

## **COMPREHENSIVE STORMWATER MANAGEMENT PERMIT**

### **HIGH DENSITY DEVELOPMENT SERVED BY AN OFF-SITE STORMWATER SYSTEM**

#### **SECTION 1 – APPROVAL**

Having reviewed the application and all supporting materials, the City of Wilmington has determined that the application is complete and the proposed development meets the requirements of the City of Wilmington's Comprehensive Stormwater Ordinance.

PERMIT HOLDER: **Live Oak Crossroads, LLC**  
PROJECT: **Crossroads at Independence - Outparcel #2**  
ADDRESS: **3830 Carolina Beach Road**  
PERMIT #: **2021031**

Therefore, the above referenced site is hereby approved and subject to all conditions set forth in Section 2 of this approval and all applicable provisions of the City of Wilmington Comprehensive Stormwater Management Ordinance.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the following specified conditions and limitations:

#### **Section 2 - CONDITIONS**

1. The runoff associated with this project has been approved to be discharged into the Crossroads at Independence wet pond operated and maintained by Live Oak Crossroads, LLC under the terms and conditions set forth in the latest version of Permit No. 2019027.
2. This approval is valid only for the stormwater management system as proposed on the approved stormwater management plans dated 7/2/2021.
3. The built-upon area allocated to this development by Stormwater Management Permit No. 2019027, is 26409 square feet. The built upon area for this project must not exceed the maximum built-upon area allocated to this project or a modification to Stormwater Management Permit No. 2019027 will be required. This project proposes 26409 square feet. The amount available for future development is 0 square feet.
4. The project will be limited to the amount and type of built-upon area indicated in Section IV of the Stormwater Management Application Form submitted as part of the approved stormwater permit application package, and per the approved plans.
5. This permit shall become void unless the facilities are constructed in accordance with the approved stormwater management plans, specifications and supporting documentation, including information provided in the application and supplements.
6. The runoff from all built-upon area within any permitted drainage area must be directed into the permitted stormwater control system for that drainage area.

7. The permittee shall submit a revised stormwater management application packet to the City of Wilmington and shall have received approval prior to construction, for any modification to the approved 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, built-upon area, details, etc.
  - b. Redesign or addition to the approved amount of built-upon area or to the drainage area.
  - c. Further subdivision, acquisition, lease or sale of any part of the project area.
  - d. Filling in, altering, or piping of any vegetative conveyance shown on the approved plan.
  - e. Construction of any permitted future areas shown on the approved plans.
8. A copy of the approved plans and specifications shall be maintained on file by the Permittee.
9. During construction, erosion shall be kept to a minimum and any eroded areas of the system will be repaired immediately.
10. All areas must be maintained in a permanently stabilized condition. If vegetated, permanent seeding requirements must follow the guidelines established in the North Carolina Erosion and Sediment Control Planning and Design Manual unless an alternative is specified and approved by the City of Wilmington.
11. The permittee is responsible for keeping the stormwater collection system within the lot property boundaries clear of trash, debris and sediment, and must control the sediment on the lot in accordance with the requirements of the NC Erosion and Sediment Control Design Manual. The following maintenance for the lot and its stormwater collection system shall be performed as indicated:
  - a. Semiannual scheduled inspections (every 6 months).
  - b. Sediment and trash removal as necessary.
  - c. Vegetate the stormwater conveyance swales and the non-paved areas of the lot.
  - d. Immediate repair and stabilization of any eroded areas on the lot.
  - e. Maintenance of all slopes in accordance with approved plans and specifications.
  - f. Repair or replacement of swales, catch basins and piping as necessary to capture the lot's runoff and maintain adequate drainage to the permitted SCM.
12. Records of inspection, maintenance and repair for the permitted stormwater system must be kept by the permittee for at least 5 years from the date of record and made available upon request to authorized personnel of the City of Wilmington. The records will indicate the date, activity, name of person performing the work and what actions were taken.
13. Upon completion of construction, before a Certificate of Occupancy shall be granted, and prior to operation of this permitted facility, the applicant shall submit to the City of Wilmington as-built plans for all stormwater management facilities. The plans shall show the final design specifications and the field location, type, depth, and invert of all measures, controls and devices, as-installed. A final inspection by City of Wilmington personnel will be required prior to issuance of a certificate of occupancy or operation of the permitted facility.



