

Hampshire Country Club Planned Residential Development

Village of Mamaroneck, Westchester
County, New York

LEAD AGENCY

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RESPONSE TO FEIS COMPLETENESS COMMENTS_JULY 2019



B. Project History

The DEIS was prepared based on a scoping document that was adopted after a public scoping session. Chronology of the SEQRA review of the Project (to date) is as follows:

9/30/15	Lead Agency Declared/Positive Declaration Issued
11/18/15	Scoping document adopted
12/13/17	DEIS accepted as adequate and complete for public review
2/14/18 and 4/11/18	DEIS public hearing held
5/14/18	End of Public Comment Period on DEIS

C. Project Description

The Applicant proposes to develop a new Planned Residential Development ("PRD") of single-family homes and semi-detached carriage houses located on a portion of the existing Hampshire Country Club golf course in the Village of Mamaroneck, NY. The proposed PRD consists of 105 residential units (comprising 44 single-family detached housing lots and 61 carriage homes, which consist of 28 two-family and 33 three-family semi-detached housing lots) on the Project Site (the "Proposed Action"). The Proposed Action would also include development of seven tennis courts and 30.6 acres of common open space, which would be kept in a natural state. No development or ground disturbance from the proposed residential buildings or tennis courts would occur within a minimum of 100 feet of the wetlands at the Project Site. The existing golf course use would be downsized to a 9-hole course to facilitate the development of the PRD. The Applicant explored the possibility of reconfiguring all holes of the downsized golf course at least 100 feet from any wetland, however this was determined to be infeasible on the Project Site because the golf course design requires the holes to be located as it is currently laid out. No development is proposed in the MR-zoned area where the existing membership club facilities (including a clubhouse, pool and parking areas) are located. These amenities would remain on the Project Site. Development is limited to the R-20-zoned area in the Village of



Mamaroneck. There are 2.91 acres of wetlands in the R-20 zone including the 100 foot buffer in the golf portion of the zone. There are no wetlands in the non-golf portion of the R-20 zone. The R-20 golf portion of the zone contains 3.45 acres of 15-25% slopes with no slopes greater than 25% and there are 3.3 acres of 15-25% slopes with no slopes greater than 25% in the non-golf portion of the R-20.

With the proposed grading changes, all proposed buildings would be located outside the 100-year and 500-year floodplains. All new buildings and roadways would be built with a minimum finished first floor elevation of 16 feet, which is four feet above the 100 year flood elevation of 12 ft elevation. The Proposed Action would not increase overall flood elevations on the Project Site, or on neighboring properties.

Three existing access roads to the Project Site (Cove Road, Eagle Knolls Road and Cooper Avenue) would be modified as part of the Proposed Action. The privately-owned portion of Cove Road within the Project site would be relocated and would form the central corridor for the Project. Eagle Knolls Road would be relocated from its existing location and would intersect with the relocated Cove Road prior to terminating in a cul-de-sac. Cooper Avenue, which currently extends from Old Boston Post Road to its terminus at the driveway to an existing golf course maintenance facility, would be extended into the Project Site and would intersect with Cove Road. A new internal roadway, "Road A", would intersect with Cove Road and terminate in a cul-de-sac as shown in Figure 2 of Appendix C in the FEIS.

The Proposed Action would realign Cove Road at a mean 14-foot elevation, which is above or at the 100-year and 500-year flood elevations. The realigned Eagle Knolls Road would have a mean 14.5-foot elevation. Furthermore, Cooper Avenue would be extended to provide emergency access and the entire length of Cooper Avenue would be higher than the 100-year flood elevation.

A Construction Phasing Plan for the Proposed Action is provided as Figure 3 in FEIS Appendix C. Based on the size of the Project Site, work must be performed in phases to minimize the area of disturbance at any given time. Excavation and filling activities would be performed in two steps: establishment of realigned Cove Road and single-family lots; and establishment of three extensions to realigned Cove Road including the Cooper Road extension, realigned Eagle Knolls Road and Road A. This approach establishes the central spine of the project providing the connection between Cove Road and Eagle Knolls Road and establishment of the core utilities for the project within realigned Cove Road.

Construction activity for the proposed development would be performed by first excavating, grading and filling to establish development sites for single family and carriage homes. Next utilities would be installed within the streets followed by placement of road bed and sidewalks. The housing would then be constructed on finished lots followed by surface treatments including topsoil and seeding, and driveways. Housing would be constructed when there is a buyer and it is anticipated that about 20 units would be constructed annually.



Temporary fill would occupy the basement area for each house before it was built. The main development platform would be first constructed to a rough grade below the final grade. When the foundations are constructed and the basements dug, the excess soil would be displaced in the vicinity of the residence, bringing the surrounding area up to grade. Surface materials such as topsoil and asphalt would be placed after the initial nine months of construction as residences are completed. Fill would be removed and relocated to other areas in need of fill when basements are constructed.

The development platforms would be stable during the life-span of the Project. The area of flooding under the Proposed Action would be similar to the existing area of flooding, the low-lying vegetated areas with grass and tree cover. The existing golf course has experienced a number of flooding events without significant erosion issues. In addition, the Project Site is outside the FEMA Wave Action limit, meaning wave action would not destabilize the development platforms. The proposed vegetated slopes of the development platform would be sufficient to resist erosion during flooding events.

As presented in the Preliminary Construction Work Plan (CWP), activity for the proposed development would primarily be divided into three stages, grading, structures and finishing. Excavation and filling activities would be performed in two steps; Step 1). establish realigned Cove Road and single family lots, and Step 2). establish three extensions to realigned Cove Road including Cooper Road extension, realigned Eagle Knolls Road and Road A. This approach establishes the central spine of the project allowing the connection between Cove Road and Eagle Knolls Road and establishment of the core utilities for the project within realigned Cove Road to serve the project. As grading activities progress, areas will be stabilized with temporary seed to maintain a total disturbed area under five acres at any given time. Disturbed area is an area without vegetation of other stabilizing method to prevent erosion of soil. Proper management of disturbed area based on planned construction of residences can be limited to an aggregate of five acres without impacting development progression.

Soil disturbance activities will minimize total area of soil disturbance to 5 acres or less at any given time.

Work will be performed in accordance with New York State New York Stormwater Management Design Manual, January 2015 edition, which provides guidance for soil erosion measures for a variety of weather conditions and time of year.

Project Modifications

Certain modifications were made to the proposed Project since the acceptance of the DEIS. Below is a summary of these modifications.



Avenue. The portion of Cooper Avenue on the Project Site is proposed to be elevated to a mean elevation 14-feet dipping to 13-feet at the property exit meeting the existing Cooper Avenue which would provide access one foot above the current FEMA 100-year flood elevation. Cooper Avenue would be utilized for emergency access only. The current plan proposes to increase the width of Cooper Road to 20 feet on the Project Site nearest the golf course where the road currently narrows down to 15 feet. As detailed in Response G.5 of this FEIS, the Applicant believes the access is adequate for the emergency access for the project.

As detailed above, the additional analyses undertaken by the Applicant team show that there would be no significant adverse impacts related to floodplain management resulting from the Proposed Action.

Tree Removal and Replacement

Regarding tree removal and replacement, the SEQRA Scope required a full description of proposed tree removal, including a complete inventory of trees larger than 8" diameter measured three feet above the base of the trunk and a diagram indicating trees over 8" diameter to be removed, along with proposed mitigation measures. As required, the DEIS provided a tree removal plan (DEIS Exhibit 3K-1), showing a total of approximately 432 trees to be removed, as well as a Landscaping Plan (DEIS Exhibits 2-14a and b) indicating that trees would be replaced at a 1 to 1 ratio and placed to provide vegetative buffers between new residential buildings and the existing neighboring properties. The DEIS analysis found that the inclusion in the Project site plan of the private recreational space would attract a more robust wildlife species assemblage than exists on the Project Site currently.

Lead Agency and public comments received on the DEIS dealing with tree removal and replacement, as well as associated responses from the Applicant, are described below.

- Lead Agency comments requested additional information on the timing of proposed tree clearing, as well as an analysis of the basal area of existing trees to be cut versus the basal area of new replacement trees to be planted. In response, this FEIS details no trees would be cut from April 15th through July 31st to avoid direct taking of migratory birds. The trees that need to be removed would be limited to the 55.6-acre area of disturbance. The Applicant is proposing to replant 432 trees to replace those that would be removed. The existing basal area of the trees to be removed is 1,575.72 square feet. The basal area of the replacement trees would be 132.53 square feet after 10 years of growth (see FEIS Appendix K). While the Applicant recognizes that there would be tree basal area loss, the number of trees to be replanted is equal to the number that are being removed. The trees identified in the Landscaping Plan (Figure 14a and b in FEIS Appendix C) would near maturity within 15 years. The size chosen for the plan are common and would typically establish faster than a larger tree. The tree basal area would increase at least 10% each year of its growth. Once established, the basal area rate of



Comment Source/Page		Commenter	Date	FEIS Subsection	Comment/ Response Number
Public Comment Letter 224	pg. 1	Maxine Fleury	5/13/2018	4 Alternatives	4.23
Public Comment Letter 225	pg. 1	Lisa Gagnum Boillot	5/13/2018	4 Alternatives	4.23
Public Comment Letter 226	pg. 1	Aramis Boillot	5/13/2018	4 Alternatives	4.23
Public Comment Letter 227	pg. 1	Etienne Boillot	5/13/2018	4 Alternatives	4.23
Public Comment Letter 228	pg. 1	Allan Wolkoff	5/13/2018	4 Alternatives	4.23
Public Comment Letter 229	pg. 1	Doug Serton	5/13/2018	4 Alternatives	4.23
Public Comment Letter 230	pg. 1	Rachel Serton	5/13/2018	3T Miscellaneous Comments	T.5
Public Comment Letter 231	pg. 1	Martha McCarthy-Falk	5/14/2018	3T Miscellaneous Comments	T.5
Public Comment Letter 232	pg. 1	Frederic Misse	5/14/2018	4 Alternatives	4.23
Public Comment Letter 233	pg. 1	Vincent Fleury	5/14/2018	4 Alternatives	4.23
Public Comment Letter 235	pg. 1	Terry Grant	5/13/2018	3M Traffic, Transit, and Pedestrians	M.51
Public Comment Letter 236	pg. 1	Renee Crabtree	5/14/2018	4 Alternatives	4.23
Public Comment Letter 237	pg. 1	John Cecil	5/14/2018	4 Alternatives	4.22
Public Comment Letter 239	pg. 1	Patricia and Arnaud Goullin	5/14/2018	4 Alternatives	4.23
Public Comment Letter 240	pg. 1	Susan Feitler	5/14/2018	4 Alternatives	4.23
Public Comment Letter 241	pg. 1	Jack Lusk	5/14/2018	3 Project Description	3.3
Public Comment Letter 242	pg. 1	Stephen L. Kass	5/14/2018	4 Alternatives	4.3
Public Comment Letter 243	pg. 1	John Cecil	5/14/2018	3G Floodplains	G.37
Public Comment Letter 243	pg. 1	John Cecil	5/14/2018	3Q Environmental Contamination	Q.1
Public Comment Letter 243	pg. 1	John Cecil	5/14/2018	3M Traffic, Transit, and Pedestrians	M.53
Public Comment Letter 243	pg. 2	John Cecil	5/14/2018	3N Community Demographics, Facilities and Services	N.8



Comment 1.7:

Page 1-20. Alternative B. "With this alternative, the Village of Mamaroneck would lose a good portion of the open space/recreation that currently is provided on the R-20 portion of the Project Site." The private aspect of this space should be noted, as in "open space/private recreation." This clarification should be made throughout the document.

(Memo 1, pg. 1, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 1.7:

Comment noted. The DEIS should state "private open space/recreation," which is applicable throughout the document.

Comment 1.8:

Page 1-11. First paragraph. Sentence starting with "Given these.." Replace "measure" with "measures".

(Memo 1, pg. 1, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 1.8:

Comment noted. The DEIS should state "measures" instead of "measure" on Page 1-11.

Comment 1.9:

Page 1-12. Mitigation measures. Remove extra period at the end of the first sentence.

(Memo 1, pg. 1, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 1.9:

Comment noted.

Comment 1.10:

Page 1-15. The statement that noise impacts would be negligible is not supported by analyses in the DEIS. This discussion may need to be revised based on the results of additional noise analyses.

(Memo 1, pg. 1, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

**Response 1.10:**

A detailed construction noise study has been conducted and includes existing ambient noise measurements, predictions of construction noise, an assessment according to applicable state policies and local ordinances, and recommendations for best management practices to reduce construction noise effects. The Construction Noise Study is attached as FEIS Appendix Y. As discussed, construction noise levels would increase existing ambient conditions by more than 10 dBA at certain locations close to the proposed earthwork construction. Although noise levels would not exceed 65 dBA (Leq), best management practices to reduce construction noise would be implemented. The predominant source of construction noise would be the stationary equipment. In efforts to reduce potential noise impacts during construction, noise reduction measures would include limitations to certain daytime and weekday hours, locating stationary construction equipment far from noise-sensitive sites, and use of temporary noise barriers, among others. With the implementation of these noise reduction measures, no significant noise impacts are anticipated.

As discussed on page 3C-5 of the DEIS, rock removal is anticipated to meet the proposed grades for the project. An area of bedrock removal has been identified in the vicinity of lot 9 based on borings performed by GZA (as shown in Appendix N and in Figure 10b in FEIS Appendix C). Bedrock would be required to be removed up to 5 to 6 feet to meet the proposed surface grade, and additional removal would be required to accommodate the basements for residences in the vicinity. Based on the character of the rock, it is expected that blasting would be required to achieve proposed grade. During construction careful attention must be paid to the neighboring properties during construction. The selected blasting shall be performed by a New York State licensed blasting contractor. The selected contractor would prepare a written Blasting Plan in accordance with the Village of Mamaroneck Village Code Chapter 120 and the New York Department of Transportation "Geotechnical Engineering Manual: Procedure for Blasting" latest edition, providing a detailed description of the means and methods of the proposed rock removal program. This plan would be forwarded to the Village Engineering Department and Building Department for review. The number of blasts cannot be accurately determined until a blast contractor has been selected. Blasting is dependent on proximity of adjacent structures, analysis of rock system and blast charge selection determined by the blast contractor. Based on the minor volume of rock to be removed it is estimated that blasting will require one to two weeks to perform with normally two blasts per day.

Comment 1.11:

Page 1-16. Define the length of the short term period during which construction impacts to air quality could occur.



(Memo 1, pg. 1, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 1.11:

Under the Proposed Action, the most significant period of construction truck traffic (and associated noise and air quality effects) would occur in the first nine months when the central development platform is being prepared. The fill import for the central development platform (realigned Cove Road) will be relocated from fill sources on the Project Site and from offsite sources during these first 9 months of the Project. Following placement of the fill for the central platform, construction will commence on the residences and the related improvements for lots on Realigned Cove Road. Following the first 9 months, excavation and fill activities will also commence on the remaining development areas of Road A, Realigned Eagle Knolls Road and Cooper Avenue Extension. During the first nine months, it is estimated that there would be approximately 24 soil fill trucks per day (on a five-day per week schedule). After that, the number of soil fill trucks would begin to diminish to three or four trucks per day as the 105 units are built-out. Housing would be constructed pursuant to pre-sales and it is anticipated that about 20 units would be constructed yearly. However, the exact construction schedule is contingent on the build out rate of the homes; therefore, the duration of the construction period and the final build-out date are unknown at this time.

Comment 1.12:

Page 1-18. Mitigation measures. First paragraph. Last sentence. "Cooper" not "Copper".

(Memo 1, pg. 1, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 1.12:

Comment noted. The DEIS should state "Cooper" not "Copper," which is applicable throughout the document.

Comment 1.13:

Page 1-20. Alternative C. First sentence. Insert "be" after would

(Memo 1, pg. 2, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)



Response 3.4:

To the extent a new lease agreement is needed, a new lease would be prepared and ratified applicable to New York State Lease and Not-for-profit Corporation Law.~~Comment noted.~~

Comment 3.5:

Nine-hole golf course with a couple of holes here, a couple of holes there and spread out throughout the property. Typically, that's not the kind of golf course that people enjoy playing. So I think it would be a challenge for that golf course to stay in existence over the long term.

(Public Hearing 1, pg. 172, John Hofstetter, 2/14/2018)

Response 3.5:

See Response 3.1.

Comment 3.6:

I do think if they allow any kind of development, there should be significant reserves made by the developer to maintain for the stormwater control and the roads and the schools. So you're going to have these trucks coming in, and they're going to damage the roads. And unless there's some provision for the developers to repave those roads and have it done and it falls back on the Village, I'm telling you, it ain't going to get done.

(Public Hearing 2, pg. 330, Jeff Stillman, 4/11/2018)

Response 3.6:

The Applicant (i.e., Hampshire Recreation, LLC) as owner of the entire Project Site would be responsible for maintaining the its stormwater infrastructure, landscaping and -as well as the private roads all roads on the Project Site during construction. After construction, a Homeowners Association would be created to manage the common areas associated with the residential development, including the stormwater infrastructure, and landscaped areas as shown on Figure 5, Open Space Plan. The Club would continue to own and be responsible for maintaining the stormwater management infrastructure and landscaping located within the club portion of the Project Site, as shown on Figure 5.



With respect to the roads on the Project Site after construction, the Applicant would convey title to the roads on the residential portion of the Project Site (identified in Figure 5 as yellow) to the Homeowner's Association, and the Homeowner's Association would be responsible for maintaining these portions of the roads. The Applicant would retain title to the portions of the roads located on the club portion of the Project Site (identified in Figure 5 as blue). The Applicant and Homeowner's Association would jointly offer all roads on the Project Site for dedication to the Village. Unless and until the Village accepts dedication of the roads, -the Applicant and the Homeowner's Association would maintain the roads in accordance with their respective responsibilities illustrated in Figure 5-

The stormwater infrastructure would remain either in the ownership of the Homeowner's Association or the Applicant, depending upon where on the Project Site it is located as illustrated in Figure 5.

The proposed open space areas are defined on Figure 5 in Appendix C and would be allowed to grow to a defined area of 30.57 acres. The HOA and golf course would be responsible for the maintenance of those areas if problems arise or landscaping adjustments are needed in the future. See Appendix H for the Landscape Management Plan.

All final details regarding the paving of roads, maintenance protocol for the stormwater infrastructure and landscaping, along with profiles of all-and public utilities, would be finalized during the site plan approval process, including any potential performance bonds that might be required to ensure the public infrastructure is installed. The plan shown in Figure 5 would be included within the Site Plan packet to be maintained in the Village's files so there would be a clear record as to the ownership and maintenance responsibilities of the roads, stormwater infrastructure and landscaping on the Project Site. In addition, the ownership and maintenance responsibilities of the Homeowner's Association would be memorialized in the Offering Plan to be filed with the New York State Attorney General's Office.

Comment 3.7:

Third thing: More information about club operations. The developers need to provide much more information about the ownership and operation of the club and expected economic and legal relationships relating to the club.

First, in the cluster development, how is the club to be owned and managed? What happens if, as I still believe is likely given the information we have, that the nine-hole golf club fails? Also, who would own the golf course?

(Public Hearing 2, pg. 360-361, and Public Comment Letter 179, pg. 3-4, Celia Felsher, 4/11/2018)



Comment 3.18:

During the April 11 public hearing a representative of the applicant said that the golf course configuration shown in the EIS would be revised. The revised course layout should be provided in the EIS and its attendant impacts analyzed.

(Memo 1, pg. 2, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 3.18:

As shown on Figure 2 in Appendix C, the golf course was revised to include a layout that allows a golfer easy transition from one hole to another. The proposed layout of the golf course as seen on Figure 2 would start in the southwest corner of the property and move in a counter clockwise direction. The golf course encircles the development with pathways for a golf cart to transition from one hole to the next. There are three areas of the golf cart pathway that would require roadway crossings. As shown on Figure 2, the golf cart would require taking a path along side of Eagles Knolls Road from hole 2 to hole 3. Another road crossing would take place between the 6th and 7th holes on Cooper Avenue, which is meant for emergency vehicles only. After the completion of the 9th hole the golf cart pathway runs between lots 41 and 42 and lots 6 and 7 requiring crossing over Cove Road to return the cart. The rest of the golf cart pathway would be surrounded by open space creating a buffer between the residential uses and the golfers. There would be no impacts to the occasional crossing of the cart over Cove Road or the emergency access of Cooper Avenue. Cart paths would be separate from pedestrian walkways and would be provided with signage, warning motorists and pedestrians at points of crossing with roads, driveways and sidewalks. Carts would be required to yield to motorists and pedestrians. Path materials and design of crossing areas would be detailed as part of Site Plan Application to the Village.

Comment 3.19:

Provide a figure illustrating the easements required for water and sewer dedication to the Village or county, including all those required for pipes and pump stations.

(Memo 1, pg. 2, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 3.19:

Figure 7 in Appendix C contains the Utility Easement Plan.



Comment 3.36:

Clarify the difference between member and non-member club events. Is any event sponsored by a single club member a "member event" or is there some other definition?

(Memo 1, pg. 3, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 3.36:

As defined in 342-35 of the Village of Mamaroneck Zoning Code, non-member events are "events or activities that are not restricted to members only or that are not hosted or financially guaranteed by a member". Member events are events that are restricted to members only or that are hosted or financially guaranteed by a member.

Comment 3.37:

Pages 2-18 and 2-27 contain statements that there are no cumulative impacts associated with the operations of the PRD and the Club. Further information should be provided justifying this statement. The EIS should provide information regarding the projected use of the site when the Club is holding special events. According to the DEIS there were 161 such events in 2016.

(Memo 1, pg. 4, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 3.37:

Page 2-18 of the DEIS states:

"Hampshire Country Club had 264 members as of early 2017. Given the balance between new potential members from project residents and potential loss of members from the reduction to a 9-hole course, in addition to the limits set by the special permit, the club expects both the number of members and the number of events held at the club annually to remain at their current levels once the project is complete. Throughout this DEIS, potential impacts are evaluated assuming that club membership will remain constant. Additional conditions set by the special permit, described above, in addition to the fact that operation levels are to remain consistent with current levels, will ensure that there will be no cumulative impacts associated with the operations of the PRD and Club."



The DEIS specifically states that throughout the DEIS potential impacts are evaluated and that the operation levels are projected to remain the same. Therefore, there would be no cumulative impacts. Cumulative impacts occur when multiple or incremental changes affect the same resource. Cumulative impacts would occur if the membership rate was expected to rise. This is not the case and therefore the statement in the DEIS remains accurate.

Page 2-27 states:

"It is the intention of current ownership of the club facility to continue operation as a social, tennis and swimming club during construction of the project. Current access to the club via Cove Road will be maintained. The parking lot to be located to the northeast of the clubhouse, with 50 proposed parking spaces, will be constructed during the first stage of construction and valet parking will be provided for club members. In addition, operation as a golf club will continue until construction makes it infeasible. At final build out, no changes in club operations are anticipated, with the exception of the reduction from an 18-hole to a 9-hole golf course. Therefore, cumulative impacts associated with the operations of the club and the Proposed Action are not anticipated."

Page 2-18 of the DEIS states "the club expects both the number of members and the number of events held at the club annually to remain at their current levels once the project is complete". Cumulative impacts occur when multiple or incremental changes affect the same resource. Cumulative impacts would occur if the membership rate was expected to rise and operations to the club were expected to change. This is not the case and therefore the statement in the DEIS remains accurate.

The Traffic Impact Study (TIS) in Appendix M of the DEIS evaluated the potential impact of special events in so much as these events typically take place after peak hours and standard engineering practice is to evaluate typical peak-hour conditions. The special events would not serve as a significant source of traffic impacts to key intersections since, by the time the traffic going to/coming from an event at the Club reached these intersections, the background levels of traffic would be lower than the peak times. In addition, because events are permitted and do occur at the Club today, any event traffic that were to occur in the peak hour would be included in the Existing and No-Build conditions also. Thus, the Level-of-Service (LOS) at the study intersections would not be significantly impacted. Studying LOS levels during special events, therefore, would not evaluate the highest potential traffic levels or project traffic impacts at the key intersections. Instead, the TIS measured LOS at the key intersections during peak travel times when traffic coming to/from the Club and the residential development could potentially most affect the LOS. The Final Scope required that trips from "the remaining club" should be included. The TIS included 19 trips from the Club in the AM peak hour, 22



trips from the Club in the AM peak hour and 34 trips from the Club in the Saturday peak hour). There would be no cumulative impacts given this analysis.

In addition, impacts to the PRD development regarding traffic and its potential impacts to the club were evaluated in Chapters M in the DEIS and FEIS. No significant impacts are anticipated as a result of the PRD development on club operations.

Comment 3.38:

Is a playground planned for the project?

(Memo 1, pg. 4, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 3.38:

No playground is currently anticipated for the Project Site.

Comment 3.39:

Will a buffer be provided between the relocated golf course and adjoining neighbors? If so, describe the buffer.

(Memo 1, pg. 4, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 3.39:

As shown on Figures 5 and 6, the golf course would be situated below the berms of the residential development. There would be landscaping provided along the berm for a buffer between the uses. In addition, most of the berm for the residential development abuts common open space and not the golf course. The trees are specifically located to provide vegetative buffers between the new residential buildings and the existing neighboring properties. This includes additional plantings in the open space areas. Trees are proposed to line the streets of the Project Site to provide aesthetic value. In addition, plantings currently within the area of the 9-hole golf course would remain on the Project Site.

Comment 3.40:



High performance mechanical systems would be incorporated to:

- Reduce energy consumption via efficient layout and design.
- Reduce energy consumption by utilizing high performance fans, pumps, condensers, heat exchangers, and heat producing mechanisms.
- Contribute to efficient performance through sophisticated control and monitoring systems.
- Reduce acoustic pollution both on the Project Site and within the residential units through high performance equipment in conjunction with acoustically baffling enclosures.

Project amenities would also include access to common electric vehicles as well as home integrated systems which accommodate electric vehicle charging.

Comment 3.47:

Of particular concern is the future of the remaining Club property, including the Clubhouse and other facilities which are in the Marine Recreation Zone. It is unlikely that this property will be viable as a private club, after there is no golf course, with very limited (if any) waterfront access, no visibility from the Post Road and limited traffic access. Thus, this is likely to become an "orphan property." If and when this orphan property fails as a private club, the owner (either the Developer or a subsequent owner) will be pleading before the Village authorities for relief from the limitations of the Marine Recreation Zone, i.e., a further development request. This application will argue, persuasively, the absence of economic/commercial viability.

(Public Comment Letter 72, pg. 2, Joel Negrin, 4/1/2018)

Response 3.47:

The Proposed Action does not include the removal of the golf course. It proposes to keep a nine-hole course. Further, the DEIS states on page 2-18 "~~the club expects,~~ based on their professional experience running events at the club and operating golf courses that, both the number of members and the number of events held at the club annually to remain at their current levels once the project is complete. ~~It is anticipated~~The Applicant projects that a country club with a nine-hole golf course would be viable because operating costs would be lower than those associated with maintaining an 18-hole course and the revenue garnered by the Applicant from the proposed residential development would offset the cost of reconfiguring the course from 18 holes to 9. In fact, the residential



~~preserved as shared open space. In addition, 37.6 acres of the existing golf course would be maintained on the Project Site, contributing to the recreational/open space character of the area. Together, this amount of open space is greater than the amount of open space preservation contemplated for the Project Site under the residential rezoning options set forth in the Comprehensive Plan.~~ The PRD clustered development layout would also permit the Applicant to preserve all wetlands and ponds identified in the Comprehensive Plan as contributing to the environmental significance of the Project Site.

Comment A.14:

Page 3A-20. Last paragraph, mid-way. Close parens.

(Memo 1, pg. 4, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response A.14:

Page 3A-20. Last paragraph, mid-way should read "(i.e., minimum 30,000 square foot lots)".

Comment A.15:

The statement that 36 acres of natural area will be preserved is at best misleading, since only 8.8 acres of natural areas currently exist there. A more precise description of the proposed action would be the creation (and preservation) of three separate open space areas that each have water features, natural areas, and golf fairways and greens. These areas are not interconnected in an ecologically significant way. The mandate of Policy #7a to "maintain their (i.e Hommocks marshlands & Delancey Cove) viability as habitats" would be better served if the proposed 36 acres of natural areas and the 36.8 acres of golf course could be contiguous and bunched together near the Hommocks saltmarshes without a road intersecting them. The proposed action is not fully compliant with this policy.

(Public Comment Letter 1, pg. 4, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

Response A.15:

Policy 7A of the LWRP states "the following areas are specifically identified as significant fish and wildlife habitats; and they will be protected, preserved, and where practical, restored so as to maintain their viability as habitats". The golf course and open space areas are contiguous and encircle the



development (see Figure 5 in Appendix C) as practically as possible. As detailed in Section 3K, Vegetation and Wildlife, the golf course and open space areas would continue to function ecologically as one comprised of landscaped habitats with trees interspersed with surface waters and wetlands, similar to the existing conditions on the Project Site. The Proposed Action would improve plant and wildlife habitat quality despite the separate open spaces due to the installation of the proposed native plan wetland buffers. The development of the road from Cooper Avenue is necessary for the future residents and emergency vehicles to enter and exit the site for emergency purposes only. This road would not interfere with the ecological functioning of the open space, for example as a signaling site for migratory birds. The open space would be kept in a natural state that would allow for the free movement of its inhabitants. New landscaping would be planted in this open space to provide improved natural habitat and opportunities for passive recreation for all community members (See Figure 6 in Appendix C). The Proposed Action would have no direct impacts (e.g., filling, draining, clearing of vegetation, etc.) to the wetlands at the Project Site. Further, while some of the golf holes would be maintained along the perimeter of the Project Site, no development or ground disturbance from the proposed residential buildings or tennis courts would occur within a minimum of 100 feet of the wetlands at the Project Site. Finally, the Proposed Action would not interfere with the Hommocks marshlands or Delancey Cove habitats. The proposed drainage system for the Project Site is designed to treat water runoff to provide water quality control, which would improve the water quality of the stormwater being discharged into these areas.

Comment A.16:

Policy #36. Activities to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur. Commentary: Chapter IX of the Preliminary SWPPP details a Spill Prevention and Response plan for contractors during construction to be used in case of fuel oil, lubricants or hydraulic oils that could be conveyed into the Hommocks marshlands or Delancey Cove by way of the stormwater discharge systems. Additional permanent measures to prevent similar escapes of heating oils from the proposed development during storm events should be proposed. The DEIS does not cover this issue sufficiently to satisfy this policy.

(Public Comment Letter 1, pg. 6, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)



Response A.16:

The final utility designs for the residential houses would not include the use of heating oil. ~~It is anticipated that natural gas would be used to heat the homes.~~ Consolidated Edison recently imposed a moratorium on new gas service in southern and central Westchester County starting March 15, 2019. The moratorium has been put into place to address limitations in available supply resulting from delays in the construction of additional regional supply mains.

The Proposed Action currently contemplates gas service for heating, cooking and drying of laundry. If the moratorium is not resolved before the Proposed Action moves into construction, alternative fuel sources will need to be provided. For Westchester County this is not an unusual case. There are many areas within County where natural gas is not available.

Alternative energy sources for heating, cooking and drying include propane, oil and electric. Each residence with the Proposed Action already contemplates service by electric for lighting and electrical and appliances. To provide additional electrical service for heating, cooking and drying would require a minor increase in service to each structure. The Proposed Action already contemplates electrical service conduit being extended above the flood elevation to maintain service during flood events.

Propane and oil are provided by truck using individual storage tanks at each residence. Oil tanks can be placed in the garage or utility room above the flood elevation while propane tanks can be buried outside the residence using a buried foundation or anchoring to resist buoyancy during flood events.

Therefore, even though the gas moratorium removes a source of potential energy from the project, it does not impact the feasibility of the project. The Proposed Action can be built as proposed without gas service.

Comment A.17:

Policy #44. Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas. Commentary: The applicant can do more to comply with the spirit and intent of this policy. While the DEIS addresses the special status of the site as a Critical Environmental Area, the proposed set-asides and landscaping plans leave ample room for improvement. The Hampshire Country Club does not only serve as a freshwater drainage for the Hommocks marshlands and Delancey Cove, but also as an important signaling site for migratory birds that "here" is a safe habitat that can serve them



as a stop-over point for resting and feeding during their migration. It is the contiguous size of the 106 acres of open space in conjunction with the Hommocks marshlands that signals that message to migratory birds. A reduction of the site by 29 acres required for the proposed development alone would not be such a large loss of habitat, but the siting of the development smack in the middle of the property does render it no longer as effective as a signaling site for migratory birds. The proposed siting of the development further splits the existing and proposed natural areas and open space into three ecologically isolated pockets - which changes the character of the site dramatically.

(Public Comment Letter 1, pg. 7, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

Response A.17:

The Proposed Action would have no direct impacts (e.g., filling, draining, clearing of vegetation, etc.) or indirect impacts to the wetlands at the Project Site. Further, while some of the golf holes would be maintained along the perimeter of the Project Site, no development or ground disturbance from the proposed residential buildings or tennis courts would occur within a minimum of 100 feet of the wetlands at the Project Site. As detailed in Chapter 3F of the DEIS, the proposed drainage system is designed to capture any sediment and mitigate any increased turbidity that may result from the Proposed Action. As a result of implementation, it is expected that there would be no significant water quality impacts on receiving wetlands. The site plan was designed to keep the golf course and open space areas as contiguous as possible, as well as avoid any impacts to the wetlands (see Figure 5 in Appendix C). In addition, all permits required from the Army Corp of Engineers will be received prior to any commencement of construction (see Response E.1).

