



Enosburg BF 0283(42)
Regional Concerns Meeting
VT Route 118 – Bridge #24 over Unnamed Brook
April 15, 2019

Introductions

Rob Young, P.E.

VTrans Design Project Manager

Laura Stone, P.E.

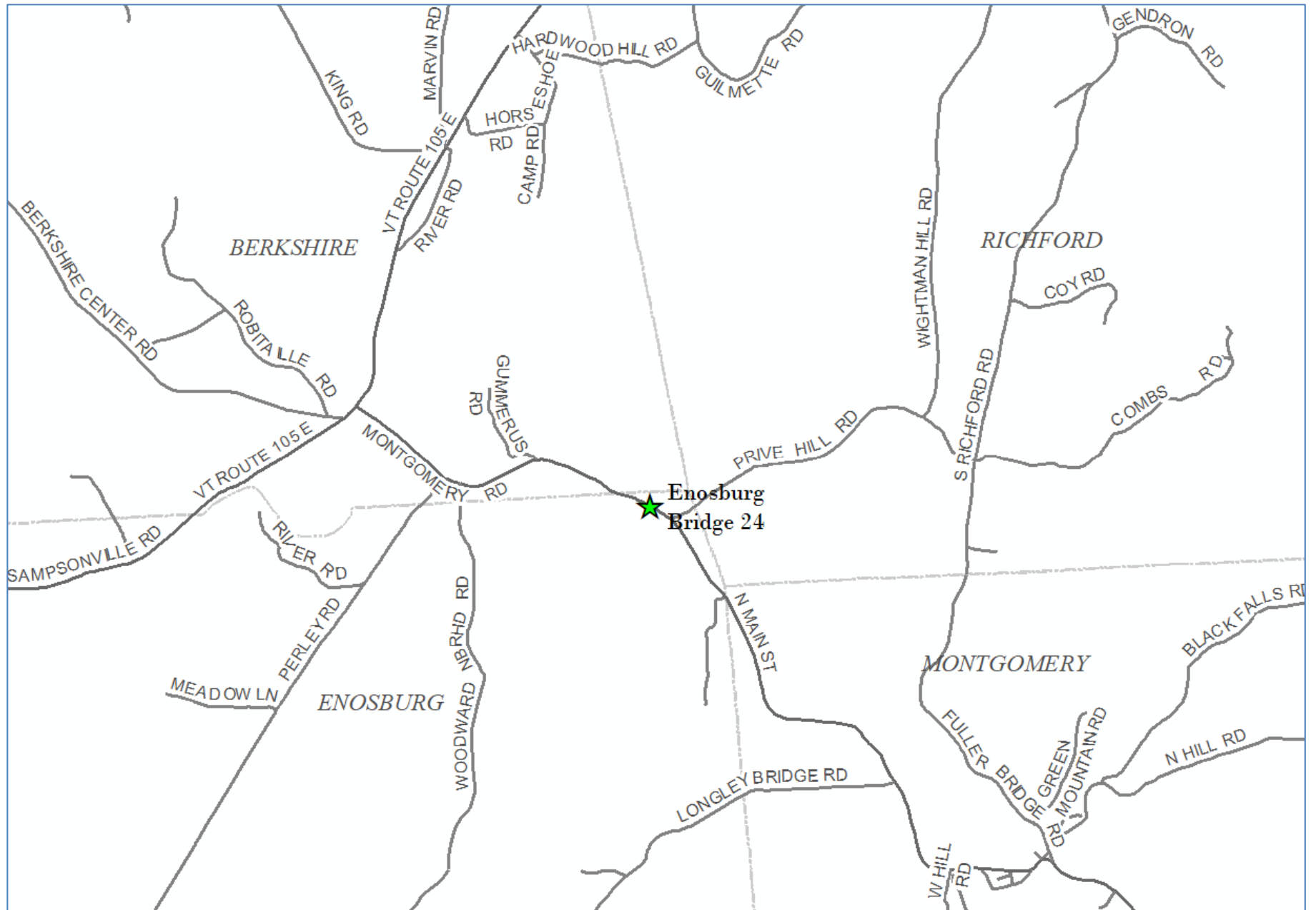
VTrans Scoping Engineer



Purpose of Meeting

- Provide an understanding of our approach to the project
- Provide an overview of project constraints
- Discuss our selected alternative
- Provide an opportunity to ask questions and voice concerns





Location Map

Bridge 24
Project Location

Montgomery Rd

118

Montgomery Rd

Google

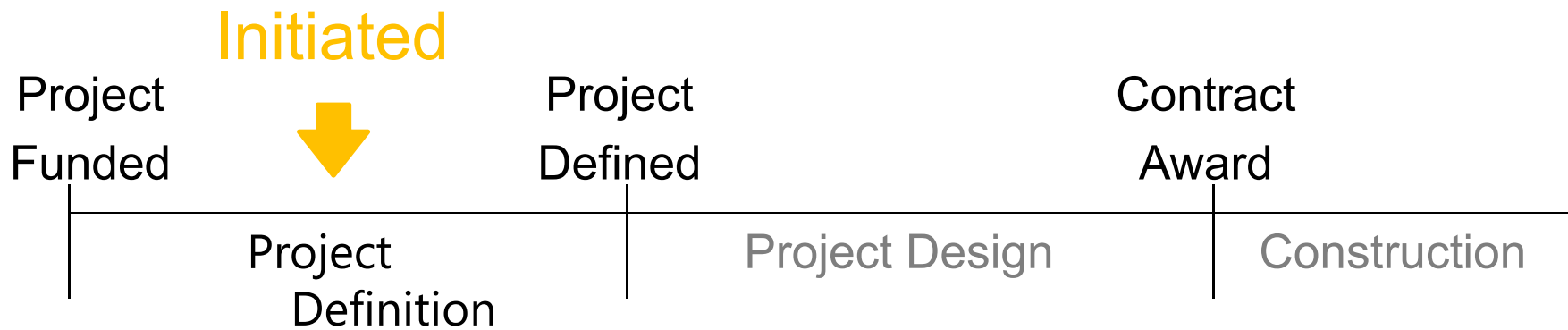


Meeting Overview

- VTrans Project Development Process
- Project Overview
 - Existing Conditions
 - Alternatives Considered
 - Selected Alternative
- Maintenance of Traffic
- Schedule
- Summary
- Questions



VTrans Project Development Process



- Identify resources & constraints
- Evaluate alternatives
- Public participation
- Build Consensus

