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February 8, 2012

Mr. Robert Iosco, Environmental Program Manager
Virginia Department of Transportation
4975 Alliance Drive
Fairfax, Virginia 22030

RE: Draft Environmental Assessment (EA) for HOV/Transit Ramp at I-395 and Seminary Road

Dear Mr. Iosco:

I am writing on behalf of the City of Alexandria to provide the City's technical response in regard to the above referenced project. City staff provides the following comments on the Draft EA:

TRAFFIC:

1. Consistent with the City's previous statements in support of studying this alternative (see Enclosures 1 and 2), the City remains supportive of an overall design of the HOV/Transit ramp alternative that does not include an AM period right turn onto eastbound Seminary Road (and complementing PM period left turn onto the ramp). City Council discussed this issue on January 24 and made it clear that they do not support a ramp with these turn options.¹
2. Additional design details depicting the physical aspects of a "no right turn" seem necessary for the alternative design as the concept drawings depict only striping. The City desires a more permanent barrier type design.
3. The 2035 design year traffic scenarios for both build alternatives should be better explained in the Draft EA. In particular, the traffic volume differences should be expanded upon and

¹ Full video and audio of City Council January 24, 2012, discussion is available for viewing on the City's website alexandriava.gov (Docket Item #15. HOV ramp discussions starts at 1:09.)

the reasons for the low volume of traffic projected for eastbound Seminary Road articulated when compared to the 2035 scenario with no right turn movement.

4. Given VDOT is currently considering the construction of an Auxiliary Lane northbound between Duke Street and Seminary Road that would likely exacerbate the impacts of this project along the east side of I-395, some explanation of why this project is not included in the Draft EA analysis for the HOV/Transit Ramp should be included. Does the additional lane mitigate the interchange congestion as defined in the project scope in a manner as to be a substitute project?

PEDESTRIAN ACCESS:

5. Provision of adequate accommodation for pedestrian access along both sides of the Seminary Road Bridge should be more comprehensively analyzed. This bridge is used by pedestrians, particularly by public school students, to access schools and communities on both sides of the bridge. Special attention to safety and ADA is of paramount concern.

NOISE, AIR AND WATER QUALITY:

6. The findings of the Draft EA indicate no substantial adverse impacts for the environmental issues studied, with minor exceptions related to noise and water quality. The City retained Kimley-Horn and Associates, Inc., a consulting firm, to review the technical aspects of the VDOT Noise and Air Quality Analyses. Kimley-Horn found the technical reports were conducted properly and within the respective guidelines, and should be accepted by the City without modification (see Enclosure 3).
7. Noise impacts may be mitigated by installation of noise barriers should the community process unfold as such. VDOT should investigate a noise barrier integral to the ramp that will not reflect noise into the adjacent community. Should a noise barrier wall be erected along the edge of the VDOT right-of-way, a green wall (one covered with plant materials, such as ivy) should be considered, as well as clear barriers such as utilized on the new Woodrow Wilson Bridge.
8. The EA should include some explanation of the inclusion of units above 30 feet in the noise analysis since this is not required and tends to overstate the impacts, yet the barrier analysis included only the units below the 30 foot level.
9. The VDOT Consultant Guide indicates that CO micro-scale analysis should be conducted for base peak, emission and design years for all alternatives under consideration. This was not done for the no-build interim and design year. As a result, some explanation needs to be provided in the EA.

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10. Similar to the comment above, the decision to exercise discretion not to conduct the PM2.5 analysis should be explained in the EA, including some discussion of the 1997 Annual PM2.5 and 2006 24-Hour PM2.5 Standards.
11. Water quality impacts should be mitigated by storm water management techniques with erosion and sediment control measures to prevent further degradation of water quality. In all other categories, the findings indicate that the impacts would be positive or neutral.

