

# CONSTRUCTION PLANS

## FOR

# THE CONSERVANCY AT JORDAN LAKE

### CHATHAM COUNTY, NORTH CAROLINA

### JUNE 19, 2020

**GENERAL CONSTRUCTION NOTES**

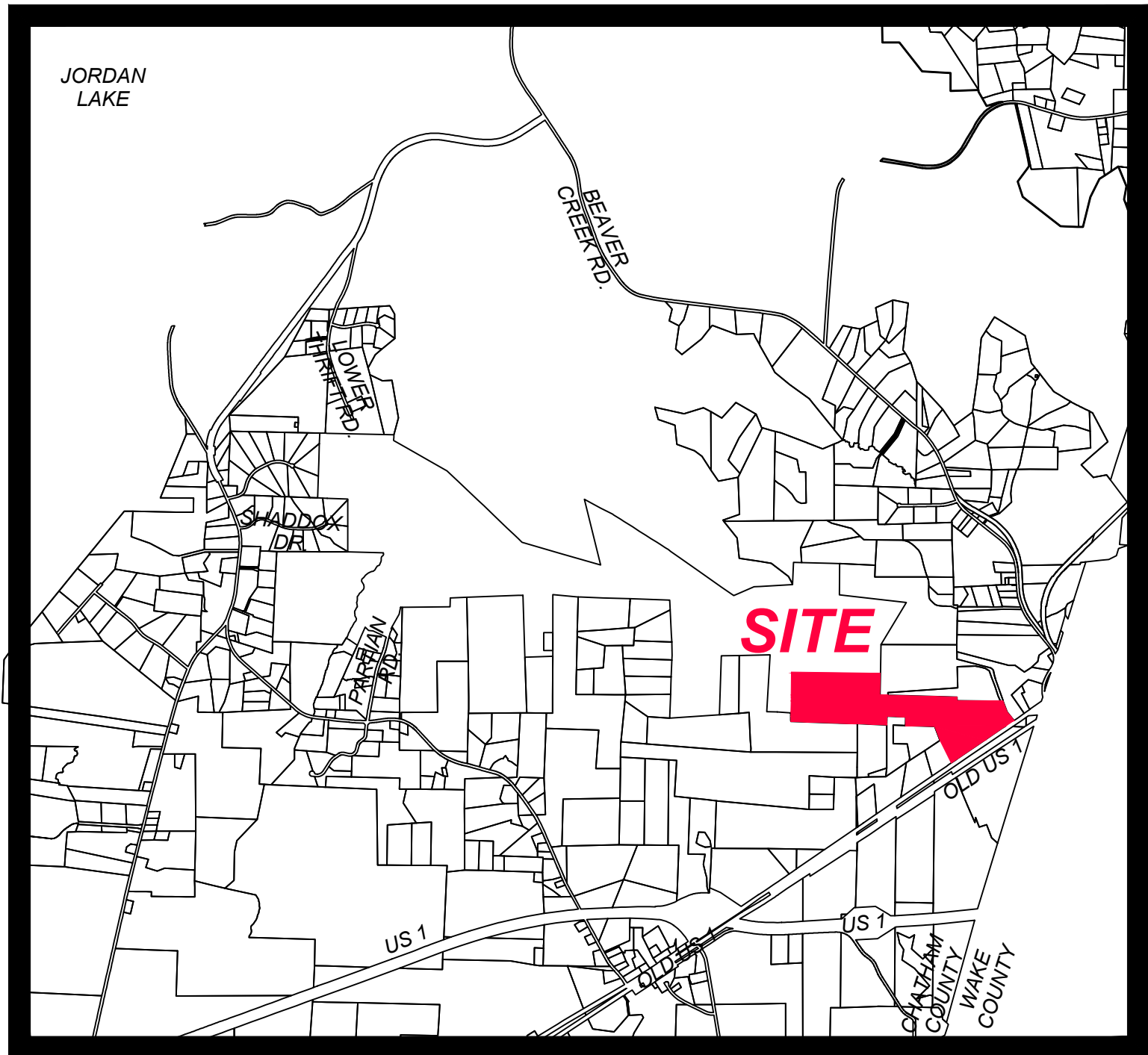
1. EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-632-4849. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
3. THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0608, MAP NUMBER 3720060800K, DATED 02/02/07 AND PANEL 9699, MAP NUMBER 3710969900K, DATED 11/17/17.
4. IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPAWNING FISH.
5. TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC. RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPING.
6. DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
7. DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
8. NCDOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL, STORMWATER BMP'S OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
9. ALL GRATED INLETS IN DITCHES ARE TO BE NCDOT STD 840.17 OR 840.26 TYPE A 2GI NARROW SLOT INLETS.
10. GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 862 OF NCDOT CURRENT ROADWAY STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH NCDOT PRIOR TO OBTAINING GUARDRAIL TO VERIFY LENGTHS FOR INSTALLATION.

**Project Data:**  
 Zoned: R-1  
 AKPAR: 68894, 5334, 5545 & 5557  
 PIN: 0609-54-0282, 0609-43-0050, 0609-34-0381 & 0609-33-1236  
 Watershed: WS-IV PA  
 Total Parcel Acreage ± 105.0 Ac.  
 Length of Streets: ± 6,250 LF

**Owner / Developer:**  
 Shaddox Creek Developers LLC  
 341 Kilmayne Dr., Suite 201  
 Cary, NC 27511

**Civil Engineer / Surveyor:**  
 CE Group, Inc.  
 301 Glenwood Avenue, Suite 220  
 Raleigh, NC 27603  
 Phone: 919.367.8790  
 Contact: Jeff Foster, PE  
 Email: jeff@cegroupinc.com

**Environmental Engineer:**  
 Environmental Services, Inc.  
 4901 Trademark Drive  
 Raleigh, NC 27610  
 Phone: 919.212.1760  
 Contact: Jeff Harbour, PWS  
 Email: jharbour@esinc.cc



**VICINITY MAP**  
 NTS NORTH

**INDEX TO DRAWINGS**

COVER	C-01
EX COND AND DEMO PLAN	EX-01
OVERALL SITE PLAN	OS-01
OVERALL EROSION CONTROL KEY	OE-01
EROSION CONTROL PLAN PH 1-3, STAGE 1	EC-01 TO EC-03
EROSION CONTROL PLAN PH1-3, STAGE 2	EC-04 TO EC-05
CONSERVANCY PARKWAY PLAN & PROFILE	RW-01 TO RW-04
RUSTIC PINE LANE PLAN & PROFILE	RW-05
TWISTED BRANCH LANE PLAN & PROFILE	RW-06
WATER QUALITY POND #1 PLAN	WQ-01
WATER QUALITY POND #2 PLAN	WQ-02
WATER QUALITY POND #3 PLAN	WQ-03
EROSION CONTROL DETAILS	ED-01 TO ED-04
EC SPECIFICATIONS	ED-05
EC MATERIALS & INSPECTION	ED-06
STORMWATER CALCS	ED-07
STORM DETAILS	SD-01
ROADWAY DETAILS	RD-01

NO.	REVISIONS	DATE
C	REVISIONS PER CHATHAM COUNTY AND NCDOT COMMENTS	06/19/20
B	REVISIONS PER CHATHAM COUNTY EC & SW COMMENTS	06/12/20
A	REVISIONS PER CHATHAM COUNTY AND NCDOT COMMENTS	06/05/20

**CE GROUP**

301 GLENWOOD AVE. 220  
 RALEIGH, NC 27603  
 PHONE: 919-367-8790  
 FAX: 919-322-0032

www.cegroupinc.com

License # C-1739



**CONSTRUCTION PLANS FOR  
 THE CONSERVANCY AT JORDAN LAKE**  
**COVER  
 CHATHAM COUNTY, NC**

Date:	JUNE 19, 2020
Scale:	N/A
Drawn:	JWA
Checked:	JRF
Project No.:	127-290
Computer Draw Name:	127-290_01-c-01_cover



**FINAL DESIGN**  
 NOT RELEASED  
 FOR CONSTRUCTION

Sheet No:  
**C-01**  
 Of \_

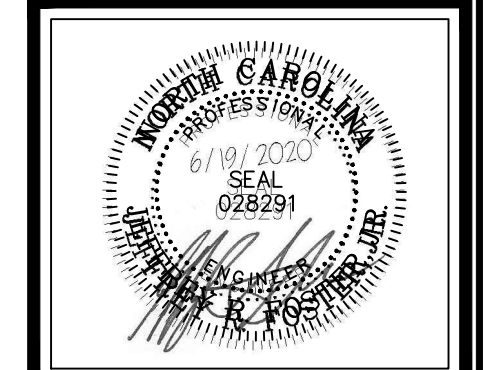


**GENERAL CONSTRUCTION NOTES**

- EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-632-4949. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0608, MAP NUMBER 372006800K, DATED 02/02/07 AND PANEL 9099, MAP NUMBER 371006900K, DATED 11/17/17.
- IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPawning FISH.
- TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC., RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPING.
- DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
- DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
- NCDDOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL STORMWATER BMP'S OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
- ALL GRATED INLETS IN DITCHES ARE TO BE NCDDOT STD 840.17 OR 840.26 TYPE A 2GI NARROW SLOT INLETS.
- GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 862 OF NCDDOT CURRENT ROADWAY STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH NCDDOT PRIOR TO OBTAINING GUARDRAIL TO VERIFY LENGTHS FOR INSTALLATION.

