- ONE OUT OF EVERY SIX (6) ACCESSIBLE PARKING SPACES, BUT NOT LESS THAN ONE, IS REQUIRED TO BE VAN ACCESSIBLE.
- ALL CONCRETE ACCESSIBLE RAMPS (3000 PSI) SURFACES SHALL HAVE COLORED TOOLED/SERRATED SLIP RESISTANT SURFACING AND/OR TACTILE WARNING DEVICE PER ADA STANDARDS AND LOCAL ACCESSIBILITY CODE.
- ALL CONCRETE ACCESSIBLE RAMPS SHALL BE COLOR IMPREGNATED TO PROVIDE VISUAL CONTRAST (DARK TO LIGHT) WITH ADJOINING CONCRETE SURFACES (MINIMUM 70% COLOR CONTRAST).
- THE MATERIAL USED TO PROVIDE COLOR CONTRAST IN CONCRETE ACCESSIBLE RAMPS SHALL BE AN INTEGRAL (PERMANENT) PART OF THE CONCRETE AND SHALL NOT BE PAINTED ON OR CAPABLE OF FADING OR WEARING OFF.
- 7. FINISHED GRADES OF PAVEMENT IN HC PARKING AND ACCESSIBILITY AISLE SHALL NOT EXCEED 1:50 SLOPE IN ANY DIRECTION.

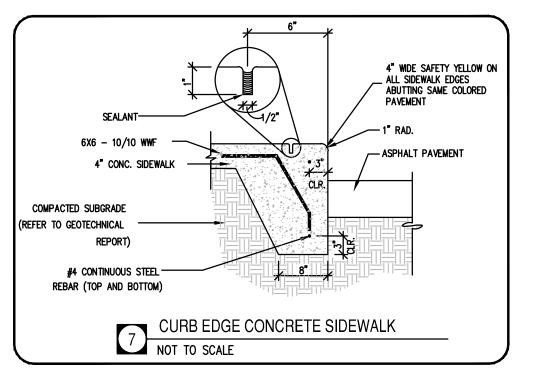


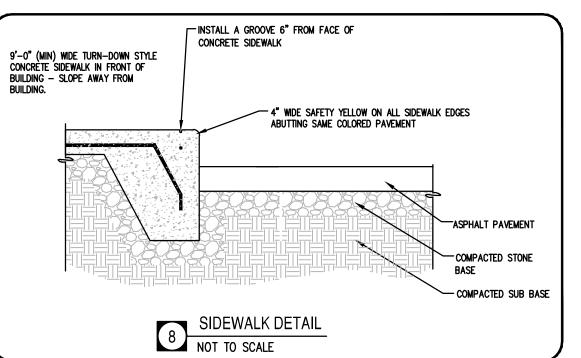
ALL HANDICAPPED RAMP AND ACCESS AISLES SHALL MEET ALL CODES AND ADA

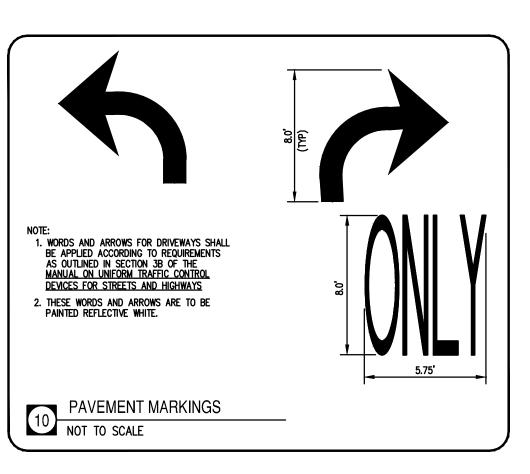
REGULATIONS.

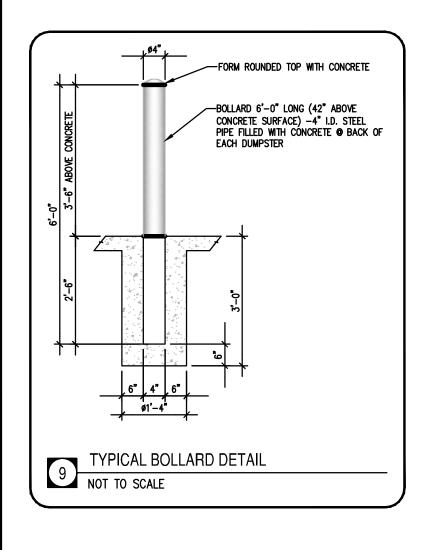


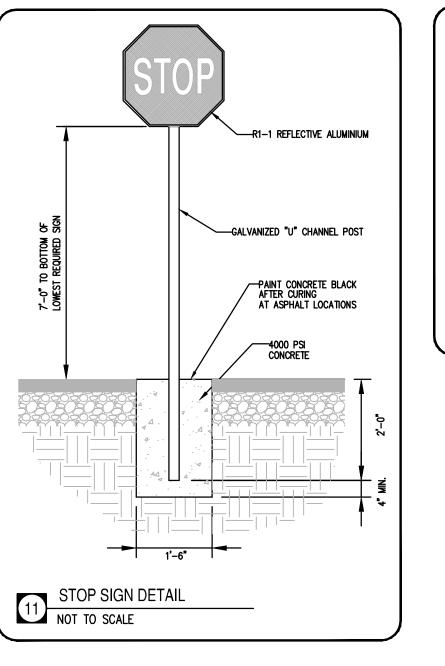


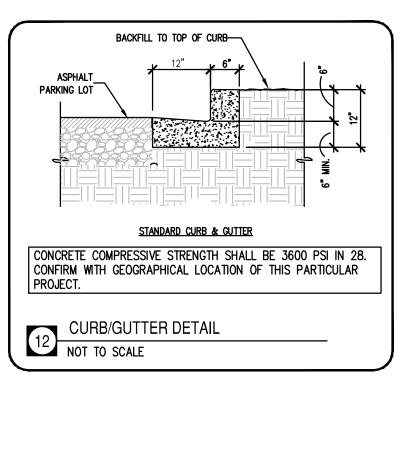












DOLLAR (
NC 55 E
ARNETT COUNTY

NOI-

CONSTRUC

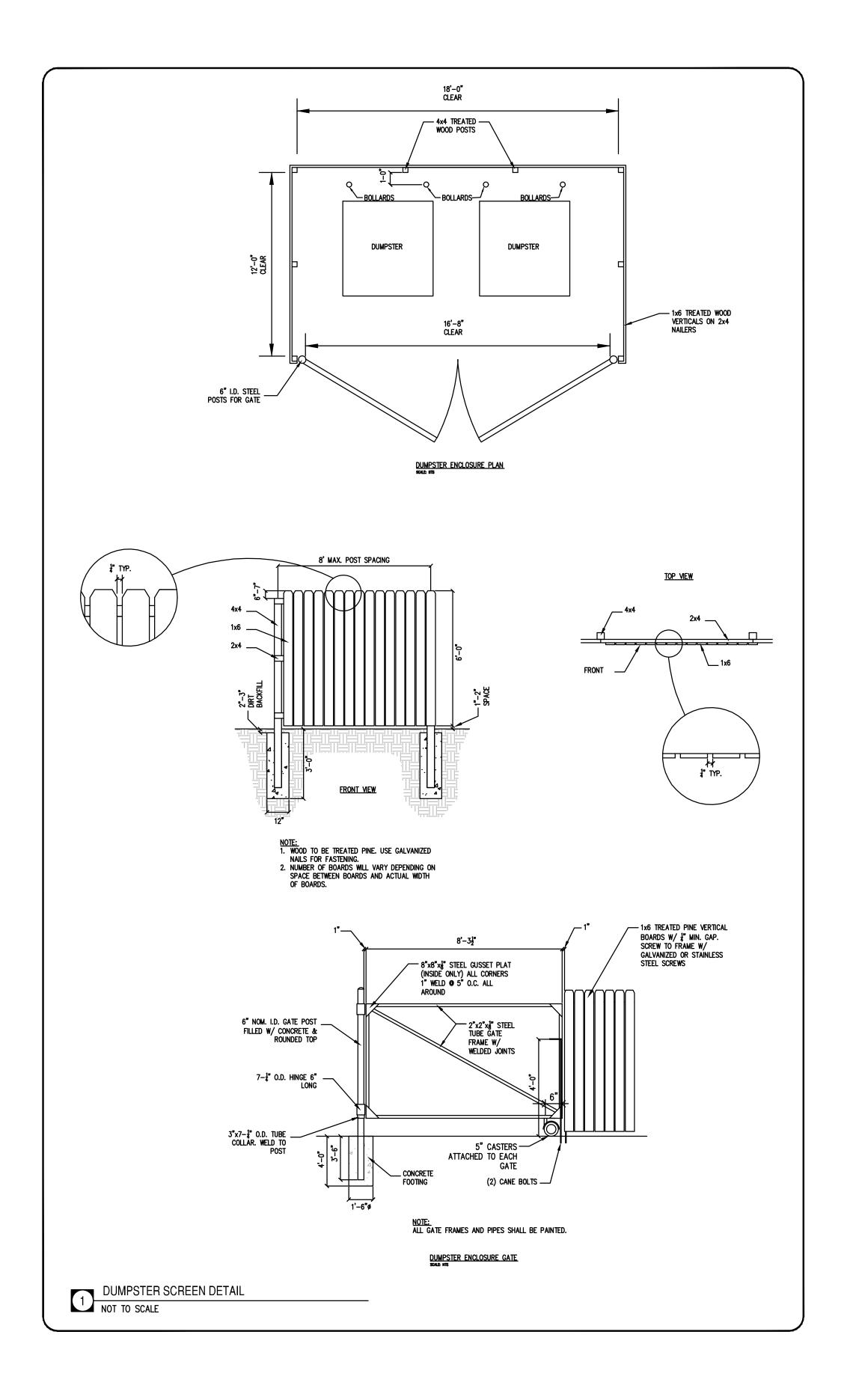
ISSUED FOR CONSTRUCTION

PLAN STATUS 10/2025 1ST SUBMITTAL 18/2025 REVISIONS PER NODEQ COMMEN 4/4/2025 2ND SUBMITTAL 6/3/2025 | revisions per nodeq comme 6/5/2025 | revisions per nodot commen DATE | DESCRIPTION KXO ML DESIGN | DRAWN | CHKD SCALE JOB No. **220154-01-001**

Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-SIT.dwg

DATE FEBRUARY 10, 2025

C6.2 SHEET





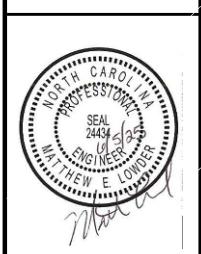
Suite 104
RALEIGH, NC 27609
Phone: (919)553-6570
bowman.com

NR GENERAL S 55 E ERWIN

TION DETAILS

CONSTRUC

NC 55 E E HARNETT COUNTY, N



ISSUED FOR CONSTRUCTION

PLAN STATUS

2/10/2025 1ST SUBMITTAL

3/18/2025 REVISIONS PER NCDEQ COMMEN

4/4/2025 2ND SUBMITTAL

6/3/2025 REVISIONS PER NCDEQ COMMEN

6/5/2025 REVISIONS PER NCDOT COMMEN

DATE DESCRIPTION

MI KXO MI

 ML
 KXO
 ML

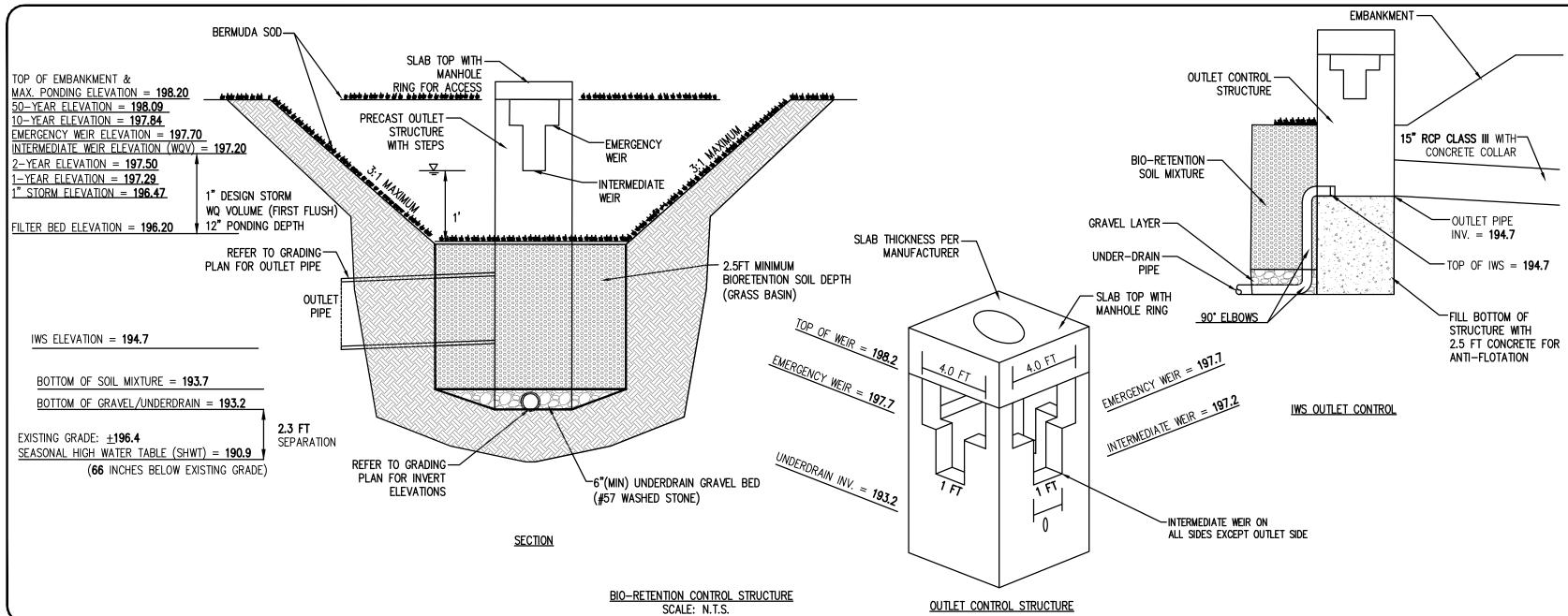
 DESIGN
 DRAWN
 CHKD

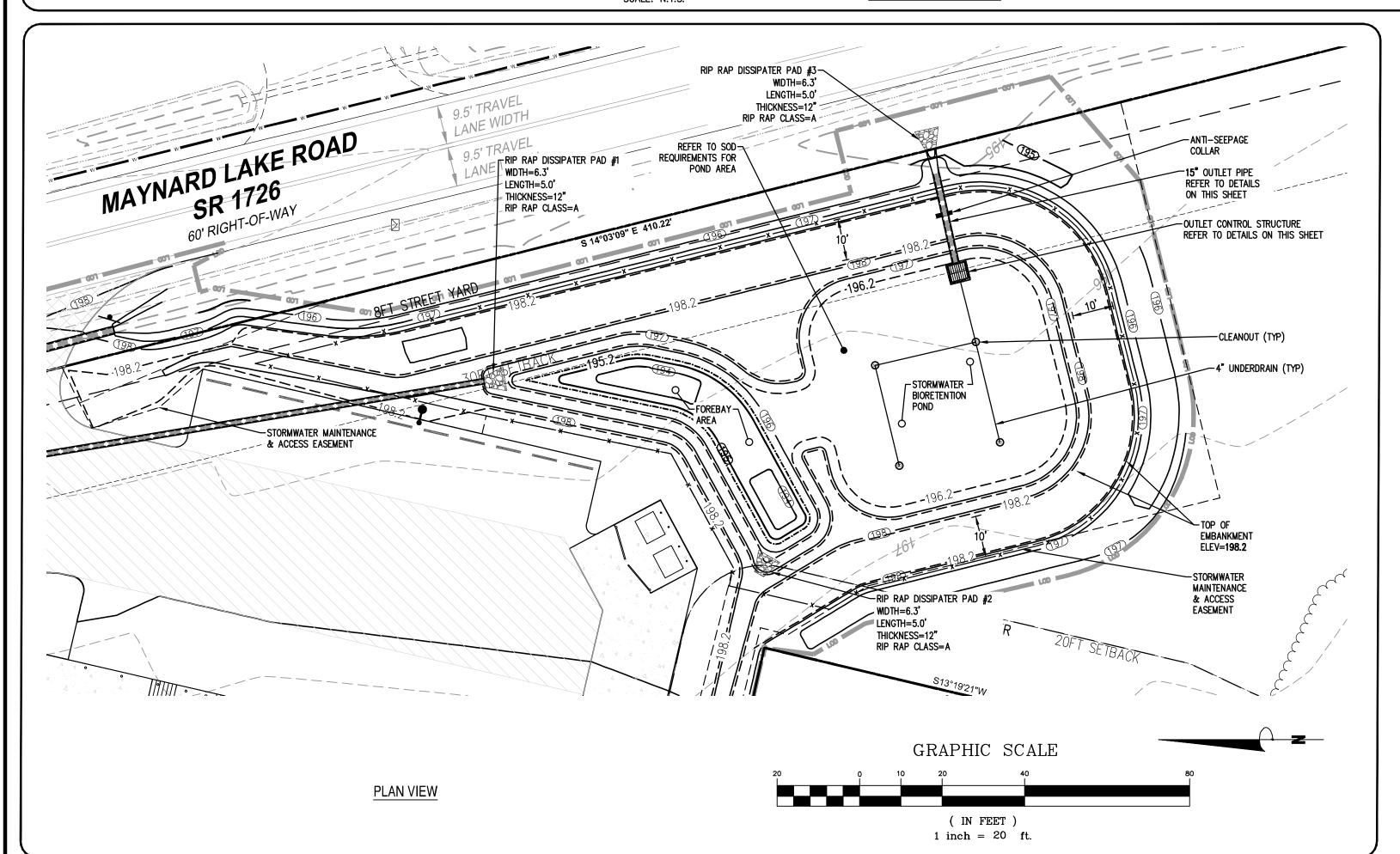
 SCALE
 H: V:

 JOB No.
 220154-01-001

DATE FEBRUARY 10, 2025

SHEET C6.3





STORMWATER MANAGEMENT NOTES: THE DEVELOPER OR HIS AGENT SHALL CONTACT THE ENGINEER WHEN THE BE MANAGEMENT PRACTICE(S) ARE CONSTRUCTED AND ABOUT TO BECOME OPERATIONAL SO A FINAL INSPECTION CAN BE PERFORMED TO DETERMINE

COMPLIANCE WITH THE APPROVED PLAN CAN BE PERFORMED.