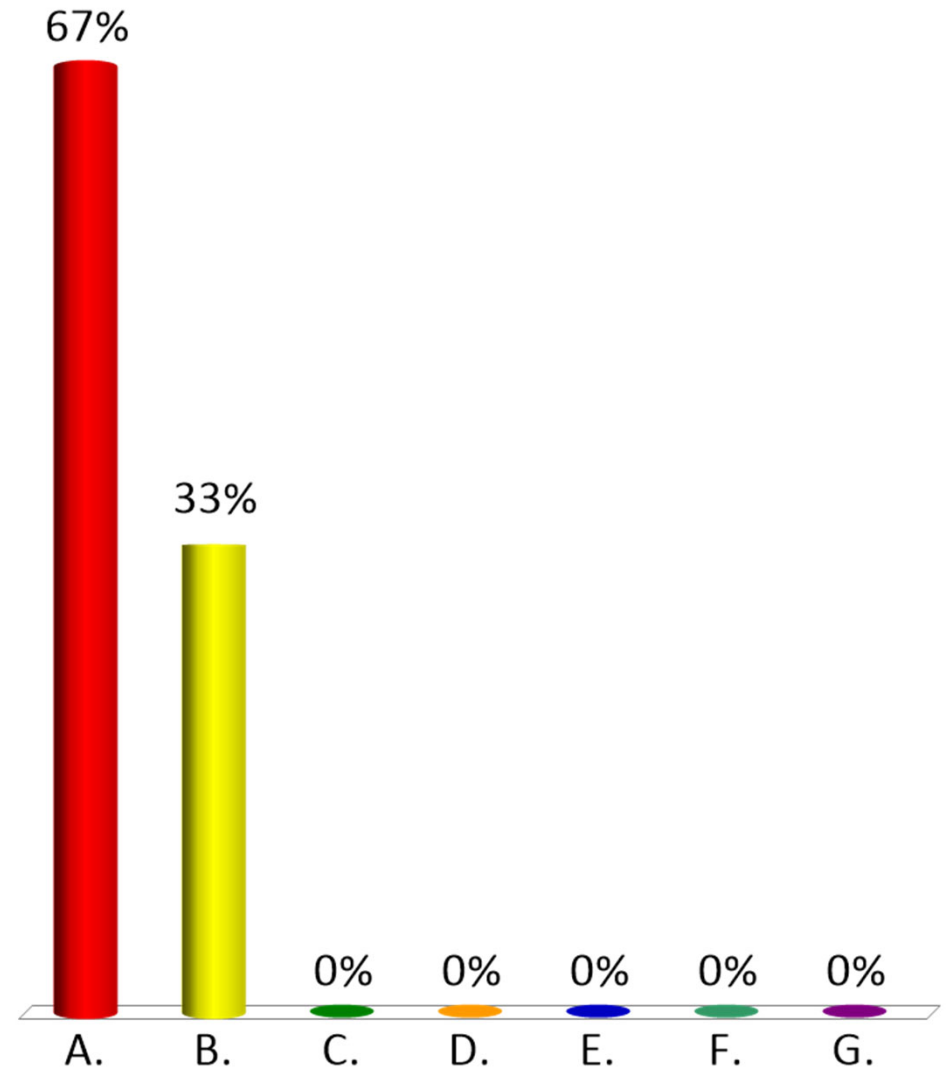
- Quantify areas of impact
- Environmental permits
- Develop plans, estimate and specifications
- Right-of-Way process if necessary



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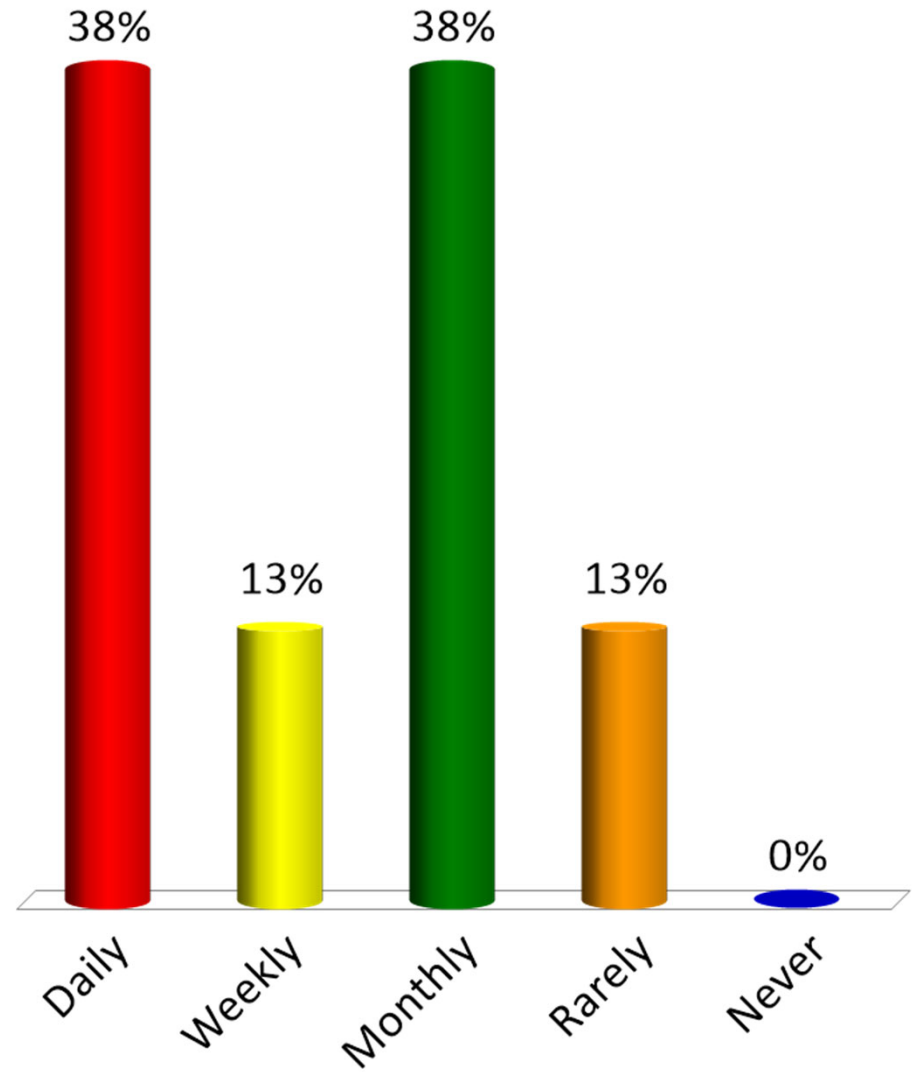
Who are you representing?

- A. Municipal Official
- B. Resident
- C. Emergency Services
- D. Local Business
- E. Independent Organization
- F. Press
- G. Other



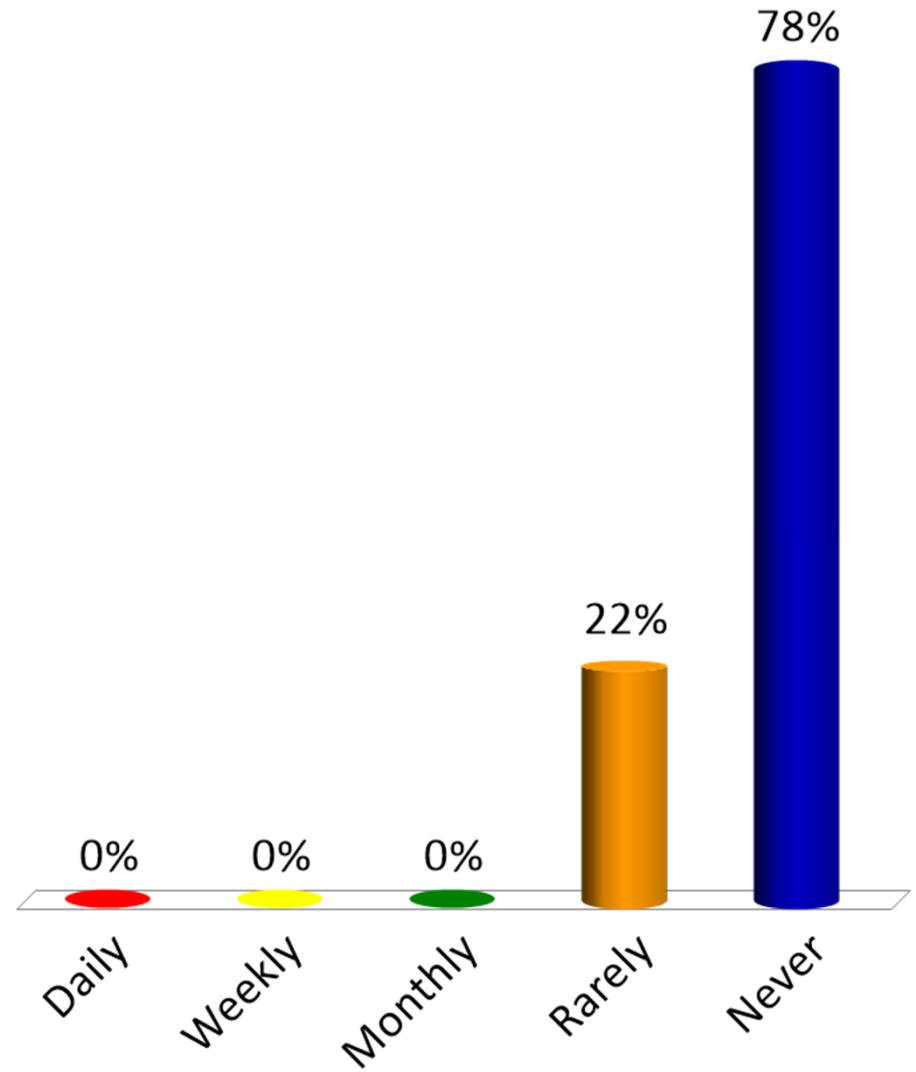
How often do you use this segment of VT Route 118?

