



LAND & WATER RESOURCES DIVISION  
Environmental Quality Department

P.O. Box 548  
Pittsboro, NC 27312  
PHONE: (919) 542-0945

Website: [www.chathamnc.org](http://www.chathamnc.org)

*General Environmental Documentation  
Submittal Form*

*This form shall be completed by applicants building a  
Residential Development that includes 49 new lots or less.*

Proposed Subdivision/Project Name: Brookside at Fieldstone

Property Owner/Applicant:	Representative (e.g., Surveyor, Engineer)
Name: <u>SHERYL-MAR COMPANY, LLC</u>	Name: <u>Dave Ballentine</u>
	Company: <u>Ballentine Associates</u>
Address: <u>87 Norwood Road</u>	Address: <u>221 Providence Road</u>
<u>Chapel Hill, NC 27516</u>	<u>Chapel Hill, NC 27514</u>
Phone: (W) <u>(919) 210-0920</u>	Phone: (W) <u>(919) 929-0481 x121</u>
(C) _____	(C) _____
Fax: _____	Fax: _____
Email: <u>jhodgin@email.unc.edu</u>	Email: <u>davidb@bapa.eng.pro</u>

Parcel #: (AKPAR): 80775

Property address: Fieldstone Lane

Total acreage: 20.0 acres

For Office Use Only	
Date Received: _____	Reviewed By: _____
Summary/comments:	

1. **Project Description. Provide a narrative describing existing site conditions, land use, natural and cultural resources and how the proposed project may potentially impact the existing conditions and resources. Include proposed uses of the property. Please describe your development plans.**

The existing site is wooded and a stream runs along the western edge of the property. Single-family residential neighborhoods lie to the west, north, and northeast. Twin Lakes Golf Course sits to the east. The proposed subdivision will be called Brookside at Fieldstone and will consist of 13 single family lots, 40,000 sq. ft. or greater. Access to the new lots will be by an extension of the existing Fieldstone Lane and 50' wide public right-of-way.

Environmental impacts of construction will be minimized to extents possible. A stream crossing was permitted (see attached) and construction of the existing crossing improvements were completed with Fieldstone Phase 2. Existing trees will be cleared to allow for grading & construction of the new roadway & utilities, while trees to remain shall be protected with tree protection fencing. An Erosion Control Plan & a Stormwater Management Plan will be submitted to the County for review and approval prior to construction.

2. **Describe the Zoning and Uses of adjacent properties below.**

North	R-1 Single Family	South	CUD-CC Undeveloped
	R-1 Single Family		
East	& Golf Course	West	R-1 Single Family

3. **Surface Waters (streams, ponds, lakes, wetlands). Are there any surface waters on the property? Attach a list of surface waters and a map showing the location of the water resources in relation to the proposed development. Include riparian buffers, if applicable. Visit our website for information regarding protected riparian buffers: <http://www.chathamnc.org/Index.aspx?page=883> and for a list of consultants to assist you with identification of streams and delineation of wetlands.**

A stream with wetland areas runs along the western edge of the property. See attached delineation.

4. **Is the project located in the Regulatory Floodplain/Floodway? Yes \_\_\_\_\_ No ☒**  
**FIRM Panel #** 3710976500J & 3710976600J **Flood Zone** Zone X **If yes, please provide a map showing the Floodplain/Floodway on a site map.**  
Use <http://www.ncfloodmaps.com> to view flood zones.

5. **Is there a Significant Natural Heritage Area on the project site? Yes \_\_\_\_\_ No ☒**  
**If yes, please provide a map showing the Significant Natural Heritage Area on the site.**  
Use this website and select Natural Heritage dropdown menu. <http://www.chathamgis.com>.

6. **Are there federally listed or federal aquatic species of concern in the designated 14 Digit Hydrologic Unit drainage basin of the project? Yes ☒ No \_\_\_\_\_**

Use this website and select Wildlife Resources Commission dropdown menu.

<http://www.chathamgis.com>.

County GIS indicates the project site lies within a "Federally Endangered Aquatic Species HUCs" area.

7. **Please circle the appropriate Watershed District (see the Watershed Protection Ordinance for descriptions).**

WS II Balance of Watershed

WS III Critical Area

WS III Balance of Watershed

WS IV-Critical Area

WS IV Protected Area

River Corridor

River Corridor Special Area

Local Watershed Area

8. Does the project site contain element occurrences of natural diversity, including rare species, as determined by the NC Natural Heritage Program, NC Wildlife Resources Commission and US Fish and Wildlife Service? Yes ☐ No ☒ If yes, please provide a narrative. Use this website to determine EO: [www.ncnhp.org/web/nhp/element-occurrences](http://www.ncnhp.org/web/nhp/element-occurrences).

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 \*See below

9. Does the project require a 404 Permit/401 Water Quality Certification? Yes ☒ No ☐  
If yes, please provide a copy of the 404 Permit application submitted to the US Army Corps of Engineers and a copy of the 401 Water Quality Certification application submitted to the NC Division of Water Resources (formerly the Division of Water Quality).

