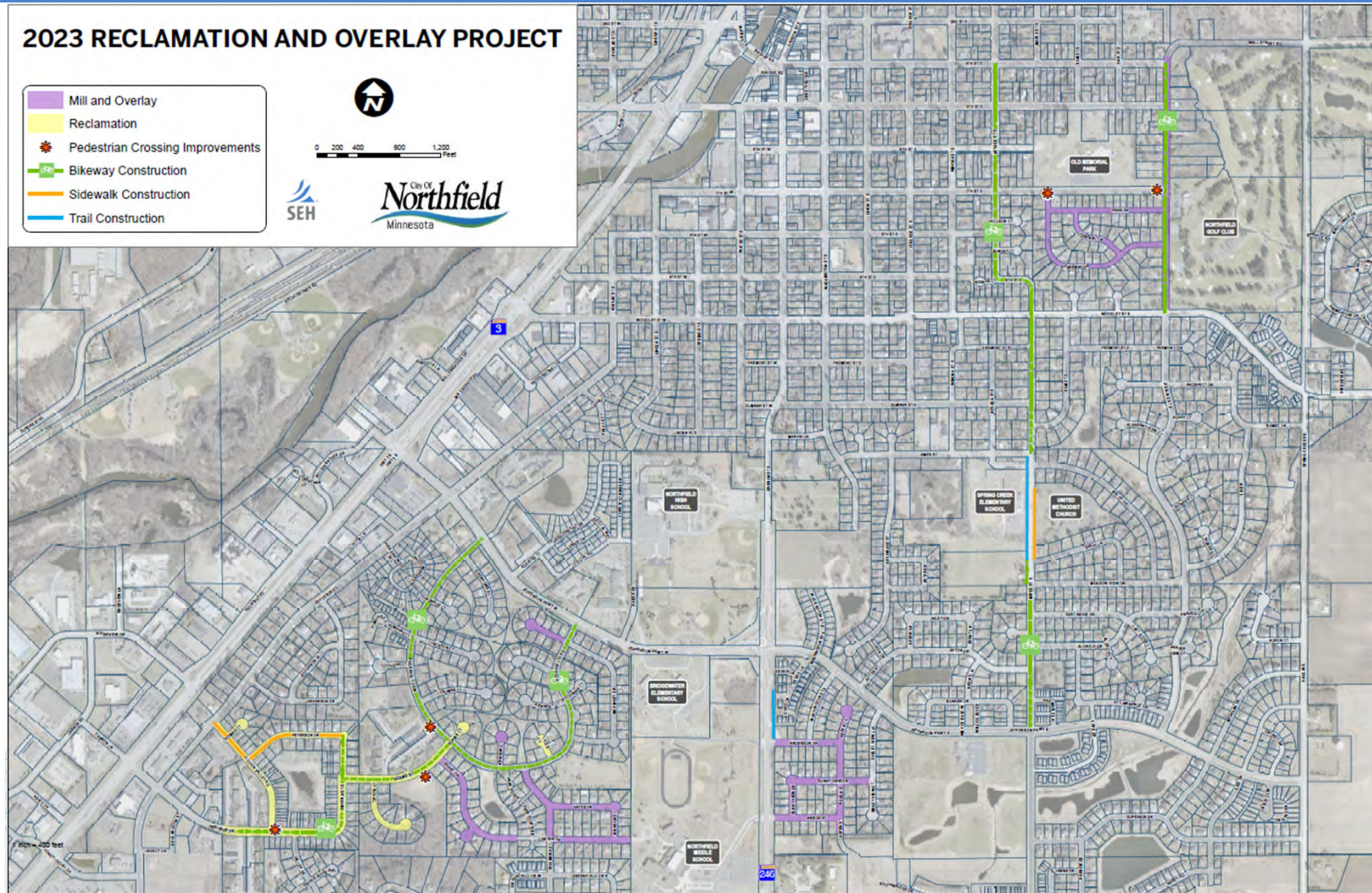


City of Northfield 2023 Reclamation and Overlay Project

December 6, 2022 | City Council Meeting



Project Location



Proposed Improvements

Street Improvements

- Full depth pavement reclamation
- Asphalt mill and overlay
- Spot curb and gutter repairs (full curb removal on Adams St.)
- Spot sidewalk repairs
- ADA curb ramp upgrades
- New sidewalk/trail installations
- On-street bikeways
- Off-street bikeways

