Durham-Newmarket 13080-A

NH Route 108

Transportation Enhancement Project

Project Update

March 6, 2013

CHA

New Hampshire DOT
Department of Transportation

Agenda

- Introductions
- Technical Presentation
  - Project Limits
  - Existing Conditions
  - Project Goals
  - Project Challenges
  - Property impacts
  - Environmental Issues
- Project Costs and Schedules

Project Team

- Design Consultant - CHA - Clough Harbour and Associates
- In-house staff design review and guidance
- In-house Right-Of-Way staff
- In-house Environmental staff
- In-house Utility Relocation/Coordination

Technical Presentation Agenda

- Thank you and introductions
- Color Plan Review
- Project Overview
- Review of Existing Conditions
- Project Goals
- Project Constraints / Controls
- Project Challenges
- ROW Impacts
- Environmental Issues
- Cultural Issues
- Looking Ahead

Color Plan Review

- Review of Color Legend
  - Travel Lanes – Yellow
  - Shoulders – Brown
  - Slope Limits – Darker Green
  - Driveway Construction Limits – Orange
  - Wetlands – Blue Hatch

- Plan Orientation – North to the right

Project Limits

- Overall Corridor – Route 108
  - Newmarket to Durham – 3.65 miles
    - Bay Road to north of Durham Point Road
  - 2 Contracts – A & B

- Contract A
  - 1.17 miles

- Contract B (to be presented at a later date)
  - 2.48 miles

Project Limits

- Contract A
  - 1.17 miles
  - 300’ north of Stagecoach Road to
  - 300’ north of Longmarsh Brook Bridge
  - Includes Bennett Road & Longmarsh Road intersection match
- Includes “Flats” Area
  - Station 572+00 to 617+00

Existing Conditions

- Roadway Classification
  - Rural, Major Collector
    - Provides a linkage between cities, larger towns and other traffic generators
    - Durham & Newmarket

- Speed Limit (Design Speed)
  - 45 mph – Southern limit to just prior to Bennett Road
  - 35 mph – Prior to Bennett Road to Northern limit

Existing Conditions

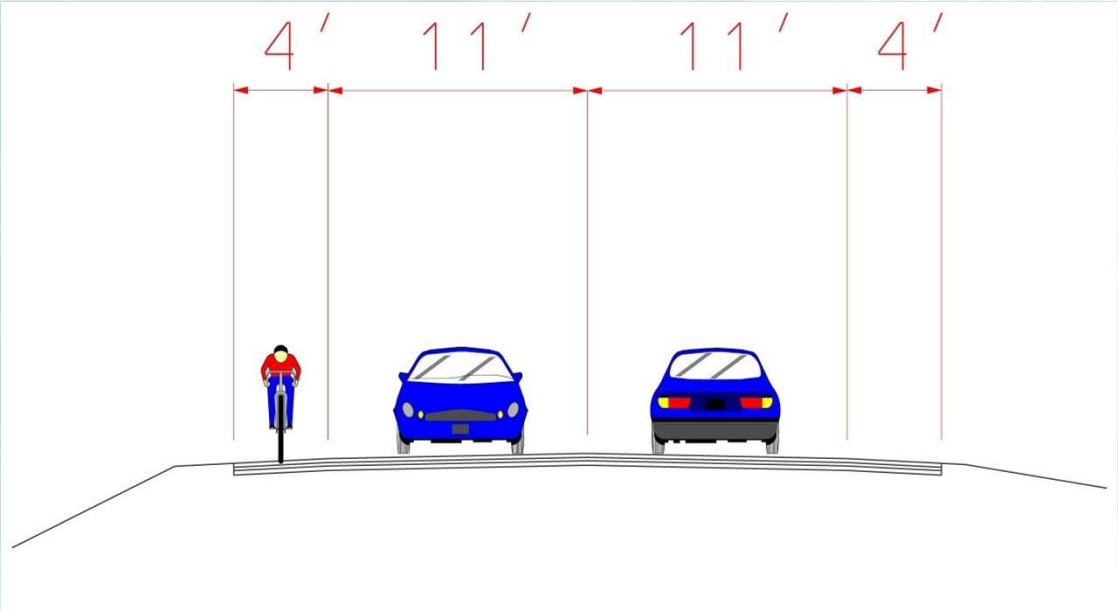
- Existing Typical Section
  - 11’ Travel Lanes
  - 0’ – 4’ Shoulders – mainly Gravel
- Project Corridor / Evolution of NH Roads
  - Horizontal Alignment
  - Vertical Alignment
    - Sandwich of extremely flat terrain (less than 0.3%) between rolling terrain
  - Cross Slope / Superelevation

