

**ROLE OF THE FHWA NDE CENTER**  
**SHRP 2 PROJECT R06-A**  
**Nondestructive Testing to Identify Bridge Deck Deterioration**

As stated in the RFP: **Special Note 1:**

The Federal Highway Administration (FHWA) Nondestructive (NDE) Center at Turner Fairbanks Highway Research Center may have test beds feasible for use in this research. For more information about the FHWA NDE Center, please contact Mr. Frank Jalinoos at (202) 493-3082 or [frank.jalinoos@fhwa.dot.gov](mailto:frank.jalinoos@fhwa.dot.gov).

The FHWA NDE Center (“Center”) (web: <http://www.tfhrc.gov/hnr20/nde/home.htm>) maintains a strong interest in the problem of detecting corrosion and imaging delamination in concrete bridge decks. The information below is meant to clarify the Center’s capabilities and availability for those proposers interested:

- The Center can share its specialized NDE systems with any offeror based on availability and if all surveying costs (operation/maintenance/data analyses) are covered solely by an offeror. If an offeror has an ongoing research project with the Center in this application, their proposal does not constitute a conflict of interest for the Center as the Center is not involved in the source selection process of SHRP 2 contract awards. All offerors will be treated on an equal basis.
- If requested, the Center can provide access to concrete test samples if they are not in use as part of ongoing research by the Center (post-awards).
- The Center has in the past used two local bridges for detecting delaminations in concrete bridge deck studies. For detailed bridge description, please refer to Appendix A. The two bridge sites include: 1) the “Van Buren Bridge,” located near the town of Dumfries, Virginia; and 2) the “Carter Creek Bridge,” located near the town of Irvington, VA. At both these bridge sites, the Center has obtained several multi-sensor datasets including GPR (pulsed and step-frequency), impact echo, infrared thermography, half-cell potential, and chain drag. If requested, the Center can furnish these dataset results to the SHRP 2 contractor (post award). Please note that both bridge sites are owned by Virginia Department of Transportation (VDOT); and access requirements, scheduling, and traffic control must be coordinated with VDOT (post award). Both bridges require traffic control for testing purposes.
- If field testing is specified, the Center may elect to be present during testing as an observer. The Center is not allowed to provide direct support during field testing. The Center can provide on-demand support for data processing or data interpretation, if requested.

As stated in Special Note 1 of the RFP, this statement does not imply endorsement by the National Academies or SHRP 2 of this or any specific facility. Please note that testing at the sites used by the Center is not mandatory or advantageous to the selection process, and the offerors can propose any field or laboratory test sites of their choosing as described in the RFP.

