



July 12, 2022

Ms. Sue Brown, Town Planner
Zoning Board of Appeals
Manchester-by-the-Sea Town Hall
10 Central Street
Manchester-by-the-Sea, MA 01944

Via: Email to Sue Brown (browns@manchester.ma.us); smellish11@comcast.net; eglenn@mit.edu; gpucci@k-plaw.com; and federspielg@manchester.ma.us

Reference: Supplemental Environmental Peer Review
Chapter 40B Comprehensive Permit Application
0 School Street
Manchester-by-the-Sea, Massachusetts
B+T Project No. 3344.00

Dear Ms. Brown:

Beals and Thomas, Inc. (B+T) is providing this supplemental review documenting our Environmental Peer Review of the Chapter 40B Comprehensive Permit Application Filing for 0 School Street ('the Property') in Manchester-by-the-Sea, Massachusetts. We understand that SLV School Street, LLC (the Applicant), proposes to develop a 40B housing project consisting of 136 apartment units, 34 of which are designated to be affordable, with associated site improvements (the Project).

B+T issued a preliminary memorandum on February 22, 2022 and an initial letter to the Board dated March 7, 2022, which presented the results of our site visit and our initial review of the original documentation submitted by the Applicant. We then issued a supplemental comment letter dated March 25, 2022, and additional documentation was subsequently provided by the Applicant. A subsequent review letter was provided by B+T on June 8, 2022. Since the issuance of our June 8, 2022 correspondence, we have participated in a public hearing (same date as issuance), performed a site visit with the Applicant's representative to review the habitat features of the site (June 28, 2022), and received the following documentation as listed below, which served as the basis of this final review letter:

- Document entitled *The Sanctuary - School Street Development - Blasting and Site Operations Protection Measures* received July 1, 2022 (undated), and prepared by Rubicon Builders
- Document entitled *Wildlife Habitat Assessment & Vernal Pool Survey* dated June 10, 2022, prepared by Goddard Consulting, LLC

Civil Engineering ▪ Land Surveying ▪ Landscape Architecture ▪ Land Use Permitting ▪ Environmental Planning ▪ Wetland Science

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- Revised Wetland Bylaw Waiver Request current as of May 25th, 2022, prepared by the Applicant.

We have reviewed the documentation above with respect to the requirements of the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, S. 40) and its implementing Regulations at 310 CMR 10.00 (collectively referred to as the 'Act'), Article XVII of the Manchester-by-the-Sea General Bylaws: General Wetlands Bylaw (Rev. April 2015) and the Manchester-by-the-Sea Wetlands Regulations for Administering General By-Law Article XVII (2021; collectively 'the Bylaw'), and particularly with regard to our most recent comments.

This letter contains the following sections:

- Vernal Pool Considerations
- Wildlife Habitat Assessment
- Blasting and Site Operations Protection Measures
- Waiver Requests
- Potential Conditions

Prior comments that were not fully addressed in the previous review letter dialogue have been incorporated into the Potential Conditions section of this letter.

Vernal Pool Considerations

We offer the following comments for the Board and Applicant's consideration which relate to vernal pool hydrology and the stormwater management system. We have included a suggested condition in the Potential Conditions section herein to address these items.

1. Upon further review, it is our opinion that additional information is warranted to determine if the Project will alter the hydrologic regime of the vernal pools. Specifically, we note the following items for further consideration during the Notice of Intent process:
 - The design of the southern retaining wall remains pending. Proximity of the retaining wall to the infiltration basin may result in lateral instead of vertical movement of infiltrated stormwater, which would be more likely to affect vernal pool hydrology. Specifically, that stormwater could discharge tributary to the vernal pools in lieu of recharging groundwater.
 - Hydrogeologic information for the path of flow from Underground Infiltration System-1 and Underground Infiltration System-2 has not been specifically determined. The Applicant should confirm that subsurface conditions throughout the systems (i.e. soil texture, presence of restrictive layers, and/or refusal) will allow vertical flow of infiltrated water vs. horizontal flow.

2. We also note the potential chemical and/or thermal impacts from deicing salts/chemicals and stormwater runoff on the vernal pools. Design confirmation that treated water will be infiltrated vertically completely through the soil profile and only break out at the natural location (wetland edge) should be provided.

