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**Lewis Road PRD**  
**Applicant's Response to Comments Prior to and After the Central Pine Barrens**  
**Commission Hearing of August 19, 2020**

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This document provides responses to comments made prior to and just after the August 19, 2020 hearing of the Central Pine Barrens Joint Planning & Policy Commission ("the Commission"). The comments are paraphrased and presented below in italics, with appropriate responses in non-italics text.

**Julie Hargrave, Principal Environmental Planner, Commission staff:** *"Please pay particular attention to the highlighted Standards and Guidelines for these are the ones the Commission needs to decide."*

Analyses prepared for the hearing of August 19<sup>th</sup> and submitted by NPV on that date, demonstrate that the proposed project complies with all of the Central Pine Barrens (CPB) Comprehensive Land Use Plan (CLUP) Standards and Guidelines. The comment simply identifies those specific Standards and Guidelines that staff has indicated should be the focus of the Commission's review in its determination as to whether the project complies with the Standards and Guidelines. There is no dispute that the project conforms to all of the Standards and Guidelines not highlighted by staff. As to the Standards and Guidelines highlighted by staff, there has been no submission of any technical data or any analysis that establishes failure of the project to comply with the Standards and Guidelines. As is discussed in greater detail below, while there has been generalized hyperbole and claims of non-compliance, there has been no evidence submitted by any public official, private person, or commenting organization that actually demonstrates any non-compliance by the project with the CPB CLUP Standards and Guidelines.



**Sarah Lansdale, Director, Suffolk County Division of Planning and Environment:** *"The County remains concerned about the placement of the affordable units next to the sewage treatment plant. The current layout seems out of sync with the renewed focus of equitable development and inclusion."*

While the substance of this concern is addressed in the response below, this comment does not raise an issue pertaining to the project's compliance with the CPB CLUP Standards and Guidelines. Accordingly, this comment is not germane to the Commission's decision. Nevertheless, the following is our response to the comment.

Since the time that the Town Board determined that 12 affordable housing units were required for the project, these units were located in a single, multi-unit structure located in the southern "panhandle" area of the site, south of the main access. In addition, the Town has requested a completely different kind of housing stock, particularly rental apartments. If the affordable units are provided as apartments in conformance with the Town's intent, those apartments need to be outside of the subdivision else they would be restricted to seasonal occupancy. The sewage treatment plant (STP) for the project was moved to this general area at the Town's request. As stated in Section 1.3.5 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

As stated in the Draft Environmental Impact Statement (DEIS) for the Hills Mixed Use Planned Development District (MUPDD) and in all subsequent analyses, the applicant remains committed to providing state-of-the-art tertiary sewage treatment for project, despite the fact that, under Suffolk County Sanitary Code (SCSC) Article 6, such a level of treatment is not required for the project. An Engineering Report for this facility has been prepared and submitted to the SCDHS, and is currently undergoing agency technical and regulatory review.

The project's proposed STP facility will be located in the southern "panhandle" portion of the Kracke Property, in an area that is primarily unvegetated. This area is in-line with groundwater flow with elevated nitrogen concentrations from upgradient historic/current farming, and is downgradient of the SCWA Spinney Road wellfield. In accordance with applicable SCDHS requirements, space at this facility has been set aside for twice the building's footprint (in case expansion is later necessary), an access drive and leaching area (with additional leaching area set aside as required by the SCDHS).

As a result, the STP has been shifted to its present location in the southern portion of the site, adjacent to the maintenance building and near the affordable unit structure, and a minimum of 600 feet from the nearest Spinney Road residence. The affordable units are not "next to" the STP as indicated in the County comment. The STP is approximately 450 feet south of the affordable units, and the maintenance area is present between the workforce units and the STP. The Applicant will work with the Town (and

Suffolk County Planning Department) during the Site Plan and Final Subdivision Review, to improve the aesthetics of the affordable units through setbacks, buffering, landscaping and architecture, to ensure that the plan addresses equitable development considerations.

**Pine Barrens Society comments (paraphrased):**

- 1. There is a concern that locating the wellfield in a Critical Resources Area (CRA; the Henrys Hollow CRA) is not appropriate, will adversely impact Coastal Buckmoth habitat, and will place new development in an otherwise undisturbed area.*

The Lewis Road PRD will not place any development on the Parlato property which is within a CRA; The location of the future SCWA wellfield site was determined by the SCWA, in consultation with the Town; the role of the Applicant is limited to simply providing 4 acres of land for this facility. This land is located in a former farm field area and does not contain any buckmoth habitat as the host tree is Scrub Oak (*Quercus ilicifolia*) and the location is a former farm field. As a result, any future activity would not be in an undisturbed area. As stated in Section 1.3.4 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

Discussions with the Town and SCWA have resulted in the decision to move the location of the proposed 4-acre dedication for a new public water supply well field from what was originally indicated in the Previous Master Plan east to the south part of the former farm field area on the Parlato Property, as shown in the Revised Master Plan. This wellfield is not required for the proposed project which has received a letter of water availability from SCWA that includes a list of improvements that are needed to ensure water supply service to the site. SCWA requested land for a future wellfield to meet the needs of the distribution area. SCWA provided a design in AutoCAD to the project design team, to incorporate the wellfield into the south part of the Parlato Property. This location is preferred by SCWA as it lies more equally between the Spinney Road wellfield to the west and the Malloy Drive wellfield to the east. This wellfield is not needed to serve the project site, and is planned as a future improvement to improve pressure and water supply to the SCWA distribution network. The Town expressed support for the proposed location as compared with the location in the north part of the Hills South Parcel that was previously proposed. The previously proposed location would have required more disturbance for access and construction as it was located within the higher elevation and steep slope areas of the Hills South Parcel and therefore also potentially more visible. The new proposed future SCWA wellfield location is in an area that exhibits flat topography. Access to this location is more easily gained, and the location is less visible.

The proposed future SCWA wellfield location is within the Critical Resource Area (CRA), and as a result of the CRA designation, requires Commission review. No additional procedural requirements apply other than Commission review, and since the application is already being reviewed under the Assertion of Jurisdiction, the process that is being followed allows for consideration of the future SCWA wellfield in this location. The basis for the Henrys Hollow CRA was primarily for protection of open space and habitat for the Coastal Barrens Buckmoth (*Hemileuca maia*) designated as a rare species of "special concern" by New York State Department of Environmental Conservation (NYSDEC). The host plant Scrub Oak (*Quercus ilicifolia*) was found to be prevalent in the higher elevation areas of the CRA. The proposed future SCWA wellfield location will not adversely impact the higher elevation areas of the property, or the host plant for the Coastal Barrens Buckmoth. The new proposed wellfield location is preferred by SCWA for future water service and access and is environmentally preferable as it requires less disturbance, is not within steep slope areas, is less visible and more accessible, and is in a previously disturbed area. For these reasons, the new proposed location is incorporated into the Revised Master Plan.

In addition to the beneficial aspects of relocating the wellfield site to the south part of the Parlato property as per SCWA noted water supply advantages and Town noted open space improvements, it is noted that the overall 11.96 acre Timperman property addition to the Parlato Property provides additional open space in the higher elevation areas of the subject site. The higher elevation areas of the site are more advantageous to buckmoth habitat and protection of steep slopes. This effectively offsets any perceived negative aspect of locating the wellfield site on the south side of the Parlato Property. The Timperman property could be developed independently with 2 single family homes under Town Zoning. Addition of this parcel to the subject site precludes such development and adds to the contiguous open space holdings to be offered for dedication to the Town, thus further improving unfragmented open space. No additional yield is being sought for this land, and as a result, any perceived yield aspect to the SCWA wellfield site is further offset by this inclusion of land in the overall project area. The Lewis Road PRD therefore results in further consolidation of land, inclusion of adjoining parcels, reduction of yield and open space preservation through this beneficial change in the project.

As noted in the Commission Draft Staff Report prepared for the August 19, 2020 Commission hearing: "Work pertaining to water supply for the residents of Suffolk County constitutes "nondevelopment"

pursuant to definitions in Section 57-0107(13)(ii) of the Act. Therefore, no Commission review of the well field is required. (see Draft Staff Report for meeting of 8/19/2020, p. 11).”

- 2. Fragmentation of open space and clustering associated with the proposed Master Plan point to the “Reduced Impact Alternative” proffered by the GFEE and LIPBS for a development with an equestrian facility, that significantly reduces potential nitrogen-related impacts on water resources. Further, this scenario would be based in a tighter cluster layout than the proposed Master Plan.*

It is not the role of the Commission to evaluate alternatives to a proposed project, but solely to evaluate whether that proposal conforms to the Standards and Guidelines of the Central Pine Barrens Comprehensive Land Use Plan (CLUP). The commenter's suggestion that an alternative to the proposed project be considered is not relevant. Alternatives could have been considered by the Town Planning Board, but that is not the role of the Commission. The SEQRA process is complete other than for the Commission to adopt a Findings Statement based on the EIS record. Alternatives were addressed in the East Quogue Land Use Plan (LUP) and Generic Environmental Impact Statement (GEIS), and the full Draft/Final EIS process conducted by the Town Board in connection with the Planned Development District (PDD) review. At that time, the Planning Board and the Commission were involved agencies as the PDD always contemplated subdivision approval and Commission review. The project remains a seasonal resort residential community with a golf recreational amenity. This use has not changed throughout the protracted review process. The project has already received preliminary subdivision approval from the Town Planning Board. The proposed project is consistent with the site use recommended in the East Quogue LUP and GEIS and was selected from among the reasonable alternatives as the most appropriate use for the site during the Town SEQRA review. It is not within the Commission's jurisdiction to evaluate alternatives; the Commission's role is to determine conformance with the Standards and Guidelines of the CLUP and to render a decision on the pending application.

- 3. According to Golf Week magazine, the rough area of a golf course takes up about 60% of the total space of the course. The average rough area of a golf course is 66.8 acres. In contrast, the rough area of the proposed Master Plan is 36.76 acres, or about the half the size of Sebonack and Golf at the Bridge.*

The golf course has been designed by experienced, credentialed professionals in this line of work, and reflects the type of golf play challenge that is sought by the Applicant for the market. The project plans for the site demonstrate the exact quantities of natural area, cleared area and fertilized area, and the project is efficient in its design intent to meet the goals of the project sponsor, and further conforms with the clearing limitations and limits on fertilizer-dependent vegetation pursuant to the CLUP.

- 4. The tee boxes of the proposed Master Plan have only tee location in each, where typically there are three or more locations in each, to accommodate golfers of varying abilities.*

See above. The Applicant expects that the tee boxes will be large enough to accommodate multiple tee location within each, these additional locations to be determined as the skill level of the residents is established.

- 5. There is no clear quantifiable delineation of golf area, existing cleared area to be revegetated, existing natural areas, and non-fertilized sand, natural areas and revegetated areas within the golf course. The limits shown on the proposed Master Plan are not realistic or enforceable.*

The project plans accurately depict the golf area, existing cleared areas (which are currently being revegetated through reduced unauthorized access control measures and natural succession), existing natural areas, sand features, turfed areas, rough areas, carry areas, greens/tees and other development features. The quantifies have been verified through development of the "Master Plan" (Vita Planning & Landscape Architecture) and are consistent with the grading and drainage plan (Nelson +Pope.)

