

New Ipswich 14465

Public Hearing
December 15, 2010

NH 123 / NH 124 Bridge
Over Souhegan River
"Highbridge"



SWRPC
Southwest Region Planning Commission

New Hampshire
DOT
Department of Transportation



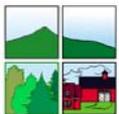
Agenda

- **Welcome and Introductions**
- **Project Approach**
- **Environmental Review**
- **Right-of-Way Process**
- **Existing Conditions**
- **Proposed Bridge Replacement**
- **Project Cost and Schedule**
- **Comments, Questions and Concerns**



Introductions

- Design Team
 - NH Department of Transportation
 - Southwest Region Planning Commission
- Project Advisory Committee
 - Town of New Ipswich
 - Project Abutters





Project Approach

Context Sensitive Solutions (CSS)

“A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility.”



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Consensus

Consensus does not mean that everyone agrees, but that the principal groups and individuals can live with a proposal.



CSS Steps

We are here

Public Hearing

Preferred Alternative

Public Info Meeting

Screen Alternatives

Brainstorm Alternatives

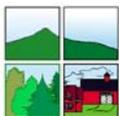
Screening Criteria

Vision Statement

Problem Statement

Placemaking Workshop

- Involve Stakeholders
- Identify Problem(s)
- Create a Vision
- Develop Range of Alternatives
- Determine Preferred Alternative



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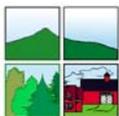
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Problem Statement

*Adopted
10/14/09*

The NH Route 123/124 (Turnpike Road) bridge, (“Highbridge”), built in 1957 over the Souhegan River in the Town of New Ipswich, is in poor condition and is on the State’s Redlist. An historic stone arch bridge structure, built circa 1820 which supports Highbridge, is deteriorating and needs attention to ensure the long-term stability of the structures. The roadway within the project area, between the intersections of NH 123/124 with Highbridge Road and River Road is narrow, lacking shoulders and adequate width for turning vehicles. The existing bridge has a sidewalk that may not be easily accessible to pedestrian/school traffic crossing the bridge. The stone arch bridge, although it is a valuable historic resource, is inaccessible and largely invisible to motorists and pedestrians. The alignment of the existing roadway bridge is skewed to the alignment of the approaches causing vehicles to strike the projecting corner of the bridge curbing. Excessive width of River Road at its intersection with Turnpike Road results in uncertain turning paths and vehicle conflict. The profile of Turnpike Road and overgrown vegetation along the roadside obstruct the sight line to the left from Highbridge Road. Viable detours are unavailable to route traffic around the bridge area for both planned and unplanned closures of the bridge. Connectivity is vital to New Ipswich residents, area businesses, commuters, schools, and emergency response.



Problem Statement

4/23/09

New Ipswich - NH 123,124 Bridge Reconstruction

Key concerns include:

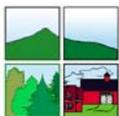
- **Bridge is in poor condition and needs replacement**
- **Historic stone arch is deteriorating and invisible to motorists and pedestrians**
- **Bridge is narrow, lacks shoulders and adequate width for turning vehicles.**
- **Bridge skew causes vehicles to strike corner of bridge curbing.**
- **Sight distance to the left, from Highbridge Road, is poor.**
- **Viable detours unavailable for both planned and unplanned closures of the bridge.**



Vision Statement

*Adopted
10/14/09*

NH Route 123/124 is a vital road providing access for local and regional traffic within and through New Ipswich. Highbridge crosses the Souhegan River at the junction of NH Routes 123 and 124. The corridor in the vicinity of the bridge will be enhanced by replacing the upper steel bridge, preserving the historic lower stone arch, and redesigning the approaches to the bridge. In addition to upgrading roadway safety, the new bridge and its approaches will provide opportunities to optimize the roadway width, allow for safe bicycle and pedestrian travel, and improve drainage. The project will maintain the historic, cultural, and natural resources by utilizing least impacting practical alternatives to protect the environment and aesthetic value in and around the Highbridge area. The bridge will be aesthetically pleasing, environmentally sensitive, and will preserve the historic character of New Hampshire's earliest textile mills.



