



# Town of Simsbury

933 HOPMEADOW STREET

SIMSBURY, CONNECTICUT 06070

Office of Planning and Community Development

**To:** Simsbury Zoning Commission  
**From:** George K. McGregor, AICP  
**Date:** March 6, 2023  
**RE:** ZC 23-03, 446 Hopmeadow St. Vessel Technologies

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## Summary of Request

**Application ZC #23-03** of Vessel RE Holdings, LLC, Applicant, EAY Properties, LLC, Owner, for a site plan pursuant to CGS 8-30g for construction of a  $\pm$  55,030 sq. ft., 80-unit, multi-family development, at 446 Hopmeadow Street. (Assessor's Map G13, Block 142, Lot 003C) Simsbury, CT 06070. Zone R-15.



The application submission details a four story, modern structure set back approximately 300 feet from Hopmeadow St. consisting of 77 one-bedroom units and 3 two-bedroom units. Consistent with 8-30g requirements, 30% of the units are affordable (a summary of the 8-30g process can be found later in this memorandum). A total of 95 parking spaces are provided, including 10 dedicated E/V charging stations.

Telephone (860) 658-3245  
Facsimile (860) 658-3206

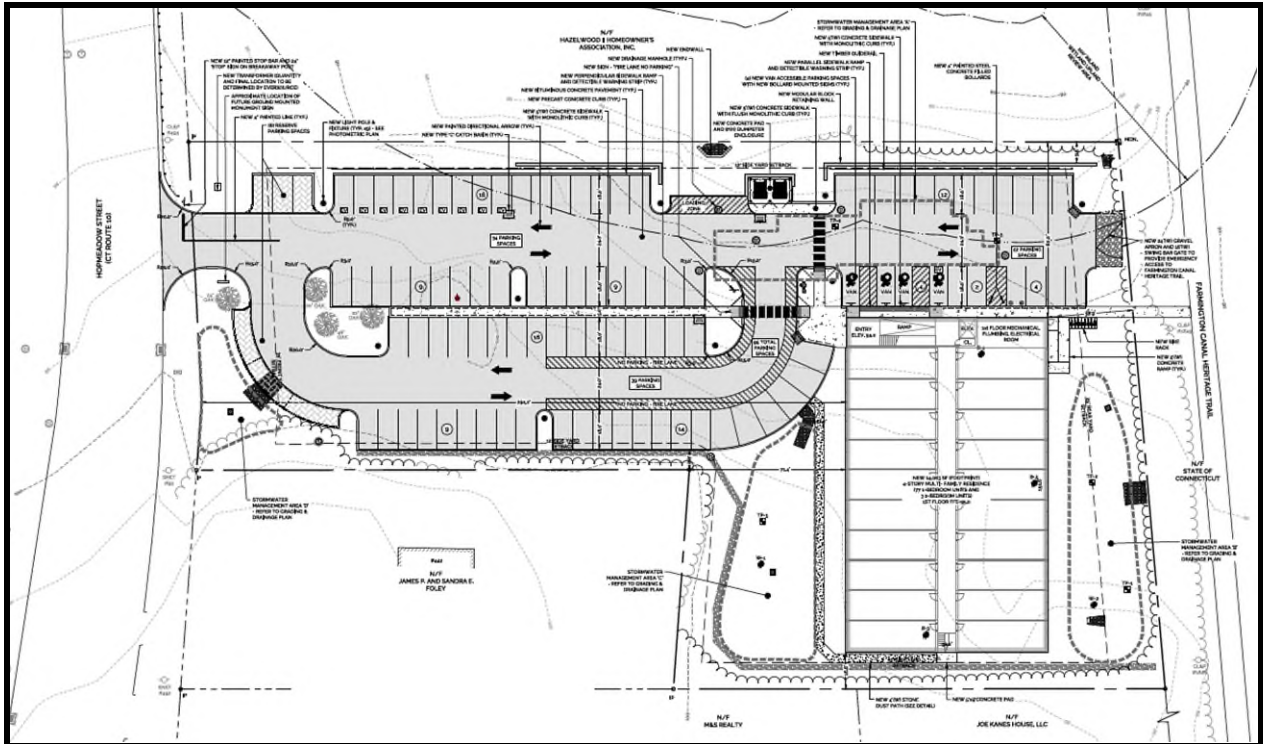
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8:30 - 7:00 Monday  
8:30 - 4:30 Tuesday through Thursday  
8:30 - 1:00 Friday

Stormwater management systems include both underground retention and conventional stormwater management areas. The Applicant revised the site plan based on Staff agency comments. It includes a full civil engineering plan set with stormwater, site layout, utilities, erosion & sediment control, and landscaping details.

Vessel Technologies has also submitted Traffic, Geotechnical, Affordability, Architectural, and Wetlands Studies in support of the site plan application.

### Site Layout



### Summary and Status of Issues, Staff Comments, and Referral Agency Review

Please note that all Staff generated comments and the Applicant responses are included in full as attachments to this memorandum.

Engineering—Town Engineering Staff identified primary issues related to Stormwater Management and questions regarding the Traffic Study. The applicant responded with revisions to the plan set, stormwater plans, and geotechnical plans. Those changes are deemed satisfactory with one exception: The Stormwater Report Infiltration Rates. The Town and the applicant continue to work on this issue and will provide an update at the meeting.

Regarding the traffic study, the applicant responded that their analysis indicates that access to and from the site will not conflict with turning movements and queue at the Powder Forest light.

Planning—Planning Staff requested additional information related to the provision of solar and EV charging stations. Staff also requested the applicant consider preserving several large trees on site. In

concert with the Engineering Department, Staff asked the applicant to justify the parking calculations. These considerations have been reasonably addressed.

A remaining outstanding issue relates to the construction of a sidewalk along Hopmeadow St. The applicant contends that due to topography and other engineering issues, the sidewalk is not feasible. In the alternative Staff requests the applicant reserve, for future dedication at the Town's request, right-of-way to accommodate a future sidewalk. The applicant agrees to this request.

Fire District—The Fire Marshall identified several issues of concern related to fire access and fire protection. The Applicant responded with changes to the site plan including, but not limited to, fire lanes, a new hydrant, dumpster relocation, and paver installed emergency access from the trail. All issues have been addressed.

Police Department—No outstanding issues.

School District—No outstanding issues.

Water Pollution Control—The WPCA requested revisions to the plan set have been accommodated. This action resolved any outstanding items.

### **Plan of Conservation and Development (POCD)**

The POCD identifies the subject parcel as a part of Weatogue Center. Overall, Simsbury strives “to maintain and enhance Weatogue Center as a unique place in Simsbury with a sense of place (POCD Goal 8.5). The POCD calls for *appropriate development* in this area in order to foster a pedestrian-friendly place. The POCD does not provide specific insight as to what exactly constitutes *appropriate development*. A mix of lands uses is consistent with this goal.

Existing land uses in Weatogue Center are diverse: A residential condominium complex to the north; a major Planned Area Development to the west with residential, office, and industrial zoning; four single-family houses and the Mitchell Automotive property to the south; to the east, the Farmington River. North of the Sand Hill/Canal St/Stratton Brook Rd. intersection is a mixed of non-residential uses including traditional office, an Inn, and small-scale commercial uses converted from former residential uses.

### **Inland Wetlands Agency Review**

The project includes construction activity in the upland review area as shown on the site plan; a wetlands permit is required. The Inland Wetlands Agency has scheduled a public hearing for March 7, 2023. The Zoning Commission may begin its review of the application but may not render a decision until the Wetlands Agency has completed its work.

### **Design Review Board**

The application was presented to the Design Review Board on February 6, 2023. The DRB requested additional information and asked the applicant to consider alternative colors and panel design. DRB will review any revisions to the project on March 6, 2023. Staff will provide a verbal update on the DRB review and recommendation and the Zoning Commission meeting on March 6, 2023.

## **8-30g Review and Timeline**

Connecticut General Statutes Section 8-30g mandates the review and appeals process for statutorily defined Affordable Housing Developments. Under the law, an affordable housing development is a development in which, for at least 40 years, at least 30% of the units are deed restricted. Specifically, at least 15% must be deed restricted to households earning 60% or less than area median income (AMI) and 15% must be deed restricted to households earning 80% or less of AMI.

