

Electric Boat South Yard Assembly Building Staff Report

March 19, 2019

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The following is a summary adapted from the Applicant’s material and Staff’s reviews. Refer to the entire application package for more detailed information.

A. Project Overview

I. Summary

The proposed South Yard Assembly Building (SYAB) is in conjunction with the Columbia Class submarine construction. The SYAB is a 624-ft. long and 317-ft. wide steel structure (197,808 SF) that is founded on concrete filled steel tube piles that extend as much as 90 ft. to bedrock. The majority of the SYAB is situated over the Thames River (waterward of the Coastal Jurisdiction Line). Bulkheads and piers are located on either side of the structure to allow for docking of transport barges and shuttles delivering materials and modules for the submarines. The SYAB is supported by an adjacent Utility Building, proposed to be constructed on the east side of the SYAB. The Utility Building will provide utility services to the SYAB, drawing from public utilities resources. Utility planning and design is still underway and impacts to public rights of ways and service demands are being evaluated.

A future module outfitting building, not part of this permit application, is planned to house module fit-up and testing facilities, as well as trade-related support spaces. Permit applications for this building will be filed at a later date. A Submerging Basin, a dredged area within the Thames River and southeast of the SYAB, will provide the required draft to launch the completed submarines and is associated with permits within the jurisdiction of the CT DEEP and US ACOE.

The proposed activity is considered a “Functionally Dependent Use or Facility”¹. This designation is relevant to the review of improvements within floodplains and CAM Zone.

The following list summarizes improvements included within the application presently before the Planning and Zoning Commission. Refer to Figure 1: Summary Plan on next page highlighting the location of the listed improvements:

- A. (A1) South Yard Assembly Building (A2 Deck)**– A new manufacturing building founded on steel piles over the harbor to allow for construction of two Columbia class submarines concurrently.
- B. Utility Building and Utility Connections** – A utility building to house primary utility infrastructure to support the SYAB and the future Module Outfitting Building. New utility connections for the utility building will come from existing facility utilities as well as public utilities in Eastern Point Road.
- C. Bulkheads and Piers** – Constructed on the north and south sides of the SYAB to allow barges to deliver materials and modules for construction of the submarines.

¹ A Functionally Dependent Use or Facility is a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers and ship building and ship repair facilities. The term does not include seafood processing facilities, long term storage, manufacturing or sales or service facilities.

- D. Floating Dry Dock** – A floating dry dock (FDD) located to the south of the SYAB to move completed submarines from the SYAB into position for launching.
- E. Wastewater Pump Station** – A wastewater pump station adjacent to the SYAB with sufficient capacity to support ship building and testing activities pumping wastewater up to sanitary sewer main located in Eastern Point Road.
- F. Electrical Receiving Station** – An electrical receiving station constructed along Eastern Point Road and fed from the Groton Utilities power distribution system to provide sufficient power to the SYAB and future Module Outfitting Building.
- G. Railroad Track Renovations** – Renovations to the existing railroad tracks that enter the site from the south utilized to deliver materials and components for construction of the submarines.
- H. Construction Road** – A construction road providing access from Eastern Point Road. The construction road will run along the southern edge of the property and then over a portion of existing railroad tracks to allow for deliveries during construction.
- I. Stormwater Management** – Replacement of existing stormwater management systems and implementation of new stormwater systems designed to remove oils and suspended solids from runoff prior to discharge to the Thames River.

2. *Inland Wetlands and Watercourse/Zoning Board of Appeals*

Three wetland areas and one watercourse is located on site. The City of Groton IWWC agency determined the activity is not significant and therefore, a hearing was not required. The IWWC will begin their review of the application during their next regularly scheduled meeting.

An application for a variance was filed with, and approved by, the Zoning Board of Appeals. The variances are associated with floodplain development and discussed further in the next section.

3. *Building Height and Design*

The building height requires a special permit because it is over 75 feet. This is discussed in more detail in Section B1.

The current aesthetic design of the Assembly Building is industrial in nature. Building elevations are provided, but do not clearly offer a representative depiction of the building's visual characteristics. Staff has requested design alternatives be explored to reduce the visual impact of the building, including a viewshed assessment. Please refer to further discussions on this matter in Section B.3 Coastal Site Plan Review.

Section 8.4.A of the Zoning Regulations states, "*These design considerations may also be used as part of development reviews in other areas of Groton, particularly as part of the Special Permit process.*" Because the Special Permit application includes a request associated with a building design feature (in this case the building's height), the considerations outlined in Section 8.4 Design Considerations apply. An architectural design that addresses the building's presence, mass, and scale has been requested.

4. *Employment Projections*

The current (2019) employment base on the largest shift (first) is 6,600 employees. The projected largest shift (first) is in 2029, with approximately 8,200 employees. In 2030, the largest shift, again first shift, is projected to decrease slightly to 7,800 employee.

5. *Parking²*

EB owns 3,800 parking spaces throughout various parcels in the City. To support future employment of 8,200 employees on the largest shift, 2,734 spaces are required (1 space per 3 employees). Therefore, the applicant meets the zoning requirement. However, staff's observed parking demand ratio is greater than 1 space per 2 employees. Using the observed parking ratio, more than 4,000 spaces would be required. Staff and the applicant are discussing possible additional parking accommodations although the required number of parking spaces are met.

6. *Construction Phase*

The following are selected highlights of potential construction phase activities and schedules. These may be revised as the Applicant continues coordination with their recently hired construction management firm.

- Applicant's ideal construction start is mid/late Summer 2019 with a completion date of July 2023. This is dependent upon Commission approvals and building permits.
- Gates are scheduled to be open from 6AM to 5pm.
- 150 construction workers are anticipated to be necessary for the structural deck; duration is expected to be 18 month.
- 300 construction workers are anticipated for the building, taking 25 months to complete.
- Very little overlap between these work schedules is anticipated.
- Construction workers will park off site and be shuttled to the Site. The offsite location of parking is not known at this time.
- Work Hours are as follows:
 - Landward: Normal workhours 7am – 3pm. Staff has asked for clarity to confirm this is a realistic schedule to anticipate and will allow the applicant to meet its schedule. Applicant is revisiting this schedule. NOTE: Landward work includes all construction, including the construction of the Assembly Building above the deck.
 - Water side: Beyond 3:30PM with second shift and weekends. If two shifts – 2-10 hour shifts 6AM – 2AM. NOTE: waterside work includes all concrete piles and deck structure which will support the Assembly Building.
- Lighting during construction is not anticipated to exceed existing lighting levels.
- Deliveries will be scheduled as needed throughout the work day.
- Deliveries will occur via land, rail and water.
- Concrete will be provided by local redi-mix suppliers and delivered to the site.

7. *Utilities*

Applicant is coordinating with Groton Utilities to finalize utility design. Absent further details, Staff has expressed concerns regarding the visual impact of the Receiving Station located along

² The parking analysis discussed does not factor in privately owned parking areas.