TRANSIT:

12. The Transit/HOV ramp should join and merge with the I-395 HOV lanes on the west side as opposed to the east side of the HOV lanes. Merging movements, especially with transit buses, are significantly safer from right to left than from left to right. This would also eliminate the unconventional incoming merge from the left-hand side, which would cause unnatural traffic conflicts on the HOV lanes.

PUBLIC SAFETY:

13. If the left turn only build alternative is selected, VDOT should develop a design that allows emergency vehicle access to/from the HOV lanes and to/from the nearby fire station and hospital on Seminary Road.
14. The City requests that any noise barriers along the edge of the VDOT right-of-way be designed and constructed of a material to discourage graffiti and facilitate easy removal when it does occur. Landscaping should be close enough to the wall so that joggers are not tempted to go between it and the walls, obscured from view. Standard emergency entrance portals should be included.

COMMUNITY CHARACTER:

15. The draft EA does not address how the potential sound barriers might impact the adjacent community. The EA should address how sound barriers could affect the surrounding community if constructed, and consider design alternatives to be compatible with the adjoining community (see Comment 7).
16. Impacts on property are found in the Draft EA to involve only minimal acquisition necessary resulting from pedestrian access improvements in the amount of 0.31 or fewer acres of uninhabitable property consisting of parking facilities and negligible vegetated land. The EA should address the right-of-way acquisition process for acquiring the 0.31 acres.

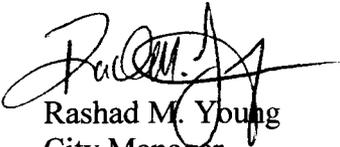
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GENERAL:

17. Page 1 of the EA indicates an incorrect street name - the intersection of Seminary Road and Mark Center *Avenue*. The correct name is Mark Center *Drive*.
18. Page 4 cites the anticipated eventual intended workforce of the Department of Defense BRAC-133 facility is 7,000. All information the City has consistently received from the Department of Defense has indicated the workforce number is 6,409.

We appreciate the opportunity to provide comments, and are available to discuss these comments in more detail with VDOT and its consultants.

Sincerely,



Rashad M. Young
City Manager

Enclosure 1: Letter from Mayor Euille to Ronaldo Nicholson
Enclosure 2: Letter from David Dexter to Mayor and City Council
Enclosure 3: Kimley-Horn Associates Technical Memorandum

cc: The Honorable Mayor and Members of City Council
Mark Jinks, Deputy City Manager
Richard J. Baier, Director T&ES
Abi Lerner, Deputy Director T&ES
David B. Grover, BRAC-133 Coordinator, T&ES



William D. Euille
Mayor

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March 24, 2010

Mr. Ronaldo T. Nicholson
Regional Transportation Program Director
Virginia Department of Transportation
14685 Avion Parkway
Chantilly, Virginia 20151

Subject: City of Alexandria Response on the Mark Center (BRAC-133) Access Study Report

Dear Mr. Nicholson:

This letter represents the City's response on the Mark Center (BRAC-133) Access Study Report. After a review of the report and consideration by City Council, the City of Alexandria:

- Supports the further study of Alternative A1, provided measures to increase the vehicle processing rate are evaluated.
- Recommends that Alternative D (as well as A2, B1, B2, C and E) be eliminated from further analysis and consideration.
- Requests that VDOT work with the Department of Defense to expedite the completion of the BRAC-133 Transportation Management Plan.
- Requests that VDOT work with City staff and staff from adjacent jurisdictions to develop additional access alternatives.
- Reiterates our position that no alternative should impact the Winkler Botanical Preserve.
- Recommends that all alternatives should take into consideration the Guiding Principles of the City's BRAC-133 Advisory Group.
- Requests that VDOT analyze at least the following two alternatives (as depicted in the enclosed graphics):
 - An alternative which provides a direct access from the HOV Lanes to the west side of Seminary Road tying to the Seminary Road Bridge over I-395.

"Home Town of George Washington and Robert E. Lee"

Mr. Ronaldo T. Nicholson
Regional Transportation Program Director
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- An alternative which provides a ramp from the HOV lanes to the Seminary Road Bridge with a signalized intersection at the ramp terminus.

