December 18, 2025

Anne Capra
Director, Planning and Conservation 4
Town of South Hadley
116 Main Street, Room U6
South Hadley, MA 01075

Re: 136 East Street
Stormwater Peer Review

Dear Ms. Capra:

BETA Group, Inc. (BETA) is pleased to provide engineering peer review services for Gerald Coderre's design submittals seeking approval of proposed work including construction of eight (8) condominium buildings (6 duplexes, 2 single units, for 14 total units), grading, stormwater management, utility connections, and roadway improvements (the Project) at 136 East Street in South Hadley, Massachusetts (the Site). This letter is provided to outline BETA's findings, comments, and recommendations.

Compiled Review Letter Key

BETA reviewed this project previously and provided review comments in a letter to the Department of Planning and Conservation dated November 5, 2025 (*original comments in italics)*. Levesque Associates, Inc. (LAI) provided responses (responses in standard text) and BETA provided comments on the status of each (***status in bold italics)***.

Basis of Review

BETA received the following items:

- A Response to Review Comments Letter to the Department of Planning and Conservation, dated December 8, 2025, by Levesque Associates, Inc.
- A letter from Superintendent Tim Cauley regarding water pressure
- Plans (18 Sheets) entitled ***Site Plans – Deer Meadow Way***; prepared by R Levesque Associated, Inc.; sheets dated September 30, 2025, and revised through December 4, 2025; stamped and signed by Marc E. Shute, MA PLS No. 33610, Robert M. Levesque MA RLA No. 1398, and Filipe J. Cravo MA P.E. No. 48376.
- Stormwater Management Report entitled ***Stormwater Drainage Report, Proposed Condominium Community***; prepared by R. Levesque Associated, Inc.; dated September 30, 2025 and revised through December 4, 2025; signed and stamped by Filipe J. Cravo MA P.E. No. 48376.
- An example HOA agreement, used as a template (to be revised per this development)
- Architectural elevations dated February 6, 2025, by Laura's Home Drafting & Design, of Granby, MA.
- Report entitled ***Invasive Species Management Plan***, dated November 2025, by Levesque Associates, Inc.
- Revision List – Revision B, summarizing revisions to the plans, dated December 8, 2025

Review by BETA included the above items along with the following, as applicable:

- Site Visit
- ***Zoning Chapter 255 From the South Hadley Code,*** current through January 2017
- ***Zoning Map of the Town of South Hadley, Massachusetts,*** current through August 2017
- ***Stormwater Management Chapter 200 From the South Hadley Code,*** current through May 2022

SITE AND PROJECT DESCRIPTION

The project site includes one lot identified as Assessors Map 35 Parcel 6 (Map ID 35/06), with a total area of 9.9± acres located at 136 East Street in the Town of South Hadley (the "Site"). The Site is located within the Residence A-1 (RA-1) zoning district. The lot is bordered to the east by a perennial stream (Stony Brook) with bordering vegetated wetland resource areas and wooded upland area. The parcel is surrounded by residential dwellings on the north, west, and south side. All of these parcels surrounding the project site are also located in the Residential A-1 zoning district.

The site is currently undeveloped. The existing topography of the project site can be described as sloping down moderately from the frontage along East Street to the wetland on the southern and eastern sides of the project site. The existing elevations along the frontage with East Street range from approximately elevation 246 at the northwesterly corner of the parcel to 241 at the southwesterly corner. From the frontage with East Street, the elevations slope down to approximately 222 at the edge of the bordering vegetated wetland. Stormwater runoff from this area generally follows the existing topography and ultimately reaches the bordering vegetated wetlands.

The proposed development entails constructing 8 new condominium buildings (six duplex condominiums and two single unit buildings), parking areas, and other associated site improvements. In addition to the dwellings and parking lot, the project will include site grading, outdoor lighting, stormwater management elements, and landscaping.

The Site is not located in a FEMA mapped 100-year floodplain or an NHESP-mapped estimated habitat of rare or endangered species. The project is not located in a Zone II of a public water supply well, does not contain any outstanding resource waters (ORWs), and is not considered an area of critical environmental concern (ACEC). NRCS soil maps indicate that underlying soils within the development area are Agawam fine sandy loam with a hydrologic soil group rating (HSGR) of B (moderate infiltration potential), Sudbury fine sandy loam with a HSGR of B, and Walpole sandy loam with a HSGR of B/D.

