Derry-Londonderry I-93 Exit 4A (13065 Series)

Public Information Meeting

www.i93Exit4A.com

September 22, 2022





For those joining us remotely: www.i93exit4a.com Project Email: exit4a@dot.nh.gov

- Submit questions and comments
- Additional project history and information
- Join the mailing list to stay informed







Agenda

- Background & Project Improvements
- Project Breakouts
- Project Schedules
- Project Status
- Rail Trail History & Design
- Next Steps
- Questions and Comments







Background

- New Exit 4A interchange proposed on I-93 in Londonderry, between Exit 4 and Exit 5
- **Purpose & Need**: Reduce congestion, improve safety and reduce traffic on local roads. Promote economic vitality in Derry & Londonderry
- Preliminary engineering completed in early 2020
- Final design engineering started in April 2021







Project Improvements

- New Londonderry interchange, with easterly access to Derry
- New 4-Lane Old Rum Trail 1 mile
- Folsom & Tsienneto Roads 2.3 miles



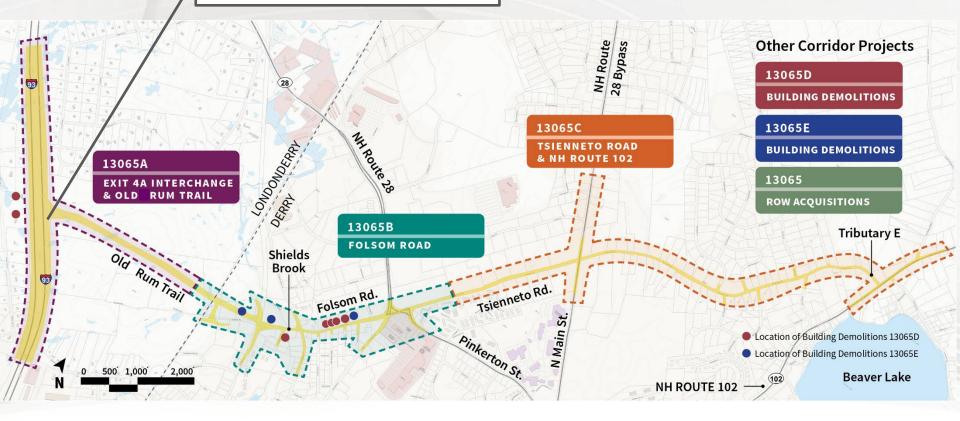
Project Improvements

- New bridges (3): 1 NHDOT, 2 Town of Derry
- Coordinated traffic signal system
- Stormwater treatment to meet MS4 (Municipal Separate Storm Sewer Systems)



Project Breakouts

New Exit 4A Interchange





Project Design Schedule

Project	Design Schedule	Construction	Design Team
13065A	Apr. 2021 – April 2022	2022 - 2024	VHB
13065B	May 2021 – Oct. 2023	2024 - 2025	MJ
13065C	Feb. 2022 – Jan. 2025	2025 - 2026	VHB
13065D	Aug. 2021 – Jan. 2022	2022	NHDOT
13065E	Aug. 2022 – Jan. 2023	2023	NHDOT
	Exit 4A 13065A EXIT 4A INTERCHANGE & OLDE RUM TRAIL	13065C	DING DEMOLITIONS
Olde Rum Trail		jienneto Rd.	S5 ACQUISITIONS Tributary E of Building Demolitions 13065D of Building Demolitions 13065E Beaver Lake



NH ROUTE 102 -



Project ROW Schedule

Cont.	Parcels	Full Acq.*	ROW Start	Duration (months)
13065A	26	2	Jun. 2021 – Apr. 2022	10
13065B	65	10	Oct. 2022 – Sep. 2023	11
13065C	100	0	June 2023 – Dec. 2024	18



*NHDOT has secured possession of all full acquisition parcels.





