

ENVIRONMENTAL ASSESSMENT

WASTEWATER TREATMENT PLANT IMPROVEMENTS

TOWN OF PEMBROKE ROBESON COUNTY, NC FOR U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

DECEMBER, 2019



Project Number: G-19127

Originating Office: Garner, NC



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Town of Pembroke, North Carolina WWTP Improvements

ENVIRONMENTAL ASSESSMENT

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1.0 – PROJECT DESCRIPTION

1.1 – BENEFICIARIES

The facility has already been cited for exceedances of the monthly average flow and total suspended solids. In order to provide additional resiliency and accommodate significant future storm events along with the ability to increase both the hydraulic and treatment capacity of the treatment facility, it will be necessary to provide an additional treatment train and modifications to the existing facility to ensure compliance with the NPDES permit.

It is imperative that the planning of the proposed upgraded facility begins soon to ensure the Town can retain the current workforce at SR Originals and allow for their potential expansion as well as allowing for the expansion of the UNC branch located in Pembroke. Since the average flows are quickly approaching 80% of the hydraulic capacity, failure to take action quickly may result in the Town being placed on a moratorium, whereas no additional customers will be allowed to hook onto the town's collection system. The improvements are also needed to prevent additional financial loss during flood events because of any facility's inability to discharge wastewater into the system due to a system surcharge and pump stations taken offline because the treatment plant cannot handle the additional flow.

1.2–PROPOSED CONSTRUCTION

Topographical Map and Site Map are attached.

1.3 – NEED AND PURPOSE

If the Town of Pembroke wishes to continue to play a significant role in the economic viability of the region, it is imperative that the issues with hydraulic capacity be resolved before the Town is faced with a moratorium. Additionally, it is essential that the facility provides a higher level of treatment, particularly of BOD and TSS, in order to sustain and promote job growth. The additional capacity shall include components to provide better resiliency of the wastewater collection and treatment system against future significant storm events.

The economic impact to the Town of Pembroke will be significant. If the plant is allowed to expand both its hydraulic and treatment capacities, SR Originals can retain its current workforce and expand its manufacturing capacity and create additional jobs. The capacity will also allow further business development of land tributary to the waste treatment facility, thereby creating more jobs within the community. The resiliency components of the waste treatment facility will allow the business to continue



to operate and discharge wastewater during a future significant storm event, preventing the loss of wages and loss of revenue as suffered during hurricane Florence.

Failure to construct the project could result in the immediate loss of approximately 400-jobs and places the Town at risk for a sewer moratorium being enforced by NCDEQ.

1.4 – ALTERNATIVES TO THE PROPOSED PROJECT

1.4.1 – ALTERNATIVES

The following alternatives were evaluated as potential solutions to the capacity and resiliency requirements for the Town of Pembroke waste treatment facilities.

1.4.1.a Option One

Part of the hydraulic capacity can be met with a very aggressive program to address the inflow/infiltration (I/I) issues within the collection system. While this may result in the reduction of storm or groundwater intrusion into the collection system, it is difficult to predict the final outcome, nor are the results permanent. It has been our experience that the flows may increase in some areas due to exfiltration (sewage leaching from the pipes and manholes). While a comprehensive I/I find and fix program is beneficial, it is best accomplished by prioritizing areas tributary to the various pump stations to find defects via smoke testing and television reconnaissance to establish the method of repairs such as dig up and replace, cured in place pipe (CIPP) or manhole lining. However, an aggressive find and fix I/I repair program will not solve the treatment or hydraulic capacity issues at the WWTP.

1.4.1.b Option Two

In order to achieve the objective of additional hydraulic capacity, better treatment for BOD, and resiliency against significant storm events, Option Two includes expanding the capacity of the wastewater treatment facility. The expansion will include an earthen lagoon with an HDPE liner to be utilized as a surge basin. The influent flow will be diverted via automated valves, which will open and close based upon a pre-set influent flow. Its purpose is to prevent the surcharge of the wastewater collection system.

We have performed an evaluation of the past three (3) years of effluent flow (October 2016 to September 2019), as recorded on monthly Discharge Monitoring Report, which indicates the average daily flows are trending upwards. The average daily flow for 2017 was 0.75-MGD; 2018, 0.93-MGD, and 2019 through September is 0.85-MGD. In accordance with the North Carolina Administrative Code §15A NCAC 02T .0118 “Demonstration of Future Wastewater Treatment Capacities” as stated below:

No permits for sewer line extensions shall be issued to wastewater treatment systems owned or operated by municipalities, counties, sanitary districts, or public utilities unless they meet the following requirements:

(1) Prior to exceeding 80 percent of the system's permitted hydraulic capacity (based on the average flow during the last calendar year), the permittee shall submit an engineering evaluation of their future wastewater treatment, utilization, and disposal needs. This evaluation shall outline plans for meeting future wastewater treatment, utilization, or disposal needs by either expansion of the existing system, elimination or reduction of extraneous flows, or water conservation and shall include the source of funding for the improvements. If expansion is not proposed or is proposed for a later date, justification shall be made that wastewater treatment needs will be met based on past growth records and future growth projections and, as appropriate, shall include conservation plans or other measures to achieve waste flow reductions.

(2) Prior to exceeding 90 percent of the system's permitted hydraulic capacity (based on the average flow during the last calendar year), the permittee shall obtain all permits needed for the expansion of the wastewater treatment, utilization, or disposal system and, if construction is needed, submit final plans and specifications for expansion, including a construction schedule. If expansion is not proposed or is proposed for a later date, justification shall be made that wastewater treatment needs will be met based on past growth records and future growth projections and, as appropriate, shall include conservation plans or other specific measures to achieve waste flow reductions.

(3) The Director shall allow permits to be issued to facilities that are exceeding the 80 percent or 90 percent disposal capacity if the additional flow is not projected to result in the facility exceeding its permitted hydraulic capacity, the facility is in compliance with all other permit limitations and requirements, and adequate progress is being made in developing the required engineering evaluations or plans and specifications. In determining the adequacy of the progress, the Director shall consider the projected flows, the complexity and scope of the work to be completed, and any projected environmental impacts.

Based upon these criteria, the treatment facility at Pembroke has achieved an average daily flow for the calendar year 2018 of 70% of its permitted flow of 1.33-MGD. Additionally, SR Originals has indicated their desire to expand their production facility and add additional jobs. Therefore, it is imperative that the Town of Pembroke find the means to expand the hydraulic capacity of the plant to provide capacity

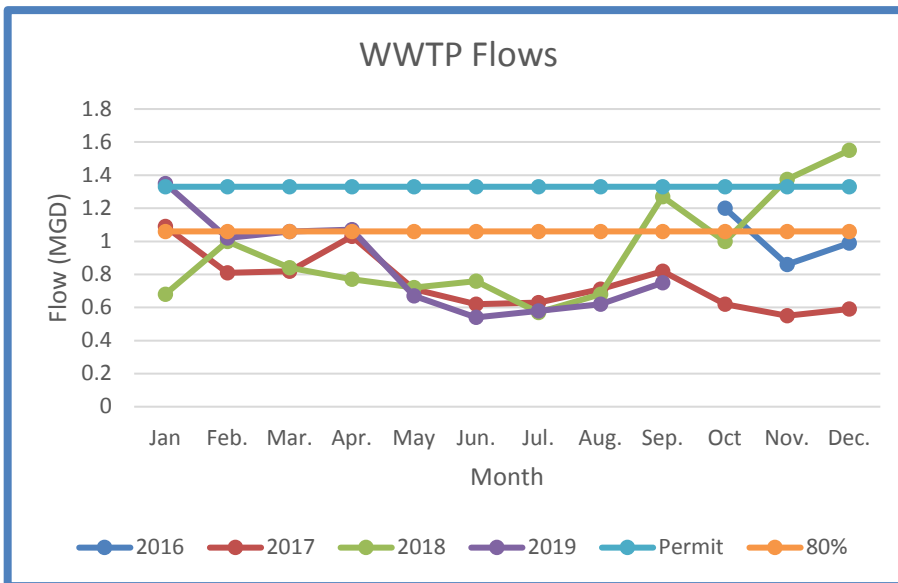


Figure 1

for growth and provide resiliency against future major storm events. Additionally, any expansion of the SR Originals flow to the facility will most likely increase the influent BOD. The current effluent limit, according to the NPDES permit, is a weekly average of 18.0 mg/L and a weekly average of 27.0 mg/L based upon the current hydraulic capacity of 1.33-MGD.

We have reviewed the last three

(3) years of monthly DMR's, beginning with October 2016 through September 2019 and determined the weekly average for BOD is as follows: 2016, 2.63-mg/L (3-months); 2017, 3.88-mg/L; 2018, 4.68-mg/L; 2019, 3.60-mg/L (9-months). These values are reflected in Figure 2.



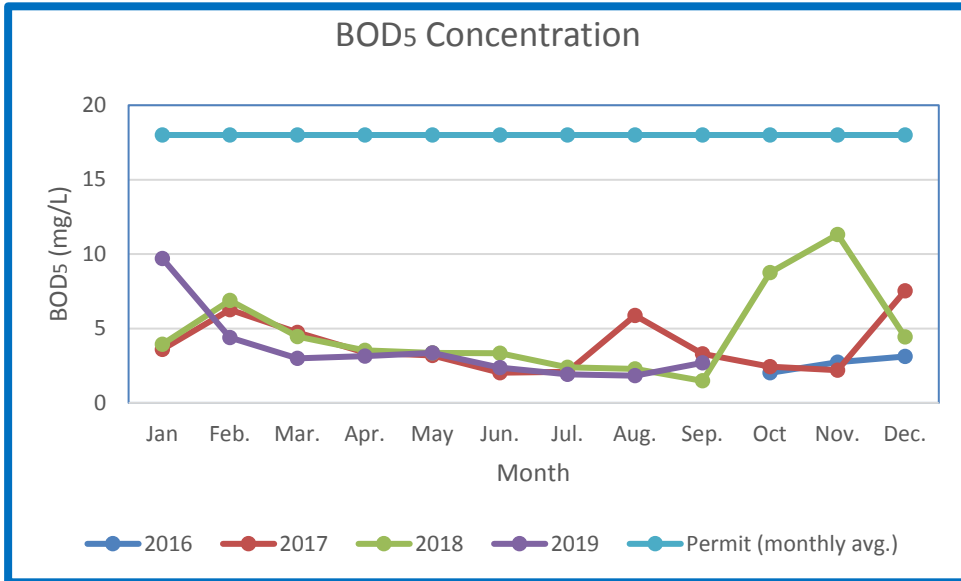


Figure 2

The Total Suspended Solids (TSS) average: 2016, 2.61-mg/L (3-months); 2017, 4.54-mg/L, 2018, 6.26-mg/L and 2019, 5.30-mg/L (9-months) as shown on *Figure 3*.

It appears the treatment facility is operating within its NPDES permit limits, with the exception of the following Notice of Violations issued by NCDEQ Fayetteville Regional Office (*See Appendix 1*).

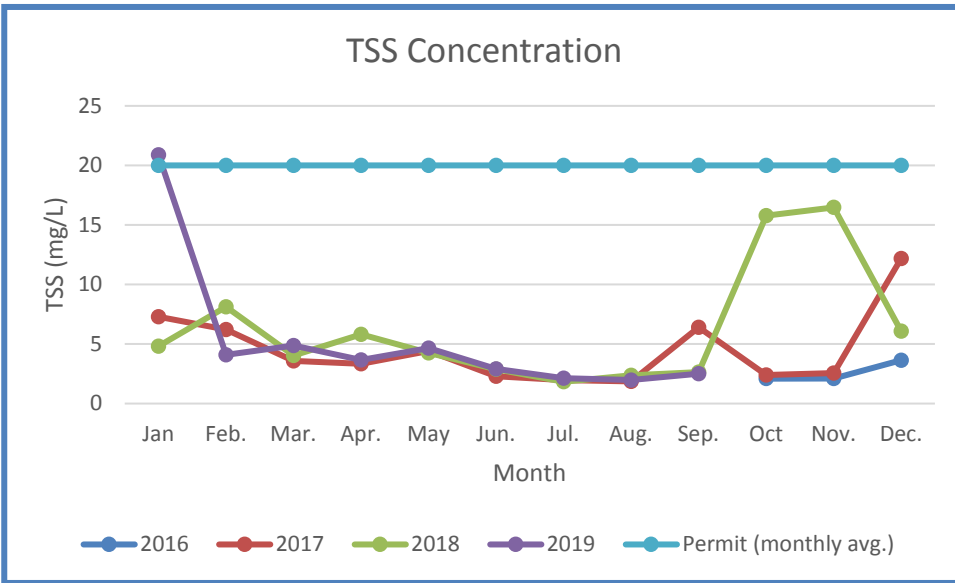


Figure 3

Date	Parameter	Limit Value	Reported Value	Type of Violation
11/3/2018	Total Suspended Solids	30 mg/L	33.67 mg/L	Weekly Avg. Exceed.
11/30/2018	Flow	1.33-MGD	1.37-MGD	Monthly Avg. Exceed
12/31/2018	Flow	1.33-MGD	1.553-MGD	Monthly Avg. Exceed
1/26/2019	Total Suspended Solids	30 mg/L	51.33 mg/L	Weekly Avg. Exceed
1/31/2019	Flow	1.33-MGD	1.354-MGD	Monthly Avg. Exceed
1/31/2019	Total Suspended Solids	30 mg/L	20.88 mg/L	Monthly Avg. Exceed

Figure 4



1.4.1.c Recommended Alternative

After careful review of the alternatives listed in 1.5.1 (Option One Collection System I/I-Find and Fix) and 1.5.2 (Option Two Expand WWTP). We have determined Option Two is the most viable option at this time, since performing Option One without expanding the WWTP, does not solve the issue with hydraulic capacity and resiliency.

