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Ref: 9526

_____, 2025

Mr. Lionel J. Lucien, P.E.
Manager, Public/Private Development Unit
MassDOT Highway Division
Office of Transportation Planning
10 Park Plaza, Room 4150
Boston MA 02116

Re: Rocky Hill Residential Development (EEA No. 16837)
Elm Street
Amesbury, Massachusetts

Dear Mr. Lucien:

In order to assist you in the preparation of the Section 61 Finding for the proposed construction of a residential development to be located off of Elm Street in the "Rocky Hill" area that is generally between Elm Street, Interstate 95 (I-95) and I-495 in Amesbury, Massachusetts (EEA No. 16837, and hereafter referred to as the "Project"), Vanasse & Associates, Inc. (VAI), on behalf of Dale Development, LLC (the "Proponent"), has prepared a summary of the proposed mitigation commitments, the anticipated schedule for implementation, and the responsible party. Listed below is a brief description of the Project, the Massachusetts Environmental Policy Act (MEPA) history, and the elements of the proposed mitigation program, which were also defined in the _____, 2025 Final Environmental Impact Report (the "EIR") and the subsequent _____, 2025 Certificate of the Secretary of Energy and Environmental Affairs issued on the Final EIR, a copy of which is attached.

I. Project Description

The Project will entail the construction of a residential development to be located off of Elm Street in Amesbury, Massachusetts. The Project will include the construction of up to 400 residential units in several buildings clustered within the Project site to include up to 309 multifamily residential units, 83 single-family attached homes (townhomes and duplex units) and eight (8) single-family detached cottage-type homes, with amenities and supporting parking. It is expected that a portion of the residents of the Project will be "empty nesters" that are looking to downsize their living area and remain within the City of Amesbury. The Project site includes multiple lots in both the City of Amesbury and the Town of Salisbury, with the area that is to be developed located entirely within the City of Amesbury and encompasses approximately 87.36± acres of land that is bounded by residential properties and areas of open and wooded space to the north; I-495, residential properties and areas of open and wooded space to the south and east; and Elm Street, residential and commercial properties and areas of open and wooded space to the west. The Project site currently contains three (3) single-family homes with associated driveways and appurtenances, all of which will be removed to accommodate the Project.

Access to the Project site will be provided by way of a full access driveway that will intersect the east side of Elm Street generally opposite the south driveway to the Hampton Inn Amesbury.

Secondary access for emergency vehicles will be provided through a connection to the abutting property to the north at 227 Elm Street which will be secured by a gate or other means acceptable to the Amesbury Fire Department. The Project will require the issuance of a State Highway Access Permit from the Massachusetts Department of Transportation (MassDOT) for access to Elm Street as the section of roadway along which the Project site is located is a State Highway that is under MassDOT jurisdiction, as well as to implement the improvements along Route 110 that have been identified as a part of this assessment.

On-site parking will be provided in individual driveways and garages for the single-family attached and detached units, and by surface and on-street parking for the multifamily units, with a targeted parking ratio of 1.5 parking spaces per residential unit to be provided. Additional parking will be provided for guests and at the amenity building. The proposed parking supply (a minimum of 1.5 parking spaces per unit) will meet or exceed the parking requirements of Section VIII, *Off Street Parking and Loading*, of the City of Amesbury Zoning Ordinance.[1]

II. MEPA History

The Proponent prepared and submitted, pursuant to M.G.L. c. 30, § 61 and 62A-H of MEPA and its implementing regulations (301 CMR 11.00), an Environmental Notification Form (June 7,2024),[2] a Draft EIR (December 11, 2024) and a Final EIR (_____, 2025). On _____, 2025, the Secretary of Energy and Environmental Affairs issued a Certificate stating that the Final EIR adequately and properly complied with MEPA and its implementing regulations.

