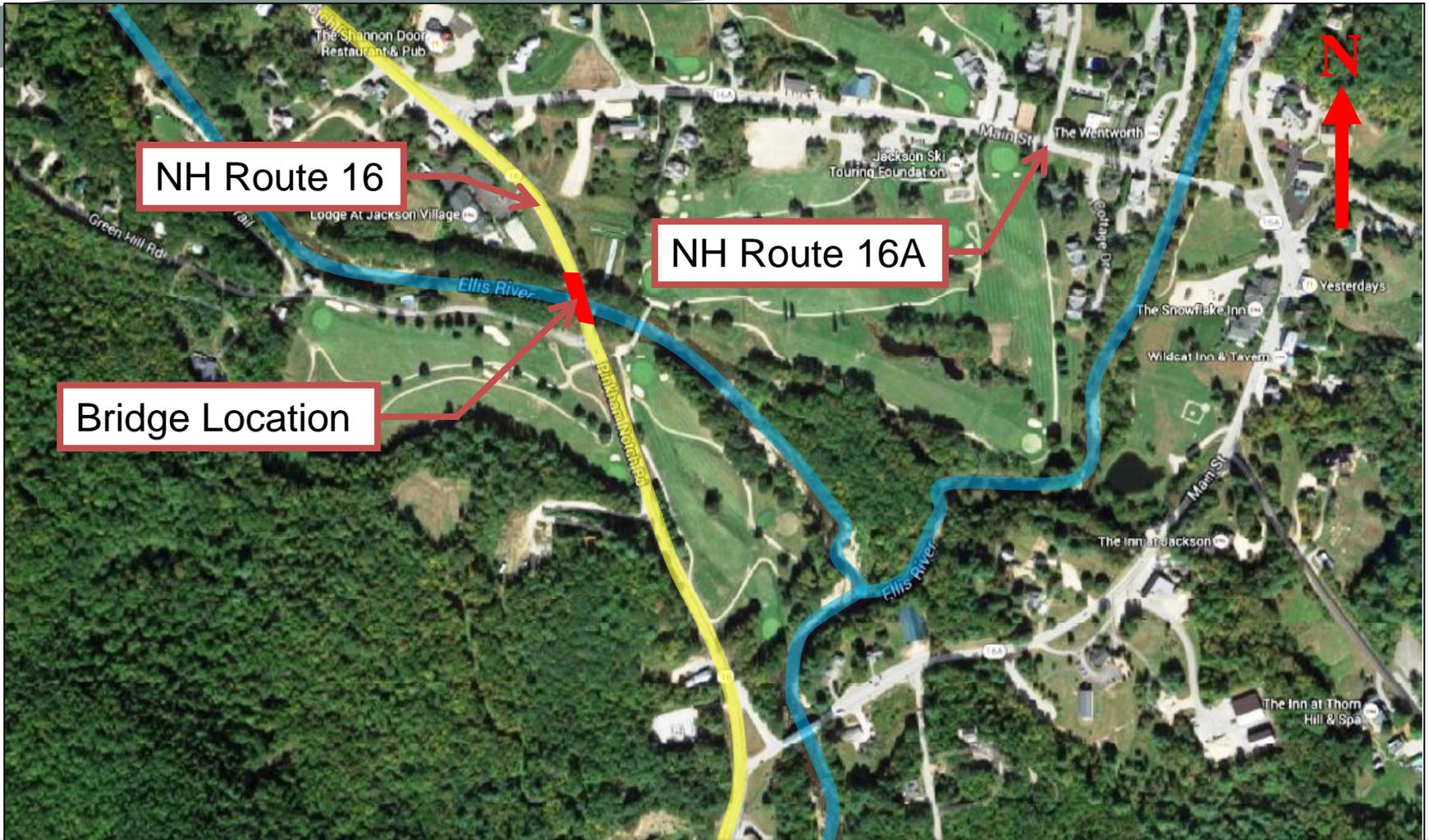


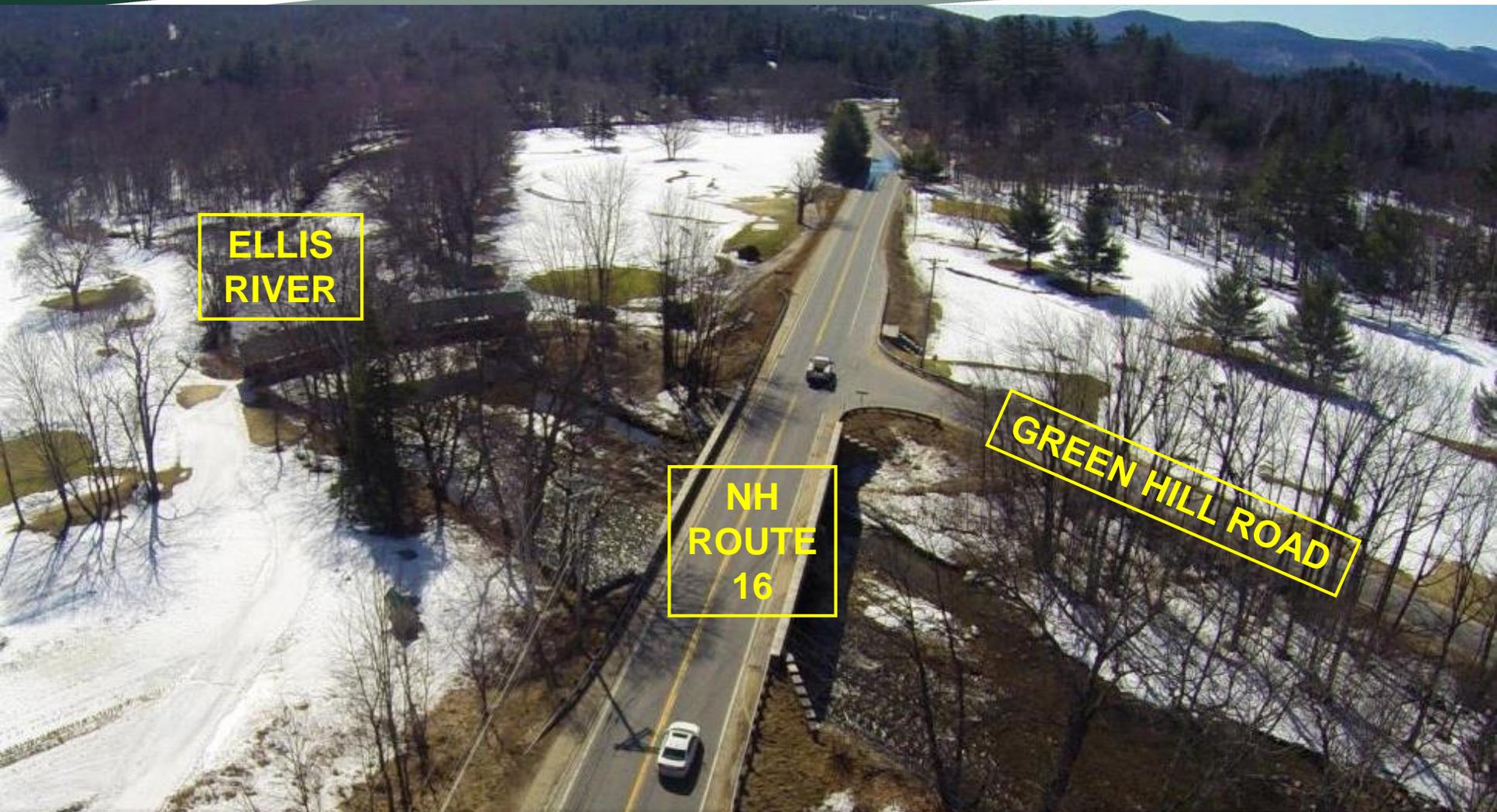


Jackson – Bridge 144/056 – NH Route 16 over Ellis River
Public Informational Meeting
March 24, 2016