Status – 13065A Project (Interchange and Old Rum Trail)

- Exit 4A Interchange
- Contract Awarded to Weaver Bros. Const. on 6/15/22
- Bid Construction Cost: \$45.5M
- Anticipated Completion Date: Fall 2024



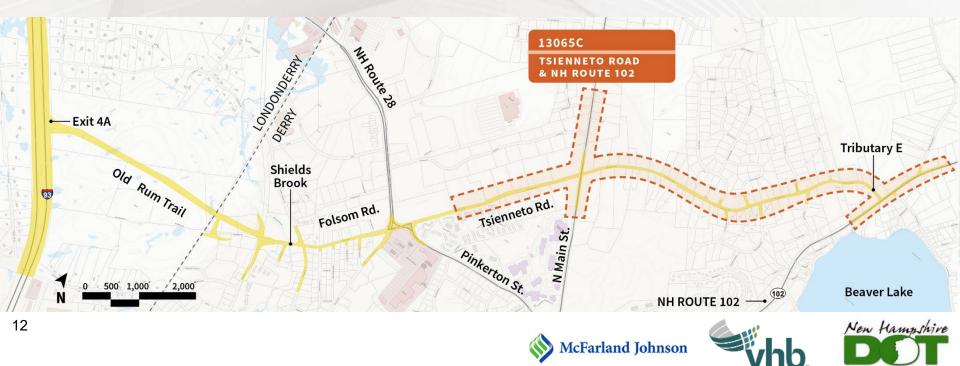
Status – 13065B Project (Folsom Road)

- Ties Interchange/Old Rum Trail to Derry
- New bridge over Shields Brook
- Integrated traffic signal systems
- Enhanced capacity on Folsom Road



Status – 13065C Project

- Rehabilitation of Tsienneto Road
- New Tributary E Bridge
- Signalization at NH Route 102 improves traffic operations
- Corridor completion



Department of Transportation

Status – 13065C Progress (Tsienneto Road)

- Data Gathering, Survey, Environmental are ongoing
- Geotechnical field program are complete
- Preliminary Design is about 20% complete
- Design advancing towards 2023 ROW start



Department of Transportatio

Status – 13065D Progress (Building Demolitions)

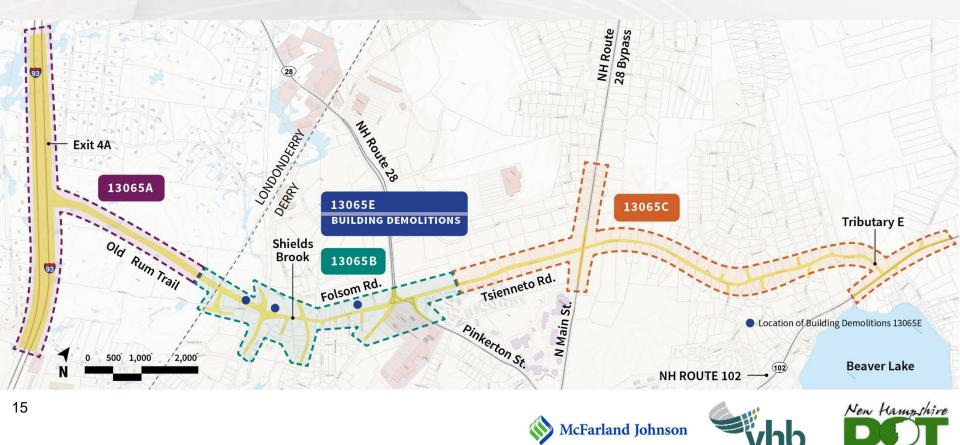
- Designed, advertised, and bid
- Awarded to Spears Bros Building Salvage & Wrecking on 4/6/22
- Bid Construction Cost: \$322k
- Completion Date: September 13, 2022



Department of Transportatio

Status – 13065E Progress (Building Demolitions)