In accordance with the City Council's action of December 12, 2010, sent under separate cover, any transportation solution should include multi-modal enhancements to adequately address the transportation needs of BRAC-133 and the surrounding area. The Alexandria City Council believes that the final VDOT proposal and recommendation should include a combination of transit, TDM and roadway improvements which fully address the transportation needs of the BRAC-133 site and the surrounding area.

Please do not hesitate to contact me, or Abi Lerner of the Department of Transportation and Environmental Services, if you have any questions concerning the City of Alexandria comments with respect to the Mark Center (BRAC-133) Access Study report. We thank you for your continuous interaction with the City of Alexandria representatives and our residents, and look forward to future collaborative work and further discussions related to the implementation of transportation solutions for BRAC-133.

Sincerely,


William D. Euille
Mayor

Enclosures: (1) Graphic depicting Seminary Road flyover
(2) Graphic depicting Alternate Seminary Road flyover

cc: The Honorable Sean Connaughton, Secretary of Transportation
The Honorable Members of City Council
The Honorable Sharon Bulova, Chair, Fairfax County Board of Supervisors
Members, BRAC-133 Advisory Group
Members, Transportation Commission
James K. Hartmann, City Manager
Mark Jinks, Deputy City Manager
Michele Evans, Deputy City Manager
Richard Baier, Director, Transportation and Environmental Services
Faroll Hamer, Director, Planning and Zoning
Abraham Lerner, Deputy Director, Transportation and Environmental Services

BRAC/Mark Center Advisory Group

March 8, 2010

The Honorable William D. Euille
and Members of City Council
City Hall
301 King Street
Alexandria, VA 22314

RE: Recommendations Regarding BRAC/Mark Center Transportation and Traffic Issues

Dear Mayor Euille and Members of City Council:

The purpose of this letter is to provide you with recommendations from the BRAC/Mark Center Advisory Group regarding transportation and traffic issues in the area surrounding the BRAC-133 office complex. The recommendations are a result of the discussions at the Advisory Group's March 1 meeting.

VDOT's Mark Center (BRAC-133) Access Study

VDOT's February 2010 report describes seven unique alternatives to facilitate direct access from I-395 to the major employment destination at Mark Center. Based on preliminary traffic analysis and level of costs, the study concludes that two alternatives, A1 and D, should be advanced for further study.

Alternative A1 provides direct access from the southbound on-ramp to the Army's south parking garage. There are fundamental weaknesses in this alternative.

- It does not provide access from the I-395 HOV lanes.
- It does not provide access to the Army's north parking garage and transit center.
- It does not provide access to the rest of the Mark Center campus.
- It harms the Winkler Botanical Preserve.

We recommend that alternative A1 be dropped from consideration and that Council inform VDOT of that decision.

Alternative D provides access to Mark Center from the I-395 HOV lanes, travels within and along a portion of the Winkler Botanical Preserve, and touches down at Mark Center Drive.

We reiterate the recommendation we made previously to Council, and that Council made to VDOT, to drop alternative D from consideration since it does not protect the Winkler Botanical Preserve and we recommend that Council inform VDOT once again of that decision.

Conceptual Interchange Alternative

At the March 1 meeting City staff presented an overview of a conceptual interchange alternative. This alternative meets several of the guiding principles developed by the Advisory Group. It accommodates HOV lanes, provides access for public transportation service to the entire neighborhood, serves the entire Mark Center campus, and protects the Winkler Botanical Preserve. Moreover, this alternative appears to provide significant

pedestrian and green space improvements to Seminary Road, and meaningful traffic improvements to the intersection of Seminary and Beauregard. Most important, this alternative could provide a sense of place and a connection to the greater neighborhood that is completely lacking from all other alternatives.

We recommend that Council direct City staff to further analyze the viability of the conceptual interchange alternative and that Council make a formal request to VDOT to assist in this endeavor.

