



September 6, 2023

Emilie Cademartori
Director of Planning & Conservation
Town of Lynnfield
55 Summer Street
Lynnfield, MA 01940

RE: **As-Built Engineering Certification
Stormwater Permit #2021-01
2 Sagamore Place, Lynnfield MA**

Dear Ms. Cademartori,

On behalf of the Jaipal and Monika Gandhi, owners of 2 Sagamore Place, The Morin-Cameron Group, Inc. (MCG) submits a request to accept the final constructed conditions of the property as substantially complete under the Stormwater Permit #2021-01 as amended for the above referenced property.

As-Built Summary

As you are aware, a Stormwater Permit #2021-01 was issued on February 16, 2021 and extended to August 26, 2023 to address land disturbance associated with the improvements to the properties located at 2 and 6 Sagamore Place and 1466 Main Street. Minor modifications were accepted for the property as illustrated on a plan dated June 20, 2022 which included:

- Minor grading/topographic adjustments including addition of a retaining wall, screening trees, fence, adding curb to the old Main Street driveway and driveway pillars.
All this work was completed in substantial compliance with the plans.
- A reduction in driveway area of approximately 1,000 S.F. for a total of 4,541 S.F. of driveway directed to the road. This included addition of a second curb cut meeting the Lynnfield regulations.
The driveway has a constructed area of 3,776 S.F. and is in substantial compliance with the approved plan.
- Collection and infiltration of 4,209 S.F. roof runoff to an onsite drywell.
The house has a constructed area of 4,209 S.F. and is in substantial compliance with the approved plan.
- Addition of 5,961 S.F. of impervious area for a pool, sports court, and patio, that is directed

to the woods or a vegetated swale behind the property which is eventually tributary to the roadway infiltration basin.

The accessory impervious surfaces have a constructed area of 2,216 S.F. and is in substantial compliance with the approved plan.

MCG completed an as-built survey of the premises; a copy of the plan is included herewith.

Based upon a review of the as-built survey of the premises and a site walk conducted on August 15, 2023, the work was completed in substantial compliance with the approved plan except for the following:

- Construction of the pool and surrounding patio area.
- The walkway and driveway extension near Main Street was not constructed and instead, gravel was placed in this area.

Neither of these changes impact the intent of the approved design and result in a reduction in impervious area from the approved plan.

As-built of Overall Stormwater System

An aerial survey was completed for the entire development consisting of the roadway and 4 dwelling lots. An as-built watershed boundary was determined by MCG based on the aerial contours and field verification. The overall watershed boundary was determined to be 273,433 s.f. whereas the design watershed was 245,356 s.f. The as-built conditions account for slightly more land (11.4%) going through the retention pond than the design condition. The constructed condition is therefore providing more retention of stormwater than the original design and is constructed in substantial compliance with the approved plan. The basin has been observed to be functioning and infiltrating in heavy storm events for 1 year.

Specific to 2 Sagamore Place, the design watershed that was directed to the road from this lot was approximately 37,705 s.f. The constructed watershed directed to the road is 16,700 s.f. The dwelling is directed to a roof drywell whereas the design included a direct connection to the street drainage system. The constructed condition for the roof runoff is better than the design condition due to the additional infiltration achieved by the roof drywell. The other areas of the lot are directed to a vegetated swale which further promotes infiltration, slows down the speed of the stormwater runoff and eventually conveys it to the retention pond. This is also an improved condition from the approved design. Based on a review of the as-built watershed plan, 2 Sagamore Place was constructed in substantial compliance with the approved design.

Other Concerns

Concern was raised following an intense rain event regarding the capacity of the drainage swale behind the lot. The swale conveys runoff from 2 Sagamore Place to two design points. A small, 4,500 s.f. portion of the yard coupled with a portion of the yard from 6 Sagamore Place, convey runoff towards Sagamore Place. The swale is flattened into a level spreader as it approaches the street so that runoff sheet flows, slowly over the curb and into the street. This was observed to be functioning as intended. The abutting driveway was constructed with its return radius extending

along the frontage of 2 Sagamore Place. As a result, the runoff from the swale appears to be travelling over the driveway. However, this is the apron that is mostly within the right of way and no water is observed traveling back towards the abutting lot. It should also be noted that the abutting driveway has not received a final coat of pavement. Once the final paving is completed, the pitch of the apron will steepen, improving runoff to the gutter of the street rather than across the apron as it does now in an unfinished condition. The balance of the swale directs water from the rear of 2 Sagamore around to the roadway retention pond. This swale was observed by MCG to be functioning as intended.

Another concern was raised with erosion during the construction process. MCG visited the site on June 15, 2023 and observed that the property at 1466 Main Street had been altered during the construction activities for 2 Sagamore Place. During this process, the grading was changed such that runoff from 1466 was directed to the swale rather than to the woods behind that lot. The owner of 1466 Main Street, Deloury Construction, mobilized equipment to correct the grading. This has corrected this issue.

In conclusion, the work at 2 Sagamore Place was completed in substantial compliance with the approved plan. The property, supporting road and stormwater infrastructure, are fully stabilized. The road infrastructure has been observed to be functioning in accordance with the design for a full year of operation. We hereby respectfully request acceptance of completion of construction for 2 Sagamore Place and that this lot be released from the stormwater permit as a partial Certificate of Completion.

If you have any questions, please do not hesitate to contact our office.

Sincerely,
THE MORIN-CAMERON GROUP, INC.



Scott P. Cameron, P.E.
Vice President

Cc: Jaipal & Monika Gandhi

Attachments