



**U.S. Department of Housing and Urban  
Development**

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Washington, DC 20410  
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## **Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58**

### **Project Information**

**Project Name:** Estrella Landing Apartments

**Project Location:** 4615 Gordon Road, Wilmington, New Hanover County, North Carolina  
28411

**Federal Agency:** U.S. Department of Housing & Urban Development (HUD)

**Responsible Entity:** North Carolina Office of Recovery and Resiliency (NCORR)

**Grant Recipient:** Estrella Landing Apartments, LLC

**State/Local Identifier:** B-19-DV-37-0001 and B-19-DV-37-0002

**Preparer:** Andrea Gievers, Environmental SME, NCORR

**Certifying Officer Name and Title:** Laura Hogshead, Director, NCORR

**Consultant:** Mr. Matt Carter, Pilot Environmental, Inc.

#### **Direct Comments to:**

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**Project Location:** The proposed project location is 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411.

**Description of the Proposed Project** [24 CFR 50.12 & 58.32; 40 CFR 1508.25]: The Estrella Landing Apartments (proposed project) is a new multifamily, affordable housing construction project consisting of three apartment buildings containing 84 units, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina (see attached preliminary site plans). The proposed development will provide affordable housing for low- and middle-income families in the local community.

**Statement of Purpose and Need for the Proposal** [40 CFR 1508.9(b)]: The proposed Estrella Landing Apartments project consists of three apartment buildings containing 84 units. The proposed project is a multifamily residential development for low- and middle-income households. The proposed project will assist the City of Wilmington and New Hanover County to provide affordable housing for the local community. The City is seeking to address the shortage in affordable housing inventory exacerbated by the effects of Hurricane Florence. The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). These hurricanes damaged or destroyed hundreds of homes worsening the affordable housing shortage. The City rezoned the main parcel, thus, allowing this affordable housing project on the condition that the development is awarded Low-income Housing Tax Credits (LIHTC) through the NC Housing Finance Agency.

**Existing Conditions and Trends** [24 CFR 58.40(a)]: This property is located at 4615 Gordon Road in the City of Wilmington, New Hanover County, North Carolina. The site is located in an area of the county that can generally be described as residential and commercial. Surrounding properties contain commercial properties, a gasoline station, outdoor boat storage facility, a church, and residential properties.

The site consists of two parcels. The first parcel is the main area of the site and the second parcel is a 60-foot access and utility easement. The main 5.12-acre parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is approximately 0.59-acre and identified as Parcel ID 314914.23.7837.000. Parcel information is attached.

In addition, the site received rezoning approval from the New Hanover County Planning and Land Use Department. The rezoning approval changed the main parcel's zoning from Residential-15 District (R-15) to Conditional Residential Multi-Family Moderate Density District (RMF-M). A letter from the New Hanover County Planning and Land Use Department describing the redistricting is attached.

**Funding Information**

<b>Grant Number</b>	<b>HUD Program</b>	<b>Funding Amount</b>
B-19-DV-37-0001 and B-19-DV-37-0002	CDBG-DR	\$2,500,000.00

**Estimated Total HUD Funded Amount:** \$2,500,000.00

**Non-HUD Funding Source:** Bank Loan  
**Non-HUD Funding Amount:** \$4,265,720.00  
**Non-HUD Funding Source:** Federal LIHTC  
**Non-HUD Funding Amount:** \$8,189,283.00

**Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]:** \$14,955,003.00

**Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities**

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6</b>		
<b>Airport Hazards</b>  24 CFR Part 51 Subpart D	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	Civilian, commercial service airports are not located within 2,500 feet of the proposed project site. The Wilmington International Airport is located more than 5,000 feet west of the site. The attached Airport Master Record shows that Wilmington International Airport is not a joint use civilian military airport. Thus, military airports are not located within 15,000 feet of the proposed project site. The site and nearby airports are depicted on the attached NEPA Assist map.
<b>Coastal Barrier Resources</b>	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	This proposed project is not located in or in proximity to a Coastal Barrier Resource

<p>Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]</p>		<p>System (CBRS) Unit. New Hanover County does contain CBRS Units. However, the closest CBRS is located over 4 miles away from the proposed project site. The attached USFWS CBRS Mapper depicts the site relative to the closest Coastal Barrier Resource System. Therefore, this proposed project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.</p>
<p><b>Flood Insurance</b></p> <p>Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]</p>	<p>Yes    No  <input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The site contains areas identified by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMette) panel 3720314900K, effective on 08/28/2018 as being in Zone X and in Zone AE. According to the FEMA Map Service Center, there are no Preliminary FIRMs available for the proposed project site. Wilmington, North Carolina is a National Flood Insurance Program (NFIP) participating community according to the FEMA Community Status Book Report. The proposed project is not located within a FEMA-designated regulatory floodway.</p> <p>A Preliminary Flood Insurance Study was conducted on New Hanover County by FEMA and a report was issued August 29, 2014, a copy of the report is attached.</p> <p>The proposed buildings and improvements will be located wholly within Zone X, outside and above the Special Flood Hazard Area, except for utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet in Zone AE as shown on the attached site plans. Thus, flood insurance will not be required for the proposed project because all insurable structures will be located in Zone X. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the</p>

		<p>NFIP. The project is in compliance with flood insurance requirements.</p> <p>The Floodplain Management Determination (Executive Order [EO] 11988) and Protection of Wetlands (EO 11990) Determination for the proposed project is attached.</p>
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**STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5**

<p><b>Clean Air</b></p> <p>Clean Air Act, as amended, particularly section 176(c) &amp; (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>According to the EPA Greenbook, the proposed project site is not located in a county in nonattainment or maintenance status for any criteria pollutants.</p> <p>The proposed project will consist of the development of the subject site with a multifamily residential development. The development will consist of the construction of three apartment buildings, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. Construction-related activities can cause short-term exposures such as fugitive dust and emissions. The proposed project will conform to NC Air Quality Management regulations during and following construction. The contractor will use Best Management Practices (BMPs) to reduce fugitive dust generation and diesel emissions. BMPs will include wetting the grading site during dry conditions. In addition, the stormwater retention system will be appropriately maintained to limit exposures.</p> <p>There will be no significant impact to air quality from the proposed project. The operation of the proposed project following the completion of construction activities will not increase emissions. Therefore, the proposed project is in compliance with the Clean Air Act, 40 CFR Parts 6, 51, and 93.</p> <p>See attached EPA Greenbook - <a href="https://www3.epa.gov/airquality/greenbook/anayo_nc.html">https://www3.epa.gov/airquality/greenbook/anayo_nc.html</a></p>
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<p><b>Coastal Zone Management</b></p> <p>Coastal Zone Management Act, sections 307(c) &amp; (d)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The proposed project is located in a coastal zone, but it has been determined to be consistent with the State coastal management program. The proposed project involves new construction and the site is located within the coastal zone. The attached coastal zone map depicts the site location relative to the nearest coastal zone. Therefore, the NC Division of Coastal Management (NC DCM) was contacted to determine whether the proposed project is consistent with the State coastal zone management program's consistency criteria.</p> <p>NC DCM reviewed the proposed project information submitted pursuant to the management objectives and enforceable policies of Subchapters 7H and 7M of Chapter 7 in Title 15A of the North Carolina Administrative Code, and concurred that the proposed activity is consistent with North Carolina's approved coastal management program. NC DCM's correspondence and email determination are attached. The proposed project is in compliance with the Coastal Zone Management Act.</p>
<p><b>Contamination and Toxic Substances</b></p> <p>24 CFR Part 50.3(i) &amp; 58.5(i)(2)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The site is not on a list of Superfund National Priorities or Comprehensive Environmental Response Superfund National Priorities or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) List, or equivalent State list compiled by the US EPA. There are no federal superfund sites or RCRA hazardous waste permit sites within a one mile radius. The NC Division of Waste management (DWM) Site Locator Tool does not identify a toxic or solid waste landfill within 3,000 feet of the site. According to NC DWM, there are no Superfund sites located within one-mile of the proposed project (See State Environmental Clearinghouse [SCH] Comments). Also, according to NC DWM Underground Storage Tank (UST) Division, a search of the UST Section databases found no reported petroleum releases known to exist at</p>

		<p>this location nor any records of registered USTs at this location (See SCH Comments).</p> <p>A Phase I Environmental Site Assessment (ESA) was conducted on the site and issued on October 13, 2021. A site inspection was performed on the proposed project site. The report does not identify on-site recognized environmental conditions (RECs).</p> <p>The Phase I ESA identifies the UST system associated with the gasoline station immediately west of the site as an off-site REC. The USTs are double-walled and utilize mechanical line leak detector systems. The USTs have catchment basin spill protection systems as well as auto shutoff devices for overfill protection. The assessment indicates that the gasoline station is relatively new (USTs installed in 2016) and based upon the age of the facility, it does not pose a hazard that could affect the health and safety of occupants or conflict with the intended utilization of the subject property. The proposed project is in compliance with contamination and toxic substances requirements.</p>
<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>This proposed project will have No Effect on listed species because the consultant determined there are no listed species, designated critical habitats or suitable habitat present in the action area. The USFWS was contacted about the proposed project (attached). A letter issued by the USFWS (attached) states that “the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at the site.” The letter goes on to state that the agency is concerned with potential impacts to aquatic species. The agency states that appropriate measures be taken in order to limit sedimentation and appropriate erosion control efforts be enacted.</p> <p>A stormwater control device will be installed at the site during grading activities. This</p>

		<p>device will be in place during site development and will assist with erosion control/sedimentation. An Erosion and Sedimentation Control Plan will be required.</p> <p>A query of the NC Natural Heritage Program (NCNHP) database resulted in no records for important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. The Upper Smith Creek Natural Area along with several Managed Areas were identified within one mile of the proposed project site. However, the proposed project activities and distance from the areas will result in no identifiable potential effects to these areas.</p> <p>In addition, the NCNHP Database was reviewed for possible endangered/threatened species in the site area identified by this database. The proposed project site does not contain suitable habitat for these species and is located within a densely developed area. According to NCNHP, the database does not have documented Northern Long-eared Bat maternity roost trees within 150 feet of this project boundary. In addition, the database indicated that there are no Northern Long-eared Bat hibernacula within 0.25 mile of this project boundary. This proposed project is in compliance with the Endangered Species Act.</p>
<p><b>Explosive and Flammable Hazards</b></p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The Phase I ESA conducted at the site does not identify explosive or flammable hazards at the site or in the vicinity of the site. Additionally, the site reconnaissance did not identify such hazards.</p> <p>A completed Thermal and Explosives Hazards Worksheet does not indicate that such hazards are associated with the site or surrounding properties.</p> <p>Deputy Fire Marshal Raymond Griswold responded to our request for information regarding AST and explosive and flammable hazards at or in the vicinity of the project site. Mr. Griswold, who also represents the County Fire Services on the counties Technical Review Committee, responded by saying “I</p>

		<p>have been here in New Hanover County since 2003 in my present position. I have never observed any above ground storage tank(s) in this area. Across the street were farmer's fields to grow crops behind the existing houses. There is a fairly new gas station next to this property with below ground fuel tanks. I have not found any hazmat spills in the area among our records." A copy of his email response is attached. The proposed project is in compliance with explosive and flammable hazard requirements.</p>
<p><b>Farmlands Protection</b></p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes    No  <input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The proposed project includes activities that could potentially convert agricultural land to a non-agricultural use, but an exemption applies. The site contains overgrown grass land and wooded land. According to the NRCS Soil Survey, the site contains mostly Leon Sand, with Baymeade fine sand, 1 to 6 percent slopes and Seagate fine sand. The U.S. Census Bureau Tiger Web mapper depicts the site as an Urbanized Area (UA) and, therefore, the proposed project will not affect important farmland. The proposed project is in compliance with the Farmland Protection Policy Act.</p>
<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes    No  <input checked="" type="checkbox"/>    <input type="checkbox"/></p>	<p>The site contains areas identified by the FEMA FIRMette panel 3720314900K, effective on 08/28/2018 as being in Zone X and in Zone AE. According to the FEMA Map Service Center, there are no Preliminary FIRMs available for the proposed project site. The proposed project is not located within a FEMA-designated regulatory floodway.</p> <p>The proposed project will result in temporary impacts to approximately 0.095 acres of a 100-year floodplain and permanent impacts to approximately 0.140 acres of the 100-year floodplain. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet.</p>

		<p>Applicable permits from the U.S. Army Corps of Engineers, NC Department of Environmental Quality, and local jurisdictions will be acquired before work is commenced. The proposed project will be constructed in accordance with permit requirements and their conditions. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the NFIP.</p> <p>The attached Floodplain Management Determination (EO 11988) and Protection of Wetlands (EO 11990) Determination documents the 8-step process under 24 CFR 55.20.</p>
<p><b>Historic Preservation</b></p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The North Carolina State Historic Preservation Office (NC SHPO) was consulted if the proposed project would have adverse effects on historic or archeological resources at the site. NCORR submitted the proposed project to the NC State Clearinghouse for review on December 14, 2021 and the NC SHPO responded with no comment on January 14, 2022.</p> <p>According to the HUD Tribal Directory Assessment Tool (TDAT), the Catawba Indian Nation is the only tribe with interests in New Hanover County, North Carolina. On February 11, 2022, NCORR consulted with the Catawba Indian Nation for discussion of historic properties in the proposed project area that may have religious and cultural significance. On February 15, 2022, the Catawba Indian Nation's Tribal Historic Preservation Office (THPO) responded that "[t]he Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this</p>

		<p>project.” The proposed project is in compliance with Section 106.</p> <p>NCORR correspondence with NC SHPO and the Catawba Indian Nation are included.</p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The HUD DNL calculator was completed for the site location. Roads in the vicinity were identified and noise levels associated with NCDOT average annual daily traffic flow for roads were inserted into the calculator. Railroads were not identified in the vicinity of the site and, therefore, not added to the DNL calculator. The calculator identified a decibel level at the proposed project site of 64 dB (attached) which is below the mitigation standard of 65 dB.</p> <p>One airport was identified in the vicinity of the site (Wilmington International Airport). The air traffic patterns for this airport were below thresholds deemed to allow air traffic noise to be contained to the airport property. The air traffic patterns for the airport air listed below with the minimum requirement in parenthesis – Air Carriers 8,626 (9,000); Air Taxis 13,912 (18,000); Military 11,430 (18,000); and, General Aviation 25,855 + 9,283 = 35,138 (72,000).</p> <p>Short-term construction noise will be limited to daytime hours with the exception of a water-main connection within Gordon Road. This will occur at night in order to limit disturbance to traffic during heavily trafficked hours. Construction equipment will be required to meet local sound control requirements. The proposed project is in compliance with HUD's Noise regulation.</p>
<p><b>Sole Source Aquifers</b></p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Sole source aquifers are not located within the boundaries of the State of North Carolina, according to the EPA. The proposed project is in compliance with Sole Source Aquifer requirements.</p>
<p><b>Wetlands Protection</b></p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>The attached USFWS National Wetlands Inventory Map (NWI) depicts a freshwater</p>

		<p>forested/shrub wetland on the northern portion of the site.</p> <p>A jurisdictional determination of surface water features has been completed for the site by the U. S. Army Corps of Engineers (USACE) and is attached. The determination indicates that jurisdictional non-streams and wetland areas are located on the site. A wetland delineation map dated February 1, 2021 is included with the jurisdictional determination. Based upon the site layout; these features will be impacted by the proposed development. The proposed project will result in temporary impacts to approximately 0.057 acres and permanent impacts to approximately 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site.</p> <p>Permits will be required in order to impact these features. A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.</p> <p>The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the environmental review record when received from the permitting agencies.</p>
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		The attached Floodplain Management Determination (EO 11988) and Protection of Wetlands (EO 11990) Determination documents the 8-step process under 24 CFR 55.20.
<b>Wild and Scenic Rivers</b>  Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	According to the attached U. S. National Park Service – Wild and Scenic Rivers Mapper and National Wild and Scenic River System Map, the site is not located in proximity to wild or scenic rivers.  <a href="https://www.rivers.gov/north-carolina.php">https://www.rivers.gov/north-carolina.php</a>
<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b>  Executive Order 12898	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	According to the EPA Environmental Justice Screening and Mapping Tool, the proposed project site is not located in a potential Environmental Justice area. The proposed project does not facilitate development which would result in disproportionate adverse environmental impacts on low-income or minority populations. Rather, the proposed project will develop the site with housing for low- and middle-income families of the local area. No adverse environmental impacts were identified in the project's environmental review. The project is in compliance with EO 12898.

**Environmental Assessment Factors** [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

**Impact Codes:** Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	1	<p>The site currently consists of a main parcel that has recently been approved to be rezoned Conditional Residential Multi-Family Moderate Density District (RMF-M). The preliminary site plan once finalized will be followed during site development.</p> <p>The surrounding properties contain residential and commercial development. The proposed development will fit within the surrounding area. The site will be an appropriate transition between Hawthorne at Smith Creek, a R-15 High Density apartment community, and the Buy Quick Convenience Store, a B-1 intense commercial use according to the Community Information Meeting Notice dated February 8, 2021.</p> <p>In addition, the current site use is undeveloped and is considered underutilized. This development will better utilize the vacant subject property.</p>
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	<p>Soil and foundation analysis will be conducted by a certified geotechnical engineering firm prior to site development. Field testing and analysis will determine that appropriate site preparation and grading will be performed per generally accepted construction practices, so that the development will not adversely affect the stability of the site or adjacent properties.</p> <p>The site is located in a generally flat, level grade location. Evidence of soil slips, soil slumps, etc. have not been observed at the site or on surrounding properties. According to the NRCS Soil Survey, the site contains mostly Leon Sand, with Baymeade fine sand, 1 to 6 percent slopes and Seagate fine sand.</p> <p>BMPs will be implemented during construction activities. Additionally, a surface water control feature will be installed at the site during the initial phase of construction in order minimize sediment loss. According to NC DEQ, the Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An Erosion and Sedimentation Control Plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable NC DEQ Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater Permit (NCG010000) is also usually issued should design features meet minimum requirements. Further, the proposed project will comply with 15A NCAC 2H 1000 State Stormwater Permitting Programs that regulate site development and postconstruction stormwater runoff control. According to NC DEQ, areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state. The proposed project will conform to construction requirements of the State of North Carolina and New Hanover County.</p> <p><b>Attachment – SCH Comments</b></p>

<p>Hazards and Nuisances including Site Safety and Noise</p>	<p>2</p>	<p>The site is not on a list of Superfund National Priorities or CERCLA List, or equivalent State list compiled by the US EPA. There are no federal superfund sites or RCRA hazardous waste permit sites within a one mile radius. The NC DWM Site locator tool does not identify a toxic or solid waste landfill within 3,000 feet of the site. The Phase I ESA completed for the site did not identify on-site RECs associated with the site. The Phase I ESA identified the gasoline station UST system immediately west of the site as a long term off-site REC. However, the assessment indicates that based on the age of the facility, it does not pose a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property.</p> <p>The site is located in an area that is regularly patrolled by the New Hanover Sherriff Department.</p> <p>A noise study did not identify noise issues associated with the surrounding areas. Short-term construction noise will be limited to daytime hours with the exception of a water-main connection within Gordon Road. This will occur at night in order to limit disturbance to traffic during heavily trafficked hours. Construction equipment will be required to meet local sound control requirements. The operation of the proposed project will not create a noise hazard.</p>
<p>Energy Consumption</p>	<p>2</p>	<p>This proposed project will meet the most recent energy consumption standards as defined by the City and State. Additionally, the proposed project will incorporate several energy saving features as defined by LEED standards and NCHFA qualified allocation plan.</p> <p>The proposed project will be located in close proximity to schools, churches, retail centers and employment centers. This allows for easy access (lower energy consumption) as part of general community access to activities.</p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>SOCIOECONOMIC</b>		
<p>Employment and Income Patterns</p>	<p>1</p>	<p>The proposed project will provide affordable housing to low-and middle-income families in a densely populated residential community.</p> <p>New residents will help to support nearby existing and planned commercial development, which may generate additional job opportunities for these residents.</p> <p>Traffic should not be adversely impacted due to construction or following development of the property. Employment options including retail, service and industrial are located near the site.</p>
<p>Demographic Character Changes, Displacement</p>	<p>2</p>	<p>The proposed project will not significantly impact the demographics of the local community. Local institutions (churches, community centers, elderly centers, etc.) will not be adversely impacted by the development.</p>

		<p>The proposed project will not deny any population within the local community potential for growth. The proposed project will not act as an isolation feature within the local area or community.</p> <p>The site contains vacant land. Therefore, involuntary displacement of persons/populations will not occur.</p>
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Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	3	<p>Students living in the proposed development would be assigned to Murrayville Elementary School, Trask Middle School, and Laney High School. Students may apply to attend public magnet, year-round elementary, or specialty high schools (see attached Staff Summary Report for Conditional Rezoning Application dated March 4, 2021). Dr. Charles Foust, New Hanover County School System Superintendent, was contacted and requested to provide information associated with impacts to the local school system. Assistant Superintendent Eddie Anderson responded indicating that the site development is located in an area that is not considered high-risk or poor performing and that the development will adversely impact the schools serving the project area. A copy of this response is attached. However, the Staff Summary Report indicates that planned facility upgrades for the schools within district combined with changes to student enrollment patterns will result in adequate capacity district-wide over the next five years if facility upgrades are funded. The Staff Summary Report also reiterated that the [c]urrently, the number of rental units in the County serving the population at these income levels is limited. The City approved the rezoning application for the development to proceed. Thus, the proposed project might temporarily have minor adverse effects on the ability of the county school system to provide quality education services until facility upgrades are funded. The proposed project will not have any adverse effects on local cultural facilities.</p>
Commercial Facilities	1	<p>The proposed project will not have an adverse effect on local commercial facilities. The project is located in an area with close proximity to local commercial, recreational, social service, health care and school facilities. These businesses include retail, service and industrial facilities that the new residents can easily access. Additionally, the development should increase the employee availability to the local area.</p>
Health Care and Social Services	2	<p>The proposed project is not likely to have an adverse effect on the local health care and social services of the area. The proposed project is located in an area with close proximity to local health care and social service providers. Additionally, the development should increase the employee availability to the local area. An increase in tax base will support this and other services.</p> <p>The online New Hanover County Social Services (<a href="mailto:dssinfo@nhcgov.com">dssinfo@nhcgov.com</a>) was contacted and requested to provide a</p>

		<p>response of impacts that the proposed project will have on their local services. A response to our request has not been provided and will be included in the ERR when received.</p>
Solid Waste Disposal / Recycling	2	<p>Solid waste disposal and recycling will be available to the site by a private solid waste service. An appropriate quantity of dumpsters will be provided to meet the proposed project's demands.</p> <p>New Hanover County Department of Environmental Management Director, Mr. Joe Suleyman, was contacted and requested to provide a response of impacts that the proposed project will have on their local services. Mr. Suleyman responded that his Department can provide adequate services and will not be adversely affected by the proposed project.</p> <p>Construction debris will be taken to an appropriate, legally compliant landfill. Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900.</p>
Waste Water / Sanitary Sewers	2	<p>Public waste water and sanitary sewer services will be provided to the site by the Cape Fear Public Utility Authority (CFPUA). The waste water treatment facilities associated with the site will be able to handle the additional waste generated.</p> <p>Bernice Johnson, CFPUA Senior Engineer, was contacted and requested to provide a response of impacts that the proposed project would have on wastewater services. Bernice Johnson responded that the public sewer is available and adequate to serve the proposed project. Also, the closest sewer main is a 10-inch line located about 65 feet off-site and buried 11 feet deep. It is a gravity flow system and engineer will have final determination if the system will have a private lift station.</p> <p>The required permits will be obtained through NC DEQ or other agencies to construct and operate sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system.</p>
Water Supply	2	<p>Water supply wells were not identified at the site. Public water supply will be provided to the site by the CFPUA. The increased water demand due to the site development will be adequately supplied via mainline from CPFUA. Bernice Johnson, CFPUA Senior Engineer, was contacted and requested to provide a response of impacts that the proposed project will have on potable water supply services. A response to our request has not been provided and will be included in the ERR when received. The proposed project should not negatively affect the municipal water supply of the region.</p> <p>Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources (DWR)/Public Water Supply Section prior to the award of a contract or the initiation of construction as</p>

		<p>per 15A NCAC 18C .0300 et. seq. All public water supply systems must comply with state and federal drinking water monitoring requirements. If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/ Public Water Supply Section. According to the NC DWR Water Quality Regional Operations Section (WQROS), a complete search for DWR records should be completed (see SCH Comments).</p> <p><b>Attachment</b> – SCH Comments</p>
Public Safety - Police, Fire and Emergency Medical	2	<p>The New Hanover Sheriff Department meets the needs of the site development and local area. The sheriff department provides routine patrol in the site area.</p> <p>The New Hanover County Fire Department Station 17 meets the needs of the site development and local area. The site development is located 0.75-miles from the station. According to the Staff Summary Report, fire protection is provided by New Hanover County Fire Services, New Hanover County Northern Fire District, and New Hanover County Murrayville Station.</p> <p>The New Hanover County EMT meets the needs of the site development and local area. The site development is located approximately 9-miles from the New Hanover Regional Medical Center (hospital).</p> <p>New Hanover County Emergency Medical Services Director, Mr. Steven Still, was contacted and requested to provide a response of impacts the project will have on their local services. A response to our request has not been provided and will be included in the ERR when received. New Hanover County Fire Chief, Mr. Donnie Hall, was contacted and requested to provide a response of impacts the project will have on their local services. A response to our request has not been provided and will be included in the ERR when received. New Hanover County Sheriff, Mr. Edward J. McMahon, was contacted and requested to provide a response of impacts the project will have on their local services. A response to our request has not been provided and will be included in the ERR when received.</p>
Parks, Open Space and Recreation	2	<p>The Parkwood Recreation Center and Park is located approximately 0.25 miles east of the site. Other public parks are located within one mile of the site. The site development will not adversely impact any local open space or recreational facilities. A play area and picnic pavilion are included in the proposed project's site plans.</p> <p>New Hanover Recreational Services Director, Ms. Tara Duckworth, was contacted and requested to provide a response of impacts that the proposed project will have on their local services. Ms. Duckworth responded indicating that adequate recreational services and facilities are available to the site and the proposed</p>

		project will not adversely affect their services. She noted that Smith Creek Park, Ogden Park and Parkwood Park are available for the proposed project’s residents. A copy of her response is attached.
Transportation and Accessibility	2	<p>The site area is provided with public bus transportation that is available through the WAVE Bus System. The site is located along the Northeast (Bus 104) Route along Gordon Road. The site area is located in an area within walking distance of businesses, churches, schools and recreational facilities.</p> <p>According to NC DOT, the CAPE FEAR MOVING FORWARD 2045 METROPOLITAN TRANSPORTATION PLAN (<a href="https://www.wmpo.org/plans/">https://www.wmpo.org/plans/</a>) and Wilmington MPO MTP (page 77) should be consulted for information on future and existing roadway and transit recommendations, plans and projects for the area surrounding the proposed project site. This includes Multi-use and Bicycle/ Pedestrian projects along Gordon Road. According to the Staff Summary Report, the “timing of the Gordon Road widening project has been accelerated and is now scheduled to begin in 2024.”</p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	3	<p>Unique features or geological features were not identified on-site or in the vicinity of the site. A query of the NC NHP database resulted in no records for important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. The Upper Smith Creek Natural Area along with several Managed Areas were identified within one mile of the proposed project site. However, the proposed project activities and distance from the areas will result in no identifiable potential effects to these areas. Additionally, wild and scenic rivers will not be affected by the proposed project.</p> <p>The proposed project will not include the discharge of sewer to surfaces of the site or surrounding properties. The site will be provided with municipal wastewater access.</p> <p>Wetland areas located on the northern portion of the site will be impacted by the proposed development. A jurisdictional determination of surface water features has been completed for the site by USACE and is attached. The determination indicates that jurisdictional non-streams and wetland areas are located on the site. A wetland delineation map dated February 1, 2021 is included with the jurisdictional determination. Based upon the site layout; these features will be impacted by the proposed development. The proposed project will result in temporary impacts to approximately 0.057 acres and permanent impacts to approximately 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity,</p>

		<p>sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site.</p> <p>Permits will be required in order to impact these features. A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.</p> <p>The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the environmental review record when received from the permitting agencies.</p> <p>The attached Floodplain Management Determination (EO 11988) and Protection of Wetlands (EO 11990) Determination documents the 8-step process under 24 CFR 55.20.</p>
Vegetation, Wildlife	2	<p>The site consists of grass-covered land and wooded land in a densely developed area. Non-significant impacts to vegetation and wildlife will occur during site development. Surface water controls will be implemented during development to minimize surface runoff from the project site. An Erosion and Sedimentation Control Plan is required. Native plants will be utilized during grass planting and landscaping activities at the site.</p>
Other Factors	2	<p>No other factors were identified which would be impacted by the proposed project.</p>

**Additional Studies Performed:**

Wetland Delineation dated February 1, 2021 (Included in USACE JD)

Phase I Environmental Site Assessment dated October 13, 2021 by Pilot Environmental, Inc.

Geotechnical Engineering Report dated March 8, 2022 by Terracon Consultants, Inc.

**Field Inspection** (Date and completed by):

Stephen Arenson, Project Manager, Pilot Environmental, Inc., Phase I Environmental Site Assessment Field Inspection (September 23, 2021)

**List of Sources, Agencies and Persons Consulted** [40 CFR 1508.9(b)]:

USGS Topographic Map Scots Hill and Castle Hayne, NC Quadrangles

Aerial Photograph (2019) Google Earth

Site Plan, Estrella Landing, Stroud Engineering, P.A.

Parcel Information (Two Parcels of the site) – New Hanover County GIS Website

New Hanover County Zoning Letter dated April 28, 2021

USFWS – Coastal Barrier Resource Online System Map  
FEMA Online National Flood Hazard Map  
Borum, Wade and Associates, P.A. – Flood Certification Letter  
EPA Non-Attainment Air Quality Map  
NOAA – Coastal Zone Management Act Online Map  
Coastal Zone Management Email Request by Pilot  
USFWS Response Letter dated October 20, 2021  
North Carolina Natural Heritage Data Explorer – Natureserve.org  
Completed Thermal Explosives Worksheet  
Thermal Explosives Response Email from Deputy Fire Marshall Raymond Griswold  
US Census Bureau – Tiger Web Online Urban Area Map  
NCSHPO Inquiry Request Letter  
Catawba Indian Nation Response Letter dated November 2, 2021  
NC DOT – Annual Average Daily Traffic Online Map  
HUD – Online Day/Night Noise Level Calculator  
EPA – Online Sole Source Aquifer Map  
USFWS National Wetland Inventory Map  
US Army Corps of Engineers – Notification of Jurisdictional Determination  
US National Park Service – Online Wild and Scenic River Map  
Emergency Medical Services Information Request Email  
Fire Protection Services Information Request Email  
Health Services Information Request Email and Response Letter  
Law Enforcement Information Request Email  
New Hanover County Assistant Superintendent Eddie Anderson Response Letter  
Staff Summary Report for Conditional Rezoning Application dated March 4, 2021  
Public Sewer Information Request Email and Response Letter  
Public Water Information Request Email  
Recreational Services Director Tara Duckworth Response Letter  
Social Services Information ([dssinfo@nhcgov.com](mailto:dssinfo@nhcgov.com)) Request Email  
State Environmental Clearinghouse Comments

**List of Permits To Be Obtained** (later identified permits will be added to the ERR):

New Hanover County Erosion Control & Grading Permit  
New Hanover County Stormwater Permit  
New Hanover County Building Permits  
New Hanover County Floodplain Development Permit  
NCDEQ NPDES Construction Stormwater Permit (NCG010000)  
NCDEQ – Division of Water Resources Wastewater Collection System (Sanitary Sewer Permit)  
NCDEQ – Division of Water Resources Watermain Extension (Water System Permit)  
US Army Corp of Engineers General Permit Section 404  
US Army Corp of Engineers Nationwide Permit 29

**Public Outreach** [24 CFR 50.23 & 58.43]:

Community Information Meeting, February 22, 2021 - During the rezoning process, Estrella Landing Apartments, LLC was required to hold a public meeting and notices were sent to property

owners within 500 linear feet of the parcel boundaries. None of the adjacent owners attended the meeting. Documentation for the meeting is attached.

**Cumulative Impact Analysis [24 CFR 58.32]:**

The proposed project will be an affordable multifamily housing complex that will provide new, safe housing that is needed in the area. The proposed project is a multifamily residential development for low- and middle-income households. The proposed project will assist the City of Wilmington and New Hanover County to provide affordable housing for the local community. The City rezoned the main parcel in part to allow for an increase in housing diversity and allow those residents to utilize existing goods and services within one mile of the subject property according to the Staff Summary Report. One of the goals of the New Hanover County Strategic Plan for 2018-2023 is to encourage the development of complete communities in the unincorporated county by increasing housing diversity and access to basic goods and services. This site was found to be a suitable site with minimal adverse environmental impacts for multifamily affordable housing in an area that needs it.

**Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]:**

No alternative sites were evaluated due to the scoring system implemented by NCHFA to determine a qualified site location, in addition to the close proximity and availability of existing utility services to the proposed project site.

**No Action Alternative [24 CFR 58.40(e)]:**

With the No Action Alternative, affordable housing would not be provided for low- and middle-income families in the local community. The City would need to find other options to address the shortage in affordable housing inventory exacerbated by the effects of hurricanes that recently damaged or destroyed hundreds of homes.

**Summary of Findings and Conclusions:**

The preceding Statutory Checklist and Environmental Assessment Checklist, and the discussion below, document that the proposed project work will comply with regulations in 24 CFR part 58 and that there are no direct or cumulative adverse environmental impacts anticipated as a result of the proposed project.

**Mitigation Measures and Conditions [40 CFR 1505.2(c)]**

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Any change to the approved scope of work will require re-evaluation by the Certifying Officer for compliance with NEPA and other laws and Executive Orders.

This review does not address all federal, state, and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state, and local environmental permits and clearances may jeopardize federal funding. Guidelines, recommendations, and requirements identified during the State Environmental Clearinghouse inter-agency review shall be considered and required, where applicable.

Law, Authority, or Factor	Mitigation Measure
<p><b>Clean Air</b></p> <p>Clean Air Act, as amended, particularly section 176(c) &amp; (d); 40 CFR Parts 6, 51, 93</p>	<p>Construction-related activities can cause short-term exposures such as fugitive dust and emissions. The proposed project will conform to NC Air Quality Management regulations during and following construction. The contractor will use BMPs to reduce fugitive dust generation and diesel emissions. BMPS will include wetting the grading site during dry conditions. In addition, the stormwater retention system will be appropriately maintained to limit exposures.</p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Short-term construction noise will be limited to daytime hours with the exception of a water-main connection within Gordon Road. This will occur at night in order to limit disturbance to traffic during heavily trafficked hours. Construction equipment will be required to meet local sound control requirements.</p>
<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Applicable permits from the U.S. Army Corps of Engineers, NC Department of Environmental Quality, and local jurisdictions will be acquired before work is commenced. The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the environmental review record when received from the permitting agencies.</p> <p>While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the NFIP.</p> <p>The attached Floodplain Management Determination (EO 11988) and Protection of Wetlands (EO 11990) Determination documents the 8-step process under 24 CFR 55.20.</p>
<p><b>Wetlands Protection</b></p> <p>Executive Order 11990, particularly sections 2 and 5</p> <p><b>Unique Natural Features, Water Resources</b></p>	<p>The proposed project will result in temporary impacts to approximately 0.057 acres and permanent impacts to approximately 0.094 acres of NWI-mapped wetlands. Permits will be required in order to impact these features. A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.</p>

	<p>The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the environmental review record when received from the permitting agencies.</p> <p>The attached Floodplain Management Determination (EO 11988) and Protection of Wetlands (EO 11990) Determination documents the 8-step process under 24 CFR 55.20.</p>
<p><b>Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff</b></p>	<p>BMPs will be implemented during construction activities. Additionally, a surface water control feature will be installed at the site during the initial phase of construction in order minimize sediment loss. According to NC DEQ, the Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An Erosion and Sedimentation Control Plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable NC DEQ Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater Permit (NCG010000) is also usually issued should design features meet minimum requirements. Further, the proposed project will comply with 15A NCAC 2H 1000 State Stormwater Permitting Programs that regulate site development and postconstruction stormwater runoff control. According to NC DEQ, areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state. The proposed project will conform to construction requirements of the State of North Carolina and New Hanover County.</p>

**Determination:**

**Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]

The project will not result in a significant impact on the quality of the human environment.

**Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]

The project may significantly affect the quality of the human environment.

Preparer Signature: Andrea Gievers Date: 3/29/22

Name/Title/Organization: Andrea Gievers, Environmental SME, NCORR

Certifying Officer Signature: Laura H. Hogshead Date: 3/29/2022

Name/Title: Laura H. Hogshead, Director, NCORR

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).





**LEGEND**

- Site Boundary
- G** Gasoline Station
- U** Current UST(s)
- 1** Boat and Trailer Repair Facility
- 2** Shell
- 3** St. Paul's Missionary Baptist Church

**Drawing 2**  
 2019 Google Earth  
 Satellite Imagery  
 Scale: 1" = 300'



**Aerial Photograph**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

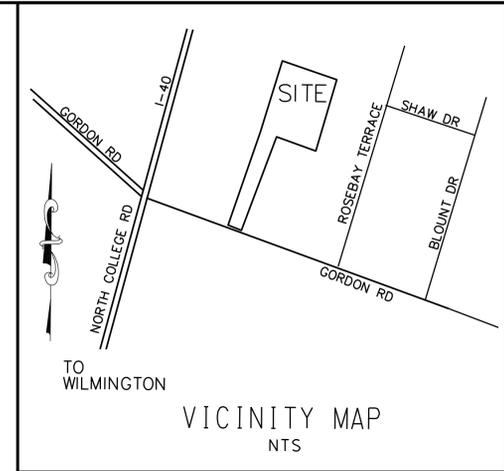
- NCHFA REQUIRED AMENITIES:**
- PLAYGROUND WITH BENCH SEAT
  - COVERED PICNIC AREA WITH 2 TABLES AND 2 GRILLS
  - BENCH SEATING IN 4 LOCATIONS
  - CLUBHOUSE WITH MULTIPURPOSE ROOM, COVERED PORCH WITH SEATING, AND RESIDENT COMPUTER CENTER

**BUFFER NOTES:**

REQUIRED TRANSITIONAL BUFFER .....TYPE A OPAQUE BUFFER  
ADJACENT TO R-15 SINGLE FAMILY USE

BUFFER WIDTH REQUIRED .....20'

PLANT MATERIALS REQUIRED .....MINIMUM 3 ROWS OF PLANTING WHICH SHALL BE 6' HIGH AND PROVIDE 100% OPAQUITY WITHIN ONE YEAR.



**PROJECT DATA**

PARCEL ID	R04300-001-007-000
DEED BOOK/PAGE	4797/397
ZONING	CZD RMF-M
CAMA LUC	URBAN MIXED USE
PROPERTY AREA	5.11 AC
TOTAL BUA	222,635 SF
	2.45 AC
	115,901 SF
% OF PROPERTY	52.1 %
BUILDING	37,557 SF
WALKWAYS	10,999 SF
PARKING/DRIVE AISLES	58,345 SF
RESERVE	9,000 SF
DISTURBANCE LIMITS	4.5 AC
RECEIVING STREAM	SMITH CREEK
CLASSIFICATION	C:Sw
STREAM INDEX	18-74-63
PROPOSED USE	APARTMENTS
TOTAL NUMBER OF UNITS	84
1 BEDROOM	13
2 BEDROOM	35
3 BEDROOM	36

**DIMENSIONAL REQUIREMENTS PER CASE # Z21-03**

MAXIMUM BLDG HEIGHT	45 FT
MINIMUM FRONT YARD	35 FT
MINIMUM REAR YARD	25 FT
MINIMUM SIDE YARD	20 FT

**LEGEND**

PROJECT BOUNDARY	---
EX WATER MAIN	---
PROP WATER MAIN	---
STORMDRAIN	---
WETLAND LINE	---
EX CONTOURS	---
SWALE	---
SILT FENCE	---
DISTURBED AREA	---

**SHEET INDEX**

COVER	1
LANDSCAPING	2
GRADING	3
EROSION CONTROL	4
UTILITY COVER	5
UTILITY PROFILE	6
DETAILS	7---

GORDON ROAD SR 2048 (PUBLIC R/W WIDTH VARIES)

GORDON 4601, LLC  
D.B. 6392 PG. 619  
PID: R04300-001-008-000  
ZONE: B-1  
USE: 58-GAS STATION

60' ACCESS EASEMENT  
PER DEED BOOK 2443 PAGE 284  
AND DEED BOOK 1215 PAGE 217

PROVIDE YELLOW PAINTED MEDIAN TO DELINEATE DRIVE AISLE FROM VEHICLE BACKING AREA

MOUNTABLE CONCRETE MEDIAN

PROVIDE "NO PARKING" SIGNAGE ALONG DRIVE AISLE

ROBERT EVANS JR  
D.B. 5958 PG. 1628  
PID: R04300-008-017-001  
ZONE: R-15  
USE: 11-MULTIPLE HOMES

GORDON ROAD INVESTMENTS LLC  
D.B. 5565 PG. 2451  
PID: R04300-001-010-000  
ZONE: R-15  
USE: 958-UNUSED

ANN S DOWNING  
D.B. 6410 PG. 1659  
M.B. 49 PG. 214  
PID: R04300-001-009-000  
ZONE: B-1  
USE: 958-UNUSED

HAWTHORNE AT SMITH CREEK APARTMENTS, LLC  
D.B. 6167 PG. 124  
PID: R04300-001-004-000  
ZONE: R-15  
USE: 12-APARTMENT

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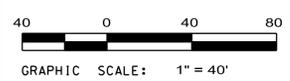
**PARKING CALCULATIONS**

PER SECTION 81-1 FOR APARTMENTS:

1.5 SPACES PER 1 BEDROOM UNIT X 13 UNITS = 20 SPACES  
2.0 SPACES PER 2 BEDROOM UNIT X 35 UNITS = 70 SPACES  
2.0 SPACES PER 3 BEDROOM UNIT X 36 UNITS = 72 SPACES

162 SPACES REQUIRED  
(162 PROVIDED, INCLUDING 22 VAN ACCESSIBLE SPACES)

- NOTES:**
- BOUNDARY BY OTHERS.
  - A PORTION OF THE SUBJECT PROPERTY IS LOCATED IN THE 100 YEAR FLOOD ZONE PER FEMA FLOOD ZONE PANEL 3720314900K.
  - 404 WETLANDS ARE FOUND ON THE SUBJECT PROPERTY, AS DELINEATED BY OTHERS.
  - WATER AND SEWER SERVICE PROVIDED BY CFPWA.
  - SOLID WASTE REMOVAL BY PRIVATE CONTRACTOR.
  - ALL RUNOFF FROM IMPERVIOUS SURFACES SHALL BE DIRECTED TO THE COLLECTION/TREATMENT SYSTEM.

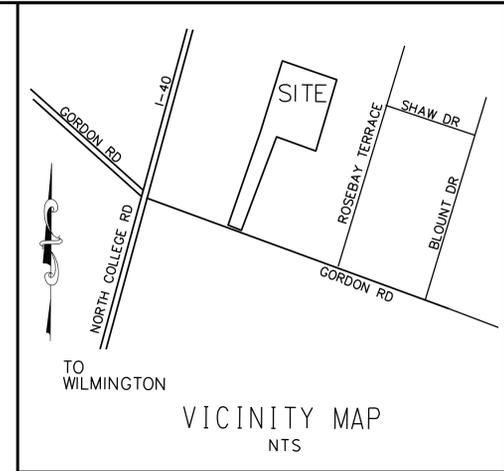


<b>PRELIMINARY</b>	COVER	<b>ESTRELLA LANDING APARTMENTS</b> 4615 GORDON ROAD WILMINGTON, NC 28403	DEVELOPER: ESTRELLA LANDING APARTMENTS, LLC ADDRESS: PO BOX 15025 WILMINGTON, NC 28408 PHONE: 910-791-3354	DRAWN: DLW SCALE: 1" = 40' SHEET: 1 OF --
	<b>ESTRELLA LANDING APARTMENTS</b>		<b>STROUD ENGINEERING, P.A.</b> 102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403 (910) 815-0775 (910) 815-0593 FAX	
	4615 GORDON ROAD WILMINGTON, NC 28403		C-0647	

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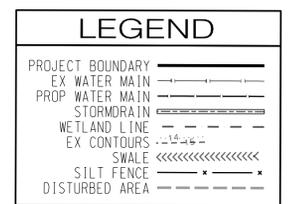


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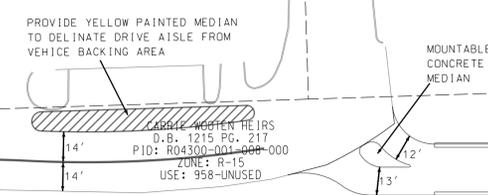
COVER	1
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UTILITY PROFILE	6
DETAILS	7---

GORDON ROAD SR 2048 (PUBLIC R/W WIDTH VARIES)

GORDON 4601, LLC  
D.B. 6392 PG. 619  
PID: R04300-001-008-000  
ZONE: B-1  
USE: 58-GAS STATION

PROVIDE DOUBLE YELLOW CENTERLINE MARKINGS IN SHARED AISLE

60' ACCESS EASEMENT PER DEED BOOK 2643 PAGE 284 AND DEED BOOK 1215 PAGE 217



PROVIDE "NO PARKING" SIGNAGE ALONG DRIVE AISLE

ROBERT EVANS JR  
D.B. 5958 PG. 1628  
PID: R04300-008-017-001  
ZONE: R-15  
USE: 11-MULTIPLE HOMES

GORDON ROAD INVESTMENTS LLC  
D.B. 5565 PG. 2451  
PID: R04300-001-010-000  
ZONE: R-15  
USE: 958-UNUSED

ANN S DOWNING  
D.B. 6410 PG. 1659  
M.B. 49 PG. 214  
PID: R04300-001-009-000  
ZONE: B-1  
USE: 958-UNUSED

PRELIMINARY

**ESTRELLA LANDING APARTMENTS**

4615 GORDON ROAD  
WILMINGTON, NC 28405

DEVELOPER: ESTRELLA LANDING APARTMENTS, LLC  
ADDRESS: PO BOX 15025  
WILMINGTON, NC 28408  
PHONE: 910-791-3354

STRoud ENGINEERING, P.A.  
102-D CINEMA DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
(910) 815-0775 (910) 815-0593 FAX

DRAWN: DLW  
SCALE: 1" = 40'  
SHEET: 1 OF --

- NOTES:**
- BOUNDARY BY OTHERS.
  - A PORTION OF THE SUBJECT PROPERTY IS LOCATED IN THE 100 YEAR FLOOD ZONE PER FEMA FLOOD ZONE PANEL 3720314900K.
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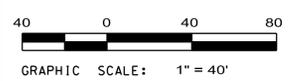
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1.5 SPACES PER 1 BEDROOM UNIT X 13 UNITS	= 20 SPACES
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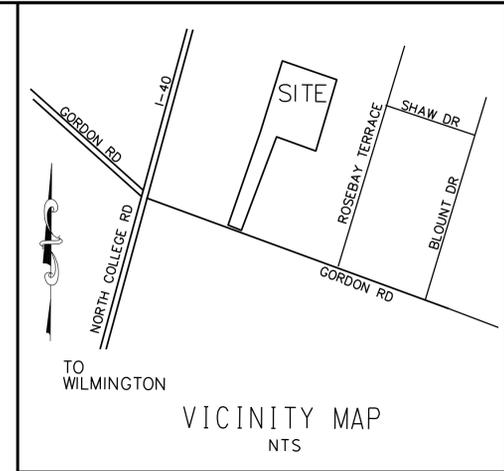
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**OPEN SPACE NOTES**

OPEN SPACE REQUIRED: 1.02 ACRES (20%)  
OPEN SPACE PROVIDED: 1.73 ACRES (34%)





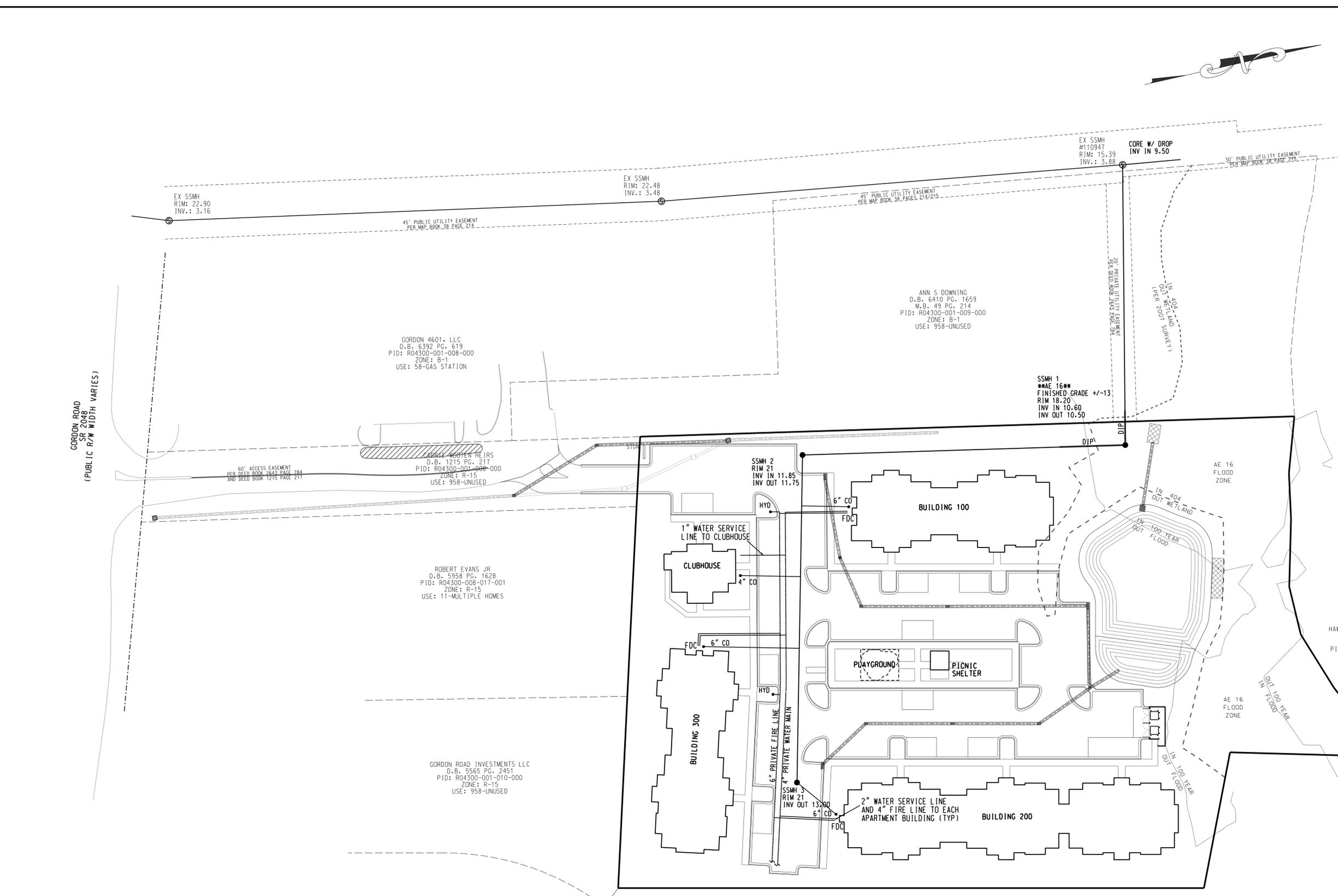


**PROJECT DATA**

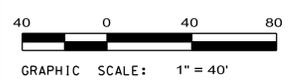
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CAMA LUC	URBAN MIXED USE
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TOTAL BUA	222,635 SF
	2.45 AC
	115,901 SF
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BUILDING	37,557 SF
WALKWAYS	10,999 SF
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RESERVE	9,000 SF
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RECIEVING STREAM	SMITH CREEK
CLASSIFICATION	C;Sw
STREAM INDEX	18-74-63
PROPOSED USE	APARTMENTS
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PER CASE # Z21-03	
MAXIMUM BLDG HEIGHT	45 FT
MINIMUM FRONT YARD	35 FT
MINIMUM REAR YARD	25 FT
MINIMUM SIDE YARD	20 FT

**LEGEND**

PROJECT BOUNDARY	———
EX WATER MAIN	———
PROP WATER MAIN	———
STORMDRAIN	———
WETLAND LINE	———
EX CONTOURS	———
SWALE	———
SILT FENCE	———
DISTURBED AREA	———



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			ADDRESS: PO BOX 15025 WILMINGTON, NC 28408		SCALE: 1" = 40'
			PHONE: 910-791-3354		SHEET: 5 OF ..
		4615 GORDON ROAD WILMINGTON, NC 28403	102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403 (910) 815-0775 (910) 815-0593 FAX		

## SITE PHOTOGRAPHS

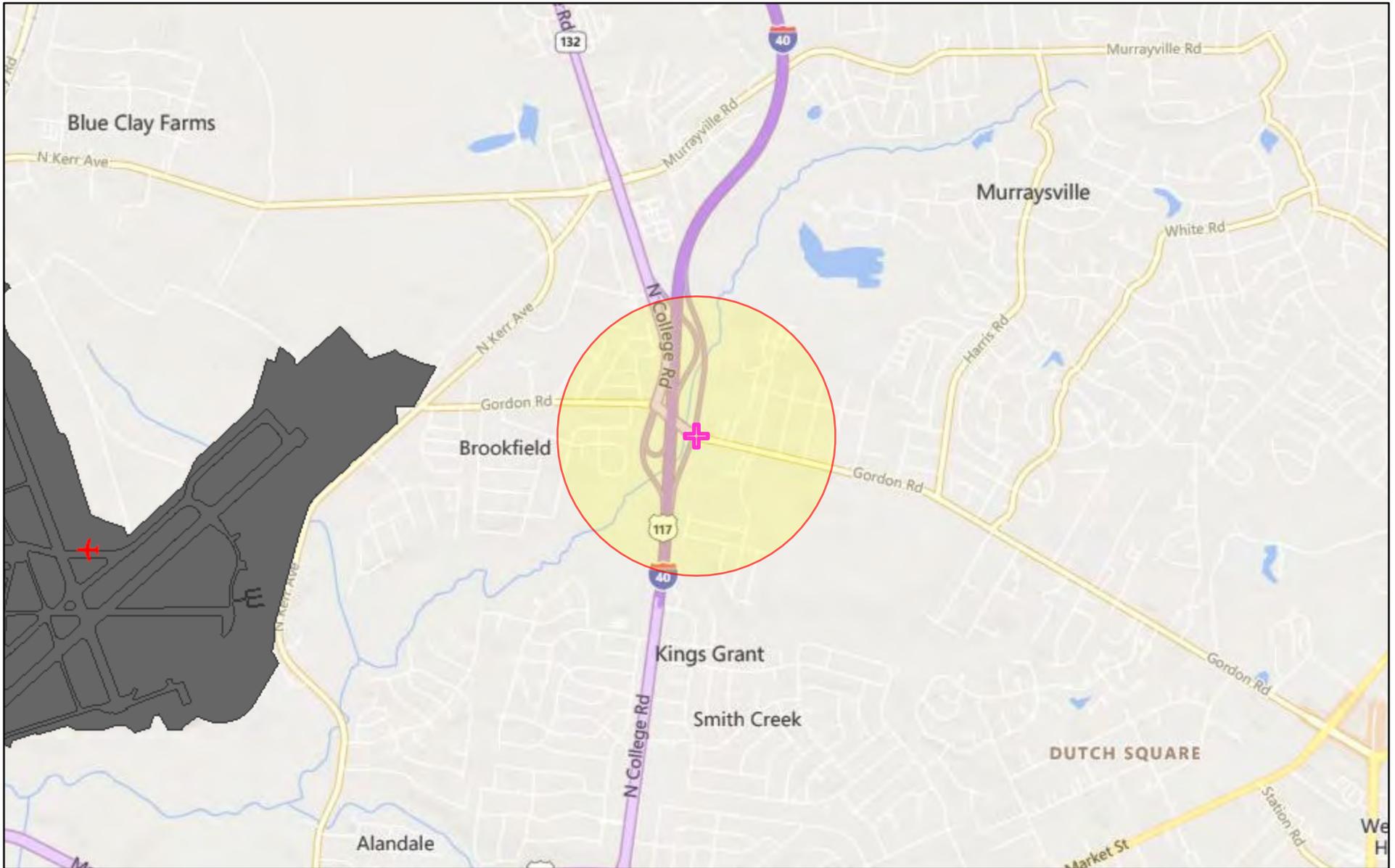


Photograph 1 - View of wooded land located on the site



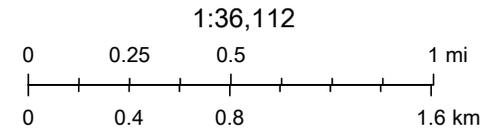
Photograph 2 - View of debris located on the site

# Estrella Landing Apartments - Civilian Airports 2,500 ft

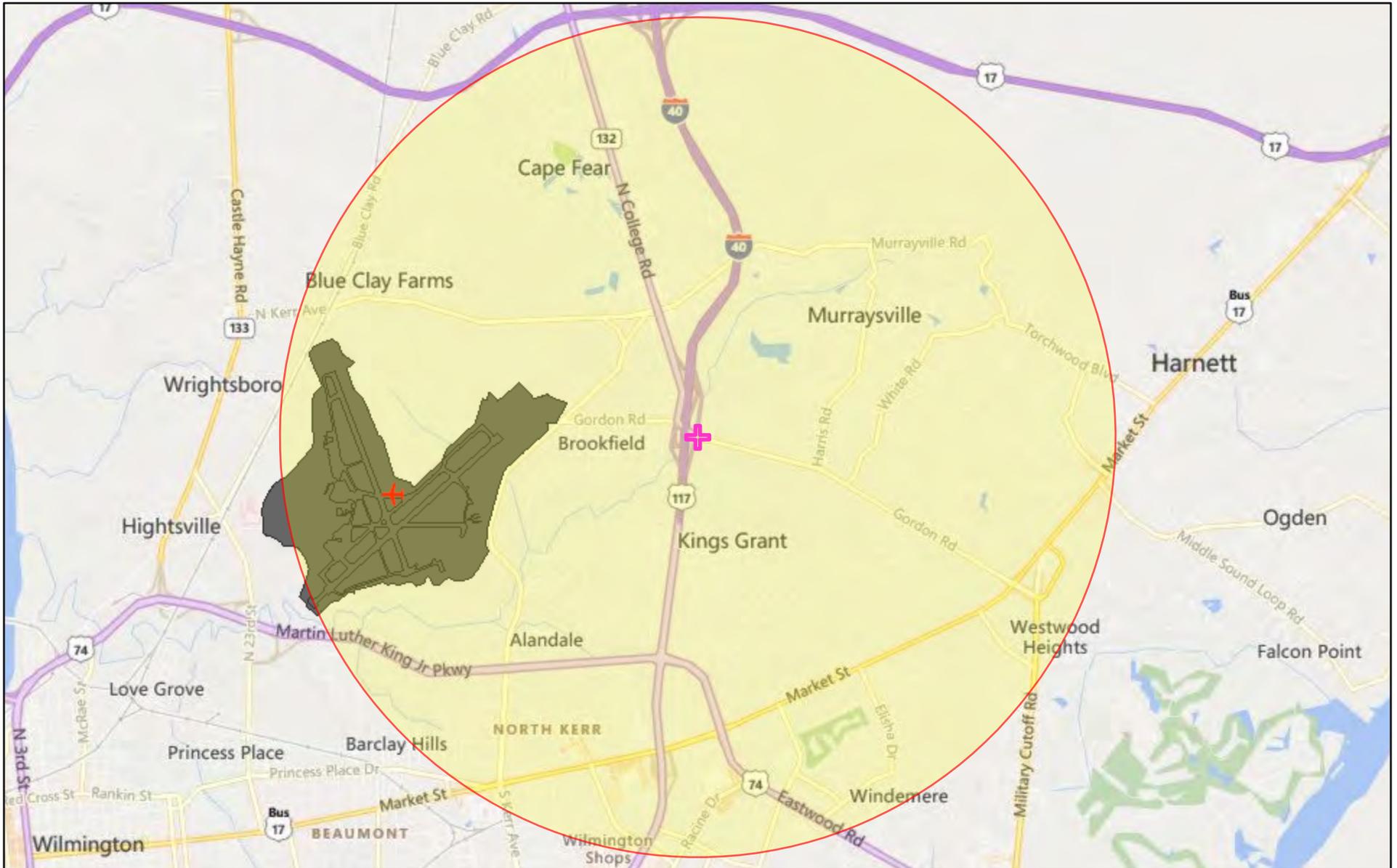


December 9, 2021

-  Project Buffer
-  Airport Points
-  Estrella Landing Apartments - Civilian Airports
-  Airport Polygons

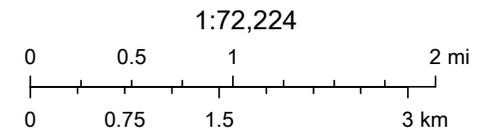


# Estrella Landing Apartments - Military Airports 15,000 ft



December 9, 2021

-  Project Buffer
-  Estrella Landing Apartments - Military Airports
-  Airport Points
-  Airport Polygons





> 1 ASSOC CITY: WILMINGTON 4 STATE: NC LOC ID: ILM FAA SITE NR: 17211.\*A  
> 2 AIRPORT NAME: WILMINGTON INTL 5 COUNTY: NEW HANOVER, NC  
3 CBD TO AIRPORT (NM): 3 NE 6 REGION/ADO: ASO / MEM 7 SECT AERO CHT: CHARLOTTE

**GENERAL**

10 OWNERSHIP: PUBLIC  
> 11 OWNER: NEW HANOVER COUNTY  
> 12 ADDRESS: 1740 AIRPORT BLVD  
WILMINGTON, NC 28405  
> 13 PHONE NR: 910-341-4333  
> 14 MANAGER: JULIE WILSEY  
> 15 ADDRESS: 1740 AIRPORT BLVD  
WILMINGTON, NC 28405

> 16 PHONE NR: 910-341-4333  
> 17 ATTENDANCE SCHEDULE:

MONTHS	DAYS	HOURS
ALL	ALL	ALL

18 AIRPORT USE: PUBLIC  
19 ARPT LAT: 34-16-16.1N ESTIMATED  
20 ARPT LONG: 77-54-10.4W  
21 ARPT ELEV: 31.7 SURVEYED  
22 ACREAGE: 1,800  
> 23 RIGHT TRAFFIC: NO  
> 24 NON-COMM LANDING: NO  
25 NPIAS/FED AGREEMENTS: YES / NGPRY3  
> 26 FAR 139 INDEX: I B S 05/1973

**SERVICES**

> 70 FUEL: 100LL A A+  
> 71 AIRFRAME RPRS: MAJOR  
> 72 PWR PLANT RPRS: MAJOR  
> 73 BOTTLE OXYGEN: HIGH/LOW  
> 74 BULK OXYGEN: HIGH/LOW  
75 TSNT STORAGE: HGR TIE  
76 OTHER SERVICES: AFRT,CARGO,CHTR,  
INSTR,RNTL,SALES

**BASED AIRCRAFT**

90 SINGLE ENG: 67  
91 MULTI ENG: 11  
92 JET: 21  
93 HELICOPTERS: 8  
TOTAL: 107  
94 GLIDERS: 0  
95 MILITARY: 0  
96 ULTRA-LIGHT: 0

**FACILITIES**

> 80 ARPT BCN: CG  
> 81 ARPT LGT SKED: SEE RMK  
BCN LGT SKED: SS-SR  
> 82 UNICOM: 122.950  
> 83 WIND INDICATOR: YES-L  
84 SEGMENTED CIRCLE:  
85 CONTROL TWR: YES  
86 FSS: RALEIGH  
87 FSS ON ARPT: NO  
88 FSS PHONE NR:  
89 TOLL FREE NR: 1-800-WX-BRIEF

**OPERATIONS**

100 AIR CARRIER: 8,626  
102 AIR TAXI: 13,912  
103 G A LOCAL: 9,283  
104 G A ITNRNT: 25,855  
105 MILITARY: 11,430  
TOTAL: 69,106  
OPERATIONS FOR 12  
MONTHS ENDING 02/29/2020

**RUNWAY DATA**

	06/24	17/35
> 30 RUNWAY IDENT:	8,016	7,754
> 31 LENGTH:	150	150
> 32 WIDTH:	ASPH-G	ASPH-G
> 33 SURF TYPE-COND:	GRVD	GRVD
> 34 SURF TREATMENT:	75.0	60.0
35 GROSS WT: S	160.0	185.0
36 (IN THSDS) D	275.0	300.0
37 2D		
38 2D/2DS		
> 39 PCN:	78/F/B/W/T	61/F/B/W/T

**LIGHTING/APCH AIDS**

	HIGH	HIGH
> 40 EDGE INTENSITY:	PIR- G / PIR- G	PIR- G / PIR- G
> 42 RWY MARK TYPE-COND:	P4R / P4L	P4L / P4L
> 43 VGS:	57 / 48	50 / 36
44 THR CROSSING HGT:	3.00 / 3.00	3.00 / 3.00
45 VISUAL GLIDE ANGLE:	- N / - N	- / -
> 46 CNTRLN-TDZ:	TR - / TR -	R - / T - N
> 47 RVR-RVV:	Y / N	Y /
> 48 REIL:	/ MALSR	/ MALSR
> 49 APCH LIGHTS:		

**OBSTRUCTION DATA**

	PIR / PIR	C / PIR
50 FAR 77 CATEGORY:	/	350 / 400
> 51 DISPLACED THR:	/	/
> 52 CTLG OBSTN:	/	/
> 53 OBSTN MARKED/LGTD:	/	/
> 54 HGT ABOVE RWY END:	/	/
> 55 DIST FROM RWY END:	0 / 0	0 / 0
> 56 CNTRLN OFFSET:	/	/
57 OBSTN CLNC SLOPE:	50:1 / 50:1	50:1 / 50:1
58 CLOSE-IN OBSTN:	N / N	N / N

**DECLARED DISTANCES**

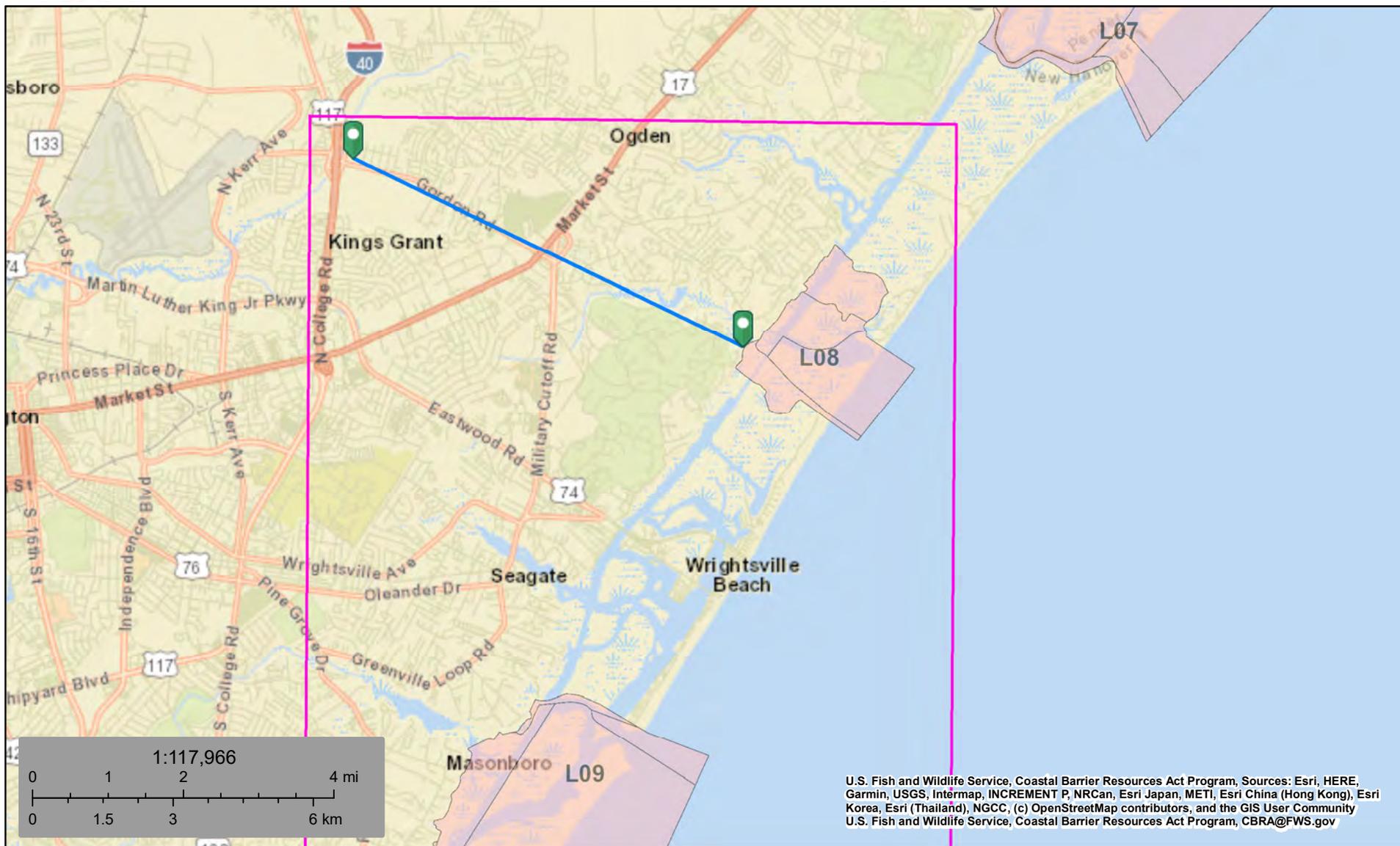
	8,016 / 8,016	7,754 / 7,754
> 60 TAKE OFF RUN AVBL (TORA):	8,016 / 8,016	7,754 / 7,754
> 61 TAKE OFF DIST AVBL (TODA):	8,016 / 8,016	6,954 / 7,604
> 62 ACLT STOP DIST AVBL (ASDA):	8,016 / 8,016	6,604 / 7,204
> 63 LNDG DIST AVBL (LDA):		

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

> 110 REMARKS:

- A 016 EXT 1001.
- A 081 ACTVT REIL RY 06, MALSR RY 24, HIRL RY 06/24, PAPI RY 06 AND 24, ALL TWY LGTS - CTAF.
- A 086 FSS-RALEIGH RDU-NOTAM ILM
- A 110-001 FUEL: AIR WILMINGTON, INC, 910-763-4691
- A 110-004 BEARING STRENGTH RWY 06-24: ST175
- A 110-005 BEARING STRENGTH RWY 17-35: ST175
- A 110-006 FOR CD IF UNA TO CTC ON FSS FREQ, CTC WASHINGTON ARTCC AT 703-771-3587.

111 INSPECTOR: ( F ) 112 LAST INSP: 03/06/2020 113 LAST INFO REQ:



December 9, 2021

 CBRS Buffer Zone       System Unit

**CBRS Units**

 Otherwise Protected Area

This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at <https://www.fws.gov/cbra/maps/index.html>. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (<http://www.fws.gov/cbra/Determinations.html>) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS mapper.



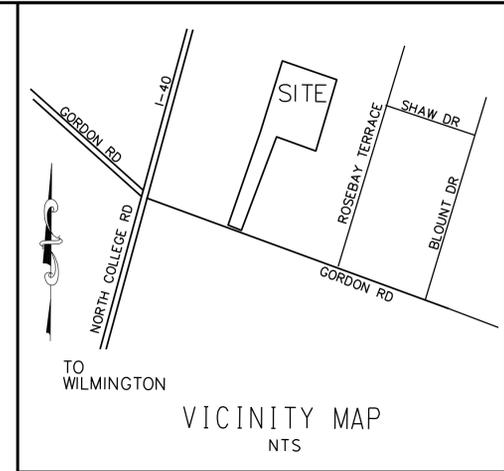
- NCHFA REQUIRED AMENITIES:**
- PLAYGROUND WITH BENCH SEAT
  - COVERED PICNIC AREA WITH 2 TABLES AND 2 GRILLS
  - BENCH SEATING IN 4 LOCATIONS
  - CLUBHOUSE WITH MULTIPURPOSE ROOM, COVERED PORCH WITH SEATING, AND RESIDENT COMPUTER CENTER

**BUFFER NOTES:**

REQUIRED TRANSITIONAL BUFFER .....TYPE A OPAQUE BUFFER  
ADJACENT TO R-15 SINGLE FAMILY USE

BUFFER WIDTH REQUIRED .....20'

PLANT MATERIALS REQUIRED .....MINIMUM 3 ROWS OF PLANTING WHICH SHALL BE 6' HIGH AND PROVIDE 100% OPAQUITY WITHIN ONE YEAR.



**PROJECT DATA**

PARCEL ID	R04300-001-007-000
DEED BOOK/PAGE	4797/397
ZONING	CZD RMF-M
CAMA LUC	URBAN MIXED USE
PROPERTY AREA	5.11 AC
TOTAL BUA	222,635 SF
	2.45 AC
	115,901 SF
% OF PROPERTY	52.1 %
BUILDING	37,557 SF
WALKWAYS	10,999 SF
PARKING/DRIVE AISLES	58,345 SF
RESERVE	9,000 SF
DISTURBANCE LIMITS	4.5 AC
RECEIVING STREAM	SMITH CREEK
CLASSIFICATION	C:Sw
STREAM INDEX	18-74-63
PROPOSED USE	APARTMENTS
TOTAL NUMBER OF UNITS	84
1 BEDROOM	13
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**DIMENSIONAL REQUIREMENTS PER CASE # Z21-03**

MAXIMUM BLDG HEIGHT	45 FT
MINIMUM FRONT YARD	35 FT
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**LEGEND**

PROJECT BOUNDARY	---
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SWALE	---
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**SHEET INDEX**

COVER	1
LANDSCAPING	2
GRADING	3
EROSION CONTROL	4
UTILITY COVER	5
UTILITY PROFILE	6
DETAILS	7---

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M.B. 49 PG. 214  
PID: R04300-001-009-000  
ZONE: B-1  
USE: 958-UNUSED

HAWTHORNE AT SMITH CREEK APARTMENTS, LLC  
D.B. 6167 PG. 124  
PID: R04300-001-004-000  
ZONE: R-15  
USE: 12-APARTMENT

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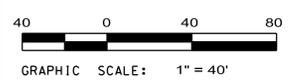
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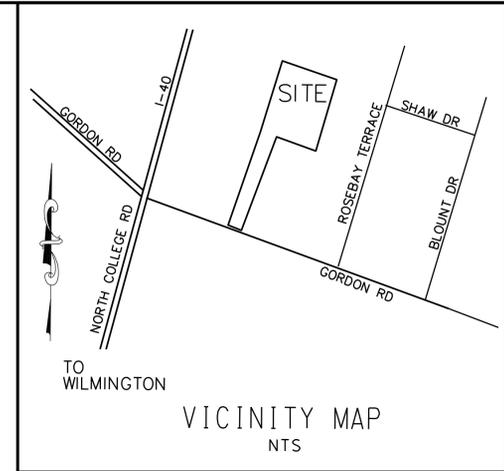
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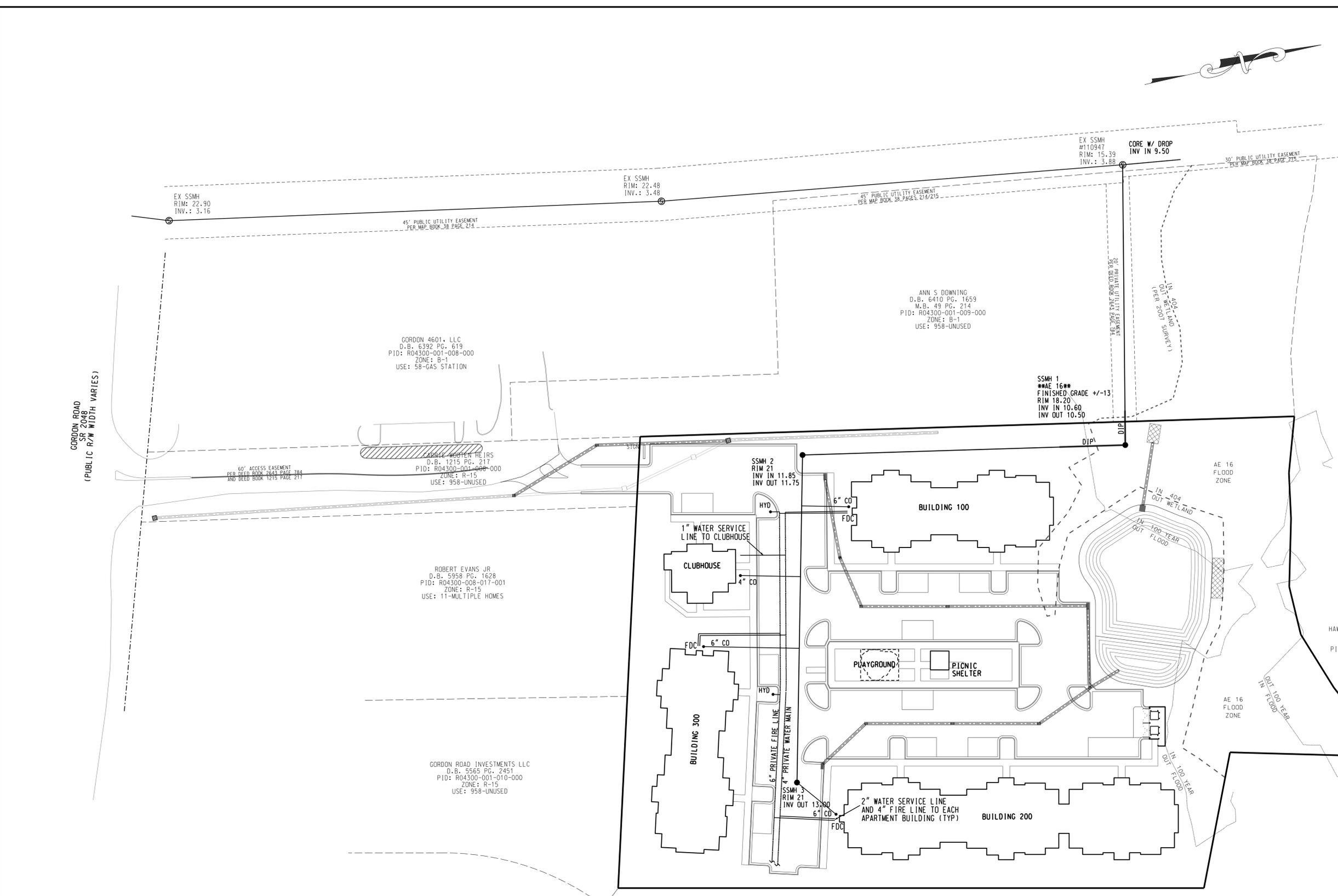


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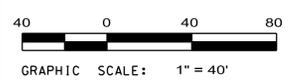
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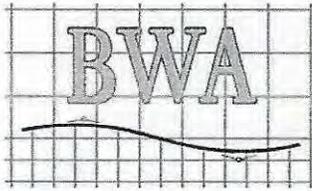
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			ADDRESS: PO BOX 15025 WILMINGTON, NC 28408
			PHONE: 910-791-3354
		<b>STROUD ENGINEERING, P.A.</b>	DRAWN: DLM
		102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403 (910) 815-0775 (910) 815-0593 FAX	SCALE: 1" = 40'
			SHEET: 5 OF ..



Engineers  
Planners  
Surveyors

Borum, Wade and Associates, P.A.

April 19, 2021

FLOOD CERTIFICATION

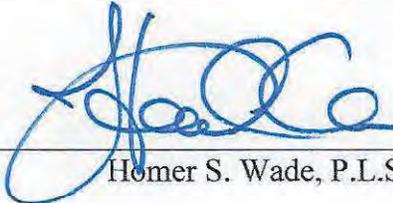
Re: Estrella Landing Apts. – 4615 Gordon Rd. – Wilmington, New Hanover Co., N.C.

PARID #: R04300-001-007-000  
(DB 4797, Pg. 397) (5.12 +/- acres)

Current Owner: Essie W. Clay, Trustee  
Charles R. & Essie W. Clay Revocable Living Trust  
4618 Gordon Rd.  
Wilmington, NC 28411

This is to certify that I have checked the location of the subject property on the Flood Insurance Rate Map Panel Number 3720314900 K Effective Date: August 28, 2018 as issued by the Federal Emergency Management Agency, and to the best of my knowledge and belief, a "portion" of the Subject Property as shown on the attached National Flood Hazard Layer FIRMette is in Zone AE (Special Flood Hazard Area - with Base Flood Elevations) and within the 100-year flood boundary. The "remainder" of the property is located in Zone X and is not located in a Special Flood Hazard Area. Proposed buildings and improvements will be located on that portion of the property within Zone X outside and above the Special Flood Hazard Area.

No field survey was preformed to determine this location. The designation zone is strictly determined by the FEMA Flood Insurance Rate Maps for North Carolina.

DATE 04/19/2021 BY   
Homer S. Wade, P.L.S.



# National Flood Hazard Layer FIRMeTte



77°52'14"W 34°16'48"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
OTHER FEATURES		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/19/2021 at 9:59 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Estrella Landing

0 250 500 1,000 1,500 2,000 Feet 1:6,000 77°51'36"W 34°16'18"N  
Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



## North Carolina Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of November 30, 2021

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

\* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 µg/m<sup>3</sup>) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:

NORTH CAROLINA

Important Notes

Download National Dataset: [dbf](#) | [xls](#) | [Data dictionary \(PDF\)](#)

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/Part County	Population (2010)	State/County FIPS Codes
<b>NORTH CAROLINA</b>								
Cabarrus County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Whole	178,011	37/025
Cabarrus County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Part	176,928	37/025
Catawba County	PM-2.5 (1997)-NAAQS revoked	Hickory-Morganton-Lenoir, NC	050607080910	12/19/2011 *	Former Subpart 1	Whole	154,358	37/035
Chatham County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Part	32,372	37/037
Davidson County	1-Hour Ozone (1979)-NAAQS revoked	Greensboro-Winston-Salem-High Point, NC	92	11/08/1993	Moderate	Whole	162,878	37/057
Davidson County	PM-2.5 (1997)-NAAQS revoked	Greensboro-Winston-Salem-High Point, NC	050607080910	12/19/2011 *	Former Subpart 1	Whole	162,878	37/057

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Davie County	1-Hour Ozone (1979)-NAAQS revoked	Greensboro-Winston-Salem-High Point, NC	92	11/08/1993	Moderate	Part	1	37/059
Durham County	1-Hour Ozone (1979)-NAAQS revoked	Raleigh-Durham, NC	9293	06/17/1994	Moderate	Whole	267,587	37/063
Durham County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	267,587	37/063
Durham County	Carbon Monoxide (1971)	Raleigh-Durham, NC	929394	09/18/1995	Moderate <= 12.7ppm	Whole	267,587	37/063
Edgecombe County	8-Hour Ozone (1997)-NAAQS revoked	Rocky Mount, NC	040506	01/05/2007	Former Subpart 1	Whole	56,552	37/065
Forsyth County	1-Hour Ozone (1979)-NAAQS revoked	Greensboro-Winston-Salem-High Point, NC	92	11/08/1993	Moderate	Whole	350,670	37/067
Forsyth County	Carbon Monoxide (1971)	Winston-Salem, NC	9293	11/07/1994	Moderate <= 12.7ppm	Whole	350,670	37/067
Franklin County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	60,619	37/069
Gaston County	1-Hour Ozone (1979)-NAAQS revoked	Charlotte-Gastonia, NC	929394	07/05/1995	Moderate	Whole	206,086	37/071
Gaston County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Whole	206,086	37/071
Gaston County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Part	190,849	37/071

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Granville County	1-Hour Ozone (1979)-NAAQS revoked	Raleigh-Durham, NC	9293	06/17/1994	Moderate	Part	17,725	37/077
Granville County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	59,916	37/077
Guilford County	1-Hour Ozone (1979)-NAAQS revoked	Greensboro-Winston-Salem-High Point, NC	92	11/08/1993	Moderate	Whole	488,406	37/081
Guilford County	PM-2.5 (1997)-NAAQS revoked	Greensboro-Winston Salem-High Point, NC	050607080910	12/19/2011 *	Former Subpart 1	Whole	488,406	37/081
Haywood County	8-Hour Ozone (1997)-NAAQS revoked	Haywood and Swain Cos (Great Smoky NP), NC	040506070809	01/06/2010	Former Subpart 1	Part	985	37/087
Iredell County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Part	68,089	37/097
Iredell County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Part	65,899	37/097
Johnston County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	168,878	37/101
Lincoln County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Whole	78,265	37/109
Lincoln County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Part	64,189	37/109

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Mecklenburg County	1-Hour Ozone (1979)-NAAQS revoked	Charlotte-Gastonia, NC	929394	07/05/1995	Moderate	Whole	919,628	37/119
Mecklenburg County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Whole	919,628	37/119
Mecklenburg County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Whole	919,628	37/119
Mecklenburg County	Carbon Monoxide (1971)	Charlotte, NC	929394	09/18/1995	Not Classified	Whole	919,628	37/119
Nash County	8-Hour Ozone (1997)-NAAQS revoked	Rocky Mount, NC	040506	01/05/2007	Former Subpart 1	Whole	95,840	37/127
Orange County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	133,801	37/135
Person County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	39,464	37/145
Rowan County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Whole	138,428	37/159
Rowan County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Part	130,057	37/159
Swain County	8-Hour Ozone (1997)-NAAQS revoked	Haywood and Swain Cos (Great Smoky NP), NC	040506070809	01/06/2010	Former Subpart 1	Part	3,288	37/173
Union County	8-Hour Ozone (1997)-NAAQS revoked	Charlotte-Gastonia-Rock Hill, NC-SC	04050607080910111213	01/02/2014	Moderate	Whole	201,292	37/179

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Union County	8-Hour Ozone (2008)	Charlotte-Rock Hill, NC-SC	121314	08/27/2015	Marginal	Part	176,055	37/179
Wake County	1-Hour Ozone (1979)-NAAQS revoked	Raleigh-Durham, NC	9293	06/17/1994	Moderate	Whole	900,993	37/183
Wake County	8-Hour Ozone (1997)-NAAQS revoked	Raleigh-Durham-Chapel Hill, NC	040506	12/26/2007	Former Subpart 1	Whole	900,993	37/183
Wake County	Carbon Monoxide (1971)	Raleigh-Durham, NC	929394	09/18/1995	Moderate <= 12.7ppm	Whole	900,993	37/183

Important Notes

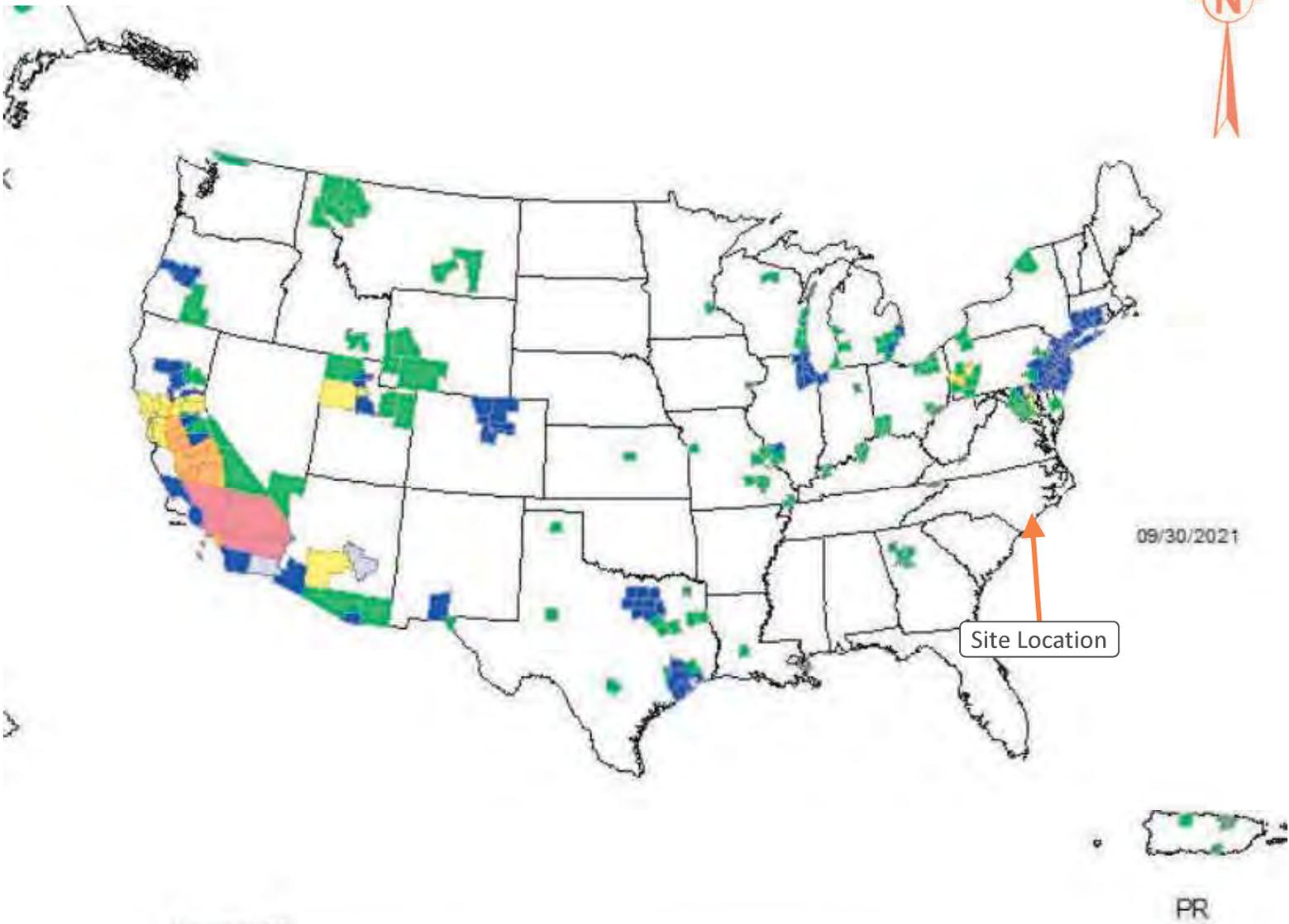
Discover.

Connect.

Ask.

Follow.

2021-11-30



Legend \*\*

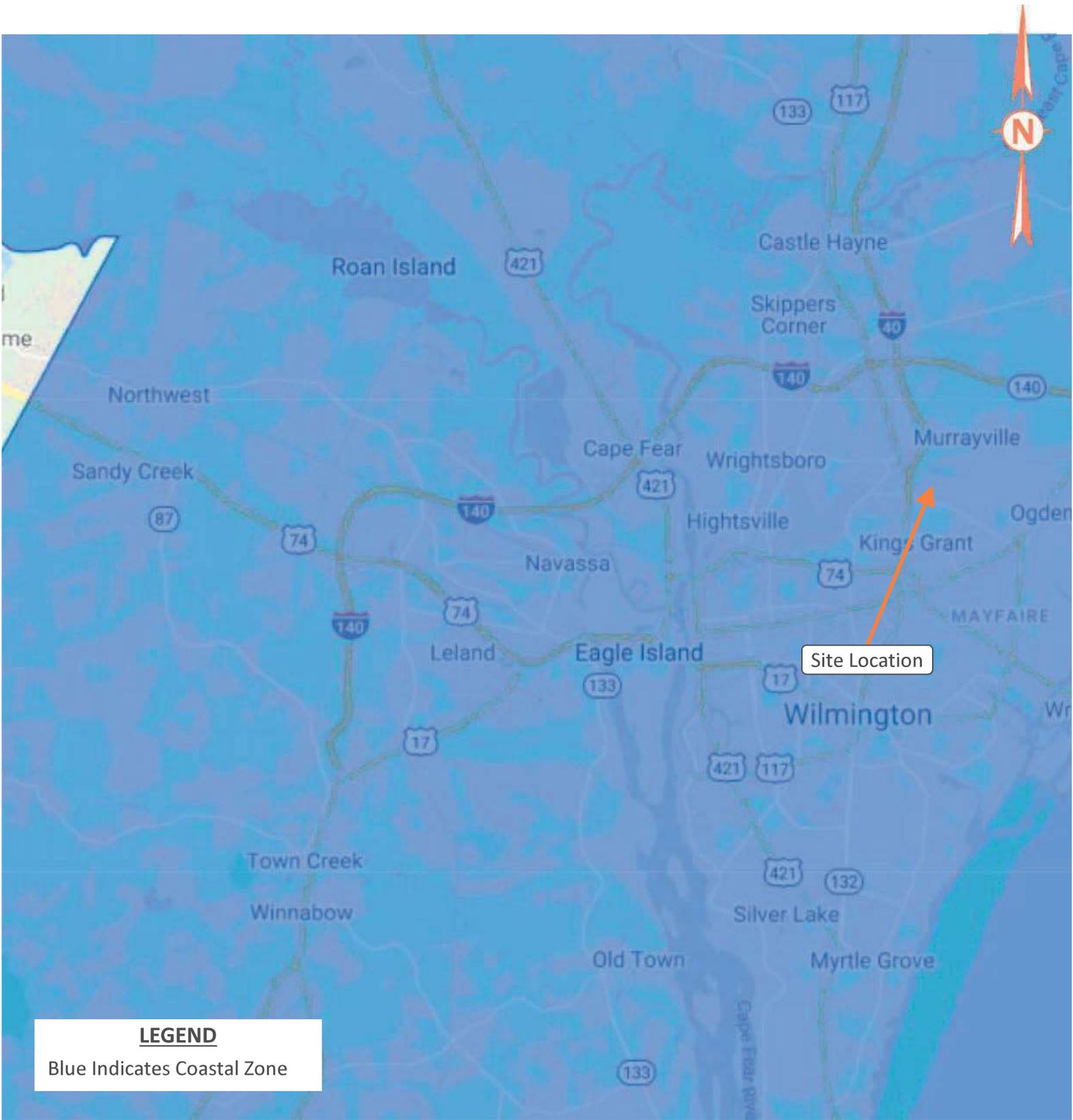
-  County Designated Nonattainment for 6 NAAQS Pollutants
-  County Designated Nonattainment for 5 NAAQS Pollutants
-  County Designated Nonattainment for 4 NAAQS Pollutants
-  County Designated Nonattainment for 3 NAAQS Pollutants
-  County Designated Nonattainment for 2 NAAQS Pollutants
-  County Designated Nonattainment for 1 NAAQS Pollutant

**Drawing 5**  
U. S. EPA Non-Attainment  
Air Quality Map

Not to Scale



**Non-Attainment Air Quality Map**  
Estrella Landing  
Approximate 5.71-Acre Tract  
Wilmington, New Hanover County, NC  
Pilot Project 7249



**LEGEND**  
 Blue Indicates Coastal Zone

**Drawing 6**  
 U. S. Coastal Zone  
 Management Area Map  
 Not to Scale



**U. S. Coastal Zone Management Map**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

## Gievers, Andrea

---

**From:** Stephanie Norris <snorris@norcomanagement.com>  
**Sent:** Monday, December 13, 2021 10:02 AM  
**To:** Govoni, Daniel  
**Cc:** MacPherson, Tara; Gievers, Andrea; Claudia Young; Matt Carter; Matt Raab (Wynnefield); Patty Reeder - WKFS  
**Subject:** RE: [External] Request for permit requirements for the following project DCM2021067

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

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

Hi Daniel

Thank you so much for the prompt response to my email request. I appreciate your help with making Estrella Landing a reality for the families and seniors of New Hanover County! Happy Holidays.