Jackson Public Informational Meeting
March 24, 2016

Project Location



ELLIS
RIVER

NH
ROUTE
16

GREEN HILL ROAD

Jackson Public Informational Meeting
March 24, 2016
Aerial View (Looking South)

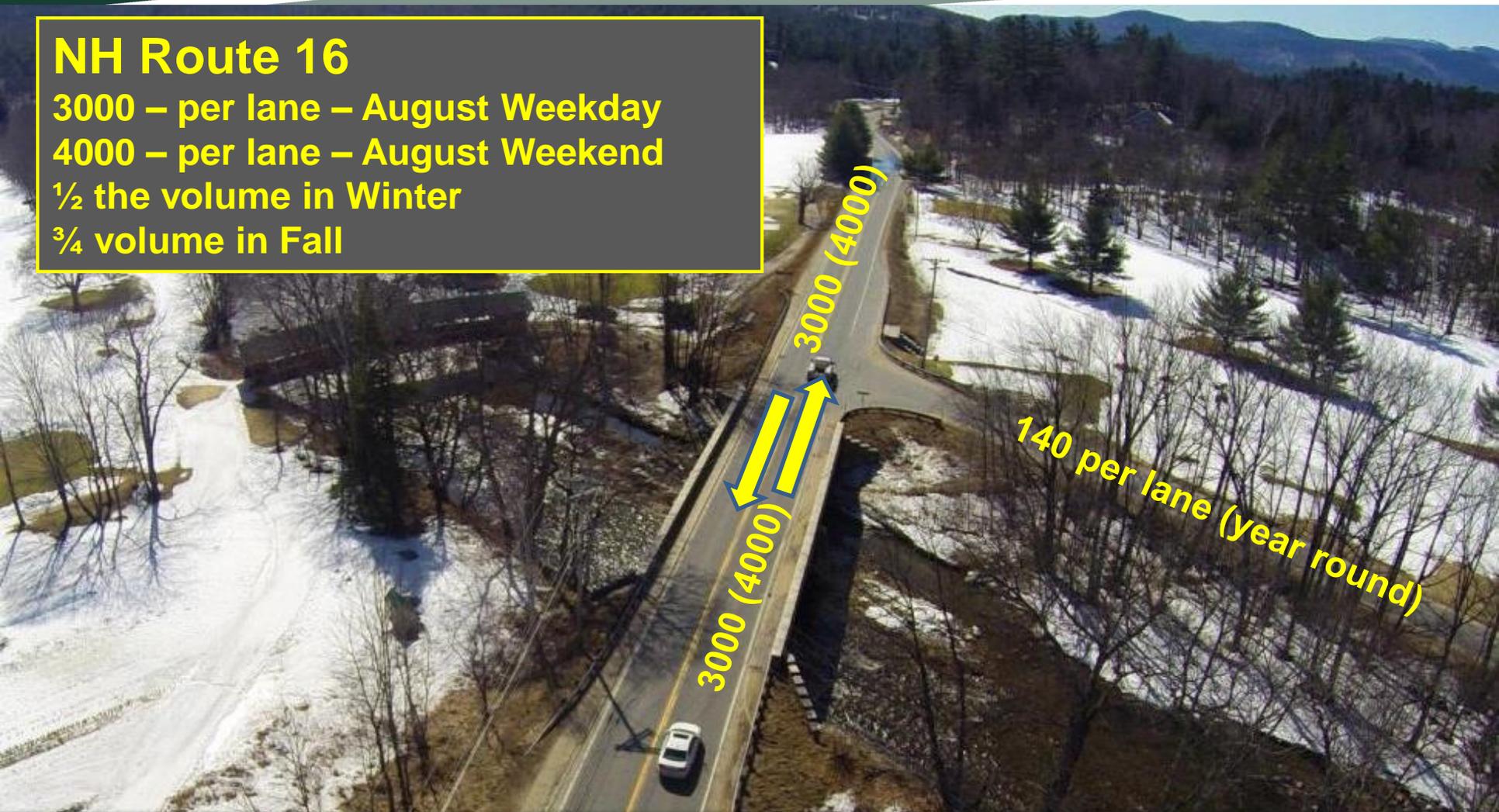
NH Route 16

3000 – per lane – August Weekday

4000 – per lane – August Weekend

1/2 the volume in Winter

3/4 volume in Fall

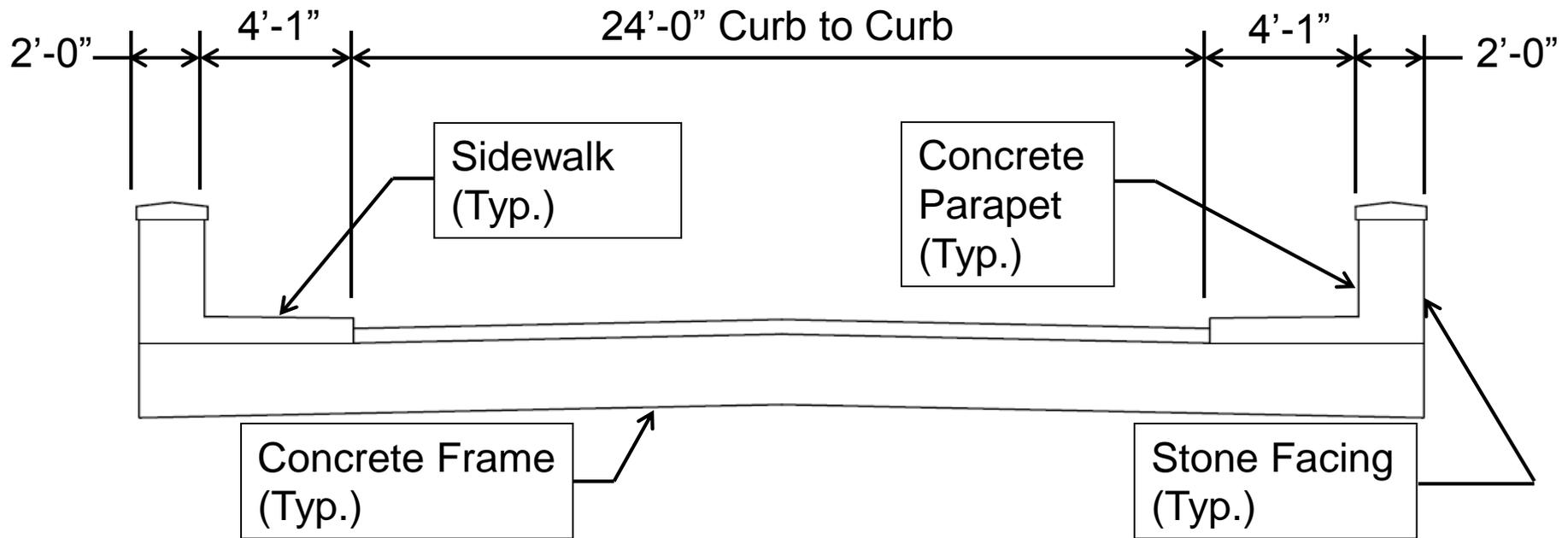


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Traffic Volume

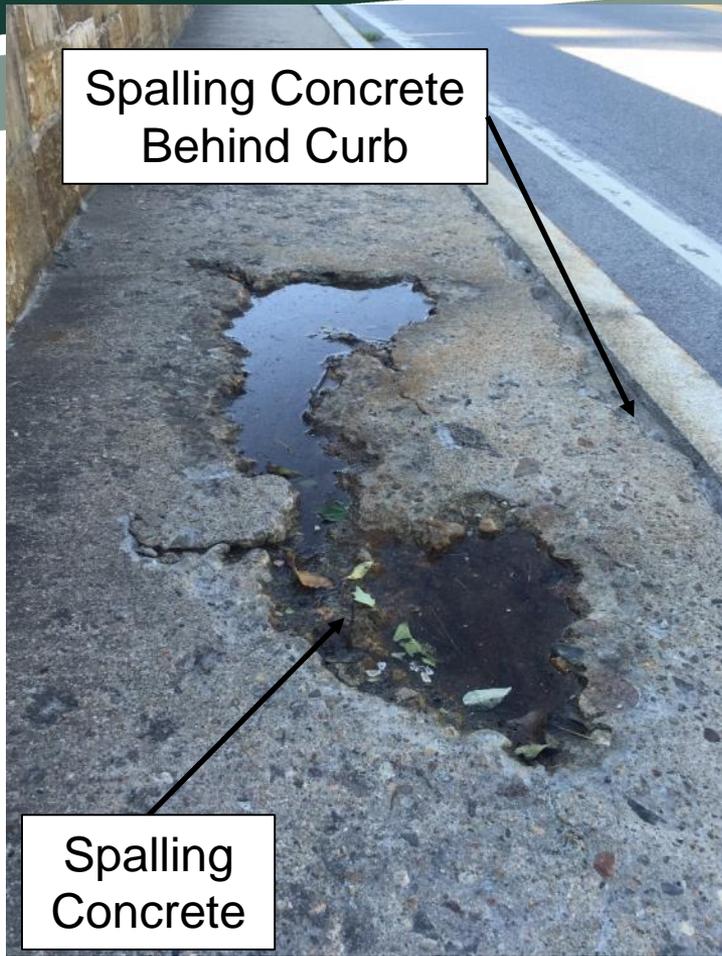
GPI



- **Two-span, 140 foot concrete rigid frame**
- **Built in 1938**

Jackson Public Informational Meeting
