

## Permeable Pavement in OHE

**A) The Board has voted to allow the use of qualified “Permeable Pavement” for projects that exceed the current 5,300 square foot Built Upon Area (BUA) limit in OHE.**

a) Background

- In the past, individual Storm Water permits were issued by the North Carolina Department of Environmental Quality (NC-DEQ).
  - i. There is currently one State-issued individual permit for Permeable Pavement in place in OHE. The individual permit was issued by the NC-DEQ in 2012.
  - ii. *The NC-DEQ recently delegated the responsibility for approving these Permits to the Association.***
  - iii. *By approving the use of Permeable Pavement, The Association has assumed the responsibility for enforcing compliance with the State-mandated guidelines as well as any potential risks of non-compliance.***

b) These projects require approval by the Association.

### **B) Built Upon Area (BUA) Credit**

- a) An eligible owner can apply to the Association for a State Storm Water BUA Credit (to meet the required [5,300 BUA limit](#)) for any surfaces that meet all the Permeable Pavement requirements specified in the OHE Storm Water Permit and NC-DEQ regulations.
- b) *For important details on the State-mandated requirements for Permeable Pavement please refer to the “[Contractors](#)” page on our website.***

**C) The “APPLICATION FORM FOR A PERMEABLE PAVEMENT CREDIT” is attached.**

## OCEAN HARBOUR ESTATES

### APPLICATION FORM FOR A PERMEABLE PAVEMENT CREDIT

*Email [ohenchoa@gmail.com](mailto:ohenchoa@gmail.com) to request a Word version of this form*

<b>Owner Information</b>	
<b>Application Date</b>	
<b>Lot Number</b>	
<b>Property Address</b>	
<b>Name</b>	
<b>Mailing Address</b>	
<b>Email</b>	
<b>Phone numbers</b>	
<b>Other contacts/numbers</b>	
<b>Other information</b>	
<b>Project Description</b>	

<b>General Contractor Information</b>	
<b>Name/Company</b>	
<b>Address</b>	
<b>Email</b>	
<b>Phone numbers</b>	
<b>Other contacts/numbers</b>	
<b>Other information</b>	

## **SUBMISSIONS REQUIRED:**

The following are required when submitting the Application:

- ☐ Letter of Intent
- ☐ ARB Review Fee, made payable to **OCEAN HARBOUR ESTATES Association, Inc.**
- ☐ Initial Escrow Deposit, made payable to **OCEAN HARBOUR ESTATES Association, Inc.**
- ☐ One full printed set of all plans (plus PDF copies of all plans).

See the attached **Permeable Pavement Credit Checklist** for details.

- ☐ Specifications of Exterior Materials
- ☐ Complete Set of Exterior Material Samples - Siding, Shingles, Brick/Stone, Paint, Fencing, Other (if actual sample is unavailable the manufacture booklets/literature is permissible)

### ***Before construction can begin:***

- ☐ Performance Bond Deposit, made payable to **OCEAN HARBOUR ESTATES Association, Inc.**
- ☐ Copy of Building Permit (if required)
- ☐ Copy of CAMA Permit (if required)
- ☐ Pictures of the Condition of the Roadway in Front of the Lot and each adjacent lot

## **PROJECT FEES:**

The following deposits are required:

ARB Review Fee (non-refundable)	<b>\$500</b>	Due prior to Preliminary ARB Review
Initial Escrow Deposit (refundable)	<b>\$500</b>	Due prior to Preliminary ARB Review
Performance Bond (refundable)	<b>\$1,200</b>	Due prior to Lot Clearing/Construction start

## **IMPORTANT DESIGN REQUIREMENTS:**

Built Upon Area (BUA) maximum	5,300 square feet (1)
Impermeable Surface maximum	5,300 square feet (2)

- (1) The North Carolina Department of Environmental Quality (NC-DEQ) Storm Water Permit for OHE legally obligates us to enforce a 5,300 square foot "Built Upon Area (BUA)" for each of our lots. ***This includes all impervious and permeable pavement surface area.***

*"Built upon area includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, coquina and parking areas, but does not include raised, open wood decking, or the water surface of swimming pools."*

OHE NC-DEQ Permit SW8931204

- (2) Declaration of Restrictive Covenants  
ARTICLE X. – USE RESTRICTIONS  
Section 26: Storm water Runoff.

