

# Staff Report

**Date:** May 27, 2022

**To:** Devens Enterprise Commission

**From:** Neil Angus, Environmental Planner

**RE:** Lovell Road Resurfacing, Bridge Repair and Drainage Improvements

**Owner:** MassDevelopment

**Applicant:** MassDevelopment/Devens Engineering/BSC Group

**Location:** Lovell Road, Devens, MA

**Zoning:** Open Space Recreation, Village Growth I, Aquifer Water Resources Protection Overlay District.

1. **Proposed Project:** BSC Group, on behalf of MassDevelopment, has submitted a Notice of Intent (NOI) application for temporary bridge deck surface repairs and stormwater and drainage improvements located along Lovell Road. The bridge carries Lovell Road over the Catacoonamug Brook which drains into the Nashua River:



The bridge deck surface is in disrepair and inadequate stormwater drainage is a contributing factor to the decline. The asphalt surface will be replaced but repair work will not encompass the full-depth of the concrete bridge deck. The existing pavement width of Lovell Road approaches will be reduced slightly to 12-foot travel lanes and 1-foot shoulders, reclaiming several feet of the currently paved areas. The roadway approaches will also be milled and resurfaced. New grass swales with check-dams will be installed along both sides of the roadway on the approach from the Army 3400 Area gate at the Devens property limits and a grass swale will be installed on the southeastern side of the road from the Hospital Road approach. The improvements include two plunge pools adjacent to the bank of the brook (see site plans at:

<https://www.devensec.com/level2hearingsMay31.html>)

MasDevelopment is seeking an Order of Conditions for the construction of the stormwater features within the Bordering Land Subject to Flooding and the 100-foot buffer zone to the Inland Bank and Bordering Vegetated Wetlands associated with the brook. These improvements will help improve the structural stability of the bridge, while also improving the drainage and pretreatment of runoff from this active army road and help bring this system into compliance with the EPA's National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit for Devens.

No direct impacts to wetlands are proposed.. The limits of work for the proposed stone plunge pool in the southeast quadrant are close but not in the actual wetlands area. Work to install the stone plunge pools and some of the subsurface drainage pipe installation will occur in areas mapped as within the 1% annual chance flood (Zone AE). There will be no net change in elevation to floodplain within the project area, and installation of the stone plunge pools will result

in 600 sf of alteration at or below the known floodplain elevation. Stone will be used to line the plunge pool depressions and will not be filled above the existing grade. A small amount of additional flood storage will be provided in the pools.

The proposed grass-lined swales will result in some additional grading and excavation outside the existing roadway and will include the installation of drainage pipes and stone outlet protection. Installation of the plunge pools will require converting vegetated areas into stone lined outfalls. Contractors will be instructed to make field changes to avoid mature living trees if feasible, and provide root and trunk protection. While small areas of impact to vegetated areas are required, existing conditions will be improved through enhanced stormwater water quality. The project will also remove approximately 2,800 sf of existing pavement. Stone will be installed at the top of each proposed swale to dissipate off-property run-off to the extent practicable before it enters the swale systems.

## 2. Site issues:

### *MA DEP Stormwater Management Standards:*

The DEC's peer review engineers have reviewed the proposed plans and have a few outstanding comments that need to be addressed in an updated HydroCAD model and revised MA DEP Stormwater Management Standards report that will need to be updated to demonstrate compliance. The Applicant should include measures to address phosphorous removal. A copy of their full comments is on-line at: <https://www.devensec.com/level2hearingsMay31.html>.

### *Work in Flood Zone:*

The timing and duration of activities in the flood zone could have significant impacts on the wetland and stream resource areas. The project will need to provide details on the timing and duration of activities in the floodzone, as well as any dewatering measures that may be required. Limits of clearing should be reduced around plunge pools (away from wetland) and work/equipment from the uphill side only to avoid additional wetland impacts and soil compaction. Any additional measures to avoid impacts should also be listed. Actual limits of clearing will be reviewed in field with DEC staff.

### *ACEC:*

This project area is also located within an Area of Critical Environmental Concern (ACEC). The majority of this area is previously disturbed so there is likely to be little concern for impacts, however prior to any determination by the DEC, the Applicant should clarify this and provide any written correspondence from the Department of Conservation and Recreation who oversees the ACEC program.

### *Slope Resource Area Impacts:*

The Applicant will be adding Slope Resource Area limits to the plan. The only work which may be within the limits is the replacement of bituminous swales. These swales will need to be removed and properly stabilized/re-vegetated. Removal methods and re-stabilization details should be provided.

### *Plan Updates:*

The Erosion and Sediment Control plan needs to include the required notes as per 974 CMR 3.02(3)(e)1-5. The Plans note project is in Shirley. Project is in Devens (Shirley), MA. A space for the DEC's endorsement of the Site Plan by a majority of the members of the DEC is required on the cover sheet and space for the chairperson or designee to sign all other sheets. Ensure all utilities are ID'd and clearly labelled.

3. **Application and Process:** BSC Group, on behalf of Devens Engineering, submitted a Level 2 Permit application package, including the application, Wetland Notice of Intent, project description, stormwater report, and plans on April 12, 2022. A Determination of Completeness was issued on April 14, 2022. Copies of the application were received by the surrounding Towns on April 19, 2022. Legal notices were placed in Nashoba Publications on April 29 and May 6, 2022. Certified Mail notice was sent to all abutters on April 15, 2022. The 30-day Town comment period expired on May 15, 2022. No comments were received.
4. **Recommended Action:** The DEC should continue this hearing until June 9, 2022 at 7:30AM to provide the Applicant time to respond to any remaining comments. Staff will then prepare a draft record of decision for the commission's consideration.

Attachments: All Site Plan and supporting application information is available at:

<https://www.devensec.com/level2hearingsMay31.html>