

North Berwick/Wells/Kennebunk Bike/Ped Trail Feasibility Study







North Berwick/Wells/Kennebunk Bike/Ped Trail Feasibility Study

Public Meeting #2

February 17, 2022









Tony GrandeProject Manager, VHB





Jon Kachmar Eastern Trail





Branden RobertsProject Engineer, VHB





Ian Gorecki MaineDOT



Technical Advisory Committee Members

	<u>Member</u>	<u>Affiliation</u>
1	Jon Kachmar	Eastern Trail
2	Ian Gorecki	MaineDOT
3	Patrick Adams	MaineDOT
4	Dwayne Morin	Town of North Berwick
5	Michael Livingston	Town of Wells
6	Bryan Laverriere	Town of Kennebunk
7	Tony Grande	VHB
8	Ethan Flynn	VHB
9	Branden Roberts	VHB

Meeting Agenda

- Welcome and Introductions
 - Technical Advisory Committee
 - Meeting Logistics
- Study Area
 - Corridor Overview
 - Existing Conditions
- Presentation of Study Findings
 - Conceptual Improvements
 - Section Overview
 - Alternatives Considered
 - Recommended Alternatives
- Public Input/Q&A
- Next Steps
 - Project Schedule

(5 min.)

(10 min.)

(40 min.)

(30 min.)

(5 min.)



Meeting Logistics

- All attendees muted
- Lots of time for Questions and Answers after the presentation
- Raise/lower your "Hand" to ask a question "live"



- Q&A type questions/comments directly into the box
- Phoning in...press *9 to raise your hand
- Email comments: Jon Kachmar, jon.kachmar@easterntrail.org

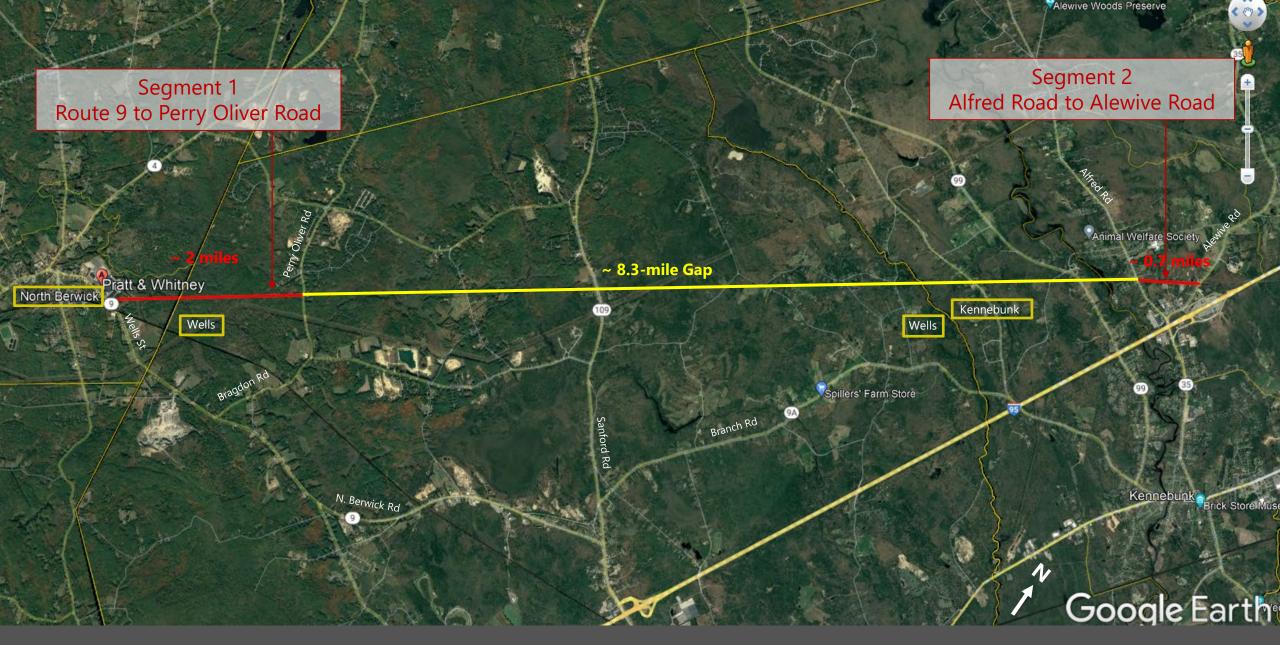
Project Overview

- Planning Partnership Initiative (PPI): North Berwick, Wells, and Kennebunk, in collaboration with The Eastern Trail Alliance (ETA), Eastern Trail Management District (ETMD), and the Maine Department of Transportation (MaineDOT).
- **Study Purpose:** evaluate/analyze alternatives to extend the Eastern Trail off-road segments:
 - 1. Route 9 in North Berwick to Perry Oliver Road in Wells (~2 miles), and
 - 2. Alfred Road to Route 35 (Alewive Road) in Kennebunk (~0.7 mile).

These two segments are believed to have independent utility.

General Scope of Work Tasks

- ✓ Project Kick-Off Meeting with Project Stakeholders and MaineDOT
- ✓ Review Available Data and Assess Current Conditions
- ✓ Evaluate Potential Alternatives
- ✓ Develop Preliminary Recommendations / Develop Draft Report (on-going)
- Public and Agency Feedback (on-going)
- Final Report





Bicycle/Pedestrian Trail Connectivity Feasibility Study – Limits of Study (along Unitil/Granite State Gas corridor)

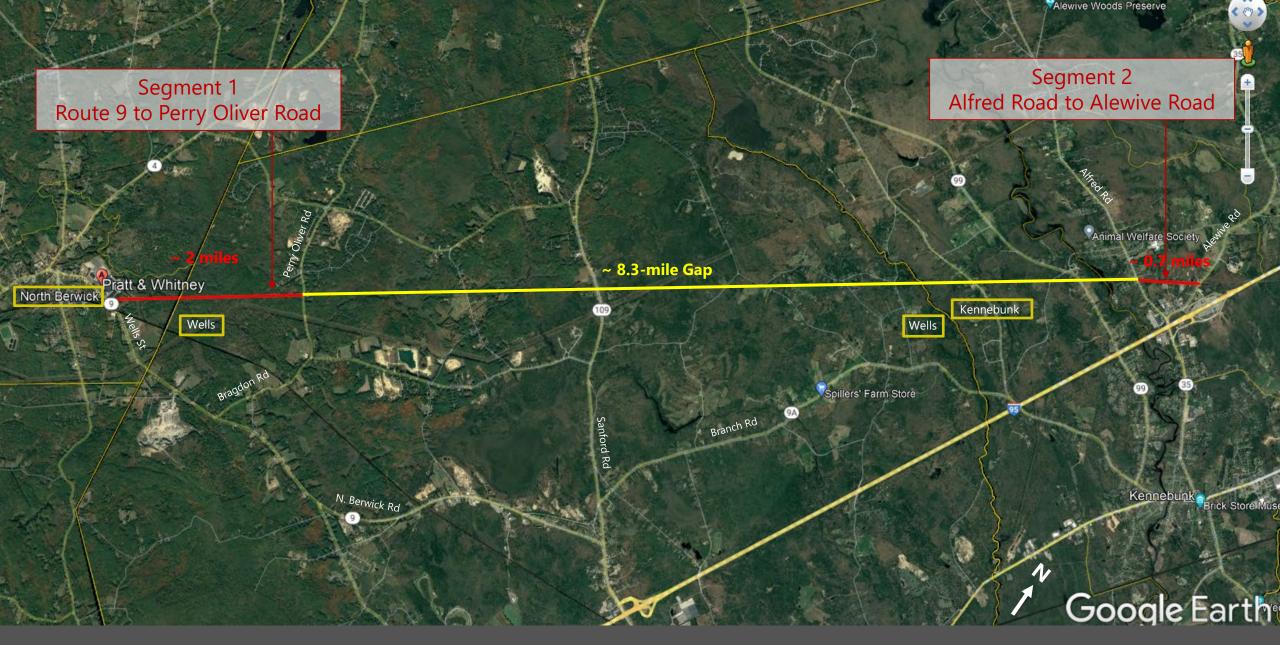
North Berwick, Wells, and Kennebunk, Maine



