

Site Planning Civil Engineering Landscape Architecture Land Surveying Transportation Engineering Environmental Studies Entitlements Construction Services 3D Visualization Laser Scanning

February 24, 2021

Chairman Thomas H. Burt and Members of the Harbor Coastal Zone Management Commission (HCZMC) Village of Mamaroneck 123 Mamaroneck Avenue Mamaroneck, NY 10543

RE: JMC Project 18100 Residential Development 1165 Greacen Point Road Village of Mamaroneck, NY

Dear Chairman Burt and Members of the Commission:

As you may recall, JMC, along with the law firm of Cuddy & Feder, represented William and Elisabeth Fedyna, the owners of and Applicants for the above referenced project site, at your January 20, 2021 meeting, at which we presented the documents submitted on various dates. These documents show the proposed residence and site improvements, including the installation of a stormwater management system and replacement of an existing on-site Sanitary Sewage Disposal Systems (SSDS). At this time, the Applicant, JMC, and Cuddy & Feder are in receipt of a Letter prepared by Maser Consulting, dated February 9, 2021, and offers this Letter in response to the various comments.

It is our understanding that Maser Consulting was engaged by the HCZMC for two specific purposes, as stated your executed Resolution of February 2, 2021. The first purpose is for Maser to "Review of the Project's impact on the floodplain, including the impact that net fill will have on the hydrology of the floodplain and adjacent properties. This should also include the potential environmental impacts associated with net fill within a floodplain." The second purpose is for Maser to "review the feasibility of providing a private sewer line to the project site".

The comments of the February 9, 2021 Maser Consulting Memorandum primarily focus on the proposed SSDS. Accordingly, prior to providing formal responses to each comment, we wish to remind the HCZMC of the two year history on this project, during which the following was presented by the Applicants and their team:

- A. There is currently no "public sewer" available to the project site. In these instances, the NYS Public Health Code (in compliance with Westchester County Department of Health regulations) permits on-site Sanitary Sewage Disposal Systems (SSDS).
- B. The use of a SSDS has proven to be an acceptable and approved method of sanitary sewer disposal. SSDSs are prevalent throughout this area of the Village.

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- C. Based upon our many discussions with Village staff and Westchester County Officials, there are no relevant environmental concerns related to existing septic systems in the vicinity of the site. Therefore, the same would be anticipated of the proposed SSDS.
- D. The Applicants are currently processing an Application for Westchester County Department of Health approval of the proposed on-site SSDS. This approval is anticipated shortly and will be provided to the Village upon receipt.
- E. Although there are several "private" sewer force mains in the vicinity of the site, running along Greacen Point Road, new construction cannot be forced to tie into a "private" sewer system unless there is a provision made under an existing legally compelling document (such as a private sewer district recognized by the Village) to permit it and the owner(s) of the existing private sewer line agreed to the connection. There is no such document to the knowledge of the Applicants and their team.
- F. The construction of a private sewer line within Greacen Point Road for connection to the public main within Orienta Avenue that would be dedicated to the project site, would require approval of all parties having rights to the roadway. The Applicant spent significant time trying to obtain these approvals and was unsuccessful.
- G. In the event the Applicants were able to obtain the agreements noted in F above, the location of the existing private force mains beneath Greacen Point Road are undetectable and there is an inherent risk with rupturing one or more of these lines in the course of excavating alongside of them for the construction of a force main dedicated to the project site.

In accordance with the above, we offer the following, which restate each comment of the Maser Consulting Letter and provides a written response to each:

Comment No. 1

The 1.09-acre property is in the AE-10 Tidal Flood Zone, and the December 14, 2020 letter from Leonard Jackson Associates states that the placement of fill will not affect the inflow/outflow of tidal waters from Long Island Sound. While this is apparently true based on the information submitted, there is no discussion regarding any environmental concerns with the proposed septic system.

Response No. 1

The acknowledgement that Maser Consulting agrees with the conclusion of the December 14, 2020 Leonard Jackson Engineering Letter, stating "the placement of fill will not affect the inflow/outflow of tidal waters from Long Island Sound", is so noted. As stated above, there are no impacts anticipated from the construction of the proposed SSDS, as there is no evidence of impacts from existing SSDSs in the area.

Comment No. 2

The property is in the AE Flood Zone with a Base Flood Elevation of 13.00-feet. The home has a proposed Finished Floor Elevation (FFE) of 16.0-feet. The septic system leach field seems to have a base elevation of 8.5-feet given the provided grading and trench detail. No profiles or elevations have been provided by the Applicant for the proposed septic system and leach field.

