TESTIMONY OF JOE MEHRA, P.E.
TRAFFIC CONSULTANT, MCV ASSOCIATES, INC.
IN OPPOSITION
TO St. Patrick's School APPLICATION

I am Joe Mehra, President of MCV Associates, Inc. I have over 30 years of experience in traffic engineering and transportation planning. I was the co-author of the first ever handbook on Site Impact Traffic Evaluation that was prepared for the U.S. Department of Transportation. I will present a review and critique of the Wells and Associates Traffic Report prepared for the applicant's submittal.

Level of Service/Delay - The turning movement counts at all locations were taken in December, 2001. The levels of service results for existing conditions show a LOS C with a delay of 19.5 seconds per vehicle, on eastbound Whitehaven Parkway at Foxhall Road during the AM peak hour. The proposed improvements on Whitehaven Parkway results in a worsening of the level of service to LOS D, with a delay of 27.9 seconds per vehicle (See Table 10 of Wells Report). Using the existing traffic volume data from Wells Report, our results show a LOS F (inadequate level of service and delay of 130.8 seconds per vehicle) on eastbound Whitehaven Parkway at Foxhall Road, using the latest version of the Highway Capacity Software. Gorove/Slade Associates, Inc. also showed a LOS F for eastbound Whitehaven Parkway during the AM peak hour in their Field School Traffic report submitted to the BZA.

It seems that the Wells Report analyzed the future conditions with the St. Patrick's School expansion without including the traffic from other recent BZA approved institutional expansions or new uses, such as the George Washington University Mount Vernon Campus, the Field School, etc. George Washington-Mount Vernon Campus is estimated to add approximately 140 vehicle trips (including several shuttle bus trips) during the morning peak hour on Whitehaven Parkway. Field School is estimated to add approximately 73 vehicle trips at the intersection of Whitehaven Parkway and Foxhall Road. The addition of these vehicle trips to the St. Patrick's School trips will result in LOS F conditions on eastbound Whitehaven Parkway.

It is important to note that the George Washington-Mount Vernon Campus traffic flow will occur at the same time as the St. Patrick's School traffic during the morning peak hour on Whitehaven Parkway. The levels of service A or B estimated at the two school driveways will be worse after the addition of the George Washington-Mount Vernon Campus traffic.

Parking - The reverse flow concept and the three lane concept on Whitehaven Parkway is contingent upon removal of on-street parking on the north side of

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Whitehaven Parkway including the section between George Washington-Mount Vernon Campus entrance and Ginger's Way. DDOT recommends a trial period for removal of on-street parking. If the trial shows that the neighborhood is experiencing parking problems due to the removal of on-street parking, will the on-street parking be reinstated and what will happen to the three laning of Whitehaven Parkway?

Wells Report (Table 8) shows parking occupancy counts taken on December 19, 2001 for St. Patrick's School. This is within one week of Christmas and some institutions may have closed for Christmas holidays. A count taken so close to a major holiday and vacation time may result in under-representation of parking utilization. The reverse flow plan and the three lane Whitehaven Parkway plan relies on removal of 65 parking spaces or 35 percent of the total supply. This is a significant reduction in parking supply, and may result in parking shortfall on Whitehaven Parkway.

Shuttlebus - St. Patrick's School is proposing to use two shuttle buses to transport the students from Whitehaven Parkway campus to the proposed MacArthur Boulevard site. This plan assumes that all parents or guardians will drop-off their children at Whitehaven Parkway and then the students will be driven by shuttlebus to MacArthur Boulevard. On paper this plan seems to be fine but is difficult to implement for several reasons:

1. Whitehaven Parkway is currently congested during the peak hours and the proposed circulation improvements will result in less congested conditions. However, the traffic from already approved institutional uses will add more traffic on Whitehaven Parkway and Foxhall Road and the result may be that we end up with as much congestion as is present today. The parents/guardians will find it easier and more convenient to drop-off the students on MacArthur Boulevard.

2. Late arriving students will be forced to be driven to MacArthur Boulevard, since they may have missed the last shuttlebus from Whitehaven Parkway.

3. Students carrying projects or large/heavy materials will find it difficult, if not impossible, to transfer to the shuttlebus for transfer to MacArthur Boulevard.

