COOR ISLAND PHASE B NUTRIENT OFFSET SITE

As-built & Baseline Monitoring Report
Wayne County, North Carolina
Neuse River Basin - 03020201

DMS Project ID No. 100650
Full Delivery Contract No. 519674731-02
DWR Project No. 2021-0021v2
RFP No. 16-519674731

Prepared for:

Mitigation Services
ENVIRONMENTAL QUALITY

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF MITIGATION SERVICES
1652 MAIL SERVICE CENTER
RALEIGH, NORTH CAROLINA 27699-1652

Baseline Data Collected: January 2024
Date Submitted: March 2024

Restoration Systems, LLC
1101 Haynes St. Suite 211
Raleigh, North Carolina
Ph: (919) 755-9490
Fx: (919) 755-9492

Response to DMS Comments

Coor Island Phase B Nutrient Offset Mitigation Site, Project ID #100650
DMS Contract #519674731-02
DWR Project No. 2021-0021 v2
Neuse River Basin 03020201, Wayne County
DMS Reviewers: Jeremiah Dow and Jeff Horton

Comments Received (Black Text) & Responses (Blue Text):

1. Cover Page: Please update the DWR project number throughout the report to match the Mitigation Plan, 2021-0021v2.
   Completed.

2. Table 2: Number 1 states soil and herbaceous vegetation preparation were completed prior to planting. Please describe what those preparation activities entailed.
   Soil and herbaceous vegetation preparation activities narrative has been added in Section 1 and 3.1.

3. Figure 2 & 3: Consider combining these 2 figures into 1 CCPV by adding the vegetation plots to the legend of Figure 3. This would eliminate the need for Figure 2.
   Figures 2 and 3 have been combined into one figure as suggested.

4. Appendix B, Table 12: There are species in this table that are not in the Table 3 planting list (green ash and cherrybark oak). Including these species in success criteria will require DWR approval. Please update Table 3 to include all species planted with any deviations from the mitigation plan redlined.
   These species were not planted and these stems were misidentified as they were still dormant at the time of the as-built vegetation survey. Table 3 has been updated accordingly.

5. Appendix B, Vegetation Plot Photos 1-12: The header states the photos were taken in February, but the timestamp on each photo says January; please update.
   The photos have been updated to the correct month.

6. Digital Deliverables: Please include the excel credit table in the digital submission.
   The excel credit table has been added to the digital deliverables.

Boundary Inspection Action Items:

7. Ensure for all corners, as per the recorded plat and the RFP, a 30" by 5/8" rebar with 3 ¼" aluminum cap is installed and stamped with the corresponding corner number located on the plat for each of the conservation easement corners.
   The following easement corners (19, 20, 106, and 171) have been verified and documented in the attached photos. Also, regarding point 19 the iron pipe is in the centerline of the ditch and the T-post is set on the bank.

8. Remove all debris from within the conservation easement area. See KML where areas were noted on this field visit. It is possible other areas exist. Make every effort to get all the old fencing out of the CE.
   Noted, the scattered debris will be removed from the conservation easement and documented in the MY1 report.

Coor Island Phase B Nutrient Offset Mitigation Site
As-Built Site Visit Response to Comments (May 2024) Photo Log

Photos 1 & 2: Point 19 sign/post and iron pipe in centerline of ditch

Photos 3 & 4: Point 20 sign/post and corresponding cap

Coor Island Phase B Nutrient Offset Mitigation Site
As-Built Site Visit Response to Comments (May 2024) Photo Log

Photos 5 & 6: Point 106 sign/post and corresponding cap

Photos 7 & 8: Point 171 sign/post and corresponding cap

COOR ISLAND PHASE B NUTRIENT OFFSET SITE

As-built & Baseline Monitoring Report
Wayne County, North Carolina
Neuse River Basin - 03020201

Prepared by:

Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, North Carolina 27604

Contact: Raymond Holz
919-755-9490 (phone)
919-755-9492 (fax)

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Appendices

1.0 Mitigation Project Summary

Restoration Systems (Sponsor) is pleased to provide the North Carolina Division of Mitigation Services (NC DMS) this **As-built & Baseline Monitoring Report** for the **Coor Island Phase B Site** (hereafter referred to as the "Project" or "Site"). The Project has been implemented in accordance with State Rules 15A NCAC 02B .0295 (Consolidated Buffer Mitigation Rule – CMB Rule) to Neuse River Riparian Buffer Credits (RBC) and 15A NCAC 02B .0703 (Nutrient Offset Credit Trading Rule) to Neuse River Nutrient Offset Credits (NOC) for impacts within the Neuse River Basin USGS 8-digit HUC 03020201, excluding the Falls Lake Watershed. The permanent conservation easement encompasses 17.795 acres and will provide 32,505.164 lbs. Nitrogen Nutrient Offset Credits (NOC or Available NOC) with the option to convert NOC eligible credits to RBC credits. The Project will provide the State with the Available NOC while permanently protecting the restored riparian area and preserving the forested floodplain, a mapped FEMA Floodway (Map 3720256800K, Panel 2568, effective June 20, 2018).

Located in Wayne County, North Carolina, the Project encompasses 17.795 acres, of which 17.019 acres of crop land were restored to forested riparian buffer and adjacent riparian areas and 0.409 acres of existing riparian forest were preserved. The Project restored riparian buffers and adjacent riparian areas along an unnamed tributary to Half Mile Creek and preserves the established riparian buffer and adjacent riparian areas where they exist. The Site is located within USGS HUC 03020201-200030 and DWR Subbasin 03-04-12. Features drain to Half Mile Branch, which is classified as WS-IV and NSW by DWR. The Coor Island Mitigation Site (DMS No. 100650) restoration efforts include the 0–100 foot buffer area of the unnamed tributary, while this Project includes the buffer at 101-200 feet on the tributary and 0-200 foot buffer area on adjacent ditch features. Detailed project mapping is provided in Appendix A, along with site-specific data in Appendix B.

Restoration Systems (RS) is the current fee-simple owner of the subject tract. Following the purchase, RS assigned a conservation easement (17.795 acres) to the State Property Office recorded July 17, 2023.

A DWR representative conducted an on-site stream determination on January 21, 2021. A Stream Determination letter was provided on March 4, 2021. Further, A DWR representative conducted a Site Viability visit on March 24, 2021, and provided an approval letter on April 16, 2021. An additional email was received from a DWR representative on March 14, 2023 confirming the site viability letter is still valid as long as there has been no change in landuse since the initial DWR review of the BPDP document. The landuse remains in agricultural production and has not changed since the initial DWR review. Both the Stream Determination and Site Viability letters are attached in Appendix C.

The Site was prepared for planting in 2023 by completing a final plowing and planting of a cover crop. The Site was planted in January 2024. Riparian buffer restoration activities included bare-root planting and broadcast application of a permanent seed mix. On January 29, 2024, Axiom Environmental installed eleven (11) Carolina Vegetation Survey (CVS) monitoring plots and collected as-built data (Appendix B).

1.1 Project Goals and Objectives

The primary goals associated with the restoration of riparian areas within the Site focused on providing ecological and water quality enhancements to the Neuse River Basin by restoring the riparian area to create a functional riparian corridor. The Site is not located within a watershed planning unit but addresses watershed goals outlined by the Neuse River Basin Restoration Priorities (RBRP) report (NCEEP 2010 amended 2018). Table 1 summarizes the RBRP goals and provides site-specific objectives to address the RBRP goals and enhancements to water quality and ecological processes.

Table 1. Ecological and Water Quality Goals

Goal	Objective
Decrease nutrient levels	Nutrient input will be decreased by filtering runoff from the agricultural fields through restored native buffer zones. The off-site nutrient input will also be absorbed on-site by filtering flood flows through restored floodplain areas, where flood flows can disperse through native vegetation.
Decrease sediment input	Sediment from off-site sources will be captured by deposition on restored floodplain areas where native vegetation will slow overland flow velocities.
Decrease water temperature and increase dissolved oxygen concentrations	Planted riparian trees will shade the streams as they mature reducing thermal pollution.
Create appropriate terrestrial habitat	Buffer areas will be restored by planting native vegetation.
Permanently protect the project Parcel from harmful uses	A permanent conservation easement will be recorded, protecting the Parcel's assets in perpetuity.

1.2 Pre-construction Site Conditions

The Site totals 17.795 acres historically used for row crop production. Of the 17.795 acres under conservation easement, 17.019 acres have been converted from active row crop land to a forested riparian buffer and adjacent riparian areas within FEMA Regulated Floodway, and the remaining 0.409 acres of forested riparian buffer and adjacent riparian areas have been preserved. The remaining area includes existing bottomland hardwood forest and water features. The Project preserves and restores riparian buffer and adjacent riparian areas along an unnamed tributary to Half Mile Creek and four (4) ditches with hydrologic connection to the unnamed tributary. The Project's sole tributary originates on Site. The Site surrounds an existing DMS Project ID No. 100183 – Coor Island – DWR Project No. 2021-0021 v3 that provides riparian buffer restoration and preservation. This existing 11.52-acre project was planted in February 2023 with Coastal Plain Bottomland Hardwood bare-root seedlings. The downstream Site boundary is an existing mitigation site, Half Mile Branch Bank Site. Detailed project mapping is provided in Appendix A.

Intensive agriculture practices historically existed across all proposed restoration areas. Agricultural fields in and adjacent to the Site were subject to routine fertilizer and herbicide applications. Site streams and ditches exhibited bank erosion due to long-term plowing and removal of native vegetation throughout the restoration areas. Historic imagery dating back to 1959 indicates that land management practices are consistent with the Site's previous condition.