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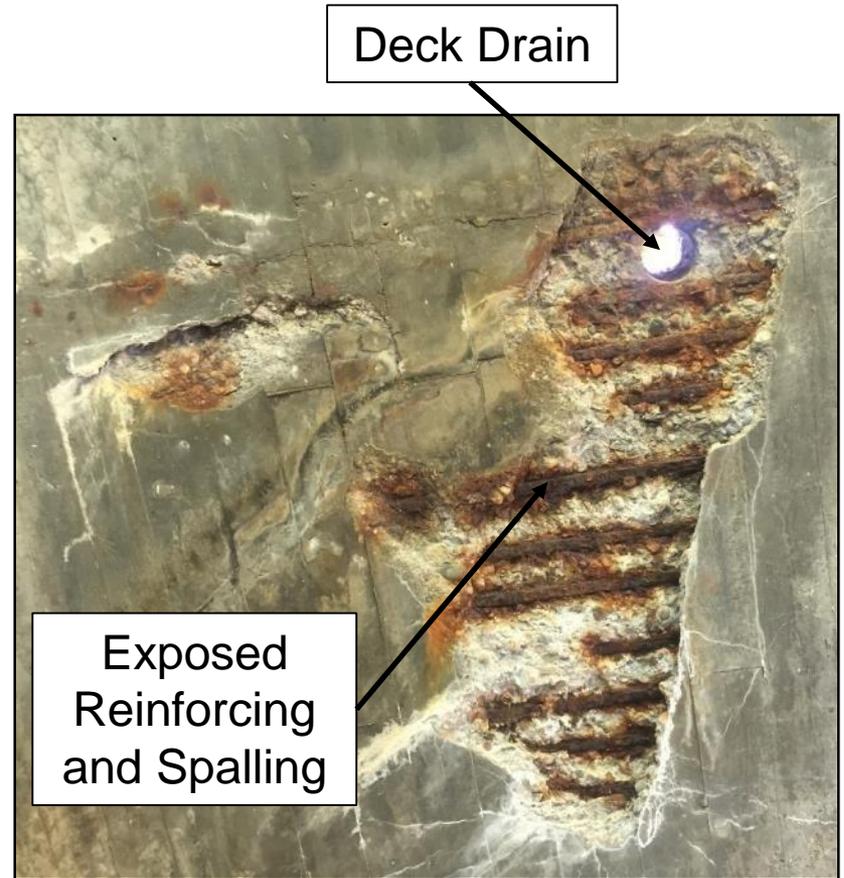
Existing Bridge Section



Spalling Concrete Behind Curb

Spalling Concrete

Sidewalk



Deck Drain

Exposed Reinforcing and Spalling

Deck Drain

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Concrete Test Results

- **The concrete is in good condition.**
- **The existing bridge may be rehabilitated.**
- **Localized areas to repair.**

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March 24, 2016

Issues To Address

- **Pedestrian Access**
- **Green Hill Road**
- **Bridge Rehabilitation**

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BRIDGE REHABILITATION (Recommended)

