

To: Howard Resnik, PE
From: Pat O’Mahony, Associate Planner; 910-341-0189
CC: File;
Date: 8/29/2022
Re: Wilmington Power Sports 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
Sally Thigpen	Urban Forestry	Comments attached
Trent Butler	Engineering	Comments attached
James Merritt	Fire	No further comments
Mitesh Baxi	Traffic Engineering	Comments attached
Bill McDow	Transportation	Comments attached

Pat O’Mahony- Planning – Attached

- Show all tree protection fencing pursuant to Sec. 18-316.3.
- Foundation plantings are required around the new warehouse building frontage and rear parking area per Sec. 18-322.
- Dumpster screening shall be at least one foot taller than that being screened. Opaque fencing may be required.
- One space for every 25 parking spaces provided shall be designated for use or combination of uses as motorcycle and moped parking.
- At least two percent of all provided parking spaces shall be electric vehicle-ready spaces with necessary infrastructure to permit conversion to full vehicle charging stations. At least one such station for every 50 parking spaces shall be a full charging station.

Urban Forestry Comments (Sally Thigpen):

1. Confirm that no trees are scheduled for removal, if not label removals as such.
2. 12 Pine on North side of proposed building appears to have impact within Critical Root Zone
3. Show tree protection fencing for all trees to remain (to scale on plan)
 - a. Label trees by species

Engineering has reviewed the 07/22/2022 TRC submittal for the Wilmington Powersports project and offers the following comments:

1. This project has an existing State stormwater permit and no existing City stormwater permits. Therefore, any net increase in onsite newly constructed impervious surface will be subject to the City's water quantity requirements (2, 10, 25-yr pre/post).
2. Submit calculations that show the existing pond meets the 2, 10, & 25-yr pre/post for the net increase in impervious area (28,311 sf of impervious).
3. Provide a callout on the plan that lists the linear feet of sidewalk to be PIL.
4. Submit a sidewalk PIL cost estimate for the sidewalk along Gordon Road.
5. Submit a copy of the modified State stormwater permit to City Engineering once it has been issued.
6. Submit a signed and notarized page 6 of the Stormwater Management Permit Application Form.
7. Revise or remove the impervious data table labeled "site notes" on sheet EC1. These totals do not match those provided on the stormwater permit application form.
8. The existing drop inlet used for the pond emergency spillway needs a grate to be installed to the top of the structure.
9. The maximum width of a driveway at the gutter flow line is 62 feet. This distance should be measured between the points where the curb returns or driveway apron meets the curb line or edge of roadway (City Technical Standards, Ch. 7, C, 1, b, Table 4). The Market St driveway exceeds this standard by more than 10 ft and 10 %, and therefore, is subject to variance and DAC review.
10. Driveways along major thoroughfares must have a minimum property line offset of 75 feet (City Technical Standards, Ch. 7, C, 2, c, 2). The driveway for this project exceeds this standard by more than 10 ft and 10 %, and therefore, is subject to variance and DAC review.
11. The maximum length of a private driveway that accesses a through street is 500 linear feet (City Technical Standards, Ch. 7, C, 4). The driveway for this project exceeds this standard by more than 10 ft and 10 %, and therefore, is subject to variance and DAC review.

Project Name: **WILMINGTON POWERSPORTS EXPANSION**

Formal TRC Date: **09.01.2022**

Reviewer Name: **Mitesh Baxi**

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

BASE INFORMATION:

- Accurately illustrate the existing conditions on and surrounding this parcel. Show all adjacent traffic signs, lane configurations, traffic control devices and pavement markings for Market St section abutting this property on the site inventory plan. Please refer to the Technical Standards and Specifications Manual (link is below) Ch. VII C.1.a.2. for specific information and distance requirements. <https://www.wilmingtonnc.gov/home/showdocument?id=11856>

TECHNICAL STANDARDS:

1. Dimension width for driveway off Market St at the property line.
2. Show and apply the City's 20'x70' sight distance triangle at each driveway appropriately as per City standards on site and landscaping plans. [Sec. 18-667 CofW Updated LDC] [Sec. 18-693 CofW Updated LDC].

SIGHT DISTANCE TRIANGLE FOR ANY STREET/DRIVEWAY INTERSECTIONS WITH THOROUGHFARES

The section of Market St and Gordon St abutting this property are major thoroughfares [Chap VII (C) (2) (a) of CofW Tech Stds]. In accordance with the City Code, sight distances along thoroughfares must be calculated in compliance with the AASHTO requirements. [Chap VII (C) (1) of CofW Tech Stds] [Sec.18-556 CofW LDC]. Show AASHTO departure sight distances in addition to 20'x70' SDT for both the driveways.

TECHNICAL STANDARDS – PARKING:

3. Provide a turning movement analysis of largest vehicle or fire vehicle accessing this parking facility. Include ingress/egress movements off Market St driveway.

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

Project Name: **WILMINGTON POWERSPORTS**
 TRC Date: **09.01.2022**
 Reviewer Name: **BILL McDow**
 Reviewer Department/Division: **PDT/Transportation Planning**

TECHNICAL STANDARDS:

1. The site plans have proposed a 12,127 SF expansion to a Recreational Vehicle Sales business, using Land Use Code 842. The resulting project is 23,178 SF.
2. Please update the proposed ITE Estimated Trip Generation Numbers for the project based upon the Institute of Transportation Engineers (ite) Trip Generation Manual, 11^h Edition:

Land Use	ITE Code*	24 Hour Volumes	AM Peak Hour Trips		PM Peak Hour Trips	
			Enter	Exit	Enter	Exit
Recreational Vehicle Sales, 23,178 SF, Proposed	842	116	9	2	6	12

3. Based upon the estimated Trip Generation for this project, a TIA is not required.
4. The proposed foundation plantings appear to be within the minimum 2.5' vehicle overhang for the parking spaces. [\[Standard Detail 15-12, CoW Technical Standards\]](#) Plantings within this zone shall have a maximum 4-inch mature height above the corresponding parking space surface [\[Typical Parking Space Configurations standards, CoW Engineering, dated 09-08-2011\]](#)
5. Verify proposed Typical Pavement Section A-A meets minimum Technical Standards for sidewalk, and stone sub-base, and tie-in to existing pavement. [\[Standard Detail 3-10, note 6, City Technical Standards\]](#)

Please let me know if you have any questions regarding the comments.

Project: Wilmington Powersports
TRC Meeting Date: 7/7/2022; 9/1/2022
Reviewer: Anna Reh-Gingerich
Department: Stormwater Services

To Whom It May Concern:

The Wilmington Powersports project falls within the Smith Creek Watershed. Any additional infiltration or pollution treatment onsite would help reduce the amount of stormwater runoff and pollution that could enter Smith Creek and, eventually, the Cape Fear River.

My comments:

1. Although allowed by ordinance, the proposed wet pond is 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://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-4%20%20Stormwater%20Wetland%201-19-2018%20FINAL.pdf>
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>
 - f. *Below are examples of bioretention, vegetated swales, and curb cuts combined with pervious pavement.***



3. Thank you for making some adjustments to the landscaping plan!
 - a. If possible, still consider native shrub alternatives to the non-native *Buxus microphylla* & *Ilex cornuta*. Examples include Dwarf Yaupon Holly, Inkberry or its cultivars, American Beautyberry, Oak Leaf Hydrangea, Sweet Pepperbush, Arrowwood Viburnum, Dwarf Palmetto, and others.
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/>
5. 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

Interim Watershed Coordinator - Heal Our Waterways

Program

City of Wilmington Stormwater Services

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