



**Stantec**

**Stantec Consulting Services Inc.**

65 Network Drive 2nd Floor, Burlington MA 01803-2767

September 24, 2021

File: 179411027

**Attention: Mr. Richard Gosselin, Chairman**

MILLBURY PLANNING BOARD

Municipal Office Building

127 Elm Street

Millbury, Massachusetts 01527

**Reference: Site Plan/Stormwater Management Permit**

**192 Millbury Avenue**

**Millbury, Massachusetts**

Dear Mr. Gosselin:

Pursuant to the Board's request, Stantec Consulting Ltd. has reviewed the Site Plan/Stormwater Management Permit *192 Millbury Avenue*, a proposed multi-family building in Millbury. The following materials were received on September 6 and 7, 2021.

- Site Plan, Stormwater Plan, and Landscape Plan (3 Sheets), dated August 25, 2021; Application of Site Plan Review and Application for Stormwater Permit, dated August 30, 2021; Stormwater Management Analysis, dated August 25, 2021; Stormwater Pollution Prevention Plan, dated August 25, 2021, and supporting documentation each as prepared by Robert G. Murphy & Associates, Inc. (RMA)

The Site Plan/Stormwater Management Permit submittal was reviewed for conformance with the Town's Zoning Bylaws, the Board's Design Standards, and generally accepted engineering practice. We offer the following comments regarding the *Site Plan/Stormwater Management Permit 192 Millbury Avenue* submittal for the Board's consideration.

**SITE VISIT**

As part of the Stantec's review, Mr. David Glenn (Stantec) conducted a site visit to view existing surface features and site conditions.

**SITE PLAN**

The proposed site development consists of an existing vacant commercial building (approximately 2,560 square feet) with associated parking, infrastructure, and landscaping. **The existing 0.26-acre parcel is located within the Business II (B-2) and Residential III (R-3) Districts, with 89.49 ft of frontage off Millbury Avenue as shown on sheet 1 of 3. We note the Business II (B-2) Zoning District requires a minimum 100 feet of frontage and recommend this item be addressed by RMA.**



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The project site is located off Millbury Avenue with ingress and egress to the project site is shown via two (2) proposed paved drives of 9 feet and 20 feet in width. The site will be serviced by municipal water and sewer

Topographic features of the parcel are typified by moderate to steep slopes ranging on average from 13 % to 25 % generally fall off in an east to west direction towards the rear property line which abuts Dorothy Pond.

**Section 12.4 - Site Plan Review, Subsection 12.44 – Contents and Scope of Application of the Town's Zoning Bylaws requires specific information be shown on the Site Development Plan. Stantec has performed a technical review of these requirements with the understanding the Town Planner will perform an independent review of the Site Plan for conformance with the site plan review zoning bylaw. We offer the following comments for the Board's consideration:**

1. North Arrow and correct scale in title box be shown on site plan sheet 1 of 3.
2. Construction of the two paved drives off Millbury Avenue will require reconstruction of the existing sidewalk and curbing. We recommend these improvements be further identified on the site plan.
3. We question on-site snow storage locations and recommend additional provisions for snow removal be addressed by the applicant.
4. Location and dimensions of all signage and refuse containers need to be identified on the site plan.
5. The site plan indicates the site will be serviced by municipal water and sewer. We question if the applicant has received approval from the Town DPW and Aquarion Water Company regarding these service connections.
6. Lighting and Photometric Plan was not provided with the Site Plan submission. We recommend this item be addressed by the applicant.
7. Parking calculations on sheet 3 of 3 identify nine (9) proposed parking spaces. Stantec recommends the applicant provide documentation to support the proposed number of parking spaces as required per Section 33. Parking and Loading Requirements. We also recommend pavement markings delineating the parking spaces be shown on the plan and provisions for handicap accessible spaces be addressed by the applicant.
8. An isometric line drawing, building plans and development impact statement were not provided with the Site Plan submission.



