

July 30, 2025

Bellingham Planning Board
Bellingham Conservation Commission
10 Mechanic Street
Bellingham, MA 02019

**Re: Prospect Hill Estates
Definitive Subdivision Plan
Bellingham, Massachusetts**

Dear Board and Commission Members,

Our firm revised the plans for the above captioned project to address the comments discussed at the Conservation Commission Meeting on July 23, 2025.

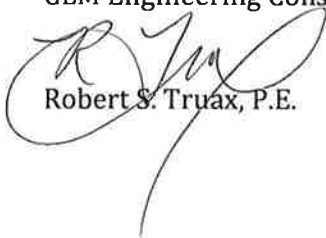
The following revisions have been provided in the revised plan set:

1. Provided a plan sheet depicting the areas of impact.
2. Provided cuts/fills for the work within the Conservation Commission jurisdiction.
(Roadway crossing area, Wetland Replication Area & Detention Basin #4) See attachment.
3. Revised Supplemental Sheet A – Wetland Replication to show proposed replication planting layout.
4. Revised Supplemental Sheet B – Hoag Brook Cross Section Slope stabilization
5. Revised Supplemental Sheet C – Provide dimensions of the existing box culvert
6. Revised Sheet 20. Proposed a Catch Basin at Lake Street with outlet to forebay.
7. Provided Forebay calculations to include Lake Street area. See Attachment

Enclosed herewith are copies of the revised plans for your review and comment. If you have any questions, please don't hesitate to contact our office.

Thank you for your cooperation in this matter.

Yours truly,
GLM Engineering Consultants Inc.



Robert S. Truax, P.E.

July 30, 2025

Project: Prospect Hill Estates
Bellingham, MA**Wetland Resource & Buffer Zone Cut/Fill Volumes:**

Elev. (feet)	Area (s.f.)	Avg Area (s.f.)	Depth feet	Volume cu.ft.	Cum. Volume cu.ft.
221	6180				
222	8290	7235	1	7235	7235
223	14340	11315	1	11315	18550
224	30276	22308	2	44616	63166
228	24689	27482	3	82447	145613
230	19417	22053	2	44106	189719
232	12015	15716	2	31432	221151
234	5720	8867	2	17735	238886
Volume Cut = 238,886/27 =				8848	cu.yds

Wetland Roadway Crossing:

Elev. (feet)	Area (s.f.)	Avg Area (s.f.)	Depth feet	Volume cu.ft.	Cum. Volume cu.ft.
226	7683				
228	10486	9084	2	18169	18169
230	12734	11610	2	23220	41389
232	21215	19474	2	38949	80338
234	16986	19100	2	38201	118539
Volume Fill = 118,539/27 =				4390	cu.yds

Drainage Basin #4

Elev. (feet)	Area (s.f.)	Avg Area (s.f.)	Depth feet	Volume cu.ft.	Cum. Volume cu.ft.
220	8143				
222	14810	11477	2	22953	22953
224	7196	11003	2	22006	44959
Volume Fill = 44,959/27 =				1665	cu.yds

Forebay Calculations Proposed Lake Street Intersection

Project:

Prospect Hill Village
Bellingham, Massachusetts
Date: July 30, 2025

Water Quality Volume (WQV): Based on 1.0 inch rainfall

Recharge Volume(Rv): Based on Soil Classification

Rv = F * Impervious Area

Rv = Required Recharge Volume

F = Depth Factor

Soil Type A – 0.60 inch

K Factor = 8.27 in/hr (Soil type A)

Sediment Forebay Volume: 0.1 inch rainfall

Catch Basin #94 & #95 and Lake Street Forebay Sizing:

Imp. Area Pavement(Prop Road): 9,784 s.f.

Imp. Area Pavement(Lake St.): 9,000 s.f

Proposed Roadway Water Quality Volume

WQV = $(9,784 \text{ sf} * 1.0 \text{ in}) / 12 = \underline{815 \text{ c.f.}}$

Lake Street Forebay Requirement:

Forebay Sizing Required

$(0.1 \text{ in} * 9,000) / 12 = \underline{75 \text{ c.f.}}$

Forebay Sizing Required (Outlets #94):

Impervious Area: 9,784 s.f.

$(0.1 \text{ in} * 9,784) / 12 = \underline{82 \text{ c.f.}}$

Forebay Provided:

Elev.	Area(sf)	Avg.	Depth	Vol.
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219	916			
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220	1443	1180	1.0	<u>1180 c.f > 815 c.f.</u>
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