## **Meeting Summary Report**

MARCH 19, 2024 | REGULAR MEETING

Town of Stonington
Planning and Zoning Commission



## Town of Stonington Planning and Zoning Commission

## AGENDA REGULAR MEETING

## TUESDAY, MARCH 19, 2024 – 7:00 PM

## STONINGTON BOARD OF EDUCATION DISTRICT OFFICE 40 FIELD STREET, PAWCATUCK, CT 06379

#### **COMMISSIONERS**

#### Charles Sheehan

Chairman

#### **Ryan Deasy**

Vice Chairman

#### **Lynn Conway**

Secretary

#### **Gary Belke**

Member

#### **Andy Meek**

Member

#### **Bennett Brissette**

Alternate

#### **Ben Philbrick**

Alternate

## MaryEllen Mateleska

Alternate

Agenda items are on file for public review at the Town of Stonington Department of Planning:

152 Elm Street Stonington, CT 06378 P: 860.535.5095 E: dop@stonington-ct.gov

Stonington Board of Education District Office is wheelchair accessible. If you plan to attend this public meeting and you have a disability which requires special arrangements, please call 860.535.5095 at least 24 hours in advance of the meeting date. Reasonable accommodations will be made to assist your needs.

- 1. Call To Order 7:00 PM
- 2. Appoint Alternates:
  - a. Bennett Brissette (Seated 10/3/23)
  - b. MaryEllen Mateleska (Seated 11/21/2023)
  - c. Ben Philbrick (Seated 9/5/23)
- Minutes:
  - a. #1749 February 20, 2024
- 4. Public Comment:
- 5. Correspondence:
- 6. Reports:
  - a. Staff
  - b. Commission
  - Zoning Enforcement and Violations
    - 1. Zoning Enforcement Officer Report February 2023
  - d. Administrative Review
- 7. Old Business:
  - a. **PZ2322SPA & GPP Fair Housing of Connecticut, LLC (M. Ranelli)** Site Plan Application and Groundwater Protection Permit applications for an Affordable Housing Project submitted pursuant to C.G.S. 8-30g. Proposal consists of 102 single-family housing units and associated site improvements. Properties located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-12A; 16-4-13. Property is located in the LS-5 Zone.

Public Hearing closed on 2/20/2024.

- 8. Public Hearings:
  - a. **PZ2401SUP & CAM Precious Memories Place Inc. (Eckersley, LLC)** Special Use Permit Application and Coastal Area Management Review for construction of a 1,158 SF building addition to support an additional 20 students. This application is a modification to PZ1103SUP+CAM. Property is located at 168 Greenmanville Ave, Mystic; M/B/L: 172-2-4. Property is located in the RA-40 and RM-15 Zones.



## Town of Stonington Planning and Zoning Commission

## MEETING PROCEDURES

## AGENDA REGULAR MEETING

## TUESDAY, MARCH 19, 2024 - 7:00 PM

## STONINGTON BOARD OF EDUCATION DISTRICT OFFICE 40 FIELD STREET, PAWCATUCK, CT 06379

#### **PUBLIC COMMENT**

Public comment is an opportunity for public participation on items <u>not</u> on the evening's agenda.

#### **PUBLIC HEARINGS**

Public hearings are an opportunity for public participation during the review of a development proposal.

Applicants will make an initial presentation. The public can then speak "in favor," "in opposition," or under "general comments." A signup sheet is located at the main entrance. Participants are not required to sign up, however, the list will be used to organize the order of interested speakers.

Any questions will be addressed as part of the applicant's rebuttal. Once a public hearing has been closed, neither the applicant nor the public can participate in the proceedings.

#### **NEW SUBMITTALS**

No action will be taken on these items. New submittals require routing to other Town agencies and, in some instances, may be scheduled for a public hearing at a later date. b. PZ2402SPA & CAM St. Edmund of Connecticut, Inc. (R. Avena, Esq.) – Site Plan Application and Coastal Area Management review for the construction of a ±6,600 SF building at St. Edmund of Connecticut on Enders Island. Proposal also includes the demolition of existing structures on campus and associated site improvements. Property is located at 1 Enders Island, Mystic; M/B/L: 178-1-1. Property is located in the RC-120 Zone.

- 9. New Submittal(s):
  - a. **PZ2403RA J and H Mystic Hospitality, LLC (J. Casey)** Zoning Text Amendment application for changes to ZR §8.1 and ZR §8.6.1 to include revised frontage and buffer requirements, applicable to the Tourist Commercial (TC-80) Zone.

Public Hearing scheduled for 4/2/2024.

b. **PZ2404SUP+CAM Currier Group, LLC c/o Robert Currier (Cherenzia & Associates, Ltd.)** – Special Use Permit application and Coastal Area Management review for outdoor vendor use. Property is located at 779 Stonington Road, Stonington; M/B/L: 75-1-5. Property is located in the GC-60 Zone.

Public Hearing scheduled for 4/16/2024.

10. Adjournment

The 1749th meeting of the Town of Stonington's Planning and Zoning Commission was held at the Stonington Board of Education Office, 40 Field Street on February 20, 2024. The meeting was called to order at 7:00 PM by Chairman Charles Sheehan. Also present for the meeting were Ryan Deasy, Gary Belke, Lynn Conway, Andy Meek, Ben Philbrick, MaryEllen Mateleska and Town Planner, Clifton Iler.

Seated for the meeting were Charles Sheehan, Ryan Deasy, Gary Belke, Lynn Conway, and Andy Meek.

#### Minutes:

Motion by Mr. Deasy to approve the minutes of February 6, 2024 with an edit to revise the virtual meeting date to "February 28<sup>th</sup>"; seconded by Ms. Conway; approved 5/0/0.

Public Comment: None Correspondence: None

Reports:

Staff: None

Commission: None

Zoning Enforcement and Violations: Mr. Iler shared the ZEO report for January 2024. No comments

from the Commission.

Administrative Review: None

Old Business: None

**Public Hearings:** 

## PZ2329ZC Maple Lawn Farm, LLC (Paul & Sharyne Cerullo)

Motion by Mr. Deasy to reopen the public hearing; seconded by Ms. Conway; approved 5/0/0.

Mr. Meek stated he was not present at the previous public hearing and had not reviewed the previous material. Mr. Sheehan seated Mr. Philbrick in place of Mr. Meek for the public hearing.

The applicant's representative, Bill Bertsche, presented the application to the Commission. Mr. Bertsche introduced the revisions made based on previous comments from staff, the Commission, and the public and read through the Master Plan submittal. The Commission asked the following questions:

- Mr. Sheehan asked how the parking requirement was calculated. Mr. Bertsche stated that parking
  was calculated assuming a restaurant use since there were no parking regulations for event spaces
  in the Zoning Regulations. Mr. Bertsche also introduced the Traffic Engineer, who shared the
  traffic study. Mr. Sheehan suggested the applicant consider reducing the calculation from 3
  persons per vehicle to 2 or 2.5 vehicles per person. Mr. Bertsche concurred and stated they could
  update for the Site Plan Application (SPA).
- Mr. Philbrick asked about the height of Streetlight Type A being 34 feet tall. Mr. Bertsche stated
  that it will be lowered to a standard streetlight but is requested by the Police Chief. Ms. Conway

asked the count of lights in the parking lot. Mr. Bertsche said there are three on the plan currently but that will be revised for the SPA with a photometric plan.

- Mr. Sheehan asked how are the parking spaces being delineated, particularly ADA spaces. Mr.
  Bertsche said they had no plans to delineate but could rope off the area. Mr. Meek added that
  the grass should be reinforced because it will turn to mud with the expected traffic, concurred by
  Mr. Sheehan. Mr. Bertsche stated they could revise the plan at SPA to include geotextiles or other
  methods of reinforcement.
- Mr. Philbrick asked whether the applicant addressed the Ledge Light Health District questions.
   Mr. Bertsche said those will be addressed at SPA.
- Ms. Conway, Mr. Meek, and Ms. Mateleska shared concerns about the frequency of events. Mr.
  Bertsche and the applicant, Paul Cerullo, stated that they projected the most intense schedule for
  the Master Plan but do not anticipate the frequency of events to be that high in reality. Mr. Meek
  added they should consider a maximum of one large event per week.
- Mr. Sheehan clarified the acoustic plan and asked whether the applicant planned outdoor amplified sound. Mr. Bertsche stated there is no planned outdoor amplified sound.
- Mr. Belke asked about the risk associated with alcohol at events. Mr. Cerullo stated that their catering agreements mitigate risks at events.

## **Public Comment:**

Carole Nossek, 43 Dawley Drive, spoke in support of the plan and the events, but was worried about the traffic on the roads. Shared concerns about people driving at night, how people would get there via GPS, and whether generators or heaters will be used in the tent.

Richard Webb, 445 Wheeler Road, spoke on the application process, stating it's hard to assess the impacts of an application without a complete application set, including: drainage impacts, surface details for pathways and parking, and location of bathroom or catering structures. Also asked whether the tent was a permanent or temporary structure.

Lisa Konicki, Ocean Community Chamber of Commerce, spoke in support of the application. Also recommended the Commission and general public conduct a site walk at the SPA.

## Rebuttal:

Mr. Bertsche spoke in rebuttal, stating that concerns will be addressed at the SPA.

#### Additional Public Comment:

Nancy Watson, 280 Wheeler Road, was concerned about traffic along Sommers Lane.

Stanton Simm, 20 Sommers Lane, was concerned about traffic and the lack of stormwater drainage calculations.

Tom Ward spoke against the application based on the concerns raised by the neighbors.

Motion by Mr. Deasy to close the public hearing; seconded by Mr. Belke; approved 4/0/1 (Ms. Conway abstained).

Motion by Mr. Deasy to approve the application with the following stipulations; seconded by Mr. Belke; approved 4/0/1 (Ms. Conway abstained):

- 1. Outdoor amplified music shall not be permitted for events.
- 2. All alcohol service during events shall not go beyond 9:00pm. Events hours shall be permitted between 9:00am and 10:00pm.
- 3. Any generators, fans, or cooling devices used for events shall have sound attenuation to minimize noise pollution.
- 4. The Site Plan Application (SPA) shall provide a revised traffic report and parking calculations assuming 2.0 occupants per vehicle.
- 5. The Site Plan Application (SPA) shall provide a revised parking lot layout with reinforcement measures to be determined by the applicant.
- 6. The Site Plan Application (SPA) shall provide a revised Stormwater Management Plan.

Mr. Sheehan called for a brief break between applications. Ms. Conway left the meeting.

The meeting was called back to order at 9:25 PM.

## PZ2322SPA & GPP Fair Housing of Connecticut, LLC (M. Ranelli)

Mr. Sheehan seated Mr. Philbrick in place of Ms. Conway.

Motion by Mr. Deasy to reopen the public hearing; seconded by Mr. Belke; approved 5/0/0.

The applicant's representative, Matt Ranelli, presented the application to the Commission. Mr. Ranelli introduced the revisions made based on previous comments from staff, the Commission, and the public.

Mr. Ranelli introduced Sergio Cherenzia, Cherenzia & Associates, to discuss the detailed design changes. Mr. Cherenzia described the revisions to the site plan based on previous comments, including: pedestrian walkability changes, DOT/OSTA approval processes, incorporation of green space, adjustments to parking areas, revisions to the stormwater management plan following peer review, and bioretention options to be considered.

Robert Ferrari, Northeast Water Solutions, Inc., spoke on the water quality and hydrogeologic concerns associated with the aquifer raised at the previous public hearing. Mr. Ferrari introduced the report submitted as part of the application set. The Commission asked the following questions:

• Mr. Philbrick asked if the above-ground and groundwater drainage flows towards the Pawcatuck River and wellhead area. Mr. Ferrari confirmed.

- Mr. Meek asked why the restaurant use was used to calculate impact if the current property is vacant. Mr. Ferrari and Mr. Ranelli stated that it is the most recent use and has not been abandoned.
- Mr. Sheehan asked about nitrogen loading concerns raised through the peer review. Mr. Ferrari
  stated that the soils are not conductive to attenuating nitrogen and needs to be designed into the
  stormwater system.

Mr. Ranelli introduced Michael Dion, BL Companies, to describe the traffic report and crash data. Mr. Dion shared the report and noted that there is no discernable pattern in recorded crash data and no significant increase in trips. The Commission asked the following questions:

- Mr. Deasy asked if the report could model school bus traffic at peak hours. Mr. Dion stated that it could be done, but is not a common practice.
- Mr. Meek asked why school hours were not used to calculate traffic impacts. Mr. Dion stated that school hours are not peak hours in traffic modeling.
- Ms. Mateleska asked if the Level of Service (LOS) decreases at non-peak hours. Mr. Dion stated that there should be a negligible change in the LOS at non-peak hours.

Josh Wheeler, Landscape Architect, shared the updated landscape plan, including: ~7,500 SF of green space to the south, programmable space to the south and northeast, and increased plantings around the site. The Commission asked the following questions:

- Mr. Meek and Mr. Deasy asked if the bioretention options (planter boxes) were above-ground or at-grade. Mr. Ranelli stated they are proposed for consideration to attenuate nitrogen, but would accept either form as a condition of approval.
- Mr. Belke asked whether a photometric plan was included. Mr. Cherenzia brought up the photometric plan to share with the Commission. Mr. Deasy asked if there was any lighting planned for the programmable green spaces. Mr. Cherenzia stated no lighting was planned at this time.

Mr. Ranelli discussed additional concerns the Commission raised at the last public hearing, including: school-age children count multipliers, 8-30g application approval processes, and previous case law regarding stormwater impacts on aquifers. The Commission asked additional questions:

• Mr. Philbrick asked whether the Police Commission reviewed the updated application set. Mr. Iler stated they have not reviewed the most-recent submittal.

Mr. Iler shared the Town's report on the application.

#### **Public Comment:**

Farrah Garland, 396 N. Stonington Road, spoke against the application, stating there is a significant lack of ADA-accessible housing in Stonington. Stated the majority of the units in this project are inaccessible and the proposed pedestrian pathways are not sufficient for disabled persons. Also asked whether the HOA fees needed to maintain the stormwater system would make the project unaffordable under 8-30g regulations.

Deborah Downie, 5 Back Acres Way, spoke against the application, stating there are significant concerns to the sole-source aquifer and the new documents provided are insufficient for engineering review. Echoed concerns about the HOA maintaining the stormwater system. Also highlighted pedestrian safety concerns and the traffic study not accounting for abutting neighborhoods.

Tom Geroulo, 23 Russell Avenue, spoke against the application, citing multiple safety concerns, including: green space adjacency to Liberty Street without fencing puts children at risk. Also stated that the stormwater and aquifer report presented by Mr. Ferrari was unsatisfactory and provided analysis to Town staff. Also stated that the Affordability Plan with the application is incomplete.

Ali Geroulo, 23 Russell Avenue, spoke against the application, stating the traffic study does not account for abutting neighborhoods, the proposed garages are too narrow, and there is no snow storage proposed for the site. Also shared concerns with emergency vehicle access and management, stating an overwhelming level of perfection and coordination is required to mitigate life-safety risks on the site.

Seth McAdams, 28 Russell Avenue, spoke against the application, stating the project does not promote the health and safety of its residents, citing environmental risk, building code risks, and a flawed traffic study. Echoed the need for the HOA fees to be included in the Affordability Plan.

Ralph Arganese, Preston, Connecticut, spoke on the application and recommended the Commission request a resume of the developer's past projects before deciding on the application.

Nick Verzillo, 14 Manor Street, spoke against the application, stating that the whole site and associated reports are flawed. Noted that the photometric plan requires residents to keep their lights on at all times in order to keep the site lit. Also worried about HOA maintenance of the site and suggested additional bonding if approved.

#### Rebuttal:

Mr. Ranelli led the rebuttal, answering the various questions posed through the public comment period. Mr. Ranelli stated that the reports and plans filed by the applicant are sufficient with what is legally required and industry-standard. Reiterated the statutory approval process for 8-30g applications, noting that a denial requires the Commission to identify the risk and evaluate the risk to public health and safety against the need for affordable housing.

#### Additional Public Comment:

Lisa Konicki, Ocean Community Chamber of Commerce, spoke in support of the project team and their quality in previous applications submitted before the Commission. Shared concerns that there are multiple opposing views between the project team and the experts sharing public testimony.

Motion by Mr. Deasy to close the public hearing; seconded by Mr. Belke; approved 5/0/0.

Mr. Sheehan stated that the Commission should not make a decision on the application until Town staff has had the time to review and report on the most-recent submittal.

Future Public Hearings: No comment.

#### New Submittals:

## PZ2402SPA & CAM St. Edmund of Connecticut, Inc. (R. Avena, Esq.)

Mr. Sheehan asked Mr. Iler if a motion was required to request a public hearing for a SPA. Mr. Iler stated he was unsure of the statutory need but suggested doing so regardless.

Motion by Mr. Deasy to require a public hearing for this application; seconded by Mr. Belke; approved 5/0/0.

## Adjournment:

Motion by Mr. Philbrick to adjourn the meeting; seconded by Mr. Deasy; approved 5/0/0.

The meeting was adjourned at 12:30 AM.





## **Zoning Enforcement Officers' Report Stonington Department of Planning**

## February 2024

## **ZONING PERMIT SUMMARY**

APPLICATION STATUS	February 2024	YEAR TO DATE
Received	15	24
Approved	14	23
Pending	1	1
Denied	0	0
Withdrawn	0	0

## **PENDING PERMITS**

PERMIT ADDRESS	OWNER	RECEIVED	REQUEST	WAITING
16 Smith St	Coast Development	2/23/2024	SFR	SLR / FEMA Review

## **CERTIFICATES OF ZONING COMPLIANCE**

	February 2024	YEAR TO DATE	
SFR CZC	2	4	
Total CZCs issued	4	14	

## **COMPLAINT SUMMARY**

	February 2024	YEAR TO DATE
Received	4	66
Notice of Complaint	0	0
NOVs Issued	0	23
Citations Issued	0	0
Cease and Desist	0	4
Resolved	4	42

## COMPLAINTS RECEIVED \*(D =

\*(D = Distressed Property)

COMPLAINT ID	RECEIVED	ADDRESS	COMPLAINT
23-065	12/28/2024	Enders Island	Expansion of existing parking lot Previous complaints on the parking lot [south area of lot] were in regards to what had been perceived as a parking lot but is a laydown area for a future application. It has been roped off to eliminate any parking. Current complaint is regarding an expansion of the existing parking lot located to the northwest of the lot.  2/8/2024 No violation found. Letter dated 2/7/2024 emailed to Atty Souchuns and sent via Dropbox with compliance report. Parking Area for current complaint had a site plan from 2001 stating "existing 27 parking spaces". Surface of parking area went from grass to gravel. Parking has never been formally laid out on a site plan. Only one flyover indicated an excess of 27/2016 had 34 cars on site. Sometime between 2001 and 2004, parking lot became gravel. Approximately 20+ years ago. No enforcement at this time. 2/6/2024 - PZ approved CAM application showing parking area as: "gravel parking to remain". Area where stones are to be removed has been approved as a landscaped buffer. Appeal filed to ZBA. To be heard 4/9/2024
24-001	1/8/2024	2 Old South Rd.	Distressed property; collapsed garage door, broken windows, damaged walls and roof, trash and debris, abandoned cars and boats.

			Overgrown shrubs/vines – Blight does not address landscaping of any kind. Broken Windows – None observed. Roof replacement – no visible issues observed. Solar Permit approved 8/23. Company [Vision Solar] filed bankruptcy on 12.28.2023 Unregistered motor vehicles – Subaru registered Toyota 4 Runner – Unregistered / No violation [ZR 4.3.G] allows for one unregistered motor vehicle. Boats are not regulated by zoning. Unless the boats were being stored for profit. All boats are owed by Reed Cypriano Garage Doors – owner stated that two doors have been ordered at Lowes. No violation 3.13.2024 Joe Cipriano called, box trucks are due this weekend to start clearing out the garage [this will allow the new door to be installed]. He plans on hiring Trinity to install solar, having found out Vision Solar is out of business.
24-005	2/21/2024	178 Liberty St.	Person residing in RV in backyard 2.22.2024 Spoke with occupants of the trailer, appeared to be a mother and adult son. Neither spoke English. The son called the landlord and we tried to communicate through the phone via an AI translator. Unsuccessful, they will contact me when they get to work where there are English/Spanish speaking individuals. 2.22.2024 Atty Paul Kuhn called on behalf of Mr. Garcia. He told his client that the occupants would need to go. We are looking at a two-week departure prior to issuing a NOV
24-006	2/22/2024	21 Russell Ave	Multiple parked vehicles in yard. Large Storage shed in yard. 3/6/2024 NOV pending



# Town of Stonington | Department of Planning Planning and Zoning Commission Meeting March 19, 2024

PZ2322SPA & GPP Fair Housing of Connecticut, LLC (M. Ranelli)

Site Plan Application and Groundwater Protection Permit applications for an Affordable Housing Project submitted pursuant to C.G.S. Section 8-30g. Proposal consists of 102 single-family housing units and associated site improvements. Properties located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-12A; 16-4-13. Properties are located in the LS-770ne

Report Prepared By: Clifton J. Iler, AICP - Town Planner

## **Application Status**

This application is for Site Plan Application (SPA) and a Groundwater Protection Permit (GPP). This application was submitted in accordance with <u>C.G.S. Section 8-30g</u>. <u>C.G.S. Section 8-3(g)</u> establishes the criteria and requirements for a Site Plan Application. The Commission can elect to conduct a public hearing within 65 days of receipt of the application and has 35 days to conduct the public hearing once opened, as established in <u>C.G.S. Section 8-7d(a)</u>. The applicant may request one or more extensions provided the total of any such extension or extensions shall not exceed 65 days.

- Official Date of Receipt for this application was 9/19/23.
- The public hearing was opened on 11/21/23.
- The public hearing was closed on 2/20/24.
- A decision, without extension, must be made by 4/25/24.
- The applicant can request an extension to any period of the application up to 9 days.

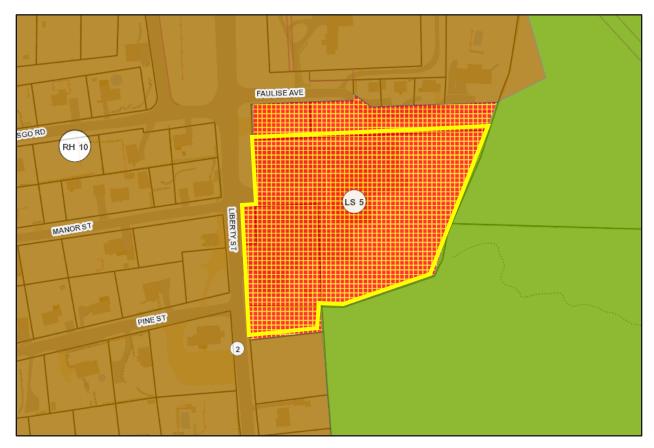
## **Purpose**

This application for a 102-dwelling unit attached housing project is made under the State Affordable Housing Appeals Act (C.G.S. Section 8-30g). The Act is intended to encourage the development and adequate supply of affordable housing in the State of Connecticut. This proposal consists of 102 single-family three-bedroom townhomes with parking, stormwater features, and associated site improvements. The units are accessed by internal roads which connect to Liberty Street (State Route 2).

## **Zoning and Context**

The site is located in the LS-5 Zone. Under C.G.S. Section 8-30g, applications are permitted to deviate from the existing zoning regulations of the base zone provided they satisfy the standards established in the Act. This application is not required to conform to the bulk and use requirements for the LS-5 Zone.

#### **ZONING MAP**



North: LS-5 Zone [Use: Residential]

South: RH-10 Zone [Use: Residential]; GB-130

Zone [Use: Educational]

East: GB-130 Zone [Use: Open Space/

**Educational**]

West: RH-10 Zone [Use: Residential]

## **Site Access and Traffic**

The site is accessed from Liberty Street (State Route 2). The project consists of an internal street network with ingress/egress points to Liberty Street at two locations. A traffic study conducted by BL Companies was provided as part of this application set. The project is subject to review by the Board of Police Commissioners and the Office of the State Traffic Administration (OSTA).

Comments on traffic flow, circulation, and other site access items are included in the Response Summary.

## **Environmental Elements**

The site is subject to previous disturbance and development and does not contain any known hazards that require remediation. There are wooded areas with mature trees around the northern, eastern, and southern parts of the site, but no known significant environmental features on the site. The site is approximately 1,000 feet west/southwest from the Pawcatuck River and well-removed from any environmental features associated with the river.

The site is located in the Groundwater Protection Overlay District (GPOD) and requires receipt of a Groundwater Protection Permit (GPP) as part of this application. The project is required to meet the standards outlined in ZR §7.2.7 (27<sup>th</sup> Edition). The applicant proposes underground treatment and infiltration systems under the paved interior road network to treat and convey stormwater. A critical element of concern for the site will be stormwater quality and the impact of stormwater on the Pawcatuck Basin Aquifer System, a Sole Source Aquifer (SSA), and the Rhode Island Wellhead Protection Area (WHPA).

The site is not located within 100 feet of and Inland Wetland or Watercourse, therefore no Inland Wetland and Watercourses Commission (IWWC) approval is required. The site is not located in a Coastal Area Management Overlay District (CAMOD); therefore, no Coastal Area Management (CAM) approval is required.

## **Utilities**

The site is serviced by public water and sewer. Water is serviced by Westerly Water Company and sanitary sewer is managed by the Water Pollution Control Authority (WPCA). Adequate service capacity has been verified by both agencies and is included in the Response Summary.

Electric and communication is provided via overhead utility lines along Liberty Street. The proposed development will consist of underground electric from the existing utility pole(s). Final location will be coordinated with the appropriate utility companies prior to construction.

Natural gas is located along the Liberty Street corridor. The Project Narrative states that the owner will determine if that service will be provided pending coordination with the Eversource and specific needs of the residential units.

Further discussion is captured in the Response Summary and Town Planner Comments.

## **Waivers Requested**

The following requirements and waivers are requested:

Item	Provided	Waiver Requested
Impact Statement in Accordance with Section 8.8. (ZR 6.1.2.1)	X	
Site Plan in Accordance with Section 8.3 (ZR 6.1.2.2)	Х	
Architectural Elevation Drawings and Landscape Plan Per Section 2.6 (ZR 6.1.2.3)	X	
Water Impact Study (ZR 6.1.2.4.1)	Х	
Sanitary Sewer Impact Study (ZR 6.1.2.4.2)	Х	
Site Drainage Analysis (ZR 6.1.2.4.3)	Х	
Erosion Control Report (ZR 6.1.2.4.4)	X	
Traffic Impact Study (ZR 6.1.2.4.5)	X	
Archaeological Study (ZR 6.1.2.4.6)		W
Soils Report, Test Pit Data and Mapping (ZR 6.1.2.4.8)	X	
Shadow Plan (ZR 6.1.2.5 & ZR 7.14.2)	X	
3-D Model for Projects Which Fall Under Criteria of Section 6.2 (ZR 6.1.2.6.1)		W
Flood Hazard Reports (ZR 6.1.2.6.2)		W
School Impact Evaluation Report (ZR 6.12.6.3)	X	
Application Fee Per Section 8.7 (ZR 6.1.2.7)	X	
Legal Description of Property/Site (ZR 6.1.2.8)	Х	
Phasing Requirements for Projects Over 24 Dwelling Units (ZR 6.1.2.9)	Х	
Written Waiver Request(s) at the Time of Application Submission (ZR 6.1.2.10)	X	

## **Response Summary**

The application was routed to the following agencies/agents of the Town. Responses are shown below:

**BUILDING OFFICIAL** – No comment.

POLICE COMMISSION – Excerpt from draft meeting minutes below [Dated: 11/9/23]:

"...many concerns raised by both the Commissioners, and Chief DelGrosso, which included safety for children going to and from school, adequate safety within the complex, and the amount of all volume on the department. The applicant, and the presenters that spoke were advised by the Police Commission to take the suggestions given and return next month."

**TOWN ENGINEER** – See attached memorandum and email correspondence from the third-party engineer, Trinkaus Engineering, LLC, regarding the revised application set submitted February 14, 2024 [Dated: 2/16/24, 2/22/24, 2/23/24, and 3/15/24].

## WATER POLLITION CONTROL AUTHORITY – Comments below [Dated: 10/6/23]:

The WPCA has reviewed the above referenced P&Z application and offers the following:

The WPCA has no objection to the above referenced application as submitted. There is sufficient capacity in the Pawcatuck collection system and treatment facility to accommodate the proposed flows (50,850 GPD Peak and 25,425 GPD average) for this project.

Please be advised of the Rules and Regulations of the Water Pollution Control Authority, specifically Article XII, Hookups.

- 12.03 No sewer construction work shall begin until detailed plans and specifications have been reviewed and approved by the Director of Water Pollution Control. This shall include a plan and profile sheet. (Scale 1'' = 40' horizontal, 1'' = 4' vertical)
- 12.04 Plans, specifications, and construction shall conform to the Town's Technical Standards for Sanitary Sewers.
- 12.05 Construction shall be carried out only in the presence of an authorized representative of the Water Pollution Control Authority.
- 12.06 Within 30 days following completion of construction, applicant shall furnish record drawings as prescribed.
- 12.08 The proposed system of sewers constitutes a "community sewerage system" as defined by CGS, Sec. 7-245. As such all properties served by the system are required to be members of the Common Interest Community. As provided under CGS, Sec. 7-246f, the community must enter into an agreement with the Town of Stonington Water Pollution Control Authority that ensures the effective design, construction, and management of the system as well as ensuring that funds are available for its operation and maintenance.
- 12.09 All properties are subject to hook-up charges as prescribed in the section. Connection fee has been provided to the property owner and shall be paid in full or a payment plan in place before a sewer connection permit will be issued.

#### **ZONING ENFORCEMENT OFFICER** – Comments below [Dated 10/6/23]:

- 1. One hundred thirteen (113) individual garbage containers seems like the beginning of an enforcement issue. Applicant should consider multiple enclosed dumpster areas.
- 2. Centralized mailbox area should be considered.

### FIRE DISTRICT MARSHAL (PAWCATUCK) – Comments below [Dated 10/11/23]:

Below is a list of concerns and requests by the Engineers of the Pawcatuck Fire District.

#### Issue:

- 1. No spare parking for visitors.
- 2. Not enough space to pile snow.
- 3. 4 Fire Hydrants shall be location the property.
- 4. 2 Fire Alarm pull boxes shall be installed.
- 5. Who will make repairs to lighting.
- 6. Will fire apparatus be able to maneuver the curves and corners.

#### Questions:

- 1. Who will maintain the property.
- 2. Who will remove snow and ice.
- 3. Where will residents' visitor's park.
- 4. If the garage is used for storage where will the tenants park.
- 5. Who will overall maintain care for the property.

Comments below based on updates provided January 11, 2024 [Dated: 1/12/24]:

7. Fire Zones shall be delimited using the Town of Stonington Fire Zone ordinance. The fire zones shall be located in front of the following units: 1-4, 15-20, 21-23, 36-49, 50-62, 63-66, 86-102.

**SOLID WASTE DEPARTMENT** – See attached memorandum [Dated: 1/10/24].

WATER COMPANY (WESTERLY WATER CO.) – No comment.

## **Town Planner Comments**

This application was initially filed as a Special Use Permit application consistent with the requirements of ZR §6.3 (27<sup>th</sup> Edition) under **PZ2322SUP & GPP Fair Housing of Connecticut, LLC (M. Ranelli)**. The application was accepted by the Commission at its regular meeting on September 19, 2023. However, in consultation with the applicant and the Town's legal counsel, it was determined that the project shall be reviewed as a Site Plan Application consistent with the requirements of C.G.S. Section 8-30g. The legal opinion was attached to the report dated November 21, 2023.

This application is made under the State Affordable Housing Appeals Act (C.G.S. Section 8-30g) and is categorized as a "set-aside development" as defined in C.G.S. Section 8-30g(6). Therefore, this application requires 15% of the units to be sold or rented at prices deemed affordable for persons less than or equal to 80% of the area median income (AMI) and 15% of the units to be sold or rented at prices deemed affordable for persons less than or equal to 60% AMI.

Projects considered under C.G.S. Section 8-30g are permitted to deviate from the existing zoning regulations of the base zone provided they satisfy the standards established in the Act. The Commission

therefore must review the application against the Statute and not the Stonington Zoning Regulations. In the absence of standard review criteria, the Commission is only permitted to deny such an application if:

1) the decision is necessary to protect substantial public interests in health, safety or other matters which the commission may legally consider; and 2) such public interests clearly outweigh the need for affordable housing (C.G.S. Section 8-30g(g)).

This application went before the Architectural Design Review Board (ADRB) at its regular meetings on October 16, 2023 and December 11, 2023. The ADRB did not render a decision on this application pending additional requested site plan revisions. Since a decision was not rendered prior to the close of the public hearing on February 20, 2024, this constitutes a **recommendation for denial** by the ADRB.

The Department of Planning provided comment provided substantial commentary on this application in the report dated November 21, 2023. Following this, a revised application was submitted on January 11, 2024, and a draft report was prepared for the January 16, 2024 Commission meeting, which was subsequently canceled due to inclement weather, resulting in the project not being discussed.

The revised application set from January 11, 2024 was circulated to relevant Town agents and agencies for comments. The Town Engineer engaged Trinkaus Engineering, LLC for a third-party review, with comments relayed to the Town and applicant on January 23, 2024.

Following a comprehensive review and discussion between the applicant and Town staff, a revised application set, incorporating comment responses was provided to the Town on February 14, 2024. However, during the February 20, 2024 meeting, it was noted that Town staff had not had adequate opportunity to review the updates and validate the comment responses from the applicant.

Following the close of the public hearing on February 20, 2024, the Commission elected to not make a decision on the application until Town staff could thoroughly review and report on the revised submission. This staff report includes additional review documentation from Town staff and its agents, which is not considered ex parte communication.<sup>1</sup>

Let this staff report serve as confirmation of the completed review and report of the submission dated February 14, 2024.

Through discussion with the Town Engineer and third-party review agent, it was determined that there was insufficient information provided to conduct a proper and thorough review of the revised application. The response letter and accompanying analyses could not be validated without the presence of complete engineering documents. Therefore, the Department of Planning finds this application to be incomplete consistent with the requirements of ZR §8.3.3.1 (27<sup>th</sup> Edition) due to the following reasons:

- 1. The revised application set dated February 14, 2024 does not provide a Type 2 Site Plan consistent with the requirements of ZR §8.4.2 (27<sup>th</sup> Edition).
- 2. The response letter dated February 14, 2024 does not provide sufficient information for the Town Planner, Town Engineer, or their agents to properly review the revised application set.

<sup>&</sup>lt;sup>1</sup> See, e.g., Megin v. Zoning Board of Appeals, 106 Conn. App. 602 (2008); Pizzola v. Planning & Zoning Commission, 167 Conn. 202, 208 (1974).

## **Commission Action Required**

The Commission is required to make a determination on the following items:

- A decision concerning the Site Plan Application (SPA)
- A decision concerning the Groundwater Protection Permit (GPP) application

In considering a decision on this project, the Commission should look towards the existing legislation in C.G.S. Section 8-30g and the requirements for approval for a Site Plan Application in ZR §8.3 (27<sup>th</sup> Edition). This report includes draft resolutions based upon the evidence in the record and testimony presented at the public hearing. Draft resolutions are not to be considered an endorsement or in opposition to this application.

If the Commission decides to proceed with approval tonight, the recommended stipulations contained within the draft resolution for approval address the incomplete review by Town staff and associated contingencies. These contingencies provide the opportunity for additional review by Town staff and the Commission, as necessary, to advance the project forward towards completion. Furthermore, an approval of this application will find the project consistent with C.G.S. Section 8-30g.

If considering denial of this project, the Commission must provide sufficient evidence in the record to make such a denial, as outlined in C.G.S. Section 8-30g(g). The denial must be made based upon evidence in the record and make the following determinations: 1) the decision is necessary to protect substantial public interests in health, safety or other matters which the commission may legally consider; 2) such public interests clearly outweigh the need for affordable housing; and 3) such public interests cannot be protected by reasonable changes to the affordable housing development.

The draft resolution includes evidence in the record and testimony presented prior to the close of the public hearing consistent with making such a determination. Additionally, the Commission could develop other objective criteria to assess public health and safety concerns to develop new findings of fact that would support such a denial.

If this project is denied by the Commission, the applicant may, within the period for filing an appeal of such decision, submit a modified application to the Commission addressing some or all reasons for denial consistent with the requirements outlined in C.G.S. Section 8-30g(h). This modification shall be treated as an amendment to the original proposal an shall require another public hearing. The decision on the modification shall be made within 65 days after the receipt of the modified application.

## **Draft Resolution (For Approval)**

Should the Commission decide to **approve** this application, the following resolution language is recommended considering the standards to approve a Site Plan Application listed in ZR §8.3 (27<sup>th</sup> Edition) and pursuant to C.G.S. Section 8-30g.

**PZ2322SPA & GPP Fair Housing of Connecticut, LLC (M. Ranelli)** – Site Plan Application and Groundwater Protection Permit applications for an Affordable Housing Project submitted pursuant to C.G.S. 8-30g. Proposal consists of 102 single-family housing units and associated site improvements. Properties located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-13. Properties are located in the LS-5 Zone.

WHEREAS, Fair Housing of Connecticut, LLC has submitted an application for the development of an Affordable Housing Project, as defined under Connecticut General Statutes (C.G.S.) Section 8-30g, at properties located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-12A; 16-4-13; and

WHEREAS, the Town of Stonington Planning and Zoning Commission has thoroughly reviewed the application, including the Site Plan Application (SPA), Groundwater Protection Permit (GPP) application, environmental assessments, traffic studies, architectural plans, landscape plans, and all other associated documents and revisions submitted throughout the application process; and

WHEREAS, the Commission has witnessed and reviewed all public testimony and correspondence submitted to the Commission prior to the close of the public hearing on February 20, 2024; and

WHEREAS, the Commission has carefully considered the provisions outlined in C.G.S. Section 8-30g and the Town of Stonington's Plan of Conservation and Development (POCD); and

WHEREAS, after due consideration and deliberation, the Commission has determined that the application meets the necessary criteria for approval under the Town of Stonington Zoning Regulations (27<sup>th</sup> Edition); and

WHEREAS, after due consideration and deliberation, the Commission has determined that the application meets the necessary criteria for approval under C.G.S. Section 8-30g; and

THEREFORE, BE IT RESOLVED that the Town of Stonington Planning and Zoning Commission hereby approves the application for the development of an affordable housing project located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-12A; 16-4-13, based on the findings and information presented herein, subject to the following stipulations:

- 1. The applicant shall provide Town staff with a complete and final set of application materials, incorporating all revisions and responses to comments to the satisfaction of the Town Engineer and Town Planner.
- 2. The applicant shall provide Town staff with a complete and revised Affordability Plan consistent with the requirements of C.G.S. Section 8-30g(b) to include details of condominium unit owners' association fees, maintenance fees, and other fees associated with the development, as well as the restrictive covenants or lease provisions that will govern said units.

- 3. Prior to the development of final plans for signature or the issuance of any permits or approvals, the applicant shall address any outstanding concerns or deficiencies identified by Town staff in review of the final application materials.
- 4. Final plans shall be reviewed to the satisfaction of the Town Engineer and Town Planner.
- 5. Final plans shall be signed by the Commission and recorded in the Town's Land Evidence Records.
- 6. Any proposed alterations or modifications to the approved site plan as a result of comments from the Connecticut Department of Transportation (CTDOT) or the Office of the State Traffic Administration (OSTA) shall be subject to review and approval by the Town Engineer, Town Planner, and Commission, as necessary.
- 7. The applicant shall acknowledge that modifications or amendments to the approved application must receive prior approval from the Commission and/or Town staff, as applicable. The Commission reserves the right to conduct additional reviews of the application, as deemed necessary, to ensure compliance with approved plans and regulations.
- 8. The applicant shall comply with all applicable codes and regulations of the Town of Stonington, as well as any additional conditions or requirements stipulated by the Commission or Town staff.
- 9. The applicant shall be responsible for all costs associated with the review, approval, and implementation of the project, including but not limited to permit fees, inspection fees, and any required mitigation measures.
- 10. The applicant shall post an Erosion and Sedimentation Control Bond prior to the issuance of a Zoning Permit. The bond shall be either in the form of a certified check or irrevocable letter of credit meeting the requirements of ZR §8.6.3 (27<sup>th</sup> Edition). The bond amount shall be established by the Town Engineer after an estimate of the costs of installing and maintaining appropriate erosion and sedimentation control measures is provided by the applicant and approved by the Town Engineer. Work shall remain bonded for a minimum of one year from the date of Zoning Compliance.
- 11. Failure to comply with any of the stipulations outlined herein may result in the revocation of permits or approvals issued by the Commission or Town of Stonington.

ADOPTED BY	' THE Planning and Zoning Commission for the Town of Stonington, Connecticut, this	th
day of	_ 2024.	

## **Draft Resolution (For Denial)**

Should the Commission decide to **deny** this application, the following resolution language is recommended considering the standards to approve a Site Plan Application listed in ZR §8.3 (27<sup>th</sup> Edition) and pursuant to C.G.S. Section 8-30g.

**PZ2322SPA & GPP Fair Housing of Connecticut, LLC (M. Ranelli)** – Site Plan Application and Groundwater Protection Permit applications for an Affordable Housing Project submitted pursuant to C.G.S. 8-30g. Proposal consists of 102 single-family housing units and associated site improvements. Properties located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-13. Properties are located in the LS-5 Zone.

WHEREAS, Fair Housing of Connecticut, LLC has submitted an application for the development of an Affordable Housing Project, as defined under Connecticut General Statutes (C.G.S.) 8-30g, at properties located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-12A; 16-4-13; and

WHEREAS, the Town of Stonington Planning and Zoning Commission has thoroughly reviewed the application, including the Site Plan Application (SPA), Groundwater Protection Permit (GPP) application, environmental assessments, traffic studies, architectural plans, landscape plans, and all other associated documents and revisions submitted throughout the application process; and

WHEREAS, the Commission has witnessed and reviewed all public testimony and correspondence submitted to the Commission prior to the close of the public hearing on February 20, 2024; and

WHEREAS, the Commission has carefully considered the provisions outlined in C.G.S. Section 8-30g and the Town of Stonington's Plan of Conservation and Development (POCD); and

WHEREAS, after due consideration and deliberation, the Commission has determined that the application fails to meet the necessary criteria for approval under the Town of Stonington Zoning Regulations (27<sup>th</sup> Edition); and

WHEREAS, after due consideration and deliberation, the Commission has determined that the application fails to meet the necessary criteria for approval under C.G.S. Section 8-30g; and

WHEREAS, the Commission has identified the following specific reasons for denying the application:

- 1. The revised application set dated February 14, 2024 is determined incomplete by the Department of Planning consistent with the requirements of ZR §8.3.3.1 (27<sup>th</sup> Edition).
- 2. The revised application set dated February 14, 2024 does not provide a Type 2 Site Plan consistent with the requirements of ZR §8.4.2 (27<sup>th</sup> Edition).
- 3. The response letter dated February 14, 2024 does not provide sufficient information for the Town Planner, Town Engineer, or their agents to properly review the revised application set.
- 4. The revised application set dated February 14, 2024 does not provide sufficient information consistent with the requirements of ZR §7.2.6.4 (27<sup>th</sup> Edition) for the Commission to determine there is no adverse impact to the public water supply due to the project's location within the Town of

- Stonington's Groundwater Protection Overlay District (GPOD), the Pawcatuck Basin Aquifer System Sole Source Aquifer (SSA), and the Rhode Island Wellhead Protection Area (WHPA).
- 5. The pollutant loading analysis dated February 14, 2024 does not sufficiently remove 80% of Total Suspended Solids (TSS) consistent with the CT DEEP goal established in the 2004 Stormwater Quality Manual, thus presenting substantial health and safety concerns to the Stonington GPOD, Pawcatuck Basin Aquifer System SSA, and the Rhode Island WHPA arising from inadequate pollutant reduction.
- 6. The pollutant loading analysis dated February 14, 2024 does not sufficiently reduce Total Nitrogen (TN) and Dissolved Inorganic Nitrogen (DIN) by 40% consistent with the CT DEEP goal established in the 2023 Stormwater Quality Manual, thus presenting substantial health and safety concerns to the Stonington GPOD, Pawcatuck Basin Aquifer System SSA, and the Rhode Island WHPA arising from inadequate pollutant reduction.
- 7. Based upon the evidence in the record and testimony presented at the public hearing, including expert testimony on topics the Commission finds to be technically complex, the Commission cannot reasonably disregard the substantial health and safety concerns to the Stonington GPOD, Pawcatuck Basin Aquifer System SSA, and the Rhode Island WHPA arising from the development of this project.
- 8. Based upon the evidence in the record and testimony presented at the public hearing, the revised affordability plan dated February 20, 2024 does not accurately represent "reasonable monthly expenses" encompassing condominium unit owners' association fees, maintenance fees, and other fees associated with the development, nor provide the restrictive covenants or lease provisions that will govern said units consistent with the requirements of C.G.S. Section 8-30g(b).
- 9. Based upon the evidence in the record provided by the Town of Stonington Police Commission and testimony presented at the public hearing, the application presents substantial health and safety concerns to pedestrians, including children, disabled individuals, elderly individuals, and other residents of the development, arising from shared pedestrian-vehicular pathways, a lack of grade-separated pedestrian pathways, uncontrolled pedestrian crossing locations, and insufficient site lighting for safe pedestrian movement.
- 10. Based upon the evidence in the record provided by the Town of Stonington Police Commission and testimony presented at the public hearing, the application presents substantial health and safety concerns to residents and visitors arising from inadequate accessibility for emergency services to reach the rear of structures, inadequate site lighting for safe pedestrian and vehicular movement, and greater strain on local infrastructure capacity to provide such services.

