



Public Services

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

September 11, 2019

Mr. Albert Eby, Executive Director
Cape Fear Public Transportation Authority
505 Cando Street
Wilmington, NC 28405

**Subject: Stormwater Management Permit No. 2018018R1
CFPTA Third Street Transit Station
High Density Redevelopment**

Dear Mr. Eby:

The City of Wilmington Engineering Division has received a request for a revision to the Stormwater Management Permit for CFPTA Third Street Transit Station. 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:

- Reduction in size of the Campbell Street access area (off-site) and associated grades.
- See approved plans dated September 11, 2019

Please be aware all terms and conditions of the permit Issued on April 19, 2018 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.

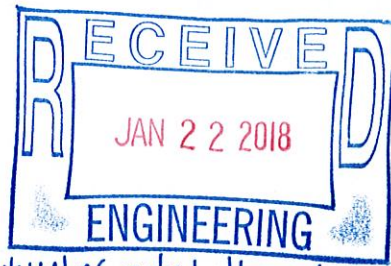
The revised stamped, approved stormwater management drawings will be released for construction by the Wilmington Planning Division under separate cover. Please replace any old plan sheets from the approved set with the new, revised sheet. An electronic copy of the approved drawing set, permit, application and supplementary documents will be maintained by the Wilmington Engineering Division. If you have any questions, or need additional information, please contact Richard Christensen at (910) 341-7813 or richard.christensen@wilmingtonnc.gov

Sincerely,

A handwritten signature in blue ink that reads 'Rich Christensen'.

for Sterling Cheatham, City Manager
City of Wilmington

cc: David E. Criser, PE, Ardurra Group North Carolina
Jeff Walton, Associate Planner, City of Wilmington



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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.):

CFPTA 3rd Street Transit Station

2. Location of Project (street address):

520 N. 3rd Street

City: Wilmington County: New Hanover Zip: 28401

3. Directions to project (from nearest major intersection):

located on the SE corner of 3rd Street and Campbell Street

II. PERMIT INFORMATION

1. Specify the type of project (check one): Low Density High Density
 Drains to an Offsite Stormwater System Drainage Plan Other :Redevelopment Exclusion
 If the project drains to an Offsite System, list the Stormwater Permit Number(s):

City of Wilmington: NA State – NCDENR/DWQ: NA

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: NA State – NCDENR/DWQ: NA

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

CAMA Major Sedimentation/Erosion Control

NPDES Industrial Stormwater 404/401 Permit: Proposed Impacts: NA

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: Cape Fear Public Transportation Authority (CFPTA)

Signing Official & Title: Albert Eby, Executive Director

- a. Contact information for Applicant / Signing Official:

Street Address: 505 Cando Street

City: Wilmington State: NC Zip: 28405

Phone: 910-202-2035 Fax: _____ Email: aeby@wavetransit.com

Mailing Address (if different than physical address): PO Box 12630

City: Wilmington State: NC Zip: 28405-0130

- 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.)

Property Owner / Organization: _____

Signing Official & Title: _____

- a. Contact information for Property Owner:

Street Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

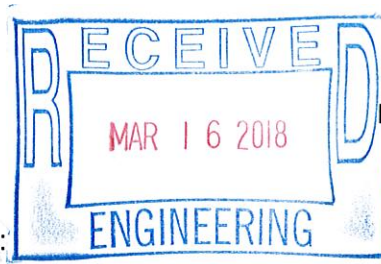
Mailing Address (if different than physical address): _____

City: _____ State: _____ Zip: _____

3. (Optional) Print the name and title of another contact such as the project's construction supervisor or another person who can answer questions about the project:

Other Contact Person / Organization: _____

Signing Official & Title: _____



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

Street Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Mailing Address (if different than physical address): _____

City: _____ State: _____ Zip: _____

IV. PROJECT INFORMATION

1. In the space provided below, briefly summarize how the stormwater runoff will be treated.

Stormwater will be collected and routed to a 12-inch pipe on 3rd Street and a 12-inch pipe on Campbell Street.

Some roof drains will discharge directly into grass areas before entering the pipe system, allowing some infiltration.

2. Total Property Area: 59,450 square feet

3. Total Coastal Wetlands Area: 0 square feet

4. Total Surface Water Area: 0 square feet

5. Total Property Area (2) – Total Coastal Wetlands Area (3) – Total Surface Water Area (4) = Total Project Area: 59,450 square feet.