Municipalities, where more than 10% of the units are “affordable,” are exempt from CGS 8-30g. According to the State Department of Housing 2022 numbers, 5.08% of Simsbury’s units are affordable.

Projects submitted under 8-30g are not required to comply with local Zoning or Subdivision Regulations. The standard of review is state mandated. 8-30g details a four-part standard of review:

- The decision is supported by sufficient evidence on the record
- The decision is based on the protection of a substantial public interest
- The public interest clearly outweighs the need for affordable housing
- There are no modifications that can reasonably be made to the application

As the application is being processed as a site plan, a decision must be rendered by the Zoning Commission within 65 days of receipt. The application was received on January 18, 2023. March 24, 2023 is the deadline for action unless extensions are granted by the applicant (a total of 65 additional days may be granted).

## **Public Comment**

The Department has received public comment on this project. As this is a site plan with no ordered public hearing, the emails and letters are included in the Agenda packet as Commission Correspondence.

## Attachments

1. Planning Department letter dated 2-2-23
2. Engineering Letter 2-10-23
3. Fire Marshal Letter 2-14-23
4. WPCA Letter 2-13-23
5. Police Department email 2-9-23
6. School District email 2-2-23
7. Applicant Response Letter 2-6-23
8. Applicant Response Letter 2-24-23

## Draft Motions

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**MOVED, the Town of Simsbury Zoning Commission APPROVES ZC 23-03**, an application of Vessel RE Holdings, LLC, Applicant, EAY Properties, LLC, Owner, for a site plan pursuant to CGS 8-30g for construction of a  $\pm$  55,030 sq. ft., 80-unit multi-family development, at 446 Hopmeadow Street. (Assessor's Map G13, Block 142, Lot 003C), based on the following findings:

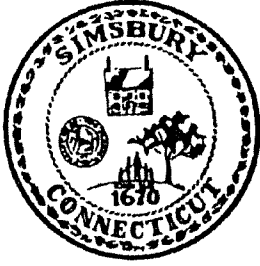
- a. Under 5% of the total housing units in Simsbury are classified as “affordable.” The need to provide for affordable housing units in the Town of Simsbury is paramount and;
- b. There is no evidence in the record that a substantial public interest exists which outweighs the need for affordable housing; and
- c. The following conditions and modifications are reasonable:

### Conditions of Approval

1. The property shall be developed in substantial conformance with the site plan set dated December 16, 2022, revised **February 24, 2023**, prepared by H&H Engineering.
2. The property shall be developed in substantial conformance with the illustrative architectural set prepared by Vessel Technologies.
3. Prior to the issuance of a building permit for this project, the Applicant shall submit to the Town of Simsbury an Erosion & Sediment Control Bond, in a form acceptable to the Town, in the amount of \_\_\_\_\_.
4. Prior to the release of any bonds for this project, the Applicant shall submit an “As-Built” to the Planning Department.
5. The property shall be developed in substantial conformance with the *Housing Affordability Plan for Household Income and Rental Price Restrictions for Housing Opportunity or Mixed-Income Units*, dated January 12, 2023.
6. A deed restriction for a set-aside development, consistent with CGS 8-30g-9, shall be recorded prior to the issuance of the first certificate of occupancy.
7. The Applicant shall reserve, for future dedication upon request of the Town of Simsbury and/or CTDOT, area sufficient to accommodate a five-foot wide sidewalk and related construction easements across the Hopmeadow St. frontage.
8. The emergency access apron shown on the site plan referenced in condition #1 shall be constructed with pavers acceptable to the Fire District.
9. An administrative zoning permit is required for construction.
10. The commission authorizes staff to approve minor changes to the approved plans such as landscaping, grading, etc. Said changes are to be made in writing to staff and approved prior to implementation.

**Or**

**Moved, (An alternative Motion)**



# Town of Simsbury


933 HOPMEADOW STREET ~ SIMSBURY, CONNECTICUT 06070

*Department of Public Works - Engineering Division*

## MEMORANDUM

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**To:** George K. McGregor, AICP, Director of Community Planning and Development

**From:** Thomas J. Roy, P.E., Director of Public Works / Town Engineer 

**Cc:** Adam D. Kessler, P.E., Deputy Town Engineer  
Daniel F. Gannon, Project Engineer  
Laura Barkowski, Code Compliance Officer  
Joseph Hollis, Land Use Specialist

**Subject:** **Engineering Comments – Vessel Multi-Family Housing**

**Date:** February 10, 2023

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The Engineering Department has reviewed the documents submitted as part of a Site Plan Application for development of 446 Hopmeadow Street received by this department on January 11, 2023:

1. Site Development Plans set titled “Vessel Multi-Family Housing” prepared by HH Engineering Associates, dated December 16, 2022.
2. Stormwater Management Report prepared by HH Engineering Associates, dated December 16, 2022.
3. Geotechnical Report prepared by GEI Consultants, Inc. dated December 7, 2022.
4. Traffic Impact Study prepared by Fuss&O’Neill, dated December 2022.

The applicant has submitted plans to construct an 80-unit multi-family housing development with at-grade and subsurface stormwater management systems, retaining walls, guard rails, paved parking lot, and associated appurtenances at 446 Hopmeadow Street.

The following comments were issued on 1/27/2023 ahead of the IWWC Public Hearing:

1. Please provide the basis for providing 94 parking spaces to support the proposed 80-unit multi-family development. **Applicant responded 2/6/2023 with the basis of the parking calculation.**
2. Two (2) 8-foot wide van accessible spaces are provided, whereas for a total of 76-100 total parking spaces, 4 total (3 standard + 1 van) accessible parking spaces should be provided. Provide two additional accessible parking spaces for this project to comply with this requirement. **Applicant responded 2/6/2023 and will add accessible parking. However, one less space will be provided.**
3. An encroachment permit shall be filed with the State of Connecticut Department of Transportation for any work within the CT Route 10 Right-of-Way. Please provide a copy of all future communications with DOT regarding the development. **Applicant responded 2/6/2023 and concurs.**

4. The stormwater report identifies infiltration rates in monitoring wells MW-1 and MW-2 as 40 in/hr and 4 in/hr, respectively. The analysis halves these rates to serve as exfiltration design rates, which is consistent with the Connecticut DEEP Stormwater Quality Manual (CTSWQM). However, Engineering respectfully disagrees with the use of an exfiltration rate (20 in/hr) given that Table 8-3 of CTSWQM states the maximum soil infiltration capacity for an infiltration basin is 5.0 in/hr. In regard to the recommended number of tests and resultant design assumptions, the CTSWQM states;

*A minimum of three field tests and test pits or soil borings should be performed at each infiltration basin. The design of the basin should be based on the slowest rate obtained from the field tests performed at the site.*

Please revise the analysis to comply with the recommendations of the CTSWQM by utilizing the slowest rate obtained from field tests on this site. **Applicant responded 2/6/2023 with the intention to perform additional field tests. No additional action has occurred and comment remains unres**

5. CB-5 has 2-feet of cover whereas Section 5.2.1.g of the Town of Simsbury Highway Construction and Design Standards states "A minimum cover of 2.5 feet shall be provided for all drain pipes unless special designs, as approved by the Town Engineer, are utilized." Please revise accordingly. **Applicant responded 2/6/2023 and will revise with Class IV RCP.**
6. Provide a detail for the modular block retaining walls. **Applicant responded 2/6/2023 and will add typical details to plan.**

The following comments include review of the Traffic Report and further review of the plans and reports:

7. Sanitary sewer main and water main in Hopmeadow Street are not depicted on the plans. Provide location of each and include the invert elevation for the sanitary sewer connection as it is pertinent to the design and feasibility of sewer service.
8. Stormwater Management Area 'D' includes an emergency spillway that extends into the State right-of-way. We recommend reaching out to District 4 early to determine if this configuration is allowable.
9. Please confirm that a minimum 1 foot of freeboard is provided in all basins during the 100-year event.
10. Please provide information regarding the capture of floatables as it pertains to parking lot runoff and stormwater quality.
11. Is there potential for the the calculated southbound queue in Hopmeadow Street to conflict with vehicles exiting the proposed driveway?
12. Please confirm that there will be safe sight distance for vehicles exiting the proposed driveway against vehicles turning left out of Powder Forest Drive and traveling northbound. Please note that the beginning of this movement from Powder Forest Drive will often be obstructed by vehicles queued at the light.