THEREFORE, BE IT RESOLVED that the Town of Stonington Planning and Zoning Commission hereby denies the application for the development of an affordable housing project located at 207, 215, and an unaddressed parcel on Liberty Street, Pawcatuck; M/B/L: 16-4-12; 16-4-12A; 16-4-13, based on the findings and information presented herein.

FURTHER RESOLVED that the Commission directs Fair Housing of Connecticut, LLC to be notified of the decision in writing, including the specific reasons for the denial as outlined above, in accordance with all applicable laws and regulations.

ADOPTED BY	THE Planning and	Zoning Commissi	on for the Town	of Stonington,	Connecticut, th	າisth
day of	2024.					

From: <u>Clifton Iler</u>

To: Adrianna Bancroft-Jones

Subject: FW: Beachway Estates - recent submittals

Date: Friday, February 16, 2024 2:36:00 PM

For the file.

Best Regards,



Clifton J. Iler, AICP Town Planner | Town of Stonington 152 Elm Street, Stonington, CT 06378

E: <u>ciler@stonington-ct.gov</u>

P: 860.535.5095

**From:** strinkaus@earthlink.net <strinkaus@earthlink.net>

**Sent:** Friday, February 16, 2024 2:01 PM

**To:** Christopher Greenlaw < cgreenlaw@stonington-ct.gov>

**Cc:** Clifton Iler <ciler@stonington-ct.gov>

**Subject:** RE: Beachway Estates - recent submittals

Caution! This message was sent from outside the Town of Stonington.

#### Chris and Clifton,

I have reviewed the updated pollutant loading analysis, the revised turning movement plan, the nitrogen calculations for the former restaurant use and the applicant's response to my review comments. No updated site plans or stormwater management report has been provided for review. Without revised site plans and stormwater report to review, I am not able to determine if the stated responses in the applicant's letter will actually address my comments. Based upon the information provided, i will note the following:

Auto turning plan:

- 1. The turning movement plan for car entering the garage now show a single movement into and out of the garage which the previously submitted plan showed a three point turn. Which movement is correct.
- 2. In this plan, the vehicles are shown going to the rear wall of the garage, this conflicts with the 70 square feet of storage which was stated to be provided in the back of the garage. If the car is parked in this location, where is the 70 square feet of storage?
- 3. The plan shows parallel spaces in front of the garage doors of several units. It is not possible for a driver or passenger depending on the direction of car parking will not be able to exit the vehicle.
- 4. Based upon this plan, a driveway will not be able to exit the vehicle in the garage as there does not appear to be adequate separation between the car and the wall.

Nitrogen calculation for the former restaurant:

5. As this use no longer exists, this analysis is not applicable to the current proposal. Additionally, nitrogen from a septic system is evaluated differently than the process used by the applicant.

## Pollutant loading calculations:

6. Without site plans, details of stormwater management systems and an updated report, the results of this analysis cannot be confirmed.

It is my professional opinion that the plans and documents are not complete enough for review and evaluation. If need, I can attend the meeting on Tuesday night. If this is desired, please let me know as soon as possible.

Thanks

Steven D. Trinkaus, PE
114 Hunters Ridge Road
Southbury, Connecticut 06488

Office: 203-264-4558 Mobile: 203-525-5153

Email: <a href="mailto:strinkaus@earthlink.net">strinkaus@earthlink.net</a>

Alternative email: <u>Trinkaus.korea.lid@gmail.com</u>

Website: www.trinkausengineering.com



**From:** Christopher Greenlaw < cgreenlaw@stonington-ct.gov >

**Sent:** Friday, February 16, 2024 12:02 PM

**To:** Steve Trinkaus (<u>strinkaus@earthlink.net</u>) <<u>strinkaus@earthlink.net</u>>

**Subject:** FW: Beachway Estates - recent submittals

Steve

Please note the attached "updated" drawings & responses from the applicant.

The email below indicates the status of the application and next meeting.

Contact me to discuss any topics at your earliest convenience

Thank you,

Chris

Christopher Greenlaw, P.E. Town of Stonington

Town Engineer (860) 535.5076

From: Adrianna Bancroft-Jones <aiones@stonington-ct.gov>

**Sent:** Friday, February 16, 2024 11:59 AM

**To:** Christopher Greenlaw < cgreenlaw@stonington-ct.gov >

**Subject:** Beachway Estates - recent submittals

Good Morning,

We received the attached updates for the Beach way Estates project yesterday. As of this morning, they have chosen to move forward with their Public Hearing on Tuesday. There had been discussion about withdrawing and reapplying at a later date. This public hearing will be their final extension. Being said, any decision made by the commission will be based on comments received thus far. The applicant is aware that submitting new material at this time may not allow for an adequate time for response from other Town officials. If you can please review the new material and submit comments or concerns at your convenience, it will be appreciated. No paper copies have been submitted.

Thank you, Adrianna

## Adrianna Bancroft-Jones

Planning & Zoning Specialist Department of Planning & Land Use Town of Stonington 152 Elm Street, Stonington CT 06378

PH: 860-535-5095

E-mail: Ajones@stonington-ct.gov

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## Trinkaus Engineering, LLC

114 Hunters Ridge Road Southbury, Connecticut 06488 203-264-4558 (office) +1-203-525-5153 (mobile)

E-mail: <u>strinkaus@earthlink.net</u> http://www.trinkausengineering.com

February 22, 2024

Mr. Clifton Iler, AICP
Planning Office
Town of Stonington
152 Elm Street
Stonington, Connecticut 06378

RE: Beachway Estates – Residential Development

207 & 215 Liberty Street Stonington, Connecticut

Dear Clifton,

On February 15, 2024 I received an email from your office with the following documents from the Beachway Estates applicant.

## **Documents Received:**

- a) Response letter from Cherenzia & Associates of 2/14/24.
- b) Pollutant Loading Analysis, undated.
- c) Updated AutoTurn Figure by Cherenzia & Associates of 2/14/24.
- d) Project Memo #1 Report Addendum by Northeast Water Solutions, Inc. of 2/12/24.

No revised site plans or stormwater report were provided by the applicant. Without this information it cannot be determined if the comments in my review letter of January 23, 2024 have been addressed. At this point it is my professional opinion that the current application for Beachway Estates is incomplete.

Please contact my office if you have any questions concerning this review.

Respectfully submitted, Trinkaus Engineering, LLC

Sten D. Teinkaus, PE

From: <u>strinkaus@earthlink.net</u>

To: <u>Clifton Iler</u>; <u>Christopher Greenlaw</u>

Cc:Jeffrey PescosolidoSubject:RE: Beachway Estates

**Date:** Friday, February 23, 2024 3:47:25 PM

Attachments: <u>image002.jpg</u>

image003.jpg image004.jpg

Caution! This message was sent from outside the Town of Stonington.

#### Clifton,

I have reviewed the pollutant loading analysis by the applicant again, in particular the summary table. Based upon the summary table, TSS will only be reduced by 55%, not the 80% which is the DEEP goal. Additionally, total nitrogen is only be reduced by 6% and Dissolved Inorganic Nitrogen is only be reduced by 7% which are not adequate as this site is within the Groundwater Protection Overlay District.

Please contact me with any questions by email as I will be traveling to a conference on Saturday in Spokane, WA.

Steven D. Trinkaus, PE 114 Hunters Ridge Road

Southbury, Connecticut 06488

Office: 203-264-4558 Mobile: 203-525-5153

Email: <a href="mailto:strinkaus@earthlink.net">strinkaus@earthlink.net</a>

Alternative email: <u>Trinkaus.korea.lid@gmail.com</u>

Website: www.trinkausengineering.com



From: Clifton Iler <ciler@stonington-ct.gov>
Sent: Friday, February 23, 2024 3:24 PM

To: strinkaus@earthlink.net; Christopher Greenlaw <cgreenlaw@stonington-ct.gov>

Cc: Jeffrey Pescosolido < jpescosolido@stonington-ct.gov>

**Subject:** RE: Beachway Estates

I've spoken with Gene, Matt, and Sergio individually over the past couple hours and from my

summation, they are looking for validation that the pollutant loading calculations are satisfactory to complete the final stormwater design. What am I missing?

## Best Regards,



Clifton J. Iler, AICP Town Planner | Town of Stonington 152 Elm Street, Stonington, CT 06378

E: ciler@stonington-ct.gov

P: 860.535.5095

From: <a href="mailto:strinkaus@earthlink.net">strinkaus@earthlink.net</a>>

Sent: Thursday, February 22, 2024 10:32 AM

**To:** Clifton Iler <ciler@stonington-ct.gov>; Christopher Greenlaw@stonington-ct.gov>

**Subject:** Beachway Estates

Clifton and Chris,

Here is follow up letter as we discussed and final invoice.

Thanks

Steven D. Trinkaus, PE
114 Hunters Ridge Road
Southbury, Connecticut 06488

Office: 203-264-4558 Mobile: 203-525-5153

Email: strinkaus@earthlink.net

Alternative email: Trinkaus.korea.lid@gmail.com

Website: www.trinkausengineering.com



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**CAUTION:** This email originated from outside of the Town of Stonington. Do not click links or open attachments unless you recognize the sender and know the content is safe.

strinkaus@earthlink.net From:

Clifton Iler To:

**Christopher Greenlaw** Subject: nitrogen reductions for project Date: Friday, March 15, 2024 8:15:22 AM

Attachments: image001.jpg

Caution! This message was sent from outside the Town of Stonington.

#### Clifton.

Cc:

The 2023 CT DEEP storm water quality manual has a Nitrogen reduction of 40% for new development projects and 30% for re-development projects. The 30% reduction is basically giving a pass to the nitrogen discharge from the site prior to re-development which does not significantly improve the downgradient water quality. It is reasonable and achievable to get a 40% reduction in the ANNUAL NITROGEN LOAD from a project. However, when the project is within a Groundwater Protection Area or where are individual wells where the quality of the water could be impacted by increased nitrogen discharges, the removal rate needs to be higher than 40%.

In these sensitive environmental conditions, the nitrogen reduction on an annual basis should be 55% which is achievable with many of the wet stormwater practices as Nitrogen is reduced in anaerobic conditions.

Please contact me with any questions.

Thanks

Steven D. Trinkaus, PE 114 Hunters Ridge Road Southbury, Connecticut 06488

Office: 203-264-4558 Mobile: 203-525-5153

Email: <a href="mailto:strinkaus@earthlink.net">strinkaus@earthlink.net</a>

Alternative email: Trinkaus.korea.lid@gmail.com

Website: www.trinkausengineering.com



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## TOWN OF STONINGTON

## SOLID WASTE & RECYCLING DEPARTMENT

152 Elm Street • Stonington, Connecticut 06378-0352 Tel: 860 535-5099 Fax: 860 535-9261

Mr. Clifton J Iler Town Planner, Town of Stonington 152 Elm Street Stonington, CT 06378 January 10, 2024

With recent discussions involving the proposed residential development at the former Rosalini's property in Pawcatuck, I feel compelled to voice my concern along with many others. As Director of Solid Waste I have a commitment to provide waste services to the residents in a fair and equitable manner. The layout of this project, 113 three-bedroom, 2.5 bathroom townhouses on a 4.2 acre site, is not conducive to allow the benefit of weekly curbside trash and recycling collection as provided by the Town. Given the density of the development and nature of the site plan, it is my opinion that the developer is seeking to maximize his profits at the expense of the Stonington taxpayers.

According to comments made by Mr. Sergio Cherenzia speaking as an associate of Mr. Gene Arganese during a November 21, 2023 Planning and Zoning meeting, the development seeks standard trash pickup from the Town, in indoor or outdoor trash bins depending on the unit style.

I am curious to what the developer envisions for these "trash bins". Does the developer realize the containers can not be any larger than 32 gallons as the trash is collected manually and weight is a safety concern? Will residents keep these bins in their garage until collection day? What are the plans for an outdoor trash bin? Multiple residents disposing of their trash in one designated area is not acceptable unless collected in a dumpster. If in the near future the town should move to automated trucks for trash collection do these units have the ability to store and place two (2) 95-gallon trash containers at each household?

Reviewing the site plans, I have concerns about the current contracted trash hauler having the ability to maneuver his trucks up and down the narrow roadway. With the limited amount of overflow parking and the chance of cars parked in the street, the hauler should not be expected to locate the owner of the vehicle to move it nor will he return to the property later in the day.

I understand that the developer discussed the ability for a fire truck to maneuver through the subdivision effectively, but did Mr. Cherenzia take into consideration cars parked in the roadway or a contractor vehicle parked in the road? The Solid Waste department currently fields calls from residents whose roadways are blocked by contractor vehicles and their trash service is missed. The contracted hauler is not responsible to return to collect the trash. With so many households in one area, what would happen if trash service could not occur? Where would this trash be stored if the resident could not meet the hours of the transfer station?

The density and congestion of the units coupled with the roadway layout would present an increased burden on the trash collection company. Certainly, questions arise for service at townhouses #88 through #99. With parking for 2 vehicles in front of each unit, these 20 parking spaces appear to effectively block the hauler's ability to load the trash directly onto the truck. Each container would have to be walked down the row of parked cars to the waiting truck, impacting the schedule and blocking the roadway for resident use. If the resident trash was placed in the roadway for pick up it would block residents wishing to leave. I see no option for curbside collection at these units. I am unsure of where the developer assumes the residents will be placing their trash containers for service. I can only assume they will be placed in the street, adding more obstacles to the hauler. Again, should the town move to automated trucks where are these units going to place their cans for pick up?

If the developer is allowed to build as proposed, it is my opinion that the Town of Stonington, the Solid Waste Department and the Stonington taxpayers could be seen as subsidizing the developer seeking to maximize his profit. The weekly curbside collection would come at no cost to the developer, whereas a dumpster and service would be an expense. Stonington residents generate 9,000 tons of waste per year, not including bulky waste or demo brought to the transfer station. This equates to the average Stonington household generating over one (1) ton of trash to be collected curbside per year. Given there are 113 households in this development one could easily estimate an increase of 113 tons of trash collected, transported and disposed of annually. The yellow bag revenue supports only a portion of the trash collection and disposal costs. It could be estimated that this projected curbside service could possibly cost the Town over \$25,000 annually just between additional units collected and tonnage disposed.

Disposal Costs  $67.21/\tan x 113 \tan x = 7,594.73$ Collection Costs \$162/year x 113 units = \$18,306.00 \$25,900.73 annually

As trash collection and disposal costs increase across the State and given the current trash crisis we are in, we can only expect very large increases to these figures in the very near future. I strongly suggest that the developer reconfigure the site plan to include dumpsters at the location to avoid issues and concerns with manual pick up and disposal and not take advantage of the Town and its programs for their own benefit.

If you have any questions, please feel free to reach out to me and we can discuss this further.

Best Regards, IILL A Senior

## **Town of Stonington**

Director Solid Waste & Recycling 152 Elm Street Stonington, CT 06378 (860) 535-5099



Civil Engineers • Land Surveyors
Land Use Planners • Environmental Consultants

Raymond F. Cherenzia, P.E., L.S., Founder Sergio F. Cherenzia, P.E., President

February 14, 2024

Mr. Christopher Greenlaw, PE Town of Stonington 152 Elm Street Stonington, CT 06378

Subject: 3<sup>rd</sup> Party Engineering Response to Comments

PZ2322SPA & GPP Fair Housing of Connecticut, LLC

Site Plan & GWP Application

Proposed Residential Housing Development

Liberty Street, 207 Liberty Street & 215 Liberty Street

Pawcatuck, Connecticut

Map 16 Block 4 Lots 12, 12A & 13

Dear Mr. Greenlaw:

Cherenzia & Associates, Ltd. (Cherenzia) has reviewed the above-referenced third-party engineering review comments dated January 23, 2024 and offers our responses to these comments below. Revised and supplemental documents included with this resubmittal and are listed below:

- 1. Three (3) copies of
  - a. Pollutant Loading Calculation
  - Autoturn sketch dated October 24, 2023 revised February 14, 2024 prepared by Cherenzia & Associates, LTD.
  - Memorandum entitled Beachway Estates Report Addendum: Evaluation of Potential Impacts & Mitigation – GPOD; Nitrogen Reduction, prepared by Robert F. Ferrari, PE, dated February 12, 2024

#### TRINKAUS ENGINEERING COMMENTS:

## **EXECUTIVE SUMMARY:**

A. Inadequate soil testing has been performed on the site to establish valid groundwater contours, types of soils, and infiltrative capacity of the soils. Thus, it cannot be confirmed that the site is appropriate for the stormwater management system proposed by the applicant and will function as intended.

Response to Comment: Additional soil testing was conducted on February 1, 2024 witnessed by the third-party reviewing engineer. Soil conditions were documented in addition to infiltrometer testing to calculate the infiltrate rate in the soil layers below the proposed subsurface infiltrator system. I believe the soil testing performed has been deemed adequate and the stormwater system will be modified accordingly. Generally, groundwater was to be found to be lower than

- prior redoximorphic indicators due to a compacted subgrade and fill over from previous development. Areas with shallow depth to restrictive layer shall be under drained accordingly.
- B. This site is in the Groundwater Protection Overlay District, so there must be a high degree of treatment provided for the runoff prior to being directed into the ground. While the stormwater management will reduce TSS loads, other pollutants, particularly nitrogen and metals are not being reduced adequately which will adversely affect the groundwater on the site and potentially impact downgradient public and private wells.
  - <u>Response to Comment:</u> See revised attached pollutant load calculation and memorandum. Per discussion with Town and third-party reviewing engineer, specific attention has been paid to nitrogen treatment and reduction. A pre- to post-development nitrogen analysis has been provided along with revised pollutant loading calculation.
- C. The modeling of the multiple stormwater management systems as a single unit is not correct as a single drainage area for post-development conditions is directed to the multiple systems which are combined in the hydrologic model. Each system must be evaluated separately for the drainage areas directed to it.
  - Response to Comment: The model shall be modified as appropriate.
- D. The applicant uses an assumed infiltration rate of 2.41"/hour for the proposed infiltration practices and makes a factual conclusion about the functionality of the stormwater system. This is not supported by actual field data.
  - Response to Comment: The infiltrate rate has been verified by infiltrometer testing. Generally, the infiltration rates were relatively fast. The stormwater calculations and design will be adjusted accordingly.
- E. The stormwater management system does not comply with the CT DEP 2004 Storm Water Quality Manual as discussed in the detailed comments below.
  - Response to Comment: The CT DEP 2004 Storm Water Quality Manual is a guidance document. The system has been designed implementing good engineering practice and utilizing other acceptable design resources. The detailed comments are addressed herein.
- F. The erosion control plan does not comply with the CT DEP 2002 Guidelines for Soil Erosion and Sediment Control as discussed in the detailed comments below.
  - Response to Comment: The CT DEP 2002 Guidelines for Soil Erosion and Sediment Control is a guidance document. The system has been designed implementing good engineering practice and utilizing other acceptable design resources. The detailed comments are addressed herein.
- G. The design of the site requires significant vehicular movements for residents, guests, and emergency services. The required movements are a significant safety concern in my professional opinion.
  - Parallel parking in front of units has been significantly reduced to improve and minimize vehicular movements required. See revised Autoturn sketch herewith.

## **AUTOTURN SKETCH:**

1. The turning movement plan in the upper left of the plan sheet shows the movements on the ladder truck within the site. The outside limit of the turning movement is almost touching the corner of the

parallel parking space in front of Unit #21 as well as going over the curb. If the vehicle in the parallel space is not centered in the space, the ladder truck may not be able to make this turning movement. This is not an acceptable condition and poses a safety risk.

Response to Comment: Building #1 (Units 1 through 20) has no parallel parking allowed, this provides additional space for the turning movement.

- 2. This same turning movement also crosses the curb to the west and opposite Unit #21. The movement is located just outside the parking spaces on the west side of the driveway opposite Units #21 and #36. If someone is parking in these spaces and has not pulled all the way in, then the ladder truck does not appear capable of making the turning movement. If people do not park ideally, then the ladder truck will not be able to fully access the site, which is a safety issue.
  - Response to Comment: Building #1 (Units 1 through 20) and Building #3 (Units 36 through 49) has no parallel parking allowed, this provides additional space for the turning movement.
- 3. While a note states that there are parallel spaces in front of many of the units, no parking spaces are shown. All parallel parking spaces need to be shown with a typical length and width dimensions, assuming all spaces are the same.
  - Response to Comment: The spaces coincide with the front of each unit where parking is allowed, dimensions are shown and can be delineated with striping or other form of designation for visible cue.
- 4. The parallel spaces are only 8' wide by scaling on sheet C-3. It does not appear possible that a person on the building side of the car will be able to exit the car safely if the car is 6.0' to 6.5' in width.
  - Response to Comment: Parallel spaces may be adjusted to 9 feet, as space allocation allows.
- 5. According to the architectural plans (11/2/23) the garages take up all the front face of the units except for the entrance door. The parallel parking will block the garage doors which may pose a safety issue for emergency crews. The Fire Marshall should be consulted on this design for public safety reasons.
  - Response to Comment: The Fire Marshall has reviewed the plans and comments have been addressed.
- 6. According to architectural plans, the width of the garages is 16'. A typical sedan/small SUV is 6.5' in width, so two vehicles will be a combined width of 13.0'. Thus, there will be 2.0' or less between the two vehicles, and between the left side vehicle and stairway wall or the wall to the outside of the right side vehicle. It does not appear that you can open the car door and safely exit the vehicle in the garage.
  - Response to Comment: The residential structures shall meet building code requirements. Final architectural plans shall provide ample space for safe exit of the vehicle.
- 7. No parking areas are shown at several locations in front of the buildings. What will prevent people from parking in these areas? Painted hatch areas in parking lots are often ignored by drivers.
  - <u>Response to Comment:</u> Fire and no parking lanes will be indicated to the satisfaction of the Police and Fire Department.

- 8. The turning movement plan in the upper right of this sheet has many of the same issues discussed above If people do not park ideally, then the ladder truck will not be able to fully access the site, which is a safety issue.
  - Response to Comment: The additional no parking/fire lanes addresses this issue. See revised Autoturn sketch.
- 9. The turning movement plan in the lower right of this sheet has many of the same issues discussed above. If people do not park ideally, then the ladder truck will not be able to fully access the site, which is a safety issue.
  - Response to Comment: The additional no parking/fire lanes addresses this issue. See revised Autoturn sketch.
- 10. The turning movement plan showing the movement of a car pulling into and backing out of a garage requires a three-point turning movement at a minimum to accomplish this movement. This movement depends on drivers making precise movements in a constrained driveway area with cars in parallel spaces on one or both sides of the garage space. Making multiple turning movements to enter and exit a residential garage is less than ideal.
  - Response to Comment: The additional no parking/fire lanes addresses this issue. See revised Autoturn sketch.
- 11. As the garages will hold two vehicles, are the turning movements for the car on the left or the right? If another vehicle is already in the garage will this affect the movement of the second vehicle entering the garage?
  - <u>Response to Comment:</u> The additional no parking/fire lanes addresses this issue. See revised Autoturn sketch. Additional turning movements have been shown for both vehicles entering the garage.
- 12. While the turning movements of backing into and then pulling out of a garage are simpler, they still require precise movements of the driver in the constrained driveway area which are also not ideal.
  - Response to Comment: Entering front end first and back end first are both accommodated with minimal turning movements.
- 13. In both turning movements of cars entering and exiting garages can also be considered a safety issue as they do not allow for any errors in the judgement of the drivers.
  - Response to Comment: The additional no parking/fire lanes addresses this issue and impact to safety.

## **SITE PLAN COMMENTS:**

## **ALL PLANS:**

- 14. Each building needs to be labelled on the site plans (i.e., Building #1, #2, etc.), also the building type A or B should be noted for coordination with the architectural plans.
  - Response to Comment: The buildings and unit types shall be labeled and consistent with the Architectural plans.

- 15. The layer containing existing development on the site needs to be removed from all plans which show proposed development to increase the readability of the plans.
  - Response to Comment: The existing conditions layer(s) shall be removed as appropriate.
- 16. It appears that blasting will be necessary based upon the location of ledge outcrops on the site. No blasting plan has been prepared. With the number of single-family residences located to the north, west and south of the site, a pre-blast survey must be done. A blasting plan must be reviewed and approved by the Fire Marshall.
  - Response to Comment: A ledge removal and blasting plan shall be prepared and reviewed by the Fire Marshall. All applicable regulatory and legal requirements shall be met.
- 17. There is no note on the plan which requires the design engineer of record to provide inspection services and to certify that all improvements (stormwater management system, all underground utilities, pavement, sidewalks and building foundations) have been installed in compliance with the plans. Written Inspection reports and final certification shall be provided to the Town of Stonington. Along with this certification As-built drawings of these engineering improvements shall be prepared by a licensed land surveyor and provided to the Town of Stonington.

Response to Comment: A note shall be added to the plan to the satisfaction of the Town Engineer.

#### SHEET C-3:

- 18. The parking spaces in the internal garages need to be shown for all units with garages as well as all parallel spaces along the front of the buildings.
  - Response to Comment: All parking spaces shall be shown, and on a separate plan as necessary.
- 19. All parking spaces need to be numbered consequently so it is clear to the commission how many parking spaces are provided on the site. This information should be shown on this plan as well as the Autoturn Sketch plan.
  - Response to Comment: All parking spaces shall be numbered sequentially.
- 20. Typical dimensions for all internal or external parking spaces need to be shown on this sheet.
  - Response to Comment: Typical dimensions shall be shown.
- 21. All proposed drainage structures should be removed from this sheet.
  - Response to Comment: All proposed drainage structures shall be removed.
- 22. No dumpster pad was found on the plans. Where will the dumpster pad be located? How big will the dumpster pad be? If garbage and recycling containers are located within a garage, how can they be moved outside the garage if there is only two feet or less between the vehicles. Once the garbage/recycling containers are outside the garage, where will they be placed for pick up? If placed outside the garage door, this will prevent an owner from moving their car out of the garage. Also, if the garbage and recycling containers are placed outside the garages, then the garbage truck will be forced to stop in the driveway and thus will limit the movement of other vehicles in the driveway. If they are placed away from the garage door, they will block the front door. This is not a desirable condition.

Response to Comment: There shall be no dumpster pad. Garbage pickup and their locations shall be coordinated with Stonington Solid Waste Department. It is assumed garbage pickup will be at a specified time each week, minimizing the window for conflict between vehicles and garbage/recycling pickup.

23. Units #75 to #85 show trash enclosures at the rear of the unit. How will unit owners move the garbage/recycling containers from the rear of the building to the driveway in front of the building as there is no sidewalk from the rear of the building to the front?

Response to Comment: Trash enclosures shall be relocated to the front of the units.

24. There is proposed graded slope at the east side of the building which would make the moving of garbage/recycling containers difficult, if not impossible.

<u>Response to Comment:</u> Trash enclosures shall be relocated to the front of the units alleviating need to bring trash around the side of the building.

25. Provide a turning movement plan for the movement of the garbage truck to and from the dumpster pad and for individual pick up in front of the units.

Response to Comment: Turning movement for garbage truck shall be provided. There is no dumpster proposed. Individual pickups will likely take place in front of each unit.

26. It appears that several sidewalks are proposed between several of the buildings. They need to be labeled.

Response to Comment: Walkways and sidewalks are labeled, typ. Additional callouts can be added as appropriate.

27. Compliant ADA ramps must be shown for all sidewalk intersections with paved driveways.

Response to Comment: ADA ramps shall be shown, as appropriate.

28. It is understood that some handicap accessible units will be located in the building of units #75 to #85. What specific units will be handicap accessible?

<u>Response to Comment:</u> The units have first floor bedrooms, but are not necessarily ADA compliant. If required, modifications will be made to accommodate ADA design.

29. If some units are to be handicap accessible, there needs to be handicap parking spaces, including van accessible in front of the unit(s). No handicap spaces are shown to the north of this building.

Response to Comment: ADA spaces are not required since units are not specifically ADA compliant. If ADA spaces are required, the parking areas will have to be redesigned to accommodate.

30. Why is there no full crosswalk shown for the sidewalk between buildings #1 and #2, and #4 and #5 across the western driveway?

Response to Comment: Crosswalks shall be incorporated as appropriate.

31. Why are there no sidewalks from Buildings #6, #7, and #8 to the other sidewalks shown on the plan? With no sidewalks, residents will be forced to walk in the driveway.

Response to Comment: Units 92-102 (Building #8) may utilize the walkways between buildings #2 & #3 and #4 & #5. Building #6 and #7 (units 75-91) shall either walk behind the building or along their fronts to the walkway in front of Building #6.

#### SHEET C-4:

32. All proposed drainage structure and labels, sanitary sewer manholes and labels and outline of stormwater management systems should be removed from this sheet.

Response to Comment: All items referenced shall be removed, as applicable.

33. Many of the proposed contours are not labelled. Label all proposed contours on this sheet.

Response to Comment: Contours requiring labels shall be provided.

34. As there is a separate erosion control plan, remove erosion control measures from this sheet.

Response to Comment: Erosion control measures shall be removed from this sheet, as applicable.

35. No areas for the stockpiling of snow are shown on this plan or any other sheet. Where will snow be stockpiled on the site?

Response to Comment: Snow stockpile areas shall be labeled.

36. A graded (triangular cross section) swale is shown between at the rear of building #8. What will prevent concentrated flows from occurring in this swale?

Response to Comment: This area shall be graded to a less pronounced swale and more level.

37. What is the purpose of this swale?

Response to Comment: The purpose of the grading is to direct water away from the building.

#### SHEET C-5:

38. Remove sanitary sewer information from this sheet.

Response to Comment: Sanitary sewer shall be removed from this sheet as applicable.

Remove grading information and erosion control measures from this sheet.

Response to Comment: Grading information and erosion control measures shall be removed from this sheet as applicable. Drainage plans are important to drainage plans.

40. Remove hatching in front of buildings to improve readability of this sheet.

Response to Comment: Hatching shall be removed.

41. Remove all sanitary sewer and erosion control information from this sheet.

<u>Response to Comment:</u> Sanitary sewer and erosion control information shall be removed from this sheet, as applicable.

- 42. What is the purpose of the drainpipe shown between buildings #2 and #3? Only two clean outs are shown near the eastern end.
  - Response to Comment: The drainpipe is the roof drain conveyance pipe which downspouts will connect to; however, it is intended to integrate the drain into foundation planters to treat roof runoff and then underdrain those planters to the subsurface infiltration system, so this pipe may change.
- 43. What is the purpose of the drainpipe shown between buildings #4 and #5? Only two clean outs are shown near the eastern end.
  - Response to Comment: The drainpipe is the roof drain conveyance pipe which downspouts will connect to; however, it is intended to integrate the drain into foundation planters to treat roof runoff and then underdrain those planters to the subsurface infiltration system, so this pipe may change.
- 44. Several of the pipe runs have slopes less than 1.0%. To ensure self-cleaning velocities, all drainage pipes should have a minimum pitch of 1.0%.
  - <u>Response to Comment:</u> Pipes shall be revised to get a minimum of 1% slope where possible. If such cannot be achieved, the operation and maintenance plan shall address cleaning of those pipes.
- 45. The drainage table for the roof drains calls out rim and inverts for the clean outs on the lines, but in most cases, the pipe connections are not located at the actual clean out and no invert information has been provided at these connection points.
  - Response to Comment: Clean outs are in close proximity to the intersection invert. This difference in elevation is negligible.
- 46. It does not appear that all pipe runs for the roof drains are defined on the plan. All pipe runs between clean outs must have pipe size, length and slope defined on the plan in a clear fashion. As an example: CO-7F to CO-7E: pipe size, pipe length, pipe slope.
  - Response to Comment: A note is provided indicating that pipe sizes not indicated default to 6" PVC. Pipe lengths and slopes have been calculated, but if required to be identified on the plan, will require additional plan sheets. Typically, such detail is not necessary and roof drains are tied in accordingly.
- 47. It is assumed that the manholes shown at the end of the Isolator Rows are for maintenance access. A person working in this manhole will be in "confined space" and must wear special gear, including breathing equipment. No safety protocols for this work have been specified on the plan.
  - Response to Comment: A note shall be added to address safety protocols must be met for "confined space".
- 48. Stormwater system E is accepting runoff from the roof of building #2 (units 21-35), but roof drains are only shown on one side of the building, how will the other side be directed to this system? The area of the roof of building #2 directed to system E must be called out on the plan. Directional arrows on all roof drain pipes would make it clear which roof drains are directed to specific stormwater systems.
  - Response to Comment: Rear of building #2 is connected to the center pipe, but is subject to design modification.

- 49. Building #7 (units 86-91) are also directed to system E. It appears that some of this roof may be directed to another system. The watershed map shows the entire front half of the roof and 50% of the back half are being directed to system E which conflicts with the information shown on the grading/drainage plan for building #7. The area of the roof of building #7 directed to system E must be called out on the plan.
  - Response to Comment: Building #7 discharges to system "A". Revisions to the modeling will be addressed accordingly as required.
- 50. If the bottom of the chambers is set at 103.0' and the inverts of the pipes from DMH-2 and DMH-9 are also at 103.0', then the connecting pipe has no pitch. All drainage pipes must have a minimum pitch of 0.5% to ensure that no sediment can accumulate in the pipes. If a flow velocity is not self-cleaning at 0.5%, then the slope needs to increase as necessary to provide for a self-cleaning velocity of 2 feet per second (fps).
  - Response to Comment: The pipes referenced are short runs and are able to be cleaned out if required. Pitch to "self-clean" is not appropriate as the system needs to be level.
- 51. It appears that there are two separate components of stormwater system F. If they are not connected, they should be considered as two separate systems and not a singular system.
  - <u>Response to Comment:</u> The systems are connected by crushed stone, so treated as one singular system.
- 52. There is only one outlet control structure (DMH-16) for all the underground stormwater systems which depend upon the critical and accurate installation of all the StormTech units and associated piping. It is my professional opinion based upon forty years of experience that each underground system needs to have its own outlet control structure. As noted below in the comments under the Stormwater Management Report, it is not an appropriate approach to model all these systems as one which is stated in the stormwater report.
  - Response to Comment: The modeling of the system will be revisited and design modified accordingly.
- 53. All runoff is being directed to the Infiltration Gallery Level Spreader Outlet. No test holes have been made within the footprints of this system to confirm the soil conditions. No infiltration tests have been performed at this location.
  - <u>Response to Comment:</u> This area is not designed to infiltrate. Any additional infiltration is bonus, but not taken into account in the design.
- 54. What is the length of this system? The type of gallery is not specified on this plan.
  - Response to Comment: Length shall be specified. Type of galley is shown on the detail sheet (4'x4' galley).

#### SHEET C-6:

- 55. Remove all drainage, erosion information, sidewalks and hatching from this plan to improve readability.
  - Response to Comment: These items shall be removed from this plan for readability, as applicable.

- 56. No pipe sizes and slopes have been provided for the sanitary sewer.
  - Response to Comment: Pipe sizes and slopes have been provided in the plan, not on a table.
- 57. It must be demonstrated that self-cleaning velocities will be present in all sanitary sewer lines, which is 2 fps.
  - Response to Comment: These calculations shall be provided to the satisfaction of the WPCA.
- 58. Have the respective utility companies signed off on the alignment and horizontal and/or vertical separation for all the utilities?
  - Response to Comment: The utility plan shall be reviewed by respective utility companies subsequent to Town review and approval.
- 59. Have the locations of the proposed hydrants been approved by the Stonington Fire Marshall?
  - Response to Comment: Yes, hydrant locations have been reviewed by the Fire Chief.

### SHEET C-7:

- 60. This erosion control needs to be split into two or more sheets. One sheet needs to show the proposed development and all erosion control measures at the same scale of all the other plans (1" = 20').
  - Response to Comment: Erosion control and phasing plan shall be split into multiple sheets as appropriate.
- 61. Only information which is relative to the erosion control plan should be shown to make it easy to read and follow.
  - Response to Comment: Only information relative to the erosion control plan shall be shown.
- 62. All erosion control details on a separate plan with the narrative on a third plan.
  - Response to Comment: Erosion control details shall be separated from the narrative.
- 63. The narrative shown on this plan is overly simplistic for a project such as this. The narrative must also follow the form and content found in the CT DEP 2002 Guidelines for Soil Erosion and Sediment Control "2002 Guidelines".
  - Response to Comment: The narrative shall be modified as appropriate and emphasis shall be added for preconstruction meeting to coordinate with the contractor, specific to any changes that may be requested by the contractor for construction phasing, staging, erosion controls, etc.
- 64. A temporary sediment trap is shown on the plan. No grading is shown for the temporary sediment basin which must be provided.
  - Response to Comment: Grading shall be shown for temporary sediment trap.
- 65. According to the 2002 Guidelines vertical perforated risers are the outlet structure for a sediment basin whereas a riprap berm is used for a temporary sediment trap. What is the applicant's justification for the vertical riser for a temporary sediment trap?

- <u>Response to Comment:</u> Vertical perforated risers are utilized for pumping when the traps are at capacity, as needed.
- 66. No riser or discharge pipe is shown on the plan view of the temporary sediment trap.
  - <u>Response to Comment:</u> This is typically not shown and generalized so that the contractor can hancle based on specific needs of the site. Additional notes can be added as appropriate.
- 67. The 2002 Guidelines (Section 5-11-25) require that calculations for wet and dry storage be done. No calculations have been provided.
  - <u>Response to Comment:</u> Sediment trap sizing has been provided in "Temporary Sediment Trap Sizing". Wet and dry volumes can be added to the notes.
- 68. The detail for the temporary sediment trap shows a discharge hose from the vertical perforated riser. Where will the hose discharge too? How will concentrated flows be reduced to non-erosive velocities at the outlet?
  - Response to Comment: This is typically left to the site contractor to handle in a non-erosive manner. Notes can be added, as appropriate.
- 69. How will construction runoff be conveyed to the temporary sediment trap?
  - Response to Comment: The temporary sediment trap is down gradient of the construction. Notes can be added to identify appropriate ways to convey stormwater to it, but generally it will be surface runoff flow.
- 70. There are five phases discussed in the construction sequence. The description of the phasing plan does not line up with the phasing limits shown on this plan. A separate plan showing the limits of each phase with a detailed description of the work to be done in each phase must be submitted.
  - Response to Comment: Additional sheets will be incorporated to separate phases to make it clearer.
- 71. Two areas are shown for "staging & stockpile area on the plan. Soil stockpiles, construction trailers, equipment and material storage area need to be clearly defined within each of these areas.
  - Response to Comment: Typically this is determined by the site contractor and covered by notes.
- 72. The detail of the silt fence backed straw bale is not an effective erosion control perimeter measure. If the straw bale is overtopped, it can easily overwhelm the siltation fence barrier. The applicant should consider a more effective and redundant perimeter erosion control measure. Hay/straw bales are a very ineffective erosion control measure.
  - <u>Response to Comment:</u> The recommendation was made by the Town Engineer. If there is a more effective perimeter control, we are happy to consider. Hay bales are typically not acceptable (because of invasive seeds), but straw bales are.
- 73. Each phase must erosion control measures for the work to be performed and cannot depend on the singular perimeter control measure to protect off-site areas.
  - Response to Comment: Additional perimeter controls shall be added when phase sheets are broken out, as appropriate.

74. The detail for the Temporary Sediment Trap Riser pipe shows perforated down to the bottom of the riser. This is not correct as it will result in the discharge of turbid runoff from the sediment trap. Only clean water is to be discharged from a temporary sediment basin or trap.

Response to Comment: The riser is surrounded by crushed stone providing sediment filtration.

75. There is grading and other work proposed within the CT DOT Right of Way. Has the applicant discussed this work with CT DOT? What will happen if the CT DOT does not permit this work to be done?

Response to Comment: A application shall be applied for at CT DOT, but Town approval is required prior to a permit being issued.

#### SHEET C-8:

76. What is the horizontal separation between the water lateral and sewer lateral in the detail showing them both in the same trench?

Response to Comment: 18" vertical if less than 10 feet separation, per the detail.

77. A detail of an ADA compliant ramp needs to be provided for where the sidewalk connects to the pavement perpendicularly.

Response to Comment: This detail shall be added if applicable. Currently it is not, but if changed, will be added.

78. A detail for a bollard has been provided, however, no bollards have been shown on the site plan. Where will the bollards be installed?

<u>Response to Comment:</u> Bollards are shown around the communication and transformer locations.

#### SHEET C-9:

79. What is the depth of the sump for a catch basin with a hood?

Response to Comment: Four feet, as indicated on the detail.

80. Will all catch basins have a hooded outlet or only select catch basins?

Response to Comment: Catch basin hoods shall be specified once the stormwater system is modified.

81. The Typical Roof Drain Connection conflicts with the information shown on the Drainage Plan. This detail shows a splash pad onto the ground surface which is not reflected on the Drainage Plan. How will the roof runoff get into the drainage system if discharged through the surcharge pipe? Corrugated HDPE pipe can be prone to clogging. Piping should be either double wall, smooth interior N-12 piping for PVC pipe (ASTM D3034, Sdr. 35). The detail must reflect the actual design.

<u>Response to Comment:</u> Splash pad will be removed. The surcharge pipe will drain to the catch basins. If the system is full and surcharging, there is either an issue with the system that needs to be addressed or it is full because of extensive rain event. All grading on site generally runs east to west and if the site surcharges, will overflow to Liberty Street and not into the buildings.

#### SHEET C-10:

82. The table called "Stormwater Treatment Data" has unconfirmed data in it. The elevations of seasonal high groundwater are not valid as discussed in the comments under the Stormwater Report.

<u>Response to Comment:</u> Additional data shall be applied to the design to verify it is designed to good engineering practice and applicable regulations.

83. There is a note under the "Stormwater Treatment Data" Table which states "Infiltration Note: An engineer shall conduct perc. And/or infiltration tests to verify infiltration rates of the soil prior to the construction activities. Stormwater modifications may be required based on results." This is not acceptable from an engineering standpoint. A comprehensive testing protocol consisting of deep test holes and double ring infiltration, not percolation tests must be done during the design stage to demonstrate that the current design will function as intended.

<u>Response to Comment:</u> This note was added per request of the Town Engineer. Infiltrometer tests have been subsequently conducted with coordination between yourself and the Town Engineer.

84. The details of the diversion weir manholes appear to have some typos on them. As an example, the detail for DMH-9 states "12" HDPE from HDS-2, Inv. 104.04". Based upon the Drainage Plan sheet, it should state "To HDS-2". All details should be checked for consistency with the information found on the Drainage Plan sheet.

Response to Comment: These details will be reviewed to confirm accuracy.

85. There is no thickness of the weir call defined in the details.

Response to Comment: A typical thickness can be added to the details.

86. Directional arrows should be added for all pipes into and out of these manholes to make the flow patterns clear.

Response to Comment: Directional arrows can be added to these details.

87. Section A-A of the weir walls should be so labeled. The top of bottom of the weir wall should be clearly labeled.

<u>Response to Comment:</u> Section A-A is labeled on all the details. Top elevation is labeled on all the details. A note shall be added that the weir wall shall extend to the floor of the manhole.

88. Calculations which show the water surface elevation for the Water Quality Flow in the pipe to the hydrodynamic separator need to be provided to confirm the top of weir elevation.

Response to Comment: Calculations for the water quality flow are provided on the Proposed Stormwater Pretreatment Table (Appendix D.1) with the elevations in the manholes calculated with a modified HydroCAD analysis based on the water quality flow (Appendix C.5) in the Stormwater Report. Additional text can be added to the report to describe these calculations.

89. For DHM-16, the invert of the low point of the outlet weir is called out as 103.3'. This is 0.8' higher than the invert of the 30" HDPE pipe from DMH-17 and will cause a backwater condition in this pipe. Why is the outlet invert set at 103.3'?

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Response to Comment: The lowest outlet in the weir wall of the outlet control structure is 103.3 to control small storms as required as required by State and Town requirements. Stormwater below this elevation will infiltrate.

- 90. The detail of the Infiltration Gallery Level Spreader Outlet is not a level spreader, and the discharges will occur as concentrated flow through the sidewall knockouts on the gallery. A level spreader ensures uniform overland flow for all discharges over a level linear length.
  - <u>Response to Comment:</u> This design has been used at least one other location in the Town. The riprap outside the galleys will dissipate concentrated flow.
- 91. The detail for Stormwater Treatment Train Section Stormwater Areas A-F which are infiltration practices shows an underdrain. If these systems are infiltration practices, why is the underdrain needed? Where will the underdrain be discharged? There are no invert elevations for the underdrain, please provide.
  - Response to Comment: Infiltration is not part of the design of all the areas due to groundwater separation. The underdrain pipe is intended that lower stone area (Elev 102.5 103.0) can drain from the areas that do not infiltrate to the areas that can infiltrate. The invert of the underdrain is provided on the plan on sheet C-5 and on the Stormwater Treatment Data table on sheet C-10 with the rest of the stormwater system elevations.
- 92. The detail for Stormwater Treatment Train Section Stormwater Areas G & H which are to be lined with an impermeable liner also show an underdrain. When and how will the underdrain be connected to the outlet system? Inverts must also be provided for these systems.