- A. Daily
- B. Weekly
- C. Monthly
- D. Rarely
- E. Never



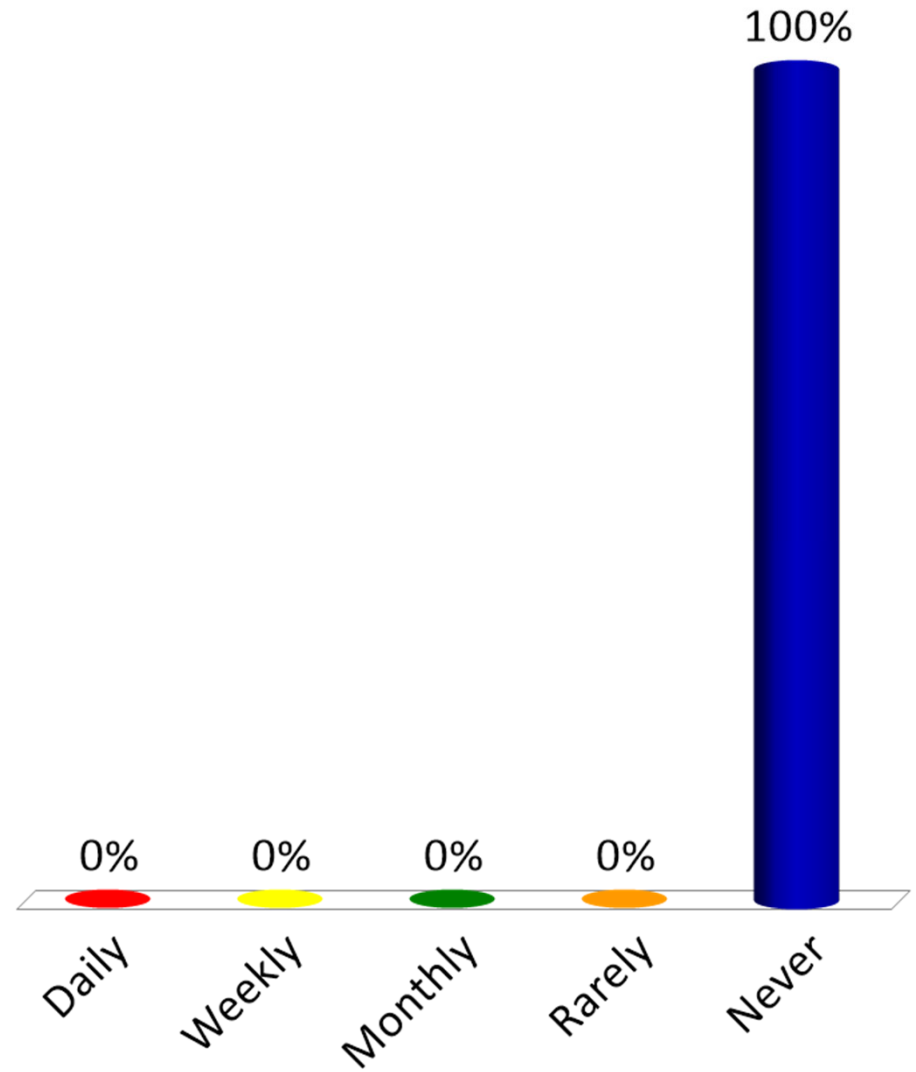
How often do you walk over the bridge?

- A. Daily
- B. Weekly
- C. Monthly
- D. Rarely
- E. Never



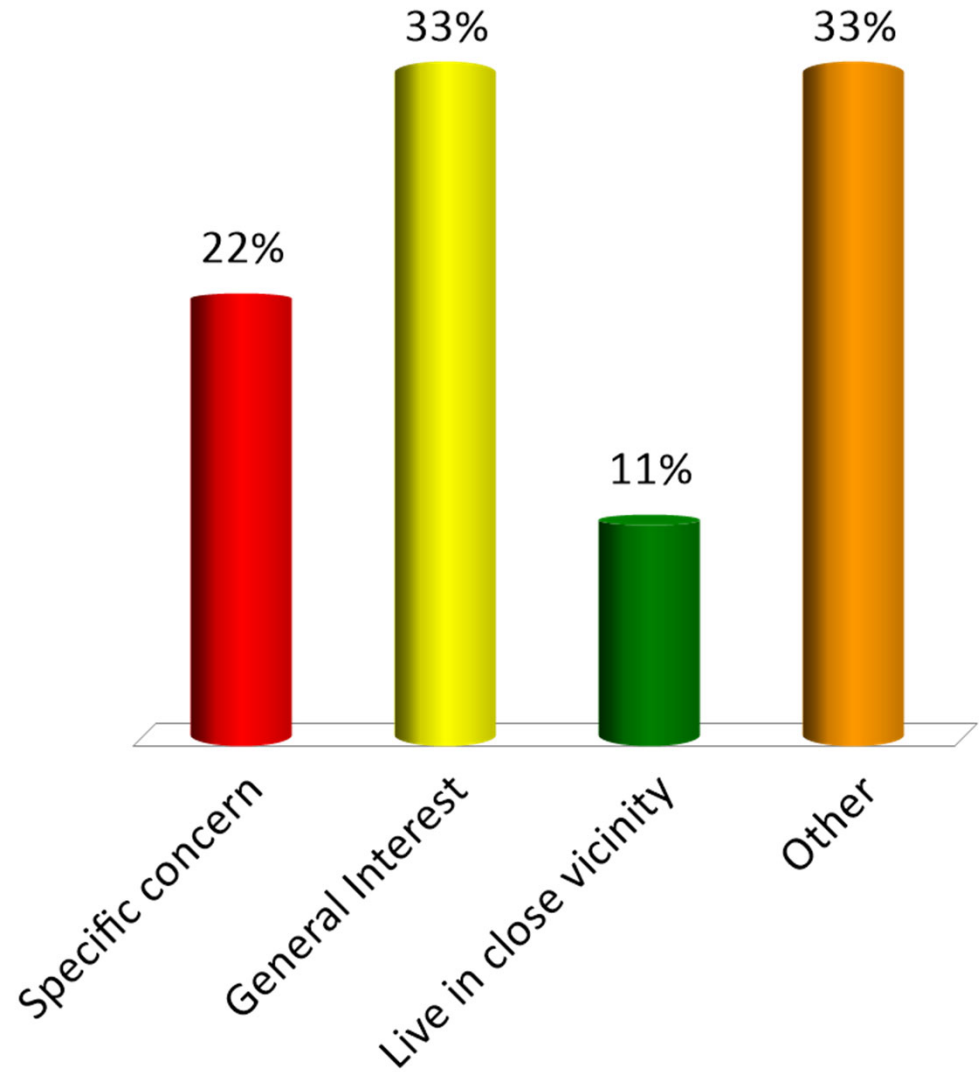
How often do you bike over the bridge?