PRIOR TO CONSTRUCTION, A SOIL TEST OF THE BIO-RETENTION FILTER MEDIA SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD WITH A COPY SENT TO THE **ENGINEER**. THE TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR pH, PHOSPHORUS, MAGNESIUM, AND POTASSIUM A ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. ALL TESTING RESULTS SHALL COME FROM THE SAME TESTING FACILITY. THE NC DEPARTMENT OF AGRICULTURE (NCDA) LAB IS THE PREFERRED TESTING FACILITY. SHOULD THE DH FALL OUT OF THE ACCEPTABLE RANGE. IT MAY BE MODIFIED (HIGHER) WITH LIME OR (LOWER) WITH IRON SULFATE PLUS SULFUR OR AS DIRECTED BY THE NCDA OR ENGINEER.

- PRIOR TO CONSTRUCTION A COMPOSITION TEST OF THE BIO-RETENTION FILTER MEDIA SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD WIT A COPY SENT TO THE **ENGINEER**. FILTER MEDIA SHALL CONFORM TO THE FOLLOWING: 75-85% MEDIUM TO COARSE WASHED SAND (ASTM C33, AASHTO M6/M80, ASTM C330, AASHTO M195, OR THE EQUIVALENT), 8-15% FINES (SILT AND CLAY), AND 5-15% ORGANIC MATTER (SUCH AS PINE BARK FINES) BY
- PERFORM A DOUBLE RING INFILTRATION TEST (MINIMUM OF 3 TESTS OR 1 PER 500 SF OF FILTER MEDIA WHICHEVER IS GREATER) AT THE COMPLETION OF TH BIO-RETENTION BMP. INFILTRATION RATE OF THE CONSTRUCTED BIO-RETENTION MEDIA SHALL BE BETWEEN 1-6 IN/HR. PROVIDE A COPY OF THE RESULTS TO
- ANNUAL MAINTENANCE INSPECTION AND REPORT REQUIRED THE OWNER OF PERMITTED STRUCTURAL STORMWATER BMP/CONTROL SHALL ANNUALLY SUBMIT A MAINTENANCE AND INSPECTION REPORT FOR EACH BMP TO THE STORMWATER ADMINISTRATOR. ANNUAL INSPECTIONS SHALL BEGIN WITHIN ONE YEAR OF TH RECORDATION OF ANY DEED(S) SHOWING STORMWATER BMPs/CONTROL
- UPON COMPLETION OF THE PROJECT, AND BEFORE A CERTIFICATE OF OCCUPANCY SHALL BE GRANTED, THE ENGINEER OF RECORD SHALL CERTIFY THAT THE COMPLETED PROJECT IS IN ACCORDANCE WITH THE APPROVED
- A FINAL INSPECTION OF THE SITE AND STORMWATER MANAGEMENT BMP/CONTROLS TO BE SCHEDULED WITH AND COMPLETED BY THE ENGINEER &

STORMWATER MANAGEMENT PLANS AND DESIGNS.

THE ENGINEER'S CERTIFICATION OF COMPLETION WILL BE REQUIRED PRIOR TO THE FINAL PLAT OR CERTIFICATE OF OCCUPANCY. THE STORMWATER CONTROL IS TO BE INSPECTED TO ENSURE IT IS FUNCTIONING AS DESIGNED AND HAS FULL DESIGN VOLUME PRIOR TO ISSUANCE OF THE FINAL CERTIFICATE OF

BIO-RETENTION CONSTRUCTION SEQUENCE STEP 1. CONSTRUCTION OF THE BIORETENTION AREA MAY ONLY BEGIN AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED. IT MAY BE NECESSARY TO BLOCK CERTAIN CURB OR OTHER INLETS WHILE THE BIORETENTION AREA IS BEING CONSTRUCTED. THE PROPOSED SITE SHOULD BE CHECKED FOR EXISTING UTILITIES PRIOR TO ANY EXCAVATION.

STEP 2. TEMPORARY E&S CONTROLS ARE NEEDED DURING CONSTRUCTION OF THE BIORETENTION AREA TO DIVERT STORMWATER AWAY FROM THE BIORETENTION AREA UNTIL IT IS COMPLETED. MAINTAIN EROSION CONTROL MEASURES IN PLACE UNTIL BIORETENTION AREA HAS BEEN COMPLETED. SPECIAL PROTECTION MEASURES SUCH AS EROSION CONTROL FABRICS MAY BE NEEDED TO PROTECT VULNERABLE SIDE SLOPES FROM EROSION DURING THE CONSTRUCTION PROCESS.

STEP 3. EXCAVATORS OR BACKHOES SHOULD WORK FROM THE SIDES TO EXCAVATE THE BIORETENTION AREA TO ITS APPROPRIATE DESIGN DEPTH AND DIMENSIONS. EXCAVATING EQUIPMENT SHOULD HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT HAVE TO SIT INSIDE THE FOOTPRINT OF THE BIORETENTION AREA. CONTRACTORS SHOULD USE A CELL CONSTRUCTION APPROACH IN LARGER BIORETENTION BASINS, WHEREBY THE BASIN IS SPLIT INTO 500 TO 1,000 SQ. FT. TEMPORARY CELLS WITH A 10-15 FOOT EARTH BRIDGE IN BETWEEN, SO THAT CELLS CAN BE EXCAVATED FROM THE SIDE.

STEP 4. IT MAY BE NECESSARY TO RIP THE BOTTOM SOILS TO A DEPTH OF 6 TO 12 INCHES TO PROMOTE GREATER INFILTRATION.

STEP 5. PLACE THE APPROPRIATE DEPTH OF STONE ON THE BOTTOM. INSTALL THE PERFORATED UNDERDRAIN PIPE AND PLACE STONE ABOVE THE UNDERDRAIN PIPE.

STEP 6. DELIVER THE SOIL MEDIA FROM AN APPROVED VENDOR, AND STORE IT ON AN ADJACENT IMPERVIOUS AREA OR PLASTIC SHEETING. APPLY THE MEDIA IN 12-INCH LIFTS UNTIL THE DESIRED TOP ELEVATION OF THE BIORETENTION AREA IS ACHIEVED. WAIT A FEW DAYS TO CHECK FOR SETTLEMENT, AND ADD ADDITIONAL MEDIA, AS NEEDED, TO ACHIEVE THE DESIGN ELEVATION. CONTRIBUTING DRAINAGE AREA TO BIO-RETENTION POND TO BE STABILIZED PRIOR TO INSTALLING BIO-RETENTION SOIL MEDIA.

STEP 7. INSTALL THE VEGETATION, AND WATER ACCORDINGLY.

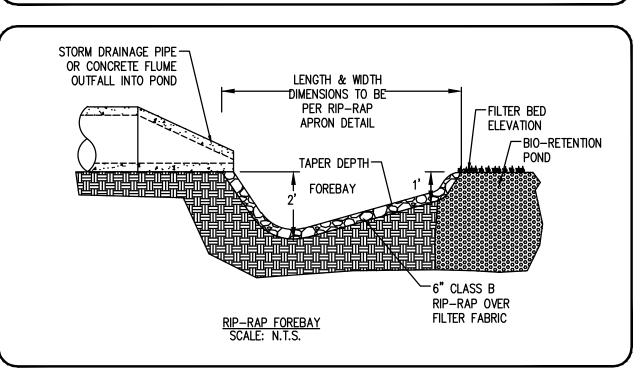
STEP 8. COORDINATE WITH INSPECTOR AND ENGINEER TO CONDUCT THE FINAL CONSTRUCTION INSPECTION. UPON COMPLETION OF BIORETENTION FACILITY REMOVE TEMPORARY EROSION CONTROL MEASURES AND COMPLETE FINAL STABILIZATION OF THE PROJECT.

— #4 REBAR **©** 12" OC

SOIL PERMEABILITY NOTE: A PERMEABILITY SOIL REPORT SHALL BE PROVIDED AFTER BIO-RETENTION SOIL MIXTURE IS IN PLACE. REFER TO STORMWATER MANAGEMENT NOTES FOR REQUIREMENTS.

BIO-RETENTION SOIL MIXTURE		
ITEM	PERCENT BY VOLUME	MATERIAL
SAND	75%–85%	MEDIUM TO COARSE WASHED SAND
FINES	8%-10%	FINES (SILT AND CLA
ORGANIC MATTER	5%-10%	ORGANIC MATTER (PINE BARK FINES)
PERMEABILITY	THE PERMEABILITY SHOULD FALL BETWEN HOUR, AND 1-2 INCHES PER HOUR IS F	
PHOSPHOROUS INDEX	RANGE BETWEEN 10 AND 30 (CONFIRM WI FROM NCDA LAB)	TH SOIL ANALYSIS REPO

- 4" SCHEDULE 40PVC, SDR35, OR SMOOTH BIO-RETENTION-WALL CORRUGATED SOIL MIXTURE PLASTIC PIPE (SOLID) CONNECTION TO UNDERDRAIN PIPE UNDISTURBED - UNDERDRAIN SUBSOIL GRAVEL BED (#57 **CLEANOUT** WASHED STONE)



	1.5'	OF COLLAR. REBAR TO HAVE 3" MIN. CONC. COVER FROM EDGE OR FACE OF COLLAR
3.0'		
<u> </u>	4 4 4 4	
	EEPAGE COLLAR LE: N.T.S.	

