March 15, 2024

Mr. Raymond Lavey
Executive Director
Waterfront District Commission
145 Taunton Avenue, Town Hall 2nd Floor
East Providence, RI 02914

Re: **Waterfront District Commission – Traffic Peer Review Services**
Metacomet Redevelopment
On-Call Professional Engineering Review Services
East Providence, Rhode Island
(Pare Project No. 24039.00)

Dear Mr. Lavey:

Pare Corporation (Pare) has completed our review of the traffic study and site access and circulation for the Metacomet Redevelopment Project. Pare reviewed the following documents provided by the Waterfront District Commission:

- Preliminary Traffic Impact and Access Study, Metacomet Golf Club Redevelopment, dated March 2023, prepared by Vanasse & Associates, Inc.

- Proposed Site Plan Documents, Proposed Metacomet Redevelopment dated December 21, 2023, prepared by Bohler Engineering

In addition, other documents have been provided to us, including:

- Letter to Bob Rocchio as a supplement to the March 2023 Preliminary Traffic Impact and Access Study, dated December 29, 2023, prepared by Crossman Engineering

- Traffic Impact and Access Study, Metacomet Golf Club Redevelopment, dated December 2020, prepared by Vanasse & Associates, Inc.

- Traffic Engineering Peer Review, Proposed Land Development Project – Master Plan Submission, The Metacomet Golf Club Redevelopment, dated March 30, 2021, prepared by BETA Group, Inc.

- Letter to Robert Rocchio, P.E., dated March 1, 2024, prepared by Keep Metacomet Green

The four documents above were not specifically reviewed but were provided for additional context in the performance of the review.

Pare offers the following comments:

March 2023 Traffic Impact and Access Study

General Comments

1. Overall, the scope of the study appears to be acceptable in terms of the study area and intersections included.

2. It is noted that the study talked very little about circulation patterns within the site, including whether parking within the site was distributed appropriately between the land uses, if the layout promoted safe and efficient internal circulation, truck delivery routes, etc. This should be discussed.

3. Crossman Engineering prepared a letter to Robert Rocchio supplementing the analyses and design recommendations in this report for the intersections along Veterans Memorial Parkway (VMP) at Lyon Avenue, the site access, and South Broadway. The recommendations in the letter to the State are not the same as the recommendations in this report.

Executive Summary

4. Is the recommendation for the main access driveway at VMP a roundabout or a signal? It should be noted that VMP is a scenic roadway. Has the applicant met with the Rhode Island Department of Transportation (RIDOT) or the Scenic Board to discuss if these options are acceptable? Further, it appears that placing traffic signals within VMP is inconsistent with the Waterfront Special Development Plan that is contained within the City's Comprehensive Plan. It is Pare's position that roundabouts could be constructed along VMP in such a fashion that it would keep within the character of the roadway, but not traffic signals, including pedestrian hybrid beacons (HAWK signal) or rapid rectangular flashing beacons.

5. Pedestrian infrastructure within the public right-of-way should be designed to the standards of the Public Right-of-Way Accessibility Guidelines (PROWAG) as developed by the U.S. Access Board.

6. Traffic control recommendation also non-committal regarding the VMP intersection with South Broadway. See Comment 1 above.

Existing Conditions

7. Roadways/Intersections – the description of the existing conditions of the roadways and intersections appears to be representative of existing conditions.

8. Traffic Volumes – Traffic counts were conducted in November 2020, when traffic volumes and patterns were significantly affected by the COVID-19 pandemic. The supplemental study conducted by Crossman was completed in November 2023, which was both post-pandemic, but also prior to the closure of the I-195 westbound bridge. These volumes should be the basis for design of off-site improvements. However, it should be noted that the supplement did not include the intersections of VMP at Mercer Street or VMP at Mauran Avenue.

9. Traffic Volume Adjustments – the methodology utilized to adjust the traffic volumes is acceptable. However, not only were traffic volumes affected by the pandemic, but traffic patterns were also affected, thus the need for new counts as discussed in Comment 8 above.

10. Public Transportation – the description of existing public transportation options appears accurate.

11. Spot Speed Measurements – It is unclear when these measurements were taken. It is also unclear how many measurements were taken and if the data collected is statistically significant.

12. Motor Vehicle Crash Data – the collection period of six years is adequate.

Future Conditions

13. Design Year – A 5-year design horizon, as used in this study is standard. However, it is noted that the project is anticipated to be completed in two phases. Is it intended to have both phases completed and occupied by 2028?

14. Background Traffic Growth Rate – the 1.5 percent annual traffic growth rate used in the study is acceptable.

15. Project-Generated Traffic – The development plan described in this report differs from the development plan in the Crossman supplemental study and the site plans. It is assumed the development plan in this report is now obsolete.

16. Project-Generated Traffic – The 11th Edition of the *Trip Generation* manual was utilized in calculating the anticipated trip generation. This is the latest edition available and is therefore acceptable.

