



May 24, 2007

Orange United Methodist Church  
1220 Martin Luther King, Jr. Blvd.  
Chapel Hill, NC 27514

RE: Stream determination  
PIN: 9880-20-9387, 9880-30-2035  
TMBL: 7.24..36, 7.24E.A.10

To Whom It May Concern:

As requested, the Town Engineering Department has performed a stream determination on the properties identified below. This determination provides important information regarding different types of streams (perennial, intermittent, and/or ephemeral) and whether or not any such streams are present on or adjacent to the properties in question. Based on this stream determination, and characteristics such as elevation and location, these properties may include a Resource Conservation District (RCD) area. Specific land use regulations and restrictions apply within the boundary of the RCD.

We performed a site inspection of these properties, Tax Map # 7.24..36, PIN # 9880-20-9387, and Tax Map # 7.24E.A.10, PIN # 9880-30-2035 at 1220 Martin Luther King, Jr. Blvd. (Orange United Methodist Church) on May 24, 2007. We determined that the properties do contain an ephemeral stream running through the center of the properties, as well as a perennial stream running along the southern border, and another perennial stream (Booker Creek) running along the eastern border. We have not identified any other streams on adjacent properties that may affect the location of the Resource Conservation District boundary on the properties in question. Comments and findings regarding our site inspection can be found on the attached stream determination form and map.

NOTE: THIS IS A STREAM DETERMINATION ONLY. It is intended to assist the requestor in identifying whether or not the properties in question include a Resource Conservation District and, if so, where it is located, depending on which ordinance(s) are applicable.

Please provide a copy of this information to a registered Land Surveyor for use in the preparation of your parcel plan or plat, which must be submitted with the permit application documents for review and approval by the Town. It is the responsibility of the Surveyor to review the stream determination information in association with information available in Article 3.6.3 of the Land Use Management Ordinance (LUMO) to identify the applicable RCD criteria. The Surveyor must certify whether or not a Resource Conservation District exists on the properties in question and, if so, where the RCD boundary is located. The following language must be provided verbatim on the application plan or plat and must be certified by a registered Land Surveyor. No additional or alternative wording or caveats are acceptable.

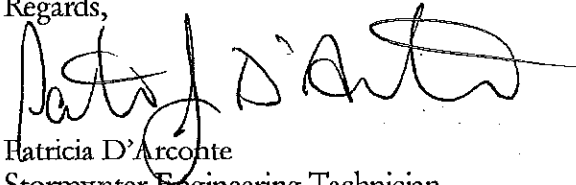
1. "This parcel is not located within the Resource Conservation District as defined in the Chapel Hill Development Ordinance/Land Use Management Ordinance."

Or

2. "All or a portion of this parcel is located within the Resource Conservation District as defined in the Chapel Hill Development Ordinance/Land Use Management Ordinance and as shown hereon."

If you have questions regarding stream determinations, please contact me at (919) 969-7202. If you have questions regarding the Town's Land Use Management Ordinance or Resource Conservation Districts, please contact the Planning Department at (919) 968-2728, or view a copy online at <http://www.townofchapelhill.org/index.asp?NID=149>.

Regards,

A handwritten signature in black ink, appearing to read "Patricia D'Arconte", written over a printed name and title.

Patricia D'Arconte  
Stormwater Engineering Technician

cc: Planning Department

**TOWN OF CHAPEL HILL  
REQUEST FOR DETERMINATION OF  
AN INTERMITTENT OR PERENNIAL STREAM**

DATE:

May 9, 2009

\*NAME OF PROPERTY OWNER/REQUESTOR:

Orange United Methodist Church

ADDRESS OF PROPERTY OWNER/REQUESTOR:

CITY

STATE

ZIP

1220 Martin Luther King Jr. Blvd. Chapel Hill, NC 27514

PROPERTY OWNER/REQUESTOR'S PHONE NO:

942-2825

LOCATION ADDRESS:

CITY

STATE

ZIP

1220 Martin Luther King Jr Blvd. CH. NC 27514

LOCATION TAX MAP #

BLOCK

LOT

TOPO

7. 24E. A. 10 + 24. .36 + 41C

PIN#

9880-30-0704 9880-30-2035 9880-30-0712

\*PINS/AMBLS  
don't match?

MAPS REQUIRED TO MAKE DETERMINATION:

3 Acres or less - Plat or Tax Map

3 Acres or more - Plat and Topo

9880-20-9387

7.24.36

ENGINEERING DEPARTMENT USE

9880-30-2035

7.24E.A.10

DATE OF INSPECTION(S) 5/24/2007

WEATHER

Clear

TEMPERATURE

INSPECTED BY











D'ARCONTE

COMMENTS

ephemeral stream flows to Booker Creek  
another perennial stream along southern boundary

\*Requestor must be the property owner OR written permission must be obtained from the property owner and attached to this request.