Response to Comment: The underdrain pipe is intended that lower stone area (Elev 102.5 – 103.0) can drain from the areas that do not infiltrate to the areas that can infiltrate. The underdrain pipe does not connect to the outlet of the system. The invert of the underdrain is provided on the plan on sheet C-5 and on the Stormwater Treatment Data table on sheet C-10 with the rest of the stormwater system elevations.

#### SHEET C-11:

93. The detail of the Stormtech Inlet Scour Protection simply shows a layer of woven geotextile at the top of the stone under the units. Scour protection is a system to slow flow velocities down to prevent erosion of native soils. Flow over a geotextile layer does not slow down as there is less friction to flow so the velocities are not reduced. This system will not function to slow the flow velocities down.

Response to Comment: This detail is per the StormTech installation requirements.

#### LANDSCAPE PLANS (3 SHEETS):

- 94. Based upon the landscape plan, there do not appear to be any available areas for the stockpiling of snow which would not adversely affect the proposed plantings. There are no open areas with direct access to any of the internal driveways where snow could be stockpiled.
  - Response to Comment: Snow is expected to be stockpiled west of Building 6. Plans will be updated as needed.
- 95. It is important to note that deicing agents will cause mortality of the trees and shrubs proposed on this plan.

<u>Response to Comment:</u> Deicing alternatives that are environmentally friendly can be explored as alternatives. Plantings that do not survive will have to be replaced in kind.

## **STORMWATER REPORT:**

## **GENERAL COMMENTS ON OVERALL DESIGN:**

- 96. As this site is in the Groundwater Protection Overlay District, all non-point source pollutants must be significantly reduced prior to introduction into the ground. These pollutants include Total Suspended Solids (TSS), Total Phosphorous (TP), Total Nitrogen (TN), Zinc (Zn) as an indicator for other metals, and Total Petroleum Hydrocarbons (TPH). The CT DEEP has a goal of reducing post-development TSS loads by 80%. This goal was established back in 2004 when the 2004 Storm Water Quality Manual was released. At that time, it was assumed that other non-point source pollutants attached to sediment particles and thus if you trapped sediments, you would eliminate the other pollutants. In the past 20+ years, there has been a lot of research in this field which found that is not the case. When you look at pollutant removal efficiencies for any stormwater practices, you will observe that they are not the same which you would expect if simply trapping the sediment trapped all the other pollutants. The following provides a brief discussion of each pollutant and environmental impacts.
  - a. Total Suspended Solids (TSS) are fine soil particles, such as silt and clay which are dissolved in water. In excessive amounts it causes turbidity in water. The turbidity blocks light in the water column which causes reduced photosynthesis, which in turn reduces the oxygen levels in the water. Coarse and fine sediments can clog the gravel substrate in breeding streams thus affecting the biological community's ability to reproduce. Common sources of TSS and sediment are runoff from construction sites, winter sanding operations, atmospheric deposition, and decomposition of organic matter, such as leaves.
  - b. Phosphorus (TP) and nitrogen (TN) are commonly found in non-point runoff with the primary source being atmospheric deposition on impervious surfaces. Excessive levels of phosphorus in freshwater systems are a concern as this nutrient causes excess growth of non-native aquatic plants and algae in lakes. As a result of increased nutrient loads, toxic algae blooms are becoming more prevalent in lakes in Connecticut. These toxic algae blooms have resulted in beach closures as exposure to the algae blooms can cause adverse health issues in humans. A further problem occurs, when the algae die off, the decomposition process of organic matter removes oxygen from the water column, thus reducing oxygen levels in the water. The reduced oxygen levels in the waterbody can result in fish killings. Nitrogen, in the form of nitrate, is a direct human health hazard and an indirect hazard in some areas where it leads to a release of arsenic from sediments. As this site is in a water supply area and there are downgradient individual wells, the release of nitrogen into the groundwater will cause an adverse environmental impact. While not a major concern for freshwater systems, nitrate can cause environmental impacts in tidal regions, even though the source of nitrate can be far away from coastal regions. Additional sources of nutrients are organic and inorganic fertilizers, animal manure, bio solids and failing sewage disposal systems.
  - c. Metals (Arsenic, Cadmium, Chromium, Copper, Nickel, and Zinc) in non-point source runoff are very toxic to aquatic life. The primary source of these metals is automobiles. The adverse effects of metals are far reaching for both aquatic and human health. Many metals can bio accumulate in the environment, which can affect higher living organisms. While the concentration of zinc or copper in stormwater is not high enough to bother humans, these same concentrations can be deadly for aquatic organisms. Many microorganisms in soil are especially sensitive to low concentrations of cadmium. Zinc, Copper, and Cadmium found in

non-point source runoff result from the movement and wear and tear of automobiles on our roadways. Of the above discussed metals, zinc and copper are the two metals which are found dominantly in non-point source runoff.

d. Total Petroleum Hydrocarbons (TPH) are highly toxic in the aquatic environment, especially to aquatic invertebrates. The primary sources of petroleum hydrocarbons are oil, grease drops from automobiles, gas spills, and vehicle exhaust. Polycyclic Aromatic Hydrocarbons (PAHs) are also toxic to aquatic life. PAHs can be discharged into the environment using coal tar asphalt sealants, commonly used by homeowners on residential driveways. The movement of vehicles or people walking over the sealed driveway can release dust particles containing PAH, which can then be washed off with the next rainfall into the stormwater management system. PAHs are also generated by the burning of fossil fuels and the airborne particles are then deposited by atmospheric deposition on an impervious surface, especially large flat roof areas. When it rains, the accumulations of PAHs due to atmospheric deposition are carried off in the stormwater.

<u>Response to Comment:</u> An updated pollutant loading has been provided based on these comments. Infiltration has been removed from the treatment and bioretention areas (planter beds) have been conceptually added for a portion of the roof runoff.

97. The stormwater management system relies on structural components only, all of which are considered secondary practices under the CT DEP 2004 Storm Water Quality Manual. Secondary practices are not effective at reducing non-point source pollutants in the runoff.

Response to Comment: Bioretention and planting beds can be added to treat some of the roof. Modifying the soil under the stormwater chambers can be explored to provide primary treatment or limit infiltration rates.

98. As this site is in a Groundwater Protection Overlay District (GPOD) it is imperative that non-point source pollutants are significantly reduced prior to entering the soil. The stormwater management system as proposed does not reduce many of non-point source pollutants sufficiently to prevent adverse impacts to the groundwater on the site.

Response to Comment: An updated pollutant loading has been provided based on these comments. Infiltration has been removed from the treatment and bioretention areas (planter beds) have been conceptually added for a portion of the roof runoff. Modifying the soil under the stormwater chambers can be explored to provide primary treatment or limit infiltration rates.

- 99. The StormTech system uses an Isolator row which is simply one row of StormTech units wrapped by geotextile. The StormTech system is the same as the isolator system used by Cultec. The Isolator rows are designed to trap sediment on the filter fabric surface, particularly on the bottom of the system. However, any trapped sediment on top of the fabric layer can be resuspended by new flows entering the Isolator row if maintenance is not properly performed. The University of New Hampshire Stormwater Center (UNHSC) tested the Stormtech Isolator Row at their facility and found that it would remove the following percentages of certain pollutants.
  - a. Total Suspended Solids 80%
  - b. Total Petroleum Hydrocarbons 88%
  - c. Zinc 55%

Response to Comment: Isolator rows have been added to the pollutant loading calculations.

- 100. In this design, the Isolator Row is located after an off-line hydrodynamic separator and thus the above removal percentages will be less than those shown for the simple reason as a pollutant is reduced in the first practice and becomes cleaner, it is more difficult to further reduce the pollutant load. The Isolator Row does not reduce nitrogen. Based upon the UNHSC testing.
  - Response to Comment: Based on conservation with the third party engineer, the Hydrodynamic Separators do not provided significant stormwater treatment as part of the design and will likely be eliminated. The isolator rows provide adequate treatment without the HDS.
- 101. According to the manufacturer, the Barracuda S4 separator has a TSS removal percentage of 50% based upon testing by NJDEP. The Barracuda S4 does not reduce phosphorous, nitrogen, hydrocarbons, or metal loads.
  - Response to Comment: The HDS structures will be removed from the design.
- 102. Section 11-S12 of the CT DEP 2004 Storm Water Quality Manual concerns infiltration practices. In addition to this section of the 2004 Manual, the requirements found in Section 11-P3 (Infiltration Practices) must also be met. This section has the following requirements for Infiltration practices such as those proposed here:
  - a. Siting: Need to be located for easy maintenance and access. Only 6" diameter inspection ports are proposed on the many StormTech units which are not adequate to provide maintenance of these systems.

Response to Comment: The inspection port is for inspection only. Access to the system for maintenance is from the proposed manholes.

b. Siting: They should only be used in soils having suitable infiltration capacity (as confirmed through field testing) and for land uses, activities, or areas that do not pose a risk to groundwater contamination. First, no field infiltration testing consisting of double ring infiltration tests have been done for the stormwater management systems. Secondly, non-point source pollutants are not being adequately reduced prior to introduction into the groundwater on the site.

Response to Comment: Modifying the soil under the stormwater chambers can be explored to provide primary treatment or limit infiltration rates.

c. Pre-treatment: "Appropriate pretreatment (e.g., oil/particle separator, hydrodynamic device, catch basin inserts, or other secondary or primary treatment practices) should be provided to remove sediment, floatables, and oil and grease. An off-line hydrodynamic separator is proposed; however, it will not remove significant amounts of hydrocarbons, or metals and does not remove nitrogen and phosphorous loads.

Response to Comment: Deep sump hooded catch basins and isolator rows are provided as pretreatment for all non-roof impervious areas.

d. Design Volume: "Underground infiltration structures should be designed as off-line practices to infiltrate the entire water quality volume. A flow bypass structure should be located upgradient of the infiltration structure to convey high flows around the structure." The proposed stormwater management system using StormTech units does not meet this requirement as all runoff is being directed to the infiltration system, not just the full Water Quality Volume.

<u>Response to Comment:</u> The underground structures are designed to manage both water quality treatment and to manage peaks discharges for the larger storm. Isolator rows and diversion manholes are designed to provide pretreatment of the first flush.

e. Infiltration Rates: "The minimum acceptable field measured soil infiltration rate is 0.3 inches per hour. Field-measured soil infiltration rates should not exceed 5.0 inches per hour...." As no double ring infiltration tests have been conducted by the applicant which are at or below the bottom of the proposed StormTech, this requirement has not been met.

<u>Response to Comment:</u> Soil testing has been coordinated between the peer reviewing engineer and the Town Engineer. Modifying the soil under the stormwater chambers can be explored to provide primary treatment or limit infiltration rates.

- 103. Section 11-P3 of the CT DEP 2004 Storm Water Quality Manual requires the following criteria be met:
  - a. Infiltration rates need to be reduced to 50% of the observed rate to provide a factor of safety. The design does not meet this criteria.

<u>Response to Comment:</u> Soil testing has been coordinated between the peer reviewing engineer and the Town Engineer.

b. For infiltration trenches (underground storage units meet this criteria), one field test and one deep test pit should be performed per 50 linear feet of trench. The design should be based on the slowest rate obtained from the infiltration tests performed at the site. This requirement has not been met by the applicant.

Response to Comment: Soil testing has been coordinated between the peer reviewing engineer and the Town Engineer.

c. Infiltration practices should not be used to infiltrate runoff containing significant concentrations of soluble pollutants that could contaminate groundwater, without adequate pretreatment. An off-line hydrodynamic separator is proposed; however, it will not remove adequate amounts of hydrocarbons and metals which will adversely affect groundwater. Additionally, the pretreatment system does not reduce nitrogen loads which are a major concern when there are downgradient wells.

Response to Comment: Based on conservation with the third party engineer, the Hydrodynamic Separators do not provided significant stormwater treatment as part of the design and will likely be eliminated. The isolator rows provide adequate treatment without the HDS.

d. The bottom of the infiltration facility should be located at least 3 feet above the seasonally high water table or bedrock, as documented by on-site soil testing. This criteria have not been met as more comprehensive soil testing and groundwater monitoring has not been done by the applicant

Response to Comment: Soil testing has been coordinated between the peer reviewing engineer and the Town Engineer. Generally, groundwater was to be found to be lower than prior redoximorphic indicators due to a compacted subgrade and fill over from previous development.

104. A total of ten deep test holes were excavated on the site. Only one test pit is located within a footprint of a stormwater management system. This is an inadequate program of deep test holes for the stormwater management system.

- <u>Response to Comment:</u> Soil testing has been coordinated between the peer reviewing engineer and the Town Engineer.
- 105. Each underground stormwater management system must have at least one, if not two deep test holes performed within the footprint of the system.
  - <u>Response to Comment:</u> Soil testing has been coordinated between the peer reviewing engineer and the Town Engineer.
- 106. The ten deep test holes were excavated on June 26th and 27th of 2023. The groundwater contours were developed from a singular measurement to the groundwater in each test hole. It is my professional opinion that the groundwater contours provided are not valid as the testing was done at a time when groundwater levels are not at their highest level.
  - Response to Comment: Additional soil testing has been coordinated between the peer reviewing engineer and the Town Engineer. Based on coordination with the peer reviewing engineer, the redox that was previously modeled as groundwater for the groundwater contours was not indicative of the groundwater table and groundwater should be considered the bottom of the test holes. The groundwater contours shall be updated accordingly.
- 107. Without a valid seasonal high groundwater table, it cannot be confirmed that all the underground stormwater management infiltration systems will provide the three (3) foot vertical separation from the seasonal high groundwater table to the lowest aspect of the stormwater practices (bottom of storage unit or bottom of crushed stone, whichever is set at the lowest elevation).
  - <u>Response to Comment:</u> Separations shall be updated based on the revised described groundwater modifications described above.
- 108. Page 4: it is stated that the three bedroom units will have a two-car garage and there will be additional parking outside most of the units. All parking spaces must be shown in and out of buildings and numbered sequentially to show the maximum number of spaces provided and will also show any potential conflicts with the parking spaces.
  - <u>Response to Comment:</u> An additional page will be added to the planset to sequentially number parking spaces.
- 109. Page 11: It is stated that the maximum infiltration rate for sandy soils (5"/hr.) was used to model the existing drywells. This is not valid as you cannot assume an infiltration rate. As noted above, field double ring infiltration testing is required. Per the CT DEP 2004 Storm Water Quality Manual, double ring infiltration tests need to be done at or below the lowest aspect of the stormwater practice as this is the layer of soil where runoff will be directed. Also, only 50% of the slowest observed infiltration rate shall be used in the hydrologic model.
  - <u>Response to Comment:</u> Additional soil testing has been coordinated between the peer reviewing engineer and the Town Engineer. The existing infiltration rate will be updated if required.
- 110. Page 12 & 13: The post development drainage areas are described on these pages. It is stated that PR-3A and PR-3B are roof drains directed to an underground infiltration system with no pretreatment. While the town engineer previously did not require pretreatment of the roof runoff, it is important to bring up the following point. 40% of the nutrient load, both nitrogen and phosphorous are the result of atmospheric deposition on impervious surfaces, so roof runoff will contain nitrogen and phosphorous. As the site is in the GPOD district, increased nitrogen loads need to be reduced prior to being introduced to the ground. Nitrogen moves easily and quickly in sandy soils and will

migrate downgradient and can affect the water quality of individual wells and public water supply wells. It is my professional opinion that the roof runoff needs to be treated to reduce nutrient loads, particularly nitrogen prior to being directed in the soil.

<u>Response to Comment:</u> Roof runoff shall be treated to the greatest extent practicable. Please also see memorandum regarding nitrogen reduction from pre- to post-development and pollutant loading calculation.

111. Page 13: Post development area P-1 includes most of the site which is directed to multiple underground stormwater management systems. Modeling of all the system as one large system is not correct even though the systems are all set at the same elevation as separate and distinct drainage areas are directed to each of the underground systems. Each system must be modeled separately for the specific drainage area directed to it. The following two comments illustrate this point.

<u>Response to Comment:</u> Modifying the HydroCAD model can be investigated if appropriate and feasible. If not, calculations shall be shown that the different sections on the system are free flowing between them and can be modeled together.

112. Stormwater System E only receives runoff from the building roofs with no pretreatment.

Response to Comment: Correct.

113. Stormwater System D only receives runoff in the driveway between Buildings #1 and #2 only and has pretreatment.

Response to Comment: Correct. This area is also directly adjacent to Stormwater Area C so stormwater will be free flowing through the stone between areas C+D.

114. No consideration or discussion has been provided concerning the infiltration of most of the rainfall on the site and whether this will increase the groundwater table under the site, or potentially saturate the soils under the building foundations which could lead to structural issues.

Response to Comment: Groundwater separation has been maintained. With the high infiltration rates found in the soils testing, water would be expected to infiltration quickly and would not be expected to be an issue. A geotechnical and/or structural engineer shall be coordinated with for adequate subgrade under the buildings.

#### **WATER QUALITY ASPECTS:**

115. Page 14: It is stated on the bottom of this page the weir in the bypass manhole will direct only 25% of the Water Quality Volume (WQV) to the isolator row. This is not correct. As both the Barracuda S4 and the StormTech Isolator Row are flow through treatment systems, the bypass manholes must directed the full Water Quality Flow (WQF) to both systems. Off-line pretreatment systems must be sized using the WQF which is a flow rate based upon the full WQV. This requirement will likely affect the proposed pretreatment systems.

Response to Comment: This is not correct and shall be clarified accordingly. The water quality flow in sized based on the modified curve number method described in the 2004 CT Stormwater Quality Manual with is based on 1 inch of rainfall. Additional per the CT Stormwater Quality Manual, pretreatment needs to be designed for 25% of the water quality volume therefore the isolator rows are designed to statically store 25% of the water quality volume.

- 116. All the notes found on pages 16 to 22 must be part of the construction narrative in the plan set.
  - <u>Response to Comment:</u> Operation and maintenance notes modified for the plan are provided on sheet C-1 of the planset.
- 117. The tests holes performed on June 26-27, 2023 are not sufficient for the design of the stormwater management system for this project. There are not enough holes and the soils are questionable for infiltration.
  - a. Test #1 55" of fill, then only 45" deep in the original soil
  - b. Test #2 18" of fill, then only 78" deep in the original soil
  - c. Test #3 18" of fill, then only 78" deep in the original soil
  - d. Test #4 11" of fill, then only 37" deep in the original soil
  - e. Test #5 28" of fill, then only 32" deep in the original soil
  - f. Test #6 36" of fill, then only 72" deep in the original soil
  - g. Test #7 45" of fill, then only 51" deep in the original soil
  - h. Test #8 96" of fill only, did not extend into original soil
  - i. Test #9 32" of fill, then only 64" deep in the original soil
  - j. Test #10 18" of fill, then only 78" deep in the original soil

Response to Comment: Additional soil testing has been coordinated between the peer reviewing engineer and the Town Engineer.

- 118. Redoximorphic Features (mottling) is observed in several of the test pits as stated below.
  - a. Test Pit #2: 24" below original ground surface
  - b. Test Pit #3: at the original ground surface below the fill layer
  - c. Test Pit #5: 6" below original ground surface
  - d. Test Pit #9: 15" below original ground surface
  - e. Test Pit #10: 28" below original ground surface

<u>Response to Comment:</u> This is what was assumed as groundwater depths originally. Based on correspondence with the peer reviewing engineer, these mottling features are not expected to be actual groundwater indications and the bottom of the test pits should be used and the assumed groundwater table. The analysis shall be updated accordingly.

119. Based upon the presence of mottling at these depth, the seasonal high groundwater table could be quite shallow on the site, thus the soils do not appear suitable for infiltration of runoff.

Response to Comment: Based on correspondence with the peer reviewing engineer, these mottling features are not expected to be actual groundwater indications and the bottom of the test

- pits should be used and the assumed groundwater table. The analysis shall be updated accordingly.
- 120. As the bottom of the stormwater management systems are at 102.5' (bottom of stone), all test pits need to be at least four (4) foot lower than this elevation to confirm no bedrock within three (3) feet of the bottom of the stone layer and a three (3) foot vertical separation to the seasonal high groundwater level.
  - Response to Comment: Additional soil testing has been coordinated between the peer reviewing engineer and the Town Engineer. Generally, groundwater was to be found to be lower than prior redoximorphic indicators due to a compacted subgrade and fill over from previous development. Separations shall be reviewed to confirm the system meets applicable requirements.
- 121. An evaluation of the location and elevations for many of the stormwater management systems showed that they will be located fully or partially in structural fill which will affect their functionality as infiltration practices. It is highly recommended that cross sections in both a north/south and east/west orientation through all the proposed stormwater management systems be provided for review by the commission and the town's consultants. The cross sections need to show existing and proposed grades, the proposed stormwater practices, the depth to seasonal high groundwater and bedrock which result from a complete soil test program.
  - Response to Comment: Cross sections can be prepared if required by the Town Engineer and/or Board.
- 122. There are no detailed review comments on the routing of the post-development runoff it was stated above that it was inappropriate to model the stormwater systems as one big system as runoff from different impervious area are directed to variable sections of the system.
  - <u>Response to Comment:</u> Modifying the HydroCAD model can be investigated if appropriate and feasible. If not, calculations shall be shown that the different sections on the system are free flowing between them and can be modeled together.
- 123. In Appendix C-5, there is a routing diagram for Pretreatment Areas 1 to 4, plus Modified PR-1. These areas are not defined on the watershed maps. For all five areas, no impervious area is called out. A better explanation and mapping of these areas need to be provided or they should be eliminated from the report.
  - Response to Comment: These areas are used for water quality flow calculations and resulting bypass weir elevations based on the method described in the 2004 Stormwater Quality Manual. Additional narrative in the Stormwater Report shall be added to better describe the calculations and relevant appendices.
- 124. For the sizing of the Barracuda S4 units, the full calculation for converting the WQV to the WQF needs to be provided. There are more steps to this conversion than provided by the applicant.
  - Response to Comment: Calculations for the water quality flow are provided on the Proposed Stormwater Pretreatment Table (Appendix D.1) and the modified HydroCAD analysis based on the modified curve number (Appendix C.5) are included in the Stormwater Report. Additional text can be added to the report to describe these calculations.
- 125. The applicant uses the pollutant concentrations for commercial land use for the developed condition. This is not correct, the concentrations for residential need to be used which are higher than those of a commercial use.

<u>Response to Comment:</u> The pollutant loading shall be updated using values for residential use for proposed conditions.

126. The analysis did not determine the pollutant loads for metals and hydrocarbons. These need to be added to this analysis for post-development conditions.

Response to Comment: The pollutant loadings have been updated to include Zn and TPH.

127. The use of Schueler Equation is an acceptable approach to determining the non-point source pollutant loads for this site.

Response to Comment: OK.

128. Deep sump catch basins with a hooded outlet will only have a TSS removal rate of 9%, not 25% based upon monitoring data from University of New Hampshire Stormwater Center.

Response to Comment: This has been added to the pollutant loading table. The 25% is from an excerpt from the RIDEM stormwater requirements. The Town Engineer previously indicated that we could use other guidance documents to preform the analysis since the 2004 CT Stormwater Quality Manual and Town stormwater ordinances do not describe how the calculation is performed.

129. As noted above in numerous comments, there must be a high degree of pollutant reduction prior to being directed to an underground infiltration practice to prevent groundwater contamination. While TSS loads will be reduced, nutrients and metals have not even been evaluated which will be present on the site due to the amount of vehicles which will be on or using the site. The CT DEP 2004 Storm Water Quality Manual, strongly suggests that underground infiltration practices be used to fully infiltrate the Water Quality Volume only. In this case, the applicant is proposing to infiltrate most if not all the rainfall which falls on the site up to the 100-year rainfall event.

Response to Comment: An updated pollutant loading has been provided based on these comments. Infiltration is not accounted for in the analysis.

130. In the pollutant loading analysis, pollutant removal amounts for each pollutant and each stormwater practice (deep sump catch basin, off-line hydrodynamic separator, off-line Isolator Row) must be provided and then a summary provided. Removal rates for Infiltration systems shall not be used in the analysis as the site in located in the GPOD district and the runoff must be as clean as possible prior to entering the infiltration systems.

Response to Comment: An updated pollutant loading has been provided based on these comments. Infiltration is not included in the analysis.

131. If there is well drained sand and gravels on the site, runoff directed to these soils moves very quickly through the soils, so no treatment is provided.

Response to Comment: An updated pollutant loading has been provided based on these comments. Infiltration is not included in the analysis.

- 132. While I concur with the concept of reducing removal efficiencies in series, it is not appropriate to use the same reduction for all pollutants from a given system. Based upon discussions with researchers at water resource and LID conferences, the following approach is strongly recommended which is more appropriate than a uniform reduction per practice:
  - a. The removal efficiency of a practice for each pollutant must be considered separately.

If the removal efficiency of the first system for a pollutant is less than 20%, then the full removal efficiency for the second practice for that pollutant in series may be applied to the remaining load for that individual pollutant.

- b. If the removal efficiency of the first system for a pollutant is between 21% and 50%, then the removal efficiency for the second practice for that pollutant shall be 75% of the stated removal efficiency for the second practice.
- c. If the removal efficiency of the first system for a pollutant is between 51% and 80%, then the full removal efficiency for the second practice for that pollutant shall be 50% of the stated removal efficiency for the second practice.
- d. If the combined calculated removal efficiency of the first two practices for a pollutant is less than 20%, then the removal efficiency for the third practice for that pollutant shall be 80% of the stated removal efficiency of the third practice.
- e. If the combined calculated removal efficiency of the first two practices for a pollutant is between 21% and 50%, then the removal efficiency for the third practice for that pollutant shall be 65% of the stated removal efficiency of the third practice.
- f. If the combined calculated removal efficiency of the first two practices for a pollutant is between 51% and 80%, then the removal efficiency for the third practice for that pollutant shall be 45% of the stated removal efficiency of the third practice.

<u>Response to Comment:</u> These series modifier have been incorporated into the pollutant loading analysis.

#### **NORTHEAST WATER SOLUTIONS, INC. REPORT:**

133. Groundwater recharge requirements are defined in the CT DEP 2004 Storm Water Quality Manual and are based upon actual soil types of the site and not the regional hydrologic setting.

Response to Comment: Test pit data was used to confirm the soil types.

134. It is stated on page 10 that the site is located slightly downstream of the Westerly wellfields. However, the movement of groundwater in sand and gravel soils (if present on the site) does not always follow surface topography.

<u>Response to Comment:</u> The statement is saying that the site is hydrologically downgradient of the Westerly wellfields. This does not provide any indication of the direction of groundwater flow under sustained pumping conditions.

- 135. Table 3-2 provides the pollutant removal percentage for this design. The results are stated below.
  - a. Total Suspended Solids 69%
  - b. Total Phosphorous 23%
  - c. Total Nitrogen 3.8%

Response to Comment: This table has been modified as attached.

136. The TSS reduction does not meet the CT DEP goal of 80% removal. Additionally, the nitrogen reduction is minimal which is a significant concern as the site is in the GPOD.

Response to Comment: The stormwater area that manages proposed pavement impervious areas provided greater than 80% TSS removal. Roof areas and untreated areas do not have this level of treatment which brings the overall average down.

I trust that these responses adequately address the comments received. Should you have any additional questions or concerns, please do not hesitate to contact me at 860-629-6500.

Sincerely,

Sergio F. Cherenzia, P.E.

President

CC: Clifton J. Iler, AICP, Town Planer

## Pollutant Loading Rates, C

Pollutant,	High Density	Commercial	Undev.
mg/l	Residential	Commerciai	ondev.
TSS	60	58	51
TP	0.3	0.25	0.10
TN	2.1	2.6	1.5
Zn	0.218	0.156	0.0
TPH	1.5	3.0	0.0
DIN	0.344	0.324	0.215

#### Notes:

- 1. Pollutant Loading Units: lbs per year
- 2. Pollutant Loading =  $P \times Pj \times (Rv/12) \times C \times A \times 2.72$  (P = 47 in, Pj = 0.9,  $Rv = 0.05 + 0.009 \times Percent Impervious$ )
- 3. Wooded area is considered undeveloped.

## **Existing Development Pollutant Loading**

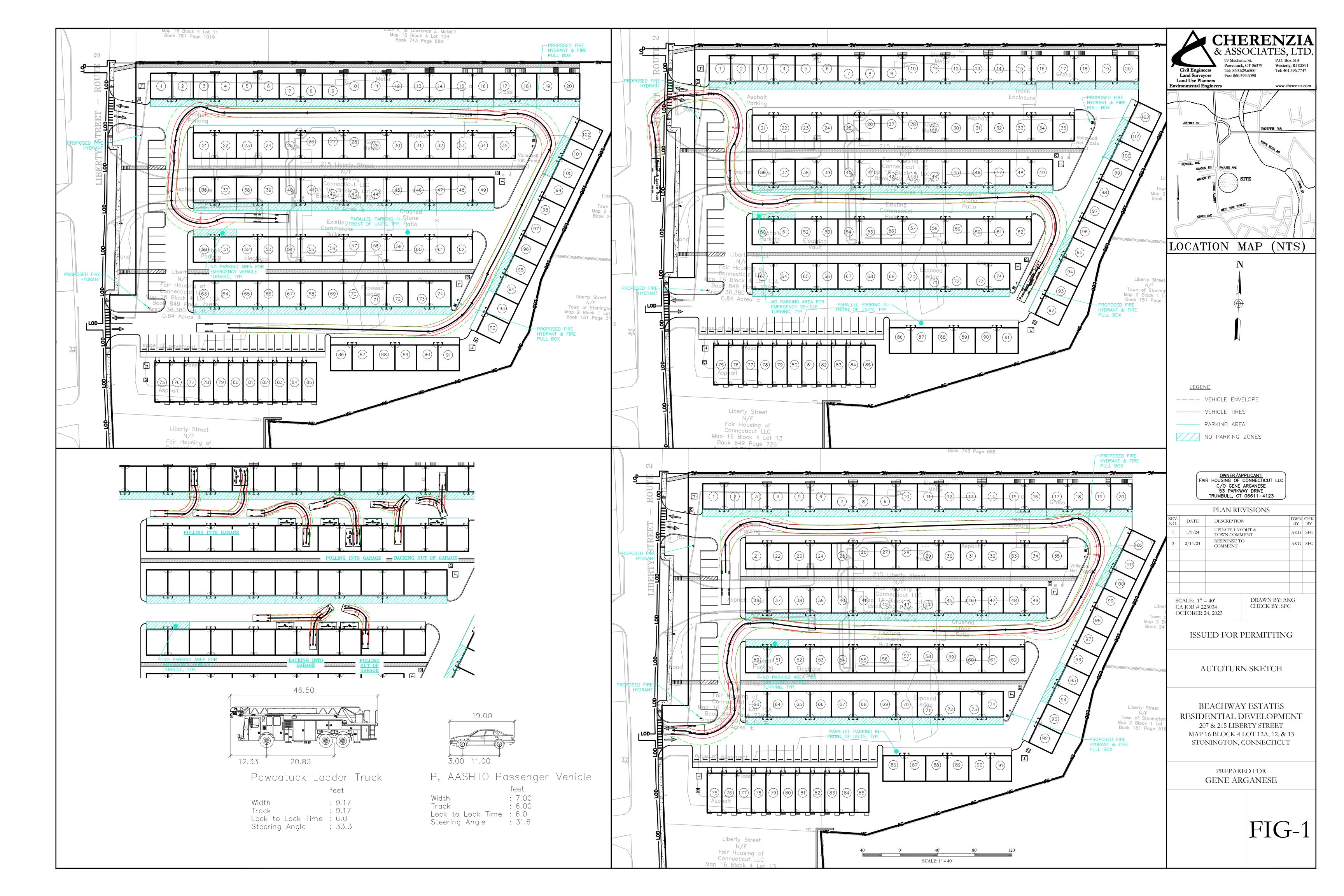
	Subcatchment 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5							
	Area	EX	(-1	EX-2		EX-3		Total
	Land Use	Com.	Undev.	Com.	Undev.	Com.	Undev.	
	Area, ac	1.13	1.59	2.47	0.31	0.34	0.73	
Site Info	Imp. Area, ac	0.40	0.00	1.69	0.00	0.03	0.00	
	Percent Imp.	35.2%	0.0%	68.5%	0.0%	8.7%	0.0%	
	Rv	0.367	0.050	0.666	0.050	0.128	0.050	
	TSS	231.06	38.98	913.65	7.68	24.19	17.78	
Untreated	TP	1.00	0.08	3.94	0.02	0.10	0.03	
	TN	10.36	1.15	40.96	0.23	1.08	0.52	
Pollutant	Zn	0.62	0.00	2.46	0.00	0.07	0.00	
Loading	TPH	11.95	0.00	47.26	0.00	1.25	0.00	
	DIN	1.29	0.16	5.10	0.03	0.14	0.07	
	TSS	270	0.04	922	1.33	41	.97	1,233.34
Untreated	TP	1.0	07	3.	95	0.	14	5.16
	TN	11	.50	41.18		1.61		54.29
Pollutant	Zn	0.	62	2.	46	0.07		3.14
Loading	TPH	11	.95	47	.26	1.	25	60.46
	DIN	1.	46	5.	14	0.	21	6.80

**Proposed Development Pollutant Loading** 

		•		1.0000	ca Develop	ment Ponu		''b		I	-	
	Subcatchment	PR	:-1	PR-1	Roof	PR-1		PR	2	PR-3/	4+3B	Total
	Area					Biorete						. 5 (3)
	Land Use	Res.	Undev.	Res.	Undev.	Res.	Unde.	Res.	Undev.	Re		
	Area, ac	2.24	1.43	0.58	0.00	0.60	0.00	1.12	0.43	0.1		
Site Info	Imp. Area, ac	1.63	0.00	0.58	0.00	0.60	0.00	0.35	0.00	0.1		
	Percent Imp.	72.7%	0.0%	100.0%	0.0%	100.0%	0.0%	31.4%	0.0%	100		
	Rv	0.704	0.050	0.950	0.050	0.950	0.050	0.333	0.050	0.9		
	TSS	907.19	34.92	314.87	0.00	330.44	0.00	215.07	10.61	91.		
Untreated	TP	4.54	0.07	1.57	0.00	1.65	0.00	1.08	0.02	0.4		
Pollutant	TN	31.75	1.03	11.02	0.00	11.57	0.00	7.53	0.31	3.2		
Loading	Zn	3.30	0.00	1.14	0.00	1.20	0.00	0.78	0.00	0.3		
Loading	TPH	22.68	0.00	7.87	0.00	8.26	0.00	5.38	0.00	2.2		
	DIN	5.20	0.15	1.81	0.00	1.89	0.00	1.23	0.04	0.5		
	TSS	942		314		330		225		91.		1,904.77
Untreated	TP	4.6		1.5		1.6		1.3		0.4		9.39
Pollutant	TN		.78	11.		11.		7.8		3.2		66.41
Loading	Zn	3.3		1.3		1.2		0.7		0.3		6.76
Loading	TPH	22.		7.8		8.2		5.3		2.2		46.48
	DIN	5.3		1.8		1.8		1.2		0.5		10.85
	Treatment	Deep Sump (	Catch Basins	Untre	eated	Biorete	ention	Untre	eated	Untre		
		Treatment	Series	Treatment	Series	Treatment	Series	Treatment	Series	Treatment	Series	
			Modifier	rreatment	Modifier		Modifier	Treatment	Modifier	rreatment	Modifier	
	TSS	9%	100%	-	-	82%	100%	-	-	-	•	
Treatment	TP	0%	100%	-	-	25%	100%	-	-	-	•	
	TN	0%	100%	-	-	36%	100%	-	-	-	•	
	Zn	0%	100%	-	-	65%	100%	-	-	-	•	
	TPH	14%	100%	-	-	65%	100%	-	-	-	•	
	DIN	0%	100%	-	-	41%	100%	-	-	-		
		Pollutant	Removal	Pollutant	Removal	Pollutant	Removal	Pollutant	Removal	Pollutant	Removal	
			Efficiency		Efficiency		Efficiency		Efficiency		Efficiency	
Treated	TSS	857.32	9.0%	314.87	0.0%	59.48	82.0%	225.68	0.0%	91.66	0.0%	1,549.02
Pollutant	TP	4.60	0.0%	1.57	0.0%	1.24	25.0%	1.10	0.0%	0.46	0.0%	8.97
	TN	32.78	0.0%	11.02	0.0%	7.40	36.0%	7.84	0.0%	3.21	0.0%	62.25
Loading	Zn	3.30	0.0%	1.14	0.0%	0.42	65.0%	0.78	0.0%	0.33	0.0%	5.97
	TPH	19.50	14.0%	7.87	0.0%	2.89	65.0%	5.38	0.0%	2.29	0.0%	37.94
	DIN	5.35	0.0%	1.81	0.0%	1.12	41.0%	1.28	0.0%	0.53	0.0%	10.07
	Treatment	Isolato		Untre		Untre		Untre		Untre		
		Treatment	Series Modifier	Treatment	Series Modifier	Treatment	Series Modifier	Treatment	Series Modifier	Treatment	Series Modifier	
	TSS	80%	100%	-	-	-		-	-	-		
Treatment	TP	49%	100%	-		-		-		-	•	
	TN	0%	100%	-		-		-		-		
	Zn	55%	100%	-	•	-	•	-	•	-	•	
	TPH	88%	100%	-		-		-		-		
	DIN	0%	100%	-		-		-		-		
		Delloteret	Removal	Dellosteret	Removal	Dellesteret	Removal	Dellosteret	Removal	Delloteret	Removal	
		Pollutant	Efficiency	Pollutant	Efficiency	Pollutant	Efficiency	Pollutant	Efficiency	Pollutant	Efficiency	
	TSS	171.46	81.8%	314.87	0.0%	59.48	82.0%	225.68	0.0%	91.66	0.0%	863.16
Treated	TP	2.35	49.0%	1.57	0.0%	1.24	25.0%	1.10	0.0%	0.46	0.0%	6.72
Pollutant	TN	32.78	0.0%	11.02	0.0%	7.40	36.0%	7.84	0.0%	3.21	0.0%	62.25
Loading	Zn	1.48	55.0%	1.14	0.0%	0.42	65.0%	0.78	0.0%	0.33	0.0%	4.16
	TPH	2.34	89.7%	7.87	0.0%	2.89	65.0%	5.38	0.0%	2.29	0.0%	20.77
	DIN	5.35	0.0%	1.81	0.0%	1.12	41.0%	1.28	0.0%	0.53	0.0%	10.07

## Summary

	Existing	Proposed	Proposed	Change from	Removal Effeciency
	Existing	Untreated	Treated	Existing	(Untreated to Treated)
TSS	1,233.34	1,904.77	863.16	-370.18	55%
TP	5.16	9.39	6.72	1.55	28%
TN	54.29	66.41	62.25	7.95	6%
Zn	3.14	6.76	4.16	1.02	38%
TPH	60.46	46.48	20.77	-39.69	55%
DIN	6.80	10.85	10.07	3.27	7%



## Northeast Water Solutions, Inc.

## Memo

To: Sergio Cherenzia, PE From: Robert F. Ferrari, PE

CC: Gene Arganese

Date: February 12, 2024

Re: Beachway Estates Report Addendum: Evaluation of Potential Impacts &

Mitigation – GPOD; Nitrogen Reduction

The purpose of this memo is to provide additional response to Engineering Peer Review Comments prepared on behalf of the Town of Stonington, regarding the subject project.

The peer review comments and subsequent discussion included the opinion that the proposed site improvements had minimal beneficial impact regarding reduction of nitrogen inputs to the groundwater aquifer underlying the project site. These comments focused upon stormwater treatment, and did not include any consideration of the elimination of the nitrogen load associated with sanitary wastewater discharged to the existing on-site wastewater treatment and disposal system (OWTS).

The project site has a long-standing restaurant/bar/nightclub facility that includes a kitchen, staff restrooms and public restrooms.

- The kitchen wastewater is disposed via a 1,000-gallon grease trap which overflows to a drywell.
- The sanitary wastewater generated on-site is disposed via a 2,000 gallon septic tank discharging to a leachfield.

A reasonable estimation of the sanitary wastewater generation and the associated nitrogen load can be made based upon the following assumptions:

Restaurant/Bar/Club Occupancy: 335
Restaurant/Bar/Club Staff: 15

Operation: 6 days per week, 50 weeks per year
Average Daily Sanitary Wastewater Vol.: (2,000 gpd) / (1.5) = 1,333 gpd

Average Raw Wastewater Total N: 45 mg/L
 Average Septic Tank Effluent Total N: 35 mg/L

• No nitrogen load in Kitchen wastewater (through grease trap)

The estimate of the historical, on-site, sanitary wastewater total nitrogen load to the aquifer, from conventional septic system treatment and leachfield return flow, is the following:

Existing Raw Sanitary Wastewater Total N Load:

$$(1,333 \text{ gpd}) \times (45 \text{ mg/L}) \times (8.34) \times (10^{-6}) = 0.500 \text{ lb./day}$$
  
 $(0.500 \text{ lbs/day}) \times (300 \text{ day/year}) = 150 \text{ lb./year}$ 

Existing Raw Sanitary Wastewater Total N Load to Aquifer:

$$(1,333 \text{ gpd}) \times (35 \text{ mg/L}) \times (8.34) \times (10^{-6}) = 0.389 \text{ lb./day}$$
  
 $(0.389 \text{ lbs/day}) \times (300 \text{ day/year}) = 116.7 \text{ lb./year}$ 

A comparative evaluation of the Site Total Nitrogen Load to Aquifer (refer to Stormwater Report Calculations) is summarized in the table below.

	<b>Existing Conditions</b>	<b>Proposed Conditions</b>
Stormwater Total N	54.3 lb./yr.	62.3 lb./yr.
Sanitary Wastewater Total N	116.7 lb./yr.	0
Kitchen Wastewater Total N	Assume 0	0
TOTAL Annual Total N to GPOD	171.0 lb./yr.	62.3 lb./yr.
Net Total N Reduction		63.6 %

This calculation is believed to be extremely conservative for the following reasons:

- 1. The calculation assumes the kitchen wastewater has zero total nitrogen;
- 2. The calculation assumes the raw sanitary wastewater total N concentration is 45 mg/L. Manufacturers of OWTS systems with nitrification/de-nitrification capability typically assume total N loading of 50 75 mg/L for residential/commercial applications. Experience by the writer has demonstrated raw sanitary wastewater total nitrogen loading of up to 90 mg/L, with annual average total N on the order of 45 50 mg/L;
- 3. The calculation assumes a sustained, conventional septic tank total N reduction of 10 mg, resulting in a net 35 mg/L total N discharge to the underlying aquifer. During periods of higher total N load in the raw wastewater, it is unlikely that a conventional OWTS septic system would sustain an effluent total N of 35 mg/L.



## Town of Stonington | Department of Planning Planning and Zoning Commission Meeting March 19, 2024 PZ2401SUP+CAM Precious Memories Place Inc.

(Eckersley, LLC)

Special Use Permit Application and Coastal Area Management Review for construction of a 1,158 SF building addition to support an additional 20 students. This application is a modification to PZ1103SUP+CAM. Property is located at 168 Greenmanville Avenue, Mystic; M/B/L: 172-2-4. Property is located in the RA-40 and RM-15 Zones.

Report Prepared By: Clifton J. Iler, AICP - Town Planner

## **Application Status**

This application for a Special Use Permit (SUP) is subject to a public hearing per ZR §17.2.1 and C.G.S. Section 8-3(b). The Commission has 65 days to open the public hearing and 35 days to conduct the public hearing once opened, as established in C.G.S. Section 8-7d(a). The applicant may request one or more extensions provided the total of any such extension or extensions shall not exceed 65 days.

- Official Date of Receipt for this application was 2/20/24.
- Tonight's meeting is **Day 28** of 65 Days to open the public hearing.
- The public hearing, without extension, must be closed by 4/23/24.
- A decision, without extension, must be made by 6/27/24.

## **Purpose**

The applicant is seeking a Special Use Permit for the construction of a 1,158 SF addition to support an additional 20 students. This application is a modification to PZ1103SUP+CAM and PZ1931SUP.

## **Zoning and Context**

The site is located in the RA-40 and RM-15 Zones and is subject to the bulk and use requirements for the RA-40 Zone. This project conforms to the bulk and use requirements for that zone.

#### RA-40 Zone Bulk and Use Requirements

	<u>Required</u>	<u>Provided</u>		<u>Required</u>	<u>Provided</u>
Lot Size	40,000 SF	±75,364 SF	Building Height	30'	26′
Frontage	125′	±227′	Floor Area Ratio	0.15	±0.13
Setbacks (F/S/R)	40'/15'/50'	±202'/35'/60'	Parking	28	29
Res. Buffer	35′	35'	Non-Infring. Area	N/A	N/A

#### **ZONING MAP**



North: RA-40 Zone [Use: Residential] East: RM-15 Zone [Use: Non-Profit]

South: RM-15 Zone [Use: Non-Profit] West: GBR-130 Zone [Use: Cemetery]

## **Site Access and Traffic**

The site is accessed from Greenmanville Avenue (State Route 27) and is subject to review by the Police Commission. There is no change to the site layout that would adversely impact ingress/egress onto the site and there is no significant impact to traffic generated from the five additional parking spaces. The original site was designed and approved with **PZ1103SUP+CAM**.

