

HANCOCK ASSOCIATES

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March 24, 2025

Reading Conservation Commission
16 Lowell Street
Reading, MA 01876
Attn: Charles Tirone, Conservation Administrator

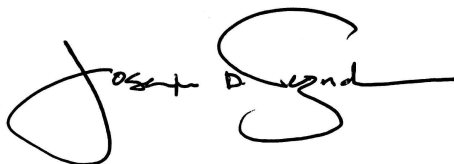
Subject: Drainage Memorandum
Reading High School Modular Classroom Relocation

Hancock Associates has completed the design of a pad area and utility connections for the relocation of a 75' x 27' modular classroom and associated minor site grading and pedestrian accommodation. The area for the classroom is located in a grass area adjacent to a small parking lot directly west of the main school building.

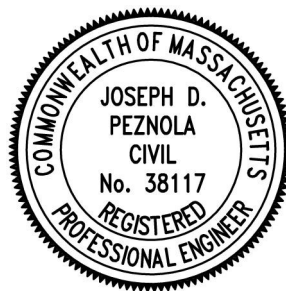
We have reviewed the stormwater associated with the roof drains of the modular building. The plan is to direct roof drain downspouts to a stone pad underneath the raised modular building. The 10-year frequency storm according to the Cornell Extreme Precipitation Table is 4.10 inches of rain. Considering a 40% void ratio of the $\frac{3}{4}$ inch stone under the building, the depth of stone required is 10.25 inches. The proposed stone pad is designed to be 12 inches deep and therefore will fully attenuate the 10-year storm without consideration of infiltration to the soils beneath. The bottom of the stone base is to be set at an elevation of 100.0. The wetland area that is 65 feet away from the building at its closest is at an elevation of 95.0. Assuming estimated seasonal high groundwater (ESHGW) is coincident with this elevation, we have a 5-foot separation to ESHGW, well above the required 2 foot separation.

Given the temporary nature of the project and that we are only dealing with clean roof drainage, we feel the project fully complies with the Massachusetts DEP Stormwater Requirements.

Sincerely,
Hancock Associates



Joseph D. Peznola, P.E.



cc: Gienapp Architects