# 61 Stream Determination Area Map

- |   |  |
|---|--|
|  Perennial Stream      |  Culverts         |
|  Intermittent Stream   |  2-foot contours  |
|  Ephemeral Stream      |  10-foot contours |
|  Stream - Unknown Flow |  Buildings        |
|   |  Parcels          |
|   |  Site visited     |

**Address:** 1220 Martin Luther King Jr. Blvd.

**TMBL:** 7.24..36, 7.24E.A.10

**Parcel ID:** 9880-20-9387, 9880-30-2035




0 50 100 200 Feet



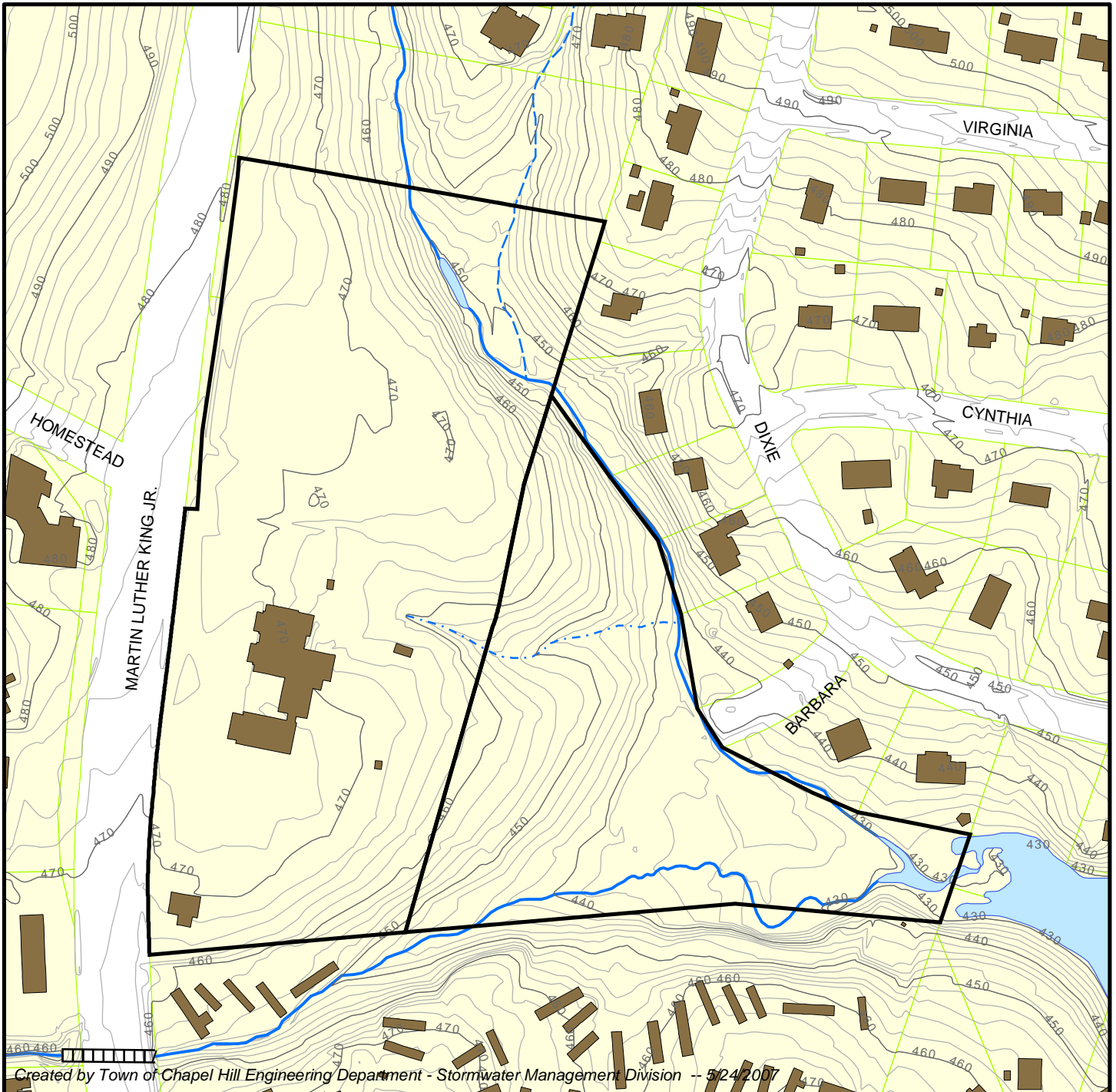
1 inch equals 200 feet



Approximate location of origin or breakpoint:

- |   |  |
|---|--|
|  staked      |  flagged only |
|  and flagged |  |

Stream locations are approximate and must be verified by survey.



