



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

November 2, 2021

Polly Taylor, Senior Vice President Flagship Wilmington Surgcare,LLC c/o Flagship Healthcare Properties 2701 Coltsgate Road, Suite 300 Charlotte, NC 28211

Subject: Stormwater Management Permit No. 2010014R2 Wilmington Surgcare (Expansion) High Density Development

Dear Ms. Taylor:

The City of Wilmington Engineering Division has received a request for a revision to the Stormwater Management Permit for Wilmington Surgcare. Having reviewed the application and all supporting materials, the City of Wilmington has determined that the proposed revision meets the requirements of the City of Wilmington's Comprehensive Stormwater Ordinance.

The revisions include:

- Property Owner/Organization Revision

Please be aware all terms and conditions of the permit Issued on July 21, 2010 remain in full force and effect. Any additional changes to the approved plans must be approved by this office prior to construction. The issuance of the plan revision does not preclude the permittee from complying with all other applicable statutes, rules, regulations or ordinances which may have jurisdiction over the proposed activity and obtaining a permit or approval prior to construction.

An electronic copy of the approved permit, application and supplementary documents will be maintained by the Wilmington Engineering Division. If you have any questions, or need additional information, please contact Richard Christensen at (910) 341-7813 or richard.christensen@wilmingtonnc.gov.

Sincerely,

Richard Christensen

for Anthony Caudle, City Manager City of Wilmington

cc: James Shafer, Wilmington Surgcare, L.P. Richard Collier, PE, McKim & Creed Brian Chambers, Senior Planner, City of Wilmington



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



STORMWATER MANAGEMENT PERMIT APPLICATION FORM (Form SWP 2.2)

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.):

Wilmington Surgcare Expansion

2. Location of Project (street address):

	1801 S. 17th Street
	City: Wilmington County: New Hanover Zip: 28401
3.	Directions to project (from nearest major intersection):
	600 feet north of where S. 17th St. and New Hanover Medical Park Dr./ Robin Hood Rd.
	intersect, on the right.
II.	PERMIT INFORMATION
1.	Specify the type of project (check one): Low Density High Density Drains to an Offsite Stormwater System Drainage Plan Other If the project drains to an Offsite System, list the Stormwater Permit Number(s):
	City of Wilmington: State – NCDENR/DWQ:
2.	Is the project currently covered (whole or in part) by an existing City or State (NCDENR/DWQ) Stormwater Permit? Yes No If yes, list all applicable Stormwater Permit Numbers:
	City of Wilmington: 2010014 State – NCDENR/DWQ:
3.	Additional Project Permit Requirements (check all applicable): CAMA Major Sedimentation/Erosion Control NPDES Industrial Stormwater 404/401 Permit: Proposed Impacts: If any of these permits have already been acquired please provide the Project Name, Project/Permit Number, issue date and the type of each permit:



III. CONTACT INFORMATION

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

Applicant / Organization: _____Wilmington Surgcare, L.P.

Signing Official & Title: James Shafer, Administrator

a. Contact information for Applicant / Signing Official:

Street Address: <u>1801</u> S. 17th Street

City: Wilmington	State:	NC _Zip	₂₈₄₀₁	
Phone: <u>910-763-4555</u> Fax: <u>910-332-8920</u>	Email:	jshafer@su	rgerypartners.com	
Mailing Address (if different than physical address):				

City: ______State: _____Zip: _____

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

The property owner (Skip to item 3) Lessee* (Attach a copy of the lease agreement and complete items 2 and 2a below) Purchaser* (Attach a copy of the pending sales agreement and complete items 2 and 2a below) Developer* (Complete items 2 and 2a below.)

2. Print Property Owner's name and title below, if you are the lessee, purchaser, or developer. (This is the person who owns the property that the project is on.)

Signing Official & Title: Polly Taylor, Senior Vice President

	a. Contact information for Property Owner Street Address: <u>2701 Coltsgate Road</u> , S			
	City: Charlotte			
	Phone: 704-442-0222 Fax:	Email: polly@	flagshiphp.com	
	Mailing Address (if different than physical a	address):		
	City:	State:	Zip:	
3.	(Optional) Print the name and title of another or or another person who can answer questions a		roject's construction super	visor

Other Contact Person / Organization: _____Richard Collier/ McKim and Creed, Inc.

Signing Official & Title:



IV.

1.

2.

3.

4.

5.

6.

7.

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

Street Address: 243 N. Front St				
City: Wilmington	State:	NC	Zip:	28401
Phone: 910-343-1048 Fax:	Email:	rcollier	@mckin	ncreed.com
Mailing Address (if different than physical add	dress):			
City:	State:		Zip:	
PROJECT INFORMATION				
In the space provided below, briefly summarize h	low the sto	ormwater	runoff w	ill be treated.
The stormwater runoff will be treated utilizing	an existi	ng wet i	retaining	pond onsite in the
southern portion of the property as well as a	n existing	infiltrati	ion basir	n in the northeast
quadrant of the site.				
Total Property Area: <u>256,568</u> square feet				
Total Coastal Wetlands Area:0squa	are feet			
Total Surface Water Area:0square	feet			
Total Property Area (2) – Total Coastal Wetlands Project Area: <u>256,568</u> square feet.	Area (3) -	- Total S	urface W	'ater Area (4) = Total
Existing Impervious Surface within Property Area	: <u>84,00</u>	2_squa	are feet	
Existing Impervious Surface to be Removed/Dem	nolished:	8,893	squar	e feet
Existing Impervious Surface to Remain:75,1	09squ	are feet		
Total Onsite (within property boundary) Newly Co	onstructed	Impervio	ous Surfa	ce (in square feet):
Buildings/Lots		8	,996	
Impervious Pavement		12	2,126	
Pervious Pavement (adj. total, with % credit a	pplied)		0	

reivious ravement (adj. total, with % credit applied)	0
Impervious Sidewalks	982
Pervious Sidewalks (adj. total, with % credit applied)	0
Other (describe) generator/transformer	226
Future Development	0
Total Onsite Newly Constructed Impervious Surface	22,330

