

EROSION



Certificate of Sedimentation and Erosion Control Plan Approval and
Land-Disturbing Permit

For

Legacy Phase 4A

Project Name

2017-0515

Permit Number

The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by Chatham County, North Carolina in accordance with North Carolina General Statute 113A-57 (4) and 113A-54 (d)(4), the North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c) and as per applicable sections of the Chatham County Soil Erosion and Sedimentation Control Ordinance. This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent ground cover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027 (b) and as per Chatham County's Erosion and Sediment Control Ordinance, Section 5 (i).

Responsible Person: **Thomas Tischer** Phone: **(617) 221-8400**

This plan was approved with "modifications" Yes No and / or
"performance reservations" Yes No.

Reviewer: _____ Date: _____

THE ORDINANCE REQUIRES THAT A COPY OF
THE EROSION CONTROL PLAN
MUST BE KEPT AVAILABLE AT THE JOB SITE
AT ALL TIMES FOR INSPECTION



SELEKZ

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 29, 2015

Thomas J. Roberts, President and COO
Aqua North Carolina, Incorporated
202 Mackenan Court
Cary, NC 27511

Subject: Permit No. WQ0037563
Aqua North Carolina, Incorporated
The Legacy Phase 4A
Wastewater Collection System Extension Permit
Chatham County

Dear Mr. Roberts:

In accordance with your application received January 15, 2015, and additional information received on we are forwarding herewith Permit No. WQ0037563 dated January 29, 2015, to Aqua North Carolina, Inc. (Permittee) for the construction and operation upon certification 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 This permit shall be effective from the date of issuance until rescinded, and shall be subject to the conditions and limitations as specified therein.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 the following conditions contained within this permit:

- Condition II.1: This permit shall not be automatically transferable; a request must be made and approved.
- 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 Permittee 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.

Division of Water Resources, Raleigh Regional Office, Water Quality Operations Section
1628 Mail Service Center, Raleigh, NC 27699-1628
Location: 3800 Barrett Drive, Raleigh, NC 27609

www.ncwaterquality.org
Phone: (919) 791-4200
Fax: (919) 788-7159

Aqua North Carolina, Inc.
Permit No. WQ0037563

If you need additional information concerning this matter, please contact Jason Robinson at (919) 791-4249 or via e-mail at jason.t.robinson@ncdenr.gov.

Sincerely,



for S. Jay Zimmerman, Acting Director
Division of Water Resources, NCDENR

by S. Daniel Smith, Regional Supervisor
Water Quality Regional Operations Section
Raleigh Regional Office
Division of Water Resources, NCDENR

cc: Mark Ashness P.E., c/o CE Group, Inc: 301 Glenwood Ave, Suite 220, Raleigh, NC 27603
Chatham County Health Department
Raleigh Regional Office Files
Water Resources Central Files
PERCS (electronic copy)



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

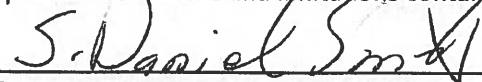
WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

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

Aqua North Carolina, Incorporated
Chatham County

for the construction and operation of approximately 6,080 linear feet of 8-inch gravity sewer; a 250-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, telemetry, and a permanent generator with automatic transfer switch; as well as approximately 720 linear feet of 4-inch force main to serve 109 single family residential lots as part of the Legacy Phase 4A project, and the discharge of 23,980 gallons per day of collected domestic wastewater into the Aqua North Carolina Incorporated existing Legacy Development sewerage system, pursuant to the application received January 15, 2015 and in conformity with 15A NCAC 2T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 and updated in March 2008, as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 and updated March 2008, 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.



for S. Jay Zimmerman, Acting Director
Division of Water Resources, NCDENR
By Authority of The Environmental Management Commission

Permit Number: WQ0037563
Permit Issued: January 29, 2015

SUPPLEMENT TO PERMIT COVER SHEET

Aqua North Carolina, Incorporated 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 Aqua North Carolina Incorporated's Legacy Development Wastewater Treatment Facility in accordance with Permit Number WQ0024844.

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 and updated March 2008, as applicable; and the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 and updated March 2008, 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 Special Conditions identified below.

I. SPECIAL CONDITIONS

1. No flow in excess of the quantity permitted herein, 23,908 gpd, shall be made tributary to the subject sewer system until an application for permit modification for an increase in flow has been submitted to and approved by the Division. [15A NCAC 02T.0304(b)]
2. Each pump station shall be clearly and conspicuously posted using a weatherproof sign with a pump station identifying name/number, 24-Hour Emergency telephone number, and name of the owner/operator of the sewer system/pump station and instructions to call the number in the event of alarm activation or other emergency.

