



Since 1979

THE JOHN R. McADAMS COMPANY, INC.

May 5, 2010

Ms. Lynn Richardson  
Chatham County Planning Department  
Post Office Box 54  
80-A East Street  
Pittsboro, North Carolina 27312-0054

Re: **Briar Chapel, Phase 4, Sections 1, 2 and 3  
Recombination Plat to Create 15 New Lots  
NEW-09004**

Dear Ms. Richardson:

Please find enclosed our submittal for the Briar Chapel, Phase 4, Sections 1, 2 and 3 recombination plat. This plat creates 15 new lots where there were 37 previously platted lots.

Enclosed in this submittal are the following:

- (A) (25) 11" x 17" exhibits illustrating the existing lot configuration and the proposed lot configuration
- (B) (25) paper copies of the five sheet recombination plat
- (C) Completed application
- (D) Completed Major Subdivision Review Checklist
- (E) A summary table of existing permits with back-up. This table lists each permit and how it relates to the proposed recombination.
- (F) CD with digital copy of information listed in Items A, B, C, D and E above.

If you have any questions please call at your earliest convenience.

Sincerely

THE JOHN R. McADAMS COMPANY, INC.

  
Jonathan S. Butters, PE  
Executive Vice President/COO

JSB/djh

cc: Mr. Lee Bowman  
Mr. Bill Mumford, PE

Research Triangle Park, NC  
Post Office Box 14005  
Research Triangle Park  
North Carolina, 27709  
2905 Meridian Parkway  
Durham, North Carolina 27713  
800-733-5646  
919-361-5000  
919-361-2269 Fax

Charlotte, NC  
6701 Carmel Road  
Suite 205  
Charlotte North Carolina 28226  
800-733-5646  
704-527-0800  
704-527-2003 Fax

Chatham County Planning Department  
 Post Office Box 54  
 Pittsboro, NC 27312  
 Tel: (919) 542-8204  
 Fax: (919) 542-2698

Type of Review  
 Sketch  
 Preliminary  
 Final

**MAJOR SUBDIVISION APPLICATION**

Name of Subdivision: Briar Chapel - Phase 4, Sections 1, 2, and 3

**Subdivision Applicant**

**Subdivision Owner**

Name: Bill Mumford, Sr. Project Manager  
 Address: 16 Windy Knoll Circle  
Chapel Hill, North Carolina 27516  
 Phone (W): (919) 951-0713  
 Phone (H): \_\_\_\_\_ Fax: (919) 951-0711  
 E-Mail: bmumford@newlandcommunities.com

Name: NNP Briar Chapel, LLC  
 Address: 16 Windy Knoll Circle  
Chapel Hill, North Carolina 27516  
 Phone (W): (919) 951-0713  
 Phone (H): \_\_\_\_\_ Fax: (919) 951-0711  
 E-Mail: bmumford@newlandcommunities.com

Township Baldwin Zoning CUD-CC  
 Flood Map # 3710977500J Zone: AE  
3710976500J AE

P.I.N. # see attachment  
 Parcel # see attachment

Watershed: WS-IV PA

Existing Access Road: S.R.# US Hwy 15-501  
 S.R. Road Name US Hwy 15-501

Total Acreage: 1586.26 Total # of Lots: Overall 2,389 Min. Lot Size: N/A Per CCO  
 \*Ph. 4 acreage of lots affected 8.51 Ph. 4 # of lots to be added 15 approval  
 Ph. I Acreage: \_\_\_\_\_ Phase I # of Lots: \_\_\_\_\_ Max. Lot Size N/A  
 Ph. II Acreage \_\_\_\_\_ Phase II # of Lots: \_\_\_\_\_ Avg. Lot Size: N/A

Type of New Road:  Private/Length \_\_\_\_\_  Public/Length \_\_\_\_\_

Name and date of contact with Chatham County Historical Association: Jane Pyle -- 4/9/2003

Road Surface:	Water System:	Sewer System:
<input checked="" type="checkbox"/> Paved	<input type="checkbox"/> Individual Wells	<input type="checkbox"/> Septic Systems
<input type="checkbox"/> Gravel	<input type="checkbox"/> Community Wells	<input type="checkbox"/> Community Systems
	<input checked="" type="checkbox"/> Public System	<input type="checkbox"/> Public System
	Name <u>Chatham County</u>	Name <u>Provided by on-site facility</u>

List other facilities: commercial, recreation, etc., and the approximate acreage or square footage:  
 \* Recombination plat to add 15 lots to existing 37 lots previously platted

Bumford Date: 5-6-10 Bumford Date: 5-6-10  
 Signature of Applicant AGENT FOR Signature of Owner  
NNP - BRIAR CHAPEL, LLC

For Office Use Only:  
 Notes: \_\_\_\_\_  
 Approved by County commissioners: \_\_\_\_\_  
 Sketch \_\_\_\_\_  
 Preliminary \_\_\_\_\_  
 Final \_\_\_\_\_

Payment Date  / / Amount: \$ \_\_\_\_\_

Pin Numbers	Parcel Numbers	Pin Numbers	Parcel Numbers
1. 9765-86-7883.000	1. 86284	31. 9765-84-7802.000	31. 86550
2. 9765-86-8866.000	2. 86488	32. 9765-94-1986.000	32. 86768
3. 9765-86-9858.000	3. 86489	33. 9765-94-2847.000	33. 86769
4. 9765-96-0839.000	4. 86490	34. 9765-94-2757.000	34. 86770
5. 9765-96-1920.000	5. 86491	35. 9765-94-2648.000	35. 86771
6. 9765-96-2920.000	6. 86492	36. 9765-94-2518.000	36. 86772
7. 9765-96-3868.000	7. 86760	37. 9765-94-1532.000	37. 86773
8. 9765-96-4866.000	8. 86761		
9. 9765-96-5854.000	9. 86762		
10. 9765-96-6840.000	10. 86763		
11. 9765-96-7737.000	11. 86764		
12. 9765-96-8700.000	12. 86765		
13. 9765-86-4866.000	13. 86279		
14. 9765-86-4934.000	14. 86280		
15. 9765-87-4011.000	15. 86463		
16. 9765-87-3180.000	16. 86464		
17. 9765-87-3169.000	17. 86465		
18. 9765-87-3269.000	18. 86466		
19. 9765-87-3399.000	19. 86467		
20. 9765-76-3505.000	20. 86558		
21. 9765-76-3533.000	21. 86559		
22. 9765-76-3563.000	22. 86560		
23. 9765-76-3593.000	23. 86561		
24. 9765-76-4572.000	24. 86564		
25. 9765-76-5448.000	25. 86565		
26. 9765-84-9770.000	26. 86545		
27. 9765-84-9711.000	27. 86546		
28. 9765-84-8752.000	28. 86547		
29. 9765-84-7793.000	29. 86548		
30. 9765-84-7747.000	30. 86549		

**CHATHAM COUNTY  
MAJOR SUBDIVISION  
REVIEW CHECKLIST**

Subdivision Name Briar Chapel (Phase 4 South, Section 1, 2, and 3)

Review For:      Sketch                    Prelim                    Final

Recombination

Attach all supporting documentation regarding these approvals. If approvals are still pending, attach applications for approval.

SKETCH DESIGN REVIEW	APPROVAL DATE
<input type="checkbox"/> 25 Copies of Plat with topo along with one (1) 8-1/2 x 11 copy	-----
<input type="checkbox"/> Application w/Complete Adjacent Owner Addresses	-----
<input type="checkbox"/> Soil Scientist Report and soil map	-----
<input type="checkbox"/> Confirmation from Chatham County Historical Association/Jane Pyle/542-3603	
<input type="checkbox"/> <b>1 electronic copy of all items above (see Digital Document Requirements)</b>	
PRELIMINARY PLAT REVIEW	
<input type="checkbox"/> 25 Copies of Plat along with one (1) 8-1/2 x 11 copy	.....
<input type="checkbox"/> Application w/ Complete Adjacent Owner Addresses	.....
<input type="checkbox"/> Detailed Soils Map and Letter of explanation or D.E.M. approval	___/___/___
{see Requirements for soil scientist report}	
<input type="checkbox"/> NCDOT Approval (if public roads)	___/___/___
<input type="checkbox"/> DOT Comm. Driveway Permit	___/___/___
<input type="checkbox"/> Erosion Control Plan Approval (if new roads or one acre disturbed)	___/___/___
<input type="checkbox"/> U.S. Army Corps of Engineers Permit (if appl)	___/___/___
<input type="checkbox"/> Road Name Request Form	___/___/___
<input type="checkbox"/> County Public Water Approval (if applicable)	___/___/___
<input type="checkbox"/> State Public Water Approval (if applicable)	___/___/___
<input type="checkbox"/> Chatham Co. Schools' Road Comments (if new roads)	___/___/___
<input type="checkbox"/> Stormwater Management Plan Approval (if appl)	___/___/___
<input type="checkbox"/> Economic & Environmental Impact Study (if appl)	___/___/___
<input type="checkbox"/> Water / Sewer Impact Statement (if appl)	___/___/___
<input type="checkbox"/> <b>1 electronic copy of all items above (see Digital Document Requirements)</b>	
FINAL PLAT REVIEW	
<input checked="" type="checkbox"/> 25 Copies of Plat	.....
<input checked="" type="checkbox"/> Application	.....
<input checked="" type="checkbox"/> <b>1 electronic copy of all items above (see Digital Document Requirements)</b>	___05/07/2010___
<input type="checkbox"/> <b>Chatham County Environmental Health Division</b> septic improvement permits or NCDWQ septic permits for each lot. – N/A	___/___/___
<input checked="" type="checkbox"/> Road Completion Certificate or Financial Guarantee	___10/20/2008___
<input checked="" type="checkbox"/> Utilities Completion Cert. or Financial Guarantee	___10/20/2008___

Comment \_\_\_\_\_

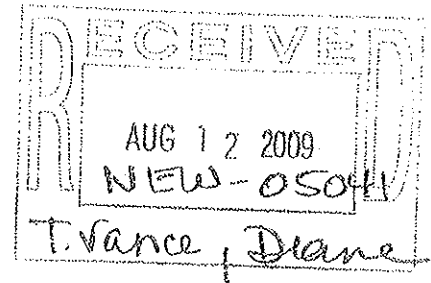
Date Complete Application Rec'd: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ By: \_\_\_\_\_

Sustainable Communities Development  
Department  
Planning Division  
Post Office Box 54  
80-A East Street - Dunlap Building  
Pittsboro, NC 27312-0054



Phone: 919-542-8204  
Fax: 919-542-2698  
www.chathamnc.org/planning

August 11, 2009



Arch Insurance Company  
Attention: George Munana  
135 N. Los Robles Avenue, Suite 825  
Pasadena, CA 91101

RE: Briar Chapel Performance Bond reduction

Dear Mr. Munana:

Based on certifications received from Tommy L. Vance, P. E., The John R. McAdams Company, Inc., and Briar Chapel, the following Performance Bonds being held for the completion of infrastructure within Briar Chapel Planned Residential Development may be reduced:

<u>Bond No.</u>	<u>Original Amount</u>	<u>Proposed Amount</u>
Bond # SU5024263 (Bond # 2)	\$ 441,031.00	\$ 7000.00
Bond # SU5024264 (Bond # 3)	\$1,477,129.00	\$ 352,840.00
Bond # SU5024265 (Bond # 4)	\$3,801,909.00	\$1,320,930.00
Bond # SU5024266 (Bond # 5)	\$2,186,293.00	\$ 429,535.00
Bond # SU5024267 (Bond # 6)	\$2,121,587.00	\$ 414,450.00
Bond # SU5024284 (Bond # 7)	\$ 398,426.00	\$ 20,580.00

Please provide the appropriate and updated documents from the bonding agent that reflects the approved reductions. Should you have any questions or the bonding company

Sustainable Communities Development  
Department  
Planning Division  
Post Office Box 54  
80-A East Street - Dunlap Building  
Pittsboro, NC 27312-0054



Phone: 919-542-8204  
Fax: 919-542-2698  
[www.chathamnc.org/planning](http://www.chathamnc.org/planning)

August 11, 2009

Arch Insurance Company  
Attention: George Munana  
135 N. Los Robles Avenue, Suite 825  
Pasadena, CA 91101

RE: Briar Chapel Performance Bond release

Dear Mr. Munana:

Based on certifications received from Tommy L. Vance, P. E., The John R. McAdams Company, Inc. (Engineer), information provided by Briar Chapel, and certification from Justin Bullock, E.I., Assistant District Engineer, NCDOT (in regard to Bond #SU5024285), the following Performance Bonds being held for the completion of infrastructure within Briar Chapel Planned Residential Development may be released:

<u>Bond No.</u>	<u>Original Amount</u>
<b>Bond #SU5024262 (Bond # 1)</b> Phase I Waste Water Treatment Plant and pond Grading, access, all WWTP related utilities (including 5-day upset pond utilities) and the Bentonite mixture In the Waste Water Treatment ponds.	\$480,446.00
<b>Bond # SU5024285 (Bond # 8)</b> Construction of Pokeberry Bridge	\$606,284.00

Enclosed with this correspondence are the two original bonds for cancellation. Should



Since 1979

THE JOHN R. McADAMS COMPANY, INC.

