STATE OF NORTH CAROLINA

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

STATE STORMWATER MANAGEMENT PERMIT

HIGH DENSITY DEVELOPMENT

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations

PERMISSION IS HEREBY GRANTED TO

Currituck Commercial Center Property Owner's Association, Inc.

Currituck Commercial Center

Located on Commercial Dr., Moyock, NC

Currituck County

FOR THE

construction, operation and maintenance of a wet detention pond in compliance with the provisions of 15A NCAC 2H .1000 (hereafter referred to as the *"stormwater rules"*) and the approved stormwater management plans and specifications and other supporting data as attached and on file with and approved by the Division of Energy, Mineral, and Land Resources (Division) and considered a part of this permit.

This permit shall be effective from the date of issuance until December 27, 2030, and shall be subject to the following specified conditions and limitations:

I. DESIGN STANDARDS

1. This permit is effective only with respect to the nature and volume of stormwater described in the application and other supporting data.

2. This stormwater system has been approved for the management of stormwater runoff as described in Section I.5. of this permit, the Project Data Sheet.

3. A maximum of 16.4 acres of built upon area is allowed.

4. All stormwater collection and treatment systems must be located in either dedicated common areas or recorded easements. The final plats for the project will be recorded showing all such required easements, in accordance with approved plans.

5. Approved plans and specifications for this project are incorporated by reference and are enforceable parts of the permit.

PROJECT DATA SHEET

Project Name:	Currituck Commercial Center
Permit Number:	SW7980513
Receiving Stream:	UT to Northwest River
Classification of Water Body:	SC
Total Site Area:	25.96 ac
Total Impervious allowed:	16.4 ac
Wet Pond Depth:	4.0 ft
Required Storage Volume:	67,654 cf
Provided Storage Volume:	78,433 cf
Required Surface Area:	45,233 sf
Provided Surface Area:	46,728 sf
Controlling Orifice:	3.0 inch

6. No homeowner/lot owner/developer shall be allowed to fill in, alter, or pipe any vegetative practices (such as swales) shown on the approved plans as part of the stormwater management system without submitting a revision to the permit and receiving approval from the Division.

7. The following items will require a modification to the permit:
   a. Any revision to the approved plans, regardless of size
   b. Project name change
   c. Transfer of ownership
   d. Redesign or addition to the approved amount of built-upon area
   e. Further subdivision of the project area.

   In addition, the Director may determine that other revisions to the project should require a modification to the permit.

8. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the Director that the changes have been made.

II. SCHEDULE OF COMPLIANCE

1. The permittee will comply with the following schedule for construction and maintenance of the stormwater management system.

   a. The stormwater management system shall be constructed in its entirety, vegetated and operational for its intended use prior to the construction of any built-upon surfaces except roads.

   b. During construction, erosion shall be kept to a minimum and any eroded areas of the system will be repaired immediately.

2. The facilities must be properly maintained and operated at all times. The approved Operation and Maintenance Plan must be followed in its entirety and maintenance must occur at the scheduled intervals.

3. The permittee shall at all times provide the operation and maintenance necessary to assure the permitted stormwater system functions at optimum efficiency including, but not limited to:

a. Semiannual scheduled inspections (every 6 months)
b. Sediment removal
c. Mowing and revegetation of side slopes
d. Immediate repair of eroded areas
e. Maintenance of side slopes in accordance with approved plans and specifications
f. Debris removal and unclogging of outlet structure, orifice device and catch basins and piping.

4. Records of maintenance activities must be kept and made available upon request to authorized personnel of the Division. The records will indicate the date, activity, name of person performing the work and what actions were taken.

5. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.

6. Upon completion of construction and prior to operation of this permitted facility, a certification must be received from an appropriate designer for the system installed certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting documentation. Mail the Certification to the Washington Regional Office, 943 Washington Square Mall, Washington, North Carolina, 27889.

7. A copy of the approved plans and specifications shall be maintained on file by the Permittee for the life of the project.

III. GENERAL CONDITIONS

1. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division accompanied by an application fee, documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.

2. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to enforcement action by the Division, in accordance with North Carolina General Statute 143-215.6(a) to 143-215.6(c).

3. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, and federal) which have jurisdiction.

4. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement stormwater management systems.

5. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and reissuance or termination does not stay any permit condition.

6. ANNUAL CERTIFICATION. The permittee shall electronically submit to the Division an annual certification completed by either the permittee or their designee confirming the projects conformance with permit conditions.

7. This permit shall be effective from **the date of issuance until December 27, 2030**. Application for permit renewal shall be submitted 180 days prior to the expiration date of this permit and must be accompanied by the processing fee.

Permit issued this the 28 th day of December 2022.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



_____For
Douglas R. Ansel, Interim Director
Division of Energy, Mineral and Land Resources
By Authority of the Environmental Management Commission

Permit Number SW7980513

ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
DOUGLAS R. ANSEL
Interim Director

NORTH CAROLINA
Environmental Quality

December 28, 2022

Currituck Commercial Center Property Owner's Association, Inc.
Attention: R. Mark Warren
111 Currituck Comm. Dr., Suite A
Moyock, NC 27958

Subject: **Stormwater Permit No. SW7980513 Renewal**
Currituck Commercial Center
High Density Project
Currituck County

Dear Mr. Warren:

The Washington Regional Office received a Stormwater Management Permit Application for renewal of the subject permit on November 21, 2022. Staff review of the application has determined that the permit can be reissued. We are forwarding Permit No. SW7980513 dated December 28, 2022, for the continued operation of the existing stormwater treatment system.

This permit, upon its effective date, will replace all previous State Stormwater permits for this project. This permit shall be effective from the date of issuance until December 27, 2030 and shall be subject to the conditions and limitations as specified therein and does not supercede any other agency permit that may be required. Please pay special attention to the Operation and Maintenance requirements in this permit. Failure to establish an adequate system for operation and maintenance of the stormwater management system will result in future compliance problems.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within thirty (30) days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made this permit shall be final and binding.

If you have any questions, or need additional information concerning this matter, please contact me at (252) 948-3923.

Sincerely,

Roger K. Thorpe
Environmental Engineer

Rivers & ASSOCIATES, INC.

ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS

LETTER OF TRANSMITTAL

DATE: September 16, 2022	JOB NO: 2022109

TO: Currituck County
Planning & Inspections Department
Planning Staff
153 Courthouse Road, Suite 110
Currituck, NC 27929

ATTENTION: Currituck County Planning & Inspections Department

SUBJECT: Maple Park Expansion, Phase III
Site Plan Submittal #2

WE ARE SENDING YOU
- ☐ Shop Drawings
- ☐ Copy of Letter

- ☑ Attached
- ☐ Prints
- ☐ Change Order

- ☐ Under Separate Cover via _____ the following items:
- ☑ Plans ☐ Samples ☐ Specifications
- ☑ Other-- Comment Responses, Revised Stormwater Narrative

COPIES	DATE	Pgs.	DESCRIPTION
1 Digital	9/16/2025		1-PDF digital copy of revised documents and plans:
		2-3	TRC Comment Responses
		4-6	Stormwater Comment Responses
		7-56	Revised Site Plan Drawing Set
		57-58	Currituck County Sewer Commitment Letter
		59-182	Revised Stormwater Narrative

THESE ARE TRANSMITTED as checked below:

- ☑ For Approval
- ☐ For Your Use
- ☐ As requested
- ☐ For Review and Comment

- ☐ Approved
- ☐ Approved as Noted
- ☐ Disapproved
- ☐ Other _____

- ☐ Resubmit_____ copies for approval
- ☐ Submit _____ copies for distribution
- ☐ Return _____ copies for approval

REMARKS

Six Forks Place lll ▪ 353 E. Six Forks Road ▪ Suite 230 ▪ Raleigh, NC 27609
Phone: 919-594-1526 NCBELS Lic. No. F-0334 www.riversandassociates.com

Currituck County Community Park – Phase III

Site Plan TRC Review, Submittal #2

September 16, 2025

Response to 1st Submittal Comments

(Responses to TRC comments in blue)

Planning, Jovita Hood, 252-232-6019

Reviewed

- Please provide total coverage on the site plan.

Response: Total lot coverage has been added to site plan. Note that the total lot coverage refers to the "Acreage (GIS)" per Currituck County GIS of 51.64 acres, which is the area within boundaries shown in GIS. "Acreage (Legal)" includes R/W area of College Way & Maple Parkway, which are not to be included in lot coverage calculations (UDO 10.3.3.3.a), the Training Center lot, and area within the boundary of Currituck County Regional Airport:

Area of Tract 1 per K/150:	+/-64.91 AC
Per M/97:	
Subtract Training Center Lot:	7.92 AC – 1.21 AC = 6.71 AC
[64.91 – 6.71 = "Acreage (Legal)"]	
Subtract Area shown in Airport:	2.12 AC
Subtract R/W Area:	+/- 4.44 AC
Area (Equals "Acreage GIS"):	+/- 51.64 AC

The lot coverage calculated for 51.64 AC is approximate.

- Illumination levels shall not exceed 30 footcandles within a site or development. (5.4.6.D.2) Page E102 reflects several areas of excess of 30 footcandles.

Response: Illumination exceeding 30 footcandles is contained within proposed ball fields. Illumination of ball fields is designed within the guidelines provided by the Illuminating Engineering Society (ANSI/IES standards) for high school, recreational, and little league softball, and matches the design of the three existing ball fields within the park.

- Page A2.01 in the building plans for the building elevations refers to pages A2.02 and A2.03. However, these referenced pages are missing from the building plans.

Response: Pages A2.02 & A2.03 have been added to drawing set along with the complete set of architectural drawings.

Currituck County Building Inspections & Fire, Rick Godsey, 252-232-6020

Approved - Fire access to support 75K LBS.

Acknowledged.

Stormwater Review, (McAdams, Stormwater Consultant)
(Comments forthcoming)

Response: See Stormwater Response Letter.

Currituck County Water, Brian Cafferello, 252-455-4975
The 1 1/2-inch meters will need to be either 1inch or 2 inches. For as we do not carry 1 1/2-inch parts.

Response: Meter changed to 2" Meter. Plan & details adjusted accordingly.

Currituck County GIS, Harry Lee 252-232-2034
Reviewed – No comment

Acknowledged.

Currituck County Parks and Recreation, Jason Weeks, 252-232-3007
Approved

Acknowledged.

Currituck Fire and Emergency Medical Services (Chief Ralph Melton, 252-232-7746)
EMS Demand Projection – Non-Residential Use
As the proposed use is for public athletic fields, it does not trigger residential EMS demand calculations (i.e., no new "rooftops" are being added).
However, EMS operations must plan for the increased likelihood of on-site injuries and medical events commonly associated with sports/recreational facilities.
Weekend and after-school usage may concentrate EMS demand in off-peak hours.

Acknowledged.

The following items are necessary for resubmittal:
• 1- PDF digital copy of all revised documents and plans.

Response: All documents and plans are combined in 1 PDF for resubmittal review

Response Memo for County Stormwater Comments
Maple Park Expansion, Phase III

To: Daniel Wiebke, PE, CFM, wiebke@mcadamsco.com
Rebecca Benfield, EI, benfield@mcadamsco.com
McAdams
621 Hillsborough Street, Suite 500
Raleigh, NC 27603

CC: Jennie Turner, Assistant Planning Director
jennie.turner@currituckcountync.gov

FR: Brian Ruff, P.E. LEED
Rivers and Associates, Inc.
353 East Six Forks Road, Suite 230
Raleigh NC 27609
Phone: (919) 594-1626 x6300

RE: Stormwater Response to Review Comments No.1

Date: 9 /11/2025

Dear Dan and Rebecca,

We've received your comments from McAdams on the proposed Phase-III Ballfields portion of the Maple Commerce Park Expansion, and have responses *{shaded}* for your approval. Thank you for your attention to our project design for the storm water piece.

Please note: We had a "percentage" factor error in the Wet Pond Calculation (Narrative Page 20) which incorporated a factor into the Simple Equation and had the first pond storage volume too large, so that has been corrected on Page 20 REV1. So the required temporary pool is less than originally thought.

See below for McAdams comments {in black & white}:

Submittal Documents per McAdams comments:

1. The provided curve numbers for the pre- and post-development conditions used for the hydrology calculations do not conform with Currituck County UDO requirements or the SW Manual.

a. The pre-development hydrograph report lists the curve number for the drainage areas to

Outlet A and B as 90. Per UDO 7.3.4.B., pre-development conditions shall be considered wooded. On page 2-23 of the SW Manual, the curve number for woods is defined to be between 30 (for A soil conditions) and 77 (for D soil conditions). With primarily B soils on site, the curve number should be at most 55. Please provide justification for this difference or provide updated calculations.

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 — Tuesday, 06 / 17 / 2025

Hyd. No. 2

Pre-Development West Outlet-B College Way

Hydrograph type	= SCS Runoff	Peak discharge	= 3.730 cfs
Storm frequency	= 2 yrs	Time to peak	= 13.00 hrs
Time interval	= 30 min	Hyd. volume	= 38,301 cuft
Drainage area	= 4.225 ac	Curve number	= 90
Basin Slope	= 0.4 %	Hydraulic length	= 1325 ft
Tc method	= TR55	Time of conc. (Tc)	= 68.80 min
Total precip.	= 3.73 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

Cover Description	Hydrologic Soil Type			
	A	B	C	D
Row Crops	72	81	88	91
Pasture	68	79	86	89
Woods	30	55	70	77

Response – We revise the Narrative to show CN for the Munden sand type revised to be "Type-B" soil (CN=55) for that area. The other (3) soil types from the County Survey, No Pt & To types, are considered as flat wetland conditions and we include as "Type-D" soil (CN=77) for an undrained. This is noted in red as a selection on the Narrative soil report pages 105-REV1, 107-REV1 and 108-REV1 selection of "D for undrained".

The resulting CN for Pre-Development East Wetland Outlet-A is 72, (Page 22 REV1) and
CN for Pre-Development West Outlet-B College Way is 74 (Page 24 REV1).

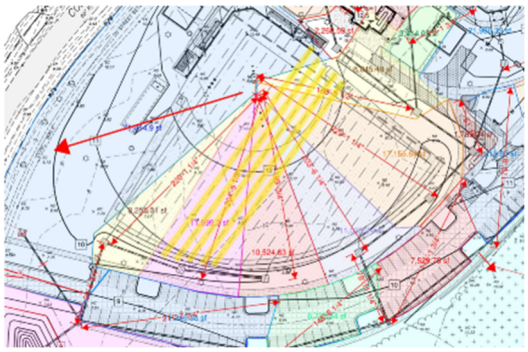
b. The post-development hydrograph reports for the individual drainage areas to the proposed pond list the curve number for the fields to be 39. It is our understanding that the field is under-drained, and runoff will drain through the soil and directly into the drainage system. Therefore, the hydrologic response of the system will be that of something closer to a directly connected impervious surface. Therefore, the curve number is expected to be much greater and the TC path should reflect the length of the drainage system. Revise to be consistent with what is occurring.

Response – Ballfield post-development soil is select fill which we include as well-drained Type-A soil, the underdrains serve to ensure well-drained conditions continue for the long term regardless of saturation of the surrounding in-situ soils. The underdrains are not modelled as direct storm flow outlets for peak runoff.

Adding increased runoff value for new ballfield areas classed "dirt road including right-of-way," as listed in the Table 2-6 Currituck County Curve Numbers, this can changes inlet values for DI-16 to DI-24 CN=72, for DI-23 to DI-20 CN=82, DI-7 to DI-14 CN=92, for DI-2 to DI-6 CN=72. The increased runoff results in a revision to the pond storage design shown on Sheet C6.21 Stormwater Control Details. Time of Concentration is included as surface runoff to open inlets, and not for underdrain trench pipes as part of the critical path. See no.2 below for more on connectivity.

Design Drawings

2. The drainage areas provided for the fields do not match the proposed drainage system within the fields. Will water be sheet flowing across the field, or will it be expected to infiltrate into the field and be collected by the drainage system? If the latter, provide updated drainage area maps with updated time of concentration paths, per the previous comment.

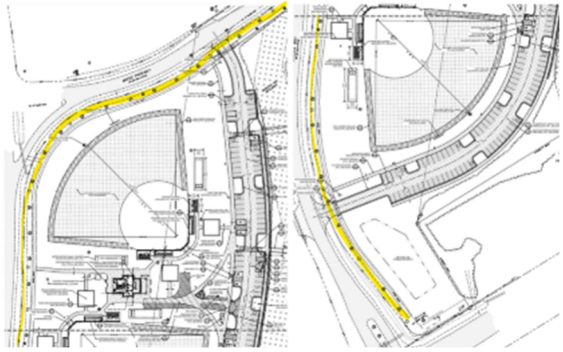


Response – We see both surface runoff and soil infiltration happening. The runoff model for rainfall falling on the surface and going into the catch basin tops stipulates "sheet flow" for the post-development fields of 50-ft of surface because the ballfield surface is well-maintained. From soil properties the rainfall does infiltrate somewhat and that condition persists over the long term because underdrains are installed and still work even if surrounding in-situ is fully wet. The model of peak runoff does not model infiltrated water as directly connected runoff because it is collected much later due to the time delay (that is, the process takes more than ½ a day possibly and occurs only after ballfield soils are wet to the point where excess drains out). Infiltrated rainfall does go through the system, later than the peak, because of soil depth absorption so that it is slow, if any reaches the underdrains for an individual storm as this location is very hot and sunny. Underdrains are considered well-maintained soil conditions for a long term view--keeping the ballfield soil from being saturated and muddy over a lifetime of use.

3. Per UDO 7.3.4.A(8) provide building pad elevation (BPE) for all applicable structures. If this is the same elevation as finished floor elevation (FFE), please state such on the plans.

Response – FFE of 12.5 is shown on the plan for the new bathroom building, and other outdoor floor surfaces are shown on Enlarged Grading Plan Sheets C4.11 and C4.12. Floor surface grades vary to shed rainfall.

4. Per UDO 7.3.4(6) provide a note on the plans that states existing ditches located totally or partially within a development and utilized for drainage or stormwater management shall be cleaned to remove drainage impediments. *Response – ditch clean-out note has been added to Utility C3.01 & Grading C4.11, 4.12.*



CURRITUCK COMMUNITY PARK - PHASE III

181 MAPLE PARKWAY
BARCO, CURRITUCK COUNTY, NORTH CAROLINA 27917

JULY 1, 2025 - CURRITUCK COUNTY SITE PLAN SUBMITTAL #1

1 SEPTEMBER 16, 2025 - CURRITUCK COUNTY SITE PLAN SUBMITTAL #2

OWNER/DEVELOPER:

CURRITUCK COUNTY
JASON WEEKS
153 COURTHOUSE ROAD,
CURRITUCK NC, 27929
252-232-3007
JASON.WEEKS@CURRITUCKCOUNTYNC.GOV

CIVIL ENGINEER:

RIVERS AND ASSOCIATES, INC.
353 E. SIX FORKS ROAD, SUITE 230
RALEIGH, NORTH CAROLINA 27609
919-594-1626, x6300
BRUFF@RIVERSANDASSOCIATES.COM

LANDSCAPE ARCHITECT:

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SURVEYOR:

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RALEIGH, NORTH CAROLINA 27609
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ARCHITECT:

INTREPID ARCHITECTURE
114 E. 3RD STREET,
GREENVILLE NC, 27858
252-270-5330
DANIH@INTREPIDARCHITECTURE.COM

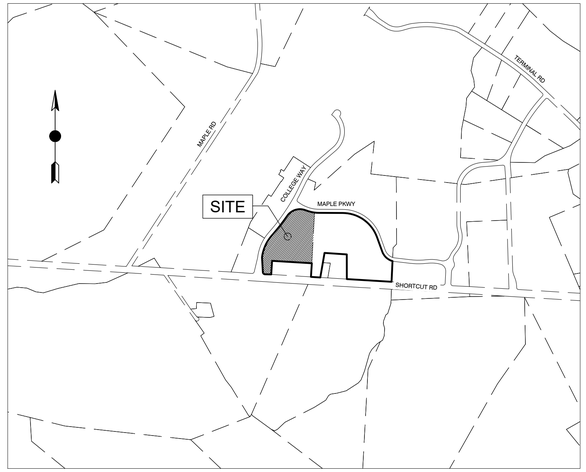
STRUCTURAL ENGINEER:

NRW ENGINEERING
748 LORD DUMMORE DRIVE, SUITE 101
VIRGINIA BEACH VA, 23464
757-474-0919
PDM@NRWENGINEERING.COM

MECHANICAL, ELECTRICAL, & PLUMBING:

DIBBLE & PLEDGER, P.A
P.O. BOX 1885
WASHINGTON NC, 27889
252-946-3320
RPLEDGER@DIBBLEANDPLEDGER.COM





VICINITY MAP

1" = 1000' - 0"

Sheet List Table

Sheet Number	Sheet Title
C1.01	COVER
C1.02	GENERAL NOTES AND LEGENDS
C1.10	SURVEY
C1.21	EXISTING CONDITIONS AND DEMOLITION PLAN
C2.01	SITE PLAN
C2.02	FIRE APPARATUS ACCESS PLAN
C2.11	ENLARGED SITE PLAN - NE
C2.12	ENLARGED SITE PLAN - SW
C2.51	SITE DETAILS
C2.52	SITE DETAILS
C2.53	SITE DETAILS
C2.54	SITE DETAILS
C3.01	UTILITIES PLAN
C4.01	GRADING & DRAINAGE PLAN
C4.11	GRADING & DRAINAGE PLAN - NE
C4.12	GRADING & DRAINAGE PLAN - SW
C4.21	GRADING, DRAINAGE, & UTILITIES DETAILS
C5.01	SEDIMENTATION & EROSION CONTROL PLAN - STAGE 1A
C5.02	SEDIMENTATION & EROSION CONTROL PLAN - STAGE 1B
C5.03	SEDIMENTATION & EROSION CONTROL PLAN - STAGE 2
C5.11	EROSION CONTROL NOTES
C5.21	EROSION CONTROL DETAILS
C6.01	STORMWATER CONTROL PLAN & DETAILS
C6.11	STORMWATER CONTROL NOTES & PLANTING DETAILS
L1.01	LANDSCAPE PLAN
L1.11	ENLARGED LANDSCAPE PLAN - NE
L1.12	ENLARGED LANDSCAPE PLAN - SW
L2.02	LANDSCAPE NOTES & DETAILS
FIELD LIGHTING DRAWINGS BY MUSCO (NIC)	
1	PROJECT SUMMARY
2	ILLUMINATION SUMMARY
3	ILLUMINATION SUMMARY
4	EQUIPMENT LAYOUT
ARCHITECTURAL	
G0.00	COVER SHEET, SYMBOLS, ABBREVIATIONS, GENERAL NOTES, LIFE SAFETY PLAN, & INTERIOR PARTITION SCHEDULE
G1.01	APPENDIX B
AS.00	ARCHITECTURAL SITE PLAN
AS.01	TYP PICNIC SHELTER
AS.02	TYP BLEACHER SHELTER
AS.03	TYP DUGOUT & SCORE KEEPER SHELTERS
A1.01	FIRST FLOOR PLAN & ROOF PLAN
A2.01	EXTERIOR ELEVATIONS & BUILDING SECTIONS
A2.02	WALL SECTIONS
A2.03	WALL SECTIONS & SECTION DETAILS
A4.00	ADA MOUNTING HEIGHTS, BATHROOM ELEVATIONS & SIGNAGE
A4.01	INTERIOR ELEVATIONS & CASEWORK SECTIONS
A5.01	REFLECTED CEILING PLAN & PLAN DETAILS
A8.01	DOOR, WINDOW, GLAZING, & HARDWARE SCHEDULES, & DETAILS
SITE LIGHTING	
E101	LIGHTING & POWER SITE PLANS BALL FIELDS & PARKING LOT
E102	SPORTS LIGHTING FIELD 1 & FIELD 2 POINT BY POINT
E103	SPORTS LIGHTING FIELD 1 POINT BY POINT
E104	SPORTS LIGHTING FIELD 2 POINT BY POINT

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Do Not Use for Construction - PERMITTING INFORMATION ONLY

GENERAL NOTES:

1. TOPOGRAPHICAL DATA FURNISHED BY RIVERS AND ASSOCIATES.
2. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OF FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. THE OWNER SHALL PAY ALL COSTS IN CONNECTION WITH ALTERATION OF OR RELOCATION OF ANY EXISTING FACILITIES.
3. ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
4. ALL STRUCTURAL FILL MATERIAL SHALL BE FREE OF ALL STICKS, ROCKS, AND CLUMPS OF MUD.
5. UNUSABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN AN APPROVED SOLID WASTE LANDFILL.
6. CONCRETE SUB SHALL BE RESPONSIBLE FOR ALL SCORE JOINTS AND EXPANSION JOINTS, CONTRACTOR TO SUBMIT PROPOSED SCORE JOINT PLAN TO THE ENGINEER PRIOR TO POURING.
7. CONTRACTOR TO FURNISH ALL PAVEMENT MARKINGS AS SHOWN.
8. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. CONTACT THE NC ONE CALL CENTER AT LEAST 72 HOURS PRIOR TO DIGGING @ 811. RIVERS AND ASSOCIATES HAS ONLY LOCATED THE UTILITIES THAT ARE ABOVE GROUND AT THE TIME OF FIELD SURVEY. UNDERGROUND LINES SHOWN HEREON ARE APPROXIMATE OR AS REPORTED BY VARIOUS RESPONSIBLE PARTIES. THE SURVEYOR DOES NOT GUARANTEE THAT ANY UNDERGROUND STRUCTURES SUCH AS UTILITIES, TANKS AND PIPES ARE LOCATED HEREON.
9. ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
10. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, AND/OR LOCAL STANDARDS IMPOSED BY LOCAL UTILITY, NCDOT AND CURRITUCK COUNTY.
11. ALL CONSTRUCTION AND MATERIALS SHALL MEET CURRITUCK COUNTY AND NCDOT SPECIFICATIONS AND STANDARDS, LATEST EDITION. ALL WORK WITHIN NCDOT RIGHT-OF-WAY SHALL MEET THE SPECIFICATIONS AND STANDARDS OF NCDOT.
12. ALL CONCRETE PIPE IS TO BE ASTM C-76, CLASS III WITH RAM-NEK, UNLESS OTHERWISE NOTED.
13. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD ZONE.
14. WETLANDS AND PONDS ARE DENOTED ON-SITE. IMPACTS TO WETLANDS PERMITTED UNDER NWP-18 ACOE ARE ANTICIPATED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL IN OR ADJACENT TO NCDOT RIGHT-OF-WAY. ALL SIGNS, PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
16. PRIOR TO PLACING CABC STONE BASE, THE CONTRACTOR SHOULD NOTIFY THE GEOTECHNICAL ENGINEER TO INSPECT AND PROOF ROLL THE SUBGRADE. ANY STONE PLACED WITHOUT PRIOR APPROVAL WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
17. ALL UTILITY SERVICES, (POWER, TELEPHONE, CABLE, ETC.) ARE PROPOSED TO BE UNDERGROUND.
18. PROPERTY IS TO BE SURVEYED BY CURRITUCK COUNTY .
19. THE BUILDING SETBACK LINES SHOWN ON THIS PLAT ARE FOR THE ENGINEER'S USE IN ESTABLISHING MINIMUM LOT FRONTAGES AT THE SETBACK LINE AND FOR RESERVING SUFFICIENT BUILDING AREA. BUILDING CONTRACTORS ARE TO VERIFY LOT LINE SETBACKS BEFORE SETTING FORMS OR DIGGING FOOTINGS. THERE ARE NO AGENCY IMPOSED SETBACK LINES AT FLOWERS.
20. REGULATORY SIGNS, STOP SIGNS AND ADA SIGNS SHALL BE MANUFACTURED FROM HIGH INTENSITY REFLECTIVE MATERIALS.
21. BALLFIELD LIGHTING NOTES:
    - A. BALLFIELD FIELD LIGHTING DESIGN PROVIDED BY DIBBLE & PLEDGER, PA. & MUSCO SPORTS LIGHTING, LLC.
    - B. DELIVERY, UNLOADING, PREPARATION OF INSTALL, AND INSTALLATION OF PRECAST CONCRETE BASES, DRIVER CABINETS, LIGHT POLES, WIRE HARNESSES & FIXTURES, ETC. SHALL BE PROVIDED BY MUSCO SPORTS LIGHTING, LLC DIRECTLY THROUGH OWNER, CURRITUCK COUNTY.
    - C. BALLFIELD LIGHTING PLANS & CONSTRUCTION ARE NOT IN THE GENERAL CONTRACTOR'S CONTRACT SCOPE (NIC), EXCEPT AS DELINEATED IN THESE NOTES.
    - D. CONTROL CABINETS AT EACH POLE SHALL BE FURNISHED AND INSTALLED BY MUSCO AT 10' MOUNT HEIGHT.
    - E. MUSCO SHALL PROVIDE ACCESS FOR ELECTRICAL CONNECTION 2' BELOW GRADE AT EACH POLE, AND FURNISH PRIMARY CONTROL & MONITORING CABINET (LCC).
    - F. SCOPE OF GENERAL CONTRACTOR IS ESTABLISHED AS FOLLOWS:
    - F.1. PRIMARY CONTROL & MONITORING CABINET PROVIDED BY MUSCO SHALL BE INSTALLED BY CONTRACTOR INSIDE CONCESSION BUILDING ELECTRICAL ROOM, INTEGRATED INTO THE SERVICE RACK AND LOCATED AS PER ELECTRICAL PLANS.
    - F.2. CONTRACTOR SHALL INSTALL WIRING AND CONDUITS TO LIGHTING CONTROL DRIVER CABINETS AT 10' HT. ON POLES AT EACH OF THE TEN (10) MUSCO POLE IN AIR LOCATIONS AS SHOWN ON THE DIBBLE & PLEDGER SPORTS LIGHTING PLANS & AS INSTALLED BY MUSCO.
    - G. GENERAL CONTRACTOR & MUSCO SHALL COORDINATE ALL ASPECTS OF THE BALLFIELD LIGHTING INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STAGING, SCHEDULING, INSTALLATION AND DEBRIS REMOVAL SO AS TO MINIMIZE CONFLICTS WITH ALL OTHER SITE CONSTRUCTION WORK.
22. ALL EXCESS TOPSOIL AND UNCLASSIFIED EXCAVATION IS TO BE HAULED OFF-SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
23. ALL SITE CONSTRUCTION MUST BE INSPECTED BY THE GEOTECHINCAL ENGINEER AT THE FOLLOWING STAGES:
    - A. COMPLETION OF GRADING SUB GRADE PRIOR TO TO PLACING STONE BASE.
    - B. COMPLETION OF STONE PLACEMENT PRIOR TO PAVING.
    - C. FINAL INSPECTION WHEN ALL WORK IS COMPLETE.
24. THE SURVEYOR DID NOT VISIBLY SEE ANY CEMETERIES IN ANY OPEN AREAS UNLESS OTHERWISE NOTED.
25. THIS PLAN DOES NOT DEPICT ENCUMBRANCES THAT ARE FOUND DURING A THOROUGH TITLE SEARCH.
26. ALL CURB AND GUTTER TO BE 24" STANDARD CURB AND GUTTER UNLESS OTHERWISE DEPICTED ON PLANS. ALL CURB AND GUTTER WITHIN NCDOT R/W SHALL BE 30" STANDARD CURB AND GUTTER.
27. ALL CURB AND GUTTER AND SIDEWALK CONCRETE IS TO BE MINIMUM 3,000 PSI AT 28 DAYS, AIR ENTRAINED.
28. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS INDICATED OTHERWISE.
29. PROVIDE HANDICAP SIGNS, MARKING AND RAMPS AS SHOWN.
30. HANDICAP RAMPS ARE TO MEET "ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" AS DETAILED IN THE FEDERAL REGISTER, VOLUME 56, NUMBER 144 DATED JULY 26, 1991. RULES AND REGULATIONS ACTIVATED JANUARY 26, 1992. FOR ADDITIONAL INFORMATION REFER TO THE NC STATE BUILDING CODE VOLUME 1-C, "MAKING BUILDINGS AND FACILITIES ACCESSIBLE TO THE USEABLE BY THE PHYSICALLY HANDICAPPED", 1991 EDITION. ALL STREET RETURNS TO HAVE H.C. RAMPS. H.C. RAMPS SHALL MEET NCDOT STANDARDS/SPECIFICATIONS.
31. CONTRACTOR SHALL NOT POUR ANY CONCRETE BEFORE FORMS ARE INSPECTED BY THE PROJECT ENGINEER AND/OR OWNER. ANY CONCRETE THAT HAS NOT BEEN APPROVED BY THE ENGINEER AND/OR OWNER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
32. A 10' UTILITY, DRAINAGE AND ROAD MAINTENANCE EASEMENT IS RESERVED ALONG AND ADJACENT TO ALL STREET RIGHT OF WAYS.
33. CONTRACTOR SHALL SAW-CUT TO PROVIDE SMOOTH TRANSITIONS WHERE EXISTING ASPHALT AND/OR CURB AND GUTTER IS TO BE REMOVED.
34. THE CONTRACTOR SHALL PROVIDE ALL THE MATERIAL AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE UTILITIES. ALL PIPE AND FITTINGS SHALL BE INSPECTED PRIOR TO BEING COVERED.
35. ALL HANDICAP SPACES ARE TO RECEIVE A HANDICAP SIGN AND HANDICAP SYMBOL PAINTED ON THE ASPHALT. NOTE STALLS TO RECEIVE 'VAN ACCESSIBLE' SIGNAGE.
36. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE POINTS.
37. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD CONDITIONS WHEN POSSIBLE, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF THE CLEARANCES ARE LESS THAN SPECIFIED ON THE PLANS OR 12 INCHES, WHICH EVER IS LESS, CONTACT THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
38. THE CONTRACTOR SHALL INCLUDE IN HIS CONTRACT PRICE THE REMOVAL AND DISPOSAL OF ANY EXCESS TOPSOIL/UNCLASSIFIED MATERIAL HE DETERMINES REQUIRED TO PERFORM THE FINAL GRADING AND LANDSCAPING OPERATION.
39. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL REQUIRED/NECESSARY SHEETING, SHORING, AND SPECIAL EXCAVATION MEASURES REQUIRED ON THE PROJECT TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THE DRAWINGS. THE OWNER, CURRITUCK COUNTY, SHALL ACCEPT NO RESPONSIBILITY FOR THE DESIGN OR INSTALLATION OF SAID ITEMS.
40. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE DAILY RECORD KEEPING OF THE AS-BUILT CONDITION OF ALL OF THE UNDERGROUND UTILITIES, CONSTRUCTION STAKEOUT ASSOCIATED WITH THE PROJECT.
41. ALL WATER LINE AND S.S. LINE INSTALLATION SHALL CONFORM TO THE STANDARDS AND DETAILS OF THE STATE OF NORTH CAROLINA PUBLIC WATER SUPPLY SECTION CONSTRUCTION PERMIT, CURRITUCK COUNTY.
42. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ALL MATERIAL AND LABOR ASSOCIATED WITH THE TESTING OF THE WATER AND S.S. LINES REQUIRED BY THE STATE OF NORTH CAROLINA PUBLIC WATER SUPPLY SECTION, CURRITUCK COUNTY.
43. ASPHALT PAVEMENT SHALL BE SMOOTH, WITH STRAIGHT OVERLAPPING SEAMS, FREE OF SEGREGATION, STAINS, BIRD BATHS, AND IMPERFECTIONS. ASPHALT PATCHING, SKIN PATCHES, OR RE-HEATING AND ROLLING WILL NOT BE ALLOWED. AREAS THAT ARE NOT ACCEPTABLE TO THE OWNER/ENGINEER WILL BE SAWCUT AND REMOVED. NO PATCH SMALLER THAN 200 SF WILL BE ALLOWED AND THE SAWCUTS MUST FALL ON A PAINT LINE OR EXISTING SEAM.
44. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY DE-WATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS.
45. TESTING BY CONTRACTOR: CONTRACTOR SHALL EMPLOY AT HIS EXPENSE AN OUTSIDE INDEPENDENT GEOTECHNICAL TESTING SERVICE (APPROVED BY THE OWNER) TO PERFORM SOIL TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING CONSTRUCTION. COPIES OF RESULTS OF TESTS SHALL BE SUBMITTED BY THE TESTING SERVICE DIRECTLY TO THE CONTRACTOR, THE OWNER, AND THE STRUCTURAL ENGINEER. -- THE TESTING SERVICE WILL CLASSIFY PROPOSED ON-SITE AND BORROW SOILS TO VERIFY THAT SOILS COMPLY WITH SPECIFIED REQUIREMENTS AND SHALL PERFORM REQUIRED FIELD AND LABORATORY TESTING. (MINIMUM REQUIRED SOIL BEARING CAPACITY IS NOTED ON THE STRUCTURAL DRAWINGS). -- IN PAVED AND BUILDING SLAB AREAS, THE TESTING SERVICE SHALL MAKE AT LEAST ONE FIELD DENSITY TEST FOR EACH 2000 SQUARE FEET OF FILL IN EACH COMPACTED FILL LAYER. IF A TEST SHOULD FAIL TO MEET REQUIRED DENSITY, THE CONTRACTOR SHALL RE-COMPACT THAT LAYER. THE SOIL TESTING SERVICE SHALL PERFORM ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE TO SHOW THAT THE FAILED LAYER HAS REACHED THE REQUIRED COMPACTION. -- IN FOUNDATION WALL AREAS, THE TESTING SERVICE SHALL MAKE AT LEAST ONE FIELD DENSITY TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH OF FILL IN EACH COMPACTED FILL LAYER, WITH NO LESS THAN TWO TESTS ALONG A WALL FACE. IF A TEST SHOULD FAIL TO MEET REQUIRED DENSITY, THE CONTRACTOR SHALL RE-COMPACT THAT LAYER. THE SOIL TESTING SERVICE SHALL PERFORM ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE TO SHOW THAT THE FAILED LAYER HAS REACHED THE REQUIRED COMPACTION.
46. COMPACTION: COMPACT EACH LAYER OF BACKFILL AND FILL SOIL MATERIALS AND THE TOP 12" OF SUBGRADE IN CUT AREAS TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 FOR STRUCTURES, SLABS, AND PAVEMENTS AND 90% OF MAXIMUM DENSITY FOR LAWNS OR UNPAVED AREAS.
47. THE BUILDING CONTRACTOR AND THE SITE WORK CONTRACTOR ARE TO COORDINATE THE INSTALLATION OF DRAINAGE PIPES AROUND THE BUILDING STRUCTURE.
48. ANY RELOCATION OF EXISTING UTILITIES WILL BE AT THE COST OF THE CONTRACTOR.
49. FIRE DEPARTMENT VEHICULAR ACCESS TO ALL STRUCTURES UNDER CONSTRUCTION SHALL BE PROVIDED AT ALL TIMES. IN AREAS WHERE GROUND SURFACE ARE SOFT OR LIKELY TO BECOME SOFT, HARD ALL WEATHER SURFACE ROADS SHALL BE PROVIDED AND MAINTAINED.
50. ADDRESS NUMBERS, BOTH COMMERCIAL AND RESIDENTIAL, MUST BE POSTED ON THE FRONT OF THE STRUCTURE NEAREST TO THE MAIN ENTRANCE IN A POSITION TO BE PLAINLY LEGIBLE, VISIBLE, AND UNOBSTRUCTED FROM THE STREET OR ROAD FRONTING THE PROPERTY.
51. THE CONTRACTOR IS RESPONSIBLE FOR RELOCATING ANY EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED CONSTRUCTION. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB, GUTTER, PAVEMENT, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OF THE ORIGINAL WORKMANSHIP. THE CONTRACTOR SHALL VERIFY UTILITIES AND AVOID OR RELOCATE IF REQUIRED.
52. (CONSTRUCTION/SITE PLANS) WATER AND S.S. PERMIT APPLICATIONS HAVE BEEN APPROVED BY NCDEQ. PERMIT NUMBERS ARE AS FOLLOWS:
    - A. WATER PERMIT NUMBER: TO BE DETERMINED AS APPLICABLE
    - B. S.S PERMIT NUMBER: TO BE DETERMINED AS APPLICABLE
53. COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT ON SITE IN A PERMIT BOX THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION. THIS INCLUDES APPROVED CONSTRUCTION PLANS, APPROVED EROSION CONTROL PLANS, ENCROACHMENT AGREEMENTS, DRIVEWAY PERMITS, WATER/S.S. PERMITS, ETC.
54. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL NCDOT, CURRITUCK COUNTY AND NCDEQ STANDARDS AND SPECIFICATIONS.
55. ALL DRAINAGE CASTINGS TO RECEIVE BITUMINOUS COATING.
56. ALL DRAINAGE STRUCTURES OVER 42" DEEP SHALL HAVE STEPS.
57. MAINTAIN MINIMUM 3' COVER FOR ALL WATER PIPE.
58. WATERLINE PIPE SHALL BE C-900 PVC UNLESS OTHERWISE NOTED.
59. CORPORATION STOPS SHALL BE RATED A MINIMUM OF 300 PSI.
60. WHERE WATERLINE CROSSES:
61. A. SANITARY S.S.: WATERLINE SHALL CROSS ABOVE AND MAINTAIN 2' VERTICAL SEPARATION OR 10' OF HORIZONTAL SEPARATION. IF THIS SEPARATION CANNOT BE MAINTAINED OR IF WATER PASSES BELOW S.S., THEN BOTH WATER AND S.S. SHALL BE CLASS 50 DUCTILE IRON PIPE FOR A MINIMUM OF 10' EACH SIDE OF CROSSING.
62. B. STORM S.S: WHERE WATERLINE CROSSES ABOVE, MAINTAIN 1' VERTICAL SEPARATION. IF THIS SEPARATION CANNOT BE MAINTAINED OR WHERE WATER AND/OR S.S. CROSSES BELOW STORM, WATERLINE AND/OR S.S. SHALL BE CLASS 50 DUCTILE IRON PIPE FOR A MINIMUM OF 10' EACH SIDE OF CROSSING.
63. ALL GRAVITY S.S LINE IS SDR 35 PVC EXCEPT WHEN NOTED DIFFERENTLY ON PLANS OR AS FOLLOWS: ALL S.S LESS THAN 3' DEEP OR GREATER THAN 14' DEEP SHALL BE A MINIMUM CLASS 50 DUCTILE IRON.
64. WATER LINE TO BE PRESSURE TESTED TO 150 PSI FOR 2 HOURS.
65. DUCTILE IRON SANITARY S.S. SHALL HAVE THE INTERIOR COATED WITH SEWPER COAT OR PROTECTO 401.
66. CONTRACTOR TO TEST S.S. AND WATER LINE ACCORDING TO CURRITUCK COUNTY.
67. THE CONTRACTOR TO NOTIFY ENGINEER & CURRITUCK COUNTY 48 HRS PRIOR TO COMMENCEMENT OF CONSTRUCTION & ANY UTILITY BEING COVERED.
68. S.S. LINES SHALL BE PRESSURE TESTED WITH 5 PSI FOR 2 MINUTES WITH NO LEAKAGE.
69. S.S. MANHOLES SHALL BE EITHER VACUUM TESTED AT 10" MERCURY FOR 2 MINUTES WITH NO LEAKAGE OR PRESSURE TESTED AT 5 PSI FOR 2 MINUTES WITH NO LEAKAGE.
70. MANHOLES TO HAVE EPOXY COATING INSIDE (24 MILS) AND OUTSIDE (16 MILS) DONE IN 2 COATS BY THE MANUFACTURER PER NC SPECS. DIVISION 3, SECTION 9.3, HEAT SHRINK RUBBER CHIMNEY SEAL, AND ALL CASTINGS TO HAVE BITUMINIOUS COATING.
71. CURRITUCK COUNTY SPECIFICATIONS AND DETAILS MAY CONFLICT. THE MORE STRINGENT SHALL APPLY.
72. CONTRACTOR SHALL PRETEST ALL WATER AND S.S. PRIOR TO SCHEDULING INSPECTION WITH CURRITUCK COUNTY OR ENGINEER. RE-INSPECTIONS DUE TO FAILED TEST WILL BE BILLED TO THE CONTRACTOR AT $150 PER HOUR.

LEGENDS:

LIST OF ABBREVIATIONS

AC	ACRE
BNDY	BOUNDARY
BOC,BC	BACK OF CURB
BOW	BACK OF WALK
BW	BOTTOM OF WALL (AT FINISHED GRADE)
C&G	CURB AND GUTTER
CB	CATCH BASIN
CIP	CAST-IN-PLACE
CFS	CUBIC FOOT PER SECOND
CL	CONTROL LINE/CENTER LINE
CONC.	CONCRETE
CU. FT (CF)	CUBIC FOOT
CU YD(CY)	CUBIC YARD
DA	DRAINAGE AREA
DB	DEED BOOK
DBH	DIAMETER AT BREAST HEIGHT
DG	DESIGN GROUND
DI	DROP INLET
DIP	DUCTILE IRON PIPE
D/S	DOWNSTREAM
DWG	DRAWING
ECM	EXISTING CONCRETE MONUMENT
EIA	EXISTING IRON AXLE
EIP	EXISTING IRON PIPE
EIR	EXISTING IRON ROD
ELEV, EL	ELEVATION
EOG	EDGE OF GRAVEL
EOP	EDGE OF PAVEMENT
ESC	EROSION AND SEDIMENT CONTROL
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EW	END WALL
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FOC	FACE OF CURB
FT.	FEET
FUT	FUTURE
G.S.	GENERAL STATUTE
HGL	HYDRAULIC GRADE LINE
HDPE	HIGH DENSITY POLYETHELENE
HOOD	ELEVATION AT TOP OF CURB INLET
HP	HIGH PERFORMANCE POLYPROPYLENE
INV	INVERT
L	LENGTH
LBS	POUNDS
L_W	WEIR LENGTH
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
NAD	NORTH AMERICAN DATUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OBV	OBVERT
OG	ORIGINAL GROUND
O/S	OFFSET
OS	OUTSIDE
PL	PROPERTY LINE
PREC	PRECAST
PROP	PROPOSED
PVC	POLY VINYL CHLORIDE
PVI	POINT OF VERTICAL INFLECTION
PS	PUMP STATION
RCP	REINFORCED CONCRETE PIPE
RIM	ELEVATION OF TOP/OPENING OF DRAINAGE STRUCTURE
ROW	RIGHT-OF-WAY
SA	SURFACE AREA
SAN	SANITARY
SCH	SCHEDULE
SDR	STANDARD DIMENSION RATIO
SF	SILT FENCE
SHLD	SHOULDER
SMH	SANITARY MANHOLE
SS	SANITARY SEWER
STMH	STORM MANHOLE
STA	STATION
STD	STANDARD
SQ. FT (SF)	SQUARE FOOT
SQ YD(SY)	SQUARE YARD
TA	TOP OF ASPHALT
TK	THICKNESS
TBA	TO BE ABANDONED
TBD	TO BE DETERMINED
TBR	TO BE REMOVED
TC	TOP OF CONCRETE
TF	TREE PROTECTION FENCING
TSB	TEMPORARY SKIMMER BASIN
TST	TEMPORARY SEDIMENT TRAP
TYP.	TYPICAL
TW	TOP OF WALL (AT FINISHED GRADE)
UGE	UNDERGROUND ELECTRIC LINE
U/S	UPSTREAM
QTY	QUANTITY
VC	VERTICAL CURVE
YI	YARD INLET
W	WIDTH

NOTE: THIS LIST MAY NOT BE INCLUSIVE OF ALL ABBREVIATIONS USED WITHIN THE CONSTRUCTION DRAWING SET. IF THE CONTRACTOR IS UNSURE OF AN ABBREVIATION OR TERMINOLOGY USED WITHIN THIS CONSTRUCTION SET, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE ENGINEER FOR CLARIFICATION. THE ENGINEER OR THE OWNER WILL NOT BE HELD LIABLE FOR MISINTERPRETATION OF THE CONSTRUCTION PLAN SET BY THE GENERAL CONTRACTOR OR ANY OF HIS SUB-CONTRACTORS.

EXISTING CONDITIONS

LEGEND

BOUNDARY
ADJOINER LINE
RIGHT-OF-WAY LINE
STORM DRAIN PIPE
OVERHEAD ELECTRIC LINE
UNDERGROUND ELECTRIC LINE (BY MARKINGS)
TOP OF BANK/SLOPE
TOE OF BANK/SLOPE
CENTERLINE OF DITCH
BUILDING LINE
EDGE OF CRUSHED ROCK
EDGE OF APPROXIMATE WETLANDS
EDGE OF LANDSCAPING
EDGE OF WOODS/VEGETATION
EDGE OF CONCRETE/BACK OF CURB
EDGE OF PAVEMENT/ASPHALT
TIE LINE
CONTOUR LINE (MAJOR)
CONTOUR LINE (MINOR)
WATER VALVE
WATER METER
FIRE HYDRANT
UTILITY/POWER POLE
ELECTRIC METER
TELEPHONE PEDESTAL
FIBER-OPTIC BOX
FIBER-OPTIC MARKER
ORNAMENTAL LIVE OAK
TREE (AS SPECIFIED)
LIGHT POLE
EIP O EXISTING IRON PIPE
EIR O EXISTING IRON ROD
SIP O SET IRON PIPE
NG× NATURAL GROUND
EC× EDGE OF CONCRETE
EP× EDGE OF PAVEMENT
TA× TOP OF ASPHALT
TOB× TOB OF BANK/SLOPE
TOE× TOE OF BANK/SLOPE
CLD× CENTERLINE OF DITCH
ASPHALT
CONCRETE
APPROXIMATE WETLANDS

ABBREVIATIONS

PIN	PARCEL IDENTIFICATION NUMBER
REID	REAL ESTATE IDENTIFICATION
N/F	NOW OR FORMERLY
D.B.	DEED BOOK
P.B.	PLAT BOOK
M.B.	MAP BOOK
P.G.	PAGE
INV.	INVERT
CI	CURB INLET
CB	CATCH BASIN
FES	FLARED-END SECTION
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
CLF	CHAIN-LINK FENCE
TOB	TOP OF BANK/SLOPE
TOE	TOE OF BANK/SLOPE
CLD	CENTERLINE OF DITCH
CLF	CHAIN-LINK FENCE
R/W	RIGHT-OF-WAY
S.R.	STATE ROAD
RD.	ROAD
BLVD.	BOULEVARD
EIP	EXISTING IRON PIPE
SIP	SET IRON PIPE
CONC.	CONCRETE
EX.	EXISTING

EROSION CONTROL

LEGEND

EXISTING CONTOURS
PROPOSED CONTOURS
LIMITS OF DISTURBANCE
CLEARING LIMITS (STAGE 1A)
TREE PROTECTION FENCE
SILT FENCE
SILT FENCE OUTLET
DIVERSION DITCH
POROUS BAFFLE
STORM DRAINAGE PIPE
RIP-RAP ENERGY DISSIPATORS
CONSTRUCTION ENTRANCE
ROLLED EROSION CONTROL MATTING
TEMPORARY STOCKPILE
CONCRETE WASHOUT
TEMP. INLET PROTECTION

SITE

HATCH LEGEND

CONCRETE
VEHICULAR CONCRETE
LIGHT DUTY ASPHALT
HEAVY DUTY ASPHALT
GRASS PAVE AT FIRE LANE
FIRE LANE

GRADING & STORM DRAINAGE

LEGEND

EXISTING CONTOURS PROPOSED
LIMITS OF DISTURBANCE LOD
TREE PROTECTION FENCE TP
COMBO TREE PRO/SILT FENCE SF-TP
CATCH BASIN
STORM SEWER MANHOLE
DROP INLET
RAISED TOP YARD INLET
OUTLET CONTROL STRUCTURE
FLARED END SECTION
END WALL
STORM SEWER
JUNCTION BOX
6" PVC COLLECTOR PIPE
4" PVC PIPE (ROOF DRAIN COLLECTORS)
CLEANOUT (@ TRECH DRAIN LATERALS)

SPOT ELEVATION KEY

BACK OF CURB SPOT ELEVATION × 13.55 BC
TOP OF CONCRETE SPOT ELEVATION × 12.45 TC
TOP OF ASPHALT SPOT ELEVATION × 11.30 TA
BOTTOM OF RAMP SPOT ELEVATION × 11.56 BR
TOP OF RAMP SPOT ELEVATION × 13.50 TR
FINISH GRADE SPOT ELEVATION × 12.24 FG
TOP OF BOARDWALK SPOT ELEVATION × 14.00 TBW
TOP OF BANK SPOT ELEVATION × 11.09 TB
HIGH POINT SPOT ELEVATION × 10.50 HP
FINISHED GRADE SLOPE 1.25%

UTILITIES

LEGEND

EXISTING		PROPOSED
	FIRE HYDRANT	
	WATER VALVE	
	WATER FITTING	
	WATER TEE	
	WATER CROSS	
	WATER REDUCER	
	PLUG	
	WATER METER	
	WATER FOUNTAIN	
	CLEANOUT	
S	SANITARY SEWER MANHOLE	S
W	WATER SERVICE	W
F	FIRE WATER LINE	F
	¾" WATER SERVICE	
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
G	GAS LINE	G
FO	FIBRE OPTIC	FO

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 43754 SEAN B. FRENCH
Do Not Use for Construction - PRELIMINARY

ISSUE/REVISIONS:

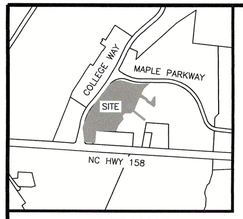
NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

GENERAL NOTES AND LEGENDS

DESIGNED BY:	
DRAWN BY:	SBF
CHECKED BY:	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C1.02

J:\RIVERS\OFFICE\2022\2022109 CURRITUCK COUNTY PARK PHASE III\CONSTRUCTION\DRAWINGS\01 GENERAL NOTES\GENERAL NOTES AND LEGENDS.dwg, 9/16/2025 11:59:46 AM, SEAN FRENCH



VICINITY MAP
(1"=1,000')

HORIZONTAL SURVEY CONTROL

POINT	LOCAL NORTHING (US FT-GROUND)	LOCAL EASTING (US FT-GROUND)	ELEVATION (NAVD88)	DESCRIPTION	GRID NORTHING (US FT-NAD 83/2011)	GRID EASTING (US FT-NAD 83/2011)
100	974,609.29'	2,877,953.10'	11.71'	CPNAIL-GPS 100	974,609.29'	2,877,953.07'
101	974,561.07'	2,878,353.97'	11.30'	CPNAIL-GPS 101	974,561.07'	2,878,353.97'

PROJECT CONTROL LOCALIZED TO GROUND AROUND RIVERS CONTROL POINT 101; CALCULATED COMBINED FACTOR = 0.99992410

VERTICAL SURVEY CONTROL

POINT	NORTHING (US FT-GROUND)	EASTING (US FT-GROUND)	ELEVATION (NAVD88)	DESCRIPTION
6091	974,627.72'	2,878,004.48'	15.50'	TOP OF HYDRANT
6090	974,172.87'	2,877,126.35'	12.43'	TOP OF HYDRANT

NCGRID NAD83/2011

NORTH CAROLINA COUNTY OF CURRITUCK

I, JAMES W. ATKINSON III, P.L.S., CERTIFY THAT THE EXISTING TOPOGRAPHIC AND PLANIMETRIC INFORMATION SHOWN HEREON WAS DRAWN UNDER MY DIRECTION FROM AN ACTUAL SURVEY MADE BY JA, JS, AND GS ON 8/22/24–12/9/24 OF THE AREA SHOWN. BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES FROM INFORMATION FOUND IN REFERENCED BOOK(S) AND PAGE(S). THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+, AND IN ACCORDANCE WITH THE US NATIONAL MAPPING ACCURACY STANDARDS, THE MAXIMUM VERTICAL ERROR IS NOT GREATER THAN ONE-HALF THE CONTOUR INTERVAL EXCEPT AS NOTED; THAT VERTICAL CONTROL WAS ESTABLISHED TO THE CLASS 'C' STANDARD VIA MULTIPLE NCGS RTN OBSERVATIONS ON CONTROL POINTS.

1) CLASS OF SURVEY:	CLASS A (HORIZ) CLASS C (VERT)
2) POSITIONAL ACCURACY:	2 CM(HORZ)
3) TYPE OF GPS FIELD PROCEDURE:	NCGS VRS RTN
4) DATE OF SURVEY WORK:	8/22/24 – 12/9/24
5) DATUM/EPOCH:	NAD83/2011
6) PUBLISHED CONTROL/FIXED CONTROL:	NCGS VRS RTN
7) GEOID MODEL:	GEOID18
8) COMBINED GRID FACTOR:	0.99992410
9) UNITS:	US SURVEY FEET

AND THAT THIS SURVEY MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600); WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 25TH *DAY OF JUNE, A.D. 2025.*

6/25/25

PROFESSIONAL LAND SURVEYOR LICENSE NO. L-5359

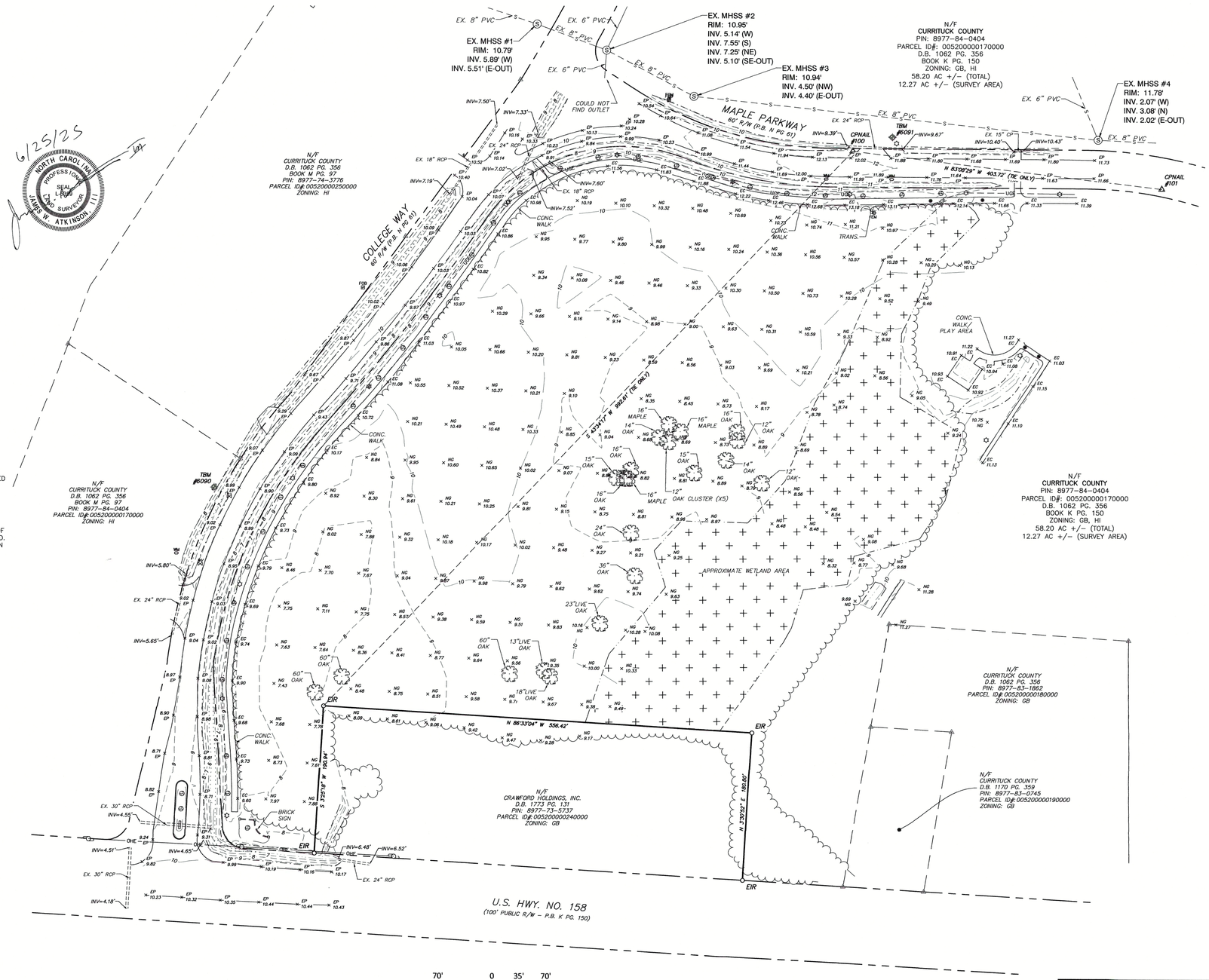
1. THE PURPOSE OF THIS PLAT IS TO DEPICT THE EXISTING TOPOGRAPHY AND PLANIMETRIC FEATURES OF THE SUBJECT PARCELS, AS OF THE DATE OF THIS SURVEY.
2. PROPERTIES SUBJECT TO ANY AND ALL EASEMENTS, RIGHTS OF WAY, RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD.
3. ALL DISTANCES ARE HORIZONTAL GROUND MEASURED UNLESS SHOWN OTHERWISE.
4. THE PROPERTY IS LOCATED IN A ZONE "X" (AREAS OUTSIDE 1% ANNUAL CHANCE FLOOD 100 YEAR), AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 3720896600L, PANEL 8966, DATED 12/21/2018.
5. SURVEY AREA = 12.27 ACRES +/–. AREA DETERMINED BY COORDINATES.

CURRENT ZONING: GB, HI

7. UTILITIES: THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES AND IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES.
6. ELEVATIONS AND CONTOURS SHOWN ARE BASED ON NAVD 88 DATUM. VERTICAL CONTROL ESTABLISHED BY MULTIPLE NCGS RTN GPS OBSERVATIONS (CLASS C).
7. INSIDE THE WOODED AREA CONTAINS MOUNDS AND DEPRESSIONS DUE TO TREES, COUNTOUR INTERVALS MAY EXCEED THE 1/2' CONFIDENCE INTERVAL IN SOME AREAS.

REFERENCES:

D.B. 1062 PG. 356
BOOK K PG. 150
D.B. 1170 PG. 359
D.B. 1773 PG. 131
BOOK M PG. 97
BOOK N PG 61



70' 0 35' 70'
SCALE: 1" = 70' ft

LEGEND

- BOUNDARY
- ADJOINER LINE
- RIGHT-OF-WAY LINE
- STORM DRAIN PIPE
- OHE — OVERHEAD ELECTRIC LINE
- UGE — UNDERGROUND ELECTRIC LINE (BY MARKINGS)
- TOP OF BANK/SLOPE
- TOE OF BANK/SLOPE
- CENTERLINE OF DITCH
- BUILDING LINE
- EDGE OF CRUSHED ROCK
- EDGE OF APPROXIMATE WETLANDS
- EDGE OF LANDSCAPING
- EDGE OF WOODS/VEGETATION
- EDGE OF CONCRETE/BACK OF CURB
- EDGE OF PAVEMENT/ASPHALT
- TIE LINE
- CONTOUR LINE (MAJOR)
- CONTOUR LINE (MINOR)
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- UTILITY/POWER POLE
- ELECTRIC METER
- TELEPHONE PEDESTAL
- FOB — FIBER-OPTIC BOX
- FOM — FIBER-OPTIC MARKER
- ORNAMENTAL LIVE OAK
- TREE (AS SPECIFIED)
- LIGHT POLE
- EIP — EXISTING IRON PIPE
- EIR — EXISTING IRON ROD
- SIP — SET IRON PIPE
- NG — NATURAL GROUND
- EC — EDGE OF CONCRETE
- EP — EDGE OF PAVEMENT
- TA — TOP OF ASPHALT
- TOB — TOB OF BANK/SLOPE
- TOE — TOE OF BANK/SLOPE
- CLD — CENTERLINE OF DITCH
- ASPHALT
- CONCRETE
- APPROXIMATE WETLANDS

ABBREVIATIONS

PIN	PARCEL IDENTIFICATION NUMBER
REID	REAL ESTATE IDENTIFICATION
N/F	NOW OR FORMERLY
D.B.	DEED BOOK
P.B.	PLAT BOOK
M.B.	MAP BOOK
P.G.	PAGE
INV.	INVERT
CI	CURB INLET
CB	CATCH BASIN
FES	FLARED-END SECTION
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
CLF	CHAIN-LINK FENCE
TOB	TOP OF BANK/SLOPE
TOE	TOE OF BANK/SLOPE
CLD	CENTERLINE OF DITCH
CLF	CHAIN-LINK FENCE
R/W	RIGHT-OF-WAY
S.R.	STATE ROAD
RD.	ROAD
BLVD.	BOULEVARD
EIP	EXISTING IRON PIPE
SIP	SET IRON PIPE
CONC.	CONCRETE
EX.	EXISTING

REVISIONS

TOPOGRAPHIC SURVEY
FOR
CURRITUCK COUNTY RECREATIONAL PARK
TOWN OF BARCO, CURRITUCK COUNTY, NORTH CAROLINA

OWNER: *CURRITUCK COUNTY*
ADDRESS: *P.O. BOX 9 CURRITUCK, NC 27929*

SURVEYED	JWA,JS,GS
DRAWN	JWA
CHECKED	JWA
APPROVED	P.M.
DATE	6/25/2025
SCALE	1" = 70'

Rivers & ASSOCIATES, INC. riversandassociates.com Since 1918
NC License: F-0334
Engineers Planners Surveyors Landscape Architects
107 East Second Street Greenville, NC 27858 (252) 752-4135

DWG. NO. W-4224 SHEET NO. 1 OF 1

Rivers & ASSOCIATES, INC. riversandassociates.com Since 1918
NC License: F-0334
Engineers Planners Surveyors Landscape Architects
107 East Second Street Greenville, NC 27858 (252) 752-4135

PROJECT NO.	2022109
DRAWING NO.	W-4224
SCALE	1"=70'
DATE	6/25/2025
SHEET NO.	C1.10

DWG. NO. W-4224

THESE PLANS ARE THE PROPERTY OF RIVERS & ASSOCIATES, INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESSED WRITTEN CONSENT OF RIVERS & ASSOCIATES, INC.



NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS:
DECEMBER 15 THROUGH FEBRUARY 14 AND / OR
APRIL 15 THROUGH JULY 31.

CONTRACTOR SHALL UTILIZE MATS DURING BOARDWALK CONSTRUCTION TO PREVENT DAMAGE TO WETLANDS, INCLUDING BUT NOT LIMITED TO RUTS, EROSION & PLANT DAMAGE. STUMP REMOVAL SHALL BE PROHIBITED WITHIN THE WETLANDS. CONTACT LANDSCAPE ARCHITECT AND CIVIL ENGINEER IF EXISTING TREES ARE ENCOUNTERED THAT WOULD INTERFERE WITH BOARDWALK ROUTING.

SCALE 1 inch = 50 ft (50' 0 25' 50')

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Surveyors
Landscape Architects
Six Forks Place III Ste. 230
353 Six Forks Road
Raleigh, NC 27609
919.594.1626

Preliminary
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
PRM 7/11/25
NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT

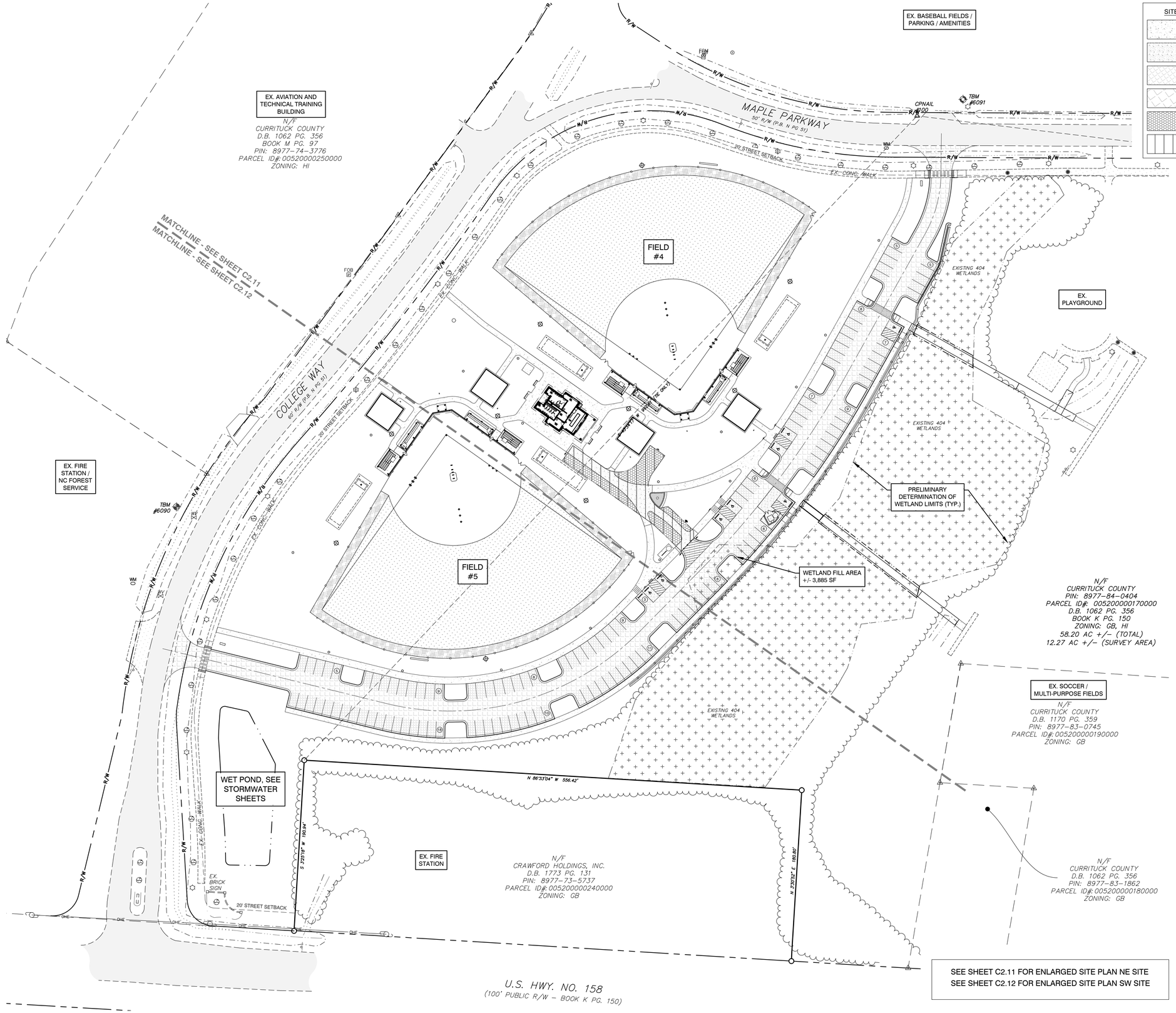
ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA
EXISTING CONDITIONS AND DEMOLITION PLAN

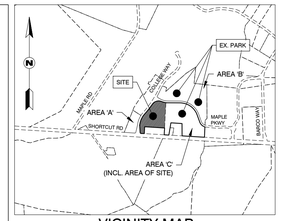
DESIGNED BY:	SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C1.21

Do Not Use for Construction - PRELIMINARY



SITE HATCH LEGEND

- CONCRETE
- VEHICULAR CONCRETE
- LIGHT DUTY ASPHALT
- HEAVY DUTY ASPHALT
- GRASS PAVE AT FIRE LANE
- FIRE LANE



VICINITY MAP
1' = 2000'

SITE DATA TABLE

PROPERTY INFORMATION / SITE ADDRESSES -		
	PARCEL ID NO. -	005200000170000
	NC PIN -	8977-84-0404
	ADDRESS -	181 MAPLE PARKWAY BARCO, NORTH CAROLINA 27917
TOWNSHIP -	CRAWFORD	
OWNER/DEVELOPER -	COUNTY OF CURRITUCK 153 COURTHOUSE RD, CURRITUCK, NC 27929	
SITE AREA -	EXISTING PARK TOTAL - 51.61 ACRES (PER CURRITUCK COUNTY GIS) SITE AREA WITHIN EX. PARK - 10.0 AC (+/- 435,600 SF)	
LAND USE -	EXISTING - PARK, VACANT	
ZONING -	GB	
ZONING OVERLAY-	AP	
PROPOSED USE -	BALL FIELDS, PARKING, ACCESSORY FACILITIES	
PROPOSED AMENITIES -	PICNIC SHELTER (4) +/- 900 SF, 30' X 30' RESTROOM / CONCESSION BUILDING (1) +/- 1,680 SF 250' BALL FIELDS (2) DUGOUTS (4) BLEACHERS (4) SCOREKEEPERS BOX (2) BOARDWALK 'A' (234 LF) BOARDWALK 'B' (219 LF)	
LOT COVERAGE -	MAX. LOT COVERAGE FOR GB DISTRICT: **65 %** **NOTE:** PER CURRITUCK COUNTY GIS & PLAT BOOK M/97, TRAINING CENTER (PIN ID # 005200000250000), IS NOT INCLUDED IN CALCULATIONS FOR THIS LOT (PIN ID # 005200000170000). GIS ACREAGE OF 51.64 REFLECTS THE EXCLUSION OF TRAINING CENTER LOT & DEDICATED R/W, WHEREAS THE INCLUSION OF THESE AREAS APPROXIMATES THE TOTAL AREA, PER PLAT BK K/150, OF TRACT 1 AT +/- 64.91 AC. PORTIONS OF THE PARK EXISTING IN ADJACENT LOTS (PIN ID#'s 005200000180000,005200000190000, 005200001A00000, 005200000160000) ARE ALSO NOT INCLUDED FOR PURPOSES OF THIS CALCULATION. *SEE VICINITY MAP ON THIS SHEET FOR AREA REFERENCES		
		ACREAGE / IMPERVIOUS AREA
	EXISTING DATA:	+/-51.64 AC
	*AREA 'A' =	+/- 3.67 AC / +/- 0.98 AC
	*AREA 'B' =	+/-20.90 AC / +/- 3.86 AC
	*AREA 'C' =	+/-27.07 AC / +/- 2.15 AC
	TOTAL EXISTING =	/ +/- 6.99 AC
	404 WETLANDS =	+/- 6.27 AC
	EXISTING LOT COVERAGE =	(6.99 / 51.64) X 100 = +/- 13.54 %
	EXISTING LOT COVERAGE = (404 WETLANDS EXCLUDED)	(6.99 / 45.37) X 100 = +/- 15.41 %
	PROPOSED EXPANSION DATA:	+/- 2.19 AC
	TOTAL LOT COVERAGE:	+/-51.64 AC / +/- 9.18 AC (9.18 / 51.64) X 100 = +/- **17.78 %**
	TOTAL LOT COVERAGE (404 WETLANDS EXCLUDED)	+/-45.37 AC / +/- 9.18 AC (9.18 / 45.37) X 100 = +/- **20.23 %**
PARKING -	REQUIRED - TO BE DETERMINED BY THE DEVELOPMENT SERVICES DIRECTOR OF CURRITUCK COUNTY, OR A DESIGNEE (PER UDO SECTION 5.1.3.E) PROPOSED - 134 PARKING SPACES MINIMUM DIMENSIONS - 10' X 18'	
BICYCLE PARKING -	PROPOSED - 2 SPACES	
WETLANDS -	AREA OF WETLANDS WITHIN PARK - +/- 273,329 SF (+/- 6.27 AC) AREA OF WETLANDS WITHIN SITE - +/- 109,511 SF (+/- 2.51 AC) AREA OF WETLANDS TO BE DISTURBED - +/- 3,885 SF (0.089 AC)	

NOTE:
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BALLFIELD LIGHTING NOTES:
1. BALLFIELD FIELD LIGHTING DESIGN PROVIDED BY DIBBLE & PLEDGER, PA. & MUSCO SPORTS LIGHTING, LLC.
2. DELIVERY, UNLOADING, PREPARATION OF INSTALL, AND INSTALLATION OF PRECAST CONCRETE BASES, DRIVER CABINETS, LIGHT POLES, WIRE HARNESSES & FIXTURES, ETC. SHALL BE PROVIDED BY MUSCO SPORTS LIGHTING, LLC DIRECTLY THROUGH OWNER, CURRITUCK COUNTY.
3. BALLFIELD LIGHTING PLANS & CONSTRUCTION ARE NOT IN THE GENERAL CONTRACTOR'S CONTRACT SCOPE (NIC), EXCEPT AS DELINEATED IN THESE NOTES.
4. CONTROL CABINETS AT EACH POLE SHALL BE FURNISHED AND INSTALLED BY MUSCO AT 10' MOUNT HEIGHT.
5. MUSCO SHALL PROVIDE ACCESS FOR ELECTRICAL CONNECTION 2' BELOW GRADE AT EACH POLE, AND FURNISH PRIMARY CONTROL & MONITORING CABINET (LCC).
6. SCOPE OF GENERAL CONTRACTOR IS ESTABLISHED AS FOLLOWS:
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   B. CONTRACTOR SHALL INSTALL WIRING AND CONDUITS TO LIGHTING CONTROL DRIVER CABINETS AT 10' HT. ON POLES AT EACH OF THE TEN (10) MUSCO POLE IN AIR LOCATIONS AS SHOWN ON THE DIBBLE & PLEDGER SPORTS LIGHTING PLANS & AS INSTALLED BY MUSCO.
7. GENERAL CONTRACTOR & MUSCO SHALL COORDINATE ALL ASPECTS OF THE BALLFIELD LIGHTING INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STAGING, SCHEDULING, INSTALLATION AND DEBRIS REMOVAL SO AS TO MINIMIZE CONFLICTS WITH ALL OTHER SITE CONSTRUCTION WORK.

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SCALE 1 inch = 50 ft (50' 0 25' 50')

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NC License: P-0334
Six Forks Place III Ste. 230
353 Six Forks Road
Raleigh, NC 27609
919.594.1626

Preliminary
NOT FOR CONSTRUCTION
PRELIMINARY PLAT NOT FOR RECORDATION, CONVEYANCES, OR SALES
NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT
LAURA E. SEAY
2758

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

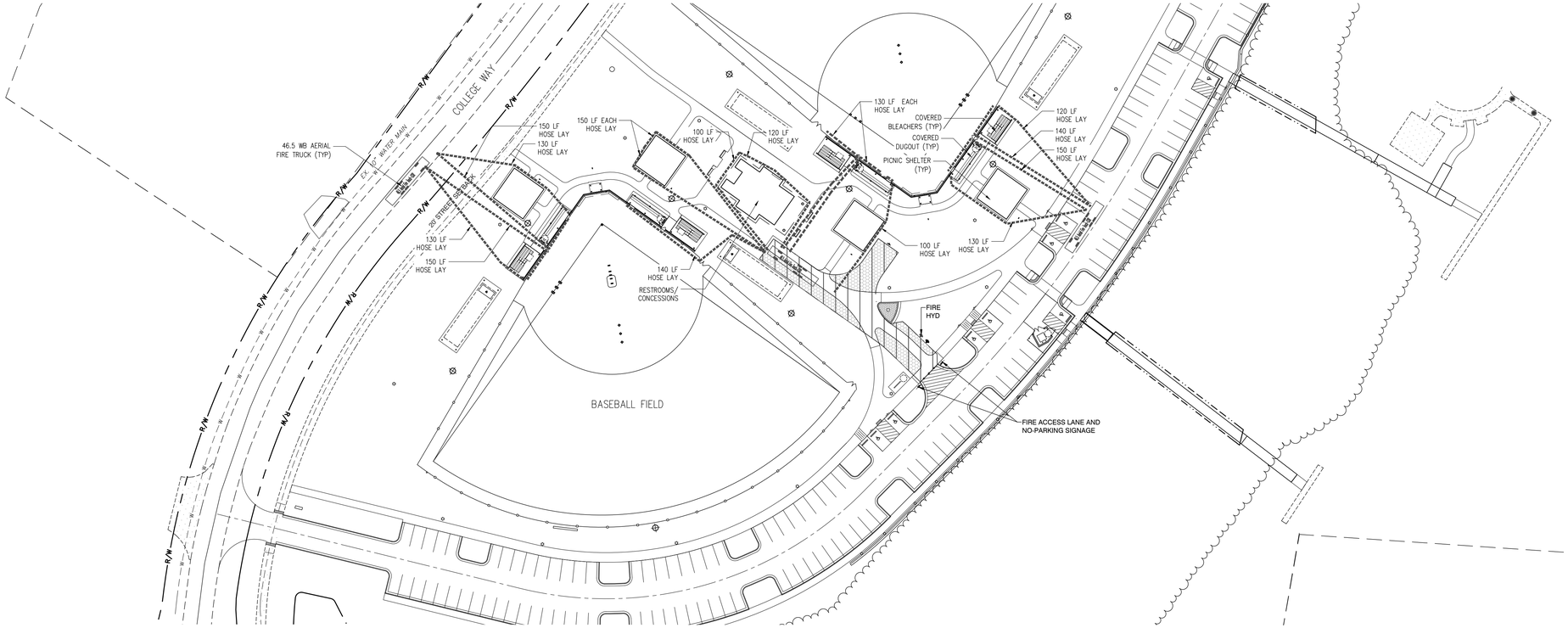
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

SITE PLAN

DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C2.01

Do Not Use for Construction - PRELIMINARY

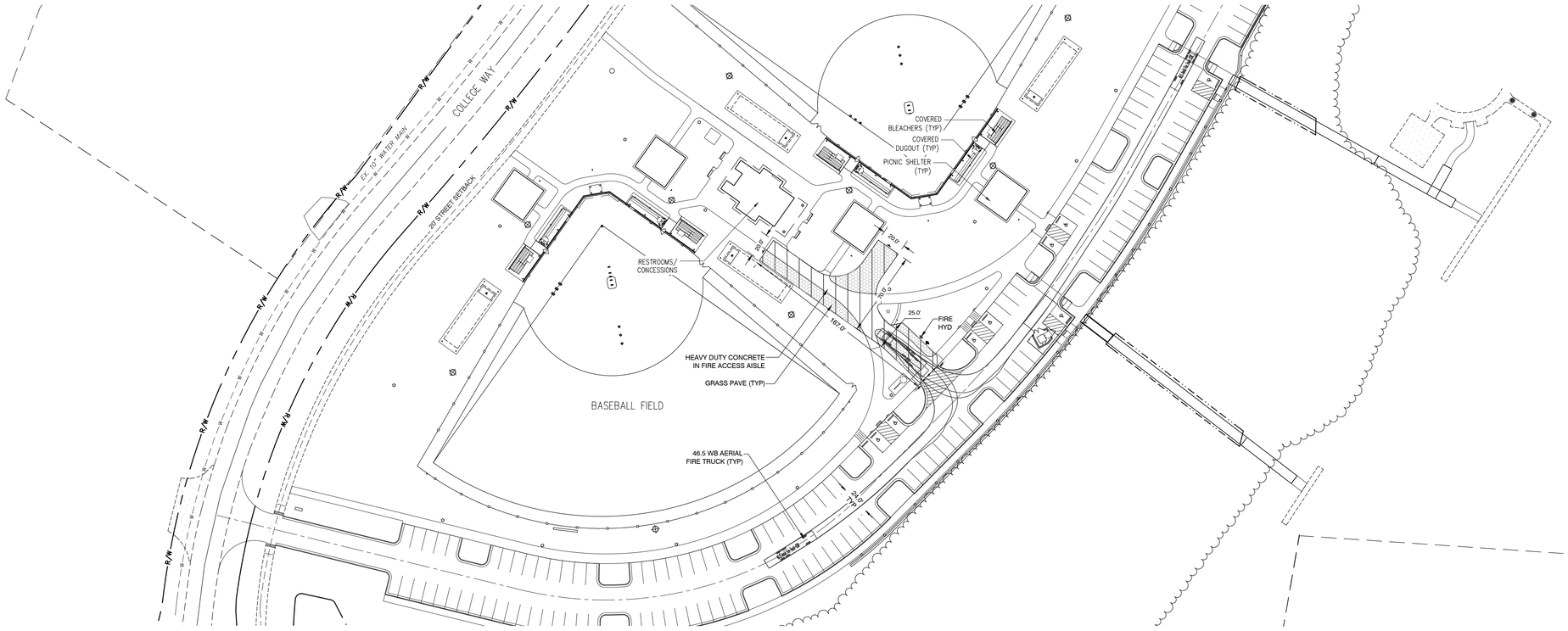
G:\WORKSPACE\CIVIL\CAD_DWG_PLANS\2022109\SITE_PLAN_CONSTRUCTION\2022109SITEPLAN.DWG, 9/16/2025 11:58:56 AM, JOHN CHEN



FIRE HOSE LAY DISTANCES

SCALE: 1:50

2



FIRE APPARATUS ACCESS PATH VEHICLE TRACKING

SCALE: 1:50

1

FIRE PROTECTION NOTES:

1. UNLESS NOTED, ALL RADII ON THIS PLAN ARE MEASURED AT FACE OF CURB.
2. MINIMUM INSIDE TURNING RADIUS OF 28' MUST BE MAINTAINED THROUGHOUT THE SITE FOR THE FIRE DEPARTMENT ACCESS LANE/PATH SHOWN ON THIS PLAN.
3. ALL FIRE APPARATUS ACCESS ROADS/STREETS SHALL BE HEAVY DUTY ASPHALT PAVING WITH MINIMUM 80,000 LB LOAD CAPACITY.
4. FIRE ACCESS TURNAROUND ROUTE SHALL BE HEAVY DUTY CONCRETE SIDEWALK AND GRASS PAVE WITH MINIMUM 80,000 LB LOAD CAPACITY.
5. ALL PORTIONS OF FIRST FLOOR OF ROOFED STRUCTURES SHALL BE MAXIMUM 150 LF HOSE LAY FROM FIRE TRUCK ACCESS PATHS.

FDC:

HOSE LAY:

46.5' WB AERIAL FIRE TRUCK:

NC License: F-0334
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Planners
Surveyors
Landscape Architects
Six Forks Place III Ste. 230
353 E. Six Forks Road
Raleigh, NC 27609
919.594.1626

Preliminary NOT FOR CONSTRUCTION

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY

CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

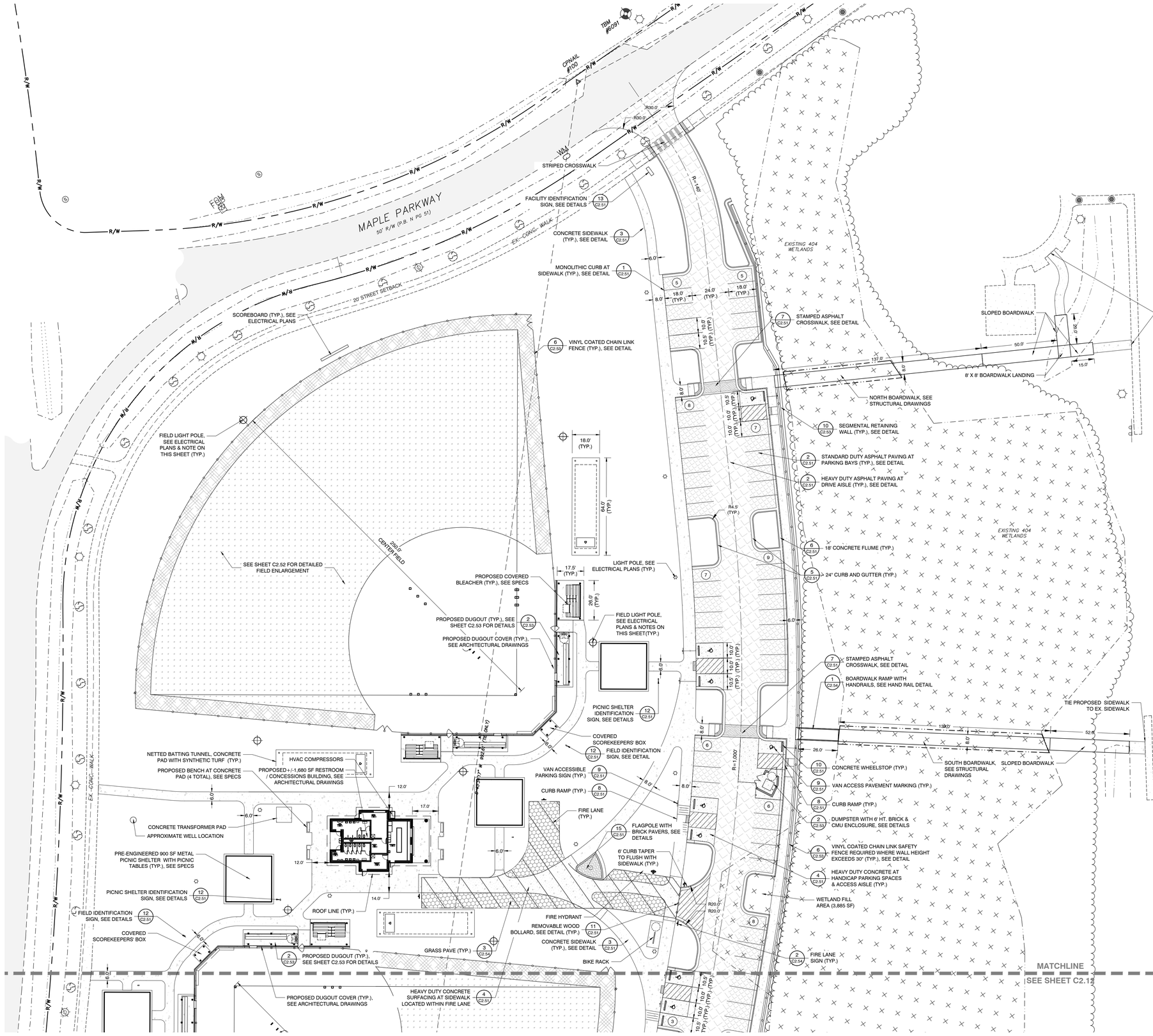
FIRE APPARATUS ACCESS PLAN

DESIGNED BY:	PRM/CK
DRAWN BY:	TAH
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN

SHEET No.

