



October 27, 2023

Mr. John Lee, Chairman
135 School Street
Walpole, MA 02081
United States

**Re: Comment Letter 1
Neponset Village
Comprehensive Permit (40B) Peer Review
Walpole, Massachusetts**

Dear Mr. Chairman:

Tetra Tech (TT) has reviewed specific submittal materials for the above-referenced Project to assist the Town of Walpole Zoning Board of Appeals (Board) in its Comprehensive Permit review of the proposed Neponset Village residential development at 5 Pleasant Street hereafter referred to as the "Project". The following letter provides comments generated during our review of Applicant submittals and generally focuses on substantive concerns that speak to issues whose eventual resolution may substantially impact Project design or could otherwise result in potentially unsafe conditions or unanticipated impacts.

The comments below are intended to guide discussion and we expect additional/refined comments as the design and discussion advances. Our review is based on the following materials available on the ZBA's website as of October 27, 2023:

- A plan set titled "Neponset Village – Comprehensive Permit Plans" (Site Plans) dated September 12, 2023 prepared by Coneco Engineers and Scientists (Coneco).
- A Stormwater Management Report for Neponset Village – 5 Pleasant Street – Walpole, Massachusetts dated September 14, 2023 prepared by Coneco (Stormwater Report).
- An undated letter to the Walpole Planning and Zoning Board and Conservation Commission from Coneco addressing comments from Walpole Town Engineer, Fire Department, Health Department and Community and Economic Development.
- A memorandum from Bayside Engineering (Bayside) dated July 20, 2021 re: Neponset Village Condominiums prepared to assess traffic impacts associated with the proposed development (Traffic Report).
- Related Exhibits
- Comment letters from town departments and abutters.

The Plans and accompanying materials were reviewed for good engineering practice, overall site plan efficiency, stormwater, utilities, traffic, and public safety. In general, the plans and supporting materials were very thoughtfully prepared and we appreciate the clarity and completeness of documents provided. Given the quality of materials submitted our technical comments are relatively minor. That being said, the Project represents a very dense development of the site leaving little, if no, practical options for addressing any unforeseen future needs while presenting significant short-term construction challenges and as such even small changes may impact site layout. Our comments are provided below organized by submittal.

Site Plans

Cover Sheet (Sheet 1)

1. The Project Site is comprised of multiple parcels including a parcel within the town of Norwood on which no work or development is proposed. It would be helpful to have the individual parcels noted clearly on the cover sheet.
2. There are small discrepancies between the sheet names listed on the cover and names used on individual sheets. The discrepancies are not significant, but we recommend they be addressed on future submittals.

Notes & Legend (Sheet 2)

3. The sheet is noted as "2 of 15" which is inconsistent with other sheet numbering. Recommend removing the "of 15" portion of the sheet numbering on future submittals to avoid confusion.

Existing Conditions Plans (Norwood Engineering)

4. Sheet is noted as "1 of 9" and "2 of 9" which is confusing. Suggest eliminating the "of 9" on future submittals.

Demolition and Erosion Control Plan (Sheet 5)

5. The plan includes a "Proposed Erosion Control Line (typ.)" label but does not indicate if it is intended to be the compost filter sock or the sediment control barrier shown on the details . Please clarify and adjust the leader to point to the applicable line.
6. Given there is relatively little demolition, and site erosion controls are relatively simple we recommend the Board request the applicant to add some basic information as to construction management and phasing to better understand how the construction will be managed on such a tight site without impacts to abutting property or the public way. At a minimum please indicate proposed accommodations for contractor parking, construction trailers, soil stockpile/material staging, material delivery, laydown and storage and associated construction period stormwater management measures. If offsite locations are required for contractor parking or material staging, please indicate as such.

