

May 27, 2021

Mr. Joseph McElwee
Capitol Seniors Housing
1275 Pennsylvania Avenue
NW 2nd Floor
Washington, DC 20004

(via email: joe.mcelwee@cshpe.com)

Re: **Traffic Engineering Response Letter**
CSH Assisted Living – West Orange
West Orange Township, Essex County, NJ
SA Project No. 20178A

Dear Joe:

In response to the May 11, 2021 review memorandum from John Hess of CME Associates, Shropshire Associates LLC has prepared this response letter to the traffic engineering related Design Comments (section B of the memorandum). Comments 6, 7, 9 and 10 are addressed below.

Comment 6: Dynamic Engineering has developed vehicle circulation plans which demonstrate the ability of the proposed site plan to accommodate fire (Sheet 15), refuse (Sheet 16) and delivery (Sheet 17) trucks. Truck activity is minimal on the site with an average of less than one truck per day considering both refuse and delivery activity. Deliveries are accomplished with single unit trucks (SU30) as demonstrated on the Dynamic Engineering vehicle circulation plan.

Comment 7: It has been challenging to assess the appropriate time when traffic has returned to a normalized condition from the COVID experience. We determined to take traffic counts in November 2020 based on the following conditions:

- There was no background traffic count data available along Eagle Rock Avenue in order to compare past traffic conditions and the effect on traffic eight months into COVID conditions.
- The local school district reported that the schools were opened which would tend to normalize weekday peak hour traffic particularly during the morning.
- Weekday afternoon peak traffic conditions depend greatly on work-to-home commuter. With the work from home scenario generated by the response to COVID, it is unclear when, or if, weekday afternoon commuter peak traffic will return to pre-2020 conditions.



The November traffic counts were used with no COVID related adjustment. It is our opinion that the post development levels of service at the site driveway would not substantially change if the pandemic had not occurred. In addition, we completed an updated traffic count during the critical weekday PM peak period of Tuesday, May 25, 2021 along Eagle Rock Avenue at the site and found that the current volume is only 2.9% higher (820 vehicles compared to 797 vehicles) than the counts conducted in November 2020. The 2.9% difference is within generally accepted variations of traffic conditions attributed to differing weekday and seasonal conditions. As a result, we feel confident that an average critical weekday PM peak hour scenario has been evaluated in our January 29, 2021 Traffic Engineering Assessment.

Comment 9: The offset of the proposed driveway with Mann Avenue is minimal and driven by the desire to provide small tangent sections along both approaches of the internal circulation aisle, which parallels Eagle Rock Avenue, to the site driveway. As the site generates a relatively low traffic volume and Mann Avenue is a low volume local street, the exact alignment of the site driveway with Mann Avenue will not compromise safety for left-turn traffic from Eagle Rock Avenue or crossing traffic between Mann Avenue and the site.

Comment 10: The capacity analyses attached to our January 29, 2021 Traffic Engineering Assessment demonstrates that the 95% queue along the site driveway will be one vehicle. The minimal queuing is directly related to the limited exiting site vehicles during the weekday morning (7 vehicles) and afternoon (16 vehicles) peak hours. Of those totals, the exiting left-turns are projected at 4 vehicles during the morning peak hour and 10 vehicles during the afternoon peak hour. As left-turn site traffic has a higher level of impedance from through traffic along Eagle Rock Avenue, the limited number of exiting left-turn site trips minimizes the delay and queuing along the site driveway. The stacking distance along the site driveway will permit two vehicles without encroaching on the east-west cross circulation aisle. As stop control is proposed on each leg of the cross-circulation aisle at the site driveway, there is additional stacking capability on-site for any unanticipated exiting queues that would exceed two vehicles.

Should you have any questions or require any additional information, please feel free to contact us.

Sincerely,
Shropshire Associates LLC

A handwritten signature in black ink, appearing to read 'David R. Shropshire', is written over a horizontal line.

David R. Shropshire, P.E., P.P.
Professional Engineer
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DRS/jab

cc:	Joseph Zadlo	(via email: jazarch@aol.com)
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