*"No more than 5,300 square feet of any lot shall be directly covered with an impervious surface."*

## **PROJECT SPECIFICATIONS:**

**Impervious total**

Cannot exceed 5,300

+ Permeable Pavement total

= Total Built Upon Area (BUA)

- Permeable Credit Requested

= Net project total

Cannot exceed 5,300

List any other details below:

**Performance Bond:**

A Performance Bond Deposit must be submitted prior to beginning construction. It is non-interest bearing and refundable in full, assuming all ARB conditions are met and there are no outstanding fines.

This deposit is required for all new construction, additions, and structural alterations. This is for maintenance, repairs and clean-up costs that may be incurred by the Association/ARB created by the project, including but not limited to roadway & median repairs, damage to other lots, and timely completion of the construction within one year of the approval of this application. This also includes any fines that may be assessed by the Board of Directors, for contractors and their employees not following the ARB rules and requirements. This deposit does not relieve the Owner(s)/Contractor(s) from their obligations for additional clean up, repairs and maintenance, and needed roadway & median repairs or timely completion of the construction of the home. The Performance Bond is required to help ensure satisfactory completion of these obligations.

Upon written notification by Owner/Contractor of said completion the ARB will inspect the exterior of the property to see that it meets with the submissions provided in this application.

In addition, the ARB will compare the roadway pictures submitted with this application and compare them to the condition of the roadway and median in front of the lot, the adjacent lots and the 3 lots across from the home to assess that they are in the same condition prior to the construction.

If all conditions are found satisfactory, a refund will be forthcoming. If any conditions are found to NOT be satisfactory, these will be described to the Owner/Contractor, in writing, and a new inspection will be required upon completion of the corrections.

**DECLARATIONS and AGREEMENT**

- ☐ By checking this box and submitting this Application, the Owner(s) acknowledge that any outstanding fees or assessments must be paid **before** this Application can be reviewed by the ARB.
- ☐ By checking this box and submitting this Application, both the Owner(s) and the Contractor(s) agree to conform with the terms and conditions of the following: **OCEAN HARBOUR ESTATES Declaration of Restrictions and Protective Covenants, OHE Storm Water Permit (SW8931204), OHE Architectural Guidelines, OHE Contractor Rules of Conduct, OHE Job Site Rules, and OHE By-Laws**
- ☐ By checking this box and submitting this Application, Applicant acknowledges that the ARB is in fact, empowered to enter this contract on the behalf of the Association.
- ☐ By checking this box and submitting this Application, Applicant certifies that "I have personally participated in the design of the project and have used reasonable care in complying with the intent of the Architectural Guidelines of Ocean Harbour Estates."
- ☐ By checking this box and submitting this Application, Applicant certifies that this project does not cause the net BUA of the lot (as defined in OHE Storm Water Permit SW8931204) to exceed 5,300 square feet.
- ☐ By checking this box and submitting this Application, Applicant certifies that this project does not cause the total impervious surface area of the lot (as defined in the OHE Declaration of Restrictive Covenants) to exceed 5,300 square feet.

Owner Certification	
<b>Signature</b>	
<b>Date</b>	
<b>Printed Name</b>	

Contractor Certification	
<b>Signature</b>	
<b>Date</b>	
<b>Printed Name</b>	

**Permeable Pavement Credit Checklist**

One printed set and PDF versions of Final plans, in complete form, must be submitted in order to gain final approval to commence construction. All plans must be submitted in consistent scale.

**1) PERMEABLE PAVEMENT INFORMATION**

- ☐ Completed NC-DEQ application
- ☐ Completed Permeable Pavement Application and Agreement
- ☐ Engineering Plan
- ☐ Inspection and Maintenance Agreement
- ☐ Designer Certification and Checklist

**2) SITE PLANS (on signed and sealed survey)**

- ☐ All setback lines (including 5-foot landscaping buffer)
- ☐ Built Upon Area (BUA) summary table showing impermeable, permeable, permeable pavement credit requested and net BUA coverage totals
- ☐ Grading and drainage plan.
  - ☐ Fill plan, if any (indicating runoff and tree preservation method).
  - ☐ Finished grade height above the highest natural elevation
  - ☐ Culvert/s, location, size, and flow direction.
- ☐ Exterior lighting plan. Included any interior lighting and elements, which may be readily visible from the outside.
- ☐ Tree survey showing location and species of trees five (5") inches or larger in diameter at a point five (5) feet above ground that are impacted by the project.
  - ☐ Site plan overlaid on tree survey indicating all structures, septic field, and trees to be removed
- ☐ Location and identification of special features (such as drainage ditch, lagoon, easements, adjacent structures, et cetera),
- ☐ Location of contractor's I.D. sign, dumpster, and portable outdoor toilet facilities.

