

August 4, 2025

Ref: 73562.00

Mr. Doug McLean Planning Director Town of Coventry 1670 Flat River Road Coventry, RI 02816

Re:

Dear Mr. McLean,

Vanasse Hangen Brustlin, Inc. (VHB) respectfully submits this letter in response to comments received from Pare Corporation dated July 7, 2025, regarding the Coventry Centre project. Comments are reiterated below in italics with VHB responses following in bold.

May 2025 Coventry Centre Traffic Impact and Access Study

Comment 1

Introduction: Recommend adding a site plan within the report to better illustrate the project location and layout. The plan should also identify the existing side streets that will line up with proposed site driveways.

Pare had coordinated with VHB prior to the study being performed and we are in concurrence with the intersections that are studied within project area.

Response

No response required.

Comment 2

Study Methodology: This section discusses the scope of the study which focuses mainly on traffic operations/capacity. A traffic safety study should be included within the report to better understand the safety aspects of the existing conditions and how the traffic operations and roadway geometrics may be impacted. Through the collection of crash data and the existing conditions, specific operational or safety issues should be examined to determine if there is a history or pattern of crashes along with their causes and what the forecast of additional impacts may be with the development. Possible improvement measures for safe, if deemed necessary, are then to be identified and explored.

It is our understanding that crash data has been requested from the Coventry Police Department from VHB. Upon receipt and the analysis of the data, VHB is to provide a supplement to their report.

Response

VHB has received the crash data and has included a summary of the data.



Comment 3 Study Area: The limits of the study area were discussed with VHB prior to them performing their study. The limits studied are satisfactory to Pare.

Response No response required.

Comment 4 Network Geometry: Roadways: New London Turnpike: Within the limits identified, New London Turnpike extends into West Greenwich north and south of the Town limits and is also under the jurisdiction of the Town of West Greenwich.

Response VHB has added reference regarding West Greenwich.

Comment 5 Network Geometry: Roadways: Arnold Road: Revise the description of Arnold Road to describe that two westbound lanes merge to one westbound lane. Also, note that the merge from two lanes to one lane is occurring within the intersection with Grandview Street.

Response Discussion of the merge near Grandview Street has been added to the report.

Comment 6 Network Geometry: Intersections: New London Turnpike at Arnold Road/Crompton Road: Revisit the site. It is noted in report that "there are no signal heads, pushbuttons, or pedestrian phases". Ped signal heads and push buttons are present.

Response The report has been revised to note the existing pedestrian heads and push buttons.

Comment 7 Network Geometry: Intersections: New London Turnpike at Center of New England Boulevard: The westbound approach has both a shared left-turn/through lane and a shared right- turn/through lane. Please revise this description.

Response The report has been revised to accurately describe the westbound approach.

Comment 8 Network Geometry: Intersections: Arnold Road at Grandview Street: It is noted that the westbound approach to the intersection under existing conditions is a shared left- turn/through lane. The westbound approach is actually in the area where the two lanes from the from the New London Turnpike intersection are merging from two lanes into one lane.

Change the last sentence in this section to read Grandview Street not Gay Street.

Response The text has been revised to discuss the merge.

Comment 9 Observed Traffic Volumes: Turning movement counts were performed from 6:30 a.m. to 8:30 a.m. The ITE peak hour trip generations for the retail uses and residential uses are 7:00 a.m, to 9:00 a.m. There were also 24-hour counts completed on New London Turnpike north of the 1-95 southbound ramps, and Arnold Road west of New London Turnpike. The counts performed on Arnold Road west of New London Turnpike indicate the peak hour from 8:00 a.m.-9:00 a.m. Please explain why turning movement counts were not performed 7:00 a.m. to 9:00 a.m.