Short-Term Road Improvements

The Advisory Group discussed several short-term improvements that could be made to roads in the Mark Center area that would facilitate the movement of traffic. These improvements are over and above the off-site road improvements proffered by Duke Realty. While the road improvements being undertaken by Duke Realty will help traffic flow, they alone will not satisfactorily mitigate traffic congestion on Seminary and Beauregard.

We recommend that Council direct City staff to work with the Army, Duke Realty, and VDOT, as well as with their counterparts in Arlington and Fairfax Counties to identify viable and promising proposals for short-term improvements and to present them to the Advisory Group and Council as expeditiously as possible so that there will be ample time to implement such improvements well before the BRAC campus opens for business in September 2011.

Bigger Picture Transportation Changes

There are a number of longer-term changes that could be made to the area's transportation system to greatly improve the movement of traffic. For example, adding a fourth lane on I-395 from Seminary southbound to past Duke Street and widening King Street from Hampton to Skyline.

We recommend that Council direct City staff to work with VDOT to identify viable long-term changes and present their findings to the Advisory Group and Council.

Funding

We recommend that Council identify the sources of funding that will be necessary to conduct the analysis of the conceptual interchange alternative, make short-term road improvements, and perform other related work in the Mark Center area.

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The Hon. William Euille
and Members of City Council
March 8, 2010

Your consideration of these recommendations is greatly appreciated. If you have any questions regarding the recommendations, please do not hesitate to contact me.

Sincerely,



David Dexter
Chair, BRAC/Mark Center Advisory Group

cc: BRAC/Mark Center Advisory Group
Jim Hartmann, City Manager
Mark Jinks, Deputy City Manager
Rich Baier, Director, Transportation and Environmental Services
Ronaldo T. Nicholson, VDOT Regional Transportation Program Director
Tom Fahrney, VDOT Commonwealth BRAC Coordinator
The Honorable Mark R. Warner, United States Senate
The Honorable James Webb, United States Senate
The Honorable James P. Moran, United States House of Representatives
The Honorable Charniele L. Herring, Virginia House of Delegates



January 25, 2012

David Grover, AICP
Principal Transportation Planner/BRAC-133 Coordinator
Department of Transportation and Environmental Services
City of Alexandria
City Hall – Room 3200
301 King Street
Alexandria, VA 22314

■
P.O. Box 33068
Raleigh, North Carolina
27636-3068

Subject: Air Quality and Noise Analysis Review, I-395 HOV Ramp at Seminary Road

Dear David:

Kimley-Horn and Associates, Inc. was retained by the City of Alexandria to conduct a review of the air quality and noise analyses performed for the I-395 HOV Ramp at Seminary Road project (VDOT Project No. 0095-100-722, 9101; UPC No. 96261). The Air Quality Analysis Technical Report and the Noise Analysis Technical Report were submitted to VDOT by Harris Miller Miller & Hanson Inc. (HMMH) in December 2011. This memorandum details the findings of the air quality and noise analysis review.

Air Quality Analysis Review

Overall, the methodology and analysis contained within the Air Quality Analysis Technical Report was found to satisfy the requirements set forth by FHWA, EPA, and VDOT. As dictated by these requirements, analysis or documentation was conducted for carbon monoxide (CO), fine particulate matter (PM_{2.5}), and mobile source air toxics (MSAT). Kimley-Horn performed a review of the methodology, parameters, and analysis conducted for this air quality analysis. The findings related to each pollutant are included below.

Carbon Monoxide (CO)

- Five signalized intersections within the study area were identified for study within the CO analysis. Four of the five intersections exhibited levels of service equal to or in excess of D during the base, interim, or design year conditions. The fifth intersection directly involved the new HOV ramp that forms the basis of this project. While this intersection was not required for inclusion in this analysis, it was included to most accurately ascertain the modeling conditions around the project. Kimley-Horn concurs that the selection of intersections is appropriate for this analysis.

