



Energy, Mineral &
Land Resources
ENVIRONMENTAL QUALITY

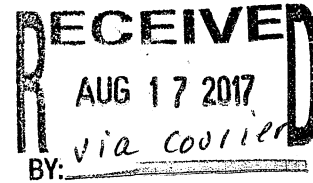
ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

TRACY DAVIS
Director

August 14, 2017

Windward Oaks HOA
ATTN: Justin Robertson, President
c/o Community Solutions Southeast, LLC
2108 Capital Drive, Suite 102
Wilmington, NC 28405



**Subject: State Stormwater Management Permit No. SW8 930818
Windward Oaks Subdivision
Low Density Subdivision with a Curb Outlet Swale System
New Hanover County**

Dear Mr. Robertson:

The Division of Energy, Mineral, and Land Resources (DEMLR) is pleased that we have reached a resolution regarding the stormwater permit for Windward Oaks Subdivision. Thank you for the time and effort that the Homeowner's Association (HOA) has invested in assisting us in crafting the attached permit.

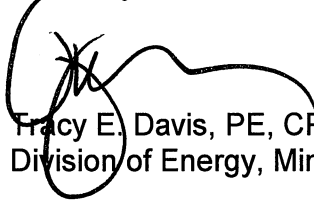
This permit is effective from the date of issuance until September 17, 2025, and the HOA as the permittee will be subject to the conditions and limitations as specified therein. Please pay special attention to the conditions regarding the Operation and Maintenance of the SCM(s), recordation of deed restrictions, certification of the SCM's, and the procedures for changing ownership, transferring the permit, and renewing the permit. Failure to establish an adequate system for operation and maintenance of the stormwater management system, to record deed restrictions, to maintain control over the built-upon area, to certify the SCM(s), to transfer the permit, or to renew the permit, will result in future compliance problems.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing by filing a written petition with the Office of Administrative Hearings (OAH). The written petition must conform to Chapter 150B of the North Carolina General Statutes. Per NCGS 143-215(e) the petition must be filed with the OAH within thirty (30) days of receipt of this permit. You should contact the OAH with all questions regarding the filing fee (if a filing fee is required) and/or the details of the filing process at 6714 Mail Service Center, Raleigh, NC 27699-6714, or via telephone at 919-431-3000, or visit their website at www.NCOAH.com. Unless such demands are made this permit shall be final and binding.

Mr. Robertson
Page 2

Documentation regarding this project and associated compliance activities will be maintained at the Wilmington Regional Office. If you have any questions or need additional information concerning this matter, please contact Georgette Scott or Linda Lewis in the Wilmington Regional Office, at (910) 796-7215.

Sincerely,



Tracy E. Davis, PE, CPM, Director
Division of Energy, Mineral and Land Resources

TED/al/gds: \\Stormwater\Permits & Projects\1993\930818 LD\2017 05 permit 930818

cc: DEMLR Stormwater Program Manager
Georgette Scott, Wilmington Regional Office Stormwater Supervisor
Larry Sneed, PE, Coastal Stormwater Services, Inc.
New Hanover County Building Inspections
Beth Wetherill, New Hanover County Engineering
Wilmington Regional Office Stormwater File

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES
STATE STORMWATER MANAGEMENT PERMIT**

**OVERALL LOW DENSITY SUBDIVISION DEVELOPMENT
with
INDIVIDUAL LOT STORMWATER CONTROL MEASURES (SCMs)**

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
Windward Oaks HOA
Windward Oaks Subdivision
Masonboro Sound Road / Masonboro Loop Road, Wilmington, New Hanover County
FOR THE

Construction, Operation and Maintenance of a 25% overall low density project and curb outlet swale system with individual on-lot remedial SCMs in compliance with the provisions of 15A NCAC 2H .1000 (1988 rules for density) and as subsequently amended on January 1, 2017 (2017 Rules for SCMs), as applicable (collectively, the "stormwater rules"), and the approved stormwater management plans and specifications and other supporting data as attached and on file with and approved by the Division and considered a part of this permit.