The report indicates that the weekday peak hours at each intersection are 7:30 a.m. and 8:30 a.m. and 4:30 p.m. and 5:30 p.m. and the Saturday mid-day peak hour is 12:30 p.m., and 1:30 p.m. Based on our review the peak hours are:



INTERSECTION AUTOMATIC TR	A.M. PEAK HOUR AFFIC RECORDER	P.M. PEAK HOUR	SATURDAY MID-DAY PEAK HOUR
NEW LONDON TURNPIKE NORTH OF I-95 SB RAMPS	7:15 a.m8:15 a.m.	4:30 p.m5:30 p.m.	11:45 a.m12:45 p.m.
ARNOLD ROAD WEST OF NEW LONDON TURNPIKE TURNING MOVE	8:00 a.m9:00 a.m. MENT COUNTS (TM	4:00 p.m5:00 p.m.	11:45 a.m12:45 p.m.
I-95 SB RAMP @ NEW LONDON TURNPIKE	7:15 a.m 8:15 a.m.	4:30 p.m5:30 p.m.	12:30 a.m1:30 p.m.
1-95 NB RAMP @ NEW LONDON TURNPIKE	7:00 a.m8:00 a.m.	3:45 p.m 4:45 p.m.	11:00 a.m12:00 p.m.
NEW LONDON TURNPIKE @ CENTRE OF NEW ENGLAND BLVD	7:30 a.m 8:30 a.m.	3:45 p.m4:45 p.m.	12:45 a.m1:45 p.m.
NEW LONDON TURNPIKE @ ARNOLD ROAD	7:30 a.m 8:30 a.m.	3:45 p.m 4:45 p.m.	12:00 a.m1:00 p.m.
ARNOLD ROAD @ GAY STREET	7:00 a.m 8:00 a.m.	4:00 p.m5:00 p.m.	11:45 a.m12:45 p.m.
ARNOLD ROAD @ GRANDVIEW STREET	7:00 a.m 8:00 a.m.	4:30 p.m5:30 p.m.	11:45 a.m12:45 p.m.

^{*}Actual peak hour volumes at intersections are bold

Provide an explanation as to why 7:30 a.m. to 8:30 a.m, and 3:30 p.m. to 4:30 p.m. for the weekday peak hours and 12:30 p.m. to 1:30 p.m. for the weekend peak hours were used. It should be noted that the variation in the counts used, and the actual peak hours is not that significant.

In reviewing Figures 2, 3 and 4 there are several intersections in which the volumes are significantly different from the peak volumes shown. The following intersections and peak hours have traffic volume differences:

• Figure 2 Existing Conditions Weekday Morning Peak Hour- many movements are slightly off. No



significant impacts to capacity are anticipated.

- Figure 3 Existing Conditions Weekday Afternoon Peak Hour-Center of New England Blvd/New London Turnpike have some significant changes (eastbound approach left 350 vs. 381; eastbound right 422 vs. 455); 1-95 Southbound ramps/New London Turnpike- southbound right 323 vs. 450; 1-95 Northbound ramps/New London Turnpike- has differences, but not significant.
- Figure 4 Existing Conditions Saturday Midday Peak Hour-Volumes at all intersection approaches are significantly different and will have an impact on the analyses. Arnold Road/Grandview Street eastbound left-513 vs. 557, westbound through-732 vs. 550; Arnold Road/Gay Street intersection-eastbound through 488 vs. 532, westbound through 732 vs. 535; Arnold Road/New London Turnpike southbound 255 vs. 330, westbound right 87 vs. 47, westbound through 223 vs. 187, westbound left 87 vs. 115; northbound left 424 vs. 384, northbound through361 vs. 396; eastbound left 82 vs. 57, eastbound right 296 vs. 377; Center of New England Boulevard/New London Turnpike southbound left 328 vs. 464, southbound right 368 vs. 348; eastbound left 350 vs. 455, eastbound through 12 vs. 21, eastbound right 422 vs. 550; northbound left 461 vs. 496, through 344 vs. 605; New London Turnpike/1-95 South ramps-southbound through 483 vs. 649, westbound right 780 vs.570 and 1-95 North Ramps/New London Turnpike southbound left 406 vs. 535. Please review and confirm all volumes.