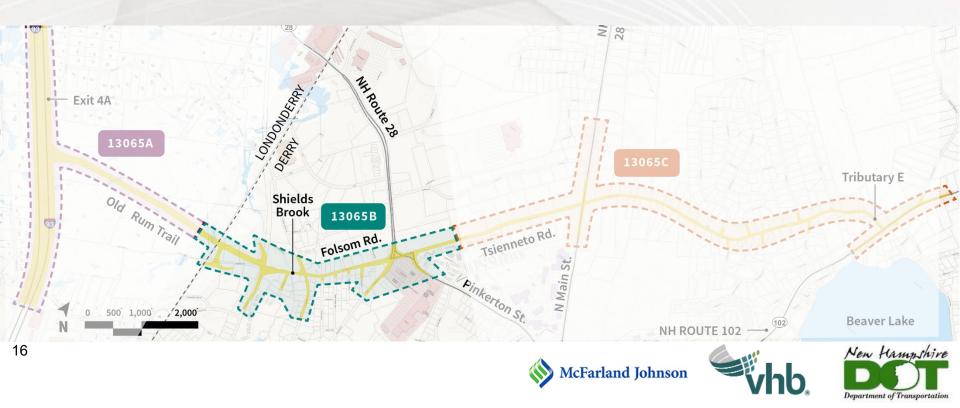
- Advertising anticipated January 2023



Department of Transportation

Status – 13065B Project (Folsom Road)

- Ties Interchange/Old Rum Trail to Derry
- Reconstruction of Folsom Road and Side Roads
- Proposed Stormwater Treatment Facilities



Status – 13065B Project (Folsom Road)

- NH Route 102 advanced temporary traffic signals are not included
 - Retain existing lane use No proposed widening, ROW, and utility relocations
 - Increased through movement delays along NH Route 102
 - Increased traffic along Tsienneto Road during construction
 - Operational concerns with residential driveway offset from Tsienneto Road

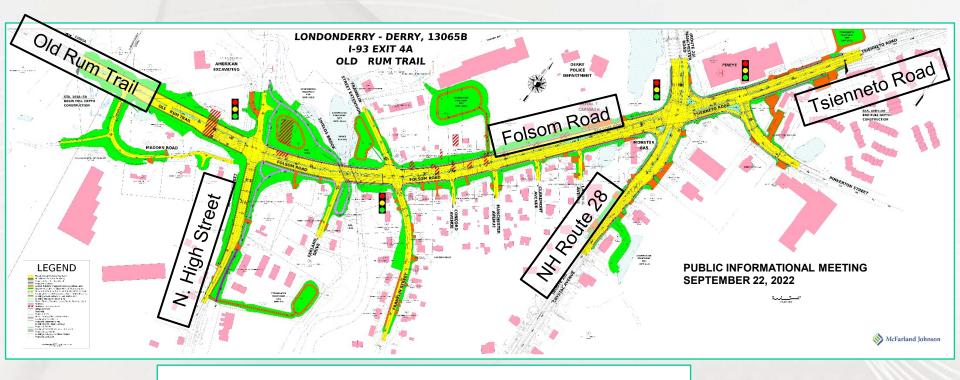


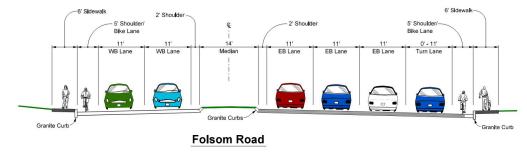
Status – 13065B Progress (Folsom Road)

- Slope and Drain (65%) milestone April 2022
- Beginning Utility Relocation Design Process
- ROW Plan Development has started with Acquisition Process Starting in October 2022
- Rail Trail Design Refinements



Status – 13065B Project (Folsom Road)



