



## MEMORANDUM

To: Isabel Tourkantonis  
Director of Environmental Affairs  
Billerica Conservation Department

From: Christina Papadopoulos  
Stormwater Engineer  
Town of Billerica – DPW Engineering

Date: 01/12/2026

Subject: Conservation Commission Peer Review – DEP #109-1614, Stormwater Peer Review  
1 & 2 Federal Street  
Billerica, MA 01821

Kimley-Horn and Associates, Inc.

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Kimley-Horn has completed the review of the application to the Conservation Commission for 2 proposed multi-family buildings located at 1 & 2 Federal Street in the Town of Billerica. The review included:

- Item 3 – Site Development Plans, prepared by Allen & Major Associates, Inc., dated 11/3/2025 (49 sheets total)
- Item 4 – Drainage Report, prepared by Allen & Major Associates, Inc., dated 11/3/2025
- Item 7 – Recent Determinations of Applicability issued separately for 1 Federal (Negative DOA – August 25, 2025) and 2 Federal Street (Positive DOA on August 27, 2025)
- Item 8 – Notice of Intent for 2 Federal Street (Map 68, Parcel 8-4) Billerica and attachments, prepared by Goddard Consulting, dated November 3, 2025.

## Conservation Commission Review

1. Provide NOI attachments.

### 1.0 EXISTING CONDITIONS

2. The NOI narrative reflects work at both 1 and 2 Federal St and describes the shared drainage between them that outfalls to the resource area.

## 2.0 PROJECT SUMMARY AND REGULATORY COMPLIANCE

### 2.1. Buffer Zone

3. Per 10.03.1.a, provide proof or explanation as to why the impacted area in the buffer zone is “not significant to the protection of any of the interests identified in M.G.L. c. 131, § 40; or...that the proposed work within a resource area will contribute to the protection of the interests identified in M.G.L. c. 131, § 40 by complying with the general performance standards established by 310 CMR 10.00 for that area.”

#### 2.1.2 Work Within A Resource Area

4. For 10.55.(4)(b).7 identify which Massachusetts Stormwater Standards are being met to the maximum extent practicable by performing this work.

#### 2.1.3 Stormwater Standards

5. As noted in the Drainage Report, if the banked parking is required to be constructed, new development standards according to the Massachusetts Stormwater Handbook shall be met.
6. Provide profiles for drainage trunk lines per Town of Billerica Board of Health Rules and Regulations Section 6.6.010.2.c.3.2.
7. Provide map of Study Points 1, 2, and 3 and the overall drainage areas to them.
8. As noted in the Drainage Report, SWPPP is required.
9. On page 14 of the Drainage Report, correct this sentence “The proposed development has been designed so that post-development peak discharge rates do not exceed the predevelopment peak discharge rates at the three Study Points for all design storms (2, 10, 25 and 100-year storms)” since the 2-yr peak flow to Study Point 3 shows a marginal increase.
10. Provide proof that the 2-yr storm event for Study Point 3 meets the Town of Billerica Board of Health Rules and Regulations 6.6.010.2.d.1 to show a reduction in the post development peak flow and volume. If this is not feasible, provide a waiver request and justification for not meeting this requirement.
11. Provide explanation for 1.02 in/hr as the infiltration rate in calculation for Standard 3.
12. Confirm inlet drainage areas are  $\frac{1}{4}$  acre or less in order to be used for TSS removal calculations under Standard 4.
13. Regarding Standard 4 as explained in the Drainage Report, for areas that do not flow through the underground infiltration systems, have street sweeping, vegetated filter strips, and other

