

# Pender County Planning and Community Development

## Planning Division

805 S. Walker Street  
PO Box 1519  
Burgaw, NC 28425



Phone: 910-259-1202  
Fax: 910-259-1295  
[www.pendercountync.gov](http://www.pendercountync.gov)

---

## Major Site Development Application Information Major Site Development

**Case Number:** SDP 2025-507

**Application Type:** Site Development Plan

**Applicant:** Bulldog Lighting and Events, Inc., Stephen Thompson, Vice President

**Owners:** Bulldog Lighting and Events, Inc., Stephen Thompson, Vice President

**Location:** The property is located at the end of Carver Drive south of the Cape Fear Holdings property.

**Property ID #(s):** 3222-59-2162-0000

**Description:** 20.16 acres of which 2.64 will be disturbed for construction of two 5,000 square feet warehouse buildings.

**Total Area of Project:** Approximately 20.16 acres

**Current Zoning:** General Industrial (GI)

**Application Materials:**

Application Package  
Site Plan

# **APPLICATION**

# Pender County Planning and Community Development



805 S. Walker Street  
PO Box 1519  
Burgaw, NC 28425

Phone: 910-259-1202

Fax: 910-259-1295

[www.pendercountync.gov](http://www.pendercountync.gov)

## Major Site Development Plan Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1. N/A **Pre-submittal Meeting**  
Date of Meeting \_\_\_\_\_
2. ✓ **Signed Application**
3. ✓ **Payment**  
\$250
4. ✓ **Paper Plan Sets**  
Two (2) 24 x 36, Four (4) 11 x 17
5. ✓ **Digital Submission**  
For all documents submitted in paper copy, bring a digital copy with paper submission.
6. ✓ **Adjacent Property List**  
A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the perimeter of the project bounds.
7. ✓ **Adjacent Property Envelopes**  
The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. ✓ **Permits**  
Include any permits issued on the project including but not limited to: environmental, traffic, utility, or site specific conditions.
9. ✓ **Site Plan Requirements**  
A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.3, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.  
(See Major Site Development Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant 

Date 04/28/2025

Printed Name Stephen Thompson - Vice President

Staff Initials: \_\_\_\_\_

Date: \_\_\_\_\_

# Pender County Planning and Community Development

**Planning Division**  
805 S. Walker Street  
PO Box 1519  
Burgaw, NC 28425



Phone: 910-259-1202  
Fax: 910-259-1295  
[www.pendercountync.gov](http://www.pendercountync.gov)

## MAJOR AND MINOR SITE DEVELOPMENT APPLICATION

THIS SECTION FOR OFFICE USE			
Date:	Permit Number:	Permit Fee:	Invoice Number:
*Zoning Approval ONLY: YES / NO		Final Zoning Compliance Approved: YES / NO / N/A	
Type of Site Development Plan:	<input type="checkbox"/> Major	<input type="checkbox"/> Minor	
SECTION 1: GENERAL INFORMATION			
Applicant's Name:	Bulldog Lighting and Events, Inc., Stephen Thompson - Vice President	Property Owner's Name:	Same as Applicant
Applicant's Address:	504 Kingsworth Lane	Property Owner's Address:	413 littleworth lane
City, State, & Zip	Leland, NC 28451-8582	City, State, & Zip	Sea cliff, NY 11579
Phone Number:	(910) 619-9988	Phone Number:	910-512-0566
Email Address:	stevet@bulldoglighting.com	Email Address:	acmelight@yahoo.com
Legal relationship of applicant to landowner:	Applicant is also land owner		
SECTION 2: PROJECT INFORMATION			
PIN (Property Id #):	3222-59-2162-0000	Total property acreage:	20.16
Zoning:	GI - General Industrial	Acreage to be disturbed:	2.64
Water Provider:	Pender County Utilities - Rocky Point/Topsail Water & Sewer District	Wastewater Provider:	Pender County Utilities - Rocky Point/Topsail Water & Sewer District
Directions to Site:	1834 Carver Drive, Rocky Point, NC 28457 Approximately 2.30 miles along Carver Drive from the intersection of Carver Drive and NC-133.		
Lot Size:	Sq Ft of Building: 11,500 SF	Building Height:	
Setbacks	Front: 50 FT	Side: 25 FT	Rear: 25 FT
NAICS Code/Use:	48-49 Transportation and Warehousing		
Business Name:	Bulldog Lighting and Events, Inc.		
Describe activities to be undertaken on project site:	Construction of warehouse/freight movement and all related utility service and SCMs.		
Ownership:	Number of Employees:	Number of Members:	Seating Capacity:
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Public			

*\*If the applicant is not the owner of the property, a notarized letter from the property owner may be required*

*\*Zoning approval is for the use being proposed ONLY, other department approvals may be required i.e. Fire Marshal, Environmental Health, Permitting, etc...*

<b>SECTION 4: ADDITIONAL COMMENTS</b>	

<b>SECTION 5: SIGNATURES</b>			
<b>Applicant's Signature</b>		<b>Date:</b>	04/28/
<b>Applicant's Name Printed</b>	Stephen Thompson - Vice President	<b>Date:</b>	2025
<b>Owner's Signature</b>	(SAME AS APPLICANT)	<b>Date:</b>	
<b>Owner's Name Printed</b>	(SAME AS APPLICANT)	<b>Date:</b>	
<b>Planning Staff:</b>		<b>Date:</b>	

# **SITE PLAN**

# BULLDOG COMMERCIAL

1832 CARVER DRIVE, ROCKY POINT, NORTH CAROLINA 28457

## FINAL DESIGN - NOT FOR CONSTRUCTION

### Project Team

#### Owner/Applicant

BULLDOG LIGHTING AND EVENTS, INC.  
504 KINGSWORTH LANE  
LELAND, NC 28451

#### Landscape Architect & Civil Engineer



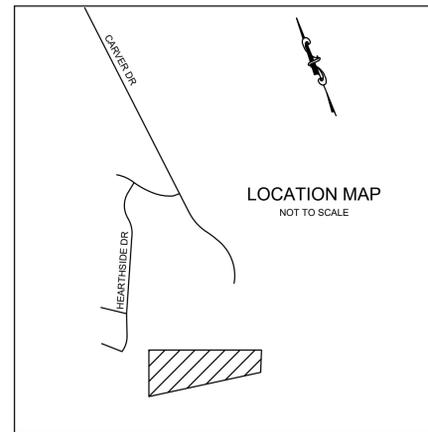
Alfred Benesch & Company  
2018 Eastwood Road, Suite 111  
Wilmington, NC 28403  
www.benesch.com  
P 910.500.7081

Corp. NC License: F-1320

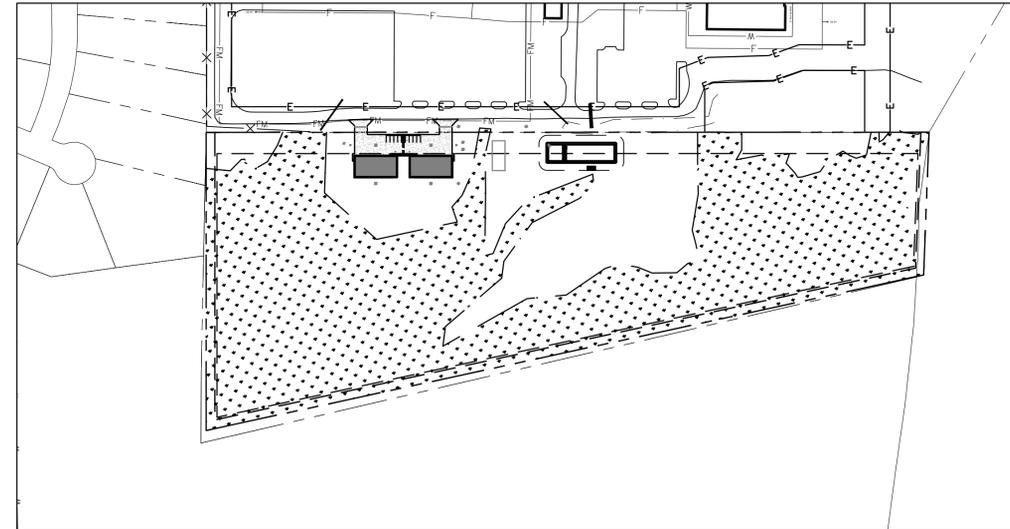
### Index of Drawings

Sheet #	Description	Rev #	Date	Seal Date
C001	COVER SHEET	1		
C002	GENERAL NOTES	1		
C100	EXISTING CONDITIONS AND DEMOLITION PLAN	1		
C200	OVERALL SITE PLAN	1		
C201	SITE PLAN	1		
C300	OVERALL STORMDRAIN PLAN	1		
C301	STORMDRAIN PLAN	1		
C302	GRADING PLAN	1		
C303	FINAL EROSION CONTROL PLAN	1		
C304	WET POND 01 DETAILS	1		
C400	UTILITY PLAN	1		
C500	EROSION CONTROL DETAILS	1		
C501	EROSION CONTROL DETAILS	1		
C501	EROSION CONTROL DETAILS	1		
C502	SITE DETAILS	1		
C503	SITE DETAILS	1		
C504	UTILITY DETAILS	1		
C505	STORMDRAIN DETAILS	1		
C600	LANDSCAPE PLAN	1		

Vicinity Map



Site Overview Map (N.T.S)



**Bulldog Commercial**  
1834 Carver Drive  
Rocky Point, North Carolina

Project no: 17.000634  
Date: 05.05.2025  
Revisions:

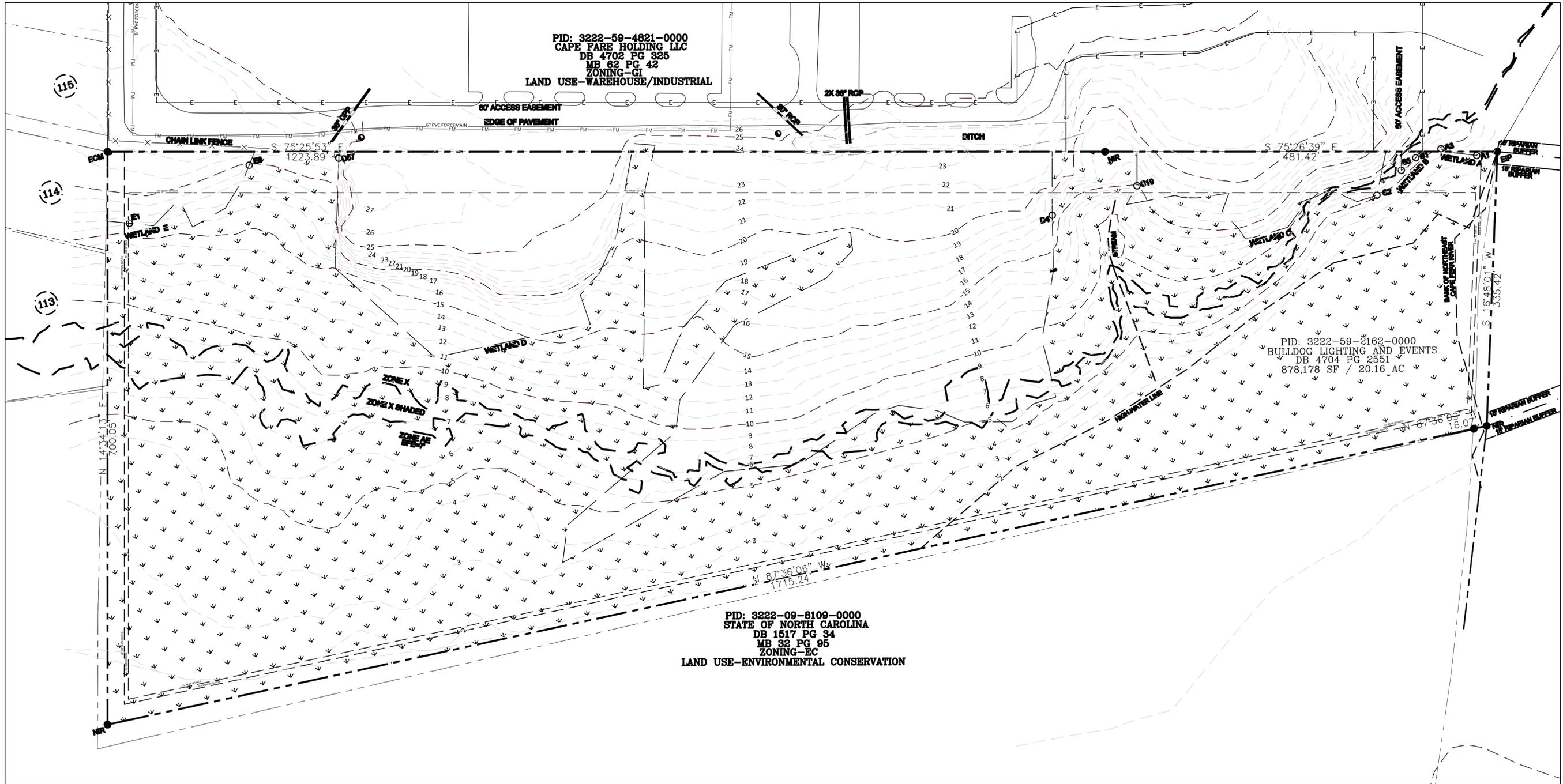
**FINAL DESIGN  
NOT FOR  
CONSTRUCTION**

Sheet Title:

COVER

Sheet No:  
**C001**





PID: 3222-59-4821-0000  
 CAPE FARE HOLDING LLC  
 DB 4702 PG 325  
 MB 82 PG 42  
 ZONING-GI  
 LAND USE-WAREHOUSE/INDUSTRIAL

PID: 3222-59-2162-0000  
 BULLDOG LIGHTING AND EVENTS  
 DB 4704 PG 2551  
 878,178 SF / 20.16 AC

PID: 3222-09-8109-0000  
 STATE OF NORTH CAROLINA  
 DB 1517 PG 34  
 MB 32 PG 95  
 ZONING-EC  
 LAND USE-ENVIRONMENTAL CONSERVATION

**GENERAL SITE NOTES:**

1. SURVEY INFO PROVIDED BY OWNER. SURVEY INFO BASED ON NAD83 AND NAVD88.
2. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. FOOT UNLESS OTHERWISE NOTED.
3. PROPERTY MAY BE SUBJECT TO ANY/ALL EASEMENTS AND RESTRICTIONS OF RECORD. THIS SURVEY IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND OR DEEDED AND HAS BEEN PREPARED WITHOUT THE BENEFIT OF A FULL TITLE REPORT. A NORTH CAROLINA LICENSED ATTORNEY-AT-LAW SHOULD BE CONSULTED REGARDING CORRECT OWNERSHIP, WIDTH AND LOCATION OF EASEMENTS, AND OTHER TITLE EXAMINATION.
4. THERE ARE NO NCOS MONUMENTS WITHIN 2,000 FEET OF PROPERTY.
5. FLOOD NOTE: THIS PROPERTY IS LOCATED IN ZONE X AND ZONE AE ACCORDING TO FEMA FLOOD MAP: | PENDER COUNTY COUNTY-CID: 372032 | PANEL: 2200 | SUFFIX: K | EFFECTIVE DATE: 2/16/2007 |

**ADJACENT PROPERTIES:**

113 - PID: 3222-49-2498-0000 OWNER: SMITH, JAMES ALLEN JR DB 4794 PG 2729 MB 45 PG 56 ZONING: PD LAND USE: RESIDENTIAL	115 - PID: 3222-49-3758-0000 OWNER: LANE, JAMES EDWARD DB 1A PG 9138 MB 45 PG 56 ZONING: PD LAND USE: RESIDENTIAL
114 - PID: 3222-49-3607-0000 OWNER: CLARK, ROBERT P DB 4254 PG 226 MB 45 PG 56 ZONING: PD LAND USE: RESIDENTIAL	