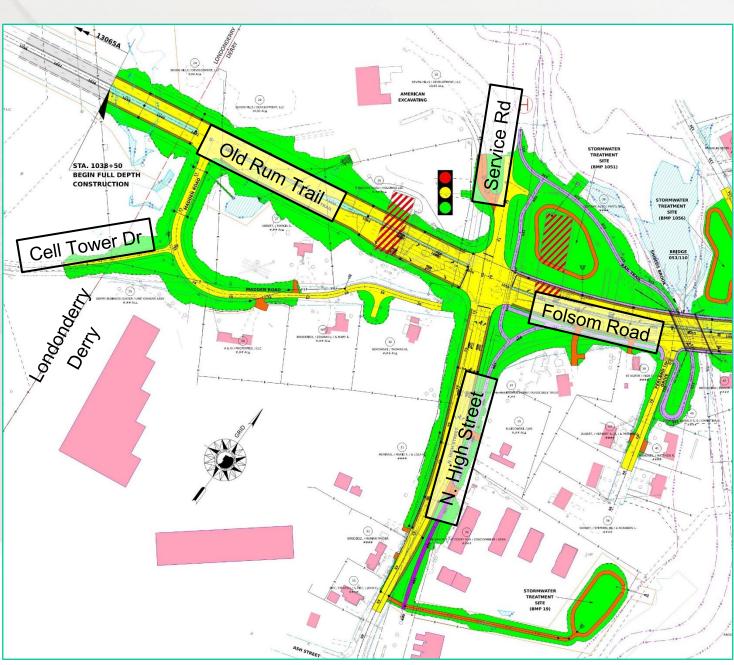






Status 13065B Project (West Segment)

- Old Rum Trail
- Madden Road Access
- Upgrades Folsom Road
- New Bridge over Shields Brook
- Rail Trail Extension
- American Excavating Access
- Stormwater Treatment Sites (2)
- New Town Roads (2)

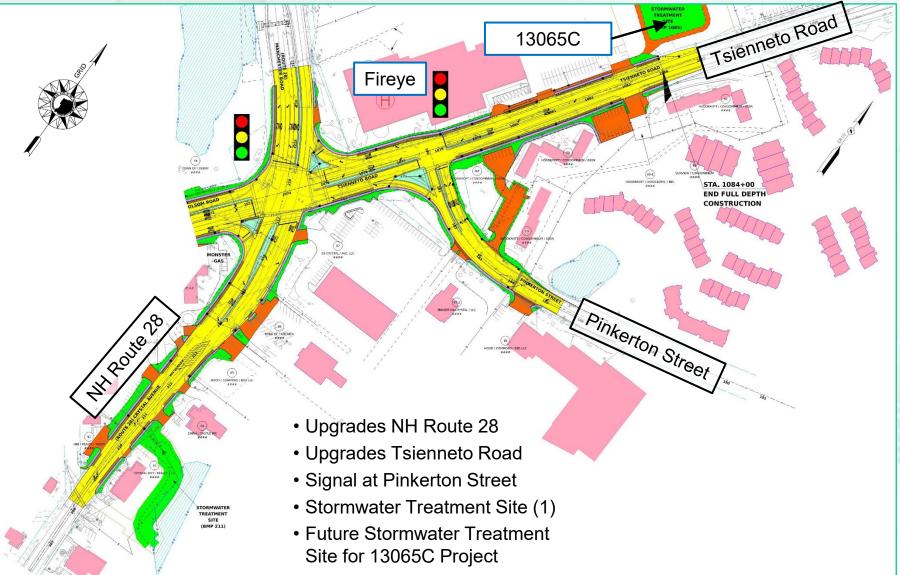


Status 13065B Project (Middle Segment)

- Upgrades Folsom Road
- Upgrades Franklin Street and Extension
- Stormwater Treatment Sites (2)
- Potential drive modifications at the Police Department driveway



Status – 13065B Project (East Segment)



Rail Trail Design History

- Public Hearing included the Tunnel Concept
- During Design Build Procurement
 - Alternative Technical Concept Proposed and Accepted
 - Initial Estimated Project Savings of \$965,000
 - Reduction of Future Town of Derry Maintenance Costs
 - Lower Profile for Old Rum Trail
 - Provides Improved Connectivity to Folsom Road Sidewalks
 - Design Build Project Delivery Method cancelled in November 2020