C2.02

Do Not Use for Construction - PRELIMINARY



BALLFIELD LIGHTING NOTES:

1. BALLFIELD FIELD LIGHTING DESIGN PROVIDED BY DIBBLE & PLEDGER, PA. & MUSCO SPORTS LIGHTING, LLC.
2. DELIVERY, UNLOADING, PREPARATION OF INSTALL, AND INSTALLATION OF PRECAST CONCRETE BASES, DRIVER CABINETS, LIGHT POLES, WIRE HARNESSES & FIXTURES, ETC. SHALL BE PROVIDED BY MUSCO SPORTS LIGHTING, LLC DIRECTLY THROUGH OWNER, CURRITUCK COUNTY.
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NOTE:
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Preliminary NOT FOR CONSTRUCTION

ISSUE/REVISIONS:

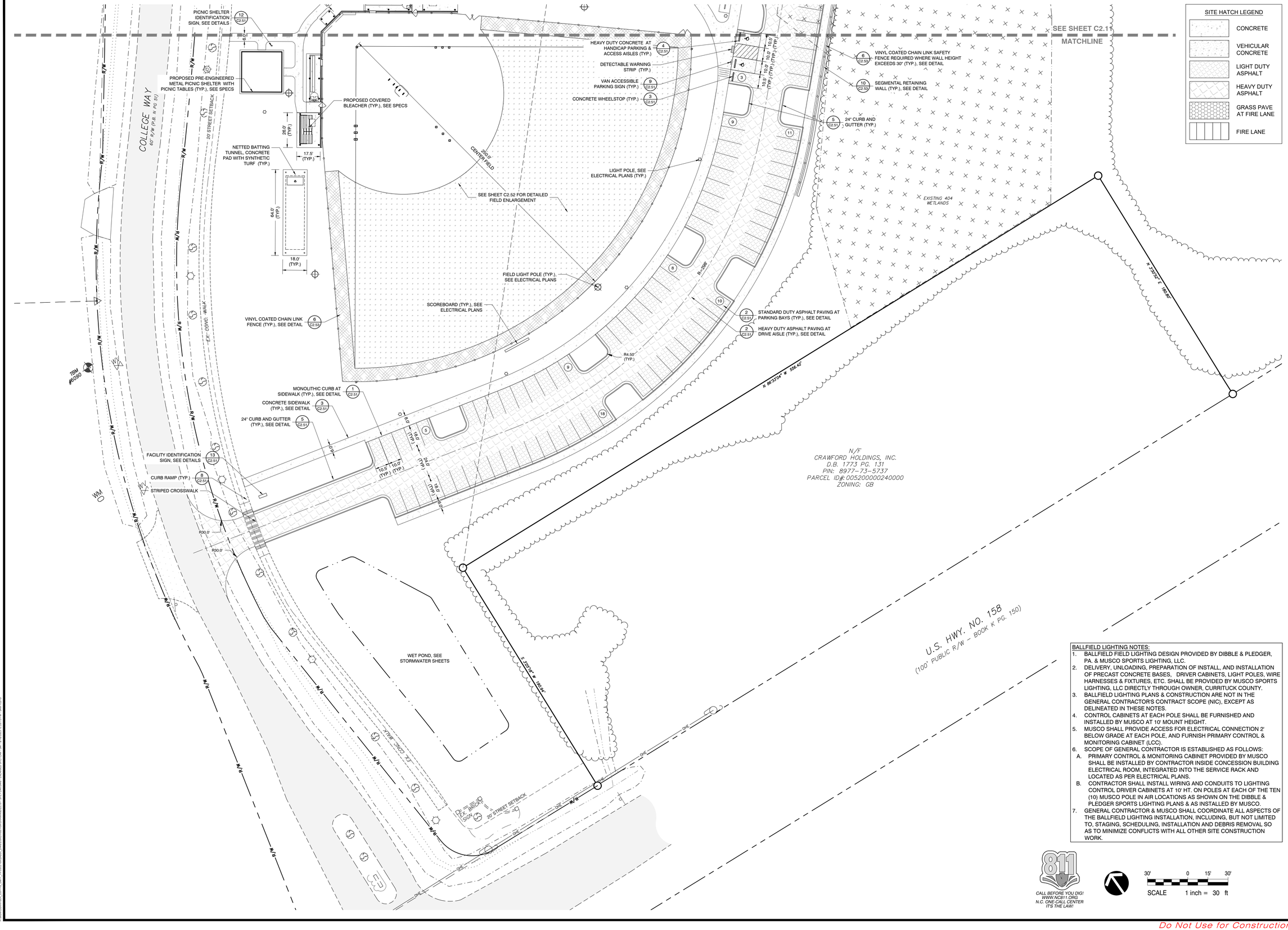
NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

ENLARGED SITE PLAN - NE

DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C2.11

Do Not Use for Construction - PRELIMINARY



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5. MUSCO SHALL PROVIDE ACCESS FOR ELECTRICAL CONNECTION 2' BELOW GRADE AT EACH POLE, AND FURNISH PRIMARY CONTROL & MONITORING CABINET (LCC).
6. SCOPE OF GENERAL CONTRACTOR IS ESTABLISHED AS FOLLOWS:
   A. PRIMARY CONTROL & MONITORING CABINET PROVIDED BY MUSCO SHALL BE INSTALLED BY CONTRACTOR INSIDE CONCESSION BUILDING ELECTRICAL ROOM, INTEGRATED INTO THE SERVICE RACK AND LOCATED AS PER ELECTRICAL PLANS.
   B. CONTRACTOR SHALL INSTALL WIRING AND CONDUITS TO LIGHTING CONTROL DRIVER CABINETS AT 10' HT. ON POLES AT EACH OF THE TEN (10) MUSCO POLE IN AIR LOCATIONS AS SHOWN ON THE DIBBLE & PLEDGER SPORTS LIGHTING PLANS & AS INSTALLED BY MUSCO.
7. GENERAL CONTRACTOR & MUSCO SHALL COORDINATE ALL ASPECTS OF THE BALLFIELD LIGHTING INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STAGING, SCHEDULING, INSTALLATION AND DEBRIS REMOVAL SO AS TO MINIMIZE CONFLICTS WITH ALL OTHER SITE CONSTRUCTION WORK.

811 CALL BEFORE YOU DIG! WWW.NC811.ORG N.C. ONE-CALL CENTER IT'S THE LAW!

30' 0 15' 30'
SCALE 1 inch = 30 ft

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353 E. Six Forks Road
Raleigh, NC 27609
919.594.1626

Preliminary NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

ISSUE/REVISIONS:

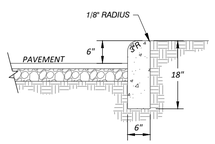
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

ENLARGED SITE PLAN - SW

DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C2.12

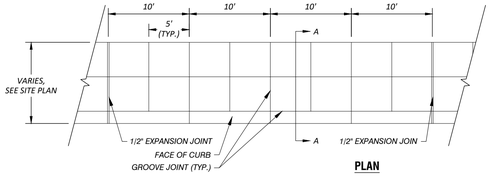
Do Not Use for Construction - PRELIMINARY

SHEET SET: W-4080 SHEET: C2.12 DRAWING: W-4080 C2.12 ENLARGED SITE PLAN - SW.DWG PLOTTED: 9/16/2025 8:38 AM BY: SBF XREFS: W-4080 C2.00 COVER SHEET.DWG W-4080 C2.01 GENERAL NOTES.DWG W-4080 C2.10 OVERALL SITE PLAN.DWG W-4080 C2.11 ENLARGED SITE PLAN - NE.DWG W-4080 C2.13 ENLARGED SITE PLAN - NW.DWG W-4080 C2.20 GRADING PLAN.DWG W-4080 C2.30 UTILITY PLAN.DWG W-4080 C2.40 LANDSCAPE PLAN.DWG W-4080 C2.50 FIELD ENLARGEMENT.DWG W-4080 C2.51 DETAILS.DWG W-4080 C2.52 FIELD DETAILS.DWG W-4080 C2.53 FENCE DETAILS.DWG W-4080 C2.54 SIGNAGE DETAILS.DWG W-4080 C2.55 RETAINING WALL DETAILS.DWG W-4080 C2.56 PICNIC SHELTER DETAILS.DWG W-4080 C2.57 PLAYGROUND DETAILS.DWG W-4080 C2.58 PLAYGROUND DETAILS.DWG W-4080 C2.59 PLAYGROUND DETAILS.DWG W-4080 C2.60 PLAYGROUND DETAILS.DWG W-4080 C2.61 PLAYGROUND DETAILS.DWG W-4080 C2.62 PLAYGROUND DETAILS.DWG W-4080 C2.63 PLAYGROUND DETAILS.DWG W-4080 C2.64 PLAYGROUND DETAILS.DWG W-4080 C2.65 PLAYGROUND DETAILS.DWG W-4080 C2.66 PLAYGROUND DETAILS.DWG W-4080

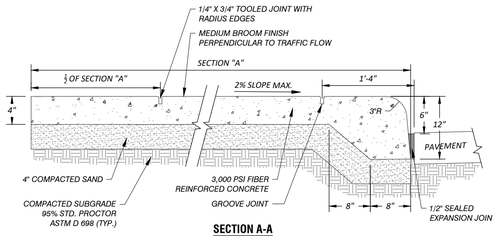


NOTES:
1. CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS, EXCEPT THAT A 15-FOOT SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT A 10-FOOT INTERVAL. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
3. ALL EXPANSION JOINTS AHLL BE SPACED AT 90 FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
4. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3,600 P.S.I IN 28 DATS.
5. TOP 6" OF SUBGRADE BENEATH THE CURB SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.

VERTICAL CURB DETAIL



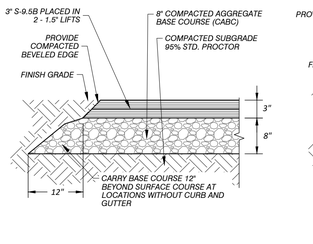
PLAN



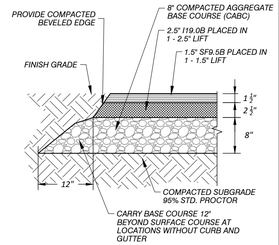
SECTION A-A

NOTES:
1) A GROOVE JOINT 1" DEEP WITH 1/3" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 40' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
2) ALL CONCRETE TO BE 3,000 PSI COMPRESSIVE STRENGTH.
3) SEE SITE PLAN FOR LOCATION.

1 VERTICAL AND MONOLITHIC SIDEWALK CURB
N.T.S.

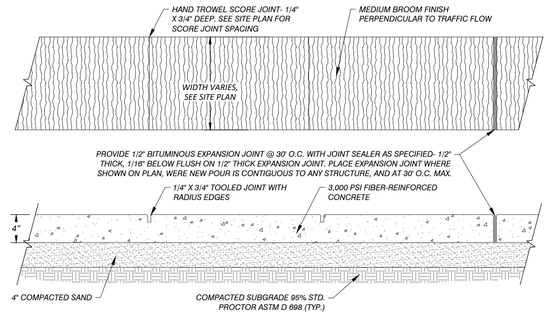


LIGHT DUTY ASPHALT PAVING SECTION

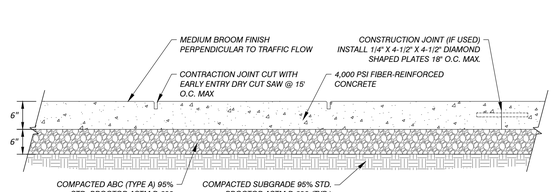


HEAVY DUTY ASPHALT PAVING SECTION

2 ASPHALT PAVEMENT
N.T.S.



3 CONCRETE SIDEWALK
N.T.S.

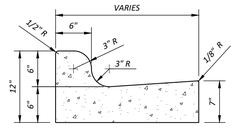


SECTION

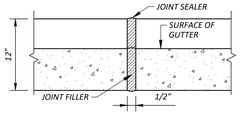
NOTES:
1. CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 330.
2. CONTRACTOR TO SUBMIT JOINTING PLAN TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OF PAVEMENT.

4 VEHICULAR CONCRETE
N.T.S.

NOTES:
1. CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS, EXCEPT THAT 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-½" SHALL BE OBTAINED.
3. ALL CONTRACTION JOINTS SHALL BE FILLED WITH JOINT FILLER.
4. EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.
5. ALL CURB AND GUTTERS ARE TO BE POURED WITH CLASS 'A' CONCRETE (3,000 PSI)
6. FLEXIBLE FORMS ARE TO BE USED WHEN RADII IS LESS THAN 2000'
7. MATCH WIDTH OF EXISTING CURB & GUTTER FOR ALL PATCHING.
8. REMOVE & REPLACE CURB & GUTTER TO NEAREST CONSTRUCTION JOINT.

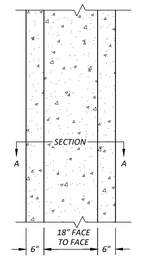


COMBINATION CURB AND GUTTER

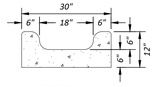


TRANSVERSE EXPANSION JOINT IN CURB AND GUTTER

5 STANDARD CURB AND GUTTER
N.T.S.

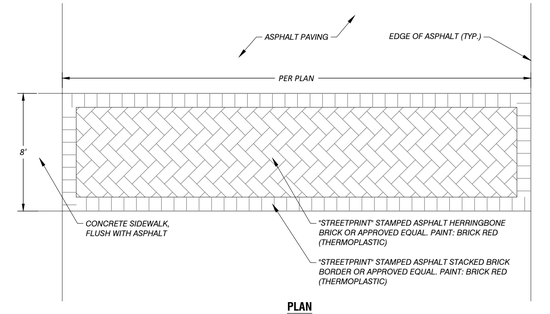


PLAN VIEW



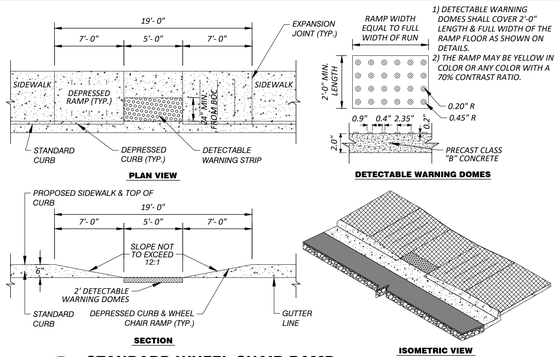
SECTION A-A

6 18 IN. CONCRETE FLUME
N.T.S.



PLAN

7 STAMPED ASPHALT CROSSWALK
N.T.S.



PLAN VIEW

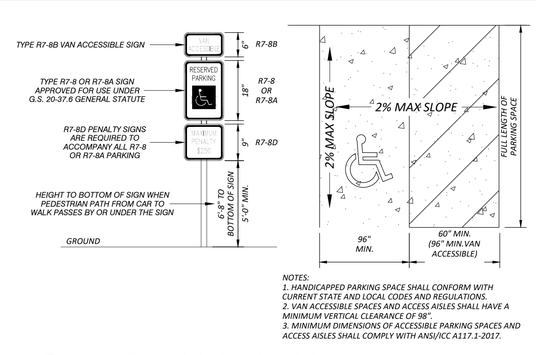
DETECTABLE WARNING DOMES

1) DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH & FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON DETAILS.
2) THE RAMP MAY BE YELLOW IN COLOR OR ANY COLOR WITH A 70% CONTRAST RATIO.

SECTION

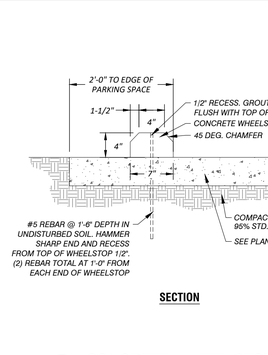
ISOMETRIC VIEW

8 STANDARD WHEEL CHAIR RAMP
N.T.S.

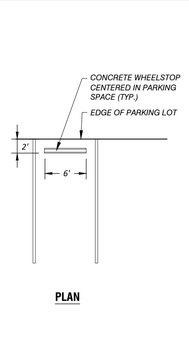


NOTES:
1. HANDICAPPED PARKING SPACE SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS.
2. VAN ACCESSIBLE SPACES AND ACCESS AISLES SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 98".
3. MINIMUM DIMENSIONS OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL COMPLY WITH ANSI/ICC A117.1-2017.

9 HANDICAPPED PARKING AND SIGNAGE
N.T.S.

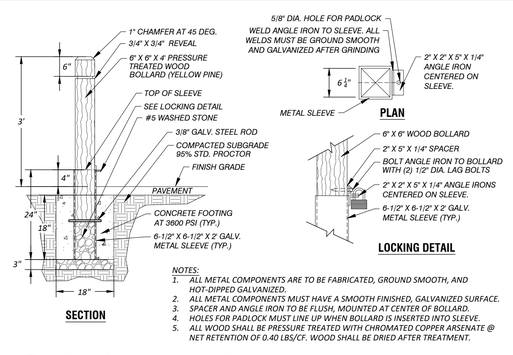


SECTION



PLAN

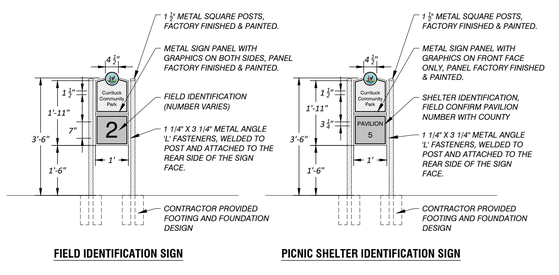
10 CONCRETE WHEEL STOP
N.T.S.



SECTION **PLAN** **LOCKING DETAIL**

NOTES:
1. ALL METAL COMPONENTS ARE TO BE FABRICATED, GROUND SMOOTH, AND HOT-DIPPED GALVANIZED.
2. ALL METAL COMPONENTS MUST HAVE A SMOOTH FINISHED, GALVANIZED SURFACE.
3. SPACER AND ANGLE IRON TO BE FLUSH, MOUNTED AT CENTER OF BOLLARD.
4. HOLES FOR PADLOCK MUST LINE UP WHEN BOLLARD IS INSERTED INTO SLEEVE.
5. ALL WOOD SHALL BE PRESSURE TREATED WITH CHROMATED COPPER ARSENATE @ NET RETENTION OF 0.40 LBS/CF. WOOD SHALL BE DRIED AFTER TREATMENT.

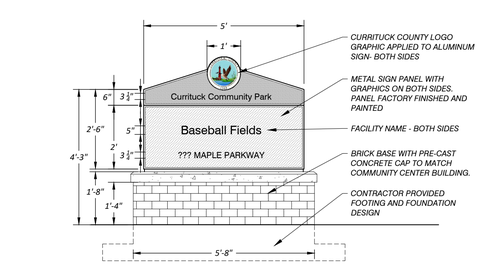
11 CONCRETE WHEEL STOP
N.T.S.



FIELD IDENTIFICATION SIGN

PICNIC SHELTER IDENTIFICATION SIGN

12 IDENTIFICATION SIGNS
N.T.S.



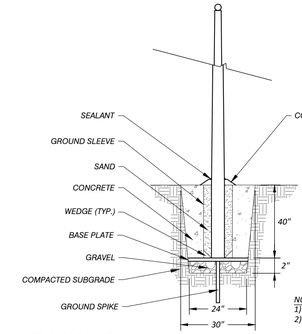
13 FACILITY IDENTIFICATION SIGN
N.T.S.

Currituck Community Park
Baseball and Softball Complex
Currituck County, North Carolina

Landscape Architect: Rivers & Associates, Inc.
Civil Engineer: Rivers & Associates, Inc.
Architect: Intrepid Architecture

General Contractor: Name Here

14 TEMPORARY CONSTRUCTION SIGN
N.T.S.



NOTES:
1) FLAG POLE HEIGHT SHALL BE 30'
2) SEE SPECIFICATIONS FOR OTHER REQUIREMENTS

15 FLAG POLE
N.T.S.

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353 E. Six Forks Road
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919.594.1626

Preliminary NOT FOR CONSTRUCTION

ISSUE/REVISIONS:

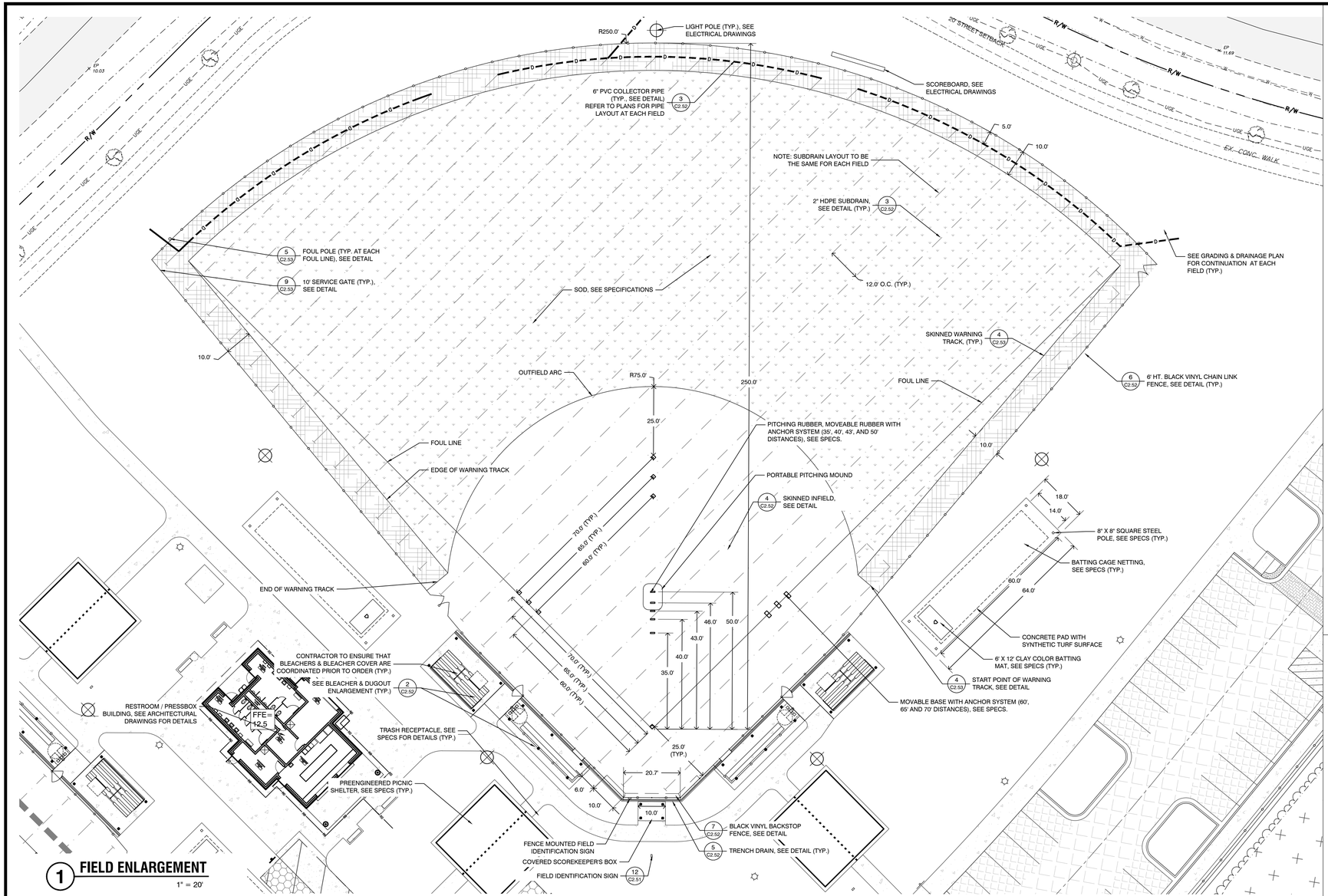
NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

SITE DETAILS

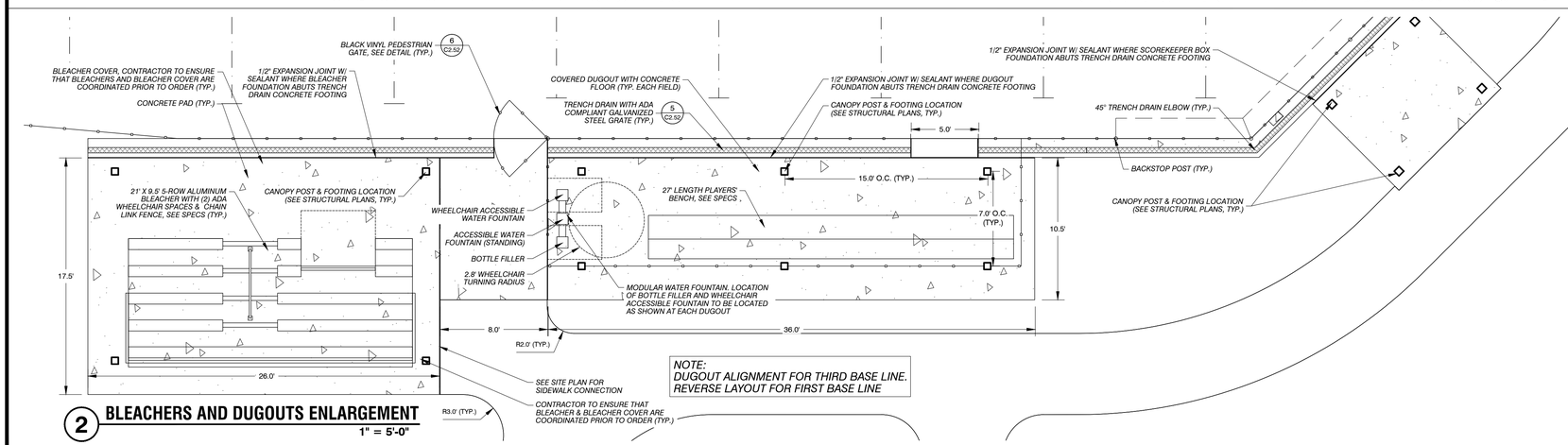
DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C2.51

Do Not Use for Construction - PRELIMINARY



1 FIELD ENLARGEMENT

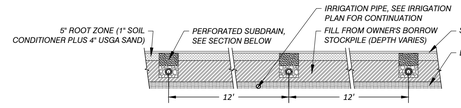
1" = 20'



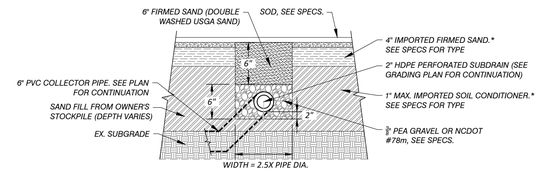
NOTE:
DUGOUT ALIGNMENT FOR THIRD BASE LINE.
REVERSE LAYOUT FOR FIRST BASE LINE

2 BLEACHERS AND DUGOUTS ENLARGEMENT

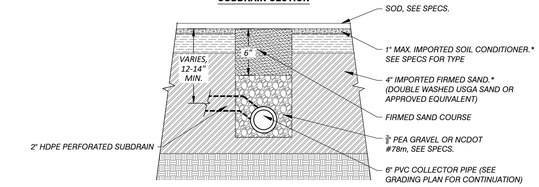
1" = 5'-0"



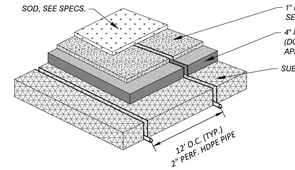
FIELD SECTION



SUBDRAIN SECTION



COLLECTOR PIPE SECTION

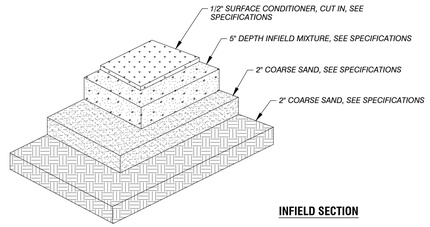


NOTES:
DETAIL ILLUSTRATES SAND AND SOIL CONDITIONER MATERIALS BEFORE MIXING PROCESS.

MATERIAL SHALL BE MIXED TO CREATE ROOT ZONE MIXTURE. SEE ATHLETIC FIELD TURF & GRASSES SPECIFICATIONS FOR MORE INFORMATION

3 FIELD SUBDRAIN DETAIL

N.T.S.



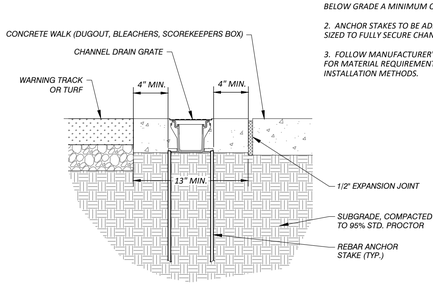
INFIELD SECTION

4 SKINNED INFIELD MIXTURE

N.T.S.

NOTE:

1. THE GRATE SHOULD BE RECESSED BELOW GRADE A MINIMUM OF 1/8".
2. ANCHOR STAKES TO BE ADEQUATELY SIZED TO FULLY SECURE CHANNEL DRAIN.
3. FOLLOW MANUFACTURER'S GUIDELINES FOR MATERIAL REQUIREMENTS AND INSTALLATION METHODS.



5 TRENCH DRAIN

N.T.S.

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NC License: F-0334
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Preliminary
NOT FOR CONSTRUCTION
DO NOT USE FOR BIDDING, PERMITTING, REGULATORY APPROVAL, OR CONSTRUCTION
PRELIMINARY PLANS
NOT FOR CONSTRUCTION
DATE: 7/15/25

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

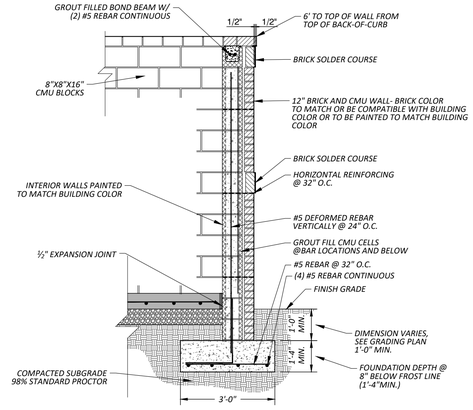
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

SITE DETAILS

DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN

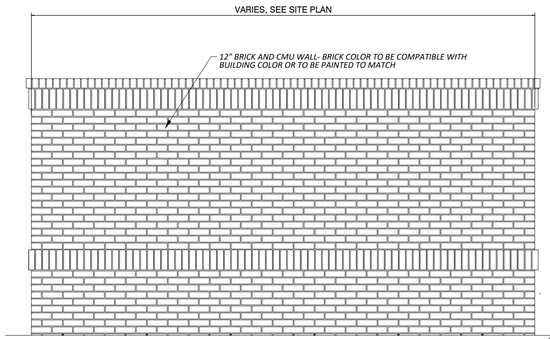
SHEET No.
C2.52

Do Not Use for Construction - PRELIMINARY



SECTION

VARIES, SEE SITE PLAN



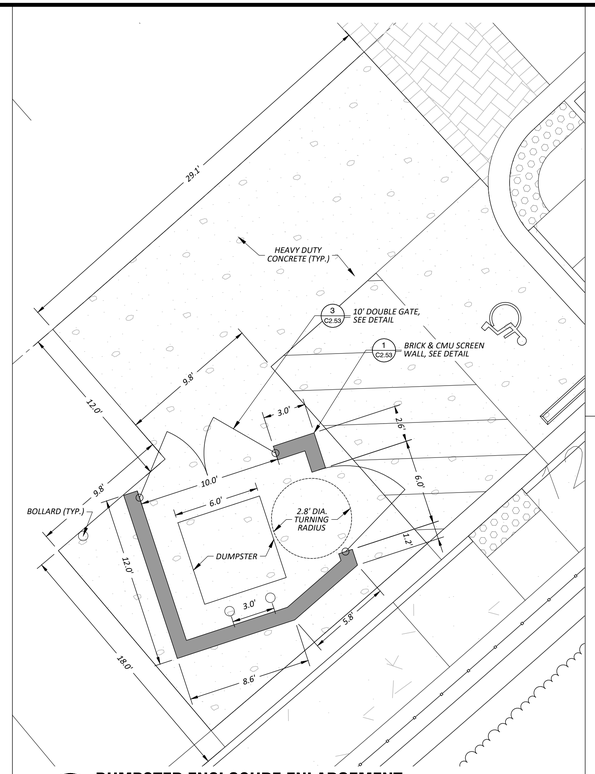
ELEVATION (SIDE)

NOTE: THIS TYPICAL WALL DETAIL IS FOR REFERENCE ONLY. THE PROFESSIONAL ENGINEER'S PE SEAL ON THESE PLANS DOES NOT INCLUDE ANY WALL DESIGN. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PREPARED AND SEALED BY LICENSED NC STRUCTURAL ENGINEER FOR APPROVAL.

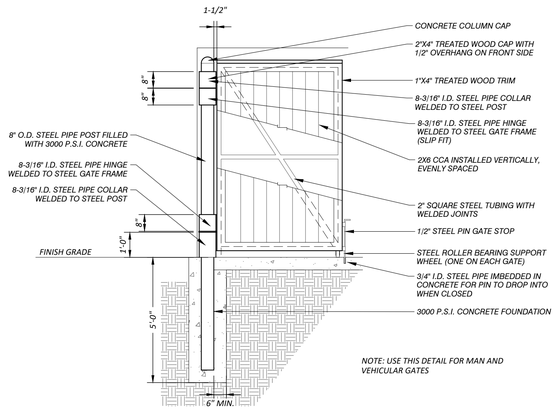
NOTES

REFER TO SITE PLAN FOR LAYOUT AND GRADING OF CONCRETE PAD. VERIFY ACTUAL DIMENSIONS IN FIELD BEFORE CONSTRUCTION.

1 8 FT. HT. BRICK AND CMU SCREEN WALL
N.T.S.

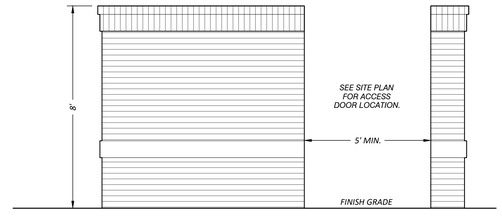


2 DUMPSTER ENCLOSURE ENLARGEMENT
1" = 5'-0"

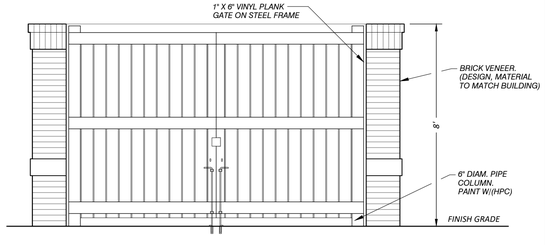


GATE POST SECTION

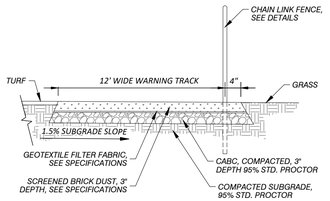
3 DUMPSTER GATE DETAILS
N.T.S.



SIDE ELEVATION



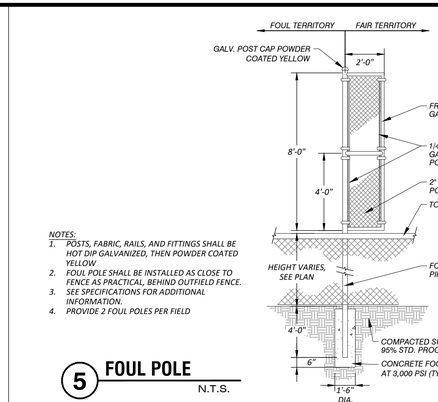
FRONT ELEVATION



SECTION

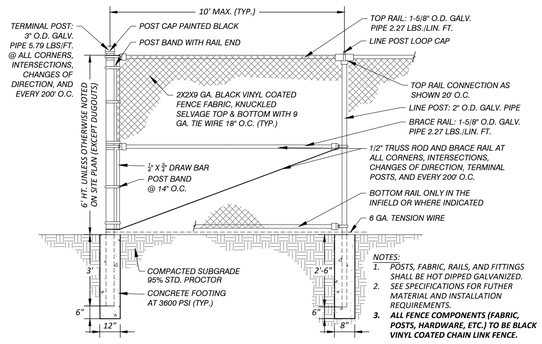
NOTES:
1. *SEE SITE PLAN FOR LOCATION.*
2. *SEE GRADING PLAN FOR FINISHED GRADES.*

4 BALLFIELD WARNING TRACK
N.T.S.



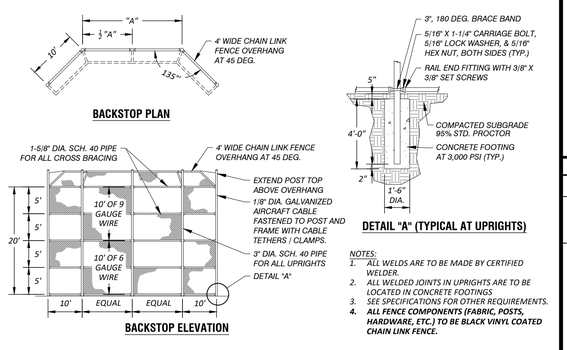
NOTES:
1. *POSTS, FABRIC, RAILS, AND FITTINGS SHALL BE HOT DIP GALVANIZED, THEN POWDER COATED YELLOW*
2. *FOUL POLE SHALL BE INSTALLED AS CLOSE TO FENCE AS PRACTICAL, BEHIND OUTFIELD FENCE.*
3. *SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.*
4. *PROVIDE 2 FOUL POLES PER FIELD*

5 FOUL POLE
N.T.S.



NOTES:
1. *POSTS, FABRIC, RAILS, AND FITTINGS SHALL BE HOT DIPPED GALVANIZED.*
2. *SEE SPECIFICATIONS FOR FUTHER MATERIAL AND INSTALLATION REQUIREMENTS.*
3. ***ALL FENCE COMPONENTS (FABRIC, POSTS, HARDWARE, ETC.) TO BE BLACK VINYL COATED CHAIN LINK FENCE.***

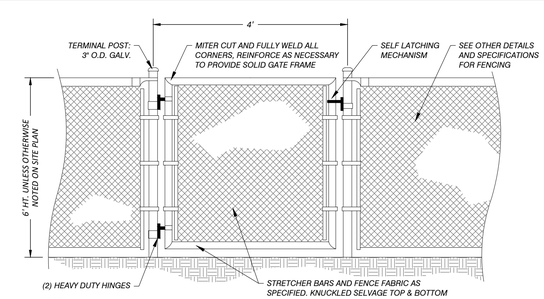
6 BLACK VINYL COATED CHAIN LINK FENCE SECTION
N.T.S.



DETAIL "A" (TYPICAL AT UPRIGHTS)

NOTES:
1. *ALL WELDS ARE TO BE MADE BY CERTIFIED WELDER.*
2. *ALL WELDED JOINTS IN UPRIGHTS ARE TO BE LOCATED IN CONCRETE FOOTINGS*
3. *SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.*
4. ***ALL FENCE COMPONENTS (FABRIC, POSTS, HARDWARE, ETC.) TO BE BLACK VINYL COATED CHAIN LINK FENCE.***

7 BLACK VINYL COATED FENCE BACKSTOP
N.T.S.



NOTES:
1. *POSTS, FABRIC, RAILS, AND FITTINGS SHALL BE HOT DIPPED GALVANIZED.*
2. *SEE SPECIFICATIONS FOR FUTHER MATERIAL AND INSTALLATION REQUIREMENTS.*
3. ***ALL FENCE COMPONENTS (FABRIC, POSTS, HARDWARE, ETC.) TO BE BLACK VINYL COATED CHAIN LINK FENCE.***

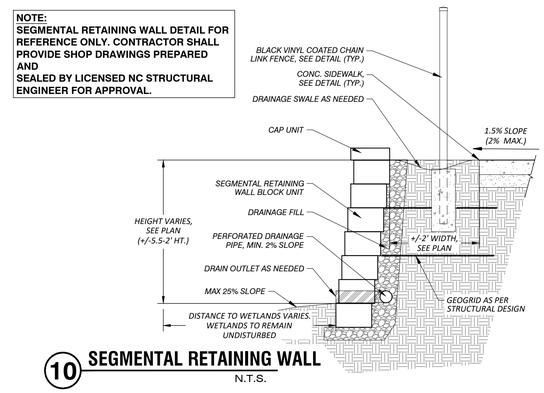
8 PEDESTRIAN GATE FOR CHAIN LINK FENCE
N.T.S.

SLEEVE DETAIL

NOTES:
1. *POSTS, FABRIC, RAILS, AND FITTINGS SHALL BE HOT DIPPED GALVANIZED.*
2. *GATE SHALL BE COMPLETE WITH BALL AND SOCKET HINGES OR APPROVED EQUAL.*
3. *ALL GATES SHALL BE DOUBLE ACTING.*
4. *SEE SPECIFICATIONS FOR FURTHER MATERIAL AND INSTALLATION REQUIREMENTS.*
5. ***ALL FENCE COMPONENTS (FABRIC, POSTS, HARDWARE, ETC.) TO BE BLACK VINYL COATED CHAIN LINK FENCE.***

9 VINYL COATED SERVICE GATE FOR CHAIN LINK FENCE
N.T.S.

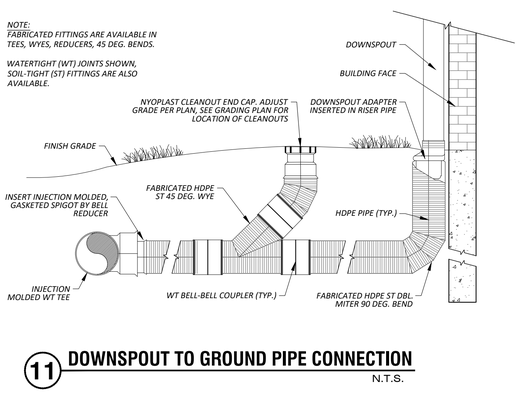
NOTE:
SEGMENTAL RETAINING WALL DETAIL FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PREPARED AND SEALED BY LICENSED NC STRUCTURAL ENGINEER FOR APPROVAL.



10 SEGMENTAL RETAINING WALL
N.T.S.

NOTE:
FABRICATED FITTINGS ARE AVAILABLE IN TEES, WYES, REDUCERS, 45 DEG. BENDS.

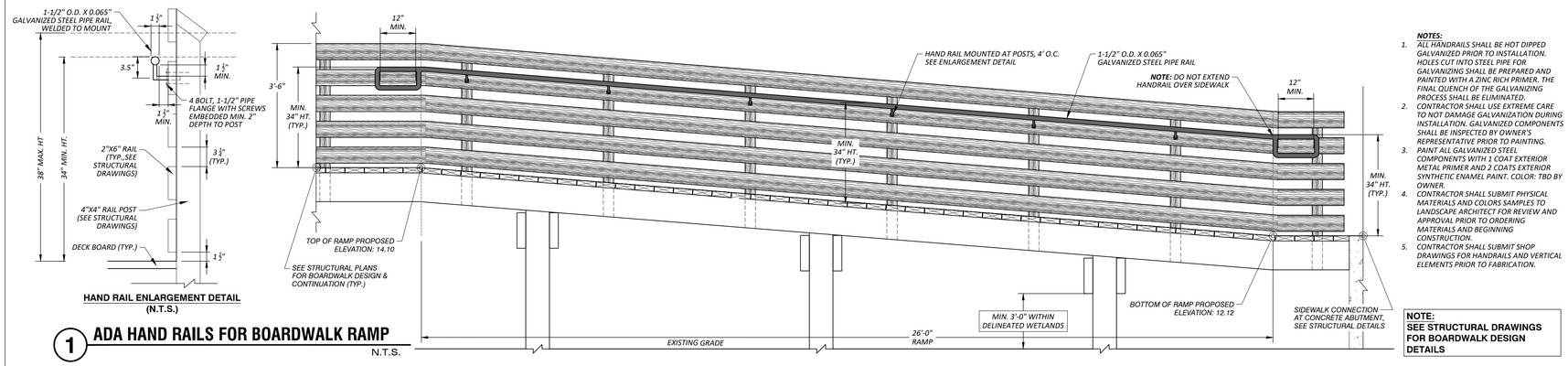
WATERTIGHT (WT) JOINTS SHOWN, SOIL-TIGHT (ST) FITTINGS ARE ALSO AVAILABLE.



11 DOWNSPOUT TO GROUND PIPE CONNECTION
N.T.S.

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919.594.1626

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DO NOT USE FOR CONSTRUCTION
PRELIMINARY PLANS

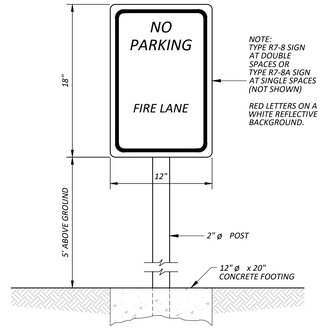


NOTES:

1. ALL HANDRAILS SHALL BE HOT DIPPED GALVANIZED PRIOR TO INSTALLATION. HOLES CUT INTO STEEL PIPE FOR GALVANIZING SHALL BE PREPARED AND PAINTED WITH A ZINC RICH PRIMER. THE FINAL QUENCH OF THE GALVANIZING PROCESS SHALL BE ELIMINATED.
2. CONTRACTOR SHALL USE EXTREME CARE TO NOT DAMAGE GALVANIZATION DURING INSTALLATION. GALVANIZED COMPONENTS SHALL BE INSPECTED BY OWNER'S REPRESENTATIVE PRIOR TO PAINTING.
3. PAINT ALL GALVANIZED STEEL COMPONENTS WITH 1 COAT EXTERIOR METAL PRIMER AND 2 COATS EXTERIOR SYNTHETIC ENAMEL PAINT. COLOR: TBD BY OWNER.
4. CONTRACTOR SHALL SUBMIT PHYSICAL MATERIALS AND COLORS SAMPLES TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR HANDRAILS AND VERTICAL ELEMENTS PRIOR TO FABRICATION.

NOTE:
SEE STRUCTURAL DRAWINGS FOR BOARDWALK DESIGN DETAILS

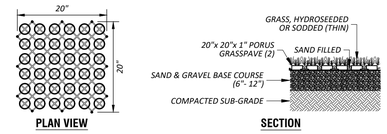
1 ADA HAND RAILS FOR BOARDWALK RAMP
N.T.S.



NOTE-
TYPE R7-8 SIGN AT DOUBLE SPACES OR TYPE R7-8A SIGN AT SINGLE SPACES (NOT SHOWN)

RED LETTERS ON A WHITE REFLECTIVE BACKGROUND.

2 FIRE LANE SIGN
N.T.S.



3 FIRE LANE GRASS PAVE
N.T.S.

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ISSUE/REVISIONS:

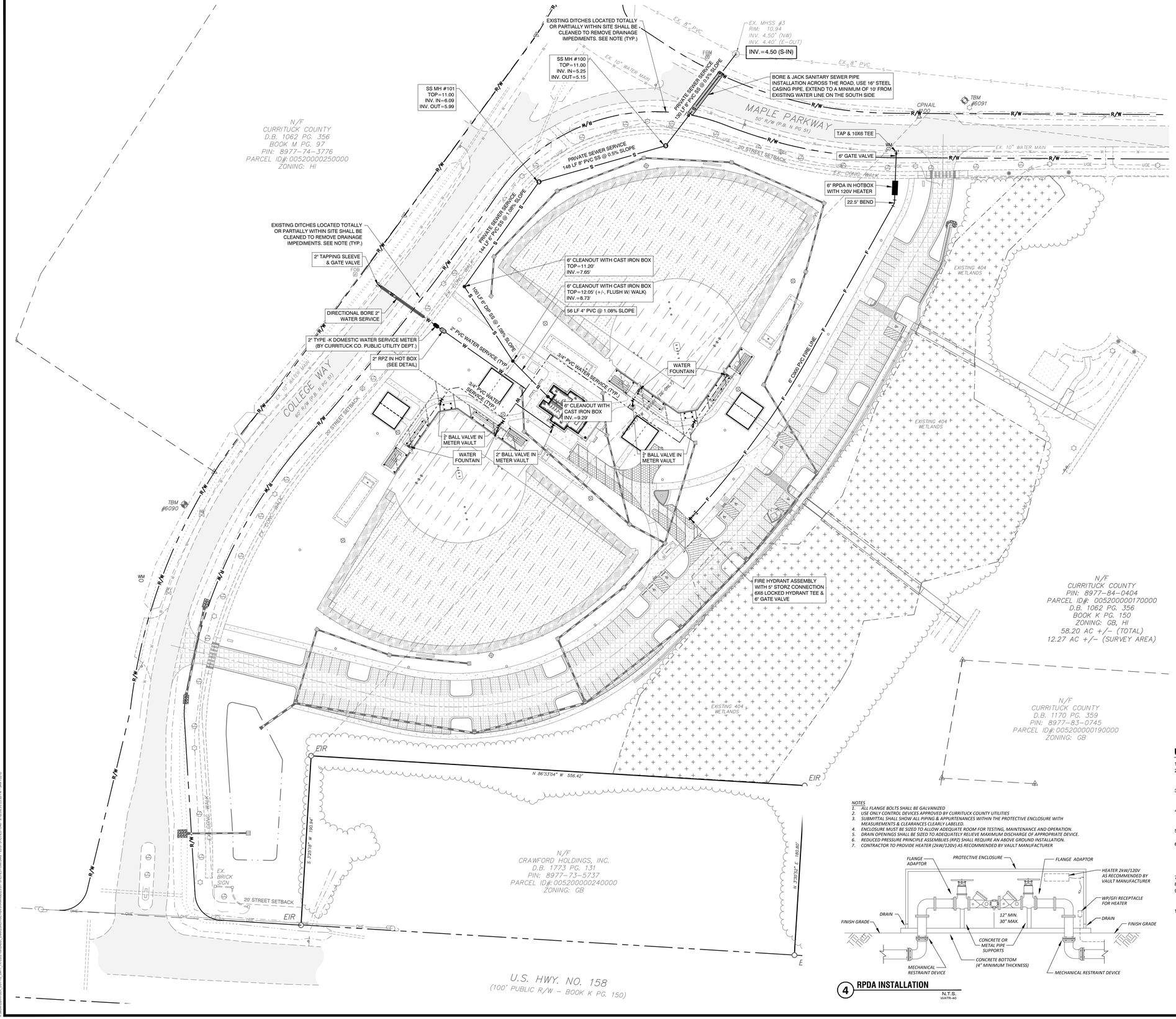
NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

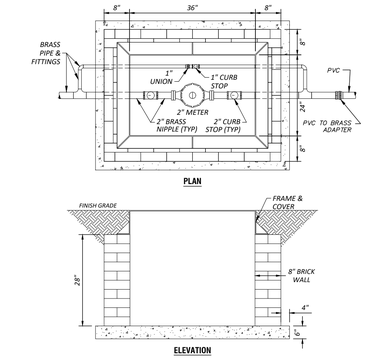
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

SITE DETAILS

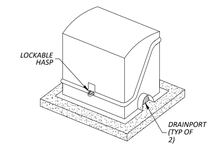
DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C2.54

Do Not Use for Construction - PRELIMINARY

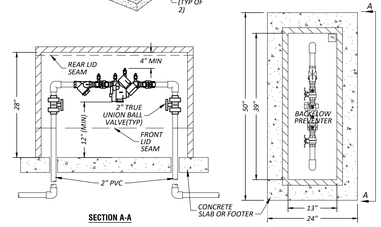




1 2" METER & VAULT
N.T.S.

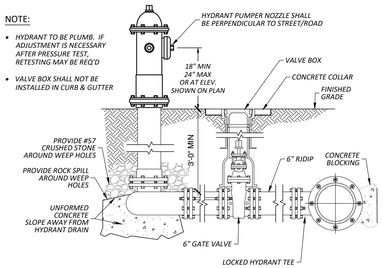


NOTES :
1) ALL DIMENSIONS ARE APPROXIMATED IN INCHES.
2) RECOMMENDED SLAB SIZE SHALL BE 50"L x 24"W x 4" MINIMUM THICKNESS.
3) "E" INDICATES THE ELECTRICAL RECEPTACLE. IT SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE SLAB.
4) HEAT IS PROVIDED BY A 90W, 120V, SINGLE PHASE HEAT TRACE CABLE (18'-0" LENGTH).
5) USE SIMILAR ENCLOSURE FOR IRRIGATION BOOSTER PUMP.



2 RPZ & ENCLOSURE
N.T.S.
WATR-27

NOTE:
- HYDRANT TO BE PLUMB. IF ADJUSTMENT IS NECESSARY AFTER PRESSURE TEST, RETESTING MAY BE REQ'D
- VALVE BOX SHALL NOT BE INSTALLED IN CURB & GUTTER



3 FIRE HYDRANT INSTALLATION
N.T.S.
WATR-03C

NOTES
1. ALL FLANGE BOLTS SHALL BE GALVANIZED
2. USE ONLY CONTROL DEVICES APPROVED BY CURRITUCK COUNTY UTILITIES
3. SUBMITTAL SHALL SHOW ALL PIPING & APPURTENANCES WITHIN THE PROTECTIVE ENCLOSURE WITH MEASUREMENTS & CLEARANCES CLEARLY LABELED.
4. ENCLOSURE MUST BE SIZED TO ALLOW ADEQUATE ROOM FOR TESTING, MAINTENANCE AND OPERATION.
5. DRAIN OPENINGS SHALL BE SIZED TO ADEQUATELY RELIEVE MAXIMUM DISCHARGE OF APPROPRIATE DEVICE.
6. REDUCED PRESSURE PRINCIPLE ASSEMBLIES (RPZ) SHALL REQUIRE AN ABOVE GROUND INSTALLATION.
7. CONTRACTOR TO PROVIDE HEATER (2kW/120V) AS RECOMMENDED BY VAULT MANUFACTURER

4 RPDA INSTALLATION
N.T.S.
WATR-40

UTILITY NOTES:

1. REFER TO UTILITY DETAIL SHEET C4.21 FOR UTILITY DETAILS.
2. INSTALLATION OF WATER LINES AND ACCESSORIES SHALL MEET THE MOST RECENT VERSION OF THE STANDARD SPECIFICATIONS AND DETAILS FOR THE CURRITUCK COUNTY WATER & SEWER DEPARTMENT.
3. THE CONTRACTOR SHALL PROVIDE ALL THE MATERIAL AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE UTILITIES. ALL PIPE AND FITTINGS SHALL BE INSPECTED PRIOR TO BEING COVERED.
4. CONTRACTOR SHALL HAVE A LICENSED SURVEYOR PROVIDE CERTIFIED AS-BUILT SURVEY LOCATIONS IN DIGITAL FORMAT AND HARDCOPY OF ALL NEW CONSTRUCTION, INCLUDING WATER & SEWER UTILITIES, PROPOSED ON THIS PLAN.
5. THESE PLANS OF UTILITY LINE CONSTRUCTION ARE DIAGRAMMATIC AND THE LOCATIONS ARE APPROXIMATE.
6. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY N.C. ONE CALL AT # (811). THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETEMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
7. ALL CLEAN-OUTS IN PAVED AREAS SHALL BE TRAFFIC RATED CLEANOUTS.
8. CONTRACTOR TO ADJUST ALL EXISTING APPURTENANCES TO MATCH FINISHED GRADE.
9. THESE PLANS ARE NOT AUTHORIZED FOR CONSTRUCTION UNLESS CURRITUCK COUNTY HAS APPROVED THE PLANS AND THE PLANS HAVE BEEN ISSUED FOR CONSTRUCTION BY THE ENGINEER.
10. CONTACT CHASE BRINKLEY WITH MAINLAND WATER OFFICE # (252) 232-2769 AT LEAST 48 HOURS IN ADVANCE OF MAKING ANY CONNECTION TO THE EXISTING CURRITUCK COUNTY WATER AND/OR SEWER SYSTEMS.

811
CALL BEFORE YOU DIG!
WWW.NC811.ORG
N.C. ONE-CALL CENTER
IT'S THE LAW!

SCALE 1 inch = 50 ft (50' 0 25' 50')

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NORTH CAROLINA PROFESSIONAL SEAL 043241 ENGINEER BRIAN RIVERS
Preliminary
DO NOT USE FOR CONSTRUCTION

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/10/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

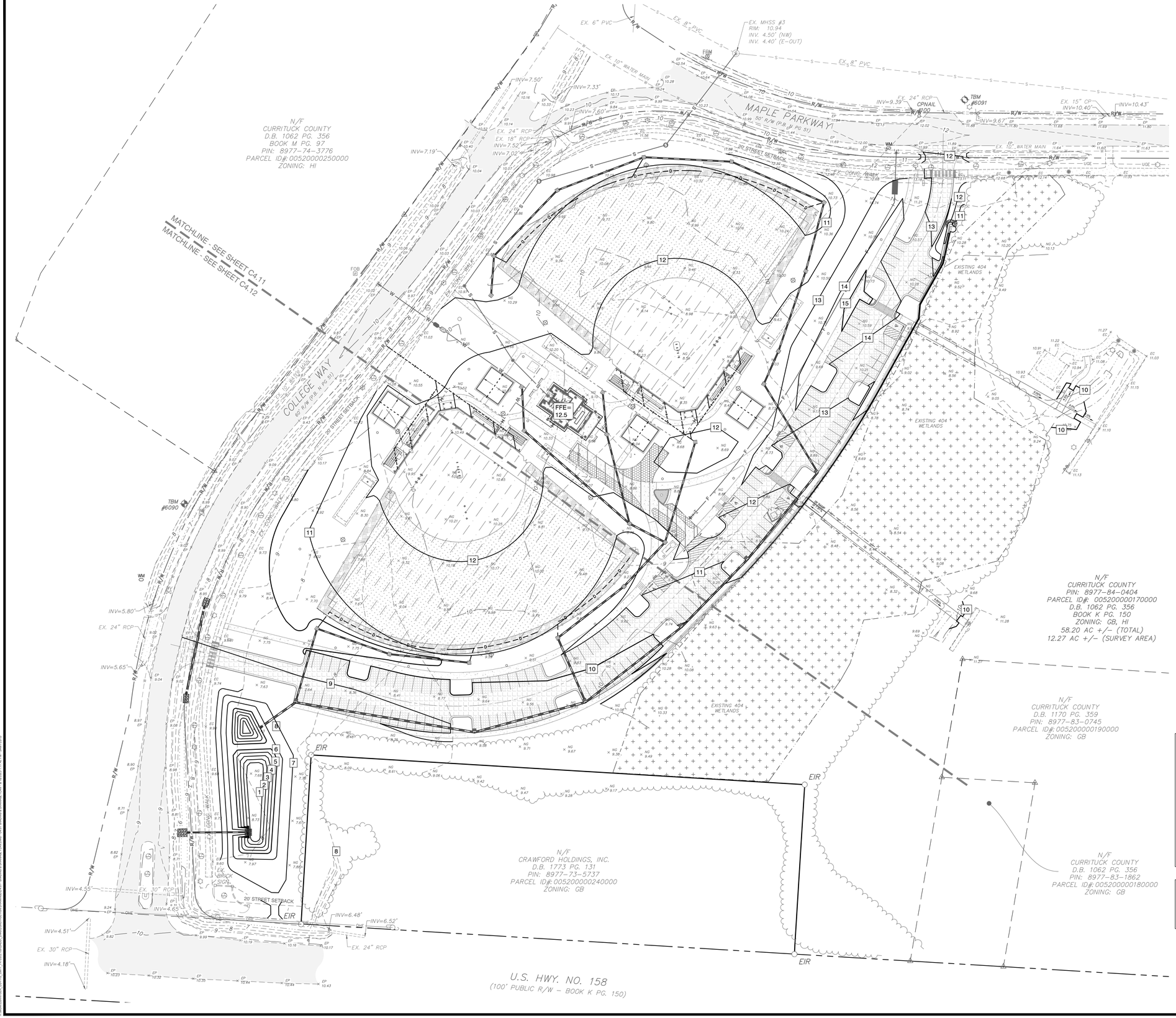
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

UTILITIES PLAN

DESIGNED BY:	BR
DRAWN BY:	TAH, SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C3.01

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G:\WORKSPACE\2022\109\CAD\C3_UTILITY PLAN.DWG 9/10/2025 8:51:37 AM BRIAN RIVERS



NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS:
DECEMBER 15 THROUGH FEBRUARY 14 AND / OR
APRIL 15 THROUGH JULY 31.

CONTRACTOR SHALL UTILIZE MATS DURING BOARDWALK CONSTRUCTION TO PREVENT DAMAGE TO WETLANDS, INCLUDING BUT NOT LIMITED TO RUTS, EROSION & PLANT DAMAGE. STUMP REMOVAL SHALL BE PROHIBITED WITHIN THE WETLANDS. CONTACT LANDSCAPE ARCHITECT AND CIVIL ENGINEER IF EXISTING TREES ARE ENCOUNTERED THAT WOULD INTERFERE WITH BOARDWALK ROUTING.

NOTE:
PER UDO 7.3.4(6) EXISTING DITCHES LOCATED TOTALLY OR PARTIALLY WITHIN A DEVELOPMENT AND UTILIZED FOR DRAINAGE OR STORM WATER MANAGEMENT SHALL BE CLEANED TO REMOVE DRAINAGE IMPEDIMENTS.

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IT'S THE LAW!

SCALE 1 inch = 50 ft (50' 0 25' 50')

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NORTH CAROLINA PROFESSIONAL SEAL 043241 ENGINEER STEPHEN B. FRENCH

Preliminary
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ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

GRADING & DRAINAGE PLAN

DESIGNED BY:	BR, SBF
DRAWN BY:	SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C4.01

Do Not Use for Construction - PRELIMINARY

NOTE:
CONTRACTOR SHALL UTILIZE MATS DURING BOARDWALK CONSTRUCTION TO PREVENT DAMAGE TO WETLANDS, INCLUDING BUT NOT LIMITED TO RUTS, EROSION & PLANT DAMAGE. STUMP REMOVAL SHALL BE PROHIBITED WITHIN THE WETLANDS. CONTACT LANDSCAPE ARCHITECT AND CIVIL ENGINEER IF EXISTING TREES ARE ENCOUNTERED THAT WOULD INTERFERE WITH BOARDWALK ROUTING.

NOTE:
PER UDO 7.3.4(6) EXISTING DITCHES LOCATED TOTALLY OR PARTIALLY WITHIN A DEVELOPMENT AND UTILIZED FOR DRAINAGE OR STORM WATER MANAGEMENT SHALL BE CLEANED TO REMOVE DRAINAGE IMPEDIMENTS.

STRUCTURE TABLE	
NAME	DETAILS
DI-2	RIM= 9.90' INV= 7.10' (E) INV= 7.10' (S-OUT)
DI-3	RIM= 9.90' INV= 7.30' (E) INV= 7.30' (W-OUT)
DI-4	RIM= 10.25' INV= 7.50' (W-OUT)
DI-5	RIM= 10.80' INV= 7.74' (NE) INV= 7.74' (SE-OUT)
DI-6	RIM= 10.90' INV= 8.03' (NE) INV= 8.03' (SW-OUT)
DI-7	RIM= 11.75' INV= 8.23' (N) INV= 8.23' (NW) INV= 8.23' (SW-OUT)
DI-8	RIM= 11.80' INV= 8.93' (S-OUT)
DI-10	RIM= 11.00' INV= 8.37' (N) INV= 8.37' (NW) INV= 8.37' (SE-OUT)
DI-11	RIM= 12.25' INV= 9.49' (N) INV= 9.49' (S-OUT)
DI-12	RIM= 12.25' INV= 10.00' (S-OUT)
DI-13	RIM= 12.25' INV= 8.84' (N) INV= 8.84' (SE-OUT)

FES & OCS	
NAME	DETAILS
FES-1	INV= 6.00' (S-OUT)
FES-2	INV= 5.82' (N)
FES-100	INV= 5.10' (E)
FES-200	INV= 5.00' (NE)
OCS	RISER ELEV= 7.60' INV= 5.20' (W-OUT)

STRUCTURE TABLE	
NAME	DETAILS
DI-14	RIM= 12.25' INV= 9.75' (S-OUT)
DI-16	RIM= 11.00' INV= 8.92' (N-OUT)
DI-17	RIM= 10.75' INV= 8.57' (S) INV= 8.57' (NE-OUT)
DI-18	RIM= 10.75' INV= 8.45' (SW) INV= 8.45' (E-OUT)
DI-19	RIM= 10.83' INV= 8.18' (W) INV= 8.18' (E-OUT)
DI-20	RIM= 12.30' INV= 7.04' (NE) INV= 7.04' (SE-OUT)
DI-21	RIM= 12.20' INV= 7.15' (N) INV= 7.15' (SW-OUT)
DI-22	RIM= 11.85' INV= 7.40' (N) INV= 7.40' (S-OUT)
DI-23	RIM= 10.70' INV= 7.62' (NW) INV= 7.62' (S-OUT)
DI-24	RIM= 10.83' INV= 7.92' (W) INV= 7.92' (SE-OUT)
CURB INLETS	
NAME	DETAILS
CB-301	HOOD = 8.90' INV= 5.13' (E) INV= 5.13' (N) INV= 5.13' (SW-OUT)
CB-302	HOOD = 9.38' INV= 5.59' (E) INV= 5.59' (W-OUT)
CB-303	HOOD = 9.82' INV= 5.88' (NE) INV= 5.88' (NW) INV= 5.88' (W-OUT)
CB-304	HOOD = 10.40' INV= 6.18' (NE) INV= 6.18' (SW-OUT)
CB-305	HOOD = 11.29' INV= 6.42' (NE) INV= 6.42' (SW-OUT)
CB-306	HOOD = 12.35' INV= 6.70' (NW) INV= 6.70' (SW-OUT)

PIPE TABLE				
PIPE NAME	SIZE	MATERIAL	LENGTH	SLOPE
P-1-200	18"	RCP	42.93'	0.30%
P-2-301	12"	RCP	86.51'	2.28%
P-3-2	12"	RCP	86.37'	0.23%
P-4-3	12"	RCP	90.25'	0.23%
P-5-303	15"	RCP	78.79'	2.37%
P-6-5	15"	RCP	94.31'	0.30%
P-7-6	15"	RCP	67.97'	0.30%
P-8-7	12"	RCP	117.87'	0.60%
P-10-7	15"	RCP	45.11'	0.30%
P-11-10	12"	RCP	103.73'	1.08%
P-12-11	12"	RCP	47.53'	1.08%
P-13-10	15"	RCP	158.14'	0.30%
P-14-13	12"	RCP	46.89'	1.94%
P-16-17	12"	RCP	42.03'	0.83%
P-17-18	12"	RCP	98.49'	0.12%
P-18-19	12"	RCP	100.86'	0.27%
P-19-24	12"	RCP	95.32'	0.27%
P-20-306	12"	RCP	116.59'	0.29%
P-21-20	12"	RCP	40.50'	0.27%
P-22-21	12"	RCP	95.21'	0.27%

PIPE TABLE				
PIPE NAME	SIZE	MATERIAL	LENGTH	SLOPE
P-23-22	12"	RCP	79.96'	0.27%
P-24-23	12"	RCP	111.68'	0.27%
P-57	18"	RCP	90.00'	0.20%
P-302-301	18"	RCP	204.23'	0.22%
P-303-302	18"	RCP	129.47'	0.22%
P-304-303	15"	RCP	137.65'	0.22%
P-305-304	15"	RCP	106.11'	0.22%
P-306-305	15"	RCP	125.60'	0.22%
P-OCS-100	12"	RCP	62.64'	0.16%

SPOT ELEVATION KEY

BACK OF CURB SPOT ELEVATION	13.55 BC
TOP OF CONCRETE SPOT ELEVATION	12.45 TC
TOP OF ASPHALT SPOT ELEVATION	11.30 TA
BOTTOM OF RAMP SPOT ELEVATION	11.56 BR
TOP OF RAMP SPOT ELEVATION	13.50 TR
FINISH GRADE SPOT ELEVATION	12.24 FG
TOP OF BOARDWALK SPOT ELEVATION	14.00 TBW
TOP OF BANK SPOT ELEVATION	11.09 TB
HIGH POINT SPOT ELEVATION	10.50 HP

MATCHLINE
SEE SHEET C4.12

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SCALE 1 inch = 30 ft

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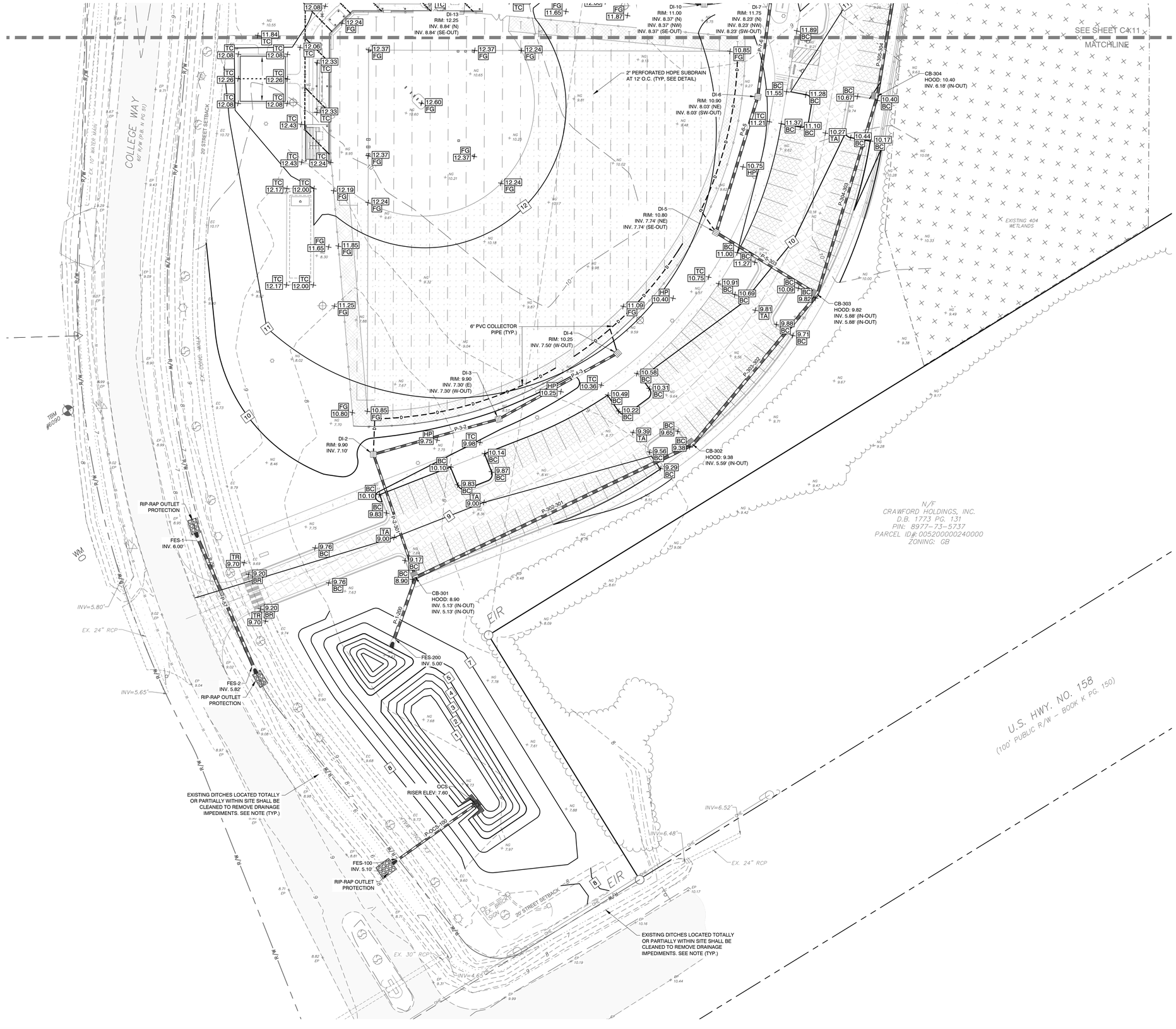
NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/10/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

GRADING & DRAINAGE PLAN - NE

DESIGNED BY:	BR, SBF
DRAWN BY:	SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C4.11

Do Not Use for Construction - PRELIMINARY



STRUCTURE TABLE	
NAME	DETAILS
DI-2	RIM= 9.90' INV= 7.10' (E) INV= 7.10' (S-OUT)
DI-3	RIM= 9.90' INV= 7.30' (E) INV= 7.30' (W-OUT)
DI-4	RIM= 10.25' INV= 7.50' (W-OUT)
DI-5	RIM= 10.80' INV= 7.74' (NE) INV= 7.74' (SE-OUT)
DI-6	RIM= 10.90' INV= 8.03' (NE) INV= 8.03' (SW-OUT)
DI-7	RIM= 11.75' INV= 8.23' (N) INV= 8.23' (NW) INV= 8.23' (SW-OUT)
DI-8	RIM= 11.80' INV= 8.93' (S-OUT)
DI-10	RIM= 11.00' INV= 8.37' (N) INV= 8.37' (NW) INV= 8.37' (SE-OUT)
DI-11	RIM= 12.25' INV= 9.49' (N) INV= 9.49' (S-OUT)
DI-12	RIM= 12.25' INV= 10.00' (S-OUT)
DI-13	RIM= 12.25' INV= 8.84' (N) INV= 8.84' (SE-OUT)

FES & OCS	
NAME	DETAILS
FES-1	INV= 6.00' (S-OUT)
FES-2	INV= 5.82' (N)
FES-100	INV= 5.10' (E)
FES-200	INV= 5.00' (NE)
OCS	RISER ELEV= 7.60' INV= 5.20' (W-OUT)

PIPE TABLE				
PIPE NAME	SIZE	MATERIAL	LENGTH	SLOPE
P-1-200	18"	RCP	42.93'	0.30%
P-2-301	12"	RCP	86.51'	2.28%
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P-20-306	12"	RCP	116.59'	0.29%
P-21-20	12"	RCP	40.50'	0.27%
P-22-21	12"	RCP	95.21'	0.27%

STRUCTURE TABLE	
NAME	DETAILS
DI-14	RIM= 12.25' INV= 9.75' (S-OUT)
DI-16	RIM= 11.00' INV= 8.92' (N-OUT)
DI-17	RIM= 10.75' INV= 8.57' (S) INV= 8.57' (NE-OUT)
DI-18	RIM= 10.75' INV= 8.45' (SW) INV= 8.45' (E-OUT)
DI-19	RIM= 10.83' INV= 8.18' (W) INV= 8.18' (E-OUT)
DI-20	RIM= 12.30' INV= 7.04' (NE) INV= 7.04' (SE-OUT)
DI-21	RIM= 12.20' INV= 7.15' (N) INV= 7.15' (SW-OUT)
DI-22	RIM= 11.85' INV= 7.40' (N) INV= 7.40' (S-OUT)
DI-23	RIM= 10.70' INV= 7.62' (NW) INV= 7.62' (S-OUT)
DI-24	RIM= 10.83' INV= 7.92' (W) INV= 7.92' (SE-OUT)
CURB INLETS	
NAME	DETAILS
CB-301	HOOD = 8.90' INV= 5.13' (E) INV= 5.13' (N) INV= 5.13' (SW-OUT)
CB-302	HOOD = 9.38' INV= 5.59' (E) INV= 5.59' (W-OUT)
CB-303	HOOD = 9.82' INV= 5.88' (NE) INV= 5.88' (NW) INV= 5.88' (W-OUT)
CB-304	HOOD = 10.40' INV= 6.18' (NE) INV= 6.18' (SW-OUT)
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P-306-305	15"	RCP	125.60'	0.22%
P-OCS-100	12"	RCP	62.64'	0.16%

NOTE:
PER UDO 7.3.4(6) EXISTING DITCHES LOCATED TOTALLY OR PARTIALLY WITHIN A DEVELOPMENT AND UTILIZED FOR DRAINAGE OR STORM WATER MANAGEMENT SHALL BE CLEANED TO REMOVE DRAINAGE IMPEDIMENTS.

SPOT ELEVATION KEY

BACK OF CURB SPOT ELEVATION	13.55 BC
TOP OF CONCRETE SPOT ELEVATION	12.45 TC
TOP OF ASPHALT SPOT ELEVATION	11.30 TA
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30' 0 15' 30'
SCALE 1 inch = 30 ft

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	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

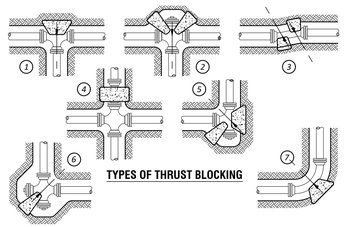
GRADING & DRAINAGE PLAN - SW

DESIGNED BY:	BR, SBF
DRAWN BY:	SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C4.12

Do Not Use for Construction - PRELIMINARY

M:\WORK\PROJECTS\2022\2022109\CIVIL\SHEETS\CONSTRUCTION DRAWINGS\C4.12 GRADING & DRAINAGE PLAN - SW.DWG, 9/16/2025 11:53:56 AM, GARY.HOO

RESULTANT THRUST AT FITTING AT 150 PSI WATER PRESSURE					
TOTAL POUNDS					
NOMINAL PIPE DIA	DEAD END	90° BEND	45° BEND	22 ½° BEND	11 ¼° BEND
4 in	2,700	3,800	2,100	1,100	530
6 in	5,600	8,000	4,300	2,200	1,100
8 in	9,700	13,600	7,400	3,800	
10 in	14,500	20,500	11,100	5,700	2,900
12 in	20,500	29,000	15,700	8,000	4,000
14 in	27,600	39,000	21,100	11,000	5,400
16 in	35,700	50,400	27,300	14,000	7,000
18 in	44,800	63,400	34,400	17,500	8,800
20 in	55,000	77,000	42,100	21,500	10,800
24 in	78,500	110,000	60,000	31,600	15,400
30 in	120,600	170,600	92,300	47,100	23,600
36 in	172,800	244,400	132,300	67,500	33,900
42 in	233,300	330,000	178,600	91,000	45,700
48 in	304,000	430,000	232,700	118,600	59,600
54 in	384,100	543,200	294,000	149,000	75,300



TYPES OF THRUST BLOCKING

SOIL	BEARING LOAD (LB / SQ FT)
MUCK	0
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	3,000
SAND	4,000
SANDY CLAY	6,000
HARD CLAY	9,000

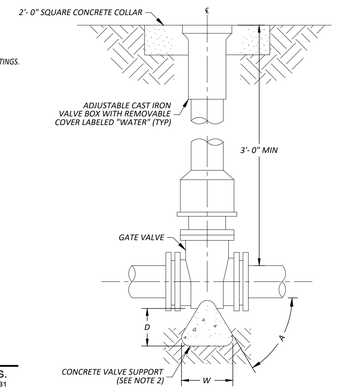
NOTES:
POLY WRAP SHALL BE USED TO COVER FITTINGS & BOLTS.
TO DETERMINE THE SIZE OF A CONCRETE THRUST BLOCK, DIVIDE THE TOTAL FORCE BY THE BEARING VALUES OF THE SOIL. THE QUOTIENT WILL BE THE SIZE OF THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET. APPROXIMATE VALUES FOR VARIOUS TYPES OF SOIL ARE LISTED IN THE TABLE. NO RESPONSIBILITY CAN BE ASSUMED FOR THE ACCURACY OF THE DATA IN THIS TABLE DUE TO THE WIDE VARIATION OF BEARING LOAD CAPABILITIES FOR EACH SOIL TYPE.

TYPES OF THRUST BLOCKING:
1) THRU LINE CONNECTION, TEE
2) THRU LINE CONNECTION, TEE (CROSS USED AS TEE)
3) DIRECTION CHANGE
4) CHANGE LINE SIZE, REDUCER
5) DIRECTION CHANGE, TEE (USED AS ELBOW)
6) DIRECTION CHANGE, CROSS (USED AS ELBOW)
7) DIRECTION CHANGE, ELBOW

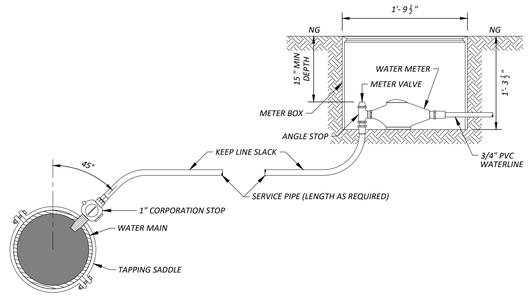
1 THRUST BLOCKING
N.T.S.
MISC-04C

NOTES:
1. DIMENSION "D" SHALL BE LARGE ENOUGH TO MAKE ANGLE "A" EQUAL TO OR GREATER THAN 45°.
2. CONCRETE SHALL NOT INTERFERE WITH MECH. JOINT FITTINGS.

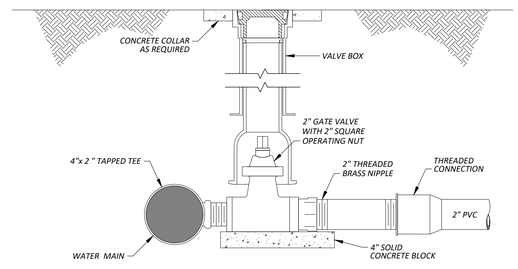
CONC BLOCKING SIZE		
PIPE SIZE	W	D
3"	1'-0"	SEE NOTE 1
4"	1'-0"	
6"	1'-3"	
8"	1'-6"	
12"	2'-3"	
16"	3'-0"	



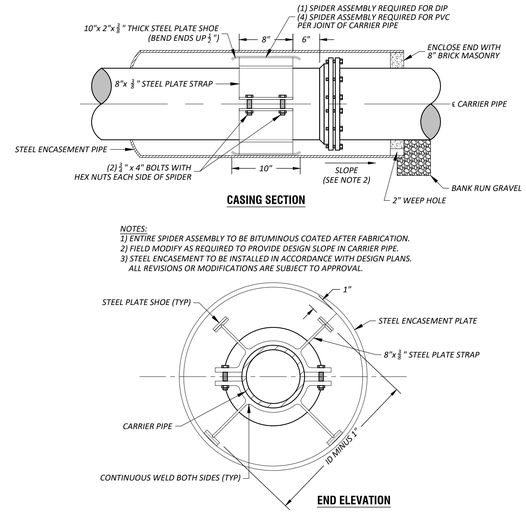
2 VALVE BOX
N.T.S.
WATR-31



3 TYPICAL 3/4 " WATER SERVICE CONNECTION
N.T.S.
WATR-12



4 2" WATER SERVICE CONNECTION
N.T.S.
WATR-04



CASING SECTION

NOTES:
1) ENTIRE SPIDER ASSEMBLY TO BE BITUMINOUS COATED AFTER FABRICATION.
2) FIELD MODIFY AS REQUIRED TO PROVIDE DESIGN SLOPE IN CARRIER PIPE.
3) STEEL ENCASEMENT TO BE INSTALLED IN ACCORDANCE WITH DESIGN PLANS. ALL REVISIONS OR MODIFICATIONS ARE SUBJECT TO APPROVAL.

END ELEVATION

5 PIPE ENCASEMENT - STEEL PLATE SHOE
N.T.S.
MISC-02

6 DRY BORE UNDER PAVED STREET
N.T.S.
MISC-03A

DEPTH	CONE
GREATER THAN 6'	ECCENTRIC
6' OR LESS	CONCENTRIC

NOTES:
1) WHEN INSTALLED IN PAVEMENT, MANHOLE TOP SHALL BE FLUSH WITH THE FINISHED PAVEMENT.
2) THE DISTANCE FROM THE TOP OF THE MANHOLE RING & COVER AND THE FINISHED GRADE MAY VARY WIDELY (SEE PLAN).
3) EXTEND PIPE INTO MANHOLE WALL (2" MAX. @ CLOSEST POINT)
4) (1 MIN.) GRADE RING REQUIRED IN NON-PAVED AREAS. GRADE RING NOT REQUIRED IN IN PAVED AREAS EXCEPT AS NECESSARY TO MEET FINISHED ELEVATION.
5) NO MORE THAN 2"- 4" GRADE RINGS SHALL BE INSTALLED.

PIPE SIZE	"D"
LESS THAN 20"	4'
20" OR GREATER	5'
30" OR GREATER	6'

7 TYPICAL PRECAST MANHOLE (MANHOLES 12' OR LESS IN DEPTH)
N.T.S.
MANH-01D

PAVED AREAS

UNPAVED AREAS

8 SEWER SERVICE CLEAN-OUT
N.T.S.
SSWR-07C

NOTES:
1. IN ADDITION TO METALLIC TRACING TAPE 12" BELOW GRADE ABOVE THE PIPE, ALSO PLACE 12 GUAGE 600 VOLT COPPER TRACER WIRE NO MORE THAN 3 FEET ABOVE PIPE.
2. 30 INCHES MINIMUM COVER OVER PIPE.

9 WATERLINE TRENCH
N.T.S.
WATR-37

10 STANDARD CATCH BASIN FRAME IN CURB & GUTTER
N.T.S.
STRM-06

NOTE:
SEE DETAIL 1 FOR CONCRETE THRUST BLOCK SIZING.

11 PIPE CROSSING STORM DRAIN
N.T.S.
SRRM-16

NOTE:
ALL DIMENSIONS SHOWN ARE MINIMUM & RELATIVE TO OUTSIDE OF PIPE BELL.

MAINLINE TESTING:
ALLOWABLE LOSS GAL/HR/1000 FT

TEST PRESSURE	3 IN	4 IN	6 IN
150 PSI	0.23	0.37	0.55
125 PSI	0.25	0.34	0.50
100 PSI	0.23	0.30	0.45

12 TYPICAL SEWER TRENCH
N.T.S.
SSWR-24

13 DROP INLET
N.T.S.
STRM-09

14 STANDARD CATCH BASIN
N.T.S.
STRM-17

15 RCP CONNECTION @ BASIN
N.T.S.
STRM-38

NOTES:
1) TRENCHES REQUIRING SHORING & BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING & BRACING.
2) NO ROCKS OR BOULDERS (4") OR LARGER TO BE USED IN BACKFILL.
3) ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4) BACKFILL SHALL BE TAMPED IN 6" LIFTS.
5) ACHIEVE 95% COMPACTION IN BACKFILL.

16 TRENCH FOR STORM DRAIN PIPE
N.T.S.
STRM-34

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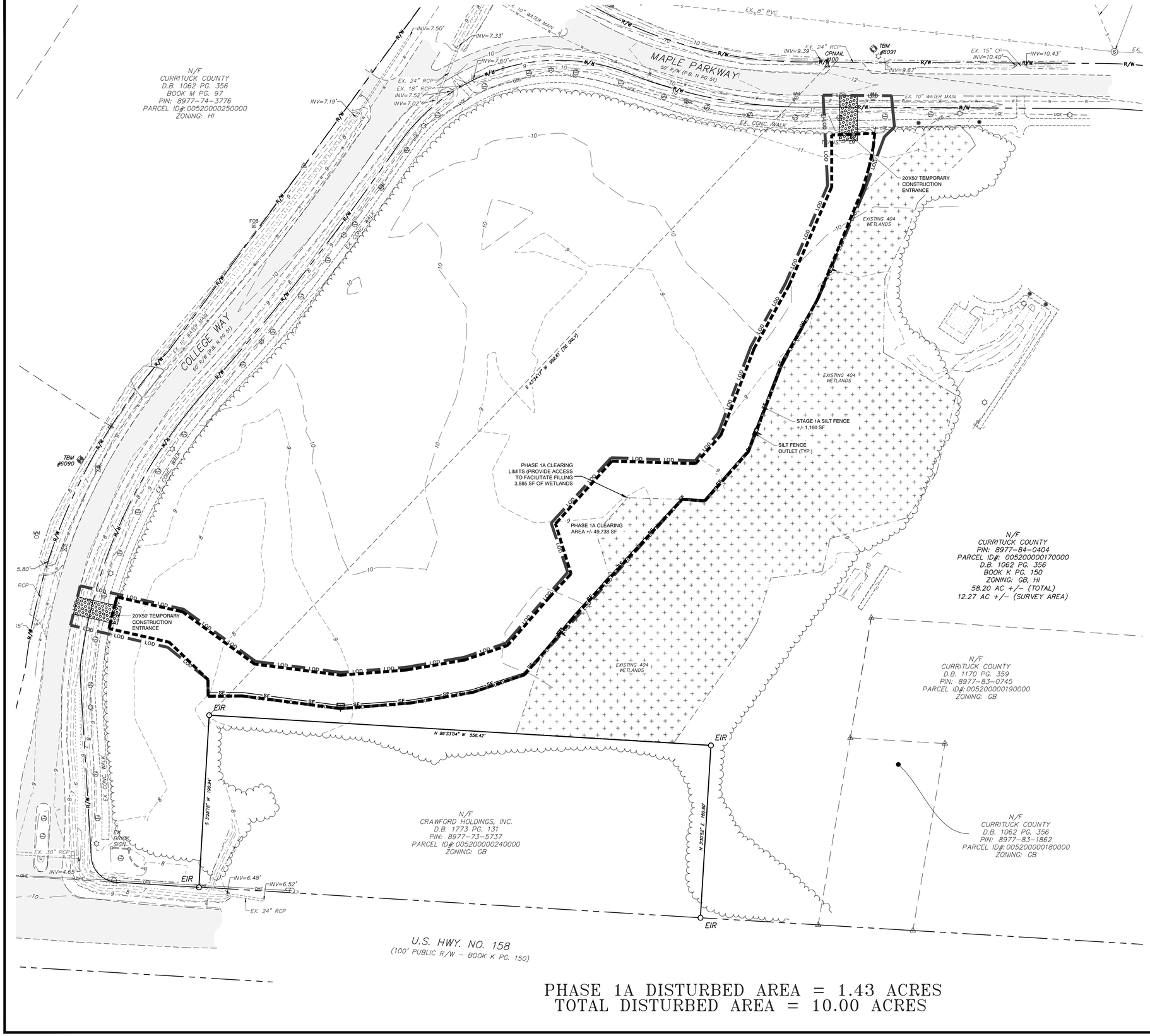
ISSUE/REVISIONS:

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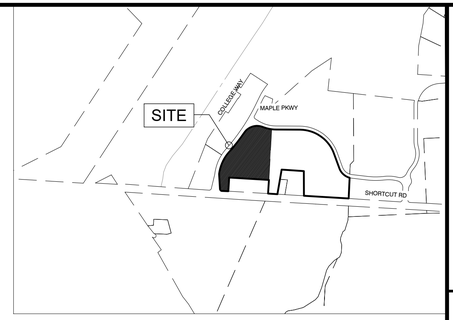
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA
GRADING, DRAINAGE, & UTILITIES DETAILS

DESIGNED BY:	BR
DRAWN BY:	SBF
CHECKED BY:	BR, JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C4.21

Do Not Use for Construction - PRELIMINARY



PHASE 1A DISTURBED AREA = 1.43 ACRES
TOTAL DISTURBED AREA = 10.00 ACRES



VICINITY MAP

1" = 1000' - 0"

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

STAGE 1A CONSTRUCTION SEQUENCE

1. OBTAIN PLAN APPROVALS AND ALL APPLICABLE PERMITS.
2. PRIOR TO BEGINNING ANY SITE WORK OR GRADING, THE CONTRACTOR SHALL COMPLETE ALL SITE DEMOLITION AND/OR RELOCATION OF EXISTING UTILITIES. REFER TO THE DEMOLITION PLAN AND UTILITY PLAN.
3. FLAG LIMITS OF CLEARING AND GRUBBING AND GRADING.
4. HOLD PRECONSTRUCTION MEETING WITH CONTRACTOR, EROSION CONTROL ADMINISTRATOR (252-946-6481), PROJECT ENGINEER AND OWNER BEFORE WORK BEGINS.
5. INSTALL SILT FENCES AND SILT FENCE OUTLETS AS THE FIRST CONSTRUCTION ACTIVITY.
6. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE & TEMPORARY DRIVEWAY PIPE (IF NEEDED).
7. INSTALL SILT FENCE PER PLAN.
8. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR FLATTER INCLUDING ALL OTHER SLOPES 4:1 OR FLATTER. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 7 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR STEEPER.

EROSION CONTROL LEGEND		
DESCRIPTION	SYMBOL	DETAIL
SILT FENCE	SF	
SILT FENCE OUTLET		
INLET PROTECTION		
PIPE INLET PROTECTION		
GRAVEL CONSTRUCTION ENTRANCE/EXIT		
TREE PROTECTION FENCE	TPF	
COMBINATION SILT AND TREE PROTECTION FENCE	TPF–SF	
TEMPORARY CHECK DAM		
LIMITS OF DISTURBANCE	LOD	
CONSTRUCTION FENCE	C	
CLEARING LIMITS		

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50' 0 25' 50'
SCALE 1 inch = **50** ft

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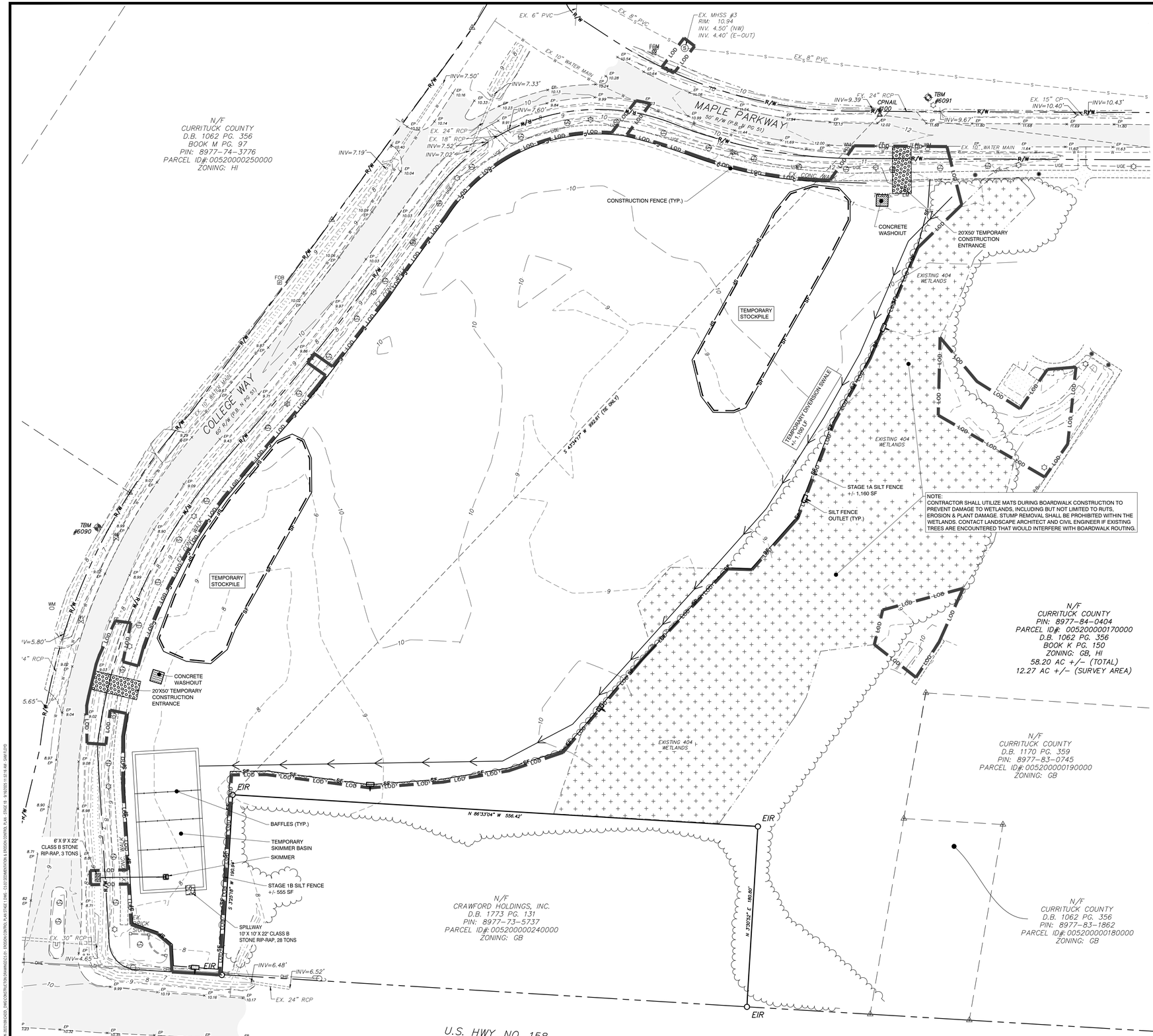
ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
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	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

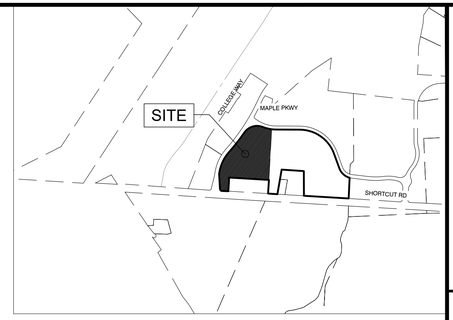
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

SEDIMENTATION & EROSION CONTROL PLAN - STAGE 1A

DESIGNED BY:	JSJ
DRAWN BY:	SCB
CHECKED BY:	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C5.01



TOTAL DISTURBED AREA = 10.00 ACRES



VICINITY MAP

1" = 1000' - 0"

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

STAGE 1B CONSTRUCTION SEQUENCE

9. INSTALL ADDITIONAL STAGE 1B SILT FENCE PER PLAN.
10. INSTALL TEMPORARY SEDIMENT BASIN AND DIVERSION SWALE PER PLAN.
11. BEGIN CLEARING AND GRUBBING SITE IN DESIGNATED AREAS AND STOCKPILE IN DESIGNATED AREA.
12. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR FLATTER INCLUDING ALL OTHER SLOPES 4:1 OR FLATTER. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 7 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR STEEPER.
13. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY THE STATE OR OWNER IF DEEMED NECESSARY.
14. PROCEED TO THE STAGE 2 EROSION CONTROL SEQUENCE AND BEGIN BRINGING SITE UP TO GRADE.