**GENERAL NOTES:**

1. SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET C200 FOR OVERALL SITE PLAN.
3. SEE SHEET C201 FOR SITE PLAN.

Seals:  
  
 Corp. NC license: F-1320

**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

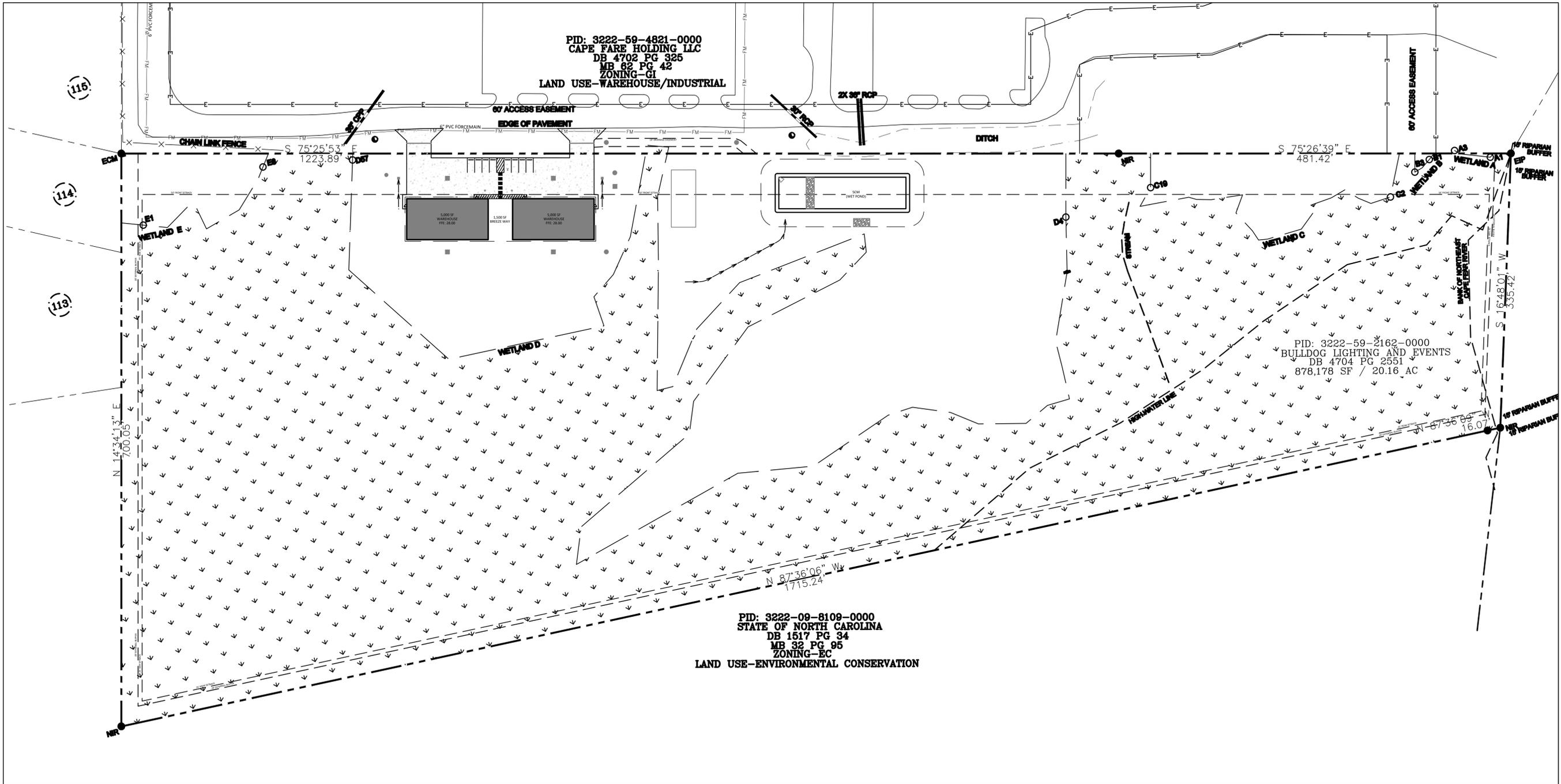
**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

Sheet Title:  
 EXISTING  
 CONDITIONS AND  
 DEMOLITION  
 PLAN

Sheet No:  
**C100**

**811**  
 Know what's below.  
 Call before you dig.

Y:\Clients\17000634\00\_Bldg\_C Commercial\Eng\_Docs\Drawings\17000634-00-CD\17000634-MASTER.rvt



Seals:  
  
 Corp. NC license: F-1320

**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

**SITE DATA:**

1. PARCEL ID:  
3222-59-2162-0000
2. PROJECT ADDRESS:  
1832 CARVER DRIVE  
ROCKY POINT, NC 28457
3. PROPERTY DEED AND PLAT  
DB: 4704 PG: 2551  
MB: -- PG: --
4. OWNER:  
BULLDOG LIGHTING AND EVENTS, INC.  
504 KINGSWORTH LANE  
LELAND, NC 28451
5. LAND USE:  
CURRENT LAND USE - VACANT  
PROPOSED LAND USE - WAREHOUSE
6. ZONING - PENDER COUNTY: GI (GENERAL INDUSTRIAL)
7. PARCEL ACREAGE: 20.16 AC
8. BUILDING SETBACKS:  
FRONT: 50 FEET  
SIDE: 25 FEET  
REAR: 25 FEET
9. BUILDING SIZE: 11,500 SF

10. BUILDING HEIGHT: MAX. 50 FEET
11. PARKING REQUIREMENTS (PER UDO):  
WAREHOUSE / FREIGHT MOVEMENT  
REQUIRED: 1 SPACE PER 5,000 SF GFA  
  
TOTAL PARKING REQUIRED:  
3 SPACES (INCLUDING HANDICAP)  
  
TOTAL PARKING PROVIDED:  
6 SPACES (5 STANDARD, 1 HANDICAP)

**ADJACENT PROPERTIES:**

- |  |   |
|--|---|
| 113 -<br>PID: 3222-49-2498-0000<br>OWNER: SMITH, JAMES ALLEN JR<br>DB 4794 PG 2729<br>MB 45 PG 56<br>ZONING: PD<br>LAND USE: RESIDENTIAL | 115 -<br>PID: 3222-49-3758-0000<br>OWNER: LANE, JAMES EDWARD<br>DB 1A PG 9138<br>MB 45 PG 56<br>ZONING: PD<br>LAND USE: RESIDENTIAL |
| 114 -<br>PID: 3222-49-3607-0000<br>OWNER: CLARK, ROBERT P<br>DB 4254 PG 226<br>MB 45 PG 56<br>ZONING: PD<br>LAND USE: RESIDENTIAL        |   |

**NCDOT TRIP GENERATION INFORMATION:**

LAND USE CODE - 150 - WAREHOUSE  
 ADT: 17  
 AM PEAK: 2  
 PM PEAK: 2

**GENERAL NOTES:**

1. SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
3. SEE SHEET C201 FOR SITE PLAN.

**UTILITY PROVIDERS:**

1. WATER AUTHORITY: PENDER COUNTY UTILITIES - ROCKY POINT/TOPSAIL WATER & SEWER DISTRICT
2. SEWER AUTHORITY: PENDER COUNTY UTILITIES - ROCKY POINT/TOPSAIL WATER & SEWER DISTRICT
3. POWER SERVICE PROVIDER: DUKE ENERGY - PROGRESS SERVICE TERRITORY
4. FIBER INTERNET PROVIDER: SPECTRUM

Y:\Chakraborty\17000634\_00\_Bulldog\_Commercial\Eng\_Docs\Drawings\17000634\_00\_CD\17000634 - MASTER.dwg

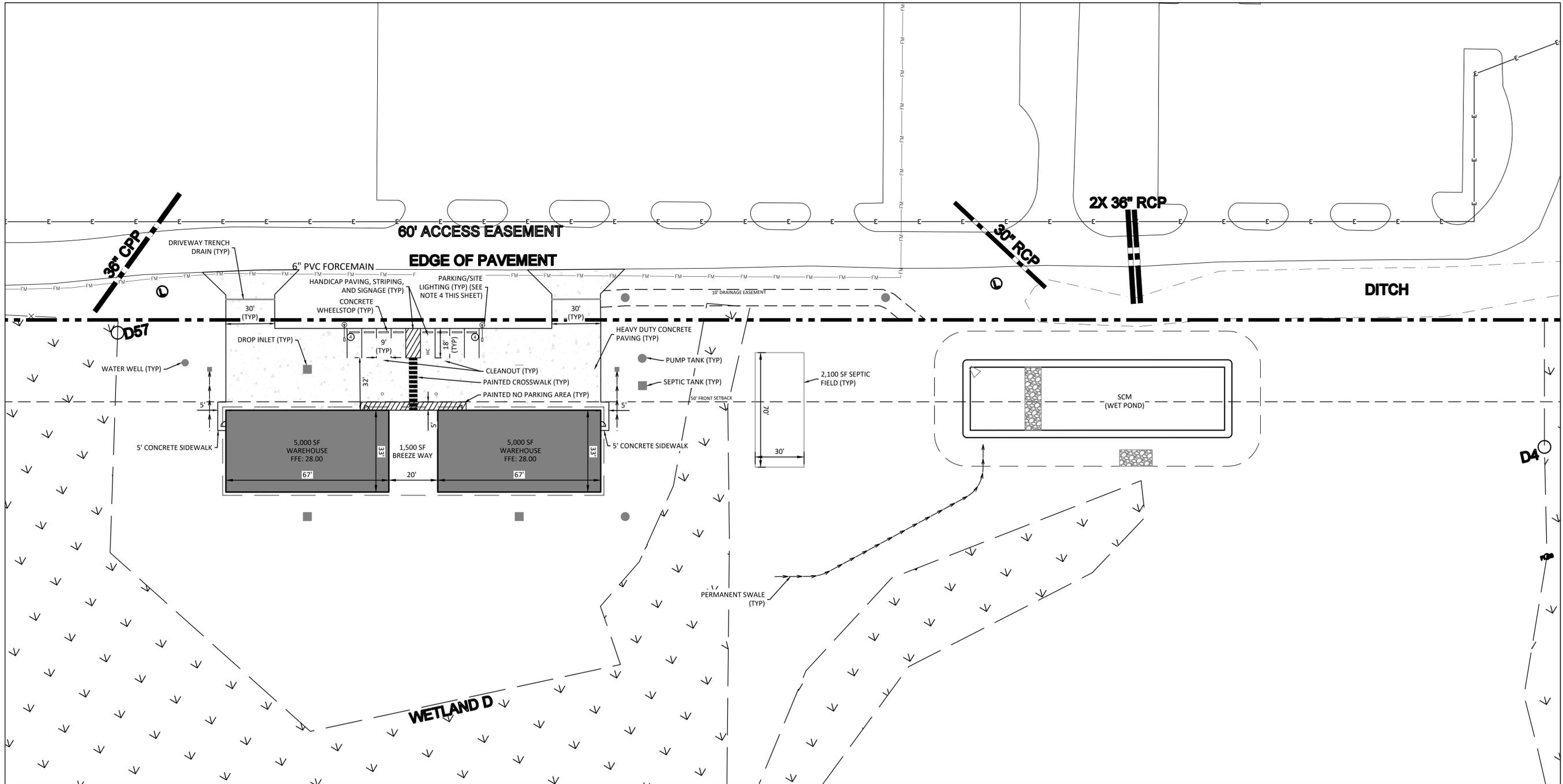
Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN**  
**NOT FOR**  
**CONSTRUCTION**

Sheet Title:

**OVERALL**  
**SITE PLAN**

Sheet No:  
**C200**



**SITE DATA:**

- PARCEL ID:  
3222-59-2162-0000
- PROJECT ADDRESS:  
1832 CARVER DRIVE  
ROCKY POINT, NC 28457
- PROPERTY DEED AND PLAT  
DB: 4704 PG: 2551  
MB: -- PG: --
- OWNER:  
BULLDOG LIGHTING AND EVENTS, INC.  
504 KINGSWORTH LANE  
LELAND, NC 28451
- LAND USE:  
CURRENT LAND USE - VACANT  
PROPOSED LAND USE - WAREHOUSE
- ZONING - PENDER COUNTY: GI (GENERAL INDUSTRIAL)
- PARCEL ACREAGE: 20.16 AC
- BUILDING SETBACKS:  
FRONT: 50 FEET  
SIDE: 25 FEET  
REAR: 25 FEET
- BUILDING SIZE: 11,500 SF

10. BUILDING HEIGHT: MAX. 50 FEET

11. PARKING REQUIREMENTS (PER UDO):

WAREHOUSE / FREIGHT MOVEMENT  
 REQUIRED: 1 SPACE PER 5,000 SF GFA  
 TOTAL PARKING REQUIRED:  
 3 SPACES (INCLUDING HANDICAP)  
 TOTAL PARKING PROVIDED:  
 6 SPACES (5 STANDARD, 1 HANDICAP)

**ADJACENT PROPERTIES:**

- |  |   |
|--|---|
| 113 -<br>PID: 3222-49-2498-0000<br>OWNER: SMITH, JAMES ALLEN JR<br>DB 4794 PG 2729<br>MB 45 PG 56<br>ZONING: PD<br>LAND USE: RESIDENTIAL | 115 -<br>PID: 3222-49-3758-0000<br>OWNER: LANE, JAMES EDWARD<br>DB 1A PG 9138<br>MB 45 PG 56<br>ZONING: PD<br>LAND USE: RESIDENTIAL |
| 114 -<br>PID: 3222-49-3607-0000<br>OWNER: CLARK, ROBERT P<br>DB 4254 PG 226<br>MB 45 PG 56<br>ZONING: PD<br>LAND USE: RESIDENTIAL        |   |

**NC DOT TRIP GENERATION INFORMATION:**

LAND USE CODE - 150 - WAREHOUSE  
 ADT: 17  
 AM PEAK: 2  
 PM PEAK: 2

**GENERAL NOTES:**

- SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
- SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
- SEE SHEET C201 FOR SITE PLAN.
- FINAL PHOTOMETRIC PLAN TO BE PROVIDED BY OTHERS. LIGHT POLE LOCATIONS SHOWN FOR REFERENCE ONLY AND MAY BE ADJUSTED PER PHOTOMETRIC PLANS. ALL LIGHTING TO BE FIXTURES MATERIALS, HEIGHTS AND INSTALLATION TO BE IN ACCORDANCE WITH PENDER COUNTY ORDINANCE.