NO.	REVISIONS	DATE
C	REVISIONS PER CHATHAM COUNTY AND NCDDOT COMMENTS	06/19/20
B	REVISIONS PER CHATHAM COUNTY EC & SW COMMENTS	06/12/20
A	REVISIONS PER CHATHAM COUNTY AND NCDDOT COMMENTS	06/05/20

**CE GROUP**  
 301 GLENWOOD AVE. 220  
 RALEIGH, NC 27603  
 PHONE: 919-367-8790  
 FAX: 919-322-0032  
 www.cegroupinc.com  
 License # C-1739

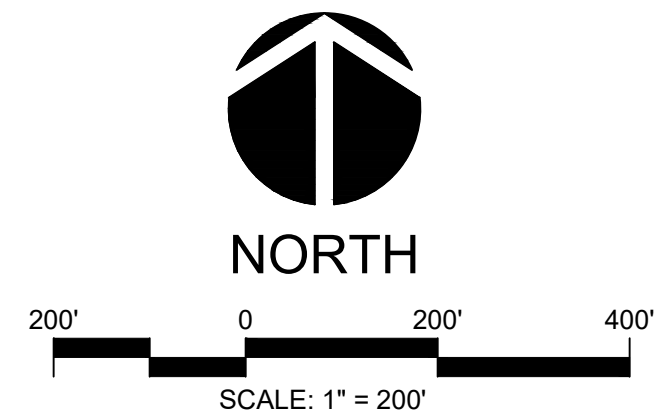


**CONSTRUCTION PLANS FOR  
 THE CONSERVANCY AT JORDAN LAKE**

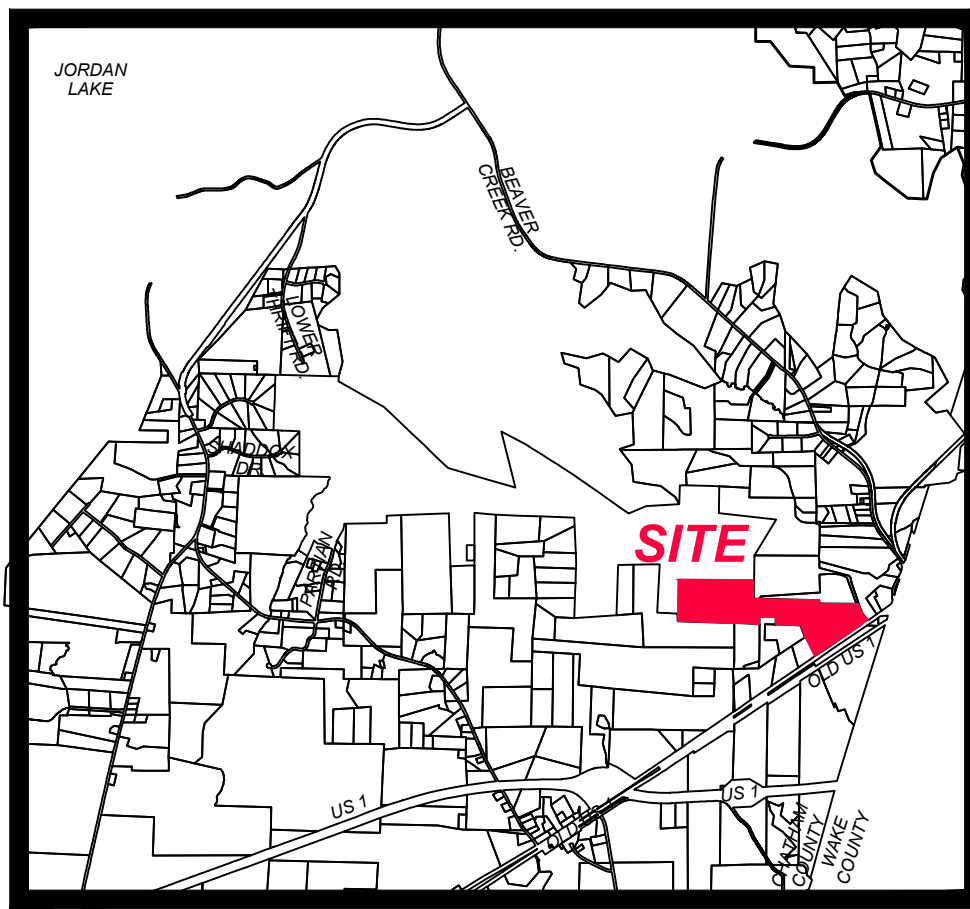
**OVERALL SITE PLAN  
 CHATHAM COUNTY, NC**

Date: JUNE 19, 2020  
 Scale: 1" = 200'  
 Drawn: JWA  
 Checked: JRF  
 Project No: 127-290  
 Computer Dwg. Name: 127-290\_03-05-01\_overall site plan

Sheet No:  
**OS-01**  
 Of 1



**FINAL DESIGN**  
 NOT RELEASED  
 FOR CONSTRUCTION



VICINITY MAP  
NTS



NORTH

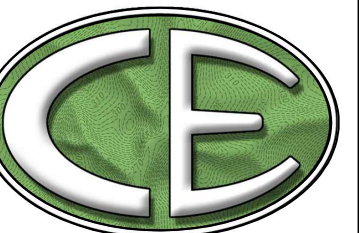
**GENERAL CONSTRUCTION NOTES**

- EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-632-4949. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0603, MAP NUMBER 372050600K, DATED 02/02/07 AND PANEL 9699, MAP NUMBER 3710969900K, DATED 11/17/17.
- IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPAWNING FISH.
- TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC. RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPING.
- DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
- DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
- NCDOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL STORMWATER BMP'S OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
- ALL GRATED INLETS IN DITCHES ARE TO BE NCDOT STD 840.17 OR 840.26 TYPE A 251 NARROW SLOT INLETS.
- GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 862 OF NCDOT CURRENT ROADWAY STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH NCDOT PRIOR TO OBTAINING GUARDRAIL TO VERIFY LENGTHS FOR INSTALLATION.

**LEGEND**

	FIREHYDRANT (FH)
	STREET SIGN
	POWER POLE
	RCP=REINFORCED CONCRETE PIPE
	R/W = RIGHT-OF-WAY
	TYP = TYPICAL
	LF = LINEAR FEET
	INV = INVERT
	OHE = OVERHEAD ELECTRIC
	FES = FLARED END SECTION
	TOP OF BANK
	BOTTOM OF BANK
	WETLAND AREA
	TREELINE
	EXISTING 1' CONTOURS
	EXISTING 5' CONTOURS

Benchmark #2  
 Northing: 693938.5158, Easting: 2005900.1163  
 Elevation: 309.865 Pipe w/Cap & Tack  
 Horizontal Datum: NAD83/2011  
 Vertical Datum: NAVD88/geoid 12B

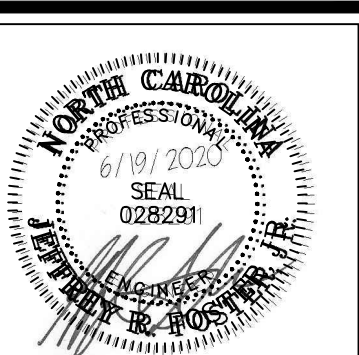


**CE GROUP**

301 GLENWOOD AVE. 220  
 RALEIGH, NC 27603  
 PHONE: 919-367-8790  
 FAX: 919-322-0032

www.cegroupinc.com

License # C-1739



CONSTRUCTION PLANS FOR  
 THE CONSERVANCY AT JORDAN LAKE

EX COND AND DEMO PLAN  
 CHATHAM COUNTY, NC

Date: JUNE 19, 2020

Scale: 1" = 200'

Drawn: JWA

Checked: JRF

Project No: 127-290

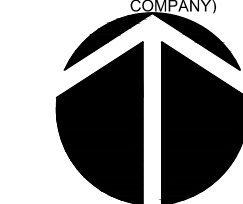
Computer Dwg. Name: 127-290\_02-ex-01\_ex cond and demo

Sheet No:

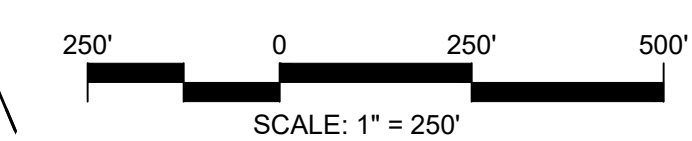
EX-01

Of

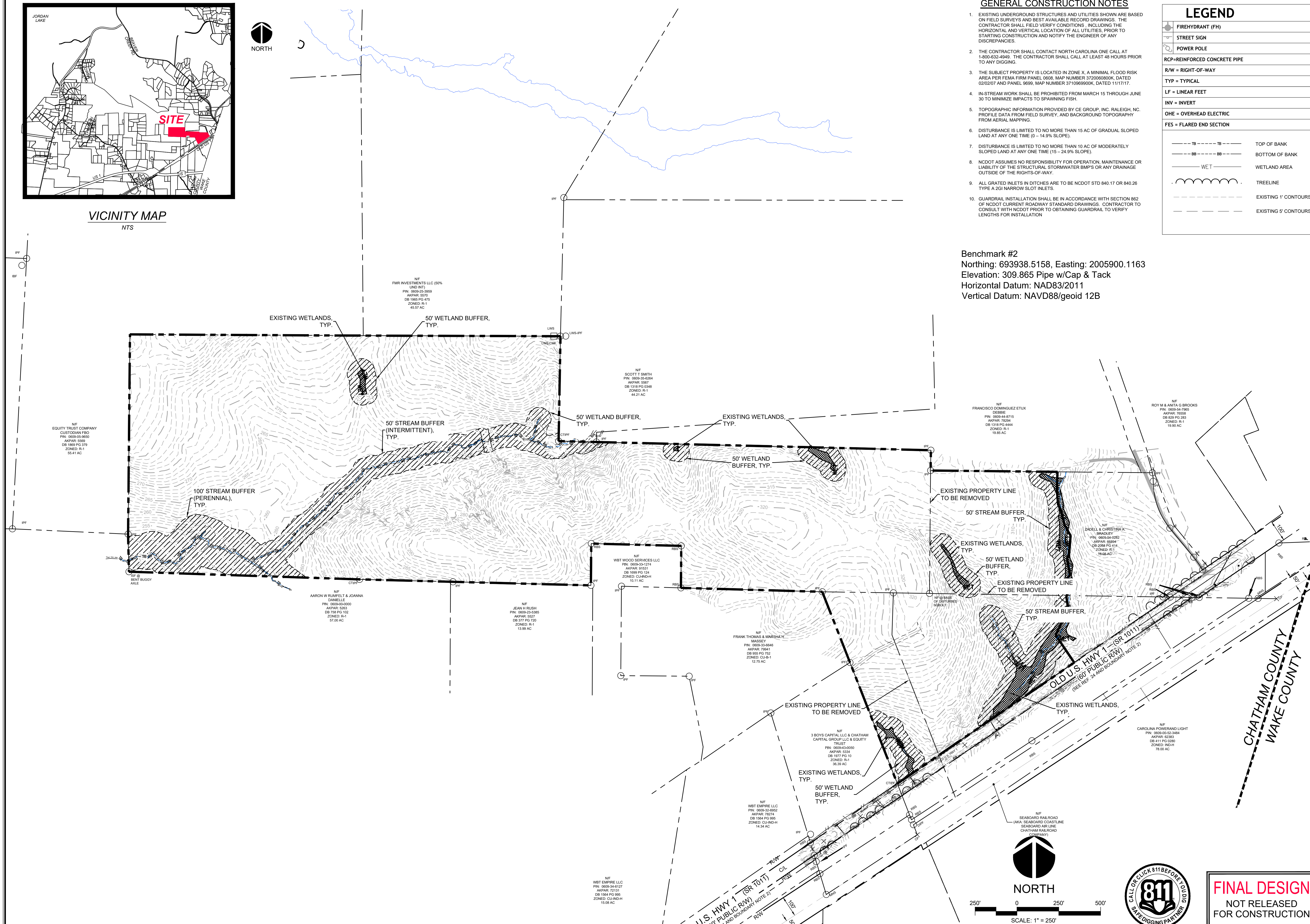
**FINAL DESIGN**  
 NOT RELEASED  
 FOR CONSTRUCTION



NORTH



SCALE: 1" = 250'