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Vision Statement

New Ipswich - NH 123,124 Bridge

Reconstruction

- NH Route 123/124 provides access for local and regional traffic
- Preservation of the historic lower stone arch
- Redesign the approaches to the bridge
- Optimize the roadway width
- Provide safe bicycle and pedestrian travel
- Maintain cultural and natural resources and preserve the historic character of New Hampshire's earliest textile mills



Screening Criteria

- Access
- Aesthetics
- Natural Resources
- Cultural Resources
- Economic Viability
- Mobility
- Safety
- Implementation / Constructibility



project website: www.nh.gov/dot/projects/newipswich14465/index.htm



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Environmental Review

Matt Urban
Environmental Analyst
NH Department of Transportation



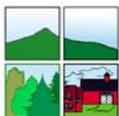
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Right-of-Way Process

Victoria H. Chase PE
Right-of-Way Engineer
NH Department of Transportation



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Location Map



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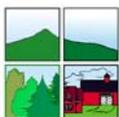
Existing Conditions - Bridges

1. NH 123/124 bridge

- Built in 1957 – steel and concrete
- 24' roadway plus sidewalk
- Poor condition
- Supported by stone bridge

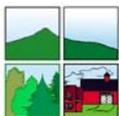
2. Stone arch bridge

- 1820's construction – historic structure
- Dry laid stone





Existing Conditions



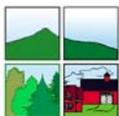
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Existing Conditions



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New Ipswich 14465 Existing Downstream Elevation



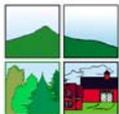
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New Ipswich 14465 Proposed Downstream Elevation



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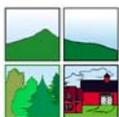
Existing Conditions - Highway

1. NH 123/124 (Turnpike Road)

- 30 mph posted speed
- No shoulders
- Steep descent from east
- Road is angled to bridge

2. NH 123 (Highbridge Road)

- Very close to bridge
- Flashing signal beacon





Existing Conditions



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Existing Conditions



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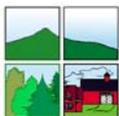


Key Design Issues

1. Minimize impacts

- Houses and buildings close to road
- Historic bridge and district

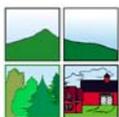
2. Maintain traffic during construction



Preliminary Alternatives

- **Context Sensitive Solutions**
 - Project Advisory Committee suggests alternatives
 - The alternatives are defined through discussion
 - The NHDOT designs the alternative to meet appropriate design standards.

- **3 alternatives screened**
 - Shared elements
 - 11' lanes
 - 4' paved shoulders
 - 5' sidewalk across bridge



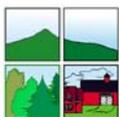
Preliminary Alternatives

Alternative 1

- New bridge beside existing (upstream)
 - No detour needed
 - Property Impacts and Structure removal

Alternative 2 and 3

- New bridge in existing location
 - Close existing bridge (Detour required)
 - Moderate alignment improvement
 - Modest alignment improvement



