APPENDIX R

November 7, 2023
Douglas J. Hahn P.E.
Hahn Engineering
1689 NY-22, Brewster, NY 10509

RE: ***Site Plan Review***
Electric Owl Holdings, LLC
1 South Broadway
Hastings-on-Hudson, NY 10706

Kimley-Horn is pleased to submit the responses below to the Site Plan review letter, dated October 13th, 2023, for the application for the above-stated project.

Engineering Review Comments

Comment #1. As previously mentioned, the proposed stormwater detention/infiltration system for the improvements on the "studio parcel" is located on the "school parcel". Easements and maintenance agreements will be required.

> ***Response****: It is acknowledged that easements and maintenance agreements will be provided. See Conceptual Subdivision Plat, refer to sheet C-1.2.*

Comment #2. As previously mentioned, the proposed parking garage has access off of the "school parcel" driveway. An access easement and agreement may be required.

> ***Response****: Acknowledged. Easements and agreements will be provided. See Conceptual Subdivision Plat, refer to sheet C-1.2.*

Comment #3. As previously mentioned, a steep slopes permit will be required. Information required by Village Code Chapter 249 "Steep Slopes" and on the Steep Slopes Application Checklist should be provided.

> ***Response****: Acknowledged. A Steep Slopes Disturbance Plan and required information based on the steep slopes permit checklist has been provided, refer to sheet C-2.0.*

Comment #4. As previously mentioned, slope stability analysis and/or calculations should be provided for disturbances on and near steep slopes.

> ***Response****: Requested analysis will be provided by Geotechnical Engineer. This analysis will be based on final site plan layout.*

Comment #5. As previously mentioned, a cut/fill map should be provided.

> ***Response****: A cut – fill diagram will be provided as part of the Site Plan submission. Preliminary earthwork estimates based on the grading plan are indicated in the EAF3 Report (see p. 28).*

Comment #6. As previously mentioned, the NYS OPRHP letter included in the Alternative Analysis notes stormwater runoff concerns from the site. These concerns should be addressed by the proposed stormwater management system.

> ***Response****: The Project will not create any significant adverse impact to the floodplain, stormwater, or flooding, and new stormwater management facilities, which include improvements to stormwater*

quantity and quality controls, will be a beneficial impact of the Proposed Action. The proposed stormwater management improvements are designed to comply with NYSDEC stormwater management guidelines, and local MS4 (Hastings) requirements, satisfying the runoff reduction, water quality, and water quantity requirements. The project proposes to implement various green infrastructure practices such as green roofs, porous pavement, infiltration basins, and other water quality systems as best practices. Overall, the proposed condition stormwater discharge rates result in pre- vs. post- development reductions of the 24-hour 1-year, 10-year, 25-year, and 100-year storm events. See EAF 3 section II.C and Appendix P. Specific to the neighboring property south, the pre vs post stormwater volumes will be reduced by approximately 30%. Nearly all the runoff from the proposed site will be conveyed away from discharging south, mitigating impacts to the storm sewer systems, drainage swales, and slopes adjacent to Dudley Street. Refer to Existing and Proposed Drainage area exhibits.

Comment #7. As previously mentioned, construction disturbance proposed is 16.6 acres referenced in the SWPPP (page 6), and 17.80 acres on the plans (Sheet C-2.1). The proposed amount of total disturbance should be revised to match.

***Response**: The SWPPP value of 16.6 acres of disturbance is correct and has been updated throughout the plan sheet set for consistency.*

Comment #8. As previously mentioned, drainage system point discharges onto steep slopes should be avoided. If necessary, level spreader with a concrete lip or similar should be provided.

***Response**: Stormwater system design has been revised to consist of two surface outfall locations. Refer to Grading and Drainage Plans, and Erosion and Sediment Control plans and details, sheets C-5.0 to C-6.21. Point Discharges at steep slopes from headwall structure A1 and headwall structure E1 propose installation of rip-rap aprons in accordance with NYSDEC manual standards to attenuate erosive flow velocities.*

Comment #9. As previously mentioned, porous pavement is proposed over the detention/infiltration system. How the two systems will interact should be considered in the design.

***Response**: Porous pavement is proposed over the drainage/infiltration system and 2' of vertical cover is ensured to allow percolation per NYSDEC guidance. The porous pavement in that area is proposed to reduce the total site impervious area, but no credit is taken for the stormwater system. That area is treated as impervious in the HydroCAD model and stormwater attenuation design.*

Comment #10. As previously mentioned, the means of access to water quality units for maintenance purposes should be addressed.

***Response:** Acknowledged. A maintenance access easement is shown, refer to Conceptual Subdivision Plat Sheet C-1.2. For the DA-2 POI water quality unit, the positioning is preliminary and will be configured to ensure that physical access is be provided for maintenance.*

Comment #11. As previously mentioned, the proposed water main extension will require Westchester County Department of Health approval.

***Response**: Acknowledged.*

Comment #12. As previously mentioned, the existing source of water should be identified. It should be protected and maintained until the new water supply is accepted.

Response: *Acknowledged. City of Yonkers is the existing source of water to the site. A request has been made to Veolia Water New York serve water to both the existing Graham School and proposed Studio Lot, refer to Utility Plan sheets C-4.0 to C-4.4. Other options, including having Yonkers continue to serve either the entirety or existing school portion of the site (preferred option) are still being explored.*

Comment #13. As previously mentioned, per Village Code §295-20 B. (8), walls greater than 6.5 feet shall conform to the requirements for buildings. Additionally, wall calculations and details will be required.

