

Middlebury RS 0174(8) Preferred Alternative Meeting

VT 125 – Bridge #13 over Middlebury River
August 6, 2012



■ Presented to
Town of Middlebury

■ Presented by
VTrans & VHB





Introductions:

Jennifer Fitch

VTrans Project Manager

Greg Goodrich

Lead Engineer

VHB

Erin Parizo

Project Engineer

VHB





Meeting Overview

- Preferred Alternative Meeting Purpose
- Project Development Process Overview
- Public Feedback
- Project Features
- Construction Methods and Traffic Control
- Questions/Comments



Preferred Alternative Meeting Purpose

- Continued Public Outreach
- Project Status Update
- Revisit Project Concerns
- Present Preferred Bridge Alternative
- Present Key Design Features and Considerations
- Receive additional feedback from municipal officials, regulatory/resource agencies, abutting property owners, and the public in regards to the project



VTrans Project Development Process

- ✓ Phase A: Project Definition
- ***Phase B: Project Design***
- Phase C: Construction



Phase A: Project Definition

- Data Collection
- Survey and Utility Location
- Project Scoping
- Public Information Meeting (*Held on 1/25/2012*)



Phase B: Project Design Continued...

- Final Design and Construction Documents
 - Construction Plan Milestones
 - ✓ Conceptual
 - ✓ Preliminary (Submitted 6/29/2012)
 - Final (90%)
 - Contract (100%)
 - Engineering
 - Foundations, Superstructure, and Arch
 - Roadway Approach Detailing and Signage
 - Other

Phase C: Construction

- Construction of Project



Public Feedback

- Impacts to the Gorge & Recreation Hole
- Impacts to the Ironworks (Historic)
- Impacts to corridor (trees and vegetation)





Public Feedback Continued...

- Effect on Local Businesses & Residents
- Effects on Touring Public
- Emergency Services & Deliveries
- Public Safety
- Bridge Aesthetics
- Aerial Utilities and Primary Water Main



Project Features

- Existing Site and Bridge Conditions
- Future Roadway Section
- Future Roadway Alignment
- Bridge Type
- Construction Methods
- Traffic Control During Construction
- Project Milestones

Existing Site and Bridge Conditions

- Roadway: Substandard Curb-to-curb width of 20'-6"
- No Sidewalk



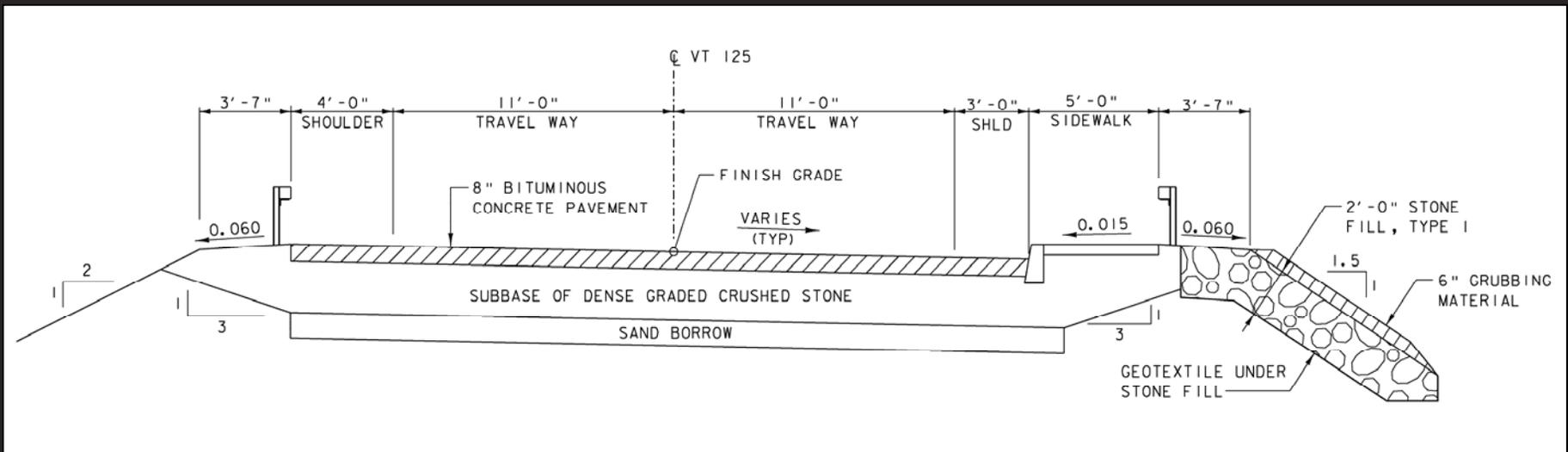
Existing Site and Bridge Conditions

- Superstructure: Arch span of 42'
- Constructed in 1924 (In Poor Condition)