III. Traffic Characteristics

In order to develop the traffic characteristics of the Project, trip-generation statistics published by the Institute of Transportation Engineers (ITE)[3] for similar residential types to those that will be located within the Project site were used. ITE Land Use Codes (LUCs) 210, *Single-Family Detached Housing*; 215, *Single-Family Attached Housing*; and 220, *Multifamily Housing (Low-Rise)*; were used to establish the base trip characteristics of the Project. Adjustments to account for the use of alternative modes of transportation to single-occupancy vehicles (SOVs) or to reflect the expectation that a portion the residents of the Project will be "empty nesters" and may be retired were not applied to the base ITE trip generation calculations.

Using this methodology, the Project is expected to generate the Project is expected to generate approximately 2,738 vehicle trips on an average weekday (two-way, 24-hour volume, or 1,369 vehicles entering and 1,369 exiting), with 163 vehicle trips (39 vehicles entering and 124 exiting) expected during the weekday morning peak-hour and 208 vehicle trips (130 vehicles entering and 78 exiting) expected during the weekday evening peak-hour.

IV. Specific Project Mitigation Measures

The Proponent is committed to the implementation of a comprehensive transportation improvement program that is designed to reduce the impact of the planned development on the transportation infrastructure. The major elements of the improvement program can be separated into four primary categories: i) Project site access accommodations; ii) off-site improvements; iii) Transportation

[1]The City of Amesbury Zoning Ordinance requires a minimum of 1.5 parking spaces per dwelling or apartment unit.
[2]Dates in parentheses refer to when notice of availability for public review was published in The Environmental Monitor for the respective environmental disclosure document.
[3]*Trip Generation*, 11th Edition; Institute of Transportation Engineers; Washington, DC; 2021.

Demand Management (TDM) measures; and iv) Traffic Monitoring. The elements of the planned transportation improvement program are discussed in detail in the following sections.

Project Site Access

Access to the Project site will be provided by way of a full access driveway that will intersect the east side of Elm Street generally opposite the south driveway to the Hampton Inn Amesbury. Secondary access for emergency vehicles will be provided through a connection to the abutting property to the north at 227 Elm Street which will be secured by a gate or other means acceptable to the Amesbury Fire Department. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:

- The primary access drives will be a minimum of 22-feet in width without a median with the section of drive that will include a median designed to provide a 14-foot wide traveled-way on either side of the median. Minor drives that are not intended to covey through traffic to Elm Street will be a minimum of 20-feet in width.. Where a roadway width of less than 24-feet is used, on-street parking will be prohibited unless a separate (from the traveled-way) parking lane or similar accommodation is provided. Corner radii and terminus points of the drives within the Project site will be designed to accommodate the turning and maneuvering requirements of an emergency vehicle as defined by the Amesbury Fire Chief.

- Consideration will be given to widening the driveway approaching Elm Street to provide an area for parent/caregiver vehicles to park when waiting for the school bus.

- The emergency vehicle access road will be 20-feet in width and paved or constructed of a stabilized base material that will support travel by the largest responding emergency vehicle under all weather conditions, and should be gated or otherwise secured in a means acceptable to the Amesbury Fire Department.

- Where perpendicular parking is proposed, the maneuvering area behind the parking will be a minimum of 23 feet in order to facilitate parking maneuvers.

- Vehicles exiting the Project site driveway to Elm Street and at intersections of minor streets with the main circulating roadway within the Project site will be placed under STOP-sign control with a marked STOP-line provided.

- Appropriate signs and pavement markings will be provided to regulate the flow of traffic on the approaches to and within the roundabout that is planned within the Project site, including "Yield" signs and accompanying pavement markings on the approaches and "One-Way" signs within the roundabout. In addition, splitter islands will be provided on all approaches to the roundabout that provide proper deflection to reduce approach speeds and reinforce the one-way circulation.

- All signs and pavement markings to be installed within the Project site will conform to the applicable standards of the *Manual on Uniform Traffic Control Devices* (MUTCD).[4]

[4]*Manual on Uniform Traffic Control Devices (MUTCD)*; Federal Highway Administration; Washington, D.C.; 2009.

- Sidewalks will be provided along one or both sides of the Project site driveway and internal roadways within the Project site and will connect to the existing sidewalk along the northeast (Project) side of Elm Street.