2.0 – HISTORIC/ARCHEOLOGICAL RESOURCES

All improvements will occur within two parcels of land, owned by the Town of Pembroke, equaling approximately 22.41-acres when combined. The parcels are bordered by the railroad tracks to the NW, Deep Branch Road to the NE, and the Lumber River to the SW.

3.0 – AFFECTED ENVIRONMENT

3.1 – AFFECTED AREA

Site Description

Site Setting

The proposed project site is composed of approximately 22.41-acres and identified as Property Identification Numbers: 933393160700 and 933393431900, both owned by the Town of Pembroke. The site is generally located at 34°40'24" N, 79°11'8" W. The property is bounded by Deep Branch Road to the NE, the railroad tracks to the NW, and Lumber River to the SW.

Between 1993 and 1999, the existing Trickling Plant was expanded to what is now the Waste Water Treatment Plant. There is no information available as to when the Trickling Plant was built or how long the town has owned these parcels.

Topography, Drainage, and Surface Waters

The site lies at an elevation of 165 in the NW corner and slopes at approximately .1% down to 140 to the Lumber River in the SE corner. The terrain is nearly flat, and the only body of water is the Lumber River along that SW border.

Physiography and Geology

The site is located on the northeasterly bank of the Lumber River, which has been classified by NCDEQ to be a High-Quality Water (HQW). According to the United States Department of Agriculture (USDA), Natural Resources Conservation Service (Soil Service) soil survey, the majority of the site is Wagram loamy sand (WaB), Norfolk loamy sand (NoA), and Lynchburg sandy loam (Ly) with a small

amount of Bibb (BB) soils. According to the Soil Surface, the soils on the site are suitable for development and described as follows:

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high-water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

It is recommended that a thorough sub-surface investigation be performed to evaluate and determine the seasonal high-water table and soil bearing pressure while the soil survey indicates, shallow excavations are possible for the soil types in general. However, a site-specific soil boring should be performed at the proposed location of each structure to determine floatation and whether the structure can be built on spread-footings or require driven piles.

Hydrogeology

The FEMA map (as seen in Appendix 1) shows that approximately a quarter of the property, bounded by the Lumber River, is in the Regulatory Floodway. Another quarter, just next to the Regulatory Floodway, resides in Zone X . A strip of land just beside that zone, about 60-foot-wide, is in the 0.2% Annual Chance Flood Hazard Zone.

Climate

The average daily high temperatures of Pembroke range from 53.4°-90.6°F and the average daily low temperatures range from 32.4°-70.7°. The average yearly precipitation is 46.5 inches.

Unique Geologic Features

The only unique geologic feature on the property is the Lumber River, which is outside of the project area.

Site Photographs

In *Figure 5*, an aerial photograph of the site is shown. For another image of the project area, see *Figure 6*.



Figure 5

Native Vegetation and Wildlife

This project area is confined to the open space, bordered by woodland and a railroad. With sparse vegetation in the immediate project area, wildlife mainly consists of small animals and birds.

The habitat for the varying wildlife in Robeson County is described in the following paragraphs (from “Natural Vegetation of the Carolinas: Classification and Description of Plant Communities of the Lumber (Little Pee Dee) and Waccamaw Rivers”)

Coastal Plain Mixed Mesic Forests

- *Quercus alba* - *Carya glabra* - *Carya alba* / *Aesculus pavia* Forest (CEGL007225) - This nutrient-rich mesic Coastal Plain forest is typically dominated by a canopy of *Quercus alba*, *Carya glabra*, and *Carya alba* and a sub-canopy of *Aesculus pavia*. This plot, which is found

on an upland slope above the Lumber River in Robeson County, North Carolina, is dominated by a host of mesic, calcareous species, including *Tilia americana* var. *heterophylla*, *Fraxinus americana*, and *Celtis tenuifolia*.

- *Quercus alba* - *Carya glabra* / Mixed Herbs Coastal Plain Forest (CEGL007226) - This plot is found on an upland slope above the Lumber River in Robeson County, North Carolina. The canopy and sub-canopy of this stand are composed of *Quercus alba*, *Carya alba*, *Liquidambar styraciflua*, and *Sassafras albidum*. The shrub stratum is dominated by *Symplocos tinctoria*, and to a lesser extent, *Callicarpa americana*. The herb stratum is low in diversity but includes *Mitchella repens*, *Euphorbia pubentissima*, and *Chimaphila maculata*. This is one of three NVC associations that broadly describe dry- mesic oak-hickory forests of North Carolina's Coastal Plain.

Coastal Plain Fire-Maintained Woodlands

- *Pinus palustris* - *Pinus taeda* - *Pinus serotina* / *Quercus marilandica* / (*Quercus pumila*) / *Aristida stricta* Woodland (CEGL003664) - These wet-mesic longleaf pine savannas are found on loamy soils of the Middle Coastal Plain of southeastern North Carolina. A few good examples of this community type remain due to agriculture site conversion. The plots sampled during this inventory are located in western Robeson County, south of Maxton, North Carolina. The canopy of these woodlands is dominated by a mix of *Pinus palustris* and *Pinus taeda*, with a lesser amount of *Pinus serotina*. The sub-canopy and shrub strata are composed of *Quercus elliotii*, *Quercus nigra*, *Quercus marilandica*, *Clethra alnifolia*, and *Gaylussacia frondosa*. In both plots, the herbaceous stratum is dominated by a dense cover of *Pteridium aquilinum*, a result of a prescribed fire that burned these stands 2-years prior to sampling. This community type typically occurs on intermediate hydrologic units of the landscape, which explains the occurrence of both xeric and mesic plants on these plots.

Coastal Plain Blackwater River Forests

- *Planera aquatica* Forest (CEGL007394) - This blackwater swamp forest plot is found at Bluff Swamp, off the Lumber River in Robeson County, NC. The short-statured canopy (~10 meters) is composed of a mixture of swamp and levee species, including *Planera aquatica*, *Taxodium distichum*, *Betula nigra*, *Nyssa biflora*, and *Fraxinus caroliniana*. The diversity of canopy species alone sets this plot apart from the NVC-described association. The NVS describes this community type as having a nearly monospecific, stunted canopy of *Planera aquatica*.

Coastal Plain Alluvial Shrub and Herb Communities

- *Eragrostis hypnoides* - *Micranthemum umbrosum* - *Lipocarpha micrantha* - (*Juncus repens*) Herbaceous Vegetation (CEGL004341) - This community occurs on drawdown banks of blackwater rivers, in mucky soils that are exposed due to unusually low water levels. This type is generally dominated by annuals, but perennials may also be present. The five plots sampled during this study are found along the Waccamaw, Little Pee Dee, and Lumber Rivers. The association nominals are not constant across these plots, nor is there a single species that occurs in every plot. The exotic, invasive *Alternanthera philoxeroides*, is found in three of the five plots, while *Juncus repens* occur in only two of the five. Other herbaceous species encountered include *Eleocharis baldwinii*, *Centella erecta*, and *Eupatorium capillifolium*. Overhanging tree species include *Planera aquatica*, *Betula nigra*, *Quercus lyrata*, and *Taxodium distichum*.

Coastal Plain Ponds and Marshes

- *Quercus phellos* / *Carex* (*albolutescens*, *intumescens*, *joorii*) - *Chasmanthium sessiliflorum* / *Sphagnum lescurii* Forest (CEGL007403) - This association describes upland depression swamp forests in the Piedmont (and sometimes Inner Coastal Plain) of the Carolinas and Virginia. This plot occurs in the Bear Swamp Uplands of the Lumber River drainage in Robeson County, NC. The canopy is co-dominated by *Quercus phellos* (an indicator of this depressional wetland type) and upland species, including *Quercus falcata*, *Quercus stellata*, *Nyssa sylvatica*, and *Carya alba*. The shrub stratum is moderately diverse and includes *Vaccinium formosum*, *Vaccinium fuscatum*, *Symplocos tinctoria*, and *Vaccinium aroboeum*. The herbaceous stratum is composed of a sparse cover of *Chasmanthium laxum*. The presence of upland forest species, interspersed with depressional wetland oaks (*Quercus nigra*, *Quercus phellos*), sets this plot apart from the NVC-described community type.

State or National Parks, or National Game Preserves

There are no designated State or National Parks or National Game Reserves located on or in the vicinity of the project.

Wilderness Areas

The Lumber River, designated a scenic river under the Wild and Scenic Rivers Act, flows adjacent to the property of the project site. However, the project is not expected to impact the river, with the exception of the wastewater discharge which is regulated through an NPDES permit, and pollutant discharge limits are continuously monitored for compliance by NCDEQ.

3.2 – COASTAL ZONES

The project area is not located within a designated coastal zone and therefore is not subject to the Coastal Zone Management Act. The project will not affect any shorelines, beaches, dunes, or estuaries.

There are no proposed overwater structures that could impact navigable waters.

3.3 – WETLANDS

According to the US Fish and Wildlife Service National Wetlands Inventory Map generated from its website, there is wetlands in the property; however, it does not appear that wetland soils will be impacted by the project.

1. *If any wetlands would be impacted by the project, provide an analysis of alternatives to wetland impact in this section or in the Alternatives to the Project section above.*

It is not anticipated that wetlands will be affected by the proposed project.

2. *Describe any mitigation plans here or in Section D below.*

As no wetland impact is anticipated, no mitigation plans have been developed.

3.4 FLOODPLAINS

FEMA Floodplain Panel number 9333, map number 3710933300J, effective date 01/19/2005; and FEMA Floodplain Panel number 9343, map number 3410934300J, effective date 01/19/2005; show that the EDA investment is not located within a FEMA 100-year floodplain.

Describe direct and indirect effects to 100-year floodplain, if any.

None of the project is expected to directly or indirectly affect the 100-year floodplain.

If any 100-year floodplain would be impacted by the project, provide an analysis of alternatives to floodplain impact in this section or in the Alternatives to the Project section above.

See the above Alternatives to the Project section.

Indicate whether the Applicant's community participated in the National Flood Insurance Program.

Yes

Indicate if a critical action (e.g., emergency response facility, hospital, wastewater treatment plant) is being located within the 500-year floodplain.

The constructed components and land disturbance are not expected to be within the 500-year floodplain.

3.5 ENDANGERED SPECIES

A review of the US Fish and Wildlife’s website indicates the presence (current) of one Federal Endangered Species in Robeson County: The Michaux’s Sumac. The proposed EDA project will take place on an approximately 22.4-acre rural site surrounded by woodland and open agricultural farmland. Due to the fact that the site area will be confined to the open space surrounding the existing Waste Water Treatment Planet, it is not anticipated that the project will impact the endangered species.

Us Fish and Wildlife Website (11/26/2019)

Species by County Report (Updated on 06-27-2018)

County: Robeson County, North Carolina

<u>Group</u>	<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Vertebrate	American Alligator	Alligator Mississippienis	Threatened due to similarity of appearance
Vertebrate	Carolina Gopher Frog	Rana Capito Capito	At-Risk Species
Vertebrate	Red-Cockaded Woodpecker	Picoides Borealis	Endangered
Vertebrate	Southern Hognose Snake	Heterodon Simus	At-Risk Species
Vertebrate	Wood Stork	Mycteria America	Threatened
Vascular Plant	Bog Spicebush	Lindera Subcoriacea	At-Risk Species
Vascular Plant	Carolina Bogmint	Macbridea Caroliniana	At-Risk Species
Vascular Plant	Georgia Lead-Plant	Amorpha Georgiana Var. Georgiana	At-Risk Species
Vascular Plant	Michaux’s Sumac	Rhus Michauxii	Endangered
Vascular Plant	Venus Fly-Trap	Dionaea Muscipula	At-Risk Species

3.6 LAND USE AND ZONING

Improvements on the Property

The site is located within the town limits of Pembroke, NC. On the property is a paved driveway to a wastewater treatment plant that was built between 1993 and 1999 according to aerial images. Before the existing plant was built, there was a now abandoned, trickling plant. The property is zone R-20, according to the Town’s Zoning Map. However, since this is a municipal waste treatment facility, it is allowed in this zone.



