

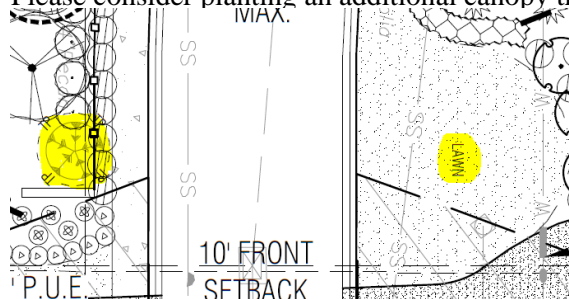
To: Towns on Green
From: Pat O’Mahony, Associate Planner; 910-341-0189
CC: File;
Date: 8/23/2022
Re: Towns on Green TRC rev. 1

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
Pat O’Mahony	Planning, Plan Review	Comments attached
Richard Christensen	Engineering	Comments attached
Chris Walker	Fire	Comments attached
Mitesh Baxi	Traffic Engineering	Comments attached
Bill McDow	Transportation	Comments attached

Pat O’Mahony- Planning – Attached

- Confirm site name accuracy. Application states “Townes on Green”, while plans show “Towns on Green”.
- Submit exceptional design narrative consistent with Sec. 18-300, as stated on Pre-TRC comments.
- Ensure tree protection fencing meets the requirements of Sec. 18-316.D. Site does not look to be in compliance.
- Please submit building elevations consistent with the CD approval.
- Landscape plans show 176LF of frontage. Please correct.
- Parking islands are required at the end of all parking rows.
- The 14” Cedar counting towards the streetscape may not survive the root disturbance. Please consider planting an additional canopy tree on the north side of the road to account



Project Name: Townes on Green
TRC Date: August 25, 2022
Reviewer: Richard Christensen, PE
Department: Engineering – Plan Review Section

Engineering has reviewed the plans for the Townes on Green project submitted July 18, 2022, for TRC review and have the following comments:

Stormwater Management Permit Application Form

1. IV. Project Information:
 - a. #5 & #6: Minor discrepancy-The amount of existing impervious doesn't match the amounts listed in the Site Data Table on the cover sheet.
 - b. #8:
 - i. The proposed pervious pavement isn't receiving pervious credit. The entry should read 1,912/1,912 and be included in the Total Onsite Newly Constructed Impervious Surface (22,914sf).
 - ii. The proposed impervious numbers aren't consistent with the BUA listed in the Site Data Table on the cover sheet.
 - iii. Same for the pervious concrete.
 - c. #9: Update this item.
 - d. #10: Update this item.
 - e. #11: Update this item.

Calculations

2. Piped collection systems shall be designed for the 10-year frequency storm event. The system low points shall be analyzed for the 50-year frequency storm event to check the system for flooding. I received the 10-year, but not the 50-year.

Plans

3. C-1:General Storm Sewer Note #1 needs to be updated.
4. C-3:
 - a. Just to clarify, these units will not have rear entries or patios? If there is a chance of those happening, it would be best to add square footage in the future development category in the application.
 - b. The driveway apron must be constructed with a 10-foot wide sidewalk section for the future MUP to connect to. Also, show the MUP on the site plan even though the city is to build it. Will the MUP be contained in the r/w or will additional public pedestrian access easement be needed for the MUP?
 - c. Parking is provided under the building? If so, it needs to be noted that off-street parking shouldn't extend out into the drive where the drive width is minimized where emergency access becomes difficult.
5. C-4: The rear of units 9/10 does not appear to be within any particular drainage area. Where will that runoff flow to?
6. C-7.0: Parking facilities must have a 2" thick pavement section per the technical standards. The drive is considered part of the parking facilities.

Please call or email if there are any questions. Thank you.

Project Name: **TOWNES ON GREEN**

TRC Date: **08.25.2022**

Reviewer Name: **BILL McDow**

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

TECHNICAL STANDARDS:

1. The site has proposed a 10 Unit residential project at 6817 Greenville Loop Road.
2. Provide revise the ITE Estimated Trip Generation Numbers for this project, (Single Family Attached, LUC 215), for the project with the AM Peak Hour Total, PM Peak Hour Total and 24 Hour Daily Total for all proposed uses:

Land Use	Intensity	ITE Code*	24 Hour Volumes	AM Peak Hour Trips		PM Peak Hour Trips	
				Enter	Exit	Enter	Exit
Single Family Attached, Proposed	10	215	72	2	3	4	2

3. The proposed private Road does not appear to meet the requirements of the city Technical Standards. Please show the ROW width, sidewalk on both sides of the street and minimum required dimensions for a 40' ROW on the plan. [\[Table 1, page 7-4, City Technical Standards\]](#) If the ROW width, sidewalk on one side of the street or other dimensions do not match the technical standards, a variance may be requested.
4. The proposed private Road does not appear to meet the requirements of the city Technical Standards. Please provide the minimum required Horizontal Centerline Radius and Tangent Length on the plan. [\[Table 2, page 7-5, City Technical Standards\]](#) A variance may be requested.
5. The Greenville Loop Trail, a 10' Multi-Use Path, is along the frontage of this site. Please show the 10' MUP on the Site plans. A pedestrian access easement may be required.
6. The existing conditions sheet appeared to show a ROW from Old Greenville -Mears Road. Please consider making a bicycle/ pedestrian connection to this ROW.