- Americans with Disabilities Act (ADA)-compliant wheelchair ramps will be provided at pedestrian crossings to be modified or constructed in conjunction with the Project, including for crossing the Project site driveway along Elm Street or the driveway will be designed so that the sidewalk crosses the driveways (i.e., pan-type driveway).

- Traffic calming measures, including raised crosswalks, raised intersections and other appropriate devices will be installed at appropriate locations within the Project site to promote reduced travel speeds and support the pedestrian focused neighborhood environment within the Project site.

- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas will be designed and maintained so as not to restrict lines of sight.

- Snow accumulations (windrows) within sight triangle areas will be promptly removed where such accumulations would impede sight lines.

Off-Site

❖ **Route 110 Coordinated Traffic Signal System**

The addition of Project-related traffic to the signalized intersections along Route 110 within the study area was shown to result in an increase in motorist delays and vehicle queuing over No-Build conditions, with the Route 110/Merrill Street/Rabbit Road and Route 110/ Elm Street/Clarks Road intersections identified as high crash locations. In order to enhance safety and to off-set the predicted impact of the Project, the Proponent will design and implement an optimal traffic signal timing, phasing and coordination plan (where applicable) for the following intersections:

1. Route 110 at the Carriagetown Marketplace Driveway;
2. Route 110 at Elm Street and Clark's Road;
3. Route 110 at the I-95 Southbound Off-Ramp (future); and
4. Route 110 at Merrill Street and Rabbit Road (not currently coordinated)

The initial traffic signal timing improvements will be completed prior to the issuance of any Certificate of Occupancy for the Project subject to receipt of all necessary rights, permits and approvals, and will include a review of the "yellow" and "all-red" clearance intervals and the pedestrian phase timings. Operating conditions at the subject intersections will reviewed thereafter as a part of the annual traffic Monitoring and Reporting Program (discussion follows) and the traffic signal timing, phasing and coordination will be further adjusted based on the results of the monitoring program again, subject to receipt of all necessary rights, permits and approvals. With the traffic signal timing improvements, operating conditions are predicted to generally improve over or to be restored to No-Build conditions.

❖ **Route 110 Corridor Improvements**

Route 110 at the I-95 North and Southbound Ramps

Independent of the Project, right-turn movements from the I-95 northbound ramp to Route 110 westbound and left-turn movements from the I-95 southbound off-ramp to Route 110 westbound are currently operating at or over capacity during both peak hours, with vehicle queues on the I-95 northbound off-ramp extending up to 72 vehicles. In order to improve operating conditions at the I-95 ramp intersections with Route 110, a review of geometric and traffic control improvements was undertaken, including the installation of a traffic control signal or modern roundabout at the Route 110/I-95 southbound off-ramp intersection. Based on this review, it was determined that the Route 110/I-95 southbound off-ramp intersection appears to meet the warrants identified in the MUTCD[5] for the installation of a traffic signal and that the traffic signal control alternative combined with the geometric improvements that have been recommended at the Route 110/ Elm Street/Clark's Road intersection (discussion follows) would result in improved operating conditions over the modern roundabout alternative such that the I-95 northbound off-ramp to Route 110 westbound would no longer be blocked thereby also improving traffic operations for the I-95 northbound off-ramp to Route 110 westbound. With the installation of a traffic control signal at the Route 110/I-95 southbound off-ramp intersection, the integration of the new traffic signal into the Route 110 coordinated traffic signal system and the completion of the associated geometric improvements along Route 110, operating conditions at both I-95 ramp intersections will be improved over No-Build conditions such that all movements are predicted to operate at LOS D or better with a significant reduction in vehicle queuing along the I-95 northbound off-ramp to Route 110 westbound (predicted to be no more than two (2) vehicles).

