



UPC 110498
Rehabilitation of John G. Lewis Memorial Bridge over
Catoctin Creek, Loudoun County, VA

Scoping Meeting

March 8, 2017

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Link to the project webpage:

http://www.virginiadot.org/projects/northernvirginia/route_673_over_catoctin_creek.asp

Project Background



Existing Bridge

Project Background cont'd

John G. Lewis Memorial Bridge (Route 673 - Featherbed Lane) over Catoctin Creek:

- Single span steel pin connected Pratt through truss with a timber deck and asphalt overlay, supported on stringers and floor beams.
- It is 157 feet long, 14 feet wide, 11 feet 2 inches face-to-face of rails, and carries one alternating traffic lane.
- Originally erected in 1889 on the Leesburg & Alexandria Turnpike (Route 7) over Goose Creek.
- In 1932 the bridge was dismantled and moved to its current location.
- The bridge was posted 15 tons in 2004 and reduced to 3 tons in 2013 due to insufficient capacity.
- The existing bridge has an average traffic count of 60 vehicles per day with daily truck traffic less than 3 trucks in 2015.
- The bridge was posted in the National Register of Historic Places on June 25, 1974.



Selected Alternative 2A

New Two/Three-Span Continuous Steel Beam Bridge with Existing Truss Members Attached



Virginia Department of Transportation

John G. Lewis Memorial Bridge over Catoctin Creek

ALTERNATIVE 2A - Two Span Continuous Steel Beam and Timber Deck Bridge with Existing Truss Members Attached. Maintain Existing Bridge Width



Selected Alternative 2A

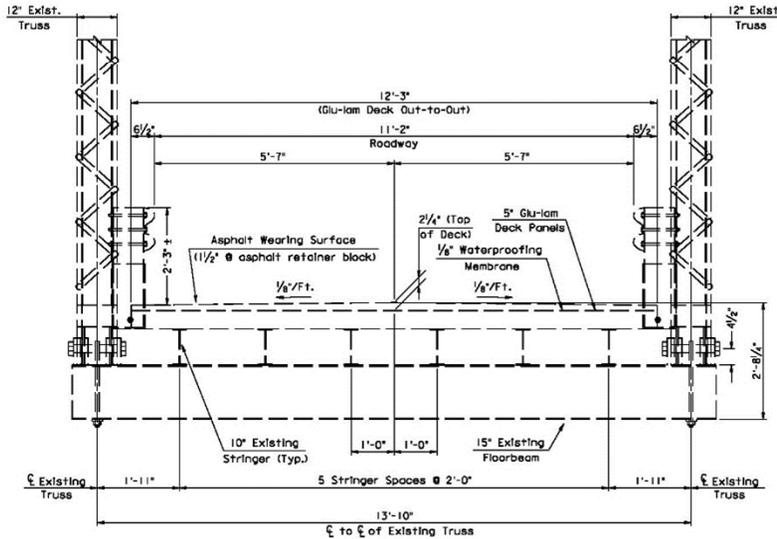
Features

Construct new bridge under the existing truss with new two/three-span continuous steel beams and glu-lam timber deck

- **Mount existing truss, supported by new abutments, above the new bridge to maintain the appearance of the existing truss bridge**
- **Will evaluate 2-span and 3-span arrangements to minimize beam depth to maintain the appearance of the existing truss bridge**
- **Provide one-lane bridge (10'-6" clear width) for alternating traffic**
- **New substructures and steel beams designed for at least 15-ton vehicular loading**
- **New bridge pier(s) and abutments will have drystack faux-stone architectural treatment with a color scheme that matches the existing bridge abutments**