Proposed Improvements



Pavement Reclamation

Proposed Improvements



Pavement Milling



Overlay

Proposed Improvements

Utility Improvements

- Catch basin / manhole repairs
- Gate valve repairs



Arborist Review



Any trees to be removed, whether due to arborist recommendation or conflict with proposed improvements, will be replaced at 2:1 ratio

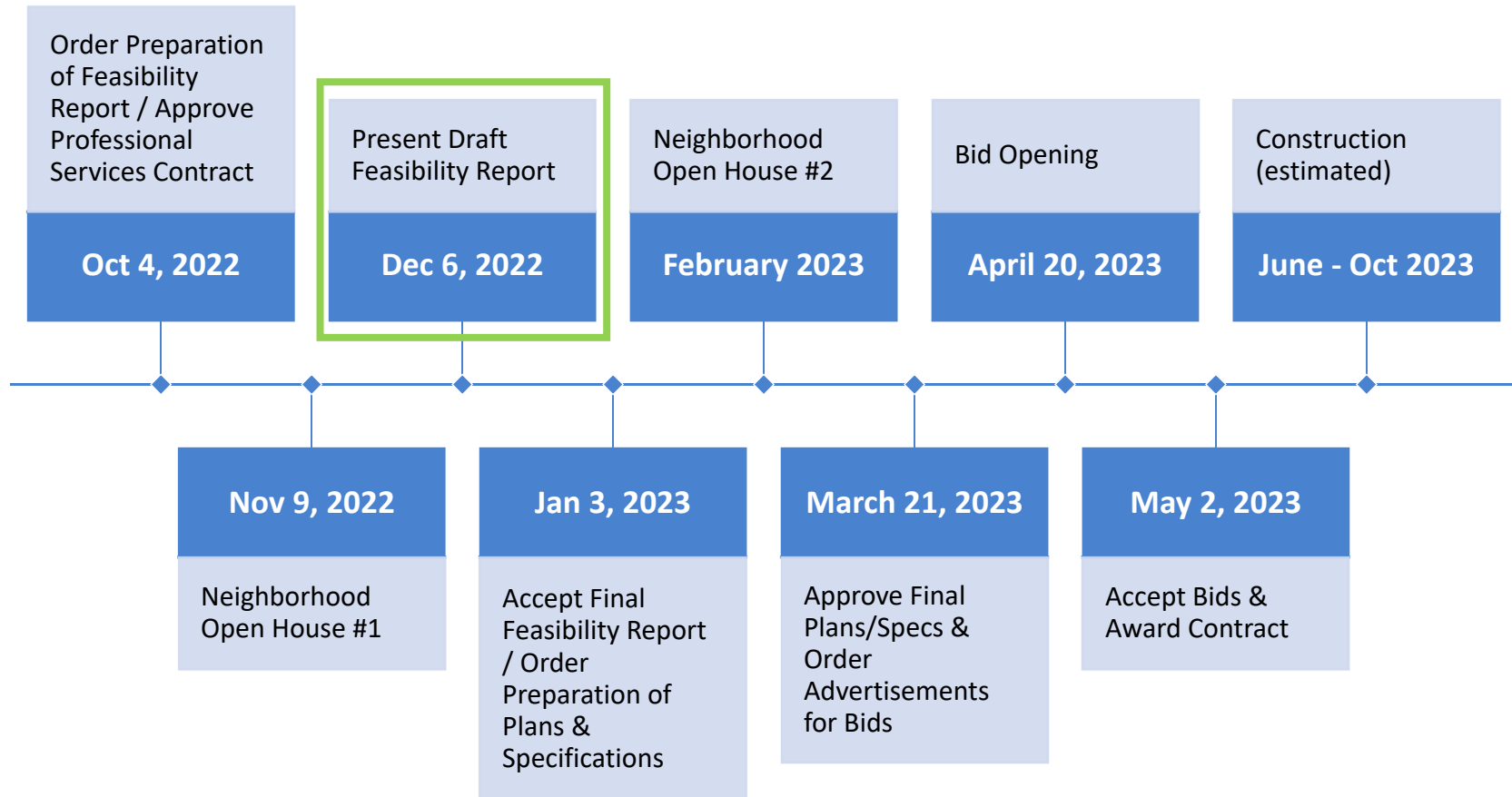
Arborist has:

- Reviewed all right-of-way trees within project limits
- Assigned condition rating
- Provided recommendation of tree fate

City Ash Tree Policy:

- Greater than 13" diameter to be saved
- Less than 13" diameter to be removed

Schedule



Estimated Project Costs

	Streets	Sanitary Sewer	Water System	Storm Sewer	Estimated Total
Estimated Construction Cost	\$4,288,837	\$76,730	\$259,270	\$202,160	\$4,826,997
Contingency (10%)	\$428,884	\$7,673	\$25,927	\$20,216	\$482,700
Art (1%)	\$47,177	\$844	\$2,852	\$2,224	\$53,097
Total with Art	\$4,764,898	\$85,247	\$288,049	\$224,600	\$5,362,794
Administration, Engineering, Legal (11%)	\$524,139	\$9,377	\$31,685	\$24,706	\$589,907
Total Estimated Project Costs (Feasibility)	\$5,289,037	\$94,624	\$319,734	\$249,306	\$5,952,701

Project Funding

Estimated Revenue	Streets	Sanitary Sewer	Water System	Storm Sewer	Estimated Total
Franchise Fees	\$1,100,000				\$1,100,000
Bonds	\$4,189,037				\$4,189,037
Enterprise Funds (Utilities)		\$94,624	\$319,734	\$249,306	\$663,664
Total Estimated Revenue (Feasibility)	\$5,289,037	\$94,624	\$319,734	\$249,306	\$5,952,701



Trail / Sidewalk / On-Street Bikeways

Guiding Documents

- Complete Streets Policy (2012)
- Pedestrian, Bike, and Trail System Plan (2019)
- Pedestrian + Bikeway Analyzation (2022)

City of Northfield Pedestrian, Bike, and Trail System

Final Report | March 2019

Contents

Section 1: Existing Plan and Policy Review Memorandum

Section 2: Community Engagement Report

Section 3: Mill Towns State Trail: Planned Route Through Northfield

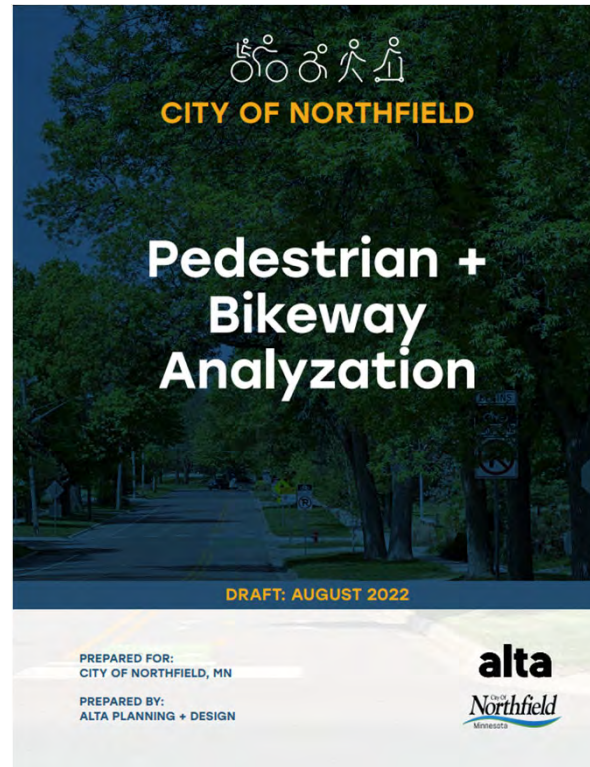
Section 4: Northfield High School & Arcadia Charter School: Walking and Bicycling Issues Maps

Section 5: Northfield High School & Arcadia Charter School: Walking and Bicycling Recommendation Maps

Section 6: Street Type Table Update

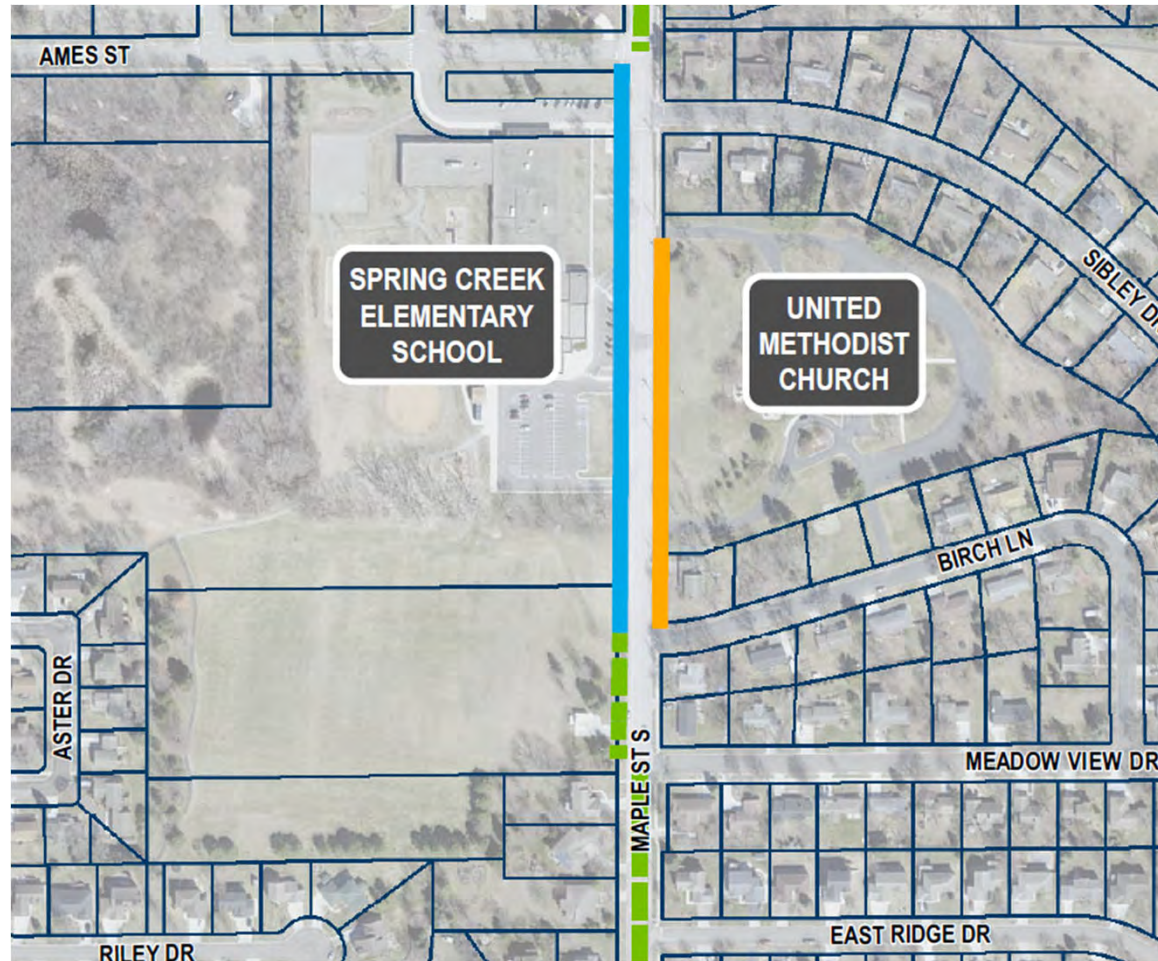
Section 7: Northfield Planned Sidewalk Network Map

