

APRIL 7, 2025

Bellingham Conservation Commission
Municipal Center
10 Mechanic Street
Bellingham, MA 02019

Re: Prospect Hill Village (DEP File No. 108-968)
Off Lake Street/ Prospect Street
Map 69, Parcel 87 and Map 65 Parcels 20, 22, 22-01, 22-02
Bellingham, Massachusetts

Dear Hannah Chace and Members of the Bellingham Conservation Commission:

BSC Group, Inc. (BSC) has reviewed the responses provided by the applicant to our comments on the submitted NOI application, plans, and other materials related to the proposed construction of 129-unit residential development with associated roadway crossings, utilities and wetland mitigation at the above-referenced parcels in Bellingham, Massachusetts. Following the submission of our initial comments, the Applicant (Wall Street Development Corp.), their consultant (EcoTec), the Bellingham Conservation Commission agent, Town Planner, a Commission member and BSC Group met on March 10, 2025, at the Bellingham Municipal Center to review the outstanding issues and concern with the application. In response to that meeting, the applicant provides a response letter (dated March 23, 2025) and revised plan sheet 20 of the map set. The following letter provides comments to the response materials provided.

Documents Reviewed

This supplemental peer review includes:

- Letter dated March 23, 2025, from Wall Street Development Corp.
- Site Development Plan Prospect Hill Village, Sheet 20 of 43, prepared by GLM Engineering Consultants, November 30, 2023; revised March 19, 2025.

Review Comments

Based on our review of these materials, as well as our field evaluation of wetland resources on the Project Site, we offer the following comments and recommendations:

Comment 1: **Construction Sequence for sewer line installation**

The Applicant responded in Exhibit 1 that the sewer extension has been designed to be installed beneath the existing culvert that conveys the Peters River beneath Cross Street and the work will not affect the culvert. The work will be completed via a direct drilling operation. The Dewatering Procedure provided in the response letter states that "At the appropriate time, the water in frac tank will be discharged to the Brook or adjacent wetlands through a flow dissipater to prevent scour at any discharge point."

BSC discourages the practice of discharging dewatering effluent directly to wetlands or watercourses, particularly where flocculants are used, and recommends requiring the discharge to an appropriate upland location. An upland discharge location should be identified by the Applicant and approved by the Commission prior to work commencing.

Comment 2: Construction Sequence - Hoag Brook crossing

As stated in Exhibit 1, the Applicant is proposing to install the sewer line beneath Hoag Brook (intermittent) during no/low flow conditions. If any flow is present at the time of installation, a sandbag dam will be constructed on the upstream and downstream ends of the work area. The Applicant states that there is a large storage area upstream of the work area to retain streamflow and, if necessary, any channel flow will be pumped around the work area using appropriate best management practices.

BSC agrees with the approach of separating the work zone from the up- and downstream ends of the crossing with sandbags to prevent sedimentation of the watercourse. However, the Applicant should consider the need for dewatering during the pipefitting operation and allow appropriate staging area for discharging to a frac tank. BSC recommends a field meeting with the contractor prior to the crossing to review the erosion controls, dewatering areas, and stream impoundment and diversion measures prior to commencing the work.

Comment 3: Construction Sequence – Main Roadway Culvert Replacement

As outlined in Exhibit 1, the Applicant states that “Stream flow may be diverted through a temporary diversion channel or the stream flow may be interrupted with the installation of sandbags to hold back stream flow while the culvert is installed”, and that “In addition to the culvert, additional structures may be installed to facilitate the road crossing.”

BSC understands the considerations for dictating means and methods to construction contractors, however, the above statements do not provide a clear picture of the proposed work or the potential effects to downstream resource areas. BSC recommends that the Applicant provide a preferred method of controlling water to remove the existing culverts and install the new open bottom box culvert in order to evaluate potential impacts to wetland resource areas. We also recommend requiring a meeting with the Commission, Applicant and Contractor to review the proposed work setup (including erosion control measures, stream flow impounding, any temporary diversion channel, dewatering measures or additional “structures” to complete the work. We agree with the suggestion to discharge dewatering effluent to a temporary infiltration pit within the former gravel mining area outside of any buffer zone.