October 23, 2007

Mr. Ed Timoney  
Newland Communities  
5850 Fayetteville Road  
Suite 201  
Durham, North Carolina 27713

Re: **Briar Chapel Development**  
**Phase 4 – Section 1, 2 & 3 Bond Amount(s)**  
**Chatham County, NC**  
**NEW-05041**

Dear Mr. Timoney:

This letter is to provide you with a breakdown of the Phase 4 – Section 1, 2 & 3 Plat Bond amount which includes Bonds 1 thru 6. Bonds 1 thru 4 are for the Section 1 plat, Bond 5 is the Section 2 plat and Bond 6 is for the Section 3 plat. The total amount of each bond includes a 40% increase as required by Chatham County.

**Bond #1** includes the Phase 1 Waste Water Treatment Plant grading, access and utilities (\$30,000) and the Bentonite mixture in the Waste Treatment ponds (\$343,176) + 40% (\$137,270). The total amount of Bond #1: **\$480,446.**

**Bond #2** is the Spray Irrigation Fields (\$315,022) + 40% (\$126,009). The total amount of Bond #2: **\$441,031.**

**Bond #3** is for the clearing, erosion control, curb & gutter, paving, waterline installation, sanitary sewer installation, storm drain installation, seeding and final clean-up on Briar Chapel Parkway and Great Ridge Parkway (\$1,055,092) + 40% (\$422,037). The total amount of Bond #3: **\$1,477,129.**

**Bond #4** is for the clearing, erosion control, curb & gutter, paving, waterline installation, sanitary sewer installation, storm drain installation, seeding and final clean-up on Great Ridge Parkway North (\$2,274,431) + 40% (\$909,772), Phase 4 POD A 15 lots (\$96,531) + 40% (\$38,612), Phase 4 POD B 23 lots (\$131,954) + 40% (\$52,782), Phase 4 POD C 25 lots (\$71,286) + 40% (\$28,514) and Phase 4 POD D 4 lots (\$189,448) + (\$75,779). The total amount of Bond #4: **\$3,801,909.**

**Bond #5** is for the clearing, erosion control, curb & gutter, paving, waterline installation, sanitary sewer installation, storm drain installation, seeding and final clean-up for the Phase 4 – Section 2 plat for 121 lots in POD's A, B, C & D (\$1,561,638) + (\$624,655). The total amount of Bond #5: **\$2,186,293.**

Research Triangle Park, NC  
Post Office Box 14005  
Research Triangle Park,  
North Carolina 27709  
2905 Meridian Parkway  
Durham, North Carolina 27713  
800-733-5646  
919-361-5000  
919-361-2269 Fax

Charlotte, NC  
5311 Seventy-Seven Center Drive,  
Suite 66  
Charlotte, North Carolina 28217  
800-733-5646  
704-527-0800  
704-527-2003 Fax

www.johnrmcadams.com

Comprehensive Land Development Design Services

*We help our clients succeed.*



Since 1979

THE JOHN R. McADAMS COMPANY, INC.

Mr. Ed Timoney  
October 23, 2007  
Page Two

**Bond #6** is for the clearing, erosion control, curb & gutter, paving, waterline installation, sanitary sewer installation, storm drain installation, seeding and final clean-up for the Phase 4 – Section 3 plat for 122 lots in POD's A, B, C & D (\$1,515,419) + 40% (\$606,168). The total amount of Bond #5: **\$2,121,587**.

The total current amount of the six bonds for the Phase 4 – Section 1, 2 & 3 Plats is \$10,075,995. This bond amount reflects work remaining on the above reference plats as of this date.

If you should have any questions concerning this matter, please contact me at this office.

Sincerely,

THE JOHN R. McADAMS COMPANY, INC.

Tommy E. Vance, PE  
Senior Project Manager







October 20, 2008

Mr. Jeff Scouten  
Newland Communities  
16 Windy Knoll Circle  
Chapel Hill, NC 27516

Re: **Briar Chapel Development**  
**Phase 4 – Bond Reductions**  
**Chatham County, NC**  
**NEW-05041**

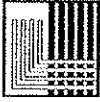
Dear Mr. Scouten:

This letter is to provide you with a breakdown of the Phase 4 Bond Reduction amount(s) which includes Bonds 1 thru 8. Bonds 1 thru 4 are for the Section 1 plat, Bond 5 is for the Section 2 plat, Bond 6 is for the Section 3 plat, Bond 7 is for the Briar Chapel Parkway south of Pokeberry Bridge and Catullo Run and Bond 8 is the Pokeberry Bridge. The total amount of each bond includes a 40% increase as required by Chatham County.

**Bond #1** includes the Phase I Waste Water Treatment Plant grading, access and utilities and the Bentonite mixture in the Waste Treatment ponds. The original amount of this Bond was \$480,446. The work for this Bond is 100% complete and at this time I am requesting it to be reduced to \$0 as indicated in the attached spreadsheet. **The total amount of Bond #1: \$0**

**Bond #2** is for the Spray Irrigation Fields. The original amount of this Bond was \$441,031. The work for this Bond is 100% complete and at this time I am requesting it to be reduced to \$0 as indicated in the attached spreadsheet. **The total amount of Bond #2: \$0**

**Bond #3** is for the final lift of asphalt paving, sidewalk and final clean-up on Briar Chapel Parkway and Great Ridge Parkway. The original amount of this Bond was \$1,477,129. There is \$177,200 of work remaining, as indicated by the attached spreadsheet plus the 40% increase of \$70,880. **The total amount of Bond #3: \$248,080**



*Since 1979*

THE JOHN R. McADAMS COMPANY, INC.

Mr. Jeff Scouten  
October 20, 2008  
Page Two

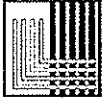
**Bond #4** is for the final lift of asphalt paving, sidewalk and final clean-up on Great Ridge Parkway, Phase 4 Pod 'A' 15 lots, Phase 4 Pod 'B' 23 lots, Phase 4 Pod 'C' 25 lots and Phase 4 Pod 'C' 4 lots. The original amount of this Bond was \$3,801,909. There is \$943,522 of work remaining, as indicated on the attached spreadsheet plus the 40% increase of \$377,408. **The total amount of Bond #4: \$1,320,930**

**Bond #5** is for the final lift of asphalt paving, sidewalk and final clean-up for Phase 4 – Pods 'A', 'B', 'C' & 'D' 121 lots. The original amount of this Bond was \$2,186,293. There is \$296,811 of work remaining, as indicated on the attached spreadsheet plus the 40% increase of \$118,724. **The total amount of Bond #5: \$415,535**

**Bond #6** is for the final lift of asphalt paving, sidewalk and final clean-up for Phase 4 – Pods 'A', 'B', 'C' & 'D' 122 lots. The original amount of this Bond was \$2,121,587. There is \$281,036 of work remaining as indicated on the attached spreadsheet plus the 40% increase of \$112,414. **The total amount of Bond #6: \$393,450**

**Bond #7** is for the roadway south of the Pokeberry Bridge, erosion control and waterline installation and also for Catullo Run. The original amount of this Bond was \$398,426. The work for this Bond is 100% complete and at this time I am requesting that the Bond be reduced to \$0. **The total amount of Bond #7: \$0**

**Bond #8** is for the construction of Pokeberry Bridge. The original amount of this Bond was \$606,284. The work for this Bond is 100% complete and at this time I am requesting that the Bond be reduced to \$0. **The total amount of Bond #8: \$0**



Since 1979

THE JOHN R. McADAMS COMPANY, INC.

Mr. Jeff Scouten  
October 20, 2008  
Page Three

If you should have any questions concerning this matter, please contact me at this office.

Sincerely

THE JOHN R. McADAMS COMPANY, INC.

Tommy L. Vance, PE  
Senior Project Manager



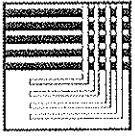
Research Triangle Park, NC  
Post Office Box 14005  
Research Triangle Park,  
North Carolina 27709  
905 Meridian Parkway  
Durham, North Carolina 27713  
900-733-5646  
919-361-5000  
919-361-2269 Fax

Charlotte, NC  
701 Carmel Road  
Suite 205  
Charlotte, North Carolina 28226  
900-733-5646  
704-527-0800  
704-527-2003 Fax

Wilmington, NC  
904 Oleander Drive  
Suite 200  
Wilmington, North Carolina 28403  
900-733-5646  
910-799-8181  
910-799-8171 Fax

[www.johnr-mcadams.com](http://www.johnr-mcadams.com)

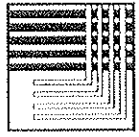
Design Services Focused On Client Success



# THE JOHN R. McADAMS COMPANY, INC.

BRIAR CHAPEL, PHASE 4 – SECTIONS 1, 2 and 3  
SUMMARY OF PERMIT IMPACT FOR  
RECOMBINATION PLAT TO ADD 15 LOTS TO EXISTING 37 LOTS PREVIOUSLY PLATTED

PERMIT	PERMITTING AGENCY	COMMENT
Roadway	NC DOT	No permit revision necessary. Please see attached documentation from Justin Bullock, NC DOT Assistant District Engineer (Division 8, District 1)
Driveway	NC DOT	Not applicable as the driveway permits for Briar Chapel Parkway and Great Ridge Parkway to Manns Chapel Road are unaffected by this change.
Erosion Control	Chatham County	No permit revision necessary since the area that was to be disturbed for the 37 currently platted lots will not increase. The limit of disturbance for the proposed additional new 15 lots will remain within the currently permitted limit of disturbance.
Wetlands/Streams	USACOE/DWQ	No permit revision necessary since the revision of lot lines to create 15 lots where there was to be 37 lots will not result in any additional impact to wetlands or streams over that currently covered under the existing 404/401 permit.
Public Water	Chatham County	Per discussion with Leonard McBryde, we have prepared a revised utility plan (attached) that shows the necessary water service additions and relocations.
Public Water	NC DENR PWS	No permit revision necessary. Please see attached documentation from Mr. Vincent Tomaino, NC DENR PWS, Environmental Engineer II
Sanitary Sewer	NC DENR DWQ APS	Please see Permit No. WQ0029867 Modification – Briar Chapel, Phase 4 – Wastewater Collection System Extension.
Stormwater Management	NC DNER DWQ	DWQ has reviewed and approved Stormwater Management Plan modification. Please see attached approval letter dated April 26, 2010 signed by Mr. Ian McMillan
Reclaimed Wastewater System	NC DENR DWQ	No permit necessary. Please see attached documentation from Mr. Mark Ashness, PE regarding summary of reclaimed wastewater infrastructure and executed bond contract with Chatham County for additional irrigation infrastructure
Affordable Housing Units	N/A	Twelve (12) affordable housing units (AHU's) are currently platted out of 405 total platted lots which equates to 2.9% AHU's. The addition of 15 replatted lots including one additional AHU revised the total number of AHU's to thirteen (13) and total platted lots to 420 or 3.09% which exceeds the 2.5% required by the CUP.



