Local Concerns Meeting

HOLMES CREEK COVERED BRIDGE

CHARLOTTE BO CVBR(6)

Lake Road (TH 9), Bridge 27 over Holmes Creek

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VTrans Working to Get You There
Vermont Agency of Transportation

Presentation Outline

- Purpose & Need
- Location Map
- Existing Bridge Information
- Inspection Findings
- Rehabilitation & Traffic Control Alternatives
- Cultural & Natural Resources
- Abutters & Right-of-Way
- Next Steps
- Anticipated Schedule
- Your Input is Needed

Purpose and Need

Purpose

- Provide a safe crossing over Holmes Creek that meets the needs of the traveling public

Need

- Address structural deficiencies & ongoing deterioration
- Extend bridge service life
- Bridge requires rehabilitation to continue to meet load capacity needs of the community

Community Needs and Considerations

Location Map

Holmes Creek Covered Bridge

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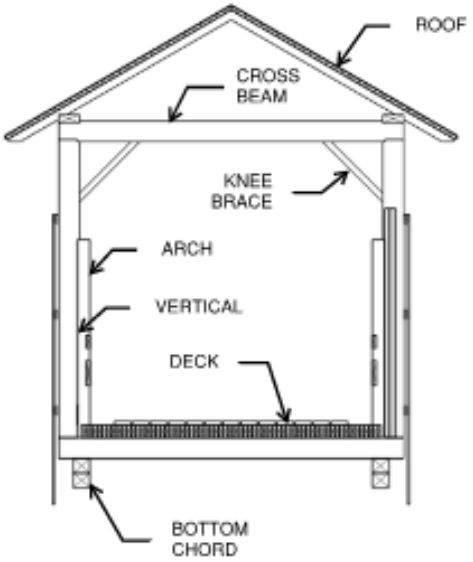
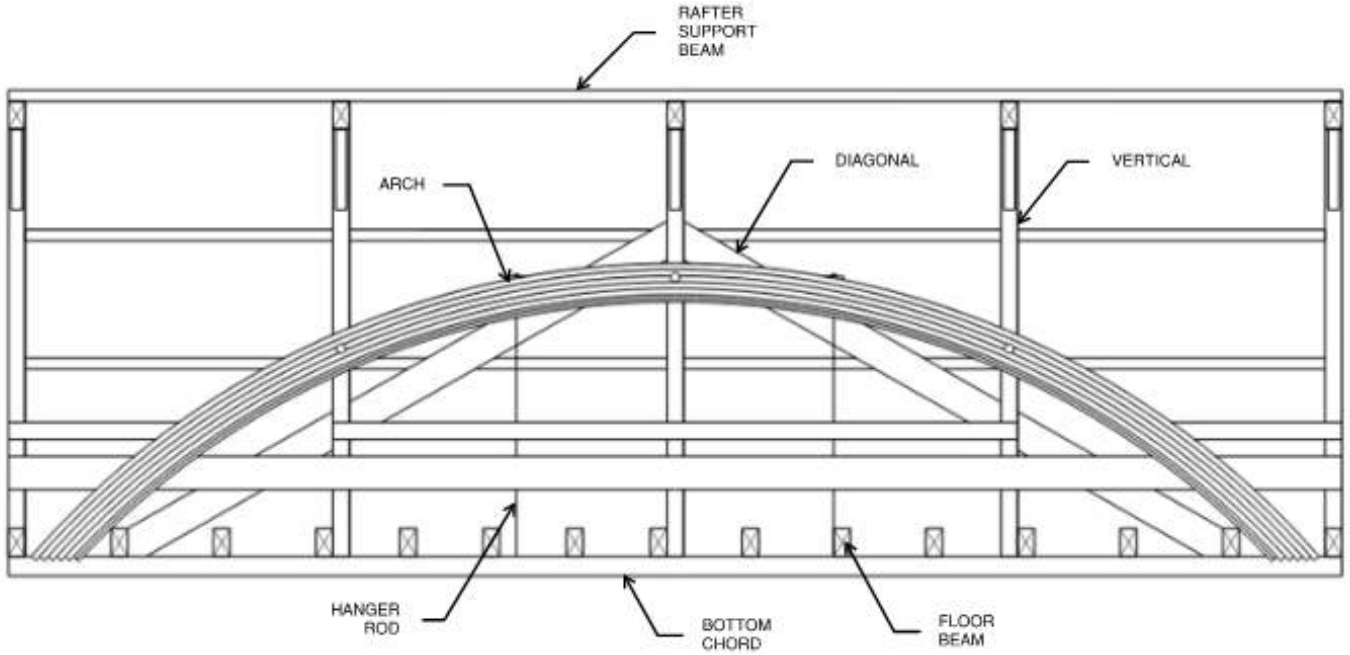
Existing Bridge Information

- Bridge Constructed in 1870, Rehabilitated in 1993
- Listed in National Register of Historic Places in 1974
- Kingpost Tied Arch
  - 41’ Long
  - 12’-0” Horizontal Clearance
  - 8’-10” Minimum Vertical Clearance (posted for 8’-3”)
  - Currently posted for 6,000 Pound Weight Limit (3 Tons)
- Substructures:
  - North Abutment - Laid up stone
  - South Abutment – Stone with concrete facing

Section and Elevation View



Typical Section



Truss Elevation

Inspection Findings

- Overall Bridge Condition = **4 (Poor)**
- Deck Condition = 6 (Satisfactory)
- Superstructure Condition = 4 (Poor)
- Substructure Condition = 5 (Fair)
- Channel Condition = 6 (Satisfactory)