- Presented the study area, purpose, and goals for the project
- Discussed potential improvements to be considered
- Reviewed existing conditions, base plans, and project schedule
- Responded to questions and comments from participants

Study Area — Corridor Overview and Existing Conditions

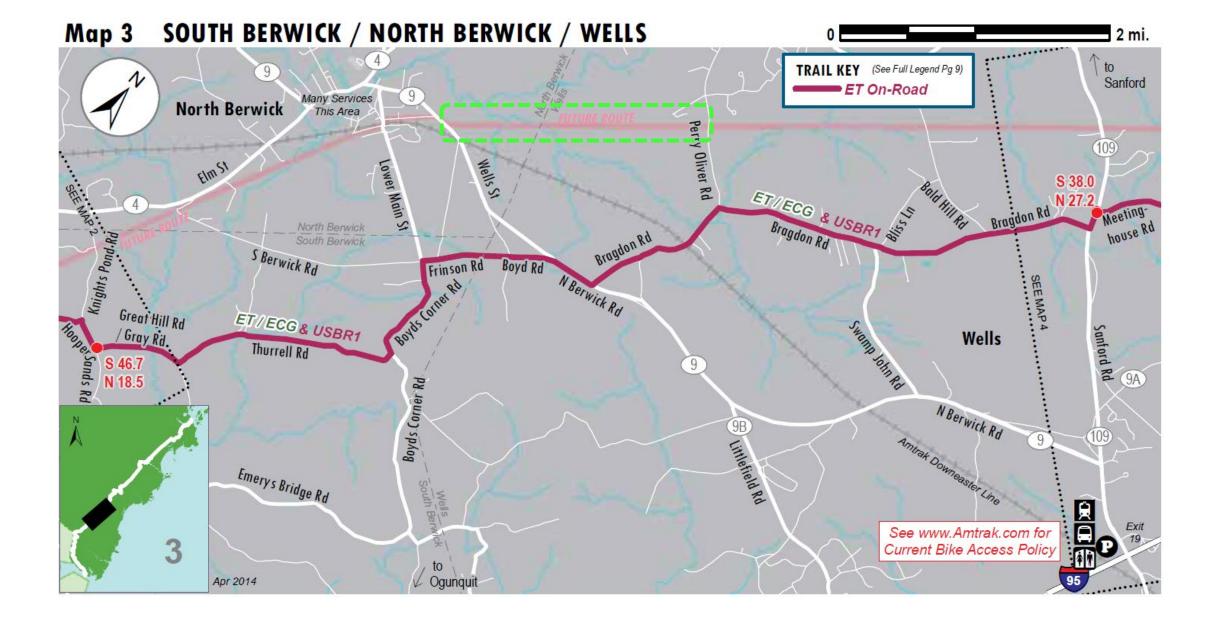


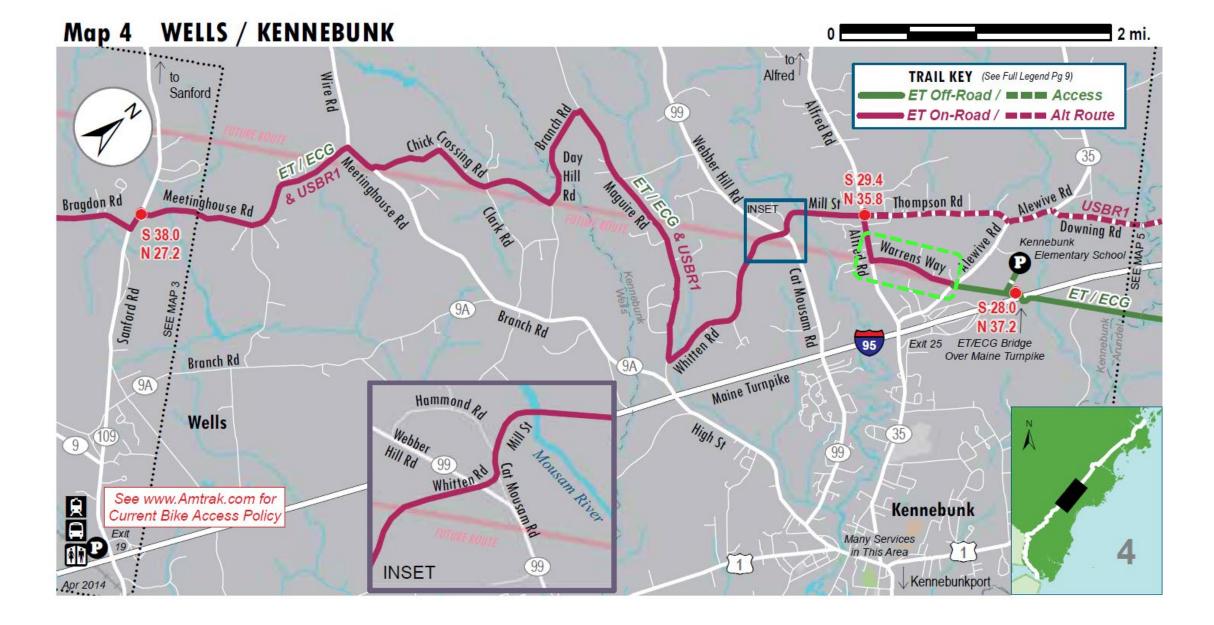




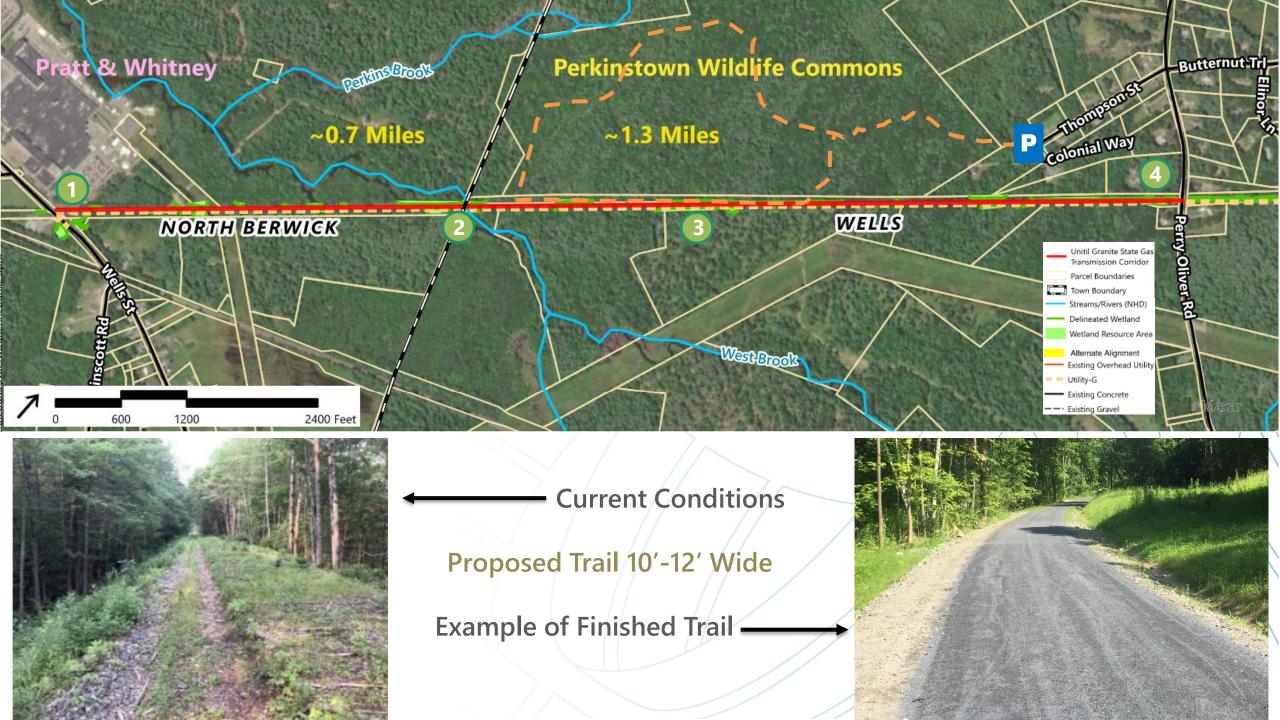
Bicycle/Pedestrian Trail Connectivity Feasibility Study – Limits of Study (along Unitil/Granite State Gas corridor)