- 6. The fairways and rough areas shown in the proposed Master Plan are narrow in order to minimize clearing and to limit the acreage of fertilized landscaping. It is expected that a golf course of this size is unplayable and will have to be expanded in the future in order to meet average golf course acreages, with associated increases in clearing and fertilized acreage.*

The golf course has been designed by experienced, credentialed professionals, in cooperation with the Town, to provide for challenging golf play for the site's resident golfers. Limits of clearing will be ensured through field survey and staking measures, and retained in perpetuity through appropriate conservation easements.

- 7. All of the golf cart paths will have to be paved.*

The Applicant does not propose to pave the golf cart paths; rather, a porous treatment will be used, to maintain recharge capability and reduce runoff to the drainage system.

- 8. The nitrogen impact analysis is not adequate because it doesn't include the effects from the off-site nitrogen "mitigations" of the community benefits analyzed in the Hills at Southampton PDD.*

In fact, the nitrogen impact analysis "IS" correct by not including these measures. The nitrogen concentrations are based on the actual on-site development and nitrogen concentrations have consistently been less than 1 mg/l as noted in the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020). Also as noted in prior responses, the Guideline is 2.5 mg/l; however, only applies to protect "surface water quality for projects in the vicinity of ponds and wetlands." The subject site is not proximate to ponds or wetlands as demonstrated in the EIS record

and there are no wetlands on the subject site as noted in the Commission Draft Staff Report for the August 19, 2020 hearing in relation to Standards 5.3.3.4.1 through 5.5.5.4.4 which states: "Not applicable; no freshwater wetland habitat was identified on site."

As the Lewis Road PRD is not a planned development district (a zoning tool no longer available in the Town of Southampton), provision of community benefits to compensate for increased density related to a membership golf course (which is not proposed), is not required. Furthermore, analyses for the proposed project clearly shows that the project will inherently provide substantial mitigation of nitrogen impacts to water resources. As stated in Section 3.2 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020);

The proposed project was subject to a Draft and Final Environmental Impact Statement (EIS) by the Town Board of the Town of Southampton as lead agency, and the Town Board issued a Statement of Findings to approve the project. This was followed by the Town of Southampton Planning Board issuance of a determination that no Supplemental EIS was required based on the Lewis Road PRD, which is very similar to the current proposed project but was prior to the improvements made to fully comply with the CPB CLUP Standards and Guidelines. The Town Planning Board issued a Statement of Findings to approve the project and approved the Preliminary Subdivision. The s EIS and the subsequent SEQRA Compliance Analysis document are part of the Town EIS record and should be relied on for information and findings with respect to potential environmental impacts. These documents fully examined surface water and groundwater quality, and wildlife resources as related to existing conditions and potential impacts. The EIS record is complete and no unmitigated significant adverse impacts to surface water, groundwater quality or wildlife resources were identified in the EIS record or Town Agency Findings Statements.

Some key points of the analyses and findings are that the proposed project is not proximate to surface waters or wetlands and therefore no surface water impacts were identified. The proposed project includes an Integrated Turf Health Management Plan (ITHMP) for golf course management which has been reviewed by the Town of Southampton's specialized consultant that oversees the monitoring of Golf at the Bridge and Sebonack Golf Club in the Town (Dr. A. Martin Petrovic, PhD), where no impacts have been identified. The Lewis Road PRD golf recreational amenity will further limit materials applied to manage healthy turf as compared to these prior approved and monitored golf courses. Turf management includes reduced and controlled use of fertilizer and turf management that will promote

maximum uptake of nitrogen by healthy turf grass. The findings with respect to recharge and uptake of nitrogen have been verified on a site and project-specific basis by the Town specialist, Dr. Petrovic. The proposed project turf area is less than 15% of the site in compliance with CPB CLUP Standard 5.3.3.6.3. The proposed golf amenity will be managed more stringently than a typical residential lot that may be maintained by a homeowner or landscape company as a result of the ITHMP, Town oversight, and baseline and continuing monitoring.

The proposed project also includes irrigation management that will intercept and extract existing groundwater with elevated nitrogen from upgradient farm fields, and will reuse this water source for irrigation of the golf course. This will remove nitrogen from the aquifer that would otherwise flow toward Weesuck Creek and western Shinnecock Bay, and will ensure maximum uptake of nutrients through fertigation and the ITHMP. This will result in a net negative nitrogen load as verified in the EIS record. Groundwater quality, groundwater outflow to Shinnecock Bay and nitrogen load are critical factors in the health of the Shinnecock Bay estuary, and this reduction of nitrogen load is a significant environmental benefit of the project.

In addition, during the August 19, 2020 hearing, a question was raised regarding seasonal occupancy. The applicant proposes a resort community and maintains that the proposed project has not changed and will be occupied seasonally. Nevertheless, if the project were occupied 365 days per year (not proposed or expected), the nitrogen concentration in recharge would still be less than 2.5 mg/l. **Attachment A** includes a hypothetical SONIR nitrogen budget analysis that demonstrates under this scenario, the nitrogen in recharge would be 0.48 mg/l.

*9. The effects of the proposed fertigation program cannot be included in the nitrogen impact analysis, as the effects of this technology cannot be quantified.*

The fertigation/irrigation quantities are not included in the SONIR model nitrogen impact analysis to determine "concentration" of nitrogen in recharge (which is the only factor under consideration). The fertigation/irrigation quantities are provided to establish nitrogen "load" which is "net negative." The Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020) provides updated calculations, and this is demonstrated on Sheet 4 in Appendix H of that report.

The analysis of the effects of the proposed fertigation program clearly demonstrate that nitrogen impacts will not be significant and in fact are net negative. As stated in Section 3.33 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

The proposed project seeks to utilize existing nitrogen-enriched groundwater in the aquifer that is contaminated by upgradient farm fields, and apply this water as for irrigation on the golf course recreational amenity. This was examined in detail in the EIS record, and was found to use common technology and proven systems to withdraw the water and reuse it for irrigation. The Town of Southampton includes this technology in their Water Quality Improvement Project Plan (WQIPP) as a remediation technique.<sup>1</sup> The EIS record found that this method of water reuse would remove nitrogen from the aquifer that would otherwise travel to Weesuck Creek and western Shinnecock Bay. This results in a net negative nitrogen load from the proposed project. The project environmental benefit is enhanced as a result of the use of fertigation. The Commission should consider the EIS record with respect to fertigation, and incorporate this remediation technique as part of the decision-making process on the pending application.

*10. The presence and effects of "legacy contaminants" in groundwater pumped by the fertigation system should be evaluated.*

Removal of such legacy contaminants is a benefit of the project and is fully considered in the EIS record. Fertigation/irrigation techniques will effectively remove groundwater that would otherwise flow down gradient of the site, and will "recycle" this water on the golf course for maximum uptake by carefully managed turf. The project's ITHMP includes continual monitoring of the groundwater pumped by the fertigation system, that program to include monitoring for substances specified by the Town and subject to Town oversight. As stated in Section 1.3.9 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

- An Integrated Turf Health Management Plan (ITHMP) has been prepared, to document the balance achieved between the requirements of healthy golf course turf and protection of groundwater quality. Maintaining healthy turf with minimal use of fertilizers and pesticides ensures maximum uptake of nutrients applied as fertilizer. The ITHMP proposed as part of the MUPDD is hereby incorporated into the subdivision/site plan development. It is noteworthy that similar protocols have successfully been put in place for similar projects in Southampton, for The Bridge and Sebonack.
- Groundwater Monitoring Protocols (GMPs) have been prepared, to document the efforts to be taken to ensure that groundwater quality

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<sup>1</sup> <https://www.southamptontownny.gov/DocumentCenter/View/7318/Water-Quality-Improvement-Plan-CPF-Referendum-PDF?bidId=>

is protected by implementing the ITHMP. Such measures have been successfully implemented at other golf courses on Long Island's East End, including as Sebonack and The Bridge. The GMPs proposed as part of the MUPDD are hereby incorporated into the subdivision/site plan development.

*11. Ten of the 42 pesticides listed for potential use are known to be highly toxic, of which three (3) are known carcinogens.*

As determined for the Hills at Southampton PDD review, any and all pesticides applied to the site will be subject to the prior review and approval of the Town. The ITHMP was reviewed during the Draft/Final EIS review process by Dr. A. Martin Petrovic, PhD on behalf of the Town of Southampton. The list was adjusted during the EIS review and the ITHMP will be implemented under the supervision of the Town's consultant. The list will be amended as appropriate through Town review and the GMPs will provide detection measures in the vadose zone as well as groundwater through installation and monitoring of lysimeters and wells. Turf management on the subject site will be held to a higher standard than typical residential subdivisions that involve chemical lawn care maintenance companies. The project's Final EIS and the lead agency's Findings Statement confirm that the project would not have the potential to generate any significant adverse impacts from turf management.

*12. There is no evidence that the two proposed ponds will perform irrigation functions. Based on what is shown, it is assumed that these ponds are for aesthetic and recreational purposes as evidenced by the pond house and recreational facilities shown.*

The artificial ponds have been described and analyzed throughout the SEQRA review process as part of the irrigation system for the site. Ponds are not proposed purely for aesthetic purposes, and will serve multiple purposes including stormwater management and irrigation supply. This clearly conforms to the CLUP, which prohibits artificial ponds created solely for aesthetic purposes. The applicable CLUP Guideline indicates that *"Ponds should only be created if they are to accommodate stormwater runoff, not solely for aesthetic purposes."* It is clear on drainage plans for the project that ponds are not solely for aesthetic purposes, and are intended to accommodate stormwater runoff. As a result, the proposed project is clearly consistent with this Guideline and there is no other conclusion to be reached.

*13. The project needs an approved SWPPP to proceed.*

Comment acknowledged; a preliminary SWPPP was prepared for the Draft/Final EIS, a full SWPPP was prepared for the Preliminary Subdivision approval, and a final SWPPP will be prepared for the Final Subdivision, based on the plan approved by the Commission. A SWPPP is required prior to construction and is a responsibility of the Town Planning Board, as well as a condition of the Planning Board

subdivision approval (see Condition 2, p. 5 of the 10/28/2019 Town Planning Board Preliminary Subdivision Approval).