- A. Daily
- B. Weekly
- C. Monthly
- D. Rarely
- E. Never



What is your reason for attending this meeting?

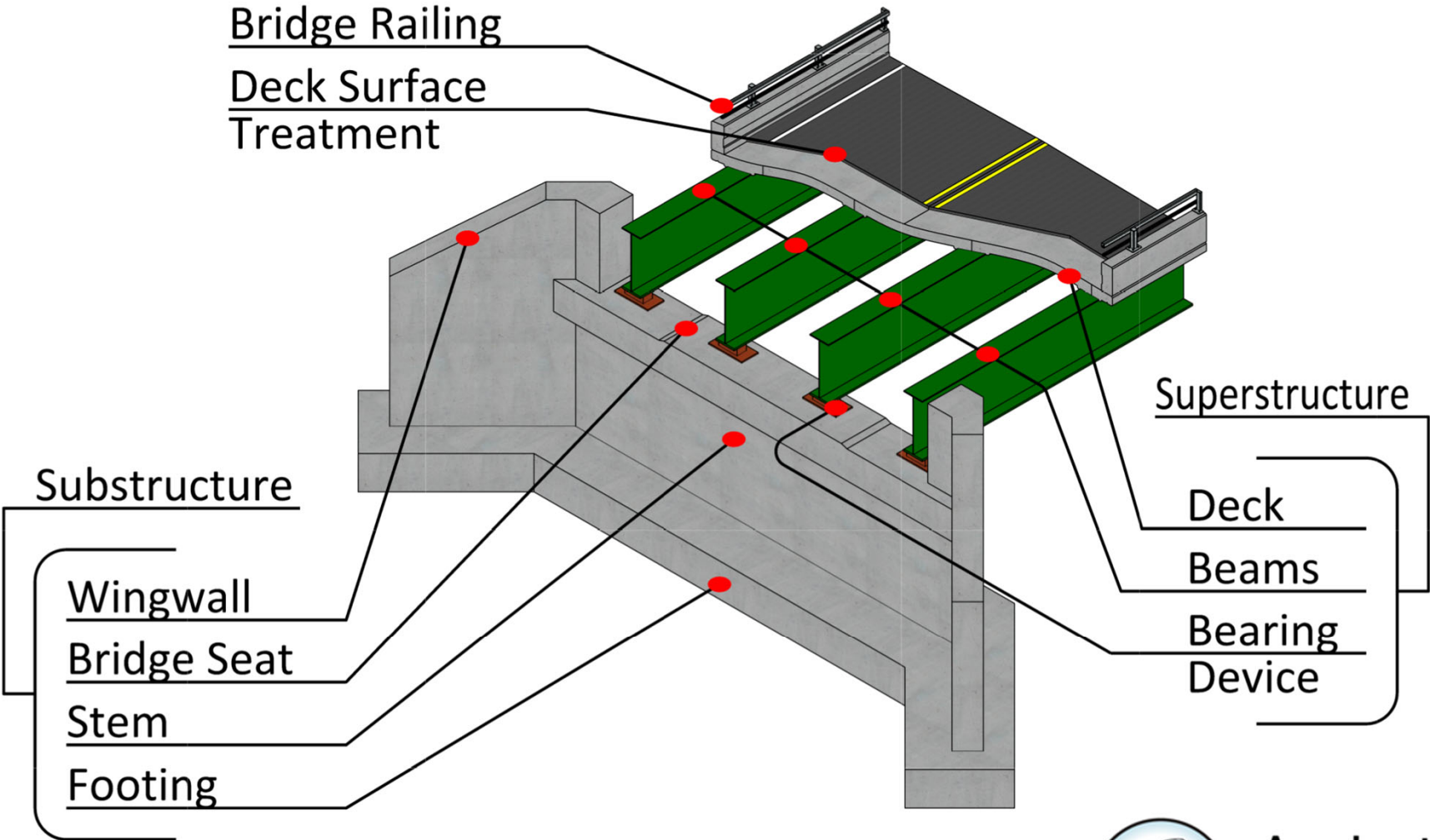
- A. Specific concern
- B. General Interest
- C. Live in close vicinity
- D. Other



Project Overview

- Existing Conditions
- Alternatives Considered
- Selected Alternative

Description of Terms Used



Looking West over Bridge



Existing Conditions – Bridge #24

- Roadway Classification – Major Collector
- Bridge Type – 20' Concrete Slab
- Ownership – State of Vermont
- Constructed in 1921

Existing Conditions – Bridge #24

- The bridge is structurally deficient with all components rated in serious condition
 - The soffit of the concrete slab has heavy spalling with exposed reinforcing steel
 - The slab has a 1-inch wide full depth crack at the center line of the roadway
 - Both abutments have settlement and rotation
 - The abutment concrete along the water line has extensive spalling.

Condition Ratings



Existing Conditions - Bridge #24

- Deck Rating 3 (Serious)
- Superstructure Rating 3 (Serious)
- Substructure Rating 3 (Serious)