Legend:

No.	Description	No.	Description
1	Ex. Influent Pump Station	9	Ex. Clarifier #1
2	Ex. Bar Screens	10	Ex. Clarifier #2
3	Ex. Aerated Grit Chamber	11	Ex. RAS/WAS Pump Sta.
4	Ex. Ditch Splitter Box	12	Ex. Chem. Feed Bldg.
5	Ex. Oxidation Ditch #1	13	Ex. Chlorine Cont. Basin
6	Ex. Oxidation Ditch #2	14	Ex. Post Aeration
7	Ex. Disc aerators (Typ.)	15	Ex. Digester
8	Ex. Clarifier Splitter Box	16	Ex. Floating Aerator

3.7 SOLID WASTE MANAGEMENT

The amount of solid waste produced in the form of waste activated sludge will increase slightly than is collected from the existing wastewater treatment plant due to the capacity expansion. Activated sludge will be disposed of in accordance with NCDEQ, Division of Waste Management Rules. Solids will be disposed of offsite through the use of private licensed contractors on land permitted by NCDEQ. The majority of the solid (non-organic) waste will be captured at the proposed influent headworks by a mechanical screening process and disposed of at the local landfill. Domestic wastewater at the plant will discharge into the influent pump station and will be treated onsite.

3.8 HAZARDOUS OR TOXIC SUBSTANCES

The only toxic or hazardous substances that the wastewater treatment plant will produce are chlorine, sulfur dioxide, and sodium hydroxide (50% caustic).

3.9 WATER RESOURCES

According to the USGS Topographic map, the proposed construction is not expected to impact any streams or surface water sources. The only known water resource is the Lumber River, which is outside of the construction area.

The Town of Pembroke uses groundwater. The aquifer it uses is neither in an overdraft or adjudicated. This project does not involve the construction of structures that will discharge into any surface water body listed on the U.S. Environmental Protection Agency's (EPA) Section 303(d) list of impaired waters.

Additional National Pollution Discharge Elimination System (NPDES) permits are required for discharges to surface waters.

The proposed project is not located within an EPA sole source aquifer recharge area.



This project development will not create any additional impervious areas and, therefore, will not affect the time of concentration for rainfall events.

3.10 WATER SUPPLY AND DISTRIBUTION SYSTEM

Water is supplied by the Town of Pembroke through three groundwater wells. The Town has an agreement to provide water to the Town on an emergency basis with the Robeson County Water Department. According to the NCDEQ Local Water Supply Plan for the Town of Pembroke, the town operates approximately 32-miles of potable water distribution lines ranging in size from 2-inches to 12-inches. The system has a water storage capacity of 925,000-gallons and serves 1,118 customers inclusive of residential, commercial, and institutional customers.

3.11 WASTEWATER COLLECTION AND TREATMENT FACILITIES

The Town also operates and maintains a sanitary sewer collection system also permitted through NCDEQ (Permit No. WQCS00114), which consists of approximately 32-miles of gravity sanitary sewer, 7-miles of force main, and 22 duplex pump stations. The system conveys wastewater from the Town's business, industry, institutional, and residential customers.

3.12 ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER 12898)

Executive Order (E.O.) 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations - was issued by President William J. Clinton in 1994. Its purpose is to focus federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities.

This project will not result in any known adverse human health or environmental impacts relative to minority and/or low-income populations. The EDA investments are occurring within the existing treatment plant property boundary.

The current use of the property is in compliance with the local zoning regulations, including those setbacks for treatment units from the surrounding boundary. No consideration of race, sex, or religion was made when determining the location of the treatment plant expansion.

3.13 TRANSPORTATION (STREETS, TRAFFIC, AND PARKING)

According to the North Carolina Department of Transportation (NCDOT), traffic counts are routinely conducted along Deep Branch Road (SR 1339). The Annual Average Daily Traffic (AADT) Count along this section of the roadway near the treatment facility is 6,100 cars per day.



The traffic is not anticipated to increase due to the expanded WWTP once completed; however, there will be some additional traffic and possible lane closures due to the construction activity. We expect continuous truck traffic leaving the site during the demolition phase while hauling debris to the landfill, and the construction of the surge basin. The contractors must obey the traffic laws regarding weight, and the loads must be covered to prevent debris from spilling onto the roadway.

3.14 AIR QUALITY

The construction of the project has no anticipated impacts on air quality, aside from temporary dust increases and emissions due to the construction of future development and expansion of the wastewater treatment plant. These impacts will be confined to the property during construction hours. The Town of Pembroke has operated a wastewater treatment plant in this location since the mid-1990s, and with this, it has had some odors associated with a wastewater treatment plant (ammonia, hydrogen sulfide, etc.). Objectional odors around the wastewater treatment plant may actually be decreased with the proposed plant expansion and treatment improvements.

3.15 NOISE

The development should not create any additional noise upon completion; however, we anticipate noise to increase during construction. Excessive noise can be mitigated if need be by establishing set working hours.

3.16 PERMITS

Required federal, state, or local permits for the total project and their status:

- A. North Carolina Department of Environmental Quality (NCDEQ)
 - a. Division of Water Resources (DWR)
 - i. NPDES Permit Modification
 - 1. Permit Application and Engineering Alternatives Analysis
 - ii. Authorization to Construct “A to C”
 - b. Division of Energy, Mineral and Land Resources
 - i. Land Quality Section – “Erosion and Sediment Control Plan”
 - ii. Land Quality Section – “Financial Responsibility/Ownership Form”
 - B. Division of Energy, Mineral and Land Resources
 - i. Plans, Specifications, and Calculations
 - b. Land Quality Section – “Erosion and Sediment Control Plan”
 - c. Land Quality Section – “Financial Responsibility/Ownership Form”
 - C. Robeson County
 - a. Building Inspections Department
 - i. Electrical Permit



3.17 PUBLIC NOTIFICATION/CONTROVERSY

The resiliency and plant expansion were discussed at the November 4, 2019, Town Council meetings of which the meeting minutes are attached (See Appendix 6)

3.18 CUMULATIVE EFFECTS

The expansion and treatment improvements consisting of a 0.67-MGD increase of hydraulic capacity will provide resilience against future significant storm events such as hurricanes Matthew and Florence. The flooding caused by these storms dealt a severe blow to both the property and economic well-being of the Town due to its inability to handle wastewater from a major manufacturer.

The expansion and upgrade of the treatment system will have a significant impact on the local community, both public and private. The improvements will help sustain the existing workforce, and allow for moderate growth for the Town of Pembroke.

Resources, ecosystems, and human communities affected

- Economic Development
- Community Development
- Floodplain
- Stormwater runoff
- Traffic
- Water Quality

Which effects on these resources are important from a cumulative effects perspective

- Economic and Community Development: The project which will take approximately one year to complete once construction begins, will provide for the retainage of 400 jobs at a large industrial bakery, which has already stated that if the Town cannot provide additional hydraulic capacity, and improve treatment efficiency related to BOD and TSS, it will be forced to relocate the operation at its headquarters in Colorado. This industry sustained a significant financial burden due to hurricanes Matthew and Florence, not only from flooding but the inability to discharge their wastewater into the Town's sanitary sewer system, which was surcharged during the floods.

The additional hydraulic capacity, while benefiting the aforementioned industry, will also provide benefits to the community as a whole. The improvements will allow the University of North Carolina at Pembroke to provide facilities for their growing student population.

A cumulative impact of the improvements will be the potential population growth as a result of new local business and institutional jobs. The additional jobs will also affect the community through increased retail sales, i.e., food, clothing, and other goods and services. Also affected is increased housing and commercial buildings, which will benefit all citizens due to additional property and sales taxes. The taxes will allow the town to sustain and improve its services to citizens with better police and fire protection, and recreational amenities.

- Floodplain: The proposed construction will have no direct or cumulative impact on the 100-year flood plain.
- Stormwater Runoff: The project itself does not create any direct stormwater runoff issues since the majority of the structures are open-top tanks. However, there may be some cumulative impacts due to potential population and job growth as additional structures will increase the amount of impervious surface areas, which will decrease the time concentration during rainfall events, thereby creating additional runoff.
- Traffic: There will be no direct impact on traffic due to the construction, with the exception of a slight increase related to construction vehicles during the time of active construction. However, we anticipate there will be a low to moderate increase in traffic due to any job and population growth, which can be attributable to the additional wastewater treatment capacity.
- Water Quality: The water quality within the Lumber River may improve slightly due to the construction of this project. Many of the components included with the expansion project will better treat the wastewater for pollutants prior to discharge. This would include a reduction of BOD and TSS due to proposed effluent filters. Conversion of the current chlorine gas disinfection system to ultra-violet will eliminate residual chlorine and sulfur dioxide, which currently discharge into the Lumber River.

4.0 – MITIGATION

The following mitigation measures are or will be implemented to minimize impacts to environmental resources from project implementation.

- Floodplain: Construction of waste treatment facilities are highly regulated by the North Carolina Department of Environmental Quality through the NPDES permit process. All building and treatment structures will be built where the slab or wall elevations are a minimum of 2-feet above the 100-year flood elevation as established by FEMA. Additionally, plant hydraulics shall be

designed to prevent floodwaters from backing up through the discharge pipe into the treatment units.

Cumulative impacts such as the construction of new houses and commercial buildings should be mitigated entirely due to strict adherence to state and local building codes, including the local flood ordinances.

- Stormwater Runoff: The proposed treatment plant improvements should not create any direct impacts on the amount of stormwater runoff. Cumulative impacts related to the expansion will be mitigated through the North Carolina Department of Environmental Quality-Division of Energy, Mineral and Land Resources, Sedimentation, and Erosion Control plan. Runoff shall be controlled through the installation of BMP's (Best Management Practice), which includes temporary measures to prevent erosion and permanent measures such as retention/detention basins.
- Traffic: As previously stated, there should not be any direct impact on traffic, with the exception of increases during active construction. Cumulative impacts due to increased jobs and population are difficult to predict. However, coordination with the North Carolina Department of Transportation and the requirement of traffic impact studies for larger developments along with proper planning should allow for the increase in traffic if adequately enforced.
- Water Quality: There should be no direct impact on the water quality as a result of the construction provided the plant is operated within the parameters of the NPDES permit. New treatment units will be installed to lessen the pollutants being discharged into the Lumber River. Cumulative impacts to water quality due to growth can be mitigated through the rigid enforcement of the Sediment and Pollution Control Act of 1973, and the installation of BMP's to remove much of the pollution from the stormwater prior to its leaving the site.

5.0 – LIST OF ATTACHMENTS

The following checklist is a list of required and optional attachments to the Environmental Narrative as described in the sections above (See Appendix Two)

Checklist of Optional Environmental Documents that should be submitted with Application if available (will expedite review and selection process):

- SHPO/THPO and Tribal Leader comments and copy of submittals (SHPO and THPO Exhibits)
- Site Photographs (Photo Exhibit)
- Coastal Zone consistency determination

- Wetland delineation and/or Jurisdictional Determination
- Preliminary wetland info (Project Maps Exhibit)
- U.S. Army Corps of Engineers comments, Section 404 Permit, Section 10 Permit, and/or Water Quality Certification (401 approval)
- Biological Assessment and/or survey for federally protected species (USFW Exhibit)
- Correspondence with US Fish and Wildlife Service and/or National Marine Fisheries Service (USFW Exhibit)
- Natural Resources Conservation Service determination of Prime Farmland, Form AD 1006, if applicable (Project Maps Exhibit)
- Phase I and II Environmental Protection Agency, if applicable
- Other federal, state, and local environmental permits
- Copies of public notices, public hearing minutes, etc. (Public Notification Exhibit)



APPENDIX 1

OWNER CERTIFICATION



*EDA Environmental Narrative Requirements***Appendix A: Applicant Certification Clause**

The applicant represents and certifies that it has used due diligence to determine that the description of the project site described herein is accurate with respect to the presence or absence of contamination from toxic and hazardous substances. The term “site” includes the entire scope of the project, including future phases of the project and all areas where construction will occur.

1. Is the site currently, or has it in the past 50 years, been used for any of the following operations or activities:
 - a. Generation of hazardous substances or waste?
 Yes No
 - b. Treatment, storage (temporary or permanent), or disposal of solid or hazardous substances or waste?
 Yes No
 - c. Storage of petroleum products?
 Yes No
 - d. Used/waste oil storage or reclamation units?
 Yes No
 - e. Research or testing laboratory?
 Yes No
 - f. Ordinance research, testing, production, use, or storage?
 Yes No
 - g. Chemical manufacturing or storage?
 Yes No
 - h. Weapons or ammunition training, use, or testing?
 Yes No
 - i. Ironworks/foundry?
 Yes No
 - j. Railroad yard?
 Yes No
 - k. Industrial or manufacturing operation?
 Yes No

If any of the above operations ever occurred at the site, and if appropriate, cleanup or other mitigation actions were performed in accordance with the local, state, and federal laws, please attach documentation of these actions.