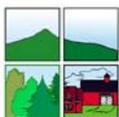
Preliminary Alternatives -Detours

Upstream detour

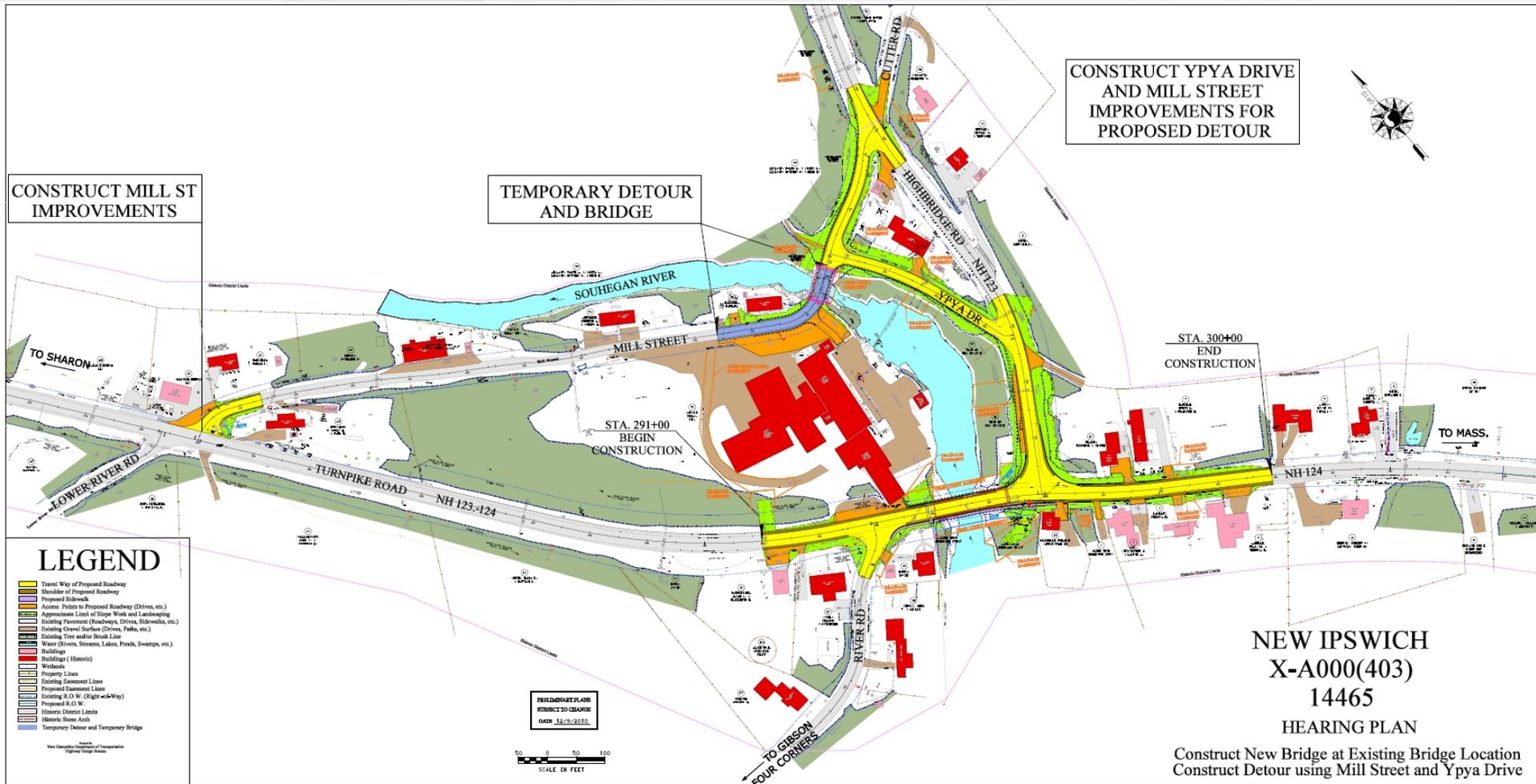
- Property impacts
- Signals / queues / steep grades
- Concern with winter operation

