N.G. Unitios Commercion

North Carolina DWQ Approvals

(See attached)

(SK013456.DOC 8)12

# **SCHEDULES 10 - NCDENR Permits** Original Permit Modification Engineer Certification WWTP and Reuse Flemming and Ashness Engineer Cert WWTP and Spray 2005 WQQQ28552 WWTP and Reclaimed System Permit 2006 WQ0028552 WWTP and Reclaimed System Permit MOD 2009 WQ0028552 WWTP and Reclaimed System Permit MOD 2014 WQ0028552 WWTP and Reclaimed System Permit MOD **Briar Chapel Collection System** 2010 WQCS00872 Brian Chapal Collection System Permit. **Pump and Haul** 9. 2008 Wol0039580 WW Pump and Hauf Permit **Great Ridge Parkway Ext** 2013 WOODSWALK GREEN PORINE Phase 9 2015. Wel00sta782 Ethatechteenit **Herndon Woods** 2009 WQ0033227 Herndon Woods LPS Permit Mod 2008 Wellous 227 Semidan Weeds LAS Parient 2008 WQ0033227 Herndon Woods LPS Engineer Cent July 30, 2009 WQ0033227 Herndon Woods Engineer Cert. September 11, 2009 WQ0033227 Herndon Woods Engineer Cert (Duplicate but re-date) **Andrews Store Road** September 2010 WQ0034951 ASR FM Permit Mod December 2010 WQ0034951 ASR FM Permit Mod A+B/Phase 4 2007 WQ0029867 A+B Permit MOD Woods Charter FM 2007 WQ0029867 A+B Permit MOD Wodds Charter FM MOD 2010 WQ0029867 A+B Permit MOD Number of Lots 2007 WQ0029867 A+B Permit MOD Length of Gravity Line 2006 WQ0029867 A+B Permit MOD Design Points PS November 6, 2008 WQ0029867 A+B Engineer Cert Final June 16, 2008 WQ0029867 A+B Engineer Cert Partial ioloje avzago**jus**eja zake pjejajih August 7, 2008 WQ0029867 A+B Engineer Cert Final 2009 WQ0029867 A+B Permit MOD Adjustment of flow allocation Pressure Sewer 66 Pumps 2005 WQ0029992 Pressure Sewer Extension Permit 66 Grinder Pumps **Low Pressure Sewer 6 Pumps** 2010 WQ0034780 LPSS Permit 6 Grinder Pumps

# **SCHEDULES 10 - NCDENR Permits**

December 7, 2010 WQ0034780 LPSS 6 Grinder Pumps Engineer Cert

## Phase 5 North

2008 WQ0083071 Phase 5 North Permit

2009 WQ0033071 Phase 5 North Permit MOD Number of Lots

October 29, 2012 WQ0033071 Phase 5 North Engineer Cert Final

#### Phase 5 South

October 27, 2010 WQ0033072 Phase 5 South Section 1 Engineer Cert Final

September 23, 2010 WQ0033072 Phase 5 South Section 2 Engineer Cert Partial

2010 WQ0033072 Phase 5 South Permit MOD Number of Lots

2008 WQ0033072 Phase 5 South Permit

## Phase 6 North

2012 WOI036015 Phase suporth Permit

July 3, 2013 WQ0036015 Phase 6 North Engineer Cert Final

#### Phase 6 South

2001 WQC035292 Phare s South Permit

February 26, 2013 WQ0035492 Phase 6 South Engineer Cert, Final

#### Phase 7

zols, wojocskalskijase zakerroli

October 30, 2014 WQ0036343 Phase 7 Engineer Cert, Final

#### Phase 8

ziolisky/opoperaky/sehase regennija

#### Phase 11

elokuk Molojokt/lasisakinga (Ulatanin)

## **Pump Stations**

ziolos averderia varianis terriporaryas respins

2013 WQ0036423 Rump Station D and EW Permit

2014 WQ0036423 PS D and FM Engineer Cert

2013 Wei0038770 Phase 9 Rump Staylon Permit.



Raleigh, N.C. 27605 Office: 919/833-1234 Fax: 919/833-1105 HAND CARRIED THIS DATE

June 25, 2008

Mr. Nathaniel Thornburg, Unit Supervisor Land Application Unit Division of Water Quality Department of Environment and Natural Resources 1636 Mail Services Center Raleigh, N.C. 27699-1636 RECEIVED / DENR / DWQ Aquiter Protection Section JUN 25 2008

RE: Partial Non-discharge Permit Certification Transmittal, Briar Chapel Development Permit Number WQ0028552, dated April 29, 2005, Chatham County

Dear Mr. Thornburg.

In accordance with our Client's request, and with the requirements of the referenced permit, our office would like to take this opportunity to provide you with a partial project certification. The purpose of this letter is to provide a certification for work accomplished on the referenced project.

In advance of making this certification, our office received one other certification and an approval letter. Mr. Mark Ashness, PE provided a partial certification for the irrigation system, the inclement weather storage pond, and the 5 day upset pond. This certification also contained information relating the installed liners in both ponds. Also, we are in receipt of letters, dated June 23, 2008 which provides approval of the dams for the project. We have attached the following documents which are part of this certification:

- 1. A partial certification form for the wastewater treatment plant, 5 day pond return pump station, and force main by W. Lee Fleming, Jr. PE dated June 25, 2008.
- One copy of a partial certification form and attached documents from Mr. Mark Ashness, PE dated May 28, 2008 for the irrigation system, inclement weather storage pond, and 5 day upset pond.
- 3. Copies of the two letters of Approval to Impound for the two ponds to be used as a part of the wastewater utilization system dated June 23, 2008.

Upon making several site visits to the project site, and to the best of our knowledge without asbuilt survey information; the wastewater treatment plant, 5 day pond return pump station, and the delivery force mains were constructed in accordance with the approved plans, specifications, and the permit.

# W. LEE FLEMING, JR. ENGINEERING

503 Oberlin Road, Suite 204 Raleigh, N.C. 27605 Office: 919/833-1234 Fax: 919/833-1105 HAND CARRIED THIS DATE

June 25, 2008

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The certification is labeled as partial due to the completion of the following portions of the permitted facilities as of this date:

	<u>Unit</u>	Size of Completed Units	% of 250,000 GPD as of May 28, 2008
1.	WWTP	250,000 gpd	100%
2.	5 Day Pond	3,500,000 MG	300%
	& Pumps		
3.	Inclement Weath	ner 21,300,000 MG	85.2%
	Pond		
4.	Irrigation Pumpi	ng 2000 gpm	due to the pump system
	System		design, % of ADF cannot be
			determined at this time
5.	Irrigation Land	31.9 AC (75,559 GPD)	30 2%

The limiting units of this installed system is the irrigation system. In the future, the parameters that are not listed as 100% must be completed before this project can be considered adequate for a flow of 250,000 gpd. Further, the flow of 750,000 gpd cannot be achieved until the required units are expanded and the permit is modified to allow the construction of the additional required components.

It is our understanding that Mr. Lee Bowman, Briar Chapel Utilities, LLC is contacting the Raleigh Regional Office 48 hours in advance of the desired starting of this facility as required by the issued permit. We hope the information contained in this final project certification is satisfactory. Should questions arise concerning this letter, please contact our office.

Sincerely yours,

W. Lee Fleming, Jr. PE

NCPE #9262

Attachments: As Noted

cc: Mr. Mitch Baron

Mr. Lee Bowman

Mr. Mark Ashness, PE

Mr. Mike Sanchez, PE W\ The John R. McAdams Company

Mr. Steve Levitas, Attorney

Permit No. WQ0028552 April 29, 2005

CENTIFICATION.

ENGINEER'S CERTIFICATION	
Partial Final	
I. W. LEFFLEMING, JR of North Carolina, having been authorized to the project,	as a duly registered Professional Engineer in the State observe (periodically, weekly, full time) the construction of
BRIAR CHAPEL	Total the contraction of the con
Project Name	Location and County
	Registration No.  Registration No.
PARTIAL CENTIFICATION 1	ton TRAATMENT PLANT Lerren
DATES JUNE 25, 2008 Is	CONSIDERED A PART OF THE



# North Carolina Department of Environment and Natural Resources

# Division of Land Resources Land Quality Section

James D Simons, PG, PE Director and State Geologist

Michael F Easley, Governor William G. Ross Jr., Secretary

June 23, 2008

Post-it* Fax Note 7671	Date 6/24/08 pages 1- 4
to Nathan Reves	From B:11 Decetyry
Co./Dept. 28 ME	OO NCHENR DLR
Phone #	Phone # 733-4574
Fax # 876-3958	Fax #

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7006 2150 0005 7357 4877

Mr. Mitch Barron Briar Chapel Utilities, LLC Post Office Box 1486 Pittsboro, North Carolina 27312

RE: A

Approval to Impound

Briar Chapel 5-day Upset Storage Pond Dam

Chatham County

Dear Mr. Barron:

This concerns the subject dam recently constructed pursuant to issuance of an Approval to Construct dated July 29, 2005 as required by the Dam Safety Law of 1967. Record Drawings, engineer's certification, and the signed Emergency Action Plan were received on December 18, 2007. The dam was certified by Mr. Wesley M. Lowder, PE. Also, Check No. 2002 in the amount of \$14,205.57 serving as the additional application processing fee was received on December 18, 2007. The amount submitted included the requisite application fee for both the Briar Chapel 5-day Upset Storage Pond Dam and Central Storage Pond.

Land Quality Section staff of the Raleigh Regional Office performed a recent inspection of this dam. The dam was found to be in general conformance with the approved plans and specifications, and you may impound water subject to the following stipulation:

A permanent stand of ground cover adequate to restrain erosion shall be established on all
portions of the dam in conformance with the approved construction plans. Effort shall be
made to accomplish this in a timely manner.

1612 Mall Service Center, Raleigh, North Carolina 27699-1612 • 919-733-4574 / FAX 919-733-2876 512 North Salisbury Street, Raleigh, North Carolina, 27604

An Equal Opportunity Affirmative Action Employer – 50% Recycled \ 10% Post Consumer Paper

Mr. Mitch Barron June 23, 2008 Page 2 of 2

The Land Quality Section staff will make periodic inspections of this dam to assure that the above stipulation is met and that the dam is being maintained in good operating condition. These inspections, however, will be relatively infrequent. It is advised that you closely inspect and monitor your dam, and that you notify your engineer and the Division of Land Resources if you see or suspect any problems concerning its safety.

Sincerely,

James D. Simons, PG, PE Director and State Geologist

JDS/whd

cc:

Mr. Wesley M. Lowder, PH

Mr. John Holley, PE, Land Quality Regional Engineer Surface Water Protection Regional Supervisor



# North Carolina Department of Environment and Natural Resources

# Division of Land Resources Land Quality Section

James D. Simons, PG, PE Director and State Geologist

Michael F. Easley, Governor William G. Ross Jr., Secretary

June 23, 2008

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7001 2150 0005 7359 4850

Mr. Mitch Barron Briar Chapel Utilities, LLC Post Office Box 1486 Pittsboro, North Carolina 27312

RE: Approval to Impound

Briar Chapel Central Storage Pond Dam

Chatham County

Dear Mr. Barron: 1

This concerns the subject dam recently constructed pursuant to issuance of an Approval to Construct dated July 29, 2005 as required by the Dam Safety Law of 1967. Record Drawings, engineer's certification, and the signed Emergency Action Plan were received on December 18, 2007. The dam was certified by Mr. Wesley M. Lowder, PE. Also, Check No. 2002 in the amount of \$14,205.57 serving as the additional application processing fee was received on December 18, 2007. The amount submitted included the requisite application fee for both the Briar Chapel Central Storage Pond and 5-day Upset Storage Pond Dam.

Land Quality Section staff of the Raleigh Regional Office performed a recent inspection of this dam. The dam was found to be in general conformance with the approved plans and specifications, and you may impound water subject to the following stipulation:

1. A permanent stand of ground cover adequate to restrain erosion shall be established on all portions of the dam in conformance with the approved construction plans. Effort shall be made to adcomplish this in a timely manner,

1612 Mail Service Center, Raleigh, North Carolina 27699-1612 • 919-733-4574 / FAX: 919-733-2876
512 North Salisbury Street, Raleigh, North Carolina, 27604

An Equal Opportunity \ Affirmative Action Employer - 50% Recycled \ 10% Post Consumer Paper

Mr. Mitch Barron June 23, 2008 Page 2 of 2

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Sincerely,

James D. Simons, PG, PE Director and State Geologist

JDS/whd

cc: Mr. Wesley M. Lowder, PE

Mr. John Holley, PE, Land Quality Regional Engineer Surface Water Protection Regional Supervisor

# Permit No. WQ0028552 April 27, 2006

Station, Reuse Irrigation Pond, and 5 D	ay Upset Pond)
X Partial Final	
	registered Professional Engineer in the State to observe (periodically, weekly, full time) the
Briar Chapel	Chatham County, North Carolina
(Project)	(Name of Location)
due care and diligence was used in the ob	hereby state that, to the best of my abilities; servation of the project construction such that It within substantial compliance and intent of ications, and other supporting materials.  Registration No. 18894
Date: <u>May 28, 2008</u>	•
This certification is provided for the 1. 74,559 GPD Reuse Irrigation	ne following items:  Spray System ( <u>31.9 AC Total)</u> (24.7 and onductivity, 7.2 ac @ 19.95" in/yr
2. 21.3 MG Central Irrigation Liner)	Storage Pond (Clay with Bentonite
3. 3.5 MG Upset Storage Pond	(Clay with Bentonite Liner)
4. Irrigation Pump Station	A ROLLING



William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Alan W. Klimek, P.E. Director Division of Water Quality

April 29, 2005

MITCH BARRON – ASSISTANT VICE PRESIDENT BRIAR CHAPEL UTILITIES, LLC POST OFFICE BOX 1486 PITTSBORO, NORTH CAROLINA 27312

Subject: Permit No. WQ0028552

Briar Chapel Development Wastewater Treatment and

Reclaimed Water Utilization System

Chatham County

Dear Mr. Barron:

In accordance with your permit application received February 17, 2005, and subsequent additional information received March 17, 2005 and April 7, 2005, we are forwarding herewith Permit Number. WQ0028552, dated April 29, 2005, to Briar Chapel Utilities, LLC for the construction and operation of the subject wastewater treatment and reclaimed water utilization system.

This permit shall be effective from the date of issuance until March 31, 2010, and shall be subject to the conditions and limitations as specified therein. Please pay particular attention to the monitoring requirements in this permit. Failure to establish an adequate system for collecting and maintaining the required operational information will result in future compliance problems. Please note that a sedimentation and erosion control plan shall be submitted to and approved by the Land Quality Section prior to construction. In addition, any changes required by the Dam Safety Permit shall be approved by the Division of Water Quality prior to construction (See Condition I.2).

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 thirty (30) days following receipt of this permit. 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, NC 27699-6714. Unless such demands are made this permit shall be final and binding.

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Nathaniel Thornburg at (919) 715-6160.

Alan W. Klimek, P.E.

cc:

Chatham County Health Department

Raleigh Regional Office, Aquifer Protection Section

Mark Ashness, PE - CE Group

Lee Fleming, PE

Mike Sanchez, PE – John R. McAdams Steven Levitas – Kilpatrick Stockton, LLP Technical Assistance and Certification Unit

Aquifer Protection Central Files

LAU Files

North Carolina
Naturally

#### NORTH CAROLINA

#### **ENVIRONMENTAL MANAGEMENT COMMISSION**

#### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### RALEIGH

#### WASTEWATER TREATMENT AND RECLAIMED WATER UTILIZATION PERMIT

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, LLC**

Chatham County

#### FOR THE

construction and operation of a 750,000 gallon per day (GPD) extended aeration wastewater treatment plant to be constructed in three (3) phases (A, B and C) with each phase having a maximum flow of 250,000 GPD and each consisting of: dual static screens for grit removal (serving Phases A, B and C); a manually cleaned bar screen; a 75,400 gallon aerated flow equalization basin with two (2) 225 gallon per minute (GPM) variable speed pumps each with an influent flow meter, and one (1) 7.5 horsepower (hp) aerator; two (2) 31,500 gallon anoxic chambers each with two (2) 3 hp mixers; two (2) 189,000 gallon aeration basins each with two (2) 10 hp aerators; two (2) 31,500 gallon clarifiers each with one (1) variable speed sludge return pump; a 75,400 gallon sludge holding basin with one (1) variable speed decanting pump and one (1) 7.5 hp aerator; a 10,730 gallon chlorine contact chamber with two (2) variable speed chlorine injection pumps; a 16,800 gallon mudwell with two (2) 200 GPM return pumps; two (2) 90 square foot (ft²) tertiary filters; a 13,800 gallon clearwell with four (4) 675 GPM backwash pumps (pumps serve Phases A, B and C); dual banks of ultraviolet (UV) modules each with 10 bulbs; a 6,850 gallon dechlorination chamber with two (2) air diffusers; an effluent flow measuring device (serving Phases A, B and C); an effluent turbidimeter (serving Phases A, B and C); and a permanent auxiliary generator (serving Phases A, B and C); and the

construction and operation of a 250,000 GPD reclaimed water utilization system consisting of a 3.75 million gallon (MG) clay lined five day upset pond with a 400 GPM dual submersible pumps station and audible/visual alarms; a 39.0 MG clay lined central storage pond with dual 2,000 GPM flooded suction pumps serving thirty-five (35) irrigation zones consisting of approximately 82.2 acres; a 13.5 MG clay lined east storage pond with dual 1,200 GPM vertical turbine pumps serving eight (8) irrigation zones consisting of approximately 44.5 acres; and all associated piping, valves and appurtenances to serve the Briar Chapel Development with no discharge of wastes to the surface waters, pursuant to the application received February 17, 2005 and subsequent additional information received by the Division, and in conformity with the project plan, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

See Condition III(3) for the flow capacity limitation specified by this permit.

This permit shall be effective from the date of issuance until March 31, 2010, and shall be subject to the following specified conditions and limitations:

1

# I. PERFORMANCE STANDARDS

- 1. The permitted wastewater treatment facility shall treat domestic strength wastewater only. The wastewater treatment plant shall not accept any wastewater from commercial facilities deemed industrial (i.e., from processes of trade or business, Laundromats, or vehicle/equipment washes) per Regulation 15A NCAC 2H .0203(19).
- 2. Prior to construction of the inclement weather storage pond(s), the Permittee shall obtain written approval from the Division of Water Quality of any modifications to the design of such pond(s) required by the Dam Safety Permit issued by Division of Land Resources.
- 3. Upon completion of site grading and shaping, but prior to construction of the irrigation facilities, a licensed soil scientist shall conduct an amended site evaluation. This report shall specifically address, but not be limited to, the effects of grading/construction upon the original site evaluation, and shall be submitted to the Raleigh Regional Office (RRO) Aquifer Protection Section. The evaluation should include an investigation of key areas of grading, including soil features such as depth to seasonal high water table, depth to fractured bedrock, soil series, and similar soil features. The report should address the site suitability to ensure the protection of groundwater and the appropriateness of the permitted irrigation rate. Upon completion of site grading and shaping, the soil scientist shall contact the RRO to inquire whether or not it will be necessary for staff to perform a revised site visit. No wastewater shall be introduced into the treatment system until written approval from the Division of Water Quality is received.
- 4. Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting materials. If this project is to be completed in phases and partially certified, you shall retain the responsibility to track further construction approved under the same permit, and shall provide a final certificate of completion once the entire project has been completed. Mail the Certification to the Land Application Unit, 1636 Mail Service Center, Raleigh, NC 27699-1636.
- 5. The Raleigh Regional Office, telephone number (919) 571-4700, shall be notified at least forty-eight (48) hours in advance of operation of the installed facilities so that an in-place inspection can be made. Such notification to the regional supervisor shall be made during the normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.
- 6. The reclaimed water utilization facilities shall be effectively maintained and operated at all times so that there is no discharge to the surface waters, nor any contamination of ground waters, which will render them unsatisfactory for normal use. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions or failure of the irrigation area to adequately assimilate the wastewater, the Permittee shall take immediate corrective actions including those actions that may be required by the Division of Water Quality (Division), such as the construction of additional or replacement wastewater treatment and disposal facilities.
- 7. The issuance of this permit shall not relieve the Permittee of the responsibility for damages to surface water or ground water resulting from the operation of this facility.
- 8. The residuals generated from these treatment facilities must be disposed in accordance with General Statute 143-215.1 and in a manner approved by the Division.
- 9. Diversion or bypassing of the untreated wastewater from the treatment facilities is prohibited.

- 10. The following buffers shall be maintained:
  - a. 100 feet between wetted areas and water supply wells,
  - b. 100 feet between wetted areas and waters classified as SA.
  - c. 25 feet between wetted areas and surface waters not classified as SA,
  - d. 100 feet between wastewater treatment units and wells.
  - e. 50 feet between reclaimed water storage/irrigation ponds and property lines, and
  - f. 50 feet between wastewater treatment units and property lines.
- 11. Public access to the irrigation sites shall be controlled during active site use. Such controls may include the posting of signs showing the activities being conducted at each site.
- 12. The following shall be requirements for the reclaimed water distribution, storage, and utilization facilities:
  - a. All reclaimed water valves, storage facilities, and outlets shall be tagged or labeled to warn the public or employees that the water is not intended for drinking. Where appropriate, such warning shall inform the public or employees to avoid contact with the water.
  - b. All reclaimed water piping, valves, outlets, and other appurtenances shall be color-coded, taped, or otherwise marked to identify the source of the water as being reclaimed water.
    - i. All reclaimed water piping and appurtenances shall be either colored purple (i.e., Pantone 522) and embossed or integrally stamped or marked "CAUTION: RECLAIMED WATER DO NOT DRINK" or be installed with a purple (i.e., Pantone 522) identification tape or polyethylene vinyl wrap. The warning shall be stamped on opposite sides of the pipe and repeated every three feet or less.
    - ii. Identification tape shall be at least three inches wide and have white or black lettering on purple (i.e., Pantone 522) field stating "CAUTION: RECLAIMED WATER DO NOT DRINK." Identification tape shall be installed on top of reclaimed water pipelines, fastened at least every 10 feet to each pipe length and run continuously the entire length of the pipe.
  - c. All reclaimed water valves and outlets shall be of a type, or secured in a manner, that permits operation by authorized personnel only.
  - d. Above-ground hose bibs (i.e., spigots or other hand-operated connections) shall not be present. Hose bibs shall be located in locked below-grade vaults that shall be clearly labeled as being of non-potable quality. As an alternative to the use of locked below-grade vaults with standard hose bibs services, hose bibs, which can only be operated by a special tool or connected to a special hose connection, may be placed in non-lockable underground services boxes clearly labeled as non-potable water.

#### II. OPERATION AND MAINTENANCE REQUIREMENTS

- 1. The facilities shall be properly maintained and operated at all times.
- 2. Upon classification of the wastewater treatment and irrigation facilities by the Water Pollution Control System Operators Certification Commission (WPCSOCC), the Permittee shall designate and employ a certified operator to be in responsible charge (ORC) and one or more certified operator(s) to be back-up ORC(s) of the facilities in accordance with 15A NCAC 8G .0201. The ORC shall visit the facilities in accordance with 15A NCAC 8G .0204 or as specified in this permit and shall comply with all other conditions specified in these rules.
- 3. A suitable, year-round vegetative cover shall be maintained on the irrigation areas.
- 4. Irrigation shall not be performed during inclement weather or when the ground is in a condition that will cause runoff.

- 5. Adequate measures shall be taken to prevent wastewater runoff from the irrigation field.
- 6. The facilities shall be effectively maintained and operated as a non-discharge system to prevent the discharge of any wastewater resulting from the operation of this facility.
- 7. The application and instantaneous loading (i.e. dosing rate) rates shall not exceed the following:

Spray Zone	Area (acres)	Dominant Soil Series	Instantaneous Loading Rate (inches/dose)	Annual Loading Rate (inches/year)
C-1A	8.0	Wedowee	0.10	37.31
C-2A	1,4	Helena	0.10	19.95
C-2B	0.9	Helena	0.10	19.95
C-2C	6.1	Wedowee	0.10	37.31
C-2D	1.8	Wedowee	0.10	37.31
C-3A	0.9	Wedowee	0.10	19.95
C-3B	0.8	Wedowee	0.10	19.95
C-3C	0.4	Wedowee	0.10	19.95
C-3D	0.4	Wedowee	0.10	19.95
C-3E	9.8	Wedowee	0.10	37.31
C-3F	3.4	Wedowee	0.10	37.31
C-5A	4.1	Wedowee	0.10	37.31
C-6A	0.5	Rion	0.10	19.95
C-6B	1.0	Helena	0.10	19.95
C-6C	0.2	Wedowee	0.10	37.31
C-6D	0.7	Wedowee	0.10	37.31
C-9A	4.2	Helena	0.10	19.95
C-9B	3.2	Wedowee	0.10	37.31
C-12A	2.0	Rion	0.10	19.95
C-12B	2.6	Helena	0.10	19.95
C-12C	3.4	Wedowee	0.10	37.31
C-12D	0.4	Wedowee	0.10	37.31
C-13A	0.4	Helena	0.10	19.95
C-13B	1.0	Helena	0.10	19.95
C-13C	1.1	Rion	0.10	19.95
C-13D	1.0	Rion	0.10	19.95
C-13E	2.7	Pacolet	0.10	37.31
C-13F	6.4	Wedowee	0.10	37.31
C-15A	3.5	Helena	0.10	19.95
C-15B	0.9	Helena	0.10	19.95
C-15C	0.9	Wedowee	01.0	37.31
C-15D	0.9	Wedowee	0.10	37.31
C-15E	1.4	Wedowee	0.10	37.31
C-16A	6.2	Wedowee	0.10	37.31
C-20A	0.4	Helena	0.10	37.31
E-1A	6.7	Wedowee	0.10	37.31
E-2A	15.4	Wedowee	0.10	37.31
E-3A	0.7	Helena	0.10	19.95
E-3B	2.2	Helena	0.10	19.95
E-3C	3.5	Wedowee	0.10	37.31
E-4A	3.5	Helena	0.10	19.95
E-4B	2.9	Helena	0.10	19.95
E-4C	9.4	Rion	0.10	37.31
Total	126.7			

- 8. An automatically activated standby power source shall be on site and operational at all times. If a generator is employed as an alternate power supply, it shall be tested weekly by interrupting the primary power source.
- 9. No type of wastewater other than that from Briar Chapel Development shall be irrigated onto the irrigation area.
- 10. Freeboard in the five-day upset pond, central storage pond and east storage pond shall not be less than two (2) feet at any time.
- 11. Waste-level gauge(s), to monitor waste levels in the storage pond(s), shall be installed prior to operation. This gauge shall have readily visible permanent markings indicating the maximum liquid level at the top of the temporary liquid storage volume, minimum liquid level at the bottom of the temporary liquid storage volume, and top of the dam elevations. Caution must be taken not to damage the integrity of the liner when installing the gauge.
- 12. A protective vegetative cover shall be established and maintained on all earthen basin embankments (outside toe of embankment to maximum pumping elevation), berms, pipe runs, erosion control areas, and surface water diversions. Trees, shrubs, and other woody vegetation shall not be allowed to grow on the earthen basin dikes or embankments. Earthen basin embankment areas shall be kept mowed or otherwise controlled and accessible.
- 13. All wastewater shall be routed to the five-day holding pond should the limit for fecal coliform (daily maximum concentration of 25 per 100 ml) or turbidity (instantaneous maximum of 10 NTU) be exceeded, until such time that the problems associated with the treatment capability of the wastewater treatment plant have been corrected. The wastewater in the five-day holding pond shall be pumped back to the treatment plant for re-treatment or treated in the five-day pond prior to discharge to the storage pond.

#### III. MONITORING AND REPORTING REQUIREMENTS

- 1. Any monitoring (including groundwater, surface water, soil or plant tissue analyses) deemed necessary by the Division to insure surface and ground water protection will be established and an acceptable sampling reporting schedule shall be followed.
- 2. Influent flow shall be continuously monitored and daily flow values shall be reported on Form NDMR. Influent flow may be represented by effluent flow from the wastewater treatment system prior to storage.

The Permittee shall install an appropriate flow measurement device consistent with approved engineering and scientific practices to ensure the accuracy and reliability of flow measurement. Flow measurement devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true flow, accurately calibrated at a minimum of once per year, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. The Permittee shall keep records of flow measurement device calibration on file for a period of at least three years. At a minimum, data to be included in this documentation shall be:

- a. Date of flow measurement device calibration
- b. Name of person performing calibration
- c. Percent from true flow

3. As an indicator of proper operation and maintenance, the facility shall produce an effluent in compliance with the following limitations:

Parameter	Monthly Average	Daily (Instantaneous) Maximum
Flow	250,000 GPD	
BOD5 (5-day, 20°C)	10 mg/l	15 mg/l
NH3 as N	4 mg/l	6 mg/l
TSS	5 mg/l	10 mg/l
Fecal Coliform	14 per 100 ml	25 per 100 ml
Turbidity		JO NTU

The effluent pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

- Monthly averages for all but fecal coliform shall be the arithmetic mean of all samples collected during the reporting period.
- Monthly average for fecal coliform shall be the geometric mean of all samples collected during the reporting period.
- Daily maximum shall be the maximum value of all samples collected during the reporting period.

The Permittee shall monitor the effluent from the subject facilities at a point prior to irrigation for the following parameters:

Parameter	Sampling Point Sampling Frequency		Type of Sample
Flow	Influent or Effluent	Continuous	Recording
Turbidity	Effluent	Continuous	Recording
BOD5 (5-day, 20°C)	Effluent	*2/Month	Composite
NH3 as N	Effluent	*2/Month	Composite
TSS	Effluent	*2/Month	Composite
Fecal Coliform	Effluent	*2/Month	Grab
Settleable Matter	Effluent	Daily	Grab
Residual Chlorine	Effluent	Daily	Grab
NO <sub>3</sub>	Effluent	**Triannually	Grab
TDS Effluent		**Triannually	Grab
TOC	Effluent	**Triannually	Grab
Chloride	Effluent	**Triannually	Grab
PH	Effluent	**Triannually	Grab

<sup>\* 2/</sup>Month sampling frequency only during the months of April through October. During the remainder of the year, these parameters shall be monitored monthly.

<sup>\*\*</sup> Triannually sampling shall be conducted during March, July and November.

- 4. The Permittee shall maintain adequate records tracking the amount of wastewater disposed. These records shall include, but are not necessarily limited to the following information:
  - a. Date and time of irrigation,
  - b. Volume of wastewater irrigated,
  - c. Zone irrigated,
  - d. Length of time zone is irrigated,
  - e. Continuous weekly, monthly, and year-to-date hydraulic (inches/acre) loadings for each zone,
  - f. Weather conditions, and
  - g. Maintenance of cover crops.
- 5. Freeboard in the 5-day upset pond, central storage pond and east storage pond shall be recorded weekly.
- 6. Three (3) copies of all monitoring data [as specified in Conditions III(2) and III(3)] on Form NDMR-1 and three (3) copies of all operation and disposal records [as specified in Conditions III(4) and III(5)] on Form NDAR-1 shall be submitted monthly on or before the last day of the following month. All information shall be submitted to the following address:

NC Division of Water Quality Information Processing Unit 1617 Mail Service Center Raleigh, North Carolina 27699-1617

- 7. A record shall be maintained of all residuals removed from this facility. This record shall include the name of the hauler, permit authorizing the disposal or a letter from a municipality agreeing to accept the residuals, date the residuals were hauled, and volume of residuals removed.
- 8. A maintenance log shall be maintained at this facility including but not limited to the following items:
  - a. Daily sampling results of dissolved oxygen in the aeration basin and at the clarifier weir.
  - b. Visual observations of the plant and plant site.
  - c. Record of preventative maintenance (changing of filters, adjusting belt tensions, alarm testing, diffuser inspections and cleanings, etc.).
  - d. Date of calibration of flow measurement device.
  - e. Date and results of power interruption testing on alternate power supply.

#### 9. Noncompliance Notification:

The Permittee shall report by telephone to the Raleigh Regional Office, telephone number (919) 571-4700, 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 any of the following:

- a. Any occurrence at the wastewater treatment facility which results in the treatment of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.
- b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
- c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.

d. Any time that self-monitoring information indicates that the facility has gone out of compliance with its permit limitations.

Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at telephone number (800) 662-7956, (800) 858-0368, or (919) 733-3300. Persons reporting such occurrences by telephone shall also file a written report in letter form within five (5) days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

# IV. GROUNDWATER REQUIREMENTS

- 1. Waste shall not be applied or discharged onto or below the land surface when the vertical separation between the waste and the seasonal high water table is less than one (1) foot.
- 2. Groundwater quality monitoring, as deemed necessary by the Division, shall be provided.
- 3. The five day upset pond shall have either a liner of natural material at least one (1) foot in thickness and having a hydraulic conductivity of no greater than 1 x 10<sup>-6</sup> centimeters per second when compacted, or a synthetic liner of sufficient thickness to exhibit structural integrity and an effective hydraulic conductivity no greater than that of the natural material liner, according to 15A NCAC 2H .0219(f).
- 4. The Compliance Boundary and Review Boundary for the waste disposal area(s) is specified by regulations in 15A NCAC 2H, Waste Not Discharged to Surface Waters, specifically, .0219(k)(1)(C)(i)(III). The Compliance Boundary and Review Boundary for groundwater shall be established at the property boundary. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to remediation action according to 15A NCAC 2L .0106(d)(2).

# V. INSPECTIONS

- 1. Adequate inspection, maintenance, and cleaning shall be provided by the Permittee to insure proper operation of the subject facilities.
- 2. The Permittee or his designee shall inspect the wastewater treatment and disposal facilities to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment, a threat to human health, or a nuisance. The Permittee shall keep an inspection log or summary including at least the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee. This log of inspections shall be maintained by the Permittee for a period of three years from the date of the inspection and shall be made available upon request to the Division or other permitting authority.
- 3. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the disposal site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be maintained under the terms and conditions of this permit, and may obtain samples of groundwater, surface water, or leachate.

#### VI. GENERAL CONDITIONS

- 1. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.
- 2. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 3. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division accompanied by an application fee, documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.
- 4. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.
- 5. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances which 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 2B.0200, erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B.0200 and 2H.0500.
- 6. The Permittee shall retain a set of approved plans and specifications for the subject facility for the life of the project.
- 7. The Permittee shall pay the annual administering and compliance fee within thirty days of being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15A NCAC 2H .0205 (c)(4).
- 8. The Permittee, at least six (6) months prior to the expiration of this permit, shall request its extension. Upon receipt of the request, the Commission will review the adequacy of the facilities described therein, and if warranted, will extend the permit for such period of time and under such conditions and limitations as it may deem appropriate.

Permit issued this the 29th day of April, 2005

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Alan W. Klimek, P.E., Director

Division of Water Quality

By Authority of the Environmental Management Commission

Permit Number WO0028552

Permit No. WQ0028552 April 29, 2005

ENGINEER'S CERTIFICATION	
Partial Final	
of North Carolina, having been authorized the project,	, as a duly registered Professional Engineer in the State to observe (periodically, weekly, full time) the construction of
Project Name	Location and County
observation of the construction such that t	post of my abilities, due care and diligence was used in the he construction was observed to be built within substantial approved plans and specifications, and other supporting
Signature	Registration No.
Date	

	,	





William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Alan W. Klimek, P.E. Director Division of Water Quality

April 27, 2006

MITCH BARRON – ASSISTANT VICE PRESIDENT BRIAR CHAPEL UTILITIES, LLC POST OFFICE BOX 1486 PITTSBORO, NORTH CAROLINA 27312

Subject: Permit No. WQ0028552

Briar Chapel Development Wastewater Treatment and

Reclaimed Water Utilization System

Chatham County

Dear Mr. Barron:

In accordance with your modification request received April 20, 2006, we are forwarding herewith Permit Number WQ0028552, dated April 27, 2006, to Briar Chapel Utilities, LLC for the construction and operation of the subject wastewater treatment and reclaimed water utilization system.