**UTILITY PROVIDERS:**

- WATER AUTHORITY: PENDER COUNTY UTILITIES - ROCKY POINT/TOPSAIL WATER & SEWER DISTRICT
- SEWER AUTHORITY: PENDER COUNTY UTILITIES - ROCKY POINT/TOPSAIL WATER & SEWER DISTRICT
- POWER SERVICE PROVIDER: DUKE ENERGY - PROGRESS SERVICE TERRITORY
- FIBER INTERNET PROVIDER: SPECTRUM

Y:\Clients\17000634\00\_Bulldog Commercial\Eng\_Docs\Drawings\17000634-00-CD\17000634 - MASTER.dwg

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

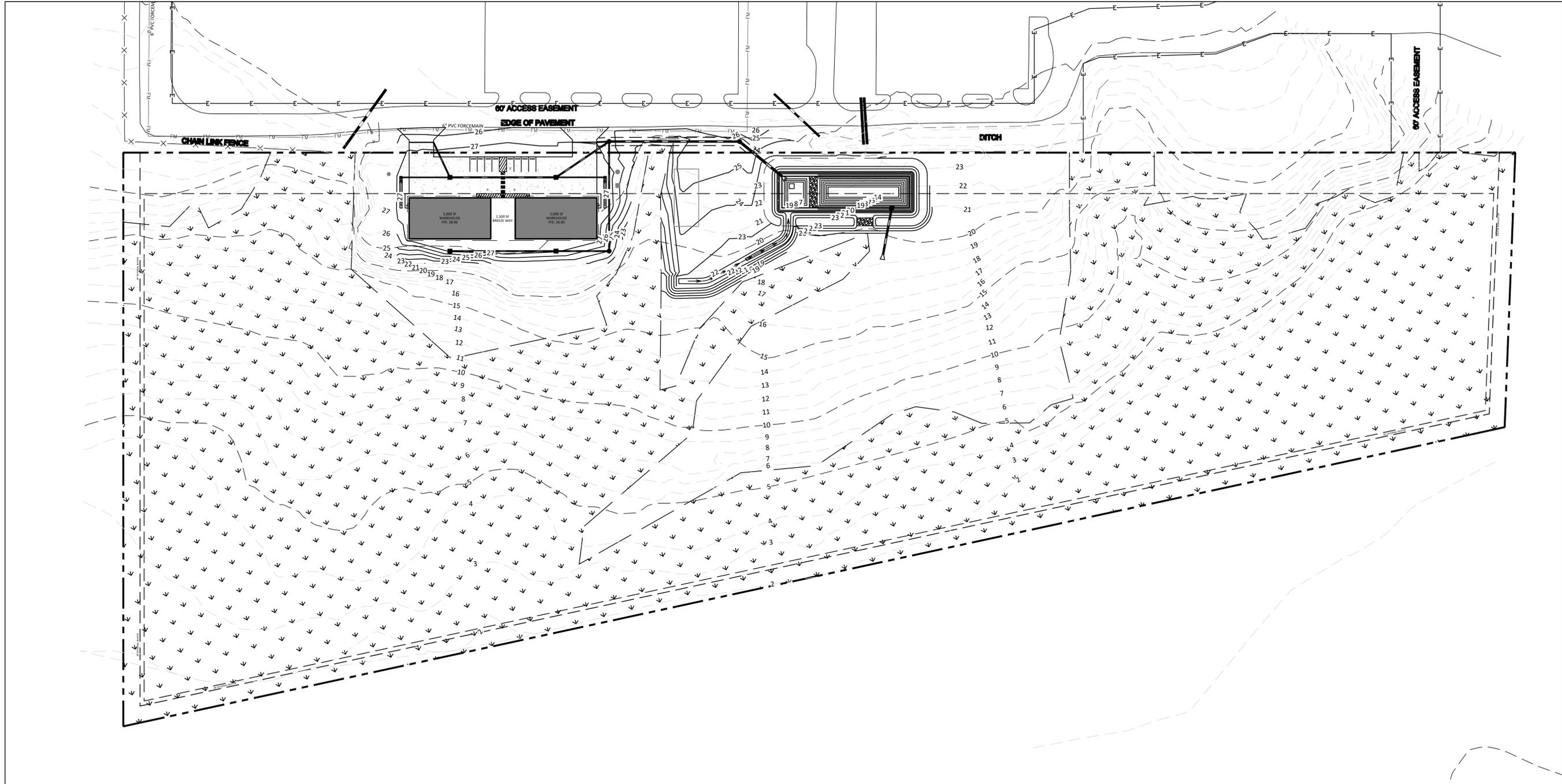
Sheet Title:

SITE PLAN

Sheet No:  
**C201**

**811**  
 Know what's below.  
 Call before you dig.

SCALE: 1" = 30'



**PRE-DEVELOPMENT IMPERVIOUS AREA**

BUILDINGS: 0 SF (0.00 AC)  
 PARKING/DRIVES: 0 SF (0.00 AC)  
 SIDEWALKS: 0 SF (0.00 AC)  
**TOTAL:** 0 SF (0.00 AC)  
 TOTAL PROP. AREA: 878,169 SF (20.16 AC)  
 % IMPERVIOUS: 0.0%

**POST-DEVELOPMENT IMPERVIOUS AREA**

BUILDINGS: 11,500 SF (0.26 AC)  
 PARKING/DRIVES: 13,991 SF (0.32 AC)  
 SIDEWALKS: 175 SF (0.004 AC)  
 FUTURE: 9,838 SF (0.23 AC)  
**TOTAL:** 35,504 SF (0.82 AC)  
 TOTAL PROP. AREA: 878,169 SF (20.16 AC)  
 % IMPERVIOUS: 4.07%

**GENERAL NOTES:**

- SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
- SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
- SEE SHEET C200 AND C201 FOR SITE PLAN.

**STORMWATER NOTES**

- WATERSHED: CAPE FEAR RIVER  
 RECEIVING STREAM: NORTHEAST CAPE FEAR RIVER  
 STREAM CLASS: B, Sw
- STREAM INDEX: 18-74-(47.5)
- THERE ARE APPROXIMATELY 13.66 AC OF WETLANDS ON SITE. NO WETLANDS WILL BE DISTURBED.



**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

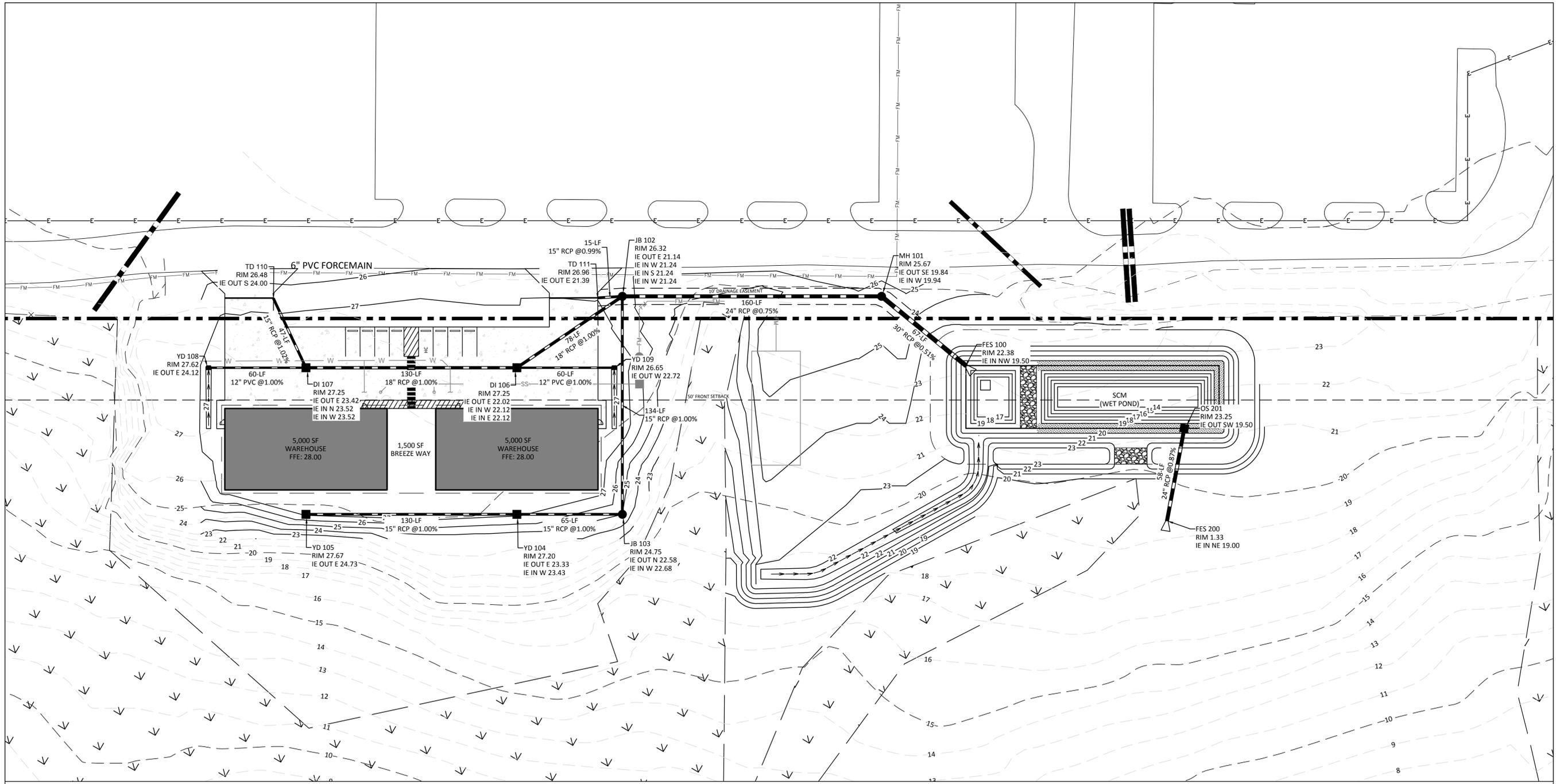
Sheet Title:  
**OVERALL  
 STORMDRAIN  
 PLAN**

Sheet No:  
**C300**

**811**  
 Know what's below.  
 Call before you dig.

SCALE: 1" = 60'  
 NORTH

Y:\charles\17000634\00\_Bulldog\_Commercial\Eng\_Docs\Drawings\17000634-00-CD\17000634-MASTER.dwg



**GENERAL NOTES:**

1. SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
3. SEE SHEET C200 AND C201 FOR SITE PLAN.
4. SEE SHEET C300 FOR OVERALL STORMDRAIN PLAN.

Y:\Chalder\17000634\_00\_Bldg\_Commercial\Eng\_Docs\Drawings\17000634\_00-CD\17000634 - MASTER.rvt



Corp. NC license: F-1320

**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

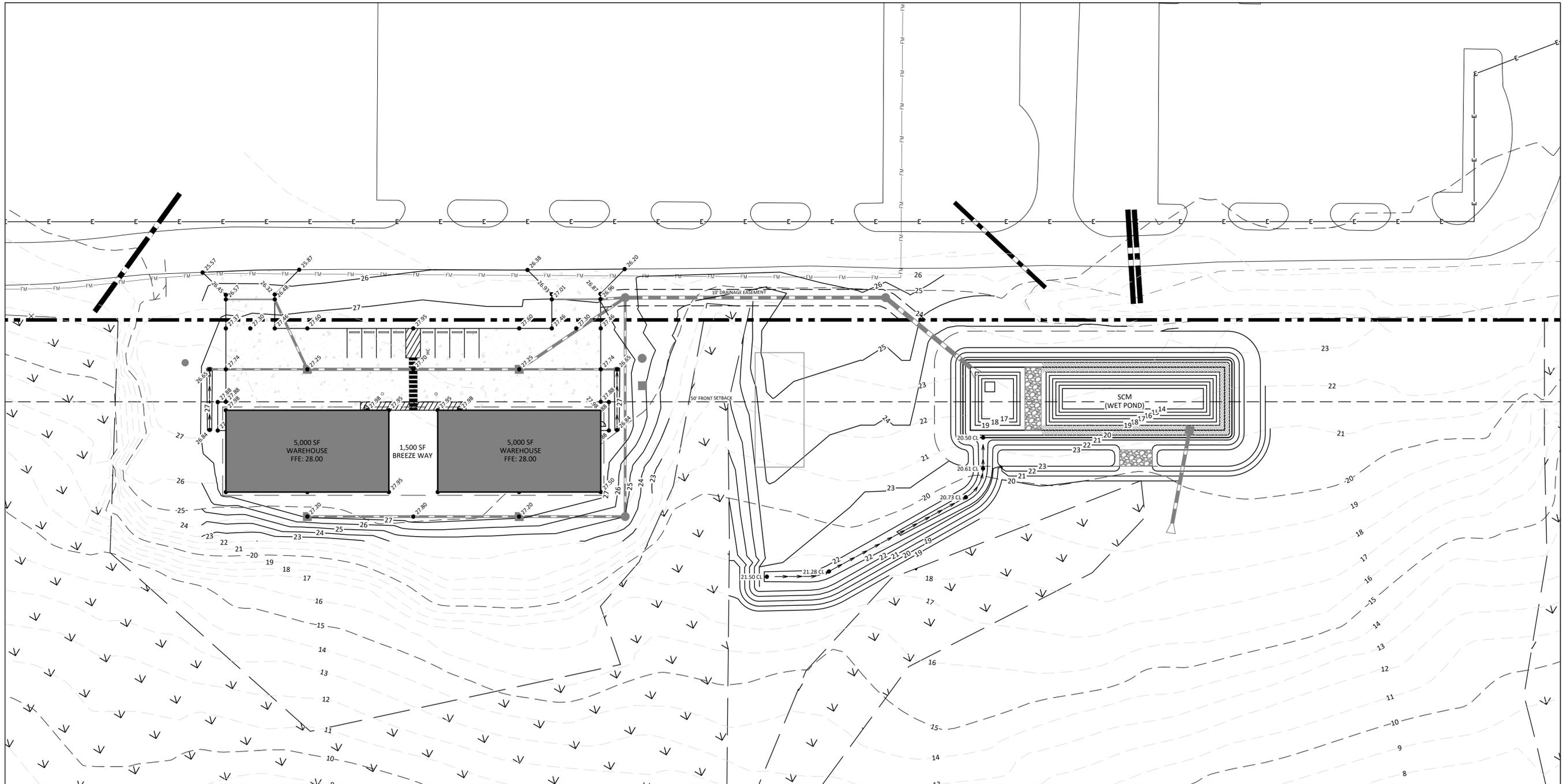
**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

Sheet Title:  
**STORMDRAIN  
 PLAN**

Sheet No:  
**C301**

**811**  
 Know what's below.  
 Call before you dig.

SCALE: 1" = 30'



- GENERAL NOTES:**
1. SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
  2. SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
  3. SEE SHEET C200 AND C201 FOR SITE PLAN.

Y:\Clients\17000634\_00\_Bldg\_Commercial\Eng\_Docs\Drawings\17000634\_00-CD\17000634 - MASTER.rvt

Seals:  
  
 Corp. NC license: F-1320

**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

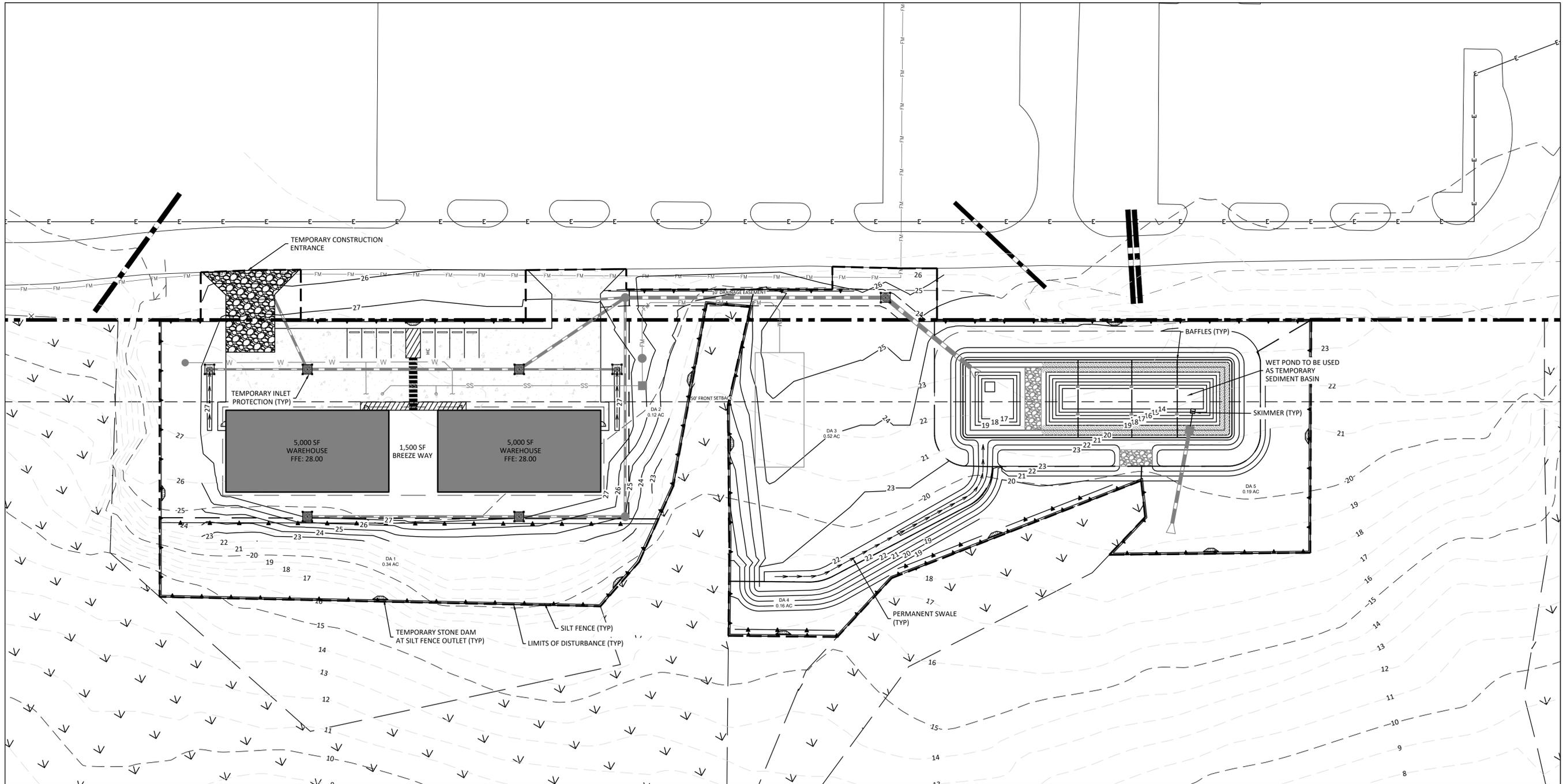
Sheet Title:  
**GRADING PLAN**

Sheet No:  
**C302**

**811**  
 Know what's below.  
 Call before you dig.

**NORTH**

SCALE: 1" = 30'



