



Date: June 4, 2024

To: Waterford Conservation Commission

cc: Joe Wren PE, Indigo Land Design, LLC - Agent

Re: Application #C-24-05: 430 Mohegan Avenue Prky & 23B Old Norwich Road
24 Unit Residential Development
Application Review Comments

Proposed Regulated Activity:

The application is for the construction of a 24 unit residential development served by a private 20 ft. wide roadway, municipal water and sewer, and a stormwater treatment / detention system composed of two basins on approximately 5.2 acres of land located 430 Mohegan Avenue Parkway and 23B Old Norwich Road. The roadway extends south off the cul-de-sac at Roberts Court and will serve 16 single family houses and 4 duplexes.

The site is presently undeveloped and vegetated with a mix of upland woodland and old field/successional area. A 0.06 acre forested wetland pocket occurs at the eastern parcel boundary and extends to the roadway embankment of CT Rte 32. On-site wetland area is 0.04 acre (~1,800 square ft.). Surface flows from the site discharge east to this wetland depression and then through a culvert under Rte 32 to eventually discharge to Mamacoke Cove.

Upland Review Area Disturbance:

The proposed construction includes alteration of @ 7,000 square ft. of upland review area for the construction of a portion of the two stormwater treatment basin embankments and a graded outlet channel. An undisturbed vegetated buffer is maintained around the wetland perimeter ranging from 100 ft. wide to the south of the wetland, 75 ft. wide to the west, and 75 – 50 ft. wide to the north. Discharge outlets from basin 1B and basin 1C are located 100 ft. and 140 ft. to the nearest wetland boundary respectively.

Wetland Description:

Isolated Forested Wetland – seasonal ponding:

A forested wetland pocket approximately 0.06 acre in area is located along the eastern property boundary, extending into the right-of-way for CT Rte 32. The wetland hydrology is seasonally ponded. The wetland delineation report notes that field investigations were conducted in March and April of this year to examine the wetland for presence of vernal pool species reproduction and none was evidenced.

Stormwater Controls:

The proposed project includes two stormwater basins designed to capture the water quality run-off volume and detain post-development run-off generated from the developed site. Basins discharge run-off to the upland review area upgradient of the wetland.

Regulated activities:

In accordance with Section 6.3 of the Waterford Inland Wetland & Watercourses Regulations, the Commission can consider activity outside of and beyond the 100 ft. upland review area to be regulated if such activity is likely to impact or affect wetlands and watercourses. The proposal involves extensive cut and fill activity on greater than 4 acres of land upgradient of an inland wetland. Regulated activities include;

1. clearing, excavation and grading associated with construction on +/- 4.5 acres of land located upgradient of inland wetlands,
2. construction of two (2) stormwater treatment & detention basins located upgradient of inland wetlands, and
3. the discharge of treated stormwater run-off to inland wetlands and watercourses.

Plan Review Comments:

The following review comments are provided for consideration. Additional comments and questions may follow as additional information is received.

Erosion & Sedimentation Impact Controls

- 1) The limits of vegetative clearing should be indicated on the E&S plan.
- 2) Additional sediment control measures should be specified and indicated upslope of the stormwater basins to control run-off and sediment impacts to the basin substrate materials during the construction of the upgradient roadway and residences.
- 3) Recommend the perimeter sediment controls extend along the northeast edge of disturbance for basin 1C and upslope to the project entrance drive to prevent loss of sediment off-site.
- 4) The minimum size requirement for wet and dry volumes of the proposed temporary sediment traps and the location of the outlets should be included on the ESC plan.
- 5) A detail is requested for the size and stabilization of the stormwater run-off swales proposed along the north, west and south bases of cut slopes. Will temporary seeding of these swales be conducted during initial site grading to control erosion and potential sedimentation due to groundwater run-off if intercepted and surface run-off as the residences are being constructed?
- 6) What flow volumes are anticipated in these swale post-construction? Will permanent stone check dams be needed to control erosion?
- 7) Catch basin inlet protection should be noted on the E&S site plan.