RECEIVING STREAM: STREAM INDEX: STREAM CLASS: HUC:	CAPE FEAR JUNIPER CREEK 18-21-1 C 0303000405 35.349900 N, 78.666700 W	ı			
POND DESIGN SUMMARY					
DRAINAGE AREA TO POND	· ·		ACRES		
SITE IMPERVIOUS AREA TO			ACRES ACRES		
OFF-SITE DESIGN IMPERVIOUS AREA TO POND: TOTAL DESIGN IMPERVIOUS AREA TO POND:			ACRES		
	PRE-DEVELOPEI TO POND	D POST-DEVELOPED TO POND	POST-DEVELOPED THROUGH POND	POST-DEVELOPED BYPASS	POST-DEVELOP COMBINED
DRAINAGE AREA:	2.45 AC	1.30 AC	THINGS OF T SIND	1.15 AC	COMBINED
CURVE NUMBER:	86.1	86.2		74.2	
TIME OF CONCENTRATION:	14.5 MIN	5 MIN		10 MIN	
1.0" STORM EVENT:		0.344 CFS	0.000 CFS		
1-YEAR STORM EVENT:	5.271 CFS	3.731 CFS	0.303 CFS	1.512 CFS	1.616 CFS
2-YEAR STORM EVENT:	7.012 CFS	4.935 CFS	1.656 CFS	2.265 CFS	3.905 CFS
10-YEAR STORM EVENT:	12.08 CFS	8.423 CFS	6.963 CFS	4.695 CFS	11.66 CFS
50-YEAR STORM EVENT:	17.86 CFS	12.38 CFS	9.633 CFS	7.699 CFS	17.26 CFS

STAGE/STORAGE TABLE					
STAGE (FT)	ELEVATION (FT)	CONTOUR AREA (SF)	INCREMENTAL STORAGE (CF)	TOTAL STORAGE (CF)	
0.0	196.2	2900	0	0	
0.8	197.0	3490	2556	2556	
1.0	197.2	8270	701	3257 (WQV)	
1.8	198.0	4060	3032	6289	
2.0	198.2	4200	826	7115	

ORAGE	TABLE	
CONTOUR AREA (SF)	INCREMENTAL STORAGE (CF)	TOTAL STORAGE (CF)
2900	0	0
3490	2556	2556
8270	701	3257 (WQV)
4060	3032	6289
4200	826	7115

CONSTRUCTION PLAN STATUS 10/2025 | 1ST SUBMITTAL

ISSUED FOR

 \mathcal{C}

0

AIL

MENT

MANGE

STORMWATER

DOLLAR

5/18/2025 REVISIONS PER NCDEQ COMME 4/4/2025 | 2ND SUBMITTAL /3/2025 | revisions per ncdeq commi 6/5/2025 | Revisions per nodot comme KXO ML DESIGN | DRAWN | CHKD

SCALE H: 1" = 20' V: 1" = 2' JOB No. **220154-01-001** DATE FEBRUARY 10, 202

C6.4 SHEET

STORMWATER MANAGEMENT SYSTEM DETAILS
NOT TO SCALE

Minimum infiltration rate that must maintained	Not provided	1 in/hr	
Planting plan for bioretention cells with trees and shrubs	Based on density of plantings	Based on providing a maximum of 50% canopy cover after five years of growth	
SCM element:	Potential problems:	How to remediate the problem:	
The entire bioretention cell	Trash/debris is present.	Remove the trash/debris.	
The perimeter of the bioretention cell	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, plant ground cover and water until it is established. Provide lime and a one-time fertilizer application.	
	The inlet pipe is clogged (if applicable)	Unclog the pipe and dispose of any sediment in a location where will not cause impacts to streams or the SCM.	
The inlet	The inlet pipe is cracked or otherwise damaged (if applicable).	Replace or repair the pipe.	
	Erosion is occurring in the swale (if applicable).	Regrade the swale if necessary and provide erosion control devices such as reinforced turf matting or riprap to avoid future erosion problems.	
	Stone verge is clogged or covered in sediment (if applicable).	Remove sediment and clogged stone and replace with clean stone.	
	Flow is bypassing pretreatment area and/or gullies have formed.	Regrade if necessary to route all flow to the pretreatment area. Restabilize the area after grading	
The pretreatment system	Sediment has accumulated to a depth greater than three inches.	Search for the source of the sediment and remedy the proble if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.	
	Erosion has occurred.	Provide additional erosion protection such as reinforced tur matting or riprap if needed to prevent future erosion problems.	
	Weeds are present.	Remove the weeds, preferably b hand. If pesticide is used, wipe on the plants rather than sprayin	
	Best professional practices show that pruning is needed to maintain optimal plant health.	Prune according to best professional practices. Maintain lines of sight between 2'-6'.	
Bioretention cell vegetation	Plants are dead, diseased or dying.	Determine the source of the problem: soils, hydrology, disease, etc. Remedy the proble and replace plants. Provide a or time fertilizer application to establish the ground cover if a sit test indicates it is necessary. If six was used, check to see that it with not grown on clay or impermeab soils. Replace sod if necessary.	
	Weeds are present.	Remove the weeds, preferably b hand. If pesticide is used, wipe on the plants rather than sprayin	
	Tree stakes/wires are present six months after planting.	Remove tree stake/wires (which can kill the tree if not removed).	
Bioretention cell mulch and media	Mulch is breaking down or has floated away.	Spot mulch if there are only random void areas. Replace whole mulch layer if necessary.	
		Remove the remaining mulch an replace with triple shredded hard wood mulch at a maximum dept of four inches.	
	Soils and/or mulch are clogged with sediment.	Determine the extent of the clogging - remove and replace either just the top layers or the entire media as needed. Dispose of the spoil in an appropriate offsite location. Use triple shredde hard wood mulch at a maximum depth of four inches. Search for the source of the sediment and remedy the problem if possible.	
	An annual soil test shows that pH has dropped or heavy metals have accumulated in the soil media.	Dolomitic lime shall be applied a recommended per the soil test a toxic soils shall be removed, disposed of properly and replace with new planting media.	
	Clogging has occurred.	Wash out the underdrain system	
The underdrain, filter fabric element, and outlet system	Clogging has occurred.	Wash out the underdrain system Clean out the drop inlet. Dispose of the sediment off-site.	

GRASS NOTE:

GRASS SHALL BE EITHER HYBRID BERMUDA GRASS OR CENTIPEDE.

BIO-RETENTION SOIL MIXTURE:

Bio—retention Soil Mixture (BSM): shall be placed and graded using low ground—contact pressure equipment or by excavators and/or backhoes operating on the ground adjacent to the bio—retention facility. No heavy equipment shall be used within the perimeter of the bio—retention facility before, during, or after the placement of the BSM. The BSM shall be placed in horizontal layers not to exceed 12 inches for the entire area of the bio—retention facility. The BSM shall be compacted by saturating the entire area of the bio—retention facility after each lift of BSM is placed until water flows from the under—drain. Water for saturation shall be applied by spraying or sprinkling. An appropriate sediment control device shall be used to treat any sediment—laden water discharged from the under—drain. If the BSM becomes contaminated during the construction of the facility, the contaminated material shall be removed and replaced with uncontaminated material at no additional cost to the Administration. Final grading of the BSM shall be performed after a 24—hour settling period. Final elevations shall be within 2 inches of elevations shown on the Contract Plans.

The Bio—retention Soil Mixture (BSM) shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the bio—retention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations.

Prior to placing the under—drain and the BSM, the bottom of the excavation shall be roto—tilled to a minimum depth of 6 inches to alleviate any compaction of the facility bottom. Any substitute method for roto—tilling must be approved by the Engineer prior to use. Any ponded water shall be removed from the bottom of the facility and the soil shall be friable before roto—tilling.

Once the BSM has been placed the entire bio—retention area shall be sodded with grass that has been grown in sandy soils or that has the roots washed clean of any clay or other materials that could clog the function of the bio—retention system.

OPERATION AND MAINTENANCE

North Carolina storm water rules require annual inspections by the regulating agency of bio—retention areas as a minimum. More frequent inspections by the land owner or system operator are strongly encouraged to ensure the proper operation of bio—retention areas.

A. Rainfall Event

1. Inspect the basin after every runoff—producing rainfall event.

Monthly Inspection
1. Inspect the basin monthly

2. Check the bio—retention area side slopes; remove trash and repair eroded areas before the next rainfall event.

3. Check the vegetative and rock filters for sediment accumulation, erosion and proper operation of the flow spreader.

3. Check the vegetative and rock filters for sediment accumulation, erosion and proper operation of the flow spreader mechanism and repair as necessary.4. Visually inspect and repair soil erosion on a monthly basis.

5. Remulch any void area whenever necessary. Replacement of mulch layers may be necessary every two or three years. mulch should be replaced in the spring. When the mulch layer is replaced, the previous layer should be removed first.

6. Remove and replace all dead and diseased vegetation considered beyond treatment. This should be done twice a year, once in the spring and once in the fall. Treat all diseased trees and shrubs that are not beyond treatment as needed.

Quarterly Inspection

1. Inspection

1. Inspect the collection system (i.e. catch basin, pipes and grass swales) for proper functioning. Clear accumulated trash from basin grates and basin bottoms. Check piping for obstructions.

Check pond inlet pipes for undercutting, replace rip—rap and repair broken pipes.
 Reseed grassed swales, including the vegetated filter if applicable, twice a year as necessary. Repair eroded areas immediately.

Six Month Inspection
1. Remove accumulated sediment from the bottom of the outlet structure or other areas where accumulated sediment is noted.