For more information, please contact Dan LaMontagne, Environmental Quality Director at (919) 542-8268 or [dan.lamontagne@chathamnc.org](mailto:dan.lamontagne@chathamnc.org) or Lynn Richardson, Subdivision Administrator at (919) 542-8207 or [lynn.richardson@chathamnc.org](mailto:lynn.richardson@chathamnc.org).

\*Please see attached 404 permit & 401 WQ Cert. associated with construction of the existing drive over the stream. Construction of the crossing was completed and approved by the County under a previous project.



## Soil & Environmental Consultants, PA

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-9467  
sandec.com

July 29, 2015  
S&EC Project No.: 9221.W2

To: Sheryl-Mar, LLC  
Jim Hodgin  
87 Norwood Road  
Chapel Hill NC 27516

Re: Wetland Delineation and Stream Evaluation  
Brookside  
Chatham County, NC

Mr. Hodgin:

On July 22, 2015, S&EC personnel completed the wetland delineation and stream evaluation on the Brookside site in Chatham County, NC. You will find the attached report detailing our findings. Maps that further document the wetland and stream related site characteristics are also attached.

The next step in the wetland and stream verification process is to visit the site with the Army Corps of Engineers' agent for Chatham County.

As you move forward in planning your development, S&EC personnel are available for site plan review and permit consultation services. Please contact S&EC if you have any questions related to wetland and stream regulations or if you need clarification of the attached report.

Sincerely,  
**SOIL & ENVIRONMENTAL CONSULTANTS, PA**

*David Gainey*

David Gainey

Project Manager

Attachments:

- 1) Wetland Delineation Report
- 2) USGS site vicinity map
- 3) NRCS Soil Survey
- 4) Wetland & Stream Sketch Map
- 5) Agent Authorization Form





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sandec.com

### **DETAILED WETLAND DELINEATION & STREAM EVALUATION FOR BROOKSIDE**

On 7/22/15, S&EC personnel completed a detailed wetland delineation and stream evaluation on Brookside ( $\pm 30$  acres). The site is located east of Fieldstone Lane in Chatham County, NC. Figure 1 and Figure 2 show the location of the site on a USGS topographic quadrangle and NRCS County Soil Survey, respectively.

#### **EXECUTIVE SUMMARY**

We have determined that wetlands and streams generally account for the jurisdictional waters observed on the site. The attached wetland sketch map depicts the approximate locations of streams and wetlands identified during our evaluation. Please refer to the sketch map and the results and recommendations section below for more detailed information.

#### **SCOPE OF WORK**

The detailed wetland delineation consisted of traversing the property to examine soils, vegetation, and hydrology across the site in search of areas that meet the criteria for jurisdictional wetlands as described by the procedures set forth in the Corps of Engineers Wetlands Delineation Manual (January 1987 – Final Report). Areas on the site with positive indicators of hydric soils, evidence of wetland hydrology, and presence of hydrophytic vegetation were flagged with sequentially numbered, pink S&EC logo flagging. Proof of wetland hydrology would be the existence of hydric soils with oxidized root channels in the upper 12 inches of the soil profile, water borne deposits, drift lines, scour marks, drainage patterns, regional indicators of soil saturation, etc. Surface waters such as intermittent and perennial stream channels, ponds, and lakes, which are also subject to regulation by the US Army Corps of Engineers (USACE) as waters of the US, were also identified. These surface waters may also be referred to as jurisdictional waters to indicate that they are within the jurisdiction of the USACE. It is important to note that wetlands are also classified as waters of the US and regulated by the USACE under authority of the Clean Water Act (33 USC 1344).

#### **RESULTS & RECOMMENDATIONS**

The results of the detailed wetland delineation and stream evaluation are discussed below.

##### ***Wetlands and Jurisdictional Waters:***

We have determined that jurisdictional waters (i.e., streams and wetlands) exist on the site. Please refer to the attached “Wetland Sketch Map” for specific flag numbers and approximate locations.

One jurisdictional stream was observed during the site evaluation; the approximate location of each is illustrated on the attached wetland sketch map. Streams identified on-site are described below:

- Feature A (Unnamed Tributary -UT to Wilkinson Creek) flows on site from the north and flows off site to the south. This stream will likely be considered important by the USACE.

Surface waters on this site flow into Wilkinson Creek in the Cape Fear River Basin, which has been classified in “Classification and NC DWQ Standards Applicable to Surface Waters and Wetlands of North Carolina” as WS-IV; NSW.

The wetlands onsite were identified as being a Riparian Forest wetland type as outlined in the publication <sup>1</sup>“A Field Guide to North Carolina Wetlands.” This wetland type is common throughout the piedmont region of North Carolina and is found mainly along headwater streams like the one onsite.

#### ***Chatham County Stream Buffers:***

Local Chatham County stream buffer regulations will apply. A brief description of these buffers can be found in the regulations section of this report. The project engineer or planner should provide input toward the application of these regulations to the site plan during design and review. S&EC can provide reference information and feedback to your engineer regarding stream features observed on-site as needed to determine the appropriate buffer widths and locations as mandated by local authorities.