This permit shall be effective from the date of issuance until March 31, 2010, and shall be subject to the conditions and limitations as specified therein. Please pay particular attention to the monitoring requirements in this permit. Failure to establish an adequate system for collecting and maintaining the required operational information will result in future compliance problems. Please note that a sedimentation and erosion control plan shall be submitted to and approved by the Land Quality Section prior to construction. In addition, any changes required by the Dam Safety Permit shall be approved by the Division of Water Quality prior to construction (See Condition I.2).

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 thirty (30) days following receipt of this permit. 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, NC 27699-6714. Unless such demands are made this permit shall be final and binding.

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Nathaniel Thornburg at (919) 715-6160.

Alan W. Klimek, P.E.

cc:

Chatham County Health Department

Raleigh Regional Office, Aquifer Protection Section

Mark Asliness, PE CE Group

Lee Fleming, PE

Mike Sanchez, PE – John R. McAdams Steven Levitas – Kilpatrick Stockton, LLP

Technical Assistance and Certification Unit

Aquifer Protection Central Files

LAU Files

NorthCarolina
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#### NORTH CAROLINA

#### **ENVIRONMENTAL MANAGEMENT COMMISSION**

## DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### RALEIGH

#### WASTEWATER TREATMENT AND RECLAIMED WATER UTILIZATION PERMIT

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, LLC

Chatham County

#### FOR THE

construction and operation of a 750,000 gallon per day (GPD) extended aeration wastewater treatment plant to be constructed in three (3) phases (A, B and C) with each phase having a maximum flow of 250,000 GPD and each consisting of: dual static screens for grit removal (serving Phases A, B and C); a manually cleaned bar screen; a 75,400 gallon aerated flow equalization basin with two (2) 225 gallon per minute (GPM) variable speed pumps each with an influent flow meter, and one (1) 7.5 horsepower (hp) aerator; two (2) 31,500 gallon anoxic chambers each with two (2) 3 hp mixers; two (2) 189,000 gallon aeration basins each with two (2) 10 hp aerators; two (2) 31,500 gallon clarifiers each with one (1) variable speed sludge return pump; a 75,400 gallon sludge holding basin with one (1) variable speed decanting pump and one (1) 7.5 hp aerator; a 10,730 gallon chlorine contact chamber with two (2) variable speed chlorine injection pumps; a 16,800 gallon mudwell with two (2) 200 GPM return pumps; two (2) 90 square foot (ft²) tertiary filters; a 13,800 gallon clearwell with four (4) 675 GPM backwash pumps (pumps serve Phases A, B and C); dual banks of ultraviolet (UV) modules each with 10 bulbs; a 6,850 gallon dechlorination chamber with two (2) air diffusers; an effluent flow measuring device (serving Phases A, B and C); and effluent turbidimeter (serving Phases A, B and C); and a permanent auxiliary generator (serving Phases A, B and C); and the

construction and operation of a 250,000 GPD reclaimed water utilization system consisting of a 3.75 million gallon (MG) clay lined five day upset pond with a 400 GPM dual submersible pumps station and audible/visual alarms; a 39.0 MG clay lined central storage pond with dual 2,000 GPM flooded suction pumps serving thirty-five (35) irrigation zones consisting of approximately 82.2 acres; a 14.1 MG clay lined east storage pond with dual 1,200 GPM vertical turbine pumps serving nine (9) irrigation zones consisting of approximately 42.1 acres; and all associated piping, valves and appurtenances to serve the Briar Chapel Development with no discharge of wastes to the surface waters, pursuant to the application received April 20, 2006, and in conformity with the project plan, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

See Condition III(3) for the flow capacity limitation specified by this permit.

This permit shall be effective from the date of issuance until March 31, 2010, and shall be subject to the following specified conditions and limitations:

#### I. PERFORMANCE STANDARDS

- The permitted wastewater treatment facility shall treat domestic strength wastewater only. The
  wastewater treatment plant shall not accept any wastewater from commercial facilities deemed
  industrial (i.e., from processes of trade or business, Laundromats, or vehicle/equipment washes)
  per Regulation 15A NCAC 2H .0203(19).
- 2. Prior to construction of the inclement weather storage pond(s), the Permittee shall obtain written approval from the Division of Water Quality of any modifications to the design of such pond(s) required by the Dam Safety Permit issued by Division of Land Resources.
- 3. Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting materials. If this project is to be completed in phases and partially certified, you shall retain the responsibility to track further construction approved under the same permit, and shall provide a final certificate of completion once the entire project has been completed. Mail the Certification to the Land Application Unit, 1636 Mail Service Center, Raleigh, NC 27699-1636.
- 4. The Raleigh Regional Office, telephone number (919) 791-4200, shall be notified at least forty-eight (48) hours in advance of operation of the installed facilities so that an in-place inspection can be made. Such notification to the regional supervisor shall be made during the normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.
- 5. The reclaimed water utilization facilities shall be effectively maintained and operated at all times so that there is no discharge to the surface waters, nor any contamination of ground waters, which will render them unsatisfactory for normal use. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions or failure of the irrigation area to adequately assimilate the wastewater, the Permittee shall take immediate corrective actions including those actions that may be required by the Division of Water Quality (Division), such as the construction of additional or replacement wastewater treatment and disposal facilities.
- 6. The issuance of this permit shall not relieve the Permittee of the responsibility for damages to surface water or ground water resulting from the operation of this facility.
- 7. The residuals generated from these treatment facilities must be disposed in accordance with General Statute 143-215.1 and in a manner approved by the Division.
- 8. Diversion or bypassing of the untreated wastewater from the treatment facilities is prohibited.
- 9. The following buffers shall be maintained:
  - a. 100 feet between wetted areas and water supply wells,
  - b. 100 feet between wetted areas and waters classified as SA.
  - c. 25 feet between wetted areas and surface waters not classified as SA.
  - d. 100 feet between wastewater treatment units and wells.
  - e. 50 feet between reclaimed water storage/irrigation ponds and property lines, and
  - f. 50 feet between wastewater treatment units and property lines.
- 10. Public access to the irrigation sites shall be controlled during active site use. Such controls may include the posting of signs showing the activities being conducted at each site.

- 11. The following shall be requirements for the reclaimed water distribution, storage, and utilization facilities:
  - a. All reclaimed water valves, storage facilities, and outlets shall be tagged or labeled to warn the public or employees that the water is not intended for drinking. Where appropriate, such warning shall inform the public or employees to avoid contact with the water.
  - b. All reclaimed water piping, valves, outlets, and other appurtenances shall be color-coded, taped, or otherwise marked to identify the source of the water as being reclaimed water.
    - i. All reclaimed water piping and appurtenances shall be either colored purple (i.e., Pantone 522) and embossed or integrally stamped or marked "CAUTION: RECLAIMED WATER DO NOT DRINK" or be installed with a purple (i.e., Pantone 522) identification tape or polyethylene vinyl wrap. The warning shall be stamped on opposite sides of the pipe and repeated every three feet or less.
    - ii. Identification tape shall be at least three inches wide and have white or black lettering on purple (i.e., Pantone 522) field stating "CAUTION: RECLAIMED WATER DO NOT DRINK." Identification tape shall be installed on top of reclaimed water pipelines, fastened at least every 10 feet to each pipe length and run continuously the entire length of the pipe.
  - c. All reclaimed water valves and outlets shall be of a type, or secured in a manner, that permits operation by authorized personnel only.
  - d. Above-ground hose bibs (i.e., spigots or other hand-operated connections) shall not be present. Hose bibs shall be located in locked below-grade vaults that shall be clearly labeled as being of non-potable quality. As an alternative to the use of locked below-grade vaults with standard hose bibs services, hose bibs, which can only be operated by a special tool or connected to a special hose connection, may be placed in non-lockable underground services boxes clearly labeled as non-potable water.

## II. OPERATION AND MAINTENANCE REQUIREMENTS

- 1. The facilities shall be properly maintained and operated at all times.
- 2. Upon classification of the wastewater treatment and irrigation facilities by the Water Pollution Control System Operators Certification Commission (WPCSOCC), the Permittee shall designate and employ a certified operator to be in responsible charge (ORC) and one or more certified operator(s) to be back-up ORC(s) of the facilities in accordance with 15A NCAC 8G .0201. The ORC shall visit the facilities in accordance with 15A NCAC 8G .0204 or as specified in this permit and shall comply with all other conditions specified in these rules.
- 3. A suitable, year-round vegetative cover shall be maintained on the irrigation areas.
- 4. Irrigation shall not be performed during inclement weather or when the ground is in a condition that will cause runoff.
- 5. Adequate measures shall be taken to prevent wastewater runoff from the irrigation field.
- 6. The facilities shall be effectively maintained and operated as a non-discharge system to prevent the discharge of any wastewater resulting from the operation of this facility.
- 7. An automatically activated standby power source shall be on site and operational at all times. If a generator is employed as an alternate power supply, it shall be tested weekly by interrupting the primary power source.
- 8. No type of wastewater other than that from Briar Chapel Development shall be irrigated onto the irrigation area.

# 9. The application and instantaneous loading (i.e. dosing rate) rates shall not exceed the following:

Spray Zone	Area (acres)	Dominant Soil Series	Instantaneous Loading Rate (inches/dose)	Annual Loading Rate (inches/year)
C-1A	8.0	Wedowee	0.10	37.31
C-1A C-2A	1,4	Helena	0.10	19.95
C-2B	0.9	Helena	0.10	19.95
C-2B C-2C	6.1	Wedowee	0.10	37.31
C-2D	1.8	Wedowee	0.10	37.31
C-2D C-3A	0.9	Wedowee	0.10	19.95
C-3B	0.9			
C-3C	0.8	Wedowee Wedowee	0.10	19.95
C-3D	0.4	Wedowee	0.10	19.95 19.95
C-3E	9.8	Company of the compan	0.10	37.31
C-3E	3.4	Wedowee	0.10	37.31
C-5A	4.1	Wedowee Wedowee	0.10	37.31
C-6A	0.5		0.10	
C-6B	0.1	Rion Helena	0.10	19.95
C-6C	0.1	Wedowee	0.10	37.31
C-6D	0.7	Wedowee	0.10	37.31
C-9A	4.2	Helena	0.10	
C-9A C-9B	3.2	Wedowee	0.10	19.95
C-12A	2.0	Rion	0.10	19.95
C-12A C-12B	2.6	Y Y . 1	0.10	19.95
C-12B	3.4	Wedowee	0.10	37.31
C-12D	0.4			
C-12D C-13A	0.4	Wedowee	0.10	37.31 19.95
C-13A C-13B	1,0	Helena Helena	0.10	19.95
C-13E	1.1	Rion	0.10	19.95
C-13D	1.0	Rion	0.10	
C-13E	2.7	Pacolet		19.95 37.31
C-13E C-13F	6.4	Wedowee	0.10	
C-15F C-15A	3.5	The state of the s	0.10	37.31
C-15B	0.9	Helena Helena	0.10	19.95
	0.9		0.10	19.95
C-15C C-15D	0.9	Wedowee Wedowee	0.10	37.31
C-15E			0.10	37.31
	6.2	Wedowee	0.10	37.31
C-16A		Wedowee	0.10	37.31
C-20A	0.4	Helena	0.10	37.31
E-1A	10.4	Wedowee	0.10	37.31
E-2A	9.0	Wedowee	0.10	37.31
E-3A	0.8	Helena	0.10	19.95
E-3B	2.2	Helena	0.10	19.95
E-3C	3.5	Wedowee	0.10	37.31
E-3D	0.9	Rion	0.10	37.31
E-4A	3.1	Helena	0.10	19.95
E-4B	2.9	Helena	0.10	19.95
E-4C	9.3	Rion	0.10	37.31
Total	124.2			

- 10. Freeboard in the five-day upset pond, central storage pond and east storage pond shall not be less than two (2) feet at any time.
- 11. Waste-level gauge(s), to monitor waste levels in the storage pond(s), shall be installed prior to operation. This gauge shall have readily visible permanent markings indicating the maximum liquid level at the top of the temporary liquid storage volume, minimum liquid level at the bottom of the temporary liquid storage volume, and top of the dam elevations. Caution must be taken not to damage the integrity of the liner when installing the gauge.
- 12. A protective vegetative cover shall be established and maintained on all earthen basin embankments (outside toe of embankment to maximum pumping elevation), berms, pipe runs, erosion control areas, and surface water diversions. Trees, shrubs, and other woody vegetation shall not be allowed to grow on the earthen basin dikes or embankments. Earthen basin embankment areas shall be kept mowed or otherwise controlled and accessible.
- 13. All wastewater shall be routed to the five-day holding pond should the limit for fecal coliform (daily maximum concentration of 25 per 100 ml) or turbidity (instantaneous maximum of 10 NTU) be exceeded, until such time that the problems associated with the treatment capability of the wastewater treatment plant have been corrected. The wastewater in the five-day holding pond shall be pumped back to the treatment plant for re-treatment or treated in the five-day pond prior to discharge to the storage pond.

## III. MONITORING AND REPORTING REQUIREMENTS

- 1. Any monitoring (including groundwater, surface water, soil or plant tissue analyses) deemed necessary by the Division to insure surface and ground water protection will be established and an acceptable sampling reporting schedule shall be followed.
  - Influent flow shall be continuously monitored and daily flow values shall be reported on Form NDMR. Influent flow may be represented by effluent flow from the wastewater treatment system prior to storage.

The Permittee shall install an appropriate flow measurement device consistent with approved engineering and scientific practices to ensure the accuracy and reliability of flow measurement. Flow measurement devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true flow, accurately calibrated at a minimum of once per year, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. The Permittee shall keep records of flow measurement device calibration on file for a period of at least three years. At a minimum, data to be included in this documentation shall be:

- a. Date of flow measurement device calibration
- b. Name of person performing calibration
- c. Percent from true flow

3. As an indicator of proper operation and maintenance, the facility shall produce an effluent in compliance with the following limitations:

Parameter	Monthly Average	Daily (Instantaneous) Maximum <sup>c</sup>
Flow	250,000 GPD	
BOD <sub>5</sub> (5-day, 20°C)	10 mg/l	15 mg/l
NH3 as N	4 mg/l	6 mg/l
TSS	5 mg/l	10 mg/l
Fecal Coliform	14 per 100 ml <sup>b</sup>	25 per 100 ml
Turbidity		10 NTU

The effluent pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

- Monthly averages for all but fecal coliform shall be the arithmetic mean of all samples collected during the reporting period.
- Monthly average for fecal coliform shall be the geometric mean of all samples collected during the reporting period.
- Daily maximum shall be the maximum value of all samples collected during the reporting period.

The Permittee shall monitor the effluent from the subject facilities at a point prior to irrigation for the following parameters:

Parameter	Sampling Point	Sampling Frequency	Type of Sample
Flow	Influent or Effluent	Continuous	Recording
Turbidity	Effluent	Continuous	Recording
BOD <sub>5</sub> (5-day, 20°C)	Effluent	*2/Month	Composite
NH3 as N	Effluent	*2/Month	Composite
TSS	Effluent	*2/Month	Composite
Fecal Coliform	Effluent	*2/Month	Grab
Settleable Matter	Effluent	Daily	Grab
Residual Chlorine	Effluent	Daily	Grab
NO3	Effluent	**Triannually	Grab
TDS	Effluent	**Triannually	Grab
TOC	Effluent	**Triannually	Grab
Chloride	Effluent	**Triannually	Grab
· pH	Effluent	**Triannually	Grab

<sup>\* 2/</sup>Month sampling frequency only during the months of April through October. During the remainder of the year, these parameters shall be monitored monthly.

<sup>\*\*</sup> Triannually sampling shall be conducted during March, July and November.

- 4. The Permittee shall maintain adequate records tracking the amount of wastewater disposed. These records shall include, but are not necessarily limited to the following information:
  - a. Date and time of irrigation,
  - b. Volume of wastewater irrigated,
  - c. Zone irrigated,
  - d. Length of time zone is irrigated,
  - e. Continuous weekly, monthly, and year-to-date hydraulic (inches/acre) loadings for each zone,
  - f. Weather conditions, and
  - g. Maintenance of cover crops.
- Freeboard in the 5-day upset pond, central storage pond and east storage pond shall be recorded weekly.
- 6. Three (3) copies of all monitoring data [as specified in Conditions III(2) and III(3)] on Form NDMR-1 and three (3) copies of all operation and disposal records [as specified in Conditions III(4) and III(5)] on Form NDAR-1 shall be submitted monthly on or before the last day of the following month. All information shall be submitted to the following address:

NC Division of Water Quality Information Processing Unit 1617 Mail Service Center Raleigh, North Carolina 27699-1617

- 7. A record shall be maintained of all residuals removed from this facility. This record shall include the name of the hauler, permit authorizing the disposal or a letter from a municipality agreeing to accept the residuals, date the residuals were hauled, and volume of residuals removed.
- 8. A maintenance log shall be maintained at this facility including but not limited to the following items:
  - a. Daily sampling results of dissolved oxygen in the aeration basin and at the clarifier weir.
  - b. Visual observations of the plant and plant site.
  - c. Record of preventative maintenance (changing of filters, adjusting belt tensions, alarm testing, diffuser inspections and cleanings, etc.).
  - d. Date of calibration of flow measurement device.
  - e. Date and results of power interruption testing on alternate power supply.

# 9. Noncompliance Notification:

The Permittee shall report by telephone to 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 any of the following:

- a. Any occurrence at the wastewater treatment facility which results in the treatment of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.
- b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
- c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.

d. Any time that self-monitoring information indicates that the facility has gone out of compliance with its permit limitations.

Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at telephone number (800) 662-7956, (800) 858-0368, or (919) 733-3300. Persons reporting such occurrences by telephone shall also file a written report in letter form within five (5) days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

#### IV. GROUNDWATER REQUIREMENTS

- 1. Waste shall not be applied or discharged onto or below the land surface when the vertical separation between the waste and the seasonal high water table is less than one (1) foot.
- 2. Groundwater quality monitoring, as deemed necessary by the Division, shall be provided.
- 3. The five day upset pond shall have either a liner of natural material at least one (1) foot in thickness and having a hydraulic conductivity of no greater than 1 x 10<sup>-6</sup> centimeters per second when compacted, or a synthetic liner of sufficient thickness to exhibit structural integrity and an effective hydraulic conductivity no greater than that of the natural material liner, according to 15A NCAC 2H .0219(f).
- 4. The Compliance Boundary and Review Boundary for the waste disposal area(s) is specified by regulations in 15A NCAC 2H, Waste Not Discharged to Surface Waters, specifically, .0219(k)(1)(C)(i)(III). The Compliance Boundary and Review Boundary for groundwater shall be established at the property boundary. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to remediation action according to 15A NCAC 2L .0106(d)(2).

## V. INSPECTIONS

- 1. Adequate inspection, maintenance, and cleaning shall be provided by the Permittee to insure proper operation of the subject facilities.
- 2. The Permittee or his designee shall inspect the wastewater treatment and disposal facilities to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment, a threat to human health, or a nuisance. The Permittee shall keep an inspection log or summary including at least the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee. This log of inspections shall be maintained by the Permittee for a period of three years from the date of the inspection and shall be made available upon request to the Division or other permitting authority.
- 3. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the disposal site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be maintained under the terms and conditions of this permit, and may obtain samples of groundwater, surface water, or leachate.

## VI. GENERAL CONDITIONS

- 1. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.
- 2. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 3. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division accompanied by an application fee, documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.
- 4. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.
- 5. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances which 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 2B.0200, erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B .0200 and 2H .0500.
- 6. The Permittee shall retain a set of approved plans and specifications for the subject facility for the life of the project.
- 7. The Permittee shall pay the annual administering and compliance fee within thirty days of being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15A NCAC 2H .0205 (c)(4).
- 8. The Permittee, at least six (6) months prior to the expiration of this permit, shall request its extension. Upon receipt of the request, the Commission will review the adequacy of the facilities described therein, and if warranted, will extend the permit for such period of time and under such conditions and limitations as it may deem appropriate.

Permit issued this the 27th day of April, 2006

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Alan W. Klimek, P.E., Director

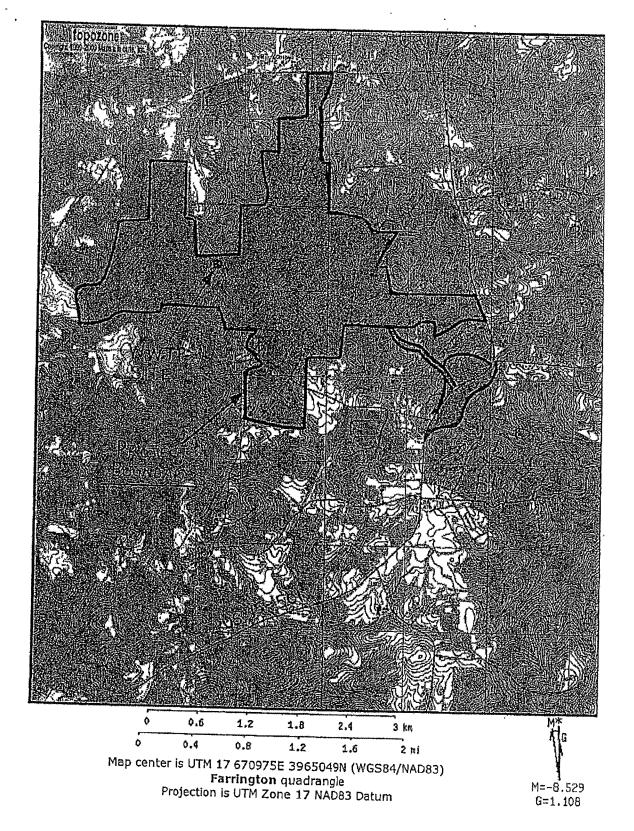
Division of Water Quality

By Authority of the Environmental Management Commission

Permit Number WQ0028552

Permit No. WQ0028552 April 27, 2006

Engineer's Certification	
Partial Final	
I, of North Carolina, having been authorized to the project,	, as a duly registered Professional Engineer in the State observe (periodically, weekly, full time) the construction of
Project Name	Location and County
observation of the construction such that the	t of my abilities, due care and diligence was used in the construction was observed to be built within substantial roved plans and specifications, and other supporting
Signature	Registration No.
Date	•



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# North Carolina Department of Environment and Natural Resources

- Beverly Eaves Perdue Governor

Division of Water Quality Coleen H. Sullins Director

Dee Freeman Secretary

May 18, 2009

WILLIAM MUMFORD - ASSISTANT SECRETARY BRIAR CHAPEL UTILITIES, LLC 16 WINDY KNOLL CIRCLE CHAPEL HILL, NORTH CAROLINA 27516

Subject: Permit No. WQ0028552

Briar Chapel Development Wastewater Treatment, Irrigation and Non-Conjunctive Reclaimed

Water Utilization System

Chatham County

Dear Mr. Mumford:

In accordance with your permit modification request received April 23, 2009, and subsequent additional information received May 7, 2009, we are forwarding herewith Permit No. WQ0028552, dated May 18, 2009, to Briar Chapel Utilities, LLC for the continued operation of the Phase A wastewater treatment plant, 5-day upset pond and main wet weather storage pond, and the construction and operation of the remaining subject wastewater treatment, wastewater irrigation and non-conjunctive reclaimed water utilization facilities.

The subject modification is to add approximately 9.5 acres of non-conjunctive reclaimed utilization area along the existing parkway between US 15-501 and the bridge at Pokeberry Creek. This additional utilization area shall be known as Phase 1C.

This permit shall be effective from the date of issuance until March 31, 2010, shall void Permit No. WQ0028552 issued May 22, 2008, and shall be subject to the conditions and limitations as specified therein. Please pay particular attention to the monitoring requirements in this permit. Failure to establish an adequate system for collecting and maintaining the required operational information will result in future compliance problems.

Please note this permit contains two new permit conditions since the last permit issuance. Please review these conditions carefully:

> Condition I.3. - This condition requires the Permittee to abandon water supply well WSW-38 prior to operation of Phase 1C spray heads that throw within 100 feet of the aforementioned



➤ Condition II.17. — This condition requires the Permittee to aerate those areas in Phase 1C affected by significant compaction prior to any utilization of reclaimed water on those sites.

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 thirty (30) days following receipt of this permit. 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, NC 27699-6714. Unless such demands are made this permit shall be final and binding.

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Nathaniel Thornburg at (919) 715-6160 or nathaniel.thornburg@ncdenr.gov.

Sincerely,

Coleen H. Sullins

cc: Chatham County Health Department
Raleigh Regional Office, Aquifer Protection Section
Mark P. Ashness, PE – CE Group
Technical Assistance and Certification Unit
APS Central Files
LAU Files

### NORTH CAROLINA

### **ENVIRONMENTAL MANAGEMENT COMMISSION**

### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

### RALEIGH

# WASTEWATER TREATMENT, WASTEWATER IRRIGATION AND NON-CONJUNCTIVE RECLAIMED WATER UTILIZATION SYSTEM PERMIT

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, LLC

Chatham County

### FOR THE

operation of a wastewater treatment, wastewater irrigation and non-conjunctive reclaimed water utilization facility consisting of the:

continued operation of a 250,000 gallon per day (GPD) extended aeration wastewater treatment plant (i.e., Phase A) consisting of: dual static screens for grit removal (serving Phases A, B and C); a manually cleaned bar screen; a 75,400 gallon aerated flow equalization basin with two (2) 225 gallon per minute (GPM) variable speed pumps each with an influent flow meter and one (1) 7.5 horsepower (hp) aerator; two (2) 31,500 gallon anoxic chambers each with two (2) 3 hp mixers; two (2) 189,000 gallon aeration basins each with two (2) 10 hp aerators; two (2) 31,500 gallon clarifiers each with one (1) variable speed sludge return pump; a 75,400 gallon sludge holding basin with one (1) variable speed decanting pump and one (1) 7.5 hp aerator; a 10,730 gallon chlorine contact chamber with two (2) variable speed chlorine injection pumps; a 16,800 gallon mudwell with two (2) 200 GPM return pumps; two (2) 90 square foot (ft²) tertiary filters; a 13,800 gallon clearwell with four (4) 675 GPM backwash pumps (pumps serve Phases A, B and C); dual banks of ultraviolet (UV) modules each with 10 bulbs; a 6,850 gallon dechlorination chamber with two (2) air diffusers; an effluent flow measuring device (serving Phases A, B and C); an effluent turbidimeter (serving Phases A, B and C); a permanent auxiliary generator (serving Phases A, B and C); and all associated piping, valves and appurtenances; the

continued operation of: a 3.5 million gallon (MG) clay lined five day upset pond with a 400 GPM dual submersible pumps station and audible/visual alarms; and a 21.3 MG clay lined central storage pond with dual 2,000 GPM flooded suction pumps; the

construction and operation of two additional 250,000 GPD extended aeration wastewater treatment plants to be constructed (i.e., Phases B and C) with each phase consisting of: a manually cleaned bar screen; a 75,400 gallon aerated flow equalization basin with two (2) 225 GPM variable speed pumps each with an influent flow meter and one (1) 7.5 hp aerator; two (2) 31,500 gallon anoxic chambers each with two (2) 3 hp mixers; two (2) 189,000 gallon aeration basins each with two (2) 10 hp aerators; two (2) 31,500 gallon clarifiers each with one (1) variable speed sludge return pump; a 75,400 gallon sludge holding basin with one (1) variable speed decanting pump and one (1) 7.5 hp aerator; a 10,730 gallon chlorine contact chamber with two (2) variable speed chlorine injection pumps; a 16,800 gallon mudwell with two (2) 200 GPM return pumps; two (2) 90 ft<sup>2</sup> tertiary filters; dual banks of ultraviolet (UV) modules each with 10

bulbs; a 6,850 gallon dechlorination chamber with two (2) air diffusers; and all associated piping, valves and appurtenances; the

construction and operation of a 253,027 GPD reclaimed water utilization system (Phase 1A: Fields C-1A through E-4C) consisting of: thirty-five (35) irrigation zones comprising approximately 82.2 acres; a 14.1 MG clay lined east storage pond with dual 1,200 GPM vertical turbine pumps serving nine (9) irrigation zones consisting of approximately 42.1 acres; and all associated piping, valves and appurtenances; the

construction and operation of a 51,499 GPD wastewater irrigation system (Phase 1B: Fields B-1A through B-9C) consisting of: sixteen (16) irrigation zones comprising approximately 22.0 acres; and all associated piping, valves and appurtenances; and the

construction and operation of a 21,749 GPD non-conjunctive reclaimed water utilization system (Phase 1C) consisting of: one (1) irrigation zone comprising approximately 9.48 acres; and all associated piping, valves and appurtenances; and the

to serve the Briar Chapel Development, with no discharge of wastes to the surface waters, pursuant to the application received April 23, 2009, and subsequent additional information received by the Division of Water Quality (Division), and in conformity with the project plan, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

This permit shall be effective from the date of issuance until March 31, 2010, shall void Permit No. WQ0028552 issued May 22, 2008, and shall be subject to the following specified conditions and limitations:

### I. SCHEDULES

- 1. Upon completion of construction and prior to operation of this permitted facility, a certification (see attached form) must be received from a professional engineer certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting materials including the location of all monitoring wells as applicable. If this project is to be completed in phases and partially certified, you shall retain the responsibility to track further construction approved under the same permit, and shall provide a final certificate of completion once the entire project has been completed. Mail the Certification to the Aquifer Protection Section, Division of Water Quality, 1636 Mail Service Center, Raleigh, NC 27699-1636.
- 2. The Raleigh Regional Office, telephone number (919) 791-4200, shall be notified at least forty-eight (48) hours in advance (excluding weekends and holidays) of operation of the installed facilities so that an in-place inspection can be made. Such notification to the regional supervisor shall be made during the normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.
- 3. Prior to operation of any Phase 1C spray heads that throw within 100 feet of water supply well WSW-38, said well shall be permanently abandoned. Within thirty (30) days of abandonment, a Well Abandonment Record (GW-30 form) that lists this permit number and the appropriate well identification number shall be completed for each well abandoned and mailed to N.C. Division of Water Quality, Aquifer Protection Section, 1636 Mail Service Center, Raleigh, N.C. 27699-1636. The well shall be abandoned by a North Carolina Certified Well Contractor according to the North Carolina Well Construction Standards (15A NCAC 02C .0113) and local county rules.

- 4. No later than six months prior to the expiration of this permit, the Permittee shall request renewal of this permit on official Division forms. Upon receipt of the request, the Division will review the adequacy of the facilities described therein, and if warranted, will renew the permit for such period of time and under such conditions and limitations as it may deem appropriate. Please note that Rule 15A NCAC 02T .0105(d) requires an updated site map to be submitted with the permit renewal application.
- 5. Prior to commencement of irrigation, an updated soil scientist site evaluation shall be submitted for all areas that have been significantly impacted during construction or altered by grading, cutting or filling. This report shall specifically address, but not be limited to, soil features such as soil compaction and saturated hydraulic conductivity of the least permeable layer, as well as any other properties that might impact the soil's ability to accept irrigation water. The report shall certify that the disturbed areas are capable of accepting the designed annual hydraulic loading rate. The requested information must be received and acknowledged in writing by the Aquifer Protection Section, 1628 Mail Service Center, Raleigh, NC 27699-1628, prior to any irrigation of wastewater.

# II. PERFORMANCE STANDARDS

- 1. The wastewater irrigation and non-conjunctive reclaimed water utilization facilities shall be effectively maintained and operated at all times so that there is no discharge to the surface waters, nor any contravention of groundwater or surface water standards. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions due to improper operation and maintenance, or failure of the irrigation area to adequately assimilate the wastewater, the Permittee shall take immediate corrective actions including those actions that may be required by the Division, such as the construction of additional or replacement wastewater treatment and disposal facilities.
- 2. The issuance of this permit shall not relieve the Permittee of the responsibility for damages to ground or surface waters resulting from the operation of this facility.
- 3. Effluent limitations shall not exceed those specified in Attachment A.
- 4. Application rates, whether hydraulic, nutrient, or other pollutant shall not exceed those specified in Attachment B.
- 5. The compliance and review boundaries for the specified reclaimed utilization areas (i.e., Phase 1A) are established at the property boundary. Any exceedance of standards at the Compliance or Review Boundary shall require action in accordance with 15A NCAC 02L .0106.
- 6. The compliance and review boundaries for the specified reclaimed utilization areas (i.e., Phase 1C) and the wastewater irrigation areas complying with 15A NCAC 02T .0506(c) (i.e., Phase 1B) are established at the irrigation/utilization area boundaries. Any exceedance of standards at the Compliance or Review Boundary shall require action in accordance with 15A NCAC 02L .0106.
- 7. The Permittee shall apply for a permit modification prior to any sale or transfer of property that affects a compliance boundary to establish a new compliance boundary.
- 8. In accordance with 15A NCAC 02L .0107(d), no wells, other than monitoring wells, shall be constructed within the compliance boundary except as provided by 15A NCAC 02L .0107(g).

- 9. Except as provided for in 15A NCAC 02L .0107(g), the Permittee shall ensure that any landowner who owns land within the compliance boundary, but who is not the Permittee, shall execute and file with the Register of Deeds in the county in which the land is located an easement running with the land that contains the following items:
  - a. A notice of the permit and number or other description as allowed in 15A NCAC 02L .0107(f)(1);
  - b. Prohibits construction and operation of water supply wells within the compliance boundary; and
  - c. Reserves the right of the Permittee or the State to enter the property within the compliance boundary for purposes related to the permit.

The Director may terminate the easement when its purpose has been fulfilled or is no longer needed.

- 10. The facilities permitted herein must be constructed according to the following setbacks:
  - a. The setbacks for reclaimed utilization sites (Phase 1A & Phase 1C) shall be as follows (all distances in feet):

i.	Surface waters not classified SA:	25
ii.	Surface waters classified SA:	100
iii.	Any well with exception to monitoring wells	100

b. The setbacks for the wastewater irrigation sites (Phase 1B) shall be as follows (all distances in feet):

a.	Any habitable residence or place of public assembly under separate ownership:	400
b.	Any habitable residence or place of public assembly owned by the Permittee:	200
c.	Any private or public water supply source:	100
đ.	Surface waters:	100
e.	Groundwater lowering ditches:	100
f.	Surface water diversions:	25
g.	Any well with exception of monitoring wells:	100
h.	Any property line:	150 *
i.	Top of slope of embankments or cuts of two feet or more in vertical height:	15
j.	Any water line from a disposal system:	10
k.	Subsurface groundwater lowering drainage systems:	100
1.	Any swimming pool:	100
m,	Public right of way:	50
n.	Nitrification field:	20
o.	Any building foundation or basement:	15

<sup>\*</sup> Setback may be reduced to zero in accordance with 15A NCAC 2T .0506(c).

c. The setbacks for treatment and storage units shall be as follows (all distances in feet):

1.	Any habitable residence or place of public assembly under separate ownership:	100
ii.	Any private or public water supply source:	100
iii.	Surface waters:	50
iv.	Any well with exception of monitoring wells:	100
v.	Any property line:	50

- 11. The following shall be requirements for the reclaimed water distribution, storage, and utilization facilities (at a minimum Phase 1A & Phase 1C, but may include Phase 1B at the Permittee's discretion):
  - a. All reclaimed water valves, storage facilities, and outlets shall be tagged or labeled to warn the public or employees that the water is not intended for drinking. Where appropriate, such warning shall inform the public or employees to avoid contact with the water.
  - b. All reclaimed water piping, valves, outlets, and other appurtenances shall be color-coded, taped, or otherwise marked to identify the source of the water as being reclaimed water.
    - i. All reclaimed water piping and appurtenances shall be either colored purple (i.e., Pantone 522) and embossed or integrally stamped or marked "CAUTION: RECLAIMED WATER DO NOT DRINK" or be installed with a purple (i.e., Pantone 522) identification tape or polyethylene vinyl wrap. The warning shall be stamped on opposite sides of the pipe and repeated every three feet or less.
    - ii. Identification tape shall be at least three inches wide and have white or black lettering on purple (i.e., Pantone 522) field stating "CAUTION: RECLAIMED WATER DO NOT DRINK." Identification tape shall be installed on top of reclaimed water pipelines, fastened at least every 10 feet to each pipe length and run continuously the entire length of the pipe.
  - c. All reclaimed water valves and outlets shall be of a type, or secured in a manner, that permits operation by authorized personnel only.
  - d. Above-ground hose bibs (i.e., spigots or other hand-operated connections) shall not be present. Hose bibs shall be located in locked below-grade vaults that shall be clearly labeled as being of non-potable quality. As an alternative to the use of locked below-grade vaults with standard hose bibs services, hose bibs, which can only be operated by a special tool or connected to a special hose connection, may be placed in non-lockable underground services boxes clearly labeled as non-potable water.
  - 12. The Permittee shall maintain an active cross-connection control program that shall have the following minimum requirements (at a minimum Phase 1A & Phase 1C, but may include Phase 1B at the Permittee's discretion):
    - a. No direct cross-connections shall be allowed between the reclaimed water and potable water systems.
    - b. A reduced pressure principle backflow preventer, an approved air gap separation, or other device approved by the Division of Environmental Health shall be installed at the potable water service connection to the use area where both reclaimed water and potable water are supplied to a reclaimed water use area. The installation of the reduced pressure principle backflow prevention device shall allow proper testing.
    - c. An air gap separation, approved and regularly inspected by the Permittee shall be provided between the potable water and reclaimed water systems where potable water is used to supplement a reclaimed water system.
  - 13. Reclaimed water distribution lines (at a minimum Phase 1A & Phase 1C, but may include Phase 1B at the Permittee's discretion) shall be located 10 feet horizontally from and 18 inches below any water line where practicable. Where these separation distances cannot be met, the piping and integrity testing procedures shall meet water main standards in accordance with 15A NCAC 18C.
  - 14. Reclaimed water distribution lines (at a minimum Phase 1A & Phase 1C, but may include Phase 1B at the Permittee's discretion) shall not be less than 100 feet from a well unless the piping and integrity testing procedures meet water main standards in accordance with 15A NCAC 18C, but no case shall they be less than 25 feet from a private well or 50 feet from a public well.