North Carolina Division of Water Quality – Stream Identification Form; Version 3.1

Date: 5/24/07	Project:	Latitude:
Evaluator: D'ARCONTE	Site: VMC behind church	Longitude:
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30	County: 11	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 7)

	Absent	Weak	Moderate	Strong
1 <sup>a</sup> . Continuous bed and bank	0	1	2	3
2. Sinuosity	0	1	2	3
3. In-channel structure: riffle-pool sequence	0	1	2	3
4. Soil texture or stream substrate sorting	0	1	2	3
5. Active/relic floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Braided channel	0	1	2	3
8. Recent alluvial deposits	0	1	2	3
9 <sup>a</sup> . Natural levees	0	1	2	3
10. Headcuts	0	1	2	3
11. Grade controls	0	0.5	1	1.5
12. Natural valley or drainageway	0	0.5	1	1.5
13. Second or greater order channel on existing USGS or NRCS map or other documented evidence.	No = 0		Yes = 3	

<sup>a</sup> Man-made ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 2)

14. Groundwater flow/discharge	0	1	2	3
15. Water in channel and > 48 hrs since rain, or Water in channel -- dry or growing season	0	1	2	3
16. Leaf litter	1.5	1	0.5	0
17. Sediment on plants or debris	0	0.5	1	1.5
18. Organic debris lines or piles (Wrack lines)	0	0.5	1	1.5
19. Hydric soils (redoximorphic features) present?	No = 0		Yes = 1.5	

C. Biology (Subtotal = 2)

20 <sup>b</sup> . Fibrous roots in channel	3	2	1	0
21 <sup>b</sup> . Rooted plants in channel	3	2	1	0
22. Crayfish	0	0.5	1	1.5
23. Bivalves	0	1	2	3
24. Fish	0	0.5	1	1.5
25. Amphibians	0	0.5	1	1.5
26. Macroinvertebrates (note diversity and abundance)	0	0.5	1	1.5
27. Filamentous algae; periphyton	0	1	2	3
28. Iron oxidizing bacteria/fungus.	0	0.5	1	1.5
29 <sup>b</sup> . Wetland plants in streambed	FAC = 0.5; FACW = 0.75; OBL = 1.5 SAV = 2.0; Other = 0			

<sup>b</sup> Items 20 and 21 focus on the presence of upland plants, Item 29 focuses on the presence of aquatic or wetland plants.

Notes: (use back side of this form for additional notes.)

Sketch:

Ephemeral stream - does follow natural drainageway

North Carolina Division of Water Quality – Stream Identification Form; Version 3.1

Date: 5/24/07	Project:	Latitude:
Evaluator: D'ARWONTE	Site: UMC - south	Longitude:
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30 39.5	County:	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 20)

	Absent	Weak	Moderate	Strong
1 <sup>a</sup> . Continuous bed and bank	0	1	2	3
2. Sinuosity	0	1	2	3
3. In-channel structure: riffle-pool sequence	0	1	2	3
4. Soil texture or stream substrate sorting	0	1	2	3
5. Active/relic floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Braided channel	0	1	2	3
8. Recent alluvial deposits	0	1	2	3
9 <sup>a</sup> Natural levees	0	1	2	3
10. Headcuts	0	1	2	3
11. Grade controls	0	0.5	1	1.5
12. Natural valley or drainageway	0	0.5	1	1.5
13. Second or greater order channel on existing USGS or NRCS map or other documented evidence.	No = 0		Yes = 3 ?	

<sup>a</sup> Man-made ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 9.5)

14. Groundwater flow/discharge	0	1	2	3
15. Water in channel and > 48 hrs since rain, or Water in channel -- dry or growing season	0	1	2	3
16. Leaf litter	1.5	1	0.5	0
17. Sediment on plants or debris	0	0.5	1	1.5
18. Organic debris lines or piles (Wrack lines)	0	0.5	1	1.5
19. Hydric soils (redoximorphic features) present?	No = 0		? Yes = 1.5	

clay  
bright red  
sand - gravel  
w/ large  
black  
shales

C. Biology (Subtotal = 10)

20 <sup>b</sup> . Fibrous roots in channel	3	2	1	0
21 <sup>b</sup> . Rooted plants in channel	3	2	1	0
22. Crayfish	0	0.5	1	1.5
23. Bivalves	0	1	2	3
24. Fish	0	0.5	1	1.5
25. Amphibians	0	0.5	1	1.5
26. Macroinvertebrates (note diversity and abundance)	0	0.5	1	1.5
27. Filamentous algae; periphyton	0	1	2	3
28. Iron oxidizing bacteria/fungus.	0	0.5	1	1.5
29 <sup>b</sup> . Wetland plants in streambed	FAC = 0.5; FACW = 0.75; OBL = 1.5 SAV = 2.0; Other = 0			

<sup>b</sup> Items 20 and 21 focus on the presence of upland plants, Item 29 focuses on the presence of aquatic or wetland plants.

Notes: (use back side of this form for additional notes.)

Sketch:

snails, worms, fish, crayfish  
adult frogs, salamanders, amphibian eggs