

February 15, 2024

Michael King, Chair  
Town of Wareham  
Planning Board  
54 Marion Road  
Wareham, MA 02571

**Re:** Initial Peer Review  
Eversource Wareham Training Facility  
Special Permit/Site Plan Review  
PB Case 22-23  
37 Doty Street  
Wareham, MA

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Dear Chair King and Members of the Planning Board:

In accordance with our contract to conduct a peer review of the Eversource Wareham Training Facility's Special Permit/Site Plan Review at 37 Doty Street in Wareham, Massachusetts, Allen & Major Associates, Inc. (A&M) is pleased to provide the following comments. The comments presented below are based on the review of the design documents provided to A&M by Wareham Planning and Community Development. A&M did not conduct a field assessment of the project but can do so if the Planning Board requires.

In conducting the peer review, A&M reviewed the following documents:

- Plans entitled "Eversource Energy 37 Doty Street Wareham, MA Permitting Plans October 2023 prepared for Eversource Energy prepared by Civil & Environmental Consultants, Inc. dated October 11, 2023".
- Stormwater Report for Eversource 37 Doty Street Wareham, MA prepared for NStar Electric Company prepared by Civil & Environmental Consultants, Inc. dated October, 2023.
- Cover Letter prepared by Civil & Environmental Consultants, Inc. dated October 12, 2023.
- Impact Statement prepared by Civil & Environmental Consultants, Inc. dated October, 2023.
- Special Permit/Site Plan Review Application, Checklists, abutters list, denial letter from the building department and Cover Letter/Impact Statement prepared by Civil & Environmental Consultants, Inc. dated October 12, 2023.

A&M reviewed the information/materials, listed above in conjunction with the applicable requirements of:

- Town of Wareham By-Laws revised October 25, 2021;
  - Division IV, Article III Earth Removal Regulations;
  - Division V, Article XI, Article I Stormwater Management & Article II Illicit Discharge;
  - Division VI, Article I Wareham Wetland Protective By-Law.
- Town of Wareham Zoning By-Laws Revised April 24, 2023
  - Article 6: Density and Dimensional Regulations
  - Article 7: Design Standards and Guidelines
  - Article 9: Parking
  - Article 10: Landscaping
  - Article 12: Performance Standards

- Article 15: Site Plan Review
- Massachusetts Stormwater Handbook, Volumes 1 through 3, as applicable under the Massachusetts Wetlands Protection Act (310 CMR 10.00) with focus on the Stormwater Management Standards.
- National Fire Protection Association (NFPA 1) and the Massachusetts Amendments (527 CMR 18) as applicable to site development plans.

The following represents A&M's review comments. A&M may submit additional comments based on supplemental information provided after the initial peer review.

### **Wareham By-Laws and Zoning By-Laws**

1. The proposed project is located within the Commercial Strip (CS) District and is subject to Article 7: Design Standards and Guideline, subsection 760 Design Standards & Guidelines for Commercial Districts. The design engineer should review the applicable section and provide statements on how the proposed project meets the standards and guidelines.
2. Zoning By-Law Section 1031 requires "new projects or expansions exceeding 5,000 square feet of non-residential development or more than three multi-family dwelling units, the landscape plan shall be prepared by a registered landscape architect whose seal shall appear on the plan." Landscaping is currently shown on the site plans but has not been prepared by a Landscape Architect. A landscape plan should be provided in accordance with the Zoning By-Law. Please provide a landscape table showing the requirements of the By-Laws and what is being provided associated with the required buffers and parking lots.
3. The proposed project is subject to Article 12: Performance Standards, subsection 1260 Analysis of Development Impact: Stormwater Runoff in Compliance with MS4. The project is subject to an MS4 Stormwater Management Permit (MS4 SMP) issued by the Planning Board. The applicant should provide documentation on the status of the MS4 SMP for the record. The design engineer should provide additional narrative and calculations to show/demonstrate compliance with the removal of 90% Total Suspended Solids (TSS) and removal of 60% Total Phosphorus from the total post-construction impervious surfaces for new development and removal of 80% Total Suspended Solids (TSS) and removal of 50% Total Phosphorus from the total post-construction impervious surfaces for redevelopment.
4. The proposed project is required to obtain a Stormwater Management Permit (SMP) in accordance with Wareham By-Laws Division V, Article XI, Article I Stormwater Management. The applicant should provide documentation on the status of the SMP.