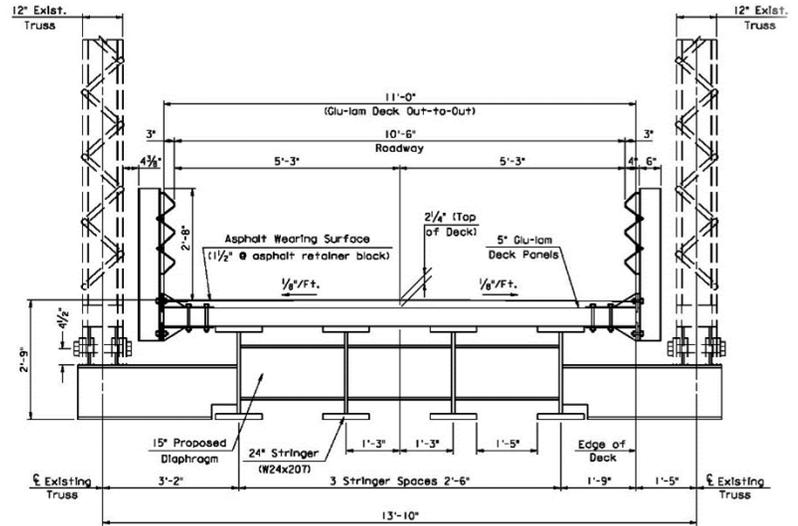
Selected Alternative 2A

Transverse Section



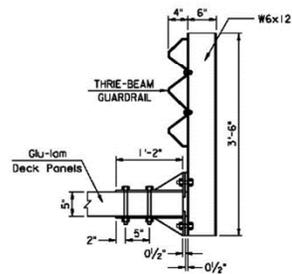
EXISTING STRUCTURE - TRANSVERSE SECTION

Scale: 3/8" = 1'-0"



PROPOSED STRUCTURE (W24x207) - TRANSVERSE SECTION

Scale: 3/8" = 1'-0"