# Simsbury Fire District

871 Hopmeadow Street • Simsbury, Connecticut • 06070

Patrick Tourville  
Fire Marshal

Phone 658-1973  
ptourville@simsburyfd.org

February 14, 2023

George K. McGregor, AICP  
Planning & Community Development Director  
Town of Simsbury  
933 Hopmeadow Street  
Simsbury, CT 06070

## Fire Marshal Comments, Vessel Apartment Complex

### Access

Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire code official.

Exception: Fences, where provided with an access gate equipped with a sign complying with the legend requirements of this section and a means of emergency operation. The gate and the means of emergency operation shall be approved by the fire code official and maintained operational at all times.

### Physical Protection

Where fire department connections are subject to impact by a motor vehicle, vehicle impact protection shall be provided in accordance with Section 312 of the International Fire Code.

- Assuming fire sprinkler connections will be located in first floor mechanical room will one parking space be removed in front of mechanical room for access to FDC on exterior wall? Also if bollards are installed to prevent vehicle impact will they limit the size of parking space provided.

### Fire Access Roads

Fire apparatus access roads shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof.

- No fire lanes identified, with limited access to building fire lanes must be established.

### Multiple Access Roads

More than one fire apparatus access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climate conditions, or other factors that could limit access.

- With only a 24 foot wide driveway, one entry way, and limited road access on site plan, fire apparatus will have issues with vehicle congestion throughout the planned parking area and road way. This will be increased in the winter months with snow accumulations narrowing road widths.



**Fire Hydrants**

No Fire Hydrants identified on site plan. 300 feet spacing, one within 100 feet of FDC.

**Access to a Public Way**

The exit discharge shall provide a direct and unobstructed access to a public way.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

The area shall be of a size to accommodate not less than 5 square feet (0.46 m<sup>2</sup>) for each person.

The area shall be located on the same lot not less than 50 feet (15 240 mm) away from the building requiring egress.

The area shall be permanently maintained and identified as a safe dispersal area.

The area shall be provided with a safe and unobstructed path of travel from the building.

- No walks leading to driveway nor area provided in site plan to address public way.

**Roof Access for Fire Department**

- Fire department access to roof will be hindered due to access for a 100 foot ladder truck. Solar arrays and mechanicals mounted on roof hinder ventilation points and access for fire department personnel.

Yours in Safety,



Patrick Tourville, Fire Marshal  
Simsbury Fire District



# Town of Simsbury

WATER POLLUTION CONTROL  
36 Drake Hill Road Simsbury, Connecticut 06070

**To:** George McGregor, Director of Planning and Community Development

**From:** Anthony Piazza, WPCA Superintendent

**Subject:** Plan Comments – Site Development Plans – 446 Hopmeadow Street

**Date:** February 13, 2023

We have completed a review of the plan documents Dated December 16, 2022 that included the following:

Plans entitled “Vessel Multi-Family Housing, 446 Hopmeadow Street, Simsbury, CT.”

## Review Comments

1. All abandon pipes must be taken out and removed from the job site – it cannot be reused.
2. Any cored openings in manholes not being used must be plugged.
3. Based on information provided, a 6 inch lateral is sufficient for the new apartment building. If it is changed to 8 inch, it must enter into a manhole.
4. Town standards require the slope of the 6 inch lateral to be no less than 2%. Current plans show a slope of 1.04%.
5. Plan elevations do not correlate to existing plans. Elevation of existing manhole on Hopmeadow St is 180.25, new plans show this at 99.44. These elevations should be clarified.
6. Sanitary manhole and trench details are not the Town standard details. These can be provided to the applicant as needed.
7. Notes for separation distance between utilities states that they only apply in the Town Right of Way or Easement. The separation for water and sewer is required by the Department of Public Health regardless of location.
8. The developer will also need to submit a letter from a professional engineer along with a location plan confirming that the proposed sanitary sewer is compliant with NEIWPC TR-16 – Guide for the Development of Wastewater Treatment Works.
9. The developer is advised that a facility connection charge (FCC) of \$230,548.50 will be due prior to the issuance of a Certificate of Occupancy. A separate letter for the FCC will be sent to the applicant.

The applicant is reminded to submit all revised plans to the WPCA as quickly as possible. The review comments represent a preliminary review of the project design documents as noted above. Subsequent review(s) of plans and documents revised per these comments should be anticipated by the applicant.

cc: Simsbury WPCA  
Tom Roy, P.E. Director of Public Works  
Henry Miga, Building Official  
Adam Kessler, Assistant Town Engineer

**Archived:** Tuesday, February 28, 2023 4:15:01 PM

**To:** [Boulter, Nicholas](#)

**Subject:** RE: 446 Hopmeadow Plan Set

**Importance:** Normal

**Sensitivity:** None

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George K. McGregor, AICP  
Planning & Community Development Director  
Town of Simsbury  
933 Hopmeadow Street  
Simsbury, CT 06070  
P(860) 658 3252  
[gmcgregor@simsbury-ct.gov](mailto:gmcgregor@simsbury-ct.gov)



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**From:** Boulter, Nicholas <[NBoulter@pd.simsbury-ct.gov](mailto:NBoulter@pd.simsbury-ct.gov)>  
**Sent:** Thursday, February 9, 2023 12:32 PM  
**To:** McGregor George <[gmcgregor@simsbury-ct.gov](mailto:gmcgregor@simsbury-ct.gov)>  
**Subject:** RE: 446 Hopmeadow Plan Set

George,

I reviewed all the documents and I have no concerns regarding the traffic study.

Nick

Nicholas J. Boulter  
Chief of Police  
Simsbury Police Department  
933 Hopmeadow Street  
Simsbury, CT 06070  
(860) 658-3101



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**From:** McGregor George <[gmcgregor@simsbury-ct.gov](mailto:gmcgregor@simsbury-ct.gov)>  
**Sent:** Tuesday, January 24, 2023 8:43 AM  
**To:** Boulter, Nicholas <[NBoulter@pd.simsbury-ct.gov](mailto:NBoulter@pd.simsbury-ct.gov)>  
**Subject:** 446 Hopmeadow Plan Set

Chief

I sent the traffic study under separate cover.

Attached is the plan set for the 80 unit multi family.

If you have formal comments or questions, please provide to me by Feb 13.

Thanks

g

George K. McGregor, AICP  
Planning & Community Development Director  
Town of Simsbury  
933 Hopmeadow Street  
Simsbury, CT 06070  
P(860) 658 3252  
[gmcgregor@simsbury-ct.gov](mailto:gmcgregor@simsbury-ct.gov)



**Archived:** Tuesday, February 28, 2023 4:15:06 PM

**From:** [Neil Sullivan](#)

**Mail received time:** Thu, 2 Feb 2023 17:39:17

**Sent:** Thursday, February 2, 2023 12:39:23 PM

**To:** [McGregor George](#)

**Cc:** [Shellman Laura](#)

**Subject:** FW: 80 unit multi family project at 446 Hopmeadow

**Importance:** Normal

**Sensitivity:** None

**Attachments:**

[ZC 23-03 446 Hopmeadow Street 80-Unit Development Plan Set.pdf](#)  [ZC 23-03 446 Hopmeadow Street 80-Unit Development Project Narrative.pdf](#) 

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Hi, George –

Thanks for looping me in on these plans. I had not heard about this particular plan until now.

That particular area would be zoned for Central Elementary School, but given that this complex calls almost exclusively for one-bedroom apartments, I am not concerned about a significant impact from school-aged children.

Again, thanks for letting us know.