### **Environmental Elements**

The site falls within the Coastal Area Management Overlay District (CAMOD) and is within 1,000 FT of designated coastal resources and therefore subject to CAM review. A southerly portion of the site is located within the Flood Hazard Overlay District (FHOD) (Zone X) but is not impacted by the new construction. New construction is not subject to FEMA requirements.

There are not any regulated freshwater inland wetlands within the parcel boundaries. There are no known tidal wetlands within 100 FT of the parcel.

## **Utilities**

The site is currently served by public water and sewer.

## **Waivers Requested**

The following waivers are requested by the applicant:

Item	Provided	Waiver Requested
Impact Statement	X	
Site Plan		W
Architectural Elevation Drawings and Landscape Plan	X	
Water Impact Study		W
Sanitary Sewer Impact Study		W
Site Drainage Analysis		W
Erosion Control Report		W
Traffic Impact Study		W
Archaeological Study		W
Soils Report, Test Pit Data and Mapping		W
Shadow Plan		W
3-D Model		W
Flood Hazard Report		W
School Impact Evaluation Report		W
Application Fee	X	
Legal Description of Property/Site	X	
Phasing Requirements for Projects Over 24 Dwelling Units		N/A
Written Waiver Request(s) at the Time of Application Submission	X	

## **Response Summary**

The application was routed to the following agencies/agents of the Town. Responses are shown below:

**BUILDING OFFICIAL** – Awaiting comment.

**LEDGE LIGHT HEALTH DISTRICT** - The applicant will first need to gain approval from the Office of Early Childhood (OEC) for the proposed addition and increase in children. Once approve, inspections will be coordinated with LLHD. The OEC is the regulatory agency responsible for licensing daycares. [Dated 2/9/24] ADDRESSED

**POLICE COMMISSION** – Awaiting comment.

**TOWN ENGINEER** – Comments below [Dated: 2/26/24]:

The Applicant for the above referenced site has requested a "waiver" for the Drainage requirements, however we are requesting Drainage data to demonstrate:

- Pre\Post analysis to demonstrate a zero increase from the site ADDRESSED (see attached memorandum)
- WQV calculation and BMP (design) to infiltrate the required WQV per the 2004 CT Stormwater Quality Manual\MS4 Permit ADDRESSED (see attached memorandum)

**WATER POLLUTION CONTROL AUTHORITY** – The WPCA has reviewed the above referenced application and agrees that the proposed project will have little no impact on the sanitary sewer flows. [Dated: 3/7/24]

**ZONING ENFORCEMENT OFFICER** – No comment.

FIRE DISTRICT MARSHAL (OLD MYSTIC) – See attached memorandum. [Dated: 2/13/24]

CT DEEP OFFICE OF LONG ISLAND SOUND PROGRAMS – See attached memorandum. [Dated: 3/8/24]

## **Town Planner Comments**

The applicant has supplied the Town with a copy of the application filed with Office of Early Childhood (OEC) in line with the comments provided by Ledge Light Health District (LLHD).

The applicant has addressed outstanding comments from the Town Engineer (see attached memorandum) and provided documentation demonstrating the existing stormwater management system is sufficient to handle the change in volumes.

There are no additional questions or concerns with the proposed application.

## **Recommended Stipulations**

Should the Commission decide to approve this application, the Department of Planning recommends the following stipulations of approval:

- 1. Final plans shall be reviewed to the satisfaction of the Town Engineer.
- 2. Prior to the issuance of a Zoning Permit, the final plans shall be signed by the Commission and recorded in the Town's Land Evidence Records.

## **Commission Action Required**

The Commission is required to make a determination on the following items:

- A decision concerning the waivers requested
- A decision on the Coastal Area Management (CAM) application
- A decision concerning the Special Use Permit (SUP) application

Section 9.2.8 – The Commission may approve, deny, or modify with conditions any project within the CAM boundary. In addition, the Commission may require additional erosion and sediment control measures, measures to mitigate any adverse impacts, pedestrian access easements, visual access easements, and conservation easements, and may require a design review in accordance with Section 17.1 of these regulations if the project is proposed for an area which has been designated as a view-shed or resource area in the Plan of Conservation and Development.

Section 15.2.8 – Commission Powers Relative to Action on a Special Use Permit

The Commission shall have the power to approve, deny, or modify any proposal and set forth special stipulations of approval or modification as follows:

- A. Special screening or landscaping to screen adjoining properties or mask obtrusive structural features.
- B. Set extra buffer requirements ranging from 25 to 100 feet for fragile environmental features or residential property.

- C. Design of buildings, structures and landscaping to ensure harmony with Stonington's architectural heritage, thus preserving and improving the appearance, beauty and character of the community, and providing a design compatible with neighborhood structures. The Commission shall consider advisory recommendations from the Architectural Design Review Board in evaluating compliance with this subsection.
- D. Time of operation or intensity of use of a site.
- E. Special site plan design features necessary to minimize adverse impacts on area, environment, or traffic.

## TOWN OF STONINGTON

Town Engineer 152 Elm Street Stonington, Connecticut 06378 (860) 535-5076 • Fax (860) 535-1023



**TO:** Clifton Iler, Town Planner, Adrianna Bancroft, Administrative Assistant

**FROM:** Christopher Greenlaw, P.E. – Town Engineer

**APPLICATION:** PZ2401SUP & CAM – 168 Greenmanville Ave. – Precious Memories Pl

**APPLICANT/OWNER:** Christine Eckersley\ Eckersley LLC.

**DESCRIPTION:** Proposed Construction of Building Addition & Expanded Parking

**DATE:** 03/11/2024

I have reviewed the above referenced application and plan entitled "Developed Watershed Plan & Grading Plans, Modified Special Use Permit Site Plan, Proposed Building Addition, Prepared for Precious Memories Place Inc. for property located at 168 Greenmanville Ave – (CT Route #27) – Mystic, Town of Stonington, New London County – Connecticut Dated: Revised 03/06/2024" by Edward H. Wenke III, P.E. (Civil\Structural Engineer) and offer the following comments:

- 1) Stormwater Volume: The drainage report indicates a 0.12 CFS increase for the 2 Year Storm (85% of storms), however after discussion with the Engineer, the revised plans illustrate roof drainage infiltration trenches for the building addition. The remaining stormwater increase (935 SF) of area will be treated and discharged to a wetland area, volume increase deemed de minimis.
- 2) Stormwater Quality: As referenced above, the additional parking area run-off will be treated via an existing hydrodynamic separator (HDS) Stormceptor 900. Additionally, the Engineer has provided (2) infiltration trenches for the roof run-off, therefore treating the new impervious surfaces to the maximum extent practicable.
- 3) Sheet C-04, Stabilization Note "ST-3" modify "..or Applicant's Engineer approved equal; and.."

In review of the aforementioned application and plan, I recommend action be taken by the commission with the stipulation that the comments be accomplished to the satisfaction\approval of the Town Engineer prior to construction activity commencing.



## The Old Mystic Fire District OFFICE OF THE FIRE MARSHAL

295 Cow Hill Road, Mystic, CT 06355 Telephone (860) 536-2220 Fax (860) 536-7811

♦ Fire Marshal: Kenneth W. Richards, Jr.♦

♦ Deputy Fire Marshal: Kevin Czapla ♦ Inspectors: Chase Marchand, Adam Pereira & Keith Richards♦



## **ZONING REVIEW**

February 13, 2024

Mr. Clifton Iler Town Planner, Town of Stonington 152 Elm Street Stonington, CT 06378

Dear Mr. Clifton Iler:

On February 13, 2024, this office conducted a review of the zoning application/plans for Precious Memories Place Inc., 168 Greenmanville Ave. Mystic, CT 06355. Please note the comments below.

$\geq$	Zoning approval is recommended [Under the Following Conditions].
	Zoning approval is NOT recommended [For the Following Reason].
	No action due to [Reason].

Additional comments about this zoning review are as follows:

• Construction plans shall be submitted for review and approval by this office.

Please forward questions to the undersigned.

Sincerely,

Kevin P. Czapla, Deputy Fire Marshal

Carbon Copy: Christine Eckersley, Permit Applicant



## **Land and Water Resources Division**

# COASTAL SITE PLAN REVIEW COMMENTS CHECKLIST

This checklist is used by the Land and Water Resources Division (LWRD) to assess the consistency of the proposed activities with the relevant policies and standards of the Connecticut Coastal Management Act [(CCMA), Connecticut General Statutes (CGS) sections 22a-90 through 22a-112, inclusive].

ORIGINAL TO:  Stonington Planning and Zoning Commission 152 Elm Street Stonington, CT 06378	COASTAL SITE PLAN REVIEW TRIGGER:  Zoning Compliance Subdivision Special Exception or Permit Variance
	Municipal Improvement
Date sent/delivered 3/8/2024 by (indicate all th	at apply):  hand fax e-mail U.S. mail
APPLICANT NAME: Precious Memories Place In MAILING ADDRESS: 168 Greenmanville Ave, My 168 Greenm	ystic, CT 06355
	wo 16 x 24 foot 1-story additions to the existing 1-story as for 20 students. Five additional parking spaces are proposed, ramp. Impervious space will increase by ~8.3%.
LWRD reviewer <u>BL</u>	Date plans were received by LWRD: 2/8/24
Date LWRD review completed: 3/8/24	Most recent revision date on plans: 2/24

Plan title: Modified Special Use Permit Site Plan – Proposed Building Addition

COASTAL RESOURCES AND RESOURCE POLICIES:						
	ON-SITE	ADJACENT TO SITE	POTENTIALLY INCONSISTENT	NOT APPLICABLE		
General Coastal Resources*	$\boxtimes$					
Beaches and Dunes				$\boxtimes$		
Bluffs and Escarpments				$\boxtimes$		
Coastal Hazard Area		$\boxtimes$				
Coastal Waters and/or Estuarine Embayments				$\boxtimes$		
Developed Shorefront				$\boxtimes$		
Freshwater Wetlands and Watercourses		$\boxtimes$				
Intertidal Flats				$\boxtimes$		
Islands				$\boxtimes$		
Rocky Shorefront				$\boxtimes$		
Shellfish Concentration Areas				$\boxtimes$		
Shorelands		$\boxtimes$				
Tidal Wetlands						

ADVERSE IMPACTS ON	N COASTAL	RESOURCE	es:
	Appears Acceptable	Potentially Unacceptable	Not Applicable
Degrades tidal wetland, beaches and dunes, rocky shorefronts, or bluffs and escarpments			$\boxtimes$
Degrades existing circulation patterns of coastal waters			$\boxtimes$
Increases coastal flooding hazard by altering shoreline or bathymetry			
Degrades natural or existing drainage patterns			$\boxtimes$
Degrades natural shoreline erosion and accretion patterns			$\boxtimes$
Degrades or destroys wildlife, finfish, or shellfish habitat			
Degrades water quality			$\boxtimes$
Degrades visual quality			$\boxtimes$

COASTAL USE POLICIES:**					
	Applies	Potentially Inconsistent			
General Development*	$\boxtimes$				
Boating					
Coastal Recreation and Access					
Coastal Structures and Filling					
Cultural Resources					
Fisheries					
Fuels, Chemicals, or Hazardous Materials					
Ports and Harbors					
Sewer and Water Lines					
Solid Waste					
Transportation					
Water-dependent Uses					

General Coastal Resources and General Development policies are applicable to all proposed activities.
 Policies that are not applicable are not checked in this chart.

ADVERSE IMPACTS ON FUTURE WATER-DEPENDENT DEVELOPMENT ACTIVITIES AND OPPORTUNITIES:			
	Appears Acceptable	Potentially Unacceptable	Not Applicable
Replaces an existing water-dependent use with a non-water-dependent use			
Reduces existing public access			$\boxtimes$
Locates a non-water-dependent use at a site that is physically suited for a water-dependent use for which there is a reasonable demand			$\boxtimes$
Locates a non-water-dependent use at a site that has been identified for a water-dependent use in the plan of development or zoning regulations			$\boxtimes$
ISSUES OF CONCERN (SEE SUMMARY AND RECOMMENDATIONS BOX FOR ADDITIONAL DETAIL):			
Insufficient information			
Potential increased risk to life and property in coastal hazard area			
Adverse impacts on future water-dependent development opportunities			
Proximity of disturbance to sensitive resources/need for additional vegetated setback			
Potential to cause erosion/sedimentation; need for adequate sedimentation and erosion control measures			
Water quality and/or stormwater impact			
Other coastal resource impacts:			
Other:			
SUMMARY AND RECOMMENDATIONS:			
The proposal does not appear to have any impact on adjacent coastal reso on nearby properties are well over 100ft away. The increase in impervious report shows that the existing storm drainage system is adequate for the 3	is space is mii	nimal and the	drainage

INDING: (Please see summary and recommendations section on page 3 for discussion)				
CONSISTENT WITH ALL APPLICABLE COASTAL POLICIES				
CONSISTENT WITH MODIFICATIONS OR COM	NDITIONS			
ADDITIONAL INFORMATION NEEDED PRIOR	TO COMPLETE CSPR EVALUATION			
SUPPORTING DOCUMENTATION ATTACHED TO	THIS CHECKLIST:			
Copies of photographs of the site dated:				
Copies of aerial photographs dated:				
GIS maps depicting:				
Coastal resources maps dated:				
Coastal Management Fact Sheet(s):	Coastal Management Fact Sheet(s):			
Other:	Other:			
Please be advised that, separate from the municipal	Please be advised that, separate from the municipal review, the following DEEP permits may be required:			
Structures, Dredging, and Fill in Tidal Coastal or Navigable Waters				
☐ Tidal Wetlands	Tidal Wetlands			
Stormwater General Permit:	Stormwater General Permit:			
Other:	Other:			
Please direct questions or comments regarding this checklist to:	copy/ies provided to			
Braden Lynn	aden Lynn			
Planning Section	anning Section			
Land and Water Resources Division				
CT DEEP				
braden.lynn@ct.gov				
	LWRD Reviewer Initials <u>BL</u> Date: 3/8/24			

This checklist is intended to replace a comment letter only in those instances where LWRD comments can be readily conveyed without the background discussion that would be provided in a letter.

This checklist is not used for projects that LWRD recommends should be denied.

# MODIFIED SPECIAL USE PERMIT SITE PLAN

FEBRUARY 2024

# PROPOSED BUILDING ADDITION

# PRECIOUS MEMORIES PLACE

168 GREENMANVILLE AVENUE (CONN. ROUTE 27) MYSTIC - TOWN OF STONINGTON NEW LONDON COUNTY - CONNECTICUT 06355

Parcel Identification M172-B2-L4

RA-40 & RM-15 Zoning Districts

## Applicant:

## Precious Memories Place, Inc.

Attn: Christine Eckersley 168 Greenmanville Avenue Mystic, Connecticut 06355 Tel. 860.415.9744

Email: preciousmemoriesplace@comcast.net

Owner Of Record:

## Eckersley, LLC

Attn: Christine Eckersley 168 Greenmanville Avenue Mystic, Connecticut 06355 Tel. 860.415.9744

Email: preciousmemoriesplace@comcast.net

Site Engineer Of Record:

## Edward H. Wenke III, PE

Civil/Structural Engineer 5666 Silverbridge Trail Bradenton, FL 34211 Tel. 860.460.1606

Email: ewenke@comcast.net

## Building Designer:

## Cardelle Design Associates LLC

26 Patricia Court Gales Ferry, CT 06335 Tel. 860.460.5152

Email: scardelle@cardelledesign.com

DWG No.	TITLE
C-01	TITLE SHEET
C-02	EXISTING SITE CONDITIONS & DEMO PLAN
C-03	SITE LAYOUT PLAN
C-04	GRADING, UTILITIES, DRAINAGE & SESC PLAN
C-05	SITE CONSTRUCTION DETAILS

## ADDENDUM DWGS:

S-01

OF DRAWINGS

PA-01	PRELIMINARY ARCHITECTURAL FLOOR PLAN	
PA - 02	PRELIMINARY ARCHITECTURAL FLEVATIONS	

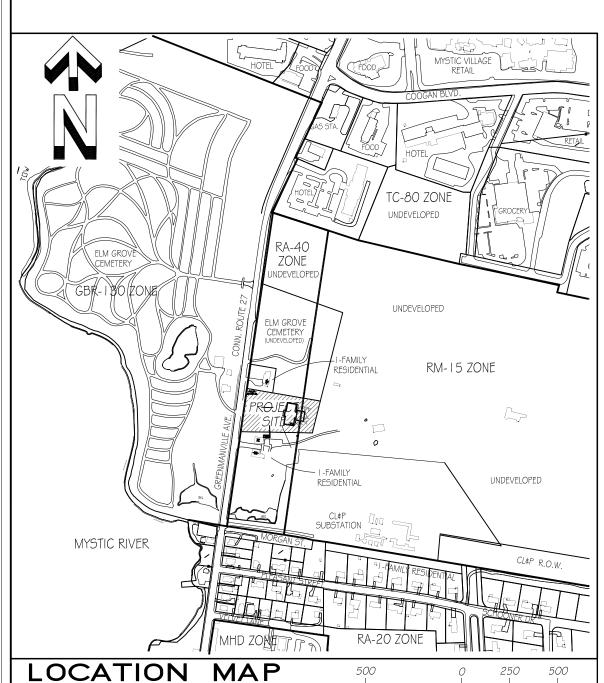
PRELIMINARY ARCHITECTURAL ELEVATIONS PA-O3

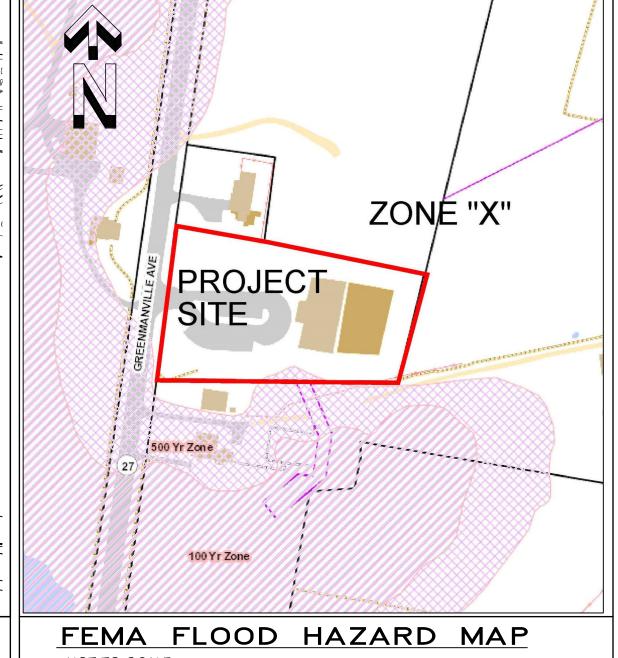
A2 BOUNDARY SURVEY

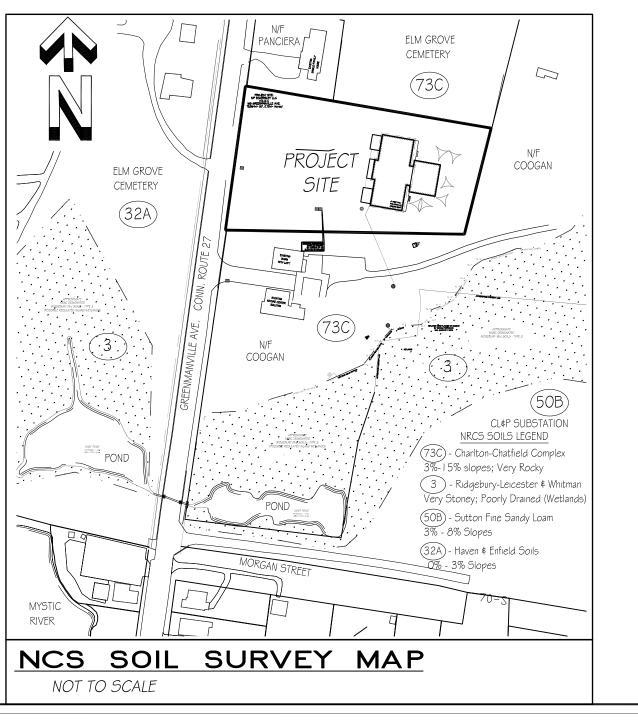
Land Surveyor Of Record:

James Bernardo Land Surveying LLC 102A Spithead Road Waterford, CT 06385 Tel. 860.447.5871

Email: jim@jbsurveγ.com



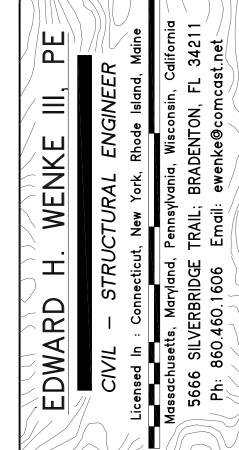


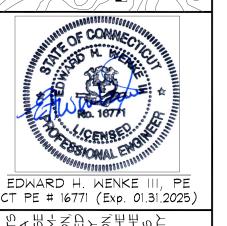


APPROVED BY THE STONINGTON PLANNING & ZONING COMMISSION

ISSUE FOR PERMIT



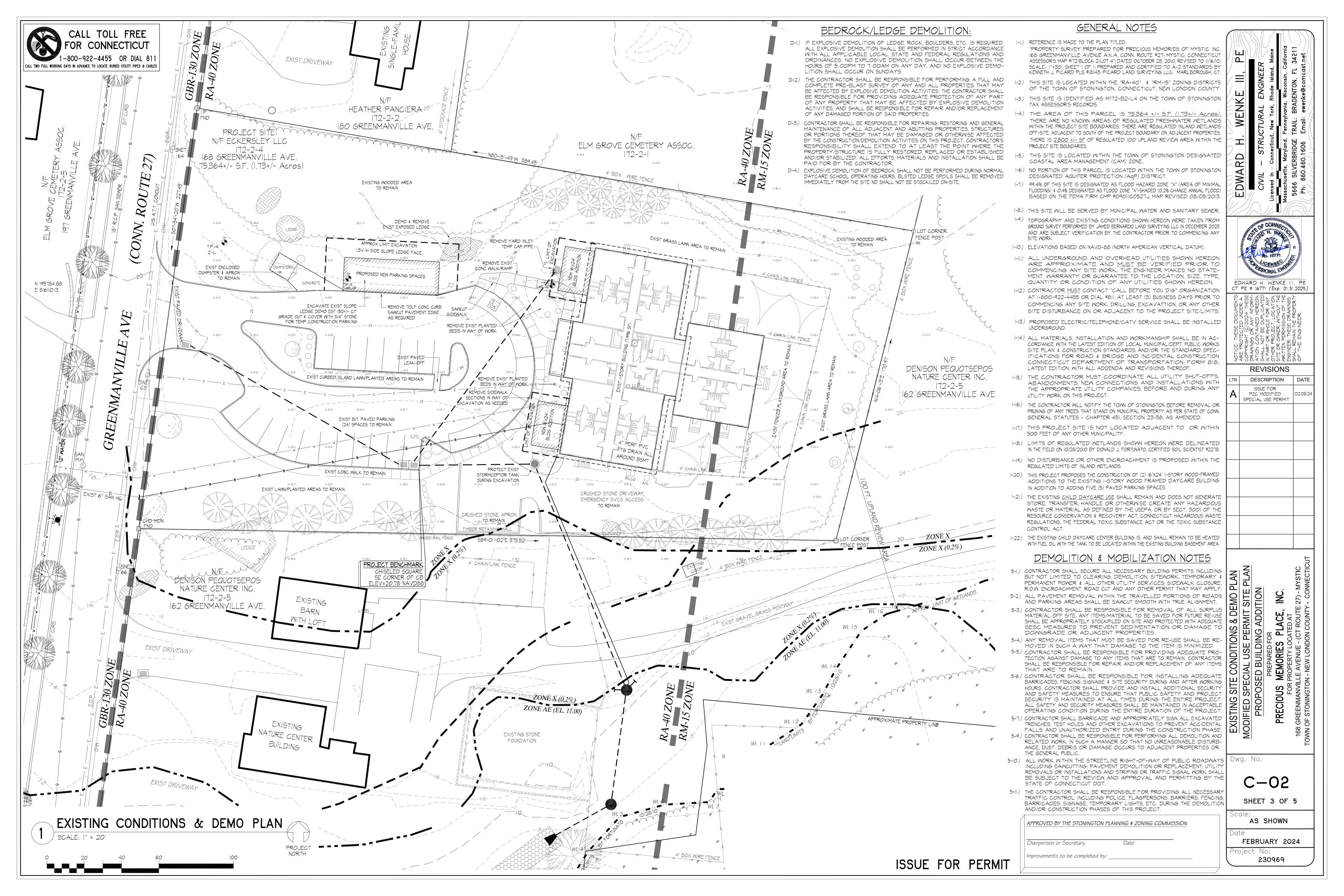


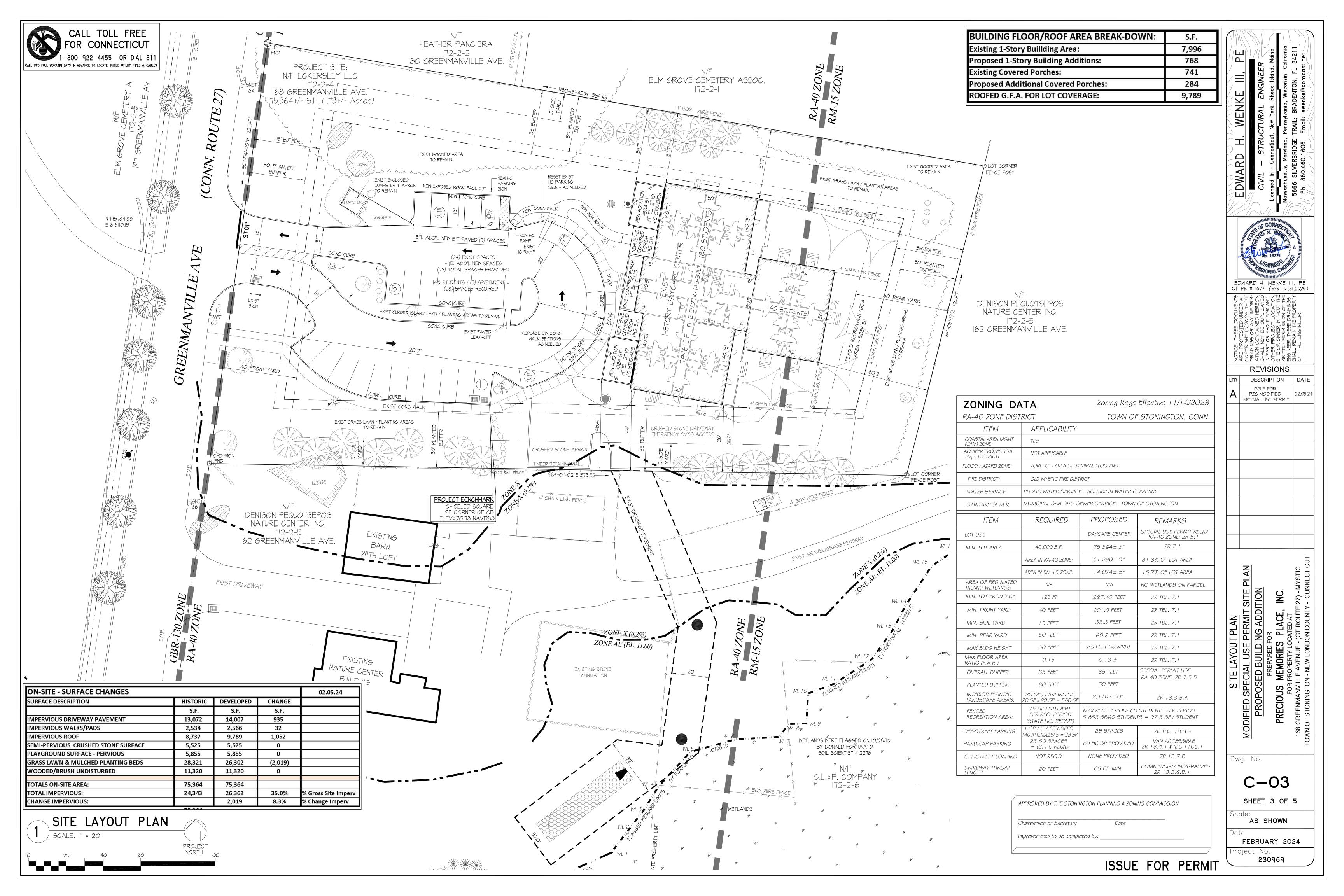


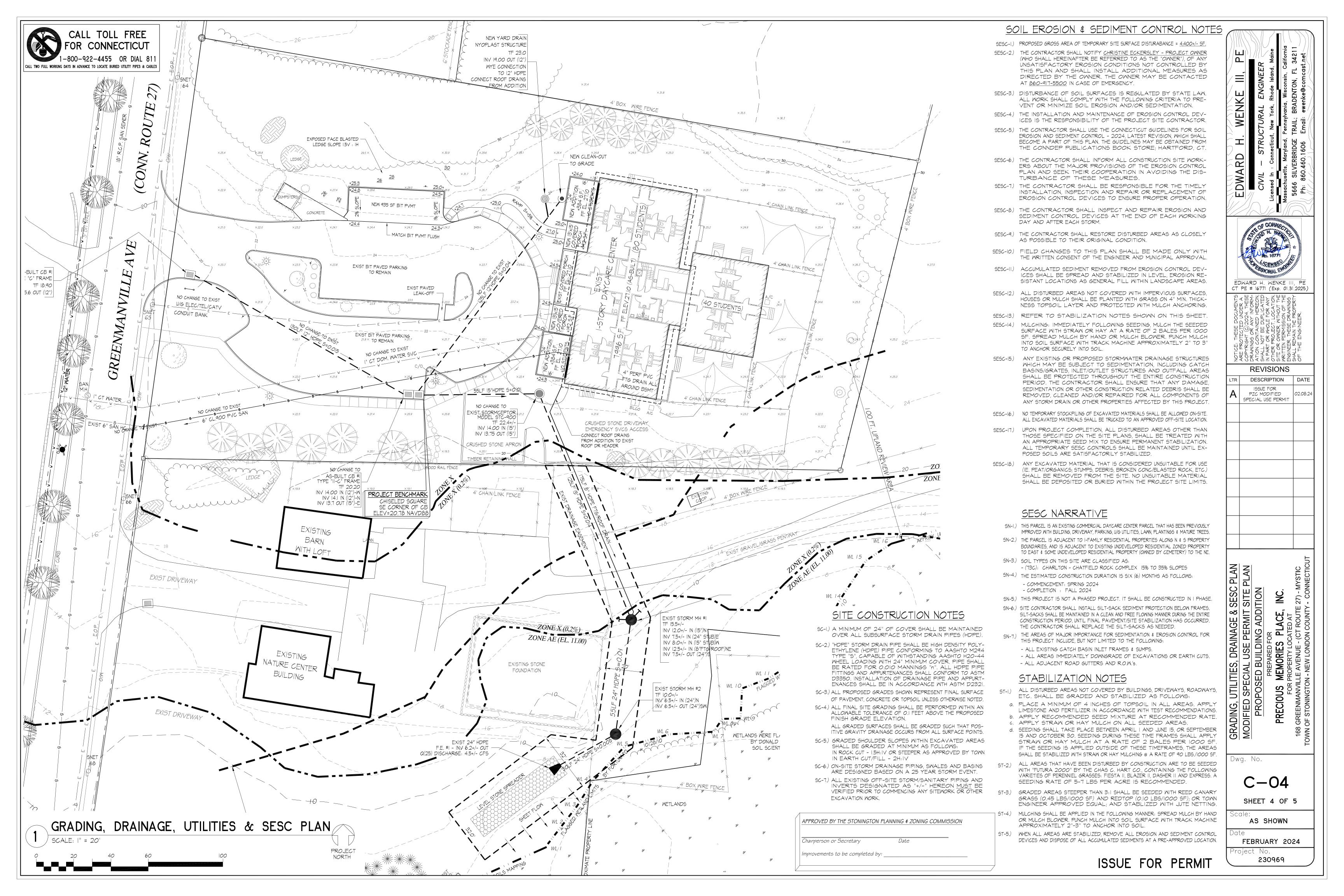
	REVISIONS	
LTR	DESCRIPTION	DATE
Α	ISSUE FOR PZC MODIFIED SPECIAL USE PERMIT	02.08.24

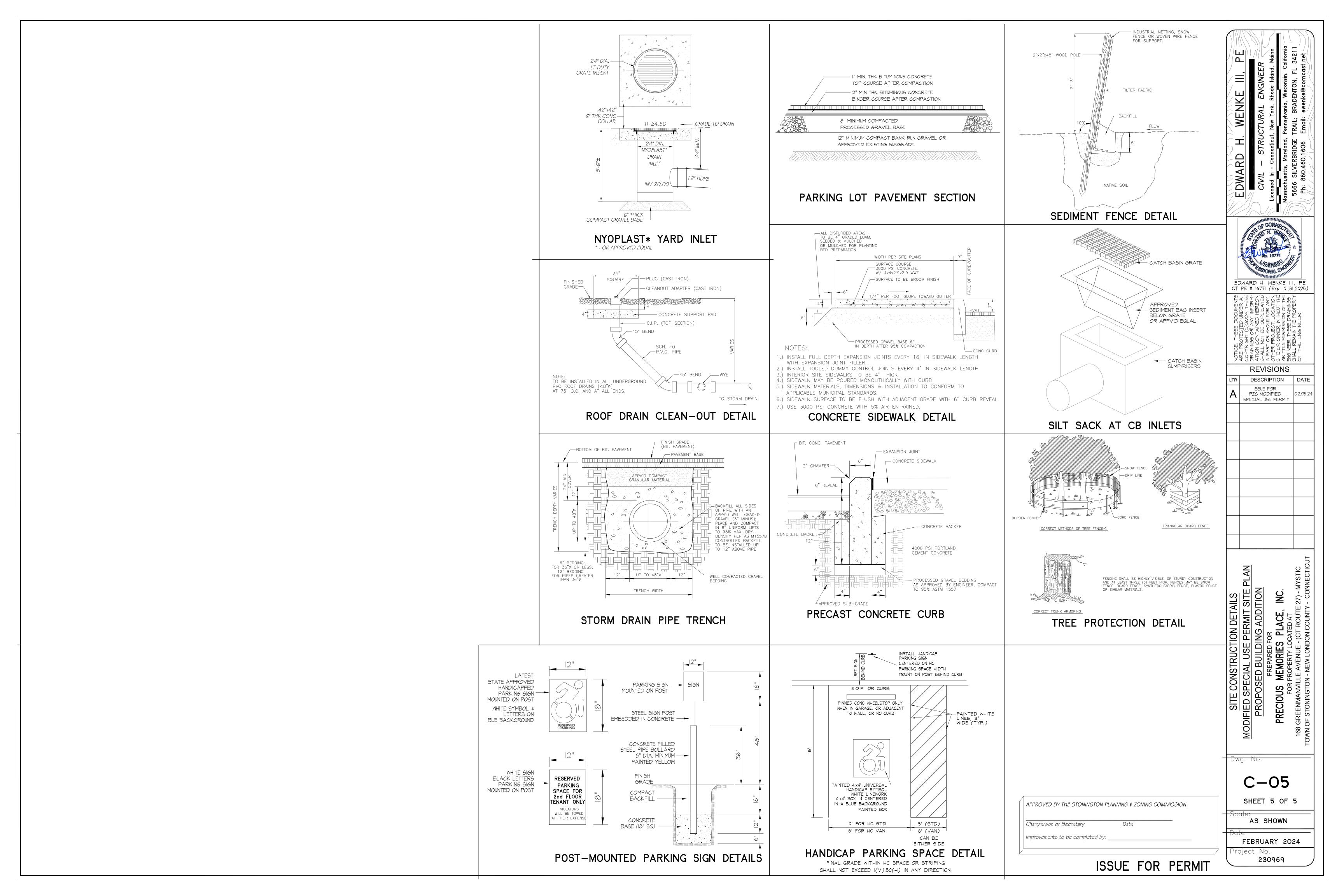
Dwg. No. C-01SHEET 1 OF 5

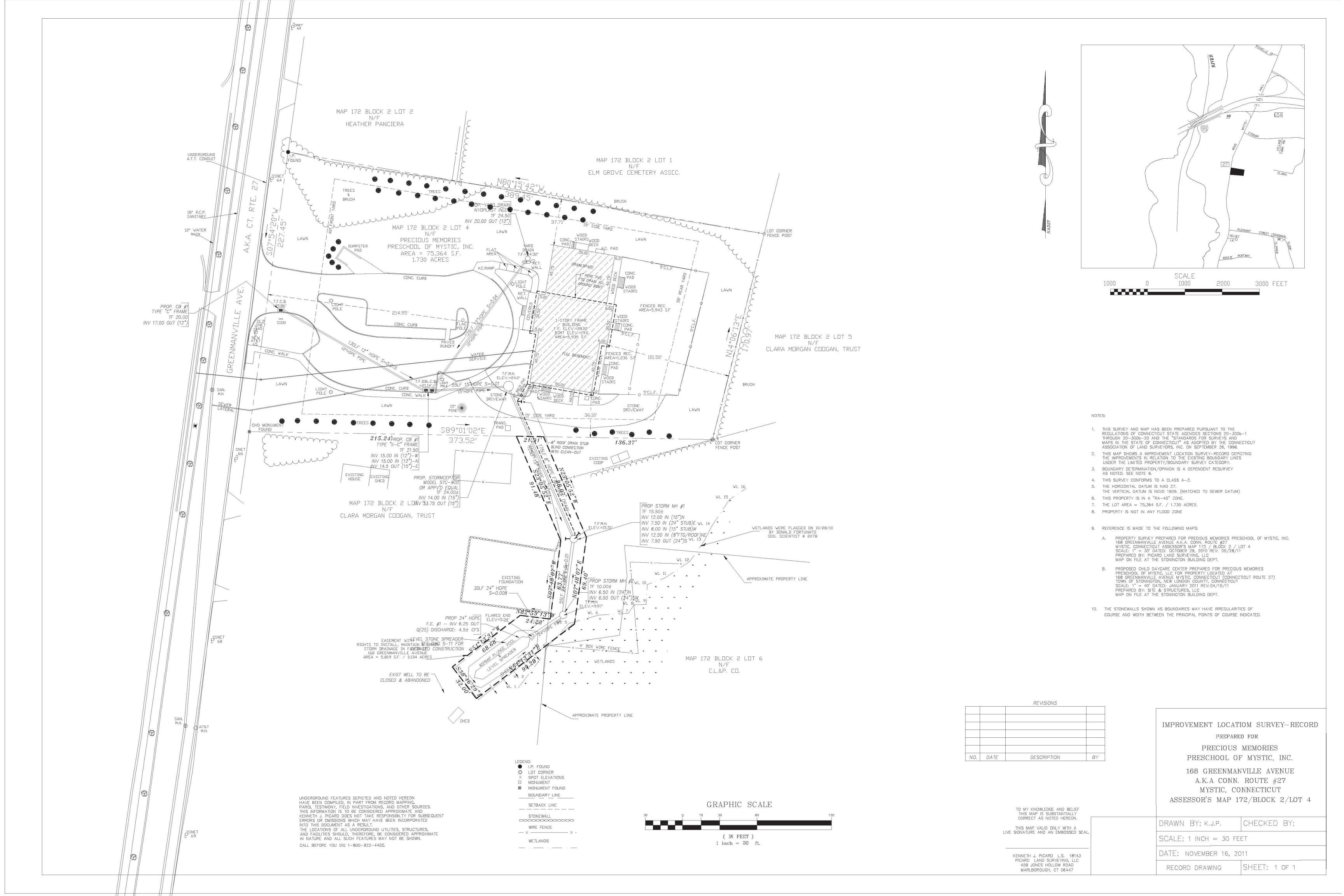
AS SHOWN FEBRUARY 2024 230969

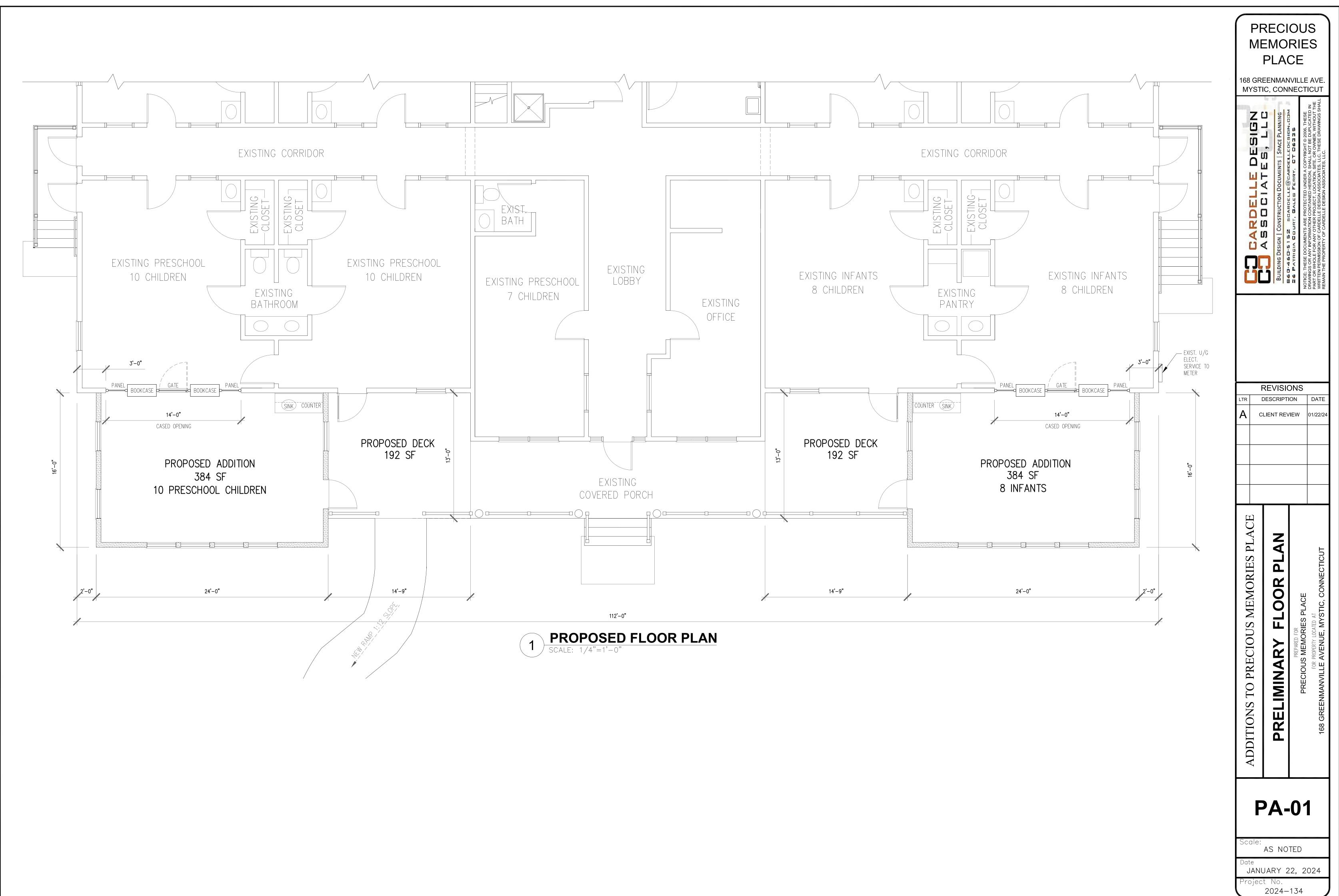


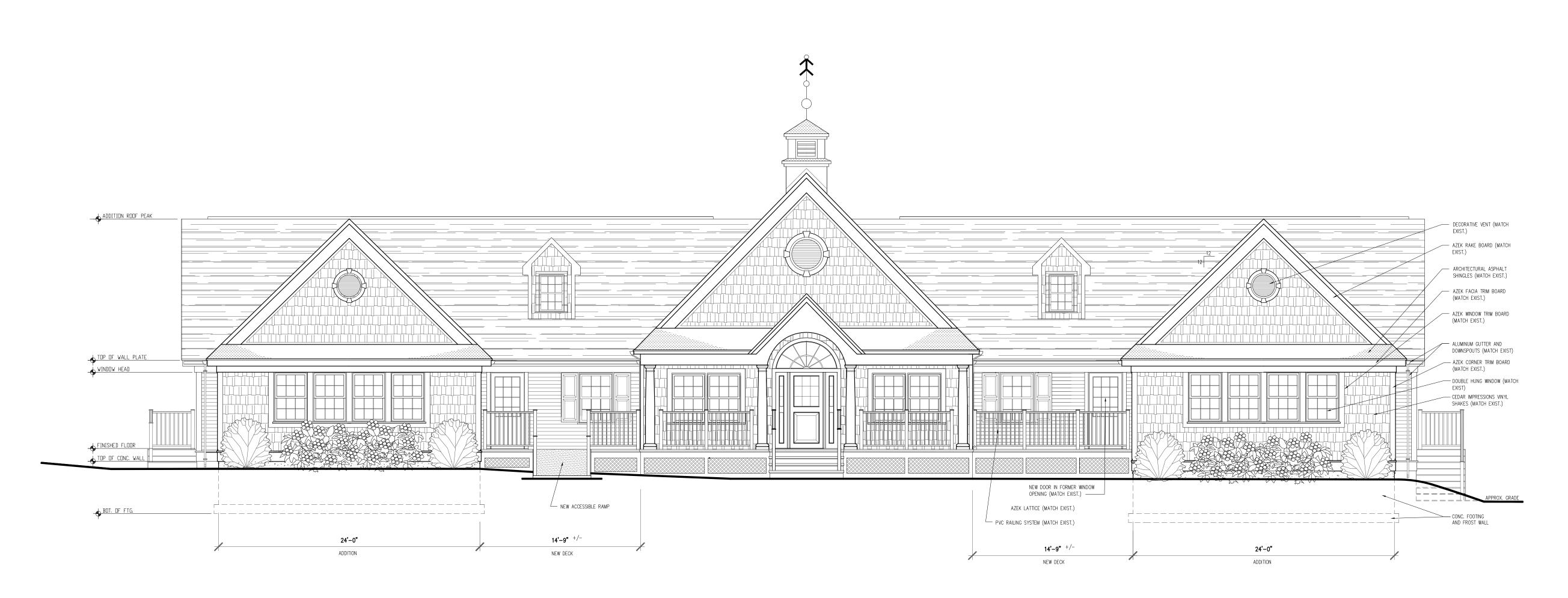




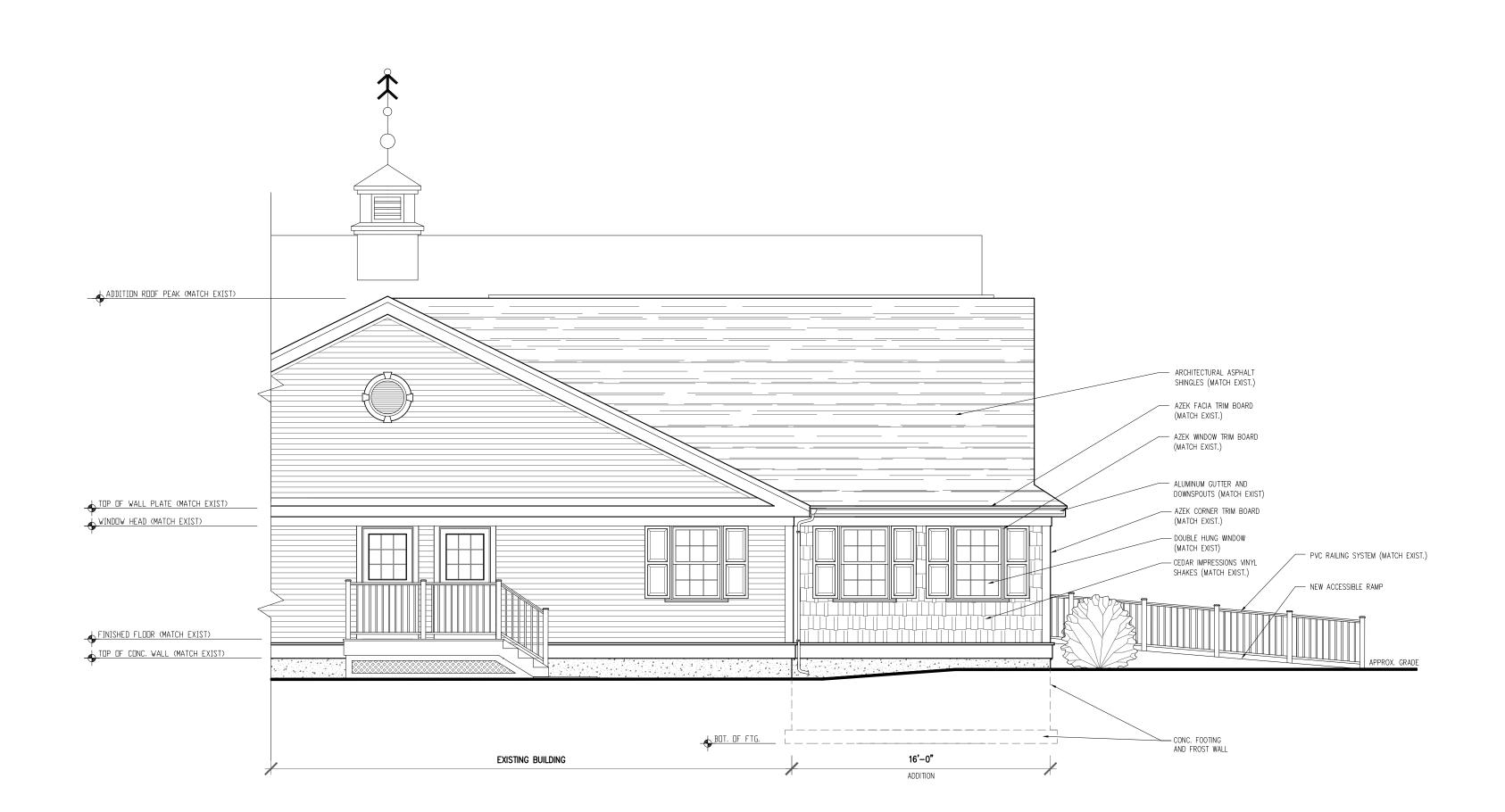








# PROPOSED FRONT ELEVATION SCALE: 3/16"=1'-0"



# PROPOSED LEFT SIDE ELEVATION (PARTIAL) SCALE: 3/16"=1'-0"

PRECIOUS MEMORIES PLACE

168 GREENMANVILLE AVE. MYSTIC, CONNECTICUT

SCOCIATES, LLCCSCONSTRUCTION DOCUMENTS | SPACE PLANNINGS SCORES | SPACE PLANNINGS SCORES | SPACE PLANNINGS SCORES | SPACE PLANNINGS SCORES | SPACE PLANNINGS | SPACE PLANNINGS