Response

VHB uses a method of looking at the traffic volumes at all of the study area intersections combined to determine the highest total traffic in the network and develop a study area peak hour. The total traffic in the network is what was used in the analysis. Using a different peak period is not anticipated to result in a significantly impact in the results of the analysis.

Comment 10 Future Conditions: A five-year planning horizon was used for future conditions. Which is industry standards.

The U.S, Census indicates an annual 0.3% annual growth. A conservative 0.5 percent annual growth per year was used. This is acceptable.

Assumptions were made for traffic distribution once the Center of New England Boulevard connection to Hopkins Hill Road is made. Several movements were modified based on assumptions. For example, reduction of traffic on the Center of New England Boulevard eastbound approach for the left turns to the intersection with New London Turnpike northbound and then the left onto Arnold Road and a 15 percent reduction in the eastbound traffic turning right onto New London Turnpike and then onto I-95 South. Also, it was assumed that the New London Turnpike northbound left turn volume and southbound right turn volumes will also be reduced by 15 percent and 5% respectively. For analyses purposes at this time, the assumptions of the redistribution are acceptable. It is recommended that once the Center of New England Boulevard is connected that counts be performed to verify the assumptions. If there is a significant difference from the assumptions made, the intersections should be reanalyzed with the new existing traffic volumes and the projected no-build and build volumes.



Response

The peer reviewer concurs with the assumptions made by VHB.

It is our opinion that the Town should be responsible for perform a traffic study to assess the impacts of the Centre of New England connection to Hopkins Hill Road. It is also our opinion that the Town should periodically (at least once a year) fine tune and optimize the traffic signal timings and offsets along the New London Turnpike corridor to compensate for any changes in traffic patterns.

Comment 11

Planned Developments: The analysis for Future Build conditions includes 7 other developments including:

- Crompton Meadows-80 single family residential houses with 25% being affordable.
- Willow Lakes- 124 independent living units, 48 assisted living units, and 30 memory care units (202 total units).
- Centre of New England Starr Capital- 362 duplex-style townhouses and 350 multifamily units (712 total units).
- Village at Tiogue- 61 detached single-family homes, 57 single-family/duplex cottages, and
 58 multifamily housing units (176 total units).
- Center of New England (the Highlands)-66 single family condominiums with 80% being designated age-restricted.
- New England Preserve-75 single family homes.
- Division Road Neighborhood Development 210 single family homes,
 72 condos/apartments and 136 mid-level condos/apartments.

Other developments have been brought to our attention including a State Police facility that will have 80 troopers stationed at the proposed 35,000 square foot facility. The schedule for the start of shifts and the end of shifts should be verified but it is anticipated that the shift changes will typically occur during off-peak hours and the peak hour volumes will not have any impact to traffic flow.

It is our understanding that during a pre-application meeting with the Town there was a discussion that an additional 700 more units on the 1-emaining vacant Centre of New England parcels are being considered. This should be included within the study.

Lastly, there is a development, The Vue Apartments/the Gemini Senior Apartments totaling 333 apartments and located south of the Walmart in the Center of New England should be included in the future no-build and build conditions and Retail Ca1111ahis is hei11g proposed in the strip mall building in front of the Marriot. A 1-year extension of a Special Use Permit held by a previous applicant. Deep Green Realty bought the property last year. Their intention is to apply to amend the Permit to include preparing edibles and installing a drive- up window.

Table I Site Specific Background Growth numbers appear accurate, As stated previously, the Vue/Gemini Senior Development and the Retail cannabis should be added.



The trip distribution and assignment for the No-Build Traffic Volumes is acceptable based on the potential proposed conditions. As previously stated, with the connection of Center of New England to Hopkin Hill Road the future existing traffic conditions assumed should be verified. Also, the analyses should be regenerated if the existing volumes are needed to be revised.

