



Weston Public Information Meeting

VT 100 – Bridge #98

January 13, 2014

Presented by



**Accelerated
Bridge
Program**
VTRANS

Introductions

Jennifer Fitch, P.E.

VTrans Project Manager

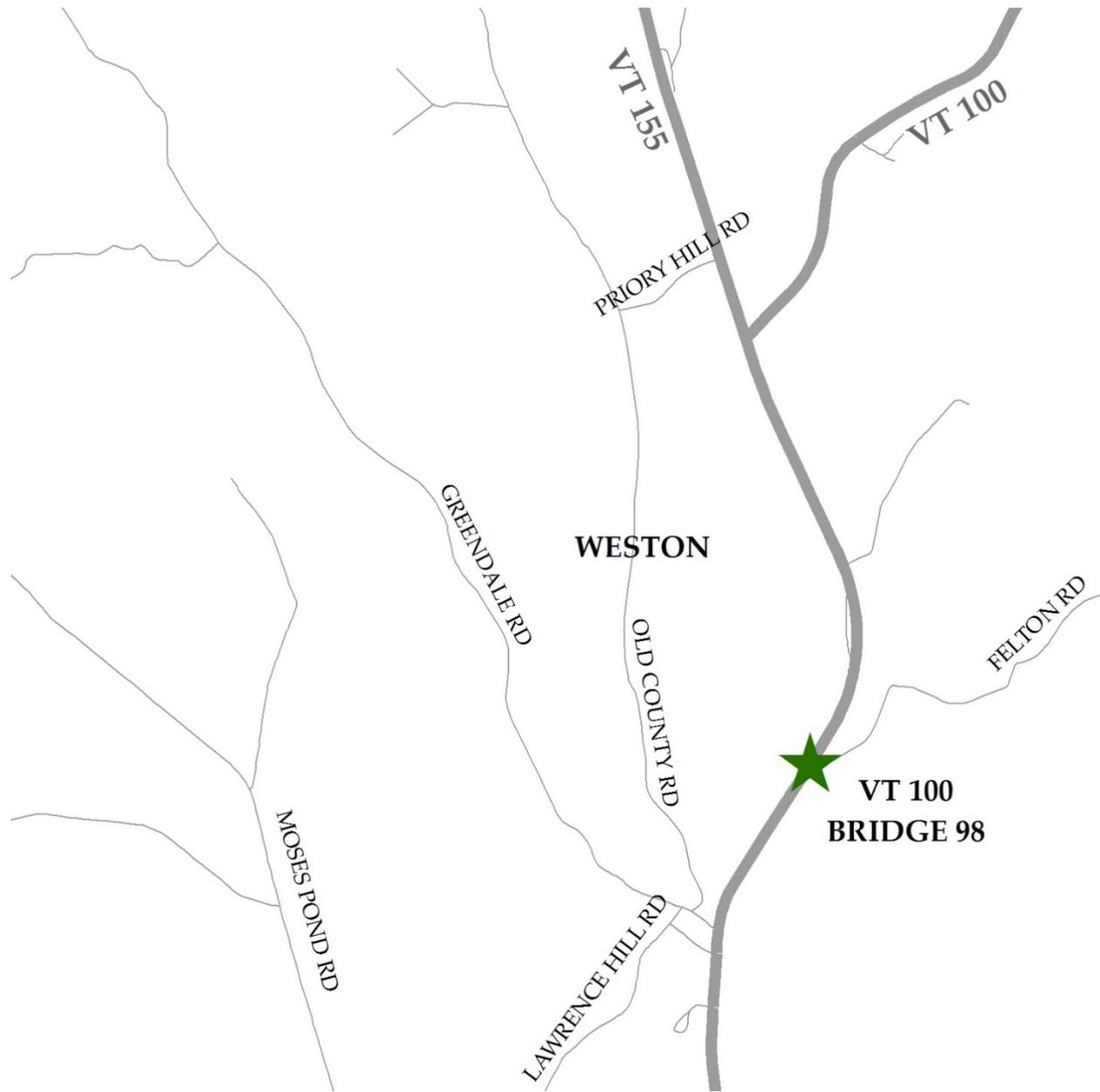
Scott Burbank, P.E.

VHB Project Manager

James Westcott, P.E.