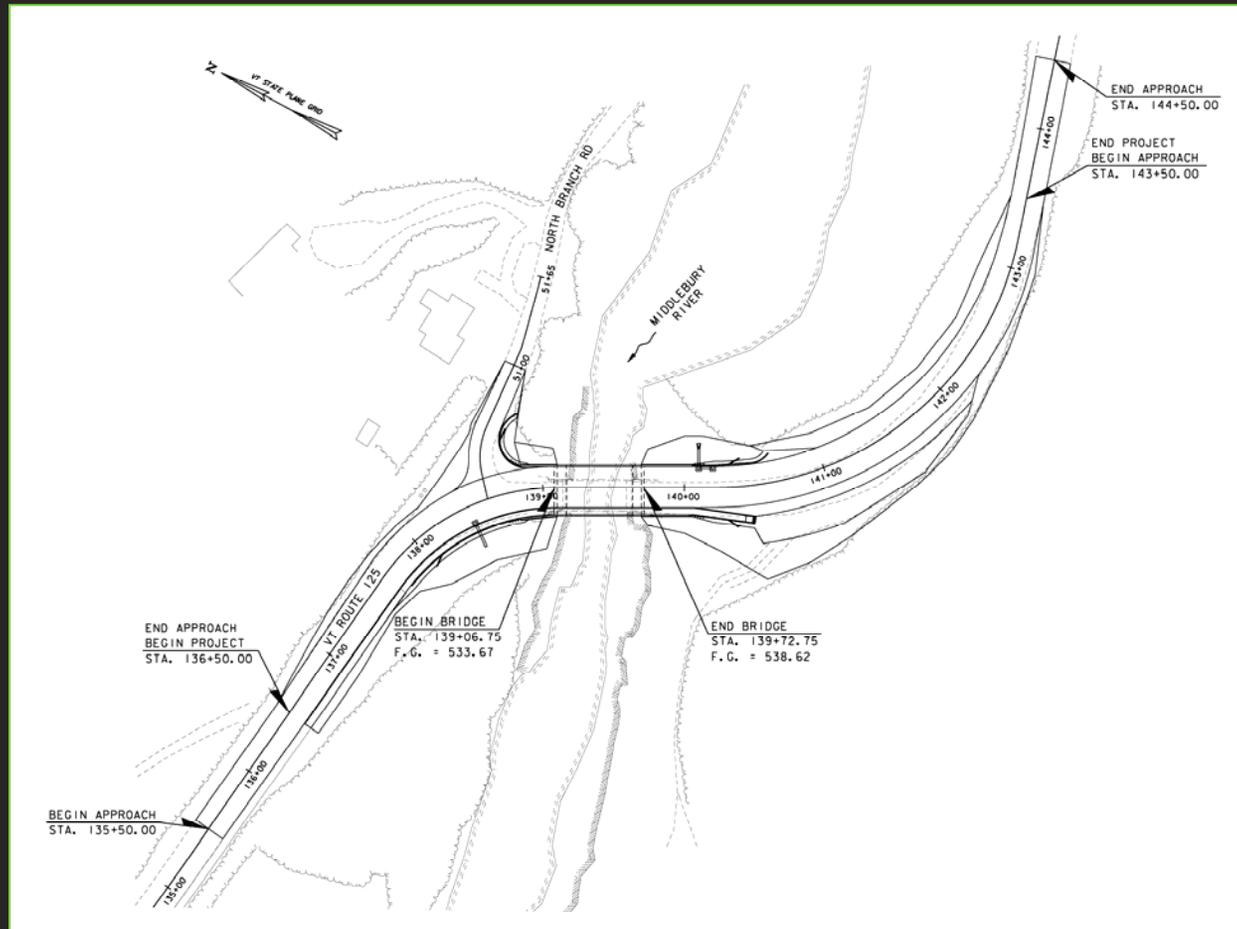


Future Roadway Section



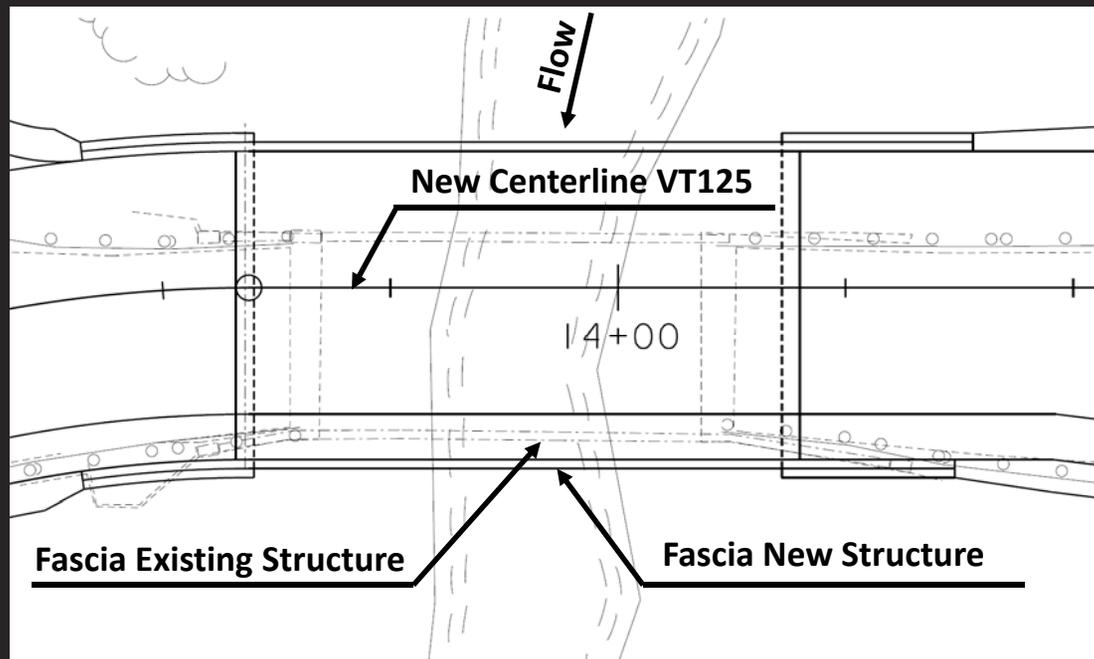


Future Roadway Alignment



Future Roadway Alignment

- *Layout over Existing Bridge*



- New Centerline VT 125 shifted East approximately 6'
- Increased Width of Structure from 24' – 6" to 36'
- Offset from existing fascia to New Fascia (3' downstream 10' Upstream)

