

July 13, 2022

BY ELECTRONIC MAIL: hunterg@manchester.ma.us AND FIRST CLASS MAIL

Ms. Sarah Mellish, Chair Manchester Zoning Board of Appeals Manchester Town Hall 10 Central Street Manchester-by-the-Sea, MA 01944-1399

Re: Application for Comprehensive Permit – School Street, Manchester

Dear Chair Mellish:

As you know, this firm represents the Manchester Essex Conservation Trust ("MECT") in the above-referenced matter. Earlier today, I submitted new comment letters from our wetlands scientist Patrick Garner, and our water resources consultant Scott Horsley, regarding the impacts of the above-referenced comprehensive permit application (the "Project") on Certified Vernal Pools ("VPs") located on the Project site at 0 School Street (the "Site"). These comment letters confirm that the proposed Project will cause water quantity and water quality alterations to the vernal pools that are not permitted under the Massachusetts Wetlands Protection Act (the "WPA"), G.L. c. 131, §40, and the regulations promulgated thereunder at 310 CMR 10.00 et. seq (the "Regulations"), such that the Project cannot be permitted as currently designed. Moreover, where the Town of Manchester-by-the-Sea has enacted a General Wetlands Bylaw and accompanying Wetlands Regulations (collectively, the "Bylaw") that afford even greater protection to vernal pools than the state standards, the Zoning Board of Appeals (the "ZBA") should deny the requested waivers related to vernal pool impacts, because the information provided by the Applicant cannot support a finding that the vernal pools will continue to be viable post-development. The Town enacted the Bylaw to provide enhanced protection to vernal pools because of the importance of this resource to the community. As set forth below, where the Applicant has failed to show that the vernal pool's water budget would be sustained and balanced post-development, waiving the Bylaw would undermine the Town's established intent to protect these critical areas.

First, as explained in Mr. Garner's and Mr. Horsley's comments, the *quantity* of water entering the vernal pools will be impermissibly altered by the Project. Mr. Garner's June 6, 2022 Vernal Pool Water Budget Analysis for the Project, which was previously provided to the Board, determined that substantial alterations to the hydrologic regime of the vernal pools will occur if the Project goes forward. For example, Mr. Garner found that post-development, "alterations to all VP hydrologic components occur — that is, watershed areas, impervious areas, runoff velocity, and volume are altered." <u>See</u> Garner correspondence dated 6-6-22, p. 7. As a result, the volume of water in the northerly VP would decrease as much as 68% post-development. Manchester Zoning Board of Appeals July 13, 2022 Page 2 of 2

Such "[v]olumetric changes alter the VP water elevation, and consequently, alter the Wildlife Habitat conditions for the VP. Volumetric alterations may also appreciably change the hydroperiod (i.e., the duration of flooding) of the pool." <u>See</u> Garner correspondence dated 7-13-22, p. 3. Mr. Garner's additional analysis of Goddard Consulting's June 10, 2022 "Wildlife Habitat Assessment & Vernal Pool Survey" (the "Wildlife Study") found that the Applicant's Wildlife Study is deficient, because it fails to assess these impacts to the "hydrologic regime of vernal pool habitat," which is required under 310 CMR 10.60(2)(c).

Mr. Horsley's hydrologic analysis dated July 13, 2022 also found that "significant reductions in groundwater recharge of 40 – 50% will result from the proposed development during the critical Spring season" resulting in "lowered water levels and impairment of the wildlife habitat conditions in the northern vernal pool." <u>See</u> Horsely correspondence dated 7-13-22, p. 6. Such changes in the quantity of water entering a vernal pool are not permitted under MassDEP adjudicatory caselaw, which states that "in order for vernal pool habitat to continue to function and co-exist with nearby development its water budget must be sustained post-development." <u>See Matter of Bosworth</u>, OADR Docket No. WET-2015-015, Recommended Final Decision (February 17, 2016) adopted by Final Decision (March 14, 2016).

Second, the water *quality* entering the vernal pools will also be negatively altered by the Project. Mr. Horsley determined that "runoff from impervious surfaces in close proximity to the northern vernal pool, including road runoff containing salt and sand, polyaromatic hydrocarbons (PAHCs), benzopyrene, and heavy metals associated with tire rubber and vehicle emissions, will alter the water quality of the northern vernal pool, impairing wildlife habitat. There are no proposed BMPs to mitigate these impacts." See Horsley correspondence, 7-13-22, p. 6. Mr. Garner also found that the Wildlife Study does not show that the Project protects water quality for the vernal pools, which are also Class A Outstanding Resource Waters, and that the Wildlife Study "ignores and is silent about the Project's likely alterations to the VPs water quality, including changes to salinity, oxygen demand, pH values, and temperature of the VPs." See Garner correspondence, 7-13-22, p. 4.

Finally, the Beals + Thomas ("B+T") supplemental peer review dated July 12, 2022 appears only to have considered the information provided by the Applicant, as B+T did not conduct independent analysis of hydrologic impacts or the vernal pool water budgets, nor did it review Mr. Garner's June 6, 2022 water budget, or the comment letters provided today. Accordingly, B+T's conclusions are not based on all of the evidence that is before the ZBA, such that the peer review cannot be relied upon to support waivers for this Project.

Thank you for your attention to these matters.

Very truly yours,

/s/ Elizabeth M. Pyle

Elizabeth M. Pyle