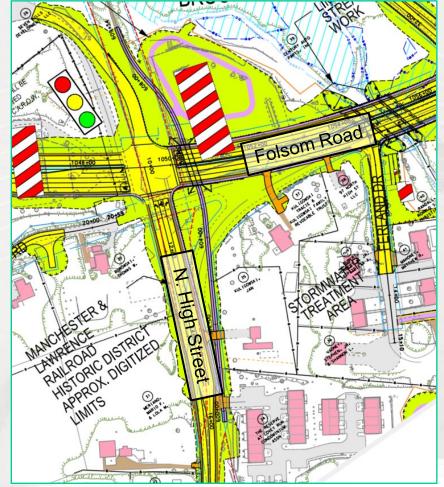
McFarland Johnson

- Final Design
 - Contract Executed in April 2021
 - Advancing Design per Standard Project Development Process
 - Concept design refinements still ongoing
 - Current estimated cost savings is \$770,000
 - Advertising Date: October 2023





Rail Trail Hearing Plan and Proposed



Public Hearing Plan – Tunnel under 24 Folsom Road

Folsom Road High WSKI, / THOMAS 10 J. / & MARY E ULIGOWSKI, / JA Street RIANO. / MARIO F. / & LOLA

Proposed Alternative: Rail Trail at Shields Brook - Shared Crossing







Questions and Concerns Raised

- Path Grades (too steep)
- Path Curves (too tight)
- Safety
- Flooding Potential
- Property Impacts
- Convenience
- Cost



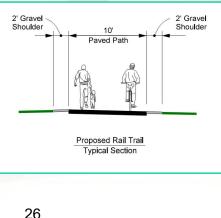


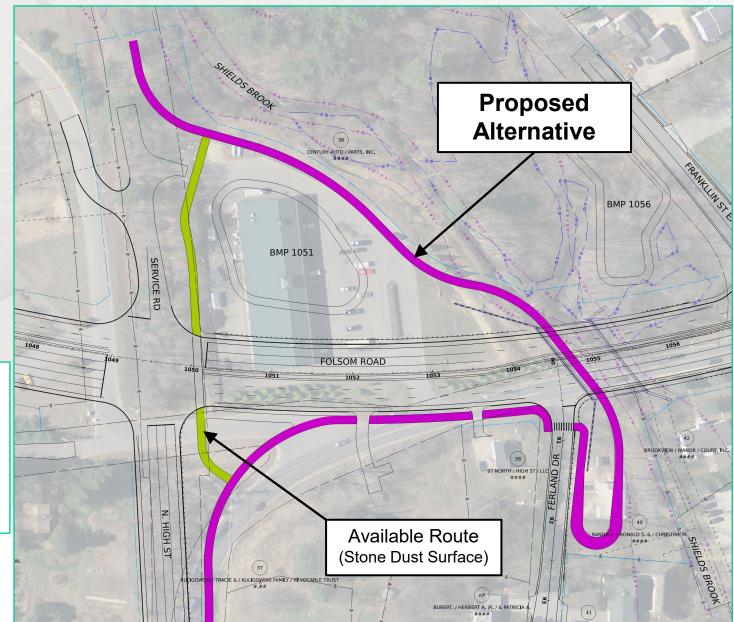




Proposed Alternative

- 10' Wide Paved Path
- 11' Vertical Clearance
- ADA Compliant
- 1,500 feet long
- Max Grade 4.96%
- Softened Curves
- Widened the U Curve
- Enhanced Signing and Striping







