



## No Practical Alternatives Authorization Certificate

August 23, 2023

Ms. Rhiannon Graham  
2401 Brentwood Road, Suite 107  
Raleigh, NC 27612

### **AUTHORIZATION of Jordan Lake Water Supply Watershed Riparian Buffer Protection Rules (15A NCAC 2B .0267) and Chatham County Watershed Protection Buffer Rules Section 304(J) Authorization Certificate**

Project Name: Firefly Overlook  
Project Number: WP-23-199

Dear Applicant,

You have our authorization, in accordance with the Chatham County Watershed Protection Ordinance and Jordan Lake Water Supply Watershed Riparian Buffer Protection Rules and any conditions listed below, to impact **16,061 square feet** of the protected riparian buffers associated with one unnamed intermittent tributary and one unnamed perennial tributary of the New Hope River Arm of Jordan Lake. The proposed impacts are associated with the construction of the subdivision – Firefly Overlook as described within your application submitted April 26, 2023, within the Riparian Buffer Impact Exhibits and the Construction Plans that were completed by CE Group. Review and approval of the proposed activities were required under Section 304(J) – Table of Uses of the Chatham County Watershed Protection Ordinance.

**Per your application this review, and authorization is only valid for those impacts stated above.**

**In addition, you should obtain or otherwise comply with any other required federal, state or local permits before you proceed with your project including (but not limited to) Erosion and Sediment Control and Non-discharge regulations.**

This authorization certification is for the purpose and design that you described in your application. If you change your project, you must notify us, and you may be required to send us a new application. ***If the property is sold, the new owner must be given a copy of this authorization letter and is thereby responsible for complying with all conditions.*** This authorization requires you to follow the conditions listed below.

**The Additional Conditions of the Certification are:**



1. Impacts Approved

The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification are met. No other impacts are approved including incidental impacts:

A. Permanent Impacts

<b>Total Impacts</b>		
<small>Total Impacts = all impacts within the full road crossing including all utilities. Utilities are embedded within the total impacts below.</small>		
(Road Crossing)		
Zone 1 – B1	8,561 (square ft.)	Project Impacts Inventory Summary, Stream Impact Exhibit
Zone 2 – B2	6,889 (square ft.)	Project Impacts Inventory Summary, Stream Impact Exhibit
Wetland – B3	611 (square ft.)	Project Impacts Inventory Summary, Stream Impact Exhibit

<b>Individual Impacts</b>		
<small>Individual Impacts – utility impacts embedded within the total road crossing impact</small>		
(Utility Crossings)		
Perennial Stream – Zone 1, B4 – Underground Electric	423 (square ft.)	Project Impacts Inventory Summary, Stream Impact Exhibit
Perennial Stream – Zone 2, B5 – Underground Electric	570 (square ft.)	Project Impacts Inventory Summary, Stream Impact Exhibit

Perennial Stream – Zone 1, B6 – Utility - Underground Non-electric (Telecom + Gas)	617 (square ft.)	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Perennial Stream – Zone 2, B7 – Utility - Underground Non-electric (Telecom + Gas)	1,020 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Intermittent Stream – Zone 1, B8 - Utility - Underground Non-electric (Telecom + Gas + Water)	1,413 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Intermittent Stream – Zone 2, B9 - Non-Electric Utilities	1,729 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Wetland, B10 - Utility - Underground Non-electric (Telecom + Gas)	750 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Intermittent Stream – Zone 1, B11 – Underground Electric Utilities	434 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Intermittent Stream – Zone 2, B12 – Underground Electric Utilities	700 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact
Wetland, B13 – Underground Electric Utilities	500 (square ft.)*	Project Summary, Exhibit	Impacts Stream	Inventory Impact

Exempt Utility Crossings		
Intermittent Stream – Zone 1, B14 – Aerial Electric Utilities	601 (square ft.)*	Project Summary, Exhibit    Impacts Stream    Inventory Impact
Intermittent Stream – Zone 2, B11 – Aerial Electric Utilities	401 (square ft.)*	Project Summary, Exhibit    Impacts Stream    Inventory Impact

2. Temporary Impacts

Such impacts are typically associated with construction corridors, temporary access roads, the installation and operation of temporary sediment and erosion control measures and devices, and vegetation management, including monitoring and maintenance, on restoration or enhancement projects. Approved temporary impacts must remain temporary in nature, minimize impacts to the riparian buffer, meet or exceed required Best Management Practices (BMP), perform and be maintained so that no violations of county riparian buffer or state water quality standards, statutes, or rules occur, and must be returned to the uses that were existing at the time of authorization. **No temporary impacts are proposed with this project.**

3. No Waste, Spoil, Solids, or Fill of Any Kind

No waste, spoil, solids, or fill of any kind shall occur in riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of county riparian buffer or state water quality standards, statutes, or rules occur.

4. Diffuse Flow

An additional condition is that all stormwater shall be directed as diffuse flow at non-erosive velocities through the protected stream buffers and will not re-concentrate before discharging into the stream as identified within Section 304(J)2 of the Watershed Protection Ordinance.

5. Protective Fencing

The outside buffer boundary and along the construction corridor within these boundaries approved under this authorization shall be clearly marked with orange warning fencing (or similar high visibility material) for the areas that have been approved to infringe within the

buffer, stream channel or water prior to any land disturbing activities to ensure compliance with the Watershed Protection Ordinance.

#### 6. Certificate of Completion

In accordance with Section 305(G)6 all activities as proposed, and any subsequent modifications, approved within this authorization must be completed within **one year** of the issuance of the authorization. The applicant is required to certify that the completed project is in accordance with this authorization and shall submit actual 'as-built' plans. If proof of completion is not presented within this timeframe, then the person shall be in violation of both the State's and Chatham County's riparian buffer protection program.

Any disputes over determinations regarding this Authorization of Approvable Impacts (associated with the approved buffer impacts) shall be referred in writing to the Director of the Division of Water Resources, c/o the 401 & Buffer Permitting Unit. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.

The mailing address for the 401 & Buffer Permitting Branch is:

Ms. Stephanie Goss  
401 & Buffer Permitting Branch Supervisor  
NC DEQ 401 & Buffer Permitting Branch  
1650 Mail Service Center  
Raleigh, NC 27699-1650  
Telephone: 919-807-6300, Facsimile: 919-807-6494

This Authorization shall expire five (5) years from the date of this letter.

This letter completes the review of the "No Practical Alternatives" determination under Section 304(I) and 15A NCAC 2B .0267. If you have any questions or would like a copy of the buffer rules, please call Taylor A. Burton at (984) 214-1456. This letter does not authorize any impacts to either Waters of the United States or Waters of the State. Please contact the US Army Corps of Engineers (USACE) or NC Division of Water Quality (DWQ) if any impacts are proposed to either of these waters.

Sincerely,



Rachael Thorn  
Chatham County Watershed Administrator

cc: Shelton Sullivan, Environmental Specialist II, NC DWR 401 & Buffer Permitting Branch  
Zachary Thomas, Environmental Program Consultant, NC DWR Raleigh Regional Office  
Stephanie Goss, Supervisor, 401 & Buffer Permitting Branch NC DWR Raleigh Regional Office  
Drew Blake, Assistant Director, Chatham County Watershed Protection Department

Justin Hasenfus, Erosion Control Program Manager, Chatham County Watershed Protection  
Department

Jason Sullivan, Director, Chatham County Planning Department

Kimberly Tyson, Subdivision Administrator, Chatham County Planning Department




Enclosures: Riparian Buffer Authorization Application – April 26, 2023  
Riparian Buffer Authorization Review Letter – April 27, 2023  
Comment Response Letter – June 16, 2023, completed by Terracon  
Riparian Buffer Authorization Review Letter - July 31, 2023  
Comment Response Letter – August 15, 2023 completed by Terracon  
Riparian Buffer Impact Exhibits – completed by CE Group  
Section 404 General Permit Verification, dated 05/01/2022, (SAW-2022-01620)

**Riparian Buffer (Authorization) No Practical Alternatives**

**Applicant**

**Primary Location**

**WP-23-199**

 Rhiannon Graham  
 760-717-2621  
 rhiannon.graham@terracon.com

1623 N Pea Ridge Rd  
Pittsboro, North Carolina 27312

Submitted On: Apr 26, 2023

**Project Information**

**Are you the Property Owner or their Agent?**

Agent

**Is the project within the Jordan Lake Watershed**

Yes

**Is a change in lot configuration proposed?**

No

**Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If yes, attach the acceptance letter from mitigation bank or in-lieu fee program.**

No

**Does the project require Corps of Engineers (USACE) approval?**

Yes

**Does the project require NC Division of Water Quality (NC DWQ) approval?**

Yes

**Name of Project**

Firefly Overlook

**Nearest Road Insection**

North Pea Ridge Road and Seaforth Road

**Subdivision Name**

Firefly Overlook

**Owner Information**

**Name**

**Pea Ridge Developers**

**Deed Book & Page Number**

**2296 & 0950**

**Responsible Party (if different from names on deed)**

**Andrew Ross**

**Mailing Address**

**PO Box 5548**

**City, State, Zip Code**

**Cary, NC**

**Phone Number**

**919-703-6203**

**Email**

**andrewross6647@gmail.com**

**Are you an Agent or Consultant applying on behalf of the landowner?**

Yes

**Applicants Information**

**Name**

**Andrew Ross**

**Primary Phone**

**919-703-6203**

**Company Name**

**Pea Ridge Developers, LLC**

**Email**

**andrewross6647@gmail.com**

**Mailing Address**

**PO Box 5548**

**City, State, Zip Code**

**Cary, NC**

**Project Information and Prior Project History**

**Parcel Number (s)**

**17531, 18070**

**Coordinates (Lat/Long)**

**Property Size (acres)**

**35.71978, -79.06740**

**76**

**Nearest Surface Waters**

**Jordan Lake**

**Project Description**

**Describe the existing conditions on the site and the general land uses in the vicinity of the project at the time of application**

**The existing conditions on site are composed of undeveloped forested land. There is a small subdivision to the south and west of the property. The rest of the land adjacent to the site is undeveloped land.**

**Explain the purpose of the proposed project**

**To construct a road crossing to access a housing development**

**Describe the overall project in detail, including the type of equipment to be used**

**32 lots are proposed, an access road to access the lots. Typical grading and construction equipment will be used.**

**Total estimated acreage of all wetlands on the property**

**0.55**

**Total estimated acreage of all FEMA floodplains on the property (SFHA)**

**0**

**Total linear feet of perennial streams on the property**

**3,230**

**Total linear feet of intermittent streams on the property**

**771**

**Total linear feet of ephemeral streams on the property**

**141**

**Jurisdictional Determinations**

**Has the USACE completed a jurisdictional determination for the property**

**Yes**

**Date USACE Determination was completed**

**03/30/2023**

**USACE Action ID#**

**SAW-2022-01620**

**Has the NC DEQ-DWR completed a jurisdictional determination for the property**

**No**

**Who delineated the jurisdictional areas (name)**

**Rhiannon Graham**

**Agency/Consulting Company/Other**

**Consultant**

**Company Name**

**Terracon**

**Staff Name**

**Rhiannon Graham**

**Project History**

**Have permits or certifications been requested or obtained for this projects (including all prior phases) in the past**

**No**

**Future Project Plans**

**Is this a phased project?**

**No**

**Project Impacts Inventory**

**Please upload a copy of the Project Impacts Inventory found here:**

**<https://www.chathamcountync.gov/home/showpublisheddocument/59971/637850115410270000>**

**Projects Inventory Map Upload**

**105225**

**Avoidance and Minimization**



Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project

**Impacts to the stream are for one proposed road crossing. The site has been designed to reduce impacts as much as practicable. There will be no impacts to the wetlands on site.**

Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques.

**The selected contractor would implement best management practices (BMPs), including, but not limited too, the use of straw bale barriers, silt fences, and/or sediment traps to control storm water runoff. All stream work would occur in the dry. The "permanent-no loss" category refers to embedded riprap in the streambed.**

**Please upload last sheet of paper application found here:  
<https://www.chathamcountync.gov/home/showpublisheddocument/61490>**

**Include Buffer Mitigation, Diffuse Flow Plan, Violations, and Cumulative Impacts Section**  
Final Sheet of Paper Application  
**105226**

**Statement of Understanding**

**I have read and understand the regulations of the Watershed Protection Ordinance, Section 304, and I agree to adhere to these associated policies and guidelines.**

Name  
**Rhiannon Graham**  
New Field  
**04/26/2023**  
Signature of Applicant  
**true**

<b>Buffer Mitigation – Required by NC DWQ</b>				
Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Comments:
If yes, then identify the square feet of the impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.				
Zone	Type of Impact	Total Impact (square feet)	Multiplier	Required Mitigation (square feet)
Zone 1		3		
Zone 2		1.5		
<b>Total buffer mitigation required:</b>				
If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment into private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund):				
Comments:				
<b>Diffuse Flow Plan (DWQ Requirement)</b>				
Is a diffuse flow plan included? If no, explain why.			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Violations (DWQ Requirement)</b>				
Is the site in violation of Chatham County Riparian Buffer Rules?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Is this an after-the-fact permit application?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If you answered yes to either of the above, provide an explanation of the violation(s):				
<b>Cumulative Impacts (DWQ Requirement)</b>				
Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If yes, submit a qualitative and quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If no, provide a short narrative description.				
<b>Rhiannon Graham</b> <hr/> Applicant/Agent's Printed Name		<hr/> Applicant/Agent's Signature <small>(Agent's signature is valid only if an authorization letter form the applicant is provided).</small>		Date: Click here to enter a date.

## Project Impacts Inventory

### Impact Summary

Which types of buffers will be impacted by the project?

Jordan Only Buffers	Intermittent (I-50')		Perennial (P - 50')		
County + Jordan Buffers	Ephemeral (E-30')		Intermittent (I - 50')	Yes	
	Perennial (P - 100')	Yes	Perennial Water Body (WB-50')		
	Wetland (W - 50')	Yes	FEMA Floodplain (FP - Extents)		

### Buffer Impacts (Reference each to Buffer Impact Map)

Buffer Impact Number	Permanent/Temporary	Purpose/Type of Impact	Stream Name (from USGS Map, UT (unnamed tributary of <u>stream name</u> <u>on USGS</u> )	Buffer Type	Square Feet	Buffer Face Width (Linear Impact)
B1 - Zone 1 Total	P	Road Crossing	T4 UT to Jordan Lake		8,561	138
B2 - Zone 2 Total	P	Road Crossing	T4 UT to Jordan Lake		6,889	114
B3 - Wetland	P	Road Crossing	Wetland (W7)	(W - 50')	611	
<b>Total Project Impacts</b>					<b>16,061</b>	<b>138</b>

### Individual Impacts

B4 - Perennial - Zone 1	P	Utility - Underground Electric	T4 UT to Jordan Lake	(P-100')	423	10
B5 - Perennial - Zone 2	P	Utility - Underground Electric	T4 UT to Jordan Lake	(P-100')	570	10
B6 - Perennial - Zone 1	P	Utility - Underground Non-electric (Telecom + Gas)	T4 UT to Jordan Lake	(P-100')	617	10
B7 - Perennial - Zone 2	P	Utility - Underground Non-electric (Telecom + Gas)	T4 UT to Jordan Lake	(P-100')	1,020	10
B8 - Intermittent - Zone 1	P	Utility - Underground Non-electric (Telecom + Gas + Water)	T4 UT to Jordan Lake	(P-100')	1,413	10
B9 - Intermittent - Zone 2	P	Utility - Underground Non-electric (Telecom + Gas + Water)	T4 UT to Jordan Lake	(I-50')	1,729	10
B10 - Wetland	P	Utility - Underground Non-electric (Telecom + Gas)	Wetland (W7)	(W - 50')	750	10
B11 - Intermittent - Zone 1	P	Utility - Electric Underground	T4 UT to Jordan Lake	(I-50')	434	10
B12 - Intermittent - Zone 2	P	Utility - Electric Underground	T4 UT to Jordan Lake	(I-50')	700	10
B13 - Wetland	P	Utility - Electric Underground	Wetland (W7)	(W - 50')	500	
B14 - Intermittent - Zone 1	P	Utility - Aerial Electric	T4 UT to Jordan Lake	(I-50')	601	30
B15 - Intermittent - Zone 2	P	Utility - Aerial Electric	T4 UT to Jordan Lake	(I-50')	401	30

Add rows as needed to list all buffer impacts separately. For buffers in the Jordan Lake Watershed, report I, P, and WB impacts as (Zone 1) first 30-feet, and (Zone 2) 30-50 feet landward. List any buffer impacts beyond Zone 2 normally.



## RIPARIAN BUFFER AUTHORIZATION REVIEW LETTER

April 27, 2023

Ms. Rhiannon Graham  
2401 Brentwood Road Suite 107  
Raleigh, NC 27612

Project Name: Firefly Overlook  
Project Number: WP-23-199

The Chatham County Watershed Protection Department reviewed your Riparian Buffer Authorization Application dated April 26, 2023, and made the following comments:

### **Riparian Buffer Authorization Application**

1. *Describe the existing conditions on the site and the general land uses in the vicinity of the project at the time of application.*
  - a. Please include water and/or sewer availability and streams and wetlands that are on the property within buffer impact narrative.
2. *Explain the purpose of the proposed project.*
  - a. Please explain the need to impact a protected riparian buffer. Please explain if an ephemeral stream could've been impacted instead of an intermittent stream. Provide this within the buffer impact narrative.
3. *Describe the overall project in detail, including the type of equipment to be used:*
  - a. How will you accomplish the project described in the previous questions? Create and refer to illustrations if necessary and be as specific as possible about what will be done and where. For the type of equipment used, make and model are not necessary but do include descriptions such as bulldozer, bucket loader, track and/or wheeled vehicles, and specify whether (and where) trees will be felled by hand (chainsaw) or mechanical means. Note that mechanized clearing is prohibited in streams and wetlands. Provide this on a comment response letter or within buffer impact narrative.
4. *Project Impact Summary Table*
  - a. Include facewidths for impacts within the impacts summary table.
  - b. If applicable include utility crossings for electric, stormwater, fiber, telephone, septic and others with defined limits and maintenance corridors. These impacts will need to be broken down on impact summary table.

### **Buffer Impact Map**

5. Add callouts to impact map that locates 30' Zone 1 Buffer and 20' Zone 2 Buffer on southern portion of impact map.
6. Any hatching that is not called out on impact map should either be removed or called out(darker green hatching).