Western Abutment



Existing Conditions - Bridge #24

- Full Height Cracks

Eastern Abutment



Existing Conditions - Bridge #24

- Spalling
- Undermining

11/15/20

Resources – Looking Upstream

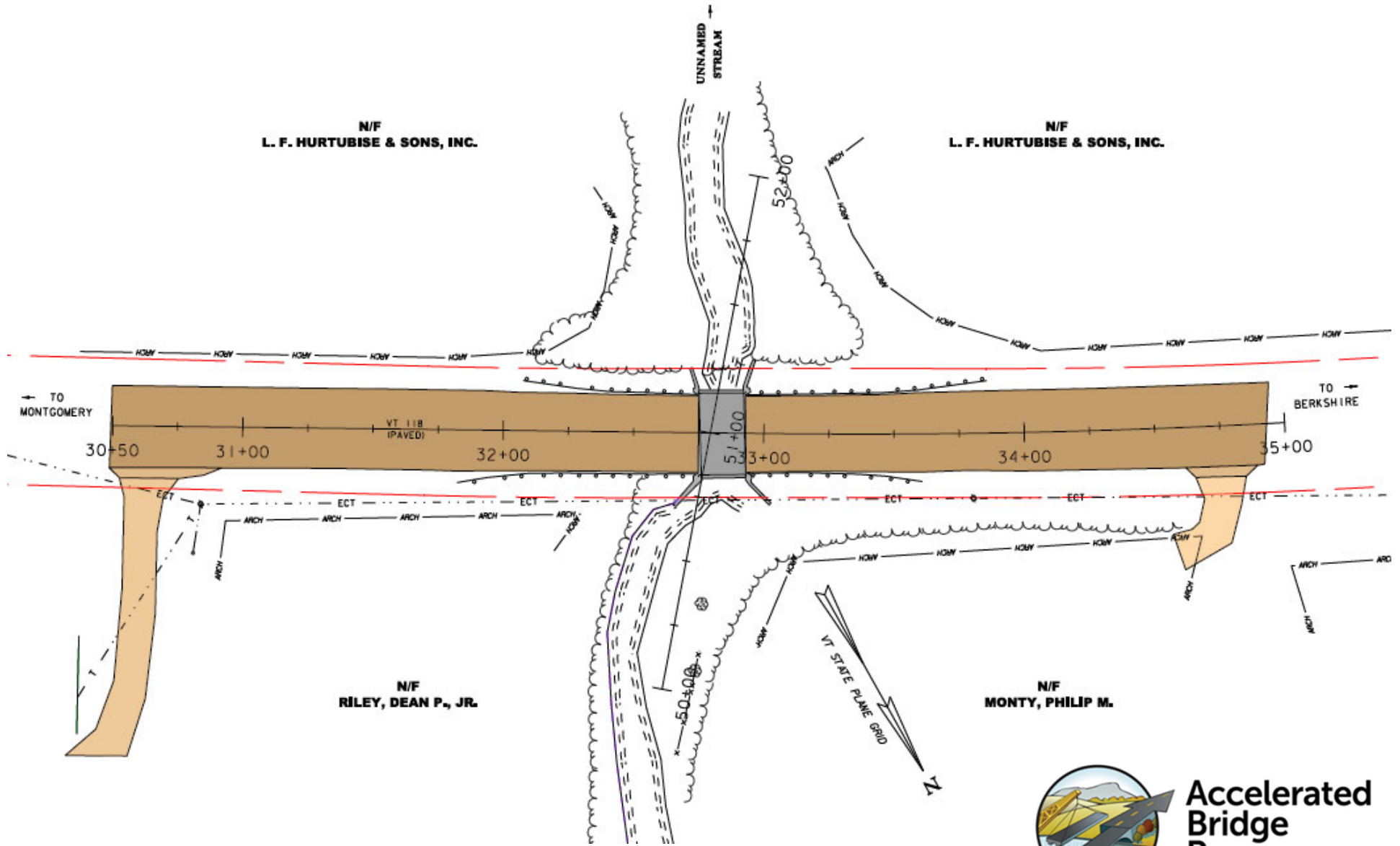


Existing Conditions - Bridge #24

- Northern Long Eared Bat Habitat
- Archaeological Resources
- Statewide Significant Agricultural Soils
- Wildlife Corridor

04/21/2017

Existing Conditions



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Design Criteria and Considerations

- ADT of 2,100
- DHV of 330
- % Trucks: 11.7
- Design Speed of 50 mph

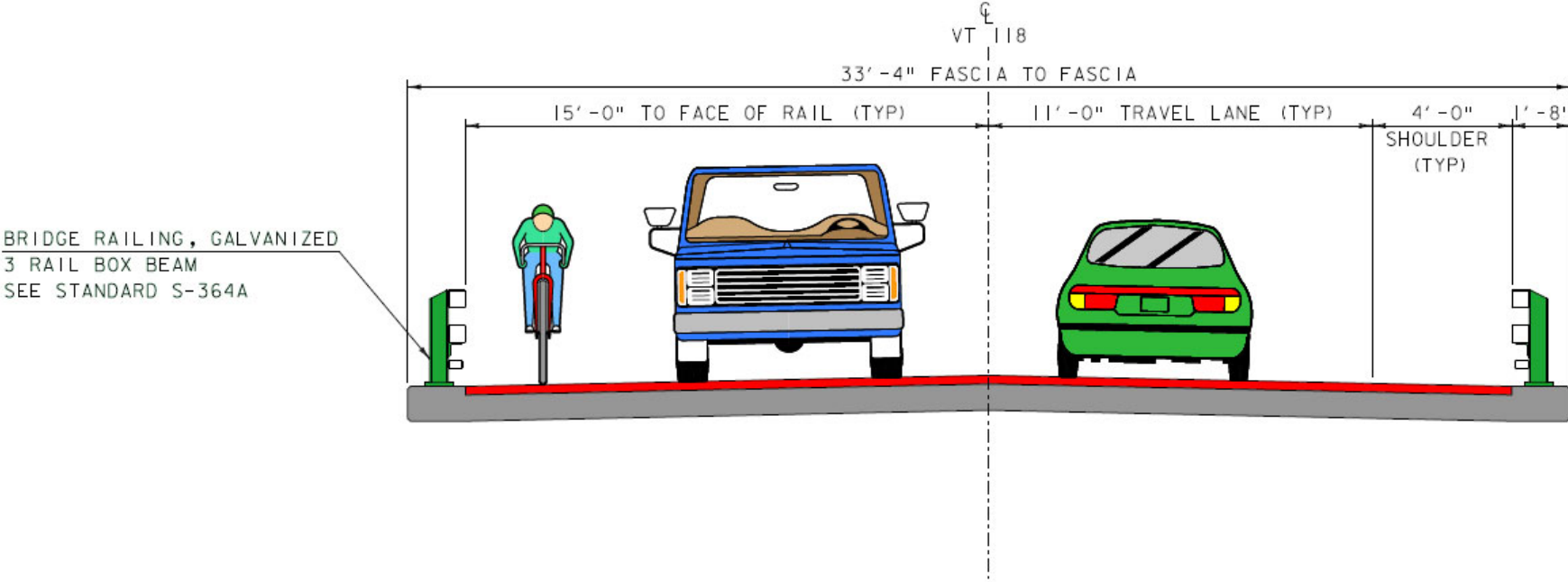
Alternatives Considered – Bridge #24

- No Action
 - Additional maintenance required within 10 years
- Full Bridge Replacement – 4-Sided Box
 - 75 year design life
- Full Bridge Replacement – Open Bottom Frame
 - 75 year design life
- Full Bridge Replacement – Integral Abutment Bridge
 - 75 year design life

Selected Alternative - Bridge #24

- Full Bridge Replacement with New Integral Abutment Bridge
 - 11'4' typical
 - 75 year design life
 - Bedrock approximately 60 feet below FG
 - 38'-span slab bridge