REVISIONS

LTR DESCRIPTION DATE

A CLIENT REVIEW 01/22/24

PREPARED FOR SIMEMORIES PLACE

PRECIOUS MEMORIES

**PA-02** 

Scale:
AS NOTED

Date
JANUARY 22, 2024

2024–134

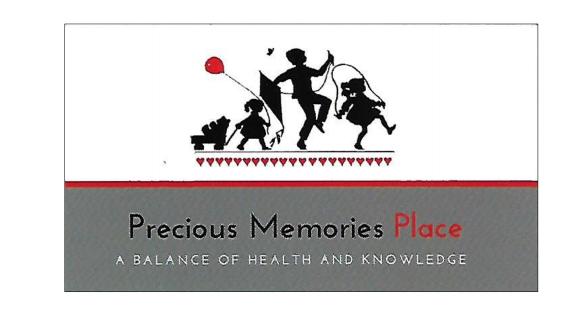


# ADDITIONS TO PRECIOUS MEMORIES PLACE

168 GREENMANVILLE AVE., MYSTIC, CONNECTICUT

**FEBRUARY 4, 2024** 







# Town of Stonington | Department of Planning Planning and Zoning Commission Meeting March 19, 2024

PZ2402SPA+CAM St. Edmund of Connecticut, Inc. (R. Avena, Esq.)

Site Plan Application and Coastal Area Management Review for the construction of a  $\pm 6,600$  SF building at St. Edmund of Connecticut on Enders Island. Proposal also includes the demolition of existing structures on campus and associated site improvements. Property is located at 1 Enders Island, Mystic; M/B/L: 178-1-1. Property is located in the RC-120 Zone.

Report Prepared By: Clifton J. Iler, AICP – Town Planner

## **Application Status**

This application is for a Site Plan Application (SPA) and Coastal Area Management (CAM) review. <u>C.G.S. Section 8-3(g)</u> establishes the criteria and requirements for a Site Plan Application and <u>Section 22a-109(g)</u> states that CAM applications are subject to the same timeframe requirements as Subsections (a) and (b) of Section 8-7d for the purpose of determining the time limitations for a zoning commission to reach a final decision. The Commission can elect to conduct a public hearing if desired, although <u>C.G.S. Section 8-7d(b)</u> places a 65-day limit on the timeframe to review and act on a Site Plan or CAM application whether or not a public hearing is held.

- Official Date of Receipt for this application was 2/20/24.
- The Commission voted to require a public hearing on this SPA+CAM application on 2/20/24.
- Tonight's meeting is Day 28 of 65 total days to open the public hearing
- The public hearing, without extension, must be closed by 4/23/24.
- A decision, without extension, must be made by 6/27/24.

The applicant may consent to one or more extensions provided the total period of any such extension or extensions shall not exceed 65 days.

## **Purpose**

This application is for the demolition and consolidation of existing facilities and uses into a new  $\pm 6,600$  SF building at St. Edmund of Connecticut on Enders Island. The project will demolish existing structures on campus and construct a new accessible recovery center facility with associated site improvements.

The application set includes a detailed description of the project overview.

## **Zoning and Context**

This parcel is in compliance with the Town of Stonington Zoning Regulations as a pre-existing, legal nonconforming use. Below are the bulk and use requirements of the Zoning Regulations for the RC-120 Zone.

**RC-120 Zone Bulk and Use Requirements** 

	<u>Required</u>	<u>Provided</u>		<u>Required</u>	<u>Provided</u>
Lot Size	120,000 SF	±422,532 SF	Building Height	25′	50.5′¹
Frontage	300′	N/A	Floor Area Ratio	0.04	0.083 <sup>23</sup>
Setbacks (F/S/R)	75'/75'/100'	Varies <sup>4</sup>	Parking	N/A	N/A
Res. Buffer	N/A	N/A	Non-Infring. Area	100′	Varies <sup>5</sup>

#### **ZONING MAP**



<sup>&</sup>lt;sup>1</sup> COV01-12 issued on May 8, 2001 for chapel use. Proposed new structure height is 22' 10".

 $<sup>^{\</sup>rm 2}$  COV01-12 issued on May 8, 2001.

 $<sup>^{\</sup>rm 3}$  Project includes FAR calculation sheets based on Assessor's records. See Town Planner comments.

<sup>&</sup>lt;sup>4</sup> Pre-existing legal nonconformity established prior to 1979.

 $<sup>^{\</sup>rm 5}$  Pre-existing legal nonconformity established prior to 1979. See Town Planner comments.

### **Site Access and Traffic**

The site is accessed from Yacht Club Road. There are no expected traffic impacts with this development as the is no change in use or intensity of use.

#### **Environmental Elements**

This site falls within the Coastal Area Management Overlay District (CAMOD) and is within 100 FT of designated coastal resources and therefore subject to CAM review. This application is subject to review by CT DEEP and comments are captured in the Response Summary.

The site also is located entirely within the Flood Hazard Overlay District (FHOD) and FEMA Special Flood Hazard Areas (SFHA), therefore regulated by FEMA and local floodplain management regulations. The existing seawall and revetment structures are located right along the boundary line between a VE (Velocity) Flood Zone with a Base Flood Elevation (BFE) of 14 feet NAVD88 and an AE Zone with a BFE of 13 feet. Inland of the coastal structures, for most of the site, the flood zone transitions to an AE Zone with a BFE of 12 feet. The proposed project does not include new construction within the SFHA.

The proposed improvements will reduce existing site impervious coverage, as well as remove two existing buildings currently within 100 FT of the Coastal Jurisdiction Line (CJL). The proposed building, which is located greater than 100 FT beyond the CJL, will also be equipped to harvest and store rainwater for use as irrigation around the proposed foundation plantings, which will help to promote additional groundwater recharge.

#### **Utilities**

The site is currently served by public water and private septic.

## **Waivers Requested**

No waivers are requested with this application.

## **Response Summary**

The application was routed to the following agencies/agents of the Town. Responses are shown below:

**BUILDING OFFICIAL** – No comment.

**HARBOR MANAGEMENT (MYSTIC)** – I have reviewed these documents several times. I support these efforts completely. [Dated: 3/5/24]

**TOWN ENGINEER** – See attached memorandum. [Dated: 3/7/24]

FLOODPLAIN MANAGER (SLR INTERNATIONAL) – See attached memorandum. [Dated: 3/8/24]

**LEDGE LIGHT HEALTH DISTRICT** – Awaiting comment.

**WATER POLLUTION CONTROL AUTHORITY** – The WPCA has no comment regarding the above referenced P&Z application as this project has no effect on the sanitary sewerage system. [Dated: 3/7/24]

**ZONING ENFORCEMENT OFFICER** – Approval will result in an overall reduction of non-conformities including compliance with the 100' non-infringement buffer and demolition of non-compliant flood resistant structures located within the flood zone.

An appeal [AAP 24-01], of my findings for 'no violation' regarding the expansion of a parking lot has been filed with the ZBA and is scheduled to be heard on April 9th. [Dated: 3/6/24]

#### FIRE DISTRICT MARSHAL (MASONS ISLAND) – Comments below [Dated: 3/10/24]:

Sorry for the delayed response, the MIFD Board has been busy on some other important matters in the past 2 weeks.

Firstly, I understand that Enders Island has a few buildings that have outlived their lifespan, and the construction of the new buildings and infrastructure called for within this zoning application will better accommodate their existing pastoral programs, and an upgrade of their septic system will lesson the risk of contaminating the waters that surround us. Overall, I find the MIFD taxpayers, with few exceptions, to be generally supportive of the existing pastoral and religious programs offered to the public as part of the mission of Enders Island, and attempts to make their experience more comfortable.

That being said, the existing programs offered by Enders already put a tremendous strain on MIPOA roads, creating traffic of over 20,000 vehicles per year, so I find there is less support for an expansion of programs on Enders since that would put even more strain on private roads that were not intended for such heavy use. I would expect the Town engineers to have similar concerns, as they would when any builder proposes to build something with the intent to bring new traffic that has the potential to over-strain the supporting road infrastructure. I have read in the supporting documents of the application that the construction intended in this zoning application is not being taken with the intent to increase the size of the programs, and therefore increase traffic, but to create better accommodations for attendees in existing programs. I am heartened by the fact that Enders has indicated an understanding that their existing programs are sized appropriately with the supporting infrastructure needed to gain access to Enders, and this construction is not intended to add to the strain on that infrastructure. If on the other hand, the Town engineer feels that this zoning application construction, combined with the previous one in January, will naturally increase traffic to Enders, then I would of course expect the Town engineer to perform a road study to ensure that the available infrastructure, especially across MIPOA private residential roads, can support such an increase in traffic.

To comment specifically on this zoning application, I would reiterate my requests listed in my comments from the first Enders application in January. Most importantly, a high volume of heavy construction vehicles going to Enders puts a tremendous strain on the private residential roads that MIPOA maintains at MIFD taxpayers expense. MIFD had requested in January as a comment to Ender's first zoning permit request, that the Town require Enders to post a \$300,000 security bond to secure funds to repair any damage or excessive wear and tear. This new construction project, in addition to their first request, just adds to my concern about the overuse of MIPOA's private roads by heavy construction trucks, roads that were designed and built for light residential traffic. Therefore, I would reiterate our initial request that the Town require that Enders post a security bond to ensure there are accessible funds that can be used by MIFD to pay for the repair of road damage caused by the excessive

use from these two, and any additional construction projects that Enders Island might pursue in the next few years.

CT DEEP OFFICE OF LONG ISLAND SOUND PROGRAMS – See attached memorandum. [Dated: 3/8/24]

#### **Town Planner Comments**

This application went before the Architectural Design Review Board (ADRB) at its regular meeting on March 11, 2024. The ADRB recommended approval of the application with the following stipulation:

1. Revise the Landscape Plan to address landscaping and pathways following the demolition of existing structures.

The Town Planner offers the following comments on the application:

- 1. The RC-120 Zone Bulk Requirements table on Sheet OV 1.0 incorrectly labels footnotes 3 and 4.
- 2. The SPA Project Description and RC-120 Zone Bulk Requirements table on Sheet OV 1.0 incorrectly calculate existing and proposed FAR.
  - a. The Gross Floor Area (GFA) calculation used on Sheet A 0-1, utilizing the 2018 Stonington Land Records, does not directly translate to FAR. For the purposes of calculating floor area ratio, roofed over space used for stairwells, elevators, accessory water tanks, and cooling towers shall not be counted toward gross floor area.<sup>6</sup>
  - b. The Enders Island Zoning Compliance Report (2018) confirms the GFA totals used by the applicant in developing this report. The Commission found the property in compliance at the time of the construction of the Chapel of Our Lady of the Assumption (2002).
- 3. As stated by the Zoning Enforcement Officer, an ongoing appeal [AAP 24-01] will go before the Zoning Board of Appeals (ZBA) on April 9, 2024. This appeal is not germane to discussion on the proposed application.
- 4. Per ZR §4.4.1.B, "buildings that are conforming in use and bulk standards but are non-conforming relative to setback requirements shall not be permitted to expand floor area within the required setback." This application increases zoning compliance by demolishing structures within setback areas and situating the new structure outside of the 100 FT Coastal Jurisdiction Line (CJL) and 100 FT Non-Infringement Area.

There are no additional questions or concerns with the proposed application.

## **Recommended Stipulations**

Should the Commission decide to approve this application, the Department of Planning recommends the following stipulations of approval:

- 1. The applicant shall address the outstanding comments to the satisfaction of the Town Engineer, Floodplain Manager, and Town Planner.
- 2. Revise the Landscape Plan to address landscaping and pathways following the demolition of existing structures.

<sup>&</sup>lt;sup>6</sup> Refer to Zoning Regulations §20.0 for Floor and Floor Area Terms.

- 3. Final plans shall be reviewed to the satisfaction of the Town Engineer.
- 4. Prior to the issuance of a Zoning Permit, the final plans shall be signed by the Commission and recorded in the Town's Land Evidence Records.

## **Commission Action Required**

The Commission is required to make a determination on the following items:

- A decision concerning the Site Plan Application (SPA)
- A decision on the Coastal Area Management (CAM) application

Section 9.2.8 – The Commission may approve, deny, or modify with conditions any project within the CAM boundary. In addition, the Commission may require additional erosion and sediment control measures, measures to mitigate any adverse impacts, pedestrian access easements, visual access easements, and conservation easements, and may require a design review in accordance with Section 17.1 of these regulations if the project is proposed for an area which has been designated as a view-shed or resource area in the Plan of Conservation and Development.

## **CLA Engineers, Inc.**

Civil • Structural • Survey

317 MAIN STREET • NORWICH, CT 06360 • (860) 886-9165 FAX

March 7, 2024

Christopher Greenlaw, P.E., Town Engineer Town of Stonington 152 Elm Street Stonington, CT 06378

RE: Coastal Site Plan Review for PZ2402 SPA & CAM St. Edmunds Retreat Kenyon Cottage Recovery Center at Enders Island 1 Enders Island CLA-7748

Mr. Greenlaw:

CLA Engineers, Inc. (CLA) has received the following application materials for the above referenced project:

- 1. Town of Stonington Application Form, Municipal Coastal Site Plan Review.
- 2. Town of Stonington Site Plan Application Form.
- 3. Project Summary Narrative from ZDS dated February 6, 2024
- 4. Stormwater Management Report prepared by SC Group, Inc., dated February 2024.
- 5. Plan Set: Proposed Improvements at St. Edmund's Retreat, Site Plan Review Application to the Town of Stonington, Dated February 20, 2024.

CLA performed a site walk on March 1, 2024 and has conducted a review of the application documents and would like to offer the following comments on the materials:

- 1. The application indicates a two phased project. The phasing should be depicted on the project plans.
- 2. We recommend that the suggested construction sequence be expanded, and additional details be provided. Especially regarding phasing, sequencing of building demolition, stockpiling in the demolished building area, septic and utility demolition, and installation. Town staff should be invited to the preconstruction meeting.
- 3. Although the 2024 Water Quality Manual and E&S Manual are not effective until the end of this month, we recommend reference be made to the new manuals, and provisions be adhered to where feasible.
- 4. Assuming the other areas of the facility will remain in operation during construction.
  - A. We would recommend construction fencing surround the work area.
  - B. An area for temporary parking should be designated. The existing gravel parking lot appears to be used for a stockpiling and staging area.

- 5. It appears that two ADA marked parking spaces will be removed and replaced with one new ADA space. The Applicant should demonstrate there is adequate ADA parking for the site.
- 6. There is proposed work within the 100-year flood plain and access to the facility is through the 100-year flood plain. We recommend that the provisions of the facility flood contingency plan be added to the plan set.
- 7. Do the 8" PVC yard drain culverts have capacity for the proposed flow?
- 8. Will the new yard drain and footing drain discharge create erosion down the slope to the south, or any icing issues over the existing perimeter road?
- 9. Construction details for the CIP concrete retaining wall should be provided.
- 10. More substantial E&S measures should be provided downgrade of the proposed septic system. Perhaps silt fence backed by straw bales, or similar.
- 11. A potential location for the dewatering hay bale basin (type 1) should be shown.
- 12. Filter inserts have been proposed for the yard drains in the narratives for the project. We would recommend a call-out be added to the plans, or detail.

Thank you for the opportunity to provide this review. Please feel free to call me at our office or email me at khaubert@claengineers.com with any questions or comments.

Very truly yours, **CLA Engineers, Inc.** 

Kyle Haubert, P.E.

## Memorandum



**To**: Clifton Iler, Candace Palmer **From**: Noah Slovin, AICP, CFM

**Date**: March 8, 2024

**Subject**: PZ2402 St. Edmunds Retreat Coastal Site Plan Review

Materials submitted on February 6, 2024 by BSC Group for St. Edmunds Retreat, Inc. were reviewed in March 2024 at the request of the Town of Stonington.

#### **Overview**

The application is to demolish two existing structures and construct a new building. The new proposed building ("Kenyon Cottage Recovery Center") will be a two-story residential structure with a basement.

Generally, the project area includes a FEMA Special Flood Hazard Area (SFHA) AE Zone with a base flood elevation (BFW) of 13 feet NAVD88, and is near a VE (velocity) zone with a BFE of 14 ft NAVD88. The planned demolition will remove buildings currently located within the AE zone, reducing flood risks.

The proposed new structure is located outside the AE zone, within a 0.2% annual chance flood zone (Zone X, not a regulated SFHA). The basement of the new property will be at elevation 8.50 ft NAVD88, with the first inhabited floor at elevation 17.50. A new ramp to access the basement will be constructed, and will involve excavation within the AE zone down to below 9 ft NAVD88. Construction of the building will include placing fill within the AE zone.

The proposed project includes construction of a septic system that includes a leaching area within the SFHA AE zone. Leaching area construction includes significant fill within the flood zone – the VE zone boundary is not included on the Plan drawings.

### **Findings**

The proposed project removes two structures from the SFHA and replaces them with a new structure at higher elevation and outside the SFHA; this will reduce flood risks and is encouraged.

The proposed new structure is located entirely outside the SFHA, and is not required to conform to any floodplain regulations.

I have some concern that the planned excavation of a ramp to the basement, which includes excavation within the SFHA, may expose the new building's basement to flood risk during a 1% annual-chance storm. It does not appear that this plan is explicitly prohibited by Stonington's



floodplain regulations; however, I would recommend the proposer evaluate this possibility and implement appropriate mitigation measures. It is also worth noting that future updates to FEMA mapping may identify this structure as being within the flood zone, due to the changed topography.

The proposed septic leaching area does not include any above-ground structures or tanks,

44 CFR 60.3 (a)(3) states that, for all proposed construction or other development (including excavation) within a participating community, the community must "Review all permit applications to determine whether the proposed building sites will be reasonably safe from flooding."

which is acceptable by Stonington's floodplain regulations. It does not *appear* to include fill in the VE zone, but I am not able to confirm this without the VE zone boundary included on the Plan.

#### Recommendations

The following two recommendations are made:

- 1. The proposer must confirm that no fill will be placed in the VE zone, in particular as part of construction of the leaching area.
- 2. The proposer should evaluate whether excavation of a ramp to the basement will expose the basement to flooding, and take appropriate action.

#### **Conclusions**

Based on a review of the application provided, the proposed project can be permitted as soon as the proposer confirms that no fill will be placed in the VE zone. Confirmation that the ramp will not expose the basement to flooding is recommended but not required from a floodplain management perspective.

Please contact me with any questions.

**Noah Slovin** AICP, CFM Senior Resilience Planner

O 617-865-2544 E nslovin@slrconsulting.com

SLR International Corporation 10 High Street, Suite 605, Boston MA United States 02110

The above permit application review was conducted in good faith using available information and the consultant's best interpretation of local, state, and federal floodplain management codes and guidelines.





## **Land and Water Resources Division**

# COASTAL SITE PLAN REVIEW COMMENTS CHECKLIST

This checklist is used by the Land and Water Resources Division (LWRD) to assess the consistency of the proposed activities with the relevant policies and standards of the Connecticut Coastal Management Act [(CCMA), Connecticut General Statutes (CGS) sections 22a-90 through 22a-112, inclusive].

ORIGINAL TO:	COASTAL SITE PLAN REVIEW TRIGGER:			
Stonington Planning and Zoning Commission 152 Elm Street Stonington, CT 06378	<ul> <li>Zoning Compliance</li> <li>Subdivision</li> <li>Special Exception or Permit</li> <li>Variance</li> <li>Municipal Improvement</li> </ul>			
Date sent/delivered 3/8/2024 by (indicate all that	apply):  hand fax e-mail U.S. mail			
APPLICANT NAME: Robert A. Avena, Esquire MAILING ADDRESS: 20 South Anguilla Road, Paw PROJECT ADDRESS: 1 Enders Island, Mystic, CT				
		_		
PROJECT DESCRIPTION:  The applicant is seeking to demolish two existing buildings and construct a new 6600 square foot building called the Kenyon Cottage Recovery Center. The two-story structure will serve as a private recovery area for residents. The total floor area ratio will be reduced slightly, and impervious area will be reduced by about 10% (106,961 sf existing, 96,689 proposed). The retreat at Enders Island offers general public access and the proposed work will not change the existing use of the site.				
LWRD reviewer <u>BL</u>	Date plans were received by LWRD: <u>2/21/24</u>			
Date LWRD review completed: 3/8/24	Most recent revision date on plans: $2/20/24$			

Plan title: Proposed Improvements at St. Edmund's Retreat

COASTAL RESOURCES AND RESOURCE POLICIES:					
	ON-SITE	ADJACENT TO SITE	POTENTIALLY INCONSISTENT	NOT APPLICABLE	
General Coastal Resources*	$\boxtimes$	$\boxtimes$			
Beaches and Dunes				$\boxtimes$	
Bluffs and Escarpments				$\boxtimes$	
Coastal Hazard Area	$\boxtimes$	$\boxtimes$			
Coastal Waters and/or Estuarine Embayments	$\boxtimes$	$\boxtimes$			
Developed Shorefront				$\boxtimes$	
Freshwater Wetlands and Watercourses				$\boxtimes$	
Intertidal Flats				$\boxtimes$	
Islands	$\boxtimes$				
Rocky Shorefront	$\boxtimes$				
Shellfish Concentration Areas				$\boxtimes$	
Shorelands				$\boxtimes$	
Tidal Wetlands				$\boxtimes$	

ADVERSE IMPACTS ON	N COASTAL	RESOURCE	es:
	Appears Acceptable	Potentially Unacceptable	Not Applicable
Degrades tidal wetland, beaches and dunes, rocky shorefronts, or bluffs and escarpments			$\boxtimes$
Degrades existing circulation patterns of coastal waters			$\boxtimes$
Increases coastal flooding hazard by altering shoreline or bathymetry			
Degrades natural or existing drainage patterns			$\boxtimes$
Degrades natural shoreline erosion and accretion patterns			$\boxtimes$
Degrades or destroys wildlife, finfish, or shellfish habitat			
Degrades water quality			$\boxtimes$
Degrades visual quality			$\boxtimes$

COASTAL USE POLICIES:**		
	Applies	Potentially Inconsistent
General Development*	$\boxtimes$	
Boating		
Coastal Recreation and Access		
Coastal Structures and Filling		
Cultural Resources		
Fisheries		
Fuels, Chemicals, or Hazardous Materials		
Ports and Harbors		
Sewer and Water Lines		
Solid Waste		
Transportation		
Water-dependent Uses	$\boxtimes$	

General Coastal Resources and General Development policies are applicable to all proposed activities.
 Policies that are not applicable are not checked in this chart.

ADVERSE IMPACTS ON FUTURE WATER-DEPENDENT DEVELOPMENT	ACTIVITIES	AND OPPORT	UNITIES:	
	Appears Acceptable	Potentially Unacceptable	Not Applicable	
Replaces an existing water-dependent use with a non-water-dependent use				
Reduces existing public access				
Locates a non-water-dependent use at a site that is physically suited for a water-dependent use for which there is a reasonable demand				
Locates a non-water-dependent use at a site that has been identified for a water-dependent use in the plan of development or zoning regulations			$\boxtimes$	
ISSUES OF CONCERN (SEE SUMMARY AND RECOMMENDATIONS BOX FO	OR ADDITION	AL DETAIL):		
Insufficient information				
Potential increased risk to life and property in coastal hazard area				
Adverse impacts on future water-dependent development opportun	ities			
Proximity of disturbance to sensitive resources/need for additional	vegetated se	tback		
Potential to cause erosion/sedimentation; need for adequate sedimentation and erosion control measures				
Water quality and/or stormwater impact				
Other coastal resource impacts:				
Other:				
SUMMARY AND RECOMMENDATIONS:				
The proposal does not appear to have adverse impacts on coastal resources. Total runoff from the site and impervious area will be reduced. Along with the two buildings to be demolished, three sheds are also proposed to be removed, all of which should improve the visual quality of the site. The proposed new construction is located outside the 100-year floodplain, and partially replaces a building located in the floodplain, increasing the setback from coastal resources.  Soil and erosion controls as proposed appear adequate to prevent sediments and contaminants from affecting coastal resources during construction. These controls should be carefully inspected and maintained throughout construction in accordance with the provided Operation and Maintenance Plan as the site is in close proximity to coastal waters.				

FINDING: (Please see summary and recommendations section on page 3 for discussion)				
CONSISTENT WITH ALL APPLICABLE COASTAL POLICIES				
CONSISTENT WITH MODIFICATIONS OR CONDIT	IONS			
ADDITIONAL INFORMATION NEEDED PRIOR TO	COMPLETE CSPR EVALUATION			
SUPPORTING DOCUMENTATION ATTACHED TO THE	IS CHECKLIST:			
Copies of photographs of the site dated:				
Copies of aerial photographs dated:				
GIS maps depicting:				
Coastal resources maps dated:				
Coastal Management Fact Sheet(s):				
Other:	Other:			
Please be advised that, separate from the municipal re	eview, the following DEEP permits may be required:			
Structures, Dredging, and Fill in Tidal Coastal or Navigable Waters				
☐ Tidal Wetlands	] Tidal Wetlands			
Stormwater General Permit:	Stormwater General Permit:			
Other:	Other:			
Please direct questions or comments regarding this checklist to:	copy/ies provided to			
Braden Lynn	aden Lynn			
Planning Section	unning Section			
Land and Water Resources Division				
CT DEEP				
braden.lynn@ct.gov				
	LWRD Reviewer Initials <u>BL</u> Date: 3/8/24			

This checklist is intended to replace a comment letter only in those instances where LWRD comments can be readily conveyed without the background discussion that would be provided in a letter.

This checklist is not used for projects that LWRD recommends should be denied.

# SITE PLAN APPLICATION APPLICATION FORM



						THE RESERVE OF THE PARTY OF THE
Application Number			Receip	ot Date:		
Applicant:	Robert A. Aven	na, Esquire				
Mailing Address:	20 South Angu	illa Road, P	awcatuck,	CT 06379	)	
Telephone Number:	(860) 650-8008					
Owner:	St. Edmund of	Connecticu	t Inc			
Mailing Address:	1 Enders Island	d, Mystic, C	Г 06355			
Telephone Number:	(860) 536-0565	5				
Project Leader*:	Robert A. Aven	a, Esquire				
Mailing Address:	20 South Anguilla Road, Pawcatuck, CT 06379					
Telephone Number:	(860) 650-8008	3				
Property Location:	1 Enders Island	l, Mystic, C⅂	-			
Parcel Information:	Мар	178	Block	1	Lot	1
Estimated Cost of Wor	k g	\$3,000,000.	00		_	
Zoning District:	RC-120		Lot Size:		9.7 +/- acre	es
Street Frontage:	N/A		Is Street F	rontage:	X Town	State
Is any portion of the pro	operty within 500	feet of the	Town Bour	ndary?	Yes	X No

<sup>\*</sup> Project Leader is the Architect, Attorney, Engineer, Landscape Architect, Surveyor, or other individual who will be the responsible contact person with the Town.

Fire District:	Masons Island		Harbor Mana	gement Di	strict: Mystic	Harbor
Water Supply: [	X Public  Pr	ivate	Sewage	Disposal:	Public	X Private
Flood Zone:	Zone AE & X		V	Wetlands:	Tidal	☐ Inland
Project Description pertinent information			erall size in S	SF, project	dimensions	and other
The Kenyon Cottage universally accessible structure (plus basem previously allowable from this new bu improve compliance of FAR will be reduced from 196,689 sf); the Total of	e home to the recove nent) that will serve a FAR calculations, a f ilding. The proposed of the island. By cons rom 0.0958 - 0.0951	ry reside s a priva ew existion project is structing to ; and the	nts on campus. te recovery area ng structures on s designed to be this structure an	The propose for the residual campus will within coasid demolishing	ed building is a dents. in order be demolished tal setback zor ig the others, tl	two-story to be within d in order to nes and to
Previous Petitions above listed prope	and the second s	revious	petitions that	have bee	n made with	respect to the
Recently approved	project for reconstr	uction of	seawall, 2024.	. Chapel cor	structed with	approved site plan
in 2002. Ledge Light	Health District revie	wing pen	ding plans for se	eptic system	improvements	on site.
The undersigned owner, or agent, hereby consents to necessary and proper inspections of the above-mentioned property by agents of the Commission at reasonable times both before and after a permit is granted by the Commission.						
The undersigned declares all information supplied is accurate to the best of his knowledge and belief. If such information subsequently proves to be false, deceptive, incomplete, or inaccurate, the permit may be modified, suspended, or revoke, by the Commission or it's agents.						
Applicant's Printed	l Name		Ap	plicant's S	Signature	
Owner's Printed Name Retreat, I'm Owner's Signature						
Owner's Printed N	ame Re	theat	, IN O	wner's Sig	nature	
Project Leader's P	rinted Name			oject Lead	ler's Signatu	re
	St	Prace	we fix			

## **Town of Stonington, Connecticut**

## **Application Form**

## Municipal Coastal Site Plan Review For Projects Located Fully or Partially Within the Coastal Boundary

Please complete this form in accordance with the attached instructions (CSPR-INST-11/99) and submit it with the appropriate plans to appropriate agency. (Planning and Zoning Commission or the Zoning Board of Appeals)

## Section I: Applicant Identification

Applicant: St. Edmund's Retreat, Inc.	Date: 02/06/2024			
Address: 1 Enders Island, Mystic, CT	_ Phone: <u>(860) 536-0565</u>			
Project Address or Location: <u>1 Enders Island, Mystic, CT</u>				
Interest in Property: ☒ fee simple ☐ option ☐ lessee ☐ easeme	ent			
other (specify)				
List primary contact for correspondence if other than applicant: BSC Group				
Name: Matt Stephan, PE				
Address: 655 Winding Brook Drive				
City/Town: Glastonbury State: CT	Zip Code: <u>06033</u>			
Business Phone: <u>(617)</u> 896-4554				
E-mail Address: <u>mstephan@bscgroup.com</u>				

### **Section II: Project Site Plans**

	project site plans that clearly and accurately depict the following information, and check boxes to indicate that the plans are included in this application:
⊠ F	Project location
⊠ E	Existing and proposed conditions, including buildings and grading
$\boxtimes$	Coastal resources on and contiguous to the site
X  H	High tide line [as defined in CGS Section 22a-359(c)] and mean high water mark
6	elevation
$\mathbf{X}$	contours (for parcels abutting coastal waters and/or tidal wetlands only)
$\boxtimes$ :	Soil erosion and sediment controls
$\boxtimes$ :	Stormwater treatment practices
X	Ownership and type of use on adjacent properties
<b>∑</b>   F	Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)

## Section III: Written Project Information

	ease check than Review:	ne appropriate box to identify the plan or application that has resulted in this Coastal Site
		Site Plan for Zoning Compliance Subdivision or Resubdivision Special Permit or Special Exception
		Variance Municipal Project (CGS Section 8-24)
Part	t I: Site In	formation
1.	Street Add 1 Enders	ress or Geographical Description: s Island
	City or Tow	n: Mystic (Town of Stonington)
2.	Is project o	r activity proposed at a waterfront site (includes tidal wetlands frontage)? 🛛 YES 🔲 NO
3.		n-site, adjacent or downstream coastal, tidal or navigable waters, if applicable: erty is an island located in Long Island Sound, southeast of Mason's Island
4.	Identify and	d describe the existing land use on and adjacent to the site. Include any existing
	The site is site. The organizate grounds,	municipal zoning classification, significant features of the project site:  s located within the RC-120 Zone. There are no abutting properties to the property is owned by St. Edmund's Retreat, which is a religious, non-profit ion that offers, in addition to public access to the shoreline and their church services, over-night retreat rooms, post-treatment recovery rooms, us programs and workshops.
5	Indicate the	e area of the project site: 9.2 +/- acres or square feet (circle one)
5. 6.		appropriate box below to indicate whether the project or activity will disturb 5 acres or
0.		acres of land area (please also see Part II.B. regarding proposed stormwater best
		ent practices):
		Project or activity will disturb 5 or more total acres of land area on the site and may be
		eligible for registration for the Department of Environmental Protection's (DEP) General
		Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities
	X	Project or activity will not disturb 5 or more total acres of land area

### Part II.A.: Description of Proposed Project or Activity

Describe the proposed project or activity including its purpose and related activities such as site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover over existing conditions resulting from the project; phasing, timing and method of proposed construction; and new uses and changes from existing uses (attach additional pages if necessary):

St. Edmund's Retreat is proposing to demolish two of their existing buildings and relocate existing operations to a single new building. The project is proposing no changes in use, and no changes in capacity or operations are anticipated. The construction activities generally include installation of erosion and sedimentation controls, demolition of two buildings, grading, trenching, and excavation for the proposed building and septic system, landscaping, and restoring disturbed areas with loam and seed. The proposed improvements will result in an approximately 10% decrease in impervious coverage. The overall site runoff Curve Number (CN) will be reduced from 73 to 72.

The project will likely be constructed in two Phases. Phase 1 includes the demolition of the Angel Hall building and refreshing of the gravel parking lot to the north of the site. Phase 2 includes demolition of the existing maintenance building and construction of the new building and supporting site features. Phase 2 will not begin until Phase 1 is complete.

### Part II.B.: Description of Proposed Stormwater Best Management Practices

Describe the stormwater best management practices that will be utilized to ensure that the volume of runoff generated by the first inch of rainfall is retained on-site, especially if the site or stormwater discharge is adjacent to tidal wetlands. If runoff cannot be retained on-site, describe the site limitations that prevent such retention and identify how stormwater will be treated before it is discharged from the site. Also demonstrate that the loadings of total suspended solids from the site will be reduced by 80 percent on an average annual basis, and that post-development stormwater runoff rates and volumes will not exceed pre-development runoff rates and volumes (attach additional pages if necessary):

The primary goal of the project is to minimize impacts and disturbance to the island, especially within 100 feet of the CJL. The project will reduce post-development stormwater runoff rates and volumes through reduction of impervious area, as well as reduction of overall watershed runoff Curve Number (CN). Additionally, rainwater harvesting is proposed at the new building to recycle for irrigation of the foundation plantings. The rainwater harvesting tank was sized to hold 1-inch of rainfall from an 800-square foot area of the roof. In addition to significant space limitations, it was determined that it would be overly intrusive to attempt to provide aboveground or underground measures for detaining the water quality volume or removing 80% TSS. The project therefore, is proposing to address stormwater quality to the maximum extent practicable by reducing site impervious and collecting rainwater.

## Part III: Identification of Applicable Coastal Resources and Coastal Resource Policies

Identify the coastal resources and associated policies that apply to the project by placing a check mark in the appropriate box(es) in the following table.

Coastal Resources	On-site	Adjacent	Off-site but within the influence of project	Not Applicable
General Coastal Resources* - Definition: CGS Section 22a-93(7); Policy: CGS Section 22a-92(a)(2)	Х			
Beaches & Dunes - Definition: CGS Section 22a-93(7)(C); Policies: CGS Sections 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)				Х
Bluffs & Escarpments - Definition: CGS Section 22a-93(7)(A); Policy: CGS Section 22a-92(b)(2)(A)				X
Coastal Hazard Area - Definition: CGS Section 22a-93(7)(H); Policies: CGS Sections 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), and 22a-92(c)(2)(B)	X			
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definition: CGS Sections 22a-93(5), 22a-93(7)(G), and 22a-93(7)(K), and 22a-93(7)(L) respectively; Policies: CGS Sections 22a-92(a)(2) and 22a-92(c)(2)(A)		X		
Developed Shorefront - Definition: CGS Section 22a-93(7)(I); Policy: 22a-92(b)(2)(G)				Х
Freshwater Wetlands and Watercourses - Definition: CGS Section 22a-93(7)(F); Policy: CGS Section 22a-92(a)(2)				Х
Intertidal Flats - Definition: CGS Section 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)				Х
Islands - Definition: CGS Section 22a-93(7)(J); Policy: CGS Section 22a-92(b)(2)(H)	Х			
Rocky Shorefront - Definition: CGS Section 22a-93(7)(B); Policy: CGS Section 22a-92(b)(2)(B)	Х			
Shellfish Concentration Areas - Definition: CGS Section 22a-93(7)(N); Policy: CGS Section 22a-92(c)(1)(I)				Х
Shorelands - Definition: CGS Section 22a-93(7)(M); Policy: CGS Section 22a-92(b)(2)(I)				Х
Tidal Wetlands - Definition: CGS Section 22a-93(7)(E); Policies: CGS Sections 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B)				Х

<sup>\*</sup> General Coastal Resource policy is applicable to all proposed activities

### Part IV: Consistency with Applicable Coastal Resource Policies and Standards

Describe the location and condition of the coastal resources identified in Part III above and explain how the proposed project or activity is consistent with all of the applicable coastal resource policies and standards; also see adverse impacts assessment in Part VII.A below (attach additional pages if necessary):

As the project is on an island located within Long Island Sound, the site is subject to resources indicated above. The proposed project is **consistent** with the goals outlined in the CGS regarding coastal resources by **removing** buildings from both the 100-foot CJL buffer line and FEMA flood zones, providing a **reduction** in impervious area, and **beautifying** an existing facility that, in addition to its many offered services, permits unrestricted **public access** to the CT coastline.

### Part V: Identification of Applicable Coastal Use and Activity Policies and Standards

Identify all coastal policies and standards in or referenced by CGS Section 22a-92 applicable to the				
proposed project or activity:				
General Development* - CGS Sections 22a-92(a)(1), 22a-92(a)(2), and 22a-92(a)(9)				
Water-Dependent Uses** - CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A);				
☑ Definition CGS Section 22a-93(16)				
Ports and Harbors - CGS Section 22a-92(b)(1)(C)				
☐ Coastal Structures and Filling - CGS Section 22a-92(b)(1)(D)				
☐ Dredging and Navigation - CGS Sections 22a-92(c)(1)(C) and 22a-92(c)(1)(D)				
☐ Boating - CGS Section 22a-92(b)(1)(G)				
Fisheries - CGS Section 22a-92(c)(1)(I)				
Coastal Recreation and Access - CGS Sections 22a-92(a)(6), 22a-92(C)(1)(j) and 22a-				
92(c)(1)(K)				
Sewer and Water Lines - CGS Section 22a-92(b)(1)(B)				
☐ Fuel, Chemicals and Hazardous Materials - CGS Sections 22a-92(b)(1)(C), 22a-92(b)(1)(E) and				
22a-92(c)(1)(A)				
☐ Transportation - CGS Sections 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and				
22a-92(c)(1)(H)				
☐ Solid Waste - CGS Section 22a-92(a)(2)				
☐ Dams, Dikes and Reservoirs - CGS Section 22a-92(a)(2)				
☐ Cultural Resources - CGS Section 22a-92(b)(1)(J)				
Open Space and Agricultural Lands - CGS Section 22a-92(a)(2)				

<sup>\*</sup> General Development policies are applicable to all proposed activities

<sup>\*\*</sup> Water-dependent Use policies are applicable to all activities proposed at waterfront sites, including those with tidal wetlands frontage.

### Part VI: Consistency With Applicable Coastal Use Policies And Standards

Explain how the proposed activity or use is consistent with all of the applicable coastal use and activity policies and standards identified in Part V. For projects proposed at waterfront sites (including those with tidal wetlands frontage), particular emphasis should be placed on the evaluation of the project's consistency with the water-dependent use policies and standards contained in CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A) also see adverse impacts assessment in Part VII.B below (attach additional pages if necessary):	
Please see response to Part VII.B.2 below.	