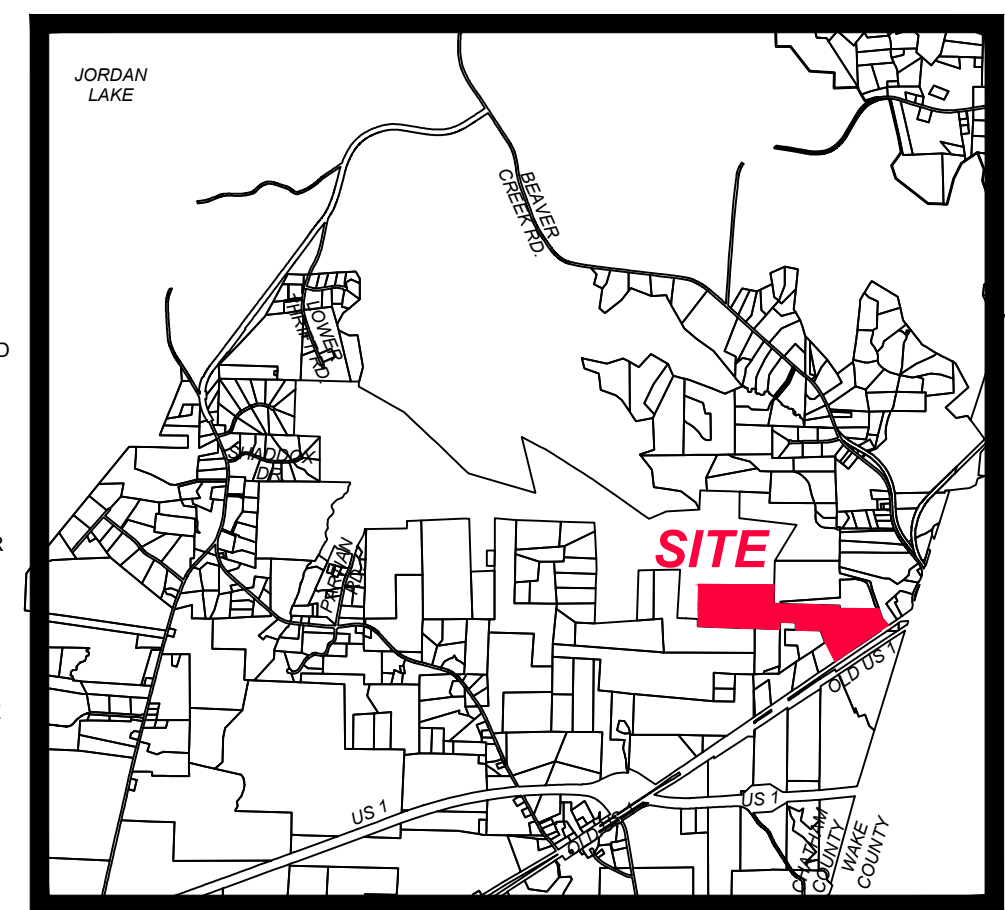


R. FLOOD

**DISTURBED AREA**  
TOTAL = 25.0 AC.

**GENERAL CONSTRUCTION NOTES**

- EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-432-4949. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0608, MAP NUMBER 3720060800K, DATED 02/02/07 AND PANEL 9699, MAP NUMBER 3710969900K, DATED 11/17/17.
- IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPAWNING FISH.
- TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC. RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPINGS.
- DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
- DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
- NC DOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL STORMWATER BMP'S OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
- ALL GRATED INLETS IN DITCHES ARE TO BE NC DOT STD 840.17 OR 840.26 TYPE A 2GI NARROW SLOT INLETS.
- GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 862 OF NC DOT CURRENT ROADWAY STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH NC DOT PRIOR TO OBTAINING GUARDRAIL TO VERIFY LENGTHS FOR INSTALLATION.

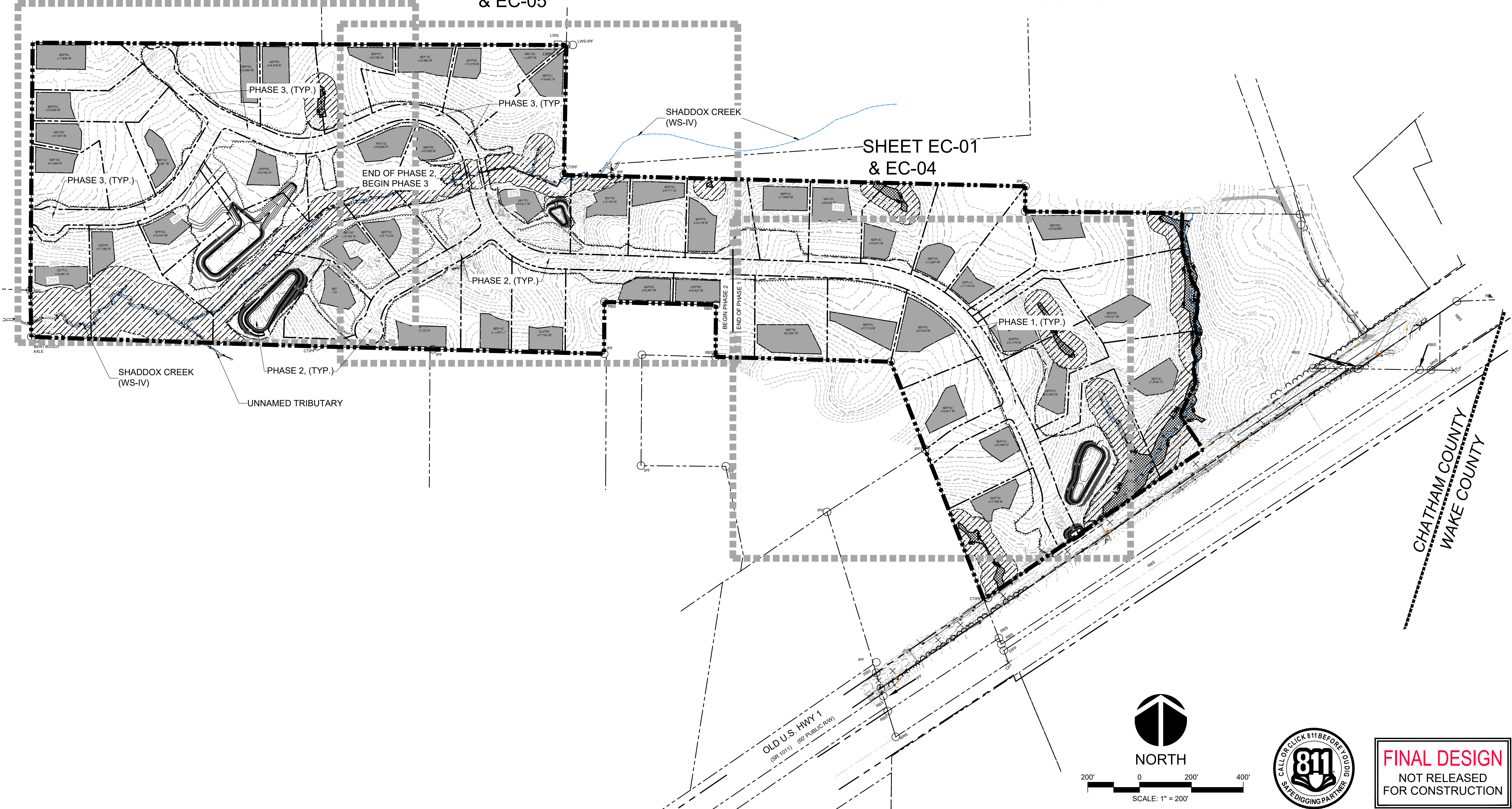


NO.	REVISIONS	DATE
C	REVISIONS PER CHATHAM COUNTY AND NC DOT COMMENTS	06/19/20
B	REVISIONS PER CHATHAM COUNTY EC & SW COMMENTS	06/12/20
A	REVISIONS PER CHATHAM COUNTY AND NC DOT COMMENTS	06/05/20

SHEET EC-03  
& EC-06

SHEET EC-02  
& EC-05

SHEET EC-01  
& EC-04

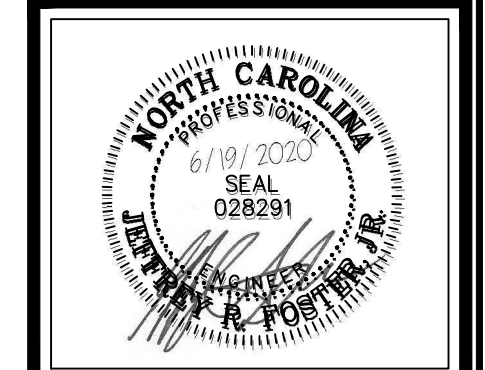


**CE GROUP**

301 GLENWOOD AVE. 220  
RALEIGH, NC 27603  
PHONE: 919-367-8790  
FAX: 919-322-0032

www.cegroupinc.com

License # C-1739



CONSTRUCTION PLANS FOR  
THE CONSERVANCY AT JORDAN LAKE

OVERALL EROSION CONTROL KEY  
CHATHAM COUNTY, NC

Date: JUNE 19, 2020

Scale: 1" = 200'