Response No. 2

The site Grading Plan prepared by JMC indicates that the finished grade at the top of the proposed septic system is at elevation 15.50 and the bottom of the proposed absorption fields is at elevation 13.5, which is 6 inches above the 100 year flood elevation in accordance with Westchester County Department of Health requirements. The fields noted in the above comment are for the required 100% expansion area, which would be constructed to replace the proposed fields if necessary, in the future. The documents submitted to the WCDOH show fill within this area, which would allow the system to be constructed at the same design elevation as the currently proposed system. Should the construction of the 100% expansion area be required in the future, the property owner will be required to obtain all necessary approvals from the Village.

Comment No. 3

The Applicant notes on Page 2 of the December 30, 2020 letter from Cuddy + Feder, LLP to the Harbor & Coastal Zone Management Commission that "the proposed 420 cubic yards of fill...is necessary to remove a failing septic system...that can leak raw sewage into the wetlands and coastal waters..." A footnote (4) provided states that "replacement of the failing septic system within the wetlands buffer furthers LWRP Policies 37 and 38...and minimizes the discharge of excess nutrients and organics into coastal waters." The Applicant only states that the new septic would "minimize" this discharge, not eliminate it completely, as would occur should the Applicant install a new private force main to the Village system on Orienta Avenue. The Applicant makes the above-referenced statement about the failing septic system being replaced with a new septic system, but has failed to provide mounding analysis, specifically detailing the impact of the new system.

Response No. 3

The statements regarding the Cuddy & Feder Letter are so noted. As stated above, the ability to connect to an existing public or private sewer system is not legally available to the site and the proposed SSDS has been designed in accordance with New York State and Westchester County Department of Health regulations, which only require mounding analyses for systems that exceed 5,000 gallons per day of flow. The proposed SSDS has been designed to treat 800 gallons per day.

Comment No. 4

The December 30, 2020 letter also discusses the ability of the Applicant to install a private sanitary line. While the Applicant notes several obstacles/concerns to the construction of a private sanitary sewer line, the Greacen Point Road Corporation apparently has granted approvals for similar lines in the past, and there was no evidence provided by the Applicant to indicate that there have been problems with either the installation or maintenance of these lines or evidence that there have been any leaks or breaks in these private sewer lines. The major issues appear to be "significant road disruption and access issues." We do not agree with the conclusions provided in the letter that the installation of the private line would contribute to "…environmental and safety issues…" The Applicant is making the conclusion that a private sewer line will create a greater environmental issue than a private septic system. It should be noted that a properly installed sanitary sewer force main would last forever and need little or no maintenance. A septic system would require monthly and annual maintenance to ensure it functions properly. Also, a septic system relies on the responsibility of the homeowner to limit use of soaps and other environmental contaminants, such as cleaning agents, all of which will contribute to long term failure of the septic system and contamination to groundwater and surface water in the area.

Response No. 4

Since the several force mains within Greacen Point Road are private, and the Applicants have no control over them, the access to the records associated with their maintenance and/or repair cannot be obtained. The statement that "the major issues appear to be "significant road disruption and access issues" is so noted. The Applicants and their team stand by the statement that a private sewer line can create environmental issues and acknowledges the fact that there can be similar issues with the construction of a SSDS. However, in the specific instance of the project site and the proposed plan, items A through G above support the fact that a SSDS is a more viable option. The statements regarding maintenance of a SSDS are also noted and the Applicants are aware of this responsibility.

Comment No. 5

The November 4, 2020 letter from Cuddy + Feder, LLP to the Harbor & Coastal Zone Management Commission states that the amended project is consistent with certain LWRP policies. Specifically given LWRP Policies 37 and 38, although not a sole-source aquifer, we believe that the installation of the proposed septic system will have a negative impact on the surface water and groundwater through the discharge of excess nutrients and organics to the underlying groundwater (which would be tidally affected). While this may not occur at the onset of the usage of a septic system, any new septic system will, by design, eventually discharge nutrients into the ground and require regular maintenance and replacement.

Response No. 5

As stated above, the requirement for maintenance of the SSDS is so noted and the Applicants are aware of the responsibility.

Comment No. 6

The Applicant noted in their September 2, 2020 submission that the project would be consistent with Policies 11 and 12, noting that it would prevent the discharge of sewage into wetlands and coastal waters. However, and as noted above, by the very design of a septic system, the leach field will in fact permit these discharges.