Comment 4: Wetland Replication for IVW and BVW Impacts

The Applicant is proposing 37,000 square feet of wetland replication for approximately 480 square feet of BVW impacts from the installation of the box culvert roadway crossing and 16,860 square feet of IVW filling, a replacement ratio of slightly greater than 2:1. The wetland replacement area is upstream of the proposed box culvert. A wetland replication protocol, dated February 3, 2025, prepared by Paul McManus of EcoTec, describes how the work meets the performance standards for BVW while also meeting the requirements of the Bellingham Wetland Bylaw for wetland mitigation.

BSC reviewed the areas of BVW and IVW impacts on a field visit with the Applicant, Mr. McManus and the Commission agent on January 2, 2025. The area of BVW impacts are associated with the open bottom box culvert installation. The IVWs were observed within a former gravel pit area near to the proposed crossing and appear to have been created by excavation during the gravel pit operations. The IVWs were observed to contain a predominance of upland vegetation (i.e., little bluestem (*Schizachyrium scoparium*), haircap moss (*Polytrichum commune*) and white pine (*Pinus strobus*)) with sparse wetland vegetation that included soft rush (*Juncus effusus*) and gray birch (*Betula populifolia*) and 1- to 2-inches of standing water. There was little to no organic soil horizon observed. BSC agrees that the proposed replication area, if constructed properly, could enhance the existing wetland associated with Hoag Brook and provide a higher value wetland compared to the lost area of BVW and IVW.

The replication protocol provided by EcoTec describes the measures that would be employed for constructing, planting and monitoring the replication area. Below are comments specific to that plan.

Hydrology – The ground elevations were provided for each wetland flag along the proposed replication area and vary from elevation 227 down to 224 nears the existing culverts. In addition, soil test pit data from the stormwater design report that were taken within the footprint of the proposed mitigation area show estimated seasonal high groundwater to be between elevation 222.7 and 223.1. The proposed replication area was graded to provide a hydrologic variation from seasonally saturated to seasonally flooded water regime to establish open water, shallow marsh, shrub swamp and forested wetland fringe cover types. BSC noted that the upstream end of the existing crossing is slightly impounded due to the undersized nature of the existing culverts and debris obstructions. The proposed open bottom box should eliminate any obstructions that would cause impounding streamflow but may also slightly lower groundwater elevations adjacent to the stream (within the proposed replication area) with the stream confined to a narrower channel. The Applicant should consider the potential effects of increasing the passage of streamflow with the addition of the box culvert as it relates to achieving appropriate grades and adjust accordingly.

Soils – The Applicant proposes to import and/or manufacture soil for the replication area that would include a mixture of loam, organic material and mineral soil. BSC agrees that an appropriate soil mix weighs heavily on the success of a wetland replication area (second only to achieving the desired hydrology) and should include between 12 and 20 percent organic material. One undesirable outcome when developing a soil mix with organic material is the introduction of invasive species. BSC agrees that compost is an excellent soil amendment to increase organic material content. The Applicant assures that all amendments would be “weed free”. A certification as to the weed-free status of material (i.e., compost, loam) should be provided to the Commission to ensure this commitment is achieved.

Vegetation – The applicant is proposing to plant the replication area with 20 red maple (*Acer rubrum*) trees around the perimeter, 200 shrubs of varying species and a wetland seed mixture. BSC generally agrees with the proposed species and numbers provided for each but suggests plug plantings of native pollinators (i.e., cardinal flower (*Lobelia cardinalis*), Northern blueflag (*Iris versicolor*), etc) that would do well along a streamside setting and further enhance the plantings. The planting plan should also include measures for controlling and/or removing invasive species that may become established within the post-construction monitoring period.

Comment 5: **Riverfront Area Impacts and performance Standards**

The Applicant provided revised Riverfront Area calculations in Exhibit 2 of the responses. In summary, there is 372,652 square feet of Riverfront Area on the property, with a total of 29,996

square feet of proposed impacts from the roadway and stormwater management features. Exhibit 2 summarizes how the performance standards for Riverfront Area will be met.