Site Layout Plan (Sheet 6)

7. Recommend including proposed reconstruction of Maguire Park and the reconstruction of the Pleasant Street sidewalk on the Site Layout Plan.
8. The proposed fence along the railroad is a good idea but please clarify if the intended construction is the same as that shown in the details for the dumpster enclosure or if some other material is anticipated. We also recommend the fence be extended at least 20' along the side lot line as an added measure to minimize access onto the railroad.
9. The gazebo is shown over the proposed infiltration system. Please explain how the gazebo will be supported and/or protected from wind loads. Typically, we would not recommend any structure be located above the infiltration system.

10. Similarly, the mailboxes and dumpster pad are situated over the proposed infiltration system. We recommend the area above any infiltration system be kept clear of any permanent structure or pad.
11. Stairs and landings shown do not suggest if any of the units are proposed to be accessible. While we don't expect any issues transitioning grade with steps there may not be enough space for an accessible ramp. Please clarify if any units are anticipated to be accessible and/or explain the strategy for accessible space layout and accommodating handicapped residents.
12. The proposed guardrail label and leader point to the curb instead of the guardrail. The intent is clear but suggest the label be fixed in later submissions.

Site Grading and Drainage Plan (Sheets 7)

13. The proposed grading at the end of Maguire Park appears to create an awkward low point between the two 117 contours. Although not likely to result in any substantial ponding adjustment is recommended.
14. Infiltration System D appears to be the only infiltration system with a dedicated overflow. Please describe how the other infiltration systems will discharge if capacity is exceeded or system is compromised.
15. Infiltration System D incorporates two (2) isolator rows which we strongly support and appreciate. However, DMH 2 is shown connecting to a non-isolator row. Drain routing should be revised to show all drains connecting to an isolator row.
16. Please clarify if the Infiltration System D will incorporate a distribution manifold and weir structure and if so, please show on plans.
17. Please show location of any proposed infiltration system inspection ports.
18. We understand that Infiltration Systems A-C are intended to serve roof runoff exclusively but still recommend an isolator row or section be included in each as a protective measure.

Site Utility Plan (Sheet 8)

19. The sewer and water mains are located very close to each other near Unit 3. Suggest the sewer be located closer to the west curb line to provide at least 10-foot offset distance from the proposed water line. This change would also reduce the length of sewer laterals.
20. Suggest adding a sewer along the front of Units 18-24 to eliminate 6 of the 7 water crossings. This change will reduce the number of water/sewer crossings and the total length of sewer laterals.

Fire Apparatus Turning Analysis (Sheets 9 - 10)

21. The analysis indicates a fire apparatus can adequately access/navigate the site with the proposed connection to Maguire Park. We recommend any decision approving a Comprehensive Permit include a condition requiring the Maguire Park connection to be constructed and operational prior to issuing a building permit.

Details (Sheets 11 - 16)

22. We request the Project provide a detail for each the proposed infiltration chambers including specific information for each location including: bottom and top of stone elevation, system dimensions and

chamber/manifold layout, inspection and maintenance ports, weir structures and offset from Estimated Seasonal High Groundwater (ESHGW). The infiltration systems are fundamental to system performance and any added detail is appreciated. Please note, the project does not appear to be within any area subject to Conservation Commission jurisdiction and as such is not expected to require their review for compliance with stormwater standards/handbook.

Hardscape and Materials Plan (Sheet L1.21)

23. Plans suggest proposed patios will be permeable however the paver examples shown appear impervious. Please clarify the intended construction and how the areas were modeled in stormwater analysis.
24. Plans indicate walks will be “Broom Finish Concrete Paving” suggesting cement concrete sidewalks whereas the Layout Plans indicate bituminous concrete sidewalks. Please clarify what sidewalk material is intended and label consistently.

Planting Plan (Sheet LP1.21)

25. Planting Plan and Plant Schedule seem reasonable. However, no planting is proposed over most of the area behind Units 20 -24 which face the abutting residential building. We recommend the Board request the applicant to consider installing a fence or similar screening element along that property boundary due to the lack of any significant buffer and the anticipated ground level activity.

