

BEFORE THE DISTRICT OF COLUMBIA ZONING COMMISSION

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GEORGE WASHINGTON UNIVERSITY  
FOGGY BOTTOM CAMPUS PLAN

Z.C. No. 06-11 & 06-12

At the hearing in this case on 30 November 2006 concerning the proposed George Washington University ("GWU") Campus Plan for 2006-2025, the Commission authorized the Foggy Bottom Association ("FBA") and Advisory Neighborhood Commission 2A (the "ANC") to submit a series of questions to the District of Columbia Department of Transportation ("DDOT"), which DDOT is to answer in writing. These questions are submitted in this fashion because of the inability of these parties to cross-examine DDOT on the traffic issues raised below. FBA and the ANC submit the following questions (reserving the objection stated at the hearing to their inability to follow up on answers that may be provided).

For purposes of responding to these questions, reference is made to DDOT's report dated 27 November 2006 and to the Supplemental Report of Joe Mehra, P.E., also dated 27 November 2006, which was filed on behalf of FBA and the ANC. Those documents are incorporated by reference in their entirety. As was discussed at the hearing, these questions are being provided to DDOT both in electronic format, as well as paper format, so that DDOT can submit to the Commission a unified document that prints the answer to each question immediately following the question.

QUESTIONS TO DDOT

1. Mr. Mehra's report cites a letter to DDOT's Ken Laden dated 4 October 2006, in which Wells & Associates states that it used a default assumption of two percent heavy vehicles at every intersection. However, in the report submitted in the Square 54 case (dated October 2006 and prepared after the 4 October letter, thus contradicting its own statement), Wells used the level of truck traffic that was actually observed. The truck percentages were 16 percent at some locations and as high as 48 percent. See Mehra Report at p. 1, par. 6.

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concludes (at pp. 1-2) that the "default assumption in the Campus Plan Study is invalid and results in considerably better levels of service than when using observed truck volumes."

(a) After receipt of the Square 54 report mentioned in the previous paragraph, but prior to the hearing on 30 November 2006, did DDOT perform any new analysis of traffic levels in this Campus Plan case, given that the Square 54 report indicated that observed heavy vehicle traffic was considerably higher than the default two percent assumption?

(b) If the answer to question 1(a) is "yes," please identify who performed the analysis, and please provide the results of those analyses.

(c) If the answer to that question is "no," why did DDOT not perform any such analysis?

2. Mr. Mehra's statement notes (at p. 2) a deficiency in the five Wells reports filed in this case and the Square 54 case (No. 06-27) with respect to "queuing," *i.e.*, congestion on Pennsylvania Avenue and K Street during peak hours forces queues back into the adjacent intersections, which has the effect of undercounting the observed volumes. In addition, data collectors record fewer vehicles passing through an intersection than actually want to pass through the intersection, with the result that the levels of service being measured are artificially inflated. He further states that under "congested conditions, other techniques such as 'saturation flow' or 'loaded cycles' should be used."

(a) Does DDOT agree that a failure to take such queuing into account can produce artificially inflated levels of service?

(b) Does DDOT believe that the "saturation flow" techniques should have been used here?

(c) If the answer to question 2(b) is "no," why is that?

(d) Does DDOT believe that a "loaded cycles" technique should have been used here?

(e) If the answer to question 2(d) is "no," why is that?

(f) The only reference to queuing in DDOT's 27 November 2006 report is the statement on p. 1, par. 3 that queuing is "a topic that DDOT can address with the applicant as the PUD

process moves to the next stage." Why did the DDOT report not address the queuing issue as it exists at this point in time, as identified by Mr. Mehra in its report?

3. In its report dated 27 November 2006, DDOT notes that GWU plans a series of new underground garages "that will try to assist in relieving some of the current intersection congestion."

(a) Please identify the garages that GWU is planning and to which DDOT is referring, and for each one, please identify the anticipated opening date and the number of vehicles it will serve.

(b) Please identify whether DDOT anticipates a net increase or decrease in the number of parking spaces after the garages identified in response to question 3(a) are opened and the current GWU garage is closed.

(c) Identify how the number of available parking spaces and their locations that DDOT has identified in response to questions 3(a) and 3(b) may relieve current congestion.

(d) Is it DDOT's belief that building more parking spaces in an area such as the GWU Campus boundaries will reduce intersection congestion? If so, please explain the basis for that conclusion.

(e) Is DDOT not concerned that an increase in the number parking spaces may simply increase demand for those spaces - and thus increase congestion?

(f) Since DDOT testifies that these new underground garages will only "try" to assist resolving the current intersection congestion, would it be fair to conclude that DDOT does not have much confidence that the garages will, in fact, "assist" with resolution of the problem?