- 10. Total Onsite Impervious Surface (Existing Impervious Surface to remain + Onsite Newly Constructed Impervious Surface) = <u>97,439</u> square feet
- 11. Project percent of impervious area: (Total Onsite Impervious Surface / Total Project Area) x100 = <u>38.0</u>%



12. Total Offsite Newly Constructed Impervious Area (improvements made outside of property boundary, *in square feet*):

Impervious Pavement	10,536
Pervious Pavement (adj. total, with % credit applied)	0
Impervious Sidewalks	0
Pervious Sidewalks (adj. total, with % credit applied)	0
Other (describe)	0
Total Offsite Newly Constructed Impervious Surface	10,536

- 13. Total Newly Constructed Impervious Surface (Total Onsite + Offsite Newly Constructed Impervious Surface) = <u>32,866</u> square feet
- 14. Complete the following information for each Stormwater BMP drainage area. If there are more than three drainage areas in the project, attach an additional sheet with the information for each area provided in the same format as below. Low Density projects may omit this section and skip to Section V.

Basin Information	WET POND BMP # 1	IB -1 BMP # 2	TOTAL SITE
Receiving Stream Name	Jumping Run Creek	Jumping Run Creek	Jumping Run Creek
Receiving Stream Index Number	18-76-13	18-76-13	18-76-13
Stream Classification	C; SW	C; SW	C; SW
Total Drainage Area (sf)	255,162	13,446	268,608
On-Site Drainage Area (sf)	238,556	13,446	251,980
Off-Site Drainage Area (sf)	16,606	0	16,606
Total Impervious Area (sf)	100,536	7,439	107,975
Buildings/Lots (sf)	8,996	0	8,996
Impervious Pavement (sf)	12,126	0	12,126
Pervious Pavement (sf)	0	0	0
Impervious Sidewalks (sf)	982	0	982
Pervious Sidewalks (sf)	0	0	0
Other (sf)	226	0	226
Future Development (sf)	0	0	0
Existing Impervious to remain (sf)	67,670	7,439	75,109
Offsite (sf)	10,536	0	10,536
Percent Impervious Area (%)	39.4%	55.3%	40.2%

15. How was the off-site impervious area listed above determined? Provide documentation:

The proposed driveway for CFCC will be treated by the wet pond on-site.



V. SUBMITTAL REQUIREMENTS

- Supplemental and Operation & Maintenance Forms One applicable City of Wilmington Stormwater BMP supplement form and checklist must be submitted for **each** BMP specified for this project. One applicable proposed operation and maintenance (O&M) form must be submitted for **each type** of stormwater BMP. Once approved, the operation and maintenance forms must be referenced on the final plat and recorded with the register of deeds office.
- 2. Deed Restrictions and Restrictive Covenants For all subdivisions, outparcels, and future development, the appropriate property restrictions and protective covenants are required to be recorded prior to the sale of any lot. Due to variability in lot sizes or the proposed BUA allocations, a table listing each lot number, lot size, and the allowable built-upon area must be provided as an attachment to the completed and notarized deed restriction form. The appropriate deed restrictions and protective covenants forms can be downloaded at the link listed in section V (3). Download the latest versions for each submittal.

In instances where the applicant is different than the property owner, it is the responsibility of the property owner to sign the deed restrictions and protective covenants form while the applicant is responsible for ensuring that the deed restrictions are recorded.

By the notarized signature(s) below, the permit holder(s) certify that the recorded property restrictions and protective covenants for this project, if required, shall include all the items required in the permit and listed on the forms available on the website, that the covenants will be binding on all parties and persons claiming under them, that they will run with the land, that the required covenants cannot be changed or deleted without concurrence from the City of Wilmington, and that they will be recorded prior to the sale of any lot.

3. Only complete application packages will be accepted and reviewed by the City. A complete package includes all of the items listed on the City Engineering Plan Review Checklist, including the fee. Copies of the Engineering Plan Review Checklist, all Forms, Deed Restrictions as well as detailed instructions on how to complete this application form may be downloaded from:

http://www.wilmingtonnc.gov/PublicServices/Engineering/PlanReview/StormwaterPermits.aspx

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



VI. CONSULTANT INFORMATION AND AUTHORIZATION

1. Applicant: 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: _____Richard M. Collier, PE

Consulting Firm: <u>McKim & Creed</u>, Inc.

a. Contact information for consultant listed above:

Mailing Address: ____243 N. Front Street

City: _Wilmington	_State:	NC	_Zip:	28401

Phone: <u>910-343-1048</u> Fax: <u>910-251-8282</u> Email: <u>rcollier@mckimcreed.com</u>