Response No. 6

A properly engineered and installed septic system poses minimal risk as to the discharge of sewerage into the environment. If this were not the case, the Westchester County Health Department would not even entertain an application. The very design of a septic system is to have the sewage treated and released over time into a leach field. Such leach field is not located in the wetlands, wetlands buffer, or coastal waterway, and by design of the impervious clay border of the septic, it will not discharge any effluent outside of its specifically designed discharge area. Hence the Applicants affirm its response to Policies 11 and 12. Again, as stated above, the requirement for maintenance of the SSDS is so noted and the Applicants are aware of the responsibility.

Comment No. 7

The Applicant is proposing a mounded septic system with a final (surface) grade elevation of between 11-feet and 15.5-feet. There are no profiles provided by the Applicant. They are proposing a 1,250-gallon septic tank (detail says 1,500-gallon); a leach field with 336-LF of piping in a sand & gravel bed installed above an

impermeable clay-filled layer (no information provided regarding capacity of the leach field). The leach field then flows to a 336-LF absorption trench all located in the front yard which would allow septic to eventually leach into the underlying soils. The Applicant notes a Base Flood Elevation of 13.00-feet, and as noted above the base of the septic "expansion area" may be as low as 8.5-feet.

Response No. 7

The Applicants are actively working with the Health Department, which has full jurisdiction over the design details for the SSDS, and is in the final phase of review of the submitted documents. It is noted that the plans under review by the Health Department include a 1,250 gallon septic tank.

Comment No. 8

The Applicant is proposing an underground stormwater detention system in close proximity to a septic system. The underground stormwater detention system is an infiltration system with an overflow directed toward Delancey Cove. The top of the proposed stormwater system is elevation 1 I and the top of the proposed septic system is elevation 15. It should also be noted that the proposed stormwater detention system does not have any test holes or permeability tests that would determine depth to seasonal high groundwater and infiltration rate of the existing soils on site. The location of the system with respect to the septic and the lack of Geotechnical data for the stormwater detention system are both concerns of this office.

Response No. 8

The proposed stormwater system does not have any test holes or permeability tests to determine depth to groundwater and infiltration rate of the existing soils because it is designed for detention only and is not an infiltration practice. The system is sealed with an impervious liner and has been designed in accordance with the NYSDEC requirements and the Town Code. It is also noted that the overall design complies with the Health Department requirements for separation between a storm system and a SSDS.

Comment No. 9

We have reviewed several letters provided by the Applicant's Engineers regarding issues related to the installation of the private sanitary sewer, and have the following comments:

Response No. 9

As a global response to the following six points (a-f below) raised on the JMC memo, it is worth pointing out the following: while the Applicants and JMC summarized concerns/issues regarding a private sewer line, the basis for all these concerns was from those expressed by the former Village Engineer in 2019. Each one of the points was a consideration directed to the former Village Engineer as to why the VOM should be very careful about creating any new private lines, and subsequently why the Applicants were denied a request to potentially seek approval from the Village to do so.

Regarding "the Applicant also notes that a survey of the existing sewer lines is available", as part of the Applicants' multi-year process to explore getting public sewer line access, the Applicants paid significant funds to have a comprehensive Right of Way survey for the length of Greacen Point Road

west of Orienta Avenue. This survey, previously provided to the Village, is evidence of the exact consideration expressed here. It should be noted that on the ROW survey that, while all utilities, water, etc. were marked out by the controlling entities, when it comes to private lines, aside from surface shows, the survey has no specific record. There is no public record or entity that has evidence of the exact locations of the current private lines within the road.

IMC Memorandum to the Commission dated December 29, 2021

Comment No. 9a

Infrastructure Crowding and Future Planning – the Applicant argues that the installation of this private line will affect future installations of unplanned private sewers and unplanned drainage infrastructure improvements. However, the Applicant also notes that a survey of the existing sewer lines is available providing the information needed for this and future private sewer line installations. We are not aware that either the Village or the Greacen Point Road Corporation has any plans on the installation of drainage improvements, so this argument is moot;

Response No. 9a

The infrastructure crowding noted above includes an existing watermain within Greacen Point Road. Discussions with Westchester Joint Waterworks (WJWW) and the former Village engineer revealed that portions of the existing watermain is transite (asbestos concrete) pipe. It was indicated that this pipe is brittle and near the end of its life and would likely need to be replaced in the near future. Unnecessarily expanding the infrastructure crowding with the construction of another force main under the road could complicate the replacement of the watermain.