This permit shall be effective from the date of issuance until September 17, 2025 considering the high density individual lot components of this permit. Within 180 days of this expiration date, the permittee shall provide an update on its compliance efforts to the Division, at which time the Division will determine if the permit expiration date will be removed or extended. In addition, the permittee shall be subject to the following specified conditions and limitations:

I. DESIGN STANDARDS

1. This permit is effective only with respect to the nature and volume of stormwater described in the application and other supporting data. This permit has two parts. The overall low density for this subdivision was designed and approved under the 1988 Stormwater rules. The design criteria for the on-lot SCMs to address the BUA overages of the original permitted BUA allocation is based on the 2017 stormwater rules.
2. This overall low density project was approved with a curb outlet swale system. Each designated curb outlet swale shown on the approved subdivision plan must be maintained at a minimum of 100' long, with 5:1 (H:V) side slopes or flatter, have a longitudinal slope no steeper than 5%, carry the flow from a 10 year storm in a non-erosive manner, and maintain a dense vegetated cover.

3. A 30' wide vegetative buffer must be provided and maintained adjacent to all surface waters, measured horizontally from and perpendicular to the normal pool of impounded structures, the top of bank of both sides of streams and rivers and the mean high water line of tidal waters.
4. The subdivision was permitted for 146 lots in 1993, each lot was limited to a maximum amount of built-upon area (BUA) as indicated in Section II.16 (f) of this permit. Each lot identified in the 2015 BUA Inventory Report that has exceeded its maximum allowed BUA limit shall construct an approved remedial SCM to facilitate infiltration and thereby, reduce the runoff for that lot to what would have run off the lot under maximum permitted BUA conditions.
5. Each on-lot remedial SCM shall be designed using a 1.5" design storm. At a minimum, the runoff from the BUA overage on each lot shall be treated by an approved SCM. Lot owners will receive BUA reduction if they choose to reduce the amount of BUA overage by removing impermeable surfaces, or removing and replacing impermeable surfaces with permeable pavement. A treatment credit may be applied for all properly designed, constructed and maintained SCM's as outlined in the table in Section I.6 of this permit to offset existing BUA overages. The treatment credits cannot be used to gain additional BUA on the lot. Only those lots that have reduced their BUA overage by removing impervious surface or replacing impermeable pavement with permeable pavement such that the net amount of BUA is below the maximum permitted BUA limit for that lot, may propose additional BUA up to their maximum permitted BUA limit.
6. Proposals shall be submitted by each lot owner to the HOA utilizing the Division-approved standardized design spreadsheets for the SCM's. The following remedial SCM's (top line) are available for use by the lot owners in this subdivision under certain restrictions and limitations, along with their treatment credit (lower line):

Table 1: Options for Treatment of BUA Overages

BUA	① Permeable	① Permeable	Rain	⑤ Cistern	Infiltration	③ Disconnected
Removal and site restoration	pavement with no adjacent BUA	pavement with adjacent BUA	Garden installation	or rain barrel installation with year-round use	Trench or Basin	Impervious Surface (DIS)
④ 100% of the removed BUA	100% of the permeable pavement area	②④ 100% of perm. pave. area + adjacent BUA that drains to it	④ 100% of the BUA directed to it	④ 100% of the roof area	④ 100% of the BUA directed to the Trench or Basin	65% of the roof area, walkway, or driveway area directed to the vegetated receiving area

7. The permittee will update the SCM Design Spreadsheet to the new design criteria noted in the table above. The permittee will use the new updated spreadsheet for checking the design of the remedial SCM's and shall ensure that the following noted design restrictions are applied to the remedial SCM's:

- ① In order to receive the BUA reduction and treatment credit for BUA overage, the permeable pavement must be designed to infiltrate. The footprint of permeable pavement will be considered 100% pervious. Any adjacent BUA that is directed onto the permeable pavement will receive treatment credit only.
- ② The site plans for the lot must delineate the adjacent BUA that drains to the permeable pavement. The permittee shall not approve any plan that allows runoff from an adjacent vegetated area to enter the permeable pavement. Although the pavement is considered 100% pervious, the adjacent BUA that drains onto the pavement is still considered as BUA but shall receive treatment credit.
- ③ The treatment credit for disconnected impervious surface (DIS) is given under the stipulation that the vegetated areas are designed to meet the Minimum Design Criteria (MDC) found under NCAC 02H.1060. No more than 500 square feet of impervious surface may drain to a single appropriately designed receiving area. The impervious areas that drain to the vegetated receiving areas shall be considered as BUA, but shall receive treatment credit.
- ④ The location, extent and drainage area for each remedial SCM must be clearly delineated on the site plans approved by the permittee for each lot. The BUA that drains to rain gardens, cisterns and infiltration systems shall be considered as BUA.
- ⑤ The cistern or rain barrel must meet the MDC in 15A NCAC 02H.1057.

