

June 15, 2022

Thomas Callahan
Planning Board
Town of Cohasset
41 Highland Avenue
Cohasset, MA 02025

**RE: Response to Review Comments Dated 4/21/22
Application for Approval of Common Driveway
94 Black Horse Lane
Cohasset, MA 02025**

Dear Chairman Callahan:

The purpose of this correspondence is to respond to the review comments submitted regarding the above referenced project by James I. Pearson, PE and M. James Riordan from Weston & Sampson Engineers, Inc. on 4/21/22. We would also like to reiterate from attorney Watsky's letter of 5/31/22 that the property has been conveyed to KD Custom Builders, LLC who we now represent.

The following response in bold following each comment related to the proposed common driveway is offered for your review and consideration:

Comments by Weston & Sampson Engineers, Inc. Submitted to Planning Board, dated 4/21/22

1. *A common driveway shall be within a 40-foot permanent easement provided for common driveway use.*

The plans do not show a 40-foot-wide easement for the common driveway. We recommend that the applicant show the required easement on the plans. We also recommend that the board include a condition in its approval requiring the applicant to provide evidence that the easement has been recorded with the Norfolk County Registry of Deeds prior to issuance of any building permits.

Response: The easement for the common driveway has been increased to 40' in width.

2. *For 3-5 houses, minimum drive width shall be 15-feet in paved width with 2.5-foot shoulders and a 2-inch crown.*

The applicant has proposed a drive width of 15-feet with 2.5-foot shoulders in compliance with this requirement. The plans show a typical driveway section with the driveway pitching to one side instead of being crowned. The slope of the driveway is indicated as 3/8"/foot which is approximately a 3% cross-slope, whereas a 2-inch crown centered on a 15-foot paved section would produce a 2% cross-slope. While these slope and crown parameters differ from the standards, in our opinion they are not objectionable from an engineering standpoint. We leave it to the discretion of the board whether they wish to accept and grant a variance for this alternate design approach.



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Response: The driveway cross-section detail on sheet 6 was revised to call for a 2% cross slope.

3. *Maximum length and turnaround requirements.*

The applicant proposes a common driveway of 687-foot length, which is less than the 750-foot maximum length prescribed by the standard. A tee-shaped back-up strip is proposed. Dimensions of the back-up strip are not shown on the plans. At the scale of the drawings, the back-up strip appears to be 15 feet wide, measures 45-feet in each direction perpendicular to the road centerline and has 30-foot radiuses connecting it to the driveway. These dimensions meet the standards. We recommend that the applicant confirm that these are the correctly scaled dimensions and show them on the plans.

Response: The common driveway is 690' long which is well under the 750' long maximum allowance. Dimensions have been added to the common driveway as requested.

4. *Subgrade preparation*

The standards require clearing of topsoil, peat, stumps, brush, roots boulders and other unsuitable materials and that the applicant have the subgrade inspected and approved by the Highway Surveyor. We recommend that the board include this and other inspections required of the Highway Surveyor as part of its conditions of approval.

Response: No comment.

5. *Pavement*

The applicant has proposed a driveway pavement cross-section consisting of 12 inches of gravel base, 2 inches of binder course pavement and 1.5 inches of top course pavement. This appears to generally comply with the pavement standards; however, we also recommend that the plans include notes specifying the compaction, gravel material gradation and other specific requirements regarding paving that are stated in the standard.

Response: We have added specifications as requested.

6. *Driveway Embankments*

The applicant has proposed 3H:1V Driveway Embankments. These slopes meet the standard, but plans do not indicate how the slopes will be stabilized. We recommend that the applicant provide information on the plans indicating that slopes are to be stabilized with a minimum of 3 inches of loam and seeded with grass.

Response: A note has been added to the revised plans.

7. Drainage

The applicant proposes to install gravel infiltration trenches at the edges of the roadway. These measures seem reasonable assuming that the underlying soils are permeable enough to recharge stormwater. We recommend that the applicant provide information regarding the characteristics of the underlying soil with respect to their ability to infiltrate stormwater.

While the scope of this peer review is limited to review of the applicant's submittal as a common driveway application, we do make note of the following issues related Town policy raised by the applicant's proposal.

Response: USDA's Web Soil Survey describes upland soils on site as Charlton-Hollis-Rock outcrop complex and Rock outcrop-Hollis. Charlton Soils are B soils and Hollis Soils are D soils. Test pits will be conducted at the proposed trench locations to confirm soil type. It is important to note that the trenches are being proposed to provide treatment. Since the direction of stormwater flow is toward Land Subject to Coastal Storm Flowage, matching peak rate of runoff and volume is not critical.

8. Roadway Standards for Width

Black Horse Lane appears to be significantly less than 20 feet wide on some parts of the proposed site plan (e.g., near the fork of Black Horse Lane) that will become public roads if the Town approves the applicant's proposal. We would, therefore, recommend the applicant explain the rationale for the Town to accept the new length of Black Horse Lane or revise the proposal to ensure compliance with standards.

Response: The status of the existing 20' ROW serving 70, 80 and 90 Black Horse Lane is independent of the proposed common driveway. We are conservatively treating the 20' ROW as an existing portion of the common driveway to be widened as required for common driveways serving more than 5 houses.

9. Dead End Length

As noted above, the applicant's submittal proposes to increase the length of Black Horse Lane. The full length of road leading to the common driveway would appear to become a dead end as a result of accepting the proposed common driveway. Current Town standards require dead-end roads be 1,500 feet or less. We would recommend that the applicant provide a callout to indicate the length of the dead end created as a result of approving the proposed common driveway. We would also recommend that the applicant provide a rule-based justification for the start and end points of the dead end to ensure that the proposed changes to Black Horse Lane will meet the 1,500-foot standard.

Response: The proposed common driveway will not extend Black Horse Lane as it is not a subdivision road.

10. New Frontage Lots

It would appear that approving the proposed common driveway will necessitate the establishment of new frontage lots. We recommend that the applicant explain how standard frontage requirements will be met since common driveways cannot be used for frontage.

Response: The purpose of the common driveway is to provide access to existing lots protected under the Single Lot Exemption in the Cohasset Zoning Bylaw §300-8.3. Please refer to attorney Watsky's letter to the Planning Board dated 5/31/22.

11. *Concept Dwellings*

The proposed conditions sheet (4 of 6) shows "concept dwellings" that appear to interrupt a right-of-way/easement shown on the existing conditions sheet. It is unclear to us whether the Town can accept an application that implies frustration of an easement, even in concept. We would recommend revising the plan set to relocate or eliminate the concept dwellings. We would also recommend that all existing easements are shown on any updates to the proposed plan sheets to help prevent implied conflicts.

Response: While this application is for a common driveway only, we thought it would be helpful to include concept driveways and dwellings. The concept dwellings and driveways have been removed from the plans.

We are enclosing six (6) copies of the revised plan set and look forward to presenting it to you and the Board at our public hearing rescheduled for 7/13/22. Please let us know if you have any questions regarding this request or the enclosed materials.

Sincerely,

Cavanaro Consulting



Carmen C. Hudson, P.E.
Project Engineer

Enclosures

cc: N. Dinunno
M. Watsky
File 22033.1