- 15. Reclaimed water distribution lines (at a minimum Phase 1A & Phase 1C, but may include Phase 1B at the Permittee's discretion) shall meet the separation distances to sewer lines in accordance with Rule .0305 of Subchapter 02T.
- 16. The wastewater irrigation and reclaimed water utilization systems shall be connected to a rain or moisture sensor that shall indicate when reclaimed water application is not appropriate in accordance with Condition III.4. and III.5. of this permit.
- 17. Areas in Phase 1C affected by significant compaction shall be identified and the soil aerated prior to any irrigation in Zone C with reclaimed water.

# III. OPERATION AND MAINTENANCE REQUIREMENTS

- 1. The facilities shall be properly maintained and operated at all times. The facilities shall be effectively maintained and operated as a non-discharge system to prevent the discharge of any wastewater resulting from the operation of this facility. The Permittee shall maintain an Operation and Maintenance Plan pursuant to 15A NCAC 02T .0507 & .0913 including operational functions, maintenance schedules, safety measures, and a spill response plan.
- 2. Upon classification of the wastewater treatment, wastewater irrigation and non-conjunctive reclaimed water utilization facilities by the Water Pollution Control System Operators Certification Commission (WPCSOCC), the Permittee shall designate and employ a certified operator to be in responsible charge (ORC) and one or more certified operator(s) to be back-up ORC(s) of the facilities in accordance with 15A NCAC 08G .0200. The ORC shall visit the facilities in accordance with 15A NCAC 08G .0200 or as specified in this permit and shall comply with all other conditions specified in these rules.
- 3. A suitable year round vegetative cover shall be maintained such that crop health is optimized, allows for even distribution of effluent, and allows inspection of the wastewater irrigation and non-conjunctive reclaimed water utilization systems.
- 4. Adequate measures shall be taken to prevent wastewater ponding or runoff from the wastewater irrigation and non-conjunctive reclaimed water utilization sites.
- 5. Wastewater irrigation and non-conjunctive reclaimed water utilization shall not be performed during inclement weather or when the ground is in a condition that will cause ponding or runoff.
- 6. All waste application equipment must be tested and calibrated at least once per permit cycle. Records of the calibration must be maintained for five years.
- 7. No type of wastewater other than that from the Briar Chapel Development shall be applied to the wastewater irrigation and non-conjunctive reclaimed water utilization sites.
- 8. An automatically activated standby power source shall be on site and operational at all times capable of powering all essential treatment units. If a generator is employed as an alternate power supply, it shall be tested weekly by interrupting the primary power source.
- No traffic or equipment shall be allowed on the wastewater irrigation and non-conjunctive reclaimed water utilization sites except while installation occurs or while normal maintenance is being performed.
- 10. Public access to the land application sites shall be controlled.
- 11. The residuals generated from these treatment facilities must be disposed / utilized in accordance with 15A NCAC 02T .1100. The Permittee shall maintain a residual management plan pursuant to 15A NCAC 02T .0508 & .0914.

- 12. Diversion or bypassing of the untreated wastewater from the treatment facilities is prohibited.
- 13. Freeboard in the five-day upset pond, central storage pond and east storage pond shall not be less than two (2) feet at any time.
- 14. Gauges to monitor waste levels in the five-day upset pond, central storage pond and east storage pond shall be provided. These gauges shall have readily visible permanent markings indicating the maximum liquid level at the top of the temporary liquid storage volume, minimum liquid level at the bottom of the temporary liquid storage volume, and the lowest point on top of the dam elevations.
- 15. A protective vegetative cover shall be established and maintained on all earthen basin embankments (outside toe of embankment to maximum allowable temporary storage elevation on the inside of the embankment), berms, pipe runs, erosion control areas, and surface water diversions. Trees, shrubs, and other woody vegetation shall not be allowed to grow on the earthen basin dikes or embankments. Earthen basin embankment areas shall be kept mowed or otherwise controlled and accessible.
- 16. All wastewater shall be routed to the five-day holding pond should the limit for fecal coliform (daily maximum concentration of 25 per 100 ml) or turbidity (instantaneous maximum of 10 NTU) be exceeded, until such time that the problems associated with the treatment capability of the wastewater treatment plant have been corrected. The wastewater in the five-day holding pond shall be pumped back to the treatment plant for re-treatment or treated in the five-day pond prior to discharge to the storage pond.
- 17. The permitted wastewater treatment facility shall treat domestic strength wastewater only. The wastewater treatment plant shall not accept any wastewater from commercial facilities deemed industrial (i.e., from processes of trade or business, Laundromats, or vehicle/equipment washes) per Regulation 15A NCAC 2T .0103(20).

### IV. MONITORING AND REPORTING REQUIREMENTS

- 1. Any monitoring (including groundwater, surface water, soil or plant tissue analyses) deemed necessary by the Division to ensure surface and ground water protection will be established and an acceptable sampling reporting schedule shall be followed.
- 2. All laboratory analyses for effluent, ground waters, or surface waters shall be made by a laboratory certified by the Division for the required parameter(s) under 15A NCAC 02H .0800.
- 3. Flow through the treatment facility shall be continuously monitored and daily flow values shall be reported on Form NDMR.

The Permittee shall install and maintain an appropriate flow measurement device consistent with approved engineering and scientific practices to ensure the accuracy and reliability of flow measurement. Flow measurement devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true flow, accurately calibrated at a minimum of once per year, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. The Permittee shall keep records of flow measurement device calibration on file for a period of at least three years. At a minimum, data to be included in this documentation shall be:

- a. Date of flow measurement device calibration,
- b. Name of person performing calibration, and
- c. Percent from true flow.
- 4. The effluent from the subject facilities shall be monitored by the Permittee at the frequencies and locations for the parameters specified in Attachment A.

- 5. The Permittee tracking the amount of wastewater irrigation and non-conjunctive reclaimed water utilization shall maintain adequate records. These records shall include, but are not necessarily limited to, the following information:
  - a. Date of wastewater irrigation and non-conjunctive reclaimed water utilization,
  - b. Volume of wastewater irrigated and reclaimed water utilized,
  - c. Field irrigated/utilized,
  - d. Length of time field is irrigated/utilized,
  - e. Continuous weekly, monthly, and year-to-date hydraulic (inches/acre) loadings for each field,
  - f. Continuous monthly and year-to-date loadings for any non-hydraulic parameter specifically limited in Attachment B for each field,
  - g. Weather conditions, and
  - h. Maintenance of cover crops.
- 6. Freeboard (waste level to the lowest elevation on the top of the embankment) in the 5-day upset pond, central storage pond and east storage pond shall be recorded weekly.
- 7. A record shall be maintained of all residuals removed from this facility. This record shall include the name of the hauler, permit authorizing the disposal or a letter from a municipality agreeing to accept the residuals, date the residuals were hauled, and volume of residuals removed.
- 8. A maintenance log shall be maintained at this facility including but not limited to the following items:
  - a. Visual observations of the plant and plant site.
  - b. Record of preventative maintenance (i.e., changing of equipment, adjustments, testing, inspections and cleanings, etc.).
  - c. Date of calibration of flow measurement device.
  - d. Date and results of power interruption testing on alternate power supply.
- 9. Three (3) copies of all monitoring data [as specified in Conditions IV.3. and IV.4.] on Form NDMR for each PPI and three (3) copies of all operation and disposal records [as specified in Conditions IV.5 and IV.6.] on Form NDAR-1 for every field shall be submitted on or before the last day of the following month. If no activities occurred during the monitoring month, monitoring reports are still required documenting the absence of the activity. All information shall be submitted to the following address:

Division of Water Quality Information Processing Unit 1617 Mail Service Center Raleigh, North Carolina 27699-1617

10. An annual representative soils analysis (Standard Soil Fertility Analysis) shall be conducted on each wastewater irrigation field (i.e., Phase 1B) and the results maintained on file by the Permittee for a minimum of five years. The Standard Soil Fertility Analysis shall include, but is not necessarily limited to, the following parameters:

Acidity	Manganese	Potassium		
Calcium	Percent Humic Matter	Sodium		
Copper	рН	Zinc		
Magnesium	Base Saturation (by calculation)	Phosphorus		
Cation Exchange Capacity	Exchangeable Sodium Percentage			

### 11. Noncompliance Notification:

The Permittee shall report by telephone to 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 any of the following:

- a. Any occurrence at the wastewater treatment facility which results in the treatment of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances including ponding in the wastewater irrigation or reclaimed utilization areas or runoff from the wastewater irrigation or reclaimed utilization areas.
- b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
- c. Any failure of disposal system resulting in a by-pass directly to receiving waters.
- d. Any time that self-monitoring information indicates that the facility has gone out of compliance with its permit limitations including, but not limited to, freeboard measurements, effluent limitations, exceedances of groundwater standards, or overloading of any irrigation or utilization area.

For any emergency that requires immediate reporting (e.g., discharges to surface waters, imminent failure of a storage structure, etc.) outside normal business hours must be reported to the Division's Emergency Response personnel at telephone number (800) 662-7956, (800) 858-0368, or (919) 733-3300. Persons reporting such occurrences by telephone shall also file a written report in letter form within five (5) days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

### V. <u>INSPECTIONS</u>

- . 1. Adequate inspection and maintenance shall be provided by the Permittee to ensure proper operation of the subject facilities.
  - 2. The Permittee or his designee shall inspect the wastewater treatment and disposal facilities to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment, a threat to human health, or a nuisance. The Permittee shall keep an inspection log or summary including at least the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee. This log of inspections shall be maintained by the Permittee for a period of five years from the date of the inspection and shall be made available upon request to the Division or other permitting authority.
  - 3. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the disposal site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be maintained under the terms and conditions of this permit, and may obtain samples of groundwater, surface water, or leachate.

### VI. GENERAL CONDITIONS

- 1. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.
- 2. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.
- 3. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data. No variances to applicable rules governing the construction and / or operation of the permitted facilities are granted unless specifically requested and granted in this permit.
- 4. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state, and federal) that have jurisdiction. Of particular concern to the Division are applicable river buffer rules in 15A NCAC 02B .0200, erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 02B .0200 and 02H .0500.
- 5. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division on official Division form(s), documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved. The Permittee of record shall remain fully responsible for compliance until a permit is issued to the new owner.
- 6. The Permittee shall retain a set of approved plans and specifications for the life of the facilities permitted herein.
- 7. The Permittee shall maintain this permit until all permitted facilities herein are properly closed or permitted under another permit issued by the appropriate permitting authority.
- 8. The Permittee must pay the annual fee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit pursuant to 15A NCAC 02T .0105(e).

Permit issued this the 18th day of May 2009

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Coleen W Sullins, Director

Division of Water Quality

By Authority of the Environmental Management Commission

Permit Number WQ0028552

Permit No. WQ0028552 May 18, 2009

ENGINEER'S CERTIFICATION	
Partial Final	
I,	, as a duly registered Professional Engineer in the State to observe (periodically, weekly, full time) the construction of
Project Name	Location and County
observation of the construction such that t	best of my abilities, due care and diligence was used in the he construction was observed to be built within substantial approved plans and specifications, and other supporting
Signature	Registration No.
Date	

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# ATTACHMENT A - LIMITATIONS AND MONITORING REQUIREMENTS

Permit Number: WQ0028552

Version: 1.3

# PPI 001 - WWTF Effluent

EFFLUENT CHARACTERISTICS			MONITORING REQUIREMENTS								
Parameter Description - PCS Code	Monthly Average		Monthly Geometric Mean		Daily Minimum		Daily Maximum		Measurement Frequency	Sample Type	
BOD, 5-Day (20 Deg. C) - 00310	10	mg/l			***************************************		15	mg/l	2 x Month	Composite	
Chloride (as Cl) - 00940								-	3 x Year <sup>2</sup>	Composite	
Chlorine, Total Residual – 50060									5 x Week	Grab	
Coliform, Fecal MF, M-FC Broth,44.5C - 31616			14	#/100ml			25	#/100ml	2 x Month 1	Grab	
Flow, in conduit or thru treatment plant - 50050	316,412 3	GPD							Continuous	Recording	
Nitrogen, Ammonia Total (as N) - 00610	4	mg/l			***************************************		6	mg/l	2 x Month	Composite	
Nitrogen, Nitrate Total (as N) - 00620									2 x Month	Composite	
ptt - 00400					6	s.u.	9	S.U.	5 x Week	Grab	
Solids, Total Dissolved - 70300		<u></u>		.,,	***************************************				3 x Year <sup>2</sup>	Composite	
Solids, Total Suspended - 00530 - Summer	5	mg/l					10	mg/l	2 x Month	Composite	
Turbidity, HCH Turbidineter - 00076							10	ntu	Continuous	Recording	

<sup>1.</sup> Monthly average for Fecal Coliform shall a geometric mean,

 <sup>3</sup> x Year monitoring shall be conducted in March, July & November.
 The monthly average daily flow is limited to 316,412 GPD due to available wet weather storage capacity.

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# ATTACHMENT B - APPROVED LAND APPLICATION SITES AND LIMITATIONS Permit Number: WQ0028552 Briar Chapel Utilities, LLC - Briar Chapel Development

Version: 1.3

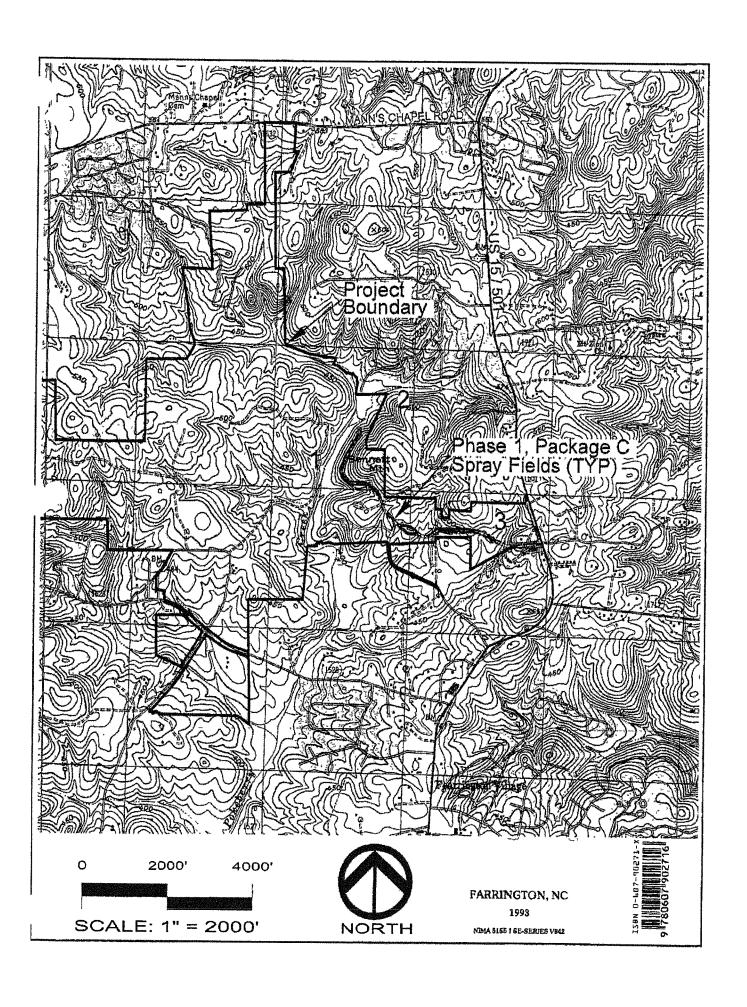
	IRRIGATION /	APPLICATION LIMITATIONS								
Field	Owner	County	Latitude	Longitude	Net Acreage	Dominant Soil Series	Parameter	Hourly Rate	Yearly Max	Units
B-IA	Briar Chapel Utilities LLC	Chatham	35° 49' 28"	-79° 05' 58"	9.90	Wedowce	01284 - Application Surface Irrigation	0.10	37.31	inches
B-1B	Briar Chapel Utilities LLC	Chatham	35° 49' 25"	-79° 06' 05"	1.70	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
B-2A	Briar Chapel Utilities LLC	Chatham	35° 49' 22"	-79° 06' 15"	0.30	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
B-3B	Briar Chapel Utilities LLC	Chatham	35° 49' 36"	-79° 06' 11"	0.20	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
B-3C	Briar Chapel Utilities LLC	Chatham	35° 49' 41"	-79° 06' 11"	0.20	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
Β-4Λ	Briar Chapel Utilities LLC	Chatham	35° 49' 42"	-79° 06' 17"	0.60	Wedowce	01284 - Application Surface Irrigation	0.10	37.31	inches
B-5A	Briar Chapel Utilities LLC	Chatham	35° 49' 07"	-79° 06' 34"	0.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
B-6A	Briar Chapel Utilities LLC	Chatham	35° 49' 07"	-79° 06' 31"	1.10	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
B-7A	Briar Chapel Utilities LLC	Chatham	35° 49' 59"	-79° 06' 28"	2.30	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
B-7B	Briar Chapel Utilities LLC	Chatham	35° 50' 16"	-79° 06' 32"	0.60	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
B-8A	Briar Chapel Utilities LLC	Chatham	35° 50' 14"	-79° 06' 26"	0.10	Wedowce	01284 - Application Surface Irrigation	0.10	37.31	inches
B-8B	Briar Chapel Utilities LLC	Chathain	35° 50' 32"	-79° 06' 27"	1.90	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
B-8D	Briar Chapel Utilities LLC	Chatham	35° 50' 25"	-79° 06' 25"	0.70	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
B-8E	Briar Chapel Utilities LLC	Chatham	35° 50' 37"	-79° 06' 22"	0.50	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
B-9A	Briar Chapel Utilities LLC	Chatham	35° 50' 42"	-79° 06' 26"	1,10	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
В-9С	Briar Chapel Utilities LLC	Chatham	35° 50' 41"	-79° 06' 20"	0.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-IA	Briar Chapel Utilities LLC	Chatham	35° 48' 35"	-79° 06' 47"	8.00	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-2A	Briar Chapel Utilities LLC	Chatham	35° 48' 45"	-79° 06' 38"	1.40	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-2B	Briar Chapel Utilities LLC	Chathain	35° 48' 44"	-79° 06′ 35″	0.90	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-2C	Briar Chapel Utilities LLC	Chatham	35° 48' 38"	-79° 06' 35"	6.10	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-2D	Briar Chapel Utilities LLC	Chatham	35° 48' 41"	-79° 06' 36"	1.80	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-3A	Briar Chapel Utilities LLC	Chatham	35° 48' 52"	-79° 06' 55"	0.90	Wedowec	01284 - Application Surface Irrigation	0.10	19.95	inches
C-3B	Briar Chapel Utilities LLC	Chatham	35° 48' 50"	-79° 06' 50"	0.80	Wedowee	01284 - Application Surface Irrigation	0,10	19.95	inches
C-3C	Briar Chapel Utilities LLC	Chatham	35° 48' 47"	-79° 06' 49"	0.40	Wedowee	01284 - Application Surface Irrigation	0.10	19.95	inches

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C-3D	Briar Chapel Utilities LLC	Chatham	35° 48' 43"	-79° 06' 46"	0.40	Wedowee	01284 - Application Surface Irrigation	0.10	19.95	inches
C-3E	Briar Chapel Utilities LLC	Chatham	35° 48' 50"	-79° 06' 53"	9.80	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-3F	Briar Chapel Utilities LLC	Chatham	35° 48' 42"	-79° 06' 44"	3.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-5A	Briar Chapel Utilities LLC	Chatham	35° 49' 05"	-79° 06' 25"	4.10	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-6A	Briar Chapel Utilities LLC	Chatham	35° 49' 10"	-79° 06' 01"	0.50	Rion	01284 - Application Surface Irrigation	0.10	19.95	inches
C-6B	Briar Chapel Utilities LLC	Chatham	35° 49' 10"	-79° 06' 54"	0.10	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-6C	Briar Chapel Utilities LLC	Chatham	35° 49' 13"	-79° 06' 58"	0.20	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-6D	Briar Chapel Utilities LLC	Chatham	35° 49' 10"	-79° 06′ 58″	0.70	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-9A	Briar Chapel Utilities LLC	Chathain	35° 49' 21"	-79° 07' 11"	4.20	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-9B	Briar Chapel Utilities LLC	Chatham	35° 49' 15"	-79° 07' 09"	3,20	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-12A	Briar Chapel Utilities LLC	Chatham	35° 49' 29"	-79° 07' 23"	2.00	Rion	01284 - Application Surface Irrigation	0.10	19.95	înches
C-12B	Briar Chapel Utilities LLC	Chatham	35° 49' 28"	-79° 07' 12"	2.60	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-12C	Briar Chapel Utilities LLC	Chatham	35°`49' 25"	-79° 07' 19"	3.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-12D	Briar Chapel Utilities LLC	Chatham	35° 49′ 18″	-79° 07' 15"	0.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-13A	Briar Chapel Utilities LLC	Chatham	35° 49' 26"	-79° 07' 00"	0.40	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-13B	Briar Chapel Utilities LLC	Chatham	35° 49' 29"	-79° 06′ 59″	1.00	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-13C	Briar Chapel Utilities LLC	Chatham	35° 49′ 33"	-79° 07' 03"	1.10	Rion	01284 - Application Surface Irrigation	0.10	19.95	inches
C-13D	Briar Chapel Utilities LLC	Chatham	35° 49' 36"	-79° 06' 59"	1.00	Rion	01284 - Application Surface Irrigation	0.10	19.95	inches
C-13E	Briar Chapel Utilities LLC	Chatham	35° 49′ 31″	-79° 06' 59"	2.70	Pacolet	01284 - Application Surface Irrigation	0.10	37.31	inches
C-13F	Briar Chapel Utilities LLC	Chatham	35° 49' 28"	-79° 07' 03"	6.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-15A	Briar Chapel Utilities LLC	Chatham	35° 49' 32"	-79° 06' 46"	3.50	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-15B	Briar Chapel Utilities LLC	Chatham	35° 49' 38"	-79° 06' 40"	0.90	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
C-15C	Briar Chapel Utilities LLC	Chatham	35° 49' 25"	-79° 06' 38"	0.90	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-15D	Briar Chapel Utilities LLC	Chathain	35° 49' 32"	-79° 06' 50"	0.90	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-15E	Briar Chapel Utilities LLC	Chatham	35° 49' 40"	-79° 06' 45"	1.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-16A	Briar Chapel Utilities LLC	Chatham	35° 49' 25"	-79° 06′ 26″	6.20	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
C-20A	Briar Chapel Utilities LLC	Chatham	35° 49' 48"	-79° 07' 00"	0.40	Helena	01284 - Application Surface Irrigation	0.10	37.31	inches
E-1A	Briar Chapel Utilities LLC	Chatham	35° 49' 21"	-79° 06' 01"	10.40	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
E-2A	Briar Chapel Utilities LLC	Chatham	35° 49' 16"	-79° 06' 49"	9.00	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches

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E-3A	Briar Chapel Utilities LLC	Chatham	35° 49' 13"	-79° 05' 30"	0.80	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
E-3B	Briar Chapel Utilities LLC	Chatham	35° 49' 11"	-79° 05' 22"	2.20	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
E-3C	Briar Chapel Utilities LLC	Chatham	35° 49' 10"	~7 <b>9</b> ° 05' <b>27</b> "	3.50	Wedowee	01284 - Application Surface Irrigation	0.10	37.31	inches
E-3D	Briar Chapel Utilities LLC	Chatham	35° 49' 12"	-79° 05' 39"	0.90	Rion	01284 - Application Surface Irrigation	0.10	37.31	inches
E-4A	Briar Chapel Utilities LLC	Chatham	35° 49' 16"	-79° 05' 35"	3.10	1 lelena	01284 - Application Surface Irrigation	0.10	19.95	inches
E-4B	Briar Chapel Utilities LLC	Chatham	35° 49' 18"	-79° 05' 18"	2.90	Helena	01284 - Application Surface Irrigation	0.10	19.95	inches
E-4C	Briar Chapel Utilities LLC	Chatham	35° 49′ 16"	-79° 05' 26"	9.30	Rion -	01284 - Application Surface Irrigation	0.10	37.31	inches
Phase IC	Briar Chapel Utilities LLC	Chatham	35° 49' 14"	-79° 05′ 46"	9.48	Wedowee	01284 - Application Surface Irrigation	0.10	30.84	inches
TOTAL					155.68					





# North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

September 12, 2014

William Mumford – Assistant Secretary Briar Chapel Utilities, LLC 16 Windy Knoll Circle Chapel Hill, North Carolina 27516

Subject: Permit No. WQ0028552

Briar Chapel Development Reclaimed Water Generation, Conjunctive Reclaimed Water Utilization, Non-Conjunctive Reclaimed Water Utilization, and Wastewater Irrigation System

Chatham County

Dear Mr. Mumford:

In accordance with your permit major modification request received June 2, 2014, and subsequent additional information received August 7, 2014 and August 28, 2014, we are forwarding herewith Permit No. WQ0028552 dated September 12, 2014, to Briar Chapel Utilities, LLC for the additional construction and continued operation of the subject facilities.

Modifications to the subject permit include an approval for construction of Package G; conjunctive reclaimed water utilization consisting of irrigation on additional residential lots and formal parks within Briar Chapel Development, and elimination of an existing non-conjunctive field (Phase 1-A, field C-5A). Please note that PPI 002 is deleted and WQ01paremeter to report the total volume of reclaimed water used for conjunctive utilization is moved to PPI 001.

This permit shall be effective from the date of issuance until March 31, 2019, shall void Permit No. WQ0028552 issued October 7, 2013, and shall be subject to the conditions and limitations as specified therein. Please pay particular attention to the monitoring requirements listed in Attachments A and B for they may differ from the previous permit issuance. Failure to establish an adequate system for collecting and maintaining the required operational information shall result in future compliance problems.

For your convenience, customized electronic copies of your facility's NDMR and NDAR-1 reporting forms are available for download at: <a href="http://portal.ncdenr.org/web/wq/aps/lau/reporting">http://portal.ncdenr.org/web/wq/aps/lau/reporting</a>.

If any parts, requirements or limitations contained in this permit are unacceptable, the Permittee has the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request shall 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 at 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made, this permit shall be final and binding.

Mr. Mumford September 12, 2014 Page 2 of 2

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Chonticha McDaniel at (919) 807-6337 or chonticha.mcdaniel@ncdenr.gov.

Sincerely,

Thomas A. Reeder, Director Division of Water Resources

cc: Chatham County Health Department (Electronic Copy)
Raleigh Regional Office, Water Quality Regional Operations Section
Mark P. Ashness, PE – CE Group (Electronic Copy)
Beth Buffington, PWSS – Protection and Enforcement Branch (Electronic Copy)
Central Files
Digital Permit Archive (Electronic Copy)

### NORTH CAROLINA

#### ENVIRONMENTAL MANAGEMENT COMMISSION

### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

### RALEIGH

RECLAIMED WATER GENERATION, CONJUNCTIVE RECLAIMED WATER UTILIZATION, NON-CONJUNCTIVE RECLAIMED WATER UTILIZATION, & WASTEWATER IRRIGATION SYSTEM PERMIT

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, LLC

Chatham County

### FOR THE

operation of a wastewater treatment, non-conjunctive reclaimed water, conjunctive reclaimed water and wastewater irrigation facility consisting of the:

continued operation of a 250,000 gallon per day (GPD) extended aeration wastewater treatment plant (i.e., Phase A) consisting of: dual static screens for grit removal (serving Phases A, B and C); a manually cleaned bar screen; a 75,400 gallon aerated flow equalization basin with two 225 gallon per minute (GPM) variable speed pumps each with an influent flow meter and one 7.5 horsepower (hp) aerator; two 31,500 gallon anoxic chambers each with two 3 hp mixers; two 189,000 gallon aeration basins each with two 10 hp aerators; two 31,500 gallon clarifiers each with one variable speed sludge return pump; a 75,400 gallon sludge holding basin with one variable speed decanting pump and one 7.5 hp aerator; a 10,730 gallon chlorine contact chamber with two variable speed chlorine injection pumps; a 16,800 gallon mudwell with two 200 GPM return pumps; two 90 square foot (ft²) tertiary filters; a 13,800 gallon clearwell with four 675 GPM backwash pumps (pumps serve Phases A, B and C); dual banks of ultraviolet (UV) modules each with 10 bulbs; a 6,850 gallon dechlorination chamber with two air diffusers; an effluent flow measuring device (serving Phases A, B and C); an effluent turbidimeter (serving Phases A, B and C); and all associated piping, valves and appurtenances; the

continued operation of: a 3.5 million gallon (MG) clay lined five day upset pond; a five day upset return pump station with two 400 GPM submersible pumps and audible/visual high-water alarms; and a 21.3 MG clay lined central storage pond with dual 2,000 GPM flooded suction pumps; the

continued operation of portions of the Phase 1-A non-conjunctive reclaimed water utilization system consisting of: portions of eight irrigation zones (E-1A, E-2A, E-3B, E-3C, E-3D, E-4A, E-4B and E-4C) and irrigation zone E-3A comprising approximately 31.9 acres with a hydraulic capacity of approximately 79,240 GPD; and all associated piping, valves and appurtenances; the

continued operation of portions of the Phase 1-C non-conjunctive reclaimed water utilization system consisting of: approximately 7.5 acres of the permitted 9.48 acre irrigation zone C-1 with a hydraulic capacity of approximately 17,195 GPD; and all associated piping, valves and appurtenances; the

continued operation of portions of the Phase 1-E conjunctive reclaimed water utilization system consisting of: three irrigation zones (E-1, E-2 and E-4) comprising 9.2 acres; and all associated piping, valves and appurtenances; the

continued operation of portions of the Phase 1-F conjunctive reclaimed water utilization system consisting of: portions of two irrigation zones (F-2 and F-3) and irrigation zone F-4 comprising approximately 3.84 acres; and all associated piping, valves and appurtenances; the

construction and operation of two additional 250,000 GPD extended aeration wastewater treatment plants to be constructed (i.e., Phases B and C) with each phase consisting of: a manually cleaned bar screen; a 75,400 gallon aerated flow equalization basin with two 225 GPM variable speed pumps each with an influent flow meter and one 7.5 hp aerator; two 31,500 gallon anoxic chambers each with two 3 hp mixers; two 189,000 gallon aeration basins each with two 10 hp aerators; two 31,500 gallon clarifiers each with one variable speed sludge return pump; a 75,400 gallon sludge holding basin with one variable speed decanting pump and one 7.5 hp aerator; a 10,730 gallon chlorine contact chamber with two variable speed chlorine injection pumps; a 16,800 gallon mudwell with two 200 GPM return pumps; two 90 ft<sup>2</sup> tertiary filters; dual banks of ultraviolet (UV) modules each with 10 bulbs; a 6,850 gallon dechlorination chamber with two air diffusers; and all associated piping, valves and appurtenances; the

construction and operation of the remaining portions of the Phase 1-A non-conjunctive reclaimed water utilization system consisting of: portions of eight irrigation zones (E-1A, E-2A, E-3B, E-3C, E-3D, E-4A, E-4B and E-4C), and 30 irrigation zones (C-1A through C-20A) comprising approximately 82.9 acres with a hydraulic capacity of approximately 205,686 GPD; a 14.1 MG clay lined east storage pond with dual 1,200 GPM vertical turbine pumps; a single 600 GPM temporary booster pump station and all associated piping, valves and appurtenances; the

construction and operation of the Phase 1-B wastewater irrigation system consisting of: 16 irrigation zones (B-1A through B-9C) comprising approximately 22.0 acres with a hydraulic capacity of approximately 55,508 GPD; and all associated piping, valves and appurtenances; the

construction and operation of the remaining portions of the Phase 1-C non-conjunctive reclaimed water utilization system consisting of: approximately 1.98 acres of irrigation zone C-1 with a hydraulic capacity of approximately 4,540 GPD; and all associated piping, valves and appurtenances; the

construction and operation of the Phase 1-D non-conjunctive reclaimed water utilization system consisting of: 22 irrigation zones (D-2 through D-26) comprising approximately 16.89 acres with a hydraulic capacity of approximately 35,527 GPD; and all associated piping, valves and appurtenances; the

construction and operation of portions of the Phase 1-E conjunctive reclaimed water utilization system consisting of: two irrigation zones (E-3 and E-5) comprising 2.8 acres; and all associated piping, valves and appurtenances;

construction and operation of the Phase 1-F conjunctive reclaimed water utilization system consisting of: one irrigation zone (F-1) and portions of two irrigation zones (F-2 and F-3) comprising 11.26 acres; and all associated piping, valves and appurtenances; and the

construction and operation of the Phase 1-G conjunctive reclaimed water utilization system consisting of: 9 irrigation zones (G-1 through G-9) comprising 26.4 acres; and all associated piping, valves and appurtenances;

to serve Briar Chapel Development, with no discharge of wastes to surface waters, pursuant to the application received June 2, 2014, and subsequent additional information received by the Division of Water Resources, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

This permit shall be effective from the date of issuance until March 31, 2019, shall void Permit No. WQ0028552 issued October 7, 2013, and shall be subject to the following specified conditions and limitations:

# I. SCHEDULES

- 1. Prior to commencing initial irrigation activities, an updated soil scientist site evaluation shall be submitted for all areas that have been significantly impacted during construction or altered by grading, cutting or filling. For conjunctive utilization areas, this report shall address soil compaction and the soil's ability to accept the designed hourly precipitation rate. For non-conjunctive utilization areas, this report shall specifically address, but not be limited to, soil features such as soil compaction and saturated hydraulic conductivity of the least permeable layer, as well as any other properties that might impact the soil's ability to accept irrigation water. The report shall certify that the disturbed areas are capable of accepting the designed annual hydraulic loading rate. The requested information must be received and acknowledged in writing by the Raleigh Regional Office, 1628 Mail Service Center, Raleigh, NC 27699-1628.
- 2. The old farm gullies present in Phase 1-A, Field C-15C shall be properly filled with suitable soil material prior to its operation.
- 3. In accordance with 15A NCAC 02T .0116, upon completion of construction and prior to operation of any of the facilities permitted herein, a certification (attached) shall be submitted from a licensed North Carolina Professional Engineer certifying that the permitted facility has been installed in accordance with this permit, Division approved plans and specifications, and other supporting documentation, including the location of all monitoring wells as applicable. If this project is to be completed in phases and partially certified, the Permittee shall retain the responsibility to track further construction approved under the same permit, and shall provide a final certificate of completion once the entire project has been completed. Mail the Certification to the Division of Water Resources, Water Quality Permitting Section, 1636 Mail Service Center, Raleigh, NC 27699-1636.
- 4. The Raleigh Regional Office, telephone number (919) 791-4200, shall be notified at least 48 hours in advance (excluding weekends and holidays) of operation of any installed facilities such that an inplace inspection can be made. Notification to the regional supervisor shall be made from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.
- 5. No later than six months prior to the expiration of this permit, the Permittee shall request renewal of this permit on official Division forms. Upon receipt of the request, the Division will review the adequacy of the facilities described therein, and if warranted, will renew the permit for such period of time and under such conditions and limitations as it may deem appropriate. Please note Rule 15A NCAC 02T .0105(d) requires an updated site map to be submitted with the permit renewal application.

