

# MEMORANDUM

**TO:** Lauren P. Lind, Planning Director  
Town of Cohasset, Massachusetts

**FROM:** Daron Kurkjian, PE (MA), Senior Project Manager  
M. James Riordan, AICP, LEED AP, Senior Project Manager  
Weston & Sampson Engineers, Inc.

**DATE:** August 21, 2020

**SUBJECT:** Peer Review: 127 & 87 Elm Street  
Architecture, Landscape Architecture, and Affordable Housing

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## Introduction

Weston & Sampson Engineers, Inc. (Weston & Sampson) was requested by the Town of Cohasset (the Town) to provide a peer review of the Site Plan and Special Permit for the proposed redevelopment of 127 & 87 Elm Street within the Harbor Village Business Overlay District (HVBOD) Zoning. 124 Elm Street is currently improved with a two-story inn, known as the Cohasset Harbor Inn, and 87 Elm Street includes a two-story multifamily/commercial structure. The Site Plan Review and Special Permit application to redevelop the subject parcels was opened and first heard during the June 17, 2020 public hearing. Subsequent Planning Board hearings attended by Weston & Sampson include on July 8, 2020 and August 5, 2020.

This memorandum summarizes the results of our peer review of Architecture, Landscape Architecture, and Affordable Housing items. The letter report is prepared pursuant to our July 1, 2020 contract with the Town, which specifies consideration of the conditions of the peer review and requirements under specific Town Bylaws. Requirements of specific Town Bylaws are discussed further under the Peer Review section of this letter report. In general, materials that we reviewed to prepare this letter report include those submitted with the Site Plan Review and Special Permit. We collected these materials from the Town's website.

## Overview of the Proposed Development

CHI Elm Street Realty LLC (the applicant) is proposing construction of 29 multi-family residential units, a 20,000 square foot (SF) waterfront public park including a 10-foot wide shoreline accessway, and commercial/retail spaces including one to two outdoor seasonal kiosk(s). The development includes three proposed buildings.

The project area is within the Cohasset HVBOD and the eastern portion of the 124 Elm Street property includes a seawall along Cohasset Harbor. The subject properties are located on the west and east sides of Elm Street and are shown on Cohasset Assessor records as a 1.23-acre parcel F5-30-021 (124 Elm Street) and a 0.41-acre parcel F5-27-004 (87 Elm Street).

## Peer Review

This peer review is provided under the general review topics listed below. This memorandum follows from our peer review memorandum dated July 22, 2020 of the following peer review topics:

1. Bylaw Compliance
2. Commercial/Retail Space
3. Site Plan Layout & Public Realm
4. Traffic & Circulation

The review topics of this memorandum are listed sequential as follows:

5. Architecture
6. Landscape Architecture
7. Affordable Housing

The format of each reviewed items is an underlined request or action for the applicant, our evaluation and analysis, and the *italicized applicable standard and enforceable policy*. Weston & Sampson reviewed the application based on the following bylaws and policies as well as engineering industry standards:

- Site Plan Review per Chapter 300, Article 12.6 of the Cohasset Zoning Bylaws;
- Special Permit per Chapter 300, Article 12.4, and Article 22 of the Cohasset Zoning Bylaws; and
- Village Business District & HVBOD Design Guidelines referenced in Article 22.6 of the Cohasset Zoning Bylaws.

## 5.0 ARCHITECTURE:

Weston & Sampson reviewed the applicant's Site Plans and Special Permit Application for compliance with Town Bylaws and policies related to Architecture.

### 5.1 **Roof-Based Equipment & Flat Roof Height**

The applicant should include on renderings and/or plans and identify the heating ventilation and air conditioning (HVAC) and other equipment that may be situated upon the roof and what screening may be proposed. The applicant should provide supporting documentation including revised sections related to the combined sloped and flat roof that affect the allowable building height.

The applicant's plans do not include HVAC units and other equipment that may be situated on the roof or visible above the roof line. Projections including screening railings would be included in the 5% limit of roof area. The letter to the Planning Board on May 8, 2020, indicates that mechanical equipment will be placed on the rooftops and screened from view from the streets. Additional details, rendering or sections of the screening would be beneficial.