Project Name: **TOWNES ON GREEN II**

Formal TRC Date: **08.25.2022**

Reviewer Name: **Mitesh Baxi**

Reviewer Department/Division: **PDT/Traffic Engineering**

TECHNICAL STANDARDS – ACCESS:

1. Provide curbing detail SD 3-11 on the plan. [[Sec. 18-529\(b\)\(2\) CofW LDC](#)]
2. A wheelchair ramp/detectable warning domes is recommended at the end of internal sidewalk per NCDOT and/or City standards. [[Chapter II \(E\) \(6\) of CofWTSSM](#)].

GENERAL NOTES TO ADD TO THE PLAN:

- A. All signs and pavement markings in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards. [[Detail SD 15-13 CofW Tech Stds](#)]
- B. All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.
- 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: **Townes on Green**

Formal TRC comments

Reviewer Name: James Merritt

Reviewer Department/Division: FIRE

Following notes must be present on the plans.

- Contractor shall maintain an all-weather access for emergency vehicles at all times during construction
- New hydrants must be brought into service prior to combustible materials delivered to the job site

- Landscaping or parking cannot block or impede FDC's or fire hydrants. A 3-foot clear space shall always be maintained around the circumference of hydrants and FDC's.
- Additional fire protection and/or accessibility requirements may be required due to any special circumstances concerning the project.

Project: Townes on Green
TRC Meeting Date: 8/25/2022
Reviewers: Anna Reh-Gingerich
Department: Stormwater Services

To Whom It May Concern:

The Townes on Green project falls within the Bradley Creek Watershed, which has high levels of fecal coliform bacteria and contributes to swimming advisories and shellfish closures in the area. Bradley Creek is part of a City Council-approved watershed restoration plan in place to encourage practices that will reduce the volume of stormwater that can transport bacteria and other pollutants into Bradley Creek.

Link to the plan: [Bradley and Hewletts Creeks Watershed Restoration Plan](#)

My comments:

1. 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. 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 combined with pervious pavement.***



2. Thank you for incorporating many 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. I have a few remaining suggestions:
 - a. **Please find alternatives for the proposed *Ligustrum japonicum*. *Recurvifolium* and tree form *ligustrum* are invasive species in North Carolina:** <https://plants.ces.ncsu.edu/plants/ligustrum-japonicum/>
 - b. **Please find alternatives for the proposed *Miscanthus sinensis*, which is considered an invasive species in North Carolina:** <https://plants.ces.ncsu.edu/plants/miscanthus-sinensis/>
 - i. The "White Cloud" variety of muhly grass would be a showy, native grass alternative: <https://plants.ces.ncsu.edu/plants/muhlenbergia-capillaris/>
 - c. Consider native shrub alternatives to the non-native cleyera, sweet viburnum, hydrangea macrophylla, confederate jasmine, and dwarf podocarpus. Examples include Inkberry or its cultivars, American Beautyberry, Oak Leaf Hydrangea, Sweet Pepperbush, Arrowwood Viburnum, Dwarf Yaupon, Dwarf Palmetto, and more: https://plants.ces.ncsu.edu/find_a_plant/?plant_type_id=11&plant_type_id=17&flower_valued_to_gardener_id=1&nc_region_id=1

- d. Native sedges are a great, low-maintenance option which could be used in place of the lirioppe, which is a species of concern in Georgia and South Carolina for invasive tendencies (note that non-native sedges are indicated with an asterix *):
http://hoffmannursery.com/assets/files/files/Hoffman_Nursery_Green_Infrastructure_Chart.pdf
 - e. There are more great options in this booklet, including trees, flowers, shrubs, and groundcovers: <https://ncwildflower.org/handouts/Coastal-Landscaping-Guide-Book.pdf>
 - f. You can find more native plant resources at the Heal Our Waterways Learning Library page: [Learning Library](#)
 - g. New Hanover County Cooperative Extension Native Plant Resources:
<https://newhanover.ces.ncsu.edu/local-native-plant-vendors/>
3. 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/>
4. Additionally, stormwater fee credits up to 40% may be available to incentivize innovative stormwater management to help achieve the stormwater volume reduction targets identified within the watershed restoration plan. 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.

Thank you,

Anna Reh-Gingerich

Watershed Coordinator - Heal Our Waterways

Program

City of Wilmington Stormwater Services

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