# THE JOHN R. McADAMS COMPANY, INC.

BRIAR CHAPEL, PHASE 4 – SECTIONS 2 and 3  
SUMMARY OF PERMIT IMPACT FOR

RECOMBINATION PLAT TO ADD 15 LOTS TO EXISTING 37 LOTS PREVIOUSLY PLATTED

Open Space	N/A	Adjustment of lot lines to provide for better use of rear yard open space. Requires the allocation of 6,594 SF of open space to existing platted lots (174 and 175). HOA responsibility remains the same.
------------	-----	---

## NC DOT Correspondence Regarding Roadway Permit

## Butters, Jon

---

**From:** Bullock, Justin E [jebullock@ncdot.gov]  
**Sent:** Thursday, May 06, 2010 5:49 PM  
**To:** Stark, Matthew; Butters, Jon; Helman, Diane  
**Cc:** Britt, Jennifer L  
**Subject:** FW: Briar Chapel Phase 4  
**Attachments:** NEW09004-S1.pdf; NEW09004-S2.pdf; NEW09004-S3.pdf

Jon, Matthew, & Diane,

I reviewed your proposal. Your revisions are approved under the following stipulations:

1. There are to be no changes to the widths or bearings on the Right of Way.
2. There are to be no horizontal or vertical alignment changes within the Right of Way.
3. There is to be no change in access to the additional properties (still accessed by private road where applicable). I understand that lots on Dark Forest Lane and Turtle Point Bend can only be accessed from the public Right of Way.
4. There are to be no changes in the drainage system in these areas.

If anything additional is needed, please advise.

## Justin Bullock, E.I.

Asst. District Engineer  
Division 8, District I

PO Box 1164  
300 Country Club Drive  
Asheboro, N.C. 27204  
Phone (336) 629-1423  
Fax (336) 629-7228

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

**From:** Stark, Matthew [mailto:stark@johnrmcadams.com]  
**Sent:** Thursday, May 06, 2010 10:22 AM  
**To:** Bullock, Justin E  
**Cc:** Butters, Jon  
**Subject:** Briar Chapel Phase 4 utility service relocations

Jason,

Per your conversation with Jon Butters, I have attached pdf exhibits for the lot redesign for Briar Chapel Phase 4. Please let me know if you have any problems with the files.

Best regards,

Matt Stark  
CAD Technician

Office: 919-361-5000  
Toll Free: 800-733-5646

Add to address book:



THE JOHN R. McADAMS  
COMPANY, INC.

ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL

Research Triangle Park • Charlotte

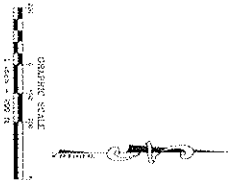
*Design Services Focused On Client Success*  
Please consider the environment before you print this e-mail.

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.





PLAN DRAWN & NOT APPROVED FOR CONSTRUCTION



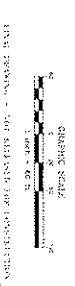
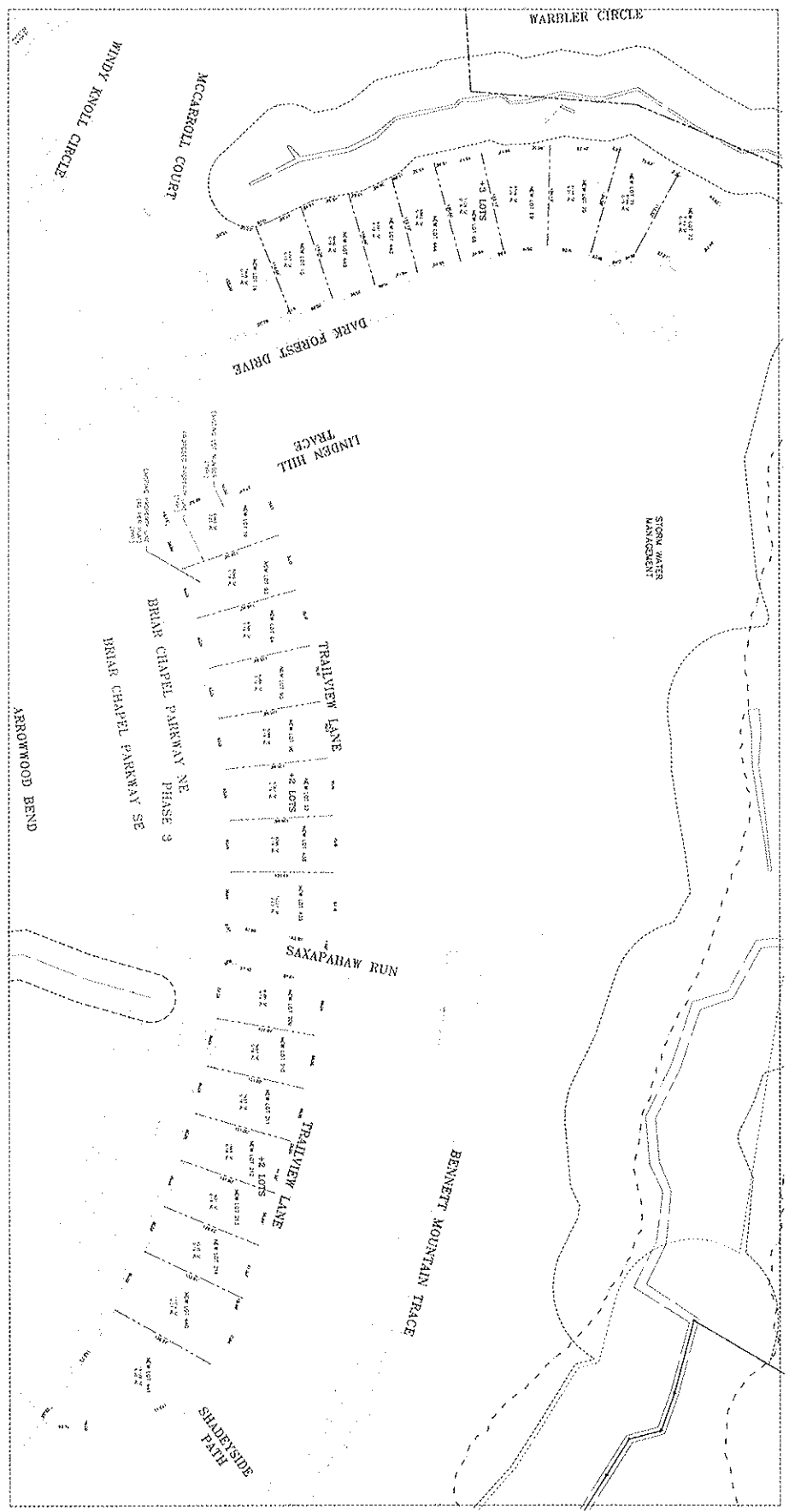
DATE	10/20/11
PROJECT	BRIAR CHAPEL
OWNER	ANNAPOLIS
DESIGNED BY	J. W. DAVIS
DRAWN BY	J. W. DAVIS
CHECKED BY	J. W. DAVIS
SCALE	AS SHOWN

**BRIAR CHAPEL**  
**PHASE 4 CONSTRUCTION PLANS**  
U.S. HWY. 15-501 & MANN'S CHAPEL ROAD BALDWIN & WILLIAMS  
TOWNSHIPS, CHATHAM COUNTY, NORTH CAROLINA

OWNER:  
**BRIAR CHAPEL**  
Newland Communities  
NNP-BRIAR CHAPEL, L.L.C.  
16 WINDY KNOLL CIR  
CHAPEL HILL, NORTH CAROLINA 27516

REVISIONS:


 **THE JOHN R. McADAMS COMPANY, INC.**  
ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL  
RESEARCH TRIANGLE PARK • CHAPEL HILL  
395 Woodfin Parkway, Durham, NC 27713  
404-285-2616 • www.jr-mc.com • License No. C-2292



DATE REVISION

NO.	DATE	DESCRIPTION

OWNER: **BRIAR CHAPEL**  
 NNP-BRIAR CHAPEL, I.L.C.  
 CHAPEL HILL, NORTH CAROLINA 27516

DESIGNER: **THE JOHN R. McADAMS COMPANY, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL  
 303 LARCH SPRING PARK • CHARLOTTE  
 28205 • 703.535.3616 • www.jrmc.com • License No. 0-021

**BRIAR CHAPEL**  
 PHASE 4 CONSTRUCTION PLANS  
 U.S. HWY. 15-501 & MANN'S CHAPEL ROAD BALZOVEN & WILLIAMS  
 TOWNSHIPS, CHATHAM COUNTY, NORTH CAROLINA

REVISIONS

NO.	DATE	DESCRIPTION

DATE REVISION

NO.	DATE	DESCRIPTION

**BRIAR CHAPEL**  
 PHASE 4 CONSTRUCTION PLANS  
 U.S. HWY. 15-501 & MANN'S CHAPEL ROAD BALZOVEN & WILLIAMS  
 TOWNSHIPS, CHATHAM COUNTY, NORTH CAROLINA

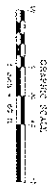
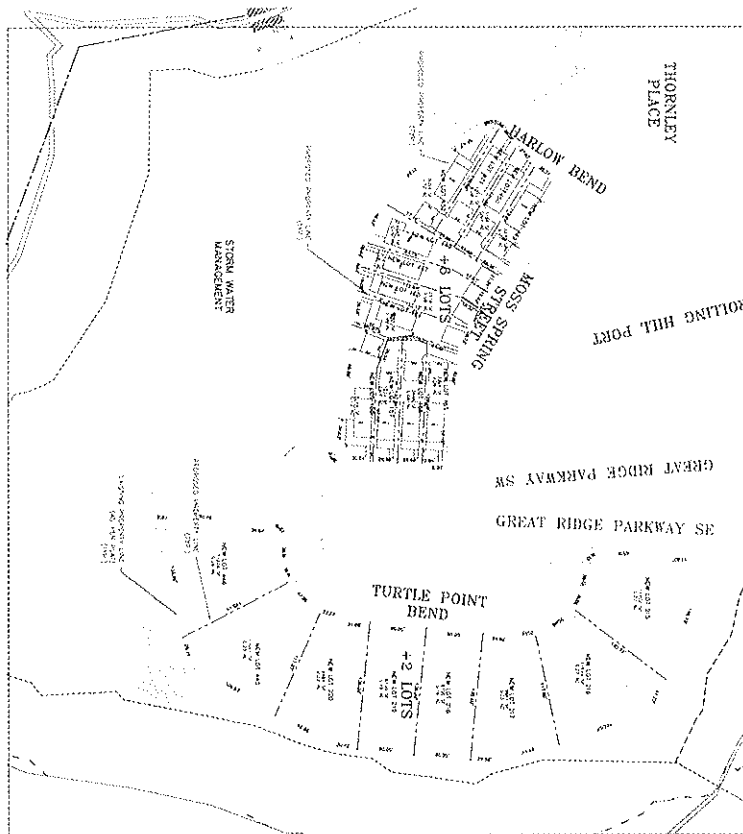
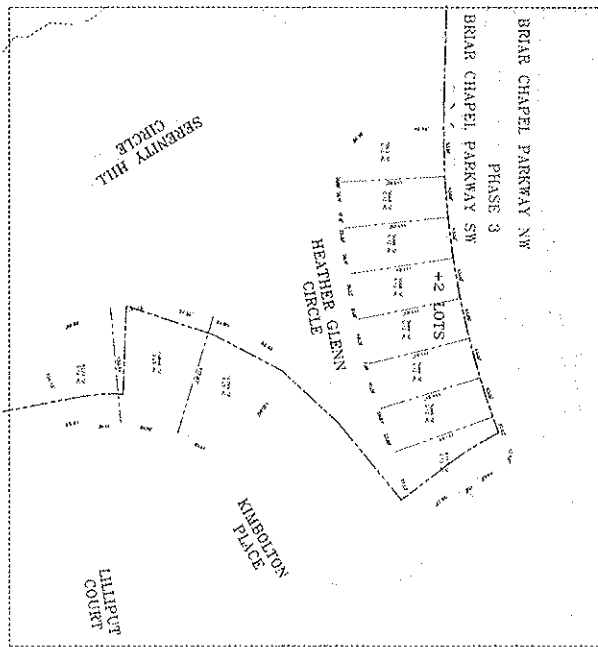
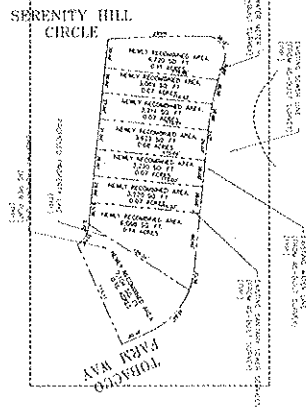
REVISIONS