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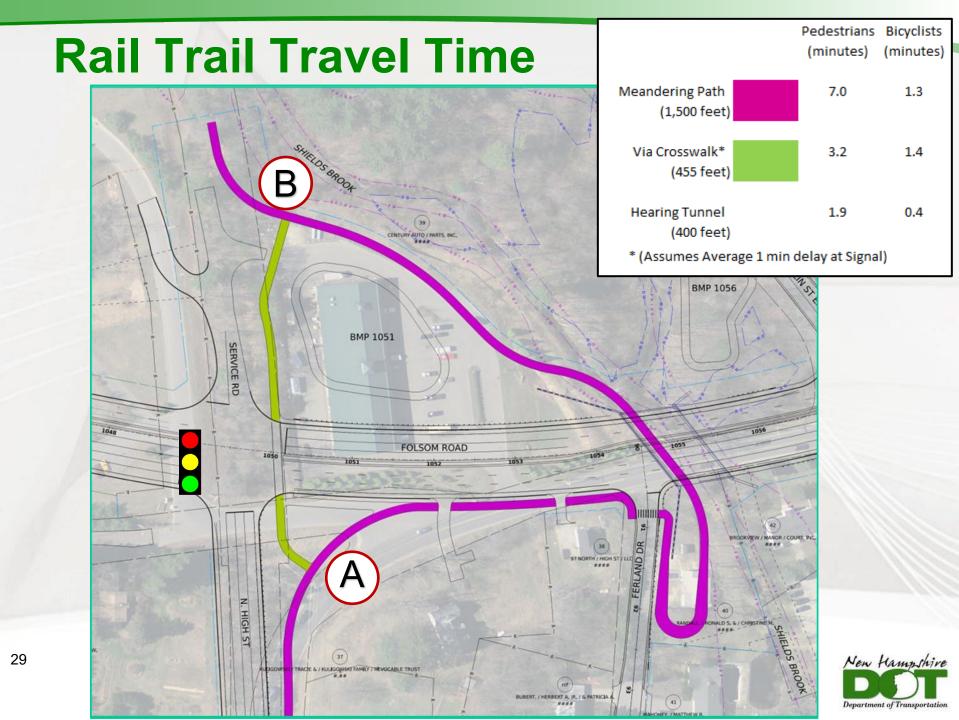


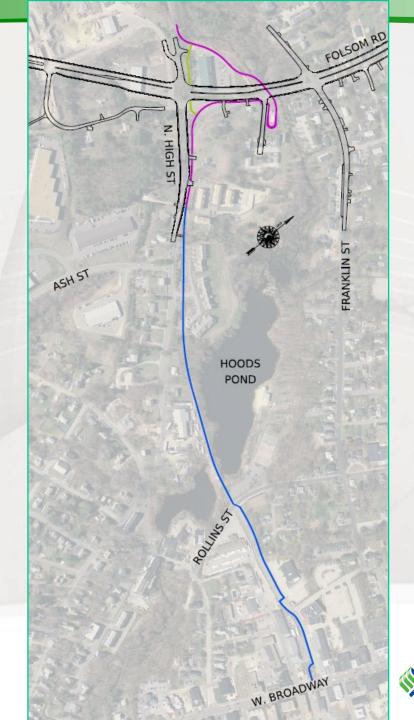


















Rail Trail – Proposed Profile (Exaggerated Vertical Scale)



Note: Vertical Scale 5x the Horizontal Scale







Rail Trail – Proposed Profile (1:1 Vertical Scale)



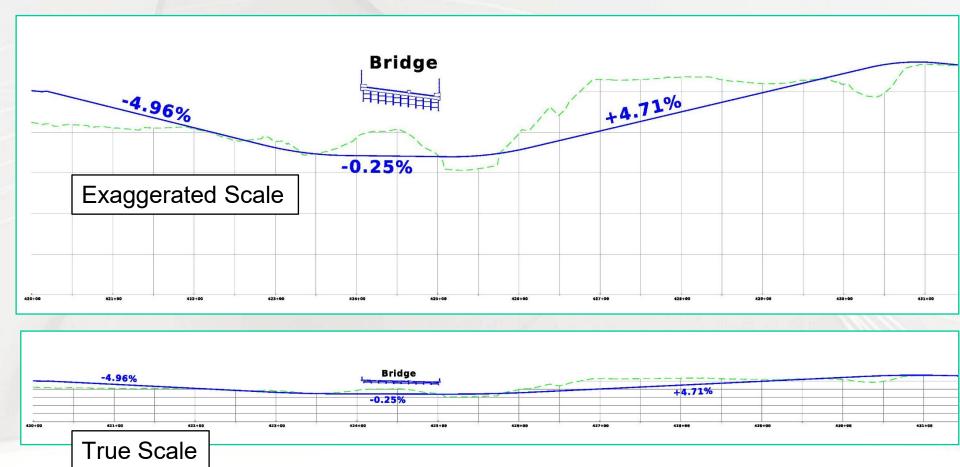
Note: True Scale







Rail Trail – Proposed Profile (Comparison)