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

I, (print or type name of person listed in Contact Information, item 2) Polly	Tay OV, certify that I
own the property identified in this permit application, and thus give	permission to (print or type name of
person listed in Contact Information, item 1) Jamcs Shafe	with (print or type name of organization
listed in Contact Information, item 1) Wilmington Suracove, LP	to develop the project as currently
proposed. A copy of the lease agreement or pending property sale	s contract has been provided with
the submittal, which indicates the party responsible for the operation	on 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 (*entity listed in Contact Information, item 1*) 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



VIII. APPLICANT'S CERTIFICATION

I, (print or type name of person listed in Contact Information, item 1), James Shafer ______ 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

ſ	requirements of the applicable stormwater rules under.
SEAL	La MAL
SHILL OF AVANC. ON MA	Signature:
AND REANAC. OF	Date: 8/25/21
NOTARY	
PUBLIC PUBLIC	I, Andreand C. Deatty, a Notary Public for the
The Armin	State of North Caroling, County of Brunswick, do
The WICK COUNT	hereby certify that James Shafer
- and the second s	personally appeared before me this day of <u>August 25</u> , <u>2021</u> ,
	and acknowledge the due execution of the application for a stormwater
permit. Witness my hand and officia	Il seal,

0. 00 A Ð 7 27,202 My commission expires: Apr: \ 5

STORMWATER MANAGEMENT PERMIT APPLICATION FORM 401 CERTIFICATION APPLICATION FORM

WET DETENTION BASIN SUPPLEMENT

This form must be filled out, printed and submitted.

The Required Items Checklist (Part III) must be printed, filled out and submitted along with all of the required information.

Project name Winnington Surgare Expansion Project name Richard Collet, PE Phone number 910.343.1048 Date 20.Jul 21 Date person 1 In DESIGN INFORMATION 1 DESIGN INFORMATION 1 State Characteristics 255.140, n² Drainage area number 100.624, l² Miniparvious area, post-development 100.624, l² Storage Volume: Non-SA Waters 39.44, % Storage Volume: Ron-SA Waters 1 Nifmum volume required 7.594, n² Volume provided is equal to or in excess of volume required 0K, volume provided is equal to or in excess of volume required Storage Volume: SA Waters n² T51 runoff Volume could is equal to or in excess of volume required n² Volume provided n² Pre-development 1-yr, 24 hr runoff n² N (Y or M) N Volume provided n² Pask Flow Calculations N File person control of the 1yr, 24 hr runoff n² N (Y or M) N Volume provided n² <t< th=""><th>I. PROJECT INFORMATION</th><th></th><th></th></t<>	I. PROJECT INFORMATION			
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1.5" runoff volume n³ Pre-development 1-yr, 24-hr runoff n³ Post-development 1-yr, 24-hr runoff n³ Winimum volume required n³ Wolume provided n³ Peak Flow Calculations n³ Peak Flow Calculations N Is the pre/post control of the 1yr 24hr storm peak flow required? N Iyr, 24-hr rainfall depth in National C, post-development (unitless) Rational C, post-development (unitless) Rational C, post-development 1-yr, 24-hr storm (unitless) Pre-development 1-yr, 24-hr peak flow 9.53 ft/sec Pre-development 1-yr, 24-hr peak flow control 5.11 ft/sec Elevation 17.00 fmsl Permanent pool elevation 17.00 fmsl Permanent pool elevation NA fmsl Sottiment Cleanout, top elevation of pond) 10.00 fmsl Sediment Cleanout, top	Volume provided	15,135 ft ³	OK, volume provided is equal to or in excess of volume required.	
Volume provided n³ Peak Flow Calculations in Is the pre/post control of the 1yr 24hr storm peak flow required? N (Y or N) 1-yr, 24-hr rainfall depth in NEW HANOVER COUNTY Rational C, pre-development (unitless) in Rational C, post-development (unitless) in/hr Rational C, post-development (unitless) in/hr Pre-development 1-yr, 24-hr peak flow 4.53 ft ³ /sec Post-development 1-yr, 24-hr peak flow 9.64 ft ³ /sec Pre/Post 1-yr, 24-hr peak flow control 5.11 ft ³ /sec Post-development 1-yr, 24-hr peak flow control 5.11 ft ³ /sec Permement pool elevation 17.00 fmsl Permanent pool elevation Post-development 1-yr, 24-hr peak flow control 5.11 ft ³ /sec SHWT elevation (approx. at the perm. pool elevation) fmsl Data not needed for calculation option #1, but OK if provided. Sediment cleanout, top elevation (bottom of pond) 10.00 fmsl Data not needed for calculation option #1, but OK if provided. Sediment cleanout, bottom elevation 9.00 fmsl Data not needed for calculation option #1, but OK if provided. Sediment cleanout, bottom elevation 9.00 fmsl Data not needed for calculation option #1, but OK if provided.	Storage Volume: SA Waters 1.5" runoff volume Pre-development 1-yr, 24-hr runoff Post-development 1-yr, 24-hr runoff Minimum volume required	ft ³		
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Temporary pool elevation 17.00 fmsl Permanent pool elevation 14.88 fmsl SHWT elevation (approx. at the perm. pool elevation) fmsl Top of 10ft vegetated shelf elevation N/A fmsl Bottom of 10ft vegetated shelf elevation N/A fmsl Bottom of 10ft vegetated shelf elevation N/A fmsl Sediment cleanout, top elevation (bottom of pond) 10.00 fmsl Sediment cleanout, bottom elevation 9.00 fmsl Sediment storage provided 1.00 ft Is there additional volume stored above the state-required temp. pool? N (Y or N) Y or N	Peak Flow Calculations Is the pre/post control of the 1yr 24hr storm peak flow required? 1-yr, 24-hr rainfall depth Rational C, pre-development Rational C, post-development Rainfall intensity: 1-yr, 24-hr storm Pre-development 1-yr, 24-hr peak flow Post-development 1-yr, 24-hr peak flow Pre/Post 1-yr, 24-hr peak flow control	in (unitless) (unitless) in/hr 4.53 ft ³ /sec 9.64 ft ³ /sec	NEW HANOVER COUNTY	
	Elevations Temporary pool elevation Permanent pool elevation SHWT elevation (approx. at the perm. pool elevation) Top of 10ft vegetated shelf elevation Bottom of 10ft vegetated shelf elevation Sediment cleanout, top elevation (bottom of pond) Sediment cleanout, bottom elevation Sediment storage provided	14.88 fmsl M/A fmsl N/A fmsl 10.00 fmsl 9.00 fmsl		
Elevation of the top of the additional volume 17.0 fmsl OK	Is there additional volume stored above the state-required temp. pool?	N (Y or N)		
	Elevation of the top of the additional volume		ОК	