## Part VII.A.: Identification of Potential Adverse Impacts on Coastal Resources

Please complete this section for all projects.

Identify the adverse impact categories below that apply to the proposed project or activity. The [applicable] column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS Section 22a-93(15). If an adverse impact may result from the proposed project or activity, please use Part VIII to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Coastal Resources	Applicable	Not Applicable
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions - CGS Section 22a-93(15)(H)		Х
Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)		Х
Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours - CGS Section 22a-93(15)(B)		Х
Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff - CGS Section 22a-93(15)(D)	X	
Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction - CGS Section 22a-93(15)(C)		Х
Degrading visual quality through significant alteration of the natural features of vistas and view points - CGS Section 22a-93(15)(F)	X	
Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity - CGS Section 22a-93(15)(A)		Х
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat - CGS Section 22a-93(15)(G)		Х

### Part VII.B.: Identification of Potential Adverse Impacts on Water-dependent Uses

Please complete the following two sections only if the project or activity is proposed at a waterfront site:

1. Identify the adverse impact categories below that apply to the proposed project or activity. The [applicable] column must be checked if the proposed activity has the potential to generate any adverse impacts as defined in CGS Section 22a-93(17). If an adverse impact may result from the proposed project or activity, use Part VIII to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities	Applicable	Not Applicable
Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use - CGS Section 22a-93(17)		Х
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)		Х
Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS Section 22a-93(17)		Х

2. Identification of existing and/or proposed Water-dependent Uses

Describe the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS Section 22a-93(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.)\*:

St. Edmund's Retreat is an existing, non-water dependent use located on Enders Island. However, as a religious, non-profit organization, the Retreat provides **general public access** to marine waters and allows members of the public to park on site and walk their grounds, which include walking paths, historic and scenic buildings, and decorative landscaping. Events that are open to the public are also held on the island. The proposed project as part of this application is entirely unrelated to the existing general public access and is not anticipated to have any impact on the existing water-dependent use aspects of the site. The Retreat is committed to continuing to provide unrestricted access by the public to their site. The site is accessed via a formal access easement through Mason's Island, ensuring public access in perpetuity.

<sup>\*</sup>If there are no water-dependent use components, describe how the project site is not appropriate for the development of a water-dependent use.

### Part VIII: Mitigation of Potential Adverse Impacts

Explain how all potential adverse impacts on coastal resources and/or future water-dependent development opportunities and activities identified in Part VII have been avoided, eliminated, or minimized (attach additional pages if necessary):

<u>Degrading natural or existing drainage patterns</u>: This potential adverse impact has been **avoided** through a reduction in peak runoff rate and volume from the site, as well as through promoting groundwater recharge. The proposed improvements will reduce existing site impervious coverage, as well as remove two existing buildings currently within 100 feet of the CJL. The proposed building, which is located greater than 100 feet beyond the CJL, will also be equipped to harvest and store rainwater for use as irrigation around the proposed foundation plantings, which will help to promote additional groundwater recharge.

<u>Degrading visual quality through significant alteration of the natural features of vistas and viewpoints</u>: This potential adverse impact has been **avoided** through the implementation of the project. The two buildings proposed to be demolished are in poor condition and located close to the shoreline. Their removal will allow less impeded views of the shoreline and Sound then under the current conditions. The proposed building will be placed further back from the shoreline, and will feature a patio at the rear of the building that will provide a 180-degree view of the Sound.

#### Part IX: Remaining Adverse Impacts

Explain why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated and why the project as proposed is consistent with the Connecticut Coastal Management Act (attach additional pages if necessary):

There are no remaining potential adverse impacts.

**ZDS** 

February 13, 2024

Project Summary Narrative / Stonington Planning and Zoning Commission Site Plan

Re: Kenyon Cottage Recovery Center at Enders Island

St. Edmund's Retreat at Enders Island is a place of worship / retreat center situated on a campus on Enders Island. The entire campus includes different structures constructed over the last 100 years that house a variety of uses, which are outlined below. The following narrative describes the current status of buildings on Enders Island as well as the proposed modifications, demolition, and new construction on site.

The Enders House was the first structure built on the island, constructed in the 1920's. It was originally a home for Dr. Thomas and Mrs. Alys Enders. The estate was designed in classic early 20<sup>th</sup> century Arts and Crafts style, clad in fieldstone, stucco, and a signature red roof. In 1954, and following the passing of Dr. Enders, his wife gifted the estate to the Society of Saint Edmund (at which time it became a retreat for the Catholic Diocese of Norwich). In its current state, the Enders' House serves as administrative offices, dining services, event meeting space, private respite rooms for the retreat program, some bedrooms dedicated to the recovery center (two beds) and apartments for the two officers of ministry who reside on campus and run the program. The two bedrooms dedicated to the recovery center will be relocated to the new proposed Kenyon Cottage and the additional space will be repurposed as expanded administration space. The structure is 15,287 SF and most uses will remain aside from what was previously described. The laundry facilities were recently relocated back to the basement of the Enders house to be a central location on campus.

**ZDS** 

demolished.

Kolbe cottage is a 2,759 SF two story structure built in the 1930s and consists primarily of lodging (nine beds) for the current Recovery Center program. The existing building is clad in fieldstone and stucco. The proposed new Kenyon Cottage will be the new location for all of these nine beds, which will allow the Kolbe Cottage structure to be repurposed as administrative offices, relocating offices from both the current Maintenance Building and Angell Hall (both planned to be demolished). There is also a 67 SF

mechanical shed that is attached to the structure that is no longer being used and is proposed to be

Angell Hall is a 2,880 SF structure that was originally a horse barn on the property and was built in the 1930s. Many renovations have occurred and it currently houses administrative offices, storage, and a small program meeting space. This building is in need of repair and is intended to be demolished in order to assist in the reduction of the Floor Area Ratio (FAR) on campus to accommodate the new construction of Kenyon Cottage.

St Michael's Hall is a two-story 9,428 SF brick and glass structure, which was constructed in 1970. It was built to serve primarily as the location for larger meetings as well as lodging for the retreats that occur on campus. There is no proposed change to the scope of this structure.

Chapel of our Lady of the Assumption is a 4,181 SF chapel that was built in 2002. It is constructed of local fieldstone with stones from significant locations around the world. The chapel was built to serve not only the residents of the island but is also open to the public, as is the entire island. The chapel serves as the centerpiece of the Community's life of prayer and celebrations. There is no proposed change to this structure.



St Mary's Hall was the original chapel space on this property but has since been repurposed for different uses. The 2,616 SF building was constructed in the 1930's and serves as the Sacred Arts Space and houses some offices a residential suite (apartment) and three bedrooms on the second floor that are for the Recovery Center. The residential suite and the three bedrooms will be relocated to Kenyon Cottage. It is anticipated that administrative offices will be relocated to these spaces.

The existing Maintenance Building, which was constructed out of wood framing and clad in tongue and groove siding was constructed in 1998 and is 2,616 SF. This structure houses the maintenance / facilities offices, storage space, a small meeting space for the recovery residents and previously housed the laundry facilities. This building is scheduled to be demolished to allow for the construction of Kenyon Cottage. All of the uses in the existing building will be relocated to other buildings on campus.

Additionally, and as illustrated in the architectural plan package submitted, there are a small number of ancillary structures on campus, including a seaside chapel, which will remain; and some unused sheds (185 SF and 160 SF) that will be demolished to aid in contributing to the FAR requirements on campus.

The new proposed structure on campus will be the Kenyon Cottage Recovery Center. It is a 6677 SF two-story building with a non-inhabitable basement area. The building is designed to be clad in stone and stucco and is meant to honor the original Enders House without mimicking the original design. The purpose of this structure is to provide safe, accessible spaces for the residents on campus during their recovery period. This building is intentionally situated further away from the main parking area, allowing residents privacy during their recovery period. Additionally, this building increases zoning compliance by being situated outside the 100-foot coastal setback zone and the 100-year non-infringement setback. This building provides a dedicated recovery resident space, including twelve recovery resident



bedrooms, a Resident Assistant unit, a dedicated ADA unit, an apartment, and relocated program space from Angell Hall. Within the dedicated recovery resident space, is an indoor fitness area, a small lobby/lounge and a separate library study room to allow for intimate spaces for residents to gather and heal. All bedrooms will be relocated from other buildings on campus (nine from Kolbe Cottage, three from St.Mary's Hall, the apartment from St. Mary's Hall and two from the second floor of the main Enders house. When larger group events are necessary, the program area in the adjacent space on the ground floor is available for their use as well. The basement will serve as maintenance storage only, while the maintenance offices will be relocated to the Kolbe Cottage or incorporated into the Enders House administrative offices.

The proposed programmatic modifications reduce the non-conformities of certain structures on the campus, while improving the ADA universal accessibility for the recovery residents on campus as well as improved building code compliance. The goal of this project is to improve the well-being of residents on campus.

# PROPOSED IMPROVEMENTS AT ST. EDMUND'S RETREAT

# SITE PLAN REVIEW APPLICATION TO THE TOWN OF STONINGTON

1 ENDERS ISLAND MYSTIC, CONNECTICUT

FEBRUARY 20, 2024

PARCEL NOTES:

MAP/BLOCK/LOT: 178-1-1-1

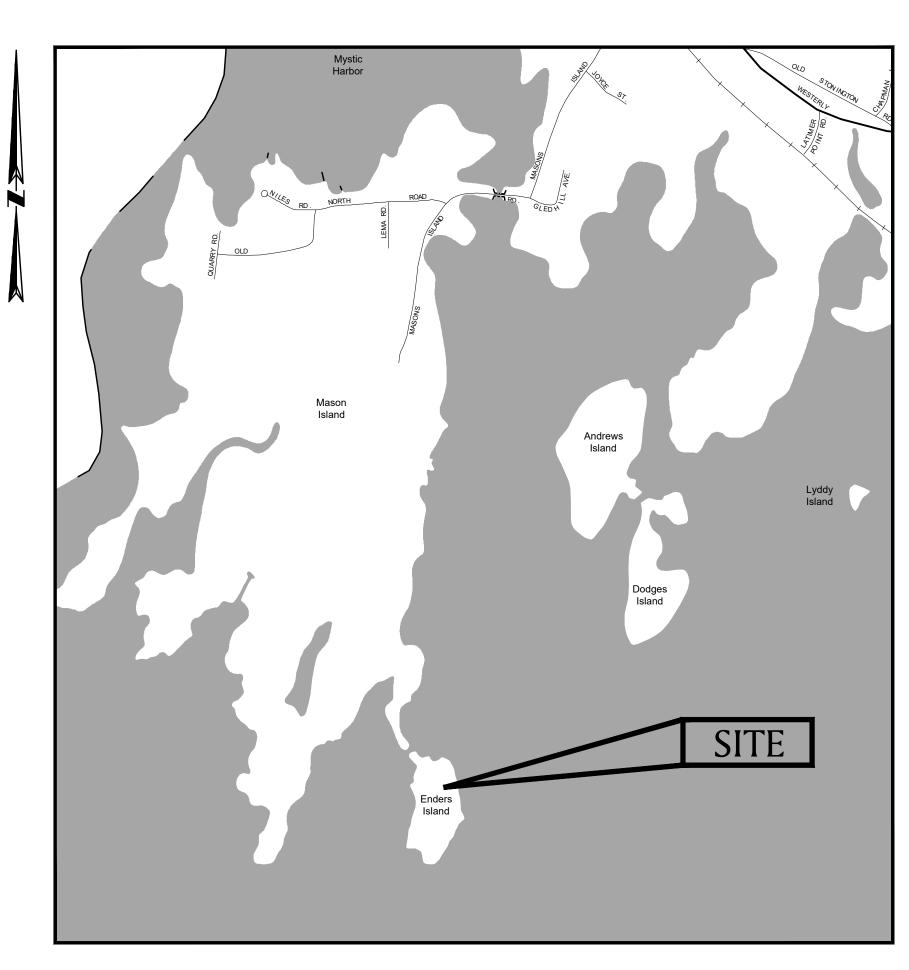
PREPARED BY:

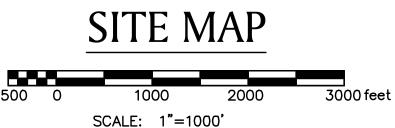


PREPARED FOR:

ST. EDMUND'S RETREAT, INC. 1 ENDERS ISLAND MYSTIC, CT 06355

Approved by the Town Planning and Zoning Commission under (Chairman's Signature) Pursuant to Section 8-3(i) of the Connecticut General Statutes, all work in connection with this approved Site Plan shall be

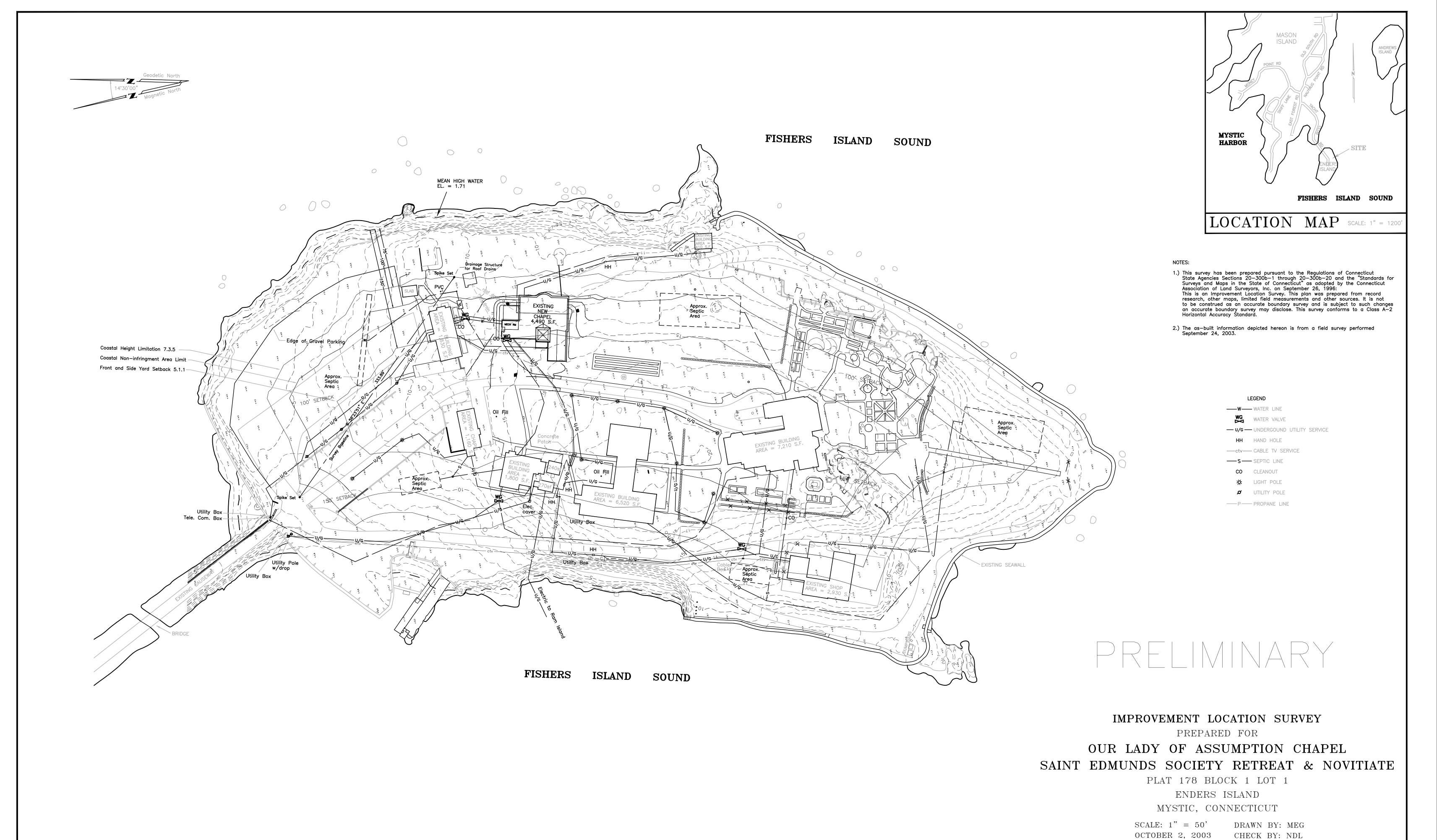




ISSUED FOR SITE PLAN REVIEW

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Nathan D. Lauder, P.L.S. #15762 Date

CHERENZIA & ASSOCIATES, LTD.
WESTERLY, RHODE ISLAND

SHEET: 1 OF 1

JOB NO.: 203146

FILE NO.:

### **EROSION & SEDIMENTATION CONTROL NOTES:**

- 1. DO NOT PROCEED WITH THE WORK UNTIL ALL E&S CONTROL MEASURES ARE IN-PLACE AND HAVE BEEN INSPECTED AND APPROVED BY THE ENGINEER.
- 2. THE MEASURES SPECIFIED HEREON ARE THE MINIMUM REQUIREMENTS FOR E&S CONTROL AND ARE SHOWN IN GENERAL SIZE AND LOCATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL E&S CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO ANY RESOURCE AREAS. PROVIDE ADDITIONAL E&S MEASURES AS REQUIRED TO CONTROL EROSION AND SILTATION THROUGHOUT THE DURATION OF THE CONSTRUCTION AS CONDITIONS DICTATE AND/OR AS DIRECTED BY THE OWNER OR
- 3. MONITOR AND INSPECT ALL E&S MEASURES IN AN ONGOING MANNER THROUGHOUT THE WORK AND TAKE CORRECTIVE MEASURES, AS REQUIRED, TO MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO ANY RESOURCE AREAS.
- 4. ANY EROSION AND SEDIMENTATION MEASURE IMPLEMENTED BEYOND THAT SHOWN HEREON SHALL CONFORM TO APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT'S "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL."
- 5. ANY STOCKPILED MATERIAL SHALL BE SUBJECT TO EROSION CONTROL MEASURES THAT INCLUDE A MINIMUM OF SILT FENCE OR HAY BALE BARRIER COVER STOCKPILES IF SIGNIFICANT RAINFALL IS PREDICTED.
- PROVIDE TEMPORARY SEEDING WITH MULCH ON ALL EXPOSED SOIL AREAS WHERE WORK WILL BE SUSPENDED FOR LONGER THAN 30 DAYS. APPLY SEED AND MULCH WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK. WHEN SEEDING IS NOT POSSIBLE DUE TO SEASONAL WEATHER CONDITIONS OR OTHER FACTORS, PROVIDE TEMPORARY STRUCTURAL SOIL PROTECTION SUCH AS MULCH, WOODCHIPS, EROSION CONTROL MATTING, OR COMPOST.
- 7. ALL TEMPORARY SLOPES IN EXCESS OF 3 (HORIZONTAL) TO 1 (VERTICAL) SHALL BE STABILIZED WITH EROSION CONTROL MATTING OR APPROVED EQUIVALENT.
- 8. NO RUNOFF SHALL BE ALLOWED TO ENTER ANY STORMWATER SYSTEM OR EXIT THE SITE PRIOR TO TREATMENT FOR SEDIMENT REMOVAL.
- 9. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS. ALL TRASH SHALL BE CLEANED ON A DAILY BASIS AND THE SITE SHALL BE LEFT IN A NEAT CONDITION AT THE END OF EACH WORK DAY.
- 10. TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS AND ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION, CONTROL, AND RESPONSE.
- 11. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER AND MAINTAIN ADEQUATE MOISTURE LEVELS.
- 12. SWEEP ADJACENT ROADWAYS IF MUD OR SOIL IS TRACKED ON TO THEM, OR AS DIRECTED BY THE ENGINEER. SHOULD THE CONSTRUCTION ENTRANCE FAIL TO PREVENT THE TRACKING OF SOILS OR SEDIMENT OFF OF THE PROJECT SITE, A WASHING RACK SHALL BE INSTALLED ALONG WITH APPROPRIATE MEASURES TO COLLECT RESULTING WASTEWATER.
- 13. DRAINAGE STRUCTURE FILTER INSERTS SHALL BE INSTALLED AND CLEANED/CHANGED PER THE MANUFACTURER'S RECOMMENDATIONS. UNITS SHALL BE INSTALLED COMPLETELY AROUND INLETS OF EXISTING AND PROPOSED DRAINAGE STRUCTURES SUCH THAT NO RUNOFF IS ALLOWED TO ENTER DRAINAGE SYSTEMS WITHOUT FILTERING THROUGH THE DEVICE.

### SUGGESTED CONSTRUCTION SEQUENCE:

- 1. CONDUCT A PRE-CONSTRUCTION MEETING WITH THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY.
- 2. INSTALL CONSTRUCTION ENTRANCE(S) AND PLACE FILTER INSERTS IN EXISTING CATCH BASINS.
- 3. INSTALL PERIMETER E&S CONTROLS AND REQUEST PRE-CONSTRUCTION INSPECTION FROM THE
- 4. FOLLOWING THE ENGINEER'S APPROVAL OF INSTALLED E&S CONTROLS, COMMENCE CONSTRUCTION
- 5. AT THE CONCLUSION OF CONSTRUCTION, COMPLETE THE INSTALLATION OF POST-CONSTRUCTION SITE
- STABILIZATION MEASURES AS SHOWN ON THE DRAWINGS.

  NOTE: THE CONTRACTOR MAY MODIFY THE SUGGESTED CONSTRUCTION SEQUENCE INDICATED ABOVE,
- PROVIDED A REVISED SEQUENCE IS SUBMITTED FOR REVIEW AND APPROVED BY THE OWNER AND ENGINEER.

	TEMPORARY E&S MEASURES MAINTENANCE SCHEDULE	
E&S MEASURE	MAINTENANCE MEASURES	SCHEDULE
FILTER INSERTS IN DRAINAGE SYSTEM	CLEAN CATCH BASIN GRATE, REMOVE SEDIMENT/DEBRIS FROM FILTER INSERTS	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
HAY BALES/ SILT FENCE BARRIER	REPAIR/REPLACE WHEN FAILURE OBSERVED, REMOVE SILT WHEN ACCUMULATION REACHES APPROX. HALF HEIGHT OF BARRIER	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
TARP TEMPORARY STOCKPILES	ENSURE TARP IS SECURED OVER STOCKPILE AT THE END OF EACH DAY	DAILY
CONSTRUCTION ENTRANCE	SWEEP PAVED ROADWAY ADJACENT TO SITE ENTRANCE AS NECESSARY, REFRESH STONE AS NECESSARY, REMOVE SILTED GRAVEL	WEEKLY
MOISTEN EXPOSED SOILS	PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS AND KEEP TRAVELWAYS DAMP	DAILY

### SITE PREPARATION NOTES:

- CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
- 2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
- 3. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
- 4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 5. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPLANATION.
- 6. PROTECT ALL IMPROVEMENTS NOT INCLUDED IN THE SCOPE OF SITE DEMOLITION. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
- 7. DURING SITE DEMOLITION, PAVEMENT REMOVAL, OR PAVEMENT RECLAIM OPERATIONS, PROTECT ALL ADJACENT CURBING, SIDEWALKS, RAMPS, ABOVE-GRADE AND BELOW-GRADE UTILITIES, DRAINAGE STRUCTURES, LIGHT BASES, AND OTHER IMPROVEMENTS POTENTIALLY AFFECTED BY THE WORK. CLEARLY DELINEATE THE LIMITS OF WORK AND MARK, BARRICADE, OR OTHERWISE IDENTIFY THOSE IMPROVEMENTS THAT ARE TO BE PROTECTED AND/OR AVOIDED. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
- 8. PRIOR TO THE TERMINATION, ABANDONMENT, OR REMOVAL OF ANY UTILITY, VERIFY THAT APPLICABLE NOTIFICATIONS HAVE BEEN MADE TO THE UTILITY OWNER/OPERATOR AND THAT THE UTILITY HAS BEEN PROPERLY TERMINATED, CAPPED, OR PLUGGED AS REQUIRED.
- 9. WHERE UTILITY POLE REMOVAL IS CALLED-FOR, COORDINATE WITH ALL UTILITY OWNERS/OPERATORS AFFECTED. UTILITY POLE REMOVAL SHALL INCLUDE THE POLE AND ALL ASSOCIATED GUYS.
- 10. ALL SURPLUS TOPSOIL BEYOND THAT QUANTITY REQUIRED FOR SITE RESTORATION SHALL BE REMOVED AND DELIVERED TO AN OFF-SITE LOCATION AS DIRECTED BY THE OWNER. SEE APPLICABLE SPECIFICATIONS.
- 11. PROVIDE PAVEMENT SAW—CUT AT THE EDGE OF EACH PAVEMENT REMOVAL AREA TO ESTABLISH A CLEAN EDGE WHERE NEW WORK WILL MEET EXISTING PAVEMENT. SAW CUT SHALL BE A MINIMUM OF 12 INCHES FROM EDGE OF PAVEMENT REMOVAL AREA.
- 12. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED.

### LAYOUT & MATERIALS NOTES:

- 1. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 2. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 3. THE DRAWINGS ARE INTENDED TO DEPICT THE LOCATION, LAYOUT, AND MATERIALS OF CONSTRUCTION AND ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DETAILS AND APPLICABLE SPECIFICATION SECTIONS.
- 4. ENGAGE A CONNECTICUT-LICENSED LAND SURVEYOR TO PERFORM LAND-SURVEYING SERVICES REQUIRED, INCLUDING, BUT NOT LIMITED TO VERIFICATION AND LAYOUT OF PROPOSED IMPROVEMENTS, DIMENSIONS, AND ELEVATIONS. REPORT DISCREPANCIES TO THE ENGINEER.
- 5. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED. BLEND RESTORED AREAS INTO ADJACENT UNDISTURBED AREAS.
- 6. CONSTRUCTION JOINTS: REINFORCEMENT SHALL NOT CONTINUE THROUGH CONSTRUCTION JOINTS.
- 7. PRIOR TO INITIATION OF CONCRETE FLATWORK, SUBMIT PROPOSED CONSTRUCTION JOINT PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL. COORDINATE SUCH PLAN WITH THE JOINT PATTERNS DEPICTED ON THE DRAWINGS.
- 8. UNLESS OTHERWISE SPECIFIED, MISCELLANEOUS CONCRETE PADS SHALL BE CONSTRUCTED PER SIDEWALK DETAIL.
- 9. ALL NON-ACCESSIBLE PARKING SPACES ARE 9' X 18'. VERIFY OVERALL LAYOUT DIMENSIONS BASED ON THESE DIMENSIONS AND THE NUMBER OF SPACES INDICATED. FIELD-ADJUST OVERALL LAYOUT DIMENSION IN CONCERT
- 10. DIMENSIONS INDICATED ARE TO FACE OF CURB, PAVEMENT EDGE, EDGE OR CENTERLINE OF IMPROVEMENT, OR AS
- 11. PROVIDE FOR THE LAYOUT AND STAKING/MARKING OF THE PROPOSED LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING FURNISHINGS. OBTAIN ENGINEER'S APPROVAL OF THE LAYOUT PRIOR TO PROCEEDING
- 12. UNLESS OTHERWISE INDICATED, LINES ARE PARALLEL OR PERPENDICULAR TO LINE FROM WHICH THEY ARE

### **GRADING & DRAINAGE NOTES:**

- 1. PROPOSED GRADES INDICATE DESIGN INTENT. VERIFY ELEVATIONS AND MAKE ADJUSTMENTS TO MEET FIELD CONDITIONS. DO NOT PROCEED WITH ANY ADJUSTMENT OR FIELD MODIFICATION UNTIL APPROVED BY THE FNGINFFR.
- 2. VERIFY ALL GRADES AND SLOPES PRIOR TO CONCRETE PLACEMENT. REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 3. COMPLY WITH CONNECTICUT BUILDING CODE FOR ALL SITE CONSTRUCTION, INCLUDING HANDICAPPED ACCESSIBILITY.
- 4. THE CROSS-SLOPE OF ANY SIDEWALK, WALKWAY, OR OTHER PEDESTRIAN SURFACE SHALL NOT BE STEEPER THAN
- 5. ACCESSIBLE ROUTES SHALL COMPLY WITH CONNECTICUT BUILDING CODE. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%). GRADING CONTOURS AND SPOT GRADES INDICATE DESIGN INTENT. CONFIRM THE GRADE AND SLOPE OF NEW WORK BASED ON ACTUAL FIELD CONDITIONS BEFORE PROCEEDING WITH INSTALLATION. BRING

ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.

- 6. RAMPS SHALL COMPLY WITH 2022 CT BUILDING CODE, REF. IBC SECTION 1010 AND ICC/ANSI A117.1 2017 CHAPTER 4, SECTION 405 AND 406. GRADING CONTOURS AND SPOT GRADES INDICATE DESIGN INTENT. CONFIRM THE GRADE AND SLOPE OF NEW WORK BASED ON ACTUAL FIELD CONDITIONS BEFORE PROCEEDING WITH INSTALLATION. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
- 7. DETECTABLE WARNINGS SHALL BE A MINIMUM OF 24-INCHES IN DEPTH. AT CURB RAMPS, DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH OF THE RAMP AND BE INSTALLED 6-INCHES FROM THE CURB LINE AT THE RAMP
- 8. GRADE TRANSITION BETWEEN TOPOGRAPHIC LINES AND SPOT GRADES SHALL BE UNIFORM UNLESS OTHERWISE INDICATED.
- 9. UNLESS OTHERWISE INDICATED, BLEND TRANSITIONS IN ELEVATION BETWEEN NEW WORK AND AREAS TO REMAIN AT A MAXIMUM SLOPE OF 1V: 2H AND RESTORE WITH SIX (6) INCHES OF LOAM AND SEED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED. COORDINATE WITH ENGINEER IF DIMENSIONAL CONSTRAINTS REQUIRE STEEPER SLOPES.
- 10. UPON REACHING PROPOSED SUBGRADE ELEVATIONS WITHIN THE FIELD, ENGINEER WILL REVIEW SUBGRADE PRIOR TO INSTALLATION OF DRAINAGE SYSTEM. SEE SPECIFICATION SECTION 31 2310 EARTHWORK.
- 11. ALL CATCH BASINS AND SHALLOW DROP INLETS SET AGAINST CURBS SHALL BE CONNDOT TYPE "C". ALL OTHERS SHALL BE CONNDOT TYPE "C-L".
- 12. THE TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) OF ALL UTILITY STRUCTURES THAT ARE TO REMAIN SHALL BE ADJUSTED TO MATCH FINAL GRADE IN A FLUSH CONDITION. ALL NEW UTILITY STRUCTURES SHALL BE INSTALLED WITH TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) TO FINAL GRADE IN A FLUSH CONDITION.
- 13. AT THE CONCLUSION OF THE WORK, CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT MATERIAL FROM ALL PORTIONS OF THE STORM DRAINAGE SYSTEM, INCLUDING NEW WORK AND EXISTING WORK THAT REMAINS OR IS INCORPORATED INTO THE NEW SYSTEM.

### UTILITY NOTES:

- 1. PERFORM EXPLORATORY EXCAVATIONS AS REQUIRED TO VERIFY THE AS—BUILT LOCATION OF EXISTING SUBSURFACE UTILITIES WHERE CROSSINGS OR OTHER POTENTIAL CONFLICTS ARE PRESENT.
- 2. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 3. THE TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) OF ALL UTILITY STRUCTURES THAT ARE TO REMAIN SHALL BE ADJUSTED TO MATCH FINAL GRADE IN A FLUSH CONDITION. ALL NEW UTILITY STRUCTURES SHALL BE INSTALLED WITH TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) TO FINAL GRADE IN A FLUSH CONDITION.
- 4. ALL LIGHTING ELECTRICAL SUPPLIES SHALL BE INSTALLED IN MINIMUM 1—INCH PVC CONDUIT PER APPLICABLE SPECIFICATIONS. PLASTIC MARKING TAPE SHALL BE USED ON ALL CONDUIT RUNS.
- 5. THE ROUTING OF LIGHTING ELECTRICAL SUPPLIES SHOWN IS CONCEPTUAL. CONTRACTOR SHALL DETERMINE THE SPECIFIC ROUTING OF ALL LIGHTING SYSTEMS BASED ON THE ACTUAL LOCATION OF TIE—IN(S) TO EXISTING LIGHTING FEEDS AND AS REQUIRED TO AVOID CONFLICTS WITH OTHER CONSTRUCTION OR SUBSURFACE FACILITIES. PRIOR TO INSTALLATION, PROVIDE SHOP DRAWING SHOWING THE ROUTING OF ALL CONDUIT, LOCATIONS OF HANDHOLES, AND DETAILS OF TIE—INS TO EXISTING SYSTEM.
- 6. CONDUIT: RIGID PVC ELECTRICAL CONDUIT, NEMA TC 2 AND UL -651; FITTINGS AND CONDUIT BODIES: PVC TO MATCH CONDUIT, NEMA TC-3. PRIMER/SOLVENT CEMENT: ASTM F656/ASTM D2564; PULL ROPE: 3/8-INCH DOUBLE BRAIDED, LOW STRETCH POLYESTER COMPOSITE ROPE.
- 7. TRACER WIRE REQUIRED FOR TELECOMMUNICATIONS AND ELECTRIC ONLY. PROVIDE APPROPRIATE WIRE ACCESS
- 8. ALL UNDERGROUND TELECOMMUNICATIONS AND ELECTRIC CONDUITS SHALL BE ENCASED IN CONCRETE EXCEPT BRANCH DISTRIBUTION FOR LIGHTING. WORK CONCRETE TO REMOVE ALL TRAPPED AIR AND INSURE EACH CONDUIT IS COMPLETELY SURROUNDED BY A MINIMUM 2" OF CONCRETE. ALLOW CONCRETE TO CURE FOR AT LEAST ONE HOUR BEFORE BACKFILLING.
- 9. FOR TELECOMMUNICATIONS AND ELECTRIC, WARNING TAPE SHALL BE INSTALLED 12-INCHES BELOW GRADE.
- 10. SEAL ALL CONDUIT ENDS WITH BLANK DUCT PLUGS. SECURE PULL ROPE TO DUCT PLUG.
- 11. ALL WORK ASSOCIATED WITH FIRE PROTECTION AND DOMESTIC WATER SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE LOCAL WATER UTILITY.
- 12. ALL WORK ASSOCIATED WITH ELECTRICAL SERVICE SHALL CONFORM TO THE STANDARDS OF EVERSOURCE. IF THERE ARE ANY CONFLICTS BETWEEN THE REQUIREMENTS INDICATED HEREON AND EVERSOURCE STANDARDS, EVERSOURCE STANDARDS SHALL PREVAIL.
- 13. ALL WORK ASSOCIATED WITH TELECOMMUNICATIONS SHALL CONFORM TO THE STANDARDS OF THE LOCAL PROVIDER.
- 14. INSTALL CONDUIT, PULL ROPE, CAPS, WARNING TAPE, AND TRACER WIRE PER APPLICABLE SPECIFICATIONS, STANDARDS, AND CODES.
- 15. ALTHOUGH NOT SHOWN ON THE DRAWINGS, PROVIDE FOR THE INSTALLATION OF ALL JOINTS, COUPLINGS, RESTRAINTS, BENDS, ANGLES, AND OTHER APPURTENANCES TO ACHIEVE A COMPLETE, FUNCTIONAL WATER SUPPLY

### SITE CIVIL CODES AND STANDARDS:

- THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL, AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITIONS UNLESS OTHERWISE INDICATED.
- 1. 2022 CONNECTICUT STATE BUILDING CODE, WHICH INCLUDES ICC/ANSI A117.1.
- 2. STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION FORM 818.
- 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.

### LANTING NOTES:

- THE CONTRACTOR SHALL CLEARLY MARK LIMITS OF CLEARING AND LIMITS OF TREE REMOVAL, SELECTIVE PRUNING AND THINNING FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO ANY CLEARING OPERATIONS. ALL TREE WORK SHALL BE EXECUTED BY A LICENSED ARBORIST.
- 2. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT EXISTING VEGETATION THAT IS DESIGNATED, "TO REMAIN".
- 3. ALL TREES TO BE SAVED SHALL BE PROTECTED. SEE SPECIFICATION FOR TREE PROTECTION REQUIREMENTS.
- 4. EXISTING ON SITE TOPSOIL MAY BE REUSED UPON APPROVAL BY THE LANDSCAPE ARCHITECT. EXISTING TOPSOIL SHALL BE TESTED AND AMENDED FOR NUTRIENTS, ORGANIC MATTER, pH, AND SOIL TEXTURE. SEE SPECIFICATIONS.
- 5. REMOVE ALL ROCKS AND DEBRIS FROM SOIL SURFACE AND GRADE TO AN EVEN SURFACE. SEE
- 6. COMPLETE QUANTITIES OF PLANTS FOR EACH AREA TO BE AVAILABLE ON SITE AT THE TIME OF PLANTING FOR FIELD LAYOUT BY OWNER'S REPRESENTATIVE. NO PARTIAL LAYOUT AND PLANTING OF AREAS WILL BE
- 7. ALL PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. SEE SPECIFICATION FOR DETAILS OF THE PROPERTY OF THE PROPERTY
- 8. ANY PROPOSED SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITH MATERIAL EQUIVALENT TO THE DESIRED MATERIAL IN OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE. NO SUBSTITUTION OF PLANT SPECIES OR VARIETIES WILL BE ACCEPTABLE WITHOUT LANDSCAPE ARCHITECT'S WRITTEN APPROVAL
- 9. OWNER'S REPRESENTATIVE TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE AND AGAIN AT THE PROJECT SITE PRIOR TO PLANTING.
- 10. VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT ANY CONFLICTS TO THE OWNER OR HIS REPRESENTATIVE.
- 11. NO PLANTING SHALL OCCUR PRIOR TO ACCEPTANCE OF FINAL GRADING.
- 12. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH GRADE. IMMEDIATELY REPLANT PLANTS WHICH SETTLE OUT OF PLUMB OR BELOW FINISH GRADE.
- 13. SEE SPECIFICATIONS FOR PLANTING MAINTENANCE AND GUARANTEE REQUIREMENTS.
- 14. THE LANDSCAPE ARCHITECT OR ENGINEER RESERVES THE RIGHT TO ADJUST FINAL GRADES IN THE FIELD TO SAVE EXISTING VEGETATION.
- 15. PLANT QUANTITIES NOTED IN THE PLANT SCHEDULE ARE APPROXIMATE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING AND INSTALLATION OF ALL PLANT MATERIALS NOTED ON THE PLANTING PLAN.
- 16. CAUTION SHALL BE USED NOT TO EXTEND MULCH LAYER ABOVE SOIL LEVEL AT TRUNKS/STEMS OF INSTALLED
- 17. PROVIDE FOUR (4) FOOT DIAMETER MULCH CIRCLE AROUND ALL INDIVIDUAL TREE PLANTINGS AND CONTINUOUS MULCH BED AROUND SHRUB, PERENNIAL AND GROUNDCOVER PLANTINGS, UNLESS OTHERWISE NOTED. DO NOT
- 18. ALL PLANTING SHALL BE DONE UNDER FULL SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR LICENSED LANDSCAPE ARCHITECT.
- 19. LOOSE OR CRACKED ROOTBALLS SHALL BE REJECTED.

PLANT MATERIAL



MATTHEW R. STEPHAN, PE NO. 34678

PROPOSED
IMPROVEMENTS AT
ST. EDMUND'S
RETREAT

1 ENDERS ISLAND

IN

MYSTIC CONNECTICUT

CENEDAL SITE NOTES

FEBRUARY 20, 2024

REV	ISIONS:	

PREPARED FOR:

ST. EDMUND'S RETREAT 1 ENDERS ISLAND MYSTIC, CT 06355



Glastonbury, Connecticut 06033

860 652 8227

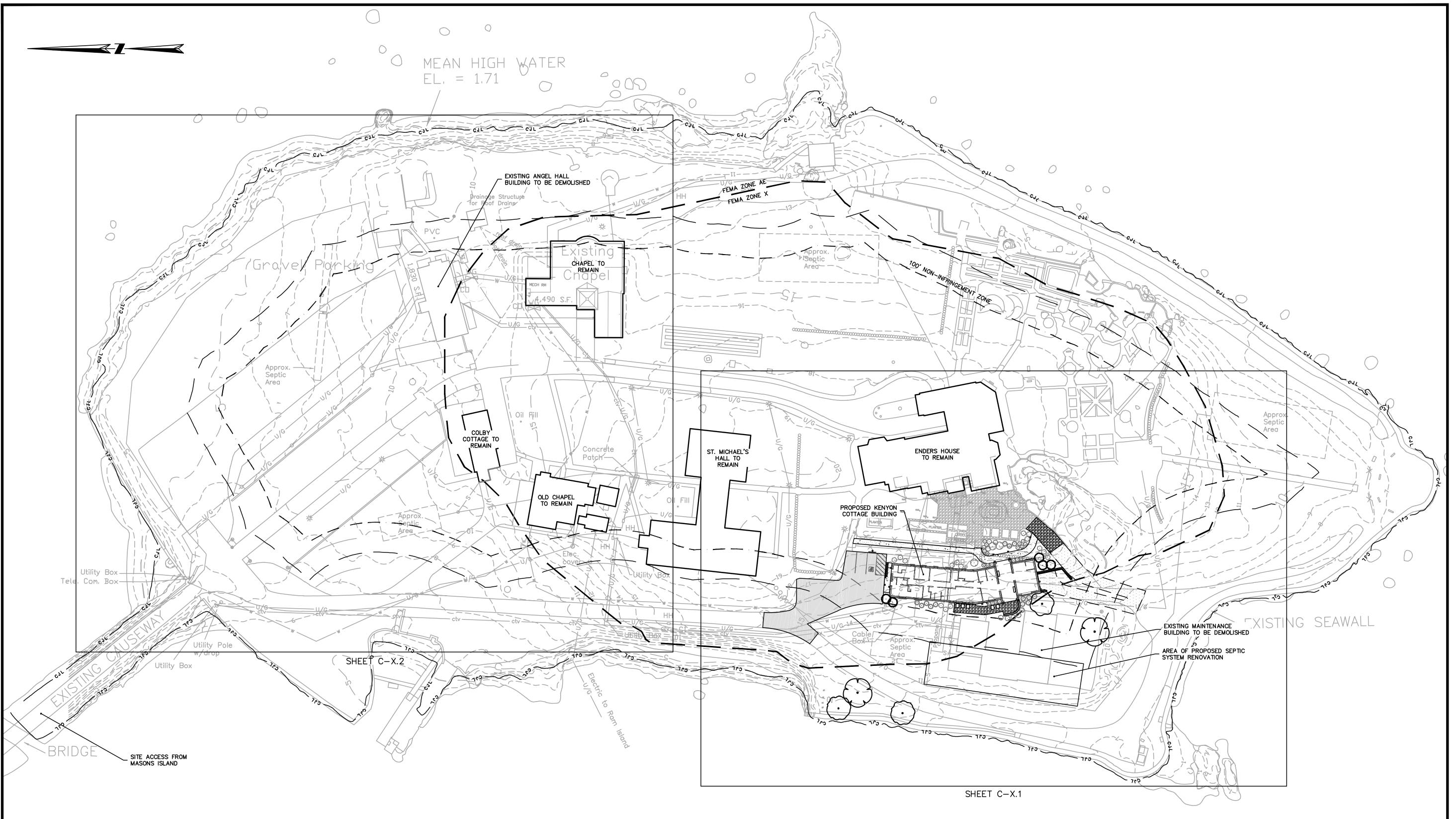
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G-1.0



			RESIDENTIAL ZO	NE RC-120 BULK	REQUIREMENTS			
	MINIMUM LOT AREA (SF)	MINIMUM FRONTAGE (FT)	MINIMUM FRONT YARD (FT)	MINIMUM SIDE YARD (FT)	MINIMUM REAR YARD (FT)	MAXIMUM HEIGHT (FT)	MAXIMUM FLOOR AREA RATIO	LOT COVERAGE (SF)
REQUIRED	120,000	300	75	75	100	25	0.083 <sup>2</sup>	N/A
EXISTING	422,532	N/A <sup>1</sup>	VARIES <sup>2</sup>	VARIES <sup>2</sup>	VARIES <sup>2</sup>	VARIES <sup>2</sup>	0.0958 <sup>3</sup>	107,158 (25.36 <b>%</b> )
PROPOSED	422,532	N/A <sup>1</sup>	105'	105'	105'	22'-10"	0.0951	94,525 (22.37%)
<u> </u>								

THE FOLLOWING ARE DETERMINATIONS FROM REPORT ENTITLED, "ENDERS ISLAND ZONING COMPLIANCE REPORT" DATED JANUARY 11, 2018

THE PROPERTY DOES NOT HAVE FRONTAGE ON AN EXISTING STATE OR TOWN STREET
 YARD AND HEIGHT REQUIREMENTS VARY PER BUILDING. EXISTING BUILDINGS CONSIDERED LEGAL NONCONFORMING.
 VARIANCE WAS PREVIOUSLY GRANTED TO INCREASE THE FAR FROM 0.04 TO 0.083
 FAR SOLELY BASED ON THE ASSESSOR'S OFFICE RECORDS REGARDING GROSS FLOOR AREA.