7. Please provide utility impact amounts as well as installation routes, corridors, and profile views. Utilities include water, sewer, storm sewer, electric, fiber, etc. that are anticipated with the development.
8. Include total face width of impacts on callouts depicting Zone 1 and Zone 2 buffer impacts on both sides of stream. Provide table on impact map summarizing the face width(same as table on overall exhibit map)
9. Zone 1 impact is called out as 7,700 sqft on one side of stream. While that may be the total impact on both sides of stream, it needs to be labeled as such. Provide Zone 1 buffer impact on southern portion of impact map. The call out will need to equal the total impacts for Zone 1 provided.
10. Please clarify the culvert cross sections on Stream Impact Profile.

### **Soil Erosion and Sedimentation Control Plans**

11. Please provide Soil Erosion and Sedimentation Control Plans
12. Please provide a cut/fill plan.

This completes the review of the Riparian Buffer Authorization Application. Additional comments may follow based on the response to the above comments.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,



Taylor A. Burton  
Watershed Specialist  
Chatham County Watershed Protection Department

CC: Rhiannon Graham, Terracon  
Justin Hasenfus, Watershed Specialist, Chatham County Watershed Protection Dept.  
Rachael Thorn, Director, Chatham County Watershed Protection Department



2401 Brentwood Rd, Suite 107  
Raleigh, NC 27604  
P (919) 873-2211  
**Terracon.com**

June 16, 2023

Taylor A. Burton  
Chatham County Watershed Protection Department  
PO Box 548  
Pittsboro, NC 27312

Re: Response to Request for Additional Information  
Firefly Overlook  
WP-23-199

Taylor Burton:

Terracon is providing the below responses to your Request for Additional Information dated April 27, 2023.

1. Existing conditions of the site is completely wooded with a mix of pine and hardwoods. The surrounding area consists of sparse single family homes.
  - a. There are no proposed utilities in the scope of work for this project. Sewer will be septic field and water will be wells located on each lot. Locations of all septic areas and wells are shown on EC plans.
2. The purpose of the project is for the construction of thirty (30) single family homes. Parcels 17531 & 18070 are to be combined.
  - a. The need to impact a protected riparian buffer is to construct a road be able to access the north side of parcel 17531 and access to parcel 18070.
3. Please see buffer impact narrative.
4. Please see buffer impact sheets
5. Please see buffer impact sheets
6. Please see buffer impact sheets
7. Please see buffer impact sheets. Utility Corridor is dedicated for future use on plans.
8. Please see buffer impact sheets
9. Please see buffer impact sheets
10. Please see buffer impact sheets
11. Please see erosion and sediment control plans
12. Please see cut/fill plans

Please contact me at (919)457-1110 or [rhiannon.graham@terracon.com](mailto:rhiannon.graham@terracon.com) if you have any questions or need anything else from us.

Sincerely,  
Terracon Consultants, Inc.

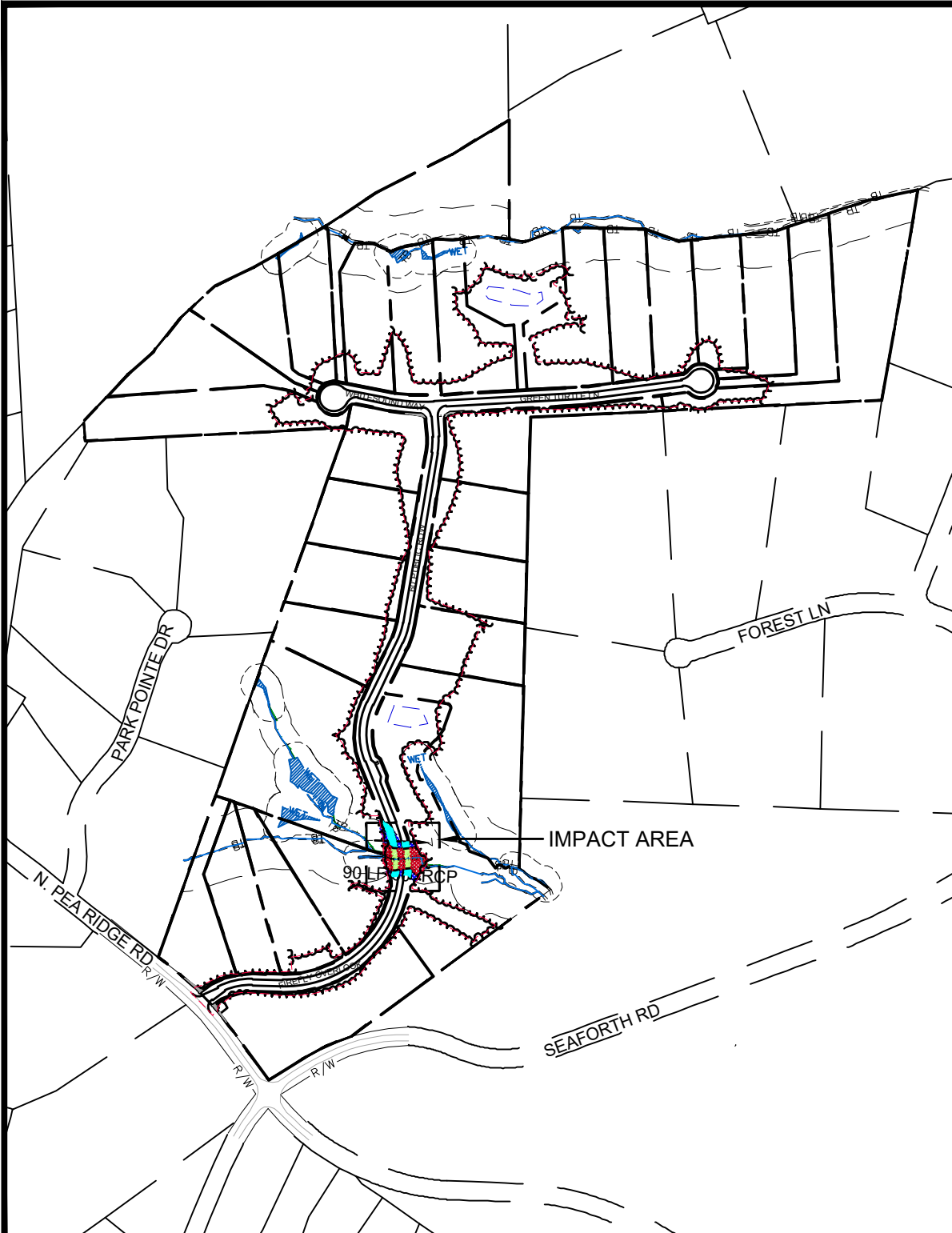
Rhiannon Graham  
Senior Staff Scientist

Jeff Harbour  
Senior Scientist

**Explore with us**

# FIREFLY OVERLOOK STREAM IMPACT OVERALL EXHIBIT

CHATHAM COUNTY, NC  
JUNE 6, 2023



## FIREFLY OVERLOOK- BUFFER IMPACTS

ZONE 1 (INNER 30')	6,113 SF	
ZONE 2 (OUTER 20')	4,059SF	
ZONE 1 UTILITY CORRIDOR (INNER 30')	2,448 SF	
ZONE 2 UTILITY CORRIDOR (OUTER 20')	2,830 SF	

## HORIZONTAL WIDTH BUFFER IMPACTS

ZONE 1A	138 LF*
ZONE 1B	133 LF*
ZONE 2A	114 LF*
ZONE 2B	113 LF*

\*MEASURED AT WIDEST POINT OF IMPACT

## FIREFLY OVERLOOK - STREAM IMPACTS

TEMPORARY	217 SF, 20 LF	
PERMANENT	768 SF, 101 LF	
PERMANENT - NO LOSS**	318 SF, 40 LF	

\*\*TOP OF RIP-RAP DISSIPATER PAD INSTALLED FLUSH AT NATURAL GRADE OF EXISTING STREAM BED



NORTH



**CE GROUP**

301 GLENWOOD AVE. SUITE 220  
RALEIGH, NC 27603  
PHONE: 919-367-8790  
www.cegroupinc.com






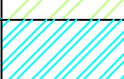
SCALE: 1" = 500'

# FIREFLY OVERLOOK STREAM IMPACT EXHIBIT

CHATHAM COUNTY, NC

JUNE 6, 2023

## FIREFLY OVERLOOK- BUFFER IMPACTS




ZONE 1 (INNER 30')	6,113 SF	
ZONE 2 (OUTER 20')	4,059 SF	
ZONE 1 UTILITY CORRIDOR (INNER 30')	2,448 SF	
ZONE 2 UTILITY CORRIDOR (OUTER 20')	2,830 SF	

## HORIZONTAL WIDTH BUFFER IMPACTS

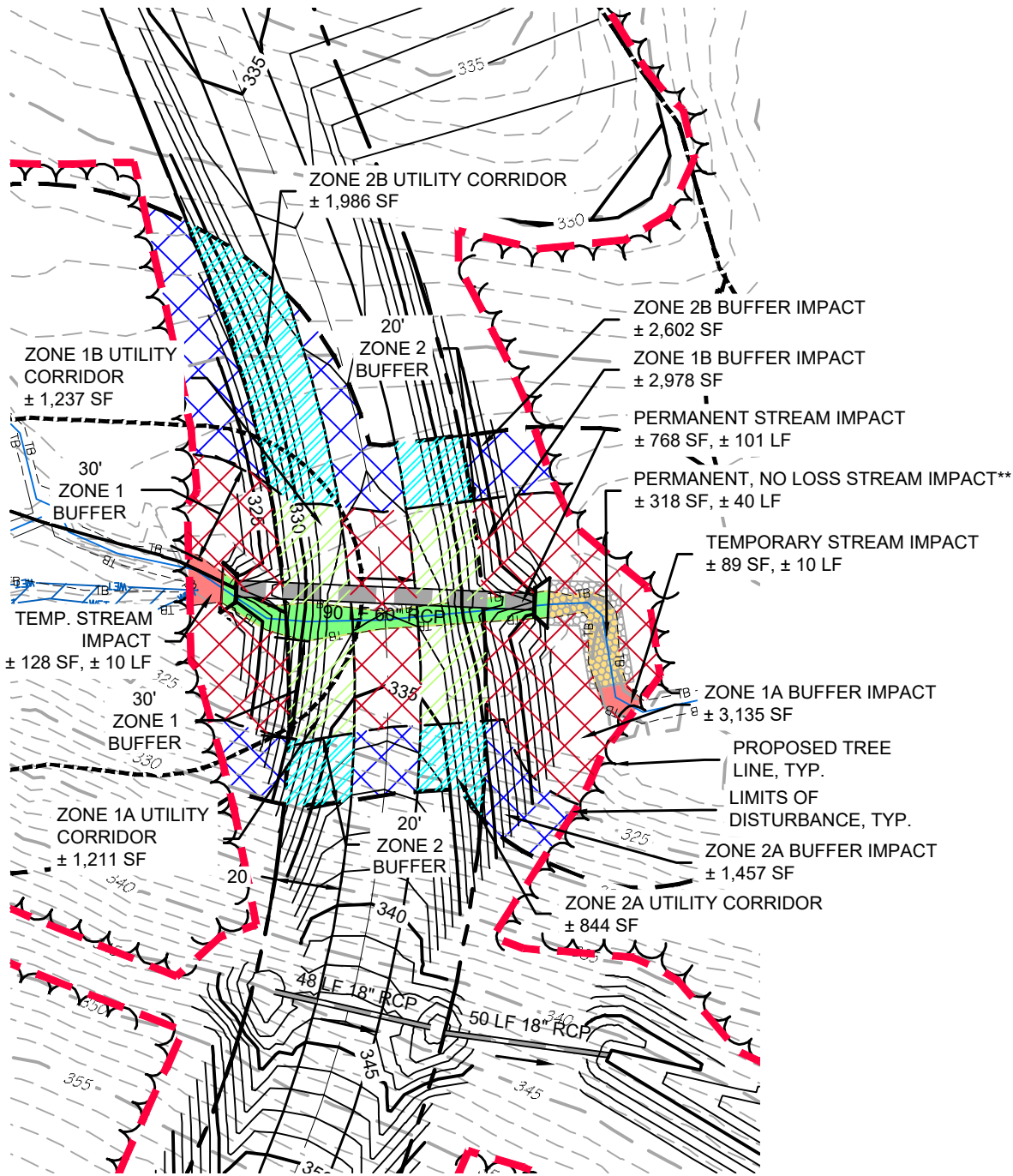
ZONE 1A	138 LF*
ZONE 1B	133 LF*
ZONE 2A	114 LF*
ZONE 2B	113 LF*

\*MEASURED AT WIDEST POINT OF IMPACT

## FIREFLY OVERLOOK - STREAM IMPACTS

TEMPORARY	217 SF, 20 LF	
PERMANENT	768 SF, 101 LF	
PERMANENT - NO LOSS**	318 SF, 40 LF	

\*\*TOP OF RIP-RAP DISSIPATER PAD INSTALLED FLUSH AT NATURAL GRADE OF EXISTING STREAM BED

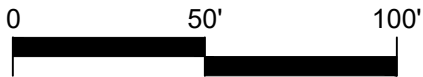


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CE GROUP

301 GLENWOOD AVE. SUITE 220  
RALEIGH, NC 27603  
PHONE: 919-367-8790  
www.cegroupinc.com

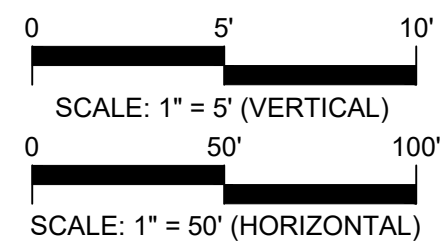
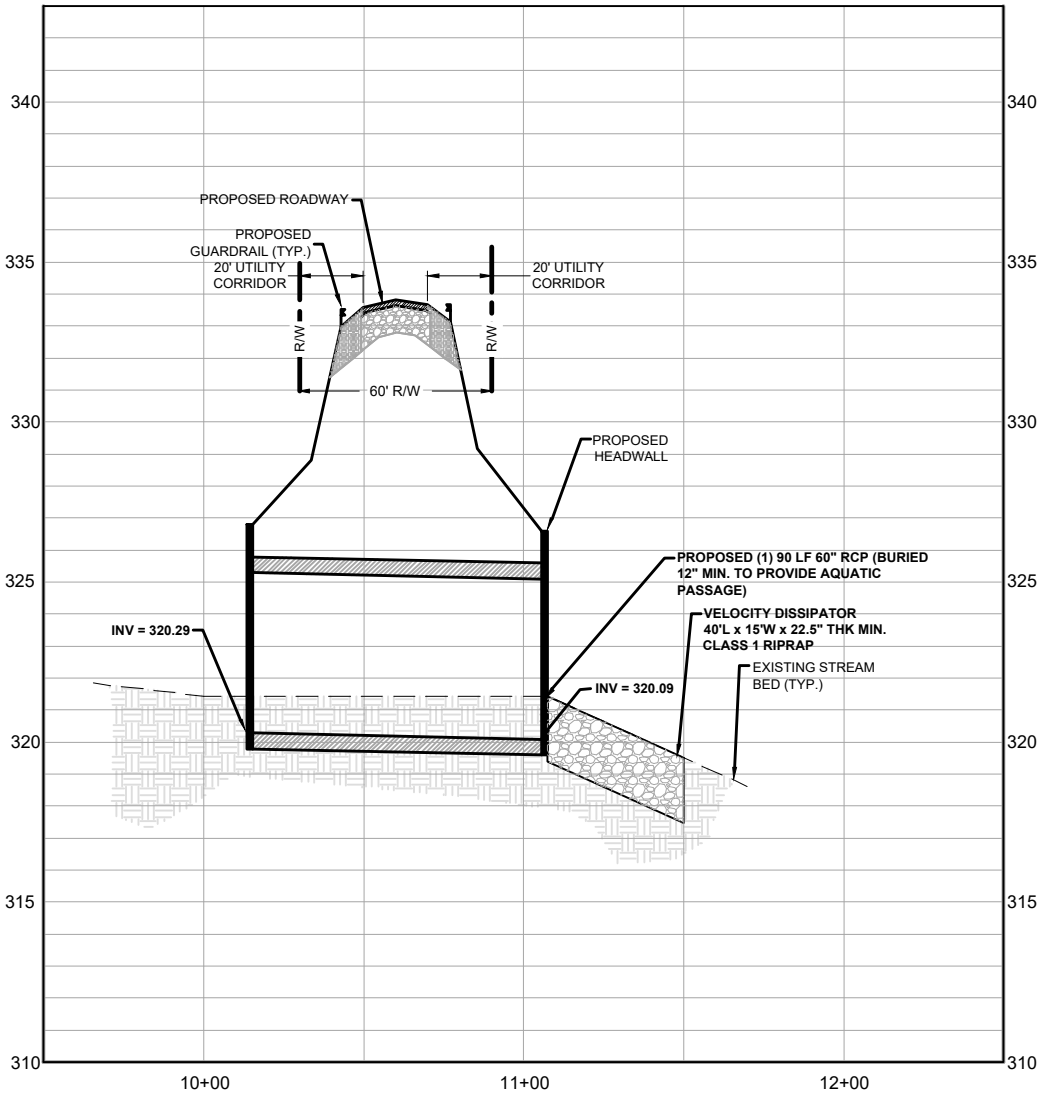
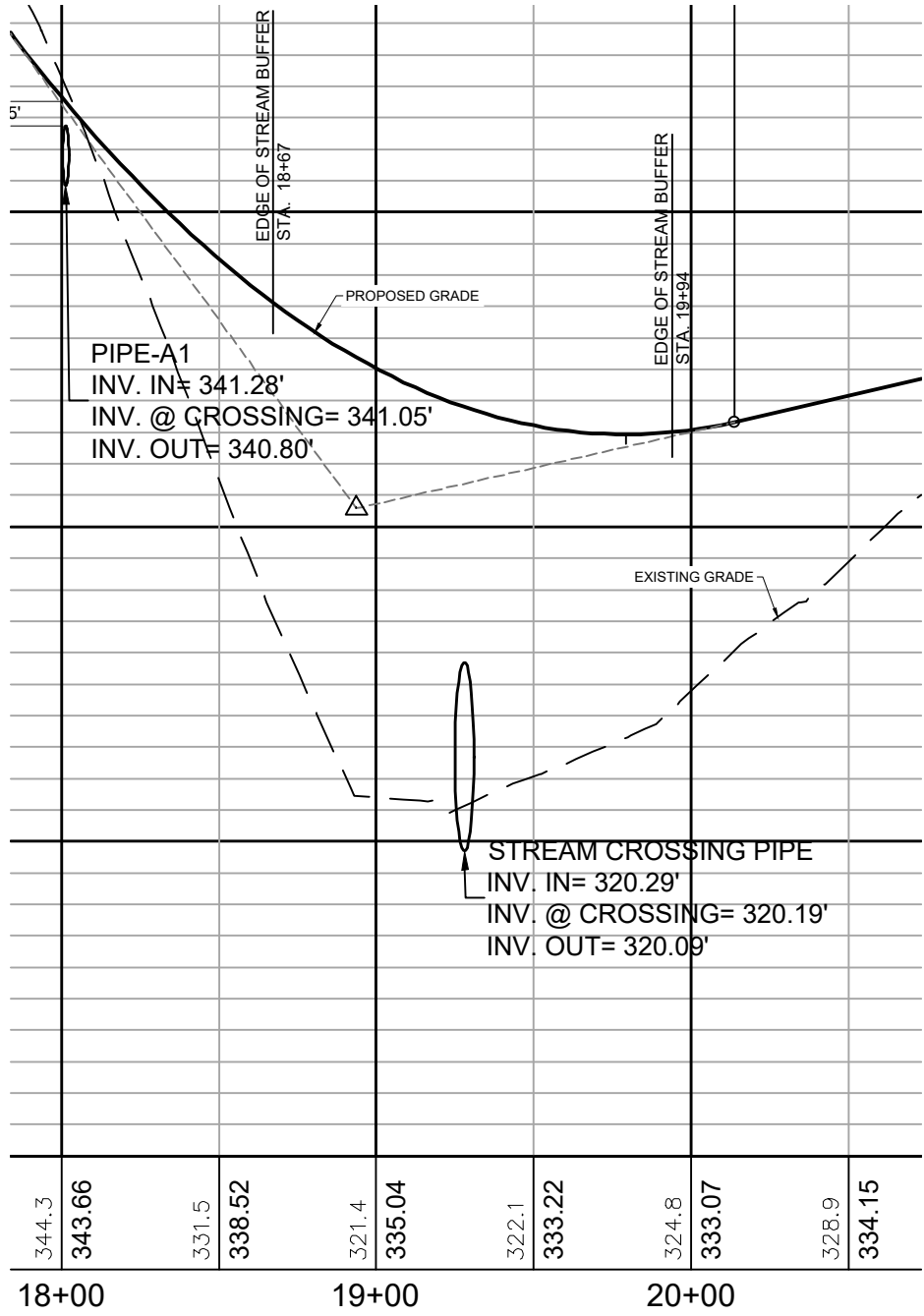