II. DESIGN INFORMATION		
Surface Areas		
Area, temporary pool	8,578 ft ²	
Area REQUIRED, permanent pool	6,055 ft ²	
SA/DA ratio	2.37 (unitless)	
Area PROVIDED, permanent pool, Aperm_pool	6,087 ft ²	ОК
Area, bottom of 10ft vegetated shelf, A _{bot_shelf}	ft ²	
Area, sediment cleanout, top elevation (bottom of pond), A_{bot_pond}	1,356 ft ²	
Volumes		
Volume, temporary pool	15,135 ft ³	ОК
Volume, permanent pool, V _{perm_pool}	15,727 ft ³	
Volume, forebay (sum of forebays if more than one forebay)	721 ft ³	
Forebay % of permanent pool volume	4.6% %	Insufficient forebay volume.
SA/DA Table Data		-
Design TSS removal	<mark>85</mark> %	
Coastal SA/DA Table Used?	Y (Y or N)	
Mountain/Piedmont SA/DA Table Used?	N (Y or N)	
SA/DA ratio	2.37 (unitless)	
Average depth (used in SA/DA table):		
Calculation option 1 used? (See Figure 10-2b)	Y (Y or N)	
Volume, permanent pool, V _{perm_pool}	15,727 ft ³	
Area provided, permanent pool, Aperm_pool	5,465 ft ²	
Average depth calculated	3.62 ft	OK
Average depth used in SA/DA, d_{av} , (Round to nearest 0.5ft)	3.6 ft	ОК
Calculation option 2 used? (See Figure 10-2b)	N (Y or N)	
Area provided, permanent pool, Aperm_pool	6,087 ft ²	
Area, bottom of 10ft vegetated shelf, A _{bot_shelf}	ft ²	
Area, sediment cleanout, top elevation (bottom of pond), $A_{\text{bot_pond}}$	1,356 ft ²	
"Depth" (distance b/w bottom of 10ft shelf and top of sediment)	ft	
Average depth calculated	ft	
Average depth used in SA/DA, dav, (Round to nearest 0.5ft)	ft	
Drawdown Calculations		
Drawdown through orifice?	Y (Y or N)	
Diameter of orifice (if circular)	1.00 in	
Area of orifice (if-non-circular)	in ²	
Coefficient of discharge (C _D)	0.60 (unitless)	
Driving head (H _o)	<mark>2.16</mark> ft	
Drawdown through weir?	N (Y or N)	
Weir type	(unitless)	
Coefficient of discharge (C _w)	(unitless)	
Length of weir (L)	ft	
Driving head (H)	ft	
Pre-development 1-yr, 24-hr peak flow	4.53 ft ³ /sec	
Post-development 1-yr, 24-hr peak flow	9.64 ft ³ /sec	
Storage volume discharge rate (through discharge orifice or weir)	0.02 ft ³ /sec	OK, draws down in 2-5 days.
Storage volume drawdown time	3.94 days	ora, arawo down in 250 dayo.
Additional Information		
Vegetated side slopes	3 :1	ОК
Vegetated shelf slope	:1	
Vegetated shelf width	ft 3 :1	ОК
Length of flowpath to width ratio Length to width ratio	<u>3</u> :1 2.0:1	OK OK
Lengin to widin ratio Trash rack for overflow & orifice?	<u>2.0</u> :1 Y (Y or N)	OK OK
Freeboard provided	<u> </u>	OK
Vegetated filter provided?	N (Y or N)	Insufficient. Vegetated filter required.
Recorded drainage easement provided?	(Y or N)	
Capures all runoff at ultimate build-out?	Y (Y or N)	ОК
Drain mechanism for maintenance or emergencies is:	Gate Valve / Pump	
Form SW401-Wet Detention Basin-Rev.8-9/17/09		Parts

Form SW401-Wet Detention Basin-Rev.8-9/17/09

Parts I. & II. Design Summary, Page 2 of 2

Permit No._

(to be provided by DWQ)

STORMWATER MANAGEMENT PERMIT APPLICATION FORM 401 CERTIFICATION APPLICATION FORM

INFILTRATION BASIN SUPPLEMENT

This form must be filled out, printed and submitted.