Wildlife Habitat Assessment

B+T reviewed the Wildlife Habitat Assessment & Vernal Pool Survey (collectively ‘the Wildlife Study’) prepared by Goddard Consulting, LLC (Goddard) and participated in a site walk with Ryan Roseen of Goddard to review the field conditions represented in the report (June 28, 2022). This report combines multiple days of field data collection and GIS analysis to provide the summary discussed herein. While we note some below items for the administrative record, B+T agrees with the methodology and findings of this review with the noted exceptions.

The Wildlife Study includes several figures dividing the locus and limit of disturbance by canopy cover, existing disturbances, presence of snags, presence of wetland resource areas, and location of trail cameras. While the Project does not appear to result in an adverse impact based on the provided analysis and site conditions, there will be a net reduction of available habitat, as would occur with any development project. Specifically, the Project will result in a net loss of approximately 7.2 acres of the overall 23.7 acres of wooded habitat on the Property. The area of lost habitat has been analyzed by the Wildlife Study based on topography, vegetative composition, and other relevant factors.

3. Some of the photographs taken on locus display the label ‘Cathedral Pines’, the adjacent Conservation Area that is not part of the proposed development footprint. We understand from our field conversations that this labeling was the result of an automatic GPS labeling system in the software used to include a data and timestamp of each photograph. We note this only for the administrative record.
4. The Appendix B Wildlife Habitat Assessment Form provided for the areas within the limit of work does not have any details selected in Section III for Important Upland/Wetland Food Plants. Based on the abundant berry and mast-producing fruit, ‘Abundant’ should be selected and consider this amendment to be a clerical error based on discussion with Goddard.
5. Wildlife cameras were not labeled (i.e. Cameras 1 through 4) on Figure 9 for the reviewer’s benefit. As B+T reviewed the camera locations in the field, we do not require further labeling of the camera locations on Figure 9 unless it is beneficial to the Board.

We further understand from conversations with the Applicant's consultant that not all photographs from the cameras were included in the report (based on amount of data), and that images were selected to provide a cross-section of all of the wildlife observed therein. We consider this approach appropriate.

6. Although B+T agrees that the Wildlife Study demonstrates that no Adverse Impact will occur to the habitat functions of regulated resource areas from the Project (subject to the Vernal Pool Considerations section above and the Potential Conditions section below), we do not necessarily agree with some of statements in the report, and note this for the administrative record. For example, Page 19 notes the following: *It is our professional opinion that this project will not substantially reduce the site's capacity to provide important wildlife habitat functions, upon two growing seasons, function will **fully resume**, as exists today* (emphasis added). While we acknowledge that some disturbance-tolerant species are noted and much of the locus will remain forested, a full resumption of wildlife habitat functions would be impossible given the net loss of approximately 7.2 acres of wooded area.
7. During the Comprehensive Permit process, the potential for a Conservation Restriction was discussed by the Applicant. We note for the record that Section 2.6 of the Wildlife Study outlines this commitment as follows: *There are no plans to affect any of these important habitat features identified outside the limit of work and the land located east and south of the proposed work is planned to be permanently protected with a conservation restriction totaling approximately 13.2 acres. This meets DEP's standard of "No Adverse Effect" as set forth in the regulations and the guidance document.* We have suggested in the Potential Conditions section that the Board consider including recording of the noted Conservation Restriction as a condition of approval.

Blasting and Site Operations Protection Measures

B+T reviewed the Blasting and Site Operations Protection Measures memorandum prepared by Brian Mitchell of Rubicon Builders. Although we find this Blasting and Site Operations Protection Measures memorandum to be of adequate detail at this schematic stage of development, B+T recommends that permit and construction-level details be provided if and when the Project advances to these later phases. We further submit the following for the Board's consideration.

8. It is noted in the Rubicon Builders memorandum that a job-specific blasting plan will be created prior to undertaking the site work and we have suggested in the Potential Conditions section of this letter that the Board consider this as a potential condition.

We also extend this recommendation for additional details to the proposed catchment berm and temporary rock fall fence as a potential condition prior to the start of work given the steep and rocky topography proximate to the WF-A Series Vernal Pools. It is unclear how the Backfill and Berming and the Catchment Berm Management Operations could be implemented given the location of the proposed limit of work and steep slopes in close proximity to potential blasting locations.