*14. The effects of shifting of lots southward and the relocation of the STP to the "panhandle" area on the wetlands and Weesuck Creek needs to be evaluated.*

As discussed in Section 1.3.5 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments (July 1, 2020)", the STP was moved southward to the southern end of the "panhandle" area, on the west side of Spinney Road. This was promoted by the Town of Southampton to locate the STP near the East Quogue Cemetery, and in a location that is downgradient of the SCWA Spinney Road well field as well as downgradient of historic/present farm fields. As stated in Section 2.1 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

The SONIR model has been updated to reflect the current proposed project including the full boundaries of the property, all nitrogen sources, water balance information and resulting concentration of nitrogen in recharge as well as nitrogen load and recharge. The SONIR model is consistent with the SONIR Model User's Guide included in the EIS record. As noted in Appendix H, the updated SONIR analysis for the Lewis Road PRD based on the project plan that is the subject of this submission has determined that the concentration of nitrogen in recharge is: 0.31 mg/l pre-mitigation and 0.24 mg/l with mitigation, and the nitrogen load prior to consideration of fertigation is 1,208.37 lbs/year pre-mitigation and 915.98 lbs/year with mitigation. When factoring in irrigation/fertigation, the nitrogen load is minus (-) 665.49 lbs/year.

and

Guideline 5.3.3.1.3, the CPB CLUP states that, "*A more protective goal of two and one half (2.5) ppm may be achieved for new projects through an average residential density of one (1) unit per two (2) acres (or its commercial or industrial equivalent), through clustering, or through other mechanisms to protect surface water quality for projects in the vicinity of ponds and wetland.*" This Guideline does not apply as the project is not "...in the vicinity of ponds and wetlands." Nevertheless, all of the PDD and Lewis Road PRD scenarios are less than 1 mg/l of total nitrogen in recharge at the property line (specifically 0.24 mg/l for the updated SONIR model run included in Appendix H), when compared with 2.5 mg/l under this Guideline if it were applicable.

The STP will be approved by the Suffolk County Department of Health Services (SCDHS). The Draft Staff Report for the Commission meeting of August 19, 2020 indicates that the proposed project conforms with Standards 5.3.3.1.1 and 5.3.3.1.2 which address conformance with Article 6 of the Suffolk County Sanitary Code (SCSC) and STP location, respectively.

*15. The January 2020 revisions to SEQRA regulations now requires climate change assessments in environmental impact statements, which should be applied to this application.*

The Standards and Guidelines applicable to review by the Commission do not include such a review requirement, therefore, this comment is irrelevant. The SEQRA process is complete and the Commission now must adopt a Statement of Findings based on the EIS record. The Environmental Impact Statement on which the proposed Lewis Road PRD is based, closed with the Town Board adoption of its Findings Statement on November 27, 2017. As such, subsequent revisions to the SEQRA requirements after that date are irrelevant. Even if the new standard was applicable, there is no doubt that the project would not have the potential to generate any significant adverse climate change impact. The development density is set by the applicable zoning and the project does not propose any additional density. The project has no potential to generate any significant greenhouse gasses, especially given its seasonal use. The FEIS and the lead agency's Finding Statement contain no information or conclusion regarding energy usage or other matters associated with the project that would have the potential to generate any significant adverse impacts on climate change.

In addition, as stated in Section 3.35 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments " (July 1, 2020);

These comment express concerns that perceived increased nitrogen loading to surface waters and groundwater from the subject sire will impair the health and thereby weaken the ability of the existing coastal salt marshes to buffer increasing storm surges and flooding in areas south of the site.

The SEQRA record establishes that the proposed project will reduce the amount of nitrogen in the stormwater flowing from the site (which could impact surface waters, including Weesuck Creek and the coastal salt marshes), by minimizing the use of nitrogen-bearing fertilizers in landscape maintenance and by engineering a site drainage system that will minimize the potential for stormwater flow from leaving the site in the first place. As for nitrogen in groundwater, the planned use of a state-of-the-art STP and reuse of impacted groundwater to reduce nitrogen in ambient groundwater will actually reduce nitrogen in groundwater, thereby reducing impacts to the coastal salt marsh vegetation. These features of the project will enhance the health of

the coastal salt marshes, and help reduce concerns over future flooding associated with climate change.

It is noted that the area south of the project site between Montauk Highway and Shinnecock Bay is residentially developed. Concerns over increased potential for flooding in this area would be addressed by a combination of Federal, state, county and Town resources acting together with the community to provide appropriate measures to reduce coastal erosion and vulnerability to storm surges and flooding.

All issues relevant to the Commission review have been addressed.

*16. The artificial turf to be used on the athletic fields may include carcinogenic materials.*

The material for ball fields has not yet been determined. At present, any such ball fields are anticipated to be turf, and are included in the 15% turf limitation. If artificial fields are preferred, current, state-of-the-art materials and installation techniques will be used, not unlike modern municipal installations used throughout Long Island. There is no CLUP Standard or Guideline pertaining to this comment.

*17. The Applicant has not clarified the question of who "the owners" may be, and whether the residents of the Dune Deck project be permitted to play in the golf course.*

As stated in Section 3.34 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

As was confirmed in the proceedings before the Town Planning Board, only the owners and immediate family members that reside on the project site are eligible to use the proposed golf course amenity. The golf course was approved as an accessory use. Residents of Dune Deck, like any other person, would have to be invited by an owner of a lot in the project in order to play on the golf course.

*18. An Excavation Plan needs to be prepared, evaluated, and finalized to assess conformance.*

As the project's grading program has been revised to eliminate the need to "mine" the site (by "balancing" the volumes of cut and fill), no excess soil will be generated to need removal from the site. This is a substantial benefit to the neighbors, as the traffic, noise and dust impacts associated with this removal operation will not occur. The Applicant has prepared a grading and drainage plan for Commission review and will updated plans for further Town review based on the plan that the Commission approves.

As stated in Section 1.3.7 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

The proposed project plan will be revised to balance the site in terms of cut and fill, such that no off-site exportation of soil is necessary. In the previous plans for the Lewis Road PRD and the prior Hills at Southampton MUPDD, the anticipated grading program would have resulted in a substantial volume of excess excavated soil, which would have to be removed from the site in some manner, either by trucks travelling to and from the site on local roadways (particularly Lewis Road), or internally to the adjacent sand mine site by trucks or a conveyor belt system. It was acknowledged that any of these options would have resulted in impacts to the community from truck traffic, and from the noise and dust associated with these trips.

For the Revised Master Plan the project's grading program will ensure all excavated soil is redistributed on the site. As a result, there will be no net excess soil generated (i.e., the site will be "balanced"), and therefore, there will be no need for soil removal off of the project site."

*19. The question of whether the project is a Development of Regional Significance (DRS) has not been settled, and needs to be.*

There is no need to determine whether the Project is a DRS. The only effect of such a designation is to vest the Commission with jurisdiction to review a project. As the Commission has already asserted its jurisdiction, a DRS determination is neither necessary nor relevant. As stated in Section 3.29 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020);

It is acknowledged that the CPB Commission could have chosen to establish the proposed Lewis Road PRD as Development of Regional Significance (DRS) when the Applicant submitted the CGA application to that entity in December 2019. However, in lieu of such a decision, the Commission opted to assert its right to review the application under the authority of Section 4.4.3 of the CLUP.

*20. The Traffic Impact Study (TIS) needs to be updated and should be based on longer-term evaluations of actual trip generations and local traffic patterns.*

The project's traffic generation does not relate to any of the Standards and Guidelines within the CPBC's jurisdiction. Thus, the comment is irrelevant. Putting this aside, the project's FEIS concludes that the project has no potential to generate any significant adverse traffic impacts. The FEIS is binding upon the Commission. In addition, as stated in Section 3.40 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

This comment refers to the review conducted for the Town Planning Board by B. Laing Associates/Kimley Horn, dated June 27, 2019. The Applicant responded to this review in September 2019, and to this comment in particular as follows:

This comment calls for further information regarding the traffic analysis in the FEIS [for The Hills at Southampton MUPDD]. As stated above, and as stated in the SPR letter, following the Planning Board's determination that no Supplemental EIS is required, comments recommending changes to FEIS analyses are no longer germane. Nevertheless, to avoid any confusion or misunderstanding of technical issues by the Planning Board, we provide the following technical response.

The traffic documentation prepared by the applicant is accurate and complete and is part of the existing information in the EIS record. The May 2018 Traffic Impact Study (TIS) included as Appendix D of the NP&V December 2018 SEQRA Compliance Analysis applies a 15% seasonal adjustment factor to the Saturday data to account for summer traffic. Therefore, the Saturday analyses is very conservative to account for any increase in traffic due to summer activities. In addition, the August 2016 TIS included as Appendix H in the DEIS for The Hills MUPDD included both summer counts (July) and Fall counts (September) and the results are similar for both the summer and fall traffic. As a result, this comment is fully addressed by information contained in the EIS record.

This comment is not relevant to the review capacity of the Commission. There are no traffic related Standards or Guidelines. The only traffic-related parameter is to determine if a project is a DRS, and the Commission has already asserted jurisdiction.

*21. The Applicant has not provided any evidence as to why it is not possible to avoid developing 17.31 acres of roads on areas of slopes 10% or greater.*

Grading in areas of 10% or greater slopes has been minimized to the maximum extent practicable. The total acreage of slopes of 10% and greater that will be disturbed by grading is 17.31 acres. As stated in Section 2.4 of the Applicant's "Response to Pine Barrens Staff Review and Public Comments" (July 1, 2020):

A total of 0.40 acres of roadways and driveways will occur on surfaces that are presently in excess of 10% in grade. Table 2-1 indicates that an estimated 11.08 acres of slopes between 10 and 15% will be subject to grading for the project, and that 6.23 acres in excess of 15% grade will likewise be subject to grading.

The Applicant's "Response to Pine Barrens Staff Review and Public Comments" (July 1, 2020) provides full documentation as to how and why the proposed project is in conformance with Guidelines 5.3.3.8.1 through 5.3.3.8.6.

## *22. Significant issues remain with respect to conformance to the SEQRA process.*

The environmental review of the project was undertaken in complete conformity with SEQRA. As stated by counsel for the applicant at the public hearing, the residential subdivision was always part of the project and its environmental impacts were fully analyzed by the Town Board as lead agency. The Planning Board reviewed the subdivision application and concluded that the subdivision application was fully analyzed in the Town Board's FEIS and concluded that no supplemental EIS was required. The Town Board remains as lead agency as it continues to have discretionary approvals associated with the proposed subdivision. The proper and only role for the Commission is as an involved agency and in that capacity the CPBC must adopt a findings statement based on the Final EIS adopted unanimously by the Town Board.

As stated in Section 3.1 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020);

The following has been prepared by Steven Barshov, Esq. on behalf of the Applicant.

Questions have been raised as to the Commission's role and obligations under the New York State Environmental Quality Review Act (SEQRA) in light of the actions taken by the Southampton Town Board as Lead Agency and the Southampton Town Planning Board as an Involved Agency. Comments were made at the public hearing alleging that the Commission has no authority to consider the Lewis Road PRD application because the Town Board did not approve the Planned Development District (PDD) application. Specifically, opponents contend that the Town Board's

decision on the PDD application constitutes a total denial of the subdivision of the property and that the Lewis Road PRD subdivision application is a completely new application requiring re-establishment of a Lead Agency. The opponent's allegation is not supported by any legal authority and rests on a misunderstanding of the facts and SEQRA requirements, particularly relating to the re-establishment of lead agency under 6 NYCRR §617.96(b)(6), which provides that re-establishment of lead agency may occur by agreement of all involved agencies in the following circumstances:

- (a) for a supplement to a Final EIS (FEIS) or Generic EIS (GEIS);
- (b) upon failure of the lead agency's basis for jurisdiction; or
- (c) upon agreement of the project sponsor, prior to the acceptance of a Draft EIS (DEIS).