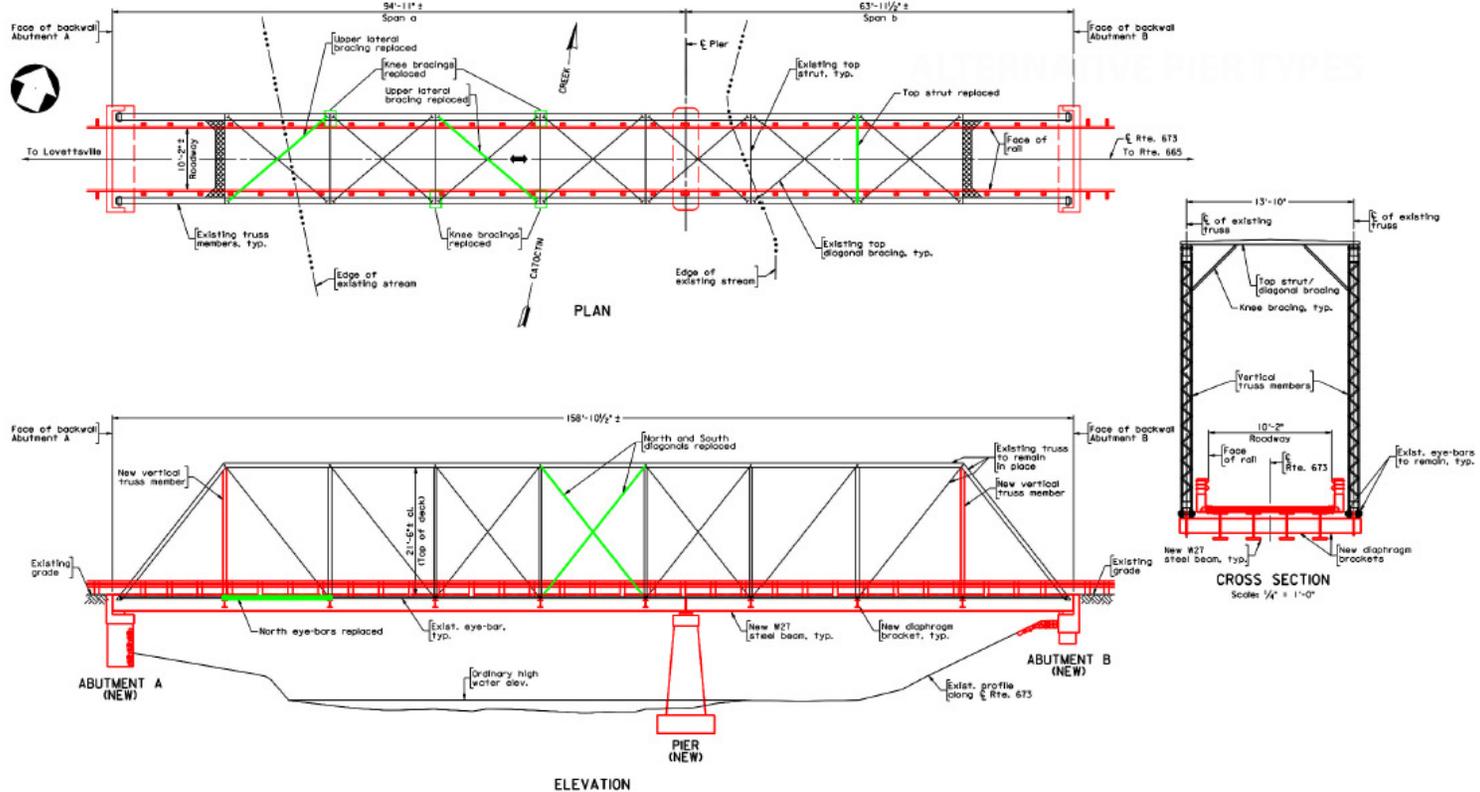


PROPOSED POST/RAILING

Scale: 1" = 1'-0"

Alternative 2A – Offset Pier

John G. Lewis Memorial Bridge over Catoctin Creek ALTERNATIVE 2A - Graphical Drawing of bridge with Offset pier



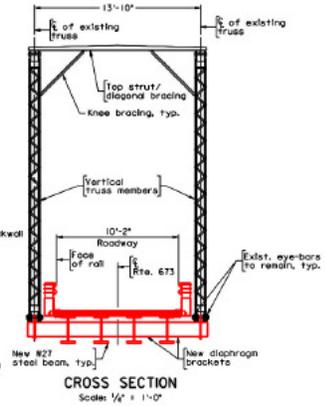
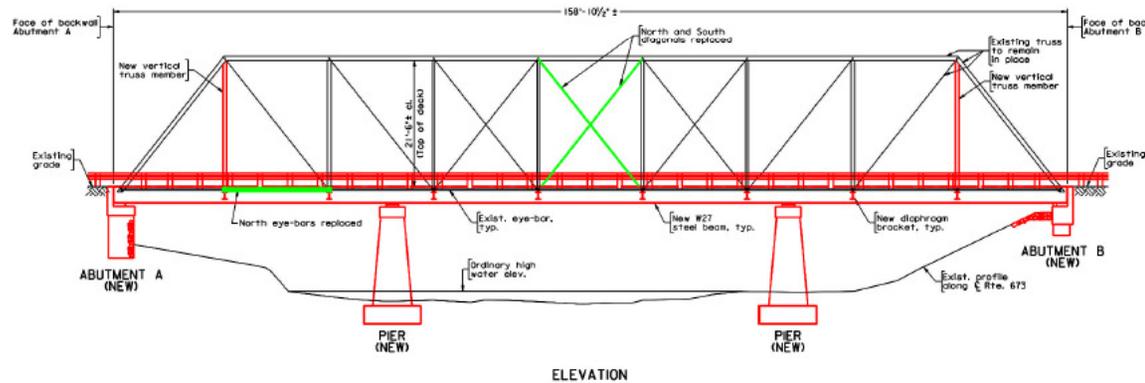
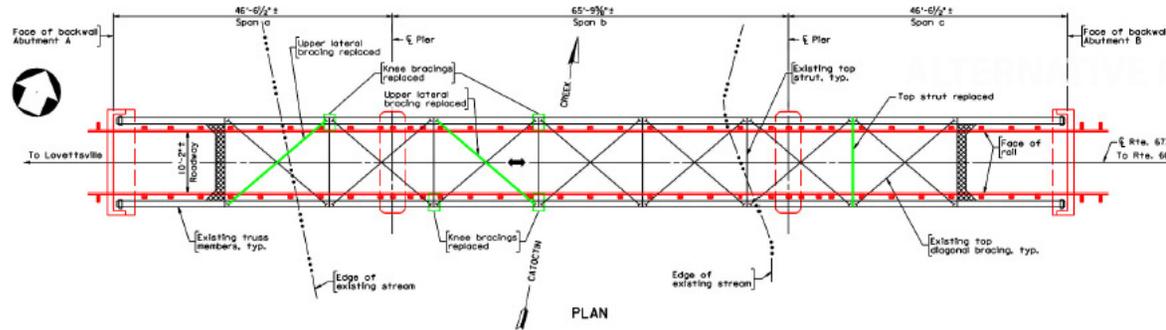
Legend:
 — Original 1889 Members
 — Members replaced since original construction
 — Proposed new or replaced members