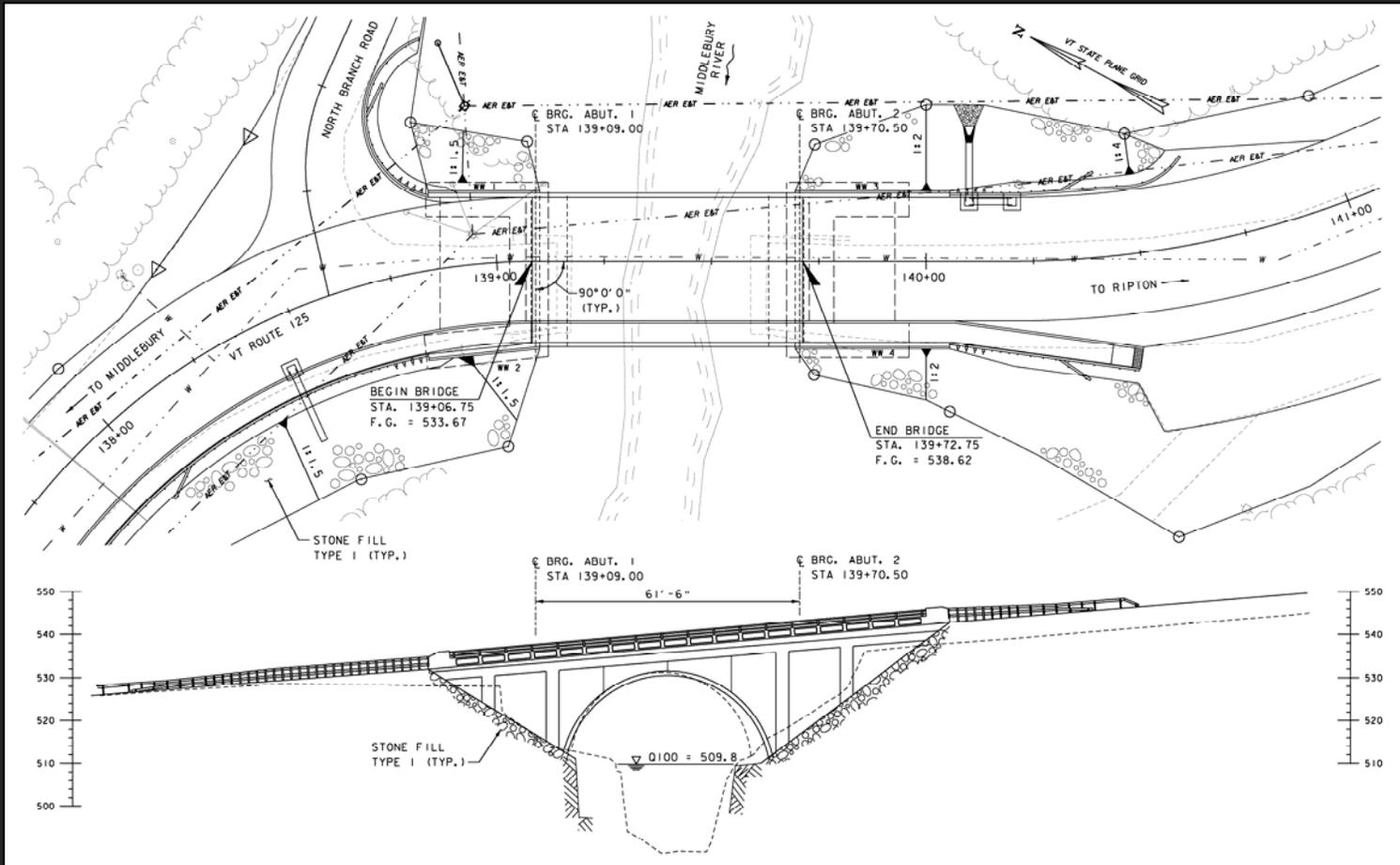


Future Roadway Alignment

- Significantly Reduced Scope - Revised Alignment
- Advantages of Revised Alignment
 - No Impacts to Recreational Resource
 - No Impacts to Archaeologically Sensitive Areas
 - Reduced Impacts to Adjacent Properties
 - Reduced Impacts to Corridor (trees and vegetation)
 - Reduced Construction Costs
 - Reduced Construction Time
 - No Impacts to Slope Along North Side of VT 125
 - Improved Drainage



