







Segment 1—Belchertown to Bondsville (Palmer)

March 2021

Mass Central Rail Trail Feasibility Study I-495 Hudson to Belchertown

## Acknowledgements

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### **Background**

The Massachusetts Central Railroad (MCRR) originally ran from Boston west 104 miles to Northampton. The vision for the Mass Central Rail Trail (MCRT) is to convert as much of the original 104-mile rail corridor as possible to an east-west, off-road, shared use path/greenway connecting Northampton to Boston.

The MCRT has been identified as a high priority for the Commonwealth's trail and greenway system in numerous visions and statewide planning documents, including the Massachusetts Department of Transportation's (MassDOT's) statewide Bike and Pedestrian Plans, the Department of Conservation & Recreation's (DCR's) Commonwealth Connections, and various local and regional plans.

Approximately 55 miles of undeveloped segments along the MCRR corridor are currently in public, private or conservation ownership. Approximately 33 miles of this trail have already been constructed as off-road, multi-use greenways. An additional 22 miles of former railroad corridor are owned by the Massachusetts Bay Transportation Authority (MBTA) and leased by DCR between Coburn Road in Berlin and Linden Street in Waltham. This 22-mile corridor is in varying stages of planning, design and construction by the municipalities, DCR and Eversource Energy to develop the 10-foot wide, paved MCRT.

### Study Purpose

The Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning initiated efforts to develop a feasibility study to complete the construction of the MCRT as an off-road shared-use path along the original MCRR corridor from the I-495 area in Hudson to the existing terminus of the Norwottuck Rail Trail in Belchertown. The current ownership, condition and existing use of the original MCRR corridor varies greatly from Hudson to Belchertown. Some sections have been converted to a shared-use path; some sections are in public ownership with an intact railbed. Other sections are active railroads while still others are now in private ownership and the original railbed has been obliterated or converted to different uses.

For the sections that have been converted to a shared-use path, the rail trail was constructed along the original MCRR railbed. Signage identifying those sections as the MCRT were installed. Other sections of path were built in locations that deviate from the original MCRR corridor or were built along different former railroad corridors; many of these trails have also been identified as the MCRT.

Development and other changes along the original MCRR corridor that have taken place over the past century plus will most likely preclude construction of a shared-use path on the MCRR corridor over the entire length of the project corridor from Hudson to Belchertown. Minor diversions to off-road paths not on the MCRR corridor or use of on-road bikeways will most likely be needed in locations where the rail bed has been physically obliterated and a shared-use path is not a practical or feasible alternative.

### **Study Tasks**

MassDOT and DCR determined that the logical and appropriate first step for this feasibility study would be complete the following tasks:

- » Locate the original MCRR right-of-way (railbed) and assess the existing condition of the corridor
- » Locate adjacent intersecting trails that have been built or are in the planning/design stages
- » Verify ownership of the MCRR corridor
- » Verify current use of railbed as intact, existing trail, active RR, inactive RR, other
- » Identify potential alternate trail routes around constrained sections for further evaluation

### **Project Location & Limits**

The preferred MCRT alignment is along the former railbed from eastern terminus of the Norwottuck Rail Trail in Belchertown to the Interstate 495 overpass in Berlin. Some segments of the MCRT between these project limits have previously been converted to a rail trail and are currently open to the public. For purposes of this feasibility study, it is assumed that the length of the study corridor is approximately 50 miles long and that the proposed MCRT Alignment Alternatives in this study will connect to the existing completed trail segments. Evaluation and review of the existing completed segments are not included in this study.

This study divides the MCRT analysis into three segments, described as follows:

- Segment 1 MCRT at easternmost extent of Norwottuck Rail Trail, Belchertown to MCRR corridor at Swift River (east bank), Bondsville (Palmer)
- Segment 2 MCRR at Swift River, Bondsville (Palmer) to westernmost extent of the MCRT at the Ware River, Barre
- Segment 3 MCRT at Glenwood Road, Rutland to MCRR at Stone Road, Berlin, just east of the I-495 underpass, Berlin/Hudson town line

Each segment is broken down into sections with a general description of existing conditions, potential trail option and a rating of difficulty of implementation from low difficulty to high difficulty. A summary matrix is included.

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# Segment 1—Summary of Proposed MCRT Location and Constrained Sections Alternate Routes

The following potential alternative MCRT locations have been identified for Segment 1.

## Segment 1A: Norwottuck Rail Trail, Northampton to Warren Wright Road, Belchertown (Map Pages 1-4)

The Norwottuck Rail Trail is an existing portion of the MCRT. It extends along the former MCRR rail corridor from Woodmont Road in Northampton, through Hadley and Amherst to Warren Wright Road in Belchertown. The 11-mile, paved path has six parking areas and several picnic sites along its length.

The only potential recommendation for this existing, established section of MCRT is to utilize the ongoing maintenance plan and to have standard signing and marking for road crossings and trail identification for other sections of the MCRT.

## Segment 1B: Warren Wright Road, Belchertown to Federal Street, Belchertown (Map Pages 4-7)

East of Warren Wright Road, the original MCRR corridor is intact, but in private ownership. The original MCRR corridor parallels the New England Central Railroad (NECR) Corridor between Warren Wright Road and Wilson Road, but the two diverge just east of this point. Ownership data shows that the original corridor exists either side of Wilson Road in two long parcels, but east of this point the corridor has been carved up into multiple and diverse private ownership although the MCRR railbed physically exists. A bridge has been removed at Federal Street and others may be missing elsewhere along the original corridor route. Some structures appear to have been constructed on the original right-of-way. In the vicinity of Lake Holland and Arcadia Lake, portions of the corridor appear to now be occupied by private roadways (Grela Terrace, Lake Drive). At Arcadia Lake, the former MCRR corridor rejoins the NECR corridor.

At the south end of Arcadia Lake, adjacent to Town Beach Road, the MCRR corridor comes into public ownership (Town of Belchertown) and originally bridged over the NECR to continue southward on the eastern side of the co-joined corridor. Historic aerial photographs indicate that the MCRR bridged over Federal Street. Both of these bridges have been removed.

#### **Possible Options:**

The lengthy areas in diverse private ownership dictate that an alternate route will likely be necessary for this section. Co-locating a rail-with-trail within the NECR Right-of-way is likely not an option both because of active use and narrow cross sections. A possible alternate route may be to establish a rail-totrail along the former corridor east from Warren Wright Road, and then negotiating access through to Goodell Street. The possible alternative would follow Goodell Street and then Federal Street to the southeast before rejoining the MCRR corridor south of Arcadia Lake.

**Approximate Length:** 2.76 miles

**Difficulty of Implementation:** High (multiple owners, bridges missing, proximity to active railroad)

Segment 1C: Federal Street, Belchertown to State Street, Belchertown (Map Pages 7-10)

The Town of Belchertown owns most of the MCRR Corridor between Federal Street and State Street. There are only three parcels in this stretch in private ownership. The most substantial is north of Bay Road. North of State Street, the corridor is owned by NECR, but this includes the former MCRR corridor and it is relatively wide.

The corridor appears to be substantially intact and some segments include unpaved pedestrian paths. There are no signed or marked/designated crossings for these pathways at grade crossings, though the adjacent active rail crossings are marked and signalized. Note that the Town of Belchertown identifies the entire stretch of the MCRR corridor south from Federal Street as public lands in its 2015 Open Space and Recreation Map. Bridges from the original corridor are missing at Federal Street and George Hannum Street.

State Street bridges over the NECR and MCRR corridors. This bridge was originally a double arch over both rail lines, but the current bridge closed off the original MCRR passage. A service road still exists next to the NECR tracks beneath the bridge.

#### **Possible Options:**

» A potential route for this section would be to create a rail-to-trail along this entire length, negotiating access through the few private parcels. A rail-with-trail would need to be created near the State Street bridge, adjacent to the active NECR, and land would need to be purchased from NECR or an easement established. Existing unpaved segments of footpaths would be formalized, and at-grade crossings should be clearly signed and marked, considering sight distance difficulties on some of the smaller roads. At Federal Street, a grade crossing may need to be established, but this depends on the manner of MCRT connection further north.

**Approximate Length: 2.66 miles** 

Difficulty of Implementation: Low (Corridor intact, some right-of-way needed)

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## Segment 1D: State Street, Belchertown to Franklin Street (State Route 181), Belchertown (Map Pages 10-15)

NECR owns the former MCRR corridor south of State Street for approximately 3,060 feet. The corridor appears intact and it is not in active rail use. A paved service road has been established, although it is difficult to discern if this is used and for what purpose.

South of Springfield Road, the corridor is intact an owned by the Town of Belchertown. It continues in parallel to the NECR corridor southward for approximately 1.5 mi before the MCRR diverges to the southeast.

As with the corridor to the north, there are areas with established pedestrian paths. These are also not marked with signage or crosswalks at grade crossings. An existing timber trestle bridge in good condition carries the MCRR over Jabish Brook, though the railroad tie bridge decking is in poor condition.

At Franklin Street (State Route 181), the corridor is a well-established pedestrian path. No designated signage or crossing exist at this location.

#### **Possible Options:**

The potential option for this section is to negotiate access to or purchase of land from NECR south of State Street and construction of a rail-with-trail path south to where the two rail corridors diverge. Beyond this point, the publicly-owned corridor can be formally designed as a rail-to-trail, including appropriate marked crossings and signage, and trail identification signage.

**Approximate Length: 3.83 miles** 

**Difficulty of Implementation:** Low (Corridor intact, roadway crossing improvements)

## Segment 1E: Franklin Street (State Route 181) to Swift River, Belchertown (Map Pages 15-17)

The corridor east of Franklin Street is in private ownership, however segments are already established as pedestrian pathways. These are shown on the Town of Belchertown Open Space and Recreation Map as public lands.

The only road crossing (other than Franklin Street) is Shea Avenue. At the Swift River, the Belchertown Land Trust owns the area at the former MCRR corridor crossing and areas north and south along the riverbanks. The bridge over the Swift River no longer exists. See the text description and map book for Segment 2 for information about the Bondsville (Palmer) side of the Swift River.

#### **Possible Options:**

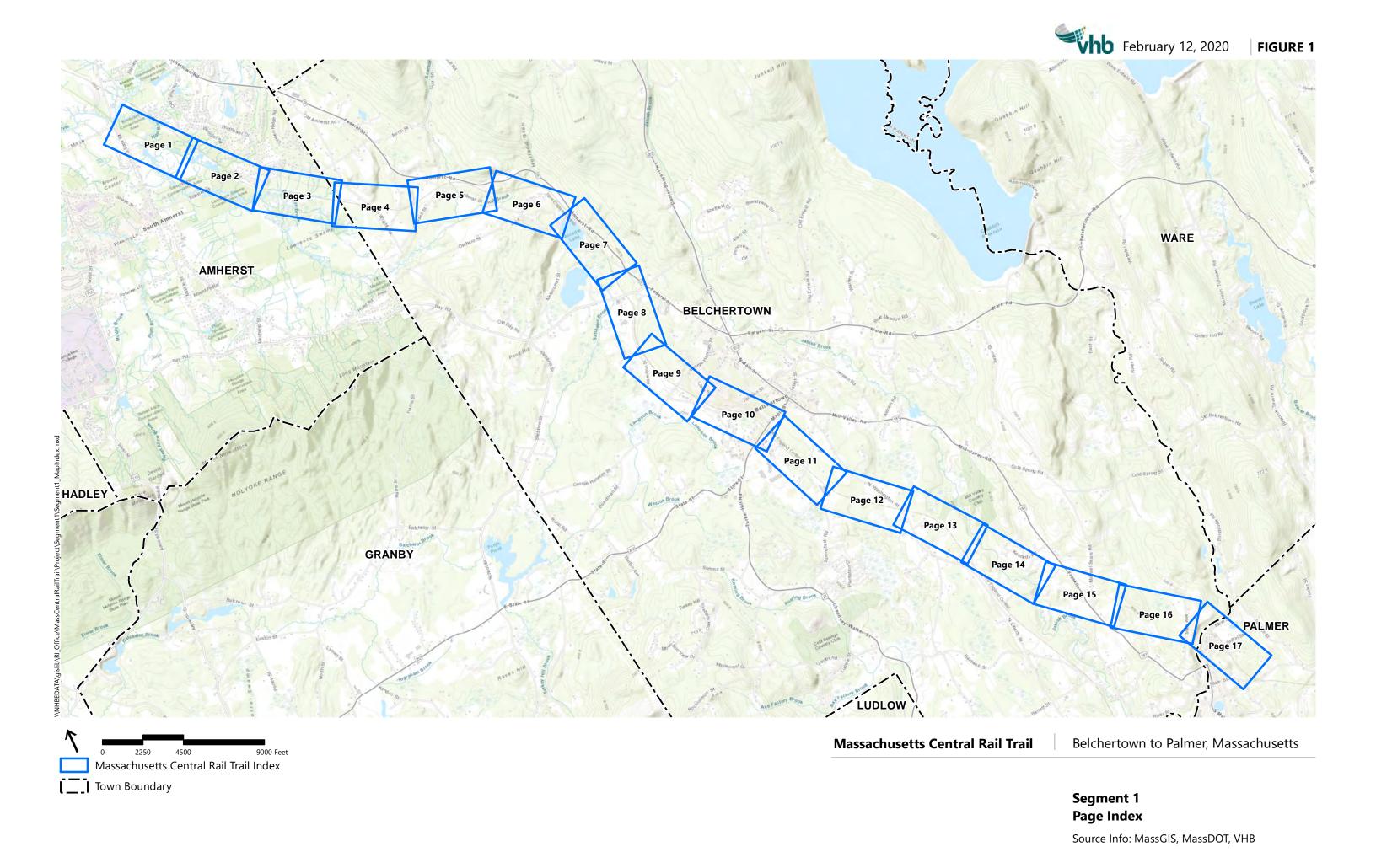
- A potential option for this section is to create a rail-to-trail along the former MCRR corridor. The current presence of pedestrian footpaths suggests that agreements for public access may already be in place with some private landowners. If these do not exist with other owners, it would be advantageous and most direct to complete the path along the original corridor alignment. The path will need to be formally designed as a full-width corridor, including appropriate marked crossings and signage, and trail identification signage.
- » If a rail-to-trail is not feasible along this privately-owned section of the former corridor, a potential alternate route could utilize the Depot Street (State Route 181) or State Street/River Street bridge crossings of the Swift River and then the Franklin Street to connect to the publicly-owned section of the MCRR corridor.

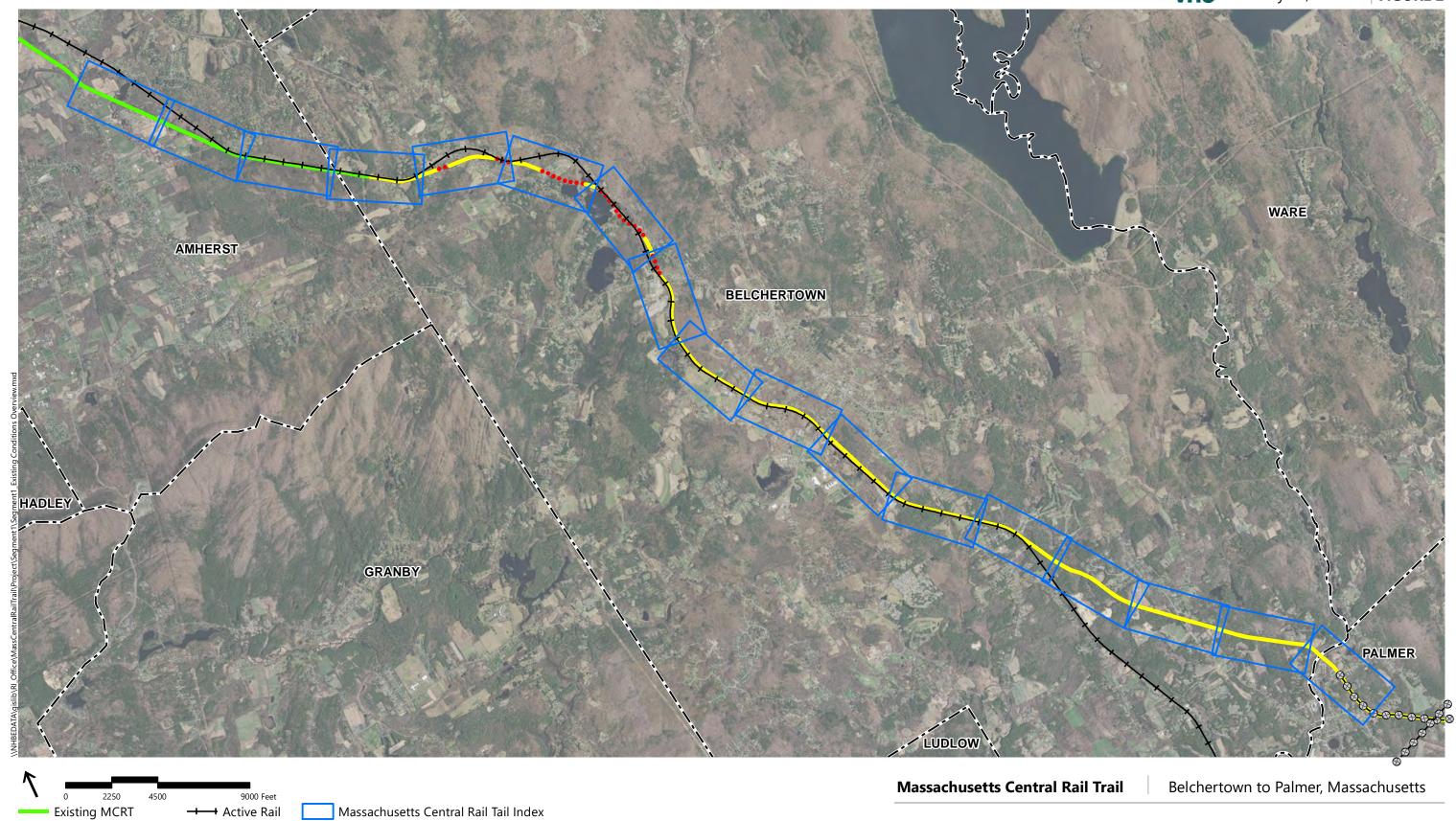
**Approximate Length:** 1.61 miles

Difficulty of Implementation: Moderate (Corridor intact, right-of-way needed)

Segment	Section	Town	Limits	Map Pages	Length	Project Type	On/Off MCRR Corridor	Roadway Crossings	RR Grade Xings	Bridges Needed	ROW Actions	Wetlands	Habitat	Water Supply	Comments	Implementation Difficulty
1	1A	Amherst, Belchertown	Existing Norwottuck Rail west of Warren- Wright Road	Pp. 1-4	11 miles	Existing trail	ON	NA	NA	NA	NA	NA	NA	NA	Existing MCRT. All crossings should be uniformly signed and marked, along with standard MCRT trail identification signage.	NA
1	1B	Belchertown	Warren Wright Rd to Federal St	Pp. 4-7	2.76 miles	Rail-to-trail; On road	On and Off	3	1	0	Possible strip takings along narrow roads	NA	NHESP* associated with Hop Brook	N	Multiple owners, Area of Critical Environmental Conern	High
1	1C	Belchertown	Federal Street to State Street	Pp. 7-10	2.6 miles on rail corridor and on- road	Rail-to-Trail; Rail- with-Trail	On	3	0	1	Access needed through several private parcels; Access needed through NECRR property near State Street	Some located between Jackson Street and State Street	NA	NA	Corridor generally intact and in public ownership. Several private parcels (including active portion of NECR) require access. Several road crossings and bridges needed.	Low
1	1D	Belchertown	State Street to Franklin Street	Pp. 10-15	3.8 miles	Rail-with-Trail; Rail- to-Trail	On	3	0	1	Access needed through NECR property from State Street to Springfield Road	Some located in vicinity of Springfield Road and south of Jabish Canal	NHESP associated with Jabish Canal and Jabish Brook	One wellhead protection area near North Washington Street intersection with MCRR corridor	Corridor generally intact and in public ownership. Access needed through NECR property near State Street. Several road crossings needed.	Low
1	1E	Belchertown, Palmer	Franklin Street, Belchertown to Griffin Street, Palmer	Pp. 15-17	1.6 miles	Rail-to-Trail	On	2	0	2	Access needed almost entirely through private parcels	Some located northwest of Shea Avenue	NA	NA	Full length of corridor is private, but corridor appears intact. New bridges needed at Swift River (2 bridges, one for main channel and one for adjacent canal and over Main Street).	Moderate

<sup>\*</sup>Natural Heritage & Endangered Species Program

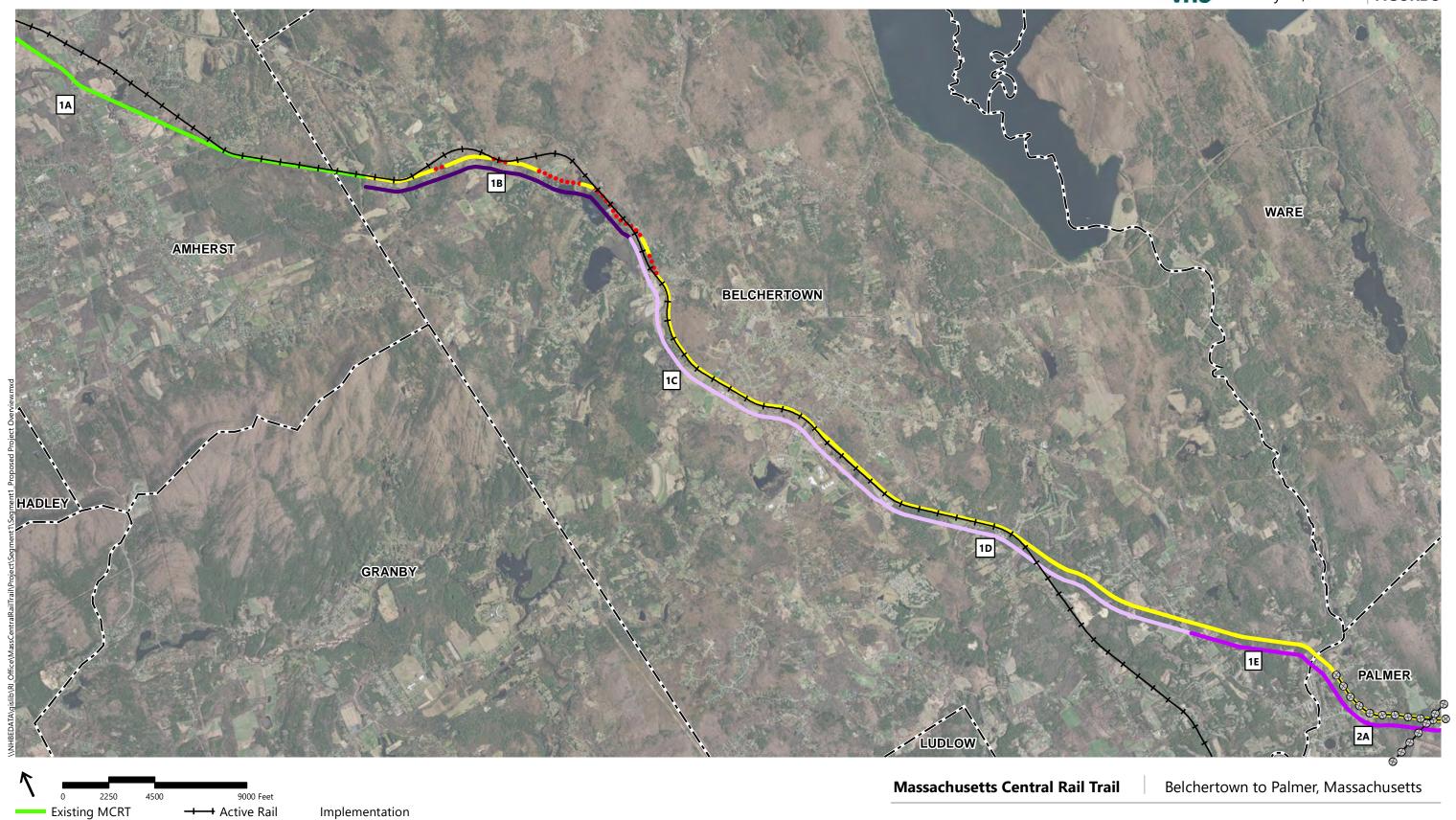




MCRR Corridor Intact 🛇 🖎 Inactive Rail 📘 📘 Town Boundary

MCRR Corridor
Obliterated

Segment 1
Existing Conditions Overview



MCRR Corridor Intact ⊗-⊗-⊗ Inactive Rail

Town Boundary

MCRR Corridor

Obliterated

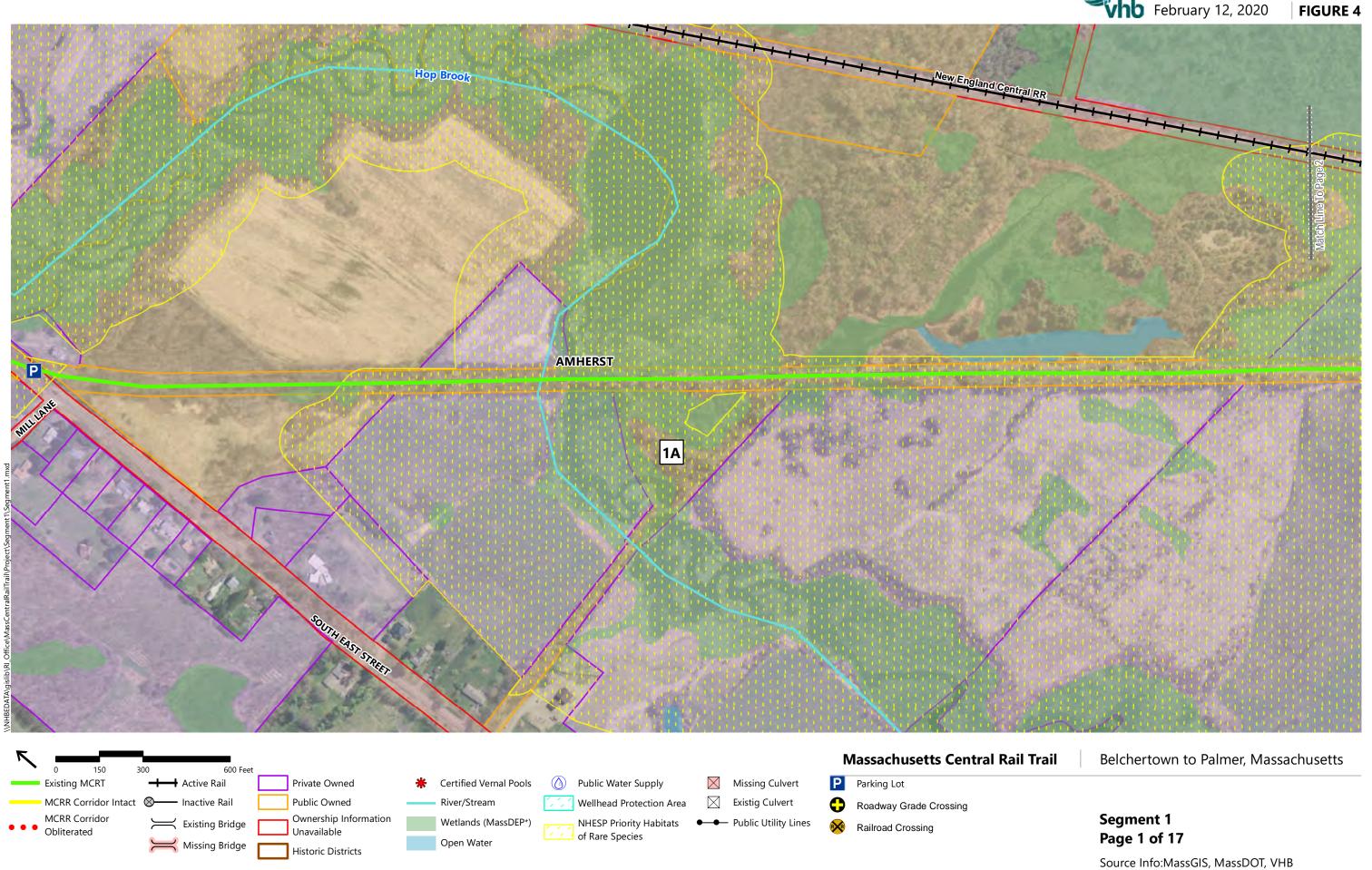
Low Difficulty

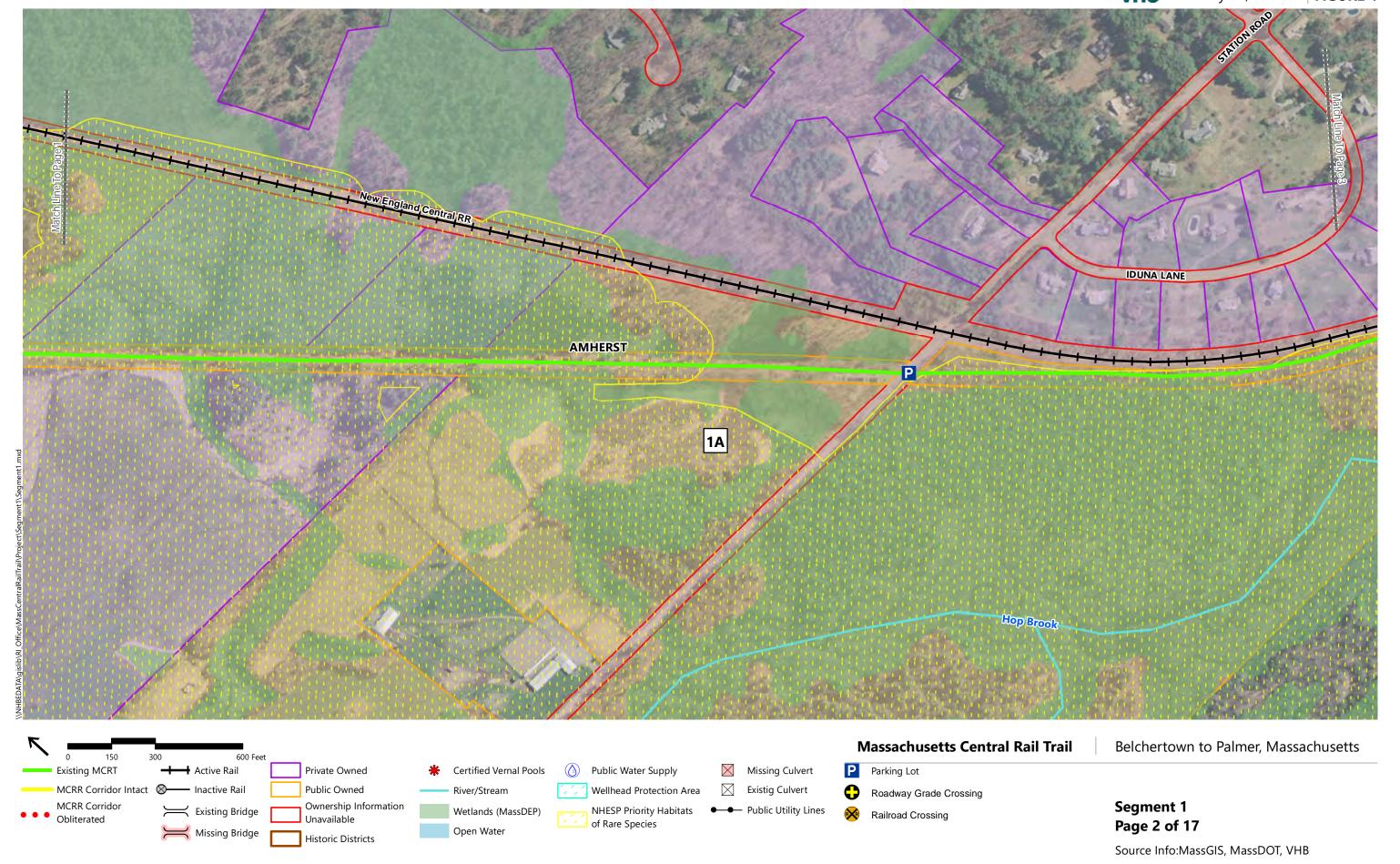
Moderate Difficulty

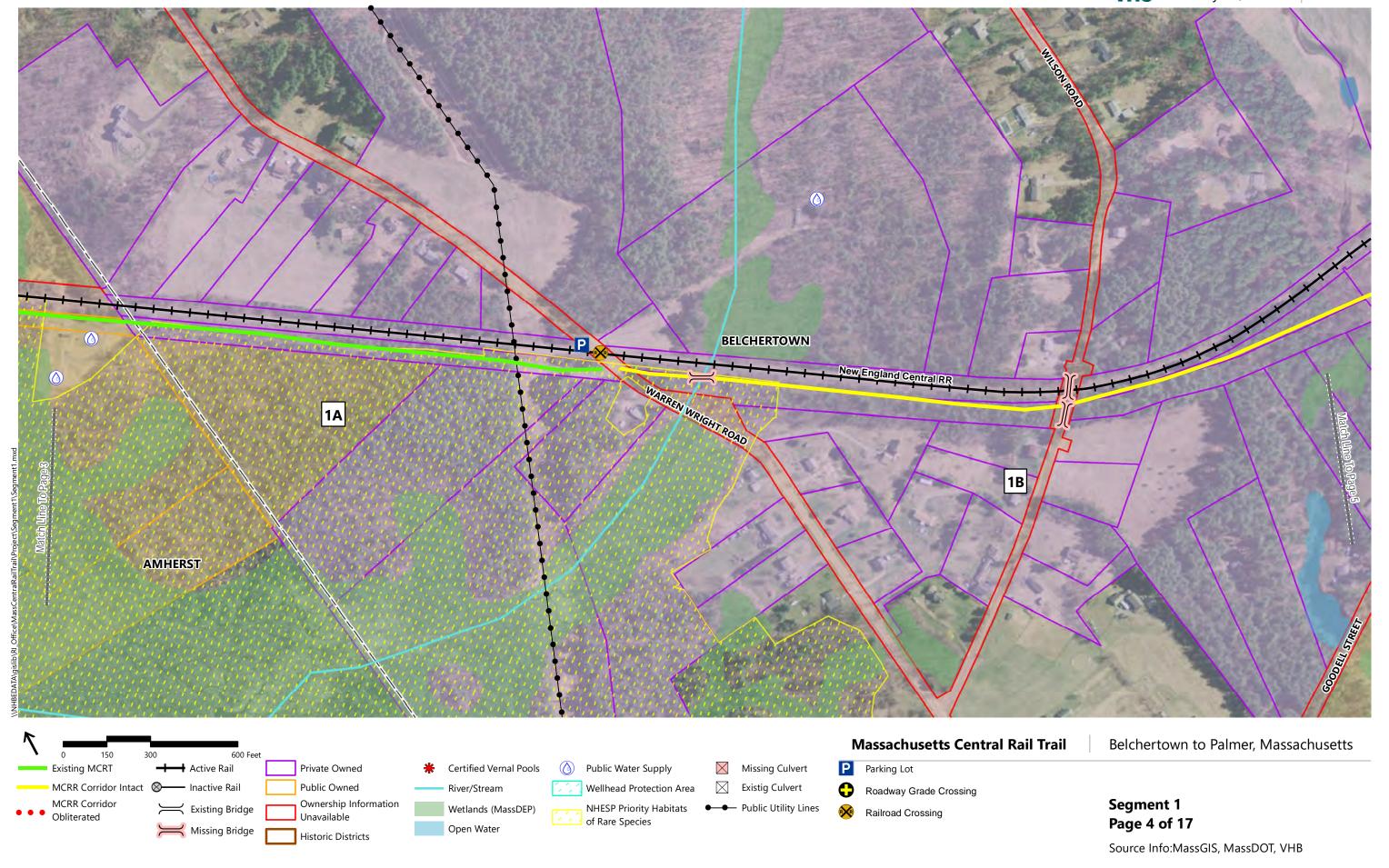
High Difficulty

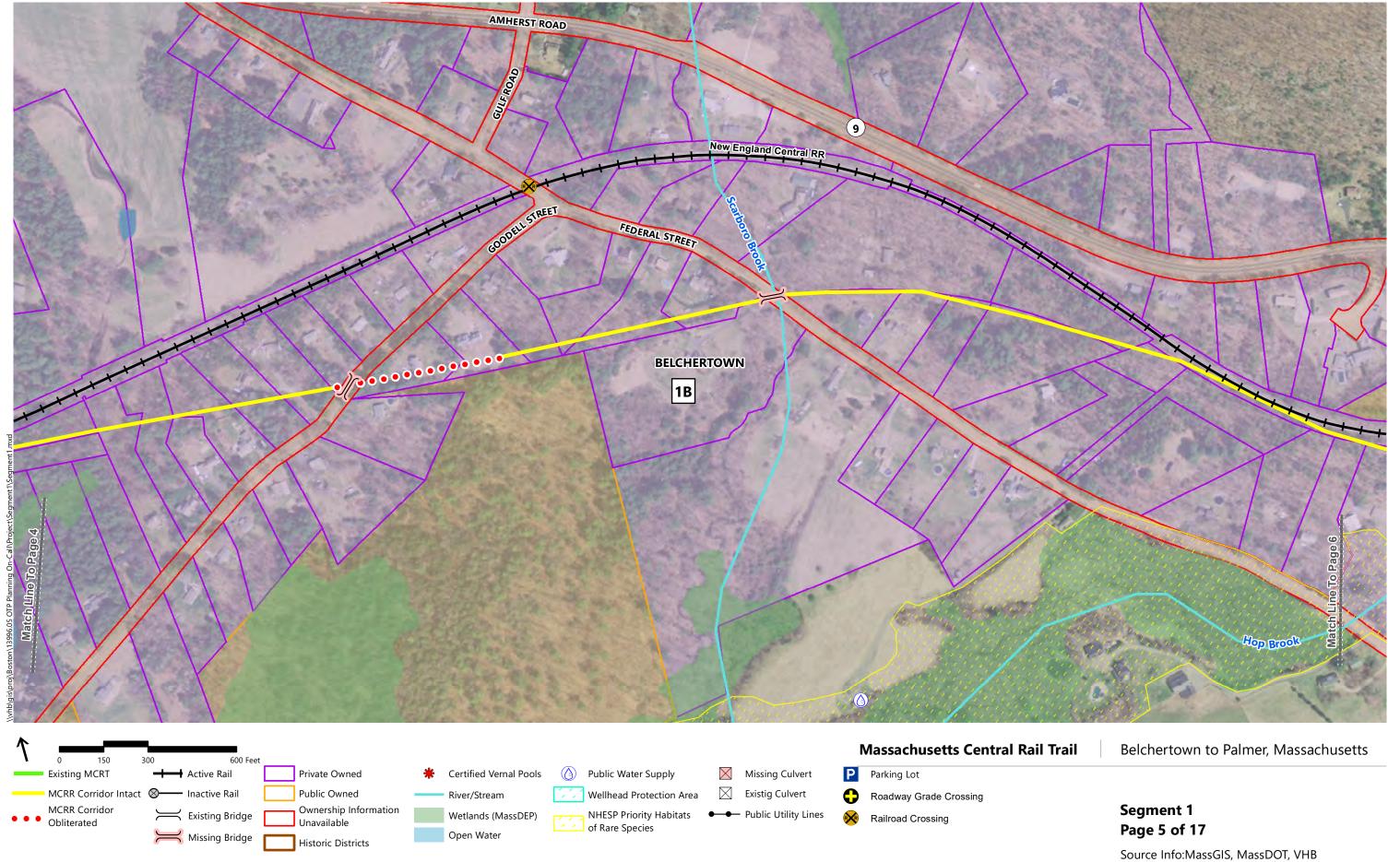
Segment 1 Proposed Project Overview

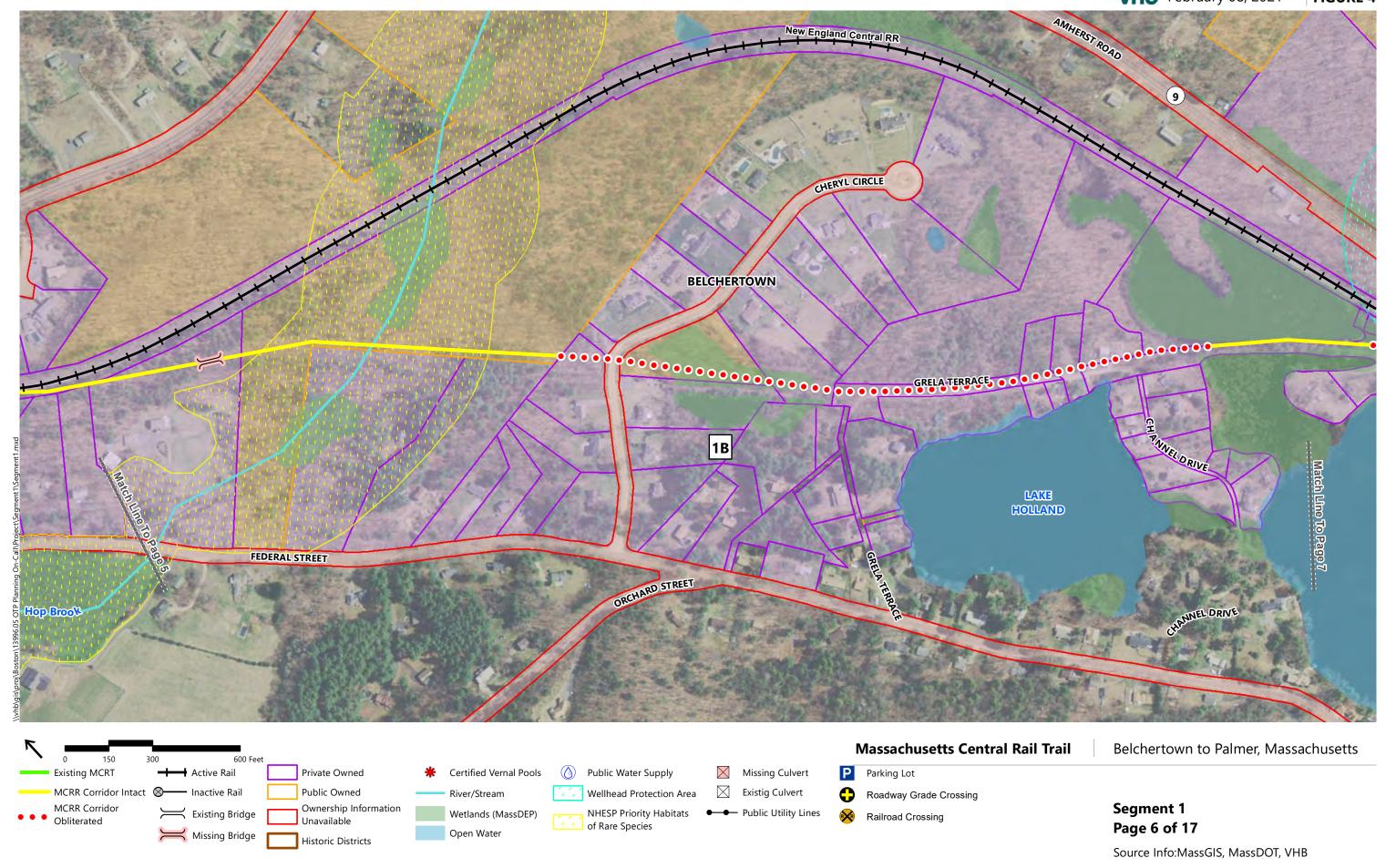
Source Info: MassGIS, MassDOT, VHB

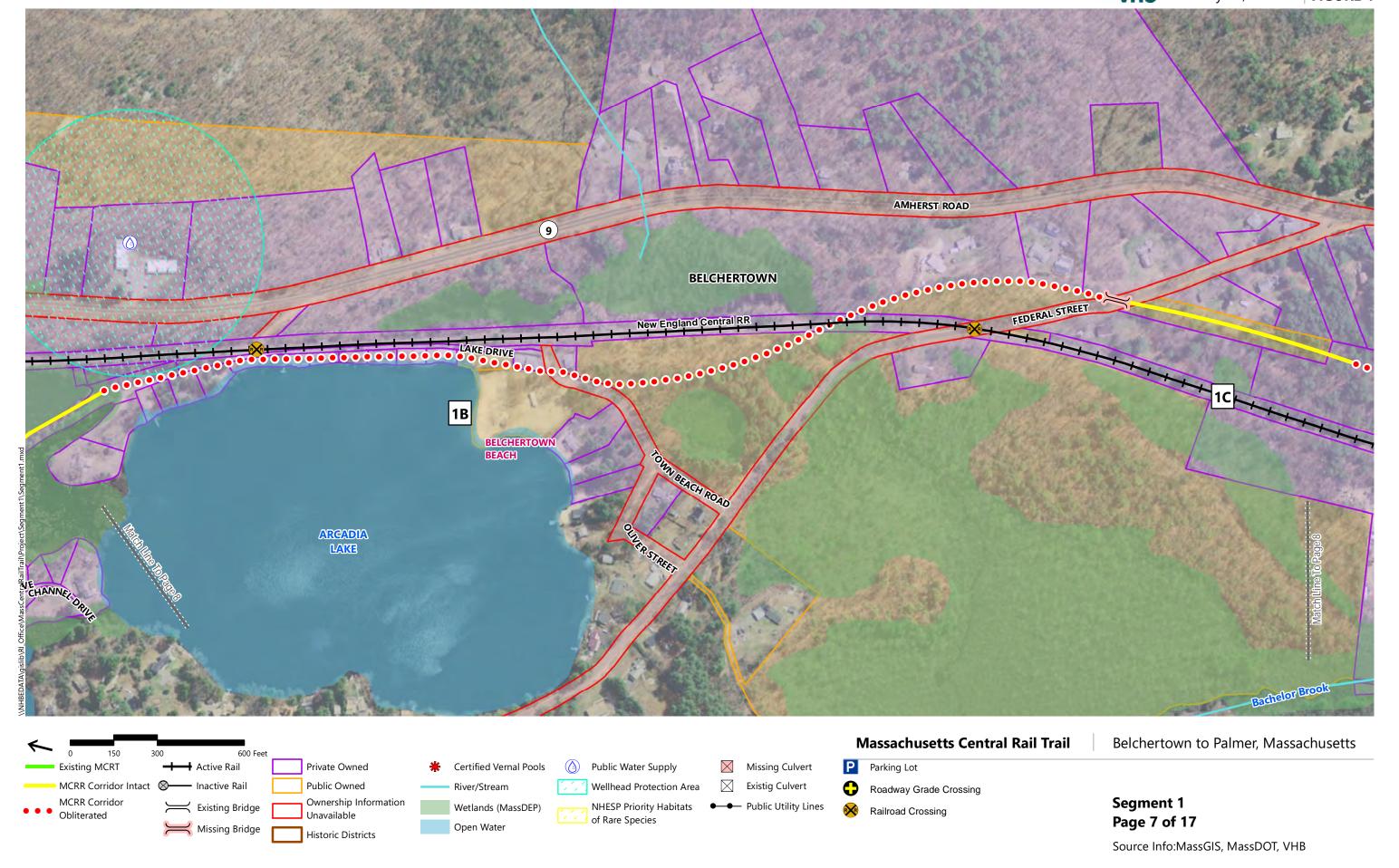




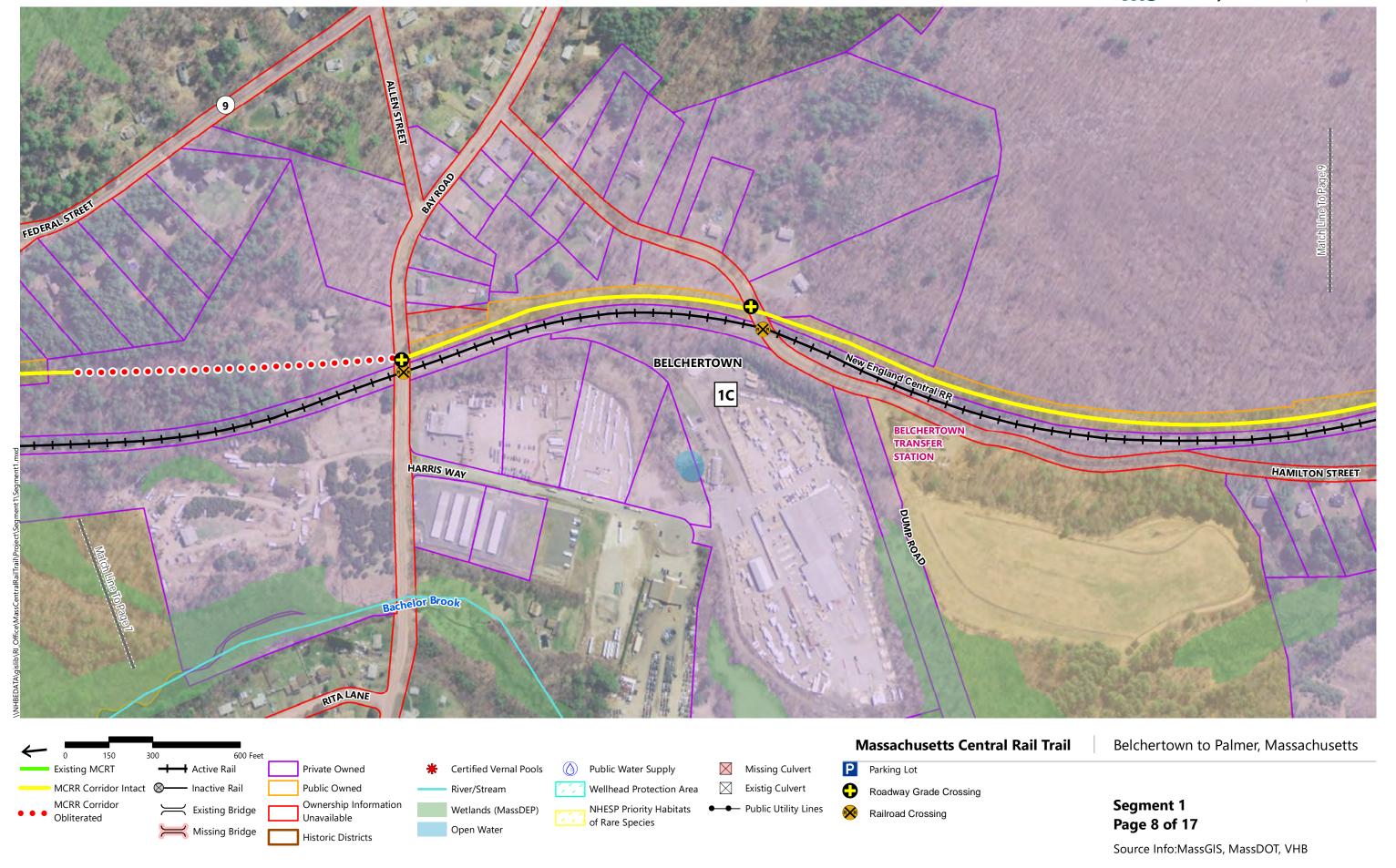


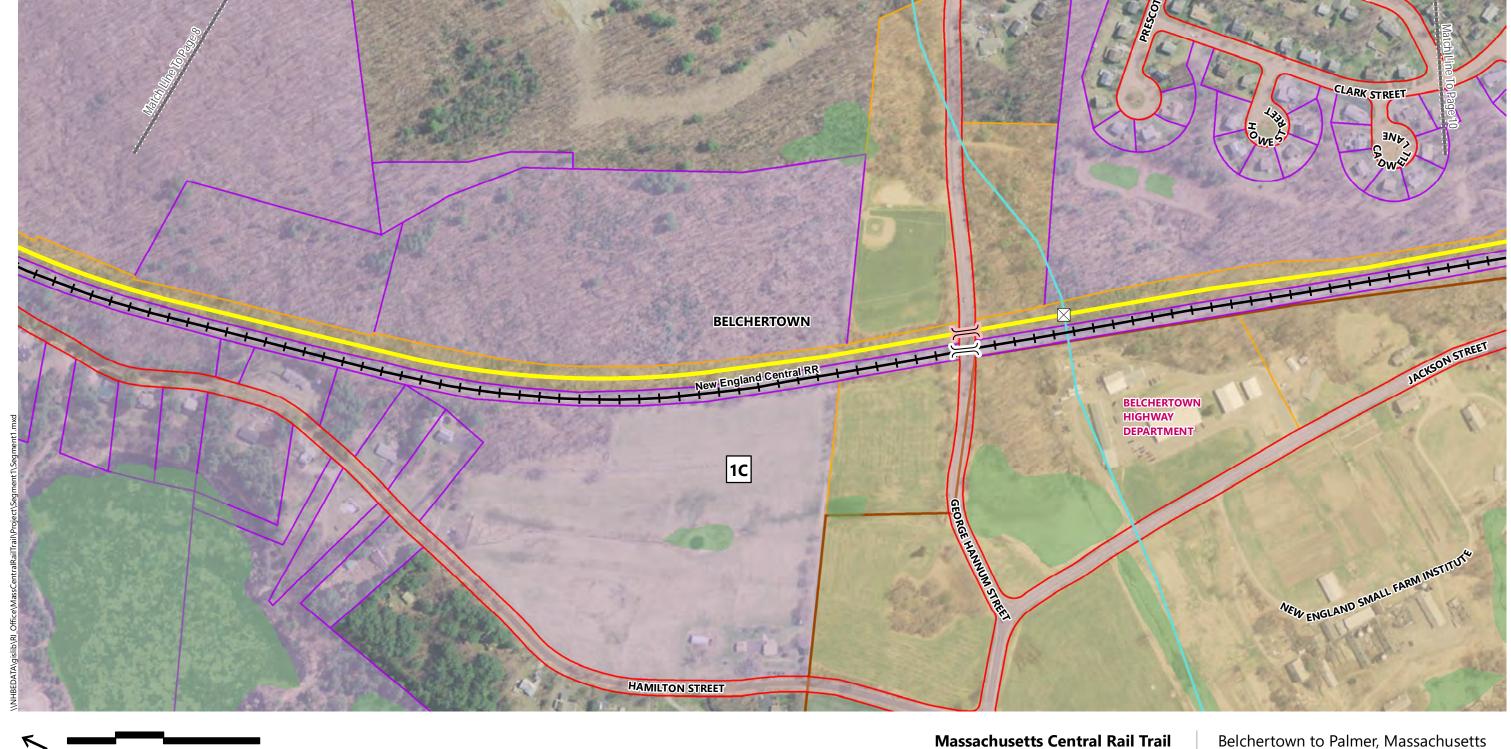












Number Supply

of Rare Species

Wellhead Protection Area

NHESP Priority Habitats

**Certified Vernal Pools** 

Wetlands (MassDEP)

River/Stream

Open Water

Existing MCRT

MCRR Corridor

Obliterated

MCRR Corridor Intact ⊗-

Active Rail

Inactive Rail

Existing Bridge

Missing Bridge

Private Owned

Public Owned

Unavailable

Historic Districts

Ownership Information

Parking Lot

Roadway Grade Crossing

Railroad Crossing

Missing Culvert

Existig Culvert

● Public Utility Lines

Segment 1 Page 9 of 17

Source Info:MassGIS, MassDOT, VHB