WAIVERS

The Applicant has not requested any waivers for the project.

SITE VISIT

BETA visited the Site on October 24, 2025, to gather photos and observations. Observed conditions were generally consistent with the existing conditions plan with the following exceptions:

SV1. *There are areas that have been cleared in order to perform the test pits.*

LAI: Noted.

BETA2: Item is closed.

SV2. *There is an existing cement block structure with a metal and asphalt shingle roof located on the parcel that is not shown on the Existing Condition Plan. This structure should be included both on the plans and in the stormwater design.*

LAI: The Existing Conditions Plan has been updated accordingly.

BETA2: Plans were revised; item is resolved.

SV3. *There is an existing white vinyl fence along the property line between the subject property and #136 East Street (north of the street frontage). This fence should be included on the Existing Conditions survey.*

LAI: The Existing Conditions Plan has been updated accordingly.

BETA2: Plans were revised; item is resolved.

SV4. *BETA noted the only drainage infrastructure in the vicinity of the subject property is a leaching catch basin located on the southwest side of East Street, directly across the street from the subject property.*

LAI: Noted.

BETA2: Item is closed.

1.0 General Review Comments

G1. *The proposed development does not include any sidewalk areas to provide pedestrian circulation on site. BETA recommends sidewalks be included in the development to facilitate pedestrian movement.*

LAI: The applicant has requested that this requirement be waived, subject to review and approval of the Planning Board.

BETA2: BETA defers to the Town whether or not to grant this variance. BETA notes that the development is intended for residents 55 and older and not providing a sidewalk to the mailbox kiosk can potentially be hazardous for pedestrian circulation, particularly during snow season.

G2. *The doghouse sewer manhole detail should also have manhole rungs to allow for access and maintenance.*

LAI: The detail on Sheet D-6 has been updated accordingly.

BETA2: Plans were revised; item is resolved.

2.0 Utilities

Proposed utilities depicted on the plans include domestic water, sanitary sewer, and electric service.

Domestic water is proposed via new 8” water main extension. Plans only indicate one water service entering each condominium. It is unclear if fire service is provided via this pipe or if a second pipe will provide fire suppression. These services will connect to the existing 8” water service stub located in East

Street. BETA notes that the existing water main is not shown on the plans. Additionally, one (1) new hydrant is proposed for the development –southwest of Unit 8.

Sanitary sewer service is proposed via new sewer force main of unknown size for Units 1 through 11, with each unit being equipped with a grinder pump. The force main is to be designed by others, as indicated on the plan set. The force main will discharge flows to PSMH-1, located on the project site, where flow will discharge to the SMH in East Street via gravity flow. Units 12, 13, and 14 will be serviced by gravity sewer that will blindly tie into the proposed sewer pipe connecting the existing SMH and PSMH-1 on site.

Electric service is proposed via new underground conduit from an existing utility pole in East Street to the proposed transformer located on site. From the transformer pad, underground electrical conduits will be laid to the proposed dwellings.

U1. *Provide the location of the existing water service in East Street. BETA defers to the preference of the Board on providing overhead or underground electric services.*

LAI: Our office has contacted the Water Department, and the location of the existing water service has been approximately located and is reflected on the Drainage and Utilities Plan.

BETA2: Plans were revised; item is resolved.

U2. *Confirm the Fire Department has reviewed the design and agrees with the locations of the proposed hydrant. BETA notes that the development only has one fire hydrant, located outside of Unit 8 and there are no fire hydrants within the right-of-way within close proximity to the proposed development.*

LAI: Fire Department comments have been received and are addressed later in this response letter.

BETA2: Fire Department comments were provided and have been addressed in the Response to Comments letter provided; item is resolved.

U3. *Clarify the size and material of the proposed water services, including fire hydrant connections and any transitions in material.*

LAI: The existing water service is 8” cast-iron and the proposed service is 8” C909.

BETA2: Information provided; item is resolved.

U4. *Confirm that a minimum 10 feet of separation is provided between the water service and the force main sewer service. The water service should have a sleeve or concrete encasement in any areas that cannot provide this separation*

LAI: Yes, the minimum 10’ separation is exceeded.

BETA2: Confirmation provided; item is resolved.

U5. *Clarify if fire protection is provided for all units. If there is a separate service line for fire protection, show this service on the plans.*

LAI: Fire protection is not required, therefore it is not proposed.

BETA2: Explanation provided; item is resolved.