**3) ARCHITECTURAL DRAWINGS**

- ☐ Elevation drawings - all sides.
- ☐ Detailed drawings of any other features desirable for clarification such as exterior walls, screens, pools, et cetera.

**4) COMPLETE IDENTIFICATION OF EXTERIOR COLORS AND MATERIALS**

- ☐ Colors for all buildings, outbuildings, trim, roof materials, screens, fences, and decorative trim including pool tile, brick and stone are to be shown on samples of actual materials to be used

**5) LANDSCAPE PLANS**

- ☐ Complete landscape plan, to scale
  - ☐ Plant materials showing species, gallon size, number, spread, height, spacing at installation,
  - ☐ Irrigation Plan
  - ☐ Any other features such as terraces, walks, paths, fences, walls, etc.

**Application and Agreement for the use of Permeable Pavement in OHE**

**A) Applicant agrees to complete the required NC-DEQ application and submit it to the ARB for review.**

1. OHE shall supply all **lot owners** wishing to install a permeable pavement on their lot with the necessary forms or direct such **lot owners** to the Division's website <https://www.deq.nc.gov> to download the forms directly.

**B) Applicant agrees to supply the Association with an Engineering Plan for review and approval at the applicant's expense.**

1. All **permeable pavement applications** within OHE, must comply with the permeable pavement design, inspection and maintenance requirements listed in the latest version of the **NC DWQ Best Management Practices Manual**.
2. OHE will hire a Storm Water Engineer to review the plan for compliance, at the owner's expense.
3. OHE shall reject all applications for lots that do not meet the minimum soil hydraulic conductivity rate and the minimum water table separation requirements, or which propose a permeable pavement that does not meet the minimum design requirements.

**C) Applicant agrees to provide OHE with a signed Inspection and Maintenance Agreement.**

1. OHE shall ensure that each **owner of a lot** having permeable pavement, provides the necessary maintenance as outlined in the attached **Quarterly Operation & Maintenance Inspection Form – Permeable Pavement** on a quarterly basis by whatever reasonable and legal means may be necessary in perpetuity and as required by the Association's current and future Storm water permits.

**D) Applicant agrees to cause the following statements to be added to the recorded covenants and restrictions for the Applicants lot, at the owner's expense.**

1. Applicant will update the recorded legal lot description on file with Brunswick County Register of Deeds that the financial responsibility for maintaining the permeable pavement has been assigned to the **individual lot owner** throughout the life of the OHE Storm Water Permit.
2. If credit for a permeable pavement within the lot boundary is desired, the **applicant** must submit a request along with supporting documentation, to the OHE representative and receive written approval **prior to construction of the permeable pavement** and this BUA Credit must be recorded in the legal lot description.

**E) Record Keeping, Annual Inspections, and Changes in Ownership will be at the owner's sole expense.**

1. OHE shall keep a copy of all permeable pavement application and agreements on file throughout the life of the current and any future OHE Stormwater Management permits.
2. At the end of every quarter, OHE shall submit a copy of the permeable pavement approval package, including lot layout plan, supplement form, calculations, soils report, and the signed Operation and Maintenance Agreement to the Division for any and all lots within the permitted project, which were approved to install a permeable pavement in that quarter.
3. Prior to the sale or ownership transfer of any lot where a permeable pavement has been installed, OHE shall provide a copy of the previously approved calculation sheet and shall require the new owner to sign an Inspection and Maintenance Agreement.
4. Applicant will initially be assessed \$500 to fund an escrow account in the owner's name to cover the costs of record-keeping and inspections. This escrow fund is intended to cover the Association's actual costs and may be raised or lowered at the Associations sole discretion.
  - a. The escrow account will exist in perpetuity.
  - b. If the actual costs are higher than the amount in escrow, the Owner must make an additional true-up payment in that same year.
  - c. Any escrow payment or account balance due must be paid prior to any sale or ownership transfer. The actual Plan Agreement and fee amounts must be disclosed part of the legally required Seller Disclosure and are assumed by the buyer.
  - d. If the Association incurs any other fees or costs related to or effecting this agreement, the Owner must remit payment within 30 days. Failure to do so will result in late fees to extent allowed under NC State law.
5. **Failure to comply in any way with this Agreement, or the provisions here in will result in fines as detailed in the Association's documents; a pass through of any fines incurred by the Association from other governing bodies; and legal action to force removal of any structure that exceeds the BUA limit, at the owner's cost.**