9. The Rubicon Builders memorandum notes that the proposed systems will be *designed in coordination with the Erosion Controls installed throughout the site*. We recommend that the Applicant provide commentary as to whether the proposed perimeter sediment controls will be refined prior to further permitting. As it stands, B+T is not confident in the schematic presentation of the perimeter controls near Vernal Pool A North given the steep topography and challenging installation on outcrops and/or shallow rock restrictions. We recommend that the Applicant continue to evaluate if additional layered and/or staggered perimeter controls along the slope are possible. Additionally, if staked BMPs are still proposed (the noted silt fence and tubular barrier), we further recommend that the Applicant consider a higher diameter tubular barrier or equivalent where staking would be limited.

In the execution of the blasting and site operations plan referenced by Rubicon Builders, it may be advantageous for the Applicant to consider first installing perimeter controls farther upslope than depicted during the initial blasting and earth removal, then phase the installation of the subsequent controls further down-gradient towards the limit of work as material is gradually removed.

We have included a Potential Condition item regarding erosion controls.

Waiver Requests

10. Please note that the dialogue in the previous review letters between B+T and the Applicant has been removed from this document for readability and discussion purposes. This section includes the Applicant's waiver requests excerpted from the most recent (May 25, 2022) waiver document and provides B+T's final commentary beneath the corresponding waiver.

Because some of the waiver requests are broad, we recommend that the Board specify for which Project components the waiver is granted.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 1.2.2: Use of Home Rule Authority	protect vernal pools as an additional resource area recognized by the Town as significant, but not included in the Act;	This extends the resource area boundary 100 feet into the uplands, unlike the WPA definition. This effectively makes a 130-foot no disturbance zone and 150-foot no build zone to vernal pools. This application of this bylaw – particularly the extended scope of the resource area and buffer would make the construction of the driveway essentially impossible and thus would be tantamount to a denial of the permit. As will be demonstrated by the Applicant’s consultant, the project will not impair vernal pool function

- Necessity of relief: Based on the illustrative buffer exhibit and site plans, there are two locations where work is proposed within the local Vernal Pool resource area (i.e. the vernal pool basin plus 100’ adjacent area): 1) west of the northerly A series Vernal Pool, for driveway, grading, and retaining wall; and 2) east of the R series Vernal Pool, for stormwater basin off-grading.
- Alternate methods of compliance: It appears that the limit of work east of the R series may be able to be tightened to avoid impact within the local vernal pool resource area. In B+T’s previous correspondence, we requested that the Applicant evaluate and advise. However, although the limit of work northwest of the A series may be able to be tightened slightly to reduce the extent of work in the vernal pool resource area, it does not appear possible to completely avoid the impact.
- Adverse impact of approval: The potential adverse impact of approving this waiver is a reduction in the natural/undisturbed area of locally jurisdictional vernal pools on-site. Specifically, two areas of the outer vernal pool upland boundary would be developed.

If this waiver is granted, the Project would be subject to the jurisdictional setbacks of the Act, which regulates vernal pool habitat only to the extent within the resource area surrounding a vernal pool. Based on the Bylaw Buffer Exhibit revised May 5, 2022, no work is proposed within state Vernal Pool Habitat (i.e. no work in RFA occurs within 100-feet of a vernal pool).

Based on the Wildlife Habitat Study, B+T does not anticipate that adverse impacts would occur which would undermine the functioning of the pools (and subject to our commentary in the Vernal Pool Considerations and Potential Conditions sections herein). As detailed in the Buffer Zone Exhibit and Wildlife Study, given the topography, distance to the vernal pool boundary, and location of ground cover favorable to vernal pool species, it does not appear that key amphibian migratory areas will be disrupted. The Applicant has also provided the requested construction sequencing information, which includes a synopsis of potential site operation procedures to protect the down-gradient vernal pools. Please refer to our suggested conditions with respect to construction-level details. We do recommend that the Applicant evaluate if changes to the grading plan can further reduce these impacts prior to the Conservation Commission submittal under the WPA but take no exception to the waiver request.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 2.9: Vernal Pool	[Definition of Vernal Pool]	As stated in prior explanation, a waiver is required from the expanded definition of the extent of a vernal pool and its buffer in that, under such bylaw, the work required for roadway construction would be within the vernal pool or buffer thereto. As will be demonstrated by the Applicant's consultant, the project will not impair vernal pool function.

- Necessity of relief: The Applicant notes that the 100-foot extension of the Vernal Pool Boundary and associated No Disturb Zone would result in a major redesign or a substantial loss of units. It appears this waiver is necessary for the Project; please refer to B+T's response to the Section 1.2.2 Waiver Request above.