In this case, there has been no agreement by all Involved Agencies to re-establish a lead agency, nor has there been a determination by any Involved Agency that a Supplemental Environmental Impact Statement (SEIS) is needed, nor has there been failure of the basis for the lead agency's jurisdiction. Lastly, the Applicant did not agree to the re-establishment of a lead agency before the acceptance of the DEIS.

As the Commission is aware, SEQRA requires all state and local government agencies to balance any significant adverse unmitigated environmental impacts against the social and economic utility of a project when deciding to approve or undertake an "Action." As early as possible in the SEQRA process, the agency which first receives an application has the obligation to coordinate review with other agencies that have been identified as having jurisdiction to approve the project or some facet thereof, for purposes of determining a "Lead Agency." The purpose of having a Lead Agency is to coordinate the SEQRA process so that a single integrated environmental review is conducted. The Lead Agency, once designated by the Involved Agencies, has the sole responsibility of determining whether the preparation of an environmental impact statement (EIS) is necessary for the project and for the preparation and filing of the statement if one is required. Upon a determination that an environmental impact statement is required, the Lead Agency undertakes and coordinates the SEQRA process with the Involved Agencies, including scoping, review of a DEIS, public comment, preparation of an FEIS, and all notices and filings associated therewith. Where an EIS is required, it is incumbent upon Involved Agencies to participate in the process and make the Lead Agency aware of the agency's concerns and technical

requirements related to its jurisdiction over the project. Upon completion and filing of a FEIS, the Lead Agency and all Involved Agencies are free to exercise their own jurisdiction and review authority over the project, however, each agency is required to adopt its own SEQRA Findings Statement based upon the FEIS before making its final decision (see 6 NYCRR §617.11(c)).

The proposed action since 2005 has been the subdivision of the property in the form of a Planned Residential Development ("PRD" a/k/a "cluster") with the 35% development area to contain residential housing and recreational accessory uses all located within the Compatible Growth Area, and the remaining 65% of the property as open space. In 2005, the proposed PRD subdivision did not propose a golf course, but after the Town's adoption of the East Quogue Land Use Plan & Generic EIS in 2008, the project was modified to include a golf course where the membership of the club was open to members of the public as well as owners of lots/units in the subdivision. The subdivision of the land is within the jurisdiction of the Southampton Town Planning Board ("Planning Board") but a golf club with membership open to the public at large was not permitted on the property without approval of a Mixed Use Planned Development District by the Southampton Town Board (Town Board). Accordingly, the Applicant made application to the Town Board for a MUPPD. The Town Board identified and coordinated review with Involved Agencies, including the Planning Board, SCDHS, NYSDEC and the Commission. After the Commission and other agencies expressly relinquished Lead Agency, the Town Board was designated Lead Agency and thereafter the proposed development underwent a complete SEQRA review, with Scoping, a DEIS and FEIS. Upon completion and filing of the FEIS by a unanimous 5-0 vote, the Town Board fulfilled its obligations as the Lead Agency for the project under SEQRA.

The Town Board, thereafter, undertook consideration of the approval of the MUPDD application. The Town Board's jurisdiction was solely over the approval of the PDD application, which would permit the golf course with membership of the club open to members of the public as well as owners of lots/units in the subdivision. The Town Board prepared and adopted a positive SEQRA Findings Statement, dated November 27, 2017, and voted 3-2 to approve the PDD application, but the vote failed because the Town's PDD law required four votes to approve the application. No decision or findings to deny the application was ever offered. The Town Board exercised its jurisdiction over a component of the project by its decision on the PDD. It is a customary course of action for the Lead Agency to be the

first agency to adopt its SEQRA Findings Statement and adopt a decision on its component of the application under its jurisdiction.

As the PDD legislation specifically identifies the Planning Board's authority (see §330-243), the Town Board's decision would have only authorized the public membership aspect of the proposed golf course. The balance of the review and approval of the PRD subdivision was left to the Planning Board's jurisdiction. Contrary to the opponents' allegations the Town Board's decision is not a complete denial of the Applicant's right to subdivide the property as a PRD with customary recreational accessory uses in the 35% allowable development area. As confirmed by both the Town ZBA and Planning Board's action (see discussion that follows) such a PRD subdivision is permitted as-of-right under the existing zoning through Planning Board review. Moreover, the Town Board as Lead Agency was always mindful of the Planning Board's authority over the subdivision of the property, and made sure that the PRD subdivision with accessory golf course was identified and considered in the SEQRA documents for both the East Quogue Land Use Plan (EQLUP) and GEIS and the FEIS for the project. Thus, the Town Board fulfilled its obligations as Lead Agency by providing a SEQRA record that each agency could rely on in making its decision.

The Town Board's exercise of its jurisdiction on the PDD application does not constitute a "failure of the lead agency's basis of jurisdiction." Failure of jurisdiction would be a matter where the project was changed thereby eliminating the need for the Town Board's action on any component of the project. As discussed below, other than the public membership aspect of the golf course, the project has not changed and the SEQRA documents address all aspects of thereof. As noted, the Town Board never had approval authority over the PRD subdivision, such authority remaining with the Planning Board. Regardless of the Town Board's decision on the PDD application, the Town Board still retains limited jurisdiction over aspects of the project related to the acceptance of applicable dedications of open space and infrastructure improvements, as well as various management agreements related to the maintenance and monitoring of the golf course.

As noted, the Town Board's decision on the MUPDD does not prevent the subdivision of the property or development of the proposed PRD subdivision, but it did eliminate the Applicant's ability to proceed with the golf club with membership open to members of the public as a component of the project. Accordingly, the Applicant has proceeded with the PRD subdivision application entitled "Lewis Road PRD" with the golf course, but

the membership will be open to only owners of the lots/units in the subdivision as a customary accessory use. The Planning Board processed the subdivision application, first as a Pre-Application and adopted a Pre-Application Report on May 24, 2018, which specifically identified its role and obligation as an Involved Agency under SEQRA (see pages 6-8). The Planning Board expressly recognized its authority to determine if an SEIS would be necessary (see 6 NYCRR §617.6(a)(7)) and when it might be necessary to establish a new Lead Agency (see 6 NYCRR §617.96(b)(6)). The Planning Board also asked the Building Inspector and Zoning Board of Appeals (ZBA) to opine on whether the proposed golf course, available only to the owners of the subdivision parcels and not to the public at-large, is customary and accessory to the 118-home PRD subdivision. The ZBA determined that the proposed golf course is a customary recreational accessory use to this PRD subdivision and not a second non-permitted use.

Thereafter, the Applicant submitted a Preliminary Subdivision Application and the Planning Board after more than six months of review guided by independent consultants determined that there were no specific adverse environmental impacts not addressed or inadequately addressed in the FEIS arising from changes to the project, or newly discovered information, or a change of circumstances related to the project, and no SEIS need be prepared, which eliminated the need and the Planning Board's ability to re-establish a Lead Agency under 6 NYCRR §617.96(b)(6). The Planning Board then scheduled and held public hearings on the preliminary application and made referrals to Involved Agencies seeking comments, including the Commission. By resolutions dated October 24, 2019, the Planning Board adopted its own SEQRA Findings Statement and approved the preliminary Lewis Road PRD application with conditions to be completed prior to final application. The Planning Board has fulfilled all of its obligations as an Involved Agency under SEQRA.

Like the Planning Board, the Commission must fulfill its obligations as an Involved Agency under SEQRA. The Commission is recognized as an Involved Agency, having gained its jurisdiction by assertion under the CLUP. The Commission's review jurisdiction is to apply the Standards and Guidelines for development within the CGA to the project. The record before the Commission, which includes the FEIS and SEQRA documents, addresses the CLUP Guidelines and Standards. There have been no allegations of specific adverse environmental impacts not addressed or inadequately addressed in the FEIS arising from changes to the project, or newly discovered information, or a change of circumstances related to the project, warranting a SEIS under 6 NYCRR §617.6(a)(7). There are no other

grounds under 6 NYCRR §617.96(b)(6) to re-establish lead agency. Accordingly, like the Planning Board, and as acknowledged in the Commission's staff report, the Commission must make its own SEQRA findings based upon consideration of the relevant environmental impacts, facts and conclusions disclosed in the FEIS, and render its decision as to the projects compliance to the CLUP standards and Guidelines.

This comment was also addressed in Section 1.4 of the June 3, 2020 Response to the Commission Draft Staff Report for the February 19, 2020 meeting.

**GFEE comments August 17, 2020 (paraphrased):**

General Applicant Response to Duplicative SEQRA Procedural Comments: The GFEE comments raise nothing new, articulate the same erroneous claims about SEQRA as the Group raised previously and has raised in litigation, and that for the reasons the Applicant and Applicant's counsel have repeatedly articulated, the Commission would be acting in full compliance with SEQRA by functioning as an involved agency and issuing a Findings Statement based on the Final EIS. No redesignation of a new lead agency is required as the Town Board retains jurisdiction because it has multiple discretionary approvals that it must issue and there is no "new" project. The Town Board lead agency review anticipated the Planning Board as an involved agency in review of a Subdivision and Site Plan. The project has essentially been subject to a scaling back to exclude the public golf club, but the residential development and accessory golf course remain as part of the project. Specific comments and responses are provided herein.

- 1. There remain significant concerns regarding: water usage, open space fragmentation, land use intensity (locating two primary uses on a single site), nitrogen and pesticide impacts on water resources, lack of nitrogen impact "mitigation", and overall CLUP Standards and Guidelines compliance.*

Water use is not a Standard or a Guideline for Commission consideration and is fully addressed in the EIS record. Open space fragmentation is fully addressed in the Applicant's "Response to Pine Barrens Commission Draft Staff Report dated August 19, 2020" and prior responses. The proposed project conforms with the applicable Standard. Land use intensity is not a function of the Commission; however, the Town of Southampton Planning Board determined that land use density was appropriate and approved the Preliminary Subdivision. Nitrogen and pesticide impacts on water resources are fully addressed in the EIS record and this response (see 8 above). Lack of nitrogen impact "mitigation" is addressed in the EIS record, the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020) and prior responses, and in responses 8 and 9 above. Full compliance with the Standards and Guidelines is addressed in this response, the Applicant's "Response to Pine Barrens Commission Draft Staff Report dated August 19, 2020" and prior responses. All applicable comments have been addressed and the project is in conformance with the Standards and Guidelines of the CLUP.

2. *Relocating the STP to the "panhandle area" is "poor planning"*

As detailed in Section 1.3.5 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020), the STP was moved southward to the southern end of the "panhandle" area, on the west side of Spinney Road. This was promoted by the Town of Southampton to locate the STP near the East Quogue Cemetery, and in a location that is downgradient of the SCWA Spinney Road well field as well as downgradient of historic/present farm fields.

As stated in Section 3.3 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

To the contrary, from its initial planning efforts for the prior The Hills at Southampton MUPDD (which was supported by a majority vote of the Town Board and the SEQRA Findings Statement adopted by that body) and continuing through to the present day, in the form of the Lewis Road PRD. The proposed project has consistently conformed to the recommendations and requirements of the various applicable land use plans, including the Town Aquifer Protection Overlay District (APOD), the Town Central Pine Barrens Overlay District, the Town Comprehensive Plan Update, the Western Town GEIS, the East Quogue GEIS and adopted Recommended Land Use Plan, the SGPA and the Central Pine Barrens CLUP.