Mill Street detour

- School buses and emergency vehicles only?
- Steep grades
- Summer only



Preferred Alternative

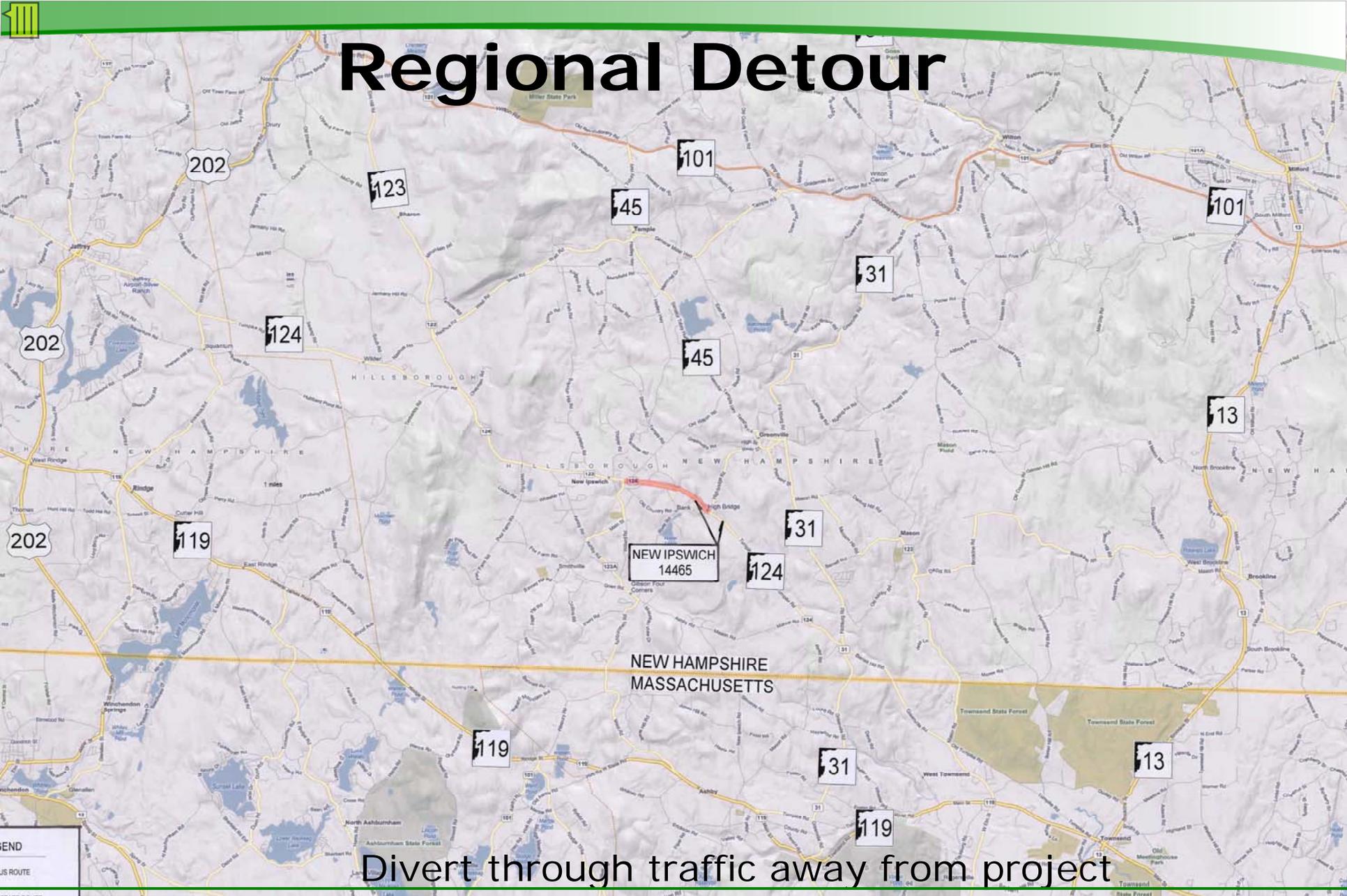


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Regional Detour



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NEW HAMPSHIRE
MASSACHUSETTS

Divert through traffic away from project

