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**Hamal Associates, Inc.**

Traffic and Transportation Consulting

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N.J. CERT. OF AUTH. NO. 24GA27922200

January 24, 2022

Ms. Frances Boardman  
Land Use Administrator  
Borough of Madison Planning Board  
Municipal Building  
50 Kings Road  
Madison, NJ 07940

Dear Ms. Boardman:

Re: Traffic Review #1  
RPM Development, LLC – Applicant  
Madison Affordable Housing Sites  
28 Walnut Street & Community Place  
Block 1601, Lots 42 & 1.01  
Borough of Madison, Morris Co., NJ  
Application No. P21-007

At the request of the Borough of Madison Planning Board, the firm of Hamal Associates, Inc. (HMA) has conducted a traffic review of the Traffic Impact Study report (dated Sept. 14, 2021) prepared by McDonough & Rea Associates, Inc. (MRA) and the associated site plans (dated Sept. 10, 2021) prepared by Shore Point Engineering (SPE), for the above referenced project. As part of our services, we also reviewed or referenced the following reports and documents:

1. Application documents;
2. Architectural Plans prepared by Inglese Architecture & Engineering (dated Oct. 21, 2021);
3. Topographic Survey Plan of Block 1601, Lot 1.01 (dated Aug. 20, 2021) prepared by DPK Consulting;
4. Topographic Survey Plan of Block 1601, Lot 42 (dated June 1, 2015) prepared by Borbas Surveying & Mapping, LLC;
5. Review report prepared by Mr. Dennis Harrington (Planning Bd. Engineer), dated Dec. 8, 2021;
6. Review report prepared by Ms. Susan Blickstein (Planning Bd. Planner), dated Dec. 6, 2021.

Supplementing the preceding, HMA performed a field inspection of the study area with photography.

This project includes two (2) separate sites, which have both been rezoned for 100% affordable housing, as identified in the Borough's Housing Element & Fair Share Plan. One site is located at 28 Walnut Street (Lot 42), which is the site of the current Madison Civic Center. The application proposes to demolish all current improvements on Lot 42 and construct 30 affordable housing units served by 45 parking spaces. The second site is located on the vacant Lot 1.01, which was subdivided from the Central Avenue School property. The latter is to have 14 affordable housing units served by 21 parking spaces.

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Based on our review, we have the following comments:

I. Shore Point Engineering (SPE) Site Plan Review

A. Civic Center Site – 28 Walnut Street (Block 1601, Lot 42)

1. The Parking Table (Sheet 1) applies a parking rate of 1.5 spaces per unit, as noted in the Redevelopment Plans for both sites. There are 30 units proposed served by 45 parking spaces. There are 60 spaces required as per the NJ Residential Site Improvement Standards (RSIS). The Board must grant a waiver from application of the parking standards noted in the RSIS.
2. The 9' x 18' parking stalls located along the frontage of Building D conform to the RSIS. The parking stalls under Buildings A, B and C are not dimensioned, but scale 8-1/2' x 18'. The latter do not meet the RSIS and would require the Board to grant a waiver for stall width. The under building spaces should be dimensioned.
3. The east-west circulation aisles are all 24 feet wide which conforms with the RSIS for perpendicular parking.
4. One-way access drives, intersecting Walnut Street, provide a clockwise, on-site circulation flow. The exit drive intersection with Walnut Street provides a 'Stop' sign (R1-1), stop line and 'Do Not Enter' sign (R5-1). The entrance drive should provide a 'One Way' sign (R6-1) at its intersection with Walnut Street. Are 'No Stopping Or Standing' signs or other parking regulations proposed along the access drives?
5. The 24 foot wide, east-west circulation aisles have arrows shown denoting traffic flow in the westbound direction only. Are the arrows to be painted on the pavement? If proposed, more than one (1) pavement arrow would be needed in each aisle to advise drivers of the one-way traffic flow. Also, appropriate signage would have to be added at each end of each aisle to identify the one-way flow and turn restrictions.
6. Related to the one-way circulation aisles, HMA notes that the 24 foot wide aisles with the adjoining perpendicular parking spaces are adequate to serve two-way traffic flow. There is a potential for wrong way flow in these aisles. Furthermore, RSIS Section 5:21-4.16(c) states; "... Only one-way traffic shall be permitted in aisles serving single-row parking spaces placed at an angle other than 90 degrees." SPE to address the preceding.
- 7.a. Are the parking spaces, including under the building overhangs, available for use by visitors? If they are not available, where do visitors park? Is on-street parking available/adequate to serve visitor parking needs?

