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March 11, 2021

Groton Planning Board c/o Mr. Takashi Tada Land Use Director/Town Planner Town of Groton 173 Main Street Groton, MA 01450 RE: Nitsch Project #13346.15
The Village at Shepley Hill
Definitive Plan and
Special Permit Review
Groton, MA

Dear Planning Board Members:

Nitsch Engineering has received and reviewed the revised Site Plans (the Plans) entitled "The Village at Shepley Hill, Groton, MA, Sand Hill Road & Longley Road" (27 sheets) prepared by Meridian Associates (MAI), dated February 5, 2021, and revised February 25, 2021. In addition to the Plans, Nitsch Engineering has also received and reviewed the following documents:

- 1. Response letter prepared by Meridian Associates to February 11, 2021 letter from Nitsch Engineering;
- 2. Cut and Fill Elevation Color Map prepared by Meridian Associates and dated February 9, 2021;
- 3. Updated Stormwater Management Report prepared by Meridian Associates, dated November 23, 2020, and revised February 25, 2021;
- 4. Updated Stormwater Management Analysis and Calculations prepared by Meridian Associates, dated November 23, 2020, and revised February 25, 2021;
- 5. The Landscape Plan entitled "The Village at Shepley Hill Groton, MA" (2 sheets), prepared by William Fleming Associates Incorporated, dated November 20, 2020, and revised on February 23, 2021; and
- 6. The Lighting Plan entitled "Shepley Hill" (one sheet), prepared by Illuminate and dated February 23, 2021.

Nitsch Engineering has reviewed the Plans to determine conformance to the following:

- 1. "Zoning Bylaw", Chapter 218 from the Code of the Town of Groton, latest version; and
- 2. "Subdivision Rules and Regulations", Chapter 381, Part 1 from the Code of the Town of Groton, latest version.

WAIVERS REQUESTED BY THE APPLICANT

- 1. Section 381-10 C.(2) A waiver is being requested to reduce the right-of-way width (50 feet minimum required, 40 feet proposed) and to reduce the pavement width (22 feet minimum required, 20 feet proposed).
- 2. Section 381-10.D.(3)(b) A waiver is being requested to reduce the safe stopping sight distance from 175 feet to 155 feet.
- 3. Section 381-10 D.(5) A wavier is being requested to allow fills greater than 7 feet. The Applicant has noted that all cuts greater than 7 feet have been eliminated.
- 4. Section 381-13.A.(1)(a)[2] A wavier is being requested to eliminate a segment of the pedestrian sidewalk located before the proposed wetland crossing which is approximately 250 feet from the intersection with Longley Road.

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5. Section 381-13.A.(2) & (3) – A waiver is being requested to extend the sidewalk outside of the limits of the right of way and for the sidewalk constructed along a portion of the interior to be constructed as a boardwalk.

All comments that have been previously addressed are omitted from this letter. The original numbering system has been maintained. This letter includes Nitsch Engineering's outstanding comments in standard text, MAI's latest responses in *italics*, and our current comments in **bold**.

SUBDIVISION RULES AND REGULATIONS

9. The Applicant has indicated that cut and fill calculations will be provided. Remaining items have been generally addressed by the latest documents.

MAI Response: We have performed volume calculations and we have determined that the proposed project represents a balanced site.

This comment has been addressed.

12. While the Landscape Plan shows 6 inches of loam for lawn areas, the Roadway Cross Section Detail on Sheet 25 still shows 4 inches of loam. The Applicant should update this detail to match the landscape detail. Also, the Applicant should indicate the minimum required slope (3% min.) for the lawn area that adjacent to the roadway.

MAI Response: The roadway cross section detail has been revised to show 6 inches of loam for the lawn areas.

This comment has been addressed.

29. Four proposed sag curves do not meet the minimum K value of 26 per MassDOT design guidelines.

MAI Response: Based upon our discussions regarding this matter at the Planning Board hearing, it is our understanding that the Planning Board is comfortable with the sag curves as designed, given that the anticipated driving speeds will be low and it is our understanding that no further action is required regarding this matter.

This comment has been addressed.

30. One proposed sag curve does not meet the minimum length of 75 feet per MassDOT design guidelines.

MAI Response: Based upon our discussions regarding this matter at the Planning Board hearing, it is our understanding that the Planning Board is comfortable with the sag curves as designed, given that the anticipated driving speeds will be low and it is our understanding that no further action is required regarding this matter.

This comment has been addressed.

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RECOMMENDATIONS

The Plans appear to conform to the Code. Nitsch Engineering does not have any additional comments related to the Definitive Plan and Special Permit review.

If the Planning Board has any questions, please call.

Very truly yours,

Nitsch Engineering, Inc.

Basel Álhadidi Project Designer Approved by:

Jared E. Gentilucci, PE, CPESC, LEED AP BD+C

Project Manager

BMA/jeg

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