Stephanie

**Stephanie L. Norris, PE**  
*Affordable Housing Developer*



PO Box 15025  
Wilmington, NC 28408

Office: 910-791-3354  
Mobile: 919-669-1079

---

**From:** Govoni, Daniel <daniel.govoni@ncdenr.gov>  
**Sent:** Monday, December 13, 2021 9:59 AM  
**To:** Stephanie Norris <snorris@norcomanagement.com>  
**Cc:** MacPherson, Tara <tara.macpherson@ncdenr.gov>  
**Subject:** RE: [External] Request for permit requirements for the following project DCM2021067

Hello Stephanie,

North Carolina's coastal zone management program consists of, but is not limited to, the Coastal Area Management Act, the State's Dredge and Fill Law, Chapter 7 of Title 15A of North Carolina's Administrative Code, and the land use plan of the County and/or local municipality in which the proposed project is located. It is the objective of the Division of Coastal Management (DCM) to manage the State's coastal resources to ensure that proposed federal actions would be compatible with safeguarding and perpetuating the biological, social, economic, and aesthetic values of the State's coastal waters.

DCM has reviewed the submitted information pursuant to the management objectives and enforceable policies of Subchapters 7H and 7M of Chapter 7 in Title 15A of the North Carolina Administrative Code and concurs that the proposed activity is consistent with North Carolina's approved coastal management program.

Prior to the initiation of the activities described, the applicant should obtain any required State approvals or authorizations. Should the proposed action be modified further, a revised consistency determination could be necessary. This might take the form of either a supplemental consistency determination pursuant to 15 CFR 930.46, or a new consistency determination pursuant to 15 CFR 930.36. Likewise, if further project assessments reveal environmental effects not previously considered, a supplemental consistency certification may be required. If you have any questions, please contact me at (252) 808-2808. Thank you for your consideration of the North Carolina Coastal Management Program.

Daniel

**Daniel M. Govoni**

Policy Analyst  
Federal Consistency Coordinator  
NC Division of Coastal Management  
Department of Environmental Quality

252 808 2808 x233  
[Daniel.Govoni@ncdenr.gov](mailto:Daniel.Govoni@ncdenr.gov)

Morehead City, NC 28557

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---

**From:** Stephanie Norris <[snorris@norcomanagement.com](mailto:snorris@norcomanagement.com)>  
**Sent:** Monday, December 13, 2021 9:47 AM  
**To:** Govoni, Daniel <[daniel.govoni@ncdenr.gov](mailto:daniel.govoni@ncdenr.gov)>; MacPherson, Tara <[tara.macpherson@ncdenr.gov](mailto:tara.macpherson@ncdenr.gov)>  
**Cc:** Gievers, Andrea <[andrea.l.gievers@rebuild.nc.gov](mailto:andrea.l.gievers@rebuild.nc.gov)>; Claudia Young <[csyoung@nchfa.com](mailto:csyoung@nchfa.com)>; Patty Reeder - WKFS <[pbreeder@wkfsllc.com](mailto:pbreeder@wkfsllc.com)>; Matt Raab (Wynnefield) <[matt.raab@wynnefieldproperties.com](mailto:matt.raab@wynnefieldproperties.com)>; Matt Carter <[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)>  
**Subject:** FW: [External] Request for permit requirements for the following project  
**Importance:** High

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Tara and Daniel

My apologies for the multiple emails. I realized that I misspelled Daniel's email address. Please see below and attached. Thank you.

Stephanie

**Stephanie L. Norris, PE**  
*Affordable Housing Developer*



PO Box 15025  
Wilmington, NC 28408

Office: 910-791-3354  
Mobile: 919-669-1079

---

**From:** Stephanie Norris

**Sent:** Monday, December 13, 2021 9:36 AM

**To:** [daniel.govonie@ncdenr.gov](mailto:daniel.govonie@ncdenr.gov); [tara.macpherson@ncdenr.gov](mailto:tara.macpherson@ncdenr.gov)

**Cc:** Gievers, Andrea <[andrea.l.gievers@rebuild.nc.gov](mailto:andrea.l.gievers@rebuild.nc.gov)>; Claudia Young <[csyoung@nchfa.com](mailto:csyoung@nchfa.com)>; Patty Reeder - WKFS <[pbreeder@wksllc.com](mailto:pbreeder@wksllc.com)>; Matt Raab (Wynnefield) <[matt.raab@wynnefieldproperties.com](mailto:matt.raab@wynnefieldproperties.com)>; Matt Carter <[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)>; [robb.mairs@ncdenr.gov](mailto:robb.mairs@ncdenr.gov)

**Subject:** FW: [External] Request for permit requirements for the following project

**Importance:** High

Tara and Daniel

Good morning. I am the Managing Member of Terroir Development, LLC, the Developer and Managing Member of the Estrella Landing Apartments community proposed in New Hanover County. Matt Carter (Pilot Environmental) forwarded the 10/12/2021 email correspondence below regarding the CAMA determination for the Estrella Landing HUD EA reporting. This EA has now been sent to Andrea Gievers (NCORR) and Claudia Young (NCHFA) for evaluation. It is my understanding that NCDENR, specifically Daniel, has not issued a reply or confirmation as of this date 12/13/2021. If it helps, attached for reference is the USACE Jurisdictional Determination approved 7/29/2021. Can one of you please assist with the requested confirmation? Thank you in advance for your assistance.

Stephanie

**Stephanie L. Norris, PE**  
*Affordable Housing Developer*



PO Box 15025  
Wilmington, NC 28408

Office: 910-791-3354  
Mobile: 919-669-1079

---

**From:** Matt Carter <[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)>

**Sent:** Monday, December 13, 2021 8:50 AM

**To:** Stephanie Norris <[snorris@norcomanagement.com](mailto:snorris@norcomanagement.com)>

**Subject:** FW: [External] Request for permit requirements for the following project

Here you go.

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)



---

**From:** MacPherson, Tara [<mailto:tara.macpherson@ncdenr.gov>]

**Sent:** Tuesday, October 12, 2021 3:48 PM

**To:** Matt Carter <[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)>; Mairs, Robb L <[robb.mairs@ncdenr.gov](mailto:robb.mairs@ncdenr.gov)>

**Cc:** Stephen Arenson <[sarenson@pilotenviro.com](mailto:sarenson@pilotenviro.com)>; Govoni, Daniel <[daniel.govoni@ncdenr.gov](mailto:daniel.govoni@ncdenr.gov)>

**Subject:** RE: [External] Request for permit requirements for the following project

Hi Matt, I am copying Daniel Govoni in our Morehead City Office as he handles the consistency projects for the Division. Daniel, please see below and attached. It appears that this project is outside of CAMA jurisdiction at first glance. You can contact the US Army Corps and the Division of Water Resources to evaluate any potential Section 404 type wetland impacts.

Thanks,  
Tara

**Tara MacPherson**  
Wilmington Region District Manager  
NC Division of Coastal Management  
Department of Environmental Quality

910 796-7266 office  
910 395-3964 fax  
[tara.macpherson@ncdenr.gov](mailto:tara.macpherson@ncdenr.gov)

127 Cardinal Drive Ext  
Wilmington, NC 28405

*Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.*

---

**From:** Matt Carter [<mailto:mcarter@pilotenviro.com>]  
**Sent:** Tuesday, October 12, 2021 9:15 AM  
**To:** MacPherson, Tara <[tara.macpherson@ncdenr.gov](mailto:tara.macpherson@ncdenr.gov)>; Mairs, Robb L <[robb.mairs@ncdenr.gov](mailto:robb.mairs@ncdenr.gov)>  
**Cc:** Stephen Arenson <[sarenson@pilotenviro.com](mailto:sarenson@pilotenviro.com)>  
**Subject:** [External] Request for permit requirements for the following project

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The attached property is under consideration for new development with a multi-family residential development utilizing HUD funding. Based upon the project utilizing HUD funding, we are contacting your agency for assistance with a Consistency Determination for permitting purposes. This determinations will need to be completed prior to funds are allowed to be released.

The property is located in Wilmington, North Carolina. I have attached a Topographic Map, Aerial Photograph and a site plan. Please provide assistance and feel free to contact us with if you need additional information and thanks in advance.

Sincerely,

**Matt Carter**

336.701.9052 (c)  
336.310.4527 (o)  
P.O. Box 128  
Kernersville, NC 27285  
[www.pilotenviro.com](http://www.pilotenviro.com)  
[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)





## **PHASE I ENVIRONMENTAL SITE ASSESSMENT**

ESTRELLA LANDING  
APPROXIMATE 5.71-ACRE TRACT  
4615 GORDON ROAD  
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

PREPARED FOR:  
ESTRELLA LANDING APARTMENTS, LLC  
P.O. BOX 15025  
WILMINGTON, NORTH CAROLINA 28408

PREPARED BY:  
PILOT ENVIRONMENTAL, INC.  
PO BOX 128  
KERNERSVILLE, NORTH CAROLINA 27285

OCTOBER 13, 2021  
PILOT PROJECT 7249



October 13, 2021

Ms. Stephanie Norris  
Estrella Landing Apartments, LLC  
P.O. Box 15025  
Wilmington, North Carolina 28408

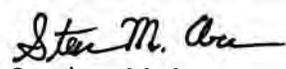
Reference: Phase I Environmental Site Assessment  
Estrella Landing  
Approximate 5.71-Acre Tract  
4615 Gordon Road  
Wilmington, New Hanover County, North Carolina  
Pilot Project 3984

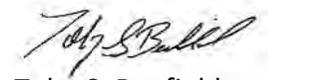
Dear Ms. Norris:

Pilot Environmental, Inc. (Pilot) is pleased to submit the Phase I Environmental Site Assessment (ESA) report for the approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The assessment was performed in general accordance with ASTM Standard Practice E1527-13: Phase I Environmental Site Assessment Process.

This report includes a description of the methodology of our investigation and a summary of our findings and conclusions. If you have questions regarding our assessment of the subject site or our conclusions, please do not hesitate to call us at 336.310.4527.

Sincerely,

  
Stephen M. Arenson  
Project Manager

  
Toby S. Benfield  
Senior Project Manager

## Project Summary Table

Report Section		No Further Assessment	REC	CREC	HREC	Other Environmental Considerations	Recommended Action
3.0	User Provided Information	✓					
4.0	Records Review	✓	✓				
5.0	Site Reconnaissance	✓	✓				
6.0	Interviews	✓					
9.0	Non-Scope Services	✓					

## **EXECUTIVE SUMMARY**

Pilot was contracted by Estrella Landing Apartments, LLC to perform an ASTM Standard E1527-13, Phase I ESA for the approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The site consists of the parcels identified by the Cumberland County Geographical Information System (GIS) as Parcel Identification Numbers (PINs) 3149-24-9298 and 3149-23-7837.

Based on Pilot's review of historical records and interviews, it appears that the site has contained wooded land since at least 1938. A single-family residence was located on the site from at least 2004 until it was demolished sometime prior to 2007. The former residence was reportedly heated with electricity and utilized a water supply well and municipal sewer services.

The site contains wooded land. Debris is located on the site. Visible portions of debris include scrap wood and household trash. Staining was not observed in the vicinity of the debris. We did not observe stained ground surfaces, stressed vegetation or evidence of underground storage tanks (USTs) on the site.

The site is located in an area of Wilmington that can generally be described as residential and commercial. Surrounding properties contain single-family residences, wooded land, apartments, and a church.

An active gasoline filling station occupied by Shell is located on an adjacent property west of the site. The Standard Environmental Records (SER) search provided by Environmental Data Resources, Inc. (EDR) identifies an occupant of this property (Buy Quick) on the Registered UST database. According to information provided by EDR, an approximate 20,000-gallon gasoline UST, an approximate 5,020-gallon diesel UST, an approximate 4,966-gallon gasoline UST, and an approximate 5,020-gallon gasoline UST were installed at this property in 2016. The USTs utilized at this property are located approximately 100 feet west and topographically cross-gradient to the subject site. The SER search provided by EDR does not identify a documented release associated with the USTs utilized at this facility. Based on the age of this facility (less than five years), it is unlikely that a release of petroleum has occurred at this property that has impacted the site. However, based on the proximity to the subject site and the groundwater flow direction inferred from surface topography, the potential for impact to the subject site from future releases originating from the USTs on the adjacent property west of the site is considered to be an on-going Recognized Environmental Condition (REC). Based on the information provided, the USTs do not pose a Vapor Encroachment Condition (VEC) for the site.

A boat and trailer storage yard has been located on an adjacent property west of the site since approximately 2006. Several metal sheds and outbuildings are located on this property. There is potential that light maintenance and repair of boats and trailers has been performed at this property. The SER search provided by EDR does not identify documented releases of petroleum or hazardous materials associated with this facility. However, based on the age of the facility and

the limited nature of possible maintenance and repair of boats and trailers that is likely performed at this property, this facility is not expected to impact the site.

The SER search provided by EDR identifies a documented release of petroleum or hazardous materials at one property in the vicinity of the site. Based on the distance (approximately 1,750 feet) and the groundwater flow direction inferred from surface topography, this release is not expected to impact the site.

Pilot has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E1527-13 for the approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. Exceptions to, or deletions from, this practice are described in Section 1.4 of this report. As documented and qualified by this report, this assessment has revealed no evidence of RECs, Controlled Recognized Environmental Conditions (CRECs), or Historical Recognized Environmental Conditions (HRECs) in connection with the site, except the following:

On-Site

- ) On-site RECs were not identified during this assessment.

Off-Site

- ) The potential for impact to the subject site from an undocumented release originating from the USTs utilized at the gasoline filling station on the adjacent property west of the site. Based on the age of the facility, additional assessment of these USTs is not recommended at this time.

Business Environmental Risks

- ) The former residence associated with the site reportedly utilized a water supply well. Water supply wells and septic systems should be abandoned in accordance with applicable regulations if they are encountered within the proposed redevelopment areas.

This Executive Summary includes only a summary of relevant information in the Phase I Environmental Site Assessment report. Pilot recommends that the report be read in its entirety.

**PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT  
APPROXIMATE 5.71-ACRE TRACT  
4615 GORDON ROAD  
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA**

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## **1.0 INTRODUCTION**

### **1.1 Purpose of Phase I ESA**

The purpose of this Phase I Environmental Site Assessment (ESA) is to conduct all appropriate inquiries into the uses and prior ownership of the subject site and to identify, to the extent feasible pursuant to the processes described herein, Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), Historical Recognized Environmental Conditions (HRECs), or Business Environmental Risks (BERs) in connection with the subject site.

This ESA should allow the User the opportunity to qualify for landowner liability protection under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The landowner liability protections are: an innocent landowner, a contiguous property owner, or a bona fide prospective purchaser. The User must meet the protection stipulations detailed in CERCLA to qualify, as well as meet the User Obligations contained within ASTM E1527-13 standard.

Pilot Environmental, Inc. (Pilot) understands that this Phase I ESA is being prepared prior to a pending real estate transaction.

### **1.2 Scope of Services**

Pilot was retained to complete a Phase I ESA in general accordance with the standard developed by the American Society for Testing and Materials (ASTM) entitled "E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." The Phase I ESA was conducted in accordance with ASTM E1527-13 and EPA Standards and Practices for All Appropriate Inquiry (40 CFR §312.10). The environmental assessment was conducted under the supervision or responsible charge of an individual that qualifies as an environmental professional, as defined in 40 CFR §312.10.

I, Toby S. Benfield, declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

### **1.3 ASTM E1527-13 Definitions**

ASTM E1527-13 defines a "recognized environmental condition (REC)" as "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: 1) due to release to the environment, 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment." For the

purposes of this practice, "migrate" and "migration" refer to the movement of hazardous substances or petroleum products in any form including solid and liquid at the surface or subsurface and vapor in the subsurface. Vapor migration in the subsurface is described in Guide E2600 published by ASTM. Pilot has not conducted a Vapor Encroachment Screen in accordance with the E2600 guide.

A "de minimis condition" is a condition that generally does not represent a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

A "controlled recognized environmental condition (CREC)" is a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition identified as a controlled recognized environmental condition does not imply that the Environmental Professional has evaluated or confirmed the adequacy, implementation or continued effectiveness of the required control that has been, or is intended to be, implemented.

A "historical recognized environmental condition (HREC)" is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (for example property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the Environmental Professional must determine whether the past release is a recognized environmental condition at the time of the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria).

A "business environmental risk (BER)" is "a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice." Client-imposed limitations and site condition limitations, if encountered, are detailed in Section 5.1 Methodology and Limiting Conditions.

#### **1.4 Limitations and Exceptions**

The findings of this report are limited to conditions observed at the time of the site reconnaissance, interviews with the landowners, and review of public documents and may not represent conditions at a later date.

Much of the information provided in this report is based upon personal interviews and review of available public documents, records and maps held by government and private agencies. This report is subject to the limitations of historical documentations, availability and accuracy of pertinent records, and the personal recollection of persons interviewed.

The conclusions and/or recommendations presented within this report are based upon a level of investigation consistent with the standard of care and skill exercised by members of the same profession currently practicing in the same locality under similar conditions. The intent of this assessment is to identify the potential for recognized environmental conditions in connection with the site; however, no environmental site assessment can completely eliminate uncertainty regarding the potential for recognized environmental conditions in connection with the site.

Additional exploratory work, including sampling and laboratory analysis that is beyond the scope of a Phase I ESA may be required to determine if contamination exists on a site. No warranty, expressed or implied, is made with regard to the conclusions and/or recommendations presented within this report.

No non-scope considerations or additional issues including but not limited to asbestos, radon, wetlands or mold were investigated, unless otherwise described in Section 9.0 of this report.

#### **1.5 User Reliance**

The resulting report is provided for the sole use of Estrella Landing Apartments, LLC. Use of this report by third parties will be at such party's sole risk. Pilot disclaims liability for any use or reliance by third parties.

#### **1.6 Data Gaps**

Data gaps have not affected our ability to identify RECs associated with the site.

## **2.0 SITE DESCRIPTION**

### **2.1 Site Location and Legal Description**

A legal description of the site has been provided to Pilot as part of an Environmental Lien Search performed by NETR Real Estate’s Research and Information. A copy of the Lien Search is included in Appendix II. The approximate site boundary is depicted on Drawing 2 of Appendix I.

<b>Property Summary</b>	
Site Name	Estrella Landing
Property Address	4615 Gordon Road in Wilmington, New Hanover County, North Carolina
Current Site Use	The site contains wooded land.
Parcel ID Number(s)	3149-24-9298 and 3149-23-7837
Property Acres	5.71

### **2.2 Current Use of the Site**

The site consists of an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The site contains wooded land.

### **2.3 Current Uses of Adjoining Property**

The site is located in an area of Wilmington that can generally be described as residential and commercial.

<b>Direction from Site</b>	<b>Current Use</b>
North	The site is bound by wooded land.
East	The site is bound by a stormwater detention pond and Rosebay Terrace.
South	The site is bound by a single-family residence and Gordon Road.
West	The site is bound by a boat and trailer storage yard and an active gasoline filling station occupied by Shell.

### 3.0 USER PROVIDED INFORMATION

The ASTM E1527-13 User Questionnaire was completed by Ms. Stephanie Norris on behalf of Estrella Landing Apartments, LLC. Section 3.0 is based on user provided information and the completed questionnaire. A copy of the completed User Questionnaire is included in Appendix II.

User Provided Information	Response	Comments
Environmental Liens or Activity and Use Limitations	Yes	Pilot contracted with NETR Real Estate Research and Information to provide information concerning environmental liens and activity and use limitations (AULs) that have been filed against the site. The NETR report did not identify environmental liens or AULs associated with the site. A copy of the NETR Report is included in Appendix II.
Specialized Knowledge	No	
Valuation Reduction for Environmental Issues	No	
Commonly Known or Reasonably Ascertainable Information	Yes	The User indicated the past uses of the site include vacant land.
Degree of Obviousness	No	

#### 4.0 RECORDS REVIEW

##### 4.1 Physical Setting Records

<b>Physical Settings</b>	
USGS Topographic Map	Castle Hayne (2000) and Scotts Hill (2000), NC Quadrangles
Site Features	Structures are not depicted on the site.
Site Elevation/Range	From approximately 30 feet above mean sea level on the southern portion of the site to approximately 10 feet above mean sea level on the northern portion of the site.
General Sloping Direction	Generally, towards the north
Inferred Groundwater Flow Direction	Generally, towards the north and west
Geologic Province	Coastal Plain
Upgradient Property Direction	Limited areas south and east of the site

##### 4.2 Regulatory Records Review

<b>Standard Environmental Record Sources</b>	<b>Approximate Minimum Search Distance (miles)</b>	<b>Target Property</b>	<b>Off-Site Property</b>
<b>Federal Databases</b>			
NPL	1.0	No	None
Delisted NPL	0.5	No	None
SEMS/CERCLIS	0.5	No	None
SEMS Archive/CERCLIS NFRAP	0.5	No	None
RCRA CORRACTS	0.5	No	None
RCRA non-CORRACTS TSD	0.5	No	None
RCRA Generators	Subject Site & Adjoining Properties	No	None
IC/EC	Subject Site Only	No	None
ERNS	Subject Site Only	No	None

Standard Environmental Record Sources	Approximate Minimum Search Distance (miles)	Target Property	Off-Site Property
<b>State and Tribal Database</b>			
HSDS (NPL Equivalent)	1.0	No	None
SHWS (CERCLIS Equivalent)	0.5	No	None
Landfill and/or Solid Waste Disposal Facilities	0.5	No	None
LUST	0.5	No	None
LAST	0.5	No	1
UST and AST	Subject Site & Adjoining Properties	No	1
IC/EC	Subject Site Only	No	None
Voluntary Cleanup Sites	0.5	No	None
Brownfields Sites	0.5	No	None
<b>Additional Environmental Record Sources</b>			
NPDES	0.5	No	1

Based on our knowledge of the subject site and the surrounding area, Pilot attempts to verify and interpret this data. While this attempt at verification is made with diligence, Pilot cannot guarantee the accuracy of the record search beyond that of information provided by the regulatory report. Mapped and unmapped sites identified in the regulatory report that are not subsequently addressed below were field verified to the extent possible by Pilot using the information available. Pilot makes no warranty regarding the accuracy of the database report information included within the regulatory report.

#### **4.3 Federal Databases**

Neither the site nor the properties in the vicinity of the site were identified on the Federal Environmental Records Sources reviewed. A list of the Federal Environmental Record Sources reviewed is included in Appendix III.

#### **4.4 State and Tribal Databases**

A list of the State Environmental Record Sources reviewed is included in Appendix III.

**Leaking Aboveground Storage Tank (LAST) List**

One property located within the ASTM approximate minimum search distance is identified on the LAST List. Based on the distance from the site (approximately 1,750 feet), this release is not expected to impact the site.

**Registered UST**

One adjacent property was identified on the Registered UST database.

- ) Buy Quick, 4607 Gordon Road – located on an adjacent property west of the site. According to information provided by EDR, an approximate 20,000-gallon gasoline UST, an approximate 5,020-gallon diesel UST, an approximate 4,966-gallon gasoline UST, and an approximate 5,020-gallon gasoline UST were installed at this property in 2016. This property contains an active gasoline station occupied by Shell. The USTs utilized at this property are located approximately 100 feet west and topographically cross-gradient to the subject site. The SER search provided by EDR does not identify a documented release associated with the USTs utilized at this facility. Based on the age of this facility (less than five years), it is unlikely that a release of petroleum has occurred at this property that has impacted the site. However, based on the proximity to the subject site and the groundwater flow direction inferred from surface topography, the potential for impact to the subject site from future releases originating from the USTs on the adjacent property west of the site is considered to be an on-going REC. Based on the information provided, the USTs do not pose a VEC for the site.

**4.5 Additional Environmental Record Sources**

A list of the Additional Environmental Record Sources reviewed is included in Appendix III.

**Unplottable (Orphan) Facilities and Sites**

Orphan facilities do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. Two properties were identified on the Orphan Summary. Determining the locations of unmapped facilities is beyond the scope of this assessment. Based on our site reconnaissance and available information, Pilot did not identify these facilities on the site or adjacent properties.

**NPDES**

One property located within one-half mile of the site is identified on the NPDES database.

) Jordan Tract, Gordon Road. This property has been incorrectly mapped. According to information provided by EDR, this permit was issued in 2002 for the construction of a stormwater detention pond and it expired in 2016. According to the historical aerial photographs provided by EDR, stormwater detention ponds have not been located on the site. Stormwater detention ponds have periodically been constructed immediately north, east, and west of the site. Based on the information provided by EDR, the utilization of stormwater detention ponds on the adjacent properties is not considered to be an off-site REC.

**4.6 Historical Use Information**

**Fire Insurance Map Review**

Pilot contracted EDR to provide Sanborn Fire Insurance Maps (Sanborns) for the site and surrounding properties to determine past uses. A Certified Sanborn Map Report provided by EDR indicates that Sanborns do not provide coverage of the site. A copy of the EDR Certified Sanborn Map Report is included in Appendix IV.

**Aerial Photograph Review**

Pilot reviewed aerial photographs of the site and immediately surrounding properties for evidence of former usage which may indicate potential environmental issues. The aerial photographs were obtained from the EDR Aerial Photo Decade Package and Google Earth™ Interactive Mapping Software. The aerial photographs reviewed were dated 1938, 1950, 1958, 1964, 1969, 1970, 1975, 1983, 1989, 1993, 1998, 2002, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2012, 2013, 2014, 2015, 2016, 2018, 2019 (Drawing 2). The Pilot review is dependent on the quality and scale of the photographs. A copy of the Historical Aerials report is included in Appendix IV.

<b>Year(s)</b>	<b>Subject Property</b>	<b>Adjoining Properties</b>
1938-1993	The site contains wooded land.	Residences, wooded land, and Gordon Road (1938). St. Paul's Missionary Baptist Church (1975)
1998-2019	Timbering activities are apparent on the site (1998). A residence is visible on the site (2004). The residence is no longer visible on the site (2007).	Same as 1938-1993. An apparent boat and trailer storage yard is visible immediately west of the site (2006). Shell Gasoline Station is visible (2018)

**City Directory Review**

One of the ASTM standard historical sources to be reviewed for previous site use are local street directories, commonly known as city directories. The purpose of the directory review is to identify past occupants of the site and adjoining and nearby properties. In some rural areas, street directories are limited or unavailable. Pilot reviewed city directories in the EDR City Directory Image Report. The directories reviewed were dated 2000, 2005, 2010, 2014, and 2017. Directories dated prior to 2000 were not included in the report.

<b>Address</b>	<b>Year</b>	<b>Occupant Listing</b>
<b>Subject Site</b>		
4615 Gordon Road	2000-2017	Residential occupant (2005)
<b>Surrounding Properties</b>		
Surrounding Properties	2000-2017	The directories identify residential occupants and a church in the vicinity of the site.

**4.7 Previous Reports Review**

Pilot was not provided with environmental or engineering reports for the subject site.

## **5.0 SITE RECONNAISSANCE**

### **5.1 Methodology and Limiting Conditions**

Pilot conducted the field reconnaissance on September 23, 2021. Observations were made from a walking reconnaissance around the perimeter boundary and along several transects across the subject site. Dense vegetation and storage of materials on several areas of the site limited visibility of ground surfaces or access to areas of the site and may have prevented the identification of environmental concerns. Photographs are included in Appendix V.

### **5.2 On-Site Observations**

The site contains wooded land (Photograph 1). Debris (Photograph 2) is located on the site. Visible portions of debris include scrap wood and household trash. Staining was not observed in the vicinity of the debris. We did not observe stained ground surfaces, stressed vegetation or evidence of USTs on the site.

<b>Feature</b>	<b>Yes</b>	<b>No</b>
Underground or aboveground storage tanks		✓
Strong, pungent or noxious odors		✓
Surface waters		✓
Standing pools of liquid likely containing petroleum or hazardous substances		✓
Drums or containers of petroleum or hazardous substances less than or equal to five-gallons		✓
Unidentified opened or damaged containers of hazardous substances or petroleum products		✓
Known or suspect PCB-containing equipment (excluding ballasts)		✓
Stains or corrosion to floors, walls or ceilings		✓
Floor drains and sump pumps		✓
Pits, ponds or lagoons		✓
Stained soil or pavement		✓
Stressed vegetation		✓
Solid waste mounds or non-natural fill materials	✓	
Wastewater discharges into drains, ditches or streams		✓
Groundwater well including potable, monitoring, dry, irrigation, injections and/or abandoned		✓
Septic system or cesspools		✓
Elevators		✓
Dry cleaning		✓
Onsite emergency electrical generators		✓
Specialized industrial equipment		✓
Hydraulic lifts		✓

Feature	Yes	No
Onsite compressors		✓
Grease traps		✓
Oil-water separators		✓

Additional Information

Debris is located on the site. Visible portions of debris include scrap wood and household trash. Staining was not observed in the vicinity of the debris.

**5.3 Adjoining and Nearby Property Observations**

Adjoining and nearby properties were observed at the time of our site reconnaissance. Reconnaissance of the adjacent properties was limited to visual observations from the site and publicly accessible roadways/sidewalks. The site is located in a residential and commercial area of Wilmington, New Hanover County, North Carolina.

Direction from Site	Current Use
North	The site is bound by wooded land. Apartments and wooded land are located farther north of the site.
East	The site is bound by a stormwater detention pond and Rosebay Terrace. Single-family residences and wooded land are located farther east of the site.
South	The site is bound by a single-family residence and Gordon Road. Single-family residences, apartments, wooded land, and a church are located farther south of the site.
West	The site is bound by a boat and trailer storage yard and an active gasoline filling station occupied by Shell. Single-family residences and wooded land are located farther west of the site.

## 6.0 INTERVIEWS

Title	Name	Comments
Real Estate Broker for the Owner	Mr. Jack Kilbourne	<p>Mr. Kilbourne indicated he has been familiar with the site since approximately 1995. Mr. Kilbourne stated the Clay family owned the entirety of the site until they sold a portion of the site identified by PIN 3149-23-7837 to the Wooten family. Mr. Kilbourne indicated the site has contained wooded land since at least 1995. Mr. Kilbourne stated a single-family residence was located on the parcel identified by PIN 3149-24-9298 from at least 2004 until it was demolished sometime prior to 2007. Mr. Kilbourne indicated the former residence was heated with electricity and utilized a water supply well and municipal sewer services. Mr. Kilbourne stated he is not aware of any cemeteries, buried debris, or landfill activity associated with the site. Mr. Kilbourne indicated he is not aware of any pesticides or herbicides stored on the site. Mr. Kilbourne stated he is not aware of any USTs associated with the site.</p> <p>Mr. Kilbourne indicated that he is not aware of 1) environmental concerns associated with the site 2) any pending, past, or threatened administrative litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site or 3) any government notices regarding any possible violation of environmental laws or possible liability related to hazardous substances or petroleum products.</p>
Local Government Official	Ms. Patti Huntley	<p>According to Ms. Huntley, with New Hanover County Fire Rescue, there have been no fire department responses due to releases of hazardous materials or petroleum or UST removals, at or within the vicinity of the site.</p>

## 7.0 FINDINGS AND OPINIONS

Pilot was contracted by Estrella Landing Apartments, LLC to perform an ASTM Standard E1527-13, Phase I ESA for the approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The site consists of the parcels identified by the Cumberland County GIS as PINs 3149-24-9298 and 3149-23-7837.

Based on Pilot's review of historical records and interviews, it appears that the site has contained wooded land since at least 1938. A single-family residence was located on the site from at least 2004 until it was demolished sometime prior to 2007. The former residence was reportedly heated with electricity and utilized a water supply well and municipal sewer services.

The site contains wooded land. Debris is located on the site. Visible portions of debris include scrap wood and household trash. Staining was not observed in the vicinity of the debris. We did not observe stained ground surfaces, stressed vegetation or evidence of USTs on the site.

The site is located in an area of Wilmington that can generally be described as residential and commercial. Surrounding properties contain single-family residences, wooded land, apartments, and a church.

An active gasoline filling station occupied by Shell is located on an adjacent property west of the site. According to information provided by EDR, an approximate 20,000-gallon gasoline UST, an approximate 5,020-gallon diesel UST, an approximate 4,966-gallon gasoline UST, and an approximate 5,020-gallon gasoline UST were installed at this property in 2016. The USTs utilized at this property are located approximately 100 feet west and topographically cross-gradient to the subject site. The SER search provided by EDR does not identify a documented release associated with the USTs utilized at this facility. Based on the age of this facility (less than five years), it is unlikely that a release of petroleum has occurred at this property that has impacted the site. However, based on the proximity to the subject site and the groundwater flow direction inferred from surface topography, the potential for impact to the subject site from future releases originating from the USTs on the adjacent property west of the site is considered to be an on-going REC. Based on the information provided, the USTs do not pose a VEC for the site.

A boat and trailer storage yard has been located on an adjacent property west of the site since approximately 2006. Several metal sheds and outbuildings are located on this property. There is potential that light maintenance and repair of boats and trailers has been performed at this property. The SER search provided by EDR does not identify documented releases of petroleum or hazardous materials associated with this facility. However, based on the age of the facility and the limited nature of possible maintenance and repair of boats and trailers that is likely performed at this property, this facility is not expected to impact the site.

*Phase I ESA  
Pilot Project 7249  
October 13, 2021*

The SER search provided by EDR identifies a documented release of petroleum or hazardous materials at one property in the vicinity of the site. Based on the distance (approximately 1,750 feet) and the groundwater flow direction inferred from surface topography, this release is not expected to impact the site.

## 8.0 CONCLUSIONS

Pilot has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E1527-13 for the approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. Exceptions to, or deletions from, this practice are described in Section 1.4 of this report. As documented and qualified by this report, this assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the site, except the following:

### On-Site

- ) On-site RECs were not identified during this assessment.

### Off-Site

- ) The potential for impact to the subject site from an undocumented release originating from the USTs utilized at the gasoline filling station on the adjacent property west of the site. Based on the age of the facility, additional assessment of these USTs is not recommended at this time.

### Business Environmental Risks

- ) The former residence associated with the site reportedly utilized a water supply well. Water supply wells and septic systems should be abandoned in accordance with applicable regulations if they are encountered within the proposed redevelopment areas.

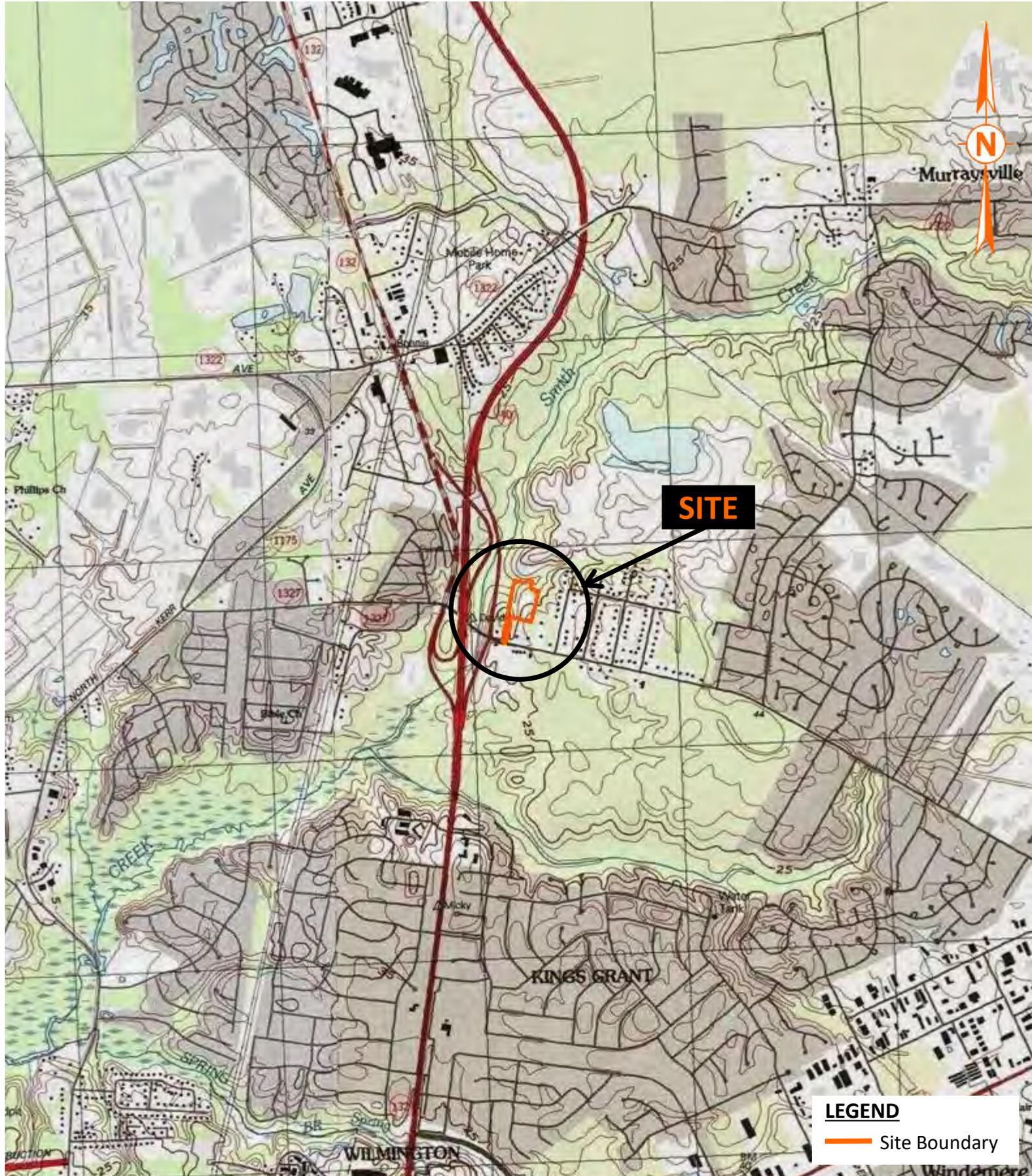
## **9.0 NON-SCOPE SERVICES**

ASTM guidelines identify non-scope issues, which are beyond the scope of this practice. Non-scope issues have the potential to be business environmental risks. Some of these non-scope issues include; asbestos-containing building materials, radon, lead-based paint, lead in drinking water, wetlands and mold.

## 10.0 REFERENCES

ASTM E1527-13, Phase I Environmental Site Assessment Process Standard.
Environmental Questionnaire for User, completed by Stephanie Norris, dated September 15, 2021.
EDR Aerial Photo Decade Package dated October 1, 2021.
EDR Certified Sanborn Map Report dated September 30, 2021.
EDR City Directory Report dated October 5, 2021.
EDR Environmental Review Report, dated September 30, 2021.
Geologic Map of North Carolina, compiled by The North Carolina Geological Survey, 1985.
Google Earth Interactive Mapping Software, aerial photographs dated 1993, 1998, 2002, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2013, 2014, 2015, 2016, 2018, and 2019.
The NETR Environmental Lien and AUL Search Report, Project Number L21-01077, dated September 20, 2021.
Telephone interview with Mr. Jack Kilbourne, Real Estate Broker for the owner of the site, dated October 5, 2021.
Telephone interview with Ms. Patti Huntley, with New Hanover County Fire Rescue, dated April 26, 2019.
USGS Topographic Map, Castle Hayne, NC Quadrangle dated 2000.
USGS Topographic Map, Scotts Hill, NC Quadrangle dated 2000.

**Appendix I**  
**Drawings**



**Drawing 1**

USGS Topographic Map  
 Scotts Hill and Castle Hayne  
 NC Quadrangles  
 Scale: 1" = 2,000'



**USGS Topographic Map**

Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249



**LEGEND**

	Site Boundary
<b>G</b>	Gasoline Station
<b>U</b>	Current UST(s)
<b>1</b>	Boat and Trailer Storage Yard
<b>2</b>	Shell
<b>3</b>	St. Paul's Missionary Baptist Church

**Drawing 2**  
 2019 Google Earth  
 Satellite Imagery  
 Scale: 1" = 300'



**Aerial Photograph**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

**Appendix II**  
**User Provided Information**

### Environmental Questionnaire for User

The person who will use the Phase I ESA should provide the following information. Please fill in this form to the best of your ability, explaining any Yes answers on a separate sheet of paper. Without these answers, our report would have to note that the Phase One is incomplete, and your Landowner Liability Protections could be at risk. Please complete and return with the Proposal Authorization Form.

1. **Environmental Cleanup Liens.** ASTM requires the User to check for environmental liens that may be filed or recorded against the subject property under federal, tribal, state or local law. Failure to check for these liens could put your Landowner Liability Protections at risk.

Would you like Pilot to provide for an additional fee (\$250 per parcel)?  Yes  No

Have you or your agent checked for these environmental cleanup liens?  Yes  No

Are you aware of any such liens against the subject property?  Yes  No

2. **Activity and Use Limitations (AULs).** These include engineering controls (e.g., slurry walls, caps) and land use restrictions or institutional controls (e.g., deed restrictions, covenants) that may be in place at the site or filed under federal, tribal, state or local law.

Are you aware of any possible AULs involving the subject site?  Yes  No

3. **Specialized Knowledge.** This involves personal knowledge or experience related to the subject property or nearby properties. For example, if you are involved in the same line of business as the current or former occupants of the property or an adjoining property, you would probably know of any chemicals, oil, degreasers, gasoline, or other hazardous substances commonly used in that type of business.

Do you have any specialized knowledge that might indicate the past or present use of such substances on the subject or nearby properties?  Yes  No

4. **Fair Market Value (FMV).** A purchase price significantly below FMV may indicate an environmental problem. Please note that this question does not require an appraisal of the property. If the price is significantly below FMV, the User should consider whether it might be because contamination may be present at the property.

Is the purchase price significantly below fair market value?  Yes  No

5. **Obvious Indicators.** This involves past or present spills, stains, releases, cleanups, etc. on or near the site.

Do you know of any obvious indicators of possible contamination on or near the site?  Yes  No

6. **Common Knowledge.** Please use a separate sheet if necessary.

a. Describe the past uses of the property: VACANT LAND

b. Describe any specific chemicals that may have been present at the property: UNKNOWN

c. Describe any other information (spills, chemical releases or environmental cleanups) that may help us identify possible contamination: UNKNOWN

Your Signature: [Signature] Date: 9/15/2021

Printed Name: STEPHANIE L. NORRIS  
FOR: TERROIR DEVELOPMENT, LLC

# of separate sheets attached: \_\_\_\_\_

Explain Yes answers on a separate sheet.



# **The NETR Environmental Lien and AUL Search Report**

**GORDON ROAD  
WILMINGTON, NORTH CAROLINA**

**Monday, September 20, 2021**

**Project Number: L21-01077**

2055 East Rio Salado Parkway  
Tempe, Arizona 85281

Telephone: 480-967-6752  
Fax: 480-966-9422

# ENVIRONMENTAL LIEN AND AUL REPORT

The NETR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied property information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' office, registries of deed, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved and description); and
- provide a copy of the deed or cite documents reviewed;

## **Thank you for your business**

Please contact NETR at 480-967-6752  
with any questions or comments

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# ENVIRONMENTAL LIEN AND AUL REPORT

The NETR Environmental Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

## **TARGET PROPERTY INFORMATION**

### **ADDRESS**

**Gordon Road  
Wilmington, North Carolina**

### **RESEARCH SOURCE**

Source: New Hanover County Assessor  
New Hanover County Register of Deeds

### **DEED INFORMATION**

The subject property is currently assessed to the Heirs of Carrie Wooten et al. Carrie Wooten died June 11, 2006. There is no probate in New Hanover County

Type of Instrument: Deed

Grantor: Charles R. Clay and Essie W. Clay

Grantee: Carrie L. Green and Willie Blanche Evans

Deed Dated: 12/20/1982  
Deed Recorded: 01/12/1983  
Book: 1215  
Page: 217

Type of Instrument: North Carolina General Warranty Deed

Grantor: Willie B. Evans and husband Robert Evans

Grantee: Carrie L. Green

Deed Dated: 02/23/1983  
Deed Recorded: 02/25/1983  
Book: 1217  
Page: 803

### **LEGAL DESCRIPTION**

All that certain piece or parcel of land being 0.58 acres, more or less, situated and lying in the City of Wilmington, New Hanover County, State of North Carolina

Assessor's Parcel Number(s): R04300-001-006-000

# ENVIRONMENTAL LIEN AND AUL REPORT

## ENVIRONMENTAL LIEN

Environmental Lien: Found  Not Found

## OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found  Not Found

# ENVIRONMENTAL LIEN AND AUL REPORT

## TARGET PROPERTY INFORMATION

### ADDRESS

Gordon Road  
Wilmington, North Carolina

### RESEARCH SOURCE

Source: New Hanover County Assessor  
New Hanover County Register of Deeds

### DEED INFORMATION

Type of Instrument: North Carolina Quit Claim Deed

Grantor: Charles R. Clay also known as Charles Rudolph Clay, Sr., and wife Essie W. Clay also known as Essie Waddell Clay

Grantee: Charles Rudolph Clay, Sr., and Essie Waddell Clay, Trustees of the Charles Rudolph Clay, Sr., and Essie Waddell Clay Revocable Living Trust dated March 3, 2005

Deed Dated: 03/03/2005  
Deed Recorded: 05/09/2005  
Book: 4797  
Page: 397

### LEGAL DESCRIPTION

All that certain piece or parcel of land being 1.10 acres, more or less, commonly known as 4638 Gordon Road, situated and lying in the City of Wilmington, New Hanover County, State of North Carolina

Assessor's Parcel Number(s): R04300-008-028-000

### ENVIRONMENTAL LIEN

Environmental Lien: Found  Not Found

### OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found  Not Found

8007

PAGE

1215 0217

RECORDED AND VERIFIED  
REBECCA P. TUCKER  
REGISTER OF DEEDS  
NEW HANOVER CO. NC

STATE OF NORTH CAROLINA :

COUNTY OF NEW HANOVER :

DEED JAN 12 4 06 PM '83

THIS DEED, made this 20<sup>th</sup> day of December, 1982, by and between CHARLES R. CLAY and wife, ESSIE W. CLAY, of New Hanover County, North Carolina, parties of the first part, and CARRIE L. GREEN and WILLIE BLANCHE EVANS, of New Hanover County, North Carolina, parties of the second part.

WITNESSETH:

56

That the said parties of the first part, for and in consideration of the sum of Ten Dollars (\$10.00) and other valuable considerations (included in these other valuable considerations is the release by grantee herein of any claim against the grantors or any claim against the property from which the within described property comes of any nature whatsoever), the receipt whereof is hereby acknowledged, have given, granted, bargained and sold, aliened and conveyed, and by these presents do hereby give, grant, bargain and sell, alien, convey and confirm unto the said parties of the second part, their heirs and assigns forever, all that certain tract or parcel of land lying and being in Harnett Township, County of New Hanover, State of North Carolina, and more particularly described as follows, to-wit:

BEGINNING at an iron pipe in the northern right of way line of SR 2048 (Gordon Road); said iron pipe being north 17 degrees 29 minutes east 30.22 feet from a railroad spike in the centerline of Gordon Road; said spike being north 72 degrees 41 minutes 30 seconds west 430.06 feet from the centerline intersection of SR 2048 (Gordon Road) and SR 2135 (Blount Drive); thence from the Beginning north 72 degrees 49 minutes west 98.40 feet with the right of way to an iron rod; thence with the right of way north 17 degrees 18 minutes 30 seconds east 20.00 feet to an iron rod; thence with the right of way north 67 degrees 21 minutes west 269.93 feet to an iron rod; thence with the control access right of way north 67 degrees 24 minutes west 9.49 feet to a point; thence north 15 degrees 33 minutes east 444.33 feet to an iron rod; thence south 69 degrees 46 minutes east 387.51 feet to an iron rod; thence south 17 degrees 29 minutes west 469.77 feet to the BEGINNING and containing four (4) acres, more or less.

EXCEPTING from the above described tract a 60-foot easement for ingress and egress over the above described tract and running along the western line thereof, which easement is retained by the grantors herein for themselves, their heirs and assigns, and is described as follows:

RETURNED TO *[Signature]*

NEW HANOVER COUNTY  
6 9 0 7 5 6

STATE OF NORTH CAROLINA  
JAN 12 '83  
P.B. 11722

Real Estate Excise Tax  
01.50



1215 0218

BEGINNING at an iron pipe in the northern right of way line of SR 2048 (Gordon Road); said iron pipe being at the most southwestern corner of the above described tract of land, and running thence north 15 degrees 33 minutes east 444.33 feet to the northwestern corner of the hereinbefore described tract of land, thence south 69 degrees 46 minutes east 60 feet to a point; thence south 15 degrees 33 minutes west 44.33 feet to the northern right of way line of SR 2048 (Gordon Road), thence north 67 degrees 21 minutes west 60 feet to the point of Beginning.

The property conveyed herein by metes and bounds is the same property that was agreed and contracted by and between the parties a year or more before the execution of this Deed.

TO HAVE AND TO HOLD the above granted and described premises, together with all and singular, the rights, privileges, easements, tenements and appurtenances thereunto belonging, or in anywise appertaining unto the said parties of the second part, their heirs and assigns, in fee simple forever.

And the said parties of the first part, for themselves, their heirs and assigns, do covenant to and with the said parties of the second part, their heirs and assigns, that they are seized in fee of the above granted and described premises, and have good right to sell and convey the same in fee simple.

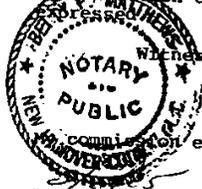
IN TESTIMONY WHEREOF, the said parties of the first part have hereunto set their hands and seals, the day and year first above written.

Charles R. Clay (SEAL)  
Charles R. Clay

Essie W. Clay (SEAL)  
Essie W. Clay

STATE OF NORTH CAROLINA  
COUNTY OF NEW HANOVER

I, Betty P. Mustard, a Notary Public in and for the County and State aforesaid, do hereby certify that CHARLES R. CLAY and wife, ESSIE W. CLAY, personally appeared before me and duly acknowledged the execution of the foregoing instrument for the purposes therein



Witness my hand and notarial seal this 20<sup>th</sup> day of December, 1982.

Betty P. Mustard  
Notary Public

My commission expires:  
2/24/85

BOOK PAGE  
1215 0219

STATE OF NORTH CAROLINA  
New Hanover County  
The foregoing Certificate of  
Betty P. Matthews  
A. Notary Public  
is certified to be correct.  
This the 12 day of Jan. 1983

Rebecca Tucker, Register of Deeds  
By Janet K. Ullery  
Deputy

BOOK PAGE  
1217 0803

RECORDED AND VERIFIED  
REBECCA P. TUCKER  
REGISTER OF DEEDS  
NEW HANOVER CO. NC

FEB 25 2 47 PM '83

NO REVENUE STAMPS

Excise Tax

Recording Time, Book and Page

Tax Lot No. Parcel Identifier No.

Verified by County on the day of 19  
by

Mall after recording to Carrie L. Green, 4640 Gordon Rd., Wilmington, N. C. 28405

This instrument was prepared by Addison Hewlett, Jr. HEWLETT & COLLINS  
Brief description for the Index

### NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 23rd day of February, 19 83, by and between

GRANTOR

GRANTEE

WILLIE B. EVANS and husband,  
ROBERT EVANS

CARRIE L. GREEN

35

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Wilmington, Harnett Township, New Hanover County, North Carolina and more particularly described as follows:

BEGINNING at an old iron pipe in the northern line of Gordon Road, (Secondary Road #1327) said iron pipe being N 11° - 38' - 15" E, 30.22 feet from a railroad spike in the centerline of Gordon Road, said spike being westwardly 430.06 feet from the centerline intersection of Blount Drive (S.R. #1396) and Gordon Road as measured along the centerline of Gordon Road; thence, from the point of Beginning, along the northern line of Gordon Road, N 78° - 40' - 40" W, 98.52 feet to an existing iron rod; thence, N 11° - 27' - 30" E, 20.00 feet to an existing iron rod; thence, N 73° - 11' - 30" W, 59.27 feet to an iron pipe; thence, leaving said R/W, N 10° - 44' - 40" E, 433.12 feet to an iron pipe; thence, S 75° - 36' - 20" E, 164.48 feet to an iron rod; thence, S 11° - 38' - 15" W, 450.00 feet to the Beginning.

The above being a part of that land described in Book 1215, Page 217, of the New Hanover County Registry, and containing 1.64 acres, more or less.

Executed in  
*Carrie L. Green*

RECORD OF POOR QUALITY DUE TO  
GENERATION OF ORIGINAL DOCUMENT  
6. 2. 1914 - 14

The property hereinabove described was acquired by Grantor by instrument recorded in \_\_\_\_\_

A map showing the above described property is recorded in Plat Book \_\_\_\_\_ page \_\_\_\_\_

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated. Title to the property hereinabove described is subject to the following exceptions:

GENEALOGICAL SOCIETY OF AMERICA

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

By: \_\_\_\_\_ (Corporate Name)  
\_\_\_\_\_  
President  
ATTEST: \_\_\_\_\_  
Secretary (Corporate Seal)

USE BLACK INK ONLY

Willie B. Evans (SEAL)  
Willie B. Evans  
Robert Evans (SEAL)  
Robert Evans (SEAL)



NORTH CAROLINA, New Hanover County.  
I, a Notary Public of the County and State aforesaid, certify that  
Willie B. Evans and husband, Robert Evans, Grantors,  
personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my  
hand and official stamp or seal, this 23rd day of February, 1933.  
My commission expires 8-10-37  
Brent G. Futch  
Notary Public

SEAL-STAMP  
NORTH CAROLINA, \_\_\_\_\_ County.  
I, a Notary Public of the County and State aforesaid, certify that \_\_\_\_\_  
personally came before me this day and acknowledged that \_\_\_\_\_ he is \_\_\_\_\_ Secretary of  
\_\_\_\_\_ a North Carolina corporation, and that by authority duly  
given and as the act of the corporation, the foregoing instrument was signed in its name by its  
President, sealed with its corporate seal and attested by \_\_\_\_\_ as its Secretary.  
Witness my hand and official stamp or seal, this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.  
My commission expires: \_\_\_\_\_ Notary Public

The foregoing Certificate(s) of Brent G. Futch, a Notary Public

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

REBECCA P. TUCKER REGISTER OF DEEDS FOR NEW HANOVER COUNTY  
By: \_\_\_\_\_ Deputy/Assistant - Register of Deeds

2  
152

NO REVENUE STAMPS



FOR REGISTRATION REGISTER OF DEEDS  
REBECCA P. SMITH  
NEW HANOVER COUNTY, NC  
2005 MAY 09 03:19:07 PM  
BK: 4797 PG: 397-399 FEE: \$17.00

INSTRUMENT # 2005024377

Excise Tax	Recording Time, Book and Page
<hr/>	
Tax Lot No. _____	Parcel Identifier No. <u>RD 4300-001-007-000</u> <u>RD 4300-008-017-000</u>
Verified by _____	County on the _____ day of _____
By _____	

Mail after recording to: **Charles Rudolph Clay, Sr., 4618 Gordon Road, Wilmington, NC 28411**

This instrument was prepared by Richard A. Horgan, Esq., 2017 Seawind Lane, Wilmington, NC 28405-4274

Brief description for the Index **40 acres, Gordon Road**

### NORTH CAROLINA QUITCLAIM DEED

THIS DEED made this 3rd day of March, 2005, by and between

GRANTOR	GRANTEE
<b>CHARLES R. CLAY (a/k/a CHARLES RUDOLPH CLAY, SR.) and wife, ESSIE W. CLAY (a/k/a ESSIE WADDELL CLAY)</b> <b>4618 GORDON ROAD</b> <b>WILMINGTON, NC 28411</b>	<b>CHARLES RUDOLPH CLAY, SR. AND ESSIE WADDELL CLAY, TRUSTEES, OF THE CHARLES RUDOLPH CLAY, SR. AND ESSIE WADDELL CLAY REVOCABLE LIVING TRUST</b> <b>DATED MARCH 3, 2005</b> <b>4618 GORDON ROAD</b> <b>WILMINGTON, NC 28411</b>

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that Grantor, for and in consideration of the sum of One Dollar (\$1.00) and other good and sufficient consideration paid by the Grantee, the receipt of which is hereby acknowledged, has remised and released and by these presents does remise, release, convey, and forever quitclaim unto the Grantee, his heirs and/or successors and assigns, all right, title, claim and interest of the Grantor in and to a certain lot or parcel of land situated in the City of \_\_\_\_\_, Harnett Township, New Hanover County, North Carolina and more particularly described as follows:

Beginning at a stake in the center of the New Gordon Road and in the run of Smith's Creek, and runs thence south 53 degrees 15 minutes east 12 poles to a stake in the bend of said road, F.J. Dempsey's corner; thence south 76 degrees east 29 poles and 2 links to a stake in the center of said road, F.J. Dempsey's corner; thence north 10 degrees east 57 poles and 20 links to a stake in the run of Cane Branch, F.J. Dempsey's corner; thence up the run of Cane Branch and 7 poles beyond; thence south 68 degrees east to the old J.K. Jones Corner, now D.L. Gore and J.B. Dempsey corner; thence south 13 degrees west crossing the New Gordon Road 107 poles to a stake; J.T. Kerr's corner; thence south 63 degrees 30 minutes west 57 poles to a stake; J.T. Kerr's corner; thence south 75 degrees west 20 poles to a stake, J.T. Kerr's corner; thence North 61 degrees west 25 poles to a stake in the run of Smith Creek, J.T. Kerr's corner; thence up the run of said creek as it meanders to the beginning, containing 40 acres, more or less, and being a portion of the lands deeded to J.K. Jones by George Harris and others, recorded in the office of the Register of Deeds of New Hanover County in Book GGG, pages 94, 95, 96. Being the same land conveyed by deed from J. J. Jones et al to J.B. Dempsey, recorded in the office of the Register of Deeds of New Hanover County in Book 49, page 650.

**EXCEPTION:** Excepting from this conveyance one hundred (100) square feet known as J.K. Jones graveyard. Also being the same land described in a deed dated September 20, 1932, from John B. Dempsey to Nannie E. Dempsey,

recorded in the New Hanover County Registry in Book 234, page 513, and having been inherited by Jessie D. Harrell as the only surviving heir-at-law of Nannie E. Dempsey who died intestate in the year 1936. Also being the same property conveyed from J. Frank Harrell and wife, to Richard D. Newkirk and Hattie J. Newkirk by deed filed September 2, 1947 in Book 404, page 127.

The property hereinabove described was acquired by Grantor in instrument recorded in Book 681, Page 516 of the New Hanover County Registry.

A map showing the above described property is recorded in Map Book \_\_\_\_\_, Page \_\_\_\_\_

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to him, the Grantee, his heirs and/or successors and assigns, free and discharged from all right, title, claim or interest of the Grantor or anyone claiming by, through or under him.

IN WITNESS WHEREOF the Grantor has hereunto set his hand and seal, the day and year first above written.

Charles R. Clay (SEAL)  
Charles R. Clay

Essie W. Clay (SEAL)  
Essie W. Clay

SEAL-STAMP



NORTH CAROLINA, NEW HANOVER COUNTY.

I, a Notary Public of New Hanover County, North Carolina, certify that Charles R. Clay, also known as Charles Rudolph Clay, Sr., personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 3rd day of March, 2005.

[Signature], Notary Public

My Commission expires May 18, 2005

SEAL-STAMP



NORTH CAROLINA, NEW HANOVER COUNTY.

I, a Notary Public of New Hanover County, North Carolina, certify that Essie W. Clay, also known as Essie Waddell Clay, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 3rd day of March, 2005.

[Signature], Notary Public

My Commission expires May 18, 2005

The foregoing Certificate(s) of \_\_\_\_\_

is/are certified to be correct. This instrument and this certificate are duly registered this \_\_\_\_\_ day of \_\_\_\_\_, 2005, at \_\_\_\_\_, M., Book \_\_\_\_\_, Page \_\_\_\_\_.

\_\_\_\_\_  
Register of Deeds for New Hanover County, North Carolina.

By \_\_\_\_\_ Deputy/Assistant - Register of Deeds.



REBECCA P. SMITH  
REGISTER OF DEEDS, NEW HANOVER  
216 NORTH SECOND STREET

WILMINGTON, NC 28401

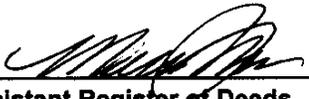
\*\*\*\*\*  
Filed For Registration: 05/09/2005 03:19:07 PM  
Book: RE 4797 Page: 397-399  
Document No.: 2005024377  
QCD 3 PGS \$17.00

Recorder: MICAH PHELPS

\*\*\*\*\*  
State of North Carolina, County of New Hanover

The foregoing certificate of RICHARD A HORGAN Notary is certified to be correct. This 9TH of May 2005

REBECCA P. SMITH , REGISTER OF DEEDS

By:   
Deputy/Assistant Register of Deeds

\*\*\*\*\*  
YELLOW PROBATE SHEET IS A VITAL PART OF YOUR RECORDED DOCUMENT.  
PLEASE RETAIN WITH ORIGINAL DOCUMENT AND SUBMIT FOR RE-RECORDING.

**\*2005024377\***

2005024377

**Appendix III**  
**Regulatory Records**

**Estrella Landing**

Gordon Road

Wilmington, NC 28411

Inquiry Number: 6685191.2s

September 30, 2021

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

GORDON ROAD  
WILMINGTON, NC 28411

#### COORDINATES

Latitude (North): 34.2784700 - 34° 16' 42.49"  
Longitude (West): 77.8646730 - 77° 51' 52.82"  
Universal Transverse Mercator: Zone 18  
UTM X (Meters): 236273.6  
UTM Y (Meters): 3796552.5  
Elevation: 23 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5945715 SCOTTS HILL, NC  
Version Date: 2013

Northwest Map: 5946093 CASTLE HAYNE, NC  
Version Date: 2013

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140523, 20140524  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
GORDON ROAD  
WILMINGTON, NC 28411

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">1</a>	JORDAN TRACT	GORDON RD	NPDES		TP
<a href="#">2</a>	BUY QUICK	4607 GORDON ROAD	UST, Financial Assurance	Lower	93, 0.018, WNW
<a href="#">3</a>	MVC-I-40 MM 420	I- 40 MM 420	LAST	Lower	1798, 0.341, SSW

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
JORDAN TRACT GORDON RD WILMINGTON, NC	NPDES Permit Number: SW8011220	N/A

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators

## EXECUTIVE SUMMARY

RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROLS..... Institutional Controls Sites List

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

NC HSDS..... Hazardous Substance Disposal Site

### ***State- and tribal - equivalent CERCLIS***

SHWS..... Inactive Hazardous Sites Inventory

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... List of Solid Waste Facilities  
DEBRIS..... Solid Waste Active Disaster Debris Sites Listing  
OLI..... Old Landfill Inventory  
LCID..... Land-Clearing and Inert Debris (LCID) Landfill Notifications

### ***State and tribal leaking storage tank lists***

LUST..... Regional UST Database  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land  
LUST TRUST..... State Trust Fund Database

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
AST..... AST Database  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal institutional control / engineering control registries***

INST CONTROL..... No Further Action Sites With Land Use Restrictions Monitoring

### ***State and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing  
VCP..... Responsible Party Voluntary Action Sites

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Brownfields Projects Inventory

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

## EXECUTIVE SUMMARY

### **Local Lists of Landfill / Solid Waste Disposal Sites**

SWRCY.....	Recycling Center Listing
HIST LF.....	Solid Waste Facility Listing
INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9.....	Torres Martinez Reservation Illegal Dump Site Locations
ODI.....	Open Dump Inventory
IHS OPEN DUMPS.....	Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL.....	Delisted National Clandestine Laboratory Register
US CDL.....	National Clandestine Laboratory Register

### **Local Land Records**

LIENS 2.....	CERCLA Lien Information
--------------	-------------------------

### **Records of Emergency Release Reports**

HMIRS.....	Hazardous Materials Information Reporting System
SPILLS.....	Spills Incident Listing
IMD.....	Incident Management Database
SPILLS 90.....	SPILLS 90 data from FirstSearch
SPILLS 80.....	SPILLS 80 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees

## EXECUTIVE SUMMARY

INDIAN RESERV.	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
AIRS	Air Quality Permit Listing
ASBESTOS	ASBESTOS
COAL ASH	Coal Ash Disposal Sites
DRYCLEANERS	Drycleaning Sites
Financial Assurance	Financial Assurance Information Listing
UIC	Underground Injection Wells Listing
AOP	Animal Operation Permits Listing
PCSRP	Petroleum-Contaminated Soil Remediation Permits
CCB	Coal Ash Structural Fills (CCB) Listing
SEPT HAULERS	Permitted Septage Haulers Listing
MINES MRDS	Mineral Resources Data System

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

# EXECUTIVE SUMMARY

## STANDARD ENVIRONMENTAL RECORDS

### ***State and tribal leaking storage tank lists***

LAST: A listing of leaking aboveground storage tank site locations.

A review of the LAST list, as provided by EDR, and dated 04/30/2021 has revealed that there is 1 LAST site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MVC-I-40 MM 420 Close Out: 02/11/2016 Incident Number: 94291 Current Status: A	I- 40 MM 420	SSW 1/4 - 1/2 (0.341 mi.)	3	10

### ***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environment & Natural Resources' Petroleum Underground Storage Tank Database.

A review of the UST list, as provided by EDR, and dated 04/30/2021 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BUY QUICK</b> Tank Status: Intent to Install Facility Id: 00-0-0000041028	<b>4607 GORDON ROAD</b>	<b>WNW 0 - 1/8 (0.018 mi.)</b>	<b>2</b>	<b>8</b>

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

<u>Site Name</u>	<u>Database(s)</u>
\$2.50 CRYSTAL CLEANERS # 107 FLEMINGTON LF	DRYCLEANERS OLI

# OVERVIEW MAP - 6685191.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites



Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Hazardous Substance Disposal Sites



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Estrella Landing  
 ADDRESS: Gordon Road  
 Wilmington NC 28411  
 LAT/LONG: 34.27847 / 77.864673

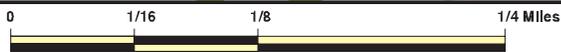
CLIENT: Pilot Environmental Inc  
 CONTACT: Stephen Arenson  
 INQUIRY #: 6685191.2s  
 DATE: September 30, 2021 5:01 pm

# DETAIL MAP - 6685191.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Hazardous Substance Disposal Sites



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Estrella Landing  
 ADDRESS: Gordon Road  
 Wilmington NC 28411  
 LAT/LONG: 34.27847 / 77.864673

CLIENT: Pilot Environmental Inc  
 CONTACT: Stephen Arenson  
 INQUIRY #: 6685191.2s  
 DATE: September 30, 2021 5:03 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
NC HSDS	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
DEBRIS	0.500		0	0	0	NR	NR	0
OLI	0.500		0	0	0	NR	NR	0
LCID	0.500		0	0	0	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>State and tribal leaking storage tank lists</b>								
LAST	0.500		0	0	1	NR	NR	1
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
SWRCY	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
IMD	0.500		0	0	0	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 90	TP		NR	NR	NR	NR	NR	0
SPILLS 80	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
NPDES	TP	1	NR	NR	NR	NR	NR	1
UIC	TP		NR	NR	NR	NR	NR	0
AOP	TP		NR	NR	NR	NR	NR	0
PCSRP	0.500		0	0	0	NR	NR	0
CCB	0.500		0	0	0	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SEPT HAULERS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
<b><u>EDR HIGH RISK HISTORICAL RECORDS</u></b>								
<b><i>EDR Exclusive Records</i></b>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<b><u>EDR RECOVERED GOVERNMENT ARCHIVES</u></b>								
<b><i>Exclusive Recovered Govt. Archives</i></b>								
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		1	1	0	1	0	0	3

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**1**            **JORDAN TRACT**  
**Target**        **GORDON RD**  
**Property**      **WILMINGTON, NC**

**NPDES**    **S117925834**  
                  **N/A**

**Actual:**  
**23 ft.**

NPDES:  
 Name: JORDAN TRACT  
 Address: GORDON RD  
 City,State,Zip: WILMINGTON, NC  
 Permit Number: SW8011220  
 Permit Status: Expired  
 Permit Type: State Stormwater  
 Issue Date: 10/28/2002  
 Region: Wilmington  
 Owner Name: Not reported  
 Class: Not reported  
 Applied: Not reported  
 Drafted: Not reported  
 Expires: 10/28/2016  
 Subbasin: Not reported  
 Receiving Stream: Not reported  
 Comments: Not reported  
 As-Built Flow (GPD): Not reported  
 Domestic %: Not reported  
 Industrial %: Not reported  
 stormwtr %: Not reported  
 Permitted Flow (GPD): Not reported  
 Program Category: Not reported  
 Project Type: Not reported  
 Is Major Permit: Not reported  
 Date Assigned: Not reported  
 Organization Name: Not reported  
 Outfall: Not reported  
 Discharge Via: Not reported  
 Stream Classification: Not reported  
 Regulated Activity: State Stormwater - HD - Detention Pond  
 Owner Type: Not reported  
 Effective Date: 10/28/2002  
 Basin Name: Cape Fear

**2**            **BUY QUICK**  
**WNW**        **4607 GORDON ROAD**  
**< 1/8**        **WILMINGTON, NC 28411**  
**0.018 mi.**  
**93 ft.**

**UST**        **U004273733**  
**Financial Assurance**    **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**12 ft.**

UST:  
 Name: BUY QUICK  
 Address: 4607 GORDON ROAD  
 City,State,Zip: WILMINGTON, NC 28411  
 Facility Id: 00-0-0000041028  
 Contact: YOSEF, INC.  
 Contact Address1: 3811 COTTONWOOD DRIVE  
 Contact Address2: Not reported  
 Contact City/State/Zip: DURHAM, NC 27705-5363  
 FIPS County Desc: New Hanover  
 Latitude: 34.27702  
 Longitude: -77.86604  
  
 Tank Id: 1  
 Tank Status: Intent to Install

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BUY QUICK (Continued)**

**U004273733**

Installed Date: 07/25/2016  
Perm Close Date: Not reported  
Product Name: Gasoline, Gas Mix  
Tank Capacity: 20000  
Root Tank Id: Not reported  
Main Tank: No  
Compartment Tank: No  
Manifold Tank: 0  
Commercial: No  
Regulated: Yes  
Other CP Tank: Not reported  
Overfill Protection Name: Auto Shutoff Device  
Spill Protection Name: Catchment Basin  
Leak Detection Name: MLLD  
Decode for TCONS\_KEY: Double Wall Steel/Jacketed  
Decode for PCONS\_KEY: Double Wall Flex  
Decode for PSYS\_KEY: Pressurized System

[Click here to access the North Carolina DEQ records for this facility:](#)

Tank Id: 2A  
Tank Status: Intent to Install  
Installed Date: 07/25/2016  
Perm Close Date: Not reported  
Product Name: Diesel  
Tank Capacity: 5020  
Root Tank Id: Not reported  
Main Tank: Yes  
Compartment Tank: Yes  
Manifold Tank: 0  
Commercial: No  
Regulated: Yes  
Other CP Tank: Not reported  
Overfill Protection Name: Auto Shutoff Device  
Spill Protection Name: Catchment Basin  
Leak Detection Name: MLLD  
Decode for TCONS\_KEY: Double Wall Steel/Jacketed  
Decode for PCONS\_KEY: Double Wall Flex  
Decode for PSYS\_KEY: Pressurized System

[Click here to access the North Carolina DEQ records for this facility:](#)

Tank Id: 2B  
Tank Status: Intent to Install  
Installed Date: 07/25/2016  
Perm Close Date: Not reported  
Product Name: Gasoline, Gas Mix  
Tank Capacity: 4966  
Root Tank Id: 357386  
Main Tank: No  
Compartment Tank: Yes  
Manifold Tank: 0  
Commercial: No  
Regulated: Yes  
Other CP Tank: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BUY QUICK (Continued)**

**U004273733**

Overfill Protection Name: Auto Shutoff Device  
Spill Protection Name: Catchment Basin  
Leak Detection Name: MLLD  
Decode for TCONS\_KEY: Double Wall Steel/Jacketed  
Decode for PCONS\_KEY: Double Wall Flex  
Decode for PSYS\_KEY: Pressurized System

Click here to access the North Carolina DEQ records for this facility:

Tank Id: 2C  
Tank Status: Intent to Install  
Installed Date: 07/25/2016  
Perm Close Date: Not reported  
Product Name: Gasoline, Gas Mix  
Tank Capacity: 5020  
Root Tank Id: 357386  
Main Tank: No  
Compartment Tank: Yes  
Manifold Tank: 0  
Commercial: No  
Regulated: Yes  
Other CP Tank: Not reported  
Overfill Protection Name: Auto Shutoff Device  
Spill Protection Name: Catchment Basin  
Leak Detection Name: MLLD  
Decode for TCONS\_KEY: Double Wall Steel/Jacketed  
Decode for PCONS\_KEY: Double Wall Flex  
Decode for PSYS\_KEY: Pressurized System

Click here to access the North Carolina DEQ records for this facility:

**NC Financial Assurance 1:**

Name: BUY QUICK  
Address: 4607 GORDON ROAD  
City,State,Zip: WILMINGTON, NC 28411  
Facility ID: 00-0-0000041028  
Region: 1  
Financial Responsibility Desc: Self-Insurance  
Financial Responsibility Name:Yosef, Inc.  
Started Date: Not reported  
Ended Date: Not reported

**3**  
**SSW**  
**1/4-1/2**  
**0.341 mi.**  
**1798 ft.**

**MVC-I-40 MM 420**  
**I- 40 MM 420**  
**WILMINGTON, NC**

**LAST S118635807**  
**N/A**

**Relative:**  
**Lower**  
**Actual:**  
**13 ft.**

**LAST:**  
Name: MVC-I-40 MM 420  
Address: I- 40 MM 420  
City,State,Zip: WILMINGTON, NC  
Facility ID: Not reported  
UST Number: WI-88469  
Incident Number: 94291  
Contamination Type: SL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MVC-I-40 MM 420 (Continued)**

**S118635807**

Source Type: Not reported  
Product Type: P  
Date Reported: 08/21/2015  
Date Occur: 08/21/2015  
Cleanup: 08/21/2015  
Closure Request: Not reported  
Close Out: 02/11/2016  
Level Of Soil Cleanup Achieved: S3  
Tank Regulated Status: N  
# Of Supply Wells: 0  
Commercial/NonCommercial UST Site: Not reported  
Risk Classification: L  
Risk Class Based On Review: L  
Corrective Action Plan Type: Not reported  
NOV Issue Date: Not reported  
NORR Issue Date: Not reported  
Site Priority: Not reported  
Phase Of LSA Req: Not reported  
Site Risk Reason: Not reported  
Land Use: RES  
MTBE: No  
MTBE1: No  
Flag: No  
Flag1: No  
LUR Filed: Not reported  
Release Detection: 0  
Current Status: A  
RBCA GW: G1  
PETOPT: 3  
RPL: False  
CD Num: 612  
Reel Num: 0  
RPOW: True  
RPOP: True  
Error Flag: 0  
Error Code: N  
Valid: False  
Lat/Long: Not reported  
Lat/Long Decimal: 34.27234 -77.86843  
Testlat: Not reported  
Regional Officer Project Mgr: Not reported  
Region: WIL  
Company: Empire distribution  
Contact Person: Not reported  
Telephone: 9106759396  
RP Address: 4805 Las Tortugs Drive  
RP City,St,Zip: Wilmington, NC 28429  
RP County: Not reported  
Comments: Highlands the consultant/// pulled for archive 3.16.2016 ///  
5 Min Quad: Not reported

PIRF:  
Facility Id: 94291  
Date Occurred: Not reported  
Date Reported: Not reported  
Description Of Incident: Not reported  
Owner/Operator: Not reported  
Ownership: 4

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MVC-I-40 MM 420 (Continued)**

**S118635807**

Operation Type:	8
Type:	3
Location:	8
Site Priority:	Not reported
Priority Update:	Not reported
Wells Affected Y/N:	N
Wells Affected Number:	Not reported
Samples Taken By:	Y
Samples Include:	Not reported
7#5 Min Quad:	Not reported
5 Min Quad:	Not reported
Pirf/Min Soil:	Not reported
Release Code:	4
Cause:	Not reported
Source:	Not reported
Source Type:	P
Last Modified:	2/11/2016
<b>Incident Phase:</b>	<b>CO</b>
NOV Issued:	Not reported
NORR Issued:	Not reported
45 Day Report:	Not reported
Public Meeting Held:	Not reported
Corrective Action Planned:	Not reported
SOC Signed:	Not reported
Reclassification Report:	Not reported
RS Designation:	Not reported
Closure Request Date:	Not reported
Close-out Report:	Not reported

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NEW HANOVER COUNTY	S126477146	\$2.50 CRYSTAL CLEANERS # 107	810 S COLLEGE RD		DRYCLEANERS
WILMINGTON	S110630319	FLEMINGTON LF	I-40 EAST TO EXIT 416A, WEST O		OLI

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **STANDARD ENVIRONMENTAL RECORDS**

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/29/2021	Source: EPA
Date Data Arrived at EDR: 08/04/2021	Telephone: N/A
Date Made Active in Reports: 08/31/2021	Last EDR Contact: 09/01/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/29/2021	Source: EPA
Date Data Arrived at EDR: 08/04/2021	Telephone: N/A
Date Made Active in Reports: 08/31/2021	Last EDR Contact: 09/01/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/29/2021  
Date Data Arrived at EDR: 08/04/2021  
Date Made Active in Reports: 08/31/2021  
Number of Days to Update: 27

Source: EPA  
Telephone: N/A  
Last EDR Contact: 09/01/2021  
Next Scheduled EDR Contact: 10/11/2021  
Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021  
Date Data Arrived at EDR: 06/24/2021  
Date Made Active in Reports: 09/20/2021  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 06/23/2021  
Next Scheduled EDR Contact: 10/11/2021  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/29/2021  
Date Data Arrived at EDR: 08/04/2021  
Date Made Active in Reports: 08/31/2021  
Number of Days to Update: 27

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 09/01/2021  
Next Scheduled EDR Contact: 10/25/2021  
Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/29/2021	Source: EPA
Date Data Arrived at EDR: 08/04/2021	Telephone: 800-424-9346
Date Made Active in Reports: 08/31/2021	Last EDR Contact: 09/01/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021	Source: EPA
Date Data Arrived at EDR: 03/23/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 09/15/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 09/15/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 09/15/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 09/15/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Quarterly

## RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 09/15/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/10/2021	Source: Department of the Navy
Date Data Arrived at EDR: 05/13/2021	Telephone: 843-820-7326
Date Made Active in Reports: 08/03/2021	Last EDR Contact: 08/05/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 11/22/2021
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/17/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 703-603-0695
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 08/23/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 12/06/2021
	Data Release Frequency: Varies

### US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/17/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 703-603-0695
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 08/23/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 12/06/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Federal ERNS list**

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/14/2021  
Date Data Arrived at EDR: 06/17/2021  
Date Made Active in Reports: 08/17/2021  
Number of Days to Update: 61

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 09/21/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Quarterly

## **State- and tribal - equivalent NPL**

HSDS: Hazardous Substance Disposal Site

Locations of uncontrolled and unregulated hazardous waste sites. The file includes sites on the National Priority List as well as those on the state priority list.

Date of Government Version: 08/09/2011  
Date Data Arrived at EDR: 11/08/2011  
Date Made Active in Reports: 12/05/2011  
Number of Days to Update: 27

Source: North Carolina Center for Geographic Information and Analysis  
Telephone: 919-754-6580  
Last EDR Contact: 07/13/2021  
Next Scheduled EDR Contact: 11/01/2021  
Data Release Frequency: No Update Planned

## **State- and tribal - equivalent CERCLIS**

SHWS: Inactive Hazardous Sites Inventory

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/12/2021  
Date Data Arrived at EDR: 06/10/2021  
Date Made Active in Reports: 09/02/2021  
Number of Days to Update: 84

Source: Department of Environment, Health and Natural Resources  
Telephone: 919-508-8400  
Last EDR Contact: 09/09/2021  
Next Scheduled EDR Contact: 12/20/2021  
Data Release Frequency: Quarterly

## **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF: List of Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/06/2021  
Date Data Arrived at EDR: 06/22/2021  
Date Made Active in Reports: 09/20/2021  
Number of Days to Update: 90

Source: Department of Environment and Natural Resources  
Telephone: 919-733-0692  
Last EDR Contact: 09/24/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Varies

OLI: Old Landfill Inventory

Old landfill inventory location information. (Does not include no further action sites and other agency lead sites).

Date of Government Version: 09/11/2020  
Date Data Arrived at EDR: 10/09/2020  
Date Made Active in Reports: 12/30/2020  
Number of Days to Update: 82

Source: Department of Environment & Natural Resources  
Telephone: 919-733-4996  
Last EDR Contact: 07/09/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DEBRIS: Solid Waste Active Disaster Debris Sites Listing

NCDEQ Division of Waste Management Solid Waste Section Temporary Disaster Debris Staging Site (TDDSS) Locations which are available to be activated in a disaster or emergency.. Disaster Debris Sites can only be used for temporary disaster debris storage if the site's responsible party activates the site for use by notifying the NCDEQ DWM Solid Waste Section staff during an emergency

Date of Government Version: 01/06/2021	Source: Department of Environmental Quality
Date Data Arrived at EDR: 03/16/2021	Telephone: 919-707-8247
Date Made Active in Reports: 06/02/2021	Last EDR Contact: 09/14/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 12/27/2021
	Data Release Frequency: Varies

## LCID: Land-Clearing and Inert Debris (LCID) Landfill Notifications

A list all of the Land-Clearing and Inert Debris (LCID) Landfill Notification facilities (under 2 acres in size) in North Carolina.

Date of Government Version: 05/11/2021	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/02/2021	Telephone: 919-707-8248
Date Made Active in Reports: 09/28/2021	Last EDR Contact: 07/02/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

### **State and tribal leaking storage tank lists**

## LUST: Regional UST Database

This database contains information obtained from the Regional Offices. It provides a more detailed explanation of current and historic activity for individual sites, as well as what was previously found in the Incident Management Database. Sites in this database with Incident Numbers are considered LUSTs.

Date of Government Version: 04/30/2021	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 05/03/2021	Telephone: 919-707-8200
Date Made Active in Reports: 07/21/2021	Last EDR Contact: 08/03/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Quarterly

## LAST: Leaking Aboveground Storage Tanks

A listing of leaking aboveground storage tank site locations.

Date of Government Version: 04/30/2021	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 05/03/2021	Telephone: 877-623-6748
Date Made Active in Reports: 07/20/2021	Last EDR Contact: 08/03/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Quarterly

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/06/2021	Source: EPA, Region 5
Date Data Arrived at EDR: 06/11/2021	Telephone: 312-886-7439
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021	Source: EPA Region 4
Date Data Arrived at EDR: 06/22/2021	Telephone: 404-562-8677
Date Made Active in Reports: 09/20/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/27/2021	Source: EPA Region 10
Date Data Arrived at EDR: 06/11/2021	Telephone: 206-553-2857
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/27/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/11/2021	Telephone: 415-972-3372
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/27/2021	Source: EPA Region 8
Date Data Arrived at EDR: 06/11/2021	Telephone: 303-312-6271
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 06/01/2021	Source: EPA Region 7
Date Data Arrived at EDR: 06/11/2021	Telephone: 913-551-7003
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021	Source: EPA Region 1
Date Data Arrived at EDR: 06/11/2021	Telephone: 617-918-1313
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/17/2021	Source: EPA Region 6
Date Data Arrived at EDR: 06/11/2021	Telephone: 214-665-6597
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

LUST TRUST: State Trust Fund Database

This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

Date of Government Version: 07/02/2021	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 07/02/2021	Telephone: 919-733-1315
Date Made Active in Reports: 09/27/2021	Last EDR Contact: 07/02/2021
Number of Days to Update: 87	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal registered storage tank lists***

### **FEMA UST: Underground Storage Tank Listing**

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021	Source: FEMA
Date Data Arrived at EDR: 02/17/2021	Telephone: 202-646-5797
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

### **UST: Petroleum Underground Storage Tank Database**

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/30/2021	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 05/03/2021	Telephone: 919-733-1308
Date Made Active in Reports: 07/20/2021	Last EDR Contact: 08/03/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Quarterly

### **AST: AST Database**

Facilities with aboveground storage tanks that have a capacity greater than 21,000 gallons.

Date of Government Version: 05/18/2021	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 06/09/2021	Telephone: 919-715-6183
Date Made Active in Reports: 08/30/2021	Last EDR Contact: 09/09/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 12/27/2021
	Data Release Frequency: Semi-Annually

### **INDIAN UST R5: Underground Storage Tanks on Indian Land**

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021	Source: EPA Region 5
Date Data Arrived at EDR: 06/11/2021	Telephone: 312-886-6136
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

### **INDIAN UST R10: Underground Storage Tanks on Indian Land**

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/27/2021	Source: EPA Region 10
Date Data Arrived at EDR: 06/11/2021	Telephone: 206-553-2857
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

### **INDIAN UST R6: Underground Storage Tanks on Indian Land**

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/17/2021	Source: EPA Region 6
Date Data Arrived at EDR: 06/11/2021	Telephone: 214-665-7591
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 06/01/2021	Source: EPA Region 7
Date Data Arrived at EDR: 06/11/2021	Telephone: 913-551-7003
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/27/2021	Source: EPA Region 8
Date Data Arrived at EDR: 06/11/2021	Telephone: 303-312-6137
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/27/2021	Source: EPA Region 9
Date Data Arrived at EDR: 06/11/2021	Telephone: 415-972-3368
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/28/2021	Source: EPA, Region 1
Date Data Arrived at EDR: 06/11/2021	Telephone: 617-918-1313
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021	Source: EPA Region 4
Date Data Arrived at EDR: 06/22/2021	Telephone: 404-562-9424
Date Made Active in Reports: 09/20/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

## ***State and tribal institutional control / engineering control registries***

### INST CONTROL: No Further Action Sites With Land Use Restrictions Monitoring

A land use restricted site is a property where there are limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site.

Date of Government Version: 09/04/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 09/09/2020	Telephone: 919-508-8400
Date Made Active in Reports: 12/03/2020	Last EDR Contact: 09/10/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 12/20/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal voluntary cleanup sites***

VCP: Responsible Party Voluntary Action Sites  
Responsible Party Voluntary Action site locations.

Date of Government Version: 05/12/2021	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 06/07/2021	Telephone: 919-508-8400
Date Made Active in Reports: 08/30/2021	Last EDR Contact: 09/09/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 12/20/2021
	Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing  
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 07/08/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing  
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/15/2021
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Varies

## ***State and tribal Brownfields sites***

BROWNFIELDS: Brownfields Projects Inventory  
A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liability control.

Date of Government Version: 06/01/2021	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 06/24/2021	Telephone: 919-733-4996
Date Made Active in Reports: 09/17/2021	Last EDR Contact: 09/28/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 01/10/2022
	Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites  
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/10/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/10/2021	Telephone: 202-566-2777
Date Made Active in Reports: 08/17/2021	Last EDR Contact: 09/14/2021
Number of Days to Update: 68	Next Scheduled EDR Contact: 12/27/2021
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### **SWRCY: Recycling Center Listing**

A listing of recycling center locations.

Date of Government Version: 01/28/2021  
Date Data Arrived at EDR: 01/29/2021  
Date Made Active in Reports: 04/23/2021  
Number of Days to Update: 84

Source: Department of Environment & Natural Resources  
Telephone: 919-707-8137  
Last EDR Contact: 07/21/2021  
Next Scheduled EDR Contact: 11/08/2021  
Data Release Frequency: Varies

### **HIST LF: Solid Waste Facility Listing**

A listing of solid waste facilities.

Date of Government Version: 11/06/2006  
Date Data Arrived at EDR: 02/13/2007  
Date Made Active in Reports: 03/02/2007  
Number of Days to Update: 17

Source: Department of Environment & Natural Resources  
Telephone: 919-733-0692  
Last EDR Contact: 01/19/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **INDIAN ODI: Report on the Status of Open Dumps on Indian Lands**

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 07/20/2021  
Next Scheduled EDR Contact: 11/08/2021  
Data Release Frequency: Varies

### **ODI: Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations**

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 07/13/2021  
Next Scheduled EDR Contact: 11/01/2021  
Data Release Frequency: No Update Planned

### **IHS OPEN DUMPS: Open Dumps on Indian Land**

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 07/20/2021  
Next Scheduled EDR Contact: 11/08/2021  
Data Release Frequency: Varies

## **Local Lists of Hazardous waste / Contaminated Sites**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2021  
Date Data Arrived at EDR: 05/18/2021  
Date Made Active in Reports: 08/03/2021  
Number of Days to Update: 77

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/17/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: No Update Planned

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2021  
Date Data Arrived at EDR: 05/18/2021  
Date Made Active in Reports: 08/03/2021  
Number of Days to Update: 77

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/17/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: Quarterly

## **Local Land Records**

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/29/2021  
Date Data Arrived at EDR: 08/04/2021  
Date Made Active in Reports: 08/31/2021  
Number of Days to Update: 27

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 09/01/2021  
Next Scheduled EDR Contact: 10/11/2021  
Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/12/2021  
Date Data Arrived at EDR: 09/13/2021  
Date Made Active in Reports: 09/28/2021  
Number of Days to Update: 15

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 09/13/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Quarterly

### SPILLS: Spills Incident Listing

A listing spills, hazardous material releases, sanitary sewer overflows, wastewater treatment plant bypasses and upsets, citizen complaints, and any other environmental emergency calls reported to the agency.

Date of Government Version: 06/07/2021  
Date Data Arrived at EDR: 06/08/2021  
Date Made Active in Reports: 08/30/2021  
Number of Days to Update: 83

Source: Department of Environment & Natural Resources  
Telephone: 919-807-6308  
Last EDR Contact: 09/15/2021  
Next Scheduled EDR Contact: 12/20/2021  
Data Release Frequency: Quarterly

### IMD: Incident Management Database

Groundwater and/or soil contamination incidents

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/30/2021  
Date Data Arrived at EDR: 08/03/2021  
Date Made Active in Reports: 08/06/2021  
Number of Days to Update: 3

Source: Department of Environment and Natural Resources  
Telephone: 877-623-6748  
Last EDR Contact: 08/03/2021  
Next Scheduled EDR Contact: 11/15/2021  
Data Release Frequency: No Update Planned

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/27/2012  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 03/06/2013  
Number of Days to Update: 62

Source: FirstSearch  
Telephone: N/A  
Last EDR Contact: 01/03/2013  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 06/14/2001  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 03/06/2013  
Number of Days to Update: 62

Source: FirstSearch  
Telephone: N/A  
Last EDR Contact: 01/03/2013  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## **Other Ascertainable Records**

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/22/2021  
Date Data Arrived at EDR: 03/23/2021  
Date Made Active in Reports: 05/19/2021  
Number of Days to Update: 57

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 09/15/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Quarterly

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/04/2021  
Date Data Arrived at EDR: 05/18/2021  
Date Made Active in Reports: 08/11/2021  
Number of Days to Update: 85

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 08/17/2021  
Next Scheduled EDR Contact: 11/29/2021  
Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 07/13/2021  
Next Scheduled EDR Contact: 10/25/2021  
Data Release Frequency: Semi-Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 07/09/2021
Number of Days to Update: 574	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 08/06/2021
Number of Days to Update: 63	Next Scheduled EDR Contact: 11/22/2021
	Data Release Frequency: Varies

### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/13/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2021	Telephone: 202-566-1917
Date Made Active in Reports: 09/28/2021	Last EDR Contact: 09/15/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/03/2022
	Data Release Frequency: Quarterly

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 07/26/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Quarterly

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 08/06/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 09/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 12/27/2021
	Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 08/14/2020	Telephone: 202-566-0250
Date Made Active in Reports: 11/04/2020	Last EDR Contact: 08/17/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 11/29/2021
	Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 04/19/2021	Source: EPA
Date Data Arrived at EDR: 04/20/2021	Telephone: 202-564-4203
Date Made Active in Reports: 07/16/2021	Last EDR Contact: 07/19/2021
Number of Days to Update: 87	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/29/2021	Source: EPA
Date Data Arrived at EDR: 08/04/2021	Telephone: 703-416-0223
Date Made Active in Reports: 08/31/2021	Last EDR Contact: 09/01/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/13/2021
	Data Release Frequency: Annually

## RMP: Risk Management Plans

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/07/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/13/2021	Telephone: 202-564-8600
Date Made Active in Reports: 08/03/2021	Last EDR Contact: 07/14/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 202-564-6023
Date Made Active in Reports: 03/05/2021	Last EDR Contact: 09/01/2021
Number of Days to Update: 50	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020	Source: EPA
Date Data Arrived at EDR: 01/08/2021	Telephone: 202-566-0500
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 07/09/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

**MLTS: Material Licensing Tracking System**

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/11/2021	Telephone: 301-415-7169
Date Made Active in Reports: 05/11/2021	Last EDR Contact: 07/14/2021
Number of Days to Update: 61	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Quarterly

**COAL ASH DOE: Steam-Electric Plant Operation Data**

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 09/03/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 12/13/2021
	Data Release Frequency: Varies

**COAL ASH EPA: Coal Combustion Residues Surface Impoundments List**

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 08/31/2021
Number of Days to Update: 251	Next Scheduled EDR Contact: 12/13/2021
	Data Release Frequency: Varies

**PCB TRANSFORMER: PCB Transformer Registration Database**

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 08/06/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Varies

**RADINFO: Radiation Information Database**

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2019  
Date Data Arrived at EDR: 07/01/2019  
Date Made Active in Reports: 09/23/2019  
Number of Days to Update: 84

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 09/27/2021  
Next Scheduled EDR Contact: 01/10/2022  
Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2007  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020  
Date Data Arrived at EDR: 01/28/2020  
Date Made Active in Reports: 04/17/2020  
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 07/23/2021  
Next Scheduled EDR Contact: 11/08/2021  
Data Release Frequency: Quarterly

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2021  
Date Data Arrived at EDR: 07/14/2021  
Date Made Active in Reports: 07/16/2021  
Number of Days to Update: 2

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 07/02/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/22/2020  
Date Made Active in Reports: 11/20/2020  
Number of Days to Update: 151

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 09/15/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Biennially

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014	Source: USGS
Date Data Arrived at EDR: 07/14/2015	Telephone: 202-208-3710
Date Made Active in Reports: 01/10/2017	Last EDR Contact: 07/02/2021
Number of Days to Update: 546	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017	Source: Department of Energy
Date Data Arrived at EDR: 09/11/2018	Telephone: 202-586-3559
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 07/23/2021
Number of Days to Update: 3	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019	Source: Department of Energy
Date Data Arrived at EDR: 11/15/2019	Telephone: 505-845-0011
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 08/12/2021
Number of Days to Update: 74	Next Scheduled EDR Contact: 11/29/2021
	Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/29/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/04/2021	Telephone: 703-603-8787
Date Made Active in Reports: 08/31/2021	Last EDR Contact: 09/01/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/03/2021  
Date Data Arrived at EDR: 05/25/2021  
Date Made Active in Reports: 08/11/2021  
Number of Days to Update: 78

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 08/24/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: Semi-Annually

## MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/30/2021  
Date Data Arrived at EDR: 07/01/2021  
Date Made Active in Reports: 09/28/2021  
Number of Days to Update: 89

Source: DOL, Mine Safety & Health Admi  
Telephone: 202-693-9424  
Last EDR Contact: 09/09/2021  
Next Scheduled EDR Contact: 12/13/2021  
Data Release Frequency: Quarterly

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020  
Date Data Arrived at EDR: 05/27/2020  
Date Made Active in Reports: 08/13/2020  
Number of Days to Update: 78

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 08/26/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 08/26/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/15/2021  
Date Data Arrived at EDR: 06/16/2021  
Date Made Active in Reports: 08/17/2021  
Number of Days to Update: 62

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 09/14/2021  
Next Scheduled EDR Contact: 12/20/2021  
Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/05/2021  
Date Data Arrived at EDR: 05/18/2021  
Date Made Active in Reports: 08/17/2021  
Number of Days to Update: 91

Source: EPA  
Telephone: (404) 562-9900  
Last EDR Contact: 08/31/2021  
Next Scheduled EDR Contact: 12/13/2021  
Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021  
Date Data Arrived at EDR: 05/21/2021  
Date Made Active in Reports: 08/11/2021  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 202-564-0527  
Last EDR Contact: 08/26/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: Varies

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/26/2021  
Date Data Arrived at EDR: 07/01/2021  
Date Made Active in Reports: 09/28/2021  
Number of Days to Update: 89

Source: Environmental Protection Agency  
Telephone: 202-564-2280  
Last EDR Contact: 07/01/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Quarterly

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 07/02/2020  
Date Made Active in Reports: 09/17/2020  
Number of Days to Update: 77

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 07/07/2021  
Next Scheduled EDR Contact: 10/25/2021  
Data Release Frequency: Varies

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/14/2021  
Date Data Arrived at EDR: 05/14/2021  
Date Made Active in Reports: 08/03/2021  
Number of Days to Update: 81

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 08/13/2021  
Next Scheduled EDR Contact: 11/29/2021  
Data Release Frequency: Quarterly

## AIRS: Air Quality Permit Listing

A listing of facilities with air quality permits.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/07/2021  
Date Data Arrived at EDR: 06/07/2021  
Date Made Active in Reports: 08/27/2021  
Number of Days to Update: 81

Source: Department of Environmental Quality  
Telephone: 919-707-8726  
Last EDR Contact: 09/08/2021  
Next Scheduled EDR Contact: 12/20/2021  
Data Release Frequency: Varies

## ASBESTOS: ASBESTOS

Asbestos notification sites

Date of Government Version: 04/30/2021  
Date Data Arrived at EDR: 05/17/2021  
Date Made Active in Reports: 08/03/2021  
Number of Days to Update: 78

Source: Department of Health & Human Services  
Telephone: 919-707-5973  
Last EDR Contact: 07/14/2021  
Next Scheduled EDR Contact: 11/01/2021  
Data Release Frequency: Varies

## COAL ASH: Coal Ash Disposal Sites

A listing of coal combustion products distribution permits issued by the Division for the treatment, storage, transportation, use and disposal of coal combustion products.