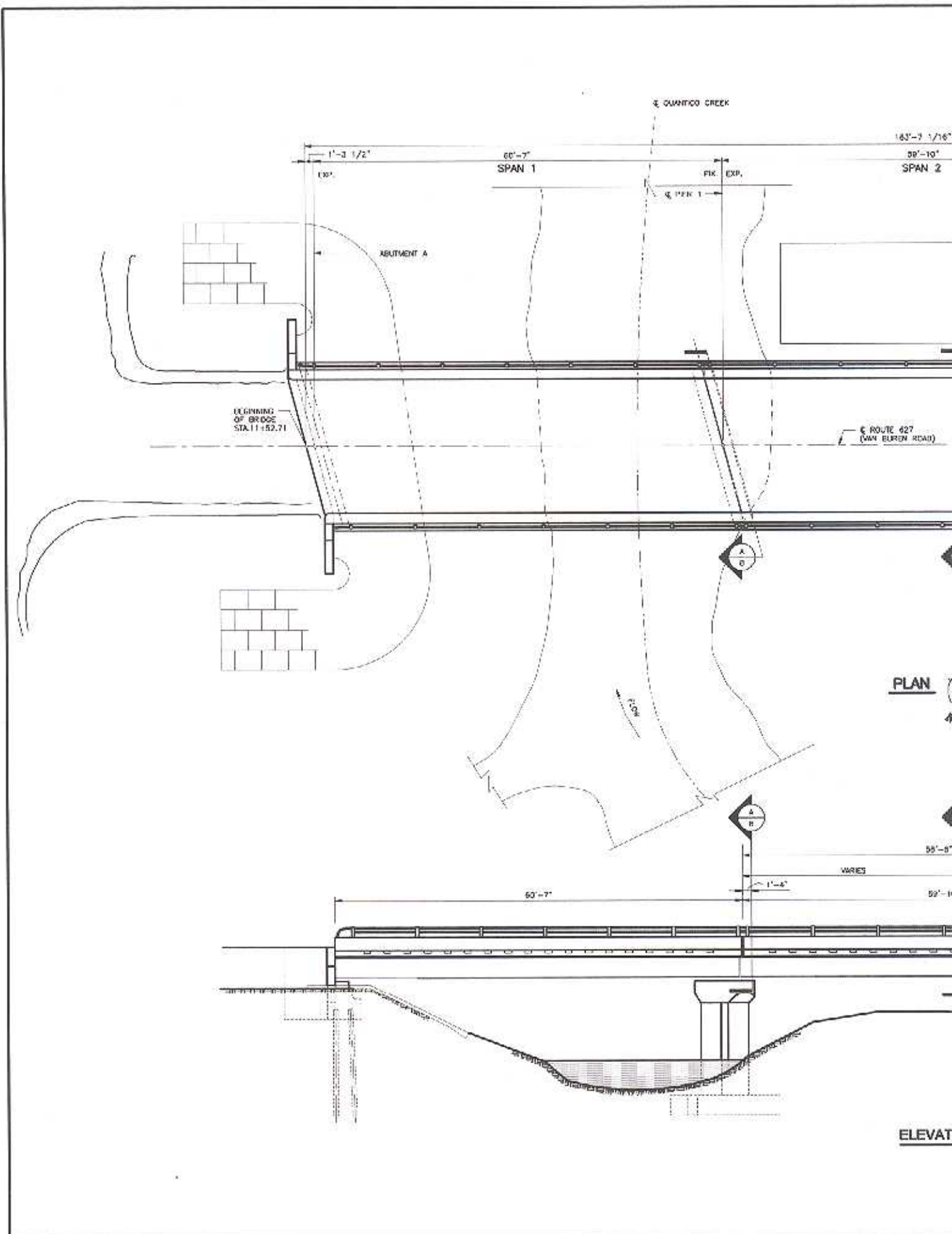
**APPENDIX A –  
VIRGINIA TEST BRIDGES**

## **VAN BUREN BRIDGE**

Structure # 609 crosses Quantico Creek, Prince Williams County, near the town of Dumfries, Virginia. The Van Buren Bridge consists of three steel beam spans with a bare concrete deck. The bridge was built in 1963 and it experiences low traffic volumes.







QUANTICO CREEK

143'-7 1/16"  
59'-10"  
SPAN 2

1'-3 1/2"  
90°

60'-7"  
SPAN 1

FIX. EXP.

ABUTMENT A

BEGINNING  
OF BRIDGE  
STA 11+52.71

ROUTE 427  
(VAN BUREN ROAD)