Neil

Neil Sullivan  
Assistant Superintendent for Administration  
Simsbury Public Schools

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**From:** McGregor George <[gmcgregor@simsbury-ct.gov](mailto:gmcgregor@simsbury-ct.gov)>

**Sent:** Thursday, February 2, 2023 10:37 AM

**To:** Sullivan Neil <[nsullivan@simsburyschools.net](mailto:nsullivan@simsburyschools.net)>

**Subject:** 80 unit multi family project at 446 Hopmeadow

Mr. Sullivan

I think anytime a residential project comes in, the School District should be included during the review process.

Please find attached select application materials for the above referenced project for your review.

If you would like to discuss please let me know.

If you would like to submit a written referral or comment, please provide no later than February 17, 2023.

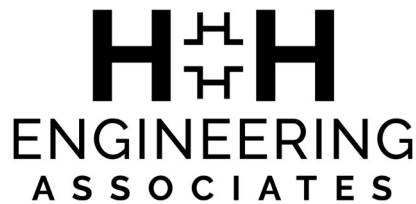
Due to the size of the attachments I may have to send on more than 1 email.

Thanks

george

George K. McGregor, AICP  
Planning & Community Development Director  
Town of Simsbury  
933 Hopmeadow Street  
Simsbury, CT 06070  
P(860) 658 3252  
[gmcgregor@simsbury-ct.gov](mailto:gmcgregor@simsbury-ct.gov)





**H+H Engineering Associates, LLC**  
232 Greenmanville Avenue, Suite 201  
Mystic, Connecticut 06355  
860-980-8008 (Office)  
[www.hh-engineers.com](http://www.hh-engineers.com)

**Via E-mail**

February 6, 2023

**Town of Simsbury**

Planning and Land Use Department  
933 Hopmeadow Street  
Simsbury, CT 06070

Attn: George K. McGregor, AICP  
Director of Community Planning and Development

RE: Engineering Comments  
Vessel Multi-family Housing  
Site Plan Application  
446 Hopmeadow Street  
Simsbury, CT 06070

Dear Mr. McGregor:

H+H Engineering Associates, LLC (H+H) is in receipt of the Town of Simsbury Engineering Department review comments dated January 27, 2023 regarding the Vessel Multi-family Housing Site Plan Application located at 446 Hopmeadow Street in Simsbury, CT 06070.

Below please find the original review comment, followed by our response in bold:

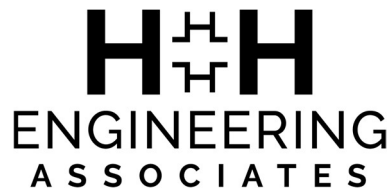
1. Please provide the basis for providing 94 parking spaces to support the proposed 80-unit multi-family development.

**Peak parking demand rates published in the industry standard ITE Parking Generation manual (5<sup>th</sup> edition) were reviewed to confirm the parking supply provided on the site is adequate. For land use code 221 (multi-family housing, mid rise), the weekday peak parking demand average rate is 0.75 spaces/bedroom which would yield a requirement of 60 spaces for 80 units. The Saturday peak parking demand average rate is 0.77 spaces/bedroom which would yield a requirement of 62 spaces for 80 units.**

**Additionally, in accordance with Public Act 21-29 adopted by the Connecticut legislature, the maximum parking limitations for multi-family developments are listed below:**

- **One-bedroom units: A minimum of 1 parking space shall be provided for each one-bedroom unit.**
- **Two-bedroom units: A minimum of 2 parking spaces shall be provided for each two-bedroom unit.**

January 30, 2023  
2022-0013



The supporting parking calculation is provided below:

- **One-bedroom units: 77 one-bedroom units x 1 space/unit = 77 spaces.**
  - **Two-bedroom units: 3 two-bedroom units x 2 spaces/unit = 6 spaces.**
- Minimum required parking spaces = 77 + 6 = 83 parking spaces**

**A total of 93 parking spaces are provided (see H+H response to comment #2 below) which includes the 83 minimum required resident parking spaces, and 10 additional overflow/guest parking spaces.**

**Therefore, the proposed 93 spaces on site well exceeds the rates published by ITE and will provide ample parking supply for the 80-unit development.**

2. Two (2) 8-foot wide van accessible spaces are provided, whereas for a total of 76-100 total parking spaces, 4 total (3 standard+ 1 van) accessible parking spaces should be provided. Provide two additional accessible parking spaces for this project to comply with this requirement.

**Two additional accessible parking spaces will be added as required. As a result, the revised total number of parking spaces will be reduced from 94 to 93 parking spaces.**

3. An encroachment permit shall be filed with the State of Connecticut Department of Transportation for any work within the CT Route 10 Right-of-Way. Please provide a copy of all future communications with DOT regarding the development.

**All future correspondence with the CT DOT regarding the encroachment permit will be provided to the Town of Simsbury Engineering Department.**

4. The stormwater report identifies infiltration rates in monitoring wells MW-1 and MW-2 as 40 in/hr. and 4 in/hr., respectively. The analysis halves these rates to serve as exfiltration design rates, which is consistent with the Connecticut DEEP Stormwater Quality Manual (CTSWQM). However, Engineering respectfully disagrees with the use of an exfiltration rate (20 in/hr.) given that Table 8-3 of CTSWQM states the maximum soil infiltration capacity for an infiltration basin is 5.0 in/hr. In regard to the recommended number of tests and resultant design assumptions, the CTSWQM states;

A minimum of three field tests and test pits or soil borings should be performed at each infiltration basin. The design of the basin should be based on the slowest rate obtained from the field tests performed at the site.

Please revise the analysis to comply with the recommendations of the CTSWQM by utilizing the slowest rate obtained from field tests on this site.

**Two additional field tests (test pits or borings) will be performed in the bioretention basin, and two additional field tests (test pits or borings) will be performed in the Stormtech subsurface stormwater management system. Additionally, permeability tests will be conducted in the additional test pit/boring locations to confirm the design infiltration rates. Results will be provided to the Town of Simsbury Engineering Department upon completion. Once additional testing has**

**H+H Engineering Associates, LLC**  
232 Greenmanville Avenue, Suite 201  
Mystic, Connecticut 06355  
860-980-8008 (Office)  
[www.hh-engineers.com](http://www.hh-engineers.com)



**H+H**  
**ENGINEERING**  
**A S S O C I A T E S**

been completed, H+H with work with the Town of Simsbury Engineering Department to determine the most appropriate design infiltration rate and Stormwater Best Management Practice(s).

5. CB-5 has 2-feet of cover whereas Section 5 .2.1.g of the Town of Simsbury Highway Construction and Design Standards states "A minimum cover of 2.5 feet shall be provided for all drain pipes unless special designs, as approved by the Town Engineer, are utilized." Please revise accordingly.

**As noted, the minimum cover over the drainage pipe exiting CB-5 is approximately 2-feet at the catch basin, which increases to 2.5-feet approximately 10-feet from the catch basin. Additionally, the pipe material has been identified as Class IV RCP, which is suitable for less than 24" of cover (see attached LRFD fill height table for RCP).**

6. Provide a detail for the modular block retaining walls.

**A typical detail for the modular block retaining wall will be added to Sheet 11 of 12.**

If you have any questions, please feel free to contact me at 860-980-8008 (office) or 413-579-4488 (mobile).