Drawn: JWA

Checked: JRF

Project No: 127-290

Computer Dwg. Name: 127-290\_04-oe-01\_overall erosion controls

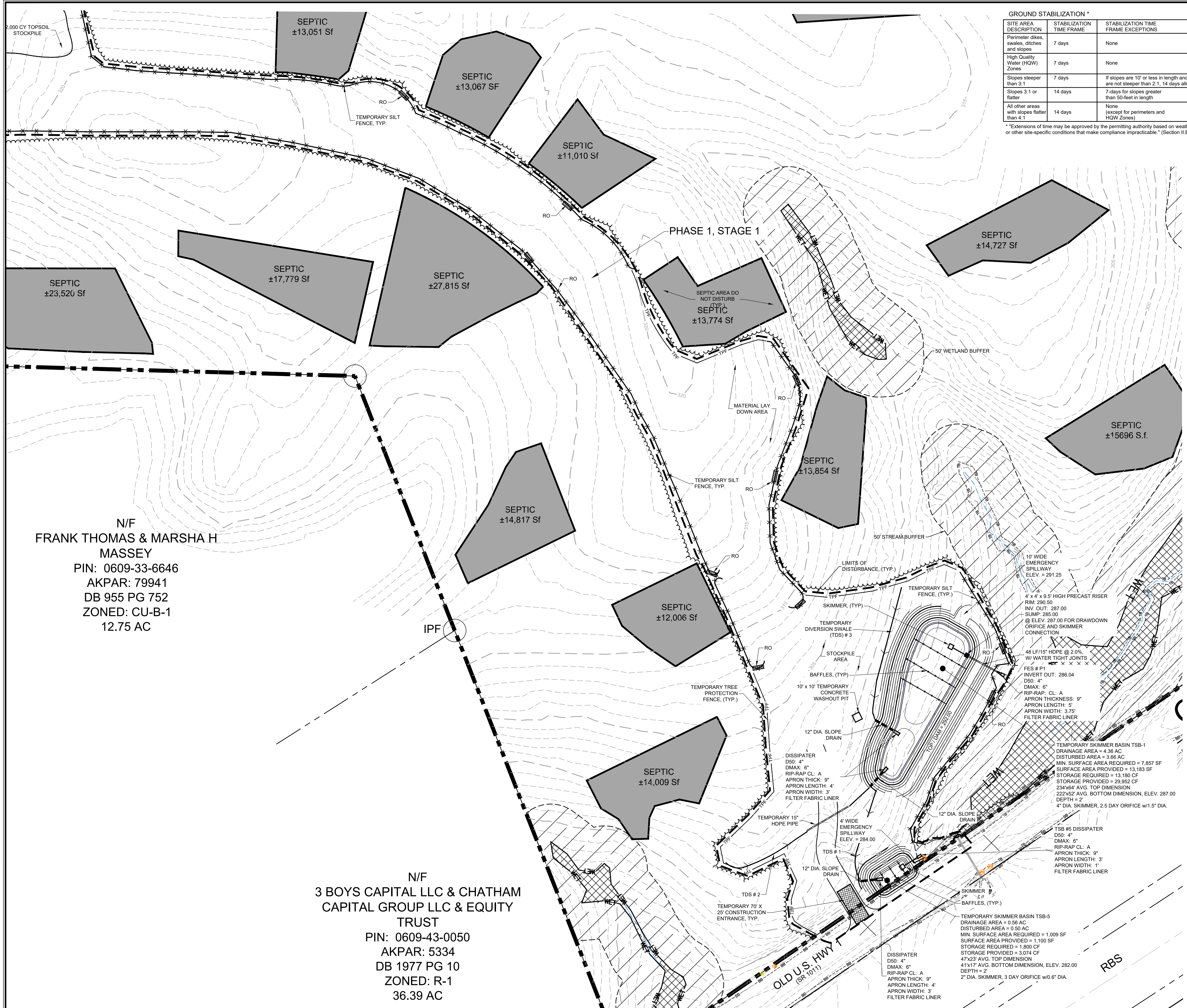
Sheet No: **OE-01**  
Of 1

NORTH

SCALE: 1" = 200'



**FINAL DESIGN**  
NOT RELEASED  
FOR CONSTRUCTION



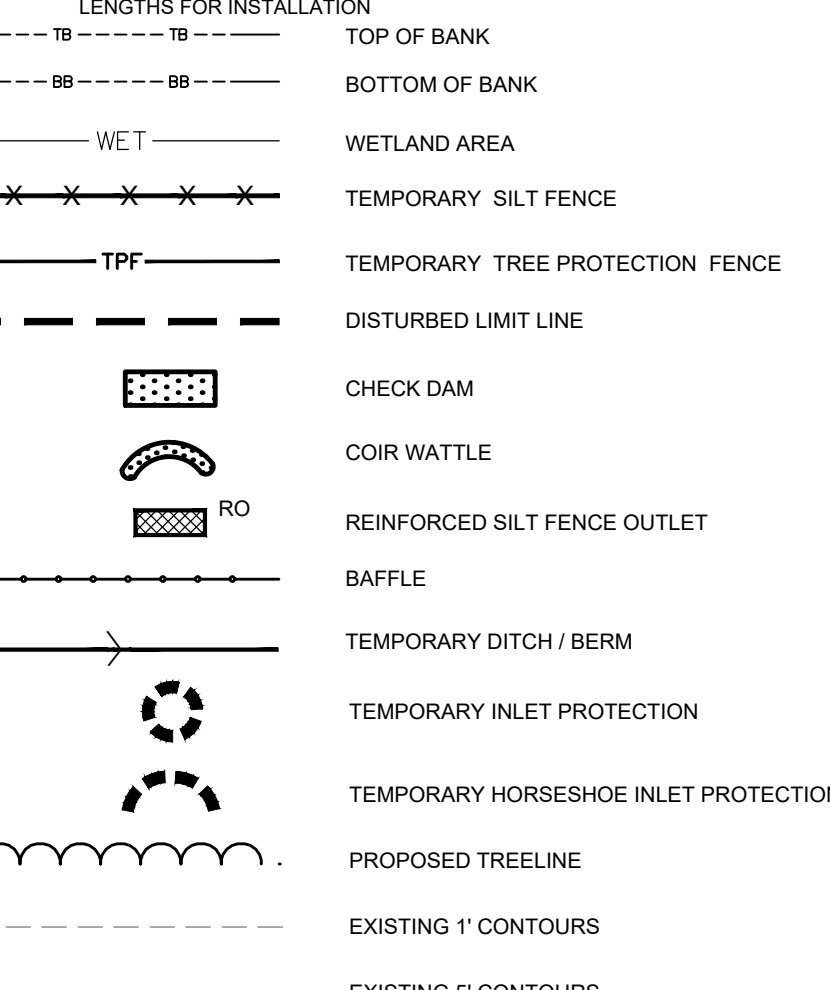
**GROUND STABILIZATION \***

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days allowed
Slopes 3:1 or flatter	14 days	7-days for slopes greater than 50-feet in length
All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

\*Extensions of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable. (Section 11.B (2)(b))

**GENERAL CONSTRUCTION NOTES**

- EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-452-4848. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0608, MAP NUMBER 3720060800K, DATED 02/02/07 AND PANEL 9699, MAP NUMBER 3710969900K, DATED 11/17/17.
- IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPAWNING FISH.
- TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC. RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPING.
- DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
- DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
- NC DOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL STORMWATER BMP'S OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
- ALL GRATED INLETS IN DITCHES ARE TO BE NC DOT STD 840.17 OR 840.26 TYPE A 2' G1 NARROW SLOT INLETS.
- GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 802 OF NC DOT CURRENT STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH NC DOT FIELD PERSONNEL OBTAINING GUARDRAIL TO VERIFY LENGTHS FOR INSTALLATION.



**CONSTRUCTION NOTES**

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE. GROUND COVER STABILIZATION SHALL BE IN ACCORDANCE WITH NPDES PERMIT AND STABILIZATION CHART ABOVE. TEMPORARY GROUND COVER WILL BE INSTALLED ON ALL EXPOSED SLOPES IN 7 OR 14 DAYS. PERMANENT GROUND COVER WILL BE INSTALLED ON EXPOSED SLOPES WITHIN 15 WORKING DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. MAINTENANCE: ALL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF PRODUCING RAINFALL EVENT. NEEDED REPAIRS WILL BE MADE IMMEDIATELY. NO DISTURBANCE TO TAKE PLACE INSIDE STREAM BUFFERS OR WETLANDS UNTIL ALL REQUIRED ACOE, 404 PERMITS, NCDWQ 401 PERMITS, AND / OR CHATHAM BUFFER IMPACT AUTHORIZATION HAVE BEEN OBTAINED AND COPY OF PERMITS ON-SITE. MAXIMUM GRADED SLOPE SHALL NOT EXCEED TWO (2) TO ONE (1).

PHASE 1 DISTURBED AREA = 8.0 ACRES  
 PHASE 2 DISTURBED AREA = 8.0 ACRES  
 PHASE 3 DISTURBED AREA = 9.0 ACRES  
**TOTAL DISTURBED AREA = 25.0 ACRES**

\* NOTE: SEE SHEET ED-06 FOR TEMPORARY AND PERMANENT SWALE DESIGN INFORMATION AND LINER SPECIFICATIONS.  
 \* NOTE: SEE SHEET ED-01 FOR THE CONSTRUCTION SEQUENCE

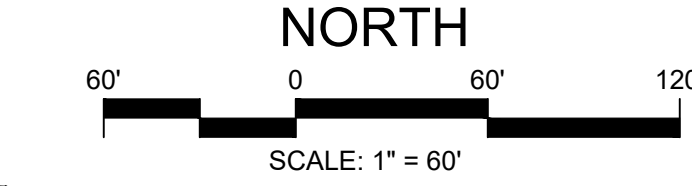
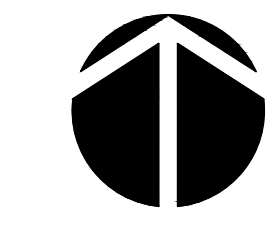
**NC DENR SELF-INSPECTION PROGRAM**

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TAKE EFFECT OCTOBER 1, 2010. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FROM THE LAND QUALITY WEB SITE.

http://portal.ncdenr.org/web/1/erosion

**GENERAL NOTES:**

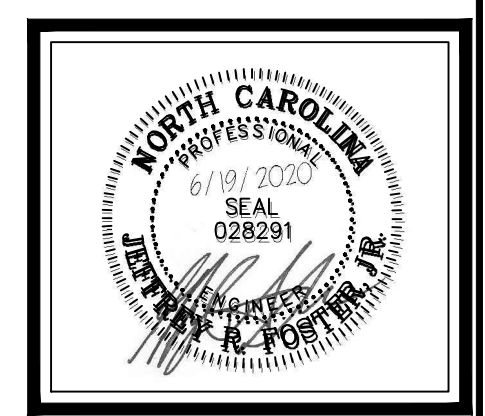
- FOR EROSION CONTROL ASSOCIATED WITH ROAD WIDENING, SEE SHEET EC-04.
- ALL SEPTIC AREAS TO REMAIN UNDISTURBED.
- SEE SHEET EC-06 FOR TEMPORARY AND PERMANENT SWALE SPECIFICATIONS.