The following table(s) present the assigned label (i.e. A, B, C, 1,2,3, etc.) for each feature on the site. Information is also presented regarding the classification of each feature on the USGS Topographic Quadrangle and NRCS County Soil Survey. In addition, the most stringent **potential** buffer is presented in contrast to the actual buffer width **S&EC** believes will be applied. The riparian buffer is measured from the top of bank, landward on each side of the stream.

**Table 1: Surface water features, classifications, and riparian buffer widths.**

<b>Feature</b>	<b>Classification on USGS</b>	<b>Classification on Soil Survey</b>	<b>Classified in Field as</b>	<b>Origin</b>	<b>Possible Buffer Width</b>	<b>Expected Buffer Width</b>
A	Intermittent	Intermittent	Perennial	offsite	50/100'	50/100'

All S&EC flags comprising the wetland and jurisdictional waters delineation should be surveyed and a Wetland Delineation Map generated for use in site planning and USACE approval and permitting. The entire length of each stream feature was not flagged, but will need to be surveyed for the Wetland Delineation Map. Stream features may be located either along the centerline (with channel widths noted at each survey point) or at the top-of-bank. The Wetland

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<sup>1</sup>“A Field Guide To North Carolina Wetlands”; Department of Environment, Health and Natural Resources, January 1996.

Delineation Map should include all of the information listed on the attached **“Obtaining a Jurisdictional Determination – Submitting a Plat for Corps Verification.”** S&EC delineation flag numbers should be shown on the wetland survey. Please have the property owner or contracting buyer complete the attached agent authorization form if you would like S&EC to act on their behalf for requesting approval of the wetland delineation. This form will also be used in preparing a permit application for impacts to wetlands or surface waters when we are provided with a plan showing the proposed impacts. **S&EC cannot conduct correspondence with the USACE unless we have agent authorization (see attached Agent Authorization). This authorization form must be filled out in its entirety and returned to S&EC (a faxed copy is acceptable).**

### **Regulations**

A general list of regulations that apply to jurisdictional wetlands and waters present on the site are discussed below. Please be aware that other local, state, and federal regulations not included in this list may also apply. S&EC personnel are available to discuss these regulations as they apply to your project.

#### ***Chatham County Buffers***

A minimum thirty (30) foot vegetative buffer for development activities is required along all ephemeral streams, and a minimum fifty (50) foot vegetative buffer for development activities is required along all perennial and intermittent waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. A minimum one hundred (100) foot vegetative buffer for development activities is required along all rivers. A minimum one hundred (100) foot vegetative buffer for development activities is required along all perennial and intermittent waters within 2,500 feet of rivers. A minimum one hundred (100) foot vegetative buffer is required along all perennial streams for all new development activities that exceed the low density option.

#### ***Wetland Permitting:***

The current Nationwide Permits were issued by the USACE on March 19, 2012. The USACE Wilmington District issued revised Regional Conditions for the 2012 Nationwide Permits. We recommend you forward a conceptual site plan to our office for review by one of our permitting specialist, who can best advise you of the specific permitting needs as you progress through the planning process.

Generally, wetland impact permits are issued on a per-project basis as determined by the USACE. The USACE has determined that impacts on parcels sub-divided from larger tracts are sometimes considered to be cumulative to existing impacts for the large tract. If this is the case, then thresholds for notification may not apply to your project and impacts to streams/wetlands must be considered in light of existing permits.