EROSION CONTROL LEGEND	
DESCRIPTION	SYMBOL
SILT FENCE	SF
SILT FENCE OUTLET	
INLET PROTECTION	
GRAVEL CONSTRUCTION ENTRANCE/EXIT	
CONCRETE WASHOUT	
CURB INLET PROTECTION	
COMBINATION SILT AND TREE PROTECTION FENCE	TPF–SF
TEMPORARY CHECK DAM	
LIMITS OF DISTURBANCE	LOD
CONSTRUCTION FENCE	C

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NORTH CAROLINA PROFESSIONAL SEAL 043241 ENGINEER SCOTT C. BLAKE
THESE DOCUMENTS ARE NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

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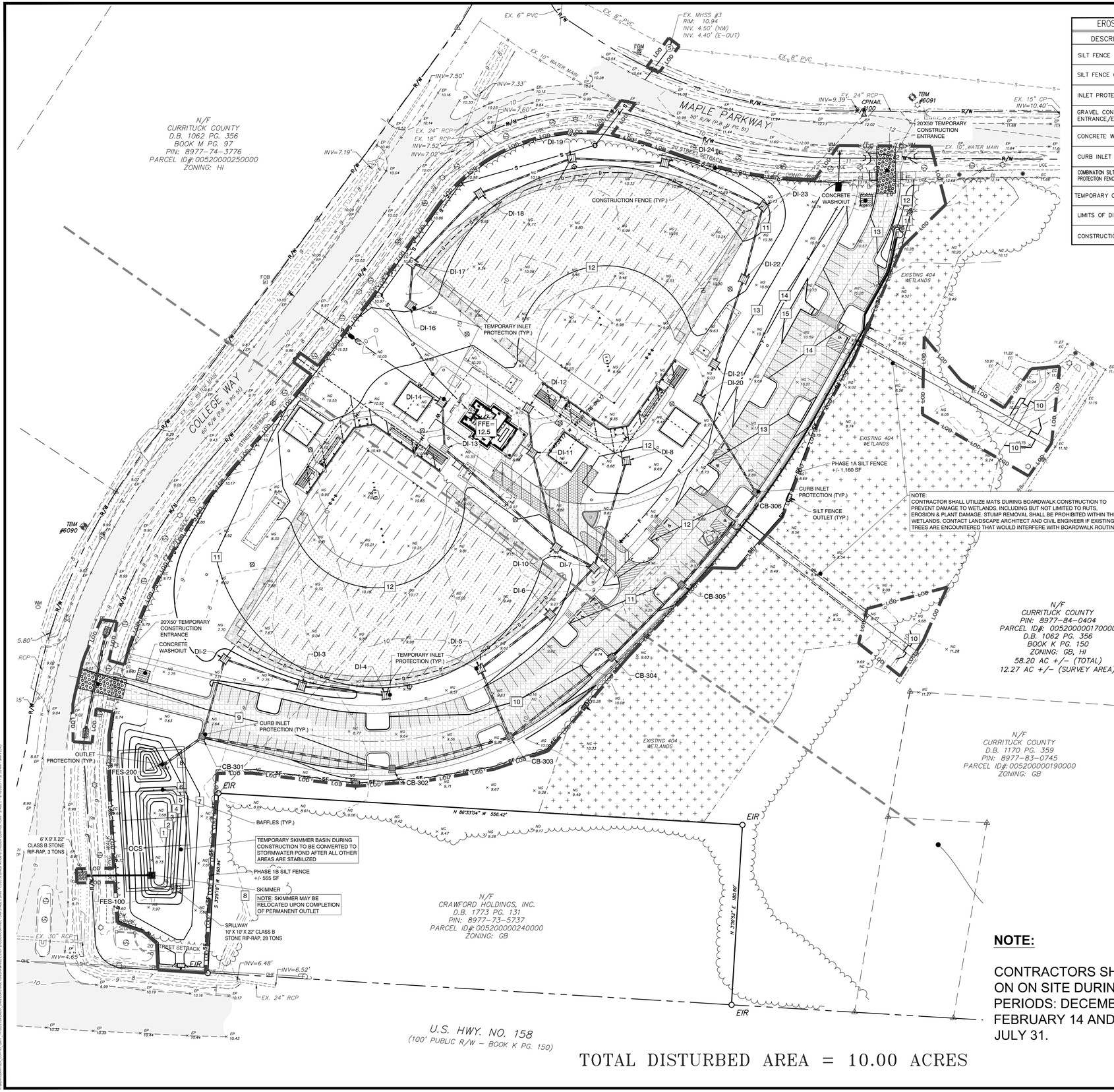
NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #1	7/1/25	JSJ
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	JSJ

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

SEDIMENTATION & EROSION CONTROL PLAN - STAGE 1B

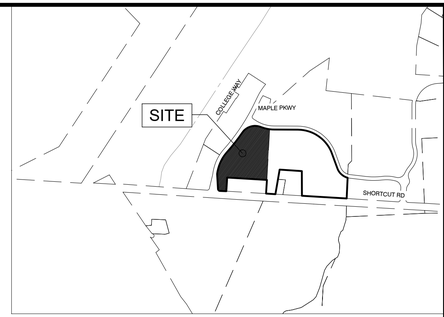
DESIGNED BY:	JSJ
DRAWN BY:	SCB
CHECKED BY:	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C5.02

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EROSION CONTROL LEGEND	
DESCRIPTION	SYMBOL
SILT FENCE	SF
SILT FENCE OUTLET	
INLET PROTECTION	
GRAVEL CONSTRUCTION ENTRANCE/EXIT	
CONCRETE WASHOUT	
CURB INLET PROTECTION	
COMBINATION SILT AND TREE PROTECTION FENCE	TPF–SF
TEMPORARY CHECK DAM	
LIMITS OF DISTURBANCE	LOD
CONSTRUCTION FENCE	C

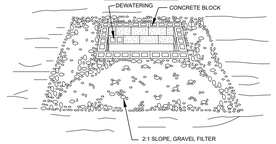
NOTE:
CONTRACTOR SHALL UTILIZE MATS DURING BOARDWALK CONSTRUCTION TO PREVENT DAMAGE TO WETLANDS, INCLUDING BUT NOT LIMITED TO RUTS, EROSION & PLANT DAMAGE. STUMP REMOVAL SHALL BE PROHIBITED WITHIN THE WETLANDS. CONTACT LANDSCAPE ARCHITECT AND CIVIL ENGINEER IF EXISTING TREES ARE ENCOUNTERED THAT WOULD INTERFERE WITH BOARDWALK ROUTING.



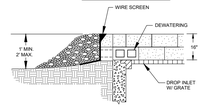
VICINITY MAP

1" = 1000' - 0"

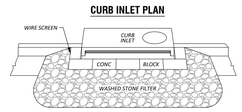
DROP INLET PLAN



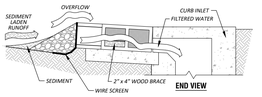
DROP INLET SECTION



CURB INLET PLAN



CURB INLET SECTION



NOTES:
1) SEDIMENT BARRIERS SHALL BE PROVIDED FOR ALL CURB INLETS IN THE IMMEDIATE AREA OF CONSTRUCTION.
2) TWO CONCRETE BLOCKS SHALL BE PLACED ON THEIR SIDES ABUTTING THE CURB AT EITHER SIDE OF THE INLET OPENING. A 2" x 4" STUD SHALL BE CUT AND PLACED THROUGH THE OUTER HOLES OF THE SPACER BLOCKS TO BRACE THE FRONT BLOCKS. FRONT BLOCKS ARE PLACED ON THEIR SIDES ACROSS THE INLET AND ABUTTING THE SPACER BLOCKS.
3) NCDOT # 57 STONE SHALL BE PLACED AGAINST THE WIRE TO THE TOP OF THE BLOCK.

NOTE THAT THIS MEASURE IS NOT TO BE USED ON CITY STREETS OPEN TO TRAFFIC AND/OR WHERE THE FINISHED COURSE OF ASPHALT HAS BEEN PLACED.

CONSTRUCTION SPECIFICATIONS:
1. *LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.*
2. *CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.*
3. *USE CLEAN GRAVEL, ¾- TO ½-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.*
4. *IF ONLY STONE AND GRAVEL ARE USED, KEEP THE SLOPE TOWARD THE INLET NO STEEPER THAN 3:1. LEAVE A MINIMUM 1-FOOT WIDE LEVEL STONE AREA BETWEEN THE STRUCTURE AND AROUND THE INLET TO PREVENT GRAVEL FROM ENTERING INLET. ON THE SLOPE TOWARD THE INLET, USE STONE 3 INCHES IN DIAMETER OR LARGER. ON THE SLOPE AWAY FROM THE INLET USE ½ - ¾-INCH GRAVEL (NCDOT #57 WASHED STONE) AT A MINIMUM THICKNESS OF 1-FOOT.*

MAINTENANCE:
1. *INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (½ INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED.*
2. *REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.*
3. *WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.*

1 TEMPORARY BLOCK & GRAVEL INLET PROTECTION

N.T.S.

STAGE 2 CONSTRUCTION SEQUENCE

15. MAINTAIN ALL STAGE 1 EROSION CONTROL MEASURES UNTIL INSTRUCTED TO REMOVE THEM.
16. MAINTAIN STAGE 1 TEMPORARY SKIMMER BASIN AS LONG AS POSSIBLE. MAINTAIN STAGE 1 DIVERSION DITCH TO BASIN. BRING SITE UP TO FINISHED GRADE WHERE POSSIBLE, IN ACCORDANCE WITH THE STABILIZATION TIMEFRAMES SHOWN ON THE NPDES/NCG01 DETAILS. WHILE RETAINING STAGE 1 SKIMMER BASIN. INSTALL PERMANENT GROUND COVER TO THE EXTENT PRACTICAL INCLUDING CURB & GUTTER, STONE BASE, GRASS, MULCH, ETC.
17. INSTALL STORM PIPE SYSTEM AND TEMPORARY INLET PROTECTION. INSTALL PROPOSED UTILITIES & RETAINING WALL. MAINTAIN ALL PERIMETER SILT FENCE & OUTLETS.
18. CONSTRUCT BALL FIELDS PER PLANS:
    - 18.1. INSTALL IRRIGATION SYSTEM MAINLINES AND OUTLETS.
    - 18.2. EXCAVATE AND POUR CONCRETE FOOTINGS: LIGHT TOWERS, DUGOUTS, BLEACHERS, ETC.
    - 18.3. INSTALL BALL FIELD DRAIN TILE SYSTEMS AND DRAIN OUTLETS.
    - 18.4. INSTALL ELECTRIC LINES, CABLES, OUTLETS TO LIGHT TOWERS, DUGOUTS, STANDS.
    - 18.5. LAY OUT STABILIZED AREAS: HAUL IN AGGREGATE FOR WARNING TRACKS, PATHS TO HOME PLATE IN FRONT OF DUGOUTS.
    - 18.6. PREPARE NATIVE TOPSOIL PER PROJECT SPECS. REMOVE ALL SOIL FROM THE EXISTING FIELD AREA AND REPLACE WITH DRAINAGE SYSTEM AND SAND-BASED ROOT ZONE FOR THE GROWING MEDIUM.
    - 18.7. STERILIZE NATIVE SOILS MATERIAL IF POSSIBLE.
    - 18.8. ROTO-TILL THE SOIL FOR UNIFORM AND THOROUGH MIXING. REWORK THE AREA TO GRADE ELEVATIONS WITH LASER GRADER.
    - 18.9. VERIFY ELEVATIONS WITH SURVEYS REPORT.
    - 18.10. ROLL THE AREA TO A FIRM SOIL.
    - 18.11. INSTALL BACK STOPS, FENCES, SCOREBOARD, FLAG POLE, FOUL LINE MARKER.
    - 18.12. BUILD PITCHER'S MOUND.
    - 18.13. SPREAD STARTING FERTILIZER AT BALL FIELDS.
    - 18.14. FINISH GRADING WITH LASER DEVISE: REMEASURE DIAMOND AND CAREFULLY RECHECK ELEVATIONS.
    - 18.15. SET THE HOME PLATE, PITCHER'S PLATE ANCHORS, AND BASE ANCHORS.
    - 18.16. MARK ALL GRASS LINES, CIRCLES, ARCS, AND BOXES WITH CHALK OR LIME.
    - 18.17. PLANT THE AREA WITH SOD PER PROJECT SPECS.
    - 18.18. INSTALL WARNING TRACKS.
19. FINISH CONSTRUCTION AND INSTALLATION OF DUGOUTS, LIGHT TOWERS, BLEACHERS, BUILDING, SHELTERS, AND PARKING LOT.
20. ONCE 80% STABILIZATION HAS BEEN ACHIEVED AND A DENSE STAND OF GRASS ESTABLISHED, REMOVE ALL TEMPORARY MEASURES, FINE GRADE DISTURBED AREAS, AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS. CONTACT EROSION CONTROL INSPECTOR FOR ONSITE INSPECTION.
21. AFTER GRADING IS COMPLETE, THEN ESTABLISH PERMANENT GROUND COVER ON ALL DISTURBED AREAS, INCLUDING PAVING, LANDSCAPING, MULCH, AND ESTABLISH A DENSE STAND OF GRASS. ANY BARE SPOTS, EROSIVE RILLS OR EROSIVE SLOPES SHALL BE PERMANENTLY STABILIZED WITH AN EROSION CONTOL BLANKET AND GRASS (SEED, HYDROSEED OR SOD AS NEEDED). THE CONTRACTOR SHALL WATER ALL VEGETATION AS NEEDED FOR HEALTHY PLANTS AND GRASS UNTIL CONSTRUCTION IS COMPLETE AND APPROVED BY MUNICIPALITIES.
22. MAINTAIN PERMANENT VEGETATION BY TOP DRESSING WITH 700 LBS PER ACRE OF FERTILIZER EVERY 6 MONTHS UNTIL COMPLETION OF THE PROJECT.
23. WITHIN 6" OF FINAL GRADE, RE-DISTRIBUTE 6" OF TOP SOIL.
24. FINE GRADE, PERMANENTLY SEED AND MULCH ALL LANDSCAPED AREAS.
25. HOLD FINAL ONSITE INSPECTION WITH EROSION CONTROL INSPECTOR AND OBTAIN FINAL APPROVAL.
26. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY THE OWNER OR COUNTY ENGINEER IF DEEMED NECESSARY.

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

TOTAL DISTURBED AREA = 10.00 ACRES

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SCALE 1 inch = 50 ft

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NORTH CAROLINA PROFESSIONAL SEAL 043241 ENGINEER SCOTT C. BOYLAN
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ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	JSJ
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	JSJ

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA
SEDIMENTATION & EROSION CONTROL PLAN - STAGE 2

DESIGNED BY:	JSJ
DRAWN BY:	SCB
CHECKED BY:	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C5.03

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DATE:

PAGE:

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

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 NCG01 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.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10 feet or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 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 slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

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 shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

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

Temporary Stabilization	Permanent Stabilization
• Temporary 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 • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. 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

1. 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.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. 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.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

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

PORTABLE TOILETS

1. 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 sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. 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.

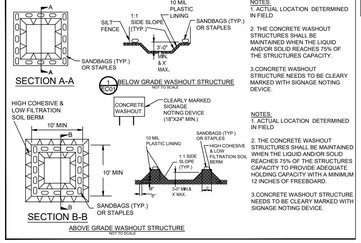
EARTHEN STOCKPILE MANAGEMENT

1. 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.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. 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.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. 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. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. 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 project.
6. 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.
7. 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.
8. 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.
9. 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 washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. 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.
3. 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.
4. Do not stockpile these materials onsite.

NORTH CAROLINA *Environmental Quality*

EFFECTIVE DATE: 11/12/2020

NCG-01 GROUND COVER & MATERIALS HANDLING

DATE:

PAGE:

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 properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
(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.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING
SECTION A: SELF-INSPECTION

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 weekend on holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "Zero." The permittee may use another rain-monitoring device approved 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.	1. Identification of the measures inspected 2. Date and Time of the inspection 3. Name of the person performing the inspection 4. Indication of whether the measures were operating properly 5. Description of maintenance needs for the measure 6. 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.	1. Identification of the discharge outfalls inspected 2. Date and Time of the inspection 3. Name of the person performing the inspection 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration 5. Indication of visible sediment leaving the site 6. Description, Evidence, and date 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 record of the following shall be made: 1) Actions taken to clean up or stabilize sediment that has left 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 or 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 required reports to the appropriate Division Regional Office per Part III, Section C, Item(2)(a) 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 assurance that they will be provided as soon as possible.

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

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING
SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

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 normal business hours.

Item to Document	Document 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 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 site-specific exemption based on unique site conditions that make this requirement not practical:

(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 the hard-copy records.

3. 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]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING
SECTION C: 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 Timeframe (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• Within 24 hours, an oral or electronic notification. • Within 7 Calendar Days, a report that contains a description of the 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 NC 303(d) list as impaired for sediment-related caused, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per item 1(b)-(c) above	• Within 24 Hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• *A report at least ten days before the date of the bypass, if possible.* The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• Within 24 Hours, an oral or electronic notification • Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	• Within 24 Hours, an oral or electronic notification • Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

NORTH CAROLINA *Environmental Quality*

EFFECTIVE DATE: 11/12/2020

NCG01- SELF INSPECTION

TEMPORARY SEEDING SCHEDULE

(TO TEMPORARILY STABILIZE DENUDED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF 15 WORKING DAYS)

SEEDING DATES: DECEMBER 1 THRU APRIL 15

SEEDING MIXTURE: SPECIES — RATE (LBS/AC)
- RYE (GRAIN) — 120
- ANNUAL LESPEDEZA (KOBE) — 50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE

SOIL AMENDMENTS:
FOLLOW SOIL TESTS OR APPLY:
2,000 LBS/AC LIMESTONE AND
750 LB/AC 10–10–10 FERTILIZER

MULCH: 4,000 LBS/AC – ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SEEDING DATES: APRIL 15 – AUGUST 15

SEEDING MIXTURE: SPECIES — RATE (LBS/AC)
- GERMAN MILLET — 40

SOIL AMENDMENTS:
FOLLOW SOIL TESTS OR APPLY:
2,000 LBS/AC LIMESTONE AND
750 LB/AC 10–10–10 FERTILIZER

MULCH: 4,000 LBS/AC – ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OF A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SEEDING DATES: AUGUST 15 THRU DECEMBER 15

SEEDING MIXTURE: SPECIES — RATE (LBS/AC)
- RYE (GRAIN) — 120

SOIL AMENDMENTS:
FOLLOW SOIL TESTS OR APPLY:
2,000 LBS/AC LIMESTONE AND
1000 LB/AC 10–10–10 FERTILIZER

MULCH: 4,000 LBS/AC – ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OF A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE: REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LBS/AC OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LBS/AC KOBE IN LATE FEBRUARY OR EARLY MARCH

PERMANENT SEEDING SCHEDULE

IN ROADWAY AREAS:

MARCH 1 – AUGUST 31:

SEED MIX:	RATE:
TALL FESCUE	50 LB/AC
CENTIPEDE	10 LB/AC
BERMUDAGRASS (HULLED)	25 LB/AC
SOIL AMENDMENTS:	**RATE:**
FERTILIZER (10–20–20)	500 LB/AC
LIMESTONE	4000 LB/AC

SEPTEMBER 1 – FEBRUARY 28:

SEED MIX:	RATE:
TALL FESCUE	50 LB/AC
CENTIPEDE	10 LB/AC
BERMUDAGRASS (UNHULLED)	35 LB/AC
SOIL AMENDMENTS:	**RATE:**
FERTILIZER (10–20–20)	500 LB/AC
LIMESTONE	4000 LB/AC

IN WASTE/BORROW AREAS:

MARCH 1 – AUGUST 31:

SEED MIX:	RATE:
TALL FESCUE	75 LB/AC
BERMUDAGRASS (HULLED)	25 LB/AC
SOIL AMENDMENTS:	**RATE:**
FERTILIZER (10–20–20)	500 LB/AC
LIMESTONE	4000 LB/AC

SEPTEMBER 1 – FEBRUARY 28:

SEED MIX:	RATE:
TALL FESCUE	75 LB/AC
BERMUDAGRASS (UNHULLED)	35 LB/AC
SOIL AMENDMENTS:	**RATE:**
FERTILIZER (10–20–20)	500 LB/AC
LIMESTONE	4000 LB/AC

MULCH:
APPLY 4,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR BY TACKING WITH ASPHALT, ROVING, NETTING, OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
REFERTILIZE THE FOLLOWING APRIL WITH 50 LB/ACRE NITROGEN. REPEAT AS GROWTH REQUIRES. MAY BE MOWED AS OFTEN AS NEEDED.

NOTE: SEE NCDOT'S LATEST STANDARDS FOR STABILIZATION FOR MORE INFORMATION.

TEMPORARY SEEDBED PREPARATION

1. A GOOD SEEDBED IS WELL PULVERIZED, LOOSE, AND UNIFORM.
2. LIMING – APPLY LIME ACCORDING TO SOIL TEST RECOMMENDATIONS. IF THE pH (ACIDITY) OF THE SOIL IS NOT KNOWN, AN APPLICATION OF GROUND AGRICULTURAL LIMESTONE AT THE RATE OF 1 – 1.5 TONS/ACRE ON FINE TEXTURED SOILS AND 2–3 TONS/ACRE ON COARSE TEXTURED SOILS IS USUALLY SUFFICIENT. APPLY LIMESTONE UNIFORMLY AND INCORPORATE INTO THE TOP 4–6 INCHES OF THE SOIL. SOILS WITH A pH OF 6 OR HIGHER NEED NOT BE LIMED.
3. FERTILIZER – BASE APPLICATION RATES ON SOIL TESTS. WHEN THESE ARE NOT POSSIBLE APPLY A 10–10–10 GRADE FERTILIZER AT 700 – 1000 LB/ACRE. BOTH FERTILIZER AND LIME SHOULD BE INCORPORATED INTO THE TOP 4–6 INCHES OF SOIL. IF A HYDRAULIC SEEDER IS USED, DO NOT MIX SEED AND FERTILIZER MORE THAN 30 MINUTES BEFORE APPLICATION.
4. SURFACE ROUGHENING – IF RECENT TILLAGE OPERATIONS HAVE RESULTED IN A LOOSE SURFACE, ADDITIONAL ROUGHENING MAY NOT BE REQUIRED, EXCEPT TO BREAK UP LARGE CLODS. IF RAINFALL CAUSES THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING BY DISKING, RAKING, HARROWING, OR OTHER SUITABLE METHODS. GROOVE OR FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR BEFORE SEEDING. SEE OTHER REQUIREMENTS FOR SURFACE ROUGHENING ON THIS SHEET.

PERMANENT SEEDBED PREPARATION

1. INSTALL NECESSARY MECHANICAL EROSION AND SEDIMENTATION CONTROL PRACTICES BEFORE SEEDING, AND COMPLETE GRADING ACCORDING TO THE APPROVED PLAN.
2. LIME AND FERTILIZER NEEDS SHOULD BE DETERMINED BY SOIL TESTS. SOIL TESTING IS PERFORMED FREE OF CHARGE BY THE NC DEPT. OF AGRICULTURE. SOIL TESTING LABORATORY, DIRECTIONS, SAMPLE CARTONS, AND INFORMATION ARE AVAILABLE THROUGH COUNTY AGRICULTURAL EXTENSION OFFICES OR FROM NCDA. BECAUSE THE NCDA SOIL TESTING LAB REQUIRES 1–6 WEEKS FOR SAMPLE TURN–AROUND, SAMPLING MUST BE PLANNED WELL IN ADVANCE OF FINAL GRADING. TESTING IS ALSO DONE BY COMMERCIAL LABORATORIES.
3. WHEN SOIL TESTS ARE NOT AVAILABLE, FOLLOW RATES SUGGESTED IN THE PERMANENT SEEDING SCHEDULE ON THIS SHEET. APPLICATION RATES USUALLY FALL INTO THE FOLLOWING RANGES:

   GROUND AGRICULTURAL LIMESTONE:
   LIGHT TEXTURED, SANDY SOILS: 1 – 1.5 TONS/ACRE
   HEAVY TEXTURED, CLAYEY SOILS: 2 – 3 TONS/ACRE

   FERTILIZER:
   GRASSES: 800 – 1200 LB/ACRE OF 10–10–10 (OR EQUIVALENT)
   GRASS–LEGUME MIXTURES: 800 – 1200 LB/ACRE OF 5–10–10 (OR EQUIVALENT)

4. APPLY LIME AND FERTILIZER EVENLY AND INCORPORATE INTO THE TOP 4–6 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. OPERATE MACHINERY ON THE CONTOUR.
5. ROUGHEN SURFACES IN ACCORDANCE WITH THE NOTES ON SURFACE ROUGHENING ON THIS SHEET.
6. COMPLETE SEEDBED PREPARATION BY BREAKING UP LARGE CLODS AND RAKING INTO A SMOOTH, UNIFORM SURFACE (SLOPES LESS THAN 3:1.) FILL IN OR LEVEL DEPRESSIONS THAT CAN COLLECT WATER. BROADCAST SEED INTO A FRESHLY LOOSENED SEEDBED THAT HAS NOT BEEN SEALED BY RAINFALL.

NEW STABILIZATION TIMEFRAMES

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
SLOPES STEEPER THAN 3:1	7 DAYS	NONE EXCEPT FOR PERIMETER AND HQW ZONES
SLOPES 3:1 OR FLATTER	14 DAYS	NONE
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE

CONSTRUCTION SEQUENCE

REFER TO C5.01 FOR STAGE 1A CONSTRUCTION SEQUENCE.
REFER TO C5.02 FOR STAGE 1B CONSTRUCTION SEQUENCE.
REFER TO C5.03 FOR STAGE 2 CONSTRUCTION SEQUENCE.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 43324 SEAN B. FOLEY

Preliminary NOT FOR RECORDATION, CONVEYANCES OR SALES DO NOT USE FOR CONSTRUCTION

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY

CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA

EROSION CONTROL NOTES

DESIGNED BY:	JSJ
DRAWN BY:	SCB, SBF
CHECKED BY:	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C5.11

M:\WORKSPACE_COMPLIANCE_DWG_W-2022109\2022109_CONSTRUCTION DRAWINGS\11 EROSION CONTROL NOTES - 9/16/2025 11:51:10 AM JSHAFLER

NOTES:

1. USE STANDARD STRENGTH FABRIC W/ 8' POST SPACING AND WIRE FENCING WHERE REINFORCED SILT FENCE IS REQUIRED.

2. WITH EXTRA STRENGTH FABRIC USE 6' POST SPACING AND NO WIRE FENCING.

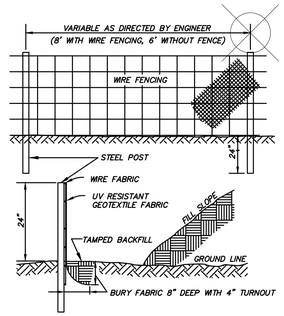
3. WIRE FENCING TO BE 32", WITH 6 LINE WIRES AND STAY WIRES ON 12" CENTERS/ BOTTOM AND TOP WIRES 10 GA., INTERMEDIATE WIRES 12.5 GA.

4. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REPAIRS IMMEDIATELY.

5. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

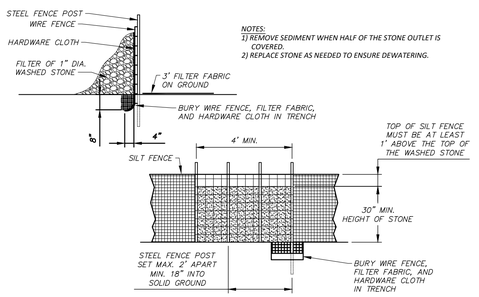
6. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.

7. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



1 TEMPORARY SILT FENCE

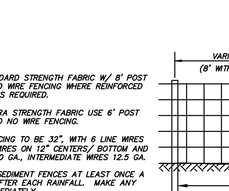
N.T.S.
EC-1(JC)



NOTES:
1) REMOVE SEDIMENT WHEN HALF OF THE STONE OUTLET IS COVERED.
2) REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

2 SILT FENCE OUTLET

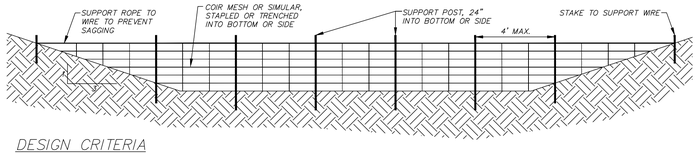
N.T.S.
(JC)



NOTES:
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
3. MAINTAIN GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING CONSTRUCTION SITE. ENTRANCE WILL REQUIRE PERIODIC REMOVAL OF SEDIMENT–LADEN STONE AND REPLACEMENT WITH FRESH STONE.

3 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

N.T.S.
STR-26 (JC)



DESIGN CRITERIA

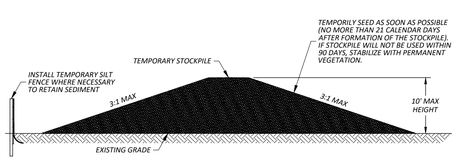
THE PERCENT OF SURFACE AREA FOR EACH SECTION OF THE BAFFLE ARE AS FOLLOWS:

- INLET ZONE 35%
- FIRST CELL 25%
- SECOND CELL 25%
- OUTLET ZONE 15%

NOTE:
BAFFLES TO BE REMOVED UPON SITE STABILIZATION AND PRIOR TO EXCAVATION FOR FINAL CONTOURS FOR DRY DETENTION CELL.

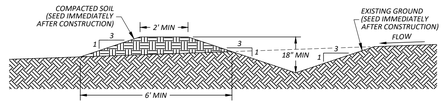
4 BAFFLE DETAIL

N.T.S.
EC-42



5 TEMPORARY STOCKPLE

N.T.S.
EC-22



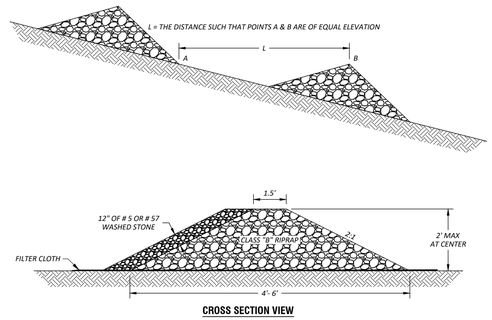
TEMPORARY DIVERSIONS

CONSTRUCTION SPECIFICATIONS:
1) REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2) ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3) ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
4) PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGARDING AND CLEANOUT.
5) VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

MAINTENANCE:
INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

6 TEMPORARY DIVERSION DITCH

N.T.S.
W-SPEC-1



CROSS SECTION VIEW

ROCK CHECK DAM

CONSTRUCTION SPECIFICATIONS:
1) PLACE STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.
2) KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CHANNEL BANKS.
3) EXTEND STONE AT LEAST 1.5 FEET BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
4) SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
5) PROTECT THE CHANNEL AFTER THE LOWEST CHECK DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
6) MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM DAM IS STABLE.
7) ENSURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW THE CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

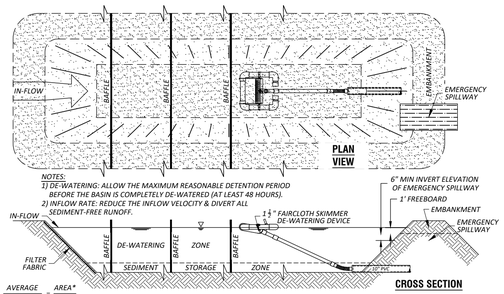
MAINTENANCE:
INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.

ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL

REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

7 TEMPORARY ROCK CHECK DAM

N.T.S.
W-SPEC-8



SKIMMER TRAP

CONSTRUCTION SPECIFICATIONS:
1) CLEAR, GRUB AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
2) ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER, AND OTHER OBJECTIONABLE MATERIAL. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVER FILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.
3) SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SWIMMING DEVICE FROM SETTLING INTO THE MUD BY EXCAVATING A SHALLOW PIT UNDER THE SKIMMER OF PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.
4) PLACE THE BARREL (TYPICALLY 4-INCH SCHEDULE 40 PVC PIPE) ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM THE FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES.

PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.

5) ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURERS INSTRUCTIONS, OR AS DESIGNED.
6) LAY THE ASSEMBLED SKIMMER ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE BARREL PIPE. ATTACH THE FLEXIBLE JOINT TO THE BARREL PIPE AND POSITION THE SKIMMER OVER THE EXCAVATED PIT OR SUPPORT. BE SURE TO ATTACH A ROPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.
7) EARTHEN SPILLWAYS - INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE SPILLWAY. THE SPILLWAY SHOULD BE LINED WITH LAMINATED PLASTIC OR IMPERMEABLE GEOTEXTILE FABRIC. THE FABRIC MUST BE WIDE AND LONG ENOUGH TO COVER THE BOTTOM AND SIDES AND EXTEND ONTO THE TOP OF THE DAM FOR ANCHORING IN A TRENCH. THE EDGES MAY BE SECURED WITH 8-INCH STAPLES OR PINS. THE FABRIC MUST BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND. THE WIDTH OF THE FABRIC MUST BE ONE PIECE, NOT JOINED OR SPLICED; OTHERWISE WATER CAN GET UNDER THE FABRIC. IF THE LENGTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH OF THE SPILLWAY, MULTIPLE SECTIONS, SPANNING THE COMPLETE WIDTH, MAY BE USED. THE UPPER SECTION(S) SHOULD OVERLAP THE LOWER SECTION(S) SO THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS.
8) INLETS - DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY
9) EROSION CONTROL - CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION.
10) INSTALL POROUS BAFFLES.
11) AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY.

MAINTENANCE:
INSPECT SKIMMER SEDIMENT TRAP(S) AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OF THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

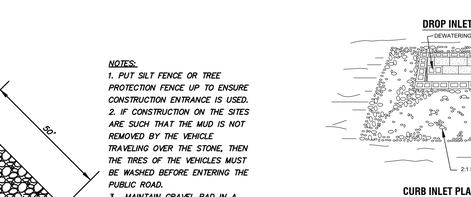
IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

8 SEDIMENT TRAP WITH SKIMMER

N.T.S.
EC-42



NOTES:
1) SEDIMENT BARRIERS SHALL BE PROVIDED FOR ALL CURB INLETS IN THE IMMEDIATE AREA OF CONSTRUCTION.
2) TWO CONCRETE BLOCKS SHALL BE PLACED ON THEIR SIDES ABUTTING THE CURB AT EITHER SIDE OF THE INLET OPENING. A 2" x 4" STUD SHALL BE CUT AND PLACED THROUGH THE OUTER HOLES OF THE SPACER BLOCKS TO BRACE THE FRONT BLOCKS. FRONT BLOCKS ARE PLACED ON THEIR SIDES ACROSS THE INLET AND ABUTTING THE SPACER BLOCKS.
3) NCDOT # 57 STONE SHALL BE PLACED AGAINST THE WIRE TO THE TOP OF THE BLOCK.

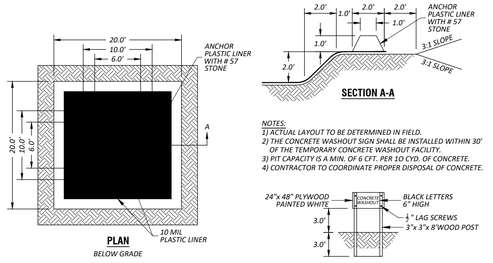
NOTE THAT THIS MEASURE IS NOT TO BE USED ON CITY STREETS OPEN TO TRAFFIC AND/OR WHERE THE FINISHED COURSE OF ASPHALT HAS BEEN PLACED.

CONSTRUCTION SPECIFICATIONS:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
3. USE CLEAN GRAVEL, ½- TO ¾-INCH N DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.
4. IF ONLY STONE AND GRAVEL ARE USED, KEEP THE SLOPE TOWARD THE INLET NO STEEPER THAN 3:1. LEAVE A MINIMUM 1-FOOT WIDE LEVEL STONE AREA BETWEEN THE STRUCTURE AND AROUND THE INLET TO PREVENT GRAVEL FROM ENTERING INLET. ON THE SLOPE TOWARD THE INLET, USE STONE 3 INCHES IN DIAMETER OR LARGER. ON THE SLOPE AWAY FROM THE INLET USE ½ - ¾-INCH GRAVEL (NCDOT #57 WASHED STONE) AT A MINIMUM THICKNESS OF 1-FOOT.

MAINTENANCE:
1. INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (½ INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED.
2. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.
3. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

9 TEMPORARY BLOCK & GRAVEL INLET PROTECTION

N.T.S.



TEMPORARY BAFFLE NOTES:
1) GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL (FRONT TO BACK & SIDE TO SIDE).
2) INSTALL POSTS OR SAWHORSES THE WIDTH OF THE SEDIMENT TRAP.
3) STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24', SPACED A MAXIMUM OF 4' APART & INSTALLED ON THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6" HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2' LOWER THAN THE TOP OF THE BERMS.
4) INSTALL AT LEAST (3) ROWS OF BAFFLES BETWEEN THE INLET & OUTLET DISCHARGE POINT. BASINS 20' IN LENGTH MAY USE (2) BAFFLES.
5) WHEN USING POSTS, ADD SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
6) WRAP POROUS MATERIAL (JUTE BACKED OR COIR) OVER SAWHORSES OR THE TOP WIRE. HAMMER REBAR INTO THE SAWHORSE LEGS
FOR ANCHORING. THE FABRIC SHOULD HAVE 5% TO 10% OPENINGS IN THE WEAVE. ATTACH FABRIC TO A ROPE AND A SUPPORT
STRUCTURE WITH ZIP TIES, WIRE OR STAPLES.
7) THE BOTTOM & SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH OR PINNED WITH 8" EROSION CONTROL MATTING STAPLES.
8) DO NOT SPLICE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.

MAINTENANCE CRITERIA:
1) INSPECT BAFFLES AT LEAST ONCE A WEEK & AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2) BE SURE TO MAINTAIN ACCESS TO BAFFLES. SHOULD THE FABRIC OF THE BAFFLE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3) REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF-FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN & TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEAN OUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGN STORAGE DEPTH.
4) AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS & UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE & STABILIZE IT.

10 CONCRETE WASHOUT PIT

N.T.S.
EC-36

NOTES:
1) ACTUAL LAYOUT TO BE DETERMINED IN FIELD.
2) THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3) PIT CAPACITY IS A MIN. OF 6 CFT. PER 10 CYD. OF CONCRETE.
4) CONTRACTOR TO COORDINATE PROPER DISPOSAL OF CONCRETE.

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Engineers
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NORTH CAROLINA PROFESSIONAL SEAL 043243 ENGINEER SCOTT C. BLACK

Preliminary
DO NOT USE FOR CONSTRUCTION

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/10/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

EROSION CONTROL DETAILS

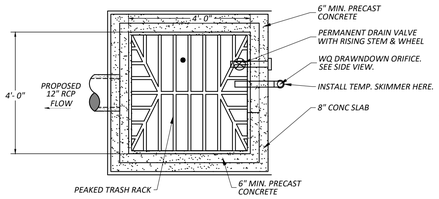
DESIGNED BY:	JSJ
DRAWN BY:	SCB, SBF
CHECKED BY:	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C5.21

Do Not Use for Construction - PRELIMINARY

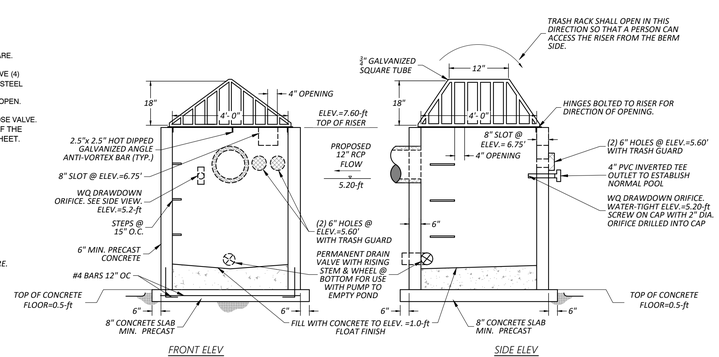
M:\WORKSPACE_SCB\PKG_DWG\W-4080\CIVIL_W4080\PLANSET\W4080_C5.21 EROSION CONTROL DETAILS - 2025.09.10.DWG 9/10/2025 11:03:59 AM EDT JOB

OUTLET CONTROL STRUCTURE NOTES

1. STRUCTURE SHALL BE PRECAST CONCRETE
2. PRECASTER SHALL DESIGN AND FURNISH ALL STEEL REINFORCING, WALL THICKNESS AND HARDWARE.
3. MANUFACTURE ENTIRE CONCRETE AS ONE SECTION WITH NO JOINTS IF PRACTICAL.
4. ANY JOINTS SHALL BE WATER TIGHT AND BE CONSTRUCTED FOR ANTI-FLOTATION. THEY SHALL HAVE (4) GALVANIZED STEEL PLATES 12" X 12" X ¼", ONE PER SIDE. EACH PLATE SHALL HAVE (4) GALVANIZED STEEL BOLTS (½" DIA X 8" L MIN). FOR ANTI-FLOTATION.
5. THROUGHOUT GRADING OPERATION, TEMPORARY SKIMMER SHALL BE IN PLACE AND DRAIN VALVE OPEN. INSTALL TEMPORARY PLUG IN DETENTION DRAWDOWN AND WQ DRAWDOWN.
6. AT END OF PROJECT, AFTER SITE IS STABLE, REMOVED TEMPORARY PLUGS AND SKIMMER AND CLOSE VALVE.
7. A SAND FILTER DIAPHRAGM AND DRAIN SYSTEM SHOULD BE PROVIDED ALONG THE BARREL OF THE PRINCIPAL SPILLWAY TO PREVENT "PIPING." SEE SAND FILTER DIAPHRAGM DETAILS ON THIS SHEET.



PLAN

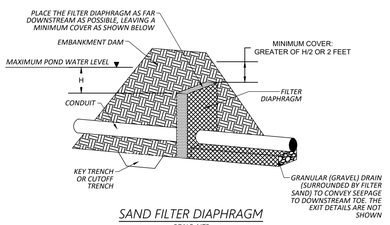


FRONT ELEV

SIDE ELEV

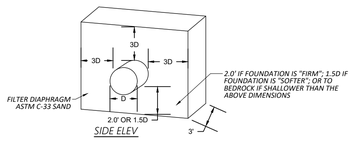
RISER OUTLET CONTROL STUCTURE

SCALE: NTS



SAND FILTER DIAPHRAGM

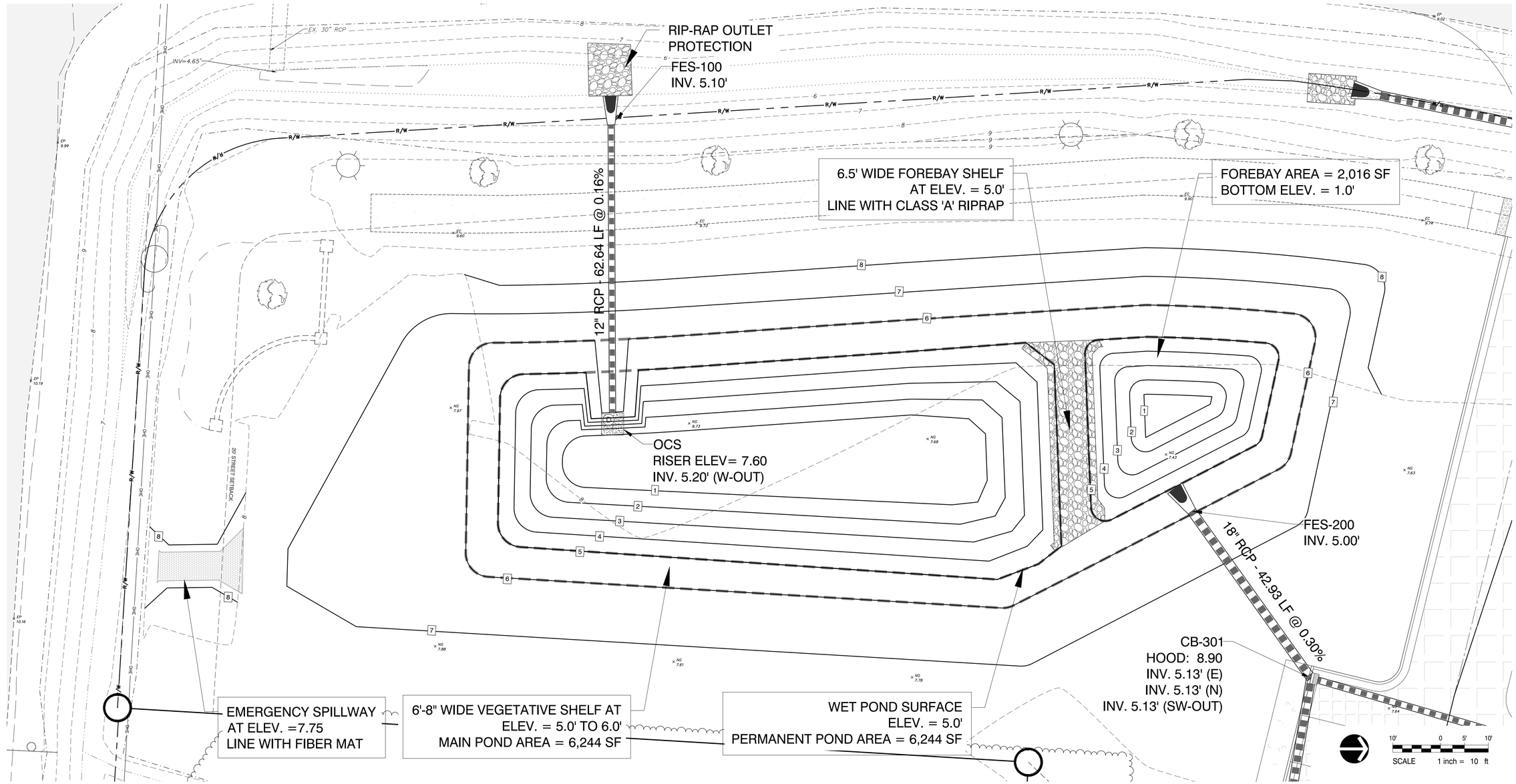
SCALE: NTS



SIDE ELEV

SAND FILTER DIAPHRAGM

SCALE: NTS



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NORTH CAROLINA PROFESSIONAL SEAL 043241 ENGINEER BRIAN RIVERS

Preliminary
DO NOT USE FOR CONSTRUCTION

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY

CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA

STORMWATER CONTROL PLAN & DETAILS

DESIGNED BY:	BR
DRAWN BY:	SBF, TAH
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	**C6.01**

Do Not Use for Construction - PRELIMINARY

TEMPORARY RISER WITH SKIMMER BASIN TO PERMANENT WET DETENTION POND CONVERSION SEQUENCE

1. PRIOR TO BEGINNING THE POND CONVERSION, THE CONTRACTOR SHALL CONTACT THE EROSION CONTROL INSPECTOR, AND THE COUNTY INSPECTOR TO REQUEST PERMISSION TO BEGIN THE POND CONVERSION.
2. PRIOR TO BEGINNING THE POND CONVERSION, THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED SURFACES IN THE UPSTREAM DRAINAGE AREA TO THE POND ARE PERMANENTLY STABILIZED WITH PERMANENT GROUND COVER (BUILDINGS, ASPHALT/CONCRETE, PARKING LOTS, SIDEWALKS, MULCH, LANDSCAPING, DITCH LINERS, AND A DENSE STAND OF GRASS.
3. THE TEMPORARY SEDIMENT BASIN SHALL BE DEWATERED USING A PUMP AND A SEDIMENT FILTER BAG ACCORDING TO NCDEQ STANDARDS. DISCHARGE THE WATER INTO THE RISER OR DRAINAGE OUTLET.
4. THE CONTRACTOR SHALL MEET ONSITE WITH THE PROJECT GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL PROVIDE FIELD GUIDANCE AS NEEDED REGARDING POTENTIAL ADDITIONAL DEWATERING MEASURES AND POND SLOPE STABILIZATION.
5. CONTRACTOR TO CONFIRM THAT THE PERMANENT RISER, ORIFICES, OUTLET PIPE, ANTI-SEEP COLLAR, AND CUTOFF TRENCH WERE ACCURATELY INSTALLED PER THE SCM PLAN/DETAILS SHEET, AND INSPECTED BY THE PROJECT GEOTECHNICAL ENGINEER AT THE TIME OF INITIAL BASIN CONSTRUCTION. SURVEY VERIFY AND MAKE ANY REPAIRS NEEDED.
6. ACCURATELY FINE GRADE THE ENTIRE POND ACCORDING TO THE SCM PLAN/DETAILS SHEET. THIS INCLUDES THE TOP OF BERM, EMBANKMENT, SLOPES, SPILLWAY, VEGETATED SHELF, MAIN POOL, FOREBAY BERM, FOREBAY, TOP OF SLOPES, TOE OF SLOPES. ALL GRADED SURFACES SHALL BE ACCURATELY GRADED TO WITHIN +/- 0.2 FEET OF VERTICAL TOLERANCE. THE CONTRACTOR SHALL RETAIN A SURVEYOR TO PERFORM CONSTRUCTION STAKEOUT AND ASBUILT SURVEY OF THE POND. PAY SPECIAL ATTENTION TO THE ACCURATE GRADING OF THE TOP OF BANK WIDTH/ELEVATION, THE 4 CORNERS OF THE SPILLWAY, SLOPES, AND THE VEGETATED SHELF.
7. REMOVE THE TEMPORARY SKIMMER. REMOVE THE TEMPORARY PLUGS IN THE WATER QUALITY DRAWDOWN ORIFICE AND THE DETENTION DRAWDOWN ORIFICE AS SHOWN IN THE OUTLET CONTROL STRUCTURE DETAIL. ENSURE THAT THE SCREW-ON CAP WITH ORIFICE IS PROPERLY INSTALLED ON THE WATER QUALITY DRAWDOWN PER THE OCS DETAIL. ENSURE THAT THE TRASH RACK IS PROPERLY INSTALLED AND OPENS IN THE DIRECTION SHOWN TO ALLOW MAINTENANCE ACCESS FROM THE BERM. ENSURE THAT ALL INVERTED PVC SIPHONS ARE CORRECTLY INSTALLED WITH NO LEAKS, AT THE PROPER ELEVATIONS. ENSURE THAT THE RISER STEPS ARE INSTALLED.
8. MUCK OUT THE BASIN. EXCAVATE THE MAIN POOL AND FOREBAY AREAS PER THE CONTOURS SHOWN ON THE SCM PLAN.
9. CONFIRM THAT ALL STORM PIPES, FES'S, CONCRETE ENDWALLS, ETC. ARE INSTALLED PER PLANS. INSTALL PERMANENT RIPRAP OVER FILTER FABRIC ON THE FOREBAY BERM, AND AT ALL STORM PIPE OUTLETS PER PLANS. REMOVE THE TEMPORARY IMPERMEABLE MEMBRANE LINER ON THE SPILLWAY.
10. AS SOON AS THE POND IS ACCURATELY GRADED, THEN PROMPTLY HAVE AN ASBUILT SURVEY OF THE POND PERFORMED. SURVEY RISER TOP ELEVATION, RISER ORIFICE ELEVATIONS/DIAMETERS, TOP OF BERM WIDTH/ELEVATION, 4 CORNERS OF THE EMERGENCY SPILLWAY ELEVATION, BOTH EDGES OF VEGETATED SHELF ELEVATIONS, ALL SLOPES, PIPE INVERTS, MAIN POOL, FOREBAY BERM AND FOREBAY. SUBMIT ASBUILT CAD FILE WITH SURVEYED AUTOCAD POINTS TO THE CIVIL ENGINEER FOR REVIEW.
11. OBTAIN ENGINEER'S COMMENTS. PROMPTLY MAKE ANY ADJUSTMENTS/REPAIRS NEEDED. PERFORM ADDITIONAL ASBUILT SURVEY OF ANY ADJUSTED AREAS AND SUBMIT ASBUILT SURVEY CAD FILE WITH POINTS TO CIVIL ENGINEER.
12. AFTER THE ENGINEER HAS ACCEPTED THE POND ASBUILT SURVEY GRADES, THEN PROMPTLY ESTABLISH PERMANENT GROUND COVER IN THE POND. ESTABLISH A DENSE STAND OF GRASS ON THE TOP OF BERM, ALL BASIN SLOPES ABOVE THE PERMANENT POOL, SPILLWAY, AND EMBANKMENT SLOPES. GRASS MAY BE INSTALLED VIA SEEDING, HYDROSEEDING, OR SOD. INSTALL PERMANENT LINER IN SPILLWAY PER THE SCM PLAN. ANY REMAINING DISTURBED OR EROSIVE AREAS SHALL BE PERMANENTLY STABILIZED WITH GRASS, SOD, AND/OR A SLOPE STABILIZATION BLANKET AS NEEDED. WATER GRASS & PLANTS ONLY AS NEEDED FOR PLANT HEALTH.
13. PLANTINGS IN THE VEGETATED SHELF SHOULD BE INSTALLED BY A PROFESSIONAL LANDSCAPER, AND THEY MAY TEMPORARILY ADJUST/LOWER THE POND WATER SURFACE ELEVATION AS NEEDED VIA PUMP UNTIL THE PLANTS ARE MATURELY ESTABLISHED.
14. SUBMIT GEOTECHNICAL NCPE CERTIFICATION OF POND BERM COMPACTION, OUTLET PIPE INSTALLATION, ANTI-SEEP COLLAR, AND CUTOFF TRENCH TO CIVIL ENGINEER.
15. AFTER POND CONSTRUCTION IS COMPLETE AND STABILIZED, THEN CONTACT ENGINEER TO REQUEST ONSITE INSPECTION, PUNCHLIST, AND FINAL APPROVAL. THE CONTRACTOR SHALL NOT BE RELEASED UNTIL AFTER THE POND IS PE CERTIFIED AND ACCEPTED BY THE COUNTY.

MAINTENANCE

INSPECTION ACTIVITIES - (FREQUENCY)

WHERE MAINTENANCE REQUIRES DEWATERING, DO SO BY MEANS OF DEWATERING PUMP.

AFTER CONSTRUCTION

INSPECT AFTER SEVERAL STORM EVENTS FOR BANK STABILITY, VEGETATION GROWTH, DRAINAGE SYSTEM FUNCTIONING, AND STRUCTURAL DAMAGE.

SEMI-ANNUAL INSPECTION

INSPECT FOR INVASIVE VEGETATION, DIFFERENTIAL SETTLEMENT, CRACKING; EROSION, LEAKAGE, OR TREE GROWTH ON THE EMBANKMENT; THE CONDITION OF THE RIPRAP IN THE INLET, OUTLET, AND PILOT CHANNELS; SEDIMENT ACCUMULATION IN THE BASIN; CLOGGING OF OUTLET; AND THE VIGOR AND DENSITY OF THE VEGETATION ON THE BASIN SIDE SLOPES AND FLOOR. CORRECT OBSERVED PROBLEMS AS NECESSARY.

NOTE SIGNS OF HYDROCARBON BUILDUP SUCH AS FLOATING OIL ON WATER SURFACE. - INSPECT FOR DAMAGE TO THE EMBANKMENT AND INLET/OUTLET STRUCTURES. REPAIR AS NECESSARY. -MONITOR FOR SEDIMENT ACCUMULATION IN THE FACILITY AND FOREBAY. EXAMINE INLET AND OUTLET DEVICES TO ENSURE THEY ARE FREE OF DEBRIS AND ARE OPERATIONAL.

MAINTENANCE ACTIVITIES - (FREQUENCY)

ONE TIME

- REPLACE WET POND VEGETATION TO MAINTAIN AT LEAST 50% OF SURFACE AREA COVERAGE IN WET POND PLANTS AFTER THE SECOND GROWING SEASON.

AS NEEDED

- REPAIR UNDERCUT AREAS, EROSION TO BANKS, AND BOTTOM AS REQUIRED. WHERE PERMITTED BY THE DEPARTMENT OF FISH AND GAME OR OTHER AGENCY REGULATIONS, STOCK CONSTRUCTED WET PONDS REGULARLY WITH MOSQUITO FISH (GAMBUSIA SPP.) TO ENHANCE NATURAL MOSQUITO AND MIDGE CONTROL.

3 TO 4 TIMES PER YEAR

- CLEAN AND REMOVE DEBRIS FROM INLET AND OUTLET STRUCTURES.
- MOW SIDE SLOPES AND REMOVE GRASS CLIPPINGS. REMOVE LITTER AND DEBRIS FROM BANKS, BASIN BOTTOM, TRASH RACKS, OUTLET STRUCTURES, AND VALVES AS REQUIRED.

ANNUAL (IF NEEDED)

- -SUPPLEMENT WET POND PLANTS IF A SIGNIFICANT PORTION HAVE NOT ESTABLISHED (AT LEAST 50% OF THE SURFACE AREA).
- -REMOVE NUISANCE PLANT SPECIES.
- -CLEAN FOREBAY TO AVOID ACCUMULATION IN MAIN WET POND AREA TO MINIMIZE WHEN THE MAIN WET POND AREA NEEDS TO BE CLEANED.
- -HARVEST PLANT SPECIES IF VEGETATION BECOMES TOO THICK CAUSING FLOW BACKUP AND FLOODING. MORE FREQUENT PLANT HARVESTING MAY BE REQUIRED BY LOCAL VECTOR CONTROL AGENCIES.
- -FERTILIZE NEW VEGETATION ONE TIME ONLY. THE OWNER SHALL NOT FERTILIZE VEGETATION AFTER THE INITIAL OCCURRENCE.
- -MONITOR SEDIMENT ACCUMULATIONS, AND REMOVE SEDIMENT WHEN THE ACCUMULATED SEDIMENT VOLUME EXCEEDS 10-20% OF THE BASIN VOLUME. PLANTS ARE 'CHOKED' WITH SEDIMENT, OR THE WET POND BECOMES EUTROPHIC. IT IS SUGGESTED THAT THE MAIN AREA BE CLEANED ONE HALF AT A TIME WITH AT LEAST ONE GROWING SEASON IN BETWEEN CLEANINGS. THIS WILL HELP TO PRESERVE THE VEGETATION AND ENABLE THE WET POND TO RECOVER MORE QUICKLY FROM THE CLEANING.

PERMANENT SEEDING SPECIFICATIONS

SEEDING MIXTURE

SPECIES	RATE (LB/ACRES)
PREMIUM BERMUDA	60

NURSE PLANTS
BETWEEN APR. 15 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDAN GRASS PRIOR TO MAY 1 OR AFTER AUG 15, ADD 25 LB/ACRE RYE (GRAIN)

SEEDING DATES

	BEST	POSSIBLE
EARLY SPRING:	FEB. 15-MAR. 20	FEB. 15-APR. 30
FALL:	SEPT. 1-SEPT. 30	SEPT. 1-OCT. 31

SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TEST IS NOT AVAILABLE APPLY 2 TONS/ACRE AGRICULTURAL GRADE LIMESTONE AND 1,000LBS/ACRE OF 10-10-10 FERTILIZER, OR APPLY 3,000-5,000 LB/ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 25 LB/ACRE RYE (GRASS)

MULCH
APPLY 4,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR ROVING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DICK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
IF GROWTH IS LESS THAN FULL ADEQUATE, REFERTILIZE THE SECOND YEAR. ACCORDING TO SOIL TESTS OR TOPDRESS WITH 500 LB/ACRE 10-10-10 FERTILIZER. MOW AS NEEDED. RESEED, FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.

POND NOTES

1. TOP OF BERM AND ALL SIDE SLOPES SHALL BE EITHER SODDED OR HYDROSEEDED TO ESTABLISH A DENSE STAND OF NON CLUMPING TURF GRASS
2. NO TREES SHRUBS OR WOODY VEGETATION IS ALLOWED ON THE TOP OF BERM OR SLOPES.
3. NO RIP RAP OR STONE IS ALLOWED IN THE BERM EMBANKMENT.
4. UNLESS DETERMINED OTHERWISE IN WRITTING BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL INSTALL A CLAY LINER IN THE POND UP TO THE ELEVATION NOTED
5. CONTRACTOR TO WATER PLANTINGS AND GRASS AS NEEDED
6. CONTRACTOR SHALL NOT BE RELEASED UNTIL AFTER THE POND HAS BEEN ASBUILT SURVEYED, PE CERTIFIED AND ACCEPTED BY NDENR.

EMBANKMENT COMPACTION

1. ALL FILL MATERIAL FOR THE EMBANKMENT SHOULD BE PLACED IN LAYERS (OR LIFTS) NO GREATER THAN 6" THICK.
2. THE LARGEST SIZE PARTICLE SHOULD NOT BE GREATER THAN 2/3rd THE HEIGHT OF THE LIFT THAT IS 2".
3. EACH LAYER SHOULD BE THOROUGHLY COMPACTED BEFORE THE NEXT LAYER IS PLACED.
4. THE COMPACTION EFFORT ACHIEVED SHOULD BE ON AVERAGE 98% STANDARD PROCTOR ASTM D698.
5. THE MINIMUM COMPACTION EFFORT SHOULD BE 95% STANDARD PROCTOR ASTM D698.
6. THE MATERIAL FORMING THE EMBANKMENT SHOULD BE PLACED WITH SUFFICIENT MOISTURE TO ENSURE PROPER COMPACTION. THE MOISTURE CONTENT SHOULD BE IN THE RANGE OF -1% TO +3% OF OPTIMUM MOISTURE CONTENT (OMC).
7. BEFORE EACH ADDITIONAL 6" LIFT IS ADDED TO THE EMBANKMENT, THE PRECEDING LIFT SHOULD BE SCARIFIED TO ENSURE THAT THE TWO LIFTS ARE PROPERLY JOINED.
8. A WHEELED SCRAPER OR TRUCK SHOULD BE USED FOR PLACING THE CLAY ON THE DAM SITE. THE CLAY SHOULD THEN BE SPREAD BY THE USE OF THE BLADE ON A TAMPER FOOT ROLLER FROM A BULLDOZER TOWING A TAMPER FOOT ROLLER (SHEEPSFOOT ROLLER).

NOTE

THERE ARE NO EXISTING ONSITE SURFACE WATERS, WETLANDS, PROTECTED VEGETATED SETBACKS, NOR PROTECTED RIPARIAN BUFFERS ON THIS PROPERTY.

BASIN DEWATERING DURING CONSTRUCTION:

THE CONTRACTOR SHALL ARRANGE FOR THE GEOTECHNICAL ENGINEER TO PROVIDE FIELD GUIDANCE ON POND DEWATERING MEASURES DURING THE POND GRADING OPERATION.

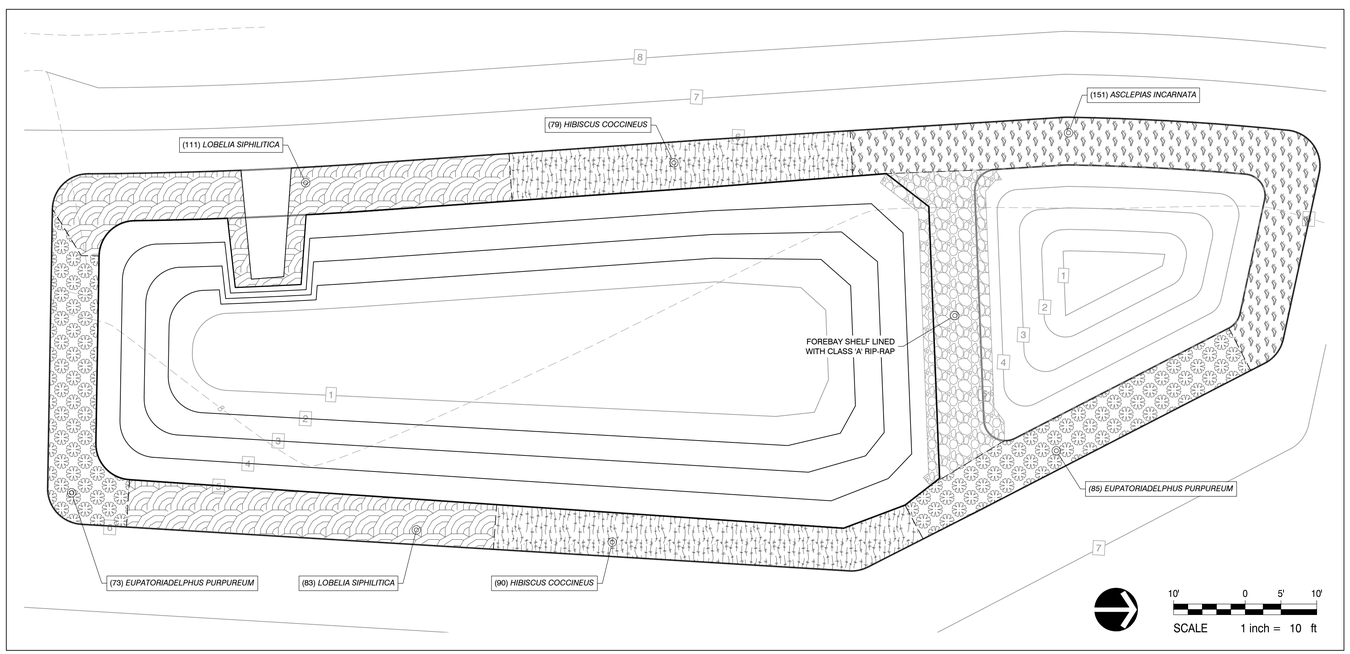
SLOPE STABILITY:

AFTER THE POND HAS BEEN EXCAVATED, THEN THE CONTRACTOR SHALL ARRANGE FOR THE GEOTECHNICAL ENGINEER TO VISIT THE SITE TO EVALUATE THE EARTHEN SIDESLOPES STABILITY OF THE POND'S NATIVE SOILS. IF THE SLOPES ARE UNSTABLE, THEN THE CONTRACTOR SHALL UNDERCUT AND REMOVE NATIVE SOIL, AND IMPORT SUITABLE, STABLE CLAY SOILS FROM OFFSITE TO GRADE & COMPACT STABLE POND SIDESLOPES UNDER THE GEOTECHNICAL ENGINEER'S DIRECTION.

AS-BUILT SURVEY:

UPON COMPLETION, CONTRACTOR TO SUBMIT NCRLS SEALED ASBUILT SURVEY OF POND, INCLUDING AUTOCAD POINTS TO OWNER/ENGINEER, INCLUDING BERM, SPILLWAY, SLOPES, MAIN POOL, FOREBAY, PIPES, INVERTS, RISER, RISER TOP ELEV, ORIFICE INVERTS, VEGETATIVE SHELF, ORIFICE DIAMETERS, ETC. TO OWNER/ENGINEER. ALL FEATURES SHALL BE WITHIN +/- 0.2 FT VERTICAL TOLERANCE OF THE DESIGN

WET DETENTION POND VEGETATIVE SHELF PLANTING PLAN



STORMWATER WET POND PLANTING SPECIFICATIONS

1. ALL HERBACEOUS PLANTS WITHIN THE WET POND PROPER SHALL BE INSTALLED BETWEEN MARCH 15 AND JULY 31.
2. UNLESS OTHERWISE DESIGNATED, PLANTS SHOULD BE INSTALLED AS LARGE DRIFTS (I.E., MASSES OF A SINGLE SPECIES) WITHIN THEIR RESPECTIVE PLANTING AREAS.
3. INSTALL A SLOW RELEASE FERTILIZER TABLET NEXT TO EACH PLANT WITHIN THE WET POND PROPER. FOR HERBACEOUS SPECIES USE AG SAFE AQUATIC-TABS 20-10-5, 90 DAY CONTINUOUS FEEDING, 5 GRAMS, OR EQUIVALENT.
4. ALL PLANTS SHALL BE DIRECTLY DESCENDED FROM INDIVIDUALS GROWING WILD WITHIN 200 MILES OF THE PROJECT SITE. IF SUITABLE STOCK CANNOT BE OBTAINED, PLANTS OF OTHER GENETIC PROVENANCES MAY BE UTILIZED WITH THE APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
5. PLANT MATERIAL SHOULD CONFORM TO AMERICAN STANDARD NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. (SEE PLANT LIST AND NOTES 6, 7, 8).
6. ALL PLANT MATERIAL TO BE CONTAINER GROWN PLANTS OF AT LEAST 4.0 CUBIC INCHES CAPACITY.
7. A MINIMUM OF THREE(3) DIFFERENT SPECIES.

VEGETATIVE SHELF PLANTS:	(50 PLANTS PER 200 SF)
TOTAL:	2,681 SF = 670 PLANTS

PLANT SCHEDULE - WET POND VEGETATED SHELF

SYMBOL	BOTANICAL / COMMON NAME	CONTAINER	SPACING	QTY
	Asclepias incarnata / Swamp Milkweed	POT/BAREROOT	24" O.C. (50 PLANTS PER 200 SF)	151
	Eupatoriadelphus purpureum / Purple Joe-Pye Weed	POT/BAREROOT	24" O.C. (50 PLANTS PER 200 SF)	158
	Hibiscus coccineus / Scarlet Rose Mallow	POT/BAREROOT	24" O.C. (50 PLANTS PER 200 SF)	169
	Lobelia siphilitica / Blue Cardinal Flower	POT/BAREROOT	24" O.C. (50 PLANTS PER 200 SF)	194

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ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA
STORMWATER CONTROL NOTES & PLANTING DETAILS

DESIGNED BY:	BR
DRAWN BY:	SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C6.11

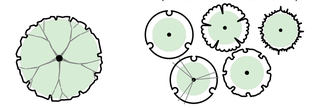
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PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	SIZE	QTY
CANOPY TREES						
	QB	Quercus bicolor / Swamp White Oak	B & B	3" CAL.	14` - 16` HT.	4
	QP	Quercus phellos / Willow Oak	B & B	4" CAL.	14` - 16` HT.	8
	QR	Quercus shumardii / Shumard Red Oak	B & B	3" CAL.	14` - 16` HT.	10
	QV	Quercus virginiana / Southern Live Oak	B & B	3" CAL.	14` - 16` HT.	9
	TD	Taxodium distichum / Bald Cypress	B & B	3" CAL.	14` - 16` HT.	9
	UP	Ulmus parvifolia / Chinese Lacebark Elm	B & B	3" CAL.	14` - 16` HT.	8
SYMBOL	**CODE**	**BOTANICAL / COMMON NAME**	**CONTAINER**	**SPACING**	**SIZE**	**QTY**
SHRUBS						
	IV	Ilex vomitoria `Nana` / Dwarf Yaupon	3 gal	4` O.C.	18" MIN.	64

NOTE: TREES SHOWN WITH COLOR APPLIED TO HERITAGE TREE REPLACEMENT REQUIREMENTS:
LIVE OAK: OAK (INCL. ALL OTHER SPP.):



LANDSCAPE CALCULATIONS:

VEHICULAR USE AREA PLANTING:
REQUIRED: MIN. 180 SF OF PLANTING AREA (FOR SINGLE LOADED BAYS) REQUIRED IN EACH PLANTING ISLAND TO ACCOMODATE PLANTING MATERIAL
PROPOSED: MIN. 360 SF OF PLANTING AREA IN ISLANDS WITH 1 SHADE TREE PROPOSED AT EACH ISLAND

SITE LANDSCAPING:
REQUIRED: PUBLIC & INSTITUTIONAL USES: 4 CALIPER INCHES OF CANOPY TREES PER ACRE + AT LEAST 1 SHRUB PER EACH 5 FEET OF BUILDING FACADE FACING A STREET.
BUILDING FACING STREET = +/- 40'/5 = 8 SHRUBS REQUIRED
PROJECT AREA: 12.27 AC = 12.27 X 4 = 49 CALIPER INCHES REQUIRED
PROPOSED: 8 SHRUBS
151 CALIPER INCHES

PERIMETER BUFFERS NOT REQUIRED
EX. STREET TREES AT COLLEGE WAY & MAPLE DRIVE TO SATISFY STREET TREE REQUIREMENTS

HERITAGE TREE CALCULATIONS
REQUIREMENT:
CUMULATIVE CALIPER MEASUREMENT THAT EQUALS OR EXCEEDS ONE-HALF THE DIAMETER OF THE HERITAGE TREES REMOVED. REPLACEMENT TREES TO HAVE A MIN. CALIPER OF 2" AND MIN. ONE-HALF OF REPLACEMENT TREES TO BE OF THE SAME SPECIES OF REMOVED HERITAGE TREES.
OAK: (3) 60", 36", 24" = 240" CUMULATIVE CALIPER
LIVE OAK: 23", 18", 13" = 54" CUMULATIVE CALIPER
TOTAL CUMULATIVE CALIPER = 294"
CUMULATIVE CALIPER REPLACEMENT REQUIREMENT = 294" / 2 = 147"
REPLACEMENT OAKS REQUIRED = 120" CUMULATIVE CALIPER
REPLACEMENT LIVE OAKS REQUIRED = 27" CUMULATIVE CALIPER

OAKS PROPOSED: (14) 3" OAKS, (8) 4" OAKS (74" CUMULATIVE CALIPER, 61.6%)
(16) OTHER 3" SPECIES (48" CUMULATIVE CALIPER, 40%)
CUMULATIVE CAL. OF OAK REPLACEMENT TREES = 122"
LIVE OAKS PROPOSED: (9) 3" LIVE OAKS (27" CUMULATIVE CALIPER, 100%)
TOTAL PROPOSED: 122" + 27" = 149" CUMULATIVE CALIPER

SEE SHEET L1.11 FOR ENLARGED LANDSCAPE PLAN NORTHEAST SITE
SEE SHEET L1.12 FOR ENLARDED LANDSCAPE PLAN SOUTHWEST SITE

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SCOTT B. FRANCIS

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1	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	
2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

LANDSCAPE PLAN

DESIGNED BY:	SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	L1.01

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NOTE: TREES SHOWN WITH COLOR APPLIED TO HERITAGE TREE REPLACEMENT REQUIREMENTS:

LIVE OAK: OAK (INCL. ALL OTHER SPP.):

60' CANOPY TREE COVERAGE FOR ALL PARKING SPACES (TYP.)

PERIMETER SHRUBS

GRASS AREA (TYP.)

SOD AREA (TYP.)

INFIELD MIXTURE

SITE LANDSCAPING SHRUBS

384 SF
389 SF
529 SF
361 SF
382 SF
466 SF
431 SF
426 SF
460 SF

EXISTING 404 WETLANDS

MAPLE PARKWAY
50' R/W (P.B. N PG 51)

20' STREET SETBACK

EX. 10" WATER MAIN

EX. CONC. WALK

MATCHLINE
SEE SHEET L1.12

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2	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

ENLARGED LANDSCAPE PLAN - NE

DESIGNED BY:	SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN

SHEET No.
L1.11

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NOTE: TREES SHOWN WITH COLOR APPLIED TO HERITAGE TREE REPLACEMENT REQUIREMENTS:
LIVE OAK: OAK (INCL. ALL OTHER SPP.):

SEE SHEET L1.11
MATCHLINE

SOD AREA (TYP.)
INFIELD MIXTURE
SOD AREA (TYP.)
GRASS AREA (TYP.)
PERIMETER SHRUBS
60' CANOPY TREE COVERAGE FOR ALL PARKING SPACES (TYP.)
368 SF
418 SF
425 SF
432 SF
425 SF
405 SF
411 SF
EXISTING 404 WETLANDS
COLLEGE WAY
60' R/W (P.B. N PG 51)
12" WATER MAIN
EX. GRAVEL WALK
30' STREET SETBACK
EX. GRAVEL WALK
30' STREET SETBACK
N 89°33'04" W 356.42'
S 20°16' E 195.64'
N 20°16' W 195.64'
N/F
CRAWFORD HOLDINGS, INC.
D.B. 1773 PG. 131
PIN: 8977-73-5737
PARCEL ID#: 005200000240000
ZONING: GB
U.S. HWY. NO. 158
(100' PUBLIC R/W - BOOK K PG. 150)
TBM #6280
FOB
WM
QV 3
QP 1
UP 1
QB 1
TD 2
UP 2
QP 2
UP 1
TD 3
QR 3
QV 1
IV 24
QR 1
QV 2

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2753
JOHN R. MCADAMS COMPANY, INC.

ISSUE/REVISIONS:

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	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

ENLARGED LANDSCAPE PLAN - SW

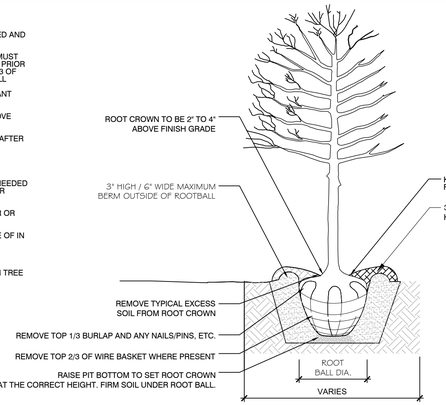
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PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	L1.12

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M:\WORKING\PLAN SHEETS\2022109 W-4080 CURRITUCK COMMUNITY PARK PHASE III\CONSTRUCTION DOCUMENTS\LANDSCAPE\2022109 W-4080 LANDSCAPE PLAN - SW.DWG 9/16/2025 11:53:15 AM SBARTLETT

NOTES:

1. ALL TREES ARE TO BE NURSERY GROWN, BALLED AND BURLAP (B&B) OR CONTAINER GROWN.
2. ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF THE BURLAP FROM THE ROOT BALL. REMOVE ALL SYNTHETIC MATERIALS: BURLAP, STRAPPING CORDAGE, ETC. PRIOR TO BACKFILLING ALL PLANT MATERIALS.
3. INSTALL TOP OF PLANT BALL TO BE 2" TO 4" ABOVE EXISTING GRADE.
4. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
5. SET TREE IN VERTICAL POSITION & STAKE IF/AS NEEDED
6. SUBMIT PREFERRED STAKING METHODS IF/AS NEEDED AND MATERIALS TO LANDSCAPE ARCHITECT FOR APPROVAL
7. ALL STAKING TO BE REMOVED AFTER ONE YEAR OR GROWING SEASON
8. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
9. RESEED UNMULCHED, DISTURBED AREAS.
10. MULCH AREA TO BE A MINIMUM 2' RADIUS FROM TREE TRUNK.



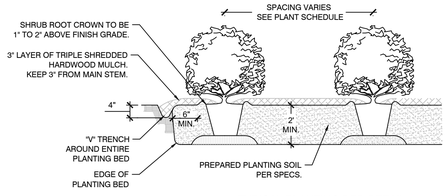
ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004)

FOR EXAMPLE: CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
2"	12-14'	16'	24"	18"
3"	14-16'	18'	32"	21"
4"	16-18'	22'	42"	25"

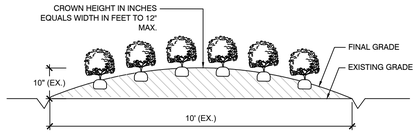
TREE PLANTING
SECTION — NTS

NOTES:

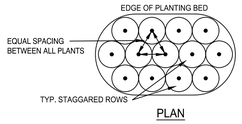
1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
2. INSTALL CONTAINERIZED PLANTS 2" - 4" ABOVE FINISHED GRADE.
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
5. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



TYPICAL PLANTING BED DETAIL

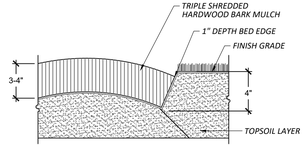


TYPICAL BED CROWNING



PLAN

SHRUB PLANTING BED
SECTION — NTS



BED TRENCHING
SECTION — NTS

PLANTING NOTES:

1. ALL PLANTINGS SHALL COMPLY WITH CURRENT LOCAL ORDINANCES AND GUIDELINES.
2. THIS PLAN IS FOR PLANTING LOCATIONS ONLY AND ALL PLANT MATERIAL SHALL BE SPACED AND LOCATED PER SCHEDULE. HOWEVER, CONTRACTOR TO SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. IF FOUND CONDITIONS VARY FROM THIS PLAN, CONTRACTOR SHALL CONTACT OWNER AND LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO DO SO WILL RESULT IN CONTRACTOR'S LIABILITY TO REPLACE PLANT MATERIALS.
3. REFER TO PLANTING DETAILS FOR ADDITIONAL PLANTING INFORMATION.
4. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT WATERING AND MAINTENANCE, INCLUDING SHRUBS AND GROUNDCOVER, AND SHALL MAINTAIN AREA IN A WEED AND DEBRIS FREE CONDITION, THROUGHOUT GUARANTEE PERIOD.
5. CONTRACTOR TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN.
6. ALL SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.
7. PLANTING SIZE DETERMINATION:
   7.1. TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT BALL TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.
   7.2. ALL PLANTS SHALL BE FRESHLY DUG OR IN GROW POTS, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, FREE OF DISEASE, INSECT EGGS, AND LARVAE, AND SHALL BE WELL ROOTED.
8. FINISHED PLANTING BEDS SHALL BE GRADED SO AS TO NOT IMPEDE DRAINAGE AWAY FROM BUILDINGS. IF SIGNIFICANT RELOCATIONS ARE REQUIRED, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH RELOCATIONS KNOWN TO THE OWNER AND LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY FOR PLANT MATERIALS AND STORMWATER DAMAGE.
9. FIELD LOCATE AND VERIFY UNDERGROUND UTILITIES LOCATIONS PRIOR TO PLANTING. FINAL TREE LOCATIONS TO BE FIELD ADJUSTED TO AVOID CONFLICTS WITH UTILITIES, LIGHTING AND DRIVEWAY LOCATIONS WHERE POSSIBLE. CONTACT LANDSCAPE ARCHITECT FOR A COORDINATED SOLUTION FOR ANY UTILITY CONFLICTS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.
10. TREES SHALL BE STAKED WITH AN AT GRADE TREE STAKING SYSTEM. STAKING MUST BE REMOVED AS SOON AS POSSIBLE OR WITHIN ONE (1) YEAR OF PLANTING. MULCH SHALL BE APPLIED IN AN EVEN THREE INCH (3") TO TO FOUR INCH (4") LAYER AROUND THE TREE PIT IN ACCORDANCE WITH ACCEPTED PRACTICES IN THE LANDSCAPE INDUSTRY.
11. CONTRACTOR SHALL NOT PLACE MULCH IN CONTACT WITH THE TRUNKS OF TREES OR SHRUBS.
12. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.
13. THE ROOT CROWN SHALL BE 1 INCH (1") TO 2 INCHES (2") ABOVE FINISHED GRADE (AFTER SETTLING) FOR SHRUBS AND TWO INCHES (2") TO FOUR INCHES (4") ABOVE FINISHED GRADE (AFTER SETTLING) FOR TREES.
14. ALL SUBSTITUTIONS OF PLANT MATERIAL ARE TO BE REQUESTED IN WRITING TO THE LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER PRIOR TO INSTALLATION. FAILURE TO OBTAIN SUBSTITUTION APPROVAL IN WRITING MAY RESULT IN LIABILITY TO THE CONTRACTOR.
15. DEAD PLANTS ARE TO BE REMOVED FROM THE JOB BY THE CONTRACTOR WEEKLY. CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED AND PRESENT A COPY OF THE LIST TO THE OWNER AND THE LANDSCAPE ARCHITECT AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.
16. TOPSOIL REQUIRED FOR SOIL MIXES AND SPECIAL SEEDING AREAS SHALL BE PROVIDED BY THE CONTRACTOR. CONTRACTOR MUST LOAD, HAUL, MIX, AND SPREAD ALL TOPSOIL AND OTHER SOIL ADDITIVES AS REQUIRED.
17. THE PROPERTY OWNER AND/OR LESSEE SHALL, UPON COMPLETION OF THE GUARANTEE PERIOD AND FINAL ACCEPTANCE OF THE LANDSCAPE MATERIALS, MAINTAIN ALL LANDSCAPE MATERIALS AND LANDSCAPE AREAS IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, MOWING, FERTILIZING, TREATING PESTS, MULCHING, PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED TREES AND SHRUBS. MAINTENANCE SHALL BE PERFORMED ON A REGULAR BASIS IN ORDER TO MAINTAIN PLANT VIGOR AND STABILITY AND TO PRESENT A NEAT AND WELL-KEPT APPEARANCE AT ALL TIMES.
18. CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, AS REQUIRED BY THE SPECIFICATIONS. CONTRACTOR MUST CONTACT THE OWNER AND THE LANDSCAPE ARCHITECT AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.
19. ALL TREES AND SHRUBS SHALL MEET THE NORMAL REQUIREMENTS FOR THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN (AAN) OR AMERICAN HORT, ANSI Z60.1.
20. MULCH SHALL BE FREE OF DEBRIS AND WOOD CHIPS. IT SHALL CONSIST OF AGED TRIPLE-SHREDDED HARDWOOD MULCH, FREE OF EXCESS TANNIC ACID OR OTHER MULCH AS SPECIFIED ON THE PLANS. SAMPLES OF MULCH SHALL BE PROVIDED FOR THE THE LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO DELIVERING THE MULCH. THE OWNER RESERVES THE RIGHT TO REJECT ANY MULCH WHICH IS CONSIDERED TO BE UNSUITABLE. ALL MULCHES SHALL BE FREE OF ANY FOREIGN MATERIALS, PIECES LARGER THAN 6 INCHES, AND/OR GREEN WOOD.
21. ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF THE BURLAP FROM THE ROOT BALL. REMOVE ALL SYNTHETIC MATERIALS: BURLAP, STRAPPING CORDAGE, ETC. PRIOR TO BACKFILLING ALL PLANT MATERIALS.
22. NO PLANTING IDENTIFIED AS REACHING A MATURE HEIGHT OF MORE THAN TWENTY FEET (20') SHALL BE PLACED WITHIN A TRANSMISSION POWER LINE RIGHT-OF-WAY OR WITHIN TEN FEET (10') OF AN OVERHEAD UTILITY LINE.
23. TREES WHICH OVERHANG THE PEDESTRIAN CIRCULATION ROUTES AT THE STREETS, SIDEWALKS OR WITHIN OPEN SPACE AREAS SHALL NOT EXTEND GREATER THAN FOUR INCHES INTO THE CIRCULATION ROUTE AT A HEIGHT LESS THAN 80 INCHES ABOVE THE ADJACENT GRADE. ALL TREES SHALL BE LIMBED TO PROVIDE 80 INCHES OF CLEARANCE AT WALKWAYS TO MEET A.D.A AND ANSI Z60.1 REQUIREMENTS.

LANDSCAPE NOTES:

1. CONTRACTOR SHALL FIELD VERIFY LOCATION, SIZE, AND MATERIAL OF EXISTING SITE AND VICINITY FEATURES AND UTILITIES PRIOR TO BEGINNING DEMOLITION AND CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AND LANDSCAPE ARCHITECT OF ANY DISCREPANCIES THAT ARE FOUND BETWEEN THE EXISTING FIELD CONDITIONS AND THE SITE PLANS OR CONSTRUCTION DRAWINGS, WHENEVER THEY ARE FOUND, DURING ALL PHASES OF SITE WORK.
2. THE PRUNING OF SCREENING SHRUBS SHALL ALLOW FOR LATERAL GROWTH OF BRANCHES SO AS TO FORM A HEDGE.
3. ALL LANDSCAPE ISLANDS, BEDS AND LAWNS SHALL BE GRADED FOR POSITIVE DRAINAGE WITH NO LOW SPOTS ALLOWING WATER TO BE TRAPPED.
4. CONTRACTOR SHALL PLANT TREES AND SHRUBS 5 FEET FROM BACK OF CURB WHEN PLANTED PERPENDICULAR FROM PARKING SPACES.
5. WHEEL STOPS ARE REQUIRED IF LANDSCAPING CANNOT BE SET BACK 5 FEET.
6. CONTRACTOR SHALL INSTALL ALL SHRUBS IN MULCHED BEDS.
7. CONTRACTOR SHALL INSTALL ALL TREES IN MINIMUM 4'-6' DIA. MULCHED BEDS.
8. WHERE TREES AND SHRUBS ARE LOCATED TOGETHER IN LANDSCAPE BUFFERS, THE CONTRACTOR SHALL MULCH THE FULL WIDTH AND LENGTH OF THE BUFFER.
9. ALL UN-MULCHED AREAS OF THE SITE SHALL BE SEEDED WITH LAWN GRASS. GRASS SEED SELECTION SHALL BE SUBMITTED TO AND APPROVED BY THE LANDSCAPE ARCHITECT, PRIOR TO PURCHASE AND INSTALLATION.