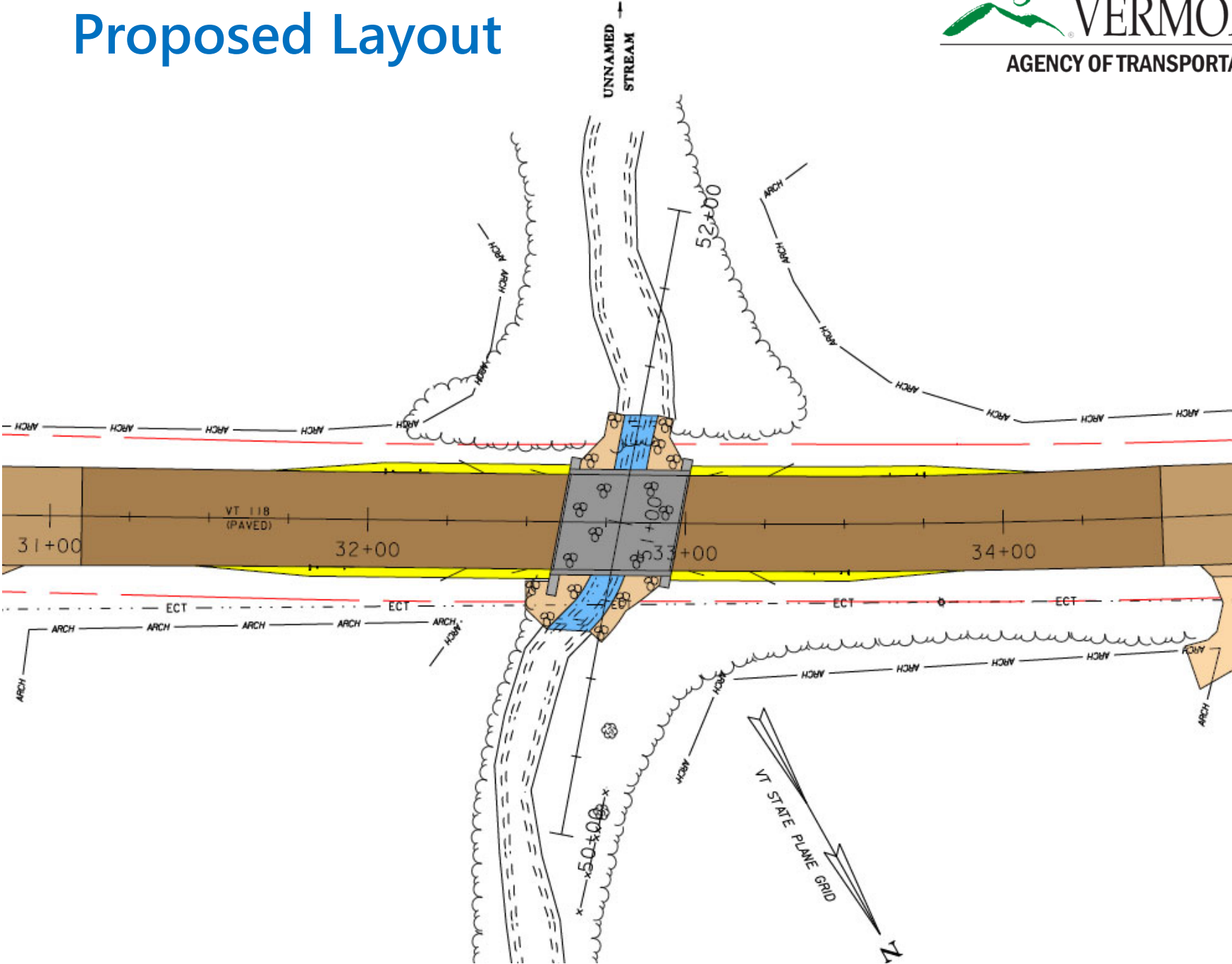
Proposed Typical Section - Bridge



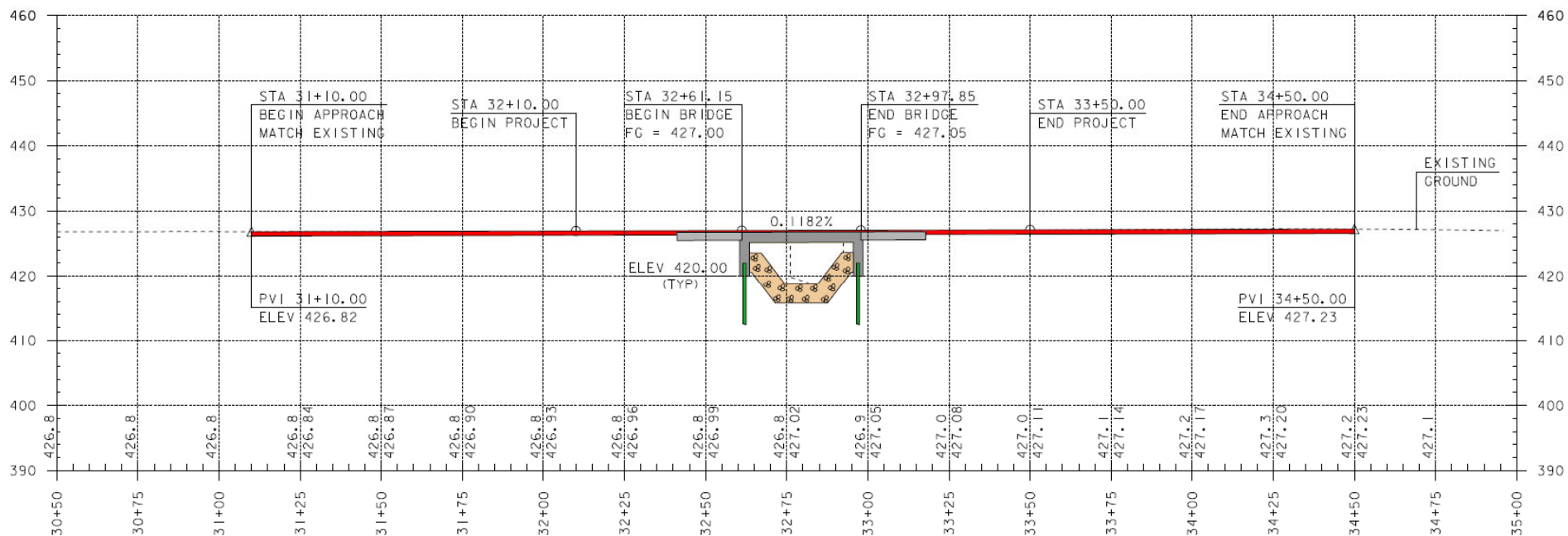
BRIDGE 24 TYPICAL SECTION



Proposed Layout



Proposed Profile



PROFILE ALONG VT 118

What Will the New Bridge Look Like?



Proposed Example - Bridge #24

- Integral Abutment Slab Bridge
- Flush Mounted Box Beam Railing

Maintenance of Traffic Options Considered

- Offsite Detour
- Temporary Bridge
- Phased Construction
 - Not recommended due to condition of existing structure