**CONSTRUCTION SEQUENCE:**

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM NCDEQ.
2. CONTRACTOR TO SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE AND PROVIDE MIN 72 HOURS NOTICE OF THE MEETING TO THE ENGINEER AND NCDEQ.
3. FLAG LIMITS OF LAND DISTURBANCE.
4. INSTALL SILT FENCE, INLET PROTECTION, SEDIMENT BASIN, DIVERSION DITCHES, AND OTHER MEASURES AS SHOWN ON PLANS. CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
5. ROUGH GRADE SITE, STOCKPILE TOPSOIL, INSTALL DRAINAGE PIPE, INSTALL INLET AND OUTLET PROTECTION, AND CONSTRUCT DITCHES AS SHOWN.
6. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
7. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
8. INSTALL ANY ADDITIONAL SILT FENCE THAT MAY NOT BE SHOWN BUT MAY BE NEEDED.
9. FINE GRADE SITE, PLACE TOPSOIL, IMMEDIATELY PROVIDE PERMANENT VEGETATION AS SHOWN IN THE SPECIFICATIONS OR ON THE DRAWINGS.
10. REMOVE ANY REMAINING SEDIMENT FROM THE PROJECT SITE AND DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
11. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
12. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL AND U.S. DEPT. OF AGRICULTURE.

**GENERAL NOTES:**

1. SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
3. SEE SHEET C200 AND C201 FOR SITE PLAN.

LIMITS OF DISTURBANCE: 2.64 AC

**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

Sheet Title:

**FINAL EROSION  
 CONTROL PLAN**

Sheet No:

**C303**

**811**  
 Know what's below.  
 Call before you dig.

**NORTH**

SCALE: 1" = 30'

SEE NOTES THIS SHEET FOR SCM MAINTENANCE AND RESPONSIBILITIES OF THE CONTRACTOR

SCM PLANTING REQUIREMENTS		
ZONE	AREA	MIN. REQUIRED PLANTS (50 PLANTS PER 200 SQ. FT.)
SHALLOW WATER	772 SF	193
SHALLOW LAND	808 SF	202

NOTE: PLANTINGS SHALL INCLUDE A MINIMUM OF 3 DIVERSE SPECIES OF HERBACIOUS, NATIVE VEGETATION.

**PLANT SLOPES AND DAM WITH PERMANENT GRASS PER SEEDING SCHEDULE.**

INSTALL NA GREEN S150 OR APPROVED EQUAL EROSION CONTROL FABRIC ON ALL POND SLOPES AND EMBANKMENTS.

**SCM PLANTING NOTES:**

- IF BARE ROOT SPECIMENS ARE NOT TO BE USED WITHIN 4 DAYS, THEY SHOULD BE PLANTED IN SUITABLE BEDS WITH THE ASSUMPTION THAT IT WILL BE A WHILE BEFORE THEY CAN BE USED, AND THEY SHOULD BE PROVIDED WITH CONDITIONS MAKING IT POSSIBLE FOR THEM TO SURVIVE AND GROW AS OPTIMALLY AS POSSIBLE.
- CONTAINER PLANTS WILL NEED TO BE WATERED REGULARLY (SEVERAL TIMES DAILY WHEN WEATHER IS HOT)
- PIN ALL SUBMERGED/FLOATING PLANT MATERIAL SECURELY TO THE BOTTOM OF POND WITH 12" BENT WIRE PINS.
- CUT BACK TALL AND EASILY BROKEN LEAVES AND STEMS AT THE TIME OF TRANSPLANTING.
- NEWLY RECEIVED NURSERY STOCK AND DISTURBED TRANSPLANTS SHOULD NOT BE EXPOSED TO DIRECT SUN ANY MORE THAN NECESSARY UNTIL THEY ARE PLACED IN THEIR PERMANENT POSITIONS.
- INSERT DRY FERTILIZER TABLETS OR SPIKES NEAR THE PLANTS AT THE TIME OF TRANSPLANTING.
- FENCE ENTIRE PLANTING AREA WITH 36" TALL PLASTIC FENCING WITH 1.5'X2" OPENINGS. PLASTIC SHALL BE UV STABLE. COLOR SHALL BE BLACK. INSTALL WITH STEEL POSTS SPACED AT 10' O.C. MAX. PIN THE BOTTOM LAYER OF THE FABRIC TO THE GROUND WITH 10-12" PINS. FENCING TO REMAIN IN PLACE FOR A PERIOD OF ONE YEAR POST INSTALLATION OF PLANT MATERIAL.
- STAKE PLANTING ZONES PRIOR TO INSTALLATION AND VERIFY AREAS ON PLAN.
- PLANTS ARE TO BE INSTALLED IN A RANDOM ARRANGEMENT WITHIN THEIR RESPECTIVE ZONES. INDIVIDUAL SPECIES MAY BE PLANTED TOGETHER IN GROUPS OF 3 TO 5. PLANTS MAY ALSO BE PLANTED INDIVIDUALLY.
- PLANT QUANTITIES ARE TO BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION. PLANTS SHALL NOT BE COMPLETELY SUBMERGED WHEN PLANTED.
- PLANT HERBACEOUS PLANTS BETWEEN MARCH 15TH AND SEPTEMBER 30TH. AMEND SOILS AND ADD ORGANICS TO UP TO 6 INCHES ON LITTORAL SHELF AREA.
- CONTRACTOR SHALL PROVIDE MAINTENANCE OF ALL BMP PLANTING FOR 12 MONTHS AFTER INITIAL ACCEPTANCE OF INSTALLATION, INCLUDING RE-SEEDING OR BARE AREAS AS REQUIRED TO ESTABLISH PERMANENT GROUND COVER, AND SUPPLEMENTAL WATERING AS REQUIRED TO ESTABLISH PLANTINGS.
- MONITORING AND REMOVAL OF INVASIVE PLANT SPECIES (INCLUDING CATTAILS) SHALL BE INCLUDED IN REQUIRED MAINTENANCE.
- SUBSTITUTIONS OF PLANT SPECIES MUST BE APPROVED BY BENESCH, PRIOR TO INSTALLATION.

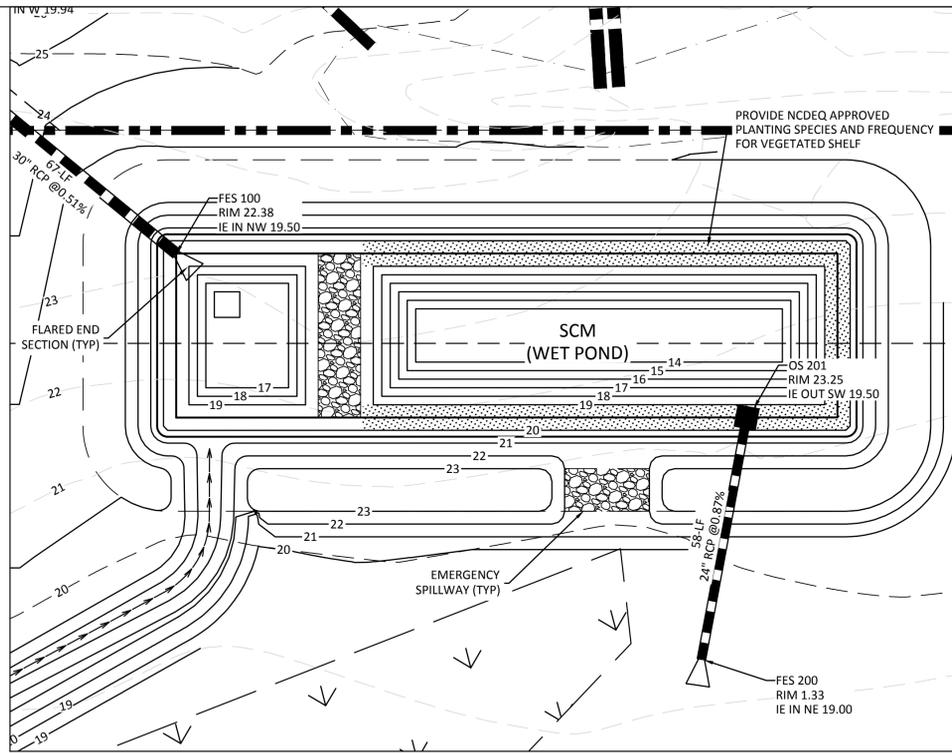
**SCM CONSTRUCTION SEQUENCE:**

- INSTALL STORM SEWER (INCLUDING OUTLET STRUCTURE AND PIPES) PRIOR TO EXCAVATING DETENTION BASIN.
- EXCAVATE DETENTION BASIN. PROVIDE WHATEVER DE-WATERING MEASURES ARE NEEDED FOR CONSTRUCTION.
- PROVIDE WHATEVER TEMPORARY SEEDING IS NEEDED TO STABILIZE BOTTOM AND SLOPES.
- USE AS A TEMPORARY SEDIMENT BASIN UNTIL ENTIRE PROJECT DENUDEED AREA HAS BEEN STABILIZED WITH VEGETATION.
- AFTER SITE STABILIZATION, REMOVE ALL SEDIMENT, RE-CONTOUR POND IF NECESSARY.
- LANDSCAPE STORM WATER WETLAND PER PLANT SCHEDULE LISTED ON THIS SHEET.
- PROVIDE AS-BUILTS OF BASIN. AS-BUILTS SHALL BE DONE PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY. SEE EARTHWORK SPECIFICATIONS FOR ADDITIONAL AS-BUILT INFORMATION.

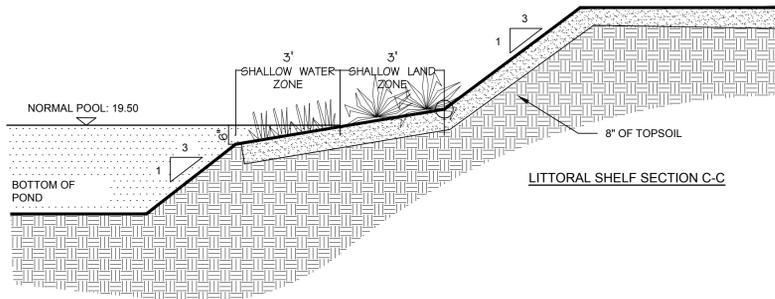
**AS-BUILT SURVEY**

AFTER COMPLETION OF CONSTRUCTION OF THE PROJECT, AN ASBUILT SURVEY OF THE STORM DRAINAGE SYSTEM (INCLUDING THE BMP PONDS WITH OUTLET STRUCTURE INFORMATION) SHALL BE COMPLETED AND SUBMITTED TO THE DESIGNER FOR REVIEW. CONTRACTOR SHALL INCLUDE THIS COST IN THEIR BID. DESIGN MODIFICATIONS TO PONDS AS A RESULT OF IMPROPER CONSTRUCTION AND CITY REVIEW WILL BE AT THE EXPENSE OF THE CONTRACTOR.

**BASIN CONVERSION:**  
DETENTION BASIN SHALL BE USED AS EROSION CONTROL BASIN DURING CONSTRUCTION. DO NOT CONVERT EROSION CONTROL BASIN UNTIL THE MAJORITY OF THE CONTRIBUTING BASIN IS STABILIZED. PRIOR TO CONVERSION, EXCAVATE ACCUMULATED SEDIMENT AND SPREAD ON-SITE. ENSURE POND IS EXCAVATED TO DESIGN ELEVATIONS AS SHOWN ON PLAN PRIOR TO PLANTING AND FINISHING THE BASINS.

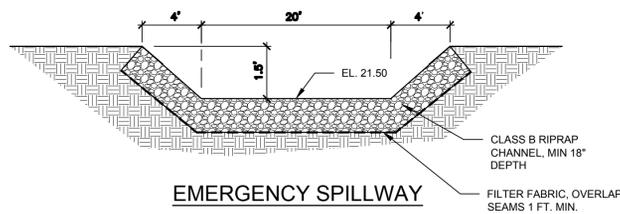
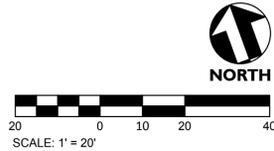


POND PLAN VIEW

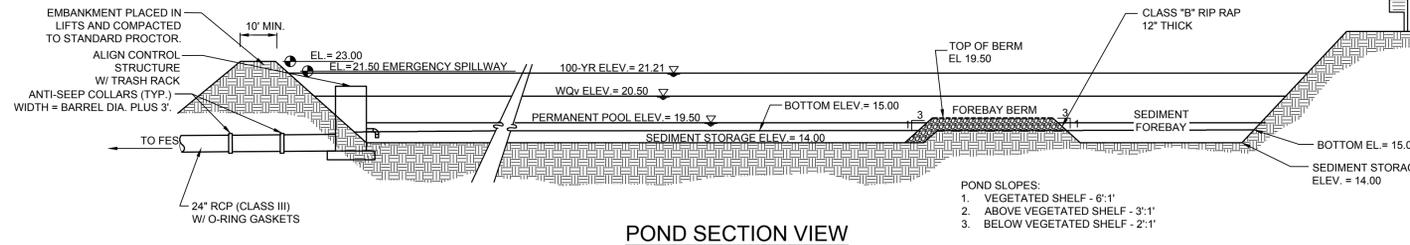


**NOTES:**

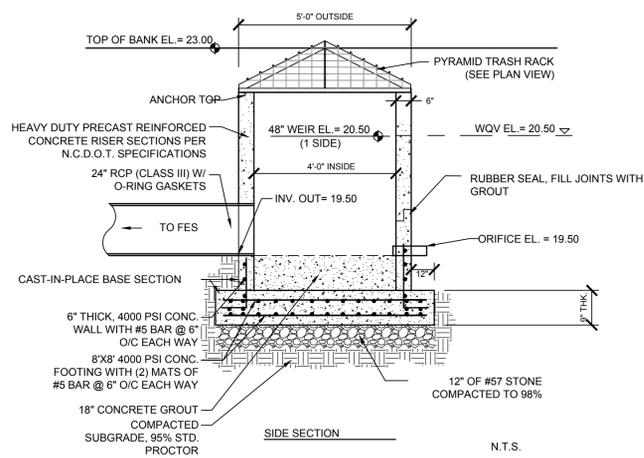
- CONSTRUCTION SHALL COMPLY WITH WETLAND PLANT SPECIFICATIONS H.A.R.P. SELECTION AND NCDEQ REQUIREMENTS.
- WHEREVER POSSIBLE, HARVEST PLANTS FROM LOCAL AREAS WITH PERMISSION.
- PLANTS MAY BE BARE ROOT OR CONTAINERIZED.