6. Existing Impervious Surface within Property Area: 44,945 square feet

7. Existing Impervious Surface to be Removed/Demolished: 40,341 square feet

8. Existing Impervious Surface to Remain: 4,604 square feet

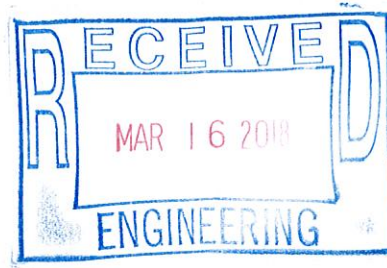
9. Total Onsite (within property boundary) Newly Constructed Impervious Surface (~~in~~ square feet):

Buildings/Lots	0
Impervious Pavement (bus parking, platforms and canopy)	36,096
Pervious Pavement (adj. total, with 100 % credit applied)	2,296 > 0
Impervious Sidewalks	3,188
Pervious Sidewalks (adj. total, with 100 % credit applied)	390 > 0
Other (describe) (misc. concrete pads, bench, signs, etc.)	656
Future Development	0
Total Onsite Newly Constructed Impervious Surface	39,940

10. Total Onsite Impervious Surface

(Existing Impervious Surface to remain + Onsite Newly Constructed Impervious Surface) = 44,544 square feet

11. Project percent of impervious area: (Total Onsite Impervious Surface / Total Project Area) x100 = 74.93 %



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

Impervious Pavement	1,908
Pervious Pavement (adj. total, with % credit applied)	
Impervious Sidewalks	1,020
Pervious Sidewalks (adj. total, with % credit applied)	
Other (describe)	
Total Offsite Newly Constructed Impervious Surface	2,928

13. Total Newly Constructed Impervious Surface
 (Total Onsite + Offsite Newly Constructed Impervious Surface) = 42,868 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	BMP # 1	BMP #	BMP #
Receiving Stream Name			
Receiving Stream Index Number			
Stream Classification			
Total Drainage Area (sf)			
On-Site Drainage Area (sf)			
Off-Site Drainage Area (sf)			
Total Impervious Area (sf)			
Buildings/Lots (sf)			
Impervious Pavement (sf)			
Pervious Pavement (sf)			
Impervious Sidewalks (sf) (Equip. Pad)			
Pervious Sidewalks (sf)			
Other (sf) (grass)			
Future Development (sf)			
Existing Impervious to remain (sf)			
Offsite (sf)			
Percent Impervious Area (%)			

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

NA

V. SUBMITTAL REQUIREMENTS

1. 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: David E. Criser

Consulting Firm: ~~Criser Troutman Tanner Consulting Engineers~~ ARDURRA GROUP NORTH CAROLINA

a. Contact information for consultant listed above:

Mailing Address: 3809 Peachtree Avenue, Suite 102

City: Wilmington State: NC Zip: 28403

Phone: 910-397-2929 Fax: 910-397-2971 Email: ~~dcriser@cttengineering.com~~

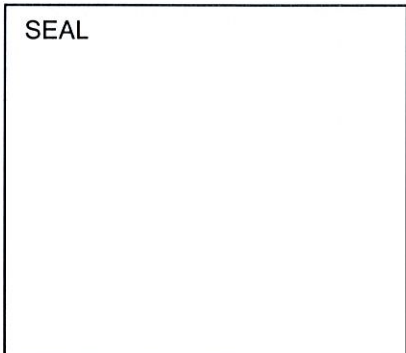
@ardurra.com

9/11/19
RAC

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) _____, 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) _____ with (print or type name of organization listed in Contact Information, item 1) _____ 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 (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 enforcement including the assessment of civil penalties.



Signature: _____

Date: _____

I, _____, a Notary Public for the

State of _____, County of _____, do

hereby certify that _____

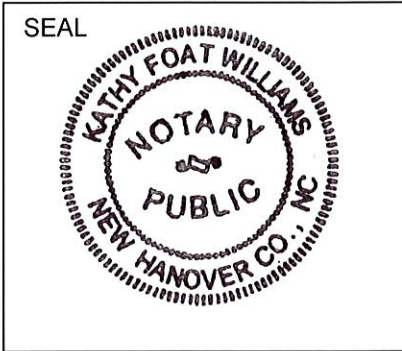
personally appeared before me this day of _____, _____,

and acknowledge the due execution of the application for a stormwater permit. Witness my hand and official seal,

My commission expires: _____

VIII. APPLICANT'S CERTIFICATION

I, (print or type name of person listed in Contact Information, item 1), Albert Eby 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 stormwater rules under.