Response

VHB has added trip generation for the following projects based on discussions with the Town Planner and performed new traffic analysis for 2030 No-Build and 2030 Build conditions:

- 500 multifamily residential units on Centre of New England Parcels 5, 6, 7, and 8
- 13,500 Deep Green Realty, LLC retail cannabis facility with drive-thru
- The Vue and Gemini Apartments

There is also a State Police Facility that is proposed to be constructed in West Greenwich adjacent to the I-95 North off-ramp. The new facility will have 80 troopers stationed at the proposed 35,000 square foot facility. The times of the shift changes are not known at this time; however, shift changes typically occur during off-peak hours and do not generate much traffic during the roadway peak hour. VHB concurs with PARE Corporation that this facility will not have a significantly impact on peak hour volumes on the surrounding roadways.

Comment 12

Site Generated Traffic Volumes: The proposed trip generation was investigated for different alternatives. The 45,000-shopping plaza with a 5,000 square foot gas station with convenience store (10 VFPs) along with the multi-family housing (Low Rise) were used. This option appears to be the most conservative traffic wise and is acceptable.

Response

No response required.

Comment 13

Pass-by/Diverted/Internal Captured Trips-A 42 percent pass-by rate for the retail trips is acceptable and the 53 percent pass-by rate for the gasoline station with convenience store is acceptable. Table 2 is acceptable.

Response

No response required.

Comment 14

Trip Distribution and Assignment-Assumptions were made where trips will be coming from/going to based existing travel patterns and from other studies. These distributions may change with the connection of Center of New England Boulevard/Hopkins Hill Road. After that connection is complete, additional counts may be warranted to justify the assumptions.

Response

No response required.

Comment 15

Traffic Operations:

- Provide signal plans in the appendices.
- Appendix C- Signalized Intersection Capacity Analysis- Move analyses for Grandview Street & Arnold Road into Unsignalized Intersection Appendix.
- Table 3- Weekday a.m. peak should be LOS B.



- Appendix C- Signalized Intersection Capacity Analysis- Move analyses for New London Turnpike/1-95 Northbound Ramps into Unsignalized Intersection Appendix.
- Please revise Tables 3 and 4 to include the intersection approach levels of service to better understand the movements that are of concern.
- Signalized Intersections-
 - New London Turnpike at Arnold Road- the eastbound movements are projected to operate at a poor LOS and experience long delays and queues. Timing adjustments should be investigated.
 - New London Turnpike at Center of New England Boulevard- Long delays and queues are projected on all the approaches.
 - New London Turnpike at 1-95 South Ramps- This intersection operates poorly in the weekday afternoon peak hours and experiences long queues and delays.
- Unsignalized Intersections-
 - New London Turnpike at 1-95 North Ramps- This signal operates poorly and a traffic signal should be installed.
 - Arnold Road at Grandview Street/New Full Access Driveway- This intersection is proposed to operate at a poor LOS during the afternoon and Saturday peak hours. A traffic signal should be investigated at this location.

Response The following is a response to the various questions/comments:

- The traffic signal phasing and timings at the signalized intersections used in the analysis are based on field observations and notes prepared by VHB. VHB has handwritten field notes of the signal data.
- The Appendix C title has been revised from Signalized Capacity Analysis to Capacity
 Analysis so that all intersections (signalized and unsignalized) can be presented
 together for each scenario (Existing AM Peak, Existing PM Peak, etc.).
- The New London Turnpike at I-95 South Ramps level of service during the 2025 weekday AM peak in Table 3 has been changed to LOS B.
- The Appendix C title has been revised from "Signalized Capacity Analysis" to "Capacity Analysis" so that all intersections (signalized and unsignalized) can be presented together for each scenario (Existing AM Peak, Existing PM Peak, etc.).
- Expanded versions of unsignalized (Table 6A) and signalized (Tables 7A, 7B, and 7C)
 capacity analysis Summary have been included in the Appendix that include the
 intersection approach levels of service to better understand the movements that are
 of concern.
- Signalized Intersections-