As shown on the April 2020 Planning Board Packet Renderings including "Aerial View – Proposed Design" flat roof sections of the structures align with the top of roof ridges. The flat roof must be edged by a railing or parapet per the design guidelines HVBOD item 5.5.6. Per Section §300-2, the required railing or parapet is included in the calculation of building height for flat roofs. Section §300-22.8(C) limits building height to a maximum building height of 35 above Base Flood Elevation. While section views of the proposed building show the mid-point of the sloped roof, the applicant should revise the sections to note the presence of a flat roof at the roof ridge line and depict the railing or parapet that extend above the flat roof in conformance with the bylaws and HVBOD. As depicted, the flat roof areas do not appear to conform to the height limitations within the HVBOD. Revised sections and renderings of the roof are needed to evaluate the proposed building height.

*§300-2.1 definition of building height shall be "The vertical distance above the mean level of the preconstruction ground within 10 feet of the outside walls of the structure. [...] On flat roof, the height is measured to the top of the parapet or to the top of the main roof surface, whichever is higher. On a sloped roof, height is measured to the midpoint of the roof surface; the midpoint shall be half the distance from the plate line to the ridgeline measured over the outer surface of the roof boarding, and the ridgeline may not be higher than five feet above the maximum allowed height. The limitations of this clause shall not apply to projections not used for human habitation which, in the aggregate, do not exceed 5% of the roof area, including without limitation chimneys, antennas, railings and cupolas."*

*Per §300-22.8(C) "Maximum height is 35 feet above Base Flood Elevation (BFE)."*

*Section 5.5.6 of the HVBOD discourages flat roofs with the following requirements: "Flat roofs are generally discouraged, but may be permitted only when they are occupiable and accessible from an interior room and must be edged by a railing or parapet, or when they serve another functional purpose such as accommodating solar panels."*

### 5.2 **Residential and Non-Residential Unit Ventilation:**

The applicant should clarify how HVAC systems are configured and how they are vented and take in fresh air.

Additional detail on the proposed HVAC system and amount of fresh air intake is requested. Considerations to privacy screens should be taken and shown on renderings if rooftop mounted equipment will be used as indicated, the configuration of equipment and screens should be shown for approval.

*HVBOD Section 5.5.5 “Mechanical equipment, including metal chimneys, and elevator penthouses at grade, attached to, or on the roof of a building, shall be screened from view from streets; or they shall be integrated into the overall design of the building by use of materials, placement, roof shape or form, or other means. Skylights, vent stacks, and other roof protrusions should be designed so as not to be visibly obtrusive from streets and sidewalks.”*

*HVBOD General note in Section 5.5: “The use of varied rooflines with traditional forms provides visual interest and variety. Screening of roof-top mechanical equipment is required.”*

### **5.3 Ventilation of Food Preparation/Restaurant Spaces:**

The applicant should specify if retail food stores or restaurants are planned for these spaces.

If restaurants are planned for these spaces, kitchen exhaust should be shown on the roof to show the impact these may have and adherence with the appropriate codes regarding fire separation and public safety will need to be taken.

*HVBOD Design Guidelines Section 5.5.5, see the above item for guidelines.*

### **5.4 Underground Parking Ventilation:**

The applicant should clarify how underground parking structures are vented.

The floor plans do not show vertical shafts or floor area taken by vent shafts. If alternate ventilation is planned, depict the proposed underground ventilation for the three proposed buildings. The parking under 87 Elm Street could be considered an open structure if open on two sides. Area of these openings should be at least 20% of the total perimeter wall area. 124 Elm Street may be considered an enclosed parking structure.

*2015 Uniform Mechanical Code. Table 403.7 indicates that the minimum exhaust rate for an enclosed parking garage is 0.75 cfm per square foot.*

### **5.5 Electric Transformers:**

The applicant should depict the location of electrical equipment including but not limited to transformers as proposed on the site plan/floor plans.

The location of electrical equipment will be useful to review as public view of both the front and rear of buildings is present based on retail parking at 87 Elm Street and the public park at 124 Elm Street.

The concern here is not related to a specific code issue but to the aesthetics of the building and neighbors concerned with potential unsightly electrical equipment and the possibility of walkway obstructions. These aesthetic considerations align with the HVBOD General Public Policy Objectives.

*HVBOD 4.1. General Public Policy Objectives. “These Design Guidelines are based on site planning and design principles that articulate public interests in the physical design and aesthetic qualities associated with the land and its development. Due to the historic nature of the existing built environment in Cohasset*

*Village, and its proximity to residential neighborhoods, particular emphasis has been placed on the relationship of new development to its surroundings.”*

### **5.6 Underground Parking Flooding & Equipment Locations:**

The applicant should clarify how underground parking structures are to be protected from potential flooding and storm surge from the adjacent Cohasset Harbor and James Brook. Utility spaces below flood elevations should also be refined on how these are protected from flood damage including but not limited to any sewer and stormwater pumps, generators, switchgear, HVAC equipment, and elevator machinery.

The floor plans do not show means to restrict floodwater from entering the underground parking and utility areas. Information on the resilient design features of the proposed buildings is requested. Additional information on the protection of areas subject to flooding and compliance with applicable state building code and federal requirements including, but not limited to, those listed below.

*780 CMR Section R322.1 as revised in the ninth edition of the Massachusetts State Residential Code states that “Buildings and structures constructed in whole or in part in flood hazard areas and coastal dunes, and substantial improvement and restoration of substantial damage of buildings and structures in those areas shall be designed and constructed in accordance with the provisions contained in this section. Buildings and structures located in more than one flood hazard area and coastal dunes shall comply with the most restrictive provisions. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24. See section R105.3.1.1 for substantial improvements and damage and see section R309 for garage requirements. Flood hazard areas include the following: 1. AO zones, where shallow flooding exists without waves; 2. A zones; and 3. V zones, where high velocity wave action exists and wave heights are greater than or equal to three feet.”*

*44 Code of Federal Regulations (CFR)*

### **5.7 Americans with Disabilities Act (ADA) Access to 87 Elm Street Non-Residential Space**

The applicant should clarify how ADA users would access the 87 Elm Street non-residential space.

Ground floor gravel parking is shown for the 87 Elm Street Non-Residential space. The path is not defined for users to traverse the parking lot and enter the retail space.

## 6.0 LANDSCAPE ARCHITECTURE:

### 6.1 Flooding of Landscaped Areas:

What is the historic high-water elevation? In addition to garage and first floor elevation impacts as well as coastal / climate barrier protection, the plant material selection could be impacted by flooding.

Saltwater spray and/or saltwater or freshwater flooding inundation of the landscaped area may damage plantings. The applicant should confirm the types of plantings are selected for a marine environment.

### 6.2 Planting Pallet:

Planting pallet should consider the Principal Native Plant Species: South Shore List and the Cohasset Conservation Commission Plant Selection for Coastal Banks if the site is anticipated to be inundated for extended periods now or in the future.

The applicant should consider specifying installation of the plantings the Town has determined are appropriate for Cohasset. The seawall may not allow for coastal bank plantings.

<https://www.cohassetma.org/DocumentCenter/View/2579/Principal-Native-Plant-Species---South-Shore>  
<https://www.cohassetma.org/DocumentCenter/View/2580/Cohasset-Conservation-Commission---Wetland--Coastal-Plantings>

### 6.3 Walkways & Lighting:

Pass-through walkways should be constructed of a mixture of masonry pavers and concrete, or other materials that complement adjoining sidewalks. The Applicant's lighting plan identified under peer review item 3.4.4. "Exterior Lighting," should include lighting of walkways.

Applicant should consider walkway materials that add visual interest matching the HVBOD design guidelines. In addition, walkways are encouraged to have nighttime lighting for safety. Refer to the HVBOD design guidelines for lighting requirements.

*HVBOD Section 6.1.6.1. "Sidewalk material should include a mixture of masonry pavers, concrete, and/or bituminous concrete to provide visual interest and to delineate sidewalk areas that are designed to be used for other functions such as outdoor seating areas. However, the use of poured concrete and bituminous concrete within the same sidewalk is discouraged except as necessary to accommodate features such as handicapped access ramps."*

*Section 6.1.7.3: "Pass-through walkways should be designed for pedestrian use and should provide adequate lighting for nighttime safety. These locations should also include landscaping, public art, and/or street furniture as space allows in order to add visual interest, functionality, and to create a welcoming pedestrian environment."*

*Section 6.3: "For reasons of safety and the reduction of light trespass, glare and light pollution, all outdoor lighting in the District should comply with the following provision: Direct light emitted by exterior luminaire should not emit directly by a lamp, off a reflector, or through a refractor above a horizontal plane (90 degrees) through the fixture's lowest light emitting part."*

#### 6.4 Sidewalks & Tree Planting

The applicant should verify that the design incorporates design guidelines provided in the HVBOD relating to frontage sidewalks and plantings. Applicant should note zone right-of-way setbacks on plans. Applicant should clarify the location of trees as locations vary from renderings to plan views.

Applicant to review HVBOD Section 7.1.4 and incorporate sidewalk planting guidelines as appropriate. Applicant should clarify location of trees as the April 2020 "Planning Board Packet" includes Landscape Grading Plan L4.00 and the Illustrative Site Plan that depict trees in on-property landscaping while select renderings including "Aerial View – Proposed Design" and "View Corridor – Proposed Design" show trees both in on-property landscaping and within the sidewalk. If trees are proposed within the sidewalk, a detail for the proposed grates/landscaping is needed per the HVBOD design guidelines copied below.

*Section 7.1.4: "Frontage sidewalks should include a variety of landscape elements including trees with irrigation grates, planters, and seasonal plantings, unless trees and plantings are provided and maintained on the property within a 5-foot distance of the front property line. In this case, trees should be planted at a maximum spacing of forty (40) linear feet, and installation of grates would only be required if trees are surrounded by impervious surfaces. Landscape features should be selected that enhance the pedestrian environment such as plazas, sitting areas, and outdoor cafes."*

#### 6.5 Turf Areas & Tree Plantings:

Where feasible, the applicant should consider low water vegetative ground cover. Applicant should refer to HVBOD Planting guidelines for water consumption and street tree sizing guidelines.

To reduce water consumption, the applicant may consider alternatives to turf that are low water ground cover. The HVBOD guidelines include requirements for minimum tree sizing as indicated in Sections 6.5.3.4 and 6.5.3.5.

*HVBOD Section Landscaping Section 6.5.1.3 "Conservation of water, including but not limited to preservation of existing native vegetation, and reduction in amounts of irrigated areas."*

*Section 6.5.3.4: "Street trees should be installed in metal grates at least sixteen (16) square feet in area to allow for infiltration of rainwater. Where feasible, the practice of continuous trench planting should be incorporated."*

*Section 6.5.3.5 "Trees should be a minimum of 3" caliper measured at breast level at time of planting."*

#### 6.6 Landscape Maintenance Plan

The applicant should provide a Landscape Maintenance Plan for the proposed redevelopment including plans for areas of proposed public use.

The applicant should include a maintenance plan including for the proposed open space. The applicant has proposed that the public park and outdoor space offset the minimum non-residential building area usage as identified under Section 2.0 of the July 22, 2020 Peer Review memorandum. The aesthetics and functionality of that public outdoor space will require long-term maintenance.

The Landscape Maintenance Plan may include but is not limited to weeding and invasive species removal, mowing, replacement of weakened or dying plantings and trees, and irrigation. While seasonal use is required, for safety the winter path clearing of snow and ice are also recommended to be

described. Plant selection along streets, driveways or parking lots must be salt tolerant per the HVBOD guidelines.

*HVBOD Section 6.5.3.2 "All plantings should be native species. Invasive plant species are prohibited. Plants located near streets, driveways or parking lots must be salt-tolerant."*

*Section 6.8.2 "Ownership and maintenance. The plans and documentation submitted to the Planning Board within the permitting process shall include a description of proposed ownership and maintenance of all common open space or facilities."*

## **6.7 Signage:**

Applicant should provide signage information for wayfinding, identification or parking areas and other information.

Applicant should consider wayfinding signage especially through public access walkway and associated with ADA, public and private parking.

*HVBOD Section 6.4. Signage." Exterior signage is governed by Section 6 of the Cohasset Zoning Bylaws. In addition to signage for private properties, installation of small, externally illuminated wayfinding signs is encouraged to assist visitors to locate sites of interest within the Village Business District. Wayfinding Signs should not exceed seven (7) feet in height, and may be installed with the approval of the Planning Board for the benefit of both automotive and pedestrian traffic."*

## **6.8 Service and Loading Areas**

The applicant should clarify locations of service and loading that should be screened from streets and abutting properties to the greatest extent possible through the provision of architectural screening, landscaping, and fencing.

Plans can define service and loading areas. Based on public access to front and rear of buildings, aesthetics of these screenings are especially important.

*HVBOD 6.6. Service and Loading Areas.*

*"6.6.1. Service and Loading Areas should be screened from streets and abutting properties to the greatest extent possible through the provision of architectural screening, landscaping, and fencing. Chain link fencing is not acceptable for screening purposes.*

*6.6.2. Service and Loading Areas should not face an open space or public street directly."*

## 7.0 AFFORDABLE HOUSING:

Weston & Sampson reviewed the applicant's Site Plans and Special Permit Application for compliance with Town Bylaws related to affordable housing. Unlike the technical sections of this peer review, the affordable housing section requires upfront policy decisions from the Planning Board based on the needs, concerns, and goals described in the Housing Production Plan and the Town's Master Plan. Critical policy questions include:

- Is the development of affordable units *preferred* over the fee in lieu of units?
- If development is preferred, will the Planning Board require the construction of *all* required units or a portion?
- If development is preferred, will the units be required onsite or at another location to be determined?

If the Planning Board authorizes the applicant to calculate a proposed fee in lieu of units, an additional technical review of the fee calculation is recommended.

### 7.1 **Affordable Housing Requirements (Inclusionary Zoning)**

The applicant is required to provide three affordable units or provide a fee in lieu of construction.

Twenty-nine units are proposed requiring three "local action units." We understand that the developer may be planning to propose only two local action units because five of the existing units are proposed to be removed from the development (thus, the application will result in 24 *net* new units, which taken at 10% and rounded *down* would result in two units). Firstly, we would point out that there is no consideration in the bylaw for units that have been removed and replaced. The trigger for a calculation of local action units is "any residential development" (§ 300-4.3N). §3-2.1 (Definitions) describes development as "any man-made change [*sic*] to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations." Secondly, we note that fractional remainders from the 10% calculation are to be rounded up to whole numbers of units. Rounded up, 10% of either 29 units or 24 units results in three whole units. Therefore, the developer must propose three local action units or a fee in lieu of units.

Notwithstanding, we recommend that the Town consider its own past practices and policies as well as the intent of the bylaw. Because the bylaw consistently defaults toward the creation of local action units (evidenced by the terms "rounding up" and "whichever number is greater"), it appears that the intent is to maximize the number of action units. Furthermore, crediting a developer for units that have been removed and replaced raises additional questions (regarding condition and habitability of the existing units, for example), that will create precedent for applications going forward. In addition to these considerations, the Planning Board may also wish to consider whether units required or developed through the Cohasset Affordable Housing Trust are to be located on or off the development site, as that could impact other aspects of the Site Plan and Special Permit Application.

§300-4.3N (Additional Use Regulations) states that "*In any residential development containing five or more units within any district and under any portion of the bylaw, a minimum of one unit or 10% of the total number of dwelling units, whichever is greater, shall be required to be "local action units" (as defined in 760 CMR 56) in accordance with the standards and conditions set forth in 760 CMR 56, so as to be eligible for inclusion within the "subsidized housing inventory" (as defined in 760 CMR 56) of the Town. In*

*the event that the 10% calculation results in fractional units, there shall be a rounding up to the nearest whole number.”*

## **7.2 Fee in Lieu of Units**

The Planning Board must authorize the applicant to calculate the fee in lieu of units (but is not obligated to accept that figure).

The applicant’s attorney requests authorization to calculate a fee in lieu of units for the Planning Board’s consideration. §300.4.3.N(1) requires that the Planning Board first authorize the “fee in lieu of units” option.

*§300.4.N(2) states that fees are calculated “as a per-unit cost as calculated from regional construction and sales reports.” The applicant should provide evidence and support of the proposed fee payment and how it was calculated. As noted above, it is recommended that this calculation receive a technical review. Alternatively, the Town can hire a third party to calculate the fee. The Planning Board ultimately makes the final determination of acceptable value, and the fee amount and schedule can be approved by the Planning Board without additional required approvals.*