4. Mr. Mehra's report states (at p. 2, par. 3) that there was almost a 50% percent discrepancy between the southbound traffic counts on 21st Street at Eye Street during the PM peak hour (634), but the number Wells used to compute levels of service was 434. When this was pointed out previously, Wells advised DDOT that the difference was due to "volume balancing," owing to data being collected on different days, as well as human error. However, Mr. Mehra points out that this is not true, that 21st Street is sending 524 vehicles from Eye Street to H Street, whereas H Street is receiving 825 vehicles in the PM peak hour. He adds that if "volume balancing" had been conducted before analysis, then the southbound volumes on 21st Street should be 735 vehicles instead of 434 - higher even than Wells estimated.

(a) Did DDOT ever perform any analysis of the discrepancy issue that Mr. Mehra identified in his report several months ago?

(b) Did DDOT perform any independent analysis of this issue after receiving the Wells letter of 4 October 2006 discussing "volume balancing" and prior to the 30 November 2006 hearing?

(c) If the answer to question 4(b) is "yes," why did DDOT not address this issue of discrepancies and "volume balancing" in its report dated 27 November 2006?

(d) If DDOT believes that Mr. Mehra's computations are incorrect (e.g., 735 vehicles on 21st Street), did DDOT conduct any independent computations of its own?

(e) If the answer to question 3(d) is "yes," please provide the results of that analysis.

5. Mr. Mehra identifies (at pp. 2-3) certain discrepancies between street peak hours and GWU's estimates of GWU's peak hours. He states that a review of the data for 31 intersections included in the Wells Report shows that 23 out of 31 intersections have street peaks earlier than Wells' estimates during the AM peak, and that 21 out of 31 intersections have street peaks earlier than the peak hour identified by Wells in the PM. He also notes that Wells' report in the Square 54 case shows street peaks identical to the GWU peaks, except for one 15-minute differential in the evening. He concludes that if this is the case, "most of the traffic analysis presented for future conditions with GWU expansion would be unduly optimistic and not valid."

(a) Did DDOT examine the discrepancies identified by Wells between the Wells estimates of peak hours in this case and in the Square 54 case prior to the hearing on 30 November 2006?

(b) Does DDOT agree with Mr. Mehra's assessment that if the Square 54 data are accurate, then "most of the traffic analysis presented for future conditions with GWU expansion would be unduly optimistic and not valid"?

(c) If the answer to question 5(b) is "no," why does DDOT disagree?

6. In his discussion of "GWU Existing Trip Generations" (Mehra Supp. Report at p. 3), Mr. Mehra notes a series of discrepancies in the travel survey of students and faculty/staff to obtain trip rates and mode of travel to and from the university. He indicates that Wells' use of

lower vehicle trip calculations can result in less vehicle trip generation and thus a better level of service. He also notes that the vehicle trip generation estimates for increased faculty/staff vary by 315 vehicles in the AM peak hour, a difference that "will have a significant effect on the projected levels of service."

(a) Without repeating here the specific numerical discrepancies identified on p. 3 of his report, did DDOT examine the discrepancies identified by Mr. Mehra in this report and his prior testimony in this case?

(b) Can DDOT explain the discrepancies identified by Mr. Mehra?

(c) Does DDOT agree with Mr. Mehra that the differentials identified in the studies he cites can yield different levels of service?

(d) If so, what levels of service should the Zoning Commission use for purposes of deciding this Campus Plan case?

7. With respect to Mr. Mehra's discussion of "future conditions," (Mehra Supp. Report at p. 4), Mr. Mehra notes that Wells assumed a 0.5% per year growth for through traffic to obtain background, whereas the DDOT Lower West End Traffic Study assumed a 1% growth for background conditions. Mr. Mehra notes that the total trips forecast for Wells are as much as 400 vehicles per hour less than would be obtained using the DDOT 1% rate. In the DDOT report dated 27 November 2006, DDOT states with respect to these two reports that "both growth rates are reasonable for the specified areas in the Foggy Bottom/Lower West End neighborhoods."

(a) If, as DDOT testified in its statement, both the 0.5% and 1% growth rates are "reasonable," does DDOT agree that the total trips forecast could exceed Wells' estimates by 400 vehicles per hour?

(b) If the answer to question 6(a) is "yes," does DDOT believe that an increase of 400 vehicles over the Wells estimate is a matter of no significance to the Commission's deliberations in this case?

(c) If the answer to question 6(a) is "no," please set forth the analysis that led DDOT to that conclusion?

8. In DDOT's letter of 27 November 2006, where DDOT states that the 0.5% and 1% growth rates are both "reasonable" assumptions, DDOT states (at p. 2) that in "the foreseeable

future (next five years), the difference in the increase in traffic between these two estimates is relatively slight."

(a) Given that GWU is applying for a 20-year campus plan to last until the year 2025, why did DDOT's report not contain any analysis for years 6 through 20?

9. On p. 4 of Mr. Mehra's Supplemental Report, it is noted that the GWU growth in vehicle trips did not include vehicular traffic that may occur from other campuses in private vehicles or non-GWU buses.