In an effort to improve traffic operations within the Route 110/I-95 interchange and recognizing the limited impact of the Project at the off-ramp intersections (defined as a predicted increase in vehicle queuing of up to six (6) vehicles), the Proponent assisted the City of Amesbury with the preparation of a Community One Stop for Growth grant application for the construction of improvements at the Route 110/I-95 southbound ramps intersection that was submitted on June 4, 2025

Route 110 at Elm Street and Clark's Road

Independent of the Project, specific movements along Route 110 at the Route 110/Elm Street/ Clark's Road intersection are currently or are predicted to operate at or over capacity, with residual vehicle queuing along the Route 110 westbound approach that extends through the Route 110/I-95 southbound ramps intersection. In an effort improve operating conditions at the Route 110/Elm Street/Clark's Road intersection and within the Route 110/I-95 interchange, the Proponent will undertake the following improvements at the Route 110/Elm Street/ Clark's Road intersection:

- Widen Route 110 westbound to accommodate three (3) through travel lanes between the I-95 southbound off-ramp to a point approximately 300 feet west of Elm Street;

[5]Federal Highway Administration, op. cit. 3.

- Reconstruct the intersection and traffic signal system to accommodate the additional through travel lane, including a section of the Salisbury Point Ghost Trail that is situated along the north side Route 110; and

- Design and implement an optimal traffic signal timing, phasing and coordination plan.

These improvements will be designed and constructed prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals and were included as a part of the Community One Stop for Growth grant application that was submitted by the City of Amesbury on June 4, 2025.

❖ **Safety Improvements**

Route 110 at Merrill Street and Rabbit Road/Route 110 at Elm Street and Clark's Road

Independent of the Project, the Route 110/Merril Street/Rabbit Road and Route 110/Elm Street/ Clark's Road intersections were found to have motor vehicle crash rates above the MassDOT statewide and District average crash rate for similar intersections. Additionally, the Route 110/Merrill Street/Rabbit Road intersection has been identified by MassDOT as a high crash location for the 2019 through 2021 reporting period. As such, in June 2025, the Proponent facilitated the completion of a Road Safety Audit (RSA) at these intersections that resulted in suggestions to enhance safety.[6] In order to advance the safety-related enhancements, the Proponent will implement the following short-term, low-cost improvements that were identified in the RSA:

Route 110/Merril Street/Rabbit Road

1. Test the vehicle detection system and repair or replace the associated equipment as needed;

2. Add backplates with reflective yellow tape to the vehicle signal indications;

3. Evaluate the impact to traffic operations of restricting right-turn-on-red movements. If deemed feasible and desirable by MassDOT, install the necessary signs to restrict this movement;

4. Evaluate the feasibility of implementing split-phasing for the intersection. If deemed feasible and desirable by MassDOT, implement the traffic signal timing plan;

5. Review and adjust the "yellow" and "all red" clearance intervals

6. Increase the audible volume of the Audible Pedestrian Signals;

7. Trim vegetation to improve sight lines on the approaches to the intersection and at the intersection corners;

8. Add tracking lines to guide vehicles to proper lane assignments;

[6] *Road Safety Audit*, Lincoln Street at Plantation Street and Boylston Street and Clinton Street (Route 70) at NE Cutoff and Plantation Street, City of Worcester, Toole Design; August 18, 2023.

9. Reapply the pavement markings on the intersection approaches with high visibility thermoplastic markings;

10. Reapply the crosswalk pavement markings with high visibility, ladder style thermoplastic markings;

11. Reapply the "Bicycle Stop on Line for Green" pavement markings;

12. Add lane use signs to the sign bridge over Route 110 for eastbound motorists;

13. Review and fix any crooked or misaligned signs within the intersection;

14. Install "4 Feet to Pass" bicycle signs on Merrill Street south of Route 110;

15. Evaluate the compliance of the wheelchairs with the requirements of the Americans with Disabilities Act (ADA) and reconstruct the ramps as necessary;

16. Rotate the parallel drainage grate on the on the southwest corner of the intersection to be perpendicular to the path of vehicle travel; and

17. Evaluate the feasibility of installing "Do Not Block" signs and pavement markings on Merrill Street in front of the Aroma Joe's/plaza entrance.