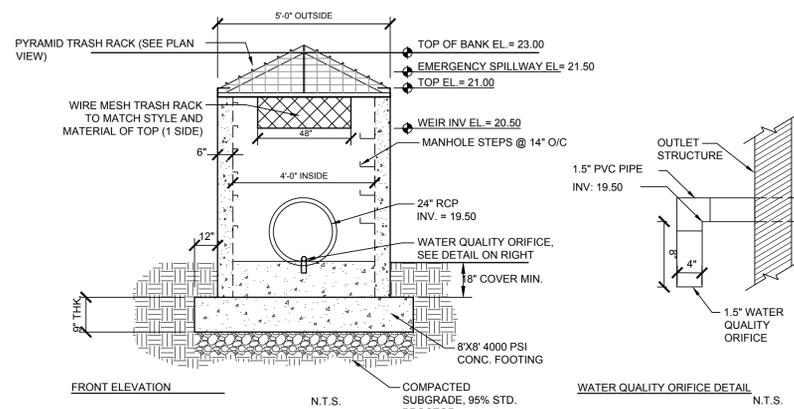
EMERGENCY SPILLWAY



POND SECTION VIEW



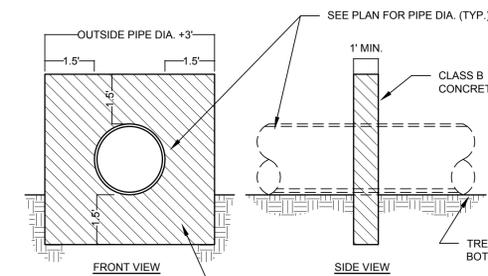
PRECAST OUTLET STRUCTURE ALLOWED WITH APPROVED SHOP DRAWING.



**POND CONSTRUCTION:**

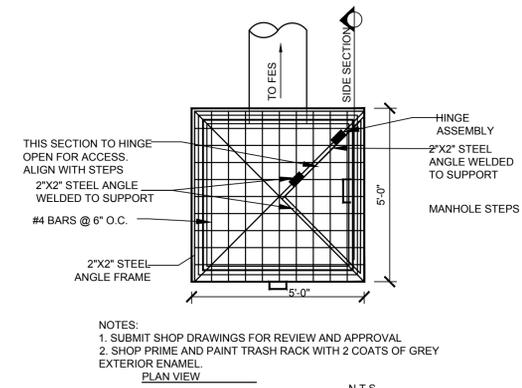
- UPPER SIX (6") INCHES OF FINE GRAINED SOILS (ML, MH, CL, CH, SC). IF GRANULAR SOILS ARE ENCOUNTERED IN THE PROPOSED POND BOTTOM AND SIDES UP TO 2' ABOVE WATER LEVEL, THEY ARE TO BE UNDERCUT SIX (6") INCHES AND REPLACED WITH THE AFOREMENTIONED FINE SOILS.
- EXISTING MATERIALS IN THE POND BOTTOM AND SIDES SHALL BE CONDITIONED TO ACHIEVE A PERMEABILITY (K) RATE OF 1X10<sup>-6</sup> CM/S IN ORDER TO MAINTAIN THE REQUIRED NORMAL POOL ELEVATION.
- THE UPPER SIX (6") INCHES OF SOIL IS TO BE SCARIFIED AND COMPACTED TO A MINIMUM OF NINETY-EIGHT (98%) OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY. MOISTURE CONTENT OF SOILS SHALL BE ADJUSTED TO WITHIN TWO (2) TO SIX (6) PERCENT WET OF OPTIMUM MOISTURE

OUTLET STRUCTURE



**NOTES:**

- SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL.
- CONTRACTOR SHALL PROVIDE SUITABLE FORMING (TO BE REMOVED) TO CONTAIN CONCRETE FOR PROPER SHAPE AND DIMENSIONS.
- PLACE ANTI-SLEEP COLLARS AT LOCATIONS AND SPACING SHOWN ON SAND FILTER / DRY DETENTION DETAILS.
- ANTI-SLEEP COLLARS SHOULD BE FORMED AND INSPECTED PRIOR TO POURING.



**Bulldog Commercial**  
1834 Carver Drive  
Rocky Point, North Carolina

Project no: 17.000634  
Date: 05.05.2025  
Revisions:

**FINAL DESIGN  
NOT FOR  
CONSTRUCTION**

Sheet Title:

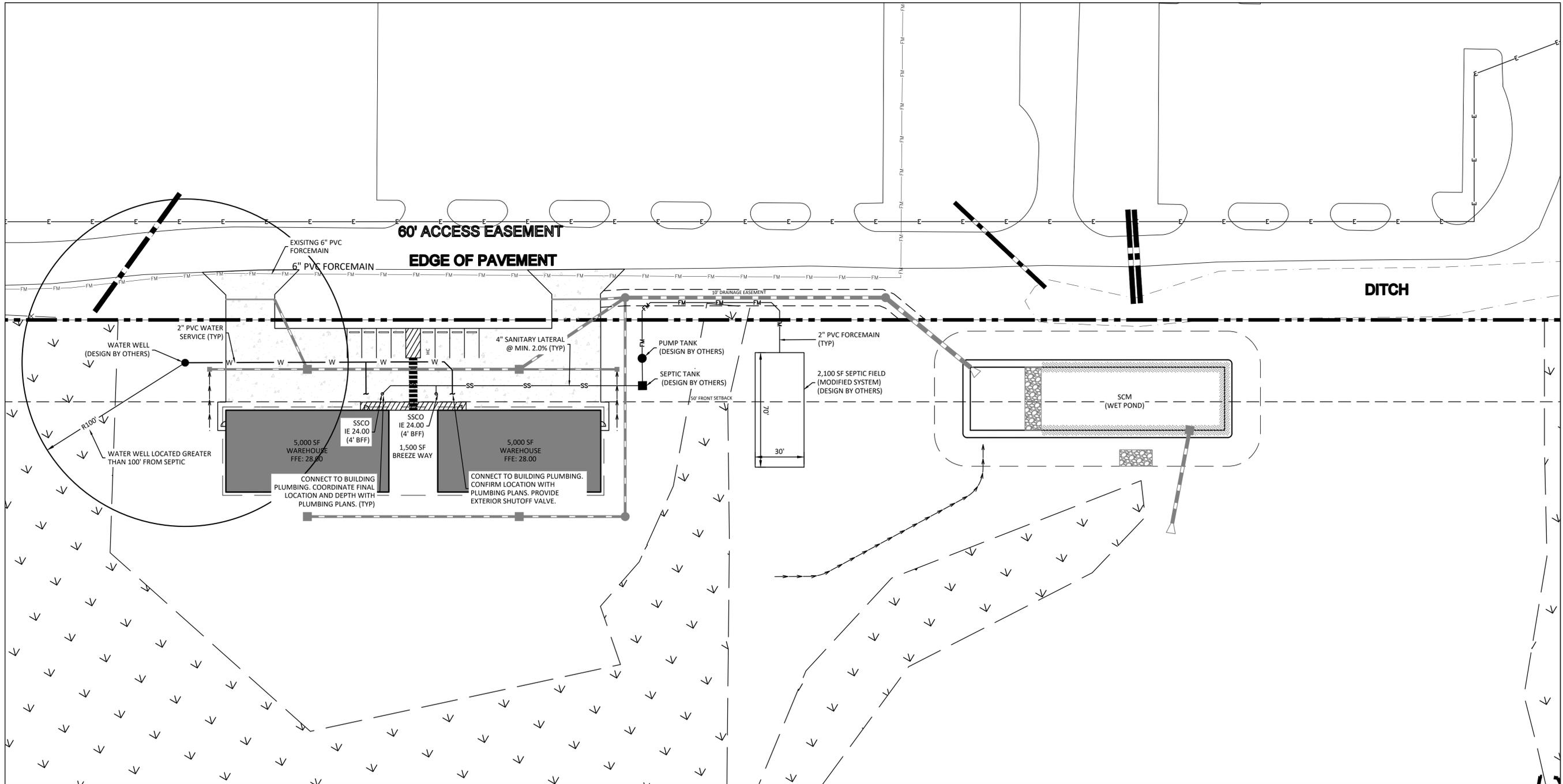
WET POND 01  
DETAILS

Sheet No:  
C304



Know what's below.  
Call before you dig.

Y:\Chalder\17000634\00-CD\17000634-00-CD\17000634-MASTER.dwg



**UTILITY NOTES:**

1. SEPTIC FIELD AND WATER WELL PLACEMENT SHOWN SCHEMATICALLY FOR REFERENCE ONLY. ON-SITE SEPTIC FIELD TO BE DETERMINED BY ENVIRONMENTAL HEALTH DEPARTMENT AND DESIGN BY OTHERS.

**GENERAL NOTES:**

1. SEE SHEET C002 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET C100 FOR EXISTING CONDITIONS AND DEMOLITION PLAN.
3. SEE SHEET C200 AND C201 FOR SITE PLAN.

**Bulldog Commercial**

1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

Sheet Title:

UTILITY PLAN

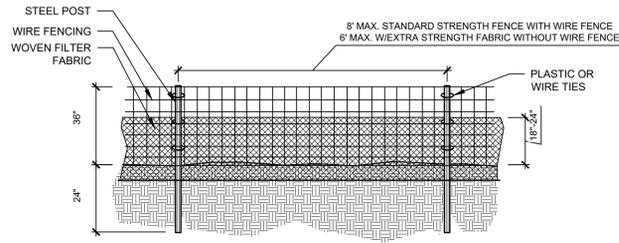
Sheet No:

**C400**



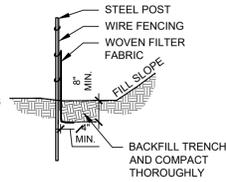
Know what's below.  
 Call before you dig.





**GENERAL NOTES:**

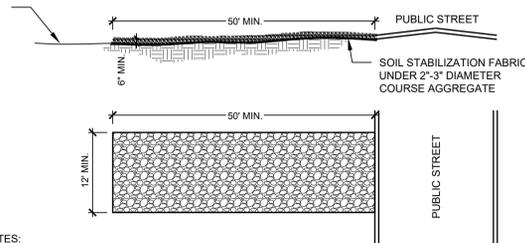
1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE MESH SHALL BE MIN. 14 GAGE WITH MAXIMUM 6" OPENINGS.
7. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE (WITHIN 5 FT.) WHEN GRADING IS ADJACENT TO SWIM BUFFERS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES).



**MAINTENANCE NOTES:**

1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3. 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.
4. 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**  
NCDEQ STD. 6.62



**NOTES:**

1. A STABILIZED ENTRANCE PAD OF 2'-3" COURSE AGGREGATE SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE MAY BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
6. SOIL STABILIZATION FABRIC (AS SPECIFIED BY THE DESIGNER) SHALL BE USED.

**CONSTRUCTION SPECIFICATIONS:**

1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

**MAINTENANCE:**

1. MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED OR TRACKED ONTO TO PUBLIC ROADWAYS.

**2 Temporary Gravel Construction Entrance**  
NCDEQ STD. 6.06

**TEMPORARY SEEDING RECOMMENDATIONS FOR FALL**

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

**SEEDING DATES**  
MOUNTAINS-AUG. 15 - DEC. 30  
COASTAL PLAIN AND PIEDMONT-AUG. 15 - DEC. 30

**SOIL AMENDMENTS**  
FOLLOW SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

**MULCH**  
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

**MAINTENANCE**

REPAIR AND RE-FERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE (PIEDMONT AND COSTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

**TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER**

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
GERMAIN MILLET	40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

**SEEDING DATES**  
MOUNTAINS-MAY 15 - AUG. 15  
PIEDMONT-MAY 1 - AUG. 15  
COASTAL PLAIN-APR. 15 - AUG. 15

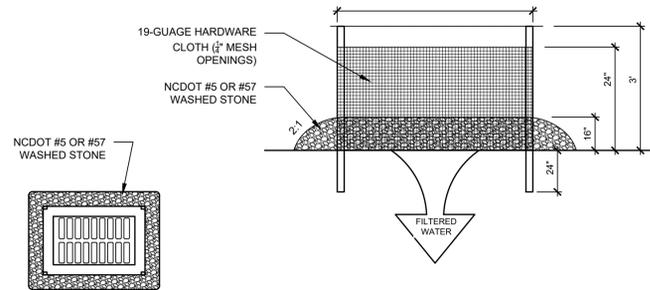
**SOIL AMENDMENTS**  
FOLLOW SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

**MULCH**  
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING 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.

**3 Seeding Specifications for Temporary Erosion Control**  
NCDEQ STD. 6.10



**CONSTRUCTION SPECIFICATIONS**

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POST EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAP OF WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUND COVER.

**MAINTENANCE**

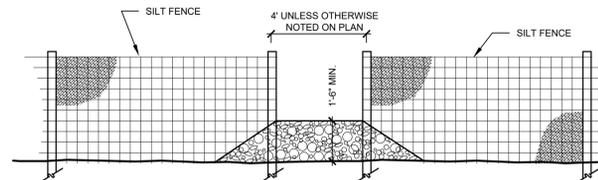
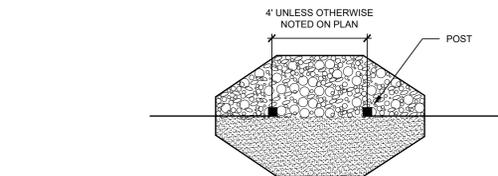
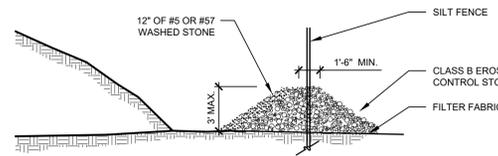
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

**REFERENCES**

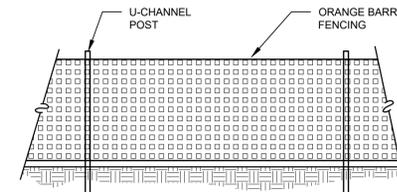
INLET PROTECTION  
6.52, BLOCK AND GRAVEL INLET PROTECTION  
6.54, ROCK DOUGHNUT INLET PROTECTION

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROADS AND STRUCTURES

**4 Hardware Cloth and Gravel Inlet Protection**  
NCDEQ STD. 6.51



**5 Temporary Stone Dam in Silt Fence Opening**  
N.T.S.



**NOTES**

1. CONTRACTOR TO INSTALL AND MAINTAIN ORANGE BARRIER FENCING AROUND EXISTING TREES WHERE DELINEATED ON PLAN.
2. NO PARKING OF EQUIPMENT OR MATERIALS SHALL BE PERMITTED INSIDE THIS AREA.
3. MAINTAIN BARRIER FENCING THROUGH CONSTRUCTION. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
4. REFER TO NCDEQ STANDARDS FOR GENERAL SPECIFICATIONS REGARDING TREE PROTECTION.
5. 6" MINIMUM WIDTH FOR 2" CAL. TREES OR SMALLER.
6. ONE FOOT OF LINEAR DISTANCE FROM THE TREE TRUNK FOR EACH INCH OF TRUNK DIAMETER, OR 1/2 HEIGHT OF THE TREE WHICHEVER IS GREATER UNLESS OTHERWISE SHOWN ON PLAN.