NO.	DATE	DESCRIPTION

**THE JOHN R. McADAMS COMPANY, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL  
 303 LARCH SPRING PARK • CHARLOTTE  
 28205 • 703.535.3616 • www.jrmc.com • License No. 0-021

DATE REVISION

NO.	DATE	DESCRIPTION



DATE: 08/27/2018 10:51:33 AM

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">DRAWING NO. S-3</p>	<p><b>BRIAR CHAPEL</b>  <b>PHASE 4 CONSTRUCTION PLANS</b>          U.S. HWY. 15-501 &amp; MANN'S CHAPEL ROAD BALDWIN &amp; WILLIAMS TOWNSHIPS, CHATHAM COUNTY, NORTH CAROLINA</p>	<p>OWNER:  <b>BRIAR CHAPEL</b>  <small>MEMBER COMPANIES</small>  <b>NNP-BRIAR CHAPEL, L.L.C.</b>          16 MERRY KNIGHT CIRCLE          CHAPEL HILL, NORTH CAROLINA 27516</p>	<p>REVISIONS:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">NO.</td><td style="width: 80%;">DESCRIPTION</td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	NO.	DESCRIPTION							<p style="text-align: center;"><b>THE JOHN R. McADAMS COMPANY, INC.</b></p> <p style="font-size: small;">ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL          1825 APACHE TRAIL DRIVE, CHARLOTTE, NC 28217          704-753-5611 • www.jrmc.com • License No. C-4223</p>
NO.	DESCRIPTION											

USACOE/DWQ Wetlands/Streams



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Coleen H. Sullins

Director

Beverly Eaves Perdue  
Governor

Dee Freeman  
Secretary

August 31, 2009

Mr. William S. Mumford  
NNP – Briar Chapel, LLC  
16 Windy Knoll Circle  
Chapel Hill, NC 27516

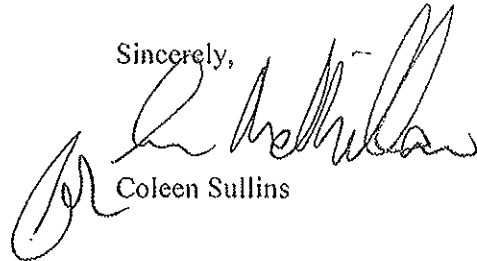
Re: Briar Chapel, Chatham County  
DWQ Project # 20050732, Ver. 13; USACE Action ID. No. 200121252  
**APPROVAL of 401 Water Quality Certification with Additional Conditions - MODIFICATION**

Dear Mr. Mumford:

Attached hereto is a copy of Certification No. 3567 issued to Mr. William S. Mumford of NNP- Briar Chapel, LLC, Inc., dated August 31, 2009. **This Certification replaces the Certification issued to you on January 11, 2008, July 21, 2009, and July 24, 2009.** In addition, you should get any other federal, state or local permits before you go ahead with your project including (but not limited to) Solid Waste, Sediment and Erosion Control, Stormwater, Dam Safety, Non-discharge and Water Supply Watershed regulations.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,



Coleen Sullins

CHS/cbk/ijm

Attachments: Certificate of Completion

cc: Becky Fox, EPA, 1307 Firefly Road, Whittier, NC 28789  
U.S. Army Corps of Engineers, Raleigh Regulatory Field Office, Wilmington District  
Lauren Witherspoon, DWQ Raleigh Regional Office  
DLR, Raleigh Regional Office  
File Copy  
Nicole Thomson, S&EC, P.A., 11010 Raven Ridge Road, Raleigh, NC 27614

Filename: 050732Ver13BriarChapel(Chatham)401\_IC\_MOI02\_ Revised

**NORTH CAROLINA 401 WATER QUALITY CERTIFICATION**

**THIS CERTIFICATION** is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500 to Mr. William S. Mumford of NNP- Briar Chapel, LLC to fill 0.4374 acres of 404/wetland (permanent impact), 0.197 acres 404/wetland (temporary impact), 2,154 linear feet of perennial stream (permanent impact), 612 linear feet of perennial stream (temporary impact), 83 linear feet of intermittent stream (permanent impact), and 22 linear feet of intermittent stream (temporary impact), in the Cape Fear River Basin, to construct the Briar Chapel residential and mixed use development at the site. The site is located west of U.S. Highway 15-501, and north of Andrew's Store Road (SR 1528), and south of Mann's Chapel Road (SR 1532), approximately 5 miles south of Chapel Hill, in Chatham County, North Carolina, pursuant to a permit application dated May 8, 2009, and received by the DWQ on May 8, 2009, by Public Notice issued by the USACE on May 22, 2009, and received by the DWQ on May 22, 2009, and by all additional correspondences received by the DWQ on May 20, 2009 and June 25, 2009.

The application and supporting documentation provides adequate assurance that the proposed work will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

This approval is only valid for the purpose and design submitted in the application materials and as described in the Public Notice. If the project is changed, prior to notification a new application for a new Certification is required. If the property is sold, the new owner must be given a copy of the Certification and approval letter and is thereby responsible for complying with all conditions of this Certification. Any new owner must notify the Division and request the Certification be issued in their name. Should wetland or stream fill be requested in the future, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). If any plan revisions from the approved site plan result in a change in stream or wetland impact or an increase in impervious surfaces, the DWQ shall be notified in writing and a new application for 401 Certification may be required. For this approval to be valid, compliance with the conditions listed below is required.

**Conditions of Certification:**

**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
404/401 Wetlands	0.4374 (acres) – permanent impact	Table 2, Application, and Public Notice
404/401 Wetlands	0.197 (acres) – temporary impact	Table 2, Application, and Public Notice
Stream (perennial)	2,154 (linear feet) – permanent impact	Table 2, Application, and Public Notice
Stream (perennial)	612 (linear feet) – temporary impact	Table 2, Application, and Public Notice
Stream (intermittent)	83 (linear feet) – permanent impact	Table 2, Application, and Public Notice
Stream (intermittent)	22 (linear feet) – temporary impact	Table 2, Application, and Public Notice

Sediment and Erosion Control:

2. 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.
3. 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 404/401 Permit Application. 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;
4. 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. 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.

Continuing Compliance:

6. Mr. William S. Mumford and NNP- Briar Chapel, LLC shall conduct construction activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act) and any other appropriate requirements of State law and federal law. If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the Certification, the Division shall notify Mr. William S. Mumford and NNP- Briar Chapel, LLC and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to Mr. William S. Mumford and NNP- Briar Chapel, LLC in writing, shall be provided to the United States Army Corps of Engineers for reference in any Permit issued

pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project;

7. Construction Stormwater Permit NCG010000

Upon the approval of an Erosion and Sedimentation Control Plan issued by the Division of Land Resources (DLR) or a DLR delegated local erosion and sedimentation control program, an NPDES General stormwater permit (NCG010000) administered by DWQ is automatically issued to the project. This General Permit allows stormwater to be discharged during land disturbing construction activities as stipulated by conditions in the permit. If your project is covered by this permit [applicable to construction projects that disturb one (1) or more acres], full compliance with permit conditions including the sedimentation control plan, self-monitoring, record keeping and reporting requirements are required. A copy of this permit and monitoring report forms may be found at [http://h2o.enr.state.nc.us/su/Forms\\_Documents.htm](http://h2o.enr.state.nc.us/su/Forms_Documents.htm).

Mitigation:

8. Compensatory Mitigation

~~Compensatory stream mitigation shall be accomplished by using 2,127 linear feet of stream~~ mitigation credit at the Harpers Crossroads stream mitigation site and the remaining 27 linear feet of required stream credit (10:1 ratio = 270 linear feet) from the 63,412 linear feet of available onsite stream preservation. These mitigation efforts shall be protected through use of conservation easement written to satisfy the US Army Corps of Engineers. Uses which may be allowable in the protected stream buffers include water dependent activities and greenway trails upon additional written approval of the Division of Water quality and the US Army Corps of Engineers. These provisions should be explicitly reflected in the conservation easements, or similar mechanisms, written to satisfy the USACE.

The Permittee shall provide stream restoration in accordance with the plan entitled 'Harpers Crossroads Stream Restoration Plan,' dated September 2005. The restoration site, which was authorized with a separate DA nationwide permit (USACE Action Id No. 200420489) has already been constructed. The as-built report dated June 12, 2006 states the total stream restoration generated by the project as 2,127 linear feet. Within 90 days of the USACE's determination that the Harpers Crossroads Stream Restoration Project has met the success criteria outlined in the 'Harpers Crossroads Stream Restoration Plan,' the permittee shall arrange for the transfer of the existing conservation easements to a third-party grantee, subject to approval by the USACE.

Type of Impact	Compensatory Mitigation Required	River and Sub-basin Number
Stream (perennial)	2,154 (linear feet)	Cape Fear/03030002

9. Stormwater Management Plan Implementation Procedures (No Further Approval Needed)

- The approved SMP must be constructed and operational before any permanent building or other structure is occupied at the site. If a development is phased, then the approved SMP for each future phase must be constructed and operational before any permanent building or other structure associated with that phase is occupied.
- The approved SMP as well as drainage patterns must be maintained in perpetuity.
- The SMP may not be modified without prior written authorization from the SMP approval authority. If the SMP falls under another state stormwater program, then a copy of the approval letter and the modified SMP must be submitted to the 401 Oversight/Express Unit prior to the commencement of the modifications.



## 10. 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 disequilibrium 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.*

## 11. Certificate of Completion

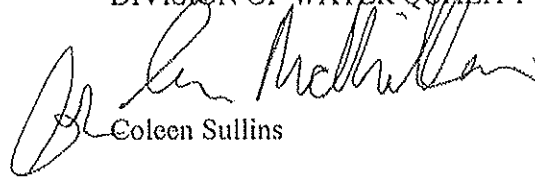
Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return the attached certificate of completion to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650 Mail Service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

**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.**

August 31, 2009

If this Certification is unacceptable to you, you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 31<sup>st</sup> day of August 2009  
DIVISION OF WATER QUALITY



Coleen Sullins

CHS/cbk/ijm

3567

---



North Carolina Department of Environment and Natural Resources  
Division of Water Quality

Beverly Eaves Perdue  
Governor

Coleen H. Sullins  
Director

Dee Freeman  
Secretary

DWQ Project No.: 05-0732 U13 County: Chatham

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: aug 31, 2009

### 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 this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to DWQ ~~by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.~~

#### *Applicant's Certification*

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### *Agent's Certification*

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### *If this project was designed by a Certified Professional*

I, \_\_\_\_\_, as a duly registered Professional \_\_\_\_\_ (i.e., Engineer, Landscape Architect, Surveyor, etc.) in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Registration No. \_\_\_\_\_

Date \_\_\_\_\_



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

August 21, 2009

Regulatory Division

Action ID. 200121252

Mr. William S. Mumford  
NNP – Briar Chapel, LLC  
16 Windy Knoll Circle  
Chapel Hill, North Carolina 27516

Dear Mr. Mumford:

Reference the Department of the Army (DA) permit issued on October 2, 2006, to Mitch Barron of Newland Communities for impacts associated with the Briar Chapel Development. Also reference the modification to this permit approved in December, 2007. This development is approximately 1,589 acres in size and is located west of US Highway 15-501, north of Andrew's Store Road (SR 1528), and south of Mann's Chapel Road (SR 1532), approximately 5 miles south of Chapel Hill, in Chatham County, North Carolina. Coordinates (in decimal degrees) for the site are 35.8251 ° North, 79.1059 ° West. The site contains several unnamed tributaries and adjacent wetlands of Pokeberry Creek and Wilkinson Creek, in the Cape Fear River Basin (8-Digit Cataloging Unit 03030002).