Comment No. 9b

Operation, Maintenance and Infiltration & Inflow Monitoring Responsibility – the Applicant refers to various instances for the need to shut off the sewer lines and "…periodically checking for leaks…" but there is no record of any issues with the existing installations that this has ever been required. Further, any maintenance issues related to shutting off the existing Greacen Point Road contributing flow into the Village receiving manhole is no different than anywhere else in the Village;

Response No. 9b

The statement that there is no record of any issues with the existing force mains is so noted. As stated above, the Applicants have no control over these lines and no knowledge of their maintenance and/or repair. The JMC Memorandum was intending to indicate that there is no controlling entity, such as the Village, to ensure proper maintenance and repair of the several existing private force mains and that there is no ability for the Village to control flows from these mains, should repairs or maintenance be required at the Village manhole. The addition of another force main would exacerbate this issue. The construction of the proposed SSDS would eliminate the exacerbation.

Comment No. 9c

Emergency Responsibility – again there is no record of any issues with any of the existing private sanitary sewer lines serving the homes on Greacen Point Road. The responsibility for any repair would fall on the private

homeowner, much the same as if there were a leak in a private septic system, required pumping of the septic system and/or issues related to seepage from the leach field. These are maintenance issues;

Response No. 9c

The comment that these are maintenance issues is so noted. However, it is noted that if the proposed septic system were to fail, it is easily identifiable as to who bears responsibility to repair or replace it. If one of the many force main services beneath the private road were to leak, the only way to identify who is responsible to fix it would be to excavate the area and trace the line. It is at this point one could determine who has responsibility to correct the issue. It is anticipated that responsibility for this initial work and the potential repairs could fall on the Village as the MS4.

Comment No. 9d

NYSDEC Penalties for Environmental Impacts – the Applicant argues that should there be a leak of the private sewer line(s) running into Long Island Sound, that there would be fines imposed. Again, there is no record of any instances where there has been a leak in any of the existing private sewer lines. The installation of a septic system, by its very nature, would leach into the ground beneath the leach field which is affected by the tidal actions in the surrounding waters;

Response No. 9d

As stated above, the Applicants are aware of their responsibility to maintain the SSDS. The statement that there is no evidence of any leaks, etc. is no reason not to point out and/or understand the implications should it occur. As further stated above, it is anticipated that the responsibility for the potential repair of the existing private force mains could fall on the Village as the MS4.

Comment No. 9e

Public Sewer Line Feasibility – there are no plans by the Village to install a public sewer line, so this argument is a non-issue

Response No. 9e

This comment is so noted.

Comment No. 9f

Low pressure Sewer Line versus Gravity Septic – we maintain that although the Applicant argues about the lifespan of the septic system, that shortly after the system becomes operational, that septic waters by design will be leaching into the underlying soils and eventually into the surrounding waters. The Applicant ignores the fact that septic systems also require regular maintenance by the homeowner and have noted that the existing system was failing and required replacing.

Response No. 9f

As stated above, the Applicants are aware of their responsibility to maintain the SSDS.

LJA Associates - Letter dated December 14, 2020

Comment No. 9g

The Applicant discusses the placement of fill on-site, and concludes that the fill "...will not affect the inflow or outflow of tidal waters of Long Island Sound, will not affect the flood elevations..." However, we understand that the placement of this fill is required primarily due to the installation of the septic system. The fill would include the proposed clay impermeable layer beneath the primary leach field, then a gravel layer and cover soils (common and topsoil). The expansion leach field area would also require the installation of gravel and cover soils (but without the underlying impermeable clay layer). All of this additional fill and site disturbance would not be required if the Applicant were to install a private sewer line. The impacts for this line would be limited and confined to the normal activities associated with the excavation of a trench, pipe installation and backfill within the Greacen Road right-of-way. Further, the requirement for fill for the septic is also caused by the type of house being proposed for the site. The Applicant could mitigate or have a net zero fill, if the Applicant were to redesign the house and site plan for the property. The reason for the additional fill in the flood plain is caused by the type of development proposed for the site.

Response No. 9g

The acknowledgement that the proposed fill will not affect the inflow or outflow of tidal waters is again noted. The support for the construction of the SSDS, as opposed to a private force main for this development, has been substantially supported above and in prior submissions, as well as during presentations to your Commission. It is important to note that the Applicants have redesigned the site and made numerous significant concessions to specifically limit the amount of fill to 420 cubic yards. If nothing were done to the house and a new septic system installed, this would entail bringing in 680 cubic yards of fill for the septic system only. The placement of the garage (to allow for greater cut), the retaining walls and even the house location, were all optimized to minimize this net fill to 420 cubic yards.

Comment No. 10

The Applicant has submitted the Coastal Assessment Form which includes 44 LWRP Policies. Based on our review, we take no exception to their responses with the following comments:

Comment No. 10a

Policy 12 – "Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources..." The Applicant has responded that "grading on the site will be limited to the maximum extent possible to allow for the moderate development of the site." However, the proposed septic system installation will disturb an additional 5,200-square foot of the front yard with the proposed clay-lined leach field, and the proposed 100-percent expansion area in addition to the proposed fill materials.