SCALE: 1" = 50'

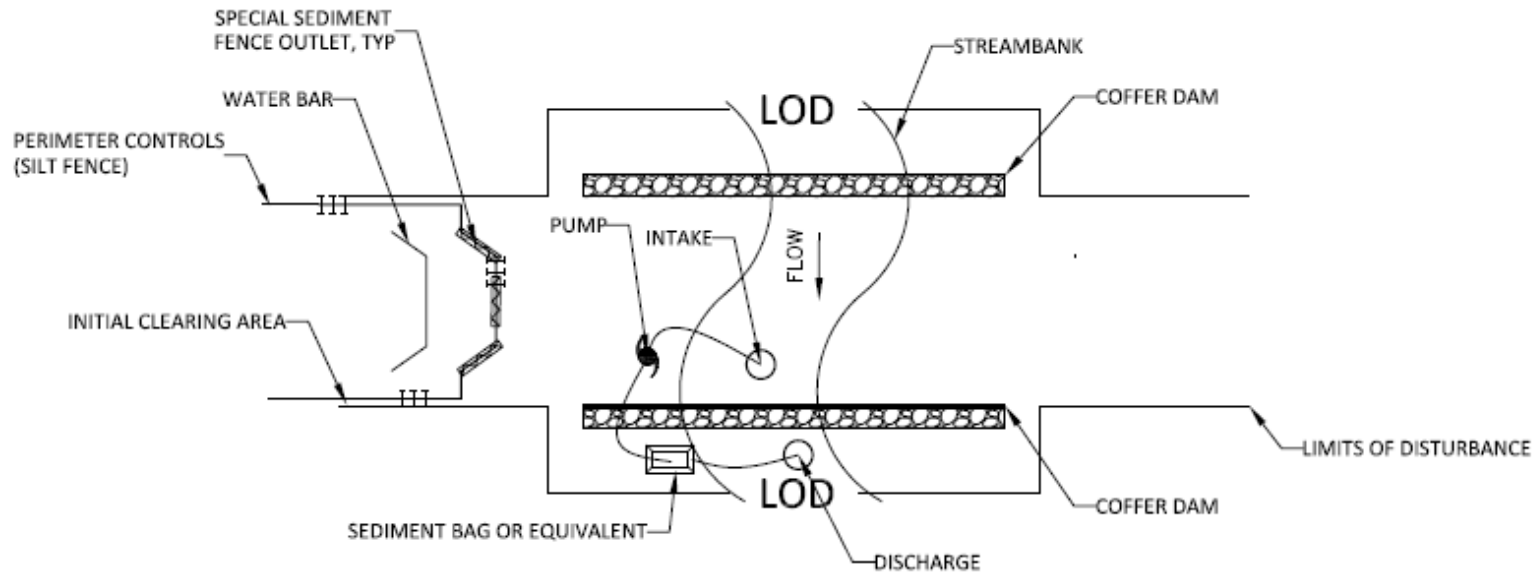


# FIREFLY OVERLOOK STREAM IMPACT PROFILE

CHATHAM COUNTY, NC  
JUNE 6, 2023



**CE GROUP**  
 301 GLENWOOD AVE. SUITE 220  
 RALEIGH, NC 27603  
 PHONE: 919-367-8790  
 www.cegroupinc.com



**INSTALLATION SEQUENCE – STEP 1:**

1. INSTALL PERIMETER EROSION CONTROL MEASURES (SILT FENCE, SILT FENCE OUTLETS, TREE PROTECTION FENCE, WATER BAR, ETC.) ON FIRST SIDE OF STREAM ONLY.
2. CLEAR AND GRADE INITIAL SIDE OF WORK AREA WHILE MAINTAINING PERIMETER CONTROLS.
4. INSTALL DITCHES, DIVERSIONS, AND PUMP AROUND AS SHOWN.
5. INSTALL COFFER DAMS ON EITHER SIDE OF WORK AREA.
6. EXCAVATE PIT PER CULVERT MANUFACTURER SPECIFICATIONS AS DETAILED IN THE PLAN SET.

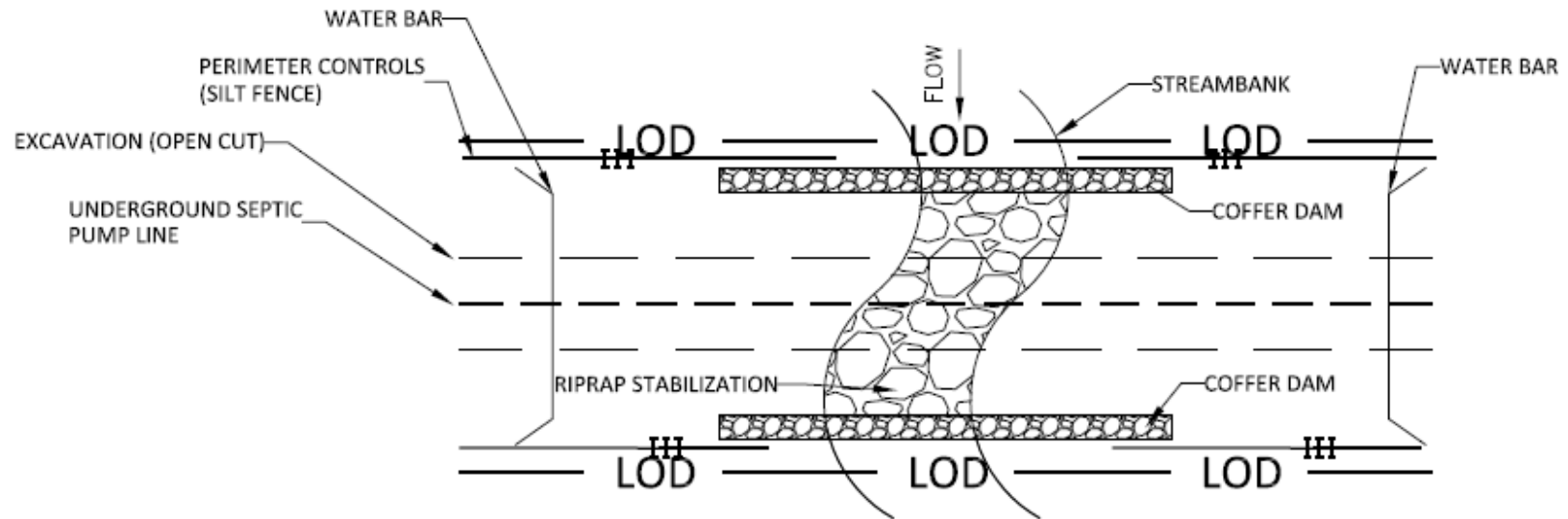
Culvert Details				
	Culvert 1	Culvert 2	Culvert 3	Culvert 4
<b>Length</b>	90 LF			
<b>Diameter</b>	60"			



**STREAM CROSSING - STEP 1**

DETAIL NUMBER

2022-001  
SHEET 1 of 3



**INSTALLATION SEQUENCE – STEP 2:**

1. EXCAVATE SEPTIC TRENCH ACROSS STREAM AND INSTALL PUMP LINE.
2. BACKFILL STREAM BED TO PREVIOUS EXISTING STREAM BED ELEVATION. IF A PERMANENT CROSSING IS REQUIRED, RIPRAP MAY BE PLACED WITHIN STREAM CHANNEL AT AN ELEVATION EQUAL TO NATURAL STREAM BED ELEVATION. RIPRAP MUST BE EMBEDDED INTO THE STREAM CHANNEL AT A MINIMUM OF THE RIPRAP STONE SIZE TO ENSURE NO "FILL" IS PLACED IN THE STREAM CHANNEL.
3. STABILIZE THE STREAM BANKS ACCORDING TO THE STREAMBANK STABILIZATION DETAILS.

**Excavation Pit Details**

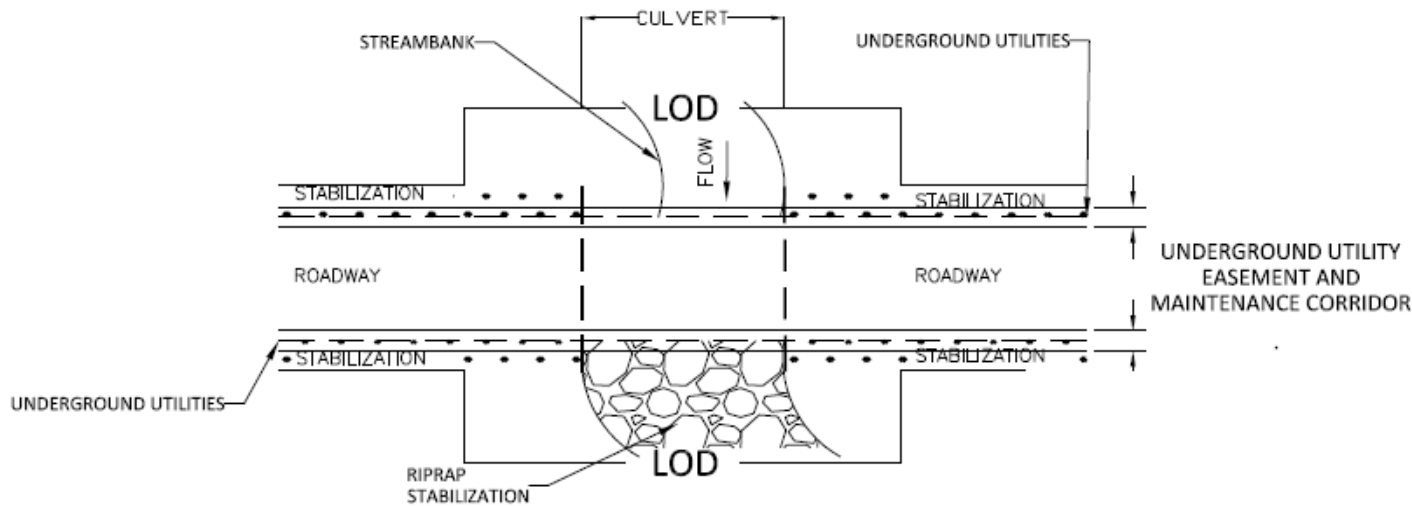
	Culvert 1	Culvert 2	Culvert 3	Culvert 4
<b>Length</b>	98 LF			
<b>Width</b>	13 LF			
<b>Depth</b>	2.5			



**STREAM CROSSING - STEP 2**

DETAIL NUMBER

2022-001  
SHEET 2 of 3

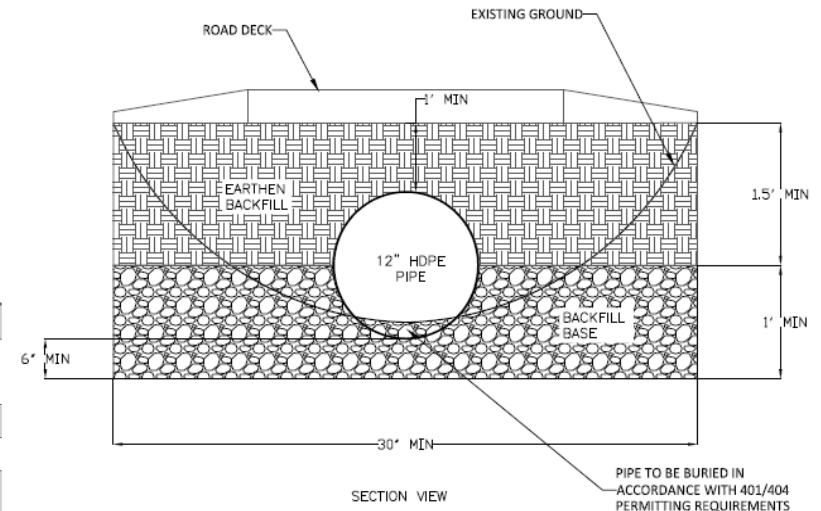


**INSTALLATION SEQUENCE – STEP 3:**

1. CONSTRUCT ROAD PER DESIGN SPECIFICATIONS.
2. ONCE CONSTRUCTION IS COMPLETE, PLACE PERMANENT STABILIZATION SEED MIX ON EXPOSED GROUND.
2. REMOVE IN-CHANNEL EROSION CONTROL MEASURES AND THEN REMOVE PERIMETER EROSION CONTROL MEASURES.
3. CLOSE OUT CONSTRUCTION AND DEMOBILIZE.

**Utility Details**

	Utility 1	Utility 2	Utility 3
Utility Type (Electric/non-electric)			
Overhead/Underground			
Clearing Width	<b>40 LF</b>		
Maintenance Corridor Width	<b>40 LF</b>		



**NOTES:**

1. 1' MINIMUM COVER IS REQUIRED OVER PIPES LESS THAN 60" IN DIAMETER. FOR PIPES 60" OR LARGER, 2' MINIMUM COVER IS REQUIRED.
2. THE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321 AND THE MANUFACTURERS INSTALLATION GUIDELINES.