Date of Government Version: 05/06/2021  
Date Data Arrived at EDR: 06/22/2021  
Date Made Active in Reports: 09/22/2021  
Number of Days to Update: 92

Source: Department of Environment & Natural Resources  
Telephone: 919-807-6359  
Last EDR Contact: 09/24/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Varies

## DRYCLEANERS: Drycleaning Sites

Potential and known drycleaning sites, active and abandoned, that the Drycleaning Solvent Cleanup Program has knowledge of and entered into this database.

Date of Government Version: 03/31/2021  
Date Data Arrived at EDR: 06/03/2021  
Date Made Active in Reports: 08/26/2021  
Number of Days to Update: 84

Source: Department of Environment & Natural Resources  
Telephone: 919-508-8400  
Last EDR Contact: 09/14/2021  
Next Scheduled EDR Contact: 12/27/2021  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 04/30/2021  
Date Data Arrived at EDR: 05/03/2021  
Date Made Active in Reports: 07/20/2021  
Number of Days to Update: 78

Source: Department of Environment & Natural Resources  
Telephone: 919-733-1322  
Last EDR Contact: 08/03/2021  
Next Scheduled EDR Contact: 11/15/2021  
Data Release Frequency: Quarterly

## Financial Assurance 2: Financial Assurance Information Listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/02/2012  
Date Data Arrived at EDR: 10/03/2012  
Date Made Active in Reports: 10/26/2012  
Number of Days to Update: 23

Source: Department of Environment & Natural Resources  
Telephone: 919-508-8496  
Last EDR Contact: 09/15/2021  
Next Scheduled EDR Contact: 01/03/2022  
Data Release Frequency: Varies

## Financial Assurance 3: Financial Assurance Information

Hazardous waste financial assurance information.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/02/2021  
Date Data Arrived at EDR: 06/03/2021  
Date Made Active in Reports: 08/25/2021  
Number of Days to Update: 83

Source: Department of Environment & Natural Resources  
Telephone: 919-707-8222  
Last EDR Contact: 08/31/2021  
Next Scheduled EDR Contact: 12/19/2021  
Data Release Frequency: Varies

## NPDES: NPDES Facility Location Listing

General information regarding NPDES(National Pollutant Discharge Elimination System) permits.

Date of Government Version: 04/02/2021  
Date Data Arrived at EDR: 04/27/2021  
Date Made Active in Reports: 07/15/2021  
Number of Days to Update: 79

Source: Department of Environment & Natural Resources  
Telephone: 919-733-7015  
Last EDR Contact: 07/26/2021  
Next Scheduled EDR Contact: 11/08/2021  
Data Release Frequency: Varies

## UIC: Underground Injection Wells Listing

A listing of uncerground injection wells locations.

Date of Government Version: 10/26/2020  
Date Data Arrived at EDR: 11/30/2020  
Date Made Active in Reports: 12/07/2020  
Number of Days to Update: 7

Source: Department of Environment & Natural Resources  
Telephone: 919-807-6412  
Last EDR Contact: 09/03/2021  
Next Scheduled EDR Contact: 12/13/2021  
Data Release Frequency: Quarterly

## AOP: Animal Operation Permits Listing

This listing includes animal operations that are required to be permitted by the state.

Date of Government Version: 04/01/2020  
Date Data Arrived at EDR: 05/26/2020  
Date Made Active in Reports: 05/27/2020  
Number of Days to Update: 1

Source: Department of Environmental Quality  
Telephone: 919-707-9129  
Last EDR Contact: 09/10/2021  
Next Scheduled EDR Contact: 12/20/2021  
Data Release Frequency: Varies

## SEPT HAULERS: Permitted Septage Haulers Listing

This list of all active and permitted Septage Land Application Site (SLAS) and Septage Detention and Treatment Facility (SDTF) sites in North Carolina. The purpose of this map is to provide the public and government entities a visual overview of the businesses that manage septage and septage facilities throughout the state.

Date of Government Version: 03/25/2021  
Date Data Arrived at EDR: 04/06/2021  
Date Made Active in Reports: 06/24/2021  
Number of Days to Update: 79

Source: Department of Environmental Quality  
Telephone: 919-707-8248  
Last EDR Contact: 07/02/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Varies

## CCB: Coal Ash Structural Fills (CCB) Listing

These are not permitted Coal Ash landfills A list all of the now closed Coal Ash Structural Fills (CCB) in North Carolina, in point data form. The purpose is to provide the public and other government entities a visual overview of coal ash structural fills throughout the state and increase public awareness of their current locations.

Date of Government Version: 05/10/2021  
Date Data Arrived at EDR: 07/02/2021  
Date Made Active in Reports: 09/27/2021  
Number of Days to Update: 87

Source: Department of Environmental Quality  
Telephone: 919-707-8248  
Last EDR Contact: 07/02/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Varies

## MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018  
Date Data Arrived at EDR: 10/21/2019  
Date Made Active in Reports: 10/24/2019  
Number of Days to Update: 3

Source: USGS  
Telephone: 703-648-6533  
Last EDR Contact: 08/26/2021  
Next Scheduled EDR Contact: 12/06/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PCSRP: Petroleum-Contaminated Soil Remediation Permits

To treat petroleum-contaminated soil in order to protect North Carolina's environment and the health of the citizens of North Carolina.

Date of Government Version: 05/25/2021  
Date Data Arrived at EDR: 07/02/2021  
Date Made Active in Reports: 09/27/2021  
Number of Days to Update: 87

Source: Department of Environmental Quality  
Telephone: 919-707-8248  
Last EDR Contact: 07/02/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Varies

## PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 02/05/2015  
Date Made Active in Reports: 03/06/2015  
Number of Days to Update: 29

Source: EPA  
Telephone: 202-564-2497  
Last EDR Contact: 06/30/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Varies

## PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014  
Date Data Arrived at EDR: 01/06/2015  
Date Made Active in Reports: 05/06/2015  
Number of Days to Update: 120

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 06/30/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Semi-Annually

## PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011  
Date Data Arrived at EDR: 08/05/2011  
Date Made Active in Reports: 09/29/2011  
Number of Days to Update: 55

Source: EPA, Office of Water  
Telephone: 202-564-2496  
Last EDR Contact: 06/30/2021  
Next Scheduled EDR Contact: 10/18/2021  
Data Release Frequency: Semi-Annually

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environment, Health and Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Environment, Health and Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/20/2013  
Number of Days to Update: 172

Source: Department of Environment, Health and Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 03/24/2021	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 05/11/2021	Telephone: 860-424-3375
Date Made Active in Reports: 07/28/2021	Last EDR Contact: 08/10/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/22/2021
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 07/09/2021
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 04/29/2020	Telephone: 518-402-8651
Date Made Active in Reports: 07/10/2020	Last EDR Contact: 07/29/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 11/08/2021
	Data Release Frequency: Quarterly

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 07/07/2021
Number of Days to Update: 53	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2019	Source: Department of Environmental Management
Date Data Arrived at EDR: 02/11/2021	Telephone: 401-222-2797
Date Made Active in Reports: 02/24/2021	Last EDR Contact: 08/11/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/29/2021
	Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018	Source: Department of Natural Resources
Date Data Arrived at EDR: 06/19/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/01/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/20/2021
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

### Electric Power Transmission Line Data

Source: Endeavor Business Media

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Child Care Facility List

Source: Department of Health & Human Services

Telephone: 919-662-4499

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: US Fish & Wildlife Service

Telephone: 703-358-2171

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

## STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

ESTRELLA LANDING  
GORDON ROAD  
WILMINGTON, NC 28411

### TARGET PROPERTY COORDINATES

Latitude (North): 34.27847 - 34° 16' 42.49"  
Longitude (West): 77.864673 - 77° 51' 52.82"  
Universal Transverse Mercator: Zone 18  
UTM X (Meters): 236273.6  
UTM Y (Meters): 3796552.5  
Elevation: 23 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5945715 SCOTTS HILL, NC  
Version Date: 2013

Northwest Map: 5946093 CASTLE HAYNE, NC  
Version Date: 2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

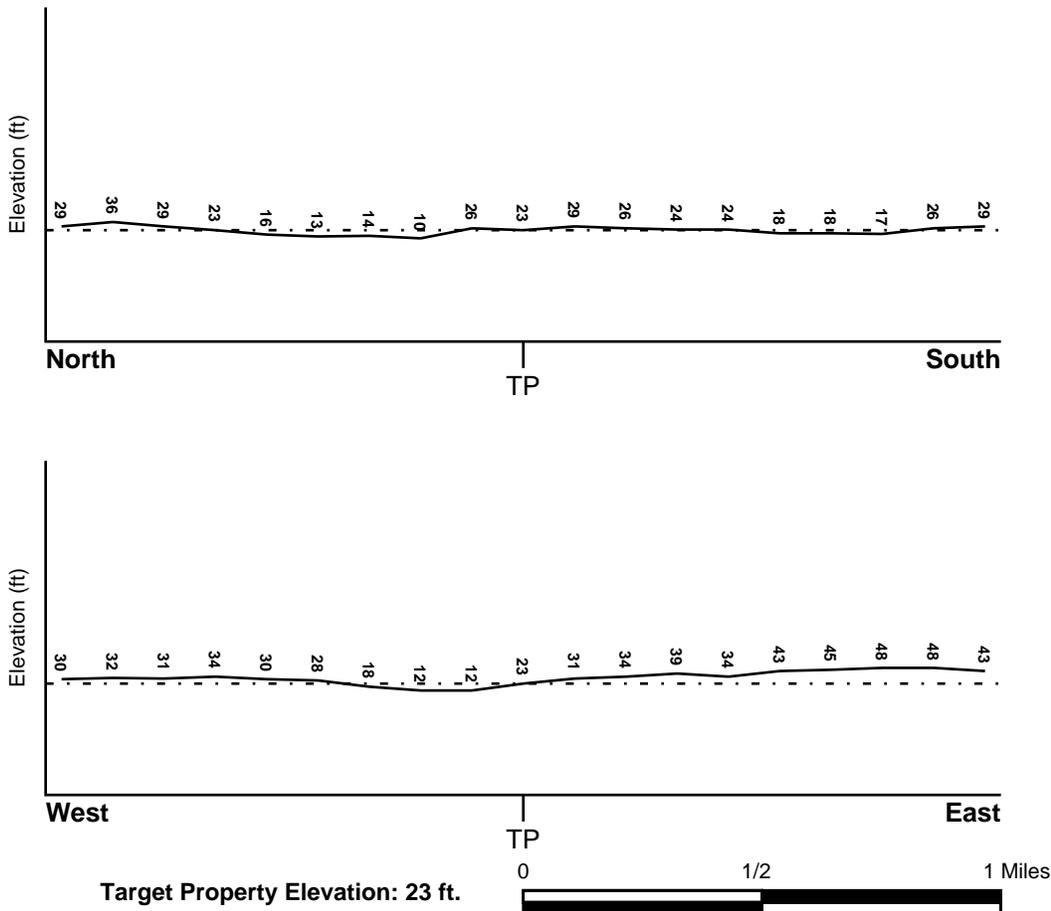
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
3720314900J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
3720313900J	FEMA FIRM Flood data
3720313800J	FEMA FIRM Flood data
3720314800J	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
SCOTTS HILL	YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Tertiary  
Series: Eocene  
Code: Te *(decoded above as Era, System & Series)*

#### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: WOODINGTON

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.

Soil Drainage Class: Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 3.60
2	12 inches	47 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 3.60
3	47 inches	85 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 2.00	Max: 5.50 Min: 3.60

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam  
loamy fine sand  
fine sand  
sand

Surficial Soil Types: loam  
loamy fine sand  
fine sand  
sand

Shallow Soil Types: fine sand  
sandy loam

Deeper Soil Types: clay loam  
loamy sand  
clay  
sandy clay loam  
loamy fine sand  
sand  
stratified

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40000882100	1/2 - 1 Mile NW
3	USGS40000882083	1/2 - 1 Mile WNW
5	USGS40000882108	1/2 - 1 Mile NW
8	USGS40000882127	1/2 - 1 Mile NNW
9	USGS40000882059	1/2 - 1 Mile East
10	USGS40000882044	1/2 - 1 Mile WSW
11	USGS40000882113	1/2 - 1 Mile NE
13	USGS40000882074	1/2 - 1 Mile West
14	USGS40000882149	1/2 - 1 Mile North
15	USGS40000882136	1/2 - 1 Mile NNW
16	USGS40000882152	1/2 - 1 Mile North

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A4	NC0465105	1/2 - 1 Mile WSW

Note: PWS System location is not always the same as well location.

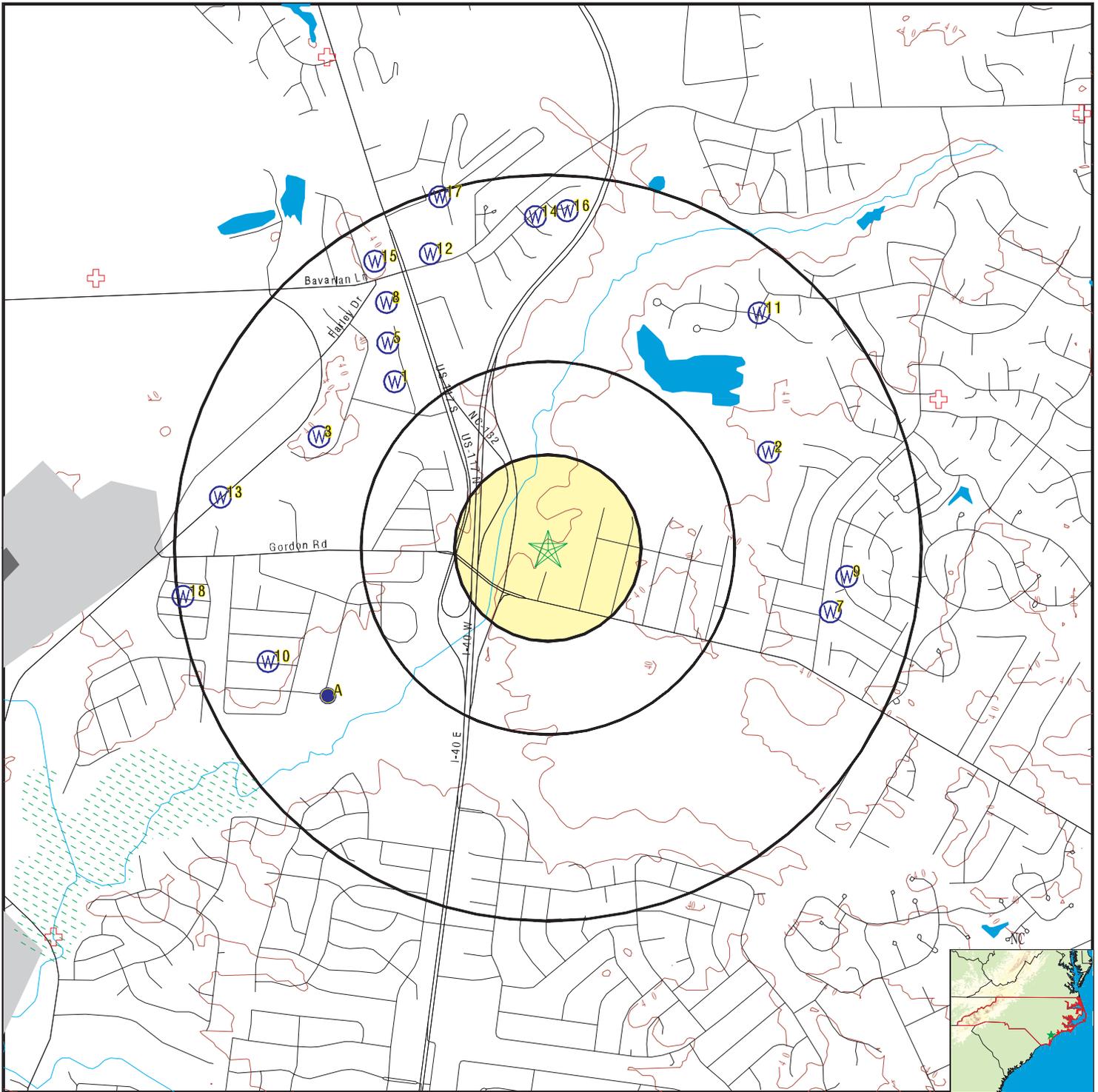
## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
2	NC3000000007727	1/2 - 1 Mile ENE
A6	NC3000000007723	1/2 - 1 Mile SW
7	NC3000000007707	1/2 - 1 Mile ESE
12	NC2000000000346	1/2 - 1 Mile NNW
17	NC2000000000352	1/2 - 1 Mile NNW
18	NC3000000007648	1/2 - 1 Mile West

## **GEOCHECK - PHYSICAL SETTING SOURCE SUMMARY**

### **OTHER STATE DATABASE INFORMATION**

# PHYSICAL SETTING SOURCE MAP - 6685191.2s



- |  |  |                           |
|--|--|---------------------------|
| County Boundary                            | Groundwater Flow Direction                 | Wildlife Areas            |
| Major Roads                                | Indeterminate Groundwater Flow at Location | Natural Areas             |
| Contour Lines                              | Groundwater Flow Varies at Location        | Rare & Endangered Species |
| Airports                                   |  |                           |
| Earthquake epicenter, Richter 5 or greater |  |                           |
| Water Wells                                |  |                           |
| Public Water Supply Wells                  |  |                           |
| Cluster of Multiple Icons                  |  |                           |



SITE NAME: Estrella Landing  
 ADDRESS: Gordon Road  
 Wilmington NC 28411  
 LAT/LONG: 34.27847 / 77.864673

CLIENT: Pilot Environmental Inc  
 CONTACT: Stephen Arenson  
 INQUIRY #: 6685191.2s  
 DATE: September 30, 2021 5:04 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**1**  
**NW**  
**1/2 - 1 Mile**  
**Higher**      **FED USGS**      **USGS40000882100**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-679	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Peedee Formation	Aquifer Type:	Confined single aquifer
Construction Date:	20010913	Well Depth:	105
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**2**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**      **NC WELLS**      **NC300000007727**

PWD ID:	NC0465232	System Name:	CFPUA/NHC
PWS Type:	Community	Primary Source:	Ground Water
Water Type:	Ground Water	Facility Name:	WELL #27
Facility Type:	Well	Well Depth:	180
Owner:	CAPE FEAR PUBLIC UTILITY AUTHORITY		

**3**  
**WNW**  
**1/2 - 1 Mile**  
**Higher**      **FED USGS**      **USGS40000882083**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-667	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Castle Hayne Limestone	Aquifer Type:	Confined single aquifer
Construction Date:	20080116	Well Depth:	50
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**A4**  
**WSW**  
**1/2 - 1 Mile**  
**Lower**      **FRDS PWS**      **NC0465105**

Epa region:	04	State:	NC
Pwsid:	NC0465105	Pwsname:	BROOKFIELD S/D
Cityserved:	Not Reported	Stateserved:	NC
Zipsserved:	Not Reported	Fipscounty:	37129

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Status:	Closed	Retpopsrvd:	555
Pwssvconn:	222	Psource longname:	Groundwater
Pwstype:	CWS	Owner:	Private
Contact:	G ALLIE MOORE OR MANAGER NOW		
Contactorgname:	Not Reported	Contactphone:	Not Reported
Contactaddress1:	Not Reported	Contactaddress2:	PO BOX 3684
Contactcity:	WILMINGTON	Contactstate:	NC
Contactzip:	28406	Pwsactivitycode:	I
Pwsid:	NC0465105	Facid:	7867
Facname:	WELL #1	Factype:	Treatment_plant
Facactivitycode:	I	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
Pwsid:	NC0465105	Facid:	7868
Facname:	WELL #2	Factype:	Treatment_plant
Facactivitycode:	I	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
Pwsid:	NC0465105	Facid:	7868
Facname:	WELL #2	Factype:	Treatment_plant
Facactivitycode:	I	Trtobjective:	iron removal
Trtprocess:	sequestration	Factypecode:	TP
PWS ID:	NC0465105	PWS name:	BROOKFIELD S/D
Address:	Not Reported	Care of:	Not Reported
City:	WILMINGTON	State:	NC
Zip:	28406	Owner:	BROOKFIELD S/D
Source code:	Ground water	Population:	750
PWS ID:	NC0465105	PWS type:	System Owner/Responsible Party
PWS name:	G ALLIE MOORE OR MANAGER NOW		
PWS address:	Not Reported	PWS city:	WILMINGTON
PWS state:	NC	PWS zip:	28406
PWS ID:	NC0465105	PWS type:	System Owner/Responsible Party
PWS name:	COASTAL PLAINS UTILITIES	PWS address:	Not Reported
PWS city:	WILMINGTON	PWS state:	NC
PWS zip:	28406	County:	NEW HANOVER
Source:	Ground water	Treatment Objective:	DISINFECTION
Process:	HYPOCHLORINATION, POST	Population:	750
County:	NEW HANOVER	Source:	Ground water
Treatment Objective:	IRON REMOVAL	Process:	SEQUESTRATION
Population:	750		
PWS ID:	NC0465105	Activity status:	Active
Date system activated:	7706	Date system deactivated:	Not Reported
Retail population:	00000500	System name:	BROOKFIELD S/D
System address:	Not Reported	System city:	WILMINGTON
System state:	NC	System zip:	28406
County FIPS:	065	City served:	WILMINGTON
Population served:	101 - 500 Persons	Treatment:	Treated
Latitude:	341618	Longitude:	0775231
Latitude:	341617	Longitude:	0775245
State:	NC	Latitude degrees:	34
Latitude minutes:	16	Latitude seconds:	20.0000
Longitude degrees:	77	Longitude minutes:	52

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Longitude seconds: 46.0000

State: NC  
 Latitude minutes: 16  
 Longitude degrees: 77  
 Longitude seconds: 30.0000

Latitude degrees: 34  
 Latitude seconds: 22.0000  
 Longitude minutes: 52

Violation id: 2501  
 State: NC  
 Contamination code: 3100  
 Violation code: 23  
 Rule code: 110  
 Violation measur: Not Reported  
 State mcl: Not Reported  
 Cmp edt: 07/31/2000

Orig code: S  
 Violation Year: 2000  
 Contamination Name: Coliform (TCR)  
 Violation name: Monitoring, Routine Major (TCR)  
 Rule name: TCR  
 Unit of measure: Not Reported  
 Cmp bdt: 07/01/2000

PWS currently has or had major violation(s) or enforcement:Yes

Violation ID: 9410632  
 PWS telephone: Not Reported  
 Violation type: Monitoring, Regular  
 Violation end date: 063094  
 Violation awareness date: 071594  
 Maximum contaminant level: Not Reported  
 Number of samples taken: 000  
 Analysis result: Not Reported

Violation source ID: Not Reported  
 Contaminant: GROSS ALPHA, EXCL. RADON & U  
 Violation start date: 070190  
 Violation period (months): 048  
 Major violator: Yes  
 Number of required samples: 000  
 Analysis method: Not Reported

PWS currently has or had major violation(s) or enforcement:Yes

Violation ID: 9272922  
 PWS telephone: Not Reported  
 Violation type: Monitoring, Regular  
 Violation end date: 123191  
 Violation awareness date: 031392  
 Maximum contaminant level: Not Reported  
 Number of samples taken: 000  
 Analysis result: Not Reported

Violation source ID: Not Reported  
 Contaminant: IRON  
 Violation start date: 010189  
 Violation period (months): 036  
 Major violator: Yes  
 Number of required samples: 000  
 Analysis method: Not Reported

PWS currently has or had major violation(s) or enforcement:Yes

Violation ID: 9272923  
 PWS telephone: Not Reported  
 Violation type: Monitoring, Regular  
 Violation end date: 123191  
 Violation awareness date: 031392  
 Maximum contaminant level: Not Reported  
 Number of samples taken: 000  
 Analysis result: Not Reported

Violation source ID: Not Reported  
 Contaminant: MANGANESE  
 Violation start date: 010189  
 Violation period (months): 036  
 Major violator: Yes  
 Number of required samples: 000  
 Analysis method: Not Reported

Violation ID: 1192  
 Enforcemnt FY: 2001  
 Enforcement Detail: St Compliance achieved

Orig Code: S  
 Enforcement Action: 04/24/2001  
 Enforcement Category: Resolving

Violation ID: 1292  
 Enforcemnt FY: 2001  
 Enforcement Detail: St Compliance achieved

Orig Code: S  
 Enforcement Action: 04/24/2001  
 Enforcement Category: Resolving

Violation ID: 1492  
 Enforcemnt FY: 2001  
 Enforcement Detail: St Compliance achieved

Orig Code: S  
 Enforcement Action: 04/24/2001  
 Enforcement Category: Resolving

Violation ID: 1592

Orig Code: S

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcemnt FY:	2001	Enforcement Action:	04/24/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1692	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/24/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1792	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/24/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2392	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/24/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2492	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	12/12/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2501	Orig Code:	S
Enforcemnt FY:	2000	Enforcement Action:	09/07/2000
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	2501	Orig Code:	S
Enforcemnt FY:	2000	Enforcement Action:	09/07/2000
Enforcement Detail:	St Formal NOV issued	Enforcement Category:	Informal
Violation ID:	289	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/24/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

**5  
NW  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000882108**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-684	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Castle Hayne Limestone	Aquifer Type:	Confined single aquifer
Construction Date:	Not Reported	Well Depth:	53
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**A6  
SW  
1/2 - 1 Mile  
Lower**

**NC WELLS      NC3000000007723**

PWD ID:	NC0465232	System Name:	CFPUA/NHC
PWS Type:	Community	Primary Source:	Ground Water
Water Type:	Ground Water	Facility Name:	WELL #21 BROOKFIELD
Facility Type:	Well	Well Depth:	110
Owner:	CAPE FEAR PUBLIC UTILITY AUTHORITY		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**7**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**NC WELLS      NC300000007707**

PWD ID:	NC0465232	System Name:	CFPUA/NHC
PWS Type:	Community	Primary Source:	Ground Water
Water Type:	Ground Water	Facility Name:	WELL #3 BAY BLOSSOM
Facility Type:	Well	Well Depth:	160
Owner:	CAPE FEAR PUBLIC UTILITY AUTHORITY		

**8**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882127**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-692	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Castle Hayne Limestone	Aquifer Type:	Confined single aquifer
Construction Date:	20040129	Well Depth:	43
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**9**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882059**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-650	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Castle Hayne Limestone	Aquifer Type:	Confined single aquifer
Construction Date:	20010420	Well Depth:	70
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**10**  
**WSW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882044**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-141 HARRELLS BLDG	Type:	Well
Description:	Not Reported	HUC:	03030007

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Early Mesozoic basin aquifers		
Formation Type:	Cenozoic-Mesozoic Erathems		
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

**11**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882113**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-688	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Peedee Formation	Aquifer Type:	Confined single aquifer
Construction Date:	Not Reported	Well Depth:	140
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**12**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**NC WELLS      NC2000000000346**

PWS ID:	NC7065012	System Name:	FELLOWSHIP BAPTIST CHURCH
PWS Type:	NC	Primary Source:	GW
Water Type:	GW	Facility Name:	WELL #1
Well Depth:	30	Owner:	FELLOWSHIP BAPTIST CHURCH_7065012

**13**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882074**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-139 E E LEWIS	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Peedee Formation	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**14**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882149**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-705	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Castle Hayne Limestone	Aquifer Type:	Confined single aquifer
Construction Date:	20010508	Well Depth:	45
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**15**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882136**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-533 ALEXANDER WEIDE	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Peedee Formation	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	109
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**16**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000882152**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	NH-706	Type:	Well
Description:	Not Reported	HUC:	03030007
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Castle Hayne Limestone	Aquifer Type:	Confined single aquifer
Construction Date:	20010604	Well Depth:	60
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**17**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**NC WELLS      NC2000000000352**

PWS ID:	NC0465144	System Name:	PORT O'PINES MHP
PWS Type:	C	Primary Source:	GW
Water Type:	GW	Facility Name:	WELL #1
Well Depth:	100	Owner:	CAPPS, JACK

**18**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**NC WELLS      NC30000000007648**

PWD ID:	NC0465121	System Name:	GLYNNWOOD MHP
PWS Type:	Community	Primary Source:	Ground Water
Water Type:	Ground Water	Facility Name:	WELL #1
Facility Type:	Well	Well Depth:	118
Owner:	AQUA NORTH CAROLINA INC.		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database      EDR ID Number

Elclass:	P	Precision1:	<b>NC_NHEO</b>	<b>NC50003079</b>
Eostat:	X	Gisid:	S	
Edr id:	NC50003079		441362	

---

Elclass:	P	Precision1:	<b>NC_NHEO</b>	<b>NC50004791</b>
Eostat:	H	Gisid:	G	
Edr id:	NC50004791		41373	

---

Elclass:	A	Precision1:	<b>NC_NHEO</b>	<b>NC50006583</b>
Eostat:	H	Gisid:	M	
Edr id:	NC50006583		251720	

---

Elclass:	P	Precision1:	<b>NC_NHEO</b>	<b>NC50015642</b>
Eostat:	E	Gisid:	S	
Edr id:	NC50015642		101220	

---

Elclass:	A	Precision1:	<b>NC_NHEO</b>	<b>NC50017642</b>
Eostat:	H	Gisid:	M	
Edr id:	NC50017642		121243	

---

Acres:	109.21	Sitename:	<b>NC_SNHA</b>	<b>NC10003066</b>
Quality type:	Not Reported	Sig:	UPPER SMITH CREEK	
Site id:	3066	Edr id:	C	
			NC10003066	

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

Federal EPA Radon Zone for NEW HANOVER County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for NEW HANOVER COUNTY, NC

Number of sites tested: 10

<u>Area</u>	<u>Average Activity</u>	<u>% &lt;4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% &gt;20 pCi/L</u>
Living Area - 1st Floor	0.240 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: US Fish & Wildlife Service

Telephone: 703-358-2171

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### North Carolina Public Water Supply Wells

Source: Department of Environmental Health

Telephone: 919-715-3243

## OTHER STATE DATABASE INFORMATION

#### North Carolina Wildlife Resources/Game Lands

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

All publicly owned game lands managed by the North Carolina Wildlife Resources Commission and as listed in Hunting and Fishing Maps.

#### NC Natural Heritage Sites: Natural Heritage Element Occurrence Sites

Source: Natural Heritage Occurrence Sites Center for Geographic Information and Analysis

Telephone: 919-733-2090

A point coverage identifying locations of rare and endangered species, occurrences of exemplary or unique natural ecosystems (terrestrial or aquatic), and special animal habitats (e.g., colonial waterbird nesting sites).

#### NC Natural Areas: Significant Natural Heritage Areas

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

A polygon coverage identifying sites (terrestrial or aquatic) that have particular biodiversity significance.

A site's significance may be due to the presence of rare species, rare or high quality natural communities, or other important ecological features.

### RADON

#### State Database: NC Radon

Source: Department of Environment & Natural Resources

Telephone: 919-733-4984

Radon Statistical and Non Statistical Data

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

### STREET AND ADDRESS INFORMATION

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**Appendix IV**  
**Historical Research Records**



Estrella Landing  
Gordon Road  
Wilmington, NC 28411

Inquiry Number: 6685191.3

September 30, 2021

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

09/30/21

**Site Name:**

Estrella Landing  
Gordon Road  
Wilmington, NC 28411  
EDR Inquiry # 6685191.3

**Client Name:**

Pilot Environmental Inc  
P.O Box 128  
Kernersville, NC 27285  
Contact: Stephen Arenson



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Pilot Environmental Inc were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** A64B-45B4-A48E  
**PO #** 7249  
**Project** Estrella Landing



Sanborn® Library search results

Certification #: A64B-45B4-A48E

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This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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**Estrella Landing**

Gordon Road

Wilmington, NC 28411

Inquiry Number: 6685191.8

October 01, 2021

# The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

10/01/21

**Site Name:**

Estrella Landing  
Gordon Road  
Wilmington, NC 28411  
EDR Inquiry # 6685191.8

**Client Name:**

Pilot Environmental Inc  
P.O Box 128  
Kernersville, NC 27285  
Contact: Stephen Arenson



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

**Search Results:**

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Acquisition Date: January 01, 1998	USGS/DOQQ
1993	1"=500'	Acquisition Date: February 03, 1993	USGS/DOQQ
1989	1"=500'	Flight Date: July 11, 1989	USGS
1983	1"=500'	Flight Date: March 13, 1983	NHAP
1975	1"=500'	Flight Date: April 01, 1975	USGS
1970	1"=500'	Flight Date: September 29, 1970	USGS
1969	1"=500'	Flight Date: April 08, 1969	USGS
1964	1"=500'	Flight Date: April 01, 1964	USGS
1958	1"=500'	Flight Date: January 01, 1958	USGS
1950	1"=500'	Flight Date: November 21, 1950	USGS
1938	1"=500'	Flight Date: March 22, 1938	USDA

**When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.**

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INQUIRY #: 6685191.8

YEAR: 2016

 = 500'



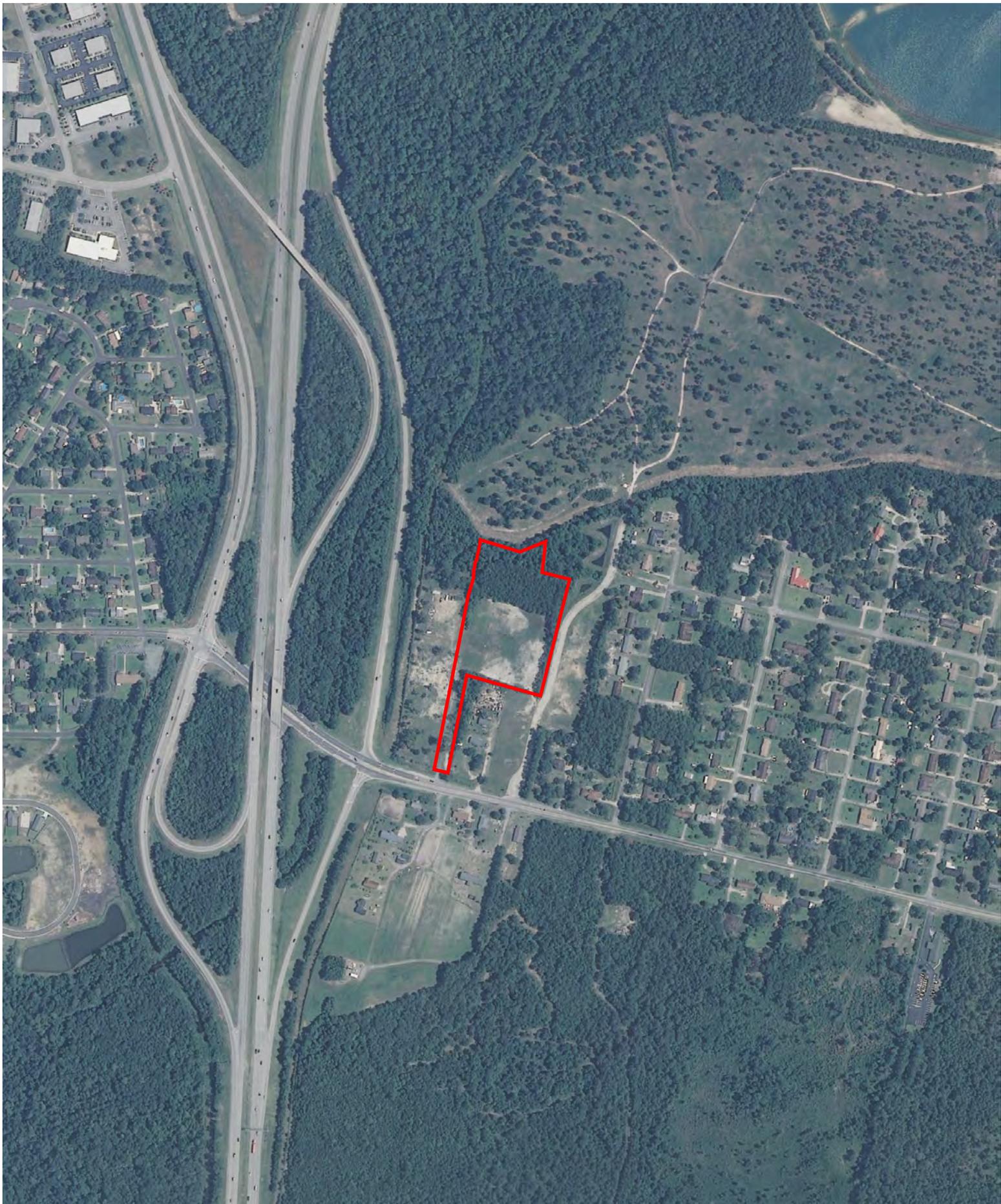


INQUIRY #: 6685191.8

YEAR: 2012

— = 500'





INQUIRY # 6685191.8

YEAR: 2009

— = 500'





INQUIRY #: 6685191.8

YEAR: 2006

— = 500'





INQUIRY #: 6685191.8

YEAR: 1998

— = 500'





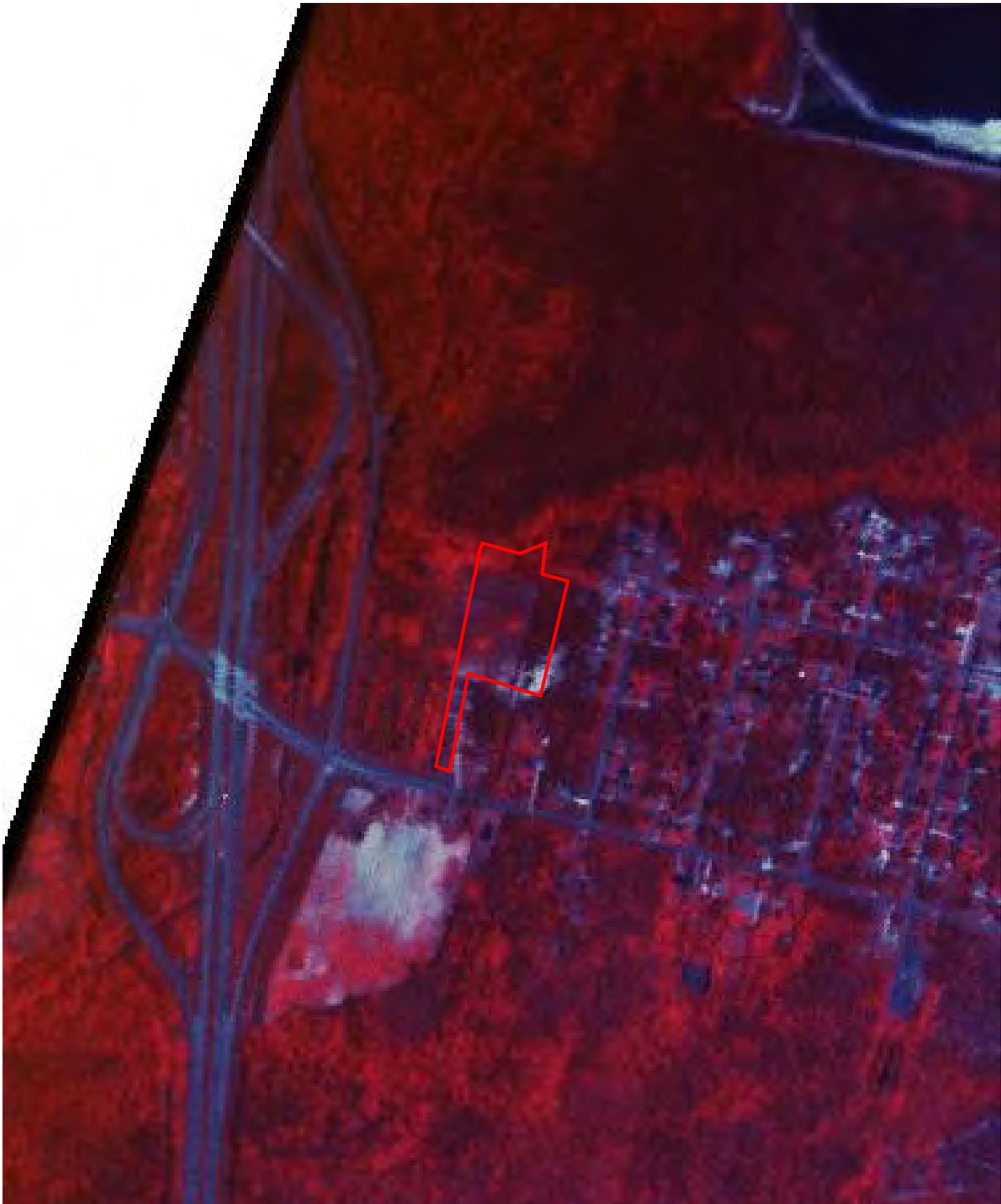
INQUIRY #: 6685191.8

YEAR: 1993

— = 500'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 6685191.8

YEAR: 1989

— = 500'





INQUIRY #: 6685191.8

YEAR: 1983

— = 500'





INQUIRY #: 6685191.8

YEAR: 1975

— = 500'





INQUIRY #: 6685191.8

YEAR: 1970

— = 500'





INQUIRY #: 6685191.8

YEAR: 1969

— = 500'





INQUIRY #: 6685191.8

YEAR: 1964

— = 500'





INQUIRY #: 6685191.8

YEAR: 1958

— = 500'





INQUIRY #: 6685191.8

YEAR: 1950

— = 500'





INQUIRY #: 6685191.8

YEAR: 1938

— = 500'



**Appendix V**  
**Site Reconnaissance Photographs**

## SITE PHOTOGRAPHS



Photograph 1 - View of wooded land located on the site



Photograph 2 - View of debris located on the site

**Appendix VI**  
**Statement of Qualifications**



# STEPHEN M. ARENSON

PO Box 128, Kernersville, 27285 | [sarenson@pilotenviro.com](mailto:sarenson@pilotenviro.com) | 336.310.4527

**EDUCATION** | BS, Environmental Science, Oklahoma State University, Stillwater, OK, 2018

**ENVIRONMENTAL CONSULTING EXPERIENCE** | Mr. Arenson has experience in the environmental consulting industry. Mr. Arenson is a Project Manager with Pilot Environmental, Inc. (Pilot). Mr. Arenson's project experience includes environmental and natural resources assessments. Mr. Arenson has conducted environmental consulting services on residential, commercial and municipal properties.

**PHASE I ENVIRONMENTAL ASSESSMENTS** | Mr. Arenson has experience performing Phase I Environmental Site Assessments (ESAs) to determine environmental liabilities for Real Property Transfers. Mr. Arenson has performed Phase Is for sites including residential, commercial and industrial properties. Phase I Environmental Assessments responsibilities include collecting historical information including aerial photographs, city directories, fire department records and NCDEQ records, conducting site and area reconnaissance and conducting interviews with owners, regulators and officials. Mr. Arenson has experience identifying potential environmental conditions, interpretation of regulatory data and communication with the client.



# TOBY S. BENFIELD

PO Box 128, Kernersville, 27285 | TBenfield@pilotenviro.com | 336.708.7812

**EDUCATION** | BS, General Chemistry, University of North Carolina at Greensboro, Greensboro NC, 1998

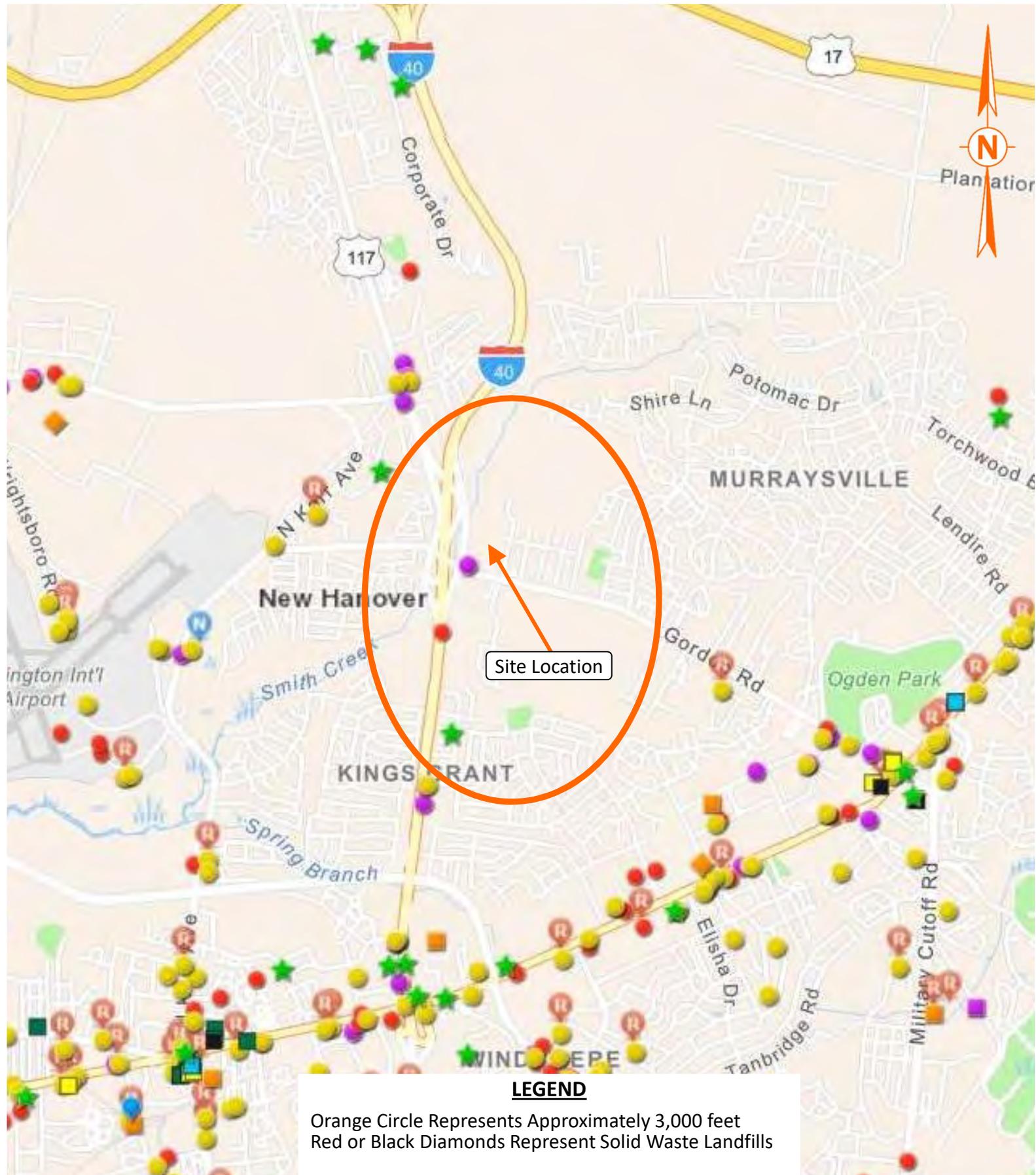
**REGISTRATIONS  
CERTIFICATIONS AND  
AFFILIATIONS** | Licensed NC Asbestos Inspector  
Environmental Professional as defined in § 312.10 of 40 CFR 312  
OSHA 40 Hour HAZWOPER Certified

**ENVIRONMENTAL  
CONSULTING  
EXPERIENCE** | Mr. Benfield has experience in the environmental consulting industry since 2002. He is a Partner and Project Manager with Pilot Environmental, Inc (Pilot). Mr. Benfield's project experience includes Phase I environmental site assessments, Phase II Environmental Site Assessments including regulatory and non-regulatory investigation, and asbestos inspections. He has conducted environmental consulting services on residential, commercial, educational, municipal and industrial properties.

**PHASE I ENVIRONMENTAL  
ASSESSMENTS** | Mr. Benfield has experience performing Phase I environmental assessments to determine environmental liabilities for Real Property Transfers ranging from greenfield sites to historical industrial facilities.

**PHASE II  
ENVIRONMENTAL  
ASSESSMENTS** | Mr. Benfield has experience performing Phase II environmental assessments including Site Checks, underground storage tank closures, Phase I and Phase II Limited Site Assessments, Comprehensive Site Assessments, and development of Corrective Action Plans and Remedial Action Plans. Mr. Benfield has experience performing vapor intrusion studies, North Carolina Brownfield's Assessments and development of Soil Management Plans and Environmental Work Plans.

**ASBESTOS INSPECTION  
SERVICES** | Mr. Benfield has experience in performing asbestos inspections on office, retail, residential, governmental, educational, university and industrial buildings. He has conducted numerous inspections throughout North Carolina.



**Drawing 12**  
 NC Division of Waste Management  
 Online Site Locator Tool

Not to Scale



**NC Waste Management Site Map**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

LYN HARDISON  
CLEARINGHOUSE COORDINATOR  
DEPT OF ENVIRONMENTAL QUALITY

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: LYN HARDISON

Date: 1/14/2022



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

To: Crystal Best  
State Clearinghouse  
NC Department of Administration

From: Lyn Hardison  
Division of Environmental Assistance and Customer Service  
Washington Regional Office

RE: 22-0133  
Scoping - Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of three apartment buildings containing eighty-four apartment units, one clubhouse building, a stormwater/retention pond, paved parking areas, and landscaped areas.  
New Hanover County

Date: January 14, 2022

The Department of Environment Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some valuable guidance. The comments are attached for the applicant's review.

The Department will continue to be available to assist the applicant with any question or concerns.

Thank you for the opportunity to respond.

Attachments



North Carolina Department of Environmental Quality

217 West Jones Street | 1601 Mail Service Center | Raleigh, North Carolina 27699-1601

919.707.8600

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0133 Due Date: 01/11/2022  
 County: New Hanover

After review of this project it has been determined that the DEQ permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, non-standard sewer system extensions & sewer systems that do not discharge into state surface waters.	Application 90 days before begins construction or award of construction contracts. On-site inspection may be required. Post-application technical conference usual.	30 days (90 days)
<input checked="" type="checkbox"/>	Permit to construct & operate, sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system	Fast-Track Permitting program consists of the submittal of an application and an engineer's certification that the project meets all applicable State rules and Division Minimum Design Criteria.	30 days (N/A)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begins activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary.	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a groundwater monitoring well located on property not owned by the applicant, and for a large capacity (>100,000 gallons per day) water supply well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input checked="" type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input checked="" type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950	Please Note - The Health Hazards Control Unit (HHCU) of the N.C. Department of Health and Human Services, must be notified of plans to demolish a building, including residences for commercial or industrial expansion, even if no asbestos is present in the building.	60 days (90 days)
<input checked="" type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater permit (NCG010000) is also usually issued should design features meet minimum requirements. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with _____ <b>Local Government's</b> approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		Based on Local Program
<input type="checkbox"/>	Compliance with 15A NCAC 2H .0126 - NPDES Stormwater Program which regulates three types of activities: Industrial, Municipal Separate Storm Sewer System & Construction activities that disturb ≥1 acre.		30-60 days (90 days)
<input checked="" type="checkbox"/>	Compliance with 15A NCAC 2H 1000 -State Stormwater Permitting Programs regulate site development and post-construction stormwater runoff control. Areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state.		45 days (90 days)

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0133 Due Date: 01/11/2022  
 County: New Hanover

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with DEQ Bond amount varies with type mine and number of acres of affected land. Affected area greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, and certify construction is according to DEQ approved plans. May also require a permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage or the total project cost will be required upon completion.	30 days (60 days)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DEQ running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DEQ rules and regulations.	10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with DEQ at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property	15-20 days N/A
<input checked="" type="checkbox"/>	401 Water Quality Certification	Compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.	60 days (130 days)
<input type="checkbox"/>	Compliance with Catawba, Goose Creek, Jordan Lake, Randleman, Tar Pamlico or Neuse Riparian Buffer Rules is required. Buffer requirements: <a href="http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program">http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program</a>		
<input type="checkbox"/>	Nutrient Offset: Loading requirements for nitrogen and phosphorus in the Neuse and Tar-Pamlico River basins, and in the Jordan and Falls Lake watersheds, as part of the nutrient-management strategies in these areas. DWR nutrient offset information: <a href="http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information">http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information</a>		
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 - \$475.00 fee must accompany application	75 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$100.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input checked="" type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq., Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input checked="" type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of the _____ water system must be approved through the _____ delegated plan approval authority. Please contact them at _____ for further information.		

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0133 Due Date: 01/11/2022  
 County: New Hanover

Other Comments (attach additional pages as necessary, being certain to comment authority)

Division	Initials	No comment	Comments	Date Review
DAQ		<input type="checkbox"/>	See checked boxes above	/ /
DWR-WQROS (Aquifer & Surface)	&	<input type="checkbox"/>	See checked boxes above &	/ /
DWR-PWS	HLC	<input type="checkbox"/>	see above comments	1/7/2021
DEMLR (LQ & SW)		<input type="checkbox"/>	See checked boxes above	/ /
DWM – UST		<input type="checkbox"/>	See attached comments	/ /
Other Comments		<input type="checkbox"/>		/ /

**REGIONAL OFFICES**

Questions regarding these permits should be addressed to the Regional Office marked below.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> <b>Asheville Regional Office</b><br>2090 U.S. 70 Highway<br>Swannanoa, NC 28778-8211<br>Phone: 828-296-4500<br>Fax: 828-299-7043 | <input type="checkbox"/> <b>Fayetteville Regional Office</b><br>225 Green Street, Suite 714,<br>Fayetteville, NC 28301-5043<br>Phone: 910-433-3300<br>Fax: 910-486-0707 | <input type="checkbox"/> <b> Mooresville Regional Office</b><br>610 East Center Avenue, Suite 301,<br>Mooresville, NC 28115<br>Phone: 704-663-1699<br>Fax: 704-663-6040 |
| <input type="checkbox"/> <b>Raleigh Regional Office</b><br>3800 Barrett Drive,<br>Raleigh, NC 27609<br>Phone: 919-791-4200<br>Fax: 919-571-4718           | <input type="checkbox"/> <b>Washington Regional Office</b><br>943 Washington Square Mall,<br>Washington, NC 27889<br>Phone: 252-946-6481<br>Fax: 252-975-3716           | <input checked="" type="checkbox"/> <b>Wilmington Regional Office</b><br>127 Cardinal Drive Ext.,<br>Wilmington, NC 28405<br>Phone: 910-796-7215<br>Fax: 910-350-2004   |
|   | <input type="checkbox"/> <b>Winston-Salem Regional Office</b><br>450 Hanes Mill Road, Suite 300,<br>Winston-Salem, NC 27105<br>Phone: 336-776-9800<br>Fax: 336-776-9797 |   |

# Department of Environmental Quality Project Review Form

**Project Number: 22-0133**

**County: New Hanover**

**Date Received: 12-15-2021**

**Due Date: 1-11-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt- UST Section	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input type="checkbox"/> Wildlife <u>Maria</u>
<input checked="" type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 12/28/2021	In-House Reviewer/Agency: Liz Price - DWM/UST Section
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Response (check all applicable)

No objection to project as proposed: As per a search of the UST Section databases, no reported petroleum releases are known to exist at this location, nor are there any records of registered USTs at this location.

To view/find other petroleum related incidents in the area please use the LINK TO UST Section GIS MAP:  
<http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps>

If you have any questions, please contact:

**Liz Price @ [liz.price@ncdenr.gov](mailto:liz.price@ncdenr.gov) or 910-796-7263**

## Department of Environmental Quality Project Review Form

**Project Number: 22-0133**

**County: New Hanover**

**Date Received: 12-15-2021**

**Due Date: 1-11-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.*

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<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input checked="" type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife <u>Maria</u>
<input type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: <u>1-3-2022</u>	In-House Reviewer/Agency: <u>MEID / NewRC</u>
--------------------------	--------------------------	--

Response (check all applicable)

No objection to project as proposed.

No Comment

Insufficient information to complete review

Other (specify or attach comments)

If you have any questions, please contact:

**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842  
943 Washington Square Mall Washington NC 27889  
Courier No. 16-04-01**

# Department of Environmental Quality Project Review Form

**Project Number: 22-0133**

**County: New Hanover**

**Date Received: 12-15-2021**

**Due Date: 1-11-2022**

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<input checked="" type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife <u>Maria</u>
<input type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 1/11/22	In-House Reviewer/Agency: Melodi Deaver, Hazardous Waste Section
--------------------------	------------------	---

Response (check all applicable)

No objection to project as proposed.
  No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:

**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

ROY COOPER  
*Governor*  
ELIZABETH S. BISER  
*Secretary*  
MICHAEL SCOTT  
*Director*



Date: January 11, 2022

To: Michael Scott, Director  
Division of Waste Management

Through: Janet Macdonald  
Inactive Hazardous Sites Branch – Special Projects Unit

From: Bonnie S. Ware  
Inactive Hazardous Sites Branch

Subject: NEPA Project # 22-0133, Estrella Landing Apartments/HUD- CDBG-DR, New Hanover County, North Carolina

The Superfund Section has reviewed the proximity of sites under its jurisdiction to the Estrella Landing Apartments/HUD- CDBG-DR project. Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.

No Superfund Section sites were identified within one mile of the project as shown on the attached report.

Please contact Janet Macdonald at 919.707.8349 if you have any questions concerning the Superfund Section review portion of this SEPA/NEPA inquiry.



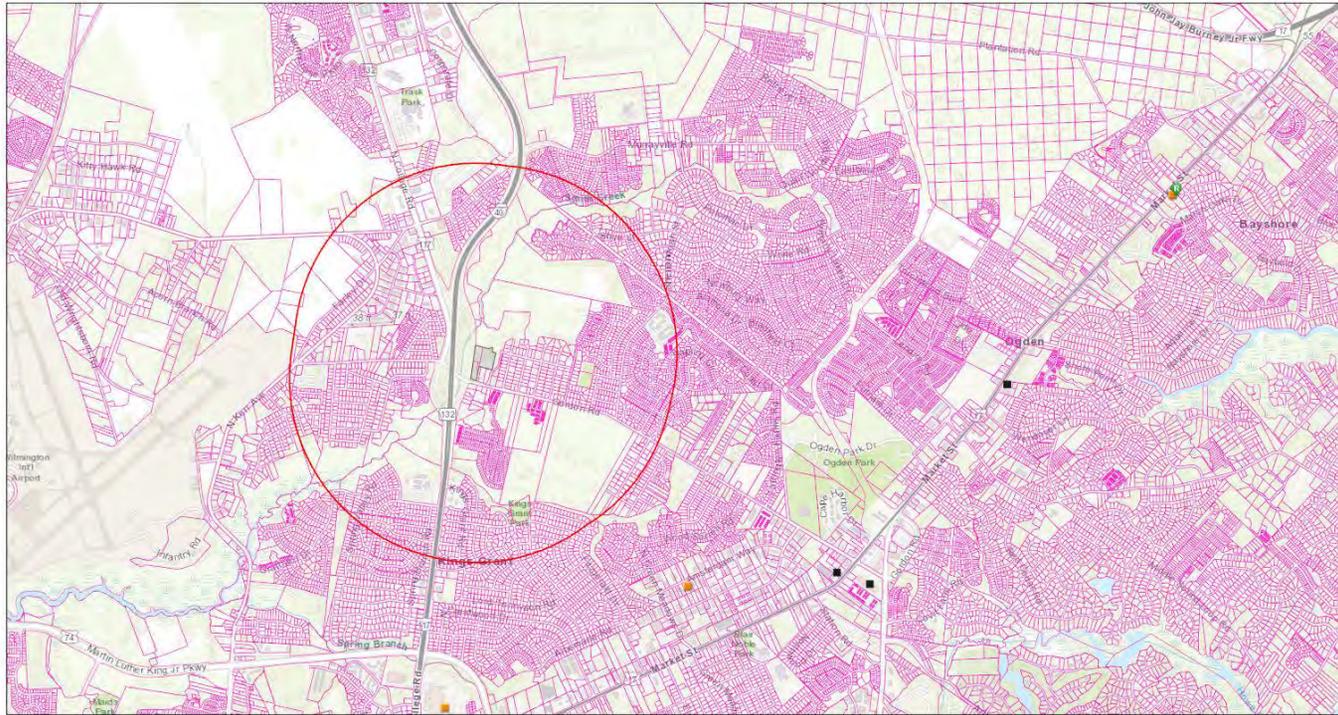
North Carolina Department of Environmental Quality | Division of Waste Management  
217 West Jones Street | 1646 Mail Service Center | Raleigh, North Carolina 27699-1646  
919.707.8200

# SUPERFUND SECTION SITES ONLY : SEPA/NEPA

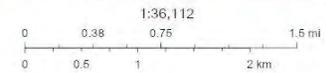
## Area of Interest (AOI) Information

Area : 2,374.01 acres

Jan 11 2022 10:56:44 Eastern Standard Time



- NC Brownfields Location\_View
-  Recorded
  -  Inactive Hazardous Sites
  -  DryCleaning Contaminated
  -  Parcels (Polygons) - Parcels



New Hanover County, State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

Superfund Section Sites Only : 22-0133 New Hanover County

## Summary

Name	Count	Area(acres)	Length(mi)
Certified DSCA Sites	0	N/A	N/A
Federal Remediation Branch Sites	0	N/A	N/A
Inactive Hazardous Sites	0	N/A	N/A
Pre-Regulatory Landfill Sites	0	N/A	N/A
Brownfields Program Sites	0	N/A	N/A



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Raleigh ES Field Office

551-F Pylon Drive

Raleigh, North Carolina 27606

March 24, 2022

Andrea Gievers  
NCORR  
PO Box 110465  
Durham, NC 27709

Re: Estrella Landing Apartments – New Hanover County

Dear Mrs. Gievers:

This letter is to inform you that the Service has established an on-line project planning and consultation process which assists developers and consultants in determining whether a federally-listed species or designated critical habitat may be affected by a proposed project. For future projects, please visit the Raleigh Field Office's project planning website at <https://www.fws.gov/office/eastern-north-carolina/project-planning-and-consultation>. If you are only searching for a list of species that may be present in the project's Action Area, then you may use the Service's Information, Planning, and Consultation System (IPaC) website to determine if any listed, proposed, or candidate species may be present in the Action Area and generate a species list. The IPaC website may be viewed at <https://ipac.ecosphere.fws.gov/>. The IPaC web site contains a complete and frequently updated list of all endangered and threatened species protected by the provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act), a list of federal species of concern<sup>1</sup> that are known to occur in each county in North Carolina, and other resources.

Section 7 of the Act requires that all federal agencies (or their designated non-federal representative), in consultation with the Service, ensure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. In addition to the federally-protected species list, information on the

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<sup>1</sup> The term "federal species of concern" refers to those species which the Service believes might be in need of concentrated conservation actions. Federal species of concern receive no legal protection and their designation does not necessarily imply that the species will eventually be proposed for listing as a federally endangered or threatened species. However, we recommend that all practicable measures be taken to avoid or minimize adverse impacts to federal species of concern.

species' life histories and habitats and information on completing a biological assessment or evaluation and can be found on our web page at <https://fws.gov/office/eastern-north-carolina>. Please check the web site often for updated information or changes.

If your project contains suitable habitat for any of the federally-listed species known to be present within the county where your project occurs, the proposed action has the potential to adversely affect those species. As such, we recommend that surveys be conducted to determine the species' presence or absence within the project area. The use of North Carolina Natural Heritage program data should not be substituted for actual field surveys.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a federally-protected species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on federally listed species, then you are not required to contact our office for concurrence (unless an Environmental Impact Statement is prepared). However, you should maintain a complete record of the assessment, including steps leading to your determination of effect, the qualified personnel conducting the assessment, habitat conditions, site photographs, and any other related articles.

With regard to the above-referenced project, we offer the following remarks. Our comments are submitted pursuant to, and in accordance with, provisions of the Endangered Species Act.

Based on the information provided and other information available, it appears that the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at these sites. We believe that the requirements of section 7(a)(2) of the Act have been satisfied for your project. Please remember that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

However, the Service is concerned about the potential impacts the proposed action might have on aquatic species. Aquatic resources are highly susceptible to sedimentation. Therefore, we recommend that all practicable measures be taken to avoid adverse impacts to aquatic species, including implementing directional boring methods and stringent sediment and erosion control measures. An erosion and sedimentation control plan should be submitted to and approved by the North Carolina Division of Land Resources, Land Quality Section prior to construction. Erosion and sedimentation controls should be installed and maintained between the construction site and any nearby down-gradient surface waters. In addition, we recommend maintaining natural, vegetated buffers on all streams and creeks adjacent to the project site.

The North Carolina Wildlife Resources Commission (NCWRC) has developed a Guidance Memorandum (found at <https://www.ncwildlife.org/Conserving/Learn-Resources/Ways-to->

Conserve) to address and mitigate secondary and cumulative impacts to aquatic and terrestrial wildlife resources and water quality. We recommend that you consider this document and the NCWRC's other conservation recommendations in the development of your projects and in completing an initiation package for consultation (if necessary).

We hope you find our web page useful and informative and that following the process described above will reduce the time required, and eliminate the need, for general correspondence for species' lists. If you have any questions or comments, please contact John Ellis of this office at (919) 856-4520 ext. 26.

Sincerely,

A handwritten signature in blue ink that reads "John Ellis for". The signature is written in a cursive style.

Pete Benjamin

Field Supervisor



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Raleigh ES Field Office

551-F Pylon Drive

Raleigh, North Carolina 27606

October 20, 2021

Matthew Carter  
Pilot Environmental Inc.  
PO Box 128  
Kernersville, NC 27285

Re: Estrella Landing–New Hanover County

Dear Mr. Carter:

This letter is to inform you that the Service has established an on-line project planning and consultation process which assists developers and consultants in determining whether a federally-listed species or designated critical habitat may be affected by a proposed project. For future projects, please visit the Raleigh Field Office's project planning website at <https://www.fws.gov/raleigh/pp.html>. If you are only searching for a list of species that may be present in the project's Action Area, then you may use the Service's Information, Planning, and Consultation System (IPaC) website to determine if any listed, proposed, or candidate species may be present in the Action Area and generate a species list. The IPaC website may be viewed at <https://ecos.fws.gov/ipac/>. The IPaC web site contains a complete and frequently updated list of all endangered threatened species protected by the provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act), a list of federal species of concern<sup>1</sup> that are known to occur in each county in North Carolina, and other resources.

Section 7 of the Act requires that all federal agencies (or their designated non-federal representative), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. In addition to the federally-protected species list, information on the species' life histories and habitats and information on completing a biological assessment or

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<sup>1</sup> The term "federal species of concern" refers to those species which the Service believes might be in need of concentrated conservation actions. Federal species of concern receive no legal protection and their designation does not necessarily imply that the species will eventually be proposed for listing as a federally endangered or threatened species. However, we recommend that all practicable measures be taken to avoid or minimize adverse impacts to federal species of concern.

evaluation and can be found on our web page at <http://www.fws.gov/raleigh>. Please check the web site often for updated information or changes.

If your project contains suitable habitat for any of the federally-listed species known to be present within the county where your project occurs, the proposed action has the potential to adversely affect those species. As such, we recommend that surveys be conducted to determine the species' presence or absence within the project area. The use of North Carolina Natural Heritage program data should not be substituted for actual field surveys.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a federally-protected species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on federally listed species, then you are not required to contact our office for concurrence (unless an Environmental Impact Statement is prepared). However, you should maintain a complete record of the assessment, including steps leading to your determination of effect, the qualified personnel conducting the assessment, habitat conditions, site photographs, and any other related articles.

With regard to the above-referenced project, we offer the following remarks. Our comments are submitted pursuant to, and in accordance with, provisions of the Endangered Species Act.

Based on the information provided and other information available, it appears that the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at these sites. We believe that the requirements of section 7(a)(2) of the Act have been satisfied for your project. Please remember that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

However, the Service is concerned about the potential impacts the proposed action might have on aquatic species. Aquatic resources are highly susceptible to sedimentation. Therefore, we recommend that all practicable measures be taken to avoid adverse impacts to aquatic species, including implementing directional boring methods and stringent sediment and erosion control measures. An erosion and sedimentation control plan should be submitted to and approved by the North Carolina Division of Land Resources, Land Quality Section prior to construction. Erosion and sedimentation controls should be installed and maintained between the construction site and any nearby down-gradient surface waters. In addition, we recommend maintaining natural, vegetated buffers on all streams and creeks adjacent to the project site.

The North Carolina Wildlife Resources Commission has developed a Guidance Memorandum (a copy can be found on our website at (<http://www.fws.gov/raleigh>) to address and mitigate secondary and cumulative impacts to aquatic and terrestrial wildlife resources and water quality.

We recommend that you consider this document in the development of your projects and in completing an initiation package for consultation (if necessary).

We hope you find our web page useful and informative and that following the process described above will reduce the time required, and eliminate the need, for general correspondence for species' lists. If you have any questions or comments, please contact John Ellis of this office at (919) 856-4520 ext. 26.

Sincerely,

A handwritten signature in blue ink that reads "John Ellis for". The signature is written in a cursive style.

Pete Benjamin  
Field Supervisor



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Raleigh Field Office  
P.O. Box 33726  
Raleigh, NC 27636-3726

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

### Self-Certification Letter

Project Name \_\_\_\_\_

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Raleigh Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended (Eagle Act). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA and Eagle Act conclusions. Based on your analysis, mark all the determinations that apply:

“no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or

“may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or

“may affect, likely to adversely affect” determination for the Northern long-eared bat (*Myotis septentrionalis*) and relying on the findings of the January 5, 2016, Programmatic Biological Opinion for the Final 4(d) Rule on the Northern long-eared bat;

“no Eagle Act permit required” determinations for eagles.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the “no effect” or “not likely to adversely affect” determinations for proposed and listed species and proposed and designated critical habitat; the “may affect” determination for Northern long-eared bat; and/or the “no Eagle Act permit required” determinations for eagles. Additional coordination with this office is not needed. Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species. Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat, or bald eagles becomes available, this determination may be reconsidered. This certification letter is valid for 1 year. Information about the online project review process including instructions, species information, and other information regarding project reviews within North Carolina is available at our website <http://www.fws.gov/raleigh/pp.html>. If you have any questions, you can write to us at [Raleigh@fws.gov](mailto:Raleigh@fws.gov) or please contact Leigh Mann of this office at 919-856-4520, ext. 10.

Sincerely,

/s/Pete Benjamin

Pete Benjamin  
Field Supervisor  
Raleigh Ecological Services

Enclosures - project review package



September 29, 2021

Mr. Pete Benjamin  
U.S. Fish and Wildlife Services, Raleigh Field Office  
P.O. Box 33726  
Raleigh, North Carolina 27636-3726

Reference: Request for Information  
Threatened and Endangered Species/Critical Habitat  
Proposed Estrella Landing - Approximate 5.71-Acre Tract  
4615 Gordon Road  
Wilmington, New Hanover County, North Carolina  
Pilot Project 7249

Dear Mr. Benjamin:

Pilot Environmental Inc. (PEI) is requesting information concerning the possible presence of threatened and endangered species and their habitat at the approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. A USGS Topographic Map (Drawing 1) and aerial photograph (Drawing 2) of the site is included as an attachment.

### **Project Description**

The site is being evaluated to determine the feasibility of development with a multi-family residential development. The development will be done in a manner that will avoid and minimize impacts to streams/wetlands/buffers as well as cultural and natural resources.

### **Site Reconnaissance**

The site contains wood land and grass covered areas. Structures were not observed at the site. The wooded areas contain pine and hardwood stands with moderate undergrowth. Tree species consist of pine, oak, sweet gum and poplar. The undergrowth consists of saplings, various bay species and holly. The grass areas consists of a mix of Bermuda and fescue species with various weeds.

## Database Review

We reviewed the USFWS Endangered Species Database to identify federally protected threatened and endangered species in New Hanover County, North Carolina. The following federally protected threatened and endangered species are identified:

Common Name	Scientific name	Federal Status	Record Status
<b>Vertebrate:</b>			
American alligator	<i>Alligator mississippiensis</i>	T (S/A)	Current
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGPA	Current
Green sea turtle	<i>Chelonia mydas</i>	T	Current
Hawksbill(=carey) sea turtle	<i>Eretmochelys imbricata</i>	E	Historic
Kemp's (=Atlantic) ridley sea turtle	<i>Lepidochelys kempii</i>	E	Current
Leatherback sea turtle	<i>Dermochelys coriacea</i>	E	Current
Loggerhead sea turtle	<i>Caretta caretta</i>	T	Current
Northern long-eared bat	<i>Myotis septentrionalis</i>	T	Current
Piping plover	<i>Charadrius melodus</i>	T	Current
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	Current
Red knot	<i>Calidris canutus rufa</i>	T	Current
Waccamaw silverside	<i>Menidia extensa</i>	T	Current
West Indian manatee	<i>Trichechus manatus</i>	E	Current
Wood stork	<i>Mycteria americana</i>	T	Current
<b>Vascular Plant:</b>			
Cooley's meadowrue	<i>Thalictrum cooleyi</i>	E	Current
Rough-leaved loosestrife	<i>Lysimachia asperulaefolia</i>	E	Current
Seabeach amaranth	<i>Amaranthus pumilus</i>	T	Current

T – Threatened      E – Endangered      T (S/A) – Threatened Due to Similar Appearance  
 BGPA – Bald and Golden Eagle Protection Act

## Species/Habitat Description

### American Alligator (*Alligator mississippiensis*)

Description: The American alligator is a large, semi-aquatic, armored reptile that is related to crocodiles. Their body alone ranges from 6 - 14 feet long. Almost black in color, it has prominent eyes and nostrils with coarse scales over the entire body. It has a large, long head with visible upper teeth along the edge of the jaws. Its front feet have 5 toes, while rear feet have 4 toes that are webbed.

Habitat: Alligators live in swampy areas, rivers, streams, lakes and ponds. Females and juveniles occasionally use seasonal wetlands, such as Carolina Bays. Although they are primarily freshwater animals, alligators will also venture into brackish salt water.

Conclusion: It is our opinion that suitable habitat for the American Alligator is not located on the site.

### Bald Eagle (*Haliaeetus leucocephalus*)

Description: The Bald Eagle is a regulated species under the Bald and Golden Eagle Protection Act (BGPA). Bald Eagles were removed from the federal list of threatened and endangered species on August 9, 2007, and are no longer protected under the Endangered Species Act. However, Bald Eagles remain protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The Bald and Golden Eagle Act prohibits anyone from taking, possessing, or transporting a Bald Eagle (*Haliaeetus leucocephalus*) or Golden Eagle (*Aquila chrysaetos*), or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. Take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb. Activities that directly or indirectly lead to take are prohibited without a permit.

A large raptor (bird of prey), the bald eagle has a wingspread of 5½ to 8 feet. Adults have a dark brown body and wings, white head and tail, and a yellow beak. In flight, the bald eagle often soars or glides with the wings held at a right angle to the body. Juvenile bald eagles have mottled brown and white plumage, gradually acquiring their dark brown body and distinctive white head and tail as they mature. Bald eagles generally attain adult plumage by 5 years of age. Adults weigh 8 to 14 pounds, occasionally reaching 16 pounds in Alaska. Those in the northern range grow larger than those in the south, and females are somewhat larger than males.

Habitat: Bald eagles generally nest near coastlines, rivers, large lakes or streams that support an adequate food supply. They often nest in mature or old-growth trees; snags (dead trees); cliffs; rock promontories; rarely on the ground; and with increasing frequency on human-made structures such as power poles and communication towers. In forested areas, bald eagles often select the tallest trees with limbs strong enough to support a nest that can weigh more than 1,000 pounds. Nest sites typically include at least one perch with a clear view of the water where the eagles usually forage. Shoreline trees or snags located near reservoirs provide the visibility and accessibility needed to locate aquatic prey. Eagle nests are constructed with large sticks, and may be lined with moss, grass, plant stalks, lichens, seaweed, or sod. Nests are usually about 4-6 feet in diameter and 3 feet deep, although larger nests exist.

Conclusion: Based on the size of the water bodies located in the immediate vicinity of the site, it is our opinion that the presence of Bald Eagles on the site is unlikely.

### Green Sea Turtle (*Chelonia mydas*)

Description: The green sea turtle grows to a maximum size of about 4 feet and a weight of 440 pounds. It has a heart-shaped shell, small head, and single-clawed flippers. Color is variable. Hatchlings generally have a black carapace, white plastron, and white margins on the shell and limbs. The adult carapace is smooth, keelless, and light to dark brown with dark mottling; the plastron is whitish to light yellow. Adult heads are light brown with yellow markings. Identifying characteristics include four pairs of costal scutes, none of which borders the nuchal scute, and only one pair of prefrontal scales between the eyes. Hatchling green turtles eat a variety of plants and animals, but adults feed almost exclusively on seagrasses and marine algae.

Habitat: Green turtles are generally found in fairly shallow waters (except when migrating) inside reefs, bays, and inlets. The turtles are attracted to lagoons and shoals with an abundance of marine grass and algae. Open beaches with a sloping platform and minimal disturbance are required for nesting. Green turtles have strong nesting site fidelity and often make long distance migrations between feeding grounds and nesting beaches. Hatchlings have been observed to seek refuge and food in Sargassum rafts.

Conclusion: Suitable habitat for the Green Sea Turtle is not located at the site.

### Hawksbill (=carey) sea turtle (*Eretmochelys imbricata*)

Description: The hawksbill is a small to medium-sized marine turtle having an elongated oval shell with overlapping scutes on the carapace, a relatively small head with a distinctive hawk-like beak, and flippers with two claws. General coloration is brown with numerous splashes of yellow, orange, or reddish-brown on the carapace. The plastron is yellowish with black spots on the intergular and postanal scutes. Juveniles are black or very dark brown with light brown or yellow coloration on the edge of the shell, limbs, and raised ridges of the carapace. As an adult, the hawksbill may reach up to 3 feet in length and weigh up to 300 pounds, although adults more commonly average about 2½ feet in length and typically weigh around 176 pounds or less. It is the only sea turtle with a combination of two pairs of prefrontal scales on the head and four pairs of costal scutes on the carapace. The hawksbill feeds primarily on sponges and is most often associated with the coral reef community.

Habitat: Hawksbills frequent rocky areas, coral reefs, shallow coastal areas, lagoons or oceanic islands, and narrow creeks and passes. They are seldom seen in water deeper than 65 feet. Hatchlings are often found floating in masses of sea plants, and nesting may occur on almost any undisturbed deep-sand beach in the tropics. Adult females are able to climb over reefs and rocks to nest in beach vegetation.

Conclusion: Suitable habitat for the Hawksbill sea turtle is not located on the site.

Kemp's (=Atlantic) ridley sea turtle (*Lepidochelys kempii*)

**Description:** The Kemp's ridley turtle is the smallest of the sea turtles, with adults reaching about 2 feet in length and weighing up to 100 pounds. The adult Kemp's ridley has an oval carapace that is almost as wide as it is long and is usually olive-gray in color. The carapace has five pairs of costal scutes. In each bridge adjoining the plastron to the carapace, there are four inframarginal scutes, each of which is perforated by a pore. The head has two pairs of prefrontal scales. Hatchlings are black on both sides. The Kemp's ridley has a triangular-shaped head with a somewhat hooked beak with large crushing surfaces. This turtle is a shallow water benthic feeder with a diet consisting primarily of crabs.

**Habitat:** Kemp's ridley sea turtles occur in the Atlantic Ocean and the Gulf of Mexico. The females come ashore only to lay eggs. Kemp's ridley sea turtles occur in bays and coastal waters of the Atlantic Ocean and the Gulf of Mexico. After hatching, males spend their entire lives in the water while the female comes ashore only to nest. A female will lay eggs during the day and may return to the same nesting beach the next year. Females reach sexual maturity in 10-15 years. A female may lay as many as 120 eggs in a nest, and may nest up to 3 times during the nesting season. Eggs hatch in 50-55 days and the hatchlings return to the sea. Kemp's ridley sea turtles usually nest on the Gulf Coast beaches of Mexico and Texas from April to July.

**Conclusion:** Suitable habitat for the Kemp's ridley sea turtle is not located on the site.

Leatherback sea turtle (*Dermochelys coriacea*)

**Description:** The leatherback is the largest, deepest diving, and most migratory and wide ranging of all sea turtles. The adult leatherback can reach 4 to 8 feet in length and 500 to 2000 pounds in weight. Its shell is composed of a mosaic of small bones covered by firm, rubbery skin with seven longitudinal ridges or keels. The skin is predominantly black with varying degrees of pale spotting; including a notable pink spot on the dorsal surface of the head in adults. A toothlike cusp is located on each side of the gray upper jaw; the lower jaw is hooked anteriorly. The paddle-like clawless limbs are black with white margins and pale spotting.

**Habitat:** The leatherback is the most pelagic of the sea turtles. Adult females require sandy nesting beaches backed with vegetation and sloped sufficiently so the distance to dry sand is limited. Their preferred beaches have proximity to deep water and generally rough seas.

An open ocean species, it sometimes moves into shallow bays, estuaries and even river mouths. The preferred food is jellyfish. The diet also includes sea urchins, squid, shrimp, fish, blue-green algae and floating seaweed. The leatherback needs sandy nesting beaches backed with plants and sloped so that the crawl to dry sand is not too far. Nest size varies from 50 to 170 eggs. Incubation lasts from 53-74 days.

**Conclusion:** Suitable habitat for the Leatherback sea turtle is not located on the site.

### Loggerhead Sea Turtle (*Caretta caretta*)

Description: The loggerhead is characterized by a large head with blunt jaws. The carapace and flippers are a reddish-brown color; the plastron is yellow. The carapace has five pairs of costal scutes with the first touching the nuchal scute. There are three large inframarginal scutes on each of the bridges between the plastron and carapace. Adults grow to an average weight of about 200 pounds and an average length of 3 feet. The species feeds on mollusks, crustaceans, fish, and other marine animals.

Habitat: The loggerhead is widely distributed within its range. It may be found hundreds of miles out to sea, as well as in inshore areas such as bays, lagoons, salt marshes, creeks, ship channels, and the mouths of large rivers. Coral reefs, rocky places, and ship wrecks are often used as feeding areas. Nesting occurs mainly on open beaches or along narrow bays having suitable sand, and it is often in association with other species of sea turtles. Most loggerhead hatchlings originating from U.S. beaches are believed to lead a pelagic existence in the North Atlantic gyre for an extended period of time, perhaps as long as 7 to 12 years, and are best known from the eastern Atlantic near the Azores and Madeira. Post-hatchlings have been found floating at sea in association with *Sargassum* rafts. Once they reach a certain size, these juvenile loggerheads begin recruiting to coastal areas in the western Atlantic where they become benthic feeders in lagoons, estuaries, bays, river mouths, and shallow coastal waters. These juveniles occupy coastal feeding grounds for about 13 to 20 years before maturing and making their first reproductive migration, the females returning to their natal beach to nest.

Conclusion: Suitable habitat for the Loggerhead Sea Turtle is not located on the site.

### Northern long-eared bat (*Myotis septentrionalis*)

Description: The northern long-eared bat is a medium-sized bat about 3 to 3.7 inches in length but with a wingspan of 9 to 10 inches. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, *Myotis*, which are actually bats noted for their small ears (*Myotis* means mouse-eared). The northern long-eared bat is found across much of the eastern and north central United States and all Canadian provinces from the Atlantic coast west to the southern Northwest Territories and eastern British Columbia. The species' range includes 39 states. White-nose syndrome, a fungal disease known to affect bats, is currently the predominant threat to this bat, especially throughout the Northeast where the species has declined by up to 99 percent from pre-white-nose syndrome levels at many hibernation sites. Although the disease has not yet spread throughout the northern long-eared bat's entire range (white-nose syndrome is currently found in at least 22 of 39 states where the northern long-eared bat occurs), it continues to spread. Experts expect that where it spreads, it will have the same impact as seen in the Northeast.

Habitat: During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts,

using tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances; constant temperatures; and high humidity with no air currents. Specific areas where they hibernate have very high humidity, so much so that droplets of water are often seen on their fur. Within hibernacula, surveyors find them in small crevices or cracks, often with only the nose and ears visible.

Conclusion: Crevices, cracks and visible bark pockets were not observed on trees located on the site. Therefore, it is our opinion that suitable habitat for the Northern long-eared bats is not located on the site.

### Piping Plover (*Charadrius melodus*)

Description: The piping plover is a small, stocky shorebird resembling a sandpiper. The adults weigh 1.5 to 2 ounces, have a length of 7 inches, and a wingspread of 15 inches. Both sexes are similar in size and color; upper parts are pale brownish, underparts are white. A black band across the forehead over the eye, and a black ring around the base of the neck are distinguishing marks in adults during the summer, but are obscure during the winter.

The bird's call is a plaintive "peep-lo" whistle. Like other plovers, it runs in short starts and stops. The piping plover eats worms, fly larvae, beetles, crustaceans, molluscs, and other invertebrates (Bent 1928), which are plucked from the sand. Chicks begin feeding on smaller sizes of these same foods shortly after they hatch.

Piping plovers arrive on their breeding grounds in late March or early April. Following establishment of nesting territories and courtship rituals, the pair form a depression in the sand generally on the upper beach close to the dunes (or in other shoreline habitats depending on the portion of the range). This is where the female will lay her eggs. The nest is often lined with stones or small fragments of shell. Occupied nests are generally 150 to 300 feet apart. Average clutch size is four eggs. Both eggs and young are well camouflaged. The young hatch about 27 to 31 days after egg laying. When predators or other intruders come close, the young squat motionless on the sand while the parents attempt to attract the attention of intruders to themselves, often by feigning a broken wing. The young fledge at about 4 weeks of age. If the eggs are destroyed early in the nesting season, the birds usually lay a second clutch. By early September both adults and young will have departed for their wintering areas.

Habitat: Piping plovers nest along the sandy beaches of the Atlantic Coast, the gravelly shorelines of the Great Lakes, and on river sandbars and alkali wetlands throughout the Great Plains region. They prefer to nest in sparsely vegetated areas that are slightly raised in elevation (like a beach berm). Piping plover breeding territories generally include a feeding area; such as a dune pond or slough, or near the lakeshore or ocean edge. These birds are primarily coastal during the winter, preferring areas with expansive sand or mudflats (feeding) in close proximity to a sandy beach (roosting).

Conclusion: Suitable habitat for the Piping plover is not located on the site.

#### Red-cockaded Woodpecker (*Picoides borealis*)

Description: The red-cockaded woodpecker (RCW) is a small bird measuring about seven inches in length. Identifiable by its white cheek patch and black and white barred back, the males have a few red feathers, or "cockade". These red feathers usually remain hidden underneath black feathers between the black crown and white cheek patch unless the male is disturbed or

excited. Female RCWs lack the red cockade. Juvenile males have a red 'patch' in the center of their black crown. This patch disappears during the fall of their first year at which time their 'red-cockades' appear.

Habitat: Red-cockaded woodpecker habitat includes forests with trees old enough for roosting, generally at least 30-120 years old, or greater than 10 inches diameter at breast height, depending on species of pine. The most prominent adaptation of RCWs is their use of living pines for cavity excavation.

For nesting and roosting habitat, red-cockaded woodpeckers prefer open stands of pine containing trees greater than 30 years old. RCWs need live, large older pines to excavate their cavities. Longleaf pines (*Pinus palustris*) are preferred, but other species of southern pine are also acceptable. Dense stands with a thick hardwood under story are avoided. Foraging habitat is provided in pine and pine hardwood stands 30 years old or older with foraging preference for pine trees 10 inches or larger in diameter. An open under story with "meadow-like" characteristic is preferred by the red-cockaded woodpecker. In good, moderately-stocked, pine habitat, sufficient foraging substrate can be provided on 75 to 125 acres. Prescribed burning is the most efficient and ecologically beneficial method to accomplish hardwood mid-story control.

Conclusion: Suitable habitat for the RCW is not located on the site.

#### The Rufa Red Knot (*Calidris canutus rufa*)

Description: The rufa red knot is a bird measuring between 25 and 28 centimeters in length. During spring (adult birds): the tops of the heads are finely mottled with grays, black and light ochre, running into stripes on crown; throat, breasts and sides of head cinnamon-brown; dark gray line through eye; abdomen and undertail coverts white; uppertail coverts white, barred with black. During winter (adult birds): the tops of the heads are pale ashy gray above, from crown to rump, with feathers on back narrowly edged with white; underparts white, the breast lightly streaked and speckled, and the flanks narrowly barred with gray. During autumn (adult birds): underparts of some individuals show traces of the "red" of spring.

Habitat: The rufa red knot is a medium sized shorebird. The shore of the Delaware Bay is the only significant breeding area for horseshoe crabs on the Atlantic coast of North America. The

red knot rely on the eggs of the horseshoe crab as a food source to fuel the migratory flight from the wintering grounds of Chile and Argentina, to the breeding grounds of the tundra and the Arctic (2000 miles).

Conclusion: Suitable habitat for rufa red knot is not located on the site.

#### Waccamaw silverside (*Menidia extensa*)

Description: The Waccamaw silverside, also known as skipjack or glass minnow, is a small (growing to about 2.5 inches), slim, almost transparent fish with a silver lateral stripe along each side. Its body is laterally compressed, the eyes are large, and the jaw is sharply angled upward. There are two widely separated dorsal fins; the first has thin spines. It may often be seen jumping out of the water.

The Waccamaw silverside spawns in open water near the shoreline from March through July, peaking when water temperatures are between 68-72°F. Fully developed larvae form small isolated schools by early May. No parental care of the young has been noted. The silversides reach sexual maturity by the following spring, spawn, and then shortly thereafter most of the adults die off. A few may survive a second winter.

This species is a surface-feeder and travels in schools. Food sources include zooplankton, particularly cladocerans (i.e., microcrustaceans). Silversides forage in areas of shallow, high quality clear, open water over clean, dark sand substrate with no vegetation.

Habitat: Lake Waccamaw is a natural lake with an approximate surface area of 8,934 acres and an average depth of 7.5 feet. Although it is fed by acidic swamp streams, the lake has a virtually neutral composition. This neutral condition, unusual among North Carolina's coastal plain lakes, is believed to be caused by the buffering effect of the calcareous Waccamaw Limestone formation, which underlies the lake and is exposed on the north shore. The Waccamaw silverside inhabits open water throughout the lake, where schools are commonly found near the surface over shallow, dark-bottomed areas.

Conclusion: Suitable habitat for the Waccamaw silverside is not located on the site.

#### West Indian Manatee (*Trichechus manatus*)

Description: Manatees are protected under the Marine Mammal Protection Act, which prohibits the take (i.e., harass, hunt, capture, or kill) of all marine mammals. Manatees are found in marine, estuarine, and freshwater environments. The West Indian manatee, *Trichechus manatus*, includes two distinct subspecies, the Florida manatee (*Trichechus manatus latirostris*) and the Antillean manatee (*Trichechus manatus manatus*). While morphologically distinctive, both subspecies have many common features. Manatees have large, seal-shaped bodies with paired flippers and a round, paddle-shaped tail. They are typically grey in color (color can range from black to light brown) and occasionally spotted with barnacles or colored by patches of green

or red algae. The muzzle is heavily whiskered and coarse, single hairs are sparsely distributed throughout the body. Adult manatees, on average, are about nine feet long (3 meters) and weigh about 1,000 pounds (200 kilograms). At birth, calves are between three and four feet long (1 meter) and weigh between 40 and 60 pounds (30 kilograms).

Habitat: Florida and Antillean manatees range freely between marine and freshwater habitats. Specific habitat types/use areas include foraging and drinking sites, resting areas, travel corridors and others. Florida manatees, living at the northern limit of the species' range, have little tolerance for cold. Historically, this sub-species has sought out natural, warm-water sites, including springs, deep water areas, and areas thermally influenced by the Gulf Stream, as refuges from the cold. In the 1930s and 40s, industrial plants, including power plants, paper mills, etc., were built along coastal and riverine shoreline areas. Plants discharging large volumes of heated discharge water into areas accessible to manatees have attracted large numbers of wintering manatees to these warm-water sites ever since. In the spring, manatees leave the warm-water sites and may travel great distances during the summer, only to return to warm water sites in the fall.

Conclusion: Suitable habitat for the West Indian Manatee is not located on the site.