- According to the VDOT Consultant Guide (developed by VDOT to guide the completion of air quality analyses for NEPA documents), a CO microscale analysis should contain the following modeled years:

“The project should be modeled for the base, peak emission and design years of the project and all of the alternatives (including the No-Build Alternative)”

In this report, the analysis was done for the base year no-build condition, peak emission build condition, and design year build condition. No-build conditions were not considered for the interim year and design year.

Correspondence was initiated with VDOT about this issue. VDOT indicated that an agreement is in place between FHWA and VDOT that gives discretion on whether no-build analyses need to be conducted for interim and design years for CE and EA NEPA documents. This discretion can be applied to help reduce the amount of work needed to complete a quantitative CO analysis. VDOT confirmed that this methodology was applied for the I-395 HOV Ramp at Seminary Road air quality analysis.

- CO emission rates were computed using the Easy Mobile Inventory Tool (EMIT), which pulls information from MOBILE6.2. Emission rates could also have been obtained by referencing MOBILE6.2 directly. Either approach would be acceptable.
- Modeling parameters for this analysis were obtained from the VDOT Consultant Guide. Parameters were needed to populate the MOBILE6.2 software (run via the EMIT software) and the CAL3QHC program. Kimley-Horn verified the parameters used in the analysis against the VDOT Consultant Guide document and found them to be consistent.
- Receptors for the five intersection analyses were located around each intersection in a method consistent with EPA modeling guidelines. Kimley-Horn found these receptor locations, shown in Figures 2-6 in the report, to be appropriate for this analysis.
- Kimley-Horn reviewed the MOBILE6.2 and CAL3QHC output data provided in Appendix B and C of the report. After referencing this data along with the mapping and traffic information contained within the report, Kimley-Horn finds the analysis procedures to be appropriate.

Fine Particulate Matter (PM2.5)

- The report provides background and documentation on the determination of the analysis level for PM2.5. Referencing the criteria set by the EPA and echoed in the VDOT Consultant Guide, the report addresses each element. Based on this process, it was determined that a PM2.5 analysis was not needed for the project.

Kimley-Horn reviewed the methodology and information provided within this section while also reviewing the guidance set forth in the EPA standards and the VDOT Consultant Guide. Based on this review, we concur that neither a qualitative or quantitative analysis is needed for this pollutant.

- The attainment status of the City of Alexandria and the Northern Virginia region was referenced several times in the technical report. In the report, it is mentioned that the region is non-attainment for PM_{2.5}. It should be noted that there are currently two PM_{2.5} standards that must be addressed. The Northern Virginia region is a non-attainment area for the 1997 annual PM_{2.5} standard. However, the region is in attainment for the 2006 24-hour PM_{2.5} standard. The 2006 standard is an additional requirement, and does not supersede the requirements set forth in the 1997 standard.

Mobile Source Air Toxics (MSAT)

- In Section 7.3, the report discusses the level of analysis needed to address MSAT. Referencing FHWA standards (which are also reflected in the VDOT Consultant Guide), it was determined a qualitative analysis was needed. Kimley-Horn reviewed these standards and guidance documents and concurs with this level of analysis.
- Kimley-Horn reviewed the language included in the report to address the requirements of the qualitative MSAT analysis. Per direction from FHWA and VDOT, this language should be taken primarily from the 2009 FHWA Interim Guidance on MSAT Analysis. Based on our review, we feel this qualitative analysis satisfies the federal and state requirements.

Noise Analysis Review

Kimley-Horn performed a review of the methodology, parameters, and analysis conducted for this noise analysis. Overall, the methodology and analysis contained within the Noise Analysis Technical Report was found to satisfy the requirements set forth by FHWA and VDOT. The following observations were made about the analysis.