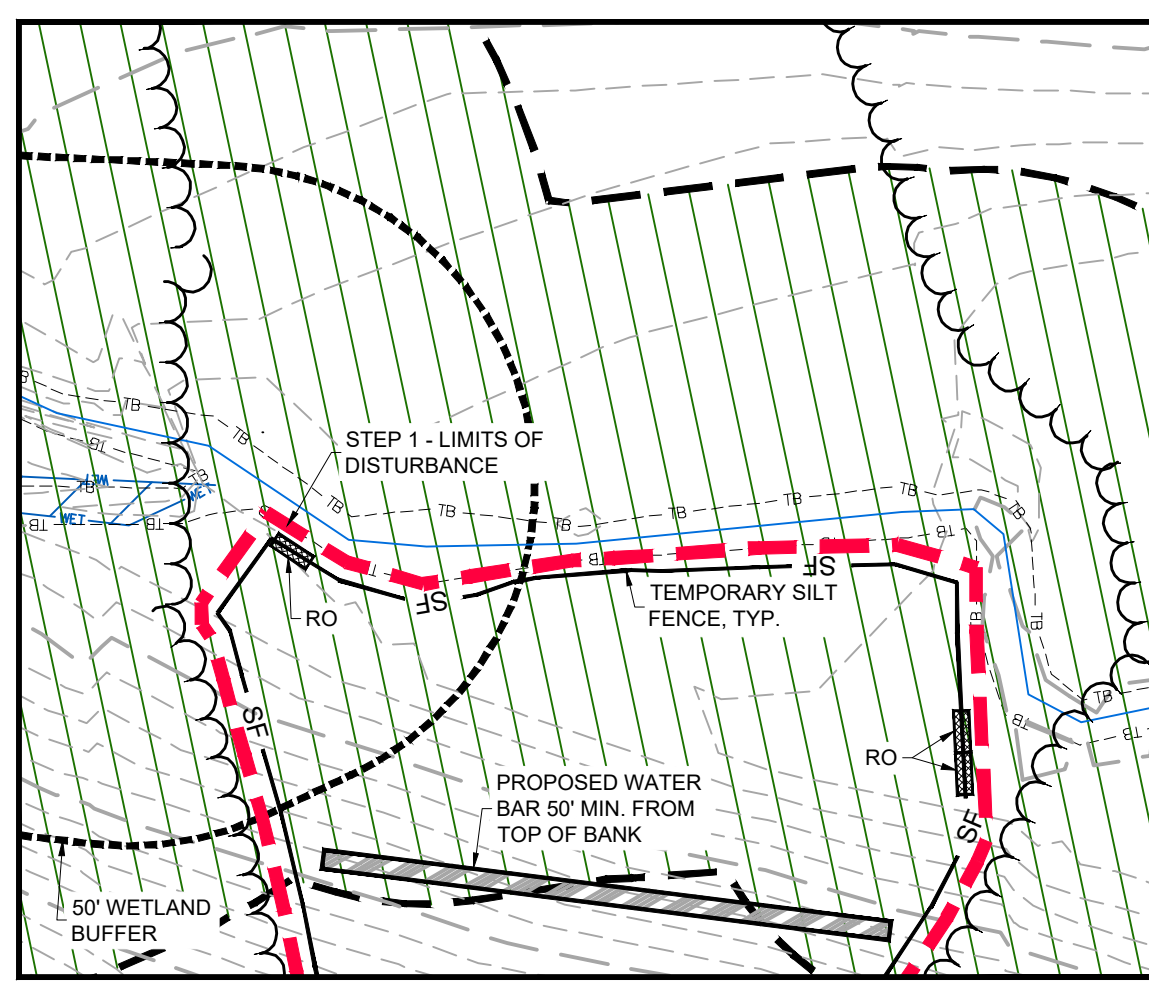


**STREAM CROSSING - STEP 3**

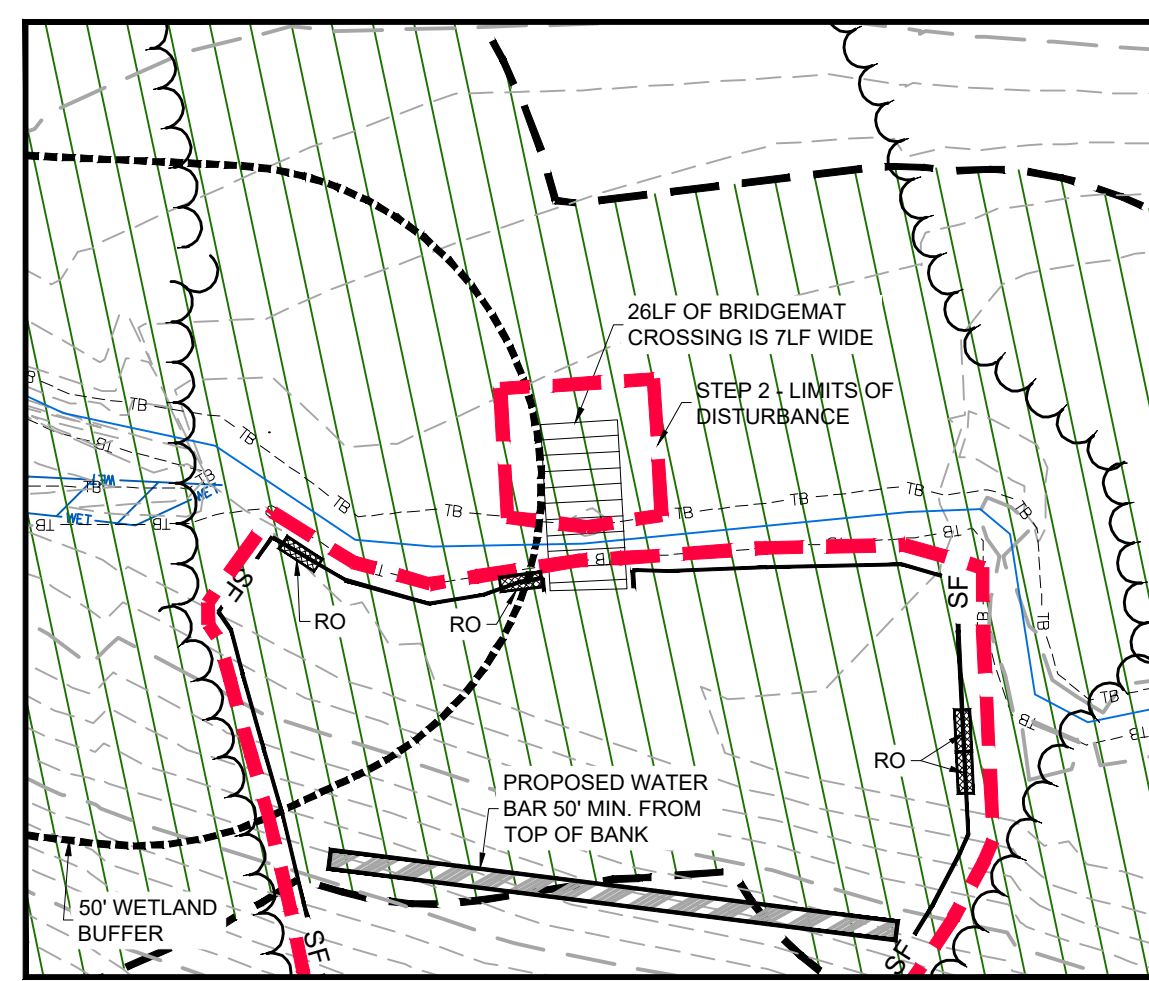
DETAIL NUMBER

2022-001  
SHEET 3 of 3

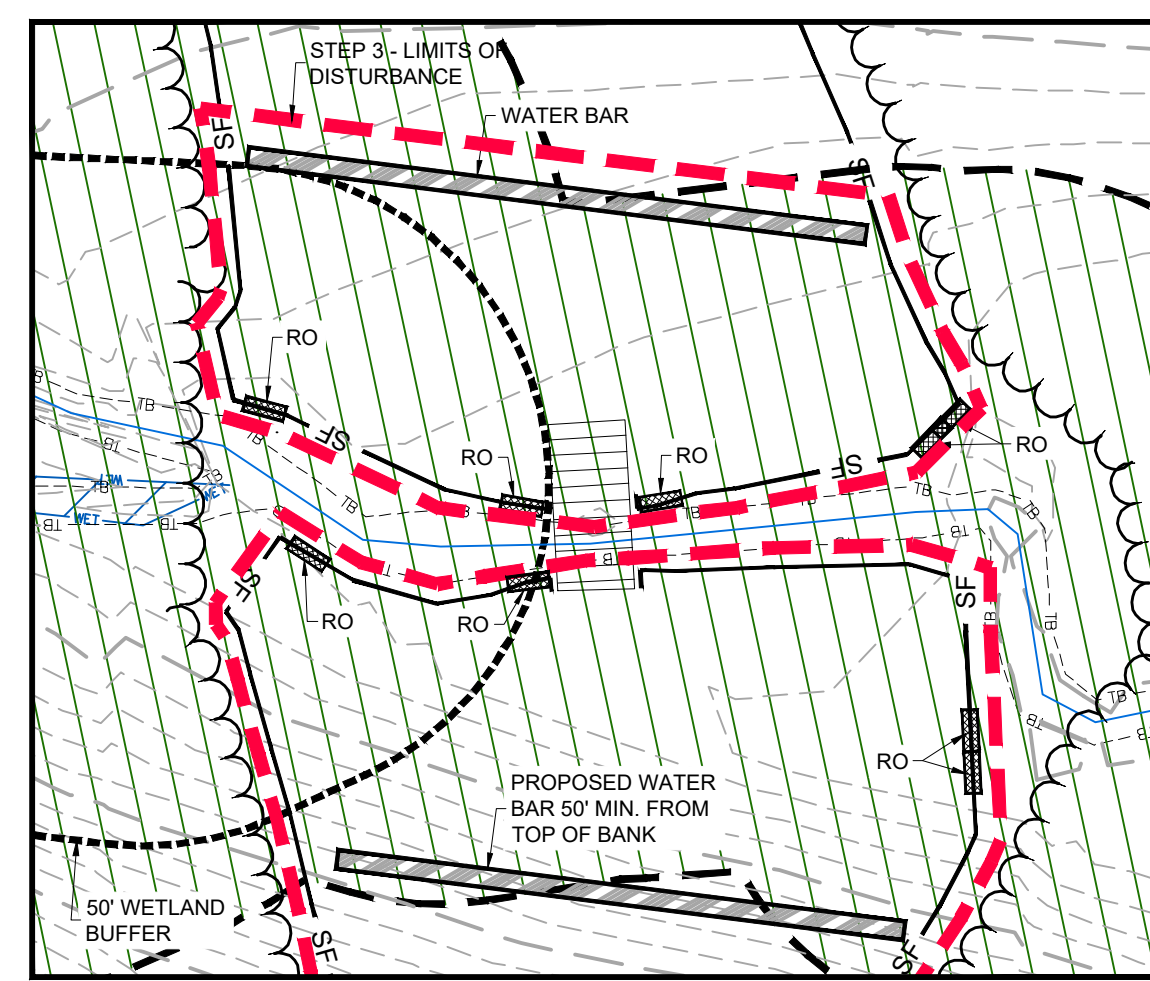




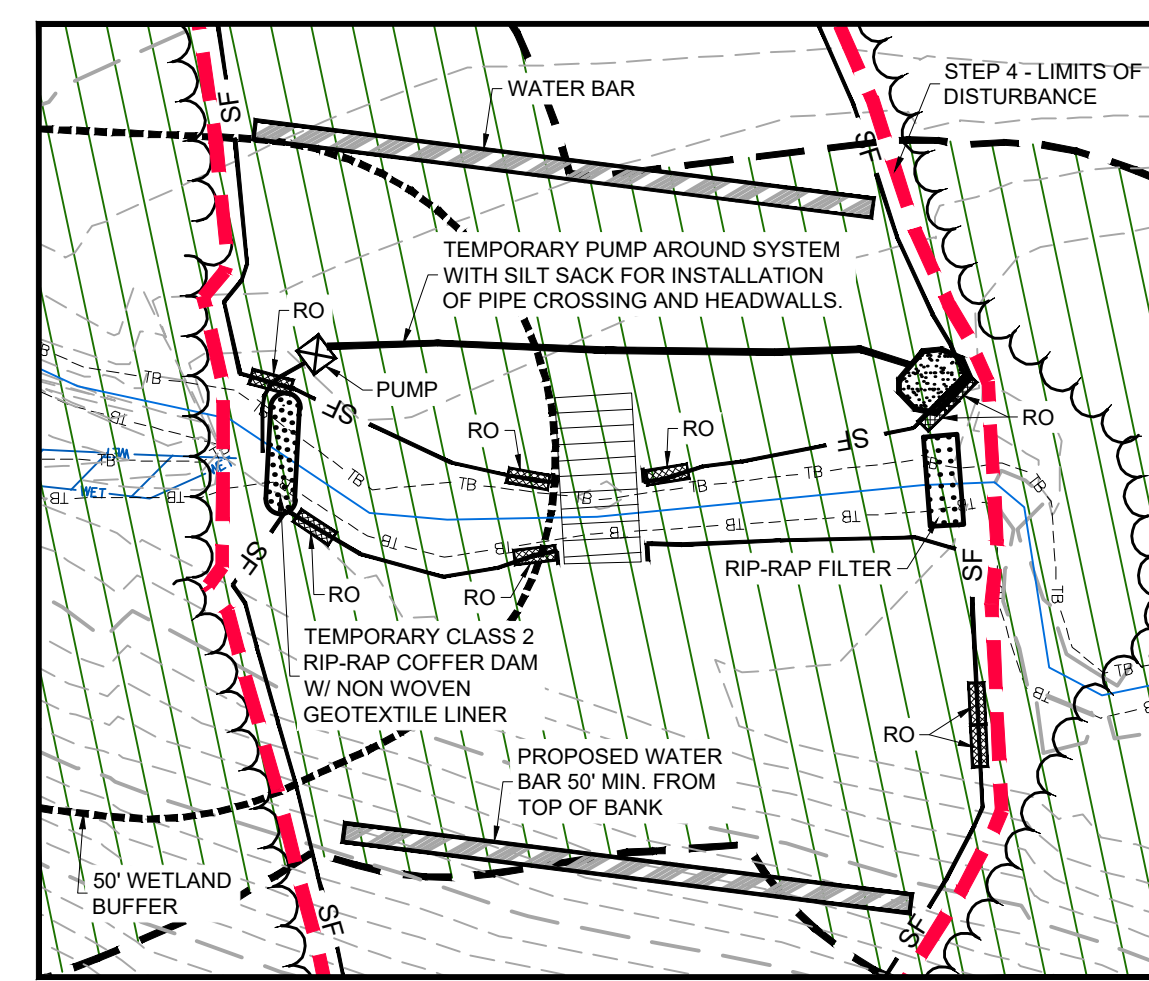
**IMPACT - STEP 1**  
SCALE: 1" = 30'



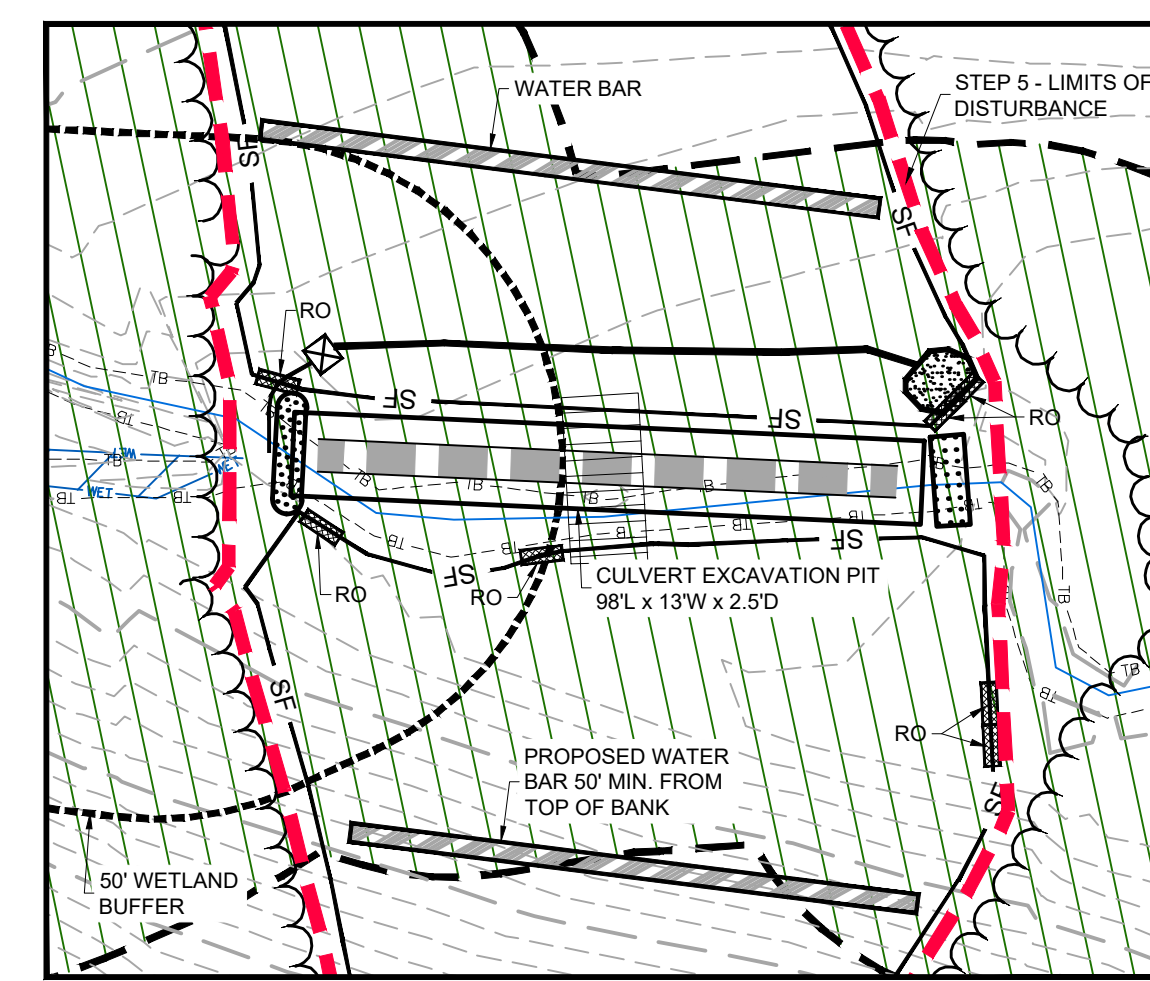
**IMPACT - STEP 2**  
SCALE: 1" = 30'



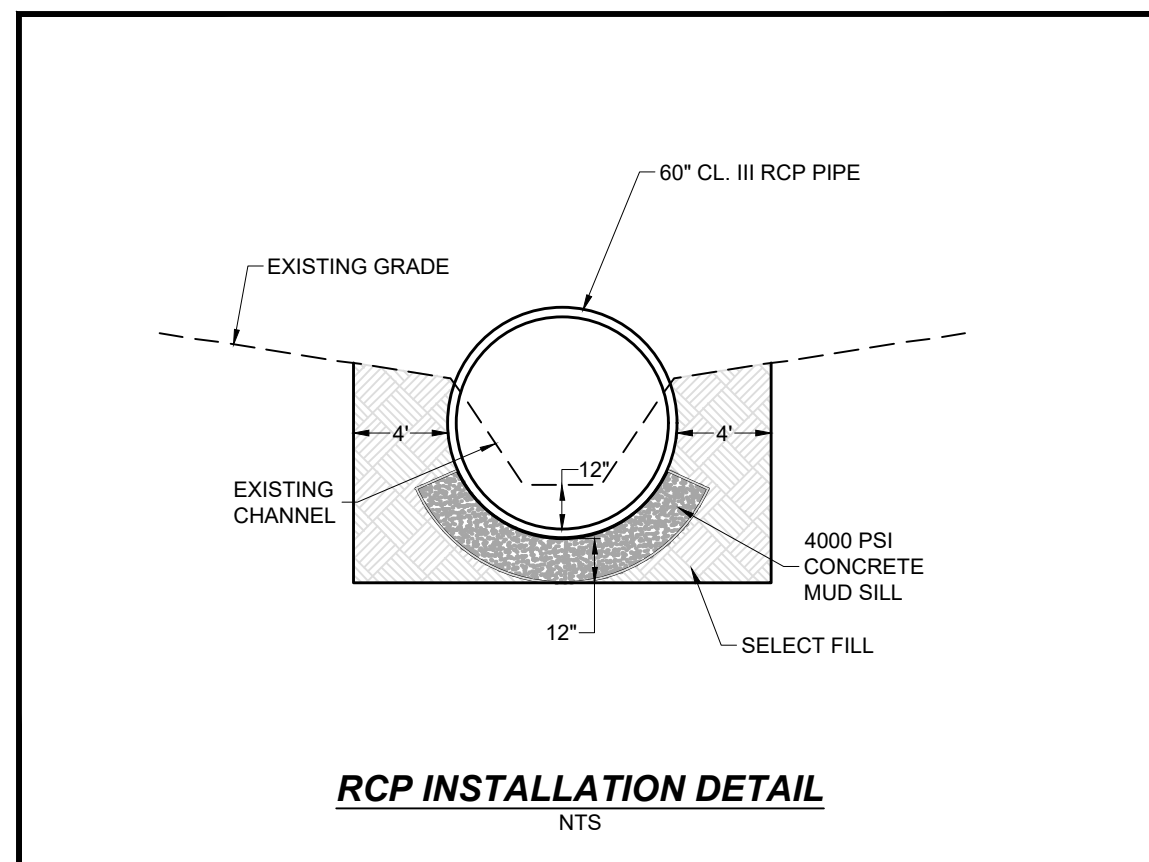
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SCALE: 1" = 30'



