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September 23, 2020

Chairman Thomas LaPerch and
Members of the Town of
Southeast Planning Board
1 Main Street
Brewster, NY 10509

RE: JMC Project 14012
Commercial Campus at Fields Corner
NY 312 & Pugsley Road
Town of Southeast, NY

Response to WIG Comments

Dear Chairman LaPerch:

We have enclosed information referenced below and provide our responses herein to the comments from the Watershed Inspector General's (WIG) letter, dated September 10, 2020. We appreciate the WIG's acknowledgement that we "thoroughly address most of [the WIG's] previous comments," and your explanation as to how most of the WIG's prior comments were resolved. Accordingly, this letter only addresses two comments that the September 10th Letter indicates were unresolved, and an additional eight comments associated with the most recent submission made in June of this year.

We have been coordinating closely with the Planning Board to address the remaining comments. Subsequent emails and conference calls have also been exchanged between our team and the Board. We believe that the revised information fully addresses the WIG's comments.

For your convenience, we have provided the WIG's comments below with our response immediately following:

Resolution of April 29, 2019 WIG Comments

Comment No. 1

Comment Unresolved. The previous 4/29/19 comment still applies. An improper coefficient was used for the shallow concentrated flow segment of the Tc calculation. Applying the appropriate (lower) Tc coefficient for the shallow concentrated flow condition will slow the flow velocity, increase the time of concentration, and decrease the existing condition discharges. Although the essential volumes and differences in peak

discharges between pre-developed and post-developed conditions will be relatively close, rerunning the Pond Pack 3.01 stormwater model with the appropriate Tc coefficient will insure the pipes transporting stormwater are properly sized.

Response No. 1

The stormwater calculations performed for determining time of concentration in the SWPPP utilized the appropriate TR-55 method. Our response to this comment in the FEIS submitted in April of 2019 incorrectly stated that TR-20 was used to calculate time of concentration. All coefficients used in the calculations follow TR-55, which is the industry standard and within the requirements set by NYSDEC and NYCDEP. This was confirmed with the Town Engineering consultant and the NYCDEP.

Comments on July 2020 Revised Project

Comment No. 12

Detail 86 is now Detail 107 on drawing C-908. Three out of the five bioretention areas, 3B-2-A, 3B-2-B, and 4D, do not meet the minimum soil planting depth requirements, which are between 30 inches and 4 feet (2015 New York State Stormwater Design Manual, page 6-48). In addition, no specifications are provided for the soil media mixture (Appendix H, page H-5), and the bottom gravel drainage layer and drain pipe are oversized. This proposed stormwater treatment design must be revised to meet current NYS design standards, or they need to be replaced with an appropriate practice that fits the site.

Response No. 12

Based on correspondence between our office and the NYSDEC, an 18-inch soil depth and 12-inch gravel layer is acceptable for the bioretention practices. The NYSDEC had provided to us a hand drawn detail indicating that an 18-inch soil bed with a 12-inch gravel layer and underdrain can be utilized in cases where a restrictive layer below the practice is present. The detail and correspondence from David Gasper of the NYSDEC Division of Water will be provided during the Site Plan Approval process.

The gravel layer and underdrain are not oversized. The underdrain and gravel layer were sized to prevent pipe freezing as recommended at the bottom of page 6-53 of the NYSDEC Stormwater Management Design Manual.

Soil specifications for the planting bed have been included on detail 107 on drawing C-908. Revised plans reflecting this change will be provided during the Site Plan Approval process.

Additional Comments on the Revised June 17, 2020 Project

Comment No. 13

Site plan drawings C-200 through C-205 depict the overall grading plan for the revised project. It appears that there are many areas where the graded topography is steeper than a 2:1 slope. These areas include the access road to the Micro Pool 4A in the south section of C-201, the south end of the fill for Building "B" on C-203, and road banks along Pugsley Road and Route 312 on drawing C-205. According to the SWPPP, Appendix D, Soil Testing Data Report, Page 11, Table 1, Summary of Soil Design Parameters, Note #3,

"Any slopes greater than 15 feet high and/or have surcharge loading above the slope, should be further evaluated by a geotechnical engineer to insure against sliding or failure." Specifically, the areas listed above must be further evaluated to comply with the Soil Testing Data Report. Retaining walls are generally used to stabilize high steep slopes and prevent slope failures. These drawings have scales on the order of 1" = 50', with a contour interval of 2 feet, but the linear scale changes when the drawings are enlarged or reduced. The use of a "bar scale" that depicts a defined linear distance will always correspond to the drawing, no matter how much it is enlarged or reduced in size. This is a recommendation for future use.

Response No. 13

Additional evaluations of the slopes in the areas in question will be performed and provided by the Geotechnical Engineer during the Site Plan Approval process to determine if additional stabilization measures are required or recommended.

Comment No. 14

Drawing C-401, Erosion & Sediment Control Plan "A", shows an unidentified temporary sediment trap at the southeast corner of proposed building "A". This trap controls runoff from 3.53 acres of the construction site. This trap should be numbered 3 and added, with its corresponding data, to Detail 83 on drawing C-906, which also details sediment traps 1 and 2.