Route 110/Elm Street/Clark's Road

1. Test the vehicle detection system and repair or replace the associated equipment as needed;

2. Replace the emergency vehicle pre-emption system and adjust the location of the receivers as necessary to ensure proper operation;

3. Evaluate the impact to traffic operations of restricting right-turn-on-red movements. If deemed feasible and desirable by MassDOT, install the necessary signs to restrict this movement;

4. Review and adjust the "yellow" and "all red" clearance intervals

5. Trim vegetation to improve sight lines on the approaches to the intersection and at the intersection corners;

6. Add advance lane assignment markings on the Elm Street approach;

7. Reapply the crosswalk pavement markings with high visibility, ladder style thermoplastic markings;

8. Reapply the pavement markings on the intersection approaches with high visibility thermoplastic markings;

9. Add additional directional guide signs for I-95 on Route 110 after (east of) the Macy Street; and

10. Install radar speed feedback signs on Route 110 east of Macy Street and west of I-495.

These improvements will be completed prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals, and were included as a part of the Community One Stop for Growth grant application that was submitted by the City of Amesbury on June 4, 2025.

Elm Street Pedestrian Crossing

In order to facilitate pedestrian access to the Project and connectivity to public transportation (discussion follows), the Carriagetown Marketplace and the Salisbury Point Ghost Trail, a pedestrian actuated Rectangular Rapid Flashing Beacon (RRFB) will be installed at the existing crosswalk across the Elm Street northwest leg of the Elm Street/Hampton Inn Amesbury driveway intersection to include pedestrian crossing warning signs at and in advance of the crossing. The location of the RRFB will be coordinated with MassDOT and the City of Amesbury as a part of the planning for the extension of the Amesbury Riverwalk connection to the Salisbury Point Ghost Trail. These improvements will be completed prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals, and were included as a part of the Community One Stop for Growth grant application that was submitted by the City of Amesbury on June 4, 2025.

Transportation Demand Management

Public transportation services are provided within the study area by Merrimack Valley Transit (MeVA). MeVA operates fixed-route bus service along Elm Street and Route 110 by way of bus Route 17, *Salisbury Beach via Amesbury*, and Route 19, *Amesbury/Costello*. The Route 17 bus provides service between the Washington Square Transit Center in Haverhill and Salisbury Beach and travels along Elm Street past the Project to Route 110. The closest regular stop for the Route 17 bus to the Project site is at the Elm Street/Carriagetown Marketplace Driveway intersection, approximately 600 feet (or a 2-minute walk) from the Project site. The Route 19 bus provides service between the Nicholas J. Costello Transportation Center in Amesbury and the Newburyport MBTA Station, and travels along Route 110 to the I-95 interchange. The closest regular stop for the Route 19 bus to the Project site located within the Carriagetown Marketplace, approximately 0.25 miles (or a 5-minute walk) from the Project site. MeVA buses also operate in a "flag stop" mode, where a rider can request a stop anywhere along the regular service route by signaling to the driver.

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the following Transportation Demand Management (TDM) measures will be implemented as a part of the Project:

- A transportation coordinator will be designated for the Project, who may have other duties and responsibilities, to coordinate the elements of the TDM program;
- The transportation coordinator will facilitate a rideshare matching program for residents to encourage carpooling;
- A "welcome packet" will be provided to new residents detailing available public transportation services, bicycle and walking alternatives, and other commuting options, including information and maps of the shared-use trail network that is accessible from the Project site (Salisbury Point Ghost Trail, the Amesbury Riverwalk and the William Lloyd Garrison shared-use trails);

- Amenities will be provided to support telecommuting by residents of the Project that may take the form of meeting space or collaboration areas within the clubhouse;
- Information regarding public transportation services, maps, schedules, and fare information will be posted in a central location and/or otherwise made available to residents;
- Pedestrian accommodations will be incorporated within the Project and consist of sidewalks that connect to the existing sidewalk infrastructure along Elm Street;
- Secure bicycle parking will be provided at appropriate locations within the Project site to include exterior bicycle racks proximate to building entrances and at the amenities and weather protected bicycle parking for residents in each residential building; and
- Wayfinding signs will be provided within the Project site to direct bicyclists to the bicycle parking areas and to the Salisbury Point Ghost Trail and the Amesbury Riverwalk from the Project site.