- Alternate methods of compliance: Alternate methods of compliance do not appear practicable; please refer to B+T’s response to the Section 1.2.2 Waiver Request above.
- Adverse impact of approval: Adverse impacts that would undermine the functioning of the pools are not anticipated (subject to our related commentary herein); please refer to B+T’s response to the Section 1.2.2 Waiver Request above. We note that only partial relief is required to the 100-foot Vernal Pool boundary extension, and portions of this locally jurisdictional resource area (if the limit of disturbance does not change) will remain undisturbed.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 2.2: Alter	[Definition of Alter]	Waiver being requested of this definition as it relates to the interpretation and implementation of the bylaw and its expanded resource areas. Many of the subsections of 2.2 are open to subjective interpretation; and adherence to local wetland bylaw regulations will make the project unbuildable. For example, the terms “cumulative” and “incremental” in bylaw section 2.2.13 are not defined. Thus, it is open to subjective interpretation and could require a major redesign and a substantial loss of units depending on the local Commission’s interpretation. The Applicant will demonstrate that the project does not result in adverse impacts to Resource areas and will otherwise be subject to approval from the Conservation Commission under the Wetlands Protection Act

- Necessity of relief: The result of granting this waiver would defer to the definition of Alter of the Act at 310 CMR 10.04, which does not include an evaluation of cumulative and incremental impacts, among other more minor differences. It remains unclear to us why denial of this waiver would result in the Project being unbuildable as stated by the Applicant but acknowledge the noted uncertainty with the undefined terms.

It appears that the waiver is requested to provide the Applicant with more certainty in the permitting process as the terms “cumulative” and “incremental” are not defined. It is not apparent to us why the development as proposed would not comply with this section but acknowledge the Applicant’s concern regarding the potentially subjective nature of this requirement.

- Alternate methods of compliance: Although the Applicant has indicated that an alternatives analysis may be provided during the NOI process, we note that it is our understanding that such an analysis would not address the Bylaw’s “cumulative” and “incremental” effect requirement, given that the NOI will be filed only pursuant to the Act in accordance with the Comprehensive Permit process.

Additionally, for the Board’s information we note that “alternative methods of compliance” are not applicable to this particular waiver request. An evaluation of “cumulative” and “incremental” impacts is either provided or it is not.

- Adverse impact of approval: Given the character of the existing site and proposed development B+T does not take exception to this waiver request. Although a separate analysis of cumulative and incremental impacts has not been provided, the Applicant has undertaken the aforementioned Wildlife Study.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 4.1.1: Jurisdiction	Any freshwater or coastal wetland; salt marsh; wetmeadow; bog; swamp; vernal pool; spring; bank; reservoir; lake; pond; river or stream; beach; dune; estuary; coastal bank; lands under water body; land subject to flooding or inundation by groundwater or surface water; land subject to tidal action; coastal storm flowage or flooding;	Requesting waiver specifically for the vernal pool resource area section. This application of this bylaw – particularly the extended scope of the resource area and buffer would make the construction of the driveway essentially impossible and thus would be tantamount to a denial of the permit. As will be demonstrated by the Applicant’s consultant, the project will not impair vernal pool function

- Necessity of relief: The Applicant is seeking relief from this section as it relates to vernal pools and proposed work therein (e.g. within 100’ of the pool basin). Please refer our discussion of the Section 1.2.2 waiver request for additional information.
- Alternate methods of compliance: It is unclear why this waiver request is necessary, given the preparation of Wildlife Study and assertion that no adverse impacts to resource areas will occur, including vernal pools. We presume that the waiver is requested to provide less uncertainty in the permit review process.
- Adverse impact of approval: Granting this waiver would result in vernal pools being considered a habitat feature of other wetland resource areas, as opposed to being themselves separate and distinct resource areas. Additionally, the extent of area subject to jurisdictional review would be reduced, as the local vernal pool resource area extends 100’ into uplands, which is not the case with the Act.

Although granting this waiver would reduce the jurisdictional footprint of resource areas and setbacks on the Property, it does not appear that an adverse impact of approval would occur for work within these areas; please refer to relevant discussion associated with above waiver requests.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 4.4: Jurisdiction and Presumption	Unless the applicant demonstrates by clear and convincing evidence that a significant adverse effect will not occur, it shall be presumed that significant adverse effects will result from any alteration within: 4.4.1 – a Resource Area, other than land subject to flooding or inundation by groundwater, or surface water or coastal storm flowage or flooding; 4.4.2 - 30 feet of the edge of any salt marsh, freshwater wetland or vernal pool;	Waivers of 4.4.1 and 4.4.2 are required because work is required within Resource Areas and 30 feet of the edge of a freshwater wetland and/or a vernal pool. As will be demonstrated by Applicant’s consultant, work will be completed without adversely impacting resource area.

