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April 29, 2022

Ms. Karen Sherman  
Town Planner  
Town of Holliston  
703 Washington Street  
Holliston, MA 01746

**Re: Definitive Open Space Residential Development (OSRD) Peer Review  
“Hidden Cove” Hill Street Holliston, MA  
CMG ID 2022-095**

Dear Karen,

CMG is providing this letter report detailing our engineering peer review of the “Hidden Cove” Definitive Open Space Residential Development in Holliston, MA (the “Site”). The project Applicant, SNZS LLC, Inc. is proposing to construct a two (2) lot open space residential development on Hill Street. The existing property currently consists of approximately 9.81 Acres located within an Agricultural-Residential B Zoning District. Portions of the Site are also partially located within the 100-year FEMA Flood Plain, and Groundwater Protection District. The project will require Definitive Subdivision Approval, Site Plan Review & Special Permit (Section V-L.D.2 Groundwater Protection District-Zone II), and a Scenic Road Permit.

CMG is in receipt of the following documents:

- “Hidden Cove Definitive Subdivision” Plan Set prepared by Legacy Engineering LLC, date March 11, 2022.
- “Stormwater Report For Hidden Cove Subdivision Holliston, MA” prepared by Legacy Engineering LLC, date March 11, 2022.

CMG is providing this letter summarizing our review comments for the above documents to evaluate the project’s compliance with the following regulations for Planning Board consideration:

- Town of Holliston Zoning By-Laws date May 10, 2021, Amendments approved by the Attorney General’s office on August 26, 2021.
- Town of Holliston Planning Board Rules and Regulations amended through January 5, 2012.

- MA-DEP Stormwater Management Standards and related Town of Holliston May 2021 Stormwater Management and Land Disturbance Permit regulations

CMG provides the following technical comments for the Board’s consideration:

**Holliston Zoning By-Law Comments:**

1. Section V-H 6.A 2) - Applicant should verify with the Fire Department what size vehicle will need to access the cul-de-sac and provide a truck turning diagram to verify there is adequate pavement width for the required design vehicle.
2. Section V-H 7.A 4) The proposed use of the common open space should be identified by the Applicant and is subject to approval by the Planning Board.
3. Section V-H 7.A 6) The proposed stormwater detention basin is located partially on Lot 1 and partially within Open Space Parcel C. Applicant’s Engineer should verify the proposed stormwater basin is not included within the minimum open space required.
4. Section V-H 8.A Applicant needs to provide information relating to which type of entity the common open space will be conveyed and maintained upon completion of the project.
5. Section V-L E.4 Groundwater Protection District Review Criteria; CMG’s review finds the proposed OSRD Subdivision to be in compliance with this Section as it will not adversely affect the existing or potential quality or quantity of water available in the Groundwater Protection District. The project design appears to avoid substantial disturbance of soils, topography, drainage, vegetation and other water-related natural characteristics of the site to be developed to the maximum extent practicable.

**Holliston Planning Board Subdivision Rules and Regulations Comments:**

6. Section 4.3.1 k – Applicant is requesting a waiver to not require the location of 14” diameter trees. CMG recommends Applicant discuss this waiver request with the Planning Board.
7. Section 5.2.1 a – Applicant is requesting a waiver to allow the proposed street to have a slope of greater than 2% after the first 75 feet. CMG recommends approval of this waiver request as the design provides the appropriate vertical curves and the proposed transition is to a 5.5 % grade.
8. Section 5.2.1 d – CMG recommends the Applicant request a waiver for the allowance of Parcel A & B. Reserve strips are only allowable if the Planning Board considers such strips to be in the public interest.
9. Section 5.2.1 g – Curb radii at Hill Street intersection and cul-de-sac roundings should be labeled on the plan.
10. Section 5.2.5.3 & 5.2.5.4 – Pavement cross-section should be provided on the Detail Sheet specifying the required gravel base and bituminous pavement specifications.
11. Section 5.2.5.5 – Applicant is requesting a waiver to allow cape cod berm. CMG recommends at a minimum vertical granite curbing be installed at the roadway intersection

- roundings at Hill Street and transition to cape cod berm. In addition, all curbing and cul-de-sac curb radii should be specified in the plans.
12. Section 5.3.3 – Applicant is requesting a waiver to allow HDPE drainage pipes instead of reinforced concrete pipe (RCP). Waiver request is provided in the “Site Narrative” and should also be listed on the Title Sheet C-0.
  13. Section 5.3.3 – Applicant is requesting a waiver to allow pipe cover of less than 36”. CMG recommends additional information be provided to specify the minimum cover depth requested and pipe manufacturers information to verify there is adequate cover to maintain H-20 loading.
  14. Section 5.4.4 – Schematic layout of underground electric / cable / telephone / utilities are not shown on the plan.
  15. Section 5.5.5 – Applicant is requesting approval to remove the existing 20” Oak tree at the right-of-way intersection with Hill Street. Street tree locations are shown on Plan & Profile Sheet C-10, however street tree planning species, caliper, and planting details should be included on the plan including the replacement for the 20” Oak tree.
  16. Appendix B – Detention Basins: Applicant is requesting a waiver to not require a slope for basin bottoms. CMG recommends the Planning Board approve this request.

### **General Engineering & Drainage Design Comments**

17. A portion of the proposed Drainage and Access Easement is located within the existing Boston Edison Easement. Applicant should confirm with Boston Edison the proposed grading and easement are allowable within the easement and provide documentation to the Planning Board.
18. Proposed top and bottom of wall spot grades should be provided for the proposed retaining wall along the east side of the roadway to confirm the wall height. CMG recommends the design of the retaining wall, guard rail, and fencing (if required) for any wall sections 4 ft. in height or greater be prepared by a licensed structural engineer prior to construction.
19. Rational method pipe sizing calculations should be provided to confirm each individual drain pipe capacity.

**Stormwater Standard 1:** *No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or water of the Commonwealth.*

20. Rip-rap aprons dimensions and a detail should be provided. Applicant’s engineer should also provide design calculations for proposed riprap aprons to verify the apron size will be able to handle 100-year flow events.

**Stormwater Standard 3:** *Loss of annual recharge of groundwater shall be eliminated or minimized.*

21. The proposed surface stormwater basin bottom (Elev = 190.5) appears to be less than 2’ of vertical separation to estimated seasonal high groundwater (ESHGW). ESHGW in the vicinity of the proposed stormwater basin is identified at 42” below the ground surface (Elev. = 189.3) based on test pit D-2.

22. CMG recommends ESHGW elevations in addition to a schedule of elevations for both the infiltration trench and infiltration basin be provided on Detail Sheet C-12.

23. CMG recommends Applicant's Engineer consider design of concrete collars for cast iron inspection port covers within cul-de-sac pavement or center landscape island for placement of access covers if truck turning radii allows.

**Stormwater Standard 4:** *Stormwater management systems shall be designed to remove 80% of the average annual post construction load of Total Suspended Solids (TSS).*

24. First Defense Unit model number is not specified on the plans or stormwater report. Manufacturer's TSS removal calculations and grate inlet capacity based on the proposed design flow should be provided.

If you have any questions or need additional information, please contact me at (508) 864-6802.

Sincerely,  
CMG



David T. Faist, PE  
Principal Engineer