Response: *Will comply. Structural design and wall calculations to be provided by structural engineer as more detailed design progresses.*

Comment #14. As previously mentioned, New York State Department of Transportation approval will be required for the proposed work and curb cuts located within the South Broadway right of way.

Response: *Acknowledged. The applicant will submit applications to NYSDOT for Highway Work Permit Application for Non-Utility Work (PERM 33) and water main extension utility work (PERM 32) respectively.*

Comment #15. As previously mentioned, per Village Code §295-41, curb cuts for driveways should not exceed 24 feet in width.

Response: *Aerial apparatus fire truck access roads around the studio lot require the roads to be a total of 26 feet in width. Driveway throat widths have been adjusted to be 24 feet in width to comply with Village Code.*

Comment #16. As previously mentioned, sight distances at the proposed curb cuts should be provided.

Response: *Sight distances are provided. Refer to sheet C-3.5.*

Comment #17. As previously mentioned, driveway profiles should be provided. As the driveway on the "school parcel" connects two streets (South Broadway and Warburton Avenue), it should be designed to the Village standards for minor streets to the greatest extent practicable.

Response: *Will comply. Driveway profiles will be provided in the Final Site Plan submission.*

Comment #18. The applicant is proposing a 5-acre waiver to disturb more than 5 acres of land at one time to perform construction. However, the applicant has also provided "staging plans" showing construction in phases under 5 acres. The applicant should be clear in their request. It is preferred that construction be phased to avoid disturbances greater than 5 acres at any one time.

Response: *5-acre waiver is not necessary. As shown in the mentioned staging/phasing plans each phase does not exceed 5.0 acres of disturbance. Refer to Preliminary SWPPP (see EAF3 Report Appendix P).*

Comment #19. The existing catch basins on the corner of the parking entrance (west of parking lot) appear to direct stormwater to the sanitary sewer. Another 12-inch VC pipe also is directed towards the sewer line. This connection is proposed to be removed. The area currently directed to the sewer should be shown and included separately in the existing tributary area map and hydrologic calculations.

Response: *The proposed stormwater system does not direct stormwater to the existing sanitary sewer system on site. The stormwater is directed to connect to the existing to remain school's roof drain system and outfalls at an existing location to the north. The existing sanitary sewer is to remain with manhole structure rims to be reset to the newly proposed finish grades.*

Comment #20. The site is a mix of redevelopment and new construction. The water quality volume (WQv) calculations should reflect this. Additionally, runoff reduction volume (RRv) is required to be provided for new impervious area; it should be stated how RRv is being provided.

Response: *Under the current existing conditions the impervious area is 8.35 acres, under proposed conditions the total impervious area is 9.17 acres. The site is a redevelopment with a 0.82-acre net increase of impervious land cover. The proposed infiltration basin treats a 12.66-acre drainage area with 7.03 acres of that area having impervious land cover. The water quality volume (WQv) has been recalculated to account for redevelopment and new construction. Calculations will be included in Preliminary SWPPP appendix. The required WQv is 0.302 ac feet. The proposed infiltration basin will reduce runoff volume and treat the entire required water quality volume. (0.318 ac feet total).*

Comment #21. Typically, channel flow does not return to shallow concentrated flow. The time of concentration calculations should be revised.

Response: *Time of concentration calculations for each drainage area has been confirmed and all account for sheet flow for 100 linear feet which then transitions into concentrated flow.*

Comment #22. Grading for proposed drainage swales should be shown.

Response: *Additional grading labels have been added to proposed Grading Plan, refer to sheets C-5.1 to C-5.4.*

Comment #23. Details for the proposed stormwater management and drainage systems should be provided.

Response*: Additional details for the proposed stormwater management and drainage systems will be provided.*

Comment #24. Deep tests and infiltration tests be performed in accordance with Appendix D of the NYS Stormwater Management Design Manual should be conducted.

Response: *Acknowledged. Deep and infiltration tests will be performed in accordance with Appendix D of the NYS Stormwater Management Design Manual by geotechnical engineer prior to final submission.*

Comment #25. A draft stormwater maintenance agreement should be provided in the SWPPP.

Response: *Acknowledged. A draft stormwater maintenance agreement will be provided.*

Comment #26. A draft Notice of Intent (NOI) should be provided in the SWPPP.

Response: *Acknowledged. A draft Notice of Intent (NOI) will be provided.*

Comment #27. It appears the existing pool and tennis courts are being removed. All items to be removed from the site should be clearly labeled on the removals plans.

Response: *As indicated on the Removal Plan legend, all site objects that are plotting in black are to be removed. Additional labels of features mentioned have been provided on the removals plans for clarity. Refer to sheet C-2.1 to C-2.4.*

Comment #28. The landscaping plans should be coordinated to avoid conflicts with site utilities, including water, sewer, and drainage.

Response: *Acknowledged. Proposed landscaping as shown on the plans will be coordinated to avoid site utilities.*

Comment #29. The recommendations provided in the Geotechnical Engineering Report should be incorporated onto the plans as applicable.

Response: *Acknowledged. Pavement type and sections have been revised to appropriately reference Geotechnical Engineering Report recommendations.*

We appreciate your assistance and coordination in reviewing and processing this application. Please do not hesitate to reach out with any questions or concerns.

Sincerely,
Kimley-Horn Engineering and Landscape Architecture of New York, P.C.

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