

October 10, 2024

**Re: Marlborough Resort Lattintown – Project No. 24-01**

Patrick J. Hines, Principal  
MHE Engineering, D.P.C.  
33 Airport Drive, Suite 202  
New Windsor, NY 12553

Dear Mr. Hines:

This letter is in response to your Technical Review Comments/SWP<sup>P</sup>P Comments dated September 25, 2024, regarding the Marlborough Resort Lattintown. The comments are in the order received and our responses are in bold italics. Passero Associates will be requesting a workshop meeting with Pat Hines prior to the board meeting to review our approach to all SWP<sup>P</sup>P comments.

1. Twelve existing drainage areas were identified and evaluated for pre-development flow rates. Post- development condition of the site divided the site into 14 drainage areas. The pre-development and post-development drainage areas each identify 154+- acres.

*Response:* Acknowledged

2. Section 5.2 references Appendix K: Green infrastructure calculations. It states that shade green infrastructure, map below, which details the catchment areas that go to each GI practice. No map is incorporated below. Provide map or reference to Appendix containing map.

*Response:* The GI practice map has been added to Appendix K.

3. Section 6 identifies: See comparison table below for sites analysis points under existing and proposed conditions. Table #3 Stormwater Quantity Comparison is not incorporated into the plan.

*Response:* The comparison table has been added to the SWP<sup>P</sup>P.

4. A Soils Map is included as Appendix D. Description of the soils should be included in the SWP<sup>P</sup>P.

**Response:** A breakdown of soils types and hydrologic soil groups has been added to the SWPPP.

5. The document should discuss project phasing for construction activities.

**Response:** A Phasing Plan has been added to the plan set showing how construction can be phased without requesting a 5-acre waiver.

6. Appendix N: Notice of Intent is missing.

**Response:** The Notice of Intent has been added to the Appendix.

7. An analysis of the underlying soils for design of the pervious pavement should be provided. It is noted that 15 inches per hour of exfiltration over the pervious pavement surfaces are identified. Soil borings and permeability testing of the underlying subsoil should be provided to evaluate underlying soils that infiltrate.

**Response:** Test pit and infiltration test results have been added to the stormwater details.

8. Soil testing and permeability testing for infiltration basins is required.

**Response:** Test pit and infiltration test results have been added to the stormwater details.

9. Erosion and Sediment Control Phasing Plan should be provided to identify the limits of disturbance in each phase. SWPPP should identify if a 5 Acre Waiver is required, and, if required, additional conditions for the 5 Acre Waiver should be addressed in the SWPPP.

**Response:** A Phasing Plan has been added to the plan set showing phases that will not exceed the 5-acre limitation.

10. Soil testing and permeability for infiltration basin Pond 2 should be provided. It is noted 20 inch per hour infiltration rates are identified in the stormwater model. Location of all infiltration testing should be identified on the plans.

**Response:** Test pit and infiltration test results have been added to the stormwater details.

11. Check velocities from the discharge pipe of Bio-Retention Area #1. A 32.4% slope is identified.

*Response: The discharge pipe from the bioretention has been revised to a slope of 2%.*

12. Check stormwater model for Bio-Retention #1 outlet invert versus discharge. The discharge invert is labeled as 574 on the plans while it is labeled 575 in the model.

*Response: The outlet invert has been coordinated on both plan and HydroCAD model.*

13. The porous pavement detail should be revised to depict the underdrain identified on Sheet C-542. The discharge location for the underdrain system should be identified.

*Response: The underdrain has been added to the detail and outlet (overflow) pipe is also shown.*

14. The pervious parking areas appear to have underdrain design in them. The details identify that it is without underdrain.

*Response: The underdrain has been added to the detail.*

15. The SWPPP should address stormwater runoff for all improvements located along Road K from Ridge Road to the high point. A single infiltration basin is proposed, however, no system of conveying stormwater from all parking and building areas is identified on the plans.

*Response: This area has been regraded and a series of storm sewer pipes has been added to route the runoff to the infiltration basin at Ridge Road.*

16. All existing buildings should be labeled as existing structures.

*Response: The existing buildings have been labeled.*

17. Based on a review of the Traffic Study, additional roadway width may be required for the access drive from Lattintown Road. Additional stormwater management would be required in this area.

*Response: The grassed area along both sides of the entry road are within a NYSDEC 100' adjacent area and are generally flat. A vegetated buffer (GI Practice) would work here as the contributing impervious length would only be 10'-12'.*

18. Numerous portions of the site are not addressed in the SWPPP. Roadway construction, cabins, recreational areas etc. are proposed.

*Response: We have updated the SWPPP to ensure all areas are covered.*

19. Pipe sizing for all proposed roadway crossings should be identified.

*Response: Pipe labels have been added to the plan set.*

20. The SWPPP identifies that roof leader disconnect will be utilized. Discharge locations for roof leaders should be provided.

*Response: Once the building design has been completed we can add roof leaders at the correct locations (limiting each roof leader to 500 s.f. of roof area per the NYSSWMDM).*

21. Drainage at the intersection of Ridge Road should be further evaluated. A large section of proposed roadway runs to the east towards Ridge Road.

*Response: As much drainage as allowed by grading is diverted into the infiltration basin. The remaining runoff from the proposed roadway does not exceed the existing discharge rate. A defined ditch on the west side of Ridge Road may be beneficial as all of the existing runoff in this area is directed across Ridge Road.*

22. Erosion control matting is depicted on slopes of the bio-retention area, however, no other erosion control practices are depicted. On the Erosion and Sediment Control Plan soil and erosion control practices should be placed in accordance with appropriate separation distances from the NYSDEC Design Guidelines.

*Response: Silt fence has been added to the toe of slope to protect against sediment migration into the adjacent orchard.*

23. Additional erosion and sediment control should be evaluated on Sheet 165. Matting is proposed on fill areas, however, practices should be proposed in the interim prior to completion of grading.

*Response: Additional erosion and sediment control practices have been added to protect against sediment laden runoff.*

24. Sediment traps are depicted on the plan. Sizing of the sediment traps and grading for

them should be provided. An Erosion and Sediment Control Plan should be included for the area of the solar farms and proposed landscape berms.

*Response: Sediment traps are sized for 3,600 c.f. per acre of contributory area. Labels, contours and capacities have been added to the Erosion & Sediment Control Plan.*

25. The Geotech Report identifies that ground water was evidenced in multiple borings. Separation distances between stormwater practices and ground water should be evaluated.

*Response: Test pit results including elevation of seasonal high groundwater have been added to the stormwater details.*

26. Larger scale maps of the Appendix J should be provided. Maps provided are difficult to read on the format presented.

*Response: Full size maps are provided with the updated report.*

27. The area for the solar farm should be evaluated with regard to stormwater management. Plans consistent with NYSDEC standards for Solar Facilities should be documented.

*Response: The solar array construction will be direct driven supports for the panels with minimal ground disturbance. The access road to the array will utilize the NYSDEC approved pervious road section and will not require stormwater management. The equipment pads will have adjacent grass filter strips as designated on the GI Plan.*

28. The Erosion and Sediment Control Plan should be evaluated with regard to placement of additional stormwater management practices. An example being the area south of the Ridge Road access point. Numerous structures and parking lots are proposed without any soil or erosion control practices being proposed.

*Response: The Erosion and Sediment Control Plan has been revised to show the appropriate erosion control practices.*

Please contact me directly with questions. Thank you.

Sincerely,



Chris LaPorta, P.E.

CL:kf

CC: File