2. Do wells draw from an underlying aquifer to provide the local domestic water supply?
 _____ Yes No
3. Has a federal, state, or local regulatory authority ever conducted an environmental assessment, environmental impact statement, or a preliminary assessment/site inspection, or similar environmental surveyor inspection report at the site? If yes, please list here and attach copies of these reports or results.
 _____ Yes No
- 1)

- 2)

- 3)

- 4)

- 5)

4. Have any environmental or OSHA citations or notices of violation been issued to a facility at the site? If yes, please attach copies.
 _____ Yes No
5. Have any unauthorized releases of hazardous substances occurred at any facility at the site, which resulted in the notification of the EPA's National Response Center?
 _____ Yes No
6. Is any material containing asbestos or lead paint located at the site? If yes, please attach information concerning State and federal regulatory compliance.
 _____ Yes No
7. Is there any equipment (electrical transformers, etc.) containing polychlorinated biphenyls (PCB) on the site? If yes, please attach a description of the equipment.
 _____ Yes No
8. Are there underground or above ground storage tanks on the site? If yes, please attach a detailed description, including the number of underground storage tanks on the site, whether the tanks have been inspected (or removed), and the results of such inspections.
 _____ Yes No
9. Has the site been tested for radon? If yes, please attach the results.
 _____ Yes No



10. Have there been, or are there now any environmental investigations by federal, state, or local government agencies that could affect the site in question? If yes, please attach the available information.

Yes No

The applicant acknowledges that this certification regarding hazardous substances and/or waste is a material representation of fact upon which EDA relies when making and executing an award. EDA reserves the right to terminate any award made in conjunction with the representations contained herein if, at any time during the useful life of the project, EDA becomes aware of the presence of hazardous materials or waste at the site, or that hazardous materials or waste have been inappropriately handled thereon.

Further, if it is determined at any time that the presence of hazardous materials or waste, or handling thereof, has been misrepresented, EDA may pursue other available legal remedies against the applicant.

Town of Pembroke
Applicant's Name

Tyler W. Thomas, Town Manager
Name and Title of Applicant's Authorized Representative


Signature of Applicant's Authorized Representative

12-18-2019
Date



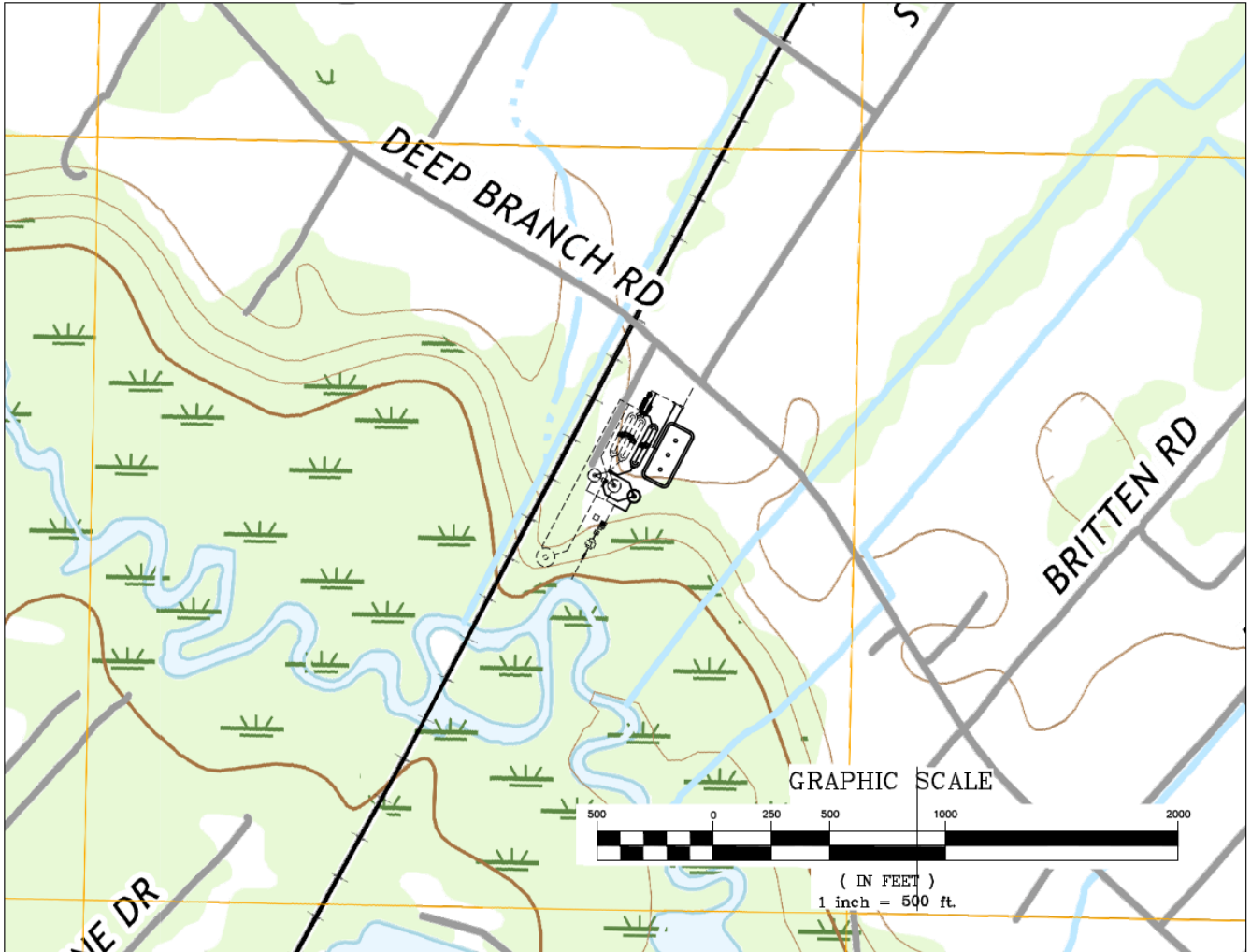
APPENDIX 2

CHECKLIST ITEMS

- 1. EDA Project Map**
- 2. USGS Topographic Map**
- 3. FEMA Floodplain Map**
- 4. US Fish and Wildlife Wetland Map**
- 5. US Soil Conservation Service Soils Map**
- 6. SHPO HPOGIS Map**



EDA PROJECT MAP



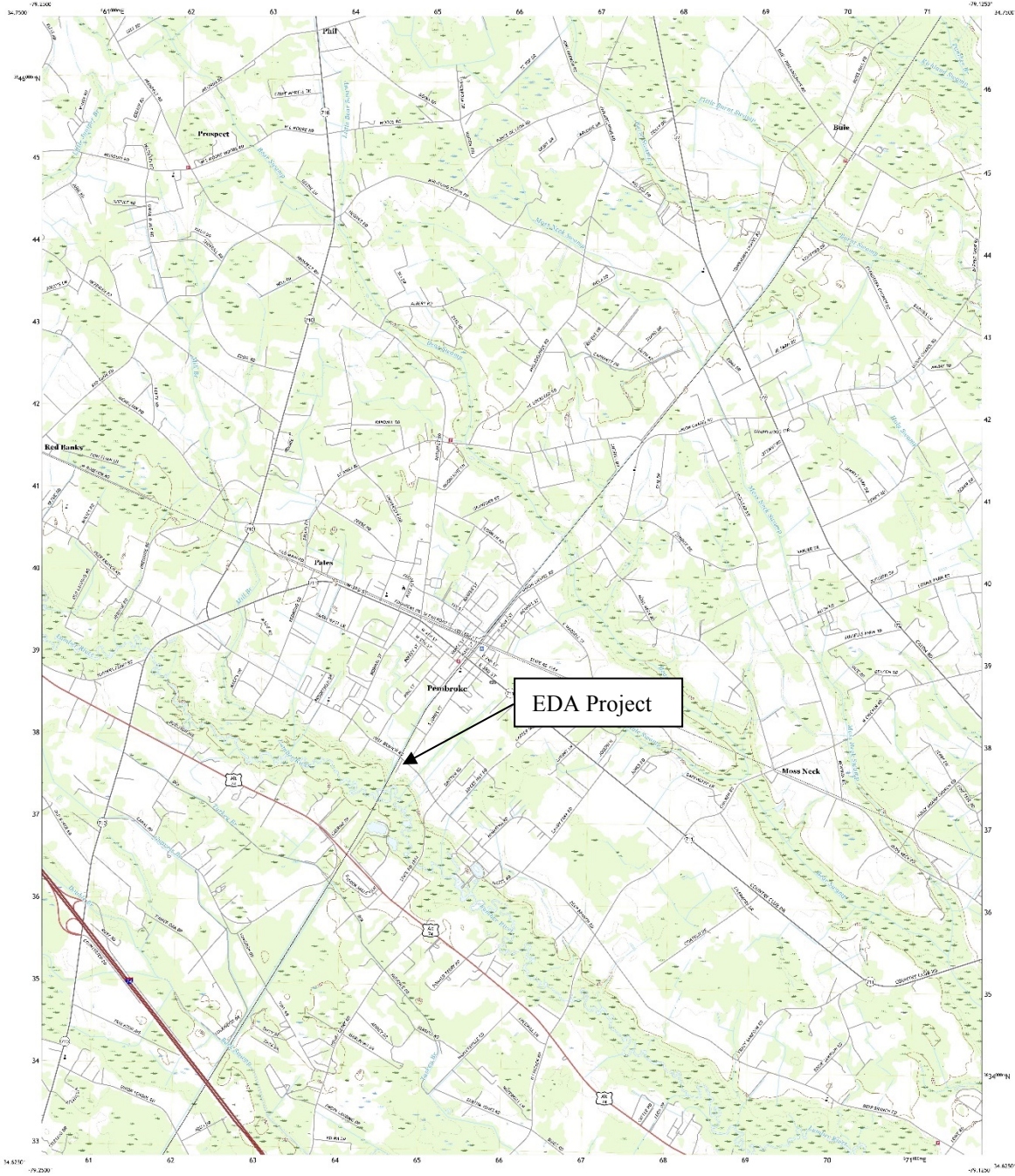
USGS TOPOGRAPHIC MAP



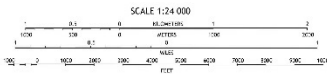
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



PEMBROKE QUADRANGLE
NORTH CAROLINA - ROBEESON COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North Carolina edition of the 7.5-MINUTE
TOPOGRAPHIC MAP SERIES of 1987 (M7.5).
This map is a derivative of the original
topographic map of the same area. The
original map was published in 1987.
The original map was published in 1987.
The original map was published in 1987.



SCALE 1:24,000
0 1000 2000 FEET
0 100 200 METERS



ROAD CLASSIFICATION

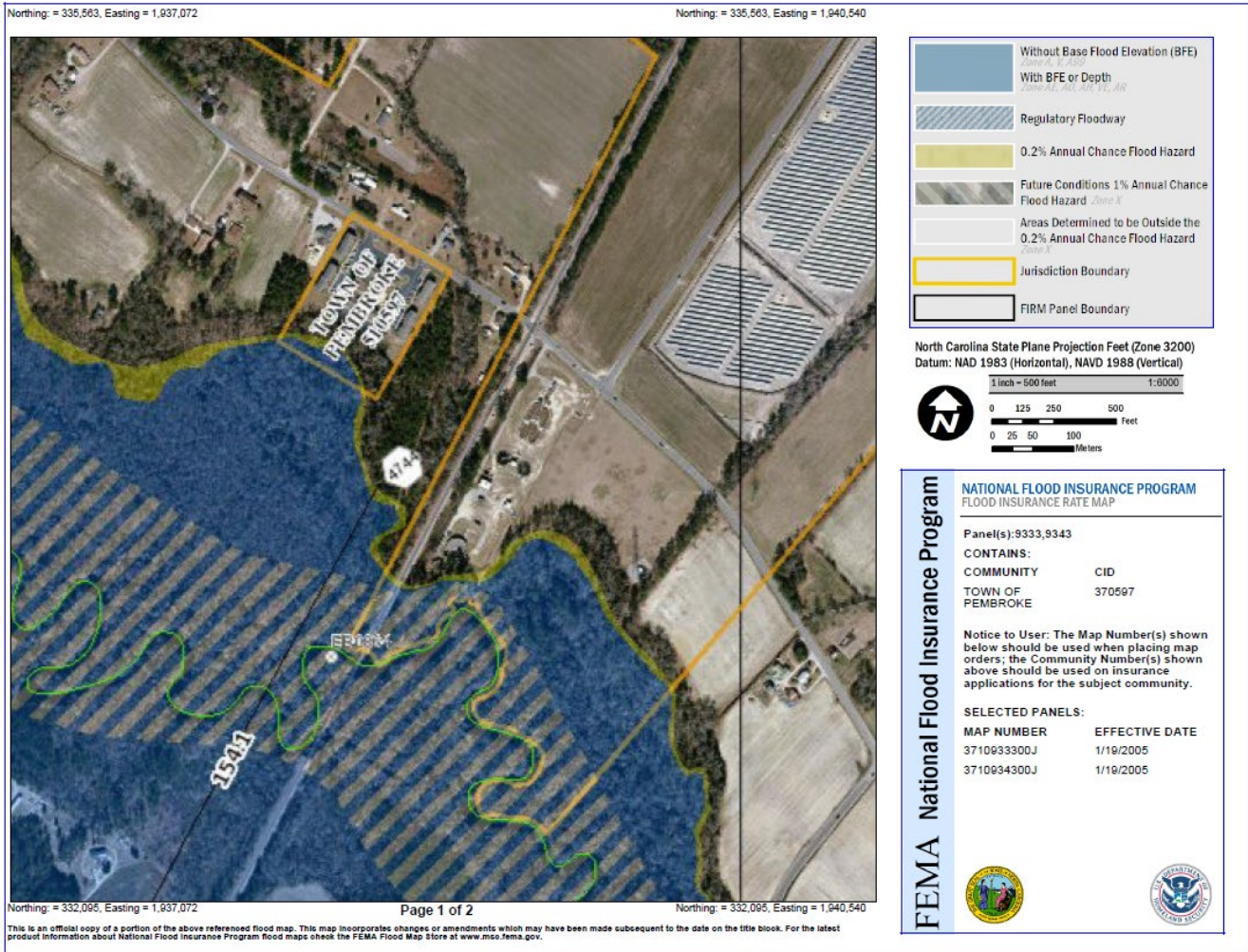
Interstate	Local Road
State Route	Local Road
County Road	Local Road
US Route	Local Road