- New London Turnpike at Arnold Road As recommended by PARE, VHB has added text which states that optimization of the traffic signal timings and offsets are proposed at all signalized study area intersections after occupancy of the proposed development to manage queues and delays. The text in the report has been revised to state this in the "Site Specific Improvements" section of Chapter 5 Comprehensive Improvements. The Build with Mitigation conditions in the analysis and in the summary tables include optimized signal timings and offsets to minimize queues on the New London Turnpike at Arnold Road eastbound approach.
- New London Turnpike at Centre of New England Boulevard- As recommended by PARE, optimization of the traffic signal timings and offsets are proposed at all signalized study area intersections after occupancy of the proposed development to manage queues and delays. The text in the report has been revised to state this in the "Additional Improvements" section of Chapter 5 Comprehensive Improvements. The Build with Mitigation conditions in the analysis and in the summary tables include optimized signal timings and offsets to minimize queues at the New London Turnpike at Centre of New England Boulevard. intersection.
- New London Turnpike at 1-95 South Ramps- As recommended by PARE, optimization of the traffic signal timings and offsets are proposed at all signalized study area intersections after occupancy of the proposed development to manage queues and delays. The text in the report has been revised to state this in the "Additional Improvements" section of Chapter 5 Comprehensive Improvements. The Build with Mitigation conditions in the analysis and in the summary tables include optimized signal timings and offsets to minimize queues at the New London Turnpike at I-95 South intersection.

Unsignalized Intersections-

- New London Turnpike at 1-95 North Ramps Based on the April 2025 traffic counts, the intersection meets the peak hour signal warrant, and it appears that it could meet additional warrants. It is recommended that the Town of Coventry and the Town of West Greenwich contact RIDOT to request that the State Traffic Commission (STC) investigate installation of a traffic signal at this location. The text in the report states this in the "Additional Improvements" section of Chapter 5 Comprehensive Improvements.
- Arnold Road at Grandview Street/New Full Access Driveway- This intersection is proposed to operate at a poor LOS during the afternoon and Saturday peak hours. Based on the limited traffic data collected, does not meet the peak hour signal warrant and is unlikely to meet the four-hour or eight-hour warrants. It should be noted that the Synchro analysis overestimates the actual delays at unsignalized because drivers tend to accept shorter gaps in traffic and the analysis does not fully take into account the gaps in traffic created by adjacent



traffic signals that allow vehicles to enter/exit unsignalized intersections. The existing traffic signals at the New London Turnpike/Arnold Road intersection will create gaps that will allow traffic to access/egress this new driveway.

Comment 16 Comprehensive Improvements-

VHB has identified improvements as part of this development. The improvements noted include:

- New sidewalks on New London Turnpike and Arnold Road adjacent to site
- Widening of New London Turnpike southbound approach to the Arnold Road signalized intersection to increase storage land and the length of the shared thru/right turn lane to accommodate projected queues.
- Arnold Road at Grandview Street/Full Access Driveway-Arnold Road westbound is to be revised to two lanes up to Grandview Street where the westbound right lane will be striped as Right tum Only.
- New London Turnpike at Center of New England Boulevard- striping to designate the southbound right lane as a "Right Tum Only" lane is proposed along with restriping the northbound approach to provide two left tum lanes, one through lane and one through/righttum lane.
- Center of New England Boulevard- Revisions to the Wendy's driveway is recommended. Also, due to the difficulty of trucks making the right-turn movement from Center of New England Boulevard eastbound to New London Turnpike it is recommended "No Through Trucks "signage eastbound be installed and the southwest corner of the New London Turnpike/Center of New England Boulevard intersection be modified to improve larger radii for turning movements.
- New London Turnpike at I-95 South Ramps- It is recommended to widen the I-95 south offramp to provide two right-tum lanes and modify the signal as required, i.e. new signal heads with right turn arrows. Calculations for any additional weight on the mast arms should be performed to ensure they can handle any additional weights. The median island will also be relocated.
- New London Turnpike at I-95 North Ramps- This intersection appears to require a new traffic signal for improved operations.
- A conceptual plan for all of the improvements should be developed and provided for future submissions.
- Provide analysis for the New London Turnpike/I-95 northbound ramps signalized intersection option.