# II. PERFORMANCE STANDARDS

- The subject non-discharge facilities shall be effectively maintained and operated at all times so there
  is no discharge to surface waters, nor any contravention of groundwater or surface water standards.
  In the event the facilities fail to perform satisfactorily, including the creation of nuisance conditions
  due to improper operation and maintenance, or failure of the utilization areas to adequately assimilate
  the reclaimed water, the Permittee shall take immediate corrective actions including Division required
  actions, such as the construction of additional or replacement wastewater treatment, disposal, or
  utilization facilities.
- 2. This permit shall not relieve the Permittee of their responsibility for damages to groundwater or surface water resulting from the operation of this facility.
- 3. Effluent limitations shall not exceed those specified in Attachment A.

- 4. Application rates shall not exceed those specified in Attachment B.
- 5. The irrigation/utilization system (excluding conjunctive utilization sites) shall be connected to a rain or moisture sensor, which shall indicate when utilization is not appropriate in accordance with Conditions III.6 and III.7 of this permit.
- 6. The following shall be requirements for the reclaimed water distribution, storage, and utilization facilities (at a minimum Phases 1-A, 1-C, 1-D, 1-E, 1-F and 1-G, but may include Phase 1-B at the Permittee's discretion):
  - a. All reclaimed water valves, storage facilities and outlets shall be tagged or labeled to warn the public or employees that reclaimed water is not intended for drinking. Where appropriate, such warning shall inform the public or employees to avoid contact with reclaimed water.
  - b. All reclaimed water piping, valves, outlets and other appurtenances shall be color-coded, taped or otherwise marked to identify the source of the water as being reclaimed water.
    - i. All reclaimed water piping and appurtenances shall be either colored purple (i.e., Pantone 522) and embossed or integrally stamped or marked "CAUTION: RECLAIMED WATER DO NOT DRINK" or be installed with a purple (i.e., Pantone 522) identification tape or polyethylene vinyl wrap. The warning shall be stamped on opposite sides of the pipe and repeated every three feet or less.
    - ii. Identification tape shall be at least three inches wide and have white or black lettering on purple (i.e., Pantone 522) field stating "CAUTION: RECLAIMED WATER DO NOT DRINK." Identification tape shall be installed on reclaimed water pipelines in a visible manner, fastened at least every 10 feet to each pipe length and run continuously the entire length of the pipe.
    - iii. Existing underground distribution systems retrofitted for the purpose of distributing reclaimed water shall be taped or otherwise identified as noted above. This identification need not extend the entire length of the distribution system, but shall be incorporated within 10 feet of crossing any potable water supply line or sanitary sewer line.
  - c. All reclaimed water valves and outlets shall be of a type, or secured in a manner, that permits operation by authorized personnel only.
  - d. Hose bibs shall be located in locked, below grade vaults that shall be labeled as being of non-potable quality. As an alternative to the use of locked vaults with standard hose bib services, other locking mechanisms such as hose bibs which can only be operated by a tool may be placed above ground and labeled as non-potable water.
- 7. No direct cross-connections shall be allowed between reclaimed water (at a minimum Phases 1-A, 1-C, 1-D, 1-E, 1-F, and 1-G but may include Phase 1-B at the Permittee's discretion) and potable water systems, unless such connection has been approved by the Department pursuant to 15A NCAC 18C .0406.
- 8. Reclaimed water distribution lines (at a minimum Phases 1-A, 1-C, 1-D, 1-E, 1-F, and 1-G but may include Phase 1-B at the Permittee's discretion) shall be located at least 10 feet horizontally from and 18 inches below any water line where practicable. Where these separation distances cannot be met, the piping and integrity testing procedures shall meet water main standards in accordance with 15A NCAC 18C.
- 9. Reclaimed water distribution lines (at a minimum Phases 1-A, 1-C, 1-D, 1-E, 1-F, and 1-G but may include Phase 1-B at the Permittee's discretion) shall not be less than 100 feet from a well unless the piping and integrity testing procedures meet water main standards in accordance with 15A NCAC 18C, but in no case shall they be less than 25 feet from a private well or 50 feet from a public well.

- 10. Reclaimed water distribution lines (at a minimum Phases 1-A, 1-C, 1-D, 1-E, 1-F, and 1-G but may include Phase 1-B at the Permittee's discretion) shall be located at least two feet horizontally from and 18 inches above any sewer line where practicable. Where these separation distances cannot be met, the piping and integrity testing procedures shall meet water main standards in accordance with 15A NCAC 18C.
- 11. The compliance and review boundaries for Phase 1-A non-conjunctive utilization areas are established at the property boundary. Any exceedance of standards at the compliance or review boundary shall require action in accordance with 15A NCAC 02L .0106.
- 12. The compliance and review boundaries for Phase 1-B [wastewater irrigation complying with 15A NCAC 02T .0506(c)], 1-C, 1-D, 1-E, 1-F, and 1-G are established at the irrigation/utilization area boundaries. Any exceedance of standards at the compliance or review boundary shall require action in accordance with 15A NCAC 02L .0106.
- 13. The Permittee shall apply for a permit modification to establish a new compliance boundary prior to any sale or transfer of property affecting a compliance boundary.
- 14. In accordance with 15A NCAC 02L .0107(d), no wells, excluding Division approved monitoring wells, shall be constructed within the compliance boundary except as provided for in 15A NCAC 02L .0107(g).
- 15. Except as provided for in 15A NCAC 02L .0107(g), the Permittee shall ensure any landowner who is not the Permittee and owns land within the compliance boundary shall execute and file with the Chatham County Register of Deeds an easement running with the land containing the following items:
  - a. A notice of the permit and number or other description as allowed in 15A NCAC 02L .0107(f)(1);
  - b. Prohibits construction and operation of water supply wells within the compliance boundary; and
  - c. Reserves the right of the Permittee or the State to enter the property within the compliance boundary for purposes related to the permit.

The Director may terminate the easement when its purpose has been fulfilled or is no longer needed.

- 16. The facilities permitted herein shall be constructed according to the following setbacks:
  - a. The setbacks for the Phase 1-A, 1-C, 1-D, 1-E, 1-F and 1-G conjunctive reclaimed utilization sites shall be as follows (all distances in feet):

i.	Surface waters not classified SA:	25
ii.	Surface waters classified SA:	100
iii.	Any well with exception to monitoring wells:	100

b. The setbacks for the Phase 1-B wastewater irrigation sites shall be as follows (all distances in feet):

i.	Any habitable residence or place of public assembly under separate ownership:	400
ii.	Any habitable residence or place of public assembly owned by the Permittee:	200
iii.	Any private or public water supply source:	100
iv.	Surface waters;	100.
v.	Groundwater lowering ditches:	100
vi.	Surface water diversions:	25
vii.	Any well with exception of monitoring wells:	100
viii	. Any property line:	0 1
ix.	Top of slope of embankments or cuts of two feet or more in vertical height:	15

x. Any water line from a disposal system:	10
xi. Subsurface groundwater lowering drainage systems:	100
xii. Any swimming pool:	100
xiii. Public right of way:	50
xiv. Nitrification field:	20
xv. Any building foundation or basement:	15

The Permittee is complying with 15A NCAC 02T .0506(c), therefore the setback to property lines is reduced from 150 feet to 0 feet.

c. The setbacks for treatment units shall be as follows (all distances in feet):

i.	Any habitable residence or place of public assembly under separate ownership:	100
ii.	Any private or public water supply source:	100
iii,	Surface waters:	50
iv.	Any well with exception of monitoring wells:	100
v.	Any property line:	50

17. Areas in Phases 1-C and 1-D affected by significant compaction shall be identified and the soil aerated prior to any irrigation within these utilization sites listed in Attachment B.

### III. OPERATION AND MAINTENANCE REQUIREMENTS

- 1. The facilities shall be properly maintained and operated at all times. The facilities shall be effectively maintained and operated as a non-discharge system to prevent the discharge of any reclaimed water or partially treated effluent resulting from the operation of this facility.
- 2. The Permittee shall maintain an Operation and Maintenance Plan pursuant to 15A NCAC 02U .0801, which at a minimum shall include the following:
  - a. Description of the system in sufficient detail to show what operations are necessary for the system to function and by whom the functions will be conducted;
  - b. A map of all distribution lines and record drawings of all utilization systems under the Permittee's control;
  - c. Description of anticipated maintenance activities:
  - d. Include provisions for safety measures including restriction of access to sites and equipment; and
  - e. Spill control provisions including response to upsets and bypasses including control, containment, remediation, and contact information for plant personnel, emergency responders and regulatory agencies.
- 3. Upon the Water Pollution Control System Operators Certification Commission's (WPCSOCC) classification of the subject non-discharge facilities, in accordance with 15A NCAC 08G .0200 the Permittee shall designate and employ a certified operator in responsible charge (ORC) and one or more certified operator(s) as back-up ORC(s). The ORC or their back-up shall visit the facilities in accordance with 15A NCAC 08G .0200, and shall comply with all other conditions specified in the previously cited rules.
- 4. An operator certified by the Water Pollution Control System Operators Certification Commission (WPCSOCC) of a grade equivalent or greater than the facility classification shall be on call 24 hours per day.

- 5. A suitable year round vegetative cover shall be maintained on irrigation sites at all times, such that crop health is optimized, allows for even distribution of reclaimed water, and allows inspection of the irrigation system.
- 6. Adequate measures shall be taken to prevent reclaimed water ponding in or runoff from the irrigation sites.
- 7. Irrigation shall not be performed during inclement weather or when the ground is in a condition that will cause ponding or runoff.
- 8. All wastewater irrigation and non-conjunctive reclaimed water irrigation equipment shall be tested and calibrated at least once per permit cycle. Calibration records shall be maintained at the facility for a period of no less than five years, and shall be made available to the Division upon request.
- 9. Only reclaimed water generated at Briar Chapel Development shall be irrigated/utilized in accordance with this permit.
- 10. An automatically activated standby power source capable of powering all essential treatment units shall be on site and operational at all times. If a generator is employed as an alternate power supply, it shall be tested weekly by interrupting the primary power source.
- 11. No automobiles or machinery shall be allowed on the wastewater irrigation site (Phase 1-B) except during equipment installation or while maintenance is being performed.
- 12. Public access to the wastewater irrigation sites (Phase 1-B), wastewater treatment facility, and five day upset pond shall be prohibited.
- 13. Public access to reclaimed water utilization sites (Phases 1-A, 1-C, 1-D, 1-E, 1-F, and 1-G) shall be controlled during active site use. Such controls may include the posting of signs showing the activities being conducted at each site.
- 14. Diversion or bypassing of untreated or partially treated wastewater from the treatment facilities is prohibited.
- 15. Freeboard in the five-day upset pond, central storage pond, and east storage pond shall not be less than two feet at any time.
- 16. A gauge to monitor waste levels in the five-day upset pond, central storage pond, and east storage pond shall be provided. This gauge shall have readily visible permanent markings at inch or tenth of a foot increments.
- 17. A protective vegetative cover shall be established and maintained on all earthen embankments (i.e., outside toe of embankment to maximum allowable temporary storage elevation on the inside of the embankment), berms, pipe runs, erosion control areas, and surface water diversions. Trees, shrubs, and other woody vegetation shall not be allowed to grow on the earthen dikes or embankments. Earthen embankment areas shall be kept mowed or otherwise controlled and accessible.
- 18. All effluent shall be routed to the five day upset pond should the limit for fecal coliform (e.g., daily maximum concentration of 25 colonies per 100 mL) or turbidity (e.g., instantaneous maximum of 10 NTU) be exceeded, until the problems associated with the wastewater treatment plant have been corrected. The wastewater in the five day upset pond shall be pumped back to the treatment plant headworks for re-treatment or treated in the five day upset pond prior to utilization.

- 19. The Permittee shall develop and implement an education program to inform users (including employees) about the proper use of reclaimed water. Educational material shall be provided to all residents and/or other facilities provided with reclaimed water, and these materials shall be maintained consistent with the reclaimed water uses. All educational materials shall be made available to the Division upon request.
- 20. In accordance with 15A NCAC 02U .0501, the Permittee shall provided notification to the public and/or employees about the use of reclaimed water, and that reclaimed water is not intended for drinking. Such notification shall be provided to employees in a language they can understand.
- 21. The residuals generated from the wastewater treatment facilities shall be disposed or utilized in accordance with 15A NCAC 02T .1100. The Permittee shall maintain a residual management plan pursuant to 15A NCAC 02U .0802.
- 22. The subject permitted wastewater treatment facility shall only treat domestic wastewater. The wastewater treatment plant shall not accept any wastewater from commercial facilities deemed industrial (i.e. from processes of trade or business, Laundromats, or vehicle/equipment washes) under 15A NCAC 02T .0103(20).

# IV. MONITORING AND REPORTING REQUIRMENTS

- 1. Any Division required monitoring (including groundwater, plant tissue, soil and surface water analyses) necessary to ensure groundwater and surface water protection shall be established, and an acceptable sampling reporting schedule shall be followed.
- 2. Per 15A NCAC 02H .0800, a Division certified laboratory shall conduct all laboratory analyses for the required effluent, groundwater or surface water parameters.
- 3. Flow through the reclaimed water generating facility shall be continuously monitored, and daily flow values shall be reported on Form NDMR.
  - The Permittee shall install and maintain an appropriate flow measurement device to ensure the accuracy and reliability of flow measurement consistent with accepted engineering and scientific practices. Selected flow measurement devices shall be capable of measuring flows with a maximum deviation of less than ten percent from true flow; accurately calibrated at a minimum of once per year; and maintained to ensure the accuracy of measurements is consistent with the selected device's accepted capability. The Permittee shall maintain records of flow measurement device calibration on file for a period of at least five years. At a minimum, documentation shall include:
  - a. Date of flow measurement device calibration,
  - b. Name of person performing calibration, and
  - c. Percent from true flow.
- 4. The Permittee shall monitor the reclaimed water from the generating facility at the frequencies and locations for the parameters specified in Attachment A.
- 5. The Permittee shall maintain adequate records tracking the amount of conjunctive reclaimed water utilized. Records shall be maintained for a minimum of five years. At minimum, these records shall include the following information for each utilization site listed in Attachment B:
  - a. Date of reclaimed water distributed; and
  - b. Volume of reclaimed water distributed (monthly total).

Monthly tracking records for all conjunctive sites shall be summed and reported on Form NDMR (see Attachment A) under parameter WQ01 (Flow, Reclaimed Water Distributed). This value shall represent the total volume of reclaimed water distributed for conjunctive utilization that month.

- 6. The Permittee shall maintain adequate records tracking the amount of effluent irrigated / non-conjunctive reclaimed water utilized. Records shall be maintained for a minimum of five years. At a minimum, these records shall include the following information for each utilization site listed in Attachment B:
  - a. Date of irrigation / utilization;
  - b. Volume of effluent irrigated / reclaimed water utilized
  - c. Site irrigated/utilized;
  - d. Length of time site is irrigated/utilized;
  - e. Continuous weekly, monthly, and year-to-date hydraulic (inches/acre) loadings;
  - f. Continuous monthly and year-to-date loadings for any non-hydraulic parameter specifically limited in Attachment B;
  - g. Weather conditions; and
  - h. Maintenance of cover crops.
- 7. Freeboard (i.e., waste level to the lowest embankment elevation) in the five-day upset pond, central storage pond, and east storage pond shall be measured to the nearest inch or tenth of a foot, and recorded weekly. Weekly freeboard records shall be maintained at the facility for a period of no less than five years, and shall be made available to the Division upon request.
- 8. Three copies of all monitoring data (as specified in Conditions IV.3., IV.4. and IV.5.) on Form NDMR, and three copies of all operation and disposal/utilization records (as specified in Conditions IV.6. and IV.7.) on Form NDAR-1 shall be submitted on or before the last day of the following month. If no activities occurred during the monitoring month, monitoring reports are still required documenting the absence of the activity. All information shall be submitted to the following address: Division of Water Resources, Information Processing Unit, 1617 Mail Service Center, Raleigh, North Carolina, 27699-1617.
- 9. Pursuant to § 143-215.1C., the Permittee shall provide to its users and the Division of Water Resources an annual report summarizing the performance of the wastewater treatment and utilization facility and the extent to which the facility has violated this permit, or federal or State laws, regulations, or rules related to the protection of water quality. This report shall be prepared on either a calendar or fiscal year basis and shall be provided no later than 60 days after the end of the calendar or fiscal year. Two copies of the annual report provided to the Permittee's users shall be submitted to: Division of Water Resources, Water Quality Permitting Section, 1636 Mail Service Center, Raleigh, North Carolina 27699-1636.
- 10. A record shall be maintained of all residuals removed from this facility. This record shall be maintained at the facility for a period of no less than five years, and shall be made available to the Division upon request. At a minimum, this record shall include:
  - a. Name of the residuals hauler:
  - b. Non-Discharge permit number authorizing the residuals disposal, or a letter from a municipality agreeing to accept the residuals;
  - c. Date the residuals were hauled; and
  - d. Volume of residuals removed.

- 11. A maintenance log shall be maintained at this facility. This log shall be maintained at the facility for a period of no less than five years, and shall be made available to the Division upon request. At a minimum, this log shall include:
  - a. Visual observations of treatment plant and plant site;
  - b. Date of calibration of flow measurement device(s);
  - c. Date and results of power interruption testing on alternate power supply;
  - d. Record of preventative maintenance (e.g., changing/adjusting of equipment, pump and valve maintenance, cross connection control, testing, inspections and cleanings, etc.; and
  - e. Record of all unpermitted releases of reclaimed water to surface water or land surface including date of occurrence, estimated volume of release, cause, and corrective action taken.
- 12. An annual representative soils analysis (i.e., Standard Soil Fertility Analysis) shall be conducted on each wastewater irrigation field in Phase 1-B (See Attachment B). These results shall be maintained at the facility for a period of no less than five years, and shall be made available to the Division upon request. At a minimum, the Standard Soil Fertility Analysis shall include the following parameters:

Acidity	Exchangeable Sodium Percentage	Phosphorus
Base Saturation (by calculation)	Magnesium	Potassium
Calcium	Manganese	Sodium
Cation Exchange Capacity	Percent Humic Matter	Zinc
Copper	pH	

# 13. Noncompliance Notification:

The Permittee shall report by telephone to 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 any of the following:

- a. Any occurrence at the facility resulting in the treatment of significant amounts of wastes that is abnormal in quantity or characteristic, including the known passage of a hazardous substance.
- b. Any process unit failure (e.g., mechanical, electrical, etc.), due to known or unknown reasons, rendering the facility incapable of adequate wastewater treatment.
- c. Any failure resulting in a discharge of reclaimed water directly to surface waters or any unpermitted release of reclaimed water to land surface greater than or equal to 5,000 gallons. Unpermitted releases less than 5,000 gallons to land surface shall be documented by the permittee in accordance with Condition IV.9, but do not require Regional Office notification.
- d. Any time self-monitoring indicates the facilities permitted herein have gone out of compliance with the limitations contained in this permit.
- e. Ponding in or runoff from the reclaimed water utilization sites.

Any emergency requiring immediate reporting (e.g., discharges to surface waters, imminent failure of a storage structure, etc.) outside normal business hours shall be reported to the Division's Emergency Response personnel at telephone number (800) 662-7956, (800) 858-0368, or (919) 733-3300. Persons reporting such occurrences by telephone shall also file a written report in letter form within five days following first knowledge of the occurrence. This report shall outline the actions taken or proposed to be taken to ensure the problem does not recur.

# V. INSPECTIONS

- 1. The Permittee shall provide adequate inspection and maintenance to ensure proper operation of the wastewater treatment, irrigation, and utilization facilities.
- 2. The Permittee or their designee shall inspect the wastewater treatment, irrigation, and utilization facilities to prevent malfunction, facility deterioration and operator errors resulting in discharges, which may cause the release of wastes to the environment, a threat to human health or a public nuisance. The Permittee shall maintain an inspection log that includes, at a minimum, the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken. The Permittee shall maintain this inspection log for a period of five years from the date of the inspection, and this log shall be made available to the Division upon request.
- 3. Any duly authorized Division representative may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the wastewater treatment, irrigation, and utilization facilities permitted herein at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records required to be maintained under the terms and conditions of this permit, and may collect groundwater, surface water or leachate samples.

# VI. GENERAL CONDITIONS

- 1. Failure to comply with the conditions and limitations contained herein may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statutes 143-215.6A to 143-215.6C.
- 2. This permit shall become voidable if the permitted facilities are not constructed in accordance with the conditions of this permit, the Division approved plans and specifications, and other supporting documentation.
- 3. This permit is effective only with respect to the nature and volume of wastes described in the permit application, Division approved plans and specifications, and other supporting documentation. No variances to applicable rules governing the construction or operation of the permitted facilities are granted, unless specifically requested and approved in this permit pursuant to 15A NCAC 02T .0105(n).
- 4. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other jurisdictional government agencies (e.g., local, state, and federal). Of particular concern to the Division are applicable river buffer rules in 15A NCAC 02B .0200; erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000; any requirements pertaining to wetlands under 15A NCAC 02B .0200 and 02H .0500; National Pollutant Discharge Elimination System (NPDES) requirements under 15A NCAC 02H .0100, and documentation of compliance with Article 21 Part 6 of Chapter 143 of the General Statutes.
- 5. In the event the permitted facilities change ownership or the Permittee changes their name, a written permit modification request shall be submitted to the Division. This request shall be made on official Division forms, and shall include appropriate property ownership documentation and other supporting documentation as necessary. The Permittee of record shall remain fully responsible for maintaining and operating the facilities permitted herein until a permit is issued to the new owner.
- 6. The Permittee shall retain a set of Division approved plans and specifications for the life of the facilities permitted herein.
- 7. The Permittee shall maintain this permit until all permitted facilities herein are properly closed or permitted under another permit issued by the appropriate permitting authority pursuant to 15A NCAC 02T .0105(j).

- 8. This permit is subject to revocation or unilateral modification upon 60 days notice from the Division Director, in whole or part for the requirements listed in 15A NCAC 02T .0110.
- 9. Unless the Division Director grants a variance, expansion of the permitted facilities contained herein shall not be granted if the Permittee exemplifies any of the criteria in 15A NCAC 02T .0120(b).
- 10. The Permittee shall pay the annual fee within 30 days after being billed by the Division. Failure to pay the annual fee accordingly shall be cause for the Division to revoke this permit pursuant to 15A NCAC 02T .0105(e)(3).

Permit issued this the 12<sup>th</sup> day of September 2014

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Thomas A. Reeder, Director

Division of Water Resources

By Authority of the Environmental Management Commission

Permit Number WQ0028552

Permit No. WQ0028552 Briar Chapel Utilities, LLC Briar Chapel Development Conjunctive, Non-Conjunctive, and Wastewater Irrigation System
September 12, 2014
Chatham County

# **ENGINEERING CERTIFICATION**

☐ Partial ☐ Final		
authorization to peri hereby state to the best construction, such that t	ofessional Engineer in the State odically weekly fully obs of my abilities that due care and	e of North Carolina, having the Permittee's erve the construction of the permitted facility, I diligence was used in the observation of the ential compliance and intent of this permit, the porting documentation.
documentation has	• •	plans and specifications, and other supporting ed as-built drawings, and shall serve as the ermit accordingly.
Provide a brief narra	tive description of any variations:	
And the second s	allen en en angen en e	
And the second s		
Professional Engineer'	s Name	
Engineering Firm		
Mailing Address		
City	State Zip	
Telephone	E-mail	NC PE Seal, Signature & Date

THE COMPLETED ENGINEERING CERTIFICATION, INCLUDING ALL SUPPORTING INFORMATION AND MATERIALS, SHALL BE SENT TO THE FOLLOWING ADDRESS:

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES
WATER QUALITY PERMITTING SECTION
NON-DISCHARGE PERMITTING UNIT

By U.S. Postal Service:

By Courier/Special Delivery:

1636 MAIL SERVICE CENTER

512 N. SALISBURY STREET

RALEIGH, NORTH CAROLINA 27699-1636

RALEIGH, NORTH CAROLINA 27604

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## Permit Number: WQ0028552

Version: 2.1

## PPI 001 - Reclaimed Water Generation System Effluent

E	EFFLUENT CHARACTERISTICS			MONITORING REQUIREMENTS				
PCS Code	Parameter Description	Units of Measure	Monthly Average	Monthly Geometric Mean	Daily Minimum	Daily Maximum	Measurement Frequency	Sample Type
00310	BOD, 5-Day (20 °C)	mg/l	10			15	2 x Month	Composite
00940	Chloride (as Cl)	mg/l					3 x Year *	Composite
50060	Chlorine, Total Residual	mg/l					5 x Week	Grab
31616	Coliform, Fecal MF, M-FC Broth, 44.5 °C	#/100ml		14		25	2 x Month	Grab
50050	Flow, in conduit or thru treatment plant	gpd	329,548 <sup>b</sup>		**************************************		Continuous	Recording
00610	Nitrogen, Ammonia Total (as N)	mg/l	4			6	2 x Month	Composite
00620	Nitrogen, Nitrate Total (as N)	mg/l					2 x Month	Composite
00400	рН	su			6	9	5 x Week	Grab
70300	Solids, Total Dissolved - 180 °C	mg/l			and the second s		3 x Year <sup>a</sup>	Composite
00530	Solids, Total Suspended	mg/l	5		Parallin Marketin consistence of the second consistence of the	10	2 x Month	Composite
00076	Turbidity, HCH Turbidimeter	ntu				10	Continuous	Recording
WQ01	Flow, Reclaimed Water Distributed <sup>c</sup>	gallons			interior de la company de desire en la reconstituir processor		Monthly	Recording

a. 3 x Year monitoring shall be conducted in March, July and November.

b. The monthly average daily flow is limited to 329,548 GPD due to available wet weather storage capacity.

c. Total volume of reclaimed water distributed for conjunctive utilization (Phases 1-E, 1-F, and 1-G).

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Version: 2.1

Page 1 of 5

## Briar Chapel Utilities, LLC - Briar Chapel Development

	A	IRRIGATION / UT	TILIZATIO	ON AREA IN	FORMATIC	N		APPLICATION LIMITATIONS			
Phase	Field	Owner	County	Latitude	Longitude	Net Acreage	Dominant Soil Series	Parameter	Hourly Rate	Yearly Max	Units
1-A	C-1A	Briar Chapel Utilities, LLC	Chatham	35° 48' 35"	-79° 06' 47"	8.00	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-2A	Briar Chapel Utilities, LLC	Chatham	35° 48' 45"	-79° 06' 38"	1.40	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-2C	Briar Chapel Utilities, LLC	Chatham	35° 48′ 38″	-79° 06' 35"	5.90	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-2D	Briar Chapel Utilities, LLC	Chatham	35° 48' 41"	-79° 06' 36"	1.80	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-3A	Briar Chapel Utilities, LLC	Chatham	35° 48' 52"	-79° 06' 55"	0.90	Wedowee	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-3B	Briar Chapel Utilities, LLC	Chatham	35° 48' 50"	-79° 06' 50"	0.80	Wedowee	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-A	C-3C	Briar Chapel Utilities, LLC	Chatham	35° 48' 47"	-79° 06' 49"	0.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-3D	Briar Chapel Utilities, LLC	Chatham	35° 48' 43"	-79° 06′ 46″	0.10	Wedowee	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-3E	Briar Chapel Utilities, LLC	Chatham	35° 48' 50"	-79° 06' 53"	9.80	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-3F	Briar Chapel Utilities, LLC	Chatham	35° 48' 42"	-79° ()6' 44"	3.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-6A	Briar Chapel Utilities, LLC	Chatham	35° 49' 10"	-79° 06' 01"	0.30	Rion	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-A	C-6C	Briar Chapel Utilities, LLC	Chatham	35° 49' 13"	-79° 06′ 58″	0.20	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-9A	Briar Chapel Utilities, LLC	Chatham	35° 49' 21"	-79° 07' 11"	4.20	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-9B	Briar Chapel Utilities, LLC	Chathain	35° 49' 15"	-79° 07' 09"	3.20	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-12A	Briar Chapel Utilities, LLC	Chatham	35° 49' 29"	-79° 07' 23"	2.00	Rion	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-A	C-12B	Briar Chapel Utilities, LLC	Chatham	35° 49' 28"	-79° 07' 12"	2.60	Helena	01284 – Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-12C	Briar Chapel Utilities, LLC	Chatham	35° 49' 25"	-79° 07' 19"	3.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-12D	Briar Chapel Utilities, LLC	Chatham	35° 49′ 18″	-79° 07' 15"	0.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-13A	Briar Chapel Utilities, LLC	Chatham	35° 49' 26"	-79° 07' 00"	0.40	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-A	C-13B	Briar Chapel Utilities, LLC	Chatham	35° 49' 29"	-79° 06' 59"	1.00	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-13C	Briar Chapel Utilities, LLC	Chatham	35° 49' 33"	-79° 07' 03"	1.10	Rion	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-13D	Briar Chapel Utilities, LLC	Chatham	35° 49' 36"	-79° 06' 59"	1.00	Rion	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	C-13E	Briar Chapel Utilities, LLC	Chatham	35° 49' 31"	-79° 06' 59"	2.70	Pacolet	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-A	C-13F	Briar Chapel Utilities, LLC	Chatham	35° 49' 28"	-79° 07' 03"	6.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-15B	Briar Chapel Utilities, LLC	Chatham	35° 49' 38"	-79° 06' 40"	0.90	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches

		IRRIGATION / U	TILIZATI	ON AREA IN	APPLICATION LIMITATIONS						
Phase	Field	Owner	County	Latitude	Longitude	Net Acreage	Dominant Soll Series	Parameter	Hourly Rate	Yearly Max	Units
1-A	C-15C	Briar Chapel Utilities, LLC	Chatham	35° 49' 25"	-79° 06′ 38"	1.30	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-15E	Briar Chapel Utilities, LLC	Chatham	35° 49' 40"	-79° 06' 45"	1.40	Wedowee	01284 - Non-Discharge Application Rate	0.40	37.31	inches
1-A	C-16A	Briar Chapel Utilities, LLC	Chatham	35° 49' 25"	-79° 06' 26"	3.20	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	C-20A	Briar Chapel Utilities, LLC	Chatham	35° 49' 48"	-79° 07' 00"	0.40	Helena	01284 - Non-Discharge Application Rate	0.10	37.31	inches
l-A	E-1A	Briar Chapel Utilities, LLC	Chatham	35° 49' 21"	-79° 06' 01"	10.40 / 8.50 1	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
l-A	E-2A	Briar Chapel Utilities, LLC	Chatham	35° 49' 16"	-79° 06' 49"	9.00 / 4.90 1	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-A	E-3A	Briar Chapel Utilities, LLC	Chatham	35° 49' 13"	-79° 05' 30"	0.80 <sup>2</sup>	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-A	E-3B	Briar Chapel Utilities, LLC	Chatham	35° 49' 11"	-79° 05' 22"	2.20 / 1.80 1	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-A	E-3C	Briar Chapel Utilities, LLC	Chatham	35° 49' 10"	-79° 05′ 27"	3.50 / 2.50 1	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-A	E-3D	Briar Chapel Utilities, LLC	Chatham	35° 49' 12"	-79° 05′ 39″	0.90 / 0.30 1	Rion	01284 - Non-Discharge Application Rate	0.10	37.31	inches
l-A	E-4A	Briar Chapel Utilities, LLC	Chatham	35° 49' 16"	-79° 05' 35"	3.10 / 2.00 1	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
l-A	E-4B	Briar Chapel Utilities, LLC	Chatham	35° 49' 18"	-79° 05′ 18"	2.90 / 2.60 1	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-A	E-4C	Briar Chapel Utilities, LLC	Chatham	35° 49' 16"	-79° 05' 26"	9.30 / 8.50 1	Rion	01284 - Non-Discharge Application Rate	0.10	37.31	inches
	Total 1	for 1-A (Non-Conjunctive Re	claimed W	ater Utilizati	on)	114.8 / 31.9 <sup>1</sup>					
I-B	B-1A	Briar Chapel Utilities, LLC	Chatham	35° 49' 28"	-79° 05' 58"	9.90	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-B	B-1B	Briar Chapel Utilities, LLC	Chatham	35° 49' 25"	-79° 06' 05"	1.70	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-B	B-2A	Briar Chapel Utilities, LLC	Chatham	35° 49' 22"	-79° 06' 15"	0.30	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-B	B-3B	Briar Chapel Utilities, LLC	Chatham	35° 49' 36"	-79° 06' 11"	0.20	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-3C	Briar Chapel Utilities, LLC	Chatham	35° 49' 41"	-79° 06' 11"	0.20	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-4A	Briar Chapel Utilities, LLC	Chatham	35° 49' 42"	-79° 06' 17"	0.60	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-B	B-5A	Briar Chapel Utilities, LLC	Chatham	35° 49' 07"	-79° 06' 34"	0.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-6A	Briar Chapel Utilities, LLC	Chathain	35° 49' 07"	-79° 06' 31"	1.10	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-7A	Briar Chapel Utilities, LLC	Chatham	35° 49' 59"	-79° 06' 28"	2.30	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-7B	Briar Chapel Utilities, LLC	Chatham	35° 50′ 16″	-79° 06′ 32"	0.60	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches

		IRRIGATION / U	TILIZATIO	ON AREA IN	FORMATIO	N		APPLICATION LIMITATIONS			
Phase	Field	Owner	County	Latitude	Longitude	Net Acreage	Dominant Soil Series	Parameter	Hourly Rate	Yearly Max	Units
l-B	B-8A	Briar Chapel Utilities, LLC	Chatham	35° 50' 14"	-79° 06' 26"	, 0.10	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-8B	Briar Chapel Utilities, LLC	Chatham	35° 50' 32"	-79° 06' 27"	1.90	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-B	B-8D	Briar Chapel Utilities, LLC	Chatham	35° 50' 25"	-79° 06' 25"	0.70	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
l-B	B-8E	Briar Chapel Utilities, LLC	Chatham	35° 50' 37"	-79° 06' 22"	0.50	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-B	B-9A	Briar Chapel Utilities, LLC	Chatham	35° 50' 42"	-79° 06′ 26″	1.10	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
l-B	B-9C	Briar Chapel Utilities, LLC	Chatham	35° 50' 41"	-79° 06' 20"	0.40	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
·		Total for 1-B (Wastewa	ater Irrigat	ion)		22.0					
1-C	C-1	Briar Chapel Utilities, LLC	Chatham	35° 49' 14"	-79° 05' 46"	9.48 / 7.5 1	Wedowee	01284 - Non-Discharge Application Rate	0.10	30.84	inches
	Total	for 1-C (Non-Conjunctive Re	claimed W	ater Utilizati	on)	9.48 / 7.5 1					
1-D	D-2	Briar Chapel Utilities, LLC	Chatham	35° 49' 25"	-79° 06' 38"	0.37	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-3	Briar Chapel Utilities, LLC	Chatham	35′ 49′ 26″	-79° 06' 43"	0.47	Нејепа	01284 - Non-Discharge Application Rate	0.10	19.95	inches
1-D	D-4	Briar Chapel Utilities, LLC	Chatham	35° 49' 41"	-79° 06' 48"	0.26	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-D	D-5	Briar Chapel Utilities, LLC	Chatham	35° 49' 48"	-79° 06' 35"	1.02	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-6	Briar Chapel Utilities, LLC	Chatham	35° 49' 51"	-79° 06' 42"	0.63	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-7	Briar Chapel Utilities, LLC	Chatham	35° 49′ 12"	-79° 07' 04"	1.83	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-D	D-8	Briar Chapel Utilities, LLC	Chatham	35° 49' 12"	-79° 06' 52"	2.62	Fill <sup>4</sup>	01284 – Non-Discharge Application Rate	0.10	19.95	inches
I-D	D-9	Briar Chapel Utilities, LLC	Chatham	35° 49′ 10″	-79° 06' 49"	0.15	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
I-D	D-10	Briar Chapel Utilities, LLC	Chatham	35° 49' 05"	-79° 06' 48"	0.06	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-D	D-11	Briar Chapel Utilities, LLC	Chatham	35° 49' 05"	-79° 06' 48"	0.04	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-D	D-12	Briar Chapel Utilities, LLC	Chatham	35° 49' 08"	-79° 06' <b>50</b> "	2.12	Fill ⁴	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-13	Briar Chapel Utilities, LLC	Chatham	35° 49' 06"	-79° 06' 46"	0.62	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-15	Briar Chapel Utilities, LLC	Chatham	35° 49' 02"	-79° 06' 46"	0.25	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-16	Briar Chapel Utilities, LLC	Chatham	35° 48' 59"	-79° 06' 47"	0.31	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-17	Briar Chapel Utilities, LLC	Chatham	35° 49' 01"	-79° 06' 47"	0.03	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-18	Briar Chapel Utilities, LLC	Chatham	35° 48' 52"	-79° 06' 40"	1.56	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.10	19.95	inches