The STP will be approved by the Suffolk County Department of Health Services (SCDHS). The Draft Staff Report for the Commission meeting of August 19, 2020 indicates that the proposed project conforms with Standards 5.3.3.1.1 and 5.3.3.1.2 which address conformance with Article 6 of the Suffolk County Sanitary Code (SCSC) and STP location, respectively.

3. *Significant issues remain with respect to conformance to the SEQRA process.*

See response to comment 22 above.

**Andrea Spilka, President, Southampton Town Civic Coalition:**

1. *In attempting to meet the standards established in the CLUP, the applicant has significantly changed the impact on the environment, the community and in some ways, the viability of the development.*

The proposed changes are all positive and demonstrate even greater compliance with the CPB CLUP Standards and Guidelines. The minor revisions to the project's Master Plan that have and continue to

be incorporated are the Applicant's responses to Commission and/or Town comments and concerns regarding a number of inter-related issues, including: siting of the project's treatment facility and affordable housing units, and avoiding impact to steep slopes and minimizing fragmented open space, balanced against the need to maintain substantial naturally-vegetated perimeter buffer depth to the neighbors along Spinney Road.

2. *The current plan is substantially different than what the Planning Board granted in October, let alone the PDD that served as the basis for the FEIS.*

See response to comment 22 of the Pine Barrens Society above. All changes reduce potential environmental impacts and none has the potential to generate any new significant adverse environmental impacts.

3. *How are you going to reconcile the differences?*

Not applicable; the minor revisions to the project's Master Plan that have occurred since the initial submission of the PRD application have been made in response to comments expressed by the Commission and/or Town. This is a normal part of the SEQRA and land use review process.

4. *Here are just a few:*

- *Is there concern that the fertilizers and pesticides used on the golf course will impact the STP and any private wells on Spinney Road?*

No; the extensive analyses prepared for the Hills at Southampton PDD and subsequent Lewis Road PRD both indicate that the project's proposed ITHMP, GMP and fertigation program, with a general minimization of fertilizer-dependent landscaping, will not result in adverse impacts to any private water supply wells along Spinney Road, or to the project's STP.

- *The Nitrogen calculations were already a concern for Town Consultants who pressed the need for a Dispersion analysis.*

*At the time, the applicant's response circled back to the Final EIS done as part of the PDD review.*

*It doesn't make sense that an environmental review done for a denied project that looked nothing like what's being proposed now can be considered sufficient!*

As stated In Section 3.32 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

Preparation of a dispersion analysis is not consistent with standard practice for this type of analysis. The CPB CLUP does not require this form of analysis. This type of analysis was not part of Final Scope for DEIS. The SEQRA process is complete and the Commission was an involved agency that had the opportunity to provide input on the DEIS and did provide other input. The Commission must rely on EIS record which provided a full and complete analysis of groundwater impacts from nitrogen leading to the conclusion that the proposed project will not have an adverse impact on groundwater as a result of nitrogen. In fact, the proposed project had the least impact of the alternatives that were assessed, and overall will have a net negative nitrogen load when considering reuse of existing nitrogen contaminated groundwater for golf course irrigation. The comment overlooks the importance of existing contaminated groundwater (with concentrations as high as 29 mg/l), and the use of irrigation-fertigation to withdraw this water and reuse it for golf course irrigation thus removing it from the aquifer, reducing the amount of fertilizer nitrogen to be applied for golf course management, and promoting plant uptake of applied nitrogen through the use of an ITHMP.

Further, the method of analysis used in the DEIS is supported by past precedent of the Commission, and was incorporated into the CPB CLUP which contemplates a mass-balance approach at the property line of a project to determine compliance with the 2.5 mg/l guideline. Mass-balance modeling of nitrogen load and concentration such as the SONIR model has been effectively used for analysis of conformance with the 2.5 mg/l guideline for many projects since the inception of the Pine Barrens Act. Dispersion modeling, which is normally used in air quality and other types of analyses not related to clustered subdivisions or groundwater nitrogen loading analysis, was not contemplated for this type of analysis and therefore should not be considered. Given these factors, dispersion analysis is not appropriate for assessment of the proposed project.

- *The change in occupancy rate from 60 days to 183 days will have a substantial impact on nitrogen, and traffic and very possibly children in the EQ schools. How will you re-evaluate the impact of these changes?*

There is no change in the unit occupancy of the proposed project. The project has always been a seasonal resort community with use patterns consistent with DLC projects. Documents and justification is included in the EIS record that support an occupancy of not more than 60 days per year. All appropriate and applicable analyses have been completed with respect to nitrogen, traffic and schools, and this is part of the EIS record. The Town will DLC proposes to install a legal mechanism preventing

enrollment by way of voluntary covenants and restrictions that would ensure that no children that reside in the Lewis Road PRD community will enroll in the East Quogue UFSD.

- *How does the golf course relocation impact the Spinney Road Community?*

*Earlier reviews of the project concluded no adverse impact. However, in moving the golf course to the south, the developers have subsumed the Spinney Road homes inside the resort, reduced the PROMISED 200 foot BUFFERS to 70 feet and placed the STP 300 yards from their homes.*

The northerly limit of development has been shifted southward (to reduce impacts to the steep slopes in this part of the site). This has resulted in a need to reduce the retained naturally-vegetated side yard buffers on the east and west sides of the southern portion of the site. Substantial buffers are retained on the southwest part of the proposed site plan; ranging from 70 to 150 feet. This is not a Commission Standard for review.

Previously, the project's STP was located in the northwestern corner of the Kracke Property, about 2,200 feet from the nearest home on Spinney Road. As discussed above but not because of the general shift southward, the STP was moved to its present location in the southern portion of the site, on the west side of the cemetery property and a minimum of 600 feet from the nearest Spinney Road residence. The required SCDHS setback between a sewage treatment plant and a habitable structure is 200 feet. The separation is more than adequate such that the STP will not have any effect on neighboring properties. The STP will be approved by the Suffolk County Department of Health Services (SCDHS). The Draft Staff Report for the Commission meeting of August 19, 2020 indicates that the proposed project conforms with Standards 5.3.3.1.1 and 5.3.3.1.2 which address conformance with Article 6 of the Suffolk County Sanitary Code (SCSC) and STP location, respectively.

- *Roads are now 40' instead of standard 50' and the Circulation analysis shows that a spur Rd. is gone. How will the new Road configuration impact traffic flow and emergency vehicle access?*

The project's internal roadways are to be 40 feet in paved width, a design feature suggested by and acceptable to the Town. Provision of an emergency access to the project's internal roadway network at the northerly end off Spinney Road remains a possibility; such an access would be gated, with access only available to established emergency services providers. In this way, there would be no use of this roadway by the project's residents or visitors. This comment is not within the review capacity of the Commission.

- *The last iteration of the golf course didn't seem playable. This latest version is even smaller with only 78 acres instead of the usual 110-150.*

*More acreage has been designated "revegetated" than designated "fairways". Does revegetated mean trees will be cut down to plant grass? How will players easily get from one golf hole to another?*

The project's golf course design is eminently playable. The value of 78 acres for the project's golf course reflects only the active play areas (i.e., fairways, tees, greens, rough and the forested areas between adjacent fairways), and does not include any of the naturally-vegetated buffer spaces between the outermost fairways and the site's perimeter. These latter areas can easily total 50 acres and are typically included when estimating the acreage of a typical golf course. Please also see response to Pine Barrens Society comment 3.

- *How can open space compliance be monitored if the development is approved? The configuration of many of the home parcels and golf holes are identified as open space. How do you prevent encroachment?*

See response to Pine Barrens Society comment 6.

- *The Homeowners Association is in control of 233 acres of open space. Can any of it be repurposed or sold?*

No. The value of 233 acres is the acreage on the Hills South Parcel/Kracke Property that will be retained naturally-vegetated land and retained previously-cleared/disturbed land that will not be disturbed by the project. All of this land will be protected from future development by restrictive covenant filed with the County and Town. As such, it may not be unilaterally changed by either party.

- *With all the underground parking will there be a need for dewatering and how will it be implemented?*

As stated in Section 3.39 of the Applicant's "Response to Pine Barrens Commission Staff Review and Public Comments" (July 1, 2020):

The proposed clubhouse has been reduced in scale such that the depth of excavation required to construct its below-grade portion can be and has been minimized to the minimum necessary. There will be an ample (in excess of 40 feet) vertical separation between the bottom of this parking level and the water table so that no dewatering will be necessary to construct this facility.

- *What's the impact of a proposed world class golf course on water usage? Something that's already becoming an issue.*

The project's anticipated water use is well-established, and is determined by applicable design requirements of SCSC Article 6 and standard irrigation demands. The Applicant is not aware of this matter "already becoming an issue." The EIS record fully addresses water use. This comment is not within the capacity of the Commission for review.

- *The owners of the neighboring East Coast Mine have recently requested an expansion. They want to excavate the mine 40 feet deeper to just 10 feet about the groundwater table.*

*What's the impact of this expansion on the project- especially considering Suffolk County Health Department concerns about groundwater contamination beneath mining and vegetative waste processing facilities.*

*With the Damascus Road contamination just west of the project site, the project seems surrounded by contaminated sites.*

Matters pertaining to East Coast Mine and their plans are not the subject of this application and are not related to the proposed project or the Commission review to determine conformance with the CLUP Standards and Guidelines. The mine operator's application for a depth extension to its existing permit is at the discretion of the NYSDEC and applicable agencies, which will presumably evaluate that request in consideration of their respective requirements.

With respect to the closed Damascus Road landfill and its potential impacts, Section 2.0, sub-section 7. Contamination of the Applicant's "Supplement to the SEQRA Compliance Analysis, Lewis Road Planned Residential Development (PRD), Response to Town Consultant Information Request" (May 7, 2019) addressed this issue, as follows:

Attachment 3 contains a figure indicating the location of the closed former Town landfill site locally known as "the Damascus Road Landfill." As can be seen, the direction of flow in shallow groundwater (i.e., the Upper Glacial Aquifer) beneath this landfill is toward the southeast, parallel to and cross-gradient of groundwater beneath the project site that is also flowing in a southeasterly direction. As a result, any contaminated groundwater flowing from or passing beneath this landfill site will not flow beneath the project site. This confirms that this change in conditions is not of consequence with regard to the proposed project.

- *Since their first Lewis Road application, the plan has changed 3 times (December 23, 2019 and its June 3, 2020 and July 1, 2020)*

The basic project is for a subdivision that includes an accessory golf recreational amenity. These basic elements of the plan and the density have been constant factors throughout the entire process. The only changes are adjustments in design in response to comments. The project's Master Plan has been

undergoing continual minor revisions as a result of continued and on-going review by the Town and the Commission as part of the land use review process. This is a normal part of project review. This comment is not relevant to the Commissions responsibility to review a project for conformance with the Standards and Guidelines of the CLUP.