- Kimley-Horn reviewed the Common Noise Environments (CNE) delineated by HMMH. Noise-sensitive receptors that were within 500 feet of the construction limits were considered as part of the model. This satisfies the requirements of the VDOT Highway Traffic Noise Impact Analysis Guidance Manual (September 16, 2011) Section 6.1.1. In CNE 1 this distance was extended to approximately 1000' to account for neighborhood continuity.
- Kimley-Horn reviewed the Traffic Noise Model (TNM) 2.5 files for compliance with FHWA and VDOT guidelines. Per those guidelines, HMMH created five different models, including validation, existing, no-

build, build, and barrier. Kimley-Horn reviewed these files and found them to be in line with the applicable standards.

- The Validation model produced computed sound levels at the ambient measurement sites that were within 3 dB(A) of the measured sound levels at these locations. This satisfies Section 6.3.4 and Section 6.3.5 of the VDOT Highway Traffic Noise Impact Analysis Guidance Manual.
 - The Existing Conditions model used the validated model and applied existing conditions traffic volumes to the roadways within the study area. This existing worst noise hour predicted existing worst noise hour noise levels within the project area. These existing worst noise levels served as a basis for the “substantial increase” calculations. This complies with Section 6.3.6 of the VDOT guidelines.
 - The No-Build model added the proposed Mark Center short and mid-term roadway improvements. Given the extent of these improvements, and the predominate traffic noise generators in the area (I-395 and Van Dorn Street) a separate No-Build scenario that excluded these improvements was not necessary. Although a No-Build condition is not always required, per Section 6.3.7 of the VDOT guidelines, any project related to the interstate system requires the calculation of No-Build noise levels.
 - The Build model added the proposed I-395 HOV Ramp to the No-Build model. The Build model satisfies the requirements of Section 6.3.8 of the VDOT guidelines which requires that noise modeling be detailed enough to thoroughly evaluate whether noise abatement is warranted, feasible, and reasonable.
 - The Barrier model analyzed the feasibility and reasonableness of noise abatement. This analysis was consistent with Section 7.3.9 and 7.3.10 of the VDOT guidelines. Multiple receptors received at least 5 dB(A) of insertion loss with the noise barriers as well as multiple receptors receiving a reduction of future highway traffic noise of 7 dB(A). The 7 dB(A) reduction meets the barrier optimization goals of Section 9.1 of the VDOT Highway Traffic Noise Impact Analysis Guidance Manual (September 16, 2011).
- According to the VDOT Highway Traffic Noise Impact Analysis Guidance Manual (September 16, 2011), “the maximum height of a noise barrier is 30 feet. For multi-story multi-family residences the noise analyst is to draw a horizontal line from the top of the noise barrier directly to the multi-story unit and analyze the receptors from the point of intersection and below.”
 - The analysis by HMMH considered all units in the multi-story multi-family buildings. Although this approach isn’t wrong from a technical standpoint, it does overstate the impacts in the study area. Specifically, in CNE 7, there are 154 units that are computed to be impacted under future No-build and Build scenarios. However, if

- you discard the units that are above the third floor (~30 feet) there are only 10 units that are computed to be impacted.
- For the barrier analyses, only receptors below 30 feet were analyzed. This is consistent with Section 7.3.3 and Section 7.3.9 of the VDOT guidance manual.
 - The site numbers listed in Appendix C Computed Noise Levels, while consistent with Figures 1 and 2, do not correspond to the TNM 2.5 files. Kimley-Horn compared the location of receptors in TNM with the locations shown in Figures 1 and 2, and was able to cross-check the TNM output with the tables in Appendix C.

Findings and Recommendations

After review of the documents, Kimley-Horn recommends that these technical reports be accepted without modification by the City of Alexandria for their use. The comments contained in this technical memorandum serve merely as clarification points. While the content of these comments could be added to the documents themselves, they would in no way affect the findings and analyses conducted. It is our recommendation that this technical memorandum be included in the project file for future reference and clarification as the project moves forward into final design.

Please let us know if you have any further questions or comments regarding this analysis or our findings.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Mike Rutkowski, P.E., AICP
Project Director