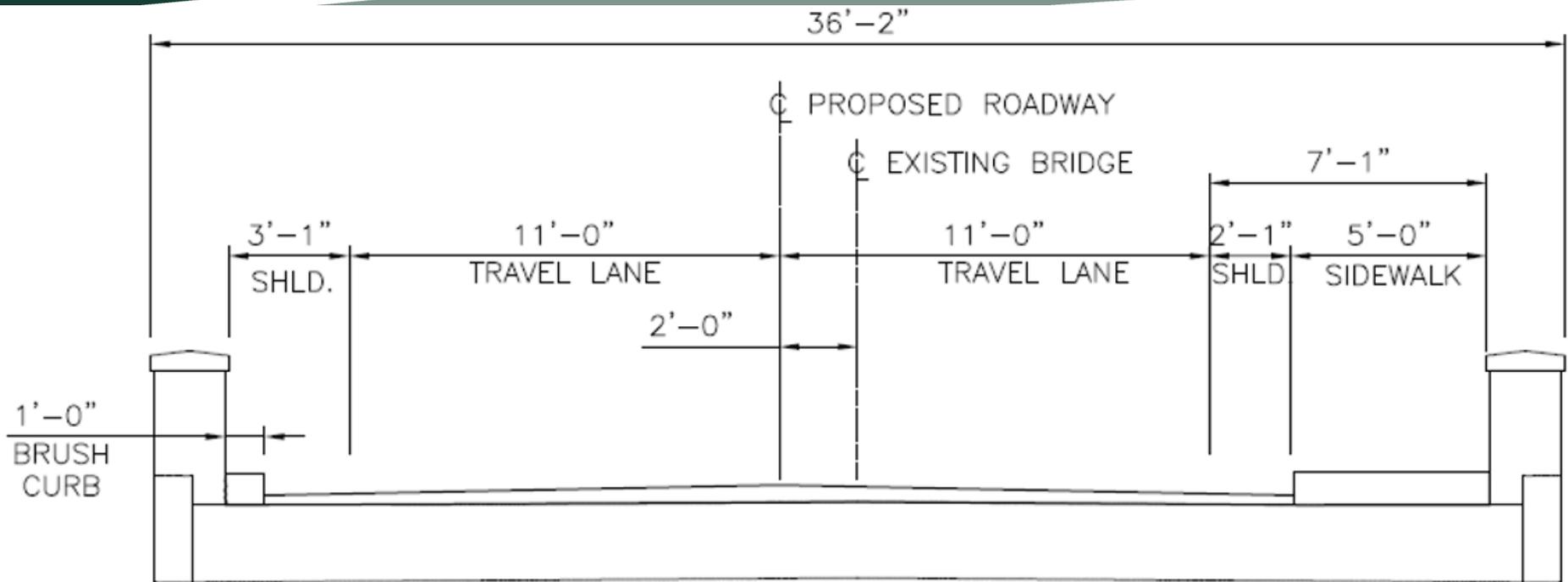
- **Removal and replacement of pavement**
- **Localized concrete patch repairs**
- **Remove deck drains – relocate drainage off bridge**
- **Replace approach guardrail**

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March 24, 2016

BRIDGE REPLACEMENT (Not Recommended)

- **Options**
 - Replace in existing footprint using temporary bridge
 - Replace in new offline alignment
 - *New Bridge built beside existing bridge*
 - Partial offline alignment with staged construction
 - *One lane of traffic throughout construction*
- **Right-of-way impacts**
 - *Temporary and permanent*
- **Environmental Impacts**
- **Utility Impacts**



EQUAL SHOULDERS

Pros

- Bicycle Accommodations (NB & SB)
- Symmetrical roadway

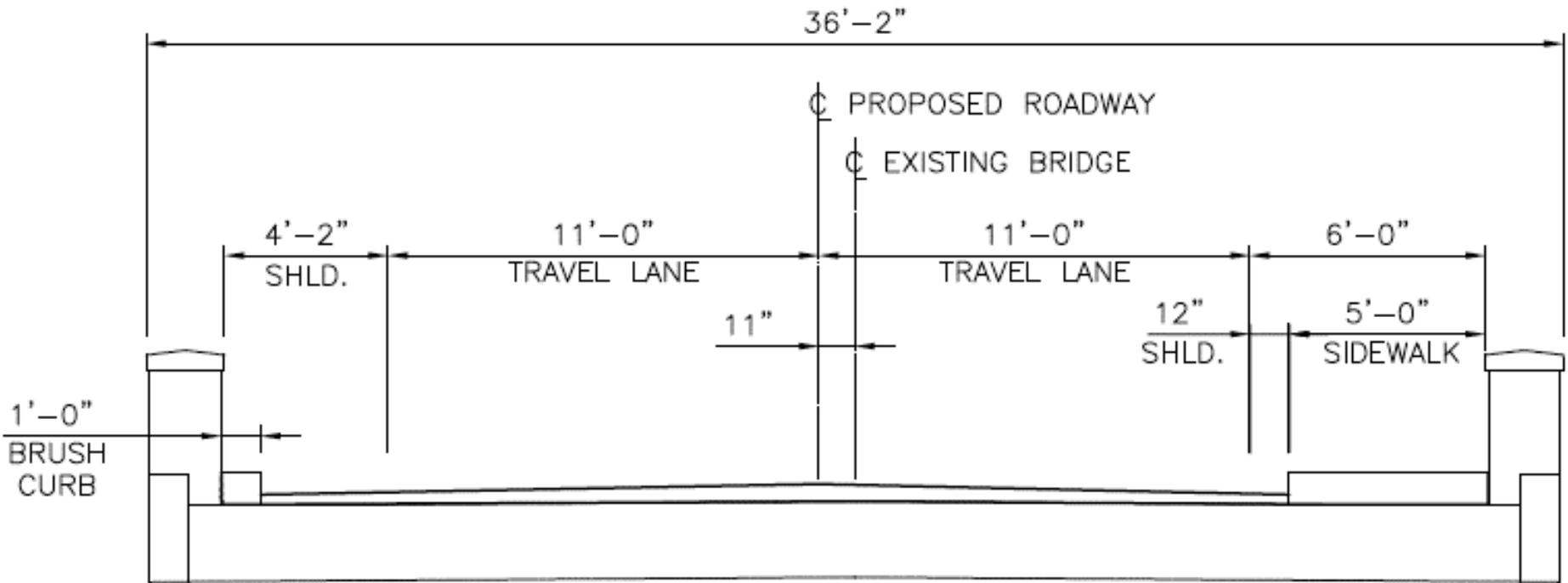
Cons

- Less sight distance than option 2 (122 feet)
- One stage of construction will require pedestrian detour

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Option 1



OFFSET CENTERLINE

Pros

- More sight distance than option 1 (130 feet)

Cons

- Bicycle accommodations (SB only)
- Offset centerline
- One stage of construction will require pedestrian detour