Sincerely,

**H+H Engineering Associates, LLC**



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Seamus Moran, P.E.  
Principal

2/6/2023

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Date

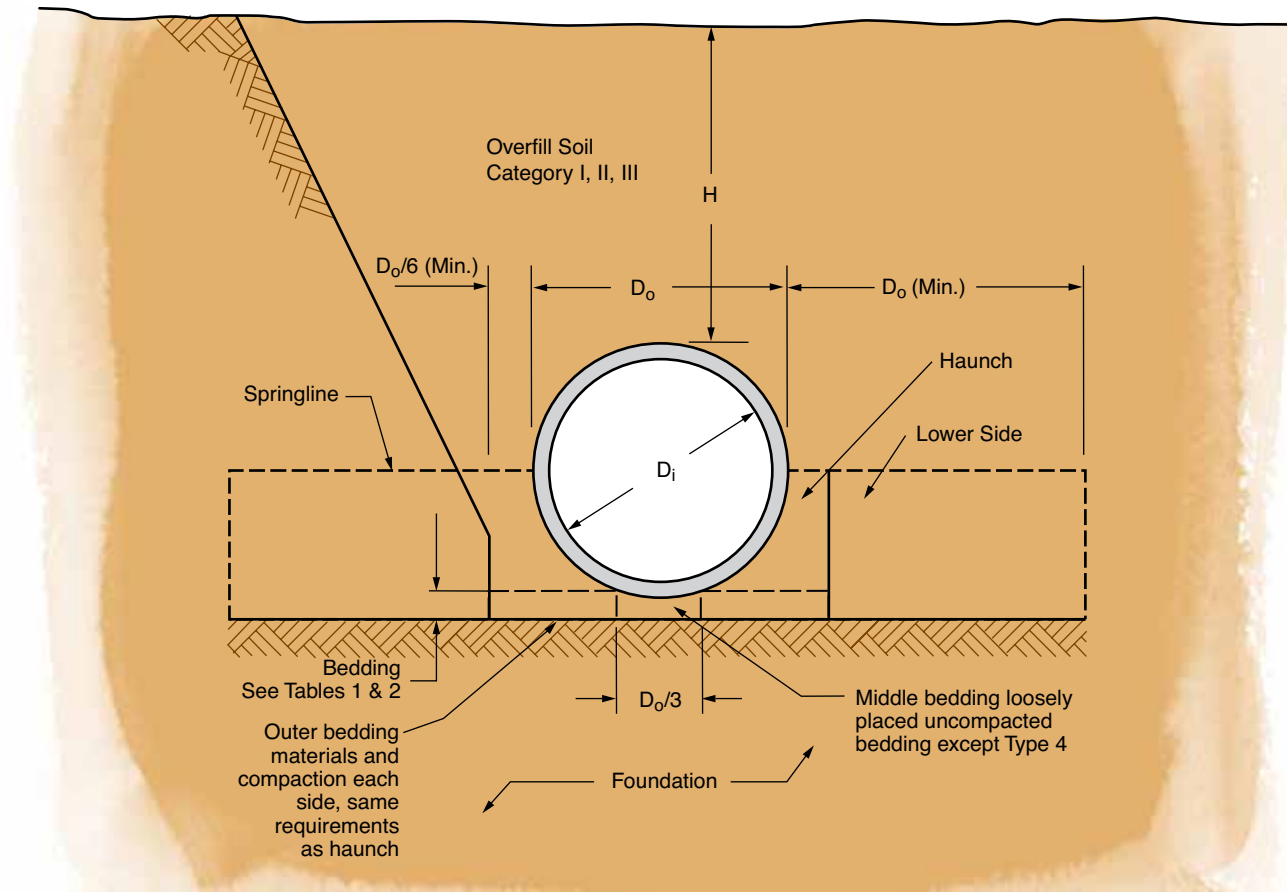
**FOR CONCRETE PIPE**

**LRFD FILL HEIGHT TABLES**



## Standard Trench/Embankment Installation

Concrete pipe should be installed in accordance with the AASHTO LRFD Bridge Construction Specifications, Section 27 or ASTM C1479. Figure 1 shows the basic pipe and soil terminology.



There are four types of Standard Installations, each with its own soil and compaction requirements. Type 1 bedding provides the most support using highly compacted granular material, while Type 4 provides for less support allowing the use of silts and clay soils with little or no compaction. These four choices provide flexibility and versatility for the designer and contractor, as well as performance and economy for the owner that are not available with other types of pipe.

The soil and compaction requirements are provided in Table 1. Table 2 shows the equivalent soil designations per the Unified Soil Classification System (USCS) and AASHTO.

To facilitate your selection of the proper reinforced concrete pipe using the most beneficial Standard Installation for the conditions at the site, fill height tables are provided on the following pages. The required 0.01 inch crack D-Loads in units of lbs per linear foot per foot of diameter are provided numerically and the class of pipe per ASTM C76 (AASHTO M 170) meeting this requirement is designated by color of the cell.

**Table 1: Standard Installation Soils and Minimum Compaction Requirements**

Installation Type	Bedding Thickness	Haunch and Outer Bedding	Lower Side
Type 1	D <sub>o</sub> /24 minimum, not less than 3" (75 mm) If rock foundation, use D <sub>o</sub> /12 minimum, not less than 6" (150 mm)	95% Category I	90% Category I, 95% Category II, or 100% Category III
Type 2	D <sub>o</sub> /24 minimum, not less than 3" (75 mm) If rock foundation, use D <sub>o</sub> /12 minimum, not less than 6" (150 mm)	90% Category I or 95% Category II	85% Category I, 90% Category II, or 95% Category III
Type 3	D <sub>o</sub> /24 minimum, not less than 3" (75 mm) If rock foundation, use D <sub>o</sub> /12 minimum, not less than 6" (150 mm)	85% Category I, 90% Category II, or 95% Category III	85% Category I, 90% Category II, or 95% Category III
Type 4	No bedding required except if rock foundation, use D <sub>o</sub> /12 minimum, not less than 6" (150 mm)	No compaction required, except if Category III, use 85%	No compaction required, except if Category III, use 85%

Reference: ASCE 15-98, "Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD)", 1998.

**Table 3: Reinforced Pipe Classes for 0.01 inch Crack Per ASTM C 76 (lbs/ft/ft)**

Class I	≤ 800
Class II	≤ 1000
Class III	≤ 1350
Class IV	≤ 2000
Class V	≤ 3000
Special Design	> 3000

**Table 2: Equivalent USCS and AASHTO Soil Classifications for Standard Installation Soil Designations**

Representative Soil Types			Percent Compaction	
SIDD	USCS	AASHTO	Standard Proctor	Modified Proctor
Gravelly Sand (Category I)	SW, SP, GW, GP	A1, A3	100 95 90 85 80 61	95 90 85 80 75 59
Sandy Silt (Category II)	GM, SM, ML, Also GC, SC with less than 20% passing #200 sieve	A2, A4	100 95 90 85 80 49	95 90 85 80 75 46
Silty Clay (Category III)	CL, MH, GC, SC	A5, A6	100 95 90 85 80 45	90 85 80 75 70 40
Not Allowed for Haunch or Bedding	CH	A7	100 95 90 45	90 85 80 40

Reference: ASCE 15-98, "Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD)", 1998.

## NOTES:

1. Compaction and soil symbols – i.e. "95% Category I" refers to Category I soil material with a minimum Standard Proctor compaction of 95%. See Table 2 for equivalent Modified Proctor values.
2. Soil in the outer bedding, haunch, and lower side zones shall be compacted to at least the same compaction as the majority of soil in the overfill zone.

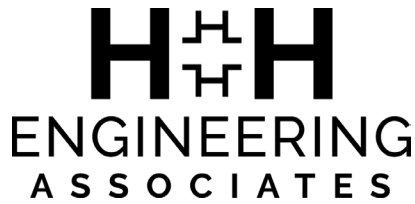
### Fill Height Tables are based on:

1.  $\gamma_s = 120$  pcf
2. AASHTO HL-93 live load
3. Positive Projecting Embankment Condition -  
this gives conservative results in comparison to trench conditions