2.0 Determination of Credits

Within the 17.795-acre Site, 17.019 acres of crop land within riparian areas along unnamed tributaries to Half-Mile Branch has been planted for riparian buffer restoration. The primary goals associated with restoring riparian areas within the Site are improvement to water quality, enhanced flood attenuation, and restored wildlife habitat. These goals were achieved by restoring 17.019 acres of forested riparian buffer and adjacent riparian areas and preserving 0.409 acres of existing forest and State waters.

3.0 Baseline Restoration Activities Summary

The Project restores agriculturally impacted land in the Project footprint to a forested riparian corridor, protected in perpetuity, improving the ecological function of the area. Riparian buffer widths associated with restoration range from 50 to 200 feet. The design ensured that no adverse impacts to wetlands or existing riparian buffers and adjacent riparian areas occur.

Table 2. Restoration Plan Activities

Restoration Plan Activity	Phase Specific Actions
Riparian Restoration	1.) Parcel-wide soil preparation herbaceous vegetation treatment ahead of planting 2.) Establishment of a native herbaceous community via site-specific seed mix (Table 4) 3.) Establishment of 17.019 acres of native hardwood forest via the planting of bare-root hardwood saplings (Table 3)

3.1 Riparian Area Restoration Activities

Restoration of Riparian Coastal Plain Bottomland Hardwood Forest allows for the development and expansion of characteristic species across the landscape. Ecotonal changes between community types contribute to habitat diversity and provide secondary benefits, such as enhanced feeding and nesting opportunities for mammals, birds, amphibians, and other wildlife.

Revegetating floodplains will provide overall system stability, shade, and wildlife habitat. In addition, viable riparian communities will improve the system's biogeochemical function by filtering pollutants from overland and shallow subsurface flows and providing organic materials to adjacent stream channels.

Prior to planting soil and herbaceous vegetation preparation activities were conducted. Which included a final plowing of the Site followed by planting a cover crop of small grains, both activities took place in 2023. The cover crops provide soil stability at the end of row cropping activities, reduce weed competition from tall herbaceous species such as dog-fennel. Additionally, the cover crops serve as a nurse crop for the planted hardwood stems by providing early growing season shade and eventually contributing surface organic matter which is expected to help reduce the droughty nature of the sandy soils onsite.

Following Site preparation activities a diverse and native herbaceous seed mix was planted across the Site. This mix provides soil stability, ecological diversity, and favorable growing conditions for the planted woody species. Seeding consists of a seasonally appropriate temporary nurse crop (eg. millet or cereal rye), a mix of wildflowers known to benefit wildlife, including pollinators (eg. *Rudbeckia hirta*, *Echinacea pupurea*, *Coreopsis* spp., *Eupatorium* spp., *Chamaecrista* spp.), and a blend of low growing grasses, which provide long term soil stability and wildlife benefit without unduly competing with the desired forbs or woody plantings (eg. *Agrostis* spp.). Species planted and abundance of each species is shown in Table 4.

Bare-root seedlings within the Riparian Coastal Plain Bottomland Hardwood Forest are planted at a density between 680 and 720 stems per acre on 8-foot centers. Planting was performed on January 11, 2023 to allow plants to stabilize during the dormant period and set roots during the spring season. Ten different species were well mixed within the planting scheme to ensure diversity of bare roots across planted areas and monitoring plots. Planting density was set to ensure sufficient diversity and density of planted stems outlined in Rule 15A NCAC 02B.0295 of 260 trees per acre at the end of five years. No one

tree species was greater than 50% of the established stems. Species planted and number of stems planted are shown in Table 3.

As-built baseline vegetation data is provided in Appendix B. Baseline data was collected in January 2024 by Axiom Environmental and derived an average planted stem density of 590 stems per acre.

Table 3. Planting List

Common Name	*Scientific Name*	Tree/Shrub	Number of Stems	Species % of Total
River birch	*Betula nigra*	Tree	1200	10%
Black gum	*Nyssa sylvatica*	Tree	1200	10%
American elm	*Ulmus americana*	Tree	1200	10%
Persimmon	*Diospyros virginiana*	Tree	1000	8%
Sycamore	*Platanus occidentalis*	Tree	1200	10%
Tulip poplar	*Liriodendron tulipifera*	Tree	1400	12%
Oak (Water)	*Quercus nigra*	Tree	1200	10%
Oak (Swamp chestnut)	*Quercus michauxii*	Tree	1200	10%
Oak (Willow)	*Quercus phellos*	Tree	1200	10%
Red mulberry	*Morus rubra*	Tree	1200	10%
Total	**10 Species**		**12,000**	**100%**

Table 4. Permanent Seed

Long-Term Seed Mix: Native diversity, Pollinator Benefits & Stabilization					
Rate: 2 lbs /acre. Species subject to availability.					
Species	**%**		**Species**	**%**	
Agrostis hyemalis	5	FAC	*Helianthus angustifolius*	4	FACW
Agrostis perennans	5	FACU	*Heliopsis helianthoides*	4	UPL
Andropogon gerardi	4	FAC	*Hibiscus moscheutos*	0.5	OBL
Bidens aristosa	3	FACW	*Juncus effusus*	2	FACW
Carex albolutescens	2	FACW	*Juncus tenuis*	2	FAC
Carex lupulina	1	OBL	*Lespedeza capitata*	2	FACU
Carex vulpinoidea	2	OBL	*Liatris spicata*	0.5	FAC
Chamaecrista fasciculata	5	FACU	*Monarda fistulosa*	0.5	FACU
Chamaecrista nictitans	2	FACU	*Panicum anceps*	6	FAC
Coreopsis lanceolata	3	NI	*Panicum clandestinum*	2	FAC
Coreopsis tinctoria	3	FAC	*Panicum virgatum*	4	FAC
Desmodium canadense	2	FAC	*Rudbeckia hirta*	7	FACU
Echinacea purpurea	7	NI	*Schizachyrium scoparium*	4	FACU
Elymus virginicus	5	FACW	*Senna hebecarpa*	5	FAC
Eupatorium coelestinum	0.5	FAC	*Sorghastrum nutans*	4	FACU
Eupatorium perfoliatum	1	FACW	*Verbena hastata*	2	FACW

4.0 Monitoring Protocol & Success Criteria

4.1 Monitoring Protocol

Restoration monitoring procedures for vegetation will monitor plant survival and species diversity. Quantitative sampling will include twelve (12) permanent 10 x 10-meter vegetation plots as outlined in the CVS Level 1-2 Protocol for Recording Vegetation, Version 4.2 (Lee et al. 2008) and will occur no earlier than the first calendar day of Fall each year. A reference photo will be taken from the origin point of each plot. All planted stems in the plots will be marked with flagging tape and recorded. Data collected will include species, height, planting type (planted stem and/or volunteer), and vigor. Monitoring will be conducted by Axiom Environment, Inc based on the schedule in Table 5. A summary of monitoring is outlined in Table 6. Annual monitoring reports will be submitted to the NCDMS by Restoration Systems no later than December 1 of each monitoring year. Appendix B includes the baseline (MY0) vegetation plot photographs along with the planted and total stem counts.

Table 5. Monitoring Schedule

Resource	Year 1	Year 2	Year 3	Year 4	Year 5
Vegetation (2% of planted area)	x	x	x	x	x
Visual Assessment (100% of Site)	x	x	x	x	x
Report Submittal	x	x	x	x	x

Table 6. Monitoring Summary

Parameter	Method	Schedule/ Frequency	Number/ Extent	Data Collected/Reported
Vegetation	12 Permanent vegetation plots 0.0247 acre (100 square meters) in size; *CVS-EEP Protocol for Recording Vegetation*, *Version 4.2* (Lee et al. 2008).	As-built (MY 0), MY 1, 2, 3, 4, and 5	12 plots across the restoration portion of the Site	Species, height, vigor, planted vs. volunteer, stems/acre. Reference photo at each monitoring plot.

4.2 Monitoring Success Criteria

Performance criteria will be based on the survival of planted species at a density of 260 stems per acre after five years of monitoring. The first annual monitoring activities will commence at the end of the first growing season, at least five months after planting has been completed.

Table 7. Success Criteria

Vegetation
• Within planted portions of the Site, in accordance with Rule 15A NCAC 02B .0295: a) a minimum of 260 stems per acre must be present at year 5, and b) a minimum of four native hardwood and native shrub species in each vegetation monitoring plot, where no one species is greater than 50 % of stems. • Planted and volunteer stems are counted, provided they are included in the approved planting list for the Site; natural recruits not on the planting list may be considered by the DWR on a case-by-case basis.

4.3 Maintenance and Contingency Plans

An adaptive management plan will be developed and implemented with the approval of DMS and DWR in the event the Site or a specific component of the Site fails to achieve success criteria as outlined above.

Other vegetation maintenance and repair activities may include pruning, mulching, and fertilizing. If exotic invasive plant species require treatment, such species will be controlled by mechanical (physical removal with the use of a chainsaw) and/or herbicide application in accordance with North Carolina Department of Agriculture (NCDA) rules and regulations.

5.0 References

Consolidated Buffer Mitigation Rule - 15A NCAC 02B .0295 (Published November 17, 2014)

Lee, M.T., R.K. Peet, S.D. Roberts, and T.R. Wentworth. 2008. CVS-EEP Protocol for Recording Vegetation. Version 4.2. North Carolina Department of Environment and Natural Resources, Ecosystem Enhancement Program. Raleigh, North Carolina.

North Carolina Department of Environmental Quality, Division of Mitigation Services (NCDMS), 2017. Riparian Buffer and Nutrient Offset Buffer Baseline and Annual Monitoring Report Template version 2.0.