In summary, the report provided by VHB for traffic capacity is complete and is performed in accordance with industry standards. There are items within the review letter that should be clarified or addressed to finalize our review. With the connection of Center of New England Boulevard to Hopkins



Hill Road it is difficult to fully understand what the traffic conditions may be. I believe VHB made good assumptions for projected traffic patterns but those should be verified to see what the impact may be on traffic volumes and operations at certain intersections.

Response

No response required for the first five bullets. The following are responses to the last four bullets:

- New London Turnpike at I-95 South Ramps Pare states that "Calculations for any additional weight on the mast arms should be performed to ensure they can handle any additional weights." VHB is proposing that a new traffic signal pole/mast arms be installed for the proposed dual right-turn movement from the I-95 South Ramp.
- New London Turnpike at I-95 North Ramps- A traffic signal is warranted under existing conditions. The report states "It is recommended that the Town of West Greenwich and the Town of Coventry contact RIDOT to request that the State Traffic Commission (STC) investigate installation of a traffic signal at this location."
- A conceptual plan for all of the improvements will be developed for the Preliminary Plan submission.
- Analysis of a new traffic signal at the New London Turnpike/I-95 northbound ramps intersection has been performed and is summarized under the future conditions with mitigation analysis.

Site Plans Coventry Centre Major Land Development Dated May 30, 2025

Comment

- Show side streets opposite the proposed driveways.
- A vehicular connection between the residential portion and the retail portion should be investigated to limit trips onto the roadway and also to provide secondary access into the residential portion in case of an emergency.
- Pedestrian and bicycle connections between the residential component and retail component
 will need to be better defined with striping and signage. Consideration for more than one
 crossing should be considered. Also, additional roadway crossings throughout the site to
 better connect buildings should be added to make the retail component more pedestrian
 friendly.
- VHB has provided a memorandum dated May 30, 2025, that provides a breakdown and approach for the parking requirements. Pare is in agreement with their justification of the parking requirements for this development and the plan layout shown on Sheet C5.0l Proposed Conditions Layout and Materials Plan.

Response The following is a response to the various comments on the site plans:



- The side streets opposite the proposed driveways have been shown on the Site Plans.
- A vehicular connection between the residential portion and the retail portion cannot be provided due to the grade changes between the properties.
- Pedestrian and bicycle connections between the residential component and retail
 component will be better defined with striping and signage during the further
 development of the plans for the Preliminary Site Plan process. Consideration for
 more than one crossing will be considered. Additional roadway crossings throughout
 the site to better connect buildings will be considered to make the retail component
 more pedestrian friendly. It should be noted that the current site plan shows
 connections between all buildings at locations where drivers will expect crossings to
 be.
- No response required regarding the parking memorandum

Comment

As detailed in the report, this area of Coventry/West Greenwich/East Greenwich has the potential for some significant development in the next several years. With the development, additional traffic will be generated impacting the operations of the traffic at unsignalized and signalized intersections and along some of the road corridors within the project areas. The cost for the off-site mitigation should be the responsibility of the developers. It is recommended that a strategy be put in place where monies are provided to the Towns to be placed in escrow. The portion of monies to be borne by each developer is to be based on the percentage/amount of traffic anticipated to be generated from each development at each specific intersection. An overall plan for the distribution of traffic for each development is to be developed which will be approved by the Towns and implemented with the developers as part of the review process with the Town boards and before all of the necessary approvals are granted by the Towns.

Response No response required.

Sincerely,

VHB

Robert Clinton, P.E.

Senior Project Manager - Transportation

cc:

Attachments