The Proposed Action would result in conversion of 29.5 acres of the Project Site to residential development. As this comment acknowledges, the remainder of the 106-acre Project Site would be comprised of vegetated communities and surface waters/wetlands, including the downsized nine-hole golf course, 30.6 acres of vegetated open space and the existing ponds and wetlands, which would be enhanced with vegetated native plant buffers. The 432 trees proposed to be removed would be replaced with in-kind species, which would grow to a mature size akin to existing conditions over time. The trees would reach maturity within 15 years.

Accordingly, following implementation of the Proposed Action, the Project Site would continue to function ecologically as a comprised of landscaped habitats with trees interspersed with surface waters and wetlands, similar to the existing conditions described above. As such, a similar plant and wildlife species assemblage is expected to inhabit the Project site following implementation of the Proposed



Response C.7:

Revised Table 3C-1 Proposed Project Site Soils

Map Unit Symbol	Map Unit Name	Acres of Project Site	Percent of Project Site	Hydric Percent of Map Unit
CrC	Charlton-Chatfield complex, rolling, very rocky	7.7	7.2%	5
CtC	Chatfield-Hollis-Rock outcrop complex, rolling	24.1	22.5%	1
Uc	Udorthents, wet substratum	62.6	58.4%	6
Uf	Urban land	0.0	0.0%	0
UIC	Urban land-Charlton-Chatfield complex, rolling, very rocky	11.9	11.1%	3
W	Water	0.9	0.8%	
Totals for Area of Interest		107.2	100.0%	

Source: USDA 2016 Soil Survey, 1025 Cove Road, Mamaroneck, NY and USDA Hydric Soils Report

Comment C.8:

Exhibit 3C-3, Steep slopes illustrates a new road exiting to the northeast corner of the site in an area of steep slopes over 25% and of 15% to 25% slopes. This does not appear to be discussed in the document as an impact. How will this road be constructed; will retaining walls be needed? What is the slope of this roadway? There was no geotechnical testing in this area based on the map. Will blasting be needed here?

(Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.8:

The Cooper Avenue extension would not require retaining walls to be constructed. Grassed slopes would be graded on either side of the road to a maximum of 3 feet horizontal to 1 foot vertical. All grading would be confined to the Project Site. Blasting is not anticipated for this work. Bedrock was cored as part of the geological investigation and was identified as slightly fractured and moderately weathered Gneiss. This description indicates a competent bedrock which would require blasting or mechanical removal. Additional testing is not required at this time.



were added to the Project Site and additional groundwater surface data was obtained to establish an estimated groundwater surface for the Project Site. The results are presented on Figure 10a in Appendix C. Groundwater elevations were compared to the existing grade and proposed grade. As demonstrated by the referenced figure, the groundwater table is below the existing and proposed grade in all locations.

To further clarify the relationship of the existing ground surface, proposed ground surface and groundwater table, an additional figure, Figure 18 in FEIS Appendix C, has been prepared showing cross sections through the Project Site. On the cross sections, the existing ground surface is shown in green, the proposed ground surface in red and the groundwater table shown in blue. The groundwater elevations are based on measurements taken by the project geotechnical engineer, GZA. As clearly demonstrated by the cross section, the groundwater elevation is below both the existing and proposed ground surface. Encountering groundwater would be expected if the proposed ground surface extended below the elevation of the groundwater. This case does not occur. Therefore, the Applicant does not expect to encounter any significant volume of groundwater during the performance of excavation and soil placement during construction of site improvements.

Comment C.10:

Provide the CAD files for proposed site grading in order that cut and fill volumes can be assessed.

(Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.10:

CAD files have been provided with the submission of this FEIS.

Comment C.11:

Provide a discussion of how the platform on which the houses are proposed to be constructed will be stabilized against erosion and damage from wave action.

(Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.11:

The slope of the development platform is gently sloped at a maximum 3 feet horizontal to 1 foot vertical slope (Figure 9 in Appendix C). The slopes would be vegetated with grass, landscaping, and



trees which would be sufficient cover surface to resist erosion forces from occasional flooding. The Project Site currently contains similar vegetated slopes, some with greater slopes than proposed, as part of the existing golf course. The golf course has experienced many flooding events without significant **areas of erosion requiring re-stabilization or new grading**. Flood waters slowly inundate and recede from the property and have not been a significant source of erosion. It should be noted that the Project Site is outside the area of wave action as defined on the FEMA mapping for the site, therefore protection from wave action is not warranted. A figure showing the limit of wave action from FEMA is attached as Figure 19 in FEIS Appendix C.

Comment C.12:

Exhibit 3C-1. Village of Mamaroneck not Town of Harrison.

(Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.12:

Comment noted. Exhibit 3C-1 should state Village of Mamaroneck.

Comment C.13:

Page 3C-3. Last paragraph. In other sections of the DEIS, rock removal is noted as potentially necessary. Clarify.

The (Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

The DEIS states that there is a "possibility" of blasting. Given that rock removal may reach 7 to 8 feet in some areas, and be required for some utility installation, blasting is likely and use of heavy equipment is a certainty. The DEIS does state that no existing rock outcroppings would be removed in order to implement the plan.

(Public Comment Letter 67, pg. 10, Neil Porto, 2/14/2018)

Response C.13:

As discussed on page 3C-5 of the DEIS, rock removal is anticipated to meet the proposed grades for the project. An area of bedrock removal has been identified in the vicinity of lot 9 based on borings performed by GZA (as shown in Appendix N and in Figure 10b in FEIS Appendix C). Bedrock would be



required to be removed up to 5 to 6 feet to meet the proposed surface grade, and additional removal would be required to accommodate the basements for residences in the vicinity. Based on the character of the rock, it is expected that blasting would be required to achieve proposed grade. **No chemical removal of bedrock is proposed.** During construction careful attention must be paid to the neighboring properties during construction. The selected blasting shall be performed by a New York State licensed blasting contractor. The selected contractor would prepare a written Blasting Plan in accordance the with the Village of Mamaroneck Village Code Chapter 120 and the New York Department of Transportation "Geotechnical Engineering Manual: Procedure for Blasting" latest edition, providing a detailed description of the means and methods of the proposed rock removal program. This plan would be forwarded to the Town-Village Engineering Department and Building Department for review. The Blasting Plan would contain the following:

Project Designations

- Name of Project Blaster(s).
- Photocopy of the Project Blaster's Explosives License (Own & Possess) and Certificate of Competence.
- Scheduled start date and length of blasting operations and blast monitoring operations.
- Limits of blasting work.
- Requirements for local permits.
- Location of any structures in proximity to the blasting.
- Location of any utilities in proximity to the blasting.
- Location of any contaminants or flammable liquids or vapors in the area to be blasted.

Safety and Health Requirements

- Type of audible warning signals and signal sequence.
- Name of company that will deliver explosives to the project site.
- Location of any pre-blast surveys.
- Location of any vibration monitoring at State owned structures, utilities on or off State ROW, or privately-owned structures off State ROW.
- Location of any air blast overpressure monitoring.



Therefore, the on-site soils for this project that are proposed for re-use cease to be regulated by Part 360. The project would not be in a regulatory program and therefore would not have a Remedial Action Plan, nor a Site Management Plan.

However, as a practical matter, the construction of the development platform by raising the existing grade for the base of the building foundations would incorporate an "easily-visible demarcation layer" (as described in C.20, above) to define the boundary between reused on-site soil and certified clean fill that would be purchased and transported to the Project Site to be used as part of the construction project.

Comment C.21:

One of the points made by one the project consultants is that the required landfill would be partially met by excavation required for the basements of the housing development. However, my understanding is that, as this development is in a flood zone, basements would not be permitted. If that is correct then it all required landfill will have to brought in from offsite and the project consultant's estimate of required fill and transport requirements are materially underestimated.

(Public Comment Letter 117, pg. 1, Michael Allen, 5/8/2018)

Response C.21

Basements are proposed for each residence to be used for ~~would be for~~ storage and mechanical space, not occupation. Basements for the proposed residences would designed with hydrostatic pressure considered to ensure that the basement remains dry and anchored in place in accordance with Village Code §186-5(B). "Standards for all structures: New structures in areas of special flood hazard shall follow all relevant regulations governing anchoring, construction materials and methods, and utilities." However, mechanical equipment can be easily accommodated in the attic space or interior mechanical closets in the first and second floor, removing them from the basement. Finalized locations of mechanicals would be determined during the building permit process.

Comment C.22:

After we rerun our projections after adjusting for the basements, at most, these basements would obviate the need of only 45,000 CY of fill which is only about 25% of the difference in fill calculations (273,900 CY). Their calculations assume 100% reuse of soil from "cut" portions of the site but 80 % of onsite soils for the proposed use as indicated in the DEIS Section 3C are structurally unsuitable.

**Comment C.24:**

Provide further discussion of the fibrous peat layer identified in Appendix P. Where did it originate, will it be encountered during construction and is there reason to believe it might generate methane or other pollutants?

(Memo 1, pg. 15, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.24

See Response C.3 above.

DEIS Appendix G**Comment C.25:**

The GZA Phase 2 Environmental Site Assessment notes that soils and sediments that exceed use standards and those that remain on-site may have regulatory restrictions, such as environmental easements or other land use controls, imposed. The need for and nature of such controls should be discussed.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.25:

The NYSDEC Division of Materials Management has reviewed the sample results obtained by GZA (in Appendix L) and has determined that the proposed re-use of on-site soil for the project's cut and fill program meets the conditional exemption under the 6NYCRR Part 360.13 (c) (see letter dated August 7, 2018 in Appendix L). Appendix L of the FEIS, contains the documentation submitted to the NYSDEC that was the basis for their determination to allow the reuse of the soils on-site. The on-site soils for this project containing arsenic, lead and the other materials identified by GZA in its testing that will be disturbed and reused on-Site, therefore, are not regulated by Part 360 and a further Remedial Action Plan is not necessary under NYSDEC Regulations.

Instead, the soils will be treated in accordance with the NYSDEC Division of Materials Management rules and regulations. To date, no visual evidence (including odors) of chemical or physical contamination has been observed in the sampling performed at the Site. Under the NYSDEC



Regulations, if there is no visual evidence (including odors) of chemical or physical contamination discovered during excavation, then no additional sampling or analyses of reused excavated material is anticipated.

In accordance with the NYSDEC Division of Materials Management Regulations, a minimum of 12 inches of clean cover must be placed on top of the excavated on-site fill used to create the soil platform. This cover ensures the relocated on-site soil will remain isolated from the proposed development. The Proposed Action would well exceed this cover requirement as NYSDEC's Regulations and standards, the delineated soil with elevated levels of arsenic, lead or other the Applicant is proposing to create a minimum of 2 feet of clean soil cover.

Comment C.26:

Page 6 of the GZA geotechnical appendix recommends compaction of structural fill to 95% of its dry capacity. Does the number of estimated truck trips bringing fill to the site take into account the 5% or more of material volume that will be eliminated due to compaction? If not, the number of truck trips should be recalculated.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.26:

Yes, the calculation of the truck trips considers an expanded condition in the truck trips.

Comment C.27:

Pages 1-9 and 3C-5 acknowledge the need for up to 7-8 feet of rock removal. Page 6 of the GZA report notes the possibility of vibrations affecting nearby buildings. Pre and post-construction surveys of surrounding buildings should be conducted to ensure against foundation damage, or information should be presented that demonstrates that such surveys are not needed. In either event, a blasting mitigation plan should be presented in the EIS if blasting is proposed. Further, if blasting is required, quantify the amount of rock to be blasted, the number of blast events likely to be required, and the likely noise impacts from blasting.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response C.27:



As discussed on page 3C-5 of the DEIS, rock removal is anticipated to meet the proposed grades for the project. An area of bedrock removal has been identified in the vicinity of lot 9 based on borings performed by GZA (as shown in Figure 10b in Appendix C of the FEIS). Bedrock would be required to be removed up to 5 to 6 feet to meet the proposed surface grade, and additional removal would be required to accommodate the basements for residences in the vicinity. Based on the character of the rock, it is expected that blasting would be required to achieve proposed grade. During construction careful attention must be paid to the neighboring properties during construction. The selected blasting shall be a New York State licensed blasting contractor. The selected contractor would prepare a written Blasting Plan in accordance the with the Village of Mamaroneck Village Code Chapter 120 and the New York Department of Transportation "Geotechnical Engineering Manual: Procedure for Blasting" latest edition (Appendix 5), providing a detailed description of the means and methods of the proposed rock removal program. This plan would be forwarded to the ~~Town-Village~~ Engineering Department and Building Department for review. The Blasting Plan would contain the following:

Project Designations

- Name of Project Blaster(s).
- Photocopy of the Project Blaster's Explosives License (Own & Possess) and Certificate of Competence.
- Scheduled start date and length of blasting operations and blast monitoring operations.
- Limits of blasting work.
- Requirements for local permits.
- Location of any structures in proximity to the blasting.
- Location of any utilities in proximity to the blasting.
- Location of any contaminants or flammable liquids or vapors in the area to be blasted.

Safety and Health Requirements

- Type of audible warning signals and signal sequence.
- Name of company that will deliver explosives to the project site.
- Location of any prelist surveys.



- Location of any vibration monitoring at State owned structures, utilities on or off State ROW, or privately-owned structures off State ROW.
- Location of any air blast overpressure monitoring.
- If seismographs will be used, provide the manufacturer's name, model number, and documentation of calibration performed within the last 12 months. Also provide name(s) of seismograph operators and relevant training and experience.
- List steps that will be taken to control flyrock (i.e. blasting mats).
- Are carbon monoxide or other noxious fumes likely to migrate from the blast location or accumulate within nearby structures and, if so, what will be done to detect and prevent their migration.

Methods and Procedures

- Type of drilling equipment.
- Method of collaring and aligning presplit drill holes.
- Hole diameter.
- Drilling pattern.
- Use of sequential timer.

Types of explosives, primers, initiators, and other blasting devices. Include manufacturer's technical data sheets and material safety data sheets for all products.

Loading parameters

The blasting contractor would have a Pre-Blast meeting with representatives of the Village Engineering and Building Departments to review schedule, field activities and vibration and noise monitoring. The blasting contractor would provide weekly updates to the Village and hold weekly progress meetings.

Prior to blasting, the face of the rock would be exposed by removing the overburden soils. Soil particles that remain on the rock face during blasting would be controlled by the blasting mats. The excavation and handling of soil would be performed in accordance with the Materials Handling Plan. Air monitoring would be performed as described in the Construction Health and Safety Plan for the Project.



Comment D.2:

There's no information describing if there's any chemical mixing of the impacted soil with water or water quality at that time -- at this time. Two water wells -- two bedrock water wells will continue to be used on the site for irrigation. There's no information on the quality of the well water coming from these wells. This water's pumped into irrigation ponds on site, some spread over the turf to percolate down into the subsurface. We would recommend monitor -- several small diameter monitoring wells possibly into the bedrock soil interface or deeper, into fractured bedrock below to provide water level data, to construct a water level contour map that's needed, as well as providing groundwater quality information, because they can be sampled, especially where the oil spill areas are.

(Public Hearing 1, pg. 92, 2/14/2018 and Public Comment Letter 67, pg. 5, Charles Rich, 3/19/2018)

Response D.2:

The construction project includes raising the current grade and creating a platform which would elevate the development further above the water table. New York State Department of Environmental Conservation has approved the reuse of the soils on the Project Site (letter dated August 7, 2018 included in Appendix L) and requires a minimum of one foot of certified clean fill. The development platform would be covered with a minimum of two feet of certified clean fill. Groundwater is therefore not anticipated to be disturbed, therefore further monitoring is not necessary.

Hampshire Country Club has always and would continue to implement the industry-established Best Management Practice (BMPs) for golf course irrigation in New York State (Portness, et. al, February 2014) which can be found in Appendix O of the FEIS. (Note that Hampshire Country Club does and will continue to follow the BMPs outlined in other sections of Appendix O, including those related to water quality management, nutrient management, fertilizers, chemicals and fuel.) ~~the Applicant does not commit to these practices as not all are applicable or relevant.~~

On March 18, 2019, two groundwater samples were collected from the two irrigation wells (i.e., for non-potable use). See attached letter report for the groundwater laboratory analytical results. For screening purposes only, the laboratory analytical results were compared to the NYSDEC Technical Operational Guidance Series 1.1.1 Ambient Water Quality Standards (AWQS) Class GA (i.e. groundwater as a source of drinking water). Lead, arsenic, or pesticides were either not-detected or at concentrations below AWQS. Trace levels of semi-volatile organic compounds (SVOCs), specifically polycyclic aromatic hydrocarbons (PAHs) such as benzo(a)anthracene, benzo(b)fluoranthene, and benzo (k) fluoranthene, were reported at quantities below their quantitation/reporting limits in groundwater. Due to low levels, the PAH results were reported as estimated.



Stormwater runoff on asphalt pathways/paving in urban areas, on site petroleum use, and groundwater in contact with the historic backfill may contribute to low-level PAHs in groundwater at similar levels as reported in the irrigation well samples. Since New York State has one of the most stringent groundwater human health drinking water guidance levels for PAHs in the country, trace PAHs are commonly detected in groundwater samples. As a point of comparison, the irrigation well water samples would not have exceeded the New Jersey Department of Environmental Protection criteria for benzo(a)anthracene, benzo(b)fluoranthene, and benzo(k)fluoranthene, which are 0.05, 0.05, and 0.5 micrograms per liter, respectively).

The BMPs for Golf Courses in New York State (Portness, et. al, February 2014), which include periodic water quality monitoring, offers industry-established course of action to managing non-potable water for irrigation to ensure that the quality is within acceptable limits to protect soil quality and turfgrass performance,

Comment D.3:

The Village has very few critical environmental areas, and this is one of them. I never heard the word groundwater mentioned once. That's apparently about three feet below the surface, and how do you build on that?

(Public Hearing 2, pg. 304-305, Jim Desmond, 4/11/2018)

Response D.3:

As a designated critical environmental area, potential impacts on the area attributes are addressed in Chapter 3L in the DEIS and FEIS. The construction project includes raising the current grade and creating a development platform. Groundwater is therefore not anticipated to be disturbed. The Applicant performed a limited well gauging to check the water table. Depth to groundwater varies from a minimum of 1.1 feet below ground surface to maximum of 9.7 feet below ground surface.

Comment D.4:

I need engineering questions. I need to see sections from -- how is groundwater affecting your basement walls? How is your power coming in?

(Public Hearing 2, pg. 402, Lou Mendes, 4/11/2018)



Response D.4:

The Hampshire Country Club Planned Residential Development Grading and Utility Plan, Exhibit C-3 is provided in the Chapter 3C of the DEIS. The construction project includes raising the current grade and creating a platform which would elevate the development further above the water table. The development platform would be at an elevation of 16.0 that includes a minimum of two feet of certified clean fill. Groundwater is therefore not expected to affect the basement and utility lines.

Comment D.5:

Provide groundwater test results from the existing wells for the same contaminants found in the soils.

(Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response D.5:

The construction project includes raising the current grade and creating a platform that would elevate the development further above the water table. ~~As groundwater is not anticipated to be disturbed during construction activities, and the Proposed Action does not plan or incorporate the use of groundwater, testing would not yield any useful information for the project. Therefore, testing is not planned.~~

On March 18, 2019, two groundwater samples were collected from the two irrigation wells (i.e., for non-potable use). See attached letter report for the groundwater laboratory analytical results. For screening purposes only, the laboratory analytical results were compared to the NYSDEC Technical Operational Guidance Series 1.1.1 AWQS Class GA (i.e. groundwater as a source of drinking water). Lead, arsenic, or pesticides were either not-detected or at concentrations below AWQS. Trace levels of SVOCs, specifically PAHs such as benzo(a)anthracene, benzo(b)fluoranthene, and benzo (k) fluoranthene, were reported at quantities below their quantitation/reporting limits in the groundwater. Due to low levels, the PAH results were reported as estimated.

In a typical urban area, stormwater runoff on asphalt pathways/paving, petroleum use, and groundwater in contact with the historic backfill may contribute to low-level PAHs in groundwater at similar levels as reported in the irrigation well samples. Since New York State has one of the most stringent groundwater human health drinking water guidance levels for PAHs in the country, trace PAHs are commonly detected in groundwater samples. As a point of comparison, the irrigation well water samples would not have exceeded the New Jersey Department of Environmental Protection



criteria for benzo(a)anthracene, benzo(b)fluoranthene, and benzo(k)fluoranthene, which are 0.05, 0.05, and 0.5 micrograms per liter, respectively).

See Response D.2 for a list of BMPs to ensure water quality standards.

Comment D.6:

Hydrogeologically, driller's well logs may be available to evaluate the construction details of the wells, and the number, depth, and possibly the correlation and orientation of the saturated bedrock fractures intercepted by them. Pumped groundwater withdrawals from rock wells typically induce an elliptical cone of depression in the water table (or potentiometric surface) parallel to bedrock fracture orientation, and such information would help determine the seasonal extent of the underlying groundwater 'capture zone' beneath the golf course. Knowing the geographic area indicative of the extent of the horizontal groundwater 'reach' outward from this pumping center that could possibly be affected by the cut-&-fill activities up on the land surface above may become important. Some discussion may also be informative regarding whether the Applicant anticipates a change to the elevation of the water table if the seasonal irrigation well pumpage is either increased or reduced (Editor's note: typical 18-hole golf course irrigation water usage in Westchester averages as much as 6 million gallons per month during an 8-9-month golfing season).

(Public Comment Letter 67, pg. 6, Charles Rich, 3/19/2018)

Response D.6:

Water levels are shown to be tidally influenced, as shown by the limited groundwater gauging we performed on June 18 and 19, and on July 12, 2018. Changes in elevation of the water table are anticipated to be tidally influenced due to the Project Site's proximity to Long Island Sound and not as a result of irrigation.

As for irrigation, Hampshire Country Club would continue to implement the industry-established Best Management Practice (BMPs) (see Portness, et. al, February 2014 in FEIS Appendix O). (Note that Hampshire Country Club does and will continue to follow BMPs outlined in other sections of FEIS Appendix O, including those related to water quality management, nutrient management, fertilizers, chemicals and fuel.) In addition, by reducing the size of the golf course and introduction of natural open space areas the amount of irrigation water usage currently needed for the golf course would be reduced.



3E. Surface Water Courses and Wetlands

Comment E.1:

Exhibit 3E-1, Table 3E-1, and this section state that Wetland A is "isolated." However, this wetland lies within the 100-year floodplain as shown in 3C-4. Typically, the Corps does not identify wetlands as Isolated under Section 404 of the Clean Water Act if they lie within a 100-year floodplain. An approved jurisdictional determination from the Corps providing the regulatory status of this wetland should be provided.

(Memo 1, pg. 5, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response E.1:

As observed in the field, Wetland A occurs in a shallow topographic depression, with no visible inlets, outlets or surficial connections to other wetlands or surface waters, including the tidal waters of Delancey Cove. As such, Wetland A was characterized as isolated under the Magee-Hollands wetland functional assessment that was performed in 2016.

With respect to federal jurisdiction, as indicated in DEIS Page 3E-5: *"Currently, the United States Army Corps of Engineers (USACE) determines federal jurisdiction over waters of the United States on a case- by-case basis... Formal jurisdictional determination has not been sought from USACE but will be prior to the completion of the FEIS."* In conformance with this statement, a jurisdictional determination request for the wetlands and surface waters at the Project Site was submitted to the USACE on September 4, 2018, during the preparation of the FEIS and the NYSDEC on September 5, 2018 requesting an official determination of the NYSDEC's tidal wetland jurisdiction at the Project Site. The response letter from the NYSDEC can be found in FEIS Appendix Q. The NYSDEC concurs with the Applicants boundaries. (see Appendix Q). An agency response is pending.

In consultation with USACE regarding obtaining an expedited Jurisdictional Determination (JD), the Applicant has elected not to contest federal jurisdiction over the on-Project Site freshwater wetlands, ponds or ditches identified in the DEIS in Exhibit 3E-1. Instead, Hampshire is seeking a "Preliminary JD" in accordance with the USACE's Regulatory Guidance Letter number 08-02.



The Preliminary JD will provide a “written indication [from the USACE] that there may be waters of the U.S. or wetlands on a parcel.” This determination “set[s] aside questions regarding CWA/PHA jurisdiction,” and allows an applicant to “move ahead expeditiously to obtain a Corps permit authorization.” See USACE Regulatory Guidance Letter 08-02.

Since the Preliminary JD would include a permit authorization for the Project, the Applicant anticipates that the USACE would not issue a Preliminary JD until the coordinated environmental review process is completed. While the actual Preliminary JD may not be issued prior to the completion of SEQRA, the EIS contains sufficient technical information to evaluate whether the Proposed Action would comply with the USACE permitting standards, including, where necessary, the requirement that compensatory mitigation is used to offset the loss of any regulated waters of the U.S. Specifically:

- Wetlands – The Project would maintain a 100-foot non-disturbance buffer around the vegetated wetland at the northwestern edge of the Project Site, as well as the wetland at the southwestern edge of the Project Site. The buffer areas would be planted with native and non-invasive, native-adaptive trees and shrubs in accordance with the Landscaping Plan annexed to the FEIS in Appendix C. Since no filling, draining or other loss of wetland area on the Project Site is proposed, the Project would comply with USACE regulations requiring that “no net loss” of wetland acreage and function occur. See 33 CFR Parts 325 and 332 and 40 CFR Part 230 (defining compensatory mitigation for “loss of aquatic resources”)¹
- Ponds – Similar to the on-Project Site wetlands, a 100-foot non-disturbance buffer around all ponds would be maintained. No filling, draining or other loss of pond area would occur. Native and non-invasive native-adaptive trees and shrubs would be planted around the perimeter of the ponds, as shown in Appendix C of the FEIS. Again, there would be “no net loss” of pond acreage or function in accordance with USACE Regulations. See *Id.*
- Drainage Ditches – Minimal filling of existing drainage ditches is proposed as part of the Project. In total, 677.95 sf of drainage ditch area would be filled in connection with the Project. However, as quantified below, the net area of on-Project Site drainage ditches will increase significantly following implementation of the Project:
 - The existing drainage area at the northern part of the Project Site in the vicinity of proposed Lot 82 (which is a combination of ditches totaling 677.95 sf that are connected by a culvert), will be filled and replaced with a 6,309.24-sf drainage ditch

¹ Federal Register, Vol.73, No70. April 10, 2008. Department of the Army, Corps of Engineers, 33 CFR Parts 325 and Environmental Protection Agency, 40 CFR Part 230 – Compensatory Mitigation for Loss of Aquatic Resources: Final rule



located just to the north of the proposed residential lots. A net increase in ditch area of 5,631.29 sf will occur as a result.

- The existing drainage ditch at the southern portion of the Project Site that flows from Pond 18 to Pond 10 is proposed to be widened to accommodate an expected increase in flow. The existing 1,172.33 sf ditch would be expanded to 2341.70 sf, resulting in a net increase in ditch area of 1,169.37 sf.

As such, net increase of 6,800.66 sf of new drainage ditch area would be created. Therefore, the Project would not result in a "net loss" of aquatic resource acreage onsite.

As noted previously, under a Preliminary JD, the USACE will consider all onsite waters, including drainage ditches, as jurisdictional waters of the U.S., and nonetheless may require compensatory mitigation for the filling of 677.95 sf of existing drainage ditches. Pursuant to federal Clean Water Act (CWA) guidelines:²

"If the district engineer determines that compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, the amount of re-quired compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate functional or condition assessment methods or other suitable metrics are available, these methods should be used where practicable to determine how much compensatory mitigation is required. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acre-age or linear foot compensation ratio must be used."

Based on VHB's experience with other similar projects (including a recent project where golf course waters were being filled), and in keeping with the above CWA guidelines, the USACE typically requires a 1:1 replacement ratio for filling of regulated waters. The Applicant would be able to comply with a 1:1 replacement ratio in the event the USACE requires mitigation for the filling of the drainage ditches. The creation of 6,800.66 sf of new drainage ditch area would result in an overall 10.03:1 replacement ratio. Even in the unlikely case that the USACE were to require additional mitigation beyond 10.03:1, the existing ponds, vegetated wetlands and ditches that occur throughout the Project Site offer ample onsite mitigation opportunities through expansion, enhancement and/or rehabilitation of these features, which are the three USACE-authorized methods for compensatory mitigation, as defined in the above-referenced federal CWA guidelines.

² 40 CFR Part 230 - Section 404(b)(1). Guidelines for Specification of Disposal Sites for Dredged or Fill Material



under the Landscaping Plan. Moreover, installation of the proposed native plant buffers and implementation of the proposed Wetland Mitigation and Monitoring Plan (see [FEIS Appendix H](#)) would improve native plant diversity and limit the potential for non-native/invasive plant species to colonize and dominate the buffers.

Comment E.5:

Page 3E-6. The wetland functionality section states that no direct impacts to wetlands are proposed. Clarify if this means wetlands that might be found "isolated" for purposes of Section 404 of the Clean Water Act.

(Memo 1, pg. 6, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response E.5:

As indicated on DEIS Page 3E-6 and 3E-7, no development or ground disturbance from the proposed residential buildings or tennis courts would occur within a minimum of 100 feet of the wetlands at the Project Site, isolated or otherwise, meaning no direct impacts would occur.

Comment E.6:

Page 3E-7 does not clearly indicate whether there will be a net gain or a net decrease in flow volumes/duration to the wetland features, and how that might impact their hydrology and functionality under current and proposed conditions. This should be stated as part of a water budget for the wetland systems as an existing and proposed condition. See also DEIS statement on page 3E- 9, Mitigation, second paragraph "As a result, onsite stormwater discharges to the three existing golf course drainage systems would decrease, with a corresponding reduction in pollutants, organic materials and mineral sediments to the ponds that comprise these systems." Will changes in stormwater hydrology to the ponds affect the size of the ponds and/or the volume of water feeding the remaining wetland system? See also page 3L-2.

(Memo 1, pg. 6, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response E.6:

As detailed in DEIS Section F, the Project Site currently contains three drainage systems comprised of the site wetlands features (seven ponds and two vegetated wetlands), as well as drainage pipes and several



drainage ditches that channel runoff to two discharge points (Points A and B). Discharge Point A occurs at the existing golf course pond located to the north of the intersection of Eagle Knolls Road and Hommocks Road ("Pond 13," see DEIS Exhibit 3E-1). Discharge Point B occurs at the golf course pond located to the southwest of the intersection of Eagle Knolls Road and Cove Road and adjacent to Delancey Cove ("Pond 10," see DEIS Exhibit 3E-1). The two ponds in turn discharge to Delancey Cove/Long Island Sound via drainage pipes and tide gates. The Tide gates keep salt water from the adjacent Long Island Sound from entering the site removing the potential for Brackish water accumulation on site. Salt water does intrude during storms greater than the 5-year storm that breaches the tide gate berm at the Delancey Cove tide gates and during greater storms that seep in from the Hommocks Road wetlands. This causes an accumulation of brackish water at the site outfalls that will discharge through the tide gates at the conclusion of the storm.

Significant Storm Events

Water budget analyses of surface water runoff under existing and proposed conditions for significant storm events (1 year storm and over) at the Project Site indicate that changes in the water budget for all but one of the ponds and wetlands would be less than 10 percent, with the exception of Pond 10, where an increase of greater than 10 percent would occur (See FEIS Appendix I). However, it is important to note that the hydrology of Pond 10 is tidally influenced and that water levels within the pond are regulated by an existing tide gate.

Similar to existing conditions, storm runoff from the proposed development and the nine-hole golf course would drain to discharge Points A and B. Due to the conversion of the existing 18-hole golf course to the proposed nine-hole golf course, stormwater runoff from golf course surfaces would decrease, with the corresponding reduction in pollutants, organic materials and mineral sediments described on DEIS Page 3E-9. However, due to a proposed increase in impervious surfaces at the Project Site, a corresponding increase in the peak rate of stormwater runoff that drains toward Points A and B would occur. Additionally, similar to existing conditions, the three drainage systems would continue to receive stormwater runoff from surrounding offsite sources. Moreover, it is important to note that, water levels within the ponds and wetlands comprising the three golf course drainage systems are and would continue to be artificially maintained by various outlet structures, including elevated drainage pipes, weirs and tide gates. Based on the foregoing, no significant changes in the hydrology of the existing drainage system ponds are anticipated as a result of the Proposed Action. Pond 10 adjacent to the tide gate is expected to experience an increased contribution of approximately 17% during significant rain events. If the tide gate is open, water will be immediately released that there will not impact water elevation in Pond 10. If rainfall accumulates while tide gates are closed, water will rise the area of Pond 10 by approximately four additional inches and then discharge through the tide gate when tide drops identical to what occurs today. For Pond 13, the proposed discharge is nearly identical to existing conditions under the Proposed Action and no changes are expected.



Minor Storm Events

For significant storm events the ground is already saturated and runoff is conveyed directly to discharge points. Water contribution to the wetland system to maintain current condition is more dependent on minor (less than the one year storm) rain events that continually replenish water to allow continued growth of wetland vegetation and maintain water levels within the soil. To understand the current site water budget for minor rain events, it needs to be understood that the distribution of water throughout the site is a result of not only natural rainfall, drainage ditches and a drainage pipe network, but also the result of an existing irrigation network, irrigation ponds and pumping systems that move water throughout the site by site groundkeepers.

The manipulating of site water conditions to optimize golf course condition has been practiced since the establishment of the golf course in 1944. Without the continued use of the irrigation and pumping systems, the current condition of the site would be considerably different.

The existing irrigation and pumping network distributes water throughout the golf course to maintain turf and landscaping and remove water where natural accumulation causes degradation of course condition. The ponds currently on site were created and modified to serve as aesthetic and functional parts of the course providing irrigation support and drainage.

The heart of the irrigation system is at Pond 5 and 6 on the northeast extent of the site. In the spring and fall, surface runoff is collected in Pond 5 and 6 and distributed via pumping systems to other on-site ponds and pumped into irrigation systems to water the course including much of the wetland areas. Water is moved around as required to areas within the course based on direction of the groundskeeper. In the Summer months, the ponds are supplemented by existing groundwater extraction wells that maintain a supply of water in ponds 5 and 6 to be distributed through the site. During dryer years, municipal water is also required to be purchased to meet irrigation need.