### **Limitations**

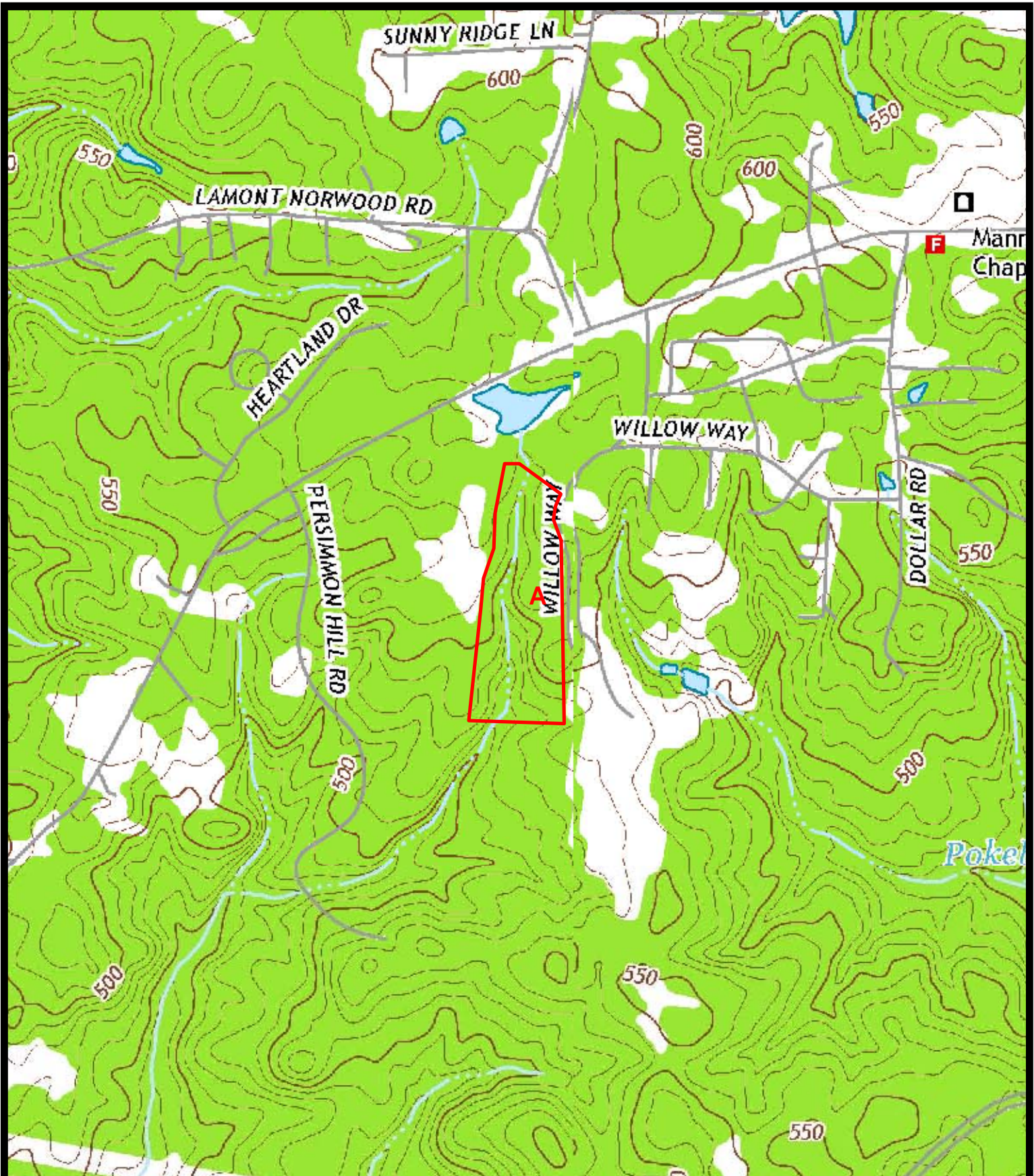
Our evaluations, conclusions, and recommendations are based on project and site information available to us at the time of this report and may require modification if there are any changes in

the project or site conditions, or if additional data about the project or site becomes available in the future. This report is intended for use by Sheryl-Mar, LLC on this project. These findings are not intended or recommended to be suitable for reuse on extensions of the project or on any other project. Reuse on extensions of this project or on any other project shall be done only after written verification or adaptation by SOIL & ENVIRONMENTAL CONSULTANTS, PA, for the specific purpose intended.

### **CONCLUSION**

The wetland and stream delineation for the Brookside Property was completed by S&EC on July 22, 2015. This site contains jurisdictional streams and wetland areas that may require preconstruction authorization for impacts, depending on the size and nature of the impact (i.e. road construction, lot fill, stormwater pond construction, etc.). USACE and DWR/WQP verification of our site assessment should be obtained. Following verification meetings with regulatory agencies, the next step in the stream and wetland identification and permitting process is to obtain a field survey of our delineation for formal approval by the USACE. Upon completing the survey, these site constraints may then be integrated into planning for property development.





Project Number: 9221.W2

Project Manager: DG

Scale: 1" = 1000'

Date: 7/22/15

Map Title:

Figure 1 - USGS Map  
Brookside  
Chatham County, NC

Source: Chatham County GIS  
USGS Farrington & Bynum Quads

0 1,000 2,000  
Feet

N



**S&EC**

**Soil & Environmental Consultants, PA**

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sandec.com







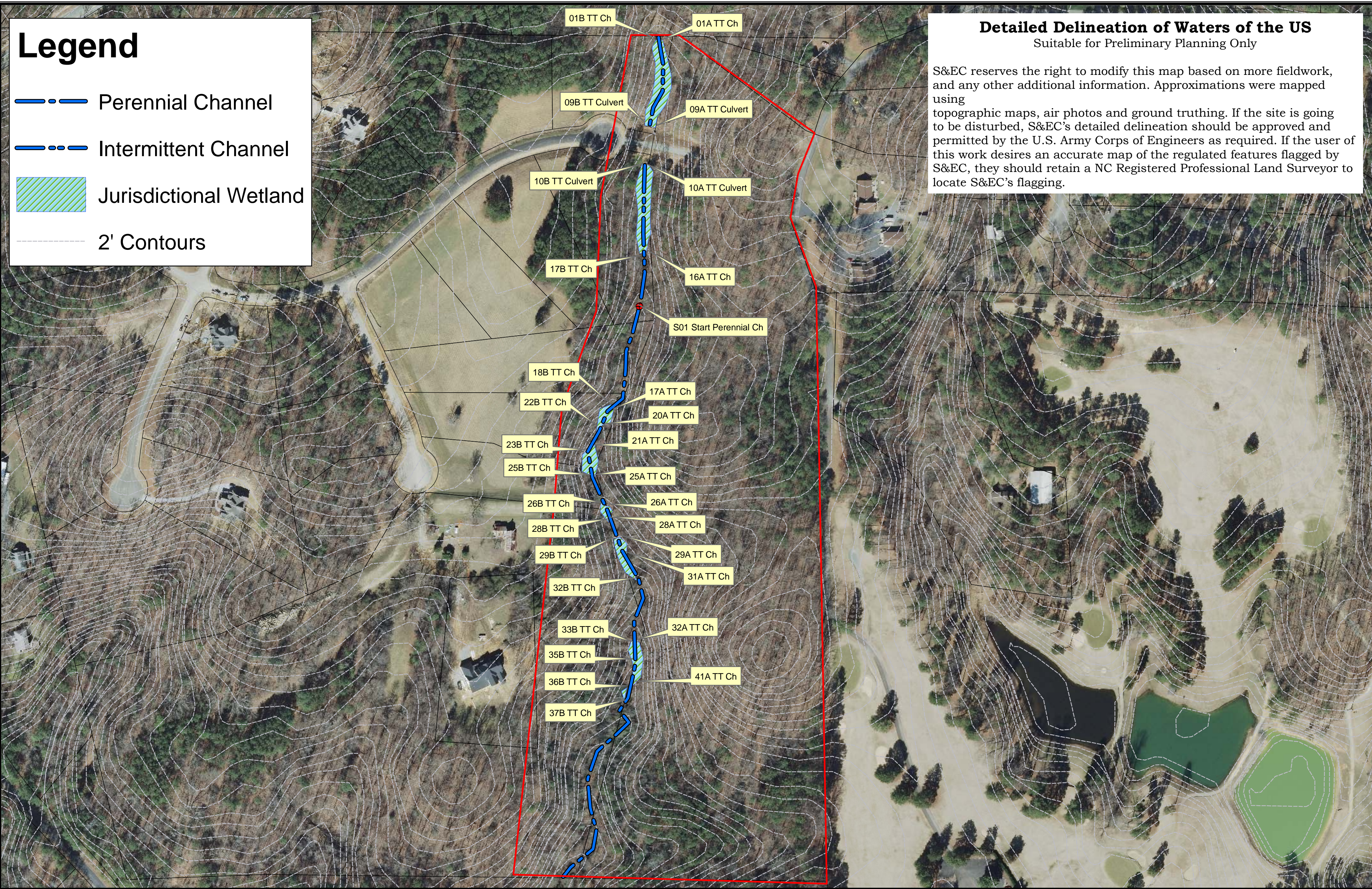
# Legend

- Perennial Channel
- Intermittent Channel
- Jurisdictional Wetland
- 2' Contours

## Detailed Delineation of Waters of the US

Suitable for Preliminary Planning Only

S&EC reserves the right to modify this map based on more fieldwork, and any other additional information. Approximations were mapped using topographic maps, air photos and ground truthing. If the site is going to be disturbed, S&EC's detailed delineation should be approved and permitted by the U.S. Army Corps of Engineers as required. If the user of this work desires an accurate map of the regulated features flagged by S&EC, they should retain a NC Registered Professional Land Surveyor to locate S&EC's flagging.



















This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long term approach to floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map flood hazard areas at the local level. As a part of this effort, the State of North Carolina has joined in a Cooperating Technical State agreement with FEMA to produce and maintain this digital FIRM.

## FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP  
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING  
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT  
[HTTP://FRIS.NC.GOV/FRIS](http://FRIS.NC.GOV/FRIS)

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
OTHER AREAS		Area with Reduced Flood Risk due to Levee See Notes Zone X
		Areas Determined to be Outside the 0.2% Annual Chance Floodplain Zone X
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer Accredited or Provisionally Accredited Levee, Dike, or Floodwall
		Non-accredited Levee, Dike, or Floodwall
		North Carolina Geodetic Survey bench mark
		National Geodetic Survey bench mark
		Contractor Est. NCFMP Survey bench mark
		Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
OTHER FEATURES		Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Limit of Study
		Jurisdiction Boundary

## NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-366-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. An accompanying Flood Insurance Study Report, Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) revising portions of this panel, and digital versions of this FIRM may be available. Visit the North Carolina Floodplain Mapping Program website at <http://www.ncfoodmaps.com> or contact the FEMA Map Service Center.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-636-6620.

Base map information shown on this FIRM was provided in digital format by the North Carolina Floodplain Mapping Program (NCFMP). The source of this information can be determined from the metadata available in the digital FLOOD database and in the Technical Support Data Notebook (TSDN).

ACCREDITED LEVEE NOTES TO USERS: If an accredited levee note appears on this panel check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicates the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at <http://www.fema.gov/business/nfip/index.shtm>.