Permanent impacts authorized by this permit and the subsequent 2007 modification totaled 1,666 linear feet of stream channel and 0.4422 acre of wetland, and temporary impacts totaled 359 linear feet of stream channel and 0.156 acre of wetlands. Mitigation was implemented for the unavoidable impacts by: a) Payment into the North Carolina Ecosystem Enhancement Program for the restoration of 0.6655 acre of riparian wetlands; b) Restoration of 2,127 linear feet of stream channel at the Harpers Crossroads Mitigation Site; and c) On-site preservation of 59.3 acres of wetlands and 63,412 linear feet of stream channel.

Also reference your permit modification request received by the Corps on May 8, 2009. This modification was to address impact amounts and location changes associated with roadway crossings in and near the development. Also included within the requested modification were impacts associated with restoration to streams and wetlands as required to satisfy an existing on-site Clean Water Act violation. On May 22, 2009, a Public Notice was issued detailing this modification request which would bring total impacts associated with Briar Chapel to: 2,237 linear feet of permanent stream channel, 634 linear feet of temporary stream channel, 0.4374 acre of permanent wetland impact,

and 0.197 acres of temporary wetland impact. Please note the attached Tables 1, 2, and 3; originally created by your consultant S&EC, which describe the impact history by site number and amount. No additional mitigation was proposed due to the relatively large amount of preservation mitigation required within the original permit.


The Corps has completed the evaluation of your request and concurs with your request for a change in impacts associated with your referenced DA permit including the change to plans as requested. No additional mitigation is required for this modification.

Special condition 1 of your permit is hereby modified to read:

“All work authorized by this permit must be performed in strict compliance with the attached plans, Exhibit A, Exhibit E, and/or Exhibit F which are a part of this permit. These plans reflect the original proposal, Exhibit A; and the modifications as depicted within the January 26, and the revised June 7, 2007, proposals as shown in Exhibit E, and the modification request of May 8, 2009, as shown in Exhibit F. Only the attached modification plans reflect approved changes to the original plans, therefore any additional ~~deviations from the original plans are not approved per this modification and any further~~ modification to the plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation. The temporary impacts as identified on Exhibit E shall be removed by May 1, 2008, or the project shall be considered non-compliant with this condition. In addition, the following time deadlines are hereby established for work considered authorized under this 2009 permit modification: all impacts, both temporary and permanent, as shown in the stream repair and stabilization document received with the modification application on May 8, 2009, must be completed prior to April 15, 2010; and all additional temporary impacts, not requested within the stream repair and stabilization document but requested and authorized under this 2009 modification, shall be removed within 30 days of the completion of each respective crossing. Proper documentation of permit compliance for this 2009 modification shall be submitted to the Corps of Engineers Regulatory Representative via email on or before April 15, 2010, or at the time of each temporary impact removal, respectively. ”

Please note that all other permit conditions and exhibits remain in effect as written. Should you have questions, contact Mr. Monte Matthews, Raleigh Regulatory Field Office at telephone (919) 554-4884, Extension 30.

Sincerely,

  
for/ Jefferson M. Ryscavage  
Colonel, U.S. Army  
District Commander

Attachments

Copy Furnished (w/o attachment)

Ms. Cyndi Karoly  
Division of Water Quality  
North Carolina Department of Environment  
and Natural Resources  
2321 Crabtree Boulevard, Suite 250  
Raleigh, NC 27604

Copy Furnished (w/attachment)

Ms. Nicole Thomson  
Soil & Environmental Consultants  
11010 Raven Ridge Road  
Raleigh, NC 27614

---

TABLE 1  
PREVIOUSLY PERMITTED IMPACTS

Regulatory Branch

Impact	Classification	Impact Type	Original permitted Stream impacts (5/9/06 & 10/2/2006)	Original permitted Wetland impacts (5/9/06 & 10/2/2006)	Approved Modification Stream impacts (12/05/07 & 1/11/08)	Approved Modification Wetland impacts (12/05/07 & 1/11/08)
A	Wetland	Road Crossing	0	0.0341 ac. perm wetland impact	N/A	N/A
B	Perennial Stream/Wetland	Road Crossing	141 LF perm. stream impact	0.0018 ac. perm. wetland impact	N/A	N/A
C	Perennial Stream	Bridge	0	0	N/A	0
D	Perennial Stream/Wetland	Road Crossing	140 LF perm. stream impact	0.0320 ac. perm. wetland impact	N/A	N/A
E	Perennial Stream	Road Crossing	129 LF perm. stream impact	0.0064 ac. perm. wetland impact	N/A	N/A
F	Perennial Stream	Road Crossing	155 LF perm. stream impact	0	197 LF perm. stream impact & 41 LF temp. stream impact	0
G	Perennial Stream/Wetland	Road Crossing	238 LF perm. stream impact	0.0030 ac. perm. wetland impact	271 LF perm. stream impact & 26 LF temp. stream impact	0.010 ac. perm. wetland impact
H	Perennial Stream	Road Crossing	166 LF perm. stream impact	0	262 LF perm. stream impact & 50 LF temp. stream impact	0
I	Perennial Stream/Wetland	Road Crossing	91 LF perm. stream impact	0.0003 ac. perm. wetland impact	83 LF perm. stream impact & 31 LF temp. stream impact	0.002 ac. perm. wetland impact & 0.019 ac. temp. wetland impact
J	Perennial Stream	Road Crossing	150 LF perm. stream impact	0	N/A	N/A
K	Intermittent Stream/Wetland	Road Crossing	150 LF perm. stream impact	0.2320 ac. perm. wetland impact	ELIMINATED	ELIMINATED
L	Perennial Stream	Road Crossing	114 LF perm. stream impact	0	N/A	N/A
M	Perennial Stream	Road Crossing	220 LF perm. stream impact	0	N/A	N/A
N	Wetland	Fill	0	0.3559 ac. perm. wetland impact	N/A	N/A
O	Perennial Stream	Road Crossing	109 LF perm. stream impact	0	N/A	N/A
*P	Wetland	Road Crossing	0	0.062 ac perm. wetland impact	N/A	N/A
Q	Perennial Stream/Wetland	Pedestrian Bridge	not part of orig. submittal	N/A	N/A	added to mod./no impact
R	Wetland/Beaver Impoundment	Pedestrian Bridge	not part of orig. submittal	N/A	N/A	added to mod./no impact

TABLE 1  
PREVIOUSLY PERMITTED IMPACTS

Impact	Classification	Impact Type	Original permitted Stream impacts (5/9/06 & 10/2/2006)	Original permitted Wetland impacts (5/9/06 & 10/2/2006)	Approved Modification Stream impacts (12/05/07 & 1/11/08)	Approved Modification Wetland impacts (12/05/07 & 1/11/08)
1	Perennial Stream	Utility	20 LF temp. stream impact	0	N/A	N/A
2	Perennial Stream	Utility	20 LF temp. stream impact	0	N/A	N/A
3	Perennial Stream	Utility	21 LF temp. stream impact	0	N/A	N/A
4	Perennial Stream	Utility	35 LF temp. stream impact	0	N/A	N/A
5	Perennial Stream	Utility	36 LF temp. stream impact	0	N/A	N/A
6	Perennial Stream	Utility	35 LF temp. stream impact	0	N/A	N/A
7	Perennial Stream	Utility	20 LF temp. stream impact	0.123 ac. temp. wetland impact	N/A	N/A
8	Perennial Stream	Utility	24 LF temp. stream impact	0	N/A	N/A
9	Wetland	Utility	0	0.0140 temp. wetland impact	N/A	N/A
Original Permitted Totals:			1,653 LF perm. Stream impact & 211 LF temp. Stream impact	0.6655 ac. perm. Wetland impact & 0.137 ac. temp. Wetland impact	1,666 LF perm. Stream impact & 359 LF temp. Stream Impact	0.4422 ac. perm. Wetland impact & 0.156 ac. temp. Wetland impact
			New Permitted Totals 2007/2008			

\* Crossings J and P were eliminated prior to 404 and 401 Approvals in 2006



TABLE 2  
2009 REVISED IMPACTS

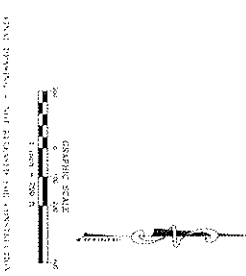
Impact	Classification	Impact Type	Revised Stream Impacts	Revised Wetland Impacts
A	Wetland	Road Crossing	4 LF perm. stream impact	0.0372 ac. perm. wetland impact & 0.0264 ac. temp. wetland impact
B	Perennial Stream/Wetland	Road Crossing	166 LF perm. stream impact & 14 LF temp. stream impact	0.0018 ac. perm. wetland (NO CHANGE TO PERM) & 0.0063 ac. temp. wetland impact
C	Perennial Stream	Bridge	0	0
D	Perennial Stream/Wetland	Road Crossing	181 LF perm. stream impact & 39 LF temp. stream impact	0.0282 ac. perm. wetland impact & 0.0077 ac. temp. wetland impact
E	Perennial Stream	Road Crossing	129 LF perm. stream impact & 40 LF of temp. stream impact	0.0065 ac. perm. wetland impact
F	Perennial Stream	Road Crossing	213 LF perm. stream impact & 56 LF temp. stream impact	0
G	Perennial Stream/Wetland	Road Crossing	296 LF perm. stream impact & 26 LF temp. stream impact (NO CHANGE TO TEMP.)	0.0095 ac. perm. wetland impact
H	Perennial Stream	Road Crossing	257 LF perm. stream impact & 55 LF temp. stream impact	0
I	Perennial Stream/Wetland	Road Crossing	83 LF perm. stream impact & 22 LF perm. stream impact (NO CHANGE TO PERM.)	0.0003 ac. perm. wetland impact & 0.0196 ac. temp. wetland impact
L	Perennial Stream	Road Crossing	123 LF perm. stream impact & 20 LF of temp. stream impact	0
M	Perennial Stream	Road Crossing	310 LF perm. stream impact & 50 LF temp. stream impact	0
N	Wetland	Road Crossing/Lot Fill	0	0.3449 ac. perm. wetland impact
O	Perennial	Road Crossing	148 LF perm. stream impact & 8 LF temp. stream impact	0
S	Perennial Stream	Road Widening (NEW)	58 LF perm. stream impact & 24 LF temp. stream impact	0
T	Perennial Stream	Road Widening (NEW)	36 LF perm. stream impact & 20 LF temp. stream impact	0
U	Perennial Stream	Road Widening (NEW)	233 LF perm. stream impact & 21 LF temp. stream impact	0.009 ac. perm. wetland impact
1	Perennial Stream	Utility	20 LF temp. stream impact (NO CHANGE)	0
2	Perennial Stream	Utility	20 LF temp. stream impact (NO CHANGE)	0
3	Perennial Stream	Utility	21 LF temp. stream impact (NO CHANGE)	0
4	Perennial Stream	Utility	41 LF temp. stream impact	0
5	Perennial Stream	Utility	50 LF temp. stream impact	0
6	Perennial Stream	Utility	43 LF temp. stream impact	0
7	Perennial Stream	Utility	20 LF temp. stream impact (NO CHANGE)	0.123 ac. temp. wetland impact (NO CHANGE)
8	Perennial Stream	Utility	24 LF temp. stream impact (NO CHANGE)	0 (NO CHANGE)
9	Wetland	Utility	0 (NO CHANGE)	0.0140 temp. wetland impact (NO CHANGE)
<b>TOTALS</b>			2,237 LF perm. stream impact & 634 LF temp. stream impact	0.4374 ac. perm. wetland impact & 0.197 ac. temp. wetland impact