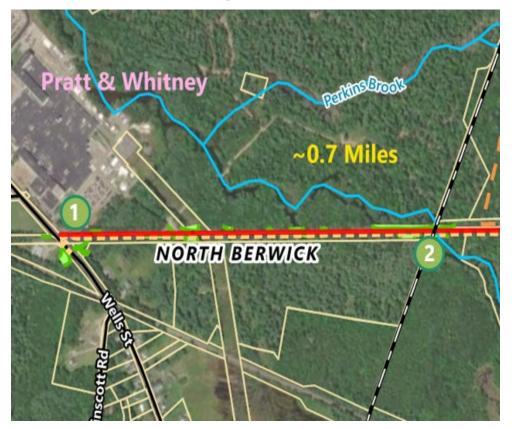
North Berwick, Wells, and Kennebunk, Maine















1.) Wells Street (Route 9) – Southerly Terminus of Segment 1

- Adjacent to Pratt & Whitney
- Potential location for small parking area and kiosk for Eastern Trail users
- Currently a staging area and access point for the Unitil/Granite State Gas Transmission corridor workers.

2.) Bridge over West Brook

- Ballasted deck girder bridge in fair condition
- Minor improvements needed to make this a **pedestrian friendly** feature of the Eastern Trail:
 - Concrete patch work
 - Ballast removal
 - Timber deck replacement
 - Addition of Timber railings





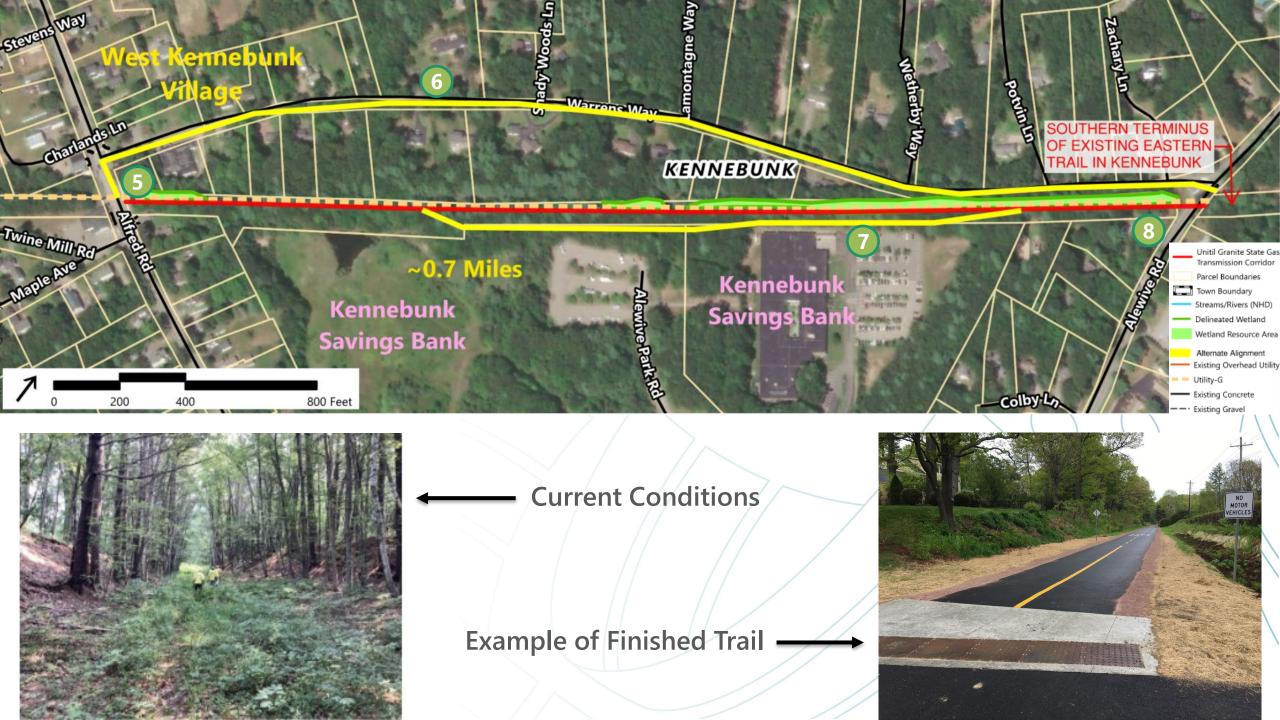


3.) Wetlands and Natural Resources

- Resources are adjacent to, or within study area
- These resources will factor into selection of recommended alternatives and typically include:
 - Stream crossings
 - Wetlands and floodplain
 - Historic districts or properties
 - Rare and endangered plant species
- Mitigation techniques may include retaining walls to reduce impacts and consideration of increased culvert sizing to pass streams under the trail

4.) Perry Oliver Road – Northerly Terminus of Segment 1

- Natural resource and utility obstacles
- ~10' tall embankment, requiring some sort of ramp for trail users to cross roadway
- Evaluate possibility of on street parallel parking (3-6 spaces)







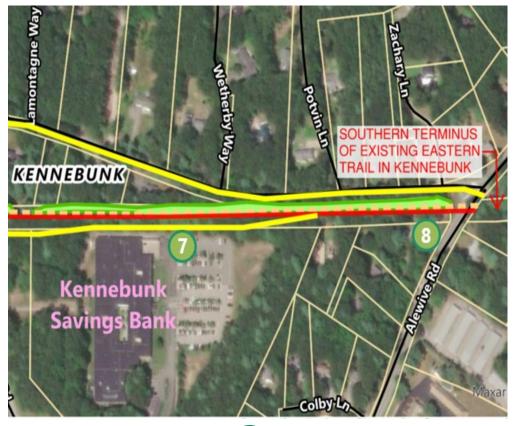


5.) <u>Alfred Road – Southerly Terminus of Segment 2</u>

- Existing RRFB at Warrens Way
- Existing on-street parking
- Potential parking/kiosk opportunities on Twine Mill Road
- ~10' embankment down to trail corridor

6.) Warrens Way Alternative

- Potential on-road trail option for short-term solution (this is the existing ET on-road route)
- Low volume, low speed roadway
- Infrastructure upgrades may include:
 - Striping the roadway for shared use
 - Striping a separated bike lane on the roadway
 - Adding to the pavement width to create a separated trail paralleling the roadway for a short section at the northern end



7.) Kennebunk Savings Bank Alternative

- To avoid natural resource impacts consider constructing trail along rail embankment
- Utilize some of the existing woods trail alignments
- Minimize tree clearing along top of embankment
- Landscaped areas separating parking lot from trail
- Promote greater use of trail

8.) <u>Alewive Road – Northerly Terminus of Segment 2</u>

- Southern terminus of existing off-road Eastern Trail in Kennebunk
- Striped crossing to Warrens Way
- Paved path at roadway approach







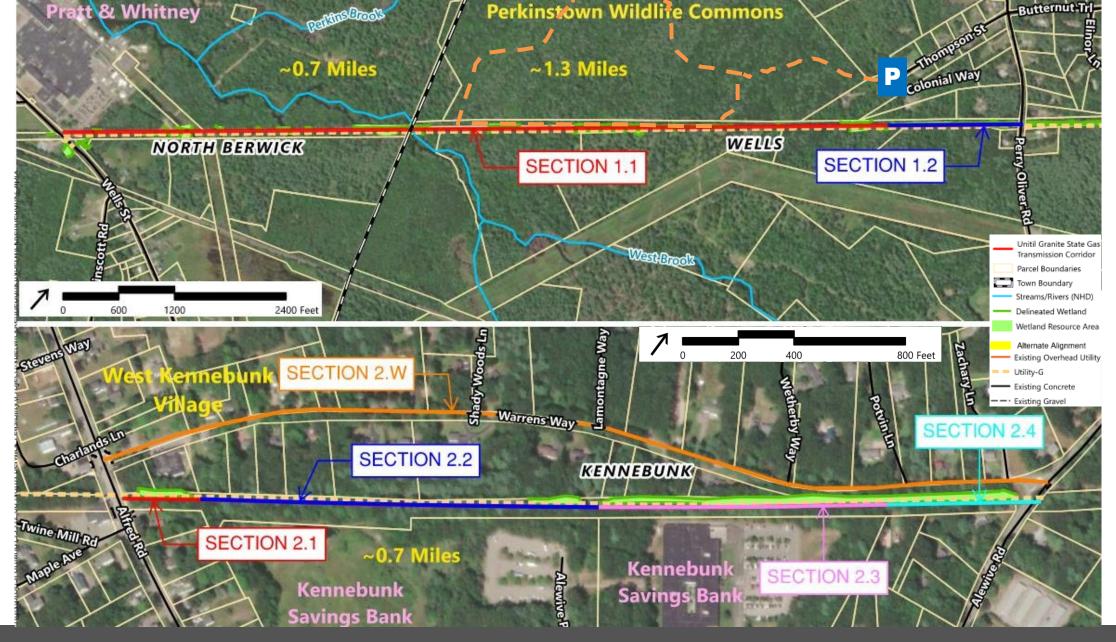
- Proposed trail typically 12 ft. wide, unpaved (like existing ET)
- No motorized vehicles permitted
- Minimal proposed grade changes, gradual slope adjustments where needed (desired max. 5%)
- ADA compliance for all crossings and sidewalk ramps
- Retaining walls incorporated at selected locations

Study Findings

Conceptual Improvements

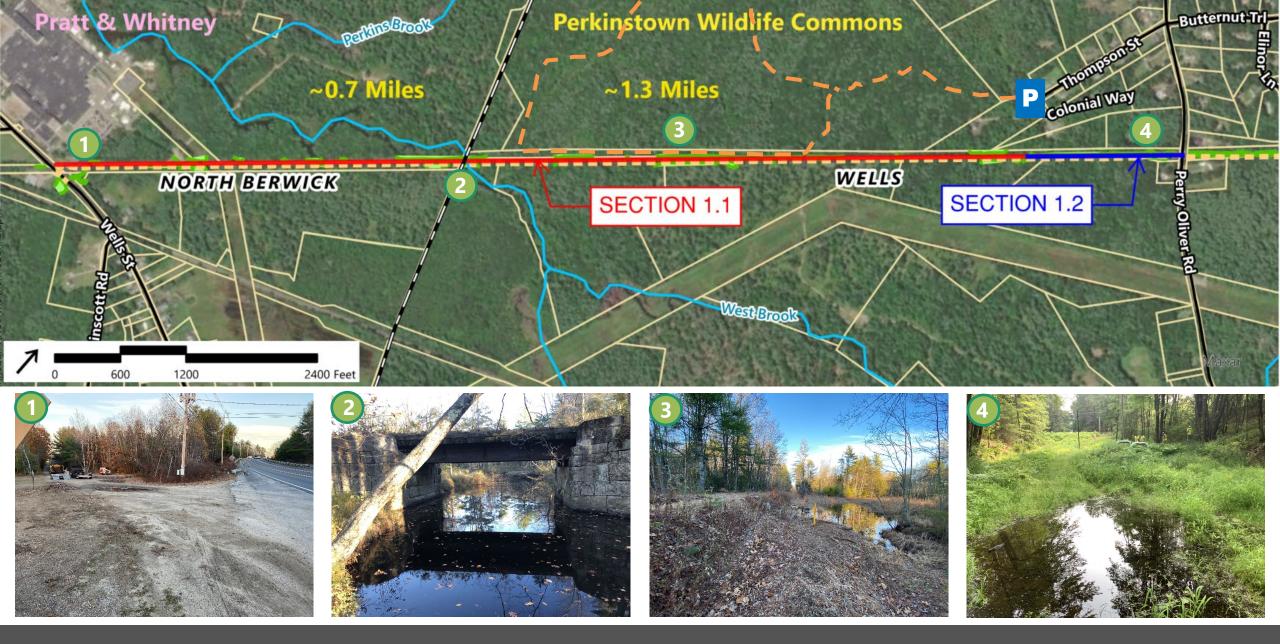
Section Overview, Alternatives Considered, and Recommended Alternatives







Bicycle/Pedestrian Trail Connectivity Feasibility Study – Corridor Breakout





Bicycle/Pedestrian Trail Connectivity Feasibility Study – Segment 1 (Route 9 to Perry Oliver Road)

North Berwick and Wells, Maine

Segment 1 (Route 9 to Perry Oliver Road)

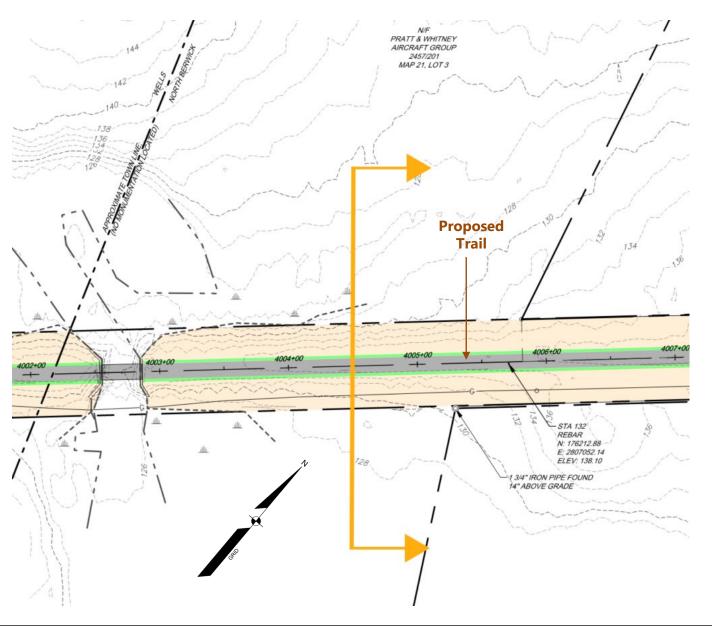
Section 1.1	Aspect	Alt	. 1.1.1 - Historic Rail Alignment	Alt. 1.1.2 - Natural Resource Avoidance Within Utility Corr.	
	Satisfies Purpose & Need		Yes	Yes	
Route 9 to 700 Linear	Safety & Mobility	Dedica	ated path for bikes/peds	Dedicated path for bikes/peds	
Feet South of Perry Oliver Road	ROW, Env. & Utility Impacts	М	inimal Env. Impacts Anticipated	Possible Utility Impacts Anticipated	
(~1.82 Miles)	Constructability		Minimal Effort	Moderate Effort	
	Estimated Cost	Low		Moderate	
	Aspect		. 1.2.1 - Historic Rail	Alt 4 2 2 Not well Become	
Section 1.2	Aspect	A.	Alignment	Alt. 1.2.2 - Natural Resource Avoidance Within Utility Corr.	
Section 1.2	Aspect Satisfies Purpose & Need	711			
Section 1.2	Satisfies Purpose		Alignment	Avoidance Within Utility Corr.	
700 Linear Feet South of Perry Oliver Road	Satisfies Purpose & Need Safety &	Dedica	Alignment Yes	Avoidance Within Utility Corr. Yes	
700 Linear Feet South of	Satisfies Purpose & Need Safety & Mobility ROW, Env. &	Dedica	Yes ated path for bikes/peds	Avoidance Within Utility Corr. Yes Dedicated path for bikes/peds Possible Utility, Moderate Env.	
700 Linear Feet South of	Satisfies Purpose & Need Safety & Mobility ROW, Env. & Utility Impacts	Dedica	Yes ated path for bikes/peds . Impacts Anticipated	Avoidance Within Utility Corr. Yes Dedicated path for bikes/peds Possible Utility, Moderate Env. Anticipated	

- Alternative category ratings are relative to the section being analyzed
- Unitil/Granite State Gas has openly expressed their support and willingness to accommodate the Eastern Trail development where feasible

Purpose & Need:

Develop a continuous bicycle and pedestrian facility that will safely accommodate all non-motorized users, within the project study limits.



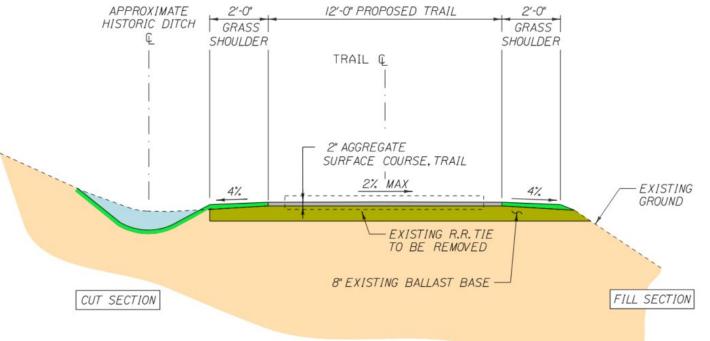




Required West Brook Bridge Improvements

- Install new ballast retainers
- Windrow, shape, grade, and choke ballast
- Add trail surface material over ballast
- Installation of pedestrian guard railings

Section 1.1



Trail Base Preparation

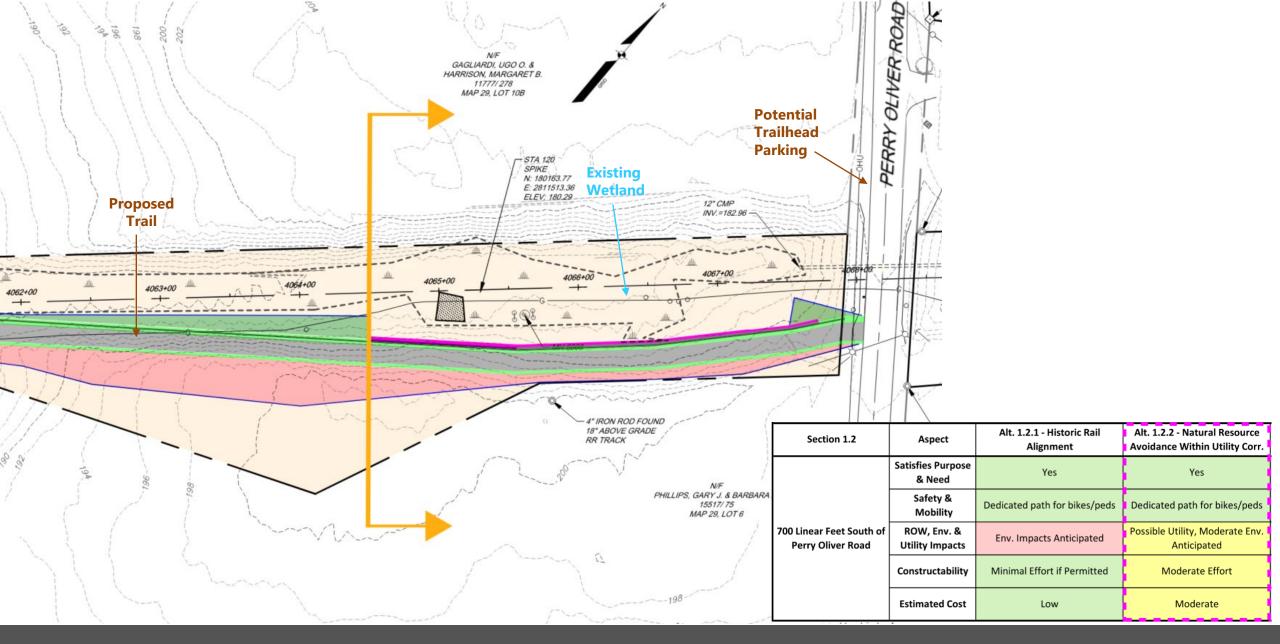
- Remove existing RR ties and debris
- Windrow top 8" of ballast to remove silt and organic debris
- Grade and Shape ballast to create a sturdy trail base
- Choke the ballast with a granular material
- Add trail surface material over ballast

TRAIL ON HISTORIC RAIL ALIGNMENT

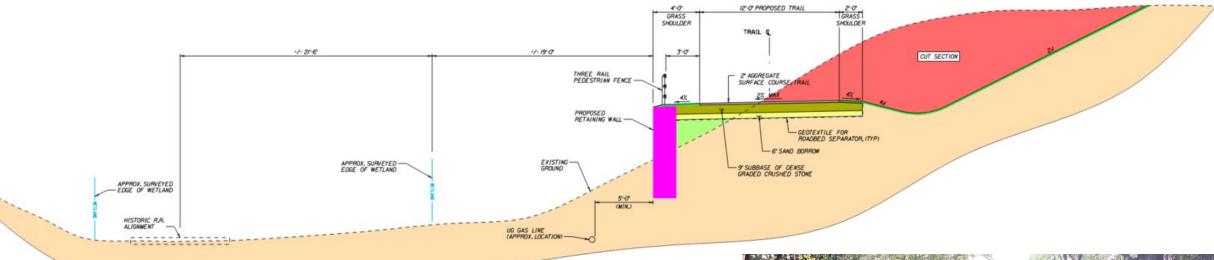
TYPICAL SECTION

NOT TO SCALE

Section 1.1	Aspect	Alt. 1.1.1 - Historic Rail Alignment	Alt. 1.1.2 - Natural Resource Avoidance Within Utility Corr.
	Satisfies Purpose & Need	Yes	Yes
Route 9 to 700 Linear	Safety & Mobility	Dedicated path for bikes/peds	Dedicated path for bikes/peds
Feet South of Perry Oliver Road	ROW, Env. & Utility Impacts	Minimal Env. Impacts Anticipated	Possible Utility Impacts Anticipated
(~1.82 Miles)	Constructability	Minimal Effort	Moderate Effort
	Estimated Cost	Low	Moderate



Section 1.2



<u>Trail Base Preparation</u>

- Excavation and grubbing of trail base area
- Installation of a geotextile material
- Add 6" of sand for areas of non-well drained existing material
- Add 9" of subbase material
- Add trail surface material over subbase







Bicycle/Pedestrian Trail Connectivity Feasibility Study – Segment 2 (Alfred Road to Alewive Road)

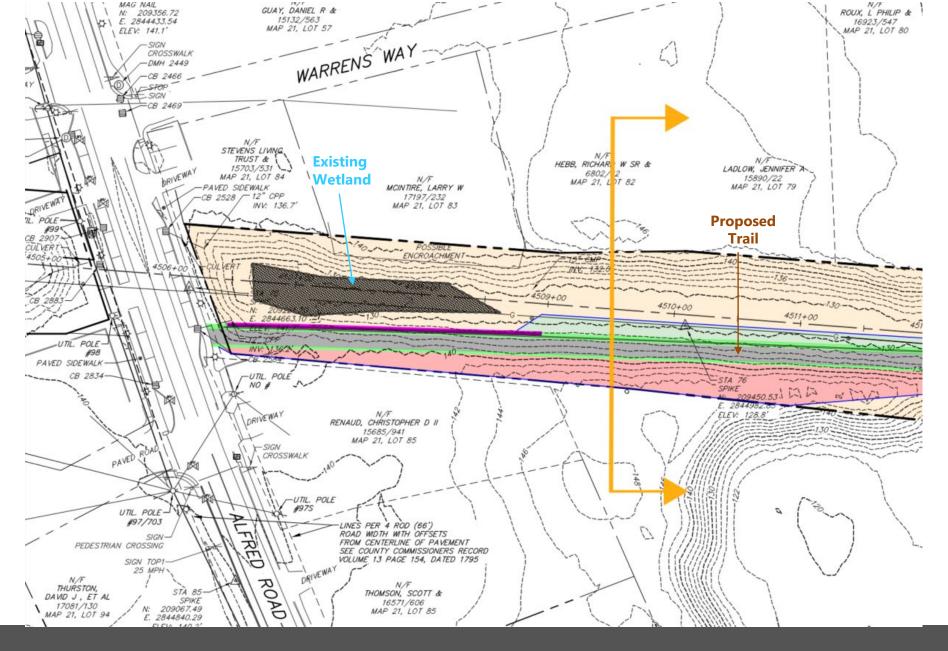
Kennebunk, Maine

Section 2.W	Aspect	Signage and Striping	Improvements	Adjacent to Roadway		
	Satisfies Purpose & Need	No	No	Yes		
	Safety & Mobility	Minimal improvement	Moderate improvement Shared roadway options	Dedicated path for bikes/peds		
Warrens Way	ROW, Env. & Utility Impacts	None anticipated	Possible ROW or Utility Impacts Anticipated	ROW and Possible Utility Impacts Anticipated		
	Constructability	Minimal Effort, Minor Traffic Impacts	Moderate Effort and Traffic Impacts	Major Effort and Traffic Impacts		
	Estimated Cost	Low	Moderate	High		
Section 2.1	Aspect	Alt. 2.1.1 - Historic Rail Alignment	Alt. 2.1.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.1.3 - Trail on Eastern Embankment		
	Satisfies Purpose & Need	Yes	Yes	Yes		
Alfred Road to	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds		
Kennebunk Savings Bank - Southern Parcel	ROW, Env. & Utility Impacts	Major Environmental Impacts	Minor Environmental Impacts Anticipated	Possible Environmental Impacts Anticipated		
(~300 Linear Feet)	Constructability	Likely would not get permitted	Moderate Effort	Moderate Effort		
	Estimated Cost	Low	Moderate	Moderate		
Section 2.2	Aspect	Alt. 2.2.1 - Historic Rail Alignment	Alt. 2.2.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.2.3 - Trail on Eastern Embankment	Alt. 2.2.4 - Trail Within Kennebunk Savings Bank - Southern Parcel Development	
	Satisfies Purpose & Need	Yes	Yes	Yes	Eventually	
Variabilit Sailani Bark	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds	Dedicated path for bikes/peds	
Kennebunk Savings Bank - Southern Parcel (~0.27 Miles)	ROW, Env. & Utility Impacts	Moderate Environmental Impacts Anticipated	Possible Environmental Impacts Anticipated	Possible Environmental Impacts Anticipated	100% off Unitil ROW	
	Constructability	Minor Effort	Moderate Effort	Moderate Effort	Minimal effort if coordinated with site development	
	Estimated Cost	Low	Moderate	Moderate	Low	
Section 2.3	Aspect	Alt. 2.3.1 - Historic Rail Alignment	Alt. 2.3.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.3.3 - Trail on Eastern Embankment	Alt. 2.3,4 - Trail Along Top of Eastern Embankment	
	Satisfies Purpose & Need	Yes	Yes	Yes	Yes	
	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds	Dedicated path for bikes/peds	
Kennebunk Savings Bank - Northern Parcel (~0.20 Miles)	ROW, Env. & Utility Impacts	Major Environmental Impacts	Minor Environmental Impacts Anticipated	Moderate Environmental Impacts	Significant ROW Impacts	
0.7000000000000000000000000000000000000	Constructability	Likely will not get permitted	Moderate Effort	Moderate Effort	Moderate Effort	
	Estimated Cost	Low	Moderate	Moderate	Low	
Section 2.4	Aspect	Alt. 2.4.1 - Historic Rail Alignment	Alt. 2.4.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.4.3 - Trail on Eastern Embankment	Alt. 2.4.4 - Trail Along Top of Eastern Embankment	Alt. 2.4.5 - Cross Railroad Corridor to Warrens Way
	Satisfies Purpose & Need	Yes	Yes	Yes	Yes	Possibly, Pending Warrens Way Level of Improvements
Kennebunk Savings Bank	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds	Dedicated reduced width path for bikes/peds	Pending Warrens Way Level of Improvements
- Northern Parcel to Alewive Road	ROW, Env. & Utility Impacts	Major Environmental Impacts	Minor Environmental Impacts Anticipated	Moderate Environmental Impacts	Significant ROW Impacts	Minor Environmental Impacts
(~500 Linear Feet)	Constructability	Likely will not get permitted	Moderate Effort	Moderate Effort	Limited space for construction activites	Moderate Effort
	Estimated Cost	Low	Moderate	Moderate	Moderate	Moderate

Segment 2 (Alfred Road to Alewive Road)

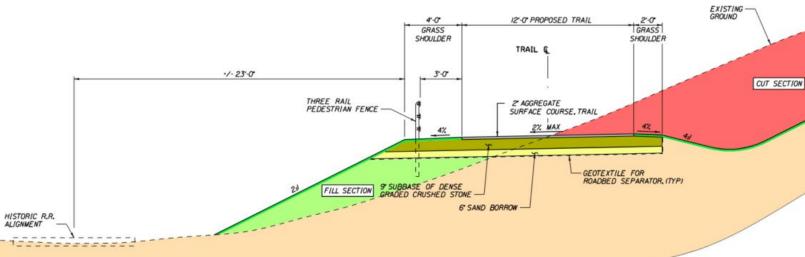
- Section 2.W is an alternative that can be utilized for the whole segment or an individual section
- Alternative category ratings are relative to the section being analyzed
- Kennebunk Savings Bank and Unitil/Granite
 State Gas has openly expressed their support
 and willingness to accommodate the Eastern
 Trail development where feasible
- RR ballast and ties were not observed here during the field reconnaissance

Feature Color Coding: More	e Desireable Neutral	Less Desireable	Not Considered
----------------------------	----------------------	-----------------	----------------









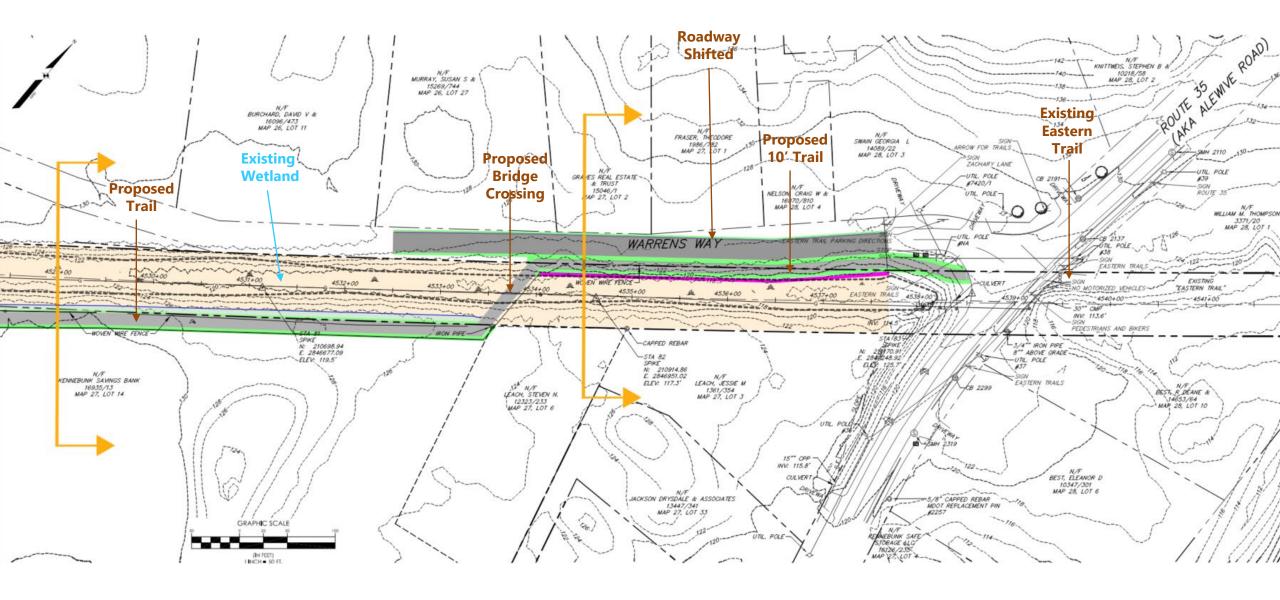
TRAIL ALONG EMBANKMENT (APPROX. STATION 4509.50) NOT TO SCALE

Section 2.1	Aspect	Alt. 2.1.1 - Historic Rail Alignment	Alt. 2.1.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.1.3 - Trail on Eastern Embankment	
	Satisfies Purpose & Need	Yes	Yes	Yes	
Alfred Road to	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds	
Kennebunk Savings Bank - Southern Parcel	ROW, Env. & Utility Impacts	Major Environmental Impacts	Minor Environmental Impacts Anticipated	Possible Environmental Impacts Anticipated	
(~300 Linear Feet)	Constructability	Likely would not get permitted	Moderate Effort	Moderate Effort	
	Estimated Cost	Low	Moderate	Moderate	
Section 2.2	Aspect	Alt. 2.2.1 - Historic Rail Alignment	Alt. 2.2.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.2.3 - Trail on Eastern Embankment	Alt. 2.2.4 - Trail Within Kennebunk Savings Bank - Southern Parcel Development
Section 2.2	Aspect Satisfies Purpose & Need				Kennebunk Savings Bank -
	Satisfies Purpose	Alignment	Historic Rail Alignment	Embankment	Kennebunk Savings Bank - Southern Parcel Development
Kennebunk Savings Bank - Southern Parcel	Satisfies Purpose & Need Safety &	Alignment Yes	Historic Rail Alignment Yes Possible Safety Concerns	Embankment Yes	Kennebunk Savings Bank - Southern Parcel Development Eventually
Kennebunk Savings Bank	Satisfies Purpose & Need Safety & Mobility ROW, Env. &	Alignment Yes Dedicated path for bikes/peds Moderate Environmental	Historic Rail Alignment Yes Possible Safety Concerns Possible Environmental Impacts	Embankment Yes Dedicated path for bikes/peds Possible Environmental Impacts	Kennebunk Savings Bank - Southern Parcel Development Eventually Dedicated path for bikes/peds

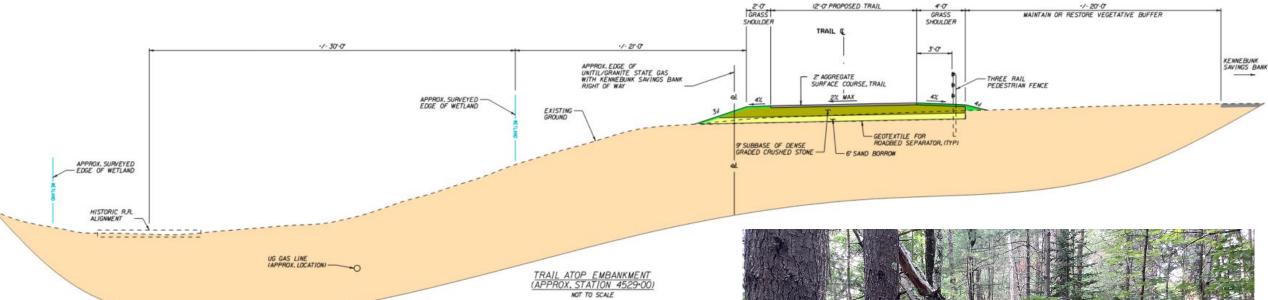
UG GAS LINE (APPROX. LOCATION)



APPROX.EDGE OF UNITIL/GRANITE STATE GAS WITH KENNEBUNK SAVINGS BANK RIGHT OF WAY



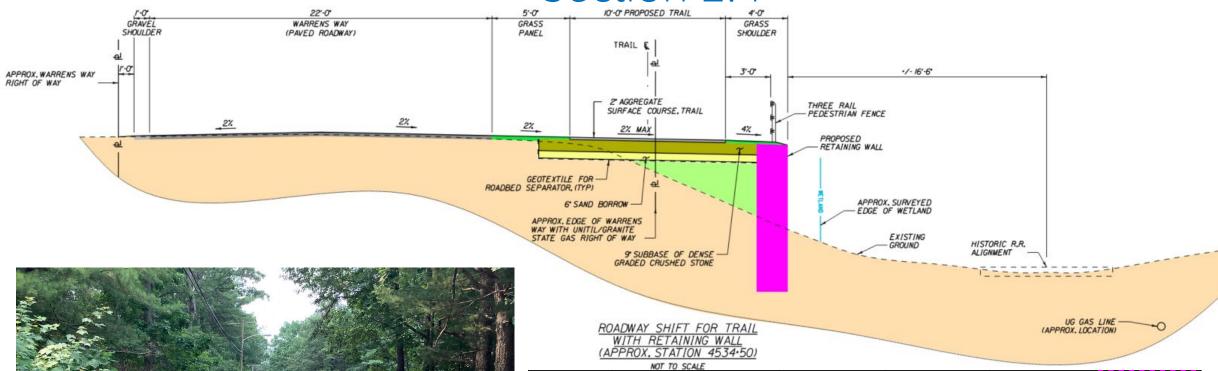
Section 2.3



Section 2.3	Aspect	Alt. 2.3.1 - Historic Rail Alignment	Alt. 2.3.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.3.3 - Trail on Eastern Embankment	Alt. 2.3.4 - Trail Along Top of Eastern Embankment
	Satisfies Purpose & Need	Yes	Yes	Yes	Yes
	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds	Dedicated path for bikes/peds
Kennebunk Savings Bank - Northern Parcel (~0.20 Miles)	ROW, Env. & Utility Impacts	Major Environmental Impacts	Minor Environmental Impacts Anticipated	Moderate Environmental Impacts	Significant ROW Impacts
(size initial)	Constructability	Likely will not get permitted	Moderate Effort	Moderate Effort	Moderate Effort
	Estimated Cost	Low	Moderate	Moderate	Low