#### Wood Stork (*Mycteria Americana*)

Description: Wood storks are large, long-legged wading birds, about 45 inches tall, with a wingspan of 60 to 65 inches. The plumage is white except for black primaries and secondaries and a short black tail. The head and neck are largely unfeathered and dark gray in color. The bill is black, thick at the base, and slightly decurved. Immature birds have dingy gray feathers on their head and a yellowish bill.

Habitat: Wood storks use freshwater and estuarine wetlands for nesting, feeding and roosting. They feed in wide variety of tidal and freshwater ecosystems: freshwater marshes, ponds, hardwood and cypress swamps, narrow tidal creeks or shallow tidal pools, and artificial wetlands such as seasonally flooded roadside and agricultural ditches, impoundments and large reservoirs. Particularly attractive feeding sites are depressions in marshes or swamps where fish become concentrated during periods of falling water levels. They nest in patches of medium to tall trees, either in standing water or on islands surrounded by expanses of open water.

Conclusion: It is our opinion suitable habitat for the Wood Stork is not located on the site.

#### Cooley's Meadowrue (*Thalictrum cooleyi*)

Description: Cooley's meadowrue (*Thalictrum cooleyi* Ahles) is a perennial herb which grows from a rhizome. The stems are usually 3.3 feet (ft) (1 meter; m) in height, but sometimes grow as high as 6.6 ft (2 m) on recently burned sites. Under ideal conditions, in full sun, these stems are erect; however, when shaded they are lax and may trail along the ground or lean on other plants. The compound green leaves are divided into three parts and the leaflets are lance-shaped and

less than 2 centimeters long. The plant has both basal and stem leaves. All parts of the plant are glabrous, having virtually no hairs or glands. Each plant is unisexual, and the male to female ratio is 3 to 1. The flowers have no petals. The sepals on the male plants are pale yellow to white. There are numerous stamens, and the filaments are pale lavender. Female plants have green sepals, and their short-stalked, ribbed carpels develop into narrowly ellipsoidal achenes. Cooley's meadowrue flowers in mid June to early July. The fruits are spindle-shaped carpels which develop into 6 millimeter long achenes, maturing in August or

September, and remaining on the plant into October. If the plants grow in partial shade instead of full sun, flowering may be delayed by as much as two weeks.

Habitat: Cooley's meadowrue occurs on circumneutral soils in grass-sedge bogs and wet pine savannahs and savannah like areas. It may also grow along fire plow lines, in roadside ditches, woodland clearings, and powerline rights-of-way, and needs some type of disturbance such as fire or mowing to maintain its open habitat. Plants often found growing with Cooley's meadowrue include tulip poplar growing with bald cypress and/or Atlantic white cedar.

Conclusion: Suitable habitat for cooley's meadowrue is not located on the site.

#### Rough-leaf Loosestrife (*Lysimachia asperulaefolia*)

Description: Rough-leaf loosestrife is a perennial herb that grows 11.8 – 23.6 inches (in) (30 - 60 centimeters; cm) tall. The triangular shaped leaves are often opposite on shorter stems (less than 30 cm tall) and tend to be arranged in whorls of three or four encircling taller stems. The leaves are widest at the base (0.3 – 0.8 in or 0.8 - 2.0 cm wide) and have three prominent veins. Contrary to the common name, the leaf surfaces are smooth to the touch. The yellow flowers are 0.6 (1.5 cm) across with yellow-orange anthers and occur on terminal racemes that are 1.2 – 3.9 in (3 - 10 cm) long. Flowering occurs from mid-May through June, with fruits (capsules) present from July through October. Since only a few stems in each population flower in any given year, surveyors should look for the leaves rather than yellow flowers. Stipitate glands are usually present on most parts of the plant. This species is easily distinguished from Loomis' yellow loosestrife (*Lysimachia loomisii*) a similar southeastern species by its broader, glandular leaves and much larger flowers.

Habitat: This species generally occurs in the ecotones or edges between longleaf pine uplands and pond pine pocosins (areas of dense shrub and vine growth usually on a wet, peaty, poorly drained soil) on moist to seasonally saturated sands and on shallow organic soils overlaying sand. Rough-leaf loosestrife has also been found on deep peat in the low shrub community of large Carolina bays (shallow, elliptical, poorly drained depressions of unknown origin). The grass-shrub ecotone, where rough-leaf loosestrife is found, is fire-maintained, as are the adjacent plant communities (longleaf pine - scrub oak, savanna, flatwoods, and pocosin). Suppression of naturally-occurring fire in these ecotones results in shrubs increasing in density and height and expanding to eliminate the open edges required by this plant. Several populations are known

from roadsides and power line rights of way where regular maintenance mimics fire and maintains vegetation so that herbaceous species are open to sunlight.

Conclusion: Suitable habitat for rough-leaf loosestrife is not located on the site.

#### Seabeach amaranth (*Amaranthus pumilus*)

Description: Seabeach amaranth is an annual plant found on the dunes of Atlantic Ocean beaches. The stems are fleshy and pinkish-red or red, with small rounded leaves that are 0.5 – 1 inch (in) (1.3 - 2.5 centimeters; cm) in diameter. The leaves, with indented veins, are clustered toward the tip of the stem and have a small notch at the rounded tip. Flowers and fruits are relatively inconspicuous, borne in clusters along the stems. Germination occurs over a relatively long period of time, generally from April to July. Upon germination, the species forms a small unbranched sprig, but soon begins to branch profusely into a clump. This clump often reaches 30 cm in diameter and consists of five to 20 branches. Occasionally, a clump may get as large as a meter or more across, with 100 or more branches.

Flowering begins as soon as plants have reached sufficient size, sometimes as early as June, but more typically commencing in July and continuing until the death of the plant in late fall. Seed production begins in July or August and peaks in September during most years, but continues until the death of the plant. Weather events, including rainfall, hurricanes, and temperature extremes, and predation by webworms have strong effects on the length of Seabeach amaranth's reproductive season. As a result of one or more of these influences, the flowering and fruiting period can be terminated as early as June or July. Under favorable circumstances, however, the reproductive season may extend into late fall. The species is an effective sand binder, building small dunes where it grows.

Habitat: Seabeach amaranth occurs on barrier island beaches, where its primary habitat consists of overwash flats at accreting ends of islands and lower foredunes and upper strands of non-eroding beaches. It occasionally establishes small temporary populations in other habitats, including sound-side beaches, blowouts in foredunes, and sand and shell material placed as beach replenishment or dredge spoil. Seabeach amaranth appears to be intolerant of competition and does not occur on well-vegetated sites. The species appears to need extensive areas of barrier island beaches and inlets, functioning in a relatively natural and dynamic manner. These characteristics allow it to move around in the landscape as a fugitive species, occupying suitable habitat as it becomes available.

Conclusion: Suitable habitat for the Seabeach amaranth is not located on the site.

*Request for Information  
Threatened and Endangered Species/Critical Habitat  
September 29, 2021*

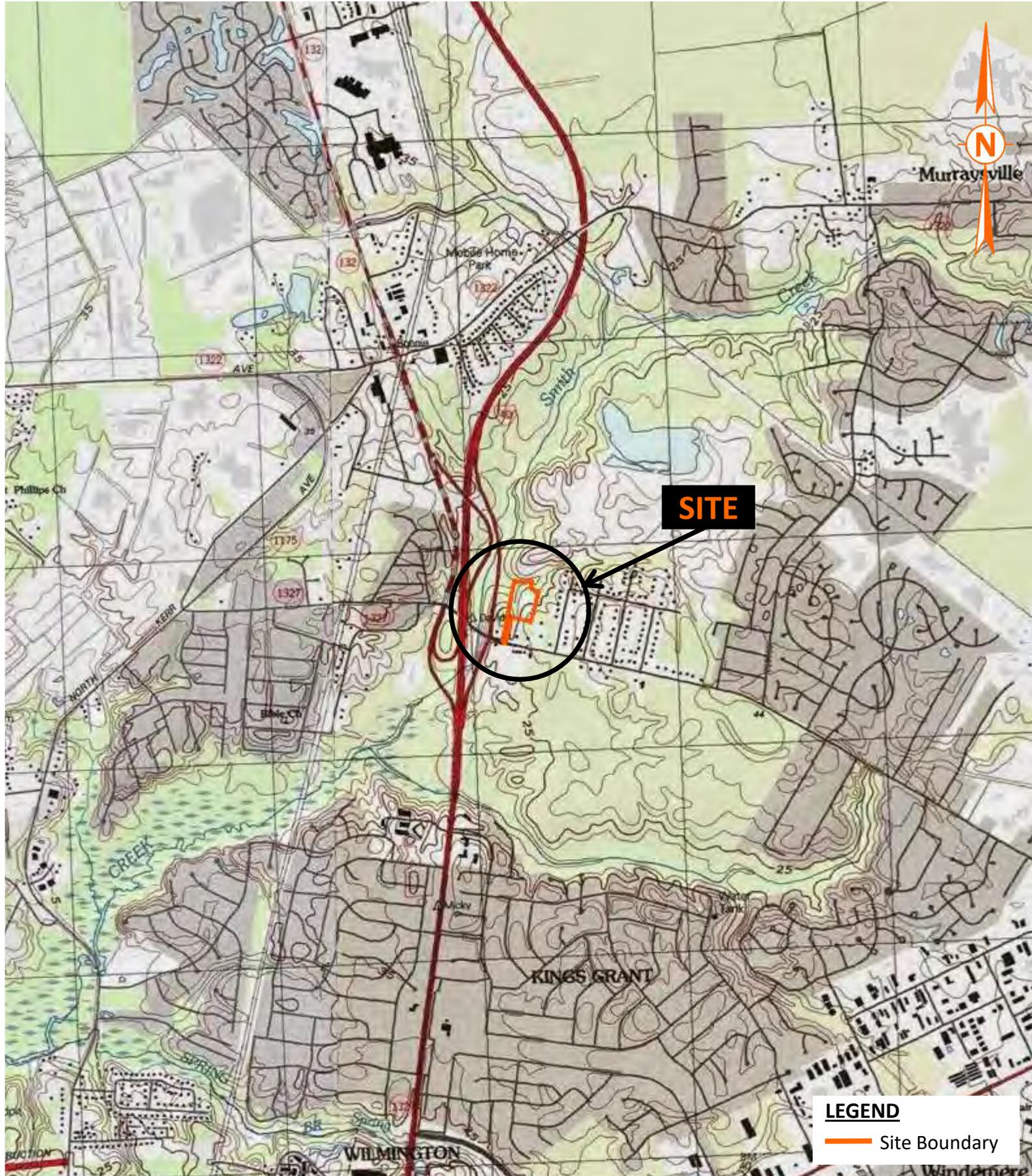
**Closure**

We appreciate your assistance. Please contact us at 336.310.4527 if you have any questions concerning the site or this request.



Matthew B. Carter  
Project Manager

Attachments:        Drawing 1 – USGS Topographic Map  
                              Drawing 2 – Aerial Photograph Map



**Drawing 1**

USGS Topographic Map  
 Scotts Hill and Castle Hayne  
 NC Quadrangles  
 Scale: 1" = 2,000'



**USGS Topographic Map**

Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249



**Drawing 2**  
2019 Google Earth  
Satellite Imagery  
Scale: 1" = 300'



**Aerial Photograph**  
Estrella Landing  
Approximate 5.71-Acre Tract  
Wilmington, New Hanover County, NC  
Pilot Project 7249



Roy Cooper, Governor

D. Reid Wilson, Secretary

Misty Buchanan  
Deputy Director, Natural Heritage Program

NCNHDE-16901

January 21, 2022

Andrea Gievers  
NC Office of Recovery and Resiliency  
P.O. Box 110465  
Durham, NC 27709  
RE: NCORR - Estrella Landing Apartments, Wilmington

Dear Andrea Gievers:

The North Carolina Natural Heritage Program (NCNHP) appreciates the opportunity to provide information about natural heritage resources for the project referenced above.

Based on the project area mapped with your request, a query of the NCNHP database indicates that there are no records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. Please note that although there may be no documentation of natural heritage elements within the project boundary, it does not imply or confirm their absence; the area may not have been surveyed. The results of this query should not be substituted for field surveys where suitable habitat exists. In the event that rare species are found within the project area, please contact the NCNHP so that we may update our records.

The attached 'Potential Occurrences' table summarizes rare species and natural communities that have been documented within a one-mile radius of the property boundary. The proximity of these records suggests that these natural heritage elements may potentially be present in the project area if suitable habitat exists. Tables of natural areas and conservation/managed areas within a one-mile radius of the project area, if any, are also included in this report.

If a Federally-listed species is found within the project area or is indicated within a one-mile radius of the project area, the NCNHP recommends contacting the US Fish and Wildlife Service (USFWS) for guidance. Contact information for USFWS offices in North Carolina is found here:

<https://www.fws.gov/offices/Directories/ListOffices.cfm?statecode=37>.

Please note that natural heritage element data are maintained for the purposes of conservation planning, project review, and scientific research, and are not intended for use as the primary criteria for regulatory decisions. Information provided by the NCNHP database may not be published without prior written notification to the NCNHP, and the NCNHP must be credited as an information source in these publications. Maps of NCNHP data may not be redistributed without permission.

The NC Natural Heritage Program may follow this letter with additional correspondence if a Dedicated Nature Preserve, Registered Heritage Area, Land and Water Fund easement, or Federally-listed species are documented near the project area.

If you have questions regarding the information provided in this letter or need additional assistance, please contact Rodney A. Butler at [rodney.butler@ncdcr.gov](mailto:rodney.butler@ncdcr.gov) or 919-707-8603.

Sincerely,  
NC Natural Heritage Program

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Within a One-mile Radius of the Project Area  
 NCORR - Estrella Landing Apartments, Wilmington  
 January 21, 2022  
 NCNHDE-16901

Element Occurrences Documented Within a One-mile Radius of the Project Area

Taxonomic Group	EO ID	Scientific Name	Common Name	Last Observation Date	Element Occurrence Rank	Accuracy	Federal Status	State Status	Global Rank	State Rank
Amphibian	6761	Ambystoma mabeei	Mabee's Salamander	1962-04	H	4-Low	---	Threatened	G4	S2
Mammal	24390	Corynorhinus rafinesquii macrotis	Eastern Big-eared Bat	2006-Pre	E	5-Very Low	---	Special Concern	G3G4T3	S3
Mammal	32126	Myotis septentrionalis	Northern Long-eared Bat	1994-Post	H?	5-Very Low	Threatened	Threatened	G2G3	S2
Reptile	35663	Deirochelys reticularia reticularia	Eastern Chicken Turtle	2001-06	E	4-Low	---	Special Concern	G5T5	S2S3
Reptile	36989	Micrurus fulvius fulvius	Eastern Coralsnake	1979-05-17	H	4-Low	---	Endangered	G5	S1
Vascular Plant	4842	Rhynchospora tracyi	Tracy's Beaksedge	1958-06	H	4-Low	---	Threatened	G4	S2

Natural Areas Documented Within a One-mile Radius of the Project Area

Site Name	Representational Rating	Collective Rating
Upper Smith Creek Natural Area	R1 (Exceptional)	C3 (High)

Managed Areas Documented Within a One-mile Radius of the Project Area

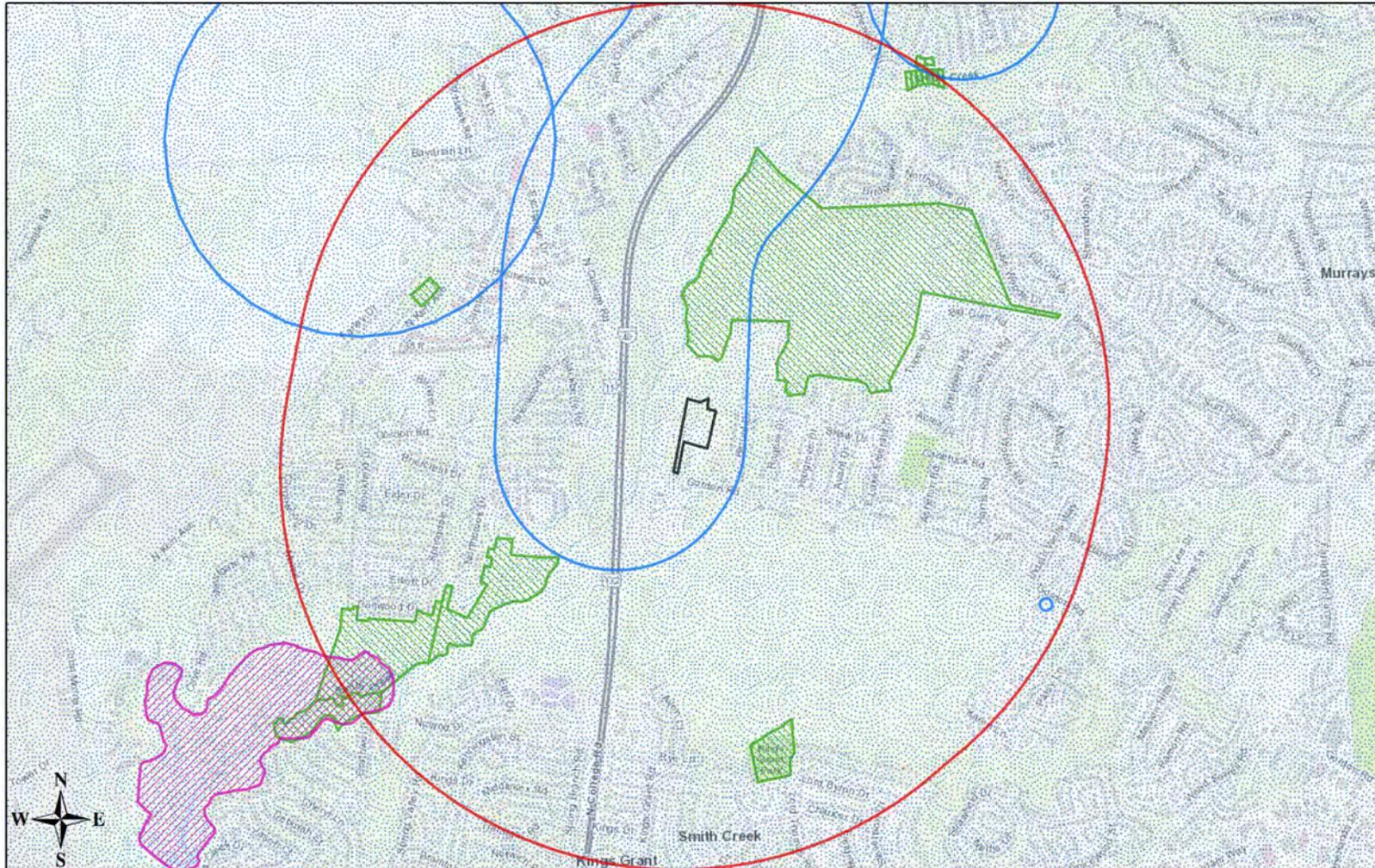
Managed Area Name	Owner	Owner Type
New Hanover County Open Space	New Hanover County	Local Government
New Hanover County Open Space	New Hanover County	Local Government
New Hanover County Open Space	New Hanover County	Local Government
New Hanover County Open Space	New Hanover County	Local Government
New Hanover County Open Space	New Hanover County	Local Government
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State

Managed Areas Documented Within a One-mile Radius of the Project Area

Managed Area Name	Owner	Owner Type
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Hazard Mitigation Buyout Property - New Hanover County	NC DPS, Division of Emergency Management	State
NC Land and Water Fund Conservation Agreement	NC DNCR, NC Land and Water Fund	State

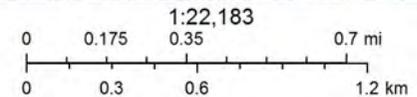
Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/help>. Data query generated on January 21, 2022; source: NCNHP, Q4, January 2022. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

# NCNHDE-16901: NCORR - Estrella Landing Apartments, Wilmington



January 21, 2022

-  Project Boundary
-  Buffered Project Boundary
-  Natural Heritage Element Occurrence (NHEO)
-  NHP Natural Area (NHNA)
-  Managed Area (MAREA)



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

## Gievers, Andrea

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**From:** Ratcliffe, Judith  
**Sent:** Thursday, January 20, 2022 9:48 AM  
**To:** Gievers, Andrea  
**Cc:** Butler, Rodney A  
**Subject:** RE: NC NHP Database Query Request - NCORR Estrella Landing Apts

Hello Andrea,

Thank you for the opportunity to review **The Estrella Landing Apartments, 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411.**

There are no documented Northern Long-eared Bat maternity roost trees within 150 feet of this project boundary.

There are no Northern Long-eared Bat hibernacula within 0.25 mile of this project boundary.

Sincerely,

Judith Ratcliffe

---

**From:** Gievers, Andrea <andrea.l.gievers@rebuild.nc.gov>  
**Sent:** Thursday, January 20, 2022 9:30 AM  
**To:** Ratcliffe, Judith <judith.ratcliffe@ncdcr.gov>  
**Cc:** Butler, Rodney A <Rodney.Butler@ncdcr.gov>  
**Subject:** NC NHP Database Query Request - NCORR Estrella Landing Apts

Hello Judy:

The North Carolina Office of Recovery and Resiliency (NCORR) as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD) is considering funding this proposed *affordable housing* project, **Estrella Landing Apartments, 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411.** I have attached the proposed project location maps and site plan from the consultant to assist in your **NC NHP database query.**

The Estrella Landing Apartments is a new multifamily, affordable housing construction project consisting of three apartment buildings containing 84 apartment units and one clubhouse building. The proposed development will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, play area, picnic pavilion, paved parking areas and landscaped areas on an approximate 5.71-acre tract. The site consists of two parcels. The first parcel is the main area of the site and the second parcel is a 60-foot access and utility easement. The main 5.12-acre parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is approximately 0.59-acre and identified as Parcel ID 314914.23.7837.000.

Please feel free to contact me if you have any questions or need anything at all. Thank you so much for your time and assistance!

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Raleigh ES Field Office

551-F Pylon Drive

Raleigh, North Carolina 27606

March 24, 2022

Andrea Gievers  
NCORR  
PO Box 110465  
Durham, NC 27709

Re: Estrella Landing Apartments – New Hanover County

Dear Mrs. Gievers:

This letter is to inform you that the Service has established an on-line project planning and consultation process which assists developers and consultants in determining whether a federally-listed species or designated critical habitat may be affected by a proposed project. For future projects, please visit the Raleigh Field Office's project planning website at <https://www.fws.gov/office/eastern-north-carolina/project-planning-and-consultation>. If you are only searching for a list of species that may be present in the project's Action Area, then you may use the Service's Information, Planning, and Consultation System (IPaC) website to determine if any listed, proposed, or candidate species may be present in the Action Area and generate a species list. The IPaC website may be viewed at <https://ipac.ecosphere.fws.gov/>. The IPaC web site contains a complete and frequently updated list of all endangered and threatened species protected by the provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act), a list of federal species of concern<sup>1</sup> that are known to occur in each county in North Carolina, and other resources.

Section 7 of the Act requires that all federal agencies (or their designated non-federal representative), in consultation with the Service, ensure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. In addition to the federally-protected species list, information on the

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<sup>1</sup> The term "federal species of concern" refers to those species which the Service believes might be in need of concentrated conservation actions. Federal species of concern receive no legal protection and their designation does not necessarily imply that the species will eventually be proposed for listing as a federally endangered or threatened species. However, we recommend that all practicable measures be taken to avoid or minimize adverse impacts to federal species of concern.

species' life histories and habitats and information on completing a biological assessment or evaluation and can be found on our web page at <https://fws.gov/office/eastern-north-carolina>. Please check the web site often for updated information or changes.

If your project contains suitable habitat for any of the federally-listed species known to be present within the county where your project occurs, the proposed action has the potential to adversely affect those species. As such, we recommend that surveys be conducted to determine the species' presence or absence within the project area. The use of North Carolina Natural Heritage program data should not be substituted for actual field surveys.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a federally-protected species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on federally listed species, then you are not required to contact our office for concurrence (unless an Environmental Impact Statement is prepared). However, you should maintain a complete record of the assessment, including steps leading to your determination of effect, the qualified personnel conducting the assessment, habitat conditions, site photographs, and any other related articles.

With regard to the above-referenced project, we offer the following remarks. Our comments are submitted pursuant to, and in accordance with, provisions of the Endangered Species Act.

Based on the information provided and other information available, it appears that the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at these sites. We believe that the requirements of section 7(a)(2) of the Act have been satisfied for your project. Please remember that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

However, the Service is concerned about the potential impacts the proposed action might have on aquatic species. Aquatic resources are highly susceptible to sedimentation. Therefore, we recommend that all practicable measures be taken to avoid adverse impacts to aquatic species, including implementing directional boring methods and stringent sediment and erosion control measures. An erosion and sedimentation control plan should be submitted to and approved by the North Carolina Division of Land Resources, Land Quality Section prior to construction. Erosion and sedimentation controls should be installed and maintained between the construction site and any nearby down-gradient surface waters. In addition, we recommend maintaining natural, vegetated buffers on all streams and creeks adjacent to the project site.

The North Carolina Wildlife Resources Commission (NCWRC) has developed a Guidance Memorandum (found at <https://www.ncwildlife.org/Conserving/Learn-Resources/Ways-to->

Conserve) to address and mitigate secondary and cumulative impacts to aquatic and terrestrial wildlife resources and water quality. We recommend that you consider this document and the NCWRC's other conservation recommendations in the development of your projects and in completing an initiation package for consultation (if necessary).

We hope you find our web page useful and informative and that following the process described above will reduce the time required, and eliminate the need, for general correspondence for species' lists. If you have any questions or comments, please contact John Ellis of this office at (919) 856-4520 ext. 26.

Sincerely,

A handwritten signature in blue ink that reads "John Ellis for". The signature is written in a cursive style.

Pete Benjamin

Field Supervisor

## Gievers, Andrea

---

**From:** Matt Carter <mcarter@pilotenviro.com>  
**Sent:** Monday, March 7, 2022 1:37 PM  
**To:** Gievers, Andrea; Stephanie Norris  
**Subject:** [External] FW: Please provide response

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

Sincerely,

**Matt Carter**

336.701.9052 (c)  
336.310.4527 (o)  
P.O. Box 128  
Kernersville, NC 27285  
[www.pilotenviro.com](http://www.pilotenviro.com)  
[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)



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**From:** Griswold, Raymond [mailto:RGriswold@nhcgov.com]  
**Sent:** Wednesday, January 19, 2022 10:45 AM  
**To:** Matt Carter <mcarter@pilotenviro.com>  
**Subject:** RE: Please provide response

Matt –

Sorry for taken so long to get back with you. We have been busy with fires, long back log of work and a trip to Conn. For a funeral.

But here is my response to your request. I have been here in New Hanover County since 2003 in my present position. I have never observed any above ground storage tank(s) in this area. Across the street were farmers fields to grow crops behind the existing houses. There is a fairly new gas station next to this property with below ground fuel tanks. I have not found any haz. – mat. Spills in the area among our records.

I hope this answers your questions. Please feel free to contact me at any time. I also represent the County Fire Services on the counties Technical Review Committee.

Raymond Griswold  
Deputy Fire Marshal  
New Hanover County Fire Services  
910-508-0234

**Raymond Griswold**  
Fire Marshal, Deputy  
New Hanover County - Fire Rescue  
(910) 798-7448 p | (910) 798-7052 f  
[RGriswold@nhcgov.com](mailto:RGriswold@nhcgov.com)  
230 Government Center Drive, Suite 130  
Wilmington, NC 28403  
[www.NHCgov.com](http://www.NHCgov.com)

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**From:** Matt Carter <[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)>  
**Sent:** Sunday, January 09, 2022 4:01 PM  
**To:** Griswold, Raymond <[RGriswold@nhcgov.com](mailto:RGriswold@nhcgov.com)>  
**Subject:** Please provide response

**\*\* External Email: Do not click links, open attachments, or reply until you know it is safe \*\***

Mr. Griswold,

Please provide response of a multifamily residential development as the acting Deputy Fire Marshall.

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)





## Thermal and Explosive Hazards

Project Name	Investigator(s)	Site Visit Date
<i>Estrella Landing</i>	<i>Mr. Matt Carter</i>	<i>9/23/21</i>

### Part I –Above Ground Storage Tanks – Site Review

Are any above ground storage tanks visible from the site?

Yes  No

If yes, are these tanks 100-gallons or larger?

Yes  No

List visible tanks						
Tank Identifier	Tank Distance (ft)	Tank Size/Contents	Flammable? (Yes or No)	Pressurized? (Yes or No)	ASD <sup>1</sup> (ft) Thermal Radiation	ASD (ft) Blast Pressure

ASD<sup>1</sup> – Accessible Squares Distance is defined in Title 19 of the Departmental Environmental Conservation Regulations

Is the project site within the ASD of any above ground storage tank visible from the site?

Yes  No

If yes, list the proposed mitigation strategies or reject the site?

Mitigation (attach additional documentation)

### Part II –Above Ground Storage Tanks – Agency Consultation

Has consultation with the Local Planning, Building, Public Safety or Fire Department indicated the presence of existing or planned thermal/explosive hazards that may affect the site (Attach record of consultation)?

Yes  No

If yes, list the proposed mitigation strategies or reject the site?

Mitigation (attach additional documentation)



### Part III – Above Ground Storage Tanks – Record Review

Are above ground storage tanks, which are visible on aerial photographs and USGS topographic maps, located within 1-mile of the site (Attach copies of documents reviewed)?

Yes  No

If yes, are these tanks 100-gallons or larger?

Yes  No

List visible tanks						
Tank Identifier	Tank Distance (ft)	Tank Size/Contents	Flammable? (Yes or No)	Pressurized? (Yes or No)	ASD <sup>1</sup> (ft) Thermal Radiation	ASD (ft) Blast Pressure

ASD<sup>1</sup> = Available-to-Domesticity Distance as defined in 30 CFR 11.103-2(a)(4) - Bureau of Land Management Handbook

Is the project site within the ASD of any above ground storage tank?

Yes  No

If yes are there acceptable barriers (natural or manmade) between the site and the tank?

Yes  No

Identify Acceptable Barriers <sup>2</sup>

Acceptable barriers may mean the construction of a CFRP or other barrier

If no, list the proposed mitigation strategies or reject the site?

Mitigation (attach additional documentation)
Additional Comments or Recommendations

*Matthew Blanton*

Lead Investigator's Signature

1/9/22

Date



Floodplain Management (EO 11988) and  
Protection of Wetlands (EO 11990)  
Determination

**Estrella Landing Apartments Project**  
**EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination**  
***Affordable Housing Development Fund Program***

March 29, 2022

**Introduction & Overview**

The purpose of Executive Order (EO) 11988 Floodplain Management is “to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The purpose of EO 11990 Protection of Wetlands is “to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” This determination contains the analysis prescribed by 24 CFR Part 55.

This project involves U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program – Disaster Recovery (CDBG-DR) funding for construction of new multifamily, affordable housing consisting of three apartment buildings containing 84 units for low- and moderate-income families. The analysis that follows focuses on floodplain and wetland impacts, as there are direct wetland and floodplain impacts associated with this project. Based on the type of land use and facility and other case characteristics described herein, it is concluded that there is a reasonable basis to proceed with funding for this project/ activity within floodplain and wetland. The CDBG-DR funding is administered through the North Carolina Office of Recovery and Resiliency (NCORR) Affordable Housing Development Fund Program which is developing safer and more resilient communities while increasing the availability of affordable housing for low- and moderate-income families. Thus, alternatives preventing or impeding the development of safer and more resilient communities along with increasing affordable housing options are not considered reasonable alternatives.

**Description of Proposed Action & Land Use**

The proposed multifamily, affordable housing development is located on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina 28411. The main 5.12-acre parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is approximately 0.59-acre and identified as Parcel ID 314914.23.7837.000. The facilities will consist of three apartment buildings, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas, and landscaped areas.

The proposed buildings and improvements will be located wholly within Zone X, outside and above the Special Flood Hazard Area, except for utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet in Zone AE as shown on the attached site plans (**Appendix 1**). The proposed project is not located within a FEMA-designated regulatory floodway. Thus, flood insurance will not be required for the proposed project because all National Flood Insurance Program (NFIP) insurable structures will be located in Zone X. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the NFIP.

This proposed project will assist the City of Wilmington and New Hanover County to provide affordable housing for the local community. The City is seeking to address the shortage in affordable housing inventory exacerbated by the effects of Hurricane Florence. The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). These hurricanes damaged or destroyed hundreds of homes worsening the affordable housing shortage.

### **Applicable Regulatory Procedure Per EO 11988 and EO 11990**

The proposed action corresponds with a noncritical action not excluded under 24 CFR §55.12. Funding is permissible for the use in the floodplain and wetland if the proposed action is processed under §55.20 and the findings of the determination are affirmative to suggest that the project may proceed.

According to 24 CFR §55, the activity planned to construct a multifamily, affordable housing development occurs in a community, the City of Wilmington, that is in good standing in the regular program of the NFIP. The proposed action involves new construction in 100-year floodplain which is only a small portion of the proposed action's parcel. However, the improvements to be conducted in 100-year floodplain do not include insurable structures. Thus, the full eight-step floodplain determination process in §55.20 is required and the following analysis examines each step in a floodplain management determination process.

Based on data from the U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory Map and U.S. Army Corps of Engineers (USACE) (see **Appendix 1**), there will be new construction within freshwater forested/shrub wetland on the northern portion of the site. Thus, in accordance with the decision-making process set forth in 24 CFR Part 55, this analysis focuses on both floodplains and wetlands.

#### ***Step 1. Determine Whether the Proposed Action is Located in the 100-year Floodplain (500-year for Critical Actions) or results in New Construction in Wetlands.***

Based on the USFWS National Wetlands Inventory Map and USACE Jurisdictional Determination, the proposed action is located in a federally mapped freshwater forested/shrub wetland, as shown in **Appendix 1**. The proposed action is considered new construction in wetlands as the development will involve utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. The proposed action will require a Section 404 Permit and Nationwide Permit 29 under the Clean Water Act (see §55.20(a)(1) and §55.28(a)).

Per the FEMA FIRMette panel 3720314900K, effective on 08/28/2018, the proposed action parcel contains areas in Zone X and in Zone AE, as shown in **Appendix 1**. According to the FEMA Map Service Center, there are no Preliminary FIRMs available for the site. A small portion of the proposed action is located within the 100-year floodplain (Special Flood Hazard Area [SFHA] – Zone AE). No structures or improvements will be located within a FEMA-designated regulatory floodway. The buildings and most of the improvements are located in Zone X with only utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet taking place in Zone AE and SFHA. The rim elevation of the proposed sanitary sewer manhole to be located between the north end of Building 100 and the stormwater management pond will be elevated approximately 4' above grade/ground elevation. This should not have a negative impact on the floodplain, since it is one manhole that is 5-foot in diameter. After the sanitary sewer installation is complete, including the pipe and manhole installation, the area will be backfilled with native soils and regraded to closely match the existing grades and elevations. This should not increase flood levels during future storm events. The proposed action has been designed to have only minimal activities conducted within the SFHA. In accordance with 24 CFR §55, the proposed action occurs in a community that is in the regular program of the NFIP and the community is currently in good standing.

#### ***Step 2. Initiate Public Notice for Early Review of Proposal.***

Because the proposed project is located in floodplain and wetlands, NCORR published an early notice that allowed for public and agency input on the decision to provide funding for construction and development activities. The early public notice and 15-day comment period is complete. The USACE commented on

March 18, 2022 that the “subject project will require a permit from the USACE. It’s advisable for the developer to seek a pre application meeting from the Corps as impacts to wetlands within the 100 year floodplain are currently proposed.” The NC State Environmental Clearinghouse comments received on March 28, 2022 for the proposed action have been incorporated into the ERR.

The early notice and corresponding 15-day public comment period started on March 13, 2022 with the "Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland" being published in the Star-News newspaper, with the 15-day period expiring on March 28, 2022. The notice targeted local residents, including those in the floodplain. The notice was also posted at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews> and sent via Federal Express and email to the following federal and state agencies: HUD NC Field Office; Federal Emergency Management Agency (FEMA); U.S. Environmental Protection Agency (EPA); USFWS; USACE; NC State Environmental Clearinghouse; and NC Housing Finance Agency (NCHFA). The notice was also sent to the Catawba Indian Nation, New Hanover County and the City of Wilmington. (See **Appendix 2** and **3** for the early notice distributed to these agencies, newspaper publication and distribution list).

***Step 3. Identify and Evaluate Practicable Alternatives to Locating the Proposed Action in a 100-year Floodplain or Wetland.***

The North Carolina Affordable Housing Development Fund Program empowers the State’s most impacted communities with the technical expertise needed to develop thorough and implementable reconstruction plans to build physically, socially, and economically resilient and sustainable communities.

There are two alternatives for the current proposed action. The first alternative for the current proposed action is to find a different location for the proposed action within the local community. There were no suitable alternative sites identified for the proposed action due to the scoring system implemented by NCHFA to determine a qualified site location. The proposed action site is ideal for the development due to the close proximity and availability of existing utility services to the site. The proposed action will be a multifamily, affordable housing complex that will provide new, safe housing that is needed in the area for low- and middle-income households. The proposed action will assist the City of Wilmington and New Hanover County to provide affordable housing for the local community. The City rezoned the main parcel in part to allow for an increase in housing diversity and allow those residents to utilize existing goods and services within one mile of the site according to the Staff Summary Report. One of the goals of the New Hanover County Strategic Plan for 2018-2023 is to encourage the development of complete communities in the unincorporated county by increasing housing diversity and access to basic goods and services. This site was found to be a suitable site with minimal adverse environmental impacts for multifamily, affordable housing in an area that needs it.

The second alternative for the current proposed action is the “no action” alternative. With the No Action Alternative, affordable housing would not be provided for low- and middle-income families in the local community. The City would need to find other options to address the shortage in affordable housing inventory exacerbated by the effects of hurricanes that recently damaged and destroyed homes. Thus, the “no action” alternative is not feasible in relation to the desired objective of creating affordable housing options in the City.

The above identified alternatives will be re-evaluated in response to public comments received.

***Step 4. Identify & Evaluate Potential Direct & Indirect Impacts Associated with Occupancy or Modification of 100-year Floodplain and Potential Direct & Indirect Support of Floodplain and Wetland Development that Could Result from Proposed Action.***

The focus of floodplain evaluation should be on adverse impacts to lives and property, and on natural and beneficial floodplain values. Natural and beneficial values include consideration of potential for adverse

impacts on water resources such as natural moderation of floods, water quality maintenance, and groundwater recharge.

#### *Natural moderation of floods*

Only a small portion of the site is located in Zone AE. The buildings and most of the improvements will be constructed in Zone X and outside of SFHA. The following improvements will be conducted in Zone AE: sanitary sewer installation and stormwater management device installation, including the proposed wet pond and pipe outlet. Construction and development activities for the proposed action have been designed to minimize impacts to wetlands and 100-year floodplain. Mitigation measures for the proposed action includes green infrastructure such as native plant landscaping and bioswales which will slow down stormwater runoff. The proposed stormwater retention pond will alleviate some flooding by intercepting stormwater runoff. Thus, while the proposed actions would directly affect the floodplain, it is not anticipated to have an adverse effect on the floodplain for the surrounding communities.

#### *Living resources such as flora and fauna*

This proposed project will have No Effect on listed species because the consultant determined there are no listed species, designated critical habitats or suitable habitat in the proposed action area. The site is a vacant lot in an urban, developed area with Hawthorne at Smith Creek, a R-15 High Density apartment community to the North, single-family residential to the East, single-family residential and a gas station to the South, and an outdoor boat storage facility and Interstate 40 corridor to the West. The USFWS was contacted about the proposed action and stated that “the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at the site.” The letter goes on to state that the agency is concerned with potential impacts to aquatic species. The agency states that appropriate measures be taken in order to limit sedimentation and appropriate erosion control efforts be enacted. A stormwater control device will be installed at the site during grading activities. This device will be in place during site development and will assist with erosion control/sedimentation. An Erosion and Sedimentation Control Plan and applicable permits from the USACE, NC DEQ and local jurisdictions, including a New Hanover County Floodplain Development Permit, will be required for the proposed action.

A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for wetland impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323. In addition, a New Hanover County Erosion Control & Grading Permit, New Hanover County Stormwater Permit, and NC DEQ NPDES Construction Stormwater Permit (NCG010000) will be obtained. The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the environmental review record (ERR) when received from the permitting agencies. Thus, there will be minimal effect on living resources such as flora and fauna.

#### *Impacts to Property & Lives*

The proposed action’s construction and development activities are mostly located within Zone X with a small portion of the site in Zone AE. Thus, the buildings and most improvements will be located outside of SFHA. In Zone AE and SFHA, there will only be underground utility installation for sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet. The rim elevation of the proposed sanitary sewer manhole to be located between the north end of Building 100 and the stormwater management pond will be elevated approximately 4’ above grade/ground elevation. This should not have negative impact on the floodplain, since it is one manhole that is 5-foot in diameter. After the sanitary sewer installation is complete, including the pipe and manhole installation, the area will be backfilled with native

soils and regraded to closely match the existing grades and elevations. This should not increase flood levels during future storm events. The stormwater management device installation is for the proposed stormwater retention pond which should assist with reducing flooding on the site and in the immediate area. According to a University of Florida/IFAS article, “Stormwater ponds’ primary purpose is flood control, and they are designed to intercept stormwater runoff (precipitation that runs off our buildings, roads, parking lots, and sidewalks), but they also provide other services like a place for sediment to settle out of the water column, habitat for wildlife, recreational opportunities like birding, and pollutant removal. Overall, stormwater ponds help mitigate the impacts of urban stormwater runoff while protecting our natural waterways from nutrient loading, erosion, sedimentation, and algal blooms.” Further, construction and development activities for the proposed action have been designed to minimize impacts to wetlands and 100-year floodplain. Therefore, the proposed action should not increase impacts to property and lives.

#### *Cultural resources such as archaeological, historic & recreational aspects*

The proposed action site is currently vacant land with no structures present. As part of this review, the NC State Historic Preservation Office (SHPO) and Tribal Historic Preservation Offices (THPO) of all applicable Tribes, Nations, and Communities were consulted regarding any historic or tribal resources in the area that could be affected by the proposed actions. The NC SHPO responded that the project will have no effect on historic properties. On February 15, 2022, the Catawba Indian Nation’s THPO responded that the “Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and/ or human remains are located during the ground disturbance phase of this project.” The SHPO and THPO consultation documentation is included in the *Estrella Landing Apartments Project Environmental Assessment (EA)*.

#### *Agricultural, aquacultural, & forestry resources*

The proposed action site and immediate area are not used for agricultural, aquacultural or forestry resources. The surrounding properties contain residential and commercial development. The proposed multifamily, affordable housing development will fit within the surrounding area. The site will be an appropriate transition between Hawthorne at Smith Creek, a R-15 High Density apartment community, and the Buy Quick Convenience Store, a B-1 intense commercial use according to the Community Information Meeting Notice dated February 8, 2021 included in the *Estrella Landing Apartments Project EA*. Thus, the proposed action will not have an effect on agricultural, aquacultural or forestry resources.

#### **Wetland Evaluation**

The purpose of wetland evaluation is to consider factors relevant to a proposal’s effect on the survival and quality of any wetlands to be disturbed. These factors should include public health (including water supply and water quality), maintenance of natural systems, cost increases attributed to construction in wetland, and other uses of wetland in the public interest. The USACE Jurisdictional Determination and wetland delineation map indicate that jurisdictional non-streams and wetland areas are located on the site. The proposed action will result in temporary impacts to approximately 0.057 acres and permanent impacts to approximately 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. The proposed action has been designed to have minimal construction and development activities in the wetland. Further, mitigation measures are incorporated into the design plans and permit requirements and conditions will be complied with during construction.

*Public health, safety, and welfare, including water supply, quality, recharge, and discharge; pollution; flood and storm hazards and hazard protection; and sediment and erosion.*

Water supply wells were not identified at the site. The site will be provided with municipal water from the CFPWA. The proposed action should not negatively affect the municipal water supply of the region. Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the NC Division of Water Resources (DWR)/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. All public water supply systems must comply with state and federal drinking water monitoring requirements. If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/ Public Water Supply Section. According to the NC DWR Water Quality Regional Operations Section (WQROS), a complete search for DWR records should be completed (see *Estrella Landing Apartments Project EA - SCH Comments*). The proposed project will not include the discharge of sewer to surfaces of the site or surrounding properties. The site will be provided with municipal wastewater access.

Best management practices (BMPs) will be implemented during construction activities. Additionally, a surface water control feature will be installed at the site during the initial phase of construction in order minimize sediment loss. According to NC DEQ, the Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An Erosion and Sedimentation Control Plan and applicable permits from the USACE, NC DEQ and local jurisdictions, including a New Hanover County Floodplain Development Permit, will be required for the proposed action. The Plan must be filed with and approved by applicable NC DEQ Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater Permit (NCG010000) is also usually issued should design features meet minimum requirements. Further, the proposed action will comply with 15A NCAC 2H 1000 - State Stormwater Permitting Programs that regulate site development and postconstruction stormwater runoff control. According to NC DEQ, areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state. The proposed action will conform to construction requirements of the State of North Carolina and New Hanover County.

A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for wetland impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323. The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the ERR when received from the permitting agencies.

*Maintenance of natural systems, including conservation and long-term productivity of existing flora and fauna; species and habitat diversity and stability; natural hydrologic function; wetland type; fish; wildlife; timber; and food and fiber resources.*

The proposed action is located adjacent to an existing, commercial development which allows direct access to a major arterial roadway and creates an orderly transition by placing higher density multifamily between the high-intensity Interstate corridor according to the Staff Summary Report included in the *Estrella Landing Apartments EA*. Green infrastructure mitigation measures will be incorporated into the design plans. Natural landscape enhancements will be installed that maintain or restore natural hydrology through infiltration along with bioswales and native plants used in landscaping. According to the EPA, “[g]reen infrastructure can be used to address stormwater runoff and sewer overflow problems. Green infrastructure works by slowing down the runoff, spreading it out over the land, and slowly soaking it into the ground, or in some cases reusing the water onsite. Green infrastructure is also sometimes referred to as low impact development. These techniques also help to remove pollutants from runoff, by allowing plants to filter out pollutants as the water slowly infiltrates into the ground.” See

<https://www.epa.gov/nutrientpollution/sources-and-solutions-stormwater>. Thus, the proposed action has been designed and mitigation measures incorporated to have the minimal impacts on these features.

*Cost increases attributed to wetland-required new construction and mitigation measures to minimize harm to wetlands that may result from such use.*

The proposed scope of work involves mitigation measures such as bioswales and native plants used in landscaping. A stormwater retention pond will be built with a small portion located in Zone AE and near the wetland. A stormwater control device will be installed at the site during grading activities. This device will be in place during site development and will assist with erosion control/sedimentation. The stormwater retention pond will also require regular maintenance, as needed. These additional costs are minimal along with permits required to be obtained. There are no anticipated cost increases attributed to additional mitigation measures to minimize harm to wetlands as these measures are built into existing plans.

*Other uses of wetland in the public interest, including recreational, scientific, and cultural uses.*

The wetland located on the northern portion of the proposed action site is surrounded by development and near the Interstate 40 corridor. The wetland will not be completely filled and a portion will remain after construction. There are no identified recreational, scientific or cultural uses of the wetland that will be impacted by the proposed action.

**Step 5. Where Practicable, Design or Modify the Proposed Action to Minimize the Potential Adverse Impacts To and From the 100-Year Floodplain and to Restore and Preserve its Natural and Beneficial Functions and Values.**

The buildings and most of the improvements will be constructed in Zone X and outside of SFHA. Only a small portion of the site is located in Zone AE, and only sanitary sewer installation and stormwater management device installation will occur in Zone AE. Construction and development activities for the proposed action have been designed to minimize impacts to wetlands and 100-year floodplain.

The short-term impacts will be mitigated by BMPs for debris, dust, and erosion control during construction activities. Mitigation measures will be incorporated to minimize potential adverse impacts to wetlands and 100-year floodplain. Natural landscape enhancements will be installed that maintain or restore natural hydrology through infiltration along with bioswales and native plants used in landscaping. A stormwater control device will be installed at the site during grading activities. This device will be in place during site development and will assist with erosion control and sedimentation. A stormwater retention pond will be constructed on the site with a small portion in Zone AE and near the wetland. An Erosion and Sedimentation Control Plan and applicable permits from the USACE, NC DEQ and local jurisdictions, including a New Hanover County Floodplain Development Permit, will be required for the proposed action. Further, the proposed action will comply with all federal, state and local permit conditions and requirements.

It is a direct policy requirement to specify standards that mitigate future flood risk. These mitigation measures will help minimize flood water level for the area, green infrastructure features will help slow down water runoff and filter out pollutants and the stormwater pond will intercept runoff. However, it is still reasonable to promote awareness of future risks of natural hazards, including altered flooding patterns, plus the physical, social and economic impacts that potential flood events could convey.

**Step 6. Reevaluate the Alternatives and Proposed Action.**

The alternative to find a different location for the proposed action within the local community was not viable. This site was determined to be a suitable site using the NCHFA scoring system and the close proximity and availability of existing utility services and surrounding existing development. No other suitable alternative sites were identified and reviewed. As such, this option was deemed not feasible.

The “no action” alternative would not address the purpose and need of the proposed action. The City would need to find other options to address the shortage in affordable housing inventory exacerbated by the effects of hurricanes that recently damaged and destroyed homes. Therefore, the “no action” alternative examined is not considered desirable and the proposed action is still practicable in light of potential adverse and beneficial impacts on the floodplain, the extent to which it may aggravate current hazards to other floodplains, and the potential to disrupt the natural and beneficial functions and values of floodplains and wetlands.

Implementation of the proposed action will abide by all applicable federal, state and local codes for construction within floodplain and wetlands. The impacts of these alternatives will be re-evaluated in response to any public comments received.

***Step 7. Issue Findings and Public Explanation.***

It is the finding of this report that there is no better alternative than to provide funding for the Estrella Landing Apartments Project. The City would need to find other suitable options to address the immense shortage in affordable housing inventory exacerbated by the effects of hurricanes.

A final notice, formally known as “Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetland” was published in accordance with 24 CFR 55. However, this notice was combined with the Notice of Finding of No Significant Impact (FONSI) and Notice of Intent to Request Release of Funds (NOI-RROF) for a 15-day comment period. The 15-day comment period started with the combined notice publishing in the Star-News newspaper on March 31, 2022 and expires at 5 PM on April 15, 2022. The notice was also posted at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews> and sent via Federal Express and email to the following state and federal agencies: HUD NC Field Office; FEMA; EPA; USFWS; USACE; NC State Environmental Clearinghouse; and NCHFA. The notice was also sent to New Hanover County and the City of Wilmington. (See **Appendix 4** for the final notice distributed to these agencies, proof pre-publication, and distribution list). Any comments received will be addressed, if significant, and added to the EA.

***Step 8. Continuing Responsibility of Responsible Entity & Recipient.***

NCORR is the responsible entity and will provide educational materials, when available. It is acknowledged there is a continuing responsibility by the responsible entity to ensure, to the extent feasible and necessary, compliance with the Steps herein.

## **APPENDIX 1**

- **FEMA FIRMette**
- **NWI Map**
- **USACE Jurisdictional Determination**
- **Site Plans showing impacts**



# National Flood Hazard Layer FIRMette



77°52'14"W 34°16'48"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 77°51'36"W 34°16'18"N  
 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/19/2021 at 9:59 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**Estrella Landing**



**Drawing 10**  
 USFWS – National  
 Wetland Inventory Map

Not to Scale



**National Wetland Inventory Map**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

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

Action Id. SAW-2021-01553 County: New Hanover U.S.G.S. Quad: NC-Scotts Hill

**NOTIFICATION OF JURISDICTIONAL DETERMINATION**

Requestor: Charles & Essie Clay Revocable Living Trust

Essie Clay, Trustee

Address: 4618 Gordon Road  
Wilmington, NC 28411

E-mail: kbeatty09@att.net

Size (acres) 5.7

Nearest Waterway Smith Creek

USGS HUC 03030007

Nearest Town Wilmington

River Basin Cape Fear

Coordinates Latitude: 34.278377

Longitude: -77.864734

Location description: The project area is located at 4615 Gordon Road in Wilmington.

**Indicate Which of the Following Apply:**

**A. Preliminary Determination**

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

**B. Approved Determination**

- There are Navigable Waters of the United States within the above described project area/property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are **waters, including wetlands** on the above described project area/property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- We recommend you have the **waters, including wetlands** on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.
- The **waters, including wetlands** on your project area/property have been delineated and the delineation has been verified by the Corps. The approximate boundaries of these waters are shown on the enclosed delineation map dated 2/1/2021. We strongly

**SAW-2021-01553**

suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

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

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **Brad Shaver at 910-251-4611 or brad.e.shaver@usace.army.mil**.

**C. Basis For Determination: Basis For Determination: See the approved jurisdictional determination form dated 07/29/2021.**

**D. Remarks:** *This determination was made via desktop.*

**E. Attention USDA Program Participants**

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

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

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

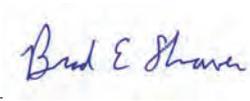
US Army Corps of Engineers  
South Atlantic Division  
Attn: Mr. Philip A. Shannin  
Administrative Appeal Review Officer  
60 Forsyth Street SW, Floor M9  
Atlanta, Georgia 30303-8803  
**AND**  
**PHILIP.A.SHANNIN@USACE.ARMY.MIL**

**SAW-2021-01553**

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **09/27/2021**.

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

Corps Regulatory Official: \_\_\_\_\_



Digitally signed by Brad Shaver  
Date: 2021.07.29 11:06:55  
-04'00'

Date of JD: **07/29/2021**    Expiration Date of JD: **07/28/2026**

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

Copy Furnished(electronic):

**LMG Inc. attn: Lauren Orzechowski**

**LMG Inc. attn: Kim Williams**

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

Applicant: **Charles & Essie Clay Revocable Living Trust, Essie Clay, Trustee**

File Number: **SAW-2021-01553**

Date: **07/29/2021**

Attached is:

See Section below

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

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

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

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

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

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

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

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

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

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

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

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

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

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

If you have questions regarding this decision and/or the appeal process you may contact:  
**District Engineer, Wilmington Regulatory Division**  
**Attn: Brad Shaver**  
**Wilmington Regulatory Office**  
**U.S Army Corps of Engineers**  
**69 Darlington Avenue**  
**Wilmington, North Carolina 28403**

If you only have questions regarding the appeal process you may also contact:  
MR. PHILIP A. SHANNIN  
ADMINISTRATIVE APPEAL REVIEW OFFICER  
CESAD-PDS-O  
60 FORSYTH STREET SOUTHWEST, FLOOR M9  
ATLANTA, GEORGIA 30303-8803  
  
PHONE: (404) 562-5136; FAX (404) 562-5138  
EMAIL: [PHILIP.A.SHANNIN@USACE.ARMY.MIL](mailto:PHILIP.A.SHANNIN@USACE.ARMY.MIL)

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

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

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

**District Engineer, Wilmington Regulatory Division, Attn: Brad Shaver, 69 Darlington Avenue, Wilmington, North Carolina 28403**

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

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

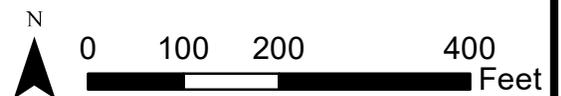
NOTE: This is not a survey. All boundaries and distances are considered approximate. This represents a preliminary sketch prepared from field notes. A survey of delineated areas and review and approval by the U.S. Army Corps of Engineers is recommended prior to specific site planning.



### Legend

- Project Area ~5.7 Acres
- Uplands ~5.0 Acres (88%)
- Wetlands ~0.7 Acres (12%)
- Jurisdictional Non-Stream ~549 Linear Feet
- DataPoints

L:\WETLANDS\2021 WETLANDS FILES\LMG21.054 ---  
4615 Gordon Road, Stephanie Norris\Maps  
Boundaries are approximate and not meant to be absolute.  
Map Source: 2020 NC OneMap



4615 Gordon Road  
New Hanover County, NC

Map Date: February 2021  
LMG21.054



Section 404/401 Delineation  
Preliminary Sketch



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

**I. ADMINISTRATIVE INFORMATION**

Completion Date of Approved Jurisdictional Determination (AJD): 7/29/2021

ORM Number: SAW-2021-01553

Associated JDs: N/A

Review Area Location<sup>1</sup>: State/Territory: NC City: Wilmington County/Parish/Borough: New Hanover

Center Coordinates of Review Area: Latitude 34.278377 Longitude -77.864734

**II. FINDINGS**

**A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

**B. Rivers and Harbors Act of 1899 Section 10 (§ 10)<sup>2</sup>**

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A	N/A.	N/A	N/A.	N/A

**C. Clean Water Act Section 404**

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): <sup>3</sup>				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
T1-T3	~549	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Jurisdictional non-streams T1-T3 flow north toward wetland W1

<sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.

<sup>2</sup> If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

<sup>3</sup> A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination	
W1	~0.7	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Wetland W1 abuts Jurisdictional Non-Streams T1-T3. W1 flows northwest to Smith Creek (offsite).
N/A.	N/A.	N/A.	N/A.	N/A.

**D. Excluded Waters or Features**

Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>				
Exclusion Name	Exclusion Size	Exclusion <sup>5</sup>	Rationale for Exclusion Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

**III. SUPPORTING INFORMATION**

**A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

Information submitted by, or on behalf of, the applicant/consultant: [USACE Data Package Submitted 7/19/21](#)

This information is sufficient for purposes of this AJD.

Rationale: [N/A or describe rationale for insufficiency \(including partial insufficiency\).](#)

- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)
- Photographs: [Select. Title\(s\) and/or date\(s\).](#)
- Corps site visit(s) conducted on: [Date\(s\).](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [ORM Number\(s\) and date\(s\).](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: [NRCS New Hanover County WebSoil GIS Data](#)
- USFWS NWI maps: [Title\(s\) and/or date\(s\).](#)
- USGS topographic maps: [New Hanover County Mosaic](#)

**Other data sources used to aid in this determination:**

Data Source (select)	Name and/or date and other relevant information
<a href="#">USGS Sources</a>	<a href="#">New Hanover County Topographic Map</a>
<a href="#">USDA Sources</a>	<a href="#">NRCS New Hanover County WebSoil GIS Data</a>
<a href="#">NOAA Sources</a>	N/A.
<a href="#">USACE Sources</a>	<a href="#">QL2 Lidar utilized for comparison purposes, DESKTOP</a>
<a href="#">State/Local/Tribal Sources</a>	N/A.
<a href="#">Other Sources</a>	<a href="#">NC Emergency Management 2014 QL2 LiDAR</a>
<a href="#">Other Sources</a>	<a href="#">2020 NC OneMap Aerial Photography</a>

<sup>4</sup> Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

<sup>5</sup> Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

- B. Typical year assessment(s):** According to Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network, the project area was wetter than normal at the time of the field work.
- C. Additional comments to support AJD:** N/A

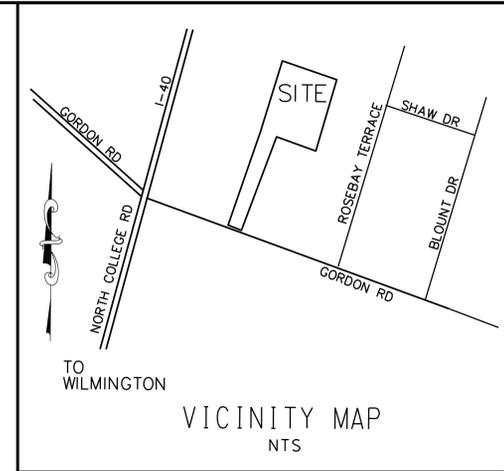
- NCHFA REQUIRED AMENITIES:**
- PLAYGROUND WITH BENCH SEAT
  - COVERED PICNIC AREA WITH 2 TABLES AND 2 GRILLS
  - BENCH SEATING IN 4 LOCATIONS
  - CLUBHOUSE WITH MULTIPURPOSE ROOM, COVERED PORCH WITH SEATING, AND RESIDENT COMPUTER CENTER

**BUFFER NOTES:**

REQUIRED TRANSITIONAL BUFFER .....TYPE A OPAQUE BUFFER  
ADJACENT TO R-15 SINGLE FAMILY USE

BUFFER WIDTH REQUIRED .....20'

PLANT MATERIALS REQUIRED .....MINIMUM 3 ROWS OF PLANTING WHICH SHALL BE 6' HIGH AND PROVIDE 100% OPAQUITY WITHIN ONE YEAR.



**PROJECT DATA**

PARCEL ID	R04300-001-007-000
DEED BOOK/PAGE	4797/397
ZONING	CZD RMF-M
CAMA LUC	URBAN MIXED USE
PROPERTY AREA	5.11 AC
TOTAL BUA	222,635 SF
	2.45 AC
	115,901 SF
% OF PROPERTY	52.1 %
BUILDING	37,557 SF
WALKWAYS	10,999 SF
PARKING/DRIVE AISLES	58,345 SF
RESERVE	9,000 SF
DISTURBANCE LIMITS	4.5 AC
RECEIVING STREAM	SMITH CREEK
CLASSIFICATION	C:Sw
STREAM INDEX	18-74-63
PROPOSED USE	APARTMENTS
TOTAL NUMBER OF UNITS	84
1 BEDROOM	13
2 BEDROOM	35
3 BEDROOM	36

**DIMENSIONAL REQUIREMENTS PER CASE # Z21-03**

MAXIMUM BLDG HEIGHT	45 FT
MINIMUM FRONT YARD	35 FT
MINIMUM REAR YARD	25 FT
MINIMUM SIDE YARD	20 FT

**LEGEND**

PROJECT BOUNDARY	---
EX WATER MAIN	---
PROP WATER MAIN	---
STORMDRAIN	---
WETLAND LINE	---
EX CONTOURS	---
SWALE	---
SILT FENCE	---
DISTURBED AREA	---

**SHEET INDEX**

COVER	1
LANDSCAPING	2
GRADING	3
EROSION CONTROL	4
UTILITY COVER	5
UTILITY PROFILE	6
DETAILS	7---

GORDON ROAD SR 2048 (PUBLIC R/W WIDTH VARIES)

GORDON 4601, LLC  
D.B. 6392 PG. 619  
PID: R04300-001-008-000  
ZONE: B-1  
USE: 58-GAS STATION

ANN S DOWNING  
D.B. 6410 PG. 1659  
M.B. 49 PG. 214  
PID: R04300-001-009-000  
ZONE: B-1  
USE: 958-UNUSED

ROBERT EVANS JR  
D.B. 5958 PG. 1628  
PID: R04300-008-017-001  
ZONE: R-15  
USE: 11-MULTIPLE HOMES

GORDON ROAD INVESTMENTS LLC  
D.B. 5565 PG. 2451  
PID: R04300-001-010-000  
ZONE: R-15  
USE: 958-UNUSED

HAWTHORNE AT SMITH CREEK APARTMENTS, LLC  
D.B. 6167 PG. 124  
PID: R04300-001-004-000  
ZONE: R-15  
USE: 12-APARTMENT

- NOTES:**
- BOUNDARY BY OTHERS.
  - A PORTION OF THE SUBJECT PROPERTY IS LOCATED IN THE 100 YEAR FLOOD ZONE PER FEMA FLOOD ZONE PANEL 3720314900K.
  - 404 WETLANDS ARE FOUND ON THE SUBJECT PROPERTY, AS DELINEATED BY OTHERS.
  - WATER AND SEWER SERVICE PROVIDED BY CFPWA.
  - SOLID WASTE REMOVAL BY PRIVATE CONTRACTOR.
  - ALL RUNOFF FROM IMPERVIOUS SURFACES SHALL BE DIRECTED TO THE COLLECTION/TREATMENT SYSTEM.

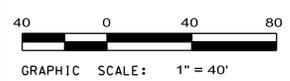
**PARKING CALCULATIONS PER SECTION 81-1 FOR APARTMENTS:**

1.5 SPACES PER 1 BEDROOM UNIT X 13 UNITS	= 20 SPACES
2.0 SPACES PER 2 BEDROOM UNIT X 35 UNITS	= 70 SPACES
2.0 SPACES PER 3 BEDROOM UNIT X 36 UNITS	= 72 SPACES

162 SPACES REQUIRED  
(162 PROVIDED, INCLUDING 21 VAN ACCESSIBLE SPACES)

**OPEN SPACE NOTES**

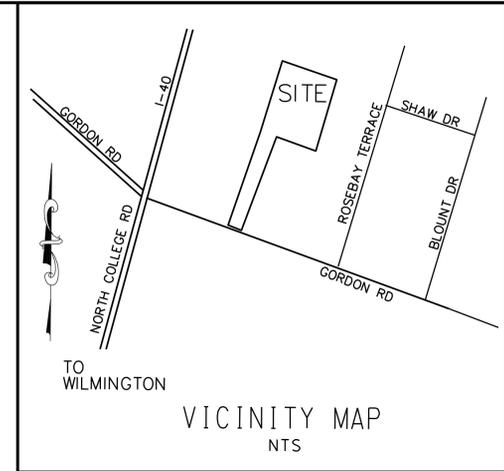
OPEN SPACE REQUIRED: 1.02 ACRES (20%)  
OPEN SPACE PROVIDED: 1.73 ACRES (34%)



<b>PRELIMINARY</b>	<b>COVER</b>	<b>DEVELOPER: ESTRELLA LANDING APARTMENTS, LLC</b>	<b>DRAWN: DLW</b>
	<b>ESTRELLA LANDING APARTMENTS</b>	<b>ADDRESS: PO BOX 15025 WILMINGTON, NC 28408</b>	<b>SCALE: 1" = 40'</b>
	4615 GORDON ROAD WILMINGTON, NC 28405	<b>PHONE: 910-791-3354</b>	<b>SHEET: 1 OF --</b>

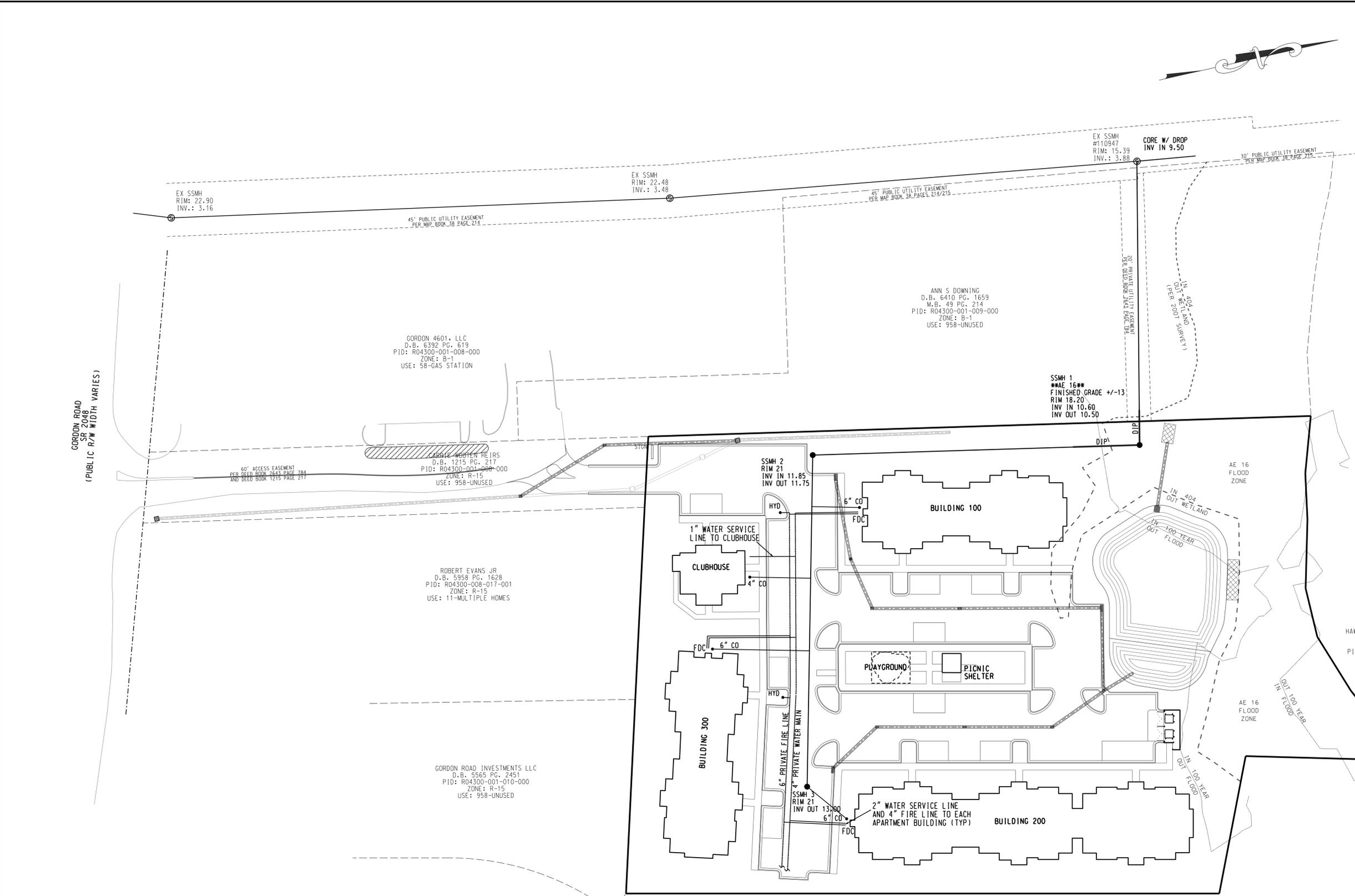
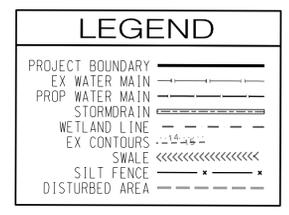
**STROUD ENGINEERING, P.A.**  
102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403  
(910) 815-0775 (910) 815-0593 FAX



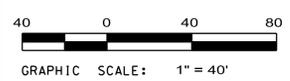


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<b>PRELIMINARY</b>	UTILITY COVER	<b>ESTRELLA LANDING APARTMENTS</b>	DEVELOPER: ESTRELLA LANDING APARTMENTS, LLC	<b>STROUD ENGINEERING, P.A.</b>	DRAWN: DLM
			ADDRESS: PO BOX 15025 WILMINGTON, NC 28408		SCALE: 1" = 40'
			PHONE: 910-791-3354		SHEET: 5 OF ..
		4615 GORDON ROAD WILMINGTON, NC 28403	102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403 (910) 815-0775 (910) 815-0593 FAX		

## **APPENDIX 2**

### **Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland**



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

### **EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA  
March 13, 2022**

To: All Interested Agencies, Groups and Individuals

This is to give notice that the N.C. Office of Recovery and Resiliency (NCORR) has received an application from Estrella Landing Apartments, LLC to use Community Development Block Grant – Disaster Recovery (CDBG-DR) funding from the Affordable Housing Development Fund Program to construct the Estrella Landing Apartments (hereinafter, the “Proposed Activity”) and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990 in accordance with U.S. Department of Housing and Urban Development (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express concerns and share information about the Proposed Activity, including alternative locations outside of the floodplain and wetland. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands supports government efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains and wetlands, it must inform people who may be put at greater or continued risk by the Proposed Activity. Funding for the Proposed Activity will be provided, in part, by the HUD CDBG-DR program for Hurricane Florence storm recovery activities in North Carolina.

The Proposed Activity is needed to address an affordable housing inventory shortage, which was exacerbated by the impacts of Hurricanes Matthew (Oct. 8, 2016) and Florence (Sept. 14, 2018), when hundreds of homes were damaged or destroyed. Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households. The Proposed Activity will assist the City of Wilmington and New Hanover County to provide affordable housing options for the local community.

The Proposed Activity entails construction of a new multifamily, affordable housing project consisting of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. The proposed development

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

*An Equal Opportunity Employer*

will occur on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina.

The Proposed Activity will result in temporary impacts to 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Activity will result in permanent impacts to 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site.

Floodplain maps based on the FEMA Flood Insurance Rate Map (FIRM) and wetland maps based on the NWI data are available for review at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. A full description of the Proposed Activity and FIRM may also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984) 833-5350 to make an appointment.

Written comments must be received by NCORR at the following address on or before March 28, 2022: Matt Arlyn, Policy and Planning Director, NCORR, ATTN: Estrella Landing Apartments, P.O. Box 110465, Durham, NC 27709. Comments may also be submitted by email to [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with “ATTN: Estrella Landing Apartments Comments” in the subject line.

## **APPENDIX 3**

- **Affidavit, Proof, and Tear Sheet of Early Notice**
- **Distribution List to Interested Agencies, Groups and Individuals**

# LOCALiQ

StarNews | The Dispatch  
Times-News

PO Box 631245 Cincinnati, OH 45263-1245

## **PROOF OF PUBLICATION**

Sarah Crump  
Ncorr  
PO BOX 110465  
DURHAM NC 27709

STATE OF NORTH CAROLINA, COUNTY OF NEW HANOVER

The Wilmington Star-News, a newspaper printed and published in the city of Wilmington, and of general circulation in the County of New Hanover, State of North Carolina, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue dated:

03/13/2022, 03/14/2022, 03/15/2022, 03/16/2022, 03/17/2022,  
03/18/2022, 03/20/2022, 03/21/2022, 03/22/2022, 03/23/2022,  
03/24/2022, 03/25/2022, 03/27/2022, 03/28/2022

and that the fees charged are legal.  
Sworn to and subscribed before on 03/28/2022

\_\_\_\_\_  
Legal Clerk

\_\_\_\_\_  
Notary, State of WI, County of Brown

\_\_\_\_\_  
My commision expires

Publication Cost: \$6652.80  
Order No: 7040283 # of Copies:  
Customer No: 491626 1  
PO #:

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*Please do not use this form for payment remittance.*

SARAH BERTELSEN  
Notary Public  
State of Wisconsin

EARLY NOTICE AND PUBLIC  
REVIEW OF A PROPOSED  
ACTIVITY IN A 100-YEAR  
FLOODPLAIN AND WETLAND

ESTRELLA LANDING  
APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH  
CAROLINA 28411  
NEW HANOVER COUNTY,  
NORTH CAROLINA

March 13, 2022

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ments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with  
"ATTN: Estrella Landing Apart-  
ments Comments" in the subject  
line.  
March 13, 14, 15, 16, 17, 18, 20, 21,  
22, 23, 24, 25, 27, 28, 2022  
7040283

# classifieds

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- classifieds/auto/real estate email: [StarNewsClassifieds@gannett.com](mailto:StarNewsClassifieds@gannett.com)
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- business & services email: [StarNewsBusSer@gannett.com](mailto:StarNewsBusSer@gannett.com)
- jobs website: [starnews.com/jobs](http://starnews.com/jobs) jobs email: [recruitads@localiq.com](mailto:recruitads@localiq.com) jobs phone: **833.516.0229**

All classified ads are subject to the applicable rate card, copies of which are available from our Advertising Dept. All ads are subject to approval before publication. The Wilmington Star News reserves the right to edit, refuse, reject, classify or cancel any ad at any time. Errors must be reported in the first day of publication. The Wilmington Star News shall not be liable for any loss or expense that results from an error in or omission of an advertisement. No refunds for early cancellation of order.

**Adopt Me**  
**Pets**  
all your favorites...

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**AUSSIEDOODLE PUPS.** Colorful patterns! Very smart, friendly, & loving! 35 to 50 lbs. Ready now! \$1,750 & up. 252-288-9727

**COCKAPOO PUPS** Multi-colored phantom! Very smart, friendly, playful & loving! 15 to 24 lbs. Ready 3/14! \$1,750 and up. 252-288-9727

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**Assorted Stuff**  
all kinds of things...

**Cemetery Lots**

Two cemetery lots, Green Lawn in Wilmington, \$10,000 total for 2 plots, inclusive Granite marker with companion bronze, interment, Flag garden area, not included vault or \$250 transfer fee due at sale, 704-842-6998

Green Lawn Cemetery  
9A Lot 50 Space1, Corner Placement - \$3,500  
☎910-232-3202

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Concrete Table & Benches with Umbrella Placement-\$150  
1 Ladder an Extension\$65 - Queen size bed with frame\$100  
☎910-623-1258

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**POOL TABLE**  
Antique, regulation size. \$6,000. 1883 Brunswick Blake Collender Company Regulation size pool table. New Bumpers, Rosewood rails, 3 Piece Slate. Call 425-457-9443



**Careers Jobs**  
new beginnings...

**General**

**Southeastern Community College** is seeking to hire the following positions.

- Campus Police Officer
- Career Advisor Adult/Dislocated Worker
- Career Advisor Youth
- Distance Education Administrator
- Financial Aid Specialist CE/CU
- Child Development Center Teacher
- English Instructor
- Math Instructor
- Student Advisor

**Adjunct Faculty/Temporary.**  
•Substitute Positions PT  
•AmeriCorps/RSVP Volunteer Recruiter PT  
•Campus Police Officer PT

Position details and application process can be found on the SCC website at [www.sccnc.edu](http://www.sccnc.edu) or call 910-788-6206. EOE

**Professional Service**  
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**PHOTOS are worth a thousand words included in your ad.**

**PHOTOS are worth a thousand words included in your ad.**

**Real Estate Rentals**

**PUBLISHER'S NOTICE**  
All real estate advertised herein is subject to the Federal Fair Housing Act, which makes it illegal to advertise any preference, limitation, or discrimination because of race, color, religion, sex, handicap, familial status, or national origin, or intention to make any such preference, limitation, or discrimination. "We will not knowingly accept any advertising for real estate which is in violation of the law. All persons are hereby informed that all dwellings advertised are available on an equal opportunity basis."

**Single Family Rentals**

**AAA PARKS** Wilmington & Leland, 2-3BR all electric \$640.No Pet 910-799-9870

**Your Source Public Notices**  
for the latest...

**Bids & Proposals**

**ADVERTISEMENT FOR BIDS**

Sealed proposals will be received until 2:00 pm March 31st, 2022 at the National Guard Wilmington (New Hanover) Readiness Center, 2412 Infantry Road, Wilmington, NC 28405

for the construction of:  
North Carolina National Guard Wilmington New Hanover - POV Expansion (SCO ID# 20-22770-01A)

at which time and place bids will be publicly opened and read.

Complete plans and specifications for this project can be examined at the following location during normal office hours after **March 10th, 2022**:

Timmons Group, Inc  
5410 Trinity Road, Suite 102  
Raleigh, NC 27607  
Attn: Frank Slinksky, PE  
Email: frank.slinksky@timmons.com  
Phone: 919-866-4505  
Hours: Mon-Fri 8am - 5pm

Hard or Digital Copies of the Contract Documents may be obtained, after **March 10th, 2022**, from:

Accent Imaging, 8121 Brownleigh Dr, Raleigh, NC 27617 Phone: 919-782-3332

Website: [AccentImaging.com](http://AccentImaging.com)  
Hard Copies and Digital Soft Copies: Refundable Plan Deposit \$150.00

Digital Copies only: Non-Refundable Purchase Price \$75.00  
Online View: Free

The state reserves the unqualified right to reject any and all proposals.

Signed: Spencer Colburn  
Project Manager  
North Carolina National Guard

**Govt Public Notices**

**NOTICE OF PUBLIC HEARING**  
NEW HANOVER COUNTY BOARD OF COMMISSIONERS  
March 21, 2022

The New Hanover County Board of Commissioners will hold public hearings on Monday, March 21, 2022 beginning at 4:00 p.m. or thereafter at the New Hanover County Historic Courthouse, 24 North Third Street (corner of Third and Princess Street, Room 301, in Wilmington, NC to consider the following:

**PUBLIC COMMENT:** For the upcoming Board of Commissioners meeting, individuals can submit public comments in advance to <https://planning.nhcgov.com/public-comment-form/> (noting the board name in the subject line) by Sunday, March 20, 2022 at noon. Written comments will be provided to the board and the board chair will acknowledge receipt during the public hearing or submit comments into the record during the public hearing and/or public comment period.

**PUBLIC HEARING:** Text Amendment Request (TA22-01) - Request by New Hanover County to modify Articles 2, 3, 4, and 5 of the Unified Development Ordinance to update permissions and standards for wireless telecommunications facilities and to perform technical fixes to various ordinance provisions. The Board of Commissioners may consider substantial changes to petitions as a result of objections, debate, and discussion at the meeting, including rezoning to other classifications. Petitions for the above items may be viewed or inquiries made by contacting the Department of Planning & Land Use at 910-798-7165, 230 Government Center Drive, Wilmington, NC. All interested citizens are invited to attend. To review specific application documents, please visit the Development Activity Page online at: [www.plannhc.com](http://www.plannhc.com)

**NOTICE TO PUBLIC**  
TOWN OF LELAND, NC  
The public will take notice that the Leland Planning Board will have a public meeting at 6:00 p.m. or shortly thereafter on Tuesday, March 22, 2022 at the Leland Town Hall, 102 Town Hall Drive, Leland, NC to consider the following:

**Zoning Map Amendment Request**  
Rezoning of 18 acres comprised of Tax Parcel No. 0381H001 located in Brunswick County, North Carolina from PUD, Planned Unit Development to M-F, Multifamily Residential District.

Citizens can sign up for or against the meeting matter. Written comments will be received up to 24 hours prior to the meeting date.  
Any questions call (910) 332-4297 or email sreinhardt@townofleland.com.  
The public is urged to attend.  
Sabrena Reinhardt, Town Clerk

**PHOTOS are worth a thousand words included in your ad.**

**Notice To Creditors**

**NOTICE TO CREDITORS** of Cape Fear Software Development, Inc. Please be advised that Cape Fear Software Development, Inc has been dissolved. All claims against the assets of Cape Fear Software Development, Inc must be made in writing including the claim amount, basis and origination date, sent by US certified mail to Cape Fear Software Development, Inc at 3224C N. College Road, #206, Wilmington, NC 28405. Any claims known to Cape Fear Software Development, Inc must be submitted within 120 days of this notice or will be barred. Any unknown claim against the Company will be barred unless a proceeding to enforce the claim is commenced in a proper forum within 5 years from the date of this notice. 2/27, 3/6, 3/13, 3/20/2022 6965124

**NOTICE TO CREDITORS**  
NORTH CAROLINA, BRUNSWICK COUNTY

All persons, firms and corporations having claims against the Estate of Jim D. Harris, File No: 2020E01085, deceased, of Brunswick County, NC, are notified to present the same to the personal representative listed below on or before June 6, 2022, or this notice will be pleaded in bar of recovery. All debtors of the said estate are asked to make immediate payment.

This 6th day of March, 2022.

William Duff Harris,  
Administrator of the Estate  
937 Berkshire Ct.  
Sycamore, IL 60178

3/6, 3/13, 3/20, 3/27/2022 7005318

**Public Notices**

**REQUEST FOR PROPOSAL (RFP)**

**HOUSING AUTHORITY OF THE CITY OF (WHA) WILMINGTON, NORTH CAROLINA GENERAL COUNSEL LEGAL SERVICES**

**CONTRACT NO.: COCC19.04**  
This Request for Proposal (RFP) is to solicit Proposals for the purpose of entering into contracts for the professional services of Legal Firms authorized to do business in the State of North Carolina.

It is the intention of the Housing Authority of the City of Wilmington, North Carolina to enter into an agreement with one or more qualified law firms to provide legal services on behalf of the Housing Authority of the City of Wilmington, N.C.

The RFP packets will be available on our website at [www.wha.net](http://www.wha.net) on Monday, March 14, 2022.

WHA reserves the right to reject any or all proposals and to waive any information in the proposal process.  
3/13, 3/20/2022 7025052

**NORTH CAROLINA RANDOLPH COUNTY IN THE GENERAL COURT OF JUSTICE**

**DISTRICT COURT DIVISION**  
FILE NO: 21 CVD 2617  
COLTON WILSON MORROW, PLAINTIFF,

V. LAUREN RENEE BUSCH, DEFENDANT.

**NOTICE OF SERVICE OF PROCESS BY PUBLICATION**  
TO: LAUREN RENEE BUSCH  
5629 OLD GARDEN ROAD, APT 109

WILMINGTON, NORTH CAROLINA 28403

Take notice that a pleading seeking relief against you has been filed in the above entitled action, wherein Plaintiff is seeking an absolute divorce based upon the grounds of one year's separation. You are required to make defense to such pleading no later than 40 days from the date of the first published notice, such first publication date being March 6, 2022. Upon your failure to do so, the party seeking service against you will apply to the Court for the relief sought.

This the 6th day of March 2021.

Scott N. Dunn NCSB#17962  
Attorney for Plaintiff  
162 East Ward Street  
Asheboro, North Carolina 27203  
Off 336.629.1650 Fax 336.629.0043

**NOTICE OF SERVICE OF PROCESS**  
BY PUBLICATION  
STATE OF NORTH CAROLINA, NEW HANOVER COUNTY

In the City of Wilmington  
Nonresidential Structure Code

In the matter of the property located at: 255 N. Front St, Wilmington, North Carolina, known as Map 3117, Block No. 00 Lot No. 00, 255 NORTH FRONT STREET CONDOMINIUMS. TO: Adrian Holdings LLC, North Front Street Ventures LLC, 255 North Front Street Condos Inc.

Take notice that a Compliant and Notice of Hearing before the Nonresidential Structure Code Hearing Officer and a Notice of Lis Pendens has been filed in these proceedings. The nature of the relief being sought is a determination of whether the structure is unsafe (Chapter 16, Article VII of the Wilmington City Code) and dangerous and injurious to the public health, safety, and welfare of occupants or others and ordering an appropriate remedy.

You are requested to file an answer to such pleading and to appear in person or by other means at the hearing before the Nonresidential Structure Code Hearing Officer at the City of Wilmington at 305 Chestnut Street on **March 24, 2022, at 09:30 a.m.** and upon your failure to do so, the hearing will proceed, and an appropriate remedy may be ordered.

Brian D Renner  
Chief Code Enforcement Officer

**EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

**ESTRELLA LANDING APARTMENTS**  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA  
March 13, 2022

To: All Interested Agencies, Groups and Individuals  
This is to give notice that the N.C. Office of Recovery and

## VALIDATION ENGINEER



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of Validation Engineer. This position, in the Manufacturing and Formulations Services department, requires a Bachelor's degree or higher in a scientific or engineering discipline with either 3 years of experience or an equivalent combination of education and experience in a GMP laboratory or manufacturing environment. Special consideration given to candidates with experience with automated filling equipment especially in a sterile manufacturing environment.

Responsibilities include: create and execute equipment installation and operational qualification/requalification, calibration, and preventative maintenance for manufacturing instruments and equipment, as well as facilities and utilities qualifications /develop Standard Operating Procedures and training materials for manufacturing equipment / perform Factory Acceptance Tests for new equipment at vendor sites/monitor ViewLinc and respond to excursions as needed/ perform data trending and write reports, change requests, and deviations / communicate with clients, manufacturing and formulations management, and the quality group.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29084726

## FORMULATIONS SCIENTIST



Quality Chemical Laboratories (QCL), a pharmaceutical testing, manufacturing, and development lab in Wilmington, is seeking a highly motivated scientist for our formulation development laboratory. The focus of this position is solid oral dosage forms but other dosage form experience, especially parenterals, will be considered as this is an area of growth for the company. Must be capable of working independently from concept and product prototype through transfer to cGMP Manufacturing. The ideal candidate will possess strong problem solving abilities, excellent customer service mindset, and a positive can do attitude. A college degree is required with at least 3 years' experience in formulation development. Experience in process development and technology transfer into cGMP manufacturing, familiarity with analytical techniques, regulatory requirements, and early phase cGMP manufacturing is preferred.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29065066

## HVAC TECHNICIAN



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of licensed HVAC Technician. This position requires a minimum of an associate's degree from a two-year college or technical school with a certificate or military training and experience in Heating, Ventilation, and Air Conditioning and 10+ years of HVAC experience is preferred. The candidate will be responsible for the installation, maintenance and repair of HVAC systems utilizing knowledge of refrigeration theory, electrical schematics, pneumatic and building automation systems (BAS), pipe fitting, welding and brazing and mechanical layouts. Other duties include following blueprints/specifications to diagnose and repair units, documentation, ability to work outdoors and/or in mechanical rooms, and flexibility to work weekends if necessary. Candidate must be proficient with laptops, tablets, smart phones, Microsoft Office, Adobe and basic apps.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29065032

**PHOTOS are worth a thousand words included in your ad.**

**Public Notices**

**Resiliency (NCORR)** has received an application from Estrella Landing Apartments, LLC to use Community Development Block Grant – Disaster Recovery (CDBG-DR) funding from the Affordable Housing Development Fund Program to construct the Estrella Landing Apartments (hereinafter, the “Proposed Activity”) and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990, in accordance with U.S. Department of Housing and Urban Development (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express concerns and share information about the Proposed Activity, including alternative locations outside of the floodplain and wetland. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands supports govern-

**Public Notices**

ment efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains and wetlands, it must inform people who may be put at greater or continued risk by the Proposed Activity. Funding for the Proposed Activity will be provided, in part, by the HUD CDBG-DR program for Hurricane Florence storm recovery activities in North Carolina. The Proposed Activity is needed to address an affordable housing inventory shortage, which was exacerbated by the impacts of Hurricanes Matthew (Oct. 8, 2016) and Florence (Sept. 14, 2018), when hundreds of homes were damaged or destroyed. Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households. The Proposed Activity will assist the City of Wilmington and New

**Public Notices**

Hanover County to provide affordable housing options for the local community. The Proposed Activity entails construction of a new multifamily, affordable housing project consisting of three apartment buildings, containing 84 apartment units; one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The Proposed Activity will result in temporary impacts to 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Activity will result in permanent impacts to 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject develop-

**Public Notices**

ment through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. Floodplain maps based on the FEMA Flood Insurance Rate Map (FIRM) and wetlands maps based on the NWI data are available for review at: <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. A full description of the Proposed Activity and FIRM may also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984)833-5350 to make an appointment. Written comments must be received by NCORR at the following address on or before March 28, 2022: Matt Arlyn, Policy and Planning Director, NCORR, ATTN: Estrella Landing Apartments, P.O. Box 110465, Durham,

**Public Notices**

NC 27709. Comments may also be submitted by email to [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with “ATTN: Estrella Landing Apartments Comments” in the subject line. March 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 28, 2022 7040283

**Public Notice**  
North Carolina Environmental Management Commission  
NPDES Unit  
1617 Mail Service Center  
Raleigh, NC 27699-1617  
Notice of Intent to Issue a NPDES Wastewater Permit NC0076732 New Hanover Terminal The North Carolina Environmental Management Commission proposes to issue a NPDES wastewater discharge permit to the person(s) listed below. Written comments regarding the proposed permit will be accepted until 30 days after the publish date of this notice. The Director of the NC Division of Water Resources (DWR) may hold a

**Public Notices**

public hearing should there be a significant degree of public interest. Please mail comments and/or information requests to DWR at the above address. Interested persons may visit the DWR at 512 N. Salisbury Street, Raleigh, NC 27604 to review information on file. Additional information on NPDES permits and this notice may be found on our website: <http://det.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/npdes-wastewater/public-notices>, or by calling (919) 707-3601. Flint Hill Resources, LP [3308 River Road, Wilmington, NC 28401] has requested renewal of permit NC0076732 for its New Hanover Terminal in New Hanover County. This permitted facility discharges treated stormwater to the Cape Fear River in the Cape Fear River Basin. Some parameters are water quality limited. This discharge may affect future allocations in this segment of the Cape Fear River.

**MANUFACTURING QUALITY ASSURANCE ASSOCIATE**



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of Manufacturing Quality Assurance Associate. This position, in the Manufacturing Quality Assurance department, requires a Bachelor’s degree or higher in a scientific or engineering discipline with either 3 years of experience or an equivalent combination of education and experience in a GMP laboratory or GMP manufacturing environment. Responsibilities include performing GMP review of manufacturing records and data, review and release manufacturing product batches, review and approve deviations, SOPs, calibration records, and protocols, perform AQLs as required, and assist with client audits.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

**QA Associate Report Generation**



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of QA Associate – Report Generation. The candidate will be responsible for review and approval of reports generated from laboratory data, such as certificate of analysis and stability study tables and will be expected to review reports for completeness and accuracy to ensure compliance with GMPs and SOPs. This position requires outstanding attention to detail, documentation, communication, problem-solving and organization skills. With experience, the candidate may be required to review technical reports such as method verifications, validations, transfer activities and other protocol driven work. Candidate must be proficient in Word and formatting documents. Additional quality assurance responsibilities may be required.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

**GMP DATA REVIEWERS, CHEMISTS, METROLOGY, LABWARE, CPU VALIDATION, STABILITY, SAMPLE LOG-IN, AND DOCUMENT CONTROL POSITIONS**



Quality Chemical Laboratories (QCL), a pharmaceutical testing and development lab in Wilmington, is seeking highly motivated candidates for qualified analytical data reviewers, LabWare LIMS development/configuration/validation, Document Control Associates, Computer System Validation and Data Integrity Specialists, Scientists (all levels) with experience in Mass Spec, LC, GC, QC compendial testing, Wet Chemistry, Microbiology, Sterility, Synthetic Chemistry, Pharmaceutical Formulation (with knowledge of manufacturing equipment), Metrology, and Sample Log-In Associates. Special attention given to candidates with advanced degree in Chemistry or related science and experience in method development/validation. Special consideration also given to experienced GMP data reviewers.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

**SYSTEM VALIDATION AND DATA INTEGRITY SPECIALIST**



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of System Validation and Data Integrity Specialist.