### Concerned Spinney Road Neighbors:

1. *“As fellow neighbors of Spinney Road we would like to make you aware of the fact that Discovery Land has again modified its proposal for a housing development and golf course in the Pine Barrens that we believe will impact the quality of life that we enjoy on Spinney Road.*

Minor revisions to the project's Master Plan have and continue occur to address Commission and/or Town comments regarding a number of inter-related issues, including: siting of the project's treatment facility and affordable housing units, and avoiding impact to steep slopes and minimizing fragmented open space, balanced against the need to maintain substantial naturally-vegetated perimeter buffer depth to the neighbors along Spinney Road. This comment is not relevant to the Commissions responsibility to review a project for conformance with the Standards and Guidelines of the CLUP.

2. *Firstly, the golf course will now be approximately 70 feet behind our backyard property lines for the entire length of the street as opposed to the 200-foot setback that was originally promised.*

Commission concerns about minimizing impacts to the steep slopes in the northern part of the site necessitate shifting the northerly golf holes southward, so that the other holes (as well as several lots and the associated roadway) must also undergo some realignment. As a consequence, the fairways on the southern portion of the site have been made slightly wider, which requires that the perimeter buffer depths on the both the eastern and western site boundaries in this area have been reduced. Nonetheless, the buffer on the west, against the rear property lines of the homes along the east side of Spinney Road, varies between 70 and 150 feet, and will be comprised of the existing natural vegetation in this area. Please also see response to A. Spilka comment 4 above. This comment is not relevant to the Commissions responsibility to review a project for conformance with the Standards and Guidelines of the CLUP.

3. *Secondly, a 9,000 SF storage building, as well as 12 workforce housing units will be constructed across the street from our homes on the opposite side of the uncleared section of Oakwood Cemetery.*

The proposed Maintenance Building and the Affordable Housing Unit structure (along with the proposed STP) will be located as indicated on the **Clearing Plan**, south of the site entrance area and to the west of the undeveloped portion of the cemetery. The **Clearing Plan** shows that these three structures will be buffered within the project site by retained natural vegetation of at least 100 feet in depth. Further,

these facilities will be separated from the residences on the east side of Spinney Road by the cemetery property, which is nearly 450 feet in width. Overall, there will be a minimum of 600 feet separating these residences and these three project facilities. This comment is not relevant to the Commissions responsibility to review a project for conformance with the Standards and Guidelines of the CLUP.

4. *Lastly, and perhaps the most odious, a large capacity sewerage treatment plant is planned in the same location.*

The STP has been shifted to its present location in the southern portion of the site in response to a specific comment of the Town to sight this facility downgradient of the Spinney Road well field and upgradient farmfields that have impact water quality. This is not a major change and on-balance, it is better from an environmental standpoint as outlined in prior responses.

5. *The nuisance of construction noise and dust pollution from just these adjacent features will progress for at least two full years (365) during the buildout. We will be virtually surrounded by clearing, excavation, noise and dust. To complete this project over the projected 6-year buildout period, approximately 300,000 cubic yards of soil (450 Tons) will be churned, shuffled, and redistributed. This undertaking will be constantly accompanied by the stereo sounds of BEEP-BEEP-BEEP, Diesel Engine Noise, and Payloader to Truck Metal Wall Slams. The disturbing effects of this "Lobster Claw" encasement will be relentless.*

Among the revisions to the project that have occurred as a result of detailed Commission and Town input, the project's grading program has been revised so that no excess soil will be generated (that would otherwise have to be removed from the site during the construction process). As no excess soil will be generated, there is no need to remove this material, and there will be a substantial decrease in the length, duration and intensity of potential impacts to the neighbors from construction-related truck traffic, noise and dust. Construction related impacts are addressed in the EIS record. This comment is not relevant to the Commissions responsibility to review a project for conformance with the Standards and Guidelines of the CLUP.

6. *We all enjoy viewing the peaceful sunsets throughout the year from our windows and now will have the luxury obstructed by all these structures."*

The visual impact analyses performed throughout the review process support a conclusion that the project will not cause any substantial or adverse impact on the existing views of the Spinney Road residents. This is due to the retention of dense, naturally-vegetated perimeter buffers adjacent to these neighbors, the substantial distances between development and these residents, the building massing and heights (where applicable), the building architecture, the low-density nature of the project itself, and the retention of natural vegetation within the development envelope.

**Comments on the Lewis Road PRD 08/18/2020 Pine Barrens Commission's Public Zoom Session August 25, 2020 by Ron Nappi:**

*1. Geographic Hydrology*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed geographic hydrology. The drainage system will accommodate stormwater per the Town's design requirements and erosion control measures as well as a SWPPP will be implemented. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines.

*2. Occupancy*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed project occupancy. As noted in response to Pine Barrens Society comment 8, the SONIR model has been updated to theoretically analyze the project as though it were occupied 365 days (not proposed), and the concentration of nitrogen in recharge is 0.48 mg/l. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines.

*3. Revised Master Plan*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed Prior Plan, the Revised Plan and the evolutionary changes in the project to address comments that has resulted in an improved plan that better conforms with the Standards and Guidelines and reduces environmental impact. The shift in development outside of steep slope areas will not have a significant adverse impact, and in fact will reduce impacts and better conform with avoidance of steep slopes and contiguous open space. The PRDs benefits with respect to nitrogen load reduction are not included the concentration of nitrogen in recharge, and therefore speculative comments regarding legacy pollution regarding concentration of nitrogen in groundwater is not relevant. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines.

#### *4. Adjusted Acreage*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed adjusted acreage of the project site. The addition of acreage and particularly the Timperman property is a beneficial aspect of the project that has increased the area with no commensurate increase in project density. Furthermore, such additional acreage removes land that would otherwise be privately held and potentially available for development. The addition of land is also consistent with the intent of the East Quogue LUP and sound planning practice. Any change in the fertilized area has been accounted for in the updated SONIR model submitted with the August 19, 2020 NPV Response to the Commission's Draft Staff Report and if the Guideline 5.3.3.1.3 applies, the resulting 0.24 mg/l is less than the 2.5 mg/l Guideline. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines.

#### *5. Course Play Area*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed comments regarding course plan area. In addition, please see response to Pine Barrens Society comment 3 above. In addition, the PRDs benefits with respect to nitrogen load reduction are not included the concentration of nitrogen in recharge, and therefore speculative comments regarding which areas will receive fertigation are not relevant. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines.

#### *6. Long Island Nitrogen Action Plan (LINAP)*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed nitrogen benefits of this project and updated information informed by LINAP. As noted in the SONIR Manual User Guide, site specific inputs were correctly adjusted to reflect the ITHMP and related factors concerning leaching rates as verified by Dr. A. Martin Petrovic, PhD on behalf of the Town of Southampton. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines given the non-applicability of Guideline 5.3.3.1.3 (as the project is not near ponds or wetlands) and the projects clear compliance with the 2.5 mg/l Guideline if it were to apply (0.24 mg/l).

## 7. *SONIR Modeling*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed SONIR modeling. The model was peer-reviewed by independent Applicant team members and reviewed by the Town's experts including Dr. A. Martin Petrovic, PhD and others. All questions and comments were thoroughly addressed during the SEQRA process and updates for the Commission simply involved an update of the model for the revised project acreage and design. The commentor provides speculative alternative calculations that are not supported or scientifically sound, particularly given the extensive analysis and review that has occurred with respect to nitrogen concentration and load. The project remains "net negative" in terms of nitrogen "load;" however, this benefit of the PRD is not even accounted for in the "concentration" which is what the Guideline relates to, if the Guideline even applies. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines, particularly given the non-applicability of Guideline 5.3.3.1.3 (as the project is not near ponds or wetlands) and the projects clear compliance with the 2.5 mg/l Guideline if it were to apply (0.24 mg/l).

## 8. *Soil*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed soils, geology, topography and erosion control. The project plan has been updated to achieve a "balanced" site. The grading plans demonstrate that this can be accomplished, and soil movement and reuse on-site is a typical part of any development. The comment speculates impacts regarding soil movement that are not consistent with construction practices and controlled development subject to Town engineering oversight, erosion control and SWPPP implementation. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the Commission's review of the Standards and Guidelines.

## 9. *Turf Leach Rates*

The Draft/Final EIS, Town Board Findings Statement, Planning Board review of the SEQRA Compliance documents and the Planning Board Findings Statement, as well as comments and responses with the Commission, and the overall EIS and project review record have thoroughly addressed turf leach rates as related to the proposed project and the SONIR model that makes use of these data inputs. The model was peer-reviewed by independent Applicant team members and reviewed by the Town's experts including Dr. A. Martin Petrovic, PhD and others. All questions and comments were thoroughly addressed during the SEQRA process and updates for the Commission simply involved an update of the model for the revised project acreage and design. The record is complete and no new comments that have not been addressed are posited by this comment. The comment itself is not relevant to the

Commission's review of the Standards and Guidelines, particularly given the non-applicability of Guideline 5.3.3.1.3 (as the project is not near ponds or wetlands) and the projects clear compliance with the 2.5 mg/l Guideline if it were to apply (0.24 mg/l).

### Observations/Conclusions

The observations and conclusions in this comment document are the opinion of the commentor. The Applicant stands by the EIS record and project comment/response record before the Commission. The Commission's role relates only to a determination of the project's conformance with the CLUP Standards and Guidelines and many of the comments in this document are not applicable to the Commission's determination.

### General Comments In-Favor of and Opposed to the Project:

In addition to the above-cited specific comments, a series of generalized comments opposed to and in support of the project were received.

Generalized expressions in opposition to the proposed Lewis Road PRD:

- Michael Alestra
- Susan Bailey (1)
- Susan Bailey (2)
- Sean Bouker
- Eileen Casino
- Avishek Chatterjee
- Melissa Clements
- Grace Cole
- Gerard Connelly
- Ethan Cowan
- Madeleine L. Dale
- Martin and Anne Downs
- Thomas Elefterion
- Yuki Endo
- Dennis Fagan
- Erin Haney
- Kathleen Hurwitz (1)
- Kathleen Hurwitz (2)
- Kathleen Hurwitz (3)
- Imcgevna@gmail.com
- Marie Jacobs

- Susan Kearns
- Julia Lane
- Susan and Tom Madigan
- Brendan Martin
- Michele Murray
- John Nelson
- Gregory Oh
- Blanca Ramirez
- Shannon Sartain
- Kristopher Selden
- Victoria and Jeffrey Greenbaum
- George Lynch
- Dominic J. Lodato
- Fred W. Thiele, Jr., NYS Assemblyman
- Susan Bailey

Generalized expressions of support for the proposed Lewis Road PRD:

- Anne Anthony
- Silas Anthony
- S. R. Anthony, Jr.
- John Artarian
- Melissa Bateman
- Thomas Bennetter
- Britton Bistran
- Ashley Bradley
- Edward Burke, Jr., Esq.
- Peter Cardel
- Ambrose Carr
- Abe & Lucy Cary
- Sharon Gregory Celi, Jr.
- Ted Davis
- Lisa Meyer Fertel
- Patrick Gorman
- Lindsey Gravina
- Patrick Haskell
- John Healey
- Jeffrey Heath
- Sheryl Heather
- Leslie M. Jones
- George Kast

- Mark F. Kessenrich, III
- Eleanor Kobel
- Joseph O. Kommer
- Karen Kooi
- Bill Kreistek, Sr.
- Mary B. Malhotra
- Tom McCarthy
- Wendy McCarthy
- Judith McDermott
- Maria Z. Moore, Mayor, Village of Westhampton Beach and Board of Trustees, Village of Westhampton Beach
- Matthew J. Morgan, DVM
- Tyler Morgan
- Lawrence Oxman
- Joe Petrocelli
- Kristie Roccoforte
- Peter Sartorius
- Peter Scott Sartorius, Jr.
- Mike Schwenk
- Aram V. Terchunian
- Celeste Tymann
- Glenn O. Vickers
- Ellen Cea
- Cyndi McNamara, Chair East Quogue CAC
- David A. Celi
- Dan and Mary Ellen Manning
- Carl Benincasa

Thank you for the opportunity to clarify any final questions that the Commission may have. The information in the record is sufficient to support a favorable decision on the pending application. The record concludes that the proposed project is consistent with all Standards and Guidelines of the CPB CLUP.