U6. *Perform a hydrant flow test to confirm the water service line has adequate pressure for both the domestic and fire protection services.*

LAI: Please see the attached correspondence from the Water Department.

BETA2: Letter from Water Superintendent was provided; item is resolved.

3.0 LANDSCAPE TREATMENT & GRADING

A landscaping plan has been provided depicting three (3) London Planetree, 22 American Arborvitae, and eight (8) Boxwoods. Landscaping is generally proposed in the parking lot area, at the southern side of the proposed buildings for screening, and to provide screening for the proposed transformer pad.

Information on proposed seed mix for landscaping areas has not been provided.

LA1. *BETA recommends providing a native seed mix, especially within the wetland buffer areas.*

LAI: The landscaping plan has been revised accordingly.

BETA2: Plans have been revised; item is resolved.

LA2. *BETA recommends that native species be planted, especially within the wetland buffer area.*

LAI: The landscaping plan has been revised accordingly.

BETA2: Plans have been revised; item is resolved.

LA3. *The basement floor elevation for Units 1 & 2 is 234.0±. The 238 & 237 contours conflict with this elevation. Revise the grading in this area.*

LAI: Units 1 and 2 have partial basements with bulkhead egress.

BETA2: Explanation provided; item is resolved.

LA4. *The basement floor elevation for Units 3 & 4 is 233.0±. The 235 and 234 contours conflict with this elevation. Revise the grading in this area.*

LAI: Units 3 and 4 have partial basements with bulkhead egress.

BETA2: Explanation provided; item is resolved.

LA5. *The basement floor elevation for Units 5 & 6 is 232.0±. The 229 contour indicates there will be a 3-foot drop between the deck elevation and the ground elevation. Revise the grading in this area.*

LAI: The basement from Units 5 and 6 have been lowered to be only a foot above the proposed exterior grade.

BETA2: Plans have been revised; item is resolved.

LA6. *Provide contours between Units 2 and 3 and Units 4 and 5.*

LAI: Contours have been added to Sheet C-5, as requested.

BETA2: Plans have been revised; item is resolved.

4.0 STORMWATER MANAGEMENT

The proposed stormwater management design consists of one subsurface infiltration system located beneath the parking lot area between the proposed condominiums, a drainage channel behind Units 1 through 6, and a surface detention pond located northeast of Unit 6. Stormwater runoff from impervious

surfaces including the parking lot and roofs will be conveyed via a closed drainage system consisting of catch basins, manholes, hydro-dynamic water quality structures, and roof leaders. Water discharging to the back of the proposed condominiums consists primarily of pervious surfaces or non-vehicular surfaces like patio areas and will be discharged to either the surface detention pond or the local wetlands via drainage channels and sheet flow. The subsurface infiltration basin provides an overflow to a retaining wall at the southeast side of the developed area which ultimately discharges to the intermittent stream and associated wetlands.

GENERAL

SW1. *The emergency overflow at the basin behind Unit 6 should be lined with riprap to prevent scouring.*

LAI: The riprap has been added to Sheet C-6, as requested.

BETA2: Riprap was provided; item is resolved.

SW2. *Indicate how the basin behind Unit 6 will be accessed for maintenance.*

LAI: Maintenance is anticipated to traverse west of Unit 1.

BETA2: Explanation provided; item is resolved.

SW3. *Provide a guardrail at the section of retaining wall adjacent to the development driveway, south of Unit 1.*

LAI: The guardrail has been added, as requested.

BETA2: The guardrail has been provided; item is resolved.

SW4. *Provide a wood guardrail at both legs of the hammerhead turnaround area.*

LAI: The guardrail has been added, as requested.

BETA2: The guardrail has been provided; item is resolved.

SW5. *Revise time of concentration (Tc) calculations such that sheet flow does not exceed 50 feet.*

LAI: The Tc calculation has been revised and is included within the revised Stormwater Report.

BETA2: Tc calculations revised; item is resolved.

SW6. *Hydraulic calculations indicate that "Line 1" and "Line 2" are undersized (both are 8" dia. pipes). Revise pipe sizes to adequately convey flows.*

LAI: Lines 1 and 2 have been resized to 10" lines. Please see the revised Stormwater Report.

BETA2: Pipe sizes have been revised; item is resolved.

SW7. *Indicate the locations of any temporary sediment basins on the Erosion Control Plan.*

LAI: A temporary sediment basin location has been added to Sheet C-3. A stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction and implementation throughout construction.