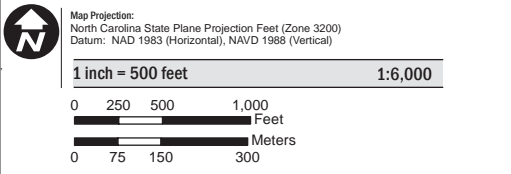
PROVISIONALLY ACCREDITED LEVEE NOTES TO USERS: If a Provisionally Accredited Levee (PAL) note appears on this panel, check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicates the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at <http://www.fema.gov/business/nfip/index.shtm>.

LIMIT OF MODERATE WAVE ACTION NOTES TO USERS: For some coastal flooding zones the AE Zone category has been divided by a Limit of Moderate Wave Action (LIMWA). The LIMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LIMWA (or between the shoreline and the LIMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

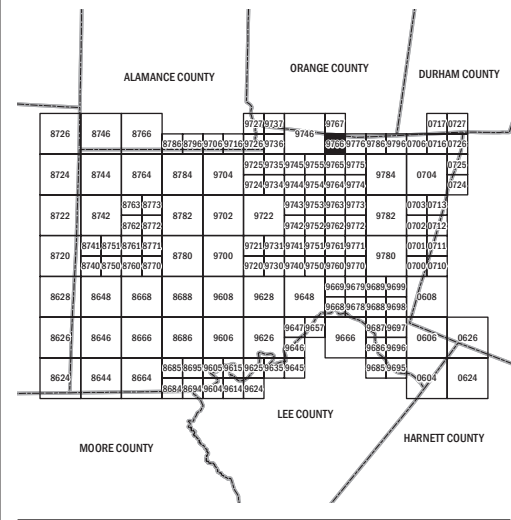
COASTAL BARRIER RESOURCES SYSTEM (CBRS) NOTE  
This map may include approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see <http://www.fws.gov/habitatconservation/cbrs/bcr.html>, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.