## D-Load (lb/ft/ft) for Type 3 Bedding

Class I	Class IV
Class II	Class V
Class III	Special Design

Pipe Size (in)	Fill Height in Feet													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
12	1518	1369	947	817	805	838	896	964	902	1000	1098	1196	1294	1392
15	1459	1318	916	794	783	815	872	939	880	975	1070	1165	1260	1355
18	1384	1285	897	781	772	804	860	926	870	963	1057	1150	1243	1337
21	1247	1263	886	775	767	799	855	921	867	959	1051	1144	1236	1329
24	1229	1248	879	772	765	798	854	920	868	960	1051	1143	1235	1327
27	1372	1251	881	778	770	804	860	925	872	963	1055	1147	1238	1330
30	1500	1260	887	786	777	812	868	933	878	970	1061	1153	1245	1337
33	1378	1218	871	780	775	813	871	936	886	978	1070	1162	1254	1345
36	1276	1189	857	776	774	815	875	941	895	987	1079	1172	1264	1356
42	1119	1113	829	765	770	815	875	942	903	995	1087	1179	1271	1363
48	1004	992	808	758	770	817	879	946	913	1005	1097	1189	1281	1373
54	963	958	791	753	771	822	884	953	926	1018	1109	1201	1293	1385
60	991	937	778	751	775	828	891	961	939	1031	1123	1216	1308	1400
66	952	920	772	751	779	835	900	970	954	1046	1138	1231	1323	1416
72	898	905	768	751	786	843	909	981	969	1062	1154	1247	1340	1433
78	853	890	762	752	790	847	913	985	977	1070	1162	1255	1348	1440
84	816	878	758	754	794	852	918	991	986	1079	1171	1263	1355	1448
90	786	866	755	756	798	857	924	996	1076	1088	1180	1272	1364	1456
96	760	833	753	759	803	862	930	1003	1083	1097	1189	1281	1373	1464
102	739	814	761	769	813	872	939	1012	1092	1174	1198	1290	1382	1473
108	722	805	770	778	822	882	949	1022	1102	1184	1208	1299	1391	1482
114	708	813	779	788	832	892	959	1032	1112	1194	1277	1309	1400	1492
120	696	821	788	796	842	902	969	1042	1121	1203	1287	1319	1410	1501
126	687	829	798	806	852	912	979	1052	1131	1213	1297	1382	1420	1511
132	679	837	802	816	863	922	989	1062	1141	1223	1307	1391	1477	1521
138	673	845	800	826	873	932	999	1072	1152	1233	1317	1401	1487	1531
144	669	853	808	837	883	943	1010	1082	1162	1244	1327	1411	1497	1583



**H+H Engineering Associates, LLC**  
232 Greenmanville Avenue, Suite 201  
Mystic, Connecticut 06355  
860-980-8008 (Office)  
[www.hh-engineers.com](http://www.hh-engineers.com)

**Via E-mail**

February 24, 2023

**Town of Simsbury**

Planning and Land Use Department  
933 Hopmeadow Street  
Simsbury, CT 06070

Attn: George K. McGregor, AICP  
Director of Community Planning and Development

RE: Review Comments  
Vessel Multi-family Housing  
Site Plan Application  
446 Hopmeadow Street  
Simsbury, CT 06070

Dear Mr. McGregor:

H+H Engineering Associates, LLC (H+H) is in receipt of the following review comments regarding the Vessel Multi-family Housing Site Plan Application located at 446 Hopmeadow Street in Simsbury, CT 06070:

1. Simsbury Office of Community Planning and Development letter dated February 2, 2023
2. Simsbury Engineering Department letter dated February 10, 2023.
3. Simsbury Water Pollution Control letter dated February 13, 2023
4. Simsbury Fire District letter dated February 14, 2023.

Below please find the original review comments, followed by our team's response in italics:

**Office of Community Planning and Development:**

1. Parking. The site plan shows 94 parking spaces for the 80 units. The Town zoning regulations would require 160 spaces for a non-830g project. The proposed ratio does not seem to account for two residents in a one bedroom or for visitors to the complex. Please provide a justification as to how this ratio was conceived. Inadequate parking could lead to spillover on the shoulder of Hopmeadow St. and other potential conflicts.

Response:

*Peak parking demand rates published in the industry standard ITE Parking Generation manual (5<sup>th</sup> edition) were reviewed to confirm the parking supply provided on the site is adequate. For land use code 221 (multi-family housing, mid rise), the weekday peak parking demand average rate is 0.75 spaces/bedroom which would yield a requirement*

February 24, 2023  
2022-0013

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of 60 spaces for 80 units. The Saturday peak parking demand average rate is 0.77 spaces/bedroom which would yield a requirement of 62 spaces for 80 units.

Additionally, in accordance with Public Act 21-29 adopted by the Connecticut legislature, the maximum parking limitations for multi-family developments are listed below:

- One-bedroom units: A minimum of 1 parking space shall be provided for each one-bedroom unit.
- Two-bedroom units: A minimum of 2 parking spaces shall be provided for each two-bedroom unit.

The supporting parking calculation is provided below:

- One-bedroom units: 77 one-bedroom units x 1 space/unit = 77 spaces.
- Two-bedroom units: 3 two-bedroom units x 2 spaces/unit = 6 spaces.

Minimum required parking spaces = 77 + 6 = 83 parking spaces

A total of 95 parking spaces are provided which includes the 83 minimum required resident parking spaces, and 12 additional overflow/guest parking spaces.

Therefore, the proposed 95 spaces on site well exceeds the rates published by ITE and will provide ample parking supply for the 80-unit development.

Lastly, 6 additional reserve parking spaces have been added to the plan set if the occupancy and use of the building warrants installation of additional parking. See **Exhibit A** (Plan Set revised 2/24/23)

2. Tree Save Opportunities. There are at least four large oak trees of unknown health located on the site planned for removal. Is it possible to identify and protect any of these trees and incorporate them into the site plan?

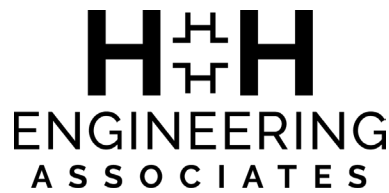
Response:

Mature existing trees within 50' of Hopmeadow Road have been located and are identified on the plan. Trees that are to be protected are identified on the Existing Conditions and Demolition Plan, and include a 24" Oak Tree, 20" Oak Tree, 48" Oak Tree, and 20" Oak Tree, together with trees located in the identified area in the southwest corner of the Site.

3. Sidewalk along Hopmeadow. The project does not include the installation of a sidewalk along the property frontage. We recommend constructing a sidewalk segment across the property frontage to connect to future segments on the east side of Hopmeadow St.

Response:

The Farmington Canal Heritage Trail is located directly to the east of the site and is expected to be the primary means of pedestrian access. Additionally, due to steep topography on the property to the north, a sidewalk extension along Hopmeadow to the north would be costly and/or infeasible. For these reasons, a sidewalk along Hopmeadow Street has not been included.



4. EV Parking/Charging. A recent State law appears to require 10% of all parking spaces to contain EV charging stations. Please provide information related to the project's plan for EV charging stations.

Response:

*A total of 10 parking spaces (10.6% of the parking spaces provided), including 1 accessible parking space, have been designated as EV Parking/Charging stations. These locations have been added to the revised plan set, with the designation "EV".*

5. Traffic Study Recommendations. The Traffic Study recommends restriping areas on Hopmeadow St. in front of and adjacent to the site. We recommend these improvements be in place prior to the issuance of the first certificate of occupancy. (Please note that Town Engineering and the Police Department are reviewing the traffic study and may provide comments under separate cover).

Response:

*Restriping will be completed prior to the issuance of the first certificate of occupancy.*

6. Architecture. The architectural submission should be enhanced with a more complete description of building materials, colors, options, at-scale typical room details, sustainable practices, and technological innovations.

Response:

*As per your request, this information was submitted at the ASDRC Meeting on February 6, 2023. For your convenience, we have also included the information as part of this submission, as **Exhibit B**. If any additional information is required, please let us know.*

7. Housing Assumptions. The Affordability quotient follows the state guidance and a standard formula. We note that for the purposes of determining affordable eligibility that 1.5 persons are assumed for the single bedroom unit and 3.0 for the double. How does this reconcile with the parking assumption that effectively assumes 1 space per unit?

Response:

*Please refer to the response to Comment #1 above regarding the proposed parking, which is supported by the ITE Parking Generation manual (5<sup>th</sup> edition) and Public Act 21-29. Additionally, the 1.5 person per bedroom standard is a state regulatory requirement purely for the purpose of calculating maximum rent allowed and is not related the number of residents living in a unit.*

8. Solar. The application materials suggest that solar arrays are planned for the roof along with a statement that says the building will be "net zero" with savings passed along to the residents. Can you elaborate on how the saving are passed along?