ISSUED FOR SITE PLAN REVIEW



MATTHEW R. STEPHAN, PE NO. 34678

PROPOSED IMPROVEMENTS AT ST. EDMUND'S RETREAT

1 ENDERS ISLAND

**MYSTIC** CONNECTICUT

OVERALL SITE PLAN

FEBRUARY 20, 2024

REVISIONS:

PREPARED FOR: ST. EDMUND'S RETREAT 1 ENDERS ISLAND MYSTIC, CT 06355

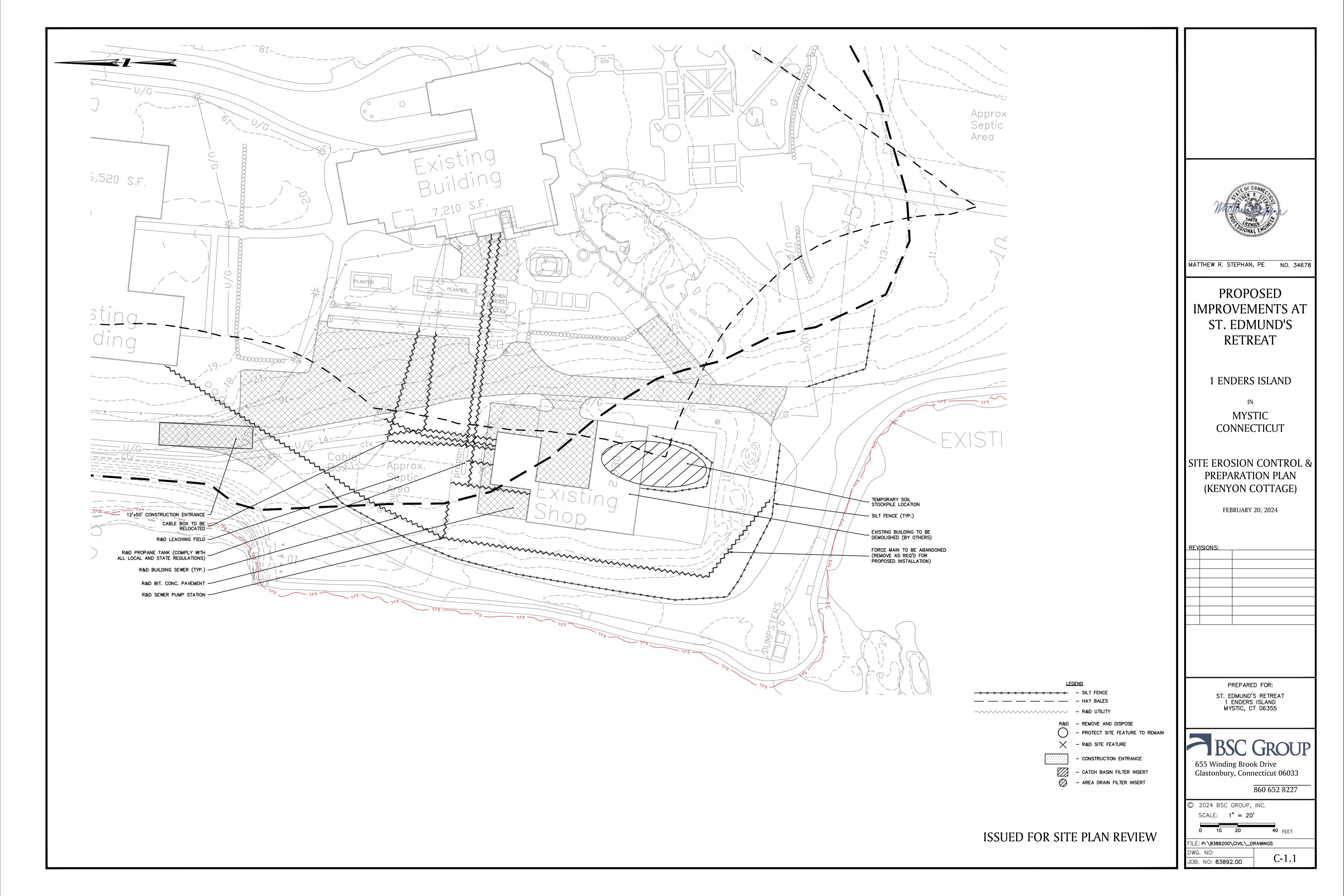
655 Winding Brook Drive Glastonbury, Connecticut 06033

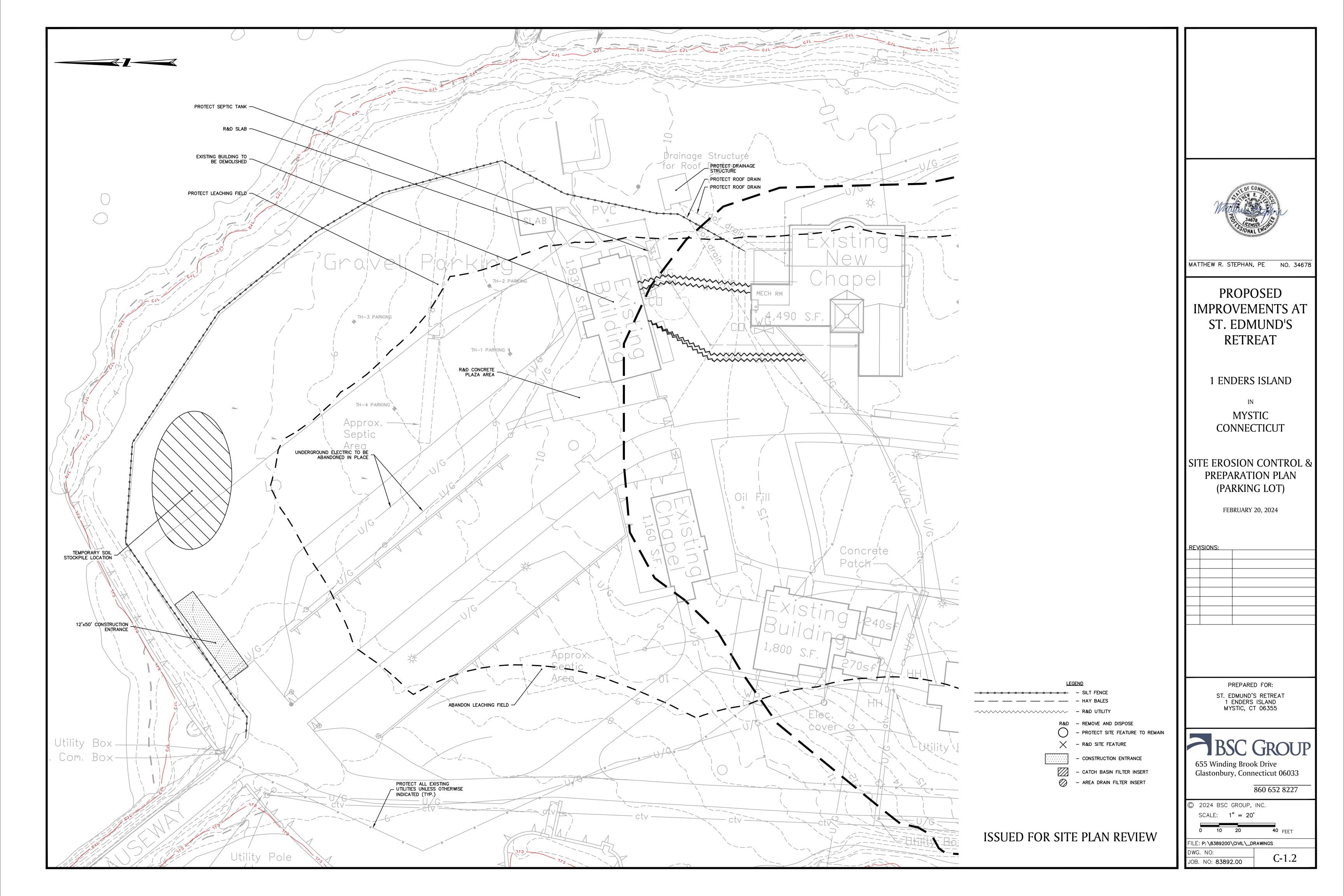
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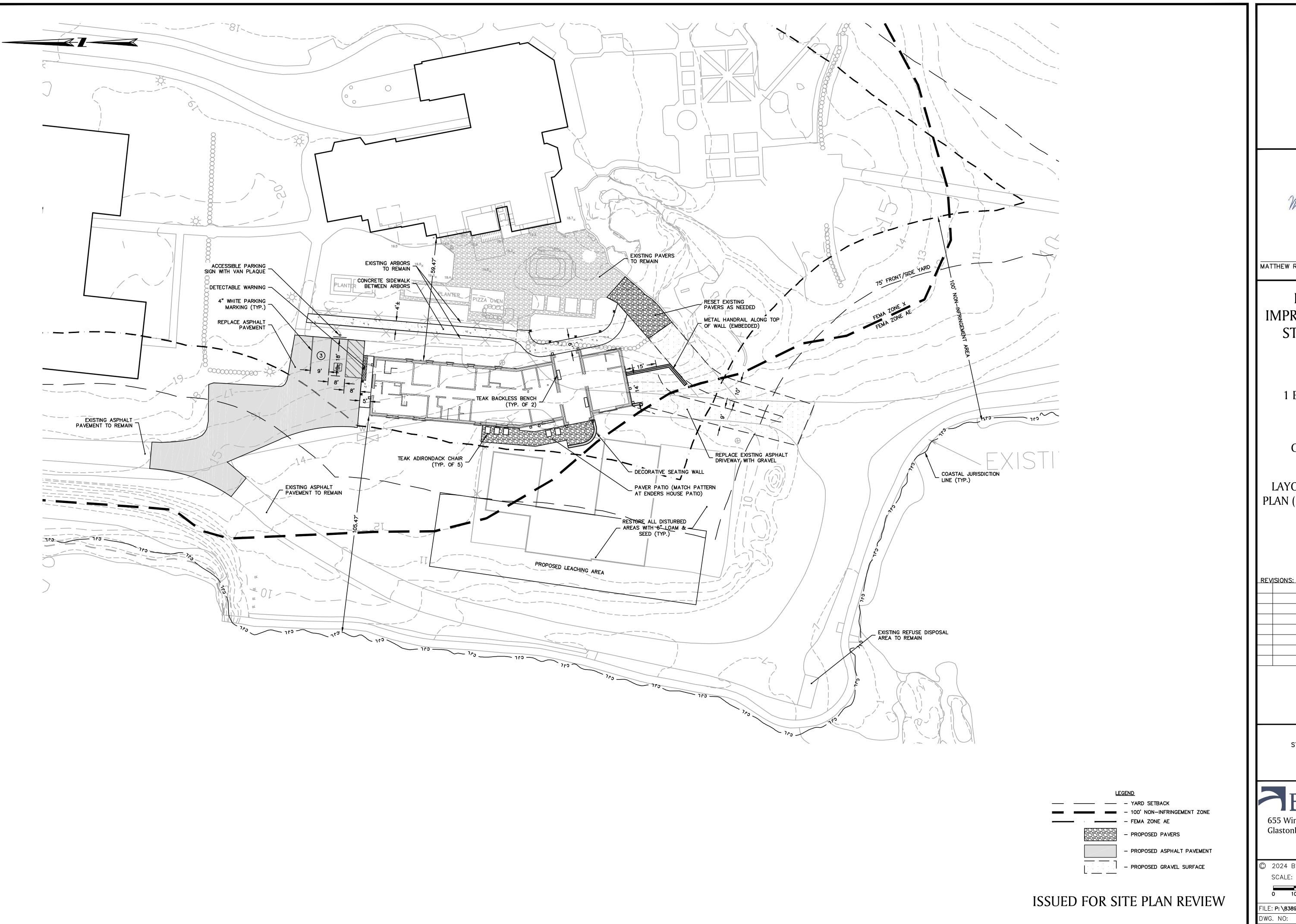
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MATTHEW R. STEPHAN, PE NO. 34678

PROPOSED **IMPROVEMENTS AT** ST. EDMUND'S RETREAT

1 ENDERS ISLAND

**MYSTIC** CONNECTICUT

LAYOUT & MATERIALS PLAN (KENYON COTTAGE)

FEBRUARY 20, 2024

PREPARED FOR: ST. EDMUND'S RETREAT 1 ENDERS ISLAND MYSTIC, CT 06355

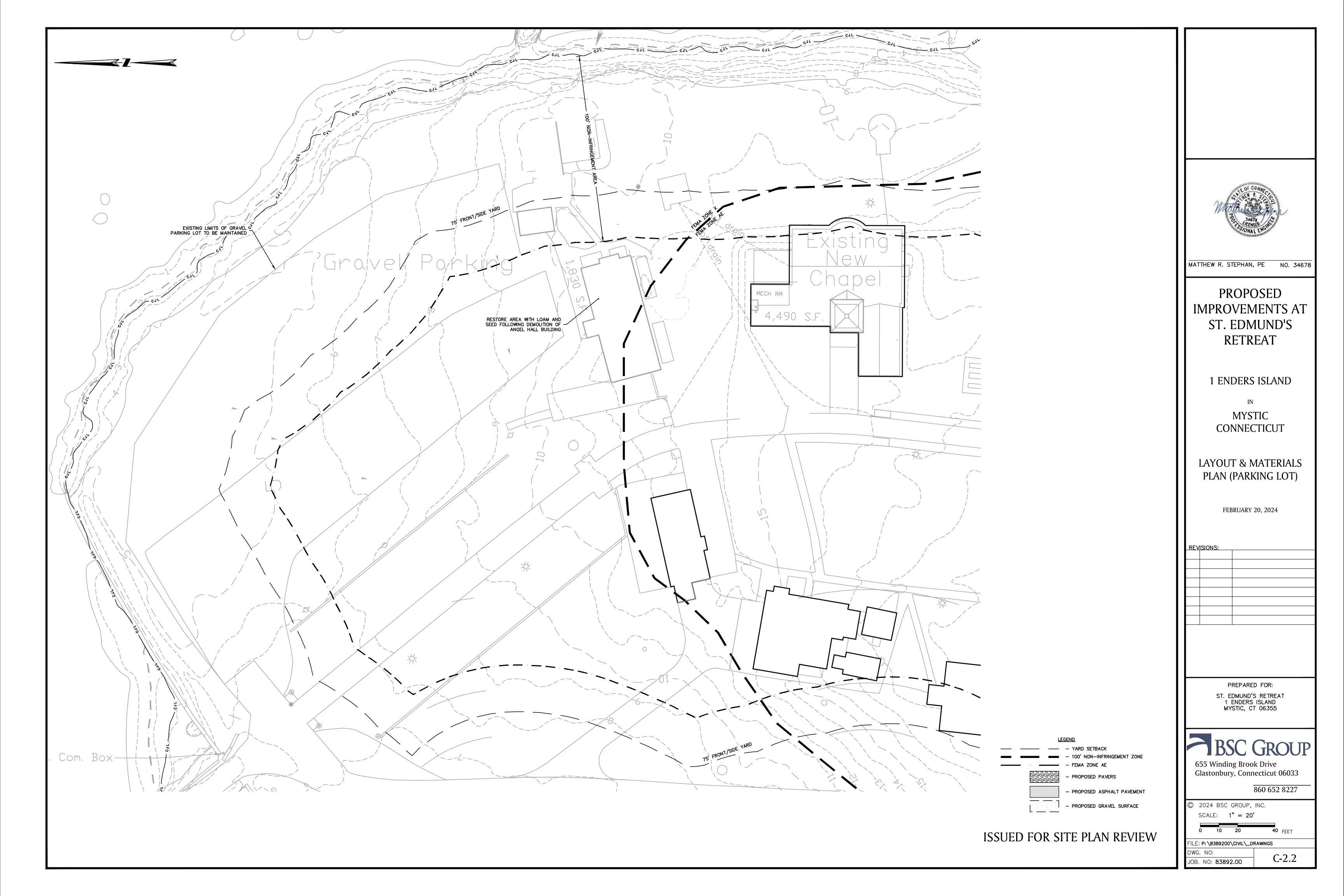


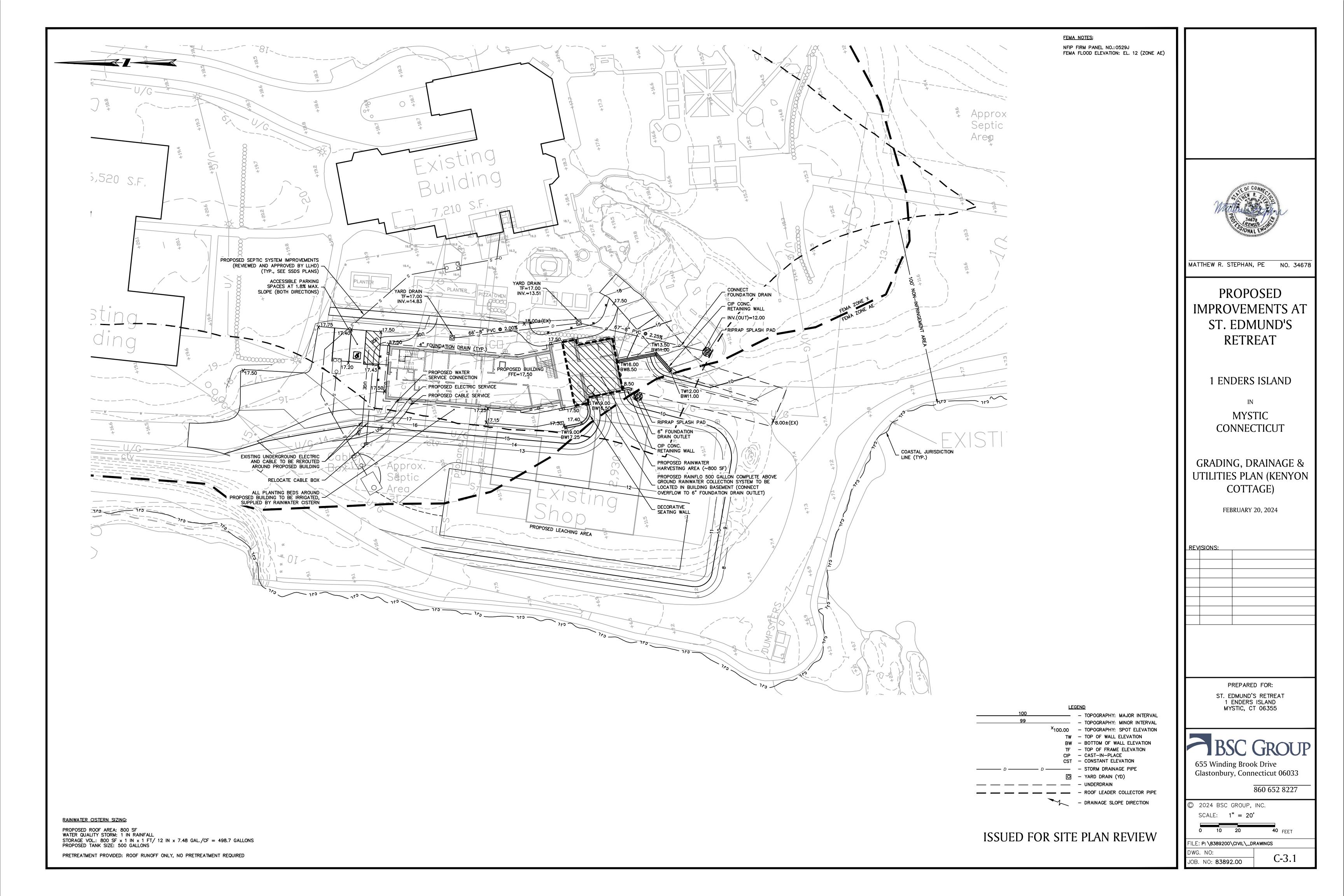
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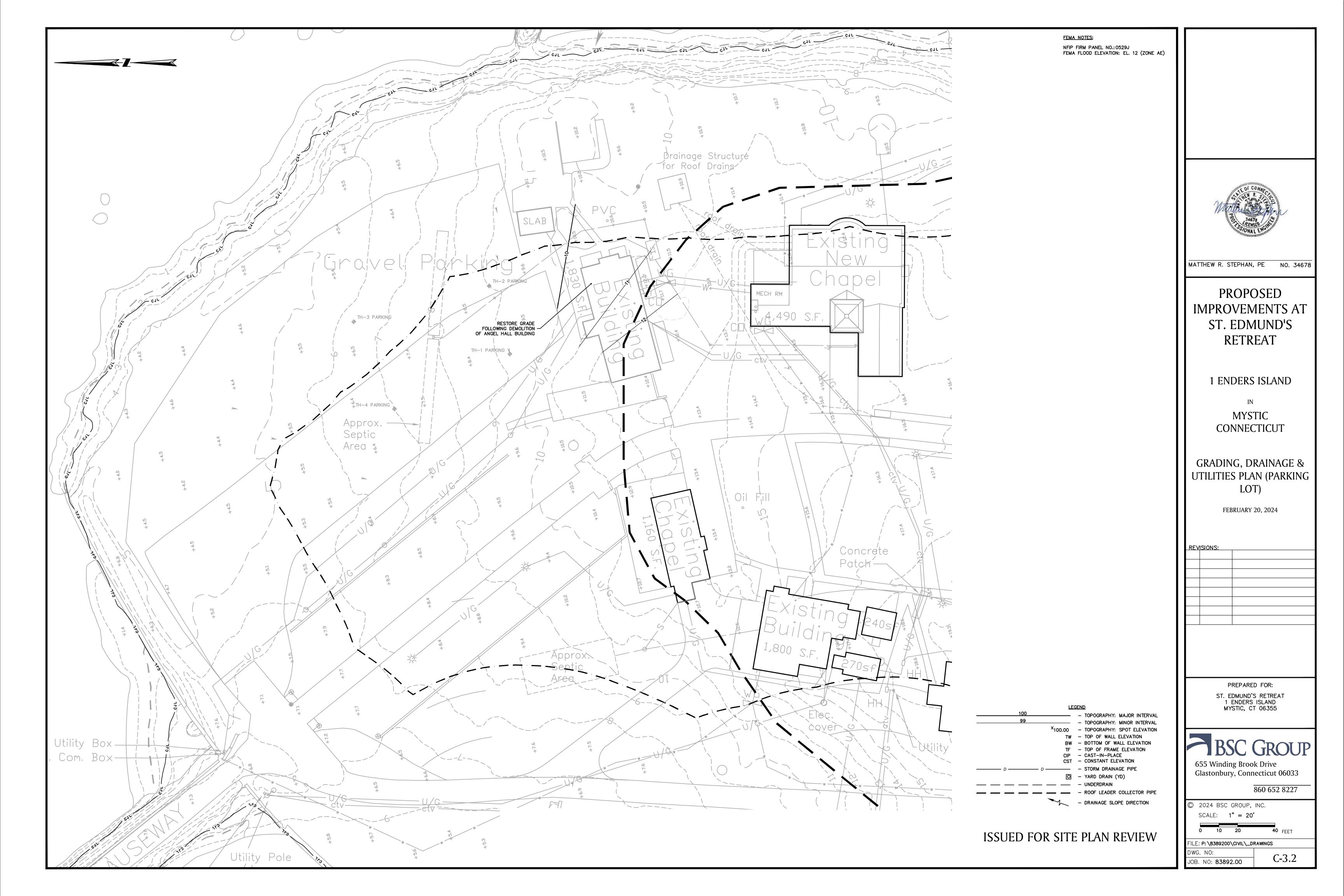
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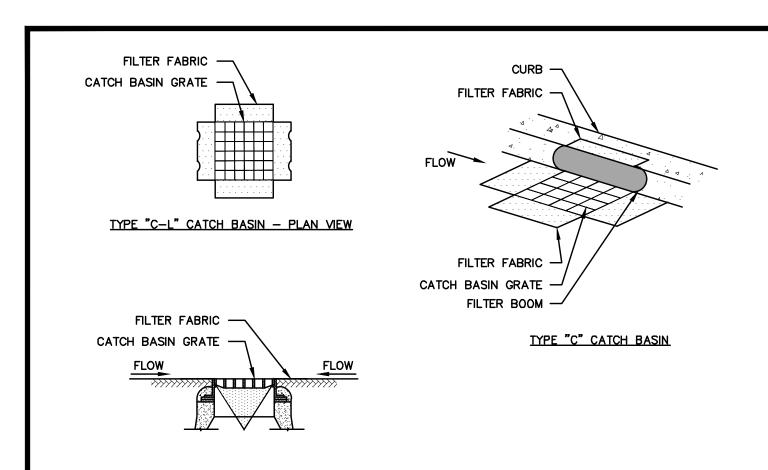
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C-2.1 JOB. NO: **83892.00** 





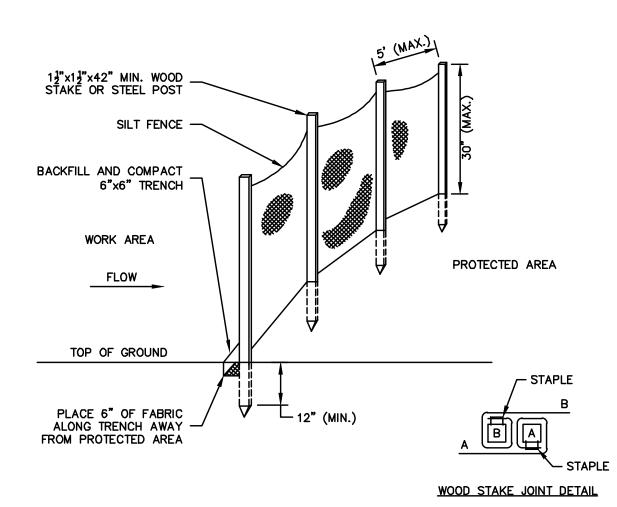




- PROVIDE INLET PROTECTION TO ALL EXISTING CATCH BASINS IN THE VICINITY OF CONSTRUCTION. PROTECT NEW CATCH BASINS AS THEY ARE CONSTRUCTED.
- 2. GRATE TO BE PLACED OVER FILTER FABRIC.

TYPE "C-L" CATCH BASIN - SECTION VIEW

### CATCH BASIN FILTER INSERT SCALE: NONE



### **GENERAL NOTES**

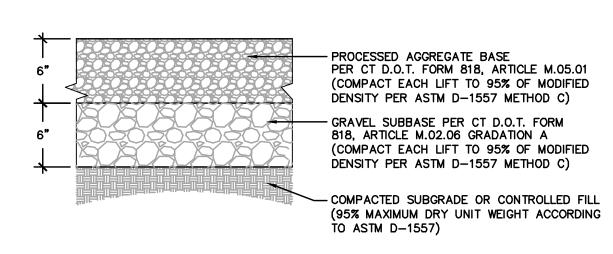
- 1. FOR SLOPE & SWALE INSTALLATIONS, EXTEND FENCE OP SLOPE SUCH THAT BOTTOM ENDS OF FENCE WILL BE HIGHER THAN THE TOP OF THE LOWEST PORTION OF FENCE.
- 2. FOR FENCE INSTALLED ON LEVEL TERRAIN INSTALL WING SECTIONS PERPENDICULAR TO MAIN BARRIER AT 50'-100' INTERVALS.

### SILT FENCE BARRIER

TYPICAL GRAVEL PARKING LOT

SCALE: NONE EC-107

SCALE: NONE

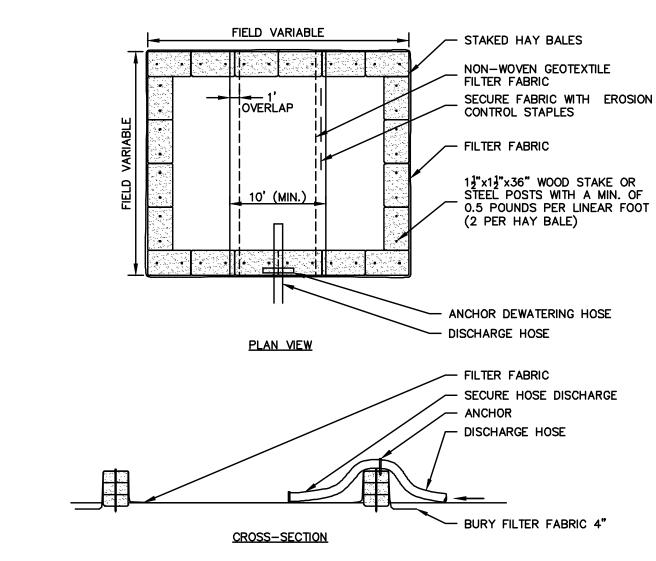


## STAKED HAY BALES NON-WOVEN GEOTEXTILE FILTER SECURE FABRIC WITH EROSION OVERLAP CONTROL STAPLES - FILTER FABRIC 1½"x1½"x36" WOOD STAKE OR STEEL POSTS WITH A MIN. OF 0.5 POUNDS PER LINEAR FOOT (2 PER HAY BALE) PLAN VIEW - FILTER FABRIC CONCRETE WASHOUT AREA SIGN - BURY FILTER FABRIC 4" CROSS-SECTION

- 1. CONSTRUCT WASHOUT AREA LARGE ENOUGH TO ENSURE MATERIALS WILL BE CONTAINED WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE AND EXCESS WATER CAN SAFELY EVAPORATE.
- 2. WASHOUT AREA SHALL BE LARGE ENOUGH TO RETAIN ALL LIQUID AND WASTE CONCRETE MATERIALS
- 3. WEEKLY INSPECTIONS OF WASHOUT AREAS SHALL BE CONDUCTED TO ASSESS THE HOLDING CAPACITY AND FUNCTIONALITY OF THE WASHOUT AREA.

### TEMPORARY CONCRETE WASHOUT AREA

SCALE: NONE

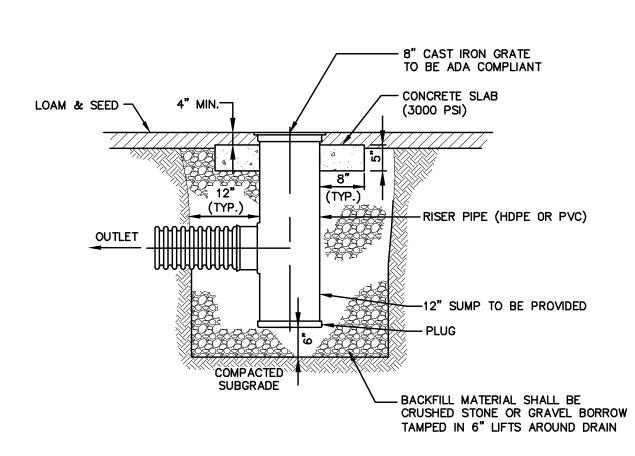


### **GENERAL NOTES**

EC-114-CT

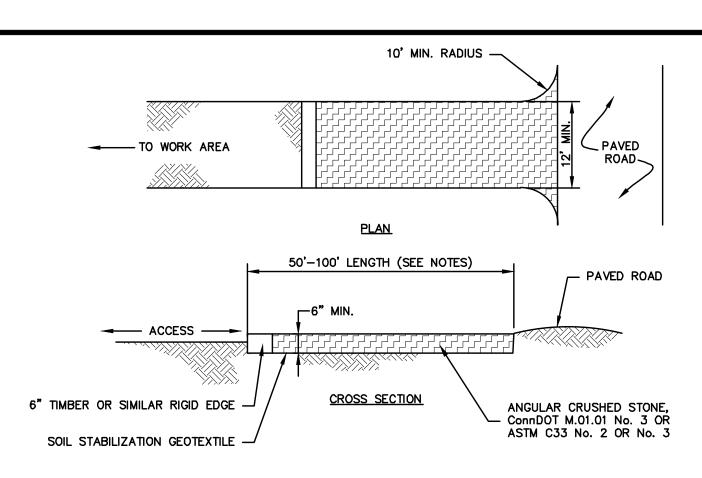
- 1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
- 2. THE BASIN TO BE SIZED ACCORDING TO: CUBIC FEET OF STORAGE = PUMP DISCHARGE RATE(gpm) x 16.
- 3. SIZE SHOWN ON PLANS SHALL BE ADJUSTED AS REQUIRED FOR THE ACTUAL PUMPING RATE.

## DEWATERING HAY BALE BASIN (TYPE 1) SCALE: NONE



## AREA DRAIN (HDPE OR PVC)

DETAILS\LD\STORM DRAINAGE\AREA DRAIN (HDPE-PVC).DWG



- REMOVE TOPSOIL AND ORGANICS PRIOR TO CRUSHED STONE PLACEMENT. 2. INSTALL SUB-BASE OF FREE DRAINING BACKFILL OR ROAD STABILIZATION GEOTEXTILE AS NECESSARY ON
- UNSTABLE SOILS. 3. LENGTH SHALL BE 50 FOOT MINIMUM. WHERE TRACKED SEDIMENTS CONTAIN LESS THAN 80% SAND, LENGTH
- SHALL BE 100 FOOT MINIMUM. 4. IF THE GRADE OF THE CONSTRUCTION ENTRANCE DRAINS TO THE PAVED SURFACE AND IT EXCEEDS 2% SLOPE, CONSTRUCT ENTRANCE AT LEASE 15 FEET FROM ITS ENTRANCE ONTO THE PAVED SURFACE WHILE
- DIVERTING RUN-OFF WATER TO A SETTLING OR FILTERING AREA.
- 5. CONSTRUCT ANY DRAINAGE AND SETTLING FACILITIES REQUIRED TO ACCOMMODATE VEHICLE WASHING OPERATIONS. DIVERT ALL WASH WATER AWAY FROM ENTRANCE TO THE SETTLING AREA.

### 6. MAINTAIN ENTRANCE IS A CONDITION THAT WILL PREVENT WASHING OF SEDIMENT ONTO PAVED SURFACES. CONSTRUCTION ENTRANCE

TYPICAL ASPHALT PAVING

MIN. 24"

COVER

6" MIN.

SCALE: NONE

FINAL BACKFILL: COMMON FILL (SEE

> COMPACTION REQUIREMENTS)

> > SPRING LINE

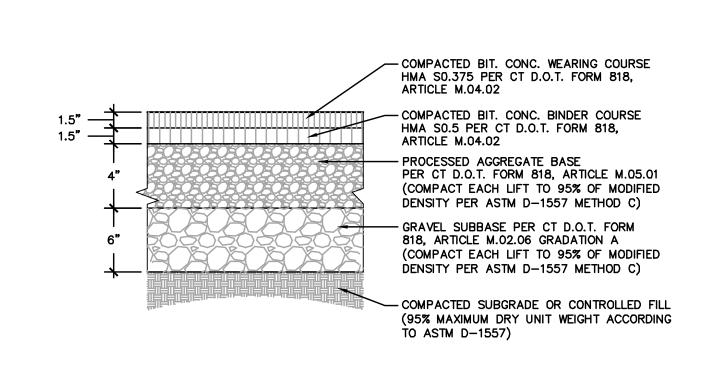
SOME CIRCUMSTANCES.

DRAINAGE PIPE

INDICATED BY THE PIPE MANUFACTURER.

SPECIFICATIONS FOR

SCALE: NONE EC-101-CT



CROSS COUNTRY — PAVEMENT AREAS

PIPE (SEE

PLANŠ &

SPECIFICATIONS)

→ TRENCH WIDTH, SEE NOTE 1 — →

NOTES:

1. WHERE TRENCH WALLS ARE STABLE OR SUPPORTED, PROVIDE A WIDTH SUFFICIENT, BUT NO GREATER THAN NECESSARY, TO ENSURE WORKING ROOM TO PROPERLY PLACE AND COMPACT HAUNCHING AND OTHER EMBEDMENT MATERIALS. UNLESS OTHERWISE SPECIFIED BY THE PIPE MANUFACTURER, THE SPACE BETWEEN THE

PIPE AND TRENCH WALL MUST BE WIDER THAN THE COMPACTION EQUIPMENT USED IN THE PIPE ZONE. MINIMUM WIDTH SHALL BE NOT LESS THAN THE GREATER OF EITHER THE PIPE OUTSIDE DIAMETER PLUS 16 INCHES OR

THE PIPE OUTSIDE DIAMETER TIMES 1.25, PLUS 12 INCHES.

WHERE PERFORATED PIPES ARE CALLED—FOR, BEDDING, HAUNCHING, AND INITIAL BACKFILL SHALL BE CONNDOT NO. 6 CRUSHED STONE SHALL MEET THE REQUIREMENTS OF FORM 816 M.08.

WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL PER THE SPECIFICATIONS. AS AN ALTERNATIVE, AND AT THE

DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL UNDER

4. BEDDING, HAUNCHING, AND INITIAL BACKFILL SHALL BE CONNDOT NO. 6, NO. 67, OR NO. 8 AGGREGATE OR OTHER MATERIALS MEETING THE REQUIREMENTS OF ASTM D2321 FOR CLASS IA, IB, II, OR III UNLESS OTHERWISE

TYPICAL TRENCH SECTION - THERMOPLASTIC

### **GENERAL NOTES**

WORK AREA

FLOW

18" (MIN.)-

1½"x1½"x36" WOOD STAKE OR STEEL POSTS WITH A MIN. OF

0.5 POUNDS PER LINEAR

FOOT (2 PER HAY BALE)

EMBED HAY BALES 4"

INTO GROUND. BACKFILL

AND COMPACT EXCAVATED FILL ALONG HAY BALES

HAY BALES SHALL BE MADE OF HAY OR STRAW WITH 40 POUND MIN. WEIGHT AND 120 POUND MAX. WEIGHT HELD TOGETHER BY TWINE OR WIRE.

PROTECTED

BINDINGS TO BE PARALLEL TO

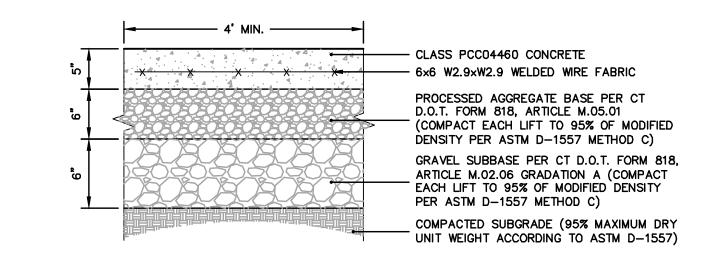
TOP OF GROUND

GROUND SURFACE

- 2. PLACE HAY BALES ON CONTOUR AND WING THE LAST HAY BALES UP SLOPE SO THAT THE TOP OF THE LAST SEVERAL HAY BALES ARE HIGHER THAN THE LINE OF HAY BALES.
- 3. DRIVE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE TO FORCE THEM TOGETHER.
- 4. PUT ONE HAY BALE PERPENDICULAR ALONG HAY BALE BARRIER EACH 100 FEET.

### HAY BALE BARRIER

SCALE: NONE EC-106-CT



- NOTES:

  1. PLASTIC SHALL NOT BE USED WHEN WET CURING CONCRETE.

  2. PRIOR TO CONCRETE PLACEMENT, THE CONTRACTOR SHALL HOLD A PRECONSTRUCTION MEETING WITH THE ENGINEER AND PREPARE MOCKUPS FOR REVIEW.
- 3. THE ENGINEER RESERVES THE RIGHT TO REJECT CONCRETE BASED ON AESTHETICS
- AND/OR INCONSISTENCY OF THE FINISHED PRODUCT. 4. WHERE CONCRETE SIDEWALK ABUTS THE BUILDING, PROVIDE EXPANSION JOINT MATERIAL AS MANUFACTURED BY W.R. MEADOWS FIBRE EXPANSION JOINT, SAKRETE FIBER EXPANSION JOINT, OR EQUAL, AND SHALL INCLUDE A PREFORMED, DISPOSABLE RESERVOIR TO ACCEPT MANUFACTURER RECOMMENDED SEALANT.

