HANCOCK
ASSOCIATES
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August 15, 2025

Alison Manugian
Assistant Town Manager
Community Development Director
62 Arlington Street
Dracut, MA 01826

RE: 2041 Bridge Street, Comprehensive Permit Peer Review

Dear Alison,

Hancock Associates has completed our revisions to the proposed project at 2041 Bridge Street. Attached herein is our response to Green Int.'s peer review comments, the revised plan set (dated revision 8/11/25), and revised stormwater report (dated revision August 2025).

Please reach out to this office with any questions or concerns

Best,

Brian Geaudreau, P.E

Open Comments
Defer to Board
Conditions of Approval

PROJECT NAME 2041 Bridge Street PEER REVIEW
DATE 7/11/2025
UPDATED:
PROJECT NO. 24016.0606

Peer Review Comment Form

NO.	SHEET NO.	SECTION	GREEN'S COMMENT	Applicant's RESPONSE	CONFIRMED BY	DATE
ZBA Review						
	APPLICATION					
1	Waivers		The Applicant provided a list of waivers relating to setbacks, landscape requirements, parking space dimensions, parking general standards, signage, disturbance within 25 feet of a wetland, and structures (walls and buildings) within 50 ft of a wetland. We defer to the Board for waiver approval.	Ackowledged		
2	Swept Path Analysis Plan	Site Plan Rules and Regulations Section 3	Has the fire truck access be coordinated with the Fire Department? Snow storage appears to block the fire truck turn around access. Please revise.	Snow storage is not proposed within the fire truck turn around. The snow storage areas proposed to be off pavement. Dotted lines have been added to show extent of snow storage areas.		
	SITE PLAN					
3	All Plans	Stormwater Rules and Regulations - Section 8.D.(2).	Please ensure that all acronyms and linetypes are listed in the legend. For example Sheet 3- Layout and Materials Plan shows VGC and CCB, which seem to be Vertical Granite Curb and Cape Cod Berm, please verity and ensure that all acronyms are listed.	Missing acronyms have been added to the revised plans.		
4	Sheet 3 - Layout and Materials Plan	Site Plan Rules and Regulations Section 2	There is snow storage within wetland buffer zones beyond the curb line. These snow piles appear to directly discharge to the wetlands. Snow piles should be placed in an are that when they met they will discharge to treatment before discharging to the wetland. Please revise location of snow piles.	Grading has been adjusted in areas of snow storage to direct snowmelt to the proposed stormwater management system. Flow arrows have been added to show grading shall be directed towards the system.		
5	Sheet 3 - Layout and Materials Plan	Zoning Bylaw 6.1.8.1.D.	The applicant is requesting a waiver for smaller parking depth from 20' to 18'. We recommend aisle with be a minimum of 24' for 18' long parking spaces. Please revise.	The required drive aisle width is 22'. Increasing the drive aisle width would increase site impacts and push the development closer to the adjacent resource area.		
6	Sheet 3 - Layout and Materials Plan	ADA	Please show detectable warning panels at handicap ramps.	Detectable warning panels have been added to the plan.		
7	Sheet 3 - Layout and Materials Plan & Sheet 4 - Grading, Drainage, and Utilities Plan	Dracut Wetland Regulations 4.2.2.3	Buffer lines are cut off in various locations, please show entirety of buffer zones.	Buffer lines have been adjusted to show theiir entirety.		