Eastern Point Road and all utility improvements conducted within the public ROWs. This is especially the case with the required 35kV redundant electrical requirement. The transmission of this utility requires more substantial infrastructure and which may have impacts throughout the ROW it is routed. Applicant has been asked to assess the feasibility of both above and below grade routes.

B. Application Description

The applicant is requesting three permits:

1. Special Permit with Site Plan Review
2. Floodplain Development Permit
3. Coastal Site Plan (CAM)
- 4.

1. Special Permit with Site Plan Review (Section 9.4)

The ‘trigger’ for this Special Permit application is not ‘use’ specific, as is often the case with special permit applications. The Applicant requires a Special Permit because they cannot meet certain standards of the zoning regulations. The City Zoning Regulations offers provisions for the Commission to modify, by Special Permit, certain standard(s) as long as another standard(s) is achieved. There are five (5) sections of the Zoning Regulations the applicant is requesting to be modified via Special Permit and noted below as SP#. The following, adapted from the Applicant’s Special Permit Narrative, explains each request:

Section 4.4 - IT Industrial/Technology Zone

SP#1: Section 4.4.E – Dimensional Standards (Building Height): Maximum building height for this zone is 75 feet. “The Commission may, by Special Permit, authorize a building height above 75 feet when such additional height is needed for a specific manufacturing process or operational consideration.”

The building height was described in the application material as 160 feet. Based upon Staff’s review, this height dimension requires clarification as its calculation was not based upon the ‘pitched roof’ style defined in the Zoning Regulations. This roof style is calculated based upon the midpoint between ridge and soffit. Staff’s estimate is approximately 145 feet high. The Applicant will clarify this dimension. The building height is required for clearances associated with the Columbia class submarine dimensions, overhead mechanical assembly equipment, and structural members to support the roof span and roof ventilation.

Section 7.6 - Outdoor Lighting

The Commission may, by Special Permit, allow the Applicant to not meet requirements of this Section of the Zoning Regulation's. The Applicant requests modifications from the following sections:

SP#2: Request: Section 7.6.C.2 states "In all non-residential districts and in all areas adjacent to a residential lot, no externally-mounted direct light source shall be visible at the lot line at ground level or above. The direct illumination measured at the lot line shall be zero (0.0) foot-candles, excluding driveway entrances."

Applicant's Narrative: *The wall mounted light fixture on the east side of the SYAB will include a glare shield so the light source will not be visible at the lot line. In addition, the direct illumination at the lot line shall not exceed 0.0 foot-candles. The wall mounted light fixtures on the west side of the building will be a full cut off light fixture. All pole mounted lights will be full cut off fixtures.*

SP#3: Request: Section 7.6.C.5 states "the height of luminaries, except streetlights in public right-of-ways, shall be minimum height necessary to provide adequate illumination, but shall not exceed a height of eighteen (18) feet. The height of a luminaire shall be measured from the finished grade (not the top of a supporting concrete base) to the bottom."; and

SP#4: Request: Section 7.6.D.3. – The Commission may, by special permit, allow lighting that does not complete with the requirements of this Section provided the Commission determine, in its sole discretion, that such proposed lighting is consistent with the purpose of these Regulation. a. That an extraordinary need for security exists because of a history of vandalism or other objective means.

Applicant's Narrative: *Due to the high security and operations of the facility, it is not feasible to have standard pole mounted lights that comply with the City regulations. In order to ensure there is adequate lighting to safely maneuver components in the yard, it is necessary to have wall mounted lighting above the 18 ft. height requirement. Wall mounted lights will be provided on all sides of the building. There will be 20 foot high lights on the west side, 40 foot and 8 foot high lights on the east side and 40 foot high lights on the north and south sides of the building. The 20 ft. and 40 ft. lights are higher than the 18 ft. high allowable light, however, the top of the 40 foot high wall mounted lights will be 15 ft. below Eastern Point Road. Lighting levels will be diminished to 0.2 foot candles 180 ft. east of the building. It should be noted that the property line is another 337 ft. east and the property line is 552 ft. east of the SYAB.*

Other site lighting on poles will be mounted on either 15 ft. or 18 ft. poles which complies with these regulations.

SP#5: Section 7.7 - Stormwater Management

Under the provisions of Section 7.7.D, the Commission may, by Special Permit, reduce the requirements of this section based upon a review by the City's engineer. Under this provision the applicant states the following requirements cannot be achieved:

- 7.7.C.1.a. Pollutant Reduction (CSQM Section 7.4).
- 7.7.C.1.b. Groundwater Recharge and Runoff Volume Reduction (CSQM Section 7.5).
- 7.7.C.1.c. Peak Flow Control (CSQM Section 7.6) for the 10-year, 25-year, and 100-year storm events.

Evaluation of applicant's supporting documentation for this modification is underway.

Section 9.4.D - Special Permit Criteria

This section of the Zoning Regulations outlines eleven topics the Commission will use to evaluate the Special Permit. This will form the foundation of the Commission's decision. The applicant has provided their position on how the application addresses these criteria. Staff has yet to comment on this information pending responses to staff comments.

2. *Floodplain Development Permit (in conjunction with above)*

Some activities are within the AE and VE Zones. They include the Assembly Building and associated deck, docks and industrial gas area. Additional information for the docks and gas areas has been requested.

Specific to the SYAB, the applicant has received a variance from the Zoning Board of Appeals for the construction of the Assembly Building. The variances include the following:

Sections 5.3.G. and 5.3.H Requirements in Zones A and AE

5.3.G.2 – Non-Residential – All new construction ... of non-residential structures shall have the lowest floor ... elevated, dry flood-proofed, or wet flood-proofed to or above the base flood elevation plus one foot

5.3.H.3 – All new construction shall be elevated so that the bottom of the lowest supporting horizontal member is located above the base flood elevation plus one foot, with all space below the lowest supporting member open as not to impede the flow of water.

Due to launching and receiving requirements, the SYAB needs to be set at elevation 12.5' and the bottom of the lowest supporting horizontal member of the utility tunnels will be at elevation -0.75'. The BFE is 14.0' for the VE zone and 11' for the AE Zone

3. Coastal Site Plan Permit

The project area and property is within the Coastal Area Management Zone and subject to a Coastal Site Plan Review. The Commission is advised to refer to the Coastal Area Management Narrative provided within the application material as the information is not easily summarized.

As noted previously, the use is a Functionally Dependent Use and must be located in proximity to the water. Several activities are proposed to take place water-side of the Coastal Jurisdiction Line (CJL), under jurisdiction of the CT DEEP and US Army Corp of Engineers. Said permits have been filed and are within the final stages of public comment period. Activities landward of the CJL and under the jurisdiction of the Commission include, all items listed in the Summary provided at the beginning of this report, including all supporting infrastructure such as stormwater systems, utilities, erosion control measures, and construction staging/sequencing.

Staff referred the CAM application to CT DEEP. In response, the Commission received the attached March 11, 2019 correspondence. It outlines some of the coastal resources on the 'site'. (CT DEEP's usage of 'site' is likely in reference to all impacted areas, including waterward improvements, inclusive of dredging.) Staff is continuing to review the improvements under CAM jurisdiction as it awaits responses to Staff Comments.