2. Inspect the embankment taking note of any wet areas where water may be seeping through the soil.

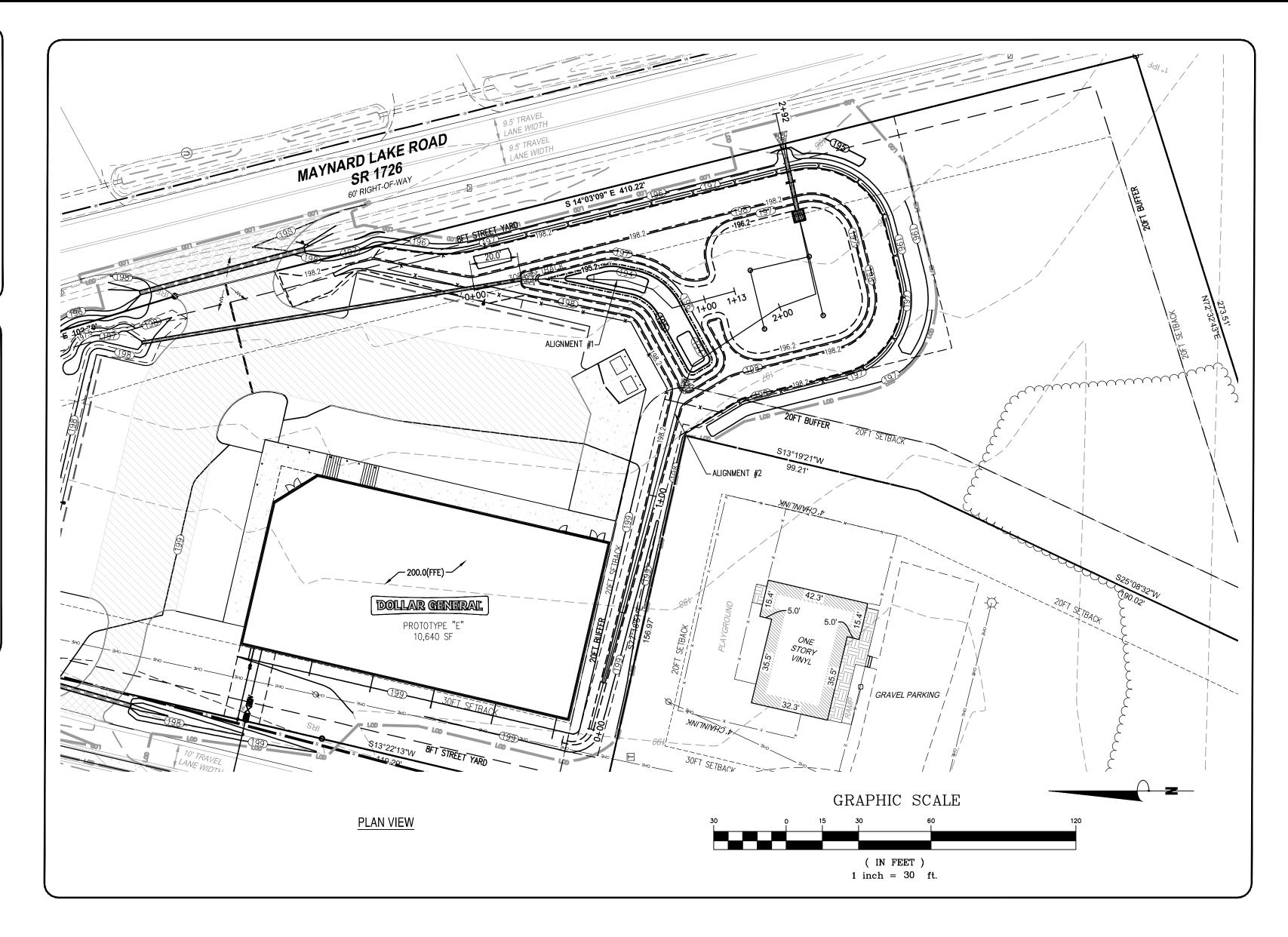
E. General Inspection

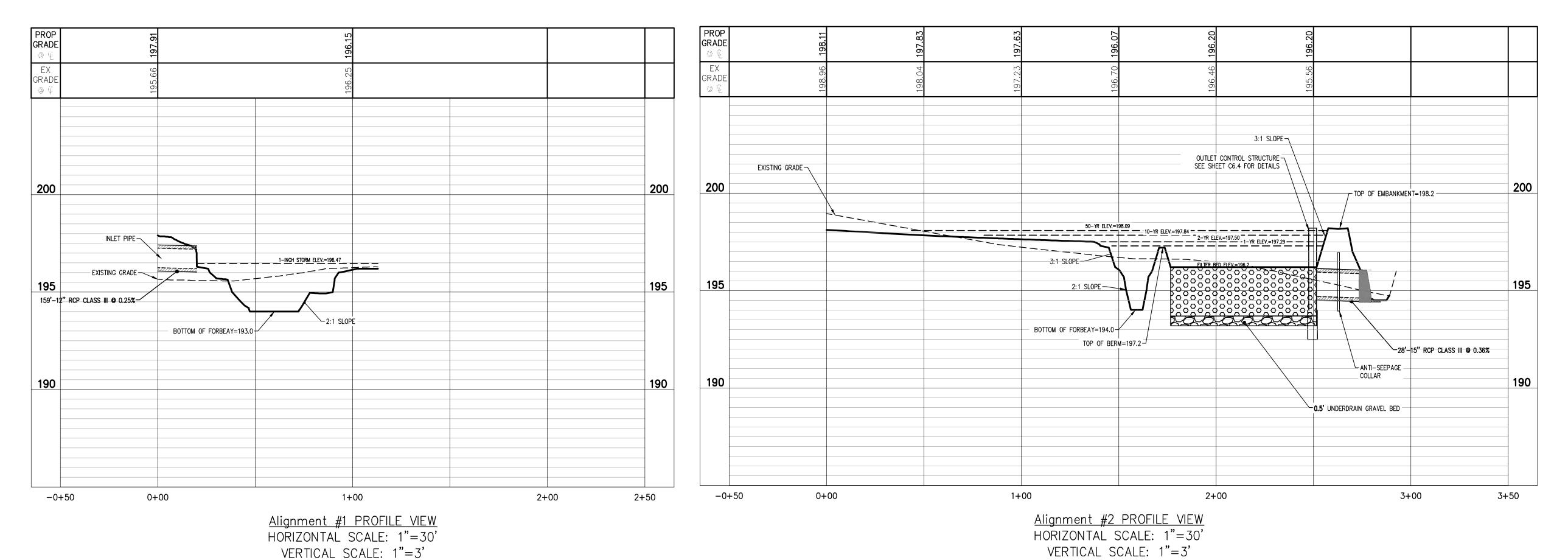
1. Maximum grass height is to be 6in.

2. No woody vegetation shall be allowed to grow in the bio—retention area.3. Debris shall be removed from blocking the inlet and outlet structures and from areas of potential clogging.

4. Periodic removal of dead vegetation shall be accomplished.

5. All components of the bio-retention system must be kept in good working order.





Cad file name: V:\220154 - DG-Erwin, NC\220154-01-001 (ENG) - Rhetson\Engineering\Engineering Plans\Construction Drawings\220154-01-001-SWD.dwg

damage have occurred at the outlet.

Repair the damage and improve the flow dissipation structure.

bioretention cell are causing erosion or sedimentation in the Office.

The receiving water

Suite 104
RALEIGH, NC 27609
Phone: (919)553-6570
howman com

2

OF

(2)

DETAILS

STORMWATER MANGEMENT

DOLLAR GENERAL

NC 55 E ERWIN
ARNETT COUNTY, NORTH CAROLII

SEAL 24431 5 255 WE IN ER STORY IN THE WELL STO

ISSUED FOR CONSTRUCTION

PLAN STATUS

2/10/2025 1ST SUBMITTAL

3/18/2025 REVISIONS PER NCDEQ COMMEN

4/4/2025 2ND SUBMITTAL

6/3/2025 REVISIONS PER NCDEQ COMMEN

6/5/2025 REVISIONS PER NCDOT COMMEN

DATE DESCRIPTION

ML KXO ML

DATE DESCRIPTION

ML KXO ML

DESIGN DRAWN CHKD

SCALE H: 1" = 30'
V: 1" = 3'