PARSONS BRINCKERHOFF
 HERNDON, VA

Scale: 1/8" = 1'-0" unless otherwise noted

VDOT REGION IV NORTHERN VIRGINIA DISTRICT
 LOUDOUN COUNTY VIRGINIA
 PROJECT NO. 0673-076-6051
 ROUTE 673 (FEATHERBED LA.) OVER CATOCTIN CREEK
 ALTERNATIVE - 2A
 STEEL BEAM WITH TIMBER DECK,
 EXISTING TRUSS AND
 OFFSET PIER

Alternative 2A – Two Piers



- Legend:**
- Original 1889 Members
 - Members replaced since original construction
 - Proposed new or replaced members

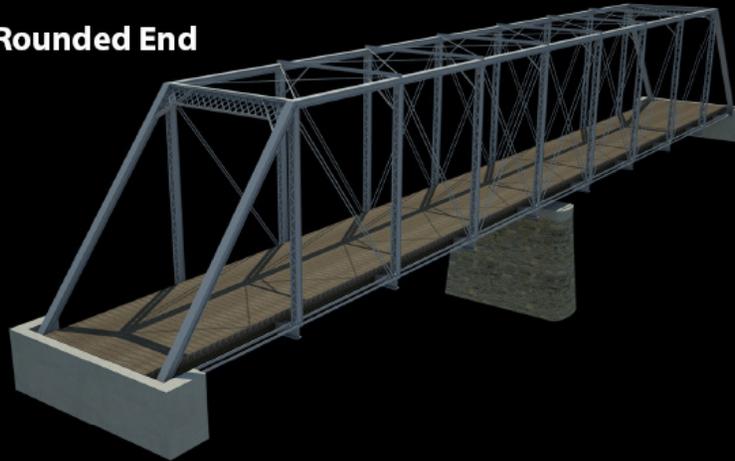
PARSONS BRINCKERHOFF
HERNDON, VA

Scale: 1/8" = 1'-0" unless otherwise noted

VDOT REGION IV NORTHERN VIRGINIA DISTRICT
LUXEMBOURG COUNTY, VIRGINIA
PROJECT NO. 0673-076-6051
ROUTE 673 (FEATHERBED LA.) OVER CATOCTIN CREEK
ALTERNATIVE - 2A
STEEL BEAM WITH TIMBER DECK,
EXISTING TRUSS AND
TWO PIERS

Alternative Pier Types

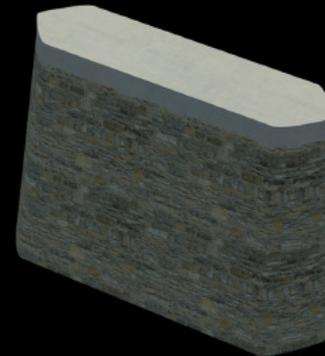
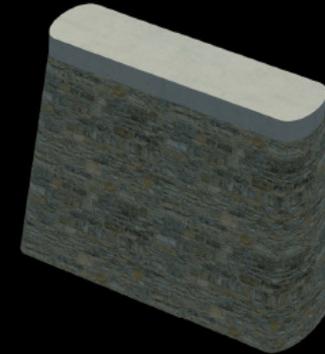
Rounded End