1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

PEMBROKE, NC
2019



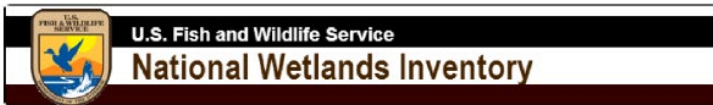
FEMA FLOODPLAIN MAP



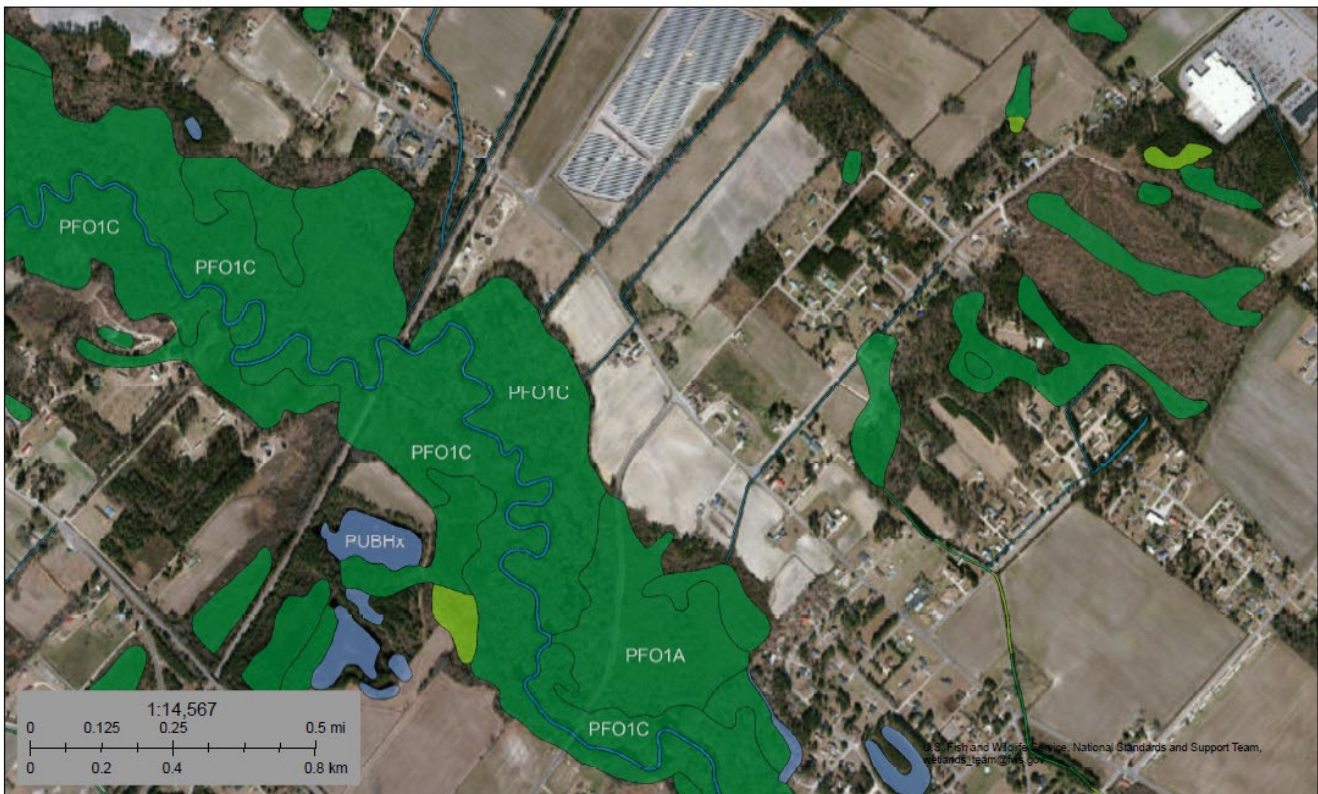
	<h2 style="margin: 0;">FEMA: National Flood Insurance Program</h2> <p style="font-size: small; margin: 0;">Page 2 of 2</p>													
<p>Panel(s): 9333, 9343</p> <p>CONTAINS:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">COMMUNITY</td> <td>CID</td> </tr> <tr> <td>TOWN OF PEMBROKE</td> <td>370597</td> </tr> </table> <p>Notice to User: The Map Number(s) shown below should be used when placing map orders; the Community Number(s) shown above should be used on insurance applications for the subject community.</p> <p>SELECTED PANELS:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">MAP NUMBER</td> <td>EFFECTIVE DATE</td> </tr> <tr> <td>3710933300J</td> <td>1/19/2005</td> </tr> <tr> <td>3710934300J</td> <td>1/19/2005</td> </tr> </table>	COMMUNITY	CID	TOWN OF PEMBROKE	370597	MAP NUMBER	EFFECTIVE DATE	3710933300J	1/19/2005	3710934300J	1/19/2005	<p>NOTES TO USERS</p> <p>Base map information and geospatial data used to develop this FIRMette were obtained from various organizations, including the participating local community(ies), state and federal agencies, and/or other sources. The primary base for this FIRM is aerial imagery acquired by the State in 2010. Information and geospatial data supplied by the local community(ies) that met FEMA base map specifications were considered the preferred source for development of the base map.</p> <p>See geospatial metadata for the associated digital FIRMette for additional information about base map preparation. Base map features shown on this FIRMette, such as corporate limits, are based on the most up-to-date data available at the time of publication. Changes in the corporate limits may have occurred since this map was published. Map users should consult the appropriate community official or website to verify current conditions of jurisdictional boundaries and base map features. This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic model was created during the production of this statewide format FIRM.</p> <p>Flood elevations on this map are referenced to either or both the North American Vertical Datum of 1988 (NAVD 88) or National Geodetic Datum of 1929 (NGVD 29), and are labeled accordingly. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. To obtain current elevation, description, and/or location information for bench marks shown on this map, or for information regarding conversion between NGVD 29 and NAVD 88, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at http://www.ngs.noaa.gov/.</p>	<p>LEGEND</p> <p style="text-align: center;">LEGEND</p> <p>MAP REVISIONS</p> <p>There are no map revisions for the selected area.</p>		
COMMUNITY	CID													
TOWN OF PEMBROKE	370597													
MAP NUMBER	EFFECTIVE DATE													
3710933300J	1/19/2005													
3710934300J	1/19/2005													
<p>NOTES TO USERS</p> <p>This is an official FIRMette of a portion of the effective panels listed in the Title Block shown on Page 1. The information represented on this FIRMette was extracted from the effective digital flood hazard data available at http://ffris.nc.gov/ffris.</p> <p>Base flood elevation data, floodway, nonencroachment widths, information on certain areas not in the Special Flood Hazard Areas protected by flood control structures, and other pertinent data are available in the Flood Insurance Study (FIS) available at http://ffris.nc.gov/ffris. Users should be aware that flood elevations shown on this FIRMette represent elevations rounded to one tenth of a foot (0.1') and should be utilized in conjunction with data available in the FIS.</p>	<p>MORE INFORMATION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Letters of Map Amendment (LOMA)</td> <td>1-877-336-2627 http://msc.fema.gov/</td> </tr> <tr> <td>Letters of Map Revision (LOMR)</td> <td>919-715-5711 www.ncfloodmaps.com</td> </tr> <tr> <td>Flood Insurance Availability</td> <td></td> </tr> <tr> <td>North Carolina Division of Emergency Management (NCDEM)</td> <td>919-715-5711 http://www.nccrimecontrol.org/nfip</td> </tr> <tr> <td>National Flood Insurance Program (NFIP)</td> <td>1-877-838-8620 http://www.fema.gov/business/nfip</td> </tr> <tr> <td>Questions about this FIRMette</td> <td>1-877-336-2627 http://fema.gov</td> </tr> </table>	Letters of Map Amendment (LOMA)	1-877-336-2627 http://msc.fema.gov/	Letters of Map Revision (LOMR)	919-715-5711 www.ncfloodmaps.com	Flood Insurance Availability		North Carolina Division of Emergency Management (NCDEM)	919-715-5711 http://www.nccrimecontrol.org/nfip	National Flood Insurance Program (NFIP)	1-877-838-8620 http://www.fema.gov/business/nfip	Questions about this FIRMette	1-877-336-2627 http://fema.gov	
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Flood Insurance Availability														
North Carolina Division of Emergency Management (NCDEM)	919-715-5711 http://www.nccrimecontrol.org/nfip													
National Flood Insurance Program (NFIP)	1-877-838-8620 http://www.fema.gov/business/nfip													
Questions about this FIRMette	1-877-336-2627 http://fema.gov													



US FISH & WILDLIFE WETLANDS INVENTORY MAP



Pembroke WWTP



November 26, 2019

Wetlands

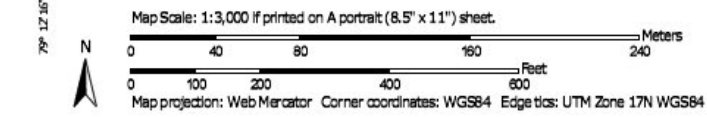
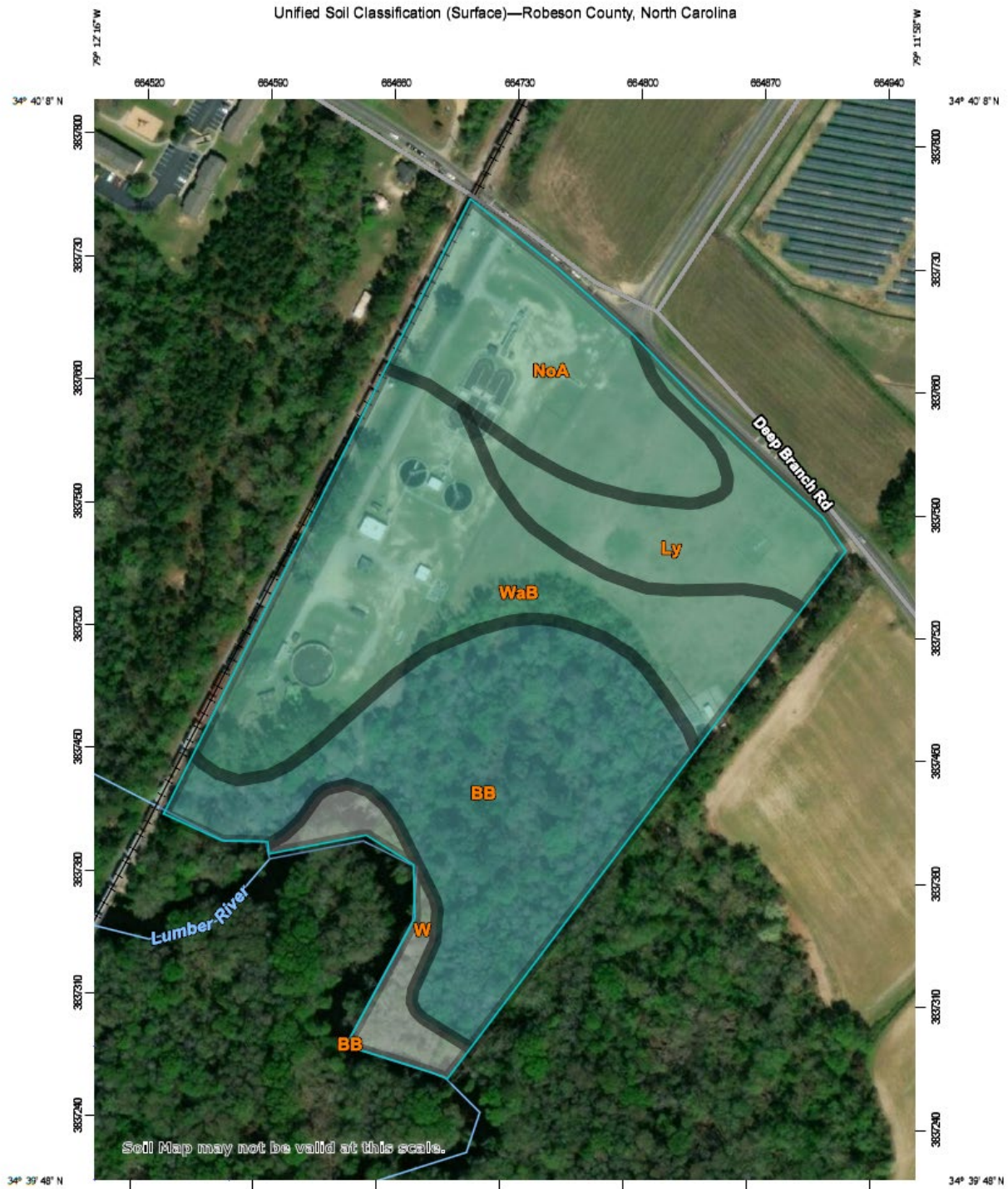
- | | | |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Wetland | Freshwater Forested/Shrub Wetland | Other |
| | Freshwater Pond | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper



US SOIL CONSERVATION SERVICE SOILS MAP



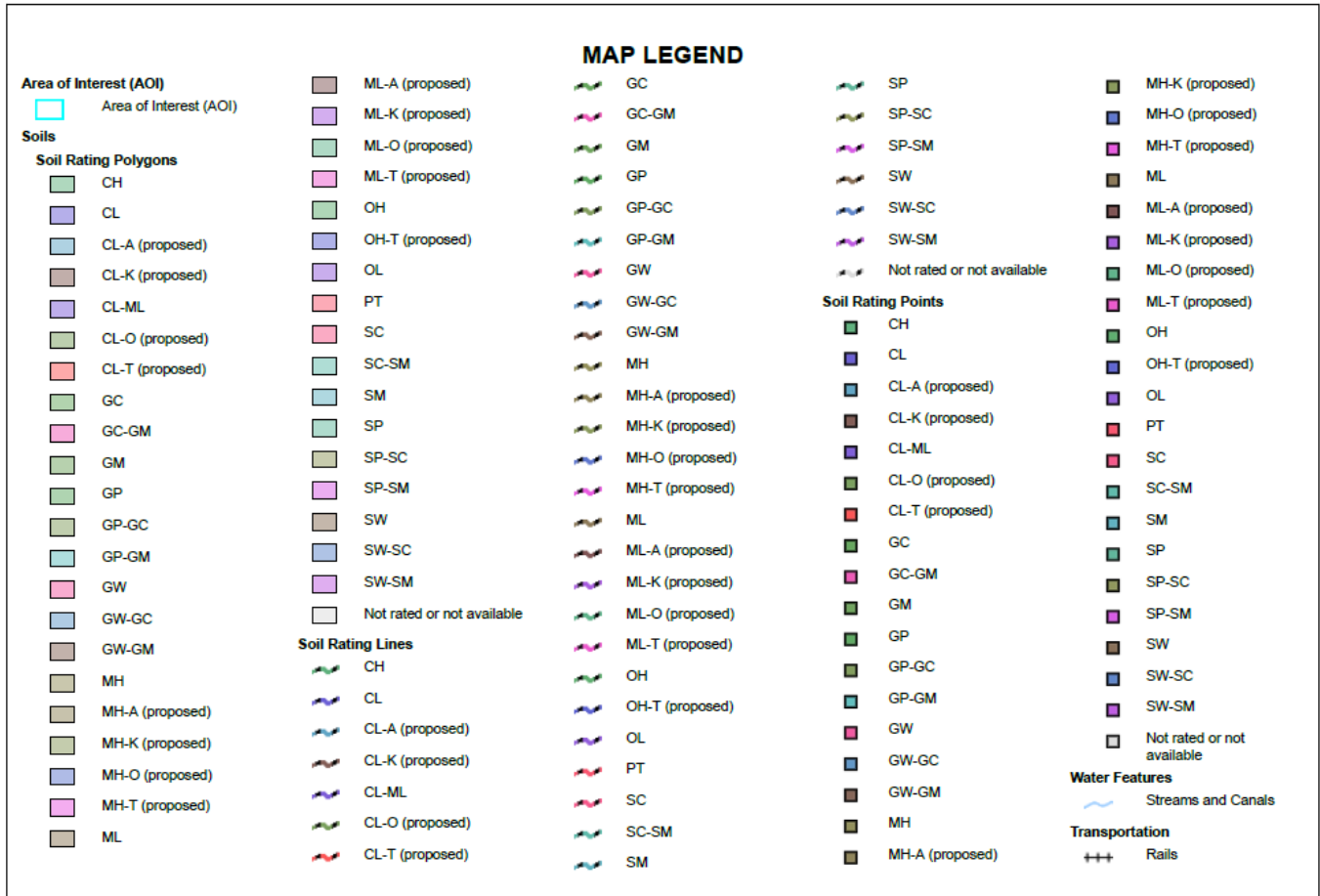
USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

11/18/2019 Page 1 of 4








Unified Soil Classification (Surface)—Robeson County, North Carolina



Unified Soil Classification (Surface)—Robeson County, North Carolina

MAP INFORMATION

-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.
 Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Robeson County, North Carolina
 Survey Area Data: Version 17, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 22, 2015—Nov 28, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Unified Soil Classification (Surface)—Robeson County, North Carolina

Unified Soil Classification (Surface)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BB	Bibb soils	SM	7.7	33.6%
Ly	Lynchburg sandy loam, 0 to 2 percent slopes	SC-SM	2.7	11.9%
NoA	Norfolk loamy sand, 0 to 2 percent slopes	SC-SM	4.0	17.6%
W	Water		1.1	5.0%
WaB	Wagram loamy sand, 0 to 6 percent slopes	SC-SM	7.3	31.9%
Totals for Area of Interest			22.8	100.0%

Description

The Unified soil classification system classifies mineral and organic mineral soils for engineering purposes on the basis of particle-size characteristics, liquid limit, and plasticity index. It identifies three major soil divisions: (i) coarse-grained soils having less than 50 percent, by weight, particles smaller than 0.074 mm in diameter; (ii) fine-grained soils having 50 percent or more, by weight, particles smaller than 0.074 mm in diameter; and (iii) highly organic soils that demonstrate certain organic characteristics. These divisions are further subdivided into a total of 15 basic soil groups. The major soil divisions and basic soil groups are determined on the basis of estimated or measured values for grain-size distribution and Atterberg limits. ASTM D 2487 shows the criteria chart used for classifying soil in the Unified system and the 15 basic soil groups of the system and the plasticity chart for the Unified system.

The various groupings of this classification correlate in a general way with the engineering behavior of soils. This correlation provides a useful first step in any field or laboratory investigation for engineering purposes. It can serve to make some general interpretations relating to probable performance of the soil for engineering uses.

For each soil horizon in the database one or more Unified soil classifications may be listed. One is marked as the representative or most commonly occurring. The representative classification is shown here for the surface layer of the soil.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

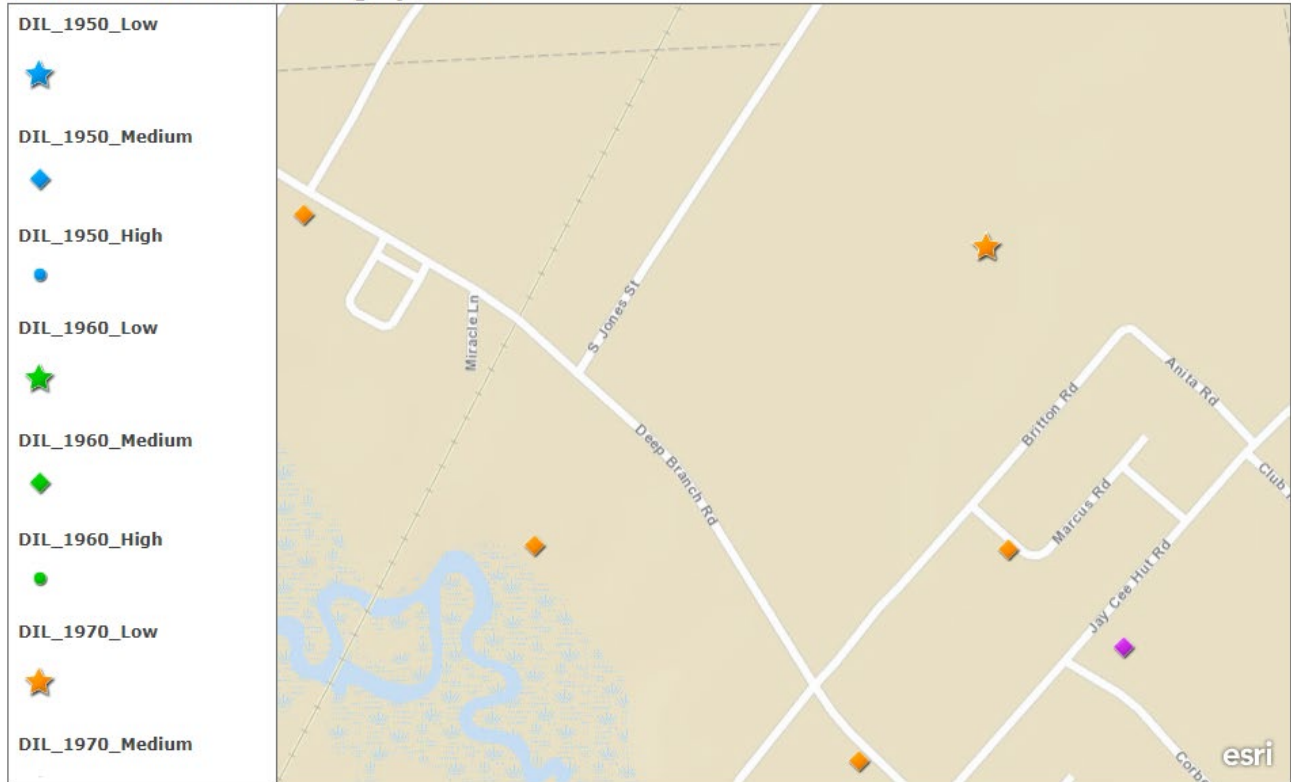
Tie-break Rule: Lower

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)



STATE HISTORIC PRESERVATION OFFICE GIS MAP

NCDOT Historical Aerial Imagery Index



NCDOT Photogrammetry Unit's Historical Aerial Imagery Thumbnails in resolution layers.

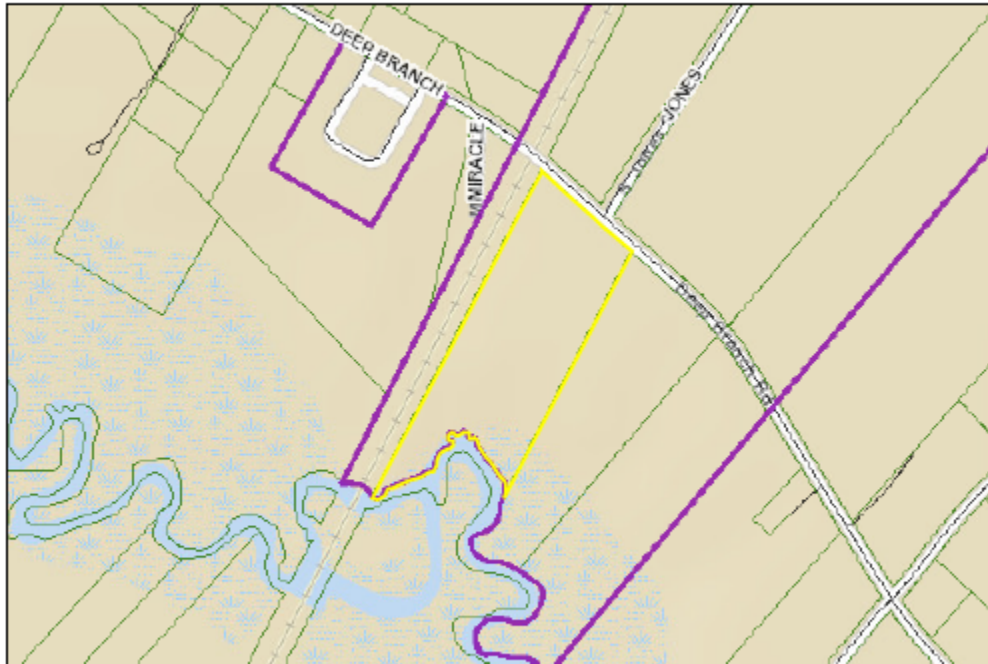
State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | Esri, HERE | NCDOT GIS Unit