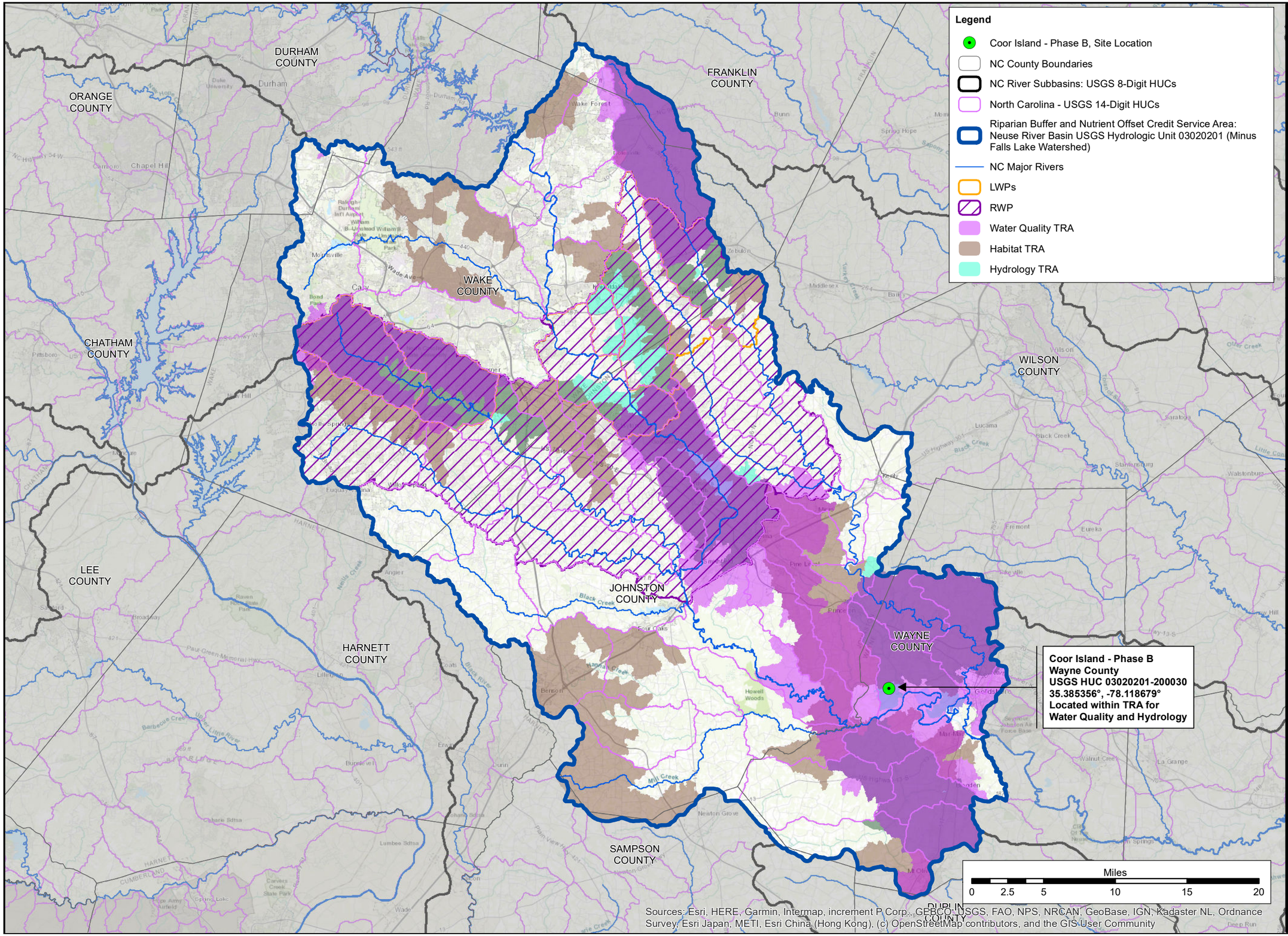
North Carolina Division of Mitigation Services (NCDMS). 2010 amended 2018. Neuse River Basin Restoration Priorities (online). Available: https://files.nc.gov/ncdeq/Mitigation%20Services/Watershed_Planning/Neuse_River_Basin/RBRP-Neuse-201807-.pdf (September 11, 2020).

Nutrient Offset Credit Trading Rule - 15A NCAC 02B .0703 (Readopted effective April 1, 2020)

Schafale, M.P. 2012. Guide to the Natural Communities of North Carolina: Fourth Approximation. North Carolina Natural Heritage Program, North Carolina Department of Environment and Natural Resources. Raleigh, North Carolina.

Appendix A: General Figures and Tables

Figure 1. Parcel Location / Service Area
Figure 2. Current Conditions Plan View
As-built Survey – Sheets 1-2
Table 8. Coor Island Phase B Nutrient Offset Site, 2021-0021v3, Project Credits
Table 9. Project Activity and Reporting History
Table 10. Project Contact
Table 11. Project Baseline Information and Attributes



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of
Mitigation Services

Project:

COOR ISLAND
PHASE B
NUTRIENT OFFSET
SITE

Wayne County, NC

Title:

VICINITY &
SERVICE AREA
MAP

Drawn by: AEB

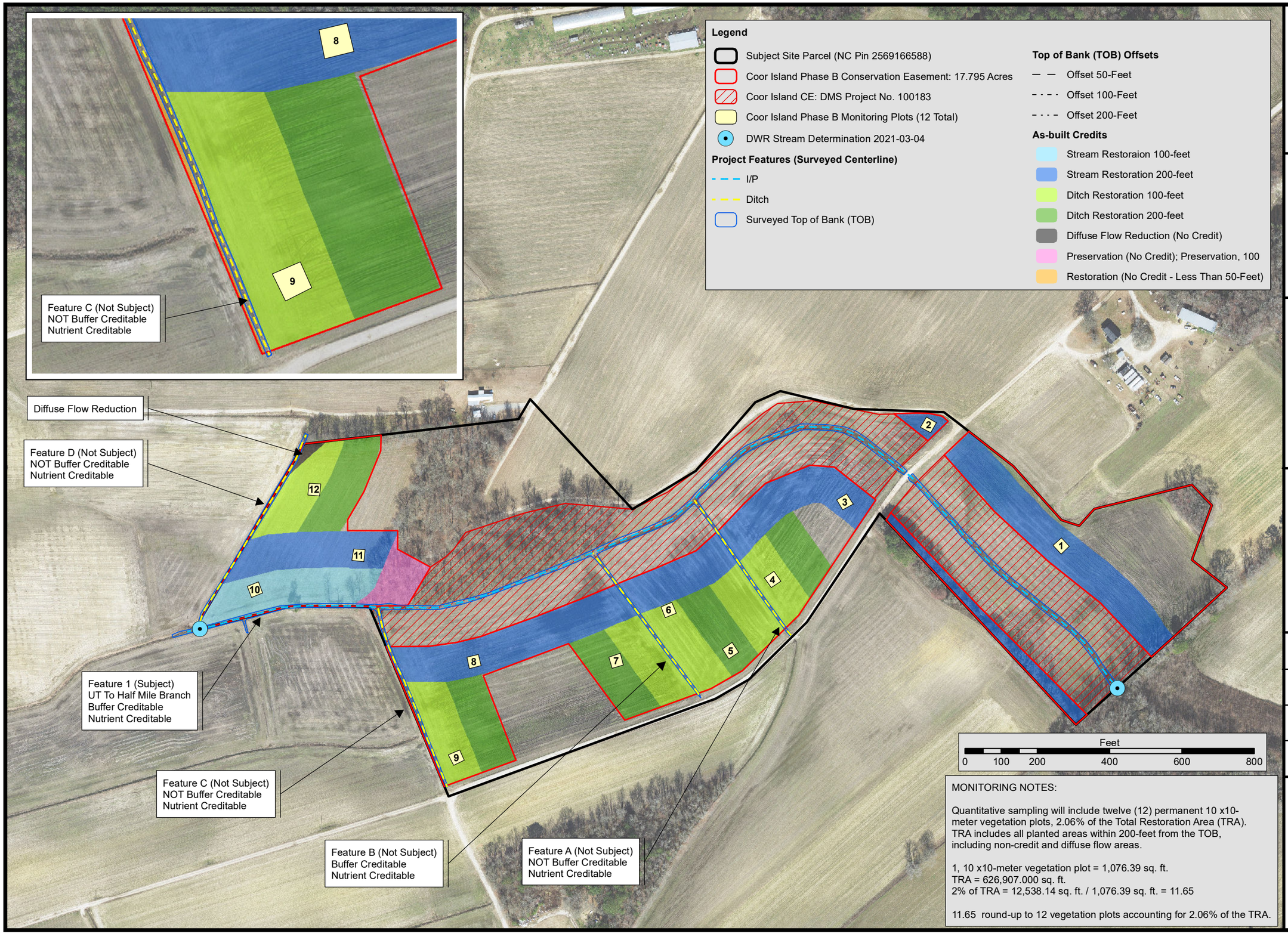
Date: MARCH 2024

Scale: 1:400,000

Project No.: 100650

FIGURE

1



RESTORATION SYSTEMS | LLC

Prepared for:

NC DEQ
Division of
Mitigation Services

Project:

COOR ISLAND
PHASE B
NUTRIENT OFFSET
SITE

Wayne County, NC

Title:

CURRENT
CONDITIONS
PLAN VIEW

2021 NC OneMap

Drawn by: AEB

Date: MARCH 2024

Scale: 1:3,000

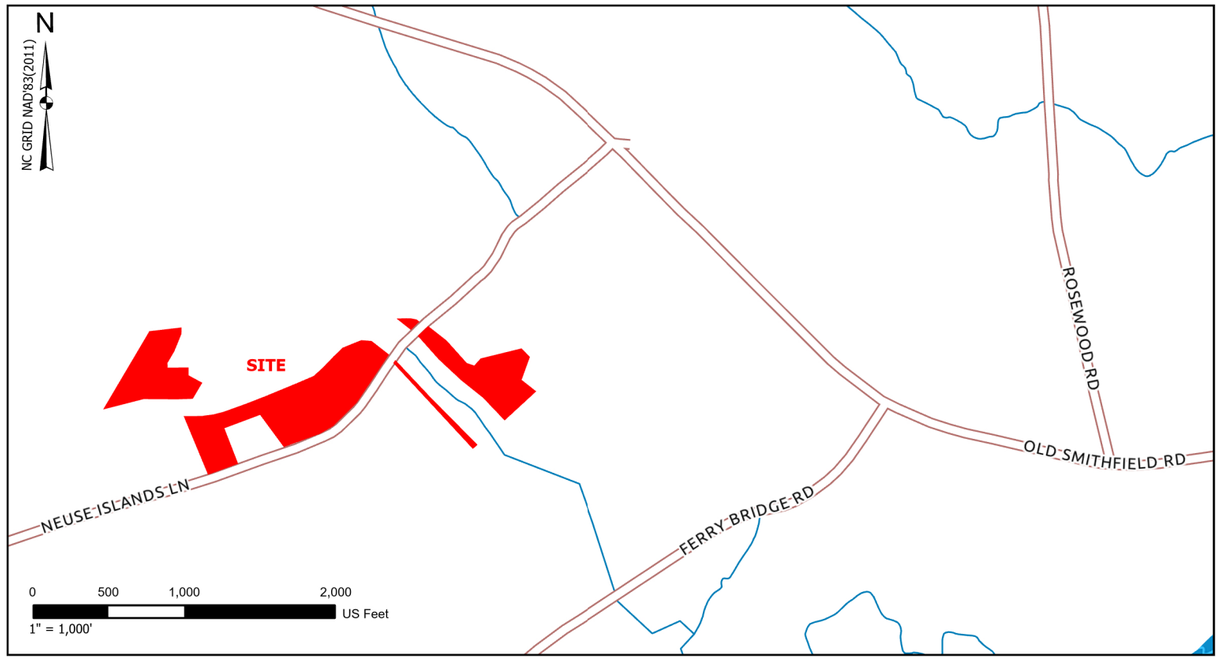
Project No.: 100650

FIGURE

2

N

VICINITY MAP



TOTAL RIPARIAN BUFFER AND NUTRIENT OFFSET MITIGATION

MITIGATION TOTALS	SQ. FT	ACRES
NO CREDIT (LESS THAN 50FT.)	1,794.00	0.04
I/P RESTORATION 0-100FT (NOC - RBC CONVERSION ELIGIBLE)	46,945.00	1.07
I/P RESTORATION 101-200FT (NOC - RBC CONVERSION ELIGIBLE)	293,514.00	6.73
PRESERVATION (NO CREDIT)	17,832.00	0.40
DITCH RESTORATION 0-100FT (NOC ONLY)	155,565.00	3.57
DITCH RESTORATION 101-200FT (NOC ONLY)	126,903.00	2.91
DIFFUSE FLOW REDUCTION (NO CREDIT)	2,175.00	0.04

SURVEYORS CERTIFICATION(S)

Surveyors disclaimer: No attempt was made to locate any cemeteries, wetlands, hazardous material sites, underground or above ground utilities or any other features above, or below ground other than those shown.

Note for bearings, distances, and coordinates of conservation easement, see P.C. P, SL. 89-A (2 sheets)(By K2 Design Group P.A.) BK. 3832, PG. 557.

I certify that the survey is of another category (credit determination plan), such as the recombination of existing parcels, a court-ordered survey, or other exception to the definition of subdivision.

I certify that this plat does not meet G.S. 47-30 as amended.

I, John A. Rudolph, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this survey was performed to meet the requirements for an LIS/GIS survey to the accuracy of Class C and no vertical accuracy; method of measurement GNSS; date(s) of survey April of 2023; datum used for survey NAD83 (2011); and all coordinates are based on NAD83 (2011).

NORTH CAROLINA PROFESSIONAL SEAL L-4194 LAND SURVEYOR JOHN ASHLEY RUDOLPH

L-4194
Professional Land Surveyor — License Number

774 S. Beston Road
La Grange, NC 28551
252.582.3097
www.k2designgroup.com
Firm License no. C-2111

k2 design group

Client: RESTORATION SYSTEMS, LLC
1101 HAYNES STREET
SUITE 211
RALEIGH, NC 27604

Project: COOR ISLAND MITIGATION SITE (PHASE B)
FORK TOWNSHIP, WAYNE COUNTY
NORTH CAROLINA

Title: CREDIT DETERMINATION PLAN
FOR THE PURPOSE OF MONITORING

DRAWN BY:	JTR
DATE:	02/14/24
SURVEYED BY:	JAR
DWG. NO.	RSS524AB24
SHEET:	1 OF 2

NORTH CAROLINA PROFESSIONAL SEAL L-4194 LAND SURVEYOR JOHN ASHLEY RUDOLPH

AS-BUILT LEGEND:

- **R/W** RIGHT-OF-WAY
- **TOB** TOP OF BANK
- PROPERTY LINES
- CONSERVATION EASEMENT
- ACCESS EASEMENT
- COOR ISLAND PHASE A
- 50 FEET FROM TOB
- 100 FEET FROM TOB
- 200 FEET FROM TOB
- CVS PLOTS
- DIFFUSE FLOW REDUCTION (NO CREDIT)
- PRESERVATION (NO CREDIT)
- RESTORATION (NO CREDIT - LESS THAN 50-FEET)
- DITCH RESTORATION 0-100 FEET (NOC ONLY)
- DITCH RESTORATION 101-200 FEET (NOC ONLY)
- I/P RESTORATION 0-100 FEET (NOC-RBC CONVERSION ELIGIBLE)
- I/P RESTORATION 101-200 FEET (NOC-RBC CONVERSION ELIGIBLE)
- SURVEYED TOB
- NO CREDIT AREA (GREATER THAN 200FT, BUT WITHIN CONSERVATION EASEMENT)

N
NC GRID NAD'83(2011)

E AND S WAYNE FARMS, LLC
D.B. 3199, PG. 420
PIN: 2569371544

ACCESS EASEMENT 2
15' WIDE

MITCHELL
D.B. 1098 PG. 499
PIN: 2569176937

E AND S WAYNE FARMS, LLC
D.B. 3199, PG. 420
PIN: 2569371544

ACCESS EASEMENT 1
20' WIDE

CONSERVATION EASEMENT AREA 3
0.14 ACRES ±

ACCESS EASEMENT 3
60' WIDE, 0.42 ACRES ±

MARTIN
D.B. 1166, PG. 832
PIN: 2569475140

DIFFUSE FLOW REDUCTION

FEATURE D (NOT SUBJECT)
NOT BUFFER CREDITABLE
NUTRIENT CREDITABLE

CREDIT TAKEN FROM FEATURE 1
OUT 200 FEET FROM TOB

RESTORATION SYSTEMS, LLC
D.B. 3757, PG. 327
P.C. P, SL. 67-C
PIN: 2569166588

ACCESS EASEMENT 6
20' WIDE, 0.10 ACRES ±

EXISTING CONSERVATION EASEMENT
D.B. 3781, PG. 638

CONSERVATION EASEMENT AREA 4
9.13 ACRES ±

CONSERVATION EASEMENT AREA 5
3.95 ACRES ±

MITCHELL
D.B. 1098 PG. 499
PIN: 2569176937

ACCESS EASEMENT 5
0.01 ACRES ±

CONSERVATION EASEMENT AREA 2
0.54 ACRES ±

CONSERVATION EASEMENT AREA 1
4.05 ACRES ±

EXISTING CONSERVATION EASEMENT
D.B. 3781, PG. 638

FEATURE 1 (SUBJECT)
UT TO HALF MILE BRANCH
BUFFER CREDITABLE
NUTRIENT CREDITABLE

MITCHELL
D.B. 1311, PG. 631
PIN: 2569058737

RESTORATION SYSTEMS, LLC
D.B. 3757, PG. 327
P.C. P, SL. 67-C
PIN: 2569264339

MARTIN
D.B. 1166, PG. 832
PIN: 2569258883

HOWELL
D.B. 2679, PG. 84
PIN: 2569469594

CREDIT TAKEN FROM FEATURE 1
OUT 200 FEET FROM TOB

FEATURE C (NOT SUBJECT)
NOT BUFFER CREDITABLE
NUTRIENT CREDITABLE

FEATURE A (NOT SUBJECT)
NOT BUFFER CREDITABLE
NUTRIENT CREDITABLE

LANE FARMS, INC.
D.B. 965, PG. 755
PIN: 2569039036

FEATURE B (NOT SUBJECT)
BUFFER CREDITABLE
NUTRIENT CREDITABLE

0 100 200 400 US Feet
1" = 200'

Table 8. Coor Island Phase B Nutrient Offset Site, 2021-0021v2, Project Credits

Neuse 03020201 - Outside Falls Lake	Project Area
19.16394	N Credit Conversion Ratio (ft^2/pound)
N/A	P Credit Conversion Ratio (ft^2/pound)

Credit Type	Location	Subject? (enter NO if ephemeral or ditch [1])	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (ft^2)	Total (Creditable) Area of Buffer Mitigation (ft^2)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Convertible to Riparian Buffer?	Riparian Buffer Credits	Convertible to Nutrient Offset?	Delivered Nutrient Offset: N (lbs)	Delivered Nutrient Offset: P (lbs)
Nutrient Offset	Rural	Yes	I / P	Restoration	0-100	UT1	46,945	46,945	1	100%	1.00000	Yes	46,945.000	Yes	2,449.653	—
Nutrient Offset	Rural	Yes	I / P	Restoration	101-200	UT1	293,514	293,514	1	33%	3.03030	Yes	96,859.717	Yes	15,315.953	—
													—		—	—
Nutrient Offset	Rural	No	Ditch	Restoration	0-100	A, B, C, D	155,565	0	1	100%		No	—	Yes	8,117.590	—
Nutrient Offset	Rural	No	Ditch	Restoration	101-200	A, B, C, D	126,903	0	1	33%		No	—	Yes	6,621.968	—
													—		—	—
Nutrient Offset	Rural	No	Ditch	Restoration		Diffuse Flow Feature D	2,175	0	1				—		—	—
													—		—	—
Nutrient Offset	Rural	No	Ditch	Restoration		Less Than 50-Feet Feature C	1,794	0	1				—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
													—		—	—
						Totals (ft2):	626,896	340,459					143,804.717		32,505.164	0.000
						Total Buffer (ft2):	0	0								
						Total Nutrient Offset (ft2):	626,896	N/A								