- similar options been considered? For both TSS and TP removal, provide evidence that the alternative options listed in Section 6.7.007.1.b through d have been fully investigated.
14. This note is included in the MADEP Calculations Appendix of the Drainage Report "Water quality volume for the following watershed areas, P-2, P-2.1, P-2.2, P-2.3, P-2, P-2.4, P-2.5, P-2.6, P-2.10, P-2.11, P-2.12, P-3, P-6, and P-7 have been converted to a water quality flow for treatment handling through a Contech Water Quality separator (Proprietary Treatment Device) in accordance with the Mass Stormwater Handbook. Please refer to the water quality calculations for the proprietary devices as included in the appendix ". Where can these water quality volume calculations be found illustrating that a 1" water quality volume is met?
  15. Regarding Standard 6, Kimley-Horn defers to the Billerica Conservation Commission on the classification of the bordering vegetated wetland as either an Outstanding Resource Water or not.
  16. Provide 1 foot of freeboard for detention structures in the 100-yr storm. According to HydroCAD report, peak elevations for the 100-yr storm exceed the height of the underground structure for multiple underground chambers systems.
  17. According to Town of Billerica Board of Health Rules and Regulations Section 6.6.011.2.b, the O&M plan should include a map of the BMPs, inlets, etc.
  18. Indicate location of any necessary easements as referenced at the bottom of the page in the Introduction of the O&M plan.
  19. As noted in the Drainage Report, and Illicit Discharge statement will be required to meet Standard 10.

#### **Waiver Requests**

20. 6.6.010(2)(c)3.2. *we didn't include a profile for drainage trunk line(s)*

KH Response: Per Stormwater Comment #6, provide stormwater profiles.

21. 6.6.012(1) – *We did not include a SWPPP with submittal but would definitely file one and provide it prior to construction. I'm not sure if you'd consider this a waiver so much as a condition.*

KH Response: Per Stormwater Comment #8, provide SWPPP.

22. 6.6.012 *contains specific ESC Plan items like description of existing vegetation (12" caliper trees, canopy layer, shrub layer etc.), volume and nature of imported soil materials, construction sequence/phasing. We can also provide construction level detailing but would consider that we complete this closer to construction with our site contractor in tow where we can provide more elaborate detailing. For example, the drainage at #4 Federal has to stay online, but we've not work out the temporary discharge solution for this yet.*

KH Response: Please provide construction level detailing of erosion and sediment control and phasing prior to approval.

23. 6.7 *Performance Standards:*

- a. *6.7.003 emergency shutoff valves on treatment devices. We don't have these designated on the plans at this stage.*

KH Response: Provide locations for emergency shutoff valves for treatment devices prior to approval.

- b. *6.7.005 This is a determination on satisfying the LID credits. I believe we have this, but I don't know if the Town held a different opinion*

KH Response: LID techniques appear to be used. Kimley-Horn finds no issue with this request.

- c. *6.7.007 requires Redevelopment sites to achieve 80% TSS removal and 50% total phosphorus ... we were at 68% TSS removal, but may meet this requirement where reg says retain 0.8" of runoff x total post-construction impervious area ... I think we did that*

KH Response: See Stormwater Comment #13. In addition, add additional justification in the narrative that LID strategies are utilized to the maximum extent practicable.

- d. *6.7.009 (21) no granite curb inlets were used. We'd note that this is a private site versus a roadway where granite inlet throats make more practical sense.*

KH Response: Catch basin detail is shown on sheet C-502. Kimley-Horn finds no issue with this waiver request.

- e. *6.7.009(24) requires 2.5' cover on pipes. This is born from the existing drainage lines that are being maintained.*

KH Response: Please note on the plans which pipes lack sufficient cover and whether they are existing to be maintained or proposed. Please provide justification that for the existing drainage lines, the cover is not being reduced and that there are no alternative options to provide sufficient cover.

- f. *6.7.009(26) requires 24" outfall pipes to be fitted w/grates or bars to prevent ingress. We would agree to this but it is not depicted on the current plans*

KH Response: Please show on the plans prior to approval.

## 2.2 Billerica Wetlands Protection By-Law

24. The project is subject to 3.03.C.3 which requires a 50-foot continuous strip of undisturbed naturally occurring vegetation between the proposed activity, which consists of the razing of an existing structure, and the wetland resource area. A variance will be required per subsection g.
25. Per subsection d of this same requirement, the applicant must consider realistic future use of the site. Therefore, if the banked parking is to be constructed, it should also be accounted for in consideration of the No Alteration Zone.

### 2.2.7 Wildlife Habitat Enhancements

26. Please provide Wildlife Habitat Evaluation.