

2021 Reclamation and Overlay Project

OCTOBER 6, 2020



Presentation Outline

- Project Scope
- What is a Modified Pavement Reclamation?
- What is a Mill & Overlay?
- Project Location
- Existing Pavement Conditions
- Proposed Street Improvements
- Proposed Trail /Sidewalk Connections
- Proposed Utility Improvements
- Project Costs/Funding/Assessments
- Project Process
- Questions/Comments



2021 Project Scope

- Modified Pavement Reclamation
- Mill and Overlay
- Concrete Curb and Gutter Spot Repairs
- Sidewalk Spot Repairs/New Sidewalk Installations/New trail/sidewalk connections/Trail reconstruction
- ADA Upgrades to Existing Pedestrian Ramps
- Storm Sewer, Sanitary Sewer, & Watermain Adjustments



What is a Modified Pavement Reclamation?



- Modified Pavement Reclamation
 - 12" Sub cut
 - 12" Select Granular Section installation
 - Underdrain installation



What is a Mill and Overlay Project?

- A Mill & Overlay project is a street rehabilitation method where the top layer of pavement (~2") is removed and a new layer of bituminous pavement is re-installed
- This is not a reconstruction project which is much more intrusive and much more expensive
- Impacts to business access is minor
- Pavement condition and traffic volumes show the streets in the project area will benefit from a mill & overlay and the rehabilitation will extend the street's pavement life
- Extends the service life of the road by 15 years -20 years

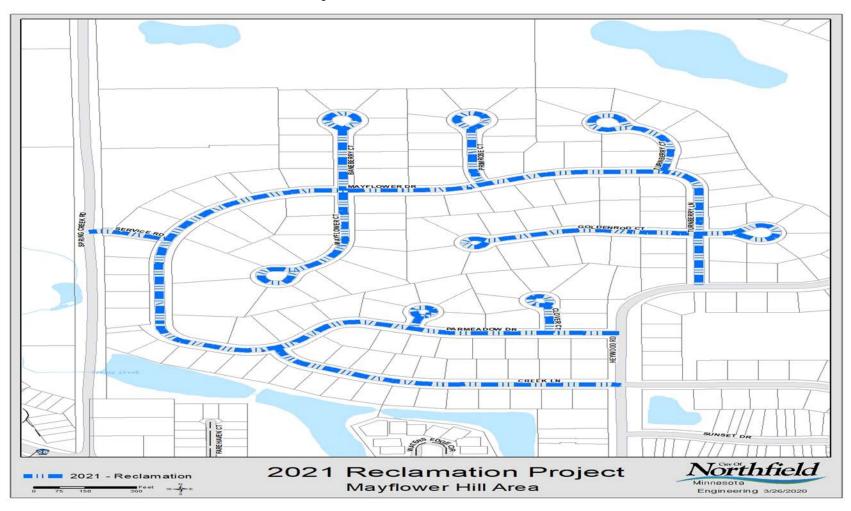


What is a Mill and Overlay Project?