Responsibilities include: Plan and write protocols for computer system validation projects per 21 CFR Part 1, Review validated systems to assess need for further enhancements, validation, or system upgrades/fixes, Work with company management to implement changes and upgrades to computer systems, Work with vendors on purchasing and planning for software upgrades, Review vendor protocols/design specifications, Perform risk assessments for existing and new computer systems, Monitor validation activities and communicates problem areas to quality assurance management, Participate in client and regulatory audits, Collaborate with other representatives from the quality department, Coordinate end user training. Candidates with experience in a pharmaceutical setting, as well as experience with GAMP5 and Computer Validation are preferred. Must be results driven, a self-starter, and possess strong interpersonal and communication skills in addition to strong verbal and technical writing skills.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)



← **FIND A HOUSE**

**Check out the classified section everyday.**

***EARLY NOTICE DISTRIBUTION LIST***

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA**

**FEDERAL AGENCIES**

<b>Agency</b>	<b>Name &amp; Address</b>	<b>Method</b>
<b>HUD NC</b>	Mr. Lenwood E. Smith, II Environmental Protection Specialist Greensboro Field Office U.S. Dept. of Housing and Urban Development 1500 Pinecroft Road, Suite 401 Greensboro, NC 27407-3838	<a href="mailto:Lenwood.E.Smith@hud.gov">Lenwood.E.Smith@hud.gov</a>
<b>FEMA, Region IV</b>	Ms. Gracia B. Szczech, Regional Administrator U.S. Dept. of Homeland Security FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, GA 30341	FedEx
<b>FEMA ATTN: 11988</b>	<i>Hard copies may also be mailed to</i> Attn: 11988/NEPA Reviewer (EHP) DHS/FEMA RIV 3003 Chamblee Tucker Road Atlanta, GA 30341	<a href="mailto:FEMA-R4EHP@fema.dhs.gov">FEMA-R4EHP@fema.dhs.gov</a> with the subject line <b>REVIEW REQUEST: 11988/NEPA</b>
<b>US EPA, Region 4</b>	Mr. John Blevins, Acting Regional Administrator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	FedEx
<b>US EPA, Region 4</b>	Ms. Ntale Kajumba, NEPA Coordinator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	<a href="mailto:Kajumba.ntale@epa.gov">Kajumba.ntale@epa.gov</a> cc: <a href="mailto:blevins.john@epa.gov">blevins.john@epa.gov</a>
<b>USFWS – Raleigh Field Office</b>	USFWS – Raleigh Field Office ATTN: John Ellis P.O. Box 33726 Raleigh, NC 27636 ph.: 919-856-4520, ext. 26	<a href="mailto:john_ellis@fws.gov">john_ellis@fws.gov</a>

<b>USACE – Wilmington District</b>	Mr. Gary H. Beecher USACE – Wilmington District 69 Darlington Avenue Wilmington, NC 28403	<a href="mailto:Gary.H.Beecher@USACE.army.mil">Gary.H.Beecher@USACE.army.mil</a>
<b>TRIBES, NATIONS AND COMMUNITIES</b> (who asked to be notified)		
<b>Catawba Indian Nation</b>	Dr. Wenonah George Haire, THPO ATTN: THPO Archaeology Dept. Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730	FedEx
<b>Catawba Indian Nation</b>	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730	FedEx
<b>NC STATE AGENCIES</b>		
<b>STATE CLEARING- HOUSE</b>	Ms. Crystal Best North Carolina Department of Administration State Environmental Review Clearinghouse 1301 Mail Service Center Raleigh, North Carolina 27699-1301	<a href="mailto:State.Clearinghouse@doa.nc.gov">State.Clearinghouse@doa.nc.gov</a> <a href="mailto:crystal.best@doa.nc.gov">crystal.best@doa.nc.gov</a>
<b>NCHFA</b>	Ronda G. Moore Senior Attorney, Manager of Real Estate Transactions North Carolina Housing Finance Agency P.O. Box 28066 Raleigh, NC 27611-8066 Phone: 919-875-3621	<a href="mailto:rgmoore@nchfa.com">rgmoore@nchfa.com</a>
<b>LOCAL AGENCIES</b>		
<b>COUNTY</b>	Chris Coudriet, County Manager County Government Complex 230 Government Center Drive, Suite 195 Wilmington, NC 28403	<a href="mailto:ccoudriet@nhcgov.com">ccoudriet@nhcgov.com</a>
<b>COUNTY</b>	Rebekah Roth, CZO, AICP Planning Director 230 Government Center Dr, Suite 110 Wilmington, NC 28403	<a href="mailto:rroth@nhcgov.com">rroth@nhcgov.com</a>

	Phone 910-798-7165	
<b>CITY</b>	Ms. Penelope Spicer-Sudbury City Clerk P.O. Box 1810 Wilmington, NC 28402 Phone: 910.341.7816	<a href="mailto:penny.spicer-sidbury@wilmingtonnc.gov">penny.spicer- sidbury@wilmingtonnc.gov</a> (she will disburse/post)

## **APPENDIX 4**

### **Combined FONSI/NOI-RROF/ Final Notice and Public Explanation of a Proposed Activity in a 100-year Floodplain and Wetland**

#### **Proof Pre-publication**

#### **Distribution List to Interested Agencies, Groups and Individuals**



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

### PUBLIC NOTICE

#### **COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT (FONSI), NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS (NOI-RROF), AND FINAL NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NEW HANOVER COUNTY, NC 28411**

**MARCH 31, 2022**

**Name of Responsible Entity and Recipient:** North Carolina Office of Recovery and Resiliency (NCORR), P.O. Box 110465, Durham, NC 27709. Contact: Director Laura Hogshead (984) 833-5350.

Pursuant to 24 CFR Section 58.43, this combined Notice of Finding of No Significant Impact (FONSI), Notice of Intent to Request Release of Funds (NOI-RROF), and Final Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland satisfies three separate procedural requirements for project activities proposed to be undertaken by NCORR.

**Project Description:** NCORR is responsible for the direct administration of the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program in North Carolina. NCORR proposes to provide CDBG-DR funding of \$2,500,000.00 for the Estrella Landing Apartments (“Proposed Project”), which is located at 4615 Gordon Road, Wilmington, New Hanover County, NC 28411. The Proposed Project is anticipated to have a total cost of \$14,955,003.00. The Proposed Project will involve the new construction of a multifamily, affordable housing project consisting of three apartment buildings containing 84 units, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas, and landscaped areas. The City is seeking affordable housing to address the shortage in inventory exacerbated by the effects of the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households in the City of Wilmington.

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

*An Equal Opportunity Employer*

## **PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

NCORR has conducted an evaluation as required by Executive Orders 11988 and 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The Proposed Project will result in temporary impacts to approximately 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Project will result in permanent impacts to approximately 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. Since the action will include new construction in wetland and floodplain, EO 11988 and EO 11990 require that the Proposed Project not be supported if there are practicable alternatives to development in floodplain and new construction in wetlands. Alternatives and the 8-step process have been documented in the EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination which is available for review. Applicable permits from the U.S. Army Corps of Engineers, NC Department of Environmental Quality, and local jurisdictions will be acquired before work is commenced. The Proposed Project will be constructed in accordance with permit requirements and their conditions.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains/ wetlands and those who have an interest in the protection of the natural environment have an opportunity to express their concerns and provide information about these areas. Second, adequate public notice is an important public education tool. The dissemination of information and request for public comment about floodplains/ wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains/ wetlands, it must inform those who may be put at greater or continued risk.

### **FINDING OF NO SIGNIFICANT IMPACT**

An Environmental Assessment (EA) for the Proposed Project has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and HUD environmental review regulations at 24 CFR Part 58. The EA is incorporated by reference into this FONSI. Subject to public comments, no further review of the Proposed Project is anticipated. NCORR has determined that the EA for the project identified herein complies with the requirements of HUD environmental review regulations at 24 CFR Part 58. NCORR has determined that the Proposed Project will have no significant impact on the human environment and therefore does not require the preparation of an environmental impact statement under NEPA.

**Public Review:** Public viewing of the EA and EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination is available online at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. Documents may

also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984) 833-5350 to make an appointment.

Further information may be requested by writing to the above address, emailing [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) or by calling (984) 833-5350. This combined notice is being sent to individuals and groups known to be interested in these activities, local news media, appropriate local, state and federal agencies, the regional office of the U.S. Environmental Protection Agency having jurisdiction, and to the HUD Field Office, and is being published in a newspaper of general circulation in the affected community.

**Public Comments on the Proposed Activity within Floodplain and Wetland, FONSI and/or NOIRROF:** Any individual, group or agency may submit written comments on the Proposed Project. The public is hereby advised to specify in their comments which “notice” their comments address. Comments should be submitted via email, in the proper format, on or before April 15, 2022 at [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov). Written comments may also be submitted by mail, in the proper format, to be received on or before April 15, 2022, and addressed to: NCORR – Public Comments, P.O. Box 110465, Durham, NC 27709. All comments must be received on or before 5:00 PM on April 15, 2022 or they will not be considered. If modifications result from public comment, these will be made prior to proceeding with the expenditure of funds.

#### **REQUEST FOR RELEASE OF FUNDS AND CERTIFICATION**

On or after April 18, 2022, the NCORR certifying officer will submit a request and certification to HUD for the release of CDBG-DR funds as authorized by related laws and policies for the purpose of implementing this part of the North Carolina CDBG-DR program.

NCORR certifies to HUD that Laura Hogshead, in her capacity as Certifying Officer, consents to accept the jurisdiction of the U.S. federal courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. HUD’s approval of the certification satisfies its responsibilities under NEPA and related laws and authorities, and allows NCORR to use CDBG-DR program funds.

**Objection to Release of Funds:** HUD will accept objections to its release of funds and NCORR’s certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later). Potential objectors may contact HUD or the NCORR Certifying Officer to verify the actual last day of the objection period.

The only permissible grounds for objections claiming a responsible entity’s non-compliance with 24 CFR Part 58 are: (a) Certification was not executed by NCORR’s Certifying Officer; (b) the responsible entity has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR Part 58; (c) the responsible entity has committed funds or incurred costs not authorized by 24 CFR Part 58 before release of funds and approval of environmental certification; or (d) another federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedures (24 CFR Part 58) and shall be addressed to Tennille Smith Parker, Director, Disaster Recovery and Special

Issues Division, Office of Block Grant Assistance, U.S. Department of Housing & Urban Development, 451 7<sup>th</sup> Street SW, Washington, DC 20410, Phone: (202) 402-4649, or emailed to [disaster\\_recovery@hud.gov](mailto:disaster_recovery@hud.gov).

Laura Hogshead  
Certifying Officer  
March 31, 2022



StarNews | The Dispatch | Times-News  
 Sun Journal | The Daily News | The Star  
 The Free Press | Gaston Gazette

## Order Confirmation

Not an Invoice

<b>Account Number:</b>	491626
<b>Customer Name:</b>	Ncorr
<b>Customer Address:</b>	Ncorr PO BOX 110465 DURHAM NC 27709
<b>Contact Name:</b>	Sarah Crump
<b>Contact Phone:</b>	9842976244
<b>Contact Email:</b>	sarah.crump@ncdps.gov
<b>PO Number:</b>	

<b>Date:</b>	03/28/2022
<b>Order Number:</b>	7101765
<b>Prepayment Amount:</b>	\$ 0.00

<b>Column Count:</b>	1.0000
<b>Line Count:</b>	310.0000
<b>Height in Inches:</b>	0.0000

**Print**

Product	#Insertions	Start - End	Category
WLM StarNews	1	03/31/2022 - 03/31/2022	Public Notices
WLM starnewsonline.com	1	03/31/2022 - 03/31/2022	Public Notices

<b>Total Order Confirmation</b>	<b>\$1023.00</b>
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**PUBLIC NOTICE**  
**COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT (FONSI), NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS (NOI-RROF), AND FINAL NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND ESTRELLA LANDING APARTMENTS 4615 GORDON ROAD WILMINGTON, NEW HANOVER COUNTY, NC 28411 MARCH 31, 2022**

Name of Responsible Entity and Recipient: North Carolina Office of Recovery and Resiliency (NCORR), P.O. Box 110465, Durham, NC 27709. Contact: Director Laura Hogshead (984) 833-5350.

Pursuant to 24 CFR Section 58.43, this combined Notice of Finding of No Significant Impact (FONSI), Notice of Intent to Request Release of Funds (NOI-RROF), and Final Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland satisfies three separate procedural requirements for project activities proposed to be undertaken by NCORR.

**Project Description:** NCORR is responsible for the direct administration of the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program in North Carolina. NCORR proposes to provide CDBG-DR funding of \$2,500,000.00 for the Estrella Landing Apartments (“Proposed Project”), which is located at 4615 Gordon Road, Wilmington, New Hanover County, NC 28411. The Proposed Project is anticipated to have a total cost of \$14,955,003.00. The Proposed Project will involve the new construction of a multifamily, affordable housing project consisting of three apartment buildings containing 84 units, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas, and landscaped areas. The City is seeking affordable housing to address the shortage in inventory exacerbated by the effects of the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households in the City of Wilmington.

**PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

NCORR has conducted an evaluation as required by Executive Orders 11988 and 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The Proposed Project will result in temporary impacts to approximately 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Project will result in permanent impacts to approximately 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. Since the action will include new construction in wetland and floodplain, EO 11988 and EO 11990 require that the Proposed Project not be supported if there are practicable alternatives to development in floodplain and new construction in wetlands. Alternatives and the 8-step process have been documented in the EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination which is available for review. Applicable permits from the U.S. Army Corps of

Engineers, NC Department of Environmental Quality, and local jurisdictions will be acquired before work is commenced. The Proposed Project will be constructed in accordance with permit requirements and their conditions.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains/ wetlands and those who have an interest in the protection of the natural environment have an opportunity to express their concerns and provide information about these areas. Second, adequate public notice is an important public education tool. The dissemination of information and request for public comment about floodplains/ wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains/ wetlands, it must inform those who may be put at greater or continued risk.

#### **FINDING OF NO SIGNIFICANT**

#### **IMPACT**

An Environmental Assessment (EA) for the Proposed Project has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and HUD environmental review regulations at 24 CFR Part 58. The EA is incorporated by reference into this FONSI. Subject to public comments, no further review of the Proposed Project is anticipated. NCORR has determined that the EA for the project identified herein complies with the requirements of HUD environmental review regulations at 24 CFR Part 58. NCORR has determined that the Proposed Project will have no significant impact on the human environment and therefore does not require the preparation of an environmental impact statement under NEPA.

**Public Review:** Public viewing of the EA and EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination is available online at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. Documents may also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984) 833-5350 to make an appointment.

Further information may be requested by writing to the above address, emailing [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) or by calling (984) 833-5350. This combined notice is being sent to individuals and groups known to be interested in these activities, local news media, appropriate local, state and federal agencies, the regional office of the U.S. Environmental Protection Agency having jurisdiction, and to the HUD Field Office, and is being published in a newspaper of general circulation in the affected community.

**Public Comments on the Proposed Activity within Floodplain and Wetland, FONSI and/or NOIRROF:** Any individual, group or agency may submit written comments on the Proposed Project. The public is hereby advised to specify in their comments which "notice" their comments address. Comments should be submitted via email, in the proper format, on or before April 15, 2022 at [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov). Written comments may also be submitted by mail, in the proper format, to be received on or before April 15, 2022, and addressed to: NCORR – Public Comments, P.O. Box 110465, Durham, NC 27709. All comments must be received on or before 5:00 PM on April 15, 2022 or they will not be considered. If modifications result from public comment, these will be made prior to proceeding with the expenditure of funds.

#### **REQUEST FOR RELEASE OF FUNDS AND CERTIFICATION**

On or after April 18, 2022, the NCORR certifying officer will submit a request and certification to HUD for the release of CDBG-DR funds as authorized by related laws and policies for the purpose of implementing this

part of the North Carolina CDBG-DR program.

NCORR certifies to HUD that Laura Hogshead, in her capacity as Certifying Officer, consents to accept the jurisdiction of the U.S. federal courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. HUD's approval of the certification satisfies its responsibilities under NEPA and related laws and authorities, and allows NCORR to use CDBG-DR program funds.

**Objection to Release of Funds.** HUD will accept objections to its release of funds and NCORR's certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later). Potential objectors may contact HUD or the NCORR Certifying Officer to verify the actual last day of the objection period.

The only permissible grounds for objections claiming a responsible entity's non-compliance with 24 CFR Part 58 are: (a) Certification was not executed by NCORR's Certifying Officer; (b) the responsible entity has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR Part 58; (c) the responsible entity has committed funds or incurred costs not authorized by 24 CFR Part 58 before release of funds and approval of environmental certification; or (d) another federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedures (24 CFR Part 58) and shall be addressed to Tennille Smith Parker, Director, Disaster Recovery and Special Issues Division, Office of Block Grant Assistance, U.S. Department of Housing & Urban Development, 451 7th Street SW, Washington, DC 20410, Phone: (202) 402-4649, or emailed to [disaster\\_recovery@hud.gov](mailto:disaster_recovery@hud.gov).

Laura Hogshead  
Certifying Officer

March 31, 2022

***FONSI/NOIRROF/FINAL NOTICE DISTRIBUTION LIST***

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA**

**FEDERAL AGENCIES**

<b>Agency</b>	<b>Name &amp; Address</b>	<b>Method</b>
<b>HUD NC</b>	Mr. Lenwood E. Smith, II Environmental Protection Specialist Greensboro Field Office U.S. Dept. of Housing and Urban Development 1500 Pinecroft Road, Suite 401 Greensboro, NC 27407-3838	<a href="mailto:Lenwood.E.Smith@hud.gov">Lenwood.E.Smith@hud.gov</a>
<b>FEMA, Region IV</b>	Ms. Gracia B. Szczech, Regional Administrator U.S. Dept. of Homeland Security FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, GA 30341	FedEx
<b>FEMA ATTN: 11988</b>	<i>Hard copies may also be mailed to</i> Attn: 11988/NEPA Reviewer (EHP) DHS/FEMA RIV 3003 Chamblee Tucker Road Atlanta, GA 30341	<a href="mailto:FEMA-R4EHP@fema.dhs.gov">FEMA-R4EHP@fema.dhs.gov</a> with the subject line <b>REVIEW REQUEST: 11988/NEPA</b>
<b>US EPA, Region 4</b>	Mr. John Blevins, Acting Regional Administrator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	FedEx
<b>US EPA, Region 4</b>	Ms. Ntale Kajumba, NEPA Coordinator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	<a href="mailto:Kajumba.ntale@epa.gov">Kajumba.ntale@epa.gov</a> cc: <a href="mailto:blevins.john@epa.gov">blevins.john@epa.gov</a>
<b>USFWS – Raleigh Field Office</b>	USFWS – Raleigh Field Office ATTN: John Ellis P.O. Box 33726 Raleigh, NC 27636 ph.: 919-856-4520, ext. 26	<a href="mailto:john_ellis@fws.gov">john_ellis@fws.gov</a>

<b>USACE – Wilmington District</b>	Mr. Gary H. Beecher USACE – Wilmington District 69 Darlington Avenue Wilmington, NC 28403	<a href="mailto:Gary.H.Beecher@USACE.army.mil">Gary.H.Beecher@USACE.army.mil</a>
<b>TRIBES, NATIONS AND COMMUNITIES</b> (who asked to be notified)		
<b>Catawba Indian Nation</b>	Dr. Wenonah George Haire, THPO ATTN: THPO Archaeology Dept. Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730	Does not want Notice
<b>Catawba Indian Nation</b>	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730	Does not want Notice
<b>NC STATE AGENCIES</b>		
<b>STATE CLEARING- HOUSE</b>	Ms. Crystal Best North Carolina Department of Administration State Environmental Review Clearinghouse 1301 Mail Service Center Raleigh, North Carolina 27699-1301	<a href="mailto:State.Clearinghouse@doa.nc.gov">State.Clearinghouse@doa.nc.gov</a> <a href="mailto:crystal.best@doa.nc.gov">crystal.best@doa.nc.gov</a>
<b>NCHFA</b>	Ronda G. Moore Senior Attorney, Manager of Real Estate Transactions North Carolina Housing Finance Agency P.O. Box 28066 Raleigh, NC 27611-8066 Phone: 919-875-3621	<a href="mailto:rgmoore@nchfa.com">rgmoore@nchfa.com</a>
<b>LOCAL AGENCIES</b>		
<b>COUNTY</b>	Chris Coudriet, County Manager County Government Complex 230 Government Center Drive, Suite 195 Wilmington, NC 28403	<a href="mailto:ccoudriet@nhcgov.com">ccoudriet@nhcgov.com</a>
<b>COUNTY</b>	Rebekah Roth, CZO, AICP Planning Director 230 Government Center Dr, Suite 110 Wilmington, NC 28403	<a href="mailto:rroth@nhcgov.com">rroth@nhcgov.com</a>

	Phone 910-798-7165	
<b>CITY</b>	Ms. Penelope Spicer-Sudbury City Clerk P.O. Box 1810 Wilmington, NC 28402 Phone: 910.341.7816	<a href="mailto:penny.spicer-sidbury@wilmingtonnc.gov">penny.spicer- sidbury@wilmingtonnc.gov</a> (she will disburse/post)

## Gievers, Andrea

---

**From:** Shaver, Brad E CIV USARMY CESAW (USA) <Brad.E.Shaver@usace.army.mil>  
**Sent:** Wednesday, March 16, 2022 8:48 AM  
**To:** Gievers, Andrea  
**Cc:** NCORR Public Comments  
**Subject:** [External] FW: Early Notice HUD 24 CFR §55.20 - Estrella Landing Apartments, Wilmington, NC  
**Attachments:** NCORR Early Notice Estrella Landing Apartments 3.13.22 RevFinal.pdf; Early Notice Estrella Landing Apts - Floodplain Wetlands Maps.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

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

Hello:

The subject project will require a permit from the US Army Corps of Engineers. Its advisable for the developer to seek a pre application meeting from the Corps as impacts to wetlands within the 100 year floodplain are currently proposed.

Thank you,

Brad Shaver  
USACE, Project Manager

---

**From:** Beecher, Gary H CIV USARMY CESAW (USA) <Gary.H.Beecher@usace.army.mil>  
**Sent:** Wednesday, March 16, 2022 6:04 AM  
**To:** Shaver, Brad E CIV USARMY CESAW (USA) <Brad.E.Shaver@usace.army.mil>  
**Subject:** FW: Early Notice HUD 24 CFR §55.20 - Estrella Landing Apartments, Wilmington, NC

Brad,

I'm forwarding this email to you.  
GB

---

**From:** Gievers, Andrea <[andrea.l.gievers@rebuild.nc.gov](mailto:andrea.l.gievers@rebuild.nc.gov)>  
**Sent:** Monday, March 14, 2022 2:25 PM  
**To:** Beecher, Gary H CIV USARMY CESAW (USA) <[Gary.H.Beecher@usace.army.mil](mailto:Gary.H.Beecher@usace.army.mil)>  
**Subject:** [Non-DoD Source] Early Notice HUD 24 CFR §55.20 - Estrella Landing Apartments, Wilmington, NC

Hello:

Please find attached the *Early Notice and Public Review for a Proposed Activity in a 100-year Floodplain and Wetland* for the NCORR Affordable Housing Development Fund Program's **Estrella Landing Apartments** proposed project in the City of Wilmington, New Hanover County, NC. Please feel free to contact me if you have any questions. Thank you for your time.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

---

Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

December 14, 2021

State Environmental Review Clearinghouse  
1301 Mail Service Center  
Raleigh, NC 27699-1301

RE: NEPA Draft EA - HUD CDBG-DR Program  
*Proposed Estrella Landing Apartments*  
4615 Gordon Road  
Wilmington, NC 28411

Dear Project Review Team:

The North Carolina Office of Recovery and Resiliency (NCORR) as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD) is considering funding this proposed affordable housing project, *Estrella Landing Apartments, 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411*. The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). These hurricanes damaged or destroyed hundreds of homes worsening the affordable housing shortage. This proposed project will increase affordable housing inventory for low- and moderate-income families. Therefore, funding for the proposed project will be provided in part by the HUD CDBG-DR North Carolina Affordable Housing Development Fund Program for Hurricane Florence storm recovery activities in North Carolina.

NCORR is serving as the responsible entity for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58, and processes environmental reviews for proposed projects on a case-by-case basis. The *Estrella Landing Apartments* (proposed project) is a new multifamily, affordable housing construction project consisting of three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

*An Equal Opportunity Employer*

The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411. The site consists of two parcels. The first parcel is the main area of the site and the second parcel is a 60-foot access and utility easement. The main parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is identified as Parcel ID 314914.23.7837.000. The site is located in an area of the county that can generally be described as residential and commercial. Surrounding properties contain commercial properties, a gasoline station, a church facility and residential properties. The proposed development will provide affordable housing for low and middle income families in the local community.

If you have any questions or require additional information regarding this project review request, please feel free to contact Andrea Gievers at (845) 682-1700 or via email at [Andrea.L.Gievers@Rebuild.NC.gov](mailto:Andrea.L.Gievers@Rebuild.NC.gov). Thank you for your time and assistance.

Sincerely,



Andrea Gievers, JD, MSEL, ERM  
Environmental Subject Matter Expert  
NCORR – Community Development

Attachment:

- Draft EA

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

DEVON BORGARDT  
CLEARINGHOUSE COORDINATOR  
DEPT OF NATURAL & CULTURAL  
RESOURCE

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: DEVON BORGARDT

Date: 12/29/2021



**North Carolina Department of Natural and Cultural Resources  
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Roy Cooper  
Secretary D. Reid Wilson

Office of Archives and History  
Deputy Secretary, Darin J. Waters, Ph.D.

November 17, 2021

Stephen Arenson  
Pilot Environmental  
P.O. Box 128  
Kernersville, NC 27285

[sarenson@pilotenviro.com](mailto:sarenson@pilotenviro.com)

Re: Construct Estrella Landing multi-family residential development, 4615 Gordon Road, Wilmington, New Hanover County, ER 21-2349

Dear Mr. Arenson:

Thank you for your letter of September 29, 2021, regarding the above-referenced undertaking. We have reviewed the submission and offer the following comments.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or [environmental.review@ncdcr.gov](mailto:environmental.review@ncdcr.gov). In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

A handwritten signature in blue ink that reads "Renee Gledhill-Earley".

*for* Ramona Bartos, Deputy  
State Historic Preservation Officer



Legend - X

**Historic Resources**

National Register

NR individual resources & centerpoints

Status, LocalStat, HDstatus

- NR Individual Listing
- NR Listing, Gone
- ★ NRHD Center Point

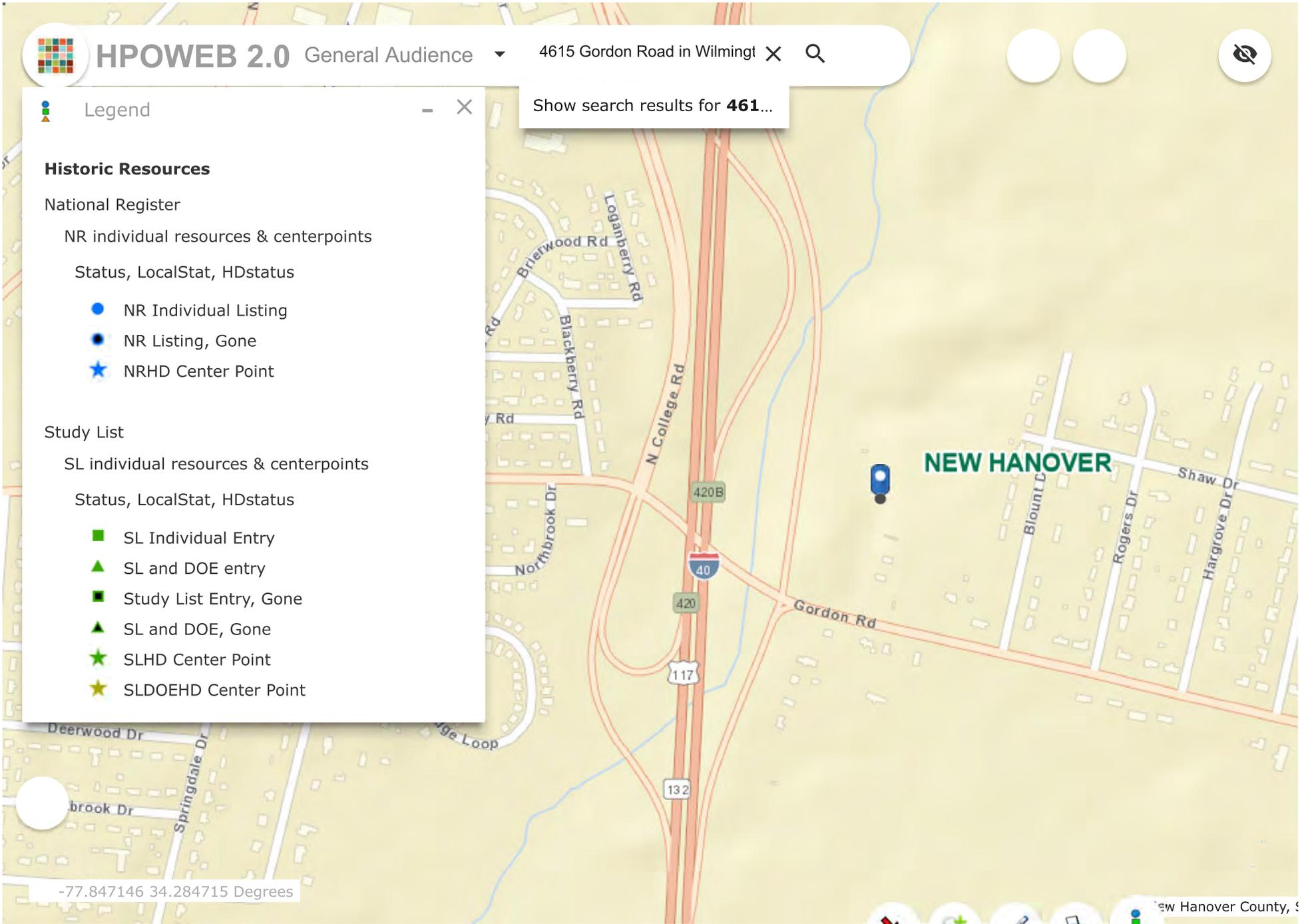
Study List

SL individual resources & centerpoints

Status, LocalStat, HDstatus

- SL Individual Entry
- ▲ SL and DOE entry
- Study List Entry, Gone
- ▲ SL and DOE, Gone
- ★ SLHD Center Point
- ★ SLDOEHD Center Point

Show search results for 461...



-77.847146 34.284715 Degrees





# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

February 11, 2022

Dr. Wenonah George Haire  
ATTN: THPO  
Catawba Indian Nation  
1536 Tom Steven Road  
Rock Hill, SC 29730

RE: Section 106 Review - HUD CDBG-DR Program  
Proposed Estrella Landing Apartments  
4615 Gordon Road  
Wilmington, NC 28411

Dear Dr. Wenonah George Haire:

The North Carolina Office of Recovery and Resiliency (NCORR), as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD), is serving as the responsible entity for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58. NCORR is acting on behalf of HUD in providing the enclosed project information and inviting this discussion with your Nation.

NCORR processes environmental reviews for proposed projects funded with HUD CDBG-DR on a case-by-case basis. In accordance with Section 101(d)(6)(B) of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470f), and its implementing regulations, 36 CFR Part 800, this letter serves as notification of the proposed action. This letter also serves as an invitation to discussion as a consulting party in this review to help identify historic properties in the proposed project area that may have religious and cultural significance to your Nation, and if such properties exist, to help assess how the proposed project might affect them. If the proposed project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

*An Equal Opportunity Employer*

**Area of Potential Effects (APE) under §800.16(d):** We have defined the APE as the boundary of the Subject Property consisting of a an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The proposed project location maps are included in **Attachment 1** for your review.

The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). These hurricanes damaged or destroyed hundreds of homes worsening the affordable housing shortage. This proposed project will increase affordable housing inventory for low- and moderate-income families.

**Proposed Project Description:** The Estrella Landing Apartments (proposed project) is a new multifamily, affordable housing construction project consisting of three apartment buildings containing eighty-four apartment units and one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. The attached preliminary drawing depicts the proposed site improvements with *slight modifications to be made* to the dumpster and parking areas, see **Attachment 1**. The proposed development will provide affordable housing for low- and middle-income families in the local community.

We have completed an initial review of this project in compliance with Section 106 of the NHPA and its implementing regulations 36 CFR Part 800. According to the North Carolina State Historic Preservation Office's (NC SHPO) HPOWEB and site review performed by Pilot Environmental, Inc., no publicly recorded historic properties which are locally designated or listed in or eligible for inclusion in the State or National Register of Historic Places are located on or adjacent to the Subject Property. The HPOWEB results are included in **Attachment 2**.

The proposed project information was sent to the NC SHPO in accordance with Section 106 of the NHPA and its implementing regulations, 36 CFR Part 800 through the NC State Clearinghouse. NC SHPO had no comment on the proposed project, see **Attachment 3**. The site consists of two parcels. The first parcel is the main area of the site and the second parcel is a 60-foot access and utility easement. The Subject Property is located in an area of the county that can generally be described as residential and commercial. Surrounding properties contain commercial properties, a gasoline station, a church facility, and residential properties.

A site reconnaissance was conducted on September 23, 2021, and there was debris present on the Subject Property. The Subject Property contains overgrown grass land and wooded land. The Subject Property has contained wooded land since at least 1938. A single-family residence was located on the Subject Property from at least 2004 until it was demolished sometime prior to 2007. The former residence was reportedly heated with electricity and utilized a water supply well and municipal sewer services. An adjacent property west of the Subject Property contains an active gasoline filling station occupied by Shell. The proposed development will be a multifamily apartment complex and, therefore, typical clearing and grading will take place on the Subject Property during construction.

With this letter, NCORR respectfully submits for your review the attached documentation for the proposed project described herein. *A previous inquiry for this project was submitted and your office responded with no immediate concerns on November 2, 2021, see **Attachment 3**.* If the APE encompasses historic properties of religious or cultural significance to your Nation, please respond within 30 days of receipt of this letter indicating a desire to consult. If you have any concerns with potential impacts of the proposed project on historic properties, please note them in your response along with your preferred principal representative's point of contact. Please respond within this timeframe, otherwise we will assume that the proposed project will have no effect to historic properties of religious or cultural significance. Please respond via email at [Andrea.L.Gievers@Rebuild.NC.gov](mailto:Andrea.L.Gievers@Rebuild.NC.gov) or in writing to the address listed below.

Ms. Andrea Gievers  
NCORR - Environmental  
ATTN: THPO Comments  
P.O. Box 110465  
Durham, NC 27709

If you have any questions or require additional information regarding this request, please feel free to contact Andrea Gievers at (845) 682-1700 or via email at [Andrea.L.Gievers@Rebuild.NC.gov](mailto:Andrea.L.Gievers@Rebuild.NC.gov). Thank you for your time and assistance.

Sincerely,



Andrea Gievers, JD, MSEL, ERM  
NCORR Environmental Subject Matter Expert

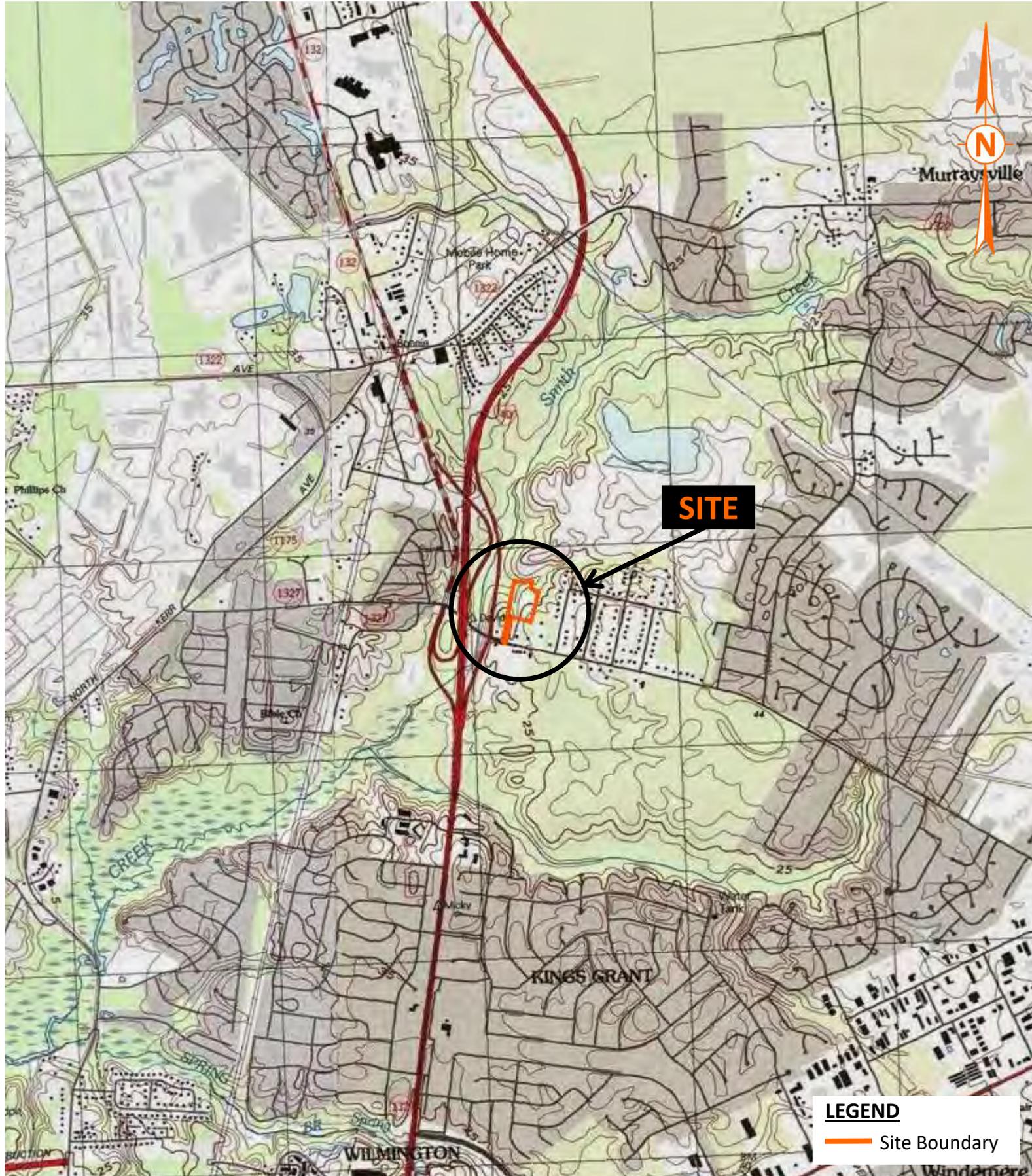
**Enclosures:**

Attachment 1: Proposed Project Location Maps and Preliminary Site Plan  
Attachment 2: NC HPOWEB Map  
Attachment 3: SHPO and Catawba Indian Nation Responses

**ATTACHMENT 1:**

**Proposed Project Location Maps and Preliminary Site  
Plan**





**LEGEND**

— Site Boundary

**Drawing 1**

USGS Topographic Map  
 Scotts Hill and Castle Hayne  
 NC Quadrangles  
 Scale: 1" = 2,000'



**USGS Topographic Map**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249



**ATTACHMENT 2:**

**NC HPOWEB Map**



Legend - X

**Historic Resources**

National Register

NR individual resources & centerpoints

Status, LocalStat, HDstatus

- NR Individual Listing
- NR Listing, Gone
- ★ NRHD Center Point

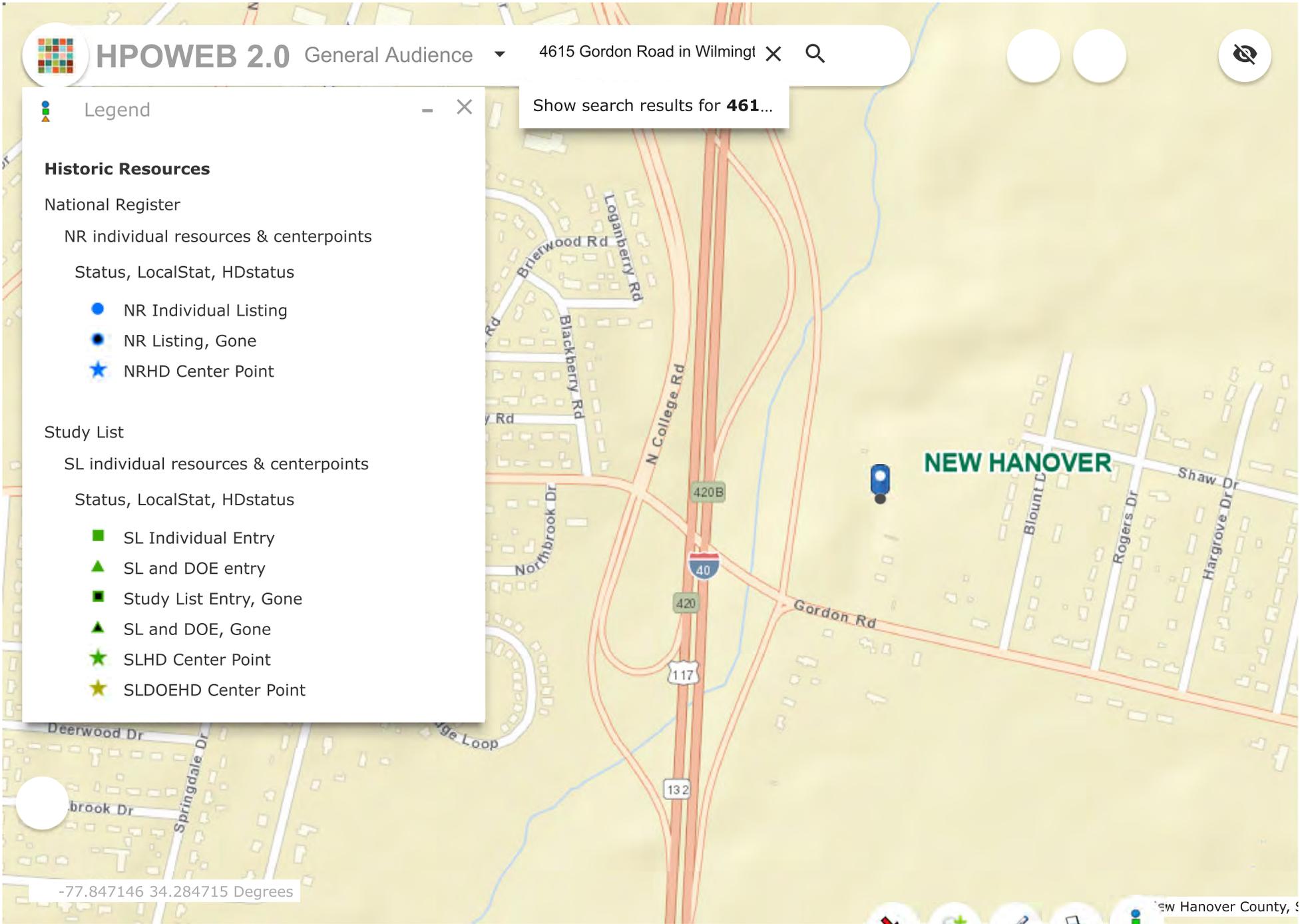
Study List

SL individual resources & centerpoints

Status, LocalStat, HDstatus

- SL Individual Entry
- ▲ SL and DOE entry
- Study List Entry, Gone
- ▲ SL and DOE, Gone
- ★ SLHD Center Point
- ★ SLDOEHD Center Point

Show search results for 461...



-77.847146 34.284715 Degrees



## **ATTACHMENT 3:**

### **SHPO and Catawba Indian Nation Responses**

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

DEVON BORGARDT  
CLEARINGHOUSE COORDINATOR  
DEPT OF NATURAL & CULTURAL  
RESOURCE

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

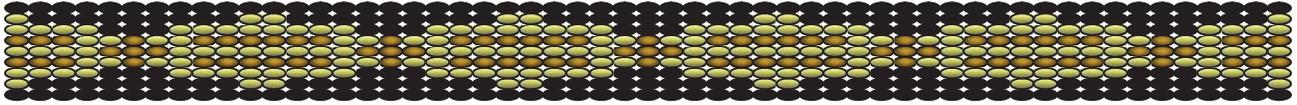
No Comment       Comments Below       Documents Attached

Reviewed By: DEVON BORGARDT

Date: 12/29/2021

Catawba Indian Nation  
Tribal Historic Preservation Office  
1536 Tom Steven Road  
Rock Hill, South Carolina 29730

Office 803-328-2427  
Fax 803-328-5791



November 2, 2021

Attention: Matthew Carter  
Pilot Environmental  
P.O. Box 128  
Kernersville, NC 27285

Re. THPO #	TCNS #	Project Description
2022-868-2		Proposed Estrella Landing – 4615 Gordon Road, Wilmington, New Hanover Co., NC

Dear Mr. Carter,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

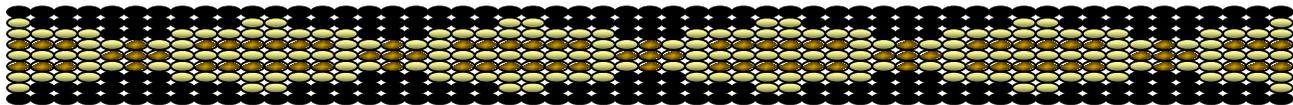
If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail [Caitlin.Rogers@catawba.com](mailto:Caitlin.Rogers@catawba.com).

Sincerely,

Wenonah G. Haire  
Tribal Historic Preservation Officer

Catawba Indian Nation  
Tribal Historic Preservation Office  
1536 Tom Steven Road  
Rock Hill, South Carolina 29730

Office 803-328-2427  
Fax 803-328-5791



February 15, 2022

Attention: Andrea Gievers  
NC Dept. of Public Safety  
P.O. Box 110465  
Durham, NC 27709

Re. THPO #	TCNS #	Project Description
2022-1119-9		Proposed Estrella Landing Apartments – 4615 Gordon Road

Dear Ms. Gievers,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail [Caitlin.Rogers@catawba.com](mailto:Caitlin.Rogers@catawba.com).

Sincerely,

Wenonah G. Haire  
Tribal Historic Preservation Officer



Home (/) > Programs (/programs/) > Environmental Review (/programs/environmental-review/) > DNL Calculator

## DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/).

## Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- Note #1: Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- Note #2: DNL Calculator assumes roadway data is always entered.

## DNL Calculator

Site ID	Proposed Estrella Landing
Record Date	10/12/2021
User's Name	Matt Carter
Road # 1 Name:	Gordon Road

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	<input type="text" value="515"/>	<input type="text" value="515"/>	<input type="text" value="515"/>
Distance to Stop Sign	<input type="text" value="500"/>	<input type="text" value="500"/>	<input type="text" value="500"/>
Average Speed	<input type="text" value="35"/>	<input type="text" value="35"/>	<input type="text" value="35"/>
Average Daily Trips (ADT)	<input type="text" value="19125"/>	<input type="text" value="2250"/>	<input type="text" value="1125"/>
Night Fraction of ADT	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text" value="1"/>
Vehicle DNL	<input type="text" value="47"/>	<input type="text" value="48"/>	<input type="text" value="58"/>
<input type="button" value="Calculate Road #1 DNL"/>	<input type="text" value="59"/>	<input type="button" value="Reset"/>	

Road # 2 Name:

Road #2

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	<input type="text" value="350"/>	<input type="text" value="350"/>	<input type="text" value="350"/>
Distance to Stop Sign	<input type="text" value="400"/>	<input type="text" value="400"/>	<input type="text" value="400"/>
Average Speed	<input type="text" value="25"/>	<input type="text" value="25"/>	<input type="text" value="25"/>
Average Daily Trips (ADT)	<input type="text" value="3485"/>	<input type="text" value="410"/>	<input type="text" value="205"/>
Night Fraction of ADT	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text" value="1"/>
Vehicle DNL	<input type="text" value="39"/>	<input type="text" value="39"/>	<input type="text" value="53"/>
<input type="button" value="Calculate Road #2 DNL"/>	<input type="text" value="54"/>	<input type="button" value="Reset"/>	

Road # 3 Name:

Road #3

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	<input type="text" value="815"/>	<input type="text" value="815"/>	<input type="text" value="815"/>
Distance to Stop Sign	<input type="text" value="600"/>	<input type="text" value="600"/>	<input type="text" value="600"/>
Average Speed	<input type="text" value="50"/>	<input type="text" value="50"/>	<input type="text" value="50"/>
Average Daily Trips (ADT)	<input type="text" value="43350"/>	<input type="text" value="5100"/>	<input type="text" value="2550"/>
Night Fraction of ADT	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text" value="1"/>
Vehicle DNL	<input type="text" value="52"/>	<input type="text" value="52"/>	<input type="text" value="60"/>
<b>Calculate Road #3 DNL</b>	<input type="text" value="61"/>	<input type="button" value="Reset"/>	

Airport Noise Level

Loud Impulse Sounds?  Yes  No

Combined DNL for all Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

---

[Calculate](#)[Reset](#)

## Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- No Action Alternative: Cancel the project at this location
- Other Reasonable Alternatives: Choose an alternate site
- Mitigation
  - Contact your Field or Regional Environmental Officer (</programs/environmental-review/ HUD-environmental-staff-contacts/>)
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
  - Construct noise barrier. See the Barrier Performance Module (</programs/environmental-review/bpm-calculator/>)

## Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide \(/resource/3822/day-night-noise-level-assessment-tool-user-guide/\)](/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

[Day/Night Noise Level Assessment Tool Flowcharts \(/resource/3823/day-night-noise-level-assessment-tool-flowcharts/\)](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)





**Drawing 10**  
 USFWS – National  
 Wetland Inventory Map

Not to Scale



**National Wetland Inventory Map**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

Floodplain Management (EO 11988) and  
Protection of Wetlands (EO 11990)  
Determination

**Estrella Landing Apartments Project**  
**EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination**  
***Affordable Housing Development Fund Program***

March 29, 2022

**Introduction & Overview**

The purpose of Executive Order (EO) 11988 Floodplain Management is “to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The purpose of EO 11990 Protection of Wetlands is “to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” This determination contains the analysis prescribed by 24 CFR Part 55.

This project involves U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program – Disaster Recovery (CDBG-DR) funding for construction of new multifamily, affordable housing consisting of three apartment buildings containing 84 units for low- and moderate-income families. The analysis that follows focuses on floodplain and wetland impacts, as there are direct wetland and floodplain impacts associated with this project. Based on the type of land use and facility and other case characteristics described herein, it is concluded that there is a reasonable basis to proceed with funding for this project/ activity within floodplain and wetland. The CDBG-DR funding is administered through the North Carolina Office of Recovery and Resiliency (NCORR) Affordable Housing Development Fund Program which is developing safer and more resilient communities while increasing the availability of affordable housing for low- and moderate-income families. Thus, alternatives preventing or impeding the development of safer and more resilient communities along with increasing affordable housing options are not considered reasonable alternatives.

**Description of Proposed Action & Land Use**

The proposed multifamily, affordable housing development is located on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina 28411. The main 5.12-acre parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is approximately 0.59-acre and identified as Parcel ID 314914.23.7837.000. The facilities will consist of three apartment buildings, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas, and landscaped areas.

The proposed buildings and improvements will be located wholly within Zone X, outside and above the Special Flood Hazard Area, except for utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet in Zone AE as shown on the attached site plans (**Appendix 1**). The proposed project is not located within a FEMA-designated regulatory floodway. Thus, flood insurance will not be required for the proposed project because all National Flood Insurance Program (NFIP) insurable structures will be located in Zone X. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the NFIP.

This proposed project will assist the City of Wilmington and New Hanover County to provide affordable housing for the local community. The City is seeking to address the shortage in affordable housing inventory exacerbated by the effects of Hurricane Florence. The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). These hurricanes damaged or destroyed hundreds of homes worsening the affordable housing shortage.

### **Applicable Regulatory Procedure Per EO 11988 and EO 11990**

The proposed action corresponds with a noncritical action not excluded under 24 CFR §55.12. Funding is permissible for the use in the floodplain and wetland if the proposed action is processed under §55.20 and the findings of the determination are affirmative to suggest that the project may proceed.

According to 24 CFR §55, the activity planned to construct a multifamily, affordable housing development occurs in a community, the City of Wilmington, that is in good standing in the regular program of the NFIP. The proposed action involves new construction in 100-year floodplain which is only a small portion of the proposed action's parcel. However, the improvements to be conducted in 100-year floodplain do not include insurable structures. Thus, the full eight-step floodplain determination process in §55.20 is required and the following analysis examines each step in a floodplain management determination process.

Based on data from the U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory Map and U.S. Army Corps of Engineers (USACE) (see **Appendix 1**), there will be new construction within freshwater forested/shrub wetland on the northern portion of the site. Thus, in accordance with the decision-making process set forth in 24 CFR Part 55, this analysis focuses on both floodplains and wetlands.

#### ***Step 1. Determine Whether the Proposed Action is Located in the 100-year Floodplain (500-year for Critical Actions) or results in New Construction in Wetlands.***

Based on the USFWS National Wetlands Inventory Map and USACE Jurisdictional Determination, the proposed action is located in a federally mapped freshwater forested/shrub wetland, as shown in **Appendix 1**. The proposed action is considered new construction in wetlands as the development will involve utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. The proposed action will require a Section 404 Permit and Nationwide Permit 29 under the Clean Water Act (see §55.20(a)(1) and §55.28(a)).

Per the FEMA FIRMette panel 3720314900K, effective on 08/28/2018, the proposed action parcel contains areas in Zone X and in Zone AE, as shown in **Appendix 1**. According to the FEMA Map Service Center, there are no Preliminary FIRMs available for the site. A small portion of the proposed action is located within the 100-year floodplain (Special Flood Hazard Area [SFHA] – Zone AE). No structures or improvements will be located within a FEMA-designated regulatory floodway. The buildings and most of the improvements are located in Zone X with only utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet taking place in Zone AE and SFHA. The rim elevation of the proposed sanitary sewer manhole to be located between the north end of Building 100 and the stormwater management pond will be elevated approximately 4' above grade/ground elevation. This should not have a negative impact on the floodplain, since it is one manhole that is 5-foot in diameter. After the sanitary sewer installation is complete, including the pipe and manhole installation, the area will be backfilled with native soils and regraded to closely match the existing grades and elevations. This should not increase flood levels during future storm events. The proposed action has been designed to have only minimal activities conducted within the SFHA. In accordance with 24 CFR §55, the proposed action occurs in a community that is in the regular program of the NFIP and the community is currently in good standing.

#### ***Step 2. Initiate Public Notice for Early Review of Proposal.***

Because the proposed project is located in floodplain and wetlands, NCORR published an early notice that allowed for public and agency input on the decision to provide funding for construction and development activities. The early public notice and 15-day comment period is complete. The USACE commented on

March 18, 2022 that the “subject project will require a permit from the USACE. It’s advisable for the developer to seek a pre application meeting from the Corps as impacts to wetlands within the 100 year floodplain are currently proposed.” The NC State Environmental Clearinghouse comments received on March 28, 2022 for the proposed action have been incorporated into the ERR.

The early notice and corresponding 15-day public comment period started on March 13, 2022 with the "Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland" being published in the Star-News newspaper, with the 15-day period expiring on March 28, 2022. The notice targeted local residents, including those in the floodplain. The notice was also posted at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews> and sent via Federal Express and email to the following federal and state agencies: HUD NC Field Office; Federal Emergency Management Agency (FEMA); U.S. Environmental Protection Agency (EPA); USFWS; USACE; NC State Environmental Clearinghouse; and NC Housing Finance Agency (NCHFA). The notice was also sent to the Catawba Indian Nation, New Hanover County and the City of Wilmington. (See **Appendix 2** and **3** for the early notice distributed to these agencies, newspaper publication and distribution list).

***Step 3. Identify and Evaluate Practicable Alternatives to Locating the Proposed Action in a 100-year Floodplain or Wetland.***

The North Carolina Affordable Housing Development Fund Program empowers the State’s most impacted communities with the technical expertise needed to develop thorough and implementable reconstruction plans to build physically, socially, and economically resilient and sustainable communities.

There are two alternatives for the current proposed action. The first alternative for the current proposed action is to find a different location for the proposed action within the local community. There were no suitable alternative sites identified for the proposed action due to the scoring system implemented by NCHFA to determine a qualified site location. The proposed action site is ideal for the development due to the close proximity and availability of existing utility services to the site. The proposed action will be a multifamily, affordable housing complex that will provide new, safe housing that is needed in the area for low- and middle-income households. The proposed action will assist the City of Wilmington and New Hanover County to provide affordable housing for the local community. The City rezoned the main parcel in part to allow for an increase in housing diversity and allow those residents to utilize existing goods and services within one mile of the site according to the Staff Summary Report. One of the goals of the New Hanover County Strategic Plan for 2018-2023 is to encourage the development of complete communities in the unincorporated county by increasing housing diversity and access to basic goods and services. This site was found to be a suitable site with minimal adverse environmental impacts for multifamily, affordable housing in an area that needs it.

The second alternative for the current proposed action is the “no action” alternative. With the No Action Alternative, affordable housing would not be provided for low- and middle-income families in the local community. The City would need to find other options to address the shortage in affordable housing inventory exacerbated by the effects of hurricanes that recently damaged and destroyed homes. Thus, the “no action” alternative is not feasible in relation to the desired objective of creating affordable housing options in the City.

The above identified alternatives will be re-evaluated in response to public comments received.

***Step 4. Identify & Evaluate Potential Direct & Indirect Impacts Associated with Occupancy or Modification of 100-year Floodplain and Potential Direct & Indirect Support of Floodplain and Wetland Development that Could Result from Proposed Action.***

The focus of floodplain evaluation should be on adverse impacts to lives and property, and on natural and beneficial floodplain values. Natural and beneficial values include consideration of potential for adverse

impacts on water resources such as natural moderation of floods, water quality maintenance, and groundwater recharge.

#### *Natural moderation of floods*

Only a small portion of the site is located in Zone AE. The buildings and most of the improvements will be constructed in Zone X and outside of SFHA. The following improvements will be conducted in Zone AE: sanitary sewer installation and stormwater management device installation, including the proposed wet pond and pipe outlet. Construction and development activities for the proposed action have been designed to minimize impacts to wetlands and 100-year floodplain. Mitigation measures for the proposed action includes green infrastructure such as native plant landscaping and bioswales which will slow down stormwater runoff. The proposed stormwater retention pond will alleviate some flooding by intercepting stormwater runoff. Thus, while the proposed actions would directly affect the floodplain, it is not anticipated to have an adverse effect on the floodplain for the surrounding communities.

#### *Living resources such as flora and fauna*

This proposed project will have No Effect on listed species because the consultant determined there are no listed species, designated critical habitats or suitable habitat in the proposed action area. The site is a vacant lot in an urban, developed area with Hawthorne at Smith Creek, a R-15 High Density apartment community to the North, single-family residential to the East, single-family residential and a gas station to the South, and an outdoor boat storage facility and Interstate 40 corridor to the West. The USFWS was contacted about the proposed action and stated that “the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at the site.” The letter goes on to state that the agency is concerned with potential impacts to aquatic species. The agency states that appropriate measures be taken in order to limit sedimentation and appropriate erosion control efforts be enacted. A stormwater control device will be installed at the site during grading activities. This device will be in place during site development and will assist with erosion control/sedimentation. An Erosion and Sedimentation Control Plan and applicable permits from the USACE, NC DEQ and local jurisdictions, including a New Hanover County Floodplain Development Permit, will be required for the proposed action.

A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for wetland impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323. In addition, a New Hanover County Erosion Control & Grading Permit, New Hanover County Stormwater Permit, and NC DEQ NPDES Construction Stormwater Permit (NCG010000) will be obtained. The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the environmental review record (ERR) when received from the permitting agencies. Thus, there will be minimal effect on living resources such as flora and fauna.

#### *Impacts to Property & Lives*

The proposed action’s construction and development activities are mostly located within Zone X with a small portion of the site in Zone AE. Thus, the buildings and most improvements will be located outside of SFHA. In Zone AE and SFHA, there will only be underground utility installation for sanitary sewer service to the subject development through an existing, recorded utility easement and stormwater management device installation, which includes the proposed wet pond and pipe outlet. The rim elevation of the proposed sanitary sewer manhole to be located between the north end of Building 100 and the stormwater management pond will be elevated approximately 4’ above grade/ground elevation. This should not have negative impact on the floodplain, since it is one manhole that is 5-foot in diameter. After the sanitary sewer installation is complete, including the pipe and manhole installation, the area will be backfilled with native

soils and regraded to closely match the existing grades and elevations. This should not increase flood levels during future storm events. The stormwater management device installation is for the proposed stormwater retention pond which should assist with reducing flooding on the site and in the immediate area. According to a University of Florida/IFAS article, “Stormwater ponds’ primary purpose is flood control, and they are designed to intercept stormwater runoff (precipitation that runs off our buildings, roads, parking lots, and sidewalks), but they also provide other services like a place for sediment to settle out of the water column, habitat for wildlife, recreational opportunities like birding, and pollutant removal. Overall, stormwater ponds help mitigate the impacts of urban stormwater runoff while protecting our natural waterways from nutrient loading, erosion, sedimentation, and algal blooms.” Further, construction and development activities for the proposed action have been designed to minimize impacts to wetlands and 100-year floodplain. Therefore, the proposed action should not increase impacts to property and lives.

#### *Cultural resources such as archaeological, historic & recreational aspects*

The proposed action site is currently vacant land with no structures present. As part of this review, the NC State Historic Preservation Office (SHPO) and Tribal Historic Preservation Offices (THPO) of all applicable Tribes, Nations, and Communities were consulted regarding any historic or tribal resources in the area that could be affected by the proposed actions. The NC SHPO responded that the project will have no effect on historic properties. On February 15, 2022, the Catawba Indian Nation’s THPO responded that the “Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and/ or human remains are located during the ground disturbance phase of this project.” The SHPO and THPO consultation documentation is included in the *Estrella Landing Apartments Project Environmental Assessment (EA)*.

#### *Agricultural, aquacultural, & forestry resources*

The proposed action site and immediate area are not used for agricultural, aquacultural or forestry resources. The surrounding properties contain residential and commercial development. The proposed multifamily, affordable housing development will fit within the surrounding area. The site will be an appropriate transition between Hawthorne at Smith Creek, a R-15 High Density apartment community, and the Buy Quick Convenience Store, a B-1 intense commercial use according to the Community Information Meeting Notice dated February 8, 2021 included in the *Estrella Landing Apartments Project EA*. Thus, the proposed action will not have an effect on agricultural, aquacultural or forestry resources.

#### **Wetland Evaluation**

The purpose of wetland evaluation is to consider factors relevant to a proposal’s effect on the survival and quality of any wetlands to be disturbed. These factors should include public health (including water supply and water quality), maintenance of natural systems, cost increases attributed to construction in wetland, and other uses of wetland in the public interest. The USACE Jurisdictional Determination and wetland delineation map indicate that jurisdictional non-streams and wetland areas are located on the site. The proposed action will result in temporary impacts to approximately 0.057 acres and permanent impacts to approximately 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. The proposed action has been designed to have minimal construction and development activities in the wetland. Further, mitigation measures are incorporated into the design plans and permit requirements and conditions will be complied with during construction.

*Public health, safety, and welfare, including water supply, quality, recharge, and discharge; pollution; flood and storm hazards and hazard protection; and sediment and erosion.*

Water supply wells were not identified at the site. The site will be provided with municipal water from the CFPWA. The proposed action should not negatively affect the municipal water supply of the region. Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the NC Division of Water Resources (DWR)/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. All public water supply systems must comply with state and federal drinking water monitoring requirements. If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/ Public Water Supply Section. According to the NC DWR Water Quality Regional Operations Section (WQROS), a complete search for DWR records should be completed (see *Estrella Landing Apartments Project EA - SCH Comments*). The proposed project will not include the discharge of sewer to surfaces of the site or surrounding properties. The site will be provided with municipal wastewater access.

Best management practices (BMPs) will be implemented during construction activities. Additionally, a surface water control feature will be installed at the site during the initial phase of construction in order minimize sediment loss. According to NC DEQ, the Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An Erosion and Sedimentation Control Plan and applicable permits from the USACE, NC DEQ and local jurisdictions, including a New Hanover County Floodplain Development Permit, will be required for the proposed action. The Plan must be filed with and approved by applicable NC DEQ Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater Permit (NCG010000) is also usually issued should design features meet minimum requirements. Further, the proposed action will comply with 15A NCAC 2H 1000 - State Stormwater Permitting Programs that regulate site development and postconstruction stormwater runoff control. According to NC DEQ, areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state. The proposed action will conform to construction requirements of the State of North Carolina and New Hanover County.

A Section 404 Permit and Nationwide Permit 29 will be acquired and complied with for wetland impact to an area of less than 0.5 acres. According to NC DEQ, compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323. The proposed project activities will be completed in accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Permits required for this proposed project shall be obtained before commencing work and appended to the ERR when received from the permitting agencies.

*Maintenance of natural systems, including conservation and long-term productivity of existing flora and fauna; species and habitat diversity and stability; natural hydrologic function; wetland type; fish; wildlife; timber; and food and fiber resources.*

The proposed action is located adjacent to an existing, commercial development which allows direct access to a major arterial roadway and creates an orderly transition by placing higher density multifamily between the high-intensity Interstate corridor according to the Staff Summary Report included in the *Estrella Landing Apartments EA*. Green infrastructure mitigation measures will be incorporated into the design plans. Natural landscape enhancements will be installed that maintain or restore natural hydrology through infiltration along with bioswales and native plants used in landscaping. According to the EPA, “[g]reen infrastructure can be used to address stormwater runoff and sewer overflow problems. Green infrastructure works by slowing down the runoff, spreading it out over the land, and slowly soaking it into the ground, or in some cases reusing the water onsite. Green infrastructure is also sometimes referred to as low impact development. These techniques also help to remove pollutants from runoff, by allowing plants to filter out pollutants as the water slowly infiltrates into the ground.” See

<https://www.epa.gov/nutrientpollution/sources-and-solutions-stormwater>. Thus, the proposed action has been designed and mitigation measures incorporated to have the minimal impacts on these features.

*Cost increases attributed to wetland-required new construction and mitigation measures to minimize harm to wetlands that may result from such use.*

The proposed scope of work involves mitigation measures such as bioswales and native plants used in landscaping. A stormwater retention pond will be built with a small portion located in Zone AE and near the wetland. A stormwater control device will be installed at the site during grading activities. This device will be in place during site development and will assist with erosion control/sedimentation. The stormwater retention pond will also require regular maintenance, as needed. These additional costs are minimal along with permits required to be obtained. There are no anticipated cost increases attributed to additional mitigation measures to minimize harm to wetlands as these measures are built into existing plans.

*Other uses of wetland in the public interest, including recreational, scientific, and cultural uses.*

The wetland located on the northern portion of the proposed action site is surrounded by development and near the Interstate 40 corridor. The wetland will not be completely filled and a portion will remain after construction. There are no identified recreational, scientific or cultural uses of the wetland that will be impacted by the proposed action.

**Step 5. Where Practicable, Design or Modify the Proposed Action to Minimize the Potential Adverse Impacts To and From the 100-Year Floodplain and to Restore and Preserve its Natural and Beneficial Functions and Values.**

The buildings and most of the improvements will be constructed in Zone X and outside of SFHA. Only a small portion of the site is located in Zone AE, and only sanitary sewer installation and stormwater management device installation will occur in Zone AE. Construction and development activities for the proposed action have been designed to minimize impacts to wetlands and 100-year floodplain.

The short-term impacts will be mitigated by BMPs for debris, dust, and erosion control during construction activities. Mitigation measures will be incorporated to minimize potential adverse impacts to wetlands and 100-year floodplain. Natural landscape enhancements will be installed that maintain or restore natural hydrology through infiltration along with bioswales and native plants used in landscaping. A stormwater control device will be installed at the site during grading activities. This device will be in place during site development and will assist with erosion control and sedimentation. A stormwater retention pond will be constructed on the site with a small portion in Zone AE and near the wetland. An Erosion and Sedimentation Control Plan and applicable permits from the USACE, NC DEQ and local jurisdictions, including a New Hanover County Floodplain Development Permit, will be required for the proposed action. Further, the proposed action will comply with all federal, state and local permit conditions and requirements.

It is a direct policy requirement to specify standards that mitigate future flood risk. These mitigation measures will help minimize flood water level for the area, green infrastructure features will help slow down water runoff and filter out pollutants and the stormwater pond will intercept runoff. However, it is still reasonable to promote awareness of future risks of natural hazards, including altered flooding patterns, plus the physical, social and economic impacts that potential flood events could convey.

**Step 6. Reevaluate the Alternatives and Proposed Action.**

The alternative to find a different location for the proposed action within the local community was not viable. This site was determined to be a suitable site using the NCHFA scoring system and the close proximity and availability of existing utility services and surrounding existing development. No other suitable alternative sites were identified and reviewed. As such, this option was deemed not feasible.

The “no action” alternative would not address the purpose and need of the proposed action. The City would need to find other options to address the shortage in affordable housing inventory exacerbated by the effects of hurricanes that recently damaged and destroyed homes. Therefore, the “no action” alternative examined is not considered desirable and the proposed action is still practicable in light of potential adverse and beneficial impacts on the floodplain, the extent to which it may aggravate current hazards to other floodplains, and the potential to disrupt the natural and beneficial functions and values of floodplains and wetlands.

Implementation of the proposed action will abide by all applicable federal, state and local codes for construction within floodplain and wetlands. The impacts of these alternatives will be re-evaluated in response to any public comments received.

***Step 7. Issue Findings and Public Explanation.***

It is the finding of this report that there is no better alternative than to provide funding for the Estrella Landing Apartments Project. The City would need to find other suitable options to address the immense shortage in affordable housing inventory exacerbated by the effects of hurricanes.

A final notice, formally known as “Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetland” was published in accordance with 24 CFR 55. However, this notice was combined with the Notice of Finding of No Significant Impact (FONSI) and Notice of Intent to Request Release of Funds (NOI-RROF) for a 15-day comment period. The 15-day comment period started with the combined notice publishing in the Star-News newspaper on March 31, 2022 and expires at 5 PM on April 15, 2022. The notice was also posted at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews> and sent via Federal Express and email to the following state and federal agencies: HUD NC Field Office; FEMA; EPA; USFWS; USACE; NC State Environmental Clearinghouse; and NCHFA. The notice was also sent to New Hanover County and the City of Wilmington. (See **Appendix 4** for the final notice distributed to these agencies, proof pre-publication, and distribution list). Any comments received will be addressed, if significant, and added to the EA.

***Step 8. Continuing Responsibility of Responsible Entity & Recipient.***

NCORR is the responsible entity and will provide educational materials, when available. It is acknowledged there is a continuing responsibility by the responsible entity to ensure, to the extent feasible and necessary, compliance with the Steps herein.

## **APPENDIX 1**

- **FEMA FIRMette**
- **NWI Map**
- **USACE Jurisdictional Determination**
- **Site Plans showing impacts**



# National Flood Hazard Layer FIRMette



77°52'14"W 34°16'48"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 77°51'36"W 34°16'18"N  
 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/19/2021 at 9:59 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**Estrella Landing**



**Drawing 10**  
 USFWS – National  
 Wetland Inventory Map

Not to Scale



**National Wetland Inventory Map**  
 Estrella Landing  
 Approximate 5.71-Acre Tract  
 Wilmington, New Hanover County, NC  
 Pilot Project 7249

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

Action Id. SAW-2021-01553 County: New Hanover U.S.G.S. Quad: NC-Scotts Hill

**NOTIFICATION OF JURISDICTIONAL DETERMINATION**

Requestor: Charles & Essie Clay Revocable Living Trust

Essie Clay, Trustee

Address: 4618 Gordon Road  
Wilmington, NC 28411

E-mail: kbeatty09@att.net

Size (acres) 5.7

Nearest Waterway Smith Creek

USGS HUC 03030007

Nearest Town Wilmington

River Basin Cape Fear

Coordinates Latitude: 34.278377

Longitude: -77.864734

Location description: The project area is located at 4615 Gordon Road in Wilmington.

**Indicate Which of the Following Apply:**

**A. Preliminary Determination**

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

**B. Approved Determination**

- There are Navigable Waters of the United States within the above described project area/property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are **waters, including wetlands** on the above described project area/property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- We recommend you have the **waters, including wetlands** on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.
- The **waters, including wetlands** on your project area/property have been delineated and the delineation has been verified by the Corps. The approximate boundaries of these waters are shown on the enclosed delineation map dated **2/1/2021**. We strongly

**SAW-2021-01553**

suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

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

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **Brad Shaver at 910-251-4611 or brad.e.shaver@usace.army.mil.**

**C. Basis For Determination: Basis For Determination: See the approved jurisdictional determination form dated 07/29/2021.**

**D. Remarks:** *This determination was made via desktop.*

**E. Attention USDA Program Participants**

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

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

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

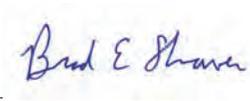
US Army Corps of Engineers  
South Atlantic Division  
Attn: Mr. Philip A. Shannin  
Administrative Appeal Review Officer  
60 Forsyth Street SW, Floor M9  
Atlanta, Georgia 30303-8803  
**AND**  
**PHILIP.A.SHANNIN@USACE.ARMY.MIL**

**SAW-2021-01553**

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **09/27/2021**.

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

Corps Regulatory Official: \_\_\_\_\_



Digitally signed by Brad Shaver  
Date: 2021.07.29 11:06:55  
-04'00'

Date of JD: **07/29/2021**    Expiration Date of JD: **07/28/2026**

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

Copy Furnished(electronic):

**LMG Inc. attn: Lauren Orzechowski**

**LMG Inc. attn: Kim Williams**

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

Applicant: **Charles & Essie Clay Revocable Living Trust, Essie Clay, Trustee**

File Number: **SAW-2021-01553**

Date: **07/29/2021**

Attached is:

See Section below

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

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

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

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

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

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

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

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

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

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

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

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

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

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

If you have questions regarding this decision and/or the appeal process you may contact:  
**District Engineer, Wilmington Regulatory Division**  
**Attn: Brad Shaver**  
**Wilmington Regulatory Office**  
**U.S Army Corps of Engineers**  
**69 Darlington Avenue**  
**Wilmington, North Carolina 28403**

If you only have questions regarding the appeal process you may also contact:  
MR. PHILIP A. SHANNIN  
ADMINISTRATIVE APPEAL REVIEW OFFICER  
CESAD-PDS-O  
60 FORSYTH STREET SOUTHWEST, FLOOR M9  
ATLANTA, GEORGIA 30303-8803  
  
PHONE: (404) 562-5136; FAX (404) 562-5138  
EMAIL: [PHILIP.A.SHANNIN@USACE.ARMY.MIL](mailto:PHILIP.A.SHANNIN@USACE.ARMY.MIL)

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

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

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

**District Engineer, Wilmington Regulatory Division, Attn: Brad Shaver, 69 Darlington Avenue, Wilmington, North Carolina 28403**

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

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

NOTE: This is not a survey. All boundaries and distances are considered approximate. This represents a preliminary sketch prepared from field notes. A survey of delineated areas and review and approval by the U.S. Army Corps of Engineers is recommended prior to specific site planning.



L:\WETLANDS\2021 WETLANDS FILES\LMG21.054 ---  
4615 Gordon Road, Stephanie Norris\Maps  
Boundaries are approximate and not meant to be absolute.  
Map Source: 2020 NC OneMap



4615 Gordon Road  
New Hanover County, NC

Map Date: February 2021  
LMG21.054



**Section 404/401 Delineation  
Preliminary Sketch**



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

**I. ADMINISTRATIVE INFORMATION**

Completion Date of Approved Jurisdictional Determination (AJD): 7/29/2021

ORM Number: SAW-2021-01553

Associated JDs: N/A

Review Area Location<sup>1</sup>: State/Territory: NC City: Wilmington County/Parish/Borough: New Hanover

Center Coordinates of Review Area: Latitude 34.278377 Longitude -77.864734

**II. FINDINGS**

**A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

**B. Rivers and Harbors Act of 1899 Section 10 (§ 10)<sup>2</sup>**

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A	N/A.	N/A	N/A.	N/A

**C. Clean Water Act Section 404**

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): <sup>3</sup>				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
T1-T3	~549	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Jurisdictional non-streams T1-T3 flow north toward wetland W1

<sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.

<sup>2</sup> If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

<sup>3</sup> A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination	
W1	~0.7	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Wetland W1 abuts Jurisdictional Non-Streams T1-T3. W1 flows northwest to Smith Creek (offsite).
N/A.	N/A.	N/A.	N/A.	N/A.

**D. Excluded Waters or Features**

Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>				
Exclusion Name	Exclusion Size	Exclusion <sup>5</sup>	Rationale for Exclusion Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

**III. SUPPORTING INFORMATION**

**A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: [USACE Data Package Submitted 7/19/21](#)

This information is sufficient for purposes of this AJD.

Rationale: [N/A or describe rationale for insufficiency \(including partial insufficiency\).](#)

- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)
- Photographs: [Select. Title\(s\) and/or date\(s\).](#)
- Corps site visit(s) conducted on: [Date\(s\).](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [ORM Number\(s\) and date\(s\).](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: [NRCS New Hanover County WebSoil GIS Data](#)
- USFWS NWI maps: [Title\(s\) and/or date\(s\).](#)
- USGS topographic maps: [New Hanover County Mosaic](#)

**Other data sources used to aid in this determination:**

Data Source (select)	Name and/or date and other relevant information
<a href="#">USGS Sources</a>	<a href="#">New Hanover County Topographic Map</a>
<a href="#">USDA Sources</a>	<a href="#">NRCS New Hanover County WebSoil GIS Data</a>
<a href="#">NOAA Sources</a>	N/A.
<a href="#">USACE Sources</a>	<a href="#">QL2 Lidar utilized for comparison purposes, DESKTOP</a>
<a href="#">State/Local/Tribal Sources</a>	N/A.
<a href="#">Other Sources</a>	<a href="#">NC Emergency Management 2014 QL2 LiDAR</a>
<a href="#">Other Sources</a>	<a href="#">2020 NC OneMap Aerial Photography</a>

<sup>4</sup> Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

<sup>5</sup> Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

- B. Typical year assessment(s):** According to Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network, the project area was wetter than normal at the time of the field work.
- C. Additional comments to support AJD:** N/A

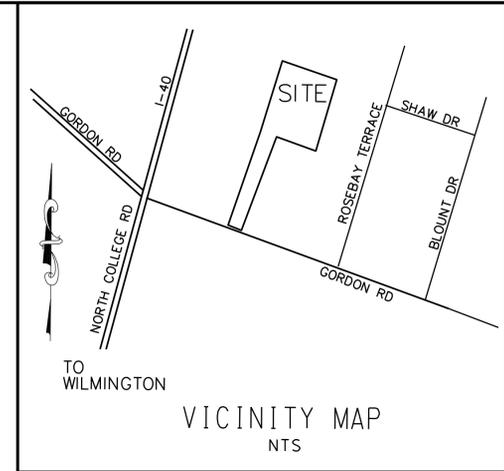
- NCHFA REQUIRED AMENITIES:**
- PLAYGROUND WITH BENCH SEAT
  - COVERED PICNIC AREA WITH 2 TABLES AND 2 GRILLS
  - BENCH SEATING IN 4 LOCATIONS
  - CLUBHOUSE WITH MULTIPURPOSE ROOM, COVERED PORCH WITH SEATING, AND RESIDENT COMPUTER CENTER

**BUFFER NOTES:**

REQUIRED TRANSITIONAL BUFFER .....TYPE A OPAQUE BUFFER  
ADJACENT TO R-15 SINGLE FAMILY USE

BUFFER WIDTH REQUIRED .....20'

PLANT MATERIALS REQUIRED .....MINIMUM 3 ROWS OF PLANTING WHICH SHALL BE 6' HIGH AND PROVIDE 100% OPACITY WITHIN ONE YEAR.



**PROJECT DATA**

PARCEL ID	R04300-001-007-000
DEED BOOK/PAGE	4797/397
ZONING	CZD RMF-M
CAMA LUC	URBAN MIXED USE
PROPERTY AREA	5.11 AC
TOTAL BUA	222,635 SF
	2.45 AC
	115,901 SF
% OF PROPERTY	52.1 %
BUILDING	37,557 SF
WALKWAYS	10,999 SF
PARKING/DRIVE AISLES	58,345 SF
RESERVE	9,000 SF
DISTURBANCE LIMITS	4.5 AC
RECEIVING STREAM	SMITH CREEK
CLASSIFICATION	C:Sw
STREAM INDEX	18-74-63
PROPOSED USE	APARTMENTS
TOTAL NUMBER OF UNITS	84
1 BEDROOM	13
2 BEDROOM	35
3 BEDROOM	36

**DIMENSIONAL REQUIREMENTS PER CASE # Z21-03**

MAXIMUM BLDG HEIGHT	45 FT
MINIMUM FRONT YARD	35 FT
MINIMUM REAR YARD	25 FT
MINIMUM SIDE YARD	20 FT

**LEGEND**

PROJECT BOUNDARY	---
EX WATER MAIN	---
PROP WATER MAIN	---
STORMDRAIN	---
WETLAND LINE	---
EX CONTOURS	---
SWALE	---
SILT FENCE	---
DISTURBED AREA	---

**SHEET INDEX**

COVER	1
LANDSCAPING	2
GRADING	3
EROSION CONTROL	4
UTILITY COVER	5
UTILITY PROFILE	6
DETAILS	7---

GORDON ROAD SR 2048 (PUBLIC R/W WIDTH VARIES)

GORDON 4601, LLC  
D.B. 6392 PG. 619  
PID: R04300-001-008-000  
ZONE: B-1  
USE: 58-GAS STATION

PROVIDE DOUBLE YELLOW CENTERLINE MARKINGS IN SHARED AISLE

60' ACCESS EASEMENT PER DEED BOOK 2643 PAGE 284 AND DEED BOOK 1215 PAGE 217

PROVIDE YELLOW PAINTED MEDIAN TO DELINEATE DRIVE AISLE FROM VEHICLE BACKING AREA

APRIL MORTEN HEIRS  
D.B. 1215 PG. 217  
PID: R04300-001-008-000  
ZONE: R-15  
USE: 958-UNUSED

PROVIDE "NO PARKING" SIGNAGE ALONG DRIVE AISLE

ROBERT EVANS JR  
D.B. 5958 PG. 1628  
PID: R04300-008-017-001  
ZONE: R-15  
USE: 11-MULTIPLE HOMES

GORDON ROAD INVESTMENTS LLC  
D.B. 5565 PG. 2451  
PID: R04300-001-010-000  
ZONE: R-15  
USE: 958-UNUSED

ANN S DOWNING  
D.B. 6410 PG. 1659  
M.B. 49 PG. 214  
PID: R04300-001-009-000  
ZONE: B-1  
USE: 958-UNUSED

HAWTHORNE AT SMITH CREEK APARTMENTS, LLC  
D.B. 6167 PG. 124  
PID: R04300-001-004-000  
ZONE: R-15  
USE: 12-APARTMENT

- NOTES:**
- BOUNDARY BY OTHERS.
  - A PORTION OF THE SUBJECT PROPERTY IS LOCATED IN THE 100 YEAR FLOOD ZONE PER FEMA FLOOD ZONE PANEL 3720314900K.
  - 404 WETLANDS ARE FOUND ON THE SUBJECT PROPERTY, AS DELINEATED BY OTHERS.
  - WATER AND SEWER SERVICE PROVIDED BY CFPWA.
  - SOLID WASTE REMOVAL BY PRIVATE CONTRACTOR.
  - ALL RUNOFF FROM IMPERVIOUS SURFACES SHALL BE DIRECTED TO THE COLLECTION/TREATMENT SYSTEM.

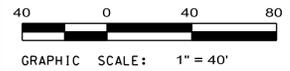
**PARKING CALCULATIONS PER SECTION 81-1 FOR APARTMENTS:**

1.5 SPACES PER 1 BEDROOM UNIT X 13 UNITS	= 20 SPACES
2.0 SPACES PER 2 BEDROOM UNIT X 35 UNITS	= 70 SPACES
2.0 SPACES PER 3 BEDROOM UNIT X 36 UNITS	= 72 SPACES

162 SPACES REQUIRED  
(162 PROVIDED, INCLUDING 21 VAN ACCESSIBLE SPACES)

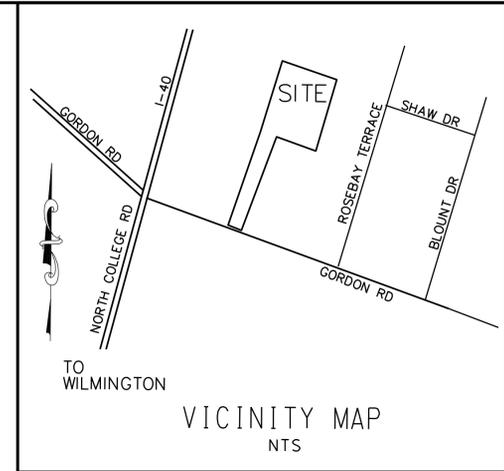
**OPEN SPACE NOTES**

OPEN SPACE REQUIRED: 1.02 ACRES (20%)  
OPEN SPACE PROVIDED: 1.73 ACRES (34%)



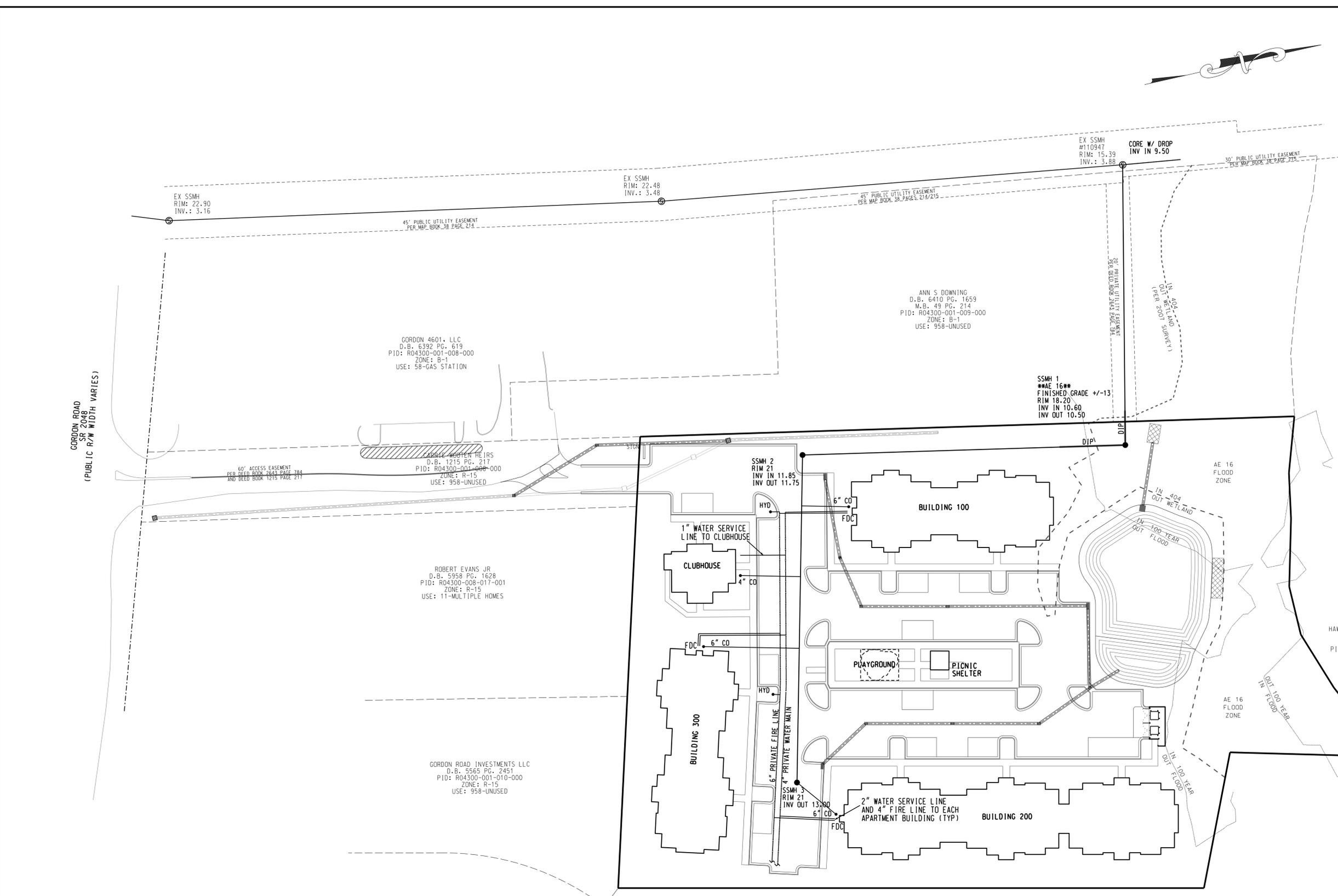
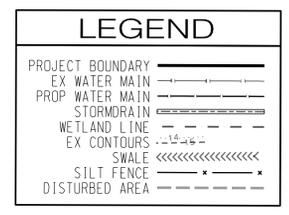
<b>PRELIMINARY</b>	COVER	<b>ESTRELLA LANDING APARTMENTS</b>	DEVELOPER: ESTRELLA LANDING APARTMENTS, LLC		<b>STRoud ENGINEERING, P.A.</b>	DRAWN: DLW		
	ADDRESS: PO BOX 15025 WILMINGTON, NC 28408		102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403 (910) 815-0775 (910) 815-0593 FAX	C-0647			SCALE: 1" = 40'	
	PHONE: 910-791-3354							102-D CINEMA DRIVE WILMINGTON, NC 28403 (910) 815-0775 (910) 815-0593 FAX
4615 GORDON ROAD WILMINGTON, NC 28405								



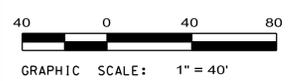


**PROJECT DATA**

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PER CASE # Z21-03	
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  - 404 WETLANDS ARE FOUND ON THE SUBJECT PROPERTY, AS DELINEATED BY OTHERS.
  - WATER AND SEWER SERVICE PROVIDED BY CFPWA.
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<b>PRELIMINARY</b>	UTILITY COVER	<b>ESTRELLA LANDING APARTMENTS</b>	DEVELOPER: ESTRELLA LANDING APARTMENTS, LLC		DRAWN: DLM
			ADDRESS: PO BOX 15025 WILMINGTON, NC 28408		SCALE: 1" = 40'
			PHONE: 910-791-3354		SHEET: 5 OF ..
		4615 GORDON ROAD WILMINGTON, NC 28403	102-D CINEMA DRIVE WILMINGTON, NORTH CAROLINA 28403 (910) 815-0775 (910) 815-0593 FAX		

## **APPENDIX 2**

### **Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland**



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

### **EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA  
March 13, 2022**

To: All Interested Agencies, Groups and Individuals

This is to give notice that the N.C. Office of Recovery and Resiliency (NCORR) has received an application from Estrella Landing Apartments, LLC to use Community Development Block Grant – Disaster Recovery (CDBG-DR) funding from the Affordable Housing Development Fund Program to construct the Estrella Landing Apartments (hereinafter, the “Proposed Activity”) and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990 in accordance with U.S. Department of Housing and Urban Development (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express concerns and share information about the Proposed Activity, including alternative locations outside of the floodplain and wetland. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands supports government efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains and wetlands, it must inform people who may be put at greater or continued risk by the Proposed Activity. Funding for the Proposed Activity will be provided, in part, by the HUD CDBG-DR program for Hurricane Florence storm recovery activities in North Carolina.

The Proposed Activity is needed to address an affordable housing inventory shortage, which was exacerbated by the impacts of Hurricanes Matthew (Oct. 8, 2016) and Florence (Sept. 14, 2018), when hundreds of homes were damaged or destroyed. Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households. The Proposed Activity will assist the City of Wilmington and New Hanover County to provide affordable housing options for the local community.

The Proposed Activity entails construction of a new multifamily, affordable housing project consisting of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. The proposed development

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

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will occur on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina.

The Proposed Activity will result in temporary impacts to 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Activity will result in permanent impacts to 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site.

Floodplain maps based on the FEMA Flood Insurance Rate Map (FIRM) and wetland maps based on the NWI data are available for review at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. A full description of the Proposed Activity and FIRM may also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984) 833-5350 to make an appointment.

Written comments must be received by NCORR at the following address on or before March 28, 2022: Matt Arlyn, Policy and Planning Director, NCORR, ATTN: Estrella Landing Apartments, P.O. Box 110465, Durham, NC 27709. Comments may also be submitted by email to [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with “ATTN: Estrella Landing Apartments Comments” in the subject line.

## **APPENDIX 3**

- **Affidavit, Proof, and Tear Sheet of Early Notice**
- **Distribution List to Interested Agencies, Groups and Individuals**

# LOCALiQ

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## **PROOF OF PUBLICATION**

Sarah Crump  
Ncorr  
PO BOX 110465  
DURHAM NC 27709

STATE OF NORTH CAROLINA, COUNTY OF NEW HANOVER

The Wilmington Star-News, a newspaper printed and published in the city of Wilmington, and of general circulation in the County of New Hanover, State of North Carolina, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue dated:

03/13/2022, 03/14/2022, 03/15/2022, 03/16/2022, 03/17/2022,  
03/18/2022, 03/20/2022, 03/21/2022, 03/22/2022, 03/23/2022,  
03/24/2022, 03/25/2022, 03/27/2022, 03/28/2022

and that the fees charged are legal.  
Sworn to and subscribed before on 03/28/2022

\_\_\_\_\_  
Legal Clerk

\_\_\_\_\_  
Notary, State of WI, County of Brown

\_\_\_\_\_  
My commision expires

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*Please do not use this form for payment remittance.*

SARAH BERTELSEN  
Notary Public  
State of Wisconsin

EARLY NOTICE AND PUBLIC  
REVIEW OF A PROPOSED  
ACTIVITY IN A 100-YEAR  
FLOODPLAIN AND WETLAND

ESTRELLA LANDING  
APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH  
CAROLINA 28411  
NEW HANOVER COUNTY,  
NORTH CAROLINA

March 13, 2022

To: All Interested Agencies,  
Groups and Individuals  
This is to give notice that the  
N.C. Office of Recovery and  
Resiliency (NCORR) has  
received an application from  
Estrella Landings Apartments,  
LLC to use Community Develop-  
ment Block Grant - Disaster  
Recovery (CDBG-DR) funding  
from the Affordable Housing  
Development Fund Program to  
construct the Estrella Landing  
Apartments (hereinafter, the  
"Proposed Activity") and is  
conducting an evaluation as  
required by Executive Order  
11988 and Executive Order 11990,  
in accordance with U.S. Depart-  
ment of Housing and Urban  
Development (HUD) regulations  
(24 CFR Part 55). There are  
three primary purposes for this  
notice. First, to provide the  
public an opportunity to express  
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about the Proposed Activity,  
including alternative locations  
outside of the floodplain and  
wetland. Second, adequate public  
notice is an important public  
education tool. The dissemination  
of information about floodplains  
and wetlands supports govern-  
ment efforts to reduce the risks  
associated with the occupancy  
and modification of these special  
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plains and wetlands, it must  
inform people who may be put at  
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provided, in part, by the HUD  
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cane Florence storm recovery  
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The Proposed Activity is needed  
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The Proposed Activity entails  
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play area, picnic pavilion, paved  
parking areas and landscaped  
areas. The proposed development  
will occur on an approximate  
5.71-acre tract located at 4615  
Gordon Road in Wilmington, New  
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acres of a 100-year floodplain and  
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Inventory-mapped wetlands. The  
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consist of: utility installation to  
provide gravity, sanitary sewer  
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installation, which includes the  
proposed wet pond and pipe  
outlet; and fill and grading for  
the proposed buildings and park-  
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accessibility throughout the site.  
Floodplain maps based on the  
FEMA Flood Insurance Rate  
Map (FIRM) and wetlands maps  
based on the NWI data are avail-  
able for review at:  
[https://www.rebuild.nc.gov/about/  
plans-policies-reports/enviro-  
nmental-reviews](https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews). A full description  
of the Proposed Activity and  
FIRM may also be viewed in  
person by appointment only at:  
NCORR, 200 Park Offices Drive,  
Durham, NC 27713. Call (919)833-  
5350 to make an appointment.  
Written comments must be  
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ing address on or before March  
28, 2022: Matt Arlyn, Policy and  
Planning Director, NCORR,  
ATTN: Estrella Landing Apart-  
ments, P.O. Box 110465, Durham,  
NC 27709. Comments may also be  
submitted by email to [publiccom-  
ments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with  
"ATTN: Estrella Landing Apart-  
ments Comments" in the subject  
line.  
March 13, 14, 15, 16, 17, 18, 20, 21,  
22, 23, 24, 25, 27, 28, 2022  
7040283

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- business & services email: [StarNewsBusSer@gannett.com](mailto:StarNewsBusSer@gannett.com)
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all kinds of things...