Condition Rating	Description
9	Excellent Condition
8	Very Good Condition
7	Good Condition
6	Satisfactory Condition
5	Fair Condition
4	Poor Condition
3	Serious Condition
2	Critical Condition
1	Imminent Failure Condition

Roofboards and Rafters

- Roof leaks
- Splits
- Breaks
- Rot

Cross Beam Members

- Splits
- Breaks
- Rot
- Impact Damage

Upper Bracing Members

- Splits
- Breaks
- Rot
- Twisting
- Impact Damage

Vertical Post Members

- Splits
- Breaks
- Rot
- Weathering

Arch Members

- Splits
- Breaks
- Weathering

Bottom Chord Members

- Splits
- Breaks
- Rot
- Weathering
- High Moisture Content

Bottom Chord Members (Continued)

- Splits
- Breaks
- Rot
- Weathering
- High Moisture Content

Floor Beams

- Splits
- Checks

Portals

- Breaks
- Impact Damage

Approach Railing

- Good Condition

Abutments and Wingwalls

- Voids
- Spalling

Abutments and Wingwalls (Continued)

- Voids
- Spalling

Questions on Inspection Findings?

Alternatives Analysis

- Bridge Rehabilitation is feasible for H-5 (5 Ton) capacity
  - Rehabilitation will extend service life

- Additional alternatives to be evaluated
  - H-12 (12-Ton) Design Vehicle
  - H-15 (15-ton) Design Vehicle

Rehabilitation Alternatives Analysis

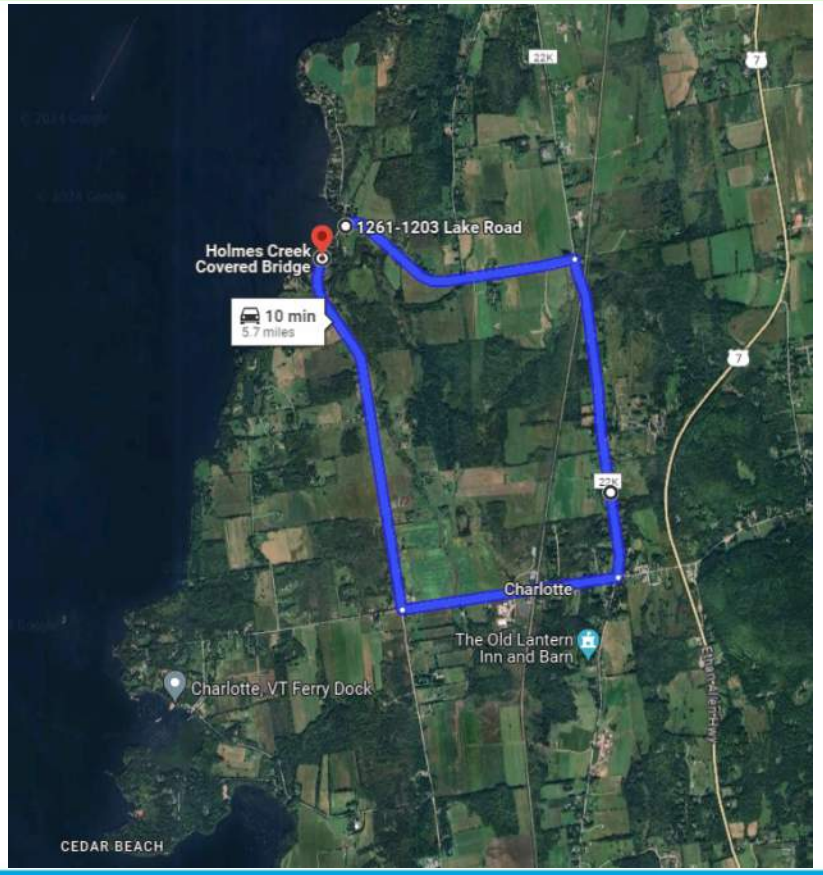
- Rehabilitation alternatives evaluation will include:
  - Initial Construction Cost
  - Fire Protection
  - Traffic Impact
  - Public Safety
  - Environmental Impacts
  - Property Impacts
  - Extending Remaining Service Life
  - Public Input

Traffic Control Alternatives

- Phased construction
  - One lane of alternating two-way traffic
  - Not Feasible – not wide enough
- Temporary bridge
  - Not Cost Effective – increased environmental & property impacts
- Bridge closure with off-site detour

Traffic Control Alternatives

- Offsite Detour
  - Lake Road to Greenbush Road (22K) to Ferry Road back to Lake Road
  - 5.7 miles, 10 minutes



Cultural & Natural Resources

- Project must follow Section 106 of the National Historic Preservation Act
- Section 106 requires consideration of cultural resources, including:
  - Historic Buildings
  - Structures
  - Archaeological Deposits
- Coordination with State Historic Preservation Office (SHPO) and Historic Covered Bridge Preservation Committee (HCBPC)
- Natural Resources

Right-of-Way

- Currently do not anticipate any permanent property easements needed

- Temporary easements for construction access will be required

Next Steps

- Evaluate rehabilitation alternatives
- HCBPC presentation to get input & comments
- Hold Public Information Meeting to present recommended rehabilitation alternative
- Complete Scoping Report
- Begin National Environmental Policy Act (NEPA) Process for environmental permitting
- Begin development of Project Plans & Documents

Anticipated Schedule

Public Input

- Abutter concerns
- Emergency response routes
- Bridge usage
- Local events and impacts
- Bridge safety concerns
- Other concerns

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