Total Ephemeral Area (ft^2) for Credit:	0	0	
Total Eligible Ephemeral Area (ft^2):	0	0.0%	Ephemeral Reaches as % TABM
Total Eligible for Preservation (ft^2):	0	0.0%	Preservation as % TABM

Enter Preservation Credits Below

Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Total (Creditable) Area for Buffer Mitigation (ft^2)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits
												—
												—
												—
												—
												—
						Preservation Area Subtotals (ft^2):	0	0				

TOTAL AREA OF BUFFER MITIGATION (TABM)			
Mitigation Totals		Square Feet	Credits
Restoration:		0	0.000
Enhancement:		0	0.000
Preservation:		0	0.000
Total Riparian Buffer:		0	0.000
TOTAL NUTRIENT OFFSET MITIGATION			
Mitigation Totals		Square Feet	Credits
Nutrient Offset:	Nitrogen:	626,896	32,505.164
	Phosphorus:		0.000

1. The Randleman Lake buffer rules allow some ditches to be classified as subject according to 15A NCAC 02B .0250 (5)(a).

last updated 08/03/2020

Table 9. Project Activity and Reporting History

Activity / Milestone	Mitigation Plan Proposed Date	Actual Date
Mitigation Plan Approved	NA	June 2023
Parcel Protection	NA	Recorded July 17, 2023
Planting	January 2024	January 11, 2024
As-built Data Collection	NA	January 2024
As-built Report Submittal	April 2024	March 2024
Year 1-5 Monitoring	December 2024 - 2028	On schedule

Table 10. Project Contact

	Firm	POC & Address
Full Delivery Provider / Designer	Restoration Systems, LLC	Raymond Holz: 919.755.9490 1101 Haynes Street, Suite 211 Raleigh, North Carolina 27604
Planting Contractor:	Restoration Systems, LLC	Josh Merritt: 919.755.9490 1101 Haynes Street, Suite 211 Raleigh, North Carolina 27604
Surveyor	K2 Design Group	John Rudolph (L-4194): 919-394-2547 5688 U.S. Hwy 70 East Goldsboro, NC 27534
Monitoring:	Axiom Environmental, Inc.	Grant Lewis; 919.215.1693 218 Snow Ave. Raleigh, NC 27603

Table 11. Project Baseline Information & Attributes

Project Information			
Project Name		Coor Island Phase B Nutrient Offset site	
County		Wayne	
Project Area (acres)		17.795	
Project Coordinates (latitude and longitude)		35.385356, -78.118679	
Project Watershed Summary Information			
Physiographic Province		Southeastern Plain	
River Basin		Neuse	
USGS Hydrologic Unit 8-digit	030202010	USGS Hydrologic Unit14-digit	03020201-200030
DWR Sub-basin		03-04-12	
Project Drainage Area, Total Outfall		UT1: 257 Acres	
Project Drainage Area Percentage of Impervious Area		< 2%	

Appendix B: Project Photos and Baseline Vegetation Data

Table 12. Baseline Vegetation Data

Vegetation Plot Photos 1-12

Table 12. Baseline Vegetation Data

Project Code 23018. Project Name: Coor B

			Current Plot Data (MY0 2024)																				
			23018-01-0001			23018-01-0002			23018-01-0003			23018-01-0004			23018-01-0005			23018-01-0006			23018-01-0007		
Scientific Name	**Common Name**	**Species Type**	**PnoLS**	**P-all**	**T**	**PnoLS**	**P-all**	**T**	**PnoLS**	**P-all**	**T**	**PnoLS**	**P-all**	**T**	**PnoLS**	**P-all**	**T**	**PnoLS**	**P-all**	**T**	**PnoLS**	**P-all**	**T**
Betula nigra	river birch	Tree				2	2	2				3	3	3							4	4	4
Diospyros virginiana	common persimmon	Tree				1	1	1	1	1	1				2	2	2	2	2	2	1	1	1
Liriodendron tulipifera	tuliptree	Tree							5	5	5	3	3	3	1	1	1	3	3	3			
Morus rubra	red mulberry	Tree										1	1	1	1	1	1	1	1	1	1	1	1
Nyssa sylvatica	blackgum	Tree							5	5	5	2	2	2	2	2	2						
Platanus occidentalis	American sycamore	Tree	1	1	1	3	3	3	1	1	1	2	2	2	2	2	2						
Quercus	oak	Tree																					
Quercus michauxii	swamp chestnut oak	Tree	2	2	2	2	2	2							1	1	1	2	2	2	4	4	4
Quercus nigra	water oak	Tree	4	4	4	3	3	3				1	1	1	3	3	3	2	2	2	2	2	2
Quercus phellos	willow oak	Tree	4	4	4	2	2	2	2	2	2				3	3	3						
Ulmus americana	American elm	Tree							3	3	3	2	2	2	1	1	1	5	5	5	2	2	2
Unknown		Shrub or Tree													1	1	1				1	1	1
		Stem count	11	11	11	13	13	13	17	17	17	14	14	14	17	17	17	15	15	15	15	15	15
		size (ares)	1			1			1			1			1			1			1		
		size (ACRES)	0.02			0.02			0.02			0.02			0.02			0.02			0.02		
		Species count	4	4	4	6	6	6	6	6	6	7	7	7	10	10	10	6	6	6	7	7	7
		Stems per ACRE	445.2	445.2	445.2	526.1	526.1	526.1	688	688	688	566.6	566.6	566.6	688	688	688	607	607	607	607	607	607

Exceeds requirements by 10%

Exceeds requirements, but by less than 10%

Fails to meet requirements, by less than 10%

Fails to meet requirements by more than 10%

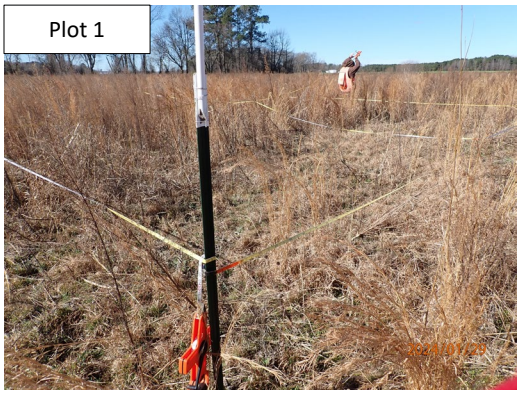
Table 12. Baseline Vegetation Data
Project Code 23018. Project Name: Coor B

			Current Plot Data (MY0 2024)															Annual Means		
			23018-01-0008			23018-01-0009			23018-01-0010			23018-01-0011			23018-01-0012			MY0 (2024)		
Scientific Name	Common Name	Species Type	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T
Betula nigra	river birch	Tree	2	2	2	2	2	2	6	6	6	1	1	1	2	2	2	22	22	22
Diospyros virginiana	common persimmon	Tree				2	2	2	2	2	2				2	2	2	13	13	13
Liriodendron tulipifera	tuliptree	Tree										3	3	3	2	2	2	17	17	17
Morus rubra	red mulberry	Tree				2	2	2							1	1	1	7	7	7
Nyssa sylvatica	blackgum	Tree				1	1	1										10	10	10
Platanus occidentalis	American sycamore	Tree	3	3	3	4	4	4							1	1	1	17	17	17
Quercus	oak	Tree	1	1	1													1	1	1
Quercus michauxii	swamp chestnut oak	Tree	2	2	2	4	4	4	3	3	3	1	1	1	2	2	2	23	23	23
Quercus nigra	water oak	Tree	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	24	24	24
Quercus phellos	willow oak	Tree	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	21	21	21
Ulmus americana	American elm	Tree							1	1	1	3	3	3				17	17	17
Unknown		Shrub or Tree													1	1	1	3	3	3
		Stem count	10	10	10	17	17	17	16	16	16	14	14	14	16	16	16	175	175	175
		size (ares)	1			1			1			1			1			12		
		size (ACRES)	0.02			0.02			0.02			0.02			0.02			0.30		
		Species count	6	6	6	8	8	8	6	6	6	6	6	6	9	9	9	12	12	12
		Stems per ACRE	404.7	404.7	404.7	688	688	688	647.5	647.5	647.5	566.6	566.6	566.6	647.5	647.5	647.5	590.2	590.2	590.2

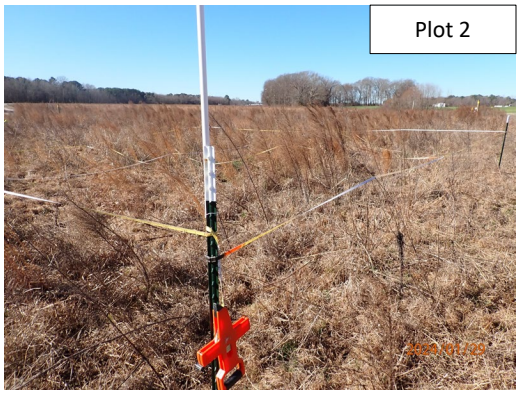
Exceeds requirements by 10%
Exceeds requirements, but by less than 10%
Fails to meet requirements, by less than 10%
Fails to meet requirements by more than 10%