VHB Project Engineer





Location Map

Meeting Overview

- VTrans Project Development Process
- Project Overview
 - Existing Conditions
 - Proposed Design
- Construction and Traffic Control
- Schedule
- Questions



VTrans Project Development Process

- Phase A: Project Definition
- Phase B: Project Design
- Phase C: Construction



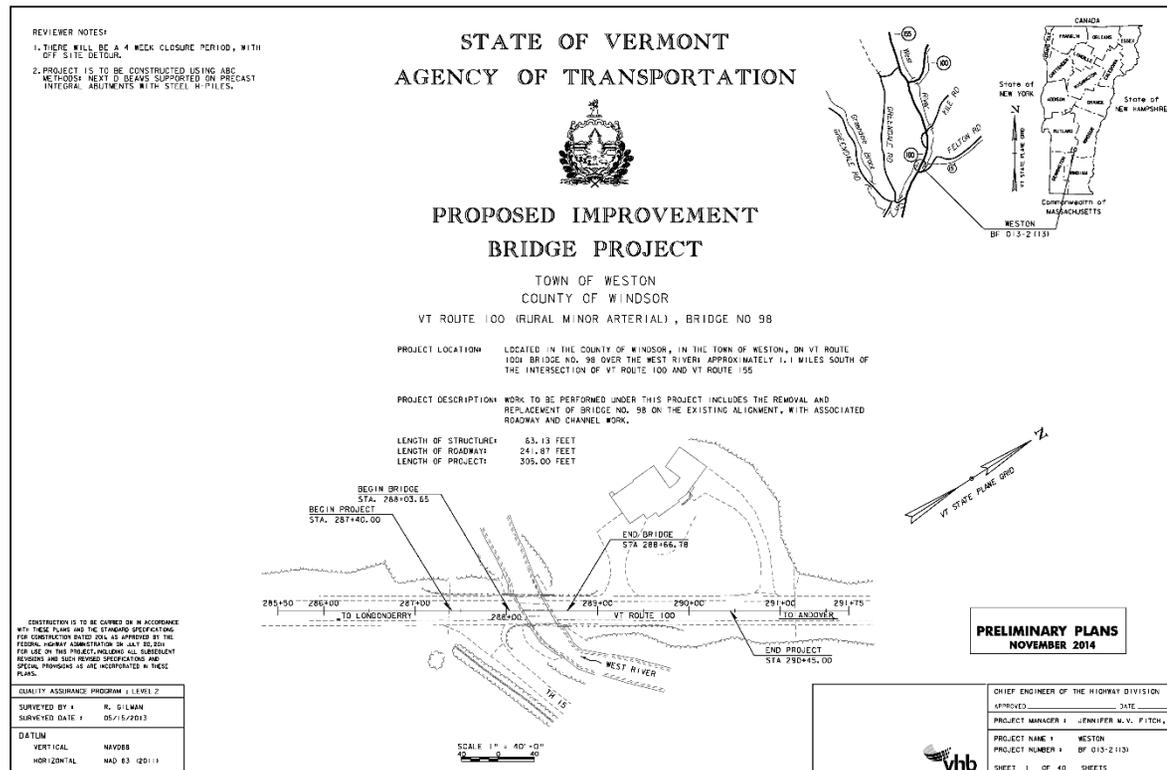
Phase A: Project Definition Completed

- Data Collection
- Survey and Utility Location
- Local Concerns
- Maintenance of Traffic
- Project Scoping
- Conceptual Plans



Phase B: Project Design ← Initiated

- Preliminary Plans through Contract Plans



Phase B: Project Design

- Design and Construction Documents
 - Plan Development Milestones
 - Preliminary (60%) - **Completed**
 - Final (90%)
 - Pre-Contract (95%)
 - Contract (100%)
- Bid Advertisement
- Accelerated Bridge Program = Expedited Project Delivery



Phase C: Construction

- Construction of Project



Phase C: Construction

- Contract Award
- Construction
- Oversight provided by VTrans Resident Engineer



Project Overview

- Existing Conditions
- Design
- Construction and Traffic Control





Existing Conditions – Bridge #98

- Superstructure - Simple Span Steel Beam with Concrete Deck
- Substructure – Reinforced Concrete Abutments
- Constructed in 1925

Existing Conditions – Bridge #98

- Structurally Deficient
- Deck geometry is substandard
- Bridge railing is substandard
- Hydraulic capacity is substandard



Existing Conditions - Bridge #98

- Structurally Deficient
 - Substructure Rating 4 "Poor"



Abutment 1: Southeast corner

Approach looking south



Existing Conditions - Bridge #98

- Substandard Deck Geometry
- Substandard Railing

05.15.2013

West Elevation



Existing Conditions - Bridge #98

- Substandard Hydraulic Opening

Design – Bridge #98

- Bridge and Roadway Widening
 - 11' Travel Lane and 5' Shoulder = 32' Roadway Width
 - Existing: 12' Travel Lane and 3' Shoulder = 30.5' Roadway Width
- Increased Bridge Length and Raised Roadway Slightly to Provide Adequate Hydraulic Capacity
- Railing



Design - Bridge #98

- Superstructure
 - Precast Prestressed Concrete NEXT Beam Bridge



Design Criteria – Bridge #98

- Substructure
 - Precast Concrete Integral Abutment on Steel H-Piles



Advantages to Bridge Design

- New Bridge Structure
- Increased rail-to-rail width
- Safety Improvements
- Increased Hydraulic Capacity
- Minimize Impacts