The letter also stated CT DEEP's concerns related to the 'visual impact' of the building upon the coastal resource of the shoreline. Based upon this comment, and a subsequent telephone conversation with CT DEEP, Staff drafted the attached follow up email requesting further explanation of their concerns to visual impacts and jurisdictional review of the building's design. As you will note, the letter does convey the City's concerns related to building design and its jurisdiction for design review under the Special Permit process.

C. Application Review Status

Staff has completed its initial review of the application and provided comments to the applicant during the week of March 11, 2019. Refer to attached comments 1-4. Applicant's response to these comments are in process and will be provided to Staff on a rolling basis as they are addressed.

D. Application Review Schedule

The public hearing opens on April 9, 2019, 6:30PM. The Applicant plans a 2-3 hour presentation. A continuation of the hearing is scheduled as a Special Meeting of the Commission on April 30, 2019, 6:30PM. Both meetings will be held in Council Chambers.

A possible application review schedule is provided below. Throughout, the applicant may request a total of 65 days of extensions, extending any portion of the below sequence:

1. Date of Receipt³: February 19, 2019
2. Hearing Opens⁴: April 9, 2019
3. Hearing Continued: April 30, 2019 (special meeting)
4. Hearing Closes⁵: May 14, 2019 (35-days from hearing opening; would require a special meeting)
5. Other hearing dates: May 21, 2019 (if required & applicant requests extension)
6. Latest Date of Decision⁶ (does not correspond to regular Commission meeting dates and assumes no extensions requested):
 - a. June 13, 2019: If hearing closes on April 30, 2019
 - b. July 18, 2019: If hearing closes on May 14, 2019 (No additional special meeting has been scheduled)
 - c. July 25, 2019: If hearing closes on May 21, 2019 (This is a regular meeting; requires applicant to request extension)

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³ 'Date of receipt' is the regular scheduled commission meeting following day of submission of a complete application

⁴ Hearing must open within 65-days from the 'date of receipt'.

⁵ Hearing must close within 35-days from the date hearing opens.

⁶ Commission must take action within 65-days from the date the hearing closes.

E. Attachments

- 4. *Staff Comments 1-4***
- 5. *CT DEEP Referral Response; March 11, 2019***
- 6. *SYAB: Visual Impacts (Email Correspondence to CT DEEP, March 19, 2019)***



City of Groton, CT
Department of Planning & Economic Development

Staff Review Comments

Planning & Zoning Applications

Site Plan #469

Special Permit #461

CSP #314

Date: March 13, 2019
Address: 75 Eastern Point Road, Electric Boat
Project: South Yard Assembly Building
From: Dennis Goderre, ASLA, AICP CUD
City Planner; goderred@cityofgroton-ct.gov; 860-446-4169

Overview

The following comments are organized into three section.

Section I. City of Groton Staff Review; Comments are compiled by the City Planner and inclusive of input from other departments. However, additional comments should be anticipated. Some comments provided herein may overlap or reinforce others in later sections.

Section II. Traffic Impact Statement; Comments from BL Companies pertaining to their review of the report by same name.

Section III. Site/Civil Review; Comments associated with the SWM Report and site plans associated with the application.

The applicant is requested to respond to each comment in writing, explaining how the comment has been addressed, if applicable. Note drawing title and sheet number, report title, or pertinent reference that may provide additional information.

All reports and plans previously submitted but revised to address these comments shall include necessary revision dates in addition to the original submission date. Site plan revisions should include revision notes, clouds and key code.

I. City of Groton Staff Review

Traffic, Parking and Pedestrian Accommodations

1. Parking beyond 500 feet from the principal use is subject to a special permit. The application should be modified to reflect this requirement.
2. On March 11, 2019, between 10:30am and 12:30PM, staff reviewed the available parking spaces upon EB owned parking facilities as identified on Figure P-MAP. Of the *available* 3,715 spaces, ~29 were vacant ('available' in this analysis omits visitor and Lot S parking as the latter area was under construction and closed). Comparing the parking used to that of the largest 2019 shift (6,600 employees), a parking ratio of ~1.8 employees per one (1) parking space has been determined.

The calculation only utilized the 180 spaces noted for Lot-M on Figure P-MAP, assuming the applicant's omission of the parking balance (440 spaces total) in Lot M will continue to be used for storage of material, equipment and snow and not made available for parking.

If this ~1.8 spaces per employee trend continues for 2029's full employment capacity (8,200 employees), there will be a deficit of ~900 spaces. While the parking requirement of 3:1 as outlined in the Zoning Regulations is achievable, it is questionable whether the actual required parking can be accommodated without having an adverse impacts. Specifically this includes the following 9.4.D Special Permit Criteria:

- a. Overall Neighborhood Compatibility,
- b. Appropriate Improvements,
- c. 8. Long Term Viability, and
- d. 11. Mitigation

NOTES:

- a. Private parking areas as outlined upon Figure P-MAP were at or near capacity, with an overall vacancy rate of ~1%. EB owned parking facilities had an overall vacancy rate of ~0.8%.
 - b. During a meeting with applicant's facilities staff, said staff acknowledged a parking 'problem' exists and complaints from staff members have been received in some form of communication to management. Therefore, additional parking is contemplated at Lots E and G. (See comment 9 below)
3. Is it the intent of the applicant to continue utilizing Lot-M for storage? If the lot will continued to be used for storage, is the intensity of use anticipated to increase? Is it possible the lot could be closed to parking when snow storage needs are at maximum? Lot M on the P-MAP is noted as having 180 spaces. Staff analysis has determined 440 spaces exists. Explain difference.
 4. A portion of Lot M is signed for Pfizer parking only. Explain.
 5. *Traffic Impact Statement*, page 6, paragraph 1 notes additional parking will be "*located outside the City of Groton.*" Where outside the City of Groton? How many spaces will be provided outside the City of Groton? This has bearing upon:

- a. Addressing the parking ratio noted above;
 - b. Possible impacts to other local roadways; and
 - c. The need to refer the application to other affected municipalities in accordance with CGS 8-7d.
6. Parking for contractors 'offsite' should be more clearly defined. Locations have bearing upon sites and circulation within the City, included specific permitting requirements. If parking is to be accommodated outside of the City, then referrals to the appropriate municipality is necessary under CGS 8-7d noted above.
 7. Visitor parking is already at capacity. How will visitor parking be accommodated in the future with the anticipated growth? Provide visitor log information/affidavit attesting to current visitation rates and anticipated increase at full build/occupancy. If an increase is anticipated, how will it be accommodated in conjunction with employee parking?
 8. Is the number of Handicap parking spaces sufficient? Only fourteen were observed within the visitor lot on Eastern Point Road. How does handicap parking meeting state building code?
 9. Additional intersections should be analyzed to confirm no adverse impacts to city streets (refer to Section II comments). The TIS primary focuses upon an OSTA oriented permit. The Special Permit must evaluate impacts to local roadways, which does not come under the primary focus of OSTA.
 10. Staff is aware that parking expansion at the Van-tran, Bldg. 35 and Lot G is planned and an application is forthcoming. Said application will also require a Special Permit. Applicant is advised to include said parking increases and anticipated traffic generation and parking counts under this application.
 11. Are adequate circulation provisions provided for pedestrians from the parking facilities to the property access gates including lighting, crosswalks, curb ramps and sidewalks?
 12. Material and equipment (gangways, snow, storage containers, etc.) is being stored at Lot-M. Will more material be stored on the Lot?
 13. It was brought to the City's attention the Applicant may have purchased 399 Benham Road (aka Avery Market), to address vehicle turning maneuvers. If this anecdotal information is correct, what proposed improvements are planned? If there are planned improvements, they shall be included with this application, including all off-site improvements.