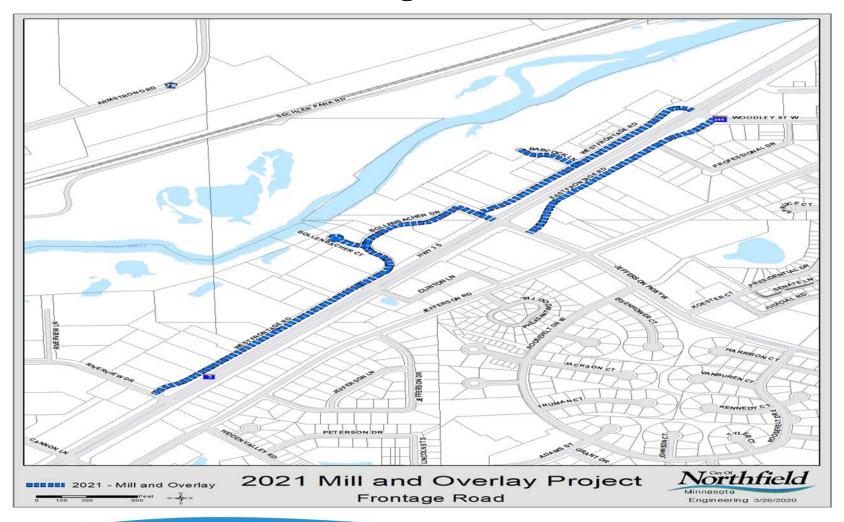


Project Location Mayflower Hill Area





Project Location TH 3 Frontage Road Area





Project Location ECRT Trail Connection





Existing Pavement/Curb/Sidewalk Condition

- Transverse Cracking
- Longitudinal Cracking
- Alligator Cracking
- Potholes

Rutting







Proposed Street Improvements

- Full Depth Modified Pavement Reclamation Mayflower Hill Area
 - 12" Select Granular sand section
 - Underdrain installation
- Mill ~2" of Existing Pavement TH 3 Frontage Road Area
- Full-Depth Bit Patches as Identified in the Field
- Subgrade Correction



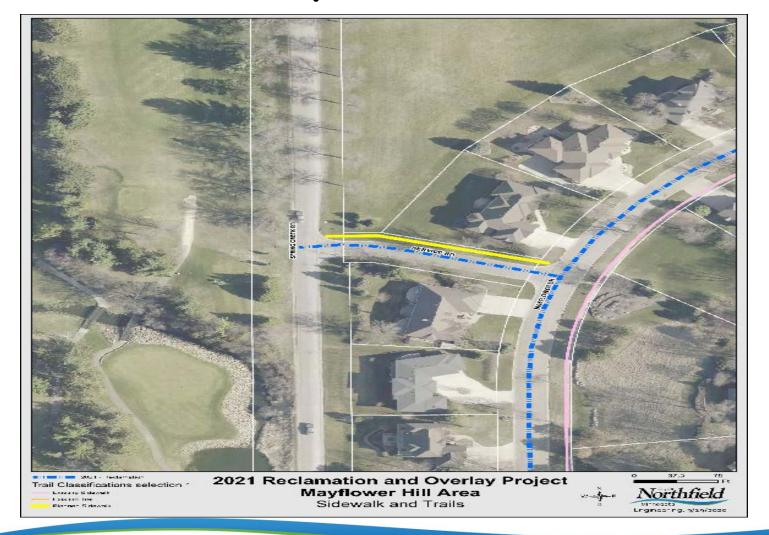
Proposed Street Improvements

- Install 2" or 4" of New Bituminous Pavement
- ADA Pedestrian Ramp Upgrades
- New Sidewalk Installations (TH 3 Frontage Road Area)
 - Mayflower Hill Service Road
 - Bollenbacher Drive
- East Cannon River Trail Connections
 - Babcock Park
 - Rodeo Grounds including existing trail replacement
 - Honey Locust Drive



