

PGB ENGINEERING, LLC

CIVIL ENGINEERING DESIGN & CONSULTING

49 TUPELO ROAD
MARSHFIELD, MA 02050-1739

Tel.: 781-834-8987
PGBEngineeringLLC@gmail.com

March 3, 2026

Hingham Planning Board
210 Central Street
Hingham, MA 02043

Subject: 19 Kimball Beach Road, Site Plan

Dear Planning Board Members:

This is to advise that we have reviewed the following documents pertaining to the proposed raze and rebuild of the dwelling at the subject site:

- Site Plan (5 sheets), dated January 13, 2026, prepared by Spruhan Engineering, P.C. (Spruhan)
- Existing Conditions plan, dated December 4, 2025, prepared by Spruhan
- Architectural drawings (10 sheets), dated November 4, 2025, prepared by National Design and Drafting
- Stormwater Report, undated, prepared by Spruhan

The purpose of our review has been to evaluate conformance with Hingham Zoning By-Laws (ZBL), MassDEP Stormwater Management Standards (SMS) and good engineering practice.

Background

The ±8,833 square foot (s.f.) lot, at 19 Kimball Beach Road, is located within the Residence A zoning district. The site is currently developed with a single-family dwelling, detached garage, paved driveway, hardscaping, stone walls, lawn areas and several trees.

The proposal calls for demolition of the existing dwelling and garage and construction of a new single-family dwelling with attached garage, relocated driveway, patio and lawn area. Runoff from the roof of the proposed dwelling would be discharged into a subsurface infiltration system, consisting of plastic chambers surrounded by crushed stone. Runoff from the relocated driveway would be collected in a trench drain and also discharged into the subsurface infiltration system. The existing sewer and water services would be cut, capped and reconnected to the proposed dwelling. A compost sock is proposed as a perimeter erosion control barrier around the limit of work. The plans do not show that any protected trees are proposed to be removed. However, three stumps are shown in the front and side yard. Google Street view shows the two in the front yard were evergreens and the one in the side yard was a cedar, existing as of August 2025 (Google Earth shows them existing on September 8, 2025). It appears that the evergreen nearest the south corner of the property was within the Tree Yard.

Comments

1. The Tree Yard is not shown correctly on the plans. It is shown to be a ten-foot offset from the proposed dwelling. It should be a ten-foot offset from the property lines. Sizes, species and critical root zones of existing trees to be protected should be shown on the

plans as well as tree protection measures. Information should also be provided about when the three trees shown as stumps were removed.

2. The rainfall data used in the HydroCAD models is not pertinent to Hingham. Hingham rainfall data is attached.
3. The time of concentration for the driveway in the post-development HydroCAD model should be five minutes, not fifteen minutes.
4. The proposed impervious area listed on Sheet 1 of the plans (2,966.1 s.f.) does not match the HydroCAD model and Stormwater Report (3,041 s.f.).
5. A construction entrance should be shown on the Erosion Control & Demolition Plan (Sheet 5).
6. The compost sock erosion control barrier should be extended along the front of the property from the southern corner to the proposed driveway.
7. The Typical Profile View for Traffic Application for the subsurface infiltration system specifies filter fabric to be mandatory on the top and sides of the system and along the bottom per the design engineer's preference. We do not recommend filter fabric along the bottom of the system.
8. All proposed utilities should be shown on the plans (electric, communication, gas, etc.).
9. The proposed water and sewer services are shown in different locations on Sheets 2 and 4.
10. We note that a corner of the existing garage extends 0.4 feet over the property line, onto the 21 Kimball Beach Road property. Removal/demolition of the garage will require disturbance on the adjacent parcel. The Applicant should provide documentation that the owners of 21 Kimball Beach Road are aware and agreeable to the proposed work on their property.
11. The Operation & Maintenance Plan includes references to items not proposed on this project (condos, straw wattles, catch basins). It should be revised to be specific to this project (compost sock, trench drain).

Please give us a call should you have any questions.

Very truly yours,

PGB Engineering, LLC

By:



Patrick G. Brennan, P.E.



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enc.

NOAA Atlas 14, Volume 10, Version 3 HINGHAM

Station ID: 19-3624

Location name: Hingham, Massachusetts, USA*

Latitude: 42.2269°, Longitude: -70.9125°

Elevation:

Elevation (station metadata): 35 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.304 (0.238-0.381)	0.376 (0.295-0.473)	0.495 (0.387-0.625)	0.594 (0.461-0.754)	0.730 (0.549-0.981)	0.831 (0.613-1.15)	0.939 (0.676-1.36)	1.07 (0.719-1.58)	1.26 (0.819-1.94)	1.43 (0.904-2.25)
10-min	0.430 (0.338-0.540)	0.533 (0.418-0.670)	0.702 (0.548-0.884)	0.841 (0.654-1.07)	1.03 (0.778-1.39)	1.18 (0.869-1.63)	1.33 (0.957-1.93)	1.51 (1.02-2.24)	1.79 (1.16-2.76)	2.02 (1.28-3.18)
15-min	0.506 (0.397-0.635)	0.627 (0.492-0.788)	0.825 (0.645-1.04)	0.990 (0.769-1.26)	1.22 (0.916-1.64)	1.38 (1.02-1.91)	1.57 (1.13-2.27)	1.78 (1.20-2.63)	2.11 (1.36-3.24)	2.38 (1.51-3.75)
30-min	0.704 (0.552-0.883)	0.873 (0.684-1.10)	1.15 (0.897-1.45)	1.38 (1.07-1.75)	1.69 (1.28-2.28)	1.93 (1.42-2.66)	2.18 (1.57-3.16)	2.48 (1.67-3.67)	2.94 (1.90-4.52)	3.33 (2.11-5.24)
60-min	0.902 (0.707-1.13)	1.12 (0.876-1.40)	1.47 (1.15-1.86)	1.76 (1.37-2.24)	2.17 (1.63-2.92)	2.47 (1.82-3.41)	2.79 (2.01-4.05)	3.18 (2.14-4.70)	3.77 (2.44-5.81)	4.28 (2.71-6.73)
2-hr	1.14 (0.902-1.42)	1.44 (1.14-1.80)	1.93 (1.51-2.41)	2.33 (1.82-2.94)	2.89 (2.19-3.86)	3.30 (2.45-4.53)	3.74 (2.72-5.40)	4.29 (2.90-6.27)	5.13 (3.33-7.80)	5.85 (3.71-9.10)
3-hr	1.32 (1.05-1.64)	1.67 (1.32-2.08)	2.24 (1.77-2.80)	2.71 (2.13-3.41)	3.36 (2.56-4.48)	3.84 (2.87-5.26)	4.36 (3.18-6.26)	5.00 (3.39-7.27)	5.98 (3.90-9.05)	6.83 (4.34-10.6)
6-hr	1.74 (1.39-2.14)	2.17 (1.73-2.68)	2.87 (2.28-3.56)	3.45 (2.72-4.31)	4.25 (3.25-5.60)	4.84 (3.63-6.56)	5.49 (4.00-7.78)	6.26 (4.26-9.01)	7.44 (4.87-11.1)	8.46 (5.40-12.9)
12-hr	2.28 (1.84-2.80)	2.79 (2.24-3.42)	3.61 (2.88-4.44)	4.29 (3.41-5.32)	5.23 (4.02-6.82)	5.92 (4.46-7.92)	6.67 (4.88-9.32)	7.56 (5.17-10.8)	8.89 (5.83-13.1)	10.0 (6.41-15.1)
24-hr	2.78 (2.25-3.39)	3.39 (2.74-4.13)	4.39 (3.53-5.37)	5.22 (4.17-6.42)	6.36 (4.91-8.23)	7.20 (5.45-9.56)	8.12 (5.96-11.2)	9.20 (6.32-13.0)	10.8 (7.14-15.8)	12.2 (7.86-18.2)
2-day	3.14 (2.56-3.80)	3.91 (3.17-4.72)	5.16 (4.17-6.26)	6.19 (4.98-7.56)	7.62 (5.93-9.81)	8.67 (6.61-11.5)	9.82 (7.29-13.6)	11.2 (7.74-15.7)	13.4 (8.87-19.4)	15.3 (9.88-22.6)
3-day	3.43 (2.80-4.13)	4.26 (3.48-5.13)	5.61 (4.56-6.78)	6.73 (5.43-8.18)	8.27 (6.46-10.6)	9.41 (7.20-12.4)	10.7 (7.93-14.6)	12.2 (8.42-16.9)	14.6 (9.66-20.9)	16.7 (10.8-24.4)
4-day	3.72 (3.05-4.46)	4.57 (3.74-5.49)	5.97 (4.86-7.20)	7.13 (5.77-8.64)	8.72 (6.83-11.1)	9.90 (7.59-12.9)	11.2 (8.34-15.3)	12.8 (8.84-17.6)	15.2 (10.1-21.7)	17.4 (11.2-25.3)
7-day	4.52 (3.72-5.39)	5.41 (4.45-6.46)	6.87 (5.62-8.23)	8.08 (6.57-9.73)	9.74 (7.66-12.3)	11.0 (8.44-14.2)	12.3 (9.18-16.6)	13.9 (9.68-19.0)	16.4 (10.9-23.2)	18.6 (12.0-26.7)
10-day	5.26 (4.34-6.25)	6.17 (5.10-7.35)	7.67 (6.31-9.16)	8.92 (7.28-10.7)	10.6 (8.37-13.3)	11.9 (9.16-15.3)	13.3 (9.89-17.7)	14.9 (10.4-20.2)	17.3 (11.6-24.3)	19.4 (12.6-27.7)
20-day	7.38 (6.14-8.71)	8.38 (6.96-9.90)	10.0 (8.28-11.9)	11.4 (9.33-13.5)	13.2 (10.4-16.4)	14.6 (11.3-18.5)	16.1 (11.9-21.0)	17.7 (12.4-23.7)	19.9 (13.4-27.6)	21.7 (14.1-30.7)
30-day	9.12 (7.62-10.7)	10.2 (8.49-12.0)	11.9 (9.89-14.1)	13.3 (11.0-15.8)	15.3 (12.1-18.8)	16.8 (13.0-21.1)	18.4 (13.6-23.7)	19.9 (14.0-26.5)	22.1 (14.8-30.3)	23.7 (15.4-33.2)
45-day	11.3 (9.48-13.2)	12.4 (10.4-14.6)	14.3 (11.9-16.8)	15.8 (13.1-18.7)	17.9 (14.2-21.8)	19.6 (15.1-24.2)	21.2 (15.7-26.9)	22.7 (16.0-29.9)	24.7 (16.6-33.6)	26.1 (17.0-36.3)
60-day	13.1 (11.0-15.3)	14.3 (12.0-16.7)	16.3 (13.6-19.1)	17.9 (14.8-21.0)	20.1 (16.0-24.3)	21.8 (16.9-26.9)	23.5 (17.4-29.6)	25.0 (17.7-32.8)	26.8 (18.1-36.4)	28.1 (18.4-38.9)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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