During heavy rains in the spring and fall, Ponds 5 and 6 have insufficient capacity to impound accumulated water and water is pumped to the south into the drainage ditch which runs under Eagle Knolls Road and discharges to Delancey Cove. If water was not pumped from this area during in response to large storm events, the rainwater would accumulate and pond in the areas of existing golf holes 5 and 6 (proposed golf holes 8 and 9).

Under the Proposed Action water from the residential lots would discharge to the golf course areas and be managed in the pipe and drainage ditch network. As noted, above the design of the distribution of the flow has been maintained at current levels with the exception of discharge through the Delancey Cove flood gates and channel under culverts in the vicinity of Eagle Knolls Road which would increase



Appendix B

Comment E.16:

Wetland Functional Assessment. Page 3 - The functional assessment identified a number of habitats on site including: Mowed Lawns with Trees and Successional Southern Hardwoods. The DEIS text did not identify Mowed Lawn with Trees or Successional Southern Hardwoods, even though large trees exist on site. There should be a category of "wooded habitat" in the list of habitats to be assessed for impacts within table 3K-1 and 3K-2.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response E.16:

Small stands of trees occur between fairways at several locations on the golf course. The trees are subject to periodic maintenance (i.e., pruning), and the areas beneath the tree canopies have been historically maintained by golf course staff and consist of mowed turf grasses, mowed/grubbed brushy areas and/or unvegetated earth and rock. As the tree stands were planted historically during development of the golf course, they are not naturally-occurring habitats and do not contain significant understory components (i.e., shrub and groundcover strata) associated with known woodland or forest types. Based on these considerations, the tree stands are not properly characterized as "wooded habitats" according to the woodland and forested community descriptions in the New York Natural Heritage Program (NYNHP) publication *Ecological Communities of New York State* (ECNYS) (Edinger et. al., 2014). The ECNYS community description that is most representative of the tree stands is the Mowed Lawn with Trees community, which is described as an "unranked cultural community" by the NYNHP (the unranked cultural designation is for communities that were created or altered by humans and have wide distributions throughout New York State). Based on the foregoing, it would be inaccurate to add a "wooded habitat" category to Tables 3K-1 and 3K-2, as no such habitats occur at the Project Site. The Wetland Functional Assessment (see [FEIS](#) Appendix Z) has been updated to reflect these findings. DEIS Tables 3K-1 and 3K-2 (see below) have also been updated to remove the reference to ECNYS ecological communities, since these tables provide quantitative site coverage for generalized habitat types, rather than acreages for the various ECNYS ecological communities that were observed qualitatively in the field.

As depicted on FEIS Figures 14a and 14b, 10.6 acres of tree areas would be removed as part of the Proposed Action, including two areas (Areas X and Y) greater than 1 acre in size and six additional areas that are greater than 0.5 acres in size. As depicted on the Landscaping Plan, the 432 trees to be removed would be replaced by 432 new evergreen and shade trees.



Appendix H

Comment F.14:

Construction activities that have the potential to affect a historic property are not eligible to obtain coverage under the SPDES General Permit (GP-0- 15-002) unless there is documentation that such impacts have been resolved. The SWPPP should include a discussion of this requirement, and include the necessary documentation.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response F.14:

There are no identified historical properties on or downstream of the Project Site. The SWPPP does not need to be updated.

Comment F.15:

A long term Operations and Maintenance Plan is required in accordance with Part III.B.2.f. of the General Permit, and question 38 of the Notice of Intent. The plan should provide inspection and maintenance schedules, and actions to ensure continuous and operation of each post-construction stormwater management practice.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response F.15:

The detailed long-term Operations and Maintenance Plan for the stormwater practices has been prepared and included in Section VIII and Attachment B and E of the SWPPP (see Appendix M).

Comment F.16:

The SWPPP indicates that the drainage channel from the site to Delancey Cove will be modified in order to convey the increased peak flow rate. This channel flows through an existing culvert under Eagle Knolls Road which will remain under the proposed condition. The SWPPP should describe the existing culvert and its capacity to convey the increased runoff, or if improvements to the culvert are required they should be described.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)



Response F.16:

The existing culvert under the Eagle Knolls Road ~~would be~~ has been evaluated through a hydraulic analysis based on existing and proposed flow for its capacity to handle the increase in runoff from the proposed development and determined to require replacement under the Proposed Action. The culvert size has been increased to four feet high by ten feet wide to match the channel cross section. See below. ~~If found to be undersized, it would be replaced with an appropriate size culvert.~~

Proposed Culvert/ Channel Sizing (by Eagle Knolls Road) for Hampshire

Proposed 100-year flowrate = 222 cfs

Assumed flow velocity = 6 ft/sec

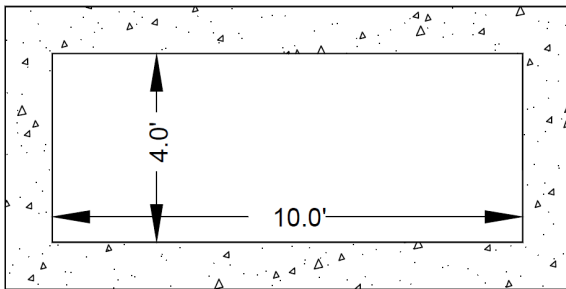
$Q = AV$

$A = Q/v = 222/6 = 37 \text{ ft}^2$

Proposed culvert and channel = 4' H x 10' L

Proposed culvert and channel area = 40 ft² (> 37 ft²) ok

Proposed Concrete Box Culvert



Comment F.17:

The SWPPP identifies two infiltration basins that will be utilized for stormwater management. The soil test results provided in the SWPPP are presented as Percolation Test Data. While percolation tests may be used for initial feasibility testing, the final design must be based on falling-head permeability tests performed in accordance with Appendix D of the NYS Stormwater Management Design Manual.

(Memo 1, pg. 14, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response F.17:

Comment acknowledged.



(FEIS Completeness Comments, Floodplains General Comments, Stuart Mesinger, Consultant to Planning Board, 4/3/2019)

Response General Comment 2:

The groundwater elevation will not be influenced by the structures placed above it, nor would the presence of groundwater cause the tidal floodwaters to rise above the base flood elevation. Groundwater level is dictated by the surrounding level of water in the soil. Under flood conditions or heavy rain, flood water will saturate the surface soil and then percolate down into the ground, slowly raising the groundwater table. The rising groundwater table does not increase the flood elevation because the volume of tidal influenced floodwater flowing from the Long Island Sound is far greater than the comparably small volume of groundwater. Under estimated future sea level rise for this century of 2 feet for modest projections, and 4 feet for the extreme projection, water levels will only potentially rise to elevation of 14 or 16 during the 100 year flood event respectively, not impacting the proposed residences.

Comment G.1:

Fifth, the project will expose a large number of new residents to the risk that they will be unable to leave their neighborhood or be accessible to emergency vehicles in the event of another coastal storm surge like Sandy. And, by the way, let me interpolate here that raising the roads to 14 feet will not help if there's a three-foot sea level rise, not to mention a four-foot sea level rise.

(Public Comment Letter 67, pg. 1, and Public Hearing 1, pg. 45, Stephen Kass, 2/14/2018)

Response G.1:

The current FEMA flood elevation for the 100-year storm is elevation 12.0. The Proposed Action provides new roadways at a minimum elevation 14.0 and residences at a minimum first floor elevation of 16.0. Although site specific elevations are not available for Sandy, regional elevations generally were at or below the 100-year storm elevation of 12.0 based on the Hurricane Sandy Mitigation Assessment Team (MAT) Report, published by FEMA, dated November 2013, which compiled FEMA data and developed geographic information system (GIS) data on the event. Therefore, the occurrence of a Sandy magnitude storm would not impact the project as proposed, as the homes and roads would be at least 2-feet above the storm elevation.

Sea level rise over the remainder of this century has been estimated between 1.5 and 4 feet over the next 80 years, although the actual extent of tidal water rise in the future is uncertain. Estimates from



recognized and reputable sources cited in the study prepared by the New York State Research and Development Authority "Climate Change in New York" dated September 2014, indicate thatTherefore, the estimated 100-year flood elevation would increase from the current 12 foot elevation to be betweento 13.5. The most conservative estimate of sea level rise projects the flood elevation at the site to rise toand 16.0 as a worst case. Even under this "worst case" scenario, ~~the~~ Proposed Action provides the residences with a first floor at a minimum elevation of 16 protecting home owners under the worst-case scenario.

Under current conditions, in the vicinity of the site, there are residents who reside along Eagles Knolls Road, Cove and Cove Road East that are cut off by flood water during a 100 year event because existing streets are below the 100 year flood elevation of 12 feet. In several cases, homes in the neighborhood served by Cove Road and Eagle Knolls Road are also located below the 100-year flood elevation, meaning that these houses would suffer damage during 100-year storms. Currently, the Village's policy during forecasted 100-year storms is to impose a mandatory evacuation order for the neighborhood, notifying the residents that EMS vehicles will not be able to access the neighborhood during elevated floods on Cove Road and Eagle Knolls Road. A past notice for Superstorm Sandy founds on the Village website and placed in local print and broadcast media stated "there is a mandatory evacuation in place for the Orienta and Shore Acres neighborhoods that are at-risk for coastal storm-surge flooding. Residents who stay will not be reachable by emergency crews" (See Appendix R). Construction of the Proposed Action would provides new access to the neighborhood during storms, as Cooper Avenue would have a minimum elevation of 13 feet. Cooper Avenue would provide an evacuation route with its proposed elevation of 13, which is above the current 100 year flood elevation to the neighborhood. The access would take vehicles through Cooper Avenue and to Route 1.

The Applicant has been asked to evaluate whether emergency access would be impeded on Cooper Avenue in the event that the road is blocked by flooding. This analysis is provided below:

Background/Current Status:

The elevation of Cooper Avenue is 13' minimum. Currently, the peak storm tidal flood elevation on Cooper Avenue reaches no greater than 12' during the FEMA 100 year storm event, meaning that all vehicles have continuous access to the Site during storm events up to and including the 100 year event.

Future Sea Rise impact on Access:

Potential sea rise is expected, and projections are contained in the New York State Energy and Development (NYSERDA) projections contained in "Climate Change in New York State" publication dated September 2014, potential sea level rise projections for the region.

2045:



Based on NYSERDA projections, average sea level rise for the New York City region in the next 25 years is expected to be about 12 inches by the year 2045. A one foot rise in flood elevation would increase the expected flood elevation to 13' and will not reach a level higher than the road surface or otherwise impede access in the year 2045 at Cooper Avenue. The minimum elevation at Cooper Avenue under the proposed Action will be elevation 13.

2070:

In 51 years, 2070, sea level rise is estimated by NYSERDA to be an average of 24 inches or 2 feet. In the event that there is a 2 foot sea rise, the 100 year flood elevation will increase to elevation 14 and with that, there will be the possibility that Cooper Avenue could be impeded by a maximum of approximately 1 foot of water during the peak of the high tide cycle (maximum of 2 hours).¹

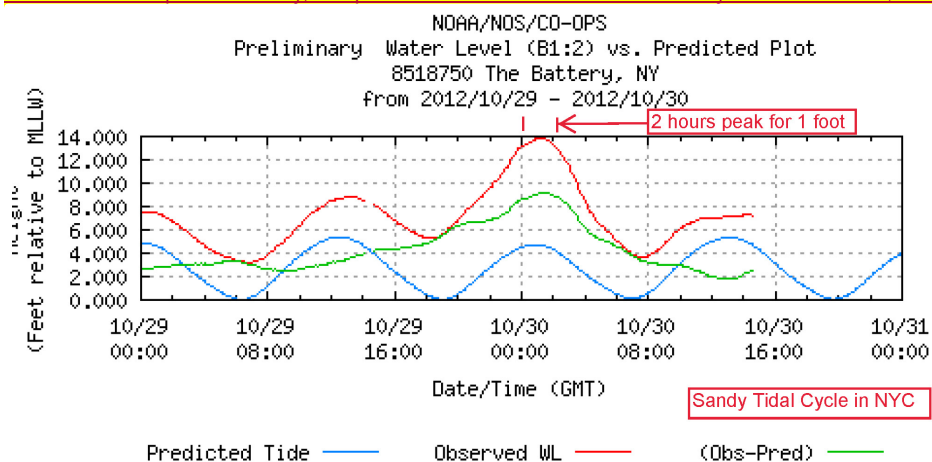
At the request of the Planning Board, the Applicant was asked to also evaluate whether Village of Mamaroneck Fire Department ("Fire") and the Mamaroneck Village Emergency Services ("EMS") emergency access would be impeded on Cooper Avenue during the limited high tide cycle, assuming that the road is blocked by 1' of water.

The Applicant has attempted to obtain a written response from Fire and EMS for the input requested by the Planning Board to provide an opinion on navigation through one foot of water. These attempts included the following:

- Visit to Village of Mamaroneck Fire Department and discussion with assistant fire chief Vincent Costa on June 28, 2019



¹ The Applicant obtained data from NOAA/NOA/CO-Ops measuring the length of peak storm tidal flood levels observed in New York City during Superstorm Sandy on October 29, 2012 through October 30, 2012 (see diagram below). This data demonstrates that the peak storm tidal flood levels rise and fall in a short cycle. In the case of Superstorm Sandy, the peak storm tidal flood level decreased by 2' within 2 hours, following the pattern of the normal tide cycle.





- Visit to Village of Mamaroneck EMS and discussion with an officer on June 28, 2019
- Call on June 28, 2019 to Vincent Costa – left message
- Emails to Vincent Costa on July 2 and July 8, 2019
- Email to Village of Mamaroneck EMS on July 9, 2019

Neither EMS nor Fire provided written responses to the above requests for information. The Applicant was able to obtain the specifications for the vehicles currently utilized by Fire and EMS. Fire currently uses a Seagraves Fire Truck. Based on discussions with Fire Truck suppliers that provide similar models, this type of fire truck is able to navigate through 12 inches of water. EMS currently uses an ambulance based on a Ford F-350 chassis, which according to Ford has a ground clearance at the axel of 8.3 inches. The Applicant was not able to obtain specific information on the ability for the ambulance to navigate 12 inches of water. EMS also has a 2016 John Deere Gator UTV which is a 6-wheel ATV style off road emergency vehicle. Based on conversations with the regional sales repitative for John Deere, this model of ATV can navigate one foot of water.

Assuming that Fire and EMS does not upgrade any of its equipment over the next 50 years to address future conditions throughout the Village, emergency vehicular access to the Project Site would be possible under the projected 1 foot inundation condition on Cooper Avenue using current emergency equipment. It is the Applicant's opinion that Fire and EMS would not be using 50 year old apparatus in 2070, but instead, would upgrade its equipment in the future to address sea level rise throughout the Village. As set forth in Chapter 3O, the projected increase in tax revenue to taxing jurisdictions as a result of the Project could be available to pay for upgrades to EMS and/or Fire vehicles to ensure additional access during 100-year storm surges in 2070.

Comment G.2:

In addition, let me say that, contrary to the DEIS, the applicant's proposed project is unlawful and simply may not be constructed because, one, the project is in blatant and gross violation of Village Code Section 186-5c which prohibits placement of fill below the floodplain where that would reduce the hydrological storage capacity of the site, precisely what this applicant is proposing.

(Public Hearing 1, pg. 46, and Public Comment Letter 67, pg. 2, Stephen Kass, 2/14/2018)

(Public Hearing 2, pg. 311, Bob Goodman, 4/11/2018)

(Public Hearing 2, pg. 342, and Public Comment Letter 107, pg. 1, Jeremy Arfield, 4/11/2018)

(Public Hearing 2, pg. 326, David Wenstrup, 4/11/2018)



(Public Hearing 2, pg. 333, Bertram Siegel, 4/11/2018)

(Public Hearing 2, pg. 390, Jen Kronik, 4/11/2018)

Response G.2:

It is the Applicant's position that Village Code Section 186-5A(3)(c) does not apply to the Proposed Action because the Project Site is located within a tidal floodplain, not a riverine floodway. Nonetheless, the Proposed Action is in compliance with Code Section 186-5A(3)(c) as demonstrated by the hydraulic modeling included in Appendix J of the DEIS which shows no significant change in water surface elevations as a result of the project. Therefore, it can be concluded that the cut and fill associated with the Proposed Action would maintain the hydraulic equivalency between the existing and proposed conditions. If it is determined by the Building Department has determined that the project is not in compliance with Section 186A(3)(c), the Applicant will provide theseek a variance based on the criteria of Section 186-6B(1), (4), (5) and (6) as detailed below in Response G9. See Response G.9 for a list of the criteria and the Applicant's position on the Project's Compliance with said criteria.

Comment G.3:

Because of the flooding, most of the property cannot be safely occupied as it is for residential development without endangering human health and safety. Experience after Sandy and other catastrophic and costly storms has led to the consensus that one of the most effective means to reduce risk is to redirect development away from flood hazard areas altogether, but this project doesn't do that. Instead, massive regrading and importation of fill is proposed, which may keep new buildings above the 100-year floods, but the development will virtually become an island surrounded by water in certain storm conditions. And the proposal will move new residents into a flood hazard area, and at times, they will not be able to get out due to the flooding of the surrounding roads which will be perilous for the new residents' first aid responders.

(Public Hearing 1, pg. 62-63, Public Comment Letter 67, pg. 5, and Public Comment Letter 67, pg. 10-11, Lisa Liquori, 2/14/2018)

(Public Hearing 2, pg. 385, Karen Rob, 4/11/2018)

Response G.3:

See Response G.1.



The other thing that -- you know, because it's in a flood zone, the developers mentioned today that they were going to widen the roads, the walkways and whatever, and I imagine the garages, and they're going to make a -- a basement in each -- in each unit. Well, we found out when we lived on Waverly Avenue that there's something called hydrostatic pressure that will come up and destroy the foundation from the bottom.

(Public Hearing 2, pg. 383, Paul Ryan, 4/11/2018)

Response G.8:

Basements for the proposed residences would designed with hydrostatic pressure considered to ensure that the basement remains dry and anchored in place. Basement construction would use the same approach described for the condo alternative garage in Response G.7 above.

Comment G.9:

Page 2-25 argues that Section 186-5(A)(3)(c) of the Village Code requiring hydraulic equivalency for any filling in a floodplain does not apply because "the purpose of this regulation is to ensure that any new construction in a regulatory floodway remains hydraulically balanced to the existing conditions and as a result there would be no increase in flood elevation." This argument is also made on pages 3G-2, 3, and 6. However, Section 186- 5(A)(3)(c) does not reference floodways, it applies to the floodplain. This section of the code therefore applies and hydraulic equivalency through compensatory storage must be achieved. We have confirmed this code interpretation with the Village Building Inspector who is responsible for administering the floodplain ordinance. If hydraulic equivalency cannot be achieved, a variance will be required. The EIS should either demonstrate achievement of hydraulic equivalency or show how the project meets the criteria for a variance.

(Memo 1, pg. 7, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

(Public Comment Letter 73, pg. 2, Randi Spatz, 4/3/2018)

(Public Comment Letter 98, pg. 1, David & Carla Henderson, 4/15/2018)

(Public Comment Letter 131, pg. 2, Jenn Kronick and Jason Shapiro, 5/8/2018)

Response G.9:



It is the Applicant's contention that the Proposed Action would provide hydraulic equivalency as demonstrated by the flood modeling contained in DEIS Appendix J. The model demonstrates that the addition of structures to the floodplain on the Project Site would not result in the displacement of current flood storage capacity in the floodplain. The model also demonstrates that there would be no significant change in water surface elevation for the adjacent properties during the 100 year regulatory flood when the Proposed Action is compared to the existing condition.

The Village Building Inspector has determined that a variance from the requirement in Village Code Section 186-5(A)(3)(c) is required. The Planning Board, therefore, would be evaluating the following criteria in weighing a variance request once SEQR is completed under Section 186-6B (4) (5) and (6) (the Applicant's opinion of how the record supports the issuance of the variance follows each criterion listed below):

(4) In passing upon such applications, the Planning Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article and:

(a) _____ The danger that materials may be swept onto other lands to the injury of others;

Response: The Applicant contends that the Proposed Action would result in the development of residential structures in the floodplain. There is little danger that materials would be swept onto other lands to the injury of others because all structures have been elevated four feet above the flood elevation, removing the potential of water reaching a level around the homes that would capture debris and then sweep it towards adjacent properties. No stockpiling of material is proposed for the residential use which would be swept by flood waters.

(b) _____ The danger to life and property due to flooding or erosion damage;

Response: It is the Applicant's position that the Residences would be placed four (4) feet above the current regulatory flood elevation, providing vertical separation to avoid flood damage -in the event of current flooding, or in the event of sea level rise in the future. Construction of the Proposed Action would also provide new access to the neighborhood during storms, as Cooper Avenue would have a minimum elevation of 13 feet. Thus, the Proposed Action would provide neighborhood residents with access to Cooper Avenue and ultimately to Boston Post Road above the current 100-year elevation. In the event of a 2-foot rise in the 100-year storm flood elevation (to 14 feet) as a result of sea level rise in the future, Cooper Avenue would still be passable by EMS



vehicles with a modest water depth of one foot for a short stretch of Cooper Avenue. In the event that the 100-year storm flood elevation rises above 14 feet in the future, the Village could still maintain its current mandatory evacuation policy for the neighborhood. During the period of time when Cooper Avenue would be flooded, all of the homes on the Project Site would remain above the flood elevation. See Response G.1 above for a discussion of access under future projected flood elevation levels.

With respect to the threat of erosion, the Flood Modeling in Appendix J of the DEIS demonstrates that the Project Site is not subject to wave action. Therefore, flood waters move slowly into and out of the Project Site, limiting the risk of potential erosion to roads, slopes and vegetation. Proposed roadway construction and the vegetative cover on slopes up to 3 horizontal to 1 vertical would be sufficient to resist erosion during flood events.

- (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

Response: It is the Applicant's position, As set forth above, that the residences and roads would be placed above the current flood elevations. The lowest inhabitable level of all residences would be above 16 feet, and therefore, four feet above the base flood elevation even under the most conservative projections of future sea level rise. Basements would be sealed below the flood elevation to prevent intrusion.

As demonstrated by the Flood Modeling contained in Appendix J of the DEIS, the Project Site is not subject to wave action. The golf course, roadways and vegetated areas would not be significantly impacted during intrusion and recession of storm waters, as water slowly enters and recedes from the Site. Access roads for the Proposed Action are also set at elevation 14, two feet above the 100 year regulatory storm, providing a two-foot buffer for future sea rise. As set forth in Response G.1, emergency access to the entire neighborhood during storms would be improved as a result of the Proposed Action.

The gas, electrical and telecom utilities would be provided with the roadway in sealed piping and conduit that would be extended at the residence to above the finished floor (four feet above regulatory flood elevation) before the service enters the home to provide resistance to flood waters in accordance with Village Code Section 186-5A(2)(b).

- (d) The importance of the services provided by the proposed facility to the community;



Response: Under current conditions, in the vicinity of the site, there are residents who reside along Eagles Knolls Road, Cove Road, and Cove Road East that are cut off by flood water during a 100 year event because existing streets are below the 100 year flood elevation. The Applicant contends that the Construction of the Proposed Action would provide news access above the 100 year flood elevation for the existing residents through the development to Cooper Avenue and ultimately to Route 1.

Further the Applicant contends that the proposed development would generate additional property tax revenues to all taxing jurisdictions, and it would generate additional purchasing power that would benefit local businesses.

(e) The necessity to the facility of a waterfront location, where applicable;

Response: Not applicable.

(f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

Response: It is the Applicant's position that the design provides isolation from flooding and resistance to erosion. The floodplain encompasses the majority of the Project Site, as well as a large portion of the adjacent neighborhood. The Proposed Action could not be relocated to an area on the Project Site outside of the floodplain. Instead, the Proposed Action incorporates resiliency and safety measures to avoid flooding and erosion by providing all structures at a minimum elevation of four feet above regulatory flood elevation and roads two feet above. All surfaces within the flood area will be stabilized by maintained vegetation to prevent erosion during flood events.

(g) The compatibility of the proposed use with existing and anticipated development;

Response: It is the Applicant's position that the The-Proposed Action is an extension of a current residential neighborhood and is consistent with the Project Site's R-20 zoning. The Proposed Action would not impact flood elevations to adjacent properties as demonstrated by the flood modeling in Appendix J of the DEIS. Development of the 105 residential units in the floodplain would be compatible with adjacent properties as the development would not redirect or otherwise increase flooding on adjacent properties and roadways.

(h) The relationship of the proposed use to the comprehensive plan and floodplain management program of that area;



Response: It is the Applicant's position that the Proposed Action would comply with the Project Site's existing R-20 zoning designation. The Proposed Action would also reflect the various zoning approaches for the Project Site identified in the 2012 Comprehensive Plan. The proposed 105 units would be "clustered" in a location on the PRD Parcel that would permit a total of 30.6 acres to be preserved as shared open space. 37.6 acres of the existing golf course would be maintained on the Project Site, contributing to the recreational/open space character of the area. In addition, the 105 units proposed is far less than the maximum amount permitted if this site were zoned R-30 (30,000 square feet per acre, allowing for a maximum density of 137 units).

The Applicant contends that the clustered development layout would also permit the Applicant to preserve all wetlands and ponds identified in the Comprehensive Plan as contributing to the environmental significance of the Project Site.

It is the Applicant's position that the The Proposed Action is also complying with the regulatory purpose of the "hydraulic equivalency" floodplain management requirement set forth in Section 186-5A(3)(c) of the Village Code. The purpose of requiring a property owner proposing to place fill in a floodplain to provide a hydraulically equivalent amount of excavation is to ensure that flood waters would not be redirected onto adjacent properties as a result of the development. As demonstrated by the hydraulic modeling included in Appendix J of the DEIS, there would be no significant change in water surface elevations in the floodplain as a result of the Proposed Action, therefore demonstrating that the Proposed Action would not cause new flooding patterns on adjacent properties post-construction. The existing hydraulic condition of the Project Site would be equivalent to the hydraulic condition of the Project Site after the construction of the Proposed Action.

- (i) [https://ecode360.com/7709340 - 7709340](https://ecode360.com/7709340-7709340) The safety of access to the property in times of flood for ordinary and emergency vehicles;

Response: Under current conditions, in the vicinity of the site, there are residents who reside along Eagles Knolls Road, Cove and Cover Road East that are cut off by flood water during a 100 year event because existing streets are below the 100 year flood elevation. Currently, the Village imposes a mandatory evacuation policy for the neighborhood for forecasted 100-year storms, indicating to residents that emergency vehicles will not be sent to the neighborhood during high flooding (See Appendix R).

It is the Applicant's position that the Construction of the Proposed Action would provide access through the development for the Project's and adjacent residents above 100 year flood elevation to Cooper Avenue and ultimately to Route 1 for emergency and residential traffic. The Cooper Avenue access provides a minimum elevation of 13.0 at the property line, one foot above the 100-year food elevation. In the event of sea



level rise, this provides continued access for up to one foot of sea level rise, and shallow flood water travel for higher events. Assuming a modest sea level rise at the end of the century of feet, the maximum flood elevation will reach 14.0, resulting in one foot of water over the Cooper access. One foot of water can be reasonably traveled by emergency vehicles.

It should also be noted that since this is a tidally dictated flood, the maximum elevation occur under influence with the tidal forces and also recede with the tidal cycle allowing low tide access through Cooper under flood conditions.

See Response G.1 above for a discussion of access under future projected flood elevation levels.

- (j) The costs to local governments and the dangers associated with conducting search and rescue operations during periods of flooding;

Response: During significant storm events, the Village of Mamaroneck currently requires mandatory evacuation of low-lying waterfront areas, including the neighborhood surrounding the Project Site. Past notices on the Village website and placed in local print and broadcast media have stated "There is a mandatory evacuation in place for the Orienta and Shore Acres neighborhoods that are at-risk for coastal storm-surge flooding. Residents who stay will not be reachable by emergency crews." See Appendix R for copies of the announcements. Thus, under mandatory evacuation, the Village does not send emergency vehicles to the Project Site and surrounding neighborhood when roads are impassible due to flooding.

It is the Applicant's position that the The-Proposed Action would not necessitate a change in this policy, requiring additional expenditures. In addition, the residences on the Project Site would be elevated above flood waters, allowing residents who do not comply with the evacuation order to stay in place without risk of water intrusion into their homes. The separation from the flood elevation would minimize the risk of the need to perform search and rescue missions during periods of flood at the Project Site. In addition, as set forth in Chapter 30 (Fiscal Impacts), the increased tax revenue generated by the Project could be used to offset any potential increased costs to the Village's emergency services, should they determine in the future to upgrade equipment and/or evacuation policies and procedures.

- (k) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and



Response: Site is beyond wave action zone per FEMA. See Figure 19 in FEIS Appendix C illustrating the FEMA delineated area under the influence of wave action relative to the site.

- (l) The costs of providing governmental services during and after flood conditions, including search and rescue operations, maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems and streets and bridges.

Response: See response (j) above regarding search and rescue operations and response (c) and (f) discussing proposed elevation of residences and roadways above the 100 year flood elevation and the floodproofing of utilities and erosion resistance of proposed roadways. It is the Applicant's position that the The goal of the design of the Proposed Action is to provide flood resilient design that would not be impacted by flood events to protect the residents and property within the development. Therefore, the Applicant does not anticipate any costs associated with repair of public utilities or facilities associated with flood waters.

In addition, the Planning board would have to consider, pursuant to the general "Conditions for variances" listed in Section 186-6(B), the following:

- (4) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

Response: The project is located out of the Floodway and modeling demonstrates no increase in flood elevations.

- (5) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

Response: It is the Applicant's position that the The design of the Proposed Action has been developed to minimize potential flooding impact by elevating the residences and roadways and flood proofing utility systems and providing dry flood access to the adjacent neighborhood. Flood resistant measures are not only in place considering current storm events, but also considering the impact of future potential sea rise by providing residences four feet, and roads two feet, above current 100 year regulatory flood elevation of 12. Therefore, the variance requested is the minimum based on the proposed design.

- (6) Variances shall only be issued upon receiving written justification of:

- (a) A showing of good and sufficient cause;



Response: It is the Applicant's position that compliance with the Village's interpretation of hydraulic equivalency would result in significantly more disturbance and impact compared to the Proposed Action. To comply with the hydraulic equivalency, the project footprint would require significantly more excavation of low-lying areas and considerably more removal of mature trees. Under this scenario, the golf course would be removed due to additional low-lying excavation. The result would not change the resulting tidal flood elevation and would not benefit the adjacent neighborhood.

(b) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

Response: The Applicant contends, As noted above, there would be a substantial increase in Project cost to excavate additional areas of the Project Site. The Applicant would also have to eliminate the golf course for the Club use, which is part of the financial benefit for the development under the Proposed Action.

(c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.

Response: The provided Flood Modeling conclusively demonstrates that the project does not adversely impact flooding in the surrounding neighborhood and the proposed roadway network benefits the neighborhood by providing additional safety during a flood event.

Comment G.10:

A number of commenters noted that the property floods and is slow to drain during heavy rainfall events; i.e. not only during the 100-year storm event, but during higher return interval storm events. Provide an analysis of water levels on the property during flood events from the 10, 25 and 50- year return storm intervals and provide a discussion of whether flooding from storms of these types will impact other properties. Also address the time for the property to drain during the above storm intervals.

(Memo 1, pg. 7, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)



(Public Comment Letter 158, pg. 1, Ben Sawyer, 5/11/2018)

Response G.10:

Additional figures have been prepared showing the flood extent for the existing and proposed action condition for the 10, 25 and 50-year flood storms; these are included in Appendix R. As demonstrated by these figures, the flood elevations for the 10, 25 and 50-year storms are identical in the existing and proposed action since elevations are dictated by the water surface of the Long Island Sound. Therefore, there is no change in impact to adjacent properties. The Proposed Action provides access for adjacent properties that does not currently exist increasing safety for the neighborhood.

Comment G.11:

Compare the flood elevations from Superstorm Sandy to the 100-year flood elevations modelled in the DEIS and discuss how a storm of that size would affect the property.

(Memo 1, pg. 7, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response G.11:

Although site specific information on flood elevations is not available for Sandy, regional levels from FEMA indicate that elevations were at or below the 100-year flood elevation as noted in Response G.1 above. The 100-year flood modeled for the project provides a conservative assessment of how the Proposed Action would be impacted by a similar storm.

Comment G.12:

Discuss the amount of sea level rise that would result in the overtopping of Eagle Knolls Road and Cove Road, thus potentially stranding people in a flood. How does this compare with the range of projections for sea level rise? How does this compare with the current regulatory flood elevation?

(Memo 1, pg. 7, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response G.12:

Currently Eagle Knolls Road on the Project Site dips to an elevation of 4.9 feet which is overtopped during a 5-year flood event, approximately. This condition would be removed under the Proposed



Action with the relocation and raising of Eagle Knolls Road. Cove Road is lowest off site at the intersection of Cove Road and East Cove Road with the elevation dipping to 9.3 feet.

The current FEMA 10-year flood elevation is 8.8. This would impact Eagle Knolls Road, but not Cove Road. The current FEMA 25-year flood elevation is 10.0 which would inundate both Eagle Knolls Road and Cove Road, although Cove Road would most likely still be passable with minimal water depth of 0.7 feet at worst. Including a potential sea rise of two to four feet, water would potentially be introduced to Cove Road in both the 10 and 25-year storms in the future, thereby restricting access.

