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September 12, 2023

Town of Wareham
Zoning Board of Appeals
54 Marion Road
Wareham, MA 02571

Attention: Nazih Elkallassi – Chairman

RE: Response to Second Peer Review
Special Permit, Variance, and Site Plan Review Application
3127 Cranberry Highway
Wareham, MA
ZBA Case 11-23
G.A.F. Job No. 22-9890

Dear Chairman Elkallassi,

G.A.F. Engineering, Inc., on behalf of our client Peter Koulouras, provides the following responses to the review comments received from Allen & Major Associates, Inc. by letter dated September 6, 2023. Revised plans dated September 8, 2023, is included with the submittal.

This letter has been formatted for clarity by listing the review comment followed by our response in ***bold italics***. Items which have been resolved by responding to the initial review have been omitted.

Wareham By-Laws and Zoning By-Laws

1. The proposed project is located within the Commercial Strip Zoning District and is subject to Article 7: Design Standards and Guideline, subsection 760 Design Standards & Guidelines for Commercial Districts. No architectural plans have been submitted; therefore A&M is unable to review for compliance with subsection 764 Architectural Design Guidelines. The ZBA may consider a condition of approval requiring the architectural design of the building be in compliance with subsection 764 of the Zoning By-Laws.

Updated Comment: The Design engineer has provided a response indicating that the architectural conditions of Section 764. Architectural Design Guidelines are “recommendations, but not required” (Section 710). A&M is in agreement with this assertion, but the original application included no architectural material which was

the substance of the comment. The design engineer has provided an architectural elevation and floor plan in the revised materials that the Zoning Board of Appeals can review against the criteria of Sections 764 and 765 and render a decision accordingly.

We request approval and acceptance of the building elevations and plans previously submitted.

Site Plan & Drainage Calculations

5. There is existing pavement on the southerly portion of the property that straddles the property line and extends onto lands owned by the Commonwealth of Massachusetts. Is the offsite pavement being removed as part of this application? Please confirm if an easement will be prepared for this work. As described on the record Approval Not Required plan dated June 2022, as prepared by GAF, it also depicts a fence line approximately 40-50 feet beyond the property line and seems to indicate this area was in use by the landowner. Please describe the intent of this area and whether the fence is to remain or be relocated/removed.

Updated Comment: The applicant's engineer has indicated that the limit of work under this proposal is as shown on the plans. This will leave remnant paved areas and a fence encroachment on property not owned by the applicant but rather owned by the Commonwealth of Massachusetts. A&M defers to the Zoning Board of Appeals whether it is appropriate to remove these encroachments as part of this project.

We request approval for the limits of work as shown on the plans.

8. The design engineer should review the proposed grading. As currently designed the proposed project is directing stormwater off-site to the east and west onto abutting properties. Based on the existing contours and spot grades, no stormwater is being directed off-site. The design engineer should also review the proposed low points being

created on the easterly and westerly property line, where water will be ponded and trapped. The design engineer should include all off-site areas and avoid directing runoff off-site onto abutting properties where no runoff is directed under existing conditions.

Updated Comment: The design engineer has provided revised plans with additional spot grades to better define the intended path of drainage. Along the easterly property line, under existing conditions runoff flows through the existing spot grade at 40.9 and toward the existing on-property catch basin. Under proposed construction a metal edge is being added as well as the grading of the 41.x spot elevations. This will result in an area of ponding on the abutting property that doesn't currently exist as part of the overland flow of water. On the westerly sideline, the contouring directly adjacent to the parking spaces drains onto the abutting property and along the property line where it may similarly become trapped at the existing 41 contour along with the effect of the proposed metal edging.

Spot grades indicate that the area of abutting property along the southeasterly property line will drain to the southeast as indicated by spot grades 40.9 to 40.5.

Along the westerly sideline runoff in the landscaped areas will be contained and directed to the south by the steel landscape edging. Refer to the details on sheet 9.