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**ATTACHMENT A**  
**SONIR HYPOTHETICAL ANALYSIS**  
**FOR 365 DAY OCCUPANCY (NOT PROPOSED)**

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# SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

NAME OF PROJECT

Lewis Road PRD - SEQRA Compliance Analysis (Aug. 26, 2020)  
118 resort homes; 12 WF Units; golf; STP; 10% Turf LR; 365d

DATA INPUT FIELD

<b>A Site Recharge Parameters</b>				<b>B Nitrogen Budget Parameters</b>			
		<b>Value</b>	<b>Units</b>			<b>Value</b>	<b>Units</b>
1	Area of Site	608.45	acres	1	Persons per Dwelling	2.90	persons
2	Precipitation Rate	49.90	inches	2	Nitrogen per Person per Year	10.0	lbs
3	Acreage of Rough/Res/Golf Landsc.	58.05	acres	3	a. Sanitary Nitrogen Leaching Rate	84%	percent
4	Fraction of Land in above	0.095	fraction	3	b. Treated Sanitary Nitrogen Leaching Rate	100%	percent
5	Evapotranspiration from above	23.00	inches	4	Fertilized Land (Golf Rough/Res/Golf Landsc.)	58.05	acres
6	Runoff from above	0.50	inches	5	Fertilizer Application Rate (for above)	1.00	lbs/1000 sq ft
7	Acreage of Greens/Tees/Fairways	33.16	acres	6	Fertilizer Nitrogen Leaching Rate (for above)	10%	percent
8	Fraction of above	0.054	fraction	7	Fertilized Land (Greens/Tees/Fairways)	33.16	acres
9	Evapotranspiration from above	23.90	inches	8	Fertilizer Application Rate (for above)	2.50	lbs/1000 sq ft
10	Runoff from above	0.50	inches	9	Fertilizer Nitrogen Leaching Rate (for above)	10%	percent
11	Acreage of Unvegetated/Dirt Roads	4.81	acres	10	Outdoor Cat Population	0.74	pets/dwelling
12	Fraction of above	0.008	fraction	11	Cat Waste Nitrogen Load	3.22	lbs/pet/year
13	Evapotranspiration from above	6.36	inches	12	Outdoor Dog Population	1.40	pets/dwelling
14	Runoff from above	1.05	inches	13	Dog Waste Nitrogen Load	4.29	lbs/pet/year
15	Acreage of Water/Ponds/Wetlands	3.37	acres	14	Pet Waste Nitrogen Leaching Rate	25%	percent
16	Fraction of Site in above	0.006	fraction	15	Adjusted Pet Waste (days/year occupied)	16%	percent
17	Evaporation from above	30.00	inches	16	Area of Land Irrigated	91.21	acres
18	Makeup Water (if applicable)	0.00	inches	17	Irrigation Rate	21.40	inches
19	Acreage of Natural/Natural Reveg.	483.66	acres	18	Irrigation Nitrogen Leaching Rate	10%	percent
20	Fraction of above	0.795	fraction	19	Atmospheric Nitrogen Application/Load	0.04	lbs/1000 sq ft
21	Evapotranspiration from above	23.00	inches	20	Atmos. N Leaching Rate (Natural/Wetlands)	25%	percent
22	Runoff from above	0.35	inches	21	Atmos. N Leaching Rate (Turf 30%; Golf 20%)	20%	percent
23	Acreage of Impervious/Paved/Bldgs	24.00	acres	22	Atmos. N. Leaching Rate (Ag; Imperv; Other)	40%	percent
24	Fraction of Land in above	0.039	fraction	23	Nitrogen in Water Supply	2.00	mg/l
25	Evapotrans. from above	4.99	inches	24	Nitrogen in Sanitary Flow -1	10.00	mg/l
26	Runoff from Impervious	0.00	inches	25	Nitrogen in Sanitary Flow -2	10.00	mg/l
23	Acreage of Other (Rain Gardens)	1.40	acres				
24	Fraction of Land in above	0.002	fraction				
25	Evapotrans. from above	23.90	inches				
26	Runoff from above	0.00	inches				
27	Acreage of Land Irrigated	91.21	acres				
28	Fraction of Land Irrigated	0.150	fraction				
29	Irrigation Rate	21.40	inches				
30	Number of Dwellings	130	units				
31	Water Use per Dwelling	300	gal/day				
32	Wastewater Design Flow (units)	0	gal/day				
33	Wastewater Design Flow (total)	40,957	gal/day				
34	Adjusted WW Design Flow (total)	40,957	gal/day				

  

<b>C Comments</b>									
1) Please refer to user manual for data input instructions; updated per LINAP.									
2) Runoff for turf areas increased/adjusted to 2.1% of ppt.									
3) Irrigation includes April-Oct.; based on 51,456,148 gpy; irrigation equals ET.									
4) Greens area equals 2.62 acres and does not include rain gardens.									
5) Bunkers and rain gardens are not fertilized or irrigated.									
6) Evapotranspiration from Unvegetated is 30% of ET for vegetated surfaces.									
7) Evapotranspiration from Rain Gardens is similar to other landscaping.									
8) Rain Garden runoff is adjusted to be similar to natural areas.									
9) Fertilizer nitrogen leaching rate is 10%; all landscaping maintained by GC									
10) Irrigation adjusted to increase runoff to 2.1% of ppt, and add leaching.									
11) Area of land irrigated includes all turf/landscaping, plus golf rough.									
12) Wastewater flow adjusted for maximum of 60 days/year; ensured by C&R.									
13) Rain Gardens adjusted for 70% Nitrogen removal efficiency (see Sheet 4).									
<table> <tr><td>Developed Area</td><td>118.58</td><td>19%</td></tr> <tr><td>Natural/Unvegetated/Revegetated Area</td><td>472.42</td><td>78%</td></tr> <tr><td>Total Acreage Check</td><td>608.45</td><td>100%</td></tr> </table>	Developed Area	118.58	19%	Natural/Unvegetated/Revegetated Area	472.42	78%	Total Acreage Check	608.45	100%
Developed Area	118.58	19%							
Natural/Unvegetated/Revegetated Area	472.42	78%							
Total Acreage Check	608.45	100%							

**SITE RECHARGE COMPUTATIONS**

<b>A Golf Rough/Res/Golf Landsc.</b>			<b>B Greens/Tees/Fairways</b>				
	<i>Value</i>	<i>Units</i>		<i>Value</i>	<i>Units</i>		
1	A = Fraction of Land in Cover Type	0.095	fraction	1	A = Fraction of Land in Cover Type	0.054	fraction
2	P = Precipitation Rate	49.90	inches	2	P = Precipitation Rate	49.90	inches
3	E = Evapotranspiration Rate	23.00	inches	3	E = Evapotranspiration Rate	23.90	inches
4	Q = Runoff Rate	0.50	inches	4	Q = Runoff Rate	0.50	inches
5	R(a) = P - (E + Q)	26.40	inches	5	R(b) = P - (E + Q)	25.50	inches
6	R(A) = R(a) x A	2.52	inches	6	R(B) = R(b) x A	1.39	inches

<b>C Unvegetated/Dirt Roads</b>			<b>D Water/Ponds/Wetlands</b>				
	<i>Value</i>	<i>Units</i>		<i>Value</i>	<i>Units</i>		
1	A = Fraction of Land in Cover Type	0.008	fraction	1	A = Fraction of Site in Water	0.006	fraction
2	P = Precipitation Rate	49.90	inches	2	P = Precipitation Rate	49.90	inches
3	E = Evapotranspiration Rate	6.36	inches	3	E = Evaporation Rate	30.00	inches
4	Q = Runoff Rate	1.05	inches	4	Q = Runoff Rate	0.00	inches
5	R(c) = P - (E + Q)	42.49	inches	5	M = Makeup Water	0.00	inches
6	R(C) = R(c) x A	0.34	inches	6	R(d) = {P - (E+Q)} - M	19.90	inches
				7	R(D) = R(d) x A	0.11	inches

<b>E Natural/Natural Revegetation</b>			<b>F Impervious/Paved/Roads</b>				
	<i>Value</i>	<i>Units</i>		<i>Value</i>	<i>Units</i>		
1	A = Fraction of Land in Cover Type	0.795	fraction	1	A = Fraction of Land in Cover Type	0.039	fraction
2	P = Precipitation Rate	49.90	inches	2	P = Precipitation Rate	49.90	inches
3	E = Evapotranspiration Rate	23.00	inches	3	E = Evapotranspiration Rate	4.99	inches
4	Q = Runoff Rate	0.35	inches	4	Q = Runoff Rate	0.00	inches
5	R(e) = P - (E + Q)	26.55	inches	5	R(f) = P - (E + Q)	44.91	inches
6	R(E) = R(e) x A	21.11	inches	6	R(F) = R(f) x A	1.77	inches

<b>F Rain Gardens</b>			<b>H Irrigation Recharge</b>				
	<i>Value</i>	<i>Units</i>		<i>Value</i>	<i>Units</i>		
1	A = Fraction of Land in Cover Type	0.002	fraction	1	A = Fraction of Land Irrigated	0.150	fraction
2	P = Precipitation Rate	49.90	inches	2	I = Irrigation Rate	21.40	inches
3	E = Evapotranspiration Rate	23.90	inches	3	E = Evapotranspiration Rate	21.40	inches
4	Q = Runoff Rate	0.00	inches	4	Q = Runoff Rate	0.00	inches
5	R(g) = P - (E + Q)	26.00	inches	5	R(h) = I - (E + Q)	0.00	inches
6	R(G) = R(g) x A	0.06	inches	6	R(H) = R(h) x A	0.00	inches