The Required Items Checklist (Part III) must be printed, filled out and submitted along with all of the required information.

I. PROJECT INFORMATION	
Project Name	Wilmington Surgcare Expansion
Contact Person	Richard Collier, PE
Phone Number	910-343-1048
Date	8-Jan-20
Drainage Area Number	2
II. DESIGN INFORMATION	
Site Characteristics	
Drainage area	13,446.00 ft ²
Impervious area	7,439.00 ft ²
Percent impervious	0.55 %
Design rainfall depth	1.50 in
Peak Flow Calculations	
1-yr, 24-hr rainfall depth	3.80 in
1-yr, 24-hr intensity	in/hr
Pre-development 1-yr, 24-hr discharge	0.26 ft ³ /sec
Post-development 1-yr, 24-hr discharge	0.88 ft ³ /sec
Pre/Post 1-yr, 24-hr peak flow control	0.62 ft ³ /sec
Storage Volume: Non-SA Waters	
Minimum design volume required	921.00 ft ³
Design volume provided	$\frac{321.00}{926.00}$ ft ³ OK for non-SA waters
Storage Volume: SA Waters	
1.5" runoff volume	ft_3
Pre-development 1-yr, 24-hr runoff volume	tt ³
Post-development 1-yr, 24-hr runoff volume	t t ³
Minimum required volume	ft ³
Volume provided	tt ³
Soils Report Summary	
Soil type	Seagate
Infiltration rate	6.60 in/hr
SHWT elevation	23.50 fmsl
Basin Design Parameters	
Drawdown time	0.36 days OK
Basin side slopes	3.00 :1 OK
Basin bottom elevation	25.50 fmsl OK
Storage elevation	26.50 fmsi
Storage Surface Area	1,420.00 ft ²
Top elevation	27.00 fmsl
Basin Bottom Dimensions	
Basin length	90.00 ft
Basin width	10.00 ft
Bottom Surface Area	900.00 ft ²

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Permit No.

(to be provided by DWQ)

Additional Information

Maximum runoff to each inlet to the basin? Length of vegetative filter for overflow Distance to structure Distance from surface waters Distance from water supply well(s) Separation from impervious soil layer Naturally occuring soil above shwt Bottom covered with 4-in of clean sand? Proposed drainage easement provided? Capures all runoff at ultimate build-out? Bypass provided for larger storms? Pretreatment device provided

0.50	ac-in	OK
50.00	ft	OK
155.00	ft	OK
n/a	ft	OK
n/a	ft	OK
n/a	ft	OK
2.00	ft	OK
У	(Y or N)	OK
У	(Y or N)	OK
У	(Y or N)	OK
У	(Y or N)	OK
-		

Wet Detention Basin Operation and Maintenance Agreement

I will keep a maintenance record on this BMP. This maintenance record will be kept in a log in a known set location. Any deficient BMP elements noted in the inspection will be corrected, repaired or replaced immediately. These deficiencies can affect the integrity of structures, safety of the public, and the removal efficiency of the BMP.

The wet detention basin system is defined as the wet detention basin, pretreatment including forebays and the vegetated filter if one is provided.

This system (check one):

does does not incorporate a vegetated filter at the outlet.

This system (check one):

does does not **incorporate** pretreatment other than a forebay.

Important maintenance procedures:

- Immediately after the wet detention basin is established, the plants on the vegetated shelf and perimeter of the basin should be watered twice weekly if needed, until the plants become established (commonly six weeks).
- No portion of the wet detention pond should be fertilized after the first initial fertilization that is required to establish the plants on the vegetated shelf.
- Stable groundcover should be maintained in the drainage area to reduce the sediment load to the wet detention basin.
- If the basin must be drained for an emergency or to perform maintenance, the flushing of sediment through the emergency drain should be minimized to the maximum extent practical.
- Once a year, a dam safety expert should inspect the embankment.

After the wet detention pond is established, it should be inspected **once a month and within 24 hours after every storm event greater than 1.5 inches**. Records of operation and maintenance should be kept in a known set location and must be available upon request.Inspection activities shall be performed as follows. Any problems that are found shall be repaired immediately.

BMP element:	Potential problem:	How I will remediate the problem:
The entire BMP	Trash/debris is present.	Remove the trash/debris.
The side slopes of the	Areas of bare soil and/or	Regrade the soil if necessary to
wet detention basin	erosive gullies have formed.	remove the gully, and then plant a
	_	ground cover and water until it is
		established. Provide lime and a
		one-time fertilizer application.
	Vegetation is too short or too	Maintain vegetation at a height of
	long.	approximately six inches.