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- b. RSIS Table 4.4 Parking Requirements For Residential land Uses, Note b., states; “Requirements for attached units (apt/condo/townhouse) include provision for guest parking (0.5 spaces per dwelling unit). Guest parking must either be provided for on street or in common parking areas.” In view of the preceding RSIS requirement, for the 30 multi-family units proposed, 15 guest parking spaces are required. How is this RSIS requirement met?
  8. Will on-site parking be restricted to one (1) space per unit?
  9. Sidewalks are provided along all roadways throughout the site. Handicap ramps (HC) should be provided at each intersection corner of the circulation aisle between Buildings A & B. Crosswalks should also be considered at these intersection locations, connecting the HC ramps.
  10. The municipal fire official should be contacted to address the adequacy of the 14 foot wide access drives to accommodate fire trucks.
  11. Truck & fire truck turning templates should be shown on the site plans.
  12. Sight distance should be shown on the site plan at the exit drive intersection with Walnut Street.
  13. How is trash pick-up handled?
  14. Are EVSE/Make-Ready electric charging stations being provided? If proposed, the engineer should identify how this affects the required parking calculation. In SPE’s response, they should also review the Board Planner’s comments 6.a. thru d. in the Dec. 6, 2021 review letter.
  15. Are bicycle storage racks being proposed? None are shown on the site plan.
- B. Community Place Site (Block 1601, Lot 1.01)
1. The Parking Table shown on Sheet 1 for Lot 1.01 does not identify the parking required based on the RSIS for the Community Place site. SPE to revise.
  2. The Parking Table (Sheet 1) applies a parking rate of 1.5 spaces per unit, as noted in the Redevelopment Plans for both sites. There are 14 units proposed served by 21 parking spaces on Lot 1.01. The Board must grant a waiver from application of the parking standards noted in the RSIS.
  3. The 9’ x 18’ parking stalls located along the frontage of Buildings E, F & G conform to the RSIS, as does the 24 foot wide parking aisle.

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- 4.a. RSIS Table 4.4 Parking Requirements For Residential land Uses, Note b., states; “Requirements for attached units (apt/condo/townhouse) include provision for guest parking (0.5 spaces per dwelling unit). Guest parking must either be provided for on street or in common parking areas.” In view of the preceding RSIS requirement, for the 14 multi-family units proposed, 7 guest parking spaces are required. It is noted that all 21 parking spaces provided on Lot 1.01 are in common parking areas. Consequently, this RSIS requirement is met.
- b. Will on-site parking be restricted to one (1) space per unit?
- c. What is the availability of on-street parking to serve visitor parking?
5. Truck & fire truck turning templates should be shown on the site plans.
6. How is trash pick-up handled?
7. Are EVSE/Make-Ready electric charging stations being provided? If proposed, the engineer should identify how this affects the required parking calculation. In SPE’s response, they should also review the Board Planner’s comments 6.a. thru d. in the Dec. 6, 2021 review letter.
8. Are bicycle storage racks being proposed? None are shown on the site plan.