IRRIGATION / UTILIZATION AREA INFORMATION								APPLICATION LIMITATIONS			
Phase	Field	Owner	County	Latitude	Longitude	Net Acreage	Dominant Soil Series	Parameter	Hourly Rate	Yearly Max	Units
1-D	D-19	Briar Chapel Utilities, LLC	Chatham	35° 48' 51"	-79° 06' 35"	1.40	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.10	37.31	inches
I-D	D-20	Briar Chapel Utilities, LLC	Chatham	35° 48' 49"	-79° 06' 34"	0.17	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-21	Briar Chapel Utilities, LLC	Chatham	35° 48′ 52"	-79° 06' 32"	0.54	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-22	Briar Chapel Utilities, LLC	Chatham	35° 48' 56"	-79° 06' 33"	0.08	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-23	Briar Chapel Utilities, LLC	Chatham	35° 49' 57"	-79° 06' 33"	0.20	Wedowee	01284 - Non-Discharge Application Rate	0.10	37.31	inches
1-D	D-26	Briar Chapel Utilities, LLC	Chatham	35° 49' [1"	-79° 06' 57"	2.16	Helena	01284 - Non-Discharge Application Rate	0.10	19.95	inches
	Total	for 1-D (Non-Conjunctive Re	claimed W	ater Utilizati	on)	16.89					***************************************
1-E	E-1 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 47"	-79° 06' 28"	1.0 2	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
1-E	E-2 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 44"	-79° 06' 08"	4.9 <sup>2</sup>	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
1-E	E-3 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 35"	-79° 06' 09"	1.0	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.15	N/A	inches
1-E	E-4 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 34"	-79° 06' 18"	3.3 <sup>2</sup>	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
1-E	E-5 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 06"	-79° 06′ 50″	1.8	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.15	N/A	inches
	Tot	al for 1-E (Conjunctive Recla	imed Wate	r Utilization	<sup>3</sup> )	12.0 / 9.2 1					
1-F	F-1 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 27"	-79° 06' 49"	4.1	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
1-F	F-2 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49′ 30″	-79° 06' 44"	4.1 / 0.51	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
1-F	F-3 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 33"	-79° 06' 43"	4.3 / 0.73 1	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
I-F	F-4 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 35"	-79° 06' 50"	2.6 <sup>2</sup>	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.25	N/A	inches
	Tota	ıl for 1-F (Conjunctive Recla	imed Wate	r Utilization³	)	15.1 / 3.8 1					````````````
				***************************************			· · · · · · · · · · · · · · · · · · ·				****
I-G	G-1 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 20"	-79° 07' 02"	3.5	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
1-G	G-2 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 24"	-79° 07' 00"	2.2	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
I-G	G-3 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 22"	-79° 06' 54"	4.2	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
1-G	G-4 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 17"	-79° 06' 59"	4.0	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
1-G	G-5 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 39"	-79° 06' 54"	1.2	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
1-G	G-6 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 11"	-79° 06' 40"	3.1	Fill ⁴	01284 - Non-Discharge Application Rate	0.30	N/A	inches

		IRRIGATION / UT	TILIZATI(	ON AREA IN	APPLICATION LIMITATIONS						
Phase	Field	Owner	County	Latitude	Longitude	Net Acreage	Dominant Soil Series	Parameter	Hourly Rate	Yearly Max	Units
I-G	G-7 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 05"	-79° 06' 44"	2.5	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
1-G	G-8 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 06"	-79° 06' 27"	3.1	Fill 4	01284 - Non-Discharge Application Rate	0.30	N/A	inches
1-G	G-9 <sup>3</sup>	Briar Chapel Utilities, LLC	Chatham	35° 49' 13"	-79° 06' 27"	2.6	Fill <sup>4</sup>	01284 - Non-Discharge Application Rate	0.30	N/A	inches
	Tota	al for 1-G (Conjunctive Recla	imed Wate	r Utilization <sup>i</sup>	3)	26.4					
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	Total 2					212.57 / 52.4 2				<	

- 1. The second value represents portions of that field which are certified and operational.
- 2. This notation represents fields that are entirely certified and operational.
- 3. Records for conjunctive utilization sites are not required to be reported on Form NDAR-1. Instead, the total monthly flow distributed should be reported on Form NDMR for parameter WQ01.
- 4. Fields permitted with "Fill" as the dominant underlying soil shall be rototilled and amended with topsoil to a suitable depth to support growth of the intended vegetative cover and in no case less than six inches in depth.

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## North Carolina Department of Environment and Natural Resources

Division of Water Quality Coleen H. Sullins

een H. Sullins Dee Freeman Director Secretary

July 26, 2010

Keith Hurand, Vice President Briar Chapel Utilities, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Beverly Eaves Perdue

Governor

Subject:

Permit No. WQCS00372 Briar Chapel Utilities, LLC Briar Chapel Collection System

Chatham County

#### Dear Keith Hurand:

In accordance with your application received on July 15, 2010, we are forwarding herewith Permit No. WQCS00372, dated July 26, 2010, to Briar Chapel Utilities, LLC for the operation and maintenance of the subject wastewater collection system.

This permit shall be effective from the effective date of August 1, 2010 until July 31, 2018. This permit shall be subject to the conditions and limitations specified herein. It is your responsibility to thoroughly review this permit. Please pay particular attention to the monitoring and reporting requirements in this permit and any compliance schedules shown in bold.

For purposes of permitting, the collection system is considered to be any existing or newly installed system extension up to the wastewater treatment facility property or point of connection with a separately owned sewer system. The collection system is considered all gravity lines, pump stations, force mains, low pressure sewer systems, STEP systems, vacuum systems, etc. and associated piping, valves and appurtenances that help to collect, manage and transport wastewater to a wastewater treatment plant under the Permittee's ownership or maintained and operated by the Permittee through a perpetual legal agreement. Satellite systems are systems tributary to the Permittee's collection system but those collection systems are not owned or maintained by the Permittee. The system description provided on Page 1 of this permit is meant to provide a general idea about the size of the system and may not be all inclusive of the collection system at the time of permit issuance or afterward.

A release of wastewater from the wastewater collection system is referred to herein as a Sanitary Sewer Overflow (SSO). The evaluation of enforcement options after a SSO will be determined considering the criteria listed in condition I(2)(a) and I(2)(b) of the permit and all other relevant information available or requested of the Permittee. Compliance with all conditions of the permit as well as all statutes and regulations pertaining to the collection system must be maintained or appropriate enforcement actions may be taken as noted in Condition VI(2).



A reportable SSO is a SSO greater than 1,000 gallons to the ground or a SSO of any amount that reaches surface water (including through ditches, storm drains, etc.) Below is the procedure to use for reporting SSOs to the Division:

- 1. Report by telephone to a Division of Water Quality staff member (not facsimile or voicemail) at your regional DWQ office during regular business hours (Monday to Friday, 8AM to 5PM) as soon as possible, but in no case more than 24 hours after the SSO is known or discovered. To report outside of regular business hours, call (800) 858-0368.
- 2. Follow up the verbal report by sending a completed written report on the most current Division approved form within five days.

To provide a uniform method for all systems covered under this permit and to provide useful and consistent information pertaining to SSOs, a new spill reporting form has been developed (October 2003). Form CS-SSO consists of two parts. Part I serves to provide to the Division the required information that has always been necessary. Part II serves as an area to provide a justification for the spill, as optional under Condition I(2) of your permit. Form CS-SSO can be downloaded from

http://h2o.enr.state.nc.us/percs/Collection%20Systems/CollectionSystemsHome.html from the SSO Reporting area.

An NOV, civil penalty, and/or a moratorium on the addition of waste to the system may be issued if adequate justification for an SSO is NOT submitted to the regional office. In order to submit a claim for justification of an SSO, you must use the Form CS-SSO with additional documentation as necessary. DWQ staff will review the justification claim and determine if enforcement action is appropriate. Please be advised that the information needed to justify a spill is very comprehensive. Begin using this form immediately to report SSOs from the collection system. Continue to use our old form for reporting bypasses at the wastewater treatment plant until further notice. The time frame for submittal of both Part I and Part II, if pertinent, is five days.

Failure to abide by the conditions in this permit may subject the Permittee to enforcement action. 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 thirty days following the receipt of this permit. 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, NC 27699-6714. Unless such demands are made, this permit shall be final and binding.

If you have questions regarding compliance contact your regional office or the Pretreatment, Emergency Response and Collection Systems Unit of the North Carolina Division of Water Quality at (919) 807-6300. If you need additional information concerning this permit, please contact the Pretreatment, Emergency Response and Collection Systems Unit at (919) 807-6300.

Sincerely,

Stanlaries acting for Reborch Gore Coleen H. Sullins

cc: Chatham County Health Department
Wastewater Collection System ORC/PUD, Briar Chapel Utilities, LLC

Raleigh Regional Office, Surface Water Protection Section Technical Assistance and Certification Unit Water Quality Central Files PERCS Files

#### NORTH CAROLINA

#### ENVIRONMENTAL MANAGEMENT COMMISSION

#### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### RALEIGH

#### SYSTEM-WIDE WASTEWATER COLLECTION SYSTEM PERMIT

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, LLC Chatham County

FOR THE

operation and maintenance of a wastewater collection system consisting of, at the time of permit issuance, approximately 5.5 miles of gravity sewer, approximately 4.3 miles of force main, 15 simplex pump stations that discharge to a pressure sewer and serve a single building, 3 duplex pump stations, and all associated piping, valves, and appurtenances required to make a complete and operational wastewater collection system to serve the Briar Chapel Utilities, LLC and any deemed permitted satellite communities, pursuant to the application received on July 15, 2010, and in conformity with the documents referenced therein and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

This permit shall be effective from the August 1, 2010 until July 31, 2018, and shall be subject to the following specified conditions and limitations:

#### I. PERFORMANCE STANDARDS

1. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Wastewater Treatment Facility (WQ0028552) prior to being disposed into the spray irrigation system. This collection system permit will be referenced upon renewal or modification of your NPDES permit(s).

2. The wastewater collection system shall be effectively managed, maintained and operated at all times so that there is no SSO to land or surface waters, nor any contamination of groundwater. In the event that the wastewater collection system fails to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective actions, including actions that may be required by the Division of Water Quality (Division), such as the construction of additional or replacement sewer lines and/or equipment.

The Director may take enforcement action against the Permittee for SSOs that must be reported to the Division as stipulated in Condition IV(2). This includes SSOs that were caused by severe natural conditions or exceptional events unless the Permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a) The SSO was caused by severe natural conditions; there were no feasible alternatives to the SSO, such as the use of auxiliary treatment facilities, retention of untreated wastewater, reduction of inflow and infiltration, use of adequate back-up equipment, or an increase in the capacity of the system. This provision is not satisfied if, in the exercise of reasonable engineering judgment, the Permittee should have installed auxiliary or additional collection system components, wastewater retention or treatment facilities, adequate back-up equipment or should have reduced inflow and infiltration; or
- b) The SSO was exceptional, unintentional, temporary and caused by factors beyond the reasonable control of the Permittee; the SSO could not have been prevented by the exercise of reasonable control, such as proper management, operation and maintenance; adequate treatment facilities or collection system facilities or components (e.g., adequately enlarging treatment or collection facilities to accommodate growth or adequately controlling and preventing infiltration and inflow); preventive maintenance; or installation of adequate back-up equipment;

The Permittee can submit a claim to the Division Regional Office that the SSO meets the criteria of this condition. The Permittee has the option of submitting this claim along with the spill report required by Condition IV(2) (i.e., within five days) in order to be considered for immunity from enforcement action. Form CS-SSO Part II, or most current Division approved form, shall be used for any claims. The Permittee has the burden of proof that the above criteria have been met.

3. The Permittee shall establish by ordinance its legal authority to require new sewers be properly constructed; to ensure proper inspection and testing of sewer mains and service laterals; to address flows from satellite systems and to take enforcement action as required by Condition I(4).

The Permittee shall develop and adopt an ordinance meeting this permit condition within 12 months of permit issuance. A copy of the adopted ordinance shall be provided to the Raleigh Regional Office, Surface Water Protection Section to show compliance with this condition.

4. The Permittee shall develop and implement an educational fats, oils and grease program that shall include at least bi-annual distribution of educational material targeted at both residential and non-residential users. The Permittee shall also develop and implement an enforceable fats, oils and grease program for non-residential users under which the Permittee can take enforcement against users who have not properly installed, operated and maintained grease traps or grease interceptors as directed or otherwise violated the terms of the local ordinance pertaining to fats, oils and grease.

The Permittee shall develop and implement an inspection and enforcement program for fats, oils and grease within 12 months of permit issuance. A copy of the program materials shall be provided to the Raleigh Regional Office, Surface Water Protection Section to show compliance with this condition. This schedule does not include the educational component of the program. Educational materials shall be distributed at least bi-annually, with increasing frequency and targeted areas as grease related blockages are noted.

5. The Permittee shall adopt and implement a Capital Improvement Plan (CIP) to designate funding for reinvestment into the wastewater collection system infrastructure. The CIP should address the short-term needs and long-term "master plan" concepts. The CIP should typically cover a three to five year period and include a goal statement, description of the project area, description of the existing facilities, known deficiencies (over a reasonable period) and forecasted future needs. Cost analysis is integral to the CIP.

The Permittee shall develop and present a Capital Improvement Plan meeting this permit condition for adoption within 12 months of a permit issuance. A copy of the Capital Improvement Plan shall be provided to the Raleigh Regional Office, Surface Water Protection Section to show compliance with this condition.

- 6. Existing overflow piping from manholes and pump stations, excluding piping to approved equalization structures, known or discovered after permit issuance shall be immediately removed or permanently capped. Plugged emergency pumping connections are allowable for portable pumping or rerouting without intentionally bypassing the wastewater treatment facility.
- 7. The Permittee shall maintain a contingency plan for pump failure at each pump station. If one of the pumps in a pump station containing multiple pumps fails, the process of repairing or replacing the pump shall be initiated immediately and the new parts or pump shall be installed as soon as possible. If the pump in a simplex pump station fails, it shall be replaced immediately.
- 8. Each pump station shall be clearly and conspicuously posted with a pump station identifier and an emergency contact telephone number at which an individual who can initiate or perform emergency service for the wastewater collection system 24 hours per day, seven days per week can be contacted. This emergency contact telephone number shall be coupled with instructions that the emergency contact should be called if the visual alarm illuminates, if the audible alarm sounds, or if an emergency is apparent.

The Permittee shall post signage on all pump stations meeting this permit condition within 3 months of permit issuance. The Raleigh Regional Office, Surface Water Protection Section shall be notified upon compliance with this condition.

- 9. Pump station sites, equipment and components shall have restricted access, per 15A NCAC 02T .305(h)(4).
- 10. Pump stations that do not employ an automatic polling feature (i.e. routine contact with pump stations from a central location to check operational status of the communication system) shall have both audible and visual high water alarms. The alarms shall be weather-proof and placed in a clear and conspicuous location. Permits issued for the construction of pump stations that included high water alarms in the description must maintain the alarms even if simple telemetry (i.e. notification of an alarm condition initiated by the pump station control feature) is installed.
- 11. For all newly constructed, modified and rehabilitated pump stations, all equipment and components located within the pump station shall be corrosion-resistant and components in close proximity of the pump station shall be sealed within a corrosion-resistant coating or encasement.
- 12. All construction and rehabilitation of the wastewater collection system (i.e., permitted or deemed permitted) shall be scheduled to minimize the interruption of service by the existing utilities. Construction and rehabilitation shall not result in the violation of Condition (I)(2) of this permit.

#### II. OPERATION AND MAINTENANCE REQUIREMENTS

1. Upon classification of the collection system by the Water Pollution Control System Operators Certification Commission (WPCSOCC), the Permittee shall designate and employ a certified operator to be in responsible charge (ORC) and one or more certified operator(s) to be back-up ORC(s) of the facilities in accordance with 15A

NCAC 8G .0201. The ORC shall visit the system within 24 hours of knowledge of a bypass, spill, or overflow of wastewater from the system, unless visited by the Back-Up ORC, and shall comply with all other conditions of 15A NCAC 8G .0204.

- 2. The Permittee shall develop and adhere to a schedule for reviewing all inspection, maintenance, operational and complaint logs. If the review process results in the identification of any recurring problem in the wastewater collection system that cannot be resolved in a short time period, the Permittee shall establish a plan for addressing the problem(s).
- 3. The Permittee shall develop and adhere to a schedule for testing emergency and standby equipment.
- 4. The Permittee shall develop and implement a routine pump station inspection and maintenance program, which shall include, but not be limited to, the following maintenance activities:
  - a. Cleaning and removing debris from the pump station structure, outside perimeter, and wet well;
  - b. Inspecting and exercising all valves;
  - c. Inspecting and lubricating pumps and other mechanical equipment according to the manufacturer's recommendations; and
  - d. Verifying the proper operation of the alarms, telemetry system and auxiliary equipment.
- 5. For each pump station without pump reliability (i.e. simplex pump stations serving more than a single building or pump stations not capable of pumping at a rate of 2.5 times the average daily flow rate with the largest pump out of service), at least one fully operational spare pump capable of pumping peak flow shall be maintained on hand.
- 6. The Permittee shall maintain on hand at least two percent of the number of pumps installed, but no less than two pumps, that discharge to a pressure sewer and serve a single building, unless the Permittee has the ability to purchase and install a replacement pump within 24 hours of first knowledge of the simplex pump failure or within the storage capacity provided in any sewer line extension permit.
- 7. Rights-of-way and/or easements shall be properly maintained to allow accessibility to the wastewater collection system unless the Permittee can demonstrate the ability to gain temporary access in an emergency situation where existing land-use conditions do not allow the establishment and maintenance of permanent access. In this case, the Permittee shall continue to observe the lines visually, utilize remote inspection methods (e.g. CCTV) and use the opportunity of drier conditions to perform further inspections and necessary maintenance.
- 8. The Permittee shall assess cleaning needs, and develop and implement a program for appropriately cleaning, whether by hydraulic or mechanical methods, all sewer lines. At least 10 percent of the wastewater collection system, selected at the discretion of the ORC, shall be cleaned each year. Preventative cleaning is not required for sewer lines less than five years old unless inspection otherwise reveals the need for cleaning or cleaning is required by a sewer line extension permit.
- 9. Adequate measures shall be taken to contain and properly dispose of materials associated with SSOs. The Permittee shall maintain a Response Action Plan that addresses the following minimum items:
  - a. Contact phone numbers for 24-hour response, including weekends and holidays;
  - b. Response time:
  - c. Equipment list and spare parts inventory;
  - d. Access to cleaning equipment;
  - e. Access to construction crews, contractors and/or engineers;
  - f. Source(s) of emergency funds;
  - g. Site sanitation and clean up materials; and
  - h. Post-SSO assessment.

- 10. The Permittee, or their authorized representative, shall conduct an on-site evaluation for all SSOs as soon as possible, but no more than two hours after first knowledge of the SSO.
- 11. In the event of a SSO or blockage within the wastewater collection system, the Permittee shall restore the system operation, remove visible solids and paper, sanitize any ground area and restore the surroundings.

#### III. RECORDS

- 1. Records shall be maintained to document compliance with Conditions I(4), II(2) II(4), II(7) II(8), IV(3) and V(1) V(4). Records shall be kept on file for a minimum of three years.
- 2. The Permittee shall maintain adequate records pertaining to SSOs, and complaints for a minimum of three years. These records shall include, but are not limited to, the following information:
  - a. Date of SSO or complaint:
  - b. Volume of wastewater released as a result of the SSO and/or nature of complaint;
  - c. Location of the SSO and/or complaint;
  - d. Estimated duration of the SSO;
  - e. Individual from the Division who was informed about the SSO and/or complaint, when applicable;
  - f. Final destination of the SSO;
  - g. Corrective actions:
  - h. Known environmental/human health impacts resulting from the SSO; and
  - i. How the SSO was discovered.
- 3. The Permittee shall maintain an up-to-date, accurate, comprehensive map of its wastewater collection system that also notes the locations where other wastewater collection systems become tributary. If a comprehensive map of the collection system has not been established, a rough sketch shall be drawn. The Permittee shall map approximately 10 percent of its existing collection system each year for the next ten years beginning at the original permit issuance date, or until complete, whichever is sooner. The comprehensive map shall include, but is not limited to: pipe size, pipe material, pipe location, flow direction, approximate pipe age, number of active service taps, and each pump station identification, location and capacity.
- 4. The Permittee shall maintain records of all of the modifications and extensions to the collection system permitted herein. The Permittee shall maintain a copy of the construction record drawings and specifications for modifications/extensions to the wastewater collection system for the life of the modification/extension. Information concerning the extension shall be incorporated into the map of the wastewater collection system within one year of the completion of construction. The system description contained within this permit shall be updated to include this modification/extension information upon permit renewal.

#### IV. MONITORING AND REPORTING REQUIREMENTS

- 1. Any monitoring (including, but not necessarily limited to, wastewater flow, groundwater, surface water, soil or plant tissue analyses) deemed necessary by the Division to ensure surface water and groundwater protection will be established, and an acceptable sampling and reporting schedule shall be followed.
- 2. The Permittee shall verbally report to a Division of Water Quality staff member at the Raleigh Regional Office, at telephone number (919) 791-4200 as soon as possible, but in no case more than 24 hours following the occurrence or first knowledge of the occurrence of either of the following:
  - a. Any SSO and/or spill over 1,000 gallons; or
  - b. Any SSO and/or spill, regardless of volume, that reaches surface water.

Voice mail messages or faxed information shall <u>not</u> be considered as the initial <u>verbal</u> report. SSOs (and other types of 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

3. The Permittee shall meet the annual reporting and notification requirements provided in North Carolina General Statute §143-215.1C.

#### V. INSPECTIONS

- 1. The Permittee or the Permittee's designee shall inspect the wastewater collection system regularly to reduce the risk of malfunctions and deterioration, operator errors, and other issues that may cause or lead to the release of wastes to the environment, threaten human health or create nuisance conditions. The Permittee shall keep an inspection log or summary including, at a minimum, the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee.
- 2. Pump stations without Supervisory Control and Data Acquisition (SCADA) systems or telemetry shall be inspected everyday (i.e. 365 days per year). Pump stations equipped with SCADA systems or telemetry shall be inspected at least once per week.
- 3. A general observation of the entire collection system shall be performed throughout the course of every year.
- 4. Inspections of all high priority lines (i.e. aerial line, sub-waterway crossing, line contacting surface waters, siphon, line positioned parallel to stream banks that are subject to eroding in such a manner that may threaten the sewer line, or line designated as high-priority in a permit) shall be performed at least once per every six-month period of time. A list of high-priority lines is presented as Attachment A and is hereby incorporated into this permit condition. New high priority lines installed or identified after permit issuance are incorporated by reference and subject to this permit condition until permit renewal where they shall be referenced in writing in Attachment A.

#### VI. GENERAL CONDITIONS

- 1. This permit is not transferable. In the event that the Permittee desires to transfer ownership of the wastewater collection system or there is a name change of the Permittee, a formal permit modification request shall be submitted to the Division. The request shall be accompanied by documentation from the parties involved, and other supporting materials as may be appropriate. Such request will be considered on its merits and may or may not be approved.
- 2. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statute §143-215.6A through §143-215.6C, and a sewer moratorium may be established.
- 3. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e., local, state, and federal) having jurisdiction, including but not limited to applicable river buffer rules in 15A NCAC 2B .0200, soil erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B .0200 and 15A NCAC 02T .0100 and all applicable North Carolina Occupational Safety and Health Act health and safety standards.

- 4. The issuance of this permit does not prohibit the Division from reopening and modifying the permit, revoking and reissuing the permit or terminating the permit as allowed by the laws, rules, and regulations contained in ISA NCAC 02T .0100 and North Carolina General Statute §143-215.1 et. al., or as needed to address changes in federal regulations with respect to the wastewater collection system.
- 5. The Permittee shall pay the annual fee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15A NCAC 02T .0110(4).
- 6. The Permittee shall request renewal of this permit at least six months prior to the expiration of this permit. Upon receipt of the request, the Commission will review the adequacy of the wastewater collection system described therein, and if warranted, will extend the permit for a period of time and under such conditions and limitations, as the Commission may deem appropriate.
- 7. The Permittee shall notify the Division's Pretreatment, Emergency Response and Collection Systems Unit in writing at 1617 Mail Service Center, Raleigh, North Carolina 27699-1617 of any changes to the name and/or address of the responsible party (i.e. mayor, city/town manager) of the wastewater collection system.
- 8. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the collection system at any reasonable time for the purpose of determining compliance with this permit, may inspect or copy any records that must be maintained under the terms and conditions of this permit, and may obtain samples of wastewater, groundwater, surface water, soil, or plant tissue.

Permit issued on July 26, 2010, with an effective date of August 1, 2010

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Coleen H. Sullins, Director
Division of W. Division of Water Quality

State lewis

By Authority of the Environmental Management Commission

Permit Number WOCS00372



William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen H. Sullins, Director Division of Water Quality

February 8, 2008

Mitch Barron, VP Briar Chapel Utilities, LLC 5850 Fayetteville Road, Suite 201 Durham, NC 27713

Subject: Permit No. WQ0032580

Briar Chapel

Domestic Wastewater Pump & Haul Permit

Chatham County

Dear Mr. Barron:

FEB 15 2008 NEW-05010 M. Sandrez, D.BAKER

In accordance with your permit request received December 27, 2007, and additional information received on February 6, 2008, we are forwarding herewith Permit No. WQ0032580, dated February 8. 2008, to Briar Chapel Utilities, LLC, for the time-limited operation of a domestic wastewater pump and haul operation. This permit shall be effective from February 8, 2008, shall expire on August 7, 2008, 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.

Please pay particular attention to Permit Condition 13 which requires accurate record keeping and reporting. Also note Permit Condition 18 which requires that the facilities associated with the pump and haul activities be inspected and pumped as often as necessary to prevent malfunctions, overflows, or nuisances.

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 asconstructed 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 facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

Permission is hereby granted to Briar Chapel Utilities, LLC, for the construction and operation of

- A domestic wastewater pump and haul operation located at the Briar Chapel Utilities subdivision, in Chatham County, North Carolina, consisting of two (2) pump station wet wells and associated piping with an estimated total storage capacity of 9,700 gallons. The wet wells shall be equipped with both audible and visual high water alarms.
- The anticipated flow for this pump and haul operation is expected to be no more than 9,700 gallons per day of domestic wastewater. It is the permittee's responsibility to notify the Division within 24 hours if the flow volume estimated above is exceeded by any amount on any day.
- The Raleigh Regional Office, Surface Water Protection Group, must be notified at least 48 hours prior to the commencement of the pump and haul activities so that a site inspection can be performed. North Carolina

North Carolina Division of Water Quality 1628 Mail Service Center Internet: www.newaterquality.org

Location: 3800 Barrett Drive

Raleigh, NC 27699-1628 Raleigh, NC 27609

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

Customer Service 1-877-623-6748

Naturally

Mitch Barron, VP Briar Chapel Utilities, LLC February 8, 2008 Page 2

The wastewater collected by this system shall be pumped by A Sani-Can Service, Inc., and hauled to the Town of Siler City WWTP, NPDES permit NC0026441, for final treatment and disposal. This permit shall become voidable unless the agreements between A Sani-Can Service, Briar Chapel Utilities, LLC, and the Town of Siler City WWTP for the pumping, hauling and final treatment of wastewater are in full force and effect.

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) 791-4249, or by e-mail to <a href="mailto:barry.herzberg@ncmail.net">barry.herzberg@ncmail.net</a>.

Sincerely,

for Coleen H. Sullins, Director Division of Water Quality

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

cc: Raleigh Regional Office, SWP, BH

Mike Sanchez, PE; John R. McAdams Co., 2905 Meridian Parkway, Durham, NC 27713

Deborah Gore, PERCS Unit

Central Files

#### **NORTH CAROLINA**

#### **ENVIRONMENTAL MANAGEMENT COMMISSION**

#### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### DOMESTIC WASTEWATER PUMP & HAUL PERMIT

#### **PERMIT No. WQ0032580**

This permit shall be effective from February 8, 2008, shall expire on August 7, 2008, and shall be subject to the conditions and limitations as specified herein:

- 1. This permit shall become voidable unless the subject pump and haul activities are carried out in a manner that has been approved by this Division.
- 2. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 3. The facilities shall be properly maintained and operated at all times.
- 4. This permit is not transferable. In the event that there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal request must be submitted to the Division of Water Quality.
- 5. No type, kind or quantity of wastewater other than the pumped and hauled wastewater from the Briar Chapel Utilities, LLC shall be included in these pump and haul activities.
- 6. This permit shall become voidable unless the agreements between A Sani-Can Service, Briar Chapel Utilities, LLC, and the Town of Siler City WWTP for the pumping, hauling and final treatment of wastewater are in full force and effect.
- 7. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, Briar Chapel Utilities, LLC, shall cease operation of all pump and haul activities and take such immediate corrective actions as may be required by this Division.
- 8. The wastewater collected by this system shall be properly treated at the Town of Siler City WWTP, permit NC0026441. A signed receipt for each load delivered to the treatment facility shall be obtained and included with the reporting requirements given in paragraph 13.
- 9. Briar Chapel Utilities, LLC, is liable for any damages caused by a spill or failure of the pump and haul operations.
- 10. Adequate inspection, maintenance, and cleaning shall be provided by Briar Chapel Utilities, LLC, or their designee, to insure proper operation of the subject facilities.

- 11. Briar Chapel Utilities, LLC, or its designee shall inspect the pump and haul collection facilities to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment, a threat to human health, or a nuisance.
- 12. Any duly authorized officer, employee, or representative of the Division of Water Quality may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the pump and haul collection facilities at any reasonable time for the purpose of determining compliance with the Division's approval; may inspect or copy any records that must be maintained under the terms and conditions of this permit; and may obtain samples.
- 13. An accurate record of the pump and haul activities must be maintained by Briar Chapel Utilities, LLC, indicating:
  - Date and times wastewater is removed from the facility
  - Name of contract hauler
  - Name of facility receiving wastewater
  - Signed receipts from receiving facility
  - Volume of wastewater removed
  - An inspection log including the date and time of inspections, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee.

These records shall be submitted weekly by the following Wednesday to the Surface Water Protection Regional Supervisor, Raleigh Regional Office, NCDENR, 1628 Mail Service Center, Raleigh, NC 27699-1628.

- 14. Failure to abide by the conditions and limitations contained in this permit may subject Briar Chapel Utilities, LLC, to appropriate enforcement actions available to the Division of Water Quality.
- 15. The granting of this permit does not preclude Briar Chapel Utilities, LLC, from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state, and federal) having jurisdiction.
- 16. Noncompliance Notification: Briar Chapel Utilities, LLC, shall report by telephone to the Raleigh Regional Office, telephone no. 919-791-4200, as soon as possible, but in no case more than twenty-four (24) hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:
  - a. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater storage and/or treatment such as failures of tanks, piping, pumps, aerators, compressors, etc.

- b. Any failure of a pumping station, sewer line, etc., resulting in a spill or bypass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.
- 17. Persons reporting such occurrences by telephone shall also file a written report in letter form within five (5) business days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.
- 18. The facilities associated with the pump and haul activities shall be inspected and pumped as often as necessary to prevent malfunctions, overflows, or nuisances.
- 19. When these pump and haul activities are no longer necessary, please send written notification to

SWP Regional Supervisor Raleigh Regional Office NCDENR-DWQ 1628 Mail Service Center Raleigh, NC 27699-1628.

Permit issued this the 8th Day of February, 2008.

for Coleen H. Sullins, Director Division of Water Quality

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

Briar Chapel Utilities, LLC Permit No. WQ0032580 Wake County



## North Carolina Department of Environment and Natural Resources

Pat McCrory Governor

Division of Water Quality Charles Wakild, P. E. Director

John E. Skvarla, III Secretary

January 9, 2013

Kevin Graham, Vice President Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0036318

NNP Briar Chapel, LLC

Great Ridge Parkway Extension

Wastewater Collection System Extension

Chatham County

Dear Mr. Graham.

In accordance with your application received December 21, 2012, and additional information received on January 8, 2013, we are forwarding herewith Permit No. WQ0036318, dated January 9, 2013, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

- Condition I.1: This permit shall be for the construction of the wastewater collection facilities only. No flow shall be made tributary to the subject facilities until a separate permit application has been received and a new permit issued for any future connections made to the sewer line permitted herein.
- Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual systemwide collection system permit issued to the Permittee.

It shall be responsibility of NNP Briar Chapel, LLC, 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.



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 need additional information concerning this matter, please contact Barry Herzberg at (919) 791-4249 or via e-mail to Barry.Herzberg@ncdenr.gov.

Sincerely,

for Charles Wakild, P.E., Director

Division of Water Quality

by S. Daniel Smith

Surface Water Quality Supervisor

Raleigh Regional Office

cc: Grant Livengood, PE; McKim & Creed, 1730 Varsity Drive Suite 500, Raleigh, NC 27606

Chatham County Health Department

Raleigh Regional Office, Surface Water Protection Section

Water Quality Central Files

PERCS (electronic copy)



## STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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

NNP Briar Chapel, LLC Chatham County

for the construction and operation of approximately 4,295 linear feet of 8-inch gravity sewer to serve as an interceptor line as part of the Great Ridge Parkway Extension project, and the discharge of no additional gallons per day of collected domestic wastewater into the Briar Chapel Utilities existing sewerage system, pursuant to the application received December 21, 2012, and additional information received January 8, 2013, and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 9<sup>th</sup> Day of January 2013.

for Charles Wakild, P.E., Director

Division of Water Quality

By Authority of The Environmental Management Commission

Permit Number: WQ0036318

## SUPPLEMENT TO PERMIT COVER SHEET

NNP Briar Chapel, LLC, is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system, prior to being land applied by spray irrigation, shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility, WQ0028552.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

#### I. SPECIAL CONDITIONS

 This permit shall be for the construction of the wastewater collection facilities only. No flow shall be made tributary to the subject facilities until a separate permit application has been received and a new permit issued for any future connections made to the sewer line permitted herein.

#### II. STANDARD CONDITIONS

- 1. 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.
- 2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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-months and inspections are documented.
- f. A general observation of the entire sewer system shall be conducted at least once per year.
- g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- h. A Grease Control Program is in place as follows:
  - For public owned collection systems, the Grease Control Program shall include at least biannual distribution of
    educational materials for both commercial and residential users and the legal means to require grease interceptors at
    existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement
    for violators and the legal means to control grease entering the system from other public and private satellite sewer
    systems.
  - 2. For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the Permittee or its representative.
  - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 6. 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.
- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- 8. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.
- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permittee:

NNP Briar Chapel, LLC

Project:

Great Ridge Parkway Extension

Permit No.