Bridge Type



Precast NEXT Beam Bridge over Precast Arch

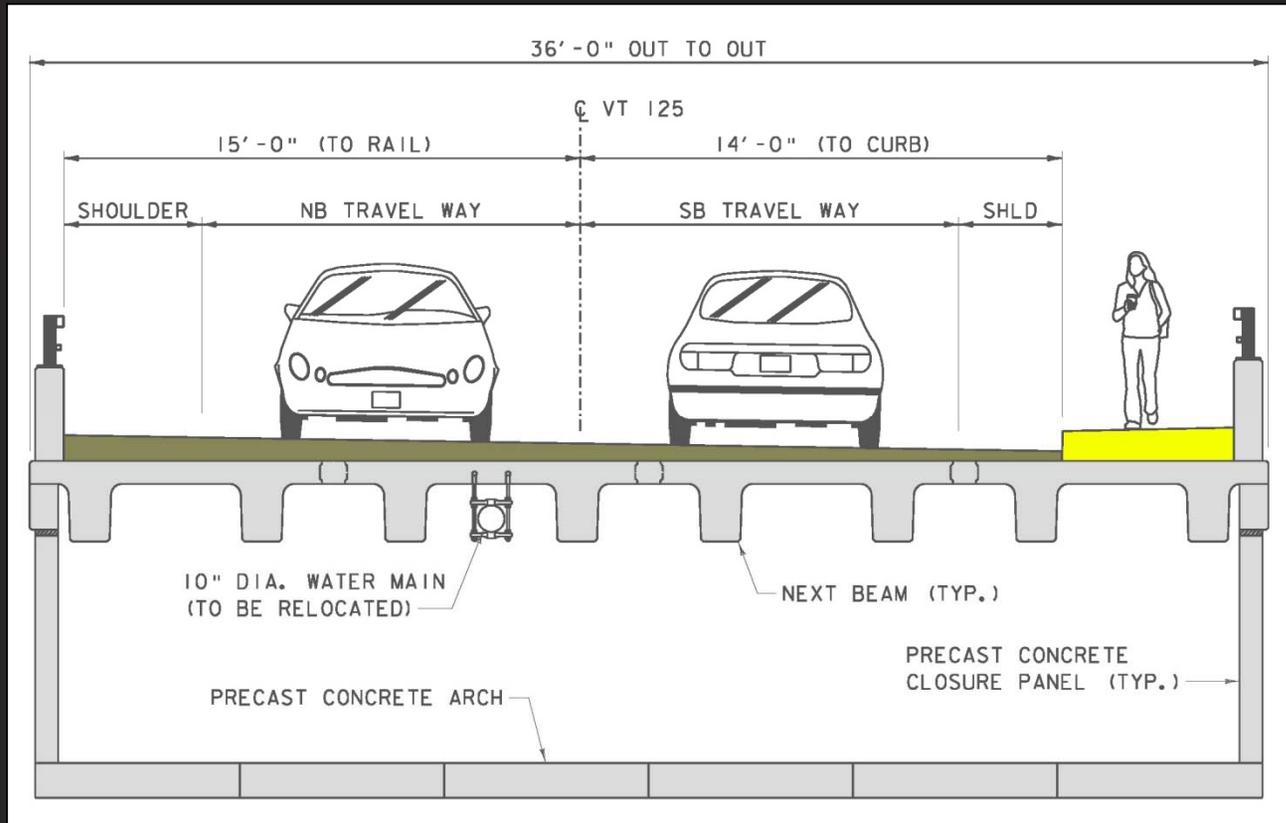




Bridge Type

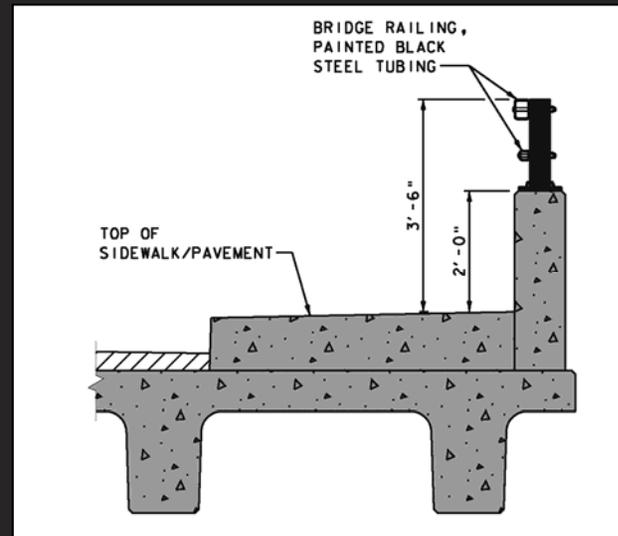
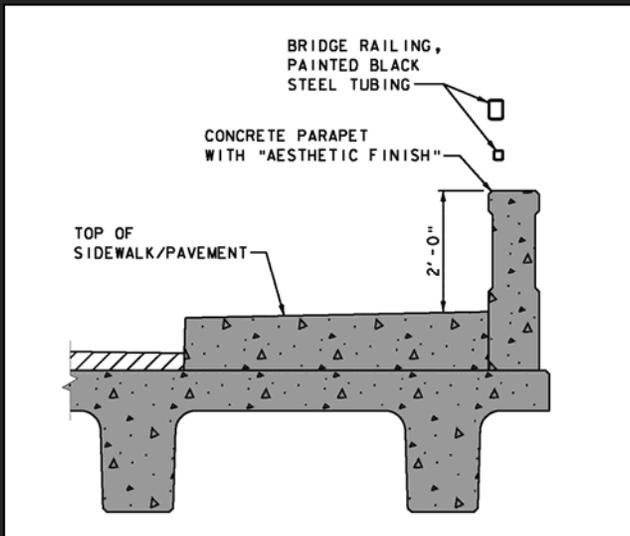
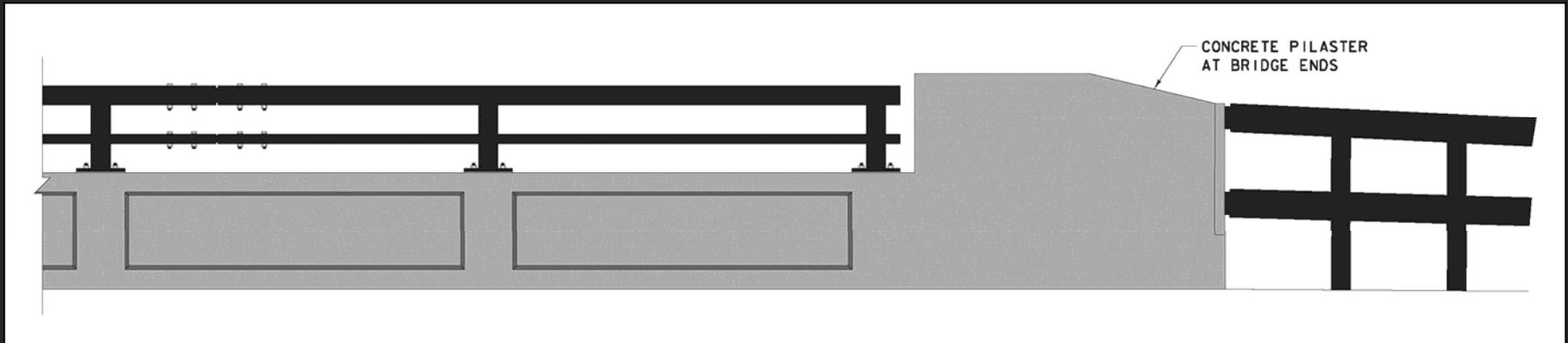
- *Precast NEXT Beam Bridge over Precast Concrete Arch*
 - Innovative Design Solution Required to Provide Desired Arch Aesthetic *and* Address Geological Concerns
 - Aesthetic Bridge Railing Upgrade