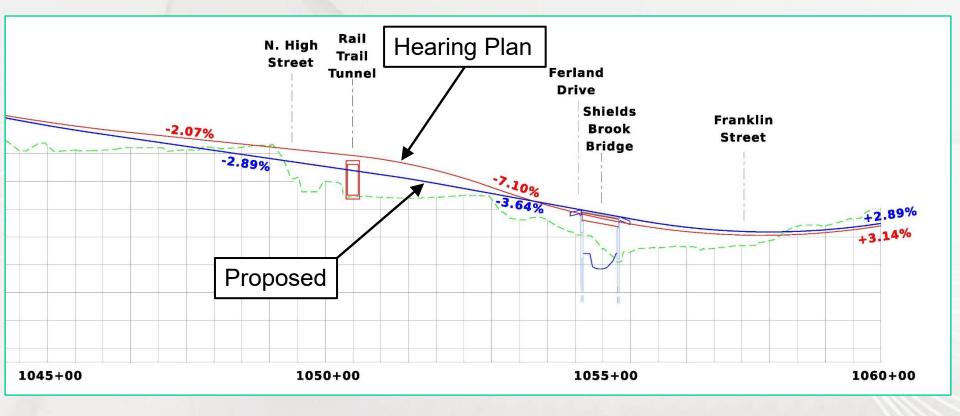








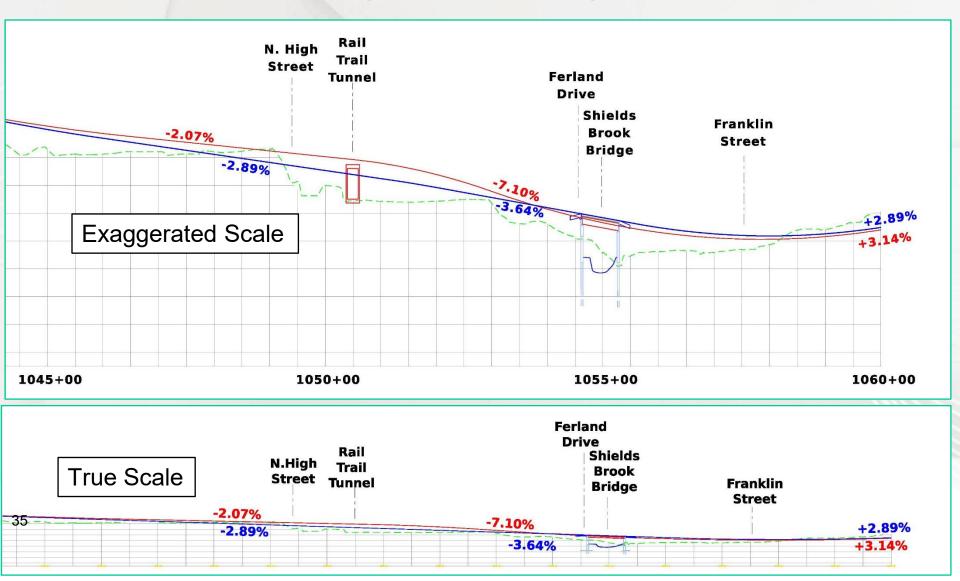
Old Rum Trail/Folsom Road Profile (Exaggerated Vertical Scale)



Note: Vertical Scale 5x the Horizontal Scale



Old Rum Trail/Folsom Road Profile (Comparison)