Response No. 14

JMC Drawing C-401 was revised to label this sediment trap as Sediment Trap 3 and was added to detail 83 on JMC Drawing C-906. Revised drawings will be provided during the Site Plan Approval process.

Comment No. 15

Drawing C-402 shows proposed temporary sediment trap 6, off the northeast corner of Building "A". The drainage area controlled by this practice is shown at 5.06 acres. Since this drainage area exceeds 5 acres, this trap should be designed as a sediment basin and added to Detail 90 on C-906.

Response No. 15

The drainage area to Sediment Trap 6 has been reduced to less than five acres to comply with the maximum requirement. The approximately 2,600 square feet (0.06 acres) exceeding the five acre maximum drainage area requirement was redirected to Sediment Basin 3B-1. This change was reflected on the plans and detail for Sediment Trap 6. The increase in area to Sediment Basin 3B-1 was minimal and not significant enough to change the sediment storage elevations or dewatering elevation of the sediment basin. Revised plans reflecting this change will be provided during the Site Plan Approval process.

Comment No. 16

Concrete truck washouts are fully discussed on page 54 of the SWPPP, but none are shown or found on the drawings. These should be added to the appropriate C-400 series Erosion & Sediment Control Plan drawings.

Response No. 16

JMC Erosion and Sediment Control Drawings have been revised to indicate concrete truck washout area locations. Revised plans reflecting this change will be provided during the Site Plan Approval process.

Comment No. 17

Drawing C-802 shows the Plan/Profile for Basin 1B-1, which is a micro pool extended detention pond and wetland system. The vertical scales on each side of the two profile segments do not match and the corresponding elevations do not agree. This inconsistency must be corrected.

Response No. 17

The vertical scales on the profile have been corrected and match on both sides. Revised plans reflecting this change will be provided during the Site Plan Approval process.

Comment No. 18

Drawing C-804 shows the Plan/Profile of Basin 4A-1. The storm labels shown in the center profile should be shifted to the right, into the pond area, where the elevation lines are drawn.

Response No. 18

The profile for Basin 4A-1 has been revised to indicate the water elevations for the corresponding storms. Revised plans reflecting this change will be provided during the Site Plan Approval process.

Comment No. 19

Drawing C-807 shows the Plan/Profile of Basin 5B-1, which is an infiltration basin, with overflow bypass, to a pocket pond system. The plan view of the pocket pond designates the water surface elevation at 612.0, while the profile shows the water surface elevation at 617.0. The plan view needs to be corrected to 617.0.

Response No. 19

The Plan view of the pocket pond on JMC Drawing C-807 has been revised to indicate a water elevation of 617.00. Revised plans reflecting this change will be provided during the Site Plan Approval process.

Comment No. 20

Drawing C-907, Detail 96, Infiltration Trench, shows the typical cross-section with dimensions. Trench width in the table is shown as 6 inches instead of 6 feet. The units need to be changed. It is assumed that this section of the infiltration trench 4B-1 is to be installed along Route 312 for highway improvements. Appendix E of the SWPPP, pages 3967 – 3969 show the calculations for the sizing of this system. The calculations are based on a trench that is 10 feet wide, 5 feet deep, and 260 feet long. That geometry provides a water quality volume (WQv) of 5,200 cubic feet, which is almost double the minimum required WQv, which is calculated to be 2,782 cubic feet. This geometry does not agree with the cross-section shown

in Detail 96. Detail 96 shows an infiltration trench cross-section with an area of 24 square feet, instead of the 50 square feet originally designed. This revised cross-section would have to be 290 feet long to provide the minimum required WQv of 2,782 cubic feet. These calculation discrepancies need to be resolved and the corrected geometry needs to be defined on the plan view of drawing C-305 and C-907, Detail 96.

Response No. 20

Per NYCDEP requirements the infiltration trench has been sized to infiltrate the one-year storm volume of the drainage area, which has been calculated to be 5,200 cubic feet. The width of the trench varies between five and thirteen feet due to the constraints of the proposed widening of Route 312. The overall area of the infiltration trench is approximately 2,600 square feet with a depth of five feet. This in combination with the observed infiltration rate, allows for the one-year storm volume to be infiltrated and therefore provide the required water quality treatment as outlined by the NYCDEP. The detail on JMC Drawing C-907 has been revised to indicate the correct dimensions for the infiltration trench. Revised plans reflecting this change will be provided during the Site Plan Approval process.

We trust the information above and included in this submission package is sufficient to complete your review. Should you have any questions regarding the responses or enclosed documents, please email or contact us at 914-273-5225. We appreciate your cooperation during this review process.

Sincerely,

JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC

David Lombardi

David Lombardi, PE
Senior Project Manager

cc: Ms. Ashley Ley, AICP, w/enc. via e-mail
Mr. Thomas H. Fenton, PE, w/enc. via e-mail
Mr. Peter Gilpatric, w/enc. via e-mail
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