Coor Island Phase B
MY0 (2024) Vegetation Monitoring Photographs (taken January 2024)

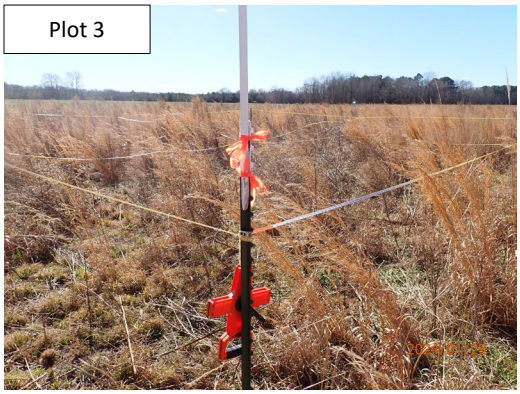
Plot 1



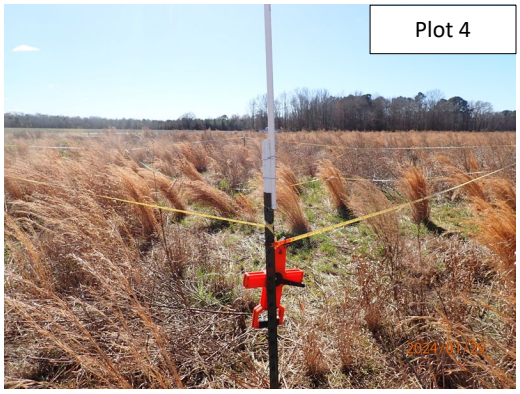
Plot 2



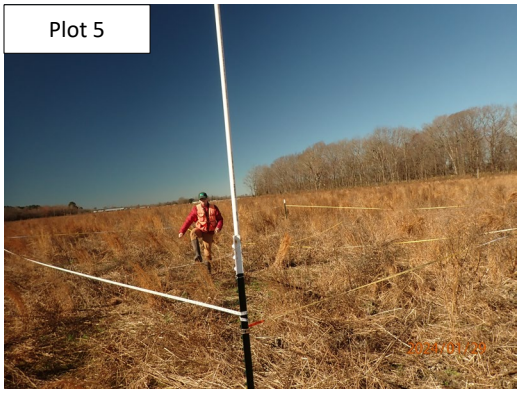
Plot 3



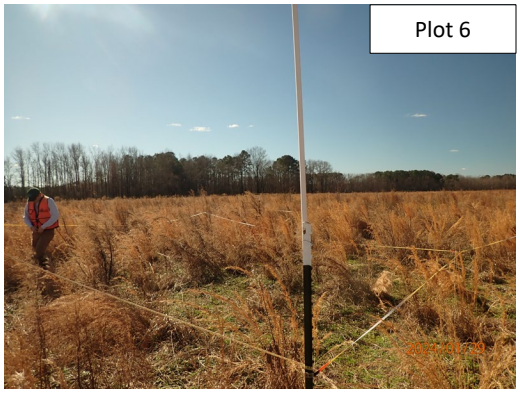
Plot 4



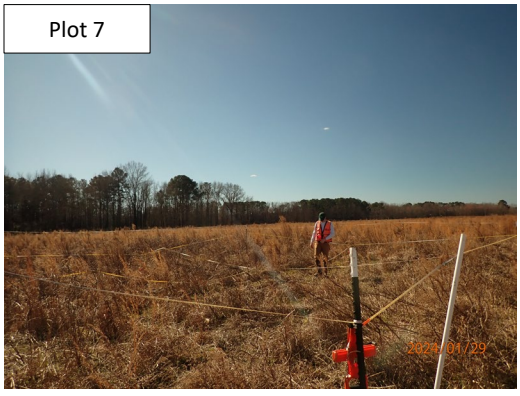
Plot 5



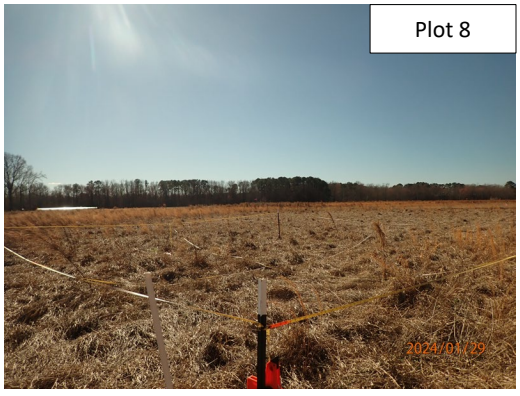
Plot 6



Plot 7

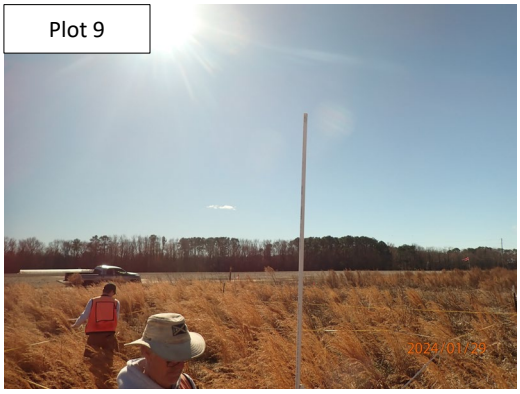


Plot 8

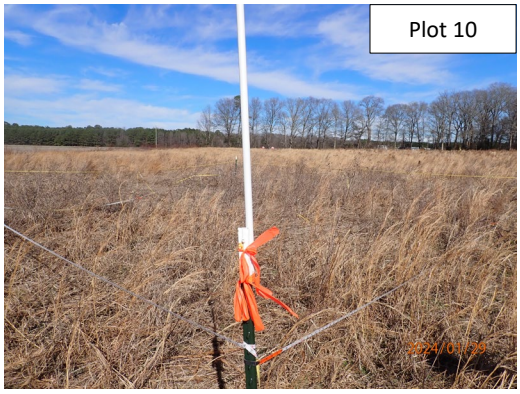


Coor Islandd Phase B
MY0 (2024) Vegetation Monitoring Photographs (taken January 2024)

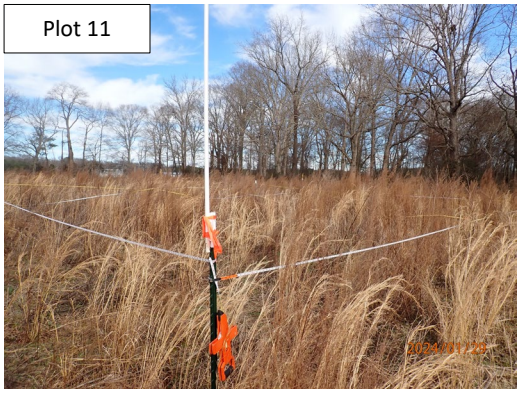
Plot 9



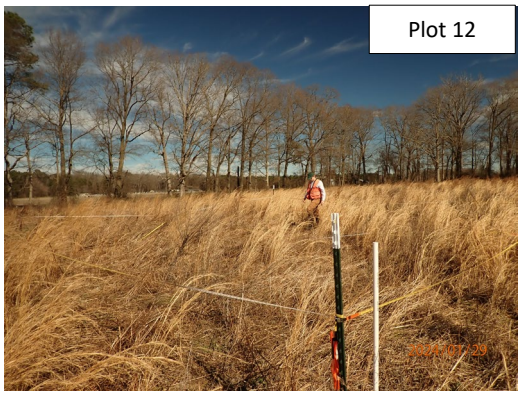
Plot 10



Plot 11



Plot 12



Appendix C: Agency Letters/Correspondence

DWR Stream Determination Letter, March 4, 2021
DWR Site Viability Letter, April 16, 2021
DWR Verification of Site Viability Letter, March 14, 2023

ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

March 4, 2021

E and S Wayne Farms, LLC
4216 White Kestrel Drive
Raleigh, NC 27616

2021 0021 v1
Wayne County

Subject: **On-Site Determination** for Applicability to Neuse Riparian Buffer Rules (15A NCAC 02B .0714)

Subject Property/ Project Name: Coor Island Mitigation Site

Address/Location: (No Number) Neuse Island Lane, Goldsboro Wayne County

Stream(s) Evaluated: (1) – UT to Half Mile Branch

Determination Date: January 21, 2021 Staff: Allen Stewart

Determination Type:	
Buffer:	Stream:
X - Neuse (15A NCAC 02B .0714) - Tar-Pamlico (15A NCAC 02B .0734 - Catawba (15A NCAC 02B .0614) - Jordan (15A NCAC 02B .0267) (governmental and/or interjurisdictional projects) - Randleman (15A NCAC 02B .0724) - Goose Creek (15A NCAC 02B .0605-.0608)	X - Intermittent/Perennial Determination

Stream	E/I/P*	Not Subject	Subject	Start@	Stop@	Soil Survey	USGS Topo
UT to Half Mile Branch	P		X	35.385270, -78.123396	35.384778, -78.114888	X	X

*Ephemeral / Intermittent / Perennial

To: E and S Wayne Farms LLC,

The Division of Water Resources has determined that the stream listed above and included on the attached map has been located on the most recent published (1974) NRCS Soil Survey of Wayne County, North Carolina and/or the most recent copy of the 2019 Princeton USGS Topographic map at a 1:24,000 scale and evaluated for applicability to the Neuse Riparian Buffer Rule. For Each stream that is checked "Not Subject" it has been determined to not be at least intermittent or not present on the property. Streams that are checked "Subject" have been mapped on (1974) NRCS Soil Survey and/or USGS Topographic map 1:24,000, located on the property and possess characteristics that qualify them to be at least intermittent streams. There may be other streams or features located on the property that do not appear on the maps referenced above but may be considered jurisdictional according to the US Army Corps of Engineers and subject to the Clean Water Act.

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by the DWR may request a determination by the Director. An appeal request must be made within sixty (60) calendar days of date of this letter to the Director in writing.