After construction of the Proposed Action, Cooper Avenue would be the only access road above flood levels to enter and exit the Project Site in a 100-year flood event. The portion of Cooper Avenue on the Project Site is proposed to be elevated to a minimum of elevation 13.0 which would provide access one foot above the current FEMA 100-year flood regulatory elevation and approximately a half a foot below the 500 year flood non-regulatory elevation.

Comment G.13:

Page 3G-8. Mitigation. 5. "With the proposed grading changes, all proposed buildings on the Project Site will be located outside the 100-year and 500- year floodplains." With the proposed grading changes, all proposed buildings on the Project Site will be located ABOVE the 100-year and 500-year floodplain base floodplain elevations as required by the Village Code. If the project was constructed and the LOMR-F was not submitted to FEMA to change the regulatory floodplain boundaries, the proposed buildings would still be in the floodplain.

(Memo 1, pg. 7, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

(Memo 1, pg. 16, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response G.13:

According to FEMA, tThey would not flood but would still be mapped in the flood plain ~~according to FEMA~~ and would still be required to purchase flood insurance. The FEMA mapping would not reflect the built condition. The Applicant may apply to FEMA for a LOMR-F to relieve the need to purchase flood insurance. Application for a LOMR-F typically takes place after construction due to the documentation required for its submittal. Documentation includes surveys of as-built conditions.



As demonstrated by the Hydraulic Modeling included in Appendix J of the DEIS, there is no significant change in water surface elevations as a result of the project for the adjacent properties. The Proposed Action provides flood access for adjacent properties that does not currently exist increasing safety for the neighborhood. The proposed improvements would provide a finished condition that is stabilized and resistant to erosion from flood waters.

Comment G.25:

Extensive regrading to create a 16 foot high ridge is proposed in order to raise the building sites above flood elevations. As mentioned, more than 270,000 cubic yards of net fill and excavation of existing soils will be stockpiled on site to accomplish this transformation. Stockpiling materials in floodplains violates best management practices because flooded and water saturated soils are unstable. The standard stormwater runoff measures proposed are not effective to prevent stormwater runoff and water quality impacts of the large amounts of materials proposed for storage and disturbance in a flood plain.

(Public Comment Letter 67, pg. 12-13, Lisa Liquori, 2/14/2018)

Response G.25:

Soil excavation and placement would be performed in maximum five-acre phases deploying phase specific soil erosion measures for each step. Placed soil would be stabilized with vegetative cover before moving to the next phase. This would minimize the extent of soil exposed at any given time and provide an area that can be easily managed. All stockpiles would be managed in accordance with New York State Department of Environmental Conservation (NYSDEC) guidelines and would be inspected by a NYSDEC certified inspection weekly through the course of construction to verify compliance with NYSDEC standards. Requirements are included in the Preliminary Stormwater Pollution Prevention Plan included as Appendix H to the DEIS.

It is the Applicant's position that dewatering would not be required (see Response D.1 and D.7).

Comment G.26:

The FEMA flood maps show that most of the Hampshire Country Club property is in the AE zone, not the VE zone. The flooding on this property is caused by two factors: a) tidal surge and b) the height of the water table and the effects of heavy rains on the high water table. We do not feel your study adequately addresses the issues caused in heavy rains due to the high water table. There are many



(Public Comment Letter 106, pg. 2, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

Response G.32:

Flood modeling included in Appendix J of the DEIS has concluded that flood elevations at adjacent properties would not be affected by the Proposed Action. If a hydrogeologist is retained by the HCZMC, the Applicant would be happy to work with ~~them~~him/her and provide any required information.

Comment G.33:

The Commission has questions concerning the functioning of structural methods to control flooding; included is-- when do tidal flood gates operate? There is great concern about the deterioration and current condition of tidal flood gates and other structures including concrete deterioration and rust due to age of the gates and the overall functionality of the flood gates. It is recommended that this be investigated by an engineer, in particular whether tidal flood gates are operating properly and/or need to be replaced. Specifically, the condition/adequacy of the tidal flood gates currently and going forward into the future (30 years) should be evaluated. Also, the condition/adequacy of any other mechanisms used to control or protect against flooding such as gates, dams and/or trenches should be fully investigated and evaluated.

(Public Comment Letter 106, pg. 3, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

(Public Comment Letter 119, pg. 1, Flood Mitigation Advisory Council, 5/8/2018)

Response G.33:

Tidal gate operation is discussed in Response G.18 above. The tidal gates are in good order and currently inspected seasonally and after major storm events, and maintained regularly, and would continue to be maintained, by the Club. If the Proposed Action is constructed, regular maintenance would be performed by the Home Owners Association. The project engineer for the applicant, Michael Junghans, NYPE 072072, certifies that the tidal gates are in good working order. Regular maintenance could include replacement of gate parts where necessary, and the tide gates would be replaced at the end of their useful life.

Comment G.34:



Comment I.5:

The capacity of the proposed onsite collection system to accommodate the calculated peak hourly flow shall be clearly demonstrated.

(Memo 1, pg. 8, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response I.5:

Attached in FEIS Appendix T is an analysis of the critical system segments demonstrating that the proposed sewer piping can accommodate the expected sewer flow including estimated inflow and infiltration.

Comment I.6:

As proposed in the DEIS, condition and capacity assessment of the existing collection system downstream of the proposed connection point is required to confirm the ability of the system to accommodate wastewater from the project.

(Memo 1, pg. 8, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response I.6:

The sanitary collection system for the project collects all on site sanitary discharge at a central pump station that discharges off site to the public system. The Applicant is currently evaluating ~~several~~ three options for discharge to the public system.

The initial option, which is presented in the DEIS, is connection to the Village of Mamaroneck 10" gravity line in Orienta Avenue at the intersection of Cove Road. Further discussions with the Village Engineer have revealed significant challenges relating to inflow and infiltration that need to be evaluated in the 6,000 linear feet of collection main from the connection point in Orienta Avenue to County pump station located adjacent to the West Basin near the intersection of Orienta Avenue and Rushmore Avenue.

An alternative connection ~~is also being explored~~ to the Town of Mamaroneck sanitary system in Hommocks Road is also being explored. Initial analysis has indicated that sufficient capacity exists to accommodate the project. Conversation are ongoing with the Town Engineer to understand connection requirements and system evaluation and analysis to prove out connection viability.



A more costly but feasible option would be to extend the force main from the Project Site all the way to the County pump station at the West Basin. This would require extensive excavation in Orienta Avenue from Cove Road to the County pump station near the intersection of Rushmore Avenue.

The 2014 Annual Report from the Westchester County Department of Environmental Facilities (latest available on-line) shows that the Mamaroneck Treatment Plant has a capacity of 20.6 MGD and an actual flow of 14.6 MGD.¹ The West Basin Pump Station has a capacity of 5.8 MGD and an actual flow of 0.689 MGD. Therefore, capacity exists in the County system. The first and second options describe above would require coordination with Town or Village to confirm capacity and provide upgrades if required. If these options do not provide sufficient capacity, the Applicant can use the third option described, which has sufficient capacity.

Comment I.7:

The DEIS references "project connection to the County pump station" but also states that "the project does not propose to utilize the existing County sewer pump station located on Cove Road." The text and drawings should be revised to consistently describe the intended connection point from the project to existing sanitary sewer infrastructure. The Grading and Utility Plan currently appears to show the project force main connecting to the existing Cove Road pump station.

(Memo 1, pg. 8, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response I.7:

See Response I.1.

Comment I.8:

Applicant should review to determine if the pump station north of Lots 17 and 18 is required, or if a deeper gravity sewer in certain sections would be feasible to eliminate the pump station. Specifically, increasing gravity sewer depth near Lots 17 and 18 may allow all sanitary flow from the western portion of the site to be routed to a single pump station on the eastern side of the site.

(Memo 1, pg. 8, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response I.8:



¹ 2014 Annual Report, Wastewater Treatment Solid Waste Water Agency Operations.
<http://environment.westchestergov.com/images/stories/pdfs/2014ARredact.pdf>. Accessed July 2019.



the proposed system would not impact, nor would it be impacted by these blockages, and therefore no mitigation is necessary.

In addition, the Applicant has invested in upgrades to the sewer system since May of 2018 including grease traps and the Club House would continue to maintain the system.

Comment I.11:

Show, as an alternative, a low pressure sewer system in which each house is equipped with an individual grinder pump. Discuss the pros, cons and environmental impacts of this alternative.

(Memo 1, pg. 9, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response I.11:

The Proposed Action provides gravity sewer system within the Project that discharges to a central pump station and is discharged by force main to either the municipal sewer system or directly to the County West Basin Pump Station on Orienta near the intersection of Route 1. Under this approach the pump station, as required by the Department of Health, would be dedicated to the Village of Mamaroneck to be operated and maintained. The proposed pump station is proposed to be set with opening, control panel and emergency generator above the flood elevation to ensure continued operation, even after a flood event. The generator would ensure continued operation in the event of extended power outage.

The Applicant has been asked to consider use of a low-pressure sewer system (LPS). An LPS system uses individual pump stations at each residence that feed into a central force main that conveys sewage off site. Although these systems are ideal for smaller developments (up to 15 units because it becomes cost effective not to purchase a duplex pump station with backup generator support), LPS systems are not well suited for developments of this size. The main advantage to the Village is that each system is owned and maintained by the homeowner and does not require Village support. The force main would be owned and maintained by the HOA. The disadvantage is that the system would have up to 105 units individually feeding into the force main significantly increasing the potential for failure at any of the pressurized connections. The system is also operated using up to 105 pumps compared to two larger pumps in the pump station. LPS systems would each require an exterior sump in the yard of the homeowner sized for a minimum of 24 hours of flow without regenerator backup.



If an extended power outage occurs, the systems would not function. Therefore, the central pump station system would be more reliable, lower maintenance, lower cost and would provide continued performance during a power outage. A low pressure system would require individual pumps within every house most likely located within the basement. This approach works well in a rural setting where houses are widely spaced or in an area where only a portion of homeowners have connection to the municipal system. This approach also requires significantly more maintenance to maintain 105 individual pumps compared to two duplex pump stations. In addition, a low pressure system does not provide pump redundancy and power back up (emergency generator) as included in the duplex pump station. The duplex stations would be under contract maintenance by the HOA which would provide the most reliable and hardened system for the development as a whole.

Comment I.12:

The draft EIS contains an adequate discussion of how the application will satisfy the County Department of Environmental Facilities' policy to require inflow/infiltration (I&I) mitigation to offset projected increase in wastewater flows at a ratio of three for one.

(Public Comment Letter 64, pg. 2, Norma V. Drummond, Westchester County Planning Board,
3/12/2018)

Response I.12:

Comment noted.

Comment I.13:

The proposed Hampshire development might have sump pumps and everyone might be pumping basement flooded storm and Sound waters into the Village's sanitary sewage system in a desperate and fruitless effort to stay above the storm surge and the groundwater.

Since the developers are including an evacuation plan into their project proposal, I would expect that they indicate their understanding of one of the Village's most insidious and ongoing problems: SSOs - sanitary sewer overflows - wherein sanitary pipes receive (illegally) added sump pumped stormwater, forcing manholes to overflow, spilling untreated sewage into our streets, neighborhoods, and ultimately Long Island Sound.

(Public Comment Letter 99, pg. 1, Katherine E. Desmond, 4/16/2018)



3K. Vegetation and Wildlife

Comment K.1:

In terms of stands of mature vegetation, the proposal calls for the clear cutting and destruction of all the vegetation within a 55-acre block of land, including the removal of 432 trees having a 25-inch or larger circumference. The extensive disturbance will have negative impacts on the site's habitat, bucolic settings, soils, and noise.

And as mitigation for the removal of these mature trees, the landscape plan proposes the planting of 432 trees, which is described as a one-for-one replacement. But the proposed two-to-two-inch diameter replacement trees represents a significant reduction in the size and the habitat value compared to the existing trees which have about 16-times the areas of the proposed vegetation. Way short of a typical one-for-one replacement standard.

(Public Hearing 1, pg. 62, 2/14/2018, Public Comment Letter 67, pg. 5, and Public Comment Letter 67, pg. 10-11, 2/14/2018, Lisa Liquori)

(Public Hearing 1, pg. 145, Paul Ryan, 2/14/2018)

Response K.1:

Comment noted. The Project Site is comprised of cultural ecological communities associated with historical and ongoing use as a golf course. The Project Site does not contain woodlands, forests or other naturally-occurring vegetated communities. As a result, the observed and expected wildlife fauna is comprised primarily of common species adapted to landscaped and developed habitats. In order to provide an estimate of avian species potentially using the Project Site, the NYSDEC New York State Breeding Bird Atlas¹ (NYSBBA) was consulted. According to this resource, a total of 86 bird species were identified within the NYSBBA survey block in which the subject property is located (Block 6053C) during the 2000-2005 breeding bird survey (NYSBBA list included in FEIS Appendix K). According to the NYSBBA, of the 86 bird species observed within Block 6053C, 71 are confirmed as breeding, 10 are listed as probably breeding and 5 are listed as possibly breeding. Forty bird species were observed at

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¹McGowan, K.J. and K. Corwin, eds. 2008. *The Atlas of Breeding Birds in New York State*. Cornell University Press. Data also available online at <http://www.dec.ny.gov/animals/51030.html>-. Accessed March 18, 2019.



the Project Site during~~Specifically, based on~~ field surveys conducted on July 24 and 31, 2018. Of the 40 observed species, 33 also appear on the above-referenced NYSBBA inventory for Block 6053C. Based on field observations, the avian fauna observed at the Project Site is comprised of birds that occur with landscaped and developed settings, including American robin (*Turdus migratorius*), barn swallow (*Hirundo rustica*), song sparrow (*Melospiza melodia*), blue jay (*Cyanocitta cristata*), mourning dove (*Zenaidura macroura*) and others. The ponds and wetlands are habitat for birds typically associated with these settings, including great egret (*Ardea alba*), snowy egret (*Egretta thula*), great blue heron (*Ardea herodias*), mallard (*Anas platyrhynchos*) and red-winged blackbird (*Agelaius phoeniceus*). An inventory of observed birds is provided in Appendix K. Observed small mammals include eastern gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*), eastern cottontail (*Sylvilagus floridanus*) and woodchuck (*Marmota monax*).

Given that the Project Site is comprised primarily of maintained fairways, greens and roughs of the existing 18-hole golf course, the herbaceous vegetative community is overwhelmingly dominated by common turf grasses (e.g. blue grasses (*Poa* spp.), fescues (*Festuca* spp.) and rye grasses (*Lolium* spp.) as well as "weedy" herbaceous plants that occur in turf communities, such as clovers (*Trifolium* spp.), plantains (*Plantago* spp.) and dandelions (*Taraxacum* spp.). The tree flora at the Project Site is dominated by several species of oaks and hickories, including northern red oak (*Quercus rubra*), white oak (*Quercus alba*), scarlet oak (*Quercus coccinea*), pin oak (*Quercus palustris*), mockernut hickory (*Carya tomentosa*), shagbark hickory (*Carya ovata*) and pignut hickory (*Carya glabra*). Other dominant tree species are red maple (*Acer rubrum*), river birch (*Betula nigra*), black walnut (*Juglans nigra*), eastern white pine (*Pinus strobus*) and cypress (*Taxodium* sp.). An inventory of observed trees is provided in Appendix K.

The Proposed Action would result in conversion of 29.5 acres of the Project Site to residential development. The remainder of the 106-acre Project Site would be comprised of vegetated communities and surface waters/wetlands, including ~~the downsized nine-hole golf course,~~ 30.6 acres of vegetated open space and the existing ponds and wetlands found on the golf course, which would be enhanced with vegetated native plant buffers that would add an additional 108,911 square feet (2.5 acres) of wetlands buffer plantings. The Proposed Action would also preserve at least 384 trees at the Project Site. These 384 trees would continue to provide habitat for the various bird and other woodland wildlife species observed at the Project Site.

The Proposed Action would not remove existing phragmites stands. Common reed (Phragmites australis) stands are dominant through much of Wetland A and the vegetated wetland to the west of Pond 10. Permanent removal of common reed from the two wetlands, if achievable, would allow opportunities for native wetland vegetation to establish, resulting in improvements to plant diversity and habitat quality for some wildlife species. However, removal of phragmites through mechanical



means and/or application of herbicides would entail a multi-year, labor-intensive operation, with no guarantee of success. The resulting long-term physical disturbance to the resident plant and wildlife communities within both wetlands would far outweigh the benefits that would occur through removal. Moreover, recolonization from offsite sources of common reed, including the adjacent Hommocks Conservation Area (where dense common reed stands occur), is likely over time.

As an alternative, the Applicant has decided to improve plant diversity and wildlife habitat value at the Project Site through installation of native plant/non-disturbance buffers around all of the ponds and wetlands at the property, including Wetland A and Pond 10. Significantly, the Wetland Mitigation and Monitoring Plan includes provisions for invasive plant monitoring and removal to ensure that common reed does not become dominant within the native plant buffers. Furthermore, it is important to note that the existing common reed stands to remain at the Project Site provide a number of ecological benefits. Common reed stands serve as habitat for bees and other beneficial insects, as well as nesting, roosting and foraging habitat a number of bird species, including various wading birds, as well as red-winged blackbird, common yellowthroat, yellow-rumped warbler, white-throated sparrow, yellow warbler, black-capped chickadee, marsh wren, salt marsh sparrow and least bittern. Common reed stands also provide other important ecosystem services, including flood control, soil stabilization and sequestration of carbon, nitrogen and other nutrients, heavy metals and other pollutants. Based on the foregoing, the potential benefits of common reed removal at the Project Site are not commensurate with the detriments that may occur as a result. As such, the Applicant is proposing to leave the existing common reed stands undisturbed and proceed with establishment of the native plant buffers, as described.

The Proposed Action would result in the removal of 432 trees totaling a tree Patch removal area of 10.6 acres. A total of 5.77 acres of tree patches would remain.- The 432 trees proposed to be removed would be replaced with 432 trees (see Response 3.20 for a list of species to be planted) with in-kind species, which would grow to a mature size akin to existing conditions over time. Based on published average growth rates described in the *Manual of Woody Landscape Plants*, by Michael A. Dirr, a projection of 20 years, on average, duration for the specified trees to reach the average mature height per species. This in part due to the selected cultivated varieties that have been hybridized for selective genetic traits, including vigor, growth rate, and adaptability over the straight species. However, projections are largely influenced, either positively or negatively, by various environmental factors beyond human control consisting of: soil conditions, drainage, water, fertility, light exposure, etc. Therefore, the above projection is solely a conservative estimate. Considering the proposed growing conditions of the proposed trees would be in an open-space environment with plentiful soil volumes, conducive for tree growth, as opposed to an urban environment (i.e. street tree planting surrounded by concrete), it is estimated trees would have favorable growing conditions. The existing basal areas



of trees to be cut is 1,575.72 square feet. The basal area of the replacement trees will be 132.53 square feet after 10 years of growth. ~~The trees would reach maturity within 15 years.~~

Based on the above, it is anticipated that bird density at the Project Site would decrease temporarily, due to the removal of 432 habitat trees. Individuals from resident species would be displaced to the preserved habitat trees at the Project Site, the Hommocks Marsh Conservation Area, surrounding residential properties and other treed properties in the general surrounding area. It is expected that a temporary increase in bird density at these properties would occur, until an equilibrium between bird numbers and available resources is reached.

As noted above, resident avian species would continue to use the 384 trees to be preserved at the Project Site as habitat, while also utilizing the 432 trees to be planted. It is further anticipated that the habitat area for birds provided by the newly planted trees would increase yearly, as the trees grow to maturity. Due to the temporary tree habitat loss that would occur during the projected 20 years until the planted trees reach maturity, overall bird density would decrease proportionately during this time, but species diversity is expected to remain similar to existing conditions, due to the preservation of existing trees and 432 replacement trees to be planted, and creation of new trees habitat.

Accordingly, following implementation of the Proposed Action, the Project Site would continue to function ecologically as one comprised of landscaped habitats with trees interspersed with surface waters and wetlands, similar to the existing conditions described above. As such, a similar plant and wildlife species assemblage is expected to inhabit the Project site following implementation of the Proposed Action, with significant improvements to plant and wildlife habitat quality anticipated due to installation of the proposed native plant wetland buffers. The removal of 432 trees (see FEIS Figures 13, 14a and 14b) would impact habitat for some of the observed and expected avian fauna described above. However, the habitat impacts would be temporary and minimized by replacement with 432 trees (see Response 3.20 for a list of species to be planted) in-kind species, preservation of 384 existing trees, and installation of the as well as the proposed native plant wetland buffers, which would improve overall avian habitat quality within and adjacent to the various wetland features. Taking these factors into account, the overall number of birds utilizing the Project Site would decrease temporarily as a result of removal of mature habitat trees. However, overall bird species density is expected to remain stable, due to preservation of existing trees and 432 replacement trees to be planted creation of new trees and otherwise vegetated habitat. Moreover, overall bird numbers are expected to rebound over time as the 432 replacement trees grow to sizes and heights that replicates the habitat opportunities and other ecological benefits provided by many of the existing trees at the Project Site. approach maturity. Since the Project Site would continue to support landscaped habitats with trees interspersed with surface waters and wetlands following implementation of the Proposed Action, no long term significant adverse impacts to avian species diversity are anticipated. Based on the foregoing, no



~~significant adverse~~ direct or indirect impacts to the Hommocks Conservation Area are anticipated due to the Proposed Action, and habitat conditions are anticipated to improve, with the installation of approximately 30.6 acres of improved quality wildlife habitat.

Comment K.2:

The destruction or damage to shade ornamental and evergreen trees and plants and the indiscriminate and excessive cutting of these trees and subdivisions and on private property causes barren and unsightly conditions, creates increased surface drainage problem, increased municipal cost to control drainage, impairs the stability and value of improved and unimproved real property and causes deterioration to the community, which adversely affects the health, safety, environment, ecosystems, and general welfare of the inhabitants of the Town of Mamaroneck.

(Public Hearing 2, pg. 382, Paul Ryan, 4/11/2018)

Response K.2:

~~The Proposed Action does not include the indiscriminate and excessive cutting of trees.~~ The trees that ~~need to~~ would be removed would be limited to the 55.6-acre area of disturbance, and would not include trees immediately surrounding ponds or wetlands on the Project Site. The Applicant is proposing to replace all 432 trees and create improved habitat over what is currently existing on the Project Site, as explained in Response K.1 above. The proposed Landscaping Plan (see Figure 6 in FEIS Appendix C), was prepared in accordance with the *Coastal Planting Guide for the Village of Mamaroneck* in order to maximize benefits for local habitat, proposes a mixture of evergreen and shade tree varieties, resulting in a 1:1 mitigation ratio. In addition, out of 106.8 acres, only 14.3 acres would be impervious surfaces, which is only an increase of 7.3 acres from existing conditions. As outlined in Chapter F of the DEIS and the FEIS, the proposed increase in impervious surface would be managed and treated so as to avoid any potential significant adverse surface drainage impacts. ~~This would have a negligible effect on drainage problems especially when including the proposed stormwater management measures as outlined in Chapter F of the DEIS and the FEIS.~~

Comment K.3:

First paragraph. Second sentence. The area of trees should not be mixed into landscaped fairways, practice rough, greens and trees (81.6% of site). Identify the wooded areas as a separate area, as defined by Exhibit 3K-1, containing the 432 trees that are 8" dbh or greater.



(Memo 1, pg. 9, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response K.3:

The trees are part of the landscaped areas of the golf course. All trees are located, pruned, and landscaped to take into account the recreational activities taking place on the Project Site. The trees are located in clusters associated with the location of the fairways, practice rough, and greens. They are not associated with a natural wooded areas or natural ecosystems. The locations of trees are identified on Figure 13 in [FEIS Appendix C](#). [See Response K.1.](#)

Comment K.4:

Exhibit 3K-1, the removal of 432 trees are 8" dbh or larger is a significant impact. There is at least one 55" dbh tree. Include a chart or table with the number of trees in size increments by 5" groupings (i.e., number of trees 10" dbh or less; number of trees 11-15" dbh; 16-20" dbh ; etc.), so that the size range and numbers of trees in each cohort can be better understood. The tree lists on this exhibit are too small to read, except at 400x magnification. Take each group of trees and label them (i.e., Group A), and where they are found on the map, label that (i.e., "Area A"), and have a table in larger font around the edges of the map with the Group A...list trees and sizes; Group B, list trees and sizes etc. The size of each wooded area could also be noted in this table around the edges of the figure. A chart or table of size groupings is also needed in this text to show the number of trees in different size classes in order to compare to what is being cut to what is being planted. The overall dbh of tree being cut versus the overall dbh of trees planted should be stated in the FEIS.

(Memo 1, pg. 9, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response K.4:

Please see the Tree Removal Plan, Tree Removal Sorted Plan and Tree Removal Sorted Table in Appendix C of the FEIS (Figures 13, 14a and 14b). As shown in the Tree Removal Plan, there would be 432 trees removed ([approximately 10.68-43 acres of tree patch area](#)) as a result of this project, [leaving and](#) 384 trees would remain on the Project Site. In addition, all 432 trees that would be removed would be replaced ([see Response 3.20 for a list of species to be planted](#)) [with an in-kind species, and the replacement trees which](#) would grow to a mature size akin to existing conditions over time. A majority of the trees that would be replaced are mature trees and have greater than a 10" dbh. Many of them are between 24-36" dbh. The replacement trees would be between 2-2.5" dbh. These trees would reach maturity within [15-20 years](#). [The basal area being removed would account for approximately 1,575 square feet and the amount being replaced with the proposed planting would equal approximately 15](#)



square feet, and 133 square feet after ten years of growth (see FEIS Appendix K). Due to the temporary tree habitat loss that would occur during the projected 20 years until the planted trees reach maturity, overall bird density would decrease proportionately during this time, but species diversity is expected to remain similar to existing conditions, due to the preservation of existing trees and creation of new treed habitat.

Comment K.5:

Provide a chart or table illustrating the size, in diameter at breast height, at 5" intervals, of trees to remain on the site after project completion. Provide the percentage of trees of each diameter group to remain on the site after project completion.

(Memo 1, pg. 9, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response K.5:

Please see the Tree Removal Plan, Tree Removal Sorted Plan, ~~and~~ Tree Removal Sorted Table, Trees to be Preserved Sorted Plan and Trees to be Preserved Sorted Table in Appendix C of the FEIS (Figures 13, 14a ~~and~~, 14b, 14c and 14d). As shown in the Tree Removal Plan, there would be 432 trees removed as a result of this project and 384 trees would remain on the Project Site. The chart below provides the percentage of trees of each diameter group to remain on site after project completion. This does not include the trees that would be planted as part of the landscaping plan.

The loss of a portion of the larger trees on the Project Site is included as a Significant Impact that Cannot be Avoided for the Proposed Action. It is noted that of the 31" to 55" size class of trees, there will be 111 trees removed (84% of that age class), with only 21 trees retained (16%). See the table below. It will take a significant period of time for new trees to reach the 31" to 55" dbh range.

Table 3K-1 Tree Removal Sorted

<u>Size (inch)</u>	<u>Existing Trees</u>	<u>Trees to Remain</u>	<u>Trees to be removed</u>	<u>Trees to be removed (%)</u>
<u>7</u>	<u>15</u>	<u>15</u>	<u>0</u>	<u>0.0</u>
<u>8</u>	<u>26</u>	<u>21</u>	<u>5</u>	<u>19.2</u>
<u>9</u>	<u>19</u>	<u>12</u>	<u>7</u>	<u>36.8</u>
<u>9.5</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>100.0</u>
<u>10</u>	<u>50</u>	<u>39</u>	<u>11</u>	<u>22.0</u>
<u>10.5</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>100.0</u>



which are not significant. Additionally, similar to existing conditions, the three drainage systems would continue to receive stormwater runoff from surrounding offsite sources. Moreover, it is important to note that, water levels within the ponds and wetlands comprising the three golf course drainage systems are and would continue to be artificially maintained by various outlet structures, including elevated drainage pipes, weirs and tide gates. Based on the foregoing, no significant changes in the hydrology of the existing drainage system ponds are anticipated as a result of the Proposed Action.

Comment K.11:

Page 3K-6 – What does the sentence stating “however the areas of natural vegetated habitats, to be located in the shared open spaces, would grow significantly” mean? Grow in area, grow through in succession? The DEIS later states on page 3K-7 that the HOA will manage these open areas. What is the management plan? Will they be managed as mowed lawn, grassland (mowed once or twice a year), old field/shrubland or allowed to succeed to wooded habitat?

(Memo 1, pg. 9, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response K.11:

The open space areas are defined on Figure 5 in Appendix C and would be allowed to grow to a defined area of 30.57 acres~~would be left in a natural state and would be allowed to grow in area and succession~~. However, the HOA would be responsible for the maintenance of those areas if problems arise or landscaping adjustments are needed in the future. See Appendix H for the Landscape Management Plan and the Wetlands Mitigation and Monitoring Plan.

Comment K.12:

Page 3K-6. The only “critical habitat” identified by the USFWS in NYS is for piping plover along the Great Lakes. Stating that the site does not contain “critical habitat” does not mean that migratory birds do not use the site, nor does it mean that cutting down 432 large trees would not have an impact on migratory birds.

The list of migratory birds that are Birds of Conservation Concern and within the range of the site is identified under within the USFWS Trust Resource List, contained within the DEIS body and in DEIS Appendix L. The NYS Breeding Bird Atlas (the site lies in Breeding Bird Block 6053c) identifies all birds which have been identified as breeding (nesting with young) in this geographic area. Include the list of breeding birds (birds of conservation concern) from the USFWS Trust Resources List and from the



Breeding Bird Atlas Block 6053c in the FEIS and identify those birds that may be present on the site given the habitat features. All of these species (except perhaps for resident Canada geese) are migrating birds.

The federal Migratory Bird Act prohibits the killing of migratory birds. (See DEIS Appendix L, USFWS Trust Resource Report, page 4 which states "any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.")

Cutting trees when birds are not nesting or fledging is an appropriate mitigation measure to reduce the potential killing or take of migratory birds. Generally, avoiding cutting of trees from April 15th through July 31st in this part of the state would avoid direct take of migratory birds. Secondly, planting larger native trees in order to make up for the significant reduction in total basal area tree loss would help reduce the take associated with the temporal loss of nesting habitat on the site.

(Memo 1, pg. 10, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response K.12

The Applicant would avoid cutting of trees from April 15th through July 31st to avoid direct take of migratory birds. The trees that need to be removed would be limited to the 55.6-acre area of disturbance. The Applicant is proposing to replant 432 trees to replace those that have been removed. As shown on the Landscaping Plan (Figure 6 [FEIS](#) in Appendix C), the new trees would include native species and those that would provide ecological diversity. The proposed Landscaping Plan, prepared in accordance with the Coastal Planting Guide for the Village of Mamaroneck in order to maximize benefits for local habitat, proposes to plant 432 trees, a mixture of evergreen and shade tree varieties, resulting in a 1:1 mitigation ratio

The trees identified in the Landscape Plan would near maturity, on average, in approximately within 20 years from the time of planting of a 2 to 2.5-inch caliper tree, on average 13 feet height per ANSI Z60.1 American Standards for Nursery Stock. Industry-accepted landscape best management practices (BMPs) and studies conducted by Cornell University's Urban Horticulture Institute (UHI), has determined planting of larger-caliper trees is detrimental to the overall health and establishment of proposed trees. Large caliper trees, for the purpose of this response, are defined as tree calipers 3-inches and larger at the time of transplant/installation. The transplanting process removes approximately up to 90% of a tree's root system, and there is a direct correlation of the larger the tree,



the more-severe transplant shock, and a longer establishment period. The UHI has published studies demonstrating smaller tree caliper (< 3" caliper) plantings have both shorter establishment periods and faster growth rates, typically exceeding large caliper tree establishment and growth rates in a 5 to 10-year period.

~~– The trees identified in the Landscape Plan would near maturity within 15 years. The size chosen for the plan are common and would typically establish faster than a larger tree. For the tree proposed in the Landscape Plan, it is anticipated that the trees would become established within 2 years.~~

Comment K.13:

Page 3K-6. Second to last paragraph. Discuss the loss of significant tree basal area.

(Memo 1, pg. 10, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response K.13:

The existing ecological communities at the Project Site provide suitable habitat for common wildlife species adapted to predominantly developed/disturbed conditions and close human presence. Therefore, the conversion of portions of the landscaped cover type to a developed residential use is not anticipated to result in significant adverse impacts to existing habitat. While there would be tree basal area loss, the number of trees to be replanted are equal to the number that are being removed.

The trees identified in the Landscaping Plan would near maturity approximately within approximately 20 years. The size chosen for the plan are industry-accepted sizes and would typically establish faster than larger trees, as stated in a published 3-year study in the Journal of Arboriculture 26(3): May 2000, p 162, *Survival and Growth of Transplanted Large- and Small-Caliper Red Oaks* by Struve et al. Based on the study, the tree basal area is projected increase at a rate of 15%, up to 22% each year of its growth. Once established, the basal area rate of growth increases as well. For the trees proposed in the Landscape Plan, it is anticipated that the trees would become established within 2 years, also based on the same study (Struve et al., p166). ~~The trees identified in the Landscaping Plan would near maturity within 15 years. The size chosen for the plan are common and would typically establish faster than a larger tree. The tree basal area would increase at least 10% each year of its growth. Once established, the basal area rate of growth increases as well. For the tree proposed in the Landscape Plan, it is anticipated that the trees would become established within 2 years.~~ The temporary reduction in tree basal area at the Project Site would be minimized or mitigated by the preservation of many existing mature trees at the Project Site including the preservation of 30.6 acres of shared open space and the installation of native plant buffers along surface waters and wetlands ~~and preservation of 30.6 acres of shared open space.~~



Comment K.16:

Provide an Integrated Pest Management Plan for the golf course.