Lighting Plan

26. We did not see a Lighting Plan in the submittal materials but noticed light fixtures noted on some of the plans. We recommend the Board request the applicant to provide a Lighting/Photometric Plan indicating the proposed location and type of exterior light fixtures to be used and the anticipate light levels so any impacts on abutting parcels can be considered.

Planting Details (Sheet LP3.01 – LP3.02)

27. We request a patio detail be provided.

Stormwater Management Report

28. We appreciate incorporation of offsite contributing area and natural depressions in the analysis. However, please explain the justification for classifying proposed impervious surfaces as “unconnected”. We would not typically consider the proposed impervious areas as “unconnected” based on their characteristics and the potential for that characterization to understate runoff rates.
29. The proposed infiltration systems are integral to stormwater mitigation and must be maintained to ensure performance, yet the Operation and Maintenance Plan (OMP) has almost no required maintenance. Given future homeowners will be responsible for system inspection and maintenance, its critical for expectations to be clearly documented and responsibilities well understood. We recommend the Board request the applicant to provide a more detailed “Long-Term Operation and Maintenance Plan” meeting all requirements for such plans noted in the Stormwater Handbook and incorporating all manufacturer’s recommended maintenance.

30. Given the Project does not appear to require an Order of Conditions from the Conservation Commission, we recommend the Board consider including the recommended conditions described under Standard 9 of the Stormwater Handbook in any decision approving a Comprehensive Permit. Copy of applicable handbook section attached at the end of this letter.
31. The Project will disturb more than an acre of land area which typically required to obtain coverage under a NPDES Construction General Permit which includes preparation of a project-specific Stormwater Pollution Prevention Plan (SWPPP). We recommend any decision approving the Comprehensive Permit include a condition requiring the Project to provide proof of NPDES Permit coverage and a copy of the SWPPP prior to the start of land clearing activity.

Traffic Report

32. The Traffic Report does not mention bike parking. We recommend the site plan include a space for bike storage.
33. It's unclear what, if any, analysis, or evaluation was performed to determine current operating conditions of the nearby Union/Pleasant or Pleasant/Summer intersections. Please provide a summary of any assessments performed.
34. Tetra Tech agrees with the proposed site access improvements to provide a Stop bar at the site driveway approach to Pleasant Street and advance driveway warning signs. All pavement markings and signage shall be MUTCD-compliant.
35. Tetra Tech recommends that the site plans include sight distance triangles to ensure the area is kept free of any sight obstructing features or vegetation.

We appreciate the thoroughness of the plans and supporting documentation and do not anticipate significant changes to the site plan will result from addressing the comments noted above. We will be available to review our findings and address any questions at the Board's next hearing. If you have any questions or comments, please feel free to contact me by email at sean.reardon@tetrattech.com or by phone at (508) 786-2230.

Very truly yours,



Sean P. Reardon, P.E.
Vice President

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sedimentation and pollution prevention plan, the issuing authority shall require implementation of any measures in the SWPPP that were not included in the plan.

The construction period erosion, sedimentation and pollution prevention plan must identify all stormwater management activities that are needed during land disturbance and construction, including source control and pollution prevention measures, BMPs to address erosion and sedimentation, stabilization measures, and procedures for operating and maintaining the BMPs, especially in response to wet weather events and frost. The plan shall include a schedule for sequencing construction and stormwater management activities that minimizes land disturbance by ensuring that vegetation is preserved to the extent practicable, and disturbed portions of the site are stabilized as quickly as possible.

The BMPs used during construction must be different from the BMPs that will be used to handle stormwater after construction is completed and the site is stabilized. Many stormwater technologies (infiltration technologies) are not designed to handle the high concentrations of sediments typically found in construction runoff, and thus must be protected from construction-related sediment loadings.

All construction period BMPs must be properly designed, and sediment traps must be sized to provide adequate capacity and retention time to allow for proper settling of fine-grained soils. Construction period BMPs must be properly operated and maintained. For more information on erosion and sediment control, see Volume 2 of the Massachusetts Stormwater Handbook and the Nonpoint Source Manual, and the Erosion and Sedimentation Control Guidelines: A Guide for Planners, Designers and Municipal Officials^{36,37}.