**Cemetery Lots**

Two cemetery lots, Green Lawn in Wilmington, \$10,000 total for 2 plots, inclusive Granite marker with companion bronze, interment, Flag garden area, not included vault or \$250 transfer fee due at sale, 704-842-6998

Green Lawn Cemetery  
9A Lot 50 Space1, Corner Placement - \$3,500  
☎910-232-3202

**Cheap Stuff**

Concrete Table & Benches with Umbrella Placement-\$150  
1 Ladder an Extension\$65 - Queen size bed with frame\$100  
☎910-623-1258

**Furniture Household**

**POOL TABLE**  
Antique, regulation size. \$6,000. 1883 Brunswick Blake Collender Company Regulation size pool table. New Bumpers, Rosewood rails, 3 Piece Slate. Call 425-457-9443



**Careers Jobs**  
new beginnings...

**General**

**Southeastern Community College** is seeking to hire the following positions.

- Campus Police Officer
- Career Advisor
- Adult/Dislocated Worker
- Career Advisor Youth
- Distance Education Administrator
- Financial Aid Specialist CE/CU
- Child Development Center Teacher
- English Instructor
- Math Instructor
- Student Advisor

**Adjunct Faculty/Temporary.**  
•Substitute Positions PT  
•AmeriCorps/RSVP Volunteer Recruiter PT  
•Campus Police Officer PT

Position details and application process can be found on the SCC website at [www.sccnc.edu](http://www.sccnc.edu) or call 910-788-6206. EOE

**Professional Service**  
all your needs...

**Cleaning - Maid Service**

Care Service, cooking, cleaning thoroughly, laundry, errands & more. 24/7. Insured. 337-661-9558.

CUSTOM Cleaning By Elaine Weekly/monthly rates Construction & Beach Home cleaning 910-231-5255

**Clean Up and Removal**

C\* SPRAY Power washing & gutter cleaning. Patios, driveways, houses. Services as low as \$90. 910-262-1133

**BE BOLD!**  
Make your ad stand out!

**Home Maintenance**

**HANDY HILTON-** Carpentry, repairs plumbing, electrical & painting. Small or lrg jobs. Lyle 231-5032.

**Landscaping**

**NEAL'S IRRIGATION** Repair & Installation of new & old systems. Call 910-264-6918

**Painting**

**CHARLIE'S PAINTING** Int/Ext & Sheet Rock Repair. Quality work & great rates! 910-231-4583

**Roofing - Siding**

**CES CONSTRUCTION** Roofing, storm repair. No job too small. Will beat any competitor's price 910-262-1133

**REPAIR SPECIALIST** "WE'LL FIX YOUR DRIP IN JUST ONE TRIP!" Bob Milligan 620-0800, MCV/Visa

**PHOTOS are worth a thousand words included in your ad.**

**PHOTOS are worth a thousand words included in your ad.**

**Real Estate Rentals**

**PUBLISHER'S NOTICE**  
All real estate advertised herein is subject to the Federal Fair Housing Act, which makes it illegal to advertise any preference, limitation, or discrimination because of race, color, religion, sex, handicap, familial status, or national origin, or intention to make any such preference, limitation, or discrimination. "We will not knowingly accept any advertising for real estate which is in violation of the law. All persons are hereby informed that all dwellings advertised are available on an equal opportunity basis."

**Single Family Rentals**

**AAA PARKS** Wilmington & Leland, 2-3BR all electric \$640.No Pet 910-799-9870

**Your Source Public Notices**  
for the latest...

**Bids & Proposals**

**ADVERTISEMENT FOR BIDS**

Sealed proposals will be received until 2:00 pm March 31st, 2022 at the National Guard Wilmington (New Hanover) Readiness Center, 2412 Infantry Road, Wilmington, NC 28405

for the construction of:  
North Carolina National Guard Wilmington New Hanover - POV Expansion (SCO ID# 20-22770-01A)

at which time and place bids will be publicly opened and read.

Complete plans and specifications for this project can be examined at the following location during normal office hours after **March 10th, 2022**:

Timmons Group, Inc  
5410 Trinity Road, Suite 102  
Raleigh, NC 27607  
Attn: Frank Slinksky, PE  
Email: frank.slinksky@timmons.com  
Phone: 919-866-4505  
Hours: Mon-Fri 8am - 5pm

Hard or Digital Copies of the Contract Documents may be obtained, after **March 10th, 2022**, from:

Accent Imaging, 8121 Brownleigh Dr, Raleigh, NC 27617 Phone: 919-782-3332

Website: [AccentImaging.com](http://AccentImaging.com)  
Hard Copies and Digital Soft Copies: Refundable Plan Deposit \$150.00

Digital Copies only: Non-Refundable Purchase Price \$75.00  
Online View: Free

The state reserves the unqualified right to reject any and all proposals.

Signed: Spencer Colburn  
Project Manager  
North Carolina National Guard

**Govt Public Notices**

**NOTICE OF PUBLIC HEARING**  
NEW HANOVER COUNTY BOARD OF COMMISSIONERS  
March 21, 2022

The New Hanover County Board of Commissioners will hold public hearings on Monday, March 21, 2022 beginning at 4:00 p.m. or thereafter at the New Hanover County Historic Courthouse, 24 North Third Street (corner of Third and Princess Street, Room 301, in Wilmington, NC to consider the following:

**PUBLIC COMMENT:**  
For the upcoming Board of Commissioners meeting, individuals can submit public comments in advance to <https://planning.nhcgov.com/public-comment-form/> (noting the board name in the subject line) by Sunday, March 20, 2022 at noon. Written comments will be provided to the board and the board chair will acknowledge receipt during the public hearing or submit comments into the record during the public hearing and/or public comment period.

**PUBLIC HEARING:**  
Text Amendment Request (TA22-01) - Request by New Hanover County to modify Articles 2, 3, 4, and 5 of the Unified Development Ordinance to update permissions and standards for wireless telecommunications facilities and to perform technical fixes to various ordinance provisions.

The Board of Commissioners may consider substantial changes to petitions as a result of objections, debate, and discussion at the meeting, including rezoning to other classifications. Petitions for the above items may be viewed or inquiries made by contacting the Department of Planning & Land Use at 910-798-7165, 230 Government Center Drive, Wilmington, NC. All interested citizens are invited to attend. To review specific application documents, please visit the Development Activity Page online at: [www.plannhc.com](http://www.plannhc.com)

**NOTICE TO PUBLIC**  
TOWN OF LELAND, NC

The public will take notice that the Leland Planning Board will have a public meeting at 6:00 p.m. or shortly thereafter on Tuesday, March 22, 2022 at the Leland Town Hall, 102 Town Hall Drive, Leland, NC to consider the following: **Zoning Map Amendment Request**  
Rezoning of 18 acres comprised of Tax Parcel No. 0381H001 located in Brunswick County, North Carolina from PUD, Planned Unit Development to M-F, Multifamily Residential District. Citizens can sign up for or against the meeting matter. Written comments will be received up to 24 hours prior to the meeting date.

Any questions call (910) 332-4297 or email [sreinhardt@townofleland.com](mailto:sreinhardt@townofleland.com). The public is urged to attend. Sabrina Reinhardt, Town Clerk

**PHOTOS are worth a thousand words included in your ad.**

**Notice To Creditors**

**NOTICE TO CREDITORS** of Cape Fear Software Development, Inc. Please be advised that Cape Fear Software Development, Inc has been dissolved. All claims against the assets of Cape Fear Software Development, Inc must be made in writing including the claim amount, basis and origination date, sent by US certified mail to Cape Fear Software Development, Inc at 3224C N. College Road, #206, Wilmington, NC 28405. Any claims known to Cape Fear Software Development, Inc must be submitted within 120 days of this notice or will be barred. Any unknown claim against the Company will be barred unless a proceeding to enforce the claim is commenced in a proper forum within 5 years from the date of this notice. 2/27, 3/6, 3/13, 3/20/2022 6965124

**NOTICE TO CREDITORS**  
NORTH CAROLINA, BRUNSWICK COUNTY

All persons, firms and corporations having claims against the Estate of Jim D. Harris, File No: 2020E01085, deceased, of Brunswick County, NC, are notified to present the same to the personal representative listed below on or before June 6, 2022, or this notice will be pleaded in bar of recovery. All debtors of the said estate are asked to make immediate payment.

This 6th day of March, 2022.

William Duff Harris,  
Administrator of the Estate  
937 Berkshire Ct.  
Sycamore, IL 60178

3/6, 3/13, 3/20, 3/27/2022 7005318

**Public Notices**

**REQUEST FOR PROPOSAL (RFP)**

**HOUSING AUTHORITY OF THE CITY OF (WHA) WILMINGTON, NORTH CAROLINA GENERAL COUNSEL LEGAL SERVICES**

**CONTRACT NO.: COCC19.04**

This Request for Proposal (RFP) is to solicit Proposals for the purpose of entering into contracts for the professional services of Legal Firms authorized to do business in the State of North Carolina.

It is the intention of the Housing Authority of the City of Wilmington, North Carolina to enter into an agreement with one or more qualified law firms to provide legal services on behalf of the Housing Authority of the City of Wilmington, N.C.

The RFP packets will be available on our website at [www.wha.net](http://www.wha.net) on Monday, March 14, 2022.

WHA reserves the right to reject any or all proposals and to waive any information in the proposal process. 3/13, 3/20/2022 7025052

**NORTH CAROLINA RANDOLPH COUNTY IN THE GENERAL COURT OF JUSTICE**

**DISTRICT COURT DIVISION**  
FILE NO: 21 CVD 2617  
COLTON WILSON MORROW, PLAINTIFF,

V. LAUREN RENEE BUSCH, DEFENDANT.

**NOTICE OF SERVICE OF PROCESS BY PUBLICATION**  
TO: LAUREN RENEE BUSCH  
5629 OLD GARDEN ROAD, APT 109  
WILMINGTON, NORTH CAROLINA 28403

Take notice that a pleading seeking relief against you has been filed in the above entitled action, wherein Plaintiff is seeking an absolute divorce based upon the grounds of one year's separation. You are required to make defense to such pleading no later than 40 days from the date of the first published notice, such first publication date being March 6, 2022. Upon your failure to do so, the party seeking service against you will apply to the Court for the relief sought.

This 6th day of March 2021.  
Scott N. Dunn NCSB#17962  
Attorney for Plaintiff  
162 East Ward Street  
Asheboro, North Carolina 27203  
Off 336.629.1650 Fax 336.629.0043

**NOTICE OF SERVICE OF PROCESS**  
BY PUBLICATION  
STATE OF NORTH CAROLINA, NEW HANOVER COUNTY

In the City of Wilmington  
Nonresidential Structure Code

In the matter of the property located at: 255 N. Front St, Wilmington, North Carolina, known as Map 3117, Block No. 00 Lot No. 00, 255 NORTH FRONT STREET CONDOMINIUMS. TO: Adrian Holdings LLC, North Front Street Ventures LLC, 255 North Front Street Condos Inc.

Take notice that a Compliant and Notice of Hearing before the Nonresidential Structure Code Hearing Officer and a Notice of Lis Pendens has been filed in these proceedings. The nature of the relief being sought is a determination of whether the structure is unsafe (Chapter 16, Article VII of the Wilmington City Code) and dangerous and injurious to the public health, safety, and welfare of occupants or others and ordering an appropriate remedy.

You are requested to file an answer to such pleading and to appear in person or by other means at the hearing before the Nonresidential Structure Code Hearing Officer at the City of Wilmington at 305 Chestnut Street on **March 24, 2022, at 09:30 a.m.** and upon your failure to do so, the hearing will proceed, and an appropriate remedy may be ordered.

Brian D Renner  
Chief Code Enforcement Officer

**EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

**ESTRELLA LANDING APARTMENTS**  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA  
March 13, 2022

To: All Interested Agencies, Groups and Individuals  
This is to give notice that the N.C. Office of Recovery and

## VALIDATION ENGINEER



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of Validation Engineer. This position, in the Manufacturing and Formulations Services department, requires a Bachelor's degree or higher in a scientific or engineering discipline with either 3 years of experience or an equivalent combination of education and experience in a GMP laboratory or manufacturing environment. Special consideration given to candidates with experience with automated filling equipment especially in a sterile manufacturing environment.

Responsibilities include: create and execute equipment installation and operational qualification/requalification, calibration, and preventative maintenance for manufacturing instruments and equipment, as well as facilities and utilities qualifications /develop Standard Operating Procedures and training materials for manufacturing equipment / perform Factory Acceptance Tests for new equipment at vendor sites/monitor ViewLinc and respond to excursions as needed/ perform data trending and write reports, change requests, and deviations / communicate with clients, manufacturing and formulations management, and the quality group.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29084726

## FORMULATIONS SCIENTIST



Quality Chemical Laboratories (QCL), a pharmaceutical testing, manufacturing, and development lab in Wilmington, is seeking a highly motivated scientist for our formulation development laboratory. The focus of this position is solid oral dosage forms but other dosage form experience, especially parenterals, will be considered as this is an area of growth for the company. Must be capable of working independently from concept and product prototype through transfer to cGMP Manufacturing. The ideal candidate will possess strong problem solving abilities, excellent customer service mindset, and a positive can do attitude. A college degree is required with at least 3 years' experience in formulation development. Experience in process development and technology transfer into cGMP manufacturing, familiarity with analytical techniques, regulatory requirements, and early phase cGMP manufacturing is preferred.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29065066

## HVAC TECHNICIAN



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of licensed HVAC Technician. This position requires a minimum of an associate's degree from a two-year college or technical school with a certificate or military training and experience in Heating, Ventilation, and Air Conditioning and 10+ years of HVAC experience is preferred. The candidate will be responsible for the installation, maintenance and repair of HVAC systems utilizing knowledge of refrigeration theory, electrical schematics, pneumatic and building automation systems (BAS), pipe fitting, welding and brazing and mechanical layouts. Other duties include following blueprints/specifications to diagnose and repair units, documentation, ability to work outdoors and/or in mechanical rooms, and flexibility to work weekends if necessary. Candidate must be proficient with laptops, tablets, smart phones, Microsoft Office, Adobe and basic apps.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29065032

**PHOTOS are worth a thousand words included in your ad.**

**Public Notices**

**Resiliency (NCORR)** has received an application from Estrella Landing Apartments, LLC to use Community Development Block Grant – Disaster Recovery (CDBG-DR) funding from the Affordable Housing Development Fund Program to construct the Estrella Landing Apartments (hereinafter, the “Proposed Activity”) and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990, in accordance with U.S. Department of Housing and Urban Development (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express concerns and share information about the Proposed Activity, including alternative locations outside of the floodplain and wetland. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands supports govern-

**Public Notices**

ment efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains and wetlands, it must inform people who may be put at greater or continued risk by the Proposed Activity. Funding for the Proposed Activity will be provided, in part, by the HUD CDBG-DR program for Hurricane Florence storm recovery activities in North Carolina. The Proposed Activity is needed to address an affordable housing inventory shortage, which was exacerbated by the impacts of Hurricanes Matthew (Oct. 8, 2016) and Florence (Sept. 14, 2018), when hundreds of homes were damaged or destroyed. Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households. The Proposed Activity will assist the City of Wilmington and New

**Public Notices**

Hanover County to provide affordable housing options for the local community. The Proposed Activity entails construction of a new multifamily, affordable housing project consisting of three apartment buildings, containing 84 apartment units; one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road in Wilmington, New Hanover County, North Carolina. The Proposed Activity will result in temporary impacts to 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Activity will result in permanent impacts to 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject develop-

**Public Notices**

ment through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. Floodplain maps based on the FEMA Flood Insurance Rate Map (FIRM) and wetlands maps based on the NWI data are available for review at: <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. A full description of the Proposed Activity and FIRM may also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984)833-5350 to make an appointment. Written comments must be received by NCORR at the following address on or before March 28, 2022: Matt Arlyn, Policy and Planning Director, NCORR, ATTN: Estrella Landing Apartments, P.O. Box 110465, Durham,

**Public Notices**

NC 27709. Comments may also be submitted by email to [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with “ATTN: Estrella Landing Apartments Comments” in the subject line. March 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 28, 2022 7040283

**Public Notice**  
North Carolina Environmental Management Commission  
NPDES Unit  
1617 Mail Service Center  
Raleigh, NC 27699-1617  
Notice of Intent to Issue a NPDES Wastewater Permit NC0076732 New Hanover Terminal The North Carolina Environmental Management Commission proposes to issue a NPDES wastewater discharge permit to the person(s) listed below. Written comments regarding the proposed permit will be accepted until 30 days after the publish date of this notice. The Director of the NC Division of Water Resources (DWR) may hold a

**Public Notices**

public hearing should there be a significant degree of public interest. Please mail comments and/or information requests to DWR at the above address. Interested persons may visit the DWR at 512 N. Salisbury Street, Raleigh, NC 27604 to review information on file. Additional information on NPDES permits and this notice may be found on our website: <http://det.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/npdes-wastewater/public-notices>, or by calling (919) 707-3601. Flint Hill Resources, LP [3308 River Road, Wilmington, NC 28401] has requested renewal of permit NC0076732 for its New Hanover Terminal in New Hanover County. This permitted facility discharges treated stormwater to the Cape Fear River in the Cape Fear River Basin. Some parameters are water quality limited. This discharge may affect future allocations in this segment of the Cape Fear River.

**MANUFACTURING QUALITY ASSURANCE ASSOCIATE**



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of Manufacturing Quality Assurance Associate. This position, in the Manufacturing Quality Assurance department, requires a Bachelor’s degree or higher in a scientific or engineering discipline with either 3 years of experience or an equivalent combination of education and experience in a GMP laboratory or GMP manufacturing environment. Responsibilities include performing GMP review of manufacturing records and data, review and release manufacturing product batches, review and approve deviations, SOPs, calibration records, and protocols, perform AQLs as required, and assist with client audits.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29064652

**QA Associate Report Generation**



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of QA Associate – Report Generation. The candidate will be responsible for review and approval of reports generated from laboratory data, such as certificate of analysis and stability study tables and will be expected to review reports for completeness and accuracy to ensure compliance with GMPs and SOPs. This position requires outstanding attention to detail, documentation, communication, problem-solving and organization skills. With experience, the candidate may be required to review technical reports such as method verifications, validations, transfer activities and other protocol driven work. Candidate must be proficient in Word and formatting documents. Additional quality assurance responsibilities may be required.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29064670

**GMP DATA REVIEWERS, CHEMISTS, METROLOGY, LABWARE, CPU VALIDATION, STABILITY, SAMPLE LOG-IN, AND DOCUMENT CONTROL POSITIONS**



Quality Chemical Laboratories (QCL), a pharmaceutical testing and development lab in Wilmington, is seeking highly motivated candidates for qualified analytical data reviewers, LabWare LIMS development/configuration/validation, Document Control Associates, Computer System Validation and Data Integrity Specialists, Scientists (all levels) with experience in Mass Spec, LC, GC, QC compendial testing, Wet Chemistry, Microbiology, Sterility, Synthetic Chemistry, Pharmaceutical Formulation (with knowledge of manufacturing equipment), Metrology, and Sample Log-In Associates. Special attention given to candidates with advanced degree in Chemistry or related science and experience in method development/validation. Special consideration also given to experienced GMP data reviewers.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29064941

**SYSTEM VALIDATION AND DATA INTEGRITY SPECIALIST**



Quality Chemical Laboratories (QCL), a leading Pharmaceutical testing and manufacturing laboratory in Wilmington, is seeking a qualified candidate for the position of System Validation and Data Integrity Specialist.

Responsibilities include: Plan and write protocols for computer system validation projects per 21 CFR Part 1, Review validated systems to assess need for further enhancements, validation, or system upgrades/fixes, Work with company management to implement changes and upgrades to computer systems, Work with vendors on purchasing and planning for software upgrades, Review vendor protocols/design specifications, Perform risk assessments for existing and new computer systems, Monitor validation activities and communicates problem areas to quality assurance management, Participate in client and regulatory audits, Collaborate with other representatives from the quality department, Coordinate end user training. Candidates with experience in a pharmaceutical setting, as well as experience with GAMP5 and Computer Validation are preferred. Must be results driven, a self-starter, and possess strong interpersonal and communication skills in addition to strong verbal and technical writing skills.

QCL offers competitive salaries commensurate with experience and an excellent benefits package as well as great potential for career advancement and leadership in a rapidly growing company. Qualified candidates should apply via our website [www.qualitychemlabs.com](http://www.qualitychemlabs.com) or email resumes to [hrrassistant@qualitychemlabs.com](mailto:hrrassistant@qualitychemlabs.com)

WN-29064793



← **FIND A HOUSE**

**Check out the classified section everyday.**

**EARLY NOTICE DISTRIBUTION LIST**

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA**

**FEDERAL AGENCIES**

<b>Agency</b>	<b>Name &amp; Address</b>	<b>Method</b>
<b>HUD NC</b>	Mr. Lenwood E. Smith, II Environmental Protection Specialist Greensboro Field Office U.S. Dept. of Housing and Urban Development 1500 Pinecroft Road, Suite 401 Greensboro, NC 27407-3838	<a href="mailto:Lenwood.E.Smith@hud.gov">Lenwood.E.Smith@hud.gov</a>
<b>FEMA, Region IV</b>	Ms. Gracia B. Szczech, Regional Administrator U.S. Dept. of Homeland Security FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, GA 30341	FedEx
<b>FEMA ATTN: 11988</b>	<i>Hard copies may also be mailed to</i> Attn: 11988/NEPA Reviewer (EHP) DHS/FEMA RIV 3003 Chamblee Tucker Road Atlanta, GA 30341	<a href="mailto:FEMA-R4EHP@fema.dhs.gov">FEMA-R4EHP@fema.dhs.gov</a> with the subject line <b>REVIEW REQUEST: 11988/NEPA</b>
<b>US EPA, Region 4</b>	Mr. John Blevins, Acting Regional Administrator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	FedEx
<b>US EPA, Region 4</b>	Ms. Ntale Kajumba, NEPA Coordinator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	<a href="mailto:Kajumba.ntale@epa.gov">Kajumba.ntale@epa.gov</a> cc: <a href="mailto:blevins.john@epa.gov">blevins.john@epa.gov</a>
<b>USFWS – Raleigh Field Office</b>	USFWS – Raleigh Field Office ATTN: John Ellis P.O. Box 33726 Raleigh, NC 27636 ph.: 919-856-4520, ext. 26	<a href="mailto:john_ellis@fws.gov">john_ellis@fws.gov</a>

<b>USACE – Wilmington District</b>	Mr. Gary H. Beecher USACE – Wilmington District 69 Darlington Avenue Wilmington, NC 28403	<a href="mailto:Gary.H.Beecher@USACE.army.mil">Gary.H.Beecher@USACE.army.mil</a>
<b>TRIBES, NATIONS AND COMMUNITIES</b> (who asked to be notified)		
<b>Catawba Indian Nation</b>	Dr. Wenonah George Haire, THPO ATTN: THPO Archaeology Dept. Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730	FedEx
<b>Catawba Indian Nation</b>	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730	FedEx
<b>NC STATE AGENCIES</b>		
<b>STATE CLEARING- HOUSE</b>	Ms. Crystal Best North Carolina Department of Administration State Environmental Review Clearinghouse 1301 Mail Service Center Raleigh, North Carolina 27699-1301	<a href="mailto:State.Clearinghouse@doa.nc.gov">State.Clearinghouse@doa.nc.gov</a> <a href="mailto:crystal.best@doa.nc.gov">crystal.best@doa.nc.gov</a>
<b>NCHFA</b>	Ronda G. Moore Senior Attorney, Manager of Real Estate Transactions North Carolina Housing Finance Agency P.O. Box 28066 Raleigh, NC 27611-8066 Phone: 919-875-3621	<a href="mailto:rgmoore@nchfa.com">rgmoore@nchfa.com</a>
<b>LOCAL AGENCIES</b>		
<b>COUNTY</b>	Chris Coudriet, County Manager County Government Complex 230 Government Center Drive, Suite 195 Wilmington, NC 28403	<a href="mailto:ccoudriet@nhcgov.com">ccoudriet@nhcgov.com</a>
<b>COUNTY</b>	Rebekah Roth, CZO, AICP Planning Director 230 Government Center Dr, Suite 110 Wilmington, NC 28403	<a href="mailto:rroth@nhcgov.com">rroth@nhcgov.com</a>

	Phone 910-798-7165	
<b>CITY</b>	Ms. Penelope Spicer-Sudbury City Clerk P.O. Box 1810 Wilmington, NC 28402 Phone: 910.341.7816	<a href="mailto:penny.spicer-sidbury@wilmingtonnc.gov">penny.spicer- sidbury@wilmingtonnc.gov</a> (she will disburse/post)

## **APPENDIX 4**

### **Combined FONSI/NOI-RROF/ Final Notice and Public Explanation of a Proposed Activity in a 100-year Floodplain and Wetland**

#### **Proof Pre-publication**

#### **Distribution List to Interested Agencies, Groups and Individuals**



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

### PUBLIC NOTICE

#### **COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT (FONSI), NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS (NOI-RROF), AND FINAL NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NEW HANOVER COUNTY, NC 28411**

**MARCH 31, 2022**

**Name of Responsible Entity and Recipient:** North Carolina Office of Recovery and Resiliency (NCORR), P.O. Box 110465, Durham, NC 27709. Contact: Director Laura Hogshead (984) 833-5350.

Pursuant to 24 CFR Section 58.43, this combined Notice of Finding of No Significant Impact (FONSI), Notice of Intent to Request Release of Funds (NOI-RROF), and Final Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland satisfies three separate procedural requirements for project activities proposed to be undertaken by NCORR.

**Project Description:** NCORR is responsible for the direct administration of the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program in North Carolina. NCORR proposes to provide CDBG-DR funding of \$2,500,000.00 for the Estrella Landing Apartments (“Proposed Project”), which is located at 4615 Gordon Road, Wilmington, New Hanover County, NC 28411. The Proposed Project is anticipated to have a total cost of \$14,955,003.00. The Proposed Project will involve the new construction of a multifamily, affordable housing project consisting of three apartment buildings containing 84 units, one clubhouse building, a stormwater retention pond, play area, picnic pavilion, paved parking areas, and landscaped areas. The City is seeking affordable housing to address the shortage in inventory exacerbated by the effects of the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). Estrella Landings Apartments will provide a multifamily residential development for low- and middle-income households in the City of Wilmington.

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

*An Equal Opportunity Employer*

## **PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

NCORR has conducted an evaluation as required by Executive Orders 11988 and 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The Proposed Project will result in temporary impacts to approximately 0.095 acres of a 100-year floodplain and 0.057 acres of National Wetlands Inventory-mapped wetlands. The Proposed Project will result in permanent impacts to approximately 0.140 acres of the 100-year floodplain and 0.094 acres of NWI-mapped wetlands. These impacts will consist of: utility installation to provide gravity, sanitary sewer service to the subject development through an existing, recorded utility easement; stormwater management device installation, which includes the proposed wet pond and pipe outlet; and fill and grading for the proposed buildings and parking areas to maintain handicap accessibility throughout the site. Since the action will include new construction in wetland and floodplain, EO 11988 and EO 11990 require that the Proposed Project not be supported if there are practicable alternatives to development in floodplain and new construction in wetlands. Alternatives and the 8-step process have been documented in the EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination which is available for review. Applicable permits from the U.S. Army Corps of Engineers, NC Department of Environmental Quality, and local jurisdictions will be acquired before work is commenced. The Proposed Project will be constructed in accordance with permit requirements and their conditions.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains/ wetlands and those who have an interest in the protection of the natural environment have an opportunity to express their concerns and provide information about these areas. Second, adequate public notice is an important public education tool. The dissemination of information and request for public comment about floodplains/ wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains/ wetlands, it must inform those who may be put at greater or continued risk.

## **FINDING OF NO SIGNIFICANT IMPACT**

An Environmental Assessment (EA) for the Proposed Project has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and HUD environmental review regulations at 24 CFR Part 58. The EA is incorporated by reference into this FONSI. Subject to public comments, no further review of the Proposed Project is anticipated. NCORR has determined that the EA for the project identified herein complies with the requirements of HUD environmental review regulations at 24 CFR Part 58. NCORR has determined that the Proposed Project will have no significant impact on the human environment and therefore does not require the preparation of an environmental impact statement under NEPA.

**Public Review:** Public viewing of the EA and EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination is available online at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. Documents may

also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27713. Call (984) 833-5350 to make an appointment.

Further information may be requested by writing to the above address, emailing [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) or by calling (984) 833-5350. This combined notice is being sent to individuals and groups known to be interested in these activities, local news media, appropriate local, state and federal agencies, the regional office of the U.S. Environmental Protection Agency having jurisdiction, and to the HUD Field Office, and is being published in a newspaper of general circulation in the affected community.

**Public Comments on the Proposed Activity within Floodplain and Wetland, FONSI and/or NOIRROF:** Any individual, group or agency may submit written comments on the Proposed Project. The public is hereby advised to specify in their comments which “notice” their comments address. Comments should be submitted via email, in the proper format, on or before April 15, 2022 at [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov). Written comments may also be submitted by mail, in the proper format, to be received on or before April 15, 2022, and addressed to: NCORR – Public Comments, P.O. Box 110465, Durham, NC 27709. All comments must be received on or before 5:00 PM on April 15, 2022 or they will not be considered. If modifications result from public comment, these will be made prior to proceeding with the expenditure of funds.

#### **REQUEST FOR RELEASE OF FUNDS AND CERTIFICATION**

On or after April 18, 2022, the NCORR certifying officer will submit a request and certification to HUD for the release of CDBG-DR funds as authorized by related laws and policies for the purpose of implementing this part of the North Carolina CDBG-DR program.

NCORR certifies to HUD that Laura Hogshead, in her capacity as Certifying Officer, consents to accept the jurisdiction of the U.S. federal courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. HUD’s approval of the certification satisfies its responsibilities under NEPA and related laws and authorities, and allows NCORR to use CDBG-DR program funds.

**Objection to Release of Funds:** HUD will accept objections to its release of funds and NCORR’s certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later). Potential objectors may contact HUD or the NCORR Certifying Officer to verify the actual last day of the objection period.

The only permissible grounds for objections claiming a responsible entity’s non-compliance with 24 CFR Part 58 are: (a) Certification was not executed by NCORR’s Certifying Officer; (b) the responsible entity has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR Part 58; (c) the responsible entity has committed funds or incurred costs not authorized by 24 CFR Part 58 before release of funds and approval of environmental certification; or (d) another federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedures (24 CFR Part 58) and shall be addressed to Tennille Smith Parker, Director, Disaster Recovery and Special

Issues Division, Office of Block Grant Assistance, U.S. Department of Housing & Urban Development, 451 7<sup>th</sup> Street SW, Washington, DC 20410, Phone: (202) 402-4649, or emailed to [disaster\\_recovery@hud.gov](mailto:disaster_recovery@hud.gov).

Laura Hogshead  
Certifying Officer  
March 31, 2022



StarNews | The Dispatch | Times-News  
 Sun Journal | The Daily News | The Star  
 The Free Press | Gaston Gazette

## Order Confirmation

Not an Invoice

<b>Account Number:</b>	491626
<b>Customer Name:</b>	Ncorr
<b>Customer Address:</b>	Ncorr PO BOX 110465 DURHAM NC 27709
<b>Contact Name:</b>	Sarah Crump
<b>Contact Phone:</b>	9842976244
<b>Contact Email:</b>	sarah.crump@ncdps.gov
<b>PO Number:</b>	

<b>Date:</b>	03/28/2022
<b>Order Number:</b>	7101765
<b>Prepayment Amount:</b>	\$ 0.00

<b>Column Count:</b>	1.0000
<b>Line Count:</b>	310.0000
<b>Height in Inches:</b>	0.0000

**Print**

Product	#Insertions	Start - End	Category
WLM StarNews	1	03/31/2022 - 03/31/2022	Public Notices
WLM starnewsonline.com	1	03/31/2022 - 03/31/2022	Public Notices

<b>Total Order Confirmation</b>	<b>\$1023.00</b>
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**PUBLIC NOTICE**  
**COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT (FONSI), NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS (NOI-RROF), AND FINAL NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND ESTRELLA LANDING APARTMENTS 4615 GORDON ROAD WILMINGTON, NEW HANOVER COUNTY, NC 28411 MARCH 31, 2022**

Name of Responsible Entity and Recipient: North Carolina Office of Recovery and Resiliency (NCORR), P.O. Box 110465, Durham, NC 27709. Contact: Director Laura Hogshead (984) 833-5350.

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Laura Hogshead  
Certifying Officer  
March 31, 2022

***FONSI/NOIRROF/FINAL NOTICE DISTRIBUTION LIST***

**ESTRELLA LANDING APARTMENTS  
4615 GORDON ROAD  
WILMINGTON, NORTH CAROLINA 28411  
NEW HANOVER COUNTY, NORTH CAROLINA**

**FEDERAL AGENCIES**

<b>Agency</b>	<b>Name &amp; Address</b>	<b>Method</b>
<b>HUD NC</b>	Mr. Lenwood E. Smith, II Environmental Protection Specialist Greensboro Field Office U.S. Dept. of Housing and Urban Development 1500 Pinecroft Road, Suite 401 Greensboro, NC 27407-3838	<a href="mailto:Lenwood.E.Smith@hud.gov">Lenwood.E.Smith@hud.gov</a>
<b>FEMA, Region IV</b>	Ms. Gracia B. Szczech, Regional Administrator U.S. Dept. of Homeland Security FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, GA 30341	FedEx
<b>FEMA ATTN: 11988</b>	<i>Hard copies may also be mailed to</i> Attn: 11988/NEPA Reviewer (EHP) DHS/FEMA RIV 3003 Chamblee Tucker Road Atlanta, GA 30341	<a href="mailto:FEMA-R4EHP@fema.dhs.gov">FEMA-R4EHP@fema.dhs.gov</a> with the subject line <b>REVIEW REQUEST: 11988/NEPA</b>
<b>US EPA, Region 4</b>	Mr. John Blevins, Acting Regional Administrator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	FedEx
<b>US EPA, Region 4</b>	Ms. Ntale Kajumba, NEPA Coordinator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	<a href="mailto:Kajumba.ntale@epa.gov">Kajumba.ntale@epa.gov</a> cc: <a href="mailto:blevins.john@epa.gov">blevins.john@epa.gov</a>
<b>USFWS – Raleigh Field Office</b>	USFWS – Raleigh Field Office ATTN: John Ellis P.O. Box 33726 Raleigh, NC 27636 ph.: 919-856-4520, ext. 26	<a href="mailto:john_ellis@fws.gov">john_ellis@fws.gov</a>

<b>USACE – Wilmington District</b>	Mr. Gary H. Beecher USACE – Wilmington District 69 Darlington Avenue Wilmington, NC 28403	<a href="mailto:Gary.H.Beecher@USACE.army.mil">Gary.H.Beecher@USACE.army.mil</a>
<b>TRIBES, NATIONS AND COMMUNITIES</b> (who asked to be notified)		
<b>Catawba Indian Nation</b>	Dr. Wenonah George Haire, THPO ATTN: THPO Archaeology Dept. Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730	Does not want Notice
<b>Catawba Indian Nation</b>	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730	Does not want Notice
<b>NC STATE AGENCIES</b>		
<b>STATE CLEARING- HOUSE</b>	Ms. Crystal Best North Carolina Department of Administration State Environmental Review Clearinghouse 1301 Mail Service Center Raleigh, North Carolina 27699-1301	<a href="mailto:State.Clearinghouse@doa.nc.gov">State.Clearinghouse@doa.nc.gov</a> <a href="mailto:crystal.best@doa.nc.gov">crystal.best@doa.nc.gov</a>
<b>NCHFA</b>	Ronda G. Moore Senior Attorney, Manager of Real Estate Transactions North Carolina Housing Finance Agency P.O. Box 28066 Raleigh, NC 27611-8066 Phone: 919-875-3621	<a href="mailto:rgmoore@nchfa.com">rgmoore@nchfa.com</a>
<b>LOCAL AGENCIES</b>		
<b>COUNTY</b>	Chris Coudriet, County Manager County Government Complex 230 Government Center Drive, Suite 195 Wilmington, NC 28403	<a href="mailto:ccoudriet@nhcgov.com">ccoudriet@nhcgov.com</a>
<b>COUNTY</b>	Rebekah Roth, CZO, AICP Planning Director 230 Government Center Dr, Suite 110 Wilmington, NC 28403	<a href="mailto:rroth@nhcgov.com">rroth@nhcgov.com</a>

	Phone 910-798-7165	
<b>CITY</b>	Ms. Penelope Spicer-Sudbury City Clerk P.O. Box 1810 Wilmington, NC 28402 Phone: 910.341.7816	<a href="mailto:penny.spicer-sidbury@wilmingtonnc.gov">penny.spicer- sidbury@wilmingtonnc.gov</a> (she will disburse/post)

## Gievers, Andrea

---

**From:** Shaver, Brad E CIV USARMY CESAW (USA) <Brad.E.Shaver@usace.army.mil>  
**Sent:** Wednesday, March 16, 2022 8:48 AM  
**To:** Gievers, Andrea  
**Cc:** NCORR Public Comments  
**Subject:** [External] FW: Early Notice HUD 24 CFR §55.20 - Estrella Landing Apartments, Wilmington, NC  
**Attachments:** NCORR Early Notice Estrella Landing Apartments 3.13.22 RevFinal.pdf; Early Notice Estrella Landing Apts - Floodplain Wetlands Maps.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

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

Hello:

The subject project will require a permit from the US Army Corps of Engineers. Its advisable for the developer to seek a pre application meeting from the Corps as impacts to wetlands within the 100 year floodplain are currently proposed.

Thank you,

Brad Shaver  
USACE, Project Manager

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**From:** Beecher, Gary H CIV USARMY CESAW (USA) <Gary.H.Beecher@usace.army.mil>  
**Sent:** Wednesday, March 16, 2022 6:04 AM  
**To:** Shaver, Brad E CIV USARMY CESAW (USA) <Brad.E.Shaver@usace.army.mil>  
**Subject:** FW: Early Notice HUD 24 CFR §55.20 - Estrella Landing Apartments, Wilmington, NC

Brad,

I'm forwarding this email to you.  
GB

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**From:** Gievers, Andrea <[andrea.l.gievers@rebuild.nc.gov](mailto:andrea.l.gievers@rebuild.nc.gov)>  
**Sent:** Monday, March 14, 2022 2:25 PM  
**To:** Beecher, Gary H CIV USARMY CESAW (USA) <[Gary.H.Beecher@usace.army.mil](mailto:Gary.H.Beecher@usace.army.mil)>  
**Subject:** [Non-DoD Source] Early Notice HUD 24 CFR §55.20 - Estrella Landing Apartments, Wilmington, NC

Hello:

Please find attached the *Early Notice and Public Review for a Proposed Activity in a 100-year Floodplain and Wetland* for the NCORR Affordable Housing Development Fund Program's **Estrella Landing Apartments** proposed project in the City of Wilmington, New Hanover County, NC. Please feel free to contact me if you have any questions. Thank you for your time.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

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Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.



STATE OF NORTH CAROLINA  
DEPARTMENT OF ADMINISTRATION

Roy Cooper  
GOVERNOR

Pamela B. Cashwell  
Secretary

March 28, 2022

Andrea Gievers  
Estrella Landing Apartments  
c/o NC Department of Public Safety  
Office of Recovery and Resiliency  
Durham, NC 27709-

Re: SCH File # 22-E-4600-0185 Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

Dear Andrea Gievers:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are comments made by the agencies in the review of this document.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

CRYSTAL BEST  
State Environmental Review Clearinghouse

Attachments

*Mailing Address:*  
NC DEPARTMENT OF ADMINISTRATION  
1301 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1301

*Telephone:* (919)807-2425  
*Fax:* (919)733-9571  
*COURIER:* #51-01-00  
*Email:* [state.clearinghouse@doa.nc.gov](mailto:state.clearinghouse@doa.nc.gov)  
*Website:* [www.ncadmin.nc.gov](http://www.ncadmin.nc.gov)

*Location:*  
116 WEST JONES STREET  
RALEIGH, NORTH CAROLINA

Control No.: 22-E-4600-0185  
County.: NEW HANOVER

Date Received: 3/14/2022  
Agency Response: 3/25/2022  
Review Closed: 3/25/2022

LYN HARDISON  
CLEARINGHOUSE COORDINATOR  
DEPT OF ENVIRONMENTAL QUALITY

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: LYN HARDISON

Date: 3/28/2022



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

To: Crystal Best  
State Clearinghouse  
NC Department of Administration

From: Lyn Hardison  
Division of Environmental Assistance and Customer Service  
Washington Regional Office

RE: 22-0185  
Scoping - Proposed project is for the construction of Estrella Landing Apartments consisting of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.  
New Hanover County

Date: March 28, 2022

The Department of Environment Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some valuable guidance. The comments are attached for the applicant's review.

The Department will continue to be available to assist the applicant with any question or concerns.

Thank you for the opportunity to respond.

Attachments



North Carolina Department of Environmental Quality

217 West Jones Street | 1601 Mail Service Center | Raleigh, North Carolina 27699-1601

919.707.8600

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0185 Due Date: 3/25/2022  
 County: New Hanover

After review of this project it has been determined that the DEQ permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, non-standard sewer system extensions & sewer systems that do not discharge into state surface waters.	Application 90 days before begins construction or award of construction contracts. On-site inspection may be required. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	Permit to construct & operate, sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system	Fast-Track Permitting program consists of the submittal of an application and an engineer's certification that the project meets all applicable State rules and Division Minimum Design Criteria.	30 days (N/A)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begins activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary.	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a groundwater monitoring well located on property not owned by the applicant, and for a large capacity (>100,000 gallons per day) water supply well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950	Please Note - The Health Hazards Control Unit (HHCU) of the N.C. Department of Health and Human Services, must be notified of plans to demolish a building, including residences for commercial or industrial expansion, even if no asbestos is present in the building.	60 days (90 days)
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater permit (NCG010000) is also usually issued should design features meet minimum requirements. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with _____ <b>Local Government's</b> approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		Based on Local Program
<input type="checkbox"/>	Compliance with 15A NCAC 2H .0126 - NPDES Stormwater Program which regulates three types of activities: Industrial, Municipal Separate Storm Sewer System & Construction activities that disturb ≥1 acre.		30-60 days (90 days)
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 -State Stormwater Permitting Programs regulate site development and post-construction stormwater runoff control. Areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state.		45 days (90 days)

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0185 Due Date: 3/25/2022  
 County: New Hanover

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with DEQ Bond amount varies with type mine and number of acres of affected land. Affected area greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, and certify construction is according to DEQ approved plans. May also require a permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage or the total project cost will be required upon completion.	30 days (60 days)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DEQ running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DEQ rules and regulations.	10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with DEQ at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property	15-20 days N/A
<input type="checkbox"/>	401 Water Quality Certification	Compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.	60 days (130 days)
<input type="checkbox"/>	Compliance with Catawba, Goose Creek, Jordan Lake, Randleman, Tar Pamlico or Neuse Riparian Buffer Rules is required. Buffer requirements: <a href="http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program">http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program</a>		
<input type="checkbox"/>	Nutrient Offset: Loading requirements for nitrogen and phosphorus in the Neuse and Tar-Pamlico River basins, and in the Jordan and Falls Lake watersheds, as part of the nutrient-management strategies in these areas. DWR nutrient offset information: <a href="http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information">http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information</a>		
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 - \$475.00 fee must accompany application	75 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$100.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input checked="" type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq., Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input checked="" type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of the _____ water system must be approved through the _____ delegated plan approval authority. Please contact them at _____ for further information.		

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0185 Due Date: 3/25/2022  
 County: New Hanover

Other Comments (attach additional pages as necessary, being certain to comment authority)

Division	Initials	No comment	Comments	Date Review
DAQ	DAC	<input checked="" type="checkbox"/>		3/22/2022
DWR-WQROS (Aquifer & Surface)	TT &	<input type="checkbox"/>	Based on a database search only, no DWR records were located using the search terms provided in the request. Because DWR files exist in hardcopy and electronic formats, a complete file review necessitates physical review of hardcopy records in the regional office. To ensure a complete records search, you may also elect to search our Laserfiche records system: <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=533172&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=533172&amp;dbid=0&amp;repo=WaterResources</a>  In addition, DWR maintains a locator tool for map searches at: <a href="https://experience.arcgis.com/experience/689283d17bf342c2a96364fbab09a5d8">https://experience.arcgis.com/experience/689283d17bf342c2a96364fbab09a5d8</a> And a streamlined well construction record Laserfiche search tool can be found at: <a href="https://edocs.deq.nc.gov/Groundwater/Welcome.aspx?dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/Groundwater/Welcome.aspx?dbid=0&amp;repo=WaterResources</a> &	3/15/2022
DWR-PWS	HLC	<input type="checkbox"/>	see above comments	3/18/2022
DEMLR (LQ & SW)		<input type="checkbox"/>		/ /
DWM – UST	LP	<input type="checkbox"/>	As per a search of the UST Section databases, no reported petroleum releases are known to exist at this location, nor are there any records of registered USTs at this location.  To view/find other petroleum related incidents in the area please use the LINK TO UST Section GIS MAP: <a href="http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps">http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps</a>	3/16/2022
Other Comments		<input type="checkbox"/>		/ /

**REGIONAL OFFICES**

Questions regarding these permits should be addressed to the Regional Office marked below.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> <b>Asheville Regional Office</b><br>2090 U.S. 70 Highway<br>Swannanoa, NC 28778-8211<br>Phone: 828-296-4500<br>Fax: 828-299-7043 | <input type="checkbox"/> <b>Fayetteville Regional Office</b><br>225 Green Street, Suite 714,<br>Fayetteville, NC 28301-5043<br>Phone: 910-433-3300<br>Fax: 910-486-0707 | <input type="checkbox"/> <b>Mooreville Regional Office</b><br>610 East Center Avenue, Suite 301,<br>Mooreville, NC 28115<br>Phone: 704-663-1699<br>Fax: 704-663-6040  |
| <input type="checkbox"/> <b>Raleigh Regional Office</b><br>3800 Barrett Drive,<br>Raleigh, NC 27609<br>Phone: 919-791-4200<br>Fax: 919-571-4718           | <input type="checkbox"/> <b>Washington Regional Office</b><br>943 Washington Square Mall,<br>Washington, NC 27889<br>Phone: 252-946-6481<br>Fax: 252-975-3716           | <input checked="" type="checkbox"/> <b>Wilmington Regional Office</b><br>127 Cardinal Drive Ext.,<br>Wilmington, NC 28405<br>Phone: 910-796-7215<br>Fax: 910-350-2004 |
|   | <input type="checkbox"/> <b>Winston-Salem Regional Office</b><br>450 Hanes Mill Road, Suite 300,<br>Winston-Salem, NC 27105<br>Phone: 336-776-9800<br>Fax: 336-776-9797 |   |

**ROY COOPER**  
*Governor*  
**ELIZABETH S. BISER**  
*Secretary*  
**MICHAEL SCOTT**  
*Director*



Date: March 22, 2022

To: Michael Scott, Director  
Division of Waste Management

Through: Janet Macdonald  
Inactive Hazardous Sites Branch

From: Bonnie S. Ware  
Inactive Hazardous Sites Branch

Subject: NEPA Project # 22-0185, Estrella Landing Apartments, New Hanover County, North Carolina

The Superfund Section has reviewed the proximity of sites under its jurisdiction to the Estrella Landing Apartments project. Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

No Superfund Section sites were identified within one mile of the project as shown on the attached report.

Please contact Janet Macdonald at 919.707.8349 if you have any questions concerning the Superfund Section review portion of this SEPA/NEPA inquiry.



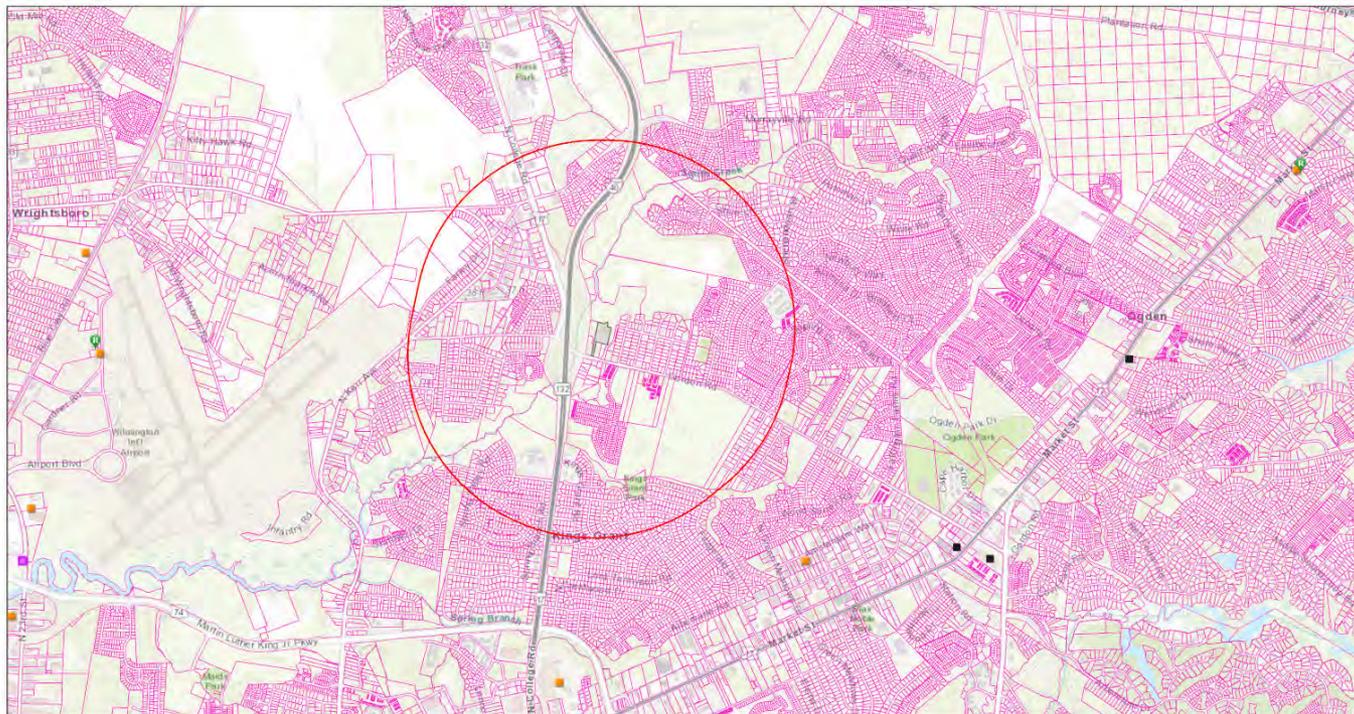
North Carolina Department of Environmental Quality | Division of Waste Management  
217 West Jones Street | 1646 Mail Service Center | Raleigh, North Carolina 27699-1646  
919.707.8200

# SUPERFUND SECTION SITES ONLY : SEPA/NEPA

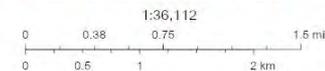
## Area of Interest (AOI) Information

Area : 2,326.82 acres

Mar 22 2022 11:45:12 Eastern Daylight Time



- NC Brownfields Location\_View
- Pre Regulatory Landfill Sites
- DryCleaning Contaminated
- Recorded
- Activity Pending
- Inactive Hazardous Sites
- Parcels (Polygons) - Parcels



New Hanover County, State of North Carolina DOT, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA

Superfund Section Sites Only : 22-0185 New Hanover County

## Summary

Name	Count	Area(acres)	Length(mi)
Certified DSCA Sites	0	N/A	N/A
Federal Remediation Branch Sites	0	N/A	N/A
Inactive Hazardous Sites	0	N/A	N/A
Pre-Regulatory Landfill Sites	0	N/A	N/A
Brownfields Program Sites	0	N/A	N/A

# Department of Environmental Quality

## Project Review Form

**Project Number: 22-0185**

**County: New Hanover**

**Date Received: 3-14-2022**

**Due Date: 4-8-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife <u>Maria</u>
<input checked="" type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 3/24/22	In-House Reviewer/Agency: Melodi Deaver, Hazardous Waste Section
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Response (check all applicable)

No objection to project as proposed.
  X
 No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:

**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

## Department of Environmental Quality Project Review Form

**Project Number: 22-0185**

**County: New Hanover**

**Date Received: 3-14-2022**

**Due Date: 4-8-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife Maria
<input checked="" type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: <i>3-25-2022</i>	In-House Reviewer/Agency: <i>M. J. D. / NCWRC</i>
--------------------------	---------------------------	--

Response (check all applicable)

No objection to project as proposed.
  No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:  
**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

Control No.: 22-E-4600-0185  
County.: NEW HANOVER

Date Received: 3/14/2022  
Agency Response: 3/25/2022  
Review Closed: 3/25/2022

JINTAO WEN  
CLEARINGHOUSE COORDINATOR  
DPS - DIV OF EMERGENCY MANAGEMENT

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Portion of the proposed project will encroach into Special Flood Hazard Area (SFHA), therefore a Floodplain Development Permit issued by New Hanover County will be required. Please coordinate with the County's Floodplain Administrator for permitting.

Reviewed By: JINTAO WEN

Date: 3/21/2022

Control No.: 22-E-4600-0185  
County.: NEW HANOVER

Date Received: 3/14/2022  
Agency Response: 4/13/2022  
Review Closed: 4/13/2022

JEANNE STONE  
CLEARINGHOUSE COORDINATOR  
DEPT OF TRANSPORTATION

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: JEANNE STONE

Date: 3/18/2022

## Stone, Jeanne B

---

**From:** Sarder, Nazia  
**Sent:** Friday, March 18, 2022 9:24 AM  
**To:** Stone, Jeanne B  
**Cc:** Norowzi, Behshad M  
**Subject:** Clearinghouse 22-E-4600-0185 Review  
**Attachments:** 22E46000185\_Estrella Landing Apartments.pdf

Good morning,

I have reviewed the attached clearinghouse and have the following comments:

1. Refer to the Wilmington MPO MTP. Particularly page 77 for all multi-modal projects near and around Gordon Road.

Clearinghouse **22-E-4600-0185**: Clearinghouse Review of A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND for Estrella Landing Apartments - Wilmington, New Hanover County, NC.

Regards,

**Nazia Sarder**  
Transportation Engineer III  
Transportation Planning Division  
North Carolina Department of Transportation

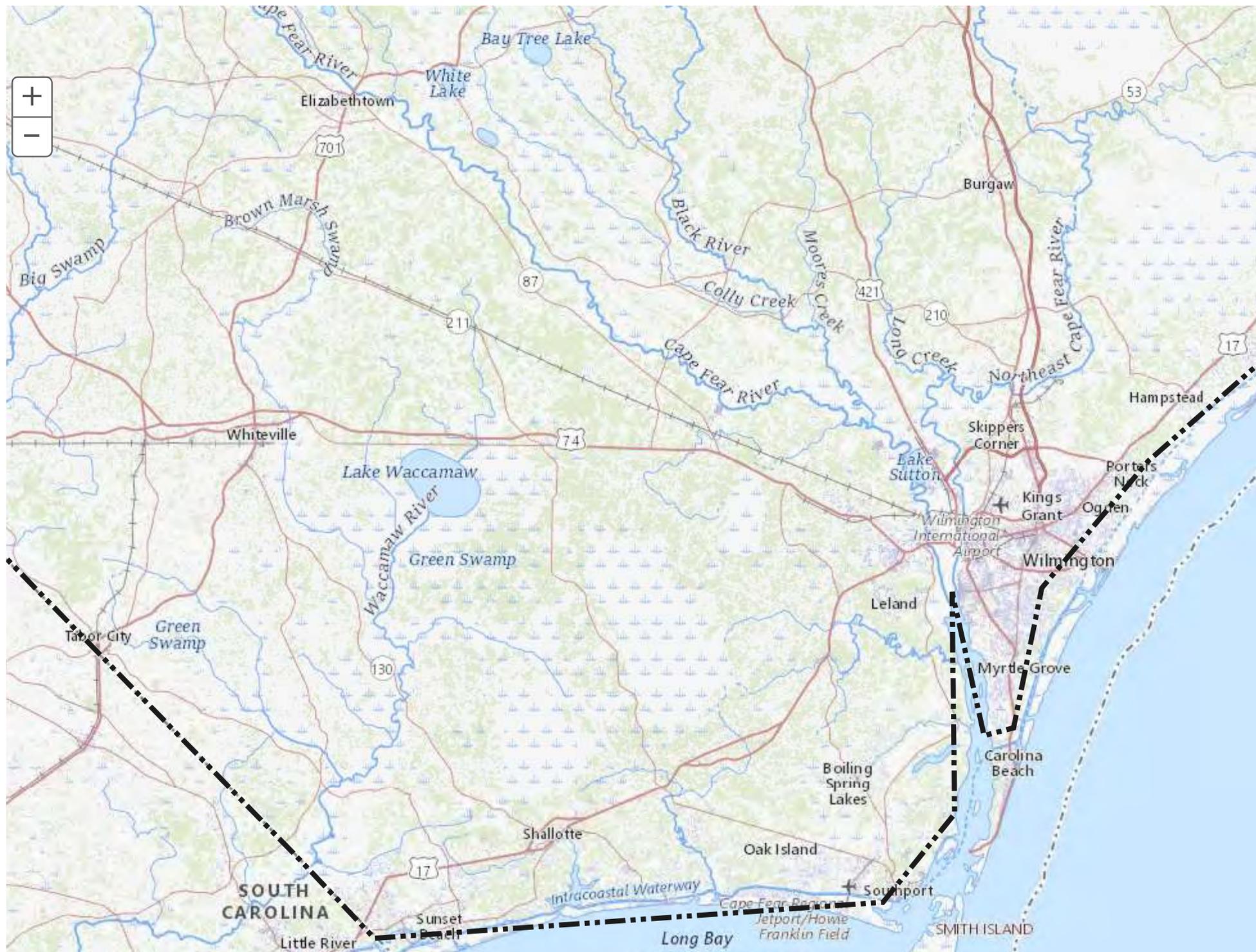
919 707 0980 office  
919 274 5349 cell  
[nsarder@ncdot.gov](mailto:nsarder@ncdot.gov)

1554 Mail Service Center  
Raleigh, NC 27699

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Location: User-specified point center at 34.278514, -77.864649

Ring (buffer): 1-miles radius

Description: Estrella Landing Apartments - EJScreen

Summary	Census 2010
Population	5,057
Population Density (per sq. mile)	1,595
People of Color Population	1,368
% People of Color Population	27%
Households	2,065
Housing Units	2,191
Land Area (sq. miles)	3.17
% Land Area	99%
Water Area (sq. miles)	0.03
% Water Area	1%

Population by Race	Number	Percent
Total	5,057	-----
Population Reporting One Race	4,943	98%
White	3,811	75%
Black	877	17%
American Indian	21	0%
Asian	70	1%
Pacific Islander	6	0%
Some Other Race	157	3%
Population Reporting Two or More Races	114	2%
Total Hispanic Population	302	6%
Total Non-Hispanic Population	4,755	94%
White Alone	3,689	73%
Black Alone	868	17%
American Indian Alone	14	0%
Non-Hispanic Asian Alone	70	1%
Pacific Islander Alone	6	0%
Other Race Alone	10	0%
Two or More Races Alone	98	2%

Population by Sex	Number	Percent
Male	2,456	49%
Female	2,601	51%

Population by Age	Number	Percent
Age 0-4	328	6%
Age 0-17	1,094	22%
Age 18+	3,963	78%
Age 65+	562	11%

Households by Tenure	Number	Percent
Total	2,065	
Owner Occupied	1,383	67%
Renter Occupied	682	33%

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

**Source:** U.S. Census Bureau, Census 2010 Summary File 1.



Location: User-specified point center at 34.278514, -77.864649  
 Ring (buffer): 1-miles radius  
 Description: Estrella Landing Apartments - EJScreen

Summary of ACS Estimates		2015 - 2019
Population		5,972
Population Density (per sq. mile)		1,884
People of Color Population		1,390
% People of Color Population		23%
Households		2,432
Housing Units		2,512
Housing Units Built Before 1950		42
Per Capita Income		28,923
Land Area (sq. miles) (Source: SF1)		3.17
% Land Area		99%
Water Area (sq. miles) (Source: SF1)		0.03
% Water Area		1%

	2015 - 2019 ACS Estimates	Percent	MOE (±)
<b>Population by Race</b>			
Total	5,972	100%	840
Population Reporting One Race	5,938	99%	1,414
White	4,927	83%	845
Black	931	16%	296
American Indian	1	0%	19
Asian	73	1%	161
Pacific Islander	0	0%	12
Some Other Race	6	0%	81
Population Reporting Two or More Races	33	1%	76
Total Hispanic Population	351	6%	514
Total Non-Hispanic Population	5,621		
White Alone	4,582	77%	780
Black Alone	931	16%	296
American Indian Alone	0	0%	16
Non-Hispanic Asian Alone	73	1%	161
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	81
Two or More Races Alone	33	1%	76
<b>Population by Sex</b>			
Male	2,856	48%	466
Female	3,116	52%	518
<b>Population by Age</b>			
Age 0-4	293	5%	144
Age 0-17	1,086	18%	282
Age 18+	4,885	82%	630
Age 65+	882	15%	255

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019

Location: User-specified point center at 34.278514, -77.864649  
 Ring (buffer): 1-miles radius  
 Description: Estrella Landing Apartments - EJScreen

	2015 - 2019 ACS Estimates	Percent	MOE (±)
<b>Population 25+ by Educational Attainment</b>			
Total	4,047	100%	519
Less than 9th Grade	116	3%	159
9th - 12th Grade, No Diploma	198	5%	136
High School Graduate	1,088	27%	300
Some College, No Degree	831	21%	367
Associate Degree	501	12%	144
Bachelor's Degree or more	1,314	32%	245
<b>Population Age 5+ Years by Ability to Speak English</b>			
Total	5,679	100%	786
Speak only English	5,244	92%	694
Non-English at Home <sup>1+2+3+4</sup>	436	8%	369
<sup>1</sup> Speak English "very well"	218	4%	165
<sup>2</sup> Speak English "well"	75	1%	205
<sup>3</sup> Speak English "not well"	102	2%	192
<sup>4</sup> Speak English "not at all"	40	1%	168
<sup>3+4</sup> Speak English "less than well"	142	2%	213
<sup>2+3+4</sup> Speak English "less than very well"	217	4%	295
<b>Linguistically Isolated Households*</b>			
Total	39	100%	168
Speak Spanish	37	95%	168
Speak Other Indo-European Languages	1	1%	29
Speak Asian-Pacific Island Languages	1	4%	58
Speak Other Languages	0	0%	12
<b>Households by Household Income</b>			
Household Income Base	2,432	100%	321
< \$15,000	255	11%	212
\$15,000 - \$25,000	176	7%	137
\$25,000 - \$50,000	722	30%	311
\$50,000 - \$75,000	391	16%	172
\$75,000 +	887	36%	246
<b>Occupied Housing Units by Tenure</b>			
Total	2,432	100%	321
Owner Occupied	1,519	62%	257
Renter Occupied	912	38%	310
<b>Employed Population Age 16+ Years</b>			
Total	5,097	100%	674
In Labor Force	3,631	71%	628
Civilian Unemployed in Labor Force	83	2%	105
Not In Labor Force	1,466	29%	281

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

\*Households in which no one 14 and over speaks English "very well" or speaks English only.



Location: User-specified point center at 34.278514, -77.864649

Ring (buffer): 1-miles radius

Description: Estrella Landing Apartments - EJScreen

	2015 - 2019 ACS Estimates	Percent	MOE (±)
<b>Population by Language Spoken at Home*</b>			
Total (persons age 5 and above)	3,524	100%	487
English	3,387	96%	526
Spanish	100	3%	262
French	0	0%	44
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	0	0%	17
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	21	1%	44
Chinese	0	0%	17
Japanese	N/A	N/A	N/A
Korean	0	0%	17
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	0	0%	17
Other Asian	0	0%	17
Tagalog	0	0%	17
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	0	0%	17
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	0	0%	17
Total Non-English	137	4%	717

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

\*Population by Language Spoken at Home is available at the census tract summary level and up.

Home Property Records **V** NHC Tax Home Register of Deeds

- Profile
- Sales
- Residential
- Commercial
- Misc. Improvements
- Permits
- Land
- Values
- Agricultural
- Sketch
- Full Legal
- Exemptions
- Sub-parcel(s) Info
- Original Parcel Info
- Parcel Map

PARID: R04300-001-007-000  
CLAY CHARLES ESSIE R L TRUST 4615 GORDON RD

Parcel

Alt ID	314914.24.9298.000
Address	4615 GORDON RD
Unit	
City	WILMINGTON
Zip Code	-
Neighborhood	F7C01
Class	RES-Residential
Land Use Code	958-Unused Land
Living Units	1
Acres	5.12
Zoning	R-15-RESIDENTIAL DISTRICT

Legal

Legal Description	TRACT B CLAY ESTATE
Tax District	FD

Owners (On January1st)

Owner	CLAY CHARLES ESSIE R L TRUST
City	WILMINGTON
State	NC
Country	
Zip	28411

THE DATA IS FROM 2021

1 of 1

**Actions**

- Printable Version
- Custom Report Builder

**Reports**

Residential PRC  
Commercial PRC



Go

**Links**

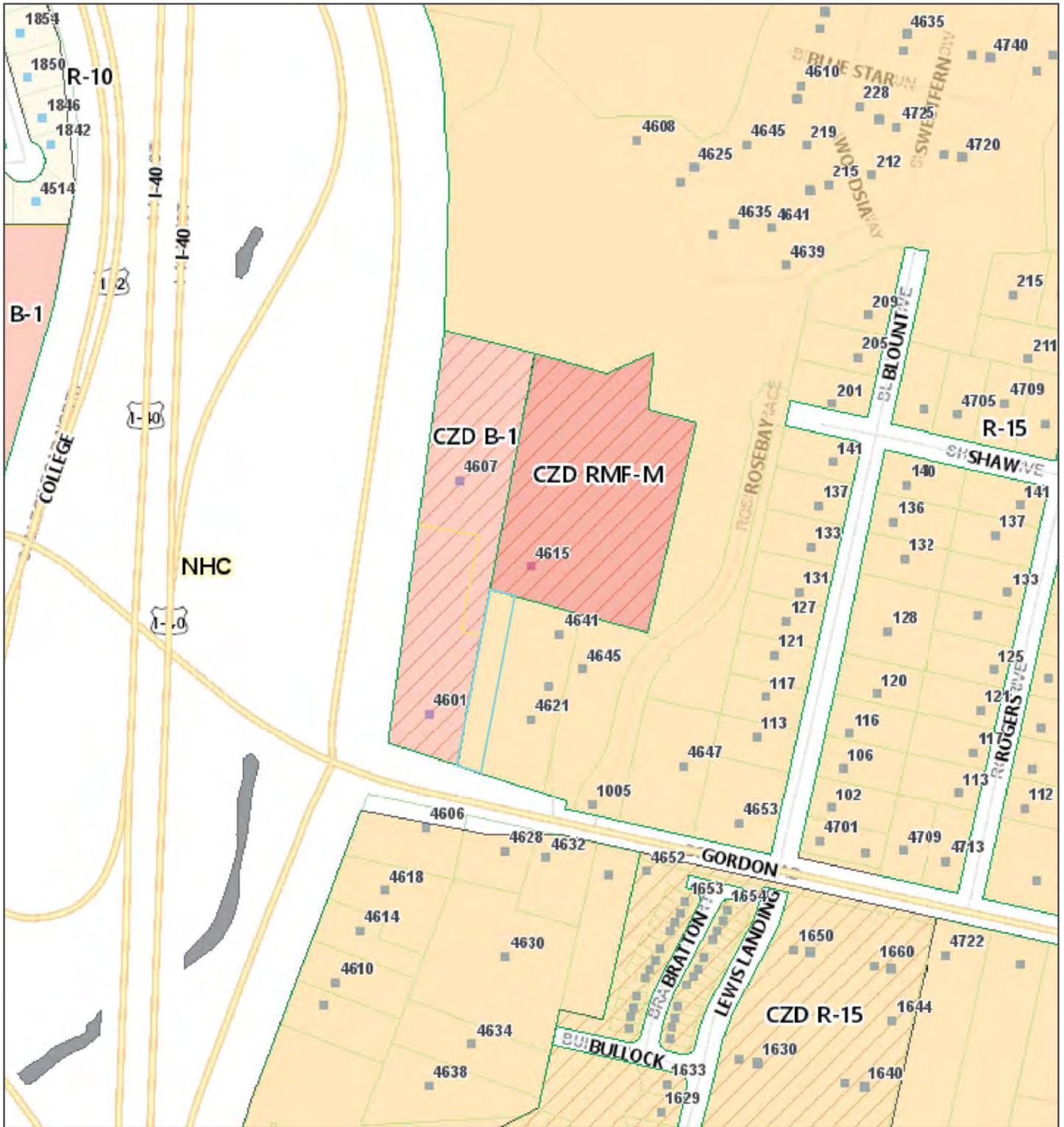
- Land Use Codes
- Tax Codes, Descriptions and Calc Formula
- Project # Assessment Descriptions

**Location** [Google Map](#)  
230 Government Center Drive, Suite 190  
Wilmington, NC 28403

**Contact Us**  
 Phone: (910) 798-7300  
 Fax: (910) 798-7310

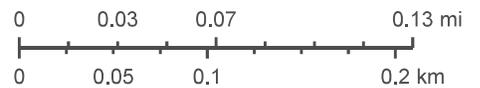
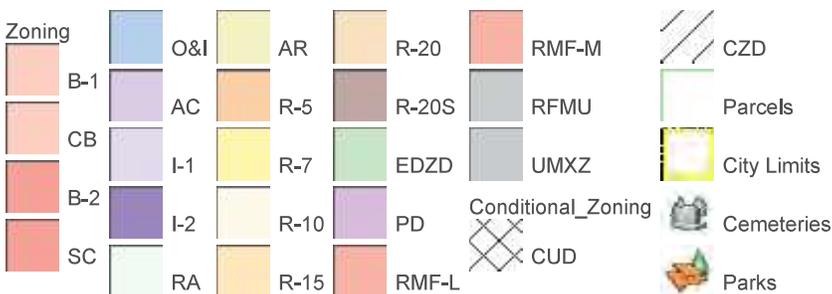
**Site Links**  
[NHC Tax Home](#)  
[Register of Deeds](#)

# Basic Map



9/14/2021, 1:36:57 PM

1:4,000



New Hanover County, NC, New Hanover County, NC

PARID: R04300-001-006-000  
WOOTEN CARRIE HEIRS ETAL

N/A

Parcel

Alt ID	314914.23.7837.000
Address	
Unit	
City	
Zip Code	-
Neighborhood	F7C06
Class	RES-Residential
Land Use Code	958-Unused Land
Living Units	
Acres	
Zoning	R-15-RESIDENTIAL DISTRICT

Legal

Legal Description	PARCEL SMITH CREEK /60' EASEMENT
Tax District	FD

Owners (On January1st)

Owner	WOOTEN CARRIE HRS ETAL
City	WINNABOW
State	NC
Country	
Zip	28479

THE DATA IS FROM 2021



# NEW HANOVER COUNTY

## PLANNING & LAND USE

230 Government Center Drive, Suite 110, Wilmington, NC 28403

P: (910) 798-7165 | F: (910) 798-7053 | [NHCgov.com](http://NHCgov.com)

**Rebekah Roth**, Director

April 28, 2021

Stephanie L. Norris  
Terroir Development, LLC  
P.O. Box 15025  
Wilmington, NC 28408

**RE: Z21-03 – Estrella Landing – Rezoning Approval**

Ms. Norris,

This letter verifies that the property located at 4615 Gordon Road, consisting of approximately 5.12 acres (Parcel ID# R04300-001-007-000), has been rezoned from R-15, Residential-15 District, to (CZD) RMF-M, Conditional Residential Multi-Family Moderate Density District. The Board of Commissioners approved the rezoning application at their April 5, 2021 meeting.

This approval allows for the construction of an 84-unit multi-family project on the site in accordance with the approved conceptual site plan and with the following conditions:

1. The development must be awarded Low-Income Housing Tax Credits through the North Carolina Housing Finance Agency.
2. Appropriate pavement markings shall be installed along the 60-foot access easement from Gordon Road to the subject site to identify two lanes of travel. In addition, no parking shall be permitted within the easement and “no parking” signs shall be installed in accordance with the North Carolina Fire Code.

Please note, prior to the commencement of construction activities, the project must be reviewed by the County’s Technical Review Committee and all applicable local, State, and Federal development permits must be obtained.

The Board’s Order and approved conceptual site plan are enclosed.

If you have any questions or concerns, please do not hesitate to contact me at (910) 798-7444 or [bschuler@nhcgov.com](mailto:bschuler@nhcgov.com).

Sincerely,

Brad Schuler, AICP  
Senior Planner

**AN ORDINANCE OF THE COUNTY OF NEW HANOVER  
AMENDING THE OFFICIAL ZONING MAP  
OF NEW HANOVER COUNTY, NORTH CAROLINA  
ADOPTED July 7, 1972 respectively and subsequently amended**

**CASE: Z21-03**

THE BOARD OF COMMISSIONERS OF NEW HANOVER COUNTY DOETH ORDAIN:

Section 1. The New Hanover County Zoning Map is hereby amended by removing the hereinafter described tract from a R-15, Residential 15, and placing it in a (CZD) RMF-M, Conditional Residential Multi-Family Moderate Density District, said land consisting of approximately 5.12 acres and being described legally as follows:

Being all of that certain tract, parcel, or lot of land in New Hanover County, North Carolina depicted as Tract "B" on that certain plat titled "Estate Map for Charles Clay & Wife Essie W. Clay" prepared by Thompson & Jones Surveying Company and recorded in Map Book 63, at Page 182 in the office of the Register of Deeds of New Hanover County on June 13, 2017.

Section 2. The County Clerk is hereby authorized and directed under the supervision of the County Commissioners to change the New Hanover County Zoning Map on file in the office of the County Commissioners, so as to make it comply with this ordinance.

Section 3. Any ordinance or any part of any ordinance in conflict with this ordinance, to the extent of such conflict, is hereby repealed.

Section 4. This ordinance is adopted in the interest of public health, safety, morals and general welfare of the inhabitants of the County of New Hanover, North Carolina and subject to the conditions also approved as part of this action, shall be in full force and effect from and after its adoption.

Section 5. The County Commissioners find, in accordance with the provisions of NCGS 160D that the zoning map amendment of approximately 5.12 acres of land from a R-15, Residential-15 District, and placing it in a (CZD) RMF-M, Conditional Residential Multi-Family Moderate Density District, is:

Inconsistent with the purposes and intent of the Comprehensive Plan because the project exceeds the density recommended for the General Residential place type. The County Commissioners also find approval of the rezoning request is reasonable and in the public interest because the proposal would provide an appropriate transition from a major thoroughfare to existing single-family housing, is consistent with the development pattern of the surrounding properties, and supports the County's goals of providing for a range of housing types and opportunities for households of different sizes and income levels.

Section 6. The County Commissioners find that all of the specific requirements set forth in Sections 3.2.13, and 10.3.3 of the County Unified Development Ordinance WILL be satisfied if the property is developed in accordance with the plans submitted to the County Commissioners and attached as part of this approval. IT IS ORDERED that the application for the issuance of a Conditional Residential Multi-Family District BE GRANTED subject to the following conditions:

- A. If any of the conditions imposed within this conditional zoning district shall be held invalid beyond the authority of this Board of Commissioners by a court of competent jurisdiction, then this district designation shall be reversed and the tract shall be rezoned in accordance with the process for map amendment outlined in Section 10.3.2 of the ordinance.

Section 7. The County Commissioners find that the zoning map amendment is inconsistent with the Comprehensive Plan; therefore, pursuant to NCGS 160D-605 the classification of the subject site shall be amended on the Future Land Use Map within the Comprehensive Plan from the General Residential place type and placing it in a Community Mixed Use place type.

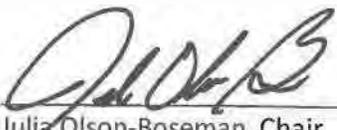
Section 8. In accordance with Section 10.3.3.C.7.c of the ordinance, revocation of the Conditional Zoning District approval may be considered if no building permit has been issued for the subject tract within two years of the date of this approval.

Section 9. The applicant shall fully comply with all of the specific requirements stated in the Ordinance for the proposed use; and all other state, federal and local rules; and any additional conditions hereinafter stated:

1. The development must be awarded Low-Income Housing Tax Credits through the North Carolina Housing Finance Agency.
2. Appropriate pavement markings shall be installed along the 60-foot access easement from Gordon Road to the subject site to identify two lanes of travel. In addition, no parking shall be permitted within the easement and "no parking" signs shall be installed in accordance with the North Carolina Fire Code.

Adopted the 5<sup>th</sup> day of April, 2021.

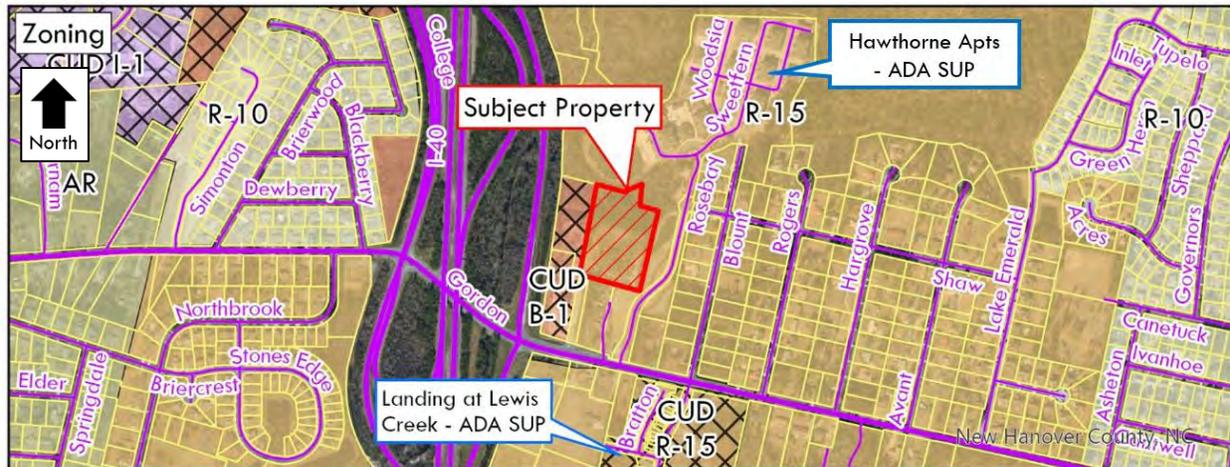


  
Julia Olson-Boseman, Chair

Attest:  
  
Kym Crowell, Clerk to the Board

# STAFF SUMMARY OF Z21-03 CONDITIONAL REZONING APPLICATION

APPLICATION SUMMARY	
<b>Case Number:</b> Z21-03	
<b>Request:</b> Rezoning to a Conditional RMF-M district	
<b>Applicant:</b> Stephanie Norris with Terroir Development, LLC	<b>Property Owner(s):</b> Charles R. Clay, Sr. and Essie W. Clay Revocable Living Trust
<b>Location:</b> 4615 Gordon Road	<b>Acreage:</b> 5.12
<b>PID(s):</b> R04300-001-007-000	<b>Comp Plan Place Type:</b> General Residential
<b>Existing Land Use:</b> Undeveloped	<b>Proposed Land Use:</b> Multi-Family
<b>Current Zoning:</b> R-15, Residential	<b>Proposed Zoning:</b> (CZD) RMF-M



ADA = Additional Dwelling Allowance Special Use Permit (SUP) for greater density than permitted by-right in base zoning district – formerly titled High Density SUP

SURROUNDING AREA		
	LAND USE	ZONING
<b>North</b>	Multi-Family Residential	R-15
<b>East</b>	Single-Family Residential	R-15
<b>South</b>	Single-Family Residential, Gas Station	R-15, (CUD) B-1
<b>West</b>	Storage, I-40	(CUD) B-1

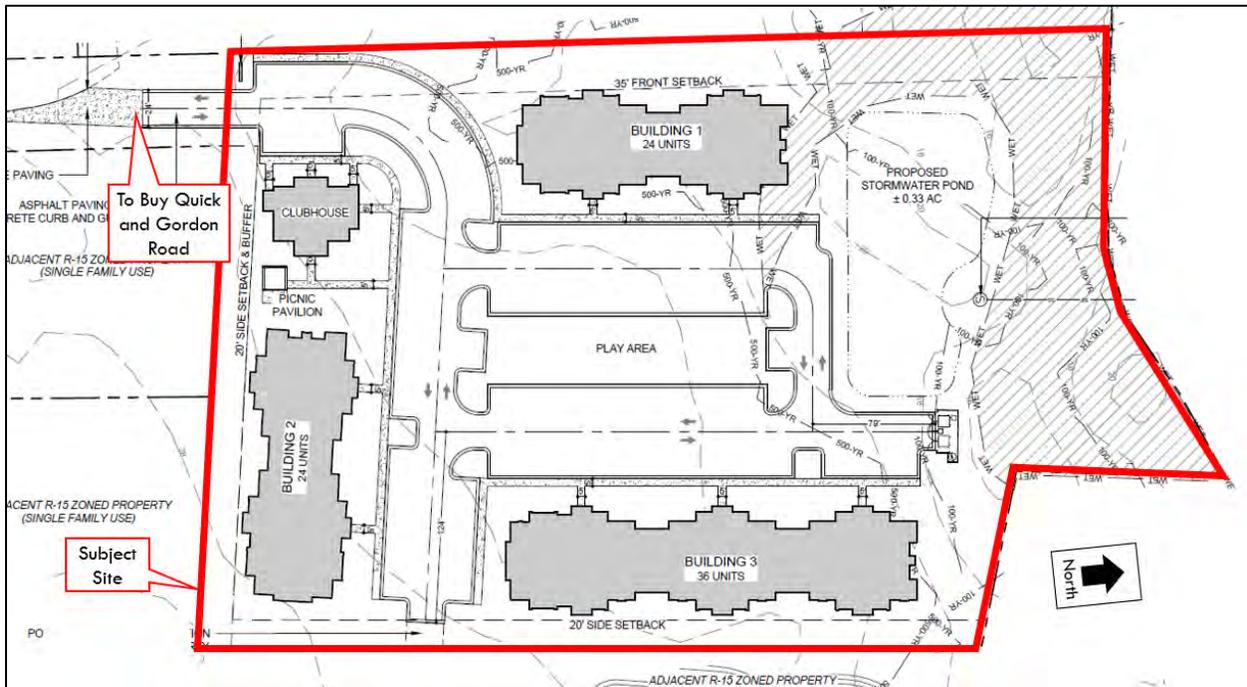


<b>ZONING HISTORY</b>	
<b>July 7, 1972</b>	Initially zoned R-15 (Area 8B)

<b>COMMUNITY SERVICES</b>	
<b>Water/Sewer</b>	Water and sewer services are available through CFPUA via mainline extension
<b>Fire Protection</b>	New Hanover County Fire Services, New Hanover County Northern Fire District, New Hanover County Murrayville Station
<b>Schools</b>	Murrayville Elementary, Trask Middle, and Laney High Schools
<b>Recreation</b>	Smith Creek Park, Parkwood Recreation Area, Ogden Park

<b>CONSERVATION, HISTORIC, &amp; ARCHAEOLOGICAL RESOURCES</b>	
<b>Conservation</b>	The Conservation Resources Map indicates that swamp forest wetlands may be present on the site. The applicant's conceptual site plan indicates that there are approximately 0.8 acres of wetlands on the site. Verification of regulated the wetlands will be required during the site plan review process. Conservation space is required for pocosin or swamp forest wetlands when at least five acres of the resource exists on the property.
<b>Historic</b>	No known historic resources
<b>Archaeological</b>	No known archaeological resources

## APPLICANT'S PROPOSED CONCEPTUAL PLAN



*Includes Staff Markups*

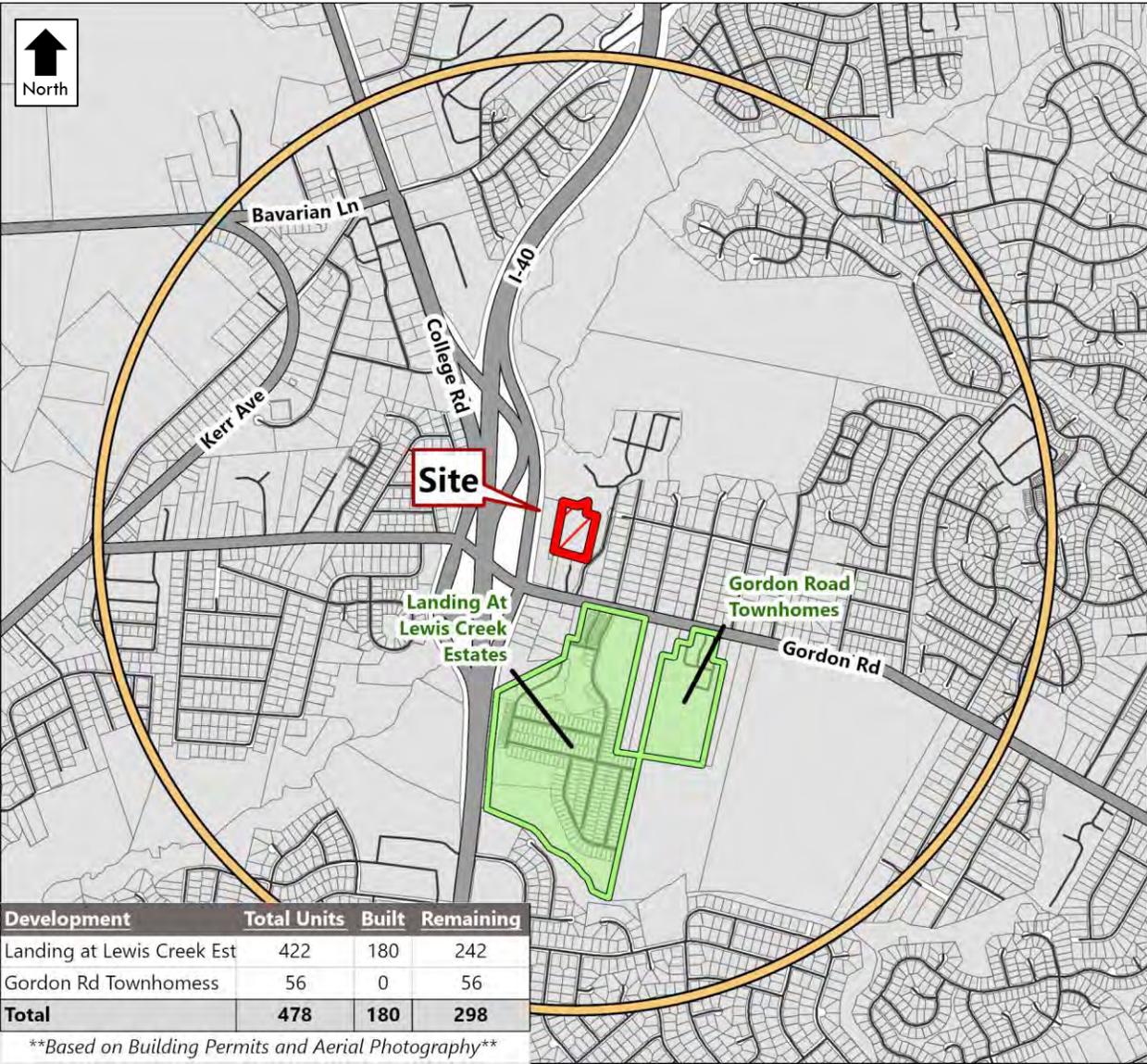
- The applicant is proposing to construct an 84-unit multi-family project. The units will be located within three buildings containing 24-36 units each. The buildings will be three stories with a maximum height of 45 feet.
- The applicant is seeking Low-Income Housing Tax Credits through the North Carolina Housing Finance Agency which would restrict the residents' incomes to under 80% area median income (AMI). In addition, 21 of the proposed units will be restricted to residents whose incomes are 30% or below AMI.
- The proposal would include about 1.7 acres of open space (34% of the site), which exceeds the County's requirement of providing 20% open space.

## ZONING CONSIDERATIONS

- The R-15 district in this area was established in 1972. At the time, the purpose of the R-15 district was to ensure that housing served by private septic and well would be developed at low densities. Since that time, water and sewer services have become available to the surrounding area; however, the Gordon Road corridor is mostly zoned for low density housing.
- While the R-15 district is the predominant zoning in the surrounding area, two nearby developments obtained special use permits to exceed the maximum density of the base zoning district of 2.5 du/ac (Hawthorne at Smith Creek Apts - 7.72 du/ac, and The Landing at Lewis Creek Estates - 5.15 du/ac).
- Under the County's performance residential standards, the site would be permitted up to 13 dwelling units at a density of 2.5 du/ac. The proposed 84 units equate to an overall density of 16.4 du/ac.

- In 2018, the Board of Commissioners approved a Special Use Permit application that would have allowed for the development of an indoor/outdoor recreation center on the subject site. That permit has since expired.

**AREA SUBDIVISIONS UNDER DEVELOPMENT**



## TRANSPORTATION

- Access is proposed to be provided to the subject property from Gordon Road, an NCDOT-maintained arterial street. The access is shared with the adjacent gas station and storage lot within an existing 60' access easement.



- The shared access does not permit left-out movements which requires motorists leaving the site seeking to travel east on Gordon Road to initially go west and then make a u-turn at the N. College Road intersection. This u-turn lane was recently extended with The Landing at Lewis Creek Estates development. According to the Traffic Impact Analysis (TIA) completed for that development, the N. College Road and Gordon Road intersection was estimated to operate at a "D" Level of Service (LOS) in 2021 when that project is expected to be completed.
- The applicant has also designed the site to allow for a future connection to Rosebay Terrace, a private road that accesses the neighboring Hawthorne at Smith Creek apartment complex. A connection to this road would allow motorists to travel to the signal on Gordon Road at Blount Drive, and for the neighboring residents to travel to the Buy Quick gas station without having to travel on Gordon. The applicant has reached out to the owners of the Hawthorne project to see if an agreement for the connection could be established.

- As currently zoned, it is estimated the site would generate about 14 trips during the peak hours if developed at the permitted density. The proposed development would increase the estimated number of peak hour trips by about 15-25 trips during the peak hours. However, according to the applicant, residents who are earning 30% or less than average median income (AMI) are typically seniors or persons with disabilities who either generally drive outside of the peak hours or rely on other modes of transportation.
- The estimated trip generation for the proposal is less than the recreation center approved for the site in 2018. That center was estimated to have generated around 50-60 trips during the peak hours.
- The estimated traffic generated from the site is under the 100 peak hour threshold that triggers the ordinance requirement for a Traffic Impact Analysis.

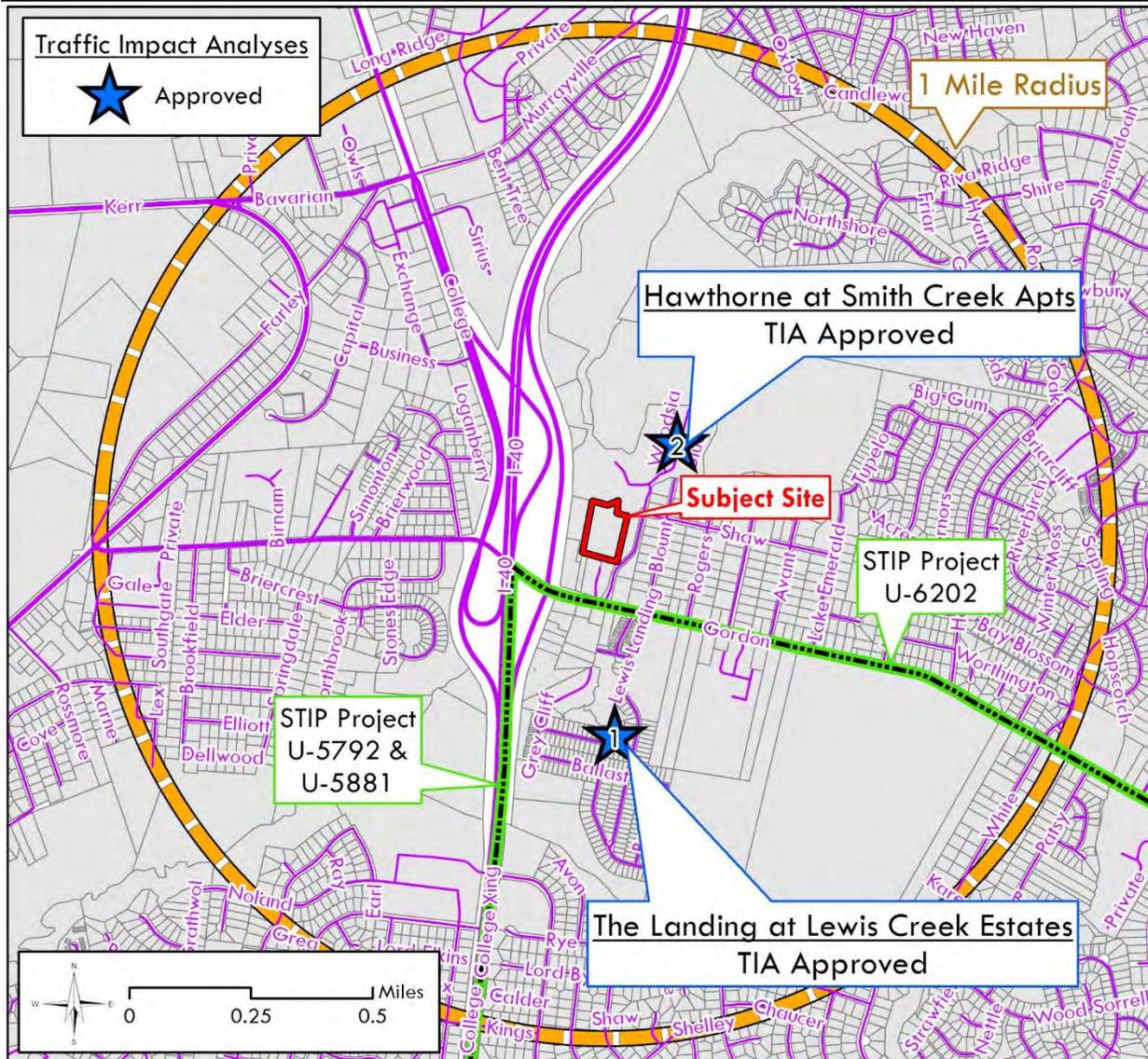
	<b>Intensity</b>	<b>Approx. Peak Hour Trips</b>
Existing Development:	Undeveloped	0 AM / 0 PM
Typical Development under Current Zoning:	13 Single-Family Dwellings	14 AM / 14 PM
Proposed Development:	84 Mid-Rise Multi-Family Units	29 AM / 37 PM

- Because a TIA is not required to analyze transportation impacts at this time, Staff has provided the volume to capacity ratio for the adjacent roadways near the subject site. While volume to capacity ratio, based on average daily trips, can provide a general idea of the function of adjacent roadways, the delay vehicles take in seconds to pass through intersections is generally considered a more effective measure when determining the Level of Service of a roadway.