WQ0036318

Issue Date:

January 9, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater
  collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf
  format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> Modifications should be submitted prior to certification.

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. <u>Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.</u>

that provides proof of receipt by the	; Division.					
	PERMITTEE'S CERTIFICATION					
I,, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.						
Printed Name, Title	Signature	Date				
	ENGINEER'S CERTIFICATION					
Permittee hereby state that, to the construction such that the construct 02T; the Division of Water Quality's	eriodically,  weekly, full time) the best of my abilities, due care and dil tion was observed to be built within subsections (Division) Gravity Sewer Minimum De Design Criteria for the Fast-Track Persond other supporting materials.	al agineer in the State of North Carolina, having a construction of the subject project for the ligence was used in the observation of the stantial compliance of this permit; 15A NCAC esign Criteria adopted February 12, 1996 as rmitting of Pump Stations and Force Mains				
72. (1) 17.71.12.13.14.14.14.14.14.14.14.14.14.14.14.14.14.		FORM & SUPPORTING DOCUMENTATION CHMENTS TO THE FOLLOWING ADDRESS				
		Surface Water Protection Supervisor 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

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permittee:

NNP Briar Chapel, LLC

Project: Great Ridge Parkway Extension

Permit No. Issue Date:

WQ0036318 January 9, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> Modifications should be submitted prior to certification.

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.

	PERMITTEE'S CERTIFI	GATION
constructed pursuant to the applicable star	idards & requirement the Permittee, and I	the Permittee, hereby state that this project has been ents, the Professional Engineer below has provided the Permittee is prepared to operate & maintain the
WILLIAM MUMFORD, YP	alenter	10-51-14
Printed Name, Title	Signature (	Date

#### **ENGINEER'S CERTIFICATION**

North Carglina Professional Engineer's

Seal, and attended date:

OZEAL

OZEA

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

Surface Water Protection Supervisor Raleigh Regional Office 1628 Mail Service Center Raleigh, NC 27899-1628

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



### North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

June 16, 2014

Laurie Ford, Vice President, Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill NC 27516

Subject:

Permit No. WQ0036732 Modification

NNP Briar Chapel, LLC Briar Chapel-Phase 9

Wastewater Collection System Extension

Chatham County

Dear Ms. Ford:

In accordance with your application received June 10, 2014, we are forwarding herewith Permit No. WQ0036732, dated June 16, 2014, to NNP Briar Chapel, LLC 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 No. WQ0036732 issued September 17, 2013, and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference. The permit originally issued on September 17, 2013 allocated 28,500 gpd for 114 lots for Phase 9. This permit modification allocates flow for an additional 25 lots for Phase 9 for a total permitted flow of 34,750 gallons per day.

Please pay particular attention to the following conditions contained within this permit:

Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be responsibility of the NNP Briar Chapel, LLC 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.

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 need additional information concerning this matter, please contact Cheng Zhang at (919) 791-4259 or via e-mail at cheng.zhang@ncdenr.gov.

Sincerely,

for Thomas A. Reeder Division of Water Resources

by S. Daniel Smith

Raleigh Region Surface Water Protection Supervisor

cc: Grant Livengood, P.E., McKim & Creed, Inc., 1730 Varsity Drive, Suite 500, Raleigh, NC 27606
Chatham County Health Department
Water Quality Central Files
PERCS (electronic copy)



# STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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 the

## NNP Briar Chapel, LLC Chatham County

for the construction and operation of approximately 4,820 linear feet of 8-inch gravity sewer to serve 139 lots @ 250/gpd/lot as part of the Briar Chapel Phase 9 project, and the discharge of 34,750 gallons per day of collected domestic wastewater into the Briar Chapel Utilities existing sewerage system, pursuant to the application received June 10, 2014, and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 16th day of June, 2014.

for Thomas A. Reeder

Division of Water Resources

By Authority of The Environmental Management Commission

Permit Number: WQ0036732 Modification

## SUPPLEMENT TO PERMIT COVER SHEET

### **NNP Briar Chapel, LLC** is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility (NPDES Permit No. WQ0028552) prior to being land applied by spray irrigation.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; the Division's 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

I. SPECIAL CONDITIONS

NONE

#### II. STANDARD CONDITIONS

- 1. 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.
- This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with
  the conditions of this permit; 15A NCAC 2T; 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 materials unless specifically
  mentioned herein.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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-months and inspections are documented.
  - f. A general observation of the entire sewer system shall be conducted at least once per year.
  - g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
  - h. A Grease Control Program is in place as follows:
    - For public owned collection systems, the Grease Control Program shall include at least biannual
      distribution of educational materials for both commercial and residential users and the legal means to
      require grease interceptors at existing establishments. The plan shall also include legal means for
      inspections of the grease interceptors, enforcement for violators and the legal means to control grease
      entering the system from other public and private satellite sewer systems.
    - For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.
    - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.

- i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone to a water resources 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.

c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

**Prior to Certification** (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- 8. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.
- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

#### Fast Track Engineering Certification

Permittee: NNP BRIAR CHAPEL, LLC
Project: BRIAR CHAPEL PHASE 9

Permit No: WQ0036732 MODIFICATION

Issue Date: 16/06/14

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

One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater
collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf
format. Record drawings should indicate the design and the marked up changes during construction.

- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> Modifications should be submitted prior to certification.

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.

	PERMITTEE'S CERTIFICATION	
constructed pursuant to the applicab	he undersigned agent for the Permittee, labeled standards & requirements, the Profestion to the Permittee, and the Permittee I herein or portions thereof.	essional Engineer below has provided
Printed Name, Title	Signature	Date
	ENGINEER'S CERTIFICATION	e yn y chweren a dae dae dae dae dae dae dae dae dae d
Partial Final  I,		
	WITH REQUIRED ATTAC	DRM & SUPPORTING DOCUMENTATION HMENTS TO THE FOLLOWING ADDRESS FACE WATER PROTECTION SUPERVISOR RALEIGH REGIONAL OFFICE 3800 BARRETT DRIVE 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.

**DWR Use Only** 

Flow from this project is tributary to:





William G. Ross Jr., Scoretary North Carolina Department of Environment and Natural Resources

> Coleen H. Sullins, Director Division of Water Quality

December 18, 2008

Mr. Mitch Barron, Vice President Briar Chapel Utilities, LLC 16 Windy Knoll Circle Chapel Hill, North Carolina 29516 MC 30 MM. NEW- OXIDA Dickle, Comchet

Subject:

Modified Permit No. WQ0033227 Herndon Woods Subdivision Low Pressure Sewer System Chatham County

Dear Mr. Barron:

In accordance with your permit application received August 26, 2008, and additional information received by the Division of Water Quality (Division), we are forwarding herewith Permit No. WQ0033227 dated December 18, 2008, to Briar Chapel Utilities, LLC for the construction and operation of the subject wastewater collection system.

This Permit shall be effective from the date of issuance until rescinded, shall void Permit No. WQ0033227 issued July 22, 2008, and shall be subject to the conditions and limitations as specified therein.

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.

Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with the approved plans and specifications. Mail the Certification to the Construction Grants & Loans Section, 1633 Mail Service Center, Raleigh, North Carolina 27699-1633. (Engineer's Certification Form is attached.)

One set of approved plans and specifications is being forwarded to you.



Mr. Mitch Barron December 18, 2008 Page 2

If you need additional information concerning this matter, please contact Adrian Eaton, State Review Engineer, at (919) 715-3283 or Seth Robertson, P.E. at (919) 715-6206.

Sincerely,

Daniel M. Blusdell for Coleen H. Sullins

ae/sr

cc: Richard Dickie, P.E., The John McAdams Company, Inc., PO Box 14005, Research Triangle Park, NC 27709

Chatham County Health Department

DWQ Wilmington Regional Office, Aquifer Protection Section (Permit No. WQ0028552)

Seth Robertson, P.E.

Daniel M. Blaisdell, P.E.

Adrian Eaton

Permit Application File WQ0033227

#### NORTH CAROLINA

#### ENVIRONMENTAL MANAGEMENT COMMISSION

#### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### RALEIGH

#### WASTEWATER COLLECTION PERMIT

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, LLC Chatham County

#### FOR THE

construction and operation of a sewer extension system consisting of: approximately 1,110 linear feet of 2-inch pressure sewer pipe; 15 simplex grinder pump stations with on-site audible and visual high water alarms serving 15 3-bedroom single family residential homes (@ 3,750 GPD already permitted herein under Permit No. WQ0033227 issued July 22, 2008); as a part of Herndon Woods Subdivision; and the discharge of 0 GPD of collected wastewater into the Briar Chapel Utilities WWTF (WQ0028552) sewerage system pursuant to the application received on August 26, 2008, and subsequent additional information received by the Division, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

This permit also grants permission for the:

construction and operation of approximately 740 linear feet of 8-inch gravity sewer, and a 180 GPM @ 171° TDH pump station with a minimum of duplex pumps, on-site audible and visual high water alarms, and an on-site generator with automatic transfer switch, and Approximately 2,895 linear feet of 6-inch force main to serve 45 single family dwellings as part of the Herndon Woods Sanitary Sewer project, and the discharge of 11,250 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received July 10, 2008, and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until reseinded, shall void Permit No. WQ0033227 issued July 22, 2008, and shall be subject to the following specified conditions and limitations:

1. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.

- 2. This permit is 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 2T .0400. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0400:
  - (a) The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - (b) A map of the sewer system shall be developed and actively maintained.
  - (c) An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response shall be developed and implemented.
  - (d) Pump stations that are not connected to a telemetry system (i.e., remote alarm system) shall be inspected by the permittee or its representative 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 sewers shall be inspected by the permittee or its representative at least once every six-months and inspections are documented.
  - (f) A general observation by the permittee or its representative of the entire sewer system shall be conducted at least once per year.
  - (g) 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 G.S. 143-215.1C.
  - (h) A Grease Control Program shall be established as follows:
    - (i) For publicly owned collection systems, the Grease Control Program shall include at least bi-annual distribution of educational materials for both commercial and residential users and the legal means to require grease interceptors for new construction and retrofit, if necessary, of grease interceptors at existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement for violators and the legal means to control grease entering the system from other public and private satellite sewer systems.
    - (ii) For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.
    - (iii) Grease education materials shall be distributed more often than required in Parts (i) and (ii) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
  - (i) Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
  - (j) Documentation shall be kept for Subparagraphs (a) through (i) for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

- 4. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities WWTF (WQ0028552) sewerage system prior to being land applied.
- 5. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division accompanied by an application fee, documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.
- Construction of the sewers, pump station(s) and force main 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.
- 7. A copy of the approved plans and specifications shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 8. Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting materials. If this project is to be completed in phases and partially certified, you shall retain the responsibility to track further construction approved under the same permit, and shall provide a final certificate of completion once the entire project has been completed. Mail the Certification to the Construction Grants & Loans Section, 1633 Mail Service Center, Raleigh, North Carolina 27699-1633. (Engineer's Certification Form is attached.)
- Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division, in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.
- 10. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e., local, state, and federal) having jurisdiction, including but not limited to applicable river buffer rules in 15A NCAC 2B .0200, soil erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B .0200 and 15A NCAC 2H .0500.
- 11. The Permittee shall provide for the pump station and force main the following items:
  - (a) Pump Station Reliability:
    - (i) Pump stations, except when exempted by Subparagraph (j)(2) of 15A NCAC 02T.0305, shall be designed with multiple pumps such that peak flow can be pumped with the largest pump out of service.
    - (ii) A standby power source or pump is required at all pump stations except for those pump stations subject to Subparagraph (j)(2) of 15A NCAC 02T.0305. Controls shall be provided to automatically activate the standby source and signal an alarm condition.

- (iii) As an alternative to Part (ii) for pump stations with an average daily design flow less than 15,000 gallons per day as calculated using 15A NCAC 02T.0114, a portable power source or pumping capability may be utilized. It shall be demonstrated to the Division that the portable source is owned or contracted by the permittee and is compatible with the station. If the portable power source or pump is dedicated to multiple pump stations, an evaluation of all the pump stations' storage capacities and the rotation schedule of the portable power source or pump, including travel timeframes, shall be provided in the case of a multiple station power outage.
- (iv) As an alternative to Part (ii) for pump or vacuum stations connecting a single building to an alternative sewer system, wet well storage requirements shall be documented to provide 24-hours worth of wastewater storage or, exceed the greatest power outage over the last three years or the documented response time to replace a failed pump, whichever is greater. Documentation shall be required pursuant to the permit application.
- (v) All pump stations designed for two pumps or more shall have a telemetry system to provide remote notification of a problem condition to include power failure and high water alarm.
- (vi) High water audio and visual alarm.
- (b) Pump stations shall have a permanent weatherproof sign stating the pump station identifier, 24-hour emergency number and instructions to call in case of emergency. Simplex pump or vacuum stations serving a single-family residence shall have a placard or sticker placed inside the control panel with a 24-hour emergency contact number.
- (c) Screened vents for all wet wells.
- (d) The public shall be restricted access to the site and equipment.
- (e) Air relief valves shall be provided at all high points along force mains where the vertical distance exceeds ten feet.
- 12. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those that may be required by this Division, such as the construction of additional or replacement wastewater collection facilities.
- 13. The facilities shall be constructed in accordance with the requirements of the North Carolina Sedimentation Pollution Control Act.
- 14. If applicable, the Operational Agreement between the Permittee and the Environmental Management Commission is incorporated herein by reference and is made a condition of this Permit. Noncompliance with the terms of the Operational Agreement may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statute 143-215.6A to 143-215.6C. A copy of the Articles of Incorporation, Declarations, and Bylaws that have been properly filed shall be submitted with the engineer's certification prior to operation.
- 15. Any abandoning of the existing facilities must be done in accordance with the requirements of the Division's Raleigh Regional Office.

#### 16. 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 render the facility incapable of adequate wastewater transport such as mechanical or electrical failures of pumps, line blockage or breakage, etc.
- (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.

Voice mail messages or faxed information is permissible but this shall <u>not</u> be considered as the initial <u>verbal</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 17. The Permittee shall maintain on hand for immediate installation a supply of spare, fully operational pump units of each type used in the pressure sewer system. The number of pumps on hand shall not be less than 10 percent of the number of installed units or one unit, whichever is greater.
- 18. No flow shall be made tributary from the subject sewer system permitted herein until the receiving downstream sewer pump station and force main permitted under Permit No. WQ0033227 issued July 22, 2008 has been constructed and the engineer's certification has been received by the Division.

Permit issued this the 18th Day of December 2008

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Coleen II. Sullins, Director

Division of Water Quality

By Authority of the Environmental Management Commission

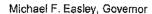
anie M. Blaisdell

Modified Permit No. WQ0033227

Briar Chapel Utilities, LLC Modified Permit No. WQ0033227 Herndon Woods Subdivision Issued December 18, 2008

## **ENGINEER'S CERTIFICATION**

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 low pressure sewer collection system serving the Herndon Woods Subdivision, located in Chatham County, hereby state that to the best of my abilities, due care and diligence was used in the observation of the following construction:			
a sewer extension system consisting of: approximately 1,110 linear feet of 2-inch pressure sewer pipe; 15 simplex grinder pump stations with on-site audible and visual high water alarms serving 15 3-bedroom single family residential homes (@ 3,750 GPD already permitted under Permit No. WQ0033227 issued July 22, 2008); as a part of Herndon Woods Subdivision, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources.			
	of the above referenced project was obsettent of the approved plans and specificat		
Signature	Registration No.	and district company and analysis of the State of State o	
Date	alled non-		
		e*	
Mail this Certification to:	DENR/DWQ Construction Grants & Loans Section 1633 Mail Service Center Raleigh, North Carolina 27699-1633.		
Operational Agreeme copy of the Articles of	ection permit was issued to a private ent ent with the Environmental Management of Incorporation, Declarations, and Bylav c applicable County's Register of Deeds	Commission, then a ws that have been	





William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen H. Sullins, Director Division of Water Quality

July 22, 2008

Mitch Barron, Vice President Briar Chapel Utilities, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0033227

Herndon Woods Sanitary Sewer

Wastewater Collection System Extension

Chatham County

Dear Mr. Barron:

In accordance with your permit application received July 10, 2008, we are forwarding herewith Permit No. WQ0033227 dated July 22, 2008, to Briar Chapel Utilities, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, 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.

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 2T .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 2T; 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, LLC, for the construction and operation of:



- Approximately 740 linear feet of 8-inch gravity sewer, and
- A 180 GPM @ 171' TDH pump station with a minimum of duplex pumps, on-site audible and visual high water alarms, and an on-site generator with automatic transfer switch, and
- Approximately 2,895 linear feet of 6-inch force main

to serve 45 single family dwellings as part of the Herndon Woods Sanitary Sewer project, and the discharge of 11,250 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received July 10, 2008, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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@ncmail.net.

Sincerely.

for Coleen H. Sullins, Director Division of Water Quality

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

Chatham County Health Department CC: Deborah Gore, PERCS Unit RRO, SWP Files RRO, APS, Jay Zimmerman

Brooks Files, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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.
  - 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 2B .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.

- 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 2T .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 a 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

Permit issued this the 22<sup>nd</sup> Day of July 2008.

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

Permit Number WQ0033227 Briar Chapel Utilities, LLC Herndon Woods Sanitary Sewer

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permit No. WQ0033227 Briar Chapel Utilities, LLC Herndon Woods Sanitary Sewer July 22, 2008

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

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 2T; 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 Demonstration is a second that the second secon
Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate
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

DWQ use only:

Flow from this project is tributary to: Briar Chapel

#### **FAST TRACK ENGINEERING CERTIFICATION**

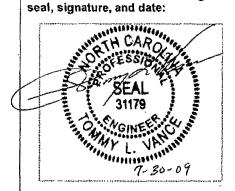
Permit No. WQ0033227 Briar Chapel Utilities, LLC Herndon Woods Sanitary Sewer July 22, 2008

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

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			
, 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 2T; 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			



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



## THE JOHN R. McADAMS COMPANY, INC.

## LETTER OF TRANSMITTAL

To:	DEN	R/DWQ		en de la companya de	Date:	September 11, 2009
	Construction Grants & Loans Section					
	1633	1633 Mail Service Center				
	Rale	igh, NC 27699-1	633			REGULAR MAIL
	**************************************	unanno altingo, epigga, every en a s				
Re:	Briar	Chapel - Herndo	on Woods Subdivisi	ion	Job No.:	NEW-05002
	Perm	nit No. WQ00332	227			
I am se	ending	you the following	g item(s):			
COPI	ES	DATE	NO.			SCRIPTION
1				Engineer's	Certification	
<del>                                      </del>					يعبيب فارد الفاطي ويويون ويويد واستعاد	
These	are tra	insmitted as che	cked below:			
	As re	equested		Ø	For your	use
	For a	approval			]	
	Forr	eview and comm	nent		]	
Remark	ks:					
Copy to	<b>ɔ</b> :			. s	igned:	Daniel Von
					\$	Tommy L. Vance, PE Senior Project Manager
			FOR INTE	RNAL USE	ONLY	
			Copy Letter of			
				2 Document		

ENGINEERS • PLANNERS • SURVEYORS • ENVIRONMENTAL

RESEARCH TRIANGLE PARK • CHARLOTTE • WILMINGTON

800-733-5646 • www.johnrmcadams.com

Briar Chapel Utilities, LLC Modified Permit No. WQ0033227 Herndon Woods Subdivision Issued December 18, 2008

#### **ENGINEER'S CERTIFICATION**

1, Tommy L. Vance, PE, 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 low pressure sewer collection system serving the Herndon Woods Subdivision, located in Chatham County, hereby state that to the best of my abilities, due care and diligence was used in the observation of the following construction:

a sewer extension system consisting of: approximately 1,110 linear feet of 2-inch pressure sewer pipe; 15 simplex grinder pump stations with on-site audible and visual high water alarms serving 15 3-bedroom single family residential homes (@ 3,750 GPD already permitted under Permit No. WQ0033227 issued July 22, 2008); as a part of Herndon Woods Subdivision, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources.

I certify that the construction of the above referenced project was observed to be built within substantial compliance and intent of the approved plans and specifications.

Registration No. 3/179

Date 9-11-09

Mail this Certification to:

DENR/DWQ

Construction Grants & Loans Section

1633 Mail Service Center

Raleigh, North Carolina 27699-1633.

Note: If the wastewater collection permit was issued to a private entity under an Operational Agreement with the Environmental Management Commission, then a copy of the Articles of Incorporation, Declarations, and Bylaws that have been properly filed with the applicable County's Register of Deeds shall be submitted with this certification.

Uly 30,2009 Hundon Woods

Briar Chapel Utilities, LLC Modified Permit No. WQ0033227 Herndon Woods Subdivision Issued December 18, 2008

#### Engineer's Certification

\_\_\_\_\_, 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 low pressure sewer collection system serving the Herndon Woods Subdivision, located in Chatham County, hereby state that to the best of my abilities, due care and diligence was used in the observation of the following construction:

a sewer extension system consisting of: approximately 1,110 linear feet of 2-inch pressure sewer pipe; 15 simplex grinder pump stations with on-site audible and visual high water alarms serving 15 3-bedroom single family residential homes (@ 3,750 GPD already permitted under Permit No. WQ0033227 issued July 22, 2008); as a part of Herndon Woods Subdivision, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources.

I certify that the construction of the above referenced project was observed to be built within substantial compliance and intent of the approved plans and specifications.

Registration No. 31179

Mail this Certification to:

DENR/DWO

Construction Grants & Loans Section

1633 Mail Service Center

Raleigh, North Carolina 27699-1633.

Note: If the wastewater collection permit was issued to a private entity under an Operational Agreement with the Environmental Management Commission, then a copy of the Articles of Incorporation, Declarations, and Bylaws that have been properly filed with the applicable County's Register of Deeds shall be submitted with this certification.



## North Carolina Department of Environment and Natural F

Division of Water Quality

Coleen H. Sullins

Secretary

2010

Beverly Eaves Perdue Governor

Director

September 8, 2010

Bill Mumford, Assistant Vice President NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0034951 Modification

Andrews Store Road Force Main

Wastewater Collection System Extension

Chatham County

Dear Mr. Mumford:

In accordance with your permit application received August 20, 2010, we are forwarding herewith Permit No. WQ0034951 dated September 8, 2010, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded 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.

Please pay particular attention to:

- a) Permit Condition 3 that requires 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, and
- b) Permit condition 3.e which requires high-priority aerial sewer lines be inspected at least once per every six-month period of time, and
- c) Permit Condition 12 which states this permit shall be for the <u>construction</u> of the wastewater collection facilities only. No flow shall be made tributary to the subject facilities until permit modification application is submitted (with the appropriate fee), a modified permit is issued, and the Engineer's Certification is received and approved by the Division

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

NorthCarolina Naturally Briat Chapel Utilities, LLC Page 2 September 8, 2010

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 NNP Briar Chapel, LLC, for the construction and operation of

approximately 1,500 linear feet of 3-inch force main

to serve future development as part of the Andrews Store Road Force Main project, and the discharge of no additional gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received August 20, 2010, and in conformity with 15A NCAC 2T; 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.

Any wastewater flow made tributary to this wastewater collection system extension prior to (1) completion of the Engineer's Certification and (2)modification of the permit as required by Permit Condition 12, shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.

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

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.

Sincerely.

for Coleen H. Sullins, Director Division of Water Quality

by S. Daniel Smith

Raleigh Regional Office

cc: Chatham County Health Department

RRO, SWP Files

Surface Water Quality Supervisor

RRO, APS, Jay Zimmerman

William O'Daniel, PE; John R. McAdams Co., 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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .0200.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - 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, such that no more than 6 months elapses between inspections.
  - 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 2B .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 2T .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 2T; 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.
- 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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.
- 12. This permit shall be for the <u>construction</u> of the wastewater collection facilities only, and is issued to allow force main installation during the construction of Andrews Store Road. No flow shall be made tributary to the permitted facilities until a permit modification application is submitted (with the appropriate fee), a modified permit is issued, and the Engineer's Certification is received and approved by the Division.

Permit issued this the 8th Day of September 2010.

Permit Number WQ0034951 NNP Briar Chapel, LLC Andrews Store Road Force Main

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. WQ0034951 NNP Briar Chapel, LLC Andrews Store Road Force Main September 8, 2010

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

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:
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SEND THIS FORM & SUPPORTING DOCUMENTATION
WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS
RALEIGH REGIONAL OFFICE
1628 MAIL SERVICE CENTER
RALEIGH NC 27699-1628
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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

DWQ use only:

enforcement actions.

Flow from this project is tributary to: Briar Chapel



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

Beverly Eaves Perdue Governor

Coleen H. Sullins Director

Dee Freeman Secretary

Butters, O'Daniel

December 13, 2010

Bill Mumford, Assistant Vice President NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0034951 Modification

Andrews Store Road Force Main

Wastewater Collection System Extension

Chatham County

Dear Mr. Mumford:

In accordance with your permit modification application received December 6, 2010, we are forwarding herewith Permit No. WQ0034951 dated December 13, 2010, to NNP Briar Chapel, LLC, 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 WQ0034951 dated September 8, 2010, 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 increases the total length of the force main.

#### Please pay particular attention to:

- a) Permit Condition 3 that requires 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, and
- b) Permit condition 3.e which requires high-priority aerial sewer lines be inspected at least once per every six-month period of time, and
- c) Permit Condition 12 which states this permit shall be for the construction of the wastewater collection facilities only. No flow shall be made tributary to the subject facilities until permit modification application is submitted (with the appropriate fee), a modified permit is issued, and the Engineer's Certification is received and approved by the Division

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

North Carolina
Naturally

Briar Chapel Utilities, LLC Page 2 December 13, 2010

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 NNP Briar Chapel, LLC, for the construction and operation of

approximately 1,775 linear feet of 3-inch force main

to serve future development as part of the Andrews Store Road Force Main project, and the discharge of no additional gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received December 6, 2010, and in conformity with 15A NCAC 2T; 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.

Any wastewater flow made tributary to this wastewater collection system extension prior to (1) completion of the Engineer's Certification and (2) modification of the permit as required by Permit Condition 12, shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.

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

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.

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

RRO, SWP Files

RRO, APS, Jay Zimmerman

William T. O'Daniel, PE; John R. McAdams Co., 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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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, such that no more than 6 months elapses between inspections.
  - 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 2B .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.

- 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 2T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>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.</u> 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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:

- 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 <u>not</u> 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.
- 12. This permit shall be for the <u>construction</u> of the wastewater collection facilities only, and is issued to allow force main installation during the construction of Andrews Store Road. No flow shall be made tributary to the permitted facilities until a permit modification application is submitted (with the appropriate fee), a modified permit is issued, and the Engineer's Certification is received and approved by the Division.

Permit issued this the 13<sup>th</sup> Day of December 2010.

Permit Number WQ0034951 NNP Briar Chapel, LLC Andrews Store Road Force Main

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. WQ0034951 NNP Briar Chapel, LLC Andrews Store Road Force Main December 13, 2010

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

ENGINEER'S CERTIFICATION
☐ Partial ☐ Final
,, as a duly registered Professional Engineer in the State of North Carolina,
aving been authorized to observe ( periodically, weekly, full time) the construction of the subject project
or 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
ebruary 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.
lorth Carolina Professional Engineer's Seal, signature, and date:
militaring days about and the Standard Astronomy and the Stand Standard and the Standard and Sta
SEND THIS FORM & SUPPORTING DOCUMENTATION WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS
RALEIGH REGIONAL OFFICE
1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628
, IALLIGH NO 27035-1020
drift salter the specialise recycle distantificability inframedal is retained.
he Permittee is responsible for tracking all partial certifications up until a final certification is received. Any
astewater 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

DWQ use only:

enforcement actions.

Flow from this project is tributary to: Briar Chapel



Alan W. Klimek, P.E., Director Division of Water Quality



April 18, 2007

Mitch Barron, VP Briar Chapel Utilities, LLC 5850 Fayetteville Road, Suite 201 Durham, NC 27713

APR 2 3 2007

Subject: Permit No. WQ0029867 Modification

Briar Chapel Subdivision A & B

Wastewater Collection System Extension

Chatham County

Dear Mr. Barron:

In accordance with your permit modification application received April 12, 2007, we are forwarding herewith Permit No. WQ0029867, dated April 18, 2007, to Briar Chapel Utilities, LLC, 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 No. WQ0029687 issued January 29, 2007, 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 is to add the Force Main for the Woods Charter School.

Please note that on September 1, 2006, the North Carolina Administrative Code (NCAC) 15A NCAC 2H .0200 rules referenced in your permit application were replaced by 15A NCAC 2T. This permit is being issued based on the new 2T rules. You should review these rules, available through the Division's PERCS web site http://www.ncwaterquality.org/percs/ to insure your compliance. The Fast Track Engineering Certification attached to this permit is based on 15A NCAC 2T.

Please pay particular attention to Permit Condition 3 which requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee. Your attention is also directed to Permit Condition 6 which requires Engineering Certification prior to operation of this collection system extension. Also note Permit Condition 12 which requires that the receiving wastewater treatment facilities be constructed and operational, and that the engineer's certification has been received by the Division of Water Quality, prior to flows being made tributary to this sewer extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

> North Carolina Naturally

Briar Chapel Utilities, LLC Page 2 April 18, 2007

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, LLC, for the construction and operation of

- approximately 3,600 linear feet of 2.5-inch force main to serve the Woods Charter School, and the continued construction and/or operation of
- 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 1,160 residential units as part of the Briar Chapel Subdivision A&B project, and the discharge of a maximum of 250,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system and Phase A treatment facility, and an additional discharge of 40,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' sewerage system and Phase B treatment facility, pursuant to the application received April 12, 2007, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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@ncmail.net.

Sincerely.

for Alan W. Klimek, P.E., Director

Division of Water Quality

by Charles Wakild, P.E. Surface Water Quality Supervisor Raleigh Regional Office

c: Chatham County Health Department Deborah Gore, PERCS Unit RRO, SWP Files

RRO, APS, Jay Zimmerman

Keith Fenn, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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:

- This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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.

- 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.
- Per 15A NCAC 2T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>Gravity sewers installed greater than ten percent 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 a 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.</u>
- 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

12. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase A is constructed and operational for the initial 250,000 gallons per day (permit number WQ0028552), and the engineer's certification has been received by the Division of Water Quality. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase B is constructed and operational for the final 40,000 gallons per day, and the engineer's certification has been received by the Division of Water Quality. Written approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 18th Day of April, 2007.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Alan W. Klimek, P.E., Director

Division of Water Quality

By Authority of the Environmental Management Commission

by Charles Wakild, P.E. Surface Water Quality Supervisor Raleigh Regional Office

Permit Number WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B April 18, 2007

enforcement actions.

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 this Engineer's Certification and all required supporting documentation have been received by the Division. 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 2T; 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



William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Alan W. Klimek, P.E., Director Division of Water Quality

May 21, 2007

Mitch Barron, VP Briar Chapel Utilities, LLC 5850 Fayetteville Road, Suite 201 Durham, NC 27713

Subject: Permit No. WQ0029867 Modification

Briar Chapel Subdivision A & B

Wastewater Collection System Extension

Chatham County

Dear Mr. Barron:

In accordance with your permit modification request received May 21, 2007, we are forwarding herewith Permit No. WQ0029867, dated May 21, 2007, to Briar Chapel Utilities, LLC, 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 No. WQ0029687 issued January 29, 2007, 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 corrects the size of the Force Main for the Woods Charter School.

Please note that on September 1, 2006, the North Carolina Administrative Code (NCAC) 15A NCAC 2H .0200 rules referenced in your permit application were replaced by 15A NCAC 2T. This permit is being issued based on the new 2T rules. You should review these rules, available through the Division's PERCS web site http://www.ncwaterquality.org/percs/ to insure your compliance. The Fast Track Engineering Certification attached to this permit is based on 15A NCAC 2T.

Please pay particular attention to Permit Condition 3 which requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee. Your attention is also directed to Permit Condition 6 which requires Engineering Certification prior to operation of this collection system extension. Also note Permit Condition 12 which requires that the receiving wastewater treatment facilities be constructed and operational, and that the engineer's certification has been received by the Division of Water Quality, prior to flows being made tributary to this sewer extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

> North Carolina Naturally

Briar Chapel Utilities, LLC Page 2 May 21, 2007

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, LLC, for the construction and operation of

- approximately 3,600 linear feet of 4-inch force main to serve the Woods Charter School, and the continued construction and/or operation of
- 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 1,160 residential units as part of the Briar Chapel Subdivision A&B project, and the discharge of a maximum of 250,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system and Phase A treatment facility, and an additional discharge of 40,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' sewerage system and Phase B treatment facility, pursuant to the request received May 21, 2007, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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 <a href="mailto-barry.herzberg@ncmail.net">barry.herzberg@ncmail.net</a>.

Sincerely

for Alan W. Klimek, P.E., Director

Division of Water Quality

by Charles Wakild, P.E.

Surface Water Quality Supervisor

Raleigh Regional Office

cc: Chatham County Health Department

Deborah Gore, PERCS Unit

RRO, SWP Files

RRO, APS, Jay Zimmerman

Keith Fenn, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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.

- 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 2T .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 greater than ten percent 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 a 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

12. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase A is constructed and operational for the initial 250,000 gallons per day (permit number WQ0028552), and the engineer's certification has been received by the Division of Water Quality. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase B is constructed and operational for the final 40,000 gallons per day, and the engineer's certification has been received by the Division of Water Quality. Written approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 21st Day of May, 2007.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Alan W. Klimek, P.E., Director/

Division of Water Quality

By Authority of the Environmental Management Commission

by Charles Wakild, P.E. Surface Water Quality Supervisor Raleigh Regional Office

Permit Number WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B May 21, 2007

enforcement actions.

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. 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 Permitte	tee hereby state that, to the best of my abilities, due care and			
diligence was used in the observation	on of the construction such that the construction was observed to be			
built within substantial compliance of	of this permit; 15A NCAC 2T; the Division of Water Quality's			
(Division) Gravity Sewer Minimum D	Design Criteria adopted February 12, 1996 as applicable; the			
Division's Minimum Design Criteria f	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				
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628			
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wastewater flow made tributary to the wa	g all partial certifications up until a final certification is received. Any astewater collection system extension prior to completion of this ered a violation of the permit and shall subject the Permittee to appropriate			



# 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 <u>prior to operation</u> 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:

NorthCarolina Naturally Briar Chapel Utilities, LLC Page 2 May 3, 2010

- 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.

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 <u>prior to operation</u> 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. <u>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.</u> 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.
- 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 <u>not</u> 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

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				
N proceduration to the content of th				
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



Alan W. Klimek, P.E., Director Division of Water Quality



January 29, 2007

Mitch Barron, VP Briar Chapel Utilities, LLC 5850 Fayetteville Street Suite 201 Durham, NC 27713

Subject: Permit No. WQ0029867 Modification

Briar Chapel Subdivision A & B

Wastewater Collection System Extension

Chatham County

Dear Mr. Barron:

In accordance with your permit modification application received January 24, 2007, we are forwarding herewith Permit No. WQ0029867, dated January 29, 2007, to Briar Chapel Utilities, LLC, 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 No. WQ0029687 issued April 3, 2006, 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 is to change the length of the gravity sewer.

Please note that on September 1, 2006, the North Carolina Administrative Code (NCAC) 15A NCAC 2H .0200 rules referenced in your permit application were replaced by 15A NCAC 2T. This permit is being issued based on the new 2T rules. You should review these rules, available through the Division's PERCS web site http://www.ncwaterquality.org/percs/ to insure your compliance. The Fast Track Engineering Certification attached to this permit is based on 15A NCAC 2T.

