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September 22, 2025

Groton Planning Board c/o Mr. Takashi Tada Land Use Director/Town Planner 173 Main Street Groton, MA 01450 RE: Nitsch Project #13346.31
Casella Meadows
Definitive Subdivision Plan and
Flexible Development
Special Permit Review
Groton, MA

Dear Planning Board Members:

Nitsch Engineering (Nitsch) has received and reviewed the following documents:

- 1. The Definitive Subdivision Plans (the Plans) entitled "Definitive Subdivision & Flexible Development Plan, Groton, MA, Casella Meadows" (16 Sheets), dated June 3, 2025, and prepared by Dillis & Roy Civil Design Group;
- 2. The Conceptual Yield Plan, dated January 2, 2025, and prepared by Dillis & Roy Civil Design Group;
- 3. The Pre-development Drainage Area Map, dated June 3, 2025, and prepared by Dillis & Roy Civil Design Group;
- 4. The Post-Development Drainage Area Map, dated June 3, 2025, and prepared by Dillis & Roy Civil Design Group:
- 5. The Stormwater Report (186 Pages), dated June 3, 2025, and prepared by Dillis & Roy Civil Design Group.

Nitsch has reviewed the Plans and supporting documents 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.

Nitsch is conducting a review of the stormwater management system design and will provide a separate review letter with our comments to the Earth Removal Stormwater Advisory Committee.

WAIVERS REQUESTED BY THE APPLICANT

1. Section 381-10.B.(5) – A waiver is being requested to allow cape cod berm along the entire road except at the roundings (granite curbing provided at roundings).

The proposed subdivision roadway, Casella Lane, is defined as a Lane under Section 180-1.A.(1)(c) since it provides access to less than 20 dwelling units. Per Section 381-13.D.(2), for a Lane bituminous Cape Cod berm is allowed on both sides of the roadway. Since the Applicant has agreed to install granite curbing at the proposed roundings along Wyman Road to comply with Section 381-10.B.(5), Nitsch believes this waiver request is not necessary and takes no exceptions to the proposed design.

2. Section 381-10.E.(2) – A waiver is being requested to reduce the minimum road width within the culde-sac (required: 24-feet, proposed: 22-feet).

Nitsch takes no exceptions to the proposed 22-foot roadway width within the cul-de-sac provided the Applicant confirms through truck turning movements that fire trucks and delivery vehicles can drive safely around the cul-de-sac without driving over the curb and landscape shoulder.

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3. Section 381-11.C.(11) – A waiver is being requested to allow plastic drainage pipe in lieu of reinforced concrete.

Nitsch takes no exceptions to this waiver request.

4. Section 381-13.A. – A waiver is being requested to remove the sidewalk requirement.

Nitsch takes no exceptions to this waiver request.

ZONING

1. Section 218-9.1.F.(4) states the minimum frontage of any lot shall not be less than 40 feet.

The frontage provided for Lot 4 is less than 40 feet. The Plans should be updated to provide at least 40 feet of frontage at Lot 4.

2. Section 218-9.1.O. states a buffer area of 50 feet shall be provided at the perimeter of the property where it abuts residentially zoned or occupied properties, except for driveways necessary for access and egress to and from the site. No vegetation in this buffer area will be disturbed, destroyed, or removed, except for normal maintenance.

The Applicant should confirm if a minimum 50-foot vegetated buffer area will be maintained along the perimeter of the property. If not, the Applicant should request a waiver from this Section.

3. Section 218-9.1.G. states the basic maximum number of dwelling units allowed in a flexible development shall not exceed the number of lots which could reasonably be expected to be developed upon the site under a conventional plan in full conformance with all zoning requirements, subdivision regulations, health regulations, wetlands regulations, and other applicable federal, state and local requirements (hereinafter, the yield plan).

The Applicant should confirm their Conceptual Yield Plan meets all requirements for a conventional subdivision. It appears Lots 1 and 5 do not meet the requirements of Section 218-6.3.K. for minimum lot width.

SUBDIVISION RULES AND REGULATIONS

4. Section 381-8.C.(1) states the Applicant shall provide a written statement addressing the items in this Section, including calculating the amount of cut and fill required for site development.

The Applicant should provide this written statement and include a cut and fill analysis.

5. Section 381-12.A.(1) states if a public water system is not located within 2,500 feet of the proposed street, water main and appurtenances shall be installed in the new subdivision road for a future connection to a public water supply.

The Plans should be updated to include a water main and appurtenances (bends, gate valves, tees, and hydrants) in the proposed roadway.

6. Section 381-12.C.(1) states wherever Town water is not available, fire sprinklers in every residential structure (preferred) or fire cisterns shall be installed.

The Plans do not currently show fire sprinklers or fire cisterns for fire protection service. The Applicant should confirm that fire protection service (whether in the form of fire sprinklers or fire cisterns) is being provided.

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7. Sections 381-36.B.(2) and (3) states the shared driveway shall have a 6-inch gravel base conforming to Standard Specifications for Highways and Bridges (SSH&B) M1.03.0, Type B, and 3 inches of dense graded crushed stone.

The Applicant should provide a detail for the proposed common driveway that meets the standards indicated in these Sections.

8. Section 381-36.B.(4) states the aprons for shared driveways shall be constructed to the bituminous sidewalk standard of the Planning Board's Subdivision Rules and Regulations for the first 20 feet from the driveway intersection with the street.

The Applicant should provide a detail for the proposed common driveway apron that meets the standards indicated in this Section.

GENERAL COMMENTS

- 9. The Plans should be updated to include a detail for the Cape Cod berm. Recommended dimensions for the berm are 12 inches wide and 4 inches high.
- 10. The Plans should be updated to include labels for the granite curb at the intersection with Wyman Road.
- 11. The Plans should be updated to include information on the horizontal geometry of Casella Lane, including roadway widths and radii of curbs/berms.

RECOMMENDATIONS

Nitsch recommends the outstanding items noted above be addressed by the Applicant prior to the Planning Board granting approval of the Definitive Subdivision Plan and Flexible Development Special Permit.

If the Planning Board has any questions, please let us know.

Very truly yours,

Nitsch Engineering, Inc.

Rones Lubin

Senior Project Designer

Approved by:

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

Deputy Director of Civil Engineering

RL/jeg