BSC agrees that the proposed roadway configuration within Riverfront Area meets the performance standards for Riverfront Areas and is the preferred alternative to other alternative configurations provided by the Applicant in that it would result in the least impact to Riverfront Area and/or other wetland resource areas.

Comment 6: Lake Street Entrance – Catch Basins/Sediment Basins and Swale

The access drive intersection with Lake Street is proposing two (2) deep sump catch basins that would discharge to a sediment forebay and then to a water quality swale before discharging to the 100 foot buffer zone of BVW. Exhibit 3 provides specifications for each of these measures but does not provide a tabulation of how or whether the combination of these would meet the TSS removal requirement for a new stormwater discharge.

Exhibit 3 provides specifications for each of these measures but does not provide a tabulation of how or whether the combination of these stormwater management measures would meet the TSS removal requirement for a new stormwater discharge. BSC understands that the stormwater management report is currently under review (by BSC Engineering) with the Planning Board and we defer to those conclusions and recommendations.

Comment 7: Stormwater Management System

As noted above, we understand that the stormwater management system is currently under review (by BSC Engineering) for compliance with the Massachusetts Stormwater Management requirement and local Bellingham stormwater management requirements. The Applicant is proposing 100% groundwater recharge while reducing peak rates of runoff as described in Exhibit 4.

Again, we defer to the conclusions and recommendations of the stormwater management review for the four (4) proposed basins and water quality swale.

Comment 8: Bellingham Zoning Bylaws - Water Resource District Compliance

Exhibit 5 provides an overview of the Water Resource District requirements including permitted and prohibited uses within it and a summary of how the project meets the requirements. The Applicant maintains that the project will not include any prohibited uses but it will render impervious greater than 15% or 2,500 square feet of the property (whichever is greater).

BSC understands that the Applicant is seeking a Special Permit from the Planning Board as an Applicable Use within the Water Resource District and defers to that decision.

Comment 9: Bellingham Wetlands Bylaw Regulations Waiver Request for Isolated Vegetated Wetlands and Land Subject to Flooding

Exhibit 6 provides a summary of the Bellingham Wetland Bylaw regulations that relate to Isolated Vegetated Wetlands and Isolated land Subject to Flooding. The regulations allow, at the Commissions' discretion, the filling of up to 5,000 square feet of IVW provided the filled wetlands are replaced at a 2:1 ratio or more. There are two (2) depressions proposed to be filled.

*The Applicant appears to be using the two terms IVW and ILSF synonymously. However, while there is no areal limit to allowing filling ILSF (provided any lost area is replicated at a 2:1 ratio or more), the regulations state the Commission may allow the filling of **up to 5,000 square feet** of IVW provided 2:1 compensation is provided. It's unclear to BSC which of the two depressions qualifies as IVW and which qualifies as ILSF. While we may agree that providing compensatory mitigation for the loss of isolated wetlands that are in the early stages of soils, hydrology and plant development, the regulations restrict the loss of IVWs to 5,000 square feet. The Applicant should clarify the IVW vs ILSF status for each of the depressions. Any ILSF determination will require engineering calculations to confirm.*

Comment 10: **Bellingham Wetlands Regulations – Stormwater Management Compliance**

Exhibit 7 provides a summary of how the project meets the Stormwater Compliance requirements of the Regulations at Section 247-33. Specifically, the Applicant concludes that the project is not a Subdivision, Commercial project, Industrial project or Transportation project and therefore not subject to Section 247-33 of the Regulations.

BSC defers to the conclusion of the review of the Stormwater Management measures by the Planning Board for this response.

We appreciate the opportunity to review the Notice of Intent for Prospect Hill Village in Bellingham and look forward to discussing the findings of our field investigations and peer review with the Commission at the next hearing. Should you have any questions regarding our review and provided comments, please do not hesitate to contact me at (617) 896-4534 or pknapi@bscgroup.com.

Sincerely
BSC Group, Inc.



Paul M. Knapik
Sr. Project Manager

CC Amanda Smith