

AMORY ENGINEERS, P.C.

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June 11, 2020

Hingham Planning Board
210 Central Street
Hingham, MA 02043

Subject: 185-193 Lincoln Street and 6 Crow Point Lane, Special Permit/Site Plan

Dear Planning Board Members:

This is to advise that we have reviewed the following documents pertaining to the proposed reconfiguration of the parking areas at the subject site:

- Site Plan Set (4 sheets), dated May 28, 2020, prepared by Cavanaro Consulting
- Stormwater Report prepared by Cavanaro Consulting
- Transmittal letter from Drohan Tocchio & Morgan, P.C., dated May 26, 2020, with Applications for 1) Special Permit A3 Parking Determination and 2) Site Plan Approval

We also met on site this morning with Ms. Loni Fournier, Conservation Senior Planner to review the proposal. The purpose of our review has been to evaluate conformance with Hingham Zoning By-Laws (ZBL), Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards (SMS) and good engineering practice.

Background

The project site, located at the northwest corner of Lincoln Street and Crow Point Lane, consists of two parcels, a 60,968 square foot (s.f.) parcel at 185-193 Lincoln Street and a 9,639 s.f. parcel at 6 Crow Point Lane. It is located within the Business District B zoning district. The property is currently developed with three commercial buildings with associated parking areas, driveways, walkways and landscaped areas. There are wetlands at the north (rear) and west sides of the site. Stormwater is collected in a series of catch basins located around the site. Some of the catch basins are leaching basins and others discharge via pipes to the wetlands. Roof leaders from the two buildings on the larger parcel discharge via pipes into many of the catch basins. The site generally slopes from south to north (Lincoln Street to the wetlands). The existing buildings are served by municipal sewer and water and overhead utilities. The site currently has 71 parking spaces.

The proposal calls for reconfiguring the parking areas on the north and east sides of the site to accommodate an additional twenty parking spaces (total of 91). The reconfiguration will result in a net increase in impervious area of 179 s.f. The east and north areas of the site will be regraded as part of the reconfiguration, the result of which will direct more stormwater to the rear of the site. The existing catch basins on site will continue to be utilized. A two foot wide by two foot deep crushed stone infiltration trench is proposed along the northern edge of the

northern parking area to provide for some treatment and recharge of runoff. Overflow from the trench would flow across a grass strip into the wetland. Proposed erosion controls will consist of stabilized construction entrances on either side of the building at 6 Crow Point Lane and a silt sock around the down-gradient perimeter of the northern parking area.

Comments

1. The drainage calculations indicate that post-development rate and volume of runoff will not exceed existing conditions. However, the proposed HydroCAD calculations model the entire area tributary to the rear of the site as discharging to the infiltration trench. This is not accurate as there will be runoff collected in the seven existing catch basins located within the tributary area. While the catch basins within the area appear to ultimately discharge to the same wetland, the post development rate and volume of stormwater runoff will essentially be the same as existing.
2. All existing catch basins that have discharge pipes should have gas-trap hoods added¹ if possible. We note that the discharge pipes are shown to be PVC and the gas traps could be PVC tees or bends with vertical pipes extending from the bottom to trap grease and oils.
3. A detail for the infiltration trench should be shown on the plans. We recommend that the detail show the bottom 20-inches of the crushed stone fully encapsulated in filter fabric so that only the top four inches of crushed stone would need to be cleaned and/or removed and replaced when it becomes clogged.
4. Construction of the crushed stone trench is specified to be prior to paving. The construction phase Stormwater Operation and Maintenance (O&M) plan specifies sedimentation fence to be placed around the perimeter of the trench. We agree with placing sediment controls around the trench until the contributing area is stabilized and recommend that the sediment controls be shown on the infiltration trench detail (Comment 3).
5. The Stormwater Report claims 80% total suspended solids (TSS) removal. While SMS allows 80% TSS removal credit for infiltration trenches, the entire site will not discharge to the trench so the 80% TSS removal will only be from the stormwater that gets to the trench. We note that between the trench and gas-trap hoods added to catch basins (Comment 2), stormwater quality will be improved over existing conditions.
6. We recommend silt sacks be installed in all catch basins during construction. A silt sack detail should be included on the plans.
7. The two existing catch basins in the northwest area of the site are shown to have 4-inch PVC discharge pipes with notes stating that the outlets were not found. The pipes either lead to a leaching trench/structure or discharge directly to the wetland. In our

¹ This was discussed with Ms. Fournier and will likely be required by the Conservation Commission.

conversation with Ms. Fournier we agreed that the Applicant should determine where the pipes discharge and, if in the wetlands, an assessment should be made if scour protection is required. We agreed that this could be a condition of approval that would require this during construction and any scour protection be coordinated with Conservation.

8. The plans indicate that the wetland line shown is “approximate” based on “record location.” Survey Note 3 on the plans references an Order of Conditions issued by the Conservation Commission on 10/21/1986 (likely the source of the record wetland line). Ms. Fournier advised that the Conservation Commission typically requires wetland delineation to have occurred within three years of an application. The Commission will likely require the line be delineated to reflect actual current conditions.
9. Currently there is a maintained grass strip between the rear parking lot and the wetlands. This area will be slightly expanded in the proposed conditions. Ms. Fournier advised that the Commission typically prefers that maintained lawns not be adjacent to the wetlands. She and I agreed that a meadow mix should be planted between the wetland and crushed stone trench/parking areas, replacing the existing maintained grass strip.
10. The Long Term Pollution Prevention Plan specifies that “snow plowed from the driveways or parking areas will be temporarily stored in available lawn areas. No snow shall be stored within the wetland.” The largest area for snow storage is adjacent to the wetlands. The parking area adjacent to the crushed stone trench is proposed to be lined with vertical concrete curb (with breaks for runoff) which will prevent some snow storage in that area. Concrete curb should also be considered along the western edge of the parking/driveway areas to prevent snow deposition in the adjacent wetland. If the proposed number of parking spaces exceed the spaces required then an area on the pavement should be designated for snow storage.
11. The plans should include a table listing the number of existing, required and proposed parking spaces.

Please give us a call should you have any question.

Very truly yours,

AMORY ENGINEERS, P.C.

By:



Patrick G. Brennan, P.E.



PGB

cc: Loni Fournier, Conservation Senior Planner