**FINAL DESIGN**  
 NOT RELEASED  
 FOR CONSTRUCTION

NO.	REVISIONS	DATE
1	REVISIONS PER CHATHAM COUNTY AND NCDOT COMMENTS	06/19/20
2	REVISIONS PER CHATHAM COUNTY EC & SW COMMENTS	06/12/20
3	REVISIONS PER CHATHAM COUNTY AND NCDOT COMMENTS	06/05/20

**CE GROUP**  
 301 GLENWOOD AVE. 220  
 RALEIGH, NC 27603  
 PHONE: 919-367-8790  
 FAX: 919-322-0032  
 www.cegroupinc.com  
 License # C-1739

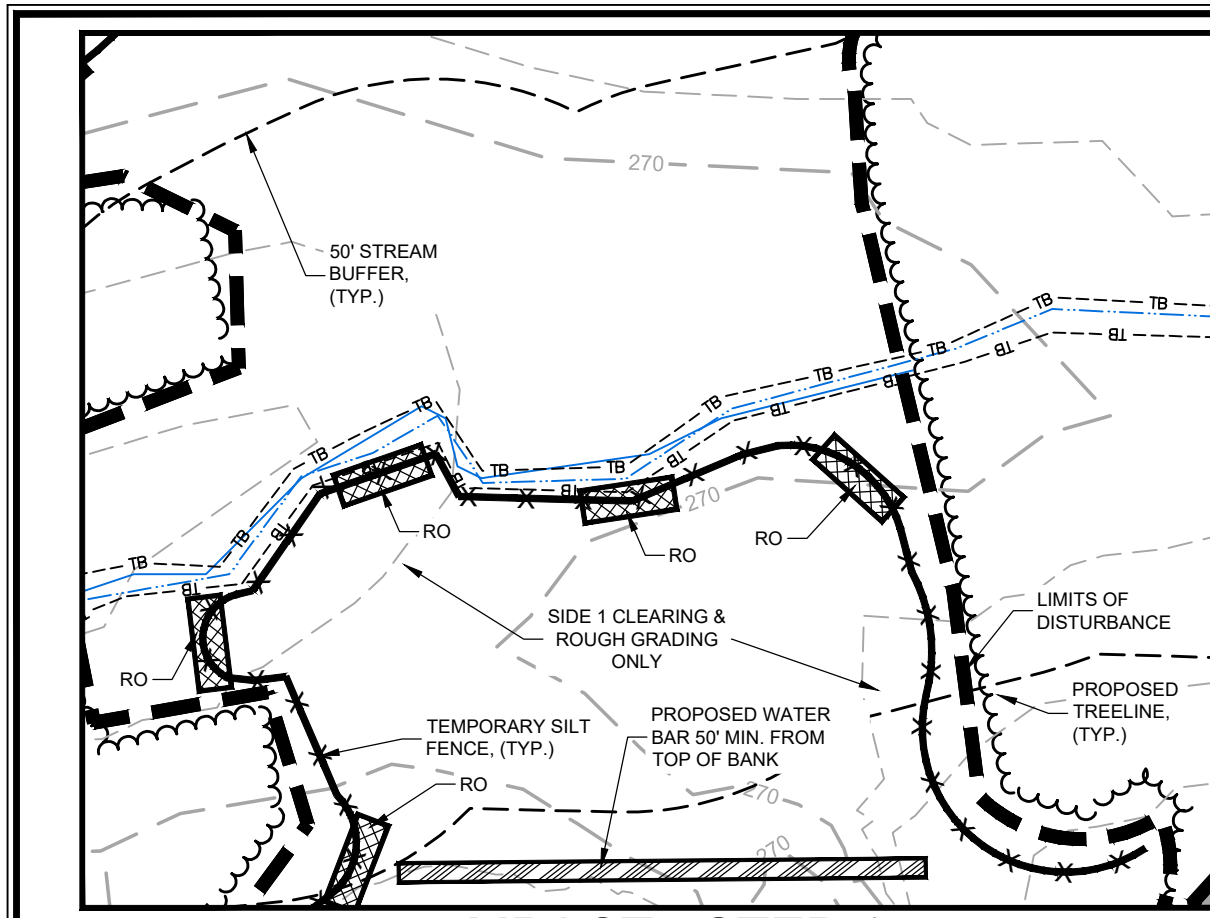


CONSTRUCTION PLANS FOR  
 THE CONSERVANCY AT JORDAN LAKE  
 EROSION CONTROL PLAN PH 1-3,  
 STAGE 1  
 CHATHAM COUNTY, NC

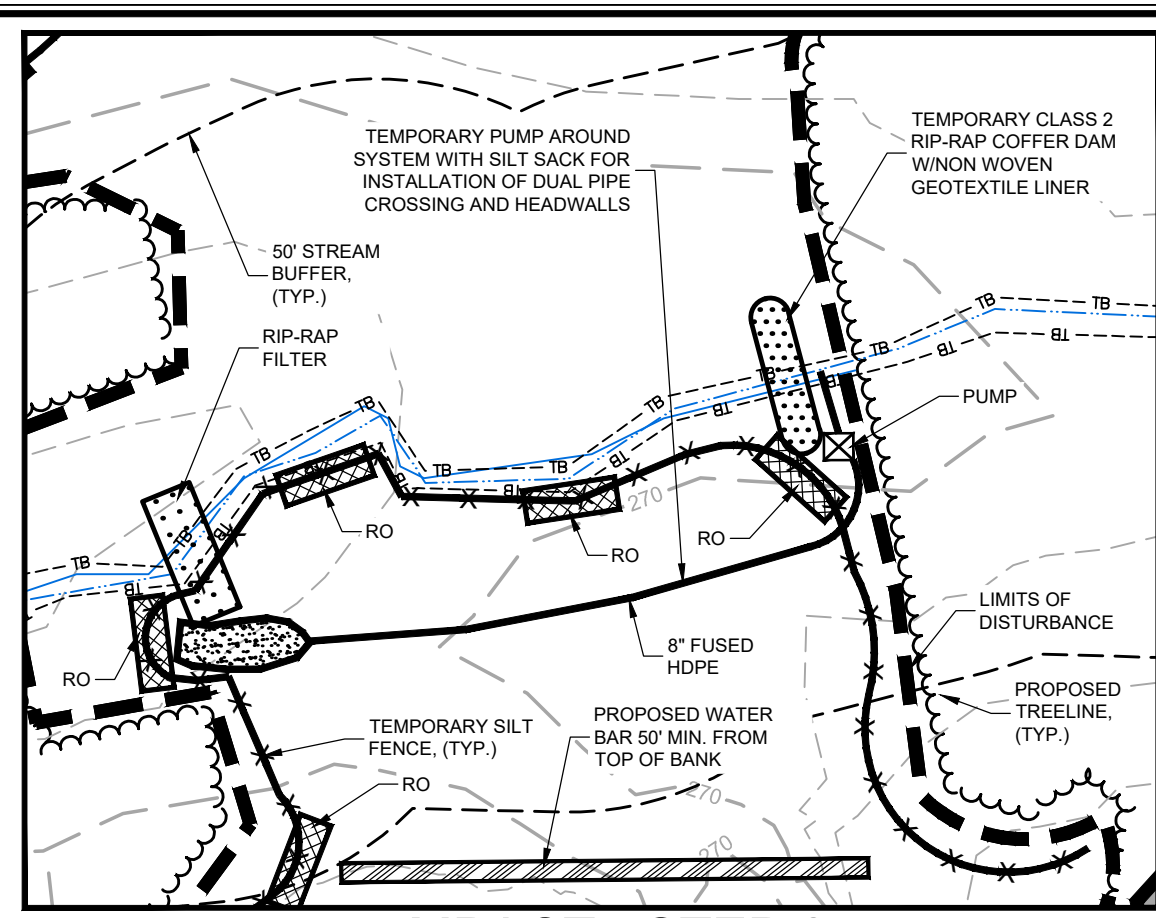
Date:	JUNE 19, 2020
Scale:	1" = 60'
Drawn:	JWA
Checked:	JRF
Project No.:	127-290
Computer Dwg. Name:	127-290_05-01.ec-01 to ec-03_erosion control.rvt
Sheet No.:	EC-01

N/F  
**FRANK THOMAS & MARSHA H MASSEY**  
 PIN: 0609-33-6646  
 AKPAR: 79941  
 DB 955 PG 752  
 ZONED: CU-B-1  
 12.75 AC