***NCDOT Average Annual Daily Traffic (AADT) - 2019***

<b>Road</b>	<b>Location</b>	<b>Volume</b>	<b>Capacity</b>	<b>V/C</b>
Gordon Road	4400 Block	22,500	19,600	1.15

## Nearby Planned Transportation Improvements and Traffic Impact Analyses



### Nearby NC STIP Projects:

- STIP Project U-6202
  - Project to widen Gordon Road from the I-40 ramps to Market Street. The widening of Gordon Road will result in the road having four lanes and a center median. The project is currently scheduled to begin in the summer of 2024.
- U-5792 (College/MLK Interchange) & U-5881 (College Road Improvements)
  - Project to upgrade College Road from Gordon Road to New Centre Drive. NCDOT's recommended plans for these projects include converting certain intersections along College Road into interchanges, including at MLK Parkway and Kings Drive.
  - The College/MLK Interchange project is currently scheduled to begin in 2026 and the College Road Improvements projects is scheduled to begin after 2030.

**Nearby Traffic Impact Analyses:**

Traffic Impact Analyses are completed in accordance with the WMPO and NCDOT standards. Approved analyses must be re-examined by NCDOT if the proposed development is not completed by the build out date established within the TIA.

Proposed Development	Land Use/Intensity	TIA Status
<b>1. The Landing at Lewis Creek</b>	<ul style="list-style-type: none"> <li>• 207 single-family dwellings</li> <li>• 40 townhome units</li> <li>• 192 multi-family units</li> </ul>	<ul style="list-style-type: none"> <li>• TIA approved September 6, 2017</li> <li>• 2021 Build Out Year</li> </ul>
<p>The TIA requires improvements be completed at certain intersections in the area. The notable improvements consisted of:</p> <ul style="list-style-type: none"> <li>• Extension of the northbound turn lane on Gordon Road and North College Road/1-40 westbound ramps.</li> <li>• Extension of the existing westbound left-turn lane and extend the existing southbound left turn lane on Gordon road and North College Road/1-40 eastbound Ramps.</li> <li>• Signalization of the intersection of Gordon and Blount Drive (site access). Installation of a westbound-left turn lane on Gordon Road and eastbound right-turn lane on Gordon Road at the site access.</li> </ul>		
<p><u>Nearby Proposed Developments included within the TIA:</u></p> <ul style="list-style-type: none"> <li>• Gordon Road Buy Quick</li> </ul>		
<p><b>Development Status: 190 lots have been platted at this time. Currently all roadway improvements have been completed.</b></p>		

Proposed Development	Land Use/Intensity	TIA Status
<b>2. Smith Creek Village Development</b>	<ul style="list-style-type: none"> <li>• 318 multi-family units</li> </ul>	<ul style="list-style-type: none"> <li>• TIA approved February 7, 2019</li> <li>• 2020 Build Out Year</li> </ul>
<p>The TIA requires improvements be completed at certain intersections in the area. The notable improvements consisted of:</p> <ul style="list-style-type: none"> <li>• At site access construction of a right-in/right-out only access and stop control for egress traffic.</li> <li>• Installation of a westbound right-turn lane and southbound left-turn lane at Gordon Road and Blount Drive.</li> </ul>		
<p><u>Nearby Proposed Developments included within the TIA:</u></p> <ul style="list-style-type: none"> <li>• The Landing at Lewis Creek Estates Subdivision</li> </ul>		
<p><b>Development Status: Completed. All roadway improvements have been completed.</b></p>		

## ENVIRONMENTAL

- The property contains an AE Special Flood Hazard Area along the northern boundary, however, no buildings are proposed within it.
- The property does not contain any Natural Heritage Areas.
- The property is within the Smith Creek (C;Sw) watershed.
- Per the Classification of Soils in New Hanover County for Septic Tank Suitability, soils on the property consist of Class II (moderate limitation), Class III (severe limitation), and Class IV (unsuitable) soils. However, the site is expected to be served by CFPWA when developed.

## OTHER CONSIDERATIONS

### SCHOOLS

- Students living in the proposed development would be assigned to Murrayville Elementary School, Trask Middle School, and Laney High School. Students may apply to attend public magnet, year-round elementary, or specialty high schools.
- A maximum of 13 dwelling units would be permitted under the current R-15 zoning base density, and 84 units could potentially be developed under the proposed zoning for an increase of 71 dwelling units.
- Based on a generalized historic generation rate\*, staff would estimate that the increase in homes would result in approximately 18 additional students than would be generated under current zoning. However, affordable housing developments may be more likely to provide housing for families with school-age children, so the proposed rezoning may generate more students than would be estimated using the historic generation rate.

<i>Development Type</i>	<i>Intensity</i>	<i>Estimated Student Generation (generalized historic student generation rate)*</i>
Existing Development	Undeveloped	Total: 0 (0 elementary, 0 middle, 0 high)
Typical Development under Current R-15 Zoning	13 residential units	Total: 2 (1 elementary, 0 middle, 1 high)
Proposed (CZD) RMF-M Zoning	84 residential units	Total: 20 (9 elementary, 4 middle, 6 high)

\* Generalized historic generation rates are calculated by dividing the projected New Hanover County public school student enrollment for the 2020-2021 school year by the estimated number of dwelling units in the county. Currently, there are an average of 0.24 public school students (0.11 for elementary, 0.05 for middle, and 0.08 for high) generated per dwelling unit across New Hanover County. These numbers are updated annually and include students attending out-of-district specialty schools, such as year-round elementary schools, Isaac Bear, and SeaTECH. Generation rates do not take into account different housing types and different locations, which typically yield different numbers of students.

- Since the proposed development is likely to have a build-out date within 5 years, staff has outlined existing school capacity to provide a general idea of the potential impact on public schools.
- These numbers do not reflect any future capacity upgrades that may occur over the next five years or changes to student populations.

**School Enrollment\* and Capacity\*\* - 2020-2021 Estimates**

Level	Total NHC % Capacity	School	Enrollment of Assigned School	Capacity of Assigned School w/ Portables	% of Capacity of Assigned School	Funded Capacity Upgrades
Elementary	97%	Murrayville	526	643	82%	None
Middle	107%	Trask	717	662	108%	None
High	105%	Laney	2,063	1,903	108%	None

\* Enrollment is based on the New Hanover County Schools enrollment that was projected for the 2020-2021 school year.

\*\* Capacity calculations were determined by New Hanover County Schools for the 2020-2021 school year and are based on NC DPI Facility Guidelines & Class Size Requirements. Modifications refer to specific program requirements unique to a particular school. These may include exceptional children’s classrooms beyond the original building design, classrooms to serve a unique population such as ESL, or classrooms designated for art and music if the building wasn’t specifically designed with those spaces.

- School staff presented a facility needs survey to the Board of Education on January 5, 2021 that included updated NC Department of Public Instruction student growth projections and school capacity data. While Planning staff does not yet have information specific to the projected enrollment and capacity of the schools that would be affected by this request, it appears that planned facility upgrades, combined with changes to student enrollment patterns, will result in adequate capacity district-wide over the next five years if facility upgrades are funded.

**NEW HANOVER COUNTY STRATEGIC PLAN**

- One of the goals of the New Hanover County Strategic Plan for 2018-2023 is to encourage the development of complete communities in the unincorporated county by increasing housing diversity and access to basic goods and services.
- The proposed RMF-M zoning district would allow for an increase in housing diversity and would allow those residents to utilize existing goods and services within one mile of the subject property.
- The predominant housing type is single family detached at 76%. Under the proposed RMF-M district the site would allow for multi-family (apartments) and increase housing type diversity by reducing the percentage of single family detached (76% to 74%), and increasing the percentage of multi-family residences (21% to 22%).
- In addition to increasing the housing type diversity of the community, the proposal would also provide housing at more affordable price points for residents earning less than 80% area median income (AMI). Income-restricted affordable housing, like the proposed LIHTC project, that are located in complete communities can create a more equitable, integrated and diverse community. The County is finalizing the Comprehensive Housing Study which will provide an assessment of the significant characteristics of the current housing market in order to better identify needed housing price points. Currently, the number of rental units in the County serving the population at these income levels is limited.

- The subject property is located in the Gordon Road community area, where 30% of residents currently live within one-mile of a convenience need (grocery store, retail staples, pharmacies, etc.), a support service (urgent care, primary doctor’s office, child & adult care, etc.), and a community facility (public park, school, museum etc.). The proposed RMF-M district would increase the number of residences within one-mile of goods and services (30% to 31%).

**REPRESENTATIVE DEVELOPMENTS**

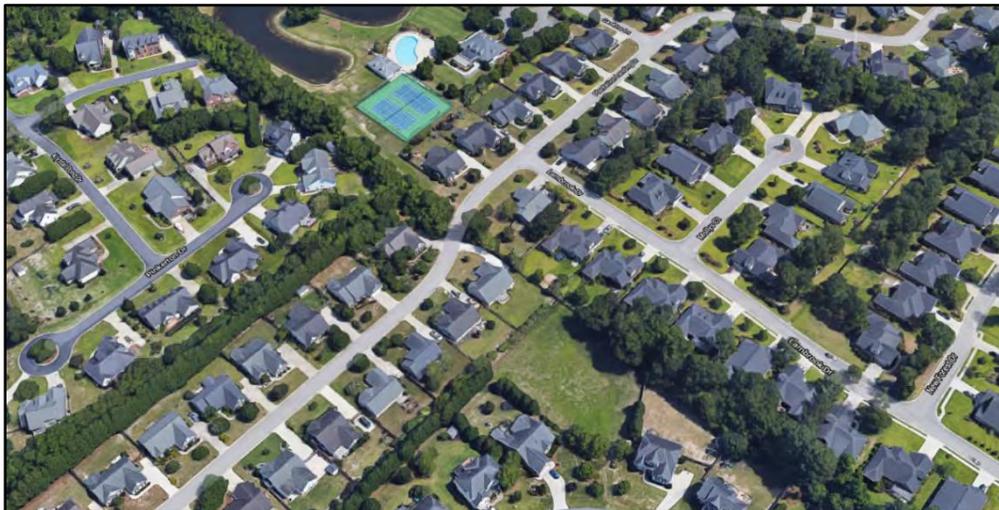
Representative Developments of R-15:



*Grayson Park*



*Clay Crossing*



*Plantation Landing*

Representative Developments of RMF-M:



*Amberleigh Shores*



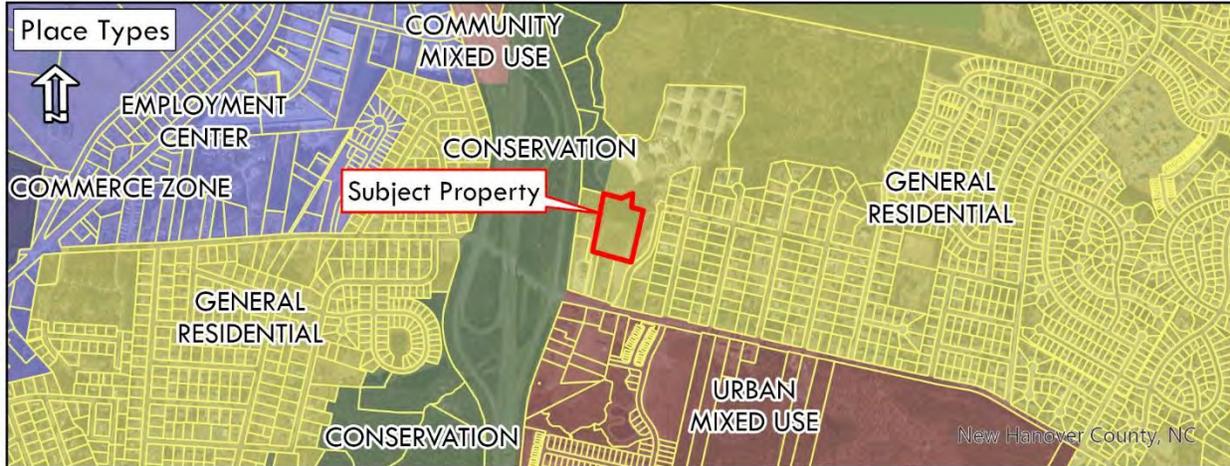
*Parks at Three Oaks*

**Context and Compatibility**

- The property is located adjacent the Gordon Road/I-40 interchange and shares access with an existing gas station and storage lot.
- The timing of the Gordon Road widening project has been accelerated and is now scheduled to begin in 2024.
- Two nearby residential developments have obtained a Special Use Permit to exceed the maximum density of the base residential zoning district and include multi-family housing.
- Due to the location and surrounding development pattern, the property is less likely to be developed with low density housing. The last development proposal for the site was for a recreation facility, for which a Special Use Permit was approved in 2018.

**2016 COMPREHENSIVE PLAN**

The New Hanover County Future Land Use Map provides a general representation of the vision for New Hanover County’s future land use, as designated by place types describing the character and function of the different types of development that make up the community. These place types are intended to identify general areas for particular development patterns and should not be interpreted as being parcel specific.



<b>Future Land Use Map Place Type</b>	General Residential
<b>Place Type Description</b>	Focuses on lower-density housing and associated civic and commercial services. Typically, housing is single-family or duplexes. Commercial uses should be limited to strategically located office and retail spaces, while recreation and school facilities are encouraged throughout. Types of uses include single-family residential, low-density multi-family residential, light commercial, civic, and recreational.
<b>Analysis</b>	<p>The subject parcel is located along Gordon Road just east of the I-40 and Gordon Road interchange. The site is adjacent to a Buy Quick gas station, an outdoor boat storage facility, and the Hawthorne at Smith Creek apartments. The proposed development will share access to Gordon Road with the Buy Quick gas station and the outdoor boat storage facility.</p> <p>This area was designated as General Residential due to the primarily lower density residential development pattern along the Gordon Road corridor toward Market Street. Although non-residential and multi-family projects were approved and permitted in this area prior to the adoption of the Comprehensive Plan in 2016, these types of low intensity commercial and low-density multi-family uses could be appropriate in a variety of place types, including General Residential.</p> <p>As proposed, the density of this multi-family project is not consistent with the General Residential place type because it exceeds the density range of up to eight units per acre outlined for General Residential areas. However, the proposed project assists in meeting the goals of the Comprehensive Plan by providing affordable housing for residents with fewer existing housing</p>

	<p>options and by establishing higher densities along major roadways that provide a transition of densities and intensities. In this case, the project is located adjacent to an existing commercial development which allows direct access to a major arterial roadway and creates an orderly transition by placing higher density multi-family between the high intensity Interstate corridor where low density single-family housing is less likely to be developed and the existing low intensity residential uses along Gordon Road</p> <p>The General Residential place type may no longer be an appropriate designation in this area because the existing commercial and multi-family projects and close proximity to a major roadway suggest the need for higher densities. Generally, the Comprehensive Plan designates areas along major roadways with higher residential densities and a mix of uses as Community Mixed Use in order to allow for the orderly transition of densities and intensities. This place type also focuses on small-scale, compact mixed-use development patterns. This type of development pattern would assist with providing opportunities for affordability and a range of housing types, opportunities, and choices.</p> <p>In situations when the Board of Commissioners approve a request that is found to be inconsistent with the Comprehensive Plan, state statutes require a statement approving the request and a declaration that the plan be amended concurrently to reflect the specific place type that is most similar to the proposed development. The statement must also include an explanation of the change in conditions in the area that were taken into account in the decision.</p>
<p><b>Consistency Recommendation</b></p>	<p>The proposed development is <b>INCONSISTENT</b> with the General Residential place type because the proposed density is greater than the maximum density recommended for this place type.</p> <p>However, staff is supportive of the proposed development as it is aligned with the goals of the Comprehensive Plan for providing affordable housing and creating complete communities. It is also aligned with the Comprehensive Plan’s intent of providing an orderly transition of uses from higher intensity to lower intensity areas and providing for a range of housing types. The proposed moderate density multi-family housing is also consistent with the existing development pattern of the surrounding area.</p> <p>As state law dictates, if the rezoning were to be approved even though inconsistent with the Comprehensive Plan, the Plan must be concurrently amended to reflect the specific place type that is most similar to the proposed development.</p> <p>Therefore, it is staff's recommendation to amend the place type for the subject site to Community Mixed Use because the proposal is in line with the recommended density of the place type. This place type is also more appropriate for the area because single-family homes are less likely to be built immediately adjacent to major thoroughfares, and because it would encourage the development of projects that would provide a buffer and serve as a transition to the existing single-family residences along Gordon Road.</p>

## STAFF RECOMMENDATION

Staff recommends approval of the proposal and the reclassification the subject site from General Residential to Community Mixed Use. Staff suggests the following motion:

I move to **APPROVE** the proposed rezoning to a Conditional RMF-M district. While I find it to be **INCONSISTENT** with the purposes and intent of the Comprehensive Plan because the project exceeds the density recommended for the General Residential place type, I find **APPROVAL** of the rezoning request is reasonable and in the public interest because the proposal would provide an appropriate transition from a major thoroughfare to existing single-family housing, is consistent with the development pattern of the surrounding properties, and supports the County's goals of providing for a range of housing types and opportunities for households of different sizes and income levels.

In accordance with the North Carolina General Statutes, I move to reclassify the property from the General Residential place type to the Community Mixed Use place type. I find the proposal is consistent with the recommended building types and densities of the Community Mixed Use classification. In addition, the Community Mixed Use classification would encourage the development of projects that would better serve as a transition between a major thoroughfare and single-family housing.

[Optional] Note any conditions to be added to the district:

1. The development must be awarded Low-Income Housing Tax Credits through the North Carolina Housing Finance Agency.
2. Appropriate pavement markings shall be installed along the 60-foot access easement from Gordon Road to the subject site to identify two lanes of travel. In addition, no parking shall be permitted within the easement and "no parking" signs shall be installed in accordance with the North Carolina Fire Code.

### Alternative Motion for Denial

I move to **DENY** the proposed rezoning to a Conditional RMF-M district. I find it to be **INCONSISTENT** with the purposes and intent of the Comprehensive Plan because the proposal exceeds the density recommended for the General Residential place type. I also find **DENIAL** of the rezoning request is reasonable and in the public interest because the proposal is not consistent with the desired character of the surrounding community and the density will adversely impact the adjacent neighborhoods.

**REPORT OF COMMUNITY MEETING REQUIRED BY NEW HANOVER COUNTY  
FOR CONDITIONAL ZONING DISTRICT REZONING REQUEST**

TO: DEPARTMENT OF PLANNING & LAND USE

RE: ESTRELLA LANDING  
4615 GORDON ROAD

CASE NO.: Z21-03

PROPOSED ZONING: CONDITIONAL ZONING RMF-M

The undersigned hereby certifies that written notice of a community information meeting with a proposed site plan and architectural building elevation for the above referenced zoning case was sent on February 8, 2021, to adjacent owners via USPS first class mail. A list of the adjacent owners is attached to this Report. A copy of the notice with attachments was also provided to the County Planning Staff.

Due to the ongoing limitations on large gatherings, as a result of the COVID-19 pandemic, the meeting was held via a Zoom link on Monday, February 22, 2021, at 5:00 PM.

Requests for the Zoom link were received from the following residents, which was sent via email reply to each person individually:

- Karen Beatty                      4618 Gordon Road
- L'Toynya Messick                5935 Rowsgate Lane
- Robert Parr
- Liz Carbone

The persons who joined the Zoom call were:

- Tim Clinkscales, PE              Paramounte Engineering, Inc.
- Jim Cirello, RLA                  Paramounte Engineering, Inc.
- Brad Schuler                      County Planning & Land Use
- Rachel LaCoe                      County Planning & Land Use

None of the residents chose to attend the Zoom meeting. As of the date of this Report, we have not received any comments from residents. As a result, no changes to the rezoning petition or site plan are anticipated at this time.

DATE: February 24, 2021

APPLICANT: Terroir Development, LLC

BY: Stephanie L. Norris, Managing Member

Enclosed:      List of Adjacent Owners  
                 Meeting Notice with Attachments  
                 Email Correspondence with Residents

Owner	Owner_Address	Owner_City
1. ALLEN CHARLES WILSON	120 HARGROVE DR	WILMINGTON, NC 28405
BANISTER WILLIAM K SANDRA DELAINE	1014 KINGS GRANT RD	WILMINGTON, NC 28405
BRIGGS DESHON JOHANNA THATCH	133 BLOUNT DR	WILMINGTON, NC 28411
BRUNSON RONALD A TIFFANY C ETAL	205 BLOUNT DR	WILMINGTON, NC 28411
5. CLAY CHARLES ESSIE R L TRUST	4618 GORDON RD	WILMINGTON, NC 28411
CLINTON ROBERT LOTTIE E	127 BLOUNT DR	WILMINGTON, NC 28405
EVANS ROBERT JR ETAL	1054 LEXINGTON AVE	LELAND, NC 28451
GARCIA SANTIAGO V	4653 GORDON RD	WILMINGTON, NC 28411
GARRISON WADE DOROTHY F	9802 ROSEWALK DR	HIGHLANDS RANCH, CO 80129
10. GISSIN JACOB ETAL	136 BLOUNT DR	WILMINGTON, NC 28411
GORDON 4601 LLC	3811 COTTONWOOD DR	DURHAM, NC 27705
GORDON ROAD INVESTMENTS LLC	PO BOX 10189	WILMINGTON, NC 28404
HANSLEY ELIGH HRS	106 BLOUNT DR	WILMINGTON, NC 28405
HAWTHORNE AT SMITH CREEK APARTMENTS LLC	806 GREEN VALLEY RD SUITE 311	GREENSBORO, NC 27408
HAWTHORNE AT SMITH CREEK APARTMENTS LLC	806 GREEN VALLEY RD SUITE 311	GREENSBORO, NC 27408
HAWTHORNE AT SMITH CREEK APARTMENTS LLC	806 GREEN VALLEY RD SUITE 311	GREENSBORO, NC 27408
15. HOWIE SAMUEL JOSEPH III	4701 SHAW DR	WILMINGTON, NC 28405
HUGIE JANICE	128 BLOUNT DR	WILMINGTON, NC 28405
LIVINGSTON JANIS S	137 BLOUNT DR	WILMINGTON, NC 28411
LOMAX HOMES LLC	520 GREEN HERON DR	WILMINGTON, NC 28411
MASSEY JACQUELINE	141 BLOUNT DR	WILMINGTON, NC 28405
20. MCGLENN WILLIAM A HENRIETTA W	4647 GORDON RD	WILMINGTON, NC 28405
MCQUEEN PEARL N	209 BLOUNT DR	WILMINGTON, NC 28411
MESSICK WARRELL L SR LTONYA M	5935 ROWSGATE LN	WILMINGTON, NC 28411
NESBITT TOMMY L PHYLLIS E	201 BLOUNT DR	WILMINGTON, NC 28405
SANCHEZ ESAU R	140 BLOUNT DR	WILMINGTON, NC 28405
25. TRASK DANIEL W JULIA	6336 OLEANDER DR SUITE 1	WILMINGTON, NC 28403
TRASK DANIEL W JULIA C	6336 OLEANDER DR SUITE 1	WILMINGTON, NC 28403
WICKER JAMES A	8600 BALD EAGLE LN	WILMINGTON, NC 28411
27. WOOTEN CARRIE HRS ETAL	4295 RIVER RD	WINNABOW, NC 28479

# TERROIR DEVELOPMENT, LLC

P.O. BOX 15025 ♦ WILMINGTON, NORTH CAROLINA 28408 ♦ OFFICE 910.791.3354

February 8, 2021

Adjacent & Nearby Property Owners

**RE: ESTRELLA LANDING – COMMUNITY INFORMATION MEETING NOTICE**  
**4615 Gordon Road, Wilmington, NC**  
**(Tax Parcel No. R04300-001-007-000)**

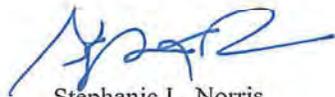
Dear Neighbors:

We have planned a Community Information Meeting for all interested Property Owners adjacent or near the vacant parcel located at 4615 Gordon Road (Tax Parcel No. R04300-001-007-000). The subject property is owned by the Charles R. and Essie W. Clay Revocable Trust and within the New Hanover County Planning and Zoning District. Terroir Development is seeking to rezone the property from its current R-15 Zoning District to Conditional Zoning Residential Multi-Family – Moderate Density (CZ-RMF-M) Zoning District for the purpose constructing 84 apartment units to be known as Estrella Landing. A Conditional Zoning District establishes specific standards and conditions, which bind the proposed development to the use, unit count, architectural elements, and layout represented in the rezoning request. A Site Plan illustrating the proposed development is attached to this Notice for your review.

The proposed development is within the General Residential classification of the Future Land Use Plan and will be an appropriate transition between Hawthorne at Smith Creek, a R-15 High Density apartment community, and the Buy Quick Convenience Store, a B-1 intense commercial use. The new apartments will be a mix of 1, 2 and 3-Bedroom Units within 3 residential buildings. Attached for reference is the proposed Building Elevation representative of the residential buildings. The Clubhouse will include a Site Manager office and interior community space for residents. A playground and covered picnic area will also be provided as exterior community space. The close proximity of the I-40 / Gordon Road interchange offers residents convenient access to employment opportunities and services throughout the county and beyond.

Due to the COVID-19 pandemic, and in strict adherence to CDC Guidelines, the Community Information Meeting will be held via a **Zoom meeting at 5PM on February 22, 2021**. To register for this meeting, please email [snorris@norcomanagement.com](mailto:snorris@norcomanagement.com) with “Estrella Landing Zoom Registration” in the subject line no later than February 18. Once your email registration has been received, a link for the meeting will be sent to you via a reply email. We look forward to discussing the plans with you and answering your questions. Thank you.

Kind regards,



Stephanic L. Norris  
Managing Member

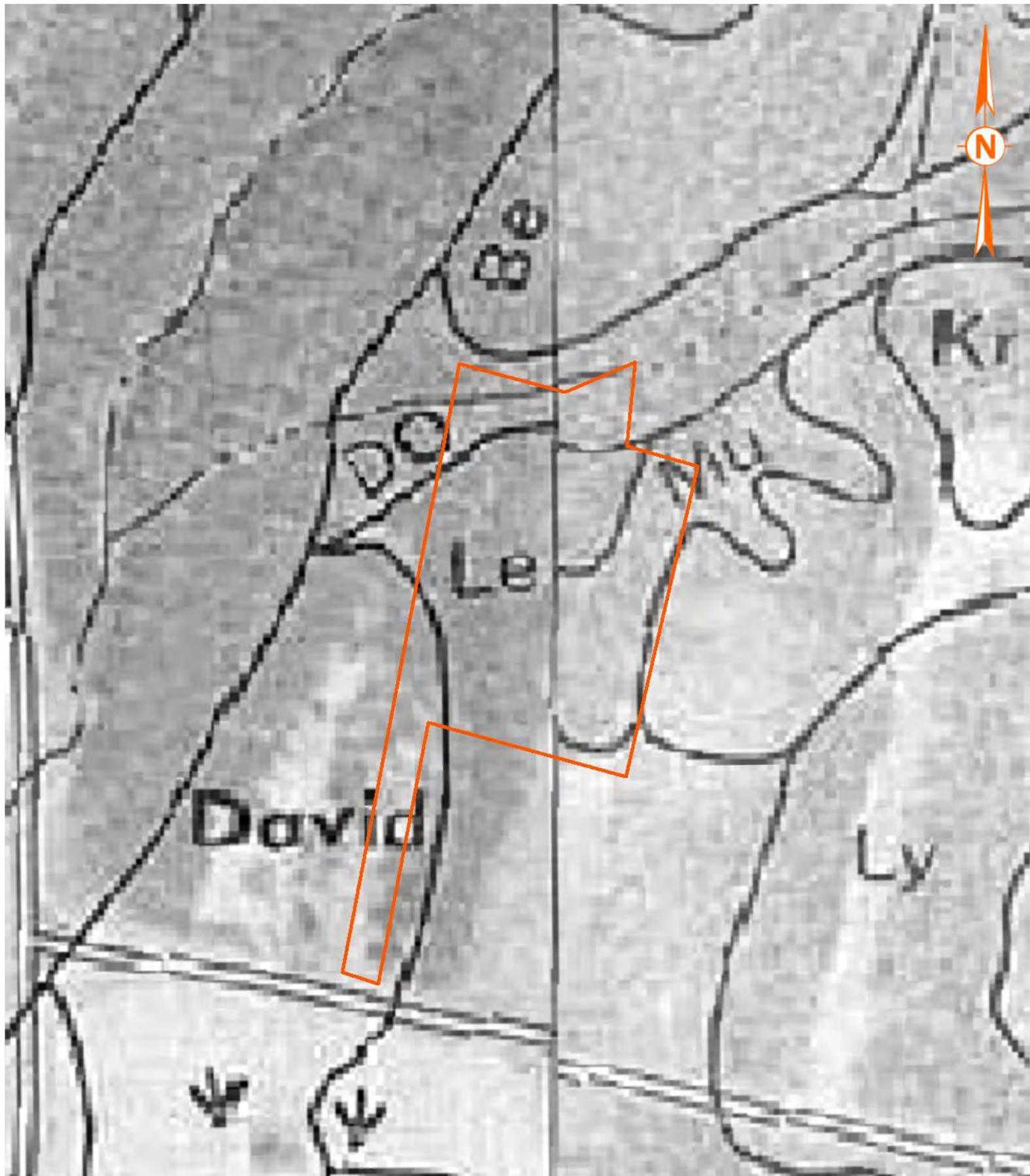
Attachments



**Drawing A**  
Online Soils Survey Map  
Not to Scale



**Online Soils Survey Map**  
Estrella Landing  
Approximate 5.71-Acre Tract  
Wilmington, New Hanover County, NC  
Pilot Project 7249



**Drawing B**  
Published Soils Map  
New Hanover County, NC Soil Survey  
  
Not to Scale



**Published Soils Map**  
Estrella Landing  
Approximate 5.71-Acre Tract  
Wilmington, New Hanover County, NC  
Pilot Project 7249



# Geotechnical Engineering Report

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**Estrella Landing  
Wilmington, NC**

March 8, 2022

Terracon Project No. 72215149



**Prepared for:**

Terroir Development, LLC  
Wilmington, NC

**Prepared by:**

Terracon Consultants, Inc.  
Wilmington, North Carolina



March 8, 2022

Terroir Development, LLC  
PO Box 15025  
Wilmington, NC 28408



Attn: Ms. Stephanie Norris, P.E.  
P: (910) 791-3354  
E: snorris@norcomanagement.com

Re: Geotechnical Engineering Report  
Estrella Landing  
4615 Gordon Road  
Wilmington, NC  
Terracon Project No. 72215149

Dear Ms. Norris:

We have completed the Geotechnical Engineering services for the above referenced project. This study was performed in general accordance with Terracon Proposal No. P72215149 dated January 10, 2022. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of foundations, grade slabs, and pavements for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

**Terracon Consultants, Inc.**

Justin L. DeNicola, P.E.  
Project Engineer  
Registered, NC 046129

James (Jim) D. Hoskins, III, P.E.  
Senior Principal – Office Manager



## REPORT TOPICS

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**Note:** This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the **GeoReport** logo will bring you back to this page. For more interactive features, please view your project online at [client.terracon.com](http://client.terracon.com).

## ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES  
PHOTOGRAPHY LOG  
SITE LOCATION AND EXPLORATION PLANS  
EXPLORATION RESULTS  
SUPPORTING INFORMATION

**Note:** Refer to each individual Attachment for a listing of contents.

## REPORT SUMMARY

Topic <sup>1</sup>	Overview Statement <sup>2</sup>
<b>Project Description</b>	Plans for the project include construction of a new apartment community with associated parking, drives, and a stormwater pond. Structures will include a single-story community building and three, three-story apartment buildings. The site will be accessed from the south via an existing access drive.
<b>Geotechnical Characterization</b>	The exploration encountered very loose to medium dense sandy soils in the upper 15 to 20 feet underlain by an approximately 10 to 15-foot-thick very soft to soft elastic silt layer. Medium dense to very dense sands were encountered beneath the elastic silt layer. Groundwater was encountered at depths ranging from 1 to 6 feet below existing grades.
<b>Geotechnical Overview</b>	Isolated subgrade repairs of very loose near surface sands not improved by vibratory rolling may be required in the areas of B-4, B-5, B-7, and B-17. Groundwater control will likely be required for deeper utility excavations and over-excavation of lower strength soils, where required.
<b>Earthwork</b>	After stripping topsoil, the exposed subgrade soils in the building and pavement footprints should be densified in place using a medium weight vibratory roller. The purpose of the vibratory rolling is to densify the exposed subgrade soils for grade slab and pavement support and to potentially improve the foundation bearing soils.
<b>Shallow Mat Foundations</b>	Allowable bearing pressure: <ul style="list-style-type: none"> <li>○ 1,500 psf for thickened slab foundations (turn-downs)</li> <li>○ 1,000 psf overall in distributed slab areas</li> </ul> Expected settlements: < 1-inch total, < 2/3 -inch differential
<b>Pavements</b>	With subgrade prepared as noted in <b>Earthwork</b> . Concrete: <ul style="list-style-type: none"> <li>■ 5 inches Portland Cement Concrete (PCC) over 4 inches granular base in Light Duty areas</li> <li>■ 6 inches PCC over 4 inches granular base in Medium Duty areas</li> <li>■ 8 inches PCC over 4 inches granular base in Heavy Duty areas</li> </ul> Asphalt: <ul style="list-style-type: none"> <li>■ 3 inches Asphaltic Concrete (AC) over 6 inches granular base in Light Duty areas</li> <li>■ 3 inches AC over 8 inches granular base in Medium Duty areas</li> </ul>
<b>General Comments</b>	This section contains important information about the limitations of this geotechnical engineering report.

1. If the reader is reviewing this report as a pdf, the topics above can be used to access the appropriate section of the report by simply clicking on the topic itself.
2. This summary is for convenience only. It should be used in conjunction with the entire report for design purposes.

# Geotechnical Engineering Report

Estrella Landing

4615 Gordon Road

Wilmington, NC

Terracon Project No. 72215149

March 8, 2022

## INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed Estrella Landing apartment project to be located at 4615 Gordon Road in Wilmington, NC. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Excavation considerations
- Stormwater considerations
- Foundation design and construction
- Grade slab design and construction
- Seismic site classification per IBC
- Pavement design and construction

The geotechnical engineering Scope of Services for this project included the advancement of 22 test borings to depths ranging from approximately 5.8 to 50 feet below existing site grades.

Maps showing the site and boring locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring logs and as separate graphs in the **Exploration Results** section.

## SITE CONDITIONS

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The project site is located at 4615 Gordon Road in Wilmington, NC. See <b>Site Location</b> .

Item	Description
<b>Existing Improvements</b>	The site is undeveloped but was cleared in the past. Existing electrical and storm lines are located on the southwest portion of the site. Based on historical imagery a single-family dwelling was removed from the southwest corner of the site around 2007.
<b>Current Ground Cover</b>	Brush and trees
<b>Existing Topography</b>	Based on the provided site plan, the site slopes down from an elevation of approximately 28 feet at the southwest corner of the site to an elevation of approximately 16 feet at the northwest corner of the site. The central portion of the site is relatively flat at an elevation of approximately 25 feet.
<b>Geology</b>	Coastal Plain Physiographic Region. See <b>Geology</b> .

We also collected photographs at the time of our field exploration program. Representative photos are provided in our **Photography Log**.

## PROJECT DESCRIPTION

Our final understanding of the project conditions is as follows:

Item	Description
<b>Information Provided</b>	Project information was obtained via email correspondence between NORCO and Terracon. We were also provided with the following drawings: <ul style="list-style-type: none"> <li>■ “Preliminary Site Plan” prepared by Paramounte Engineering dated March 22, 2021.</li> <li>■ Wetland Delineation report prepared by Land Management.</li> <li>■ “Existing Conditions Survey” prepared by Paramounte Engineering dated January 11, 2022</li> </ul>
<b>Project Description</b>	Plans for the project include construction of a new apartment community with associated parking, drives, and a stormwater pond. The site will be accessed from the south via an existing access drive.
<b>Proposed Structures</b>	The project includes construction of three, three-story apartment buildings and a clubhouse building.
<b>Building Construction</b>	Assumed to be wood framed supported on a mat foundation
<b>Finished Floor Elevation</b>	Assumed to be within 3 feet of existing site grades
<b>Maximum Loads</b>	Based on similar previous developments we assume the buildings will be supported on a mat foundation using the following assumed structural loads. <ul style="list-style-type: none"> <li>■ Columns: up to 100 kips</li> <li>■ Walls: up to 3 kips per linear foot (klf)</li> <li>■ Slabs: up to 200 pounds per square foot (psf)</li> </ul>

Item	Description
<b>Grading/Slopes</b>	We assume up to 3 feet of cut and fill will be required to develop final grade. Final slope angles of as steep as 3H: 1V (Horizontal: Vertical) are expected.
<b>Below-Grade Structures</b>	None
<b>Free-Standing Retaining Walls</b>	None
<b>Pavements</b>	Anticipated traffic is as follows: <ul style="list-style-type: none"> <li>■ Autos/light trucks: up to 500 vehicles per day</li> <li>■ Light delivery and trash collection vehicles: 20 vehicles per week</li> <li>■ Tractor-trailer trucks: &lt;1 vehicle per week</li> </ul> The pavement design period is 20 years.

## GEOTECHNICAL CHARACTERIZATION

### Geology

The project site is located in the Coastal Plain Physiographic Province. The Coastal Plain soils consist mainly of marine sediments that were deposited during successive periods of fluctuating sea level and moving shoreline. The soils include sands, silts, and clays with irregular deposits of shells, which are typical of those lain down in a shallow sloping sea bottom. Recent alluvial sands, silts, and clays are typically present near rivers and creeks.

According to USGS Mineral Resources On-Line Spatial Data based on the 1998 digital equivalent of the 1985 Geologic Map of North Carolina updated in 1998, the site is mapped within the Peedee Formation (Cretaceous).

### Subsurface Profile

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of site preparation and foundation options. Conditions encountered at each exploration point are indicated on the individual logs. Stratification boundaries on the boring logs represent the approximate location of changes in native soil types; in situ, the transition between materials may be gradual. The individual logs can be found in the **Exploration Results** section and the GeoModel can be found in the **Figures** section of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	Sand	Very loose to medium dense sand with varying amounts of silt
2	Silt	Very soft to soft elastic silt with sand
3	Underlying Sand	Medium dense to very dense sand and silty sand

## Groundwater Conditions

Groundwater was encountered while drilling in each of the boring locations at depths ranging from 1 to 6 feet beneath the existing ground surface. It should be noted that drilling mud was used to advance the borings and the after-drilling water levels indicated on the boring logs may be obscured by the introduction of drilling mud. Due to the low permeability of the soils encountered in the borings, a relatively long period may be necessary for a groundwater level to develop and stabilize in a borehole. Long term observations in piezometers or observation wells sealed from the influence of surface water are often required to define groundwater levels in materials of this type.

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

## GEOTECHNICAL OVERVIEW

The exploration encountered very loose to medium dense sandy soils in the upper 15 to 20 feet underlain by an approximately 10 to 15-foot-thick very soft to soft elastic silt layer. Medium dense to very dense sands were encountered beneath the very soft elastic silt layer. Groundwater was encountered at depths ranging from 1 to 6 feet below existing grades and may be encountered during grading operations. A temporary dewatering system consisting of sumps with pumps could be necessary to achieve the planned excavation depths for proposed underground utilities. Low ground pressure or tracked equipment may be required in certain areas of the site (e.g. shallow, near surface groundwater, areas near wetlands) for site preparation.

After stripping topsoil and once any areas of cut are excavated to proposed subgrade elevation, the exposed subgrade soils in the building and pavement footprints should be densified in place using a medium weight vibratory roller. The purpose of the rolling is to densify the exposed subgrade soils for grade slab and pavement support and to potentially improve the foundation bearing soils. Very loose sands were encountered in the near surface at borings B-4, B-5, B-7, and B-17. Remediation of these soils may be necessary depending on proofrolling performance. Further details are provided in **Earthwork**.

Following the recommended **Earthwork**, a net allowable bearing pressure of up to 1,500 psf can be used for designing the thickened slab foundations (turn-downs) at perimeter walls and columns. A net allowable bearing pressure of up to 1,000 psf can be used for designing post-tensioned slabs considering a distributed load. The **Shallow Mat Foundations** section addresses support of the buildings bearing on densified existing soils or structural fill. The **Grade Slabs** section addresses slab-on-grade support of the buildings.

A rigid or flexible pavement system is suitable for this site. The **Pavements** section addresses the design of pavement systems supported on the densified existing soils or structural fill.

Based on the results of our field testing and the International Building Code (IBC), the seismic classification for the site is D.

The **General Comments** section provides an understanding of the report limitations.

## **EARTHWORK**

Earthwork is anticipated to include clearing and grubbing, excavations, densification, and fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations, grade slabs, and pavements. Grading for the structure should incorporate the limits of the proposed structure plus 5 feet beyond proposed perimeter building walls and any exterior columns.

### **Site Preparation**

Site preparation should begin with the complete removal of surface vegetation and topsoil. Based on site observations during the drilling process, topsoil and surface vegetation in the proposed building footprint and pavement areas should be stripped to a depth of approximately 3 to 5 inches in the mature wooded areas. Topsoil was not encountered in a majority of the borings. The Geotechnical Engineer should field verify the stripping depth and existing fill material suitability during construction. Topsoil may be reused in areas of the site to be landscaped but should not be used as structural fill or backfill.

After stripping and removing topsoil and once any areas of cut have been excavated to proposed subgrade elevation, the exposed subgrade soils in the building and pavement footprints should be densified in place using a medium weight vibratory roller. The purpose of the vibratory rolling is to densify the exposed subgrade soils for grade slab and pavement support and to potentially improve the foundation bearing soils. The roller should make at least six passes across the site, with the second set of three passes perpendicular to the first set of three passes with intermittent vibration activated. If water is brought to the surface by the vibratory rolling, the operation should be

discontinued until the water subsides. Vibratory rolling should be completed during dry weather. Static rolling and additional repairs should be anticipated for areas too wet for vibratory rolling.

After the vibratory rolling, pore pressures should be allowed to dissipate for a minimum of 16 hours. After the waiting period, proofrolling should be performed on the exposed subgrade soils in areas to receive fill or at the subgrade elevation with a loaded, tandem-axle dump truck (15 to 20 ton total vehicle weight) or similar rubber-tired construction equipment. Proofrolling is recommended as a means of detecting areas of soft or unstable subgrade soils. The proofrolling should be performed during a period of dry weather to avoid degrading an otherwise suitable subgrade. The proofrolling operations should be observed by a representative of the geotechnical engineer. Subgrade soils that exhibit excessive rutting or deflection during proofrolling should be repaired as directed by the field representative. Typical repairs include overexcavation followed by replacement with either properly compacted fill or by a subgrade stabilization fabric in conjunction with a sand fill or crushed stone.

If subgrade soils are unsuitable, they will require removal and replacement; however, if they are unstable due to excessive moisture, the most economical solution for remediation may be to scarify, dry and recompact the material. This remediation is most effective during the typically hotter months of the year (May to October). If construction is performed during the cooler period of the year, the timeline for scarifying, drying, and recompacting typically increases considerably and may lead to alternative remediation solutions. These solutions can include overexcavation of some or all of the unstable material to be backfilled with either approved structural fill or geotextile and ABC Stone. Potential undercutting can be reduced if the site preparation work is performed during a period of dry weather and if construction traffic is kept to a minimum on prepared subgrades. We recommend that the contractor submit a unit rate cost for undercutting as part of the bidding process.

Very loose sands were encountered in the near surface at borings B-4, B-5, B-7, and B-17. Remediation of these soils as described above may be necessary depending on proofrolling performance. Moisture conditioning of the soils should be anticipated.

### Fill Material Types

Earthen materials used for structural fill should meet the following material property requirements.

Soil Type <sup>1</sup>	USCS Classification	Acceptable Location for Placement
Imported Soil	SC, SM, SP, SM-SP	All location and elevations.
On-Site Soils	SM, SP	All locations and elevations.

Soil Type <sup>1</sup>	USCS Classification	Acceptable Location for Placement
<ol style="list-style-type: none"> <li>1. Structural fill should consist of approved materials free of organic matter and debris. Frozen material should not be used, and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to use on this site.</li> <li>2. Elastic silt soils are not recommended for use as structural fill due to moisture sensitivity and the availability of sandier soils on site.</li> </ol>		

## Fill Compaction Requirements

Structural fill should meet the following compaction requirements.

Item	Description
<b>Maximum Lift Thickness</b>	8 inches or less in loose thickness when heavy, self-propelled compaction equipment is used. 4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack or plate compactor) is used.
<b>Minimum Compaction Requirements</b> <sup>1, 2, 3</sup>	Minimum 95% of the material's maximum standard Proctor dry density (ASTM D 698). The upper 12 inches of subgrade in pavement areas should be compacted to at least 98% of the materials maximum standard Proctor dry density (ASTM D 698).
<b>Water Content Range</b> <sup>1</sup>	Within 3% of optimum moisture content
<ol style="list-style-type: none"> <li>1. Maximum density and optimum water content as determined by the standard Proctor test (ASTM D 698).</li> <li>2. High plasticity cohesive fill should not be compacted to more than 100 percent of standard Proctor maximum dry density.</li> <li>3. If the granular material is a coarse sand or gravel, or of a uniform size, or has a low fines content, compaction comparison to relative density may be more appropriate. In this case, granular materials should be compacted to at least 70% relative density (ASTM D 4253 and D 4254).</li> </ol>	

## Grading and Drainage

All grades must provide effective drainage away from the buildings during and after construction and should be maintained throughout the life of the structures. Water retained next to the buildings can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential grade slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roofs should have gutters/drains with downspouts that discharge onto splash blocks at a distance of at least 10 feet from the buildings.

Exposed ground should be sloped and maintained at a minimum 5% away from the buildings for at least 10 feet beyond the perimeter of the buildings. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After building construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structures should also be periodically inspected and adjusted, as

necessary, as part of the structure's maintenance program. Where paving or flatwork abuts the structures, a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

## **Earthwork Construction Considerations**

Shallow excavations for the proposed structure are anticipated to be accomplished with conventional construction equipment. Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of grade slabs. Construction traffic over the completed subgrades should be avoided. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade freezes, desiccates, saturates, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted prior to grade slab construction.

Groundwater will likely be encountered in deeper utility excavations or for overexcavation of unsuitable soils. A temporary dewatering system consisting of sumps with pumps could be necessary to achieve the required excavation depths. Pumping water, as required, should continue until excavations are completely backfilled.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local, and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety, or the contractor's activities; such responsibility shall neither be implied nor inferred.

## **Construction Observation and Testing**

The earthwork efforts should be monitored under the direction of the Geotechnical Engineer. Monitoring should include documentation of adequate removal of vegetation and topsoil, proofrolling, and mitigation of areas delineated by the proofroll to require mitigation.

Each lift of compacted fill should be tested, evaluated, and reworked, as necessary, until approved by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,500 square feet of compacted fill in the building areas and 5,000 square feet in pavement areas. One density and water content test should be performed for every 50 linear feet of compacted utility trench backfill.

In areas of foundation excavations, the bearing subgrade should be evaluated under the direction of the Geotechnical Engineer. If unanticipated conditions are encountered, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer’s evaluation of subsurface conditions, including assessing variations and associated design changes.

## SHALLOW MAT FOUNDATIONS

If the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow mat foundations.

### Design Parameters – Compressive Loads

Item	Description
<b>Maximum Net Allowable Bearing pressure</b> <sup>1, 2</sup>	1,500 psf – thickened slab foundations (turn-downs) 1,000 psf – overall, distributed slab area
<b>Required Bearing Stratum</b> <sup>3</sup>	Approved existing soils or structural fill
<b>Minimum Foundation Dimensions</b>	16 inches
<b>Minimum Embedment below Finished Grade</b> <sup>4</sup>	12 inches
<b>Estimated Total Settlement from Structural Loads</b> <sup>2</sup>	About 1 inch
<b>Estimated Differential Settlement</b> <sup>2, 5</sup>	About 2/3 of total settlement

1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. An appropriate factor of safety has been applied. Values assume that exterior grades are no steeper than 20% within 10 feet of structure.
2. Values provided are for assumed maximum loads noted in **Project Description**. Should these values change, we should be contacted to update our recommendations as needed.
3. Unsuitable soils should be over-excavated and replaced per the recommendations in **Earthwork**.
4. Embedment necessary to minimize the effects of frost and/or seasonal water content variations. For sloping ground, maintain depth below the lowest adjacent exterior grade within 5 horizontal feet of the structure.
5. Differential settlements are as measured over a span of 50 feet.

### Foundation Construction Considerations

The foundation bearing materials should be evaluated at the time of the foundation excavation. This is an essential part of the construction process. A representative of the geotechnical engineer

should use a combination of hand auger borings and dynamic cone penetrometer (DCP) testing to determine the suitability of the bearing materials for the design bearing pressure. DCP testing should be performed to a depth of 3 to 5 feet below the bottom of foundation excavation. Excessively soft, loose, or wet bearing soils should be over excavated to a depth recommended by the geotechnical engineer. The excavated soils should be replaced with structural fill or washed, crushed stone (NCDOT No. 57) wrapped in a geotextile fabric (Mirafi 140 N or equivalent). The need for the geotextile fabric with the crushed stone should be determined by the Geotechnical Engineer during construction based on sloughing/caving soils and excavation observations. However, footings could bear directly on the soils after over excavation if approved by the Geotechnical Engineer.

The base of all foundation excavations should be free of water and loose soil prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Should the soils at bearing level become excessively disturbed or saturated, the affected soil should be removed prior to placing concrete.

## SEISMIC CONSIDERATIONS

Based on the soil properties encountered at the site and as described on the exploration logs and results, it is our professional opinion that the **Seismic Site Classification is D**. Subsurface explorations at this site were extended to a maximum depth of 50 feet. The site properties below the boring depth to 100 feet were estimated based on our experience and knowledge of geologic conditions of the general area. Deeper exploration or geophysical exploration could be performed to confirm the conditions below the current depth of exploration. Based on the results of the borings, liquefaction is not expected based on the relatively low level of ground motions associated with the design earthquake.

## GRADE SLABS

Design parameters for grade slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the aggregate base beneath the grade slab.

### Grade Slab Design Parameters

Item	Description
<b>Grade Slab Support</b>	Suitable existing soils or new structural fill compacted in accordance with <b>Earthwork</b> section of this report. <sup>1</sup>
<b>Estimated Modulus of Subgrade Reaction</b> <sup>2</sup>	100 pounds per square inch per inch (psi/in) for point loads

Item	Description
<b>Aggregate base course/capillary break</b> <sup>3</sup>	Minimum 4 inches of free-draining granular material (less than 5% passing the U.S. No. 200 sieve)
<ol style="list-style-type: none"> <li>1. Grade slabs should be structurally independent of building footings or walls to reduce the possibility of grade slab cracking caused by differential movements between the slab and foundation.</li> <li>2. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in <b>Earthwork</b>, and the grade slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.</li> <li>3. Free-draining granular material should have less than 5% fines (material passing the No. 200 sieve). Other design considerations such as cold temperatures and condensation development could warrant more extensive design provisions.</li> </ol>	

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut control joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual. Joints or cracks should be sealed with a water-proof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where grade slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or grade slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing or other means.

### Grade Slab Construction Considerations

Finished subgrade, within and for at least 10 feet beyond the grade slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until grade slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of grade slabs, the affected material should be removed and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the grade slab support course.

The Geotechnical Engineer should approve the condition of the grade slab subgrades immediately prior to placement of the grade slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

## PAVEMENTS

### General Pavement Comments

Pavement designs are provided for the traffic conditions and pavement life conditions as noted in **Project Description** and in the following sections of this report. A critical aspect of pavement performance is site preparation. Pavement designs noted in this section must be applied to the site which has been prepared as recommended in the **Earthwork** section.

### Pavement Design Parameters

Design of Asphaltic Concrete (AC) pavements are based on the procedures outlined in the AASHTO Guide for Design of Pavement Structures 1993 Method. Design of Portland Cement Concrete (PCC) pavements are based upon American Concrete Institute (ACI) 330; Guide for Design and Construction of Concrete Parking Lots.

A subgrade CBR of 14 was used for the AC pavement designs, and a modulus of subgrade reaction of 100 pci was used for the PCC pavement designs. The values were derived based upon our lab testing, experience with the sandy subgrade soils and our understanding of the quality of the subgrade as prescribed by the **Site Preparation** conditions as outlined in **Earthwork**. A modulus of rupture of 580 psi was used for pavement concrete.

### Pavement Section Thicknesses

The following tables provide options for AC and PCC Sections:

Asphaltic Concrete Design			
Layer	NCDOT Grading <sup>1</sup>	Recommended Minimum Pavement Section Thickness (inches) <sup>2</sup>	
		Automobile Areas (Light Duty)	Main Drives & Truck Access Areas (Medium Duty)
Asphalt Concrete Surface Course	S-9.5B	3 <sup>3</sup>	3 <sup>3</sup>
Aggregate Base	ABC	6	8

1. All materials should meet the current North Carolina Department of Transportation (NCDOT) Standard Specifications.

2. Based on anticipated traffic loading as described in **Project Description** section.

3. Placed in two equal lifts.

Portland Cement Concrete Design				
Layer	Specification <sup>1</sup>	Recommended Minimum Pavement Section Thickness (inches) <sup>2</sup>		
		Automobile Areas	Main Drives & Truck Access Areas	Heavy Duty <sup>3</sup>
Portland Cement Concrete	4,000 psi	5	6	8
Aggregate Base <sup>4</sup>	ABC	4	4	4

1. All materials should meet the current North Carolina Department of Transportation (NCDOT) Standard Specifications.
2. Based on anticipated traffic loading as described in **Project Description** section.
3. In areas of anticipated heavy traffic, fire trucks, delivery trucks, or concentrated loads (e.g. dumpster pads), and areas with repeated turning or maneuvering of heavy vehicles.
4. Crushed Aggregate Base Course is recommended for construction purposes. Concrete could be placed directly on an approved subgrade. However, stormwater can quickly degrade exposed subgrades without the crushed aggregate base course leading to additional subgrade repair.

The placement of a partial pavement thickness for use during construction is not suggested without a detailed pavement analysis incorporating construction traffic. If the actual traffic varies from the assumptions outlined in **Project Description**, we should be contacted to update our recommendations as necessary.

Recommendations for pavement construction presented depend upon compliance with recommended material specifications. To assess compliance, observation and testing should be performed under the direction of the geotechnical engineer.

## Pavement Drainage

Pavements should be sloped to provide rapid drainage of surface water. Water allowed to pond on or adjacent to the pavements could saturate the subgrade and contribute to premature pavement deterioration. In addition, the pavement subgrade should be graded to provide positive drainage within the granular base section. Appropriate sub-drainage or connection to a suitable daylight outlet should be provided to remove water from the granular subbase.

## Pavement Maintenance

The pavement sections represent minimum recommended thicknesses and, as such, periodic maintenance should be anticipated. Therefore, preventive maintenance should be planned and provided for through an on-going pavement management program. Maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment. Maintenance consists of both localized maintenance (e.g., crack and joint sealing and patching) and global maintenance (e.g., surface sealing). Preventive maintenance is usually the priority when implementing a pavement maintenance program. Additional engineering observation is

recommended to determine the type and extent of a cost-effective program. Even with periodic maintenance, some movements and related cracking may still occur and repairs may be required.

Pavement performance is affected by its surroundings. In addition to providing preventive maintenance, the civil engineer should consider the following recommendations in the design and layout of pavements:

- Final grade adjacent to paved areas should slope down from the edges at a minimum 2%.
- Subgrade and pavement surfaces should have a minimum 2% slope to promote proper surface drainage.
- Install below pavement drainage systems surrounding areas anticipated for frequent wetting.
- Install joint sealant and seal cracks immediately.
- Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils.
- Place compacted, low permeability backfill against the exterior side of curb and gutter.
- Place curb, gutter and/or sidewalk directly on clay subgrade soils rather than on unbound granular base course materials.

## **STORMWATER MANAGMENT CONSIDERATIONS**

### **Seasonal High-Water Table**

To aid in the design of stormwater management at the site, soil samples from B-22 obtained during our field exploration were observed for hydric soils or any colors indicating a reducing environment as well as redoximorphic features of the soil profile to estimate the seasonal high water table (SHWT) level. Hydric soils (a gray or bluish-gray colored soil matrix) and redoximorphic features (mottles or a “rust” staining) are formed by the process of reduction, translocation and/or oxidation of iron oxides as the water table fluctuates. A soil layer exhibiting redoximorphic features can be representative of the SHWT level.

Based on the depth that redoximorphic features were encountered, it is our opinion that the SHWT level occurs at a depth of approximately 2 feet below the existing ground surface at B-22, which corresponds to an approximate elevation of 14 feet.

### **Infiltration Testing**

Infiltration testing was also performed in the proposed stormwater pond area at a depth of approximately 1.5 feet beneath the existing ground surface using an Aardvark Soil Permeameter. The infiltration rate was measured to be 4.93 inches per hour. Data from the infiltration testing can be found in [Supporting Information](#).

## **GENERAL COMMENTS**

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client, and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

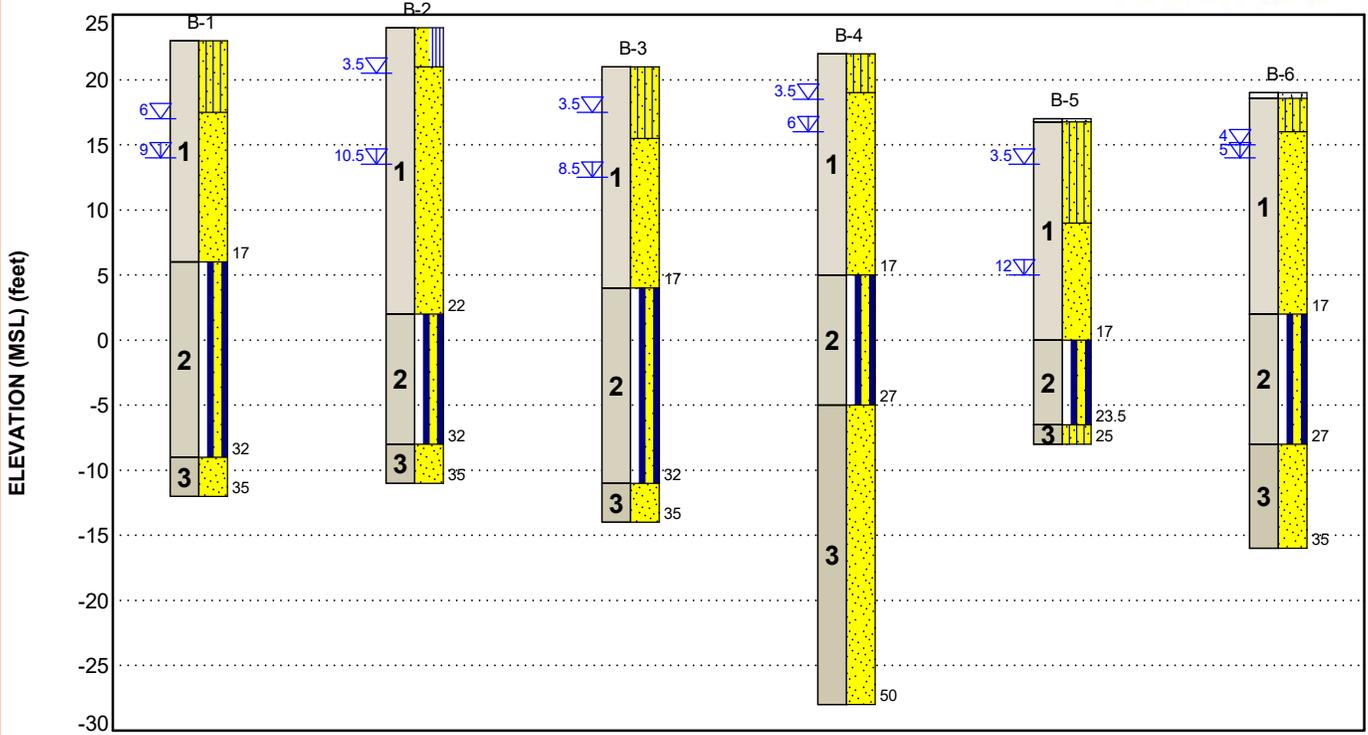
## FIGURES

### Contents:

GeoModel (4 pages)

**GEOMODEL**

Estrella Landing ■ Wilmington, NC  
Terracon Project No. 72215149



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	Sand	Very loose to medium dense sand with varying amounts of silt
2	Silt	Very soft to soft elastic silt with sand
3	Underlying Sand	Medium dense to very dense sand and silty sand

**LEGEND**

- Silty Sand
- Poorly-graded Sand with Silt
- Poorly-graded Sand
- Topsoil
- Elastic Silt with Sand

- First Water Observation
- Second Water Observation

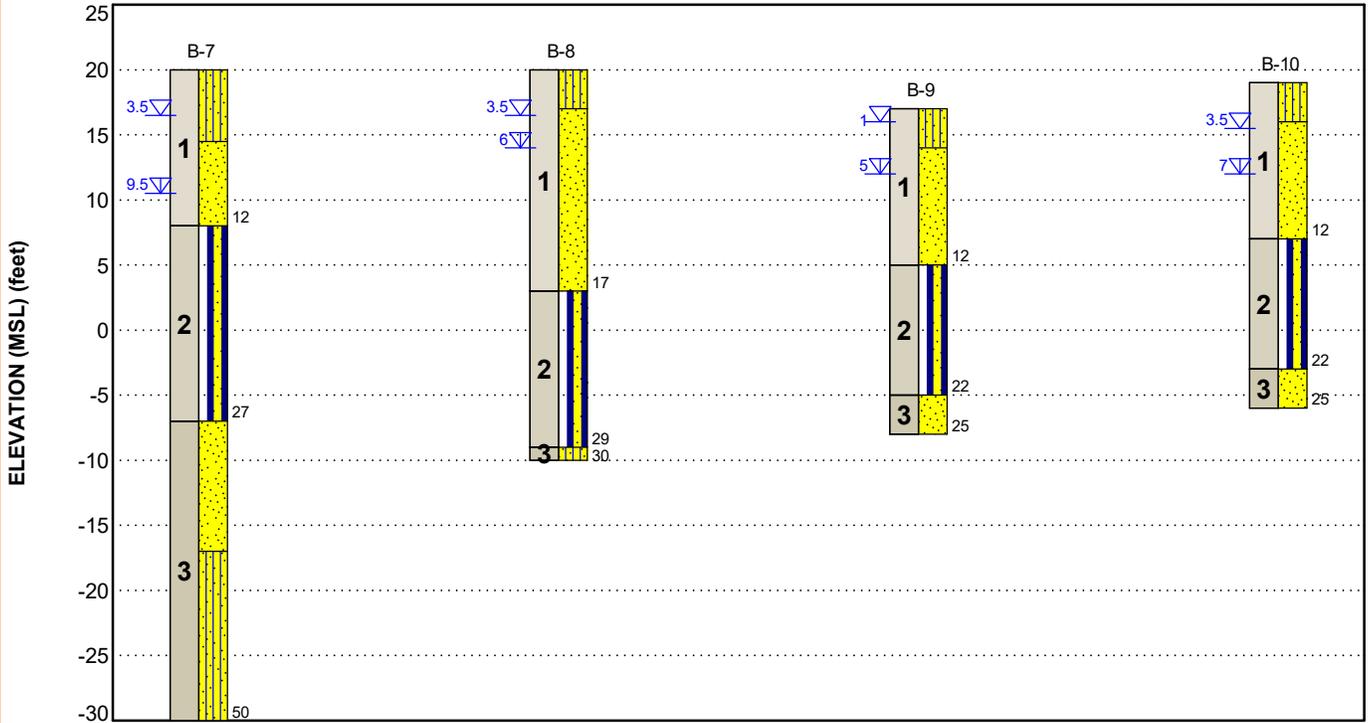
Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time. Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

**NOTES:**

Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project. Numbers adjacent to soil column indicate depth below ground surface.

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- Elastic Silt with Sand

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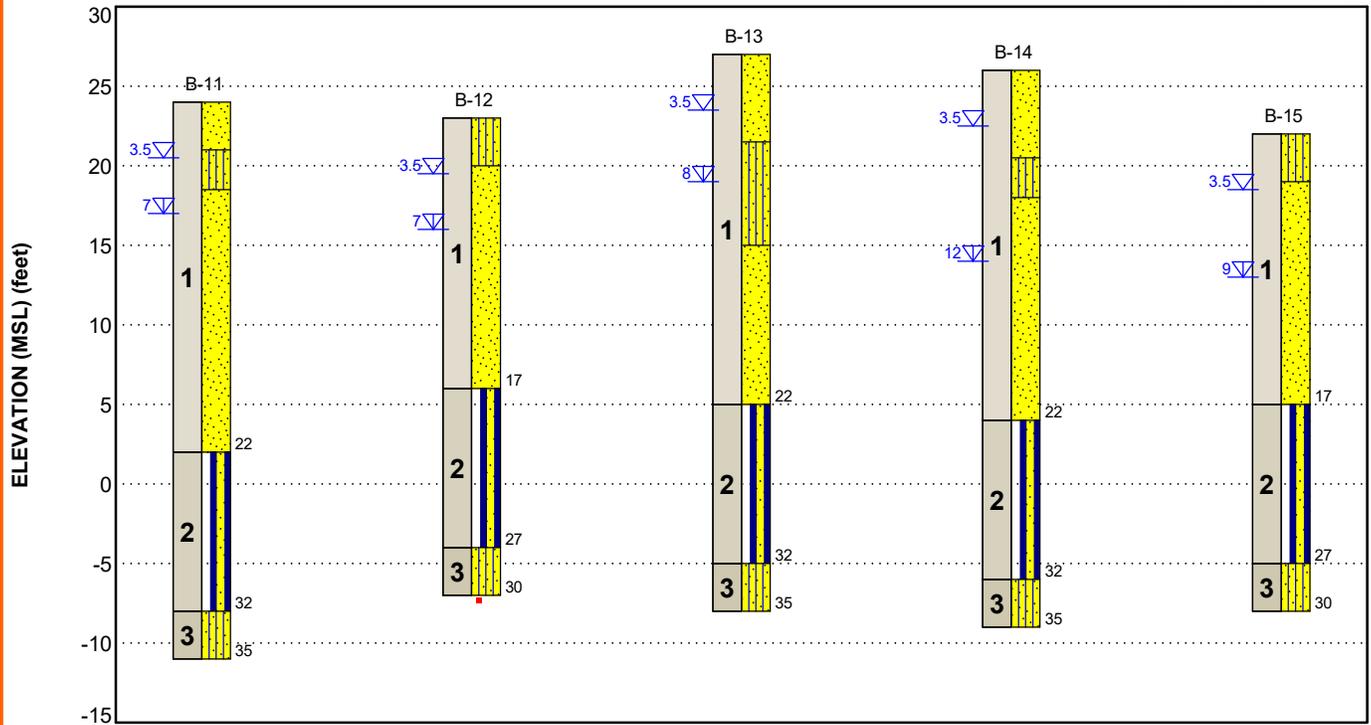
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- Silty Sand
- Elastic Silt with Sand

- First Water Observation
- Second Water Observation

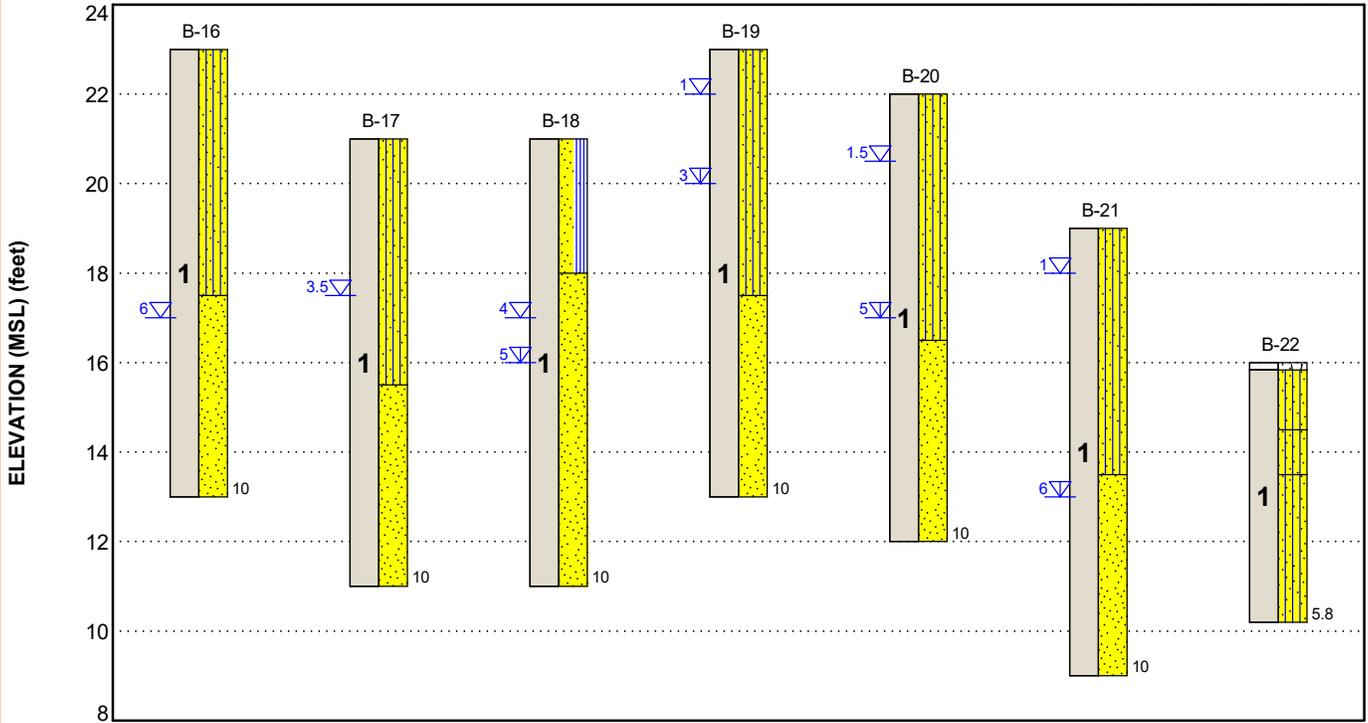
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Model Layer	Layer Name	General Description
1	Sand	Very loose to medium dense sand with varying amounts of silt
2	Silt	Very soft to soft elastic silt with sand
3	Underlying Sand	Medium dense to very dense sand and silty sand

**LEGEND**

- Silty Sand
- Poorly-graded Sand
- Poorly-graded Sand with Silt
- Topsoil

- First Water Observation
- Second Water Observation

Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time. Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

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## **ATTACHMENTS**

## EXPLORATION AND TESTING PROCEDURES

### Field Exploration

Borings	Boring Depth (feet) <sup>1</sup>	Location
15	25 to 50	Planned Building Area
6	10	Planned Pavement Area
1 <sup>2</sup>	5.8	Planned Stormwater Area

1. Referenced from existing ground surface.

2. Performed for infiltration testing and seasonal high-water table evaluation only.

**Boring Layout and Elevations:** Unless otherwise noted, Terracon personnel provided the boring layout. Coordinates were obtained with a handheld GPS unit (estimated horizontal accuracy of about  $\pm 10$  feet) and approximate elevations were obtained by interpolation from the contour lines shown on the provided site plan. If elevations and a more precise boring layout are desired, we recommend borings be surveyed following completion of fieldwork.

**Subsurface Exploration Procedures:** The subsurface exploration was performed by a track mounted power drilling rig utilizing direct push, cone penetration testing (CPT) to advance into the subsurface. Samples taken during the drilling process were tagged for identification, sealed to reduce moisture loss, and taken to our laboratory for further examination, testing, and classification.

**Subsurface Exploration Procedures:** We advanced the borings with a track-mounted rotary drill rig using continuous flight augers. Four samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. We observed and recorded groundwater levels during drilling and sampling. For safety purposes, all borings were backfilled with soil cuttings after their completion.

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

## **Laboratory Testing**

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil strata, as necessary, for this project. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods were applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D422 Standard Test Methods for Determining Particle Size Analysis of Soils
- ASTM D1140 Standard Test Methods for Determining the Amount of Material Finer than No. 200 Sieve in Soils by Washing
- ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort
- ASTM D1883 Standard Test Method for California Bearing Ratio (CBR) of Laboratory-Compacted Soils

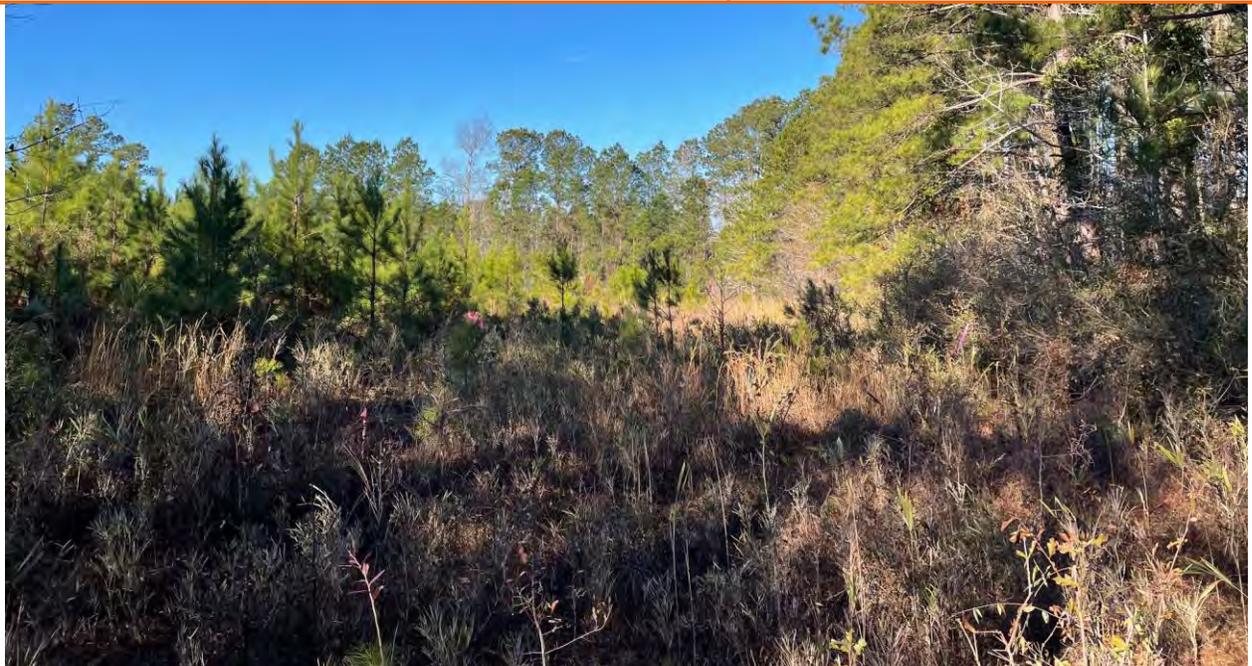
Detailed results of our laboratory testing can be found in in the **Exploration Results** section and are attached herein. Our laboratory testing program includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

## PHOTOGRAPHY LOG

Photos taken January 24, 2022



Location B-13 looking north



Location B-3 looking west



**Location B-21 looking east**



**Electrical box at B-17**

## **SITE LOCATION AND EXPLORATION PLANS**

### **Contents:**

Site Location  
Exploration Plan

Note: All attachments are one page unless noted above.

**SITE LOCATION**

Estrella Landing ■ Wilmington, NC

March 8, 2022 ■ Terracon Project No. 72215149

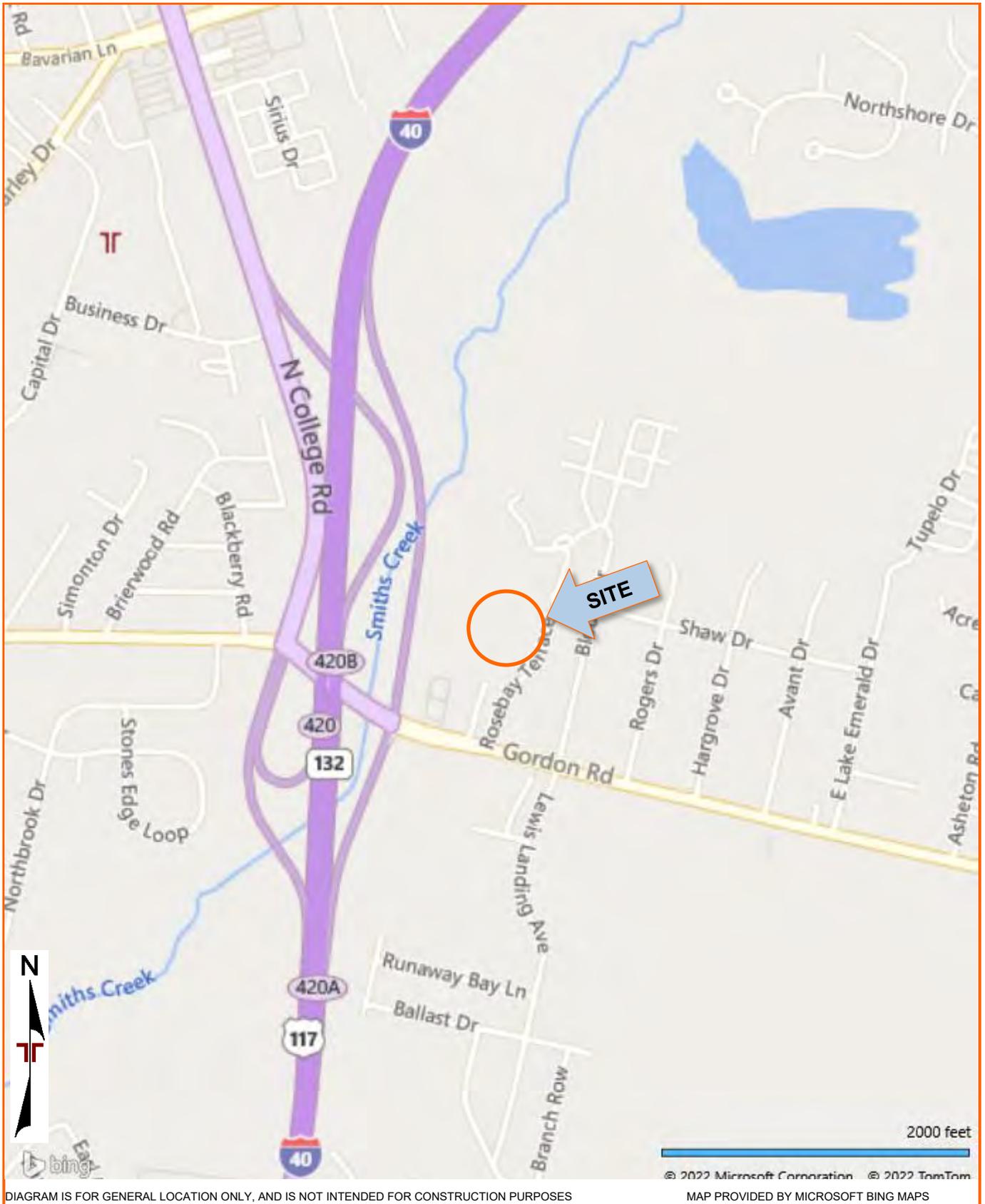


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

# EXPLORATION PLAN

Estrella Landing ■ Wilmington, NC

March 8, 2022 ■ Terracon Project No. 72215149

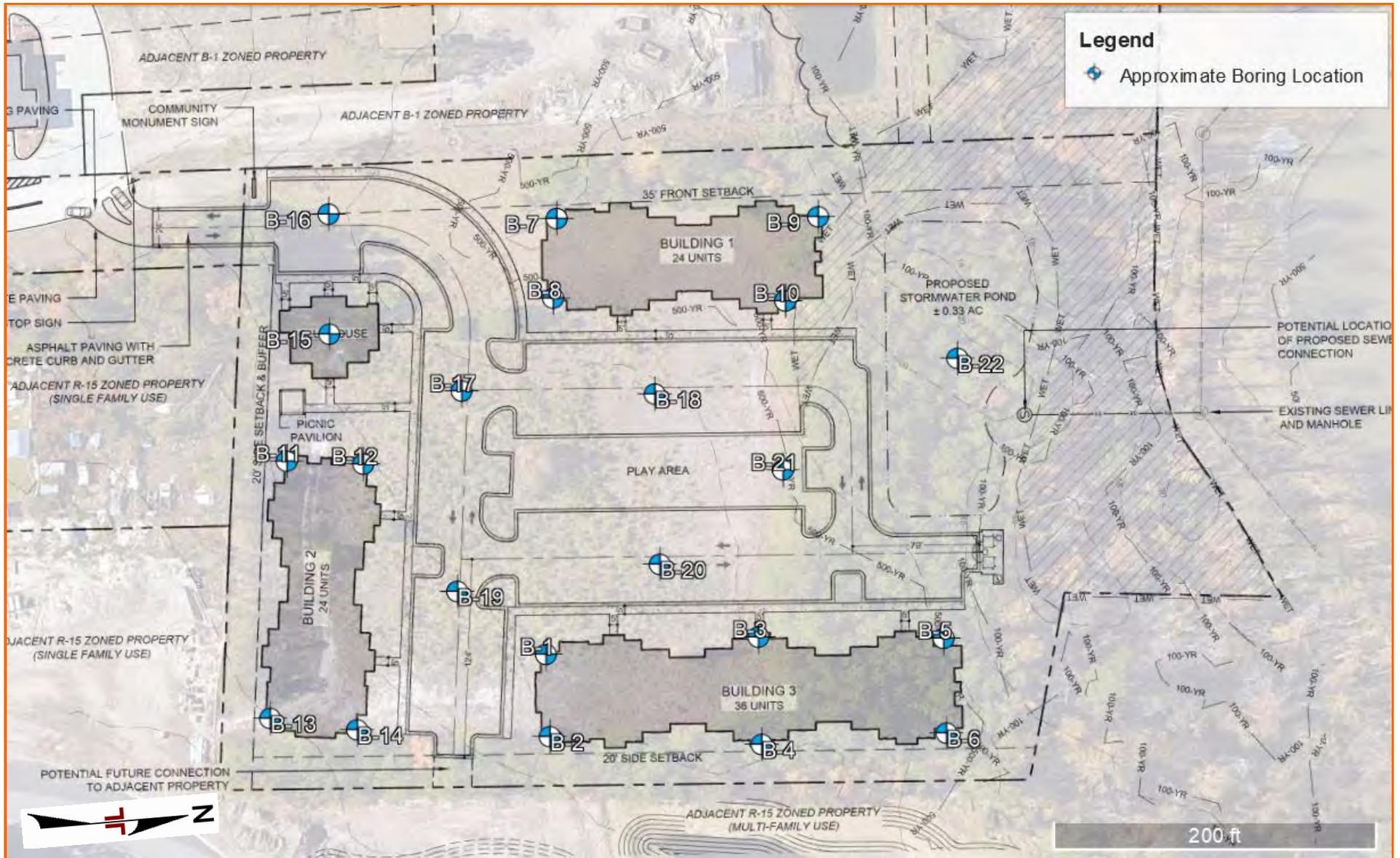


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

SITE PLAN PROVIDED BY NORCO

## **EXPLORATION RESULTS**

### **Contents:**

Exploration Logs (B-1 through B-22)  
Summary of Laboratory Results  
Atterberg Limits Results  
Grain Size Distribution  
Moisture Density Relationship  
CBR Results

Note: All attachments are one page unless noted above.

# BORING LOG NO. B-1

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2782° Longitude: -77.8643°  Approximate Surface Elev.: 23 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
1		<b>SILTY SAND (SM)</b> , trace roots, gray and black to black and brown, loose to medium dense  <b>POORLY GRADED SAND (SP)</b> , gray and white, loose to medium dense	5.5		X	3-2-4 N=6				
			17.5+/-	5	▽	X	7-8-9 N=17			
			17.0	10	▽	X	4-5-8 N=13			
			6+/-	15		X	6-6-7 N=13			
2		<b>ELASTIC SILT WITH SAND (MH)</b> , black and gray, very soft to medium stiff	20		X	4-4-4 N=8				
			25		X	0-0-0 N=0				
			30		X	0-0-0 N=0				
3		<b>POORLY GRADED SAND (SP)</b> , gray, black, and white, dense	32.0		X	0-2-3 N=5				
			-9+/-	35		X	17-21-29 N=50			
<b>Boring Terminated at 35 Feet</b>			-12+/-							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-04-2022

Boring Completed: 02-04-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

# BORING LOG NO. B-2

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2782° Longitude: -77.8642°  Approximate Surface Elev.: 24 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
1		<b>POORLY GRADED SAND WITH SILT (SP-SM)</b> , black and brown, loose	3.0		X	2-3-4 N=7	15.6	NP	6	
		<b>POORLY GRADED SAND (SP)</b> , gray and white, very loose to medium dense		5	▽	X	6-8-10 N=18			
				10	▽	X	6-8-9 N=17			
				15		X	7-9-9 N=18			
			Black and white	20		X	4-4-4 N=8			
2		<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft to soft	22.0		X	2-2-1 N=3				
				25		X	0-0-0 N=0			
				30		X	0-2-2 N=4			
3		<b>POORLY GRADED SAND (SP)</b> , gray and white, dense	32.0		X	8-18-25 N=43				
		<b>Boring Terminated at 35 Feet</b>	35.0							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-02-2022

Boring Completed: 02-02-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-3

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2785° Longitude: -77.8643°	DEPTH	Approximate Surface Elev.: 21 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES	
										LL-PL-PI			
1		<b>SILTY SAND (SM)</b> , black and gray, medium dense	5.5	15.5+/-	5	▽	X	4-6-5 N=11					
							X	5-7-10 N=17					
						10	▽	X	5-4-7 N=11				
						15		X	5-6-5 N=11				
2		<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft to soft	17.0	4+/-	20		X	0-0-0 N=0					
					25		X	0-2-2 N=4					
					30		X	0-0-1 N=1					
3		<b>POORLY GRADED SAND (SP)</b> , gray and black, very dense	32.0	-11+/-	35		X	17-28-25 N=53					
			35.0	-14+/-	35								
<b>Boring Terminated at 35 Feet</b>													

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-02-2022

Boring Completed: 02-02-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-4

**PROJECT: Estrella Landing**

**CLIENT: Norco Management Holding, Inc.  
Wilmington, NC**

**SITE: 4615 Gordon Road  
Wilmington, NC**

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2785° Longitude: -77.8641°	DEPTH	Approximate Surface Elev.: 22 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
1		1	3.0	19+/-		▽	X	2-1-2 N=3				
			5	19+/-		▽	X	5-7-9 N=16				
			10	19+/-		X	5-6-7 N=13					
			15	19+/-		X	4-4-3 N=7					
			17.0	5+/-		X	2-2-3 N=5					
2		2	20	5+/-		X	0-0-0 N=0			62-40-22	81	
			25	5+/-		X	0-1-1 N=2					
3		3	27.0	-5+/-		X	5-10-15 N=25					
			35	-5+/-		X	14-16-19 N=35					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



314 Beacon Dr  
Winterville, NC

Boring Started: 02-01-2022

Boring Completed: 02-01-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-4

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2785° Longitude: -77.8641°  Approximate Surface Elev.: 22 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
3	[Dotted Pattern]	<p><b>POORLY GRADED SAND (SP)</b>, gray and black, medium dense to very dense (<i>continued</i>)</p>	50.0							
		<b>Boring Terminated at 50 Feet</b>	-28+/-							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- While drilling
- After drilling



Boring Started: 02-01-2022

Boring Completed: 02-01-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-5

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2788° Longitude: -77.8642°	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
		Approximate Surface Elev.: 17 (Ft.) +/-										
			0.3	17+/-								
		<b>TOPSOIL</b> , 3-inches										
		<b>SILTY SAND (SM)</b> , brown and black, very loose to loose				▽		4-2-2 N=4				
								2-1-1 N=2				
								1-1-2 N=3				
1			8.0	9+/-				3-3-4 N=7				
		<b>POORLY GRADED SAND (SP)</b> , gray and black, loose										
								2-2-2 N=4				
						▽						
		<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft						0-0-1 N=1				
2												
								2-3-4 N=7				
		<b>SILTY SAND (SM)</b> , black and gray, loose										
3			23.5	-6.5+/-								
			25.0	-8+/-								
		<b>Boring Terminated at 25 Feet</b>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-02-2022

Boring Completed: 02-02-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_ 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-6

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2788° Longitude: -77.8640°  Approximate Surface Elev.: 19 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
		DEPTH								
		0.4 <b>TOPSOIL</b> , 5-inches	18.5+/-							
		<b>SILTY SAND (SM)</b> , black, medium dense				3-5-9 N=14				
		3.0	16+/-							
		<b>POORLY GRADED SAND (SP)</b> , gray and brown, loose to medium dense		5		6-9-13 N=22				
						4-7-6 N=13				
						3-2-3 N=5				
						3-2-4 N=6				
		17.0	2+/-							
		<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft				0-0-0 N=0				
						0-0-0 N=0				
		27.0	-8+/-							
		<b>POORLY GRADED SAND (SP)</b> , gray and black, medium dense				4-10-13 N=23				
						6-10-13 N=23				
		35.0	-16+/-							
		<b>Boring Terminated at 35 Feet</b>								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- While drilling
- After drilling



Boring Started: 01-31-2022

Boring Completed: 01-31-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-7

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2784° Longitude: -77.8652°	DEPTH	Approximate Surface Elev.: 20 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
1	Silty Sand (SM)	SILTY SAND (SM), black, loose	5.5	14.5+/-	5	▽		0-2-1 N=3	51.1	NP	12	
							0-1-2 N=3					
2	Poorly Graded Sand (SP)	POORLY GRADED SAND (SP), gray and brown, medium dense	12.0	8+/-	10	▽		12-13-16 N=29				
							5-9-10 N=19					
3	Elastic Silt with Sand (MH)	ELASTIC SILT WITH SAND (MH), black and brown, very soft	27.0	-7+/-	15			0-0-0 N=0				
							0-0-1 N=1					
3	Poorly Graded Sand (SP)	POORLY GRADED SAND (SP), gray and black, dense			25			0-0-1 N=1				
							8-12-20 N=32					
					30							
					35			15-16-14 N=30				

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



314 Beacon Dr  
Winterville, NC

Boring Started: 01-31-2022

Boring Completed: 01-31-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-7

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		Latitude: 34.2784° Longitude: -77.8652°						LL-PL-PI	
		Approximate Surface Elev.: 20 (Ft.) +/-							
		ELEVATION (Ft.)							
		37.0 <b>POORLY GRADED SAND (SP)</b> , gray and black, dense <i>(continued)</i>							
		<b>SILTY SAND (SM)</b> , black and gray, medium dense to very dense	-17+/-						
			40	X		6-8-10 N=18			
			45	X		15-10-34 N=44			
			50	X		25-34-35 N=69			
		<b>Boring Terminated at 50 Feet</b>	50						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- While drilling
- After drilling



314 Beacon Dr  
Winterville, NC

Boring Started: 01-31-2022

Boring Completed: 01-31-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-8

**PROJECT: Estrella Landing**

**CLIENT: Norco Management Holding, Inc.  
Wilmington, NC**

**SITE: 4615 Gordon Road  
Wilmington, NC**

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2783° Longitude: -77.8650°	DEPTH	Approximate Surface Elev.: 20 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES																								
										LL-PL-PI																										
1			3.0		17+/-	5	X	5-5-4 N=9																												
													<b>SILTY SAND (SM)</b> , black and tan, loose																							
													2			17.0		3+/-	10	X	3-3-4 N=7															
																									<b>POORLY GRADED SAND (SP)</b> , gray and tan, loose to medium dense											
																									3			29.0		-9+/-	15	X	4-3-2 N=5			
<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft																																				
			30.0		-10+/-	20	X	0-0-0 N=0																												
			30.0		-10+/-	25	X	0-0-0 N=0																												
			30.0		-10+/-	30	X	0-5-8 N=13																												
<b>Boring Terminated at 30 Feet</b>																																				

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- While drilling
- After drilling



314 Beacon Dr  
Winterville, NC

Boring Started: 02-01-2022

Boring Completed: 02-01-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL- 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-9

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2788° Longitude: -77.8651°  Approximate Surface Elev.: 17 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
1		<b>SILTY SAND (SM)</b> , black, loose	3.0	14+/-						
			12.0	5+/-						
2		<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft to medium stiff	5							
			10							
			15							
3		<b>POORLY GRADED SAND (SP)</b> , gray and tan, medium dense	20							
			22.0	-5+/-						
		<b>POORLY GRADED SAND (SP)</b> , gray and black, loose	25.0	-8+/-						
<b>Boring Terminated at 25 Feet</b>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

-  While drilling
-  After drilling



Boring Started: 02-02-2022

Boring Completed: 02-02-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-10

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2787° Longitude: -77.8649°  Approximate Surface Elev.: 19 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES	
								LL-PL-PI			
1		DEPTH	3.0		X	4-6-7 N=13					
			16+/-	▽	X	6-8-10 N=18					
			12.0	▽	X	4-4-5 N=9					
			7+/-		X	8-4-5 N=9					
2		ELASTIC SILT WITH SAND (MH), black and brown, very soft	22.0		X	0-0-0 N=0					
			-3+/-		X	0-0-0 N=0					
3		POORLY GRADED SAND (SP), gray and black, dense	25.0		X	8-17-17 N=34					
<b>Boring Terminated at 25 Feet</b>			-6+/-								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-01-2022

Boring Completed: 02-01-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-11

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2779° Longitude: -77.8649°	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
1		Approximate Surface Elev.: 24 (Ft.) +/-	<b>POORLY GRADED SAND (SP)</b> , tan, medium dense	21+/-	3.0			3-6-8 N=14	6.0	NP	3	
			<b>SILTY SAND (SM)</b> , brown and tan, loose	18.5+/-	5.5	▽		6-5-4 N=9				
			<b>POORLY GRADED SAND (SP)</b> , gray and black, medium dense			▽		6-9-12 N=21				
								6-10-14 N=24				
								4-6-8 N=14				
2		2+/-	<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft		22.0			6-8-8 N=16				
							0-0-1 N=1					
							0-0-1 N=1					
3		-8+/-	<b>SILTY SAND (SM)</b> , gray and black, dense		32.0							
		-11+/-	<b>Boring Terminated at 35 Feet</b>		35.0							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-03-2022

Boring Completed: 02-03-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-12

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2780° Longitude: -77.8648°	DEPTH	APPROXIMATE SURFACE ELEV.: 23 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
1		<b>SILTY SAND (SM)</b> , brown, medium dense	3.0	20+/-	4	▽	X	4-5-6 N=11				
			<b>POORLY GRADED SAND (SP)</b> , gray and tan, medium dense	5	5	▽	X	8-9-11 N=20				
				8	8	▽	X	8-9-10 N=19				
				10	10	X	7-7-8 N=15					
				15	15	X	8-8-6 N=14					
2		<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft to soft	17.0	6+/-	20	X	0-0-0 N=0					
			25	25	X	0-1-1 N=2						
3		<b>SILTY SAND (SM)</b> , gray and white, medium dense	27.0	-4+/-	30	X	5-6-6 N=12					
			30.0	-7+/-	30	<b>Boring Terminated at 30 Feet</b>						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-03-2022

Boring Completed: 02-03-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-13

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2777° Longitude: -77.8643°  Approximate Surface Elev.: 27 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
1	5.5 21.5+/-	<b>POORLY GRADED SAND (SP)</b> , tan to gray and white, loose to medium dense	5.5	▽	X	3-4-6 N=10	23.6			
					X	3-3-5 N=8				
				▽	X	7-8-10 N=18				
			12.0		X	13-18-18 N=36				
					X	8-10-12 N=22				
2	22.0 5+/-	<b>ELASTIC SILT WITH SAND (MH)</b> , black and brown, very soft			X	3-3-6 N=9				
			25		X	0-0-0 N=0				
					X	0-0-0 N=0				
3	32.0 -5+/-	<b>SILTY SAND (SM)</b> , gray and brown, medium dense			X	0-0-0 N=0				
	35.0 -8+/-	<b>Boring Terminated at 35 Feet</b>			X	11-11-13 N=24				

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (If any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

WATER LEVEL OBSERVATIONS	
▽	While drilling
▽	After drilling



Boring Started: 02-02-2022	Boring Completed: 02-02-2022
Drill Rig: Geoprobe 7822DT	Driller: M. Padgett
Project No.: 72215149	



# BORING LOG NO. B-15

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2780° Longitude: -77.8651°	DEPTH	APPROXIMATE SURFACE ELEV.: 22 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES	
										LL-PL-PI			
1	Silty Sand (SM)	SILTY SAND (SM), black, medium dense	3.0	19+/-				3-4-6 N=10	21.4				
			Poorly Graded Sand (SP)	POORLY GRADED SAND (SP), gray and black, medium dense		5	▽			8-12-12 N=24			
										5-7-9 N=16			
						10	▽			5-7-7 N=14			
2	Elastic Silt with Sand (MH)	ELASTIC SILT WITH SAND (MH), black and brown, very soft	17.0	5+/-									
				20			0-0-0 N=0						
				25			0-0-0 N=0						
3	Silty Sand (SM)	SILTY SAND (SM), gray and black, medium dense	27.0	-5+/-									
			30.0	-8+/-				4-5-5 N=10					
<b>Boring Terminated at 30 Feet</b>													

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Mud Rotary

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ While drilling
- ▽ After drilling



Boring Started: 02-03-2022

Boring Completed: 02-03-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-16

**PROJECT: Estrella Landing**

**CLIENT: Norco Management Holding, Inc.  
Wilmington, NC**

**SITE: 4615 Gordon Road  
Wilmington, NC**

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		Latitude: 34.2780° Longitude: -77.8653°						LL-PL-PI	
		Approximate Surface Elev.: 23 (Ft.) +/- ELEVATION (Ft.)							
1		<b>SILTY SAND (SM)</b> , black and brown, loose to medium dense	5.5	5	X	4-3-4 N=7			
			17.5+/-	5	X	1-4-12 N=16			
		<b>POORLY GRADED SAND (SP)</b> , gray and black, medium dense	10.0	10	X	5-9-10 N=19			
			13+/-	10	X	7-9-12 N=21			
<b>Boring Terminated at 10 Feet</b>									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- While drilling**  
Not encountered due to cave in
- Dry cave in**



Boring Started: 02-03-2022

Boring Completed: 02-03-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-17

**PROJECT: Estrella Landing**

**CLIENT: Norco Management Holding, Inc.  
Wilmington, NC**

**SITE: 4615 Gordon Road  
Wilmington, NC**

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		Latitude: 34.2782° Longitude: -77.8649°						LL-PL-PI	
		Approximate Surface Elev.: 21 (Ft.) +/- ELEVATION (Ft.)							
1		<b>SILTY SAND (SM)</b> , black, very loose	5	▽	X	1-0-1 N=1			
			5.5		X	0-0-0 N=0			
		<b>POORLY GRADED SAND (SP)</b> , gray and black, very loose to loose	10		X	1-1-3 N=4			
			10.0		X	1-0-1 N=1			
<b>Boring Terminated at 10 Feet</b>			10						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

- ▽ *While drilling*  
*Not encountered due to cave in*
- ☒ *Dry cave in*



Boring Started: 02-02-2022

Boring Completed: 02-02-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-18

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		Latitude: 34.2785° Longitude: -77.8648°						LL-PL-PI	
		Approximate Surface Elev.: 21 (Ft.) +/- ELEVATION (Ft.)							
1		<b>POORLY GRADED SAND WITH SILT (SP-SM)</b> , brown, medium dense	3.0		X	3-4-6 N=10	10.9	NP	11
		<b>POORLY GRADED SAND (SP)</b> , gray and black, loose to medium dense	18+/-	5	X	9-13-15 N=28			
					X	5-7-9 N=16			
					X	3-3-4 N=7			
		<b>Boring Terminated at 10 Feet</b>	10.0	10					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

▽ While drilling  
▽ After drilling

Wet cave in



Boring Started: 02-04-2022

Boring Completed: 02-04-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-19

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		See <a href="#">Exploration Plan</a> Latitude: 34.2781° Longitude: -77.8645°  Approximate Surface Elev.: 23 (Ft.) +/- ELEVATION (Ft.)						LL-PL-PI	
1		<b>SILTY SAND (SM)</b> , black with brown, loose	5.5	▽	X	3-2-4 N=6			
			17.5+/-	▽	X	2-2-4 N=6			
		<b>POORLY GRADED SAND (SP)</b> , gray and black, medium dense	10.0	X	X	6-6-7 N=13			
			13+/-	X	X	3-4-7 N=11			
		<b>Boring Terminated at 10 Feet</b>		10					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

▽ *While drilling*  
▽ *After drilling*

Wet cave in



Boring Started: 02-03-2022

Boring Completed: 02-03-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-20

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		Latitude: 34.2784° Longitude: -77.8645°						LL-PL-PI	
		Approximate Surface Elev.: 22 (Ft.) +/- ELEVATION (Ft.)							
1		<b>SILTY SAND (SM)</b> , gray and black, medium dense	5.5	5	X	5-7-5 N=12			
			16.5+/-	5	X	5-9-12 N=21			
		<b>POORLY GRADED SAND (SP)</b> , gray and black, loose	10.0	10	X	2-3-3 N=6			
			12+/-	10	X	1-2-3 N=5			
<b>Boring Terminated at 10 Feet</b>									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

▽ While drilling  
▽ After drilling

Wet cave in



Boring Started: 02-03-2022

Boring Completed: 02-03-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-21

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2787° Longitude: -77.8646°  Approximate Surface Elev.: 19 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
1	5.5	13.5+/-	5	▽	X	2-2-3 N=5				
			5		X	2-2-4 N=6				
			5	▽	X	5-3-3 N=6				
			10		X	2-2-3 N=5				
		10.0	10							
<p><b>Boring Terminated at 10 Feet</b></p>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Boring backfilled with soil cuttings upon completion.