END
ROUTE

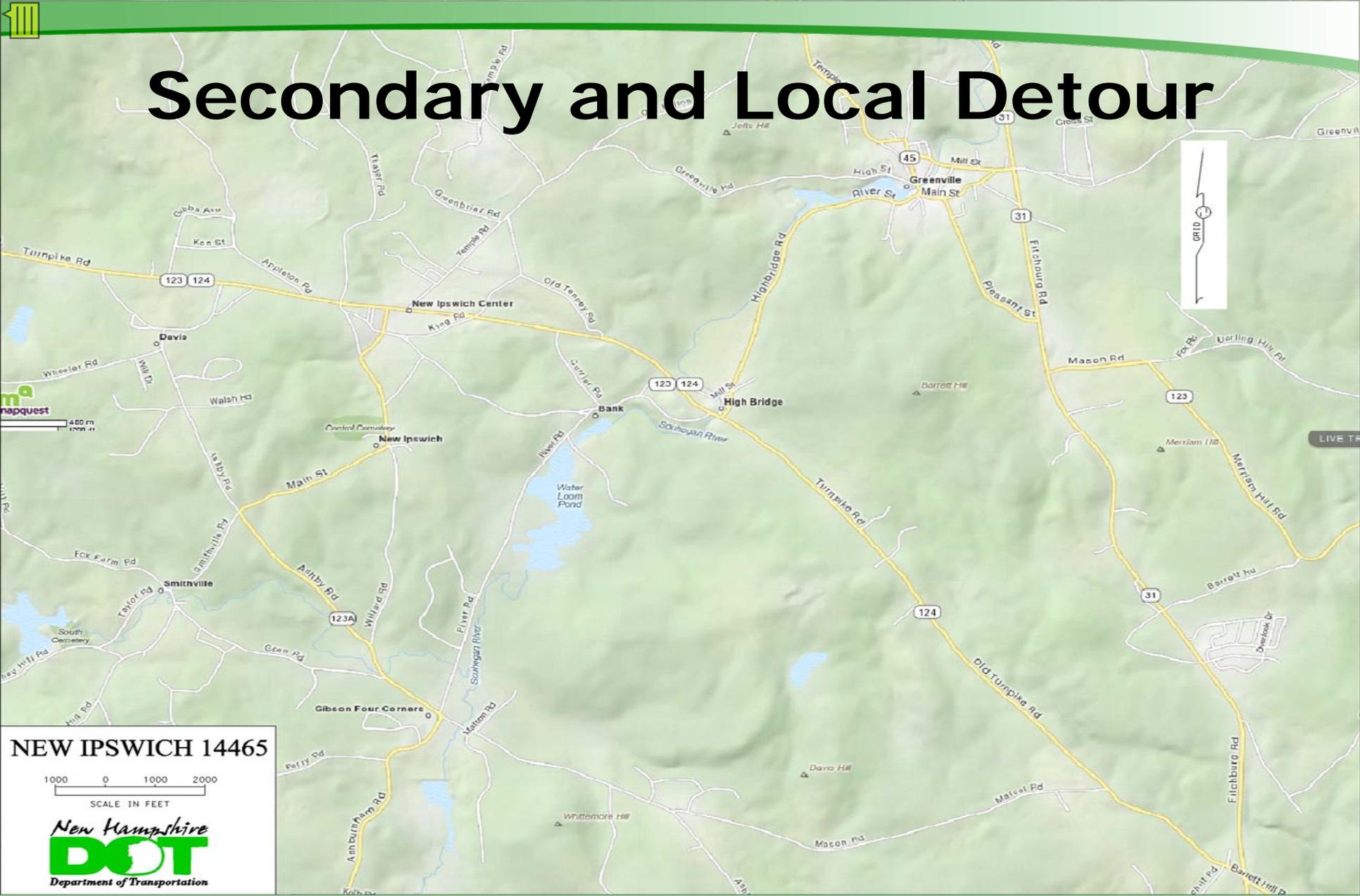


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Secondary and Local Detour



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1000 0 1000 2000
SCALE IN FEET

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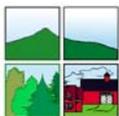
Cost and Schedule

