Reply To
Attention Of

DEPARTMENT OF THE ARMY
NORFOLK DISTRICT CORPS OF ENGINEERS
FORT NORFOLK 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

November 9, 2012

Eastern Virginia Regulatory Section
NAO-2012-00638

Federal Highway Administration
ATTN: Mr. Ed Sundra
Director of Program Development
400 N. 8th Street, Suite 750
Richmond, VA 23219-4825

Virginia Department of Transportation
ATTN: Ms. Angel Deem, Project Manager
Environmental Division
1401 East Broad Street
Richmond, VA 223219

Dear Mr. Sundra and Ms. Deem:

This letter provides the comments of the Norfolk District Corps of Engineers (Norfolk District) in response to the Environmental Assessment (EA), dated August 23, 2012, for the Route 29 Bypass in Albemarle County and Charlottesville, Virginia. The proposed project is a new 6.24-mile four-lane divided, limited access bypass to the west of existing Route 29, beginning at the Route 250 Bypass and terminating at the existing Route 29, north of the South Fork Rivanna River. Over the course of approximately twenty-five years, you have prepared an Environmental Impact Statement (EIS), an EA, a Supplemental EIS (SEIS), and a Record of Decision (ROD), for this project, and the Norfolk District was a cooperating agency in the preparation of those documents. You have prepared the current EA as a re-evaluation of the project.

We regret that due to workload, the belated notification that the EA was available for review, and the complexity of the matters at hand, we were unable to provide comments by the deadline of October 9, 2012. As you know, this project has had considerable history which requires a lot of time and consideration. During this time, we have had the opportunity to receive and consider the comments from Environmental Protection Agency (EPA), interested organizations, and the public.

The stated purpose of the project is "to find a solution to existing and future congestion on a three-mile section of U.S. Route 29 between U.S. Route 250 Bypass and the South Fork Rivanna River in the City of Charlottesville and Albemarle County north of Charlottesville." A secondary purpose of the study was "to complete a gap in ongoing improvements to U.S. Route 29 through Central Virginia."

The EA states that the preferred alternative will impact 2.8 acres of jurisdictional wetlands, and approximately 7040 linear feet of streams, at 43 locations. These waters are regulated by the

Norfolk District under Section 404 of the Clean Water Act (33 U.S.C. 1344). Therefore, an Individual Department of the Army permit would be required for the project as proposed.

The EA evaluates only "Alternative 10" from the 1993 EIS, with modifications, as the selected alternative. The EA only briefly summarizes alternatives previously considered. It indicates that 4.2 miles of the 6.24-mile road would cross the watershed of the South Fork of the Rivanna River Reservoir, and potential impacts to this Reservoir were the subject of a lawsuit and the subsequent 2003 SEIS. The EA further states, "an alternatives analysis will not be conducted anew because the project has a valid 2003 ROD."

The National Environmental Policy Act (NEPA) provides a broad-based approach to impact balancing. However, NEPA does not contain substantive requirements that compel agencies to choose a particular alternative as is required by Section 404(b)(1) of the Clean Water Act. Compliance with NEPA requirements may not necessarily translate to compliance with the Section 404(b)(1) guidelines during the Section 404 permit process. As you know, Corps regulations require us to consider a full range of public interest factors and conduct an alternatives analysis in order to identify the least environmentally damaging practicable alternative (LEDPA), which is the only alternative we can authorize. In addition to wetland and waters impacts, we must consider factors such as land use (including displacements of homes and businesses), floodplain hazards and values, water supply and conservation, water quality, safety, cost, economics, threatened and endangered species, historic and cultural resources, and environmental justice. The term, "practicable" means "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the project purpose." The principal prerequisite to establishing practicability is to establish the purpose of the proposed activity and to apply the above-mentioned practicability factors with the intent of avoiding significant impacts to aquatic resources, and is not necessarily confined to maximizing benefits related to the project's purpose.

Because of the age of the previous studies, we may not have all of our earlier files and related letters. Nevertheless, our letters commenting on the DEIS on July 9, 1990, on the SEIS on April 15, 2002, and our most current letter of March 27, 2012, had noted that we could not identify the LEDPA because the level of detail given regarding wetlands was insufficient for us to compare the alternatives. The current EA provides an overview map of the alignments of each of the alternatives considered in the past, and briefly states why they were eliminated from further consideration, but it still does not provide sufficient detail for the Corps to reach a conclusion of LEDPA.