8. The soil type, infiltration rate and seasonal high water table elevation to be utilized for the SCM design will be as follows. The applicable soil parameters for each lot will be identified by use of the map submitted with the Soils Report.

	HSG	Infiltration rate	SHWT elevation
Murville	A/B	2.5 in/hr	33" b.e.g.
Lakeland	A/B	4 in/hr	37" b.e.g.
Leon	A/B	4 in/hr	24" b.e.g.

II. SCHEDULE OF COMPLIANCE

1. No person shall alter, fill in, or pipe any of the approved stormwater management curb outlet swales, perimeter drainage ditches or interior drainage features shown on the approved plans, except for minimum driveway crossings, unless and until the permittee submits a modification to the permit and receives approval from the Division.
2. All permitted curb outlet swales and their associated runoff collection systems must be located in public rights-of-way, dedicated common areas or recorded easements. The final plats for the project will be recorded showing all such required rights-of-way, common areas and easements, in accordance with the approved plans. Access to the curb outlet swales and to the collection system, for inspection and maintenance, shall be maintained via appropriate recorded easements.

3. The permittee is responsible for the routine monitoring of the project for compliance with the BUA limits, grading, and the curb outlet swale storm drainage system established by this permit, the permit documents, the approved plans, and the recorded deed restrictions. The permittee shall notify any lot owner that is found to be in noncompliance with the conditions of this permit in writing, and shall require timely resolution.
4. The permittee shall review all individual proposed and modified lot plans for compliance with the conditions of this permit as follows:
 - a. All plans submitted to the HOA for approval shall delineate all the existing BUA on the lot, the existing and proposed grading, location of the proposed remedial SCM(s), the drainage area of the BMP(s), and the construction details of the SCM(s).
 - b. Per the August 14, 2015, BUA Inventory Report, there are 36 lots in the subdivision that are currently under their permitted BUA maximum. The HOA shall not approve the use of any remedial SCM on those 36 lots to exceed the maximum BUA limit.
 - c. To achieve BUA reduction, any lot may remove impervious pavement and replace it with a properly designed, approved, constructed and maintained permeable pavement to stay below their maximum BUA limit and to achieve compliance. In addition, the drainage from any other BUA on the lot that is directed to the permeable pavement will receive treatment credit.
 - d. The HOA shall utilize the SCM Design Spreadsheet to check each SCM for compliance with the minimum SCM Manual design requirements.
 - e. Once a non-compliant lot has been brought into compliance by means of the approved SCM's, no additional impervious surface will be allowed on that lot unless a plan shows that an equal or greater amount of impervious surface is being removed.
 - f. The HOA shall routinely spot-check the SCM Design Spreadsheet formulas for errors, and shall correct such errors upon discovery.

5. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the Director that the changes have been made.
6. During the Compliance Period specified in the HOA's Plan of Action, the permittee shall update and maintain the BUA Inventory Report upon verification by the lot owner's engineer or design professional that the SCM has been constructed in accordance with the 2017 MDC and the plans approved by the HOA. The report will be updated with each approved lot application and shall include the type of remedial SCM's that were approved for that lot and how much impervious area reduction and/or BUA treatment credit was assigned. After permit issuance, the HOA shall submit a copy of the updated BUA Inventory Report to the Division's Wilmington Regional Office on a quarterly basis, within 30 days of January 1, April 1, July 1, and October 1 of each year which falls within the Compliance Period set forth in the Plan of Action and annually thereafter. The HOA may request that the actual due dates for submission of the report be adjusted.