If sending via US Postal Service:
c/o *Paul Wojoski*
DWR – 401 & Buffer Permitting Unit
1617 Mail Service Center
Raleigh, NC 27699-1617

If sending via delivery service (UPS, FedEx, etc.):
c/o Paul Wojoski
DWR – 401 & Buffer Permitting Unit
512 N. Salisbury Street
Raleigh, NC 27604

This determination is final and binding as detailed above unless an appeal is requested within sixty (60) days.

This determination only addresses the applicability to the buffer rules and does not approve any activity within the buffers or waters. The project may require a Section 404/401 Permit for the proposed activity. Any inquiries regarding applicability to the Clean Water Act should be directed to the US Army Corps of Engineers Raleigh Regulatory Field Office at (919)-554-4884 Ext. 22.

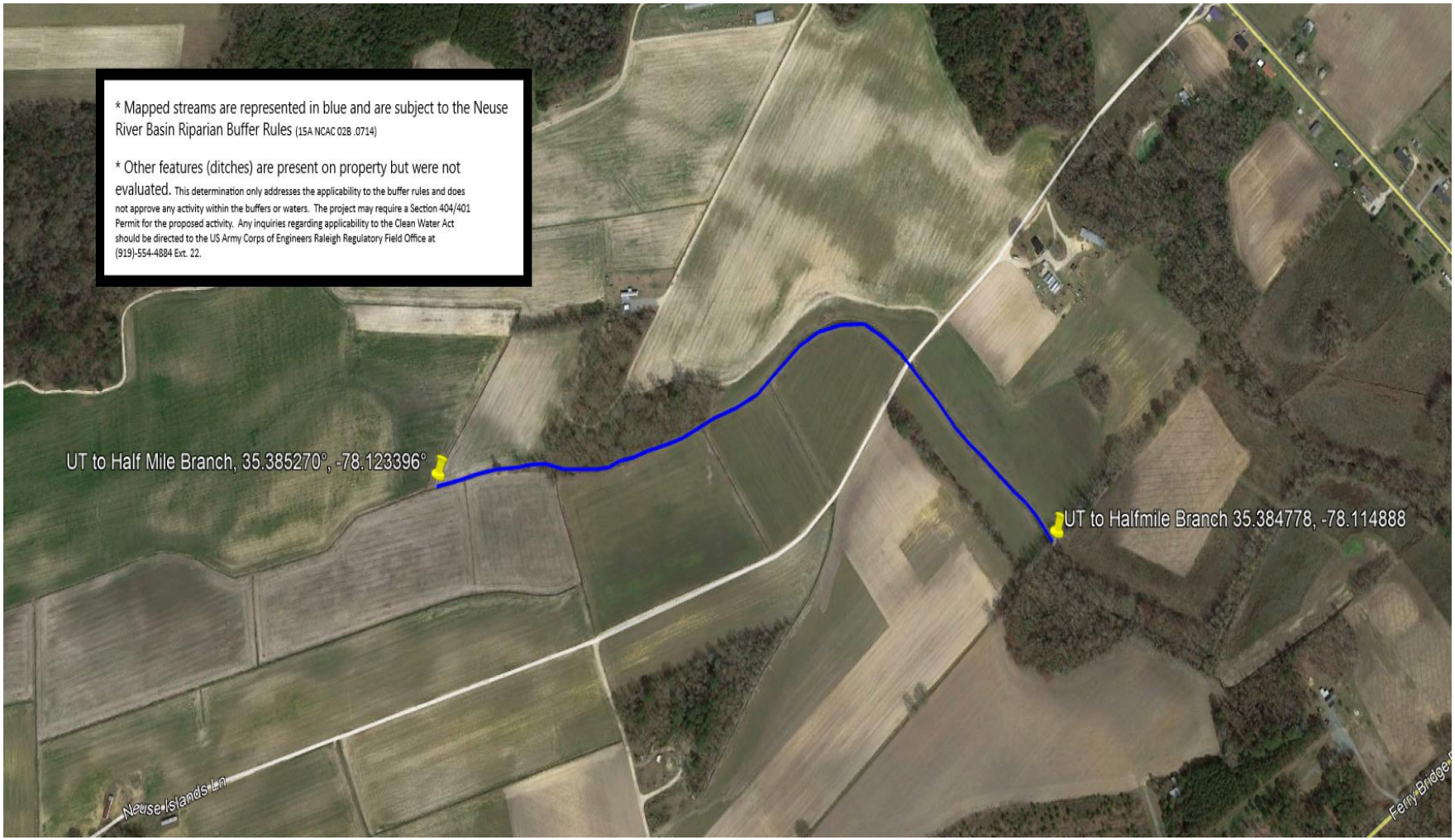
If you have questions regarding this determination, please feel free to contact Allen Stewart at (252) 946-6481.

Sincerely,

Robert Tankard

Robert Tankard, Assistant Regional Supervisor
Water Quality Regional Operations Section
Division of Water Resources, NCDEQ

cc: WaRO DWR File Copy/LASERFICHE
Raymond Holz, Restoration Systems LLC, rholz@restorationsystems.com
Katie Merritt, NCDWR 401 & Buffer Permitting Branch, Katie.Merritt@ncdenr.gov
Samantha Dailey, US Army Corps of Engineers Raleigh Regulatory Field Office, samantha.j.dailey@usace.army.mil


* Mapped streams are represented in blue and are subject to the Neuse River Basin Riparian Buffer Rules (15A NCAC 02B .0714)
* Other features (ditches) are present on property but were not evaluated. This determination only addresses the applicability to the buffer rules and does not approve any activity within the buffers or waters. The project may require a Section 404/401 Permit for the proposed activity. Any inquiries regarding applicability to the Clean Water Act should be directed to the US Army Corps of Engineers Raleigh Regulatory Field Office at (919)-554-4884 Ext. 22.
UT to Half Mile Branch, 35.385270°, -78.123396°
UT to Halfmile Branch 35.384778, -78.114888
Neuse Islands Ln
Ferry Bridge

DocuSign Envelope ID: 16C4B847-E58C-4293-ADFE-A71CE192FD2C

ROY COOPER
Governor
DIONNE DELLI-GATTI
Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

April 16, 2021

Raymond Holz
Restoration Systems, LLC
(via electronic mail: rholz@restorationsystems.com)

Re: Site Viability for Buffer Mitigation & Nutrient Offset – Coor Island Site
Off Neuse Island Lane, Goldsboro (near 35.386634, -78.116390)
Neuse 03020201
Wayne County

Dear Mr. Holz,

On December 11, 2020, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Restoration Systems, LLC (RS) for a site visit near the above-referenced site in the Neuse River Basin within the 8-digit Hydrologic Unit Code 03020201. The site visit was to determine the potential for riparian buffer mitigation and nutrient offset within a proposed conservation easement boundary, which is more accurately depicted in the attached map labeled "Figure 1-Existing Conditions" (Figure 1) prepared by RS. The proposed easement boundary in Figure 1, includes all riparian areas intended to be proposed as part of a full-delivery project for the Division of Mitigation Services (RFP #16-20200402) as well as a private mitigation bank project by RS. On March 24, 2021, Ms. Merritt performed a site assessment of the subject site. Staff with RS were also present.

Ms. Merritt's evaluation of the features onsite and their associated mitigation determination for the riparian areas are provided in the table below. This evaluation was made from Top of Bank (TOB) and landward 200' from each feature for buffer mitigation pursuant to 15A NCAC 02B .0295 (effective November 1, 2015) and for nutrient offset credits pursuant to 15A NCAC 02B .0703.

DocuSign Envelope ID: 16C4B847-E58C-4293-ADFE-A71CE192FD2C

Feature	Classification onsite	[1]Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	[3]Nutrient Offset Viable	[4,5]Mitigation Type Determination w/in riparian areas
UT to Half Mile Branch	Stream	Yes	Combination of non-forested agricultural fields with mature forest Agricultural land uses not present along entire reach during baseline period 1991-1995 (see map) Neuse buffers (Zone 1 & Zone 2) timbered & cleared between 1999-2004 (see map) post buffer-protection rules cannot be used for crediting *(area not shown within the proposed project boundary but was assessed)*	[2]Yes (except within certain areas)	Yes (non-forested ag fields also not forested during baseline)	Non-forested fields - **Restoration Site** per 15A NCAC 02B .0295 (n) Timbered & Cleared Neuse Buffer (Zone 1 & Zone 2)- no credit Timbered & Cleared areas (beyond the Neuse Buffer) – **Restoration Site** per 15A NCAC 02B .0295 (n) for buffer credit only Forested Areas – **Preservation Site** per 15A NCAC 02B .0295 (o)(5)
A	Ditch >3'	No	Non-forested agricultural fields & partially located within a DOT Right Of Way (ROW)	No	Yes	**Restoration Site** per 15A NCAC 02B .0295 (n) Note: No credits are allowed within the DOT R.O.W
B	Ditch <3' depth	No	Non-forested agricultural fields and partially located within a DOT Right Of Way (ROW)	*see note	Yes	**Restoration Site** per 15A NCAC 02B .0295 (o)(8) ***Buffer Mitigation Note –** Assessment concludes the ditch meets 15A NCAC 02B.0295 (o)(8) (A, B, C, D & E). More information is required to be provided in a mitigation plan for complete assessment. See rule. Note: No credits are allowed within the DOT R.O.W
C	Ditch >3' depth	No	Right Bank – non-forested agricultural fields and partially located within a DOT Right Of Way (ROW) Left bank - Agricultural land uses not present adjacent to entire reach during baseline period 1991-1995 (see map)	No	Yes (on right side only)	**Restoration Site** per 15A NCAC 02B .0295 (n) Fields forested during baseline – no credit Note: No credits are allowed within the DOT R.O.W

DocuSign Envelope ID: 16C4B847-E58C-4293-ADFE-A71CE192FD2C

Feature	Classification onsite	[1]Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	[3]Nutrient Offset Viable	[4,5]Mitigation Type Determination w/in riparian areas
D	Ditch >3' depth	No	Left Bank - non-forested agricultural fields and partially located within a DOT Right Of Way (ROW) Right Bank - Agricultural land uses not present adjacent to entire reach during baseline period 1991-1995 (see map)	No	Yes (on left side only)	**Restoration Site** per 15A NCAC 02B .0295 (n) Fields forested during baseline – no credit Note: No credits are allowed within the DOT R.O.W
E	Ditch	No	Not assessed	N/A	N/A	Not assessed

[1]Subjectivity calls for the features were determined by DWR in correspondence dated March 4, 2021 (ID# 2021-0021) using the 1:24,000 scale quadrangle topographic map prepared by USGS and the most recent printed version of the soil survey map prepared by the NRCS .