Response No. 10a

This comment is so noted. However, it should also be noted that the trenching of 1,500 linear feet of force main and the installation of cleanouts, air release manholes, and a pump station provide a similar disturbance area (3.5' trench \times 1,500 LF = 5,250 SF of disturbance).

Comment No. 10b

Policy 17 – "minimize damage...from flooding and erosion." While the Applicant notes that they are maintaining setbacks and complying with the applicable building codes, this does not address the erosion issues associated with the proposed leach fields which, although temporary, would be avoided if a private sewer line were to be installed.

Response No. 10b

We offer the same response as above. The disturbance for a pump station, 1,500 linear feet of force main with cleanout and air release manholes is similar to the disturbance associated with a septic system. The prospect for sediment entering the environment would be anticipated to be higher for the force main installation, as it is always more difficult to provide sediment control within paved roadways having trenches in a linear fashion.

Comment No. 10c

Policy 18 – "safeguard vital...environmental interests..." While the Applicant indicates that this Policy is not applicable, our review of the provided documentation would seem to favor the installation of a private sewer system versus a septic system to fully comply with this policy.

Response No. 10c

It is noted that the submitted Application did not state that Policy 18 in "not applicable". Although the response does not mention the SSDS, it is further noted that, as stated above, when access to a public sewer is not an option, the installation of an onsite wastewater treatment system is a perfectly viable consideration that has been approved in thousands of similar instances, and over a dozen instances on the very same road where the Applicants are proposing to construct a home.

The Applicants reaffirm the statements in Policy 18, not least because everything being done is done in compliance with all codes, but also because the Applicants are using a septic system, which is an approved method of waste disposal by the Westchester County Department of Health. The SSDS is subject to the review, approval, and construction compliance by the WCDOH, which satisfies this policy.

Comment No. 10d

Policy 37 – "Best Management Practices will be utilized to minimize...excess nutrients, organics...into coastal waters." While the Applicant also responds that this is not applicable, the installation of a septic system will eventually discharge excess nutrients and organics into the coastal waters.

Response No. 10d

It is noted that the submitted Application did not state that Policy 37 in "not applicable". As stated above, the Applicants are aware of their responsibility to maintain the SSDS.

Comment No. 10e

Policy 38 – "quality and quantity of surface and groundwater supplies will be preserved and protected..." While the Applicant again responds that this is not applicable, the installation of a septic system will eventually discharge excess nutrients and organics into the groundwater (although not a groundwater "supply").

Response No. 10e

It is noted that the submitted Application did not state that Policy 38 in "not applicable". As stated above, the Applicants are aware of their responsibility to maintain the SSDS.

Comment Conclusion

Based on all of the above, the request for additional fill in the flood plain is caused by the Applicant's proposed Dwelling & Site Plan and their desire to maximize the use of the site for the proposed development. It is the opinion of this office that the Applicant can redesign this site to have a net zero fill and limit any impacts to groundwater and surface water in the area.

It should also be noted that the conclusion the Applicant makes, that "A septic system is safer or limits environmental contamination to surface and groundwater better than a sanitary sewer force main", is false. The proper construction on a sanitary sewer force main will have no impact to groundwater or surface water unless disturbed by an outside source, such as a utility company. A sanitary sewer also requires little or no maintenance, if installed properly. To the contrary, a septic system requires monthly and annual maintenance to make sure it is functioning properly and relies on the responsibility of the homeowner to limit the use of soaps and cleaning agents to limit contamination to groundwater and/or surface water.

Response Conclusion

As stated above, Maser Consulting has already acknowledged that the placement of fill will not impact the coastal area. As further stated above, the fill is required for the construction of the SSDS and the Applicants, along with their team, have evaluated many design options to minimize the impacts. Again, the Applicants and their team stand by the statement that a private sewer line can create environmental issues and acknowledges the fact that there can be similar issues with the construction of a SSDS. However, in the specific instance of the project site and the proposed plan, items A through G above support the fact that a SSDS is a more viable option. The statements regarding maintenance of a SSDS are also noted and the Applicants are aware of this responsibility.

We trust that the above provides adequate responses to the Maser Consulting comments and look forward to seeing the Commission at your next available meeting. In the interim, should you have questions or require additional information, please do not hesitate to contact us at 914-273-5225.

Sincerely,

IMC Planning Engineering Landscape Architecture & Land Surveying, PLLC

James A. Ryan

James A. Ryan, RLA Principal

Cc: Mr. William Fedyna

CUMP Anlandy

David P. Lombardi, PE Senior Project Manager