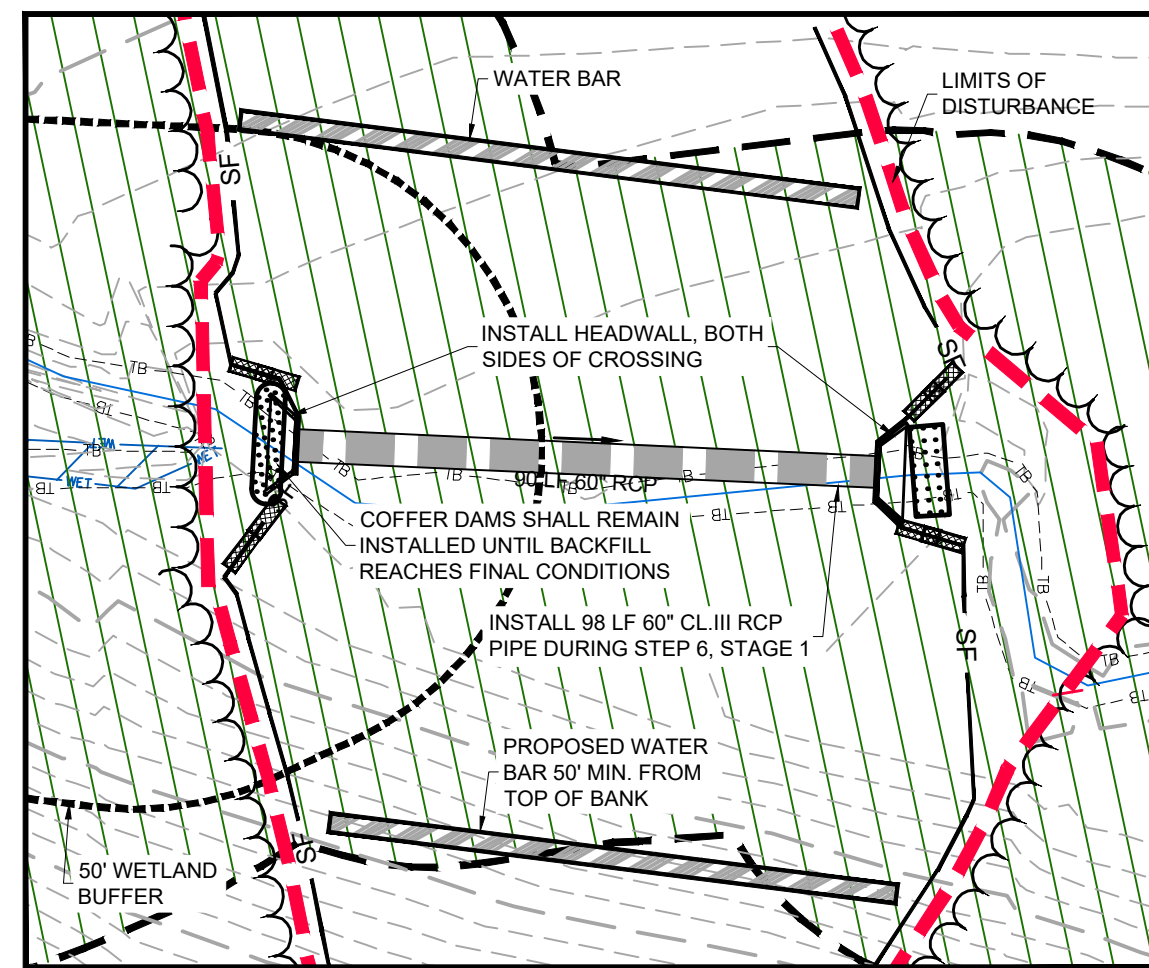
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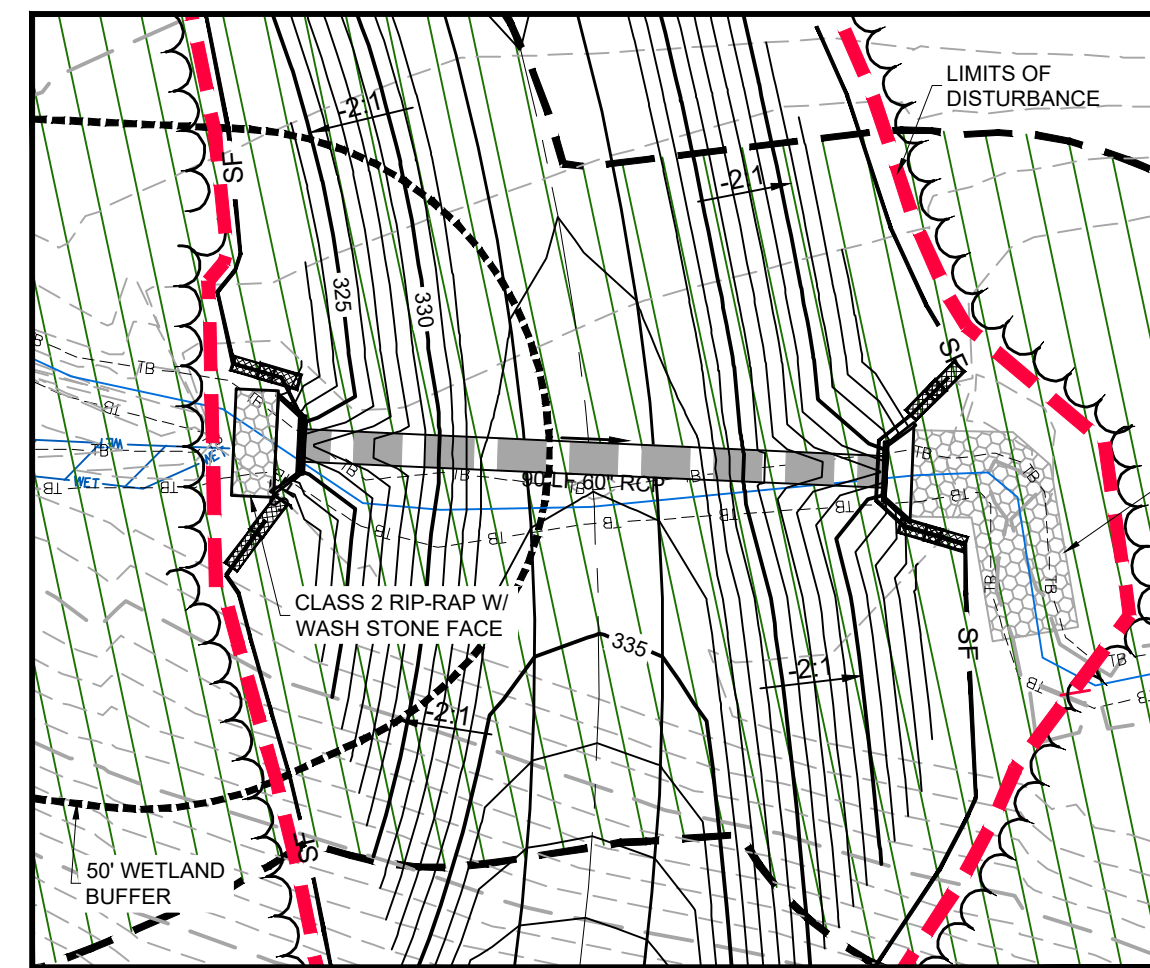
**IMPACT - STEP 5A**  
SCALE: 1" = 30'



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

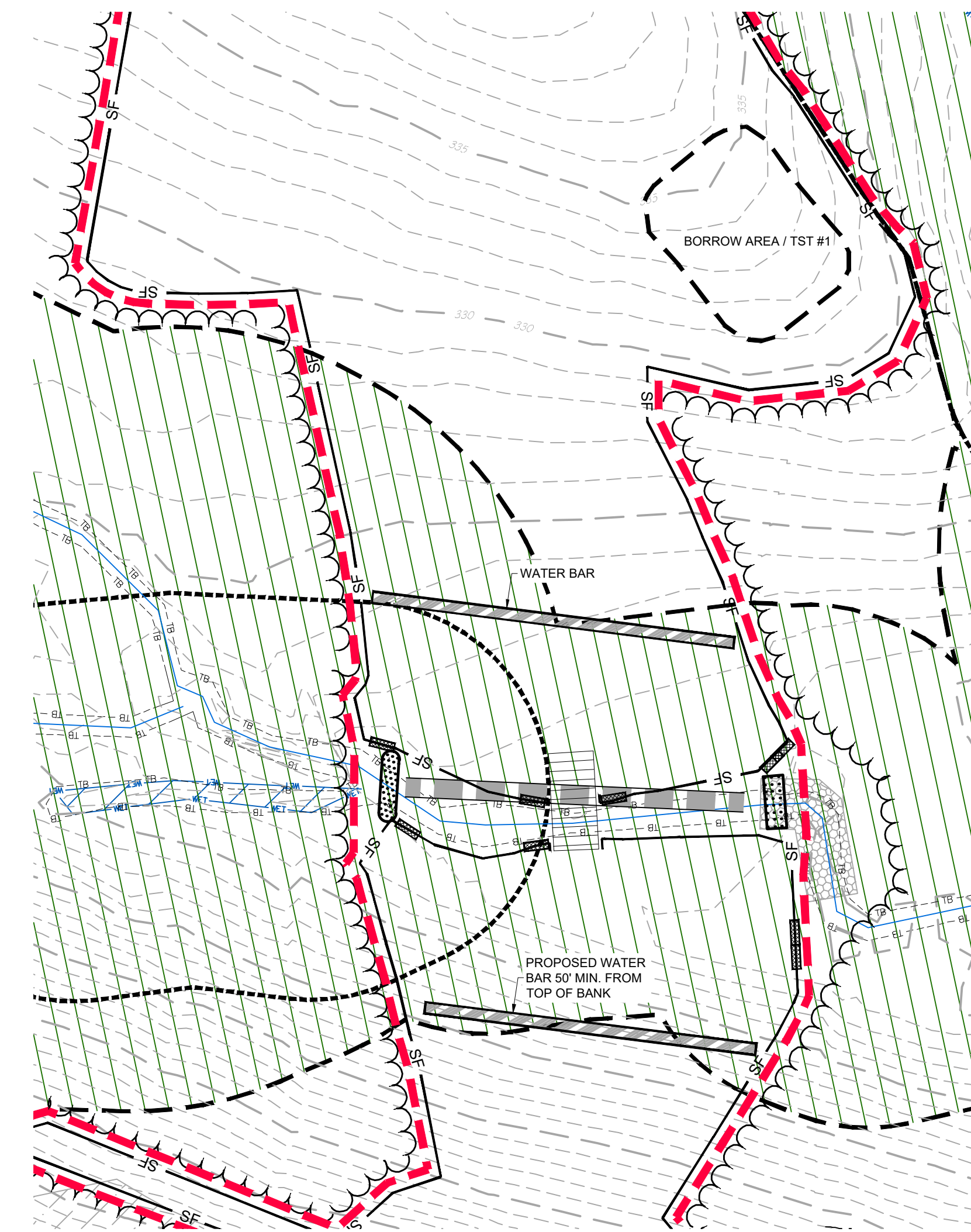


**IMPACT - STEP 6**  
SCALE: 1" = 30'



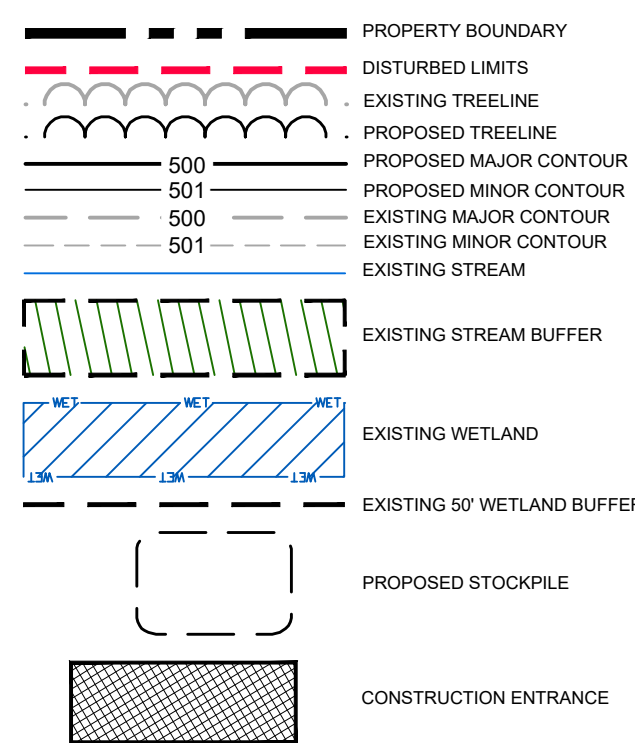
**IMPACT - STEP 7**  
SCALE: 1" = 30'

STREAM CROSSING  
DISSIPATER  
D50: 10"  
DMAX: 15"  
RIP-RAP CL. 1  
APRON THICKNESS: 22.5"  
APRON LENGTH: 40'  
FILTER FABRIC LINER

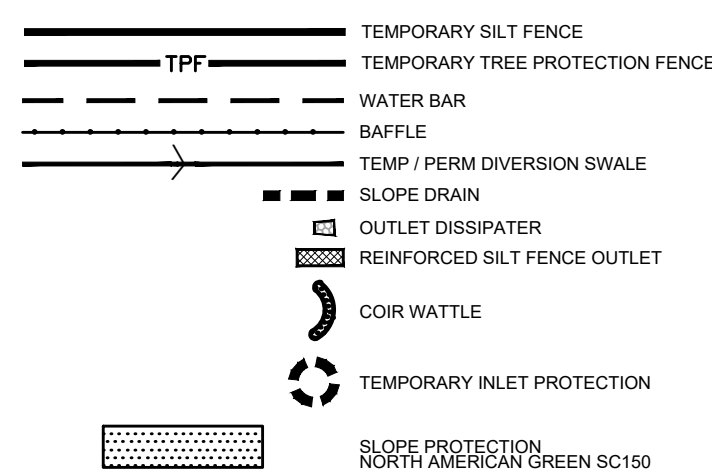


**STREAM CROSSING FOR EXCAVATION**  
SCALE: 1" = 30'

**LEGEND**



**EC LEGEND**



**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 HOW 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))

**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.

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

<http://portal.ncdenr.org/web/eri/erosion>

**CHANNEL IMPACT SEQUENCE**

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**STEP 1:** AFTER UPSTREAM DIVERSIONS ARE 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 STEP 2 CLEARING. INSTALL WATER BAR (DIVERSION) AS SHOWN. NO ACTIVITY ALLOWED WITHIN STREAM CHANNEL ON NORTH SIDE.

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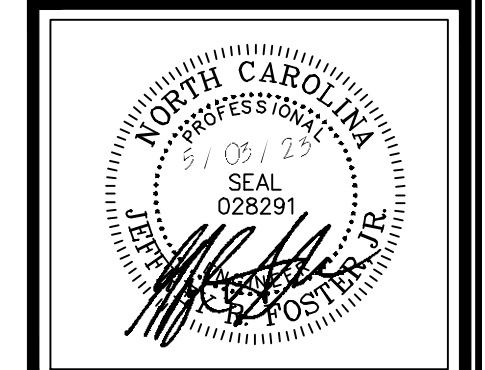
**STEPS 5A-5B:** WHILE MAINTAINING BYPASS PUMPING SYSTEM, EXCAVATE CHANNEL FOR PRECAST RCP PIPE STARTING FROM DOWNSTREAM END. REMOVE AND REPLACE BRIDGEMAT AS REQUIRED FOR CHANNEL EXCAVATION. EXCAVATE GRADE 4' BEYOND OUTSIDE EDGE OF RCP ON EACH SIDE TO ALLOW ADEQUATE WIDTH FOR RE-COMPACTION. PLACE RCP ON A 4,000 PSI CONCRETE MUD SILL AS DIRECTED BY GEOTECHNICAL ENGINEER. BACKFILL OVER PIPE ENOUGH TO ALLOW FOR PERMANENT REMOVAL OF BRIDGEMAT.

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NO.	REVISIONS	DATE

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



**EROSION CONTROL PLANS  
FIREFLY OVERLOOK  
EC STREAM IMPACT**  
CHATHAM COUNTY, NORTH CAROLINA

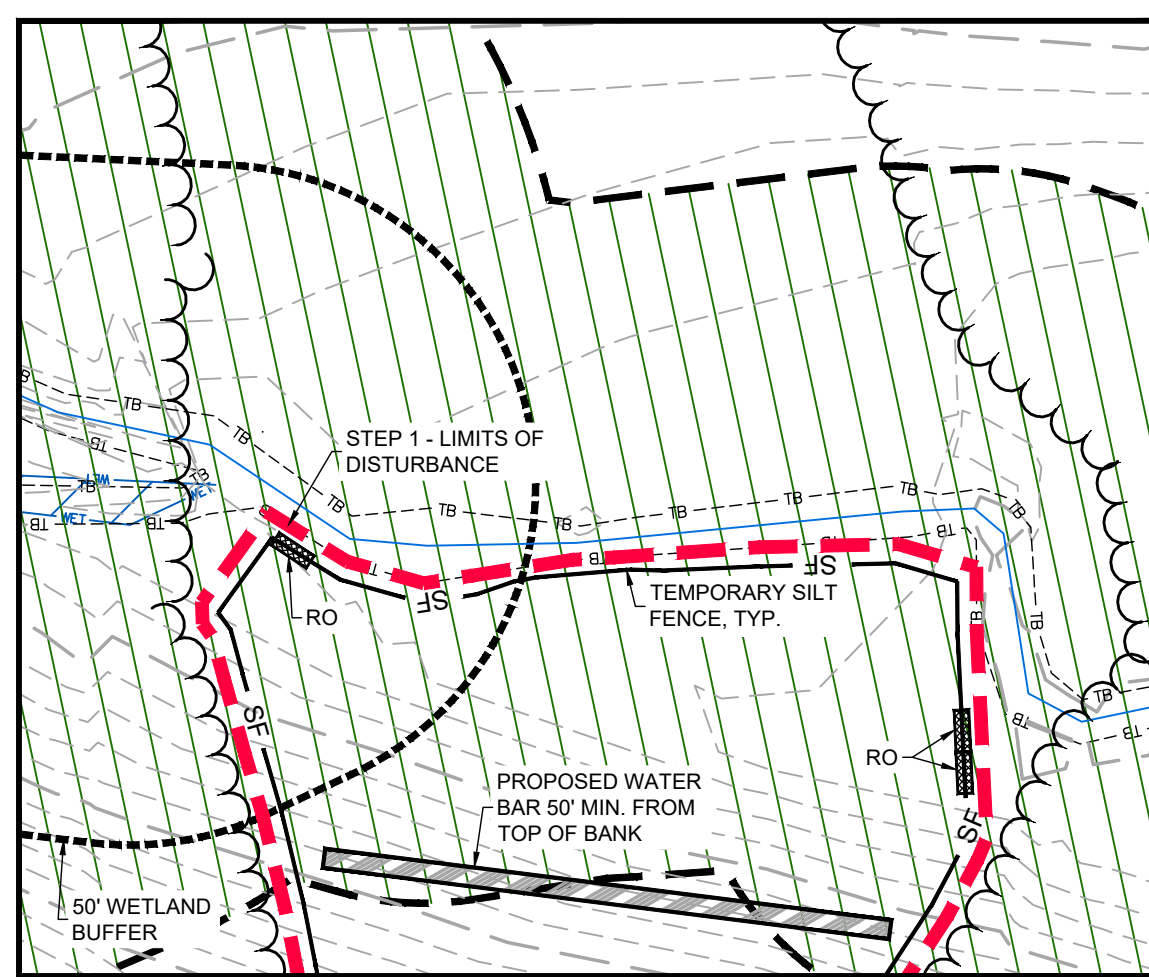
Date:	MAY 3, 2023
Scale:	1" = 30'
Drawn:	BCS
Checked:	JRF
Project No.:	148-001
Computer Dwg. Name:	148-001_e307 - ec stream impact