(Memo 1, pg. 10, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

(Public Comment Letter 106, pg. 2, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

Response K.16:

Please see Appendix U for the Pest Management Plan for the golf course

Comment K.17:

Advocating for migratory birds, wading birds, grazers, amphibians, reptiles and small mammals, it is important to see these three wetland/natural complexes from an animal's perspective where they are rather separate from one another- especially when floating on a pond, stalking for worms at the shore or perched in a shrub. The mass of buildings, the roads - not to mention increased numbers of humans, their pets (CATS and dogs), and their vehicles, will provide formidable barriers for creatures which are not wing-endowed, such as amphibians (toads, frogs, salamanders), reptiles (turtles, snakes) and small mammals (mice, muskrat, opossums, etc.). A meaningful, much better conceived and ecologically viable mitigation proposal would create a single set-aside preservation area, enhanced by natural vegetation and water features, even at the cost of losing existing water features elsewhere on the site to construction....In order to continue to serve as significant open space and maintain its character as a "Significant Environmental Area", the development would need to be redesigned to abut existing residential areas and to consolidate all remaining golf course and natural areas into one contiguous and compact mass with immediate connection to the Hommocks Salt Marsh Complex.

(Public Comment Letter 1, pg. 2, 1/12/2018, Public Comment Letter 58, pg. 1, 1/17/2018, Sven Hoeger, Environmental Consultant to the HCZMC)

(Public Comment Letter 106, pg. 1, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

Response K.17:

A habitat corridor is usually installed when there is access between two of the same habitats and a pathway needs to be created to connect the habitats for without the connection they would be isolated. This is not the case with the Project Site. The golf course and open space areas encircle the development and all animals and would be able to move around and through the Project Site (see Figure 5 in [FEIS](#) Appendix C). **Some movement between the natural areas and the golf course areas is**



anticipated as well. Overall, the open space would be kept in a natural state and layout that would allow for the free movement of its inhabitants.

Based on the existing conditions, the Project Site is comprised of cultural ecological communities associated with historical and ongoing use as a golf course. The Project Site does not contain woodlands, forests or other naturally-occurring vegetated communities. As a result, the observed and expected wildlife fauna is comprised primarily of common species adapted to landscaped and developed habitats. See Response K.1 for a full list observed during field surveys.

Given that the Project Site is comprised primarily of maintained fairways, greens and roughs of the existing 18-hole golf course, the herbaceous vegetative community is overwhelmingly dominated by common turf grasses (e.g. blue grasses (*Poa* spp.), fescues (*Festuca* spp.) and rye grasses (*Lolium* spp.) as well as “weedy” herbaceous plants that occur in turf communities, such as clovers (*Trifolium* spp.), plantains (*Plantago* spp.) and dandelions (*Taraxacum* spp.). The tree flora at the Project Site is dominated by several species of oaks and hickories, including northern red oak (*Quercus rubra*), white oak (*Quercus alba*), scarlet oak (*Quercus coccinea*), pin oak (*Quercus palustris*), mockernut hickory (*Carya tomentosa*), shagbark hickory (*Carya ovata*) and pignut hickory (*Carya glabra*). Other dominant tree species are red maple (*Acer rubrum*), river birch (*Betula nigra*), black walnut (*Juglans nigra*), eastern white pine (*Pinus strobus*) and cypress (*Taxodium* sp.). An inventory of observed trees is provided in Appendix K.

The Proposed Action would result in conversion of 29.5 acres of the Project Site to residential development. The remainder of the 106-acre Project Site would be comprised of vegetated communities and surface waters/wetlands, including the downsized nine-hole golf course, 30.6 acres of vegetated open space and the existing ponds and wetlands, which would be enhanced with vegetated native plant buffers. The 432 trees proposed to be removed would be replaced (see Response 3.20 for a list of species to be planted) with in-kind species, and the replacement trees which would grow to a mature size akin to existing conditions over time. ~~The trees would reach maturity within 15-20 years.~~

Accordingly, following implementation of the Proposed Action, the Project Site would continue to function ecologically as one comprised of landscaped habitats with trees interspersed with surface waters and wetlands, similar to the existing conditions described above. As such, a similar plant and wildlife species assemblage is expected to inhabit the Project Site following implementation of the Proposed Action, with significant improvements to plant and wildlife habitat quality anticipated due to installation of the proposed native plant wetland buffers. Based on the foregoing, no significant adverse impacts to the Hommocks Conservation Area are anticipated due to the Proposed Action, and



habitat conditions are anticipated to improve, with the installation of approximately 30.6 acres of improved quality wildlife habitat.

The Proposed Action would have no direct impacts (e.g., filling, draining, clearing of vegetation, etc.) to the wetlands at the Project Site. Further, while some of the golf holes would be maintained along the perimeter of the Project Site, no development or ground disturbance from the proposed residential buildings or tennis courts would occur within a minimum of 100 feet of the wetlands at the Project Site.

It has been recommended in comments to explore connections between ponds 16 and 13, ponds 5 and 6, and pond 18 and 10. Pond 16 and 13 are currently connected by a stream channel which conveys excess runoff from Pond 18 to 13 and ultimately off site to the western flood gates under the Hommocks School sports field. This area is not proposed to be disturbed and current golf improvements would remain. Ponds 5 and 6 share a buffer area connection them. No additional improvements are proposed and current golf improvements would remain. Ponds 10 and 18 are currently connected by a drainage channel that is proposed to be improved but no habitat connection is proposed and existing golf improvements would remain.

Comment K.18:

On page 3K-3 the DEIS makes a statement about 28 bird species listed by the US Fish and Wildlife Service as potentially using the site during migrations. The DEIS correctly states that none of these species are "rare or endangered", but omits to mention that ALL are flagged as "Conservation Concerns" (see Appendix L). In other words, these species are on a federal watch list and are regarded as vulnerable to disturbance and habitat loss. Their survival and conservation IS an important concern when making decisions concerning the future development of the site.

(Public Comment Letter 1, pg. 2, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

Response K.18:

As noted in the response to Comment K.1, the Proposed Action would result in conversion of 29.5 acres of the Project Site to residential development. The remainder of the 106-acre Project Site would be comprised of vegetated communities and surface waters/wetlands, including the downsized nine-hole golf course, 30.6 acres of vegetated open space and the existing ponds and wetlands, which would be enhanced with vegetated native plant buffers. The 432 trees proposed to be removed would be replaced (see Response 3.20 for a list of species to be planted) with in-kind species, and the



replacement trees which would grow to a mature size akin to existing conditions over time. The trees would reach maturity within 20 years.

Accordingly, following implementation of the Proposed Action, the Project Site would continue to function ecologically as one comprised of landscaped habitats with trees interspersed with surface waters and wetlands, similar to the existing conditions described above. As such, a similar plant and wildlife species assemblage is expected to inhabit the Project Site following implementation of the Proposed Action, with significant improvements to plant and wildlife habitat quality anticipated due to installation of the proposed native plant wetland buffers. Based on the foregoing, no significant adverse impacts to the Hommocks Conservation Area are anticipated due to the Proposed Action, and habitat conditions are anticipated to improve, with the installation of approximately 30.6 acres of improved quality wildlife habitat.

There would be temporary impact on the migratory birds during construction due to construction activity but once construction ceases, the open space and golf course would continue to function ecologically similar to the existing conditions described above.

Comment noted.

Comment K.19:

The DEIS also mentions proposed native plantings at the perimeter of ponds. Judging from the photos of those ponds and their connecting ditches, many of these plantings would not be directly connected to the water, but rather sitting high and dry above stone walls that define several of the aquatic features of the golf course. To have a meaningful ecological effect, many of these stonewalls would have to be removed, the adjacent land regraded to slope gently toward the water and then planted/seeded with native vegetation in accordance with a prevailing moisture gradient. This recommendation applies to ponds as well as ditches. A local example of how this was done along the Sheldrake River exists at the Bonnie Briar Golf Club in the Town of Mamaroneck.

(Public Comment Letter 1, pg. 2, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

Response K.19:

The proposed Landscaping Plan (see Figure 6 in FEIS Appendix C), was prepared in accordance with the *Coastal Planting Guide for the Village of Mamaroneck* in order to maximize benefits for local habitat. Removal of the walls-Removal of the walls and re-grading of side slopes would be unnecessary, as it would result in a larger site disturbance, potential water quality impacts to the pond, and potential



generation of contaminated fill. The wetland edge plantings, at time of installation, would be adjusted in the field to account for existing site features to remain (e.g. walls, paths, utilities, etc.). So long as the installed surface area of wetland edge plantings are consistent with the proposed areas, the exact shape can be adjusted per existing field conditions to remain. The Wetland Edge plant selection also consists of a variety of plant species adaptable to variable soil conditions upon establishment, including dry to wet soils. Therefore, it is anticipated that the plantings would thrive within the existing hydrological conditions. The plantings are specified to be installed in randomized mass plantings- to encourage dense establishment of native plant communities. Notes would be added to the proposed Landscaping Plan consistent with the above. ~~would be costly and is not necessary to provide an improved ecological habitat.~~ All wetlands plantings would be installed in accordance with standard practice and within the required moisture gradients. Currently, the ponds on the Project Site do not contain the wetland plantings proposed in the Landscape Plan. ~~–Therefore, the~~ ecological environment of the wetland perimeters would be improved as a result of this project.

Comment K.20:

While the Village of Mamaroneck does not have a tree preservation/replacement ordinance, the proposed one-for-one replacement of trees does not go far enough. Since only trees greater than 8 inches in diameter at breast height have been counted toward replacement, it is inevitable that at least an equal number of trees smaller than that size will be removed without replacement. It is also understood that the replaced trees will be replaced at smaller sizes, reducing the initial future canopy coverage dramatically. As a rule of thumb, the canopy of a tree increases exponentially as the tree trunk diameter increases. For example, a 4-inch caliper tree (the typical landscaping size) would only have a quarter of the canopy size of an 8-inch caliper tree (the minimum tree size counted for removal). If the applicant was to replace the canopy of those trees counted for removal (432), and all of those were measured at only 8 inches in diameter, then at the very minimum the planting of at least 4 times as many trees as proposed would be required to adequately replace the lost canopy. That would amount to 1,728 replacement trees at 4-inch caliper size. In reality several of those removed trees will be larger than 8 inches, so that an even larger number of replacements would be required to truly reflect an ecologically equivalent replacement effort. This is not a mere numbers game, but a significant factor when considering the ecological impact the removal of existing trees will have on the environment and when planning for the enhancement and development of natural areas (preserved or created) on site. Tree removal also affects the water budget.

(Public Comment Letter 1, pg. 2, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

(Public Comment Letter 106, pg. 1, Cindy Goldstein, Chair - HCZMC, 4/23/2018)



3M. Traffic, Transit, and Pedestrians

Comment M.1:

The project will require not 10 or 20 truck trips a day. It will require, we believe, up to 280 truck trips a day for almost a year and immediately past the Hommocks School.

(Public Hearing 1, pg. 45, and Public Comment Letter 67, pg. 1, Stephen Kass, 2/14/2018)

Response M.1:

A comparison of existing and future conditions was conducted by the civil engineer to determine how much compacted fill would be required for the Proposed Action. It was determined that the Project site would require a total of 84,100 cubic yards (CY) of compacted fill. The clean fill would be brought to the site uncompacted; and, based on industry standards, it was determined that one-third more fill would need to be brought to the site (112,140 CY) than the volume it would occupy when it is compacted properly, as required. The volume of import general fill was based on three-dimensional computer modeling of the site for the 84,100 CY compacted in place volume required. See Earthwork section of DEIS for calculations.

The 112,140 CY of uncompacted fill would be brought in 16 CY capacity trucks. The total number of trucks required to bring the fill to the site is 7,009 (divide 112,140 CY uncompacted fill by 16 CY truck). The project is expected to require 84,104 cubic yards (CY) of fill to be imported and trucks with a 16 CY capacity would be used. The fill to be hauled would be compacted once placed at the Project Site. Uncompacted, clean fill has typically 33% more volume than compacted, clean fill. Therefore, each full-loaded, 16 CY truck would carry the equivalent of 12 CY of compacted fill. Dividing 84,104 by 12 indicates that a total of approximately 7,000 16 CY trucks would be required to import the required fill. Therefore, assuming a nine-month duration for the primary fill phase (the central platform), 36 months for the secondary fill phase (project buildout and the secondary platforms), and 20.5 full workdays per month, 24 fill trucks per day would visit the Project Site during the primary fill phase and 3.5 fill trucks per day would visit the Project Site during the secondary fill phase. Accounting for other construction activities in addition to fill trucks, total trucks would amount to 26.2 during the first nine months and between 8.2 and 12.5 during the following 36 months (a-tables summarizing all projected



operation of motor vehicles.” Noise emanating from the operation of motor vehicles on public highways is regulated by the New York State Vehicle and Traffic Law. To minimize construction truck noise impact at the school, the Applicant is willing to submit to a condition that trucks accessing the Project Site would not use Jake Brakes (-the Jacob’s Engine Brake® diesel engine retarder is the source of much of the noise emanating from a construction truck) between the Project Site and US Route 1. In addition, the Applicant would ensure that the surface of Hommocks Road from US Route 1 past the school remains in good condition throughout the construction project (next to Jake Br~~ake~~eeaks, the biggest contributor to construction truck noise is the banging of parts when trucks pass over a broken pavement surface).

Comment M.5:

The truck access hours, we think, should be -- not be within the peak vehicle hours of 9 -- of 7 to 9 a.m. Instead of starting at 8:15 a.m., should probably start at 9 a.m. if, indeed, they're going to happen. And then also clarify the number of trips. This isn't only trucks coming to the site. You're going to have machinery coming to the site. You're going to have workers coming to the site. So all that traffic should be generated and put into an enhanced traffic analysis.

(Public Hearing 1, pg. 78-79, Neil Porto, 2/14/2018)

Response M.5:

See Response to Comment M.2. The ~~developer~~-Applicant would work with the Mamaroneck School District to agree upon the appropriate truck arrival/departure schedule for construction activity. It is anticipated that truck arrivals and departures would be prohibited from arriving or departing within 30 minutes on either side of the start of the school day and within 30 minutes on either side of the end of the school day.

Comment M.6:

And the thought of additional traffic where -- maybe it might only be an extra second or two in a car. We've already had many situations where cars have run stop signs and almost already hit people. And the more -- the more cars we have, the more trucks we have coming in and out, the more that's going to add to that potential.

(Public Hearing 1, pg. 133, Randi Spatz, 2/14/2018)

Response M.6:



There would be minimal increase in traffic volumes due to the proposed activity. Only There were 27 17 accidents were recorded in a recent 3-year period at or near the intersection of Boston Post Road with Hommocks Road and Weaver Street, which is not an elevated amount. As indicated in the accident table provided in FEIS Appendix V, based on a crash frequency of 5.7 crashes per year (17 total crashes/3 years) at the intersection of Boston Post Road with Hommocks Road/Weaver Street, it is calculated that construction activity would result in no additional crashes (0.03) over the course of the entire construction period. The traffic signal at the intersection of Boston Post Road at Hommocks Road/Weaver Street has an exclusive pedestrian phase (and crossing guard control for school arrivals and dismissals). The minimal-projected increase in traffic volumes at this intersection is not anticipated to lead to any perceptible increases in accidents. See Response to Comment M.38

Comment M.7:

But an F can get worse. And what people don't recognize, is that when we're in a situation where cars are backing up on Rushmore Avenue, going down Orienta, they find alternative routes. It's Old Boston Post Road out through Boston Post Road by McDonald's. It backs up the lateral roads that go into the main arteries, which are Rushmore and Orienta. You cannot get out of a lateral street during peak time, which is 3:00 in the afternoon and sometimes going on until 4, 4:30.

Any additional traffic is going to be -- is going weigh very heavy on the community. It already does now. We're hoping that, you know, there will be some mitigation for whatever may be developed there.

(Public Hearing 1, pg. 136-137, George Mgrditchian, 2/14/2018)

Response M.7:

The analysis projected minimal change in peak-hour Level-of-Service (LOS) for the intersection of Boston Post Road at Orienta Avenue/Delancey Avenue (0.3 seconds or less on any movement). It is also expected to be less than the projected change because the analysis was conservative: project trips were generated for the peak hour of the development and added to the peak hour of school activity to present a worst-case scenario but, in reality, these two peaks would not coincide. Therefore, the Proposed Action is expected to have no significant impact on delay.

Comment M.8:



Comment noted. The last sentence of the first paragraph on page 3M-40 was missing a closing parenthesis. The sentence should state that the weekday AM peak-hour volumes were much higher than the PM and Saturday peak hour volumes and should have concluded "(primarily as a result of traffic to and from the Hommocks Middle School)."

Comment M.15:

Address change in traffic pattern on Cooper Avenue. Describe proposed improvements in detail and provide an assessment of impacts. Specifically, address the impacts of the proposed new sidewalks on Cooper Avenue and the proposed widening of Cooper Avenue.

(Memo 1, pg. 11, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response M.15:

As vehicular use of Cooper Avenue would only be permitted in case of a bona-fide emergency, there would be almost no change in traffic patterns on Cooper Avenue. The proposed restriction in access would eliminate the ~~very~~-small volume of golf course maintenance traffic that currently uses Cooper Avenue. All roads within the development would be built or upgraded to sufficient widths to accommodate emergency access. Primary emergency access to the Project Site would be via Eagle Knolls Road and E. Cove Road (as it is today). These roads do not require widening to accommodate emergency vehicles. It is proposed that Cooper Avenue be used for emergency access only if these roads are impassable. Cooper Avenue is currently 14 feet wide as it enters the Project Site and provides truck access to the club's maintenance facility. As such, it can accommodate a one-way emergency traffic entrance to the site by emergency vehicles by opening the emergency gate. If Cooper Avenue were needed to evacuate the Orienta Avenue neighborhood, the gate could be opened by emergency personnel to allow residents to leave. Widening of Cooper Avenue would be limited to 4 feet for a distance of approximately 70 feet from the property line and The proposed emergency access at Cooper Avenue would provide improved flood access to a number of the existing homes on Eagle Knolls Road.

Comment M.16:

During the April 11 public hearing a representative of the applicant stated that Cooper Avenue would be gated. This is not discussed in the DEIS. If this is now planned it should be described and the impacts with respect to traffic and pedestrian circulation discussed. Did the traffic study take into account the



gating of Cooper Avenue? Who will control access to the gate (i.e. assuming it is locked, who will have the key?)

(Memo 1, pg. 11, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response M.16:

The gate is to prevent vehicle access except for emergency vehicles. The developer would coordinate with the Fire Department and Police Department on suitable design. Access would be maintained for pedestrians. During emergencies, Cooper Avenue would be available as an egress for residents or anyone else who needs it, at the discretion of and as directed by police/fire officials. Since this gated access will only be used during evacuations when other roads are impassable, and with the traffic movements controlled by emergency personnel, the design of the Cooper Avenue access will not be affected.

New intersection analyses were performed for the intersection of US Route 1 with Old Post Road/Richbell Road accounting for Cooper Avenue as closed. The results of this analysis are summarized and provided in FEIS Appendix V. Multiple analyses were performed before the decision was made to limit Cooper Avenue to emergency access only. In the DEIS, each intersection was studied for a worst-case condition at that specific location. That means that the intersections of US 1 with Orienta Avenue and Hommocks Road already had traffic with the assumption that Cooper Avenue would be for emergency use only (as indicated in DEIS Exhibit 3M-12, for all intersections except those of Old Boston Post Road with Cooper Avenue and US1/Richbell Road, it was assumed Cooper Avenue was closed and available only for emergency access). Therefore, the DEIS traffic analyses at the intersections of US 1 with Orienta Avenue and Hommocks Road, accurately reflected the current Proposed Action condition and no new analysis is required.

Since Cooper Avenue would now be closed, there would be less traffic at the intersections of Old Post Road with Cooper Avenue and US 1/Richbell Road than evaluated in the DEIS (the DEIS analysis conservatively assumed that the worst-case condition for these intersections would be that Cooper Avenue would be open and that a substantial portion of Project traffic use Cooper Avenue to travel between the Project Site and US Route 1). Therefore, operating conditions would be better at this intersection than projected in the DEIS.

New intersection analyses were performed for the intersection of US Route 1 with Old Post Road/Richbell Road with Cooper Avenue closed. The results of this analysis, which are summarized and provided in FEIS Appendix V, indicated that overall peak-hour operating conditions would be LOS C or better and the Proposal Action would increase peak-hour delays by 0.2 seconds or less for the overall intersection and by 0.3 seconds or less on any individual movement.



33 construction-employee personal vehicle trips in the busiest hour during construction activity, as indicated in the table which is also included in FEIS Appendix V.

~~During the primary fill phase (first nine months), project is expected to add 12 truck trips and 17 construction-employee personal vehicle trips in the busiest hour.~~

As detailed in the response to Comment M.1, The total number of trucks required to bring the fill to the site is 7,009 over a 47-month period (see tables in FEIS Appendix V). An additional 6,900 trucks are expected to visit the site for other construction activities over the course of the entire 52 months of construction. Combined, an average of 13.4 trucks per day are projected to visit the site during the 52-month construction period. During the primary fill phase, which is the busiest phase for construction truck activity), the project is expected to add 13 truck trips and 17 construction-employee personal vehicle trips in the busiest hour. See also the Response to Comment M.1.

Comment M.19:

Provide a quantitative discussion of increased construction truck traffic on residential streets leading to the project site. The analysis should compare existing traffic and truck volumes to construction traffic volumes.

(Memo 1, pg. 11, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response M.19:

~~There would be~~N-no construction trucks would be permitted ~~access allowed~~ to access the Project Site via Orienta Avenue or East Cove Road. All trucks would be required to access the Project Site via Hommocks Road (except for during the Hommocks School arrival and dismissal periods, identified in Response M.2). Therefore, there would be no increase in truck traffic on Orienta Avenue or East Cove Road.

There are ~~only~~ four homes on Eagle Knolls Road and two on Hommocks Road between the Walgreens Parking Lot and the Project Site. Access to the Hommocks Apartments at 2-116 Hommocks Road is provided from Hommocks Road between Boston Post Road and the Hommocks Middle School. By the Hommocks Apartments, there are currently almost 700 vehicles in the peak hour on Hommocks Road, of which, the DEIS traffic counts indicate, 18 are buses and 19 are trucks. On the east end of Hommocks Road, there are currently almost 150 vehicles in the peak hour (mostly vehicles traveling across the Hampshire Country Club site to and from the school) of which 9 are buses and 1 is a truck. By comparison, during the busiest period of construction, the project is calculated to add 8 truck and 33 employee-vehicle trips to Eagle Knolls Road and Hommocks Road.

**Comment M.20:**

Discuss, as a potential mitigation measure, limitation of the hours at which construction trucks may access the site.

(Memo 1, pg. 11, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response M.20:

See Response M.~~182~~.

Comment M.21:

Representatives of the School District indicated during the public comment period that certain intersections were troublesome. Identify those intersections, discuss issues as identified by the school district and provide an assessment of their significance and whether mitigation is needed.

(Memo 1, pg. 11, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response M.21:

The Applicant was unable to speak to the School District to identify, with certainty, what intersections it thinks are troublesome. However, it is noted that the intersection of Boston Post Road with Hommocks Road experiences, by far, the greatest average peak-hour delays and that this intersection is the closest major intersection to the Hommocks Middle School. The traffic signal at this intersection has an exclusive pedestrian phase (meaning that all other movements are stopped to allow pedestrians to cross the intersection in any direction they need to) and that there is a school crossing guard posted during the school arrival and dismissal periods. Based on a review of the DEIS data, the period at this intersection during which motorists experience the longest delays occurs from 7:30 a.m. to 8:30 a.m., when approximately 30 percent of the vehicles passing through the intersection area destined to or from the middle school.

By comparison, the Proposed Action is projected to increase traffic volumes through the intersection in the peak hour by ~~just~~ 1.5%, adding an average of just over 1 vehicle to the intersection every 2 minutes. The intersection capacity analyses performed for the DEIS indicated that the addition of these vehicles would increase the overall average delay by ~~just~~ one second and that there would be no changes in LOS (Level of Service). The DEIS queuing analysis also indicated that adequate storage would be provided to accommodate the average of one and maximum of two vehicles added to the



As part of the Proposed Project, the Applicant proposes to realign Cove Road. New pavement would be installed on Cove Road within the Project Site, beginning at the eastern property line and extending to Hommocks Road.

Comment M.24:

Currently, the morning school drop off hour is a nightmare at the intersection of Boston Post Road and Hommocks Road. I cannot imagine how much worse it would be with more traffic originating on Hommocks.

(Public Comment Letter 35, pg. 1, Robert Lieber, 2/13/2018)

Response M.24:

Currently, 30% of the traffic passing through the intersection of Hommocks Road with Boston Post Road in the morning peak hour (over 600 vehicles between 7:30 and 8:30) is traffic headed to and from the school. ~~This number would be even higher were a connection through the Hampshire Country Club to the Orienta Avenue not provided.~~ The Proposed Action is projected to add ~~just~~ 1 vehicle every 2 minutes to this intersection in the busiest hour, the impact of which would be empirically insignificant, and almost imperceptible. See also Response to Comment M.21.

Comment M.25:

Any plan that would use Cooper and Hommocks as routes into the development must include (at a minimum) sidewalks along Old Post Road (including Gillies Park), Cooper and the back of the Hommocks into the development to help ensure the safety of our children and community with the traffic influx...Dump trucks with fill should be prohibited during peak school hours... We recommend that Hampshire revisit the hours it proposes to drive construction trucks down Hommocks' Road by the middle school, given the hours proposed are during prime school travel hours and the middle school students are unattended...Cooper and Post Lane residents need some mechanism to ensure their homes and property values aren't substantially decreased by the widened road going into the development. This could be landscaping, soundproofing - not sure what.

(Public Comment Letter 37, pg. 1, 2/14/2018, and Public Comment Letter 68, pg. 1, 3/29/2018, Abby Roberts, Board of Traffic Commissioners Chair)

Response M.25:



The Proposed Action would use Cooper Avenue as a gated, an-emergency-only access point and, as such, would have ~~virtually~~-no impact on Cooper Avenue or Old Post Road. Therefore, there would be almost no traffic on Cooper Avenue (on either side of the closed gate), obviating the requirement for a sidewalk to be built along Cooper Avenue. Therefore, no new sidewalk connections are planned for Cooper Avenue or Old Post Road. The Applicant does propose to construct new sidewalks traversing the Project Site and, if permitted, connecting to the existing pedestrian infrastructure at the rear of Hommocks Middle School.

The Applicant would work with the Hommocks Middle School administration to minimize impacts. It is anticipated that truck arrivals and departures would be prohibited from arriving or departing within 30 minutes on either side of the start of the school day and within 30 minutes on either side of the end of the school day. Cooper Avenue is planned to be an emergency-only access point and would be available as an egress for residents or anyone else who needs it, at the discretion of and as directed by police/fire officials. See also Responses to Comments M.2 and M.15 ~~and any widening required would be very limited in nature.~~

Comment M.26:

Traffic would double on Old Post Road, which already has incredibly heavy car and pedestrian traffic as it is a feeder street from Orienta to Boston Post, Central Elementary and the High School. The Village Traffic Commission, among others, has studied the road and recommended a sidewalk be installed for pedestrian safety issues - and this is before the proposed plan. (As a side note, we reviewed the car and pedestrian study on Old Post Road and think it's incredibly inaccurate. Far more than 9 cars go through Old Post Road in an hour during peak traffic time - even during non-peak time there's a lot more than that.)

(Public Comment Letter 37, pg. 2, Abby Roberts, Board of Traffic Commissioners Chair, 2/14/2018)

Response M.26:

Cooper Avenue is proposed to be an emergency-only access point for the development. Therefore, ~~only a very~~-minor amount of new project-related traffic is expected to utilize Old Boston Post Road and this would largely be offset by the elimination of maintenance vehicle access to the Hampshire Country Club via Cooper Avenue. As indicated in DEIS Exhibit 3M-3, as many as 125 vehicles were determined to travel along Old Post Road at Cooper Avenue during the peak hour.



There are concerns about the effect of elevating the portion of the site to be developed. In particular, the effect on other low-lying properties in the vicinity should be studied. It appears the area to be developed and access roads will be elevated. The impacts associated with elevated roadways should be fully evaluated, including accessibility and how emergency services would be able to access residential structures during a storm event, post construction and into the future.

(Public Comment Letter 106, pg. 2, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

Response M.48:

Elevating portions of the site to be developed would have no negative effect on other low-lying properties in the vicinity. All roads within the development are being designed at an elevation of 14 feet. The connection to Cooper Avenue would be at 13 feet. The FEMA ~~maximum-effective~~ 100-year base flood elevation for this area is 12 feet. Therefore, even if the FEMA ~~maximum~~-flood height is exceeded by up to two feet, fire trucks, which have a profile that is approximately 1 foot higher than typical vehicles, would likely still be able to access the Project Site during a catastrophic flood.

Furthermore, the proposed new roadway system would provide improved access to the existing/remaining homes on Eagle Knolls Road. R-~~(r~~esidents of all but 1 of these homes would be able to access their homes until flood waters reached 13 feet, while the residents of the last home would be able to access their home until flood waters reached 8 feet. These residents, where they are currently cut off when flood waters reach approximately 5 feet. The proposed new roadway would also provide improved access to at least 4) and to approximately to 5 homes on E. Cove Road, ~~(allowing~~ access until floodwaters reach 10 feet instead of the current 9.5 feet, ~~(although this could be increased to 12 feet if a portion of the existing country club parking lot and E. Cove Road in front of these 5 homes were raised by 2 feet).~~ Under the Proposed Action, at the regulating 100-year flood elevation, vehicles would be able to egress via Cooper Avenue which would be used in emergency situations only.

Comment M.49:

The Commission has concerns regarding public access to the site. This is proposed to be a private development. The status of the access roads should be confirmed, i.e. whether they will be public (Village) roads or private roads maintained by the HOA. The Commission recommends that there be public access to the site including the development of bike paths and walking paths. The Commission recommends that public access to the site be preserved to the maximum extent practicable.



(Public Comment Letter 106, pg. 3, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

Response M.49:

It is presently contemplated that at least the newly constructed Cove Road across the Project Site would be offered for dedication to the Village as a public roadway. It is not proposed to gate off the other newly-constructed roadways. Bicyclists would be permitted to use all of the new roadways, which are generally low-speed and predominantly serve residential neighborhoods. Sidewalk would be installed traversing the entirety of the Project Site for pedestrians and, if permitted, the new sidewalk would connect to the existing sidewalk infrastructure near Hommocks Middle School. Bicycle and pedestrian access would be extended to Cooper Avenue; ~~would be maintained.~~ Cooper Avenue is proposed to be gated and used as an emergency-only access point; therefore, there would be almost no traffic on Cooper Avenue (on either side of the closed gate), obviating the requirement for a sidewalk to be built along Cooper Avenue.

After construction of the Proposed Action, Cooper Avenue would be the only access road above flood levels to enter and exit the site in a 100-year flood event. The portion of Cooper Avenue on the Project Site is proposed to be elevated to a minimum of elevation 13.0 which would provide access one foot above the current FEMA 100-year flood regulatory elevation and approximately a half a foot below the 500-year flood non-regulatory elevation.

Comment M.50:

It also adds a high degree of risk to the rest of us living on Orienta as it will overload our delicate roads during emergencies. There are two insufficient egresses from Hampshire; Hommocks and Orienta. Orienta cannot carry the number of people in an evacuation situation in an efficient manner.

(Public Comment Letter 154, pg. 1, Andrea J. Grant, 5/11/2018)

Response M.50:

There would be minimal increase to traffic as a result of the proposed development during emergencies. In addition to using Hommocks Road and Orienta Avenue, Cooper Avenue would be available for emergency access, if needed. The added flexibility provided by this connection would only improve overall egress from the area in case of an emergency.

Comment M.51:



As recent storm damage made clear, it doesn't take much to block egress from Orienta point. Equally obvious is how limited the egress is from Hommocks. In an emergency, it might well be impossible to safely evacuate residents from Orienta point. This development would increase that risk.

(Public Comment letter 217, pg. 1, Terry Grant, 5/13/2018)

(Public Comment letter 235, pg. 1, ~~Sally Roberts~~Terry Grant, 5/13/2018)

Response M.51:

Cooper Avenue would provide a third point of egress from the Orienta peninsula, if needed, and would improve egress for a number of the existing homes on Eagle Knolls Road and, to a lesser extent, on E. Cove Road (See Response to Comment M.49). The added flexibility provided by this connection would ~~only~~ improve overall egress from the area in case of an emergency.

Comment M.52:

By our calculations to import 84,000 CY in 9 months of 5-day weeks would require 72 truck trips per day and not 24.

(Public Comment Letter 179, pg. 1, Neil Porto, 5/10/2018)

Response M.52:

See Response to Comment M.1. With 20.5 full workdays per month for 9 months in the primary fill phase, 24 fill trucks per day would visit the Project Site. This translates to 48 truck trips per day or an average of 1 truck trip every 11 minutes.

Comment M.53:

The intersection of Hommocks Road, Boston Post Road, and Weaver Street is already a major bottleneck. In the mornings, at School dismissal and during workday evenings, traffic backs up from the Post Road up Weaver all the way to Myrtle Avenue. The proposed development will greatly worsen this problem.

a. During construction. the developer will bring in: (1) more than 200,000 cubic yards of fill based on the estimates of independent experts; (2) gravel, asphalt and cement for roads and sidewalks; and (3) concrete, lumber, drywall, etc. for 105 homes. There will also be all of the associated construction



included in Appendix N of the DEIS. In the email response from MEMS, the provider states that “Given the information outlined within this report and data that is publicly available, MEMS believes that the additional calls for service as a result of the increase in residential population and other human activity are within the response capabilities of the organization. Given the additional tax base provided by these units, MEMS would anticipate an increased allocation of operating budget funds from the Town of Mamaroneck to support response activity.” In its email response, the Police Department indicated that the proposed site access would be adequate for the new development, and that the biggest concern related to police services would be the potential for increase in traffic in the area. However, the potential impacts of the proposed development are analyzed in detail in Chapter 3M of the DEIS, and as detailed, no significant adverse impacts on area traffic operating conditions are anticipated.

