Evaluation of Strengthening/Replacement Alternatives
John G. Lewis Memorial Bridge on Route 673
(Featherbed Lane) over Catoctin Creek

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Vicente Valeza, P.E.
NOVA District Senior Structural Engineer
(703) 259–3256
Vicente.Valeza@vdot.virginia.gov

Link to the project webpage:
http://www.virginiadot.org/projects/northernvirginia/route_673_over_catoctin_creek.asp
Alternative 7

Features

• Replace existing Pratt thru truss bridge with a new through truss bridge similar in appearance
  • Will carry one reversible lane
  • Designed for AASHTO LRFD HL-93 loading
  • Increases horizontal clearance between the bridge railings from 11’-2” to 14’
  • Crash tested bridge safety railing
  • Timber Glu-lam Deck

• New Abutments

• Estimated Cost $3.0M to $4.0M
Alternative 7  New Single Lane Steel Thru Truss Bridge
Alternative 7 – Roadway Plan

- Existing Entrance
- Guardrail on Each Approach Replaced per Current Standards
- Tar and Chip Treatment at Bridge Approaches
- Reconstructed Gravel Roadway East and West of Bridge
- Existing 30' Prescriptive Right-of-Way
- New Single Lane Steel Truss Bridge
- Route 673 (Featherbed Lane)
- Existing Culvert Over Tributary to Catoctin Creek
- New Gravel Roadway
- Tar/chip Treatment
- New Guardrail
Proposed Detour Route (orange) utilizes larger paved roads; however, alternate routes will not be prohibited.
Highlights:

Listed in the National Registry of Historic Places and in Virginia Landmarks Registry.

Built in 1898, the capacity was recently reduced to a 4 ton weight limit posting.

It was decided to close the bridge for safety reasons (non-redundant design can lead to instantaneous collapse, no emergency responder vehicle access).

In order to keep the bridge at the current location, the County decided to repurpose the one-lane Truss Bridge as a pedestrian bridge. A new parallel 2-lane bridge was constructed to carry traffic (4-spans, prestressed box beams with concrete overlay, 136 ft long x 32 ft wide).

The project maintains the old historic truss bridge in its current setting and provides a new bridge to meet current and future traffic needs.