Utilities

At the time these comments were prepared, Groton Utilities (GU) had not completed their review. However, several questions arose during internal staff meetings, despite the information provided in the Project Narrative. They are as follows:

1. What is the capacity requirements of water, sewer and electric? How will they be provided? What is the source of each and how shall they be routed to the property and through public ROWs? What installation requirements are needed? For instance, what size utility poles and location, is guying required and if so how and on what property? Are easements necessary for any utility to reach the property? Can electric power be installed underground to reduce impacts to neighborhoods? If overhead, what is the visual impact to the neighborhood the utility is routed through?

2. Explain electromagnetic frequency levels that may be associated with offsite electric utility improvements.
3. Are there impacts to the sewer within the south property line sewer easement?
4. The appropriateness of screening at the receiving station cannot be evaluated. More information on the nature of the utilities, size, etc. that will be located here should be provided.
 - a. Is additional screening (i.e. walls) appropriate rather than just landscaping?
 - b. Are generators located in this area?
 - c. What noise levels can be anticipated?
 - d. What are the lighting levels and are they included in the photometric?

Construction/Phasing/Stockpile/Storage

1. Review ongoing; comments may follow.

Erosion Control & Earthwork

1. Provide details on how erosion control will be addressed as site phasing and staging changes in response to construction sequencing. For example, where are temp sedimentation traps required, their size and provide necessary calculations and construction details?
2. The ES barrier along the Thames River is a single row of fencing or a silt sock. This single barrier is insufficient. Additional protective measures shall be provided to protect the Thames River.
3. What is the anticipated cut and fill of earth material, inclusive of rock? What are the quantities and number of trips for import and export for all materials, inclusive of processed base, steel, and other materials?
4. Blasting Ordinance #105 shall be followed including State of CT blasting regulations Section 29-349-106 through 29-349-378.
5. A blasting permit is required from the Fire Marshal.
6. What ES measures will be used for the construction of all bulkheads along docks/piers?
7. All required Stormwater and Erosion Control third party inspection reports, periodic inspections and after storm events, shall be reported to the City Planner and Zoning Enforcement Officer at time of submission to the applicable state or federal agency.
8. A bond will be required for all erosion control measures. Provide a cost estimate.

Architectural Design

1. Assembly building exhaust stack shall be shown on elevations and in plan views.
2. What will be done to reduce the building's massing and height to reduce the overall impact on viewsheds from neighborhoods nearby and beyond. It should be noted the upper portions of the building will be visible from Groton Bank National Register Historic District and Fort Griswold.

A viewshed analysis should be provided to understand overall impacts from various vantage points.

3. Provide an interior building cross section depicting the submarine height and mechanical equipment needs above the hull, supporting the need for the building height and statement provided under Special Permit Narrative, Item 1 Section 4.4.E – Dimensional Standards (Building Height). Depict structural requirements, rigging, cranes, etc.

Drawings & General

4. Boundary survey is not signed or sealed.
5. Scale of the boundary survey is not correct. The sheet seems to be reduced to fit the typical titleblock.
6. Site Prep Plans depict buildings and improvements to be removed under another permit application. The plans imply these improvements are being requested under this application. It should be clearly noted which improvements are part of past approved applications and which are being requested under this permit application.
7. SY-C-112: A note calls for underground storage tanks to be removed by others. Is this part of the current application or past permits?
8. Provide details of construction of dock/pier.
9. Is the 24' access drive wide enough for the swing of a trailer truck? How will one truck see the other, are sight lines appropriate from the stop signs?
10. Provide a copy of General Permits in place with CT DEEP.

Floodplain Permit

2. Provide more details on the industrial gas tank area including how they meet the flood regulations. VE specifications apply.
3. Additional review ongoing; comments may follow.

Coastal Area Management

1. This application was referred to CT DEEP on February 19, 2019; at time of these comments no response has been received.
2. Additional review ongoing; comments may follow.

II. Traffic Impact Statement

The following comments have been prepared by BL Companies:

We have received a copy of the following documents from Fuss & O'Neill pertaining to our peer review:

- General Dynamics Electric Boat Permit Plans, prepared by Fuss & O'Neill
- Preliminary Geotechnical Recommendations Report, prepared by GEI Consultants
- Special Permit Report, prepared by Fuss & O'Neill
- Stormwater Management Report, prepared by Fuss & O'Neill
- Traffic Impact Statement, prepared by Fuss & O'Neill

As part of the effort, BL Companies evaluated the adequacy and comprehensiveness of the following facets of the Traffic Impact Statement (TIS) prepared by the applicant's consultant:

- Existing conditions of study area
- 2029 background conditions of study area
- Proposed conditions of study area
- Intersection crash, capacity, and queueing analysis

Project Understanding

This project proposes the construction of a 198,000sf assembly building with a 16,500sf utility building (the "Site") on the Groton campus of Electric Boat Corporation at 75 Eastern Point Road in Groton, Connecticut.

The adjacent roadway network was analyzed as part of this TIS, consisting of Eastern Point Road, CT Route 349, Chester Street, and Thames Street. Seven intersections, five signalized and two unsignalized, around the Site were also analyzed. A growth rate of 0.5% per year, to the design year of 2029, was applied to the 2018 existing traffic volumes at intersections within the study area. As noted in the report, no pending or approved developments have been identified in the study area. There is one resurfacing project proposed for 2019, the resurfacing of Route 349, as part of the Pavement Preservation program.

Electric Boat currently has 3,818 parking spaces at this facility, as noted on the Parking Inventory Map, "P-MAP", dated February 2019. This number of parking spaces meets the zoning requirements for the 10,882 projected employees in the peak year of 2029. Per the zoning regulations in the City of Groton, the requirement is one parking space for every three employees. Employees using the parking facilities will arrive, by shuttle and/or walking to the site.