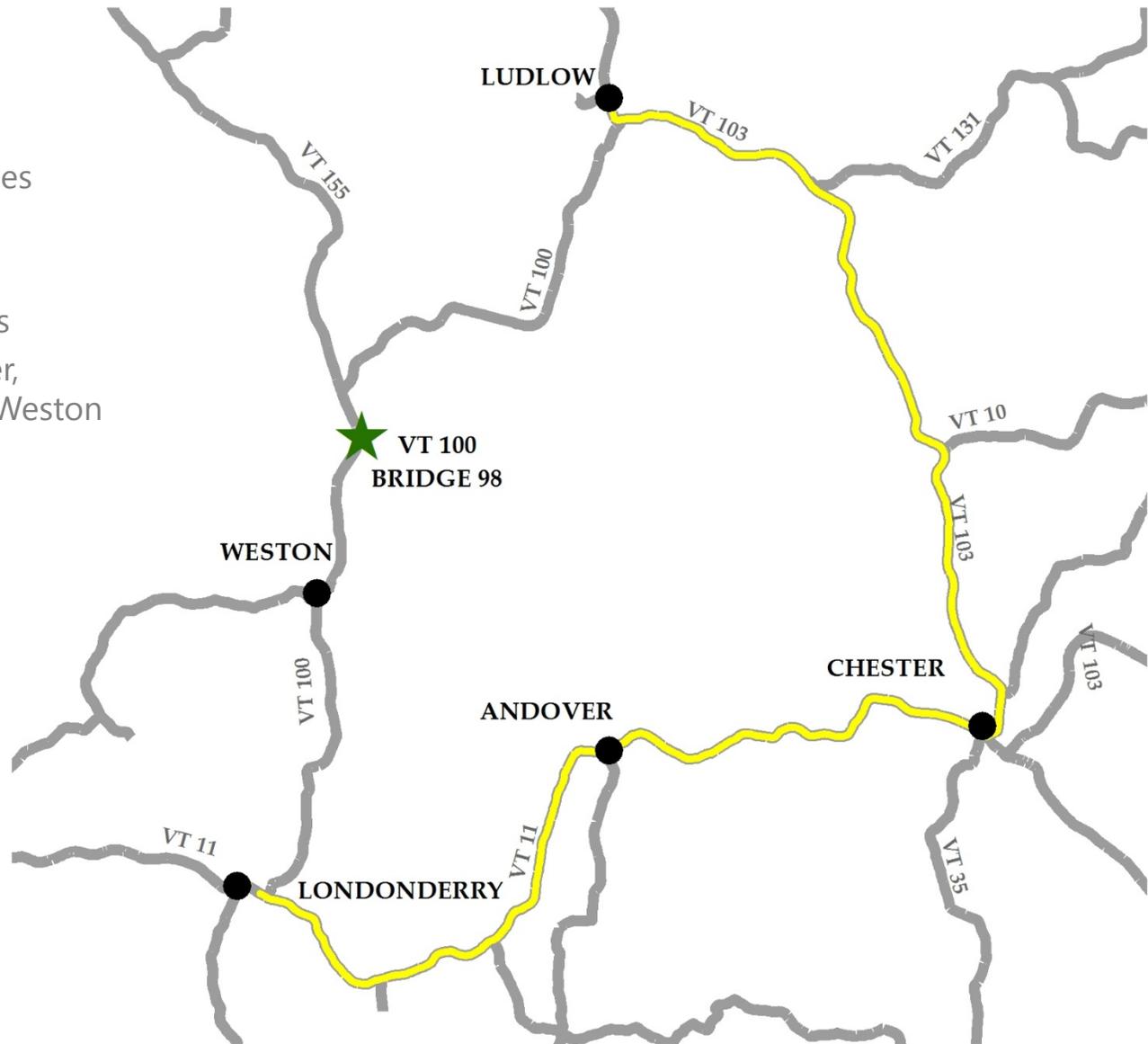
Construction and Traffic Control

- Accelerated Bridge Construction with Off-Site Detour
 - Construction During Summer
 - 4 Week Roadway Closure – Between July and August



Regional Detour Map

- Through Distance = 16 miles
Ludlow to Londonderry
- Detour Distance = 27 miles
Ludlow to Chester, Andover,
Londonderry and back to Weston
- Extra Mileage Required by
Detour = 11 miles



Schedule

- Preliminary Plans – Completed Fall 2014
- Final Design – Spring 2015
- Pre-Contract and Contract Plans – Summer 2015
- Bid Advertisement – Fall 2015
- Contract Awarded – Late Fall 2015
- Construction – Summer 2016



Questions?



Local Bypass

