

To: Hanover Design Services, P.A.
From: Miranda G. Frantz, Associate Planner; 910-772-4133
CC: File;
Date: 5/13/2024
Re: St. Luke AME Zion Church Parking Lot 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
Miranda Frantz	Planning, Plan Review	Comments below
Randall Glazier	Traffic Engineering	No further comments
Bill McDow	Transportation	No further comments
Trent Butler	Engineering	Comments below
Robert Bentfield	Fire	No further comments

Miranda Frantz - Planning

- Show number of seats to ensure parking is under maximum.
- Please add all calculations from landscape comment response to the landscape plan.
- Corner islands allow for a shading coverage of 531 sq. ft. and parking lot perimeter allows for a coverage of 354 sq. ft. Perimeter understory trees allow for a shading coverage of 157 sq. ft.
- Ensure calculations for streetscape landscaping are for properties within the 1945 Corp. Limits. The landscape comment response appears to reference the plantings needed for outside the 1945 Corp. Limits.

Trent Butler – Engineering

1. Revise the impervious data table on Sheet No. 1 of the plans to match the stormwater permit application form. The proposed onsite newly constructed impervious area should include the proposed 27 square feet of proposed onsite sidewalk as listed on the stormwater permit application form, resulting in a total of 4884 square feet.
2. Revise the impervious data table line item listed as “Proposed Impervious Onsite Total” to be “Total Onsite Impervious” to differentiate what is being proposed vs. the total impervious. This value should include the proposed 27 square feet of proposed onsite sidewalk, resulting in a total of 13,657 square feet.
3. Revise the Stormwater Management Permit Application Form, Sect. IV, #9 Total Onsite Impervious Surface. This should be the sum of the existing onsite impervious to remain plus the proposed onsite newly constructed impervious (should equal 13,657 sf).
4. Will the depressed landscape island include a curb cut to allow it to capture pavement runoff? Please add a callout and specify on the plan.

5. Curbing or landscape timbers should be installed as a vehicular barrier along the landscape area to the north of the proposed parallel parking spaces (City SD 15-14).

Project: St. Luke AME Zion Church Parking Lot
TRC Meeting Date: 6/1/2023 ; 1/17/24 ; 5/16/24
Reviewer: Anna Reh-Gingerich
Department: Stormwater

To Whom It May Concern:

The St. Luke AME Zion Church Parking Lot project falls within the Burnt Mill Creek Watershed. Burnt Mill Creek is listed by the State for a poor benthic community. Any additional infiltration or pollution treatment onsite would help reduce the amount of stormwater runoff and pollution that could enter Burnt Mill Creek and contribute to the current pollution problems.

My comments

NEW

1. Thank you for incorporating some 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. A few additional considerations:
 - a. For the remaining non-native trees and shrubs, such as the nandina domestica which has varieties that are considered invasive in NC, consider this list that NC Cooperative Extension put together of recommended native trees, shrubs, and grasses for urban areas:
<https://www.wilmingtonnc.gov/home/showpublisheddocument/17120/638301074568030000>
 - b. A list of many native groundcovers is available here as potential alternatives to Liriope, which is a non-native groundcover that can spread aggressively:
https://plants.ces.ncsu.edu/find_a_plant/?nc_region_id=1&plant_type_id=8&plant_type_id=11
 - c. There are more great options in this booklet, including trees, flowers, shrubs, screening plants, and groundcovers: <https://ncwildflower.org/handouts/Coastal-Landscaping-Guide-Book.pdf>
 - d. Many resources are available in the [Learning Library](#).

Carried over from previous Pre-TRC:

2. We encourage passive infiltration over green space, infiltration basins, or depressed bioretention areas to allow for more infiltration and pollution treatment on the property where possible. Some examples are available at the following links:
 - a. Massachusetts "Green Parking" example: <https://www.mass.gov/service-details/demonstration-3-permeable-paving-materials-and-bioretention-in-a-parking-lot>
 - b. NCDEQ Stormwater Manual, Bioretention Cell Chapter: <https://deq.nc.gov/media/17536/download>
 - c. Filterra boxes (adding trees and stormwater management in one practice): <https://www.conteches.com/stormwater-management/biofiltration-bioretention/filterra>
 - d. ***Below are examples of bioretention, vegetated swales, and curb cuts.***



3. If the soils and water table levels allow, consider incorporating pervious materials or reducing the parking to create more green space. Any conservation of green space or replacement of impervious material with pervious material (pavers, pervious concrete, porous asphalt, grass) would help reduce the amount of stormwater runoff being generated:

- a. <https://deq.nc.gov/media/17539/download>



4. 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/>

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

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