Please pay particular attention to Permit Condition 3 which requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee. Your attention is also directed to Permit Condition 6 which requires Engineering Certification prior\_to operation of this collection system extension. Also note Permit Condition 12 which requires that the receiving wastewater treatment facilities be constructed and operational, and that the engineer's certification has been received by the Division of Water Quality, prior to flows being made tributary to this sewer extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

> North Carolina Naturally

Briar Chapel Utilities, LLC Page 2 January 29, 2007

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, LLC, for the construction and operation of

- 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

to serve 1,160 residential units as part of the Briar Chapel Subdivision A&B project, and the discharge of a maximum of 250,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system and Phase A treatment facility, and an additional discharge of 40,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' sewerage system and Phase B treatment facility, pursuant to the application received January 24, 2007, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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 <a href="mailto:barry.herzberg@ncmail.net">barry.herzberg@ncmail.net</a>.

Sincerely.

for Alan W. Klimek, P.E., Director

Division of Water Quality

by Charles Wakild, P.E. Surface Water Quality Supervisor Raleigh Regional Office

cc: Chatham County Health Department
Deborah Gore, PERCS Unit
RRO, SWP Files
RRO, APS, Jay Zimmerman

Richard Dickie, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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 2T .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 greater than ten percent 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 a 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 2T; 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.
- 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.
- 12. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase A is constructed and operational for the initial 250,000 gallons per day (permit number WQ0028552), and the engineer's certification has been received by the Division of Water Quality. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase B is constructed and operational for the final 40,000 gallons per day, and the engineer's certification has been received by the Division of Water Quality. Written approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 29th Day of January, 2007.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Alan W. Klimek, P.E., Director

Division of Water Quality

By Authority of the Environmental Management Commission

by Charles Wakild, P.E. Surface Water Quality Supervisor Raleigh Regional Office

Permit Number WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B January 29, 2007

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
   <u>modifications are required for any changes resulting in non-compliance with this permit, regulations or
   minimum design criteria.</u>

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. 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					
I, , as a c	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 Permitte	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	n of the construction such that the construction was observed to be					
built within substantial compliance of	this permit; 15A NCAC 2T; the Division of Water Quality's					
(Division) Gravity Sewer Minimum De	(Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the					
Division's Minimum Design Criteria fo	or 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:						
all the same of th	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.



Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director Division of Water Quality

April 3, 2006

Mitch Barron, VP Briar Chapel Utilities, LLC 5850 Fayetteville Street Suite 201 Durham, NC 27713 Property OBARTA

Subject: Permit No. WQ0029867 Modification Briar Chapel Subdivision A & B Wastewater Collection System Extension Chatham County

Dear Mr. Barron:

In accordance with your permit modification application received March 29, 2006, we are forwarding herewith Permit No. WQ0029867, dated April 3, 2006, to Briar Chapel Utilities, LLC, 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 No. WQ0029687 issued March 2, 2006, 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 is to change the design points for the pump stations.

Please pay particular attention to Permit Condition 3 which requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2H .0227 or any individual system-wide collection system permit issued to the Permittee. Your attention is also directed to Permit Condition 6 which requires Engineering Certification <u>prior to operation</u> of this collection system extension. Also note Permit Condition 12 which requires that the receiving wastewater treatment facilities be constructed and operational, and that the engineer's certification has been received by the Division of Water Quality, prior to flows being made tributary to this sewer extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2H .0200; 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.



Briar Chapel Utilities, LLC Page 2 April 3, 2006

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, LLC, for the construction and operation of

- approximately 21,900 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

to serve 1,160 residential units as part of the Briar Chapel Subdivision A&B project, and the discharge of a maximum of 250,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system and Phase A treatment facility, and an additional discharge of 40,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' sewerage system and Phase B treatment facility, pursuant to the application received February 15, 2006, and in conformity with 15A NCAC 2H .0200; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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 hinding.

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@ncmail.net.

Sincerely.

May (C), Morely for Alan W. Klimek, P.

cc: Chatham County Health Department

Marie Doklovic, PERCS Unit

Raleigh Regional Office, SWP

Raleigh Regional Office, APS, Jay Zimmerman

Brian King, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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 2H .0200; 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 2H .0227. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2H .0227:
  - 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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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 2H. .0220, 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 greater than ten percent 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 a 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 2H .0200; 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 fall 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.
- 12. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase A is constructed and operational for the initial 250,000 gallons per day (permit number WQ0028552), and the engineer's certification has been received by the Division of Water Quality. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase B is constructed and operational for the final 40,000 gallons per day, and the engineer's certification has been received by the Division of Water Quality. Written approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 3<sup>rd</sup> Day of April, 2006.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Alan' W. Klimek, P.E., Director

Division of Water Quality

By Authority of the Environmental Management Commission

Permit Number WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B April 3, 2006

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. 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 2H .0200; 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
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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.

Permit No. WQ0029867 Briar Chapet Utilities, LLC Briar Chapel A&B March 2, 2006

enforcement actions.

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 nonallowed to operate until this Engineer's Certification and ell required supporting documentation have been received by the Division. Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.

			MEER'S CERTI	FICATION	
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Carolina, h	aving been autho	rized to obser	ve (M periodic	ally. $\square$ weekly.	I full time) the construction
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Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate

A STATE OF THE STA

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B March 2, 2006

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 normal, regulations of
  minimum design criteria.

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

	ENGINEER'S CERTIFICATION						
	☐ Partlel ☐ 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 2H .0200; 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.						
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	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 order to completion of this						
	Engineer's Curtification shall be considered a violation of the permit actions.						



Michael F. Easley, Governor William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Alan W. Klimek, P.E., Director Division of Water Quality

March 2, 2006

Mitch Barron, VP Briar Chapel Utilities, LLC 5850 Fayetteville Street Suite 201 Durham, NC 27713

> Subject: Permit No. WQ0029867 Briar Chapel Subdivision A & B Wastewater Collection System Extension Chatham County

Dear Mr. Barron:

In accordance with your permit application received February 15, 2006, and additional information received on February 21, 2006, we are forwarding herewith Permit No. WQ0029867, dated March 1, 2006, to Briar Chapel Utilities, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, 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.

Please pay particular attention to Permit Condition 3 which requires that the wastewater collection facilities be properly operated and maintained in accordance with 16A NCAC 2H .0227 or any individual system-wide collection system permit issued to the Permittee. Your attention is also directed to Permit Condition 6 which requires Engineering Certification prior to operation of this collection system extension. Also note Permit Condition 12 which requires that the receiving wastewater treatment facilities be constructed and operational, and that the engineer's certification has been received by the Division of Water Quality, prior to flows being made tributary to this sewer extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2H .0200; 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.

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NorthCarolina Naturally

Briar Chapel Utilities, LLC Page 2 March 2, 2006

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, LLC, for the construction and operation of

- · approximately 21,900 linear feet of 8-inch gravity sewer, and
- a 256-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 210-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

to serve 1,160 residential units as part of the Briar Chapel Subdivision A&B project, and the discharge of a maximum of 250,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system and Phase A treatment facility, and an additional discharge of 40,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' sewerage system and Phase B treatment facility, pursuant to the application received February 15, 2006, and in conformity with 15A NCAC 2H .0200; 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 filled and approved by the Department of Environment and Natural Resources and considered a part of this permit.

The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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@ncmail.net.

Sincerely

for Alan W. Klimek, P.E.

cc: Chatham County Health Department
Marie Doklovic PERCS Unit

Marie Doklovic, PERCS Unit Raleigh Regional Office, SWP

Raleigh Regional Office, Jay Zimmerman

Brian King, PE; John R. McAdams Company, 2905 Meridian Parkway, Durham, NC 27713 Central Files

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## 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 voldable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2H .0200; 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 2H .0227. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2H .0227:
  - 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 2L .0200 or the surface water standards in 15A NCAC 2B .0200.
  - A map of the sewer system shall be developed and shall be actively maintained.
  - 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.
  - 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.
  - 1. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .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.

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- 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.
- Per 15A NCAC 2H. .0220, 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 greater than ten percent 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 a 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 2H .0200; 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 nulsance 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition 1(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

12. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase A is constructed and operational for the initial 250,000 gallons per day (permit number WQ0028552), and the engineer's certification has been received by the Division of Water Quality. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase B is constructed and operational for the final 40,000 gallons per day, and the engineer's certification has been received by the Division of Water Quality. Written approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 2<sup>nd</sup> Day of March, 2006.

NORTH CABOLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Alan W. Klimek, P.E., Director (

Division of Water Quality

By Authority of the Environmental Management Commission

Permit Number WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B

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Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B March 2, 2006

enforcement actions,

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. 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				
l, asad	uly registered Professional Engineer in the State of North				
Carolina, having been authorized to o	bserve ( periodically, weekly, full time) the construction				
of the subject project for the Permittee	e 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 t	this permit; 15A NCAC 2H .0200; the Division of Water Quality's				
(Division) Gravity Sewer Minimum De	sign Criteria adopted February 12, 1996 as applicable; the				
Division's Minimum Design Criteria fo	r the Fast-Track Permitting of Pump Stations and Force Mains				
adopted June 1, 2000 as applicable; a	and other supporting materials.				
North Carolina Professional Engineer's seal, signature, and date:					
	ANGEN CONTRACTOR				
* 1	SEND THIS FORM & SUPPORTING DOCUMENTATION WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS				
7	RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628				
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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

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B May 21, 2007

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 this Engineer's Certification and all required supporting documentation have been received by the Division. Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.

	Engineer's C	ERTIFICATION	
	Partial	☑ Final	
1. TOMMY L. VANCE, PE	, as a duly registered	Professional Engineer in the State	of North
Carolina, having been author	ized to observe (I pe	iodically, [] weekly, [] full time) t	the construction
of the subject project for the	Permittee hereby state	that, to the best of my abilities, du	e care and
diligence was used in the obs	servation of the constru	ction such that the construction w	as observed to be
built within substantial compli	ance of this permit; 15	NCAC 2T; the Division of Water	Quality's
(Division) Gravity Sewer Mini	mum Design Criteria a	lopted February 12, 1996 as appli	icable; the
Division's Minimum Design C	riteria for the Fast-Trac	k Permitting of Pump Stations and	d Force Mains
adopted June 1, 2000 as app	licable; and other supp	orting materials.	
North Carolina Professiona seal, signature, and date:	ll Engineer's		
T	2/1		
TH CAR		END THIS FORM & SUPPORTING I	

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.



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

Beverly Eaves Perdue Governor

Coleen H. Sullins Director Dee Freeman Secretary

NEW 05042 N. Sanchez, Deane

April 14, 2009

Jeff Scouten, Senior Project Manager Briar Chapel Utilities, LLC 5850 Fayetteville Road, Suite 201 Durham, NC 27713

Subject: Permit No. WQ0029867 Modification

Briar Chapel Subdivision A & B

Wastewater Collection System Extension

Chatham County

Dear Mr. Scouten:

We are forwarding herewith modified Permit No. WQ0029867 dated April 14, 2009, to Briar Chapel Utilities, LLC, 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 No. WQ0029687 issued May 21, 2007, 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 adjusts flow allocations for the lots to be built under this permit as described herein.

It should be noted that references made herein to the 15A NCAC 02T rules are applicable only where they do not conflict with the 15A NCAC 02H .0200 rules by which the project infrastructure was built under the original permit issued March 2, 2006. The Engineer's Certification page attached hereto is based on the original permit and reflects the 2H rules.

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 2T .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. Also note Permit Condition 12 that requires that the receiving wastewater treatment facilities be constructed and operational, and that the engineer's certification has been received by the Division of Water Quality, prior to flows being made tributary to this sewer extension.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

North Carolina Naturally

Briar Chapel Utilities, LLC Page 2 April 14, 2009

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, LLC, for the construction and operation of

- 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 287 residential units permitted herein and allocate flow for 66 residential units permitted under WQ0029992 as part of the Briar Chapel Subdivision A&B project, and the discharge of 88,250 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, and in conformity with 15A NCAC 2T except as previously noted; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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 <a href="mailto:barry.herzberg@ncmail.net">barry.herzberg@ncmail.net</a>.

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
Deborah Gore, PERCS Unit
RRO, SWP Files
RRO, APS, Jay Zimmerman
R. J. Dickie, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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.
- Per 15A NCAC 2T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>Gravity sewers installed greater than ten percent 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.</u>
- 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 2T; 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.
- 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I (2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

12. No wastewater flow shall be made tributary to the subject sanitary sewer system until the VVastewater Treatment Facility Phase A is constructed and operational for the initial 250,000 gallons per day (permit number WQ0028552), and the engineer's certification has been received by the Division of Water Quality. No wastewater flow shall be made tributary to the subject sanitary sewer system until the Wastewater Treatment Facility Phase B is constructed and operational for the final 40,000 gallons per day, and the engineer's certification has been received by the Division of Water Quality. Written approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 14th Day of April 2009.

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

Permit Number WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B

# **FAST TRACK ENGINEERING CERTIFICATION**

Permit No. WQ0029867 Briar Chapel Utilities, LLC Briar Chapel A&B April 14, 2009

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

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

Makada Marangan ya Marina ya nya fidikisisisisi Marina marina mana kata mana kata manana ana kata manana kata	ENGINEER'S CERTIFICATION	<u>N</u>
	☐ Partial	Final
I, as a du	ly registered Professional Eng	neer in the State of North Carolina, having
been authorized to observe ( period	lically,   weekly,  full time)	the construction of the subject project for the
Permittee hereby state that, to the bes	it of my abilities, due care and	diligence was used in the observation of the
construction such that the construction	was observed to be built with	n substantial compliance of this permit; 15A
NCAC 2H .0200; the Division of Water	· Quality's (Division) Gravity Se	wer Minimum Design Criteria adopted
February 12, 1996 as applicable; the D	Division's Minimum Design Crit	eria for the Fast-Track Permitting of Pump
Stations and Force Mains adopted Jur	ne 1, 2000 as applicable; and c	ther supporting materials.
North Carolina Professional Engine seal, signature, and date:	er's	
		FORM & SUPPORTING DOCUMENTATION CHMENTS TO THE FOLLOWING ADDRESS
		RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628
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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.



William G Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

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Alan W. Klimek, P.E., Director Division of Water Quality

July 28, 2006

Mitch Barron Briar Chapel Utilities LLC PO Box 1486 Pittsboro, NC 27312

Subject: Permit No. WQ0029992

Briar Chapel

Pressure Sewer Extension Chatham County

Dear Mr. Barron:

In accordance with your permit application received March 10, 2006, and subsequent additional information received July 6, 2006, July 17, 2006 and July 24, 2006, we are forwarding herewith Permit No. WQ0029992 dated July 28, 2006, to Briar Chapel Utilities LLC for the construction and operation of the subject wastewater collection extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein.

Please pay particular attention to Permit Condition 3 which requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2H .0227 or any individual system-wide collection system permit issued to the Permittee. Permit Condition 5 prohibits operation of this sewer system until the downstream sewer and treatment plant are constructed and certified operational. Permit Condition 17 requires a check valve on the Alley A1 downhill force main.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2H .0200; 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.

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.

Mr. Barron July 28, 2006 Page 2

Note that the Division reorganized in 2004. For our organizational chart, see http://h2o.enr.state.nc.us/documents/dwq\_orgchart.pdf. All sewer related matters are now handled through the Pretreatment, Emergency Response and Collection Systems Unit under the Point Source Branch EXCEPT FOR FAST-TRACK SEWER PERMITTING WHICH CONTINUES TO BE ADMINISTERED THROUGH OUR REGIONAL OFFICES. The Unit is located on the 13th floor of the Archdale building in downtown Raleigh. Please ensure the letterhead information is used for all correspondence to ensure timely delivery.

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Marie Doklovic at (919) 733-5083 extension 371.

Sincerely

Alan W. Klimek, P. E.

cc: Chatham County Health Department
Raleigh Regional Office, Water Quality Section (Permit WQ0028552)
Richard Dickie, PE, The John R. McAdams Company
SWP Central Files
PERCS (formerly NDPU) Files

## NORTH CAROLINA

#### **ENVIRONMENTAL MANAGEMENT COMMISSION**

#### DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### RALEIGH

# WASTEWATER COLLECTION PERMIT

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 LLC CHATHAM COUNTY

#### FOR THE

construction and operation of a pressure sewer collection system consisting of 66 centrifugal simplex grinder pump stations with on-site audible and visual high water alarms; approximately 2,426 linear feet of 2-inch pressure sewer; approximately 1,863 linear feet of 3-inch pressure sewer; approximately 1,298 linear feet of 4-inch pressure sewer and all associated appurtenances and service lines to serve 66 lots in Briar Chapel, with no additional discharge of collected wastewater into the Briar Chapel Utilities LLC's existing sewerage system (flow allocated under Permit No. WQ0029867), pursuant to the application received March 10, 2006, and subsequent additional information received by the Division, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this 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 revocable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2H .0200; 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 is 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 2H .0227. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2H .0227:
  - 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 2L .0200 or the surface water standards in 15A NCAC 2B .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. This requirement does not apply to pump stations serving a single building associated with a properly permitted pressure sewer system.
- 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 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- 4. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities LLC Wastewater Treatment Facility (Non-Discharge Permit No. WQ0028552) prior to being land applied by spray irrigation.
- No flow shall be made tributary to the subject sewer system permitted herein until the downstream sewers (Permit No. WQ0029867) and/or wastewater treatment plant (Permit No. WQ0028552) have been constructed and the engineer's certification has been received by the Division of Water Quality.
- 6. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division of Water Quality (Division) accompanied by documentation from the parties involved and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.
- 7. Construction of the sewers, pump station(s) and force main 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.
- 8. Per 15A NCAC 2H .0220, 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.
- 9. A copy of the approved plans and specifications shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 10. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2H .0200; 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.

- 11. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e., local, state, and federal) having jurisdiction, including but not limited to applicable river buffer rules in 15A NCAC 2B .0200, soil erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B .0200 and 15A NCAC 2H .0500.
- 12. The Permittee shall provide the following items for the pressure sewer:
  - a. Pump on/off elevations located so that 2-8 pumping cycles may be achieved per hour in any centralized pump station serving more than one building.
  - b. A minimum of 250 gallons of storage capacity above the pump-on activation level in the simplex pump station wet well.
  - c. An air relief valve located at all high points along the force main.
  - d. A screened vent for the wet well.
  - e. Fillets located in the wet well(s) at the intersection of the flooring and side walls.
  - f. Three feet of cover (minimum) over the force main or the use of ferrous material where three feet cannot be maintained.
  - g. Sufficient devices which will protect the pump station from vandals.
  - h. Flood protection if the pump station is located below the 100-year flood elevation.
  - i. Adherence with the following minimum separations:
    - (i) Storm sewers (vertical) 12 inches
    - (ii) Water mains (vertical-water over sewer) 18 inches or (horizontal) 10 feet
    - (iii) In benched trenches (vertical) 18 inches
    - (iv) Any private or public water supply source, including any WS-I waters or Class I or Class II impounded reservoirs used as a source of drinking water 100 feet
    - (v) Waters classified WS (other than WS-I), B, SA, ORW, HQW, or SB [from normal high water (or tide elevation)] 50 feet
    - (vi) Any other stream, lake or impoundment 10 feet
    - (vii) Any building foundation 5 feet
    - (viii) Any basement 10 feet
    - (ix) Top slope of embankment or cuts of 2 feet or more vertical height 10 feet
    - (x) Drainage systems
      - (I) Interceptor drains 5 feet
      - (II) Ground water lowering and surface drainage ditches 10 feet
    - (xi) Any swimming pool 10 feet
    - (xii) Ferrous sewer pipe with joints equivalent to water main standards, shall be used where these minimum separations cannot be maintained. The minimum separation shall however not be less than 25 feet from a private well or 50 feet from a public water supply well;
- 13. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those that may be required by this Division, such as the construction of additional or replacement wastewater collection facilities.

# 14. 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 render the facility incapable of adequate wastewater transport such as mechanical or electrical failures of pumps, line blockage or breakage, etc.

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.

Voice mail messages or faxed information is permissible but this shall <u>not</u> be considered as the initial <u>verbal</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 15. The Permittee shall maintain on hand for immediate installation a supply of spare, fully operational pump units of each type used in the pressure sewer system. The number of pumps on hand shall not be less than 10 percent of the number of installed units or one unit, whichever is greater.
- 16. Each pump station shall be clearly and conspicuously posted with the telephone number of the owner/operator of the pressure sewer system and instructions to call the number in the event of high water alarm activation.
- 17. A check valve shall be placed on the Alley A1 force main (a downhill main) to 1)keep wastewater from backing up into the line from the main and 2) to keep the line full to force flow into the main when needed.

Permit issued this the 28th day of July, 2006

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Alan W. Klimek, P. E., Director
Division of Water Quality
By Authority of the Environmental Management Commission

Permit Number WQ0029992

Permit No. WQ0029992 July 28, 2006

System Description:

66 centrifugal simplex grinder pump stations with on-site audible and visual high water alarms; approximately 2,426 linear feet of 2-inch pressure sewer; approximately 1,863 linear feet of 3-inch pressure sewer; approximately 1,298 linear feet of 4-inch pressure sewer and all associated appurtenances and service lines to serve 66 lots

Complete and submit this form to the permit issuing office as indicated below with the following:

- One copy of the project record drawings (plan & profile views of sewer lines) of the wastewater collection system extension
- 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 this Engineer's Certification and all required supporting documentation have been received by the Division. 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 ( $\square$ periodically, $\square$ weekly, $\square$ 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 2H .0200; 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				
NC DIVISION OF WATER QUALITY				
PRETREATMENT, EMERGENCY RESPONSE & COLLECTION SYSTEMS UNIT				
1617 MAIL SERVICE CENTER				
RALEIGH NC 27699-1617				

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.



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

Beverly Eaves Perdue Governor

Coleen H. Sullins
Director

Dee Freeman Secretary

December 7, 2010

Mr. Bill Mumford Briar Chapel Utilities, LLC 16 Windy Knoll Circle Chapel Hill, North Carolina 27516 Butters, O'Danie, Drais

Subject:

Permit No. WQ0034780

Briar Chapel Phase 4 Sewer Extension

Low Pressure Sewer System

Chatham County

Dear Mr. Mumford:

In accordance with your permit application received May 24, 2010, and additional information received by the Division of Water Quality (Division), we are forwarding herewith Permit No. WQ0034780 dated December 7, 2010, to the Briar Chapel Utilities, LLC for the construction and operation of the subject wastewater collection system.

This Permit shall be effective from the date of issuance until rescinded, and shall be subject to the conditions and limitations as specified therein.

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.

Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with the approved plans and specifications. Mail the Certification to the Construction Grants & Loans Section, 1633 Mail Service Center, Raleigh, North Carolina 27699-1633. (Engineer's Certification Form is attached.)

One set of approved plans and specifications is being forwarded to you.



Mr. Bill Mumford December 7, 2010 Page 2

If you need additional information concerning this matter, please contact Adrian Eaton, State Review Engineer, at (919) 715-3283 or Seth Robertson, P.E. at (919) 715-6206.

Sincerely,

Coleen H. Sullins

ae/sr

cc:

Mr. William T. O'Daniel, P.E., The John R. McAdams Company, Inc., 2905 Meridian Parkway, Durham, NC 27713

Chatham County Health Department DWQ Raleigh Regional Office, Aquifer Protection Section (WQ0028552) DWQ Raleigh Regional Office, Surface Water Protection Section Permit Application File WQ0034780

# NORTH CAROLINA

# **ENVIRONMENTAL MANAGEMENT COMMISSION**

# DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

# RALEIGH

# WASTEWATER COLLECTION PERMIT

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 THE

# BRIAR CHAPEL UTILITIES, LLC Chatham County

#### FOR THE

construction and operation of a low pressure sewer system consisting of six (6) simplex pump stations with on-site audible and visual high water alarms to serve six (6) 3-bedroom single family residential units as a part of Briar Chapel Phase 4 sewer extension, and the discharge of 0 GPD (flow permitted under Permit No. WQ0029867) of collected wastewater into the Briar Chapel Reclaimation Facility (Permit No. WQ0028552) sewerage system pursuant to the permit application received on May 24, 2010, and subsequent additional information received by the Division, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this 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 facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.
- 2. This permit is 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 2T .0400. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0400:
  - (a) The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - (b) A map of the sewer system shall be developed and actively maintained.

- (c) An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response shall be developed and implemented.
- (d) Pump stations that are not connected to a telemetry system (i.e., remote alarm system) shall be inspected by the permittee or its representative 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.
- (c) High-priority sewers shall be inspected by the permittee or its representative at least once every six-months and inspections are documented.
- (f) A general observation by the permittee or its representative of the entire sewer system shall be conducted at least once per year.
- (g) 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 G.S. 143-215.1C.
- (h) A Grease Control Program shall be established as follows:
  - (i) For publicly owned collection systems, the Grease Control Program shall include at least bi-annual distribution of educational materials for both commercial and residential users and the legal means to require grease interceptors for new construction and retrofit, if necessary, of grease interceptors at existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement for violators and the legal means to control grease entering the system from other public and private satellite sewer systems.
  - (ii) For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.
  - (iii) Grease education materials shall be distributed more often than required in Parts (i) and (ii) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- (i) Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- (j) Documentation shall be kept for Subparagraphs (a) through (i) for a minimum of three years with exception of the map, which shall be maintained for the life of the system.
- 4. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Reclaimation Facility (Permit No. WQ0028552) sewerage system prior to being land applied.
- 5. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division accompanied by an application fee, documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.

- 6. Construction of the sewers, pump station(s) and force main 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.
- 7. A copy of the approved plans and specifications shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 8. Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with this permit, the approved plans and specifications, and other supporting materials. If this project is to be completed in phases and partially certified, you shall retain the responsibility to track further construction approved under the same permit, and shall provide a final certificate of completion once the entire project has been completed. Mail the Certification to the Construction Grants & Loans Section, 1633 Mail Service Center, Raleigh, North Carolina 27699-1633. (Engineer's Certification Form is attached.)
- 9. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division, in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.
- 10. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e., local, state, and federal) having jurisdiction, including but not limited to applicable river buffer rules in 15A NCAC 2B .0200, soil erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B .0200 and 15A NCAC 2H .0500.
- 11. The Permittee shall provide for the pump station and force main the following items:
  - (a) Pump Station Reliability:
    - (i) Pump stations, except when exempted by Subparagraph (j)(2) of 15A NCAC 02T.0305, shall be designed with multiple pumps such that peak flow can be pumped with the largest pump out of service.
    - (ii) A standby power source or pump is required at all pump stations except for those pump stations subject to Subparagraph (j)(2) of 15A NCAC 02T.0305. Controls shall be provided to automatically activate the standby source and signal an alarm condition.
    - (iii) As an alternative to Part (ii) for pump stations with an average daily design flow less than 15,000 gallons per day as calculated using 15A NCAC 02T.0114, a portable power source or pumping capability may be utilized. It shall be demonstrated to the Division that the portable source is owned or contracted by the permittee and is compatible with the station. If the portable power source or pump is dedicated to multiple pump stations, an evaluation of all the pump stations' storage capacities and the rotation schedule of the portable power source or pump, including travel timeframes, shall be provided in the case of a multiple station power outage.

- (iv) As an alternative to Part (ii) for pump or vacuum stations connecting a single building to an alternative sewer system, wet well storage requirements shall be documented to provide 24-hours worth of wastewater storage or, exceed the greatest power outage over the last three years or the documented response time to replace a failed pump, whichever is greater. Documentation shall be required pursuant to the permit application.
- (v) All pump stations designed for two pumps or more shall have a telemetry system to provide remote notification of a problem condition to include power failure and high water alarm.
- (vi) High water audio and visual alarm.
- (b) Pump stations shall have a permanent weatherproof sign stating the pump station identifier, 24-hour emergency number and instructions to call in case of emergency. Simplex pump or vacuum stations serving a single-family residence shall have a placard or sticker placed inside the control panel with a 24-hour emergency contact number.
- (c) Screened vents for all wet wells.
- (d) The public shall be restricted access to the site and equipment.
- (e) Air relief valves shall be provided at all high points along force mains where the vertical distance exceeds ten feet.
- 12. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those that may be required by this Division, such as the construction of additional or replacement wastewater collection facilities.
- 13. The facilities shall be constructed in accordance with the requirements of the North Carolina Sedimentation Pollution Control Act.
- 14. If applicable, the Operational Agreement between the Permittee and the Environmental Management Commission is incorporated herein by reference and is made a condition of this Permit. Noncompliance with the terms of the Operational Agreement may subject the Permittee to an enforcement action by the Division in accordance with North Carolina General Statute 143-215.6A to 143-215.6C. A copy of the Articles of Incorporation, Declarations, and Bylaws that have been properly filed shall be submitted with the engineer's certification prior to operation.
- 15. Any abandoning of the existing facilities must be done in accordance with the requirements of the Division's Raleigh Regional Office.
- 16. 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 render the facility incapable of adequate wastewater transport such as mechanical or electrical failures of pumps, line blockage or breakage, etc.
- (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.

Voice mail messages or faxed information is permissible but this shall <u>not</u> be considered as the initial <u>verbal</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

17. The Permittee shall maintain on hand for immediate installation a supply of spare, fully operational pump units of each type used in the pressure sewer system. The number of pumps on hand shall not be less than 10 percent of the number of installed units or one unit, whichever is greater.

Permit issued this the 7th Day of December 2010

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Coleen H. Sullins, Director Division of Water Quality

By Authority of the Environmental Management Commission

Permit No. WQ0034780

Briar Chapel Utilities, LLC Permit No. WQ0034780 Briar Chapel Phase 4 Sewer Extension Low Pressure Sewer System Issued December 7, 2010

# **ENGINEER'S CERTIFICATION**

A power with the contract the c	, as a duly registered	Professional Engineer in the
State of North Carolina, ha	aving been authorized to observe (period	dically/weekly/full time) the
	essure sewer system serving Briar Chap	
	, hereby state that to the best of my abil of the following construction:	ines, due care and diffence
was used in the observation	of the following constituction.	
a low pressure sewer system	n consisting of six (6) simplex pump state	ions with on-site audible and
	serve six (6) 3-bedroom single family	
<del>"</del>	r extension, and in conformity with the	
	subsequently filed and approved by the	Department of Environment
and Natural Resources.		
I certify that the constructi	on of the above referenced project was	absenced to be built within
	intent of the approved plans and specification	
Signature	Registration No	makinga da kake angan saka saka saka saka saka saka saka sa
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Date	TOTAL COLUMN	A STATE OF THE STA
Mail this Certification to:	DENR/DWQ	
	Construction Grants & Loans Section	1
	1633 Mail Service Center	T SEAL
	Raleigh, North Carolina 27699-1633.	,
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Note: If the wastewater collection permit was issued to a private entity under an Operational Agreement with the Environmental Management Commission, then a copy of the Articles of Incorporation, Declarations, and Bylaws that have been properly filed with the applicable County's Register of Deeds shall be submitted with this certification.

# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. W-1230

# BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

# In the Matter of

Application by Briar Chapel Utilities, LLC, for a Certificate of	)	ORDER
Public Convenience and Necessity to Provide Sewer Utility	)	DECLARING
Service in Briar Chapel Subdivision in Chatham County,	)	UTILITY
North Carolina, and for Approval of Rates	)	STATUS

BY THE COMMISSION: On April 14, 2004, Briar Chapel Utilities, LLC (Applicant), filed an application with the Commission for a certificate of public convenience and necessity to provide sewer utility service in Briar Chapel Subdivision in Orange County, North Carolina. The application requested that an Order Declaring Utility Status be issued in order to fulfill the filing requirements of the Division of Water Quality (DWQ) before DWQ will review and approve plans for the proposed sewer system.

The Commission is of the opinion that the request for an Order Declaring Utility Status should be approved.

# IT IS, THEREFORE, ORDERED as follows:

- 1. That the Applicant is declared a public utility with regards to its plans for the construction of the public sewer system serving Briar Chapel Subdivision in Chatham County, North Carolina, and as such, is subject to the jurisdiction of the North Carolina Utilities Commission.
- 2. That the Applicant is authorized to obtain such permits as may appropriately be issued by the Permit Section of DWQ.
- 73. That this Order shall not constitute any operating authority, certificate of public convenience and necessity, or finding by the Commission that the Applicant is the most feasible franchise holder for the above-referenced service area.

•			

4. That the Applicant shall not acquire title to the public utility property in the above-referenced service area prior to issuance of a Certificate of Public Convenience and Necessity pursuant to G.S. 62-110.

ISSUED BY ORDER OF THE COMMISSION.

This the 10th day of June, 2004

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

16060804 01

Gail L. Mount, Deputy Clerk

1am

Briar Chapel Utilities, LLC
Permit No. WQ0034780
Briar Chapel Phase 4 Sewer Extension
Low Pressure Sewer System
Issued December 7, 2010

# ENGINEER'S CERTIFICATION

construction of the low pre	ving been authorized to observe (periorssure sewer system serving Briar Chap), hereby state that to the best of my abi	oel Phase 4 sewer extension,
	of the following construction:	intent that the management
visual high water alarms to Briar Chapel Phase 4 sewer	n consisting of six (6) simplex pump states serve six (6) 3-bedroom single family extension, and in conformity with the subsequently filed and approved by the	residential units as a part of project plans, specifications,
	on of the above referenced project was intent of the approved plans and specific	
Signature Len	Registration No.	03/55 <sup>-7</sup>
Date <u>4/04/2011</u>	************	THE CAROLINA LONGON
Mail this Certification to:	DENR/DWQ Construction Grants & Loans Section 1633 Mail Service Center/ Raleigh, North Carolina 27699-1633.	1 章:淡淡色: 章

Note: If the wastewater collection permit was issued to a private entity under an Operational Agreement with the Environmental Management Commission, then a copy of the Articles of Incorporation, Declarations, and Bylaws that have been properly filed with the applicable County's Register of Deeds shall be submitted with this certification.



William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen H. Sullins, Director Division of Water Quality

June 5, 2008

Jeff Scouten, Senior Project Manager Briar Chapel Utilities, LLC 5850 Favetteville Road. Suite 201 Durham, NC 27713

Subject: Permit No. WQ0033071 Briar Chapel Phase 5 North

Wastewater Collection System Extension

Chatham County

Dear Mr. Scouten:

In accordance with your permit application received May 23, 2008, we are forwarding herewith Permit No. WQ0033071 dated June 5, 2008, to Briar Chapel Utilities, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, 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.

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 2T .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. Also note Permit Condition 12 that requires that the Division of Water Quality, prior to flows being made tributary to this sewer extension, has received the engineer's certification.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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 Brian Chapel Utilities, LLC, for the construction and operation of:

> orthCarolina Vaturally

approximately 7,702 linear feet of 8-inch gravity sewer

to serve 194 single family dwellings as part of the Briar Chapel Phase 5 North project, and the discharge of no additional gallons per day of collected domestic wastewater (flow allocated in permit WQ0029867) into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received May 23, 2008, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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@ncmail.net.

Sincerely,

for Coleen H. Sullins, Director Division of Water Quality

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

Chatham County Health Department CC: Deborah Gore, PERCS Unit RRO, SWP Files

RRO, APS, Jav Zimmerman

Richard Dickie, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713 Brooks Files, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713

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 voldable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .0200.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - 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 2B .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 2T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>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.</u> If there is a 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

12. No wastewater flow shall be made tributary to the subject sanitary sewer system extension until the engineer's certification has been received by the Division of Water Quality. Approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 5th Day of June, 2008.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Coleen H. Sullins, Director

Division of Water Quality

By Authority of the Environmental Management Commission

S. Daniel Smit

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

Permit Number WQ0033071 Briar Chapel Utilities, LLC Briar Chapel Phase 5 North

# **FAST TRACK ENGINEERING CERTIFICATION**

Permit No. WQ0033071 Briar Chapel Utilities, LLC Briar Chapel Phase 5 North June 5, 2008

enforcement actions.

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. 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 2T; 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:				
productive to it made administrative temporal activities, very soften a property				
SEND THIS FORM & SUPPORTING DOCUMENTATION				
WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS				
RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628				
The state of the processing of the control of the c				
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



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

Beverly Eaves Perdue Governor

Coleen H. Sullins Director

Dee Freeman Secretary

APR 16 2009 NEW-06020 M. Sanchez, Diane

April 14, 2009

Jeff Scouten, Senior Project Manager Briar Chapel Utilities, LLC 5850 Fayetteville Road, Suite 201 Durham, NC 27713

Subject: Permit No. WQ0033071 Modification

Briar Chapel Phase 5 North

Wastewater Collection System Extension

Chatham County

Dear Mr. Scouten:

We are forwarding herewith modified Permit No. WQ0033071 dated April 14, 2009, to Briar Chapel Utilities, LLC, 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 WQ0033071 issued June 5, 2008, 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 number of lots covered by this permit from 194 to 192, and allocates flow for the 192 lots permitted herein.