CBRS Area Otherwise Protected Area

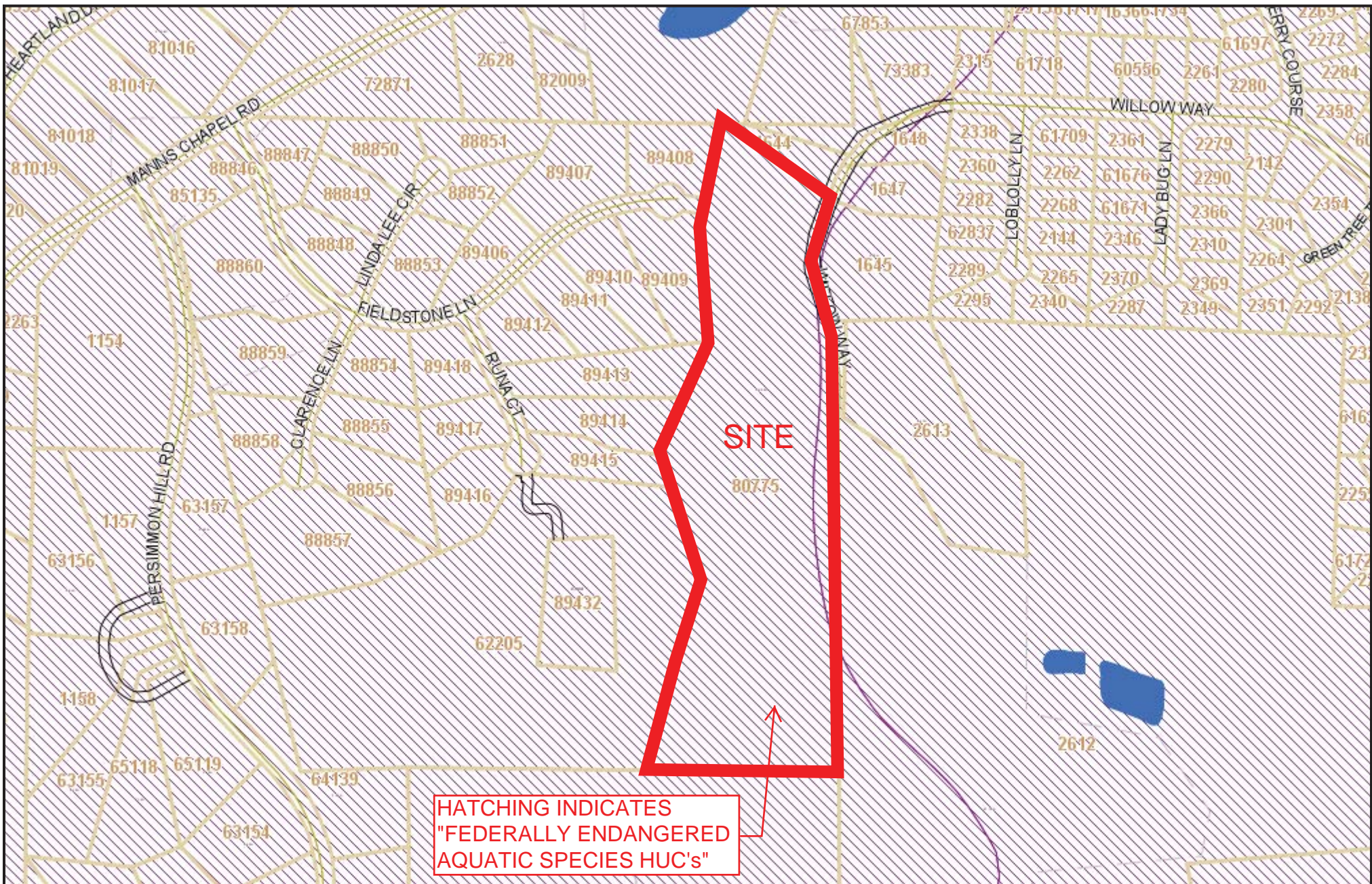
## SCALE



## PANEL LOCATOR







## CHATHAM COUNTY, NC



### Property Map

Disclaimer:  
The data provided on this map are prepared for the inventory of real property found within Chatham County, NC and are compiled from recorded plats, deeds, and other public records and data. This data is for informational purposes only and should not be substituted for a true title search, property appraisal, survey, or for zoning verification.



One Inch = 400 Feet



U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT

PER

**COPY**

ction ID. 200703594

County: Chatham

USGS Quad: Bynum

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Property Owner / Authorized Agent: James E. Dixon

Address: 94 Chatham Drive

Chapel Hill, North Carolina 27516

RECEIVED

RECEIVED

APR 27 2009

JUN 09 2009

LITTLE & LITTLE

Telephone No.: 919-933-9677

CHATHAM COUNTY EH

Size and location of property (water body, road name/number, town, etc) EST The project site is located adjacent to the existing Fieldstone Subdivision and is considered an extension of this project. This proposal is to extend Fieldstone Lane to access high ground within the property boundaries for the purpose of timber management and driveway access.

Description of projects area and activity: This permit verifies 98 linear feet of permanent intermittent stream impact and 0.082 acre of permanent wetland impact during the construction of a driveway large enough to accommodate timber machinery (this is not considered normal timber management due to future residential development). No compensatory mitigation is required for this impact.

Applicable Law: ☒ Section 404 (Clean Water Act, 33 USC 1344)  
☐ Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number: \_\_\_\_\_  
Nationwide Permit Number: 29

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order and/or appropriate legal action.

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

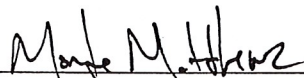
Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Quality (telephone (919) 733-1786) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Monte Matthews.

Corps Regulatory Official: Monte Matthews



Date: April 20, 2009

Expiration Date of Verification: April 20, 2011

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at <http://regulatory.usacesurvey.com/> to complete the survey online.



### Determination of Jurisdiction:

- ☐ Based on preliminary information, there appear to be waters of the US including wetlands within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).
- ☐ There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. 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 waters of the US and/or wetlands within the above described project area 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.
- ☒ The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued 12-20-2007. Action ID same id number

Basis of Jurisdictional Determination: \_\_\_\_\_

### Appeals Information (This information applies only to approved jurisdictional determinations.)

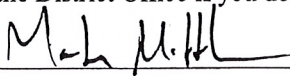
Attached to this verification is an approved jurisdictional determination. If you are not in agreement with that approved jurisdictional determination, you can make an administrative appeal under 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Division  
Attn: Jean Manuele, Project Manager,  
Raleigh Regulatory Field Office  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, North Carolina 27587

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 District 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 June 20, 2009.

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

Corps Regulatory Official: Monte Matthews



Date April 20, 2009

Expiration Date April 20, 2014

**SURVEY PLATS, FIELD SKETCH, WETLAND DELINEATION FORMS, PROJECT PLANS, ETC., MUST BE ATTACHED TO THE FILE COPY OF THIS FORM, IF REQUIRED OR AVAILABLE.**

Copy Furnished:

Little and Little Landscapes Architects, PLLC  
PO Box 1448  
Raleigh, NC 27602



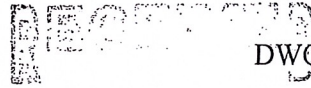
North Carolina Department of Environment and Natural Resources

Division of Water Quality  
Coleen H. Sullins  
Director

Beverly Eaves Perdue  
Governor

Dee Freeman  
Secretary

April 21, 2009



DWQ Project # 09-0194  
Chatham County

Mr. James E. Dixon  
94 Chatham Drive  
Chapel Hill, NC 27516

APR 24 2009

LITTLE

RECEIVED

JUN 09 2009

CHATHAM COUNTY EH  
SESC

Subject Property: **Fieldstone Lane Private Extension**  
Ut to Williamson Creek [030604, 16-35, WSIV, NSW]

**Approval of 401 Water Quality Certification and Authorization Certificate with Additional Conditions - REVISED**

Dear Mr. Dixon:

You have our approval, in accordance with the attached conditions and those listed below, to place fill within or otherwise impact 0.082 acres of 404/wetlands and 98 linear feet of intermittent stream, as described in your revised application dated April 1, 2009, and received by the Division of Water Quality (DWQ) on April 17, 2009, to construct the proposed residential development at the site. After reviewing your application, we have decided that the impacts are covered by General Water Quality Certification Number(s) 3705 (GC3705). The Certification(s) allows you to use Nationwide Permit(s) NW29 when issued by the US Army Corps of Engineers (USACE). In addition, you should obtain or otherwise comply with any other required federal, state or local permits before you go ahead with your project including (but not limited to) Erosion and Sediment Control, and Non-discharge regulations. **Also, this approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 or CAMA Permit.**

This approval is for the purpose and design that you described in your application. If you change your project, you must notify us and you may be required to send us a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter and is thereby responsible for complying with all conditions. If total fills for this project (now or in the future) exceed one acre of wetland or 150 linear feet of stream, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h). **This approval requires you to follow the conditions listed in the attached certification and any additional conditions listed below.**

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

**1. Impacts Approved**

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

Type of Impact	Amount Approved (Units)	Plan Location or Reference
404/Wetlands	0.082 (acres)	PCN page 4 of 10
Stream - intermittent	98 (linear feet)	PCN page 4 of 10

401 Oversight/Express Review Permitting Unit  
1650 Mail Service Center, Raleigh, North Carolina 27699-1650  
Location: 2321 Crabtree Blvd., Raleigh, North Carolina 27604  
Phone: 919-733-1786 \ FAX: 919-733-6893  
Internet: <http://h2o.enr.state.nc.us/ncwetlands/>

One  
North Carolina  
*Naturally*



## 2. No Waste, Spoil, Solids, or Fill of Any Kind

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

## 3. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:

- a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
- b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- c. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

## 4. Sediment and Erosion Control Measures

Sediment and erosion control measures shall not be placed in wetlands or waters without prior approval from the Division. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. All sediment and erosion control devices shall be removed and the natural grade restored within two (2) months of the date that the Division of Land Resources or locally delegated program has released the project;

## 5. Culvert Installation

All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual ([http://www.ncdot.org/doh/operations/BMP\\_manual/download/BMP\\_Manual.pdf](http://www.ncdot.org/doh/operations/BMP_manual/download/BMP_Manual.pdf)) such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.

Culverts required for this project shall be installed in such a manner that the original stream profiles are not altered. Existing stream dimensions (including the cross section dimensions, pattern, and longitudinal profile) must be maintained above and below locations of each culvert. Culverts shall be designed and installed to allow for aquatic life movement as well as to prevent head cutting of the streams. If any of the existing pipes are or become perched, the appropriate stream grade shall be re-established or, if the pipes installed in a perched manner, the pipes shall be removed and re-installed correctly.

Culvert(s) shall not be installed in such a manner that will cause aggradation or erosion of the stream up or down stream of the culvert(s). Existing stream dimensions (including the cross section



dimensions, pattern and longitudinal profile) shall be maintained above and below locations of each culvert.

Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ.

The establishment of native, woody vegetation and other soft stream bank stabilization techniques must be used where practicable instead of rip rap or other bank hardening methods. If rip-rap is necessary, it shall not be placed in the stream bed, unless specifically approved by the Division of Water Quality.

Installation of culverts in wetlands must ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions.

Upon completion of the project, the Applicant shall complete and return the enclosed "Certificate of Completion" form to notify NCDWQ when all work included in the §401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the NC Division of Water Quality upon completion of the project. *Please send photographs upstream and downstream of each culvert site to document correct installation along with the Certificate of Completion form.*

#### 6. Protective Fencing

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

#### 7. Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return the attached certificate of completion to the 401 Oversight/Express Review Permitting Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. The authorization to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application and as authorized by this Certification, shall expire upon expiration of the 404 or CAMA Permit.

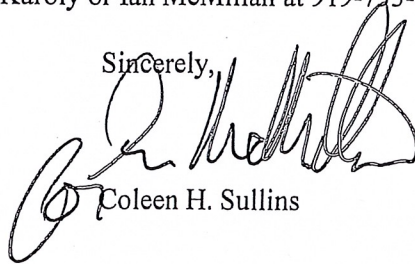
If you do not accept any of the conditions of this Certification (associated with the approved wetland or stream impacts), you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition, which conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

April 21, 2009

Any disputes over determinations regarding this Authorization Certificate (associated with the approved buffer impacts) shall be referred in writing to the Director for a decision. The Director's decision is subject to review as provided in Articles 3 and 4 of G.S. 150B.

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please telephone Cyndi Karoly or Ian McMillan at 919-733-1786.

Sincerely,



Coleen H. Sullins

CHS/ijm

Enclosures: GC3705  
Certificate of Completion

cc: USACE Raleigh Regulatory Field Office  
Lauren Witherspoon, DWQ Raleigh Regional Office  
DLR Raleigh Regional Office  
File Copy  
J. Mack Little, Little & Little Landscape Architects, PLLC, P.O. Box 1448, Raleigh, NC 27602

Filename: 090194FieldstoneLanePrivateExtension(Chatham)401\_Revised