Peer Review Comments

We offer the following comments based on our review of the Traffic Impact Statement by Fuss & O'Neill (the "Consultant") prepared for this development:

Existing Traffic Counts

1. Raw traffic counts provided in the TIS for Poquonnock Road @ Mitchell Street, Benham Road, and Chicago Avenue do not reflect the counts displayed on Figure 2: 2018 Existing Traffic Conditions. Please clarify how the traffic volumes on Figure 2 were determined from the Raw Traffic Counts.
2. It appears that the Thames Street approach has incorrect AM and PM Existing Peak Hour volumes for the right turn movement. Please revise the volumes for the movement.

Parking

1. Lot M shown on the P-MAP drawing is across the street from another parcel that is owned by Electric Boat, per City of Groton GIS. There are multiple curb cuts and a crosswalk connecting the two parcels. This appears to be used for overflow parking and there appears to be traffic coming out of the parcel on the raw traffic counts provided. Please clarify if this parcel is used for overflow parking or as a laydown area and provide additional traffic information, as necessary.
2. The P-MAP drawing has two Parking Areas labeled "Parking Lot B." We recommend the Consultant revise the name of the Parking Area along Smith Street to "Parking Lot Annex B."
3. The Consultant has two different parking space numbers on the P-MAP drawing. One is for Electric Boat only (3,818 total spaces) and one is for "Third Party" Parking providers (1,128 total spaces). The report is unclear about why this "Third Party" number is provided. Please provide additional information on the need for the "Third Party" number.
4. Lot M has signage indicating Pfizer parking so not all spaces in lot M are EB spaces. Please clarify parking calculations and "P-MAP." For Lot M. Lot M shows 180 spaces on "P-MAP" but there appears to be additional spaces in the lot. Is this for snow storage/laydown/Pfizer parking?
5. The available parking should be broken down by the classifications and their assigned parking lots. Certain lots may be overcapacity if the number of employees assigned to that parking lot exceeds the number of spaces. More detail should be provided and "P-MAP" should be revised.
6. The TIS states the increase in the number of employees starting in the year 2024 will be accommodated via additional parking facilities located outside of the City of Groton. Section 7.1.D.2-.4 of the City of Groton Zoning Regulations requires the following:
 - a. The parking spaces required for non-residential uses shall be located on the same lot as the principal use or on a lot which is within 500 feet of the principal use, such distance to be measured along the street lines to the property.
 - b. In industrial zones, if there are special and unusual circumstances that make it impractical to provide all required parking within 500 feet of the principal use, other provisions may be made for the location of parking provided parking is a permitted use in the zone in

which it is to be located and subject to Special Permit approval and Site Plan approval by the Commission.

- c. When required parking spaces are provided on land other than the lot occupied by the principal use for which they are required:
 - i. The land occupied by such spaces must be in the same possession as such principal use.
 - ii. Such land must be bound by a covenant, recorded in the office of the Town Clerk binding such owner and his/her heirs and assigns to maintain the required number of parking spaces for the duration of the use served.
7. A special permit may be required for parking outside of the 500 foot boundary.

Trip Distribution and Generation

1. The TIS states that employees will be shuttled into the Site creating no net new trips to the Electric Boat Property. This will be creating new trips, just in a different mode of transport than personal passenger vehicle. The Consultant should submit a trip distribution and trip generation for the new transit shuttle trips.
2. The TIS states that there is currently 6,578 1st shift employees. This number is to increase to 7,036 1st shift employees by 2024, a net increase of 458 employees. This number increases to 8,175 1st shift employees by 2029, a net increase of 1,597 employees. These trips are not accounted for in any peak hour analysis. The consultant should supply a trip distribution and apply this to a 2029 build condition analysis.

Intersection Analysis

1. In the analysis, the intersection of SR 649 (Rainville Avenue/ Poquonnock Road) @ Poquonnock Road/Old Farm Road was not analyzed in the TIS. However, the rest of the Chester Street/Rainville Avenue corridor from the Site to the intersection and the following intersection east of this intersection SR 649 (Poquonnock Road) @ Electric Boat Parking Lot (Lot M) were analyzed. We recommend the Consultant analyze SR 649 (Rainville Avenue/ Poquonnock Road) @ Poquonnock Road/Old Farm Road.
2. The raw traffic counts provided show pedestrian volumes of 850 people in the peak hour at some intersections. With the use of exclusive pedestrian phases at 4 of the 5 signalized intersections, this will have an impact on traffic signal analysis. We recommend the Consultant analyzes the intersections with the exclusive pedestrian signals included. We also recommend the Consultant adjust the saturation flow rate for the two-way stop controlled intersection at Route 349 and Mumford Avenue. In particular, we recommend the pedestrian blocking factors be adjusted.
3. The peak hour factor that are provided on the raw traffic counts sheets are well below the default of 0.92 that is used in the Synchro analysis. We recommend the Consultant adjust peak hour factors to reflect the existing conditions at all intersection analyzed in the TIS.
4. The intersection of Eastern Point Road @ Thames Street, Smith Street and Poquonnock Road is showing pedestrian timings when there is no pedestrian signalization. We recommend the Consultant remove the timings from the Synchro analysis.

5. Vehicle extensions throughout the Synchro analysis is set to the default 3.0 seconds. We recommend the Consultant set the vehicle extensions to their correct timings based on the available signal plans.
6. The TIS routes traffic directly to Route 349 (Clarence B Sharp Highway). The City observes that significant traffic uses Route 349 (Eastern Point Road) and Mitchell Street to access I-95 at Bridge Street. Intersections to the north of the Site should be included in the analysis. We recommend the following intersections should be included:
 - a. Mitchell Street/North Street at Meridian Street
 - b. North Street at Broad Street
 - c. North Street at Bridge Street and I-95 On-Off Ramps

Construction Management Plan

1. Construction activities will have a significant impact on the local street network. Please provide a construction management plan that includes the following:
 - a. Routing of vehicles, particularly concrete deliveries.
 - b. Water for dust control
 - c. Noise control; provide noise study when completed.
 - d. Contractor laydown areas, if not on site.
 - e. Contractor employee parking and plans for getting contractor employees to work site. When location is determined agreements for off-site parking should be provided to the city and plan for employee trips to the worksite should be determined.

III. Site/Civil Review

The following comments have been prepared by BL Companies:

We have received a copy of the following documents from Fuss & O'Neill pertaining to our peer review:

- General Dynamics Electric Boat Permit Plans, prepared by Fuss & O'Neill
- Preliminary Geotechnical Recommendations Report, prepared by GEI Consultants
- Special Permit Report, prepared by Fuss & O'Neill
- Stormwater Management Report, prepared by Fuss & O'Neill
- Traffic Impact Statement, prepared by Fuss & O'Neill

Project Understanding

This project proposes the construction of a 198,000sf assembly building with a 16,500sf utility building in the South Yard (the "Site") on the Groton campus of Electric Boat Corporation at 75 Eastern Point Road in Groton, Connecticut.

