***Charles L. Rowley, PE, PLS***

Consulting Engineer and Land Surveyor

## 5 Carver Road Tel: 508-295-1881

**PO Box 9 Cell: 508-295-0545**

# West Wareham, MA 02576 E-mail: [crsr63@verizon.net](mailto:crsr63@verizon.net)

November 1, 2021

Town of Wareham Planning Board

Memorial Town Hall

54 Marion Road

Wareham, MA 02571

Re: Subdivision Plan Review,

Maritime Haven, Sias Point

Attention: Richard Swenson, Chairman

Dear Chairman Swenson:

I am in receipt of a set of plans by GAF Engineering dated August 25, 2021 for the above referenced project. The following comments relate to a review of the plan set as outlined in my letter to the Planning Board dated September 22, 2021.

Compliance with Zoning

1. Lot 48 as shown on Sheet 4 of 8 does not comply with Section 615, Lot Shape Factor of the Zoning By-Law. The section requires the circle of a diameter equivalent with the minimum frontage (180’) to be in buildable upland. The Board has the authority to waive this requirement if it is seen as not detrimental to the intent of the regulation.
2. The 180’ diameter circle as noted above includes within it an area that is identified as an isolated vegetated wetland. This would not be considered as buildable upland.
3. Lot 52 also has a small portion of the 180’ diameter circle located within an area that is below an existing retaining wall on an existing beach (310 CMR 10.27) and coastal dune (310 CMR 1028) both as noted on the plan. Both of these areas would not be considered as buildable upland as required in Section 615 of the By-Law.

Stormwater Requirements

1. The stormwater review is limited to the impact on the site caused by the construction of the proposed paved road labeled as “Maritime Row”. Under the subdivision review requirements.
2. Any stormwater impacts related to construction on the proposed lots is subject to comment by the Wareham Board of Health and to the provisions of MGL Chapter 131, The Wetlands Protection Act and the Wareham Wetlands By-Law.
3. The GAF submittal includes a request for a waiver to the requirement of provide existing and post construction stormwater calculations due to the location of the project being in an area subject to coastal storm flowage. This waiver request should be rejected as being inconsistent with the requirements of the stormwater regulations as it pertains to impacts on abutting lands.

Re: Subdivision Plan Review,

Maritime Haven, Sias Point

Page two

1. A 100-year storm event may not involve coastal flooding but may be a significant rain event. Events of this magnitude should not adversely impact the abutting properties.
2. Stormwater calculations should be submitted for the project as required by Section V, Design Standards, B, Design,1. Full compliance with this section is required.
3. It is highly recommended that a design for the proposed road not include a low point where surface water can collect and not be properly disposed off from the paved surface.
4. Should the proposed subsurface infiltration system fail, there is no provision for an emergency outlet.
5. An equalizer should be installed under the proposed roadway at or near station 1+0 where the road profile is in a fill section.
6. It is recommended that a low impact design be considered that holds more to existing contours without cuts and fills.

Access

1. It has been pointed out during the public hearing that currently Robinwood Road is narrow and in poor condition. It is recommended that the Board inspect Robinwood Road for possible improvements from its intersection with Powers Avenue to the proposed Maritime Row.
2. MGL Chapter 41, Section 81Q is the basis under which certain improvements of access may be required.

Proposed Sewer Connection

1. It is recommended that the proposed sewer force main from the project to Nanumet Street be buried to below frost depth or be otherwise insulated to prevent freezing.
2. If the proposed sewer line is located within any private ways that are not part of the project development site, it is recommended that approval be obtained from responsible parties to allow for excavation, directional drilling or other disturbance.
3. Any portion of the proposed sewer line that is within a public way that is maintained by the Town of Wareham will need a permit from Municipal Maintenance for construction.
4. Requirements of the Sewer Department should be provided for the file.

Water Mains and Services:

1. These need to comply with the requirements of the Onset Fire District Water Department and Fire Department.

Waiver Request

1. Waiver from requirement for Stormwater Calculations: This waiver is not recommended and is explained above.
2. Waiver from the requirement for Street Trees: This waiver is not recommended. Whether the project remains in private hands in perpetuity or not is not part of the consideration for whether trees need to be added.
3. Waiver from Sidewalks. There is no technical comment for this request and is left to the Board for its consideration. At the public hearing it was noted that there are no sidewalks in the immediate area.
4. Waiver for use of molded berms along the proposed road: This waiver may not be necessary depending on the final profile and cross section of the road. If allowed to stay as currently designed, Cape Cod Berms are a suitable alternative to either granite or cement concrete curbs.

Re: Subdivision Plan Review,

Maritime Haven, Sias Point

Page three

1. It is assumed that the above four design criteria waivers are the only ones requested for the project and that all other requirements of the Rules and Regulations will be incorporated into the final plan. This includes all appropriate items of Section VI of the Rules and Regulations.

General Plan Comments

Sheet 5 of 8

1. Revise Note 2 at the top of the sheet to reflect the appropriate lot numbers.

Sheet 7 of 8

1. Proposed Roadway Cross Section: The use of gravel and dense graded material under the proposed road surface is not recommended in this instance. Adequate sub-surface drainage is of utmost importance due to the existing site conditions.
2. It is also recommended that the road surface be crowned to both sides with suitable stone lined swales to collect surface runoff along its length rather than a single collection system with no emergency outlet.

Sheet 8 of 8

1. The bottom of the proposed rain garden is shown as being at elevation 1.0 based on the detail shown. The test pit elevation is at elevation 7.5 with mottles at 72” (6 feet) suggesting high ground water is at elevation 1.5. This is an unacceptable condition.
2. The bottom of the proposed rain garden, if maintained, should have the bottom of stone no lower than elevation 3.5 to be in compliance with the Stormwater Regulations and guidelines of the Stormwater Handbook.

This concludes the first review of the plan set as received to date. Please feel free to contact me if you have any questions.

Very truly yours,

Charles L. Rowley

Charles L. Rowley, PE, PLS

Cc Board Members

Ken Buckland, Wareham Town Planner

Aaron Shaheen, Asst. Town Planner

William F. Madden, PE, GAF Engineering

Bob Rogers, GAF Engineering

David Pichette, Conservation Agent

Jim Munise, BOS liaison to Planning Board