1. Estimated cost

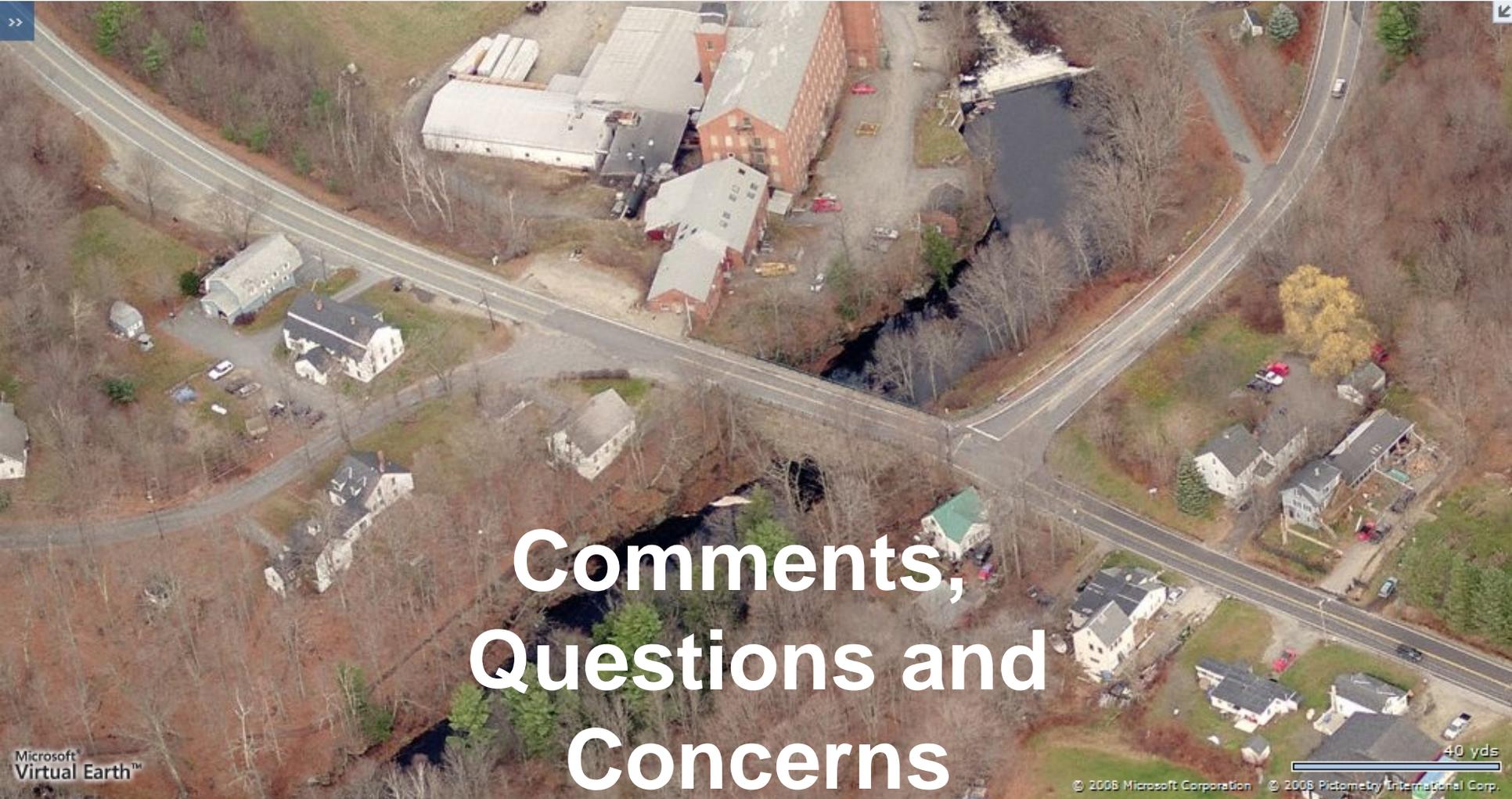
- \$2.75 million
- Includes cost of Mill Street detour

2. Schedule

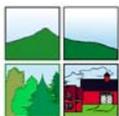
- Final Design 2011-2012
- Construction begins Fall 2012



Thank You



Comments, Questions and Concerns



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