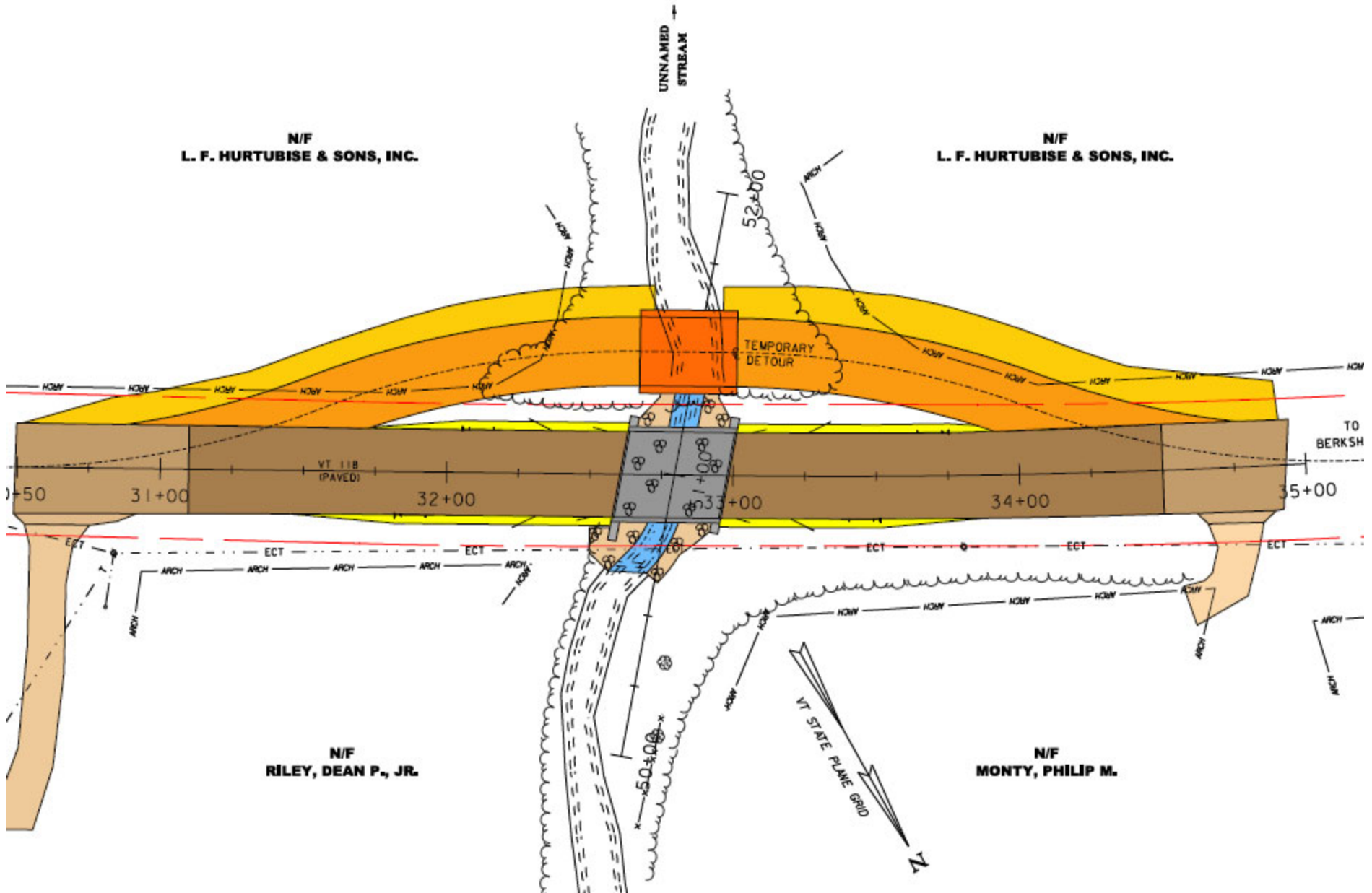
Selected Method of Traffic Maintenance



Temporary Bridge

- One or Two Lane Temporary Bridge/Roadway
- Upstream or Downstream

Downstream Temp Bridge Layout



Preliminary Project Schedule

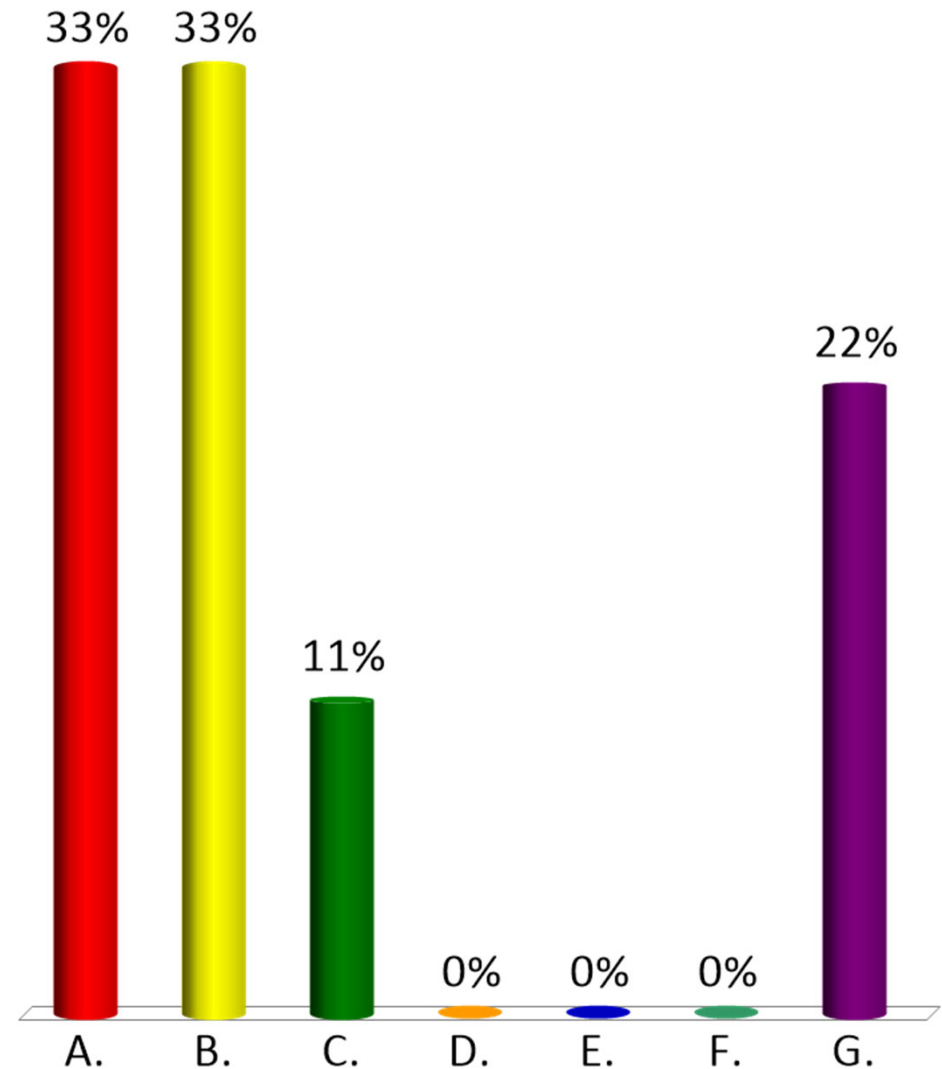
- Construction Start – 2021
 - Total Cost Estimate: \$1,323,300

Project Summary

- New Integral Abutment Bridge with Traffic Maintained on a Temporary Bridge
 - 11'¼' typical
 - 38'-span slab bridge
 - 75 year design life
 - Right of Way Needed
 - Aerial Utility Relocation Possible

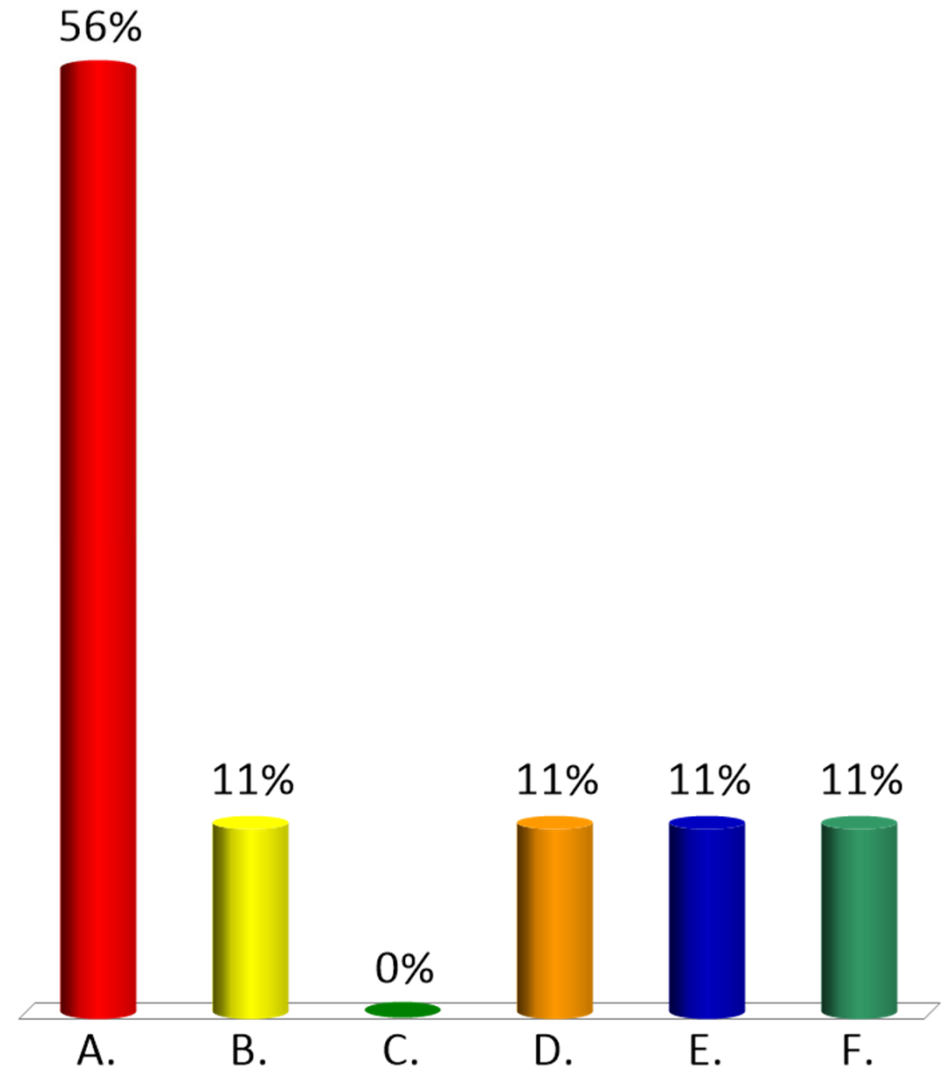
Which would you be most concerned about?