In order for us to identify the LEDPA, we must have sufficient information included in the comparison of the alternatives and agree that there are no other reasonable alternatives that need evaluation. In order for us to concur that the preferred alternative is the LEDPA, you must demonstrate either that 1) all alternatives with less impact are impracticable, 2) they would not adequately meet the project purpose, or 3) that the impacts for the preferred alternative can be further avoided and minimized by means such as bridging, shifts within the corridor, or narrowing of crossings etc. But failing this, other alternatives may be considered "practicable" for the Section 404 alternatives analysis.

We will evaluate whether the project will have significant environmental effects, and if so, then the FHWA and/or the Norfolk District will need to prepare an EIS or an SEIS, prior to our making a permit decision. We encourage you to conduct a thorough alternatives analysis as part of your current study to avoid future delays and repetition of effort, particularly given the extent of time that has passed since your prior studies.

In order for the Norfolk District to make a LEDPA determination, the following issues must be sufficiently addressed:

Traffic Study

1) The traffic study, entitled "Traffic and Transportation Technical Report for Environmental Assessment, Route 29 Bypass," dated August 16, 2012 (Table 6), suggests that in the 2040 design year, there is little difference in Level of Service (LOS) between the build and the no-build alternative, for the preferred alternative: in fact, the only changes in LOS occur at Route 29 at Hilton Heights Road, which goes from an "F" to a "D", and Route 29 at Rio Road (as at-grade intersection), which goes from an "E" to a "D". Otherwise, four scenarios remain an "F" and three remain a "D." Thus, it is not clear that the proposed project will provide much relief to traffic congestion.

2) Although the traffic study indicates that it is based on a design with no interchanges in between its two interchange termini, it is unclear whether it is based on the most current preliminary design, (i.e., with signalized interchanges). In addition, Southern Environmental Law Center (SELC) contends that the study is based on a flawed traffic study model, which inflated the amount of through traffic. The (SELC) states that the model was revised in February; however the previous model was still used in the study. Please clarify, as this difference could have an impact on the travel times in the study. If the current design and model criteria are not the basis for the study, then the study needs to be revisited using the proper updated criteria.

3) The study suggests that most of the traffic currently using this corridor is local traffic, rather than through traffic. Therefore, the project purpose of reducing congestion along three miles of the existing Route 29 may be better served by a more localized improvement or series of improvements. Have any similar traffic studies been conducted for other alternatives that improve the existing corridor?

4) The traffic study indicates that the preferred alternative would result in a 13% increase in traffic north of its northern interchange with the existing corridor. However, the EA does not indicate how this new problem area would be addressed, or how this might affect the current project's effectiveness in meeting its purpose and need.

Alternatives analysis

Since we have insufficient information for determining a LEDPA at this point, it is not appropriate to consider only the preferred alternative for our purposes. It is clear that the alternatives analysis is based on information that is between 10 and 20 years old, and needs to be updated to reflect current conditions and alternatives.

1) It is our understanding that since the 2003 ROD was finalized, considerable efforts have been made by the Charlottesville/Albemarle Transportation Coalition and others in cooperation with local and state officials, to identify alternatives to the preferred alternative along the existing Route 29 corridor, through efforts called "Places 29" as well as a Metropolitan Planning Organization (MPO) Corridor Study. We note that reference is made to these efforts in the EA. However, it is unclear specifically which components of these efforts were considered, incorporated, or eliminated, and why. In addition, the EA indicates that grade-separated interchanges along the existing Route 29 at Hydraulic Road and Greenbriar Drive, which were originally part of the selected alternative, were eliminated, but it does not indicate why. Particular attention should be given to improve-in-place alternatives, particularly those that resulted from the aforementioned efforts. Please specify which road projects will be going forward with or without the bypass (which ones are in the six-year plan), as well as discuss all of the components that were not considered, or considered and ruled out, and why. Each component of the above-mentioned efforts should be described in terms of what role it could play in reducing congestion. Combinations of some or all of the components of these efforts should be evaluated as stand-alone alternatives to the preferred alternative. In light of the fact that these alternatives appear to have less environmental impact than the preferred one, all of these factors need to be thoroughly and carefully evaluated, in comparison with the preferred alternative.