- Necessity of relief: Given the configuration of the Property’s School Street frontage, the Project requires work within Riverfront Area which is the subject of the Section 4.4.1 waiver request. With respect to the Section 4.4.2 waiver request, the Applicant is requesting this to allow the stormwater management system and driveway within the 30’ No Disturb and 50’ No Build Zone. These subsections of the Bylaw specifically relate to the presumption that work therein (the resource areas and 30-foot No Disturb Zone) carries the presumption of significant adverse effect.
- Alternate methods of compliance: There do not appear to be alternate methods of compliance. We note that alternate means of access along either Old School Street or School Street would appear to be more impactful to resource areas than the current configuration of the site entrance. With regard to the stormwater basin and site driveway there do not appear to be alternate methods of compliance regarding the 30-foot No Disturbance Zone.
- Adverse impact of approval: It does not appear that adverse impacts will occur to the resource areas, subject to our other related commentary herein.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 6.1: Applications and Fees	Except as provided in Section 5 hereof, a written NOI application shall be filed with the ConCom to prior to performing any activity affecting a Resource Area. The NOI shall include such information and plans as are deemed necessary by the ConCom to describe proposed activities and their effects on the Resource Area or Resource Area Buffer Zone. No activities shall commence without receiving and complying with a permit issued pursuant to this By-Law.	All local applications and consideration within the context of the local bylaws, shall be subsumed into 40B process and under the jurisdiction of the ZBA. As such, the applicant will not be submitting a separate local bylaw NOI filing

- Necessity of relief: Granting of this waiver request is consistent with the Comprehensive Permit process, through which the Applicant will not be seeking a separate Order of Conditions under the Bylaw. This waiver relates to the procedural processes under the Bylaw which establishes one of the grounds through which this local permit is required. We note for the record that this Project will be subject to similar provisions as stated in this section of the Bylaw under the Act when reviewed by the Manchester Conservation Commission.
- Alternate methods of compliance: As the Bylaw review is being addressed pursuant to the Comprehensive Permit process, there is no alternative to this procedural waiver.
- Adverse impact of approval: There is no specific adverse impact of approval, since this waiver only reflects the Comprehensive Permit process (whereby the Board addresses the local bylaws) and does not change performance standards of the Bylaw.

By-Law or Regulations Section	Requirement	Notes
Wetlands Bylaw Section 9: Permits and Conditions	[Standards of Review for applications under the local wetlands bylaw]	Waiver from this entire section. This section is not applicable under c. 40B. Permits and approvals to be granted pursuant to G.L. c. 40B. Enhanced standards and burdens of proof are not applicable under 40B and, if applied, could nullify the project. As will be demonstrated by the Applicant’s consultant, the project will not adversely impact the interests set forth under the Wetlands Protection Act.

- Necessity of relief: Sections 9.1 through 9.6 and 9.12 through 9.16 generally address procedural considerations, waiver of which are appropriate given the Comprehensive Permit process at play (whereby the Board addresses the wetlands Bylaw). Sections 9.7 through 9.11 are administrative in nature. We take no exception to these waivers.

Regarding the other subsections, it is not apparent that waivers are needed from 9.8 (relating to Riverfront Area requirements) or 9.9 (relating to wetland replication). With respect to the Riverfront Area requirements in 9.8, the Applicant will still need to provide an Alternatives Analysis to the Conservation Commission during the NOI process under the Act. We understand that this waiver request may be included based on potential open-endedness of 9.8 whereas when filing under the Act, the Project will be subject to the performance standards of 310 CMR 10.58(4). However, a waiver from Section 9.9 does not appear necessary given that it relates to wetland replication requirements.

For Sections 9.10 and 9.11, the Applicant has undertaken a study to address wildlife habitat and vernal pools. However, we recognize that this waiver request may relate more to managing the scope and extent of these studies, since particularly Section 9.10 provides broad discretion regarding what can be required as part of a study. We take no exception to these waivers, given that the Applicant has provided the Wildlife Study which, in our opinion, appropriately analyzes the site characteristics for assessing potential impacts.