**6 Temporary Tree Protection Barricade**  
N.T.S.



**GENERAL NOTES:**

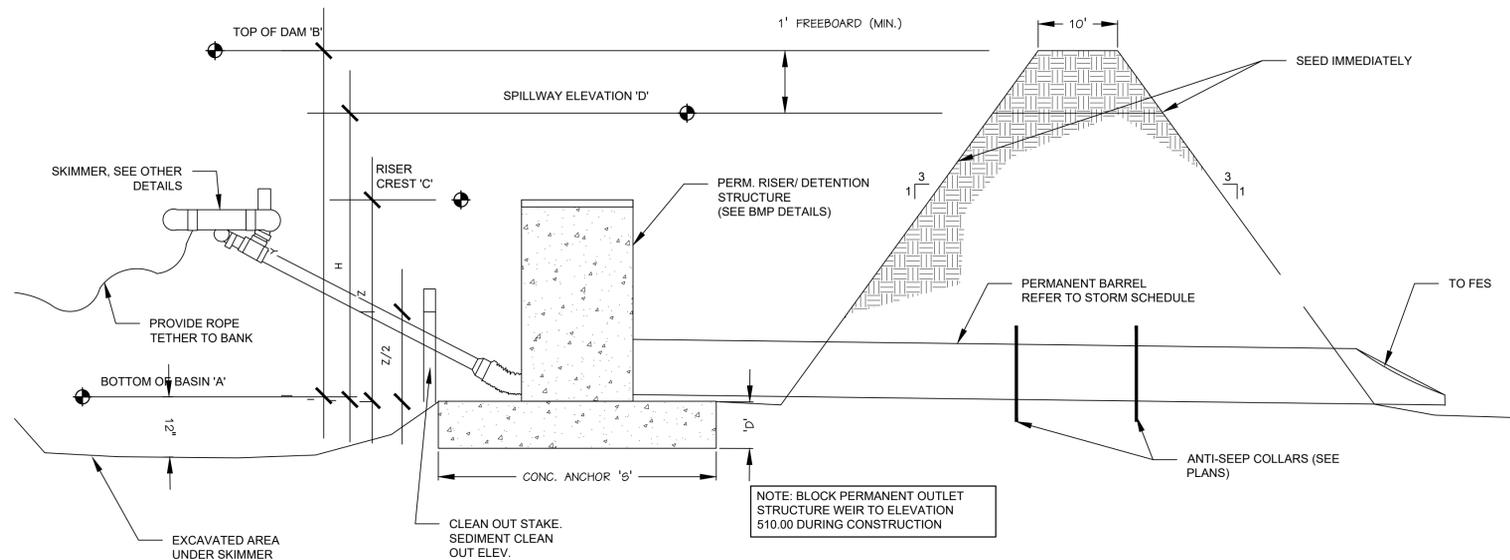
- CONSTRUCTION OPERATION SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED. CLEAR, GRUB, AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
- THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE BEING CONSTRUCTED. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVERFILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT. SPILLWAYS SHOULD NOT BE CONSTRUCTED THROUGH FILL SECTIONS. ALL SPILLWAYS SHOULD BE LINED AND/OR RIPRAPPED.
- ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER, UNLESS CERTIFIED BY REGISTERED GEOTECHNICAL ENGINEER.
- SEDIMENT BASIN EMBANKMENTS SHOULD BE PROVIDED WITH EROSION CONTROL AND STABILIZATION.
- STORAGE AREA IS SHOWN AS RECTANGULAR FOR ILLUSTRATIVE PURPOSES ONLY. AND MAY BE CONSTRUCTED IN ANY SHAPE PROVIDED THE MINIMUM STORAGE VOLUME REQUIREMENT IS MET. THE BASIN SHOULD ALSO BE ORIENTED SUCH THAT THE FILTER AND THE MAIN FLOW OF WATER AND SEDIMENT ARE ON OPPOSITE ENDS OF THE LONGER BASIN DIMENSIONS.
- REQUIRED STORAGE IS 3600 CUBIC FEET OF STORAGE VOLUME PER ACRES OF DISTURBED AREA. MINIMUM REQUIRED SURFACE AREA REQUIRED SHALL BE 435 ST PER CFS OF Q10 PEAK INFLOW.
- THE LENGTH OF THE STONE OUTLET (SPILLWAY) IS TO BE BASED ON A 10 YEAR STORM. EARTHEN SPILLWAYS-INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADES, 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 EDGES AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS.
- 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 IN UPPER END OF THE TRAP.
- 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
- WHENEVER TOPOGRAPHY ALLOWS, THE BASIN LENGTH SHOULD BE TWICE (2X) THE BASIN WIDTH, TO ALLOW FOR SETTLING. BAFFLES SHOULD BE PROVIDED IN THE BASIN, BASED ON SECTION 6.65.
- CLEANOUT STAKES SHALL BE PLACED IN ALL SEDIMENT BASINS AT THE LOW POINT IN THE BASIN. THE STAKES SHALL BE MARKED SHOWING THE HALF FULL, CLEANOUT POINT, OF THE BASIN.
- SAFETY FENCING 3' HIGH SHOULD BE PLACED AROUND ALL SEDIMENT TRAPS THAT ARE IN VICINITY TO NON-CONSTRUCTION PEDESTRIAN TRAFFIC AND NOT ALREADY PROTECTED BY FENCING.
- FOR SLOPES GREATER THAN 10' IN LENGTH AND PROTECTED BY SILT FENCE AT THE TOE OF THE SLOPE, SLOPE TERRACING WILL BE REQUIRED.
- THE BERM ON SEDIMENT BASINS SHALL BE SEEDED ONCE FINAL GRADE HAS BEEN REACHED. THE SILT FENCE AND BASIN MAY BE REMOVED IF PERMISSION HAS BEEN GRANTED BY NCDEQ LAND DEVELOPMENT INSPECTOR AFTER THE GRASS HAS GERMINATED AND STABLE GROUND HAS BEEN ESTABLISHED.
- ALL EROSION CONTROL MEASURES ARE TO BE CONSTRUCTED TO THE STANDARDS DOCUMENTED IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES, EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

**MAINTENANCE**

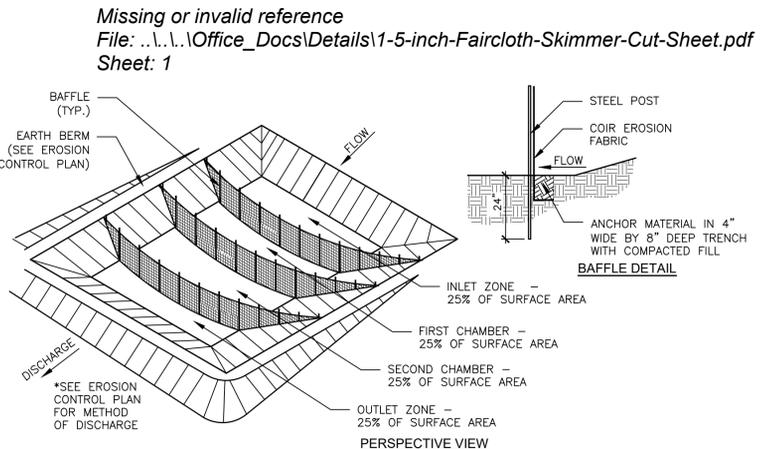
- INSPECT SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR 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.

**SKIMMER CONSTRUCTION SPECIFICATIONS**

- SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SKIMMING DEVICE FROM SETTLING INTO THE MUD BY EXCAVATING A SHALLOW PIT UNDER THE SKIMMER OR PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.
- PLACE THE BARREL (TYPICALLY 4-INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE OR 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.
- ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURES INSTRUCTIONS, OR AS DESIGNED.
- 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.



BASIN NO.	DRAINAGE AREA (AC.)	DENuded AREA (AC.)	Q10 (CFS)	BASIN VOLUME		BASIN SURFACE AREA		CLEANOUT DEPTH (FT.) H/2	SPILLWAY LENGTH (FEET)	ELEV. A	ELEV. B	ELEV. C	ELEV. D	SKIMMER Ø (IN.)	SKIMMER ORIFICE DIA. (IN.)
				REQUIRED (CU. FT.)	PROVIDED (CU. FT.)	REQUIRED (SQ. FT.)	PROVIDED (SQ. FT.)								
1	0.93	0.93	2.66	1,674	3,890	1,311	2,412	0.75	N/A	15.00	23.00	20.50	N/A	1.50	1.25



- CONSTRUCTION SPECIFICATION**
- GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
  - INSTALL POSTS ACROSS THE WIDTH OF THE SEDIMENT TRAP, SEDIMENT BASIN AND/OR SKIMMER BASIN AS SHOWN.
  - STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES, SPACED A MAXIMUM OF 4 FEET APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.
  - BAFFLE MATERIAL SHALL BE 700 G/M<sup>2</sup> COIR EROSION FABRIC.
  - INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES THAT DIVIDES THE BASIN IN THIRDS.
  - ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
  - WRAP BAFFLE MATERIAL OVER THE TOP WIRE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE, OR STAPLES. USE 3 TIES PER POST ALL WITHIN TOP 8" OF FABRIC.
  - THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH 8" DEEP. IN LIEU OF EXCAVATING A TRENCH, THE FABRIC MAY BE INSTALLED WITH A PIECE OF EQUIPMENT SPECIFICALLY DESIGNED TO SLICE THE GROUND WITH A DISC.
  - DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.
- MAINTENANCE**
- INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
  - BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
  - REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

**2 Temporary Porous Baffle**  
NCDEQ STD. 6.66

**1 Temporary Sediment Basin**  
NCDENR STD. 6.61



**Bulldog Commercial**  
1834 Carver Drive  
Rocky Point, North Carolina

Project no: 17.000634  
Date: 05.05.2025  
Revisions:

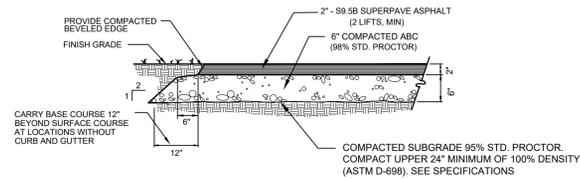
**FINAL DESIGN  
NOT FOR  
CONSTRUCTION**

Sheet Title:

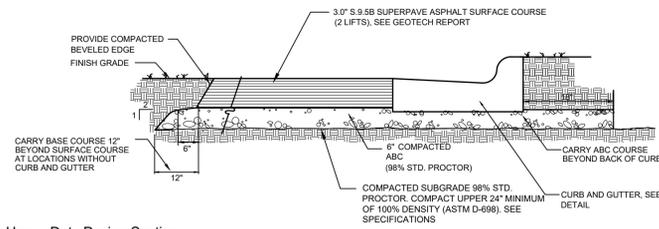
**EROSION  
CONTROL  
DETAILS**

Sheet No:  
**C502**

Y:\Clients\17000634\05\_17\000634\_00\_CD\17000634\_00\_CD\17000634 - MASTERS.dwg



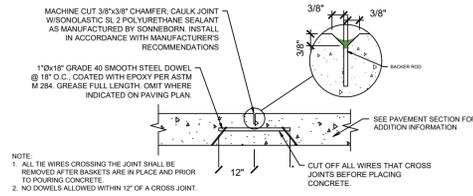
**Standard Duty Paving Section**



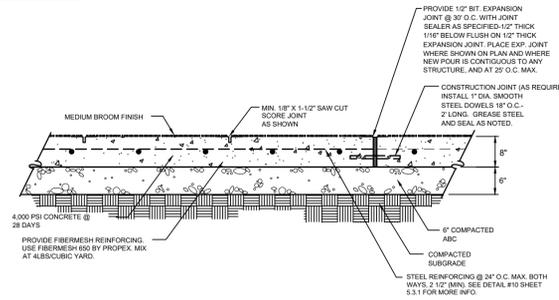
**Heavy Duty Paving Section**

- NOTES**
1. PAVEMENT RECOMMENDATIONS PER GOETECH REPORT BY ECS SOUTHEAST, LLP. ECS PROJECT NO. 22-32186 DATED SEPTEMBER 09, 2022.
  2. PERFORM COMPACTION IN ACCORDANCE WITH SECTION 520 OF THE MOST RECENT VERSION OF THE NCDOT STANDARD SPECIFICATION FOR ROADWAYS AND STRUCTURES.

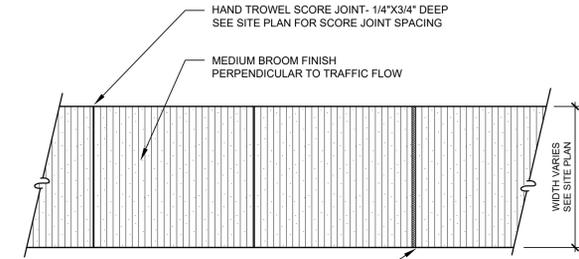
**1 Asphalt Pavement Detail**  
 N.T.S.



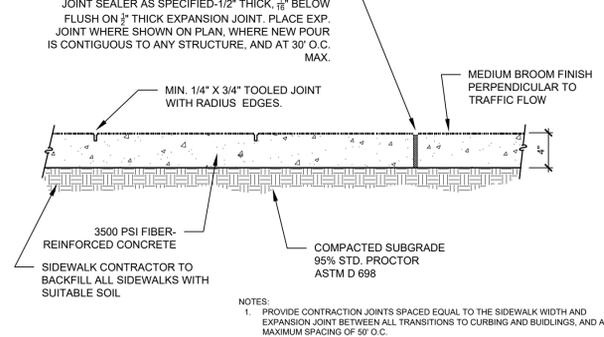
**CONTRACTION JOINT DETAIL**



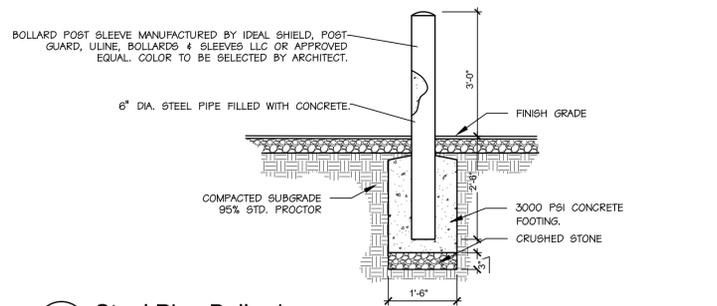
**2 Concrete Paving - Heavy Duty**  
 N.T.S.



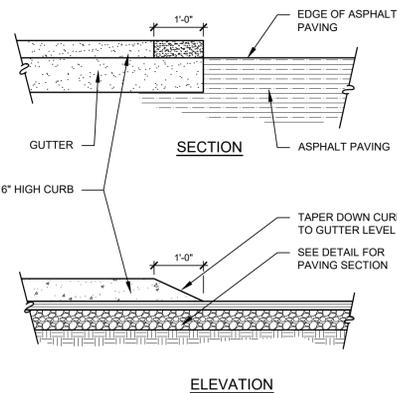
**3 Concrete Sidewalk Detail**



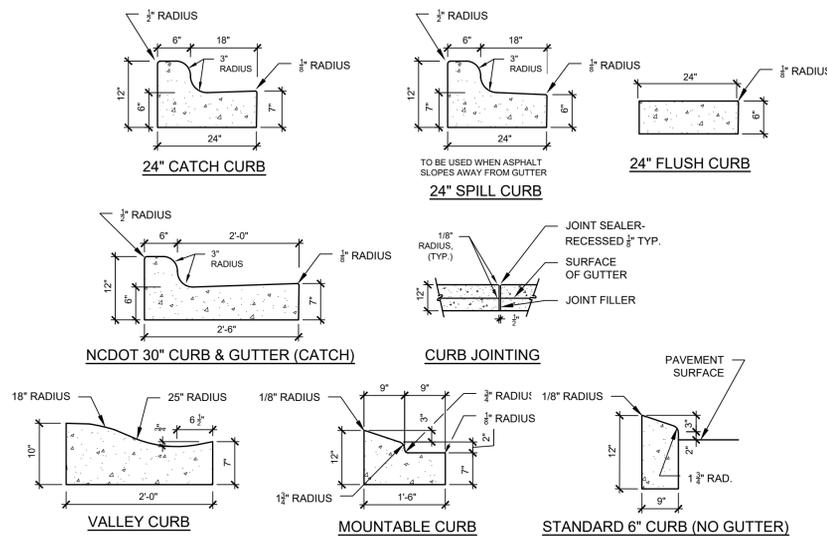
**3 Concrete Sidewalk Detail**  
 N.T.S.



