



November 23, 2021

Town of Franklin
Zoning Board of Appeals
355 East Central Street
Franklin, MA 02038

Re: 10 Margaret's Cove
Special Permit for Impervious Cover in Water Resources District **(Revised)**

Dear Members of the Board:

Strong Point Engineering Solutions, Inc. (SPES) is pleased to provide this letter on behalf of the Applicant, Ms. Shala Ranieri, to accompany an application for a Special Permit for impervious cover within a Water Resource District. The total proposed impervious cover for the single-family dwelling located at 10 Margaret's Cove exceeds the 15% impervious area requirement allowed by right in the Water Resource District.

The Zoning Board of Appeals previously issued a Special Permit to the builder of the lot to allow impervious coverage of up to 22.8% prior to construction of the lot. The current homeowner seeks to make improvements to the lot including expanding the existing driveway and proposed pool patio area and installing a shed. The current proposal will exceed the amount of impervious area previously allowed by the ZBA.

As part of the previous application, the home builder installed rooftop runoff collection and infiltration systems on the lot to provide enhanced recharge of clean runoff on the lot.

Under existing conditions, the house, driveway, walks, and pool result in 20.8% impervious coverage to the lot which is under the 22.8% previously approved.

The existing driveway, which was previously proposed to be widened by 9 feet, is now proposed to be widened by 7 feet which results in only an additional 2.2% impervious cover to the lot. As depicted on the approved subdivision plans for the development, the majority of stormwater runoff from the proposed lot is directed to the closed drainage system in Margaret's Cove where it is captured and discharged to a stormwater infiltration basin located to the west of the subject lot. That basin is designed to infiltrate stormwater runoff from the proposed project roadway and lots.

A portion of the proposed patio has been removed from the plan to limit the installation of impervious surfaces. In addition, the proposed walkway from the patio to the garage/driveway has been revised to a cobble stone walkway thus keeping the pervious nature of the area intact. As a result, the proposed patio area has been reduced from 3,100 SF to 2,605 SF. The patio is proposed to include stormwater infiltration trench along its northern and eastern border to capture stormwater runoff from the impervious surface and promote enhanced groundwater infiltration.

The proposed shed was previously proposed at 20' x 24' (480 SF) and has been reduced to 20' x 16' (320 SF) and accounts for approximately 1.0% impervious coverage to the lot. The proposed shed shall be equipped with a rooftop collection manifold and all rooftop runoff will be directed to a proposed rooftop infiltration system.

Both of the proposed infiltration facilities have been designed to completely capture and recharge stormwater runoff from impervious surfaces up to, and including, the 25-year storm event which was the design threshold utilized under the prior permit issuance.

As a result of the revisions noted above, the following provides a tabulation of the proposed impervious areas and their percent coverages:

- Total Impervious Area Proposed On Site = 10,380 SF (31.8%)
- Area of Recharge for Existing Dwelling = 3,145 SF (9.6%)
- Area of Recharge for Proposed Patio = 2,605 SF (8.0%)
- Area of Recharge for Proposed Shed = 302 SF (1.0%)
- Total Impervious Area Not Proposed for Recharge = 4,310 SF (13.2%)
 - Previously Allowed = 4,265 SF (13.0%)

It should be noted that with the improvements made as outlined above, the proposed effective impervious area not proposed for infiltration on site is only 0.2% over what was previously allowed and is under the 15% threshold allowed by right.

Based on the above, it is the opinion of this office that further mitigation and/or recharge of stormwater runoff from additionally proposed impervious surfaces is not warranted in this case and instead the design of the subdivision project meets the intent of residential development within the Water Resource District.

On behalf of the Applicant, we respectfully request that this matter be heard at the next available public hearing of the Zoning Board of Appeals.

If you have any questions or wish to discuss this matter further, please feel free to contact our office at (508) 682-0229 at your leisure.

Kind Regards,



Eric Dias, P.E
President/Owner