PAVEMENT SECTION VARIES (SEE PLANS AND

DETAILS)

SUBBASE OR

COMMON FILL BASED ON

PAVEMENT SECTION

GEOTEXTILE (ONLY TO BE USED WHERE PERFORATED PIPES

ARE CALLED FOR)

- INITIAL BACKFILL

- HAUNCHING

BEDDING

CONCRETE SIDEWALK

ISSUED FOR SITE PLAN REVIEW



MATTHEW R. STEPHAN, PE NO. 34678

## **PROPOSED IMPROVEMENTS AT** ST. EDMUND'S **RETREAT**

1 ENDERS ISLAND

**MYSTIC** 

**CONNECTICUT** 

**CIVIL DETAILS** 

FEBRUARY 20, 2024

REV	(ISIONS:	

PREPARED FOR: ST. EDMUND'S RETREAT 1 ENDERS ISLAND

MYSTIC, CT 06355



655 Winding Brook Drive Glastonbury, Connecticut 06033

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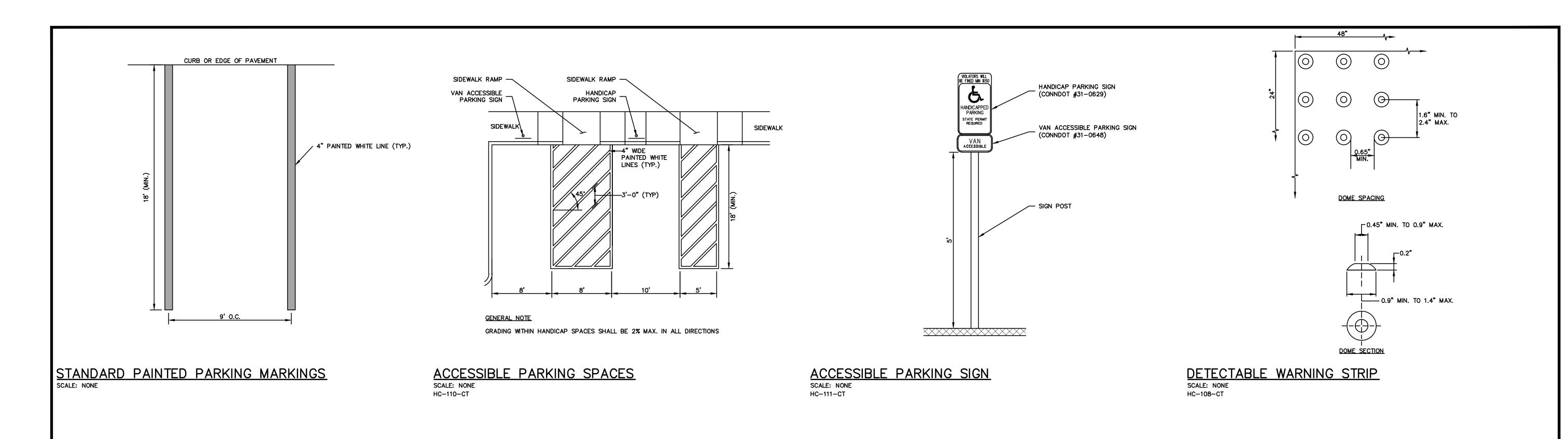
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DWG. NO: C-4.0JOB. NO: **83892.00** 



SCALE: NONE 06/08





MATTHEW R. STEPHAN, PE NO. 34678

PROPOSED
IMPROVEMENTS AT
ST. EDMUND'S
RETREAT

1 ENDERS ISLAND

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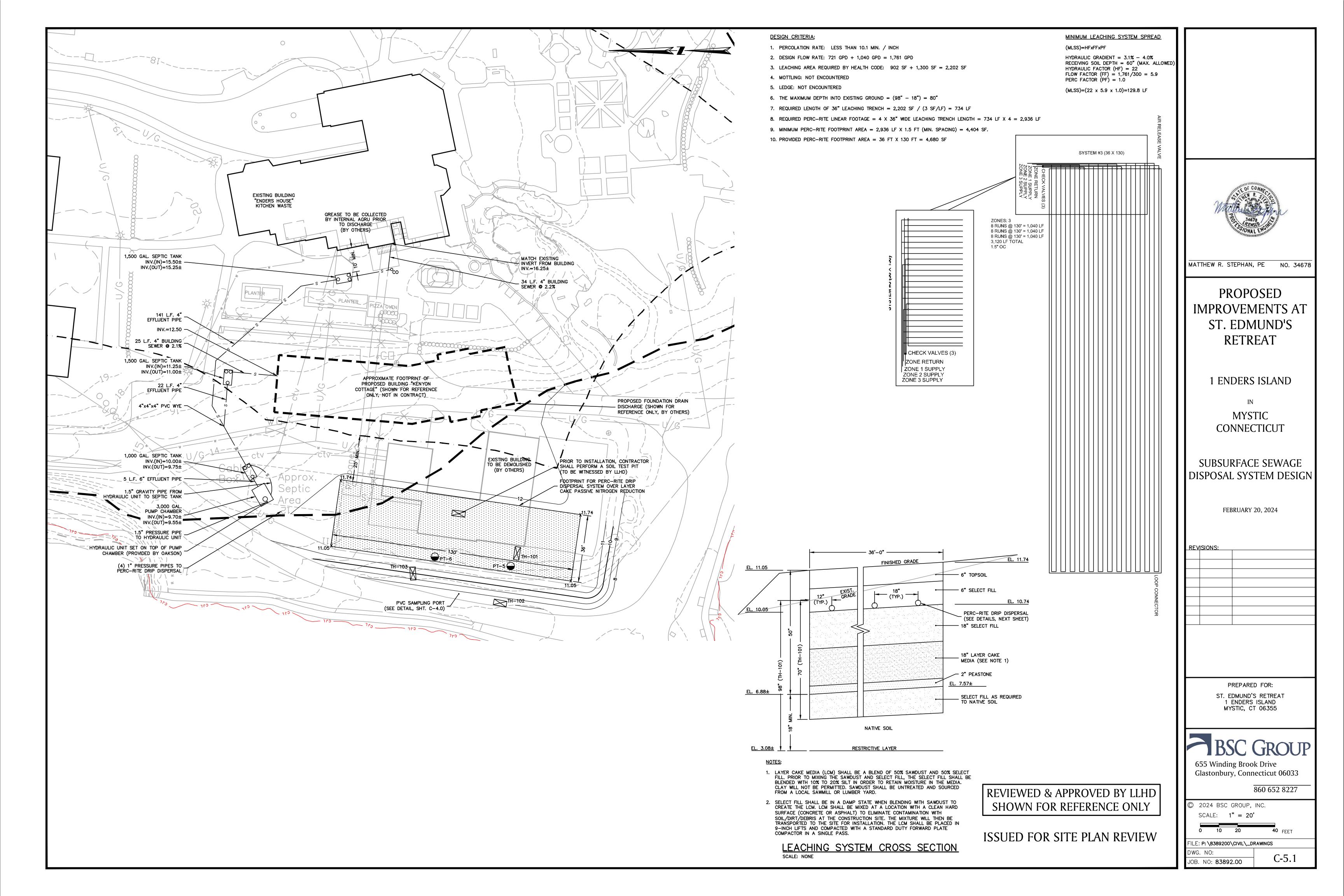
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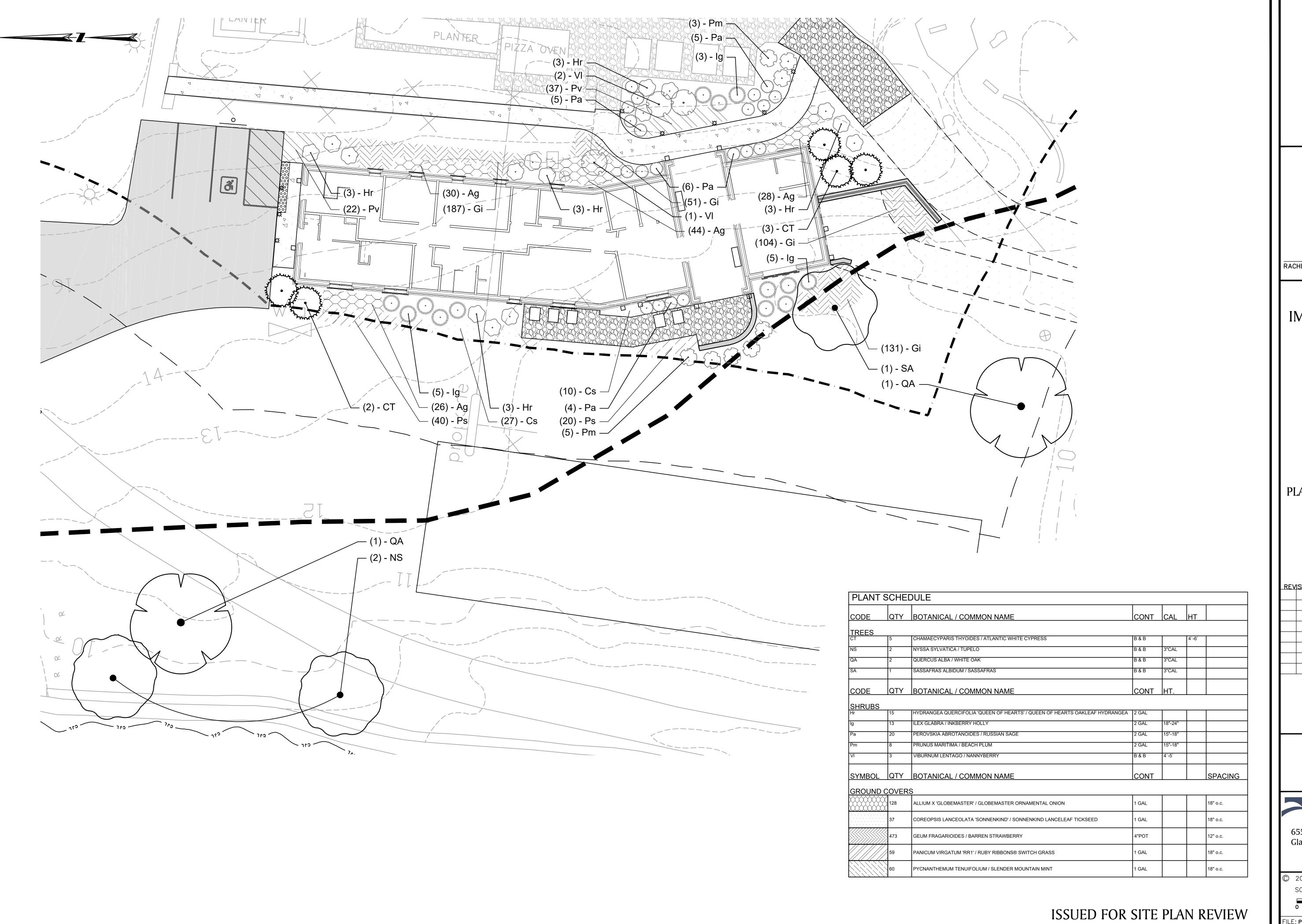
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RACHEL N. SALCH, PLA

PROPOSED IMPROVEMENTS AT ST. EDMUND'S RETREAT

1 ENDERS ISLAND

**MYSTIC** CONNECTICUT

PLANTING PLAN (KENYON COTTAGE)

FEBRUARY 20, 2024

REVISIONS:

PREPARED FOR: ST. EDMUND'S RETREAT 1 ENDERS ISLAND MYSTIC, CT 06355

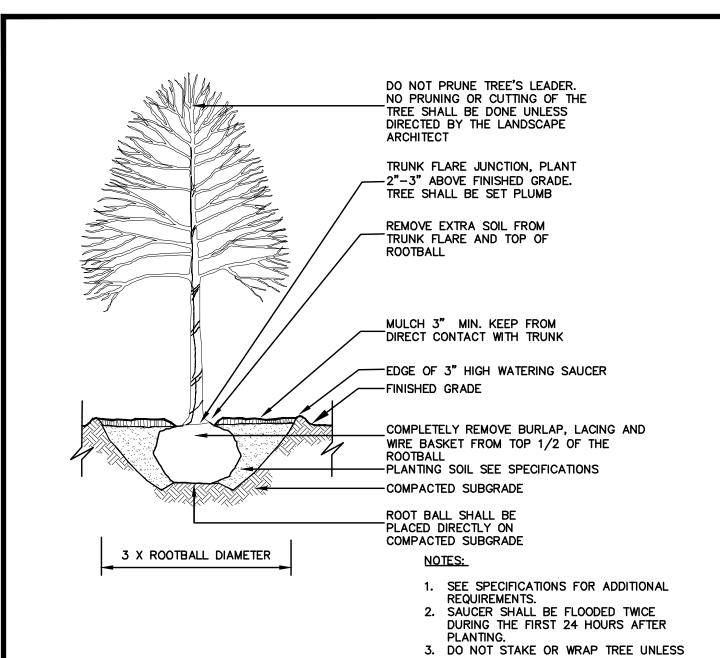
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## DECIDUOUS TREE PLANTING

— PREPARED SUBGRADE

NOTED OTHERWISE.

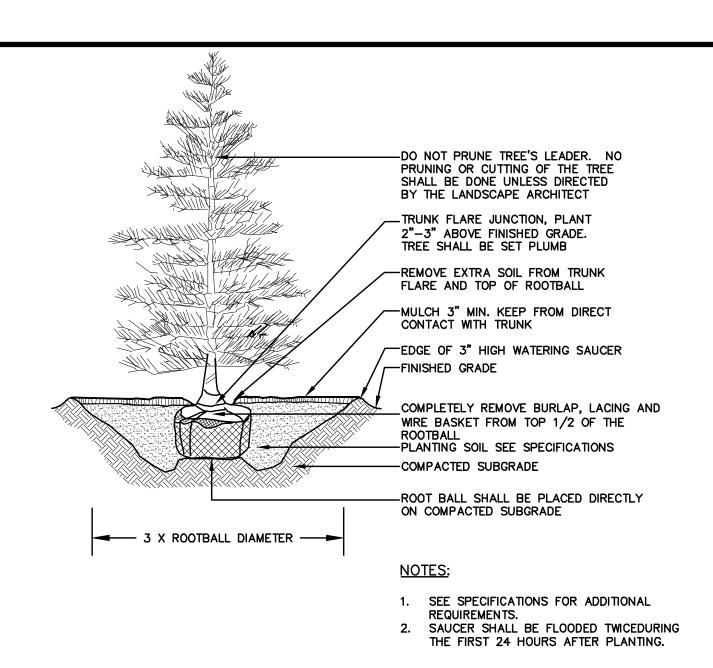
NOTES:

1. CONTRACTOR SHALL PREPARE SOILS IN ALL DISTURBED AREAS AND AREAS USED FOR EQUIPMENT ACCESS.

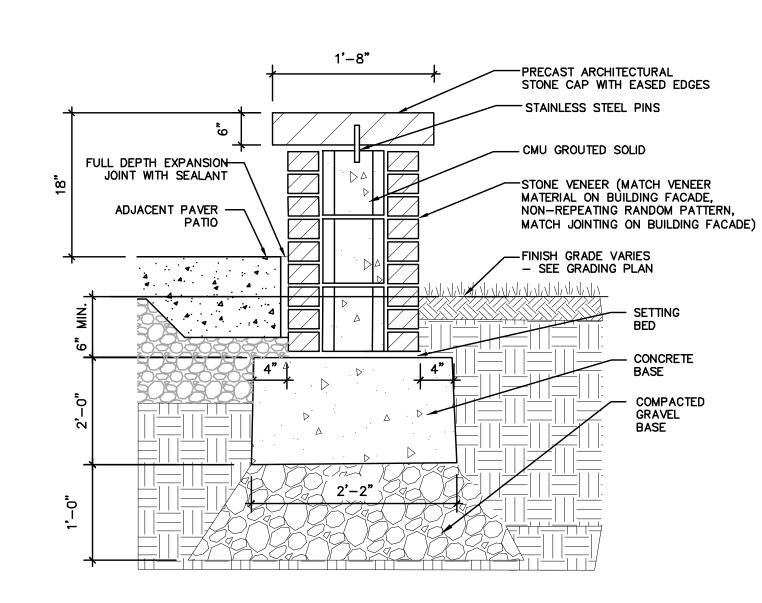
## SEEDED LAWN

SCALE: NONE

SCALE: NONE



### EVERGREEN TREE PLANTING SCALE: NONE



DECORATIVE SEATING WALL SCALE: NONE

## 1. WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING. 2. DO NOT CUT LEADER. SO THAT CROWN IS 2"-3" ABOVE FINISHED GRADE AFTER SETTLEMENT 3. TREE SHALL BE SET PLUMB. — 3" PINE BARK MULCH (PULL MULCH AWAY FROM TRUNK OF TREE) -3" HIGH EARTH WATERING SAUCER AROUND TREE PIT \_\_COMPLETELY REMOVE BURLAP, LACING AND WIRE BASKET FROM TOP 1/2 OF THE ROOTBALL. BACKFILL MIX PER -SPECIFICATIONS 6" BELOW ROOTBALL -I ROOTBALL → 3 X ROOTBALL DIAMETER 🔨 ➤ - EXCAVATE PLANTING PIT TO DEPTH OF ROOT BALL

TREE PLANTING ON SLOPE SCALE: NONE

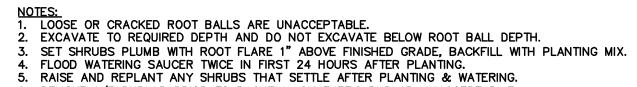


NOTES:

1. PRODUCT SHALL BE FOXHALL 4'-7" BACKLESS BENCH, AS MANUFACTURED BY COUNTRY CASUAL TEAK, OR APPROVED EQUIVALENT.

2. DIMENSIONS: 55" L x 18" W x 17" H

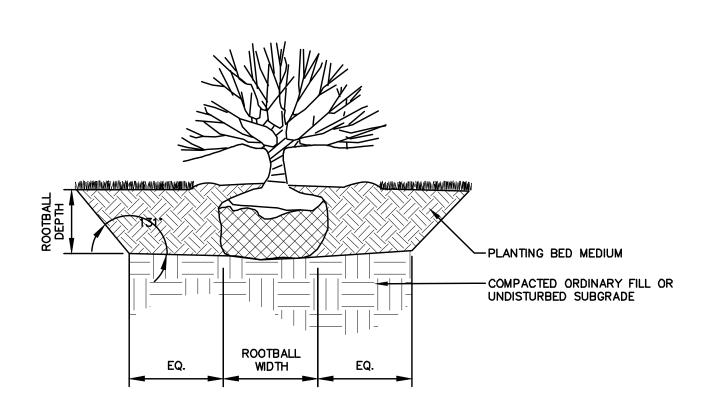
## TEAK BACKLESS BENCH



6. REMOVE 1/3 BURLAP PRIOR TO BACKFILL. SYNTHETIC BURLAP UNACCEPTABL.E 7. 2" DEPTH MULCH (KEEP MULCH 1" AWAY FROM SHRUB BASE) 3" HIGH EARTH WATERING SAUCER

1'-0" BEYOND ROOT BALL PLANTING MIXTURE.

8. FOR CONTAINERIZED PLANTS: REMOVE CONTAINER PRIOR TO PLANTING, SCARIFY ROOT BALL BELOW EDGE 1/2" DEEP IN FOUR LOCATIONS.



SHRUB PLANTING

SCALE: NONE



NOTES:

1. PRODUCT SHALL BE ASPEN TEAK ADIRONDACK CHAIR, AS MANUFACTURED BY COUNTRY CASUAL TEAK, OR APPROVED EQUIVALENT.

2. DIMENSIONS: 37" L x 29" W x 38-3/4" H

TEAK ADIRONDACK CHAIR



MATTHEW R. STEPHAN, PE NO. 34678

PROPOSED **IMPROVEMENTS AT** ST. EDMUND'S RETREAT

1 ENDERS ISLAND

**MYSTIC** CONNECTICUT

LANDSCAPING DETAILS

FEBRUARY 20, 2024

ΕV	ISIONS:	

PREPARED FOR: ST. EDMUND'S RETREAT 1 ENDERS ISLAND MYSTIC, CT 06355



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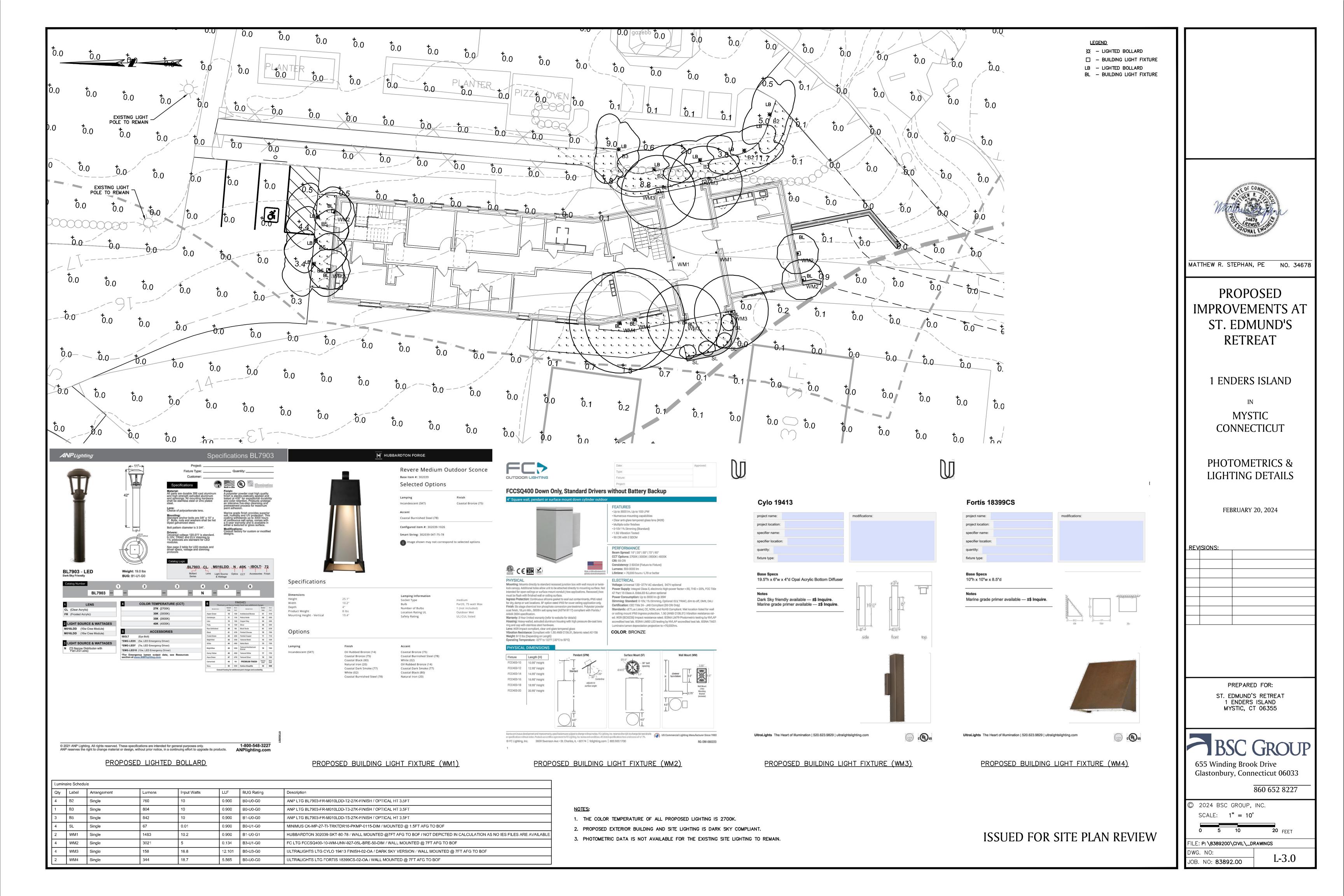
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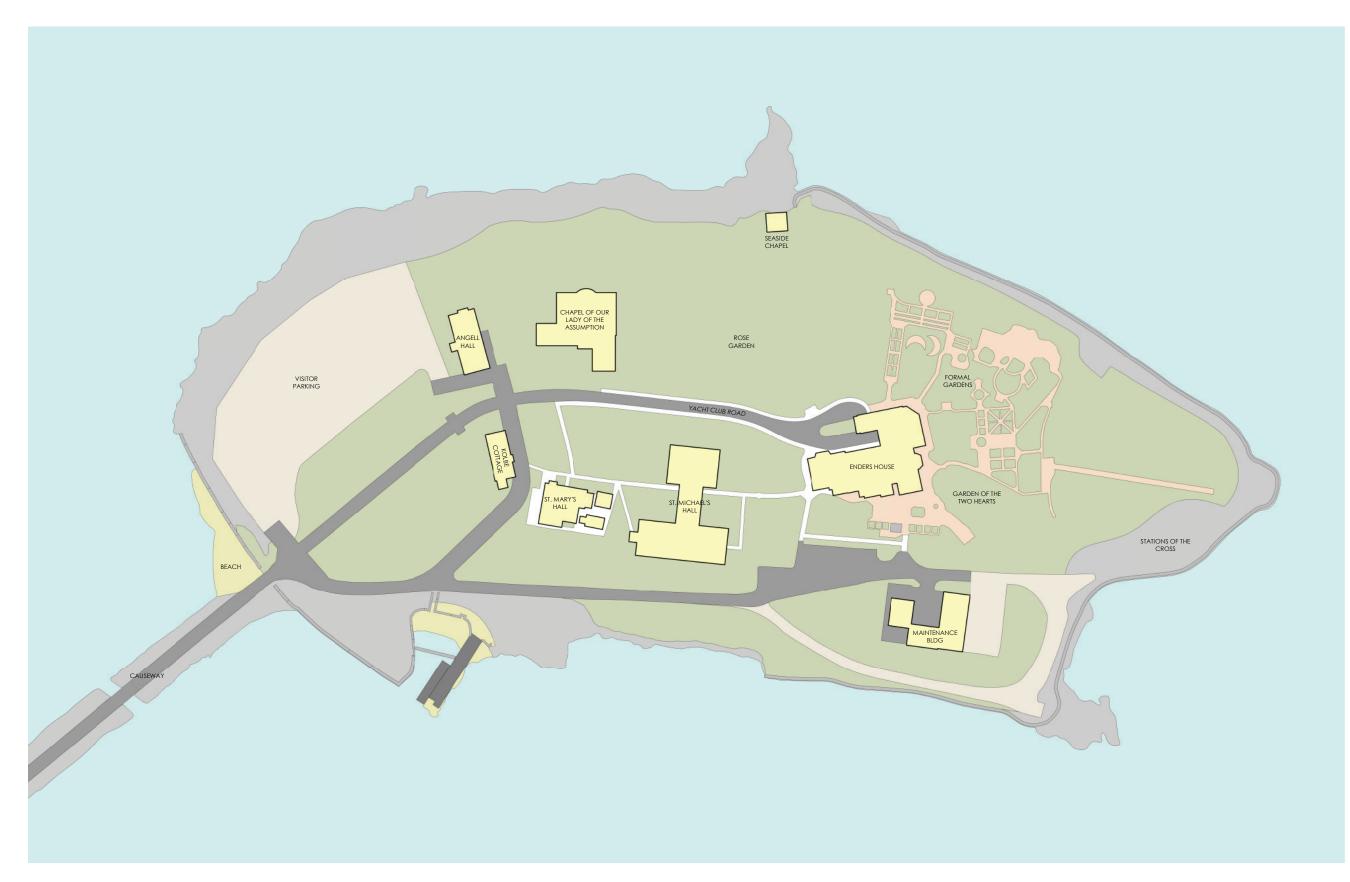
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ISSUED FOR SITE PLAN REVIEW



### SITE PLANS

## **EXISTING SITE PLAN**





ST. MICHAEL'S HALL:



CHAPEL OF OUR LADY:



**ENDERS HOUSE:** 



KOLBE COTTAGE:



ANGELL HALL:

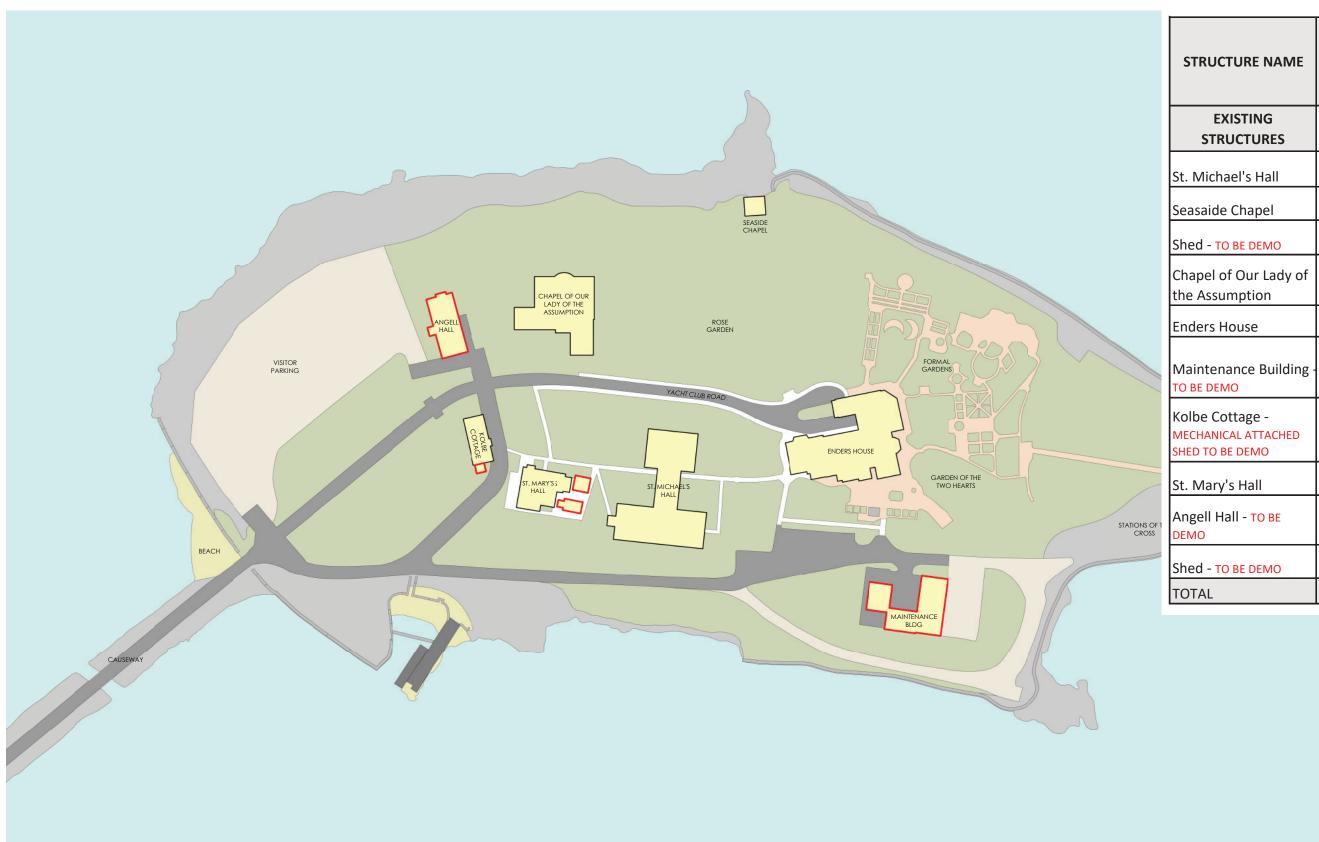


### SITE PLANS

## **EXISTING STRUCTURE ANALYSIS**

STRUCTURE NAME	FUNCTION	ID	LAND USE CODE	SQUARE FEET (2018 STONIGTON LAND RECORDS)	HEIGHT	YEAR BUILT
EXISTING STRUCTURES						
St. Michael's Hall	Lodging; 28 rooms, 56 beds, meeting rooms (3), gift shop	178-1-1-1	9060 Church MDL- 94	9,428	44'	1970
Seasaide Chapel	Chapel	178-1-1-2	9090 Conservation MDL-00	219		
Shed		178-1-1-3	9090 Conservation MDI-00	185		
Chapel of Our Lady of the Assumption	Chapel	178-1-1-4	9060 Church MDL- 94	4,181	50.5'	2002
Enders House	Lodging; 19 beds, dining (4 areas), chapel, commercial kitchen, event venue, meeting space, retreat facility	178-1-1-5	9060 Church MDL- 94	15,287	68'	1920s
Maintenance Building	Meeting space, utility, laundry	178-1-1-5	9060 Church MDL- 94	2,616	28'	1998
Kolbe Cottage	Office, lodging: 12 beds	178-1-1-6	9060 Church MDL-	2,759	35'	1930s
St. Mary's Hall	Offices, lodging: 1 suite	178-1-1-7	9060 Church MDL- 94	2,760	35'	1930s
Angell Hall	Offices, meeting spaces, event spaces	178-1-1-8	9060 Church MDL- 94	2,880	37'	
Shed		178-1-1-9	9090 Conservation MDL-00	160		
TOTAL	88 BEDS			40,475		

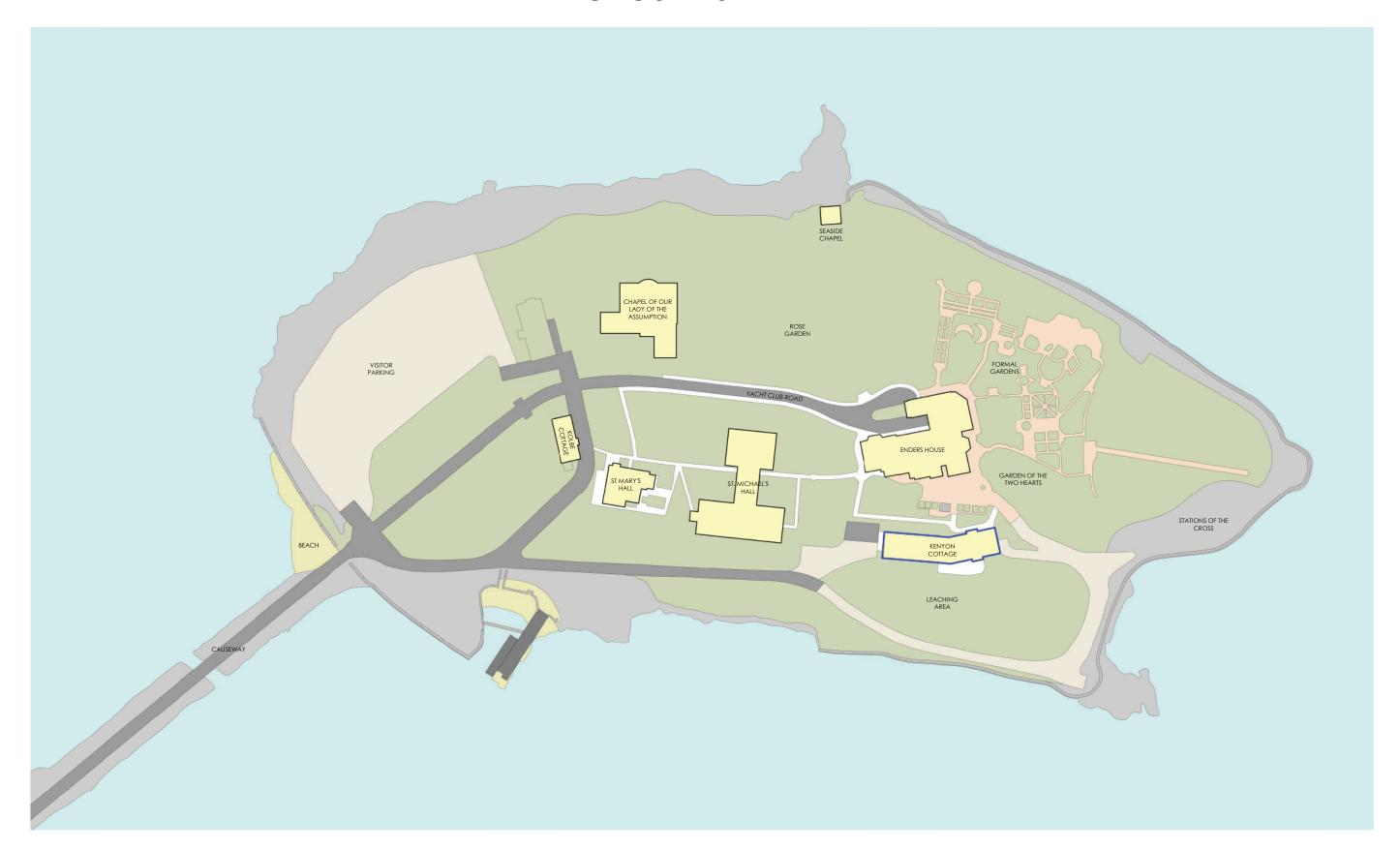
## **DEMO SITE PLAN**



STRUCTURE NAME	SQUARE FEET (2018 STONIGTON LAND RECORDS)	BUILDING/ SPACES TO BE DEMOLISHED OR NON CONTRIBUTING
EXISTING STRUCTURES		
St. Michael's Hall	9,428	
Seasaide Chapel	219	
Shed - TO BE DEMO	185	185
Chapel of Our Lady of the Assumption	4,181	
Enders House	15,287	
Maintenance Building -	2,616	2,616
Kolbe Cottage - MECHANICAL ATTACHED SHED TO BE DEMO	2,759	67
St. Mary's Hall	2,760	44
Angell Hall - TO BE DEMO	2,880	2,880
Shed - TO BE DEMO	160	160
TOTAL	40,475	5,952

### SITE PLANS

## PROPOSED SITE PLAN



### SITE PLANS

## PROPOSED STRUCTURE ANAYLSIS

STRUCTURE NAME	FUNCTION	ID	LAND USE CODE	SQUARE FEET (2018 STONIGTON LAND RECORDS)	BUILDING/ SPACES TO BE DEMOLISHED OR NON CONTRIBUTING	CONTRIBUTING SQUARE FEET	HEIGHT	YEAR BUILT	NON- CONTRIBUTING SQUARE FEET
EXISTING STRUCTURES									
St. Michael's Hall	Lodging; 28 rooms, 56 beds, meeting rooms (3), gift shop	178-1-1-1	9060 Church MDL- 94	9,428	0	9,428	44'	1970	
Seaside Chapel	Chapel	178-1-1-2	9090 Conservation MDL-00	219	0	219	-		
Shed - TO BE DEMO		178-1-1-3	9090 Conservation MDI-00	185	185	0	-		
Chapel of Our Lady of the Assumption	Chapel	178-1-1-4	9060 Church MDL- 94	4,181	0	4,181	50.5'	2002	
Enders House	Lodging; 19 beds, dining (4 areas), chapel, commercial kitchen, event venue, meeting space, retreat facility	178-1-1-5	9060 Church MDL- 94	15,287	0	15,287	68'	1920s	
Maintenance Building - TO BE DEMO	Meeting space, utility, laundry	178-1-1-5	9060 Church MDL- 94	2,616	2,616	0	28'	1998	
Kolbe Cottage - MECHANICAL ATTACHED SHED TO BE DEMO	Office, lodging: 12 beds	178-1-1-6	9060 Church MDL- 94	2,759	67	2,692	35'	1930s	
St. Mary's Hall/ Sacred Art Institute	Offices, lodging: 1 suite	178-1-1-7	9060 Church MDL- 94	2,760	0	1,962	35'	1930s	
Basement Below 15'				754	-	-	-		754
Floors Above 15'				2,006	44	-	-		
Angell Hall - TO BE DEMO	Offices, meeting spaces, event spaces	178-1-1-8	9060 Church MDL- 94	2,880	2,880	0	37'		
Shed - TO BE DEMO		178-1-1-9	9090 Conservation MDL-00	160	160	0	-		
PROPOSED STRUCTURES									
Kenyon Cottage	Lodging: 14 beds, program space, fitness, studio apt.	178-1-1-5	9060 Church MDL- 94	0	0	6,677	22' - 11"	2025	
Basement Below 15'									3,090
TOTAL	88 BEDS			40,475	5,952	40,446			3844

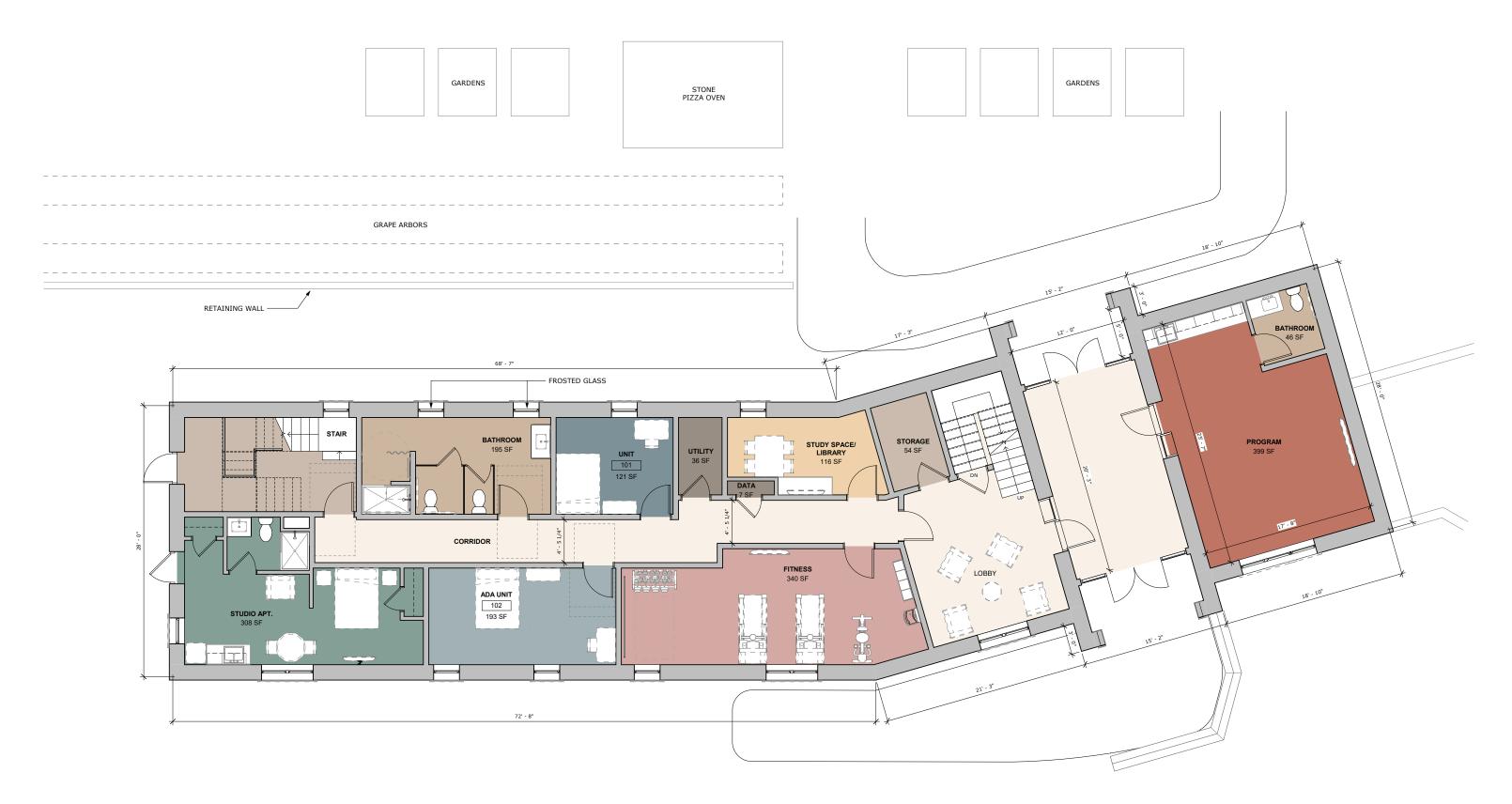
TOTAL SQFT DIFFERENCE: 29 SQFT

# ARCHITECTURAL SITE PLAN

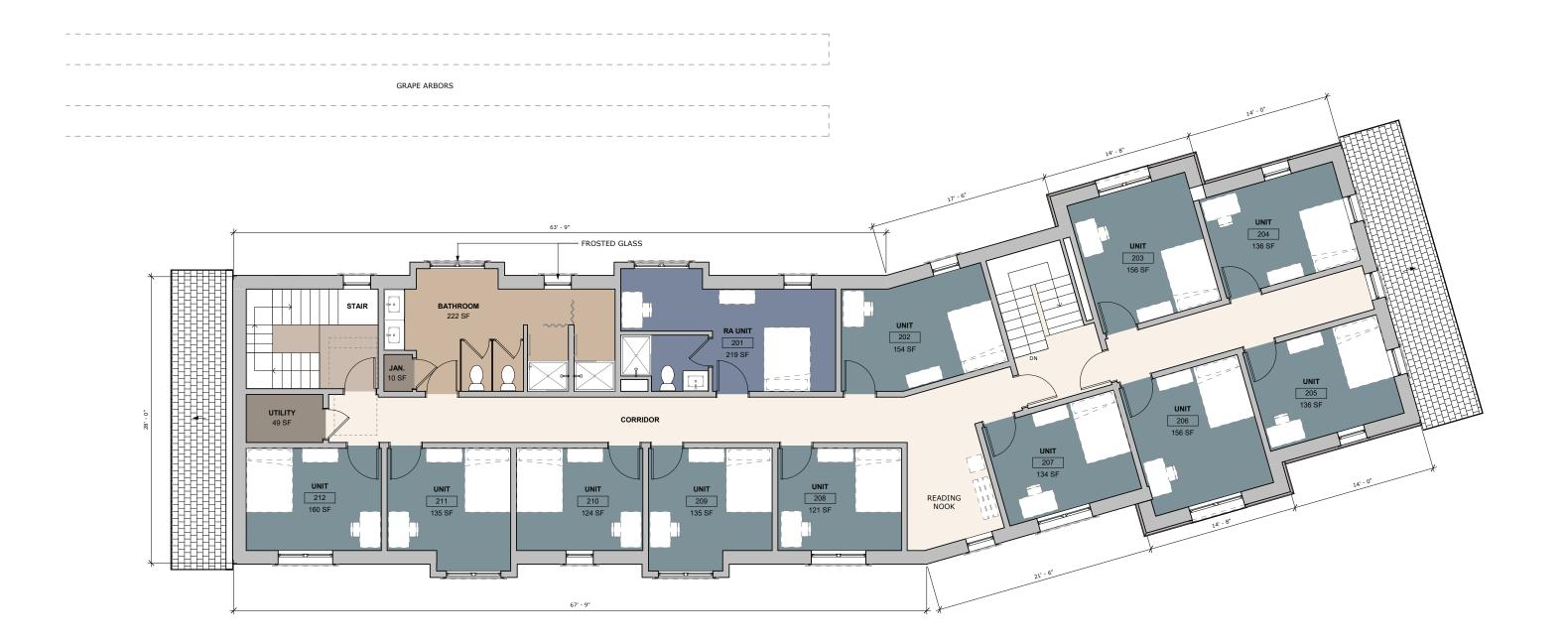




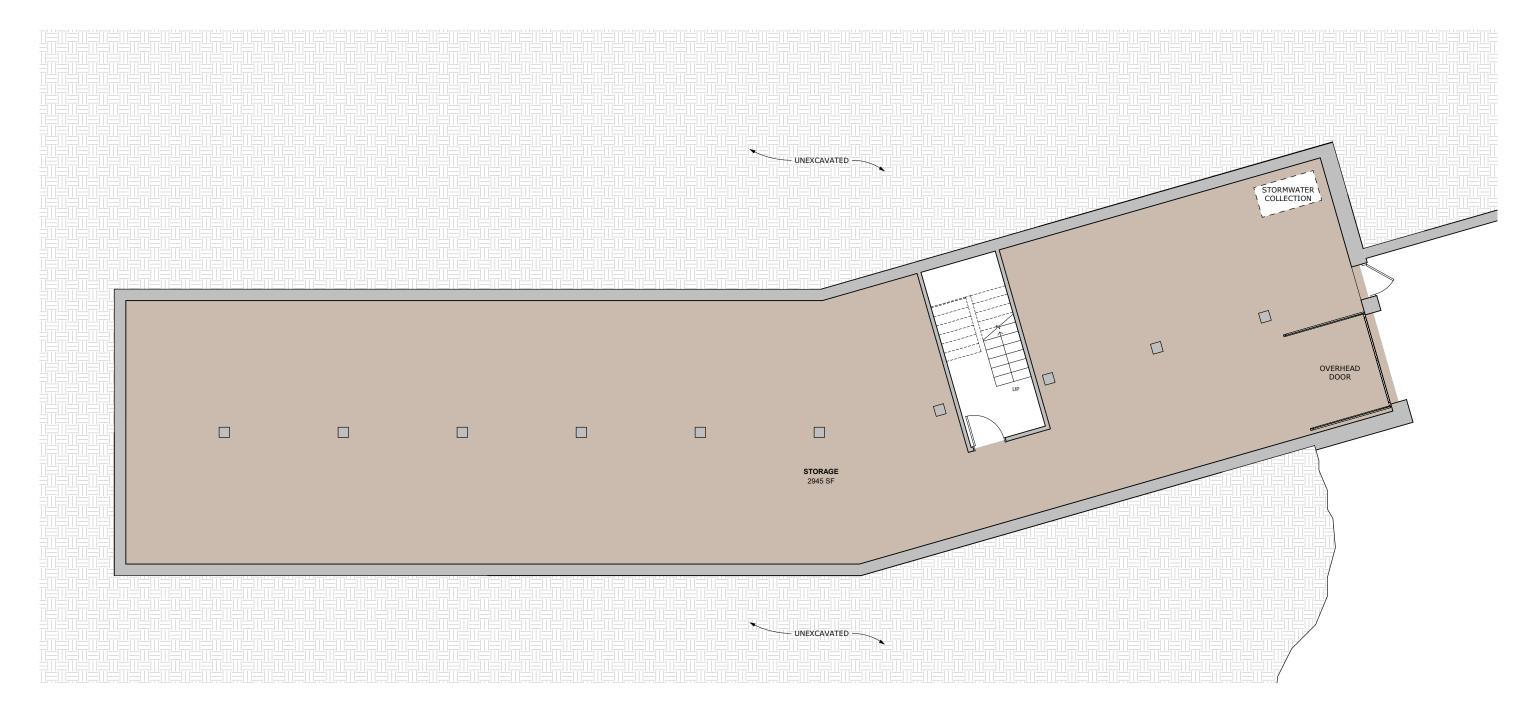
## **GROUND FLOOR**



## **SECOND FLOOR**



## **BASEMENT**





## **FACING/ VIEW**



## **FACING/ VIEW**



1 LEFT FACING ELEVATION



2 RIGHT FACING ELEVATION
1/4" = 1'-0"