- Alternate methods of compliance: Alternates for compliance are not relevant to this waiver request as it relates to how the Town is to consider potential impacts of a Project, as opposed to the Project design. Additionally, some components of Section 9 are procedural/administrative in nature.
- Adverse impact of approval: The Applicant has undertaken the studies noted in Section 9, and other subsections therein are either not germane or mirror the Act. Therefore, it does not appear that there is an adverse impact of approval of this waiver request, although we recommend that it be limited to only those sections necessary to be waived (e.g. not Section 9.9).

By-Law or Regulations Section	Requirement	Notes
Wetlands Regulations Section 10.1	10.1.1 – No Build Zone (50 feet) 10.1.2 – No Disturb Zone (30 feet)	Portions of work for the stormwater management area and driveway are proposed in the 30’ NDZ and 50’ NBZ. The stormwater management area and driveway will comply with all necessary requirements and standards. Applicant’s consultant will provide documentation that project work will not adversely impact these resource areas.

- Necessity of relief: The Applicant is seeking a waiver from Section 10.1 which applies a local 30’ No Disturb Zone to all freshwater wetlands, including vernal pools, and a 50’ No Build Zone to the aforementioned resource areas. This waiver will be necessary for the construction of the access road, driveway, and a portion of the stormwater management system, which occur within these setbacks from the outer 100’ vernal pool boundary.
- Alternate methods of compliance: Alternate methods of compliance to remove work from the 30’ and 50’ zones do not appear feasible as discussed elsewhere herein.
- Adverse impact of approval: The majority of the work proposed within the 30’ No Disturb Zone and 50’ No Build Zone appears to be within areas of ledge outcrops. Granting this waiver would result in a net reduction of the extent of natural local setbacks within these portions of the landscape. The Wildlife Study indicates that adverse impacts to the jurisdictional resource areas are not anticipated.

In our opinion, diligence and monitoring during the construction period will be required to mitigate the risk of adverse environmental impacts. We have included in the Potential Conditions section a recommendation to consider requiring third-party oversight during the construction phase of the Project given the steep topography and sensitive resource areas. The Applicant has previously indicated in the public hearing that such a condition is acceptable.

By-Law or Regulations Section	Requirement	Notes
Wetlands Regulations Section 2.17 & 2.18	2.17 – Definition – No Build Zone 2.18 – Definition – No Disturb Zone	As stated in previous note, a waiver is required from the No Build and No Disturb Zones. Under such bylaw, the work required for the driveway and stormwater areas would be within these zones and would be prohibited. As will be demonstrated by the applicant’s consultant, the work will not impair these areas.

- Necessity of relief: Certain components of the Project lie within the 30’ No Disturb Zone and the 50’ No Build Zone to Vernal Pools with respect to the driveway and some stormwater features, as previously discussed. We note that this section is only a waiver to the definitions of these jurisdictional setbacks, not their performance standards.
- Alternate methods of compliance: This waiver relates to definitions rather than the implementation of these definitions. Therefore, alternatives are not applicable; please refer to the discussion of the Section 10.1 Waiver requests herein.
- Adverse impact of approval: Diligence during construction will be necessary to avoid adverse impacts; please refer to our discussion of the Section 10.1 Regulation Waiver Request above.

By-Law or Regulations Section	Requirement	Notes
Wetlands Regulation Section 4.4.2	Delineation and review of vernal pools	Waiver is requested in that vernal pools have been established by NHESP and the conditions in the field are adequate to review at the present time

- Necessity of relief: It does not appear that this waiver is necessary, given that the Applicant conducted vernal pool studies during the appropriate breeding season/time of year, and has documented that all features noted as possible vernal pools are indeed functioning as such. B+T staff were on-site during portions of the vernal pool investigations, and it does not appear that the work performed by Goddard contrasted with the recommendations of NHESP or the Bylaw with respect to the evaluation of these vernal pools.
- Alternate methods of compliance: Not applicable as the requirement has been met.
- Adverse impact of approval: There does not appear to be an adverse impact of approval given that the on-site vernal pools have been confirmed to be certifiable under the Bylaw and NHESP standards.