BETA2: Sedimentation basin has been added to the plans; item is resolved.

SW8. *Provide a retaining wall detail. The detail should show there is adequate room for the Cape Cod berm, fence, guardrail, and wall.*

LAI: The detail has been added to Sheet D-6, as requested.

BETA2: Retaining wall detail has been added; item is resolved.

SW9. *POCS-2 should be equipped with a locking mechanism to prevent entry.*

LAI: A locking mechanism has been added, as requested.

BETA2: Locking mechanism has been added; item is resolved.

SW10. *The outlet pipe from POCS-2 does not have enough cover. Grading and pipe information say the top of this pipe will either be exposed or flush with finished grade. Revise the pipe to provide adequate cover.*

LAI: The grading has been adjusted on Sheet C-5, as requested.

BETA2: Grading has been revised; item is resolved.

STORMWATER MANAGEMENT REGULATIONS (CHAPTER 200)

The project proposes disturbing more than one acre of land within the Town of South Hadley and therefore must comply with Chapter 200 of the Town's Bylaws as well as the Stormwater Design Manual. In addition to the requirements described in the Stormwater Design Manual, all stormwater best management practices must also be designed to meet the performance standards described in Section 2.3.6.A.II.3 and 4 of the Massachusetts Municipal Storm Sewer Systems (MS4) permit for all new development and redevelopment projects (§200-6.D.).

SW11. *Given that the project is designed to infiltrate greater than the one-inch water quality volume from all impervious surfaces, the total phosphorus load removal requirement has been achieved. No action required.*

BETA2: Item is closed.

SW12. *Deep observation hole #8 indicates a groundwater elevation of approximately 223.83± (226 – 26/12). The bottom of the basin in this area is at El. 226±, providing approximately 26" of separation between the bottom of the basin and the seasonal high groundwater table. Revise the design to provide the required three feet of separation from groundwater (§200-20.A.(6)). Additionally, the Existing Conditions Survey indicates the existing contours shown on the plan, and therefore used as the surface elevation of the test pits, were taken from LIDAR contours, which tend to be less accurate than a typical on-the-ground survey.*

LAI: Section 200-20(A)(6) pertains specifically to infiltration basins. The basin in question functions as a detention basin, and the stormwater design does not assume any infiltration within this area. As the basin's purpose is limited to peak flow rate attenuation, the 3-foot separation requirement is not applicable in this instance.

BETA2: Explanation provided; item is resolved.

SW13. *Provide data on the change in total volume of runoff (§200-16.V.(4)).*
LAI: Total runoff volume information is provided in Appendix C: Pre- and Post-Development Hydrologic Analysis and is summarized as follows:

Pre- and Post-Development Total Volume Discharges						
	2-year storm (cf)		**10-year storm (cf)**		**100-year storm (cf)**	
DP-1	5,108	4,089	20,179	15,373	55,539	53,835

BETA2: Information provided; item is resolved.

SW14. *§200-1.C.(3) states the proper management of stormwater shall minimize volume and rate of stormwater which is discharged to rivers, streams, reservoirs, lakes, and combined sewers. The proposed system increases total volume during all storm events by 13,323 cf (2-year), 19,833 cf (10-year), and 26,922 cf (100-year). BETA defers to the Town whether this is an acceptable increase in total volume to Stoney Brook.*

LAI: The runoff volume numbers referenced in comment SW14 represent the difference in runoff volume from the site prior to treatment by the proposed stormwater management system. Once stormwater runoff is collected and conveyed to the subsurface infiltration system, attenuation and recharge to the underlying native soils will occur and thereby reduce the total volume of runoff reaching the design point. The runoff volume discharging to the design point has been reduced as demonstrated in the table from response to comment SW13. Please refer to Appendix C of the revised Stormwater Drainage Report for detailed information.

BETA2: Explanation has been provided; item has been resolved as volumes are reduced compared to pre-development conditions.

MASSDEP REPORTABLE RELEASES

The MassDEP Waste Site / Reportable Release database identifies the residential home at 47 East Street, located approximately 1,500 feet northwest of the subject property, as the location of a reportable release under Release Tracking Number (RTN) 1-0015276. Available documentation indicates that fuel oil was spotted along the garage foundation around the above-ground storage tank. A total of 94.27 tons of fuel oil impacted soil was excavated and disposed of in November of 2005. The RTN has been closed since April 19, 2007.