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Preliminary NOT FOR CONSTRUCTION — 2025-09-16 — 27539 — NORTH CAROLINA — REGISTERED LANDSCAPE ARCHITECT

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
1	CURRITUCK COUNTY SITE PLAN SUBMITTAL #2	9/16/25	
	CURRITUCK COUNTY SITE PLAN SUBMITTAL	7/1/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO ~ CURRITUCK COUNTY ~ NORTH CAROLINA

LANDSCAPE NOTES & DETAILS

DESIGNED BY:	SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	L2.02

Do Not Use for Construction - PRELIMINARY

A:\WORKS\PROJECTS\2022109_CURRITUCK COUNTY PARK PHASE III\CONSTRUCTION\DRAWINGS\L01 LANDSCAPE\2022109_L02 LANDSCAPE NOTES & DETAILS.DWG 9/16/2025 11:53:15 AM SBF

Currituck Coummunity Park

Barco, NC

Lighting System

Pole/Fixture Summary

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	60'	60'	3	TLC-LED-1200	3.51 kW	A
A3-A4	60'	60'	3	TLC-LED-1200	3.51 kW	B
B1-B2	60'	60'	5	TLC-LED-1200	5.85 kW	A
		16'	1	TLC-BT-575	0.57 kW	A
B3-B4	60'	60'	5	TLC-LED-1200	5.85 kW	B
		16'	1	TLC-BT-575	0.57 kW	B
C1	60'	60'	4	TLC-LED-1200	4.68 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
C2	60'	60'	4	TLC-LED-1200	4.68 kW	B
		16'	2	TLC-BT-575	1.15 kW	B
10			**48**		**51.40 kW**	

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Softball 1	25.70 kW	24
B	Softball 2	25.70 kW	24

Fixture Type Summary

Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	40

Single Luminaire Amperage Draw Chart

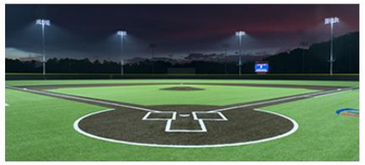
Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination Ave					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Softball 1 (Infield)	Horizontal Illuminance	52.92	38.66	63.89	1.65	1.37	A	24
Softball 1 (Outfield)	Horizontal Illuminance	34.22	22.17	45.08	2.03	1.54	A	24
Softball 2 (Infield)	Horizontal Illuminance	52.92	38.66	63.89	1.65	1.37	B	24
Softball 2 (Outfield)	Horizontal Illuminance	34.22	22.17	45.08	2.03	1.54	B	24

From Hometown to Professional









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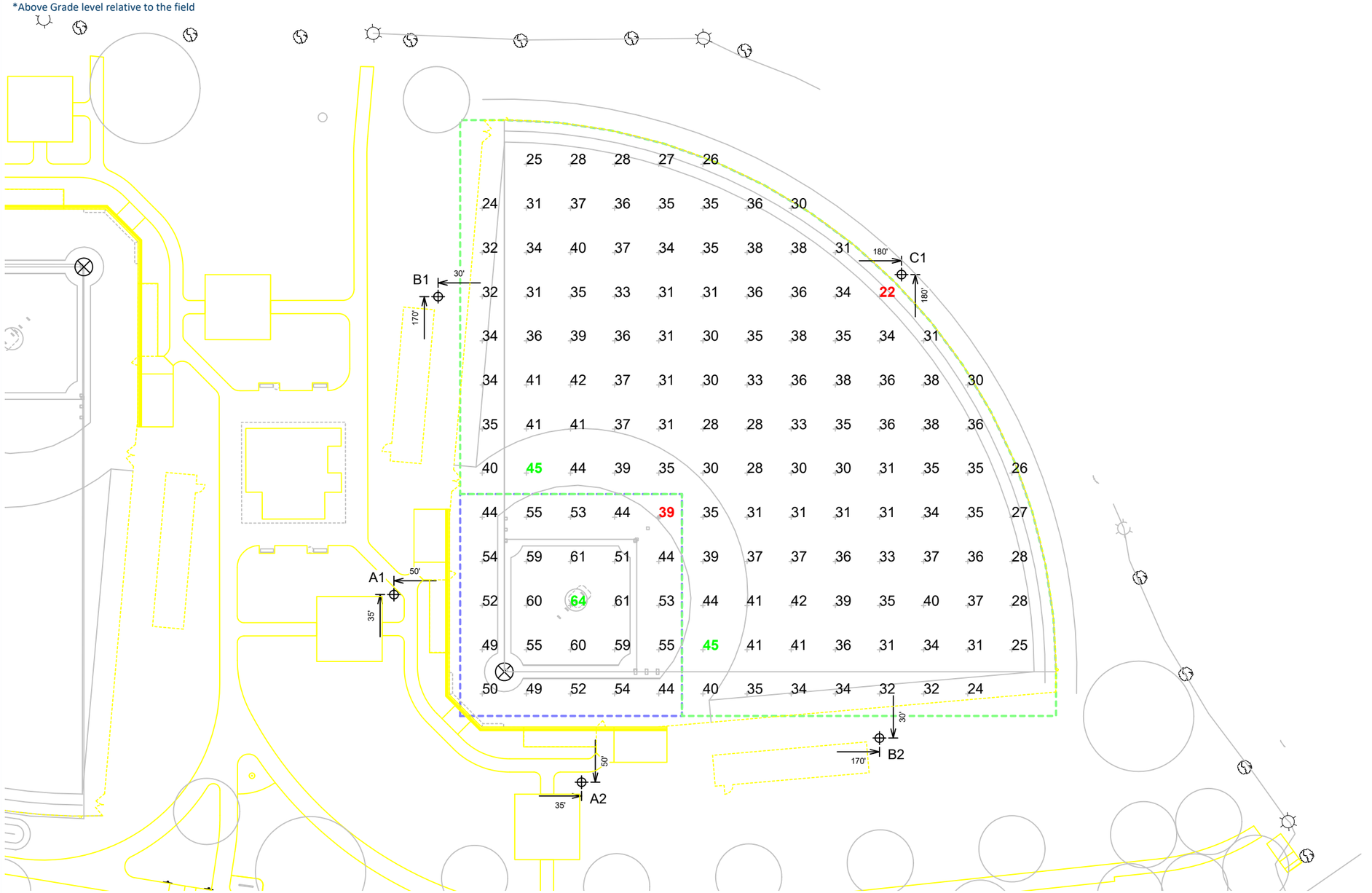
Currituck Coummunity Park

Barco, NC

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	A1-A2	60'	-	60'	TLC-LED-1200	3	3	0
2	B1-B2	60'	-	60'	TLC-LED-1200	5	5	0
				15.5'	TLC-BT-575	1	1	0
1	C1	60'	-	60'	TLC-LED-1200	4	4	0
				15.5'	TLC-BT-575	2	2	0
5	Totals					24	24	0

*Above Grade level relative to the field



Grid Summary

Name:	**Softball 1**
Size:	250'/250'/250' - basepath 60'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES	
	Infield	Outfield
Guaranteed Average:	**50**	**30**
Scan Average:	52.92	34.22
Maximum:	63.89	45.08
Minimum:	38.66	22.17
Avg/Min:	1.37	1.54
Guaranteed Max/Min:	**2**	**2.5**
Max/Min:	1.65	2.03
UG (adjacent pts):	1.25	1.53
CU:	0.68	
No. of Points:	25	119
LUMINAIRE INFORMATION		
Applied Circuits:	A	
No. of Luminaires:	**24**	
Total Load:	25.70 kW	

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 50

0' 50' 100'

ENGINEERED DESIGN By: Joe Nicholson • File #243209A_R1 • 20-Mar-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

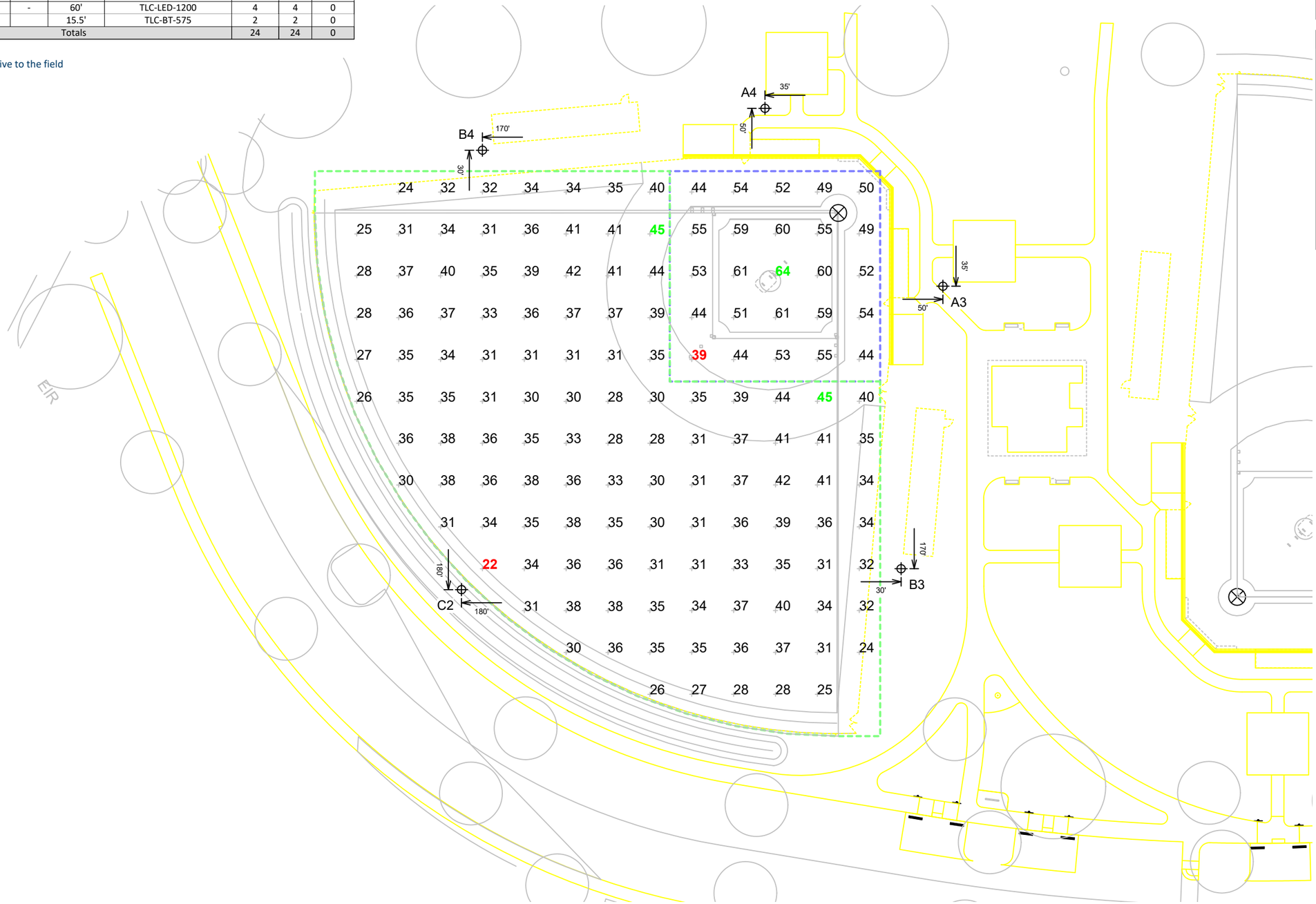
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Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	A3-A4	60'	-	60'	TLC-LED-1200	3	3	0
2	B3-B4	60'	-	60'	TLC-LED-1200	5	5	0
				15.5'	TLC-BT-575	1	1	0
1	C2	60'	-	60'	TLC-LED-1200	4	4	0
				15.5'	TLC-BT-575	2	2	0
5	Totals					24	24	0

*Above Grade level relative to the field



SCALE IN FEET 1 : 50

0' 50' 100'

ENGINEERED DESIGN By: Joe Nicholson • File #243209A_R1 • 20-Mar-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

Currituck Coummunity Park

Barco, NC

Grid Summary

Name:	**Softball 2**
Size:	250'/250'/250' - basepath 60'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Infield	Outfield
Guaranteed Average:	**50**	**30**
Scan Average:	52.92	34.22
Maximum:	63.89	45.08
Minimum:	38.66	22.17
Avg/Min:	1.37	1.54
Guaranteed Max/Min:	**2**	**2.5**
Max/Min:	1.65	2.03
UG (adjacent pts):	1.25	1.53
CU:	0.68	
No. of Points:	25	119
LUMINAIRE INFORMATION		
Applied Circuits:	B	
No. of Luminaires:	**24**	
Total Load:	25.70 kW	

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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Currituck Coummunity Park

Barco, NC

Equipment Layout

INCLUDES:
· Softball 1
· Softball 2

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

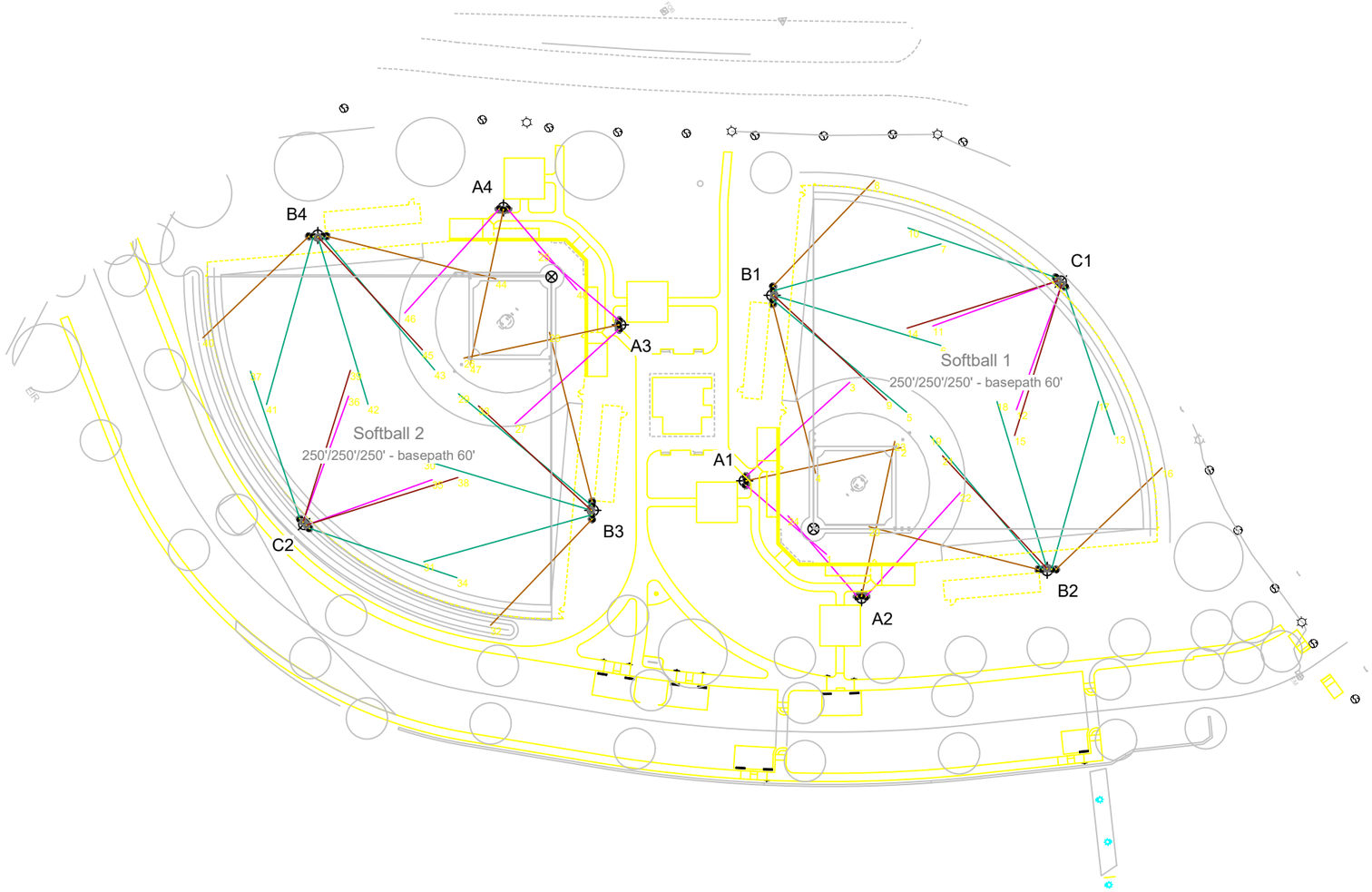
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE
4	A1-A4	60'	-	60'	TLC-LED-1200	3
4	B1-B4	60'	-	60' 15.5'	TLC-LED-1200 TLC-BT-575	5 1
2	C1-C2	60'	-	60' 15.5'	TLC-LED-1200 TLC-BT-575	4 2
10	Totals					48

Single Luminaire Amperage Draw Chart

Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5



SCALE IN FEET 1 : 100

0' 100' 200'

ENGINEERED DESIGN By: Joe Nicholson • File #243209A_R1 • 20-Mar-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

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CURRITUCK COMMUNITY PARK

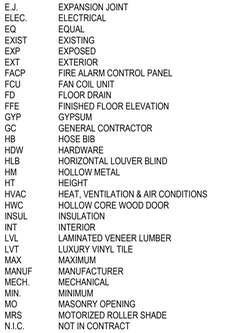
CONCESSIONS / RESTROOMS BUILDING

SHORTCUT ROAD
BARCO, CURRITUCK, NC 27971

GENERAL ABBREVIATIONS:

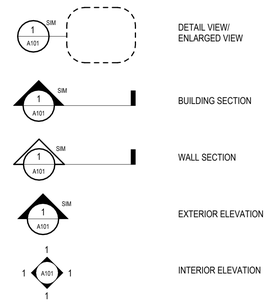
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT OF 1992
ADJ.	ADJACENT
AFF	ABOVE FLOOR FINISH
AFG	ABOVE FINISHED GRADE
ARA	AREA OF RESCUE ASSISTANCE
BD	BOARD
B/W	BETWEEN
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
CAN	CANOPY
CI	CAST IRON
CPT	CARPET
CLG. HT.	CEILING HEIGHT
CL	CENTER LINE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CRS	CHAIN ROLLER SHADE
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DO	DOOR OPENING
DS	DOWNSPOUT
DWG.	DRAWINGS
EA	EACH
EC	ELECTRICAL CONTRACTOR
E.J.	EXPANSION JOINT
ELEC.	ELECTRICAL
EQ	EQUAL
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
GYP	GYPSUM
GC	GENERAL CONTRACTOR
HB	HOSE BIB
HDW	HARDWARE
HLB	HORIZONTAL LOUVER BLIND
HM	HOLLOW METAL
HT	HEIGHT
HVAC	HEAT, VENTILATION & AIR CONDITIONS
HWC	HOLLOW CORE WOOD DOOR
INSUL	INSULATION
INT	INTERIOR
LVL	LAMINATED VENEER LUMBER
LVT	LUXURY VINYL TILE
MAX	MAXIMUM
MANUF	MANUFACTURER
MECH.	MECHANICAL
MIN.	MINIMUM
MO	MASONRY OPENING
MRS	MOTORIZED ROLLER SHADE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.P.C.I.	OWNER PROVIDED CONTRACTOR INSTALLED
OPP.	OPPOSITE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PGB	PAINTED GYPSUM BOARD
PT	PAINT
RB	RUBBER BASE
RD	ROOF DRAIN
REINF	REINFORCED
REQD	REQUIRED
RM	ROOM
RO	ROUGH OPENING
SAB	SOUND ABATING BATTING
SD	SMOKE DETECTOR
SF	SQUARE FEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SS	STAINLESS STEAL
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL DRAWINGS
SWC	SOLID WOOD CORE DOOR
SY	SQUARE YARD
CT	CERAMIC TILE
TERM	TERMINATION/TERMINATE
THRESH	THRESHOLD
T&G	TONGUE AND GROOVE
TO	TOP OF
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PLATE
TOS	TOP OF STEEL
TOW	TOP OF WALL
TS	TRANSITION STRIP
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAR	VARIES
VCT	VINYL COMPOSITE TILE
WC	WATER CLOSET
WB	WOOD BASE
WD	WOOD
W/	WITH
W/O	WITHOUT

GENERAL ANNOTATION SYMBOLS:

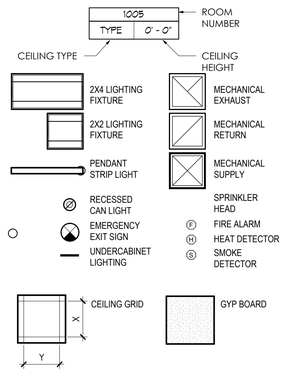


GENERAL SYMBOLS:

VIEW TYPE SYMBOLS:

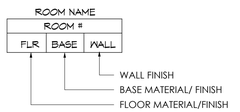


CEILING SYMBOLS:



FINISH SYMBOLS

ROOM FINISH TAG



FLOOR MATERIALS/FINISH LEGEND

SC	EXPOSED CONCRETE, SEALED
EP	EPOXY FLOOR COATING

BASE MATERIALS/FINISH LEGEND

RB	RUBBER BASE

WALL MATERIALS/FINISH LEGEND

PT	PAINTED
PGB	PAINTED GYPSUM BOARD

CEILING MATERIALS/FINISH LEGEND

ACT	ACOUSTICAL PANEL CEILING
PGB	PAINTED GYPSUM BOARD
EX	EXPOSED CONSTRUCTION, UNPAINTED
EP	EXPOSED CONSTRUCTION, PAINTED
VAR	VARIES, HEIGHT

*NOTE REGARDING ALL FINISH TAGS - IF DESIGNATION IS FOLLOWED BY NUMERAL, DENOTES SPECIFIC MATERIAL TYPE WITHIN CATEGORY (REFER TO FINISH SCHEDULE)

GENERAL NOTES:

1. CONTRACTOR REQUIRED TO MAKE A SITE VISIT PRIOR TO SUBMITTING BID. UPON SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THEIR FAMILIARITY WITH THE PROJECT SITE AND EXISTING CONDITIONS.
2. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. IN CASE OF CONFLICT, CONSULT THE ARCHITECT FOR DIRECTION.
3. ALL WORK TO COMPLY WITH CURRENT APPLICABLE LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE NORTH CAROLINA BUILDING CODE, THE NORTH CAROLINA EXISTING BUILDING CODE, AND ANSI A117.1, ETC. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SHEETS FOR ADDITIONAL APPLICABLE CODES FOR THEIR RESPECTIVE SCOPES OF WORK.
4. IF CONTRACTOR REQUESTS PRESENCE OF ARCHITECT ON SITE, CONTRACTOR TO GIVE ARCHITECT MINIMUM OF 48 HOURS NOTICE.
5. INTERIOR PARTITIONS ARE DIMENSIONED FROM FACE OF STUD TO FACE OF STUD, UNLESS NOTED OTHERWISE. MAINTAIN DIMENSIONS MARKED "CLEAR", ALLOW FOR THICKNESS OF FINISHED WALL MATERIAL WHEN LAYING OUT WALLS NOTED TO BE "CLEAR". DOT AT DIMENSION TICK INDICATES MEASUREMENT TO FACE OF FINISHED SURFACE. PLAN NORTH/SOUTH DIMENSION STRINGS ARE ON THE PLAN NORTH FACE OF INTERIOR STUD. PLAN EAST/WEST DIMENSION STRINGS ARE PICKED FROM THE PLAN EAST FACE OF INTERIOR STUD. ALL INTERIOR DIMENSION STRINGS AT EXTERIOR WALLS PICK FROM INSIDE FACE OF STUD OR WALL U.N.O.
6. CONTRACTOR RESPONSIBLE FOR FIELD VERIFYING ALL UTILITIES AND UNDERGROUND ITEMS AS REQUIRED FOR THIS SCOPE OF WORK. CONDITIONS THAT PROHIBIT THE WORK FROM BEING PERFORMED AS SHOWN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR EVALUATION BEFORE CONTINUING WITH WORK.
7. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND SIZES PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FROM THE DRAWINGS SHALL BE CONVEYED TO THE ARCHITECT FOR EVALUATION PRIOR TO CONTINUING WORK.
8. CONTRACTOR RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AS WELL AS COORDINATING AND SCHEDULING ALL REQUIRED INSPECTIONS. ARCHITECT AND OWNER TO BE NOTIFIED OF SCHEDULED INSPECTION WITH 3 DAYS' NOTICE SO THEY CAN WITNESS THE INSPECTION IF DESIRED.
9. CONTRACTOR RESPONSIBLE FOR COORDINATING ALL SCHEDULES WITH OWNER AND ARCHITECT PRIOR TO START OF CONSTRUCTION.
10. SEE DOOR AND WINDOW SCHEDULES FOR ALL DOOR AND WINDOW SIZES. CONTRACTOR RESPONSIBLE TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO FABRICATION AND INSTALLATION.
11. CLEAN ALL SPACES WHERE DEMOLITION/CONSTRUCTION HAS OCCURRED AT THE CLOSE OF EACH DAY. MAINTAINING A CLEAN AND SAFE SITE IS THE RESPONSIBILITY OF THE GC.
12. COORDINATE ALL PLUMBING, MECHANICAL, ELECTRICAL WORK. REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR EVALUATION PRIOR TO CONTINUING WORK.
13. PROVIDE SOLID BLOCKING FOR ALL WOOD CASINGS, TRIM, CASEWORK, AND ANY OTHER WALL-MOUNTED ITEM OR ACCESSORY. ALL BLOCKING TO BE FIRE RETARDANT TREATED WOOD.
14. DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER IMMEDIATELY. IF REQUIRED, THE CONTRACTOR SHALL PRICE/PROVIDE THE MORE EXPENSIVE OPTION.
15. ACCESS PANELS SHALL BE LOCATED AS REQUIRED TO ACCESS ITEMS ABOVE CEILING OR WITHIN WALLS. A SHOP DRAWING SHALL BE SUBMITTED TO ARCHITECT AND OWNER FOR REVIEW AND APPROVAL SHOWING LOCATION OF ALL ACCESS PANELS.
16. ALL MEASUREMENTS AND DIMENSIONS TO EXISTING LEVELS/SURFACES ARE +/- AND SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
17. CONTRACTOR TAKE NECESSARY MEASURES TO PROTECT EXISTING FINISHES TO REMAIN FROM DAMAGE. REPAIR/REFINISH/REPLACE ALL MATERIALS DAMAGED BY WORK.
18. MATCH EXISTING IMPLIES MATERIAL, TYPE, QUALITY, COLOR, PATTERN, TEXTURE, ETC.
19. UNTAGGED DOORS INDICATE NO WORK.
20. THE FOLLOWING RESTROOM ACCESSORIES ARE OWNER-PROVIDED, CONTRACTOR INSTALLED: SOAP DISPENSERS, TOILET PAPER DISPENCERS, AND ROOM ODOR CONTROL. ROOM ODOR CONTROL TO BE INSTALLED IN LOCATION PER OWNER'S DIRECTION.

GENERAL FINISH NOTES:

1. PROVIDE AND INSTALL TRANSITION STRIPS/THRESHOLDS AS SCHEDULED AT FLOORING FINISH CHANGES AS NOTES IN FINISH PLAN.
2. PROVIDE AND INSTALL SEALANT MATCHING COLOR OF GRID AT JOINT BETWEEN ACT GRID AND WALL. FINAL WALL PAINT CUT IN AFTER SEALANT INSTALLATION IS REQUIRED.
3. IF A PAINT PRE-INSTALL MEETING IS REQUESTED, ARCHITECT SHALL WALK WITH PAINTING CONTRACTOR AND GC TO REVIEW PAINT COLOR LOCATIONS PRIOR TO START OF PAINT.

GENERAL RCP NOTES:

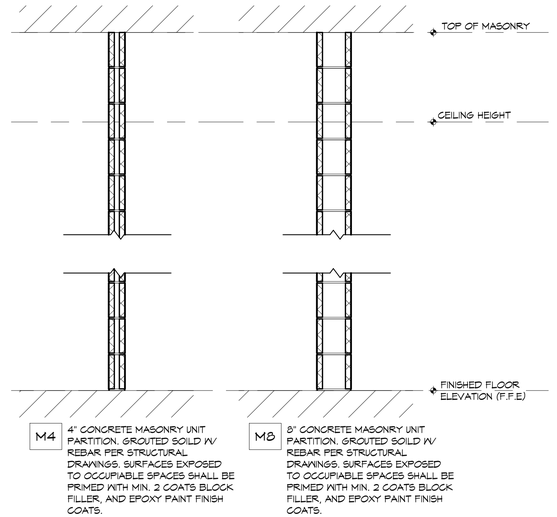
1. FOR AREAS OF THE PROJECT WHERE CEILING LOADS DO NOT EXCEED 5 POUNDS PER SQUARE FOOT AND WHERE PARTITIONS ARE NOT CONNECTED TO THE CEILING SYSTEM, THE FOLLOWING MAY BE UTILIZED: 1) ALLOW FOR LATERAL MOVEMENT OF THE SYSTEM. ATTACH MAIN RUNNERS AND CROSS RUNNERS AT TWO ADJACENT WALLS; MAINTAIN CLEARANCE BETWEEN THE WALL AND THE RUNNERS AT THE OTHER TWO WALLS. IF MANUFACTURER RECOMMENDATIONS CONFLICT, INFORM THE ARCHITECT IMMEDIATELY PRIOR TO CONTINUING WORK FOR FURTHER DIRECTION.
2. PROVIDE VERTICAL SUPPORT AS REQUIRED IN BUILDING CODES. IN ADDITION, VERTICALLY SUPPORT ENDS OF RUNNERS WITHIN 8" OF DISCONTINUITIES SUCH AS MAY OCCUR WHERE THE CEILING IS INTERRUPTED BY A WALL, OR WHERE A FLOATING CEILING TERMINATES.
3. SUPPORT LIGHT FIXTURES AND AIR DIFFUSERS/GRILLES DIRECTLY BY WIRES TO THE STRUCTURE ABOVE.
4. LOCATE REGISTERS AND LIGHTING FIXTURES WITHIN GRID LINES. CENTER SPRINKLER HEADS, SPEAKERS, RECESSED FIXTURES, AND ALL OTHER CEILING ELEMENTS IN ACOUSTICAL TILES, UNLESS OTHERWISE NOTED.
5. FINISH HVAC DIFFUSERS, DRAPERY/SHADE POCKETS, SPEAKER GRILLES AND OTHER ITEMS LOCATED IN CEILING TO MATCH ADJACENT FINISH, UNLESS OTHERWISE NOTED.
6. LOCATION OF ELECTRICAL, MECHANICAL, AND PLUMBING FIXTURES INDICATED ON ARCHITECTURAL BACKGROUNDS ARE FOR LOCATIONS PURPOSES ONLY. REFER TO ENGINEERING DRAWINGS FOR FINAL TYPES AND QUANTITIES. IF A DISCREPANCY EXISTS, INFORM THE ARCHITECT FOR CLEAR DIRECTION.
7. UNLESS NOTED OTHERWISE, ALL EXPOSED CONDUIT AND PIPING PERMITTED TO BE PAINTED PER THE NORTH CAROLINA STATE BUILDING CODE SHALL BE PAINTED. REFER TO FINISH SCHEDULE FOR PAINT SELECTIONS. CONFER WITH OWNER TO CONFIRM STANDARD PAINT COLORS AS WELL.
8. UNLESS NOTED OTHERWISE, ALL ELECTRICAL LIGHTING TO BE CENTERED IN THE SPACE.

GENERAL FIRE PREVENTION NOTES:

1. INTERIOR WALL AND CEILING FINISHES IN STAIRWAYS, EXIT PASSAGEWAYS, AND CORRIDORS ARE SPECIFIED TO BE CLASS A (FLAME SPREAD 0-25, SMOKE DEVELOPMENT 450 OR LESS) OR BETTER, UNLESS NOTED OTHERWISE.
2. INTERIOR WALL AND CEILING FINISHES IN ROOMS AND OTHER ENCLOSED SPACES ARE SPECIFIED TO BE CLASS B (FLAME SPREAD INDEX 26-75; SMOKE-DEVELOPED INDEX LESS THAN 450) OR BETTER, UNLESS OTHERWISE NOTED.
3. INTERIOR TRIM IS SPECIFIED TO BE CLASS 3 (FLAME SPREAD 76 TO 200, SMOKE DEVELOPMENT OF 450 OR LESS) OR BETTER.
4. THIS PROJECT DOES NOT INCLUDE STORAGE, DISPENSING OR USE OF ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, FLAMMABLE GAS, OR HAZARDOUS SUBSTANCES.
5. ALL WOOD BLOCKING, CLEATS, GROUNDS, SHEATHING AND OTHER MISC. CARPENTRY ITEMS SHALL BE FIRE RETARDANT TREATED.
6. FLOOR COVERING FOR CORRIDORS, LOBBIES, STAIRS, OTHER EXIT PATHS OR EXIT AREAS ARE SPECIFIED TO BE CLASS B OR BETTER.

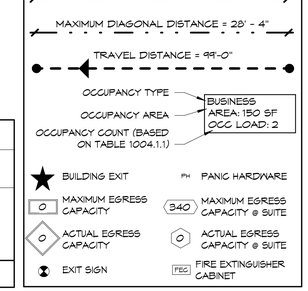
GENERAL POWER & TELECOM NOTES:

1. REFERENCE ELECTRICAL SHEETS FOR ALL STANDARDS AND DESIGN INFORMATION.
2. INDICATED DIMENSIONS ARE TO THE CENTER LINE OF OUTLETS OR SWITCHES, OR CLUSTERS OF OUTLETS OR SWITCHES, UNLESS NOTED OTHERWISE.
3. PROVIDE MATCHING COVER PLATES AND DEVICES, UNLESS NOTED OTHERWISE.
4. GC TO COORDINATE FINAL LAYOUT OF ELECTRICAL AND DATA OUTLETS WITH FINAL SELECTION OF FURNITURE AND CASEWORK PRIOR TO INSTALLATION OF FLOOR BOXES AND RECEPTACLES U.N.O.
5. GC RESPONSIBLE FOR COORDINATING AND SCHEDULING INSPECTIONS BY THE STATE ELECTRICAL INSPECTOR PRIOR TO RE-ENERGIZING CIRCUITS AFTER ELECTRICAL ITEMS ARE COMPLETE.

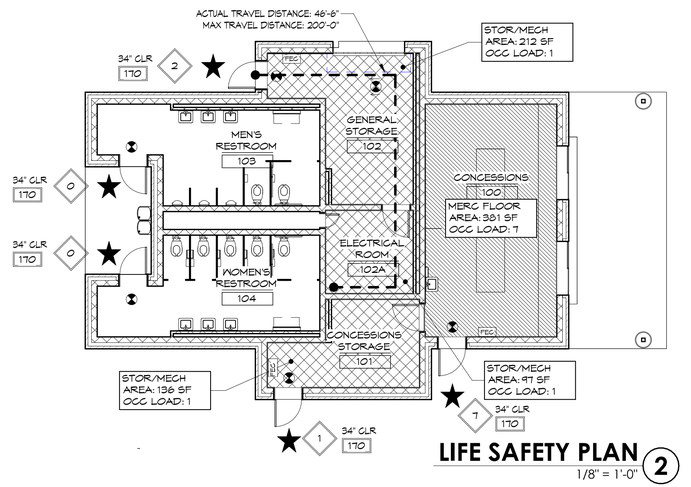


INTERIOR PARTITION SCHEDULE 1

3/4" = 1'-0"



OCCUPANCY SUMMARY	
AREA PER OCCUPANT (TABLE 1004.1)	CALC OCCUPANT LOAD
ACCESSORY STORAGE/MECHANICAL (1/300)	3
MERCANTILE - FLOOR (1/60)	7
TOTAL OCCUPANCY	10



LIFE SAFETY PLAN 2

1/8" = 1'-0"

INTREPID ARCHITECTURE
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CURRITUCK COMMUNITY PARK - PHASE III
CONCESSIONS / RESTROOM BUILDING
SHORTCUT ROAD
BARCO, CURRITUCK COUNTY, NC 27971

DANIELLE J. HOFF — REGISTERED ARCHITECT — 15158 — NORTH CAROLINA — GREENVILLE, NC — 7/23/2025

INTREPID Architecture PA — registered Architectural Corporation — 53628 — North Carolina — GREENVILLE, NC

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REVISIONS:

#	DESC:	DATE

DRAWN BY: DJH
PROJECT #: 22008
ISSUE DATE: 07/23/2025

PHASE:
CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER

COVER SHEET, SYMBOLS, ABBREVIATIONS, GENERAL NOTES, LIFE SAFETY PLAN, & INTERIOR PARTITION SCHEDULE

G0.00

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2 - FAMILY DWELLINGS AND TOWNHOUSES)
(REPRODUCE THE FOLLOWING DATA ON THE BUILDING PLAN SHEET 1 OR 2)

NAME OF PROJECT: CURRITUCK COMMUNITY PARK - PHASE III
ADDRESS: SHORTCUT ROAD, BARCO, CURRITUCK COUNTY, NC ZIP CODE: 27971
PROPOSED USE: MERCANTILE
OWNER OR AUTHORIZED AGENT: CURRITUCK COUNTY, NC PHONE #: E-MAIL:
OWNED BY: ■ CITY/COUNTY ☐ PRIVATE ☐ STATE
CODE ENFORCEMENT JURISDICTION: ☐ CITY: ■ COUNTY: ☐ STATE:

LEAD DESIGN PROFESSIONAL

DESIGNER	FIRM	NAME	LICENSE#	TELEPHONE	E-Mail
ARCHITECTURAL:	INTREPID ARCHITECTURE, PA	DANIELLE J HOFF, AIA	NC 15158	252-270-5330	DANIH@INTREPIDARCHITECTURE.COM
CIVIL:	RIVERS & ASSOCIATES				
ELECTRICAL:	DIBBLE & PLEDGER, PA	RONALD E. PLEDGER, PE	NC 11654	252-946-3320	RPLEDGER@DIBBLEANDPLEDGER.COM
FIRE ALARM:	N/A				
PLUMBING:	DIBBLE & PLEDGER, PA	RONALD E. PLEDGER, PE	NC 11654	252-946-3320	RPLEDGER@DIBBLEANDPLEDGER.COM
MECHANICAL:	DIBBLE & PLEDGER, PA	RONALD E. PLEDGER, PE	NC 11654	252-946-3320	RPLEDGER@DIBBLEANDPLEDGER.COM
SPRINKLER/STANDPIPE:	N/A				
STRUCTURAL:	NRW ENGINEERING	PEYTON D MULE, PE	NC C-1393	757-474-0612	PDM@NRWENGINEERING.COM
RETAINING WALLS >5' HIGH:	N/A				
OTHER:	N/A				

"OTHER" should include firms and individuals such as truss, precast, pre-engineering, interior designers, etc.)

2018 NC BUILDING CODE:
■ NEW BUILDING ☐ 1ST TIME INTERIOR COMPLETION ☐ ADDITION ☐ RENOVATION
☐ SHELL/CORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS
☐ PHASED CONSTRUCTION - SHELL/CORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

2018 NC EXISTING BUILDING CODE: EXISTING:
☐ PRESCRIPTIVE ☐ REPAIR ☐ CHAPTER 14
☐ LEVEL I ☐ LEVEL II ☐ LEVEL III
☐ HISTORIC PROPERTY ☐ CHANGE OF USE

CONSTRUCTED *(date)* _____ **CURRENT OCCUPANCY(S)** *(Ch. 3)* _____
RENOVATED *(date)* _____ **PROPOSED OCCUPANCY(S)** *(Ch. 3)* MERCANTILE

RISK FACTOR *(Table 1604.5)*: **Current:** ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA:
CONSTRUCTION TYPE: *(Check all that apply)* ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ■ V-B
SPRINKLERS: ■ NO ☐ PARTIAL ☐ YES ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
STANDPIPES: ■ NO ☐ YES CLASS: ☐ I ☐ II ☐ III ☐ WET ☐ DRY MANUAL
FIRE DISTRICT: ■ NO ☐ YES FLOOD HAZARD AREA: ☐ NO ☐ YES
SPECIAL INSPECTIONS REQ'D: ■ NO ☐ YES CONTACT THE LOCAL INSPECTION JURISDICTION FOR ADDITIONAL PROCEDURES AND REQUIREMENTS

GROSS BUILDING AREA TABLE:

FLOOR	EXISTING (SQ. FT.)	NEW AREA (SQ. FT.)	SUB TOTAL
1ST FLOOR:	0	1683	1683
TOTAL:			1683

ALLOWABLE AREA
PRIMARY OCCUPANCY: *(SELECT ONE)*
ASSEMBLY ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
BUSINESS ☐
EDUCATIONAL ☐
FACTORY ☐ F-1 Moderate ☐ F-2 Low
HAZARDOUS ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
INSTITUTIONAL ☐ I-1 CONDITION ☐ 1 ☐ 2
☐ I-2 CONDITION ☐ 1 ☐ 2
☐ I-3 CONDITION ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4
MERCANTILE ■
RESIDENTIAL ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
STORAGE ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
UTILITY & MISC. ☐

ACCESSORY OCCUPANCY CLASSIFICATION(S): NONE
INCIDENTAL USES *(Table 509)*: NONE
SPECIAL USES (Chapter 4 - List Code Sections): NONE
SPECIAL PROVISIONS: (Chapter 5 - List Code Sections): NONE
MIXED OCCUPANCY: ☐ YES ■ NO SEPARATION: HR. EXCEPTION:

☐ NON-SEPARATED USE (508.3) - THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.

☐ SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY. THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

ACTUAL AREA OF OCCUPANCY A / ALLOWABLE AREA OF OCCUPANCY A	+	ACTUAL AREA OF OCCUPANCY B / ALLOWABLE AREA OF OCCUPANCY B	=	< 1.00	=	< 1.00
	+		+		=	< 1.00

STORY NUMBER	DESCRIPTION AND USE	(A) BUILDING AREA PER STORY (ACTUAL)	(B) TABLE 506.2 * AREA	(C) AREA FOR FRONTAGE INCREASE *,#	(D) ALLOWABLE AREA PER * STORY OR UNLIMITED
1	MERCANTILE	1683	9000	6750	15750

* FRONTAGE AREA INCREASE FROM SECTION 506.3 ARE COMPUTED THUS:
A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = 209 (F)
B. TOTAL BUILDING PERIMETER = 209 (P)
C. RATIO (F/P)= 1 (F/P)
D. W= MINIMUM WIDTH OF PUBLIC WAY= 30 (W)
E. PERCENT OF FRONTAGE INCREASE I = 100 (F/P-0.25) x W/30 = 73(%)
UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.
* MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (506.2).
* MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH 406.5.4.
* FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT:

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE *
BUILDING HEIGHT IN FEET (Table 504.3) *	40	16'-8"	
BUILDING HEIGHT IN STORIES (Table 504.4) *	1	1	

* PROVIDE CODE REFERENCE IF THE "SHOWN ON PLANS" QUANTITY IS NOT BASED ON TABLE 504.3 OR 504.4
THE MAXIMUM HEIGHT OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH TABLE 412.3.1.
THE MAXIMUM HEIGHT OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.5.

FIRE PROTECTION REQUIREMENTS:

Notes:

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/____") REDUCTION	DETAIL # & SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES		0	0	-	-	-	-
BEARING WALLS		0	0	-	-	-	-
EXTERIOR							
NORTH	>30'	0	0	-	-	-	-
EAST	>30'	0	0	-	-	-	-
WEST	>30'	0	0	-	-	-	-
SOUTH	>30'	0	0	-	-	-	-
INTERIOR		0	0	-	-	-	-
NON-BEARING WALLS & PARTITIONS EXTERIOR WALLS							
NORTH	>30'	0	0	-	-	-	-
EAST	>30'	0	0	-	-	-	-
WEST	>30'	0	0	-	-	-	-
SOUTH	>30'	0	0	-	-	-	-
INTERIOR WALLS AND PARTITIONS		0	0	-	-	-	-
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		0	0	-	-	-	-
FLOOR CEILING ASSEMBLY		0	0	-	-	-	-
COLUMNS SUPPORTING FLOORS		N/A					
ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS		0	0	-	-	-	-
ROOF CEILING ASSEMBLY		0	0	-	-	-	-
COLUMNS SUPPORTING ROOFS		0	0	-	-	-	-
SHAFT ENCLOSURES - EXIT		N/A					
SHAFT ENCLOSURES - OTHER		N/A					
CORRIDOR SEPARATION (EGESS)		0	0	-	-	-	-
OCCUPANCY/FIRE BARRIER SEPARATION		N/A					
PARTY/FIRE WALL SEPARATION		N/A					
SMOKE BARRIER SEPARATION		N/A					
SMOKE PARTITION		N/A					
RADIO AMPLIFICATION SYSTEM		N/A					
TENANT/DWELLING UNIT/SLEEPING UNIT SEPARATION		N/A					
INCIDENTAL USE SEPARATION		N/A					

* INDICATE SECTION NUMBER PERMITTING REDUCTION

PERCENTAGE OF WALL OPENING CALCULATIONS:

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
>30'	UNPROTECTED, UP	NO LIMIT	N/A

LIFE SAFETY SYSTEM REQUIREMENTS:

EMERGENCY LIGHTING: ☐ NO ■ YES
EXIT SIGNS: ☐ NO ■ YES
FIRE ALARM: ■ NO ☐ YES
SMOKE DETECTION SYSTEMS: ■ NO ☐ YES ☐ Partial
PANIC HARDWARE: ■ NO ☐ YES
CARBON MONOXIDE DETECTION: ■ NO ☐ YES

LIFE SAFETY PLAN REQUIREMENTS:

LIFE SAFETY PLAN SHEET#: G0.00

☐ Fire and/or smoke rated wall locations (Chapter 7) N/A
■ Assumed and real property line locations (if not on the site plan) SEE A5.00
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8) N/A
■ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
■ Occupant loads for each area
■ Exit access travel distances (1017)
☐ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1)) N/A
☐ Dead-end lengths (1020.4) N/A
■ Clear exit widths for each exit door
■ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3) Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation N/A
☐ Location of doors with panic hardware (1010.1.10) N/A
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7) N/A
☐ Location of doors with electromagnetic egress locks (1010.1.9.9) N/A
☐ Location of doors equipped with hold-open devices N/A
☐ Location of emergency escape windows (1030) N/A
☐ The square footage of each fire area (202) N/A
☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) N/A
☐ Note any code exceptions or table notes that may have been utilized regarding the items above N/A
■ Actual occupant load for each exit door

ACCESSIBLE DWELLING UNITS *(SECTION 1107)*:

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL # ACCESSIBLE UNITS PROVIDED
N/A							

ACCESSIBLE PARKING *(Section 1106)*: SEE CIVIL PLANS

LOT OR PARKING AREA	TOTAL NUMBER OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # OF ACCESSIBLE SPACES PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132' ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL:						

PLUMBING FIXTURE REQUIREMENTS *(SECTION 2902.1)*:

USE: A-5 (OUTDOOR SPORTING EVENTS)		WATER CLOSETS MALE	WATER CLOSETS FEMALE	WATER CLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS/ TUBS	DRINKING FOUNTAINS	SERVICE SINKS
SPACE	CALC. FACTOR	1/125	1/100			1/250	1/250		-	1/1000	-
	REQUIRED	3	5			2	2			1	
	PROVIDED	2	5		3	2	2			2	

* Urinals are provided as substitute for men's room Water Closets. Urinal substitution percentage meets NCBC Plumbing Code section 419.2 substitution requirements.

OCCUPANTS EXPECTED FROM FIELDS (800) + OCCUPANTS IN BUILDING (10) = 810 TOTAL OCCUPANTS

SPECIAL APPROVALS: SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, ETC., DESCRIBE BELOW)
NONE

ENERGY SUMMARY:

ENERGY REQUIREMENTS:
THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST FOR THE STANDARD REFERENCE DESIGN VS ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: ☐ NO ☐ YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE) ■ N/A
EXEMPT BUILDING: ■ NO ☐ YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)
CLIMATE ZONE: ■ 3A ☐ 4A ☐ 5A
METHOD OF COMPLIANCE: ENERGY CODE ☐ PERFORMANCE ■ PRESCRIPTIVE
ASHRAE 90.1 ☐ PERFORMANCE ☐ PRESCRIPTIVE IF "OTHER" SPECIFY SOURCE HERE

THERMAL ENVELOPE

ROOF/CEILING ASSEMBLY (EACH ASSEMBLY)
DESCRIPTION OF ASSEMBLY: STANDING SEAM METAL ROOF, VAPOR BARRIER, 1/2" COVERBOARD, 5" RIGID INSULATION, METAL DECKING
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION: R-25 CI (R-25 CI REQ'D)
SKYLIGHT IN EACH ASSEMBLY N/A
DESCRIPTION OF ASSEMBLY:
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION:
SKYLIGHT IN EACH ASSEMBLY
DESCRIPTION OF ASSEMBLY:
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION:
SKYLIGHT IN EACH ASSEMBLY

WALLS ABOVE GRADE (EACH ASSEMBLY)
DESCRIPTION OF ASSEMBLY: 8" CMU WALL, VAPOR PERMEABLE AIR BARRIER, 2" RIGID INSULATION, AIR SPACE, BRICK VENEER
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION: R-7.6 CI (R-7.6 CI REQ'D)
OPENING (windows or doors with glazing)
u-value of assembly: U-0.70 (OPAQUE), U-0.45 (WINDOWS)
Solar heat gain coefficient: 0.40
projection factor: >0.5
Door R-Values:
DESCRIPTION OF ASSEMBLY:
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION:

WALLS BELOW GRADE (EACH ASSEMBLY)
NOT APPLICABLE

FLOORS OVER UNCONDITIONED SPACE (EACH ASSEMBLY)
NOT APPLICABLE

FLOORS SLAB ON GRADE
DESCRIPTION OF ASSEMBLY: 4" REINFORCED CONCRETE SLAB ON GRADE WITH 10 MIL VAPOR BARRIER ON MIN. 4" POROUS FILL
U-VALUE OF TOTAL ASSEMBLY: NOT REQUIRED
R-VALUE OF TOTAL INSULATION: NOT REQUIRED
Horizontal / vertical requirement: NOT REQUIRED
Slab heated? (Y/N) NO

STRUCTURAL DESIGN *(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)*

DESIGN LOADS:
SEE STRUCTURAL DRAWINGS
IMPORTANCE FACTORS: SNOW (Is) SEISMIC (Ie)
LIVE LOADS: ROOF psf MEZZANINE psf FLOOR psf
GROUND SNOW LOAD: psf
WIND LOAD: ULTIMATE WIND SPEED mph (ASCE-7) EXPOSURE CATEGORY

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☐ C ☐ D
PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:
RISK CATEGORY (TABLE 1604.5) ☐ I ☐ II ☐ III ☐ IV
SPECTRAL RESPONSE ACCELERATION: Sds= Sg Sd1= Sg
SITE CLASSIFICATION: (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ FIELD TEST ☐ PRESUMPTIVE ☐ HISTORICAL DATA
BASIC STRUCTURAL SYSTEM ☐ BEARING WALL ☐ DUAL WITH SPECIAL MOMENT FRAME ☐ BUILDING FRAME ☐ DUAL WITH INTERMEDIATE R/C OR SPECIAL STEEL ☐ MOMENT FRAME ☐ INVERTED PENDULUM
ANALYSIS PROCEDURE: ☐ SIMPLIFIED ☐ EQUIVALENT LATERAL FORCE ☐ DYNAMIC
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? ☐ YES ☐ NO

LATERAL DESIGN CONTROL: EARTHQUAKE ☐ WIND ☐

SOIL BEARING CAPACITIES:
FIELD TEST (PROVIDE COPY OF TEST REPORT) psf
PRESUMPTIVE BEARING CAPACITY psf
PILE SIZE, TYPE, AND CAPACITY psf

MECHANICAL SUMMARY (SEE MECHANICAL SHEETS)

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
SEE MECHANICAL DRAWINGS
THERMAL ZONE
WINTER DRY BULB:
SUMMER DRY BULB:
INTERIOR DESIGN CONDITIONS
WINTER DRY BULB:
SUMMER DRY BULB:
RELATIVE HUMIDITY:
BUILDING HEAT LOAD:
BUILDING COOLING LOAD:

MECHANICAL SPACING CONDITIONING SYSTEM
UNITARY
description of unit
heating efficiency
cooling efficiency
size category of unit
HEAT PUMP, If oversized, state reason.:
CHILLER, If oversized, state reason.:
LIST EQUIPMENT EFFICIENCIES

ELECTRICAL SUMMARY (SEE ELECTRICAL SHEETS)

ELECTRICAL SYSTEM AND EQUIPMENT
SEE ELECTRICAL DRAWINGS
METHOD OF COMPLIANCE:
ENERGY CODE ☐ PERFORMANCE ☐ PRESCRIPTIVE
ASHRAE 90.1 ☐ PERFORMANCE ☐ PRESCRIPTIVE
LIGHTING SCHEDULE (EACH FIXTURE TYPE)
LAMP TYPE REQUIRED IN FIXTURE
NUMBER OF LAMPS IN FIXTURE
BALLAST TYPE USED IN THE FIXTURE
NUMBER OF BALLASTS IN FIXTURE
TOTAL WATTAGE PER FIXTURE
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED (WHOLE BUILDING OR SPACE BY SPACE)
TOTAL EXTERIOR WATTAGE SPECIFIED VS ALLOWED
ADDITIONAL PRESCRIPTIVE COMPLIANCE
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient Mechanical Equipment
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Supply of Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

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BARCO, CURRITUCK COUNTY, NC 27971

DANIELLE J. HOFF REGISTERED ARCHITECT 15158 NORTH CAROLINA GREENVILLE, NC 7/23/2025

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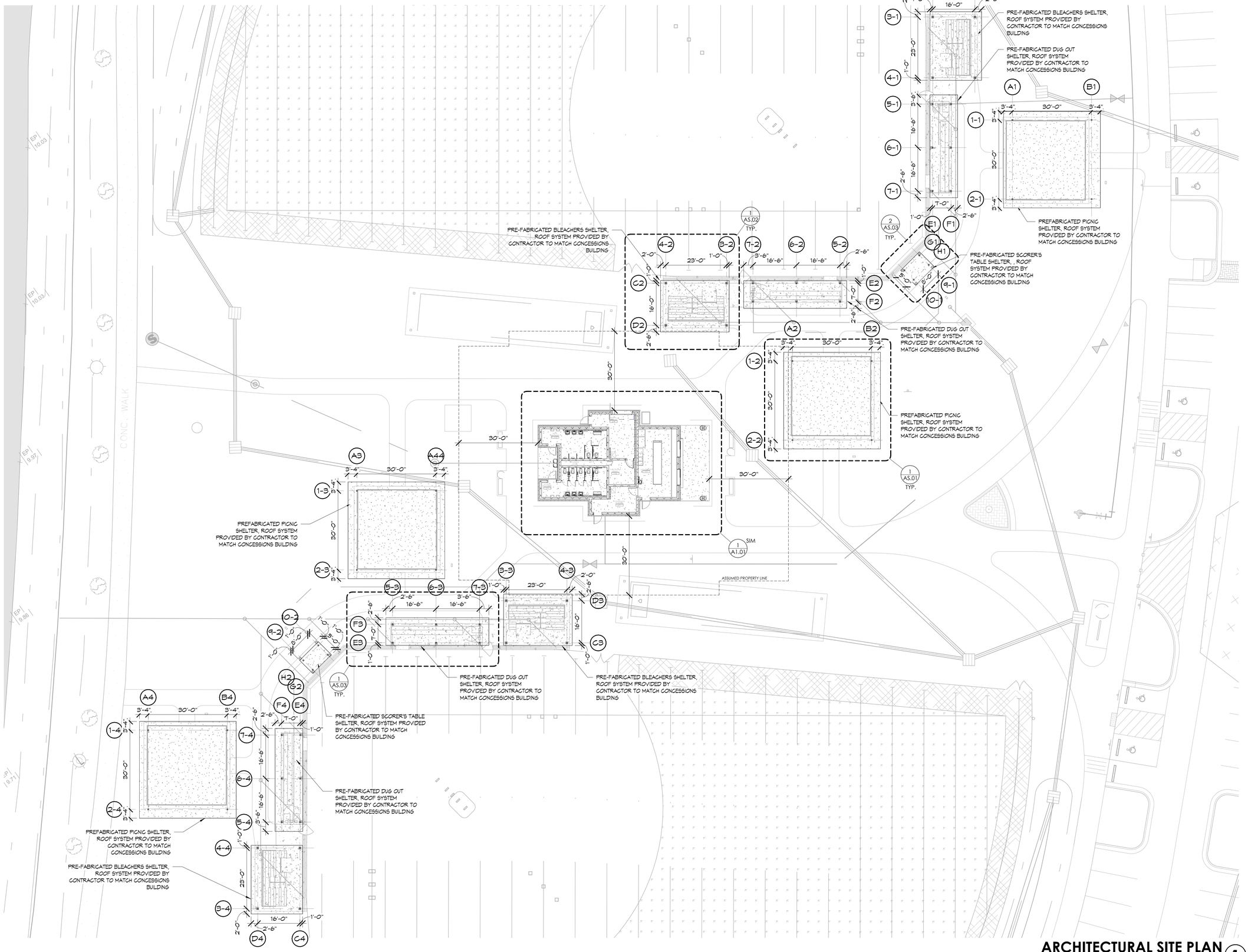
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PROJECT #: 22008
ISSUE DATE: 07/23/2025
PHASE:
CONSTRUCTION DOCUMENTS
SHEET NAME & NUMBER
APPENDIX B

G1.01



ARCHITECTURAL SITE PLAN

1/16" = 1'-0" (1)

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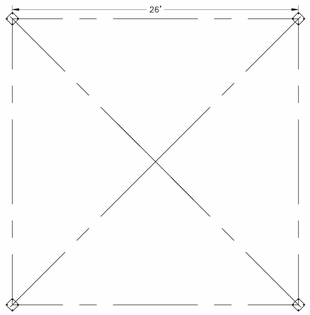
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CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER
ARCHITECTURAL SITE PLAN

AS.00

PRELIMINARY: NOT FOR CONSTRUCTION



ANCHOR BOLT LAYOUT

Z (INSIDE OF BUILDING)
Y

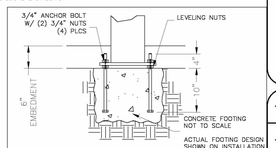
LOADS TO FOUNDATION (KIPS, IN-KIPS)

LOAD COMBINATION	FOUNDATION LOADS				
	AXIAL (Fx)	SHEAR (Fy)	SHEAR (Fz)	MOMENT (My)	MOMENT (Mz)
DL	1.76	0.00	0.00	−0.01	0.00
SL	5.15	0.00	−0.01	−0.04	0.00
W−UPLIFT	−2.37	0.37	−0.36	3.31	3.28
W−FY	−2.21	−0.37	0.37	−3.26	−3.28
W−FZ	−2.21	0.37	0.37	−3.26	3.28
E−FY	−0.07	−0.37	−0.37	3.28	−3.27
E−Z	−0.07	−0.37	−0.37	3.28	−3.27

THESE FOUNDATION LOADS ARE FOR ESTIMATING PURPOSE ONLY.
THE ACTUAL LOADS WILL BE DETERMINED IN THE FINAL ENGINEERING

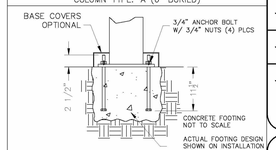
NOTES:
- TABLE SHOWS UNFACTORED SERVICE LOADS
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- COORDINATES ARE LOCAL TO THE COLUMN

DEFINITIONS:
DL = SERVICE LEVEL DEAD LOAD REACTION WITH THE GREATEST AXIAL LOAD
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W−Y = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION
W−Z = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST SHEAR VALUE ACTING IN THE SAME DIRECTION AS THE DL SHEAR LOAD
E−Y = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION
E−Z = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Z DIRECTION



PRELIMINARY DRAWINGS SHOWN AS 6" BURIED

STANDARD BASE CONNECTION
COLUMN TYPE: A (6" BURIED)



OPTIONAL BASE CONNECTION
COLUMN TYPE: B (SURFACE MOUNT W/ COVERS)

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

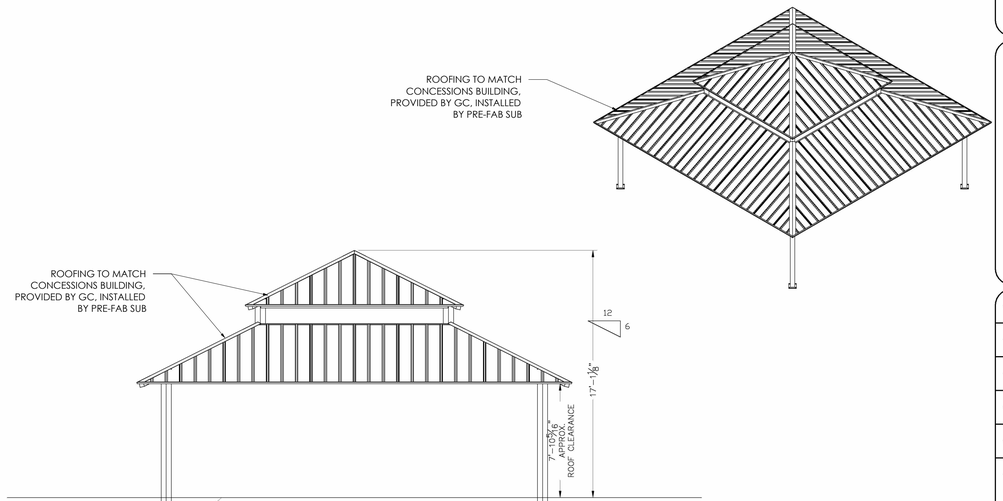
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616.748.0995 FX

Anchor Bolt Layout

DRAWN BY: ID
DATE: 1/20/2009
JOB NO.: STANDARD
REVISION:
BUILDING TYPE: SQ30M2C−P6
PROJECT NAME: 20−90−30

SHEET 2.0

DWG:S:\Engineering\Standards\Shelters\SQ\30\M2C−P6−20−90−30\Drawings\Preliminary\SQ30M2C−P6−20−90−30−8962.DWG



PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

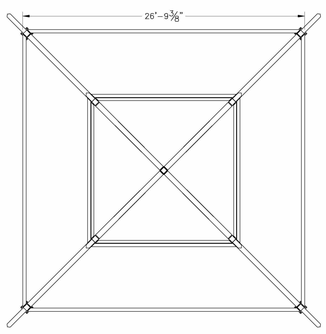
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Elevation

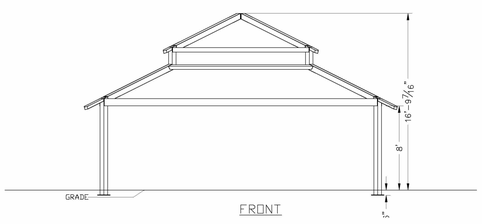
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DATE: 1/20/2009
JOB NO.: STANDARD
REVISION:
BUILDING TYPE: SQ30M2C−P6
PROJECT NAME: 20−90−30

SHEET 1.0

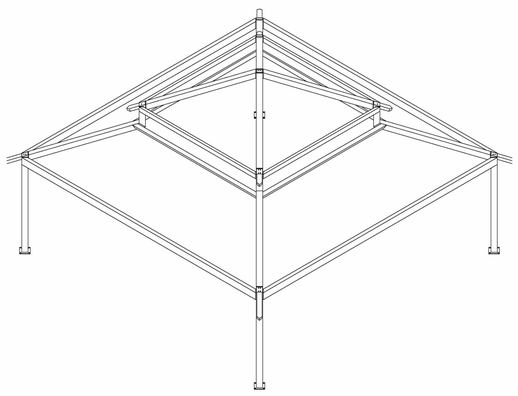
DWG:S:\Engineering\Standards\Shelters\SQ\30\M2C−P6−20−90−30\Drawings\Preliminary\SQ30M2C−P6−20−90−30−8962.DWG



PLAN



FRONT



ISOMETRIC

ALL STRUCTURAL COMPONETS WILL BE:
TUBE: ASTM A500 GRADE B
PLATE: ASTM A36
BOLTS: ASTM A325
NUTS: ASTM A563
WELDING: GMAW

NOTE:
COLUMN SIZE: HSS6x6x0.1875

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

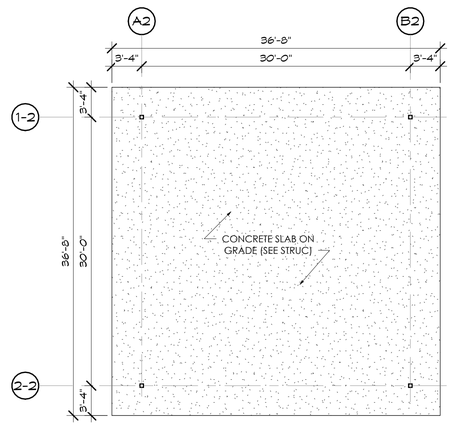
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Frame

DRAWN BY: ID
DATE: 1/20/2009
JOB NO.: STANDARD
REVISION:
BUILDING TYPE: SQ30M2C−P6
PROJECT NAME: 20−90−30

SHEET 3.0

DWG:S:\Engineering\Standards\Shelters\SQ\30\M2C−P6−20−90−30\Drawings\Preliminary\SQ30M2C−P6−20−90−30−8962.DWG



TYP. PICNIC SHELTER FLOOR PLAN (1)
1/8" = 1'−0"

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PHASE:
CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER
TYP PICNIC SHELTER

AS.01

Z (INSIDE OF BUILDING)

Y

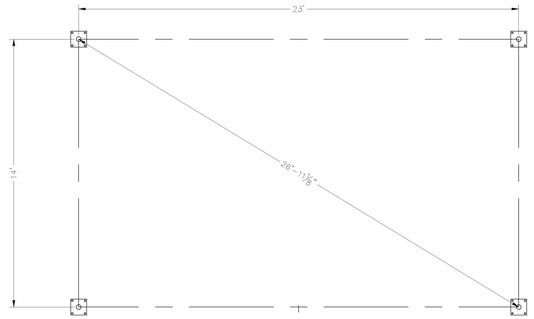
THESE FOUNDATION LOADS ARE FOR ESTIMATING PURPOSE ONLY.
THE ACTUAL LOADS WILL BE DETERMINED IN THE FINAL ENGINEERING

CL1

LOADS TO FOUNDATION (KIPS, N-KIPS)	FOUNDATION LOADS				
LOAD COMBINATION	AXIAL (Fx)	SHEAR (Fy)	SHEAR (Fz)	MOMENT (My)	MOMENT (Mz)
DL	1.04	−0.09	0.11	−2.84	−4.40
SL	2.86	−0.38	0.32	−8.68	−17.22
W−UPLIFT	−1.76	0.40	0.82	−75.71	18.38
W−FY	2.40	−0.49	−0.80	75.18	−22.89
W−FZ	1.83	−0.43	−1.01	92.61	−20.16
E−FY	−0.04	0.12	0.00	0.26	10.46
E−Z	−0.08	−0.01	−0.15	11.24	−0.29

NOTES:
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– A FOUNDATION DESIGN HAS NOT BEEN PERFORMED BY ICON SHELTER SYSTEMS INC.
– A LICENSED ENGINEER FAMILIAR WITH SOIL CONDITIONS AT CONSTRUCTION SITE MUST PERFORM A FOUNDATION DESIGN.
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– CONSULT ICON SHELTER SYSTEMS INC. IF THE STRUCTURE IS TO BE ENCLOSED.
– COORDINATES ARE LOCAL TO THE COLUMN

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E−Z = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Z DIRECTION



ANCHOR BOLT LAYOUT

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

PRELIMINARY: NOT FOR CONSTRUCTION

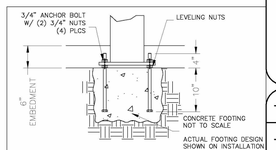
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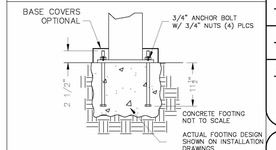
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Anchor Bolt Layout



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STANDARD BASE CONNECTION
COLUMN TYPE: A (6" BURIED)

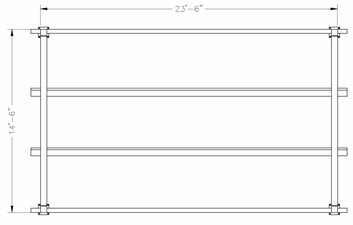


OPTIONAL BASE CONNECTION
COLUMN TYPE: B (SURFACE MOUNT W/ COVERS)

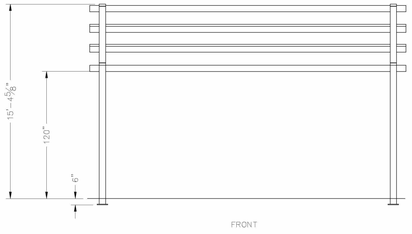
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MB
DATE:
12/1/2014
JOB NO.:
STANDARD
REVISION:
BUILDING TYPE:
MP16X25−10G
PROJECT NAME:

SHEET 2.0

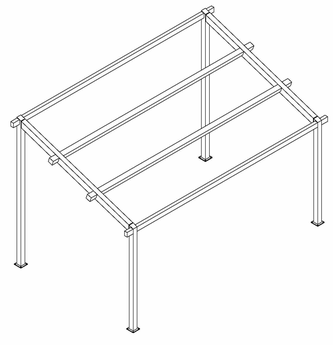
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PLAN



FRONT



Frame

PRELIMINARY: NOT FOR CONSTRUCTION

ALL STRUCTURAL COMPONENTS WILL BE:
TUBE: ASTM A500 GRADE B
PLATE: ASTM A36
BOLTS: ASTM A325
NUTS: ASTM A563
WELDING: GMAW

NOTE:
COLUMN SIZE: HSS 6x6x3/16

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

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800.748.0085
616.396.0944 FX

Frame

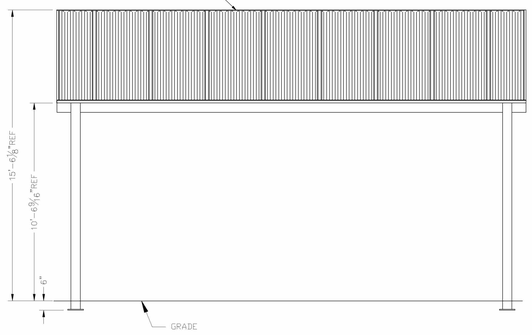
DRAWN BY:
MB
DATE:
12/1/2014
JOB NO.:
STANDARD
REVISION:
BUILDING TYPE:
MP16X25−10G
PROJECT NAME:

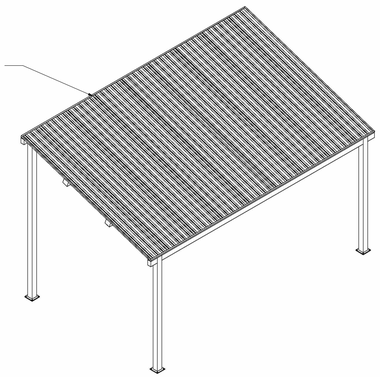
SHEET 3.0

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PRELIMINARY: NOT FOR CONSTRUCTION

ROOFING TO MATCH CONCESSIONS BUILDING, PROVIDED BY GC, INSTALLED BY PRE-FAB SUB





PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

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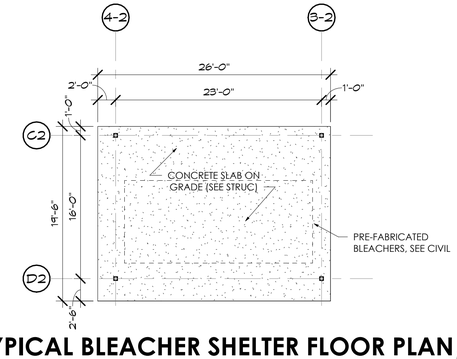
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616.396.0944 FX

Elevation

DRAWN BY:
MB
DATE:
12/1/2014
JOB NO.:
STANDARD
REVISION:
BUILDING TYPE:
MP16X25−10G
PROJECT NAME:

SHEET 1.0

DWG: \\icon01\Company\Engineering\Standards\Shelters\MP\16X25\G−P4−20−90−30\Drawings\Preliminary\MP16x25−10G−P4−20−90−30−297.59.dw



TYPICAL BLEACHER SHELTER FLOOR PLAN 1

1/8" = 1'-0"

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REGISTERED ARCHITECT
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DRAWN BY: DJH
PROJECT #: 22008
ISSUE DATE: 07/23/2025

PHASE:
CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER

TYP BLEACHER SHELTER

AS.02

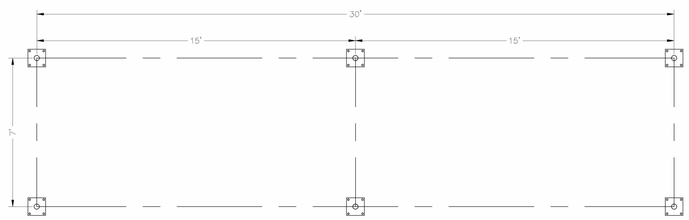
Z (INSIDE OF BUILDING)

Y

THESE FOUNDATION LOADS ARE FOR ESTIMATING PURPOSE ONLY. THE ACTUAL LOADS WILL BE DETERMINED IN THE FINAL ENGINEERING

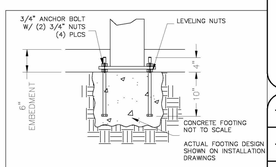
NOTES:
– TABLE SHOWS UNFACTORED SERVICE LOADS
– A FOUNDATION DESIGN HAS NOT BEEN PERFORMED BY ICON SHELTER SYSTEMS INC.
– A LICENSED ENGINEER FAMILIAR WITH SOIL CONDITIONS AT CONSTRUCTION SITE MUST PERFORM A FOUNDATION DESIGN.
– THE STRUCTURE HAS BEEN ENGINEERED AS AN OPEN STRUCTURE.
– CONSULT ICON SHELTER SYSTEMS INC. IF THE STRUCTURE IS TO BE ENCLOSED.
– COORDINATES ARE LOCAL TO THE COLUMN

DEFINITIONS:
DL = SERVICE LEVEL DEAD LOAD REACTION WITH THE GREATEST AXIAL LOAD
SL = SERVICE LEVEL SNOW LOAD REACTION WITH THE GREATEST AXIAL LOAD
W–UL = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST UPLIFT LOAD
W–T = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION
W–Z = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST SHEAR VALUE ACTING IN THE SAME DIRECTION AS THE DL SHEAR LOAD
E–T = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION
E–Z = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Z DIRECTION

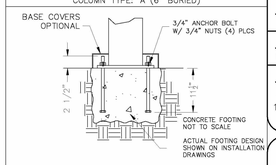


PRELIMINARY: NOT FOR CONSTRUCTION

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS



PRELIMINARY DRAWINGS SHOWN AS 6" BURIED
STANDARD BASE CONNECTION
COLUMN TYPE: A (6" BURIED)



OPTIONAL BASE CONNECTION
COLUMN TYPE: B (SURFACE MOUNT W/ COVERS)

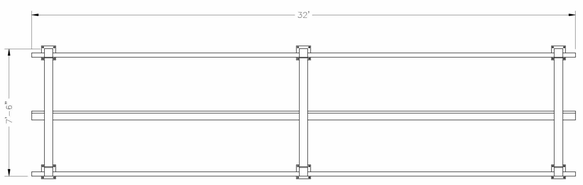
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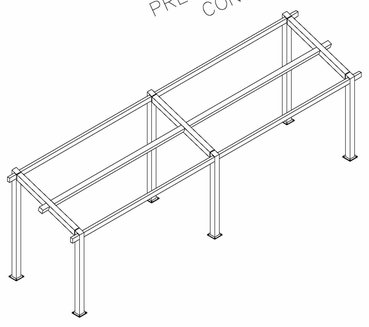
Anchor Bolt Layout

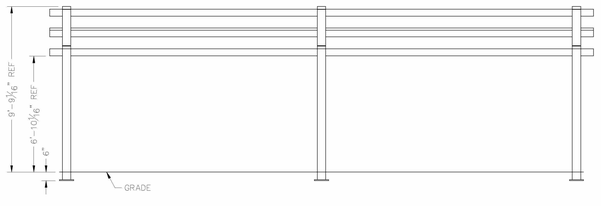
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DATE:	5/13/10
JOB NO.:	STANDARD
REVISION:	
BUILDING TYPE:	MP9x32–7M–P4
PROJECT NAME:	–45–90–150 7' AT LOW SIDE 10' AT HIGH SIDE

SHEET 2.0

DWG: \\Icon01\Company\Engineering\Standards\Shelters\MP\9X32\M–P4–45–90–150\Drawings\Preliminary\MP9x32–7M–P4–45–90–150–15840.DWG







PRELIMINARY: NOT FOR CONSTRUCTION

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

ALL STRUCTURAL COMPONETS WILL BE:
TUBE: ASTM A500 GRADE B
PLATE: ASTM A36
BOLTS: ASTM A325
NUTS: ASTM A563
WELDING: GMAW

NOTE:
COLUMN SIZE: HSS 6x6x3/16

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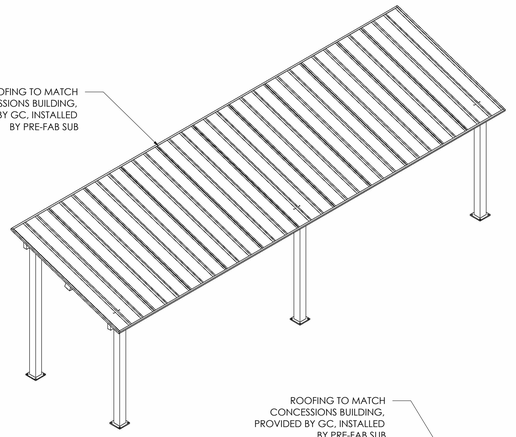
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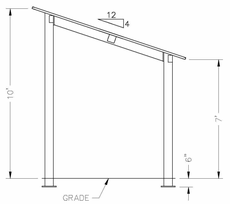
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DATE:	5/13/10
JOB NO.:	STANDARD
REVISION:	
BUILDING TYPE:	MP9x32–7M–P4
PROJECT NAME:	–45–90–150 7' AT LOW SIDE 10' AT HIGH SIDE

SHEET 3.0

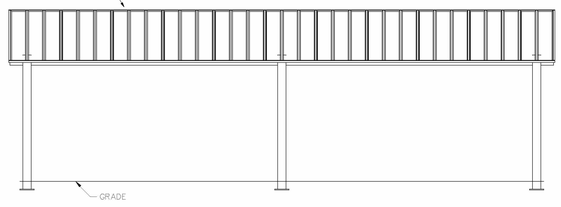
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ROOFING TO MATCH CONCESSIONS BUILDING, PROVIDED BY GC, INSTALLED BY PRE-FAB SUB





ROOFING TO MATCH CONCESSIONS BUILDING, PROVIDED BY GC, INSTALLED BY PRE-FAB SUB



PRELIMINARY: NOT FOR CONSTRUCTION

PRELIMINARY BASIS-OF-DEISGN PREFABRICATION DRAWINGS - REFER TO COLUMN GRID ON TYPICAL FLOOR PLAN FOR DIMENSIONS

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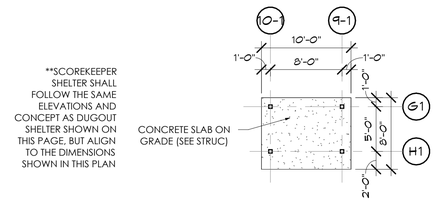
Elevation

DRAWN BY:	LB
DATE:	5/13/10
JOB NO.:	STANDARD
REVISION:	
BUILDING TYPE:	MP9x32–7M–P4
PROJECT NAME:	–45–90–150 7' AT LOW SIDE 10' AT HIGH SIDE

SHEET 1.0

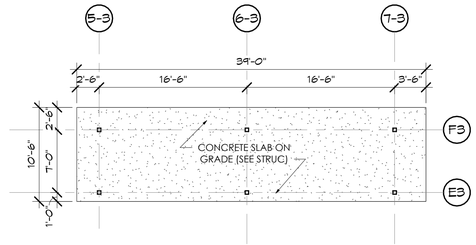
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**SCOREKEEPER SHELTER SHALL FOLLOW THE SAME ELEVATIONS AND CONCEPT AS DUGOUT SHELTER SHOWN ON THIS PAGE, BUT ALIGN TO THE DIMENSIONS SHOWN IN THIS PLAN



TYPICAL SCOREKEEPER SHELTER FLOOR PLAN 2

1/8" = 1'-0"



TYPICAL DUGOUT SHELTER FLOOR PLAN 1

1/8" = 1'-0"

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REGISTERED ARCHITECT
15158
NORTH CAROLINA
GREENVILLE, NC
7/23/2025

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PROJECT #: 22008
ISSUE DATE: 07/23/2025

PHASE:
CONSTRUCTION DOCUMENTS

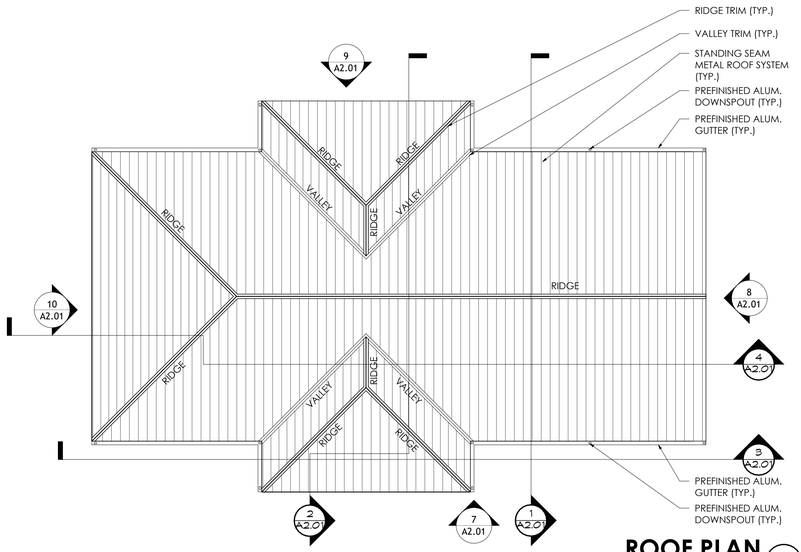
SHEET NAME & NUMBER

TYP DUGOUT & SCORE KEEPER SHELTERS

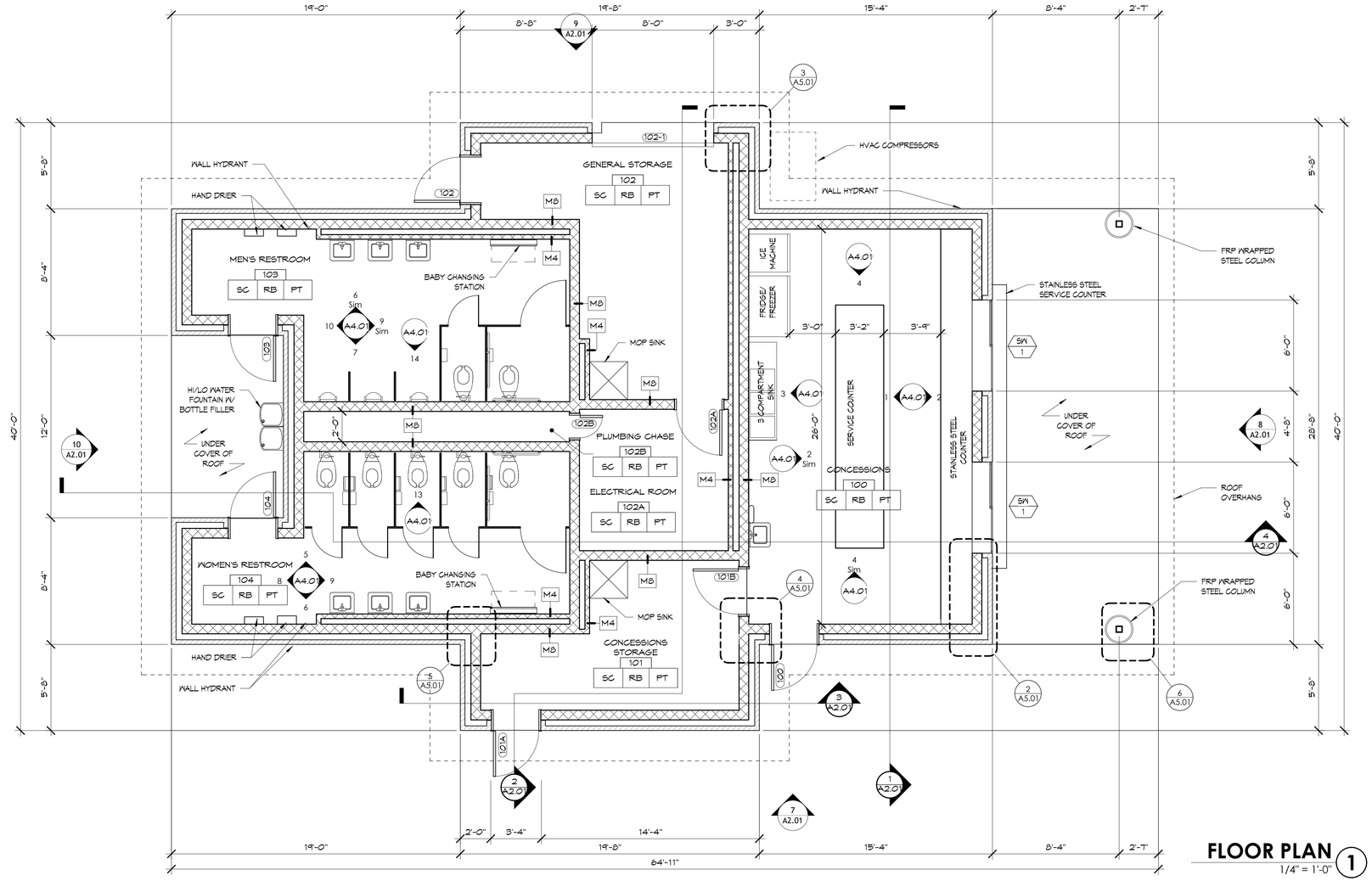
AS.03

FINISH SHCEDULE

	TAG	FINISH TYPE	MANUFACTURER	STYLE/COLOR	ALTERNATE MANUFACTURER	REMARKS
FLOOR	EP	EPOXY1	TRI SOLUTIONS	MANUF. FULL RANGE	STONHARD, LATICRETE OR EQUIVILANT	
WALL	PT	PAINT	SHERWIN WILLIAMS	MANUF. FULL RANGE	BENJAMINE MOORE, VALSPAR OR EQUIVILANT	
BASE	RB	RUBBER BASE	JOHNSONITE	MANUF. FULL RANGE	ROPPE, MOHAWK OR EQUIVILANT	INSTALLED THROUGH SCOPE AREA, UNO
CASEWORK	PLAM	PLASTIC LAMINATE	FORMICA	MANUF. FULL RANGE	WILSONT ART, PANOLAM OR EQUIVILANT	
	SST	STAINLESS STEEL SURFACE	CUSTOM FABRICATION	304 BRUSHED		
CEILING	ACT	ACOUSTICAL CEILING TILE	USG	WHITE, SQUARE EDGE, WIPEABLE SURFACE	ARMSTRONG, CERTAINTEED OR EQUIVILANT	
OTHER	TS	TRANSITION STRIP	HANSTONE	MANUF. FULL RANGE	OR EQUAL	ADA COMPLIANT



ROOF PLAN 6
1/8" = 1'-0"



FLOOR PLAN 1
1/4" = 1'-0"

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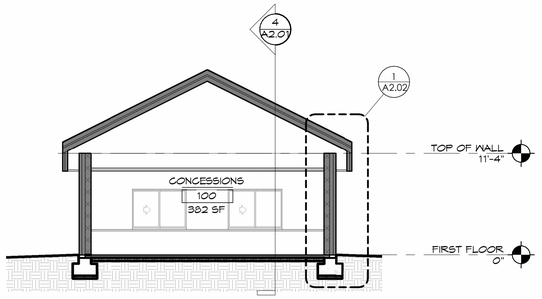
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PROJECT #: 22008
ISSUE DATE: 07/23/2025

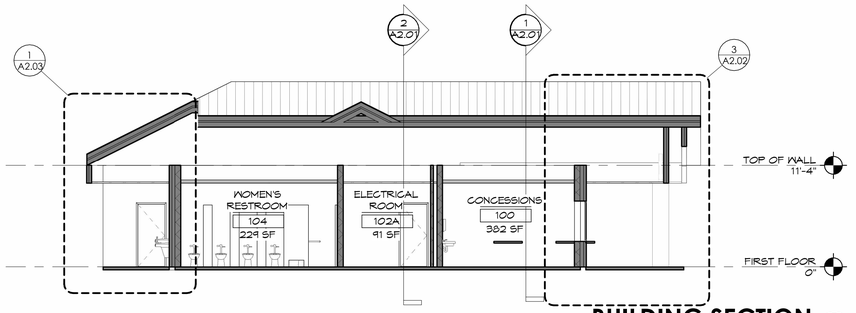
PHASE:
CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER
FIRST FLOOR PLAN & ROOF PLAN

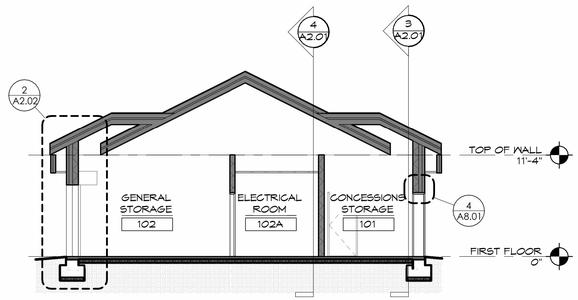
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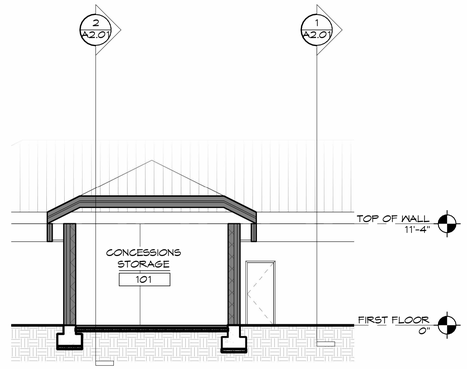
BUILDING SECTION 1
1/8" = 1'-0"



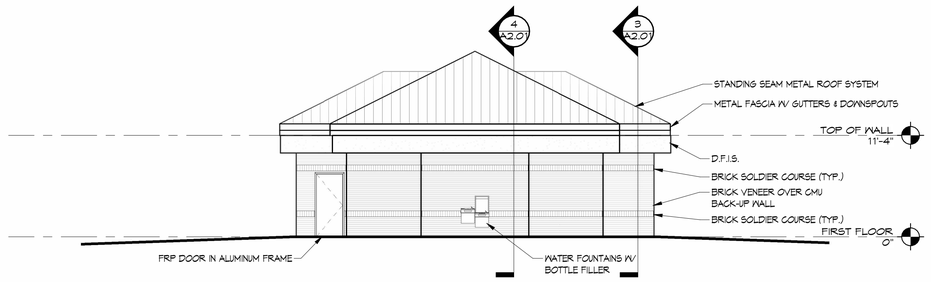
BUILDING SECTION 4
1/8" = 1'-0"



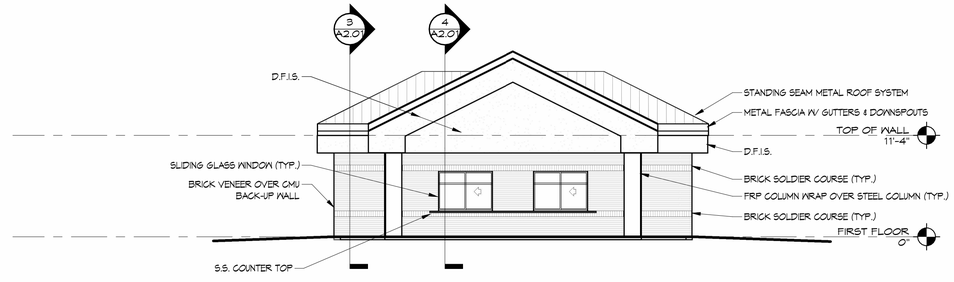
BUILDING SECTION 2
1/8" = 1'-0"



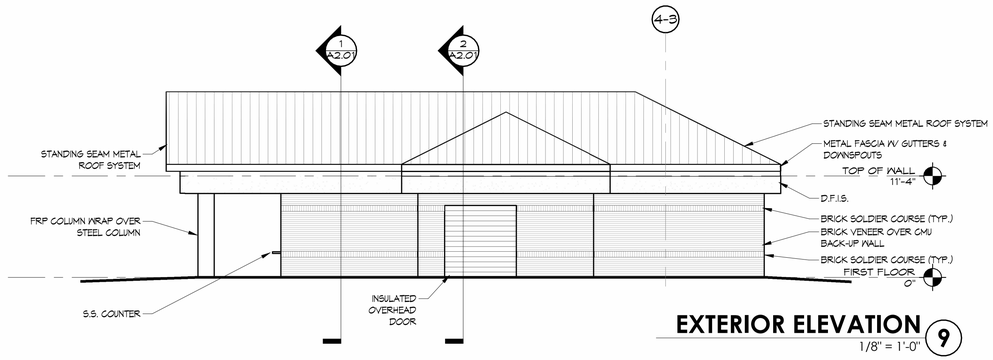
BUILDING SECTION 3
1/8" = 1'-0"