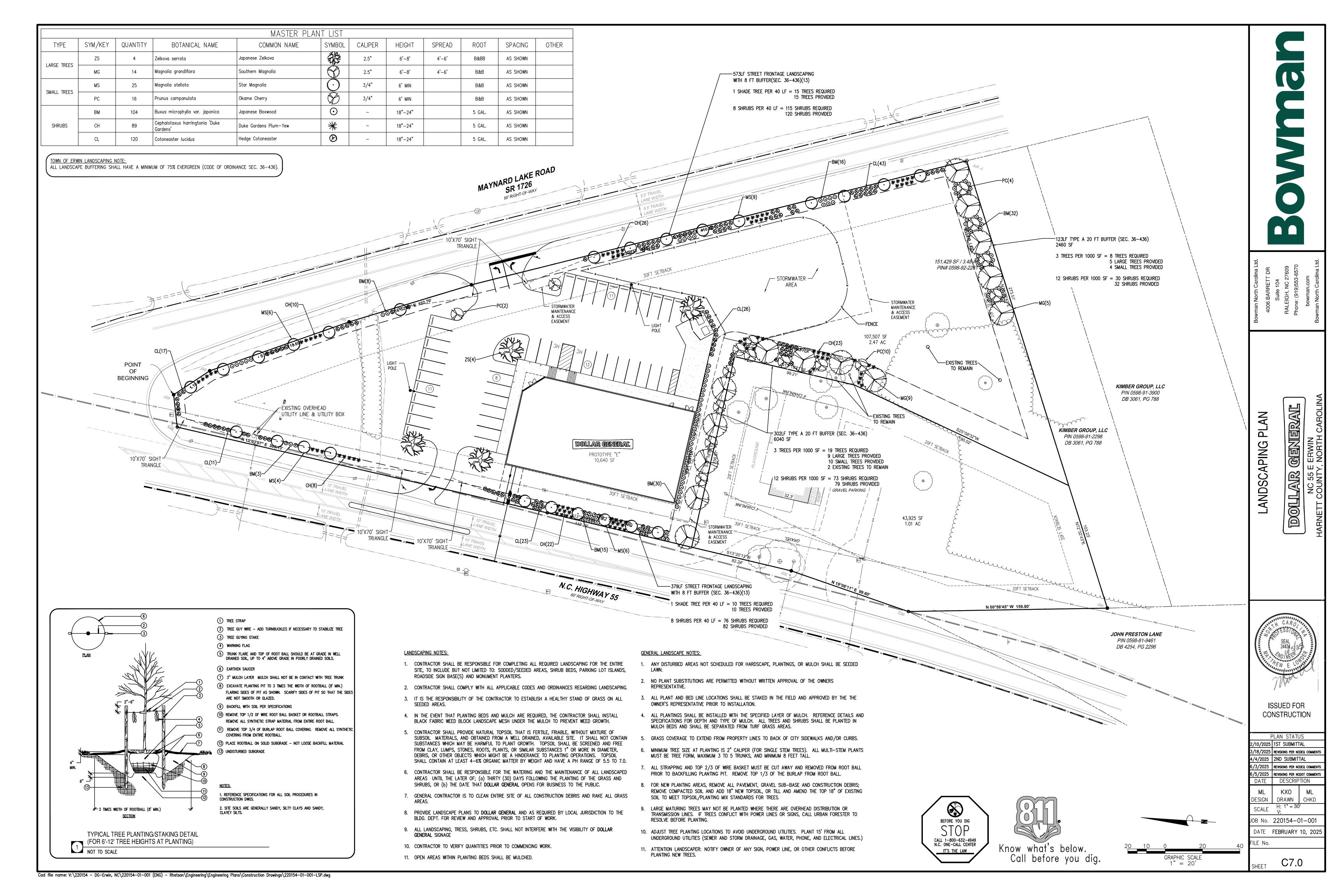
SCALE V: 1" = 30 V: 1" = 3'