8	Sheet 4 - Grading, Drainage, and Utilities Plan		P.OCS2 missing invert in and P.OCS4 missing invert in. Please provide.	Invert information has been added to the plans.		
9	Sheet 4 - Grading, Drainage, and Utilities Plan	Stormwater Rules and Regulations - Section 7.G.(12)	Many pipes, especially those with slopes over 10%, will result in very high velocities and could cause premature wear and damage to drainage structures. Many pipes that outlet to flared end sections could have slopes reduced to be closer to 1% to reduce stormwater velocity and minimize erosion to rip rap. Please provide calculations to size drainage pipes to accommodate the 25 year storm event and maintain velocities between 2.5 and 10 feet per second.	Pipe slopes have been revised to result in velocities between 2.5-10 fps during the 25 year storm event. A table showing these calculations is included in the revised stormwater report. Pipes leading directly to flared end section have been revised to have a slope between 1 - 1.5%.		
10	Sheet 4 - Grading, Drainage, and Utilities Plan		Has town engineering and sewer department been contacted to verify that water and sewer system connections are acceptable and the town can handle the additional flows?	The engineering department and sewer department have been engaged previously as part of preliminary meeting and have given verbal approval that the town's water and sewer systems are capable of handling the proposed additional flow. Written approval shall be submittal upon reciept.		
11	Sheet 4 - Grading, Drainage, and Utilities Plan		Stormwater may buildup against wall west of the drainage swale going to P.DCB2. Consider moving swale to start in the south corner.	Swale has been shifted closer to the south corner of the retaining wall.		
12	Sheet 4 - Grading, Drainage, and Utilities Plan		There is a water gate shown at the bend by the fire hydrant. Can the bend be eliminated and the water line or hydrant be shifted?	The water line has been shifted to the north to eliminate the bend at the gate.		
13	Sheet 4 - Grading, Drainage, and Utilities Plan	Stormwater Rules and Regulations - Section 7.B.(3)(b)	Please confirm that there is no gas service to proposed building.	Gas service is not proposed at this time.		
14	Sheet 4 - Grading, Drainage, and Utilities Plan & Sheet 6 - Detail Sheet (1 of 3)	ADA	Transition slabs for handicap ramps will have to be more than 6.6', as is shown in the details, in order to have a max 7.5% slope to transition up 6". Please revise.	Transistion slabs have been updated to reflect a length of 6'-8" to match the maximum 7.5% slope as shown on the detail sheet.		
15	Sheet 4 - Grading, Drainage, and Utilities Plan & Sheet 7 - Detail Sheet (2 of 3)		The plans show multiple inlet pipes in the cases of P.DMH1 and P.DMH4, but the detail only shows one inlet pipe. Please verify that this structure can accommodate two inlet pipes.	The proposed drain man holes that include multiple inlet pipes have been reviewed for conflicts in having multiple inlets. The manholes were found to have adequate spacing between the pipes to accommodate the multiple inlets.		
16	Sheet 4 & Appendix V Pre and Post Development Watershed Plans (Stormwater Report)		Please revise so that proposed stormwater design matches in plan and stormwater report. For example, P.CB1, P.DMH1, and P.CB2 configuration is different.	The post development subcatchment plan has been updated to reflect the most recent drainage design.		