Response:

*The building has solar photovoltaic panels on the roof which will be used to provide energy to the building. Based on the current calculations of our engineers, the building is expected to operate at a "net zero" level over the course of a year. The energy generated from the system will be used to power the units, in addition to any common areas, thus*

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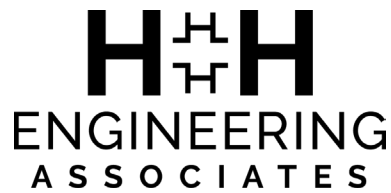
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*passing along the energy savings to tenants. We expect that a tenant who has typical energy usage will not receive a utility bill when living in our units.*

9. Draft Warranty Deed. Please provide a draft warranty deed establishing the affordable units on site for a review by the Town Attorney. Also, please clarify when the deed would be recorded during the process.

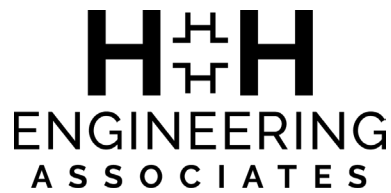
Response:

*The Applicant will use the model deed restriction for a set aside development in Conn. Agencies Regs. §8-30g-9(1), please see attached, **Exhibit C**. The deed restriction will be recorded at or around of the time of the closing from the property owner to the Applicant. The Applicant will provide the Town will proof that the deed restriction has been recorded prior to the issuance of a certificate of occupancy.*

10. POCD Consistency. Please provide a summary addressing how the project is compatible with surrounding land uses and the Town Plan of Conservation and Development.

Response:

*The Application is compatible with the surrounding land uses as it proposes a residential use in a residential zone (R-15 High Density Residential). The Site is surrounded by a residential condominium complex to the north, single family homes to the south and the bike path to the east. The project is consistent with the Town of Simsbury 2017 Plan of Conservation & Development as it proposes affordable housing, which the Town "has been working on increasing the number of affordable housing units in ways and locations appropriate for the community." (p. 12) The project includes both market-rate and affordable rental units and is ideally located on the bike path providing a direct pedestrian path from the Site to amenities in the Town's center (1.25± miles to the north). Telephone survey results included in the POCD, indicated that "participants feel there may be too few affordable housing units for elderly persons and for first-time buyers" (pg. 89) Further the POCD's Future Land Use Plan specifically identifies this parcel for "Moderate Density Residential." (pg. 125) The Application is consistent with the growth management principles, as it both "[c]oncentrat[es] development around transportation nodes and along major transportation corridors to support the viability of transportation options and land reuse" and "[e]xpand[es] housing opportunities and design choices to accommodate a variety of household types and needs." (pg. 126). Additionally, the Application is consistent with the promotion of sustainability found in the POCD by "promoting the installation of residential solar arrays." (pg. 94) The proposed building is a net zero building with a roof solar array. Finally, the proposed stormwater management plan uses LID techniques and infiltrates the Site's stormwater, consistent with the POCD. (pg. 116)*



**Engineering Department:**

1. Please provide the basis for providing 94 parking spaces to support the proposed 80-unit multi-family development. **Applicant responded 2/6/2023 with the basis of the parking calculation.**

Response:

*Comment previously addressed. No further action required.*

2. Two (2) 8-foot wide van accessible spaces are provided, whereas for a total of 76-100 total parking spaces, 4 total (3 standard+ 1 van) accessible parking spaces should be provided. Provide two additional accessible parking spaces for this project to comply with this requirement. **Applicant responded 2/6/2023 and will add accessible parking. However, one less space will be provided.**

Response:

*A total of four accessible parking spaces are now proposed. A total of 95 parking spaces are proposed.*

3. An encroachment permit shall be filed with the State of Connecticut Department of Transportation for any work within the CT Route 10 Right-of-Way. Please provide a copy of all future communications with DOT regarding the development. **Applicant responded 2/6/2023 and concurs.**

Response:

*Comment previously addressed. No further action required.*

4. The stormwater report identifies infiltration rates in monitoring wells MW-1 and MW-2 as 40 in/hr. and 4 in/hr., respectively. The analysis halves these rates to serve as exfiltration design rates, which is consistent with the Connecticut DEEP Stormwater Quality Manual (CTSWQM). However, Engineering respectfully disagrees with the use of an exfiltration rate (20 in/hr.) given that Table 8-3 of CTSWQM states the maximum soil infiltration capacity for an infiltration basin is 5.0 in/hr. In regard to the recommended number of tests and resultant design assumptions, the CTSWQM states;

A minimum of three field tests and test pits or soil borings should be performed at each infiltration basin. The design of the basin should be based on the slowest rate obtained from the field tests performed at the site.

Please revise the analysis to comply with the recommendations of the CTSWQM by utilizing the slowest rate obtained from field tests on this site. Applicant responded 2/6/2023 with the intentions to perform additional field tests. **No additional action has occurred and comment remains unresolved.**

Response:

*Additional test borings, test pits and permeability tests were conducted by the project Geotechnical Engineer on February 14, 2023. Based on a conversation with the Geotechnical Engineer, and the comments received from the Town Engineer, the Stormwater Management System has been revised accordingly. The design utilizes a*

**H+H Engineering Associates, LLC**

232 Greenmanville Avenue, Suite 201

Mystic, Connecticut 06355

860-980-8008 (Office)

[www.hh-engineers.com](http://www.hh-engineers.com)

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*maximum infiltration rate of 5.0 inches/hour for the practices that allow for subsurface infiltration (Stormwater Management Areas A, C, & D), and a maximum infiltration rate of 2.0 inches/hour for the bioretention basin. Additionally, attached please find the revised Geotechnical Report dated February 24, 2023, as **Exhibit D**.*

5. CB-5 has 2-feet of cover whereas Section 5 .2.1.g of the Town of Simsbury Highway Construction and Design Standards states "A minimum cover of 2.5 feet shall be provided for all drain pipes unless special designs, as approved by the Town Engineer, are utilized." Please revise accordingly. **Applicant responded 2/6/2023 and will revise with Class IV RCP.**

Response:

*Comment previously addressed. No further action required.*

6. Provide a detail for the modular block retaining walls. **Applicant responded 2/6/2023 and will add typical details to plan.**

Response:

*The typical modular block retaining wall detail has been added to sheet 10 of 13.*

7. Sanitary sewer main and water main in Hopmeadow Street are not depicted on the plans. Provide location of each and include the invert elevation for the sanitary sewer connection as it is pertinent to the design and feasibility of sewer service.

Response:

*Following the original submission, the project land surveyor obtained additional field data including the approximate locations of the water main and sanitary sewer main in Hopmeadow Street, and the elevations of the sanitary sewer main in Hopmeadow Street. The location of these mains and the sanitary sewer elevations have been added to the plan set.*

8. Stormwater Management Area 'D' includes an emergency spillway that extends into the State right-of-way. We recommend reaching out to District 4 early to determine if this configuration is allowable.

Response:

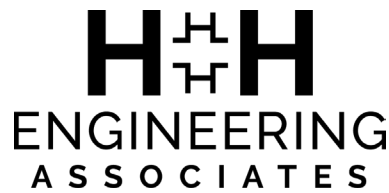
*The emergency spillway has been relocated accordingly.*

9. Please confirm that a minimum 1 foot of free board is provided in all basins during the 100-year event.

Response:

*The basins have been revised to provide a minimum of 1-foot of freeboard between the top of the berm and 100-year water surface elevation. Enclosed herewith please find Figure 6 from the stormwater management report which has been updated accordingly.*

10. Please provide information regarding the capture of floatables as it pertains to parking lot runoff and stormwater quality.



Response:

*Each catch basin will have a minimum of a 2' sump, and the last catch basin in each catchment system will have a 4' sump and a trap hood installed. Sumps and outlet hoods provide a means of pre-treatment by preventing oil and debris from discharging into the subsurface infiltration system.*

*Per the 2004 Stormwater Quality Manual:*

*"Sumps provide storage volume for coarse sediments, provided that accumulated sediment is removed on a regular basis. Hooded outlets, which are covers over the catch basin outlets that extend below the standing water, can also be used to trap litter and other floatable materials. A recent study conducted in New York City demonstrated that catch basins equipped with hoods increase the capture of floatables by 70 to 80 percent over catch basins without hoods and greatly extend the cleaning interval without degraded capture performance (Pitt, 1999 in NRDC, 1999)."*

*The Drainage Structure Table on the Grading & Drainage plan has been updated to indicate the proposed sump depths of each structure, and the proposed trap hoods.*

11. Is there potential for the calculated southbound queue in Hopmeadow Street to conflict with vehicles exiting the proposed driveway?