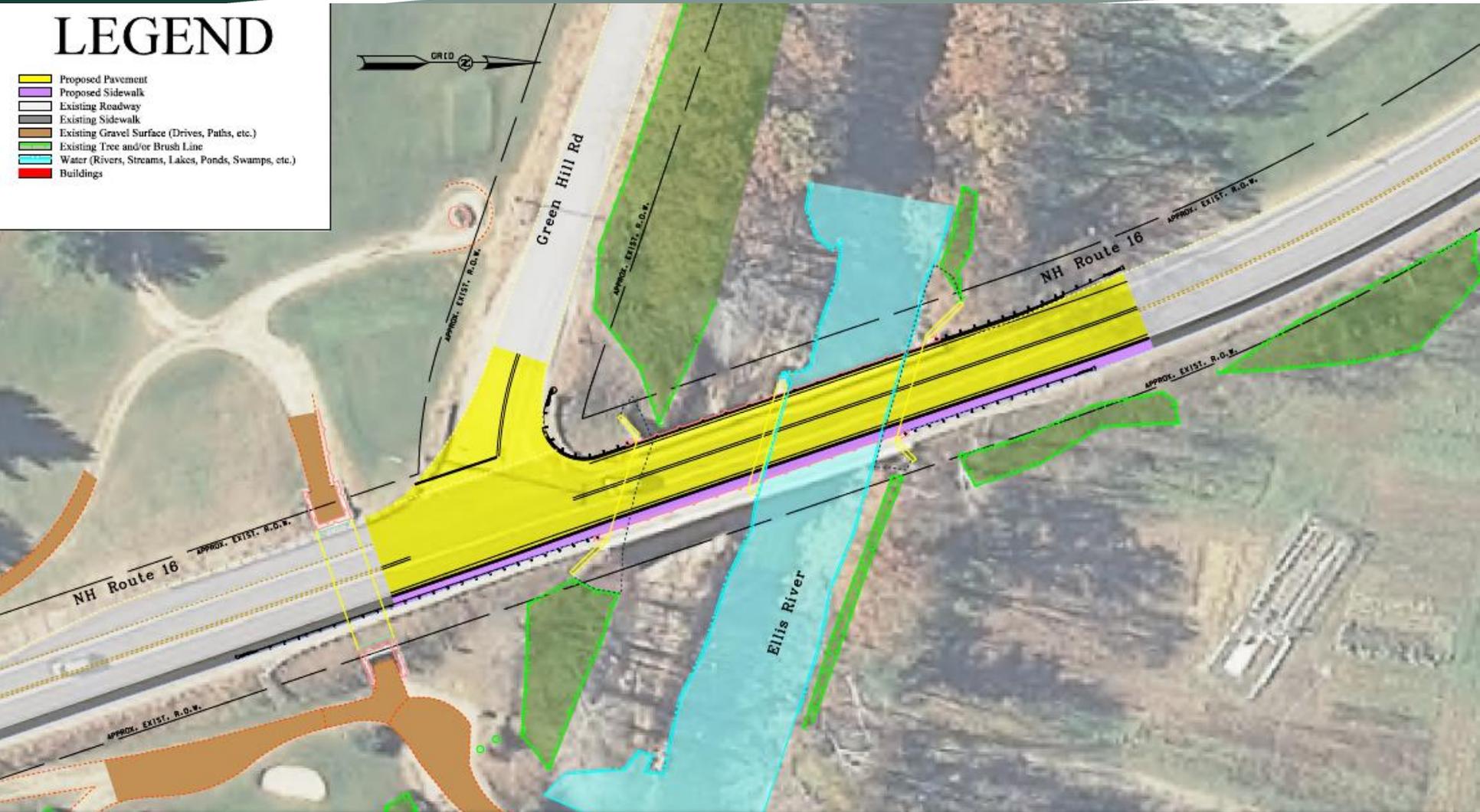
Jackson Public Informational Meeting

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Option 2

LEGEND

- Proposed Pavement
- Proposed Sidewalk
- Existing Roadway
- Existing Sidewalk
- Existing Gravel Surface (Drives, Paths, etc.)
- Existing Tree and/or Brush Line
- Water (Rivers, Streams, Lakes, Ponds, Swamps, etc.)
- Buildings



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Plan View

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COST BREAKDOWN

- **Option 1 & Option 2 - Essentially Identical**
- **Rehabilitation Options (Recommended)**
 - **Bridge - \$225,000**
 - **Highway/Traffic - \$305,000**
 - **Total = \$530,000**
- **Replacement Option (Not Recommended)**
 - **Total = \$5,000,000 - \$7,000,000**

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March 24, 2016

GREEN HILL ROAD INTERSECTION

- **Issues**

- **Sight Obstructions**

- *Conc. bridge parapet*
- *Vegetation*

- **Solutions**

- **Raising GHR profile**

- *(evaluated - does not help)*

- **Improve signage**

- **Improve lighting**

- **Remove vegetation**

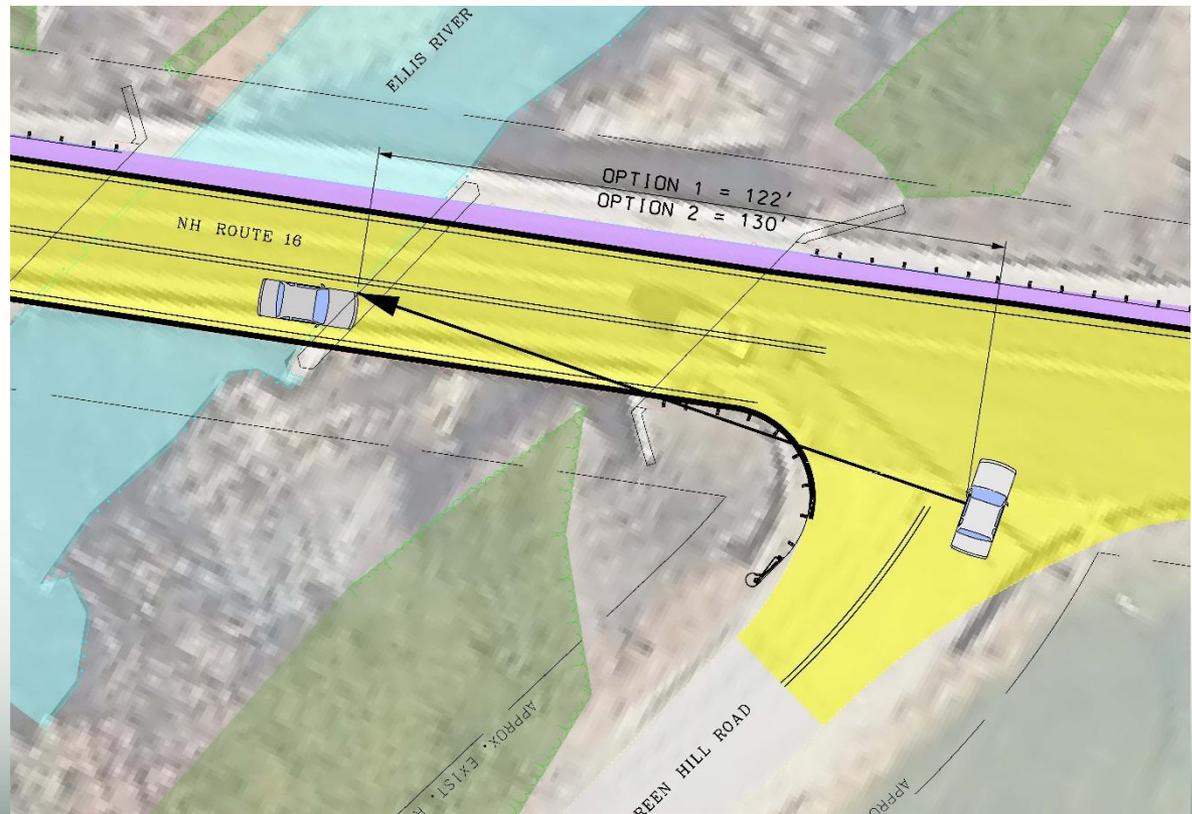


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GREEN HILL ROAD INTERSECTION