APPENDIX 3
PROPERTY REPORTS



County of Robeson, NC



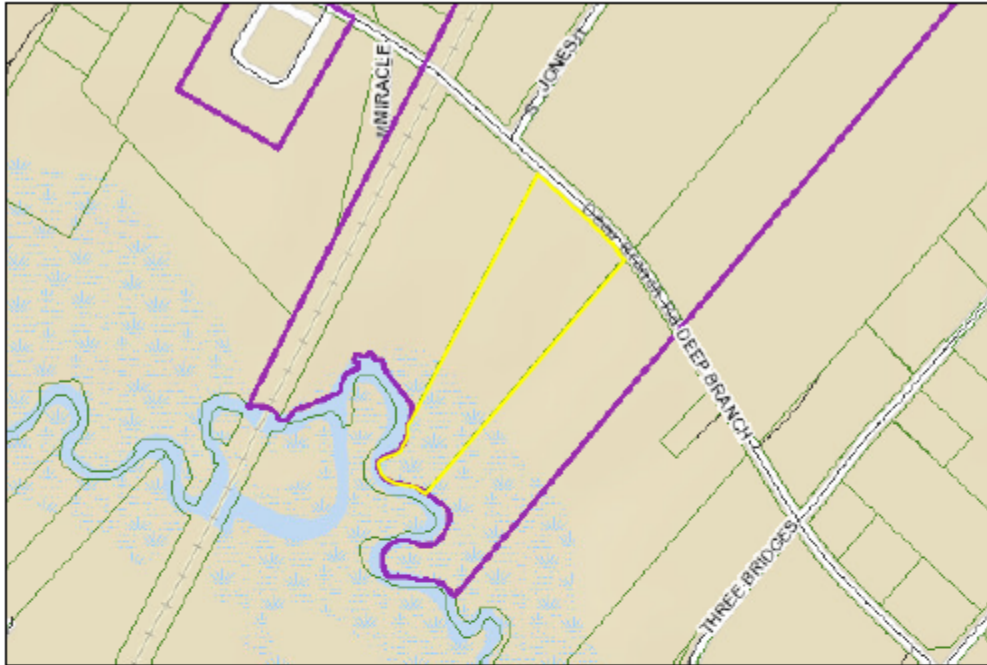
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STATUS	null
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NUMMOD	null
LOT	null
NBHD_CODE	35C07
TAX_YEAR	2019
PAR_CODE	
MAP	9333
SUBMAP	
BLOCK	93
PARCEL	1607
SUBPARCEL	00
PHYLOCAT	18883
CITYCODE	
ROUTENUM	0
OWNERID	47114016
CUROWNID	47114016
OWNAM1	TOWN OF PEMBROKE
OWNAM2	



OWNAM3	
OWADR1	
OWADR2	
OWADR3	
OWADR4	
OWCITY	
OWSTATE	,
OWZIP	0
STNUM	8257
STSUFFIX	
STDIR	
STNAME	DEEP BRANCH
STTYPE	RD
STDIRSUF	
UNITNO	
DEEDACRE	12.53
MAPACRE	12.53
DISTCODE	55
TOWNCODE	14
PARDESC3	
PARDESC1	E-70
NBHCLASS	
NBHCODE	35C07
EXEMCODE	E70
DEEDBOOK	01804
DEEDPAGE	0204
DEEDYEAR	0
PLATBOOK	
PLATPAGE	
DATESOLD	20110406
LEGDESC1	AC S/S SR 1339 PEMBROKE W
LEGDESC2	ASTE TREATMENT
LEGDESC3	
PARDESC4	
GROUPPAR	933393160700
REQREVIEW	
PHYSTRADR	8257 DEEP BRANCH RD
SCHCODE	0
AREACODE	1
LNDASVCUR	78700
IMPASVCUR	85900
RECTYPE	null
SALEAMT	null
QUALCODE	null
SALEINST	null
DEEDSTMP	null



County of Robeson, NC



MAPNO	14100204208
PIN_NUMBER	933393431900
PARCELTYPE	Base Parcel
CONFLICTNOTATION	
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OWNERTYPE	null
STATUS	null
OLDMAPNO	1410-02-04208
NUMMOD	null
LOT	null
NBHD_CODE	35C07
TAX_YEAR	2019
PAR_CODE	
MAP	9333
SUBMAP	
BLOCK	93
PARCEL	4319
SUBPARCEL	00
PHYLOCAT	74308
CITYCODE	
ROUTENUM	0
OWNERID	47114000
CUROWNID	47114000
OWNAM1	TOWN OF PEMBROKE
OWNAM2	

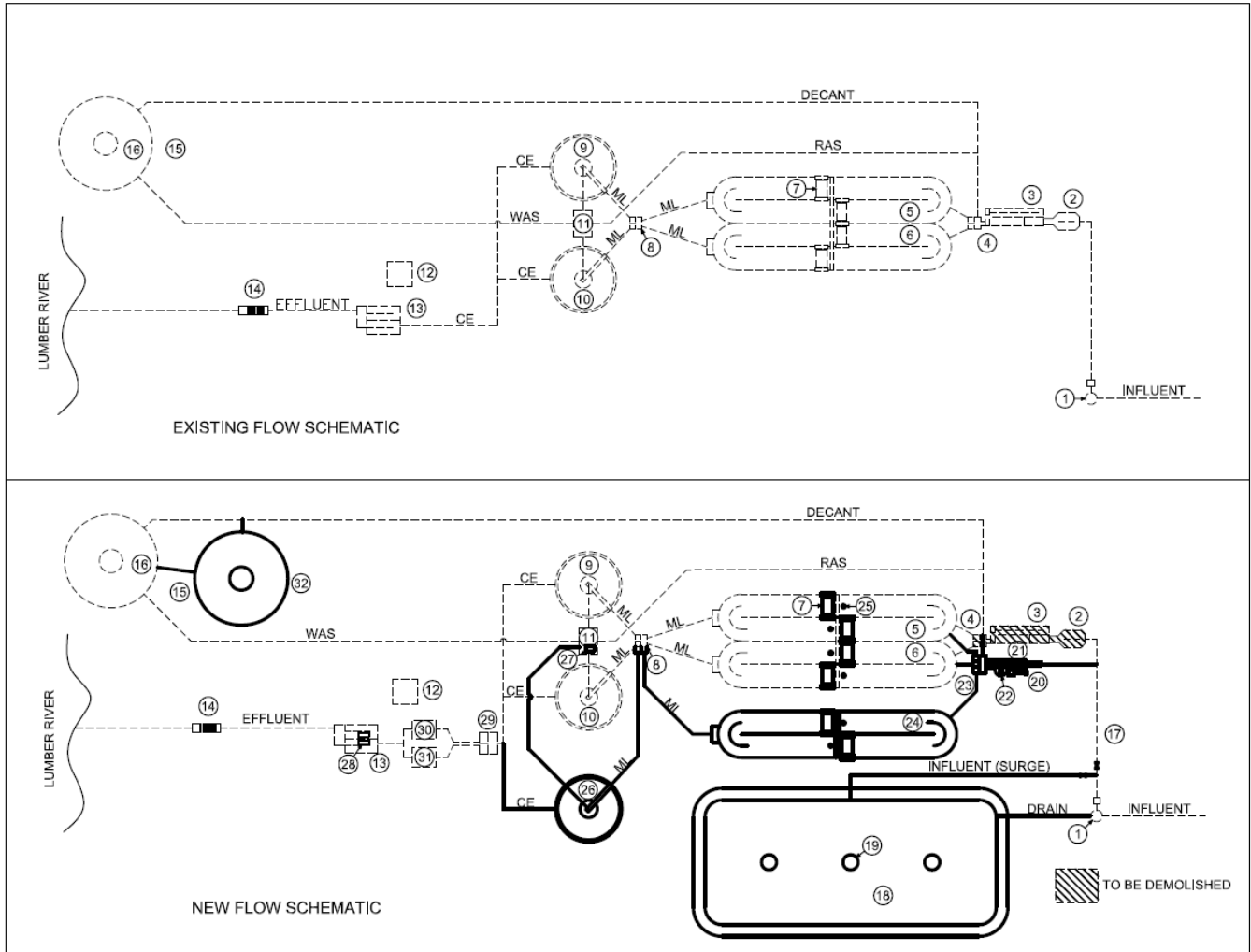


OWNAM3	
OWADR1	PO BOX 866
OWADR2	
OWADR3	
OWADR4	
OWCITY	PEMBROKE
OWSTATE	NC
OWZIP	283720000
STNUM	0
STSUFFIX	
STDIR	
STNAME	DEEP BRANCH
STTYPE	RD
STDIRSUF	
UNITNO	
DEEDACRE	9.91
MAPACRE	9.91
DISTCODE	55
TOWNCODE	14
PARDESC3	
PARDESC1	E-70
NBHCLASS	
NBHCODE	35C07
EXEMCODE	E70
DEEDBOOK	
DEEDPAGE	
DEEDYEAR	0
PLATBOOK	
PLATPAGE	
DATESOLD	20050101
LEGDESC1	AC S/S SR 1339
LEGDESC2	
LEGDESC3	
PARDESC4	
GROUPPAR	933393431900
REQREVIEW	
PHYSTRADR	DEEP BRANCH RD
SCHCODE	0
AREACODE	1
LNDASVCUR	70200
IMPASVCUR	5900
RECTYPE	null
SALEAMT	null
QUALCODE	null
SALEINST	null
DEEDSTMP	null



APPENDIX 4
SITE SCHEMATIC





APPENDIX 5
SITE PHOTOS







APPENDIX 6

MEETING MINUTES



Minutes of a regular meeting held by the Pembroke Town Council on November 4, 2019 at 7:00 P.M. at Pembroke Town Hall.

Members Present:

Mayor Gregory Cummings
Councilman Channing Jones
Councilman Larry McNeill
Councilman Ryan Sampson
Councilwoman Theresa Locklear

Members Absent:

Others Present:

Mr. Tyler Thomas, Town Manager
Ms. Amira Hunt, Town Clerk
Mrs. Marie Moore, Finance Officer
Mrs. Jessica Scott, Town Attorney

- I. Mayor Gregory Cummings called the meeting to order and declared a quorum present.
- II. Councilman Larry McNeill gave the invocation.
- III. Mayor Gregory Cummings led the Pledge of Allegiance.
- IV. Ms. Amira Hunt read the Ethics Statement.

Ethics Statement

“All members of this Council are reminded of their duty under the Town’s Adopted Code of Ethics to avoid conflicts of interest and the appearance of conflict of interest as required by the act. Each member has received the agenda and related information for this regularly scheduled monthly meeting of the Town Council for the Town of Pembroke. If any member knows of any conflict of interest or appearance of conflict with respect to any matter coming before the council at this meeting, the conflict should be identified at this time.”

V. Consideration of Minutes

Councilman Channing Jones made motion to approve minutes from October 7, 2019 meeting, seconded by Councilman Larry McNeill, motion carried.

VI. Public Hearings

- A. Consideration of Request to Amend Zoning Map – R-10 (Residential District) to R-8 (Multiple Family Dwelling District) – Evergreen Construction Company (applicant) – Mr. Tyler Thomas, Town Manager

Town Manager - Request to Amend Zoning Map R-10 to R-8. 10-acre tract for multi-family development. Future land use shows zoning remaining R-10 Moderate Density Residential. Planning Board made recommendation to deny request.

Vice President Tim Morgan (Evergreen Construction Company) – Evergreen Construction is proposing to develop a sixty (60) unit family rental community on the 9.9+/- acre parcel, located adjacent to 715 E. Third Street.

The preliminary layout reflects a total of 6 residential buildings, two and three stories in height (garden style walkups), along with a clubhouse and various site amenities.

The proposed unit mix, size and preliminary rents are:

- (16) 1BR 786 SF Rents from \$425/450/550
- (24) 2BR 957 SF Rents from \$525/550/650
- (20) 3BR 1374 SF Rents from \$605/650/750

The target market are individuals and families earning up to 60% of median income.

Evergreen Construction will need to apply for federal tax credits through the North Carolina Housing Finance Agency (NCHFA) during the 2020 application cycle. The preliminary application is due in January with the full application due in May. Awards are announced in August.

Evergreen Construction was formed in 1978 and is located in Raleigh. We are a development, construction and management company with 46 rental communities in our portfolio (2,032 units). We employ just over 50 full and part time persons in North Carolina.

- Water / sewer capacity was verified with Town
- Traffic (trip study) will need to be performed
- Runoff (retention pond) will be built
- Values (comparison) to nearby properties

Councilman Ryan Sampson – Which families will you target and how will the rent be based?

Mr. Tim Morgan – The target market are individuals and families earning up to 60% of median income (\$43,800).

Mayor Gregory Cummings – Will you provide security?

Mr. Tim Morgan – No, only if issues occur.

Councilman Channing Jones – Federal tax credits through January 2020 application cycle.

Mr. Tim Morgan – Yes, the preliminary application is due in January 2020 with the full application due in May. Awards are announced in August.

Councilman Ryan Sampson – conflict with rent for student housing!

Mr. Tim Morgan – This is not student housing.

Councilman Channing Jones – Have there been any discussions with DOT?

Mr. Tim Morgan – No, not at this time.

Councilman Larry McNeill – Who will be responsible for the upkeep of grounds / security?

Mr. Tim Morgan – We do not currently employ security, but if there is a need, we would provide security and we hire a third party for grounds and maintenance.

Councilman Channing Jones – Has capacity been discussed with the town?

Mr. Tim Morgan – Yes, we did have a conversation about water / sewer capacity with the town manager.

Town Manager – No sewer connection was discussed. Yes, there is availability at the plant but an engineer would still need to determine if capacity is available.

Councilman Channing Jones – Retention pond on site?