Sheet No:  
**C307**  
Of 30

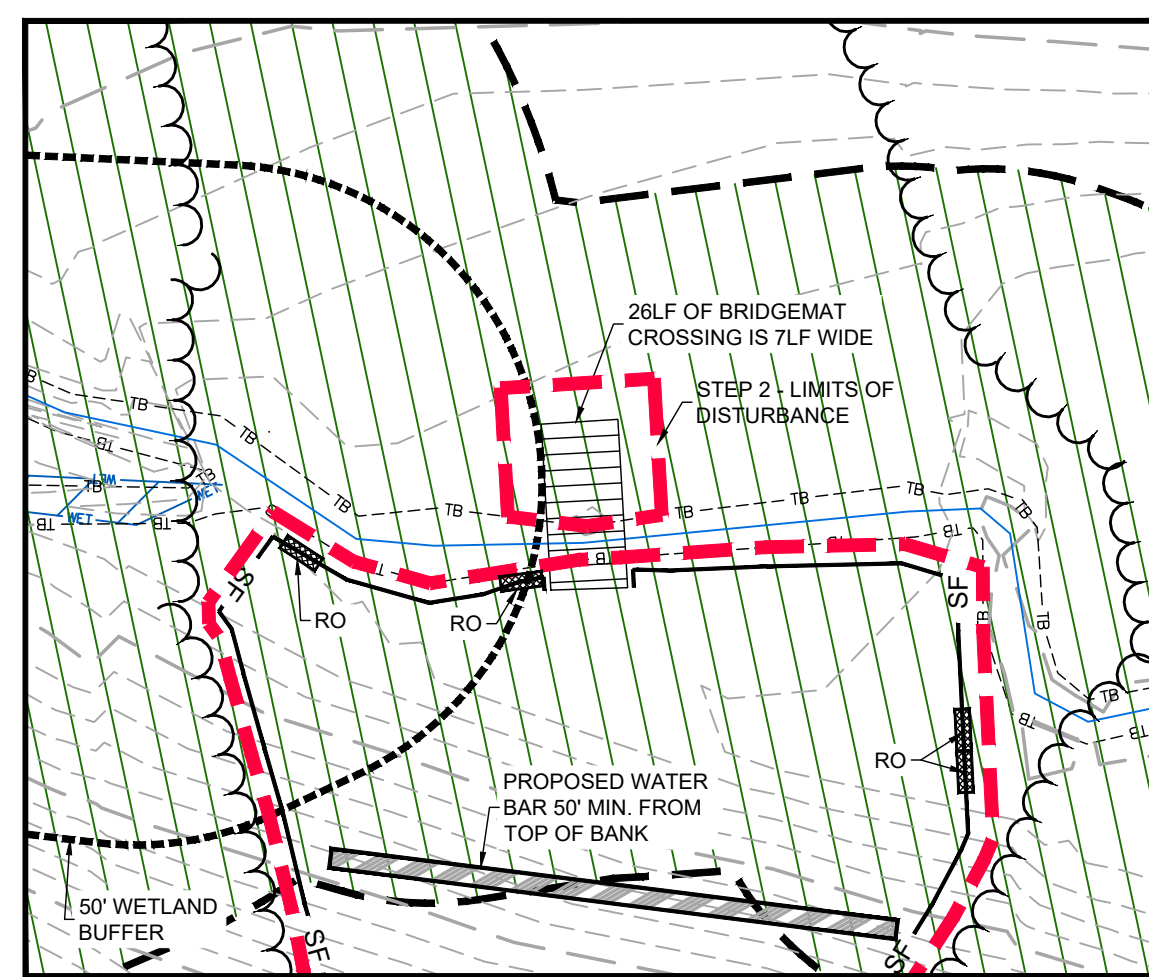


**FINAL DESIGN**  
NOT RELEASED  
FOR CONSTRUCTION

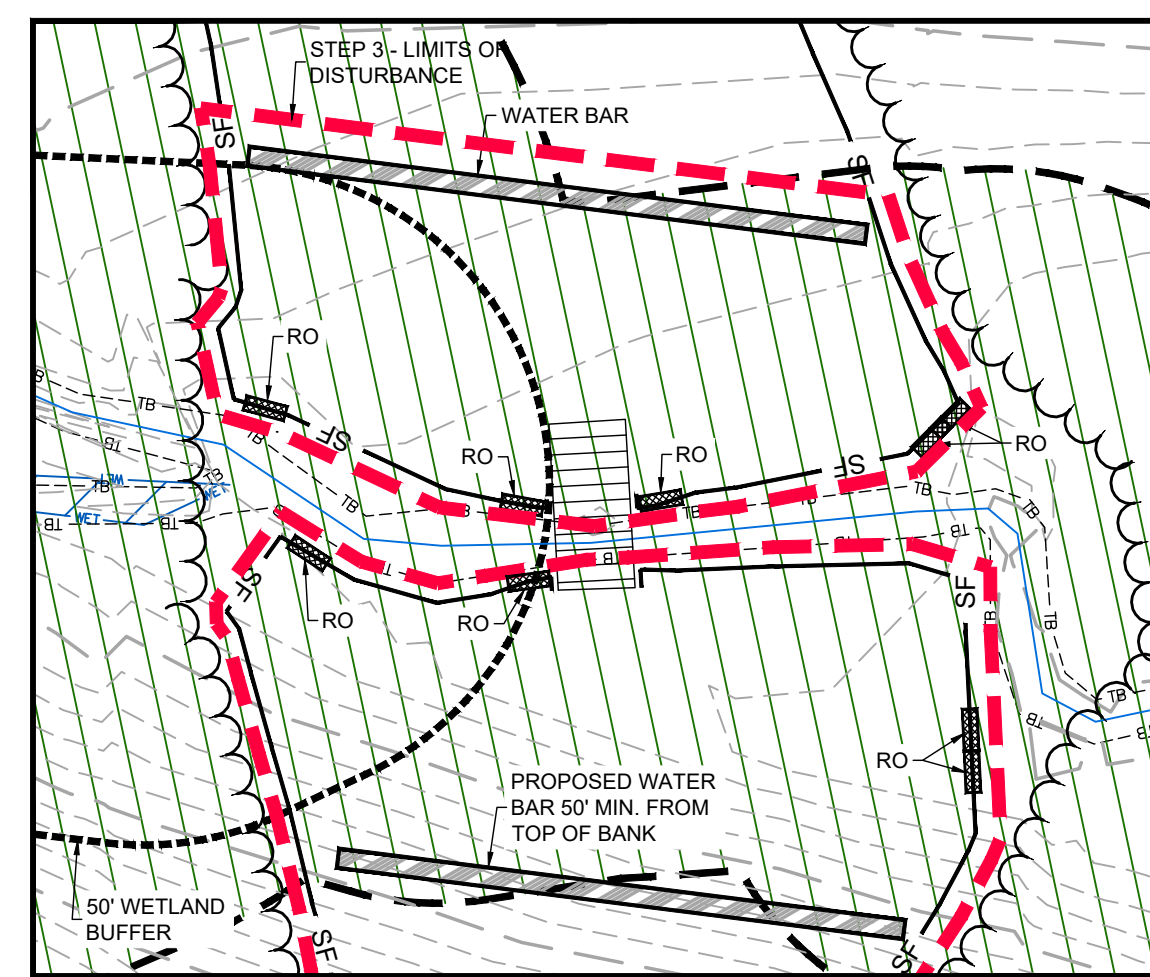




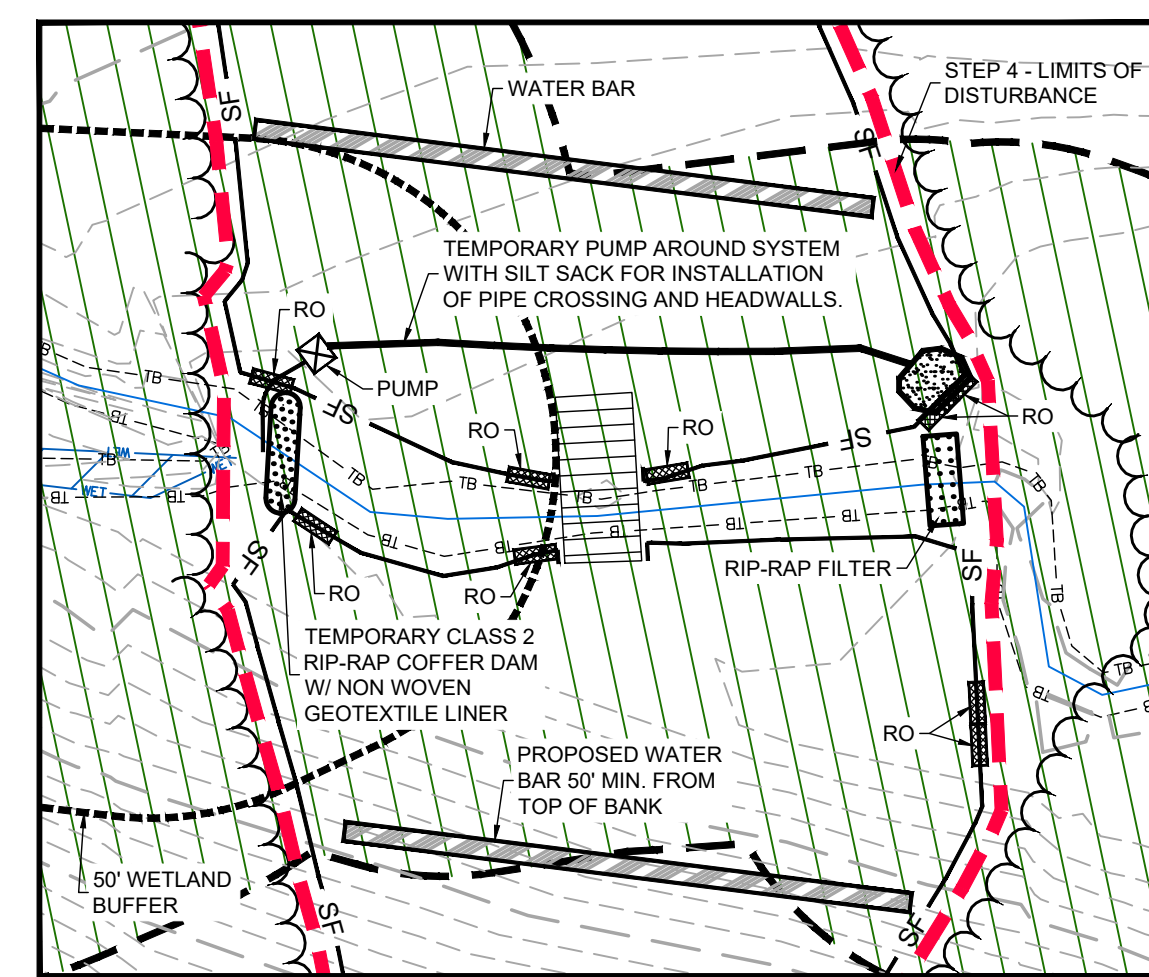
**IMPACT - STEP 1**  
SCALE: 1" = 30'



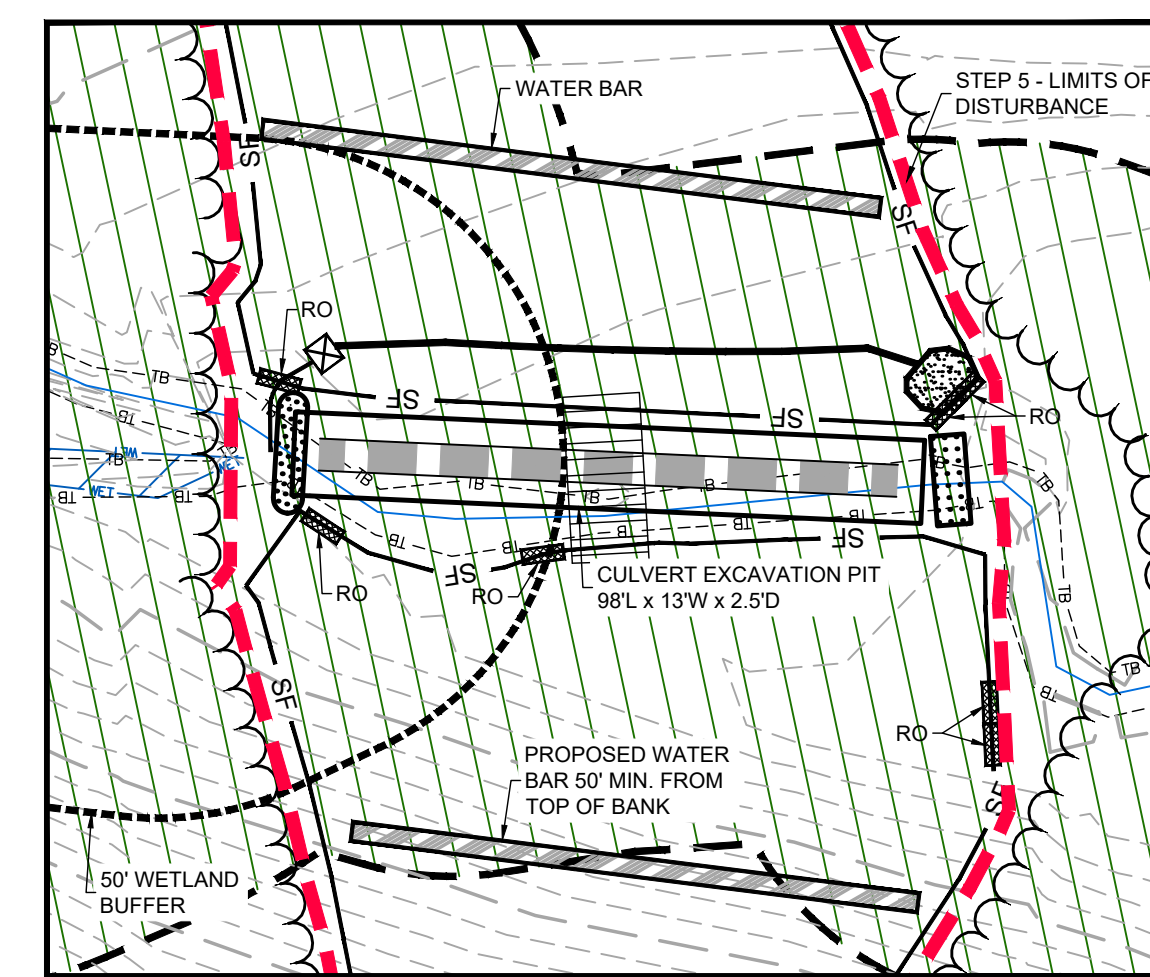
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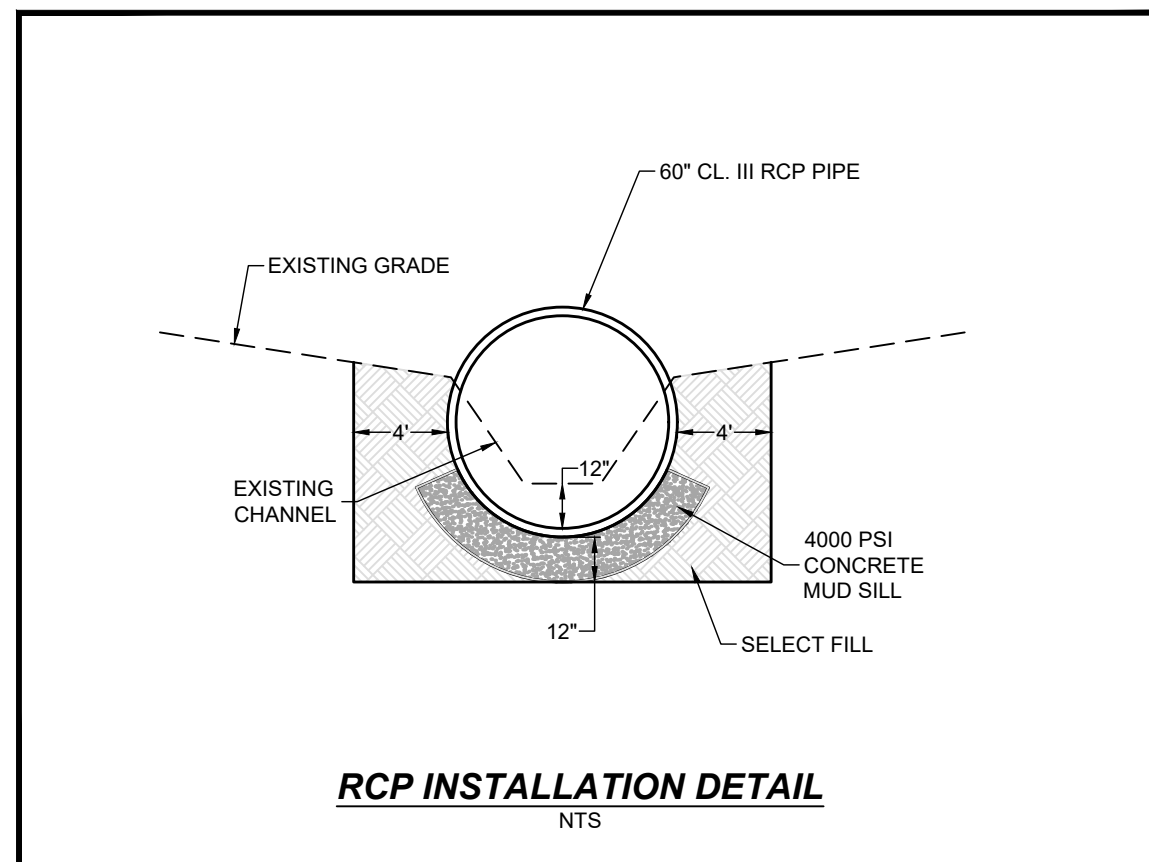
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SCALE: 1" = 30'



