

December 4, 2023

Mr. Patrick Scordo, President/CEO/Director of Engineering  
Mr. Mark Tompkins, Design Engineer  
GYMO  
18969 US Route 11  
Watertown, NY 13601

Hovey's Island PDD Application  
Response to EAR/Plans Questions

Dear Patrick and Mark:

With the large amount of information that has been provided to date for this project, we would like to highlight specific information that we expect will be useful to you and the Town Board during the review of the EAR and PDD Application.

The following are additional points of clarification to the EAR:

- On Page 8, under Section B. Impact on Water, subsection B.4, third paragraph, add the following sentence: "The selection and design of the erosion and sediment control measures will take into account the proximity of the project to Lake Ontario and Hovey's Island coast for the prevention of any erosion, turbidity, and siltation."
- On Page 12, under Section H. Impact on Transportation, subsection H.1, add the following sentences after the third paragraph: "The peak hour during the August 2022 count period was 12:15 pm to 1:15 pm with 67 vehicles per hour. This is equivalent to approximately 1 vehicle per minute or 54 seconds between vehicles traveling on Snowshoe Road. During the September 2023 Labor Day count period, the Saturday peak hour was 11:30 am to 12:30 pm with 117 vehicles per hour which is about 2 vehicles per minute or 31 seconds between vehicles on Snowshoe Road."
- On Page 13, after the third paragraph, second sentence add the following: Data received by Sun Communities Inc. during the September 2023 count period showed that the peak occupancy was 65.85% (about 209 sites). This is typical of the holiday weekend occupancy observed in recent years for Association Island, as well as throughout the campground and RV park industry. The ITE Trip Generation Manual 11th Edition has limited data for RV parks of a similar size and none in New York; however, the projected trips generated based on full occupancy of the existing Association Island RV park was evaluated and determined to be comparable to the actual counts in the Labor Day weekend. Therefore, the local data for the existing RV Park is considered more accurate.

- On Page 13, in the fourth paragraph, after the first sentence, add the following sentence: "This is equivalent to approximately 3 vehicles per minute or about 19 seconds between vehicles traveling on Snowshoe Road."
- On Page 14, after the second paragraph, add the following paragraphs: "Per the HCM 7th Edition, the hourly capacity of a two-lane highway segment is 1,700 vehicles per hour per lane, under base/ideal conditions including 12-foot lanes, level terrain, and a straight alignment. The Level of Service (LOS) for an uninterrupted two-lane highway facility (i.e., no signals or stop control within the segment) is not solely based on capacity and the HCM methodology does not produce a capacity adjusted for actual roadway conditions. However, based on engineering judgement and an iterative analysis in the Highway Capacity Software 7th Edition (HCS7) (i.e., increasing volume until the volume to capacity ratio equals 1.0), the adjusted capacity is assumed at about 1,490 vehicles per hour per lane. The projected peak hour volume on Snowshoe Road on a peak season Saturday with the addition of Hovey's Island cabins is 189 vehicles per hour total and 99 vehicles per hour in the peak direction. This is significantly less than the expected capacity of Snowshoe Road at about 6.6% of the adjusted capacity.

The vehicle trips per hour in the peak direction is only 6.6% of the capacity of Snowshoe Road.

Synchro software was used to conduct a preliminary intersection capacity analysis. Along Snowshoe Road, an intersection with a driveway was modeled to evaluate the impact of a resident turning left out of their driveway across both lanes of traffic. On the holiday peak season Saturday with the addition of Hovey's Island Cabins, the driveway LOS is expected to be A with a delay of 9.6 seconds per vehicle, compared to 9.2 seconds per vehicle without the development traffic. The unsignalized intersection of Snowshoe Road at Military Road was also analyzed, which shows an expected LOS of A for the intersection. The average delay per vehicle at the intersection is anticipated to increase from 4.2 seconds to 4.9 seconds per vehicle. The full Synchro reports are included in Appendix C."

- On Page 14, after the third paragraph, add the following sentences: "However, widening the roadway could have impacts on existing features such as driveways, trees, and parking, as well as the financial costs of road reconstruction and potential right-of-way acquisitions. In addition, according to the Highway Capacity Manual and Federal Highway Administration, wider lanes and shoulders can also lead to increased vehicle speeds."

The private road system that serves Hoveys Island and Association Island is also important to the proposed development. Sun Communities diligently maintains the private road system, which begins at the end of the public road terminus on the mainland and extends across the private bridge, Hoveys Island, a causeway

and Association Island. It is imperative for the success of Sun's business that this system be maintained in a safe operating condition. As a part of Sun's commitment to maintaining these facilities, they regularly employ experts, including transportation and structural engineers to assist with evaluation of the private road system. Sun has recently engaged the services of structural engineers for evaluation of the condition of the existing bridge and expects to conduct subsurface testing of the soil and bridge structure in 2024 to aid in further analysis. This analysis is part of Sun's maintenance of their property and is not considered part of the PDD land use application review process.

- On Page 10, under Section E. Impact on Plants and Animals, subsection E.1, second paragraph, replace the sentence with "Approximately 11% (4.24 acres of 39-acre total project area) of the island will be preserved in it's natural forested condition to mitigate the conversion of existing forest on portions of the island."
- On Page 11, under Section F. Impact on Aesthetic Resources, subsection F.1, add the following sentences to the end of the first paragraph: "To prepare the photo simulation, we used Autodesk 3ds Max to create the existing conditions model. We altered/added the proposed grading, landscape, and structures via the CAD drawings and using camera photo matching techniques in 3ds Max. Based on the recorded camera focal length and sensor size, we recreated the real camera view in a 3D scene. We then rendered the views and overlayed them in a composite Adobe Photoshop with the underlying base photo. Decisions on which trees and foliage should be eliminated or remain comes from observing the photo, the site drawings in plan view, and using the Pictometry oblique imagery service."
- On Page 6, under Section B. Impact on Water, subsection B.1, first paragraph, add the following sentence: "The SMP will be in complete accordance with the NYSDEC Stormwater Design Manual and will continue to advance as the project design advances to 90% and ultimately to final design."

The following are clarifications to the design plans:

- Campsite boundaries are shown on Sheets 8, 9 and 10 of the plan set dated 11/27/23.
- On sheet 30, Horizontal Directional Drill Plan & Profile, the 8" DIP for water will be revised to 2" (or larger) PE pipe, and the 4" PVC conduit for sanitary forcemain will be revised to 2" (or larger) PE pipe.

Also attached, for further reference, is our letter to Ed Glaser and the Town Board dated September 25, 2023 in which each of the comments and recommended conditions of the Planning Board were addressed.

Further, we want to clarify how the management and maintenance of the proposed Hoveys Island development will be conducted. Sun Communities will be selling the cabins and leasing the underlying campsite land to the residents. The land, roads and amenities will continue to be owned by Sun Communities. Since maintenance of the land will remain Sun's responsibility,

preservation of trees and other vegetation will be fully in the control of Sun Communities, which will ensure that the character of the development is sustained.

Lastly, Sun will work with the Town of Henderson officials and staff during the construction of the project to ensure that the standards and requirements of the Town, County and State are closely followed. It is our understanding that following approval of the proposed PDD, which is a land use review, additional building permit reviews will be completed by the Town Zoning Enforcement Officer prior to issuance of permits for construction. We expect that requirements for the construction of the project, including inspections, work hours and other matters of concern to the town will be implemented as conditions of these future permits.

Sincerely,

Colliers Engineering & Design, Inc.



Ray L. Darling, Jr., PE  
Department Manager