PLAN

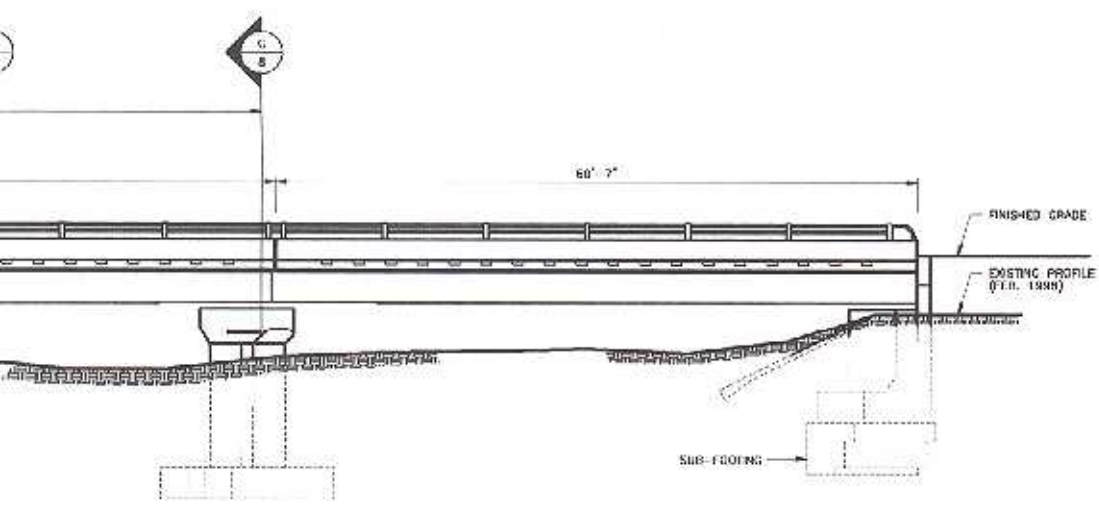
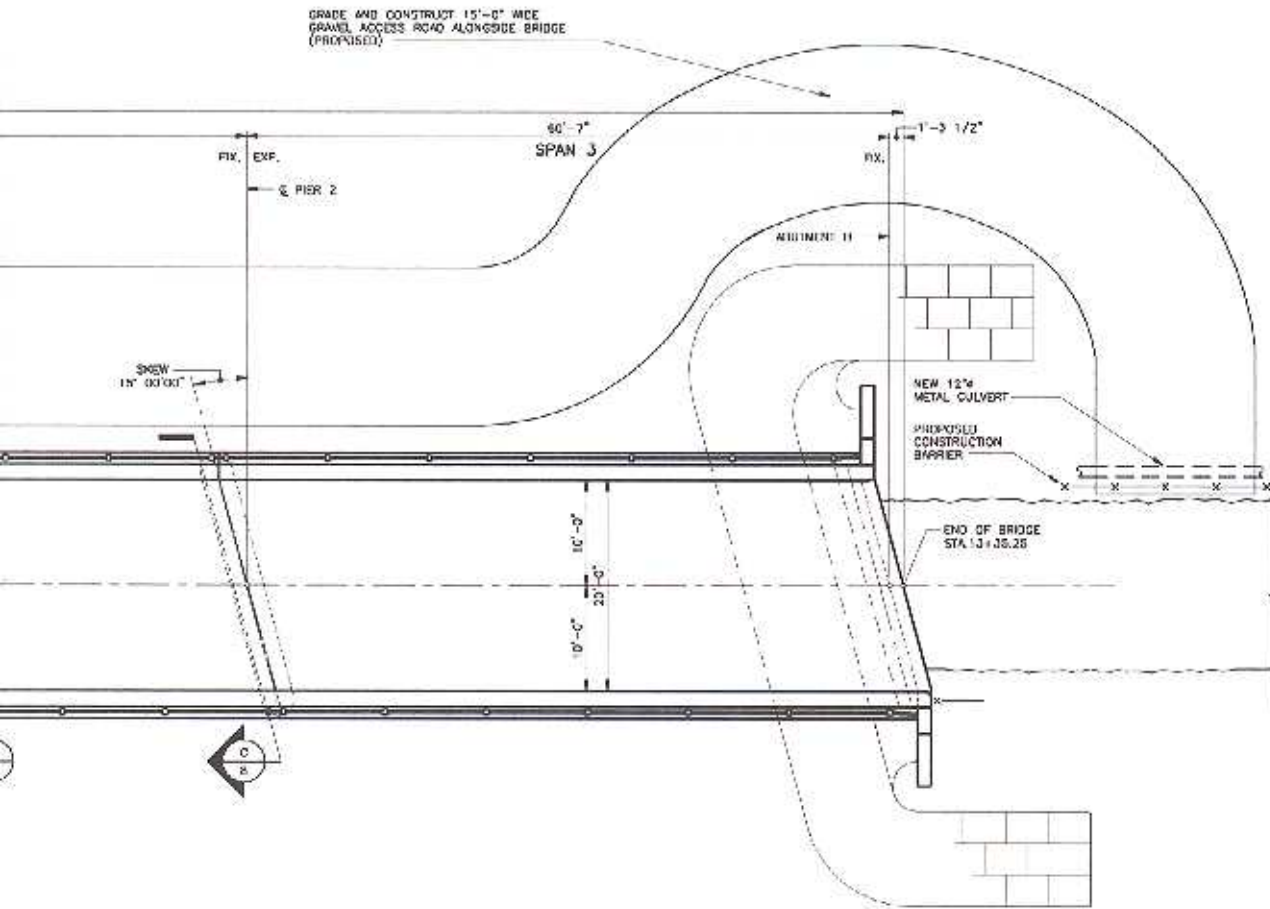
59'-8"

