

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning • Structural • Mechanical • Architectural Engineering

P.O. Box 191
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October 10, 2022

Harry B. Heller
Heller, Heller & McCoy
736 Norwich-New London Turnpike
Uncasville, CT 06382

**RE: Watch Hill Builders, LLC – 3 Lot Subdivision – Old Colchester Road – Montville, CT
P&R Job No. 213075**

Dear Mr. Heller:

In preparing the site development plans for the above referenced subdivision, I have also reviewed the field conditions on and around the subject property to review the potential for storm drainage impacts associated with the proposed construction of the two driveways and three houses. Additionally, I have attached sizing calculations for rain gardens to be installed with the construction of houses on each of the three lots. These rain gardens will provide for water quality renovation through stormwater infiltration and bioremediation with the proposed plantings. While not specifically designed to provide stormwater detention or peak flow control, these rain gardens will provide some degree of peak flow reduction by retaining the first inch of runoff from the impervious roof surfaces.

The project frontage on Old Colchester Road includes a gentle swale off the edge of pavement which conveys roadway runoff to catch basins located easterly and westerly of the proposed driveways. Each driveway will include a culvert adjacent to the road to maintain positive drainage flow to these catch basins. The proposed lot and driveway grading will not have a significant effect on drainage patterns which would impact Old Colchester road or the existing catch basins.

If you have any questions or need additional information, please do not hesitate to contact us at your convenience.

Sincerely,



David J. Held, P.E., L.S.
Provost & Rovero, Inc.

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Job: 213075 - Damiano

Sheet No. 1 of

Calculated by: DJH Date: 10/10/22

Checked by: Date:

Scale: Rain garden sizing

LOT 1

$$\text{Impervious Area} = 1,184 \text{ ft}^2$$

Retain 1" rainfall from impervious area

$$\text{Required Volume} = (1,184 \text{ ft}^2) (1"/12) = 99 \text{ ft}^3$$

$$\text{Proposed Volume} = 142 \text{ ft}^3$$

LOT 2

$$\text{Impervious Area} = 1,380 \text{ ft}^2$$

Retain 1" rainfall from impervious area

$$\text{Required Volume} = (1,380 \text{ ft}^2) (1"/12) = 115 \text{ ft}^3$$

$$\text{Proposed Volume} = 142 \text{ ft}^3$$

LOT 3

$$\text{Impervious Area} = 1,380 \text{ ft}^2$$

Retain 1" rainfall from impervious area

$$\text{Required Volume} = (1,380 \text{ ft}^2) (1"/12) = 115 \text{ ft}^3$$

$$\text{Proposed Volume} = 142 \text{ ft}^3$$