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Section 12.4 - *Site Plan Review*, Subsection 12.45 – *Design Standards* of the Town's *Zoning Bylaws* requires applicant to adhere to general principles regarding site design. **In We offer the following comments for the Board's consideration:**

1. Landscaping: As shown on sheet 3 of 3, proposed grading includes fills between 2 and 6 feet within the site. As such, retaining walls are proposed along the northerly and easterly property line in varied height between 2 and 5 feet. We recommend the applicant provide final designed stamp drawings of the proposed retaining walls and evaluate the need for a guard rail adjacent to the proposed parking areas. We note segments of the proposed retaining walls are approximately 2 feet off the property line and question the need for temporary construction easements from the abutting properties.
2. Circulation: Proposed parking area internal circulation, deliveries and signage be identified on the site plan.
3. As previously noted in subsection 12.44, Lighting and Photometric Plan was not provided with the Site Plan.
4. Landscaping: We question if the proposed landscaping complies with the "landscaping within the setbacks requirements".
5. Interior Walkways/Pedestrian Path: We recommend proposed walkways and pedestrian paths within the parking area be identified on the site plan.

**STORMWATER MANAGEMENT**

The Stormwater Management Report is included under a separate cover of the same name with the Site Plan submission. The report includes a narrative with attachments which addresses the Town's General Bylaw Chapter 16 – *Water, Sewer and Sewage Disposal* for Stormwater Management, which includes addressing the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards.

Stantec offers the following comments and recommendations for the Board's consideration.

**The following list refers to the Millbury Planning Board Submission of Stormwater Plan Review Checklist. Our review has only included "design" related items as part of the checklist.**

- The location of existing and proposed utilities has been identified on the Site Plans.
- The existing site hydrology is shown on the Site Plans.



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- Soil logs 1 and 2 have been provided on Sheet 3 of 3, entitled Landscape Plan. The seasonal high groundwater elevation has only been provided for both basin locations.
- Existing and proposed ground cover and runoff coefficients have been provided in the Stormwater Report.
- A drainage area map showing pre and post conditions have been provided in the Stormwater Report.
- A sequence of construction has been provided in the Stormwater Pollution Prevention Plan. We recommend the construction sequence be added to the Site Plan.
- Stantec recommend cross section of the proposed two subsurface chamber systems identifying items such as existing and proposed grades, refusal and/or seasonal high groundwater be provided on the plans.
- Provide calculations regarding the average annual load of Total Phosphorus and estimated pollution removal

**MassDEP Stormwater Standards**

**We offer the following comments on the proposed stormwater management system, specifically for compliance with the ten performance standards as outlined in the MassDEP Stormwater Management Standards. We also note that the Stormwater Report Checklist needs to be stamped by a professional engineer.**

1. No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

**We note the applicant has not provided rip-rap sizing calculations at the subsurface chamber outfall and recommended these calculations be provided for review.**

2. Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

**Recommend rainfall amounts used be based on the 1998 Cornell University Study, NOAA Atlas Volume 10 Point Precipitation Frequency be used in estimating the pre and post development peak discharge rates for the 2, 10 and 100 yr. storm events.**

3. Loss of annual recharge to groundwater should be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a



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minimum annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type.

**The applicant has provided groundwater recharge and time required for the two subsurface chamber systems. Stantec recommend cross section of the proposed two subsurface chamber systems identifying items such as existing and proposed grades, refusal and/or seasonal high groundwater be provided on the plans.**

4. Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:
  - a) Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained.
  - b) Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and
  - c) Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook

**Standard 4 is met. The applicant provided a worksheet to confirm the required TSS removal rate 80%.**

5. For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Water Act, M.G.L. c. 21, §§26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

**The project is not associated with a land use with higher potential pollutant load; therefore, this standard is not applicable.**

6. Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, considering site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best



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practical method of treatment. A “stormwater discharge” as defined in 314 CMR 3.04(2)(a) 1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.

**The project is not within a critical area; therefore, this standard is not applicable.**

7. A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions

**This project is a redevelopment project and is required to meet the above Stormwater Management Standards.**

8. A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

**Erosion and sedimentation control measures are identified on the Site Plans and further described in the submitted Stormwater Pollution Prevention Plan. A sequence of construction has been provided in the Stormwater Pollution Prevention Plan. We recommend the construction sequence be added or referenced to the Site Plan.**

9. A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

**An operation and maintenance plan has been included in the Stormwater Pollution Prevention Plan (SWPPP). As noted in the SWPPP, the proposed stormwater management facilities shall be owned, operated, and maintained by the applicant. In Stantec’s opinion the standard is met.**

10. All illicit discharges to the stormwater management system are prohibited.

**An illicit discharge statement was not included as part of this submission. We recommend this be provided by the applicant.**



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If there are any questions regarding our comments and recommendations, please do not hesitate to call at 1-781-221-1134.

Regards,

**STANTEC CONSULTING SERVICES INC.**

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cc. Ms. Laurie Connors, Town Planner