17. Internal Trips – The internal trip calculations appear to have been applied correctly, using the latest available data, as applicable to the scenario. However, if the development program has changed since this was completed, it will need to be recalculated.

18. Pass-By Trips – The retail component of the proposed development is almost 75 percent (by area) a supermarket. Per ITE, supermarkets have a 24% average pass-by rate. However, a 40 percent rate was used. This should be reduced.

19. Pass-By Trips – It is noted that the 256 pass-by trips during the weekday morning peak hour is more than 13 percent of the no-build condition passing traffic on VMP, while the 342 pass-by trips during the weekday afternoon peak hour is more than 19 percent of the no-build condition passing traffic and the 518 pass-by trips during the Saturday peak hour is more than 38 percent of the no-build condition passing traffic volumes. It is Pare's opinion that the likelihood of the number of pass-by trips exceeding 10 percent of the no-build condition traffic volumes is unlikely. We suggest capping the number of pass-by trips to 10 percent of the no-build condition passing volume.

20. Trip Distribution and Assignment – The methodology utilized to determine the trip distribution to the edges of the study area is acceptable, including using Journey-to-Work data for the residential trips. Given that much of the retail space will be a grocery store that will likely attract customers only locally, the commercial distribution appears reasonable.

21. Trip Distribution and Assignment – how were trips assigned to the respective site driveways? How were the number of trips that may cut through the adjacent neighborhoods (ex., Mercer Street) determined?

22. Traffic Operations Analysis – Capacity analyses were conducted using Synchro 11 software and the reports included in the appendix utilized HCM methodology. Peak hour factors and heavy vehicle adjustments appear to have been utilized correctly. Overall, the analyses appear to have performed in conformance with professional standards.

23. Traffic Operations Analysis – Given some of the other comments above relative to the ultimate development program and reducing pass-by trips to levels that can be supported by the volume of traffic on VMP, the results of these analyses will change, particularly for the Build condition.

24. Sight Distance Evaluation – The sight distance measurements appear reasonable, and the methodology utilized is acceptable.

Conclusions and Recommendations

25. Project Access – Will there be a specific route for trucks delivering to the retail establishments, especially the grocery store, which will likely need to be accessed by 53-foot trailer semi-trucks? It should be noted that VMP is not a RIDOT-approved route for such vehicles.

26. Project Access – There is only a brief note that the internal pedestrian circulation network be linked to the East Bay Bike Path, but only options and no recommendation on how that should be designed safely.

27. Project Access – The VMP at the main site driveway is recommended to be either signalized or designed as a roundabout. No analyses were conducted at this intersection either under signalized conditions or as a roundabout. A specific recommendation should be made and analyzed.

28. Project Access – Based on the site plans reviewed, it appears there are two significant intersections within the development, including one all-way stop, and one roundabout/traffic circle. Consideration should be given to analyzing these intersections as well to ensure they are designed appropriately.

29. Off-Site – A recommendation was made to take some measures, without specifics, to reduce cut-through traffic on Mercer Street. No mitigated analyses were performed at the VMP/Mercer Street intersection with an assumed reduction in cut-through trips. A specific recommendation should be made and analyzed.

30. Off-Site – A roundabout is recommended at the VMP at Lyon Avenue intersection. However, the mitigated analysis at this intersection was for a signal, not a roundabout. A roundabout analysis should be provided.

31. Off-Site – The recommendation at VMP at South Broadway includes a signal or a roundabout. The mitigated analysis at this intersection was for a signal, but no analysis was performed for a roundabout design. A specific recommendation should be made and analyzed. Regardless of which design is ultimately used, Pare recommends consolidating the intersection into a more standard single intersection and should be analyzed as a single intersection, not as two intersections.

Site Plans

32. Sheet EX-01 – it appears that an amphitheater is part of the development plan. This land use is not included in the traffic study.

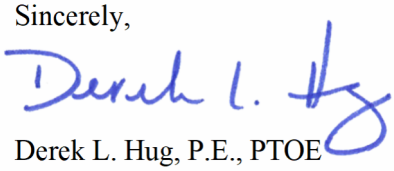
33. Sheet EX-05 – The parking analysis table appears to be incomplete. Please revise.

34. Sheet EX-07 – The development plan indicates that the preferred point of connection to the East Bay Bike Path is at the proposed roundabout on the east side of Lyon Avenue. Careful consideration will need to be given as the design progresses as to whether having just one or multiple connections should be considered based on the locations within the site of the land uses that are most likely to want to access the path. The currently proposed access location appears to be quite convenient for shoppers at the supermarket, but supermarket shoppers may be the least likely to want to access the path, in comparison to the residents, restaurant customers, or amphitheater patrons.

The applicant should provide a formal response to address each comment.

If you have any questions or require any additional information, please do not hesitate to contact me at 401-578-8543 or dhug@parecorp.com.

Sincerely,



Derek L. Hug, P.E., PTOE
Managing Engineer

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