MODIFICATION REQUEST  
BRIAR CHAPEL, CHATHAM CO., NC

TABLE 3  
NET DIFFERENCES IN IMPACTS

Impact	Classification	Impact Type	Net difference Stream Impact	Net difference Wetland Impact
A	Wetland	Road Crossing	+ 4 LF perm. stream impact	+0.0031 ac. perm. wetland impact & +0.0264 ac. temp wetland impact
B	Perennial Stream/Wetland	Road Crossing	+25 LF perm. stream impact & + 14LF temp. stream impact	+0.0063 ac. temp. wetland impact
C	Perennial Stream	Bridge	0	0
D	Perennial Stream/Wetland	Road Crossing	+41 LF perm. stream impact & +39 LF temp. stream impact	-0.0038 ac. perm. wetland impact & +0.0077 ac. temp. wetland impact
E	Perennial Stream	Road Crossing	0 LF perm. stream impact & + 40 LF temp. stream impact	+0.0001 ac. perm. wetland impact
F	Perennial Stream	Road Crossing	+16 LF perm. stream impact & +15 LF temp. stream impact	0
G	Perennial Stream/Wetland	Road Crossing	+25 LF perm. stream impact	-0.0005 ac. perm. wetland impact
H	Perennial Stream	Road Crossing	-5 LF perm. stream impact & +5 LF temp. stream impact	0
I	Perennial Stream/Wetland	Road Crossing	0 LF perm. stream impact & - 9 LF temp. stream impact	-0.0017 ac. perm. wetland impact & +0.0006 ac. temp. wetland impact
L	Perennial Stream	Road Crossing	+9 LF perm. stream impact & +20 LF temp. stream impact	0
M	Perennial Stream	Road Crossing	+90 LF perm. stream impact & +50 LF temp. stream impact	0
N	Wetland	Fill	0	-0.011 ac. perm. wetland impact
O	Perennial Stream	Road Crossing	+39 LF perm. stream impact & + 8 LF temp. stream impact	
S	Perennial Stream	Road Widening (NEW)	+58 LF perm. stream impact & +24 LF temp. stream impact	0
T	Perennial Stream	Road Widening (NEW)	+36 LF perm. stream impact & +20 LF temp. stream impact	0
U	Perennial Stream	Road Widening (NEW)	+233 LF perm. stream impact & +21 LF temp. stream impact	+0.009 ac. perm. wetland impact
1	Perennial Stream	Utility	0	0
2	Perennial Stream	Utility	0	0
3	Perennial Stream	Utility	0	0
4	Perennial Stream	Utility	+6 LF temp. stream impact	0
5	Perennial Stream	Utility	+14 LF temp. stream impact	0
6	Perennial Stream	Utility	+8 LF temp. stream impact	0
7	Perennial Stream	Utility	0	0
8	Perennial Stream	Utility	0	0
9	Wetland	Utility	0	0
TOTALS NET FOR PROJECT			+571 LF perm./+275 LF temp.	-0.0048 ac. perm/+0.041 ac. temp.

# CHATHAM COUNTY Public Water



JOHN R. McADAMS  
 S-1  
 DATE: 12/20/01  
 DRAWN BY: JRM  
 CHECKED BY: JRM  
 PROJECT NO: 01-0001

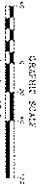
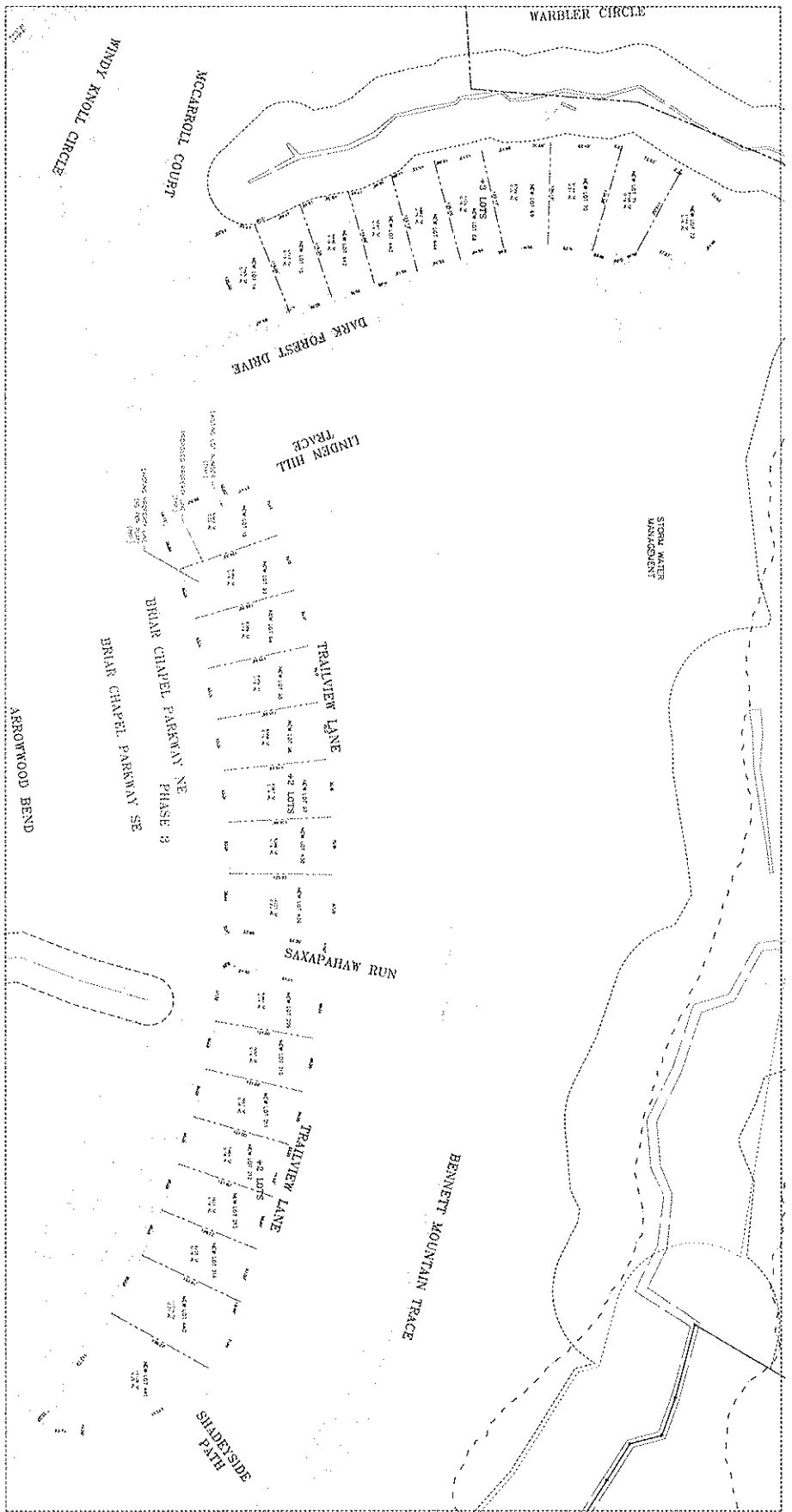
**BRIAR CHAPEL**  
**PHASE 4 CONSTRUCTION PLANS**  
 U.S. HWY. 15-501 & MANN'S CHAPEL ROAD BALDWIN & WILLIAMS  
 TOWNSHIPS, CHATHAM COUNTY, NORTH CAROLINA  
**OVERALL SITE PLAN**

OWNER:  
**BRIAR CHAPEL**  
 A DEVELOPMENT OF  
**NNP-BRIAR CHAPEL, L.L.C.**  
 16 WINDY KNOLL CIRCLE  
 CHAFFEE HILL, NORTH CAROLINA 27514

REVISIONS:

NO.	DATE	DESCRIPTION

**THE JOHN R. McADAMS COMPANY, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL  
 RESEARCH TRIANGLE PARK • CHARLOTTE  
 2850 BUCKLEBERRY DRIVE, LAYTON, NC 27015  
 404-225-5444 • www.jrmc.com • License No. C-4299



DATE PLOTTED: 11/20/2013 11:58:45 AM

PROJECT NO.	13-001
DATE	11/20/2013
SCALE	AS SHOWN
DRAWN BY	J. R. McADAMS
CHECKED BY	J. R. McADAMS
DATE	11/20/2013
PROJECT	BRIAR CHAPEL PHASE 4 CONSTRUCTION PLANS
LOCATION	16 WINDY KNOLL CIRCLE, CHAPEL HILL, NC 27514
CLIENT	NNP-BRIAR CHAPEL, L.L.C.
DESIGNED BY	J. R. McADAMS
DATE	11/20/2013
SCALE	AS SHOWN
DRAWN BY	J. R. McADAMS
CHECKED BY	J. R. McADAMS
DATE	11/20/2013
PROJECT	BRIAR CHAPEL PHASE 4 CONSTRUCTION PLANS
LOCATION	16 WINDY KNOLL CIRCLE, CHAPEL HILL, NC 27514
CLIENT	NNP-BRIAR CHAPEL, L.L.C.

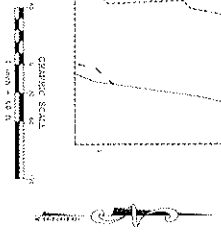
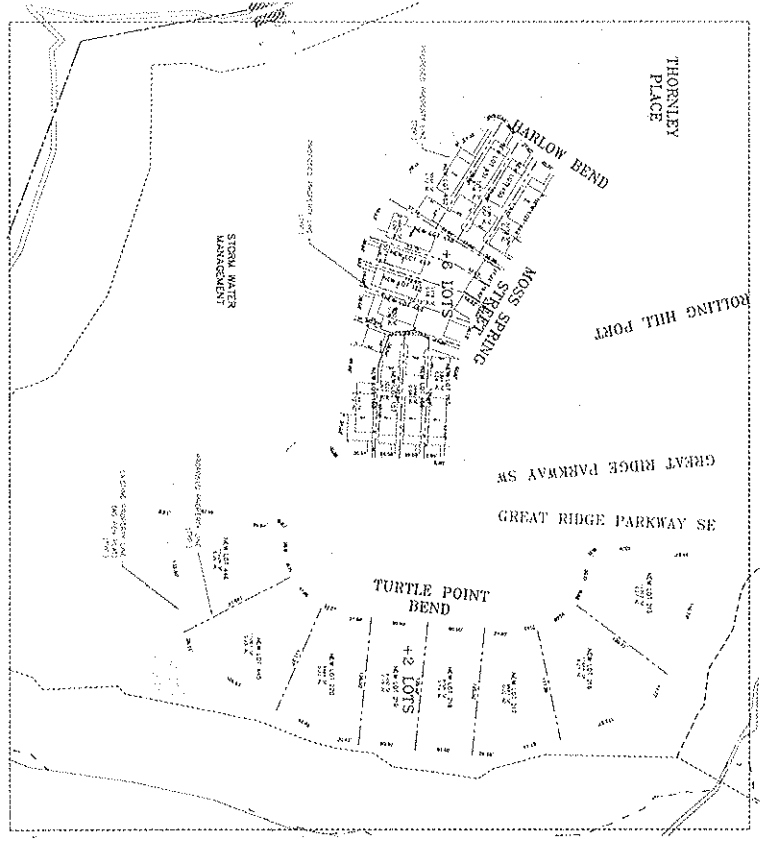
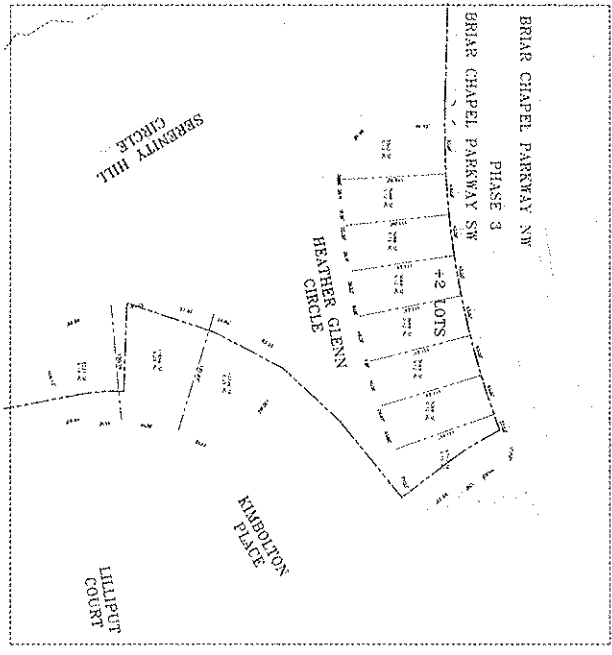
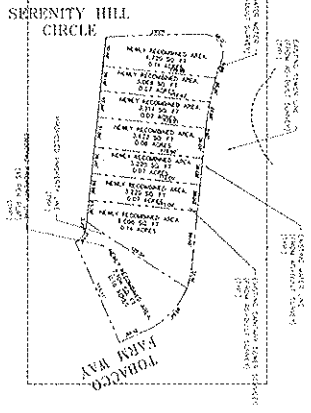
**BRIAR CHAPEL**  
**PHASE 4 CONSTRUCTION PLANS**  
 U.S. HWY. 15-501 & MANN'S CHAPEL ROAD BALDWIN & WILLIAMS TOWNSHIPS, CHATHAM COUNTY, NORTH CAROLINA