Mr. Rick Baker (Timmons Group) – Evergreen Construction would need to get approval based on town requirements.

Councilman Channing Jones – Have you looked at UDO to check compliance?

Mr. Rick Baker – yes, we have reviewed the UDO.

Councilman Larry McNeill – What are some of the amenities with this project?

Mr. Rick Baker:

- Club house
- Patio
- Picnic area
- Playground

Councilman Channing Jones – What is the process for approval?

Mr. Tim Morgan – \$25 application fee, credit / background check, and verify income.

(1) Bryan Maynor (Juddie Street) – supportive of progress but have concerns with this project:

- Income based is a concern. Do we need this type of project?
- Value of properties will decrease
- Flood issues during the last two storms
- Traffic already bad on 711
- 200 people in that area will create a lot of walking – no sidewalks there
- Area is too confined
- Ask Council to deny request

- (2) Sonya Oxendine (her property adjoins this property)
- Concerned with not having security
 - Town police already stretched
 - Traffic volume is already heavy and this project will make it worse
 - Against this project
- (3) Ruth Woods (Carter-Morgan Rd)
- Economic impact
 - Value of property
 - Against this project

Mayor Gregory Cummings closed the Public Hearing.

Councilman Channing Jones made motion to deny request due to lack of information (ingress/egress, capacity issues, traffic/walking, infrastructure concerns, other areas more suitable), seconded by Councilwoman Theresa Locklear, motion carried.

VII. New Business

- A. Consideration of Commitment of Matching Funds – Economic Development Administration Disaster Supplemental Grant Opportunity – Mr. Tyler Thomas, Town Manager

Project: Expansion of Waste Water Treatment Plant to increase capacity to 2 million gallons per day capacity. Anticipated Cost: \$ 6,700,000. Anticipated Match: \$1,340,000 (20%)

Town Manager – EDA 2019 DISATER

- Resiliency and economic development
- Increasing size of Waste Water Treatment Plant
- 2 million gallons per day / currently at 1.33 million gallons per day
- \$6.7 million total cost of expansion
- 20% match – \$1.3 million
- Audit – \$2.4 million water/sewer fund

Recommend to reserve funds for this grant.

Councilman Larry McNeill – What is the capacity currently at Waste Water Treatment Plant?

Town Manager- Already at million gallon per day flow - almost 80%; state requires 80%.

Councilman Channing Jones – growth is always a two-edge sword. Invest in that growth; great thing!

Councilman Channing Jones made motion to a commitment of matching funds (\$1,340,000) – EDA Disaster Supplemental Grant, seconded by Councilman Larry McNeill, motion carried.

VIII. Item of Interest

2019 Winter Sports Programs

IX. Public Comments – Comments Only – If you would like to discuss your issues please submit in writing to the Town Clerk.

No public comments were received.

X. Closed Session

Councilman Ryan Sampson made motion to go into closed session, seconded by Councilman Channing Jones, motion carried.

Councilwoman Theresa Locklear made motion to come out of closed session, seconded by Councilman Larry McNeill, motion carried


No action taken in closed session.

XI. Adjournment

Councilman Channing Jones made motion to adjourn, seconded by Councilman Larry McNeill, motion carried.



Mayor



Clerk

APPENDIX 7
COMMENT SOLICITATION





Municipal Engineering Services Company, P.A.

December 10, 2019

Dr., Wenonah G. Haire
Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, SC 29730

SUBJECT: Town of Pembroke
EDA- Small Business Center Project

Tribal Historic Preservation Office Comments

Dear Dr. Haire:

The Town of Pembroke is submitting a Title EX Disaster Assistance Grant application to the Economic Development Administration (EDA), US Department of Commerce.

The following information and enclosures are being submitted for your review and comments.

- *What is the nature of the undertaking? Is it a new construction, renovation or utility improvement? Will there be any ground disturbance?*

What is the nature of the undertaking?

The hydraulic capacity of the wastewater treatment facility for the Town of Pembroke is quickly nearing the 80% capacity. Additionally, SR Originals, Inc, has indicated their desire to expand and add 200 new jobs. However, the bakery is already having issues meeting the BOD limits of their IUP and suffered a significant financial loss due to the treatment plant's inability to accept waste during Hurricane Florence. This is in addition to anticipated growth at the University of North Carolina at Pembroke. Additionally, the facility has received Notice of Violations from NCDEQ related to exceedance of flow and total suspended solids within the past year. Therefore, it is imperative that improvements be made to the facility to increase the treatment capacity and improve the resiliency of the facility against significant storm events.

68 Shipwash Drive • Garner, NC 27529 • ph: 919-772-5393 • fx: 919-772-1176 • www.mesco.com
P.O. Box 349 • Boone, NC 28607 • ph: 828-262-1767 • fx: 828-265-2601 • www.mesco.com

Specific project tasks are as follows:

- Construction: Expand the current WWTP from 1.33 to 2.0-MGD with construction of a new influent pump station, headworks, distribution box, oxidation ditch, clarifier, effluent filters, ultra-violet disinfection, surge basin, and modifications to the clarifier distribution box, and return sludge pump station.
- Architectural/Engineering Services.
- Administration/Legal Services.

Is it a new construction, renovation, or utility improvement?

This project is a renovation in which there will be an expansion of the existing wastewater treatment capacity at the plant.

Will there be any ground disturbance?

Yes, there will be ground disturbance as a result of new construction activities required to expand the plant.



Topographic map of the project site

A description of previous land use

The proposed project site is composed of approximately 22.41 acres and identified as Property Identification Numbers: 933393160700 and 933393431900 both owned by the Town of Pembroke. The site is generally located at 34°40'24" N, 79°11'8" W. The property is bounded by Deep Branch Road to the NE, the railroad tracks to the NW, and Lumber River to the SW.

Between 1993 and 1999, the existing Trickling Plant was expanded to what is now the Waste Water Treatment Plant. There is no information available as to when the Trickling Plant was built or how long the town has owned these parcels.

Has the property been graded or paved to subsoil?

The site area, surrounding the wastewater treatment plant, has been previously disturbed by past construction activities.

If the ground has been previously disturbed, will the new ground disturbance be any deeper or wider than the initial ground disturbance? This applies to highway and water/sewer line rights-of-way, as well as old structural foundation trenches.

Although there will be new ground disturbance around the previously disturbed area, it will be confined to the site area just surrounding the existing wastewater treatment plant. Some construction activities may be deeper than the initial ground disturbance.

- *A list of all archaeological sites within a half-mile radius of the project area (historic and pre-contact) whether or not they are on the National Register of Historic Places.*

There are no known historic and/or pre-contact archaeological sites within a half-mile radius of the project area.

- *A copy of any archaeological surveys done within a half mile of the project area.*

There have been no known archaeological surveys done within a half mile of the project area.

- *A copy of the State Historic Preservation Office's letter of concurrence.*


SHPO has been requested to comment on the project. A copy of SHPO's letter of concurrence will be forwarded to you upon its receipt

- *Photographs of the project area, facing north, south, east, and west. We are primarily interested in ground disturbance and do not need detailed information or photographs of historic structures in the project area.*

Aerial photographs of the project area and site are enclosed.

Please contact me if you need any additional information or clarification. Thank you for your assistance.

Sincerely,


Rebecca E. Bennett



Zoomed in aerial image showing existing ground disturbance



Municipal Engineering Services Company, P.A.

December 10, 2019

Pete Benjamin, Field Supervisor
Raleigh Field Office
U.S. Fish and Wildlife
551 Pylon Drive, Suite F
Raleigh, North Carolina 27606-1487

SUBJECT: Town of Pembroke
EDA- Small Business Center Project

**Request for comments concerning compliance with the Endangered
Species Act of 1973 as Amended (16 U.S.C. 1531-1543)**

Dear Mr. Benjamin:

The Town of Pembroke is submitting a Title EX Disaster Assistance Grant application to the Economic Development Administration (EDA), US Department of Commerce. The hydraulic capacity of the wastewater treatment facility for the Town of Pembroke is quickly nearing the 80% capacity. Additionally, SR Originals, Inc, has indicated their desire to expand and add 200 new jobs. However, the bakery is already having issues meeting the BOD limits of their IUP and suffered a significant financial loss due to the treatment plant's inability to accept waste during Hurricane Florence. This is in addition to anticipated growth at the University of North Carolina at Pembroke. Additionally, the facility has received Notice of Violations from NCDEQ related to exceedance of flow and total suspended solids within the past year. Therefore, it is imperative that improvements be made to the facility to increase the treatment capacity and improve the resiliency of the facility against significant storm events.

The proposed project site is composed of approximately 22.41 acres and identified as Property Identification Numbers: 933393160700 and 933393431900 both owned by the Town of Pembroke. The site is generally located at 34°40'24" N, 79°11'8" W. The property is bounded by Deep Branch Road to the NE, the railroad tracks to the NW, and Lumber River to the SW.

Between 1993 and 1999, the existing Trickle Plant was expanded to what is now the Waste Water Treatment Plant. There is no information available as to when the Trickle Plant was built or how long the town has owned these parcels.

The EDA application requires the submittal of an Environmental Narrative that includes US Fish & Wildlife Service project comments in respect to the Endangered Species Act of 1973 as Amended (16 U.S.C. 1531-1543).

68 Shipwash Drive • Garner, NC 27529 • ph: 919-772-5393 • fx: 919-772-1176 • www.mesco.com
P.O. Box 349 • Boone, NC 28607 • ph: 828-262-1767 • fx: 828-265-2601 • www.mesco.com

Enclosed for your review and comments are:

- Project Maps
- Project Photos

Please send your written comments to attention:

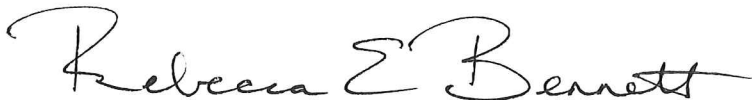
Michael McAllister
Municipal Engineering Services Co., P.A.
68 Shipwash Drive
Garner, NC 27529

And

Keith Dyche, Regional Environmental Officer
Economic Development Administration, US Department of Commerce
Atlanta Regional Office
Suite 1820
401 West Peachtree St. N.W.
Atlanta, Georgia 30308-3510

Please contact me if you need any additional information or clarification. Thank you for your assistance.

Sincerely,

A handwritten signature in cursive script that reads "Rebecca E. Bennett". The signature is written in black ink and is positioned above the typed name.

Rebecca E. Bennett



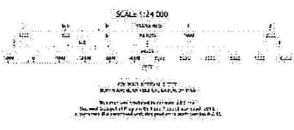
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



PEMBROKE QUADRANGLE
NORTH CAROLINA—ROKESBY COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
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aerial photography collected in 1997. It is not
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this map is for general reference only. It is not
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ROAD CLASSIFICATION

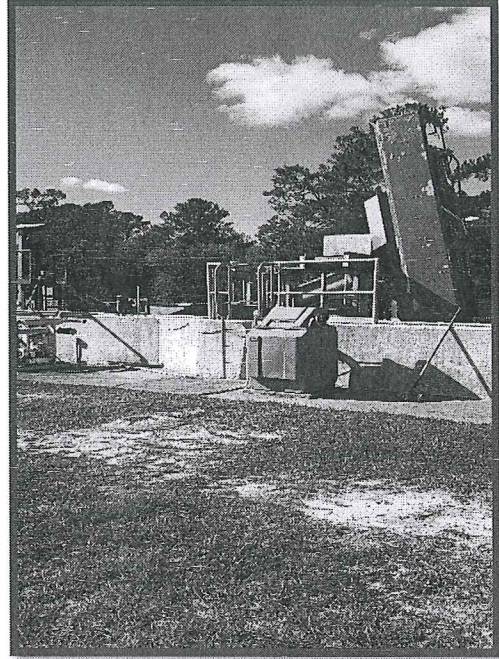
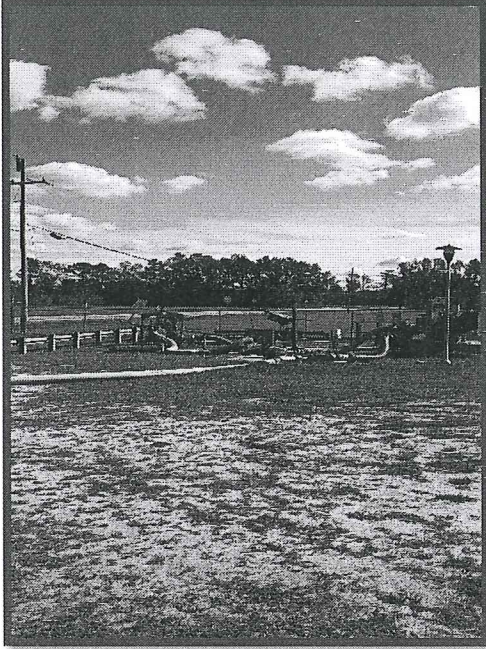
	Interstate
	US Highway
	State Route
	County Road
	Local Road
	Railroad
	Canal
	Pipeline
	Power Line

PEMBROKE, NC
2019





Zoomed in aerial image



Site Images

