SHIVEHATTERY
ARCHITECTURE + ENGINEERING

July 5, 2022

Kenneth Buckland
Director of Planning and Community Development – Town of Wareham
54 Marion Road
Wareham, MA 02571

RE: Site Plan Review Report for Eversource Energy, 5 Doty Street

Dear Kenneth:

Shive-Hattery offers the following response to the city site plan review comments dated May 10, 2022 (responses in ***bold italics***).

General

1. The project is located in the CS (Strip Commercial Zoning District) and includes the clearing of existing vegetation, construction of a gravel-type parking area and stormwater basin, installation of fencing and landscape features for the site.

    ***a. SH Response: Noted.***

2. The Wareham Zoning By-Law requires an impact statement to be included in the submission of documents in accordance with Article 15, Site Plan Review and Section 1534. No impact statement was included with the information provided for review.

    a. In particular, an environmental analysis should be provided for current conditions as well as for proposed changes in the project area.

    b. Other requirements of the impact statement should also be addressed accordingly, including but not limited to the current use and activities of the site as well as the proposed use and activities anticipated.

    c. It should include a statement as to how the project conforms with the intended use for a location in a commercial zoning district.

        ***i. SH Response to Comments 2a – 2c: An impact statement was included with the original submittal. It has already been reviewed and accepted by Charles Rowley.***

Landscape Requirements

1. Article 10, Landscape Requirements of the Zoning By-Law require any new projects or expansions of non-residential project over 5000 square feet to be done by a Landscape Architect. See Section 1031 of the By-Law. The project does not appear to comply with this section.

    ***a. SH Response: The landscape plans are now stamped by a licensed Landscape Architect.***

2. The project is subject to the requirements of Section 1040 and 1061.1 of Article 10 as well. It should be demonstrated by photos and/or other means that the project meets these standards.

    a. ***SH Response: The landscape plan has been updated to clearly show that the existing vegetation is dense enough to meet the Town's screening requirements. The landscape plan shows all proposed plantings that also help to meet the Town's screening requirements.***

Plans

1. The plans show a proposed clearing of an area that is supposedly to be used for the parking of vehicles. The parking area is proposed to consist of 8 inches of 3/4" crushed stone over soils of undetermined type.

    a. ***SH Response: Eversource Energy confirmed that the vehicles stored in this proposed lot will be in good, working condition.***

2. Reconsideration should be given to the depth and type of stone to be used for surface treatment due to the potential for displacement of the stone during ordinary movement of vehicles and the removal of snow during winter months.

    a. ***SH Response: Per phone conversation with Charles Rowley on 06/09/2022, pavement section has been changed to 3" of 3/8" pea gravel on top of 8" of reclaimed asphalt per Massachusetts DOT specifications, on top of compacted subgrade.***

3. The subgrade materials under the stone should be defined to insure appropriate and stable conditions upon compaction.

    a. ***SH Response: See above response on proposed gravel section.***

4. There are no cross-section details of the proposed drainage area that include surface treatment, emergency spillways or soil types for the section.

    a. ***SH Response: Cross-sectional details of the infiltration basin have been added to sheet C202.***

5. The site plan indicates that an existing fence is to remain in the vicinity of the proposed drainage basin. The fence appears to be encroachment onto abutting property. Will any attempts be made to relocate the fence?

    a. ***SH Response: Noted. Per phone conversation with Charles Rowley on 06/09/2022, the Planning Board will decide if they want the fence move or not as part of this site plan approval. Currently the scope of this project does not impact or alter the existing fence.***

Stormwater

1. On page 6 of the Stormwater Report, it indicates that no soil borings had been completed as of the writing of the report. The results of soil testing and high ground water determination are required. The use of generalized soil maps alone to determine specific site conditions is not acceptable.

    a. ***SH Response: A test pit was performed on 12/27/2021 and the results have been submitted for consideration. The results concluded that loamy sand is present in the***

***location of the proposed infiltration basin and it has a high infiltration rate based on the percolation test. Charles Rowley has reviewed and accepted the results from the test pit.***

2. Projected infiltration rates for runoff control should be compatible with existing site conditions backed up by appropriate testing.

    a. ***SH Response: Based on the results from the test pit, calculations have been updated to use an infiltration rate of 2.41 in/hr since the existing soil is loamy sand (rate is from Table 2.3.3 in Stormwater Handbook).***

3. The plans show an existing retention area. What is the condition of this retention area and what, if any, is the elevation of surface water?

    a. ***SH Response: Additional topo survey of the existing retention area was received on 06/15/2022. The plan sheets have been updated to show this survey information in the background. Analyzing the new survey information, it was confirmed that the design is properly accounting for existing overland flow. The existing and proposed overland flow drainage areas are delineated in the Catchments Exhibits. Most of the existing site does <u>not</u> flow into the proposed basin.***

4. The site plan shows that there is an existing subsurface stormwater system that includes catch basins, manholes and discharge pipe adjacent to the project area that collects runoff from existing roofs and pavement. The discharge point of the pipe appears to be such that flow will be directed toward the new drainage basin. This discharge and the area surrounding it should be included in the drainage areas considered in the stormwater calculations.

    a. ***SH Response: Additional topo survey of the existing retention area and subsurface stormwater system was received on 06/15/2022. Based on the survey, the pipe discharges directly into the existing retention basin. It is <u>not</u> directed towards the proposed infiltration basin.***

5. The calculation for stormwater runoff is in a format that is somewhat different than that which is customarily seen. It is not clear that adjustments were made in the calculations for rainfall intensity beyond the 2-year storm event. Both the 10-year data and 100-year data still show an intensity of 3.4” per hour which is the intensity usually associated with the 2-year event. Please explain.

    a. ***SH Response: Per phone conversation with Charles Rowley on 06/09/2022, it was confirmed that the calculations were performed with the correct rainfall intensity for each storm event. The output results have been clarified to avoid confusing report format.***

6. It is essential to know what the expected high ground water levels in the area of the drainage basin are given the wetlands line that shows near elevation 69 on the site plan. The bottom of the proposed basin is shown at elevation 67.5. Normal elevations of the bottom of such basins are 2 feet above high ground water.

    a. ***SH Response: Based on the results from the test pit, the seasonal high water table is 48” below existing surface. The existing surface in the area of the proposed retention is approximately 71’. Therefore, the groundwater elevation is approximately 67’. The bottom of the proposed infiltration basin is 69.5’ to provide over 2’ of clearance between the basin bottom and seasonal high water table.***

7. The pre-construction and post-construction drainage sub-catchment areas need to be better defined for existing and proposed surface treatment.

    a. ***SH Response: The Catchment Exhibit was created to show the overall pre- and post-development drainage areas. The Stormwater Basin Exhibit has been updated to show the drainage areas used to design the infiltration basin. Both of these exhibits are included in the resubmittal.***

Sincerely,

SHIVE-HATTERY, INC.

Jeffrey M. Rath
Civil Engineer

/JMR

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