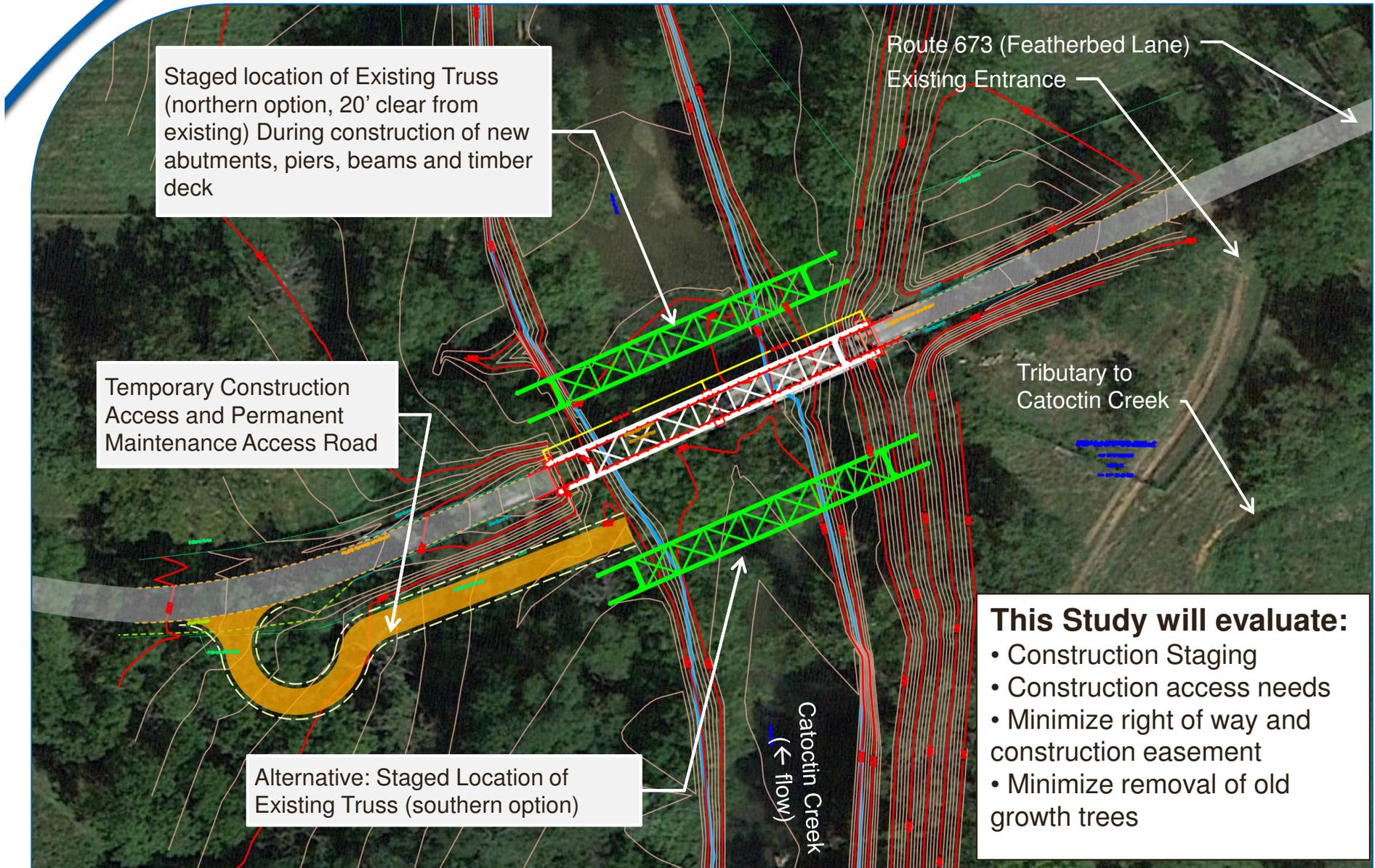
Ice Breaker End



ALTERNATIVE PIER TYPES

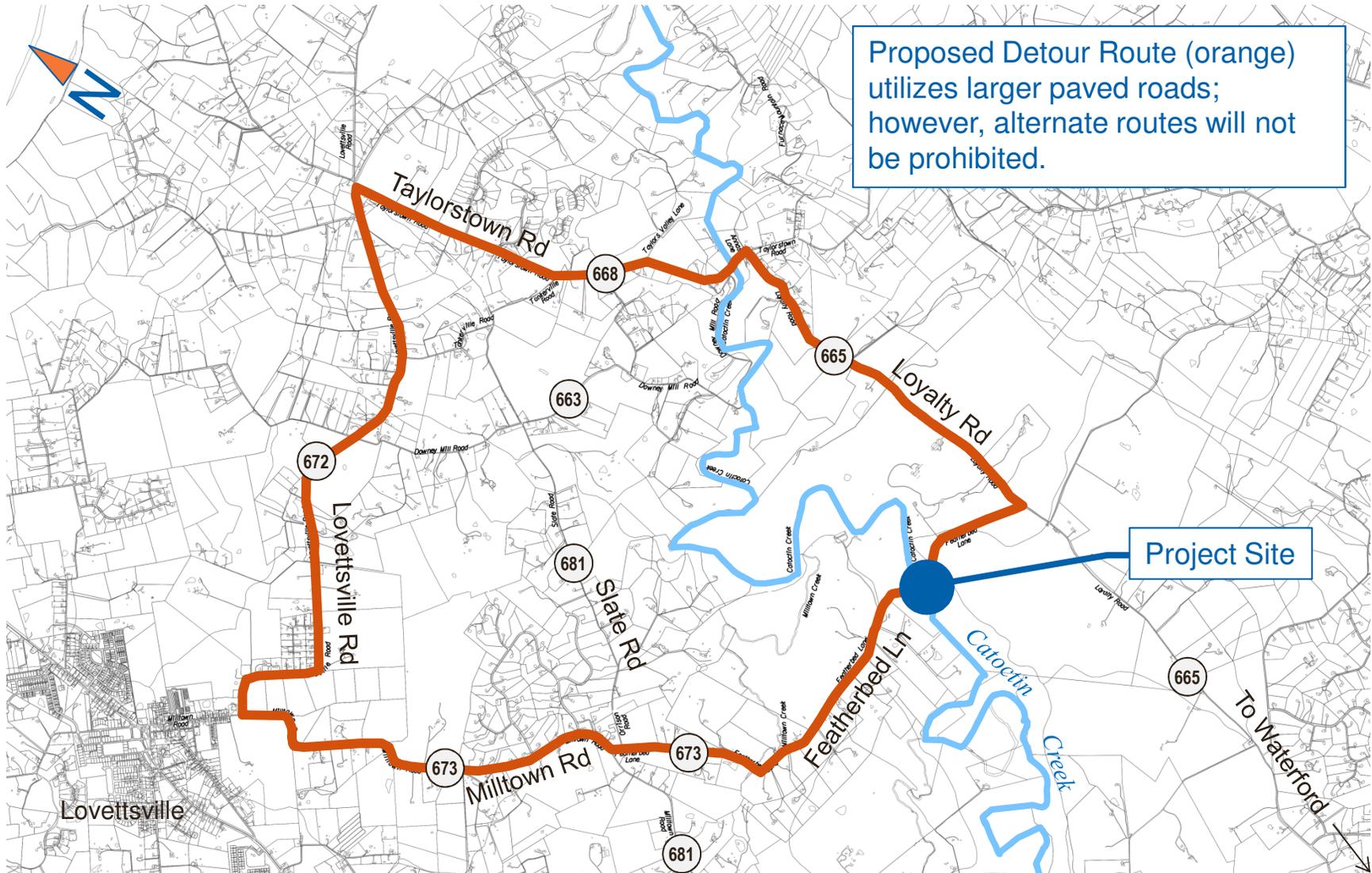


Construction Staging and Maintenance Access



Detour Route

Featherbed Lane will be closed at the Bridge during construction



Project Schedule

- **Public Hearing Nov. 01, 2018**
- **Right-of-Way Feb. 27, 2020**
- **PAC Meeting Oct. 22, 2020**
- **Ad Date Feb. 09, 2021**

QUESTIONS