### **Site Plan & Drainage Calculations**

5. The Stormwater Report, Section 2.2 Existing Conditions states the existing boundaries were taken from the previous Flagship Cinema drainage report by SITEC Inc., dated October 18<sup>th</sup>, 2000. The watershed plan provided within the report is cutoff and A&M is unable to review and confirm the watershed boundaries used within the calculations. The design engineer should provide a new watershed map for review. Based on the HydroCAD report, it appears that the existing conditions analyzed and reported appear to be the existing conditions of the site as it appears today. The design engineer should clarify the intent of the statement about reuse of the "existing boundaries". To make a full evaluation of the site and the proposed impacts of the project at the design point, the design engineer should provide a comparison table showing the original existing conditions values from the 2000, the current values using 2023 existing conditions relative to the proposed conditions.

6. Under Standard 7, the design engineer states that the project is considered redevelopment and has been designed to the maximum extent practicable. The design engineer should review Chapter 3 Checklist for Redevelopment Volume 2: Technical Guide for Compliance with the Massachusetts Stormwater Management Standards.

*Redevelopment is defined to include:*

- *Maintenance and improvement of existing roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems and repaving;*
- *Development rehabilitation, expansion and phased projects on previously developed sites, provided the redevelopment results in no net increase in impervious area; and*
- *Remedial projects specifically designed to provide improved stormwater management, such as projects to separate storm drains and sanitary sewers and stormwater retrofit projects.*

*Components of redevelopment projects that include development of previously undeveloped sites do not meet the definition. The portion of the project located in previously developed area must meet Standard 7, but project components within undeveloped areas must meet all the Standards.*

The design engineer should provide more documentation and how the project complies with the redevelopment section given the noted increase in impervious surfaces throughout the site.

7. The design engineer should review the time of concentration calculation for sheet flow and update the calculations accordingly. The value for the 2-yr event differs from the actual 2-yr rainfall event as noted within the HydroCAD report.
8. According to the project narrative, the design engineer states that the proposed building has an existing roof drain dry well to infiltrate the roof runoff and they are to remain in place, which contradicts the HydroCAD report. The HydroCAD report has the entire roof area directed into the detention basin. The design engineer should review the input areas contributing to Watershed A1: Flow to existing Detention Basin and revise the report and calculations accordingly.
9. The design engineer should review the input area of the building, which does not match the existing conditions plan. Since the building is connected directly into the dry well system for the roof area, the use of unconnected roofs in HydroCAD is not correct. Please review calculations accordingly.
10. The HydroCAD model for Pond P1: Ex. Detention Basin should be revised to have the rectangular weir and orifice routed through the existing 24 inch outlet pipe.
11. The design engineer is providing a water quality swale seeking a 70% TSS removal rate. No calculations or design information has been provided to support the water quality swale. The design engineer should provide the required calculations for the sizing of the water quality swale in accordance with the Stormwater Handbook and applicable details on the plans.
12. The design engineer is providing a sediment forebay, but no calculations have been provided. The design engineer should provide the required calculations for the sizing of the sediment forebay in accordance with the Stormwater Handbook and applicable details on the plans.
13. The design engineer is stating 70% TSS removal in the worksheet for an extended dry detention basin. The Massachusetts Stormwater Handbook allows 50% TSS removal when combined with a sediment forebay. The TSS worksheet should be updated accordingly to reflect the reported values in the handbook or provide documentation justifying the higher TSS removal rate.
14. The illicit discharge compliance statement is not signed. Please provided a signed copy for the record.
15. Existing Conditions Plan
- a. The existing conditions plan is not stamped by a Professional Land Surveyor registered in the Commonwealth of Massachusetts. The plan shall be endorsed by a PLS for record.