[2]The area of preservation credit within a buffer mitigation site shall comprise of no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 0295 (o)(5) and 15A NCAC 0295 (o)(4). Site cannot be a Preservation Only site to comply with this rule.

[3]*NC Division of Water Resources - Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment*

[4] Determinations made for this Site are determined based on the proposal provided in maps and figures submitted with the request.

[5] All features proposed for buffer mitigation or nutrient offset, must have a planted conservation easement established that includes the tops of channel banks when being measured perpendicular and landward from the banks, even if no credit is viable within that riparian area.

[6]The area of the mitigation site on ephemeral channels shall comprise no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 02B .0295 (o)(7).

Determinations provided in the table above were based on the proposed conservation easement boundaries depicted in Figure 1 for the full-delivery mitigation site and the private mitigation bank site. The two easement boundaries are contiguous, and thus, the approval of the private mitigation bank site will be dependent on the approval and implementation of the full-delivery mitigation site. The map representing the proposal for the site is attached to this letter and is initialed by Ms. Merritt on April 13, 2021. Substantial changes to the proposed easement boundaries could affect the site's potential to generate buffer mitigation and nutrient offset credits.

This letter does not constitute an approval of this Site to generate buffer and nutrient offset credits. Pursuant to 15A NCAC 02B .0295, a mitigation proposal and a mitigation plan shall be submitted to DWR for written approval **prior** to conducting any mitigation activities in riparian areas and/or surface waters for buffer mitigation credit. Pursuant to 15A NCAC 02B .0703, a proposal regarding a proposed nutrient load-reducing measure for nutrient offset credit shall be submitted to DWR for approval prior to any mitigation activities in riparian areas and/or surface waters.

All vegetative plantings, performance criteria and other mitigation requirements for riparian restoration, enhancement and preservation must follow the requirements in 15A NCAC 02B .0295 to be eligible for buffer and/or nutrient offset mitigation credits. For any areas depicted as not being viable for nutrient offset credit above, one could propose a different measure, along with supporting calculations and sufficient detail to support estimates of load reduction, for review by the DWR to determine viability for nutrient offset in accordance with 15A NCAC 02B .0703.

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This viability assessment will expire on April 16, 2023 or upon approval of a mitigation plan by the DWR, whichever comes first. This letter should be provided in any nutrient offset, buffer, stream or wetland mitigation plan for this Site.

Please contact Katie Merritt at (919) 707-3637 if you have any questions regarding this correspondence.

Sincerely,

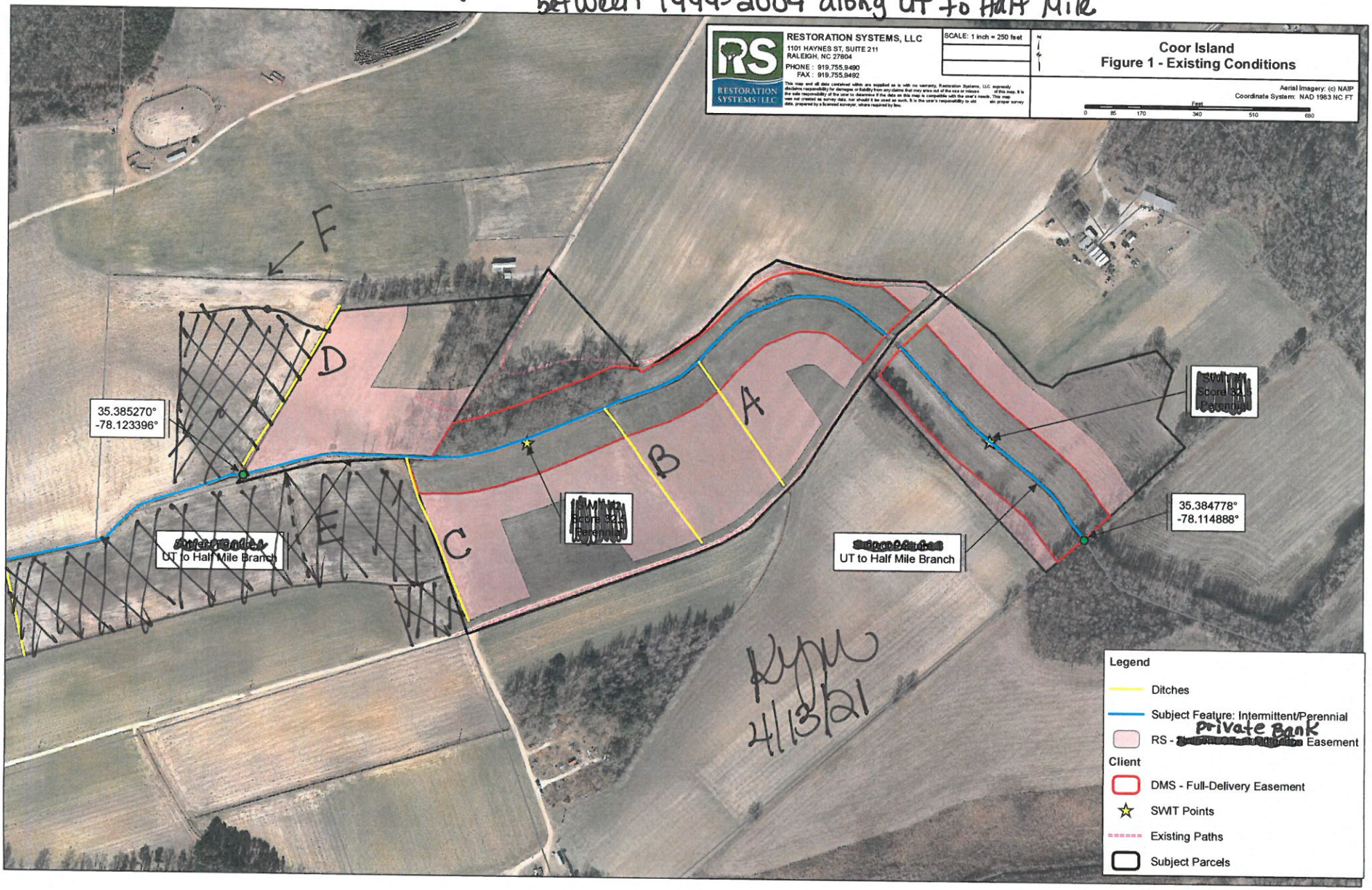
DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor
401 and Buffer Permitting Branch

PW/kym
Attachments: "Figure 1 – Existing Conditions"

cc: File Copy (Katie Merritt)

= Not agriculture during baseline, forested until between 1999-2004 along UT to Half Mile



4/13/21

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Holz, Raymond

From: Merritt, Katie <katie.merritt@ncdenr.gov>
Sent: Tuesday, March 14, 2023 4:50 PM
To: Ray Holz
Cc: Dunnigan, Emily
Subject: RE: [External] Coor Island Phase B (DWR 2021-0021v2) & Thunder Phase B (DWR 2021-0018v2)

Hey Raymond,
Thank you for you letting me know. The Coor Island Phase B & Thunder Phase B BPDP documents along with the corresponding draft UMBI are formally withdrawn from the DWR Bank review. Please make sure to still use the same DWR project ID numbers that were assigned to these two sites when submitting documents to DMS.

The site viability letters for these two sites are still valid, as long as there have been no landuse changes since the initial DWR review of the two draft BPDP documents.

Thank you,
Katie

From: Ray Holz <rholz@restorationsystems.com>
Sent: Tuesday, March 14, 2023 3:26 PM
To: Merritt, Katie <katie.merritt@ncdenr.gov>
Cc: Dunnigan, Emily <emily.dunnigan@ncdenr.gov>
Subject: [External] Coor Island Phase B (DWR 2021-0021v2) & Thunder Phase B (DWR 2021-0018v2)

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to Report Spam.

Katie – Following up on our conversation earlier today, I wanted to provide you with formal notice that Restoration Systems (RS) would like to terminate the banking process for Coor Island Phase B (DWR 2021-0021v2) & Thunder Phase B (DWR 2021-0018v2). RS received contracts from DEQ to provide these sites via full-delivery contracts through DMS. We have started that process and will submit mitigation plans to DMS soon. RS will apply comments received from DWR during the Draft BPDP submittal/review process.

Given that RS has already started the permitting process on these two sites and DWR has reviewed/made comments to the drafts, I wanted to confirm that our viability letters are still valid. Each Site's viability letter states, "This viability assessment will expire on April 13, 2023, or upon approval of a mitigation plan by the DWR, whichever comes first" – attached for quick reference.

Please let me know if we need to address the expiration of the viability letters.

Thanks,
RH

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Raymond J. Holz | Restoration Systems, LLC
1101 Haynes St. Suite 211 | Raleigh, NC 27604
tel: 919.334.9122 | cell: 919.604.9314 | fax: 919.755.9492
email: rholz@restorationsystems.com