Peer Review Comments

We offer the following comments based on our review of the Site Plans and Stormwater Management Report prepared by Fuss & O'Neill (the "Consultant") for this development:

Stormwater Management Report, February 2019

1. There is no WQ device at Outfall 33B. Please confirm that there are no surface inlets at RR Drains 33B-1,2, & 3. SY-C-141 Construction Road Profile sheet indicates that these structures are to be yard drains.
2. Provide documentation demonstrating the effective treatment flow rates for each CDS WQ unit specified, as well as maximum hydraulic bypass.
3. Provide sediment storage information for each CDS unit specified.
4. The proposed HDS at CB-33C-1 is proposed to have a Type C inlet. Is this configuration acceptable to the manufacturer?
5. The Existing & Proposed Watershed Results table on Page 5 indicate that there is an increase in peak flow rate at existing outlet #34. Please confirm that the existing 30" ACCMP downstream of this outlet can safely convey the increased flows.
6. Please confirm that there will be no tidal influence at outfalls?
7. Section 5 Post-Construction Stormwater Management notes "the majority of the project area in the south yard has very shallow bedrock. The shallow bedrock prevents the use of subsurface infiltration to treat stormwater runoff". However, the Executive Summary of the Preliminary Geotechnical Recommendations Report prepared by GEI, dated December 2017, states that "The subsurface conditions on land portions of the South Yard generally consisted of 10 to 54 feet of fill over bedrock". This statement is supported by the boring logs and profiles. Please provide rationale for why primary infiltration is not feasible.
8. Roof discharge under building? How will this be handled? What elevation? Will splash pads be provided under the building?
9. Will north & south decks contain outside storage of hazardous materials?
10. Provide maintenance data for Flexstorm deck drains. What pollutants do they filter out? How often should they be inspected and cleaned?
11. How will bulkhead be constructed by CB-33A-13? This corner appears to have work below the CJL, but the silt fence shown on the E&S plan is at the top of the rip-rap slope.
12. Is there a Stormwater Pollution Control Plan? (SWPCP) Please provide.
13. Is there a long-term Operation & Maintenance Plan for all elements of the stormwater system? Please provide. Please provide all forms and include a note that the City of Groton shall be copied on yearly inspection reports.
14. Stormwater Management report page 6 notes that silt fence backed by haybales will be installed around the perimeter of on-site soil stockpiles. The silt fence detail on sheet

15. Existing Conditions Watershed Drainage Map DRA-01, references Large EPR Offsite Area E-29A (60.83 Ac.) and Small EPR Offsite area E-29B (14.00 Ac.), but does not provide a plan depicting the limits. Please provide watershed plans for both areas.

Sheet SY-C-000 Cover Sheet - No Comment

Sheet SY-C-001 General Civil Notes

1. Parking Summary Chart notes “ADA spaces (2%)”. Code requires that for lots containing in excess of 1001 parking spaces, 20 ADA spaces plus 1 for each 100 over 1000 are required. 3,818 spaces requires 49 ADA compliant spaces, where the chart shows 37 spaces. The chart indicates that 51 ADA compliant spaces are provided.
2. Please indicate number of van accessible parking spaces.
3. Has an ADA accessible route to the building served been identified? If so, please indicate location.

Sheet SY-C-010-012 Property Boundary Survey

1. Please provide survey signed and sealed by the Connecticut Licensed Land Surveyor.
2. CJL elevation is shown as elevation 2.0 NAVD88. It should be elevation 2.1 NAVD88.
3. Please explain “Remove Water Perimeter” note.
4. Note on sheet SY-C-112 says “Clean out water course to restore proper flow capacity”. Please explain, is all vegetation to be removed? To what elevation?

Sheet SY-C-100 Site Layout Key Plan - No Comment

Sheet SY-C-101-104 Topographic Survey - No comment

Sheet SY-C-110 Wetlands Plan

1. No inland wetlands flags are shown on plan along inland wetland linetype.
2. Please add note indicating the registered soil scientist who delineated the inland wetlands and the date of the delineation.
3. Please add a note indicated who located the inland wetland flags.

Sheet SY-C-111-114 Site Preparation Plan

1. The hatch pattern designated as “remove all improvements in this area unless otherwise noted” covers the stone revetment along the shoreline and the hatch extends beyond the CJL line but stops short of the water line. Confirm this is correct.

Sheet SY-C-121-124 Erosion and Sediment Control Plan (501-502)

1. Stormwater Management report page 6 notes that silt fence backed by haybales will be installed around the perimeter of on-site soil stockpiles. Please add a sediment stockpile detail to the detail sheet and a detail for silt fence backed by haybales.
2. Note #7 on sheet SY-C-501 indicates that stockpiles shall be encircled with a “hay bale or silt fence barrier”. Correct note to say “silt fence backed by haybales”.
3. No temporary sediment stockpile is show on the plans. Please provide proposed location and size.
4. There is a Temporary Sediment Trap detail on sheet SY-C-501. No Temporary Sediment Trap is show on the plans. Please provide proposed locations and sizing calculations.
5. The plans callout several areas to receive “erosion control mat”. Please specify the mat to be used, and provide a detail for installation.
6. What is the slope of grades due south of the proposed receiving station? Should this area receive an erosion control mat?
7. Please provide a double row of silt fence at all proposed flared end storm drain outlets.
8. Please add an anti-tracking apron to the driveway at the proposed receiving station.
9. Where will the site construction entrance be located? Please provide an anti-tracking apron. (Prior to the construction of the permanent access road?)
10. How will overwater work be completed? Will a floating boom be utilized?
11. Per the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, Chapter 3, Part III, Please identify an agent or agents who have responsible authority for the implementation, operation, monitoring and maintenance of E&S measures, including phone number. Please provide a narrative description of the project and any proposed phasing or sequencing. Please provide the planned start and completion dates for each phase. Please provide information and procedures to address emergency situations and the failure of E&S measures.
12. Phasing plans should be considered due to expected construction duration and sequence.
13. Please provide drainage calculations to support size of spreader pads and rip-rap size.
14. Which erosion controls are to be in place during demolition activities?
15. Please provide erosion controls at existing watercourse/drainage ditch below proposed wall construction.
16. Extend silt fencing along west side of RR tracks and fencing to eliminate the gap. Sheet SY-C-124.
17. Add inlet protection as needed for work in Eastern Point Road.
18. Please provide total area of disturbance.

Sheet SY-C-130 Site Security Fence Plan

1. Position of gate at top of south driveway may present problem for exiting vehicles who must stop on 9.3% grade. Consider alternate location of gate.

2. Indicate location of fencing with barbed wire and fencing without barbed wire.

Sheet SY-C-131-134 Site Layout Plan

1. Provide callouts for where curbing type begins and ends.
2. Add Metal Beam Rail along Eastern Point Road opposite Chapman Street for added protection of electrical receiving station and equipment.
3. Add vehicle protection at gravel drive maneuvering area west and south side of receiving station adjacent to slope.
4. Add MBR at south parking area by Building 83 and dumpster enclosure at top of slope.
5. What is “2000 gallon ecology AST”?
6. Please indicate location of snow storage areas.

Sheet SY-C-141 Construction Road Profile

1. Indicate limits of curbing.
2. Position of gate (SY-C-130) at top of south driveway may present problem for exiting vehicles who must stop on 9.3% grade. Consider alternate location of gate.