Sidewalk Improvements

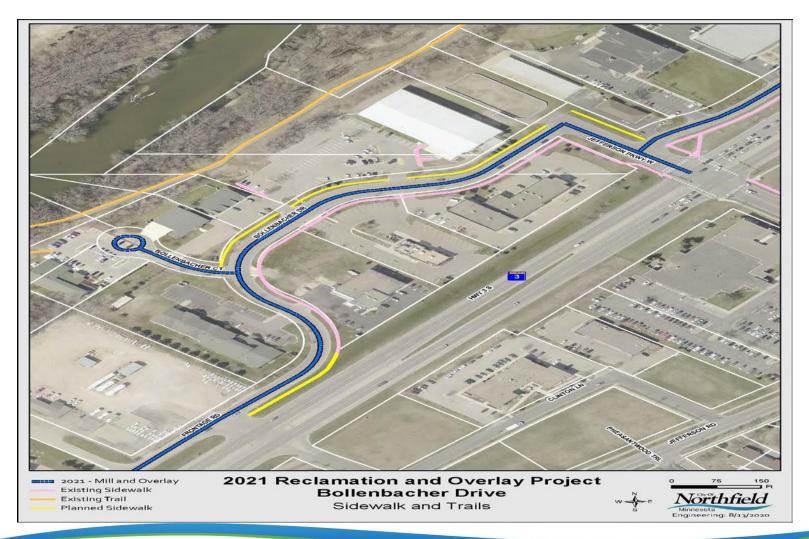
Mayflower Hill





Sidewalk Improvements

Bollenbacher Drive





Trail Connections/Improvements

Babcock Park





Trail Connections/Improvements **Rodeo Grounds**



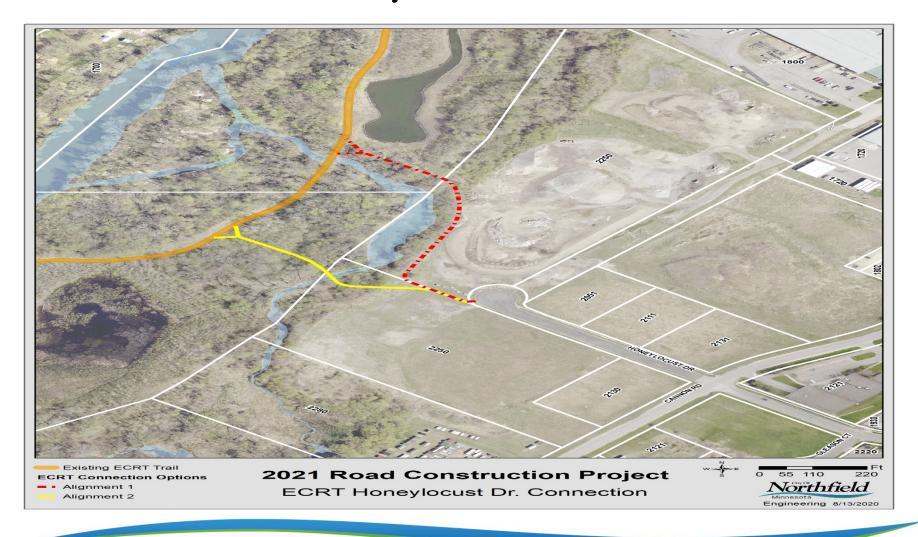
2021 -Trail Overlay

2021 Road Construction Project Rodeo Grounds ECRT Connection





Trail Connections/Improvements Honeylocust Drive





Alignment #1 – Staff Recommendation

- Permanent Easement Acquisition
 - 0.31 Acres
- Temporary Easement Acquisition
 - 0.42 Acres
- Wetland Mitigation
 - \$9,900





ECRT Connection
Northfield, MN

Alignment 1 - Right-of-Way Impacts







Alignment #2

- Permanent Easement Acquisition
 - 0.16 Acres
- Temporary Easement Acquisition
 - 0.14 Acres
- Wetland Mitigation
 - **\$12,600**
- Box Culvert Installation