Standard 9: A Long -Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.

The Long-Term Operation and Maintenance Plan shall at a minimum include:

1. Stormwater management system(s) owners;
2. The party or parties responsible for operation and maintenance, including how future property owners will be notified of the presence of the stormwater management system and the requirement for proper operation and maintenance;
3. The routine and non-routine maintenance tasks to be undertaken after construction is complete and a schedule for implementing those tasks;
4. A plan that is drawn to scale and shows the location of all stormwater BMPs in each treatment train along with the discharge point;
5. A description and delineation of public safety features; and
6. An estimated operations and maintenance budget.

The Operation and Maintenance Plan shall identify best management practices for implementing maintenance activities in a manner that minimizes impacts to wetland resource areas.³⁸

³⁶ MA Erosion & Sedimentation Control Guidelines -

<http://www.mass.gov/eea/agencies/massdep/water/watersheds/erosion-and-sedimentation-control-guidelines.html>

³⁷ Nonpoint Source Manual (formally known as the MegaManual):

<http://projects.geosyntec.com/NPSManual/>

³⁸ Some proponents may have developed an operation and maintenance plan for stormwater BMPs to meet the requirements of the National Pollutant Discharge System Elimination System (NPDES) Multi-Sector General Permit or the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4 Permit). To avoid duplication of effort, proponents may be able to prepare one plan for the operation and maintenance of stormwater BMPs that fulfills the requirements of Standard 8 and the applicable NPDES general stormwater permit. The Operation and Maintenance Plan must be included in the Stormwater Report. See Volume 3.

For projects subject to jurisdiction under the Wetlands Protection Act, the Conservation Commission and MassDEP will take the actions set forth below to ensure compliance with Standard 9. Unless and until another party accepts responsibility, the Conservation Commission and MassDEP shall presume that the owner of the BMP is the landowner of the property on which the BMP is located, unless there is a legally binding agreement with another entity that accepts responsibility for the operation and maintenance. If an applicant envisions that the municipality may accept responsibility for the operation and maintenance of a stormwater BMP, the applicant shall notify the Conservation Commission and make available to the municipal official responsible for stormwater management the design and operation and maintenance plan for the BMP in order that the municipal official may have an opportunity to review and provide comments to the Conservation Commission within a reasonable period of time prior to the issuance of the Final Order of Conditions. It is recommended that the Conservation Commission solicit comments from the responsible municipal official.

To ensure compliance with Standard 9, the Order of Conditions should include the continuing conditions set forth below.

- (1) All stormwater BMPs shall be operated and maintained in accordance with the design plans and the Operation and Maintenance Plan approved by the issuing authority.
- (2) The responsible party shall:
 - (a) maintain an operation and maintenance log³⁹ for the last three years, including inspections, repairs, replacement and disposal (for disposal, the log shall indicate the type of material and the disposal location);
 - (b) make this log available to MassDEP and the Conservation Commission upon request; and
 - (c) allow members and agents of the MassDEP and the Conservation Commission to enter and inspect the premises to evaluate and ensure that the responsibility party complies with the Operation and Maintenance Plan requirements for each BMP.

These same continuing conditions should be included in the Certificate of Compliance.

The Order of Conditions should also include a condition requiring the responsible party to submit an O & M Compliance statement when requesting a Certificate of Compliance. The O & M Compliance Statement shall identify the party responsible for implementation of the Operation and Maintenance Plan and state that:

- a. the site has been inspected for erosion and appropriate steps have been taken to permanently stabilize any eroded areas;
- b. all aspects of the stormwater BMPs have been inspected for damage, wear and malfunction, and appropriate steps have been taken to repair or replace the system or portions of the system so that the stormwater at the site may be managed in accordance with the Stormwater Management Standards;
- c. future responsible parties must be notified of their continuing legal responsibility to operate and maintain the structure; and
- d. the Operation and Maintenance Plan for the stormwater BMPs is being implemented.