In addition, the Proponent will consult with MeVA and the City to establish a bus stop along Elm Street at the Project site. To the extent that a bus stop is established and if so desired by MeVA, a bus shelter will be provided at a location determined in consultation with MeVA and MassDOT.

With implementation of the aforementioned recommendations, safe and efficient access will be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

Traffic Monitoring Program

The Proponent will conduct a post-development traffic monitoring and resident survey program in order to evaluate the success and to refine the elements of the TDM program, and to validate the trip projections for the Project. The monitoring program will include:

i) Obtaining traffic-volume information over a continuous seven-day, weeklong period on the driveway serving the Project;

ii) Performing manual turning movement and vehicle classification counts at the following intersections (the "Monitored Intersections") during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods:

- Elm Street at the Project site driveway
- Route 110 at the Carriagetown Marketplace Driveway;
- Route 110 at Elm Street and Clark's Road;
- Route 110 at the I-95 Southbound Ramps
- Route 110 at the I-95 Northbound Ramps
- Route 110 at Merrill Street and Rabbit Road;

iii) Evaluating motor vehicle crash data at the Monitored Intersections;

iv) Obtaining parking demand observations between 5 AM and 7 AM on a weekday; and

v) Performing a survey of resident commuting modes.

The monitoring program will commence six (6) months after issuance of the first Certificate of Occupancy for the Project and will continue on an annual basis thereafter for a period not to exceed 5-years after completion of the Project. The results of the monitoring program will be summarized in a report (the "Traffic Monitoring Report") to be provided to MassDOT, the Merrimack Valley Planning Commission (MVPC) and the City of Amesbury within 2-months after the completion of the data collection effort. The Traffic Monitoring Report will document: i) traffic volumes associated with the Project; ii) motorist delays, vehicle queuing, crash severity and calculated crash rates at the Monitored Intersections; iii) parking occupancy; and iii) the elements of the TDM program that have been implemented and use of alternative modes of transportation to SOVs by residents.

If and to the extent any of the following occur: i) the volume of traffic attributable to the Project as measured at the Project site driveway exceeds the projected traffic volumes on a daily or peak-hour basis by more than 10 percent; ii) there is an increase in the frequency of occurrence of motor vehicle crashes at the Monitored Intersections that can be attributed to the Project; or iii) traffic operations at the Monitored Intersections are materially degraded as a result of the addition of Project-related traffic; the Project proponent will coordinate with the appropriate approving authorities to implement one or more of the following measures subject to receipt of all necessary rights, permits and approvals:

- Traffic signal timing, phasing and coordination improvements
- Sign and pavement marking installation
- Expansion or refinement of the elements of the TDM program
- On-site operation and management strategies that are designed to reduce overall and peak traffic volumes and parking demands that may include providing a resident shuttle service to supplement the MeVa bus service.

The specific improvement measure(s) will be summarized in the Traffic Monitoring Report and their status and effectiveness will be evaluated in the subsequent Traffic Monitoring Report.

Greenhouse Gas Emissions Reduction Self-Certification

The Proponent will provide a certification to the MEPA Office signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) indicating that the greenhouse gas (GHG) emissions reduction measures adopted by the Proponent have been incorporated into the Project. Should alternative GHG emissions reduction measures be implemented that differ from those outlined in the _____, 2025 Final EIR, the Proponent shall certify that the collective measures achieve an equivalent percentage reduction in GHG emissions based on the same modeling assumptions. For those measures that are operational in nature (i.e., TDM, recycling), the Proponent shall provide an updated plan and/or narrative identifying the measures, the schedule for implementation and how progress towards achieving the measures will be obtained. Said certification shall be provided following the completion of each phase of the Project (to the extent that the Project is phased) and shall be supported by plans that clearly illustrate where GHG mitigation measures have been incorporated.

We trust that this information is of assistance. If you have any questions or require additional information in order to issue a Section 61 Finding for the Project, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk, P.E., PTOE, FITE
Managing Partner

Professional Engineer in CT, MA, ME, NH, RI and VA

Attachments