There is an existing catch basin and underground drainage system adjacent to the low point on the property of the westerly abutters. The applicant is willing to install a leveling area to eliminate the low area and direct the runoff to the abutter's drainage system prior to the installation of the landscaping areas along the property line.

11. The drainage field has been designed relying on test pits conducted on adjacent sites. No site specific data is provided in support of the soil classification or the estimated seasonal high groundwater table. In order to comply with the Massachusetts Stormwater Standards, one test pit is required for each 5,000 square feet of drainage area provided. The applicant should conduct a test pit to confirm soil conditions. The Zoning Board of Appeals may consider

a condition that requires the test pit be performed at the time of general construction. The results of the test pit should be provided for record along with any changes to the site plans, if required. Site plan changes would require a modification of any permit(s) issued by the Board.

Updated Comment: No test pit data has been provided but given the design engineer's familiarity with the surrounding site and their confidence in the underlying soils, should the Zoning Board of Appeals agree, a condition can be put in place that the soils are verified during the time of construction and a report provided to Board for record. The report would include the location of the test pit, depth of excavation, and confirmation of estimated seasonal high groundwater. Any unanticipated effects of the soil testing would be discussed in the report to the Board. The design engineer has indicated they are amenable to this condition if so chosen by the Board.

No further action required.

12. No details on site lighting nor a photometric plan have been provided, A&M is unable to review impacts on surrounding properties or compliance with Zoning §1243 Lighting Standards or §1533 (11).

Updated Comment: A site lighting layout plan and cut sheets have been provided. Light trespass from the proposed fixture locations is occurring along the east, west, and south property lines and should be revised to be in conformance with lighting standard 1243.2.

The proposed light fixtures have been revised and the site lighting plan revised accordingly. The prior light trespass has been eliminated.

13. Existing watersheds and drainage calculations should be revised to include off-site areas draining onto the lot towards the existing catch basin, identified as design point #1.

Updated Comment: A&M acknowledges the design engineer's preference to not include the existing runoff into the stormwater calculations as it results in a more

conservative design approach to the proposed conditions of the property only. Further, the design engineer has noted that the proposed metal edging will prohibit runoff from entering the site under proposed conditions. This does not address the effect on the runoff condition under proposed conditions. Both issues are as described under Comment 8 above.

On-site runoff is contained on-site, and off-site runoff is prevented from entering the site by the installation of the raised steel landscape edging. Refer to response comment #8 above.

14. The design engineer should review the proposed watersheds. Based on the proposed grading the landscape shoulders associated with Watershed 1S do not appear to drain into the pavement as intended. Portions of Watershed 2S do not appear to drain towards the landscape depression along the southerly line.

Updated Comment: The design engineer has indicated that the landscaped beds are higher than the parking field. Portions of the shoulder are higher, however, along the easterly property line, the limit of drainage area that will drain onto the parking field is approximately at the 44 contour. Along the westerly sideline, the entirety of the landscaped area is directed toward the property line (see Comment 8 above). The landscaped beds along the front of the site direct water toward Cranberry Highway and the added French drains. None of this water should be part of watershed 1S and should be reviewed.

Post-development watershed 2S is valid due to the installation of the raised steel landscape edging.

The small area adjacent to Cranberry Highway has been separately analyzed as requested. Pre-development sub-watershed 2S is the 530-sf area of pavement adjacent to the existing entrance to the property. This area is compared with post-development sub-watershed 3S which is a combination of landscaping and paved entrance which is an area of 600-sf.

Post-development sub-watershed 1S has been revised by removing the area listed in sub-watershed 3S. The

revised summary table confirms a reduction in peak flow rates and volumes to Cranberry Highway as well as on-site.

We trust the foregoing adequately addresses the comments raised on the September 6, 2023 correspondence. Please contact me directly should you have any questions about this project.

Very truly yours,



William F. Madden, P.E.
bill@gafenginc.com

WFM/

Enclosures

cc: Peter Koulouras
Jilian Morton, Esq
Allen & Major Associates, Inc.