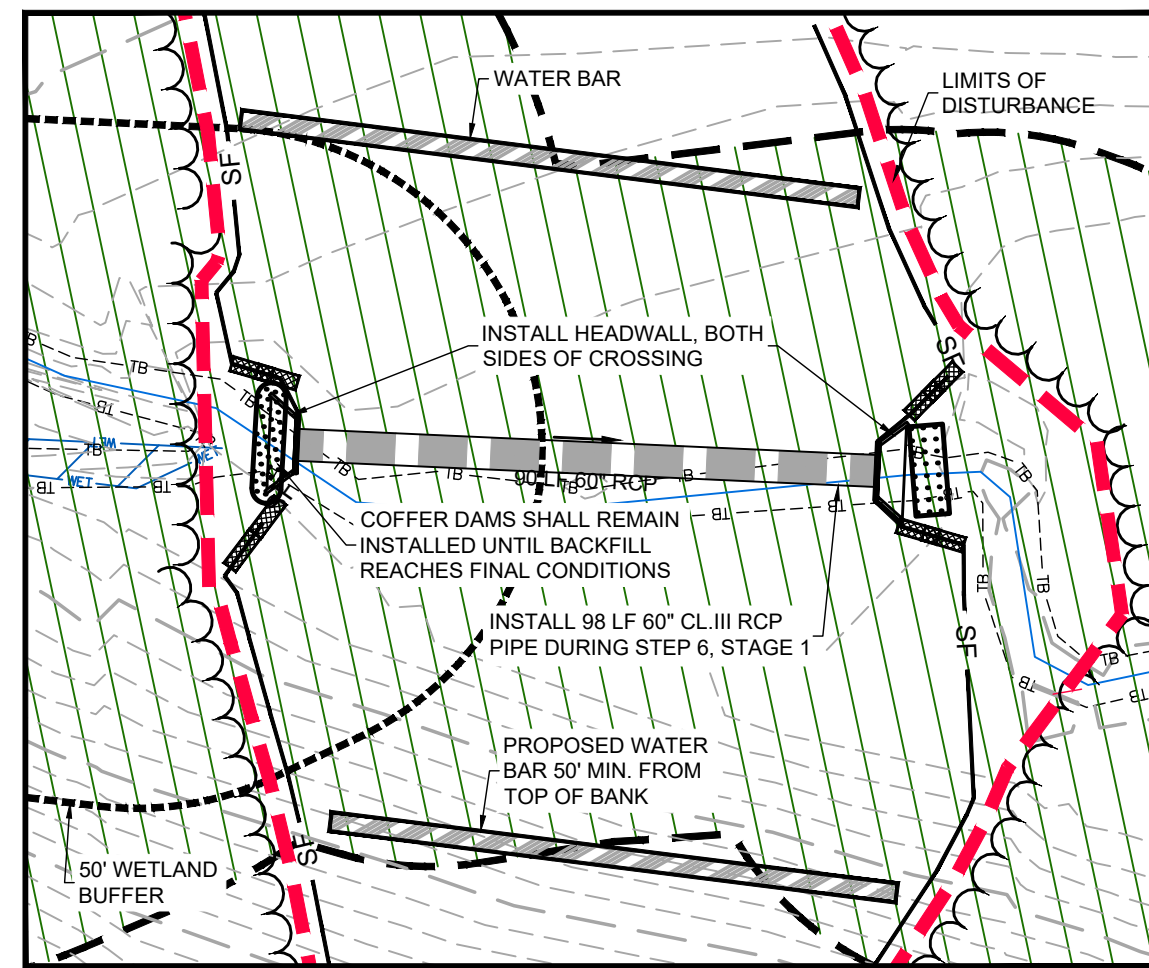
**IMPACT - STEP 4**  
SCALE: 1" = 30'



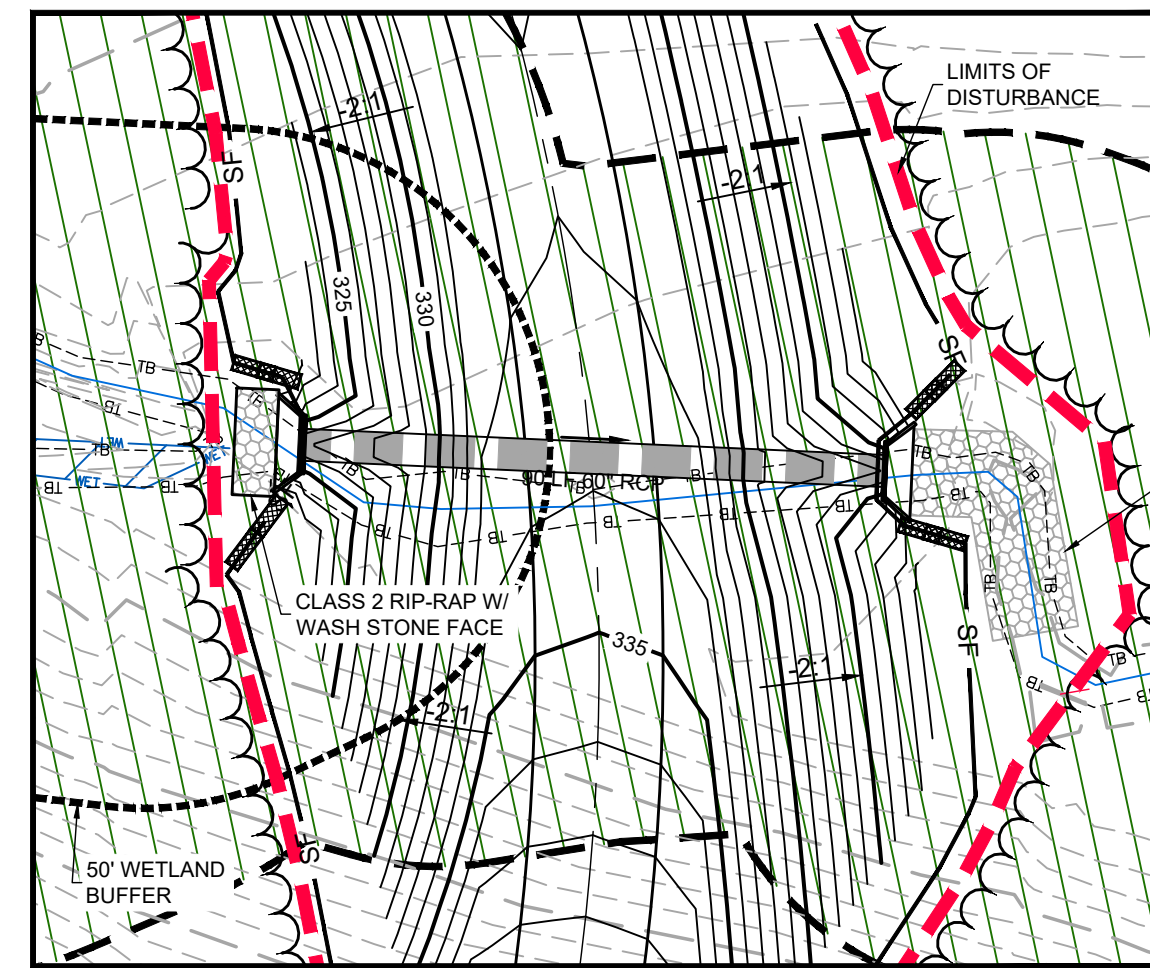
**IMPACT - STEP 5A**  
SCALE: 1" = 30'



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

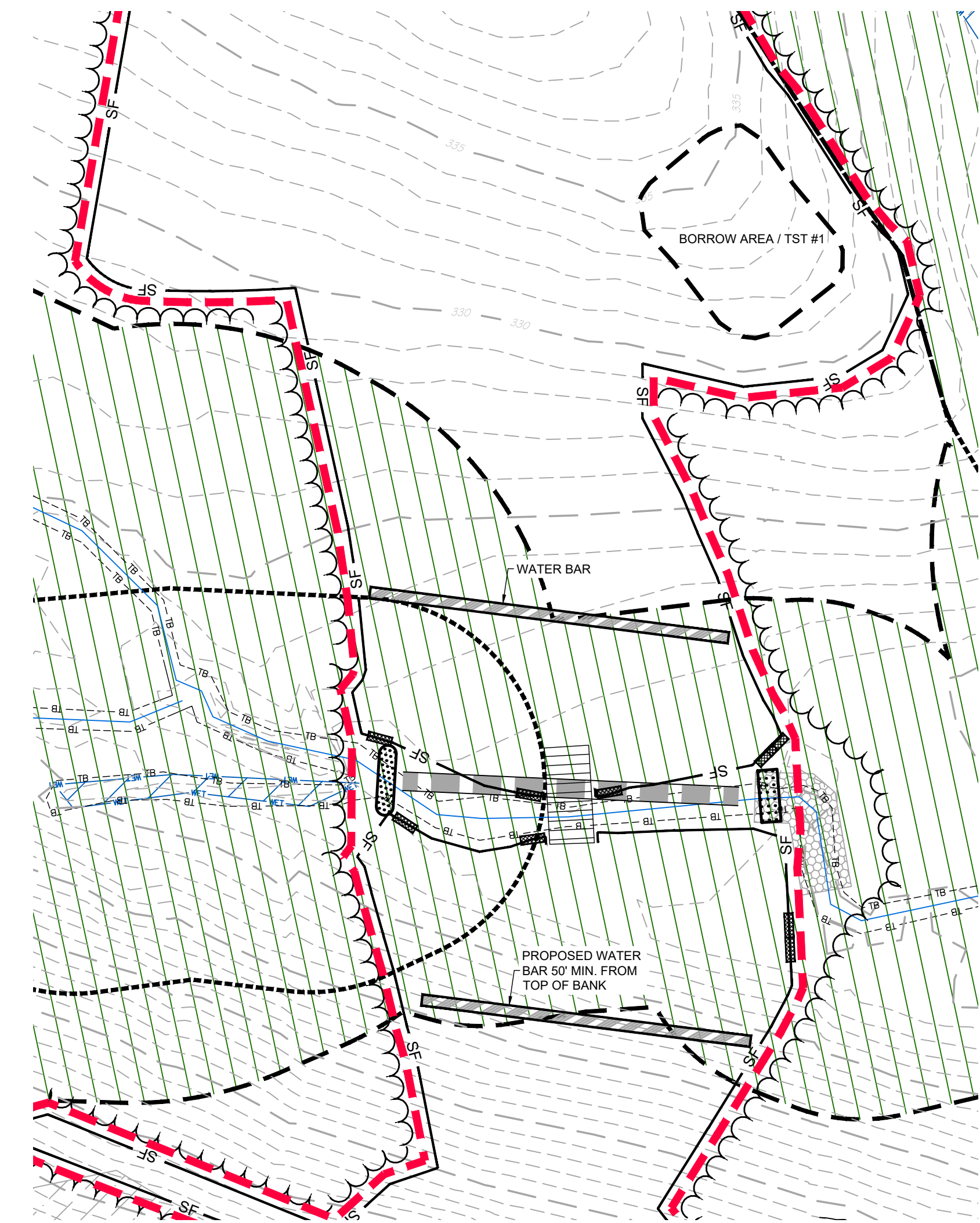


**IMPACT - STEP 6**  
SCALE: 1" = 30'



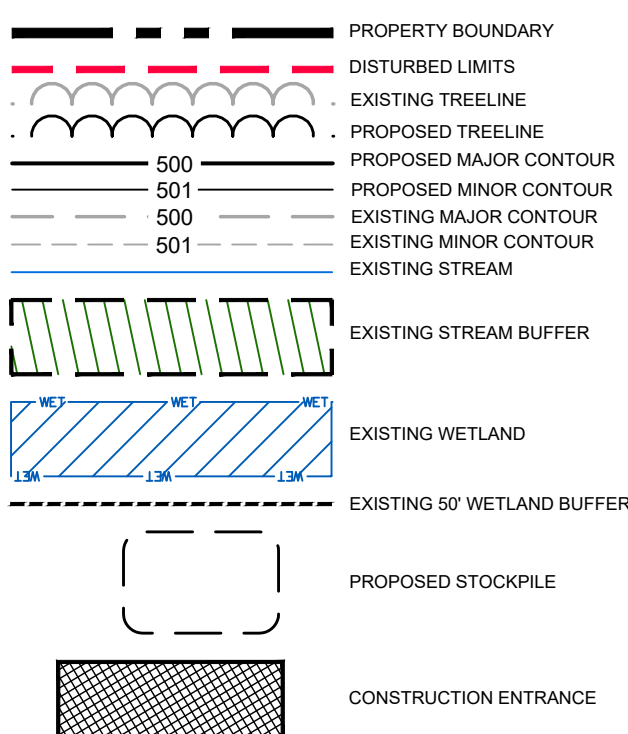
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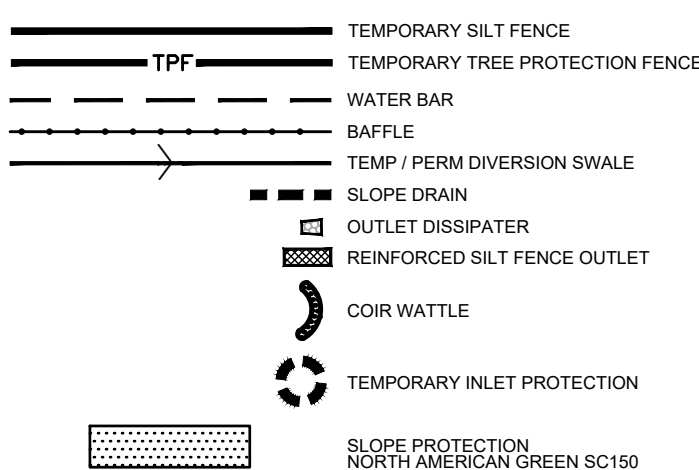


**STREAM CROSSING FOR EXCAVATION**  
SCALE: 1" = 30'

**LEGEND**



**EC LEGEND**



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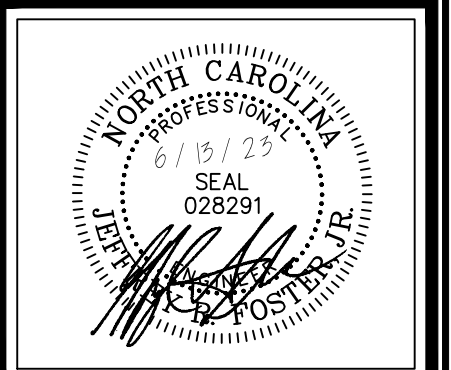
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NO.	REVISIONS	DATE

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www.cegroupinc.com  
License # C-1739



**EROSION CONTROL PLANS  
FIREFLY OVERLOOK  
EC STREAM IMPACT**  
CHATHAM COUNTY, NORTH CAROLINA

Date:	JUNE 13, 2023
Scale:	1" = 30'
Drawn:	BCS
Checked:	JRF
Project No.:	148-001
Computer Dwg. Name:	148-001_e307 - ec stream impact

Sheet No:  
**C307**  
Of 30



**FINAL DESIGN**  
NOT RELEASED  
FOR CONSTRUCTION





## RIPARIAN BUFFER AUTHORIZATION REVIEW LETTER

July 31, 2023

Ms. Rhiannon Graham  
2401 Brentwood Road Suite 107  
Raleigh, NC 27612

Project Name: Firefly Overlook  
Project Number: WP-23-199

The Chatham County Watershed Protection Department reviewed your Riparian Buffer Authorization Application dated June 16, 2023, and made the following comments:

### **Riparian Buffer Authorization Application**

1. *Project Impact Summary Table*
  - a. Complete as **provided impact table**.

### **Buffer Impact Map**

2. Update impact table on plan set to match Impact Summary Table.
3. Please clarify the culvert cross sections on Stream Impact Profile.

### **Soil Erosion and Sedimentation Control Plans**

4. Sheet C304 – Shows ditches entering the riparian buffer. New or altered drainage ditches, roadside ditches and stormwater outfalls must include a stormwater management facility that is installed to control nutrients and attenuate flow before the conveyance discharges through the riparian buffer.
  - a. Recommend design of scour holes prior to ditches entering the riparian buffer.
  - b. These ditches are not depicted in the stream crossing construction details. Please update all sheets and details accordingly.
5. Provided cut/fill plan is not acceptable. Provide cut/fill plan that denotes source of fill and if onsite, where it is located on site.

This completes the review of the Riparian Buffer Authorization Application. Additional comments may follow based on the response to the above comments.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Taylor A. Burton  
Senior Watershed Specialist  
Chatham County Watershed Protection Department

CC: Rhiannon Graham, Terracon  
Justin Hasenfus, Erosion Control Program Manager, Chatham County Watershed Protection  
Department  
Drew Blake, Assistant Director, Chatham County Watershed Protection Department  
Rachael Thorn, Director, Chatham County Watershed Protection Department





2401 Brentwood Rd, Suite 107  
Raleigh, NC 27604  
P (919) 873-2211  
**Terracon.com**

August 15, 2023

Taylor A. Burton  
Chatham County Watershed Protection Department  
PO Box 548  
Pittsboro, NC 27312

Re: Response to Comments  
Firefly Overlook  
WP-23-199

Taylor Burton:

Terracon is providing the below responses to your Request for Additional Information/comments dated July 31, 2023.

