

APPENDIX E

**VDOT NARRATIVE OF CONSTRUCTION ACTIVITY DURING
JUNE 2006 FLOOD EVENT**

Narrative Summary of the Woodrow Wilson Bridge Project Status near Cameron Run on June 25, 2006

On the evening of June 25, 2006, a significant amount of precipitation fell within the Cameron Run watershed in a relatively short period of time resulting in significant flooding within the Woodrow Wilson Bridge Project Area and beyond. In June of 2006, the Woodrow Wilson Bridge (WWB) Project had two construction contracts working within the Cameron Run floodplain: VB-5 and VA-6/7.

Contract VB-5

As depicted on the submitted WWB Project "Rainbow Charts," Contract VB-5 is the first contract for the Telegraph Road interchange with I-95/495 (Capital Beltway) and is focused on utility relocation including tunneling and boring operations alongside and under Cameron Run, tributary Pikes Branch, and tributary Taylor Run. The various VB-5 work areas within the Telegraph Road interchange can be seen on the submitted WWB Project aerial photograph.

Contract VA-6/7

Also depicted on the "Rainbow Charts," Contract VA 6/7 is the last in a series of VDOT construction contracts completing the reconstruction of the US Route 1 interchange with I-95/495 (Capital Beltway). VA-6/7 activities can be seen on the submitted WWB aerial photograph including US Route 1 construction in and adjacent to Cameron Run. Reconstruction of this interchange was approximately 61% complete in late June. Accordingly, as of June of 2006 some new structure was in place, some pre-existing structure was in place, and some pre-existing structure had been removed, as depicted on Project aerial photographs. The following elements were identified in the July 6, 2006, agency coordination meeting as specific elements in and immediately adjacent to Cameron Run in late June within the US 1 interchange and the following dimensions were requested:

- 40'x40' Material barge drawing 1 foot of water;
- 30'x40' Material barge drawing 1 foot of water;
- 60'x80' Crane Barge + 10'x40' ballast barge with 100-ton crane drawing 2' of water;
- 17'x68' steel cofferdam for new US Route 1 bridge foundation in Cameron Run. Tops of steel sheets were approximately 10' above the Cameron Run stream bottom.
- 30'Lx80'Wx15'H (approximate dimensions) dirt stockpile located on north bank of Cameron Run just west of existing US 1. The base of the stockpile was 3'-4' above the mean high water level. It should be noted that the silt fence around this stockpile was only slightly damaged and the stockpile appeared intact after the storm.

Others notes:

-In accordance with regulatory permits, temporary stone causeways were in place in June and are visible on the Project aerials in the southwest quadrant of the US 1 interchange. They are temporary and will be fully removed once construction is complete.

-As can also be seen on the Project aerial photographs, two other soil stockpiles are located along Cameron Run: one south of Cameron Run and west of Telegraph Road near Burgundy Road and one north of Cameron Run, south of the beltway, and west of the WMATA rail bridge. Both are on relatively high banks above Cameron Run and are surrounded by super silt fence. While the perimeter controls were damaged there was no evidence observed indicating that flows removed stockpiled material.

-Temporary fills in the 100-year floodplain, temporary causeways, and temporary trestles were permitted by Project permits and required for access to build the VA-5 "Advanced Bridge" Contract (depicted on the "Rainbow Chart"). All of these elements were removed and restored prior to June 2006 in a concerted effort to maintain the floodplain cross-sections in the Project models.

June 25 Storm Event

While cross-section and high water survey points were submitted by the Project under separate cover, the following are visual observations and situations experienced by Project personnel:

At approximately 10:30pm on June 25, an Environmental Inspector for the Project made observations of severe flooding in the Project area associated with Cameron Run and the tributary Pikes Branch. Also, at approximately 11:00pm on June 25, Cameron Run overtopped Interstate 95/495 just west of the Telegraph Road interchange, closing the highway until 7:00am the following morning. Debris in the glare shields in the median of I-95 indicated flows approximately five feet deep over the beltway. Debris, including large trees and upwards of 5 feet of mud covered the beltway, requiring hours of emergency operations to reopen I-95/495. The outside bank of the sharp meander in Cameron Run just upstream of the beltway bridge was overtopped, flooding the lower levels of the building adjacent to Cameron Run. Water marks and significant debris piles indicate the flow continued due east and north of the beltway and ramps to a topographical low point under the Eisenhower Avenue Bridge adjacent to Telegraph Road. Multiple floating cars were deposited at this point.

Visual evidence indicates that the flow did not overtop the Telegraph Road bridge over Cameron Run but did flow around the bridge, flooding the intersection with Huntington Avenue. Telegraph Road between Cameron Run and the Eisenhower Avenue bridge exhibited signs of inundation. The flooding south of Cameron Run near Telegraph Road was exaggerated by Pike's Branch flooding just to the west which overtopped Burgundy Road. The flows significantly scoured a 55'x30' steel cofferdam located on the south bank of Cameron Run just east of Telegraph Road. This cofferdam was basically idle at the time of the flood but was intended to function as a receiving/launching pit for an ongoing microtunneling operation to the north, as part of the VB-5 contract.

At the US 1 interchange, visual observations at approximately 10:30pm on June 25 indicate both high water levels and high velocities in the main Cameron Run channel under the US 1 bridge. Flooding extended back to the Fort Hunt Road intersection to the south and generally to the beltway toe of slope to the north. The crane barge noted above was spudded down with 40' steel spuds (steel girders positioned vertically into the stream

bed to anchor the barge in place). In spite of the anchoring, the crane barge was pushed downstream by the flood flow and against the ramp bridge from US 1 northbound to I-95/495 outer loop (northbound) causing some damage to the first 24"x24" pre-cast concrete pile in that particular bent (row) of piles. At some point during the storm the 40'x40' material barge (also noted above) broke loose from the crane barge and floated downstream. At 6am on June 26, a Project manager observed the material barge located at the South Washington Street (George Washington Memorial Parkway) stone arch bridge over Cameron Run/Hunting Creek. This bridge is basically located at the mouth of Cameron Run/Hunting Creek at the confluence with the Potomac River. Divers, cranes, and crews worked to raise the partially sunken barge and float it back to the work area by Thursday, June 29, in spite of continued heavy rains and elevated flows. No damage to the bridge was observed by VDOT and FHWA bridge experts. This bridge has three arches, with the center arch being the largest and located in the deepest water. The barge was partially blocking a portion of the smaller southern arch. It was estimated that the barge may have blocked approximately 15% of the total capacity of the arch bridge flow capacity. There was no visual evidence of blockages of any sort within or around the other two arches.

Other notes:

- An overturned vehicle is visually evident on the downstream side of the arch bridge, which apparently floated downstream and through the arch bridge during the flood.
- During the days of subsequent rains and storms beyond June 25, flows remained elevated within Cameron Run but the Project did not observe subsequent overtopping of Cameron Run stream banks within the Project area.
- The Potomac River crested on or about June 28 but the actual Wilson Bridge construction contracts in Jones Point Park were not affected. They were heavily damaged by storm surge and high tides associated with Tropical Storm Isabel.