In addition, annual property taxes generated from the Project would exceed current taxes, as outlined in Chapter 3O of the DEIS, Fiscal and Economic Conditions. It is anticipated that the additional tax revenue would cover any incremental costs to the Police Department, Fire Department, and Emergency Medical Services, to service the project. The projected Village taxes are \$1,304,928.

3. Fire and EMS

Comment N.5:

Provide evidence that the Village of Mamaroneck Fire Department has reviewed and approved the site plan, including the location and arrangement of fire hydrants.

(Memo 1, pg. 11, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response N.5:

As part of the analysis of potential impacts to local service providers, a letter and proposed site plan was sent to the Village’s community service providers, including the Police Department, Fire Department, and Emergency Medical Services, to inquire as to potential issues or impacts of the Proposed Action. All correspondence with service providers is included in Appendix N of the DEIS. In addition, a fire truck vehicle maneuvering plan was included as Figure 2-20 in the DEIS.

The site plan would be reviewed and finalized, including approval from the Fire Department, during the site plan review process, per the requirements set forth in Chapter 342, Article XI of the Village Code, Site Development Plan Approval. The location and arrangement of fire hydrants would also be finalized during site plan review, to be approved by the Fire Department and Westchester County Department of Health.



The Applicant has been asked specifically to evaluate whether emergency access would be impeded on Cooper Avenue in the event that the road is blocked by flooding. This analysis is provided below:

Background/Current Status:

The elevation of Cooper Avenue is 13' minimum. Currently, the peak storm tidal flood elevation on Cooper Avenue reaches no greater than 12' during the FEMA 100 year storm event, meaning that all vehicles have continuous access to the Site during storm events up to and including the 100 year event.

Future Sea Rise impact on Access:

Potential sea rise is expected, and projections are contained in the New York State Energy and Development (NYSED) projections contained in "Climate Change in New York State" publication dated September 2014, potential sea level rise projections for the region.

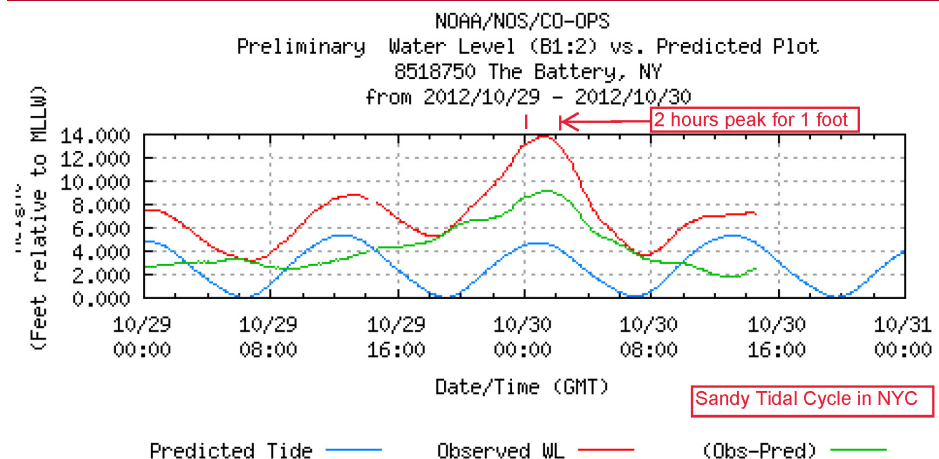
2045:

Based on NYSED projections, average sea level rise for the New York City region in the next 25 years is expected to be about 12 inches by the year 2045. A one foot rise in flood elevation would increase the expected flood elevation to 13' and will not reach a level higher than the road surface or otherwise impede access in the year 2045 at Cooper Avenue. The minimum elevation at Cooper Avenue under the proposed Action will be elevation 13.

2070:

In 51 years, 2070, sea level rise is estimated by NYSED to be an average of 24 inches or 2 feet. In the event that there is a 2 foot sea rise, the 100 year flood elevation will increase to elevation 14 and with that, there will be the possibility that Cooper Avenue could be impeded by a maximum of approximately 1 foot of water during the peak of the high tide cycle (maximum of 2 hours).¹

▼
The Applicant obtained data from NOAA/NOA/CO-Ops measuring the length of peak storm tidal flood levels observed in New York City during Superstorm Sandy on October 29, 2012 through October 30, 2012 (see diagram below). This data demonstrates that the peak storm tidal flood levels rise and fall in a short cycle. In the case of Superstorm Sandy, the peak storm tidal flood level decreased by 2' within 2 hours, following the pattern of the normal tide cycle.





At the request of the Planning Board, the Applicant was asked to also evaluate whether Village of Mamaroneck Fire Department ("Fire") and the Mamaroneck Village Emergency Services ("EMS") emergency access would be impeded on Cooper Avenue during the limited high tide cycle, assuming that the road is blocked by 1' of water.

The Applicant has attempted to obtain a written response from Fire and EMS for the input requested by the Planning Board to provide an opinion on navigation through one foot of water. These attempts included the following:

- Visit to Village of Mamaroneck Fire Department and discussion with assistant fire chief Vincent Costa on June 28, 2019
- Visit to Village of Mamaroneck EMS and discussion with an officer on June 28, 2019
- Call on June 28, 2019 to Vincent Costa – left message
- Emails to Vincent Costa on July 2 and July 8, 2019
- Email to Village of Mamaroneck EMS on July 9, 2019

Neither EMS nor Fire provided written responses to the above requests for information. The Applicant was able to obtain the specifications for the vehicles currently utilized by Fire and EMS. Fire currently uses a Seagraves Fire Truck. Based on discussions with Fire Truck suppliers that provide similar models, this type of fire truck is able to navigate through 12 inches of water. EMS currently uses an ambulance based on a Ford F-350 chassis, which according to Ford has a ground clearance at the axle of 8.3 inches. The Applicant was not able to obtain specific information on the ability for the ambulance to navigate 12 inches of water. EMS also has a 2016 John Deere Gator UTV which is a 6-wheel ATV style off road emergency vehicle. Based on conversations with the regional sales representative for John Deere, this model of ATV can navigate one foot of water.

Assuming that Fire and EMS does not upgrade any of its equipment over the next 50 years to address future conditions throughout the Village, emergency vehicular access to the Project Site would be possible under the projected 1 foot inundation condition on Cooper Avenue using current emergency equipment. It is the Applicant's opinion that it is likely that Fire and EMS would not be using 50 year old apparatus in 2070, but instead, would upgrade its equipment in the future to address sea level rise throughout the Village. As set forth in Chapter 30, the projected increase in tax revenue to taxing jurisdictions as a result of the Project could be available to pay for upgrades to EMS and/or Fire vehicles to ensure additional access during 100-year storm surges in 2070.





Comment O.4:

Page 3O-4. 2nd to last paragraph. The MUFSD has indicated the need for new portable buildings as recently as 2017 for other schools in the District. Section 3O-6 should provide an assessment of the need for new capital facilities as a result of children generated by the project. Note that this comment does not request a cumulative assessment of the impacts of all pending or proposed projects in the school district; rather, the assessment is requested for the applicant's proposed project only.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response O.4:

See Response O.1. The response letter from the Mamaroneck Union Free School District dated August 3, 2018 (see FEIS Appendix W) states that the Mamaroneck Union Free School District Board of Education "declined to pursue the portable classrooms for the 2018-2019 school year."

Comment O.5:

Provide substantiation for the use of \$2,600,000 as the assessed valuation of the proposed single-family homes and \$1,300,000 for the assessed valuation of the carriage homes and town homes.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response O.5:

The Applicant calculated the assessed values for the single-family homes and carriage homes based off the fair market values of comparable developments in the Village of Mamaroneck and surrounding communities with similar real estate markets. Comparable developments were considered generally new construction, single-family homes and townhomes with similar square footage and number of bedrooms/bathrooms within the Mamaroneck Union Free School District or similar school district. The table below highlights the comparable homes and townhomes used in the Applicant's calculation of the projected assessed values used in the DEIS. Generally, prices as dictated by the comparable homes below are in the range of \$434-423 to \$570 per square foot for single-family and a minimum of \$371 per square foot for townhomes. The assessed values used in the DEIS fall within that range. Listings and other backup materials are included in FEIS Appendix X.



Table O.1-2: Real Estate Comps

Project Name/ Address	Municipality	School District	Bedrooms/ Baths	Square Footage	Sale or Listed Price	Price/ square foot
71 Edgewood Avenue	Larchmont	MUFSD	5/5.2	5,888	\$2,995,000	\$509
8 Highclere Court	Larchmont	MUFSD	5/4.1	4,908	\$2,795,000	\$570
51 Thompson Place	Larchmont	MUFSD	5/4.1	4,441	\$2,495,000	\$562
20 Gate House Lane	Village of Mamaroneck	MUFSD	5/4.1	4,800	\$2,198,124	\$458
55 Harrison Drive	Larchmont	MUFSD	4/4.1	4,342	\$1,885,000	\$434
606 Fairway Avenue	Village of Mamaroneck	MUFSD	5/5.2	4,639	2,495,000	\$538
16 Gate House Lane	Town of Mamaroneck	MUFSD	5/6.1	7,093	2,999,000	\$423
17 Kilmer Road	Larchmont	MUFSD	4/3	2,426	\$1,360,000	\$561
16 Dante Street	Larchmont	MUFSD	4/4	3,679	\$1,895,000	\$515
23 Glen Eagles Drive	Larchmont	MUFSD	5/5	5,234	\$2,950,000	\$567
Kingfield Aspen Townhomes	Rye Brook	Blind Brook SD	3/2.5	2,423	From \$900,000	\$371

Comment O.6:

Page 3O-8. First paragraph. \$11,162 should be replaced with \$11,416.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response O.6:

Comment noted. DEIS should state "\$11,416" as the estimated tax projection for Tax Parcel 4-14-20, as identified in DEIS Table 3O-8, Estimated Tax Projections.

Comment O.7:

Page 3O-9. Table 3O-9. "Apparel" not "appeal"

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response O.7:



The MUFSD did not identify any direct capital improvements that would be needed as a result of the projected school children. It did provide current capital needs by school, including the three schools to which students residing within the proposed project would attend:

- Central Elementary School - \$4,659, 122
- Hommocks Middle School - \$7,873,992
- Mamaroneck High School – 16,623,744

With an annual projected surplus of \$1,555,160 (using the ESI multipliers) to the school district, the Proposed Project would provide the MUFSD funds that could be used towards their existing capital needs.

Comment O.12:

The argument that was made at the Planning board — that [project] will provide jobs -- is ridiculous. A couple of months of construction jobs will not make up for the many year-round jobs lost when the golf course is eliminated.

(Public Comment Letter 160, pg. 1, Judy Santamaria, 5/11/2018)

Response O.12:

Under the Proposed Action, the golf course would not be completely eliminated, but would be downsized to a 9-hole course. As the clubhouse is currently in operation, the existing number of jobs that are held at the clubhouse are 15 during off-season and 75 during on-season. At full build-out of the Project, it is anticipated that the number of jobs associated with the clubhouse would increase to 16 during off-season and 80 during on-season, an increase of 6.4%. This is due to the fact that it is anticipated that proximity to the Club would be a draw of the new homes, and therefore many of the new residents of the Project would join the Club as social members to utilize the tennis, swimming and clubhouse facilities. The increase in membership is anticipated to outperform the decrease in golf memberships at full buildout. The 9-hole course would still be attractive to a not insignificant percentage of golfers generally and the other amenities are anticipated to be attractive to the future residents of the Project. In addition, it is anticipated that a number of jobs would be generated in association with the maintenance of the residential development, including landscaping or property management positions. The proposed 179 parking spaces would be able to accommodate the increased number of employees.



The sample plot location map on page 716 of the report in Appendix P is missing the sample plot number designations for plots 8, 9, 18 and 19.

(Public Comment Letter 1, pg. 1, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

Other Improvements are possible, since most of the soil samples taken for a Phase II site investigation showed metal and pesticide contamination exceeding limits for unrestricted use. Habitat creation and miscellaneous site work for stormwater controls outside of the "development" cluster will occur. Additional soil remediation should be considered to further reduce the risk of off-site contamination in waters of the Hommocks marshlands and of Long Island Sound.

(Public Comment Letter 1, pg. 4, Sven Hoeger, Environmental Consultant to the HCZMC, 1/12/2018)

Despite the limited soil testing, there are already at least two (2) surficial soil areas outside of the soil platform contaminated with arsenic at levels above the applicable residential SCO standard of 16 mg/kg. And there are 36 acres of open space outside of the soil platform that will not be part of the 9-hole golf course included in the development. This land will presumably be owned and operated by an HOA. The DEIS does not indicate the type of use for this open space, further testing of it, or any soil protective measures proposed if it is to be considered for picnic area(s), and/or playground or dog park, etc. The applicability of the '16 mg/kg' arsenic guidance value is used as an action level for soil management since soil with arsenic levels greater than 16 mg/kg are considered potentially harmful to humans if excessive quantities are ingested (NYSDOH, 'The Development of New York State Cleanup Objectives for Arsenic'). The supplemental soil sampling to be described in an Investigation Work Plan, yet to be prepared by the Applicant, should be designed to delineate all soil quality in excess of 16 mg/kg site-wide.

(Public Comment Letter 67, pg. 4, Charles Rich, 3/19/2018)

There are concerns that there is no remediation plan for proposed open space areas. There is concern that if open space areas are not subject to remediation, there still may be impacts to the 55 to 60 acres to be developed as well as to nearby properties.

(Public Comment Letter 106, pg. 1, Cindy Goldstein, Chair - HCZMC, 4/23/2018)

Response Q.7:

In the development areas, the on-site soil would be consolidated below the development platform, and described in the proposed development plan. Other areas of the Project Site would be maintained



as open spaces and passive recreational areas. The Project Site is not in a regulatory program that requires additional sampling or active remediation.

The landscaped areas of the Project Site that would be maintained as a Hampshire Country Club would continue to implement the industry-established Best Management Practice (BMPs) for Golf Courses in New York State (Portness, et. al, February 2014).

All 30.6 acres of open space would be converted from the current active recreational use (golf) to passive private recreation and open space. New landscaping would be planted in this open space to provide vegetative buffers between the new residential buildings and the existing neighboring properties. This open space would provide improved natural habitat and opportunities for passive recreation for all community members.

As stated in the DEC letter dated August 7, 2018, if fill material exhibits historical or visual evidence of contamination (including odors) and will be used in an area with public access, the relocated fill material will be covered with 12-inches of soil or fill material that meets the criteria for general fill.

Post construction, this open space site cover will be maintained. The golf course will be maintained in accordance with Best Management Practices for NYS Golf Courses. The open spaces associated with the homes will be maintained by the HOA.

The landscaped areas and pathways for the residential apartments will be managed by the maintenance staff of building project.

Comment Q.8:

The DEIS indicates that one of the three existing septic systems servicing the property will be tested (the one at the tennis pavilion). In addition, there are two (2) separated pad-mounted electrical transformers located on the south and north sides of the golf course. In addition to testing one of the three septic systems, surficial soils in proximity to both transformer pads should be tested for the possible presence of PCB isomers, particularly the higher-chlorinated pervasive isomers (i.e. 'Aroclor 1260'). Information as to whether surficial soil at either of these two transformer pad areas is either hazardous or non-hazardous (the possibility of residual leakage from older PCB containing transformers) would be potentially important should these two transformer areas continue to be utilized to supply energy.

(Public Comment Letter 67, pg. 5, Charles Rich, 3/19/2018)



Comment R.2:

Page 3R-3. The Village Code limits construction hours to 8:00 am to 6:00 pm. However, page 3M-37 references construction truck access between 4:00 pm and 7:00 pm. Clarify.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response R.2:

Construction trucks would access the Project Site up to 6:00 pm on weekdays in accordance with the Village Noise Ordinance.

Comment R.3:

Page 3R-4. First paragraph. In other sections of the DEIS, rock removal is noted as potentially necessary. Clarify.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response R.3:

Based on the composition of the bedrock, blasting would be required for removal. See the preliminary construction work plan in FEIS Appendix G. An area of bedrock removal has been identified in the vicinity of lot 9 based on borings performed by GZA (as shown in FEIS Appendix N). A certified blasting company will be needed to determine the number of days or daily duration of blasting. Based on the minor volume of rock to be removed it is estimated that blasting will require one to two weeks to perform with normally two blasts per day. During construction, careful attention would be paid to the neighboring properties. The blasting shall be conducted by a New York State licensed blasting contractor. The selected contractor would prepare a written Blasting Plan in accordance the with the Village of Mamaroneck Village Code Chapter 120 and the New York Department of Transportation "Geotechnical Engineering Manual: Procedure for Blasting" latest edition (Appendix 5), providing a detailed description of the means and methods of the proposed rock removal program. This plan would be forwarded to the Town-Village Engineering Department and Building Department for review. The blasting contractor would have a Pre-Blast meeting with representatives of the Village Engineering and Building Departments to review schedule, field activities and vibration and noise monitoring. The blasting contractor would also implement acoustic overpressure and vibration monitoring as required by the Blasting Plan to minimize the risk of structural damage to nearby structures. Since blasting



involves relatively short (a few seconds) noise exposures in the community, it is not considered a significant cause of human annoyance.

Comment R.4:

Pages 3R-4 and 3R-5. Discuss the potential need for noise mitigation measures. The need for such measures should be further evaluated and provided in the EIS if they are required.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response R.4:

See Response R.1.

Comment R.5:

Discuss the impacts on noise to residences from truck traffic on residential streets leading to the project site. The analysis should estimate decibel levels from passing trucks compared to background noise levels and discuss the frequency and time period over which sound level increases will occur.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response R.5:

The Construction Noise Study included in FEIS Appendix Y details noise from trucking operations and stationary equipment and compares the sound levels from construction activities to existing conditions. As analyzed in the Construction Noise Study, the predominant source of construction noise would be the stationary equipment, since trucking operations and passbys generate relatively brief noise exposure at approximately ten seconds. The Construction Noise Study finds that construction would generate noise levels ranging from 49 to 65 dBA. In efforts to reduce potential noise impacts from truck traffic, noise reduction measures would include limitations to certain daytime and weekday hours, minimizing idling times and potential rerouting of truck routes, among others. With the implementation of these noise reduction measures, no significant noise impacts are anticipated.



4. Alternatives

SUMMARY

The DEIS evaluates seven (7) alternatives (A through G), which were identified in the SEQRA Scope. The Lead Agency subsequently requested that the Applicant evaluate a sub-set of the Proposed Action, Alternative F (the “No Fill” Alternative) and Alternative G (Rezoning for Condominium and Golf Course) at lower-density iterations of 75, 50 and 25 units. A summary comparison of all the alternatives is contained in Table 4-1.

While the Applicant evaluated each of the lower-density iterations, it must be noted that reducing the density of the Proposed Action to 75, 50 or 25 units would render the development financially infeasible. This is because the investment required for infrastructure, golf course re-design and professional fees and permits would greatly exceed what could be derived from the sale of significantly fewer units to be built on a property that is large enough to support a significantly larger development based on current zoning. The infrastructure for this development includes installing a sewer collection main; sewer pump station with emergency generator; a sewer force main; offsite sewer infiltration and inflow mitigation; stormwater infrastructure and treatment facilities; development of the platform and Cove Road extension; lighting; installation of gas main; underground electric and transformers; water/fire mains and hydrants through the site looping the Cove Road and Hommocks Road water mains; and consolidation and management of arsenic impacted soil on-site during construction. This initial infrastructure investment would vary little the reduced density scenarios causing the costs to be amortized over the smaller number of units. Accordingly, reducing the Project density would not be a reasonable or feasible alternative because it would not result in a viable development that is consistent with the Applicant’s goals.

In addition, a reduction in project density is not a necessary measure to mitigate any identified potentially significant adverse environmental impacts associated with the Proposed Action. The Proposed Action already incorporates measures to mitigate each of the identified areas of environmental concern in the SEQRA Scope as described below:

1. Land Use and Zoning

The Proposed Action would be developed in accordance with the Village’s Planned Residential Development (PRD) regulations. The PRD Regulations indicate that the maximum density of any



residential redevelopment is calculated by dividing the total lot area of the Project Site (here 94.5 acres) by the minimum lot size for the underlying zoning district (here 20,000 sf). Thus, the maximum density of a PRD at the Project Site is 205 units. The Proposed Action would limit Project density to 105-units, and cluster development in a portion of the Project Site to ensure there are ample buffers from neighboring uses and sensitive areas on the Project Site.

The Proposed Action is also consistent with the underlying R-20 zoning bulk regulations, including regulations for building height, the minimum required setback of 30-foot side yard, 37.5-foot front yard, and 45-foot rear yard setbacks, and with the major policy documents that govern development in the Village, including the Village's Comprehensive Plan, LWRP, Westchester 2025 policies, and Patterns for Westchester. Therefore, the DEIS finds no significant adverse impacts to Land Use and Zoning.

2. Visual and Community Character

The Proposed Action would add a residential use to the golf course. As set forth in DEIS Chapter 3B, the visual impact of this development would be limited, as the new homes on the Project Site would be visible from only those private properties and portions of public roadways that are immediately adjacent to the Project Site. The Proposed Action would incorporate open space setbacks, landscaping and appropriate siting measures to ensure that the new homes would not be visible from public vantage points deemed significant in the SEQRA Scope.

3. Natural Features and Open Space

The 105-unit layout would protect all of the features on the Project Site deemed environmentally significant in the Village's designation of the Project Site as a CEA (i.e., the 100-year floodplain, the ponds and wetland system and the Project Site's proximity to the Long Island Sound) through proper siting of development and buffer areas, increased landscaping and stormwater management. The various studies completed, including the SWPPP (see FEIS Appendix M) and wetlands analysis (Appendix B in the DEIS), demonstrate that the Proposed Action would not impact the function and benefit of these areas on the Project Site, or otherwise cause degradation to off-site wetlands or the water quality of the Long Island Sound. Nor would the Proposed Action cause the reduction of any significant or unique areas of vegetation. As shown in Figure 2 in FEIS Appendix C, the areas to be disturbed on the Project Site to accommodate the 105-unit Proposed Action are currently composed primarily of golf course land. These areas do not provide significant habitat for unique, threatened or endangered plant or animal species. The Proposed Action would include the creation of 30.6 acres of new unique habitat not currently existing on the golf course, and overall improved habitat quality compared with the existing conditions on the Project Site.



4. Stormwater and Drainage

As demonstrated by the Stormwater Pollution Prevention Plan (SWPPP) in FEIS Appendix M, the potential stormwater and drainage impacts associated with the Proposed Action would be addressed through the implementation of various measures, including the implementation of the proposed drainage system, to include a series of drainage pipes, infiltration basins, bioretention basins, stone diaphragms, CDS units and dry wells, as well as implementation of the detailed Sediment and Erosion Control Program. As a result of the implementation of the SWPPP and Sediment and Erosion Control Program, it is expected that there would be no significant water quality impacts on receiving wetlands or downstream discharge points or erosion and sediment impacts on the Project Site or on the Long Island Sound. In addition, proposed residential buildings would be elevated above the floodplain with excavated material moved from other portions of the Project Site for grading purposes in accordance with NYS Department of Environmental Conservation (NYSDEC) regulations (see NYSDEC letter in FEIS Appendix L).

5. Traffic

As outlined in Chapter 3M of the DEIS and analyzed in the Traffic Impact Study in Appendix M of the DEIS, the Proposed Action would have no significant adverse impacts to area traffic operating conditions. Levels of Service at all of the intersections analyzed would remain unchanged, and delay times would increase only marginally, on the order of one second or less. The proposed site design would lead to a number of improvements to operating conditions, the most notable of which are: improved road surface, profile and alignment of Cove Road across the Project Site for residents on either side of the property; improved pedestrian environment with the completion of a sidewalk across the Project Site; road widths to accommodate bicycles; and improved emergency evacuation routes with the raising of Cove Road above flood elevation.

Note, the post-construction trip generation for each of the alternatives was determined by using the ITE trip equations for the peak hour of the adjacent street for Single Family Homes and Condos (carriage homes were also considered condos). Where there were both carriage homes and single-family homes, a 5% credit was taken for trips between the three uses (carriage homes, single family homes and the clubhouse). Where the 18-hole golf course was preserved, no reduction was taken for a reduction in golf-course trips. Where a 9-hole course was preserved, the number of golf-course trips was reduced by 50%. Where no golf-course was preserved, all of the golf-course trips were removed.



The average daily trucks during the busiest phase of construction was pro-rated based on the Proposed Project. For alternatives with fill, the number of trucks was prorated on the cubic yards of fill for the alternative against the 26 trucks associated with the 84,000 cy of fill required for the proposed plan. For the alternatives without fill, the number of construction trucks was prorated based on the number of units for the alternative against the 1.25 trucks associated with the 105 proposed units.

6. Construction

The Proposed Action has been designed to balance cut and fill on the Project Site to the greatest extent practicable and to provide structural fill where necessary to minimize overall site impacts. Sediment and erosion controls would be used to protect the soils during construction, as described in the Soil Erosion and Sediment Control Plan. The detailed Erosion and Sediment Control Plan would be implemented to mitigate the short-term impacts of soil erosion and the proposed disturbance to steep slopes during the construction period. Rock removal would be performed in accordance with New York State Department of Transportation Geotechnical Engineering Manual #22 "Procedures for Blasting" latest edition. A Blasting Plan would be prepared and reviewed by the Town Engineering Department and Building Department for review.

Under the Proposed Action, the most significant period of construction truck traffic (and associated noise) would occur in the first 9 months when the development platform is being prepared. It is anticipated that 26 truck visits per hour of operation would occur during the first 9-month period. It is also anticipated that truck arrivals and departures would be prohibited from arriving or departing within 30 minutes on either side of the start of the school day and within 30 minutes on either side of the end of the school day. All construction trucks accessing the Project Site would be required to use I-95, exiting at either Exit 17 (from the south) or Exit 18 (to or from the north) to use Boston Post Road (US Route 1) to get to and from Hommocks Road and Eagle Knolls Road. There would be no truck access allowed via Orienta Avenue or East Cove Road.

Construction would be carried out in accordance with the Construction Work Plan (CWP), included in FEIS Appendix G. Noise from construction activities would be limited to the hours of 8:00 a.m. and 6:00 p.m. Monday through Saturday in accordance with the Village of Mamaroneck Village Code, Chapter 254. Noise would be limited to typical construction equipment in good working order; malfunctioning equipment generating excessive noise would be immediately taken out of service.

The CWP also includes a Construction Health and Safety Plan (CHASP) that addresses measures to minimize any potential exposure to impacted soil by contact, inhalation and ingestion through the establishment of safety protocols, hazard response, and implementation of active dust monitoring. In addition, in accordance with the NYSDEC Division of Materials Management, the project's cut and fill



Section 7-703-A, which delegates to the Village Board the authority to determine the appropriate measures to calculate the maximum base density.

In accordance with these policies, the Applicant analyzed alternatives with a number of units far less than the maximum permitted density because it would result in developments that would preserve and protect all of the key environmental features of the Project Site identified in the Village's Comprehensive Plan – i.e., the "100-year floodplain . . . several ponds and wetland systems and the club's proximity to the Long Island Sound." (Comprehensive Plan pg. 63).

Response A.6 in FEIS Chapter 3A provides a full explanation of permitted density on the Project Site. In addition, the Applicant has included in the DEIS Alternatives Chapter 4 a series of conventional yield layouts, including a conventional R-20 layout, as well as the "No Fill" Alternative. Both alternatives demonstrate that 106 units could be feasibly developed at the Project Site.

However, at the request of the Planning Board, the Applicant has provided an analysis of several Alternatives, including Alternative F, at lower densities of 25, 50 and 75 units. See the full analysis in Response 4.5. As discussed, these proposed lower density alternatives would not be financially viable because the investment required for infrastructure, golf course re-design and professional fees and permits would greatly exceed what could be derived from the sale of significantly fewer units to be built on a property that is large enough to support a significantly larger development based on current zoning. Therefore, this alternative could not be pursued by the Applicant.

Comment 4.5:

A reduced density project would have fewer impacts in a number of areas, including, among others, reduced impacts to open space and the property's associated CEA designation, reduced vegetation impacts, fewer truck trips and associated noise, fewer visual impacts and less construction disturbance and risks associated with the movement of contaminated soil. Provide reduced density versions of Alternative F, the No-Fill Alternative, with 25, 50 and 75-units and compare the impacts of each alternative to the proposed action. The comparison should cover each of the areas of the environment analyzed in the DEIS and be at a level of detail sufficient to allow the Planning Board to make a SEQRA Finding comparing the impacts of each alternative with the proposed action.

(Memo 1, pg. 12, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

Response 4.5:



As set forth in the summary above, reducing the density of the Proposed Action is not a necessary remedial measure to address any identified significant impact of the Project. The Proposed Action incorporates measures to ensure that the potential impacts are properly mitigated and/or avoided.

As requested by the Lead Agency, reduced density versions of Alternative F, with 25, 50 and 75 units, are presented in Table 4-1 to show a comparison of specific characteristics and potential impacts as compared to the Proposed Action and the No-Fill Alternative F. Under the reduced density versions of Alternative F, the existing R-20 zoning would remain applicable and the Planned Residential Development regulations would be applied without bringing any new fill to the Project Site (though excavated material may be moved around within the boundaries of the Project Site for grading purposes). 25 single-family homes would be developed primarily along a rerouted Cove Road extending through the center of the Project Site; 50 and 75 single-family homes would be developed along the same rerouted Cove Road, as well as an extended Eagle Knolls Road. Note that in the 75 unit reduced density version of the No Fill Alternative, the development of 75 single-family homes (as opposed to a mix of housing types) is the most reasonable alternative as the Applicant would look to maximize profitability of the site given the smaller number of units. The 7.3 acres that fall within the Town of Mamaroneck would remain undisturbed, and the clubhouse would remain in use in the MR district. See Figures 16a through 16c in FEIS Appendix C.

Impact assessments by major category are summarized below.

1. Land Use and Zoning

As with Alternative F and the Proposed Action, the lower density versions of Alternative F would be compatible with existing zoning regulations and surrounding land uses. Alternative F and all of the reduced density iterations would be developed in accordance with the Village's Planned Residential Development (PRD) regulations. Therefore, a lower density of units on the Project Site under Alternative F is not a necessary mitigation measure to address any identified land use and zoning impact.

2. Visual and Community Character

As with Alternative F and the Proposed Action, the reduced density iterations of Alternative F would add a residential use to the Project Site with the addition of the single-family homes and carriage homes, along with the elimination of the golf course. This would result in a development that is more consistent with the character of its immediate surroundings, incorporating single-family homes, similar in style to those along Orienta Avenue or Cove Road. As demonstrated in the Visual Analysis detailed in Chapter 3B of the DEIS, a residential redevelopment of 105-units would not be visible from key



vantage points in the Village deemed significant by the Lead Agency. This would not change under the No-fill Alternative, or its 75-, 50- or 25-unit iterations.

3. Natural Features and Open Space

As with Alternative F and the Proposed Action, the reduced density iterations of Alternative F would protect all of the features on the Project Site deemed environmentally significant in the Village's designation of the Project Site as a CEA (i.e., the 100-year floodplain, the ponds and wetland system and the Project Site's proximity to the Long Island Sound) through proper siting of development and buffer areas, increased landscaping and stormwater management. Implementation of proper erosion and sediment control measures would ensure that the proposed development would not impact the function and benefit of these areas on the Project Site, or otherwise cause degradation to off-site wetlands or the water quality of the Long Island Sound. Therefore, though the lower density versions of the Alternate F would result in more open space in terms of acreage, lowering the density would not provide any further mitigation in terms of preservation of features deemed environmentally significant by the Village in the Comprehensive Plan.

The construction of Alternate F will consolidate the on-site soils, similar to the Proposed Action to create the development platform and the relocated Cove Road extending to Eagles Knoll Road. Alternative F does not have the additional branch roadways of Road A, Copper Avenue extension and Realigned Eagles Knoll Road. This is the same for full Alternate F and reduced density options. The same area of disturbance as the Proposed Action would be required, resulting in identical levels of mature tree removal compared the Proposed Action.

It should also be noted that the Proposed Action would result in a positive impact of increasing functional habitat areas on the Project Site. Alternative F 50-and 75-unit iteration would require the same amount of tree removal (53% of total trees) as the Proposed Action where the 25-unit layout would require a 45 percent reduction in trees. The areas to be disturbed on the Project Site to accommodate the Proposed Action are currently comprised primarily of maintained golf course areas, not natural open space. These areas of recreational space currently do not provide significant habitat for unique, threatened or endangered plant or animal species. While the 25-, 50- and 75-unit iterations of Alternative F would increase the provision of open space, they do not represent reasonable alternatives because they are financially infeasible proposals inconsistent with the Applicant's objectives and capabilities.

4. Stormwater and Drainage

As demonstrated by the Stormwater Pollution Prevention Plan (SWPPP) in FEIS Appendix M, the potential stormwater and drainage impacts associated with the Proposed Action can be addressed



Comment 4.11:

During the February 14 public hearing comments were made to the effect that the Applicant had represented that Alternative G, if pursued, would be an age-restricted community. The Applicant should confirm whether or not this is the case and assess the impacts to the school district if it is. If it is the case, what would be the minimum age allowed to reside on the property?

(Memo 1, pg. 13, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)

And the last one I actually do want to point out also, in regard to the 55 and older, just because you're 55 doesn't mean you don't have little kids.