By-Law or Regulations Section	Requirement	Notes
Wetlands Regulations Section 8.2	Clear and Convincing Standard	Waiver is requested from standard regarding work in Resource Areas. Applicant will demonstrate no impact by a preponderance of evidence

- Necessity of relief: The Applicant is seeking relief from this standard as it pertains to work within resource areas and the No Disturb Zone and the extent to which the proponent carries the burden of proof that there will not be a significant immediate or cumulative adverse effect upon the wetland values of the Bylaw. We understand that the Applicant's concern is that certain terms used in this section are undefined (specifically as it relates to 'Immediate or Cumulative Adverse Effect'), as well as the burden of proof indicated.
- Alternate methods of compliance: Alternate methods of compliance are not applicable as this waiver relates to the standard of proof required of the Applicant.

- Adverse impact of approval: The potential adverse impact is a reduction in the burden of proof required, and therefore less certainty than would be required per the Bylaw, in the Applicant’s indication that significant adverse effects will not occur. Additionally, an analysis of cumulative impacts would not be undertaken, and therefore, potential future impacts associated with the Project would not be addressed by the permitting process. The Applicant notes that it will be demonstrated by a preponderance of evidence that there will be no impact to resource areas. We have interpreted this commentary to imply that the Wildlife Study and additional construction documentation represent this preponderance of evidence.

B+T takes no exception to the waiver given the detail of the Wildlife Study and that we agree with its ultimate findings.

By-Law or Regulations Section	Requirement	Notes
Wetlands Regulations Section 9.7	Standard of review for Vernal Pools	As stated in prior note, a waiver is required from the expanded definition of, and protections for vernal pools and their buffer in that, under such regulation, which requires higher burden of proof and an alternatives analysis, the work required for roadway construction, which would be within the vernal pool or buffer thereto, would essentially be prohibited. As will be demonstrated by the Applicant’s consultant, the project will not impair vernal pool function.

- Necessity of relief: The Applicant’s request is to waive the higher burden of proof (demonstrate by clear and convincing evidence through an alternatives analysis) and presumption (see following quote) relating to evaluating vernal pool impacts. Specifically, Section 9.7 states that *Any Alteration which impacts the topography, soil structure, plant community composition, vegetation canopy or understory, hydrologic regime, drainage patterns, migratory paths of Vernal Pool species and/or water quality of a Vernal Pool shall be presumed to have a Significant Immediate and Cumulative Adverse Effect to the Vernal Pool and the wetlands values protected by the By-Law.*

As it stands, the Project will alter the soil structure and drainage patterns within the 100' Vernal Pool boundary extension; therefore, the Applicant would either need to provide the required Alternatives Analysis to overcome this presumption or pursue a waiver as they have done.

- Alternate methods of compliance: Alternate methods of compliance include providing the additional documentation (the aforesaid alternatives analysis) on potential vernal pool impacts required by the Bylaw.
- Adverse impact of approval: The Regulations extend the presumption of significant impact beyond the requirements of the Act when taking into account the extension of the 100-foot Vernal Pool Boundary into the uplands and the level of burden of proof.

The potential impact of approving this waiver is that the work that alters vegetation, soils, and drainage patterns within the local vernal pool extension would no longer carry the presumption of significant impact. Based on the findings of the Wildlife Study, we take no exception to this waiver as long as our other Vernal Pool Considerations comments are addressed.

By-Law or Regulations Section	Requirement	Notes
Wetlands Regulations Section 12.4	Mitigation	Waiver is requested from requirements for mitigation due to alterations to certain resource areas and no-disturb zones. Project will not cause adverse impacts and will provide mitigation, as designed

- Necessity of relief: The Regulations maintain a mitigation requirement for work within the 30' No Disturb Zone and the 50' No Build Zone. Examples of mitigation include native plantings, invasive species removal, and/or restoration of lawn areas.
- Alternate methods of compliance: The Applicant could incorporate invasive species management and native planting areas into the design. For example, we continue to encourage the Applicant to consider the ways in which the proposed landscape plan and meadow seed mix can be factored into potential mitigation (which would require quantification). Additionally, we understand that the Applicant will be placing an approximate 13.2 acre Conservation Restriction, which could also potentially count as mitigation.

- Adverse impact of approval: Granting of this waiver would result in a reduction of the required on-site mitigation, resulting in fewer natural/planted areas than if mitigation were required.

Although B+T does not anticipate that there will be an adverse impact of approval, we recommend that the Board and Applicant consider the following mitigation through Conditions should a waiver be granted:

- Providing area takeoffs to differentiate how much open space will be managed as lawn versus meadow habitat.
- Incorporate invasive species management during the construction phase of the Project (see Previous response letters).
- Record the Conservation Restriction noted in the Wildlife Study.