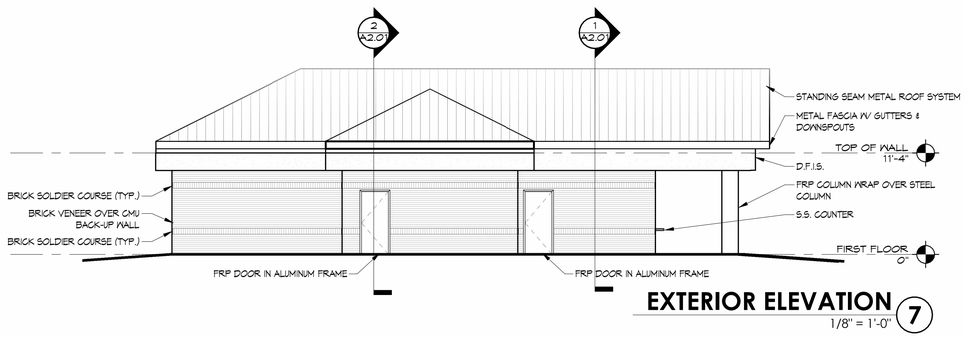
EXTERIOR ELEVATION 10
1/8" = 1'-0"



EXTERIOR ELEVATION 8
1/8" = 1'-0"



EXTERIOR ELEVATION 9
1/8" = 1'-0"



EXTERIOR ELEVATION 7
1/8" = 1'-0"

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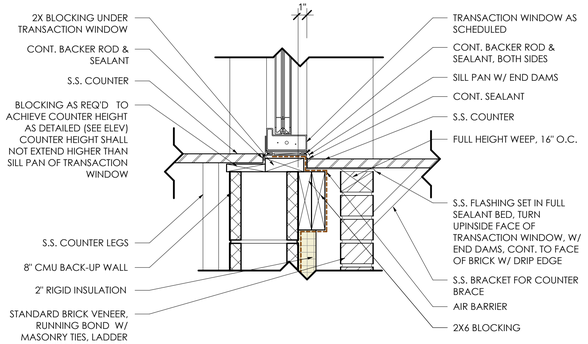
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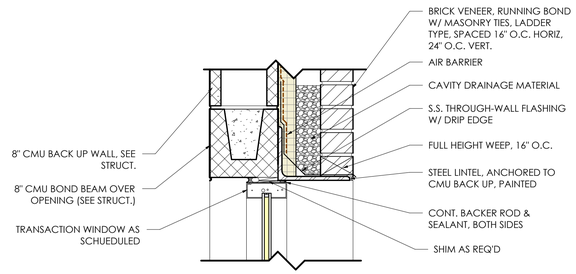
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EXTERIOR ELEVATIONS & BUILDING SECTIONS

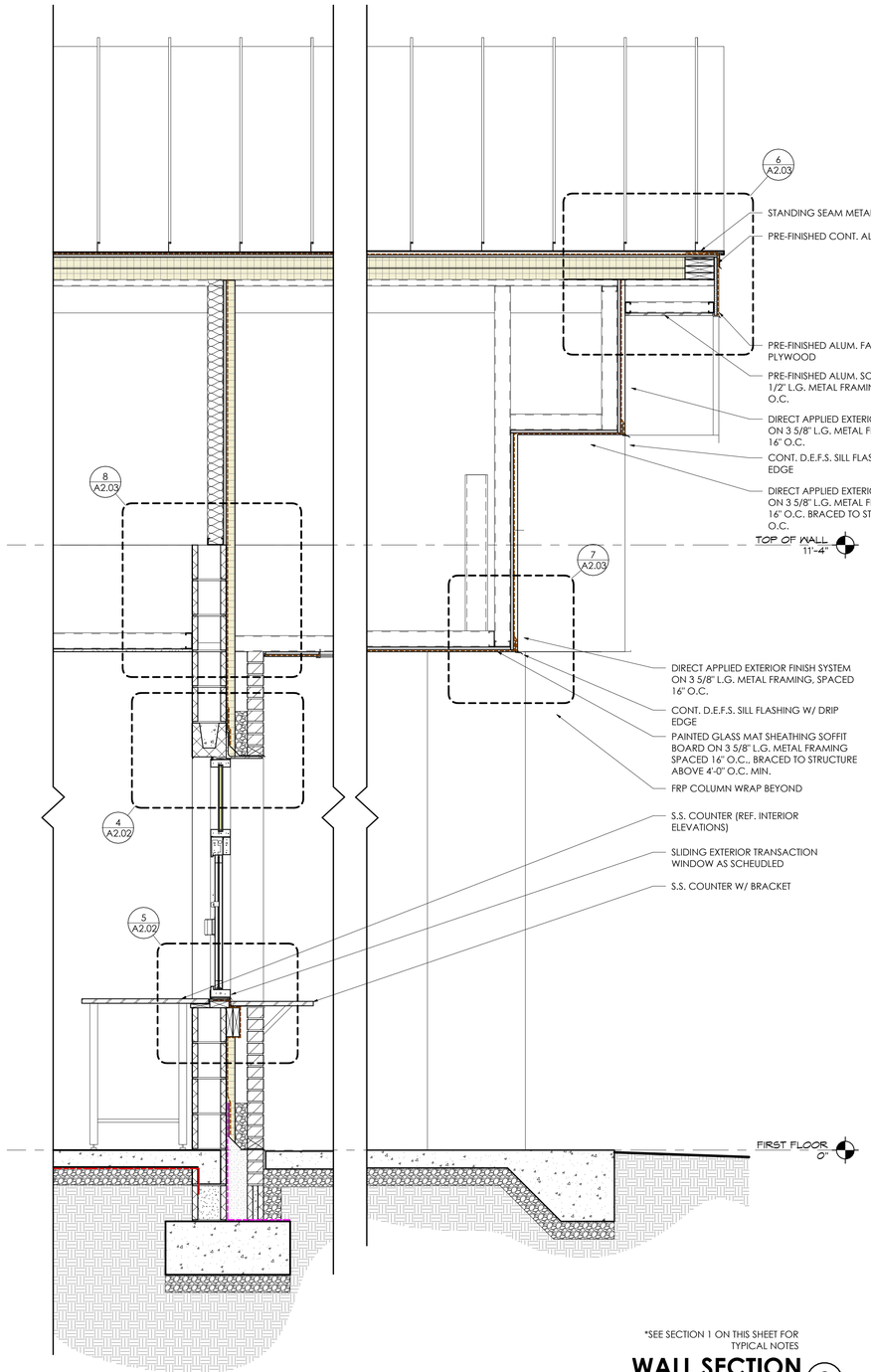
A2.01



Detail 228 (5)
1 1/2" = 1'-0"

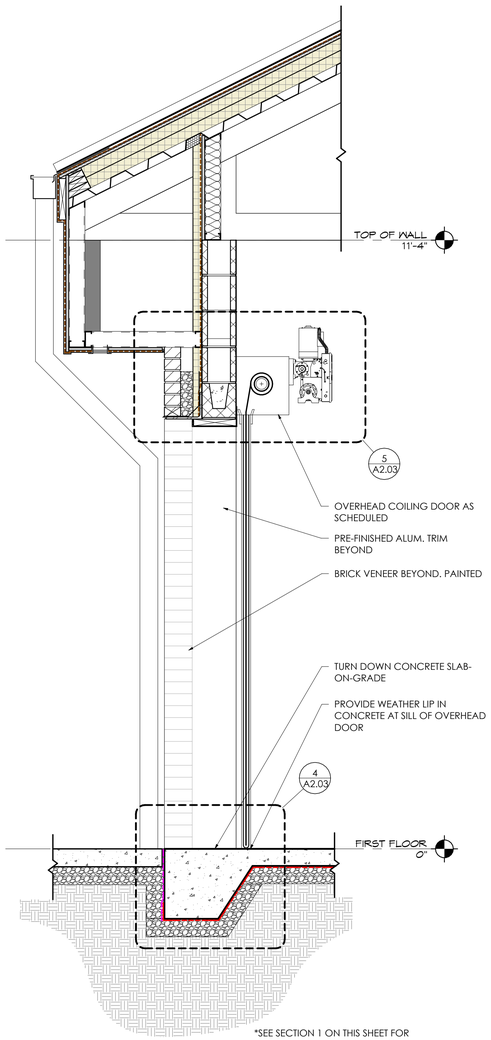


Detail 227 (4)
1 1/2" = 1'-0"



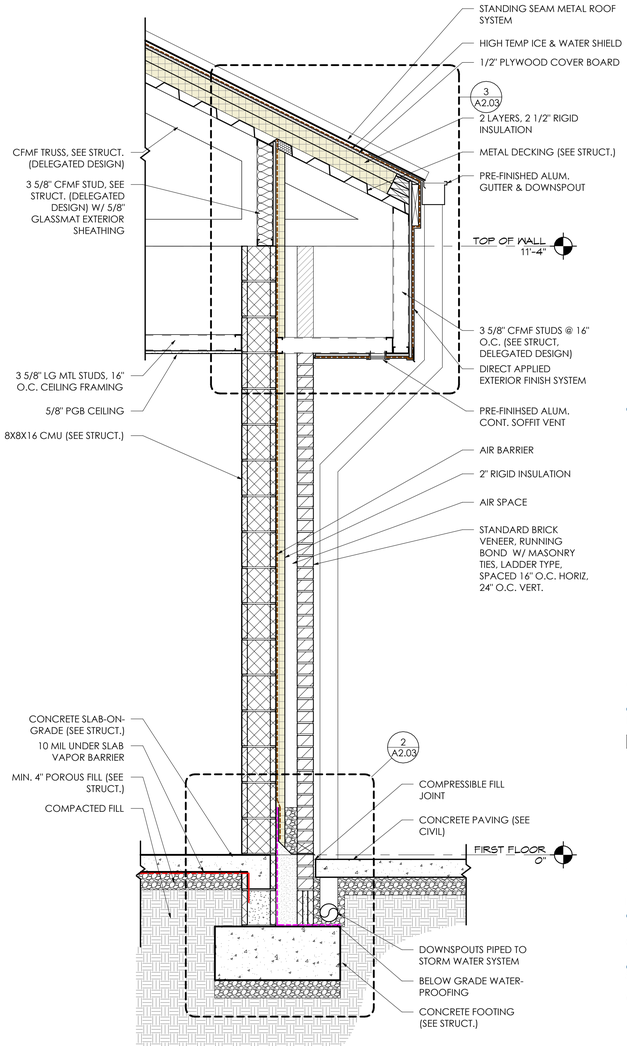
*SEE SECTION 1 ON THIS SHEET FOR TYPICAL NOTES

WALL SECTION (3)
3/4" = 1'-0"



*SEE SECTION 1 ON THIS SHEET FOR TYPICAL NOTES

WALL SECTION (2)
3/4" = 1'-0"



TYPICAL WALL SECTION (1)
3/4" = 1'-0"

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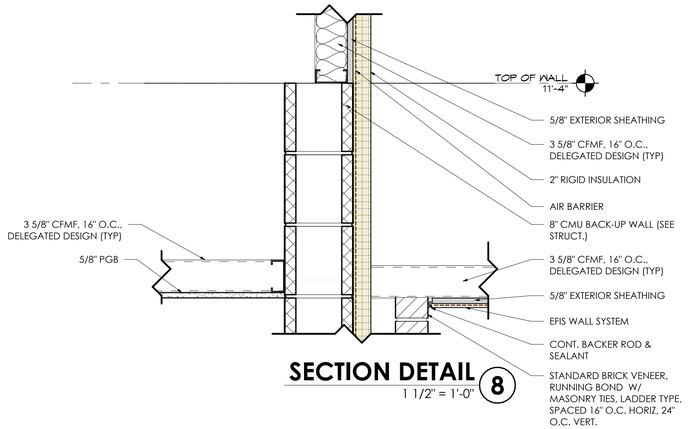
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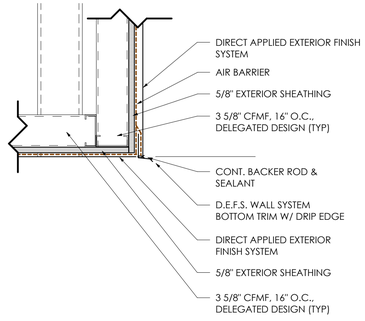
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SHEET NAME & NUMBER
WALL SECTIONS

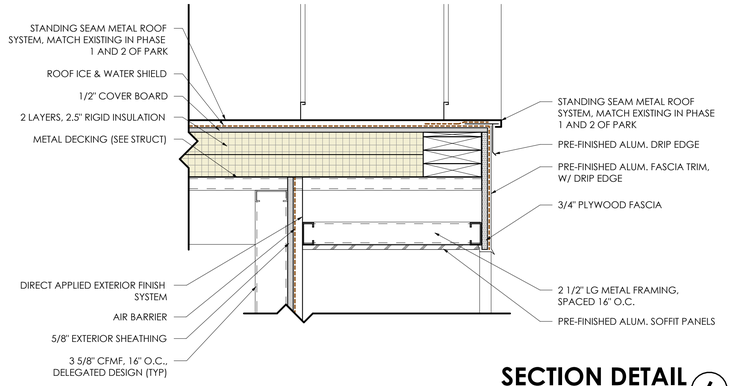
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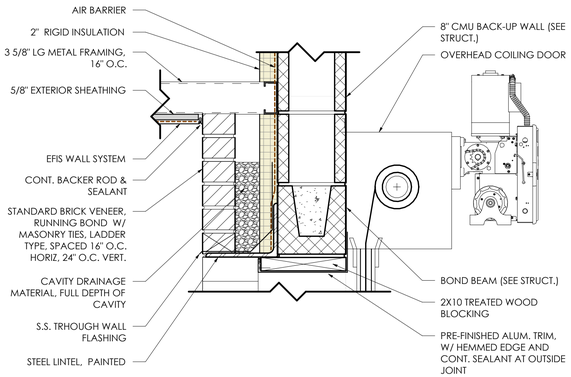
SECTION DETAIL 8
1 1/2" = 1'-0"



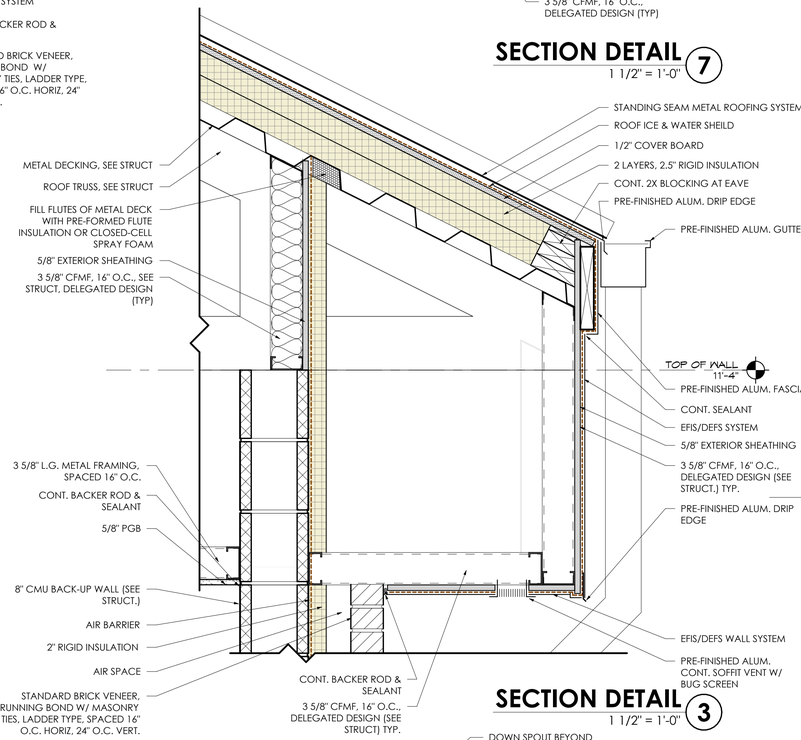
SECTION DETAIL 7
1 1/2" = 1'-0"



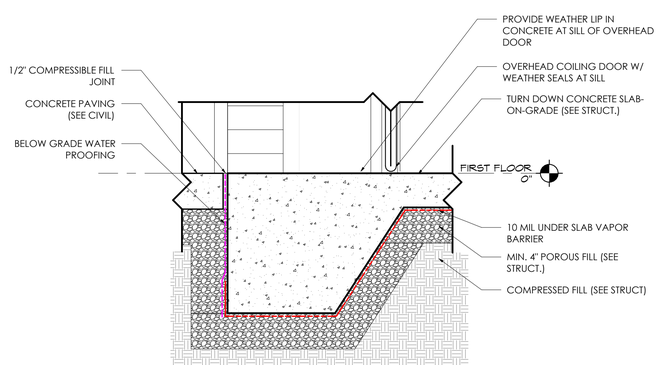
SECTION DETAIL 6
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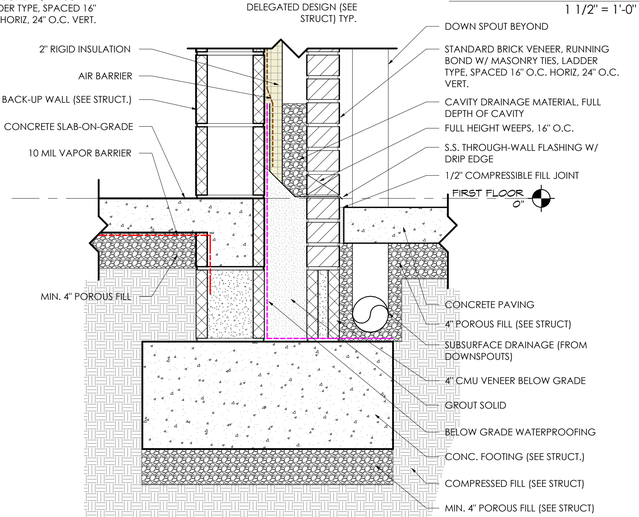
SECTION DETAIL 5
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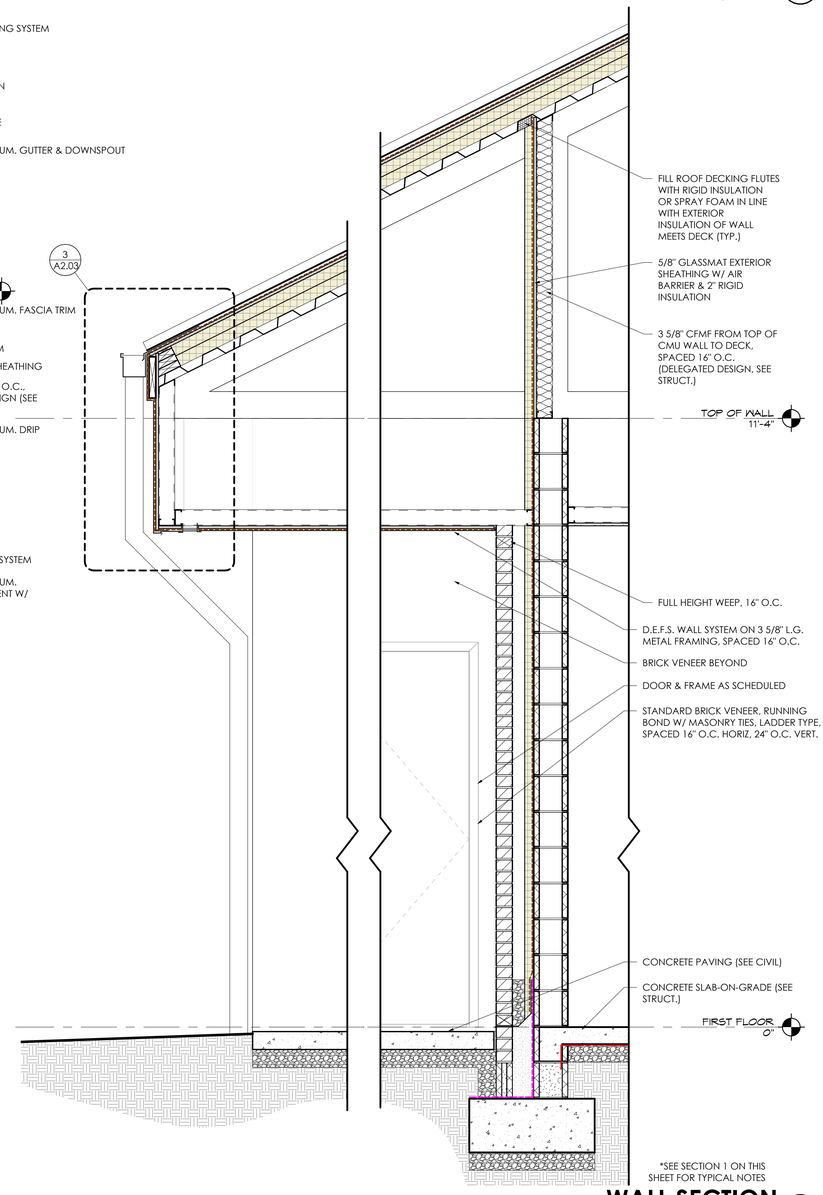
SECTION DETAIL 3
1 1/2" = 1'-0"



SECTION DETAIL 4
1 1/2" = 1'-0"



SECTION DETAIL 2
1 1/2" = 1'-0"



*SEE SECTION 1 ON THIS SHEET FOR TYPICAL NOTES

WALL SECTION 1
3/4" = 1'-0"

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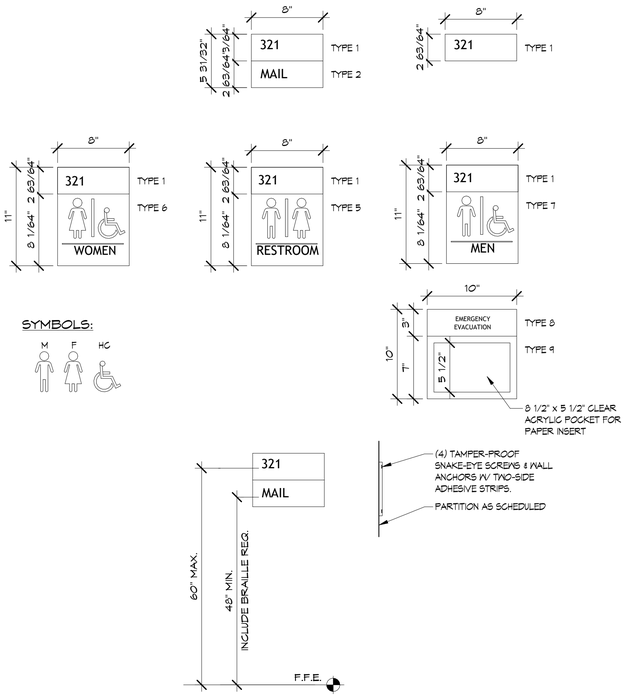
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WALL SECTIONS & SECTION DETAILS

A2.03

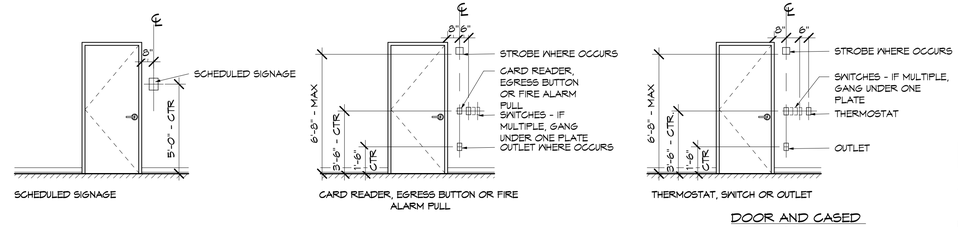
GENERAL SIGN NOTES:

1. PROVIDE 2 SIGNS PER OPENING THROUGHOUT THE BUILDING, IF SIGN LOCATION IS ON GLASS, PROVIDE BLACK PANEL ON OPPOSITE SIDE OF GLASS TO CONCEAL ATTACHMENTS.
2. ALL SIGNS TYPES SHALL HAVE ADA COMPLIANT BRAIL TO ACCOMPANY SYMBOLS AND LETTERING.
3. ALL SIGN COPY SHALL MATCH ROOM NAME AS SHOWN ON THE FLOOR PLANS. G.C. RESPONSIBLE FOR SIGN SCHEDULE SUBMITTAL ALL SIGN COPY SHALL BE REVIEWED AND APPROVED BY THE OWNER AND ARCHITECT PRIOR TO FABRICATION.
4. ALL RESTROOMS SHALL USE SIGN TYPES 5, 6, OR 7 AS APPROPRIATE IN ADDITION TO TYPE 1 AS INDICATED IN THE ILLUSTRATION ABOVE.
5. ALL SIGNS TO HAVE ADA COMPLIANT BRAIL MATCHING THE CONTENT OF THE SIGN.

SYMBOLS:

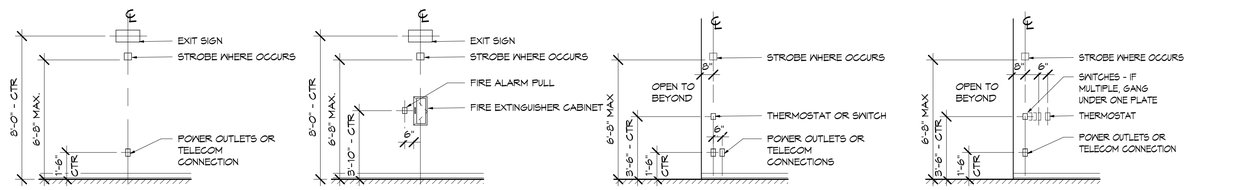


SIGN TYPES 6
1 1/2" = 1'-0"

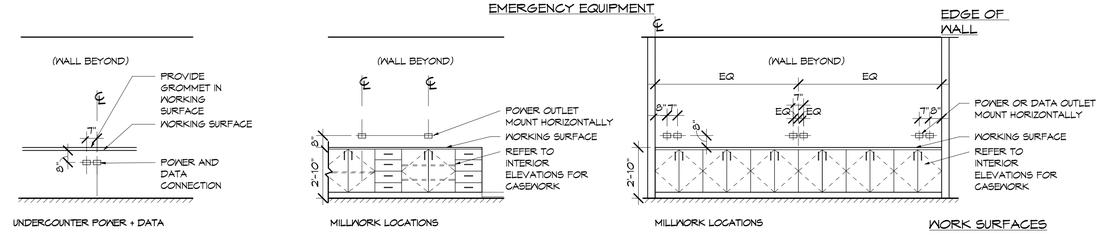


SCHEDULED SIGNAGE | CARD READER, EGRESS BUTTON OR FIRE ALARM PULL | THERMOSTAT, SWITCH OR OUTLET

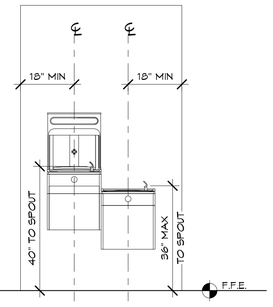
DOOR AND CASED OPENINGS



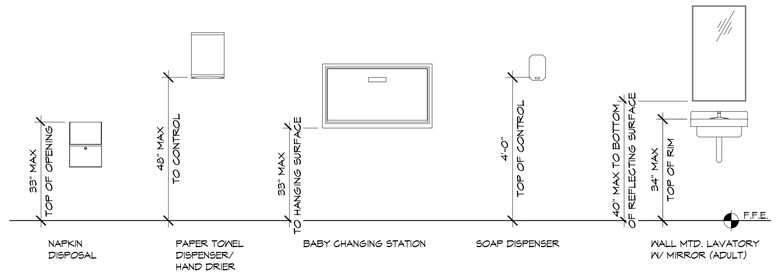
EMERGENCY EQUIPMENT



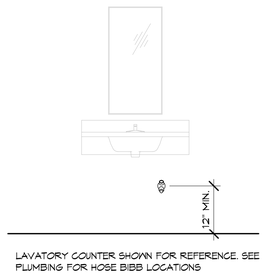
TYP. MOUNTING HEIGHTS & CLEARANCES 7
1/4" = 1'-0"



TYP. DRINKING FOUNTAIN MOUNTING HEIGHTS & CLEARANCES 2
1/2" = 1'-0"

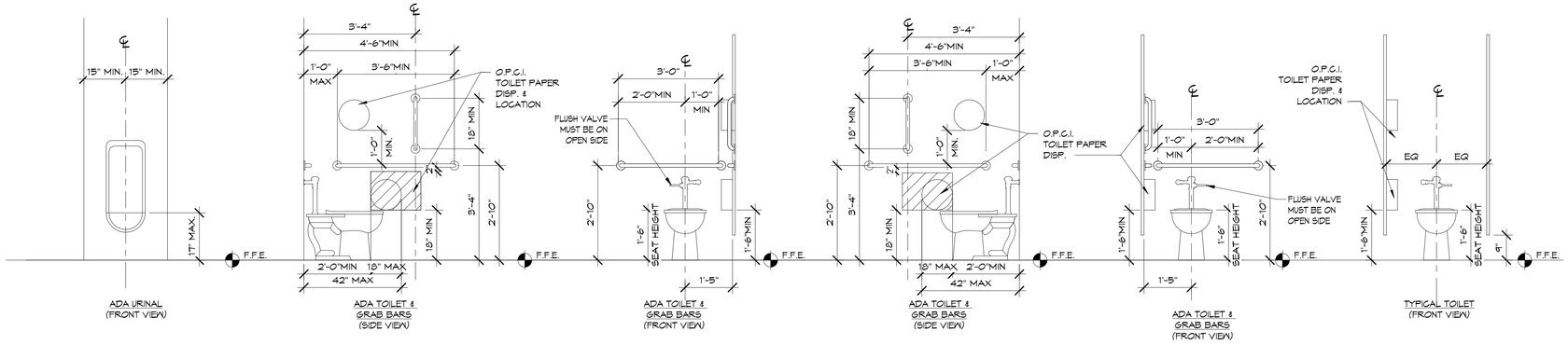


TYP. MOUNTING FIXTURE & ACCESSORY MOUNTING HEIGHTS & CLEARANCES 4
1/2" = 1'-0"



LAVATORY COUNTER SHOWN FOR REFERENCE. SEE PLUMBING FOR HOSE BIBB LOCATIONS

TYP. HOSE BIBB MOUNTING HEIGHT 3
1/2" = 1'-0"



TYP. RESTROOM FIXTURE & ACCESSORY MOUNTING HEIGHTS AND CLEARANCES 1
1/2" = 1'-0"

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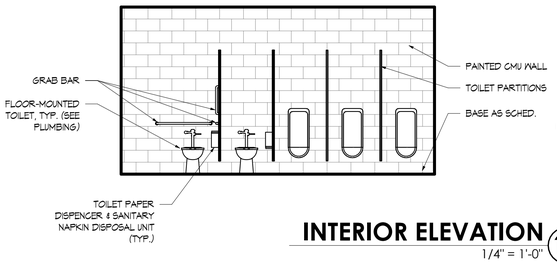
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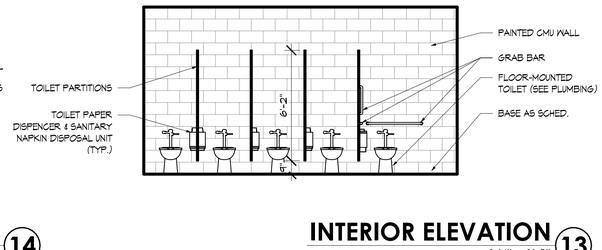
SHEET NAME & NUMBER

ADA MOUNTING HEIGHTS, BATHROOM ELEVATIONS, & SIGNAGE

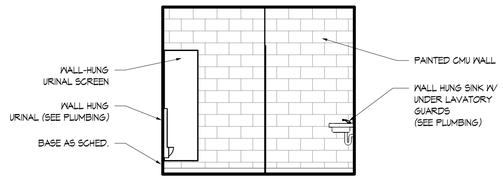
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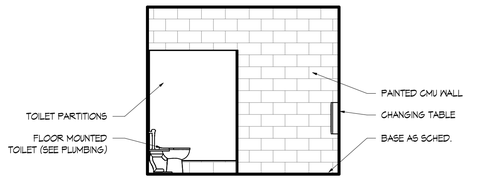
INTERIOR ELEVATION 14
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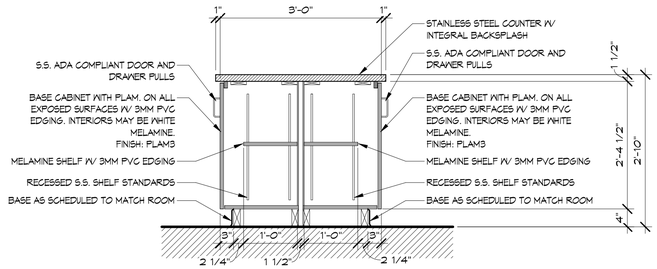
INTERIOR ELEVATION 13
1/4" = 1'-0"



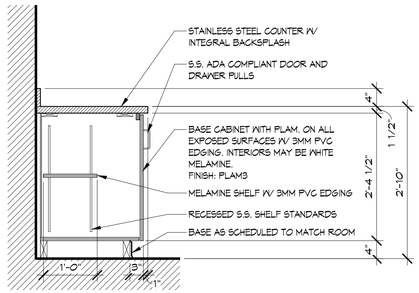
INTERIOR ELEVATION 10
1/4" = 1'-0"



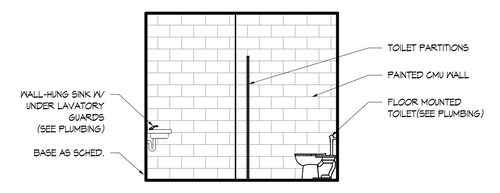
INTERIOR ELEVATION 9
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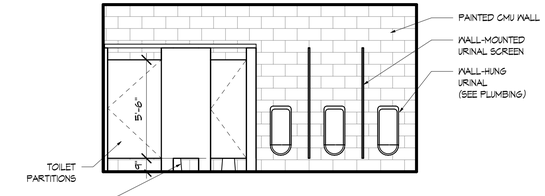
CASEWORK SECTION 11
3/4" = 1'-0"



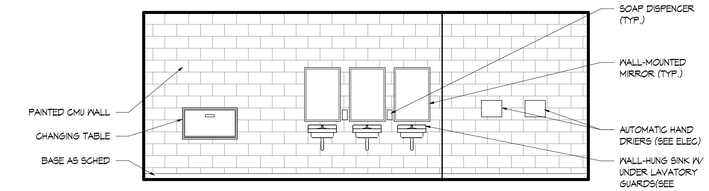
CASEWORK SECTION 12
3/4" = 1'-0"



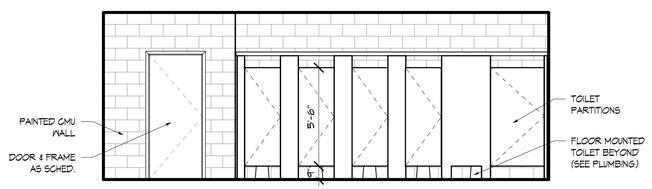
INTERIOR ELEVATION 8
1/4" = 1'-0"



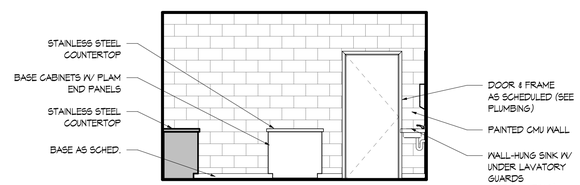
INTERIOR ELEVATION 7
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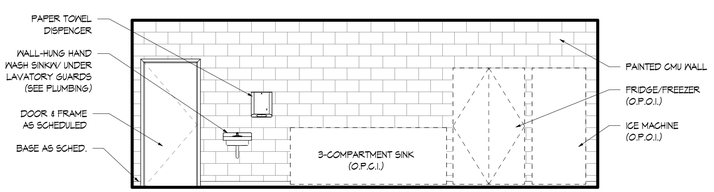
INTERIOR ELEVATION 6
1/4" = 1'-0"



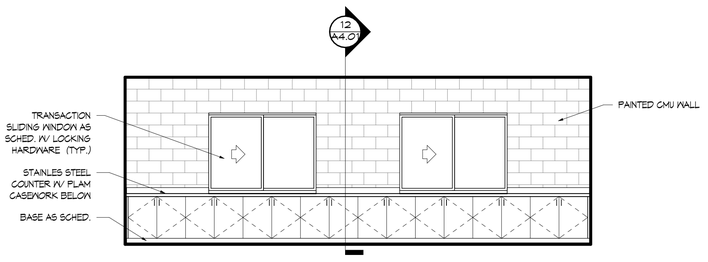
INTERIOR ELEVATION 5
1/4" = 1'-0"



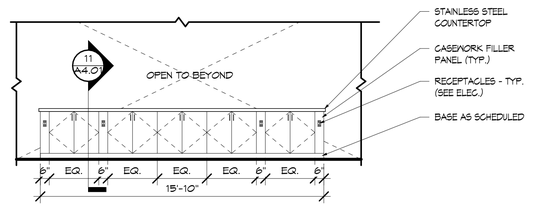
INTERIOR ELEVATION 4
1/4" = 1'-0"



INTERIOR ELEVATION 3
1/4" = 1'-0"



INTERIOR ELEVATION 2
1/4" = 1'-0"



INTERIOR ELEVATION 1
1/4" = 1'-0"

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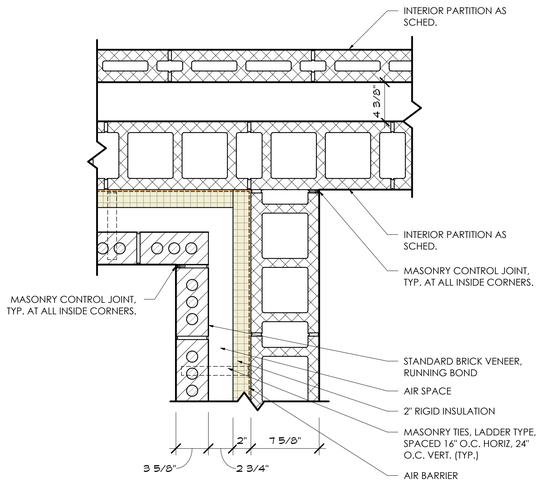
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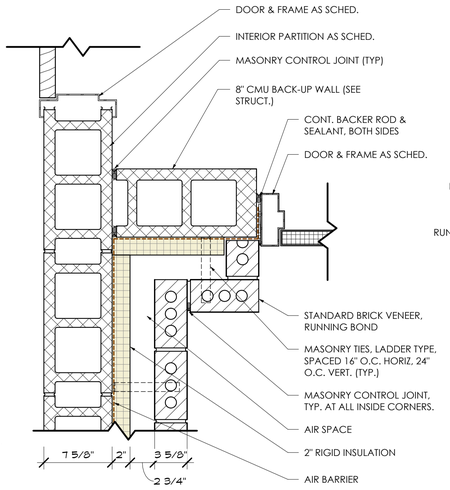
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SHEET NAME & NUMBER
INTERIOR ELEVATIONS & CASEWORK SECTIONS

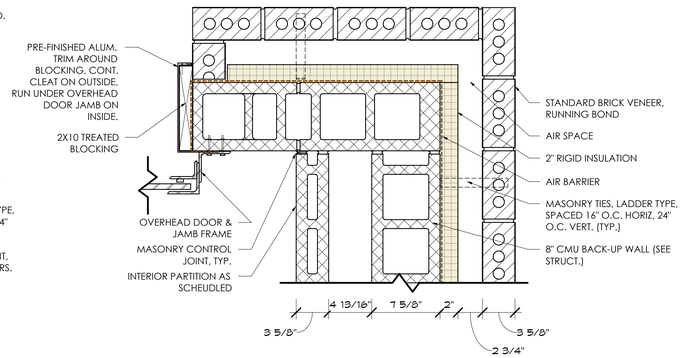
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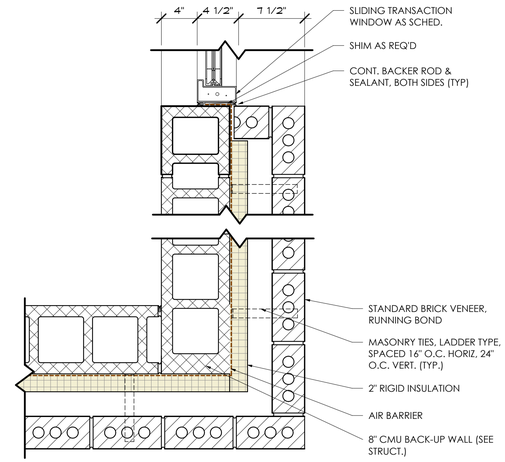
PLAN DETAIL 5
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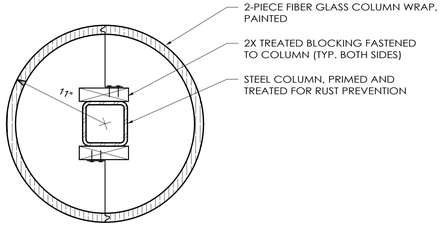
PLAN DETAIL 4
1 1/2" = 1'-0"



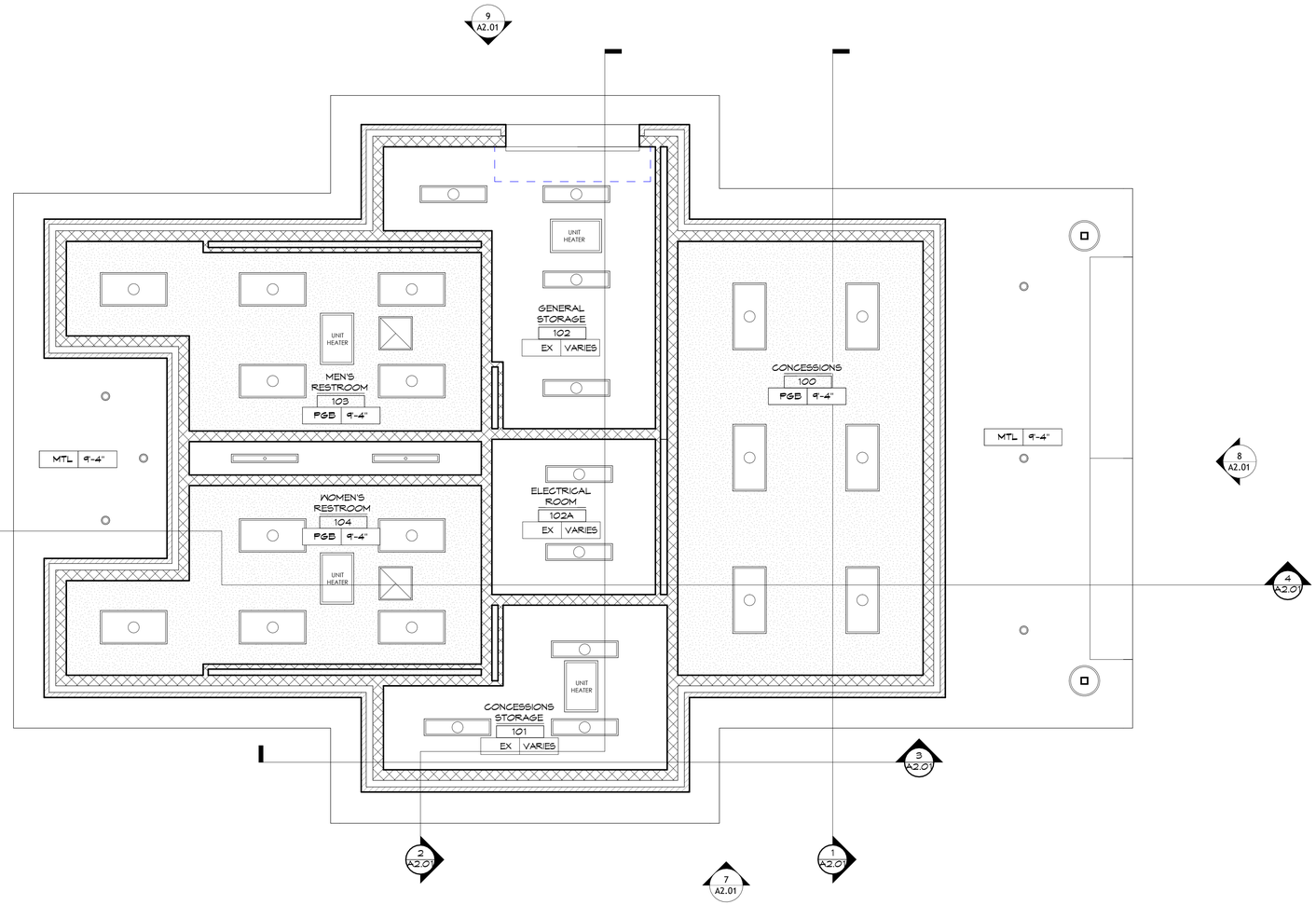
PLAN DETAIL 3
1 1/2" = 1'-0"



PLAN DETAIL 2
1 1/2" = 1'-0"



PLAN DETAIL 6
1 1/2" = 1'-0"



FIRST FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"

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CURRITUCK COMMUNITY PARK - PHASE III
CONCESSIONS / RESTROOM BUILDING
SHORTCUT ROAD
BARCO, CURRITUCK COUNTY, NC 27971

DANIELLE J. HOFF REGISTERED ARCHITECT 15158 NORTH CAROLINA GREENVILLE, NC 7/23/2025

INTREPID Architecture P.A. Registered Architectural Corporation 53628 North Carolina GREENVILLE, NC

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REVISIONS:

#	DESC:	DATE

DRAWN BY: DJH
PROJECT #: 22008
ISSUE DATE: 07/23/2025

PHASE:
CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER

REFLECTED CEILING PLAN & PLAN DETAILS

A5.01

DOOR SCHEDULE

DOOR NO.	SIZE			DOOR			FRAME							HARDWARE SET	REMARKS
										DETAILS			FIRE RATING		
	WIDTH	HEIGHT	THICKNESS	DOOR TYPE	MATERIAL	FINISH	FRAME ELEVATION	FRAME MATERIAL	FRAME FINISH	HEAD	JAMB	SILL			
100	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	4/A8.01	3/A8.01	2/A8.01	N/A	1	
101A	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	4/A8.01	3/A8.01	2/A8.01	N/A	3	
101B	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	3/A8.01	3/A8.01	1/A8.01	N/A	3	
102	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	4/A8.01	3/A8.01	2/A8.01	N/A	3	
102-1	8'-0"	8'-0"	3"	D	AL	PT	-	-	-	5/A2.03	2/A6.01	4/A2.03	N/A		OVERHEAD COILING DOOR W/ MOTOR
102A	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	3/A8.01	3/A8.01	1/A8.01	N/A	3	
102B	1'-6"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	3/A8.01	3/A8.01	1/A8.01	N/A	3	
103	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	4/A8.01	3/A8.01	2/A8.01	N/A	2	
104	3'-0"	7'-0"	1 3/4"	B	HM	PT	HM1	HM	PT	4/A8.01	3/A8.01	2/A8.01	N/A	2	

GLAZING SCHEDULE

G1	CLEAR 1" TEMPERED INSULATED LOW-E GLASS

DOOR/OPENINGS GENERAL NOTES:

1. GC TO FIELD VERIFY ALL OPENINGS PRIOR TO FRAME ORDERING AND FABRICATION.
2. HOLLOW METAL FRAME MULLIONS ARE 2" SIGHTLINES ON SIDES, AND 4" AT HEAD WHERE COURSING WITH MASONRY, U.N.O.
3. "SW" TAGS INDICATES EXTERIOR SLIDING WINDOW - REFER TO PLANS FOR LOCATIONS, FRAME ELEVATIONS FOR DIMENSIONS, GLAZING TAGS, ETC.

ABBREVIATIONS:

D.O. DOOR OPENING
R.O. ROUGH OPENING

WINDOW SCHEDULE

WINDOW TYPE	NUMBER	ASSEMBLY TYPE	WIDTH	HEIGHT	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	GLAZING TYPE	REMARKS
SW	1	SLIDING WINDOW	6'-0"	4'-4"	2/A2.02	1/A6.01	5/A2.02	G1	EXTERIOR, THERMALLY BROKEN, LOCKING BAR, ONE SIDE SLIDING, OTHER SIDE FIXED.

HARDWARE SCHEDULE

SET #1: SINGLE DOOR ENTRY - CONCESSIONS

QUANTITY & DESCRIPTION	MODEL NUMBER	MANUF.
1 CONT. HINGE	661HD-AL	STANLEY
1 MORTISE LOCKSET	40H SERIES	BEST LOCK
1 CLOSER	4111-HSCUSH	LCN
1 THRESHOLD	41366	NGP
1 SWEEP		NGP
1 GASKETING		NGP

SET #2: SINGLE DOOR - BATHROOMS

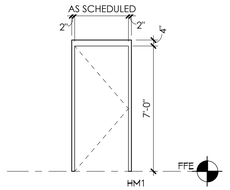
QUANTITY & DESCRIPTION	MODEL NUMBER	MANUF.
1 CONT. HINGE	661HD-AL	STANLEY
1 DEADBOLT - KEYED FROM BOTH SIDES	40H SERIES	BEST LOCK
1 PUSH/PULL HARDWARE		HAGER
2 S.S. PROTECTION PLATE FOR DEADBOLT & PUSH/PULL		HAGER
1 CLOSER	4111-HSCUSH	LCN
1 THRESHOLD	41366	NGP
1 SWEEP		NGP
1 GASKETING		NGP

SET #3: SINGLE DOOR - STORAGE

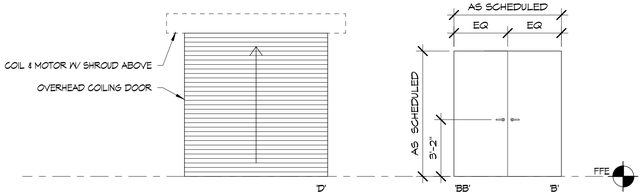
QUANTITY & DESCRIPTION	MODEL NUMBER	MANUF.
1 CONT. HINGE	661HD-AL	STANLEY
1 DEADBOLT - KEYED FROM BOTH SIDES	40H SERIES	BEST LOCK
1 DUMMY LEVER SET	40H SERIES	BEST LOCK
2 S.S. PROTECTION PLATE FOR DEADBOLT & LEVER		HAGER
1 CLOSER	4111-HSCUSH	LCN
1 THRESHOLD	41366	NGP
1 SWEEP		NGP
1 GASKETING		NGP

HARDWARE GENERAL NOTES:

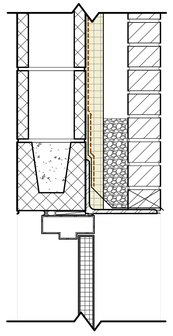
1. HARDWARE SHALL COMPLY WITH ALL ACCESSIBILITY REQUIREMENTS PER ANSI A117.1 AND THE CURRENT NCBC.
2. ALL EXTERIOR DOORS SHALL HAVE ADA COMPLIANT THRESHOLDS AND WEATHER-STRIPPING.
3. ALL HARDWARE SHALL BE COORDINATED WITH COUNTY STANDARDS.
4. OWNER TO APPROVE ALL HARDWARE AND KEYING & FUNCTION PRIOR TO ORDERING. GC TO COORDINATE KEYING MEETING.
5. ITEMS LISTED ABOVE ARE THE BASIS OF DESIGN, EQUIVALENT BY ALTERNATE MANUFACTURERS LISTED IN SPEC WILL BE CONSIDERED.



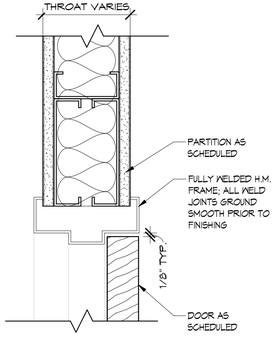
FRAME TYPES 6
1/4" = 1'-0"



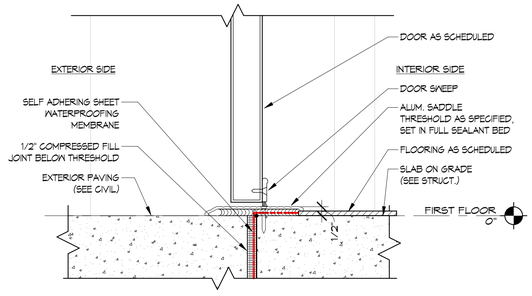
DOOR TYPES 5
1/4" = 1'-0"



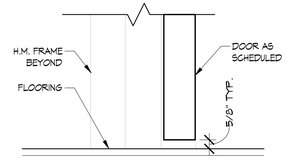
TYP. EXTERIOR DOOR HEAD DETAIL 4
1 1/2" = 1'-0"



TYP. HM FRAME HEAD/JAMB 3
3" = 1'-0"



TYPICAL EXTERIOR THRESHOLD DETAIL 2
3" = 1'-0"



TYP. INT. THRESHOLD 1
3" = 1'-0"

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CURRITUCK COMMUNITY PARK - PHASE III
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SHORTCUT ROAD
BARCO, CURRITUCK COUNTY, NC 27971

DANIELLE J. HOFF
REGISTERED ARCHITECT
15158
NORTH CAROLINA
GREENVILLE, NC
7/23/2025

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REVISIONS:

#	DESC:	DATE

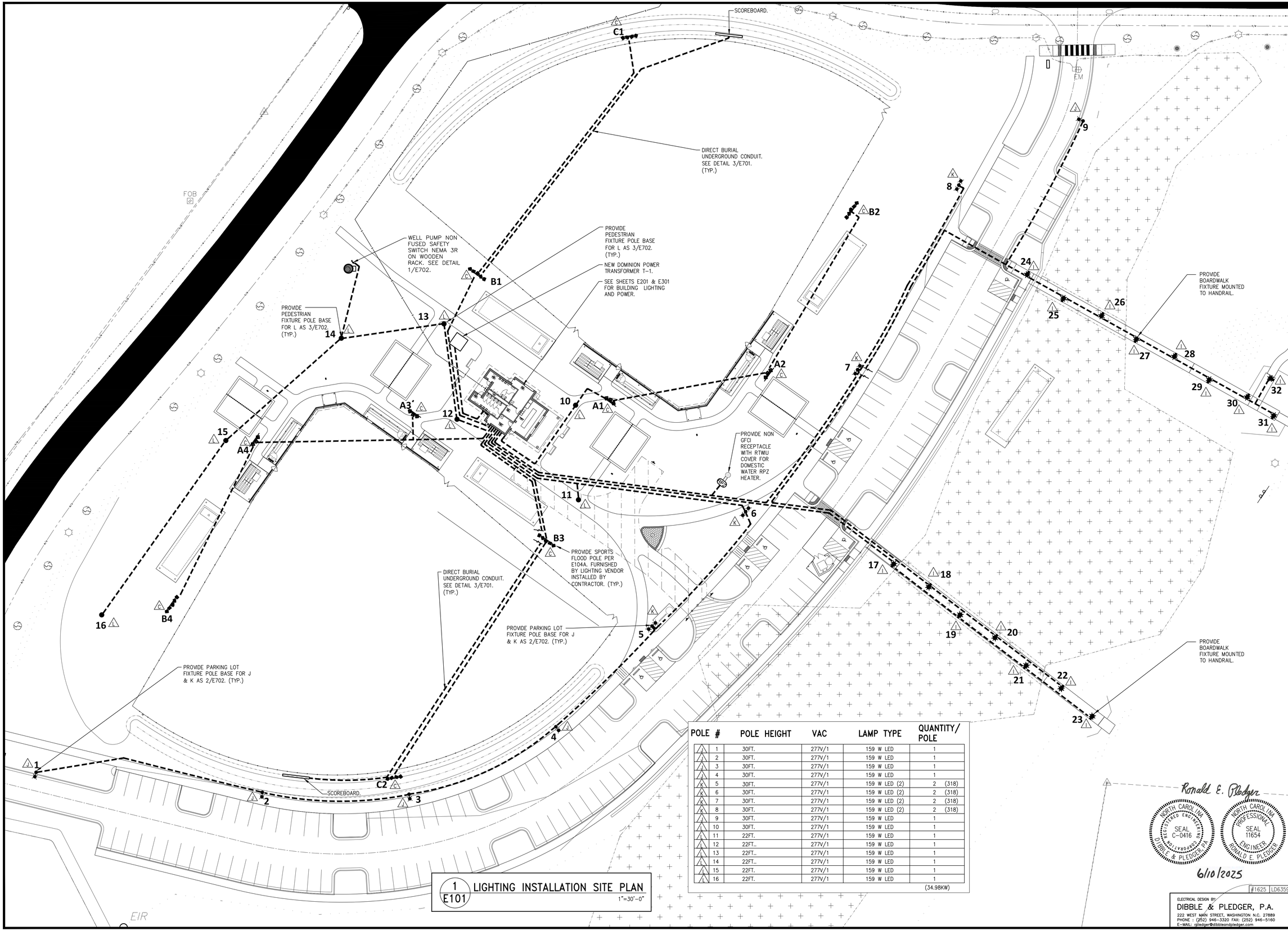
DRAWN BY: DJH
PROJECT #: 22008
ISSUE DATE: 07/23/2025

PHASE:
CONSTRUCTION DOCUMENTS

SHEET NAME & NUMBER

DOOR, WINDOW, GLAZING, & HARDWARE SCHEDULES, & DETAILS

A8.01



POLE #		POLE HEIGHT	VAC	LAMP TYPE	QUANTITY/ POLE
J	1	30FT.	277V/1	159 W LED	1
J	2	30FT.	277V/1	159 W LED	1
J	3	30FT.	277V/1	159 W LED	1
J	4	30FT.	277V/1	159 W LED	1
K	5	30FT.	277V/1	159 W LED (2)	2 (318)
K	6	30FT.	277V/1	159 W LED (2)	2 (318)
K	7	30FT.	277V/1	159 W LED (2)	2 (318)
K	8	30FT.	277V/1	159 W LED (2)	2 (318)
J	9	30FT.	277V/1	159 W LED	1
J	10	30FT.	277V/1	159 W LED	1
J	11	22FT.	277V/1	159 W LED	1
J	12	22FT..	277V/1	159 W LED	1
J	13	22FT..	277V/1	159 W LED	1
J	14	22FT..	277V/1	159 W LED	1
J	15	22FT.	277V/1	159 W LED	1
J	16	22FT.	277V/1	159 W LED	1
					(34.98KW)

1 E101 LIGHTING INSTALLATION SITE PLAN
1"=30'-0"

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ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
	60% DD SET	1/14/25	

CURRITUCK COUNTY

CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

LIGHTING & POWER SITE PLANS BALL FIELDS & PARKING LOT

Ronald E. Pledger

NORTH CAROLINA REGISTERED ENGINEERING CORPORATION SEAL C-0416 DIBBLE & PLEDGER, PA

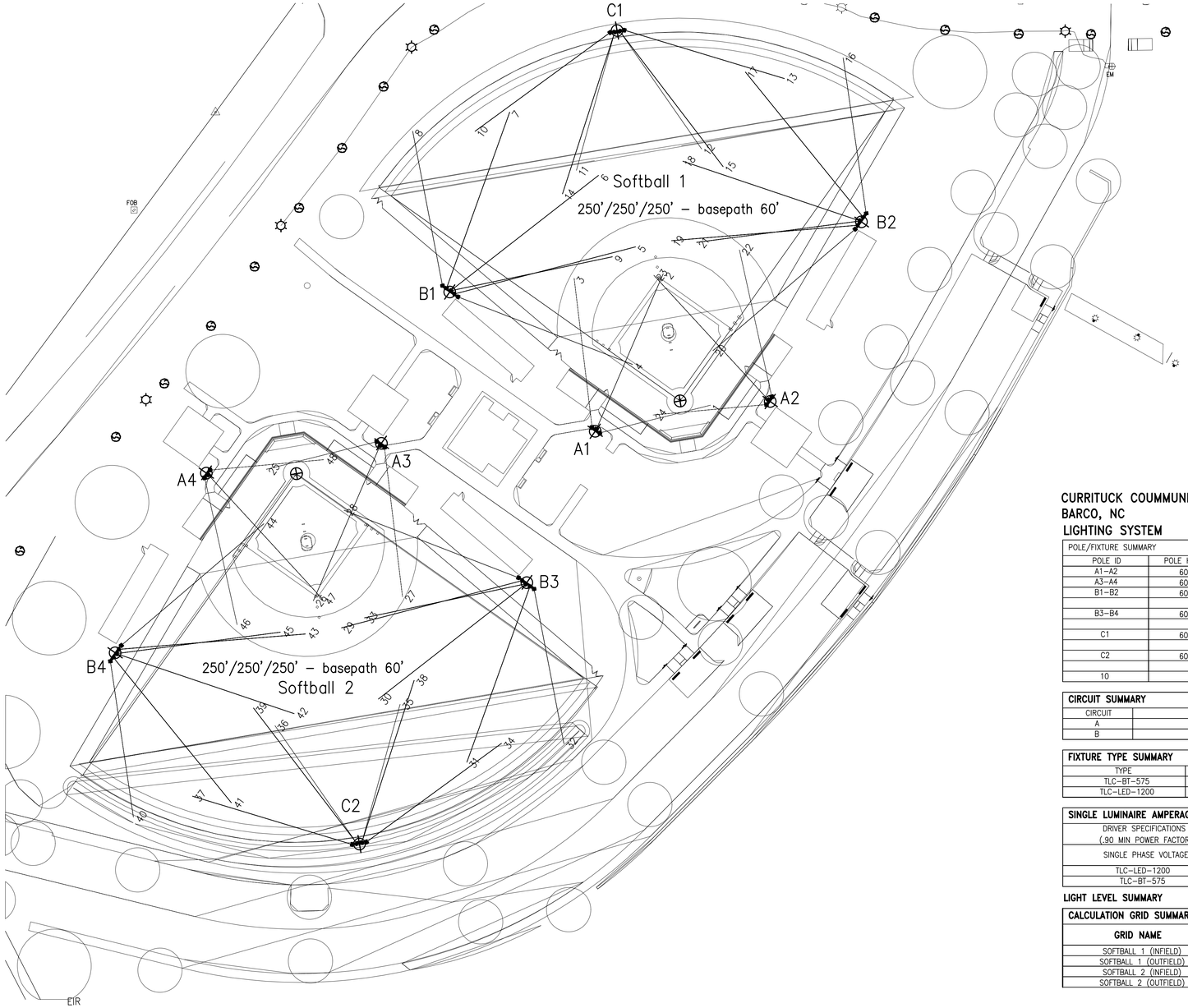
NORTH CAROLINA PROFESSIONAL SEAL 11654 ENGINEER RONALD E PLEDGER

6/10/2025

DESIGNED BY:	REP
DRAWN BY:	WAW
CHECKED BY:	REP
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	E101

#1625 LD6359

ELECTRICAL DESIGN BY:
DIBBLE & PLEDGER, P.A.
222 WEST MAIN STREET, WASHINGTON N.C. 27889
PHONE : (252) 946-3320 FAX: (252) 946-5160
E-MAIL: rpledger@dibbleandpledger.com



1 E102 LIGHTING POINT BY POINT SITE PLAN (FIELD #1 & FIELD #2) 1"=40'-0"

EQUIPMENT LAYOUT

INCLUDES:
- SOFTBALL 1
- SOFTBALL 2

ELECTRICAL SYSTEM REQUIREMENTS: REFER TO AMPERAGE DRAW CHART AND/OR THE "MUSCO CONTROL SYSTEM SUMMARY" FOR ELECTRICAL SIZING.

INSTALLATION REQUIREMENTS: RESULTS ASSUME ± 3% NOMINAL VOLTAGE AT LINE SIDE OF THE DRIVER AND STRUCTURES LOCATED WITHIN 3 FEET (1M) OF DESIGN LOCATIONS.

EQUIPMENT LIST FOR AREAS SHOWN

POLE				LUMINAIRES		
QTY	LOCAT.	SIZE	GRADE ELEV.	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/ POLE
4	A1–A4	60'	–	60'	TLC–LED–1200	3
4	B1–B4	60'	-	60' 15.5'	TLC–LED–1200 TLC–BT–575	5 1
2	C1–C2	60'	-	60' 15.5'	TLC–LED–1200 TLC–BT–575	4 2
10	Totals					48

SINGLE LUMINAIRE AMPERAGE DRAW CHART

DRIVER SPECIFICATIONS (.90 MIN POWER FACTOR)	LINE AMPERAGE PER LUMINAIRE (MAX DRAW)						
SINGLE PHASE VOLTAGE	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC–LED–1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC–BT–575	3.3	3.2	2.9	2.5	2.0	1.8	1.5

CURRITUCK COUMMUNITY PARK
BARCO, NC
LIGHTING SYSTEM

POLE/FIXTURE SUMMARY

POLE ID	POLE HEIGHT	MTG HEIGHT	Fixture Qty	LUMINAIRE TYPE	LOAD	CIRCUIT
A1–A2	60'	60'	3	TLC–LED–1200	3.51 kW	A
A3–A4	60'	60'	3	TLC–LED–1200	3.51 kW	B
B1–B2	60'	60'	5	TLC–LED–1200	5.85 kW	A
		16'	1	TLC–BT–575	0.57 kW	A
B3–B4	60'	60'	5	TLC–LED–1200	5.85 kW	B
		16'	1	TLC–BT–575	0.57 kW	B
C1	60'	60'	4	TLC–LED–1200	4.68 kW	A
		16'	2	TLC–BT–575	1.15 kW	A
C2	60'	60'	4	TLC–LED–1200	4.68 kW	B
		16'	2	TLC–BT–575	1.15 kW	B
10			48		51.40 kW	

CIRCUIT SUMMARY

CIRCUIT	DESCRIPTION	LOAD	FIXTURE QTY
A	SOFTBALL 1	25.70 kW	24
B	SOFTBALL 2	25.70 kW	24

FIXTURE TYPE SUMMARY

TYPE	SOURCE	WATTAGE	LUMENS	L90	L80	L70	QUANTITY
TLC–BT–575	LED 5700K – 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC–LED–1200	LED 5700K – 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	40

SINGLE LUMINAIRE AMPERAGE DRAW CHART

DRIVER SPECIFICATIONS (.90 MIN POWER FACTOR)	LINE AMPERAGE PER LUMINAIRE (MAX DRAW)						
SINGLE PHASE VOLTAGE	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC–LED–1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC–BT–575	3.3	3.2	2.9	2.5	2.0	1.8	1.5

LIGHT LEVEL SUMMARY

CALCULATION GRID SUMMARY

GRID NAME	CALCULATION METRIC	ILLUMINATION AVE					CIRCUITS	FIXTURE QTY
		AVE	MIN	MAX	MAX/MIN	AVE/MIN		
SOFTBALL 1 (INFIELD)	HORIZONTAL ILLUMINANCE	52.92	38.66	63.89	1.65	1.37	A	24
SOFTBALL 1 (OUTFIELD)	HORIZONTAL ILLUMINANCE	34.22	22.17	45.08	2.03	1.54	A	24
SOFTBALL 2 (INFIELD)	HORIZONTAL ILLUMINANCE	52.92	38.66	63.89	1.65	1.37	B	24
SOFTBALL 2 (OUTFIELD)	HORIZONTAL ILLUMINANCE	34.22	22.17	45.08	2.03	1.54	B	24

Ronald E. Pledger

NORTH CAROLINA REGISTERED ENGINEERING CORPORATION SEAL C-0416 DIBBLE & PLEDGER, P.A.

NORTH CAROLINA PROFESSIONAL SEAL 11654 ENGINEER RONALD E. PLEDGER

6/10/2025

#1625 | LD6359

ELECTRICAL DESIGN BY:
DIBBLE & PLEDGER, P.A.
222 WEST MAIN STREET, WASHINGTON N.C. 27889
PHONE : (252) 946-3320 FAX: (252) 946-5160
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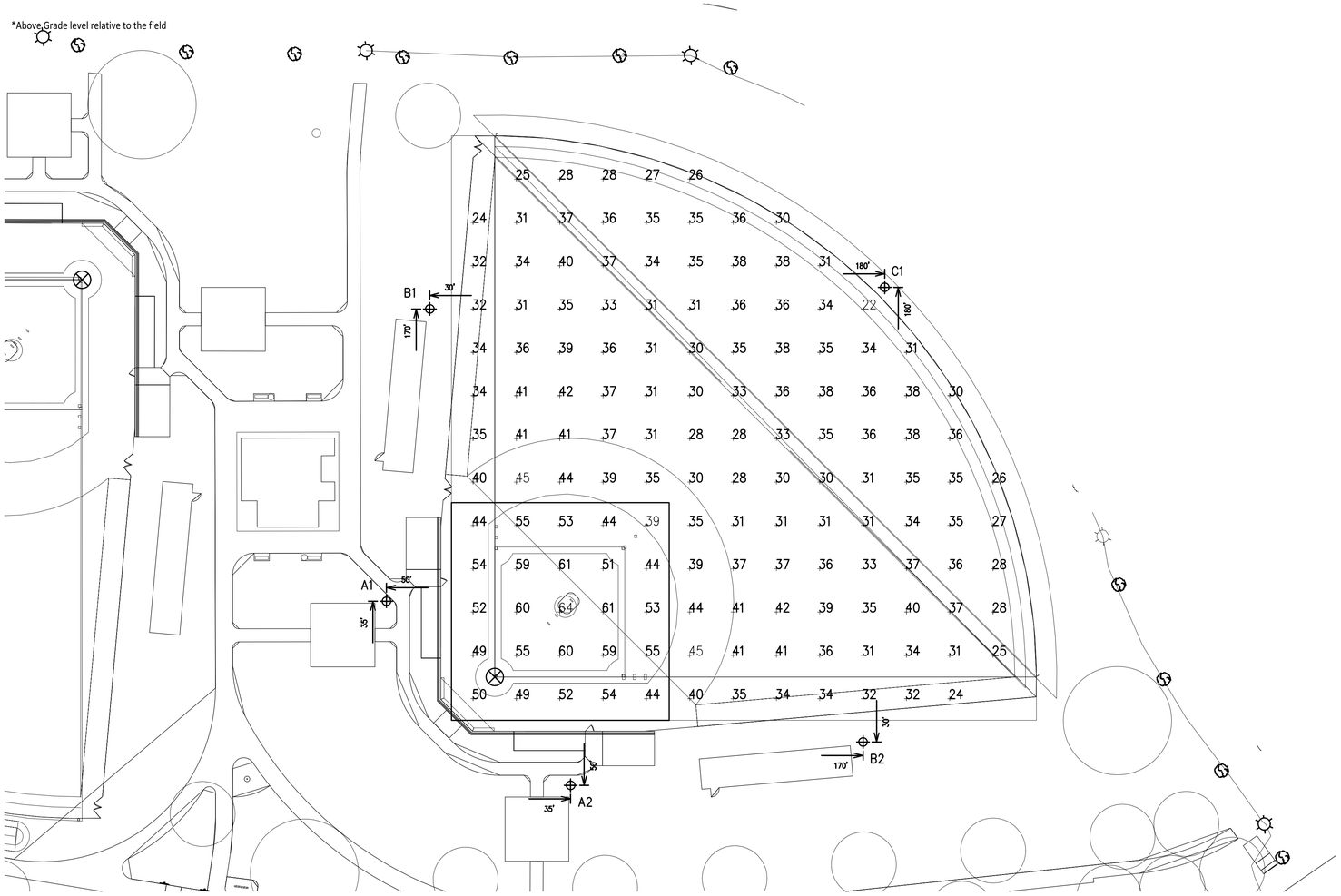
ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
	60% DD SET	1/14/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA
SPORTS LIGHTING FIELD 1 & FIELD 2 POINT BY POINT

DESIGNED BY:	REP
DRAWN BY:	WAW
CHECKED BY:	REP
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	E102

*Above Grade level relative to the field



1/E103 LIGHTING POINT BY POINT SITE PLAN (FIELD #1)
1"=30'-0"

GRID SUMMARY

NAME: SOFTBALL 1
SIZE: 250'/250'/250' – BASEPATH 60'
SPACING: 20.0' x 20.0'
HEIGHT: 3.0' ABOVE GRADE

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES INFIELD	OUTFIELD
GUARANTEED AVERAGE:	50	30
SCAN AVERAGE:	52.92	34.22
MAXIMUM:	63.89	45.08
MINIMUM:	38.66	22.17
AVG/MIN:	1.37	1.54
GUARANTEED MAX/MIN:	2	2.5
MAX/MIN:	1.65	2.03
UG (ADJACENT PTS):	1.25	1.53
CU:	0.68	
NO. OF POINTS:	25	119

LUMINAIRE INFORMATION
APPLIED CIRCUITS: A
NO. OF LUMINAIRES: 24
TOTAL LOAD: 25.70 kW

GUARANTEED PERFORMANCE: THE ILLUMINATION DESCRIBED ABOVE IS GUARANTEED PER YOUR MUSCO WARRANTY DOCUMENT AND INCLUDES A 0.95 DIRT DEPRECIATION FACTOR.

FIELD MEASUREMENTS: INDIVIDUAL FIELD MEASUREMENTS MAY VARY FROM COMPUTER-CALCULATED PREDICTIONS AND SHOULD BE TAKEN IN ACCORDANCE WITH IESNA RP-6-15.

ELECTRICAL SYSTEM REQUIREMENTS: REFER TO AMPERAGE DRAW CHART AND/OR THE "MUSCO CONTROL SYSTEM SUMMARY" FOR ELECTRICAL SIZING.

INSTALLATION REQUIREMENTS: RESULTS ASSUME ± 3% NOMINAL VOLTAGE AT LINE SIDE OF THE DRIVER AND STRUCTURES LOCATED WITHIN 3 FEET (1M) OF DESIGN LOCATIONS.

EQUIPMENT LIST FOR AREAS SHOWN

POLE QTY	POLE LOCATION	POLE SIZE	POLE GRADE ELEVATION	LUMINAIRES ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	A1–A2	60'	–	60'	TLC–LED–1200	3	3	0
2	B1–B2	60'	–	60'	TLC–LED–1200	5	5	0
				15.5'	TLC–BT–575	1	1	0
1	C1	60'	–	60'	TLC–LED–1200	4	4	0
				15.5'	TLC–BT–575	2	2	0
5	Totals					24	24	0

Ronald E. Pledger

NORTH CAROLINA REGISTERED ENGINEERING FIRM C-0416 DIBBLE & PLEDGER PA
SEAL C-0416

NORTH CAROLINA PROFESSIONAL SEAL 11654 ENGINEER RONALD E. PLEDGER
SEAL 11654

6/10/2025

#1625 LD6359

ELECTRICAL DESIGN BY:
DIBBLE & PLEDGER, P.A.
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PHONE : (252) 946-3320 FAX: (252) 946-5160
E-MAIL: rpledger@dibbleandpledger.com

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ISSUE/REVISIONS:

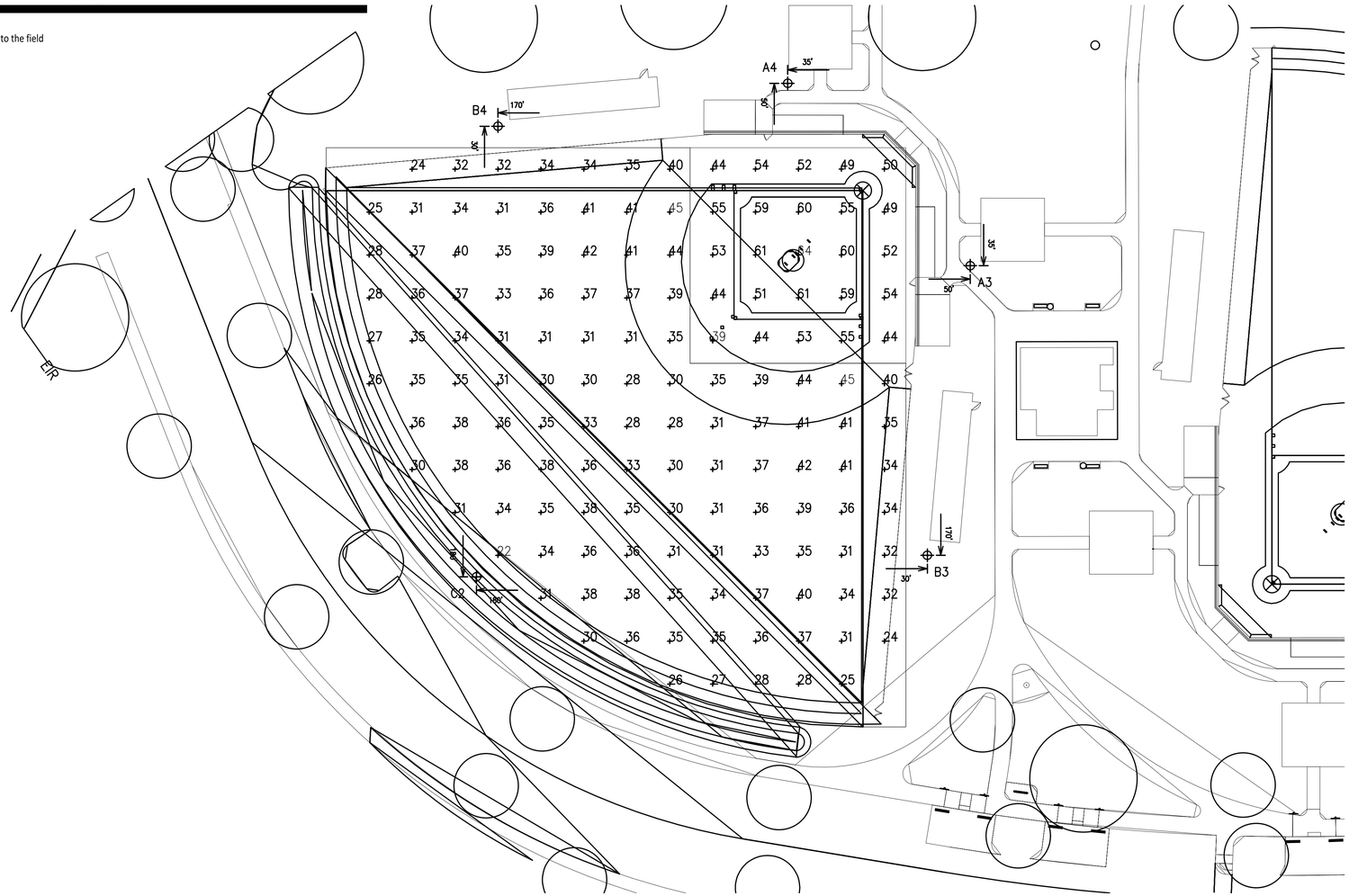
NO.	DESCRIPTION	DATE	BY
60%	60% DD SET	1/14/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA
SPORTS LIGHTING FIELD 1
POINT BY POINT

DESIGNED BY:	REP
DRAWN BY:	WAW
CHECKED BY:	REP
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN

SHEET No.
E103

ade level relative to the field



1 / E104 LIGHTING POINT BY POINT SITE PLAN (FIELD #2)
1"=30'-0"

GRID SUMMARY

NAME: SOFTBALL 2
SIZE: 250'/250'/250' – BASEPATH 60'
SPACING: 20.0' x 20.0'
HEIGHT: 3.0' ABOVE GRADE

ILLUMINATION SUMMARY

	MAINTAINED HORIZONTAL FOOTCANDLES	
	INFIELD	OUTFIELD
GUARANTEED AVERAGE:	50	30
SCAN AVERAGE:	52.92	34.22
MAXIMUM:	63.89	45.08
MINIMUM:	38.66	22.17
AVG/MIN:	1.37	1.54
GUARANTEED MAX/MIN:	2	2.5
MAX/MIN:	1.65	2.03
UG (ADJACENT PTS):	1.25	1.53
CU:	0.68	
NO. OF POINTS:	25	119
LUMINAIRE INFORMATION		
APPLIED CIRCUITS:	B	
NO. OF LUMINAIRES:	24	
TOTAL LOAD:	25.70 kW	

GUARANTEED PERFORMANCE: THE ILLUMINATION DESCRIBED ABOVE IS GUARANTEED PER YOUR MUSCO WARRANTY DOCUMENT AND INCLUDES A 0.95 DIRT DEPRECIATION FACTOR.

FIELD MEASUREMENTS: INDIVIDUAL FIELD MEASUREMENTS MAY VARY FROM COMPUTER-CALCULATED PREDICTIONS AND SHOULD BE TAKEN IN ACCORDANCE WITH IESNA RP-6-15.

ELECTRICAL SYSTEM REQUIREMENTS: REFER TO AMPERAGE DRAW CHART AND/OR THE "MUSCO CONTROL SYSTEM SUMMARY" FOR ELECTRICAL SIZING.

INSTALLATION REQUIREMENTS: RESULTS ASSUME ± 3% NOMINAL VOLTAGE AT LINE SIDE OF THE DRIVER AND STRUCTURES LOCATED WITHIN 3 FEET (1M) OF DESIGN LOCATIONS.

EQUIPMENT LIST FOR AREAS SHOWN

POLE				LUMINAIRES				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	A3–A4	60'	–	60'	TLC–LED–1200	3	3	0
2	B3–B4	60'	–	60'	TLC–LED–1200	5	5	0
				15.5'	TLC–BT–575	1	1	0
1	C2	60'	–	60'	TLC–LED–1200	4	4	0
				15.5'	TLC–BT–575	2	2	0
5	Totals					24	24	0

Ronald E. Pledger

NORTH CAROLINA REGISTERED ENGINEERING FIRM DIBBLE & PLEDGER, P.A. SEAL C-0416

NORTH CAROLINA PROFESSIONAL ENGINEER RONALD E. PLEDGER SEAL 11654

6/10/2025

Rivers & ASSOCIATES, INC. Since 1918
NC License: F-0334
riversandassociates.com
Six Forks Place III Ste. 230
353 E. Six Forks Road
Raleigh, NC 27609
919.594.1626
Engineers
Planners
Surveyors
Landscape Architects

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
	60% DD SET	1/14/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA
SPORTS LIGHTING FIELD 2
POINT BY POINT

DESIGNED BY:	REP
DRAWN BY:	WAW
CHECKED BY:	REP
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	E104

#1625 LD6359

ELECTRICAL DESIGN BY:
DIBBLE & PLEDGER, P.A.
222 WEST MAIN STREET, WASHINGTON N.C. 27889
PHONE : (252) 946-3320 FAX: (252) 946-5160
E-MAIL: rpledger@dibbleandpledger.com

Currituck County Mainland Wastewater
Capacity Availability Form Maple Commerce Park

County Contact Information

Will Rumsey, Utilities Manager
444 Maple Road
Maple, NC 27956

Phone: 252.232.2769
Fax: 252.453.3721

Website: https://co.currituck.nc.us/departments/water/

Request

This request is for:

- ☐ Single Family Residence
- ☐ Residential Development
- ☒ Non-residential

Owner Information

Name(s): COUNTY OF CURRITUCK

Mailing Address: 153 COURTHOUSE RD., SUITE 204, CURRITUCK, NC 27929

E-Mail Address: REBECCA.GAY@CURRITUCKCOUNTYNC.GOV

Phone Number: 252-232-2075

Applicant Information (if different from Owner)

Name(s): _____

Mailing Address: _____

E-Mail Address: _____

Phone Number: _____

Parcel Information

PIN(s): 005200000170000

Street Address: CORNER OF COLLEGE WAY & MAPLE PARKWAY, BARCO, NC

Project Information

Name of Project: CURRITUCK COMMUNITY PARK PH III., BALLFIELDS

Number of Units: _____

Projected Daily Project Demand (gpd): 6,750 GPD
27 PLUMBING FIXTURES
250GPD/ PLUMBING FIXTURES
→ PER RIVERS & ASSOCIATES

Anticipated Wastewater Access Date: JAN 2026+

Applicant's Signature

I declare, that to the best of my knowledge, the information provided herein is true, correct, and complete.

Rebecca L. Gay
Property Owner/Applicant Signature

6/23/2025
Date

Note: Sewer developmental fees are due at building permit application. See the Currituck County Master Fee Schedule for rates.
https://co.currituck.nc.us/master-fee-schedule/

For Office Use Only

☒ Wastewater capacity is available for this project.

☐ Wastewater capacity is not available for this project.

Utilities Manager — 6.25.25 — Date

Rebecca L. Gay — County Manager — 6/25/2025 — Date

This capacity availability is good for one year.

Storm Water Narrative & Calculations

Maple Commerce Park
Phase-3 Ballfields
Shortcut Road
Currituck NC 27917



9/11/2025

Brian P. Ruff Sr., P.E. LEED
Rivers and Associates, Inc.
353 East Six Forks Road, Suite 230
Raleigh NC 27609
Phone: (919) 594-1626
Fax: (252) 752-3974

TABLE OF CONTENTS

1. Stormwater Narrative Text
    a. Introduction…p3
    b. Pre-Submittal Meeting…pREV1-5
    c. Original Area Map…p7
    d. Phase-Two Drainage Area Map…p8
    e. Phase-Three Project Area…p9
    f. Wet Detention MDC List…p10
    g. DA#1 Exhibit (northeast plan) Showing the prior permit 20,038sf impervious runoff directly to wetland—how this is addressed for the project…p11
    h. DA#1 Exhibit (southwest plan) ditto "g."…p12
    i. Runoff Summary – 2-YR Pre-Dev. Compared to 5-YR Post-Dev….pREV1-17
2. Pre-Submittal email…p19
3. Wet Pond Area & Stage-storage chart…pREV1-20
4. Pre-Development Runoff Exhibits
    a. Pre-Development Drainage Area Map…pREV1-21
    b. Outlet-A discharge to wetland on east side, 2-yr pre-dev….pREV1-22
    c. Outlet-B discharge to roadside College Way west side, 2yr pre-dev….pREV1-24
    d. Rainfall Table Hydraflow -- from the NOAA local chart…p26
5. Post-Development Runoff Exhibits
    a. Post-Development Drainage Area Map…pREV1-27
    b. Hydraflow Summary output sheets…p28
        i. Hydrographs CFS for 5-Year rainfall…pREV1-30
            1. #80 5-YR inflow to wet pond=14.4cfs…pREV1-33
            2. #81 5-YR attenuated discharge=3.42cfs…pREV1-34
            3. #84 combined Discharge "B" to west at College Way=5.066cfs…pREV1-35
            4. #87 comb. Discharge "A" to east wetlands=3.90cfs…pREV1-36
        ii. Wet Pond geometry report…pREV1-37
6. Omitted other output sheets…p38-99
7. Currituck County Soil Map…p100
8. Flood Map…p11
9. NC Stream Classification Map…p111
10. NOAA Rainfall Chart…p112
11. 15A NCAC 02H .1003 "Requirements that apply to all projects"…p113
12. Detail 8 – Ballfield Warning Track…p116
13. Existing Stormwater Permit No. SW7111105 MOD#2…p117
14. Ex. SW7111105-MOD#2 Permit Application…p127
15. USACE Section 404 Wetland Fill Permit…p136
16. E&SC Permit Curri-2024-001…p143
17. Geotechnical Engineering Report…p159
    a. SHWT Report insert by Terrain Environmental Consulting…p163
    b. "SHWT was approximated to range from 6-to-12 inches below the ground surface."

INTRODUCTION

The current project is "Phase-3 Ballfields" of the Currituck Community Park in Currituck County NC, west of Barco on U.S. Hwy 158 (Shortcut Road). Areas of projects have been coordinated with Currituck County and DEQ archives.

Existing permitted areas for SW7111105 Drainage Area #1 are accounted for as a portion of this project and the remainder is figured as new Drainage Area 6 to be treated by the proposed wet pond in the southwest corner.

5-Year attenuated Post-Development runoff is less than the 2-Year Pre-Development flows, with some areas shedding directly to the roadside ditches per the Existing Permit of DA#1. See pp. 17 of this Narrative Text:

- 5-Year flow to east discharge is 3.90 cfs, which is less than the 2-year Pre-Development Flow of 4.62 cfs. Also,

- 5-Year attenuated flow to the west discharge is 3.42 cfs, which is less than the 2-year Pre-Dev. Flow of 3.81 cfs.

Phase-3 Ballfields is the 3rd athletic field project for the Currituck Community Park which was masterplanned for the area beside the County Airport. The project development has generally followed the 2012 Masterplan, shown below with rectangular soccer fields and pie-shaped ballfields shown. This project proposes two medium-sized baseball fields in the area shown on the master plan below as one big baseball field.



INTRODUCTION

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- 5-Year flow to east discharge is 5.81 cfs, less than the Pre-Dev. Flow of 7.34 cfs.
- 5-Year attenuated flow to the west discharge is 3.51 cfs LT 2yr Pre-Dev. Flow of 3.73 cfs.

Phase-3 Ballfields is the 3rd athletic field project for the Currituck Community Park which was masterplanned for the area beside the County Airport. The project development has generally followed the 2012 Masterplan, and one can see the area of ballfields in the quadrant of College Way and Shortcut Road below, with rectangular soccer fields, and pie-shaped ballfields shown.

This project proposes two medium-sized baseball fields in the area shown on the master plan below as one big baseball field.

see REV-1



Stormwater Management Permit SW7111105 and Modifications represent the area of ballfields on the property, and also include the COA Aviation Center west of College Way Road, the Park Maintenance Facility north of the softball complex, plus the Skate Park area going east on Maple Parkway. The original permit was submitted in 2011 to commence this County land development project under number SW7111105, with two Modification to the current date, and the Proposed Phase-Three Ballfields as Modification #3 summarized in the chart below.

SUMMARY OF PERMIT DRAINAGE AREAS - SW711105 Original, Mod#1, Mod#1, and Mod#3

Original App. SW7111105	76.42 ac	3329051 sf
Modification No.1 (Changes in Green)	83.94	
Modification No.2 (Purple)	83.94	
Modification No.3 (Orange)	83.94	

	Low Density DA No.1 (SF)	Wet Pond DA No.2 (SF)	Low Density DA No.3 (SF)	Wetland #1 DA No.4 (SF)	Wetland #2 DA No.5 (SF)	Wet Pond DA No.6
Total DA Original	3044396	284655				
Total DA Mod.1	2429758	284655	671941	64033	206039	
Total DA Mod.2	2391886	284655	671941	64033	243724	
Total DA Mod.3	1923579	284655	671941	64033	243724	468307
Impervious Sum Orig.	162300	143555				
Impervious Sum Mod.1	168775	143555	68492	44867	82328	
Impervious Sum Mod.2	168775	143555	68492	44867	105712	
Impervious Sum Mod.3	168775	143555	68492	44867	105712	89981

Impervious Itemization (Changes)

OnSite Building		41500				
OnSite Building Mod.1				544	5003	
OnSite Building Mod.2					5302	
OnSite Building Mod.3	4787					11223
OnSite Streets	62300					
OnSite Streets Mod.1	79811		23492			
OnSite Streets Mod.2	79811					
OnSite Parking		77000				
OnSite Parking Mod.1	20038			36047	58020	
OnSite Parking Mod.2	20038				74295	
OnSite Parking Mod.3	22911					45945
OnSite Sidewalk		15055				
OnSite Sidewalk Mod.1	18926			8276	14335	
OnSite Sidewalk Mod.2	18926				17615	
OnSite Sidewalk Mod.3	24921					32813
Future	100000	10000				
Future Mod.1	50,000		45000			
Future Mod.2	50,000					
Future Mod.3	36,345				2000	Note1
Other						
Other Mod.1					4970	
Other Mod.2					6500	
Imp. Itemization Total	162300	143555				
Imp. Item Total Mod.1	168775		68492	44867	82328	
Imp. Item Total Mod.2	168775				105712	
Imp. Item Total Mod.3	168,775					89981

Note1: inserted to get sum to work out.

PRE-SUBMITTAL MEETING

The submittal for storm water management permit modification no.3 is coordinated with Review Consultant McAdams & Co. in Raleigh. Pre-submittal meeting is held with Mr. Daniel Weibke PE and Ms. Katie Balaze PE and resulting summary points are as follows:

1) Confirmed "yes" of County flow requirements as to rainfall runoff is to reduce Post-Development 5-Year Storm to the Pre-Development 2-Year Flow, regarding the calculations of rainfall and runoff;

2) Consider using the pre-development watershed values to maximize the site development, and not require "all" surfaces go into the SCM;
    a. Response – Low density flows at the north driveway and on the west side are into roadside ditches, and fall under the Drainage Area #1 Low Density column.

3) Try to use the existing permit SW711105-MOD#2 impervious item 50000 "Future" which is currently permitted for development;
    a. Response – The 20038 SF parking area of DA#1 (which corresponds to the DA#1A area shown on the drainage map) is figured for a portion of parking area on the driveway entrance to Maple Parkway, and the sidewalk on the east side, which is planned to shed directly into the wetland. Also a portion of the Future 50000 sf item in the DA#1 Column is used for some impervious areas which can shed directly into the roadside ditch on College Way. Please refer to the drainage area sketches below for an indication of these areas.

4) See if you can find a copy of the drainage area map which goes along with the existing permit SW7111105-MOD#2 and maybe shows the 50000 "Future" so the CRC can understand the areas;
    a. Response – This map has been found with Ms. Brooke Sullivan at DEQ and is included below.