In the case of stormwater BMPs that are serving more than one lot, the applicant shall include with the Notice of Intent a mechanism for implementing and enforcing the Operation and Maintenance Plan. The applicant shall identify the lots or units that will be serviced by the proposed stormwater BMPs. The applicant shall also provide a copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of stormwater BMPs. In the event that the stormwater BMPs will be operated and maintained by an entity, municipality, state agency or person other than the sole owner of the lot upon which the stormwater management facilities are placed, the applicant shall provide a plan and easement deed that provides a right

³⁹ This is a rolling log in which the responsible party records all operation and maintenance activities for the past three years.

of access for the legal entity to be able to perform said operation and maintenance functions. It is recommended that the Order of Conditions include a condition requiring that the responsible party provide a copy of the Order of Conditions and the legal instrument to each unit or lot owner at or before the purchase of each unit or lot to be serviced by the stormwater BMPs. When requesting the issuance of a Certificate of Compliance, the applicant shall identify to the Conservation Commission or MassDEP in writing the entity with legal responsibility for the operation and maintenance of the stormwater BMPs and provide a copy of the recorded instrument creating the responsible entity.

Prior to issuing a Certificate of Compliance, the Conservation Commission or MassDEP should inspect the site to determine whether the Stormwater BMPs are operating as designed so that the stormwater at the site may be managed in accordance with the Stormwater Management Standards. In conducting the inspection, the Conservation Commission or MassDEP should look for indicia that the stormwater BMPs are not functioning as designed. Evidence of problems with stormwater BMPs may include without limitation sand plumes at outfalls, excessive sands in catch basins, oil sheens, stressed vegetation, accumulated litter, and/or failure of the BMP to drain after 72 hours. No Certificate of Compliance should be issued unless and until the stormwater BMPs are functioning in accordance with the Final Order of Conditions and the Stormwater Management Standards.

Standard 10: All illicit discharges to the stormwater management system are prohibited.

Standard 10 prohibits illicit discharges to stormwater management systems. The stormwater management system is the system for conveying, treating, and infiltrating stormwater on-site, including stormwater best management practices and any pipes intended to transport stormwater to the groundwater, a surface water, or municipal separate storm sewer system. Illicit discharges to the stormwater management system are discharges that are not entirely comprised of stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated groundwater, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.

Proponents of projects within Wetlands jurisdiction must demonstrate compliance with this requirement by submitting to the issuing authority an Illicit Discharge Compliance Statement verifying that no illicit discharges exist on the site and by including in the pollution prevention plan measures to prevent illicit discharges to the stormwater management system, including wastewater discharges and discharges of stormwater contaminated by contact with process wastes, raw materials, toxic pollutants, hazardous substances, oil, or grease. The Illicit Discharge Compliance Statement may be filed with the Notice of Intent. If the Illicit Discharge Compliance Statement has not been filed, the Final Order of Conditions shall require the submission of an Illicit Discharge Compliance Statement prior to the discharge of stormwater runoff to the post-construction stormwater best management practices. The issuing authority should not issue a Certificate of Compliance until it has determined that the Illicit Discharge Compliance Statement has been submitted, has reviewed the Illicit Discharge Compliance Statement, and has verified that there are no illicit discharges at the site.

The Illicit Discharge Compliance Statement must be accompanied by a site map that is drawn to scale and that identifies the location of any systems for conveying stormwater on the site and shows that these systems do not allow the entry of any illicit discharges into the stormwater management system. The site map shall identify the location of any systems for conveying wastewater and/or groundwater on the site and show that there are no connections between the stormwater and wastewater management systems and the location of any measures taken to prevent the entry of illicit discharges into the stormwater management system. For redevelopment projects, the Illicit Discharge Compliance Statement shall also document all actions taken to identify and remove illicit discharges, including, without limitation, visual screening, dye or smoke testing, and the removal of any sources of illicit discharges to the stormwater management system.