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 2T .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. Also note Permit Condition 12 that requires that the Division of Water Quality, prior to flows being made tributary to this sewer extension, has received the engineer's certification.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.



Briar Chapel Utilities, LLC Page 2 April 14, 2009

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, LLC, for the construction and operation of

approximately 7,702 linear feet of 8-inch gravity sewer

to serve 192 single family dwellings as part of the Briar Chapel Phase 5 North project, and the discharge of 48,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the original application received May 23, 2008, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facilities Phases A and B (Permit No. WQ0028552) prior to being land applied by spray irrigation.

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 <a href="mailto-barry.herzberg@ncmail.net">barry.herzberg@ncmail.net</a>.

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 Deborah Gore, PERCS Unit RRO, SWP Files RRO, APS, Jay Zimmerman

Richard Dickle, PE; John R. McAdams, 2905 Meridian Parkway, Durham, NC 27713 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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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 2T .0116, upon completion of construction and <u>prior to operation</u> 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 2T; 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.
- 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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. Per Condition I (2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

12. No wastewater flow shall be made tributary to the subject sanitary sewer system extension until the engineer's certification has been received by the Division of Water Quality. Approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 14th Day of April 2009.

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

Permit Number WQ0033071 Briar Chapel Utilities, LLC Briar Chapel Phase 5 North

Permit No. WQ0033071 Briar Chapel Utilities, LLC Briar Chapel Phase 5 North April 14, 2009

enforcement actions.

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u>

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. 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; 15Å NCAC 2T; 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:			
a - a tradicional regional del del constant del del constant de co			
SEND THIS FORM & SUPPORTING DOCUMENTATION WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS			
RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628			
dimension in this print the and their edges all the orders and the control of the			

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

Permit No. WQ0033071 NNP Briar Chapel, LLC Briar Chapel Phase 5 North September 1, 2010

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

Engineer's Certification			
having been authorized to observe (X) for the Permittee hereby state that, to the of the construction such that the conspermit; 15A NCAC 02T; the Division of	periodically, [] weekly, [] he best of my abilities, due struction was observed t Water Quality's (Division) Division's Minimum Desig	Final fessional Engineer in the State of North Carolina full time) the construction of the subject project full time) the construction of the subject project for care and diligence was used in the observation to be built within substantial compliance of thi for Gravity Sewer Minimum Design Criteria adopte for Criteria for the Fast-Track Permitting of Pum and other supporting materials.	
North Carolina Professional Enginee	r's	•	

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:

Permit No. WQ0033072

Briar Chapel Utilities, LLC

Briar Chapel Phase 5 South (LATER KNOWN AS SECTION I)

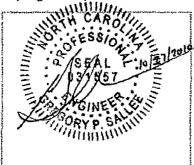
April 14, 2009

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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, requiations or minimum design criteria.</u>

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

### 



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.

Permit No. WQ0033072 Briar Chapel Utilities, LLC Briar Chapel Phase 5 South October 2, 2009

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.

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



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

Beverly Eaves Perdue Governor Coleen H. Sullins Director

Dee Freeman Secretary

February 5, 2010

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

Subject: Permit No. WQ0033072 Modification

Briar Chapel Phase 5 South

Wastewater Collection System Extension

Chatham County

Dear Mr. Mumford:

In accordance with your permit modification application received January 28, 2010, and additional information received on February 4, 2010, we are forwarding herewith Permit No. WQ0033072 dated February 5, 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 WQ0033072 issued June 5, 2008, 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 from 55 to 60.

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 <u>prior to operation</u> 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.



Briar Chapel Utilities, LLC Page 2 February 5, 2010

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:

Approximately 3,487 linear feet of 8-inch gravity sewer

To serve 60 single family dwellings as part of the Briar Chapel Phase 5 South project, and the discharge of 15,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received January 28, 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 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.

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.
- Per 15A NCAC 02T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>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.</u> 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 <u>not</u> 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 5<sup>th</sup> Day of February 2010.

Permit Number WQ0033072 Briar Chapel Utilities, LLC Briar Chapel Phase 5 South

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

Permit No. WQ0033072 Briar Chapel Utilities, LLC Briar Chapel Phase 5 South October 2, 2009

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			

DWQ use only:



NEW-06030 B.Files, V. White

Coleen H. Sullins, Director Division of Water Quality



June 5, 2008

Jeff Scouten, Senior Project Manager Briar Chapel Utilities, LLC 5850 Fayetteville Road, Suite 201 Durham, NC 27713

Subject: Permit No. WQ0033072

Briar Chapel Phase 5 South

Wastewater Collection System Extension

Chatham County

Dear Mr. Scouten:

In accordance with your permit application received May 23, 2008, we are forwarding herewith Permit No. WQ0033072 dated June 5, 2008, to Briar Chapel Utilities, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, 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.

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 2T .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. Also note Permit Condition 12 that requires that the Division of Water Quality, prior to flows being made tributary to this sewer extension, has received the engineer's certification.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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, LLC, for the construction and operation of:

rth Carolina

#### 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:

- This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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 2B .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.

- 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. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.
- 12. No wastewater flow shall be made tributary to the subject sanitary sewer system extension until the engineer's certification has been received by the Division of Water Quality. Approval shall be obtained from the Raleigh Regional Office prior to the use of this sewer line.

Permit issued this the 5<sup>th</sup> Day of June, 2008.

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

Permit Number WQ0033072 Briar Chapel Utilities, LLC Briar Chapel Phase 5 South



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

Beverly Eaves Perdue Governor Charles Wakild, P.E.

Director

Dee Freeman Secretary

June 26, 2012

Bill Mumford, Assistant Vice President NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0036015

Briar Chapel Phase 6 North

Wastewater Collection System Extension

Chatham County

Dear Mr. Mumford:

In accordance with your permit application received July 29, 2011, we are forwarding herewith Permit No. WQ0036015 dated June 26, 2012, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded 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.

#### Please pay particular attention to:

- a) Permit Condition 3 that requires 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, and
- b) Permit Condition 6 that requires Engineering Certification <u>prior to operation</u> 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 2T; 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.



Briar Chapel Utilities, LLC Page 2 June 26, 2012

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 NNP Briar Chapel, LLC, for the construction and operation of

approximately 4,808 linear feet of 8-inch gravity sewer

to serve 115 single family dwellings as part of the Briar Chapel Phase 6 North project, and the discharge of 28,750 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received July 29, 2011, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility, Permit number WQ0028552, prior to being land applied by spray irrigation.

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.

Sincerely,

for Charles Wakild, P.E., Director

Division of Water Quality

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

cc: Chatham County Health Department

RRO, SWP Files

RRO, APS, Jay Zimmerman

William O'Daniel, PE; John R. McAdams Company, 2905 Meridian Pkwy., Durham, NC 27713

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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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, such that no more than 6 months elapses between inspections.
  - 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 2B .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 2T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>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.</u> 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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 <u>not</u> 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 26<sup>th</sup> Day of June 2012.

Permit Number WQ0036015 NNP Briar Chapel, LLC Briar Chapel Phase 6 North

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Charles Wakild, P.E., Director

Division of Water Quality

by Authority of the Environmental Management Commission

by S. Daniel Smith

Surface Water Quality Supervisor

Raleigh Regional Office

Permit No. WQ0036015 NNP Briar Chapel, LLC Briar Chapel Phase 6 North June 26, 2012

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

ENGINEER'S CERTIFICATION			
ENGINEER'S VERTIFICATION			
☐ Partial ☐ Final			
I,, as a duly registered Professional Engineer in the State of North Carolin			
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 th			
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.			
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North Carolina Professional Engineer's			
Seal, signature, and date:			
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SEND THIS FORM & SUPPORTING DOCUMENTATIO WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRES			
WITH REGULED ATTACHMENTS TO THE COLLOWING ADDRES			
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1628 MAIL SERVICE CENTE RALEIGH NC 27699-162			
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wastewater flow made tributary to the wastewater collection system extension prior to completion of th			

Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate

DWQ use only:

enforcement actions.

Permit No. WQ0036015 NNP Briar Chapel, LLC Briar Chapel Phase 6 North June 26, 2012

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

ENGINEER'S CERTIFICATION			
	☐ Partial	🗶 Final	
1. GREGORY P. SALLEE, PE	, as a duly re	gistered 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:  CARO  SEND THIS FORM & SUPPORTING DOCUMENTATION			
	WITH RE	QUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS	
CHEET IN		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:



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

Beverly Eaves Perdue Governor

Coleen H. Sullins Director

Dee Freeman Secretary

August 1, 2011

Bill Mumford, Assistant Vice President NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0035492

Briar Chapel Phase 6 South

Wastewater Collection System Extension

Chatham County

Dear Mr. Mumford:

In accordance with your permit application received July 29, 2011, we are forwarding herewith modified Permit No. WQ0035492 dated August 1, 2011, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded 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.

#### Please pay particular attention to:

- a) Permit Condition 3 that requires 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, and
- b) 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 2T; 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 NNP Briar Chapel, LLC, for the construction and operation of

approximately 6,830 linear feet of 8-inch gravity sewer

to serve 134 single family dwellings as part of the Briar Chapel Phase 6 South project, and the discharge of 33,500 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received July 29, 2011, and in conformity with 15A NCAC 2T; 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 sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility, Permit number WQ0028552, prior to being land applied by spray irrigation.

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.

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

RRO, SWP Files

RRO, APS, Jay Zimmerman

Grant Livengood; PE; McKim & Creed, 1730 Varsity Drive Suite 500, Raleigh, NC 27606

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 2T; 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .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 2L .0200 or the surface water standards in 15A NCAC 2B .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, such that no more than 6 months elapses between inspections.
  - 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 2B .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 2T .0116, upon completion of construction and <u>prior to operation</u> 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. <u>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.</u> 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.
- 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 2T; 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 2B .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 2B .0200 and 15A NCAC 2H .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:

- 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 <u>not</u> 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 1 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 1st Day of August 2011.

Permit Number WQ0035492 NNP Briar Chapel, LLC Briar Chapel Phase 6 South

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

Permit No. WQ0035492 NNP Briar Chapel, LLC Briar Chapel Phase 6 South August 1, 2011

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

Engineer's Certification			
	☐ Partial	☐ Final	
1,	, as a duly registere	d 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 abiliti	es, due care and diligence was used in the observation	
of the construction such that the cor	nstruction was obse	rved 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 Jun	e 1, 2000 as applica	ble; and other supporting materials.	
North Carolina Professional Engineer's Seal, signature, and date:			
the transverse law con-		ND THIS FORM & SUPPORTING DOCUMENTATION ED ATTACHMENTS TO THE FOLLOWING ADDRESS	
· · · · · · · · · · · · · · · · · · ·		RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER	
The state of the s		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			

DWQ use only:

enforcement actions.

Permit No. WQ0035492 NNP Briar Chapel, LLC Briar Chapel Phase 6 South August 1, 2011

Complete and submit this form (NO SUBSTITUTES) to the Raleigh Regional Office together 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. It is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division. The Division does not acknowledge receipt of Fast Track Engineering Certifications!

	Engineer's Certifica	TION
for the Permittee hereby state that, to to of the construction such that the con-	periodically, weekly, the best of my abilities, due nstruction was observed to	Final ssional Engineer in the State of North Carolina, full time) the construction of the subject project care and diligence was used in the observation be built within substantial compliance of this Gravity Sewer Minimum Design Criteria adopted
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:		
CAROLLA CAROLL	· · · · ·	IS FORM & SUPPORTING DOCUMENTATION ACHMENTS TO THE FOLLOWING ADDRESS
028419 -26-13-00		RALEIGH REGIONAL OFFICE 1628 MAIL SERVICE CENTER RALEIGH NC 27699-1628
"aminus		

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:



#### North Carolina Department of Environment and Natural Resources

Division of Water Quality Charles Wakild, P. E. Director

John E. Skvarla, III Secretary

Pat McCrory Governor

February 5, 2013

Kevin Graham, Vice President Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0036343

NNP Briar Chapel, LLC Briar Chapel Phase 7

Wastewater Collection System Extension

**Chatham County** 

Dear Mr. Graham,

In accordance with your application received January 28, 2013, and additional information received on February 5, 2013, we are forwarding herewith Permit No. WQ0036343, dated February 5, 2013, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be responsibility of NNP Briar Chapel, LLC, 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.

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.

1628 Mail Service Center, Raleigh, North Carolina 27699-1628 (3800 Barrett Drive, Raleigh, North Carolina 27609)
Internet: <a href="www.ncwaterquality.org">www.ncwaterquality.org</a>
Customer Service: 877-623-6748
An Equal Opportunity \ Affirmative Action Employer



### NNP Briar Chapel, LLC WQ0036343

If you need additional information concerning this matter, please contact Barry Herzberg at (919) 791-4249 or via e-mail to Barry.Herzberg@ncdenr.gov.

Sincerely,

for Charles Wakild, P.E., Director

**Division of Water Quality** 

by S. Daniel Smith

Surface Water Quality Supervisor

Raleigh Regional Office

cc: Grant Livengood, PE; McKim & Creed, 1730 Varsity Drive Suite 500, Raleigh, NC 27606

**Chatham County Health Department** 

Raleigh Regional Office, Surface Water Protection Section

Water Quality Central Files PERCS (electronic copy)



# STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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

NNP Briar Chapel, LLC Chatham County

for the construction and operation of approximately 2,342 linear feet of 8-inch gravity sewer and approximately 4,261 linear feet of 6-inch gravity sewer to serve 166 lots as part of the Briar Chapel Phase 7 project, and the discharge of 41,500 gallons per day of collected domestic wastewater into the Briar Chapel Utilities existing sewerage system, pursuant to the application received January 28, 2013, and additional information received February 5, 2013, and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 5th Day of February 2013.

for Charles Wakild, P.E., Director

Division of Water Quality

By Authority of The Environmental Management Commission

Permit Number: WQ0036343

#### SUPPLEMENT TO PERMIT COVER SHEET

NNP Briar Chapel, LLC, is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system, prior to being land applied by spray irrigation, shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility, WQ0028552.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

#### I. SPECIAL CONDITIONS

1. None

#### II. STANDARD CONDITIONS

- 1. 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.
- 2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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-months and inspections are documented.

- f. A general observation of the entire sewer system shall be conducted at least once per year.
- g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- h. A Grease Control Program is in place as follows:
  - For public owned collection systems, the Grease Control Program shall include at least biannual distribution of
    educational materials for both commercial and residential users and the legal means to require grease interceptors at
    existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement
    for violators and the legal means to control grease entering the system from other public and private satellite sewer
    systems.
  - 2. For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the Permittee or its representative.
  - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.
- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- 8. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.
- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

Permittee: NNP Briar Chapel, LLC Project: Briar Chapel Phase 7

Permit No. Issue Date:

WQ0036343 February 5, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater
  collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf
  format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> <u>Modifications should be submitted prior to certification.</u>

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. <u>Therefore</u>, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.

PERMITTEE'S CERTIFICATION				
the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.				
Printed Name, Title	Signature	Date		
	ENGINEER'S CERTIFICATION			
Partial				
SEND THIS FORM & SUPPORTING DOCUMENTATION WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS				
Surface Water Protection Supervisor 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:

Permittee: Project: NNP Briar Chapel, LLC

Briar Chapel Phase 7

Permit No.

WQ0036343

Issue Date: Fel

February 5, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, requiations or minimum design criteria.</u> Modifications should be submitted prior to certification.

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.

PERMITTEE'S CERTIFICATION		
I,, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.		
Laurie Ford, Pice Pres	ident formale	Par 10-30-14
Printed Name, Title	(Signature	Date
	ENGINEER'S CERTIFICATION	<b>√</b>
Partial Pfinal  1,		
North Carolina Professional Engineer's Seal, signature, and date:		

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

Surface Water Protection Supervisor 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:



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

Pat McCrory Governor Charles Wakild, P. E. Director

John E. Skvarla, III Secretary

May 30, 2013

Kevin Graham, Vice President Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject:

Permit No. WQ0036547 NNP Briar Chapel, LLC Briar Chapel Phase 8

Wastewater Collection System Extension

Chatham County

Dear Mr. Graham,

In accordance with your application received May 23, 2013, and additional information received on May 29, 2013, we are forwarding herewith Permit No. WQ0036547 dated May 30, 2013, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be responsibility of NNP Briar Chapel, LLC, 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.

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.

1628 Mail Service Center, Raleigh, North Carolina 27699-1628 (3800 Barrett Drive, Raleigh, North Carolina 27609) Internet: <a href="https://www.ncwaterquality.org">www.ncwaterquality.org</a> Customer Service: 877-623-6748

North Carolina
Naturally

NNP Briar Chapel, LLC WQ0036547 May 30, 2013

If you need additional information concerning this matter, please contact Barry Herzberg at (919) 791-4249 or via e-mail to Barry.Herzberg@ncdenr.gov.

Sincerely,

for Charles Wakild, P.E., Director

Division of Water Quality

by S. Daniel Smith Surface Water Quality Supervisor

Raleigh Regional Office

cc: Grant Livengood, PE; McKim & Creed, 1730 Varsity Drive Suite 500, Raleigh, NC 27606

Chatham County Health Department

RRO, SWP files

Matt Fleahman, RRO, APS Water Quality Central Files PERCS (electronic copy)



# STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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

NNP Briar Chapel, LLC Chatham County

for the construction and operation of approximately 2,342 linear feet of 8-inch gravity sewer and approximately 4,261 linear feet of 6-inch gravity sewer to serve 110 single family building lots as part of the Briar Chapel Phase 8 project, and the discharge of 27,500 gallons per day of collected domestic wastewater into the Briar Chapel Utilities existing sewerage system, pursuant to the application received May 23, 2013, additional information received May 29, 2013, and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 30th Day of May 2013,

for Charles Wakild, P.E., Director

Division of Water Quality

By Authority of The Environmental Management Commission

Permit Number: WQ0036547

#### SUPPLEMENT TO PERMIT COVER SHEET

#### NNP Briar Chapel, LLC, is hereby authorized to:

Construct and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility, NPDES Permit number WQ0028552, prior to being land applied by spray irrigation.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

#### I. SPECIAL CONDITIONS

1. None.

#### II. STANDARD CONDITIONS

- 1. 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.
- 2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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 months and inspections are documented.

- f. A general observation of the entire sewer system shall be conducted at least once per year.
- g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- h. A Grease Control Program is in place as follows:
  - For public owned collection systems, the Grease Control Program shall include at least biannual distribution of
    educational materials for both commercial and residential users and the legal means to require grease interceptors at
    existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement
    for violators and the legal means to control grease entering the system from other public and private satellite sewer
    systems.
  - For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the Permittee or its representative.
  - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 6. 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.
- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- 8. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.
- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permittee: Project: NNP Briar Chapel, LLC

Briar Chapel Phase 8

Permit No.

WQ0036547

Issue Date:

May 30, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> Modifications should be submitted prior to certification.

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. <u>Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.</u>

The state of the s	PERMITTEE'S CERTIFICATION	
I,, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.		
Printed Name, Title	Signature	Date
	ENGINEER'S CERTIFICATION	
Partial		
The second secon		PRM & SUPPORTING DOCUMENTATION MENTS TO THE FOLLOWING ADDRESS
		Surface Water Protection Supervisor 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 Utilities WWTP

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#### North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

August 11, 2014

Laurie Ford, Vice President, Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject:

Permit No. WQ0037256

NNP Briar Chapel, LLC Briar Chapel – Phase 11

Wastewater Collection System Extension

**Chatham County** 

Dear Ms. Ford:

In accordance with your application received July 8, 2014, and additional information received August 7, 2014, we are forwarding herewith Permit No. WQ0037256, dated August 11, 2014, to NNP Briar Chapel, LLC for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be the responsibility of NNP Briar Chapel, LLC 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.

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.



### NNP Briar Chapel, LLC WQ0037256

If you need additional information concerning this matter, please contact Ted Cashion at (919) 791-4254 or via e-mail at ted.cashion@ncdenr.gov.

Sincerely,

for Thomas A. Reeder
Division of Water Resources

by S. Daniel Smith, Supervisor Water Quality Regional Operations

cc: Grant Livengood, P.E., McKim & Creed, Inc., 1730 Varsity Drive, Suite 500, Raleigh, NC 27606
Chatham County Health Department
Raleigh Regional Office, Surface Water Protection Section
Water Quality Central Files
PERCS (electronic copy)



# STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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 the

### NNP Briar Chapel, LLC Chatham County

for the construction and operation of approximately 1,066 linear feet of 8-inch gravity sewer to serve 200 single family residential lots as part of the Briar Chapel — Phase 11 project, and the discharge of 50,000 gallons per day of collected domestic wastewater into the NNP Briar Chapel, LLC's existing sewerage system, pursuant to the application received July 8, 2014, and additional information received August 7, 2014, and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 11th day of August, 2014.

for Thomas A. Reeder

Division of Water Resources

By Authority of The Environmental Management Commission

Permit Number: WQ0037256

#### SUPPLEMENT TO PERMIT COVER SHEET

#### NNP Briar Chapel, LLC is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility (Permit No. WQ0028552) prior to being land applied by spray irrigation.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

#### I. SPECIAL CONDITIONS

NONE

#### **II. STANDARD CONDITIONS**

- 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.
- 2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.

- c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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-months and inspections are documented.
- f. A general observation of the entire sewer system shall be conducted at least once per year.
- g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- h. A Grease Control Program is in place as follows:
  - For public owned collection systems, the Grease Control Program shall include at least biannual
    distribution of educational materials for both commercial and residential users and the legal means to
    require grease interceptors at existing establishments. The plan shall also include legal means for
    inspections of the grease interceptors, enforcement for violators and the legal means to control
    grease entering the system from other public and private satellite sewer systems.
  - For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.
  - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone to a water resources 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:

- 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form

CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control

- 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.
- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

#### FAST TRACK ENGINEERING CERTIFICATION

Permittee: NNP Briar Chapel, LLC
Project: Briar Chapel – Phase 11

Permit No. WQ0037256 Issue Date: 8-11-2014

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> <u>Modifications should be submitted prior to certification.</u>

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. <u>Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.</u>

****		
	PERMITTEE'S CERTIFICATION	
I,, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.		
Printed Name, Title	Signature	Date
	Engineer's Certification	
for the Permittee hereby state to of the construction such that permit; 15A NCAC 02T; the Div February 12, 1996 as applicable.	Partial Final as a duly registered Professional Engerve ( periodically, weekly, full time) that, to the best of my abilities, due care and dithe construction was observed to be built wisjon of Water Quality's (Division) Gravity Sewble; the Division's Minimum Design Criteria for ted June 1, 2000 as applicable; and other supp	ne construction of the subject project diligence was used in the observation within substantial compliance of this er Minimum Design Criteria adopted the Fast-Track Permitting of Pump
	- · · · · · · · · · · · · · · · · · · ·	SUPPORTING DOCUMENTATION S TO THE FOLLOWING ADDRESS
	WATER QUALITY REGIO	ONAL OPERATIONS SUPERVISOR RALEIGH REGIONAL OFFICE 3800 BARRETT DRIVE RALEIGH, NC 27609
wastewater flow made tributa	for tracking all partial certifications up until a try to the wastewater collection system ext considered a violation of the permit and shall	ension prior to completion of this

DWR Use Only:

enforcement actions.

Flow from this project is tributary to:



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

Beverly Eaves Perdue Governor Coleen H. Sullins Director

Dee Freeman Secretary

October 2, 2009

Keith Hurand, Vice President Briar Chapel Utilities, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject: Permit No. WQ0034371

Briar Chapel Middle School Temporary Pump Station

Wastewater Collection System Extension

Chatham County

Dear Mr. Hurand:

In accordance with your permit application received September 23, 2009, and additional information received on October 1, 2009, we are forwarding herewith Permit No. WQ0034371 dated October 2, 2009, 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, 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.

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:

NorthCarolina *Naturally* 

- Approximately 101 linear feet of 6-inch gravity sewer, and
- A 125 GPM @ 83' TDH pump station with a minimum of duplex pumps, on-site audible and visual high water alarms, and a portable generator receptacle with telemetry, and
- Approximately 510 linear feet of 4-inch force main

To serve an 800 student population school as part of the Briar Chapel Middle School Temporary Pump Station project, and the discharge of 12,000 gallons per day of collected domestic wastewater into the Briar Chapel Utilities' existing sewerage system, pursuant to the application received October 1, 2009, 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 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.

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

William O'Daniel, PE; John R. McAdams Company, PO Box 14005, RTP, NC 27709

Deborah Gore, PERCS Unit

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 <u>prior to operation</u> 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. <u>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.</u> 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.
- 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 <u>not</u> 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 2<sup>nd</sup> Day of October 2009.

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

Permit Number WQ0034371
Briar Chapel Utilities, LLC
Briar Chapel Middle School Temporary Pump Station

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permit No. WQ0034371
Briar Chapel Utilities, LLC
Briar Chapel Middle School Temporary Pump Station
October 2, 2009

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	
1,	as a duly registered Prof	essional 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 cons	struction was observed t	to be built within substantial compliance of this	
permit; 15A NCAC 02T; the Division of V	Water Quality's (Division)	Gravity Sewer Minimum Design Criteria adopted	
February 12, 1996 as applicable; the D	livision's Minimum Desig	n Criteria for the Fast-Track Permitting of Pump	
Stations and Force Mains adopted June	1, 2000 as applicable; as	nd other supporting materials.	
North Carolina Professional Engineer's Seal, signature, and date:			
16 CAPATILITY OF THE PARTY OF T		HIS FORM & SUPPORTING DOCUMENTATION TACHMENTS 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



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

Pat McCrory Governor Charles Wakild, P. E. Director

John E. Skvarla, III Secretary

March 18, 2013

Kevin Graham, VP Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject:

Permit No. WQ0036423

NNP Briar Chapel

Area D Pump Station and Force Main Wastewater Collection System Extension

Chatham County

Dear Mr. Graham,

In accordance with your application received March 12, 2013, we are forwarding herewith Permit No. WQ0036423 dated March 18, 2013, to NNP Briar Chapel, LLC, for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be responsibility of the NNP Briar Chapel, LLC, 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.

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.

1628 Mail Service Center, Raleigh, North Carolina 27699-1628 (3800 Barrett Drive, Raleigh, North Carolina 27609) Internet: <a href="https://www.ncwaterquality.org">www.ncwaterquality.org</a>

Customer Service: 877-623-6748

North Carolina

Naturally

NNP Briar Chapel, LLC WQ0036423 March 18, 2013

If you need additional information concerning this matter, please contact Barry Herzberg at (919) 791-4249 or via e-mail to Barry.Herzberg@ncdenr.gov.

Sincerely,

for Charles Wakild, P.E., Director

Division of Water Quality

by S. Daniel Smith

Surface Water Quality Supervisor

Raleigh Regional Office

cc: Mark P. Ashness, PE; CE Group, 301 Glenwood Avenue Suite 220, Raleigh, NC 27603

Chatham County Health Department

Raleigh Regional Office, Surface Water Protection Section

Water Quality Central Files PERCS (electronic copy)



# STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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

### NNP Briar Chapel, LLC Chatham County

for the construction and operation of

- approximately 915 linear feet of 8-inch gravity sewer, and
- a 360 GPM @ 206' TDH pump station with a minimum of duplex pumps, on-site audible and visual high water alarms, telemetry, and a portable generator receptacle with telemetry, and
- a 290 GPM @ 70' TDH pump station with a minimum of duplex pumps, on-site audible and visual high water alarms, telemetry, and a portable generator receptacle with telemetry, and
- approximately 842 linear feet of 12-inch force main, and
- approximately 6,604 linear feet of 8-inch force main, and
- approximately 1,253 linear feet of 6-inch force main, and
- approximately 922 linear feet of 4-inch force main

to serve 2 existing schools and future development as part of the Area D Pump Station and Force Mains project, and the discharge of no additional gallons per day of collected domestic wastewater into the Briar Chapel Utilities existing sewerage system, pursuant to the application received March 12, 2013, and in conformity with 15A NCAC 2T; 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. Flow for the existing schools has been allocated in permits WQ0034371 and WQ0033244. Flows for future development will be allocated in permits for future connections to this system.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 18th Day of March 2013.

for Charles Wakild, P.E., Director

Division of Water Quality

By Authority of The Environmental Management Commission

Permit Number: WQ0036423

#### SUPPLEMENT TO PERMIT COVER SHEET

#### NNP Briar Chapel, LLC, is hereby authorized to:

Construct and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility, NPDES Permit number WQ0029867, before being land applied by spray irrigation.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

#### I. SPECIAL CONDITIONS

1. None

#### II. STANDARD CONDITIONS

- 1. 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.
- 2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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-months and inspections are documented.

- f. A general observation of the entire sewer system shall be conducted at least once per year.
- g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- h. A Grease Control Program is in place as follows:
  - For public owned collection systems, the Grease Control Program shall include at least biannual distribution of
    educational materials for both commercial and residential users and the legal means to require grease interceptors at
    existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement
    for violators and the legal means to control grease entering the system from other public and private satellite sewer
    systems.
  - 2. For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the Permittee or its representative.
  - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 6. 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.
- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- 8. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.
- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permittee: Project: NNP Briar Chapel, LLC

Area D Pump Station and Force Main

Permit No. Issue Date: WQ0036423 March 18, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. <u>Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.</u> Modifications should be submitted prior to certification.

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.

PERMITTEE'S CERTIFICATION		
the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.		
Printed Name, Title	Signature	Date
Engineer's Certification		
Partial  Final		
on Arteria de la constitución de		RM & SUPPORTING DOCUMENTATION MENTS TO THE FOLLOWING ADDRESS
The special sp		Surface Water Protection Supervisor 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

#### **FAST TRACK ENGINEERING CERTIFICATION**

Permittee:

NNP Briar Chapel, LLC

Project:

Area D Pump Station and Force Main

Permit No.

WQ0036423

Issue Date:

March 18, 2013

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. Modifications should be submitted prior to certification.

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.

	PERMITTEE'S CERTIFICATION	
I, Laurie for the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.		
LAURIE FORD, VILE PROJECT		
Printed Name, Title	Signature Date	
	ENGINEER'S CERTIFICATION	
Partial Final I, Partial Final I, Final I Fina		
North Carolina Professional Engliser's Seal, signature, and data	SEND THIS FORM & SUPPORTING DOCUMENTATION	
Parall 1	WITH REQUIRED ATTACHMENTS TO THE FOLLOWING ADDRESS	
WAR PARTY OF THE P	Surface Water Protection Supervisor Raleigh Regional Office 1628 Mall 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



#### North Carolina Department of Environment and Natural Resources

Division of Water Resources Water Quality Programs Thomas A. Reeder Director

John E. Skvarla, III Secretary

October 14, 2013

Laurie Ford, Vice President, Operations NNP Briar Chapel, LLC 16 Windy Knoll Circle Chapel Hill, NC 27516

Subject:

Pat McCrory

Governor

Permit No. WQ0036770 NNP Briar Chapel, LLC

Briar Chapel – Phase 9 Pump Station and FM Wastewater Collection System Extension

Chatham County

Dear Ms. Ford:

In accordance with your application received October 8, 2013 we are forwarding herewith Permit No. WQ0036770, dated October 14, 2013, to NNP Briar Chapel, LLC for the construction and operation of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein. This cover letter and supplement shall be considered a part of this permit and are therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be the responsibility of the NNP Briar Chapel, LLC 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.

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.



NNP Briar Chapel, LLC WQ0036770

If you need additional information concerning this matter, please contact Ted Cashion at (919) 791-4254 or via e-mail at ted.cashion@ncdenr.gov.

Sincerely,

for Thomas A. Reeder

**Division of Water Resources** 

by S. Daniel Smith

Raleigh Region Surface Water Protection Supervisor

cc: Mark P. Ashness, P.E., CE Group, Inc., 301 Glenwood Avenue, Suite 220, Raleigh, NC 27603

**Chatham County Health Department** 

Raleigh Regional Office, Surface Water Protection Section

Water Quality Central Files PERCS (electronic copy)



# STATE OF NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

#### WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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 the

#### NNP Briar Chapel, LLC Chatham County

for the construction and operation of a 113-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, telemetry, and a portable generator receptacle with telemetry as well as approximately 1,450 linear feet of 4-inch force main as part of the Briar Chapel – Phase 9 Pump Station and FM project, and the discharge of no additional flow of collected domestic wastewater into the Briar Chapel Utilities existing sewerage system, pursuant to the application received October 8, 2013 and in conformity with 15A NCAC 2T; 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.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

Permit issued this the 14th day of October, 2013.

for Thomas A. Reeder

**Division of Water Resources** 

By Authority of The Environmental Management Commission

Permit Number: WQ0036770

#### SUPPLEMENT TO PERMIT COVER SHEET

#### NNP Briar Chapel, LLC is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the Briar Chapel Utilities Wastewater Treatment Facility (Permit No. WQ0028552) prior to being land applied by spray irrigation.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; the Division's 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.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

#### I. SPECIAL CONDITIONS

#### NONE

#### II. STANDARD CONDITIONS

- 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.
- 2. This permit shall become voldable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; 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 materials unless specifically mentioned herein.
- 3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data.
- 4. 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 2T .0403. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2T .0403:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.

- c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been 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-months and inspections are documented.
- f. A general observation of the entire sewer system shall be conducted at least once per year.
- g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
- h. A Grease Control Program is in place as follows:
  - For public owned collection systems, the Grease Control Program shall include at least biannual
    distribution of educational materials for both commercial and residential users and the legal means to
    require grease interceptors at existing establishments. The plan shall also include legal means for
    inspections of the grease interceptors, enforcement for violators and the legal means to control
    grease entering the system from other public and private satellite sewer systems.
  - For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.
  - 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
- Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
- j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.

#### 5. Noncompliance Notification:

The Permittee shall report by telephone to a water resources 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:

- 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 SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this 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 and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form

CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

- 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.
- 7. Per 15A NCAC 2T.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. 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.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting pump station design calculations (selected pumps, system curve, operating point, buoyancy calculations, 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.
- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation.

- 8. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
- 9. Fallure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; 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, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

- 10. 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.
- 11. 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 2B .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 2B .0200 and 15A NCAC 2H .0500.

#### FAST TRACK ENGINEERING CERTIFICATION

Permittee: NNP Briar Chapel, LLC

Permit No. WQ0036770 Briar Chapel - Phase 9 Pump Station and FM Project: Issue Date: 10-14-13

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

- One copy of the project record drawings (plan & profile views and detail drawings of sewer lines) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) in pdf format. Record drawings should indicate the design and the marked up changes during construction.
- 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. Modifications should be submitted prior to certification.

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.

· ·		
	PERMITTEE'S CERTIFICATION	
I,, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.		
Printed Name, Title	Signature	Date
	ENGINEER'S CERTIFICATION	
for the Permittee hereby state of the construction such that permit; 15A NCAC 02T; the Dapplicable; the Division's Mini	as a duly registered Professional Englerve ( periodically, weekly, full time) the that, to the best of my abilities, due care and dil the construction was observed to be built with bivision's Gravity Sewer Minimum Design Critemum Design Criteria for the Fast-Track Permiss applicable; and other supporting materials.	e construction of the subject project igence was used in the observation thin substantial compliance of this in a adopted February 12, 1996 as
North Carolina Professional I Seal, signature, and date:	Engineer's	
TOTAL CONTRACTOR CONTR	SEND THIS FORM & S WITH REQUIRED ATTACHMENTS	SUPPORTING DOCUMENTATION TO THE FOLLOWING ADDRESS
	SURFACE WAT	TER PROTECTION SUPERVISOR RALEIGH REGIONAL OFFICE 3800 BARRETT DRIVE RALEIGH, NC 27609
	for tracking all partial certifications up until a ry to the wastewater collection system exter	

Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate

DWR Use Univ:

enforcement actions.

Flow from this project is tributary to: