

AMORY ENGINEERS, P.C.

WATER WORKS • WATER RESOURCES • CIVIL WORKS

25 DEPOT STREET, P.O. BOX 1768
DUXBURY, MASSACHUSETTS 02331-1768

TEL.: 781-934-0178 • FAX: 781-934-6499
WWW.AMORYENGINEERS.COM

September 9, 2022

Mr. Jim Young, Land Use Administrator
Southfield Redevelopment Authority
223 Shea Drive
South Weymouth, MA 02190

Subject: Proposed Hotel Development – Development Plan & Site Plan Approval

Dear Mr. Young:

In response to your request we have reviewed the following documents in support of the proposed hotel development located at the corner of Main Street (Route 18) and Shea Drive:

Application documents:

- Proposed Site Plan (20 sheets), dated July 14, 2022, prepared by Bohler
- Fire Truck Turning Exhibit, dated July 14, 2022, prepared by Bohler
- Easement Exhibit, dated July 14, 2022, prepared by Bohler
- Drainage Report, dated July 14, 2022, prepared by Bohler
- Architectural Plans (A1.01, A1.02, A3.01 and A3.02), dated July 15, 2022, prepared by Opechee Construction Corporation
- Joint Application for Development Plan and Site Plan Approval, dated July 19, 2022
- Variance Application, dated July 19, 2022

Peer review & municipal comments:

- Architectural peer review, dated September 1, 2022, prepared by Davis Square Architects
- Letter from Weymouth Conservation Commission, dated August 30, 2022
- Letter from Weymouth Mayor Hedlund, dated August 26, 2022
- Peer Review report, dated August 26, 2022, prepared by BETA Group, Inc. (BETA)
- Memorandum, dated August 11, 2022, prepared by Wetland Strategies, Inc.

The documents have been reviewed for conformance with the Zoning and Land Use By-Laws (ZBL) and Subdivision Rules and Regulations (R&R) for NAS South Weymouth, MassDEP Stormwater Standards (SMS) and good engineering practice.

Background

The site is comprised of two parcels with a total land area of about 97,341 square feet (s.f.). It is located partially located within the Open Space Commercial (OS-C) district and partially within the Shea Village Commercial District (SVCD) and the Neighborhood Sub-District of the Mixed Use Overlay District. The site is currently undeveloped with walkways, landscaped areas, woodland and wetlands. The proposed calls for the construction of a 99 room hotel with associated driveway, parking areas and landscaping. There are a number of existing easements on the property which are proposed to be revised/abandoned/relocated as part of the development. There are also a number of resource areas that will be impacted as part of the

project, including bordering vegetated wetlands, bordering land subject to flooding, bank and land under water.

The Applicant is proposing to develop the project under the underlying SVCD zoning which will require compliance with the Office/Commercial Building Form. The Applicant is seeking the following variances and waivers from the ZBL, R&R and other SRA regulations:

Variances:

- ZBL §6.5 and Exhibit F – Office/Commercial Building Form; which requires three parking spaces per 1,000 s.f. of gross floor area. *The proposed 53,890 s.f. hotel would require 162 spaces and 101 spaces are proposed.*
- ZBL §6.5 and Exhibit F – Office/Commercial Building Form; which requires that parking spaces be located to the rear of the building. *The proposed parking spaces would be located along the south, west and north sides of the building. The parking on the west and north sides would be between the building and Main Street (Route 18) and Shea Drive, respectively.*
- ZBL §6.5 and Exhibit F – Office/Commercial Building Form; which requires the primary entrance be oriented toward the street. *The primary entrance to the hotel would be on the east side of the building, not facing either of the adjacent streets.*

Waivers:

- R&R §4.5.A.4; which requires shade trees to be planted along both sides of Shea Drive between forty and eighty feet apart. *No new trees are proposed to be planted along the street.*
- R&R §4.5.A.5; which requires shade trees to be planted along both sides of Main/Neighborhood Streets between thirty-five and fifty feet apart. *This waiver is being requested in the event that the SRA determines that Main Street (Route 18) falls into this category. No new trees are proposed along the streets.*
- R&R §4.6.I; which requires 1) a minimum of 10% of the interior of parking areas to be landscaped; 2) the maximum length of a row of parking spaces at fifteen spaces without a landscaped island; 3) one tree for each eight parking spaces to provide a minimum of 40% of the parking spaces to be shaded at noon; 4) parking lots adjacent to streets to be screened from view; 5) buffer strips along property lines to be a minimum of eight feet; 6) that impervious areas drain to buffer strips (bio-swales) before discharge to a drainage system; and 7) screening of utilities (junction boxes, meters, etc.). *Less than 10% of the interior of proposed parking areas are landscaped; rows of parking exceed fifteen spaces (16, 17, 23 and 34 space rows are proposed); the parking lot will not have 40% shaded by trees; the parking areas will not be screened from the streets; eight foot wide buffer strips will not be provided (two feet is proposed); impervious surfaces will not drain to buffer strips before discharge to the drainage system and the proposed utility boxes, etc. at the southwest corner of the site will not be screened.*
- Architectural and Urban Design Standards (AUDS) §2.2.3.1; which requires that loading docks, service areas and trash disposal facilities not face open space or streets. *The*

proposed dumpster location is visible from Main Street (Route 18) and the OS-C district to the east.

- AUDS §7.3.2; which requires landscaping of parking areas to comply with the R&R. This is the relief requested under R&R §4.6.I. *See above.*
- AUDS §7.5; which requires 1) parking lots to be behind or to the sides of buildings; 2) parking be set back ten feet from right-of-way property lines; 3) screening of parking areas from streets; and 4) minimum width of landscaping area to screen parking of five feet. *Parking is proposed between the building and streets; parking will not be set back ten feet from property lines; parking areas will not be screened from the streets; and there will not be a five foot wide landscaped screened area (two feet is proposed and it appears that it will only be planted with grass).*
- Sustainability Standards and Guidelines (SSG) §2.5 – Green Streets; which requires potable water use for irrigation to be reduced by 50% through the use of graywater, reclaimed water, etc.; and use of bio-swales and planting buffers to mitigate stormwater runoff as required by the R&R. *The project proposes to use potable water for irrigation and does not propose bio-swales and planting buffers for stormwater mitigation.*
- SSG §3.4 – Water Use Reduction; which has the same requirements for use of potable water for irrigation as SSG §2.5. *The project proposes the use of potable water for irrigation.*
- SSG §3.6 – Heat Island Reduction; which requires measures to reduce heat islands. *The proposed project does not include any measures to reduce heat island effects within parking areas.*
- SSG §3.7 – Impervious Surfaces and Stormwater Runoff; which requires that no more than one row of parking be located between the principal structure and the street. *Two rows of parking are proposed between the building and both Main Street (Route 18) and Shea Drive.*

Comments:

General

1. Vehicular access around the building is limited. If all spaces are occupied there is no way for a vehicle to turn around, which will require someone to back up all the way around the building. Additionally, a trash truck will need to either back in or back out around the building to get to the dumpster.
2. Consideration should be given to relocating some of the handicap parking spaces to the north side of the building so that they are closer to the primary building entrance.
3. The exterior lighting as proposed would require waivers from R&R §3.5.D(3)(a) and §3.5. D(3)(c)(i); which limits light intensity at property lines to no more than 0.5 foot candles. Light intensities along the southern property line proximate to the hotel will be up to 1.4 foot candles and up to 2.1 foot candles at the property line right behind the hotel (adjacent to the primary entrance).
4. Light fixture and pole specifications (cut-sheets) should be included in the plans.

5. The plans should show the center island and pavement markings in Shea Drive to demonstrate their relationship with the proposed driveway.
6. In the Joint Application, under the Site Plan Review Standards discussion, ZBL §12.5.B (page 10), the narrative states that 6,975 s.f. of the existing SVCD district land will be open space post-development. This area should be identified on the plans.
7. In the Joint Application, under the discussion about compliance with the AUDS §5.3.2.2 (page 19), it is stated that the facades facing Route 18 and Shea Drive will have windows encompassing 15% of wall area and that the actual window area on the facades is indicated on the building elevation sheets A3.01 and A3.02. However, those drawings do not list the actual window areas of the facades.
8. The hotel will be receiving deliveries and a loading space should be identified.
9. We question what the Driveway Construction detail on Sheet C9.01 is meant to depict. Will the onsite driveway have a cement concrete base?
10. In accordance with R&R §3.4.S(1), all granite curb should be specified to be Type VA4.
11. General Notes 6 and 13 and General Grading & Utility Plan Notes 10 and 11 on Sheet C-102, and Erosion & Sediment Control Notes on Sheet C-602 reference a geotechnical report (also). The geotechnical report should be submitted.
12. There should be a detail for the stone dust path. We note that the stone dust path will pass through the compensatory flood storage area which may make it impassable at times.
13. The proposed siltation barrier should be extended to Main Street and Shea Drive to delineate the limit of work.

Utilities and Stormwater

1. We concur with all of the stormwater related comments contained in the BETA Group peer review letter, especially in reference to seasonal high groundwater. With adjacent wetlands at about elevation 152, seasonal high groundwater would be expected to be at about that elevation on site. Bottoms of the proposed subsurface infiltration systems are at El. 147, which are likely seven feet below where they are required to be (minimum two feet of separation to seasonal high groundwater).
2. SMS does not allow infiltration systems to be within fifty feet of surface waters and wetlands are considered surface waters. As noted in the BETA letter, proposed replicated wetlands would be within eighteen feet of the subsurface infiltration system and the existing wetlands are within thirty-five feet.

3. Energy dissipaters should be proposed at all outlets from the drainage system to prevent scour and erosion.
4. The locations of inspection ports for the subsurface infiltration systems should be shown in plan. We recommend at least one inspection port for each row of chambers.
5. The HydroCAD model indicates that catch basin CB-1 will be the emergency overflow from subsurface infiltration system 1 and the Grading and Drainage Plan (sheet C-401) appears to show no curb behind the catch basin. However, it is not clear on the Site Layout Plan (sheet C-301) whether there will be a curb there or not. There should not be a curb, but perhaps a paved weir, so that overflow from the system may flow off the parking lot toward the wetlands. A stabilized channel to convey the flow should be considered.
6. R&R §3.6.J(1) requires three feet of minimum cover over drain lines. Drain lines at all proposed catch basins are proposed to have three feet of vertical distance from the grate to the invert of the pipe. With 12-inch HDPE pipe, this will leave 1.8 feet of cover.
7. There is existing drainage infrastructure that conveys stormwater from Shea Drive, through the subject site to the wetlands. This infrastructure is proposed to remain. However, there is no information on the plans related to the sizes or elevations of the piping. This should be shown on the plans to confirm that proposed design elements will not create conflicts with the existing infrastructure.
8. The plans show one water line to service the building. Separate water lines for fire protection and domestic use are required. Documentation should also be provided to demonstrate that there will be adequate water supply for fire flow and domestic use.

Please give us a call should you have any question.

Very truly yours,

AMORY ENGINEERS, P.C.

By:



Patrick G. Brennan, P.E.



PGB