<b>I Wastewater Recharge</b>			<b>J Runoff Recharge</b>				
	<i>Value</i>	<i>Units</i>		<i>Value</i>	<i>Units</i>		
1	WDF = Wastewater Design Flow	40,957	gal/day	1	Q(A) = Runoff from Rough/Landscaped	0.048	inches
2	WDF = Wastewater Design Flow	1,998,722	cu ft/yr	2	Q(B) = Runoff from Tees/Fairways	0.027	inches
3	A = Area of Site	26,504,082	sq ft	3	Q(C) = Runoff from Unvegetated	0.008	inches
4	R(j) = WDF/A	0.08	feet	4	Q(E) = Runoff from Natural	0.278	inches
5	R(I) = Wastewater Recharge	0.90	inches	5	Q(H) = Runoff from Rain Gardens	0.000	inches
				6	Q(I) = Runoff from Irrigation	0.00	inches
				7	Q(tot) = Q(A)+Q(B)+Q(C)+Q(E)+Q(H)+Q(I)	0.36	inches

<b>Total Site Recharge</b>		
R(T) =	R(A)+R(B)+R(C)+R(D)+R(E)+R(F)+R(G)+R(H)+R(I)+R(J)+Q(tot)	
<b>R(T) =</b>	<b>28.56</b>	<b>inches</b>

**SITE NITROGEN BUDGET**

<b>A</b>	<b>Sanitary Nitrogen-Residential</b>	<b>Value</b>	<b>Units</b>
1	Number of Dwellings	0	units
2	Persons per Dwelling	2.90	capita
3	P = Population	0.00	capita
4	N = Nitrogen per person	10	lbs
6	N = (total; pre loss/removal)	0	lbs
7	LR = Leaching Rate	84%	percent
8	N(S) = P x N x LR	0.00	lbs
9	N = loss/removed	0.00	lbs

<b>C</b>	<b>Sanitary Nitrogen (Wastewater Design Flow)</b>		
1	CF = Commercial/STP Flow	40,957	gal/day
2	CF = Commercial/STP Flow	56,583,119	liters/yr
3	N = Nitrogen (1)	10.00	mg/l
4	N = Nitrogen (1)	1247.66	lbs
5	N =Nitrogen (2)	10.00	mg/l
6	N = Nitrogen (2)	1247.66	lbs
7	LR = Leaching Rate	100%	percent
8	N(S) = CF x N x LR	565,831,194	milligrams
9	N(S) = Sanitary Nitrogen	1247.66	lbs
10	N = loss/removed	0.00	lbs

<b>E</b>	<b>Fertilized Land (Golf Rough/Res/Golf Landscaped)</b>		
1	A = Area of Land Fertilized 1	2,528,658	sq ft
2	AR = Application Rate	1.00	lbs/1000 sf
3	N(T) = Nitrogen (total applied)	2528.66	lbs
4	LR = Leaching Rate	10%	percent
5	N(F1) = A x AR x LR	252.87	lbs
6	N = loss/removed	2275.79	lbs

<b>G</b>	<b>Atmospheric Nitrogen (existing condition)</b>		
1	Application Load	0.041	lbs/1000 sf
2	Area of Natural/Wetlands/1000 sf	21,276	1000 sf
3	Leaching Rate	25%	percent
4	Atmos. N Load-1 (natural/wetlands)	218.08	lbs/year
5	Area of turf/golf/1000 sf	3,973	1000 sf
6	Leaching Rate	20%	percent
7	Atmos. N Load-2 (golf/turf)	32.58	lbs/year
8	Area of Impervious/Agricult/1000 sf	1,255	1000 sf
9	Leaching Rate	40%	percent
10	Atmos. N Load-3 (ag; imperv; other)	20.58	lbs/year
11	N(at) = N Load 1 + 2 +3	271.24	lbs
12	N = loss/removed	815.43	lbs

<b>B</b>	<b>Cat Waste Nitrogen</b>	<b>Value</b>	<b>Units</b>
1	Number of Cats per Dwelling	0.74	cats/dwelling
2	Number of Cats (Cats/dwelling x dwellings)	96	cats
3	Cat Waste Nitrogen Load	3.22	lbs/cat/year
4	N(p) = AR x cats x Adjustment (if applicable)	50.92	lbs/year
5	LR = Leaching Rate	25%	percent
6	N(P) = N(p) x LR	12.73	lbs
7	N = (loss/removed)	38.19	lbs

<b>B'</b>	<b>Dog Waste Nitrogen</b>	<b>Value</b>	<b>Units</b>
1	Number of Dogs per Dwelling	1.40	dogs/dwelling
2	Number of Dogs (Dogs/dwelling x dwellings)	182	dogs
3	Dog Waste Nitrogen Load	4.29	lbs/dog/year
4	N(p) = AR x dogs x Adjustment (if applicable)	128.35	lbs/year
5	LR = Leaching Rate	25%	percent
6	N(P) = N(p) x LR	32.09	lbs
7	N = (loss/removed)	96.26	lbs

<b>D</b>	<b>Water Supply Nitrogen (other than wastewater, if applicable)</b>		
1	WDF = Wastewater Design Flow	0	gal/day
2	WDF = Wastewater Design Flow	0	liters/yr
3	N = Nitrogen in Water Supply	10.00	mg/l
4	N(WW) = WDF x N	0	milligrams
5	N(WW) = Wastewater Nitrogen	0.00	lbs

<b>F</b>	<b>Fertilized Land (Greens/Tees/Fairways)</b>		
1	A = Area of Land Fertilized 2	1,444,450	sq ft
2	AR = Application Rate	2.50	lbs/1000 sf
3	N(T) = Nitrogen (total applied)	3611.12	lbs
4	LR = Leaching Rate	10%	percent
5	N(F2) = A x AR x LR	361.11	lbs
6	N = loss/removed	3250.01	lbs

<b>H</b>	<b>Irrigation Nitrogen</b>		
1	R = Irrigation Recharge (inches)	0.00	inches
2	R = Irrigation Rate (feet)	0.0001	feet
3	A = Area of Land Irrigated	932,376	sq ft
4	R(I) = R(irr) x A	51	cu ft
5	R(I) = Site Irrigation (liters)	1,451	liters
6	N = Nitrogen in Water Supply	2.00	mg/l
7	N(T) = Nitrogen (total applied)	0.01	lbs
8	LR = Leaching Rate	10%	percent
9	N(irr) = R(I) x N x LR	290	milligrams
10	N(irr) = Irrigation Nitrogen	0.00	lbs
11	N = loss/removed	0.01	lbs

<b>Total Site Nitrogen</b>		
N=	N(S) + N(P) + N(WW) + N(F1) + N(F2) + N(ppt) + N(irr)	
N=	<b>2,177.69</b>	lbs

**SIMULATION OF NITROGEN IN RECHARGE (SONIR)**

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

NAME OF PROJECT

Lewis Road PRD - SEQRA Compliance Analysis (Aug. 26, 2020)  
118 resort homes; 12 WF Units; golf; STP; 10% Turf LR; 365d

**FINAL COMPUTATIONS**

A	Nitrogen in Recharge	Value	Units
1	N = Total Nitrogen (lbs)	2,177.69	lbs
2	N = Total Nitrogen (milligrams)	988,672,847	milligrams
3	R(T) = Total Recharge (inches)	28.56	inches
4	R(T) = Total Recharge (feet)	2.38	feet
5	A = Area of Site	26,504,082	sq ft
6	R = R(T) x A	63,074,527	cu ft
7	R = Site Recharge Volume	1,786,270,616	liters
9	NR = N/R	0.55	mg/l

CONCENTRATION OF NITROGEN IN RECHARGE	
Pre-Mitigation	<b>0.55</b>

A	Nitrogen in Recharge	Value	Units
1	N = Total Nitrogen (lbs)	1,885.30	lbs
2	N = Total Nitrogen (milligrams)	855,924,762	milligrams
3	R(T) = Total Recharge (inches)	28.56	inches
4	R(T) = Total Recharge (feet)	2.38	feet
5	A = Area of Site	26,504,082	sq ft
6	R = R(T) x A	63,074,527	cu ft
7	R = Site Recharge Volume	1,786,270,616	liters
9	NR = N/R	0.48	mg/l

CONCENTRATION OF NITROGEN IN RECHARGE	
With Mitigation (not including well pumping)	<b>0.48</b>

B	Site Recharge Summary	Value	Units
1	R(T) = Total Site Recharge	0.00	inches/yr
2	R = Site Recharge Volume	63,074,527	cu ft/yr
3	R = Site Recharge Volume	471,830,264	gal/yr
4	R = Site Recharge Volume	471.83	MG/yr

**MITIGATION COMPUTATIONS**

M1	Reuse of Irrigation Water	Value	Units
1	IW = Reused Irrigation Water	54,795	gal/day
2	IW = Reused Irrigation Water	75,700,000	liters/yr
3	N = Nitrogen in Aquifer	10.00	mg/l
4	AF = Additional Factor (n/a)	100%	percent
5	N(IW) = IW x N x AF	757,000,000	milligrams
6	N(IW) = Irrigation N Reduction	1669.19	lbs

Conversions used in SONIR	
Acres x 43,560 =	Square Feet
Cubic Feet x 7.48052 =	Gallons
Cubic Feet x 28.32 =	Liters
Days x 365 =	Years
Feet x 12 =	Inches
Gallons x 0.1337 =	Cubic Feet
Gallons x 3.785 =	Liters
Grams / 1,000 =	Milligrams
Grams x 0.002205 =	Pounds
Milligrams / 1,000 =	Grams

M2	Lined Greens	Value	Units
1	A = Area of Land Fertilized 2	114,127	sq ft
2	AR = Application Rate	2.50	lbs/1000 sf
4	N(LG) = A x AR x LR	285.32	lbs
5	N(LG) = Potential Lined Greens N Reduction	285.32	lbs
6	N(LGeff) = Effective Lined Greens N Reduction	199.72	lbs (70% eff)

**Mitigation Summary**

<b>M1 Reuse of Irrigation Water</b>	<b>1,669.19</b>
<b>M2 Lined Greens</b>	<b>199.72</b>
<b>M3 Rain Gardens</b>	<b>4.96</b>
<b>Total</b>	<b>1,873.86</b>
<b>Total Nitrogen</b>	
Site Nitrogen (No Mitigation)	2,177.69
Mitigation Nitrogen	<b>1,873.86</b>
Adjusted Total Site Nitrogen	<b>303.83</b>
<b>Total Anthropogenic Nitrogen</b>	
Site Nitrogen (No Mitigation)	1,906.45
Mitigation Nitrogen	<b>1,873.86</b>
Adjusted Total Site Nitrogen	<b>32.59</b>

M3	Rain Gardens	Value	Units
1	RG = RG Recharge (inches)	0.36	inches
2	RG = RG Recharge (feet)	0.03	feet
3	A = Area of Golf Runoff (SF)	1,444,450	SF
4	RG = RG Recharge Volume (CF)	43,441	CF
5	RG = RG Recharge (Gallons/year)	324,965	gal/yr
6	RG = RG Recharge (Liters/year)	1,229,992	liters/yr
8	N = Nitrogen in Runoff (mg/l)	2.61	mg/l
9	N = Nitrogen Load (milligrams)	3,210,279	milligrams
10	N(IW) = IW x N x AF	7.08	lbs
12	N(RG) = Potential Rain Garden N Reduction	7.08	lbs
13	N(RGeff) = Effective Rain Garden N Reduction	4.96	lbs (70% eff)