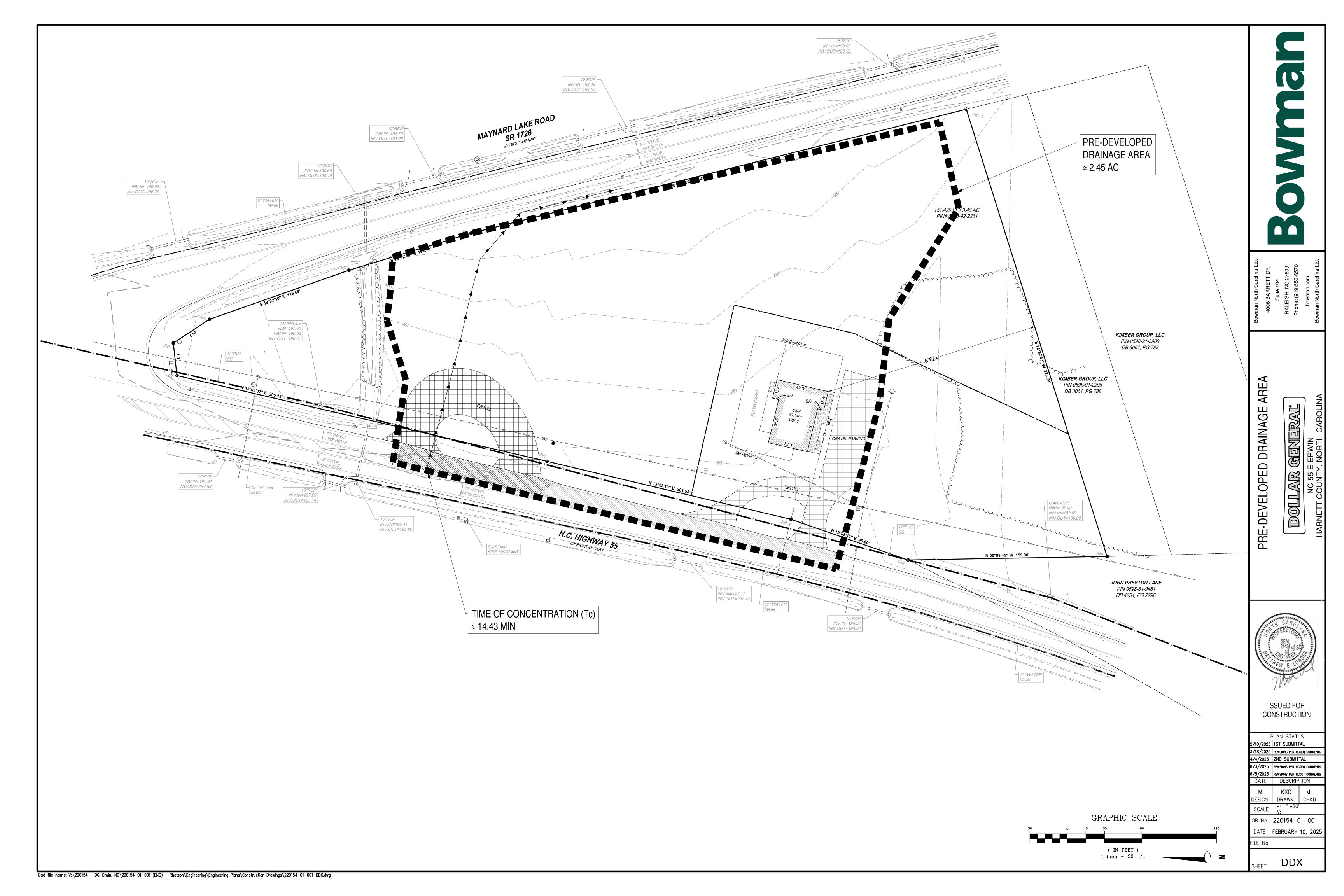
JOB No. 220154-01-001

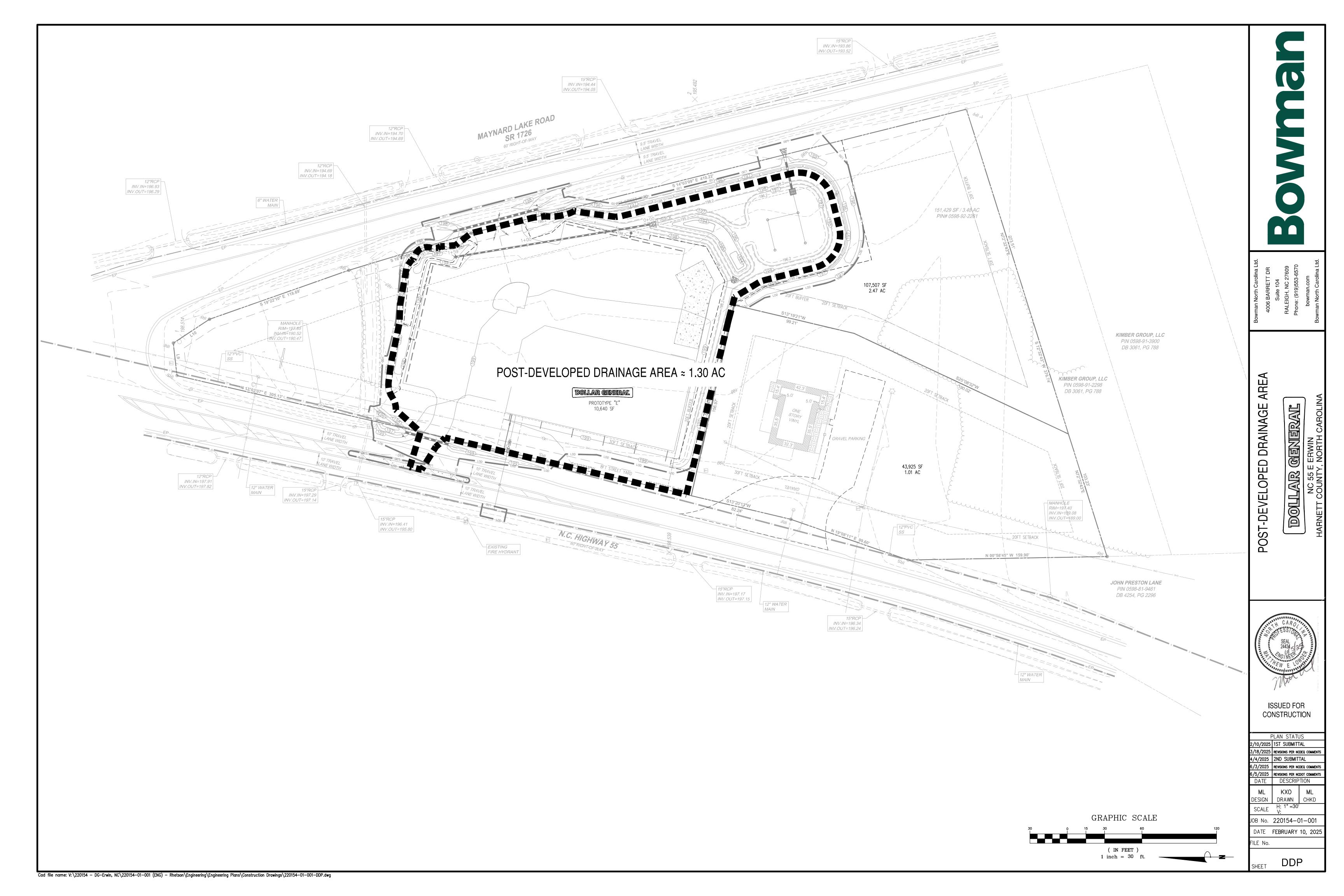
DATE FEBRUARY 10, 2025

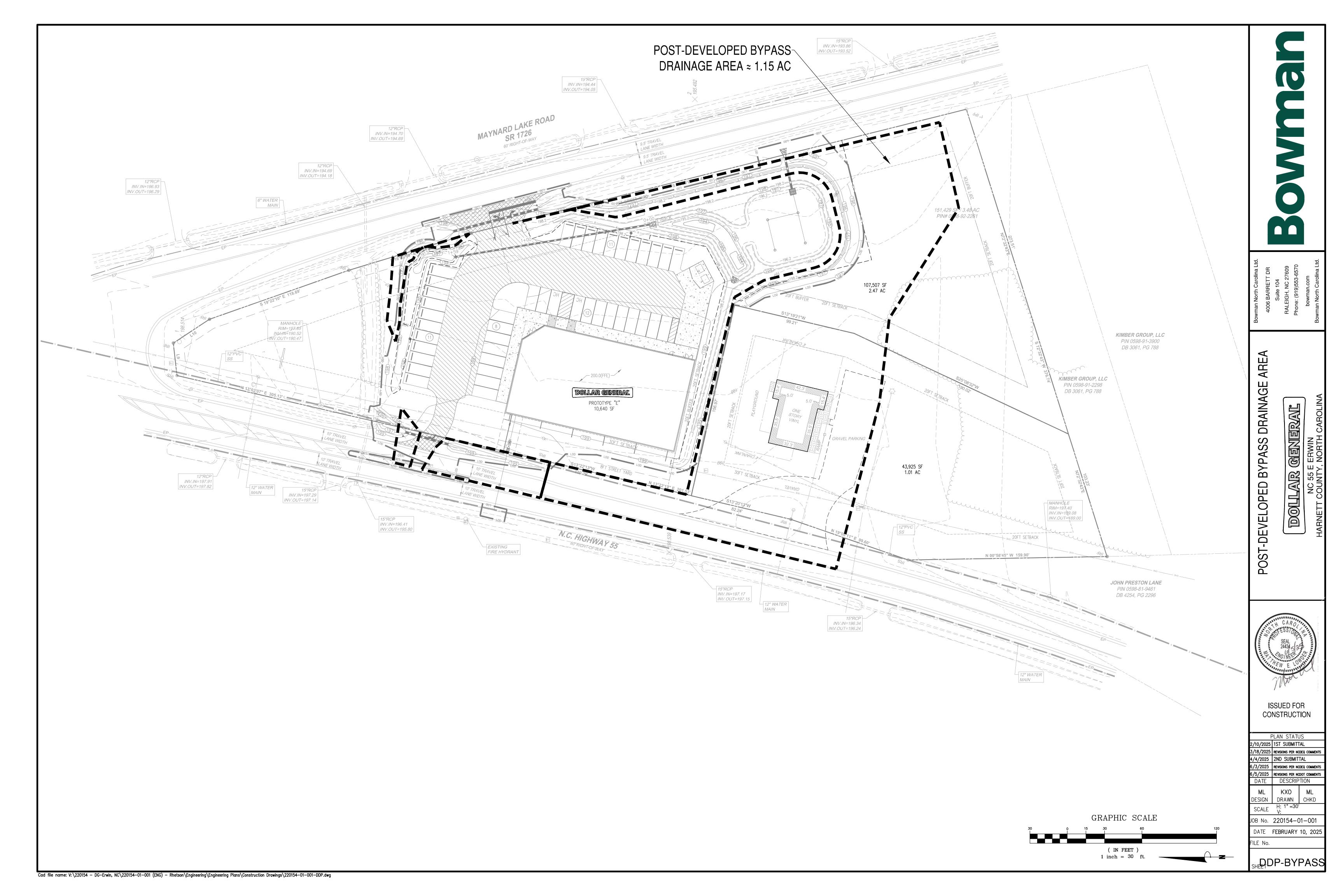
E No.