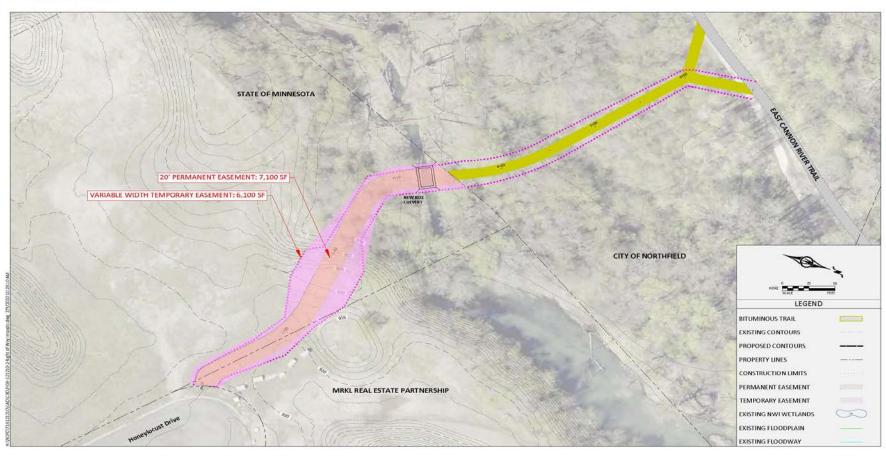




ECRT Connection
Northfield, MN

Alignment 2 - Right-of-Way Impacts







Honeylocust Drive Trail Connection Wetland Mitigation

Option #1 (No Floodway Increase) – Staff Recommended Option

- Construct trail at an elevation at or below the existing grade to ensure flood elevations are not increased.
 - Wetland Delineation
 - Wetland Permitting and Mitigation Approval
 - o Alternate #1 \$9,900
 - o Alternate #2 \$12,600
 - Construction could occur in the summer of 2021



Proposed Utility Improvements

- Adjusting Storm Sewer & Sanitary Sewer Castings
- Rehab Storm Sewer Catch Basins & Manholes, As Necessary
- Drain Tile Installation
- Gate Valve Box Adjustments/Repair



Project Costs ECRT Alignment #1

ESTIMATED PROJECT COSTS				
ECRT ALIGNMENT #1				
	Mayflower Hill Area	TH 3 Frontage Road Area	East Cannon River Trail Alignment 1	TOTAL
Street	\$1,534,569	\$851,928	\$118,749	\$2,505,246
Storm Sewer	\$221,241	\$35,488	\$8,200	\$264,929
Sanitary Sewer	\$31,876	\$9,128	\$0	\$41,004
Watermain	\$26,325	\$13,075	\$0	\$39,400
Construction Subtotal	\$1,814,011	\$909,619	\$126,949	\$2,850,579
Construction Contingency (10%)	\$181,401	\$90,962	\$0	\$272,363
Construction Contingency (15 %)	\$0	\$0	\$19,042	\$19,042
Total Construction	\$1,995,412	\$1,000,581	\$145,991	\$3,141,984
Permanent Easement	\$0	\$0	\$41,100	\$41,100
Temporary Easement	\$0	\$0	\$8,250	\$8,250
Wetland Mitigation	\$0	\$0	\$9,900	\$9,900
Project Subtotal	\$1,995,412	\$1,000,581	\$205,241	\$3,201,234
Overhead (50%)	\$0	\$0	\$102,621	\$102,621
Overhead (20%)	\$399,082	\$200,116	\$0	\$0
Total Project Costs	\$2,394,495	\$1,200,697	\$307,862	\$3,903,054



Project Costs ECRT Alignment #2

ESTIMATED PROJECT COSTS				
ECRT ALIGNMENT #2				
	Mayflower Hill Area	TH 3 Frontage Road Area	East Cannon River Trail Alignment 2	TOTAL
Street	\$1,534,569	\$851,928	\$93,961	\$2,480,458
Storm Sewer	\$221,241	\$35,488	\$109,100	\$365,829
Sanitary Sewer	\$31,876	\$9,128	\$0	\$41,004
Watermain	\$26,325	\$13,075	\$0	\$39,400
Construction Subtotal	\$1,814,011	\$909,619	\$203,061	\$2,926,691
Construction Contingency (10%)	\$181,401	\$90,962	\$0	\$272,363
Construction Contingency (15 %)	\$0	\$0	\$30,459	\$30,459
Total Construction	\$1,995,412	\$1,000,581	\$233,520	\$3,229,513
Permanent Easement	\$0	\$0	\$21,300	\$21,300
Temporary Easement	\$0	\$0	\$4,575	\$4,575
Wetland Mitigation	\$0	\$0	\$12,600	\$12,600
Project Subtotal	\$1,995,412	\$1,000,581	\$271,995	\$3,267,988
Overhead (50%)	\$0	\$0	\$135,998	\$135,998
Overhead (20%)	\$399,082	\$200,116	\$0	\$0
Total Project Costs	\$2,394,495	\$1,200,697	\$407,993	\$4,003,184