BMP element:	Potential problem:	How I will remediate the problem:
The inlet device: pipe or	The pipe is clogged.	Unclog the pipe. Dispose of the
swale		sediment off-site.
	The pipe is cracked or	Replace the pipe.
	otherwise damaged.	
	Erosion is occurring in the	Regrade the swale if necessary to
	swale.	smooth it over and provide erosion
		control devices such as reinforced
		turf matting or riprap to avoid
		future problems with erosion.
The forebay	Sediment has accumulated to	Search for the source of the
	a depth greater than the	sediment and remedy the problem if
	original design depth for	possible. Remove the sediment and
	sediment storage.	dispose of it in a location where it
		will not cause impacts to streams or
	Encloy Lagrand	the BMP.
	Erosion has occurred.	Provide additional erosion
		protection such as reinforced turf
		matting or riprap if needed to
	Woods are present	prevent future erosion problems.
	Weeds are present.	Remove the weeds, preferably by
		hand. If pesticide is used, wipe it on the plants rather than spraying.
The vegetated shelf	Best professional practices	Prune according to best professional
The vegetated shell	show that pruning is needed	practices
	to maintain optimal plant	practices
	health.	
	The plant community and	Restore plant vegetation to
	coverage is significantly	approved condition. If landscape
	(>25%) different from	plan needs to be adjusted to specify
	approved landscape plan.	vegetation more appropriate for site
		conditions, contact City Stormwater
		or Engineering Staff.
	Cattails or other invasive	Remove all invasives by physical
	plants cover >25% of the veg't	removal or by wiping them with
	shelf. A monculture of plants	pesticide (do not spray) – consult a
	must be avoided)	professional.
	Plants are dead, diseased or	Determine the source of the
	dying.	problem: soils, hydrology, disease,
		etc. Remedy the problem and
		replace plants. Provide a one-time
		fertilizer application to establish the
		ground cover if a soil test indicates
		it is necessary.
The main treatment area	Sediment has accumulated to	Search for the source of the
	a depth greater than the	sediment and remedy the problem if
	original design sediment	possible. Remove the sediment and
	storage depth.	dispose of it in a location where it
		will not cause impacts to streams or
		the BMP.

Permit Number:

(to be provided by City of Wilmington) BMP Drainage Basin #:

BMP element:	Potential problem:	How I will remediate the problem:
The main treatment area (continued)	Algal growth covers over 25% of the area.	Consult a professional to remove and control the algal growth.
	Cattails or other invasive plants cover >25% of the veg't shelf. A monculture of plants must be avoided)	Remove all invasives by physical removal or by wiping them with pesticide (do not spray) – consult a professional.
The embankment	Shrubs have started to grow on the embankment.	Remove shrubs immediately.
	Evidence of muskrat or beaver activity is present.	Use traps to remove muskrats and consult a professional to remove beavers.
	A tree has started to grow on the embankment.	Consult a dam safety specialist to remove the tree.
	An annual inspection by an appropriate professional shows that the embankment needs repair. (if applicable)	Make all needed repairs.
The outlet device	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
	The outlet device is damaged	Repair or replace the outlet device.
The receiving water	Erosion or other signs of damage have occurred at the outlet.	Contact the local NC Division of Water Quality Regional Office, or the 401 Oversight Unit at 919-733- 1786.

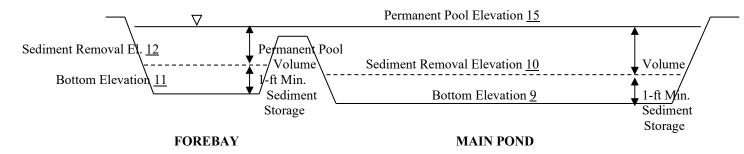
The measuring device used to determine the sediment elevation shall be such that it will give an accurate depth reading and not readily penetrate into accumulated sediments.

When the permanent pool depth reads <u>3</u> feet in the main pond, the sediment shall be removed.

When the permanent pool depth reads <u>3</u> feet in the forebay, the sediment shall be removed.

BASIN DIAGRAM

(fill in the blanks)



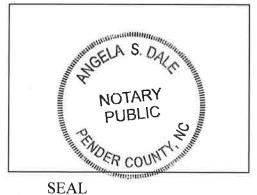
Permit Number:______(to be provided by City of Wilmington)

I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed above. I agree to notify the City of Wilmington of any problems with the system or prior to any changes to the system or responsible party.

Project name: Wilmington Surgcare Expansion
BMP drainage basin number:1
Print name:James Shafer
Title:Administrator
Address:1801 S. 17 th Street
Phone:910-763-4555
Signature: Jum M. May
Date: 1/2010

Note: The legally responsible party should not be a homeowners association unless more than 50% of the lots have been sold and a resident of the subdivision has been named the president.

a Notary Public for the State of _, County of New Hanover, do hereby certify that ciral _____ personally appeared before me this $\frac{2444}{2444}$ ater _, 2020, and acknowledge the due execution of the day of Jary forgoing wet detention basin maintenance requirements. Witness my hand and official seal,



28,2022 My commission expires

Permit Number: (to be provided by City of Wilmington) BMP Drainage Basin #:

Infiltration Basin Operation and Maintenance Agreement

I will keep a maintenance record on this BMP. This maintenance record will be kept in a log in a known set location. Any deficient BMP elements noted in the inspection will be corrected, repaired or replaced immediately. These deficiencies can affect the integrity of structures, safety of the public, and the removal efficiency of the BMP.

Important maintenance procedures:

- The drainage area will be carefully managed to reduce the sediment load to the infiltration basin.
- Immediately after the infiltration basin is established, the vegetation will be watered twice weekly if needed until the plants become established (commonly six weeks).
- No portion of the infiltration basin will be fertilized after the initial fertilization that is required to establish the vegetation.
- The vegetation in and around the basin will be maintained at a height of approximately six inches.

After the infiltration basin is established, it will be inspected **once a quarter and within 24 hours after every storm event greater than 1.5 inches**. Records of operation and maintenance will be kept in a known set location and will be available upon request.