(a) Does DDOT believe that it is appropriate to exclude that information in calculating growth in vehicle trips?

(b) If the answer to question 9(a) is "yes," why does DDOT believe that?

10. Mr. Mehra's analysis of "levels of service" (at p. 4) notes that there are currently 9 out of 37 intersections with some failing approaches (LOS E or LOS F), and with the GWU expansion, that number will grow to 14 of 37, even with mitigation and even with loss of curbside parking. He also estimates that if DDOT's growth rates are used, an additional 12 intersections currently at LOS D may fail, resulting in a possible total of 26 failing intersections out of 37.

(a) In light of DDOT's written testimony that the 1% growth rate is "reasonable," does DDOT have any reason to question the accuracy of Mr. Mehra's projection that as many as 26 intersections could fail under the proposed GWU expansion?

(b) If DDOT does not agree with Mr. Mehra's estimate, how many intersections does DDOT believe could fail, using the 1% growth rate figure that DDOT deems "reasonable"?

(c) Why did DDOT not address this issue in its report dated 27 November 2006?

11. In its report dated 27 November 2006, DDOT recommends hiring a Transportation Management Coordinator to monitor the GWU Transportation Management Program ("TMP") and recommends that this be included in the Commission's order.

(a) Should this individual be a GWU employee? Considering that the person is performing an audit function, would it not make more sense to have someone independent of GWU doing the monitoring?

(b) Should the Transportation Management Coordinator provide regular reports to DDOT or the Commission on compliance issues?

(c) Given DDOT's reliance on GWU's use of a Transportation Management Program here, what objective, measurable criteria does DDOT recommend that the Zoning Commission use to determine whether the TMP is a success?

(d) Would it be appropriate for the Commission to adopt a condition in any order approving the Campus Plan under which an independent Transportation Management Coordinator must certify as to GWU's compliance with the TMP before any further zoning relief can be granted in connection with the Campus Plan?

(e) Given the disparities between the estimates of Wells & Associates and Mr. Mehra about future growth in the area of GWU's Campus Plan, would it be appropriate for the Commission to add a condition that GWU shall not seek nor receive further zoning relief if levels of service are not at or above a level identified by DDOT as acceptable here?

(f) DDOT emphasizes the importance of "strict adherence" to restrictions on the timing of deliveries to off-street loading facilities" at GWU. What sanctions does DDOT recommend if there is not "strict adherence" to those criteria? Would there be a recommendation that there should be no further processing of GWU applications, as indicated above?

12. In preparing the report dated 27 November 2006, did DDOT consider the impact on traffic of the various potential transportation changes currently under consideration (*e.g.*, Whitehurst Deconstruction Study, Juarez Circle, Bike Lanes, etc.) when combined with the proposed Campus Plan development?

(a) If your answer to question 12 is "no," why was that?

(b) If your answer to question 12 is "yes," please identify the analysis and conclusions that were reached as to each change that was considered.

(c) If your answer to question 12 is "yes," why did DDOT not address any of these points in its report of 27 November 2006?

13. Another item that was not addressed in DDOT's report dated 27 November 2006 is pedestrian safety. Did DDOT consider pedestrian safety in its analysis of the Wells reports?

(a) If your answer to question 13 is "no," why was that?

(b) If your answer to question 13 is "yes," please identify DDOT's analysis, and conclusions on this topic.

(c) If your answer to question 13 is "yes," why did DDOT not address the issue in its report?

14. Following the September hearing in this case, DDOT received the previously cited 4 October 2006 letter from Wells & Associates (and perhaps other communications as well). Following the 30 November hearing in this case, did any person at DDOT receive any oral, written, electronic or other communications from any person not employed by DDOT in connection with this case (Z.C. Nos. 06-11 & 06-12), the questions being propounded here or DDOT's answers to these questions?

(a) If the answer to question 14 is "yes," please identify the person(s) who provided all such communications and the person(s) who received all such communications.

(b) If the answer to question 14 is "yes," (i) please attach to your answers the text of any written or electronic communication that was received, and (ii) please summarize the contents of any oral communication that was received, identifying the person providing the communication and the person who received it.

15. Since answers to these questions are to be provided in lieu of answers to cross-examination, (a) please identify all individuals who prepared the answers to these questions, and (b) please confirm that the answers provided are being provided from personal knowledge.

#### CERTIFICATE OF SERVICE

I hereby certify that copies of this document were served electronically this 7<sup>th</sup> day of December, 2006 upon Maureen E. Dwyer, counsel for the applicant, at [Maureen.Dwyer@pillsburylaw.com](mailto:Maureen.Dwyer@pillsburylaw.com), upon Barbara Kahlow for West End Citizens Association at [Barbara.Kahlow@verizon.net](mailto:Barbara.Kahlow@verizon.net) and upon Jeffrey Jennings at DDOT at [Jeffrey.Jennings@dot.gov](mailto:Jeffrey.Jennings@dot.gov).

  
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