



December 23, 2020

Ms. Erin O'Hare, Environmental Planner  
Town of Wallingford  
45 South Main Street  
Wallingford, CT 06492

**RE: 5 and 21 Toelles Road and Wharton Brook – Pfizer, Inc.  
Quinnipiac River Backwater Conditions  
Wallingford, Connecticut  
MMI #141.11585.00064.0020**

Dear Ms. O'Hare:

The following response is related to the Town of Wallingford inquiries associated with the potential impacts of backwater from the Quinnipiac River on Wharton Brook and the effects that backwater could have on the Soil Remediation Project being proposed at 5 and 21 Toelles Road in Wallingford, Connecticut. As you know, Milone & MacBroom, Inc. has been providing ongoing independent technical review services to the Town of Wallingford for the proposed wetland soil remediation project and has reviewed the materials supporting the Inland Wetlands permit application that have been provided to date by the applicant.

After review of the project plans ("5 & 21 Toelles Road, Wallingford CT, Soil Remediation Project, Project No. 0232596.00," Woodard and Curran, November 2020) and the topographic basemapping provided therein, we note that the lowest elevation on the project site is located along the banks of Wharton Brook and is at elevation 23.0 feet NAVD 88. All proposed work on the site is higher than this elevation.

We also assessed the effective Flood Insurance Study (FIS) prepared by the Federal Emergency Management Agency (FEMA) for New Haven County (FIS No. 09009CV010D, Effective May 16, 2017). The relevant page from that study is appended to this letter. We note that the project site falls between FEMA lettered sections "D" and "E." The excerpted profile depicts the flood elevations along Wharton Brook beginning at the confluence with the Quinnipiac River and extending through the project site. From this profile, we note that the flood elevations at the site are hydraulically controlled by a constriction located approximately 1,000 feet downstream of the site. Based on field assessments, we have identified this constriction as dual 60-inch cast-in-place culverts (approximate size) associated with an existing gravel pit access road.

According to the FEMA profile, the 100-year flood elevation in Wharton Brook downstream of the twin culverts is approximately 22.6 feet NAVD, which is lower than the lowest grade on the project site and would not impact the site even if the culverts were not present. However, the undersized culverts cause a substantial (4.6-foot) increase in the 100-year flood and act as the hydraulic control for the project site. The same is true for the other floods assessed by FEMA.

In short, we do not believe that flooding conditions within the Quinnipiac River will have any hydraulic impact on Wharton Brook as it relates to the proposed project.

If you have any questions regarding the above, please feel free to contact either of the undersigned at (203) 271-1773.

Very truly yours,

MILONE & MACBROOM, INC.

Handwritten signature of Matthew J. Sanford in blue ink.

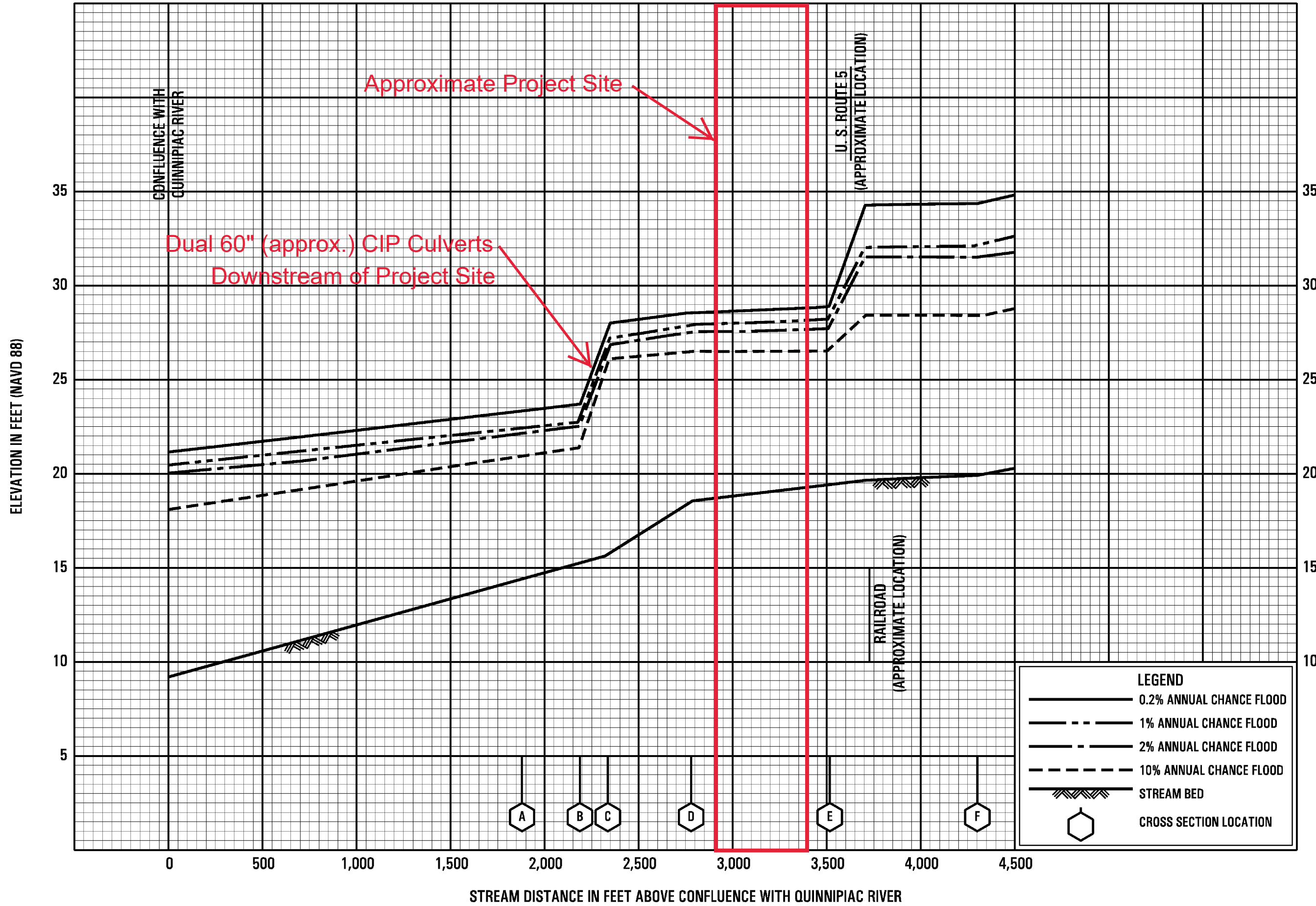
Matthew J. Sanford, MS, PWS  
Manager of Natural Resources Planning

Handwritten signature of James Murac in blue ink.

James Murac, PE, CFM  
Senior Water Resources Engineer

Attachment

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**FLOOD PROFILES**  
**WHARTON BROOK**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**NEW HAVEN COUNTY, CT**  
(ALL JURISDICTIONS)