2) Comparable waters/wetlands data for other alternatives will be needed in order to reach a LEDPA determination, unless information is submitted to substantiate that none of the other alternatives is practicable or address the purpose and need. In addition, given that the majority of the impacts for the preferred alternative are within direct tributaries of the S/F Rivanna River Reservoir, the preferred alternative may be more impactive to water quality overall than other alternatives that are not so located. A range of alternatives must be given full consideration. The 2002 SEIS document did not include information concerning the linear feet or area of stream impacts for any of the alternatives except for the preferred alternative. Furthermore, it contained a chart with comparisons of each alternative's wetland impacts, but it did not specifically explain how or when these figures were derived. The comparisons between the other alternatives' impacts appear to have been compiled at least 20 years ago; the jurisdictional determination for the preferred alternative was completed in 1998; and no overview or topo maps depicting the approximate locations and sizes of these impacts within each alternative alignment was provided. The project terminii

appear to have changed since all of this work was completed, and changes have most likely occurred within the other alternatives' corridors such that these figures and conditions may no longer be accurate. An updated study of impacts to waters of the U.S., including wetlands, is clearly needed; and the identification of waters of the U.S must be sufficient for locating and comparing the alternatives. U.S. quads, NWI maps, aerials of the study area, soil mapping, modeling, and spot-checked locations should be utilized to estimate the location of wetlands and waters, for each alternative, as well as thorough descriptions of how they were quantified.

3) Once the Corps identifies the LEDPA, a new jurisdictional determination using the Corps 1987 wetland delineation manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, will be required to identify all waters of the U.S. within the project corridor.

Comments with Regard to the Preferred Alternative

1) Impacts on the South Fork Rivanna River Reservoir: As you know, the Corps is required to consider impacts on public water supplies. We recognize that extensive work was done to this end in the 2003 SEIS. However, it is our understanding from SELC that since that time, there may have been a change in the management plan for the Rivanna Water and Sewer Authority (RWSA) Reservoir, such that intake pipes will now begin to pump water from the South Fork Rivanna River Reservoir to two other associated reservoirs. However, it is unclear whether RWSA officials have reviewed the project with regard to its effects on their facility, operations, and water quality, making it difficult to assess fully the project's impacts on the water supply. Please have the RWSA review the project, and provide to us their comments and how you will address them.

2) Stormwater management: The EA states that 100% of the runoff within the South Fork Rivanna Reservoir watershed will be captured, but neither the basis for this statement nor the storm year for which this is true (2 year, 5-year 10-year, etc) is specified. VDOT should ensure that its stormwater plans are in compliance with the current stormwater management regulations. It is recommended that VDOT consider incorporating into the stormwater plan up-to-date low impact development (LID) facilities, which may be more effective at removing sediment and other pollutants than older designs. In addition, it is unclear whether or not stormwater treatment facilities are planned in waters of the U.S., including wetlands. As indicated in previous correspondence, all facilities should be located outside of jurisdictional waters unless you can demonstrate that it is impracticable to do so.

3) Total Maximum Daily Loads (TMDLs) and other water quality impacts: The EA makes no mention of how the preferred alternative would affect the already impaired waters with the increased impervious area, the 2.8 acres of wetlands impacts, impacts from 24 crossings, runoff, or pollutants. Anticipated water quality impacts and new TMDL

requirements mentioned in EPA's letter will need to be thoroughly addressed, as they will be considerations in obtaining a Section 401 permit from the Virginia Department of Environmental Quality (VDEQ). The Section 401 permit must be obtained before the Norfolk District can issue its Section 404 permit.

4) Threatened/Endangered species: The Norfolk District has designated FHWA as the lead Federal agency responsible for fulfilling our collective duties under Section 7 of the Endangered Species Act. We note that a June 2011 survey in Ivy Creek found two live James Spinymussels (*Pleurobema collina*), a Federally-listed endangered species. We also note that the project does not cross Ivy Creek but comes within 1000 feet of it. In addition, in June 2012, a survey was done from the S/Fork Rivanna River dam to 800 meters downstream of the proposed Bypass crossing of the S/F. No James Spinymussel specimens were found there. The EA found that the project is not likely to adversely affect the James Spinymussel; however, please note that for a "not likely to adversely affect" one must obtain concurrence of the U.S. Fish and Wildlife Service (USFWS), through the use of their online review process. While we are not the lead, we recommend that you perform the online review process and obtain an up-to-date response letter from the USFWS. Confirmation of this coordination will be required with any application submitted to the Norfolk District. In addition, as past, present, and reasonably foreseeable future impacts may have potential to affect the species, we recommend that this be addressed in the cumulative effect determination.