Stormwater Treatment

- 8) Measures to reduce directly connected impervious area are recommended to minimize stormwater run-off to the stormwater basins. Application should incorporate low impact design measures to achieve the intent of the stormwater quality manual requirements. Are roof areas discharging to lawn areas or the street. This needs to be indicated on the plans.
- 9) The construction detail for the stormwater basins requires a specification for the proposed 18" layer of stormwater management basin floor mix.

- 10) The stormwater basins should be completed, planted and stabilized prior to receiving discharge from the roadway and upgradient construction run-off. Recommending the construction sequence identify construction and stabilization of the basins as part of the initial stage of site work.
- 11) According to the drainage report, the basins may likely be "wet-bottom" stormwater basins with temporary ponding depths up to 1.5 or 2 feet during storm events. A wet basin planting plan should be prepared for application to ensure basin substrate supports rooted vegetation and vegetative cover prior to receiving site run-off.
- 12) The cross sections provided for basins 1B and 1C do not match the elevations on the site plan. This needs to be clarified on the application record.
- 13) The required water quality volumes noted on the basin cross sections are not consistent with the volumes identified on the drainage report. Also clarify.
- 14) Access for inspection and maintenance of the stormwater basins needs to be shown on the site plans.
- 15) The stormwater management plan must include the inspection and maintenance requirements for roadway sweeping, catch basin cleaning and perimeter grassed swale maintenance and repair.
- 16) Due to the small size of the basins low and high level outlet controls, the stormwater basin maintenance plan should include more frequent inspections of the orifices to ensure outlets are not clogged from floating debris.

Planning Comments

- 1) Duplex units have label on sheets 2, 3, and 4 indicating garage elevation. Application should clarify if there are garages on every unit.
- 2) Provide zoning table and parking table to document proposed conditions (for reference only).
- 3) Provide a landscape schedule - include species of street trees and evergreens. (Use Techny Arborvitae as they are "deer resistant").
- 4) Indicate location of street lights. Will there be house mounted lights? Provide photometric plan
- 5) Provide fence detail showing dimensions, materials, design.
- 6) Show driveway easement for 23b Old Norwich Road. Provide easement for pervious walkway show on plan.
- 7) Fence configuration is awkward especially for unit 24. Possibly reconfigure to equally distribute back yards.

Dept. of Public Works Comments

- 1) Before work begins on the project, a site access permit is required from DPW.
- 2) Any work that is performed within the Towns ROW, an excavation permit is required from DPW.
- 3) Any work within the roadway would require repair per the towns street use regulations.
- 4) Being a private road no garbage or recycling pick up will be performed by the Town.

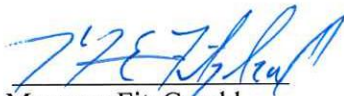
- 5) The detail sheet for Basin 1B shows a 131.00 top of grate elevation. It shows the top of basin elevation at 131.50 then notes 1.4' - of freeboard. This is incorrect. The detail also shows the spillway elevation at 131.00. The elevations need correcting.
- 6) The Town requests that snow removal not be plowed out into the cul-de-sac from Roberts Village Drive.
- 7) Street lighting (Installation and billing) is the responsibility of the developer/owner/HOA.
- 8) Connection of the pervious path to the existing asphalt sidewalk on Old Norwich Road shall be asphalt within the ROW.
- 9) How will run-off be controlled from the pervious path onto Old Norwich Road when the rainfall exceeds the ability of the pervious path's material to accept water?

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Respectfully Submitted,



Maureen FitzGerald
Environmental Planner
Town of Waterford



2019 Aerial Survey
SCALE: 1" = 200 FT

430 Mohegan Avenue Parkway

OLD NORWICH RD

ROBERTS CT

BENJAMIN AVE

MOHEGAN AVENUE PKWY

MOHEGAN AVENUE PKWY

DRIVEWAY