- **Visible Distance**
 - **Option 1 – 122 feet**
 - **Option 2 – 130 feet**



Jackson Public Informational Meeting

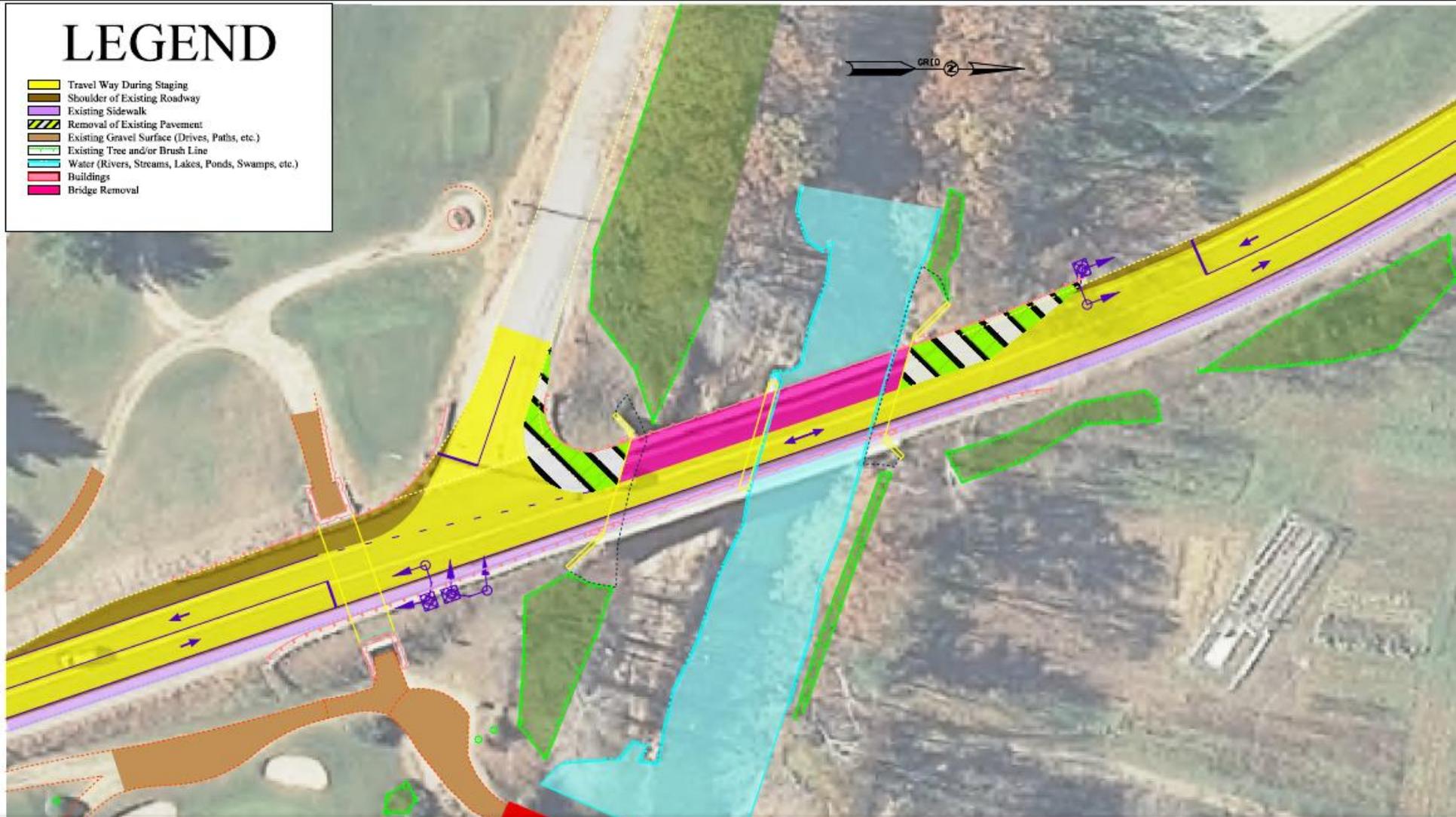
March 24, 2016

CONSTRUCTION STAGING

- **2 Construction Stages**
- **Signalized Alternating One-Lane Construction Zone**
- **Estimated 1 Construction Season**
 - **April – November (weather dependent)**

LEGEND

- Travel Way During Staging
- Shoulder of Existing Roadway
- Existing Sidewalk
- Removal of Existing Pavement
- Existing Gravel Surface (Drives, Paths, etc.)
- Existing Tree and/or Brush Line
- Water (Rivers, Streams, Lakes, Ponds, Swamps, etc.)
- Buildings
- Bridge Removal