Bridge Type – Typical Section





Bridge Type - Railing

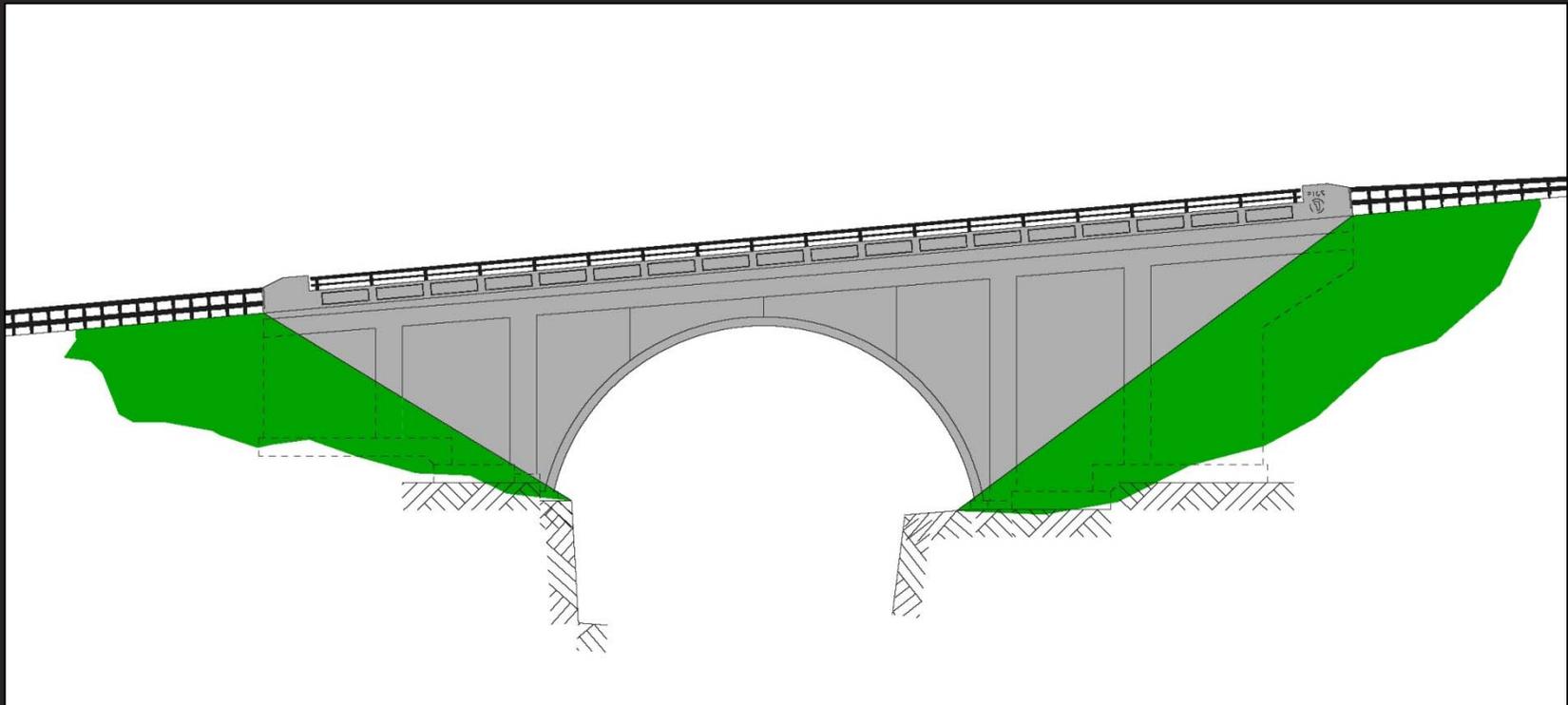


Bridge Type - Railing

- *Sample Photo: Chester Bridge 9 - Built in 2011*



Bridge Type - Elevation





Construction Methods

- Accelerated Bridge Construction (ABC)
- ~~Phased Traffic Control~~
- ~~Temporary Bridge~~

Construction Methods

- Accelerated Bridge Construction (ABC)
 - Rapid Bridge Construction Techniques & Technology
 - Incentive Driven Contract (A + B Bidding)
 - ***Bridge Construction Duration: 40 Day Road Closure***





Construction Methods

- “ABC” - Chester Bridges 8 & 9: Get In, Get Out, Stay Out!!