Potential Conditions

We respectfully submit for the Board's consideration the below suggested topics to be addressed in conditions. As applicable, we recommend that the Board coordinate with legal counsel as to whether these conditions can be incorporated into the Comprehensive Permit decision.

11. Additional stormwater management information should be provided for third-party review during the Notice of Intent process as indicated in the Vernal Pool Considerations section herein.
12. The Wildlife Study lists additional mitigation measures available to protect the habitat functions of the resource areas and their surrounding Buffer Zones. These include: deploying additional silt fence at specific points in the breeding period to preclude amphibians being stuck within the limit of work; and creating additional dead woody debris piles on the forest floor. B+T recommends that these items be considered as potential conditions.
13. Prior to the start of work, we recommend that the Applicant provide the Town with the documentation outlined in the Rubicon Builders memorandum and supplemented by our Comment 8. Given the sensitivity of the down-gradient vernal pools, we recommend that the Town consider third-party review of these construction documents and third-party oversight during the construction phase.

14. The environmental waiver review has generated dialogue regarding the invasive species on-site, particularly the Japanese knotweed (*Fallopia japonica*) in the northeasterly portion of the Property. We recommend that an invasive species management plan be provided for Town and third-party review, especially as it relates to the stockpiling and management of soil throughout the site.
15. We recommend that permit-level documents, especially subsequent stamped site plans, undergo third-party review when submitted to the Town as part of the Notice of Intent process with the Manchester Conservation Commission or prior to the issuance of a building permit.
16. We recommend that the Applicant and Board consider whether certain aspects of the work such as the blasting can be subject to time of year restrictions proximate to the vernal pool areas. We understand that the Applicant previously maintained that construction means and methods for preserving the vernal pools are not seasonal; however, we note that such construction-level detail has not been provided at this time.
17. As the Applicant has agreed to the Conservation Restriction as outlined in the Wildlife Study, we recommend that the Board include establishment of the CR as a condition.
18. If approved, the Project will be subject to the 2022 Construction General Permit (CGP) under the EPA's National Pollutant Discharge Elimination System (NPDES) Program. Using the US Fish and Wildlife Service's IPaC tool and using the locus as an Area of Interest, it appears that the range of the Northern long-eared bat (*Myotis septentrionalis*), the small whorled pogonia (*Isotria medeloides*), and the candidate species monarch butterfly (*Danaus plexippus*) fall within the area of interest. The Applicant will be required to demonstrate compliance with the federal Endangered Species Act and others (e.g., the Migratory Bird Act) through the NPDES permitting process. We recommend that the Board be kept apprised of the compliance process with both the 2022 CGP and the relevant US Fish and Wildlife requirements.
19. We recommend that the Applicant undertake additional evaluation of the erosion controls during the Notice of Intent process, pursuant to our Comment 9 herein.

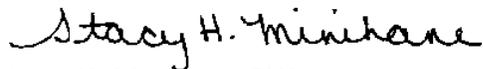
20. As part of this permitting interaction, a significant amount of data collection and reporting has been undertaken with respect to the potential vernal pools on-site. It is unambiguous that these potential vernal pools satisfy the NHESP standards for certification. We recommend that these features be submitted to NHESP for certification to memorialize the findings and update the inventory of certified vernal pools within the Town.
21. Quantify other proposed aspects of the Project that may count toward mitigation, such as the meadow habitat.
22. Pre- and post-construction monitoring of the vernal pools will provide valuable information as to whether the Project ultimately does or does not impact these resource areas. Therefore, we recommend that pre- and post-construction monitoring of the vernal pools be undertaken annually, with the time period to include at least three non-drought years post completion of construction. During such monitoring, visual assessment of the resource area health, breeding amphibian surveys (for vernal pools), and measurement of water level, pH, temperature, salt and other relevant chemicals used on-site should be undertaken. If impacts are observed that affect the successful breeding of species using the pool corrective measures should be identified and undertaken by the Applicant. The Applicant should submit a proposed monitoring plan for review by the Town.

Ms. Sue Brown, Town Planner
Manchester-by-the-Sea
July 12, 2022
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We thank the Board of the opportunity to assist with its review of the Project. We look forward to discussing our findings at the July 13, 2022 public hearing.

Very truly yours,

BEALS AND THOMAS, INC.



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