7. **The lot owner must provide and maintain access to the remedial SCM's for inspection by HOA and/or DEMLR staff.**
8. During construction of the remedial SCM's, each lot owner shall restrain the sediment on site and shall repair any eroded areas immediately.
9. Upon completion of construction of any approved remedial SCM, the permittee shall require the lot owner to provide written certification from the lot owner's design professional to the HOA that the SCM has been installed in accordance with the approved remedial SCM plans, specifications, and supporting documentation. Any deviations from the approved plans or specifications must be noted on the Certification. The permittee shall keep all certifications on file for each lot as a condition of this permit. This requirement applies to all remediation plans submitted for approval after August 2, 2017.
10. The permittee shall submit to the Director and shall have received approval for revised plans, specifications, and calculations prior to construction, for any modification to the approved subdivision plans, including, but not limited to, those listed below:
 - a. Any revision to any item shown on the approved plans, including the stormwater management measures, BUA, details, etc.
 - b. Redesign or addition to the approved amount of BUA or to the drainage area.
 - c. Further development, subdivision, acquisition, lease or sale of any, all or part of the project area.
 - d. Filling in, altering, or piping of any vegetative conveyance shown on the approved plan.
 - e. The construction of any future BUA listed on the application.
11. The permittee shall provide the operation and maintenance (O & M) necessary to assure that the permitted curb outlet swales function at design condition. The approved O& M Agreement is incorporated by reference into this permit and must be followed in its entirety and maintenance must occur at the scheduled intervals.

12. Records of maintenance activities for the curb outlet swale system and associated runoff collection system, must be kept and made available upon request to authorized personnel of DEMLR. The records will indicate the date, activity, name of person performing the work and what actions were taken.
13. The HOA shall send letters to all lot owners with approved SCMs on an annual basis to remind them to check that their SCMs are functional and that the SCMs cannot be altered or removed, and that their lots must be compliant with their approved plans or they could be subject to HOA and/or DEQ enforcement.
14. The facilities shall be constructed, operated and maintained in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.
15. The following deed restrictions and protective covenants related to stormwater management recorded with the New Hanover County Register of Deeds are

incorporated by reference and must be maintained in perpetuity: October 11, 1993 in Deed Book 1708 at Page 0462; as amended on October 21, 1993 in Deed Book 1711 at Page 906; as amended on March 17, 1994 in Deed Book 1756 at Page 108; as amended on July 31, 1995 in Deed Book 1909 at Page 782; and as amended on March 6, 1997 in Deed Book 2149 at Page 190, In addition, the following requirements apply::

- a. The above covenants are intended to ensure ongoing compliance with modified State Stormwater Management Permit Number SW8 930818, as issued by DEMLR under NCAC 2H.1000.
- b. The State of North Carolina is made a beneficiary of these covenants to the extent necessary to maintain compliance with the Stormwater Management Permit.
- c. These covenants are to run with the land and be binding on all persons and parties claiming under them.
- d. The covenants pertaining to stormwater may not be altered or rescinded without the express written consent of the State of North Carolina, Division of Energy, Mineral and Land Resources (DEMLR).
- e. Alteration of the drainage as shown on the approved plans may not take place without the concurrence of the DEMLR. The maximum BUA per lot is as follows, in square feet.

Lot #	1	2	38 & 39	65-145	3-37, 40-64 & 146
BUA allowed	6,000	12,850	4,560	4,850	4,911

This allotted amount includes any BUA constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement. BUA includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, coquina and parking areas, but does not include a slatted deck; the water area of a swimming pool; a surface of number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric; a trail as defined in G.S. 113A-85 that is either unpaved or paved as long as the pavement is porous with a hydraulic conductivity greater than 0.001 centimeters per second (1.41 inches per hour).hour); or landscaping material, including, but not limited to, gravel, mulch, sand, and vegetation, placed on areas that receive pedestrian or bicycle traffic or on portions of driveways and parking areas that will not be compacted by the weight of a vehicle, such as the area between sections of pavement that support the weight of a vehicle. In addition, BUA does not include the footprint of permeable pavement that is designed to infiltrate.

- f. Each designated curb outlet swale or 100' vegetated area shown on the approved plan must be maintained at a minimum of 100' long, maintain 5:1 (H:V) side slopes or flatter, have a longitudinal slope no steeper than 5%, carry the flow from a 10 year storm in a non-erosive manner, maintain a dense vegetated cover, and be located in either a dedicated common area or a recorded drainage easement.