Project Funding

Project will be funded through a combination of the following sources:

- Bonding (Street Improvement Bonds and Abatement Bonds)
- Assessments (Benefit Appraisal forthcoming)
- Storm Sewer Fund
- Sanitary Fund
- Water Fund



Assessments

The proposed street improvements are eligible for assessments according to Minnesota State Statute Chapter 429, City of Northfield Ordinance and the City of Northfield's Assessment Policy. As of this time, a benefit appraisal has not been performed for this project. Staff will utilize rates from the 2019 Street Reclamation Project, and the 2020 Mill and Overlay Project for assessment rates, and will be updated once new rates are calculated. The rates proposed for the project are shown in the table below:

PROPOSED ASSESSMENT RATES				
Property Type	Assessment Rate			
Reclaim-Residential	\$58			
Mill & Overlay-Commercial	\$31			
Mill & Overlay-Residential	\$46			
Mill & Overlay-Multifamily	\$59			



Project Funding ECRT Alignment #1

ESTIMATED TOTAL PROJECT FUNDING				
ECRT ALIGNMENT #1				
	Mayflower Hill Area	TH 3 Frontage Road Area	East Cannon River Trail Alignment 1	TOTAL
Bonding	\$1,059,238	\$933,604	\$287,976	\$2,280,818
Assessments	\$966,393	\$190,941	\$0	\$1,157334
Storm Fund	\$292,038	\$46,844	\$19,886	\$358,768
Sanitary Fund	\$42,076	\$12,049	\$0	\$54,125
Watermain Fund	\$34,749	\$17,259	\$0	\$52,008
Total Project Costs	\$2,394,495	\$1,200,697	\$307,862	\$3,903,054



Project Funding ECRT Alignment #2

ESTIMATED TOTAL PROJECT FUNDING				
ECRT ALIGNMENT #2				
	Mayflower Hill Area	TH 3 Frontage Road Area	East Cannon River Trail Alignment 2	TOTAL
Bonding	\$1,059,238	\$933,604	\$188,788	\$2,181,630
Assessments	\$966,393	\$190,941	\$0	\$1,157,334
Storm Fund	\$292,038	\$46,844	\$219,205	\$558,087
Sanitary Fund	\$42,076	\$12,049	\$0	\$54,125
Watermain Fund	\$34,749	\$17,259	\$0	\$52,008
Total Project Costs	\$2,394,495	\$1,200,697	\$407,993	\$4,003,184



Project Process

April 7, 2020 - Order Preparation of Feasibility Report

Aug 26, 2020 - Neighborhood Meeting #1

Sept 1, 2020 - Accept Feasibility Report & Call for Improvement Hearing

Oct 6, 2020 - Public Improvement Hearing & Order Improvement and Preparation of Plans and Specifications

Jan 6, 2021 - Neighborhood Meeting #2

Feb 2, 2021 - Approve Final Plans/Specs & Order Advertisements for Bids

Mar 2, 2021 - Bid Opening

• Mar 16, 2021 - Accept Bids & Award Contract

Apr 6, 2021 - Declare Amount to be Assessed/Call for Assessment Hearing

May 2021 - Property Owner Meetings

May 4, 2021 - Assessment Hearing/Adopt Assessment Roll

June to Oct 2021 - Construction

June 2022 - Accept Improvements & Authorize Final Payment



Project Website:

https://www.ci.northfield.mn.us/1350/2021-Reclamation-and-Overlay-Project

Questions?



Project Website:

https://www.ci.northfield.mn.us/1350/2021-Reclamation-and-Overlay-Project

Questions?



Action Tonight:

Approve Resolution 2020-XXX Ordering Improvement 2021STRT- A46 2021 Reclamation and Overlay Project and Preparation of Plans and Specifications.

*per Minnesota State Statute, this resolution requires a supermajority (6 of 7) for approval