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. [15A NCAC 02T.0104; G.S 143-215.1(d3)]
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's Gravity Sewer Minimum

Design Criteria adopted February 12, 1996 and updated March 2008, as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 and updated March 2008, as applicable; and other supporting materials unless specifically mentioned herein. [15A NCAC 02T.0110]

3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data. [15A NCAC 02T .0110]
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: [15A NCAC 02T .0108(b)]:
 - 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:
 1. 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. 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, 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. [G.S. 143-215.1C(a1)]

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. [15A NCAC 02T.0108(b)]
7. 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 applicable design calculations including pipe and pump sizing, velocity, pump cycle times, and level control settings, pump station buoyancy, wet well storage, surge protection, detention time in the wet well, and force main, ability to flush low points in force mains with a pump cycle, and downstream sewer capacity analysis. If a portable power source or pump is dedicated to multiple 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.
- 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. [15A NCAC 02T .0116]

8. 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. [15A NCAC 02T.0105(n)]
9. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities. [15A NCAC 02T .0116]
10. 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 and updated March 2008, as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Station and Force Mains adopted June 1, 2000 and updated March 2008 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. [15A NCAC 02T .0104; 15A NCAC 02T .0108(b-c)]
11. 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. [15A NCAC 02T .0110; 15A NCAC 02T .0108(b)]

12. 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 the Division any other Federal, State, or Local government agencies which have jurisdiction or obtaining other permits which may be required by the Division or any other Federal, State, of Local government agencies. [G.S. 143-215.1(b)]

FAST TRACK SEWER ENGINEERING CERTIFICATION

PERMITTEE: Aqua North Carolina, Incorporated
PERMIT #: WQ0037563
PROJECT: The Legacy Phase 4A
ISSUE DATE: January 29, 2015

This project shall not be considered complete nor allowed to operate in accordance with Condition 7 of this permit until the Division has received this Certification and all required supporting documentation. It should be submitted in a manner that documents the Division's receipt. Send the required documentation the Regional Supervisor, Water Quality Regional Operations Section at the address at the bottom.

Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions. The Permittee is responsible for tracking all partial certifications up until a final certification is received. A Final Certification shall be a complete set of record drawings and design calculations regardless of whether partials have been submitted.

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

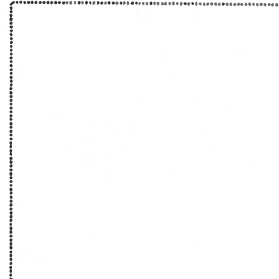
Date

ENGINEER'S CERTIFICATION

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 project name and location as referenced above for the above 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 Resources' (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 and updated March 2008, as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 and updated March 2008, as applicable; and other supporting materials.

North Carolina Professional Engineer's Seal w/signature & date:

Final Partial (include description)



Certification Comments/Qualifiers (attach if necessary):

Division of Water Resources, Raleigh Regional Office, Water Quality Operations Section
1628 Mail Service Center, Raleigh, NC 27699-1628
Location: 3800 Barrett Drive, Raleigh, NC 27609

www.ncwaterquality.org
Phone: (919) 791-4200
Fax: (919) 788-7159

Project Detail

07/07/2017

WATER

Serial No: 17-00460 **Received:** 5/11/2017 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: NC0319126 **County:** CHATHAM
Water System Name: CHATHAM CO-NORTH
Description: LEGACY PHASE 4A2

Contacts

Applicant Name: Renee Paschal, County Manager **Engineer Name:** Mark P Ashness, Pe
Reviewer Name: Bass, Sarah

Events

<u>Event</u>	<u>Event Date</u>	<u>Comments</u>
project approval	06/22/2017	Uploaded document: 17-00460 Paschal
approval mailed	06/22/2017	tlk
authorization to construct	06/22/2017	WSMP: 12-00936
authorization to construct mailed	06/22/2017	tlk
response to comments received	06/21/2017	sb
comment letter	05/26/2017	Comment Email 17-00460

Mark Ashness

From: Dan LaMontagne <dan.lamontagne@chathamnc.org>
Sent: Wednesday, February 4, 2015 3:46 PM
To: Mark Ashness
Cc: Lynn Richardson
Subject: RE: Legacy Phase 4A and 5A

That is correct. You are good to go.

Dan J. LaMontagne, P.E.
Public Works Director
Chatham County
919-545-8531

In keeping with the NC Public Records Law, e-mails, including attachments, may be released to others upon request for inspection and copying.

From: Mark Ashness [mailto:mark@cegroupinc.com]
Sent: Tuesday, February 03, 2015 2:41 PM
To: Dan LaMontagne
Subject: Legacy Phase 4A and 5A

Dan: Just a heads up. We are submitting for Prel plat on Legacy Phase 4A on Friday. Phase 5A will be next month.

This project pre-dates the County stormwater ordinance. We do have wet or dry stormwater controls at all release points handling the first 1/2" of impervious (with a 2-5 day drawdown). The submission we made to you (attached) on Dec 17th has all that info.

When we spoke last week you were going to let Lynn know that we were good. I am just confirming that this is the case.

thx

Mark Ashness
P.E., ASLA, LEED AP



CE GROUP

301 Glenwood Avenue, Suite 220
Raleigh, NC 27603
Phone: (919) 367-8790
Cell: (919) 606-7704

STORM WATER