# MASS CENTRAL RAIL TRAIL
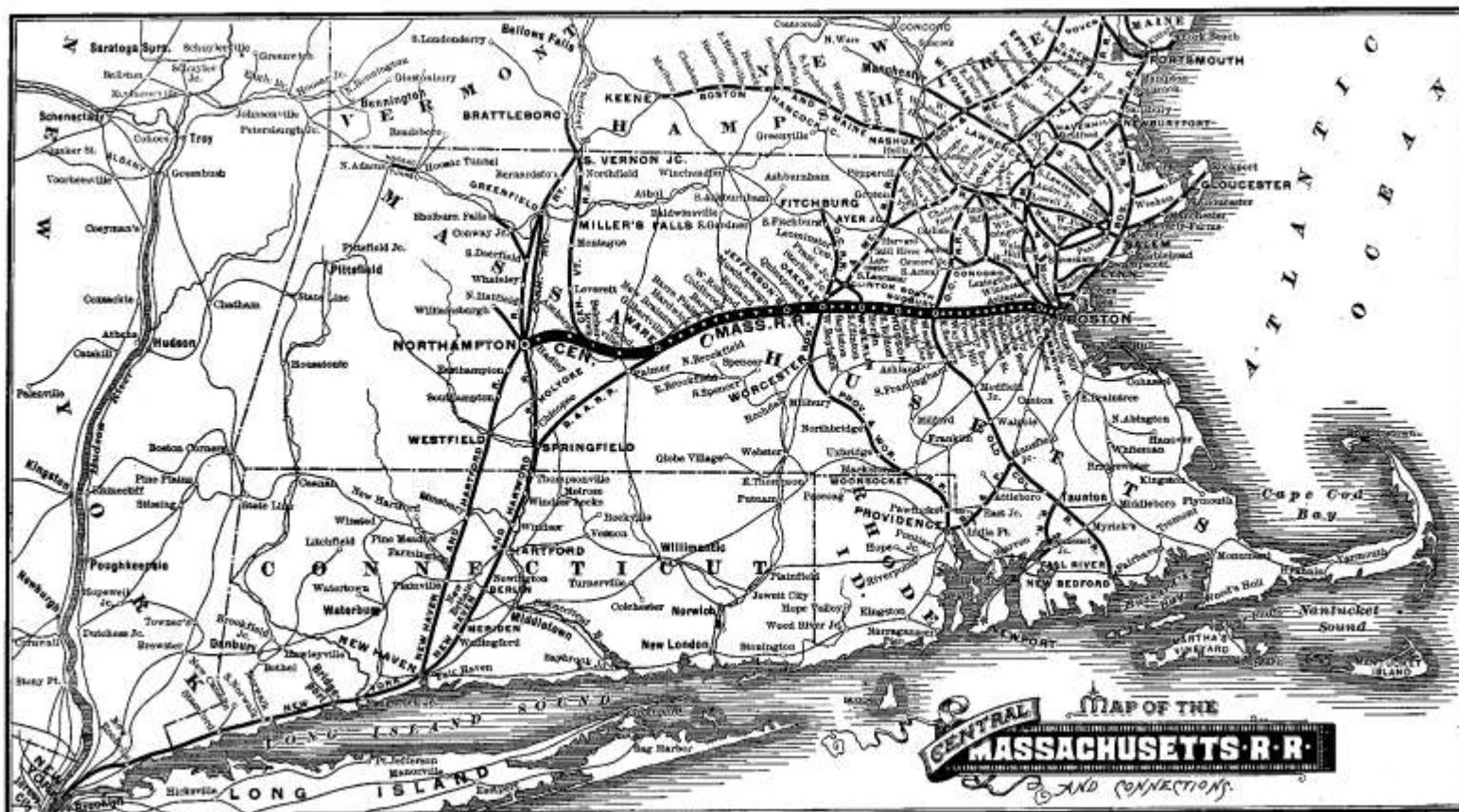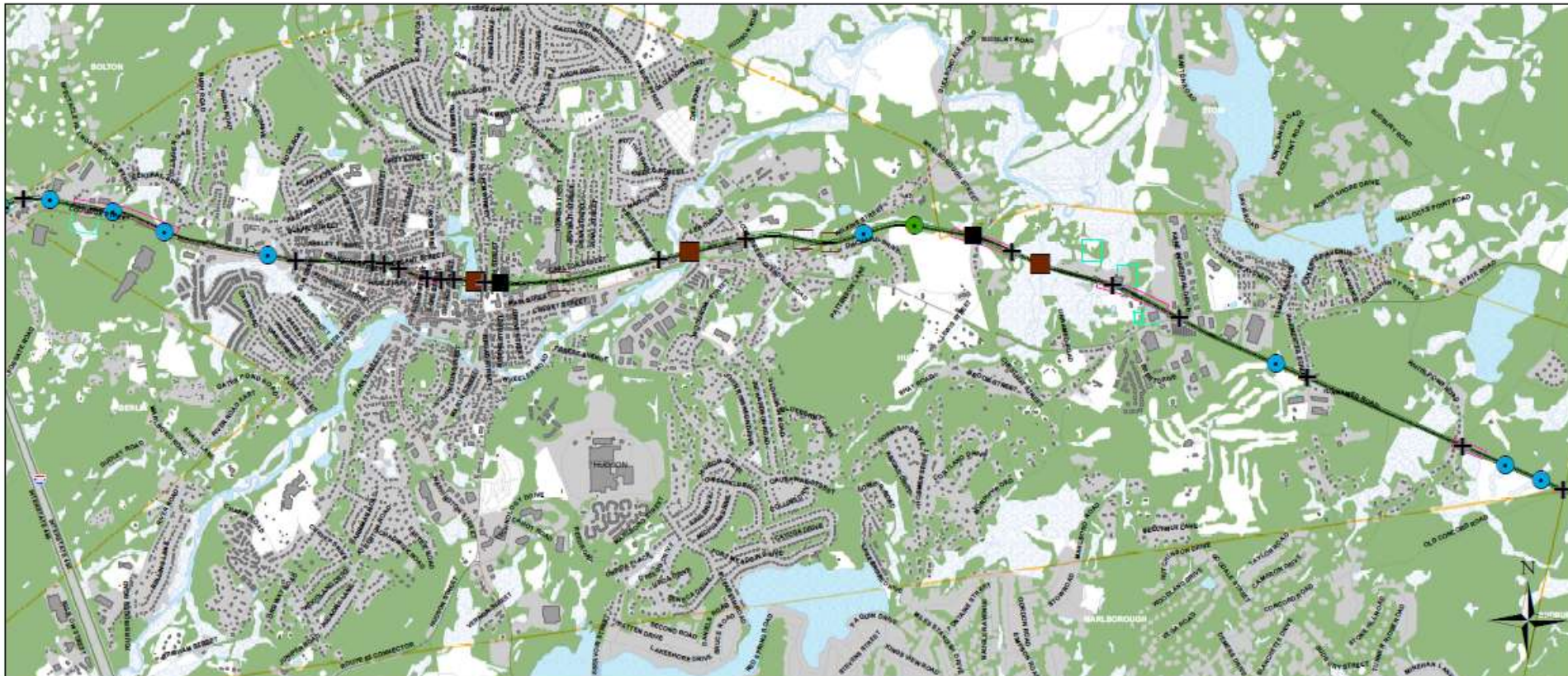## Wayside
### Update and Status

MCRT - Wayside
Berlin to Waltham

Mass Central Rail Trail - Wayside
Berlin Section

**Legend**

MBTA ROW - DCR Lease
MCRT Construction Limit
ArchaeologicallySensitiveAreas
Archaeological_Sites
MCRT Encroachments

**MCRT Infrastructure**
At-Grade Crossing
Underpass
Underpass - Filled
Bridge
Bridge - Missing
Culvert
Cattle Pass

**Land Use (2005)**
Forest
Water
Developed
MA Towns..Solid Outline
DEP Wetlands (1:12,000)

dcr
Massachusetts

For planning purposes only.
Data from MassGIS, DCR, EOT Val Maps,

0    0.125    0.25    0.5    0.75    1
Miles

# Berlin

495 Underpasses

## Mass Central Rail Trail - Wayside
## Hudson Section

**Legend**

| | |
|---|---|
| ☐ | MBTA ROW - DCR Lease |
| ☐ | MCRT Construction Limit |
| ☐ | ArchaeologicallySensitiveAreas |
| ☐ | Archaeological_Sites |
| ▨ | MCRT Encroachments |

**MCRT Infrastructure**

| | |
|---|---|
| ✛ | At-Grade Crossing |
| ▣ | Underpass |
| ■ | Underpass - Filled |
| ■ | Bridge |
| ☐ | Bridge - Missing |
| ● | Culvert |
| ● | Cattle Pass |

**Land Use (2005)**

| | |
|---|---|
| ■ | Forest |
| ■ | Water |
| ■ | Developed |
| ☐ | MA Towns..Solid Outline |
| ▨ | DEP Wetlands (1:12,000) |

dcr
Massachusetts



0   0.3   0.6   1.2   1.8   2.4
Miles

For planning purposes only.
Data from MassGIS, DCR, EOT Val Maps,

# Hudson

MCRT - Wayside
Berlin to Waltham

**Mass Central Rail Trail - Wayside Sudbury Section**

Legend

MBTA ROW - DCR Lease
MCRT Construction Limit
ArchaeologicallySensitiveAreas
Archaeological_Sites
MCRT Encroachments

MCRT Infrastructure

At-Grade Crossing
Underpass
Underpass - Filled
Bridge
Bridge - Missing
Culvert
Cattle Pass

Land Use (2005)

Forest
Water
Developed
MA Towns..Solid Outline
DEP Wetlands (1:12,000)

dcr
Massachusetts

0    0.225    0.45    0.9    1.35    1.8
Miles

For planning purposes only.
Data from MassGIS, DCR, EOT Val Maps,
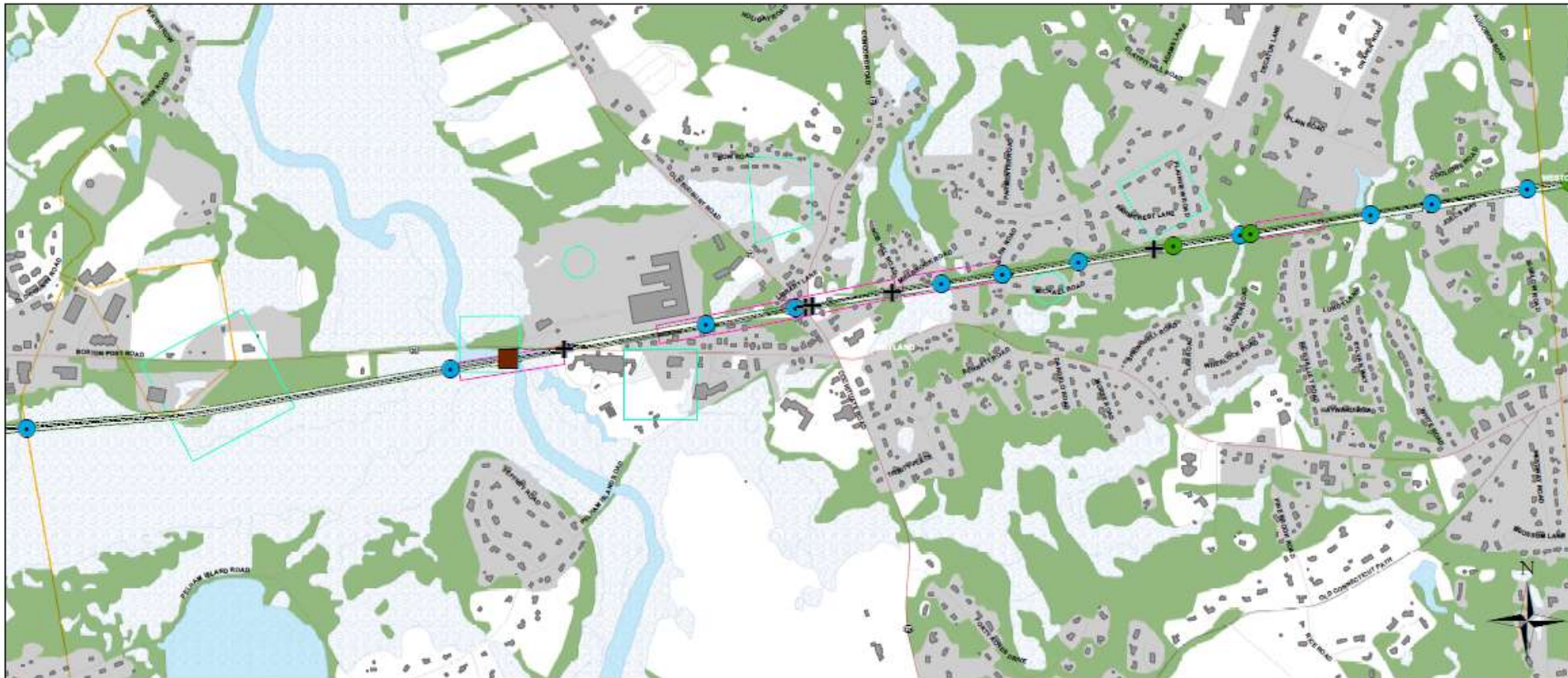
Sudbury

MCRT - Wayside
Berlin to Waltham

Mass Central Rail Trail - Wayside
Wayland Section

**Legend**

MBTA ROW - DCR Lease
MCRT Construction Limit
ArchaeologicallySensitiveAreas
Archaeological_Sites
MCRT Encroachments

**MCRT Infrastructure**

At-Grade Crossing
Underpass
Underpass - Filled
Bridge
Bridge - Missing
Culvert
Cattle Pass

**Land Use (2005)**

Forest
Water
Developed
MA Towns..Solid Outline
DEP Wetlands (1:12,000)

dcr
Massachusetts

0    0.125    0.25    0.5    0.75    1
Miles

For planning purposes only.
Data from MassGIS, DCR, EOT Val Maps,

# Wayland

Mass Central Rail Trail - Wayside
Weston Section

**Legend**

| MBTA ROW - DCR Lease |
| MCRT Construction Limit |
| ArchaeologicallySensitiveAreas |
| Archaeological_Sites |
| MCRT Encroachments |

**MCRT Infrastructure**

At-Grade Crossing
Underpass
Underpass - Filled
Bridge
Bridge - Missing
Culvert
Cattle Pass

**Land Use (2005)**

Forest
Water
Developed
MA Towns...Solid Outline
DEP Wetlands (1:12,000)

dcr
Massachusetts

For planning purposes only.
Data from MassGIS, DCR, EOT Val Maps,

0   0.125   0.25   0.5   0.75   1
Miles

# Weston

# entral Rail Trail - Wayside
## Waltham Section

For planning purpose
Data from MassGIS,

| 0 | 0.125 | 0.25 | | 0.5 | | 0.75 | | 1 |

Miles

Waltham

CONSTR B

VARIES | 19.00' | VARIES

2.50'

1.50'

9.50'

SPLIT RAIL
WOOD FENCE *

SPLIT RAIL
WOOD FENCE *

PROP BIKE
PATH

3.00' MIN CLEAR ZONE

PGL

1.50%

SLOPE VARIES
1.5:1 (MAX)

SLOPE VARIES
1.5:1 (MAX)

MEET
EXIST

MEET EXIST

EXIST
GROUND

EXIST
GROUND

PROP 4" LOAM &
SEED WITH TURF
REINFORCING MAT

PROP 4" LOAM &
SEED WITH TURF
REINFORCING MAT
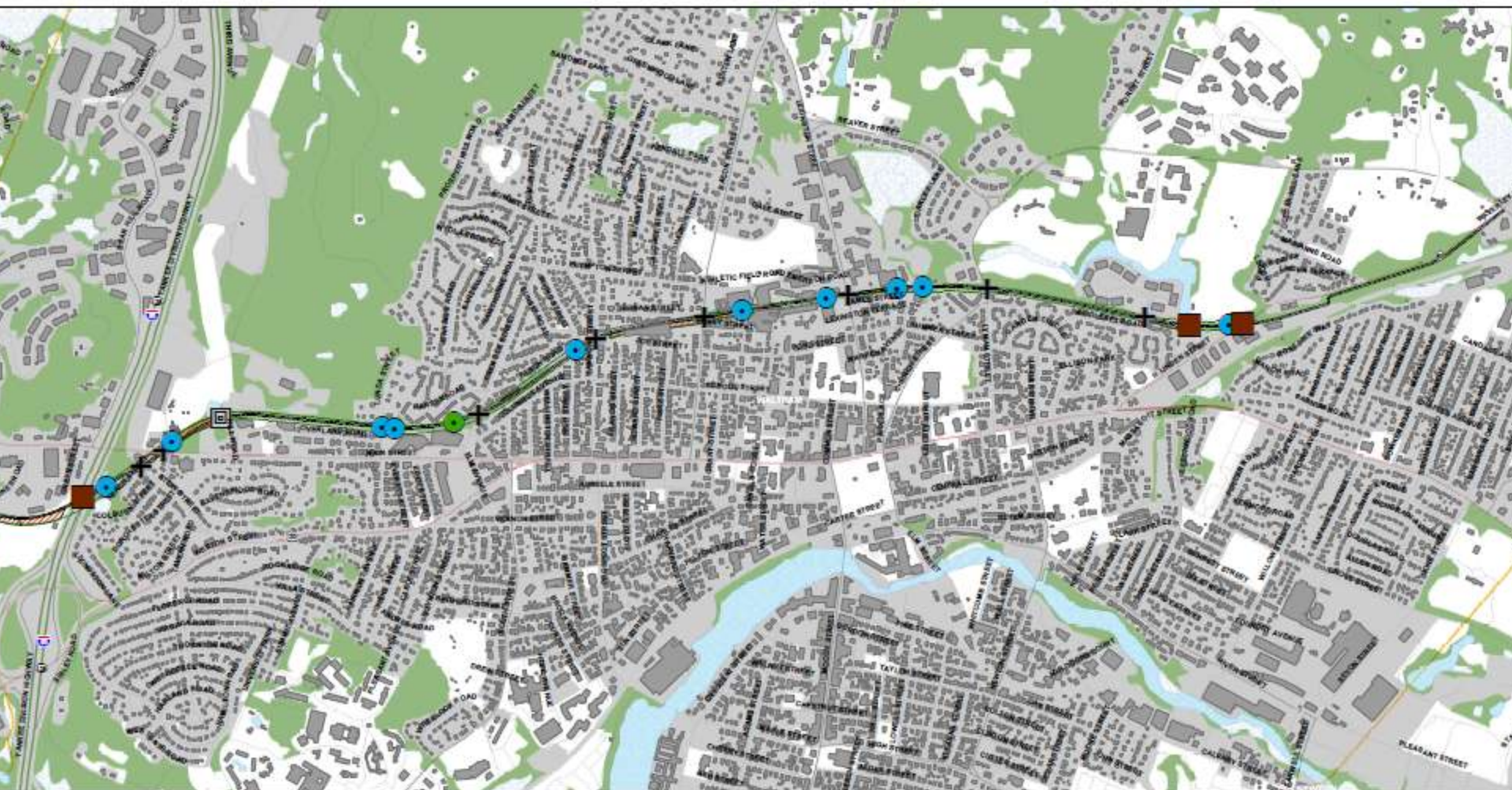
**TYPICAL SECTION**
**FILL SECTION**
NTS
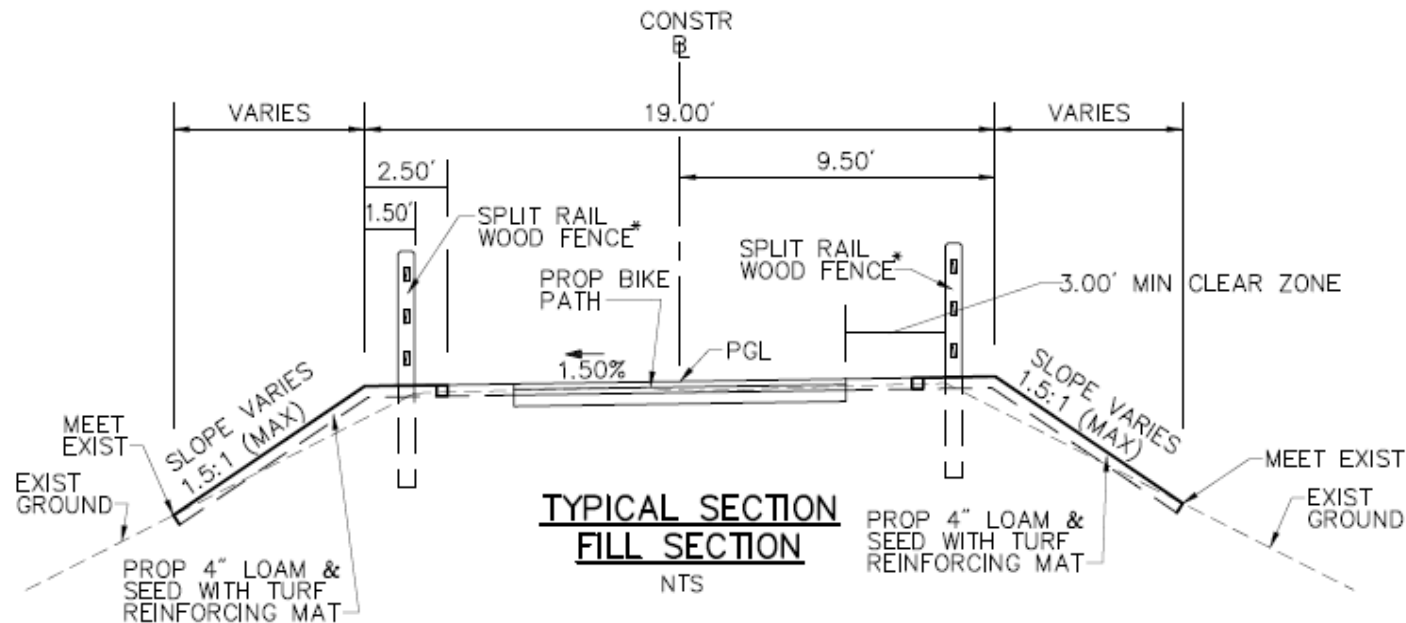
* SPLIT RAIL FENCE TO BE USED ONLY AS NEEDED

CONSTRUCTION DETAILS
1 OF 16

MASS CENTRAL
RAIL TRAIL

TYPICAL SECTION
CUT SECTION
NTS

CONSTRUCTION DETAILS
2 OF 16

MASS CENTRAL
RAIL TRAIL
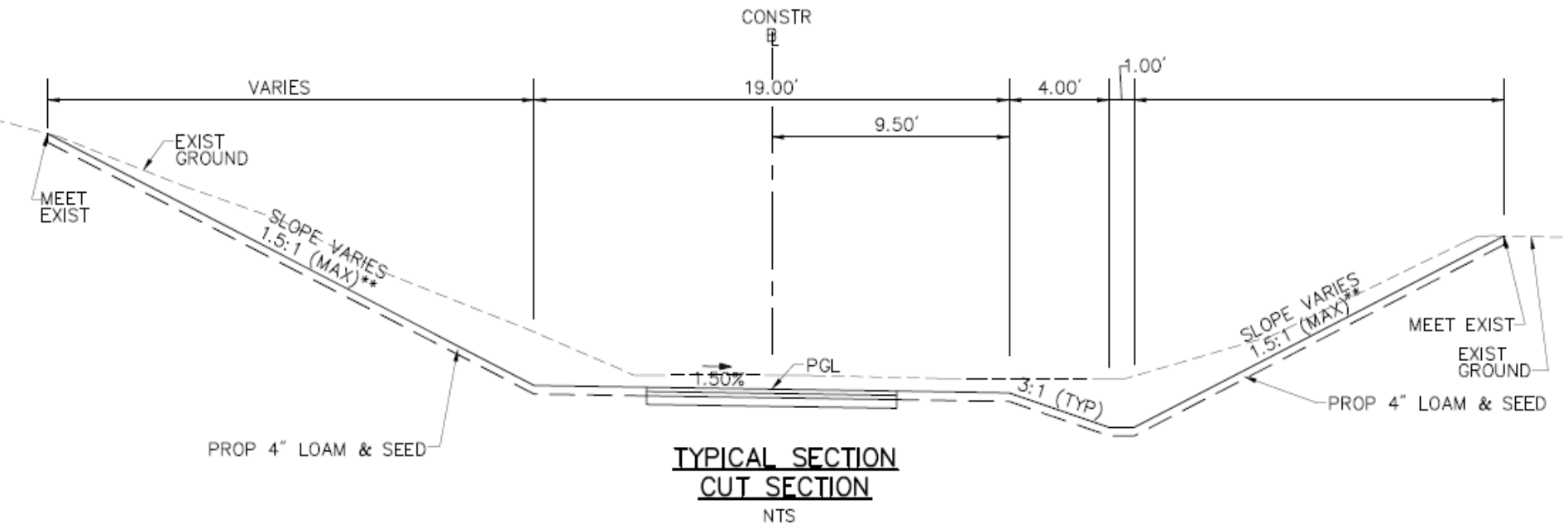
# Surface

- DCR prefers a consistent surface treatment that serves the most users
- Surface must meet ADA and AAB accessibility standards
  - Possible surfaces include asphalt, concrete, stabilized soil aggregate, and crushed-stone aggregate that meets firm and stable assessment

SOLAR PANEL

RADIO ANTENNA

PEDESTAL TRAFFIC SIGNAL SUPPORT

BICYCLE PEDESTRIAN SIGN
(W11-15 36"X36")

RECTANGULAR RAPID FLASHING BEACON
(FLASHERS ON 3 SIDES)
DIAGONAL DOWNWARD POINTING ARROW
(W16-7P 24"X12")

CABINET ON OPPOSITE SIDE OF POLE

STAND ALONE REMOTE
PUSH BUTTON BOLLARD
ADA COMPLIANT PUSHBUTTON
(FACING THE PATH)
(3 FEET IN ADVANCE
OF STOP LINE)

5'-0"

LOAM AND SEED

LOAM AND SEED

GROUND

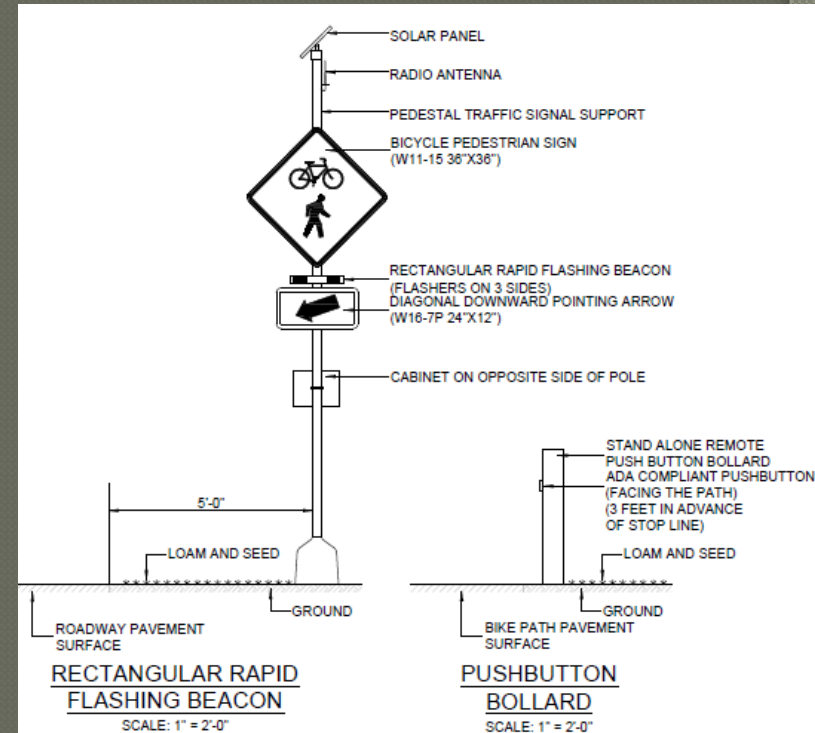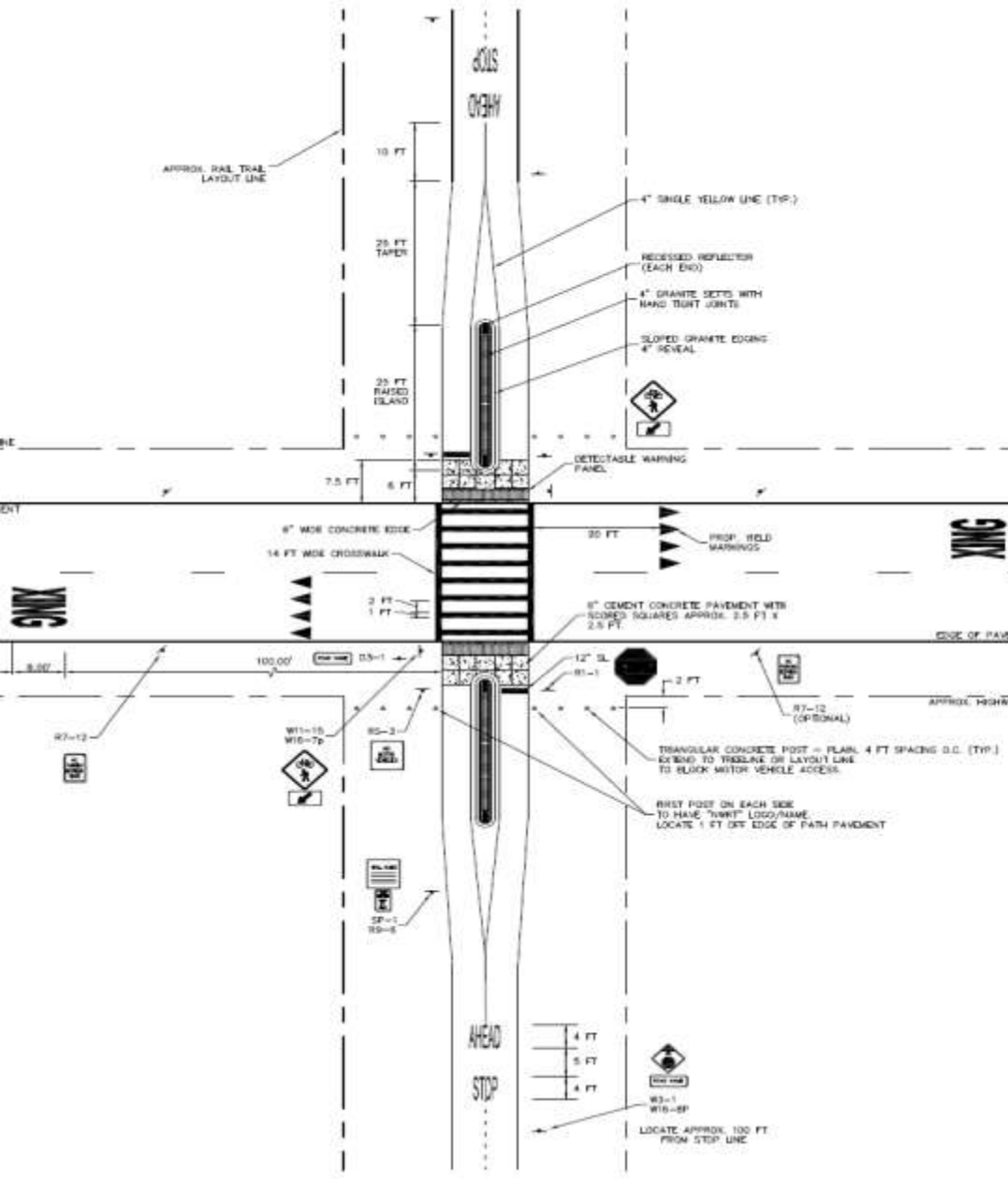GROUND

ROADWAY PAVEMENT
SURFACE

BIKE PATH PAVEMENT
SURFACE

RECTANGULAR RAPID
FLASHING BEACON
SCALE: 1" = 2'-0"