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevations obtained from GoogleEarth Pro

**WATER LEVEL OBSERVATIONS**

▽ While drilling  
▽ After drilling

Wet cave in



Boring Started: 02-04-2022

Boring Completed: 02-04-2022

Drill Rig: Geoprobe 7822DT

Driller: M. Padgett

Project No.: 72215149

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# BORING LOG NO. B-22

**PROJECT:** Estrella Landing

**CLIENT:** Norco Management Holding, Inc.  
Wilmington, NC

**SITE:** 4615 Gordon Road  
Wilmington, NC

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 34.2790° Longitude: -77.8647°  Approximate Surface Elev.: 16 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	ATTERBERG LIMITS	
								LL-PL-PI	PERCENT FINES
1		0.2' <b>TOPSOIL</b> , 1-inch	16+/-						
		1.5' <b>SILTY SAND (SM)</b> , gray to dark brown, trace roots at 10 inches	14.5+/-						
		2.5' <b>SILTY SAND (SM)</b> , light brownish gray with orange mottle	13.5+/-						
		<b>SILTY SAND (SM)</b> , dark brown and brown	10+/-	5					
		<b>Boring Terminated at 5.8 Feet</b>							

Stratification lines are approximate. In-situ, the transition may be gradual.

<p>Advancement Method: Hand Auger</p>	<p>See <a href="#">Exploration and Testing Procedures</a> for a description of field and laboratory procedures used and additional data (If any).</p> <p>See <a href="#">Supporting Information</a> for explanation of symbols and abbreviations.</p> <p>Elevations obtained from GoogleEarth Pro</p>	<p>Notes:</p>						
<p>Abandonment Method: Boring backfilled with soil cuttings upon completion.</p>								
<p><b>WATER LEVEL OBSERVATIONS</b> <i>Groundwater not encountered</i></p>	<p>314 Beacon Dr Winterville, NC</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Boring Started: 02-09-2022</td> <td style="width: 50%;">Boring Completed: 02-09-2022</td> </tr> <tr> <td>Drill Rig:</td> <td>Driller: B. Rogers</td> </tr> <tr> <td>Project No.: 72215149</td> <td></td> </tr> </table>	Boring Started: 02-09-2022	Boring Completed: 02-09-2022	Drill Rig:	Driller: B. Rogers	Project No.: 72215149	
Boring Started: 02-09-2022	Boring Completed: 02-09-2022							
Drill Rig:	Driller: B. Rogers							
Project No.: 72215149								

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

# Summary of Laboratory Results

BORING ID	Depth (Ft.)	Soil Classification USCS	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Proctor Dry Density (pcf) / Opt. Moisture (%)
B-2	1-2.5	POORLY GRADED SAND with SILT(SP-SM)	15.6	NP	NP	NP	
B-4	18.5-20	ELASTIC SILT with SAND(MH)		62	40	22	
B-7	3.5-5	SILTY SAND(SM)	51.1	NP	NP	NP	
B-11	1-2.5	POORLY GRADED SAND(SP)	6.0	NP	NP	NP	
B-13	3.5-5		23.6				
B-15	1-2.5		21.4				
B-18	0-3	POORLY GRADED SAND with SILT(SP-SM)	10.9	NP	NP	NP	106.8 / 12.6

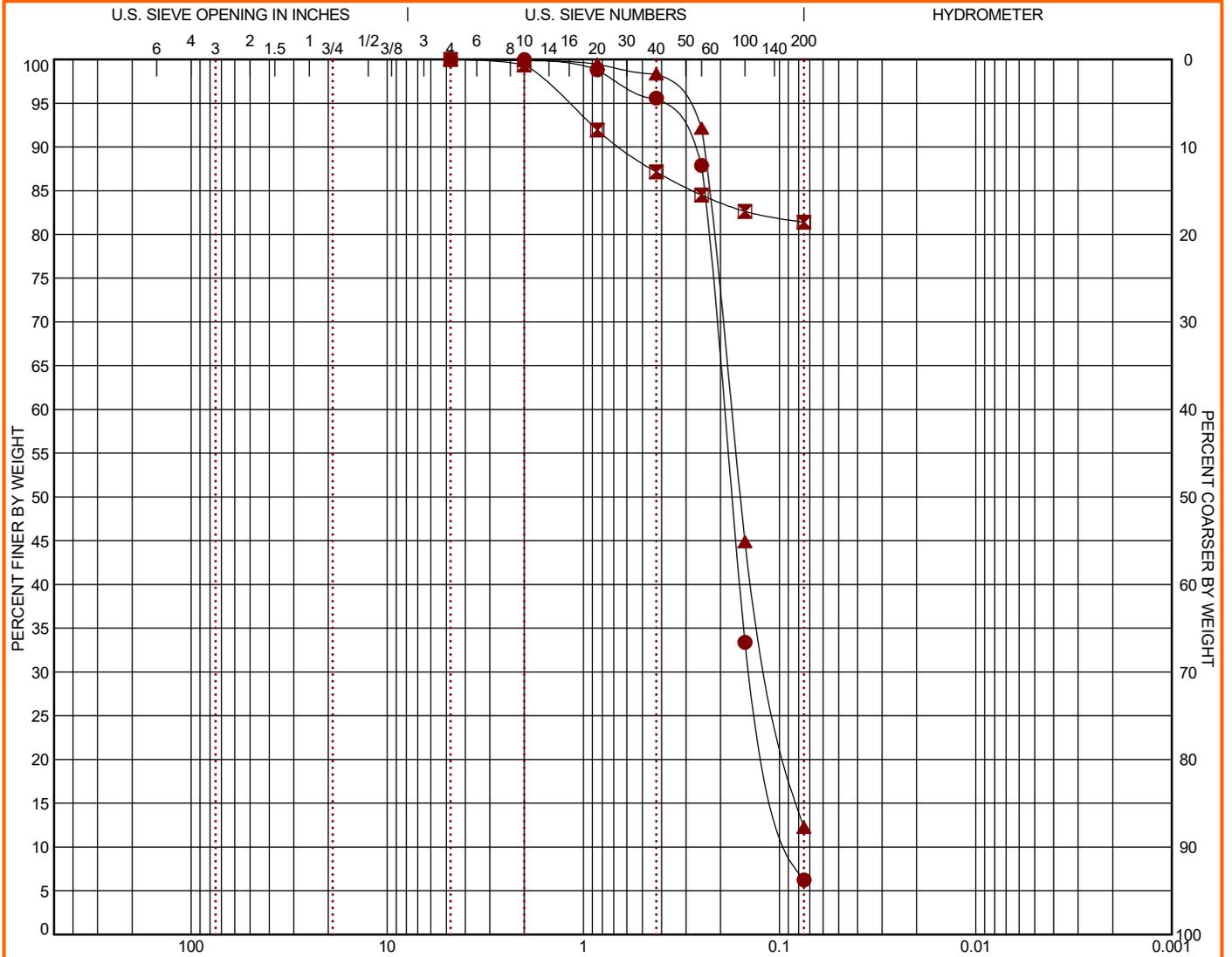
LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. SMART LAB SUMMARY-PORTRAIT 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

PROJECT: Estrella Landing	 314 Beacon Dr Winterville, NC	PROJECT NUMBER: 72215149
SITE: 4615 Gordon Road Wilmington, NC		CLIENT: Norco Management Holding, Inc. Wilmington, NC



# GRAIN SIZE DISTRIBUTION

ASTM D422 / ASTM C136



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BORING ID	DEPTH	% COBBLES	% GRAVEL	% SAND	% SILT	% FINES	% CLAY	USCS
● B-2	1 - 2.5	0.0	0.0	93.8		6.2		SP-SM
☒ B-4	18.5 - 20	0.0	0.0	18.6		81.4		MH
▲ B-7	3.5 - 5	0.0	0.0	87.8		12.2		SM

GRAIN SIZE			
	●	☒	▲
D <sub>60</sub>	0.192		0.177
D <sub>30</sub>	0.138		0.109
D <sub>10</sub>	0.083		

COEFFICIENTS			
	●	☒	▲
C <sub>c</sub>	1.19		0.95
C <sub>u</sub>	2.33		2.47

●		☒		▲	
Sieve	% Finer	Sieve	% Finer	Sieve	% Finer
#4	100.0	#4	100.0	#4	100.0
#10	99.97	#10	99.38	#10	99.88
#20	98.82	#20	91.94	#20	99.46
#40	95.58	#40	87.13	#40	98.35
#60	87.88	#60	84.5	#60	92.15
#100	33.39	#100	82.64	#100	44.89
#200	6.24	#200	81.4	#200	12.24

SOIL DESCRIPTION	
●	POORLY GRADED SAND with SILT (SP-SM)
☒	ELASTIC SILT with SAND (MH)
▲	SILTY SAND (SM)

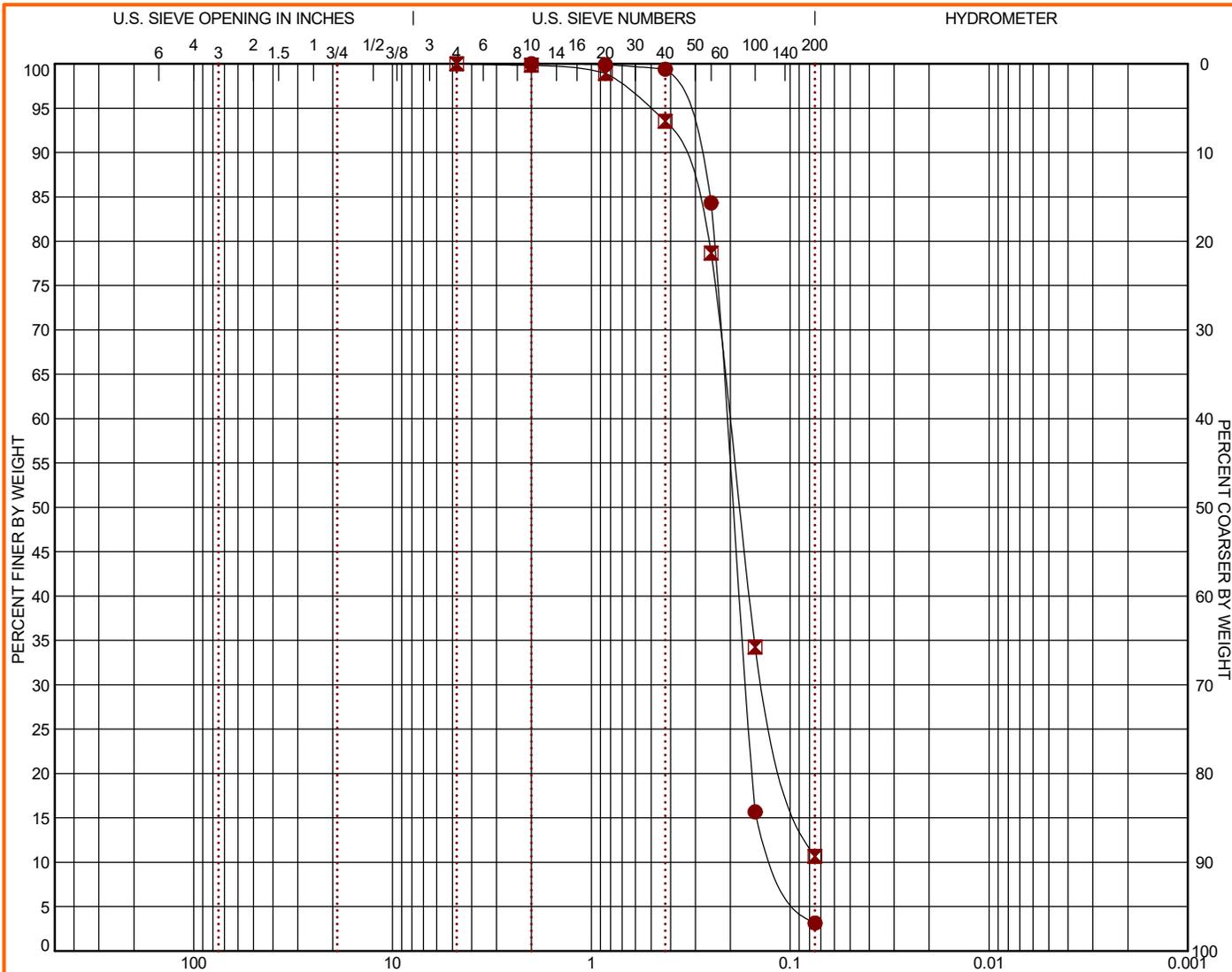
REMARKS
●
☒
▲

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS 1 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

PROJECT: Estrella Landing	<p style="font-size: small;">314 Beacon Dr Winterville, NC</p>	PROJECT NUMBER: 72215149
SITE: 4615 Gordon Road Wilmington, NC		CLIENT: Norco Management Holding, Inc. Wilmington, NC

# GRAIN SIZE DISTRIBUTION

ASTM D422 / ASTM C136



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	
●	0.0	0.0	96.8	3.2	0.0	0.0
✕	0.0	0.0	89.3	10.7	0.0	0.0

BORING ID	DEPTH	% COBBLES	% GRAVEL	% SAND	% SILT	% FINES	% CLAY	USCS
●	B-11	1 - 2.5	0.0	0.0	96.8	3.2	0.0	SP
✕	B-18	0 - 3	0.0	0.0	89.3	10.7	0.0	SP-SM

GRAIN SIZE		
	●	✕
<b>D<sub>60</sub></b>	0.209	0.202
<b>D<sub>30</sub></b>	0.167	0.132
<b>D<sub>10</sub></b>	0.11	

COEFFICIENTS		
	●	✕
<b>C<sub>c</sub></b>	1.22	1.18
<b>C<sub>u</sub></b>	1.90	2.74

●		✕			
Sieve	% Finer	Sieve	% Finer	Sieve	% Finer
#10	100.0	#4	100.0		
#20	99.99	#10	99.84		
#40	99.39	#20	98.93		
#60	84.32	#40	93.52		
#100	15.68	#60	78.67		
#200	3.15	#100	34.26		
		#200	10.65		

SOIL DESCRIPTION	
●	POORLY GRADED SAND (SP)
✕	POORLY GRADED SAND with SILT (SP-SM)

REMARKS	
●	
✕	

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS 1 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22

PROJECT: Estrella Landing

SITE: 4615 Gordon Road  
Wilmington, NC



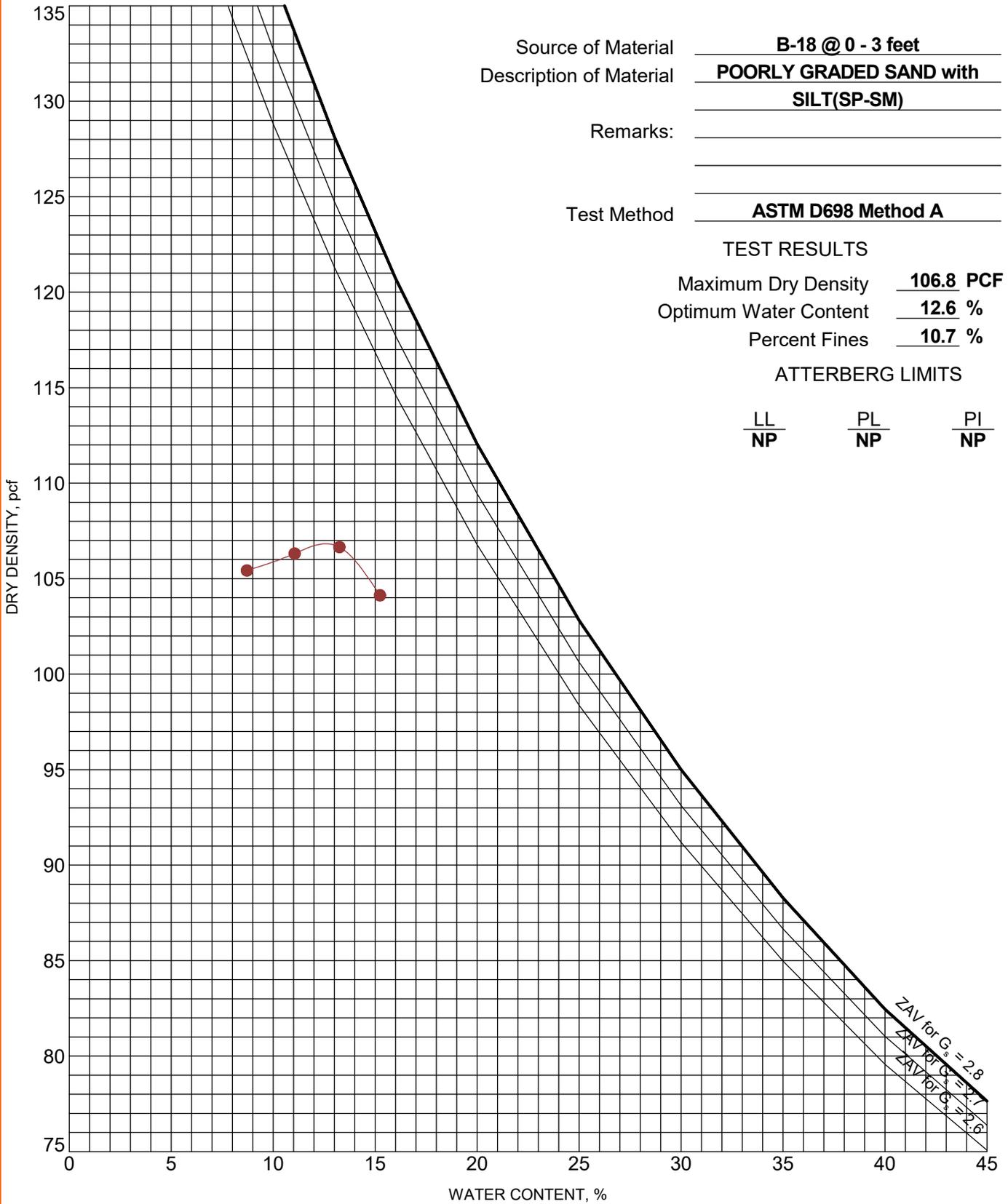
PROJECT NUMBER: 72215149

CLIENT: Norco Management Holding, Inc.  
Wilmington, NC

# MOISTURE-DENSITY RELATIONSHIP

ASTM D698/D1557

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. COMPACTION - V2 72215149 ESTRELLA LANDING.GPJ TERRACON\_DATATEMPLATE.GDT 2/17/22



Source of Material B-18 @ 0 - 3 feet  
 Description of Material POORLY GRADED SAND with SILT(SP-SM)  
 Remarks: \_\_\_\_\_  
 Test Method ASTM D698 Method A

**TEST RESULTS**

Maximum Dry Density 106.8 PCF  
 Optimum Water Content 12.6 %  
 Percent Fines 10.7 %

**ATTERBERG LIMITS**

LL	PL	PI
NP	NP	NP

PROJECT: Estrella Landing

SITE: 4615 Gordon Road  
Wilmington, NC

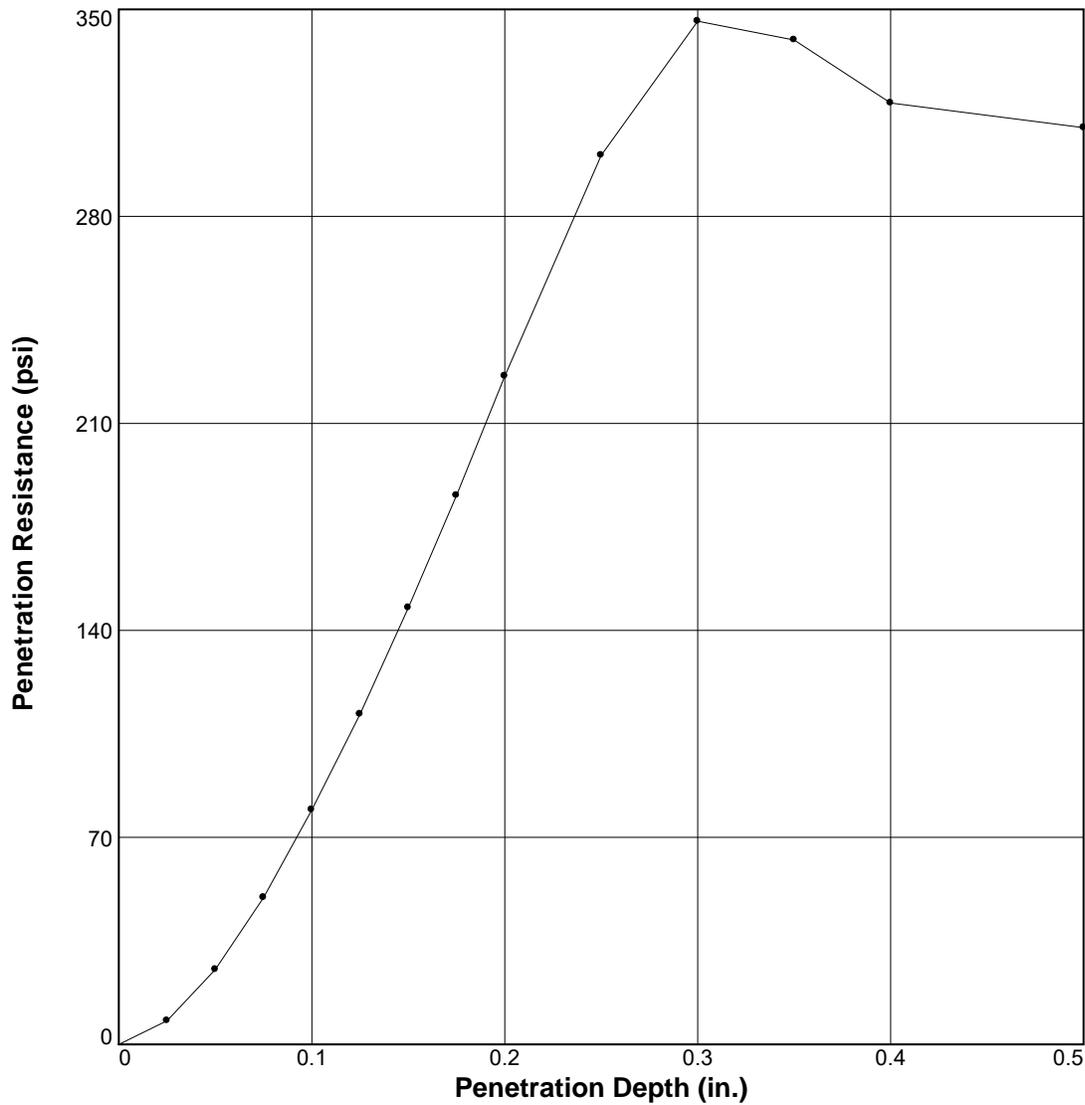


PROJECT NUMBER: 72215149

CLIENT: Norco Management Holding, Inc.  
Wilmington, NC

# BEARING RATIO TEST REPORT

## ASTM D 1883-07



	Molded			Soaked			CBR (%)		Linearity Correction (in.)	Surcharge (lbs.)	Max. Swell (%)
	Density (pcf)	Percent of Max. Dens.	Moisture (%)	Density (pcf)	Percent of Max. Dens.	Moisture (%)	0.10 in.	0.20 in.			
1 ○	105.1	98.4	14.0	105.1	98.4	15.4	14.9	20.1	0.051	10	
2 △											
3 □											

Material Description	USCS	Max. Dens. (pcf)	Optimum Moisture (%)	LL	PI
Dark gray & yellow tan poorly graded sand with silt	SP-SM	106.8	12.6	NL	NP

**Project No:** 72215149  
**Project:** Estrella Landing; 4615 Gordon Road; Wilmington, NC  
**Location:** B-18  
**Sample Number:** CBR-1      **Depth:** 0-3 ft  
**Date:** 2-14-22

**Test Description/Remarks:**  
 ASTM D1883; Soaked  
  
 Proposed soil subgrade; Natural moisture is 10.9%

## **SUPPORTING INFORMATION**

### **Contents:**

Infiltration Testing Results

General Notes

Unified Soil Classification System

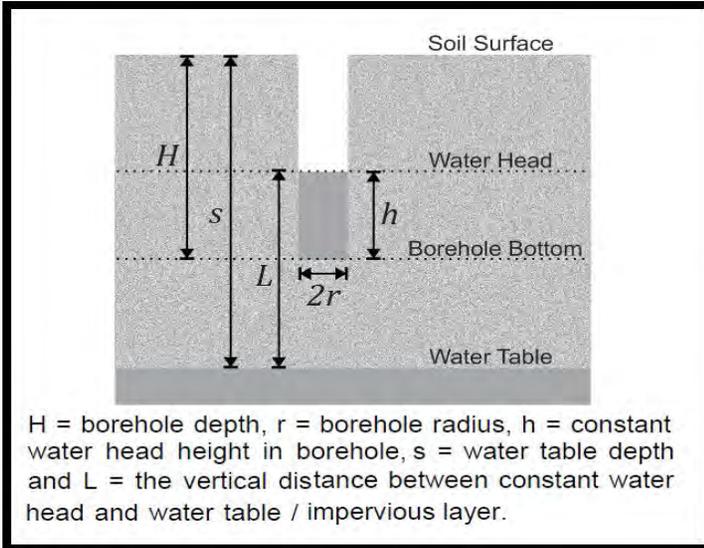
Note: All attachments are one page unless noted above.



# Soilmoisture Ksat Calculator

## Parameters Scenario

Q: Steady Flow Rate (ml/min):	133.33
r: Borehole Radius (cm):	3.81
h: Water head Height (cm):	10.15
H: Depth of Borehole (cm):	55.88
Water Temp ©:	25
S: Water Table Depth (cm):	180



### Elrick and Reynolds

Soil Type Description
I. Compacted, Structure-less, clayey or silty material
II. Soils which are both fine textured (clayey or silty)
III. Most structured soils from clays through loams; s
IV. Coarse and gravely sands; may also include some

	(m/s)
Ksat I:	3.35E-06
Ksat II:	1.09E-05
Ksat III:	2.01E-05
Ksat IV:	2.82E-05

### Radcliffe (new)

I. Compacted, Structure-less, clayey or silty material
II. Soils which are both fine textured (clayey or silty)
III. Most structured soils from clays through loams; s
IV. Coarse and gravely sands; may also include some

	(m/s)
Ksat I:	3.33E-06
Ksat II:	1.03E-05
Ksat III:	2.02E-05
Ksat IV:	2.91E-05

### Glover

	(m/s)
Ksat:	3.5E-05

### Earth Manual

Water Table Condition	
a. Deep Water Table	(L/h) > 3
b. Shallow Water Table	1 <= (L/h) <= 3
c. Very Shallow water Table	(L/h) < 1

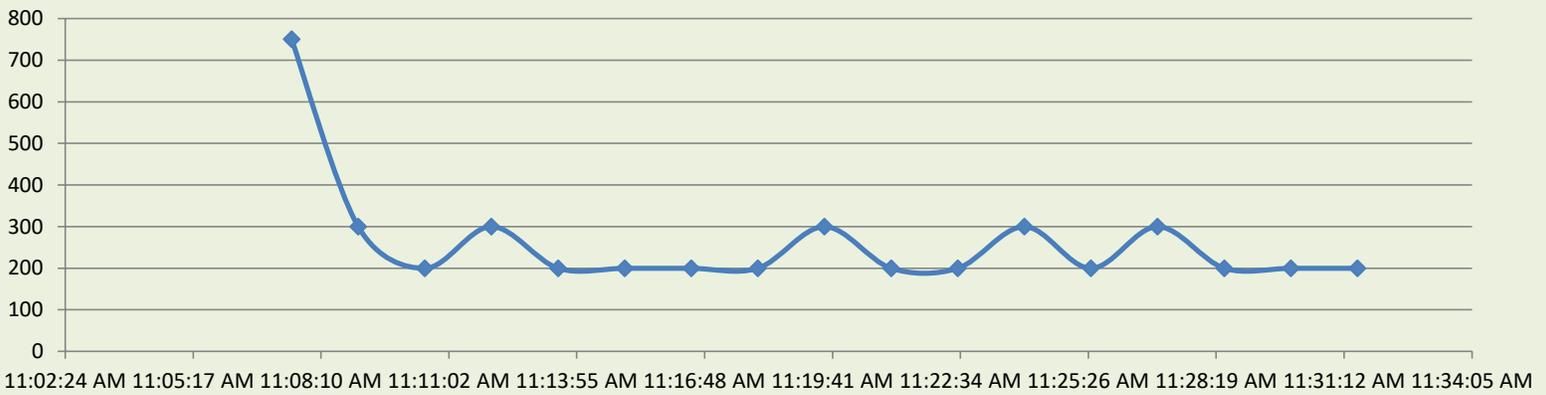
	(m/s)	(in/hr)
Ksat-a:	3.5E-05	4.933
Ksat-b:		
Ksat-c:		



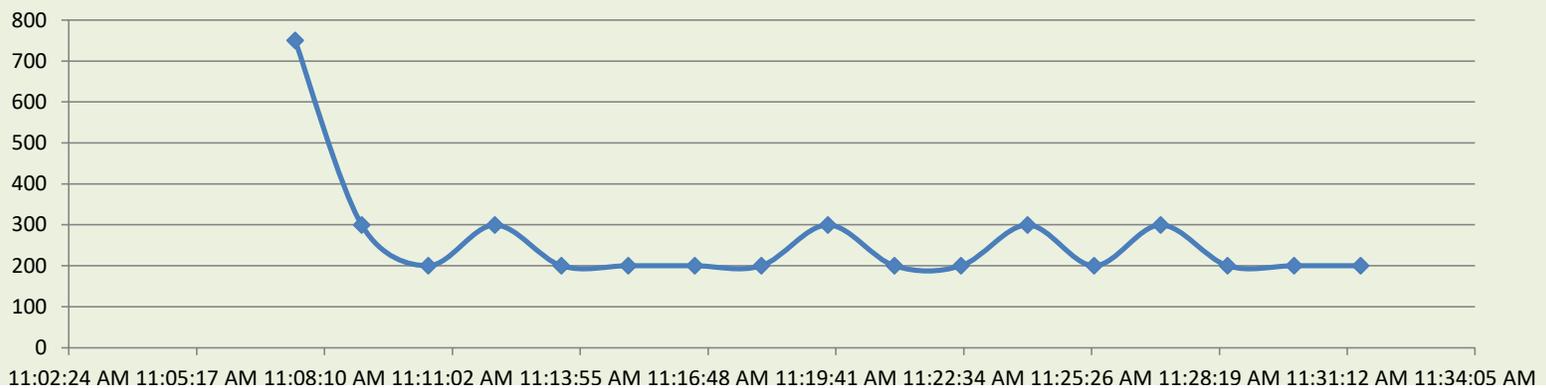
# Soilmoisture Ksat Calculator

Reading Number	Time	Reservoir Water Level (ml)	Elapsed Time (min)	Interval Water Consumed (ml)	Total Water Consumed (ml)	Water Consumption Rate (ml/min)
1	11:06:00 AM	9450				
2	11:07:30 AM	8700	1.50	750.00	750.00	500.00
3	11:09:00 AM	8400	1.50	300.00	300.00	200.00
4	11:10:30 AM	8200	1.50	200.00	200.00	133.33
5	11:12:00 AM	7900	1.50	300.00	300.00	200.00
6	11:13:30 AM	7700	1.50	200.00	200.00	133.33
7	11:15:00 AM	7500	1.50	200.00	200.00	133.33
8	11:16:30 AM	7300	1.50	200.00	200.00	133.33
8	11:18:00 AM	7100	1.50	200.00	200.00	133.33
8	11:19:30 AM	6800	1.50	300.00	300.00	200.00
8	11:21:00 AM	6600	1.50	200.00	200.00	133.33
8	11:22:30 AM	6400	1.50	200.00	200.00	133.33
8	11:24:00 AM	6100	1.50	300.00	300.00	200.00
8	11:25:30 AM	5900	1.50	200.00	200.00	133.33
8	11:27:00 AM	5600	1.50	300.00	300.00	200.00
8	11:28:30 AM	5400	1.50	200.00	200.00	133.33
8	11:30:00 AM	5200	1.50	200.00	200.00	133.33
8	11:31:30 AM	5000	1.50	200.00	200.00	133.33

Interval Water Consumed (ml)



Total Water Consumed (ml)



SAMPLING	WATER LEVEL	FIELD TESTS
 Auger Cuttings  Split Spoon	 Water Initially Encountered  Water Level After a Specified Period of Time  Water Level After a Specified Period of Time  Cave In Encountered  Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	<b>N</b> Standard Penetration Test Resistance (Blows/Ft.)  <b>(HP)</b> Hand Penetrometer  <b>(T)</b> Torvane  <b>(DCP)</b> Dynamic Cone Penetrometer  <b>UC</b> Unconfined Compressive Strength  <b>(PID)</b> Photo-Ionization Detector  <b>(OVA)</b> Organic Vapor Analyzer

**DESCRIPTIVE SOIL CLASSIFICATION**

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

**LOCATION AND ELEVATION NOTES**

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See [Exploration and Testing Procedures](#) in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

**STRENGTH TERMS**

RELATIVE DENSITY OF COARSE-GRAINED SOILS <small>(More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance</small>		CONSISTENCY OF FINE-GRAINED SOILS <small>(50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance</small>		
Descriptive Term (Density)	Standard Penetration or N-Value Blows/Ft.	Descriptive Term (Consistency)	Unconfined Compressive Strength Qu, (tsf)	Standard Penetration or N-Value Blows/Ft.
Very Loose	0 - 3	Very Soft	less than 0.25	0 - 1
Loose	4 - 9	Soft	0.25 to 0.50	2 - 4
Medium Dense	10 - 29	Medium Stiff	0.50 to 1.00	4 - 8
Dense	30 - 50	Stiff	1.00 to 2.00	8 - 15
Very Dense	> 50	Very Stiff	2.00 to 4.00	15 - 30
		Hard	> 4.00	> 30

**RELEVANCE OF SOIL BORING LOG**

The soil boring logs contained within this document are intended for application to the project as described in this document. Use of these soil boring logs for any other purpose may not be appropriate.

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests <sup>A</sup>				Soil Classification		
				Group Symbol	Group Name <sup>B</sup>	
<b>Coarse-Grained Soils:</b> More than 50% retained on No. 200 sieve	<b>Gravels:</b> More than 50% of coarse fraction retained on No. 4 sieve	<b>Clean Gravels:</b> Less than 5% fines <sup>C</sup>	$Cu \geq 4$ and $1 \leq Cc \leq 3$ <sup>E</sup>	GW	Well-graded gravel <sup>F</sup>	
			$Cu < 4$ and/or $[Cc < 1$ or $Cc > 3.0]$ <sup>E</sup>	GP	Poorly graded gravel <sup>F</sup>	
		<b>Gravels with Fines:</b> More than 12% fines <sup>C</sup>	Fines classify as ML or MH	GM	Silty gravel <sup>F, G, H</sup>	
			Fines classify as CL or CH	GC	Clayey gravel <sup>F, G, H</sup>	
	<b>Sands:</b> 50% or more of coarse fraction passes No. 4 sieve	<b>Clean Sands:</b> Less than 5% fines <sup>D</sup>	$Cu \geq 6$ and $1 \leq Cc \leq 3$ <sup>E</sup>	SW	Well-graded sand <sup>I</sup>	
			$Cu < 6$ and/or $[Cc < 1$ or $Cc > 3.0]$ <sup>E</sup>	SP	Poorly graded sand <sup>I</sup>	
		<b>Sands with Fines:</b> More than 12% fines <sup>D</sup>	Fines classify as ML or MH	SM	Silty sand <sup>G, H, I</sup>	
			Fines classify as CL or CH	SC	Clayey sand <sup>G, H, I</sup>	
<b>Fine-Grained Soils:</b> 50% or more passes the No. 200 sieve	<b>Silts and Clays:</b> Liquid limit less than 50	<b>Inorganic:</b>	$PI > 7$ and plots on or above "A" line	CL	Lean clay <sup>K, L, M</sup>	
			$PI < 4$ or plots below "A" line <sup>J</sup>	ML	Silt <sup>K, L, M</sup>	
		<b>Organic:</b>	Liquid limit - oven dried	< 0.75	OL	Organic clay <sup>K, L, M, N</sup>
			Liquid limit - not dried			Organic silt <sup>K, L, M, O</sup>
	<b>Silts and Clays:</b> Liquid limit 50 or more	<b>Inorganic:</b>	$PI$ plots on or above "A" line	CH	Fat clay <sup>K, L, M</sup>	
			$PI$ plots below "A" line	MH	Elastic Silt <sup>K, L, M</sup>	
		<b>Organic:</b>	Liquid limit - oven dried	< 0.75	OH	Organic clay <sup>K, L, M, P</sup>
			Liquid limit - not dried			Organic silt <sup>K, L, M, O</sup>
	<b>Highly organic soils:</b>	Primarily organic matter, dark in color, and organic odor			PT	Peat

<sup>A</sup> Based on the material passing the 3-inch (75-mm) sieve.

<sup>B</sup> If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

<sup>C</sup> Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

<sup>D</sup> Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

$$Cu = D_{60}/D_{10} \quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

<sup>F</sup> If soil contains  $\geq 15\%$  sand, add "with sand" to group name.

<sup>G</sup> If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

<sup>H</sup> If fines are organic, add "with organic fines" to group name.

<sup>I</sup> If soil contains  $\geq 15\%$  gravel, add "with gravel" to group name.

<sup>J</sup> If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

<sup>K</sup> If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

<sup>L</sup> If soil contains  $\geq 30\%$  plus No. 200 predominantly sand, add "sandy" to group name.

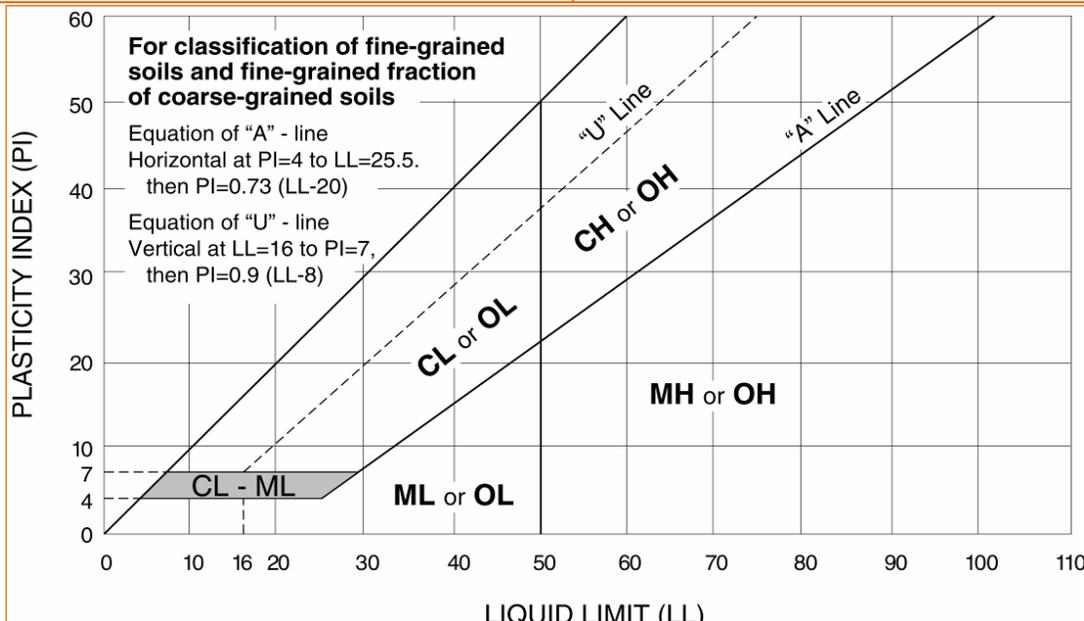
<sup>M</sup> If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name.

<sup>N</sup>  $PI \geq 4$  and plots on or above "A" line.

<sup>O</sup>  $PI < 4$  or plots below "A" line.

<sup>P</sup>  $PI$  plots on or above "A" line.

<sup>Q</sup>  $PI$  plots below "A" line.



## PUBLIC EDUCATION CERTIFICATION

Project Name: Estrella Landing Apartments  
Proposed No. of Units: 84 Apartment Units  
Address: 4615 Gordon Road  
Wilmington, NC

Closest street intersection or landmark: Located northeast of the intersection of Gordon Road and Interstate 40.

The above project, which is located in the New Hanover County school district(s), will  will not  adversely affect the schools serving this project. Furthermore, schools located in this district are  are not  considered high risk or poor performing schools per state or federal performance standards.

The schools that will serve project are: Murrayville Elementary, Trask Middle, and Laney High Schools

Additional Comments/Conditions/Concerns Trask and Laney currently exceed their building capacity.

1/11/2022  
Date

Eddie Anderson  
(Official's Signature)

Eddie Anderson  
(Official's Name - Print or Type)

Asst. Supt.  
(Official's Title)

Operations + Planning  
(Department Name)

Note: Copying official letterhead onto this certification is encouraged.

## Gievers, Andrea

---

**From:** Matt Carter  
**Sent:** Sunday, January 9, 2022 3:41 PM  
**To:** DSSinfo@NHCgov.com  
**Subject:** Request for response  
**Attachments:** SOCIAL SERVICES CERTIFICATION.docx

Please provide response for multifamily residential development.

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)





**NEW HANOVER COUNTY**  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
3002 US HIGHWAY 421 NORTH  
Wilmington, NC 28401-9008  
Telephone: (910) 798-4400 • Fax (910) 798-4408  
E-Mail Address: [jsuleyman@nhcgov.com](mailto:jsuleyman@nhcgov.com)

**JOE SULEYMAN**  
Director of Environmental Management

### HEALTH SERVICES CERTIFICATION

Project Name: Estrella Landing  
Proposed No. of Units: 64 Apartment Units  
Address: 4615 Gordon Road  
Wilmington, NC

Closest street intersection or landmark: Located northeast of intersection of Gordon Road  
And Interstate 40.

Adequate and appropriate Health Services are  are not  available for this project  
Furthermore, available Health Services will  will not  be adversely affected  
by this project.

Health Service/Provider organizations that may serve the project are: \_\_\_\_\_  
New Hanover County Department of Environmental Management

Additional Comments/Conditions/Concerns \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1/25/2022  
Date

  
\_\_\_\_\_  
(Officials Signature)  
**Joe Suleyman**  
Director  
\_\_\_\_\_  
(Officials Name – Print or Type)  
Director  
\_\_\_\_\_  
(Official's Title)  
NHC Dept. of Environmental  
Management  
\_\_\_\_\_  
(Department Name)

Note: Copying official letterhead onto this certification is encouraged.

**PUBLIC SEWER CERTIFICATION**

Project Name: Estrella Landing Apartments  
Proposed No. of Units: 84 Apartment Units  
Address: 4615 Gordon Road  
Wilmington, NC

Closest street intersection or landmark: Northeast of intersection of Gordon Road and Interstate 40.

Public Sewer is available and adequate  or is not available  to serve the above project

The closest tap sewer main is a 10 inch line located about 65 feet off-site.  
This line is approximately 11 feet deep. This will be a gravity flow system  ; a lift station will be required  or will not be required   
Location of line: Please see attached map.

Additional Comments/Conditions/Concerns Engineer will have final determination as to whether the system will a private lift station.

1/25/2022  
Date

Bernice Johnson  
(Officials Signature)

**Bernice Johnson**  
CFPUA Senior Project Engineer  
(Officials Name – Print or Type)

\_\_\_\_\_  
(Official's Title)

Engineering Department  
(Department Name)

Note: Copying official letterhead onto this certification is encouraged.

**PUBLIC WATER CERTIFICATION**

Project Name: Estrella Landing Apartments  
Proposed No. of Units: 84 Apartment Units  
Address: 4615 Gordon Road  
Wilmington, NC

Closest street intersection or landmark: Northeast of intersection of Gordon Road and Interstate 40.

Public Water is available and adequate  or is not available  to serve the above  
The closest tap  
project. main is a 16 inch line located about 100 feet off-site.  
Location of line: \_\_\_\_\_

Additional Comments/Conditions/Concerns \_\_\_\_\_

1/25/2022 Bernice Johnson  
Date (Officials Signature)

**Bernice Johnson**  
**CFPUA, Senior PROJECT Engineer**  
(Officials Name – Print or Type)

\_\_\_\_\_  
(Official's Title)

Engineering Department  
(Department Name)

Note: Copying official letterhead onto this certification is encouraged.



  
 Gravity Sewer  
 SS Force Main  
 Water Main  
 1 inch = 160 feet

  
**Cape Fear**  
 Public Utility Authority  
Providing Sustainable Services  
 All Cape Fear Public Utility Authority water and sewer geographic data is provided for general information purposes only. This data is considered to be sensitive information that is not to be copied or distributed without the express written consent of Cape Fear Public Utility Authority. While Cape Fear Public Utility Authority makes every effort to confirm the accuracy of this information, it does not warrant or guarantee information provided is accurate, current, or complete, and will not be held liable for problems that arise based upon the reliance of this information. Cape Fear Public Utility Authority assumes no responsibility for the consequences of inappropriate uses or interpretations of the data.  
 Sensitive Security Information Non Releasable per NCGS 132-1.7

## Gievers, Andrea

---

**From:** Matt Carter  
**Sent:** Monday, January 24, 2022 7:14 PM  
**To:** bernice.johnson@cfpua.org  
**Subject:** Please provide response  
**Attachments:** PUBLIC SEWER CERTIFICATION.docx; PUBLIC WATER CERTIFICATION.docx

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)



## Gievers, Andrea

---

**From:** Matt Carter  
**Sent:** Sunday, January 9, 2022 3:06 PM  
**To:** sstill@nhcgov.com  
**Subject:** Please provide response for planned site multi-family residential development  
**Attachments:** EMERGENCY MEDICAL SERVICE CERTIFICATION.docx

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)



## Gievers, Andrea

---

**From:** Matt Carter  
**Sent:** Sunday, January 9, 2022 3:11 PM  
**To:** 'dhall@nhcgov.com'  
**Subject:** Response request for proposed multi-family residential development  
**Attachments:** FIRE PROTECTION CERTIFICATION.docx

Please provide response.

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)



## Gievers, Andrea

---

**From:** Matt Carter  
**Sent:** Sunday, January 9, 2022 3:18 PM  
**To:** emcmahon@nhcgov.com  
**Subject:** Please provide response  
**Attachments:** LAW ENFORCEMENT CERTIFICATION.docx

Please provide response for proposed multifamily residential development.

Sincerely,

**Matt Carter**

336.701.9052 (c)

336.310.4527 (o)

P.O. Box 128

Kernersville, NC 27285

[www.pilotenviro.com](http://www.pilotenviro.com)

[mcarter@pilotenviro.com](mailto:mcarter@pilotenviro.com)





# NEW HANOVER COUNTY

## PARKS & GARDENS

896 Airline Road, Wilmington, NC 28403

P: (910) 798-7620 | F: (910) 798-7621 | Parks.NHCgov.com

**Tara Duckworth**, Director

### RECREATIONAL SERVICES CERTIFICATION

Project Name: Estrella Landing Apartments  
Proposed No. of Units: 84 Apartment Units  
Address: 4615 Gordon Road  
Wilmington, NC

Closest street intersection or landmark: Northeast of intersection of Gordon Road and Interstate 40.

Adequate and appropriate Recreational Services and Facilities are  are not  available for this project. Furthermore, available Recreational Services and Facilities will  will not  be adversely affected by this project.

Recreational facilities and organization that may serve the project are: Smith Creek Park, Ogden Park and Parkwood Park.

Additional Comments/Conditions/Concerns \_\_\_\_\_

1/10/22

Date

(Officials Signature)

**Tara Duckworth**

Director

(Officials Name – Print or Type)

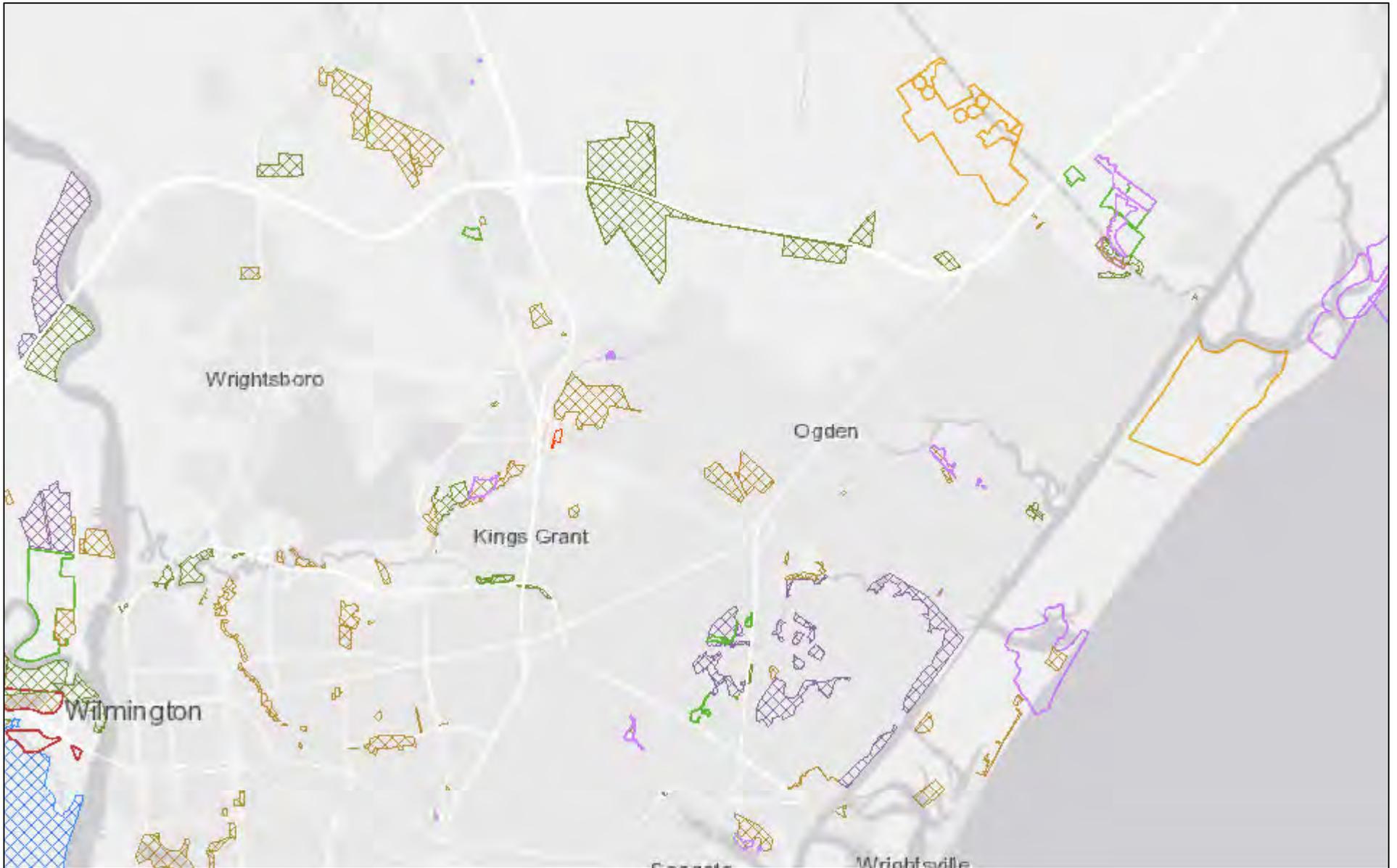
Parks and Garden Director

(Official's Title)

NHC Parks & Gardens

(Department Name)

# Gordon Road Managed Areas Map

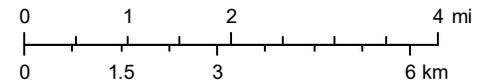


January 9, 2022

## Managed Areas

- |   |   |  |
|---|---|--|
|  Dedicated Nature Preserve |  Conservation Easement |  State Ownership            |
|  Registered Heritage Area  |  Other Protection      |  Local Government Ownership |
|   |  Federal Ownership     |  Private                    |

1:116,762



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Tuesday, December 14, 2021 4:16 PM  
**To:** Best, Crystal  
**Cc:** State Clearinghouse; Stephanie Norris  
**Subject:** NEPA Draft EA - Estrella Landing Apartments  
**Attachments:** NCORR Estrella Landing Apts Draft EA 12.14.21.pdf

Dear Ms. Best:

I have attached the NEPA Draft EA for the proposed Estrella Landing Apartments project. The North Carolina Office of Recovery and Resiliency (**NCORR**) as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD) is considering funding this proposed affordable housing project, **Estrella Landing Apartments, 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411**. The proposed project involves the construction of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water/retention pond, paved parking areas, and landscaped areas.

The site is comprised of an approximate 5.71-acre tract consisting of two parcels. The first parcel is the main area of the site and the second parcel is a 60-foot access and utility easement. The main parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is identified as Parcel ID 314914.23.7837.000. The site is located in an area of the county that can generally be described as residential and commercial. Surrounding properties contain commercial properties, a gasoline station, a church facility and residential properties. The proposed development will provide affordable housing for low and middle income families in the local community.

Thank you so much for distributing this project to the State Clearinghouse's project review team and participating agencies. If you have any questions or require additional information regarding this project review request, please feel free to contact Andrea Gievers at (845) 682-1700 or via email at [Andrea.L.Gievers@Rebuild.NC.gov](mailto:Andrea.L.Gievers@Rebuild.NC.gov). Thank you for your time and assistance!

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

December 14, 2021

State Environmental Review Clearinghouse  
1301 Mail Service Center  
Raleigh, NC 27699-1301

RE: NEPA Draft EA - HUD CDBG-DR Program  
*Proposed Estrella Landing Apartments*  
4615 Gordon Road  
Wilmington, NC 28411

Dear Project Review Team:

The North Carolina Office of Recovery and Resiliency (NCORR) as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD) is considering funding this proposed affordable housing project, *Estrella Landing Apartments, 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411*. The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). These hurricanes damaged or destroyed hundreds of homes worsening the affordable housing shortage. This proposed project will increase affordable housing inventory for low- and moderate-income families. Therefore, funding for the proposed project will be provided in part by the HUD CDBG-DR North Carolina Affordable Housing Development Fund Program for Hurricane Florence storm recovery activities in North Carolina.

NCORR is serving as the responsible entity for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58, and processes environmental reviews for proposed projects on a case-by-case basis. The *Estrella Landing Apartments* (proposed project) is a new multifamily, affordable housing construction project consisting of three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

*An Equal Opportunity Employer*

The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, New Hanover County, North Carolina 28411. The site consists of two parcels. The first parcel is the main area of the site and the second parcel is a 60-foot access and utility easement. The main parcel is identified by the New Hanover County GIS website as Parcel ID 314914.24.9298.000. The second easement parcel is identified as Parcel ID 314914.23.7837.000. The site is located in an area of the county that can generally be described as residential and commercial. Surrounding properties contain commercial properties, a gasoline station, a church facility and residential properties. The proposed development will provide affordable housing for low and middle income families in the local community.

If you have any questions or require additional information regarding this project review request, please feel free to contact Andrea Gievers at (845) 682-1700 or via email at [Andrea.L.Gievers@Rebuild.NC.gov](mailto:Andrea.L.Gievers@Rebuild.NC.gov). Thank you for your time and assistance.

Sincerely,



Andrea Gievers, JD, MSEL, ERM  
Environmental Subject Matter Expert  
NCORR – Community Development

Attachment:

- Draft EA



STATE OF NORTH CAROLINA  
DEPARTMENT OF ADMINISTRATION

Roy Cooper  
GOVERNOR

Pamela B. Cashwell  
Secretary

January 18, 2022

Andrea Gievers  
Estrella Landing Apartments  
c/o NC Department of Public Safety  
Office of Recovery and Resiliency  
Durham, NC 27709-

Re: SCH File # 22-E-4600-0133 Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a

Dear Andrea Gievers:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are comments made by the agencies in the review of this document.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

CRYSTAL BEST  
State Environmental Review Clearinghouse

Attachments

Mailing Address:  
NC DEPARTMENT OF ADMINISTRATION  
1301 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1301

Telephone: (919)807-2425  
Fax: (919)733-9571  
COURIER: #51-01-00  
Email: [state.clearinghouse@doa.nc.gov](mailto:state.clearinghouse@doa.nc.gov)  
Website: [www.ncadmin.nc.gov](http://www.ncadmin.nc.gov)

Location:  
116 WEST JONES STREET  
RALEIGH, NORTH CAROLINA

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

LYN HARDISON  
CLEARINGHOUSE COORDINATOR  
DEPT OF ENVIRONMENTAL QUALITY

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: LYN HARDISON

Date: 1/14/2022



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

To: Crystal Best  
State Clearinghouse  
NC Department of Administration

From: Lyn Hardison  
Division of Environmental Assistance and Customer Service  
Washington Regional Office

RE: 22-0133  
Scoping - Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of three apartment buildings containing eighty-four apartment units, one clubhouse building, a stormwater/retention pond, paved parking areas, and landscaped areas.  
New Hanover County

Date: January 14, 2022

The Department of Environment Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some valuable guidance. The comments are attached for the applicant's review.

The Department will continue to be available to assist the applicant with any question or concerns.

Thank you for the opportunity to respond.

Attachments



North Carolina Department of Environmental Quality

217 West Jones Street | 1601 Mail Service Center | Raleigh, North Carolina 27699-1601

919.707.8600

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0133 Due Date: 01/11/2022  
 County: New Hanover

After review of this project it has been determined that the DEQ permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, non-standard sewer system extensions & sewer systems that do not discharge into state surface waters.	Application 90 days before begins construction or award of construction contracts. On-site inspection may be required. Post-application technical conference usual.	30 days (90 days)
<input checked="" type="checkbox"/>	Permit to construct & operate, sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system	Fast-Track Permitting program consists of the submittal of an application and an engineer's certification that the project meets all applicable State rules and Division Minimum Design Criteria.	30 days (N/A)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begins activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary.	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a groundwater monitoring well located on property not owned by the applicant, and for a large capacity (>100,000 gallons per day) water supply well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input checked="" type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input checked="" type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950	Please Note - The Health Hazards Control Unit (HHCU) of the N.C. Department of Health and Human Services, must be notified of plans to demolish a building, including residences for commercial or industrial expansion, even if no asbestos is present in the building.	60 days (90 days)
<input checked="" type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater permit (NCG010000) is also usually issued should design features meet minimum requirements. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with _____ <b>Local Government's</b> approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		Based on Local Program
<input type="checkbox"/>	Compliance with 15A NCAC 2H .0126 - NPDES Stormwater Program which regulates three types of activities: Industrial, Municipal Separate Storm Sewer System & Construction activities that disturb ≥1 acre.		30-60 days (90 days)
<input checked="" type="checkbox"/>	Compliance with 15A NCAC 2H 1000 -State Stormwater Permitting Programs regulate site development and post-construction stormwater runoff control. Areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state.		45 days (90 days)

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0133 Due Date: 01/11/2022  
 County: New Hanover

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with DEQ Bond amount varies with type mine and number of acres of affected land. Affected area greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, and certify construction is according to DEQ approved plans. May also require a permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage or the total project cost will be required upon completion.	30 days (60 days)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DEQ running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DEQ rules and regulations.	10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with DEQ at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property	15-20 days N/A
<input checked="" type="checkbox"/>	401 Water Quality Certification	Compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.	60 days (130 days)
<input type="checkbox"/>	Compliance with Catawba, Goose Creek, Jordan Lake, Randleman, Tar Pamlico or Neuse Riparian Buffer Rules is required. Buffer requirements: <a href="http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program">http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program</a>		
<input type="checkbox"/>	Nutrient Offset: Loading requirements for nitrogen and phosphorus in the Neuse and Tar-Pamlico River basins, and in the Jordan and Falls Lake watersheds, as part of the nutrient-management strategies in these areas. DWR nutrient offset information: <a href="http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information">http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information</a>		
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 - \$475.00 fee must accompany application	75 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$100.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input checked="" type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq., Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input checked="" type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of the _____ water system must be approved through the _____ delegated plan approval authority. Please contact them at _____ for further information.		

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0133 Due Date: 01/11/2022  
 County: New Hanover

Other Comments (attach additional pages as necessary, being certain to comment authority)

Division	Initials	No comment	Comments	Date Review
DAQ		<input type="checkbox"/>	See checked boxes above	/ /
DWR-WQROS (Aquifer & Surface)	&	<input type="checkbox"/>	See checked boxes above &	/ /
DWR-PWS	HLC	<input type="checkbox"/>	see above comments	1/7/2021
DEMLR (LQ & SW)		<input type="checkbox"/>	See checked boxes above	/ /
DWM – UST		<input type="checkbox"/>	See attached comments	/ /
Other Comments		<input type="checkbox"/>		/ /

**REGIONAL OFFICES**

Questions regarding these permits should be addressed to the Regional Office marked below.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> <b>Asheville Regional Office</b><br>2090 U.S. 70 Highway<br>Swannanoa, NC 28778-8211<br>Phone: 828-296-4500<br>Fax: 828-299-7043 | <input type="checkbox"/> <b>Fayetteville Regional Office</b><br>225 Green Street, Suite 714,<br>Fayetteville, NC 28301-5043<br>Phone: 910-433-3300<br>Fax: 910-486-0707 | <input type="checkbox"/> <b> Mooresville Regional Office</b><br>610 East Center Avenue, Suite 301,<br>Mooresville, NC 28115<br>Phone: 704-663-1699<br>Fax: 704-663-6040 |
| <input type="checkbox"/> <b>Raleigh Regional Office</b><br>3800 Barrett Drive,<br>Raleigh, NC 27609<br>Phone: 919-791-4200<br>Fax: 919-571-4718           | <input type="checkbox"/> <b>Washington Regional Office</b><br>943 Washington Square Mall,<br>Washington, NC 27889<br>Phone: 252-946-6481<br>Fax: 252-975-3716           | <input checked="" type="checkbox"/> <b>Wilmington Regional Office</b><br>127 Cardinal Drive Ext.,<br>Wilmington, NC 28405<br>Phone: 910-796-7215<br>Fax: 910-350-2004   |
|   | <input type="checkbox"/> <b>Winston-Salem Regional Office</b><br>450 Hanes Mill Road, Suite 300,<br>Winston-Salem, NC 27105<br>Phone: 336-776-9800<br>Fax: 336-776-9797 |   |

# Department of Environmental Quality Project Review Form

**Project Number: 22-0133**

**County: New Hanover**

**Date Received: 12-15-2021**

**Due Date: 1-11-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt- UST Section	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input type="checkbox"/> Wildlife <u>Maria</u>
<input checked="" type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 12/28/2021	In-House Reviewer/Agency: Liz Price - DWM/UST Section
--------------------------	------------------	---

Response (check all applicable)

No objection to project as proposed: As per a search of the UST Section databases, no reported petroleum releases are known to exist at this location, nor are there any records of registered USTs at this location.

To view/find other petroleum related incidents in the area please use the LINK TO UST Section GIS MAP:  
<http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps>

If you have any questions, please contact:

**Liz Price @ [liz.price@ncdenr.gov](mailto:liz.price@ncdenr.gov) or 910-796-7263**

## Department of Environmental Quality Project Review Form

**Project Number: 22-0133**

**County: New Hanover**

**Date Received: 12-15-2021**

**Due Date: 1-11-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input checked="" type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife <u>Maria</u>
<input type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: <u>1-3-2022</u>	In-House Reviewer/Agency: <u>MEID / NewRC</u>
--------------------------	--------------------------	--

Response (check all applicable)

No objection to project as proposed.

No Comment

Insufficient information to complete review

Other (specify or attach comments)

If you have any questions, please contact:

**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842  
943 Washington Square Mall Washington NC 27889  
Courier No. 16-04-01**

# Department of Environmental Quality

## Project Review Form

**Project Number: 22-0133**

**County: New Hanover**

**Date Received: 12-15-2021**

**Due Date: 1-11-2022**

*Scoping - Proposed project is for the construction of Estrella Landing Apartments.*

**Project Description:** *The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input checked="" type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife <u>Maria</u>
<input type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 1/11/22	In-House Reviewer/Agency: Melodi Deaver, Hazardous Waste Section
--------------------------	------------------	---

Response (check all applicable)

No objection to project as proposed.
  No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:

**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

ROY COOPER  
*Governor*  
ELIZABETH S. BISER  
*Secretary*  
MICHAEL SCOTT  
*Director*



Date: January 11, 2022

To: Michael Scott, Director  
Division of Waste Management

Through: Janet Macdonald  
Inactive Hazardous Sites Branch – Special Projects Unit

From: Bonnie S. Ware  
Inactive Hazardous Sites Branch

Subject: NEPA Project # 22-0133, Estrella Landing Apartments/HUD- CDBG-DR, New Hanover County, North Carolina

The Superfund Section has reviewed the proximity of sites under its jurisdiction to the Estrella Landing Apartments/HUD- CDBG-DR project. Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of three apartment buildings containing eighty-four apartment units, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas.

No Superfund Section sites were identified within one mile of the project as shown on the attached report.

Please contact Janet Macdonald at 919.707.8349 if you have any questions concerning the Superfund Section review portion of this SEPA/NEPA inquiry.



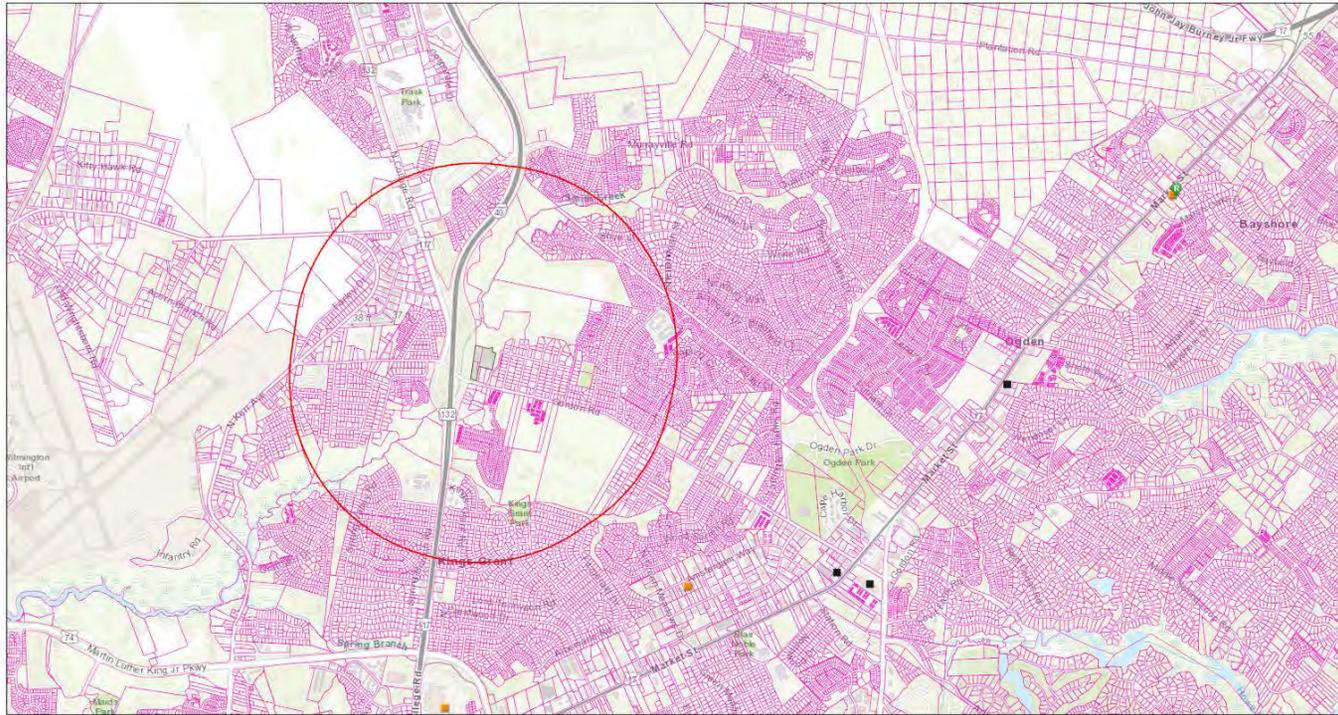
North Carolina Department of Environmental Quality | Division of Waste Management  
217 West Jones Street | 1646 Mail Service Center | Raleigh, North Carolina 27699-1646  
919.707.8200

# SUPERFUND SECTION SITES ONLY : SEPA/NEPA

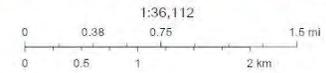
## Area of Interest (AOI) Information

Area : 2,374.01 acres

Jan 11 2022 10:56:44 Eastern Standard Time



- NC Brownfields Location\_View
-  Recorded
  -  Inactive Hazardous Sites
  -  DryCleaning Contaminated
  -  Parcels (Polygons) - Parcels



New Hanover County, State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

Superfund Section Sites Only : 22-0133 New Hanover County

## Summary

Name	Count	Area(acres)	Length(mi)
Certified DSCA Sites	0	N/A	N/A
Federal Remediation Branch Sites	0	N/A	N/A
Inactive Hazardous Sites	0	N/A	N/A
Pre-Regulatory Landfill Sites	0	N/A	N/A
Brownfields Program Sites	0	N/A	N/A

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

JEANNE STONE  
CLEARINGHOUSE COORDINATOR  
DEPT OF TRANSPORTATION

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: JEANNE STONE

Date: 12/16/2021

**Stone, Jeanne B**

---

**From:** Sarder, Nazia  
**Sent:** Thursday, December 16, 2021 10:16 AM  
**To:** Stone, Jeanne B  
**Cc:** Norowzi, Behshad M  
**Subject:** Clearinghouse 22-E-4600-0133 Review  
**Attachments:** 22E46000133\_Estrella Landing Apartments.pdf

Hello again,

I have reviewed the clearinghouse below (and attached) and I have the following comments:

1. Please refer to the [Wilmington MTP](#). For existing and future roadway/ transit recommendations surrounding the apartment area in Wilmington, you may review the plan for the following projects near the proximity of this area:
  - a. US 17
  - b. Military Cutoff Road
  - c. Other surrounding minor roadways
2. Refer to Wilmington MTP for Multi-use and Bicycle/Pedestrian Projects along:
  - a. Gordon Road
  - b. Market Street
3. Additional information for I-40 near this project in the MTP: "The WMPO Board passed a resolution in February of 2019 in support of NCDOT's efforts to secure state and federal funding for improvements to I-40 and I-95 to address flooding and accessibility issues experienced during recent, significant weather events."

Clearinghouse **22-E-4600-0133**: Clearinghouse Review of Request for Proposed Estrella Landing Apartments - Wilmington, New Hanover County, NC.

Regards,

**Nazia Sarder**  
Transportation Engineer III  
Transportation Planning Division  
North Carolina Department of Transportation

919 707 0980 office  
919 274 5349 cell  
[nsarder@ncdot.gov](mailto:nsarder@ncdot.gov)

1554 Mail Service Center  
Raleigh, NC 27699

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

DEVON BORGARDT  
CLEARINGHOUSE COORDINATOR  
DEPT OF NATURAL & CULTURAL  
RESOURCE

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: DEVON BORGARDT

Date: 12/29/2021

Control No.: 22-E-4600-0133  
County.: NEW HANOVER

Date Received: 12/15/2021  
Agency Response: 1/14/2022  
Review Closed: 1/14/2022

JINTAO WEN  
CLEARINGHOUSE COORDINATOR  
DPS - DIV OF EMERGENCY MANAGEMENT

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. The proposed project involves the construction of a three apartment buildings containing eighty-four apartment units, one clubhouse building. The facilities will consist of three apartment buildings, one clubhouse building, a storm water/retention pond, paved parking areas and landscaped areas. The proposed development will occur on an approximate 5.71-acre tract located at 4615 Gordon Road, Wilmington, North Carolina.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

The proposed project site encroaches into the Special Flood Hazard Area (SFHA). Any encroachment, grading, fill or placement of equipment or materials in the SFHA will require a floodplain development permit issued by New Hanover County. Please coordinate with the County's Floodplain Administrator for permitting if needed.

Reviewed By: JINTAO WEN

Date: 1/10/2022



STATE OF NORTH CAROLINA  
DEPARTMENT OF ADMINISTRATION

Roy Cooper  
GOVERNOR

Pamela B. Cashwell  
Secretary

March 28, 2022

Andrea Gievers  
Estrella Landing Apartments  
c/o NC Department of Public Safety  
Office of Recovery and Resiliency  
Durham, NC 27709-

Re: SCH File # 22-E-4600-0185 Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

Dear Andrea Gievers:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are comments made by the agencies in the review of this document.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

CRYSTAL BEST  
State Environmental Review Clearinghouse

Attachments

Mailing Address:  
NC DEPARTMENT OF ADMINISTRATION  
1301 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1301

Telephone: (919)807-2425  
Fax: (919)733-9571  
COURIER: #51-01-00  
Email: [state.clearinghouse@doa.nc.gov](mailto:state.clearinghouse@doa.nc.gov)  
Website: [www.ncadmin.nc.gov](http://www.ncadmin.nc.gov)

Location:  
116 WEST JONES STREET  
RALEIGH, NORTH CAROLINA

Control No.: 22-E-4600-0185  
County.: NEW HANOVER

Date Received: 3/14/2022  
Agency Response: 3/25/2022  
Review Closed: 3/25/2022

LYN HARDISON  
CLEARINGHOUSE COORDINATOR  
DEPT OF ENVIRONMENTAL QUALITY

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: LYN HARDISON

Date: 3/28/2022



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

To: Crystal Best  
State Clearinghouse  
NC Department of Administration

From: Lyn Hardison  
Division of Environmental Assistance and Customer Service  
Washington Regional Office

RE: 22-0185  
Scoping - Proposed project is for the construction of Estrella Landing Apartments consisting of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.  
New Hanover County

Date: March 28, 2022

The Department of Environment Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some valuable guidance. The comments are attached for the applicant's review.

The Department will continue to be available to assist the applicant with any question or concerns.

Thank you for the opportunity to respond.

Attachments



North Carolina Department of Environmental Quality

217 West Jones Street | 1601 Mail Service Center | Raleigh, North Carolina 27699-1601

919.707.8600

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0185 Due Date: 3/25/2022  
 County: New Hanover

After review of this project it has been determined that the DEQ permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, non-standard sewer system extensions & sewer systems that do not discharge into state surface waters.	Application 90 days before begins construction or award of construction contracts. On-site inspection may be required. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	Permit to construct & operate, sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system	Fast-Track Permitting program consists of the submittal of an application and an engineer's certification that the project meets all applicable State rules and Division Minimum Design Criteria.	30 days (N/A)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begins activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary.	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a groundwater monitoring well located on property not owned by the applicant, and for a large capacity (>100,000 gallons per day) water supply well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950	Please Note - The Health Hazards Control Unit (HHCU) of the N.C. Department of Health and Human Services, must be notified of plans to demolish a building, including residences for commercial or industrial expansion, even if no asbestos is present in the building.	60 days (90 days)
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater permit (NCG010000) is also usually issued should design features meet minimum requirements. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with _____ <b>Local Government's</b> approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets.		Based on Local Program
<input type="checkbox"/>	Compliance with 15A NCAC 2H .0126 - NPDES Stormwater Program which regulates three types of activities: Industrial, Municipal Separate Storm Sewer System & Construction activities that disturb ≥1 acre.		30-60 days (90 days)
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 -State Stormwater Permitting Programs regulate site development and post-construction stormwater runoff control. Areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state.		45 days (90 days)

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0185 Due Date: 3/25/2022  
 County: New Hanover

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with DEQ Bond amount varies with type mine and number of acres of affected land. Affected area greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, and certify construction is according to DEQ approved plans. May also require a permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage or the total project cost will be required upon completion.	30 days (60 days)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DEQ running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DEQ rules and regulations.	10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with DEQ at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property	15-20 days N/A
<input type="checkbox"/>	401 Water Quality Certification	Compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323.	60 days (130 days)
<input type="checkbox"/>	Compliance with Catawba, Goose Creek, Jordan Lake, Randleman, Tar Pamlico or Neuse Riparian Buffer Rules is required. Buffer requirements: <a href="http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program">http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program</a>		
<input type="checkbox"/>	Nutrient Offset: Loading requirements for nitrogen and phosphorus in the Neuse and Tar-Pamlico River basins, and in the Jordan and Falls Lake watersheds, as part of the nutrient-management strategies in these areas. DWR nutrient offset information: <a href="http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information">http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information</a>		
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 - \$475.00 fee must accompany application	75 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$100.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input checked="" type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq., Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input checked="" type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of the _____ water system must be approved through the _____ delegated plan approval authority. Please contact them at _____ for further information.		

State of North Carolina Department of Environmental Quality  
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: WIRO  
 Project Number: 22-0185 Due Date: 3/25/2022  
 County: New Hanover

Other Comments (attach additional pages as necessary, being certain to comment authority)

Division	Initials	No comment	Comments	Date Review
DAQ	DAC	<input checked="" type="checkbox"/>		3/22/2022
DWR-WQROS (Aquifer & Surface)	TT &	<input type="checkbox"/>	Based on a database search only, no DWR records were located using the search terms provided in the request. Because DWR files exist in hardcopy and electronic formats, a complete file review necessitates physical review of hardcopy records in the regional office. To ensure a complete records search, you may also elect to search our Laserfiche records system: <a href="https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=533172&amp;dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/WaterResources/Browse.aspx?id=533172&amp;dbid=0&amp;repo=WaterResources</a>  In addition, DWR maintains a locator tool for map searches at: <a href="https://experience.arcgis.com/experience/689283d17bf342c2a96364fbab09a5d8">https://experience.arcgis.com/experience/689283d17bf342c2a96364fbab09a5d8</a> And a streamlined well construction record Laserfiche search tool can be found at: <a href="https://edocs.deq.nc.gov/Groundwater/Welcome.aspx?dbid=0&amp;repo=WaterResources">https://edocs.deq.nc.gov/Groundwater/Welcome.aspx?dbid=0&amp;repo=WaterResources</a> &	3/15/2022
DWR-PWS	HLC	<input type="checkbox"/>	see above comments	3/18/2022
DEMLR (LQ & SW)		<input type="checkbox"/>		/ /
DWM – UST	LP	<input type="checkbox"/>	As per a search of the UST Section databases, no reported petroleum releases are known to exist at this location, nor are there any records of registered USTs at this location.  To view/find other petroleum related incidents in the area please use the LINK TO UST Section GIS MAP: <a href="http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps">http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/waste-management-gis-maps</a>	3/16/2022
Other Comments		<input type="checkbox"/>		/ /

**REGIONAL OFFICES**

Questions regarding these permits should be addressed to the Regional Office marked below.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> <b>Asheville Regional Office</b><br>2090 U.S. 70 Highway<br>Swannanoa, NC 28778-8211<br>Phone: 828-296-4500<br>Fax: 828-299-7043 | <input type="checkbox"/> <b>Fayetteville Regional Office</b><br>225 Green Street, Suite 714,<br>Fayetteville, NC 28301-5043<br>Phone: 910-433-3300<br>Fax: 910-486-0707 | <input type="checkbox"/> <b>Mooreville Regional Office</b><br>610 East Center Avenue, Suite 301,<br>Mooreville, NC 28115<br>Phone: 704-663-1699<br>Fax: 704-663-6040  |
| <input type="checkbox"/> <b>Raleigh Regional Office</b><br>3800 Barrett Drive,<br>Raleigh, NC 27609<br>Phone: 919-791-4200<br>Fax: 919-571-4718           | <input type="checkbox"/> <b>Washington Regional Office</b><br>943 Washington Square Mall,<br>Washington, NC 27889<br>Phone: 252-946-6481<br>Fax: 252-975-3716           | <input checked="" type="checkbox"/> <b>Wilmington Regional Office</b><br>127 Cardinal Drive Ext.,<br>Wilmington, NC 28405<br>Phone: 910-796-7215<br>Fax: 910-350-2004 |
|   | <input type="checkbox"/> <b>Winston-Salem Regional Office</b><br>450 Hanes Mill Road, Suite 300,<br>Winston-Salem, NC 27105<br>Phone: 336-776-9800<br>Fax: 336-776-9797 |   |

**ROY COOPER**

*Governor*

**ELIZABETH S. BISER**

*Secretary*

**MICHAEL SCOTT**

*Director*



**NORTH CAROLINA**  
*Environmental Quality*

Date: March 22, 2022

To: Michael Scott, Director  
Division of Waste Management

Through: Janet Macdonald  
Inactive Hazardous Sites Branch

From: Bonnie S. Ware  
Inactive Hazardous Sites Branch

Subject: NEPA Project # 22-0185, Estrella Landing Apartments, New Hanover County, North Carolina

The Superfund Section has reviewed the proximity of sites under its jurisdiction to the Estrella Landing Apartments project. Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

No Superfund Section sites were identified within one mile of the project as shown on the attached report.

Please contact Janet Macdonald at 919.707.8349 if you have any questions concerning the Superfund Section review portion of this SEPA/NEPA inquiry.



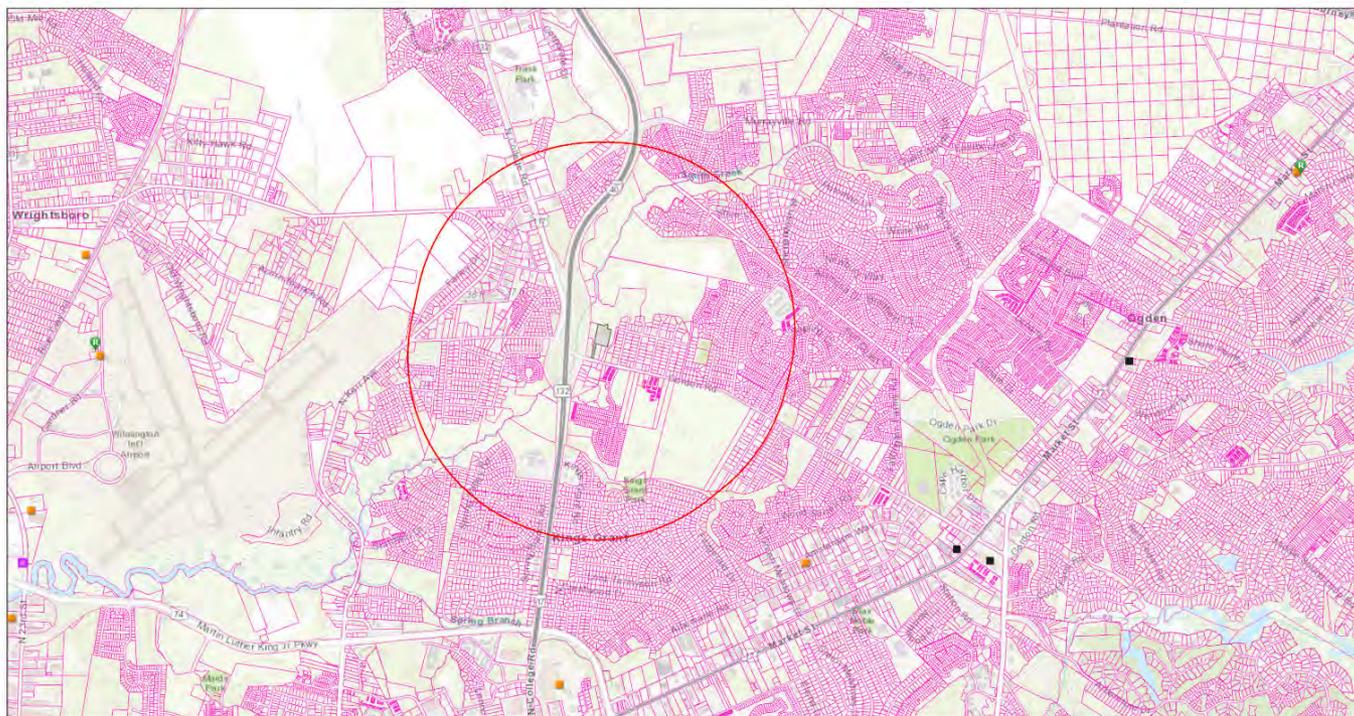
North Carolina Department of Environmental Quality | Division of Waste Management  
217 West Jones Street | 1646 Mail Service Center | Raleigh, North Carolina 27699-1646  
919.707.8200

# SUPERFUND SECTION SITES ONLY : SEPA/NEPA

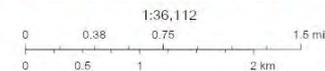
## Area of Interest (AOI) Information

Area : 2,326.82 acres

Mar 22 2022 11:45:12 Eastern Daylight Time



- NC Brownfields Location\_View
- Pre Regulatory Landfill Sites
- DryCleaning Contaminated
- Recorded
- Activity Pending
- Inactive Hazardous Sites
- Parcels (Polygons) - Parcels



New Hanover County, State of North Carolina DOT, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA

Superfund Section Sites Only : 22-0185 New Hanover County

## Summary

Name	Count	Area(acres)	Length(mi)
Certified DSCA Sites	0	N/A	N/A
Federal Remediation Branch Sites	0	N/A	N/A
Inactive Hazardous Sites	0	N/A	N/A
Pre-Regulatory Landfill Sites	0	N/A	N/A
Brownfields Program Sites	0	N/A	N/A

# Department of Environmental Quality Project Review Form

**Project Number: 22-0185**

**County: New Hanover**

**Date Received: 3-14-2022**

**Due Date: 4-8-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife <u>Maria</u>
<input checked="" type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 3/24/22	In-House Reviewer/Agency: Melodi Deaver, Hazardous Waste Section
--------------------------	------------------	---

Response (check all applicable)

No objection to project as proposed.
  X
 No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:  
**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

## Department of Environmental Quality Project Review Form

**Project Number:** 22-0185

**County:** New Hanover

**Date Received:** 3-14-2022

**Due Date: 4-8-2022**

**Project Description:** *Scoping - Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.*

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Parks & Recreation	<input type="checkbox"/> Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR - Public Water	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt (Public Water, Planning & Water Quality Program)	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> DWM	<input type="checkbox"/> DWR-Transportation Unit	<input checked="" type="checkbox"/> Wildlife Maria
<input checked="" type="checkbox"/> Wilmington			<input type="checkbox"/> Wildlife/DOT
<input type="checkbox"/> Winston-Salem			

Manager Sign-Off/Region:	Date: 3-25-2022	In-House Reviewer/Agency: M. J. D. / NCWRC
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Response (check all applicable)

No objection to project as proposed.
  No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:  
**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

Control No.: 22-E-4600-0185  
County.: NEW HANOVER

Date Received: 3/14/2022  
Agency Response: 3/25/2022  
Review Closed: 3/25/2022

JINTAO WEN  
CLEARINGHOUSE COORDINATOR  
DPS - DIV OF EMERGENCY MANAGEMENT

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Portion of the proposed project will encroach into Special Flood Hazard Area (SFHA), therefore a Floodplain Development Permit issued by New Hanover County will be required. Please coordinate with the County's Floodplain Administrator for permitting.

Reviewed By: JINTAO WEN

Date: 3/21/2022

Control No.: 22-E-4600-0185  
County.: NEW HANOVER

Date Received: 3/14/2022  
Agency Response: 4/13/2022  
Review Closed: 4/13/2022

JEANNE STONE  
CLEARINGHOUSE COORDINATOR  
DEPT OF TRANSPORTATION

Project Information

Type: National Environmental Policy Act ping  
Applicant: Estrella Landing Apartments  
Project Desc.: Proposed project is for the construction of Estrella Landing Apartments. Proposed project will consist of three apartment buildings containing 84 apartment units, one clubhouse building, a storm water retention pond, play area, picnic pavilion, paved parking areas and landscaped areas.

As a result of this review the following is submitted:

No Comment       Comments Below       Documents Attached

Reviewed By: JEANNE STONE

Date: 3/18/2022

## Stone, Jeanne B

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**From:** Sarder, Nazia  
**Sent:** Friday, March 18, 2022 9:24 AM  
**To:** Stone, Jeanne B  
**Cc:** Norowzi, Behshad M  
**Subject:** Clearinghouse 22-E-4600-0185 Review  
**Attachments:** 22E46000185\_Estrella Landing Apartments.pdf

Good morning,

I have reviewed the attached clearinghouse and have the following comments:

1. Refer to the Wilmington MPO MTP. Particularly page 77 for all multi-modal projects near and around Gordon Road.

Clearinghouse **22-E-4600-0185**: Clearinghouse Review of A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND for Estrella Landing Apartments - Wilmington, New Hanover County, NC.

Regards,

**Nazia Sarder**  
Transportation Engineer III  
Transportation Planning Division  
North Carolina Department of Transportation

919 707 0980 office  
919 274 5349 cell  
[nsarder@ncdot.gov](mailto:nsarder@ncdot.gov)

1554 Mail Service Center  
Raleigh, NC 27699

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