**4 Steel Pipe Bollard**  
 N.T.S.

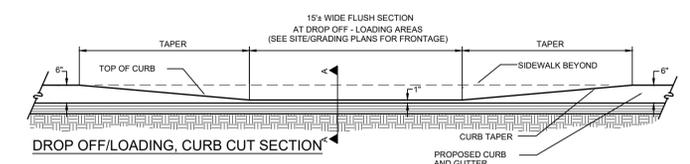
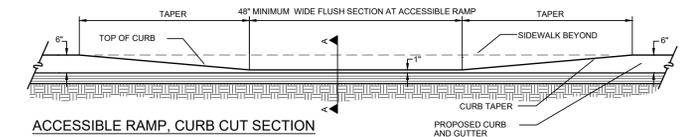
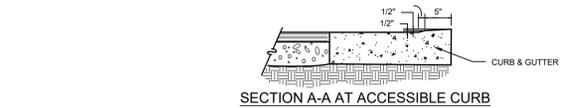


**5 Curb Taper Detail**  
 N.T.S.

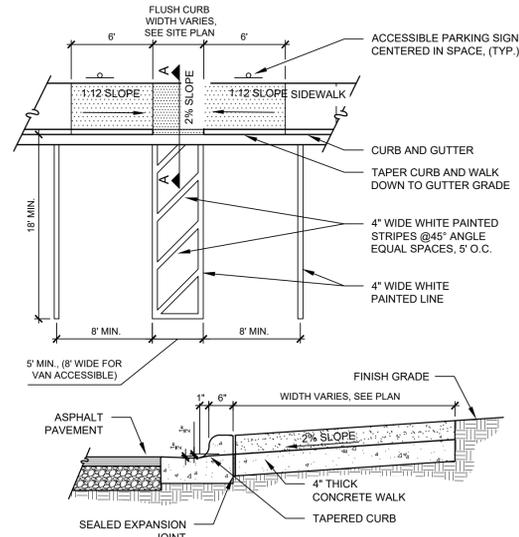


- NOTES**
1. CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS. FOR VALLEY GUTTER, A 15-FOOT SPACING MAY BE USED WHEN A MACHINE IS USED. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
  2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
  3. ALL EXPANSION JOINTS SHALL BE SPACED AT 90 FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ADJUTING SIDEWALK.
  4. TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.
  5. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
  6. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 P.S.I. IN 28 DAYS.

**6 Concrete Curb and Gutter Detail**  
 N.T.S.

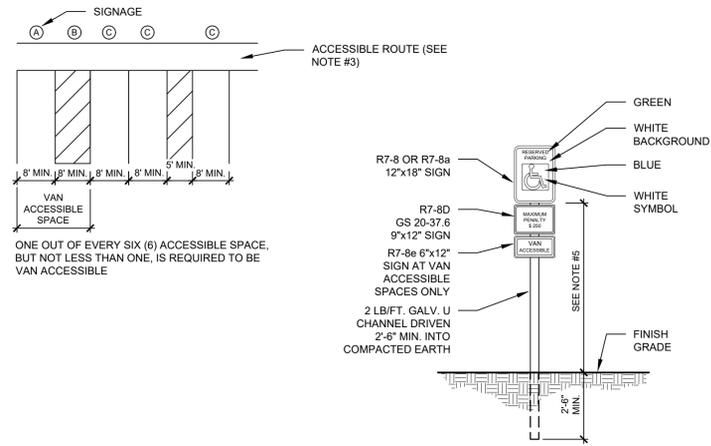
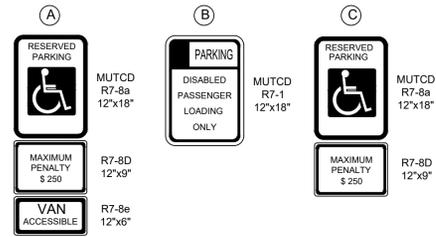


**7 Flush Curb**  
 SCALE: N.T.S.

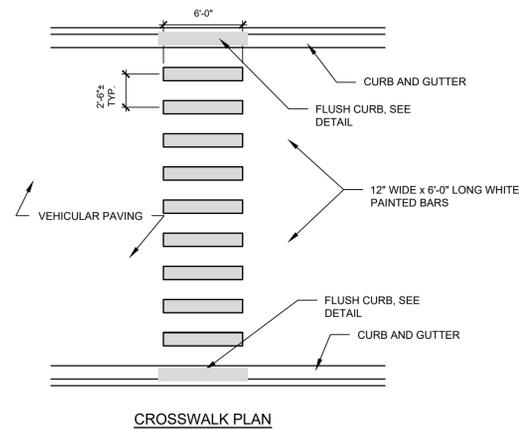
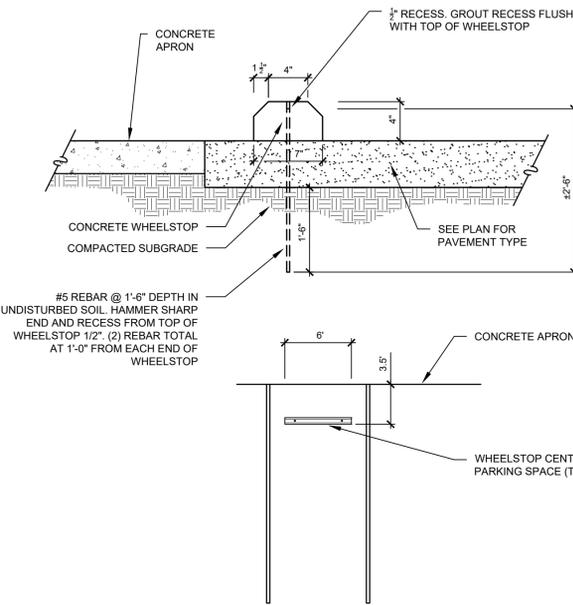


NOTES

- RAMP AND WING SLOPES SHALL NOT BE STEEPER THAN 1:12.
- GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA.
- IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.
- COORDINATE CONSTRUCTION TO COMPLY WITH LOCAL AND FEDERAL ADA STANDARDS
- ALL 12"x18" ACCESSIBLE SIGNS (R7-8a AND R7-1) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCD). MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
- REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
- REFER TO PLAN SHEETS FOR ALL GRADING AND RAMP LOCATIONS/CONFIGURATIONS.



1 Accessible Parking/Signage/Striping Detail  
N.T.S.



- NOTES
- CROSSWALK SHALL MEET 'MANUAL OF TRAFFIC CONTROL DEVICES' MIN REQ.

2 Concrete Wheelstop Detail  
N.T.S.

3 Painted Crosswalk  
N.T.S.

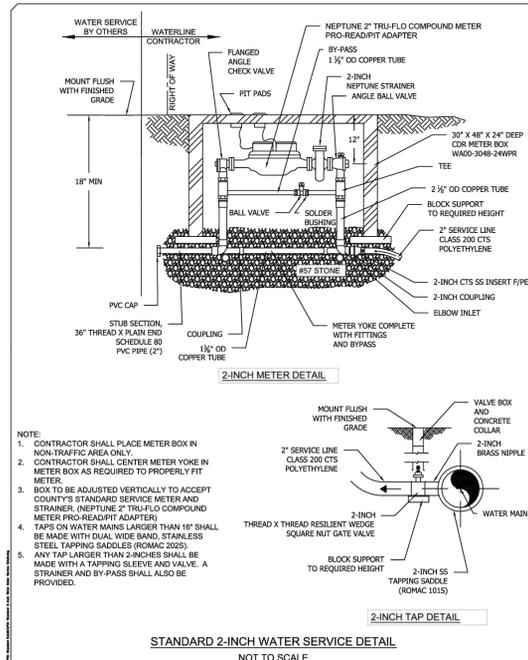
PCU STANDARD NOTES

1. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE BEGINNING WORK. THE MEETING MUST BE SCHEDULED WITH PENDER COUNTY UTILITIES (PCU) AT LEAST ONE WEEK IN ADVANCE. ATTENDEES MUST INCLUDE PCU, THE UTILITY CONTRACTOR'S SUPERINTENDENT, THE SUPPLIER, AND THE CONSULTING ENGINEER.
2. ALL MATERIALS USED SHALL CONFORM TO PENDER COUNTY UTILITIES REQUIREMENTS. NON-CONFORMING MATERIAL WILL NOT BE ACCEPTED FOR FINAL CERTIFICATION.
3. ALL PIPE SHALL BE C900 CR18 PVC, UNLESS OTHERWISE NOTED (SEE PCU STANDARD DETAIL). PCU MUST APPROVE THE USE OF DIP IN THE FIELD BEFORE INSTALLATION. PIPE SHOULD NEVER BE UNDER THE ROADWAY, PARKING LOT, OR SIDEWALKS. PENDER COUNTY UTILITIES DOES NOT ALLOW SIZE-ON-SIZE TAPS.
4. PCU STANDARD WATERLINE PIPE RESTRAINING METHOD IS MEGA LUGS. AT A MINIMUM ALL FITTINGS, VALVES, ETC. MUST BE RESTRAINED (SEE PCU STANDARD DETAIL).
5. PCU MUST INSPECT CASING INSTALLATIONS PRIOR TO BACKFILL. PCU MUST WITNESS PRESSURE TESTS, AND WITHDRAWAL OF BACTERIOLOGICAL SMPAPLES. CONTACT PENDER COUNTY UTILITIES INSPECTOR TO SCHEDULE.
6. CLOSE-OUT DOCUMENTS WHICH MUST BE RECEIVED PRIOR TO PCU SIGNING THE NCDCEQ PWSS APPLICANT CERTIFICATION INCLUDE: BACTERIOLOGICAL TESTS, PRESSURE TESTS, DEED OF DEDICATION, AFFIDAVIT/RELEASE OF LIENS, WARRANTY, AND RECORDS DRAWINGS (PDF & GIO REFERENCED CAD).
7. AN 18-MONTH WARRANTY PERIOD APPLIES TO ALL WATERLINE CONSTRUCTION. THIS WARRANTY PERIOD DOES NOT BEGIN UNTIL FINAL APPROVAL OF THE SYSTEM HAS BEEN RECEIVED FROM NCDCEQ PWSS.

