



April 14, 2021

Newburyport Planning Board
60 Pleasant Street,
Newburyport, MA 01950

**Subject: 21-27 Hancock Street
PCG Peer Plan and Stormwater Review Response**

Dear, Chair Sontag and Planning Board Members

The purpose of this letter is to address the engineering comments provided by Phil Christiansen regarding the drainage calculations for 21-27 Hancock Street.

See the responses below:

Sheet T1

The elevation of the iron rods are not on the elevation datum and shot for location only. It is a very short street with steps visible from new work. Upon completion of demolition a few benchmarks will be set for construction.

The frontage shown on T1 only included Hancock Street and is now updated to show both Leavitt Court and Hancock Street.

Sheet S1

The easement has been added for the raingarden and swale for maintenance and to insure the there are no grading impacts. Upon completion of construction all additional easements and exclusive use areas will be provided on the Condominium Site Plan.

Review of Stormwater Management Analysis

2.0 Existing Condition

The hydrological design has since been revised to include two design discharge points, one discharging at the Clipper City Rail Trail and one discharging to the abutter's property to the east. Thus, the corresponding stormwater management design has been revised to accommodate the two separate design discharge points from the property.

4.0 Hydrological Model

115 GLASTONBURY BLVD
GLASTONBURY CT 06033
860.659.1416

120 MIDDLESEX AVENUE
SUITE 20
SOMERVILLE, MA 02145
617.776.3350

6 CHESTNUT ST
AMESBURY MA 01913
978.388.2157

197 LOUDON RD
SUITE 310
CONCORD NH 03301
603.856.7854

317 IRON HORSE WAY
SUITE 100
PROVIDENCE RI 02908
401.383.6530

The 6 minute minimum used for Tc calculations has been revised. The Tc flow paths have been shown on the Drainage Area Plans and their corresponding calculations can be found in the full HydroCAD calculations in the Appendices of the Stormwater Report.

Sheet V102 Existing Condition Plan

The paved area on the plan has been revised to better show where the edge of pavement is within the brush area at the western side of the property. The contours have been revised as well.

Sheet C401 Drainage Area Plan

As mentioned above, the design discharge point discrepancy has been revised to delineate two separate points. There was also a comment addressing a third potential design discharge point where a small portion of the rear garage and some limited grass area flows across the property line to the abutters at 66-68 Purchase Street in the rear. This area has been maintained as a portion of design point 1 rather than separating it into a third design point, seeing as it joins the rest of the runoff from design point 1 and flows directly to the Clipper City Rail Trail path just beyond the property line. Additionally, any runoff that would flow across that northern property line is now directed to the western property boundary by the proposed swale in the revised stormwater design, eliminating any flow directly to the abutters at 66 & 68 Purchase Street in the proposed conditions. Therefore, we have not separated it out as a third design point in the existing conditions.

Existing and Proposed Hydrology

As mentioned above, the time of concentration has now been calculated and those calculations are provided.

Operation and Maintenance Plan

An O&M Plan has been provided again in the revised Stormwater Report as the revised design includes a raingarden, swale, drywell, etc.

Sincerely,

DESIGN CONSULTANTS, INC.

Stephen Sawyer

Stephen Sawyer

Sr. Project Manager