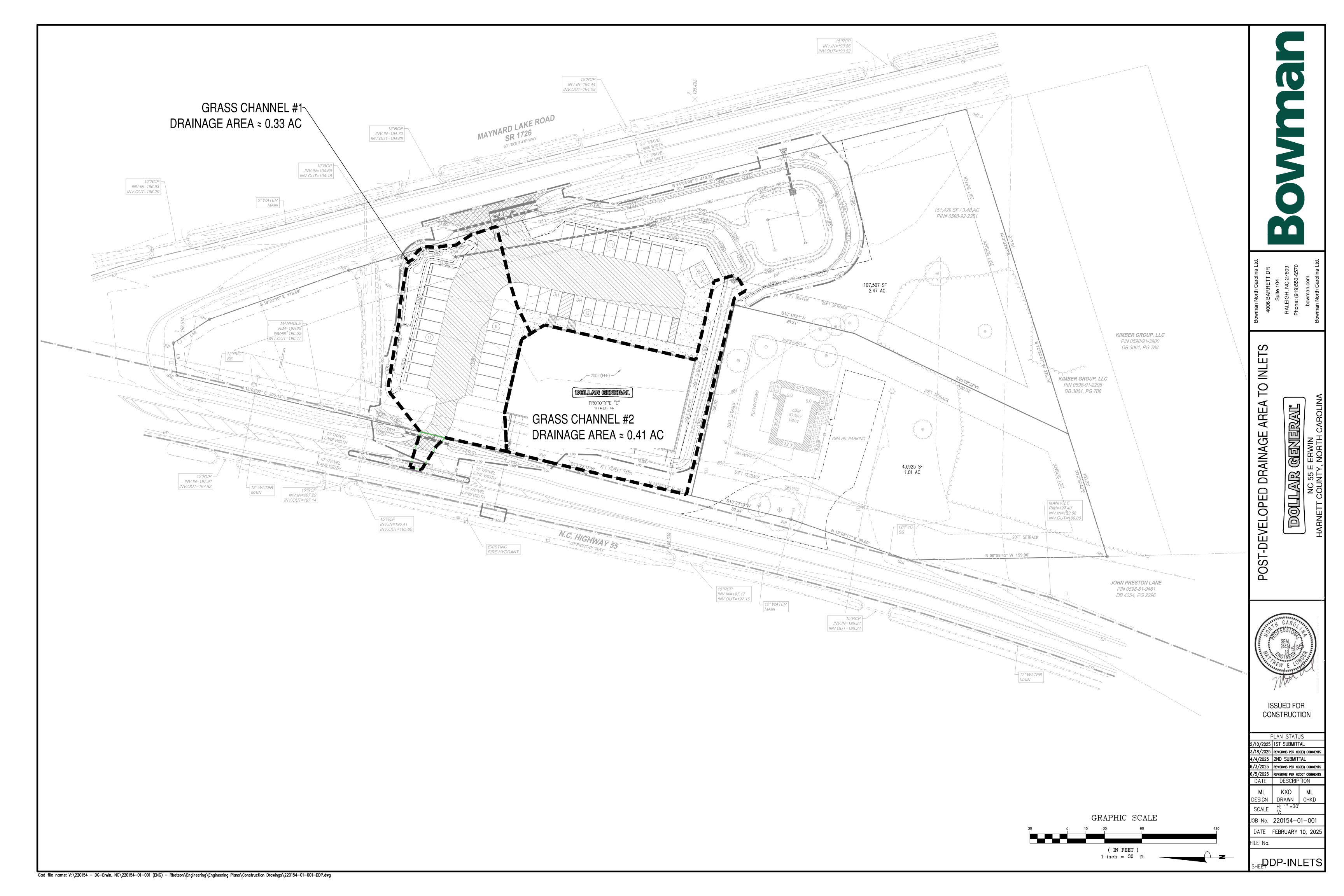
C6.5

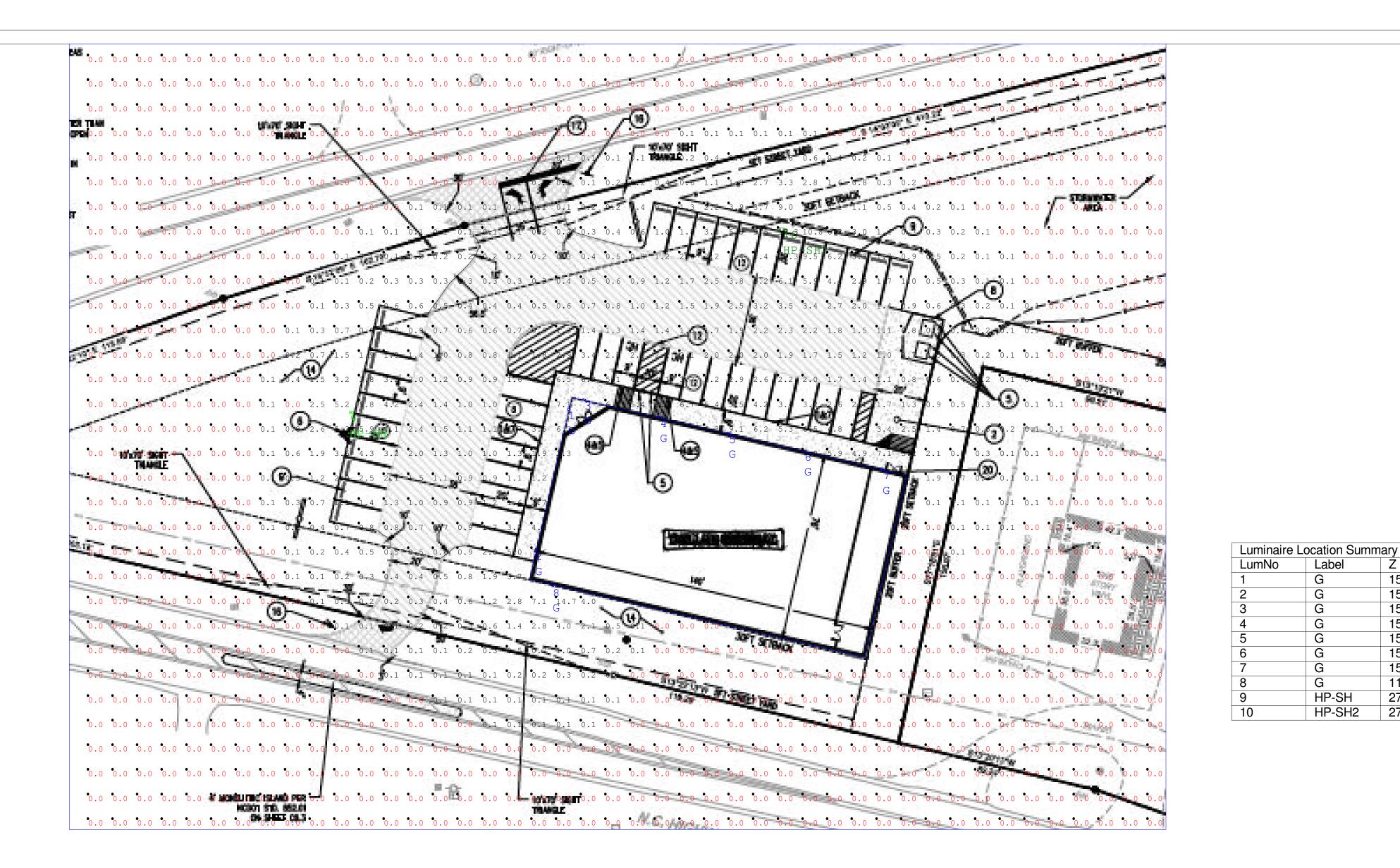












Total

Watts

294.978

337.925

147.489

Luminaire

Watts

147.489

42.2406

147.489

Luminaire

Lumens

16181

5696

16181

0.950

0.950

0.950

Calculation Summary

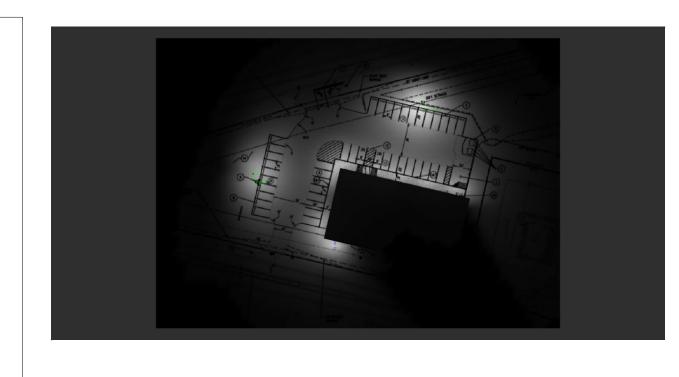
Label

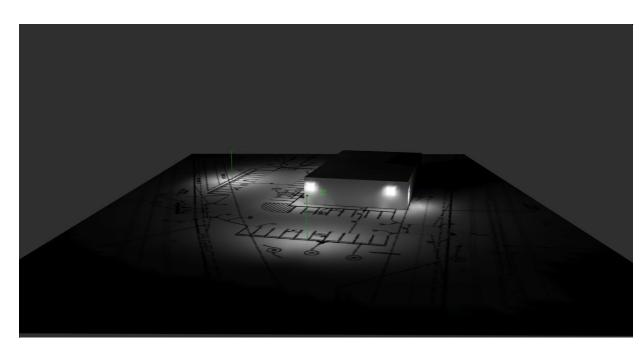
Parking Lot

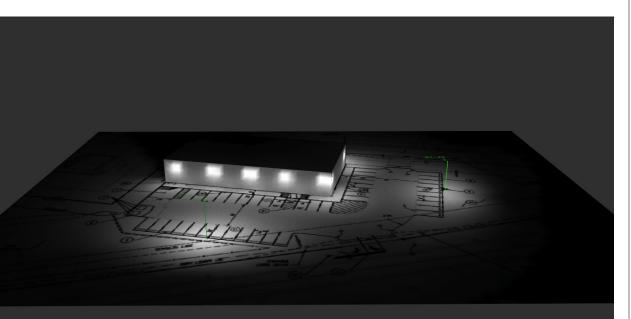
CalcType

Illuminance

Illuminance







15.5

HP-SH

Max/Min

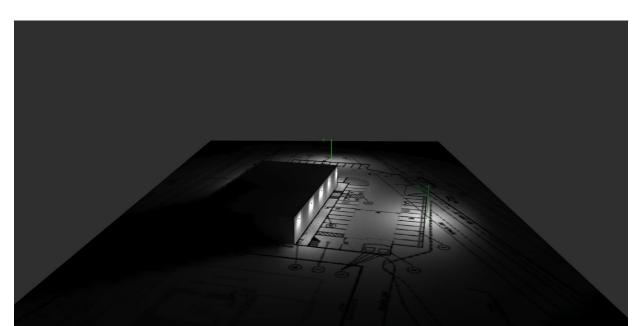
N.A.

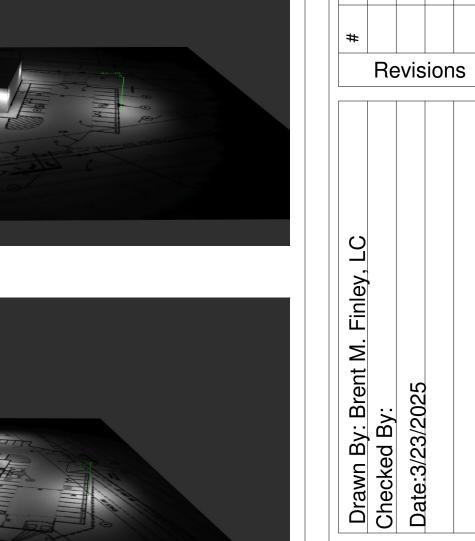
51.50

Avg/Min

10.60

HP-SH2 27





Notes:

Luminaire Schedule

HP-SH2

HP-SH

Symbol Qty

Plan Notes:

Calculations at Ground Level (10' x 10' Grid Spacing). Refer to luminaire location summary for mounting heights of each fixture. Pole mounted fixtures include a 2ft concrete base. Mounting heights indicated on luminaire location summary is a total A.F.G. height.

Description

Shield, 2-H NLES WP4054

NLES AL1212 Back

NLES AL1212 Back Shield

Arrangement

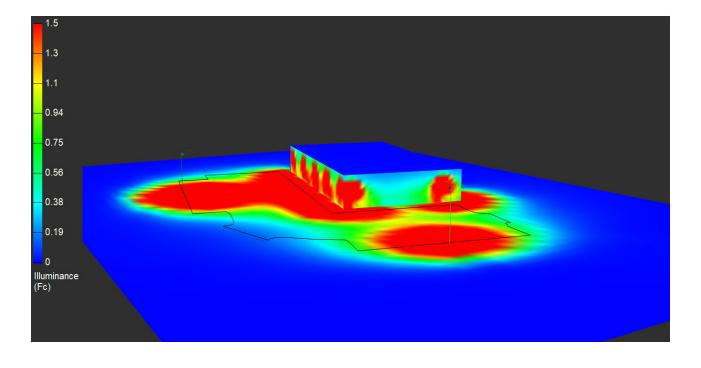
Twin

Single

Single

General Notes:

Due to changing lighting ordinances it is the contractors resposibility to submit the site photometrics & luminaire specs to the local inspector before ordering to ensure this plan complies with local lighting ordinances. This lighting design is based on information supplied by others. Changes in electrical supply, area geometry & objects within the lighted area may produce illumination values different from the predicted results shown on this layout. This layout is based on .IES files that were lab tested or computer generated, actual results may vary.



Avg 0.59

2.12

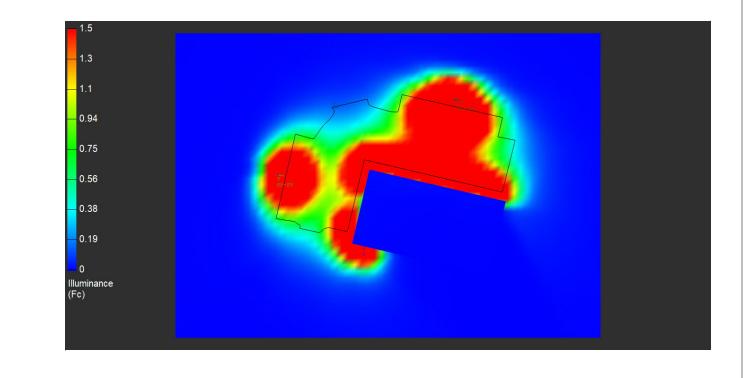
Fc

14.7

10.3

0.0

0.2



Page 1 of 1

General

Dollar

25444

S

Erwin