14. This permit is not transferable except after application and approval by the City of Wilmington. In the event of a change of ownership, name change or change of address the permittee must submit a completed Name/Ownership Change form to the City of Wilmington at least 30 days prior to the change. It shall be signed by all applicable parties, and be accompanied by all required supporting documentation. Submittal of a complete application shall not be construed as an approved application. The application will be reviewed on its own merits by the City of Wilmington and may or may not be approved. The project must be in compliance with the terms of this permit in order for the transfer request to be considered. The permittee is responsible for compliance with all permit conditions until such time as the City of Wilmington approves the transfer request. Neither the sale of the project nor the conveyance of common area to a third party should be considered as an approved transfer of the permit.
15. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to enforcement action by the City of Wilmington, in accordance with Sections 18-52 and 18-53 and any other applicable section of the Land Development Code.
16. The City of Wilmington 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 City of Wilmington for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the City of Wilmington that the changes have been made.
17. The issuance of this permit does not preclude 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) having jurisdiction.
18. 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 as may be required by the City of Wilmington, such as the construction of additional or replacement stormwater management systems.
19. The permittee grants City of Wilmington Staff permission to enter the property during normal business hours for the purpose of inspecting all components of the permitted stormwater management facility.
20. The permit issued shall continue in force and effect until revoked or terminated by the City of Wilmington. 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.
21. The approved stormwater management plans and all documentation submitted as part of the approved stormwater management permit application package for this project are incorporated by reference and are enforceable parts of the permit.
22. The permittee shall submit a renewal request with all required forms and documentation at least 180 days prior to the expiration date of this permit.



#### Public Services

Engineering  
212 Operations Center Drive  
Wilmington, NC 28412  
910 341-7807  
910 341-5881 fax  
wilmingtonnc.gov  
Dial 711 TTY/Voice

23. If any one or more of the conditions of this permit is found to be unenforceable or otherwise invalidated, all remaining conditions shall remain in full effect.

Stormwater Management Permit issued this the 2<sup>nd</sup> day of July, 2021

A handwritten signature in black ink, appearing to read "Ralt GL", written over a horizontal line.

for Anthony N. Caudle, Interim City Manager  
City of Wilmington



**Public Services**  
 Engineering  
 212 Operations Center Dr  
 Wilmington, NC 28412  
 910 341-7807  
 91 341-5881 fax  
 wilmingtonnc.gov  
 Dial 711 TTY/Voice

## STORMWATER MANAGEMENT PERMIT APPLICATION FORM (Form SWP 2.3)

### I. GENERAL INFORMATION

1. Project Name (subdivision, facility, or establishment name - should be consistent with project name on plans, specifications, letters, operation and maintenance agreements, etc.):

Crossroads at Independence - Outparcel #2

2. Location of Project (street address):

3830 Carolina Beach Road

City: Wilmington

County: New Hanover

Zip: 28412

### II. PERMIT INFORMATION

1. Specify the type of project (check one): ☐ Low Density ☐ High Density  
☒ Offsite Stormwater System ☐ Drainage Plan ☐ Redevelopment ☐ Other

If the project drains to an Offsite System, list the Stormwater Permit Number(s):

City of Wilmington: 2019027

State - NCDEQ/DEMLR: \_\_\_\_\_

2. Is the project currently covered (whole or in part) by an existing City or State (NCDEQ/DEMLR) Stormwater Permit? ☒ Yes ☐ No

If yes, list all applicable Stormwater Permit Numbers:

City of Wilmington: 2019027

State - NCDEQ/DEMLR: \_\_\_\_\_

3. Additional Project Permit Requirements (check all applicable):

☐ CAMA Major ☐ Sedimentation/Erosion Control ☐ 404/401 Permit

### III. CONTACT INFORMATION

1. Print Applicant / Signing Official's name and title (the developer, property owner, lessee, designated government official, individual, etc. who owns the project):

Applicant / Organization: Live Oak Crossroads, LLC

Signing Official & Title: Dean Scarafoni - Member

a. Contact information for Applicant / Signing Official:

Address: 5 Allen Avenue

City: Manchester State: MA Zip: 01944

Phone: 910-538-5855 Email: deanscarafoni@comcast.net

b. Please check the appropriate box. The applicant listed above is:

- ☒ The property owner/Purchaser (Skip to item 3)  
☐ Lessee (Attach a copy of the lease agreement and complete items 2 and 2a below)  
☐ Developer (Complete items 2 and 2a below.)