- 16. The permittee shall amend the Architectural Guidelines to reflect the necessary changes based on this modified permit. Upon the issuance of this permit, the permittee

shall cause a notice to be filed with the New Hanover County Register of Deeds which puts all prospective purchasers of a lot in Windward Oaks on notice that the BUA on the lot must conform to and be maintained in accordance with the requirements of the most recently modified stormwater permit SW8 930818 and 2017 Architectural Guidelines. The modified permit may be recorded with that document. The permittee shall submit a copy of the recorded document to the Division within 30 days of recording.

17. After the permittee has achieved compliance with the terms of this permit, the permittee shall have the opportunity to propose additional BUA provided that the need for the BUA is justified and that stormwater control measures for the BUA are designed in accordance with Table 1 and the MDC in 15A NCAC 02H .1050 through .1062. It shall be the responsibility of the permittee to provide all needed justification, plans, calculations and other supporting information to DEMLR for review and approval prior to constructing any additional BUA.

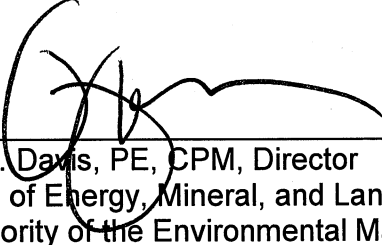
III. GENERAL CONDITIONS

1. Any individual or entity found to be in noncompliance with the provisions of a state stormwater management permit or the requirements of the stormwater rules is subject to enforcement action as set forth in NCGS 143, Article 21.
2. The issuance of this permit does not preclude the Permittee from complying with all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state, and federal) having jurisdiction.
3. The permittee grants DEQ Staff permission to enter the property during normal business hours to inspect the permitted stormwater management facility.
4. This permit is not transferable to any person or entity except after notice to and approval by the Director. The permittee shall submit a completed and signed Name/Ownership Change Form, accompanied by the supporting documentation as listed on the form, to the Division at least 60 days prior to any one or more of the following events:
 - a. Bankruptcy;
 - b. Dissolution of the partnership or corporate entity;
 - c. A name change of the current permittee;
 - d. A name change of the project;
 - e. A mailing address change of the permittee;
5. The permittee is responsible for compliance with all permit conditions until the Division approves a request to transfer the permit. Neither the sale of the project in whole or in part, nor the conveyance of common area to a third party constitutes an approved transfer of the permit.
6. In the event the SCM's fail to perform satisfactorily the lot owner(s) shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement stormwater management systems. Additional or replacement stormwater management systems shall receive a permit from the Division prior to construction.

7. The permit issued shall continue in force and effect until revoked or terminated. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and re-issuance or termination does not stay any permit condition.
8. Unless specified elsewhere, permanent seeding requirements for the stormwater control must follow the guidelines established in the North Carolina Erosion and Sediment Control Planning and Design Manual.
9. Approved plans, specifications, supplement forms, O&M Agreements and calculations for this project are incorporated by reference and are enforceable parts of the permit. The permittee shall maintain a copy of these documents on file.
10. The permittee shall submit a permit renewal application at least 180 days prior to the expiration date of this permit. The renewal request must include the appropriate documentation and the processing fee including an update on its compliance efforts. Based upon the information provided, the Division will determine if the permit expiration date will be removed or extended.
11. If there are any lots that have not remediated their BUA as outlined in the 2017 HOA Plan of Action, then the HOA shall attempt to achieve compliance on any non-compliant lots by any means deemed appropriate and pursuant to the Bylaws of the HOA, Article XI of the Declaration, and in accordance with the Planned Community Act (as stated in the November 21, 2014 letter to DEMLR) and as defined in the Architectural Guidelines (as amended). If the HOA is unable to bring about compliance, then the HOA shall notify the Division and the Division will seek enforcement action and civil fines and penalties against those individual lot owners as a third-party beneficiary of the Windward Oaks Declaration of Covenants, Conditions, and Restrictions, as amended.

Permit modified and reissued this the 14th ___ day of August, 2017.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



Tracy E. Davis, PE, CPM, Director
Division of Energy, Mineral, and Land Resources
By Authority of the Environmental Management Commission

Permit Number SW8 930818