OWNER:  
**BRIAR CHAPEL**  
 NEWLAND DEVELOPMENT  
 NNP-BRIAR CHAPEL, L.L.C.  
 16 WINDY KNOLL CIRCLE  
 CHAPEL HILL, NORTH CAROLINA 27514

REVISIONS:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

DATE PLOTTED: 11/20/2013 11:58:45 AM

**THE JOHN R. McADAMS COMPANY, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL  
 RESEARCH TRIANGLE PARK • CHAPEL HILL  
 2955 WINDY KNOLL CIRCLE, CHAPEL HILL, NC 27514  
 603.232.2444 • WWW.JRMCADAMS.COM • LICENSE NO. C-2211



SCALE PERMITTED BY REGISTRAR, INC. - NINETEENTH FLOOR

SUBMITTAL SHEET  
S-3

**BRIAR CHAPEL**  
PHASE 4 CONSTRUCTION PLANS  
U.S. HWY. 15-501 & MANN'S CHAPEL ROAD HALDWIN & WILLIAMS TOWNSHIP, CHATHAM COUNTY, NORTH CAROLINA  
REVISED LOT LAYOUT EXHIBIT

OWNER:  
**BRIAR CHAPEL**  
Newland CONCRETE  
NNP - BRIAR CHAPEL, L.L.C.  
16 WINDY RIDGE CIRCLE  
CHAPEL HILL, NORTH CAROLINA 27516

REVISIONS:

**THE JOHN R. McADAMS COMPANY, INC.**  
ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL  
8828 SCHUBERT LANE, CHAPEL HILL, NC 27517  
252.728.5444 • www.jrmc.com • 12/24/14 • C-6254

NC DENR Public Water Supply Section Correspondence  
Regarding Water Line Permit

**Butters, Jon**

---

**From:** Tomaino, Vincent [vincent.tomaino@ncdenr.gov]  
**Sent:** Wednesday, May 05, 2010 9:00 AM  
**To:** Helman, Diane  
**Cc:** Butters, Jon  
**Subject:** RE: Briar Chapel, Phase 4, Sections 2 and 3

The number of connections for Briar Chapel Phase 4, Sections 2 & 3 waterlines (Chatham County Water System) can be increased without additional review of plans and specifications by PWS.

Explanation: As I just discussed with Mr. Butters, we do not regulate the number of connections in a system owned by a unit of local government. See T15A NCAC 18C .0409(a):

**.0409 SERVICE CONNECTIONS**

(a) Local Water Supply Plan. Units of local government which are operating under a local water supply plan in accordance with G.S. 143-355(l) shall not be limited in the number of service connections.

<http://www.deh.enr.state.nc.us/pws/rules/contents.htm>

Please call or email me if you have any questions.

+++++

Standard Boilerplate Disclaimers Apply ....

1. Please note that my Email address has changed to: [vincent.tomaino@ncdenr.gov](mailto:vincent.tomaino@ncdenr.gov)  
Please update your address book accordingly.
2. E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

\*\*\*\*\*

Vincent Jude Tomaino, P.E., Environmental Engineer II  
DENR-DEH-PWS-TSS  
1634 Mail Service Center, Raleigh, NC 27699-1634  
2728 Capital Boulevard, Raleigh, NC 27604  
[vincent.tomaino@ncdenr.gov](mailto:vincent.tomaino@ncdenr.gov) PHONE 919/715-3234 FAX 919/715-4374

*Big Ben go Bye-Bye.*



NC DENR DWQ Aquifer Protection Section  
Correspondence Regarding Sanitary Sewer Permit



North Carolina Department of Environment and Natural Resources  
Division of Water Quality

Beverly Eaves Perdue  
Governor

Coleen H. Sullins  
Director

Dee Freeman  
Secretary

May 3, 2010

Bill Mumford, Project Manager  
Briar Chapel Utilities, LLC  
16 Windy Knoll Circle  
Chapel Hill, NC 27516

Subject: Permit No. WQ0029867 Modification  
Briar Chapel Phase 4  
Wastewater Collection System Extension  
Chatham County

Dear Mr. Mumford:

In accordance with your permit modification application received April 19, 2010, we are forwarding herewith Permit No. WQ0029867 dated May 3, 2010, to Briar Chapel Utilities for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, shall void permit WQ0029867 issued April 14, 2009, and shall be subject to the conditions and limitations as specified therein. This cover letter shall be considered a part of this permit and is therefore incorporated therein by reference. This modification changes the total number of building lots served by gravity sewer from 287 to 321.

Please pay particular attention to Permit Condition 3 that requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 02T .0403 or any individual system-wide collection system permit issued to the Permittee. Your attention is also directed to Permit Condition 6 that requires Engineering Certification prior to operation of this collection system extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 02T; the Division of Water Quality's (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; and the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable, unless specifically mentioned herein. Division approval is based on acceptance of the certification provided by a North Carolina-licensed Professional Engineer in the application. It shall be the Permittee's responsibility to ensure that the as-constructed project meets the appropriate design criteria and rules. Failure to comply may result in penalties in accordance with North Carolina General Statute §143-215.6A through §143-215.6C, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations, permission is hereby granted to Briar Chapel Utilities for the construction and operation of an additional 462 linear feet of 8-inch gravity sewer, and the continued operation of:

One  
North Carolina  
*Naturally*

North Carolina Division of Water Quality  
Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

Raleigh Regional Office  
1628 Mail Service Center

Surface Water Protection  
Raleigh, NC 27699-1628

Phone (919) 791-4200  
FAX (919) 788-7159

Customer Service  
877-623-6748

- approximately 3,600 linear feet of 4-inch force main to serve the Woods Charter School, and
- approximately 22,450 linear feet of 8-inch gravity sewer, and
- a 371-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, and an on-site generator with automatic transfer switch, and
- a 683-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, and an on-site generator with automatic transfer switch, and
- approximately 1,800 linear feet of 6-inch force main, and
- approximately 7,000 linear feet of 8-inch force main, and

To serve 321 single family dwellings as part of the Briar Chapel Phase 4 project, and the discharge of 98,500 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received April 19, 2010, and in conformity with 15A NCAC 02T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit. The flow allocation given above includes flow for 73 grinder pump stations permitted under WQ0029992.

The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility (Permit # WQ0028552) prior to being land applied by spray irrigation.

***Any wastewater flow made tributary to this wastewater collection system extension prior to completion of the Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.***

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made, this permit shall be final and binding.

If you have any questions regarding this permit or require any additional information, please contact Barry Herzberg at (919) 791-4200, or by e-mail to [barry.herzberg@ncdenr.gov](mailto:barry.herzberg@ncdenr.gov).

Sincerely,

---

for Coleen H. Sullins, Director  
Division of Water Quality

by S. Daniel Smith  
Surface Water Quality Supervisor  
Raleigh Regional Office

cc: Chatham County Health Department  
Raleigh Regional Office, SWP, APS  
Michael Sanchez, PE; John R. McAdams Company, PO Box 14005, RTP, NC 27709  
Central Files

NORTH CAROLINA  
ENVIRONMENTAL MANAGEMENT COMMISSION  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
RALEIGH  
WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

---

This permit shall be effective from the date of issuance until rescinded and shall be subject to the following specified conditions and limitations:

1. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 02T; the Division of Water Quality's (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials unless specifically mentioned herein.
2. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
3. The wastewater collection facilities shall be properly maintained and operated at all times. The Permittee shall maintain compliance with an individual system-wide collection system permit for the operation and maintenance of these facilities as required by 15A NCAC 02T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 02T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and any contravention of the groundwater standards in 15A NCAC 02L .0200 or the surface water standards in 15A NCAC 02B .0200.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan shall be developed and implemented.
  - d. Pump stations that are not connected to a telemetry system shall be inspected every day (i.e. 365 days per year). Pump stations that are connected to a telemetry system shall be inspected at least once per week.
  - e. High-priority sewer lines shall be inspected at least once per every six-month period of time.
  - f. A general observation of the entire sewer system shall be conducted at least once per year.
  - g. Inspection and maintenance records shall be maintained for a period of at least three years.
  - h. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 02B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
4. **This permit shall not be transferable.** In the event there is a desire for the wastewater collection facilities to change ownership, or there is a name change of the Permittee, a formal permit request shall be submitted to the Division accompanied by documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request shall be considered on its merits and may or may not be approved.

5. Construction of the gravity sewers, pump stations, and force mains shall be scheduled so as not to interrupt service by the existing utilities nor result in an overflow or bypass discharge of wastewater to the surface waters of the State.
6. Per 15A NCAC 02T .0116, upon completion of construction and **prior to operation** of these permitted facilities, the completed Engineering Certification form attached to this permit shall be submitted with the required supporting documents to the address provided on the form. A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. **Gravity sewers installed below the minimum required slope per the Division's Gravity Sewer Minimum Design Criteria shall not be acceptable and shall not be certified until corrected.** If there is an unforeseen obstacle in the field where all viable solutions have been examined, a slope variance can be requested from the Division with firm supporting documentation. This shall be done through a permit modification with fee. Such variance requests will be evaluated on a case-by-case basis. Resolution of such request shall be evident prior to completing and submitting the construction certification.
7. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
8. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 02T; the Division's Gravity Sewer Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Station and Force Mains adopted June 1, 2000 as applicable; and other supporting materials may subject the Permittee to an enforcement action by the Division, in accordance with North Carolina General Statutes §143-215.6A through §143-215.6C.
9. In the event that the wastewater collection facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement facilities.
10. The issuance of this permit shall not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (local, state and federal) which have jurisdiction, including but not limited to applicable river buffer rules in 15A NCAC 02B .0200, erosion and sedimentation control requirements in 15A NCAC Ch. 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 02B .0200 and 15A NCAC 02H .0500.
11. **Noncompliance Notification:**

The Permittee shall verbally report to a water quality staff member at the Raleigh Regional Office, telephone number 919-791-4200, as soon as possible, but in no case more than 24 hours or on the next working day, following the occurrence or first knowledge of the occurrence of either of the following:

- a. Any process unit failure, due to known or unknown reasons, that renders the facility incapable of adequate wastewater transport, such as mechanical or electrical failures of pumps, line blockage or breakage, etc.; or
- b. Any failure of a pumping station or sewer line resulting in a by-pass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.

Initial voice mail messages or faxed information shall not be considered as the initial verbal report. Overflows and spills occurring outside normal business hours may also be reported to the Division of Emergency Management at telephone number (800) 858-0368 or (919) 733-3300. Persons reporting any of the above occurrences shall file a spill report by completing Part I of Form CS-

SSO (or the most current Division approved form), within five days following first knowledge of the occurrence. This report shall outline the actions taken or proposed to ensure that the problem does not recur. **The Director, Division of Water Quality, may take enforcement action for SSO's that are required to be reported to the Division unless it is demonstrated that:**

1. The discharge was caused by severe natural conditions and there were no feasible alternatives to the discharge; or
2. The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Permittee and/or owner, and the discharge could not have been prevented by the exercise of reasonable control.

Permit issued this the 3<sup>rd</sup> Day of May 2010.