PENDER COUNTY UTILITIES  
605 E FREMONT STREET  
PO BOX 995, BURGAW, NC 28425



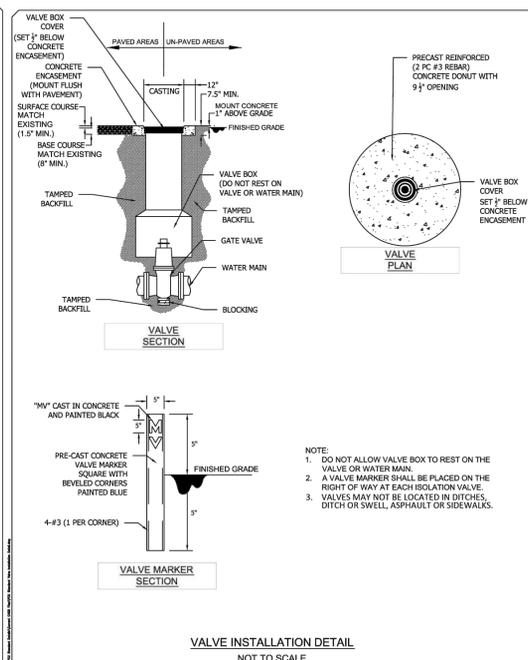
STANDARD NOTES  
PCU WATER SYSTEMS  
VERSION #4 - OCTOBER 2023



PENDER COUNTY UTILITIES  
605 EAST FREMONT STREET  
BURGAW, NC 28425



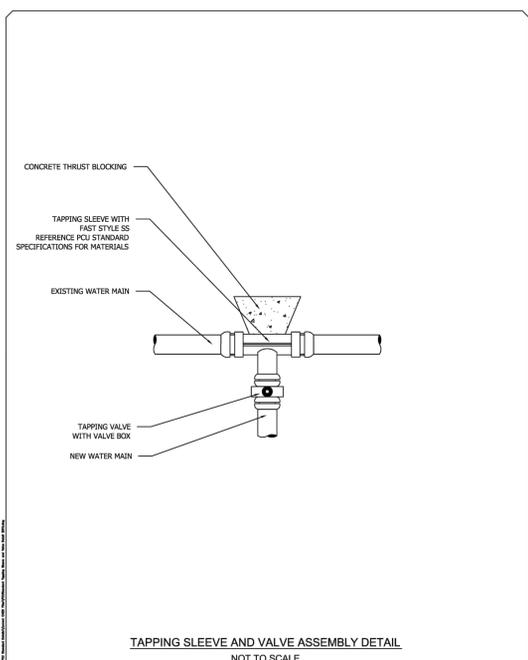
2-INCH WATER SERVICE  
STANDARD DETAIL  
VERSION #1 - AUGUST 2010



PENDER COUNTY UTILITIES  
605 EAST FREMONT STREET  
BURGAW, NC 28425



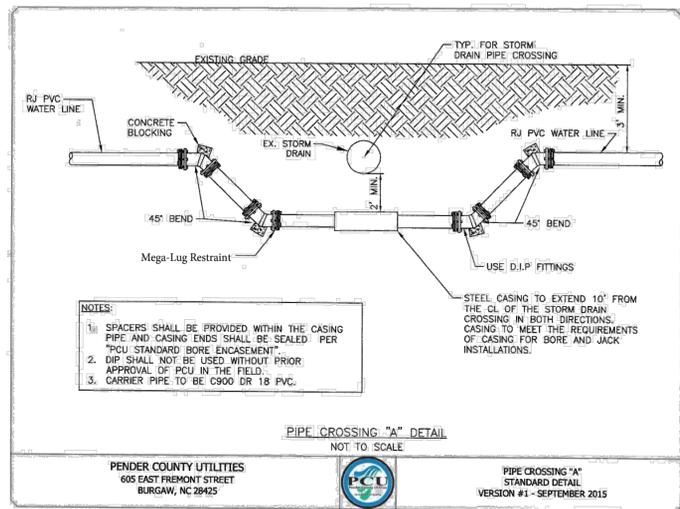
VALVE INSTALLATION  
STANDARD DETAIL  
VERSION #3 - JUNE 2016



PENDER COUNTY UTILITIES  
605 EAST FREMONT STREET  
BURGAW, NC 28425



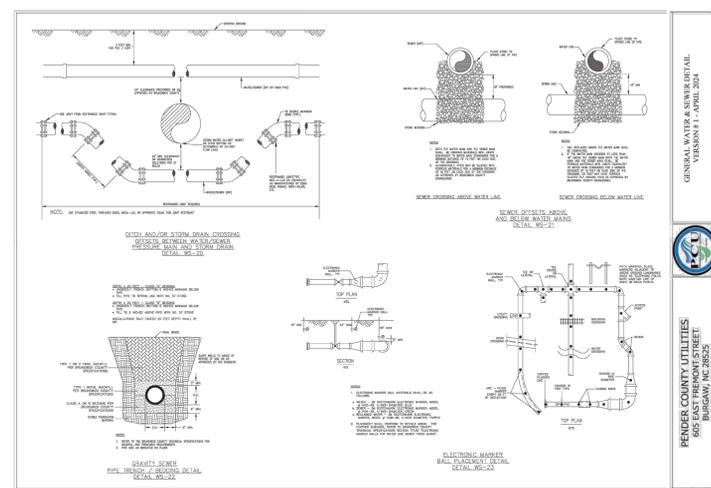
TAPPING SLEEVE AND VALVE ASSEMBLY  
STANDARD DETAIL  
VERSION #3 - FEB 2016



PENDER COUNTY UTILITIES  
605 EAST FREMONT STREET  
BURGAW, NC 28425



PIPE CROSSING "A"  
STANDARD DETAIL  
VERSION #1 - SEPTEMBER 2015



PENDER COUNTY UTILITIES  
605 EAST FREMONT STREET  
BURGAW, NC 28425



**LANDSCAPE NOTES**

- PLANT MATERIAL**
- MINIMUM TREE SIZE AT PLANTING IS 3" CALIPER DBH AND 8-10' FEET TALL FOR SINGLE-STEM CANOPY TREES. ALL MULTI-STEM PLANTS MUST BE TREE FORM, MAXIMUM 3 TO 5 TRUNKS, AND MINIMUM 10' TALL. ALL UNDERSTORY TREES AT THE TIME OF PLANTING SHALL HAVE A MINIMUM 2" CALIPER DBH AND AN AVERAGE MINIMUM HEIGHT OF 10 FEET.
  - ALL NEW TREES MUST HAVE STRAIGHT TRUNKS WITH STRONG CENTRAL LEADERS INTACT TO THE TOP OF THE CROWN UNLESS MULTI-STEM TREES ARE SPECIFIED. ALL TREES SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, HAVE WELL-DEVELOPED BRANCHES, BE VIGOROUS AND HAVE FIBROUS ROOT SYSTEMS. TREES WITH CO-DOMINANT BRANCHING WILL NOT BE ACCEPTED. TREES THAT HAVE BEEN SHEARED, TOPPED OR CUT BACK TO MULTIPLY THE BRANCHING STRUCTURE WILL NOT BE ACCEPTED. TREES SHALL BE FREE OF ABRASIONS, DAMAGE, DISEASE, PESTS AND CRACKS. ALL PRUNING CUTS GREATER THAN 7" DIAMETER SHALL HAVE CALLUS TISSUE FORMED PRIOR TO PLANTING. NO PRUNING CUT ON THE TRUNK SHALL BE MORE THAN ONE-HALF THE DIAMETER OF THE CENTRAL LEADER AT THE HEIGHT WHERE THE CUT WAS MADE. ROOT FLARES SHALL BE LOCATED AT GRADE. TREES WITH MORE THAN 2" OF SOIL COVERING THE ROOT BALL/FLARE FROM WILL NOT BE ACCEPTED.
  - SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 (LATEST EDITION) AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
  - ALL TREES OF A PARTICULAR SPECIES AND VARIETY SHALL BE UNIFORM IN SIZE AND CONFIGURATION.

- PLANTING REQUIREMENTS**
- PLASTIC HOSE PARTS WILL NOT BE ACCEPTED FOR TREE STAKING. SEE DETAILS AND SPECIFICATIONS FOR APPROVED STAKING METHODS/MATERIALS.
  - ALL STRAPPING, AND TOP 1/4 OF WIRE BASKET AND BURLAP MUST BE CUT AWAY AND REMOVED FROM ROOT BALL WHEN PLANTING.
  - FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 24" NEW TOPSOIL, OR TILL AND AMEND THE TOP 24" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS FOR TREES.
  - ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
  - THE TOP OF ALL ROOT BALLS FOR SHRUBS & GROUNDCOVERS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE, AS BORN TO PREVIOUS GROWING CONDITIONS.
  - ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING.
  - MULCH A MINIMUM 4 FOOT AREA AROUND EACH TREE AND - MULCH A CONTINUOUS AREA AROUND ALL SHRUB BEDS, AS INDICATED ON THE PLAN. MULCH SHALL BE 3-4" THICK. MULCH AROUND TREES SHALL BE TAPERED TOWARD TRUNK SO THAT NO MORE THAN 2" IS PLACED AT TREE TRUNK AS SHOWN ON DETAIL. SEE SPECIFICATIONS FOR TYPE.
  - SEE EROSION CONTROL PLANS FOR TEMPORARY SEEDING PLAN.
  - ALL DISTURBED AREAS SHALL BE SEEDED AND PERMANENTLY ESTABLISHED.

- UTILITY ISSUES**
- LARGE MATURING TREES MAY NOT BE PLANTED WITHIN 15' OF OVERHEAD POWER DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CALL LANDSCAPE ARCHITECT TO RESOLVE BEFORE PLANTING.
  - CONTRACTOR IS RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITIES LOCATED AND CLEARLY PAINTED WITHIN 10 DAYS OF ANY GROUND DISTURBING ACTIVITY. OWNER WILL NOT PAY FOR UTILITY REPAIRS DUE TO FAILURE TO MARK AND OBSERVE UTILITY LOCATIONS.
  - ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLANT 10' FROM ALL UNDERGROUND UTILITIES (SEWER AND STORM DRAINAGE, GAS WATER, PHONE AND ELECTRICAL LINES).

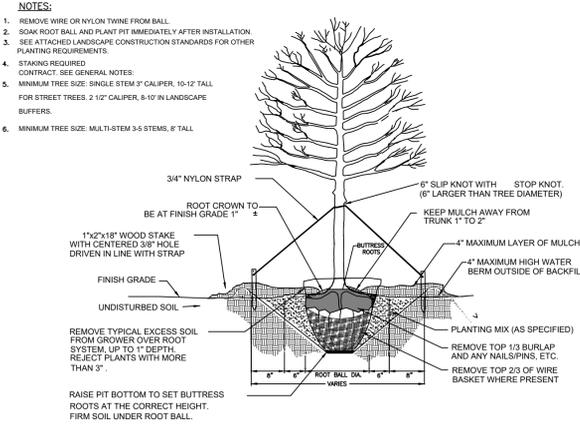
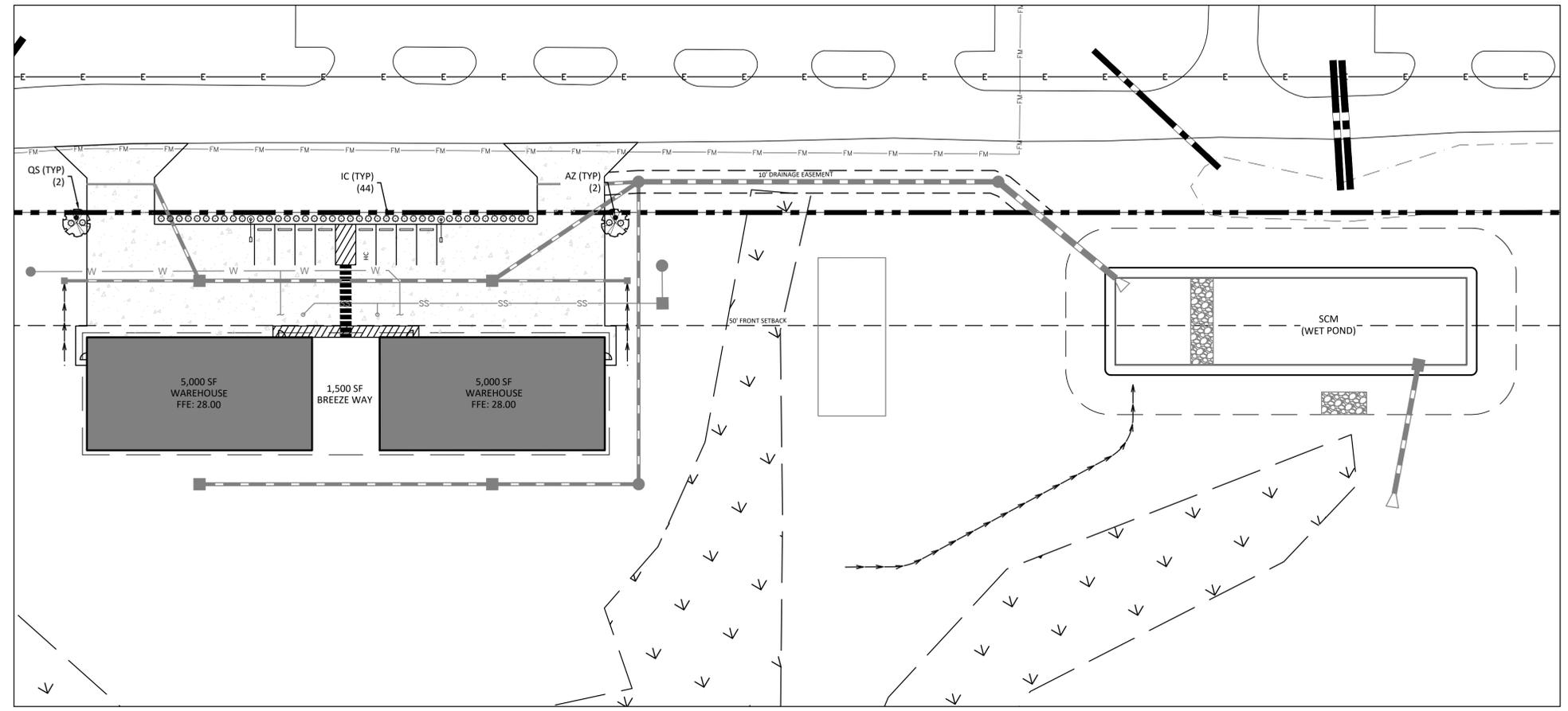
- GENERAL**
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUANTITY OF PLANTS SHOWN ON THE PLAN. ANY DISCREPANCIES BETWEEN QUANTITIES ON PLAN AND PLANT LIST SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND ANY FIELD ADJUSTMENTS OR QUANTITY ADJUSTMENTS MUST BE AUTHORIZED PRIOR TO PLANTING.
  - ALL PLANTS SHALL BE GUARANTEED TO BE IN HEALTHY CONDITION FOR ONE (1) YEAR AFTER ACCEPTANCE BY OWNER OF ALL PLANT MATERIAL.
  - ALL DISTURBED AREAS SHALL BE SEEDED AS SPECIFIED.
  - SEE EROSION CONTROL/GRADING PLAN FOR ADDITIONAL TREE PRESERVATION NOTES.
  - CONTRACTOR TO SUBMIT IRRIGATION PLAN FOR APPROVAL PRIOR TO INSTALLATION. PROVIDE PVC SLEEVES TO LANDSCAPE AREAS IF IRRIGATIONS IS NOT INSTALLED PRIOR TO INSTALLATION OF HARDSCAPE.

- SITE DATA:**
- PARCEL ID: 3222-59-2162-0000
  - PROJECT ADDRESS: 1832 CARVER DRIVE ROCKY POINT, NC 28457
  - PROPERTY DEED AND PLAT DB: 4704 PG: 2551 MB: -- PG: --
  - OWNER: BULLDOG LIGHTING AND EVENTS, INC. 504 KINGSWORTH LANE IELAND, NC 28451
  - LAND USE: CURRENT LAND USE - VACANT PROPOSED LAND USE - WAREHOUSE / FREIGHT MOVEMENT
  - ZONING - PENDER COUNTY: G1 (GENERAL INDUSTRIAL)
  - PARCEL ACREAGE: 20.16 AC
  - BUILDING SETBACKS: FRONT: 50 FEET SIDE: 25 FEET REAR: 25 FEET
  - BUILDING SIZE: 11,500 SF
  - BUILDING HEIGHT: MAX. 50 FEET

- LANDSCAPE REQUIREMENTS:**
- STREET YARDS (8.1.0) - BUFFER TYPE D: ALONG ALL BOUNDARIES  
 D-1: 15' WIDE STRIP WITH 3 CANOPY TREES AND A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE) PER 100 LINEAR FEET. OR  
 D-2: 20' WIDE STRIP WITH 2 CANOPY TREES, 2 UNDERSTORY TREES AND A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE) PER 100 LINEAR FEET. OR  
 D-3: 25' WIDE STRIP WITH 1 CANOPY TREE, 3 UNDERSTORY TREES AND A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE) PER 100 LINEAR FEET

- FOUNDATIONS PLANTING: N/A  
 BUFFERYARDS: N/A  
 TREE SURVEY: REQUIRED

- ADDITIONAL LANDSCAPE NOTES:**
- CANOPY AND UNDERSTORY TREES TO BE INSTALLED IN ACCORDANCE TO DETAIL 1 THIS PAGE.
  - SHRUBS TO BE INSTALLED IN ACCORDANCE TO DETAIL 2 THIS PAGE.
  - GROUNDCOVERS TO BE INSTALLED IN ACCORDANCE TO DETAIL 3 THIS PAGE.
  - CONTRACTOR TO SUBMIT PHOTOS OF PLANT MATERIAL AS SHOP DRAWINGS FOR APPROVAL.
  - ANY PROPOSED PLANT SPECIES SUBSTITUTIONS MUST BE REQUESTED IN WRITING TO THE DESIGNER OF RECORD FOR APPROVAL.
  - PLANTING PLAN PROVIDED REPRESENTS THE MINIMUM REQUIRED FOR COMPLIANCE WITH ZONING AND IS FOR INFORMATION ONLY. FINAL DESIGN MUST BE REVIEWED, PREPARED AND SEALED BY A NC LICENSED LANDSCAPE ARCHITECT.

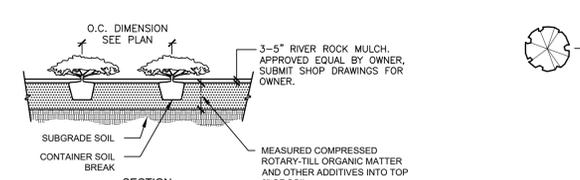
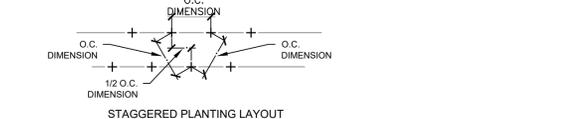


ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (AMSA, 1990, PART 1, "SHADE AND FLOWERING TREES") FOR EXAMPLE:

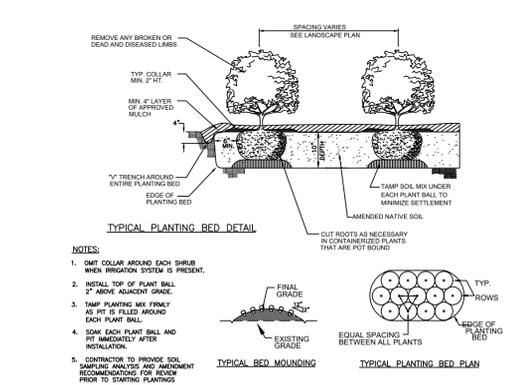
CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
2"	12-14'	15'	24"	15"
3"	14-16'	18'	24"	20"

(FOR SINGLE AND MULTI-STEM TREES)

**1 Tree Planting**  
N.T.S.



**3 Foundation Groundcover Planting Detail**  
N.T.S.



**2 Shrub Planting**  
N.T.S.

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	ROOT	CAL.	REMARKS	SIZE
QS	2	Quercus shumardii / Shumard Oak	B & B	2"-2.5" Cal.	Full Matched Specimen	8-10' HT.

SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	HEIGHT	SPREAD
IC	44	Ilex cornuta / Dwarf Burford Holly	#5 Container	4" O.C.	18-24" HT.	
AZ	2	Rhododendron 'Gumpo' Series / Satsuki Azaleas	#5 Container	4" O.C.	18-24" HT.	

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	ROOT	CAL.	REMARKS	SIZE
QS	2	Quercus shumardii / Shumard Oak	B & B	2"-2.5" Cal.	Full Matched Specimen	8-10' HT.

Y:\Chalder\17000405\17000405\_00\_Buldog\_CommercialEng\_Doc\Drawings\17000405-00-CD\17000405-00-MASTER.rvt



**Bulldog Commercial**  
 1834 Carver Drive  
 Rocky Point, North Carolina

Project no: 17.000634  
 Date: 05.05.2025  
 Revisions:

**FINAL DESIGN  
 NOT FOR  
 CONSTRUCTION**

Sheet Title:  
**LANDSCAPE PLAN**

Sheet No:  
**C600**

Know what's below.  
 Call before you dig.

SCALE: 1" = 30'