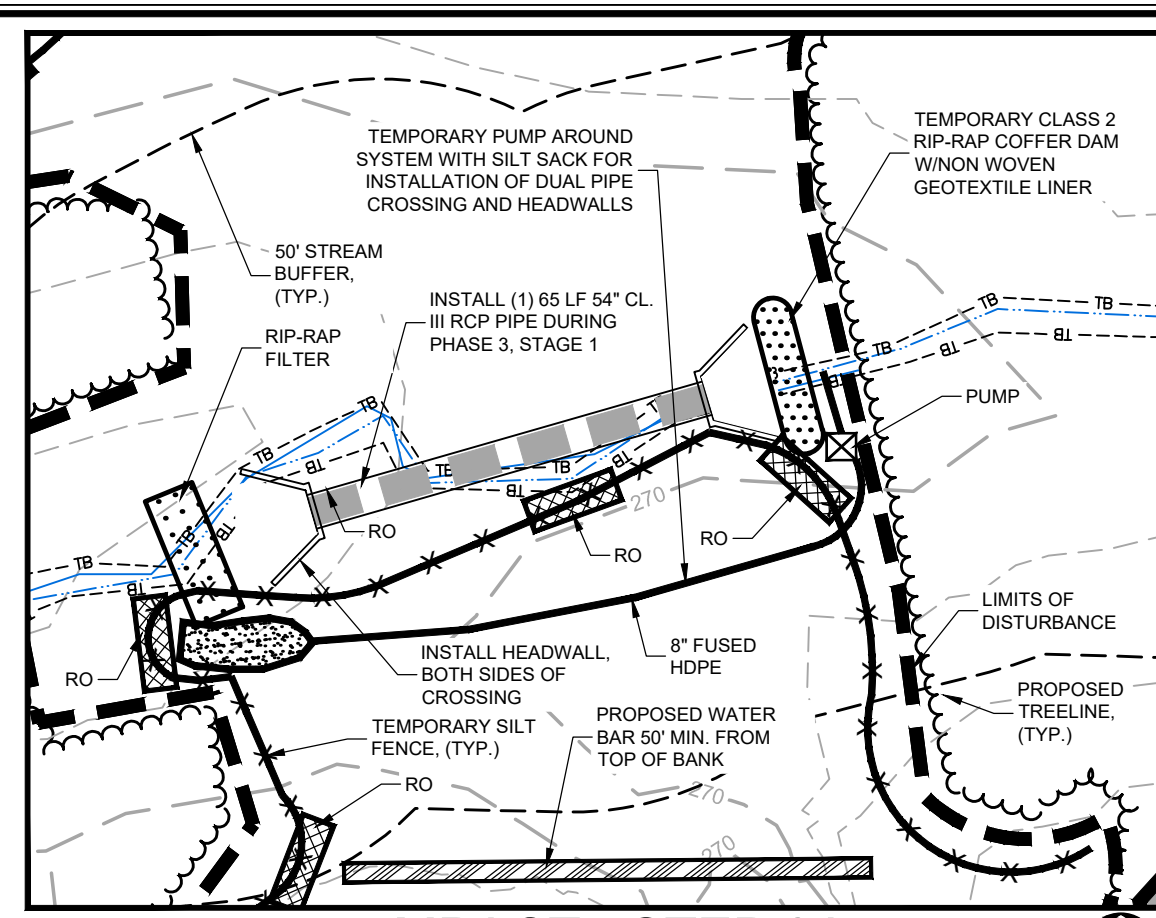
N/F  
**3 BOYS CAPITAL LLC & CHATHAM CAPITAL GROUP LLC & EQUITY TRUST**  
 PIN: 0609-43-0050  
 AKPAR: 5334  
 DB 1977 PG 10  
 ZONED: R-1  
 36.39 AC



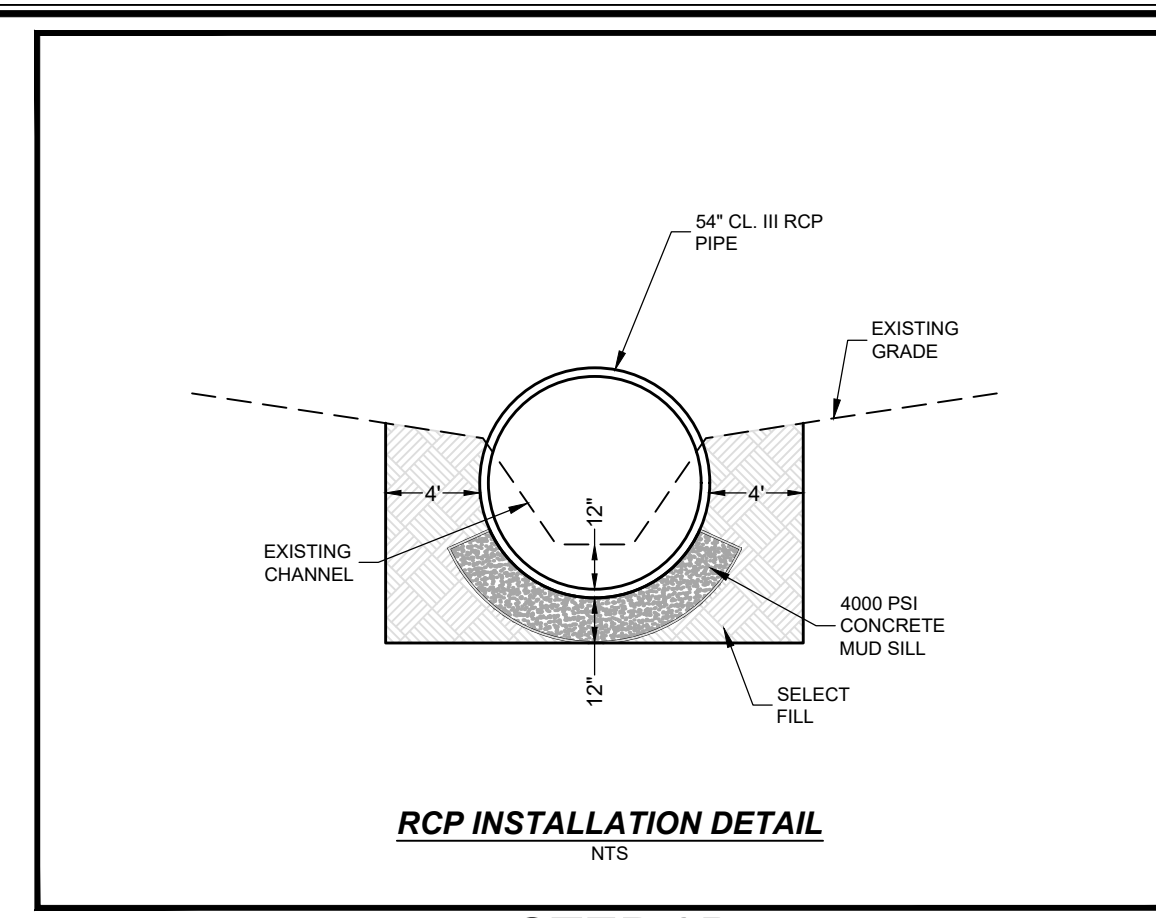
**IMPACT - STEP 1**  
SCALE: 1" = 30'-0"



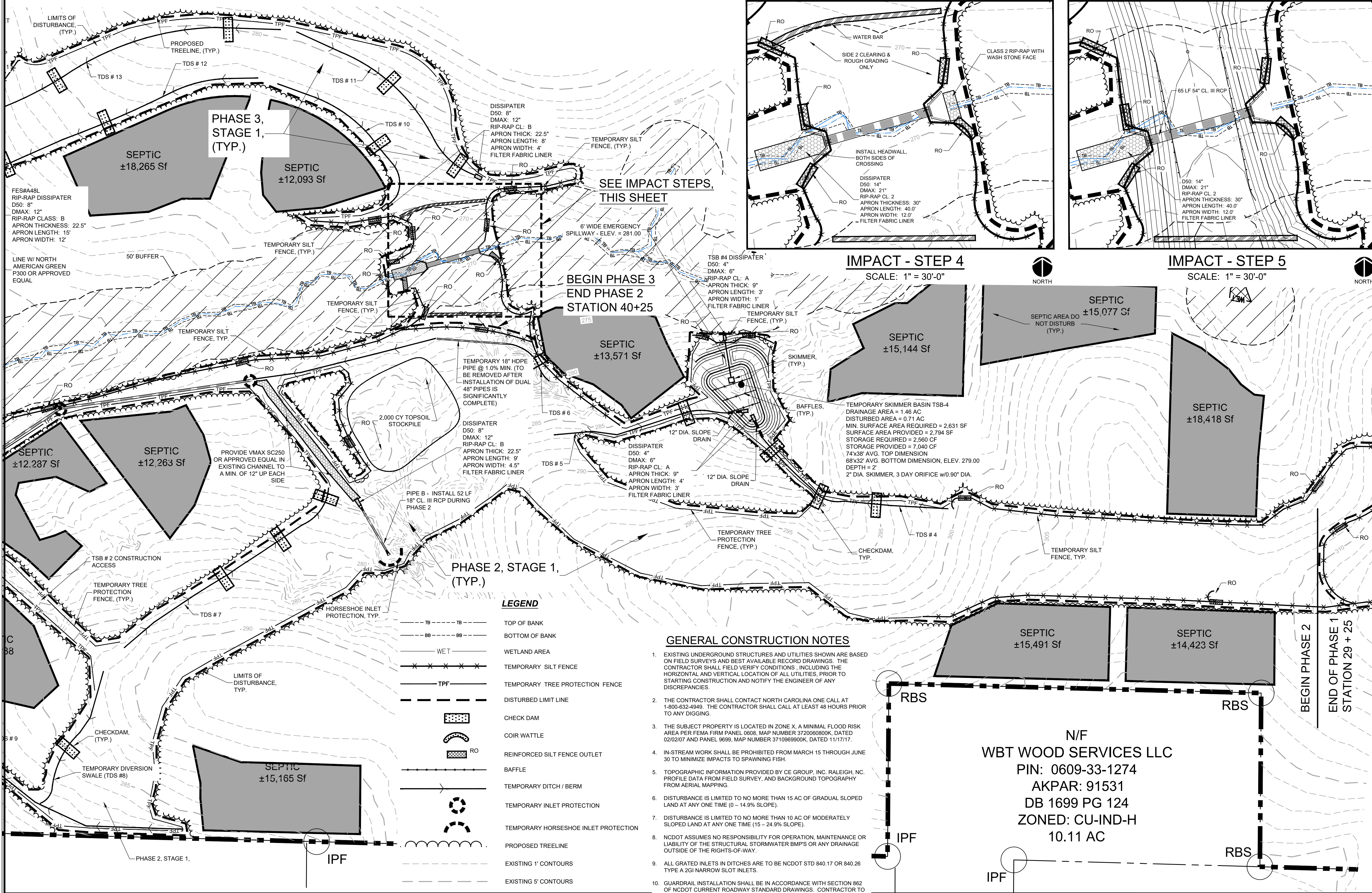
**IMPACT - STEP 2**  
SCALE: 1" = 30'-0"



**IMPACT - STEP 3A**  
SCALE: 1" = 30'-0"



**STEP 3B**  
NTS



SEE IMPACT STEPS THIS SHEET

**IMPACT - STEP 4**  
SCALE: 1" = 30'-0"

**IMPACT - STEP 5**  
SCALE: 1" = 30'-0"

**LEGEND**

- TOP OF BANK
- BOTTOM OF BANK
- WETLAND AREA
- TEMPORARY SILT FENCE
- TEMPORARY TREE PROTECTION FENCE
- DISTURBED LIMIT LINE
- CHECK DAM
- COIR WATTLE
- REINFORCED SILT FENCE OUTLET
- BAFFLE
- TEMPORARY DITCH / BERM
- TEMPORARY INLET PROTECTION
- TEMPORARY HORSESHOE INLET PROTECTION
- PROPOSED TREELINE
- EXISTING 1' CONTOURS
- EXISTING 5' CONTOURS

**GENERAL CONSTRUCTION NOTES**

1. EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-632-4949. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
3. THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0608, MAP NUMBER 3720060800K, DATED 02/02/07 AND PANEL 9699, MAP NUMBER 3710669900K, DATED 11/17/17.
4. IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPAWNING FISH.
5. TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC. RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPING.
6. DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
7. DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
8. NCDOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL STORMWATER BMPs OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
9. ALL GRATED INLETS IN DITCHES ARE TO BE NCDOT STD 840.17 OR 840.26 TYPE A 20" NARROW SLOT INLETS.
10. GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 802 OF NCDOT CURRENT ROADWAY STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH LOCAL AGENCIES FOR ANY LOCAL REQUIREMENTS.