5) Consider NOT using a wet pond since this project is within 5 miles of an airport, ref. "**BASH"** guidance (Bird Airstrike Hazard).
    a. SCM design "to detract" waterfowl;
    b. Try to do an infiltration basin. If that doesn't work then try for a Dry Pond. Need to evaluate the SHWT and advise. Provide the soils investigation for Dan to evaluate.
        i. Response – We have talked with the County and the entire Park is using wet ponds all around the place. AND, the addition of this wet pond is needed because the SHWT is near the existing ground surface. Infiltration basin or dry pond are not really acceptable based on the SHWT criteria.

6) Consider use of ballfield underdrain as a means to infiltrate the 1-1/2" first flush, and may be able to reduce the required SCM size
    a. ~~Response – We have done this by considering that the soil is a now a Type-A good condition soil which quickly absorbs runoff – and uses a CN value of 39. Instead of using a Type-D poor condition soil type which would have been the original status.~~

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    a. Response – We have done this by considering that the soil is a now a Type-A good condition soil which quickly absorbs runoff – and uses a CN value of 39. Instead of using a Type-D poor condition soil type which would have been the original status.

b. Revised response REV1 – the ballfield import soil & underdrains are considered to be Type-A well-drained soil regardless of the surrounding in-situ level of saturation, for the long term. Underdrains are not modelled in the peak flow calculation of surface runoff beyond the implied soil condition improvement.

7) Move the proposed berm grading at least 10-FT from the property line. The County is sensitive to the neighbors and doesn't want to see berm grading adjacent to neighboring property is not preferred.
    a. Response – The pond has been shifted away from the property line by at least 10-ft and has been reduced in size a bit, so no berm grading is used at this point.

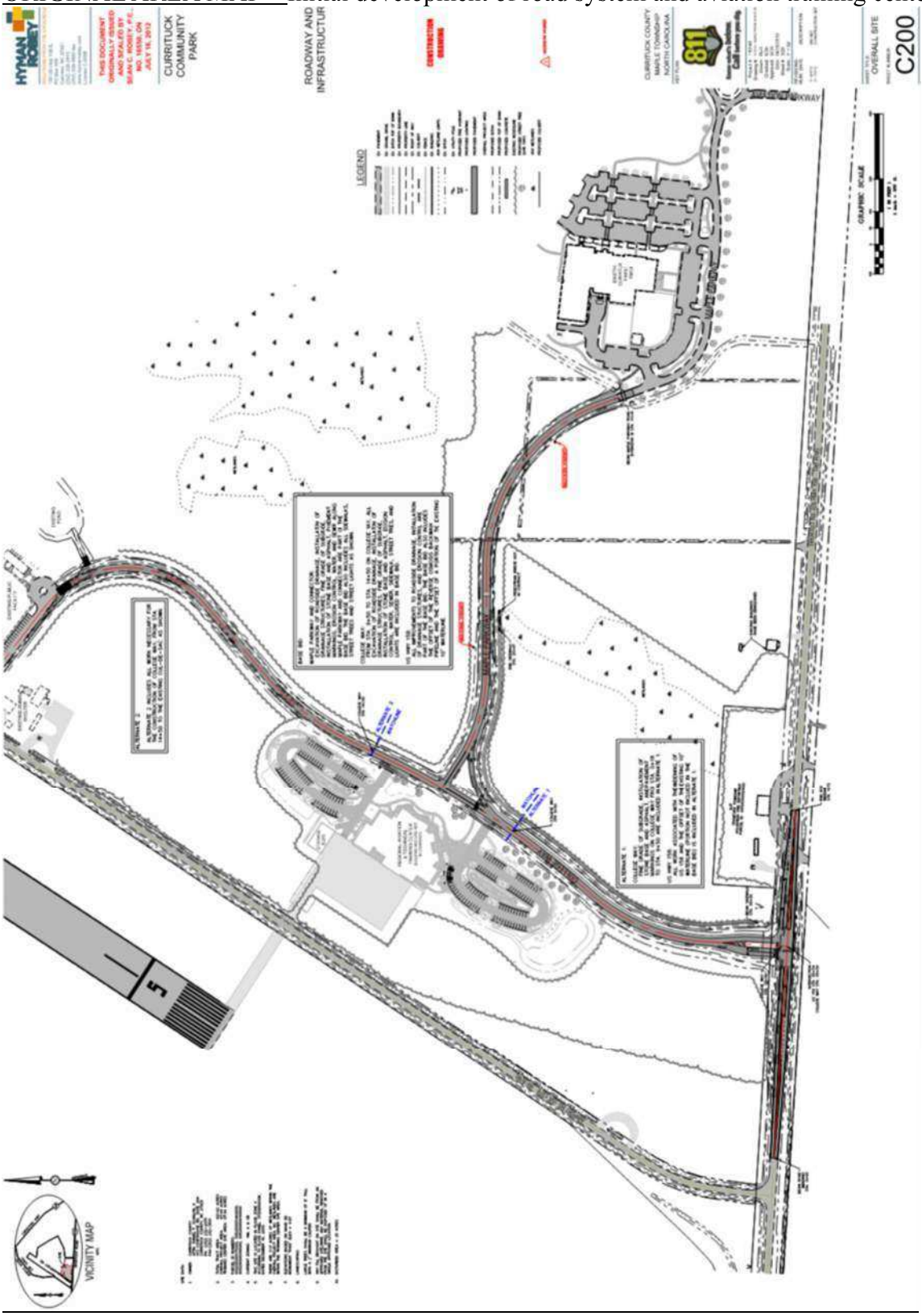
8) Additional attached email from Ms. Balaze sent about the pre-submittal meeting, email is attached for reference.

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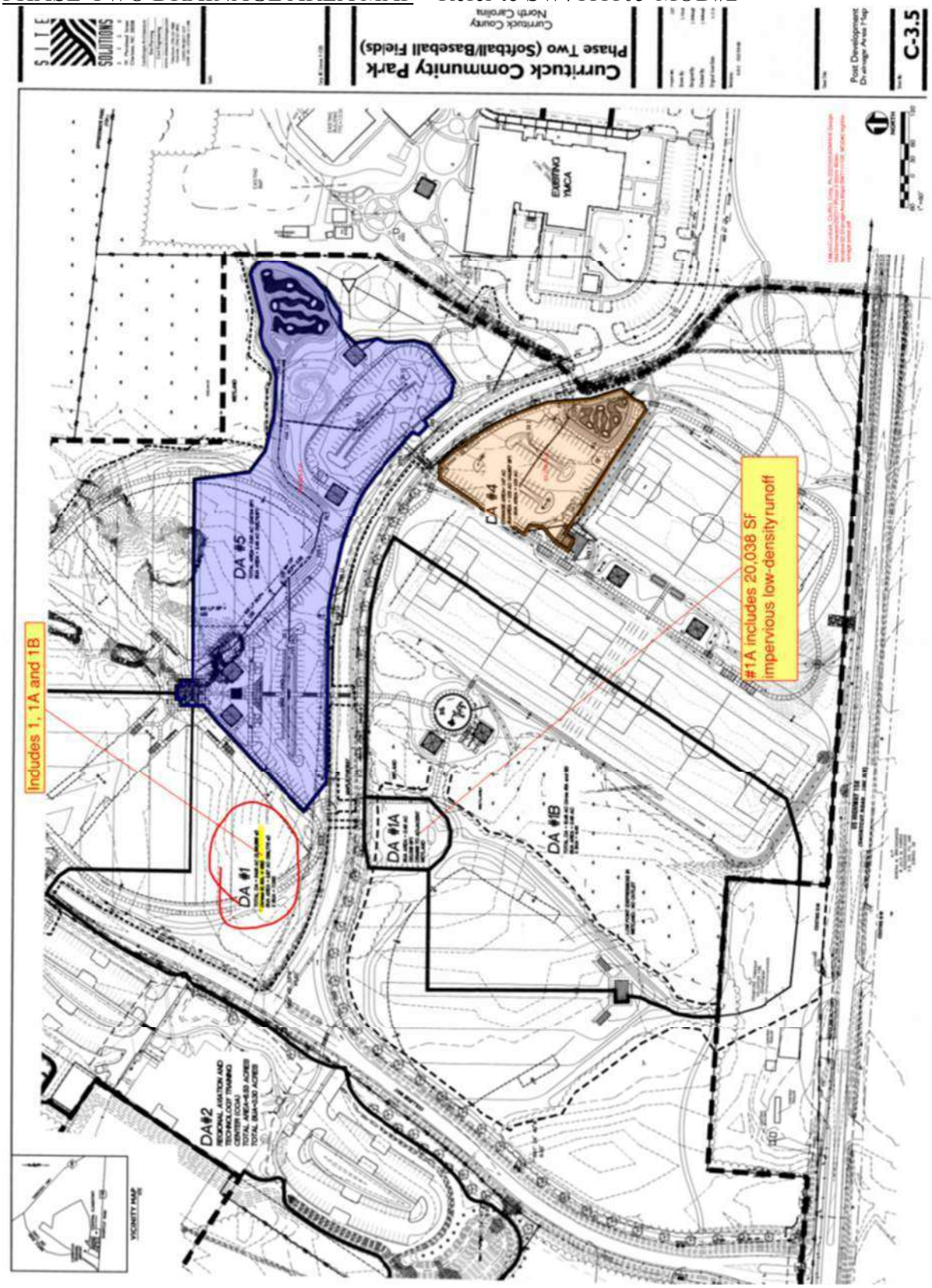
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see REV-1

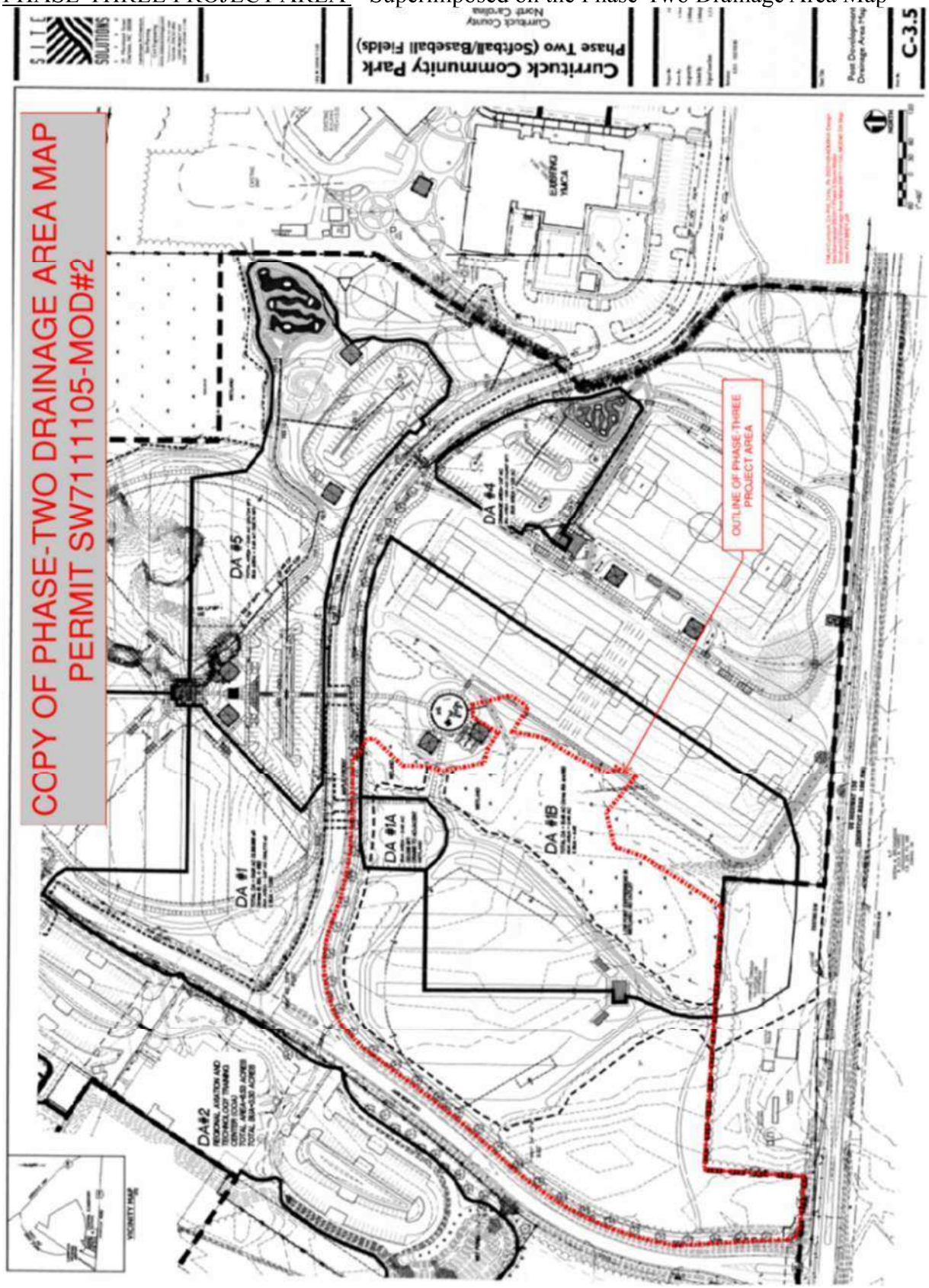
ORIGINAL AREA MAP – Initial development of road system and aviation training center.



PHASE-TWO DRAINAGE AREA MAP – Refer to SW7111105-MOD#2



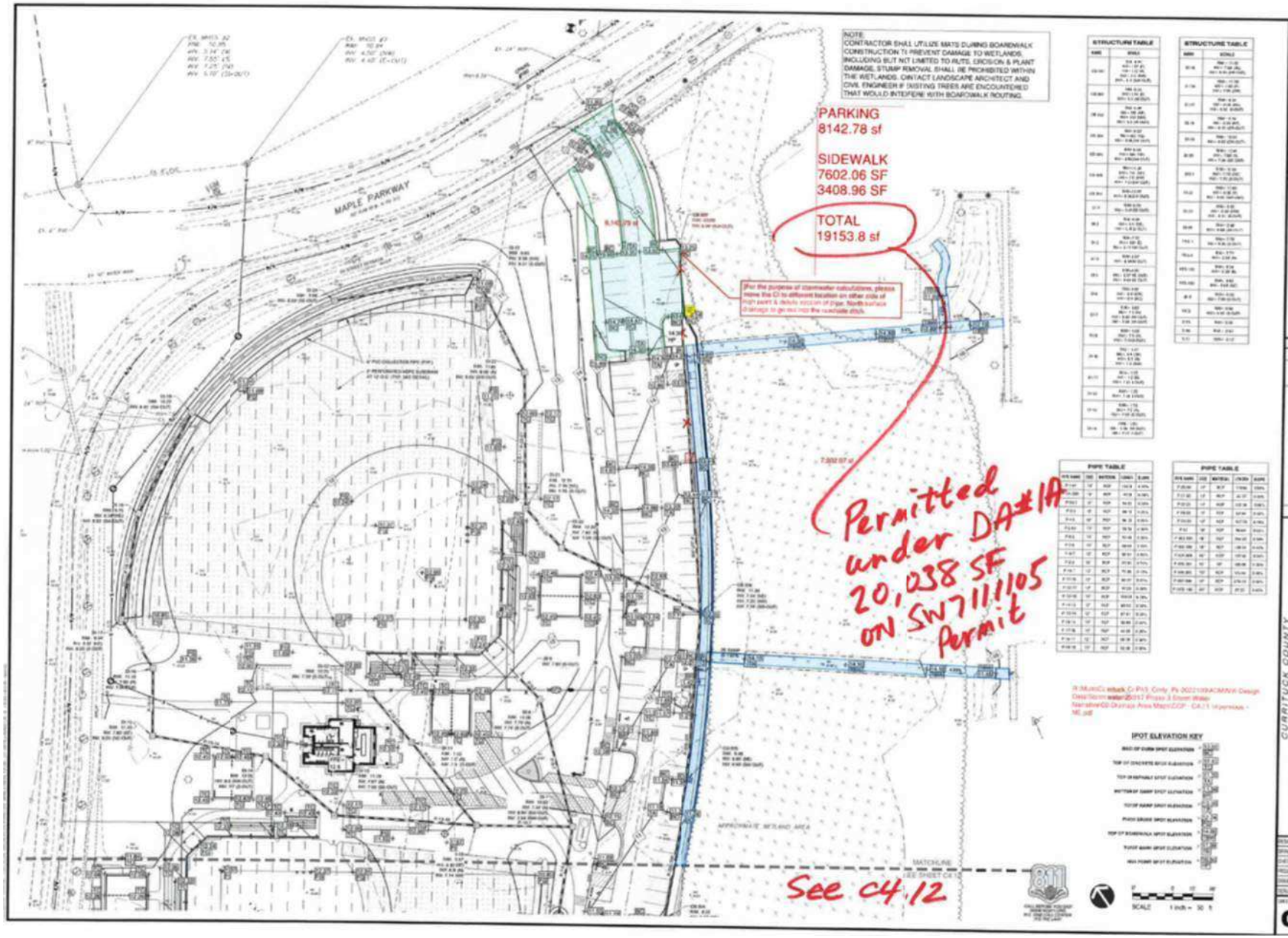
PHASE-THREE PROJECT AREA – Superimposed on the Phase-Two Drainage Area Map



WET POND MINIMUM DESIGN CRITERIA ITEM LIST

MDC 1. MAIN POOL SURFACE AREA AND VOLUME

1. Sa/da Tables with Average Depth Method
    a. Using SA/DA = 1.26
    b. Multiply by Total percent drainage area (excluding the wetlands) of 10.04ac
    c. Required pond SA = SA/DA * DA /100
       = 1.26 * 10.04 ac / 100 = 0.126 ac = 5510.92 sf (minimum)
    d. Provided pond SA = 6244.0 sf → OK
2. Phase-III Ballfields – Use of the 20,038 SF parking area of DA #1A.
    a. Impervious area which is currently approved as low density on the Drainage Area Map for Phase-Two, refer to the Sheet C-3.5 by Site Solutions above for the Phase-Two Drainage Areas.
        i. Drainage Area #1 which listed in SW7111105 Permit documents includes the areas shown on the plan.
        ii. On the plan for the area labelled DA#1, see the note under the label for DA#1 which says it includes "(Areas #1, #1A + #1B)."
        iii. See Area DA #1A for BUA of 20038 sf "Drains to adjacent wetland" referring to the parking area there. → That area is permitted on SW7111105 for OnSite Parking.
        iv. For up to the 20038 sf amount included on Phase-Three project will comprise of some parking and sidewalk area designed to shed into roadside ditch in Maple Parkway and then to the wetland, and also shed directly from sidewalk to wetland. Refer to the next pages for Rivers Sheets C4.11 and C4.12 with highlighted pavement and sidewalk areas figured for this amount.



Rivers

Preliminary
DO NOT USE
FOR CONSTRUCTION

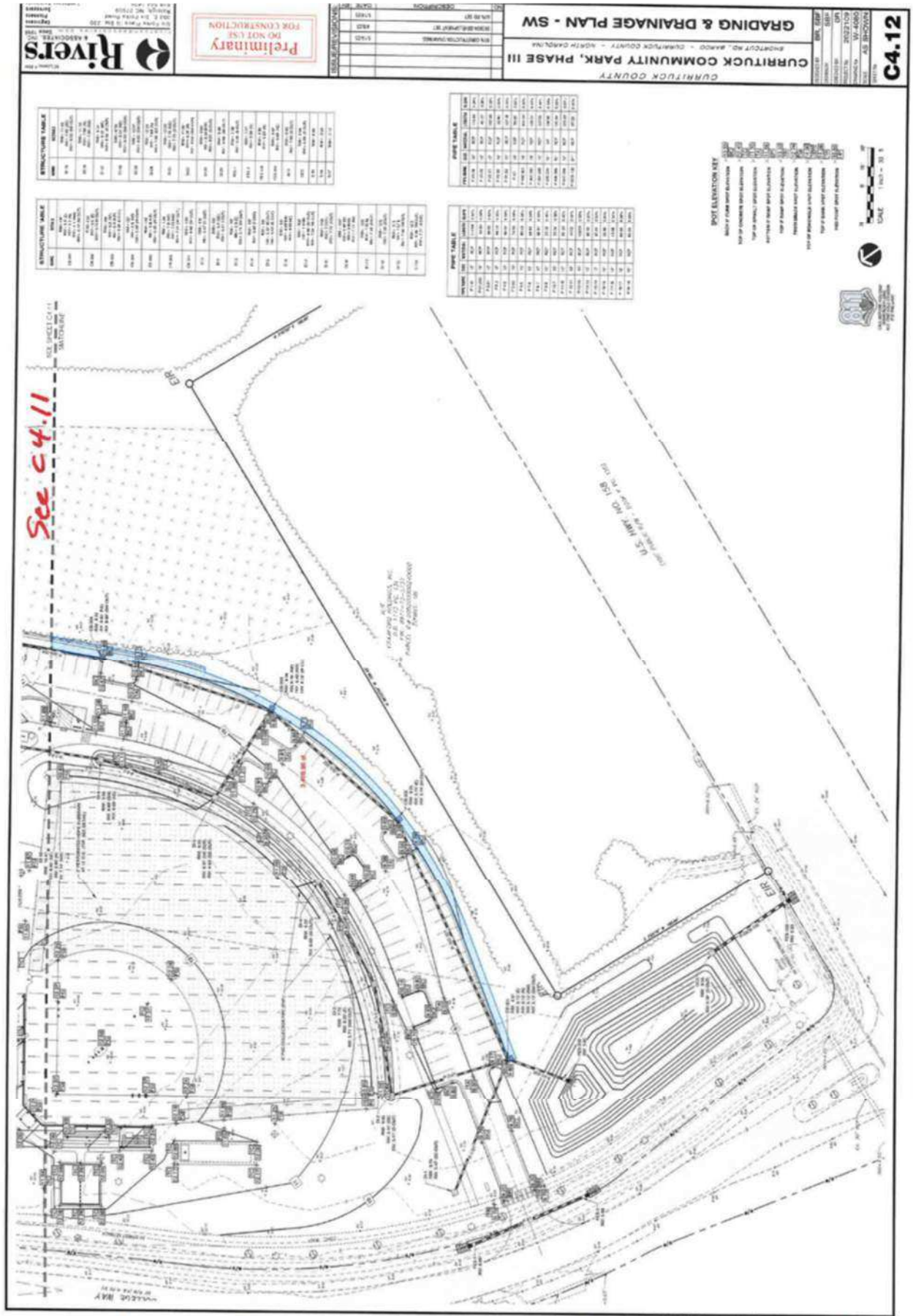
ISSUE REVISIONS

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

GRADING & DRAINAGE PLAN - NE

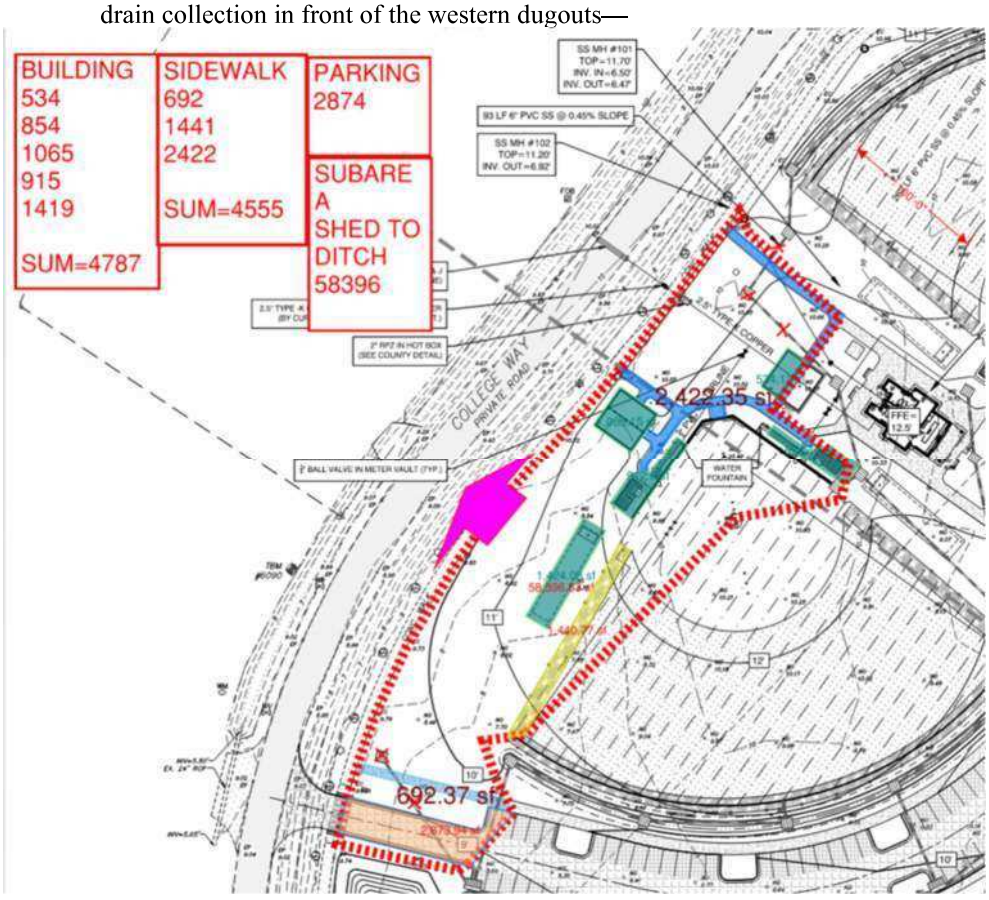
DESIGNED BY	BR, SBF
DRAWN	SBF
CHECKED BY	BR
PROJECT No.	2022109
DRAWING	W-4080
SCALE	AS SHOWN

C4.11

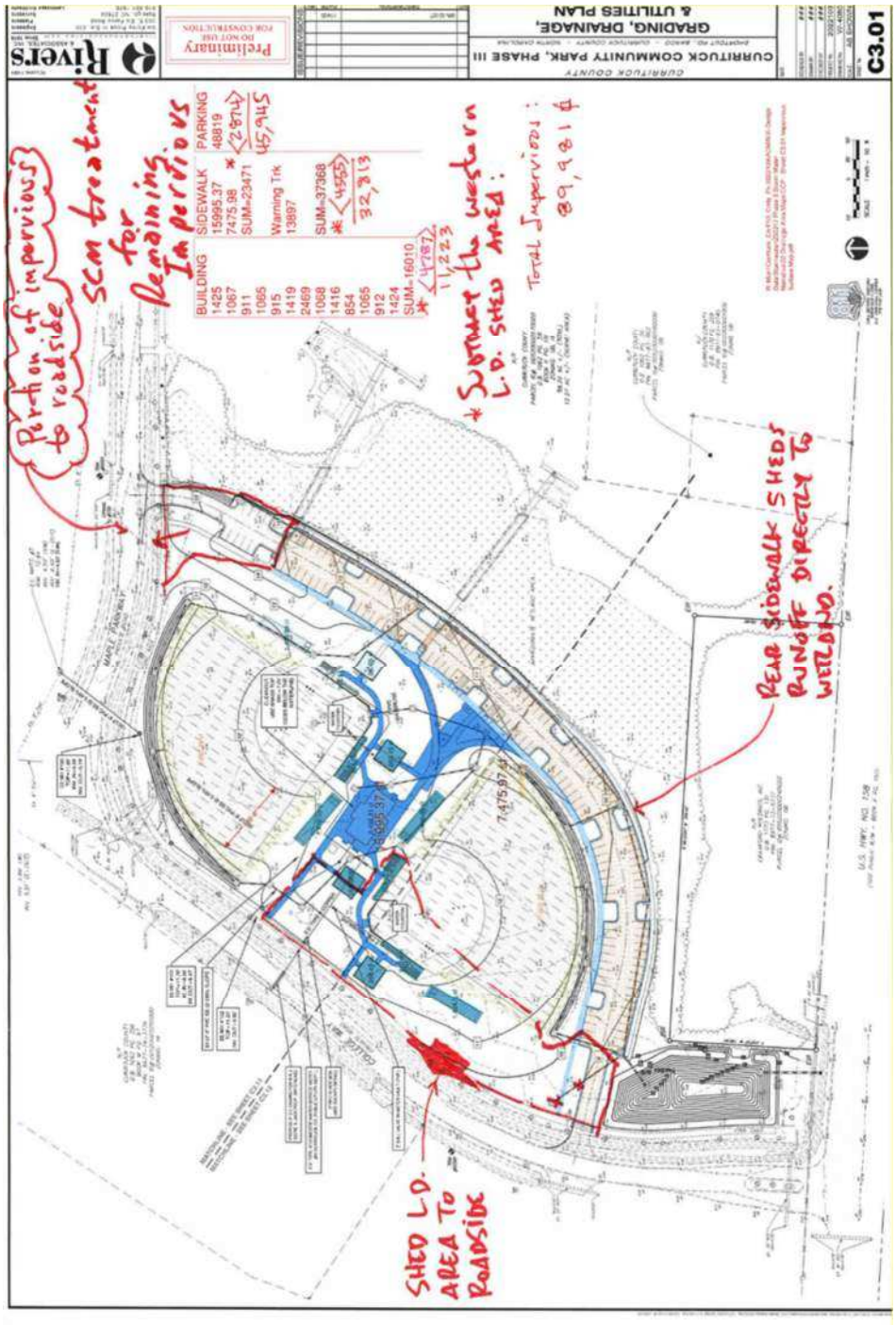

GRADING & DRAINAGE PLAN - SW
CURRITUCK COMMUNITY PARK, PHASE III
C4.12
Preliminary
DO NOT USE FOR CONSTRUCTION
Rivers
See C4.11

3. Phase-3 Ballfields – Use of Low Density shed flow into roadside ditch of College Way makes use of the
    i. 58396 Total drainage area
    ii. 4787 sf buildings
    iii. 4555 sf walks
    iv. 1440 sf warning track 3" brick dust on 3" CABC
    v. 2873 sf parking
        1. 13655 sf subtotal impervious area

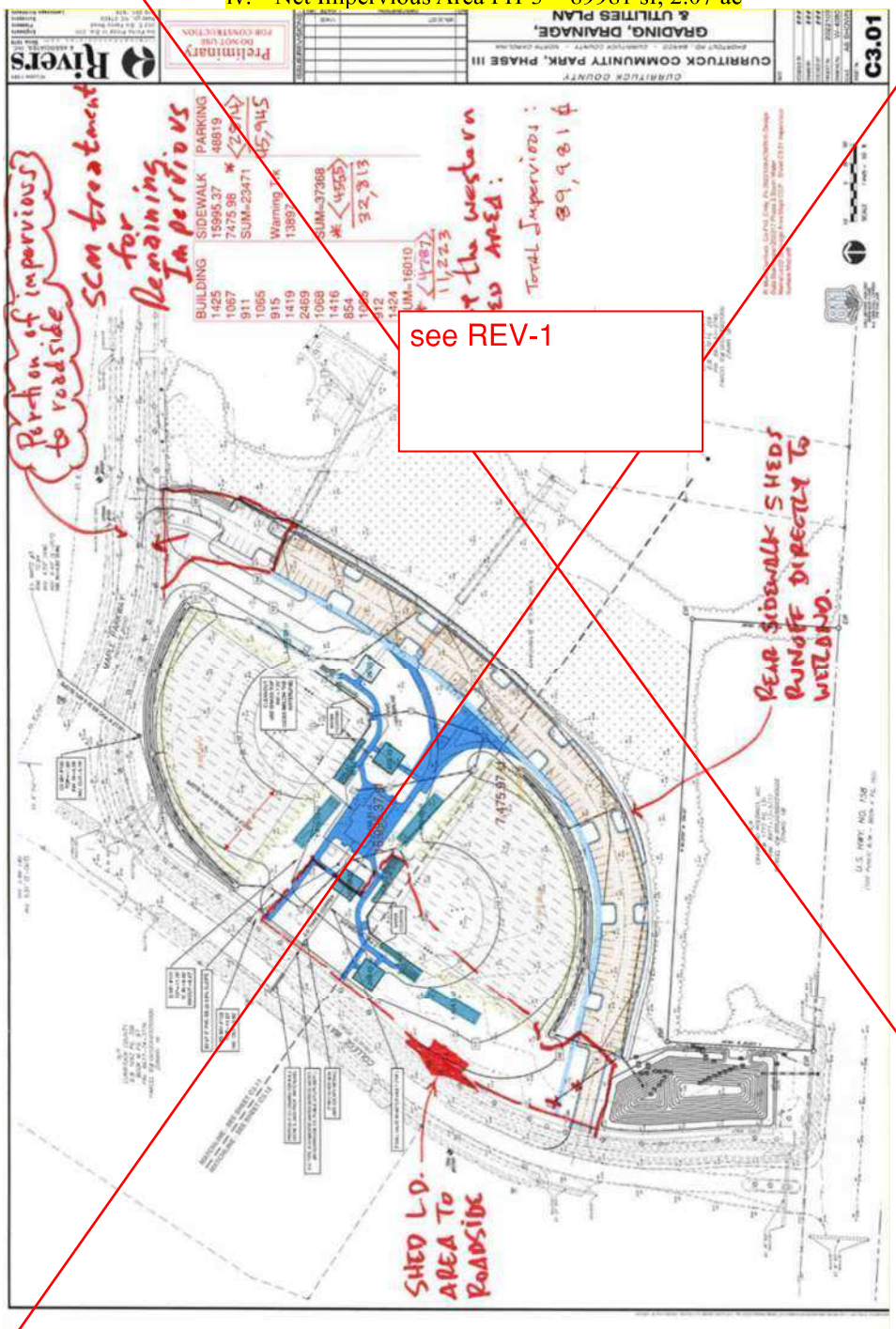
b. For Drainage Area #1 listed in SW7111105-MOD#2 the permit documents include an amount for "Future Impervious = 50,000sf" from which this "low density" portion will be applied.
    i. Hence for DA#1 for low density drainage area:
        1. Onsite Building Impervious increases by 4787 sf
            a. 0 sf + 4787 sf (added by Phase-3) = 4787 sf resulting building
        2. Onsite Sidewalk Impervious increases by 4555 sf walks & 1440 warning track
            a. 18926 sf + 5995 sf (added by Phase-3) = 24921 sf resulting sidewalk
        3. Onsite Parking Impervious increases by 2873 sf
            a. 20038 sf + 2873 sf (added by Phase-3) = 22911 sf resulting parking
        4. Future 50000 sf amount is reduced by 13655 sf = 36345 sf resulting future
        5. Total drainage area for DA#1 1,923,576 sf
        6. Subtract the above amounts of 13655 subtotal imp. Area from 50000 sf Future. Hence 36345 Remaining as "Future" for Mod.3 in the DA #1 column.
    ii. Area map for Phase-3 surface runoff into the College Way roadside ditch, includes trench drain collection in front of the western dugouts—

c. 

4. Phase-3 Ballfields – Remaining High-Density Runoff Design for DA#6 into Wet Pond SCM
    a. Total Site (from Wetland permit plans) = 546,678 sf, 12.55 ac
    b. Subtract 20,038 sf Impervious from DA#1A permit (LD to wetlands), 0.46 ac
    c. Subtract 13655 sf (0.31 ac) Impervious from DA#1 (LD shed flow to ditch), and 44741 sf (1.03 ac) pervious runoff from Phase-3 Ballfield to the roadside dich in College Way
    d. Net Drainage Area for Phase-3 = 10.75 ac
    e. Measured Impervious Area for PH-3 = 89981 sf, 2.07 ac



4. Phase-3 Ballfields – Remaining High-Density Runoff Design for DA#6 into Wet Pond SCM
    a. Total Site (from Wetland permit plans) = 546,678 sf, 12.55 ac
    b. Coastal Wetland within the site 109511 sf, 2.51 ac (from Wetlands permit plan)
    c. Resulting Project Area = 437,167 sf, 10.04 ac
        i. Subtract 20,038 sf Impervious from DA#1A permit (LD to wetlands), 0.46 ac
        ii. Subtract 13655 sf (0.31 ac) Impervious from DA#1 (LD shed flow to ditch), and 44741 sf (1.03 ac) pervious runoff from Phase-3 Ballfield to the roadside dich in College Way
        iii. Net Drainage Area for Phase-3 = 358,940 sf, 8.23 ac
        iv. Net Impervious Area PH-3 = 89981 sf, 2.07 ac



MDC 2. MAIN POOL DEPTH: average depth 3-8 feet below permanent pool.

1. Davg= is 4-FT

MDC 3. SEDIMENT STORAGE – The forebay and main pools shall have a minimum sediment storage of six inches.

1. Main pool depth of 4-ft from surface at 5.0-ft to depth of 1.0-ft
    a. Bottom at Elev.=0.5 provides a minimum sediment storage of 6-in (min.)
2. Forebay minimum depth of 30-in from Elev.=5.0 to Elev.=2.5
    a. Bottom Elev. = 1.0 provides a minimum sediment storage of 12-in (min.)

MDC 4. LOCATION OF INLETS AND OUTLET – located in a manner that avoids short circuiting.

MDC 5. FOREBAY –

(a) Measured at Elev. = 5.0 – 1160 sf area
    a. 1160 sf forebay / 6244 sf main pool = 19%
    b. Forebay entrance is deeper than the exit.
    c. Nonerosive flow over berm to main pool
    d. Clean out forebay if it gets silted

MDC 6. VEGETATED SHELF

MDC 7. DRAWDOWN TIME – to be 2-5 days

MDC 8. PROTECTION OF THE RECEIVING STREAM – The wet pond discharge of runoff from the one-year, 24-hour storm minimizes the impacts

MDC 9. FOUNTAINS – n/a

MDC 10. TRASH RACK – to be included

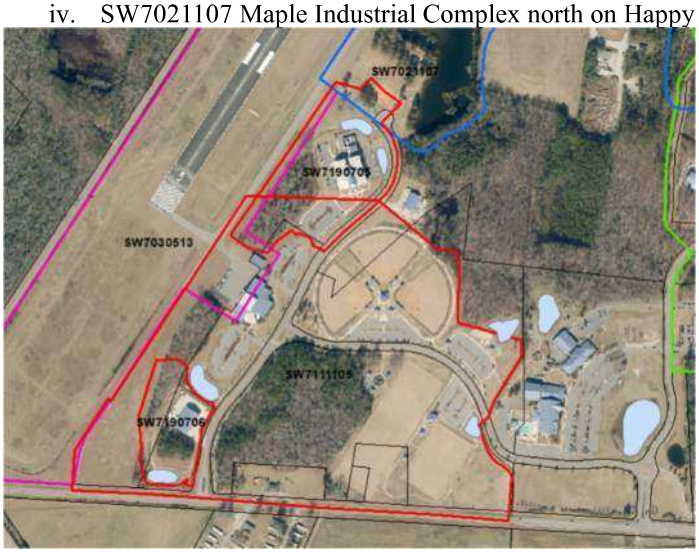
MDC 11. VEGETATION – by a qualified design professional

a. Non-clumping turf grass
b. #6 planting is (3) species

State DEQ Storm Water Permit Modification – SW7111105 MOD#3

1. ORIGINAL permit application was made in 2011 for county-owned property: 76.42 AC total as a mixture of low density and high density areas: DA#1 = 3,044,396 SF low density and DA #2 = 284,655 SF high density.
    Total 3329051 SF (76.42 ac)
2. MODIFICATION No.1 was filed with the resulting total areas comprising 83.94 AC – and included Note on the application: “Drainage Areas 4 & 5 were taken out of the previously approved DA#1”:
    DA#1 (Mod-1) 2,429,758 (Low Density)
    DA#2 (Mod-1) 284,655 (High density - Wet Detention Pond Imp.=143,555sf)
    DA#3 (Mod-1) 671,941 (Low Density)
    DA#4 (Mod-1) 64,033 (High density - Wetland #1 Soccer Imp.=44,867sf)
    DA#5 (Mod-1) 206,039 (High density - Wetland #2 Softball Imp.=105,712sf) (SumHD Imp.294134sf)
    Total 3656426 SF (83.94 ac)
3. MODIFICATION No.2 revise area of Wetland#2 as part of “Phase-2 Softball” for DA#1, DA#4 and DA#5 as shown changed on the permit application:
    DA #1 (Mod-2 rev.) 2,391,886
    DA #2 (no change)
    DA #3 (no change)
    DA #4 (no change)
    DA #5 (Mod-2 rev.) 243,724
    Total _____ SF (84.41 ac)

BUA = 14.5% for total 84.41 ac. “This project is permitted for a maximum of 531,401 SF of BUA consisting of 237,267 sf for the Low Density areas of the project and 294,134 sf for the three high density areas within this project.

4. Updated Map from Michelle Perry from the Currituck County GIS application, showing many Stormwater Permit areas on this property area—
    a. SW711105 appears on this map in the area of the ballfields – County Community Park and Regional Aviation Training Center
    b. Surrounding additional permits are shown including
        i. SW7030513 Co. airport
        ii. SW7190705 Co. public safety center (overlap onto SW7111105 of 184,182 sf)
        iii. SW7190706 Co. public safety support building (overlap of 237,911 sf)
        iv. SW7021107 Maple Industrial Complex north on Happy Landing Road
    c. 

Stormwater Runoff – Comparison of Pre-Development and Post-Development Runoff

Pre-Dev. Drainage Area I.D.	Description	Sub-Area (sf)	Sub-Area (ac)	Soil Type	Curve No.	High Elev. (ft)	Low Elev. (ft)	Basin Length (ft)	Basin Slope (%)	2-Year Pre-Dev. Discharge (cfs)	5-Year Post-Dev. Discharge (cfs)	Water Elev. in Pond
A-1	East Outlet-A Wetland	362672	8.32	D	90	10.0	9.0	747	0.13	4.63	3.90	
B-1		23219										
B-2		160852										
Subtotal	West Outlet-B College Way	184071	4.22	D	90	10.0	4.7	1325	0.40	3.81	3.42	7.61’

Stormwater Runoff – Comparison of Pre-Development and Post-Development Runoff

Pre-Dev. Drainage Area I.D.	Description	Sub-Area (sf)	Sub-Area (ac)	Soil Type	Curve No.	High Elev. (ft)	Low Elev. (ft)	Basin Length (ft)	Basin Slope (%)	2-Year Pre-Dev. Discharge (cfs)	5-Year Post-Dev. Discharge (cfs)	Water Elev. in Pond
A-1	East Outlet-A Wetland	362672	8.3	see REV-1				747	0.13	7.34	5.81	
B-1		23219										
B-2		160852										
Subtotal	West Outlet-B College Way	184071	4.22	D	90	10.0	4.7	1325	0.40	3.73	3.51	6.87’

Outlook

RE: Phase-III Ballfields - Currituck Community Park

From Katie Balaze <balaze@mcadamsco.com>
Date Wed 4/23/2025 2:57 PM
To Brian Ruff <bruff@riversandassociates.com>
Cc Daniel Wiebke <wiebke@mcadamsco.com>

Brian,

Great to meet you today. Please see our notes from the meeting below:

- Major site plan – for Currituck UDO we regulate detention, DEQ regulates water quality
  - Reduce the peak discharge from the 5-year storm event to a level equal to the peak runoff anticipated from a 2-year event under wooded conditions
- Currituck County Airport nearby –
  - Currituck UDO - Airport Overlay (AO) district – Per 3.8.5.D.(5)(c) “Stormwater management facilities shall be designed, engineered, constructed, and maintained to detract waterfowl. This may include but is not limited to the use of riparian buffers, vegetative benches, wire gridding, or other techniques approved by the County.”
  - State Minimum Design Criteria info on the “five-mile radius” – discourages use of SCMs with standing water - https://www.deq.nc.gov/energy-mineral-and-land-resources/stormwater/bmp-manual/e-4-airports-01-29-2018/download
- Existing state SW permit – SW7111105 – 2015
  - DA Map from existing – determine if the site within the drainage area with 50,000 sf of future impervious
- Consider detention in the ball fields if the seasonal high water table allows
  - After further discussion about how to treat the fields for the CN analysis – they would still be considered D since the in-situ soils will not be drained, just the field. But depending on the subsurface design/soil report results, detention could be utilized in this area and modeled
- Keep existing points of outflow in mind from pre to post when designing the storm network/grading for the proposed site

Don’t hesitate to reach out with any further questions!

Katie Balaze, PE
Assistant Project Manager, Water Resources

Office: 919. 361. 5000 Mobile: 734. 716. 2482
balaze@mcadamsco.com

621 Hillsborough Street, Suite 500
Raleigh, NC 27603

MCADAMSCO.COM JOIN OUR TEAM

McAdams

From: Brian Ruff <bruff@riversandassociates.com>
Sent: Tuesday, April 22, 2025 2:57 PM

Rivers & ASSOCIATES, INC. Since 1918
ENGINEERS, PLANNERS, SURVEYORS & LANDSCAPE ARCHITECTS

Currituck Park Ph#3 Ballfields

9/16/2025

Wet Pond Calculations

Total Project Area=	12.55	ac	546710	sf
Subtract North "Low Density" Shed portion (prior permit)	0.46	ac	20038	sf
Subtract West "Low Density" Shed portion (prior permit)	1.34	ac	58396	sf
Net Project Drainage Area for Water Quality	10.75	ac		
New Impervious Area draining to SCM =	2.07	ac	89981	sf

Simple Method:

Rv = 0.05+0.9 * Impervious fraction(IA) IA = 0.19

Rv = 0.0517 inches/inches

Design Rainfall = 1.5 inch (1.0 inch in non-coastal counties)

Min. Req. WQ Volume = 3630 * (Design rainfall inches) * (Rv) * (Drainage Acres)

Min. Req. WQ Volume = **3,028** cf must store above the permanent pool elev.

Permanent Pool Elevation	**5.20**		
Temporary Pool Elevation	**5.61**	conservatively choose 18" - 30"	
Temporary Pool Depth Provided	**0.41**	ft	depth of Temporary Pool
Max. Temp Pool Depth Allowed	**2.80**	ft	
WQ Volume Provided	**3093**	cf	

Stage Storage Data

Elevation	surface area	diff. elev	incremental storage	accum. storage	Stage
1.00	1,297				
		1.00	1,662		
2.00	2,026			1,662	1.00
		1.00	2,462		
3.00	2,898			4,124	2.00
		1.00	3,378		
4.00	3,858			7,502	3.00
		1.20	6,416		
5.20	6,835			13,917	4.20
		0.41	3,093		
5.61	8,254			17,011	4.61
		0.39	3,404		
6.00	9,200			20,414	5.00
		1.00	11,750		
7.00	14,300			32,164	6.00
		0.60	9,222		
7.60	16,440			41,386	6.60

Main pool surface area and vol.

SA/DA Tables with Average Depth Method

	0.19	Percent Impervious Cover
	4.00	Permanent Pool Average Depth
	21	Use Percent Impervious Cover from Chart
	1.10	Coastal SA/DA from Chart
SA req'd = Vmp / Temp. Pool Depth	5,156	SA prov'd = 6835 O.k.

Size Water Quality Orifice for (2-5) Day Drawdown for WQ Volume

$Q = CdA(2gh)^{1/2}$	(Orifice Equation; Cd=0.60)
2.00	Orifice Diameter (inches)
0.3267	Driving Head to Centroid of Orfice (ft)
0.0173	Drawdown Rate (cfs)
3,093	Water Quality Volume (V_{WQ})
$V_{WQ}/(Q \times 86{,}400)$	Drawdown Time (days)
2.1	**Drawdown Time (days) (2 - 5 days)**

Currituck Park Ph#3 Ballfields

5/29/2025

Calculations

Drainage Area=	12.55	ac	546710 sf
Coastal wetlands Area =	2.51	ac	
Drainage Area without wetlands =	10.04	ac	437374 sf
Impervious to SCM =	2.35	ac	102197 sf

Simple Method:

Rv = 0.05+0.9 * Impervious fraction(IA) IA = 18.69 %

Rv = 0.2182 inches/inches

Design Rainfall = 1.5 inch (1.0 inch in non-coastal counties)

Min. Req. WQ Volume = 3630 * (Design rainfall inches) * (Rv) * (Drainage Acres)

Min. Req. WQ Volume = **14,914** cf must store above the perm. pool elevation

Permanent Pool Elevation	**5.00**		
Temporary Pool Elevation	**6.80**		conservatively choose 18" - 30"
Temporary Pool Depth Provided	**1.80**	ft	depth of Temporary Pool
Max. Temp Pool Depth Allowed	**2.70**	ft	
WQ Volume Provided	**15682.00**	cf	

Stage Storage Data

Elevation	surface area	diff. elev	incremental storage	accum. storage	Stage
1.00	1,297				
		1.00	1,662		
2.00	2,026			1,662	1.00
		1.00	2,462		
3.00	2,898			4,124	2.00
		1.00	3,378		
4.00	3,858			7,502	3.00
		1.00	5,051		
5.00	6,244			12,553	4.00
		1.00	7,624		
6.00	9,004			20,177	5.00
		0.80	8,058		
6.80	11,140			28,234	5.80
		0.20	2,281		
7.00	11,672			30,515	6.00
		0.50	6,215		
7.50	13,186			36,730	6.50

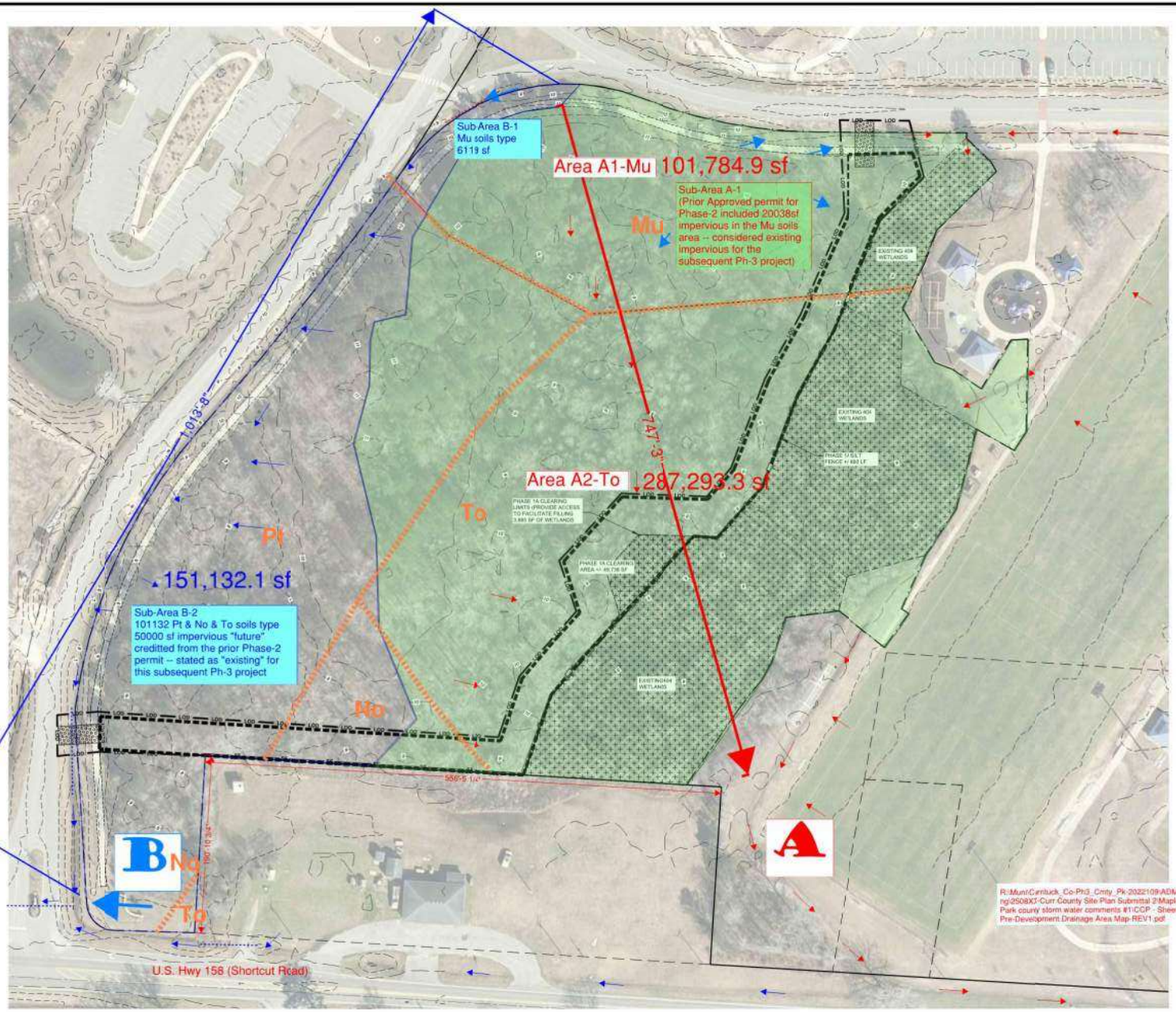
Main pool surface area and vol. SA/DA Tables with Average Depth Method

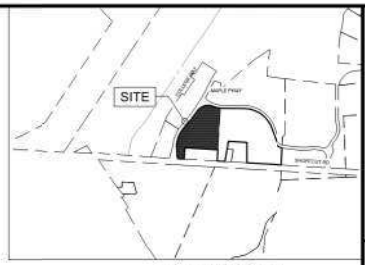
18.69		Percent Impervious Cover
3.50		Permanent Pool Average Depth
20		Use Percent Impervious Cover from Chart
1.26		Coastal SA/DA from Chart
SA req'd = 5,510.92	SA prov'd = 6244.00	O.k.

Size Water Quality Orifice for (2-5) Day Drawdown for WQ Volume

$Q = CdA(2gh)^{1/2}$	(Orifice Equation; Cd=0.60)
2.00	Orifice Diameter (inches)
1.7167	Driving Head to Centroid of Orifice (ft)
0.0397	Drawdown Rate (cfs)
15,682	Water Quality Volume (V_{WQ})
$V_{WQ}/(Q \times 86{,}400)$	Drawdown Time (days)
4.6	**Drawdown Time (days) (2 - 5 days)**

see REV-1





VICINITY MAP
1" = 1000' - 0"

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

EROSION CONTROL LEGEND

DESCRIPTION	SYMBOL	DETAIL
SILT FENCE	SF	
SILT FENCE OUTLET		
INLET PROTECTION		
PIPE INLET PROTECTION		
GRAVEL CONSTRUCTION ENTRANCE/EXIT		
TREE PROTECTION FENCE	TPF	
COMBINATION SILT AND TREE PROTECTION FENCE	SPF-TF	
TEMPORARY CHECK DAM		
LIMITS OF DISTURBANCE	LOD	
CONSTRUCTION FENCE	C	
CLEARING LIMITS		

811 CALL BEFORE YOU DIG (WAKE NC1 ONE N.C. ONE CALL CENTER) IT'S THE LAW

50' 0 25' 50'
SCALE 1 inch = 50 ft

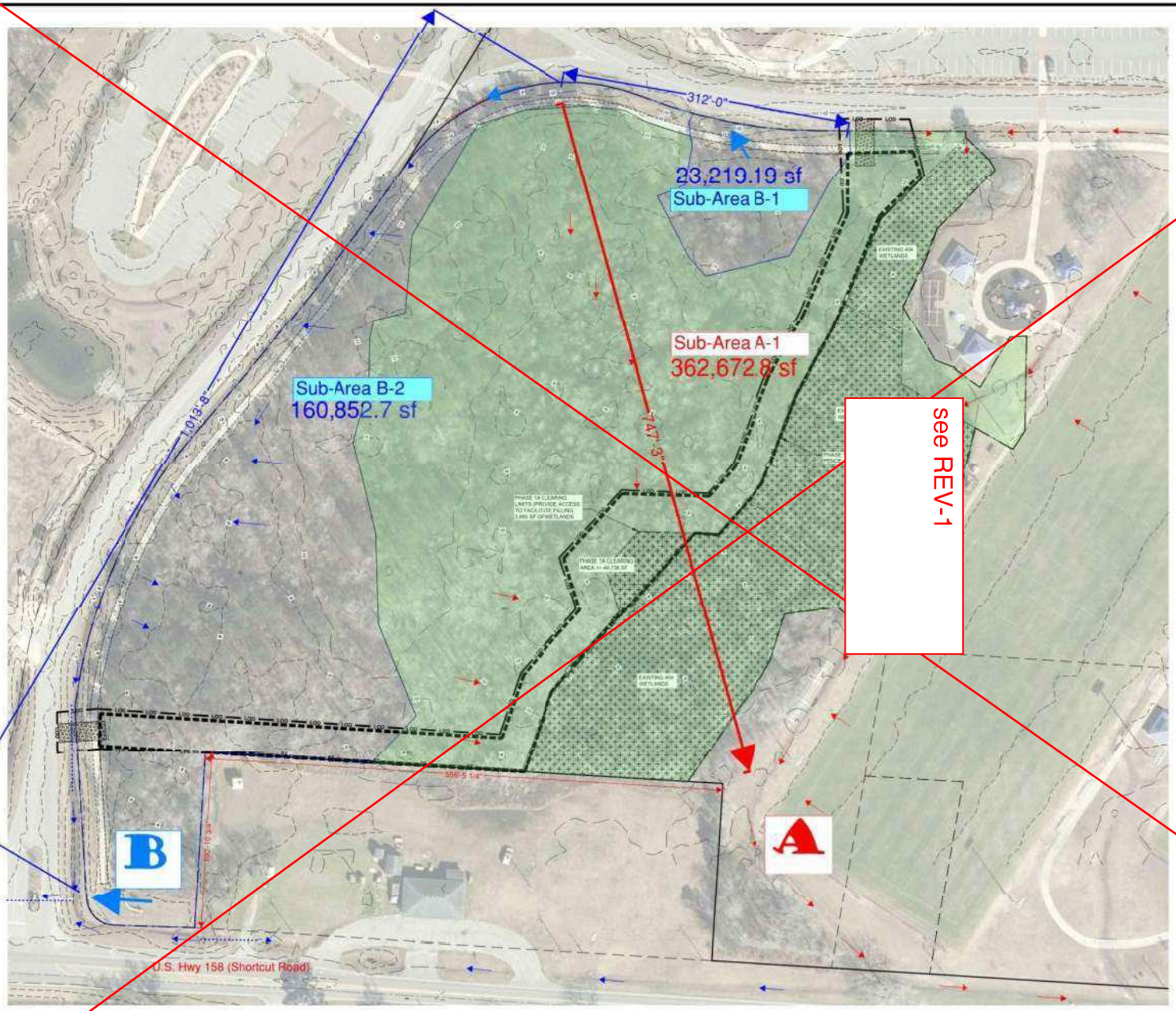
Rivers & ASSOCIATES, INC.
Civil Engineers Planners Surveyors Landscape Architects
Six Forks Phase III Ste. 230
353 E. Six Forks Road
Raleigh, NC 27609
919.334.1625

ISSUE/REVISIONS:

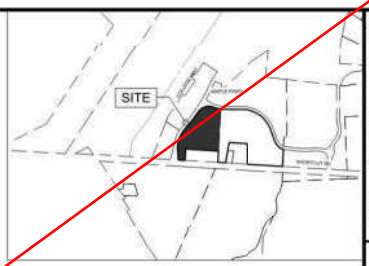
NO	DESCRIPTION	DATE	BY

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO -- CURRITUCK COUNTY -- NORTH CAROLINA
PRE-DEVELOPMENT DRAINAGE AREA OVERLAY

DATE	JUNE 20, 2023
DESIGNED BY	JSJ
DRAWN BY	SCB
CHECKED BY	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE	1:50
SHEET No.	C5.01



see REV-1



VICINITY MAP

1" = 1000'-0"

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

EROSION CONTROL LEGEND

DESCRIPTION	SYMBOL	DETAIL
SILT FENCE	SF	
SILT FENCE OUTLET		
INLET PROTECTION		
PIPE INLET PROTECTION		
GRAVEL CONSTRUCTION ENTRANCE/EXIT		
TREE PROTECTION FENCE	TPF	
COMBINATION SILT AND TREE PROTECTION FENCE	TPF SF	
TEMPORARY CHECK DAM		
LIMITS OF DISTURBANCE	LOD	
CONSTRUCTION FENCE	C	
CLEARING LIMITS		

811

50' 0 25' 50'

SCALE

Rivers & ASSOCIATES, INC.

Engineers
Surveyors
Landscape Architects

ISSUE/REVISIONS:

NO	DESCRIPTION	DATE	BY

CURRITUCK COUNTY

CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA

PRE-DEVELOPMENT DRAINAGE AREA OVERLAY

DATE	JUNE 20, 2023
DESIGNED BY	JSJ
DRAWN BY	SCB
CHECKED BY	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE	1:50
SHEET No.	C5.01

Hydrograph Report

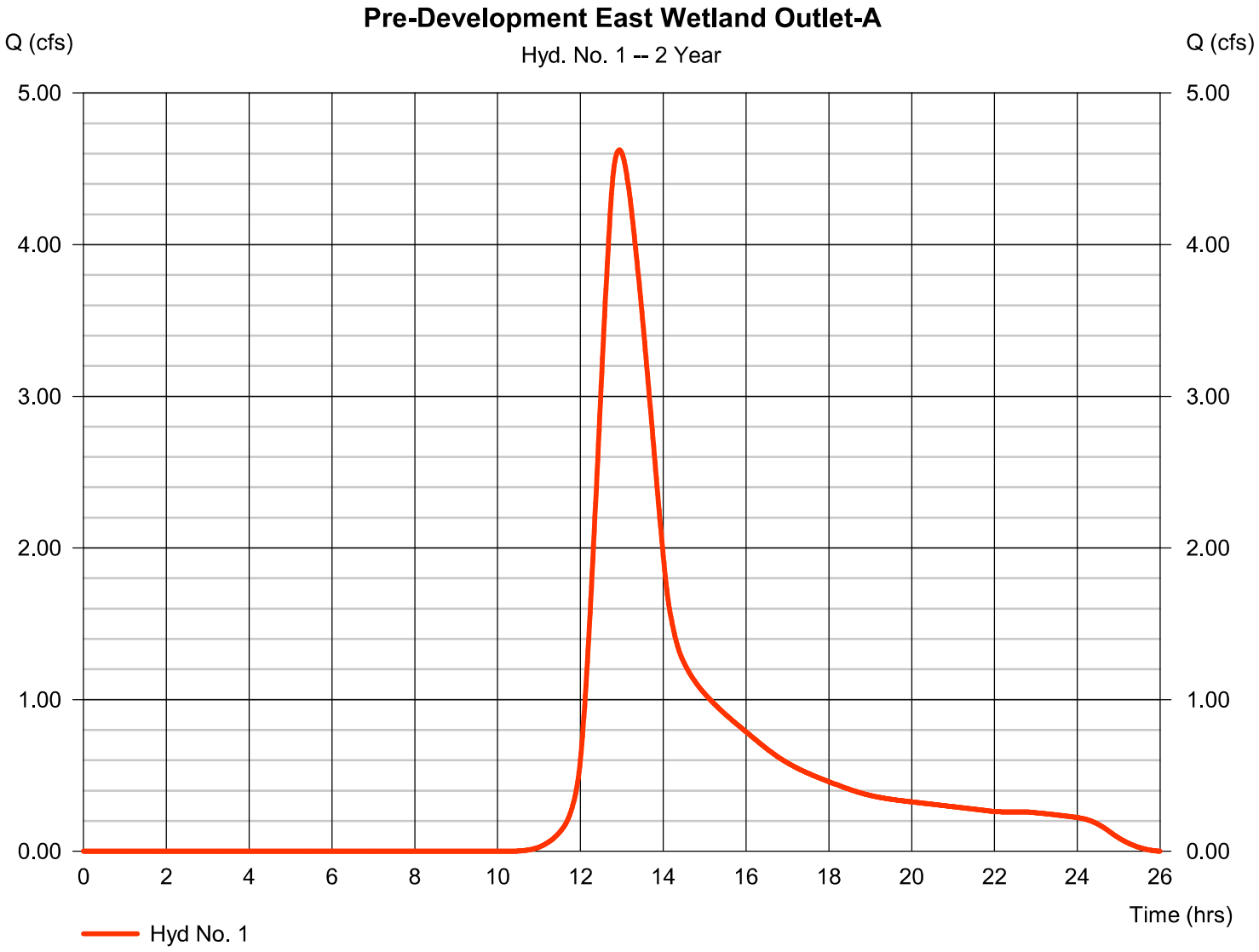
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Wednesday, 09 / 10 / 2025

Hyd. No. 1

Pre-Development East Wetland Outlet-A

Hydrograph type	= SCS Runoff	Peak discharge	= 4.623 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.93 hrs
Time interval	= 1 min	Hyd. volume	= 43,218 cuft
Drainage area	= 8.930 ac	Curve number	= 73*
Basin Slope	= 0.1 %	Hydraulic length	= 747 ft
Tc method	= TR55	Time of conc. (Tc)	= 78.40 min
Total precip.	= 3.73 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.460 x 94) + (1.880 x 55) + (6.590 x 77)] / 8.930



Hydrograph Report

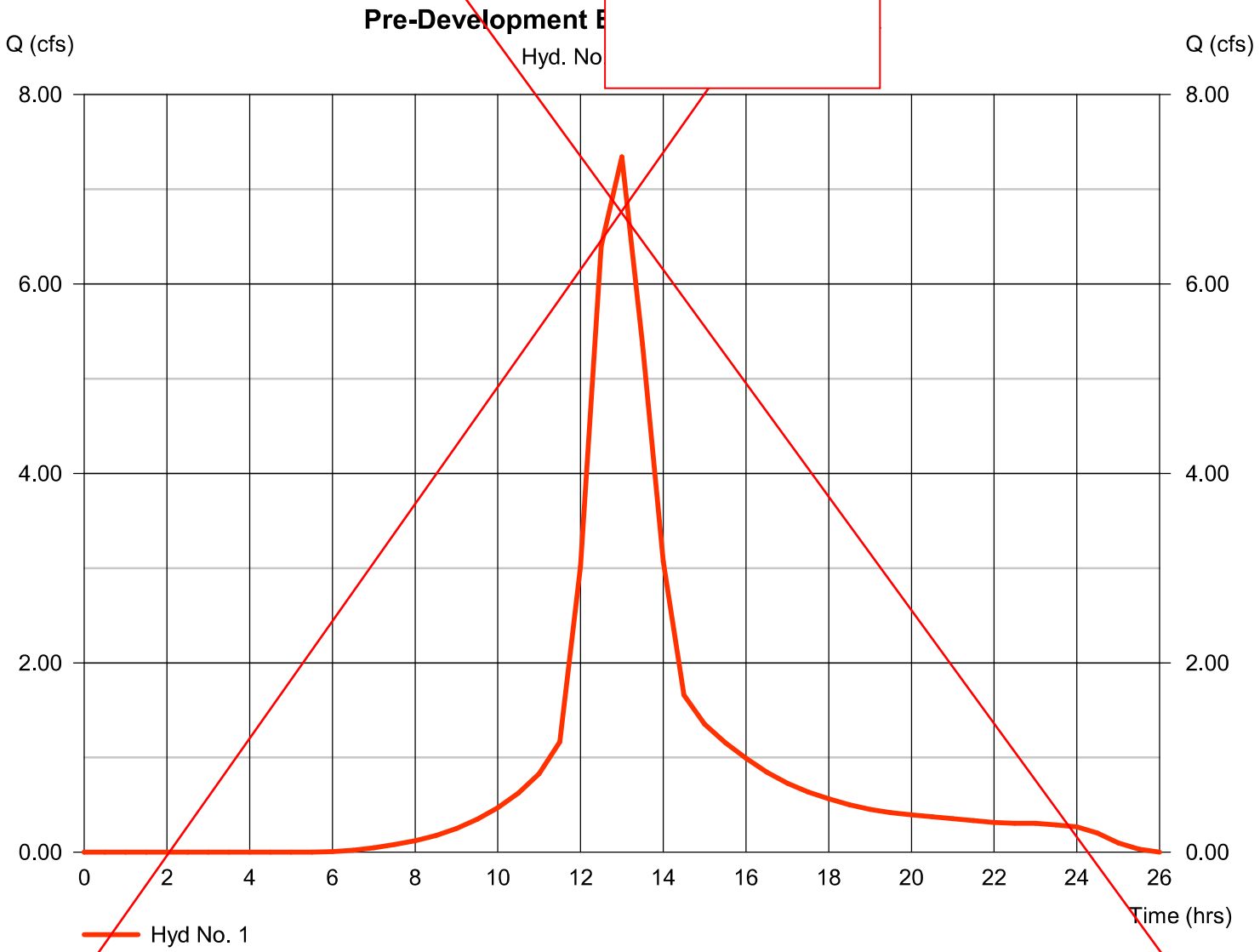
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Tuesday, 06 / 17 / 2025

Hyd. No. 1

Pre-Development East Wetland Outlet-A

Hydrograph type	= SCS Runoff	Peak discharge	= 7.344 cfs
Storm frequency	= 2 yrs	Time to peak	= 13.00 hrs
Time interval	= 30 min	Hyd. volume	= 75,424 cuft
Drainage area	= 8.320 ac	Curve number	= 90
Basin Slope	= 0.1 %	Hydraulic length	= 747 ft
Tc method	= TR55	Time of conc. (Tc)	= 78.40 min
Total precip.	= 3.73 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

see REV-1



TR55 Tc Worksheet

Hyd. No. 1

Pre-Development East Wetland Outlet-A

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.800		0.011		0.011		
Flow length (ft)	= 50.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 3.73		0.00		0.00		
Land slope (%)	= 0.13		0.00		0.00		
Travel Time (min)	**= 58.68**	**+**	**0.00**	**+**	**0.00**	**=**	**58.68**
Shallow Concentrated Flow							
Flow length (ft)	= 697.00		0.00		0.00		
Watercourse slope (%)	= 0.13		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=0.59		0.00		0.00		
Travel Time (min)	**= 19.68**	**+**	**0.00**	**+**	**0.00**	**=**	**19.68**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
Total Travel Time, Tc							**78.40 min**

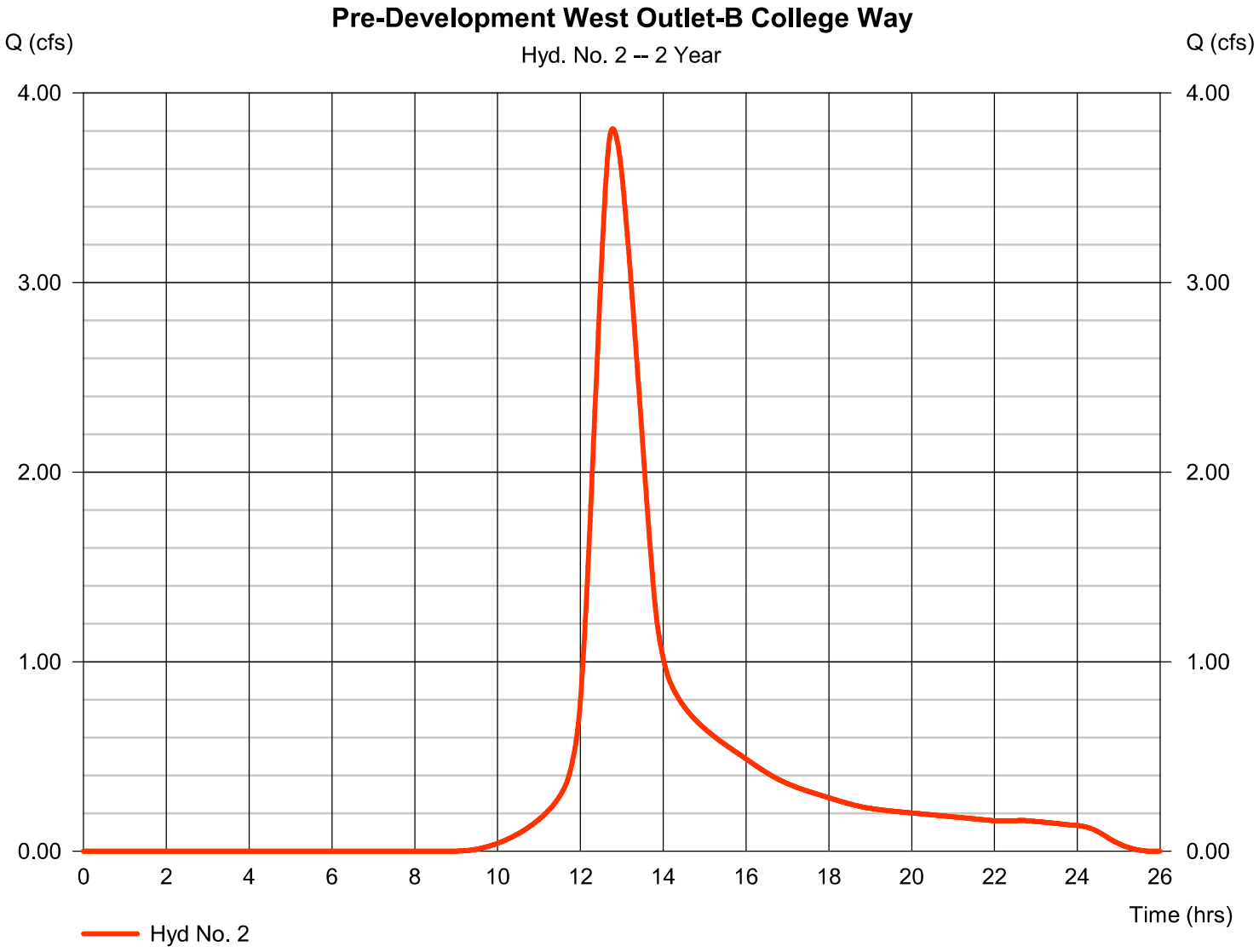
Hydrograph Report

Hyd. No. 2

Pre-Development West Outlet-B College Way

Hydrograph type	= SCS Runoff	Peak discharge	= 3.811 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.78 hrs
Time interval	= 1 min	Hyd. volume	= 31,364 cuft
Drainage area	= 4.760 ac	Curve number	= 80*
Basin Slope	= 0.4 %	Hydraulic length	= 1325 ft
Tc method	= TR55	Time of conc. (Tc)	= 68.80 min
Total precip.	= 3.73 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.150 x 94) + (0.140 x 55) + (3.470 x 77)] / 4.760



Hydrograph Report

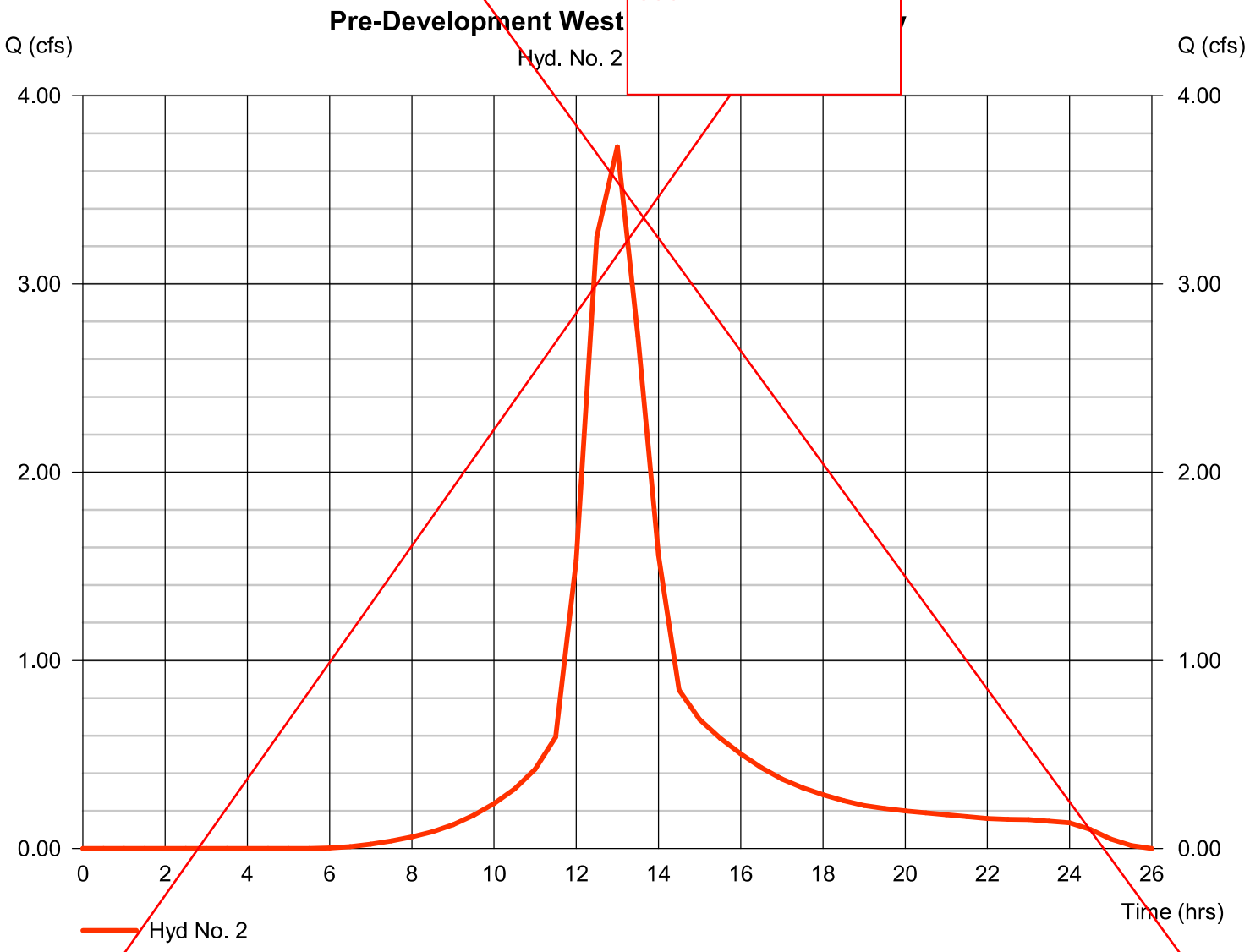
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Tuesday, 06 / 17 / 2025

Hyd. No. 2

Pre-Development West Outlet-B College Way

Hydrograph type	= SCS Runoff	Peak discharge	= 3.730 cfs
Storm frequency	= 2 yrs	Time to peak	= 13.00 hrs
Time interval	= 30 min	Hyd. volume	= 38,301 cuft
Drainage area	= 4.225 ac	Curve number	= 90
Basin Slope	= 0.4 %	Hydraulic length	= 1325 ft
Tc method	= TR55	Time of conc. (Tc)	= 68.80 min
Total precip.	= 3.73 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

see REV-1



TR55 Tc Worksheet

Hyd. No. 2

Pre-Development West Outlet-B College Way

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.800		0.011		0.011		
Flow length (ft)	= 50.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 3.73		0.00		0.00		
Land slope (%)	= 0.30		0.00		0.00		
Travel Time (min)	**= 42.48**	**+**	**0.00**	**+**	**0.00**	**=**	**42.48**
Shallow Concentrated Flow							
Flow length (ft)	= 1250.00		0.00		0.00		
Watercourse slope (%)	= 0.24		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=0.79		0.00		0.00		
Travel Time (min)	**= 26.36**	**+**	**0.00**	**+**	**0.00**	**=**	**26.36**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
Total Travel Time, Tc							**68.80 min**

Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	63.1989	12.9000	0.8933	--------
2	68.6781	12.6000	0.8716	--------
3	0.0000	0.0000	0.0000	--------
5	0.0000	0.0000	0.0000	--------
10	69.8886	12.3000	0.7995	--------
25	64.3732	11.4000	0.7510	--------
50	54.9803	10.0000	0.6934	--------
100	48.9327	8.9000	0.6488	--------

File name: Intensity Table.IDF

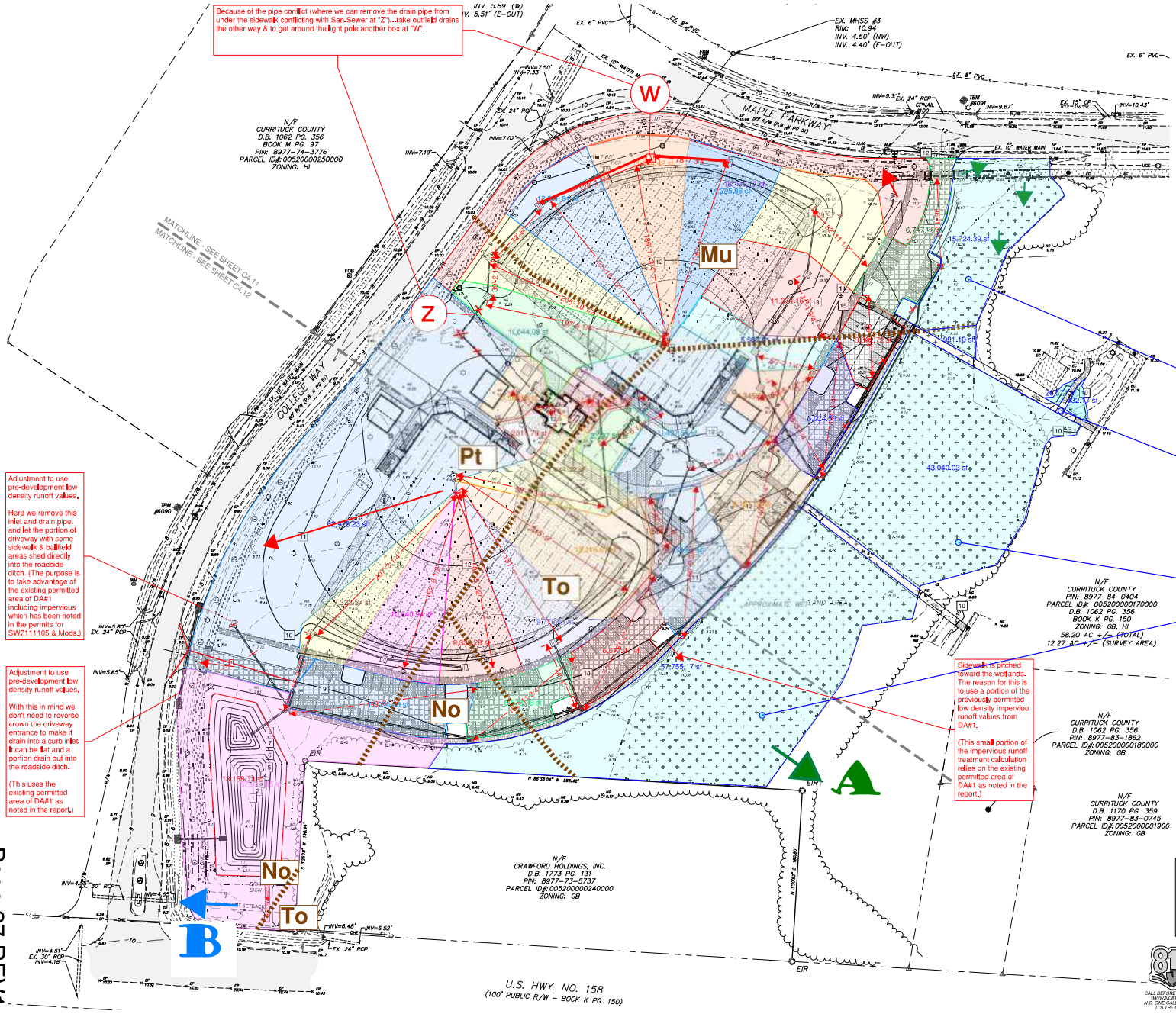
Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	4.80	3.85	3.23	2.79	2.46	2.20	1.99	1.82	1.68	1.56	1.46	1.37
2	5.64	4.54	3.81	3.30	2.91	2.61	2.37	2.17	2.01	1.87	1.75	1.64
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	7.15	5.84	4.97	4.34	3.87	3.50	3.20	2.95	2.75	2.57	2.41	2.28
25	7.88	6.45	5.51	4.84	4.33	3.93	3.61	3.34	3.12	2.92	2.76	2.61
50	8.41	6.89	5.90	5.20	4.67	4.26	3.93	3.65	3.42	3.22	3.04	2.89
100	8.87	7.27	6.24	5.52	4.97	4.55	4.21	3.92	3.68	3.48	3.30	3.14

Tc = time in minutes. Values may exceed 60.

_3-2024065\ADMIN\K-Design Data\Stormwater\240710_Stormwater-Report_BR\2-Hydro BPK3\From NOAA Chart.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	3.06	3.73	0.00	4.82	5.73	7.08	8.24	9.52
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Rivers & Associates, Inc.
Civil Engineers Planners Surveyors Landscape Architects
Six Forks Place III Ste. 230
353 E. Six Forks Road
Raleigh, NC 27609
919-394-1626

Preliminary
DO NOT USE FOR CONSTRUCTION

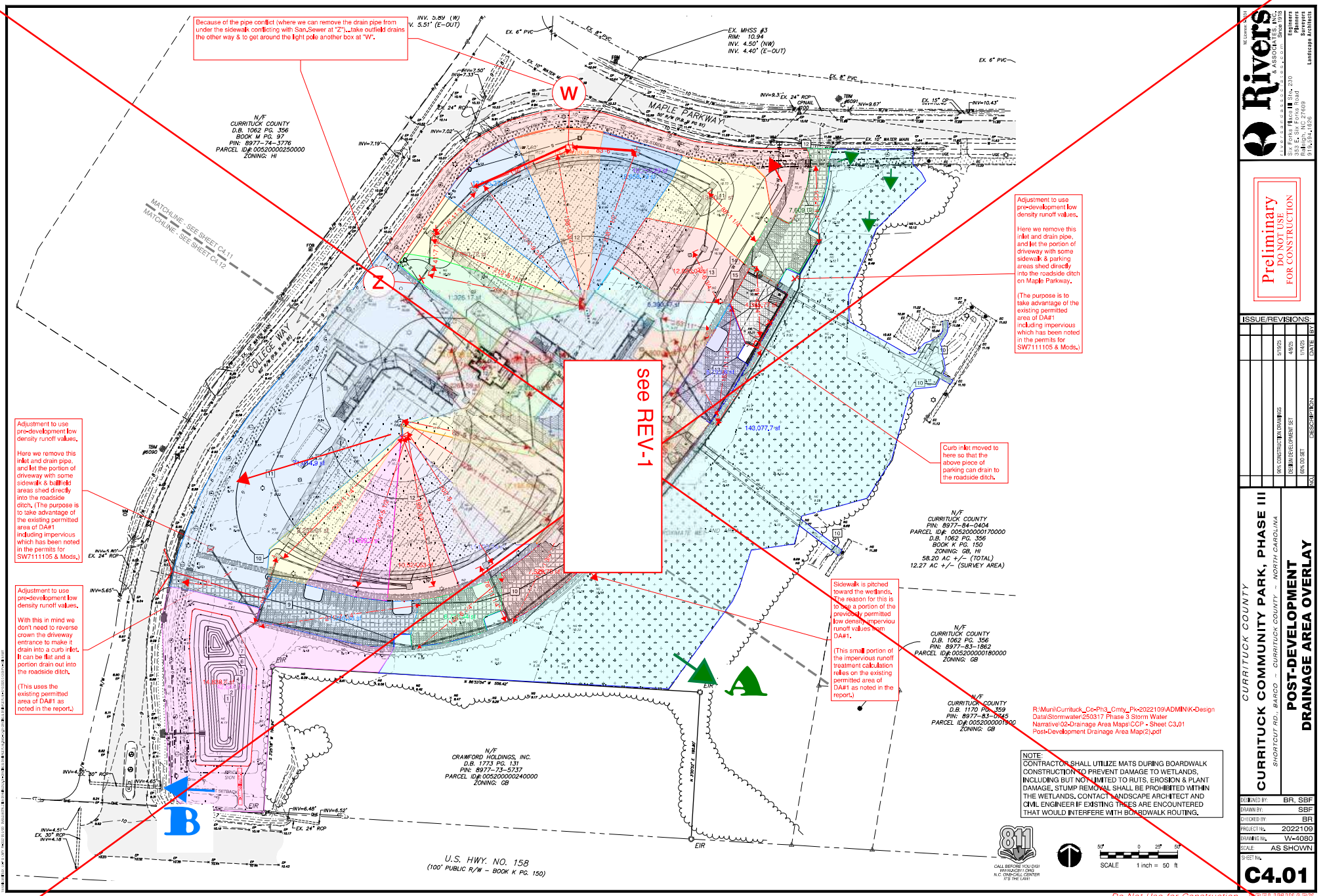
ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
	90% CD SET	1/14/25	
	DESIGN DEVELOPMENT SET	4/8/25	
	90% CONSTRUCTION DRAWINGS	5/19/25	

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO – CURRITUCK COUNTY – NORTH CAROLINA
POST-DEVELOPMENT DRAINAGE AREA OVERLAY

DESIGNED BY:	BR, SBF
DRAWN BY:	SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C4.01

Do Not Use for Construction - PRELIMINARY



Rivers & Associates, Inc.
Joe Rivers, PE Paul III, PE, CPSM
353 E. Six Forks Road Suite 230
Raleigh, NC 27609
919-439-4000
Engineers Planners Surveyors Landscape Architects

Preliminary
DO NOT USE FOR CONSTRUCTION

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE	BY
	90% CONSTRUCTION DRAWINGS	3/19/25	
	DESIGN DEVELOPMENT SET	4/8/25	
	60% DD SET	1/14/25	

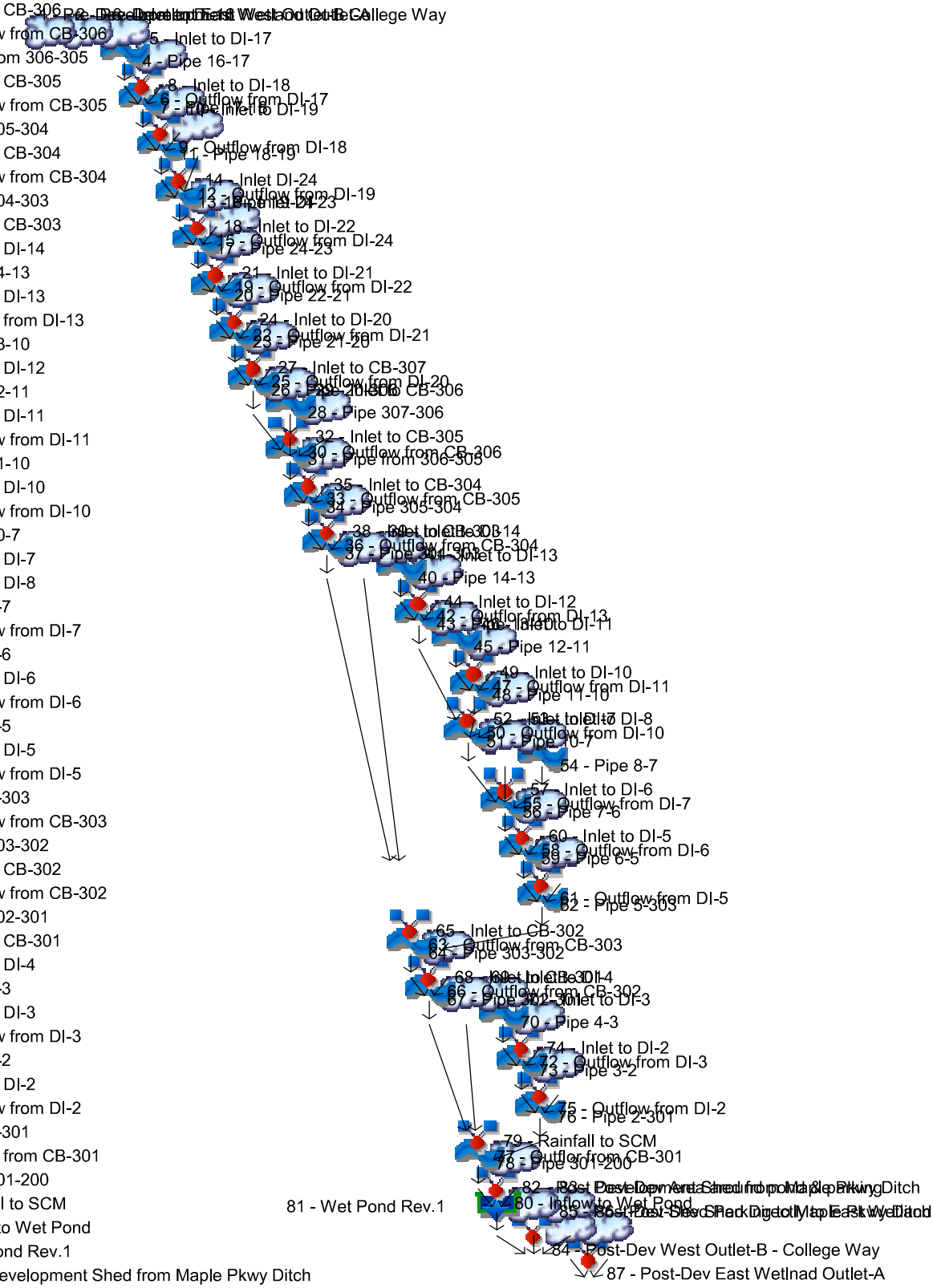
CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA
POST-DEVELOPMENT DRAINAGE AREA OVERLAY

DESIGNED BY:	BR, SBF
DRAWN BY:	SBF
CHECKED BY:	BR
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE:	AS SHOWN
SHEET No.	C4.01

Do Not Use for Construction - PRELIMINARY

Watershed Model Schematic

22	Combine	Outflow from DI-21
23	Reach	Pipe 21-20
24	SCS Runoff	Inlet to DI-20
25	Combine	Outflow from DI-20
26	Reach	Pipe 20-306
27	SCS Runoff	Inlet to CB-307
28	Reach	Pipe 307-306
29	SCS Runoff	Inlet to CB-306
30	Combine	Outflow from CB-306
31	Reach	Pipe from 306-305
32	SCS Runoff	Inlet to CB-305
33	Combine	Outflow from CB-305
34	Reach	Pipe 305-304
35	SCS Runoff	Inlet to CB-304
36	Combine	Outflow from CB-304
37	Reach	Pipe 304-303
38	SCS Runoff	Inlet to CB-303
39	SCS Runoff	Inlet to DI-14
40	Reach	Pipe 14-13
41	SCS Runoff	Inlet to DI-13
42	Combine	Outflor from DI-13
43	Reach	Pipe 13-10
44	SCS Runoff	Inlet to DI-12
45	Reach	Pipe 12-11
46	SCS Runoff	Inlet to DI-11
47	Combine	Outflow from DI-11
48	Reach	Pipe 11-10
49	SCS Runoff	Inlet to DI-10
50	Combine	Outflow from DI-10
51	Reach	Pipe 10-7
52	SCS Runoff	Inlet to DI-7
53	SCS Runoff	Inlet to DI-8
54	Reach	Pipe 8-7
55	Combine	Outflow from DI-7
56	Reach	Pipe 7-6
57	SCS Runoff	Inlet to DI-6
58	Combine	Outflow from DI-6
59	Reach	Pipe 6-5
60	SCS Runoff	Inlet to DI-5
61	Combine	Outflow from DI-5
62	Reach	Pipe 5-303
63	Combine	Outflow from CB-303
64	Reach	Pipe 303-302
65	SCS Runoff	Inlet to CB-302
66	Combine	Outflow from CB-302
67	Reach	Pipe 302-301
68	SCS Runoff	Inlet to CB-301
69	SCS Runoff	Inlet to DI-4
70	Reach	Pipe 4-3
71	SCS Runoff	Inlet to DI-3
72	Combine	Outflow from DI-3
73	Reach	Pipe 3-2
74	SCS Runoff	Inlet to DI-2
75	Combine	Outflow from DI-2
76	Reach	Pipe 2-301
77	Combine	Outflor from CB-301
78	Reach	Pipe 301-200
79	SCS Runoff	Rainfall to SCM
80	Combine	Inflow to Wet Pond
81	Reservoir	Wet Pond Rev.1
82	SCS Runoff	Post Development Shed from Maple Pkwy Ditch
83	SCS Runoff	Post-Dev Area around pond & parking
84	Combine	Post-Dev West Outlet-B - College Way
85	SCS Runoff	Post-Dev Shed Parking to Maple Pkwy Ditch
86	SCS Runoff	Post-Dev Shed Directly to East Wetland
87	Combine	Post-Dev East Wetlnad Outlet-A



SCS Curve Numbers (CN)

Land Use Description	Hydrologic Soil Group			
Residential	**A**	**B**	**C**	**D**
Average lot size:				
1/8 acre or smaller	77	85	90	92
1/4 acre	61	75	83	87
1/3 acre	57	72	81	86
1/2 acre	54	70	80	85
1 acre	51	68	79	84
2 acre	46	65	77	82
1/8 acre or smaller	77	85	90	92
Paved parking lots and roofs	98	98	98	98
Streets and roads:				
Paved with curbs	98	98	98	98
Gravel	76	85	89	91
Dirt	72	82	87	89
Commercial and business areas	89	92	94	95
Industrial districts	81	88	91	93
Open spaces, lawns, and parks:				
Good condition	39	61	74	80
Fair condition	49	69	79	84
Fallow	77	86	91	94
Row crops	72	81	88	91

*Average Runoff Condition. Ia = 0.2S

Source: Soil Conservation Service TR-55

Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	63.1989	12.9000	0.8933	--------
2	68.6781	12.6000	0.8716	--------
3	0.0000	0.0000	0.0000	--------
5	0.0000	0.0000	0.0000	--------
10	69.8886	12.3000	0.7995	--------
25	64.3732	11.4000	0.7510	--------
50	54.9803	10.0000	0.6934	--------
100	48.9327	8.9000	0.6488	--------

File name: Intensity Table.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	4.80	3.85	3.23	2.79	2.46	2.20	1.99	1.82	1.68	1.56	1.46	1.37
2	5.64	4.54	3.81	3.30	2.91	2.61	2.37	2.17	2.01	1.87	1.75	1.64
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	7.15	5.84	4.97	4.34	3.87	3.50	3.20	2.95	2.75	2.57	2.41	2.28
25	7.88	6.45	5.51	4.84	4.33	3.93	3.61	3.34	3.12	2.92	2.76	2.61
50	8.41	6.89	5.90	5.20	4.67	4.26	3.93	3.65	3.42	3.22	3.04	2.89
100	8.87	7.27	6.24	5.52	4.97	4.55	4.21	3.92	3.68	3.48	3.30	3.14

Tc = time in minutes. Values may exceed 60.