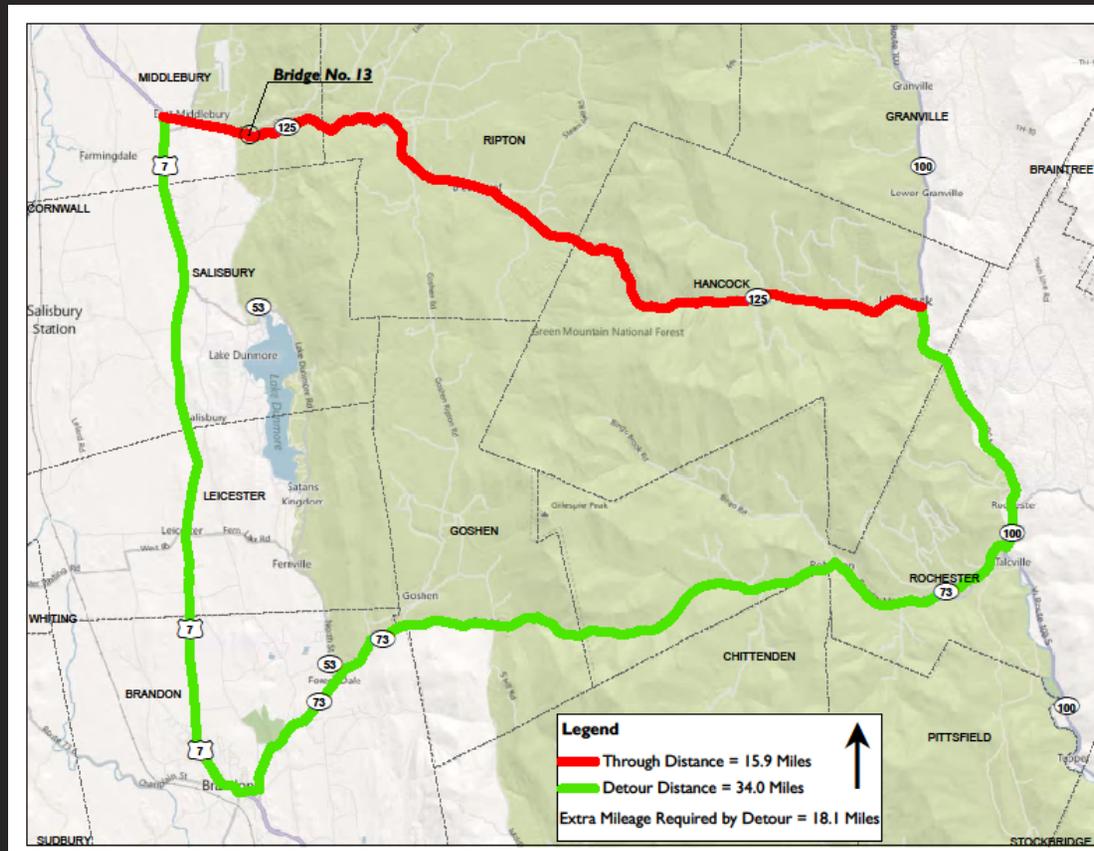
Traffic Control During Construction

- ABC Proposed – Requires Short Duration Closure
- Regional Traffic Detour
- Short Local Traffic Detour for Residents & Emergency
- Access Maintained to North Branch Road During Construction



Regional Traffic Detour

- VT 73 to US 7





Local Traffic Detour

- Local Road Usage
 - To Avoid Long Detours, Traffic may Seek Alternative Routes
 - Local Roads Often Available
 - How to Keep Everyone Happy and Safe



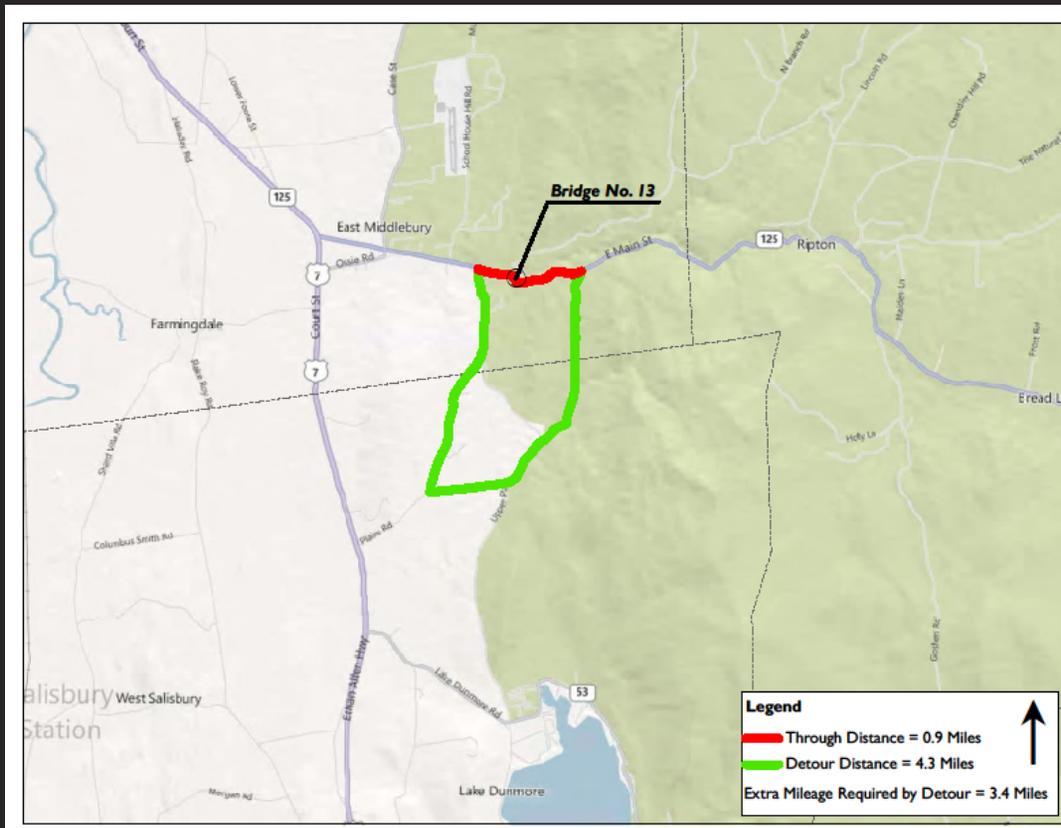
Local Traffic Detour

- VTrans Working with the Town on the Following:
 - Compensation for Increased Traffic on Local Roads Used to Avoid Construction
 - Compensation for Providing Increased Law Enforcement on Local Road Network During Construction



Local Traffic Detour

- Upper & Lower Plains Road





Project Milestones

- Preliminary Plans – Submitted June 29, 2012
- Permitting – Underway
- Final Design – April 2013
- Right-of-Way Complete – June 2013
- Bid Advertisement – September 2013
- Contract Award – November 2013
- Construction – April/May 2014

Concerns, Comments, and Questions

