



Indigo Land Design, LLC
40 Elm Street, 2nd Floor
Old Saybrook, CT 06475

860.388.9343 Phone
860.391.8854 Fax
jwren@Indigo-Land.com E-mail
www.Indigo-Land.com

July 17, 2024

Maureen FitzGerald, P.E.
Environmental Planner
Town of Waterford
Chester, CT 06412

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

Dear Ms. FitzGerald:

We received the staff review comments dated June 4, 2024. Below are our responses to your comments:

Responses to Plan Review Comments

1. Callouts indicating the proposed clearing limits have been added to the E&S plan (Sheet 3 of 13).
2. A 24" tall wood chip berm has been added to the E&S plan (Sheet 3 of 13). It is located along the entire upslope (western) edge of the stormwater basins. A detail for the wood chip berm has been added to the construction details (Sheet 10 of 13).
3. A cut slope is proposed along the northeast property lines to create a bypass swale (Swale 1A) around Basin 1C. Since runoff will drain toward the site, no off-site sediment loss is anticipated in this area. Silt fence reinforced with haybales is proposed downslope of Swale 1A and Basins 1B and 1C and is shown on the E&S plan (Sheet 3 of 13).
4. The minimum volumes of the temporary sediment traps have been added to the E&S plan (Sheet 3 of 13) and are based on the newly implemented CT guidelines for E&S controls. A detail for the temporary sediment trap is included in construction details (Sheet 10 of 13).
5. Grassed swale details have been added to the construction details (Sheet 8 of 13) for the swales on the northeast, south and west sides of the property (Swale 1A, 1B and 1C, respectively). The swales will have 3-ft wide bottoms and 2:1 (max) side slopes. The swales will be lined with biodegradable erosion control blankets meeting FHWA standards as specified. Prior to installation, the swale will be heavily seeded with a permanent seed mixture for stabilization. Additionally, the swales will have permanent stone check dams at 75-ft (min) intervals.
6. The grassed swales were analyzed using the Rational Method. The flow rate for the 100-yr storm event is 8.3 cfs, 2.1 cfs and 1.6 cfs for Swale 1A, 1B and 1C, respectively. An exhibit called "Swale Cross-Sections" has been created and depicts the flow rates and water depths within each swale for the 100-yr storm event (enclosed). The stone check dams will be left in place as specified on the E&S plan (Sheet 3 of 13) and in the construction detail (Sheet 8 of 13).
7. Silt sacks for the proposed catch basins are already indicated on the E&S plan (Sheet 3 of 13). A callout for a silt sack at the existing catch basin near the end of Roberts Court has been added.

Responses to Stormwater Treatment Comments

8. The buildings will have gable roofs with gutters. Gutter downspouts will be “disconnected” and will drain directly to the ground or splash blocks and then flow overland to either the proposed road or grassed swales, generally. The gutter downspout detail on the construction details (Sheet 9 of 13) has been removed. Various LID measures have been incorporated into the site plans as indicated in the Drainage Report.
9. The basin floor mix has been added to the construction details (Sheet 8 of 13) per discussions with Bob Russo, CPSS. The floor mix will be 12 inches thick and consist of a mixture of sand, topsoil, and weed-free leaf litter.
10. Item #10 has been updated in the Construction Sequence (Sheet 3 of 13) incorporating this comment.
11. Bob Russo, CPSS and his office developed a planting schedule suitable for the basins based on temporary ponding depths of 1.5 to 2 feet. The planting schedule has been included in the construction details (Sheet 8 of 13) and includes a total of 1637 plants spaced 2-ft on center.
12. The basin cross-sections, details, and plans have been updated to all be consistent.
13. The WQV reported in the drainage report and cross-sections have been updated to be consistent.
14. A double swing gate has been added to the portion of fence just northeast of Unit 1 to provide access for inspection and maintenance of the stormwater basins and swales. The gate is called out on the E&S plan (Sheet 3 of 13). The basins are proposed to have 8-foot-wide berms with access on all sides as indicated with green arrows added to the E&S plan.
15. The “Schedule of Maintenance Frequency” (Sheet 8 of 13) has been updated to include street sweeping at least twice per year.
16. The “Schedule of Maintenance Frequency” (Sheet 8 of 13) has been updated and indicates that the outlet control structure/orifices shall be inspected at least once every 3 months. Also, the low-level orifices have been increased to 3” diameter to minimize the chance of clogging as recommended in the latest CT Stormwater Manual.

Responses to Planning Comments

1. Duplex units will not have garages. Garage elevations for these units have been eliminated from the site plans (Sheets 2 through 5 of 13). All single-family units will have an attached 1-car garage.
2. During our preliminary discussion with the Town, we were asked to only include relevant information and sheets for our submittal to the Conservation Commission. This will be included in our submittal to PZC.
3. Techny Arborvitae and/or other deer resistant arborvitae will be incorporated into the plans for our submittal to PZC. Also, see note #2 above.
4. Light pole locations are already indicated on the site plans. A photometrics will need to be prepared for our submittal to PZC and the light pole locations may slightly change based on the photometrics analysis. Also, see note #2 above.
5. A fence detail will be provided for our submittal to PZC. Also, see note #2.
6. A walkway easement and driveway easement have been added and called out on the Grading Plan (Sheet 2 of 13) and will be more clearly shown for our submittal to PZC. Also, see note #2 above.
7. We will look into adjusting the fencing. Also, see note #2 above.

Responses to Dept. of Public Works Comments

1. Construction Note 3 on the utility plan (Sheet 4 of 13) makes reference to the access permit.
2. Construction Note 3 on the utility plan (Sheet 4 of 13) makes reference to the excavation permit.
3. No response necessary.
4. Construction Note 21 on the utility plan (Sheet 4 of 13) states that the garbage and recycling barrels is the responsibility the association for the development.

5. The cross-section for Basin 1B has been updated, as well as the construction details on the site plans (Sheet 8 of 13). At least 1-ft of freeboard is provided from the top of the basin berm down to the water elevation for 100-yr storm event.
6. Construction Note 23 has been added to the utility plan (Sheet 4 of 13) and states that no snow shall be plowed into the Roberts Court cul-de-sac.
7. No response necessary.
8. A callout for asphalt sidewalk within the street ROW has been added to the site development plan (Sheet 1 of 13).
9. A pervious paver walkway detail has been added to the construction details (Sheet 11 of 13). The walkway will be pervious, have 3/4" sand filled joints and be underlaid with a 12" of crushed stone base for infiltration and storage. The base/joints will provide over 2 cubic feet of storage volume per linear foot.

Please feel free to contact me at any time if you have any questions or need any additional information.

Very Truly Yours,

Joe Wren, P.E.
INDIGO LAND DESIGN, LLC