PUSHBUTTON
BOLLARD
SCALE: 1" = 2'-0"

SOUTH MAPLE STREET CROSSING DETAIL

NOTE:
1. STAND-ALONE BOLLARD AND RECTANGULAR RAPID FLASH BEACON SHALL BE INSTALLED ON
BOTH SIDES OF THE INTERSECTION AT SOUTH MAPLE STREET.
2. THE ACTIVATION LENGTH OF THE FLASHING LIGHTS SHOULD BE PROGRAMMED AS 13 SECONDS
BASED ON THE MUTCD PROCEDURE.
3. PUSHBUTTON BOLLARDS SHALL BE INSTALLED AT 3 FEET IN ADVANCE OF STOP LINE AND
WITHIN 10 INCHES OF THE EDGE OF PAVEMENT.
4. RRFBS SHALL BE INSTALLED AT 5 FEET TO THE EDGE OF ROADWAY AND 4 FEET TO THE EDGE
OF RAIL TRAIL.

# DCR Environmental Assessments and Permitting

- DCR conducted a Phase One Environmental Site Assessment of the entire corridor in 2009
  - Including a soil sample program

- Developed a preliminary path alignment

- DCR submitted an Expanded Environmental Notification Form (EENF) to MEPA 2013

- DCR received a waiver from an EIR 2014

- DCR seeks to work in partnership with municipalities on Wetland and Historic permitting

# Infrastructure

Project Wide:
- 42 at-grade crossings
- Bridges
  - 10 Existing Bridges
  - 4 Missing Bridges
- Underpasses
  - 5 Existing
  - 4 Filled underpasses
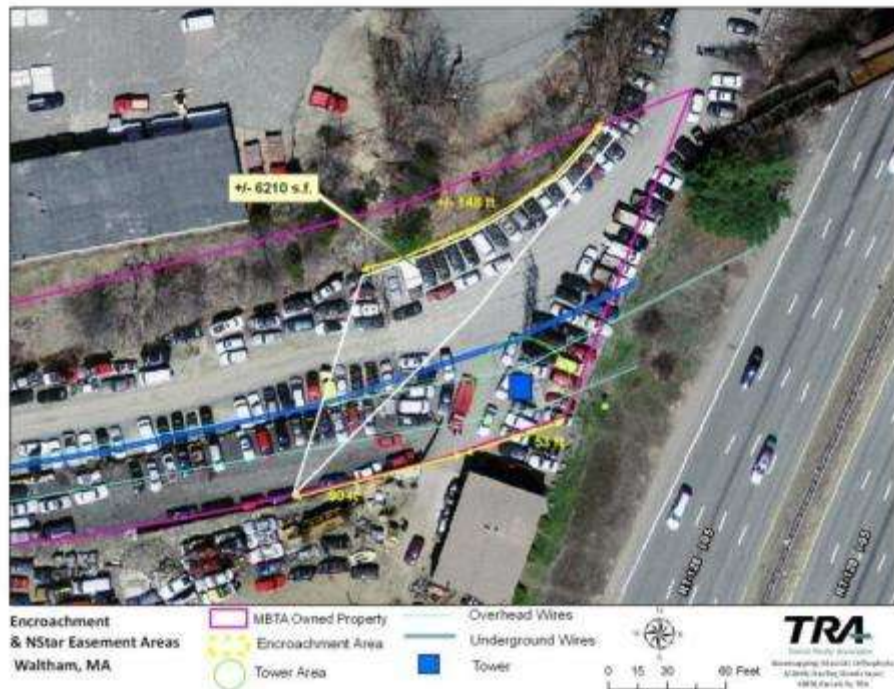  - As many as 69 culverts and cattle passes

Facing N

# Licenses and Encroachments

DCR has identified licenses and potential encroachments in the corridor and is working to address them

# Preliminary Cost Estimates

- Based of prices from similar MassDOT / DCR projects
- Berlin: $2,355,000
- Bolton: $ 69,800
- Hudson: $8,151,000
- Stow: $ 83,000
- Sudbury: $5,678,000
- Wayland: $4,306,000
- Weston: $4,314,000
- Waltham: $5,371,000

# Conditions / Standards for Development

- Path development must follow DEP best practices for Rail Trail development
- Path surface must meet ADA / AAB standards for firm and stable
- Road crossings must meet AASHTO and MUTC guidelines for safe crossings
- Procurements must follow applicable state procurement laws for horizontal construction
- Appropriate community outreach and abutter communication
- Appropriate drainage planning
- Obtain applicable wetlands and MESA and historic permits

- Stakeholder / Community meetings and communication

- Need to advocate and identify funds for design, permitting and construction

- Initiate wetland and historic permitting with municipalities

- Need to refine bridge and cost assessments