Sheet SY-C-142-144 Vehicle Maneuvering Plan

1. Confirm that fire truck vehicle show is acceptable to City of Groton Fire Marshall.
2. Utility truck “DL-23” may not be appropriate size vehicle to model turning radii. Consider using SU-30 design vehicle.

Sheet SY-C-151-154 Site Grading Plan

1. Indicate top of bulkhead elevations at SE side of proposed assembly building.
2. Consider fence at top of retaining wall adjacent to south access driveway.
3. Show proposed top of bulkhead/sheet pile elevations adjacent to floating drydock pier and on bulkhead return.

Sheet SY-C-161-164 Site Drainage Plan

1. Provide callout to reference location of internal building roof drains.
2. Provide scour protection at outfall #27A and 33A.
3. Access for maintenance at HDS 27A appears to be restricted.

4. Confirm diameter of MH structure 33C-3 behind retaining wall. This structure will be over 15-ft deep.
5. The north deck has includes proposed inlets with treatment units, yet this deck is over dry land. Why aren't these drains tied together with one treatment unit and one outlet. What is the thickness of the deck? Will there be a crawl space between the bottom of the deck and the land?

Sheet SY-C-171-175 Site Utility Plan

1. Are generators gas or diesel powered? Consider adding bollard protection.
2. Will sanitary pump station be on generator power during power outage? If not provide 1-day emergency storage.
3. Fire hydrant locations shall be reviewed and approved by City of Groton Fire Marshall.

Sheet SY-C-182 Site Landscape Plan

1. Please provide a lawn seed mix.
2. Add a note to the landscape plan specifying 6-inch depth of topsoil.
3. The Landscape Plan does not provide information for final treatment at the proposed site access road embankments (both sides of road). Please provide.
4. The Landscape Plan does not provide information for final treatment east of the RR tracks where inland wetlands are proposed to be filled. Please provide.
5. There is proposed grading and a slope depicted to the NW of the RR tracks, roadway Sta 100+00. What will be the final treatment at this slope?
6. There is a hatch pattern show in the drainage ditch/wetland swale. What does this pattern represent?
7. What will be the ground treatment at the proposed row of evergreens to the west and north of Parking Lot J?

Sheet SY-C-185-186 Cross Sections

1. Sheet SY-C-185 is missing from the plan set.

Sheet SY-C-200 Pump Station Plan and Section - No comment

Sheet SY-C-300 Receiving Station General Notes - No comment

Sheet SY-C-310 Receiving Station Medium Voltage One-Line - No comment

Sheet SY-C-311 Receiving Station Layout Plan - No comment

Sheet SY-C-500 General Notes

1. Pavement Note #1 says to construct accessible routes, parking spaces, ramps, sidewalks and walkways in conformance with the Federal Americans with Disabilities Act, yet there are no ADA spaces or accessible routes depicted on the plans. Please provide.

Sheet SY-C-501-502 Erosion & Sediment Control Details

1. Refer to previous comments.

Sheet SY-C-503-510 Site Details

1. Provide detail for fencing/railing at top/edge of bulkhead.
2. Provide additional details for hydrodynamic separators.
3. Headwall detail shows inlet grate with a note to “see detail”. Provide detail for grate.
4. Provide detail for thrust block at the bottom of vertical drain pipe.
5. Deck drain detail indicates “rip-rap over land”. What size rip-rap? How large is the splash pad and what depth?

Sheet SY-C-511 Railroad Details - No comment

Sheet SY-C-512-515 Storm Drainage Details - No comment

Sheet SY-C-519-520 Sanitary Sewer Details - No comment

Sheet SY-C-521-522 Utility Details - No comment

Sheet SY-C-101P-107P Floor Plans - No comment

Sheet SY-C-201P-202P Elevations - Please provide area of building signage.

Sheet SY-ES-100P Site Lighting Plan - No comment

Sheet SY-E-113P First Floor Lighting Plan - No comment

Sheet SY-E-115P Utility Building Lighting Plan – No comment

Sheet SY-E-LTG-P Site Lighting Photometrics

1. Is any lighting proposed at the receiving station? If so please provide photometrics.

Sheet SY-E-602P Luminaire Schedule - No comment



City of Groton, CT
Department of Planning & Economic Development

Staff Review Comments

Planning & Zoning Applications

Site Plan #469

Special Permit #461

CSP #314

Date: March 13, 2019 COMMENTS #2
Address: 75 Eastern Point Road, Electric Boat
Project: South Yard Assembly Building
From: Dennis Goderre, ASLA, AICP CUD
City Planner; goderred@cityofgroton-ct.gov; 860-446-4169

Overview

The following is provided from Groton utilities:

Groton Utilities, as supplier of electric power, water, and sewer services, have already been planning with EB personnel and EB's contracted engineering firms on the shipyard's expansion and its related increased needs.

The constrained geographic area surrounding the shipyard make expanding overhead (OH) and underground (UG) utility installations complex and involved. These factors include the electric power distribution system, telephone system, cable TV, water supply system, gravity and pumped waste water systems, storm water sewer system, natural gas piping, as well as multiple UG parallel abandoned facilities. New utilities will have to pass through the contiguous residential areas to the shipyard creating additional concerns and the need for enough space to install the required equipment.

A Master Plan must be developed to include all these factors.

Safety is critical and of utmost importance during the simultaneous intricate installations. Motor vehicle and workforce personnel must be able to safely accomplish their expected responsibilities through the proper co-ordination of the respective utilities' installations.



City of Groton, CT
Department of Planning & Economic Development

Staff Review Comments

Planning & Zoning Applications

Site Plan #469

Special Permit #461

CSP #314

Date: March 14, 2019 COMMENT #3
Address: 75 Eastern Point Road, Electric Boat
Project: South Yard Assembly Building
From: Dennis Goderre, ASLA, AICP CUD
City Planner; goderred@cityofgroton-ct.gov; 860-446-4169

Overview

1. Are flashing, colored lights required on the building?
2. What visible outdoor storage is planned?
3. Special Permit Narrative;
 - a. 7.8.B.1 & 2, 7.8.C.1: Provide a list of any permits/certifications/inspection reports associated with applicable state, and federal laws which EB is required to abide by.
 - b. 7.8.C.4: Provide information as to the level of radiation allowed to be discharged under the federal laws EB follows.
4. When will the noise study be complete?
5. Is vibration expected during construction? If so to what extent/distance? Will residents be notified?
6. Applicant should provide a public communications plan and protocol to inform residents and businesses of construction schedule, changes, when blasting may occur, and other possible activities that may cause a temporary nuisance or alarm. Start of construction, changes to sequence of work, delays in schedule, etc, and that may impact neighborhoods should be communicated. Police, Fire, Building and Planning shall also be notified.
7. Is there a need to withdraw water from the Thames River for any permanent or temporary use?