**Permit Number WQ0029867**  
**Briar Chapel Utilities, LLC**  
**Briar Chapel Phase 4**

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

---

*for* Coleen H. Sullins, Director  
Division of Water Quality  
by authority of The Environmental Management Commission

*by* S. Daniel Smith  
Surface Water Quality Supervisor  
Raleigh Regional Office

# FAST TRACK ENGINEERING CERTIFICATION

Permit No. WQ0029867  
Briar Chapel Utilities, LLC  
Briar Chapel Phase 4  
May 3, 2010

Complete and submit this form to the permit issuing regional office with the following:

- One copy of the project record drawings (plan & profile views of sewer lines) of the wastewater collection system extension.
- Supporting design calculations (selected pumps, system curve, operating point, available storage if portable generator(s) or storage greater than longest past three year outage reliability option selected) for any pump stations permitted as part of this project
- Changes to the project should be clearly identified on the record drawings or in written summary form. **Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.**

This project shall not be considered complete nor allowed to operate until the Division has received this Engineer's Certification and all required supporting documentation. **Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.**

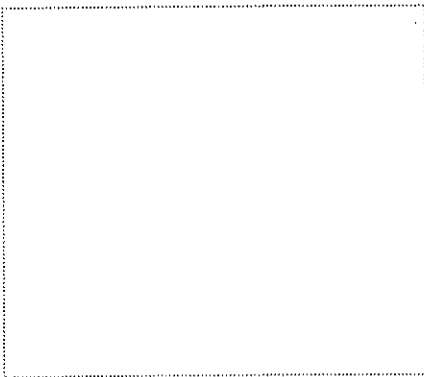
## ENGINEER'S CERTIFICATION

Partial

Final

I, \_\_\_\_\_, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe ( periodically,  weekly,  full time) the construction of the subject project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance of this permit; 15A NCAC 02T; the Division of Water Quality's (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials.

**North Carolina Professional Engineer's  
Seal, signature, and date:**



**SEND THIS FORM & SUPPORTING DOCUMENTATION  
WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS**

**RALEIGH REGIONAL OFFICE  
1628 MAIL SERVICE CENTER  
RALEIGH NC 27699-1628**

The Permittee is responsible for tracking all partial certifications up until a final certification is received. Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.

DWQ use only:

Flow from this project is tributary to: Briar Chapel

NC DENR DWQ Correspondence Regarding  
Stormwater Management Permit





North Carolina Department of Environment and Natural Resources

Division of Water Quality  
Coleen H. Sullins  
Director

Beverly Eaves Perdue  
Governor

Dee Freeman  
Secretary

April 26, 2010

DWQ # EXP: 05-0732v16  
**Chatham County**

NNP – Briar Chapel, LLC  
Attn: Mr. William Mumford, Vice President Newland Communities  
16 Windy Knoll Circle  
Chapel Hill, NC 27516

Subject Property: **Briar Chapel Community Phase 4**

***APPROVAL OF STORMWATER MANAGEMENT PLAN (SMP) - MODIFICATION***

Dear Mr. Mumford:

The Division of Water Quality (DWQ) has reviewed your application dated April 21, 2010 requesting for modification to the previous SMP approval dated August 7, 2006 and subsequent DWQ approval modifications dated October 31, 2007, November 3, 2008 and June 30, 2009. The requested modifications, as shown on the Drainage Area Map and Exhibits (S1 – S3) received by DWQ on April 22, 2010, include:

1. Revised site layout and increase in impervious areas for portions of drainage areas 1 and 3 (draining to wet ponds 1 and 3 respectively);
2. Revised site layout and increase in impervious areas for bypass areas B and F; and
3. Revised site layouts with no change in the amount of impervious area for drainage area 4 (draining to wet pond 4)

The DWQ has determined that the proposed modifications do not require structural modification to any of the stormwater best management practice (BMP) devices. As a result, the DWQ approves the requested modifications, and accepts the previously approved SMP and BMP devices to satisfy the stormwater condition required by the Individual Water Quality Certification issued on May 9, 2006. You are required to meet the following conditions:

1. The stormwater treatment system, which includes six wet detention ponds, preformed scour holes, and forested filter strips, and the signed and notarized Operation and Maintenance Agreements dated October 17, 2008, as approved by this Office, and the drainage patterns depicted on the plans, must be maintained *in perpetuity*. No changes to the structural stormwater practices shall be made without written authorization from the Division of Water Quality. The stormwater management structures shall have maintenance access and at least 10-foot drainage easement on each side to allow for the ability to maintain the structures, to perform corrective actions and shall provide protection of the structures from potential alterations by future property owners.
2. Stormwater best management practices (BMPs) for future phase developments shall be in accordance with the most current version of the NCDENR Stormwater Best Management Practices Manual at the time of the development.

431 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/hicvetlands/>

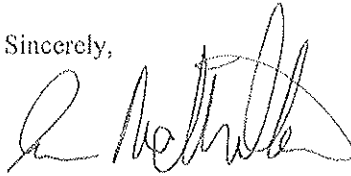
An Equal Opportunity / Affirmative Action Employer

One  
North Carolina  
*Naturally*

3. Any further increase in the impervious amount of a bypass area beyond that listed in Attachment A (Briar Chapel Master Impervious Area Summary) will require water quality treatment, and must be approved by the DWQ.
4. The permittee shall ensure that the maximum built upon (BUA) area per lot tabulated in Exhibit F of the recorded *Declaration of Covenants and Restrictions for Briar Chapel* shall be updated to reflect the most current approved BUA amount in Attachment A.
5. The applicant and/or authorized agent shall contact the DWQ Express Review Program in writing at the letterhead address within ten (10) days of the commencement of construction.

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 contact Joseph Gyamfi at 919-715-3473 or Lia M. Gilleski at 919-733-9502.

Sincerely,



Ian McMillan, Acting Supervisor  
401 Oversight/Express Review Program

IJM/jg

cc: DWQ Raleigh Regional Office  
File Copy  
Jeremy Finch, PE, EcoEngineering (John R. McAdams), P. O. Box 14005, RTP, NC  
27709

# NC DENR DWQ Reclaimed Wastewater System



LAND PLANNING  
CIVIL ENGINEERING  
LAND SURVEYING

January 15, 2010

Ms. Lynn Richardson c/o  
Chatham County Planning Department  
P.O. Box 87  
Pittsboro, NC 27312

RE: **Briar Chapel  
Bond / Letter of Credit Estimate for Reclaimed Wastewater System  
Chatham County, NC**

Dear Ms. Richardson:

Currently Briar Chapel has constructed reclaimed wastewater infrastructure to support:

- 250,000 GPD Treatment Plant
- Increment Weather Storage that exceeds 250,000 GPD
- Upset Storage that exceeds 250,000 GPD
- Irrigation installed and certified that supports 73,512 GPD
- Irrigation Areas substantially installed but not yet certified that support another 30,368 GPD

The combination of completed, substantially installed, and permitted (but not constructed) sprayfields will support over 315,000 GPD in total. Bill Mumford, with Newland Communities, has asked us to determine the cost required to complete irrigation infrastructure to support up to 125,000 GPD in total.

1. We estimate the cost to complete the substantially installed areas (30,368 GPD) to be \$65,000.
2. We estimate the cost to install permitted spray fields (approximately 10 AC to support additional 21,120 GPD) to be \$ 150,000

**Including a 40% Contingency, the estimated amount is \$301,000.**

The reclaimed wastewater (reuse) system has been constructed in accordance with Briar Chapel Utility and NCDENR standards and specifications.

I would anticipate that these costs will be valid for 1 year from this date.

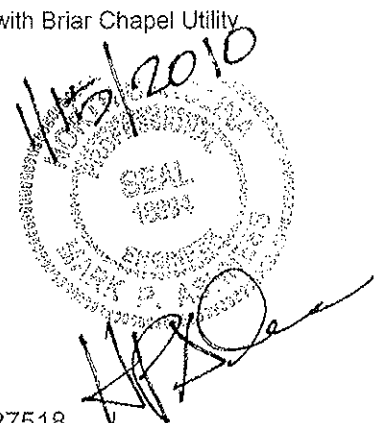
Please contact us if you have any questions for need any additional information.

Respectfully submitted,

Mark P. Ashness, PE  
CE Group, Inc.

11000 Regency Parkway, Suite 410 – Cary, N.C. 27518

Voice (919) 367-8790, X101 – Fax (919) 367-8791 – email [mark@cegrouppinc.com](mailto:mark@cegrouppinc.com)



## Summary of Wastewater Flow Calculation

### Current Platted Lots plus Phase 4 Section 4 and Phase 5 Section 1 (Platted Lots)

- 327 Platted Lots @ 250gpd/house = 81,750 gpd
- Woods Charter School 500 students @ 5gpd/student = 2,500 gpd
- Phase 4, Section 4 – 37 Lots @ 250gpd/lot = 9,250 gpd
- Phase 5 Section 1 – 28 Lots @ 250gpd/lot = 7,000 gpd

**Total = 100,500 gpd reqd.**

**Completion of Substantially Installed Areas (Item 1) will provide 103,880 GPD total**

### Other 2010 Proposed Additions (Platted Lots)

- Phase 5 Section 2 – 32 Lots @ 250gpd/lot = 8,000 gpd
- Phase 4 Re-Plats – 41 Lots @ 250gpd/lot = 10,250 gpd
- Margaret Pollard Middle School – 600 students @ 10gpd/student = 6,000 gpd

**Total = 24,250 gpd**

**Completion of +/- 10 AC of sprayfield (Item 2) will provide another 21,120 GPD totaling 125,000 GPD**

NORTH CAROLINA  
CHATHAM COUNTY

THIS CONTRACT FOR SUBDIVISION IMPROVEMENTS (this "Contract") made and entered into this the 29<sup>th</sup> day of January, 2010, by and between NNP-Briar Chapel, LLC, a Delaware limited liability company, with a mailing address of 16 Windy Knoll Circle, Chapel Hill, North Carolina 27516 (the "Developer") and Chatham County, a body politic and corporate of the State of North Carolina, with a mailing address of Post Office Box 54, Pittsboro, North Carolina 27312 (the "County");

WITNESSETH:

WHEREAS, the Developer wishes to guarantee the satisfactory construction, installation, and completion of all improvements required by the County for the Briar Chapel Reclaimed Wastewater System serving subdivision lots, schools, park site and other uses within Briar Chapel ("Subdivision") located in Chatham County, North Carolina.

WHEREAS, the County has agreed to sign the plats for the Subdivision if the Developer will enter into this Contract guaranteeing the completion of all such improvements and provide security to the County in an amount sufficient to secure the satisfactory construction, installation, and completion of all required improvements;

NOW, THEREFORE, Developer and County agree as follows:

1. Developer shall construct, install, complete and apply for any necessary permits or approvals for all improvements required by the County for the Subdivision (the "Improvements") on or before February 1, 2012.
2. The Improvements are set forth in the records of the County approving the Subdivision, including without limitation, all correspondence, cost estimates, subdivision plats, and other filings, which records are incorporated in this Contract by reference.
3. The Developer shall provide adequate security in an amount not less than the amount determined by a licensed architect or engineer sufficient to secure the satisfactory construction, installation, and completion of the Improvements.
4. The County will sign the subdivision plat upon the execution of this Contract by the Developer and the delivery of adequate security in an amount and form acceptable to the County in its reasonable discretion.
5. After completion of all Improvements and upon acceptance of such work by the County, Developer may apply in writing for release of the security given to the County in paragraph 3. Developer shall deliver to the County a certifying statement, in a form reasonably acceptable to the County, from the Engineer of Record verifying the satisfactory completion of the Improvements. Upon receipt and investigation of the certifying statement, the Planning Director of the County (or his/her designee) shall issue a notice of cancellation and termination of the performance bond (if that is the security

given), or such portion thereof as the Developer may be entitled to receive, within a period of sixty (60) days thereafter.

6. This Contract may be extended by the County for good cause shown by the Developer, and will be extended upon demonstration by the Developer that any necessary permits or approvals required by third parties have not been issued through no fault of the Developer. In the event this Contract is extended, Developer may seek a reduction of the performance bond reflecting the substantial completion of the Improvements.

---

IN WITNESS WHEREOF, the parties have caused this instrument to be executed as of the day and year first written above.

NNP-Briar Chapel, LLC

By: \_\_\_\_\_

Keith Howard, Manager

County of Chatham

By: \_\_\_\_\_

Jason Sullivan, Acting Planning Director  
Authorized Official