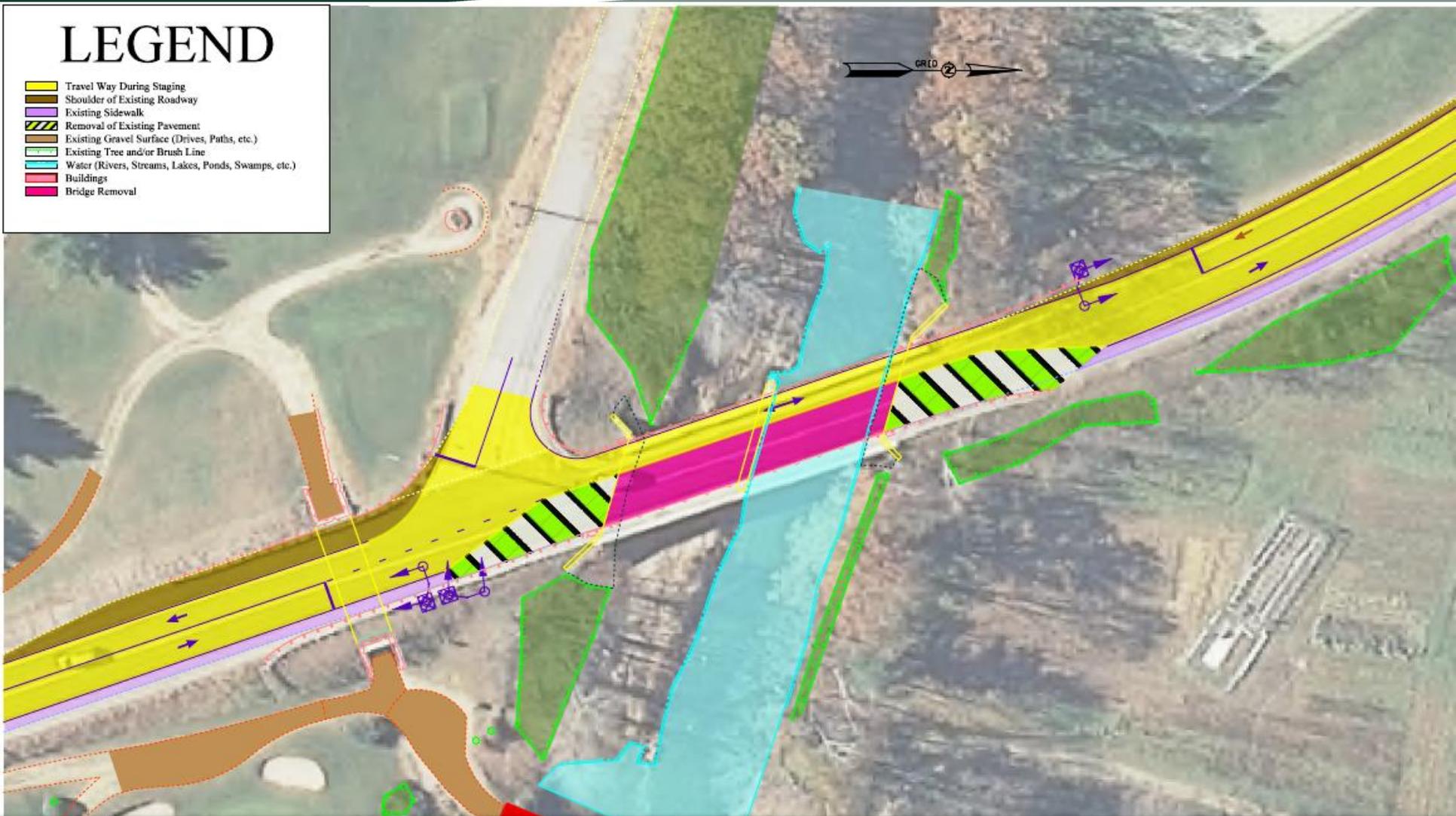


Jackson Public Informational Meeting Traffic Control – Stage 1

March 24, 2016

LEGEND

- Travel Way During Staging
- Shoulder of Existing Roadway
- Existing Sidewalk
- Removal of Existing Pavement
- Existing Gravel Surface (Drives, Paths, etc.)
- Existing Tree and/or Brush Line
- Water (Rivers, Streams, Lakes, Ponds, Swamps, etc.)
- Buildings
- Bridge Removal



Jackson Public Informational Meeting **Traffic Control – Stage 2**
March 24, 2016

Jackson Public Informational Meeting

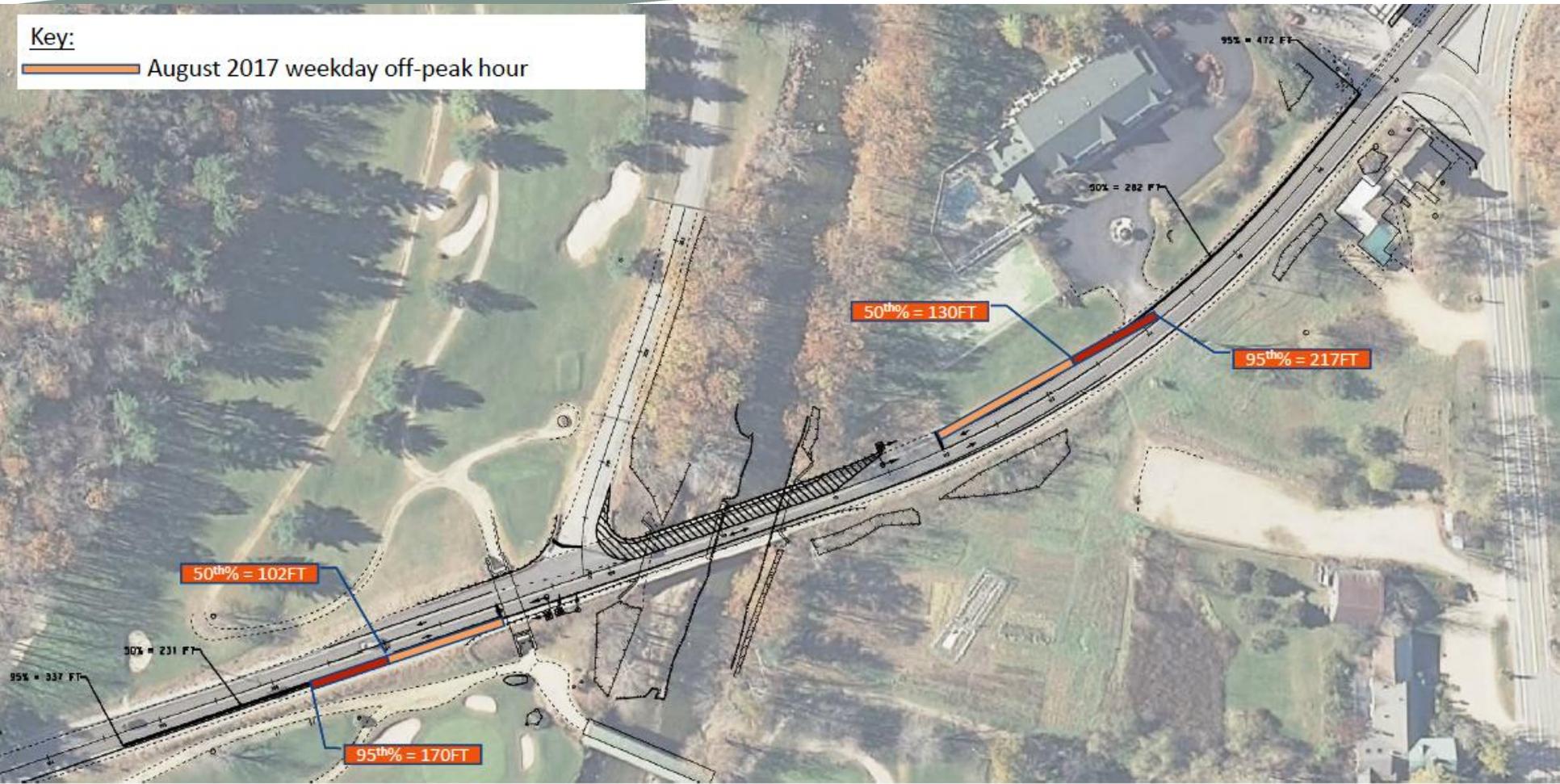
March 24, 2016

TRAFFIC QUEUES

- **Alternating one-way traffic**
- **Peak traffic is August weekend traffic**
- **Weekend traffic is approximately double the weekday condition**
- **Nearly all queues will clear in one cycle**
- **Traffic queues not anticipated to affect intersection of NH Route 16 & NH Route 16A**
- **NH 16 (NB and SB) and Green Hill Road will be under signal control.**
- **Emergency vehicle pre-emption accommodation**

Key:

August 2017 weekday off-peak hour



Jackson Public Informational Meeting
March 24, 2016

Traffic Queue Lengths

Cultural Resources

- **Project must follow Section 106 of the National Historic Preservation Act of 1966**
- **Section 106 requires consideration of cultural resources, including historic buildings and structures and archaeological deposits, that are generally greater than 50 years old**
- **The NH Division of Historical Resources (NHDHR) acts as the State Historic Preservation Office (SHPO)**
- **For this project, the Federal Highway Administration (FHWA) will be the Lead Federal Agency**

Cultural Resources

Architectural Resources: Review of the project area by an Architectural Historian will identify potentially historic buildings or structures.