Project Goals

- Provide additional width for:
  - Vehicles
  - Bicycles
  - Pedestrians

Project Goals

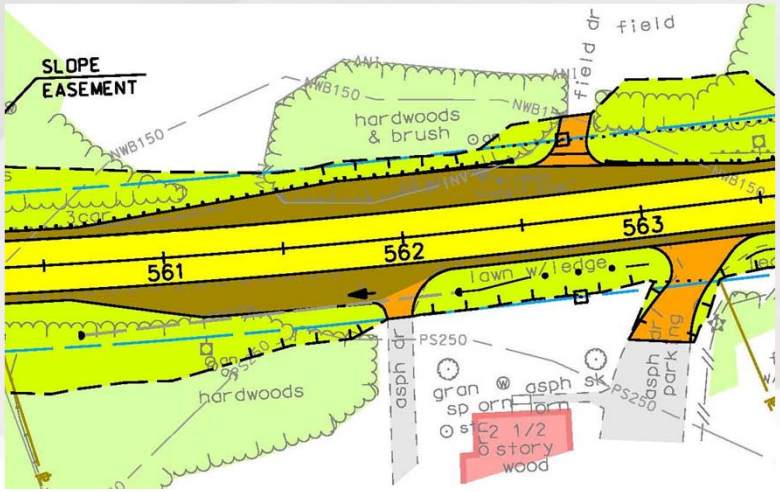
- Proposed Typical Section
  - 11’ Travel Lane with 4’ Paved Shoulder



Project Goals

- Formalize and improve Wildcat Transit Bus Pull Offs

  Contract A: 8 locations



Project Goals

- Improve the following:
  - Pavement Condition / Structural Box
  - Clear Zone / Side Slopes / Guardrail
  - Drainage – open and closed systems

Project Constraints / Controls

- Closely Mimic Existing Geometry
- Right-of-Way (ROW)
- Wetlands
- Utility Poles

Project Constraints / Controls

- Rock Outcroppings
  - Station 568+00 RT
  - Station 619+00 LT
  - Station 628+00 LT
  - Station 636+00 RT

- Existing Bridge over Longmarsh Brook (Profile Control)

Project Challenges

- Balancing improvements to Route 108 against impacts to properties
  - Horizontal Alignment
    - Closely mimics existing layout
  - Vertical Alignment
    - Improving sight distances – Crest & Sag
    - Creating vertical geometry in the “Flats”
    - Reclaiming existing pavement / profile control

Right-of-Way Impacts

- Avoid or minimize ROW impacts through design alternatives
  - Modified ditch sections
  - Re-routing drainage

- Unavoidable in all locations

Right-of-Way Impacts

- Easements
  - Permanent and Temporary
    - Drainage
    - Slope
    - Stone Wall
    - Driveway
    - Sight Line
- Acquisitions – minimized but 1 required

Environmental Issues

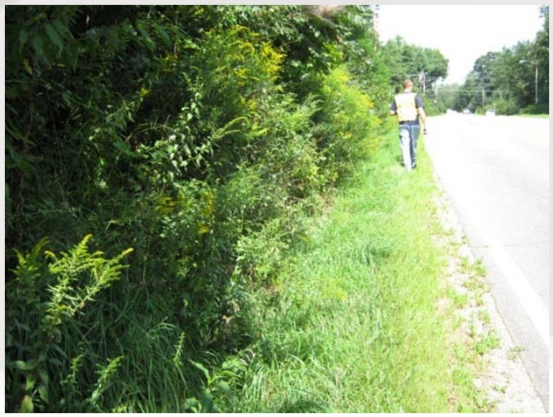
- Wetland Impacts
  - Minimized using 4:1 slopes
  - Clearing to Slope Limits
- Prime Turtle Habitat

Blanding's Turtle

Environmental Issues

- Invasive Species Program
  - Started Fall 2011
- Vegetation Management

Japanese Knotweed



Dense Roadside Vegetation

Cultural Issues

- Historic District
  - Doe-Mooney-Dame-Stevens Farms
- Stone Walls
  - Reconstruction

Looking Ahead

- Finalize Design
- Utility Coordination
- Environmental Permitting
- ROW Process
- Prepare for Contract Advertising
- Construction

Current Project Cost and Schedule
13080-A

- $2.42 million
  - 80% Federal / 20% State
  - No Town funds
- Final Design plans – Ongoing
- Right of way acquisition – Ongoing
- Advertise project for bids – **April 1, 2014**
- Begin Construction – June 2014

Current Project Cost and Schedule
13080-B

- $4.6 million
  - 80% Federal / 20% State
  - No Town funds
- Final Design plans – 2013 / 2014
- Right of way acquisition – 2013 / 2014
- Advertise project for bids – **September 9, 2014**
- Begin Construction – April 2015

Coordination with Town

- Municipal Work Zone Agreement (MWZA)

Thank You

Plans and presentation are available on Internet

http://www.nh.gov/dot/projects/specifics.htm