

October 19, 2023

MEMORANDUM

To: Suzanne Simone, Environmental Planner
Conservation Commission

From: Stephen Braun, Assistant Town Engineer

Re: 64-Unit Residential Planned Area Development
Glastonbury Housing Authority
55 Nye Road

The Engineering Division has completed a preliminary review of application materials for the proposed 64-Unit Residential Planned Area Development for the Glastonbury Housing Authority located at 55 Nye Road prepared by Benesch including construction plans dated October 13, 2023 and the related Stormwater Management Report dated October 12, 2023 and offers the following comments:

Stormwater Management Report

1. The Stormwater Management Report indicates that the project site meets the requirements for redevelopment relative to water quality volumes and the Town's MS4 permit standards however computations show that the existing site is approximately 22% impervious versus the 40% required for redevelopment. Based on the data provided the site does not appear to meet the redevelopment standard and therefore 100% of the water quality volume should be retained for this project. This could be accomplished by modifying the pervious paver areas to retain water below the level of the proposed underdrain or through other possible treatment mechanisms. Treatment systems designed for the water quality flow do not meet the requirements of the MS4 permit.
2. A new Stormwater Quality Manual was issued on September 30, 2023 by the Department of Energy and Environmental (CTDEEP) which increases the water quality volume to include the first 1.3 inches of stormwater run-off and goes into effect upon issuance. A waiver is noted in the manual for projects that have surpassed 50% design at the time of issuance. Applicant should provide a statement in the report indicating level of design completed and the relevance of the new manual to the project.
3. Drainage computations do not account for off-site stormwater run-off coming from the drainage area to the north of the subject property. While this won't likely affect pre and post development analysis it will affect peak discharge computations and should be reviewed relative to the need for additional stormwater systems on the north side of the property, particularly above and below the proposed retaining walls and residential buildings in this area.
4. Test pits to confirm soil type and groundwater levels in the areas of the proposed stormwater management facilities should be conducted as soon as possible to verify infiltration rates used and ensure feasibility of proposed design.

5. The Stormwater Management Report should include computations for outlet protection sizing as well as for channel lining analysis for proposed swales. Erosion control matting or other suitable channel lining should be shown on the plans for the swales with an appropriate detail.
6. Many inconsistencies are noted between the Stormwater Management Report and the proposed drainage system shown on Sheet L3.0 of the plans. These will need to be corrected and resubmitted for further review.

Construction Plans:

7. Sheet L1.0 and L1.1 – The address of the abutting Town property should be corrected to indicate 50 Nye Road, not 43-45 Nye Road.
8. Sheet L1.4 – Erosion and Sediment Control Narrative should include an estimate of disturbed area and a discussion of project sequence and phasing. Disturbance greater than 5 acres will require registration with the CTDEEP under the construction general permit.
9. Sheet L2.0 – Each proposed building in the project must be assigned a unique address and labeled as such on the plan per the Town's current addressing policy. Consideration should be given as to a name for the private road serving the facility or if these buildings will all be given Nye Road addresses. The Engineering Division should be consulted for further guidance on this item.
10. Sheet L2.0 – 60-degree angled parking creates an 18'-9" vehicle projection from the curb which extends into the relatively narrow 14'-wide one-way roadway. This will create a particular problem where parallel spaces are across the street from angled parking. It is suggested that the driveway be widened in these areas or the parallel parking be relocated. Parallel parking spaces should also be a minimum of 22' in length.
11. Sheet L2.0 – Proposed signage including stop signs, one ways signs, pedestrian crossing signs, etc. should be shown on this plan or a separate plan created for this purpose.
12. Sheet L2.0 – Proposed pavement markings should be labeled with the size type and color of proposed markings. The stop bar northwest of the community building is located in the middle of a parking space. This parking space should be eliminated since the stop bar needs to be kept back a minimum of 4' from the pedestrian crosswalk.
13. Sheet L2.0 – Proposed speed tables will require supplemental pavement markings and signage. A detail for the proposed speed tables should be provided to clarify design intent.
14. Sheet L2.0 – Identify the location of the central mail box for the project according to new USPS regulations.
15. Sheet L2.0 – A plan for snow storage should be considered based on the extent of hard surfaces to be maintained throughout the project. Specific snow storage

areas should be designated on the plans for that purpose to ensure that the area is free of improvements that would be damaged.

16. Sheet L2.0 – Applicant should consider use of clay brick pavers rather than concrete pavers to increase resistance to salt damage. Applicant should also consider use of alternates to concrete curbing to reduce potential for future spalling due to salt damage.
17. Sheet L2.1 – Applicant should consider other design vehicles including delivery trucks and moving trucks to ensure they can navigate the facility.
18. Sheet L3.0 – Plans should depict the existing sidewalk in the Nye Road cul-de-sac, and the applicant should review options that would avoid steps where proposed sidewalk meets the cul-de-sac sidewalk for ADA accessibility.
19. Sheet L3.0 - Consider constructability of a central crown in the 14'-wide one-way access road. Cross pitch to one side would seem easier to construct.
20. Sheet L3.0 – Label underdrains on the plan and show the line type in the legend.
21. Sheet L3.0 – The Town standard MS4 tracking table should be added to this sheet and a detailed maintenance plan for all stormwater facilities added to the plan set.
22. Sheet L3.0 – Storm drain pipe between CCB S-2.6 and DMH S-2.31 is too close to the proposed residential building and should be relocated. The Pond outlet structure should also be labeled on the plan.
23. Sheet L3.0 - A gravel access way should be provided for Pond 2 to ensure equipment can reach all areas that would require maintenance.
24. Sheet L3.0 – Proposed swale along the western property line should be captured into the storm drainage system rather than directing flow onto Nye Road.
25. Sheet L4.0 – Include root barriers in all areas where proposed trees abut new hardscape areas including sidewalk, roadways, and parking areas.
26. Sheet L4.0 – Consider the need for additional screening for the property to the west of the project site at 43-45 Nye Road.
27. Sheet L5.0 – Sewer laterals must be 6" PVC and collectors must be 8" PVC. Provide a profile along all sewer collector pipes and depict storm drain and water crossings to review for possible conflicts.
28. Sheet L5.0 – Label building addresses and finish floor elevations on utility plan.