5) Cultural Resources/Historic Properties: The Norfolk District has designated FHWA as the lead Federal agency responsible for fulfilling our collective duties under Section 106 of the National Historic Preservation Act (NHPA). We note that there has been some additional architectural survey work done in August 2012, documented in a report entitled, "Environmental Assessment, Route 29 Bypass, Management Survey for Architectural Survey." Mention is also made of a data recovery plan for archeology, which was apparently formalized in a 1992 Memorandum of Agreement (MOA). The EA further states that both the Virginia Department of Historic Resources (VDHR) and the Advisory Council on Historic Preservation (ACHP) have concurred that the project will have no adverse effect on historic properties. However, documentation to that effect is not found in the EA. With the submittal of an application to the Norfolk District, all historic and cultural resources work would need to be brought up-to-date, including up-to-date response(s) from these agencies.

Secondary and Cumulative Impact Analysis

The EA refers back to the 2003 SEIS's cumulative impact analysis, and then states that since the 2003 SEIS, some changes in development have occurred along the corridor and to the termini and/or alignment in response. However, these impacts are not specified, quantified, or addressed. We must consider all impacts that are expected to occur later in time or farther removed in distance, but are still reasonably foreseeable, as well as incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. The specific

characterizations of existing, new, and planned roads, land use, percent impervious surface, anticipated growth induced by the project, and known and anticipated water quality and wetland impacts, which were provided in the 2003 SEIS, need to be quantified and updated. These include, but are not necessarily limited to:

- the "Base Case;"
- All of the projects listed as being on the comprehensive long-range plan;
- All existing, proposed, and projected growth and development in the watershed and along the corridor, up through Greene County. We understand that according to data SELC has obtained from Albemarle and Greene Counties, substantial new development--approximately 3000 residential units and 3.3 million sq ft of non-residential--have been approved in Albemarle County, north of the proposed northern bypass terminus, since the 2003 SEIS. Further, Greene County further north has recently approved another 1100 residential units and 500,000 sq ft of commercial development in the Rt 29 corridor;"
- The additional 8.3-mile bypass, called a "Western Bypass Extension" to connect to the northern terminus of this one, if planned or reasonably foreseeable;
- Cumulative long-term risk from contamination should be calculated for the life of the entire reservoir facility, including any components connected through pipes;
- Potential indirect and cumulative impacts on the James Spinymussel and its habitat.

Models and/or land use experts may be helpful in accomplishing these analyses.

Mitigation

As mentioned earlier, avoidance of impacts to the aquatic environment, including wetlands, should be an important consideration in your alternatives analysis. Measures to avoid and minimize impacts to streams and wetlands, such as bridging, alignment shifts, and elimination of medians, should be incorporated wherever practicable, and the environmental document should discuss avoidance and minimization measures considered. Relocation of streams should be avoided. All stormwater facilities should be located outside of jurisdictional areas.

Options for compensating for unavoidable impacts to wetlands and other aquatic resources should be an early consideration. Mitigation plans must be in compliance with the 2008 EPA/Corps Final Compensatory Mitigation Rule. Currently, the Norfolk District typically requires wetland impacts to be mitigated at 2:1 for forested, 1.5:1 for scrub/shrub, and 1:1 for emergent. Typically, we require stream mitigation for unavoidable stream impacts to greater than 300 linear feet of stream at a crossing. However, we also consider the cumulative impacts to streams from a given project, and may require mitigation for shorter lengths of stream if there are many impacts in close proximity, or if there are multiple impacts to the same stream and/or its direct tributaries. We encourage natural channel design to the extent practicable for streams that must be relocated. Currently, the Norfolk District utilizes the Unified Stream Methodology for determining how much stream mitigation is required and the amount of mitigation credit that

will be granted for stream mitigation projects. Mitigation banks that include the impact areas within their geographic service areas should be identified, as well as any currently proposed banks.

In conclusion, the current EA is insufficient for the Norfolk District to make a LEDPA determination. We concur with EPA that it would be prudent to allow for a comprehensive reevaluation of the project, and a new NEPA document to address all the issues raised in this letter, as well as those that have been raised by others and are outside our purview but are subject to NEPA, and to provide an up-to-date alternatives analysis that is appropriate for a future Section 404 permit application. However, if these issues are not addressed in your final NEPA document, then we may need to prepare our own NEPA document, or adopt your document and prepare a supplement to it, once we receive an application.

Thank you for the opportunity to provide comments. If you have questions, please contact Ms. Kathy Perdue at (757) 201-7218 or Kathy.S.Perdue@usace.army.mil.

Sincerely,

for William T. Walker
Chief, Regulatory Branch