_3-2024065\ADMIN\K-Design Data\Stormwater\240710_Stormwater-Report_BR\2-Hydro BPK3\From NOAA Chart.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	3.06	3.73	0.00	4.82	5.73	7.08	8.24	9.52
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	7.634	1	774	69,193	------	------	------	Pre-Development East Wetland Outle
2	SCS Runoff	5.772	1	766	47,138	------	------	------	Pre-Development West Outlet-B Colle
3	SCS Runoff	0.447	1	733	1,922	------	------	------	Inlet to Di-16
4	Reach	0.445	1	735	1,839	3	------	------	Pipe 16-17
5	SCS Runoff	0.496	1	727	1,720	------	------	------	Inlet to DI-17
6	Combine	0.854	1	729	3,559	4, 5	------	------	Outflow from DI-17
7	Reach	0.852	1	731	3,489	6	------	------	Pipe 17-18
8	SCS Runoff	0.690	1	727	2,393	------	------	------	Inlet to DI-18
9	Combine	1.496	1	729	5,882	7, 8	------	------	Outflow from DI-18
10	SCS Runoff	0.669	1	727	2,318	------	------	------	Inlet to DI-19
11	Reach	1.495	1	730	5,878	9	------	------	Pipe 18-19
12	Combine	2.129	1	729	8,197	10, 11	------	------	Outflow from DI-19
13	Reach	2.130	1	730	8,193	12	------	------	Pipe 19-24
14	SCS Runoff	0.626	1	727	2,169	------	------	------	Inlet DI-24
15	Combine	2.720	1	729	10,362	13, 14	------	------	Outflow from DI-24
16	SCS Runoff	0.778	1	731	3,218	------	------	------	Inlet DI-23
17	Reach	2.722	1	730	10,360	15	------	------	Pipe 24-23
18	SCS Runoff	0.752	1	731	3,111	------	------	------	Inlet to DI-22
19	Combine	3.468	1	730	13,471	17, 18	------	------	Outflow from DI-22
20	Reach	3.474	1	731	13,467	19	------	------	Pipe 22-21
21	SCS Runoff	0.363	1	731	1,502	------	------	------	Inlet to DI-21
22	Combine	3.837	1	731	14,969	20, 21	------	------	Outflow from DI-21
23	Reach	3.841	1	732	14,969	22	------	------	Pipe 21-20
24	SCS Runoff	0.285	1	731	1,180	------	------	------	Inlet to DI-20
25	Combine	4.126	1	732	16,149	23, 24	------	------	Outflow from DI-20
26	Reach	4.130	1	732	16,149	25	------	------	Pipe 20-306
27	SCS Runoff	0.488	1	724	1,716	------	------	------	Inlet to CB-307
28	Reach	0.453	1	727	1,560	27	------	------	Pipe 307-306
29	SCS Runoff	0.780	1	724	2,745	------	------	------	Inlet to CB-306
30	Combine	4.862	1	731	20,455	26, 28, 29	------	------	Outflow from CB-306
31	Reach	4.866	1	732	20,455	30	------	------	Pipe from 306-305
32	SCS Runoff	1.024	1	724	3,603	------	------	------	Inlet to CB-305
33	Combine	5.382	1	731	24,059	31, 32	------	------	Outflow from CB-305
34	Reach	5.389	1	732	24,060	33	------	------	Pipe 305-304

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
35	SCS Runoff	1.073	1	724	3,775	------	------	------	Inlet to CB-304
36	Combine	5.945	1	731	27,835	34, 35	------	------	Outflow from CB-304
37	Reach	5.946	1	732	27,836	36	------	------	Pipe 304-303
38	SCS Runoff	0.829	1	724	2,917	------	------	------	Inlet to CB-303
39	SCS Runoff	0.406	1	724	1,319	------	------	------	Inlet to DI-14
40	Reach	0.390	1	726	1,163	39	------	------	Pipe 14-13
41	SCS Runoff	0.226	1	724	733	------	------	------	Inlet to DI-13
42	Combine	0.605	1	726	1,895	40, 41	------	------	Outflor from DI-13
43	Reach	0.554	1	729	1,809	42	------	------	Pipe 13-10
44	SCS Runoff	0.316	1	724	1,026	------	------	------	Inlet to DI-12
45	Reach	0.305	1	726	875	44	------	------	Pipe 12-11
46	SCS Runoff	0.361	1	724	1,172	------	------	------	Inlet to DI-11
47	Combine	0.655	1	725	2,047	45, 46	------	------	Outflow from DI-11
48	Reach	0.642	1	727	1,889	47	------	------	Pipe 11-10
49	SCS Runoff	0.903	1	724	2,930	------	------	------	Inlet to DI-10
50	Combine	2.005	1	726	6,628	43, 48, 49	------	------	Outflow from DI-10
51	Reach	2.002	1	727	6,573	50	------	------	Pipe 10-7
52	SCS Runoff	0.181	1	724	586	------	------	------	Inlet to DI-7
53	SCS Runoff	1.379	1	737	7,159	------	------	------	Inlet to DI-8
54	Reach	1.377	1	739	7,154	53	------	------	Pipe 8-7
55	Combine	3.120	1	728	14,313	51, 52, 54	------	------	Outflow from DI-7
56	Reach	3.121	1	729	14,313	55	------	------	Pipe 7-6
57	SCS Runoff	0.841	1	727	2,917	------	------	------	Inlet to DI-6
58	Combine	3.944	1	728	17,229	56, 57	------	------	Outflow from DI-6
59	Reach	3.950	1	729	17,230	58	------	------	Pipe 6-5
60	SCS Runoff	0.539	1	727	1,870	------	------	------	Inlet to DI-5
61	Combine	4.468	1	729	19,099	59, 60	------	------	Outflow from DI-5
62	Reach	4.472	1	730	19,099	61	------	------	Pipe 5-303
63	Combine	10.89	1	730	49,852	37, 38, 62	------	------	Outflow from CB-303
64	Reach	10.91	1	730	49,852	63	------	------	Pipe 303-302
65	SCS Runoff	0.731	1	724	2,574	------	------	------	Inlet to CB-302
66	Combine	11.36	1	730	52,426	64, 65	------	------	Outflow from CB-302
67	Reach	11.36	1	731	52,427	66	------	------	Pipe 302-301
68	SCS Runoff	1.268	1	724	4,461	------	------	------	Inlet to CB-301

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
69	SCS Runoff	0.518	1	727	1,795	------	------	------	Inlet to DI-4
70	Reach	0.500	1	729	1,699	69	------	------	Pipe 4-3
71	SCS Runoff	0.604	1	727	2,094	------	------	------	Inlet to DI-3
72	Combine	1.089	1	728	3,793	70, 71	------	------	Outflow from DI-3
73	Reach	1.081	1	729	3,757	72	------	------	Pipe 3-2
74	SCS Runoff	0.410	1	727	1,421	------	------	------	Inlet to DI-2
75	Combine	1.476	1	729	5,178	73, 74	------	------	Outflow from DI-2
76	Reach	1.473	1	730	5,153	75	------	------	Pipe 2-301
77	Combine	13.59	1	730	62,041	67, 68, 76	------	------	Outflor from CB-301
78	Reach	13.59	1	731	62,052	77	------	------	Pipe 301-200
79	SCS Runoff	1.272	1	725	3,953	------	------	------	Rainfall to SCM
80	Combine	14.41	1	730	66,006	78, 79	------	------	Inflow to Wet Pond
81	Reservoir	3.423	1	765	62,234	80	7.61	31,534	Wet Pond Rev.1
82	SCS Runoff	1.412	1	727	4,882	------	------	------	Post Development Shed from Maple
83	SCS Runoff	2.460	1	725	7,672	------	------	------	Post-Dev Area around pond & parkin
84	Combine	5.066	1	726	74,787	81, 82, 83	------	------	Post-Dev West Outlet-B - College Wa
85	SCS Runoff	0.829	1	724	2,917	------	------	------	Post-Dev Shed Parking to Maple Pkw
86	SCS Runoff	3.812	1	762	29,455	------	------	------	Post-Dev Shed Directly to East Wetla
87	Combine	3.903	1	762	32,372	85, 86	------	------	Post-Dev East Wetlnad Outlet-A

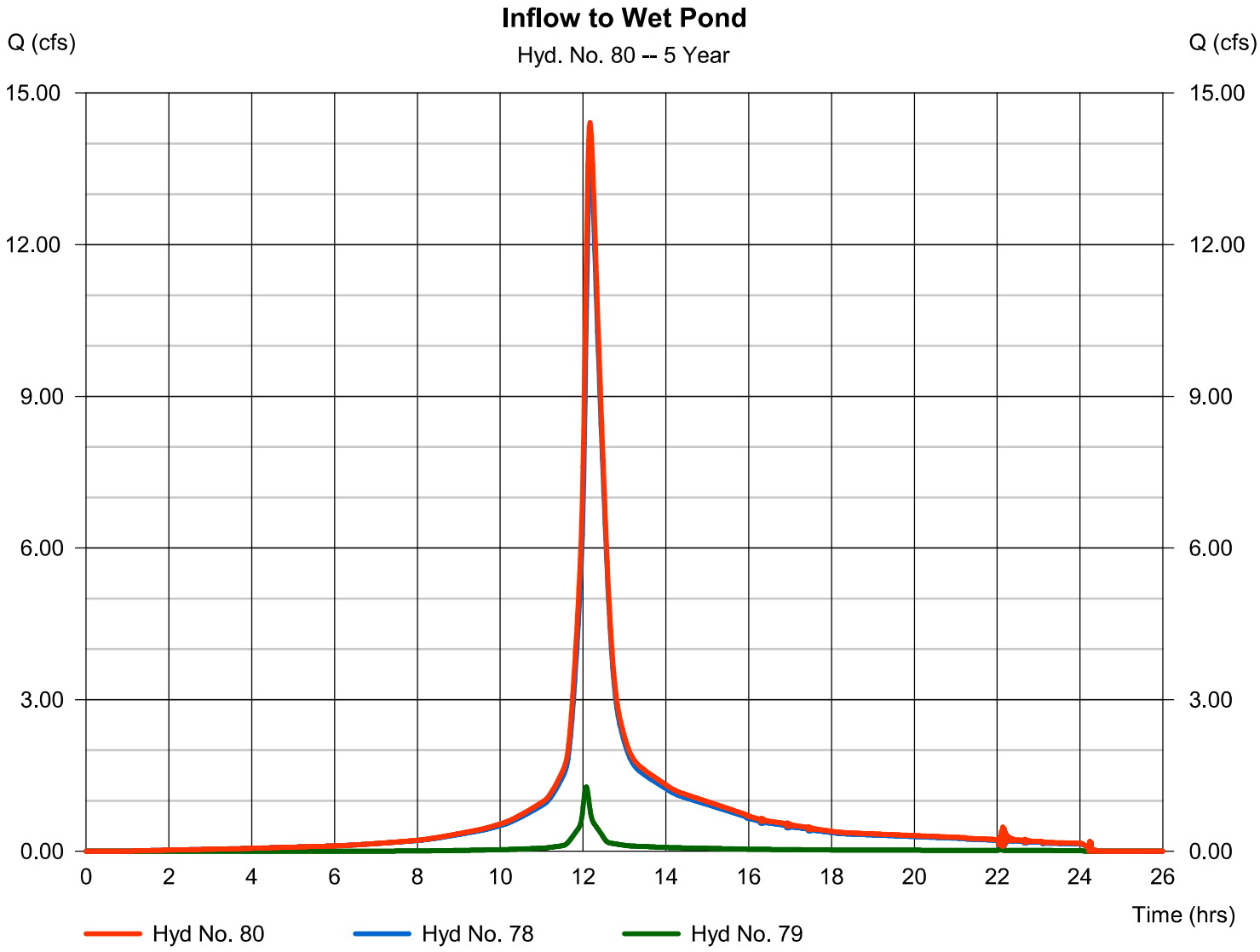
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Wednesday, 09 / 10 / 2025

Hyd. No. 80

Inflow to Wet Pond

Hydrograph type	= Combine	Peak discharge	= 14.41 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.17 hrs
Time interval	= 1 min	Hyd. volume	= 66,006 cuft
Inflow hyds.	= 78, 79	Contrib. drain. area	= 0.340 ac



Hydrograph Report

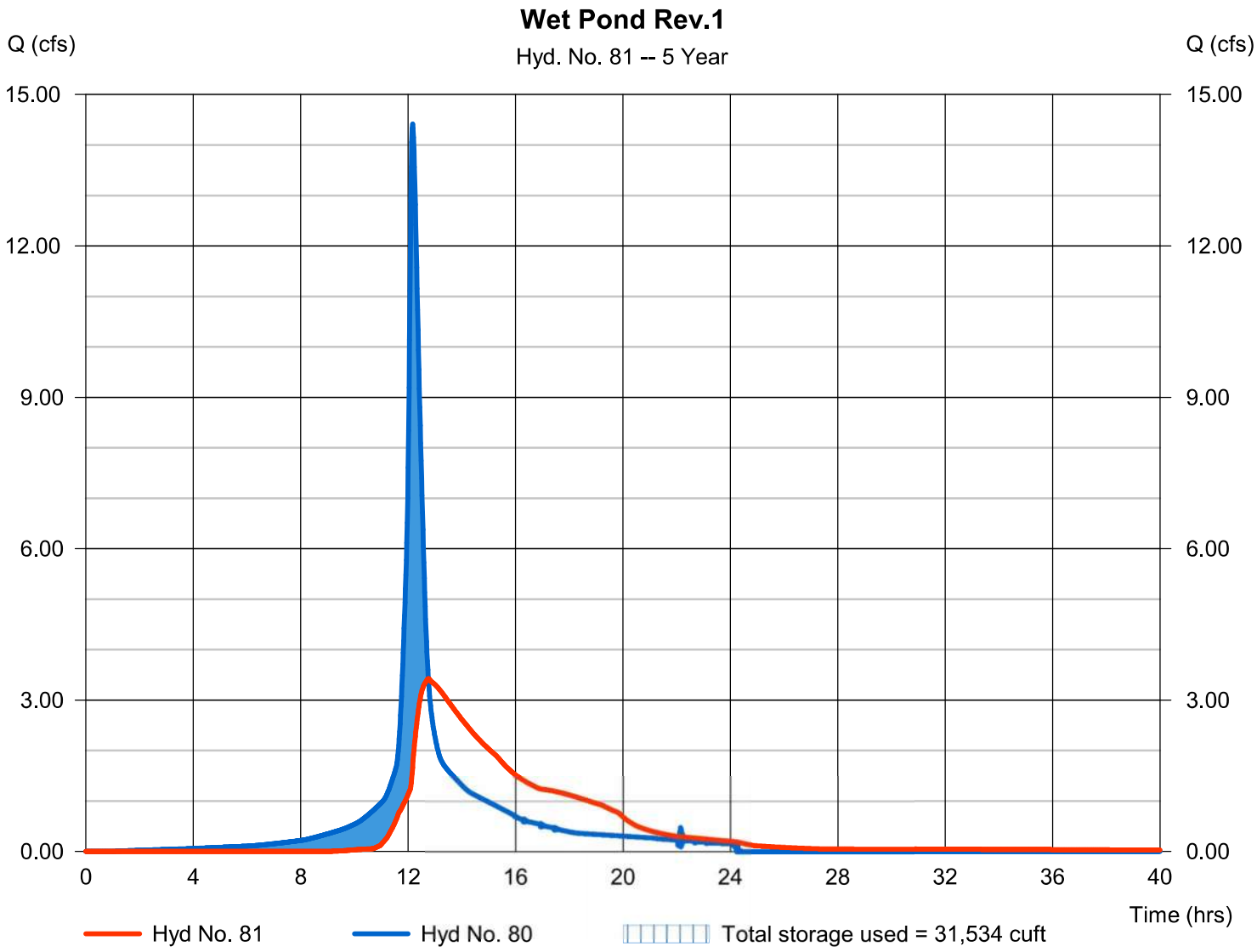
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Wednesday, 09 / 10 / 2025

Hyd. No. 81

Wet Pond Rev.1

Hydrograph type	= Reservoir	Peak discharge	= 3.423 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.75 hrs
Time interval	= 1 min	Hyd. volume	= 62,234 cuft
Inflow hyd. No.	= 80 - Inflow to Wet Pond	Max. Elevation	= 7.61 ft
Reservoir name	= Phase-3 Wet Pond REV.1	Max. Storage	= 31,534 cuft

Storage Indication method used.

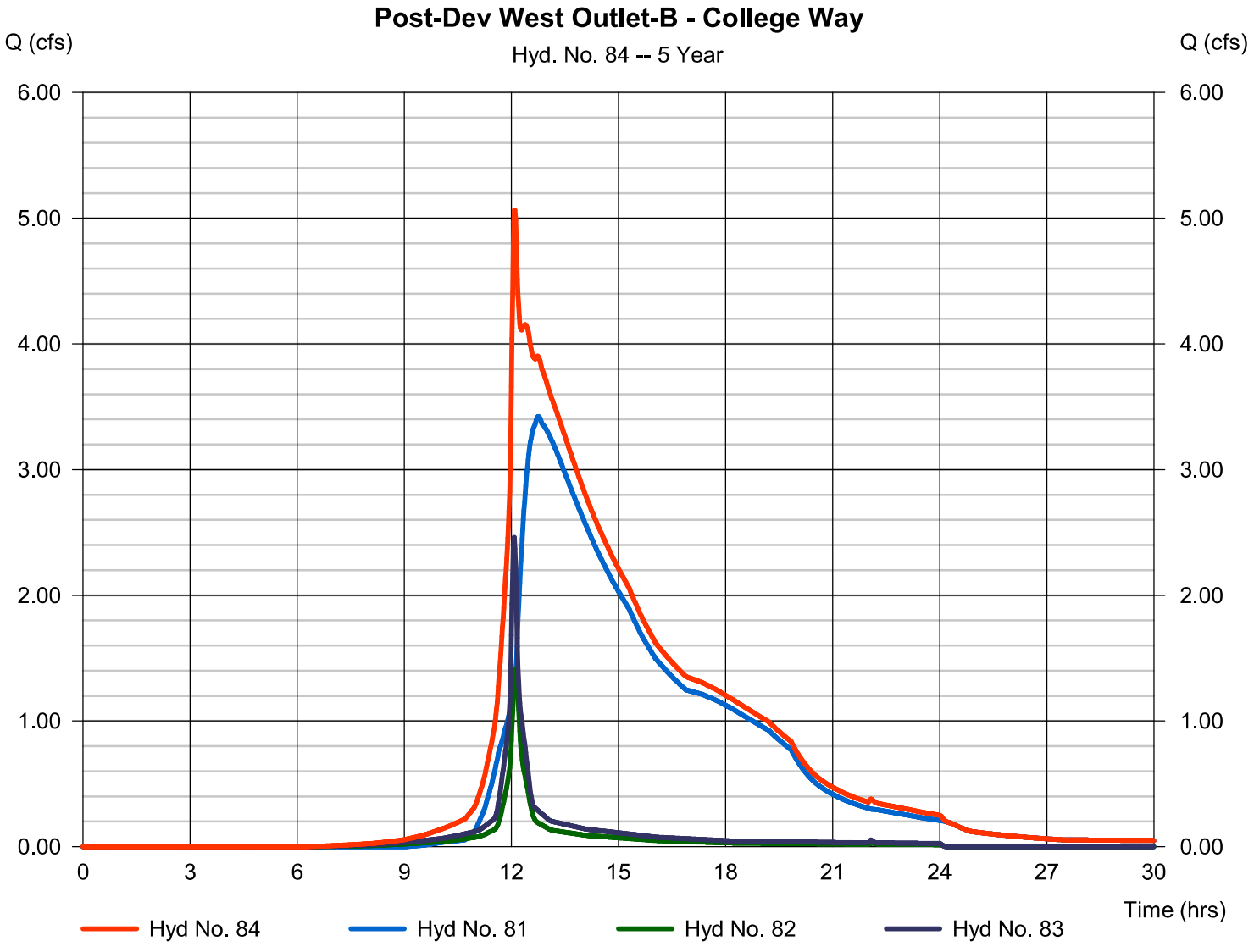


Hydrograph Report

Hyd. No. 84

Post-Dev West Outlet-B - College Way

Hydrograph type	= Combine	Peak discharge	= 5.066 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 74,787 cuft
Inflow hyds.	= 81, 82, 83	Contrib. drain. area	= 1.060 ac

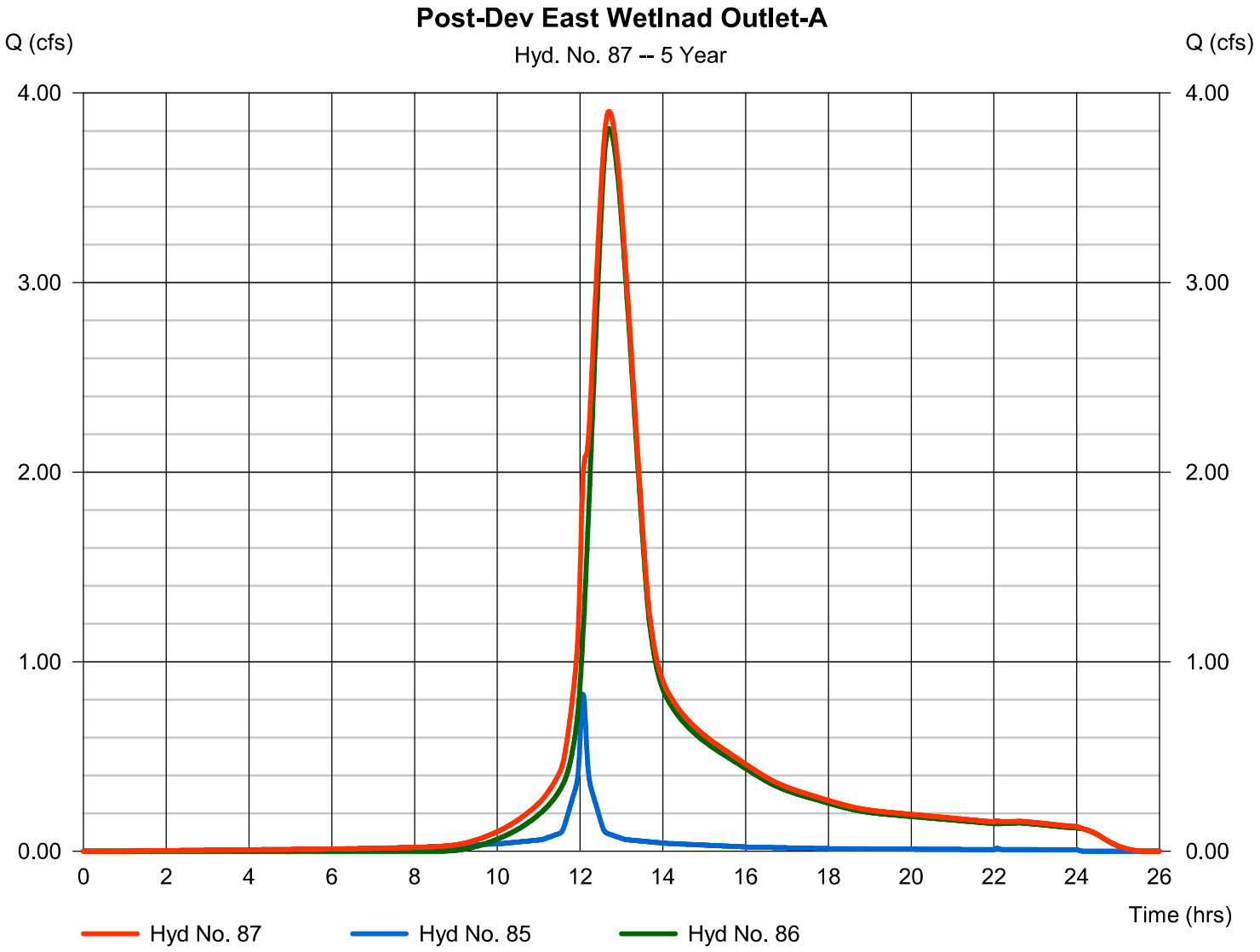


Hydrograph Report

Hyd. No. 87

Post-Dev East Wetlnad Outlet-A

Hydrograph type	= Combine	Peak discharge	= 3.903 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.70 hrs
Time interval	= 1 min	Hyd. volume	= 32,372 cuft
Inflow hyds.	= 85, 86	Contrib. drain. area	= 3.440 ac



Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Tuesday, 09 / 9 / 2025

Pond No. 1 - Phase-3 Wet Pond REV.1

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 4.75 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	4.75	5,900	0	0
0.25	5.00	6,244	1,518	1,518
1.25	6.00	9,200	7,674	9,191
2.25	7.00	14,300	11,655	20,847
3.25	8.00	21,200	17,635	38,482
4.25	9.00	30,000	25,470	63,953

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	2.00	6.00	0.00
Span (in)	= 12.00	2.00	6.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 5.20	5.20	5.60	0.00
Length (ft)	= 42.00	1.00	1.00	0.00
Slope (%)	= 0.24	1.00	1.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	0.67	6.00	0.00
Crest El. (ft)	= 7.60	6.75	7.75	0.00
Weir Coeff.	= 3.33	3.33	2.60	3.33
Weir Type	= 1	Rect	Broad	---
Multi-Stage	= Yes	Yes	No	No

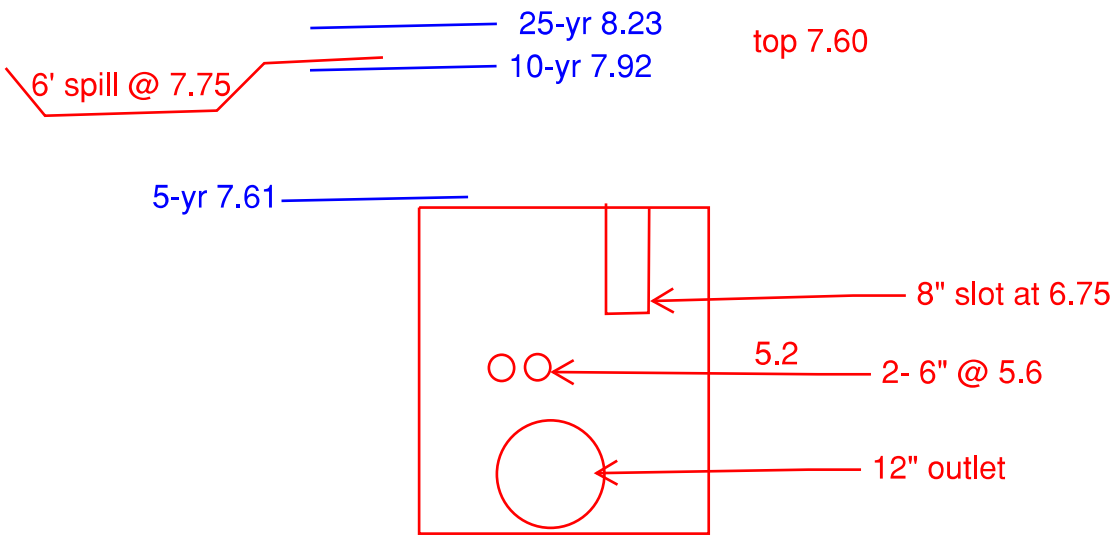
Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	4.75	0.00	0.00	0.00	---	0.00	0.00	0.00	---	---	---	0.000
0.25	1,518	5.00	0.00	0.00	0.00	---	0.00	0.00	0.00	---	---	---	0.000
1.25	9,191	6.00	0.78 oc	0.05 ic	0.73 ic	---	0.00	0.00	0.00	---	---	---	0.773
2.25	20,847	7.00	1.89 oc	0.08 ic	1.52 ic	---	0.00	0.28	0.00	---	---	---	1.887
3.25	38,482	8.00	5.17 oc	0.01 ic	0.22 ic	---	4.28 s	0.64 s	1.95	---	---	---	7.108
4.25	63,953	9.00	6.41 oc	0.00 ic	0.05 ic	---	5.81 s	0.41 s	21.80	---	---	---	28.08



United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Currituck County, North Carolina



February 22, 2023

Custom Soil Resource Report
Soil Map



Map Scale: 1:2,350 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Mu	Munden loamy sand	2.2	21.7%
No	Nimmo loamy sand	0.5	4.5%
Pt	Portsmouth fine sandy loam	4.5	43.9%
To	Tomotley fine sandy loam	3.1	29.9%
Totals for Area of Interest		**10.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

Currituck County, North Carolina

Mu—Munden loamy sand

Map Unit Setting

National map unit symbol: 3rnr
Elevation: 0 to 20 feet
Mean annual precipitation: 42 to 58 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 190 to 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Munden and similar soils: 85 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Munden

Setting

Landform: Ridges on marine terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and loamy fluviomarine deposits and/or marine deposits

Typical profile

A - 0 to 9 inches: loamy sand
Bt - 9 to 37 inches: fine sandy loam
C - 37 to 72 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Nimmo, undrained

Percent of map unit: 5 percent
Landform: Flats on marine terraces, depressions on marine terraces
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

No—Nimmo loamy sand

Map Unit Setting

National map unit symbol: 3rnv
Elevation: 0 to 20 feet
Mean annual precipitation: 42 to 58 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 190 to 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Nimmo, drained, and similar soils: 80 percent
Nimmo, undrained, and similar soils: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nimmo, Drained

Setting

Landform: Flats on marine terraces, depressions on marine terraces
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy and loamy fluviomarine deposits and/or marine deposits

Typical profile

Ap - 0 to 6 inches: loamy fine sand
Btg - 6 to 25 inches: fine sandy loam
Cg - 25 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Nimmo, Undrained

Setting

Landform: Flats on marine terraces, depressions on marine terraces

Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy and loamy fluviomarine deposits and/or marine deposits

Typical profile

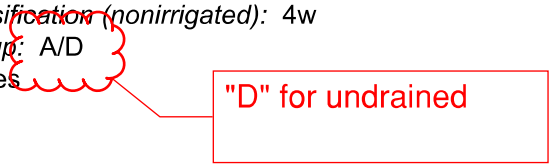
Ap - 0 to 6 inches: loamy fine sand
Btg - 6 to 25 inches: fine sandy loam
Cg - 25 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes



Pt—Portsmouth fine sandy loam

Map Unit Setting

National map unit symbol: 3rp0
Elevation: 0 to 30 feet
Mean annual precipitation: 42 to 58 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 190 to 270 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Portsmouth, drained, and similar soils: 75 percent
Portsmouth, undrained, and similar soils: 10 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Portsmouth, Drained

Setting

Landform: Flats on marine terraces, depressions on marine terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits over sandy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: fine sandy loam
Eg - 12 to 19 inches: fine sandy loam
Btg - 19 to 35 inches: sandy clay loam
BCg - 35 to 38 inches: sandy loam
2Cg - 38 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Very poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Description of Portsmouth, Undrained

Setting

Landform: Depressions on marine terraces, flats on marine terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits over sandy fluviomarine deposits

Typical profile

A - 0 to 12 inches: fine sandy loam
Eg - 12 to 19 inches: fine sandy loam
Btg - 19 to 35 inches: sandy clay loam
BCg - 35 to 38 inches: sandy loam
2Cg - 38 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Very poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: B/D
Hydric soil rating: Yes

"D" for undrained

Minor Components

Cape lookout, undrained
Percent of map unit: 4 percent
Landform: Flats, depressions, pocosins
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Portsmouth, undrained
Percent of map unit: 3 percent
Landform: Depressions on marine terraces, flats on marine terraces
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

To—Tomotley fine sandy loam

Map Unit Setting
National map unit symbol: 3rp4
Elevation: 0 to 30 feet
Mean annual precipitation: 42 to 58 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 190 to 270 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Tomotley, drained, and similar soils: 75 percent
Tomotley, undrained, and similar soils: 10 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tomotley, Drained

Setting
Landform: Flats on marine terraces, depressions on stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and loamy fluviomarine deposits and/or marine deposits

Typical profile
Ap - 0 to 7 inches: fine sandy loam
Btg1 - 7 to 12 inches: fine sandy loam
Btg2 - 12 to 42 inches: sandy clay loam
BCg - 42 to 50 inches: sandy loam
Cg - 50 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Description of Tomotley, Undrained

Setting

Landform: Depressions on stream terraces, flats on marine terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and loamy fluviomarine deposits and/or marine deposits

Typical profile

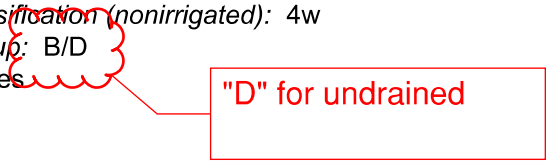
A - 0 to 7 inches: fine sandy loam
Btg1 - 7 to 12 inches: fine sandy loam
Btg2 - 12 to 42 inches: sandy clay loam
BCg - 42 to 50 inches: sandy loam
Cg - 50 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes



Minor Components

Nimmo, undrained

Percent of map unit: 3 percent
Landform: Depressions on marine terraces, flats on marine terraces
Down-slope shape: Concave

Across-slope shape: Linear
Hydric soil rating: Yes

Arapahoe, undrained

Percent of map unit: 3 percent
Landform: Flats, depressions
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

National Flood Hazard Layer FIRMette



Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

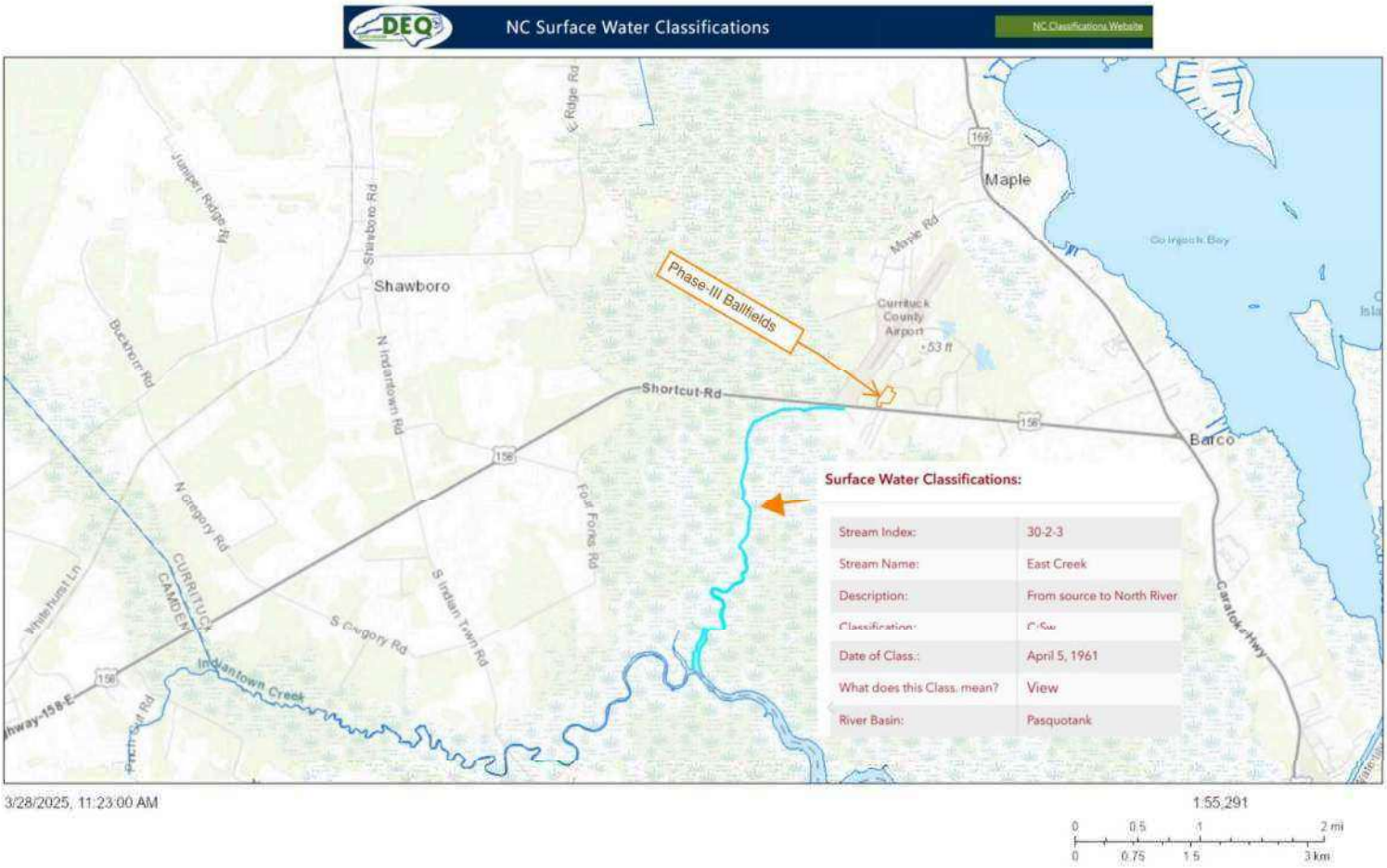
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/19/2025 at 2:32 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Page110


NC Surface Water Classifications
NC Classifications Website
Phase-III Ballfields
Shawboro
Maple
Barco
Shortcut Rd
Currituck County Airport
Surface Water Classifications:
Stream Index: 30-2-3
Stream Name: East Creek
Description: From source to North River
Date of Class.: April 5, 1961
What does this Class. mean? View
River Basin: Pasquotank
3/28/2025, 11:23:00 AM
1:55,291
0 0.5 1 2 mi
0 0.75 1.5 3 km

NOAA Atlas 14, Volume 2, Version 3 ELIZABETH CITY
Station ID: 31-2719
Location name: Elizabeth City, North Carolina, USA*
Latitude: 36.3097°, Longitude: -76.205°
Elevation:
Elevation (station metadata): 8 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.434** (0.392-0.479)	**0.509** (0.460-0.562)	**0.585** (0.528-0.646)	**0.663** (0.597-0.732)	**0.748** (0.670-0.825)	**0.819** (0.733-0.902)	**0.887** (0.789-0.976)	**0.954** (0.845-1.05)	**1.04** (0.910-1.14)	**1.11** (0.969-1.23)
10-min	**0.693** (0.626-0.765)	**0.814** (0.736-0.898)	**0.936** (0.845-1.03)	**1.06** (0.954-1.17)	**1.19** (1.07-1.31)	**1.30** (1.17-1.44)	**1.41** (1.25-1.55)	**1.51** (1.34-1.66)	**1.64** (1.44-1.80)	**1.75** (1.53-1.93)
15-min	**0.866** (0.782-0.956)	**1.02** (0.925-1.13)	**1.18** (1.07-1.31)	**1.34** (1.21-1.48)	**1.51** (1.35-1.67)	**1.65** (1.48-1.82)	**1.78** (1.59-1.96)	**1.91** (1.69-2.10)	**2.06** (1.81-2.27)	**2.20** (1.92-2.42)
30-min	**1.19** (1.07-1.31)	**1.41** (1.28-1.56)	**1.68** (1.52-1.86)	**1.94** (1.75-2.14)	**2.24** (2.01-2.47)	**2.49** (2.23-2.74)	**2.73** (2.43-3.00)	**2.97** (2.63-3.27)	**3.28** (2.88-3.61)	**3.56** (3.10-3.92)
60-min	**1.48** (1.34-1.63)	**1.77** (1.60-1.96)	**2.16** (1.95-2.38)	**2.53** (2.28-2.79)	**2.98** (2.67-3.29)	**3.37** (3.02-3.71)	**3.76** (3.34-4.13)	**4.16** (3.69-4.58)	**4.71** (4.14-5.18)	**5.20** (4.53-5.73)
2-hr	**1.73** (1.55-1.93)	**2.08** (1.87-2.32)	**2.59** (2.32-2.88)	**3.09** (2.76-3.43)	**3.72** (3.31-4.13)	**4.29** (3.80-4.75)	**4.86** (4.28-5.40)	**5.47** (4.79-6.07)	**6.32** (5.49-7.01)	**7.08** (6.10-7.85)
3-hr	**1.85** (1.67-2.07)	**2.23** (2.01-2.49)	**2.78** (2.50-3.10)	**3.34** (2.99-3.72)	**4.07** (3.63-4.53)	**4.74** (4.20-5.26)	**5.44** (4.79-6.02)	**6.19** (5.42-6.84)	**7.27** (6.28-8.04)	**8.24** (7.06-9.12)
6-hr	**2.21** (2.00-2.46)	**2.66** (2.40-2.96)	**3.32** (2.99-3.69)	**4.00** (3.59-4.44)	**4.88** (4.36-5.41)	**5.70** (5.06-6.30)	**6.56** (5.79-7.23)	**7.50** (6.56-8.24)	**8.84** (7.64-9.71)	**10.1** (8.60-11.1)
12-hr	**2.60** (2.35-2.89)	**3.12** (2.82-3.48)	**3.91** (3.52-4.35)	**4.74** (4.25-5.26)	**5.83** (5.19-6.44)	**6.86** (6.06-7.57)	**7.94** (6.95-8.74)	**9.14** (7.92-10.0)	**10.9** (9.27-11.9)	**12.5** (10.5-13.7)
24-hr	**3.06** (2.82-3.35)	**3.73** (3.44-4.08)	**4.82** (4.43-5.26)	**5.73** (5.26-6.25)	**7.08** (6.45-7.70)	**8.24** (7.44-8.95)	**9.52** (8.51-10.3)	**10.9** (9.66-11.8)	**13.0** (11.3-14.2)	**14.8** (12.7-16.2)
2-day	**3.54** (3.26-3.86)	**4.29** (3.95-4.67)	**5.50** (5.06-5.99)	**6.55** (6.00-7.12)	**8.12** (7.38-8.80)	**9.48** (8.54-10.3)	**11.0** (9.80-11.9)	**12.7** (11.1-13.8)	**15.2** (13.1-16.6)	**17.4** (14.8-19.1)
3-day	**3.77** (3.49-4.10)	**4.57** (4.23-4.96)	**5.84** (5.39-6.32)	**6.90** (6.36-7.47)	**8.48** (7.76-9.17)	**9.83** (8.93-10.6)	**11.3** (10.2-12.2)	**12.9** (11.5-14.0)	**15.4** (13.4-16.7)	**17.5** (15.1-19.2)
4-day	**4.00** (3.73-4.33)	**4.84** (4.51-5.24)	**6.17** (5.73-6.66)	**7.26** (6.72-7.83)	**8.85** (8.14-9.54)	**10.2** (9.32-11.0)	**11.6** (10.5-12.5)	**13.2** (11.8-14.3)	**15.5** (13.7-16.9)	**17.7** (15.4-19.4)
7-day	**4.69** (4.39-5.03)	**5.65** (5.29-6.07)	**7.10** (6.62-7.60)	**8.29** (7.72-8.88)	**10.0** (9.27-10.7)	**11.4** (10.5-12.2)	**13.0** (11.8-13.9)	**14.6** (13.2-15.7)	**17.0** (15.1-18.4)	**18.9** (16.6-20.6)
10-day	**5.29** (4.99-5.65)	**6.35** (5.97-6.77)	**7.86** (7.39-8.38)	**9.11** (8.54-9.69)	**10.9** (10.2-11.6)	**12.4** (11.5-13.2)	**14.0** (12.9-14.9)	**15.7** (14.3-16.8)	**18.1** (16.2-19.5)	**20.1** (17.8-21.7)
20-day	**7.20** (6.81-7.62)	**8.57** (8.12-9.08)	**10.4** (9.85-11.0)	**11.9** (11.3-12.6)	**14.1** (13.2-14.9)	**15.9** (14.8-16.8)	**17.7** (16.4-18.8)	**19.7** (18.0-21.0)	**22.4** (20.2-24.0)	**24.6** (21.9-26.6)
30-day	**8.87** (8.41-9.38)	**10.5** (9.99-11.1)	**12.7** (12.0-13.4)	**14.4** (13.6-15.2)	**16.7** (15.7-17.7)	**18.6** (17.4-19.7)	**20.6** (19.1-21.8)	**22.5** (20.8-24.0)	**25.3** (23.1-27.0)	**27.4** (24.8-29.5)
45-day	**11.0** (10.4-11.7)	**13.0** (12.3-13.8)	**15.6** (14.7-16.5)	**17.6** (16.7-18.7)	**20.6** (19.3-21.8)	**23.0** (21.5-24.4)	**25.5** (23.7-27.0)	**28.1** (25.9-29.9)	**31.7** (28.9-33.9)	**34.6** (31.2-37.2)
60-day	**13.2** (12.5-13.9)	**15.6** (14.8-16.5)	**18.4** (17.4-19.4)	**20.7** (19.5-21.8)	**23.8** (22.4-25.1)	**26.2** (24.6-27.7)	**28.7** (26.8-30.4)	**31.2** (28.9-33.1)	**34.6** (31.8-37.0)	**37.3** (33.9-40.0)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

15A NCAC 02H .1003 REQUIREMENTS THAT APPLY TO ALL PROJECTS

The following requirements shall apply to projects subject to any North Carolina stormwater program set forth in Rule .1001 of this Section.

(1) CALCULATION OF PROJECT DENSITY. The following requirements shall apply to the calculation of project density:

(a) Project density shall be calculated as the total built-upon area divided by the total project area;

(b) A project with existing development may use the calculation method in Sub-Item (1)(a) or shall have the option of calculating project density as the difference of total built-upon area minus existing built-upon area divided by the difference of total project area minus existing built-upon area;

(c) Total project area shall exclude the following:

(i) areas below the Normal High Water Line (NHWL); and

(ii) areas defined as "coastal wetlands" pursuant to 15A NCAC 07H .0205, herein incorporated by reference, including any subsequent amendments and editions, and may be accessed at no cost at http://reports.oah.state.nc.us/ncac.asp as measured landward from the Normal High Water (NHW) line; and

Area of wetlands within the site
109511 sf
2.51 ac

(d) On a case-by-case basis as determined by the Division during application review, projects may be considered to have both high and low density areas based on one or more of the following criteria:

(i) natural drainage area boundaries;

(ii) variations in land use throughout the project; and

(iii) construction phasing.

(2) DESIGN REQUIREMENTS FOR LOW DENSITY PROJECTS. Low density projects shall meet the following minimum design criteria:

(a) DENSITY THRESHOLDS. Low density projects shall not exceed the low density development thresholds set forth in the stormwater programs to which they are subject pursuant to Rules .1017, .1019, and .1021 of this Section. For projects subject to the requirements for Non-Coastal High Quality Waters and Outstanding Resource Waters, dwelling unit per acre may be used instead of density to establish low density status for single-family detached residential development as set forth in Rule .1021 in this Section;

(b) DISPERSED FLOW. Projects shall be designed to maximize dispersed flow through vegetated areas and minimize channelization of flow;

(c) VEGETATED CONVEYANCES. Stormwater that cannot be released as dispersed flow shall be transported by vegetated conveyances. A minimal amount of non-vegetated conveyances for erosion protection or piping for driveways or culverts under a road shall be allowed by the permitting authority when it cannot be avoided. Vegetated conveyances shall meet the following requirements:

(i) Side slopes shall be no steeper than 3:1 (horizontal to vertical) unless it is demonstrated to the permitting authority that the soils and vegetation will remain stable in perpetuity based on engineering calculations and on-site soil investigation; and

(ii) The conveyance shall be designed so that it does not erode during the peak flow from the 10-year storm as demonstrated by engineering calculations.

(d) CURB OUTLET SYSTEMS. Low density projects may use curb and gutter with outlets to convey stormwater to grassed swales or vegetated areas. Requirements for these curb outlet systems shall be as follows:

(i) The curb outlets shall be designed such that the swale or vegetated area can carry the peak flow from the 10-year storm at a non-erosive velocity;

(ii) The longitudinal slope of the swale or vegetated area shall not exceed five percent, except where not practical due to physical constraints. In these cases, devices to slow the rate of runoff and encourage infiltration to reduce pollutant delivery shall be provided;

(iii) The swale's cross-section shall be trapezoidal with a minimum bottom width of two feet;

(iv) The side slopes of the swale or vegetated area shall be no steeper than 3:1 (horizontal to vertical);
(v) The minimum length of the swale or vegetated area shall be 100 feet; and
(vi) Low density projects may use treatment swales designed pursuant to Rule .1061 of this Section in lieu of the requirements specified in Sub-items (i) through (v) of this Item.

(3) DESIGN REQUIREMENTS FOR HIGH DENSITY PROJECTS. High density projects are projects that do not conform to Item (2) of this Rule. High density projects shall meet the following minimum design criteria:
(a) TREATMENT REQUIREMENTS. SCMs shall be designed, constructed, and maintained so that the project achieves either "runoff treatment" or "runoff volume match" as those terms are defined in Rule .1002 of this Section.
(b) OFF-SITE STORMWATER. Stormwater runoff from off-site areas and existing development shall not be required to be treated in the SCM. Runoff from off-site areas or existing development that is not bypassed shall be included in the sizing of on-site SCMs at its full built-out potential.
(c) OFF-SITE SCM. A project that controls runoff through an off-site SCM shall be allowed on a case-by-case basis as determined by the permitting authority if the off-site SCM meets the provisions of Rules .1050 through .1061 of this Section.
(d) EXPANSION OR REPLACEMENT OF EXISTING DEVELOPMENT. When new built-upon area is added to existing development or existing development is replaced with new built-upon area, only the area of net increase shall be subject to this Section.
(e) MDC FOR SCMS. SCMs shall meet the relevant MDC set forth in Rules .1050 through .1062 of this Section except in accordance with Item (6) of this Rule.

(4) VEGETATED SETBACKS. Vegetated setbacks shall be required adjacent to waters as specified in the stormwater rules to which the project is subject pursuant to this Section, in addition to the following requirements applicable to all vegetated setbacks:
(a) The width of a vegetated setback shall be measured horizontally from the normal pool elevation of impounded structures, from the top of bank of each side of streams or rivers, and from the mean high waterline of tidal waters, perpendicular to the shoreline;
(b) Vegetated setbacks may be cleared or graded, but shall be replanted and maintained in grass or other vegetation;
(c) Built-upon area that meets the requirements of G.S. 143-214.7(b2)(2) shall be allowed within the vegetated setback.
(d) Built-upon area that does not meet the requirements of G.S. 143-214.7(b2)(2) shall be allowed within a vegetated setback when it is not practical to locate the built-upon area elsewhere, the built-upon area within the vegetated setback is minimized, and channelizing runoff from the built-upon area is avoided. Built-upon area within the vegetated setback shall be limited to:
(i) Publicly-funded linear projects such as roads, greenways, and sidewalks;
(ii) Water Dependent Structures; and
(iii) Minimal footprint uses such as poles, signs, utility appurtenances, and security lights.
(e) Stormwater that has not been treated in an SCM shall not be discharged through a vegetated setback; instead it shall be released at the edge of the vegetated setback and allowed to flow through the setback as dispersed flow.
(f) Artificial streambank and shoreline stabilization shall not be subject to the requirements of this Item.

(5) STORMWATER OUTLETS. Stormwater outlets shall be designed so that they do not cause erosion downslope of the discharge point during the peak flow from the 10-year storm event as shown by engineering calculations.

(6) VARIATIONS FROM THIS SECTION. The permitting authority shall have the option to approve projects that do not comply with all of the provisions of this Section on a case-by-case basis as follows:
(a) If the variation pertains to an SCM design that does not meet all of the MDC, then the applicant shall provide technical justification based on engineering calculations and the

results of research studies showing that the proposed design provides equal or better stormwater control and equal or better protection of waters of the State than the requirements of this Section and that it shall function in perpetuity. The permitting authority shall have the option to require compliance with the MDC in the event that the alternative SCM design fails;

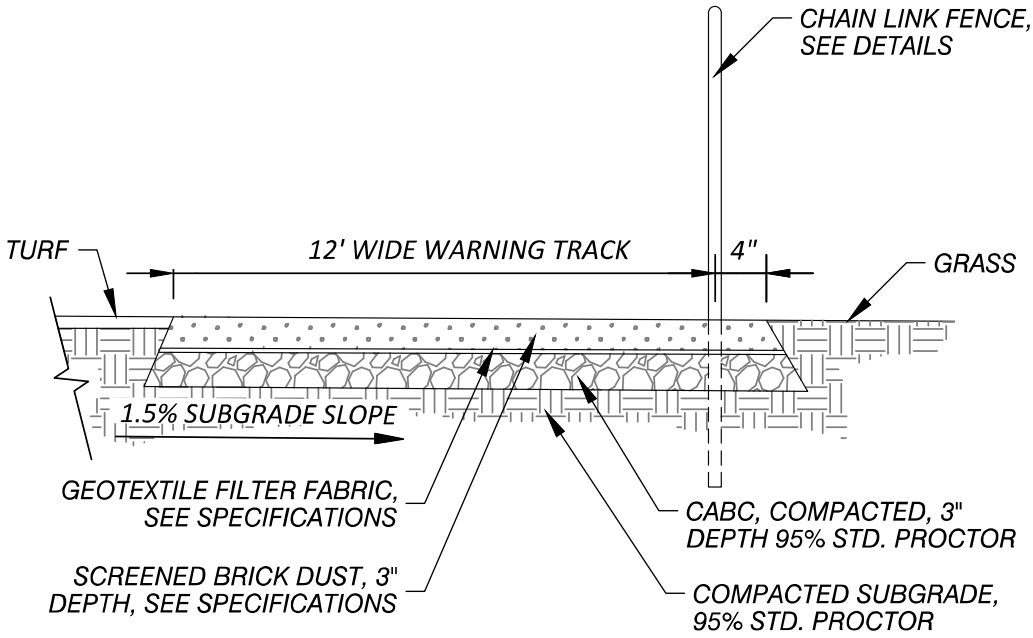
(b) If the variation pertains to other aspects of the project, then the applicant shall demonstrate that the project provides equal or better stormwater control and equal or better protection of waters of the State than the requirements of this Section; and

(c) Variations from this Section shall not be allowed if the project is being permitted under the fast-track process.

(7) DEED RESTRICTIONS AND PROTECTIVE COVENANTS. The permittee shall record deed restrictions and protective covenants prior to the issuance of a certificate of occupancy to ensure that projects will be maintained in perpetuity consistent with the plans and specifications approved by the permitting authority. For projects owned by public entities, the permittee shall have the option to incorporate specific restrictions and conditions into a facility management plan or another instrument in lieu of deed restrictions and protective covenants.

(8) COMPLIANCE WITH OTHER REGULATORY PROGRAMS. Project designs shall comply with all other applicable requirements pursuant to G.S. 143-214.1, G.S. 143-214.5, G.S. 143-214.7, and G.S. 143-215.3(a)(1).

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.1(d); 143-215.3(a)(1); S.L. 2008-198;*
Eff. January 1, 1988;
Amended Eff. December 1, 1995; September 1, 1995;
Readopted Eff. January 1, 2017.



SECTION

NOTES:

1. *SEE SITE PLAN FOR LOCATION.*
2. *SEE GRADING PLAN FOR FINISHED GRADES.*

8 BALLFIELD WARNING TRACK

N.T.S.

North Carolina Department of Environmental Quality

Pat McCrory
Governor

Don Van der Vaart
Secretary

September 25, 2015

Mr. Eric T. Weatherly, PE, County Engineer
County of Currituck
153 Courthouse Road, Suite 302
Currituck, NC 27929

Subject: **Stormwater Permit No. SW7111105 Modification#2**
Currituck Community Park & Regional Aviation
and Technical Training Center
Overall Low Density Commercial Development
with Areas of High Density
Currituck County

Dear Mr. Weatherly:

The Washington Regional Office received a complete Stormwater Management Permit Modification Application for the Currituck Community Park and Regional Aviation and Technical Training Center on August 27, 2015. Staff review of the plans and specifications has determined that the project, as proposed, will comply with the Stormwater Regulations set forth in Session Law 2008-211 and Title 15A NCAC 2H.1000. We are forwarding Permit No. SW7111105MOD#2 dated September 25, 2015, for the continued construction of the subject project. By issuance of this permit, permit SW7111105MOD which was issued on August 22, 2012 is hereby rescinded.

This permit shall be effective from the date of issuance until November 29, 2021, and shall be subject to the conditions and limitations as specified therein. Please pay special attention to the Operation and Maintenance requirements in this permit. Failure to establish an adequate system for operation and maintenance of the stormwater management system will result in future compliance problems.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within thirty (30) days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made this permit shall be final and binding.

If you have any questions, or need additional information concerning this matter, please contact me at (252) 946-6481.

Sincerely,

Samir Dumpor, PE
Environmental Engineer

PHM/ sd: G:\LR\SWP\SD\Permits-Hybrid LD & HD\SW7111105MOD#2

cc: Kevin Westra, PE, Alfred Benesch & Company
Currituck County Planning Division
Washington Regional Office

STATE OF NORTH CAROLINA

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

STATE STORMWATER MANAGEMENT PERMIT

OVERALL LOW DENSITY COMMERCIAL DEVELOPMENT

WITH AREAS OF HIGH DENSITY

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations

PERMISSION IS HEREBY GRANTED TO

County of Currituck

Currituck Community Park and Regional Aviation and Technical Training Center

off NC Hwy 158, between Airport Rd.& Aviation Parkway, Barco, Currituck County

FOR THE

construction, operation and maintenance of an overall low density commercial development with a wet detention pond as the treatment system for Drainage Area No.2 and two constructed wetland systems for Drainage Areas No.4 & No.5, all in compliance with the provisions of Session Law 2008-211 and 15A NCAC 2H .1000 (hereafter referred to as the *"stormwater rules"*) and the approved stormwater management plans and specifications and other supporting data as attached and on file with and approved by the Division of Energy, Mineral, and Land Resources and considered a part of this permit.

This permit shall be effective from the date of issuance until November 29, 2021, and shall be subject to the following specified conditions and limitations:

I. DESIGN STANDARDS

1. This permit is effective only with respect to the nature and volume of stormwater described in the application and other supporting data.

2. The built-upon area percentage for this 84.41 acre project is currently approved for 14.5% and must be maintained at 24% or lower per the requirements of Session Law 2008-211 and 15A NCAC 2H .1000. This project is permitted for a maximum of **531,401** square feet of built upon area consisting of 237,267 square feet for the Low Density areas of the project and 294,134 square feet for the three High Density areas within this project.

3. The stormwater systems proposed to treat the runoff generated by the designated high density areas have been approved for the management of stormwater runoff as described in Section I.7 & I.8 on page 3 of this permit.

4. All stormwater collection and treatment systems must be located in either dedicated common areas or recorded easements. The final plats for the project will be recorded showing all such required easements, in accordance with the approved plans.

5. The runoff from all built-upon area within the high density portion of the permitted drainage area of this project must be directed into the permitted stormwater control system. Within the low density portions of the permitted project, the only runoff conveyance systems allowed will be vegetated conveyances such as swales with minimum side slopes of 3:1 (H:V) as defined in the stormwater rules and as shown on the approved plans. The built-upon area for the future development is limited to 50,000 square feet within the low density drainage area #1 and 10,000 square feet within the high density drainage area #2 as set within the approved plans and application. Plans for any future built-upon area not currently shown on the approved plans must be submitted and approved by the Division prior to the start of construction.

6. The built-upon areas associated with this project shall be located at least 50 feet landward of all perennial and intermittent surface waters.

7. The following design criteria have been provided in the wet detention pond and must be maintained at design condition:

		Drainage Area No.2
a.	Drainage Area, acres:	6.53 ac (284,655sf)
b.	Total Impervious Surfaces, ft^2:	143,555
c.	Design Storm, inches:	1.50
d.	Pond Depth, feet:	7.50 (4.0'average)
e.	TSS removal efficiency:	90%
f.	Permanent Pool Elevation, FMSL:	7.00
g.	Permanent Pool Surface Area, ft^2:	12,800
h.	Permitted Storage Volume, ft^3:	23,921 (at temporary pool elev)
i.	Temporary Storage Elevation, FMSL:	8.50
j.	Predevelopment 1 year 24 hour:	1.45 cfs
k.	Post development 1 year 24 hour:	0.12 cfs w/control
l.	Controlling Orifice:	2.50"Ø pipe
m.	Permitted Forebay Volume, ft^3:	7,752
n.	Fountain Horsepower, HP	1/6 Hp
o.	Receiving Stream/River Basin:	UT to North River / Pasquotank
p.	Stream Index Number:	30 – 2
q.	Classification of Water Body:	"SC"

8. The following design criteria have been provided in the two constructed wetlands and must be maintained at design condition:

		DA #4	**DA#5**
a.	Drainage Area, ft^2:	64,033	243,724
b.	Total Impervious Surfaces, ft^2:	44,867	105,712
c.	Design Storm, inches:	1.50	1.50
d.	Permanent Pool (PP)Elevation, FMSL:	5.50	6.00
e.	Shallow Water (PP) Surface Area, ft^2:	2,383	5,700
f.	Temporary Pool (TP) Elevation, FMSL:	6.75	6.92
g.	Shallow Land (TP) Surface Area, ft^2:	2,399	5,520
h.	Deep Pool (incl Forebay) Surface Area, ft^2:	1,241	2,892
i.	Required Storage Volume, ft^2:	5,433	10,559
j.	Permitted Storage Volume, ft^3:	5,433	13,829
k.	Controlling Orifice:	1.50"Ø	2.00"Ø pipe
l.	Receiving Stream/River Basin:	UT to North River / Pasquotank	
m.	Stream Index Number:	30 – 2	
n.	Classification of Water Body:	"SC"	

II. SCHEDULE OF COMPLIANCE

1. The stormwater management system shall be constructed in its entirety, vegetated and operational for its intended use prior to the construction of any built-upon surface.

2. During construction, erosion shall be kept to a minimum and any eroded areas of the system will be repaired immediately.

3. The permittee shall at all time provide the operation and maintenance necessary to assure the permitted stormwater system functions at optimum efficiency. The approved Operation and Maintenance Plan must be followed in its entirety and maintenance must occur at the scheduled intervals including, but not limited to:
   a. Semiannual scheduled inspections (every 6 months).
   b. Sediment removal.
   c. Mowing and re-vegetation of slopes and the vegetated filter strip.
   d. Immediate repair of eroded areas.
   e. Maintenance of all slopes in accordance with approved plans and specifications.
   f. Debris removal and unclogging of outlet structure, orifice device, level spreader, filter strip, catch basins and piping.
   g. Access to the outlet structure must be available at all times.
4. Records of maintenance activities must be kept for each permitted BMP. The records will indicate the date, activity, name of person performing the work and what actions were taken.

5. Access to the stormwater facilities shall be maintained via appropriate easements at all times.

6. Decorative spray fountains will be allowed only in the wet detention basin system, subject to the following criteria:
   a. The fountain must draw its water from less than 2' below the permanent pool surface.
   b. Separated units, where the nozzle, pump and intake are connected by tubing, may be used only if they draw water from the surface in the deepest part of the pond.
   c. The falling water from the fountain must be centered in the pond, away from the shoreline.
   d. The maximum horsepower for a fountain in this pond is 1/6 horsepower.

7. The facilities shall be constructed as shown on the approved plans. This permit shall become void unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.

8. Upon completion of construction, prior to issuance of a Certificate of Occupancy, and prior to operation of this permitted facility, a certification must be received from an appropriate designer for the system installed certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting documentation. Any deviations from the approved plans and specifications must be noted on the Certification. A modification may be required for those deviations.

9. If the stormwater system was used as an Erosion Control device, it must be restored to design condition prior to operation as a stormwater treatment device, and prior to occupancy of the facility.

10. The permittee shall submit to the Director and shall have received approval for revised plans, specifications, and calculations prior to construction, for any modification to the approved plans, including, but not limited to, those listed below:
    a. Any revision to any item shown on the approved plans, including the stormwater management measures, built-upon area, details, etc.
    b. Project name change.
    c. Transfer of ownership.
    d. Redesign or addition to the approved amount of built-upon area or to the drainage area.
    e. Further subdivision, acquisition, lease or sale of all or part of the project area. The project area is defined as all property owned by the permittee, for which Sedimentation and Erosion Control Plan approval or a CAMA Major permit was sought.
    f. Filling in, altering, or piping of any vegetative conveyance shown on the approved plan.

11. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the Director that the changes have been made.

12. The permittee shall submit final site layout and grading plans for any permitted future areas shown on the approved plans and receive approval prior to the start of construction.

13. A copy of the approved plans and specifications shall be maintained on file by the Permittee at all times.

14. This permit shall become void unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.

15. Prior to transfer of the permit, the stormwater facilities will be inspected by DEMLR personnel. The facility must be in compliance with all permit conditions. Any items not in compliance must be repaired or replaced to design condition prior to the transfer. Records of maintenance activities performed to date will be required.

16. Prior to the subdivision and/or sale of this project, in whole or in part, the following deed restrictions must be recorded with the Office of the Register of Deeds:
    a. The following covenants are intended to ensure ongoing compliance with State Stormwater Management Permit Number SW7111105, as issued by the Division of Energy, Mineral, and Land Resources under NCAC 2H.1000.
    b. The State of North Carolina is made a beneficiary of these covenants to the extent necessary to maintain compliance with the Stormwater Management Permit.
    c. These covenants are to run with the land and be binding on all persons and parties claiming under them.
    d. The covenants pertaining to stormwater may not be altered or rescinded without the express written consent of the State of North Carolina, Division of Energy, Mineral, and Land Resources.
    e. Alteration of the drainage as shown on the approved plans may not take place without the concurrence of the Division of Energy, Mineral, and Land Resources.

f. This project is permitted for a maximum of **531,401** square feet of built-upon area. Construction of additional built-upon area in excess of this amount will require a permit modification.

g. This project may not be sold or subdivided, in whole or in part, without first receiving a permit modification from the Division.

h. Construction of additional impervious areas such that low-density requirements are no longer met will require a permit modification prior to construction. An engineered system will be required to collect and treat the runoff from all built-upon area associated with the project, including that area permitted under the low density option.

i. Filling in or piping of any vegetative conveyances (ditches, swales, etc.) associated with this development, except for average driveway crossings, is strictly prohibited by any persons.

j. The built-upon areas shall be located a minimum of 50 feet landward of all perennial and intermittent surface waters.

17. A copy of the recorded deed restrictions must be submitted to the Division within 30 days of the date of recording the plat, and prior to selling lots. The recorded copy must contain all of the statements above, the signature of the Permittee, the deed book number and page, and the stamp/signature of the Register of Deeds.

III. GENERAL CONDITIONS

1. This permit is not transferable except after notice to and approval by the Director. In the event of a change of ownership, or a name change, the permittee must submit a completed Name/Ownership Change form, to the Division of Energy, Mineral, and Land Resources, signed by both parties, and accompanied by supporting documentation as listed on page 2 of the form. The project must be in good standing with the Division. The approval of this request will be considered on its merits and may or may not be approved.

2. The permittee is responsible for compliance with all permit conditions until such time as the Division approves the transfer request.

3. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to enforcement action by the Division of Energy, Mineral, and Land Resources, in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.

4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state, and federal) having jurisdiction.

5. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement stormwater management systems.

6. The permittee grants DENR Staff permission to enter the property during normal business hours for the purpose of inspecting all components of the permitted stormwater management facility.

7. The permit issued shall continue in force and effect until revoked or terminated. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and re-issuance or termination does not stay any permit condition.

8. Unless specified elsewhere, permanent seeding requirements for the stormwater control must follow the guidelines established in the North Carolina Erosion and Sediment Control Planning and Design Manual.

9. Approved plans and specifications for this project are incorporated by reference and are enforceable parts of the permit.

10. The issuance of this permit does not prohibit the Director from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules and regulations contained in Session Law 2008-211, Title 15A NCAC 2H.1000, and NCGS 143-215.1 et.al.

11. The permittee shall notify the Division of any name, ownership or mailing address changes at least 30 days prior to making such changes.

12. This permit shall be effective from the date of issuance until November 29, 2021. Application for permit renewal shall be submitted 180 days prior to the expiration date of this permit and must be accompanied by the processing fee.

Permit issued this the 25th day of September, 2015.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

_____ *for*

Tracy E. Davis, PE, CPM
Division of Energy, Mineral, and Land Resources
By Authority of the Environmental Management Commission

Stormwater Permit No. SW7111105 Modification#2

Currituck Community Park & Regional Aviation & Technical Training Center
Stormwater Permit No. SW7111105 Modification#2
Currituck County

Designer's Certification

I, _____, as a duly registered _____ in the State of North Carolina, having been authorized to observe (periodically/ weekly/ full time) the construction of the project,

_____

(Project)

for _____(Project Owner) hereby state that, to the best of my abilities, due care and diligence was used in the observation of the project construction such that the construction was observed to be built within substantial compliance and intent of the approved plans and specifications.

The checklist of items on page 2 of this form is included in the Certification.

Noted deviations from approved plans and specification:

SEAL

Signature _____

Registration Number _____

Date _____

Certification Requirements:

_____1. The drainage area to the system contains approximately the permitted acreage.

_____2. The drainage area to the system contains no more than the permitted amount of built-upon area.

_____3. All the built-upon area associated with the project is graded such that the runoff drains to the system.

_____4. All roof drains are located such that the runoff is directed into the system.

_____5. The outlet/bypass structure elevations are per the approved plan.

_____6. The outlet structure is located per the approved plans.

_____7. Trash rack is provided on the outlet/bypass structure.

_____8. All slopes are grassed with permanent vegetation.

_____9. Vegetated slopes are no steeper than 3:1.

_____10. The inlets are located per the approved plans and do not cause short-circuiting of the system.

_____11. The permitted amounts of surface area and/or volume have been provided.

_____12. Required drawdown devices are correctly sized per the approved plans.

_____13. All required design depths are provided.

_____14. All required parts of the system are provided, such as a vegetated shelf, and a forebay.

_____15. The required system dimensions are provided per the approved plans.

cc: NCDENR-DEMLR Washington Regional Office
Currituck County Planning Division

WaRO

DEMLR USE ONLY		
Date Received	Fee Paid	Permit Number
8/27/15	#505	SW7111105 Mod

Applicable Rules: ☐ Coastal SW – 1995 ☐ Coastal SW – 2008 ☐ Ph II - Post Construction
(select all that apply) ☐ Non-Coastal SW- HQW/ORW Waters ☐ Universal Stormwater Management Plan
☐ Other WQ Mgmt Plan: SWACK 9/15/15

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State of North Carolina
Department of Environment and Natural Resources
Division of Energy, Mineral and Land Resources

STORMWATER MANAGEMENT PERMIT APPLICATION FORM

This form may be photocopied for use as an original

I. GENERAL INFORMATION

1. Project Name (subdivision, facility, or establishment name - should be consistent with project name on plans, specifications, letters, operation and maintenance agreements, etc.):

   Maple Park Expansion - Phase 2 (Currituck Community Park - Phase 2)

2. Location of Project (street address):

   Maple Parkway between College Way and Community Way

   City: Barco County: Currituck Zip: 27917

3. Directions to project (from nearest major intersection):

   Travel west 2.0 miles form intersection of Caratoke Hwy and Shortcut Rd. Turn right (north) onto Aviation Pkwy. Then take the next left turn onto Maple Pkwy. Travel 0.3 miles along Maple Pkwy to the site driveway on the right (north) side of the road.

4. Latitude: 36° 23' 29.8" N Longitude: 76° 0' 55.5" W of the main entrance to the project.

II. PERMIT INFORMATION:

1.a. Specify whether project is (check one): ☐ New ☒ Modification ☐ Renewal w/ Modification†
†*Renewals with modifications also requires SWU-102 – Renewal Application Form*

b. If this application is being submitted as the result of a **modification** to an existing permit, list the existing permit number SW7111105, its issue date (if known) 11-29-11, and the status of construction: ☐ Not Started ☒ Partially Completed* ☐ Completed* **provide a designer's certification*

2. Specify the type of project (check one):
   ☒ Low Density ☒ High Density ☐ Drains to an Offsite Stormwater System ☐ Other

3. If this application is being submitted as the result of a **previously returned application** or a **letter from DEMLR requesting a state stormwater management permit application**, list the stormwater project number, if assigned, _____ and the previous name of the project, if different than currently proposed, _____.

4.a. Additional Project Requirements (check applicable blanks; information on required state permits can be obtained by contacting the Customer Service Center at 1-877-623-6748):

   ☐ CAMA Major ☒ Sedimentation/Erosion Control: 22 ac of Disturbed Area
   ☐ NPDES Industrial Stormwater ☐ 404/401 Permit: Proposed Impacts _____

b. If any of these permits have already been acquired please provide the Project Name, Project/Permit Number, issue date and the type of each permit: _____

5. Is the project located within 5 miles of a public airport? ☐ No ☒ Yes
   If yes, see S.L. 2012-200, Part VI: http://portal.ncdenr.org/web/lr/rules-and-regulations

III. CONTACT INFORMATION

1. a. Print Applicant / Signing Official's name and title (specifically the developer, property owner, lessee, designated government official, individual, etc. who owns the project):

Applicant/Organization: Currituck County

Signing Official & Title: Eric Weatherly, PE, County Engineer

b. Contact information for person listed in item 1a above:

Street Address: 153 Courthouse Road, Suite 302

City: Currituck State: NC Zip: 27929

Mailing Address (*if applicable*): 153 Courthouse Road, Suite 302

City: Currituck State: NC Zip: 27929

Phone: (252) 232-6035 Fax: (252) 232-3298

Email: eric.weatherly@currituckcountync.org

c. Please check the appropriate box. The applicant listed above is:

- ☒ The property owner (Skip to Contact Information, item 3a)
- ☐ Lessee* (Attach a copy of the lease agreement and complete Contact Information, item 2a and 2b below)
- ☐ Purchaser* (Attach a copy of the pending sales agreement and complete Contact Information, item 2a and 2b below)
- ☐ Developer* (Complete Contact Information, item 2a and 2b below.)

2. a. Print Property Owner's name and title below, if you are the lessee, purchaser or developer. (This is the person who owns the property that the project is located on):

Property Owner/Organization:

Signing Official & Title:

b. Contact information for person listed in item 2a above:

Street Address:

City: State: Zip:

Mailing Address (*if applicable*):

City: State: Zip:

Phone: ( ) Fax: ( )

Email:

3. a. (Optional) Print the name and title of another contact such as the project's construction supervisor or other person who can answer questions about the project:

Other Contact Person/Organization:

Signing Official & Title:

b. Contact information for person listed in item 3a above:

Mailing Address:

City: State: Zip:

Phone: ( ) Fax: ( )

Email:

4. Local jurisdiction for building permits: Currituck County

Point of Contact: Donna Voliva Phone #: (252) 232-2055

IV. PROJECT INFORMATION

1. In the space provided below, briefly summarize how the stormwater runoff will be treated.

This project will contain a mix of high density and low density features. Stormwater runoff in low density areas will be collected via sheet flowand grassed lined swales. High density areas will be provided with treatment primary by stormwater wetlands. This permit modification applies only to Drainage Area 5 and constructed wetland #2

2. a. **If claiming vested rights,** identify the supporting documents provided and the date they were approved:

☐ Approval of a Site Specific Development Plan or PUD — Approval Date: _____
☐ Valid Building Permit — Issued Date: _____
☐ Other: _____ — Date: _____

b. **If claiming vested rights, identify the regulation(s) the project has been designed in accordance with:**

☐ Coastal SW – 1995 ☐ Ph II – Post Construction

3. Stormwater runoff from this project drains to the North River basin.

4. Total Property Area: 84.41 acres

5. Total Coastal Wetlands Area: 0 acres

6. Total Surface Water Area: 0 acres

7. Total Property Area (4) – Total Coastal Wetlands Area (5) – Total Surface Water Area (6) = Total Project Area+: 84.41 acres

+ *Total project area shall be calculated to exclude the following: the normal pool of impounded structures, the area between the banks of streams and rivers, the area below the Normal High Water (NHW) line or Mean High Water (MHW) line, and coastal wetlands landward from the NHW (or MHW) line. The resultant project area is used to calculate overall percent built upon area (BUA). Non-coastal wetlands landward of the NHW (or MHW) line may be included in the total project area.*

8. Project percent of impervious area: (Total Impervious Area / Total Project Area) X 100 = 14.5 +/- %

9. How many drainage areas does the project have?3 *(For high density, count 1 for each proposed engineered stormwater BMP. For low density and other projects, use 1 for the whole property area)*

10. Complete the following information for each drainage area identified in Project Information item 9. If there are more than four drainage areas in the project, attach an additional sheet with the information for each area provided in the same format as below.

Basin Information	Drainage Area 1	Drainage Area 4	Drainage Area 5	Drainage Area __
Receiving Stream Name	North River	North River	North River	
Stream Class *	SC	SC	SC	
Stream Index Number *	30-2	30-2	30-2	
Total Drainage Area (sf)	2,391,886 ↑	64,033 ✓	243,724 ↑	
On-site Drainage Area (sf)	2,391,886	64,033	243,724	
Off-site Drainage Area (sf)				
Proposed Impervious Area** (sf)	168,775 ✓	44,867 ✓	109,212	105,712 per Kevin's Email of 8-23-15 S.D.
% Impervious Area** (total)	7.06%	70.07%	44.81% 43.37 →	

Impervious** Surface Area	Drainage Area 1	Drainage Area 4	Drainage Area 5	Drainage Area __
On-site Buildings/Lots (sf)		544	5,302	
On-site Streets (sf)	79,811			
On-site Parking (sf)	20,038	36,047	74,295	
On-site Sidewalks (sf)	18,926	8,276	17,615	
Other on-site (sf)			6,500	
Future (sf)	50,000			
Off-site (sf)				
Existing BUA*** (sf)				Total BUA all 5 DA
Total (sf):	168,775 ✓	44,867 ✓	105,712	531,401

* *Stream Class and Index Number can be determined at: http://portal.ncdenr.org/web/wq/ps/csu/classifications*

** *Impervious area is defined as the built upon area including, but not limited to, buildings, roads, parking areas, sidewalks, gravel areas, etc.*

*** *Report only that amount of existing BUA that will remain after development. Do not report any existing BUA that is to be removed and which will be replaced by new BUA.*

11. How was the off-site impervious area listed above determined? Provide documentation. _____

_____

Projects in Union County: *Contact DEMLR Central Office staff to check if the project is located within a Threatened & Endangered Species watershed that may be subject to more stringent stormwater requirements as per 15A NCAC 02B .0600.*

V. SUPPLEMENT AND O&M FORMS

The applicable state stormwater management permit supplement and operation and maintenance (O&M) forms must be submitted for each BMP specified for this project. The latest versions of the forms can be downloaded from http://portal.ncdenr.org/web/wq/ws/su/bmp-manual.

VI. SUBMITTAL REQUIREMENTS

Only complete application packages will be accepted and reviewed by the Division of Energy, Mineral and Land Resources (DEMLR). A complete package includes all of the items listed below. A detailed application instruction sheet and BMP checklists are available from http://portal.ncdenr.org/web/wq/ws/su/statesw/forms_docs. The complete application package should be submitted to the appropriate DEMLR Office. (The appropriate office may be found by locating project on the interactive online map at http://portal.ncdenr.org/web/wq/ws/su/maps.)

Please **indicate that the following required information have been provided by initialing** in the space provided for each item. All original documents MUST be signed and initialed in **blue ink. Download the latest versions for each submitted application package from** http://portal.ncdenr.org/web/wq/ws/su/statesw/forms_docs.

Initials

1. *Original and one copy* of the Stormwater Management Permit Application Form. KW
2. *Original and one copy* of the signed and notarized Deed Restrictions & Protective Covenants Form. *(if required as per Part VII below)* on file.
3. *Original* of the applicable Supplement Form(s) (sealed, signed and dated) and O&M agreement(s) for each BMP. on file
4. Permit application processing fee of $505 *payable to NCDENR.* (For an Express review, refer to http://www.envhelp.org/pages/onestopexpress.html for information on the Express program and the associated fees. Contact the appropriate regional office Express Permit Coordinator for additional information and to schedule the required application meeting.) KW
5. A detailed narrative (one to two pages) describing the stormwater treatment/managementfor the project. This is required in addition to the brief summary provided in the Project Information, item 1. on file
6. A USGS map identifying the site location. If the receiving stream is reported as class SA or the receiving stream drains to class SA waters within ½ mile of the site boundary, include the ½ mile radius on the map. on file
7. Sealed, signed and dated calculations (one copy). KW
8. Two sets of plans folded to 8.5" x 14" (sealed, signed, & dated), including: KW
   a. Development/Project name.
   b. Engineer and firm.
   c. Location map with named streets and NCSR numbers.
   d. Legend.
   e. North arrow.
   f. Scale.
   g. Revision number and dates.
   h. Identify all surface waters on the plans by delineating the normal pool elevation of impounded structures, the banks of streams and rivers, the MHW or NHW line of tidal waters, and any coastal wetlands landward of the MHW or NHW lines.
      - Delineate the vegetated buffer landward from the normal pool elevation of impounded structures, the banks of streams or rivers, and the MHW (or NHW) of tidal waters.
   i. Dimensioned property/project boundary with bearings & distances.
   j. Site Layout with all BUA identified and dimensioned.
   k. Existing contours, proposed contours, spot elevations, finished floor elevations.
   l. Details of roads, drainage features, collection systems, and stormwater control measures.
   m. Wetlands delineated, or a note on the plans that none exist. (Must be delineated by a qualified person. Provide documentation of qualifications and identify the person who made the determination on the plans.

n. Existing drainage (including off-site), drainage easements, pipe sizes, runoff calculations.
o. Drainage areas delineated (included in the main set of plans, not as a separate document).
p. Vegetated buffers (where required).

9. Copy of any applicable soils report with the associated SHWT elevations (Please identify elevations in addition to depths) as well as a map of the boring locations with the existing elevations and boring logs. Include an 8.5"x11" copy of the NRCS County Soils map with the project area clearly delineated. For projects with infiltration BMPs, the report should also include the soil type, expected infiltration rate, and the method of determining the infiltration rate. **(Infiltration Devices submitted to WiRO:** *Schedule a site visit for DEMLR to verify the SHWT prior to submittal, (910) 796-7378.)* on file

10. A copy of the most current property deed. Deed book: 1062 Page No: 356 on file

11. For corporations and limited liability corporations (LLC): Provide documentation from the NC Secretary of State or other official documentation, which supports the titles and positions held by the persons listed in Contact Information, item 1a, 2a, and/or 3a per 15A NCAC 2H.1003(e). The corporation or LLC must be listed as an active corporation in good standing with the NC Secretary of State, otherwise the application will be returned. http://www.secretary.state.nc.us/Corporations/CSearch.aspx N/A

VII. DEED RESTRICTIONS AND PROTECTIVE COVENANTS

For all subdivisions, outparcels, and future development, the appropriate property restrictions and protective covenants are required to be recorded prior to the sale of any lot. If lot sizes vary significantly or the proposed BUA allocations vary, a table listing each lot number, lot size, and the allowable built-upon area must be provided as an attachment to the completed and notarized deed restriction form. The appropriate deed restrictions and protective covenants forms can be downloaded from http://portal.ncdenr.org/web/lr/state-stormwater-forms docs. Download the latest versions for each submittal.

In the instances where the applicant is different than the property owner, it is the responsibility of the property owner to sign the deed restrictions and protective covenants form while the applicant is responsible for ensuring that the deed restrictions are recorded.

By the notarized signature(s) below, the permit holder(s) certify that the recorded property restrictions and protective covenants for this project, if required, shall include all the items required in the permit and listed on the forms available on the website, that the covenants will be binding on all parties and persons claiming under them, that they will run with the land, that the required covenants cannot be changed or deleted without concurrence from the NC DEMLR, and that they will be recorded prior to the sale of any lot.

VIII. CONSULTANT INFORMATION AND AUTHORIZATION

Applicant: Complete this section if you wish to designate authority to another individual and/or firm (such as a consulting engineer and/or firm) so that they may provide information on your behalf for this project (such as addressing requests for additional information).

Consulting Engineer: Kevin J Westra, PE

Consulting Firm: Alfred Benesch & Company

Mailing Address: 2320 West Morehead Street

City: Charlotte State: NC Zip: 28208

Phone: (704) 496-6297 Fax: (704) 521-8955

Email: kwestra@benesch.com

IX. PROPERTY OWNER AUTHORIZATION *(if Contact Information, item 2 has been filled out, complete this section)*

I, *(print or type name of person listed in Contact Information, item 2a)* _____, certify that I own the property identified in this permit application, and thus give permission to *(print or type name of person listed in Contact Information, item 1a)* _____ with *(print or type name of organization listed in Contact Information, item 1a)* _____ to develop the project as currently proposed. A copy of the lease agreement or pending property sales contract has been provided with the submittal, which indicates the party responsible for the operation and maintenance of the stormwater system.

As the legal property owner I acknowledge, understand, and agree by my signature below, that if my designated agent (entity listed in Contact Information, item 1) dissolves their company and/or cancels or defaults on their lease agreement, or pending sale, responsibility for compliance with the DEMLR Stormwater permit reverts back to me, the property owner. As the property owner, it is my responsibility to notify DEMLR immediately and submit a completed Name/Ownership Change Form within 30 days; otherwise I will be operating a stormwater treatment facility without a valid permit. I understand that the operation of a stormwater treatment facility without a valid permit is a violation of NC General Statue 143-215.1 and may result in appropriate enforcement action including the assessment of civil penalties of up to $25,000 per day, pursuant to NCGS 143-215.6.

Signature:_____ Date:_____

I, _____, a Notary Public for the State of _____, County of _____, do hereby certify that _____ personally appeared before me this ___ day of _____, _____, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal, _____

SEAL

My commission expires_____

X. APPLICANT'S CERTIFICATION

I, *(print or type name of person listed in Contact Information, item 1a)* Eric T. Weatherly, PE, County Engineer, certify that the information included on this permit application form is, to the best of my knowledge, correct and that the project will be constructed in conformance with the approved plans, that the required deed restrictions and protective covenants will be recorded, and that the proposed project complies with the requirements of the applicable stormwater rules under 15A NCAC 2H .1000 and any other applicable state stormwater requirements.

Signature: Eric T Weatherly Date: 8-6-15

I, Leeann Walton, a Notary Public for the State of North Carolina County of Currituck, do hereby certify that Eric T. Weatherly personally appeared before me this 6TH day of August, 2015, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal, Leeann Walton

SEAL

Leeann Walton
Currituck County, NC
Notary Public

My commission expires June 23, 2019

NCDENR

DIVISION OF WATER QUALITY DWQ

STORMWATER MANAGEMENT PERMIT APPLICATION FORM
401 CERTIFICATION APPLICATION FORM

WETLAND SUPPLEMENT

This form must be filled out, printed and submitted.
The Required Items Checklist (Part III) must be printed, filled out and submitted along with all the required information.