8. Sheet SY-C-131: What is the method to restore the 'Coastal Revetment Underneath Proposed Building'? What is the extent of anticipated disturbance?
9. Sheet SY-C-141: What is the wall detail along the northeast side of the drive and will its construction displace parking?
10. Datum: Add Tunnel FFE to table
11. Sheets SY-C-152 154: What are thick shaded lines representing? If utility corridor, what is the construction detail? How does this meet the flood regulations of Section 5.
12. General Note: It would be beneficial to code all construction details with detail and sheet numbers, with said codes referenced on appropriate site plans.
13. Provide one overall plan, similar to Wetlands or Security Fence plans, clearly denoting improvements within the regulated floodplains.
14. Provide a more robust and streetscape/residential oriented landscape design along Eastern Point Road rather than the utilitarian/soldier fashion planting of trees. Consider a mix of deciduous and evergreens, shrubs, bulb plantings, or similar ornamental design in context with the abutting residential neighborhood/zoning district. A street level rendering from various vantage points would be beneficial.
15. Plantings should extend further south beyond the receiving station. Consider wrapping landscaping towards the west to help mitigate views from the south looking north and west.
16. Provide a comparison of the SYAB height to that of existing buildings.

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City of Groton, CT
Department of Planning & Economic Development

Staff Review Comments
Planning & Zoning Applications
Site Plan #469
Special Permit #461
CSP #314

Date: March 15, 2019 COMMENT #4
Address: 75 Eastern Point Road, Electric Boat
Project: South Yard Assembly Building
From: Dennis Goderre, ASLA, AICP CUD
City Planner; goderred@cityofgroton-ct.gov; 860-446-4169

Overview

General

1. The property is over 1,000' from the City of Groton and City of New London municipal boundary. The Mean High Water line depicted upon SY-C-011 thru 012 was presumed to be representative of the western boundary line. Applicant is requested to confirm this western (waterward) property boundary is correct.¹
2. The applicant made staff aware the western deck may be reduced in size as a result of value engineering. The design of the deck must be determined as part of the review of this application.
3. What other improvements associated with this application may be value engineered? Other revisions may have a direct impact upon the site plan and special permit review. If other revisions are necessary to meet budgetary objectives, what are they?
4. Sheet SY-C-010: Note 4 references the incorrect zoning district.
5. Applicant shall provide calculations to assist with fire suppression requirements of the building.

Floodplain Permit

1. Provided within prior comments

¹ Source: Town of Groton GIS data

Coastal Area Management

1. Provide a copy of the CT DEEP application referenced in the CAM application.
2. References are made to various attachments (i.e. M1M3 and M5). Please provide.
3. Provide a brief description and location of the 4 priority and 22 additional habitat restoration projects.
4. Provide a map highlighting all coastal/aquatic resources referenced in the CAM application.
5. CGS 22a-92a:
 - a. Goal 8: Explain how the project is compliant with the State Plan of Conservation and Development.
 - b. Goal 9: Elaborate on the coordination that has/is taking place between agencies and the economic development benefits.

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March 11, 2019

Paul Kunkemoeller, Chairman
Planning and Zoning Commission
City of Groton
c/o Dennis Goderre, City Planner
295 Meridian Street
Groton, CT 06340

RE: South Yard Assembly Building at 75 Eastern Point Road; Electric Boat, applicant

Dear Chairman Paul Kunkemoeller and Commissioners:

Thank you for referring this coastal site plan review received February 19, 2019 to us for review and comment.

Project Description

Electric Boat is proposing to construct an over the water structure at its facility/campus at 75 Eastern Point Road. The overall site is 74.89 acres and is zoned Industrial/Technology. The purpose of the building is to construct submarines, a water-dependent use which cannot be located on the upland. The building is proposed to be 624' long and 317' wide (197,808 square feet) and 160' high. A variance for the height has been previously granted for this proposal.

The applicant is in the process of applying for required state DEEP permits.

Coastal resources are significant on the site and include rocky shorefront, freshwater wetlands, coastal hazard area, developed shorefront, shorelands, shellfish concentration area, wildlife resources and habitat and submerged aquatic vegetation.

Visual Impacts

Given the size of the proposed building, visual impacts of the structure will be significant. The Commission may wish to require the applicant to design the building to reflect Groton's nautical history with architectural details.

Conclusion

We hope that these comments are helpful to the Commission. Pursuant to CGS Section 22a-110, we request that these comments be read into the record at a Public Hearing for this application. If we can be of further assistance to you in this or any other coastal management or Long Island Sound-related matter, please feel free to contact me at 860-424-3138.

Sincerely,



Carol Szymanski, Environmental Analyst II
Land & Water Resources Division
Bureau of Water Protection and Land Reuse

Goderre, Dennis

Sent: Monday, March 18, 2019 5:27 PM
To: Grzywinski, Micheal; Szymanski, Carol
Cc: Golembiewski, Brian
Subject: SYAB: Visual Impacts

Dear Mr. Grzywinski,

Thank you for following up on your office's letter dated March 11, 2019. Your input regarding the 'visual impact' component of the proposed SYAB was helpful as the City has similar concerns with the building's aesthetic features. The City of Groton, via Special Permit, has provisions within its Zoning Regulations that allows the Planning and Zoning Commission to evaluate an application's building and site design elements. And because the applicant requires a Special Permit for the new building to be above 75', these architectural design considerations will be applied. Therefore, last week we requested the applicant explore further design alternatives to reduce the visual impacts resulting from the building's size. The building will be prominent from many vantage points. This not only includes Eastern Point Road and the Thames River, but the Groton Bank National Historic District and Fort Griswold each just north of the South Yard Campus and prominent hill top locations overlooking the Thames River Heritage Park.

You noted DEEP will include comments regarding building design within your office's review of an application submitted by Electric Boat to DEEP and US ACOE for the same project. I am hopeful you can share these draft comments. Furthermore, please provide recommendations/guidance that may assist the Planning and Zoning Commission as it pertains to their review of 'visual impacts' under the Coastal Area Management Act. We wish to complement both jurisdictional reviews to the extent practicable and in light of the City's design guidelines.

The City understands and respects that this is a heavily developed industrial waterfront with several functionally dependent facilities, which includes Electric Boat. However, context sensitive design and planning has evolved substantially over the last decades, and we strive to be respectful of how this facility will impact the City for generations to come. The currently developed, utilitarian industrial buildings along the Thames River waterfront, is not indicative of how future patterns should continue to evolve.

Please contact me should you have any questions. EB's application drawings can be downloaded from the below link with architectural building elevations located in the last few pages, sheet numbers SY-A-201P to 202P.

http://cityofgroton.com/download/Boards-and-Commissions/planning_and_zoning_commission/application_materials/2019/2-february/electric_boat_assembly_building_site_plan_special_permit/application_material_021519/GDEB-SYAB-Permit-Plans-02-13-2019_esigned.pdf

Sincerely,

Dennis G. Goderre ASLA, AICP CUD
City Planner

City of Groton
295 Meridian Street
Groton, CT 06340
Direct: 860-446-4169
Cell: 860-235-2041