Signature: AEy

Date: July 31, 2017

I, Kathy Foat Williams, a Notary Public for the State of North Carolina, County of New Hanover, do hereby certify that Albert Eby personally appeared before me this day of 31st July, 2017, and acknowledge the due execution of the application for a stormwater

permit. Witness my hand and official seal,

Kathy Foat Williams

My commission expires: October 29, 2020

SUPPLEMENT-EZ FORM COVER PAGE

Please indicate the types, quantities and locations of SCMs that will be used on this project:

Quantity	Location(s)
	Infiltration System
	Bioretention Cell Wet Pond
	Stormwater Wetland
1	Employee Parking Area & Sidewalk
	Permeable Pavement
	Sand Filter
	Rainwater Harvesting
	Green Roof
	Level Spreader-Filter Strip
	Disconnected Impervious Surface
	Treatment Swale
	Dry Pond

Project Name:

CFPTA 3rd Street Transit Station

Address

520 N. 3rd Street

City / Town

Wilmington

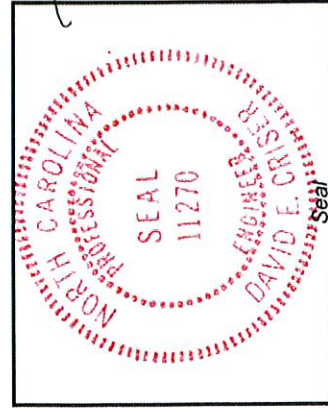
Designer information for this project:

Name and Title:	David E. Criser, PE
Organization:	Criser Troutman Tanner Consulting Engineers
Street address:	3809 Peachtree Avenue, Suite 102
City, State, Zip:	Wilmington, NC 28403
Phone number(s):	910-397-2929
Email:	dcriser@cttengineering.com

Applicant:

Company:	Cape Fear Public Transportation Authority
Contact:	Albert Eby, Executive Director
Mailing Address:	505 Cando Street
City, State, Zip:	Wilmington, NC 28405
Phone number(s):	910-202-2035
Email:	aeby@wavetransit.com

Designer



[Handwritten Signature]
Signature of Designer

05/01/18
Date

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.

I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment for knowing violations as well as a report being made to my professional board.

RECEIVED

MAY 1 2018

ENGINEERING

PERMEABLE PAVEMENT

CFPTA 3rd Street Transit Station

THE DRAINAGE AREA		1	
Drainage area number	Permeable Pavement	Break down of BUA in the drainage area (both new and existing):	
Total coastal wetlands area (sq ft)	sf	- Parking / driveway (sq ft)	2726 sf
Total surface water area (sq ft)	sf	- Sidewalk (sq ft)	134 sf
Total drainage area (sq ft)	3331 sf	- Roof (sq ft)	
BUA associated with existing development (sq ft)	sf	- Roadway (sq ft)	
Proposed new BUA (sq ft)	2860 sf	- Other, please specify in the comment box below (sq ft)	
Percent BUA of drainage area	85.86%	Total BUA (sq ft)	2860 sf
COMPLIANCE WITH THE APPLICABLE STORMWATER PROGRAM			
Stormwater program(s) that apply (please specify):			
City of Wilmington has approval authority			
GENERAL MDC FROM 02H .1050			
#1 Is the SCM sized to treat the SW from all surfaces at build-out?	Yes	#7 If applicable, with the SCM be cleaned out after construction?	No
#2 Is the SCM located on or near contaminated soils?	No	#8 Does the maintenance access comply with General MDC (8)?	Yes
#3 What are the side slopes of the SCM (H:V)?	No	#9 Does the drainage easement comply with General MDC (9)?	Yes
#3 Does the SCM have retaining walls, gabion walls or other engineered side slopes?	No	#10 If the SCM is on a single family lot, does the plat comply with General MDC (10)?	Yes
#4 Are the inlets, outlets, and receiving stream protected from erosion (10-year storm)?	Yes	#11 Is there an O&M Agreement that complies with General MDC (11)?	Yes
#5 Is there a bypass for flows in excess of the design flow?	Yes	#12 Is there an O&M Plan that complies with General MDC (12)?	Yes
#6 What is the method for dewatering the SCM for maintenance?	Other	#13 Was the SCM designed by an NC licensed professional?	Yes
PERMEABLE PAVEMENT MDC FROM 02H .1055			
#1 Was the soil investigated in the footprint and at the elevation of the infiltration system?		#6 How will the pavement surface be tested?	
#1 Briefly describe the hydraulic properties and characteristics of the soil profile:			
		#7 Area of permeable pavement to be installed (square feet)	2315 sf
		#7 Area of screened roof runoff that is directed to pavement (square feet)	sf
		#7 Area of additional built-upon area runoff that is directed to pavement (square feet)	sf
		#7 Will runoff from pervious surfaces be directed away from the pavement?	No
		#8 Dewatering time (hours)	0.30
		#8 Is additional media being added to the soil profile?	No
		#9 Is at least one observation well per terrace been provided at the low point(s)?	Yes
		#10 Is this a detention permeable pavement system?	No
		#10 If so, what is the drawdown time for the design storm?	
		#11 Have edge restraints been provided?	Yes
		#12 Will the subgrade be graded when dry?	Yes
		#13 Will the permeable pavement be protected from sediment during construction?	Yes
		#13 Will an in-situ permeability test be conducted after site stabilization	No
ADDITIONAL INFORMATION			
Please use this space to provide any additional information about this permeable pavement design that you think is relevant to the review.			
O&M Plan included within the O&M Agreement			