I. PROJECT INFORMATION

Project name	Maple Park Expansion
Contact name	Kevin J Westra, PE
Phone number	704-496-6297
Date	August 21, 2015
Drainage area number	5

II. DESIGN INFORMATION

Site Characteristics

Drainage area	243,724.00	ft^2	
Impervious area	105,712.00	ft^2	
Percent impervious	43.4%	%	
Design rainfall depth	1.50	inch	

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Peak Flow Calculations

1-yr, 24-hr rainfall depth	3.06	in	
1-yr, 24-hr intensity	0.13	in/hr	
Pre-development 1-yr, 24-hr runoff	0.36	ft^3/sec	
Post-development 1-yr, 24-hr runoff	4.96	ft^3/sec	
Pre/Post 1-yr, 24-hr peak control	4.60	ft^3/sec	

Storage Volume: Non-SA Waters

Minimum required volume	13,325.00	ft^3	
Volume provided (temporary pool volume)	13,829.00	ft^3	OK

Storage Volume: SA Waters Parameters

1.5" runoff volume		ft^3
Pre-development 1-yr, 24-hr runoff volume		ft^3
Post-development 1-yr, 24-hr runoff volume		ft^3
Minimum volume required		ft^3
Volume provided		ft^3

Outlet Design

Depth of temporary pool/ponding depth (D_{Plants})	12.00	in	OK
Drawdown time	2.73	days	OK
Diameter of orifice	2.00	in	OK
Coefficient of discharge (C_D) used in orifice diameter calculation	0.62	(unitless)	
Driving head (H_o) used in the orifice diameter calculation	0.36	ft	OK

Surface Areas of Wetland Zones			
Surface Area of Entire Wetland	14,103.00 ft²		OK
Shallow Land	5,520.00 ft²		OK
The shallow land percentage is:	39% %		
Shallow Water	5,700.00 ft²		OK
The shallow water percentage is:	40% %		
Deep Pool			
Forebay portion of deep pool (pretreatment)	1,554.00 ft²		OK
The forebay surface area percentage is:	11% %		
Non-forebay portion of deep pool	1,338.00 ft²		OK
The non-forebay deep pool surface area percentage is:	9% %		
Total of wetland zone areas	14,112.00 ft²		Enter data into the shaded cells in this section.
Add or subtract the following area from the zones	9.00 ft²		
Topographic Zone Elevations			
Temporary Pool Elevation (TPE)			
Shallow Land (top)	~~6.00~~ ft amsl	6.92 per plans	
Permanent Pool Elevation (PPE)			
Shallow Water/Deep Pool (top)	6.00 ft amsl		
Shallow Water bottom	5.50 ft amsl		
Most shallow point of deep pool's bottom	6.00 ft amsl		
Deepest point of deep pool's bottom	3.00 ft amsl		
Design must meet one of the following two options:			
This design meets Option #1, Top of PPE is within 6" of SHWT, If yes:	Y (Y or N)		
SHWT (Seasonally High Water Table)	6.00 ft amsl		OK
This design meets Option #2, Wetland has liner with permeability < 0.01 in/hr, If yes:	(Y or N)		
Depth of topsoil above impermeable liner	in		
Topographic Zone Depths			
Temporary Pool			
Shallow Land	0.00 in		
Permanent Pool			
Shallow Water	6.00 in		OK
Deep Pool (shallowest)	0.00 in		
Deep Pool (deepest)	36.00 in		OK
Planting Plan			
Are cattails included in the planting plan?	N (Y or N)		OK
Number of Plants recommended in Shallow Water Area:			
Herbaceous (4" cubic-inch container)	1,450		
Number of Plants recommended in Shallow Land Area:			
Herbaceous (4" cubic-inch container), **OR**	1,400		
Shrubs (1 gallon or larger), **OR**	224		
Trees (3 gallon or larger) **and** Herbaceous (4+ cubic-inch)	28	**and**	1,120
Number of Plants provided in Shallow Water Area:			
Herbaceous (4" cubic-inch container)	2,678		OK
Number of Plants provided in Shallow Land Area:			
Herbaceous (4" cubic-inch container)	2,000		OK
Shrubs (1 gallon or larger)	16		More required if not planting herb. and/or trees.
Trees (3 gallon or larger) **and** Grass-like Herbaceous (4+ cubic-inch)	0		More required if not planting herb. and/or shrubs.

Additional Information

Can the design volume be contained?	Y	(Y or N)	OK
Does project drain to SA waters? If yes,	N	(Y or N)	Excess volume must pass through filter.
What is the length of the vegetated filter?		ft	
Are calculations for supporting the design volume provided in the application?	Y	(Y or N)	OK
Is BMP sized to handle all runoff from ultimate build-out?	Y	(Y or N)	OK
Is the BMP located in a recorded drainage easement with a recorded access easement to a public Right of Way (ROW)?	Y	(Y or N)	OK
The length to width ratio is:	1.79	:1	OK
Approximate wetland length	215.00	ft	
Approximate wetland width	120.00	ft	
Approximate surface area using length and width provided	25,800.00	ft^2	This approx. surface area is within this number of square feet of the entire wetland surface area reported above:
Will the wetland be stabilized within 14 days of construction?	Y	(Y or N)	OK

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action Id. SAW-2020-01450 County: Currituck U.S.G.S. Quad: NC-Currituck

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: Currituck County
Jason Weeks
Address: 153 Courthouse Road, Suite 204
Currituck, North Carolina 27929
Telephone Number: (252) 232-3007
E-mail: Jason.Weeks@CurrituckCountyNC.com

Size (acres) 12.8
Nearest Waterway Bullfrog Creek
USGS HUC 03010205

Nearest Town Barco
River Basin Albemarle-Chowan
Coordinates Latitude: 36.390746
Longitude: -76.016112

Location description: **The property is known as Maple Commerce Park (Currituck County Parcel No. 005200000170000) and is located on the north side of Shortcut Road (Hwy 158), approximately 1,000 feet east of Airport Road in Barco, Currituck County, North Carolina.**

Description of projects area and activity: **This verification authorizes the filling of 0.089 acres of wetlands to accommodate the parking area associated with the proposed construction of baseball fields in Phase III of the community park.**

Applicable Law(s): ☒ Section 404 (Clean Water Act, 33 USC 1344)
☐ Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: **NWP 18 Minor Discharge**

SEE ATTACHED NWP GENERAL, REGIONAL, AND/OR SPECIAL CONDITIONS

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached Conditions, your application signed and dated 4/27/2023, and the enclosed sheets 1, 2.11, and 2.12 received date 4/27/2023. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

This verification will remain valid until the expiration date identified below unless the nationwide and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide and/or regional general permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management in Elizabeth City, NC, at (252) 264-3901.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits. If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Anthony D. Scarbraugh at 910 251-4619 or anthony.d.scarbraugh@usace.army.mil

Corps Regulatory Official: _____ Date: 06/14/2023
Expiration Date of Verification: 3/14/2026

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Copy furnished:

Agent:	Davey Resources Group, Inc.
	Kim Williams
Address:	3805 Wrightsville Avenue, Suite 10
	Wilmington, North Carolina 28403
Telephone Number:	(910) 452-0001
E-mail:	kim.williams@davey.com

Agency:	North Carolina Division of Water Resources
	Robert Tankard
Address:	943 Washington Square Mall
	Washington, North Carolina 27889
Telephone Number:	(252) 948-3921
E-mail:	robert.tankard@deq.nc.gov

SPECIAL CONDITIONS

Conservation Measures:

a. The project will not disturb hibernating Northern Long-Eared Bats (NLEB) in a known hibernaculum during hibernation. Disturbance could include entry into a known hibernacula or the following activities within 0.25 miles of a known hibernacula: prescribed fire, blasting, pile driving, drilling, and certain military operations. Smaller buffer sizes may be appropriate depending on the intensity of the activity.

b. The project will not alter the entrance or interior environment of a known hibernaculum at any time of the year. Hibernacula alteration could include the following activities within 0.25 miles of a known hibernacula: prescribed fire, blasting, pile driving, drilling, certain pesticide use, and certain military operations. Smaller buffer sizes may be appropriate depending on the intensity of the activity.

c. The project will not remove any trees within 0.25 miles of a known hibernaculum at any time of year.

d. The project will not cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree, from June 1 through July 31.

Supplementary Measures:

e. The proposed project will meet the required conservation measures noted above. Furthermore, at the request of the US Fish and Wildlife Service, the applicant agrees to avoid cutting trees during the coldest winter months (December 15 - February 14) and the early part of the breeding season (April 15 - July 31). Additionally, Light-Emitting Diode fixtures will be used, and cutoffs utilized on parking lot fixtures to minimize off-site intrusion as much as possible.

Action ID Number: SAW-2020-01450 **County:** Currituck

Permittee: Currituck County, Jason Weeks

Project Name: Maple Commerce Park / Highway 158 / Currituck County

Date Verification Issued: 06/14/2023

Project Manager: Anthony D. Scarbraugh

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

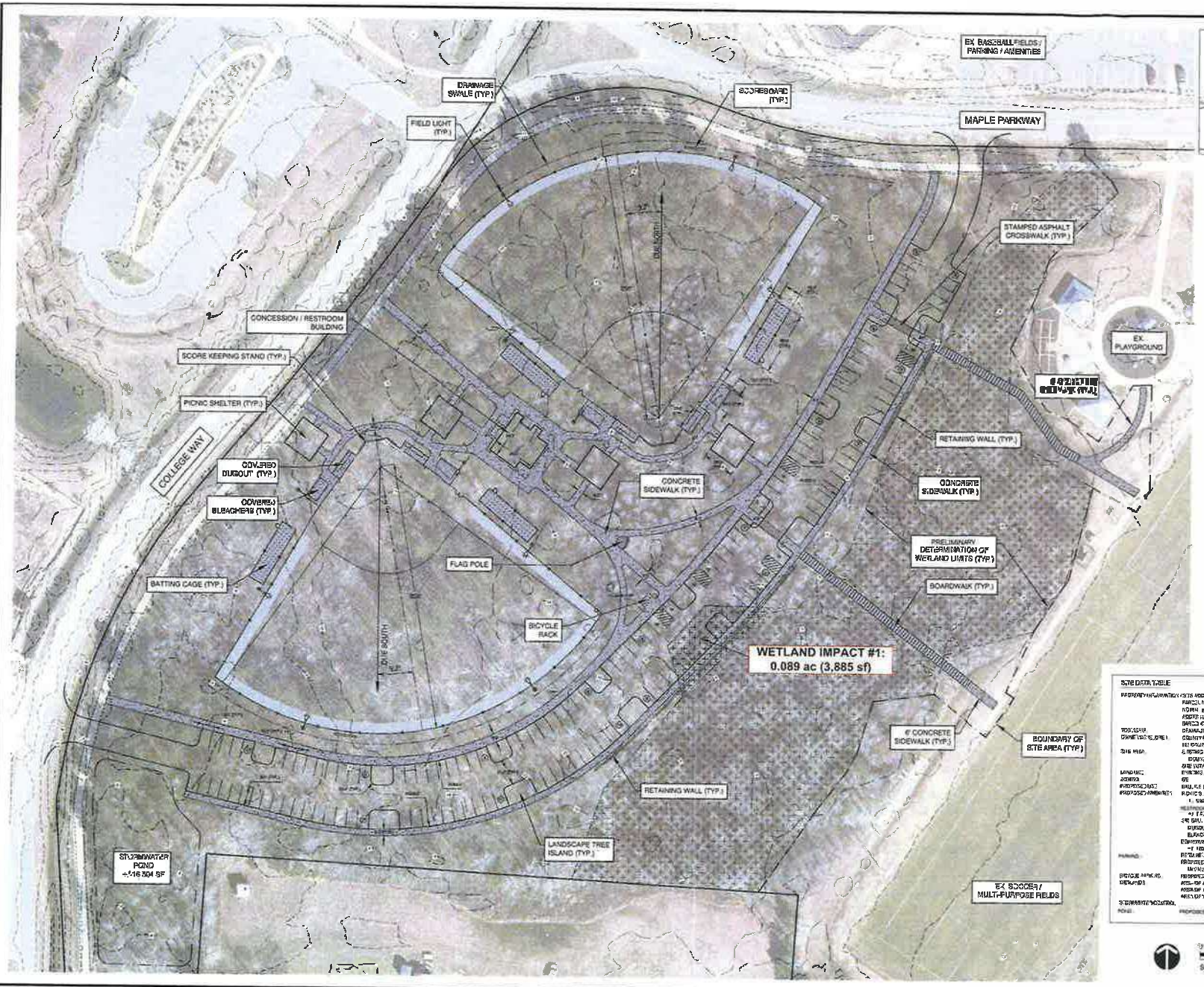
US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
Attn: Anthony D. Scarbraugh
Washington Regulatory Office
U.S Army Corps of Engineers
2407 West Fifth Street
Washington, North Carolina 27889
or
anthony.d.scarbraugh@usace.army.mil

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee **Date**



Rivers

Preliminary
DO NOT USE
FOR CONSTRUCTION

ISSUE/REVISIONS:

NO	DESCRIPTION	DATE	BY
	VOLUNTARY BUYOUT		
	RETAINING WALL		

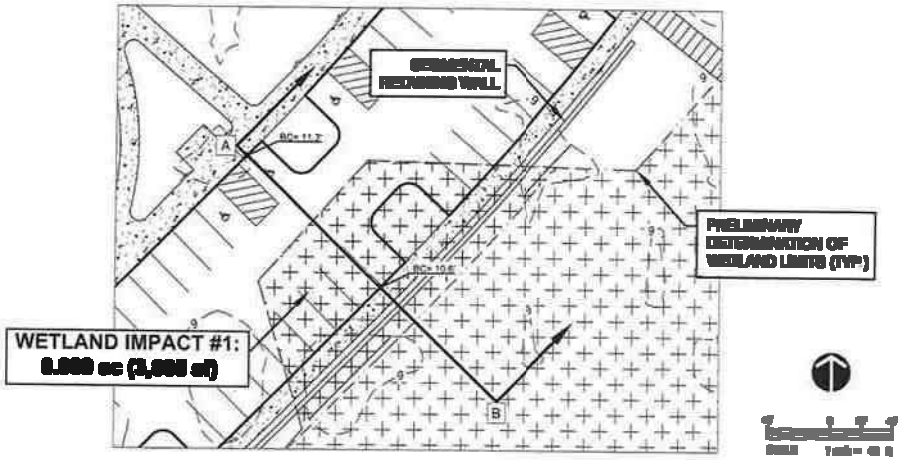
CURRITUCK COUNTY

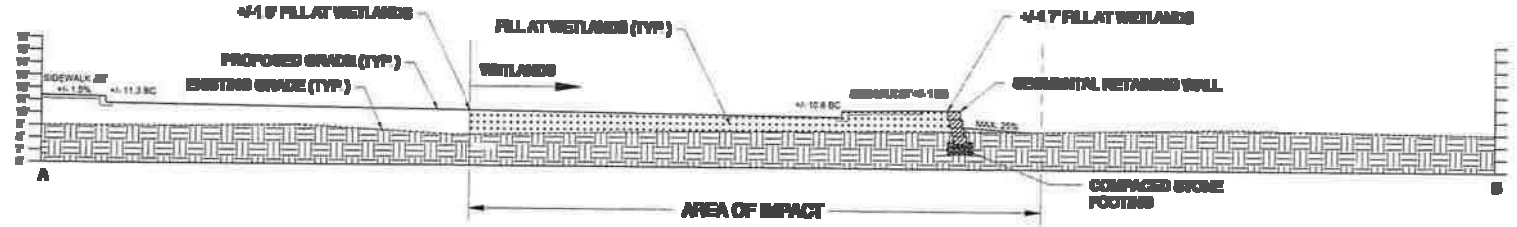
CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD. - BARCO - CURRITUCK COUNTY - NORTH CAROLINA

MASTER PLAN

DESIGNED BY	PRM, SBF
DRAWN BY	SBF
CHECKED BY	PRM
PROJECT No.	2022109
PERMIT No.	W-4060
SCALE	AS SHOWN
SHEET No.	1





WETLAND IMPACT SECTION DETAIL

Rivers & Associates, Inc.

CURRITUCK COUNTY

CURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD. - CURRITUCK COUNTY - NORTH CAROLINA

WETLAND IMPACT SECTION

DESIGNED BY:	PRM, SBF
DRAWN BY:	SBF
CHECKED BY:	PRM
PROJECT No.	2022109
DRAWING No.	W-4060
SCALE:	AS SHOWN
DATE:	
SHEET No.	C2.11

Landscape Architects
RIVERS & ASSOCIATES, INC.
A ASSOCIATES
Since 1918

FINANCIAL RESPONSIBILITY/OWNERSHIP FORM
SEDIMENTATION POLLUTION CONTROL ACT

No person may initiate any land-disturbing activity on one or more acres as covered by the Act before this form and an acceptable erosion and sedimentation control plan have been completed and approved by the Land Quality Section, N.C. Department of Environment and Natural Resources. (Please type or print and, if the question is not applicable or the e-mail and/or fax information unavailable, place N/A in the blank.)

Part A.

1. Project Name Currituck Community Park, Phase III

2. Location of land-disturbing activity: County Currituck City or Township Crawford

   Highway/Street Shortcut Rd./College Way Latitude 36.390283 Longitude -76.018545

3. Approximate date land-disturbing activity will commence: April, 2024

4. Purpose of development (residential, commercial, industrial, institutional, etc.): Governmental

5. Total acreage disturbed or uncovered (including off-site borrow and waste areas): 10.0 Acres

6. Amount of fee enclosed: $ 1,000.00. The application fee of ~~$65.00~~ $100.00 per acre (rounded up to the next acre) is assessed without a ceiling amount (Example: a 9-acre application fee is $585).

7. Has an erosion and sediment control plan been filed? Yes_____ No_____ Enclosed X

8. Person to contact should erosion and sediment control issues arise during land-disturbing activity:

   Name Donald "Ike" McRee, Jr. E-mail Address ike.mcree@currituckcountync.gov

   Telephone 252-232-2075 Cell # N/A Fax # 252-232-3551

9. Landowner(s) of Record (attach accompanied page to list additional owners):

Currituck County	252-232-2075	252-232-3551
Name	Telephone	Fax Number
P.O. Box 9	153 Courthouse Road, suite 306	
Current Mailing Address	Current Street Address	
Currituck NC 27929	Currituck, NC 27929	
City State Zip	City State Zip	

10. Deed Book No. 1062 Page No. 356 Provide a copy of the most current deed.

Part B.

1. Person(s) or firm(s) who are financially responsible for the land-disturbing activity (Provide a comprehensive list of all responsible parties on an attached sheet):

Currituck County	ike.mcree@currituckcountync.gov
Name	E-mail Address
PO Box 9	153 Courthouse Road, Suite 306
Current Mailing Address	Current Street Address
Currituck, NC 27929	Currituck, NC 27929
City State Zip	City State Zip
Telephone 252-232-2075	Fax Number 252-232-3551

2. (a) If the Financially Responsible Party is not a resident of North Carolina, give name and street address of the designated North Carolina Agent:

Name	E-mail Address
Current Mailing Address	Current Street Address
City State Zip	City State Zip
Telephone	Fax Number

(b) If the Financially Responsible Party is a Partnership or other person engaging in business under an assumed name, **attach a copy of the Certificate of Assumed Name.** If the Financially Responsible Party is a Corporation, give name and street address of the Registered Agent:

Name of Registered Agent	E-mail Address
Current Mailing Address	Current Street Address
City State Zip	City State Zip
Telephone	Fax Number

The above information is true and correct to the best of my knowledge and belief and was provided by me under oath (This form must be signed by the Financially Responsible Person if an individual or his attorney-in-fact, or if not an individual, by an officer, director, partner, or registered agent with the authority to execute instruments for the Financially Responsible Person). I agree to provide corrected information should there be any change in the information provided herein.

Donald "Ike" McRee, Jr.	County Manager
Type or print name	Title or Authority
Signature	6/27/23 Date

I, Leeann Walton, a Notary Public of the County of Currituck State of North Carolina, hereby certify that Donald I. McRee, Jr. appeared personally before me this day and being duly sworn acknowledged that the above form was executed by him.

Witness my hand and notarial seal, this 27th day of June, 2023

Leeann Walton
Currituck County, NC
Notary Public
Seal

Leeann Walton
Notary

My commission expires June 23, 2024

NCG01 Notice of Intent (NOI) Certification Form

Directions:
Print this form, complete, scan and upload to the electronic NOI.
Then, mail the original form to the NC DEMLR Stormwater Program (with $100 check *if paying by check*) at:
Division of Energy, Mineral & Land Resources Stormwater Program
512 N. Salisbury Street, 6th Floor (Office 640K)
1612 Mail Service Center
Raleigh, NC 27699-1612

DO NOT MAIL THIS FORM OR PAYMENT UNTIL YOUR APPLICATION HAS BEEN ACCEPTED AS COMPLETE.
THE FORM YOU MAIL MUST BE COMPLETED WITH AN ORIGINAL SIGNATURE (NOT DIGITAL) [40 CFR 122.22]

Per NC General Statute 143-215.6B (i), any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Article or a rule implementing this Article . . . shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed ten thousand dollars ($10,000).

Under penalty of law, I certify that (**check all boxes to indicate your agreement**):

- ☑ I am the person responsible for the construction activities of this project, for satisfying the requirements of this permit, and for any civil or criminal penalties incurred due to violations of this permit.
- ☑ The information submitted in this NOI is, to the best of my knowledge and belief, true, accurate, and complete based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information.
- ☑ I will abide by all conditions of the NCG010000 General Permit and the approved Erosion and Sediment Control Plan.
- ☑ If the approved Erosion and Sediment Control Plan is not compliant with Part II (Stormwater Pollution Prevention Plan) of the NCG010000 General Permit, I will nonetheless ensure that all conditions of Part II of the permit are met on the project at all times.
- ☑ I hereby request coverage under the NCG010000 General Permit and understand that coverage under this permit will constitute the permit requirements for the discharge(s) and is enforceable in the same manner as an individual permit.

Project Name (*must match A1a*): Currituck Community Park, Phase III

Specific Lot Numbers (*must match A1b*):

Permittee (*must match B1*): Currituck County

Legally Responsible Person (*must match B2 & B3*): Donald I. McRee, Jr.

Title of Legally Responsible Person (*must match B3b*): Currituck County Manager

Print Name & Title of Signed if Authorized Individual Differs from Legally Responsible Person:

Phone Number: 252-232-2075

Signature of Legally Responsible Person or Authorized Individual

9/11/23
Date

* ***IMPORTANT NOTE:*** *This form must be signed by a responsible corporate officer that owns or operates the construction activity, such as a president, secretary, treasurer, or vice president, or a manager that is authorized in accordance with Part IV, Section B, Item (6) of the NCG010000 permit.*

Certificate of Coverage

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

GENERAL PERMIT NO. NCG010000

NC Reference No. NCG01-2023-2752
Certificate of Coverage No. NCC232752

STORMWATER DISCHARGES

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

Currituck County

is hereby authorized to discharge stormwater associated with CONSTRUCTION ACTIVITIES to surface waters of North Carolina from a site located at:

Currituck Community Park, Phase III
Shortcut Road
Barco
Currituck County

in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in N.C. General Permit No. NCG010000.

This Certificate of Coverage is affiliated with **E&SC Plan Project No.** Curri-2024-001

This Certificate of Coverage shall become effective 10/12/2023.

This Certificate of Coverage shall remain in effect until rescinded or expired.

This Certificate of Coverage will expire on the anniversary of its effective date unless it is renewed by payment of the annual administration and compliance fee.

William E. Vinson, Jr., PE, CPESC, CPM, Interim Director
Division of Energy, Mineral, and Land Resources
By the Authority of the Environmental Management Commission

NORTH CAROLINA
Environmental Quality

Construction Stormwater: Notice of Intent (NOI)

National Pollutant Discharge Elimination System (NPDES) application for coverage under North Carolina's General Permit NCG010000: STORMWATER DISCHARGES associated with construction activities

A. Project Information

NOTE: If you save a draft of this application, do not save it with uploaded attachments. This may cause problems when you resume editing the draft and try to submit it. Remove all uploaded attachments before saving a draft. Upload necessary documents only when you are ready to submit the eNOI.

Part A.

Project Location and Waterbody Information

Are you submitting an NOI that was rejected before?

- (•) No
- ( ) Yes

1a. Project Name *

Currituck Community Park, Phase III

1b. Specific Lot Numbers

This field may be used to list specific lot numbers.

1c. Parcel ID Number(s) (PIN) *

List all PINs associated with this project.

005200000170000

2. County *

Currituck

3. Highway or Street Address *

Shortcut Road

Street name only is acceptable if no address number assigned yet

4. City or Township *

Barco

5. State * NC

6. Zip Code * 27917

7. Latitude * Enter the latitude in decimal degrees

36.3902

8. Longitude * Enter the longitude in decimal degrees (MUST be negative)

-76.0186

If you do not know the latitude and longitude coordinates for this project, you can search the location on this map of North Carolina. Look for the coordinates in the **bottom left corner**.

9. Date to Begin * 09/04/2023

Estimated Construction Project Start Date

10. Date to End* 09/04/2024
Estimated Construction Project End Date

11. SIC (Primary)*
Other (0000)
Standard Industrial Classification for Development

12. Acres to be disturbed* IMPORTANT: Must match E&SC Plan Approval Letter or Grading Permit
10.00
(including off-site borrow and waste areas)

13. Total site area (acres)* 58.20

14. Post-construction impervious area (acres)* 6.00
(Estimated)

Below you must enter waterbody information for surface waters affected by this project. Please consult DWR's Surface Water Classifications Map Viewer to find waterbody name and corresponding index number. Please enter only immediate receiving waterbodies - *not waters downstream* of those unless the project extends there. You may enter up to 3 waterbodies if needed.

15a. Receiving Waterbody*
East Creek
Name of waterbody into which stormwater runoff will discharge

15b. Waterbody Index No.*
30-2-3
NC Waterbody Index Number

Stormwater discharges will flow to additional waters*
- (•) No
- ( ) Yes

16a. Is this project subject to the NC Sediment Pollution Control Act?*
- (•) Yes
- ( ) No, not subject to NC SPCA

Note: Stormwater discharges from **construction activities associated with oil and gas exploration, production, processing, treatment, or transmission facilities** are eligible for the exemption from NPDES permit coverage except in very limited instances. Do not proceed with this application before consulting this EPA fact sheet and verifying a permit applies.

17. Is this project funded with ARPA (American Rescue Plan Act) grant funds?*
- (•) No
- ( ) Yes

B. Permittee Information

Part B.

Permittee Information - Legally Responsible Entity and Individual

Important: The person who *signs the NOI Certification Form and signs the Certification in Section E* of this application form must be the same person as listed in THIS SECTION, or an authorized responsible individual within the same organization. That person must be a responsible corporate officer who owns or operates the construction activity, such as a president, secretary, treasurer, or vice president, or a manager that is authorized in accordance with Part IV, Section B, item (5) of the NCG010000 General Permit. For more information on signatory requirements, see Part IV, Section B, item (5) of that permit.

1. Permittee *

Legally Responsible Entity

Currituck County

If permittee is an individual, enter first and last name in this field. Otherwise, enter organization/business name.

Note: If the permittee is a business, the business must be registered with the NC Secretary of State. You can verify the registration here. Permittee must be the same entity that is responsible for the land-disturbing activity as listed on the NC SPCA Financial Responsibility/Ownership (FRO) Form.

2. First Name * Donald "Ike"

3. Last Name * McRee, Jr.

3b. Title * Assistance County Manager

4. Permittee E-mail Address *

ike.mcree@currituckcountync.gov

5. Permittee Telephone No. *

252-252-2075

6. Permittee Mailing Address *

Street Address

153 Courthouse Road

Address Line 2

Suite 308

City	State / Province / Region
Currituck	NC
Postal / Zip Code	**Country**
27929	USA

Check box if the street address the same as mailing address

☐ Yes

7. Permittee Street Address*

Street Address

153 Courthouse Road

Address Line 2

Suite 306

City

Currituck

State / Province / Region

NC

Postal / Zip Code

27929

Country

USA

8. Type of Ownership*

Ownership is only individual if an individual is named in 8.1. above.

Government - County

C. Site Contact Information

Part C.

Project Site Contact Information

1. Primary Site Contact - First Name*

Donald "Ike"

2. Primary Site Contact - Last Name*

McRee, Jr.

3. Title

Assistance County Manager

4. Site Contact E-mail Address*

jason.weeks@currituckcountync.gov

This person will be copied on all correspondence

5. Site Contact Telephone No.*

252-252-2075

6. Organization Name

Currituck County

7. Site Contact Mailing Address*

Street Address

153 Courthouse Road

Address Line 2

Suite 306

City

Currituck

State / Province / Region

NC

Postal / Zip Code

27929

Country

USA

8. Consultant Name

(Optional)

Paul Meder

First and Last name

9. Consultant E-mail

pmeder@riverseandassociates.com

This person will be copied on all correspondence

10. Consultant Telephone No.

919-594-1628

Verify billing contact information and revise if necessary.

11. Billing E-mail*

(For Annual Fee correspondence)

ike.mcree@currituckcountync.gov

Default is legally responsible person e-mail

12. Billing Telephone*

(For Annual Fee correspondence)

252-252-2075

Default is legally responsible person telephone

D. E&SC Plan

Part D.

Erosion & Sediment Control (E&SC) Plan Approval Information

1. Date E&SC Plan Approved* 08/03/2023

2. E&SC Plan Project Number/ID* Curri-2024-001
Assigned by agency or local program

3. E&SC Plan Approved by* (•) State DEQ Office ( ) Local Program

4. State DEQ Office* Washington Regional Office (WaRO)

Documentation of E&SC Plan approval and the signed Notice of Intent (NOI) Certification Form is required for a complete application. Please also upload a site map showing the overall extent of the project (for linear projects, can include the beginning point and end point coordinates in the "Notes" box below).

5. E&SC Plan Approval letter or Grading Permit* Approval documentation only! DO NOT upload entire set(s) of E&SC Plans
Curri-2024-001 Currituck Community Park, Phase III - 08032023.pdf — 1.37MB
Must be PDF format

6. Signed FRO* Financial Responsibility/Ownership Form
FRO-Completed-230807.pdf — 326.54KB
Must be PDF format

7. Site Location Map* Must be PDF format (limit 20 MB)
USGS Topo quad.pdf — 15.85MB
Please do not upload entire set of E&SC plans

8. Notes (Optional) Provide any additional information that might help the reviewer better understand how uploaded documents support the application. Include additional waterbodies if necessary.

9. NOI Certification Form* NOI Cert form.pdf — 251.22KB
Must be PDF format

YOU MUST MAIL THE **ORIGINAL SIGNED NOI CERTIFICATION FORM (click on this link)** to The Stormwater Program at the address on the form for the application to fulfill federal application requirements. The Certification Form must be signed by the person listed in Section B (Permittee Information) or by an authorized responsible person within the same organization. **NOTE: The person who signs the paper form must be the same person to electronically certify and sign the eNOI.**

This is an Express Review Project* (•) No ( ) Yes

E. Certification

North Carolina General Statute 143-215.6B (i) provides that:

Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Article or a rule implementing this Article; or who knowingly makes a false statement of a material fact in a rulemaking proceeding or contested case under this Article; or who falsifies, tampers with, or knowingly renders inaccurate any recording or monitoring device or method required to be operated or maintained under this Article or rules of the Commission implementing this Article shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed ten thousand dollars ($10,000).

Under penalty of law, I certify that:

- * ☑ I am the person responsible for the construction activities of this project, for satisfying the requirements of this permit, and for any civil or criminal penalties incurred due to violations of this permit.
- * ☑ The information submitted in this NOI is, to the best of my knowledge and belief, true, accurate, and complete based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information.
- * ☑ I will abide by all conditions of the NCG010000 General Permit and the approved Erosion and Sediment Control Plan.
- * ☑ I hereby request coverage under the NCG010000 General Permit and understand that coverage under this permit will constitute the permit requirements for the discharge(s) and is enforceable in the same manner as an individual permit.

Specify if you are:* ◉ The Legally Responsible Person named on this Notice of Intent
○ Authorized Responsible Person* (signing on behalf of Legally Responsible Person named in Part B)

Important: The person who electronically signs this Certification above must be the same person who signs the NOI Certification Form. If that person is signing on behalf of the Permittee, that individual must be an authorized responsible person within the same organization as the Permittee.

***An authorized individual is a responsible corporate officer who owns or operates the construction activity, such as a president, secretary, treasurer, or vice president, or a manager that is authorized in accordance with Part IV, Section B, Item (6) of the NCG010000 General Permit. For more information on signatory requirements, see Part IV, Section B, Item (6) of that permit.**

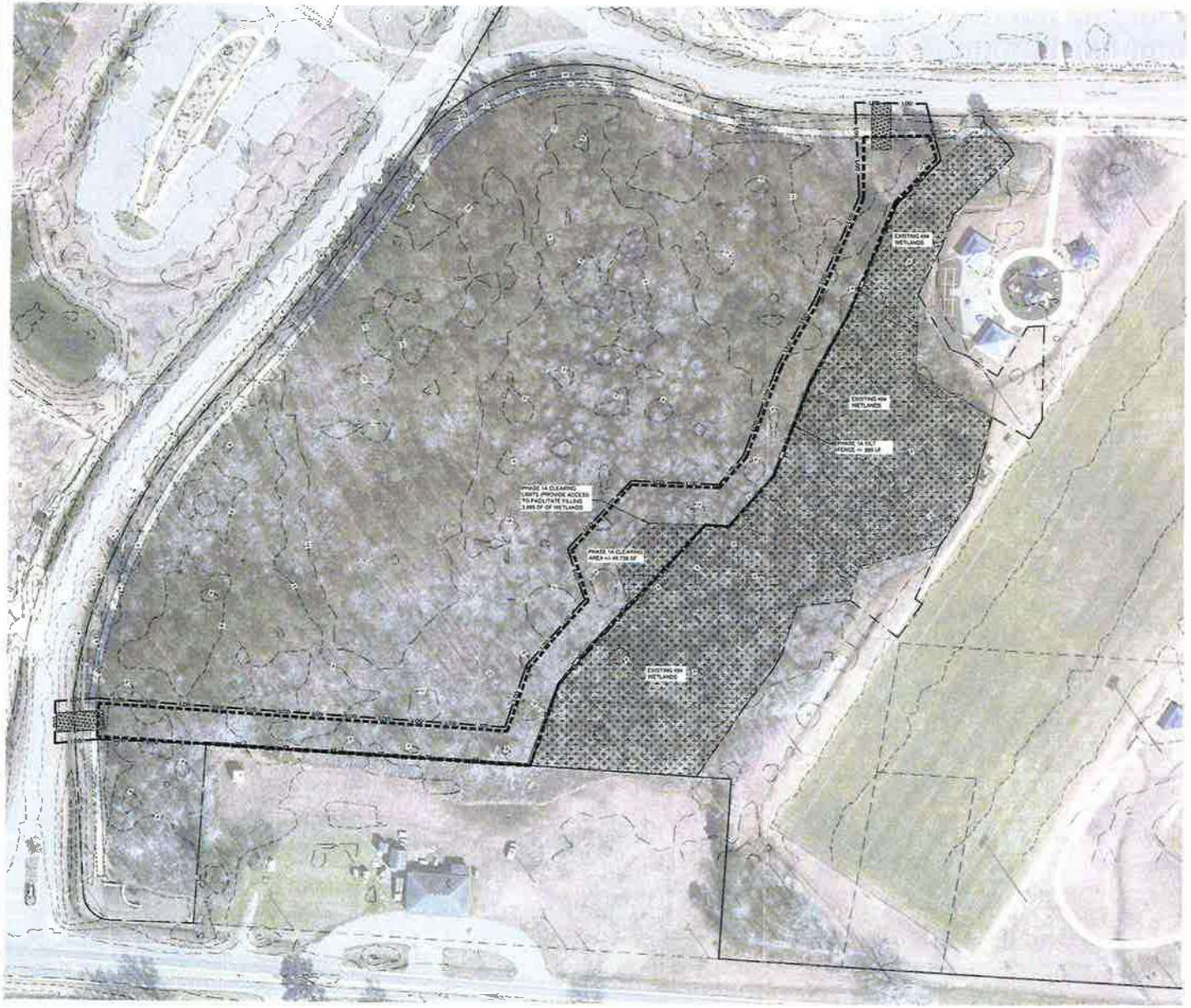
Signature* Donald McRee, Jr.

Type Name* Donald McRee, Jr.

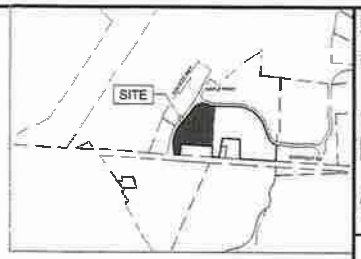
Title* Assistance County Manager

Organization* Legally Responsible Entity
Currituck County

Date* 09/12/2023



PHASE 1A DISTURBED AREA = 1.43 ACRES
TOTAL DISTURBED AREA = 10.00 ACRES



VICINITY MAP
1" = 1000' - 0"

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

EROSION CONTROL LEGEND		
DESCRIPTION	SYMBOL	DETAIL
SILT FENCE		
SILT FENCE OUTLET		
INLET PROTECTION		
PIPE INLET PROTECTION		
GRAVEL CONSTRUCTION ENTRANCE/EXIT		
TEMPORARY CHECK DAM		
LIMITS OF DISTURBANCE		
CONSTRUCTION FENCE		
CLEARING LIMITS		

811

50' 0 25' 50'
SCALE 1 inch = 50 ft

Rivers & Associates, Inc.
Engineering
Planning
Surveying
Landscape Architecture
One Parke Place N Ste 320
321 E. Elm Parke Road
Greenville, NC 27858
919 355 1550

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
CLEARING, GRUBBING & EROSION CONTROL PLAN, PHASE 1A
CURRITUCK RD. BARCO - CURRITUCK COUNTY - NORTH CAROLINA

DATE	JUNE 20, 2023
DESIGNED BY	JSJ
DRAWN BY	SSB
CHECKED BY	EEI
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE	1:50
SHEET No.	C5.01



EROSION CONTROL LEGEND		
DESCRIPTION	SYMBOL	DETAIL
SILT FENCE		
SILT FENCE OUTLET		
INLET PROTECTION		
PAVEMENT INLET PROTECTION		
GRAVEL CONSTRUCTION		
TREE PROTECTION FENCE		
[redacted]		
[redacted]		
LIMITS OF DISTURBANCE		
CONSTRUCTION FENCE		

NOTE:

CONTRACTORS SHALL NOT CUT ANY TREES ON ON SITE DURING THE FOLLOWING TIME PERIODS: DECEMBER 15 THROUGH FEBRUARY 14 AND / OR APRIL 15 THROUGH JULY 31.

811

[redacted]

60' 0 25 50'

SCALE 1 inch = 50 ft

TOTAL DISTURBED AREA = 10.00 ACRES

Rivers

ISSUE/REVISIONS:

NO.	DESCRIPTION	DATE

SURRYVIEW SENIORITY

SURRYVIEW COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO - CURRITUCK COUNTY - NORTH CAROLINA

CLEARING, GRUBBING & EROSION CONTROL PLAN, PHASE 1B

DATE	JUNE 20, 2023
DESIGNED BY	JSJ
DRAWN BY	SCB
CHECKED BY	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE	1:50
SHEET No.	**C5.02**

DATE:

PAGE:

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

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 numbers of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control rules sponsored 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.

SECTION E: GROUND STABILIZATION

	Applicable Ground Stabilization Timeframe	
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10 feet or less in length and are steeper than 3:1, 14 days are allowed
(d) Slopes flatter than 3:1	14	• 7 days for slopes greater than 50 feet 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 • 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones • 10 days for Falls Lake Watershed unless there is zero slope
(e) Areas with slopes flatter than 50:1	14	None

Note: After the permanent cessation of construction activities, any area still temporary ground stabilized 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 shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

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

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied staple-pinned straw mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or crushing rock • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control measures.
3. Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under containment cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers, and properly dispose as hazardous waste (recycle where possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Keep spent fuels, lubricants, coolants, manually flush, and any petroleum products in a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Do not 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.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. 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.
5. Cover waste containers at the end of each workday and before predicted storms to prevent wastewater from entering the containers, and to prevent the containers from overflowing.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose wastes on site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Consult local sources for a controlled area.
4. Containment must be installed, stored and disposed appropriately to the needs of site.
5. Prevent the discharge of wash, rainwater, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. 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 feet effort is not practicable, provide protection at perimeter rather than at the toilet itself to ensure there are no ground pass and surround with sand bags.
2. Provide sanitary service maintenance of portable toilets during periods of high usage, up to high foot traffic areas.
3. Monitor portable toilets for bonding and properly dispose of wastewater material. Utilize a licensed sanitary waste hauler to remove bonding portable toilets and replace with properly operating unit.

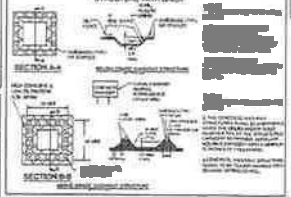
EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate environmentally sensitive areas, at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
2. Protect stockpiles with silt fence installed along toe of slope with minimum offset of five feet from the toe of stockpile.
3. Provide a stable stone access pad when feasible.
4. Cover stockpiles with plastic liner, tarp or other material when rain is forecasted, or during periods of inactivity. Secure liner, tarp or other material with sandbags or other weighted objects.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection area on site.
2. Place hazardous waste containers in area shown on the approved plans.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of all recycle surplus, hardened concrete materials on immediate site basis and store solid waste regulations and an approved facility.
3. Manage washout from mixer returns in accordance with the above item and in addition place the mixer and associated reasonably on impervious barrier and within the perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approved authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this sheet.
5. Do not use concrete washouts for dewatering or pouring excess from soil or drywall systems. Stormwater encountered within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquids must be pumped out and removed from ground.
6. 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. In addition, locate washouts at least 7 days from any surface waters, storm drain inlets, ditches or perennial streams and wetlands.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washouts. Additional controls may be required by the reviewing authority.
8. 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.
9. Maintain washouts when they reach 75% capacity or 75% capacity to limit overflow events. Replace the liner, berm repair, or other temporary structural components when the damage is identified. When utilizing alternative or proprietary products, follow manufacturer's instructions for maintenance.
10. At the completion of the concrete work, remove remaining bindings and dispose with an approved off-site facility. Fill pit, if applicable, and smooth any disturbances caused by removal of washout.

HERBICIDES, PESTICIDES AND ROOKTICIDES

1. Store and apply herbicides, pesticides and rooksticides in accordance with local guidelines.
2. Store herbicides, pesticides and rooksticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rooksticides in areas where flooding is possible or where they may spill to bare soil, stormwater drains, ground water or surface water. In a spill occurs, clean immediately.
4. Do not discharge these materials, wastes.

NORTH CAROLINA Environmental Quality

EFFECTIVE DATE: 11/13/2020

NCG-01 GROUND COVER & MATERIALS HANDLING

DATE:

PAGE:

PART II, SECTION G, ITEM (4)
SKIMMER BASINS 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 dewters exist or as drains down for maintenance or close out unless this is infeasible. Dewaterable to withdraw water from the surface shall be sized for (for example, there with permitted outlet velocities). Temporary 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 terms.
(b) The non-surface withdrawal has been approved by an authorized person 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 to surface waters and downstream lands. Examples of appropriate controls include properly sized, designed and maintained dewatering tanks, leak tubes, and filtration systems.
(d) Visible, unstable areas within the drainage area of the basin have been stabilized.
(e) 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.

PART II
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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 reported in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection consists must include:
(1) Sediment control measures	Daily	Daily rainfall amounts. On rainy days (except observations are made during weekends or holiday periods, and rainfall/visual information is available), record the cumulative rain measurement for those uninterrupted days (this will determine if site inspections are required). Days on which no rainfall measurement is recorded as "Zero." The previous rain gauge information may be obtained 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.	1. Identification of the measures inspected. 2. Date and Time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measures. 6. Description, Evidence, and date of corrective actions taken.
(3) Stormwater discharge outfall(s)/point(s)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	1. Identification of the discharge outfall(s) inspected. 2. Date and Time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indications of unnatural pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediment leaving the site. 6. Description, Evidence, and date 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.	1. For visible sedimentation in receiving waters via ditches, then record the following shall be noted: 2) Actions taken to clean up or stabilize sediment that has left the site limits. 3) Description, Evidence and date of corrective actions taken. 4) An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite where sediment is leaving the site	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 sediment deposition or is showing signs of unnatural erosion associated with the construction activity, then a record of the following shall be made: 1) Description, Evidence and date of corrective actions taken. Effectiveness of implemented controls to the maximum Division Regional Office (see Part III, Section C, Item (2)(a) 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 installed within the required timeframe or explanation for why they will be installed as soon as practicable.

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

PART II
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. Records of inspections made during the previous twelve months. The permittee shall record the inspection records on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements, line of authorized signature dates records for any of the required paper copies will be allowed to document those records electronic and utility as the numbering records.

2. Records of inspections made during the previous twelve months. The permittee shall record the inspection records on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements, line of authorized signature dates records for any of the required paper copies will be allowed to document those records electronic and utility as the numbering records.

3. Documentation that the required ground stabilization measures have been installed within the required timeframe or explanation for why they will be installed as soon as practicable.

3.—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 inspection at all times during normal business hours, unless the permittee provides a geographically reasonable time for review when site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, plan sheets and;

(b) Records of inspections made during the previous twelve months. The permittee shall record the inspection records on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements, line of authorized signature dates records for any of the required paper copies will be allowed to document those records electronic and utility as the numbering records.

Recordkeeping Requirements for Three Years

All data collected to complete the NCG and all inspection records shall be maintained for a period of three years after project completion and made available upon request. NCGTR 122.41(j)

Item to Document	[redacted]
[redacted]	[redacted]
(a) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, sign and date an inspection report that this area E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or upon the completion of any later installation.
(b) Ground cover is installed and applied in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, sign and date an inspection report to indicate compliance with the approved ground cover specifications.
(c) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(d) 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.

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) [redacted]

- They are 25 gallons or more.
- Weigh greater than 200 pounds that cannot be contained on site.
- They cause visible oil sheen on surface waters (regardless of volume); or

(c) [redacted]

(d) Permit-related exceedances and non-compliance actions.

(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 listed in accordance with the other requirements listed below. Circumstances outside normal business hours may also be reported to the Department's Emergency Management Service (state) at (800) 858-0368.

Occurrence	Reporting Timeframe (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland.	• Within 24 hours, an oral or electronic notification. • Within 7 Calendar Days, a report that includes a description of the 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 or wetland on the NC 303(d) list for impacted by sediment-related stressor, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine the additional requirements are necessary to ensure compliance with the federal or state total maximum daily load.
(b) Oil spills and release of hazardous substances (as listed in 40 CFR 110, 40 CFR 117, and 40 CFR 302) that result in a discharge to surface waters.	• As soon as possible, but no later than 24 hours, on and or electronic notification. • Within 7 calendar days, a report that includes a description of the 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.
(c) Anticipated bypasses (40 CFR 122.41(m)(3))	• A report at least ten days before the date of the bypass, if possible. • Within 7 calendar days, a report that includes an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses (40 CFR 122.41(m)(3))	• Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.41(l)(7))	• Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the noncompliance, and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)). • Division staff may waive the requirement for a written report on a case-by-case basis.

NORTH CAROLINA Environmental Quality

EFFECTIVE DATE: 11/13/2020

NCG01- SELF INSPECTION

TEMPORARY SEEDING SCHEDULE

[AN] TEMPORARY STABILIZATION OF DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF 14 CONSECUTIVE DAYS.

[redacted]

SEEDING MIXTURE: [redacted]

RATE (LBS/1,000 SF):

[redacted]

FERTILIZER: [redacted]

RATE (LBS/1,000 SF):

[redacted]

LIME: [redacted]

RATE (TONS/ACRE):

[redacted]

ONLY PROVEN, RESISTANT WEED VARIETIES OF TEMPORARY COVER IS NOT TO EXCEED 5 PERCENT WEED.

SOIL AMENDMENTS:

[redacted]

MULCH: 4,000 LBS/ACRE – ANCHOR STRAW BY TACKING WITH ASPHALT NETTING, OR A MULCH ANCHORING TOOL. A DISC WITH BLADES SET HEAVILY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SEEDING DATES: APRIL 15 – AUGUST 15

SECOND MIXTURE: [redacted]

RATE: [redacted]

[redacted]

SOIL AMENDMENTS:

[redacted]

MULCH: [redacted]

[redacted]

MAINTENANCE: [redacted]

SEEDING DATES: AUGUST 15 THRU DECEMBER 15

SEEDING MIXTURE: [redacted]

RATE: [redacted]

[redacted]

SOIL AMENDMENTS:

[redacted]

MULCH: [redacted]

[redacted]

MAINTENANCE: [redacted]

CONSTRUCTION SCHEDULE

PHASE 1A

1. OBTAIN PLAN APPROVALS AND ALL APPROVABLE AND ALL APPLICABLE PERMITS.
2. FLAG LIMITS OF CLEARING AND GRUBBING AND GRADING.
3. HOLD PRE-CONSTRUCTION MEETING WITH CONTRACTOR, EROSION CONTROL ADMINISTRATOR (ENG-SAL-LAKE), PROJECT ENGINEER, AND OWNER BEFORE WORK BEGINS.
4. INSTALL SILT FENCE FENCES AND SILT FENCE OUTLETS AS THE FIRST CONSTRUCTION ACTIVITY.
5. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
6. INSTALL SILT FENCE PER PLAN.
7. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR FLATTER INCLUDING ALL OTHER SLOPES 4:1 OR FLATTER PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 7 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR STEEPER.

PHASE 1B

8. INSTALL TEMPORARY SEDIMENT BASIN AND DIVERSION SWALE PER PLAN.
9. BEGIN CLEARING AND GRUBBING SITE IN DESIGNATED AREAS AND STOCKPILE IN DESIGNATED AREA.
10. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR FLATTER INCLUDING ALL OTHER SLOPES 4:1 OR FLATTER, PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 7 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR STEEPER.
11. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY THE OWNER OR CITY ENGINEER IF DEEMED NECESSARY.
12. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES, FINE GRADE DISTURBED AREAS, AND INSTALL PERMANENT VEGETATION IN THE DISTURBED AREAS.
13. MAINTAIN PERMANENT VEGETATION BY TOP DRESSING WITH 10 LBS PER ACRE OF FERTILIZER EVERY 6 MONTHS UNTIL COMPLETION OF THE PROJECT.
14. WITHIN 6" OF FINAL GRADE, RE-DISTRIBUTE 6" OF TOP SOIL.
15. FINE GRADE, PERMANENTLY SEED AND MULCH ALL LANDSCAPED AREAS.
16. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES UPON COMPLETION AND STABILIZATION OF PROJECT(S).

PERMANENT SEEDING SCHEDULE

IN SUNNY/FULL AREAS:

[redacted]

IN SHADY/PARTIAL SHADE AREAS:

[redacted]

PERMANENT SEEDBED PREPARATION

1. [redacted]
2. [redacted]
3. [redacted]
4. [redacted]
5. [redacted]
6. [redacted]

NEW/SPARSE/BARE/DISTURBED AREAS	STABILIZATION	[redacted]
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	[redacted]
[redacted]	7 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
[redacted]	7 DAYS	NONE EXCEPT FOR PERIMETER AND HQW ZONES
SLOPES 3:1 OR FLATTER	14 DAYS	NONE
[redacted]	14 DAYS	NONE

Rivers & Associates, Inc.
Engineers
Planners
Surveyors
107 East Second Street
Greenville, NC 27858
(252) 752-4135

REVISIONS:

NO.	DESCRIPTION	DATE	BY

GURRITUCK COUNTY

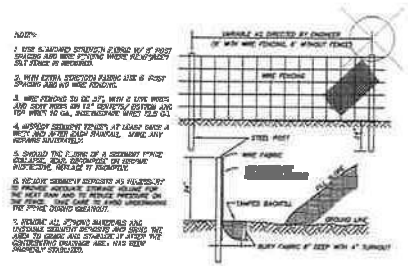
GURRITUCK COMMUNITY PARK, PHASE III

SHORTCUT RD., BARCO - CURRITUCK COUNTY - NONINCORPORATED, N/A

EROSION CONTROL NOTES

DATE: JUNE 21, 2023
DESIGNED BY: JSJ
DRAWN BY: SCB
CHECKED BY: JSJ
PROJECT No.: 2022109
DRAWING No.: W-4080
SCALE: N/A
SHEET No.: CS.11

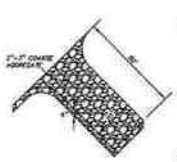
Page157



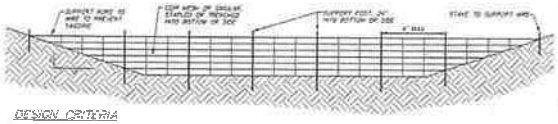
1 TEMPORARY SILT FENCE



2 SILT FENCE OUTLET



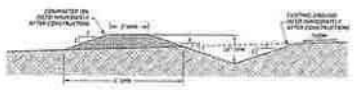
3 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



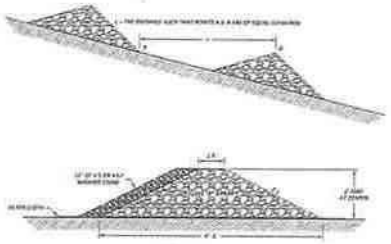
4 BAFFLE DETAIL



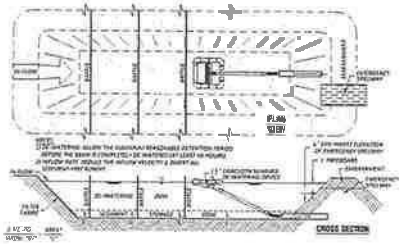
5 TEMPORARY STOCKPLE



6 TEMPORARY DIVERSION DITCH



7 TEMPORARY ROCK CHECK DAM



8 SEDIMENT TRAP WITH SKIMMER

Rivers & Associates, Inc.
107 East National Street
Greenville, NC 27834
(252) 752-4135

REVISIONS:

NO.	DESCRIPTION	DATE	BY

CURRITUCK COUNTY
CURRITUCK COMMUNITY PARK, PHASE III
SHORTCUT RD. - CURRITUCK COUNTY - NORTH CAROLINA

EROSION CONTROL DETAILS

DATE	JUNE 21, 2024
DESIGNED BY	JSJ
DRAWN BY	SCB
CHECKED BY	JSJ
PROJECT No.	2022109
DRAWING No.	W-4080
SCALE	N/A
SHEET No.	C5.21

Currituck Community Park Phase III

Geotechnical Engineering Report

January 31, 2025 | Terracon Project No. K5235057

Prepared for:

Rivers and Associates, Inc.
107 E 2nd St
Greenville, NC 27858

Terracon
Explore with us

Nationwide
Terracon.com

- Environmental
- Geotechnical
- Materials

106 Capital Trace, Unit E
Elizabeth City, North Carolina 27909
P (252) 335-9765
Terracon.com

January 31, 2025

Rivers and Associates, Inc.
107 E 2nd St
Greenville, NC 27858

Attn: Mr. Paul Meder
P: 919-215-2492
E: pmeder@riversandassociates.com

Re: Geotechnical Engineering Report
Currituck Community Park Phase III
613 Shortcut Road
Barco, Currituck County, North Carolina
Terracon Project No. K5235057

Dear Mr. Meder:

We have completed the scope of Geotechnical Engineering services for the above referenced project in general accordance with Terracon Proposal No. PK5235057 dated December 22, 2023. This report presents the findings of the subsurface explorations and provides geotechnical recommendations concerning earthwork and the design and construction of foundations, floor slabs, pavements, bulkheads, and boardwalks for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please

Sincerely,

Terracon

Gerald W. Stalls, Jr., P.E.
Senior Geotechnical Engineer
NC Registration No.: 034336

Bruce R. Spiro, P.E.
Senior Engineering Cor
NC Registration No.: 0

Table of Contents

Introduction **1**
Project Description **1**
Site Conditions **3**
Geotechnical Characterization **4**
Field and Laboratory Testing 5
Soil Classification and Index Testing 5
Bulk Soil Sample CBR Testing 6
Geologic Setting **6**
Geologic Hazards **7**
Seismic Site Class **7**
Geotechnical Overview **8**
Earthwork **9**
Site Preparation 9
Subgrade Preparation 10
Excavation 11
Soil Stabilization 11
Fill Material Types 12
Fill Placement and Compaction Requirements 14
Utility Trench Backfill 14
Grading and Drainage 15
Earthwork Construction Considerations 15
Construction Observation and Testing 16
Shallow Foundations **17**
Design Parameters – Compressive Loads 17
Design Parameters – Overturning and Uplift Loads 18
Foundation Construction Considerations 18
Floor Slabs **19**
Floor Slab Design Parameters 19
Floor Slab Construction Considerations 20
Deep Foundations **21**
Drilled Shaft Design Parameters 21
Drilled Shaft Lateral Loading 22
Driven Pile Design Parameters 24
Driven Pile Construction Considerations 27
Dynamic Testing 28
Establishing Pile Driving Criteria 29
Driven Pile Installation Monitoring 29
Allowable Driving Stresses 30
Hammer Types and Energies 30
Pile Group Settlement 31
Adjacent Structures 31
Below-Grade Structures **31**

Lateral Earth Pressures **32**
Design Parameters 32
Subsurface Drainage for Below-Grade Walls 34
Pavements **35**
Pavement Subgrade Support Characteristics 35
General Pavement Comments 35
Pavement Section Thicknesses 36
Pavement Drainage 38
Pavement Maintenance 39
General Comments **39**

Figures

GeoModel
Subsurface Profile

Attachments

Exploration and Testing Procedures
Photography Log
Site Location and Exploration Plans
Exploration and Laboratory Results
Supporting Information

Note: **Blue Bold** text in the report indicates a referenced section heading. This PDF report also includes hyperlinks which direct the reader to that section and clicking on the Terracon logo will bring you back to this page. For more interactive features, please view your project online at **client.terracon.com**.

Refer to each individual Attachment for a listing of contents.

TERRAIN ENVIRONMENTAL CONSULTING

November 1, 2024

Terracon Consultants, Inc.
106 Capital Trace, Unit E
Elizabeth City, NC 27909

Attention: Mr. Jerry Stalls, P.E.

Subject: **Stormwater Soil Evaluations**
Project No. 24-044-SS
Currituck Community Park Phase III
College Way
Barco, NC

Dear Mr. Stalls:

Terrain Environmental Consulting, PLLC (TEC) appreciates the opportunity to provide you with this report for stormwater soil evaluation services associated with the design of stormwater control measures (SCMs) at the above referenced project site. The results of the testing are presented below.

PROJECT BACKGROUND

TEC was contracted by Terracon to perform soil evaluation services, specifically seasonal high water table (SHWT) evaluations and hydraulic conductivity (Ksat) testing, to assist with the future design of SCMs at the above referenced project site. An aerial photograph showing three test locations (BMP-01 through BMP-03) was provided along with coordinates for each location which were used to create a geo-referenced .pdf field map to identify the test locations in the field. The test locations were also staked in the field prior to our mobilization. You also informed us that BMP-02 and -03 were moved due to existing ground surface conditions for path clearing. The figure included in this report approximately shows those changes.

Review of the Web Soil Survey showed the areas at test locations are mapped with the Portsmouth soil series. This series is generally described as very poorly drained soils formed in loamy marine sediments on marine terraces with an expected SHWT between 0 to 12 inches below the ground surface.

RESULTS

Seasonal High Water Table Evaluations

The SHWT evaluations were performed on October 22, 2024 by advancing hand auger borings at each of the locations, as shown on the attached Stormwater Soil Evaluations sketch (**Figure 1**). The hand auger borings were advanced to depths ranging from approximately 36 to 42 inches below the existing ground surface. Soils

were evaluated by a Licensed Soil Scientist for evidence of SHWT influence. This evaluation involved looking at the actual moisture content in the soil and observing the matrix and mottle colors. Depending on the soil texture, the soil color will indicate processes that are driven by SHWT fluctuations such as iron reduction and oxidation and organic matter staining.

Soils at each of the test locations consisted of silt loam surface horizons with high organic content underlain by an eluviated silt loam horizons with finer textured horizons beneath that varied from clay to sandy clay loam. The deeper, finer textured horizons had consistencies ranging from slightly sticky and slightly plastic to sticky and plastic indicating the potential for shrink-swell clay mineralogy. The SHWT was approximated to range from 6 to 12 inches below the surface. An approximated ranged is provided due to the presence of a nearby ditch that is likely affecting SHWT depths slightly. Observed Water Table (OWT) was encountered at depths ranging from approximatley 29 to 30 inches measured approximately 18 hours after the boreholes were advanced.

A Soil Profile Description sheet, which provides a description of the observed soil horizons and the estimated SHWT depths, has also been included with this report.

Ksat Testing

TEC personnel performed in-situ saturated hydraulic conductivity (Ksat) testing at each of the test locations after the SHWT evaluations were complete. Specifically, the constant-head well permeameter technique (also known as shallow well pump-in technique and bore hole permeameter method) was used. This procedure is described in Methods of Soil Analysis, Part 1., Chapter 29 – Hydraulic Conductivity of Saturated Soils: Field Methods, 29 – 3.2 Shallow Well Pump In Method, pp. 758-763 and in the Soil Science Society of America Journal, Vol. 53, no. 5, Sept. – Oct. 1989, "A Constant-head Permeameter for Measuring Saturated Hydraulic Conductivity of the Vadose Zone" and "Comparison of the Glover Solution with the Simultaneous – Equations Approach for Measuring Hydraulic Conductivity." This method involves allowing a measured volume of water to percolate through the soil until a steady rate of flow is achieved. The steady state rate is used to calculate the Ksat of the soil horizon using the Glover equation.

Due to the shallow SHWT conditions at each location, the Ksat tests were performed immediately below the surface. The Ksat rates were calculated as ranging from 0.24 to 1.49 inches per hour.

See Table 1 below for a summary of the soil evaluation results.

TABLE 1				
TEST LOCATION	**SHWT (inches below ground surface)**	**OWT (inches below ground surface)**	**Ksat Testing Interval (inches below ground surface)**	**Ksat RATE (inches per hour)**
BMP-01	6 to 12 inches	29 inches	2 to 8 inches	0.24 in/hr
BMP-02	6 to 12 inches	29 inches	2 to 8 inches	0.31 in/hr
BMP-03	6 to 12 inches	30 inches	3 to 9 inches	1.49 in/hr

DISCUSSION

As mentioned above, there is a nearby ditch along College Way, approximatley 50 to 100 feet west of the test locations. It appears that the ditch may have been constructed partially in fill material used for College Way and adjacent sidewalk and partially excavated into native soil, as the bottom of the ditch appears to be one to two feet lower than the ground surface at the test locations. To assess the potential for soils at the test locations being affected by the ditch, we used Lateral Effect version 2.8.1 software developed and published by Phillips, Skaggs and Chescheir at NC State University. Drainage modeling simulations were run for 1-foot and 2-foot deep ditches in the Portsmouth soil series. The simulation results showed a lateral effect of 42 to 142 feet for the 1-foot and 2-foot deep ditches, respectively. These results put each test location potentially within the zone of influence of the ditch, assuming the ditch was at least partially excavated in the native soil, and depending on the ditch bottom elevations relative to the ground surface elevations at the test locations. Review of grading plans for the College Way entrance could provide further insight as to whether the ditch was constructed entirely in fill. If so, then drainage of soil at the test locations is likely not happening and SHWTs would be at the ground surface for each location.

CLOSING

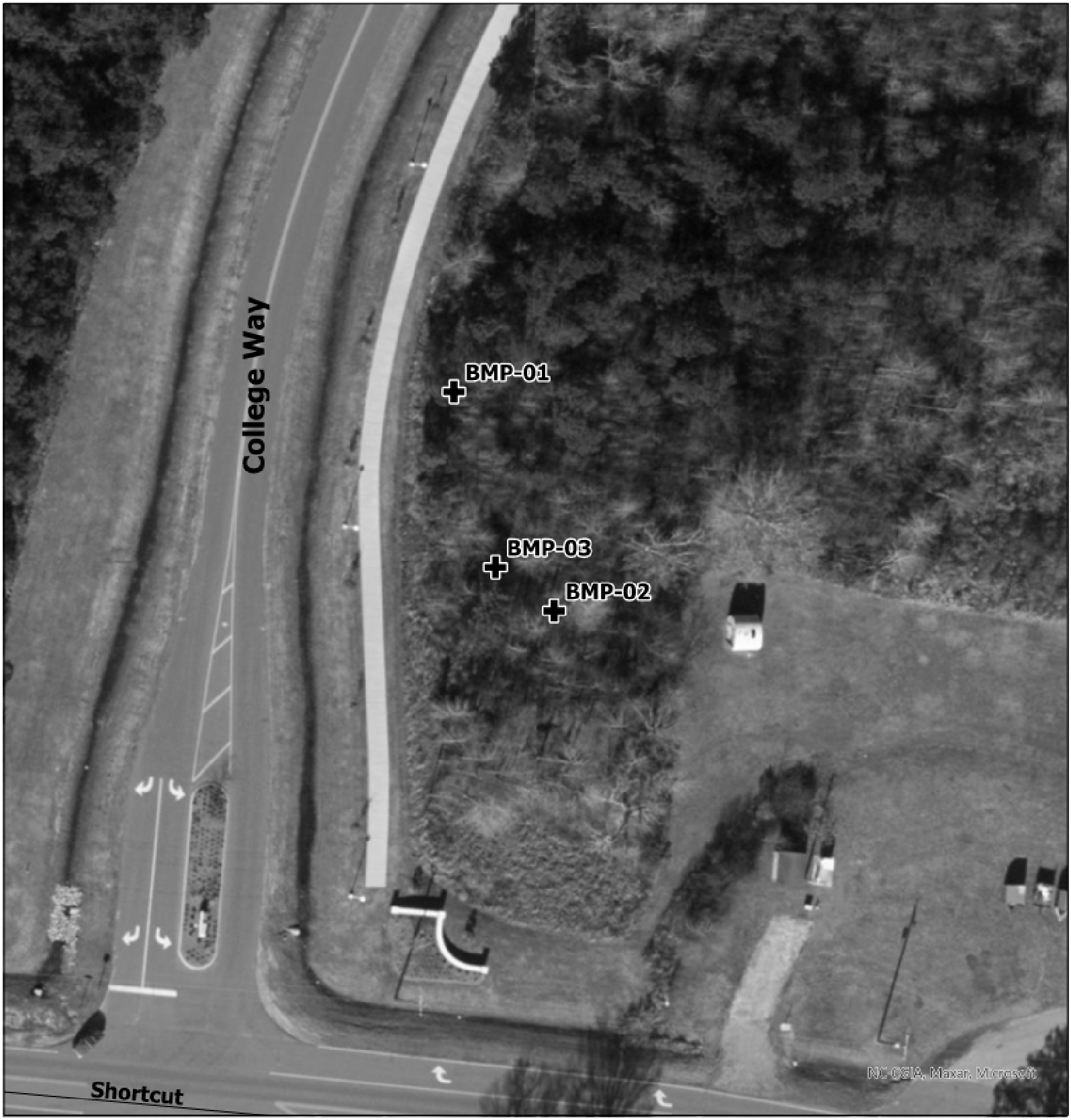
We appreciate the opportunity to provide stormwater soil evaluation services. If you have any questions, please do not hesitate to contact me.

Sincerely,



Paul Masten, LSS, PWS
President/Owner

Attachments
Figure 1 – Stormwater Soil Evaluations
Soil Profile Descriptions
Lateral Effect simulation results



TERRAIN ENVIRONMENTAL CONSULTING

Figure 1 - Stormwater Soil Evaluations
Currituck Community Park Phase III
College Way
Barco, NC

0 150 Feet

N

SOIL PROFILE DESCRIPTIONS
Currituck Community Park Phase III
College Way
Barco, NC

Location	Horizon	Depth (inches)	Matrix	Mottles	Texture, Structure, Consistence
BMP-01	A	0-13	2.5Y 2.5/1		Black loamy silt loam, granular, very friable, high organic content
	E	13-23	10YR 3/1		Very dark gray loam, moderate, medium sub-angular blocky, friable, high organic content
	Btg	23-36	10YR 4/1	10YR 5/1 10YR 2/1	Dark gray silty clay loam, strong, medium angular blocky, slightly sticky, slightly plastic, firm; common gray redox depletions and black organic accumulations
Seasonal High Water Table = 6 to 12 inches below the existing ground surface. Water table observed at 29 inches below the ground surface.					
BMP-02	A	0-12	10YR 2/1		Black silt loam, granular, very friable, high organic content
	Btg1	12-18	10YR 3/1		Very dark gray silty clay loam, strong, medium angular blocky, slightly sticky, slightly plastic, firm, high organic content
	Btg2	18-28	10YR 4/1	10YR 2/1 10YR 5.8	Dark gray clay, strong, medium angular blocky, slightly sticky, plastic, firm; common black organic accumulations and yellowish brown redox concentrations
	Btg3	28-40	10YR 3/1	5YR 3/3 10YR 5/1	Very dark gray sandy clay loam, moderate, medium angular blocky, sticky, slightly plastic, firm; common dark reddish brown redox concentrations and gray redox depletions
Seasonal High Water Table = 6 to 12 inches below the existing ground surface. Water table observed at 29 inches below the ground surface.					

SOIL PROFILE DESCRIPTIONS
Currituck Community Park Phase III
Page 2

Location	Horizon	Depth (inches)	Matrix	Mottles	Texture, Structure, Consistence
BMP-03	A	0-14	10YR 2/1		Black loamy silt loam, granular, very friable, high organic content
	Eg	14-23	10YR 3/1		Very dark gray silt loam, moderate, medium angular blocky, stick, slightly plastic, firm
	Btg	23-42	10YR 4/1	10YR 5/1 10YR 3/1	Dark gray silty clay loam, moderate, medium angular blocky, sticky, plastic, firm; common gray redox depletions and very dark gray organic accumulations
Seasonal High Water Table = 6 to 12 inches below the existing ground surface. Water table observed at 30 inches below the ground surface.					

```
********************************************************************************
----Lateral Effect Program Summary----
Application of Skaggs Method
Copyright 2006-2014. Brian D Phillips, R Wayne Skaggs, G M Chescheir
North Carolina State University Dept of Biological & Agricultural Engineering
Version: 2.8.1.0
Project Run Date and Time: 10/25/2024 9:12:44 AM
Output Filename:  C:\LateralEffect\outputs\Lateral_Effect_Summary.txt

********************************************************************************

Project Information
-------------------------------------------------------------------
Project :  24-044-SS
User:  Paul Masten
Company / Agency:  Terrain Environmental
Department:

Project Location:
Project Coordinates:

Soil ID:  Portsmouth

Notes:

Site Parameters
-------------------------------------------------------------------
State:  North_Carolina
County / Parish:  Currituck

Surface Storage:  1_inch_(2.5_cm)
Ditch Depth or Depth to Water Surface:  1 ft
Depth to Restrictive Layer:  6.667 ft
Drainable Porosity:  0.04

Hydroperiod:  14 days

User defined T25 or Default T25:  DEFAULT
T25 value:  8.9 days

User Conductivity or Soil Survey Conductivity:  SOIL SURVEY
Weighted Hydraulic Conductivity:  7.1132 in/hr

Hydraulic Conductivity Data by Layer for Soil: Pt__Portsmouth__undrained
Weighted Hydraulic Conductivity Calculated Using: Average K Values

     Bottom Depth in      Low K in/hr          High K in/hr        Average K in/hr
Layer 1   12.00               1.98               5.95               3.968496
Layer 2   19.00               1.98               5.95               3.968496
Layer 3   35.00               0.57               1.98               1.275588
```

Layer 4	38.00	1.98	5.95	3.968496
Layer 5	80.00	1.98	19.98	10.98423
Layer 6	0.00	0.00	0.00	0.00
Layer 7	0.00	0.00	0.00	0.00
Layer 8	0.00	0.00	0.00	0.00

Lateral Effect: 42.4 ft

****
----Lateral Effect Program Summary----
Application of Skaggs Method
Copyright 2006-2014. Brian D Phillips, R Wayne Skaggs, G M Chescheir
North Carolina State University Dept of Biological & Agricultural Engineering
Version: 2.8.1.0
Project Run Date and Time: 10/25/2024 9:14:02 AM
Output Filename: C:\LateralEffect\outputs\Lateral_Effect_Summary.txt

****

Project Information

Project : 24-044-SS
User: Paul Masten
Company / Agency: Terrain Environmental
Department:

Project Location:
Project Coordinates:

Soil ID: Portsmouth

Notes:

Site Parameters

State: North_Carolina
County / Parish: Currituck

Surface Storage: 1_inch_(2.5_cm)
Ditch Depth or Depth to Water Surface: 2 ft
Depth to Restrictive Layer: 6.667 ft
Drainable Porosity: 0.04

Hydroperiod: 14 days

User defined T25 or Default T25: DEFAULT
T25 value: 8.2 days

User Conductivity or Soil Survey Conductivity: SOIL SURVEY
Weighted Hydraulic Conductivity: 7.1132 in/hr

Hydraulic Conductivity Data by Layer for Soil: Pt__Portsmouth__undrained
Weighted Hydraulic Conductivity Calculated Using: Average K Values

	Bottom Depth in	Low K in/hr	High K in/hr	Average K in/hr
Layer 1	12.00	1.98	5.95	3.968496
Layer 2	19.00	1.98	5.95	3.968496
Layer 3	35.00	0.57	1.98	1.275588

Layer 4	38.00	1.98	5.95	3.968496
Layer 5	80.00	1.98	19.98	10.98423
Layer 6	0.00	0.00	0.00	0.00
Layer 7	0.00	0.00	0.00	0.00
Layer 8	0.00	0.00	0.00	0.00

Lateral Effect: 142.1 ft

Exploration Plan

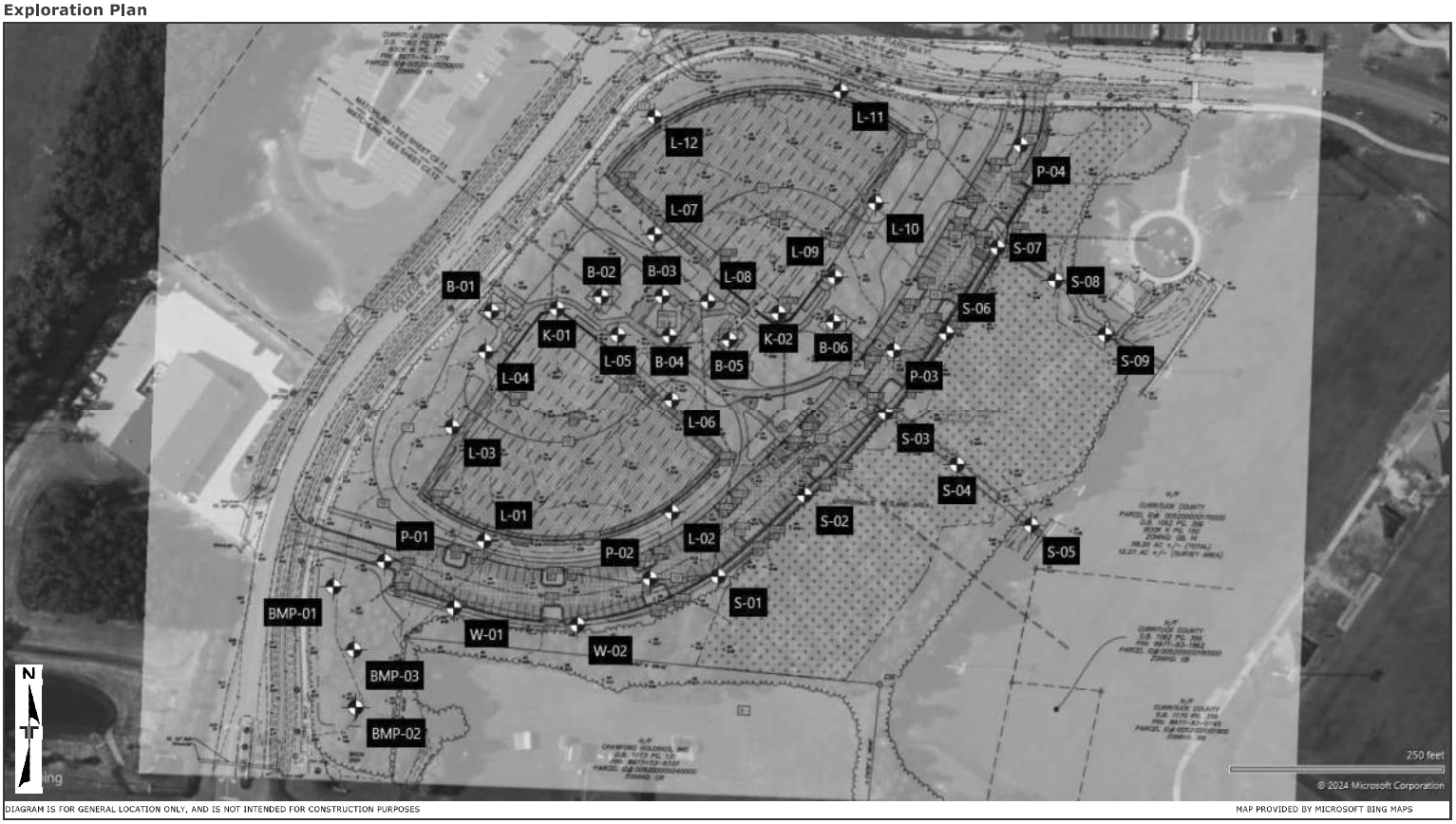


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

Major Site Plan
Application

OFFICIAL USE ONLY:
Case Number: _____
Date Filed: _____
Gate Keeper: _____
Amount Paid: _____

Contact Information

APPLICANT:
Name: Miller Homes and Building, LLC
Address: 155 Survey Road, Ste. A
Moyock, NC 27958
Telephone: 252-435-6402
E-Mail Address: smiller@millerhomesandbuilding.com

PROPERTY OWNER:
Name: GLM Investments NC, LLC
Address: 155 Survey Road, Ste. A
Moyock, NC 27958
Telephone: _____
E-Mail Address: _____

LEGAL RELATIONSHIP OF APPLICANT TO PROPERTY OWNER: Same

Property Information

Physical Street Address: 110 Currituck Commercial Drive
Location: Moyock, NC 27958
Parcel Identification Number(s): 015B-000-0010-0000
Total Parcel(s) Acreage: 1.41
Existing Land Use of Property: Vacant

Request

Project Name: Lot 110, Currituck Commercial Drive
Proposed Use of the Property: Single tenant comm. units and single tenant upper story residential units
Deed Book/Page Number and/or Plat Cabinet/Slide Number: 1723/585/G/24 & 25
Total square footage of land disturbance activity: 43084 s.f. +/-
Total lot coverage: 48.72 % (proposed)
Total vehicular use area: 14843 s.f.
Existing gross floor area: 0 (vacant)
Proposed gross floor area: 14980 s.f.

I hereby authorize county officials to enter my property for the purpose of determining zoning compliance. All information submitted and required as part of this process shall become public record.

MILLER HOMES AND BUILDING, LLC BY SAM MILLER — 9/2/25
Applicant — Date

SAME
Property Owner(s) — Date

*NOTE: Form must be signed by the owner(s) of record, contract purchaser(s), or other person(s) having a recognized property interest. If there are multiple property owners/applicants a signature is required for each.

APPLICATION IDENTIFICATION

Driveway Permit No.

Date of Application 9-22-25

County: Currituck

Development Name: Moyock Business Commons

N.C. DEPARTMENT OF TRANSPORTATION

STREET AND DRIVEWAY ACCESS PERMIT APPLICATION

LOCATION OF PROPERTY:

Route/Road: SR 1454

Exact Distance 0.03 ☒ Miles ☐ Feet N ☒ S ☐ E ☐ W ☐

From the Intersection of Route No. SR 1454 and Route No. SR 1456 Toward SR 1454

Property Will Be Used For: ☐ Residential /Subdivision ☒ Commercial ☐ Educational Facilities ☐ TND ☐ Emergency Services ☐ Other

Property: ☒ is ☐ is not within Currituck City Zoning Area.

AGREEMENT

- I, the undersigned property owner, request access and permission to construct driveway(s) or street(s) on public right-of-way at the above location.
- I agree to construct and maintain driveway(s) or street entrance(s) in absolute conformance with the current "Policy on Street and Driveway Access to North Carolina Highways" as adopted by the North Carolina Department of Transportation.
- I agree that no signs or objects will be placed on or over the public right-of-way other than those approved by NCDOT.
- I agree that the driveway(s) or street(s) will be constructed as shown on the attached plans.
- I agree that that driveway(s) or street(s) as used in this agreement include any approach tapers, storage lanes or speed change lanes as deemed necessary.
- I agree that if any future improvements to the roadway become necessary, the portion of driveway(s) or street(s) located on public right-of-way will be considered the property of the North Carolina Department of Transportation, and I will not be entitled to reimbursement or have any claim for present expenditures for driveway or street construction.
- I agree that this permit becomes void if construction of driveway(s) or street(s) is not completed within the time specified by the "Policy on Street and Driveway Access to North Carolina Highways".
- I agree to pay a $50 construction inspection fee. Make checks payable to NCDOT. This fee will be reimbursed if application is denied.
- I agree to construct and maintain the driveway(s) or street(s) in a safe manner so as not to interfere with or endanger the public travel.
- I agree to provide during and following construction proper signs, signal lights, flaggers and other warning devices for the protection of traffic in conformance with the current "Manual on Uniform Traffic Control Devices for Streets and Highways" and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the District Engineer.
- I agree to indemnify and save harmless the North Carolina Department of Transportation from all damages and claims for damage that may arise by reason of this construction.
- I agree that the North Carolina Department of Transportation will assume no responsibility for any damages that may be caused to such facilities, within the highway right-of-way limits, in carrying out its construction.
- I agree to provide a Performance and Indemnity Bond in the amount specified by the Division of Highways for any construction proposed on the State Highway system.
- The granting of this permit is subject to the regulatory powers of the NC Department of Transportation as provided by law and as set forth in the N.C. Policy on Driveways and shall not be construed as a contract access point.
- I agree that the entire cost of constructing and maintaining an approved private street or driveway access connection and conditions of this permit will be borne by the property owner, the applicant, and their grantees, successors, and assignees.
- **I AGREE TO NOTIFY THE DISTRICT ENGINEER WHEN THE PROPOSED WORK BEGINS AND WHEN IT IS COMPLETED.**

SIGNATURES OF APPLICANT

PROPERTY OWNER (APPLICANT)		WITNESS	
COMPANY	MHB, LLC BY SAM MILLER	NAME	MARY KAY MILLER
SIGNATURE		SIGNATURE	
ADDRESS	155 SURVEY RD SUITE A	ADDRESS	146 S JOLLY LICK RD
	Mayork, NC 27958 Phone No. 757-513-7671		LEECHBURG PA 15656

AUTHORIZED AGENT		WITNESS	
COMPANY	Bissell Professional Group	NAME	Marcie Respass
SIGNATURE		SIGNATURE	
ADDRESS	PO Box 1068 Kitty Hawk	ADDRESS	PO Box 1068 Kitty Hawk NC
	Phone No. 252-261-3546		

APPROVALS

APPLICATION RECEIVED BY DISTRICT ENGINEER

SIGNATURE DATE

APPLICATION APPROVED BY LOCAL GOVERNMENTAL AUTHORITY (when required)

SIGNATURE TITLE DATE

APPLICATION APPROVED BY NCDOT

SIGNATURE TITLE DATE

INSPECTION BY NCDOT

SIGNATURE TITLE DATE

COMMENTS:

ROUTE SR 1454 PROJECT Moyock Business Commons COUNTY OF Currituck STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

-AND-

GLM Investments NC, LLC

Moyock, NC 27958

-AND-

Currituck County, NC

Currituck, NC 27929

THREE PARTY RIGHT OF WAY ENCROACHMENT AGREEMENT ON PRIMARY AND SECONDARY SYSTEM

THIS AGREEMENT, made and entered into this the 22 day of Sept. , 20 25 , by and between the Department of Transportation, party of the first part; and GLM Investments NC, LLC party of the second part; and Currituck County, NC party of the third part,

WITNESSETH

THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated as Route(s) SR1454 , located 0.03 miles north of intersection of SR 1454 and SR 1456

with the construction and/or erection of: waterline

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the conditions of this agreement;

NOW, THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment as shown on attached plan sheet(s), specifications and special provisions which are made a part hereof upon the following conditions, to wit:

That the installation, operation, and maintenance of the above described facility will be accomplished in accordance with the party of the first part's latest UTILITIES ACCOMMODATIONS MANUAL and such revisions and amendments thereto as may be in effect at the date of this agreement. Information as to these policies and procedures may be obtained from the Division Engineer or State Utilities Manager of the party of the first part.

That the said party of the second part binds and obligates himself to install and maintain the encroaching facility in such safe and proper condition that it will not interfere with or endanger travel upon said highway, nor obstruct nor interfere with the proper maintenance thereof, to reimburse the party of the first part for the cost incurred for any repairs or maintenance to its roadways and structures necessary due to installation and existence of the facilities of the party of the second part, and if at any time the party of the first part shall require the removal of or changes in the location of the said facilities, that the said party of the second part binds himself, his successors and assigns, to promptly remove or alter the said facilities, in order to conform to the said requirement, without any cost to the party of the first part.

That the party of the second part agrees to provide during construction and any subsequent maintenance proper signs, signal lights, flagmen and other warning devices for the protection of traffic in conformance with the latest Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first.

That the party of the second part hereby agrees to indemnify and save harmless the party of the first part from all damages and claims for damage that may arise by reason of the installation and maintenance of this encroachment.

That the party of the second part agrees to restore all areas disturbed during installation and maintenance to the satisfaction of the Division Engineer of the party of the first part. The party of the second part agrees to exercise every reasonable precaution during construction and maintenance to prevent eroding of soil; silting or pollution of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces or other property; or pollution of the air. There shall be compliance with applicable rules and regulations of the North Carolina Division of Environmental Management, North Carolina Sedimentation Control Commission, and with ordinances and regulations of various counties, municipalities and other official agencies relating to pollution prevention and control. When any installation or maintenance operation disturbs the ground surface and existing ground cover, the party of the second part agrees to remove and replace the sod or otherwise reestablish the grass cover to meet the satisfaction of the Division Engineer of the party of the first part.

That the party of the second part agrees to assume the actual cost of any inspection of the work considered to be necessary by the Division Engineer of the party of the first part.

That the party of the second part agrees to have available at the construction site, at all times during construction, a copy of this agreement showing evidence of approval by the party of the first part. The party of the first part reserves the right to stop all work unless evidence of approval can be shown.

Provided the work contained in this agreement is being performed on a completed highway open to traffic; the party of the second part agrees to give written notice to the Division Engineer of the party of the first part when all work contained herein has been completed. Unless specifically requested by the party of the first part, written notice of completion of work on highway projects under construction will not be required.

That in the case of noncompliance with the terms of this agreement by the party of the second part, the party of the first part reserves the right to stop all work until the facility has been brought into compliance or removed from the right of way at no cost to the party of the first part.

That it is agreed by both parties that this agreement shall become void if actual construction of the work contemplated herein is not begun within one (1) year from the date of authorization by the party of the first part unless written waiver is secured by the party of the second part from the party of the first part.

During the performance of this contract, the second party, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor"), agrees as follows:

a. Compliance with Regulations: The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the U. S. Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

b. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

c. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

d. Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

e. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to,

(1) withholding of payments to the contractor under the contract until the contractor complies, and/or
(2) cancellation, termination or suspension of the contract, in whole or in part.

f. Incorporation of Provisions: The contractor shall include the provisions of paragraphs "a" through "f" in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Department of Transportation to enter into such litigation to protect the interests of the State, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

That when title to the subject that constitutes the aforesaid encroachment passes from the party of the second part and vests in the party of the third part, the party of the third part agrees to assume all responsibilities and rights and to perform all obligations as agreed to herein by the party of the second part.

R/W (166) : Party of the Second Part certifies that this agreement is true and accurate copy of the form R/W (166) incorporating all revisions to date.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed the day and year first above written.

DEPARTMENT OF TRANSPORTATION

BY: _____
DIVISION ENGINEER

WITNESS:

Mary Kay Miller
MARY KAY MILLER

SAM MILLER, MGR
SAM MILLER, MANAGER

Second Party

WITNESS:

Robert L. Cy
Currituck County

Third Party

Currituck County Mainland Water
Capacity Availability Form

County Contact Information

Will Rumsey, Utilities Manager
444 Maple Road
Maple, NC 27956

Phone: 252.232.2769
Fax: 252.453.3721

Website: https://co.currituck.nc.us/departments/water/

Request

This request is for:

- ☐ Single Family Residence
- ☑ Residential Development
- ☑ Non-residential

Owner Information

Name(s): Miller Homes and Building, LLC

Mailing Address: ~~111 Currituck Commercial Drive, Suite B~~ 155 Survey Rd Suite A Moyock, NC 27958

E-Mail Address: smiller@millerhomesandbuilding.com

Phone Number: 252-435-6402

Applicant Information (if different from Owner)

Name(s): Same

Mailing Address:

E-Mail Address:

Phone Number:

Parcel Information

PIN(s): 015B-000-0010-0000

Street Address: Currituck Commercial Drive

Project Information

Name of Project: Lot 110, Currituck Commercial Drive

Number of Units: ~~xx~~ 16 Projected Daily Project Demand (gpd): 3,950

Anticipated Water Access Date: Spring 2026

Applicant's Signature

I declare, that to the best of my knowledge, the information provided herein is true, correct, and complete.

[signature] 9/2/25

Property Owner/Applicant Signature Date

Note: Water connection and/or developmental fees are due at building permit application. See the Currituck County Master Fee Schedule for rates.
https://co.currituck.nc.us/master-fee-schedule/

For Office Use Only

☒ Water capacity is available for this project.

☐ Water capacity is not available for this project.

[signature] 9.3.25 [signature] 9/4/2025

Utilities Manager Date County Manager Date

This capacity availability is valid for one year from approval date.

Major Stormwater Plan
Form SW-002

OFFICIAL USE ONLY:
Permit Number: _____
Date Filed: _____
Date Approved: _____

Contact Information

APPLICANT:

Name: Miller Homes and Building, LLC
Address: ~~111 Currituck Comm. Dr., Ste. B~~ 155 SURVEY RD STE A
Moyock, NC 27958
Telephone: 252-435-6402
E-Mail Address: smiller@millerhomesandbuilding.com

PROPERTY OWNER:

Name: Same
Address: _____
_____
Telephone: _____
E-Mail Address: _____

Property Information

Physical Street Address: 110 Commercial Drive
Parcel Identification Number(s): 015B-000-0010-0000
FEMA Flood Zone Designation: X

Request

Project Description: 8 Single tenant comm. units and 8 single tenant upper story residential units
Total land disturbance activity: 42,197 sf
Calculated volume of BMPs: N/A sf
Maximum lot coverage: 39,938 sf
Proposed lot coverage: 29,932 sf

TYPE OF REQUEST

- ☐ Major subdivision (10-year, 24-hour rate)
- ☒ Major site plan (5-year, 24-hour rate)

METHOD USED TO CALCULATE PEAK DISCHARGE

- ☒ Rational Method
- ☐ NRCS Method (TR-55 and TR-20)
- ☐ Simple volume calculation for small sites (less than 10 acres)
- ☐ Alternative stormwater runoff storage analysis
- ☐ Downstream drainage capacity analysis

I hereby authorize county officials to enter my property for the purpose of determining compliance. All information submitted and required as part of this process shall become public record.

MILLER HOMES AND BUILDING LLC BY SAM MILLER
Applicant

Date

MANAGER
Property Owner(s)

9/2/25
Date

***NOTE: Form must be signed by the owner(s) of record, contract purchaser(s), or other person(s) having a recognized property interest. If there are multiple property owners/applicants a signature is required for each.**

	Certificate	
22	The major stormwater plan shall contain the following certificate: I, MHB, SAM MILLER MGR, owner/agent hereby certify the information included on this and attached pages is true and correct to the best of my knowledge. On the plan entitled _____, stormwater drainage improvements shall be installed according to these plans and specifications and approved by Currituck County. Yearly inspections are required as part of the stormwater plan. The owner is responsible for all maintenance required. Currituck County assumes no responsibility for the design, maintenance, or performance of the stormwater improvements. Date: 9/2/25 Owner/Agent: MGR	

Major Stormwater Plan Submittal Checklist

Staff will use the following checklist to determine the completeness of your application. Please make sure all the listed items are included. Staff shall not process an application for further review until it is determined to be complete.

Major Stormwater Plan Form SW-002

Submittal Checklist

Date Received: _____

Project Name: Lot 110 Currituck Commercial Drive

Applicant/Property Owner: Miller Homes and Building, LLC

	Major Stormwater Plan Form SW-002 Submittal Checklist – Documents provided on USB flash drive or CD	
1	Completed Major Stormwater Plan Form SW-002	X
2	Completed Rational Method Form SW-003 or NRCS Method Form SW-004	
3	Stormwater plan	X
4	NCDENR permit applications, if applicable	

Comments

_____

_____

_____