Section 2.4



	NOT T	O SCALE				
Section 2.4	Aspect	Alt. 2.4.1 - Historic Rail Alignment	Alt. 2.4.2 - Boardwalk Along Historic Rail Alignment	Alt. 2.4.3 - Trail on Eastern Embankment	Alt. 2.4.4 - Trail Along Top of Eastern Embankment	Alt. 2.4.5 - Cross Railroad Corridor to Warrens Way
	Satisfies Purpose & Need	Yes	Yes	Yes	Yes	Possibly, Pending Warrens Way Level of Improvements
Kennebunk Savings Ban	Safety & Mobility	Dedicated path for bikes/peds	Possible Safety Concerns	Dedicated path for bikes/peds	Dedicated reduced width path for bikes/peds	Pending Warrens Way Level of Improvements
- Northern Parcel to Alewive Road	ROW, Env. & Utility Impacts	Major Environmental Impacts	Minor Environmental Impacts Anticipated	Moderate Environmental Impacts	Significant ROW Impacts	Minor Environmental Impacts
(~500 Linear Feet)	Constructability	Likely will not get permitted	Moderate Effort	Moderate Effort	Limited space for construction activites	Moderate Effort
	Estimated Cost	Low	Moderate	Moderate	Moderate	Moderate

Section 2.W	Aspect	Alt. 2.W.1 - Pvmt. Preserv., Add Signage and Striping	Alt. 2.W.2 - Roadway Improvements	Alt. 2.W.3 - Shared-Use Path Adjacent to Roadway
	Satisfies Purpose & Need	No	No	Yes
	Safety & Mobility	Minimal improvement	Moderate improvement Shared roadway options	Dedicated path for bikes/peds
Warrens Way	ROW, Env. & Utility Impacts	None anticipated	Possible ROW or Utility Impacts Anticipated	ROW and Possible Utility Impacts Anticipated
	Constructability	Minimal Effort, Minor Traffic Impacts	Moderate Effort and Traffic Impacts	Major Effort and Traffic Impacts
	Estimated Cost	Low	Moderate	High

Unitil/Granite State Gas Corridor Crossing (example)





Opinion of Costs

<u>Segment 1 – Route 9 to Perry Oliver Road</u>

- Section 1.1 Alt. 1.1.1 (Historic Rail Alignment) = \$920,000
- Section 1.2 Alt. 1.2.2 (Natural Resource Avoidance Within Utility Corridor) = \$580,000
 Segment 1 Subtotal = \$1,500,000

<u>Segment 2 – Alfred Road to Alewive Road</u>

- Section 2.1 Alt. 2.1.3 (Trail on Eastern Embankment) = \$440,000
- Section 2.2 Alt. 2.2.3 (Trail on Eastern Embankment) = \$305,000
- Section 2.3 Alt. 2.3.4 (Trail Along Top of Eastern Embankment) = \$180,000
- Section 2.4 Alt. 2.4.5 (Cross Railroad Corridor to Warrens Way) = \$1,255,000
 Segment 2 Subtotal = \$2,180,000

Total Cost of Recommended Trail Alternatives = \$3,680,000

- Conceptual order of magnitude costs based on 2021 \$\$
- Includes assumptions for PE, Construction, and CE
- <u>Does not include</u> ROW, permitting, or mitigation costs

Public Input and Discussion



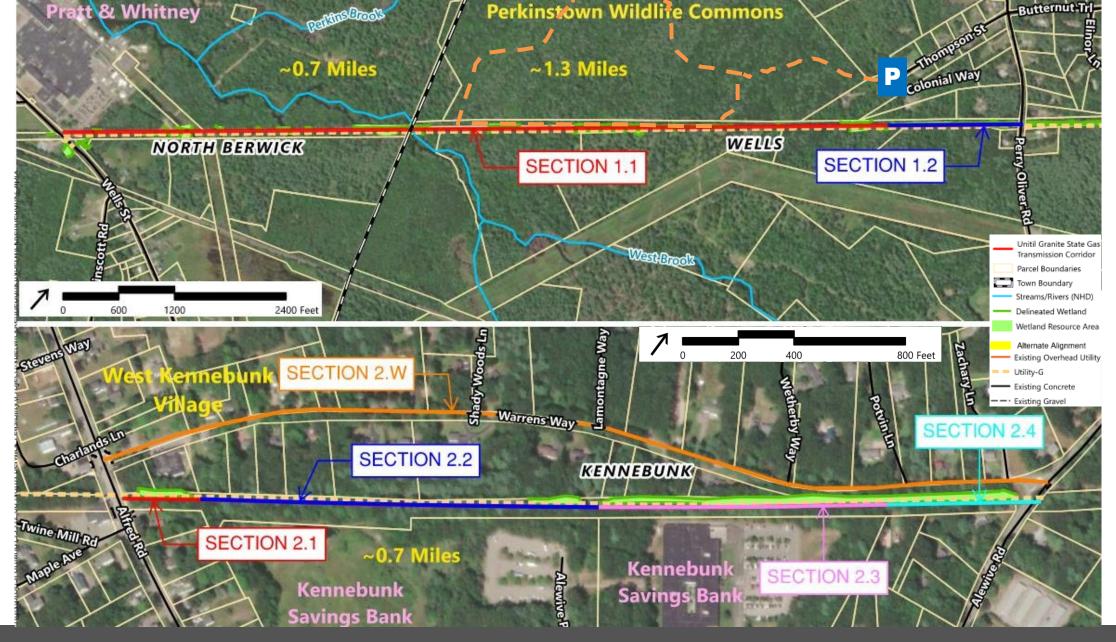
Focus of Tonight's Meeting

...help us identify and understand local concerns and opportunities in relation to the recommended alternatives presented

Public Input / Discussion

Study's purpose is to evaluate and analyze **connectivity** alternatives for the Eastern Trail in **North Berwick**, **Wells**, and **Kennebunk**.

- 1. What else can you think of to add to tonight's discussion and/or contribute to the overall success of this project? (for example...)
 - Other ideas/options that should be considered
 - Location specific information
 - Local issues and concerns we should be aware of
 - Potential future developments that should be considered
 - Any other relevant information...
- 2. What are your hopes and or goals for this study?
- 3. Any concerns, questions, or comments related to the study?





Bicycle/Pedestrian Trail Connectivity Feasibility Study – Corridor Breakout

Next Steps

Public Meeting Follow up:

 Collect all feedback and ideas from tonight's meeting (All comments provided prior to, during, and after the meeting)

Prepare a summary of all comments for review by the TAC

Remaining Project Schedule:

March '22 – Prepare and Submit Final Report



North Berwick/Wells/Kennebunk Bike/Ped Trail Feasibility Study