4. Some parents/guardians will be driving by the Ashby school site on MacArthur Boulevard. It will be very convenient for them to drop-off the children at Ashby, rather than drive to congested Whitehaven Parkway and have the students shuttled back to Ashby and MacArthur Boulevard.

5. It is difficult to monitor and enforce the "do not drop-off children at MacArthur Boulevard school" policy everyday.

Carpool - DDOT has recommended that a satisfactory carpooling plan be a condition of BZA approval and that at a minimum, the plan should establish as a requirement that the number of trips generated by the school not increase as a result of the increased number of students attending the proposed middle school. The Wells report has indicated that presently there is essentially no carpooling. The report further states that there are a significant number of after school activities such as study hall, dance cooking language, sports, etc. The timing of these activities and the magnitude of participation by students, makes it difficult to develop an effective carpool program.

REVIEW OF JULY 3, 2002 SUPPORTING DOCUMENTATION BY WELLS & ASSOCIATES, INC.

This document provides the technical data that was used by Wells & Associates, Inc. to develop their recommended plan for St. Patrick's School. A review of this data and its application by Wells & Associates shows inconsistencies and errors. For example, Figure 1 shows existing peak hourly flow rates (4x Peak 15 minute volumes) as 428 vehicles entering the school in the AM. This number should be 460 based on a peak 15 minute flow of 115 vehicles entering the school, shown on page 5 of the document. Similarly, the eastbound Whitehaven Parkway traffic volumes at the east school driveway is shown as 296 and should be 340, based on a peak 15 minute flow of 85 vehicles on Page 5 of the document. These are but just two examples that show that the existing peak hourly flow rates are under reported by approximately 15 percent.

The inbound traffic to George Washington University on Whitehaven Parkway is 53 vehicles during the AM peak hour. DDOT's Palisades Traffic Study notes that 151 inbound vehicle trips are generated by George Washington University during the AM peak hour and approximately 90 percent of them (0.9x151 = 136 vehicles) would be traveling on Whitehaven Parkway. This shows that the Wells & Associates analysis has under reported George Washington University traffic by a significant number during the AM peak hour. Further, it should be noted that the George Washington traffic includes shuttle buses also.

Using traffic volumes that are significantly under reported, the Wells & Associates document shows the following results:

1. The queue on westbound Whitehaven Parkway at MacArthur Boulevard increases by 23 percent from the existing 449 feet with the recommended plan.

2. The queue on southbound Foxhall Road at Whitehaven Parkway increases by 388 percent from the existing 113 feet with the recommended plan.

3. The queue on westbound Whitehaven Parkway at the school driveway redu by 60 percent from its current 578 feet.

This shows that the recommended plan is expected to reduce queues on Whitehaven Parkway at the school driveway, but is expected to significantly increase queues on Foxhall Road and on Whitehaven Parkway at MacArthur Boulevard. The use of the corrected traffic volumes will result in even longer queues and more delays than noted above. Therefore, the shuttlebus plan will not be successful, as noted on page 2.

SUMMARY

MCV reviewed the data, assumptions and findings of the Wells Reports for the existing conditions and future scenarios including the impacts of George Washington University and the Field School. Our review of the data that Wells used to support their findings found under representation of existing peak hour volume traffic flow. We also found under representation of traffic associated with the George Washington University for establishing future scenarios.

Even using applicants own data, we found a worse level of service at eastbound Whitehaven Parkway at Foxhall Road than the Wells Report under existing conditions – a Level of Service of F (which the District deems inadequate) versus a LOS C.

Taking into account the higher volume of traffic to be expected from George Washington University than used in the Wells future scenario, we conclude that the Level of Service in the Future will not be sufficiently ameliorated by the traffic management plan offered by the school. In addition, traffic on Whitehaven Parkway will be worse than that projected by Wells.

We believe the carpool program will be hard to develop and sustain over time due to the fact of how school activities are structured and range in hours of operation.

We believe that the Shuttle Bus will not be effective or sustainable due to the worse level of congestion to be expected on Whitehaven Parkway during the relevant AM and PM pick up and drop off periods than identified by Wells. Further, additional factors such as late students, logistics of carrying projects, the convenience of direct drop off at the proposed site will all work against successful implementation of the Shuttle Bus program.

Accordingly, we believe that it is highly likely that with the congestion, difficulties in implementation of the shuttle bus program and other behavior patterns facing parents, they will likely drop off students directly at the Ashby site.