2. Print Property Owner's name and title (if different from the applicant).

Property Owner / Organization: \_\_\_\_\_

Signing Official & Title: \_\_\_\_\_

a. Contact information for Property Owner:

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

3. (Optional) Other Contact name and title (such as a construction supervisor) who would like to be copied on all correspondence:

Other Contact Person / Organization: \_\_\_\_\_

Signing Official & Title: \_\_\_\_\_

a. Contact information for person listed in item 3 above:

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

4. Agent Authorization: Complete this section if you wish to designate authority to another individual and/or firm (such as a consulting engineer and /or firm) so that they may provide information on your behalf for this project (such as addressing requests for additional information).

Consulting Engineer: Garry S. Pape, P.E.

Consulting Firm: GSP Consulting, PLLC.

a. Contact information for consultant listed above:

Mailing Address: 6626-C Gordon Road

City: Wilmington State: NC Zip: 28411

Phone: 910-442-7870 Email: gpape@gsp-consulting.com



#### IV. PROJECT INFORMATION

1. Total Property Area: 39,038 square feet
2. Total Coastal Wetlands Area: 0 square feet
3. Total Surface Water Area: 0 square feet
4. Total Property Area (1) – Total Coastal Wetlands Area (2) – Total Surface Water Area (3) = Total Project Area: 39,038 square feet.
5. Existing Impervious Surface within Project Area: 0 square feet
6. Existing Impervious Surface to be Removed/Demolished: 0 square feet
7. Existing Impervious Surface to Remain: 0 square feet
8. Total Onsite (within property boundary) Newly Constructed Impervious Surface (in square feet):

Buildings/Lots	4,280
Impervious Pavement	19,455
Pervious Pavement (total area / adjusted area w credit applied)	/
Impervious Sidewalks	2,674
Pervious Sidewalks (total area / adjusted area w credit applied)	/
Other (Describe)	
Future Development	
<b>Total Onsite Newly Constructed Impervious Surface</b>	<b>26,409</b>

9. Total Onsite Impervious Surface  
(Existing Impervious Surface to remain + Onsite Newly Constructed Impervious Surface) 26,409 square feet
10. Net Change in Onsite Impervious Surface (+ for net increase, - for net decrease) \_\_\_\_\_ square feet
11. Project percent of impervious area: (Total Onsite Impervious Surface / Total Project Area) x100 = 67.6 %
12. Total Offsite Newly Constructed Impervious Area (in square feet):

Impervious Pavement	<u>1435</u>
Pervious Pavement (total area / adjusted area w credit applied)	/
Impervious Sidewalks	
Pervious Sidewalks (total area / adjusted area w credit applied)	/
Other (Describe)	
<b>Total Offsite Newly Constructed Impervious Surface</b>	<b><u>1435 *</u></b>

\* On outparcel #1



13. Complete the following information for each Stormwater SCM drainage area. Low Density and Drainage Plan projects (with no permeable pavements) may omit this section and skip to Section V.

Basin Information	Outparcel #2 SCM # 1	Outparcel #2 SCM # 2	Type of SCM SCM #
Receiving Stream Name	Bernards Creek	Bernards Creek	
Receiving Stream Index Number	18-80	18-80	
Stream Classification	C; Sw	C; Sw	
Total Drainage Area (sf)	39,038	1,435	
On-Site Drainage Area (sf)	39,038	1,435	
Off-Site Drainage Area (sf)			
Buildings/Lots (sf)	4,280		
Impervious Pavement (sf)	19,455	1,435	
Pervious Pavement (total / adjusted) (sf)	/	/	/
Impervious Sidewalks (sf)	2,674		
Pervious Sidewalks (total / adjusted) (sf)	/	/	/
Other (sf)			
Future Development (sf)			
Existing Impervious to remain (sf)			
Offsite (sf)			
<b>Total Impervious Area (sf)</b>	26,409	1435	
<b>Percent Impervious Area (%)</b>	67.6		