Inspection activities shall be performed as follows. Any problems that are found shall be repaired immediately.

BMP element:	Potential problem:	How I will remediate the problem:
The entire BMP	Trash/debris is present.	Remove the trash/debris.
The perimeter of the infiltration basin	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, and then plant a ground cover and water until it is established. Provide lime and a one-time fertilizer application.
The inlet device: pipe or swale	The pipe is clogged (if applicable). The pipe is cracked or otherwise damaged (if applicable).	Unclog the pipe. Dispose of the sediment off-site. Replace the pipe.
	Erosion is occurring in the swale (if applicable).	Regrade the swale if necessary to smooth it over and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.

BMP element:	Potential problem:	How I will remediate the problem:
The forebay	Sediment has accumulated and reduced the depth to 75% of the original design depth.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or
	Erosion has occurred or riprap is displaced.	the BMP. Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
	Weeds are present.	Remove the weeds, preferably by hand. If pesticides are used, wipe them on the plants rather than spraying.
The main treatment area	A visible layer of sediment has accumulated.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP. Replace any media that was removed in the process. Revegetate disturbed areas immediately.
	Water is standing more than 5 days after a storm event.	Replace the top few inches of filter media and see if this corrects the standing water problem. If so, revegetate immediately. If not, consult an appropriate professional for a more extensive repair.
	Weeds and noxious plants are growing in the main treatment area.	Remove the plants by hand or by wiping them with pesticide (do not spray).
The embankment	Shrubs or trees have started to grow on the embankment. An annual inspection by an appropriate professional shows that the embankment needs repair.	Remove shrubs or trees immediately. Make all needed repairs.
The outlet device	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
The receiving water	The outlet device is damaged Erosion or other signs of damage have occurred at the outlet.	Repair or replace the outlet device. Contact the NC Division of Water Quality 401 Oversight Unit at 919- 733-1786.

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I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed above. I agree to notify the City of Wilmington of any problems with the system or prior to any changes to the system or responsible party.

Project	name:Wil	Imington	Surgcare

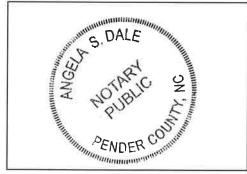
Expansion

BMP drainage basin number:2_

Print name: James Shafer	
Title: Administrator	2
Address: <u>1801 S. 17th Street</u>	
Phone: <u>910-763-4555</u>	
Signature: M. May	
Date: 1/24/2020	

Note: The legally responsible party should not be a homeowners association unless more than 50% of the lots have been sold and a resident of the subdivision has been named the president.

Angela S Dale, , a Notary Public for the State of h Caro Lina, County of New Hanger, do hereby certify that M. Shafer personally appeared before me this 2 3020, and acknowledge the due execution of the day of anvan forgoing infiltration basin maintenance requirements. Witness my hand and official seal,



SEAL

ine 28, 2022 My commission expires

Permit Number:____

(to be provided by City of Wilmington)

9

186





Engineering 414 Chestnut St, Suite 200 Wilmington, NC 28401 910 341-7807 910 341-5881 fax wilmingtonnc.gov Dial 711 TTY/Voice

July 21, 2010

Mr James Shafer, Administrator Wilmington Surgery Center, L.P. 1801 South 17th Street Wilmington, NC 28401

Subject: Stormwater Management Permit No. 2010014 Wilmington SurgCare High Density Development

Dear Mr. Shafer:

The City of Wilmington Engineering Department has received a complete Stormwater Management Permit application for The Wilmington SurgCare facility. Having reviewed the application and all supporting materials, the City of Wilmington has determined that the the proposed development meets the requirements of the City of Wilmington's Comprehensive Stormwater Ordinance. We are forwarding the Stormwater Management Permit for the construction, operation and maintenance of the subject project and stormwater management system.

This permit shall be effective from the date of issuance until July 16, 2020, and shall be subject to the conditions and limitations specified therein. Please pay special attention to the following permit conditions:

- Condition 12 All applicable operation and maintenance agreements must be recorded with the register of deeds prior to intended use or final inspection.
- Condition 15 Operation and Maintenance responsibilities. Failure to establish an adequate system for inspection and maintenance of the stormwater management system will result in future compliance problems.
- Condition 17 As built and certification requirements. All items must be completed prior to intended use or final inspection.

The City of Wilmington is now the designated coastal stormwater permitting and enforcement authority for projects within the Wilmington City limits. All components of the stormwater management system currently covered by State Stormwater Permit No. SW8961212 have been incorporated into the stormwater management application package for this approval. The Stormwater Management system for the entire site is now covered by Permit No. 2010014 and any future development activities will be subject to the requirements of the Wilmington Comprehensive Stormwater Ordinance. It is recommended that you contact the North Carolina Department of Environment and Natural Resources - Division of Water Quality at the address below to request rescission of Stormwater Permit No. SW8 961212. The project will be subject to all NCDENR – DWQ rescission requirements, terms and conditions.