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days allowed
Slopes 3:1 or flatter	14 days	7-days for slopes greater than 50-feet in length
All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

\* Extensions of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable. (Section II.B (2)(b))

**CONSTRUCTION NOTES**

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE. GROUND COVER STABILIZATION SHALL BE IN ACCORDANCE WITH NPDES PERMIT AND STABILIZATION CHART ABOVE. TEMPORARY GROUND COVER WILL BE INSTALLED ON ALL EXPOSED SLOPES IN 7 OR 14 DAYS. PERMANENT GROUND COVER WILL BE INSTALLED ON EXPOSED SLOPES WITHIN 15 WORKING DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. MAINTENANCE: ALL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF PRODUCING RAINFALL EVENT. NEEDED REPAIRS WILL BE MADE IMMEDIATELY.

NO DISTURBANCE TO TAKE PLACE INSIDE STREAM BUFFERS OR WETLANDS UNTIL ALL REQUIRED ACOE, 404 PERMITS, NCDWQ 401 PERMITS, AND / OR CHATHAM BUFFER IMPACT AUTHORIZATION HAVE BEEN OBTAINED AND COPY OF PERMITS ON-SITE.

MAXIMUM GRADED SLOPE SHALL NOT EXCEED TWO (2) TO ONE (1).

PHASE 1 DISTURBED AREA = 8.0 ACRES  
PHASE 2 DISTURBED AREA = 8.0 ACRES  
PHASE 3 DISTURBED AREA = 9.0 ACRES  
**TOTAL DISTURBED AREA = 25.0 ACRES**

\* NOTE: SEE SHEET ED-06 FOR TEMPORARY AND PERMANENT SWALE DESIGN INFORMATION AND LINER SPECIFICATIONS.

\* NOTE: SEE SHEET ED-01 FOR THE CONSTRUCTION REQUIRE NCDENR SELF-INSPECTION PROGRAM

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED.

RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TAKE EFFECT OCTOBER 1, 2010.

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

THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FROM THE LAND QUALITY WEB SITE.

<http://portal.ncdenr.org/web/inserection>

**CHANNEL IMPACT SEQUENCE**

GENERAL: THE INTERMITTENT STREAM DOES NOT HAVE ANY BASE FLOW. THE CONTRACTOR SHALL NOT IMPACT THE STREAM AND ASSOCIATED BUFFER UNTIL THE PRECAST RCP AND HEADWALL HAS BEEN DELIVERED ON-SITE AND READY FOR INSTALLATION. WORK WITHIN THE STREAM SHOULD ONLY BE UNDERTAKEN WITH THE EXPECTATION OF 4-5 DAYS OF DRY WEATHER AS FORECASTED BY NWS.

STEP 1: AFTER STREAM DIVERSIONS (INCLUDING 18" RCP IN PHASE 2) IS FUNCTIONING; INSTALL SILT FENCING ALONG SOUTH SIDE OF EXISTING CHANNEL BANK AS SHOWN WITH REINFORCED SILT FENCE OUTLETS. CLEAR SOUTH SIDE OF STREAM BUFFER FROM STREAM BANK TO LIMITS OF PHASE 2 CLEARING, INSTALL WATER BAR (DIVERSION) AS SHOWN, NO ACTIVITY ALLOWED WITHIN STREAM CHANNEL OR NORTH SIDE.

STEP 2: LAY 8" FUSED HDPE PIPE ON TOP OF GROUND AND POSITION MUD PUMP UPSTREAM OF EACH COFFER DAM. INSTALL SILT BAG AT DOWNSTREAM END OF 8" HDPE BYPASS LINE (OUTSIDE TOP OF BANK). INSTALL UPSTREAM AND DOWNSTREAM SANDBAG COFFER DAMS. CLEARING ONLY AS NECESSARY WITHIN THE STREAM AND NORTHERN TOP OF BANK TO INSTALL COFFER DAM AND DOWNSTREAM CLASS II RIP RAP CHECK DAM WITH WASHED STONE FACE. ACTIVATE BYPASS PUMPING SYSTEM.

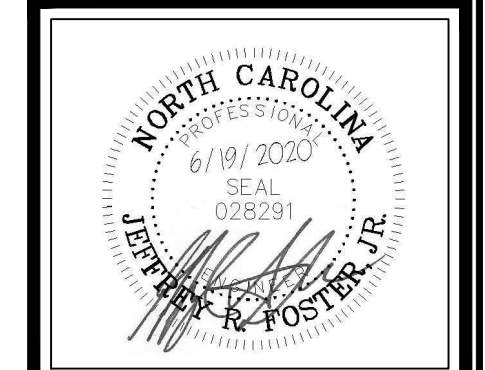
STEP 3: WHILE MAINTAINING BYPASS PUMPING SYSTEM, EXCAVATE CHANNEL FOR PRECAST RCP PIPE STARTING FROM DOWNSTREAM END. PLACE RCP ON A 4,000 PSI CONCRETE MUD SILL AS DIRECTED BY GEOTECHNICAL ENGINEER. EXCAVATE GRADE 4" BEYOND OUTSIDE EDGE OF RCP ON EACH SIDE TO ALLOW ADEQUATE WIDTH FOR RECOMPACTION. INSTALL RCP STARTING FROM DOWNSTREAM END THEN HEADWALLS. UTILIZE EARTHEN MATERIAL STOCKPILED AS SELECT BACKFILL TO PIPE SPRINGLINE (APPROVED BY GEOTECHNICAL ENGINEER). INSTALL RIP RAP DISSIPATOR. IMPACT NORTHERN CHANNEL TOP OF BANK AND BEYOND ONLY AS NECESSARY TO INSTALL PIPE AND HEADWALL.

STEP 4: AFTER PIPE AND HEADWALLS ARE COMPLETE AND BACKFILLED; INSTALL SILT FENCING ALONG HEADWALL AND ON NORTH SIDE OF EXISTING CHANNEL BANK AS SHOWN WITH REINFORCED SILT FENCE OUTLETS. REMOVE UPPER COFFER DAM AND RIP-RAP WITH CLASS II RIP-RAP FILTER WITH WASH STONE FACE. THEN CLEAR NORTH SIDE OF STREAM BUFFER FROM STREAM BANK TO LIMITS OF DISTURBANCE AS SHOWN. INSTALL WATER BAR (DIVERSION) AS SHOWN ON NORTHSIDE.

STEP 5: AFTER TEMPORARY GROUND STABILIZATION IS ACHIEVED; REMOVE UPSTREAM AND DOWNSTREAM RIP RAP FILTERS AND MAINTAIN SILT FENCE AT TOE OF SLOPES AND ALONG HEADWALLS.

NO.	REVISIONS	DATE
1	REVISED PER CHATHAM COUNTY AND NCDOT COMMENTS	06/19/20
2	REVISED PER CHATHAM COUNTY EC & SW COMMENTS	06/12/20
3	REVISED PER CHATHAM COUNTY AND NCDOT COMMENTS	06/05/20

**CE GROUP**  
301 GLENWOOD AVE. 220  
RALEIGH, NC 27603  
PHONE: 919-367-8790  
FAX: 919-322-0032  
www.cegroupinc.com  
License # C-1739



CONSTRUCTION PLANS FOR  
THE CONSERVANCY AT JORDAN LAKE  
EROSION CONTROL PLAN PH 1-3,  
STAGE 1  
CHATHAM COUNTY, NC

Date: JUNE 19, 2020  
Scale: 1" = 60'  
Drawn: JWA  
Checked: JRF  
Project No: 127-290  
Computer Dwg. Name: 127-290\_05-01 to 05-03\_erosion control  
Sheet No: EC-02  
Of: 2

**811**  
CALL OR CLICK 811 BEFORE YOU DIG  
SAFEGUARDING PARTNER

**FINAL DESIGN**  
NOT RELEASED  
FOR CONSTRUCTION

RBS  
IPF  
N/F  
WBT WOOD SERVICES LLC  
PIN: 0609-33-1274  
AKPAR: 91531  
DB 1699 PG 124  
ZONED: CU-IND-H  
10.11 AC

**NC DENR SELF-INSPECTION PROGRAM**

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED.

RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TAKE EFFECT OCTOBER 1, 2010.

