









July 7, 2025

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

Re:

Coventry Centre
Traffic Engineering Review Services
Coventry, Rhode Island
(Pare Project No.: 25077.00)

Dear Mr. McLean:

Pare Corporation (Pare) has completed our review of the traffic study and the accompanying documents for the Coventry Centre mixed-use development to be located at 666 Arnold Road and 2271 New London Turnpike in Coventry, Rhode Island. As part of our review, the following documents were provided by VHB or were obtained from the Town:

- Coventry Centre Traffic Impact and Access Study for Local Approval dated May 2025 prepared by VHB
- Coventry Centre Major Land Development Site Plans issued for Master Plan date issued April 18, 2025 with latest issue date of May 30, 2025 prepared by VHB
- Correspondence from Kelley Morris Salvatore, Esq. to Mr. Doug McLean, Coventry Director of Planning and Development regarding information pertaining to proposed permitted uses from the Town's Zoning Ordinance dated February 17, 2025
- Traffic Assessment Introduction dated January 14, 2025 prepared by Robert Clinton, PE from VHB
- Parking Assessment dated May 30, 2025 prepared by Robert Clinton, P.E.

The project will consist of constructing up to 50,000 square feet of retail space and up to 220 residential units. Access will be provided by one full access driveway and one limited (right turn in/right turn out) driveway on both New London Turnpike and Arnold Road. The northern driveway on Arnold Road will provide full access to the residential component while the other three driveways will provide access to the retail component. Pare offers the following comments regarding this submission:

May 2025 Coventry Centre Traffic Impact and Access Study

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.

2. Study Methodology: This section discusses the scope of the study which focuses mainly on traffic



Mr. Doug Mclean (2) July 7, 2025

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.

- 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.
- 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.

The typical section north of the site is described. Descriptions of New London Turnpike between Arnold Road and Center of New England Boulevard and New England Boulevard and the I-95 Ramps should be described to better understand the corridor within the study.

- 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.
- 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.
- 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.
- 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.

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 I-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



Mr. Doug Mclean (3) July 7, 2025

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 | A.M. PEAK HOUR | P.M. PEAK HOUR | SATURDAY MID-DAY PEAK HOUR |
|----------------------------------|-------------------|--------------------|-------------------------------|
| AUTOMATIC TRAFFIC RECORDER (ATR) | | | |
| NEW LONDON | 7:15 a.m8:15 | 4:30 p.m5:30 p.m. | 11:45 a.m. – 12:45 p.m. |
| TURNPIKE | a.m. | | |
| NORTH OF I-95 | | | |
| SB RAMPS | | | |
| ARNOLD ROAD | 8:00 a.m9:00 | 4:00 p.m5:00 p.m. | 11:45 a.m. – 12:45 p.m. |
| WEST OF NEW | a.m. | | |
| LONDON | | | |
| TURNPIKE | | | |
| TURNING MOVEMENT COUNTS (TMCs) | | | |
| I-95 SB RAMP @ | 7:15 a.m 8:15 | 4:30 p.m5:30 p.m. | 12:30 a.m. – 1:30 p.m. |
| NEW LONDON | a.m. | | |
| TURNPIKE | | | |
| I-95 NB RAMP @ | 7:00 a.m8:00 | 3:45 p.m 4:45 p.m. | 11:00 a.m. – 12:00 p.m. |
| NEW LONDON | a.m. | | |
| TURNPIKE | | | |
| NEW LONDON | 7:30 a.m 8:30 | 3:45 p.m4:45 p.m. | 12:45 a.m. – 1:45 p.m. |
| TURNPIKE @ | a.m. | | |
| CENTRE OF | | | |
| NEW ENGLAND | | | |
| BLVD | | | 12.00 |
| NEW LONDON | 7:30 a.m 8:30 | 3:45 p.m 4:45 p.m. | 12:00 a.m. – 1:00 p.m. |
| TURNPIKE @ | a.m. | | |
| ARNOLD ROAD | | 1.00 | 11.15 |
| ARNOLD ROAD | 7:00 a.m 8:00 | 4:00 p.m5:00 p.m. | 11:45 a.m. – 12:45 p.m. |
| @GAY STREET | a.m. | | |
| ARNOLD ROAD | 7:00 a.m 8:00 | 4:30 p.m5:30 p.m. | 11:45 a.m. – 12:45 p.m. |
| @ GRANDVIEW | a.m. | | |
| STREET | | | |

^{*}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



Mr. Doug Mclean (4) July 7, 2025

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); I-95 Southbound ramps/New London Turnpike- southbound right 323 vs. 450; I-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 through 361 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/I-95 South ramps-southbound through 483 vs. 649, westbound right 780 vs. 570 and I-95 North Ramps/New London Turnpike southbound left 406 vs. 535. Please review and confirm all volumes.
- 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.

- 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



Mr. Doug Mclean (5) July 7, 2025

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 thee was a discussion that an additional 700 more units on the remaining 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 Cannabis is being 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 1 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.

- 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.
- 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.



Mr. Doug Mclean (6) July 7, 2025

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.

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/I-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 nd 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 I-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 I-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.
- 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 turn Only.
- New London Turnpike at Center of New England Boulevard- striping to designate
 the southbound right lane as a "Right Turn Only" lane is proposed along with
 restriping the northbound approach to provide two left turn lanes, one through lane
 and one through/right-turn 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



Mr. Doug Mclean (7) July 7, 2025

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 off-ramp to provide two right-turn 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.

SITE PLANS COVENTRY CENTRE MAJOR LAND DEVELOPMENT DATED MAY 30, 2025

- 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 C5.01 Proposed Conditions
 Layout and Materials Plan.

OFF-SITE MITIGATION COSTS

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



Mr. Doug Mclean (8) July 7, 2025

Town boards and before all of the necessary approvals are granted by the Towns.

It is anticipated that the applicant will provide a formal response to address the comments above. If you have any questions or require any additional information, please do not hesitate to contact me at 401-334-4100 or jshevlin@parecorp.com

Sincerely,

John P. Shevlin, P.E. Chief Executive Officer

JPS/

Z:\JOBS\25 Jobs\25077.00 Starr Capitol-Coventry Ctr Traffic-RI\Report\Centre Traffic Peer Reviewa.docx