NCDENR – Division of Water Quality Wilmington Regional Office 127 Cardinal Drive Extension Wilmington, NC 28405 (910) 796-7215





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The stamped, approved stormwater management drawing set will be released for construction by the Wilmington Planning Division under separate cover. The plan sheets approved previously as part of Wilmington Stormwater Discharge Permit Numbers 1997002 & 1997058 are attached for reference. Please add these sheets to the approved drawing set for Wilmington Stormwater Management Permit No. 2010014. An electronic copy of the entire approved drawing set, permit, application and supplementary documents will be maintained by the Wilmington Engineering Division. If you have any questions, or need additional information, please contact Robert Gordon at (910) 341-5856 or rob.gordon@wilmingtonnc.gov

Sincerely,

for Sterling Cheatham, City Manager City of Wilmington

cc: Nick Lauretta, PE, McKim & Creed, PA Dawn Snotherly, Wilmington Development Services/Planning





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COMPREHENSIVE STORMWATER MANAGEMENT PERMIT

HIGH DENSITY DEVELOPMENT

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:Wilmington Surgery Center, L.P.PROJECT:Wilmington SurgCareADDRESS:1801 South 17th St., WilmingtonPERMIT #:2010014

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 July 16, 2020 and shall be subject to the following specified conditions and limitations:

Section 2 - CONDITIONS

- 1. This approval is valid for the stormwater management system as proposed on the approved stormwater management plans for the Wilmington SurgCare Parking Lot Expansion dated July 16, 2010. The wet detention pond system previously approved by Wilmington Stormwater Discharge Permit Numbers 1997002 & 1997058 is incorporated by reference and is enforceable component of this permit.
- 2. 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 application package for the approved stormwater permit, and per the approved plans.
- 3. 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.
- 4. 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.
- 5. The following design criteria have been provided for the wet detention pond and must be maintained at design condition:

a. Drainage area* (ft ²):	474,881
 b. Total impervious surfaces* (ft²): 	78,994
c. Design Storm (inches):	.1
d. Pond Design Depth (feet):	6
e. TSS removal efficiency (%):	90
f. Permanent Pool Elev. (FMSL):	15
a. Permanent Pool Surface Area (ft ²):	5,937





17

645

847

225

15/s" Ø pipe

14,166(at temporary pool)

Public Services

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- h. Permitted Storage Volume (ft³):
- i. Temporary Storage Elevation (FMSL):
- j. Controlling Orifice:
- k. Permitted Forebay Surface Area (ft²):
- I. Permitted Forebay Volume (ft³):
- m. Grassed Swale Pretreatment (linear ft):
- n. Fountain Horsepower (HP):
- o. Received Stream:
- p. River Basin:
- q. Stream Index Number:
- r. Classification of Waterbody:
- * Does not include Infiltration basin data
- 6. 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.
 - Construction of any permitted future areas shown on the approved plans.
- 7. A copy of the approved plans and specifications shall be maintained on file by the Permittee.
- 8. During construction, erosion shall be kept to a minimum and any eroded areas of the system will be repaired immediately.
- 9. If the stormwater system was used as an Erosion Control device, it must be restored to design condition prior to operation as a stormwater treatment device, and prior to issuance of any certificate of occupancy for the project.
- 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. All stormwater treatment systems as well as access to nearest right-of-way must be located in recorded easements.
- 12. All applicable operation & maintenance agreements and easements pertaining to each stormwater treatment system shall be referenced on the final plat and recorded with the Register of Deeds upon final plat approval. If no plat is recorded for the site the operation and maintenance agreements and easements shall be recorded with the Register of Deeds so as to appear in the chain of title of all subsequent purchasers under generally accepted searching standards.

N/A Jumping Run Br./Greenfield Lake Cape Fear River Basin 18-76-1-3 "C; Sw"





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- 13. The stormwater management system shall be constructed in its entirety, vegetated and operational for its intended use prior to the construction of any built-upon surface unless prior approval is obtained. City Staff must be notified of any deviation prior to construction of the built-upon surface. Any deviation request shall include justification and must propose an alternative timeline or construction sequence. Notification shall not constitute approval. Any alternative timeline approved by City staff shall become an enforceable component of this permit.
- 14. Each component of the stormwater management system should be inspected once a month and within 24 hours after every storm event greater than 1.5 inches. Records of inspection should be kept by the permittee in a known set location and made available upon request to authorized personnel of the City of Wilmington.
- 15. The permittee shall at all times provide the operation and maintenance necessary to assure the permitted stormwater system remains in accordance with the approved stormwater management plans and functions at optimum efficiency. The approved Operation and Maintenance Plan must be followed in its entirety and maintenance must occur at the scheduled intervals including, but not limited to:
 - a. Scheduled inspections.
 - b. Sediment removal.
 - c. Mowing and revegetation of slopes and the vegetated areas.
 - d. Maintenance of landscape plants, including those within the landscape buffer and on the vegetated shelf.
 - e. Immediate repair of eroded areas.
 - f. Maintenance of all slopes in accordance with approved plans and specifications.
 - g. Debris removal and unclogging of outlet structure, orifice device, flow spreader, catch basins and piping.
 - h. Access to the outlet structure must be available at all times.
- 16. 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.
- 17. Upon completion of construction, before a final inspection shall be granted, and prior to use or 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, invert and planted vegetation of all measures, controls and devices, as-installed. A certification shall be submitted, along with all supporting documentation that specifies, under seal that the as-built stormwater measures are in compliance with the approved stormwater management plans. A final inspection by City of Wilmington personnel will be required prior to use or operation of the permitted facility.





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- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. 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.





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27. 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 16th day of July, 2010

for Sterling Cheatham, City Manager City of Wilmington