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

THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FROM THE LAND QUALITY WEB SITE.

http://portal.ncdenr.gov/web/lerosion

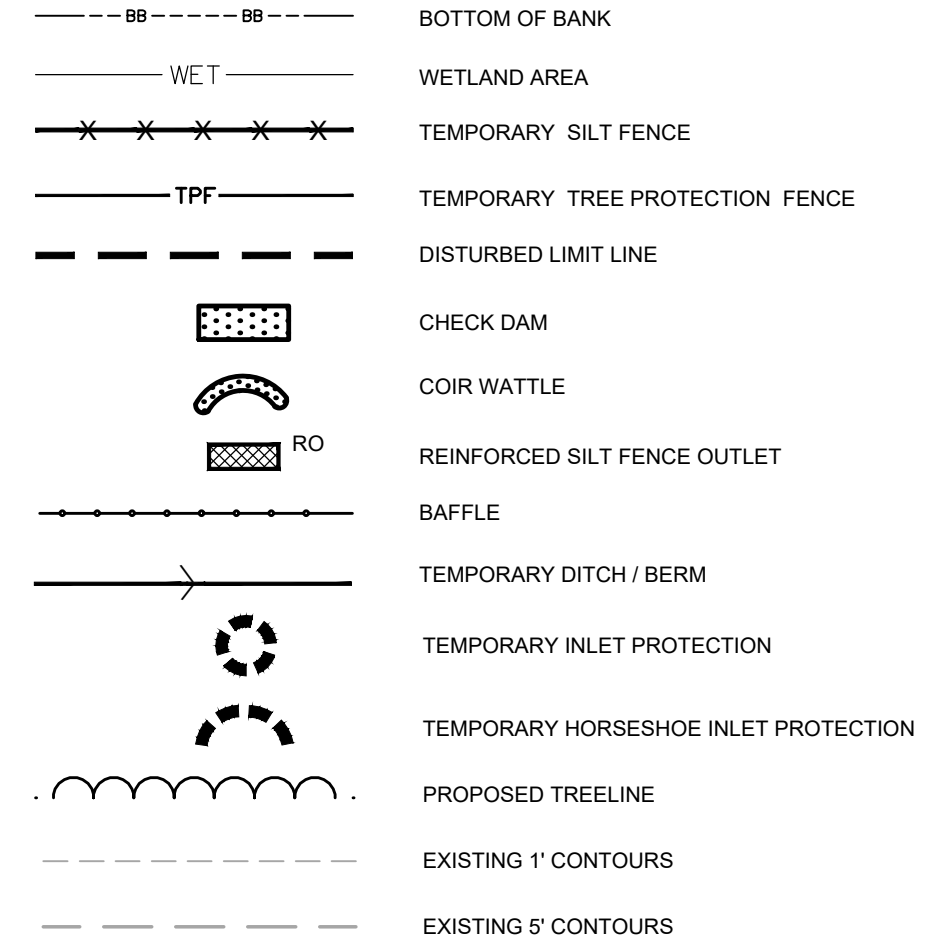
**GROUND STABILIZATION \***

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days allowed
Slopes 3:1 or flatter	14 days	7-days for slopes greater than 50-feet in length
All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

\* Extensions of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable. (Section II.B (2)(b))

**GENERAL CONSTRUCTION NOTES**

- EXISTING UNDERGROUND STRUCTURES AND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-652-4849. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, A MINIMAL FLOOD RISK AREA PER FEMA FIRM PANEL 0608, MAP NUMBER 372008000K, DATED 02/02/07 AND PANEL 9699, MAP NUMBER 371096900K, DATED 11/17/17.
- IN-STREAM WORK SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 30 TO MINIMIZE IMPACTS TO SPAWNING FISH.
- TOPOGRAPHIC INFORMATION PROVIDED BY CE GROUP, INC., RALEIGH, NC. PROFILE DATA FROM FIELD SURVEY, AND BACKGROUND TOPOGRAPHY FROM AERIAL MAPPING.
- DISTURBANCE IS LIMITED TO NO MORE THAN 15 AC OF GRADUAL SLOPED LAND AT ANY ONE TIME (0 - 14.9% SLOPE).
- DISTURBANCE IS LIMITED TO NO MORE THAN 10 AC OF MODERATELY SLOPED LAND AT ANY ONE TIME (15 - 24.9% SLOPE).
- NC DOT ASSUMES NO RESPONSIBILITY FOR OPERATION, MAINTENANCE OR LIABILITY OF THE STRUCTURAL STORMWATER BMP'S OR ANY DRAINAGE OUTSIDE OF THE RIGHTS-OF-WAY.
- ALL GRATED INLETS IN DITCHES ARE TO BE NC DOT STD 840.17 OR 840.26 TYPE A 2GI NARROW SLOT INLETS.
- GUARDRAIL INSTALLATION IN ACCORDANCE WITH SECTION 862 OF NC DOT CURRENT ROADWAY STANDARD DRAWINGS. CONTRACTOR TO CONSULT WITH NC DOT PRIOR TO OBTAINING GUARDRAIL TO VERIFY LENGTHS FOR INSTALLATION.



**CONSTRUCTION NOTES**

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE. GROUND COVER STABILIZATION SHALL BE IN ACCORDANCE WITH NPDES PERMIT AND STABILIZATION CHART ABOVE. TEMPORARY GROUND COVER WILL BE INSTALLED ON ALL EXPOSED SLOPES IN 7 OR 14 DAYS. PERMANENT GROUND COVER WILL BE INSTALLED ON EXPOSED SLOPES WITHIN 15 WORKING DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

MAINTENANCE: ALL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF PRODUCING RAINFALL EVENT. NEEDED REPAIRS WILL BE MADE IMMEDIATELY.

NO DISTURBANCE TO TAKE PLACE INSIDE STREAM BUFFERS OR WETLANDS UNTIL ALL REQUIRED ACOE, 404 PERMITS, NCDOWQ 401 PERMITS, AND / OR CHATHAM BUFFER IMPACT AUTHORIZATION HAVE BEEN OBTAINED AND COPY OF PERMITS ON-SITE.

MAXIMUM GRADED SLOPE SHALL NOT EXCEED TWO (2) TO ONE (1).

PHASE 1 DISTURBED AREA = 8.0 ACRES  
 PHASE 2 DISTURBED AREA = 8.0 ACRES  
 PHASE 3 DISTURBED AREA = 9.0 ACRES  
**TOTAL DISTURBED AREA = 25.0 ACRES**

\* NOTE: SEE SHEET ED-06 FOR TEMPORARY AND PERMANENT SWALE DESIGN INFORMATION AND LINER SPECIFICATIONS.  
 \* NOTE: SEE SHEET ED-01 FOR THE CONSTRUCTION SEQUENCE

NO.	REVISIONS	DATE
1	REVISIONS PER CHATHAM COUNTY AND NCDOT COMMENTS	06/19/20
2	REVISIONS PER CHATHAM COUNTY EC & SW COMMENTS	06/12/20
3	REVISIONS PER CHATHAM COUNTY AND NCDOT COMMENTS	06/05/20

**CE GROUP**  
 301 GLENWOOD AVE. 220  
 RALEIGH, NC 27603  
 PHONE: 919-367-8790  
 FAX: 919-322-0032  
 www.cegroupinc.com  
 License # C-1739

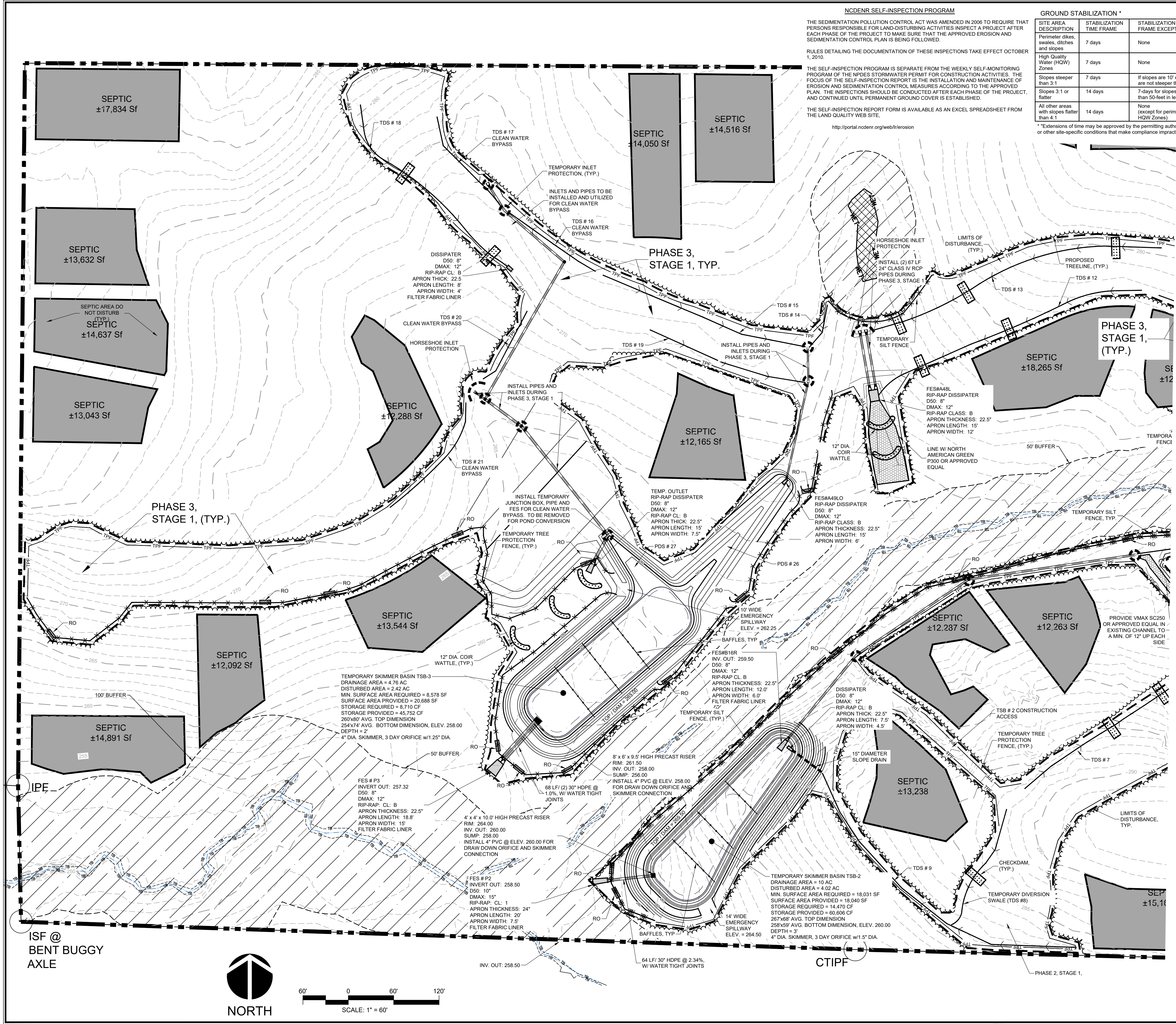


**CONSTRUCTION PLANS FOR  
 THE CONSERVANCY AT JORDAN LAKE  
 EROSION CONTROL PLAN PH 1-3,  
 STAGE 1  
 CHATHAM COUNTY, NC**

Date: JUNE 19, 2020  
 Scale: 1" = 60'  
 Drawn: JWA  
 Checked: JRF  
 Project No: 127-290  
 Computer Dwg. Name: 127-290\_05-01.ec-01 to ec-03\_erosion control.dwg

Sheet No:  
**EC-03**  
 Of 3

**FINAL DESIGN  
 NOT RELEASED  
 FOR CONSTRUCTION**



ISF @ BENT BUGGY AXLE