## II. McDonough & Rea Associates (MRA) Traffic Impact Study (TIS) Report Review

1. The MRA traffic study was prepared according to accepted traffic engineering procedures and methodologies.
2. The TIS introduction states that the Walnut Street site (Lot 42) will have two, 2-way driveways intersecting with Walnut Street. The site plans identify two drives that are one-way inbound and one-way outbound. MRA should clarify this discrepancy.
3. The existing roadway and intersection descriptions are accurate.
4. Existing traffic counts were performed on Thursday, June 3, 2021, between 7-9:30 am and 2:30-6:30 pm at the intersections of; 1) Walnut Street & Dehart Place, and 2) Cook Avenue & Community Place. The afternoon count period was expanded, due to the proximity of the Central Avenue School and its afternoon dismissal time. The time periods selected are acceptable. MRA should indicate if the school was in normal, in-person session on the day of the counts, or was any remote schooling in effect.

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5. Three (3) weekday time periods were selected for study, being identified as the AM school/street peak hour, the PM school peak hour and the PM street peak hour. From the traffic counts performed, the respective peak hours were identified as; 7:45-8:45 am, 2:45-3:45 pm and any hour between 4:45-6:45 pm.
6. MRA applied trip generation rates from the ITE publication, Trip Generation – 10<sup>th</sup> Edition, in developing peak hour traffic projections for the proposed 44 residential units distributed between the two sites. This is the accepted source for performing this analysis and is required for use by the NJ Residential Site Improvements Standards (RSIS). As presented in Table 1, the residential weekday am and pm peak hour trip generation is, respectively, 14 and 17 trips (total two-way) for the Walnut Street site, and 6 and 8 trips (total two-way) for the Community Place site. These volumes are very small in magnitude. HMA agrees with the analyses performed.
7. Report Figures 6 & 7 respectively identify the assignment of the peak hour trip generation to the several site drives and the adjoining roadway system. As noted in HMA's Comment II. 2., the Walnut Street site drives have been analyzed in the MRA TIS as both being two-way driveways, whereas the site plans identify one-way drives. In consideration of the nominal peak hour trip generation by the Walnut Street site and the existing, lighter traffic volumes on Walnut Street, it is not requested that the affected report figures be revised. HMA does not anticipate that the revision of the Walnut Street site drive volume assignments would have any notable change in the capacity analyses results.
8. MRA adjusted the 2021 peak hour traffic counts to 2024, based on NJDOT annual background traffic growth rates. This is the accepted source for performing this adjustment. Report Figures 7, 8 and 9 reflect the background traffic growth increase plus the two site's peak hour trip generation assignments. HMA agrees with the summations presented.
9. Capacity analysis for unsignalized intersections were followed by MRA according to the 2010 Highway Capacity Manual (HCM) and associated software. This is the accepted source for performing this analysis. Based on the analyses performed, for 2021 existing and 2024 proposed conditions and all time periods, all the critical traffic movements at the intersections studied will operate at a good Level of Service (LOS) 'A' traffic condition. Buildout condition impacts are a negligible fraction of a second increase in average vehicle delay for some traffic movements. We concur with the MRA capacity analyses conclusions. Impacts to motorists would be imperceptible.

HMA notes that, in view of the superior LOS 'A' results at the Walnut Street site drive intersections, revision of the capacity analyses to reflect one-way drives for the small site volumes to be served would have no notable change in the capacity analyses results.

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10. MRA provided a discussion on parking supply. HMA had previously summarized our comments on parking in the Site Plan Review section of this review letter. MRA should also address our comments on parking, where appropriate, with particular attention to visitor parking at the Walnut Street site. Will the Walnut Street site be posted for 'No Visitor Parking'? We concur with MRA's comment that the RSIS (Sect. 5:21-4.14(c)) allows for provision of alternate parking standards to those shown in RSIS Table 4.4 with consideration of available mass transit, off-site parking resources, etc.

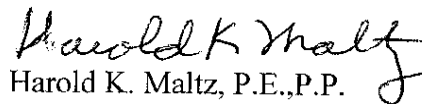
### III. General Comments

1. All traffic related review comments by other Board professionals and municipal police and fire officials shall be addressed by SPE and MRA.

The foregoing represents our traffic review of the subject application. If you have any questions, please do not hesitate to contact us.

Very truly yours,

Hamal Associates, Inc.



Harold K. Maltz, P.E., P.P.

President

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