- b. Note 1, states that the property line information was taken from a plan dated March 7, 1989, however the property line at the southwest corner at the intersection of Route 58 and Doty Street differs from the record plan.
  - c. The tree line on the easterly side of the main driveway appears to be incomplete and facing the opposite direction.
  - d. Three catch basins are located on the westerly side of the existing building. What type of catch basins are these and where do they connect to? The final determination and discharge point may have an impact on the watershed plans and should be reviewed.
16. Erosion & Sedimentation Control/Demolition Plan
- a. No work is shown on this plan. The plan should be updated to show the proposed erosion control measures being installed to protect the existing drainage system, downgradient properties and the wetland resource areas.
  - b. The plan should identify the areas being demolished, cleared, removal of topsoil, etc.
  - c. Two existing catch basins, located on the westerly side of the building will be located within the proposed material logistics storage and meter training area. Are these catch basins to remain or to be removed and how will they be protected during construction if to remain?
17. Site Layout
- a. The site layout plan illustrates several new utility poles with camera and lights to be installed in close proximity to the perimeter. What are the purpose of the lights and what are the hours of operation? A photometric plan should be provided to confirm and verify that light spillover has been minimized.
18. Grading/Drainage Plan
- a. The extended detention basin as designed does not meet the Massachusetts Stormwater Handbook Standards and should be updated to include the following:
    - i. Provide calculations demonstrating that the required water quality volume meets the 24-hr time to allow solids to settle.
    - ii. A 15-ft wide access road is required around the basin providing access to the forebay and the outlet control structure.
    - iii. No emergency spillway has been provided.
  - b. Several drainage pipes are shown discharging into the grassed water quality swale and do not have any rip rap dissipation pads. The plans should be updated to provide appropriately sized pads at each outfall based on the maximum anticipated velocity. The design engineer should provide appropriate calculations to support the design.
19. Detail Sheets
- a. No detail is provided on the extended detention basin. Detail should be provided showing the minimum side slope, finish treatment of side slope and bottom area, access road, etc.
  - b. A spillway detail is provided on Sheet C801, but A&M is unable to find where the detail is being used. Please identify the spillway location and provide the elevation of the spillway crest.
20. The site currently has mature vegetated areas adjacent to Doty Street and Route 58 and based on the site layout plan a majority of this vegetation is being removed to accommodate the proposed training areas. The applicant is proposing to install new landscape along the frontage as shown on Sheet C700. To the extent the existing vegetation can be maintained, is there an opportunity to review the dimensions of the training areas and determine if they can be lessened to preserve the mature

vegetated areas. As previous mentioned above, the limits of clearing should be added to the demolition plan.

21. The site relies on multiple stormwater management areas to function. The applicant should provide a statement for record that the existing systems have been inspected and maintained in accordance with the Stormwater Handbook before receiving additional flows as a result of the increased impervious. Any structures requiring cleaning, should be cleaned and documented prior to receiving additional stormwater runoff. These will include the catch basins, dry well systems, detention basin, and basin inlets and outlets.
22. The abutter list provided with the application appears incomplete as it only encompasses lot A1. Lot B1 contains portions of the building and stormwater management areas that would require inclusion in the list.
23. Neither the plans or narratives identify the potential uses for the series of concrete pads on the easterly training site. Their use should be identified to the extent it may have impact to the adjacent resource areas or stormwater basins. Potential impact could include use of hazardous material that would drain into the catch basin and flow through the system.
24. The application notes the parking lot will be used for staging of vehicles as part of emergency response operations. For clarity, is it the intent that the lot be used for long term storage/staging, mechanical repair, or refueling?

#### **Relationship to other permits**

The applicant is also required to submit a Notice of Intent to the Wareham Conservation Commission for work within 100 feet of a resource area protected under the Wetlands Protection Act. Under the Wetlands Protection Act, additional comments may apply.

As part of the conservation process, the wetland lines shown on the proposed plans requires verification. The date of the wetland line is not noted on the plans. Verification of the line occurs simultaneously during the Notice of Intent. The final resource area evaluation may result in additional changes pertinent to the Planning Board's review of the application.

In order to track any changes made to the proposed project, A&M recommends the applicant/engineer provide a written response to the items identified above and/or supplemental information necessary to review the application.

Very Truly Yours,

**ALLEN & MAJOR ASSOCIATES, INC.**

Philip Cordeiro, PE  
Branch Manager