MASSDEP STORMWATER STANDARDS

The project proposes to disturb greater than one acre of land within the Town of South Hadley and is in proximity to wetland resources. Therefore, the project is subject to Chapter 200 and the Massachusetts Stormwater Standards. The following sections are provided for the Boards consideration. BETA notes that the Applicant has documented compliance with some of the MA Stormwater Standards in the Stormwater Management Report, but requires further documentation.

LOW IMPACT DEVELOPMENT (LID) TECHNIQUES

Proposed LID measures include a subsurface infiltration basin and no disturbance to wetland resources.

NO UNTREATED STORMWATER (STANDARD NUMBER 1): *No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.* The project does not propose any new discharges to wetlands – ***Standard #1 is met.***

POST-DEVELOPMENT PEAK DISCHARGE RATES (STANDARD NUMBER 2): *Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.* The project proposes to mitigate increases to runoff rates with the use of a subsurface infiltration system and surface detention pond. Calculations indicate a decrease in peak discharge rate and an increase peak runoff volume to Design Point 1. ***– Standard #2 is met.***

RECHARGE TO GROUNDWATER (STANDARD NUMBER 3): *Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to maximum extent practicable.*

NRCS soil maps indicate that underlying soils within the development area are Agawam fine sandy loam with a hydrologic soil group rating (HSGR) of B (moderate infiltration potential), Sudbury fine sandy loam with a HSGR of B, and Walpole sandy loam with a HSGR of B/D. The Applicant has conducted nineteen soil tests at the Site indicating the subsurface soils are predominantly loamy sand over very fine sand. Groundwater was detected between 22 and 68 inches below existing grade. The subsurface infiltration system provides greater than three feet of separation between the bottom of the system and the groundwater table, which meets the local regulation. The detention pond at the rear of the development does not provide the required separation to groundwater.

Groundwater recharge is proposed via a new subsurface infiltration system. The project is expected to provide a recharge volume in excess of what is required by Standard 3. Calculations have been provided indicating all BMPs will draw down within 72 hours. ***– Standard #3 is met.***

SW15. *Provide required mounding analysis where infiltration BMPs have less than 4 feet of separation to estimated seasonal high groundwater.*

LAI: The proposed subsurface infiltration basin has been revised to provide a minimum of 4 feet of separation to estimated seasonal high groundwater. Therefore, this comment is no longer applicable.

BETA2: Infiltration system elevation has been revised; item is no longer applicable and is resolved.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): *For new development, stormwater management systems must be designed to remove 80% of the annual load of Total Suspended Solids (TSS)*.

The project has been designed to provide 90% TSS removal for treated impervious areas. Water quality volume calculations are provided verifying that the Barracuda water quality structure provides sufficient pretreatment.

A Long Term Pollution Prevention Plan is included in the O&M Plan. – ***Standard #4 is met.***

HIGHER POTENTIAL POLLUTANT LOADS (STANDARD NUMBER 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads (LUHPPLs) require the use of specific stormwater management BMPs.*

The project includes a residential use which is not typically considered a LUHPPL – ***Standard #5 is not applicable****.*

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.*

Project is not located within or near a critical area ***– Standard #6 is not applicable.***

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.*

The project does not qualify as a redevelopment ***– Standard #7 is not applicable.***

EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.* The project proposes to disturb greater than one acre of land and therefore will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). An erosion control plan has been provided showing inlet protection, linear sedimentation control (compost filter sock), and construction entrance/tracking pad. ***Standard #8 has been met.***

OPERATIONS/MAINTENANCE PLAN (STANDARD NUMBER 9): *A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that stormwater management systems function as designed.* A Stormwater Operation and Maintenance Manual was provided with the Stormwater Management Report. ***Standard #9 is met.***

SW16. *Provide signature of owner on the O&M Plan.*

LAI: A signed O&M is included within the revised stormwater report.

BETA2: A signed O&M plan has been provided; item is resolved.

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* A signed Illicit Discharge Compliance Statement was provided with the submission. ***Standard #10 is met.***

SW17. *Provide signature of owner on the illicit discharge statement.*

LAI: A signed Illicit Discharge Compliance Statement is included within the revised stormwater report.

BETA2: A signed Illicit Discharge Compliance Statement has been provided; item is resolved.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Steven Lee, PE, SE
Senior Project Engineer