(Public Hearing 1, pg. 135, Randi Spatz, 2/14/2018)

Response 4.11:

As stated at the February 14 public hearing, Alternative G, if pursued, would be an age-restricted development, with ownership to be restricted to residents age 55 and older. Hampshire would include a requirement in the Homeowners Association Rules and Regulations that no owner may be under the age of 55.

Alternative G is not anticipated to result in a significant, if any, increase in school-age children. The units proposed under Alternative G would be geared towards empty nesters, as it would include luxury amenities and would be accompanied by a requirement of club membership. In addition, an age-restricted development is unlikely to attract families, who often prefer housing options nearby other families. Therefore, the units proposed under Alternative G are very unlikely to generate the number of school children estimated with a more traditional condominium unit. However, though not anticipated, these units could potentially house school-aged children. Using multipliers provided by Rutgers University Center for Urban Policy Research, it is estimated that the condominium development could generate approximately 20 school age children. This minor increase would not be expected to put a significant strain on the school district.

Comment 4.12:

Provide an assessment of consistency with the LWRP for Alternative G, as well as the variants discussed in Comment 141 above.

(Memo 1, pg. 13, Stuart Mesinger, Consultant to Planning Board, 5/14/2018)



Under absolutely no circumstances should any residential building take place in the MR-1 District, as identified in the Village's LWRP (adopted by NYS and the VOM in 1986). Building ANYWHERE in this Zone would constitute "spot zoning" and would jeopardize the entire existence of the Village's MR and MC Zones and the Village's express desire to preserve and protect its waterfront for future generations.

(Public Comment Letter 209, pg. 1, Paul A. Ryan, 5/12/2018)

Response 4.12:

In 2016, a draft update to the LWRP was published for review. The 2016 LWRP update defers to the recommendations of the Comprehensive Plan regarding the rezoning of the Hampshire Country Club. It states, "The zoning changes discussed in the 2012 Comprehensive Plan to preserve Hampshire and better reflect the use of Village parks and open space would be consistent with the goals and objectives articulated and policies presented in this LWRP" (Village of Mamaroneck Local Waterfront Revitalization Program, Draft Update 2016. Page 86).

Alternative G, the condominium alternative, would involve a Village Zoning Code text amendment to create an Open Space/Residential Community District, which would permit multifamily housing as part of a Planned Golf Course Community. Under this alternative, the Village of Mamaroneck portion of the Project Site would be rezoned to this new zoning district.

It is the opinion of the Applicant that this rezoning would be in accordance with the 2012 Comprehensive Plan Update for the Village of Mamaroneck, which discusses the Village's preference to preserve as much open space on the site as possible for rezoning in order to preserve various features deemed environmentally significant on the Project Site, along with its recreational space. This alternative's compliance with the Comprehensive Plan would not constitute spot zoning, but rather a zoning change that, in the Applicant's opinion, is in line with the stated preferences outlined in the comprehensive planning effort.

Comment 4.13:

The condo development is not a reasonable alternative. It is not in the best interest of the community. It is and is only in the interest of the developers. It would be drastically out of character with the surrounding community with a massive five-story 300,000-plus square foot 121-unit luxury condo complex with, in this flooded area, a 300-car underground parking garage that was going to have hydraulic, James-Bond-like, you know, automatic closing doors in the event of a flood, and all this in an otherwise residential area. More importantly, perhaps, for the village as opposed for the residents

C Updated Figures

Figure 1:	Existing Conditions Plan
Figure 2:	Layout Plan
Figure 3:	Construction Phasing Plan
Figure 4:	Preliminary Subdivision Plat
Figure 5:	Open Space Plan
Figure 6a:	Landscaping Plan
Figure 6b:	Landscaping Plan Details
Figure 7:	Utility Easement Plan
Figure 8:	Cut and Fill
Figure 9:	Development Platform Cross Section
Figure 10a:	Groundwater Elevation Map
Figure 10b:	Bedrock Elevation Map
Figure 11:	Flood Extent Model - 100 Year Storm
Figure 12:	Grading and Utility Plan
Figure 13:	Tree Removal Plan
Figure 14a:	Tree Removal Sorted Plan
Figure 14b:	Tree Removal Sorted Table
Figure 15a:	Proposed Action Lower Density Site Plan - 25 Units
Figure 15b:	Proposed Action Lower Density Site Plan - 50 Units
Figure 15c:	Proposed Action Lower Density Site Plan - 75 Units
Figure 16a:	Alternative F Lower Density Site Plan - 25 Units
Figure 16b:	Alternative F Lower Density Site Plan - 50 Units
Figure 16c:	Alternative F Lower Density Site Plan - 75 Units
Figure 17:	Alternative G Photo Simulations

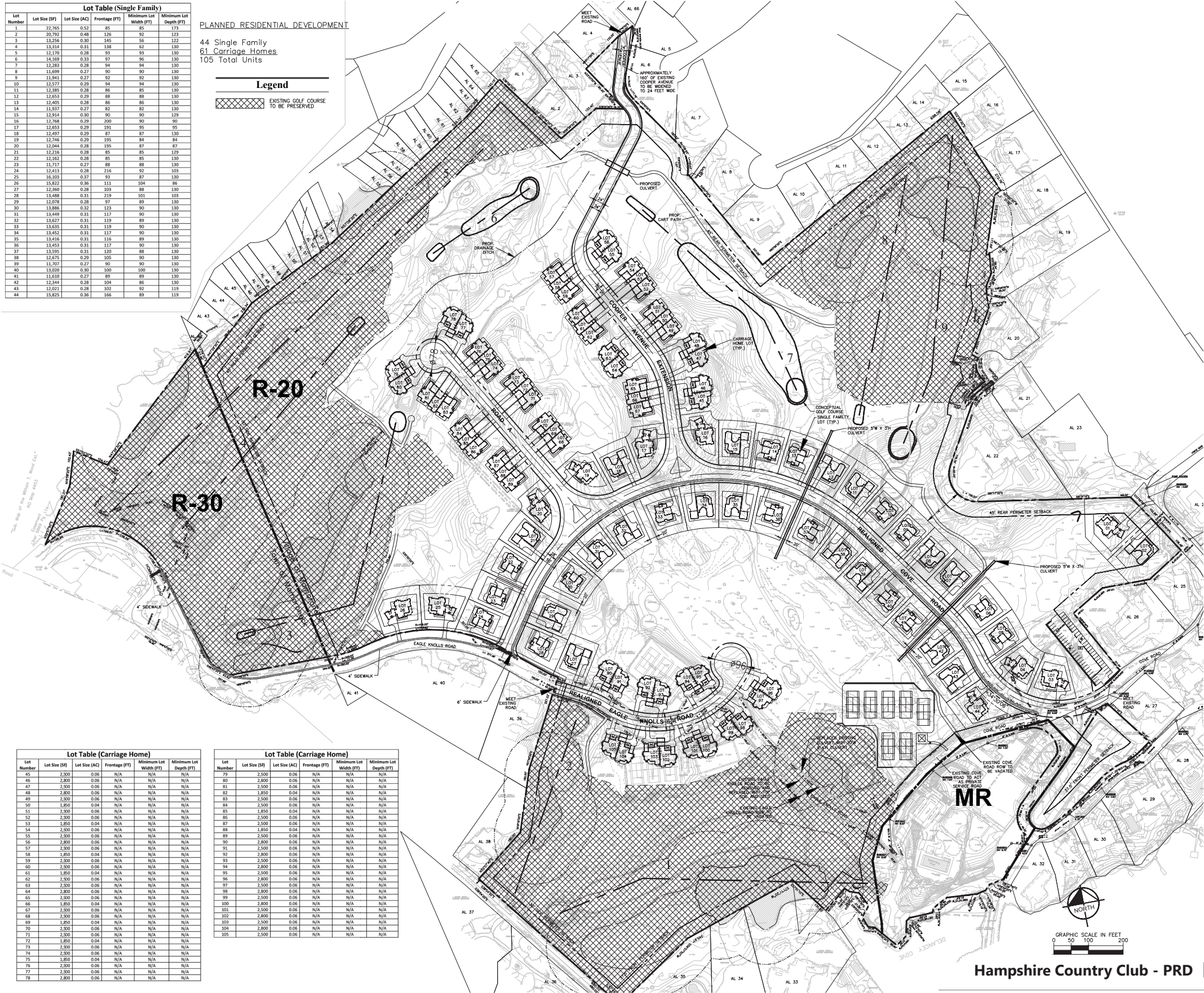
Lot Table (Single Family)						
Lot Number	Lot Size (SF)	Lot Size (AC)	Frontage (FT)	Minimum Lot Width (FT)	Minimum Lot Depth (FT)	
1	22,765	0.52	85	95	175	
2	20,792	0.48	126	92	123	
3	19,296	0.40	145	98	122	
4	19,316	0.41	138	83	130	
5	12,170	0.28	93	93	130	
6	14,169	0.33	97	96	130	
7	12,283	0.28	94	94	130	
8	11,699	0.27	90	90	130	
9	11,941	0.27	92	92	130	
10	15,577	0.35	94	94	130	
11	12,385	0.28	86	85	130	
12	12,653	0.29	88	88	130	
13	12,405	0.28	86	86	130	
14	11,937	0.27	82	82	130	
15	12,914	0.30	90	90	129	
16	12,768	0.29	200	90	90	
17	12,653	0.29	191	95	95	
18	12,497	0.29	87	87	130	
19	12,740	0.29	195	84	84	
20	12,044	0.28	195	87	87	
21	12,218	0.28	85	85	130	
22	12,162	0.28	85	85	130	
23	11,717	0.27	88	88	130	
24	12,433	0.28	216	92	103	
25	16,103	0.37	93	87	130	
26	15,822	0.36	111	104	86	
27	12,360	0.28	103	88	130	
28	13,488	0.31	219	101	103	
29	12,078	0.28	97	89	130	
30	13,886	0.32	123	90	130	
31	13,449	0.31	117	90	130	
32	15,627	0.31	119	89	130	
33	13,630	0.31	119	90	130	
34	13,452	0.31	117	90	130	
35	13,416	0.31	116	89	130	
36	13,453	0.31	117	90	130	
37	13,595	0.31	120	88	130	
38	12,675	0.29	105	90	130	
39	11,701	0.27	90	90	130	
40	13,020	0.30	100	100	130	
41	11,610	0.27	89	89	130	
42	15,344	0.35	104	86	130	
43	12,021	0.28	102	92	119	
44	15,823	0.36	106	89	119	

PLANNED RESIDENTIAL DEVELOPMENT

44 Single Family
61 Carriage Homes
105 Total Units

Legend

EXISTING GOLF COURSE
TO BE PRESERVED



Lot Table (Carriage Home)						
Lot Number	Lot Size (SF)	Lot Size (AC)	Frontage (FT)	Minimum Lot Width (FT)	Minimum Lot Depth (FT)	
45	2,500	0.06	N/A	N/A	N/A	
46	2,800	0.06	N/A	N/A	N/A	
47	2,500	0.06	N/A	N/A	N/A	
48	2,800	0.06	N/A	N/A	N/A	
49	2,500	0.06	N/A	N/A	N/A	
50	1,850	0.04	N/A	N/A	N/A	
51	2,500	0.06	N/A	N/A	N/A	
52	2,500	0.06	N/A	N/A	N/A	
53	1,850	0.04	N/A	N/A	N/A	
54	2,500	0.06	N/A	N/A	N/A	
55	2,500	0.06	N/A	N/A	N/A	
56	2,800	0.06	N/A	N/A	N/A	
57	2,500	0.06	N/A	N/A	N/A	
58	1,850	0.04	N/A	N/A	N/A	
59	2,500	0.06	N/A	N/A	N/A	
60	2,500	0.06	N/A	N/A	N/A	
61	1,850	0.04	N/A	N/A	N/A	
62	2,500	0.06	N/A	N/A	N/A	
63	2,500	0.06	N/A	N/A	N/A	
64	2,800	0.06	N/A	N/A	N/A	
65	2,500	0.06	N/A	N/A	N/A	
66	1,850	0.04	N/A	N/A	N/A	
67	2,500	0.06	N/A	N/A	N/A	
68	2,500	0.06	N/A	N/A	N/A	
69	1,850	0.04	N/A	N/A	N/A	
70	2,500	0.06	N/A	N/A	N/A	
71	2,500	0.06	N/A	N/A	N/A	
72	1,850	0.04	N/A	N/A	N/A	
73	2,500	0.06	N/A	N/A	N/A	
74	2,500	0.06	N/A	N/A	N/A	
75	1,850	0.04	N/A	N/A	N/A	
76	2,500	0.06	N/A	N/A	N/A	
77	2,500	0.06	N/A	N/A	N/A	
78	2,800	0.06	N/A	N/A	N/A	

Lot Table (Carriage Home)						
Lot Number	Lot Size (SF)	Lot Size (AC)	Frontage (FT)	Minimum Lot Width (FT)	Minimum Lot Depth (FT)	
79	2,500	0.06	N/A	N/A	N/A	
80	2,800	0.06	N/A	N/A	N/A	
81	2,500	0.06	N/A	N/A	N/A	
82	2,800	0.06	N/A	N/A	N/A	
83	2,500	0.06	N/A	N/A	N/A	
84	2,500	0.06	N/A	N/A	N/A	
85	1,850	0.04	N/A	N/A	N/A	
86	2,500	0.06	N/A	N/A	N/A	
87	2,500	0.06	N/A	N/A	N/A	
88	1,850	0.04	N/A	N/A	N/A	
89	2,500	0.06	N/A	N/A	N/A	
90	2,800	0.06	N/A	N/A	N/A	
91	2,500	0.06	N/A	N/A	N/A	
92	2,800	0.06	N/A	N/A	N/A	
93	2,500	0.06	N/A	N/A	N/A	
94	2,800	0.06	N/A	N/A	N/A	
95	2,500	0.06	N/A	N/A	N/A	
96	2,800	0.06	N/A	N/A	N/A	
97	2,500	0.06	N/A	N/A	N/A	
98	2,800	0.06	N/A	N/A	N/A	
99	2,500	0.06	N/A	N/A	N/A	
100	2,800	0.06	N/A	N/A	N/A	
101	2,500	0.06	N/A	N/A	N/A	
102	2,800	0.06	N/A	N/A	N/A	
103	2,500	0.06	N/A	N/A	N/A	
104	2,800	0.06	N/A	N/A	N/A	
105	2,500	0.06	N/A	N/A	N/A	

Layout Plan



Figure 4

Lot Table (Single Family)					
Lot Number	Lot Size (SF)	Lot Size (AC)	Frontage (FT)	Minimum Lot Width (FT)	Minimum Lot Depth (FT)
1	22,765	0.52	85	85	173
2	20,792	0.48	126	92	123
3	13,256	0.30	145	56	122
4	13,314	0.31	138	62	130
5	12,170	0.28	93	93	130
6	14,169	0.33	97	96	130
7	12,283	0.28	94	94	130
8	11,699	0.27	90	90	130
9	11,941	0.27	92	92	130
10	12,577	0.29	96	94	130
11	12,385	0.28	86	85	130
12	12,653	0.29	88	88	130
13	12,405	0.28	86	86	130
14	11,937	0.27	82	82	130
15	12,914	0.30	90	90	129
16	12,748	0.29	200	90	90
17	12,653	0.29	191	95	95
18	12,497	0.29	87	87	130
19	12,746	0.29	195	94	94
20	12,044	0.28	195	87	87
21	12,216	0.28	85	85	129
22	12,162	0.28	85	85	130
23	11,717	0.27	88	88	130
24	12,413	0.28	216	92	103
25	16,103	0.37	93	87	130
26	15,822	0.36	111	104	86
27	12,360	0.28	103	88	130
28	13,488	0.31	239	103	103
29	12,078	0.28	97	89	130
30	13,886	0.32	123	90	130
31	13,449	0.31	117	90	130
32	13,627	0.31	119	89	130
33	13,655	0.31	119	90	130
34	13,652	0.31	117	90	130
35	13,416	0.31	116	89	130
36	13,653	0.31	117	90	130
37	13,595	0.31	120	88	130
38	12,675	0.29	105	90	130
39	11,707	0.27	90	90	130
40	13,020	0.30	100	100	130
41	11,610	0.27	89	89	130
42	12,344	0.28	104	86	130
43	12,021	0.28	102	92	119
44	15,825	0.36	166	89	119

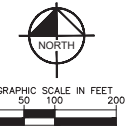
Lot Table (Carriage Home)					
Lot Number	Lot Size (SF)	Lot Size (AC)	Frontage (FT)	Minimum Lot Width (FT)	Minimum Lot Depth (FT)
45	2,500	0.06	N/A	N/A	N/A
46	2,800	0.06	N/A	N/A	N/A
47	2,500	0.06	N/A	N/A	N/A
48	2,800	0.06	N/A	N/A	N/A
49	2,500	0.06	N/A	N/A	N/A
50	1,850	0.04	N/A	N/A	N/A
51	2,500	0.06	N/A	N/A	N/A
52	2,500	0.06	N/A	N/A	N/A
53	1,850	0.04	N/A	N/A	N/A
54	2,500	0.06	N/A	N/A	N/A
55	2,500	0.06	N/A	N/A	N/A
56	2,800	0.06	N/A	N/A	N/A
57	2,500	0.06	N/A	N/A	N/A
58	1,850	0.04	N/A	N/A	N/A
59	2,500	0.06	N/A	N/A	N/A
60	2,500	0.06	N/A	N/A	N/A
61	1,850	0.04	N/A	N/A	N/A
62	2,500	0.06	N/A	N/A	N/A
63	2,500	0.06	N/A	N/A	N/A
64	2,800	0.06	N/A	N/A	N/A
65	2,500	0.06	N/A	N/A	N/A
66	1,850	0.04	N/A	N/A	N/A
67	2,500	0.06	N/A	N/A	N/A
68	2,500	0.06	N/A	N/A	N/A
69	1,850	0.04	N/A	N/A	N/A
70	2,500	0.06	N/A	N/A	N/A
71	2,500	0.06	N/A	N/A	N/A
72	1,850	0.04	N/A	N/A	N/A
73	2,500	0.06	N/A	N/A	N/A
74	2,500	0.06	N/A	N/A	N/A
75	1,850	0.04	N/A	N/A	N/A
76	2,500	0.06	N/A	N/A	N/A
77	2,500	0.06	N/A	N/A	N/A
78	2,800	0.06	N/A	N/A	N/A

Lot Table (Carriage Home)					
Lot Number	Lot Size (SF)	Lot Size (AC)	Frontage (FT)	Minimum Lot Width (FT)	Minimum Lot Depth (FT)
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80	2,800	0.06	N/A	N/A	N/A
81	2,500	0.06	N/A	N/A	N/A
82	1,850	0.04	N/A	N/A	N/A
83	2,500	0.06	N/A	N/A	N/A
84	2,500	0.06	N/A	N/A	N/A
85	1,850	0.04	N/A	N/A	N/A
86	2,500	0.06	N/A	N/A	N/A
87	2,500	0.06	N/A	N/A	N/A
88	1,850	0.04	N/A	N/A	N/A
89	2,500	0.06	N/A	N/A	N/A
90	2,800	0.06	N/A	N/A	N/A
91	2,500	0.06	N/A	N/A	N/A
92	2,800	0.06	N/A	N/A	N/A
93	2,500	0.06	N/A	N/A	N/A
94	2,800	0.06	N/A	N/A	N/A
95	2,500	0.06	N/A	N/A	N/A
96	2,800	0.06	N/A	N/A	N/A
97	2,500	0.06	N/A	N/A	N/A
98	2,800	0.06	N/A	N/A	N/A
99	2,500	0.06	N/A	N/A	N/A
100	2,800	0.06	N/A	N/A	N/A
101	2,500	0.06	N/A	N/A	N/A
102	2,800	0.06	N/A	N/A	N/A
103	2,500	0.06	N/A	N/A	N/A
104	2,800	0.06	N/A	N/A	N/A
105	2,500	0.06	N/A	N/A	N/A

Notes

- Effective FEMA 100-Year Flood Elevation is 12' (NAVD 88 datum)
- This plan elevation is based on NAVD 88 datum.

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA
C1 (Total)	240.81'	56.67'	S59°07'54"E	56.54'	13°29'05"
C2 (Total)	300.00'	516.44'	N74°53'18"E	454.99'	98°37'54"
C3 (Total)	59.00'	259.71'	S78°35'44"W	95.34'	252°12'17"
C4 (Total)	19.00'	30.56'	S1°29'34"E	27.37'	92°09'41"
C5 (Total)	250.00'	94.03'	S55°25'45"W	93.47'	21°32'57"
C6 (Total)	250.00'	246.11'	N85°35'41"W	236.29'	56°24'11"
C7 (Total)	235.00'	62.40'	N64°59'59"W	62.21'	15°12'48"
C8 (Total)	33.27'	43.50'	N19°53'05"W	40.47'	74°552'1"
C9 (Total)	575.00'	1110.99'	N78°42'37"E	946.01'	110°41'43"
C10 (Total)	425.00'	154.87'	S35°30'11"E	154.01'	20°52'41"
C11 (Total)	275.00'	444.68'	S71°23'19"E	397.80'	92°38'57"
C12 (Total)	539.53'	21.24'	N61°09'32"E	21.24'	2°152'1"
C13 (Total)	228.97'	482.85'	N83°25'59"W	387.97'	115°49'21"
C14 (Total)	475.00'	173.04'	N35°30'20"W	172.09'	20°52'22"
C15 (Total)	625.00'	467.98'	N67°23'33"W	457.12'	42°54'04"
C16 (Total)	119.00'	167.81'	N48°26'42"W	154.25'	80°47'46"
C17 (Total)	275.00'	150.18'	N23°41'29"W	148.32'	31°172'1"
C18 (Total)	99.00'	104.72'	N6°00'13"W	98.91'	66°39'54"
C19 (Total)	94.00'	114.13'	N7°27'16"W	107.25'	69°33'59"
C20 (Total)	31.00'	26.36'	N17°52'28"W	25.58'	48°43'34"
C21 (Total)	65.00'	55.28'	S17°52'28"E	53.63'	48°43'34"
C22 (Total)	60.00'	72.85'	S7°27'16"E	68.46'	69°33'59"
C23 (Total)	124.00'	144.28'	S6°00'13"E	136.28'	66°39'54"
C24 (Total)	225.00'	122.87'	S23°41'29"E	121.35'	31°172'1"
C25 (Total)	119.00'	159.66'	S30°23'18"W	147.95'	76°52'14"
C26 (Total)	625.00'	75.04'	S65°23'03"W	75.00'	6°52'45"
C27 (Total)	119.00'	160.08'	N79°31'05"W	148.28'	77°04'29"
C28 (Total)	50.00'	221.21'	S11°45'04"W	80.13'	253°29'35"
C29 (Total)	19.00'	24.54'	S77°56'17"E	22.87'	74°00'53"
C30 (Total)	119.00'	167.39'	S0°41'00"E	153.93'	80°35'41"
C31 (Total)	625.00'	177.27'	S31°29'18"W	176.68'	16°15'05"
C32 (Total)	19.00'	30.20'	S68°53'28"W	27.12'	91°10'34"



Hampshire Country Club - PRD | Village of Mamaroneck, New York

Preliminary Subdivision Plat

Source: Kimley Horn

VOLUME SUMMARY

TOP SOIL (6")	24006.4 CUBIC YARDS
PAVEMENT (18")	8511.1 CUBIC YARDS
BASEMENT (10")	85282.4 CUBIC YARDS
BASEMENT SLAB (12")	8528.2 CUBIC YARDS
DRIVEWAY (12")	5365.9 CUBIC YARDS
TENNIS AND PARKING (18")	3550.1 CUBIC YARDS
TOTAL VOLUME	135244.3 CUBIC YARDS

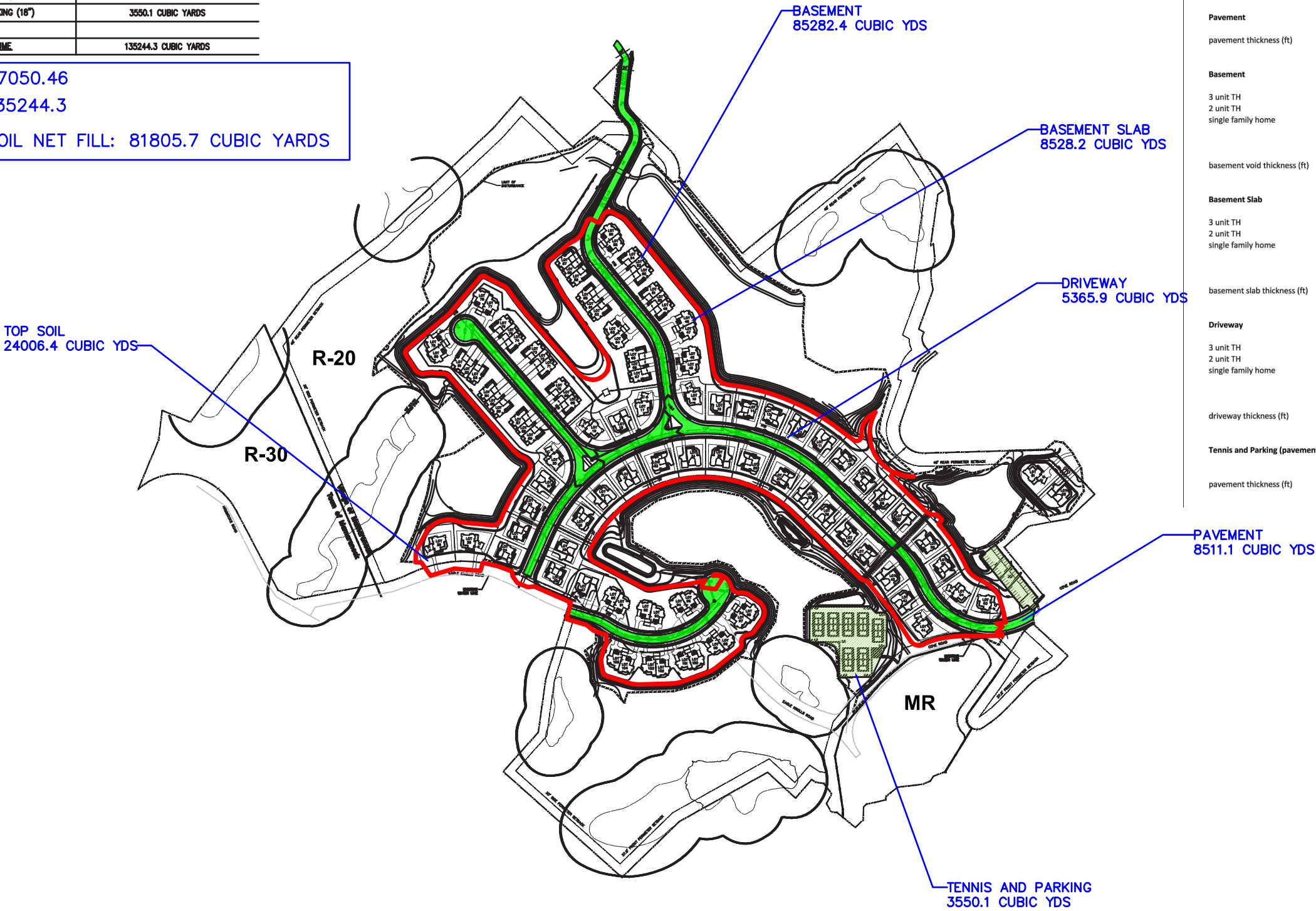
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SOIL NET FILL: 81805.7 CUBIC YARDS



Top Soil			
top soil thickness (ft)	0.5	total area (acres)	29.76
		volume of top soil (ac * ft)	14.88
		volume of top soil (cubic yard)	24006.4
Pavement			
pavement thickness (ft)	1.5	roadway area (ac)	3.517
		volume of pavement (ac*ft)	5.2755
		volume of pavement (cubic yard)	8511.1
Basement			
		Unit areas (ac)	
3 unit TH		0.1495	11
2 unit TH		0.108	14
single family home		0.0484	44
		total area (ac)	5.2861
basement void thickness (ft)	10	total area (ac)	5.2861
		volume of basement void (ac*ft)	52.861
		volume of basement void (cubic yard)	85282.4
Basement Slab			
		Unit Areas (ac)	
3 unit TH		0.1495	11
2 unit TH		0.108	14
single family home		0.0484	44
		total area (ac)	5.2861
basement slab thickness (ft)	1	total area (ac)	5.2861
		volume of basement slab (ac*ft)	5.2861
		volume of basement slab (cubic yard)	8528.2
Driveway			
		Driveway areas (ac)	
3 unit TH		0.09	11
2 unit TH		0.06	14
single family home		0.034	44
		total area (ac)	3.326
driveway thickness (ft)	1	total area (ac)	3.326
		volume of driveway (ac*ft)	3.326
		volume of driveway (cubic yard)	5365.9
Tennis and Parking (pavement)			
pavement thickness (ft)	1.5	tennis and parking area (ac)	1.467
		Volume of tennis and parking pavement (ac*ft)	2.2005
		Volume of tennis and parking pavement (cubic yard)	3550.1

Hampshire Country Club Planned Residential Development
Village of Mamaroneck,
Westchester County, New York
Final Environmental Impact Statement

G Preliminary Construction Work Plan

(Updated Pages Only)





PRELIMINARY CONSTRUCTION WORK PLAN

Hampshire Country Club Planned Residential Development
Village of Mamaroneck, New York

August 2018, Revised July 2019

Prepared for:

Hampshire Recreation LLC
60 Cutter Mill Road
Great Neck, NY

Prepared by:

Michael W. Junghans, PE
1 N. Lexington Ave
White Plains, NY 10601

Kimley»Horn

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1. Introduction

This Preliminary Construction Management Plan CWP has been prepared to provide contractor responsibilities and expected project execution steps for construction of the proposed development and provide safeguards to protect the environment, adjacent property owners and Village residents. The following provides steps to be satisfied prior to the start of construction and during performance of construction. The CWP provides the following:

- Project contacts
- Construction Phasing
- Preconstruction requirements
 - Staking of Limit of Disturbance
 - Soil Erosion controls
 - Tree Protection
 - Preconstruction Photos
 - Public Outreach
 - Preconstruction Coordination
- Record Keeping
- Site Security
- Construction Truck Traffic
- Construction Health and Safety
- Material Handling
- Tree Removal
- Soil Erosion Measures
- Rock Removal
- Construction Noise

2. Project Description

The project site (The Site) is located at the southern portion of the Westchester County within the Village of Mamaroneck and the Town of Mamaroneck, New York. The Site has frontage on Long Island Sound at Delancey Cove. Work is only proposed on the 94.5 acre portion of the Site within the Village. Currently, the Site consists of an 18 hole golf course, club house, and associated tennis, maintenance and support buildings.

The project proposes to redevelop the central portion of the golf course as a planned residential development (PRD) consisting of 44 single family homes and 61 carriage townhomes and associated roadways, utilities, storm water facilities, and related site improvements. The remainder of the golf course will remain as a nine-hole golf course surrounding the residential development. The clubhouse and support buildings will remain and the existing tennis facilities will be relocated within the development.

The project will require tree removal, extensive regrading of the site and import of soil to provide home sites and a roadway network in the central portion of the site. The project also proposes realignment and extension of existing roadways servicing the site.

3. Project Contacts

The following is the contact information for the project representatives, project contractor, and responsible municipal oversight.

Owner:

Hampshire Recreation LLC
c/o New World Realty Advisors, LLC
28 West 44th Street, Suite 700
New York, NY 10036
Contact: Dan Pfeffer
(914) 325-9563
dpfeffer@nwradvisors.com

Contractor:

TBD

Village of Mamaroneck
Engineering Department:

Village of Mamaroneck
169 Mount Pleasant Avenue
Mamaroneck, NY 10543
Contact: Hernane De Almeida
(914) 825-8758
hdealmeida@vomny.org

Village of Mamaroneck
Building Department:

Village of Mamaroneck
169 Mount Pleasant Avenue
Mamaroneck, NY 10543
Contact: Dan Gray
(914) 777-7731
dgray@vomny.org

Civil and Traffic Engineer:

Kimley-Horn of New York PC
1 N. Lexington Avenue, Suite 1575
White Plains, NY 10601
Contact: Michael Junghans, PE
(914) 368-9189
Mike.Junghans@kimley-horn.com

Environmental Engineer:

GZA GeoEnvironmental
104 West 29th Street, 10th Floor
New York, NY 10001
Contact: Steve Kline, PE
(212) 594-8140
stephen.kline@gza.com

4. Construction Phasing

Construction activity for the proposed development will be performed by first excavating, grading and filling to establish development sites for single family and carriage homes. Next utilities will be installed within the streets followed by placement of the road bed and sidewalks. The housing will then be constructed on finished lots followed by surface treatments including topsoil, seeding, and driveways.

Based on the size of the development, site work must be performed in phases to minimize the area of disturbance at any given time. Excavation and filling activities will be performed in two steps; Step 1: establishment of realigned Cove Road and single family lots, and Step 2: establishment of three roadway extensions that will connect to the realigned Cove Road including the Cooper Avenue extension, realigned Eagle Knolls Road and Road A. This approach establishes the central spine of the project providing the connection between Cove Road and Eagle Knolls Road and establishment of the core utilities for the project within realigned Cove Road. Soil disturbance activities will minimize total area of soil disturbance to 5 acres or less at any given time. The 5 acres increments and the expected progression of work is shown on the Construction Phasing Plan attached as Appendix 1.

Once construction of the proposed development commences, it is estimated for Step 1 that there will be approximately 24 soil fill trucks per day (on a five-day per week schedule) for the first 9 months of construction. During the initial 9 months excavation and filling activities will be performed to construct realigned Cove Road and the adjacent single-family lots. Following establishment of realigned Cove Road, the number of soil fill trucks will begin to diminish to 3 or 4 trucks per day for the balance of the project.