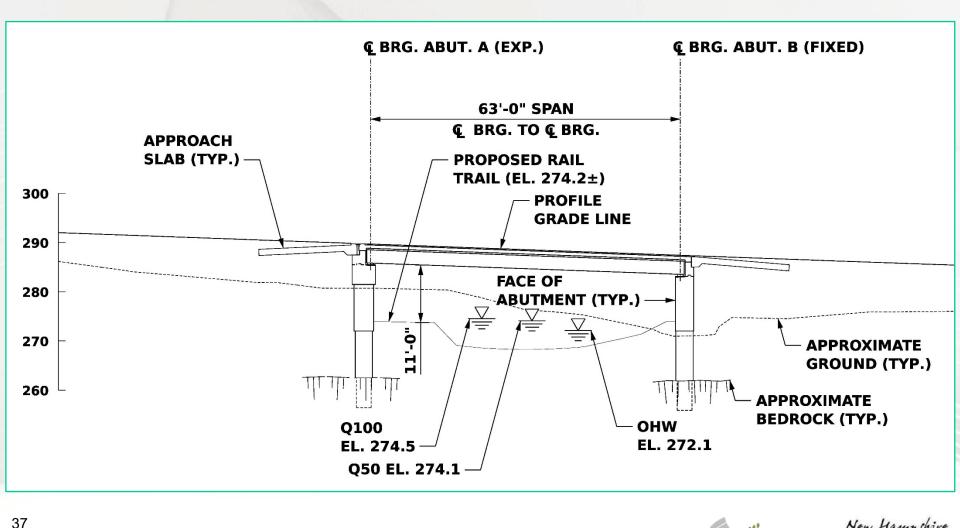


Shields Brook Before and After Proposed Folsom Road **Existing Folsom Road** -3.64% 11' Existing 6' Diameter **Proposed Bridge** Culvert (Area = 28 sf) (Area = 195 sf)

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Shields Brook Bridge





McFarland Johnson

Manchester Street, Concord



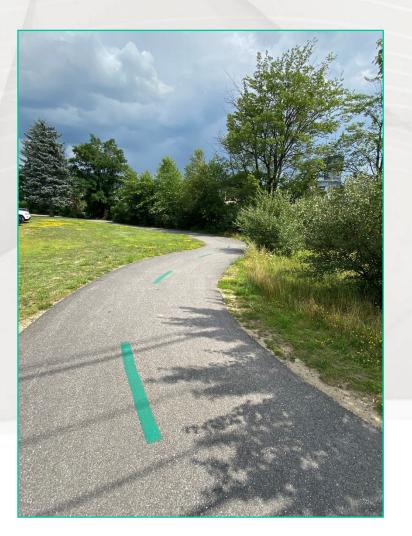








Fair Street, Laconia





Sewalls Falls Rec Trail, Concord











Sugar River Rec Trail, Newport











Rail Trail Cost Differential Analysis

Public Hearing vs. Design Build Alternative Rail Trail Concept Savings = \$965,000 Current Proposed Rail Trail Concept Savings = \$770,000

Major Cost Items	Change in Major Items (Public Hearing Design vs. 2022 Modified Rail Trail Design)	Estimated Cost Difference
Tree Clearing	+ 0.2 Acres	\$4,000
Excavation (Earth and Rock)	+ 8,850 CY	\$99,000
Fill	- 3,800 CY	- \$42,000
Crushed Stone (inc. fine grading)	+ 360 CY	\$16,000
Rail Trail Surface (Asphalt)	+ 1320 SY	\$36,000
Minor Items, Drainage and Erosion	\$5,000	
Mobilization and Construction Engir	\$12,000	
Rail Trail Estimated Construct	\$130,000	
Rail Trail Tunnel	Tunnel Eliminated	- \$1,175,000*
Shields Brook Bridge Retaining Wall Extensions & Railings		\$275,000
Estimated Total Cost D	- \$770.000	

* Note that 2020 Public Hearing tunnel costs are escalated/inflated to 2022 for apples-to-apples comparison







Next Steps for Project 13065B

- Overall Design Advancement
 - Roadways, Bridge, Retaining Walls, Trail, Traffic Signals, Signs
 - Utility Relocation Design and Incorporation
 - Finalizing Geotechnical Engineering
 - Stormwater and Best Management Practices Design
 - Traffic Control Plan Development and Construction Staging
- ROW Plan Development and Acquisition Process
- Specification Development
- Construction Cost Estimate Update
 - Currently \$29M
- Construction Advertising Date: October 2023
- Construction Start: Spring 2024







THANK YOU - QUESTIONS?

Project Website: www.i93exit4a.com Project Email: exit4a@dot.nh.gov





