

Ms. Beth Foley
Planning Board Admin. Assistant
Township of Mendham
2 West Main Street
Brookside, New Jersey 07926

**RE: Mendham Golf & Tennis Club Pickleball Project
Preliminary and Final Major Site Plan Review
Kenneday Road , Golf & Corey Lanes, Mendham Township, NJ Block 144, Lot 24
PH No.: 1114.034**

October 11, 2023

Dear Members of the Board,

Princeton Hydro, LLC has completed our review of the updated plans and supporting materials submitted for the Proposed Pickleball Courts (Block 144, Lot 24) in response to the technical review.

Materials Reviewed

The comments presented in this letter, which summarizes our findings and comments, are based on Princeton Hydro's review of the following documents received Monday, July 31, 2023:

- Plans entitled, "Mendham Golf and Tennis Club, Preliminary and Final Major Site Plans, Pickleball Courts Project" by Gregory E. Yannaccone, P.E. of Yannaccone, Villa, and Aldrich, LLC, sheets 1 to 7 of 7, dated August 29, 2022 and revised to August 1, 2023.
- Report entitled, "Stormwater Management Report for the Pickleball Courts Project" By Candice J. Davis, P.E. of Yannaccone, Villa, and Aldrich, LLC, dated February 3, 2023.
- Custom Soil Resource Report for Morris County, New Jersey by the USDA NRCS

Introduction

The applicant is proposing the development of four pickleball courts, sidewalks to access the courts and associated stormwater improvements. The project site is located on Block 144, Lot 24. The property is fronting Kenneday Road, Golf Lane and Corey Lane. The property is a private golf and tennis club.

The proposed stormwater system is comprised of inlets, pipes and a small-scale subsurface infiltration system. The limit of disturbance is 35,625 sq. ft. The project proposed to install a total of 7,544 sq. ft of impervious surface. The existing lot is mostly developed, and the proposed improvements are located on existing development. The stormwater systems will discharge downstream of the existing tennis court to the surface of the golf course. The property is in the drainage area of a Passaic River tributary. The project does not disturb more than 1 acre of land and does not propose more than 0.25 acres of impervious surface. This project would not qualify as a major project but due to previous developments on the site, the cumulative increase of impervious surface qualifies this as a major project.



1.0 Stormwater Runoff Quantity Standards

For compliance with Stormwater Runoff Quantity Standards, the design relies a small scale subsurface infiltration basin. The narrative provided in the stormwater management report indicates that quantity control is achieved but does not state which condition of N.J.A.C. 7:8-5.6 does the design satisfy.

The following comments are provided with respect to the project's compliance with the quantity control criteria:

- 1.1 The stormwater model does not model the runoff from the entire drainage area; just the total increase of impervious surface. The model shall include the entire drainage area for the Point of Analysis (POA).
- 1.2 The NJDEP BMP Manual requires small scale subsurface infiltration basins to have pre-treatment. The proposed design does not include any pre-treatment.
- 1.3 The post-construction model using a Time of Concentration (ToC) of 10 minutes. The applicant will calculate the ToC as per NJDEP BMP Manual.
- 1.4 The applicant shall provide pre- and post construction drainage area maps that shows the POA, drainage paths, ToC, location of borings found on page 20 and soil types in the drainage area.
- 1.5 N.J.A.C. 7:8-5.6 allows an applicant to comply with four different methods to meet the stormwater quantity requirements. The applicant shall state which method they used to comply with N.J.A.C. 7:8-5.6 and then clearly demonstrate how they meet that standard.
- 1.6 The applicant shall provide a location map of the borings and infiltration tests to confirm if the the applicant performed the necessary number of borings and infiltration tests required as per the NJDEP Manual.
- 1.7 The contractor also uses exfiltration in the proposed stormwater model. Chapter 5 of the NJDEP BMP Manual states any model that uses exfiltration must meet seven requirements. The applicant has not demonstrated that they meet these requirements.
- 1.8 The modeling results are missing the 10- and 100-year pre-construction scenario.

2.0 Groundwater Recharge

In accordance with N.J.A.C. 7:8-5.4 (Groundwater Recharge Standards), the site is required to maintain 100% of its predevelopment groundwater recharge or the increase of stormwater runoff volume from pre-construction to post-construction for the two-year storm. The applicant used HydroCAD modeling to demonstrate compliance with N.J.A.C. 7:8-5.4 that the design captures the difference in volume from the pre- and post-construction from the 2 year storm.

The following comments are provided with respect to the project's compliance with the quantity control criteria:

- 2.1 The applicant shall provide a groundwater mounding analysis of their BMP design.
- 2.2 Based on the comments from the water quantity requirements, the applicant may need to re-evaluate their design to meet groundwater recharge requirements

3.0 Stormwater Runoff Quality Standards

The project proposes does not propose to install any motor vehicle surfaces. The impervious surfaces the project proposes to install are sidewalks and pickleball courts. These surfaces do not trigger the water quality requirements of N.J.A.C. 7:8-5.5.

4.0 Operation & Maintenance

The applicant did not provide an Operation and Maintenance Manual with their submittal. The applicant shall provide an Operations and Maintenance Manual for the proposed stormwater system. The manual shall be compliant with Chapter 8 of the New Jersey Stormwater Best Management Practice Manual.

5.0 Soil Erosion and Sediment Control

The application includes a Soil Erosion and Sediment Control plan. The plan includes a delineated limit of disturbance, construction sequence narrative, locations for topsoil stockpile, and inlet protection. The plan proposes the installation of silt fence around the limit of disturbance. A permit is required from the local Soil Conservation District. The following comments are provided in reference to the Soil Erosion and Sediment Control plans and details:

- 5.1 The applicant shall confirm that the slope downstream of the pre-formed scour hole complies with the point of discharge stability analysis.

Summary and Conclusions

In summary, we have provided comments which illustrate that there are critical remaining issues with the project's compliance with the stormwater ordinance.

This concludes Princeton Hydro's review of the revised materials submitted to the Land Use Board for the proposed Pickleball Courts; Block 144 Lot 24. We reserve the right to provide further comment should it become necessary. Please do not hesitate to contact me with any questions. We appreciate the opportunity to provide Gladstone-Peapack Township with these services.

Sincerely,



Sean Walsh, PE
Senior Project Manager, Engineering

cc: Geoff Goll, Title, Princeton Hydro
Denis Keenan, Township Engineer