

To: Tim Clinkscales
From: Brian Chambers, Senior Planner; 910.342.2782
CC: File;
Date: 12/5/2022
Re: Hawthorne At The Pointe Phase 2 TRC Rev 1

The following is a list of comments for review from planning regarding the project. Please provide your corrections as listed below. A staff summary of comments:

| Staff | Department | Notes |
|--------------------|-----------------------|-------------------|
| Brian Chambers | Planning, Plan Review | Comments below |
| Eric Seidel | Engineering | Comments attached |
| Chris Walker | Fire | Comments attached |
| Mitesh Baxi | Traffic Engineering | Comments attached |
| Bill McDow | Transportation | Comments attached |
| Sally Thigpen | Urban Forestry | No comments |
| Anna Reh-Gingerich | Stormwater Services | Comments attached |

Planning Comments

- Include all conditions of SRB approval on the plan set (missing #18).
- Include list of approved waivers on plan set (SRB-12-618).
- Identify which trees are being used to satisfy mitigation (86 required).
- Include streetyard and calculations for street frontages. Minimum width is 9 feet, maximum width is 27 feet.
- Confirm that there are no protected trees located within the minimum streetyard area (within 9 feet of right-of-way).
- Include foundation planting calculations. You can provide for just one of the buildings as an example.
- Explain how stormwater ponds have been designed as open space amenities (SRB Condition #19)
- Add number of buildings to site data table.
- Label location of bicycle rack.

Project Name: Hawthorne at The Pointe PHII
Formal TRC Date: 12/8/2022
Reviewer: Eric Seidel, PE
Department: Engineering – Plan Review Section

1. Calculations / Routing: Please check Curve Numbers for Pre & Post Routing. Per Tech Standards Craven Soils are classified as a C which is only 21.9% of the site. The remaining soils need a B designation with a small percentage as an A (0.8%).
2. Calculations / Routing: Wet Pond #2 – update weir width to 12" & height to 12".
3. Calculations: Please provide Pre / Post summary sheet for 2, 10, & 25yr. storm events.
4. Calculations: Provide Swale Drainage calculations pertaining to swales draining to Wet Pond #3.
5. Calculations: Please check Avg. Depth Permanent Pool for Wet Pond #2.
6. Application / Site Data Table (C-2.0): Please update On/Offsite Impervious numbers to match. If Application is revised, please make sure Section 13 matches Onsite impervious Totals.
7. C-5.2: Dimension Outlet Structure. Provide Top View to provide spillway dimensions.
8. Add Note specifically related to lots 1-4 that all impervious area is to be directed to rear drainage swale. If this is not made very clear the builder / contractor will direct drainage to Appleton Way.
9. Add Note to the plans that indicates "parking is limited to parallel on-street spaces and driveway parking entirely on private property. Any vehicle blocking the sidewalk or parked within the plaza area of the City right-of-way is subject to enforcement per City Code".
10. Add Note below the driveway detail that "driveway is for access over the right-of way for parking entirely on private property. The driveway apron and sidewalk within the public right-of way shall not be used for vehicular parking."

Project Name: **Hawthorne at the Point Phase 2**

FORMAL TRC Date: December 8, 2022

Reviewer Name: Chris Walker

Reviewer Department/Division: FIRE

Please add the following Fire & Life Safety Note:

- Additional fire protection and/or accessibility requirements may be required due to any special circumstances concerning the project.

EXISTING CONDITIONS:

- Locate and callout existing streetlights on Carolina Beach Rd and Appleton Way abutting this property.

TECHNICAL STANDARDS – STREETS:

1. Provide a turning movement analysis of a largest vehicle at expected to this subdivision.

SIGNAGE AND PAVEMENT MARKING [MUTCD]:

2. Pavement markings for crosswalks at street intersections within this project are not required and shall not be installed.
3. Pavement markings for on-street parallel parking are not required and shall not be installed.
4. Edge line should be installed along all parallel parking areas to delineate the travel lane and at the mail pull out near the entrance.
5. Pavement markings for crosswalk at the intersection of Carolina Beach Rd and Mccarley Blv. are not required but the markings for extended median into potential crosswalk off Carolina Beach Rd shall be removed.
6. The Dead End (W14-1 sign) not required and shall not be installed.
7. Propsoed No outlet sign W14-2 at the entrance of Levon Dr is not required and shall not be installed
8. Proposed pedestrian crossing sign. R1-5b are not required and shall not be installed.
9. Site plan shows proposed median extension on Mccarley Blv closing the left turn movements into Levon Dr. Revise signage and pavement marking plan accordingly.
10. With the median extension on Mccarley Blv the existing 'Keep Right' traffic sign is not required at the this median and should be removed.
11. Show location of street names signs.
12. Expect further changes prior to street acceptance.

STREET LIGHTING [City of Wilmington Street Lighting Policy]:

1. A standard streetlighting plan is attached with this review. Minimum 7 standard streetlighting are required for this phase.
2. Duke Energy prepared plan shows on 5 streetlights proposed for this development whereas minimum seven (7) standard streetlights are required. Revise and reconcile with all applicable plans.
3. Lighting standards for City streetlights are 4000k as previous photometrics prepared by Duke Energy for public streets. Get it verified and revised.
4. Street trees must be located a minimum of 15 feet from streetlights. [CofW SD 15-17]
5. All the streetlights shall be installed within the public ROW.