In Step 2 soil import will continue at a reduced rate to establish the Cooper Avenue Extension, realigned Eagle Knolls Road and Road A. During this period construction of the single-family homes on realigned Cove Road will commence. After Step 2 soil excavation and filling activities will be complete and housing construction will commence in those areas. Housing would be constructed when there is a buyer and it is anticipated that about 20 units would be constructed yearly.

The exact construction schedule is contingent on the build out rate of the homes; therefore, the duration of the construction period and the final build-out date are unknown at this time.

5. Preconstruction Requirements

The following requirements must be completed prior to the start of construction activities to the satisfaction of the Village Engineer and Building Department representatives.

5.1 STAKING OF LIMIT OF DISTURBANCE

Prior to implementation of any site disturbance activities, the contractor shall stake the limit of disturbance for the project providing labeled survey stakes in 50-foot intervals along the limit of disturbance for the

project. Following staking of the limit of disturbance, the contractor shall notify the Village Engineer and project Civil Engineer to allow inspection of the staked limit. Any field conditions that warrant adjustment of the limit of disturbance as shown on the engineering drawings shall be communicated to the Village Engineer and project civil engineer to resolve discrepancy.

5.2 SOIL EROSION CONTROLS

Soil erosion controls shall be implemented prior to the disturbance of any soil. Soil erosion control measures shall be based on the requirements of the New York State Department of Environmental Conservation ("NYSDEC") Standards and Specifications for Erosion and Sediment Control, latest edition, and the engineering drawings for the project.

Erosion control measures shall be implemented to minimize or control soil erosion on site. These include, but not limited to, silt fence, straw bale, inlet protection, stabilized construction entrance, concrete truck wash-out area and stock pile area. Fencing will be placed around trees for protection. Other site preparation includes setting up of staging area, construction fence, and temporary access road.

Controls will be tailored to the limit of disturbance of construction and will be adjusted as construction progresses through the project. Any soil disturbing activities shall be accompanied by the required soil erosion control measures. Prior to start of soil disturbance activities, the contractor will be required to coordinate with the project civil engineer regarding the placement of the soil erosion control measures,

The project engineer in accordance with NYSDEC requirements, will provide for inspections of soil erosion measures by a qualified inspector prior to the start of soil disturbance activities. Inspections will be documented by field notes and site photos and will provide a summary of observations, work being performed and corrective actions required. The inspection reports will be provided to the contractor, project owner and Village MS4, and will be available at the Village for review by the public.

5.3 TREE PROTECTION

Prior to the start of any soil disturbance, the contractor is required to install all tree protection measures in the vicinity of the proposed area of disturbance in accordance with the engineering drawings. The contractor shall coordinate inspection of the installed tree protection measures by the project civil engineer and Village Engineer.

Tree protection measures shall be inspected on a weekly basis by the project civil engineer to ensure adequacy with ongoing construction activities and recommend adjustments and additions.

5.4 PRECONSTRUCTION PHOTOS

Prior to the start of construction activities the contractor shall photo document the following:

- All on site areas proposed to be disturbed
- Cove Road from the Site out to Orienta Avenue
- Cooper Avenue from the Site to Old Boston Post Road
- The entirety of Eagles Knoll Road

- Hommocks Road from Eagle Knolls Road to Route 1.

The photos will serve as documentation of preconstruction conditions to be compared to post construction condition to assess impact of construction activities on approach roads to site. Copies of photos shall be provided in hard copy and electronic form to the Village. The Village will make these copies available for public review.

5.5 PUBLIC INFORMATION

The contractor shall provide to the Village engineer weekly summaries of upcoming construction activities including construction traffic routing and proposed days and hours of construction for posting by the Village on the Village website.

5.6 PRECONSTRUCTION COORDINATION

Prior to the start of any construction activities, the contractor shall schedule a preconstruction meeting to present the proposed project approach, schedule and responsible parties during construction. The following shall attend the preconstruction meeting:

- Village Engineer
- Village site inspector
- Project civil engineer
- Contractor representative
- Contractor Site Supervisor
- Owner representative

During the meeting the following shall be discussed at a minimum:

- Project contacts
- Emergency response
- Weekly construction meetings
- Shop drawing review protocol
- SWPPP inspections
- Tree removal
- Soil import documentation
- Construction traffic parking
- Construction traffic routing

The Contractor will be responsible to record notes during the pre-construction meeting and distribute copies to all meeting attendees.

6. Record Keeping

The contractor will be responsible to perform record keeping for the project throughout the development process. Documentation shall be made available to the Village as requested in hard copy or electronic format. The following at a minimum shall be maintained:

- **Engineering Documents:** Hard copies of all current engineering drawings and specifications shall be maintained by the contractor for the duration of the project and be available for review by the project team and Village representatives at the project trailer.
- **Project Schedule:** The contractor shall maintain the project schedule and update on a weekly basis.
- **As Built Plans:** The contractor shall maintain all as-built documentation and perform survey of installed improvements where necessary to document variations in the as-built condition. The contractor will be responsible to utilize collected as-built information to provide an AutoCAD as-built survey of the project documenting all constructed improvements for submission to the Village.
- **Impact Soil Relocation Report:** The contractor shall maintain documentation of the relocation of identified impacted soil on site into the development platform. The report shall provide the area of removal and deposition. Collected documentation shall be sufficient to provide the horizontal and vertical limits of the deposition of impacted soil and the institutional controls deployed to prevent potential exposure in the future.
- **Soil Import Documentation:** The contractor shall maintain manifests for all soil fill imported to the site including volume, origin of material and required quality documentation. The contractor shall maintain copies of all meeting notes for the duration of the project and be available for review by the project team and Village representatives as requested.
- **Dust Monitoring Report:** The contractor shall maintain all dust monitoring reports and distribute weekly summaries to the Village indicating exceedances and resulting corrective action. The contractor shall maintain copies of all monitoring report for the duration of the project and be available for review by the project team and Village representatives as requested.
- **Shop Drawings and Requests for Information:** The contractor shall be responsible for the documentation, distribution and follow up of initial and reviewed shop drawings to the project team. The contractor shall provide an on-line site for to review all shop drawings accessible to the project team and Village representatives.
- **Construction Stake out:** All survey stake out cut sheets prepared by the contractor's surveyor shall be maintained by the contractor for the duration of the project and be available for review by the project team and Village representatives.
- **Construction Meeting Notes:** The Contractor shall be responsible to record notes during weekly construction meeting and distribute copies to all meeting attendees and Village representatives.

Notes shall be either available in hard copy or electronic format. The contractor shall maintain copies of all meeting notes for the duration of the project and be available for review by the project team and Village representatives as requested.

- **Construction Photos:** The contractor shall maintain daily pictures of construction activities to document the progress of the project. The contractor shall maintain copies of construction photos for the duration of the project and be available for review by the project team and Village representatives as requested.

7. Site Security

The contractor will be required to secure all active areas of construction to prevent unwanted access to the construction site. All active work areas shall be enclosed by a temporary construction fence of a minimum height of 6 feet with controlled access points maintained by the contractor. Signage shall be provided including contractor and emergency contact information and direction for site visitors to report to the construction trailer and sign in with site personnel.

The contractor shall provide video cameras at each access point to the site to monitor incoming and outgoing traffic and access to the site. Cameras shall record 24 hours a day and be connected to a central location that provides a minimum, of one week of video back-up.

8. Construction Truck Traffic

All construction trucks accessing the Project Site will be required to use I-95, exiting at either Exit 17 (to and from the south) or Exit 18 (to or from the north) to use Boston Post Road (US Route 1) to get to and from Hommocks Road and Eagle Knolls Road. There will be no truck access allowed via Orienta Avenue or East Cove Road. When school is in session, truck access to the Project Site will only be permitted between 8:15 am and 2:30 pm, as well as between 4:00 pm and 7:00 pm. Construction truck routes are depicted in Exhibit 2-19.

9. Construction Health and Safety

The proposed project will require the on-site excavation, handling and relocation of soil identified to be impacted with contaminants. To safeguard worker health a Construction Health and Safety Plan (CHASP) has been prepared for the proposed activities and is attached in Appendix 2.

The CHASP addresses measures to minimize worker exposure to impacted soil by contact, inhalation and ingestion through worker education, establishment of safety protocols, hazard response, and implementation of active dust monitoring. Each worker, contractor employee, or subcontractor, involved in management of impacted material will be required to review the CHASP and acknowledge their understanding of the document requirements and expectations.

The CHASP provides a dust monitoring program that will be implemented during construction to minimize dust generated from impacted soil and provide mitigation measures. Based on the site specific levels of contaminated soil, airborne dust monitoring levels that require a response, known as Action Levels, have

been developed to safeguard on site and downwind receptors. If an Action Level is reached, the contractor is required to perform stipulated mitigation steps to reduce dust levels. Dust monitoring will be performed upwind to establish background levels and downwind to assess the impact of construction activities. Dust monitoring data will be electronically logged and summaries will be provided to the Village on a weekly basis.

10. Material Handling

In addition to the above CHASP, the contractor must implement a Material Handling Plan (MHP) developed for the project to provide a protocol for quality review of imported soil, movement and placement of impacted on site soil and installation of institutional controls to isolate identified impacted material. The project does not seek to remove any impacted soil from the site. A copy of the MHP is attached as Appendix 3.

The attached MHP provides testing requirements of off site soil sources proposed to be utilized as on-site fill. All soil import sources will be required to provide soil testing data from a certified laboratory that the imported soil is free of contamination and meets required engineering properties. Testing data will be required to be submitted and approved by the project geotechnical engineer and Village Engineer before being allowed to commence import. The contractor will be responsible maintain records of the location of placement of each soil source within the fill area of each phase.

The attached MHP also provides handling requirements for CHASP addresses measures to minimize worker exposure to impacted soil by contact, inhalation and ingestion through worker education, establishment of safety protocols, hazard response, and implementation of active dust monitoring. Each worker, contractor employee or subcontractor, involved in management of impacted material will be required to review the CHASP and acknowledge their understanding of the document requirements and expectations.

11. Tree Removal

Prior to removal of trees, the contractor shall mark all trees adjacent to the limit of disturbance to be removed by marking them with an "X" in paint. The contractor shall notify the Village Engineer and project civil engineer to inspect the marked trees. The contractor shall then obtain a written approval from the Village Engineer to allow implementation of tree removal. All tree material shall be removed from the site and shall not be used as backfill or stored on site. The tree removal plan is included as Appendix 4

12. Soil Erosion Measures

The SPDES General Permit GP-0-15-002 requires that the owner/operator be responsible for inspecting and maintaining the erosion control practices implemented on site. The owner/operator must document compliance with the permit throughout the entire construction process.

A) Inspection

- The owner/operator shall have a qualified inspector inspect all erosion and sediment control practices to ensure their integrity and effectiveness throughout the entire construction process.
- The qualified inspector shall perform inspection at least once every seven (7) calendar days. If construction work includes soil disturbance of greater than five (5) acres, qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days with minimum separation of two (2) full calendar days.
- Within one business day of the completion of an inspection, the qualified inspector shall notify the owner/operator and appropriate contractor or subcontractor of any corrective actions shall be taken.
- The qualified inspector shall prepare an inspection report in accordance with the permit subsequent to each and every inspection. The owner/operator shall maintain a record of all inspection reports in a site log book as part of the updated SWPPP and shall be made available upon request by permitting authority.

B) Maintenance

- Sediment shall be removed from behind the silt fence or the straw bales if accumulation of greater than 6-inches deep or as needed.
- Sediment that is collected in inlet protection practice shall be removed on a regular basis to ensure the integrity of the drainage inlet system.
- The underside of straw bales shall be kept in close contact with the ground surface.
- Straw bales and silt fence that are damaged shall be replaced or as necessary.
- On site's paved areas shall be swept on an as needed basis during the construction process.
- The contractor or subcontractor shall begin implementing the corrective actions within one business day of the notification from qualified inspector and shall complete the corrective actions within a reasonable time frame.

Refer to Appendix 8 of the SWPPP for inspection and maintenance schedule; and refer to Appendix 9 for sample of construction site log book.

13. Rock Removal

Based on the composition of the bedrock, blasting will be required for removal. The selected blasting contractor shall be a New York State licensed blasting contractor.

To ensure protection of adjacent properties and existing site structures, the selected contractor will prepare a written Blasting Plan in accordance with the Village of Mamaroneck Village Code Chapter 120 and the New York Department of Transportation "Geotechnical Engineering Manual: Procedure for Blasting" latest edition (Appendix 5), providing a detailed description of the means and methods of the proposed rock removal program. This plan will be forwarded to the Village Engineering Department and Building Department for review. The Blasting Plan will contain the following:

1. Project Designations

- Name of Project Blaster(s).
- Photocopy of the Project Blasters Explosives License (Own & Possess) and Certificate of Competence.
- Scheduled start date and length of blasting operations and blast monitoring operations.
- Limits of blasting work.
- Requirements for local permits.
- Location of any structures in proximity to the blasting.
- Location of any utilities in proximity to the blasting.
- Location of any contaminants or flammable liquids or vapors in the area to be blasted.

2. Safety and Health Requirements

- Type of audible warning signals and signal sequence.
- Name of company that will deliver explosives to the project site.
- Location of any pre-blast surveys.
- Location of any vibration monitoring at State owned structures, utilities on or off State Right-of-Way (ROW), or privately owned structures off State ROW.
- Location of any air blast overpressure monitoring.
- If seismographs will be used, provide the manufacturer's name, model number, and documentation of calibration performed within the last 12 months. Also provide name(s) of seismograph operators and relevant training and experience.
- List steps that will be taken to control flyrock (i.e. blasting mats).
- Are carbon monoxide or other noxious fumes likely to migrate from the blast location or accumulate within nearby structures and, if so, what will be done to detect and prevent their migration.

3. Methods and Procedures

- Type of drilling equipment.
- Method of collaring and aligning presplit drill holes.
- Hole diameter.
- Drilling pattern.
- Use of sequential timer.
- Types of explosives, primers, initiators, and other blasting devices. Include manufacturer's technical data sheets and material safety data sheets for all products.
- Loading parameters

The blasting contractor will have a Pre-Blast meeting with representatives of the Village Engineering and Building Departments to review schedule, field activities and vibration and noise monitoring. The blasting contractor will provide weekly updates to the Village and hold weekly progress meetings.

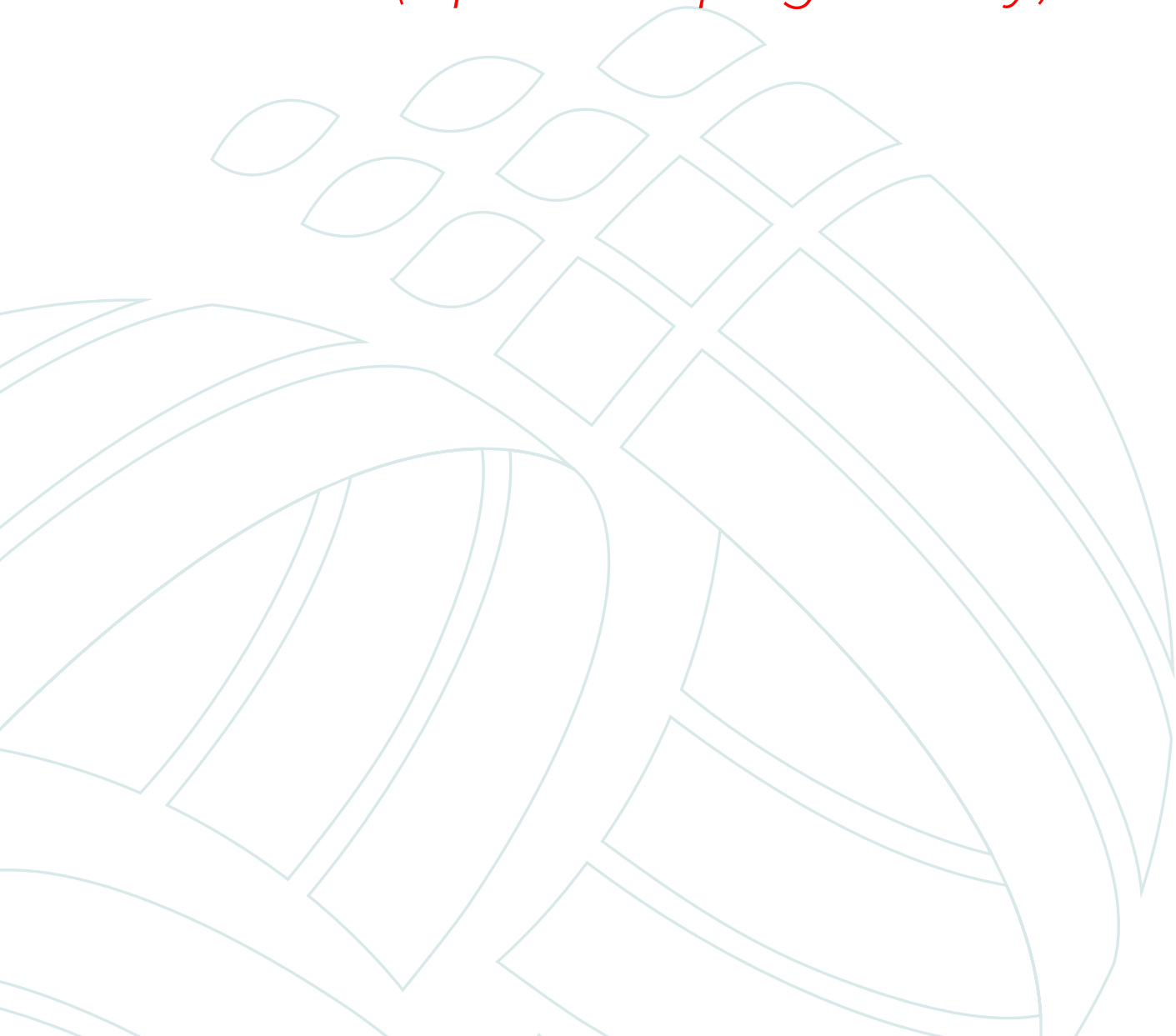
14. Noise

Noise from construction activities shall be limited to the hours of 8:00 a.m. and 6:00 p.m. Monday through Saturday in accordance with the Village of Mamaroneck Village Code, Chapter 254, Noise shall be limited to typical construction equipment in good working order. Malfunctioning equipment generating excessive noise shall be immediately taken out of service.

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H Landscape Management Plan and Wetland Mitigation and Monitoring Plan

(updated pages only)



Project Site (as described in detail below) will be maintained by the Hampshire Golf Club. Additionally, the existing 18-hole golf course use would be downsized to a ~~36.837.6~~- acre, nine-hole golf course to be owned and maintained by ~~HCC~~Hampshire Golf Club (see Attachment C, Open Space Plan).

~~The proposed nine-hole golf course contains or abuts eight existing wetlands, including golf course ponds and emergent vegetation wetlands.~~ The Project Site contains seven ponds and two emergent wetlands, as well as various drainage ditches and subgrade drainage pipes associated with three golf course drainage systems (Golf Course Drainage Systems 1, 2 and 3, see see Attachment A, Figure 2). ~~These wetland features were created or altered historically for drainage and irrigation purposes and to serve as water hazards for the golf course, which has been operational since 1944. Two of the golf course drainage systems (Golf Course Drainage Systems 1 and 3) discharge to Delancey Cove via a series of culverts and tide gates, while the third drainage system (Golf Course Drainage System 2) is self- contained. A summary of the wetlands at the Project site is provided on Table 1.~~

Table 1 – Wetland Summary

<u>Feature</u>	<u>Components</u>	<u>Discharge Point</u>	<u>Acres</u>	<u>Wetland Edge Planting Area</u>
<u>Golf Course Drainage System 1</u>	<u>Ponds 13 & 16, drainage ditches and sub-grade pipes</u>	<u>Delancey Cove</u>	<u>1.07</u>	<u>Pond 13: 34,187 SF</u> <u>Pond 16: 5,574 SF</u>
<u>Golf Course Drainage System 2</u>	<u>Ponds 5 & 6, sub-grade drainage pipes</u>	<u>None</u>	<u>0.81</u>	<u>Pond 5: 9,553 SF</u> <u>Pond 6: 15, 247 SF</u>
<u>Golf Course Drainage System 3</u>	<u>Ponds 10 (includes vegetated wetland area), 11 & 18, drainage ditches and sub-grade pipes</u>	<u>Delancey Cove</u>	<u>2.28</u>	<u>Pond 10: 13,300 SF</u> <u>Pond 11: 12,450 SF</u> <u>Pond 18: 10,575 SF</u>
<u>Wetland A</u>	<u>Emergent Wetland</u>	<u>None</u>	<u>0.39</u>	<u>8,025 SF</u>

As required by the Village of Mamaroneck, a functional assessment of ~~these the wetlands at the Project Site wetlands~~ was performed by VHB in May 2016, according to the methods developed by Dennis W. Magee (with technical contributions from Garrett G. Hollands), as described in "A Rapid Procedure for Assessing Wetland Functional Capacity Based on Hydrogeomorphic (HGM) Classification" (the "Magee- Hollands Method").

plan, annual vegetation monitoring surveys will be performed for three years by VHB or other qualified personnel. Monitoring will commence with a baseline survey in Year 1, which will be the year that installation of the mitigation areas is completed. In the case that supplemental watering is needed, following the cessation of watering, monitoring surveys will be conducted every two years for four years.

~~A list of dominant plant species and their estimated relative frequency and percent areal cover will be identified once annually during the growing season within the wetland mitigation areas.~~ The annual survey will occur within one-two vegetation monitoring plots selected during Year 1 for each of the eight wetland mitigation areas shown on the Landscaping Plan (see Attachment B). The location of the monitoring plots will be determined after planting of the mitigation areas is complete, to ensure the plots representatively sample each mitigation area and that the potential for invasive species colonization and other potential risk factors that may affect plan efficacy are taken into account. The monitoring plots will remain fixed over the course of the monitoring period to facilitate comparisons between years. Plot locations will be marked with flagged wooden stakes (or similar durable materials) and recorded with a sub-meter Global Positioning System (GPS) unit, to allow for repeat sampling throughout the monitoring period. The monitoring plots will be centered over the installed stake. A ten-foot diameter plot will be used for herbaceous layers (non-woody plants and woody plants less than 3.28 ft tall), a 15-foot diameter plot will be used for saplings/shrubs (woody plants less than three inches in diameter at breast height (dbh) and taller than 3.28 ft), and a 30-foot diameter plot will be used for trees (woody plants greater than three inches dbh). In cases where the plot extends outside the mitigation area, the shape of the plot will be adjusted accordingly to remain within the confines of the mitigation area. The location of monitoring plots will be determined after planting of the mitigation areas is complete, to ensure the plots representatively sample each mitigation area.

Permanent photograph locations will be established for each plot during repeat visits to develop a photo record during the monitoring period.

The following data will be collected at each mitigation area:

- Site information – Wetland/plot number, wetland type, date, observer(s).
- Hydrology – Water depth or depth to saturated soils will be recorded to the nearest inch. Depths will be recorded at the center of the monitoring plot.
- Plant survival – The number of trees, shrubs and herbaceous plants from each of the installed plant species will be identified within the monitoring plot and assigned one of three overall fitness categories: (1) thriving, (2) alive but stressed, (3) dead or near dead. In cases where counting of individual herbaceous plants is impractical, the absolute areal cover of these species will be visually estimated within the monitoring

plot. Areal cover estimates will be based on the USACE cover class ranges shown in Table 2.

- Invasive plant species – Any invasive plant species rooted within the monitoring plot will be noted, and absolute areal cover of each invasive species will be estimated visually. Areal cover estimates will be based on the USACE cover class ranges shown in Table 2. The areas surrounding the monitoring plot will also be inspected to identify any invasive plant species.
- Magee-Hollands rankings – rankings for the two targeted wetland functions (Diversity of Wetland Vegetation and Contribution to Abundance and Diversity of Wetland Fauna) will be calculated for each wetland.
- Photographs – Representative photographs will be taken annually at each monitoring plot, from permanent photograph locations to maintain consistency and allow for comparison between yearly monitoring surveys.

Table 2: Areal Cover Class Ranges

<u>Areal Cover Range (%)</u>	<u>0-6</u>	<u>6-15</u>	<u>15-26</u>	<u>26-50</u>	<u>50-76</u>	<u>76-95</u>	<u>95-100</u>
<u>Cover Class</u>	<u>3</u>	<u>10.5</u>	<u>20.5</u>	<u>38</u>	<u>63</u>	<u>85.5</u>	<u>97.5</u>

Source: USACE, 1987

1.6 Reporting

Annual monitoring reports summarizing the status of the monitoring and maintenance activities will be prepared each year during the monitoring period. The monitoring period will be ~~a minimum of~~ for three years, ~~to ensure and will conclude when that~~ the mitigation plan meets the mitigation goals outlined in Section 2.1. A copy of the report will be provided to HCC-HR and the Village no later than December 15th of the year during which the monitoring occurred. Each report will include:

- Maps showing wetlands, wetland mitigation areas, monitoring plots and photograph locations.
- Data and results of the monitoring survey for each wetland, including planting survivability rates, areal cover of invasive plant species (as applicable) and Magee-Hollands rankings for each wetland for the two targeted wetland functions (Diversity of Wetland Vegetation and Contribution to Abundance and Diversity of Wetland Fauna).
- Analysis of invasive plant species within the mitigation areas, as necessary.
- Photographs taken during the monitoring survey, with comparison to prior monitoring survey photographs, as necessary.

- Conclusions based on the monitoring survey results, including an assessment of whether progress toward the identified mitigation goals has occurred.
- Recommendations for corrective action(s) to ensure that the mitigation goals are met. Such actions may include replacement of dead or dying trees, shrubs or herbaceous plants and/or removal of invasive plants.

1.7 Responsible Party Maintenance

The responsible party for maintenance of the mitigation areas will be:
Hampshire ~~Country Club~~ Recreation, LLC

1025 Cove Road

Mamaroneck, New York 10543

(646) 723-4750

During the time when the mitigation area plantings are becoming established (i.e., within the first three years following installation), routine maintenance activities (e.g., supplemental watering, pruning, mulching, staking, etc.) to ensure plan success.

Following establishment, the plantings within the mitigation areas will be left in an unmaintained, wild state. However, HCC-HR reserves the right to trim or remove trees and other vegetation for safety purposes or other relevant reasons. Maintenance of the mitigation areas will include installation of signage identifying the mitigation area boundaries.

Long-term protection of the mitigation area will be ensured through a deed restriction, if required by the Village of Mamaroneck.

2

Monitoring and Maintenance Proposed Action

2.1 Background

The Wetland Mitigation and Monitoring Plan includes an adaptive management strategy to address unforeseen changes in the mitigation areas or surrounding site conditions. Adaptive management measures will be implemented as necessary to address both foreseeable and unforeseen circumstances that may adversely affect the success of the wetland mitigation plan, including colonization by invasive plant species, as discussed in Section 3.2.

The results of each annual monitoring survey will be used to determine whether adaptive management measures are warranted, and any such measures will be included in the recommendations section of the annual monitoring report. **HCC-HR** will be responsible for implementing the adaptive management recommendations, as necessary.

2.2 Invasive Species

As a proactive measure during routine maintenance activities by **HR-HCC**, observed occurrences of invasive plant species within the mitigation areas will be removed to the extent practicable. In the event that significant occurrences of invasive plants that threaten the success of the mitigation plan are observed within the mitigation areas during the annual monitoring surveys, **HR-HCC** will be responsible for implementing methods designed to limit or remove the plants. For the purposes of this plan, any invasive species occurrence exceeding twenty percent areal cover, as determined during the annual monitoring surveys, will be considered significant and require corrective measures.

A variety of methods are available for controlling invasive plants, and the selection of method depends largely on the invasive plant(s), extent of the occurrence and site conditions. If the occurrence is deemed minor, hand-removal will be the preferred method to limit the overall impact within the affected mitigation area(s). For larger occurrences, mechanical means may be employed in accordance with applicable regulations and with appropriate controls to protect adjacent areas and restore native plantings within the affected area. In some cases, biological controls (e.g., beetles) may be effective for limiting the growth of invasive species such as purple loosestrife (*Lythrum salicaria*), although such controls may not completely eliminate all of the targeted plants.

3

Adaptive Management Plan

3.1 Background

The Wetland Mitigation and Monitoring Plan includes an adaptive management strategy to address unforeseen changes in the mitigation areas or surrounding site conditions. Adaptive management measures will be implemented as necessary to address both foreseeable and unforeseen circumstances that may adversely affect the success of the wetland mitigation plan, including colonization by invasive plant species, as discussed in Section 3.2.

The results of each annual monitoring survey will be used to determine whether adaptive management measures are warranted, and any such measures will be included in the recommendations section of the annual monitoring report. **HRHCC** will be responsible for implementing the adaptive management recommendations, as necessary.

3.2 Invasive Species

As a proactive measure during routine maintenance activities by **HRHCC**, observed occurrences of invasive plant species within the mitigation areas will be removed to the extent practicable. In the event that significant occurrences of invasive plants that threaten the success of the mitigation plan are observed within the mitigation areas during the annual monitoring surveys, **HRHCC** will be responsible for implementing methods designed to limit or remove the plants. For the purposes of this plan, any invasive species occurrence exceeding twenty percent areal cover, as determined during the annual monitoring surveys, will be considered significant and require corrective measures.

A variety of methods are available for controlling invasive plants, and the selection of method depends largely on the invasive plant(s), extent of the occurrence and site conditions. If the occurrence is deemed minor, hand-removal will be the preferred method to limit the overall impact within the affected mitigation area(s). For larger occurrences, mechanical means may be employed in accordance with applicable regulations and with appropriate controls to protect adjacent areas and restore native plantings within the affected area. In some cases, biological controls (e.g., beetles) may be effective for limiting the growth of invasive species such as purple loosestrife (*Lythrum salicaria*), although such controls may not completely eliminate all of the targeted plants.

Attachment C



Open Space Plan

Source: Kimley-Horn

Files added to:

X Real Estate Listings and Development Comparables





606 FAIRWAY AVENUE

MAMARONECK , NY 10543
WESTCHESTER COUNTY

\$2,495,000

DOWN FROM \$2,595,000

LAST REDUCED ON: 06/24/2019

5

BEDROOMS

5.2

BATHROOMS

4,639

SQUARE FEET

0.35

ACRES



1040 COVE ROAD

MAMARONECK , NY 10543
WESTCHESTER COUNTY

\$3,395,000

DOWN FROM \$3,595,000

LAST REDUCED ON: 07/01/2019

6

BEDROOMS

4.1

BATHROOMS

5,368

SQUARE FEET

0.4

ACRES

**16 GATE HOUSE LANE**

MAMARONECK , NY

WESTCHESTER COUNTY

\$2,999,000**5**

BEDROOMS

6.1

BATHROOMS

7,093

SQUARE FEET

1.32

ACRES

Hampshire Country Club Planned Residential Development
Village of Mamaroneck,
Westchester County, New York
Final Environmental Impact Statement

Z Wetland Functional Assessment
(updated pages only)



Hampshire Country Club Property

Cove Road
Village of Mamaroneck and
Town of Mamaroneck,
Westchester County,
New York

Prepared for: **Hampshire Recreation, LLC
c.o. New World Realty Advisors
1500 Broadway, 15th Floor
New York, NY 10036**

Prepared by: 
**50 Main Street, Suite 360
White Plains, New York 10606**

July 2019 Update

The following provides a summary of the functional capacity of the four wetlands at the Project Site, based upon the Magee-Hollands FCI scores, site observations, the NP&V report and information provided by Mr. Olsen. As detailed in Attachment D, the NP&V report -identified the presence of fish in all ponds and streams and noted the use of the site by egrets.

Golf Course Drainage System 1

This wetland system is comprised of Ponds 13 and 16, with associated drainage ditches and pipes. Pond 16 is an artificial structure located at and beyond the northwestern property boundary. The pond was constructed in 1982, in order to accommodate stormwater runoff from the adjoining condominium development, as well as to provide drainage for the golf course. Reportedly, Pond 16 has also been subject to illicit stormwater discharges from adjacent commercial uses. As stormwater is a primary hydrological source, Pond 16, contains high levels of algae, organic matter and sediment deposits. According to Mr. Olsen, the pond is periodically treated with herbicides and/or organic microbe applications. The plant community within the pond is dominated by submerged aquatic vegetation, with no emergent plants observed during the wetland assessment. The NP&V report identified frogs in Pond 16.

Water exits Pond 16 via a subgrade pipe that outfalls to a drainage ditch (Ditch 1) that connects to Pond 13. The ditch is largely unvegetated and contains a mineral substrate comprised primarily of gravels and clays. A similar pipe/ditch combination drains the northcentral portion of the golf course and also discharges to Pond 13.

Pond 13 was reportedly a naturally occurring pond that was modified and expanded between 1960 and 1976. With the exception of scattered patches of emergent vegetation, the majority of the pond is largely unvegetated. The pond contains algal deposits and has been impacted by both organic and mineral sediment deposits from stormwater runoff. Two large culvert openings with manually-operated gate valves occur within a concrete and fieldstone wall located at the terminus of the pond along the western property boundary near Hummocks Road. The culverts reportedly run under Hummocks Road to a subgrade vault located beneath the school athletic field, which in turn discharges via a culvert to the tidal wetlands of Delancey Cove to the south. The culvert gate valves were observed to be open at the time of the May 2016 wetland assessment. According to Mr. Olsen, the gate valves are left open continuously, and the water level within Pond 13 is therefore subject to a two-foot range as a result of tidal influence. As also observed during the wetland assessment, two smaller culvert openings occur within the fieldstone wall at the western terminus of Pond 13. The culverts appear to discharge stormwater from Hummocks Road to the pond.

Based on the Magee-Hollands assessment, the primary functions of Golf Course Drainage System 1 are Modification of Water Quality and Storm and Floodwater