Basin Information	Type of SCM SCM #	Type of SCM SCM #	Type of SCM SCM #
Receiving Stream Name			
Receiving Stream Index Number			
Stream Classification			
Total Drainage Area (sf)			
On-Site Drainage Area (sf)			
Off-Site Drainage Area (sf)			
Buildings/Lots (sf)			
Impervious Pavement (sf)			
Pervious Pavement (total / adjusted) (sf)	/	/	/
Impervious Sidewalks (sf)			
Pervious Sidewalks (total / adjusted) (sf)	/	/	/
Other (sf)			
Future Development (sf)			
Existing Impervious to remain (sf)			
Offsite (sf)			
<b>Total Impervious Area (sf)</b>			
<b>Percent Impervious Area (%)</b>			



## V. SUBMITTAL REQUIREMENTS

Only complete application packages will be accepted and reviewed by the City. A complete package includes all of the items listed below. Copies of forms, deed restrictions, checklists as well as detailed instructions on how to complete this application form may be downloaded from the City of Wilmington Plan Review website below:

<https://www.wilmingtonnc.gov/departments/engineering/plan-review/stormwater-permits>

The complete application package should be submitted to the following address:

City of Wilmington – Engineering  
Plan Review Section  
212 Operations Center Dr.  
Wilmington, NC 28412

Please indicate that the following required information have been provided by initialing in the space provided for each item.

- |  | Initials                      |
|--|-------------------------------|
| 1. One completed Stormwater Management Permit Application Form.  | <u>ASB</u>                    |
| 2. One completed Supplement Form for each SCM proposed (signed, sealed and dated).   | <u>ASB</u>                    |
| 3. One completed Operation & Maintenance agreement for each <u>type</u> of SCM.  | <u>Previously Provided</u>    |
| 4. Proposed Deed Restrictions and Restrictive Covenants (for all subdivisions)   | <u>To Be provided by Dev</u>  |
| 5. Appropriate stormwater permit review fee.   | <u>To Be Provided by Dev.</u> |
| 6. Minimum requirements identified on the Engineering Plan Review Checklist have been addressed.   | <u>ASB</u>                    |
| 7. One set of calculations (sealed, signed and dated).   | <u>ASB</u>                    |
| 8. A detailed narrative (one to two pages) describing the stormwater treatment/management system for the project.  | <u>ASB</u>                    |
| 9. A USGS map identifying the site location. If the receiving stream is reported as class SA or the receiving stream drains to class SA waters within ½ mile of the site boundary, include the ½ mile radius on the map. | <u>Previously Provided</u>    |
| 10. A copy of the soils report, if applicable. Must meet NCDEQ SCM Manual and MDC requirements for the type of SCM proposed. The report must include boring logs and a map of boring locations.                          | <u>Previously Provided</u>    |
| 11. One full set of plans <u>folded to 8.5" x 14"</u> .  | <u>ASB</u>                    |
| 12. A map delineating and labeling the drainage area for each SCM proposed.  | <u>ASB</u>                    |
| 13. A map delineating and labeling the drainage area for each inlet and conveyance proposed.   | <u>ASB</u>                    |
| 14. A digital copy of the entire submittal package (can be submitted via flash drive, CD, email, dropbox or other file sharing system).  | <u>ASB</u>                    |



# VI. PROPERTY OWNER AUTHORIZATION (If Section III(2) has been filled out, complete this section)

I, \_\_\_\_\_, certify that I own the property identified in this permit application, and thus give permission to \_\_\_\_\_ with \_\_\_\_\_ to develop the project as currently proposed. A copy of the lease agreement or pending property sales contract has been provided with the submittal, which indicates the party responsible for the operation and maintenance of the stormwater system.

As the legal property owner I acknowledge, understand, and agree by my signature below, that if my designated agent \_\_\_\_\_ dissolves their company and/or cancels or defaults on their lease agreement, or pending sale, responsibility for compliance with the City of Wilmington Stormwater Permit reverts back to me, the property owner. As the property owner, it is my responsibility to notify the City of Wilmington immediately and submit a completed Name/Ownership Change Form within 30 days; otherwise I will be operating a stormwater treatment facility without a valid permit. I understand that the operation of a stormwater treatment facility without a valid permit is a violation of the City of Wilmington Municipal Code of Ordinances and may result in appropriate enforcement including the assessment of civil penalties.

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

Date: 3-17-2021

SEAL

I, Susan L. Price, a Notary Public for the State of Florida, County of St. Lucie, do hereby certify that Dean Scarsone personally appeared before me this day of March 17, 2021, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal.