VARIES

60'-7"

1'-6"

ELEVATION



Engineers, Architects, Material Scientists (703) 641-6801 Fax: (703) 641-6822	Engineers, Architects, Material Scientists (703) 641-6801 Fax: (703) 641-6822	MADE BY	CHECKED BY
PROJECT: <b>NIDE VALIDATION CENTER FEDERAL HIGHWAY ADMINISTRATION 6300 Georgetown Pike McLean, Virginia</b>	PROJECT: <b>NIDE VALIDATION CENTER FEDERAL HIGHWAY ADMINISTRATION 6300 Georgetown Pike McLean, Virginia</b>	REVISION RECORD	
DATE	DATE		
REV. NO.	REV. NO.		
Miss, Jarney, Elstner Associates, Inc. 3025 Hamaker Court, Suite 100, Fairfax, VA 22031	Miss, Jarney, Elstner Associates, Inc. 3025 Hamaker Court, Suite 100, Fairfax, VA 22031		
DRAWING TITLE: <b>PLAN AND ELEVATION VAN BUREN ROAD BRIDGE</b>	DRAWING TITLE: <b>PLAN AND ELEVATION VAN BUREN ROAD BRIDGE</b>		
<b>WJE</b>			
DATE: 3/20/1988	DATE: 3/20/1988		
DRAWN BY: BSB	DRAWN BY: BSB		
CHECKED BY: RW	CHECKED BY: RW		
SCALE: AS SHOWN	SCALE: AS SHOWN		
PROJECT NO: 981387	PROJECT NO: 981387		
SHEET:	SHEET:		
<b>7</b>			



## **CARTER CREEK BRIDGE**

Structure #1011 crosses Carter Creek at Route 200 (west of Route 3), Lancaster County, near the town of Irvington, Virginia. Carter Creek Bridge is 288 ft in length and consists of 5 spans using steel beam construction and a bare concrete deck. The bridge experiences moderate traffic (6,500 cars a day).