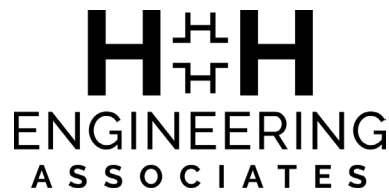
Response:

*The calculated southbound queue on Hopmeadow Street does not conflict with vehicles exiting the proposed driveway. The southbound 95th % queues at the signal do not extend to the Site's driveway location 250 feet north of the signal at Powder Forest drive. Should maximum queues extend to the driveway location in the field, any site driveway blockages would be temporary and restricted to morning and afternoon peak hours of traffic on Hopmeadow Street. The southbound queues on Hopmeadow Street clear every signal cycle when the Hopmeadow mainline goes green enabling vehicles to exit the site driveway.*

12. Please confirm that there will be safe sight distance for vehicles exiting the proposed driveway against vehicles turning left out of Powder Forest Drive and traveling northbound. Please note that the beginning of this movement from Powder Forest Drive will often be obstructed by vehicles queued at the light.

Response:

*Sight lines are sufficient looking in both directions from the site driveway and exceed CTDOT criteria for safe egress. Specific to cars turning out of Powder Forest Drive, the site driveway is located 250 feet north of that intersection and there is clear sight line to the intersection. It is important to note that cars coming out of Powder Forest and turning left out to head northbound are moving very slowly (~15 mph as they turn) and require less intersection sight distance (under 200 feet). 250 feet is sufficient sight distance to see oncoming northbound traffic regardless of the presence of a southbound queue obstruction.*



**Water Pollution Control:**

1. All abandon pipes must be taken out and removed from the job site – it cannot be reused.

Response:

*A note has been added to the Utility Plan.*

2. Any cored openings in manholes not being used must be plugged.

Response:

*A note has been added to the Utility Plan.*

3. Based on information provided, a 6-inch lateral is sufficient for the new apartment building. If it is changed to 8-inch, it must enter into a manhole.

Response:

*The sanitary sewer line has been revised to an 8" line and a manhole has been added.*

4. Town standards require the slope of the 6 inch lateral to be no less than 2%. Current plans show a slope of 1.04%.

Response:

*The sanitary sewer line has been revised to an 8" sanitary sewer line with a slope of 0.0083 ft./ft.. Per the NEIWPCC TR-16 Manual, – a minimum slope of 0.004 ft./ft. is required for 8" gravity sewer lines to maintain a mean velocity of 2.0 ft./second.*

5. Plan elevations do not correlate to existing plans. Elevation of existing manhole on Hopmeadow St is 180.25, new plans show this at 99.44. These elevations should be clarified.

Response:

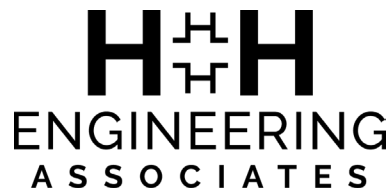
*The existing conditions survey is based on an assumed vertical datum. Following the original submission, the project land surveyor obtained additional field data including the approximate locations of the water main and sanitary sewer main in Hopmeadow Street, and the elevations of the sanitary sewer main in Hopmeadow Street. The location of these mains and the sanitary sewer elevations have been added to the plan set.*

6. Sanitary manhole and trench details are not the Town standard details. These can be provided to the applicant as needed.

Response:

*The appropriate Town of Simsbury sewer details have been provided by the WPCA and have been added accordingly.*

7. Notes for separation distance between utilities states that they only apply in the Town Right of Way or Easement. The separation for water and sewer is required by the Department of Public Health regardless of location.



Response:

*Utility Notes #10 and #11 list the minimum required separating distances between utility services.*

8. The developer will also need to submit a letter from a professional engineer along with a location plan confirming that the proposed sanitary sewer is compliant with NEIWPC TR-16 – Guide for the Development of Wastewater Treatment Works.

Response:

*The developer and design engineer will work with the WPCA to satisfy the noted request.*

9. The developer is advised that a facility connection charge (FCC) of \$230,548.50 will be due prior to the issuance of a Certificate of Occupancy. A separate letter for the FCC will be sent to the applicant.

Response:

*Understood, thank you.*

**Fire District:**

**1. Access**

Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire code official.

Exception: Fences, where provided with an access gate equipped with a sign complying with the legend requirements of this section and a means of emergency operation. The gate and the means of emergency operation shall be approved by the fire code official and maintained operational at all times.

Response:

*The location of the Fire Department Connection (FDC) has been added to the revised plan set. Additionally, pavement striping and bollards have been added to the parking space directly in front of the FDC to allow for access.*

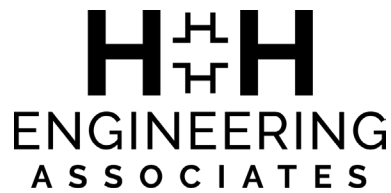
**2. Physical Protection**

Where fire department connections are subject to impact by a motor vehicle, vehicle impact protection shall be provided in accordance with Section 312 of the International Fire Code.

- Assuming fire sprinkler connections will be located in first floor mechanical room will one parking space be removed in front of mechanical room for access to FDC on exterior wall? Also if bollards are installed to prevent vehicle impact will they limit the size of parking space provided.

Response:

*See Response to Comment #1.*



### 3. Fire Access Roads

Fire apparatus access roads shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof.

- No fire lanes identified, with limited access to building fire lanes must be established.

Response:

*Pavement striping and signage have been added to the revised plan in the locations discussed. Please find the Vehicle Turning Demonstration Plan for 100-FT Aerial Fire Truck, as **Exhibit E**.*

### 4. Multiple Access Roads

More than one fire apparatus access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climate conditions, or other factors that could limit access.

- With only a 24 foot wide driveway, one entry way, and limited road access on site plan, fire apparatus will have issues with vehicle congestion throughout the planned parking area and road way. This will be increased in the winter months with snow accumulations narrowing road widths.

Response:

*The dumpster enclosure has been relocated and an emergency fire access path and gate have been added to allow for emergency vehicles to access Farmington Heritage Trail.*

### 5. Fire Hydrants

No Fire Hydrants identified on site plan. 300 feet spacing, one within 100 feet of FDC.

Response:

*A fire hydrant has been added within the island in the northwest corner of the building.*

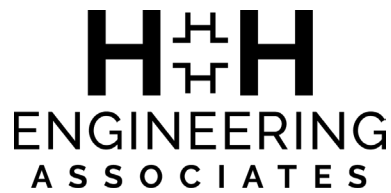
### 6. Access to a Public Way

The exit discharge shall provide a direct and unobstructed access to a public way.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

- The area shall be of a size to accommodate not less than 5 square feet (0.46 m<sup>2</sup>) for each person.
- The area shall be located on the same lot not less than 50 feet (15 240 mm) away from the building requiring egress.
- The area shall be permanently maintained and identified as a safe dispersal area.
- The area shall be provided with a safe and unobstructed path of travel from the building.

- No walks leading to driveway nor area provided in site plan to address public way.



Response:

*A concrete pad and a stone dust walk have been added to the rear egress door to provide access to the parking area.*

**7. Roof Access for Fire Department**

Fire department access to roof will be hindered due to access for a 100 foot ladder truck. Solar arrays and mechanicals mounted on roof hinder ventilation points and access for fire department personnel.

Response:

*Access to the roof is provided from the proposed stairwells.*

If you have any questions, please feel free to contact me at 860-980-8008 (office) or 413-579-4488 (mobile).

Sincerely,

**H+H Engineering Associates, LLC**

A handwritten signature in black ink, appearing to read 'Seamus Moran'.

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Seamus Moran, P.E.  
Principal

2/24/2023

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Date