1. Please see attached completed project summary impact table
2. Please see attached updated buffer impact map
3. The culvert cross sections will be provided separately by the CE group
4. The Soil Erosion and Sediment Control Plans will be provided separately by the CE group

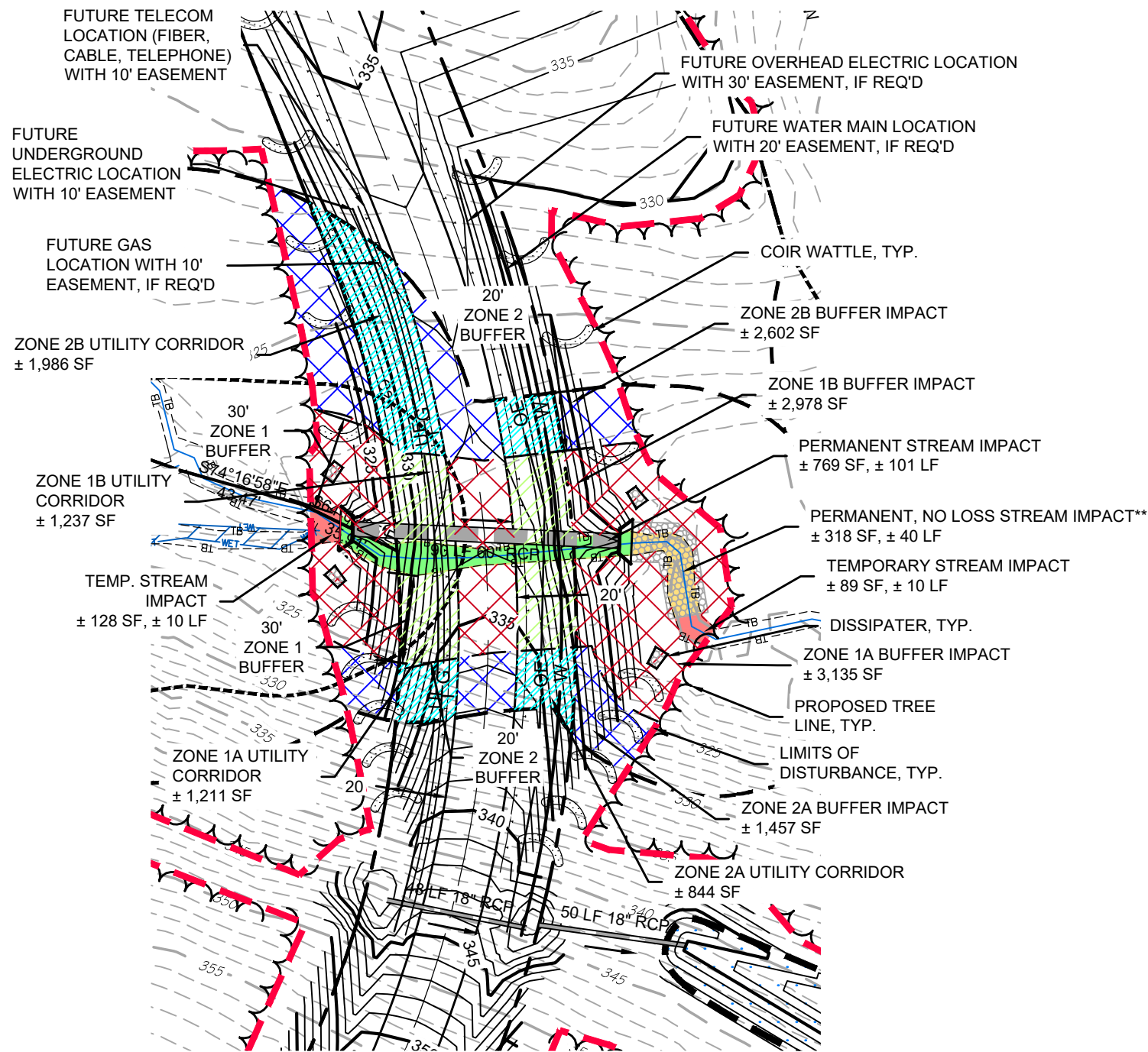
Please contact me at (919)457-1110 or [rhiannon.graham@terracon.com](mailto:rhiannon.graham@terracon.com) if you have any questions or need anything else from us.

Sincerely,  
Terracon Consultants, Inc.

Rhiannon Graham  
Senior Staff Scientist

Jeff Harbour  
Senior Scientist

**FIREFLY OVERLOOK  
STREAM IMPACT EXHIBIT**  
CHATHAM COUNTY, NC  
AUGUST 8, 2023



**FIREFLY OVERLOOK- BUFFER IMPACTS**

ZONE 1 (INNER 30')	6,113 SF	
ZONE 2 (OUTER 20')	4,059 SF	
ZONE 1 UTILITY CORRIDOR (INNER 30')	2,448 SF	
ZONE 2 UTILITY CORRIDOR (OUTER 20')	2,830 SF	
ZONE 1 TOTAL (INNER 30')	8,561 SF	
ZONE 2 TOTAL (OUTER 20')	6,889 SF	

**ZONE 1 UTILITY IMPACT**

ZONE 1 TELECOM	407 SF
ZONE 1 UGE	434 SF
ZONE 1 GAS	405 SF
ZONE 1 OHE	601 SF
ZONE 1 WATER	601 SF

**ZONE 2 UTILITY IMPACT**

ZONE 2 TELECOM	619 SF
ZONE 2 UGE	700 SF
ZONE 2 GAS	673 SF
ZONE 2 OHE	401 SF
ZONE 2 WATER	437 SF

**HORIZONTAL WIDTH BUFFER IMPACTS**

ZONE 1A	138 LF*
ZONE 1B	133 LF*
ZONE 2A	114 LF*
ZONE 2B	113 LF*

\*MEASURED AT WIDEST POINT OF IMPACT

**FIREFLY OVERLOOK - STREAM IMPACTS**

TEMPORARY	217 SF, 20 LF	
PERMANENT	768 SF, 101 LF	
PERMANENT - NO LOSS**	318 SF, 40 LF	

\*\*TOP OF RIP-RAP DISSIPATER PAD INSTALLED FLUSH AT NATURAL GRADE OF EXISTING STREAM BED



NORTH



SCALE: 1" = 50'



**CE GROUP**  
301 GLENWOOD AVE. SUITE 220  
RALEIGH, NC 27603  
PHONE: 919-367-8790  
www.cegroupinc.com

**U.S. ARMY CORPS OF ENGINEERS**  
**WILMINGTON DISTRICT**

Action Id. SAW-2022-01620 County: Chatham U.S.G.S. Quad: NC-Merry Oaks

**NOTIFICATION OF JURISDICTIONAL DETERMINATION**

Requestor: Terracon  
Rhiannon Graham  
Address: 2401 Brentwood Road, Suite 107  
Raleigh, NC 27604  
Telephone Number: 760-717-2621  
E-mail: Rhiannon.graham@terracon.com

Size (acres)	<u>76</u>	Nearest Town	<u>Pittsboro</u>
Nearest Waterway	<u>Jordan Lake</u>	River Basin	<u>Cape Fear</u>
USGS HUC	<u>03030002</u>	Coordinates	Latitude: <u>35.71978</u> Longitude: <u>-79.06740</u>

Location description: The project review area is located just north of the intersection of N Pea Ridge Road and Seaforth Road

**Indicate Which of the Following Apply:**

**A. Preliminary Determination**

- There appear to be **waters, including wetlands** on the above described project area/property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The **waters, including wetlands** have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. The approximate boundaries of these waters are shown on the enclosed delineation map dated 5/1/2022. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.
- There appear to be **waters, including wetlands** on the above described project area/property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). However, since the **waters, including wetlands** have not been properly delineated, this preliminary jurisdiction determination may not be used in the permit evaluation process. Without a verified wetland delineation, this preliminary determination is merely an effective presumption of CWA/RHA jurisdiction over all of the **waters, including wetlands** at the project area, which is not sufficiently accurate and reliable to support an enforceable permit decision. We recommend that you have the **waters, including wetlands** on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

**B. Approved Determination**

- There are Navigable Waters of the United States within the above described project area/property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are **waters, including wetlands** on the above described project area/property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- We recommend you have the **waters, including wetlands** on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.
- The **waters, including wetlands** on your project area/property have been delineated and the delineation has been verified by the Corps. The approximate boundaries of these waters are shown on the enclosed delineation map dated DATE. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once

**SAW-2022-01620**

verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

- The **waters, including wetlands** have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on **DATE**. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are no waters of the U.S., to include wetlands, present on the above described project area/property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in **Morehead City, NC, at (252) 808-2808** to determine their requirements.

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **James C Lastinger at 910-251-4558 or james.c.lastinger@usace.army.mil.**

**C. Basis For Determination: Basis For Determination: See the preliminary jurisdictional determination form dated 03/23/2023.**

**D. Remarks: REMARKS**

**E. Attention USDA Program Participants**

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

**F. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)**

If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers  
South Atlantic Division  
Attn: Mr. Philip A. Shannin  
Administrative Appeal Review Officer  
60 Forsyth Street SW, Floor M9  
Atlanta, Georgia 30303-8803  
**AND**  
**PHILIP.A.SHANNIN@USACE.ARMY.MIL**

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **Not applicable.**

\*\*It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.\*\*

Corps Regulatory Official: 

Date of JD: **03/23/2023** Expiration Date of JD: **Not applicable**

**SAW-2022-01620**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Copy Furnished:

**SAW-2022-01620**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=136:4:0](http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0)

Copy furnished:

Agent: **Terracon**  
**Rhiannon Graham**  
Address: **2401 Brentwood Road, Suite 107**  
**Raleigh, NC 27604**  
Telephone Number: **760-717-2621**  
E-mail: **Rhiannon.graham@terracon.com**

Property Owner: **Pea Ridge Road Developers**  
Address: **PO Box 5548**  
**Cary, NC 27512**  
Telephone Number: **919-703-6203**  
E-mail: **andrewross6647@gmail.com**

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND  
REQUEST FOR APPEAL**

Applicant: **Terracon, Rhiannon Graham**

File Number: **SAW-2022-01620**

Date: **03/23/2023**

Attached is:

See Section below

<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input checked="" type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx> or the Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT: You may accept or appeal the permit**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.



**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

**District Engineer, Wilmington Regulatory Division  
Attn: James C Lastinger  
Washington Regulatory Office  
U.S Army Corps of Engineers  
2407 West Fifth Street  
Washington, North Carolina 27889**

If you only have questions regarding the appeal process you may also contact:

**MR. PHILIP A. SHANNIN  
ADMINISTRATIVE APPEAL REVIEW OFFICER  
CESAD-PDS-O  
60 FORSYTH STREET SOUTHWEST, FLOOR M9  
ATLANTA, GEORGIA 30303-8803  
  
PHONE: (404) 562-5136; FAX (404) 562-5138  
EMAIL: [PHILIP.A.SHANNIN@USACE.ARMY.MIL](mailto:PHILIP.A.SHANNIN@USACE.ARMY.MIL)**

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____	Date:	Telephone number:
Signature of appellant or agent.		

*For appeals on Initial Proffered Permits send this form to:*

**District Engineer, Wilmington Regulatory Division, Attn: James C Lastinger, 69 Darlington Avenue, Wilmington, North Carolina 28403**

*For Permit denials, Proffered Permits and Approved Jurisdictional Determinations send this form to:*

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Philip Shannin, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801  
Phone: (404) 562-5137**



**PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM**

**BACKGROUND INFORMATION**

- A. REPORT COMPLETION DATE FOR PJD:** 03/23/2023
- B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Terracon, Rhiannon Graham, 2401 Brentwood Road, Suite 107, Raleigh, NC 27604
- C. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Wilmington District, Chatham Parcel Site, SAW-2022-01620
- D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:** The project review area is located just north of the intersection of N Pea Ridge Road and Seaforth Road

**(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)**

State: NC County: Chatham City: Pittsboro  
 Center coordinates of site (lat/long in degree decimal format): Latitude: 35.71978 Longitude: -79.06740

Universal Transverse Mercator:

Name of nearest waterbody: Jordan Lake

**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date: 03/31/2023

Field Determination. Date(s):

**TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION**

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resources in review area (acreage and linear feet, if applicable)	Type of aquatic resources (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
T1	35.72386	-79.06624	2050 LF	non-wetland waters	Section 404
T2	35.72370	-79.06770	87 LF	non-wetland waters	Section 404
T3	35.71920	-79.06824	594 LF	non-wetland waters	Section 404
T4	35.71861	-79.06846	610 LF	non-wetland waters	Section 404
T5	35.71845	-79.06824	377 LF	non-wetland waters	Section 404
T6	35.71803	-78.06634	193 LF	non-wetland waters	Section 404
T7	35.71824	-79.06783	90 LF	non-wetland waters	Section 404
W1	35.72390	-79.06880	0.03 AC	wetland	Section 404
W2	35.72375	-79.06725	0.01 AC	wetland	Section 404
W3	35.72370	-79.06633	0.05 AC	wetland	Section 404
W4	35.71971	-79.06948	0.02 AC	wetland	Section 404

W5	35.71912	-79.06860	0.22 AC	wetland	Section 404
W6	35.71894	-79.06871	0.15 AC	wetland	Section 404
W7	35.71821	-79.06778	0.01 AC	wetland	Section 404
W8	35.71864	-79.06727	0.06 AC	wetland	Section 404
W9	35.71757	-79.06604	0.002 AC	wetland	Section 404

1. The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre- construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for PJD (check all that apply)** Checked items are included in the administrative record and are appropriately cited:

Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:

Map: **Exhibit 3**

Data sheets prepared/submitted by or on behalf of the PJD requestor. Datasheets:

Office concurs with data sheets/delineation report.

Office does not concur with data sheets/delineation report. Rationale: \_\_\_\_\_

Data sheets prepared by the Corps: \_\_\_\_\_

Corps navigable waters' study:

U.S. Geological Survey Hydrologic Atlas:

USGS NHD data:

USGS 8 and 12 digit HUC maps:

U.S. Geological Survey map(s). Cite scale & quad name: **Merry Oaks**

Natural Resources Conservation Service Soil Survey. Citation: **Exhibit 2**

National wetlands inventory map(s). Cite name:

State/local wetland inventory map(s): \_\_\_\_\_

FEMA/FIRM maps:

100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodetic Vertical Datum of 1929)

Photographs:  Aerial (Name & Date): **Exhibit 3**

or  Other (Name & Date): **Photos 1-10 Dated 2/27/2023**

Previous determination(s). File no. and date of response letter: \_\_\_\_\_

Other information (please specify):

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**



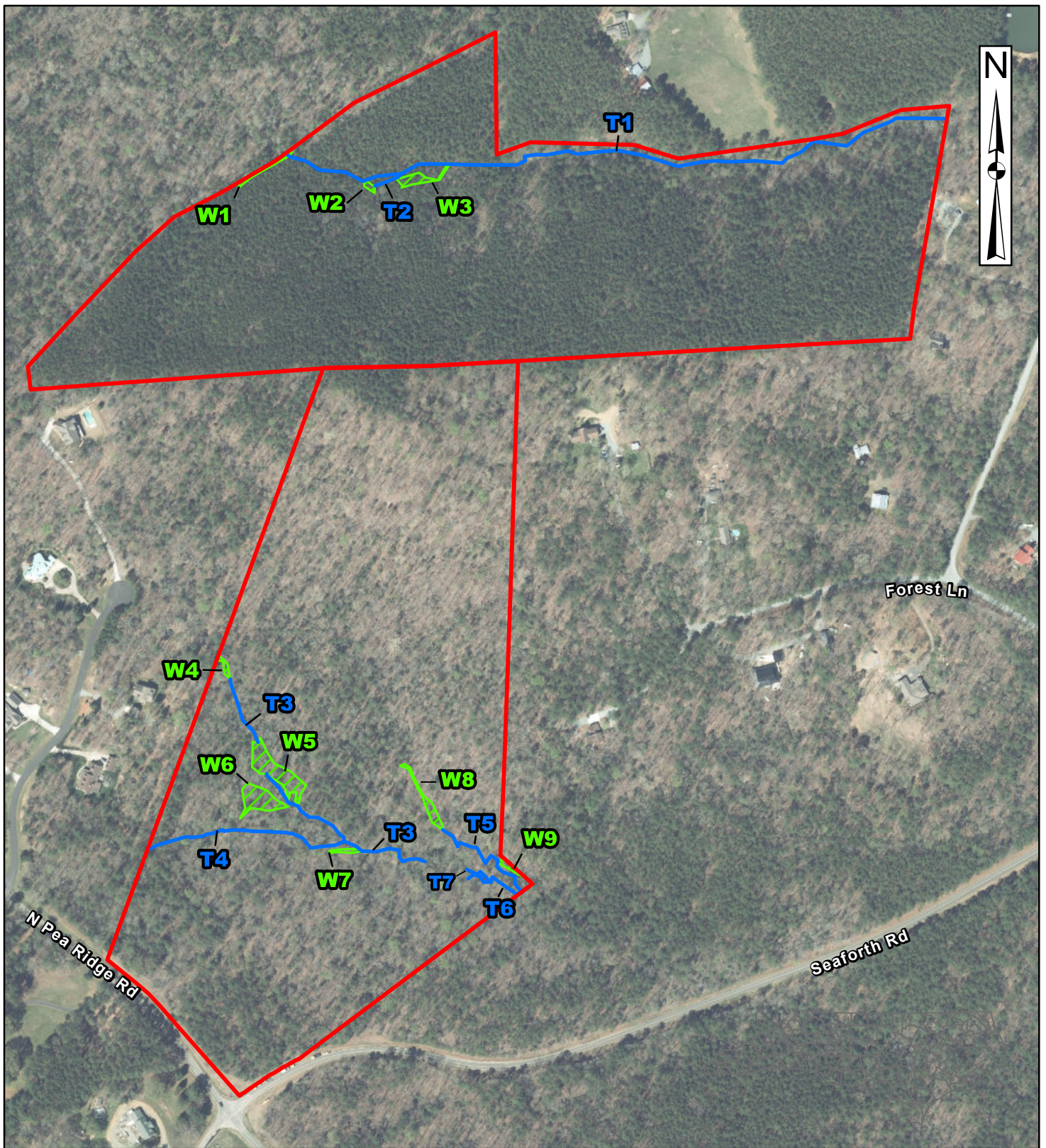
Signature and date of Regulatory  
staff member completing PJD  
03/23/2023

Signature and date of person requesting PJD  
(REQUIRED, unless obtaining the signature is  
impracticable)<sup>1</sup>

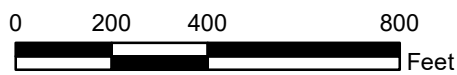
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<sup>1</sup> Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.






- ▭ Project Study Area
- ▨ Potential Wetland
- Potential Tributary



DATA SOURCES:  
 Latest High-Resolution NC Statewide Orthoimagery, NC OneMap Server; 2017; Project Study Area approximated from Chatham County Parcel Data.  
 Note: Vegetation removal or alteration of soils or hydrology after initial site evaluation can affect jurisdictional status and may require re-evaluation of wetland boundaries.

PM:	JH	Project No:	70227223
Drawn By:	MM	Scale:	1:4,800
Checked By:	RG	File Name:	ChathamParcles
Approved By:	JH	Date:	May 2022



2401 Brentwood Road, Suite 107 Raleigh, NC 27604  
 Phone: (919) 873-2211 Fax: (919) 873-9555

<b>Potential Wetlands and Waters</b>
Chatham Parcels 17531 and 18070 Chatham County, North Carolina

<b>EXHIBIT NO.</b>
<b>3</b>