- A. Construction delays on VT Route 118
- B. Temporary Bridge Impacts
- C. Bridge Aesthetics
- D. Environmental Impacts
- E. Recreational Impacts
- F. Other
- G. Not really concerned



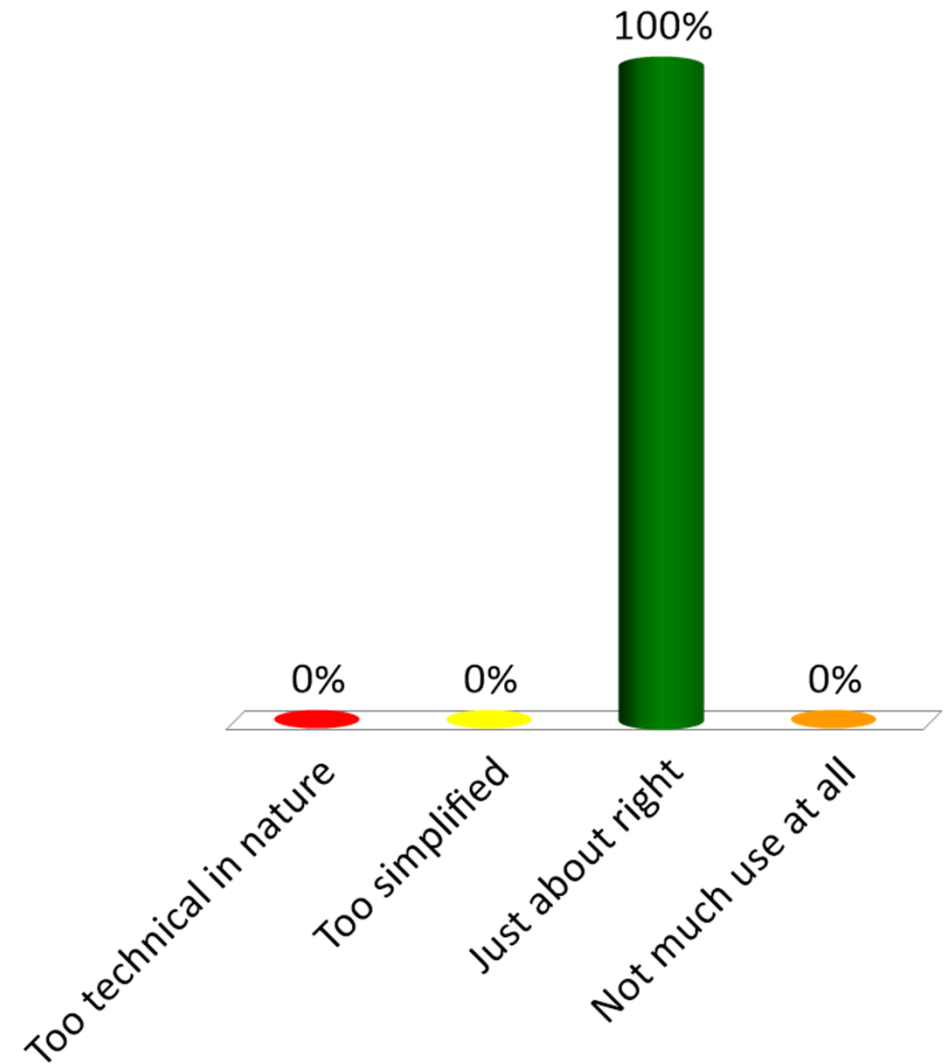
Which design aspect is the most important to you?

- A. Shoulder width/bicycle accommodations
- B. Aesthetics - Bridge Railing
- C. Construction year
- D. Construction Duration
- E. Cost
- F. Other



Did you find this presentation to be?

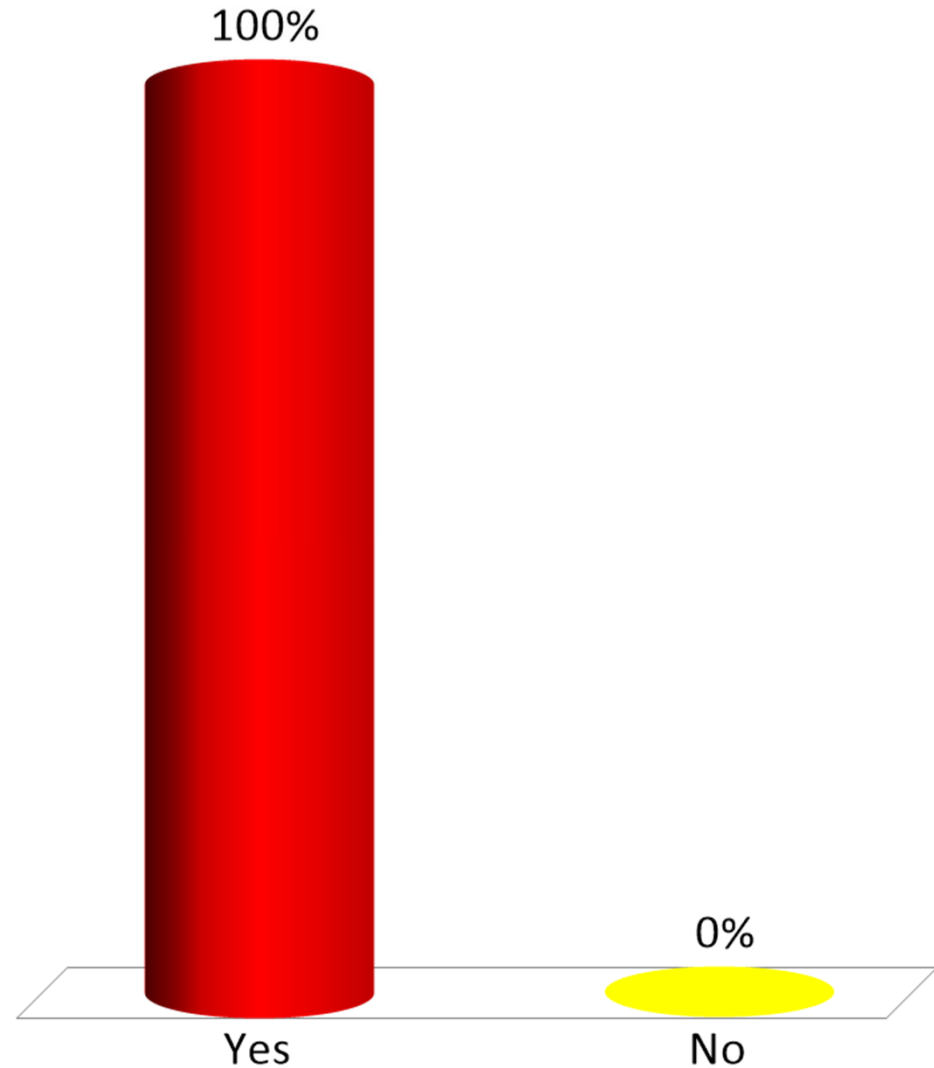
- A. Too technical in nature
- B. Too simplified
- C. Just about right
- D. Not much use at all



Do you find the selected scope of work satisfactory?

A. Yes

B. No



For more information:

- <https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/12C584>



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Questions and Comments

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