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17		Stormwater Rules and Regulations - Section 7.B.(3)(c)ii.	Please provide profile for drainage trunk line.	Profile of of the drainage trunk line has been developed and added to the plan set.		
18	Sheet 5 - Erosion and Sedimentation Control Plan		It is assumed that the proposed erosion control line represents the hay bales and silt fence barriers. Please confirm.	Confirmed		
19	Sheet 5 - Erosion and Sedimentation Control Plan		Only one of the temporary sediment basins has a swale leading to it. Please clarify how stormwater will be getting to the other basins.	Temporary swales have been shown directing runoff to the proposed temporary sediment basins		
20	Sheet 6 - Detail Sheet (1 of 3)		There is a detail for Bollard, but it's unclear where these are in the plans. Please clarify.	A label indicating bollards adjacent to the proposed transformer has been added.		
21	Sheet 7 - Detail Sheet (2 of 3)		Please verify if Double Grate for Catch Basins is to be used with the Catch Basin with Hood detail. If a different structure is required, please provide detail.	Catch basin detail has been revised noting that 60" diameter structures are to be used with double grate inlets.		
22	Sheet 7 - Detail Sheet (2 of 3)		There is a detail for Area Drain, but it's unclear where this is in the plans.	Area drains are labeled as P.AD1, P.AD2 etc. They are found in various locations surrounding the proposed building.		
23	Sheet 7 - Detail Sheet (2 of 3)		The Grass Drainage Swale detail shows a minimum width of 11', but the swales in the plan are less than 11'. There is also a swale that is 1.5' wide, but with a 1:3 slope that would mean that the sides would create a "V" rather than a swale as is shown in the detail. Please revise.	Grass drainage swale has been revised to show varying total width, with refernce to the Grading, Drainage, and Utilities Plan.		
24	Sheet 8 - Detail Sheet (3 of 3)		Please provide elevations for system bottom along with SHGW for each subsurface system in detail.	A table of elevations has been added to the infiltration system detail.		
25	Sheet 8 - Detail Sheet (3 of 3)		Isolator Row details mention that Stormtech recommends flexstorm inserts in upstream structures with open grates, are these inserts going to be used for this design? Please clarify.	No permanent inlet filters are proposed at this time. Flexstorm inserts have been removed from details.		
26	Sheet 8 - Detail Sheet (3 of 3)		Outlet Control Structure (P. OCS) detail shows underdrains, but there doesn't seem to be any underdrains shown in the plans. Please clarify. It is unclear when the drawdown pipe cap is to be removed. Please verify that this is necessary for OCS.	Underdrains are shown as dashed lines below each underground infiltration system. Labels have been added to provide clarification. Underdrains are provided for mainenance purposed only to allow for manual draining of the system.		
	Stormwater Report					
27	Standard 2 Peak Rates	Stormwater Rules and Regulations - Section 7.B.(6)	Only a table for peak rates was provided. Please provide a table showing peak volumes have been met.	A table of peak volumes has been added to the revised stormwater report.		
28	Appendix II Stormwater Checklist	Stormwater Rules and Regulations - Section 7.B.(4)(a)	Stormwater checklist must be stamped and signed by registered Professional Engineer (PE).	The revised stormwater report contains a stamped stornwater checklist.		
29	Appendix V Pre and Post Development Watershed Plans	Stormwater Rules and Regulations - Section 7.B.(3)(d)	There is not enough topography information outside of the lot to delineate watershed areas. Please include more topography information. Please indicate ground cover material. Soils must be broken down by soil hydrologic group rating in plans. Please show flow path for all drainage areas.	Supplimental topographic information, ground cover information and hydrologic soil groups have been added to the watershed plans.		
30	Appendix V Pre and Post Development Watershed Plans		In the plans there is a swale in 13S that doesn't seem to be considered in the watershed plans. 11S and 22S don't seem to have a boundary between them. Please revise	The plans have been revised to reflect the subcatchment ares described in the HydroCAD analysis. Swales are shown in the HydroCAD worksheets as 13R, 14R, and 19R.		
31	Appendix V Pre and Post Development Watershed Plans & Appendix VI HydroCAD Output		18S is shown in the proposed HydroCAD, but not in the watershed plan. 22S does not appear to all go to the drainage swale, but HydroCAD indicates that it does. Please revise. Please verify that all of the roof drains go directly to DMH2.	The plans have been revised to show 18S and 22S and their associated boundaries. Roof drains shall be designed to connect to the proposed drainage line surround the perimeter of the building.		
32	Appendix VI HydroCAD Output		HydroCAD lists all soils as C soils, but 51A seems to be B/D soil. This is generally interpreted as area within the wetlands is D soils and area outside the wetlands is considered B soils. Please revise.	The post development subcatchment plan has been revised to show NRCS soil boundaries. The only portion of the site that proposes any development within the 51A soils is an area of approximately 1000SF to be regraded near entance to the site. This area has been accounted for in subcatchment 10S of the revised HydroCAD report.		
33	Appendix VI HydroCAD Output		Tc for 10S is listed as less than 6 minutes. Please revise.	Tc for 10S has been revised to 6 minutes.		

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34	Appendix VI HydroCAD Output		Inverts must match between plans and HydroCAD. Invert out for Pond 12P does not match P.OCS2 in plan. Please revise and verity that all other invert information is consistent between plans and HydroCAD.	12P and P.OCS2 have been corrected. Other invert information has been revised to be consistent between plans and HydroCAD.		
34	Mounding Analysis		It appears that for UIS2 &3 it will mound up into the mounding of the system. This may affect the infiltrate rate that is being used for peak rate attenuation. Can the design be modified to prevent it from mounding up into the system?	The mounding of groundwater into the systems is not expected to effect the peak discharge rates of the system due to the saturated hydraulic conductivity (Ksat = 10.25in/hr) of the underlying soil being greater than the exfiltration rate (Rawl's Rate = 8.27in/hr) used to model the infiltration systems.		
35	Appendix X Operations and Maintenance Log		Please provide O&M manual from manufacturer for Stormtech systems similar to what was provided for Contech systems. Please also include O&M instructions for drainage swales and catch basins.	O&M manual has been added for the proposed Stormtech systems. O&M instruction have been added for drainage swales and catch basins.		