My commission expires: \_\_\_\_\_



## VII. APPLICANT'S CERTIFICATION

I, Dean Scarsone, certify that the information included on this permit application form is, to the best of my knowledge, correct and that the project will be constructed in conformance with the approved plans, that the required deed restrictions and protective covenants will be recorded, and that the proposed project complies with the requirements of the applicable rules under the City's Comprehensive Stormwater Ordinance.

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

Date: 3-18-2021

SEAL

KARI LYNNE WILKINSON  
Notary Public  
North Carolina  
New Hanover County

I, Kari Lynne Wilkinson, a Notary Public for the State of North Carolina, County of New Hanover, do hereby certify that Dean Scarsone personally appeared before me this day of 25th March, 2021, and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal.

My commission expires: 9/4/2021

# SUPPLEMENT-EZ COVER PAGE

FORMS LOADED

## PROJECT INFORMATION

1	Project Name	Crossroads at Independence - Outparcel #2
2	Project Area (ac)	0.9
3	Coastal Wetland Area (ac)	0
4	Surface Water Area (ac)	0
5	Is this project High or Low Density?	High
6	Does this project use an off-site SCM?	Yes

## COMPLIANCE WITH 02H .1003(4)

7	Width of vegetated setbacks provided (feet)	N/A
8	Will the vegetated setback remain vegetated?	N/A
9	If BUA is proposed in the setback, does it meet NCAC 02H.1003(4)(c-d)?	N/A
10	Is streambank stabilization proposed on this project?	No

## NUMBER AND TYPE OF SCMs:

11	Infiltration System	
12	Bioretention Cell	
13	Wet Pond	
14	Stormwater Wetland	
15	Permeable Pavement	
16	Sand Filter	
17	Rainwater Harvesting (RWH)	
18	Green Roof	
19	Level Spreader-Filter Strip (LS-FS)	
20	Disconnected Impervious Surface (DIS)	
21	Treatment Swale	
22	Dry Pond	
23	StormFilter	
24	Silva Cell	
25	Bayfilter	
26	Filterra	



FORMS LOADED

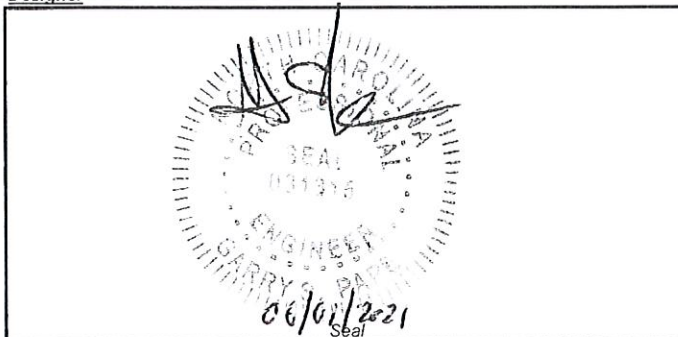
## DESIGNER CERTIFICATION

27	Name and Title:	Garry S. Pape, P.E.
28	Organization:	GSP Consulting, PLLC.
29	Street address:	6626-C Gordon Road
30	City, State, Zip:	Wilmington, NC 28411
31	Phone number(s):	910-442-7870
32	Email:	gpape@gsp-consulting.com

### Certification Statement:

I certify, under penalty of law that this Supplement-EZ form and all supporting information were prepared under my direction or supervision; that the information provided in the form is, to the best of my knowledge and belief, true, accurate, and complete; and that the engineering plans, specifications, operation and maintenance agreements and other supporting information are consistent with the information provided here.

### Designer



  
Signature of Designer

06/01/2021  
Date



# OFF-SITE SCM

## THE DRAINAGE AREA

1	Drainage area number for this project	1
2	Master permit number	2019027
3	Drainage area number from the master permit	1
4	Lot or outparcel number	2
5	BUA allocated by Master Permit	26409 sf

## INFORMATION ABOUT THE OFF-SITE SCM

6	Type of off-site SCM	Wet Pond
7	Available treatment capacity in the off-site SCM (cu ft)	134848 cf
8	Have deed restrictions limiting the BUA on the site been recorded?	
9	Has an Engineer's Certification for the off-site SCM been submitted to DEQ?	No
10	Are there any Notices of Violation for the off-site system?	No
11	Has the off-site SCM been maintained in accordance with its O&M Plan?	
12	Will the collection system be maintained in its design state and kept clean?	Yes

## ADDITIONAL INFORMATION

13	Please use this space to provide any additional information about the off-site SCM(s):	
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