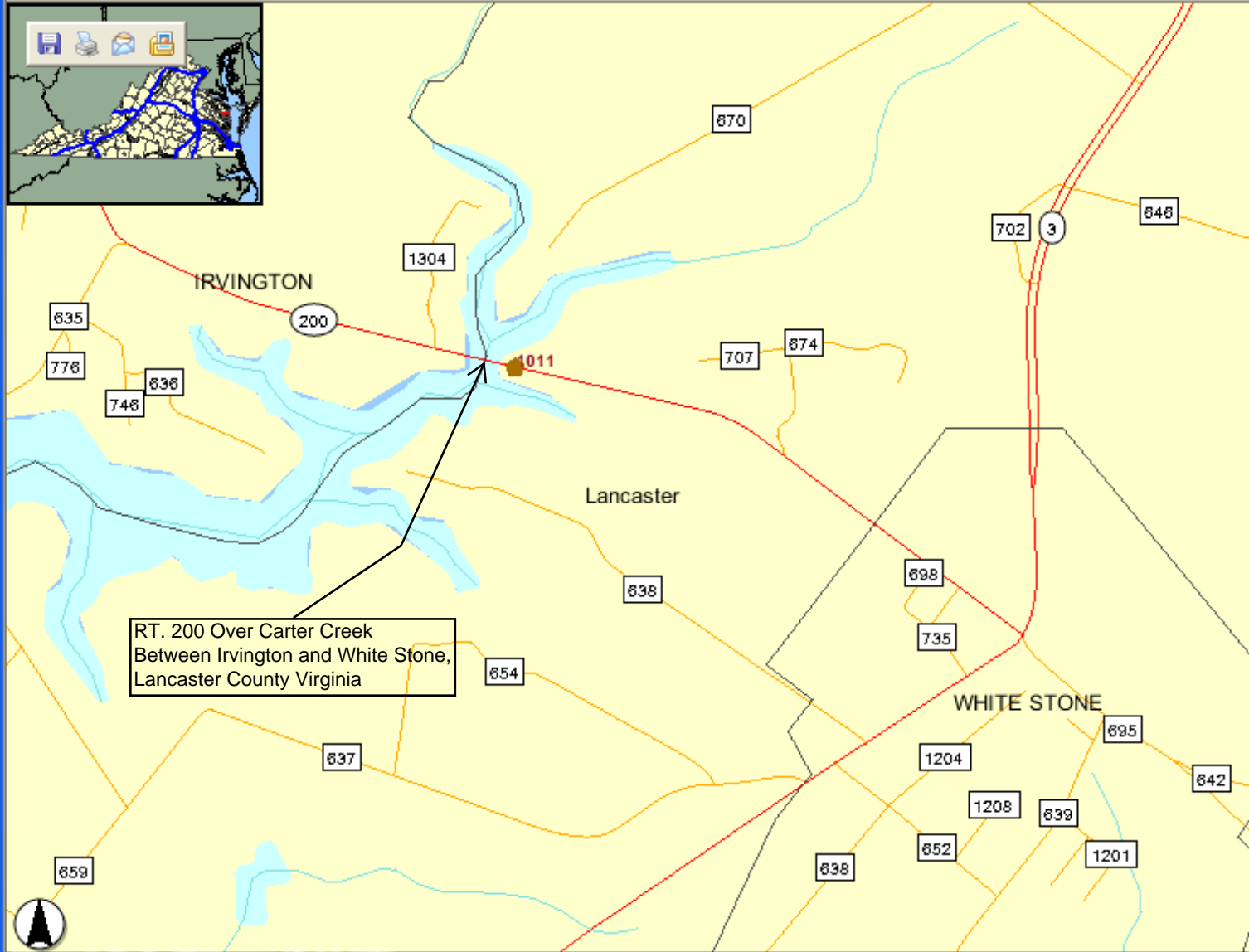
Active Tool Zoom Out

Toolbox



Map Scale

1:18,158



RT. 200 Over Carter Creek  
Between Irvington and White Stone,  
Lancaster County Virginia

refresh map

Visible Active

- Roadway Inventory**
  - Cultural Items
  - HPM Sample Sections
  - HTRIS Routes
  - Road Characteristics
  - Right-of-Way
  - Road Type
- Business Data**
  - Accidents
  - Nodes
  - Pavement
  - Projects
  - Railroad Crossings
  - Speedzone TMS
  - Street Aliases
  - Structures
  - Traffic Controls
  - Traffic Count
- Base Map**
  - Jurisdictions
  - VDOT Districts
  - VDOT Residencies
  - VDOT Area Headquarters
  - Quad Grid

Layer List Help:

- An active layer.
- An inactive layer.
- A visible layer.
- A hidden layer.
- A partially visible group.
- A layer not visible at this scale.
- A hyperlink layer.

Map created by the GIS Program, Virginia DOT.

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