Bridge – has previously been determined Eligible for listing in the National Register of Historic Places

Archaeology: There seems to be no archaeological concerns within the anticipated project area given the limited proposed Scope of Work

Cultural Resources

- Information will be reported to NHDOT and NHDHR for technical review and consultation.
- A Determination of Effect will be determined by NHDHR and FHWA
- Possible mitigation if the project is found to have an Adverse Effect
- Interested persons or organizations may request “*Consulting Party*” status from FHWA

Contact Jamie Sikora, 603-401-4870 or
jamie.sikora@fhwa.dot.gov

Natural Resources

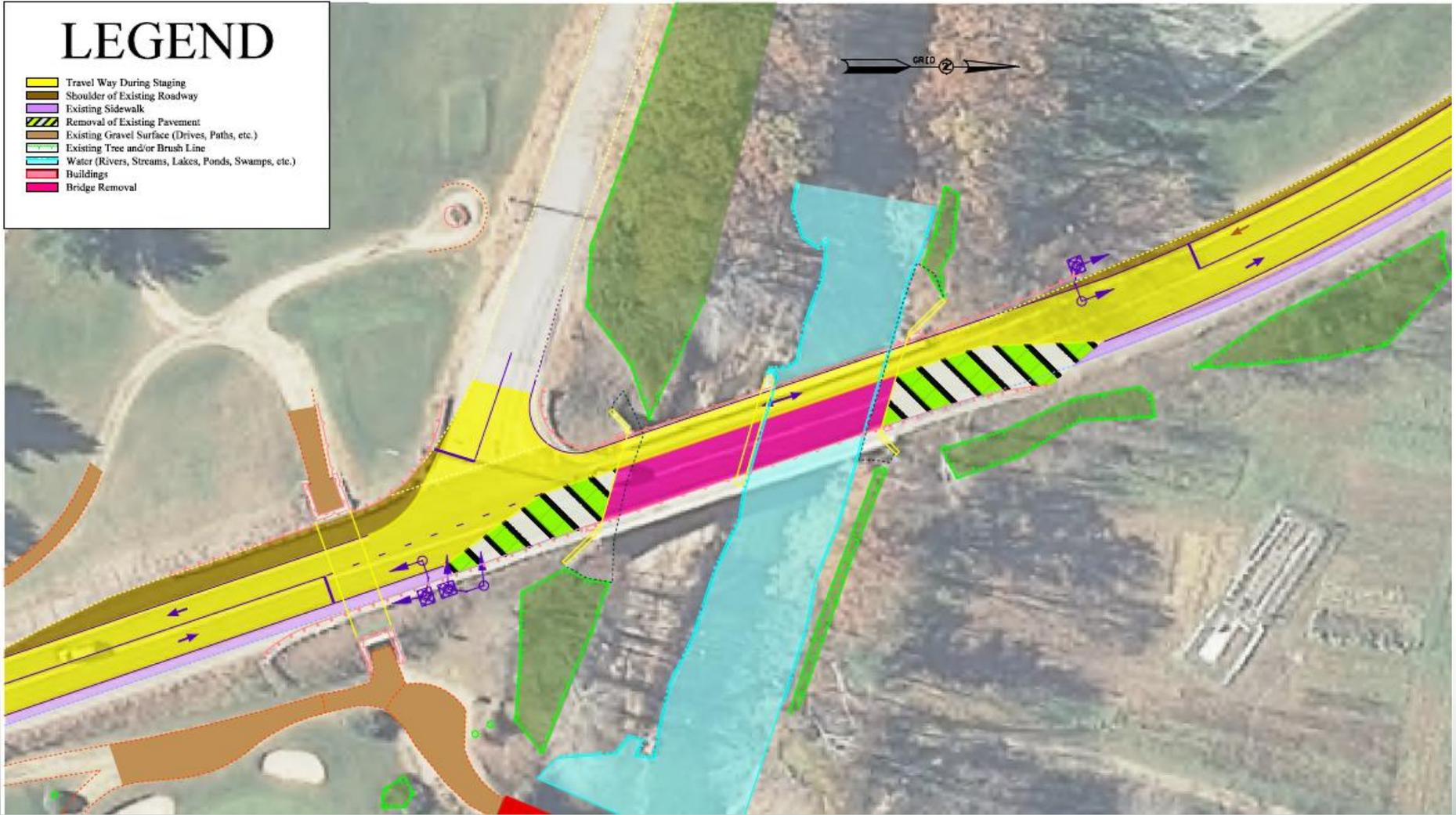


- Ellis River
- Wetlands
- Rare and Endangered Species
 - Northern Long-eared Bat
 - Mussels
- Essential Fish Habitat
- Floodplain
- Water Quality

Abutters and Right-of-Way

LEGEND

- Travel Way During Staging
- Shoulder of Existing Roadway
- Existing Sidewalk
- Removal of Existing Pavement
- Existing Gravel Surface (Drives, Paths, etc.)
- Existing Tree and/or Brush Line
- Water (Rivers, Streams, Lakes, Ponds, Swamps, etc.)
- Buildings
- Bridge Removal



Next Steps

- **Present Findings to Cultural and Natural Resource Agencies to Get Their Input and Comments**
- **Develop and Evaluate Alternatives based on Tonight's Input**
- **2nd Public Informational Meeting (Fall 2016), if needed, to address concerns raised tonight with the Preferred Alternative**
- **Complete NEPA Process (National Environmental Policy Act) for Environmental Permitting**
- **Develop Preliminary Plans**
- **Develop Contract Plans and Documents**

Next Steps and Schedule

- **Contract Plans Completed Fall 2017**
- **Funding in Fiscal Year 2023 (current Ten-Year Plan)**
- **Construction Starts in 2023**
- **Estimated Construction Cost \$600,000 based on Rehabilitation
(Funding is State & Federal - No Town Funding)**
- **Could Construct in 2018 if Funding Becomes Available**

Your Input is Needed

- **Emergency Response Routes**
- **School Bus Routes**
- **Historic Concerns**
- **Past Flooding Concerns with Ellis River**
- **Intersection Site Distance Concerns**
- **Bike and Pedestrian Concerns**
- **Other Concerns**



Concerns, Comments & Questions?