Print Name	Signature	Date
President, OHE Association		



**NC Division of Energy, Mineral, and Land Resources**  
**Quarterly Operation & Maintenance Inspection Agreement – Permeable Pavement**

Project name:	Permit number: SW8931204	Permitee: Ocean Harbour Estates Association
Street address:	City: Calabash	State and ZIP code: NC 28467
Description of SCM location on the project:		

**Perimeter of the Permeable Pavement**

- |  |   |
|--|---|
| 1. Surrounding pervious areas are free from bare soil and erosive gullies.     | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 2. Drainage from pervious areas is directed away from the pavement.            | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 3. There is a sign to inform maintenance staff how to care for the pavement. * | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |

**Permeable Pavement Surface**

- |  |   |
|--|---|
| 4. Pavement is free from rutting, cracking, slumping, or other damage. | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 5. Pavement surface is free from standing water.                       | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 6. Pavement surface is free from sediment.                             | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 7. Pavement surface is free from trash and debris.                     | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |

**Observation Well, Underdrains and Outlet Structure**

- |   |   |
|---|---|
| 8. Observation wells are capped and accessible for inspection.              | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 9. Underdrains are empty within 5 days after a storm event (if applicable). | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |
| 10. Outlet structure is free from damage and clogging (if applicable).      | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> |

\* NOTE: Providing a sign is a recommendation, not a requirement.

<input type="checkbox"/>	Applicant agrees to perform required inspections, as well as any required maintenance, on a quarterly basis and submit the completed forms to the Association.
<input type="checkbox"/>	Applicant agrees that the Association can enter the property to conduct an inspection annually (including an infiltration test) at the owner's expense, and that the owner will perform any maintenance required by the Association at the owner's expense.

Print Name	Signature	Date
President, OHE Association		



Ocean Harbour Estates  
Stormwater Permit No. SW8 931204  
Brunswick County

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**Designer's Certification**

I, \_\_\_\_\_, as a duly registered \_\_\_\_\_ in the State of  
North Carolina, having been authorized to observe (periodically/weekly/full time) the construction of the project,

\_\_\_\_\_(Project)

for \_\_\_\_\_(Project Owner) hereby state that, to the best of my abilities, due care and diligence  
was used in the observation of the project construction such that the construction was observed to be built within substantial  
compliance and intent of the approved plans and specifications.

The checklist of items on page 2 of this form is a part of this Certification.

Noted deviations from approved plans and specifications:

SEAL

Signature \_\_\_\_\_

Registration Number \_\_\_\_\_

Date \_\_\_\_\_

Certification Requirements:

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- \_\_\_\_ 1. The drainage area to the system contains approximately the permitted acreage.
- \_\_\_\_ 2. The drainage area to the system contains no more than the permitted amount of built-upon area.
- \_\_\_\_ 3. All the built-upon area associated with the project is graded such that the runoff drains to the system.
- \_\_\_\_ 4. The outlet/bypass structure elevations are per the approved plan.
- \_\_\_\_ 5. The outlet structure is located per the approved plans.
- \_\_\_\_ 6. Trash rack is provided on the outlet/bypass structure.
- \_\_\_\_ 7. All slopes are grassed with permanent vegetation.
- \_\_\_\_ 8. Vegetated slopes are no steeper than 3:1.
- \_\_\_\_ 9. The inlets are located per the approved plans and do not cause short-circuiting of the system.
- \_\_\_\_ 10. The permitted amounts of surface area and/or volume have been provided.
- \_\_\_\_ 11. Required drawdown devices are correctly sized per the approved plans.
- \_\_\_\_ 12. All required design depths are provided.
- \_\_\_\_ 13. All required parts of the system are provided, such as a vegetated shelf, a forebay, and the vegetated filter.
- \_\_\_\_ 14. The overall dimensions of the system, as shown on the approved plans, are provided.

cc: NCDENR-DWQ Regional Office  
Inspector, [Brunswick](#) County Building Inspections