Permeable Pavement Operation and Maintenance Agreement

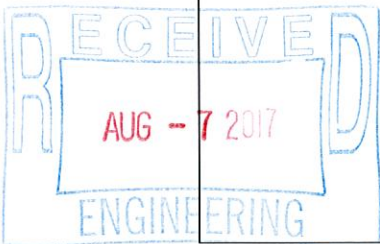
I will keep a maintenance record on this BMP. This maintenance record will be kept in a log in a known set location. Any deficient BMP elements noted in the inspection will be corrected, repaired or replaced immediately. These deficiencies can affect the integrity of structures, safety of the public,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

Important operation and maintenance procedures:

- Stable groundcover will be maintained in the drainage area to reduce the sediment load to the permeable pavement.
- The area around the perimeter of the permeable pavement will be stabilized and mowed, with clippings removed.
- Any weeds that grow in the permeable pavement will be sprayed with pesticide immediately. Weeds will not be pulled, since this could damage the fill media.
- Once a year, the permeable pavement surface will be vacuum swept.
- At no time shall wet sweeping (moistening followed by sweeping) be allowed as a means of maintenance.
- There shall be no repair or treatment of Permeable Pavement surfaces with other types of pavement surfaces. All repairs to Permeable Pavement surfaces must be accomplished utilizing permeable pavement which meets the original pavement specifications.
- Concentrated runoff from roof drains, piping, swales or other point sources, directly onto the permeable pavement surface shall not be allowed. These areas must be diverted away from the permeable pavement.

Initial Inspection: Permeable Pavements shall be inspected monthly for the first three months for the following:

BMP element:	Potential problem:	How to remediate the problem:
The perimeter of the permeable pavement	Areas of bare soil and/or erosive gullies have formed.	In the event that rutting or failure of the groundcover occurs, the eroded area shall be repaired immediately and permanent groundcover re-established. Appropriate temporary Erosion Control measures (such as silt fence) shall be installed in the affected area during the establishment of permanent groundcover, and any impacted area of permeable pavement is to be cleaned via vacuum sweeping.
The surface of the permeable pavement	Rutting / uneven settlement	This indicates inadequate compaction of the pavement base / sub-base. If rutting or uneven settlement on the order of ½ inch or greater occurs, permeable pavement shall be removed and base / sub-base re-compacted, smoothed, and permeable pavement shall then be re-installed. Base and sub-base compaction shall be monitored by a licensed geotechnical engineer to ensure that infiltration capacity of base and sub-base are not compromised by compaction and smoothing processes.
	The pavement does not dewater between storms, or water is running off.	Vacuum sweep the pavement. If the pavement still does not dewater, consult a professional.



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 City of Wilmington of any problems with the system or prior to any changes to the system or responsible party.

Project name: CFPTA 3rd Street Transit Station

BMP drainage area or lot number: 2

Print name: Albert Eby

Title: Executive Director

Address: 505 Cando Street, Wilmington, NC 28405

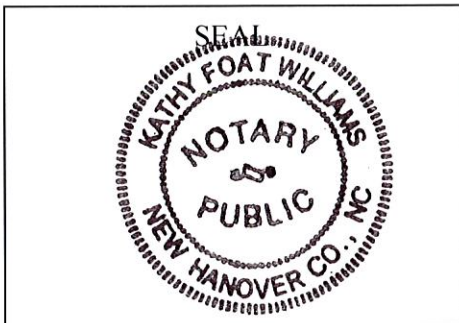
Phone: 910-202-2035

Signature: 

Date: 08/07/2017

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.

I, Kathy Foat Williams, a Notary Public for the State of North Carolina, County of New Hanover, do hereby certify that Albert Eby personally appeared before me this 17th day of August, 2017, and acknowledge the due execution of the forgoing permeable pavement maintenance requirements. Witness my hand and official seal,



My commission expires October 29, 2020