GENERAL NOTES TO ADD TO THE PLAN:

- A. Add a note 'No parking spaces, fences, walls, posts, lights, shrubs, trees, or other type of obstructions not specifically exempted shall be permitted in the space between 30 inches and above ground and 10 feet above ground level within a triangular sight distance [Sec. 18-667 Figure 18-667 CofW Updated LDC: Vision clearance].
- B. Any required installation or relocation of traffic signs/pavement markings is the responsibility of the project developer. Please coordinate with City Traffic Signs and pavement markings Manager/ Supervisor prior to installation/relocation of any traffic signs or markings on existing or proposed public ROW.
- C. Contact 811 prior to contacting City of Wilmington, Traffic Engineering regarding the utilities in ROW.

Please let me know if you have any questions or if I can be of further assistance.

Project Name: **HAWTHORNE AT THE POINT PHASE 2**

TRC Date: **12.08.2022**

Reviewer Name: **BILL McDow**

Reviewer Department/Division: **PDT/Transportation Planning**

TECHNICAL STANDARDS:

1. The proposed plan is Echo Farms Phase 5, for 4 single family detached units and 42 single family attached unit development.
2. A TIA was completed for this project. The project will be responsible for the improvements approved in the TIA.
3. No Further Comments.

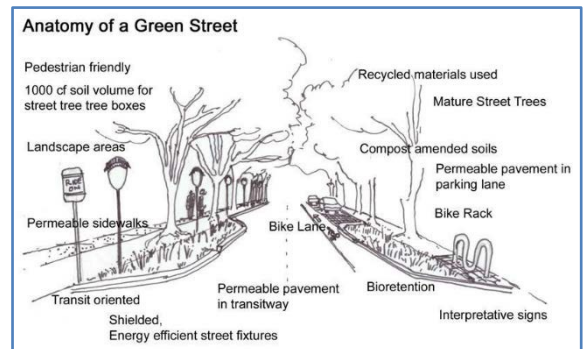
Project: Hawthorne at the Point Phase II
TRC Meeting Date: 9/1/2022 ; 12/8/2022
Reviewer: Anna Reh-Gingerich
Department: Stormwater Services

To Whom It May Concern:

The Hawthorne at the Point Phase II project drains to Barnards Creek and, eventually, the Cape Fear River. Any additional infiltration or pollution treatment onsite would help reduce the amount of stormwater runoff and pollution that could enter Barnards Creek and the Cape Fear River, which is currently listed by the State for exceeding the pH standard, having a poor benthic community, high copper levels, and low dissolved oxygen.

My comments:

1. Although allowed by ordinance, the proposed wet ponds are not recommended for approval. With recent incidents of anatoxin-A and other bacteria associated with blue-green algae in wet ponds, as well as recent and on-going research by NC State University, UNC-Wilmington and NCDEMLR concerning the efficacy and overall public health and safety and water quality performance of wet ponds, we recommend alternative stormwater control measures, depending on the soils and ground water conditions. These could include bio-retention, constructed stormwater wetlands, and infiltration practices, using the NCDEMLR Stormwater MDC Design Manual.
 - a. Stormwater Wetlands MDC: <https://deq.nc.gov/media/17538/download>
2. We encourage depressed bioretention areas in landscaping (with curb cuts and overflows) to allow for even more infiltration and pollution treatment on the property where possible. Some examples are available at the following links:
 - a. EPA Green Streets video
<https://www.youtube.com/watch?v=TxqxEqnHIKw&feature=youtu.be>;
 - b. Massachusetts "Green Parking" example:
<https://www.mass.gov/service-details/demonstration-3-permeable-paving-materials-and-bioretention-in-a-parking-lot>
 - c. NCDEQ Stormwater Manual, Bioretention Cell Chapter:
<https://deq.nc.gov/media/17536/download>
 - d. Filterra boxes (adding trees and stormwater management in one practice):
<https://www.conteches.com/stormwater-management/biofiltration-bioretention/filterra>
 - e. Portland Green Street examples: <https://www.portlandoregon.gov/bes/45386>
 - f. EPA Anatomy of a Green Street: <https://www.epa.gov/G3/learn-about-green-streets>
 - g. ***Below are examples of bioretention, vegetated swales, and curb cuts combined with pervious pavement.***





3. If the soils and water table levels allow, consider incorporating pervious materials. Any replacement of impervious material with pervious material (pavers, pervious concrete, porous asphalt) would help reduce the amount of stormwater runoff being generated:
 - a. <https://deg.nc.gov/media/17539/download>



4. Thank you for using mostly native plants! Native plants require less maintenance (fertilizers, pesticides, water, etc.) than non-native plants to grow successfully since they are already acclimated to local conditions. Many resources are available in the [Learning Library](#).
 - a. Could a native flowering tree stand in for the saucer magnolia, which is a hybrid of two species that are non-native?
https://plants.ces.ncsu.edu/find_a_plant/?nc_region_id=1&landscape_location_id=7&plant_type_id=11&plant_type_id=18&flower_value_to_gardener_id=1
5. Properties that go above and beyond to incorporate green infrastructure are eligible to apply to the Lower Cape Fear Stewardship Development Coalition Awards:
<http://www.stewardshipdev.org/>
6. Additionally, stormwater fee credits up to 40% may be available to incentivize innovative stormwater management. Contact Fred Royal (Frederic.royal@wilmingtonnc.gov) for more information.

Thank you for the opportunity to review! Please do not hesitate to reach out to me if you have any other questions or would like to explore other ways to incorporate green infrastructure into the project.

Thank you,

Anna Reh-Gingerich

Watershed Coordinator - Heal Our Waterways Program
City of Wilmington Stormwater Services
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