TOWN OF LEDYARD

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LAND USE DEPARTMENT

Memorandum:

To: Juliet Hodge, Director of Land Use & Planning

From: Steve Masalin, Public Works Director/Town Engineer

Date: December 6, 2022

Re: Avery Brook Homes, 94/96/98/100 Stoddards Wharf Rd (Appl. IWWC #22-18URA, PZ

#22-18SUB)

I have reviewed the plans and stormwater management report for the subject application. I have the following comments.

1. General

- a. I find that the application and stormwater management system meet the requirements of the Drainage Ordinance (#300-017).
- b. Through extensive discussions with the applicant and in light of the nature of the application, including transition from private to public roadway, an exception regarding road width was considered and accepted. An allowance for a 22' width was granted beyond the Road Ordinance (#300-025) limit of a road serving up to eight (8) lots.

Notwithstanding, I continue to have reservations, based on experience, about the practical realities of a minimum-width road. Though we have robust enforcement provisions for parking violations, the likelihood remains of at least periodic issues with necessary routine access of large vehicles, such as curbside collection trucks, delivery trucks, plow trucks, etc,

On the other hand, as regulations have generally been progressively revised to accommodate mandates and best management practices (BMPs) associated with minimizing the impacts of development-related stormwater, reduction of the width of roadways is a measure that is finding more widespread adoption. Thus, I would see this as a relevant consideration here.

To offset the lack of access to on-street parking, the applicant has included a small public parking area for overflow parking in the parcel to be conveyed to the Town. The Town should not be required to maintain this public parking lot, even though on Town property. There should be a formal agreement that the maintenance needs of this lot, whether general or snow-removal-related, are the responsibility of the residents. In the absence of such agreement, the Town should not bear this responsibility.

Also, In keeping with stormwater impacts mitigation, elimination of curbing where practicable in allowing sheet in lieu of concentrated flow is another BMP. The applicant

has proposed a substantial stretch of the roadway without curbing. Again, though I have reservations about the eventualities of this based on some prior experiences, I feel that the grades of the affected area appear suitable for this approach.

2. Plans

- a. No Parking Signs: Part V, Section 2, Para E (Minor Local Streets) requires "No Parking" signs every 125' on both sides of the road for 22'-wide streets. This is contemplated in conjunction with at street that serves only 8 lots (for which an aforementioned exception has been afforded). If applied to this subdivision, this would calculate out to about 20 individual signs. This clearly seems excessive and would not be in the interests of the residents or the Town (from a maintenance standpoint). I recommend working out a more reasonable, tailored spacing/number of signs for this subdivision.
- b. Sheet 1: The following general notes should be added:
 - 1) "Actual conditions that develop or are more clearly assessed during construction may dictate that field adjustments, including additional drainage and sightline measures, may be necessary for adequate stormwater management. Additional design effort for and installation of such measures shall be undertaken in accordance with direction from the Town."
 - 2) "The Town will install the required road signage and markings, the cost of which will be backcharged to the applicant/owner."

c. Sheet 6

- 1) There is a curbing gap between stations 12+80 and 13+50 on the west side of the road that should be annotated for curbing.
- 2) The discharge invert of 144.75 for the basin is wrong. It should be revised to provide the correct pitch to meet the calculations of the drainage analysis. Also, appropriate grading should be depicted to integrate this within the downgrade sloped area.
- d. Sheet 7: The pipe inverts associated with CBs 2 and 3 appear to be reversed.

e. Sheet 10

- 1) For clarity, invert elevations should be added to the D-Box detail.
- 2) There appear to be duplicate details for the preformed scour hole.
- f. Disparities exist between the Engineering Report Storm Sewer System Design tabulations and the inverts shown on the plans:
 - 1) Pipe length of CB 1 discharge pipe: 42' on plan, 48' in report.
 - 2) Pipe slopes:
 - a) Pipe from CB 3 to CB 2: .020 in report, calculated at .0125 from plan elevations.
 - b) Pipe from CB 2 to CB 1: .017 in report, calculated at .0125 from plan elevations.
 - c) Pipe from CB 1 to discharge: .170 in report, calculated at .048 from plan elevations.

This doesn't seem to necessarily present a problem based on the reserve of pipe capacity indicated in the report, but since the construction slopes are less, the analysis should be rerun to confirm adequacy.