Section 8: Northfield Planned Walking and Bicycling Network Map



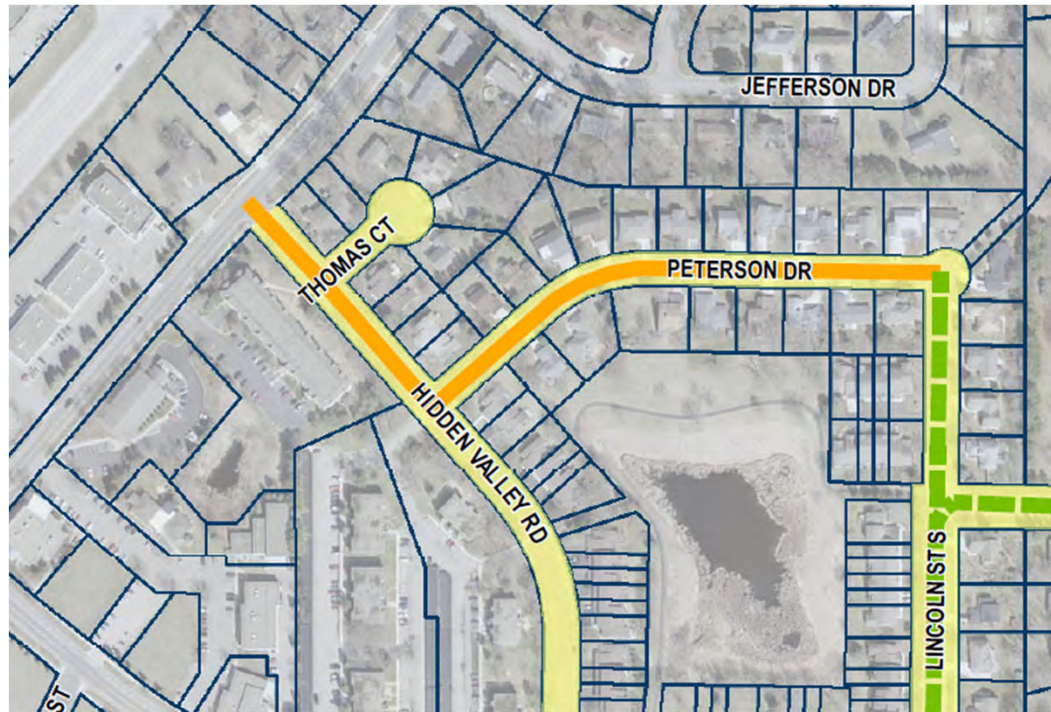
Sidewalk Improvements

- Maple Street from United Methodist Church to Birch Lane (east side)



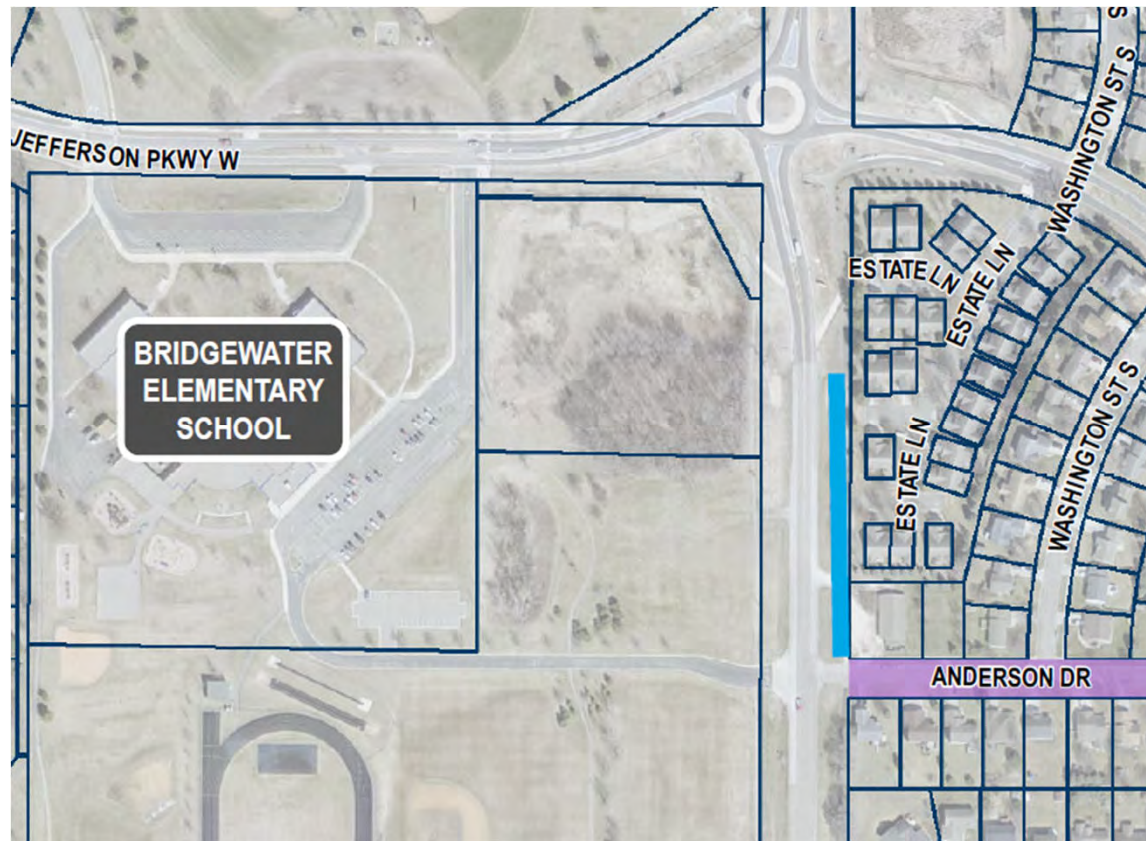
Sidewalk Improvements

- Hidden Valley Road from Jefferson Rd to Peterson Dr (north/east side)
- Peterson Drive from Hidden Valley Rd to Truman Park trail

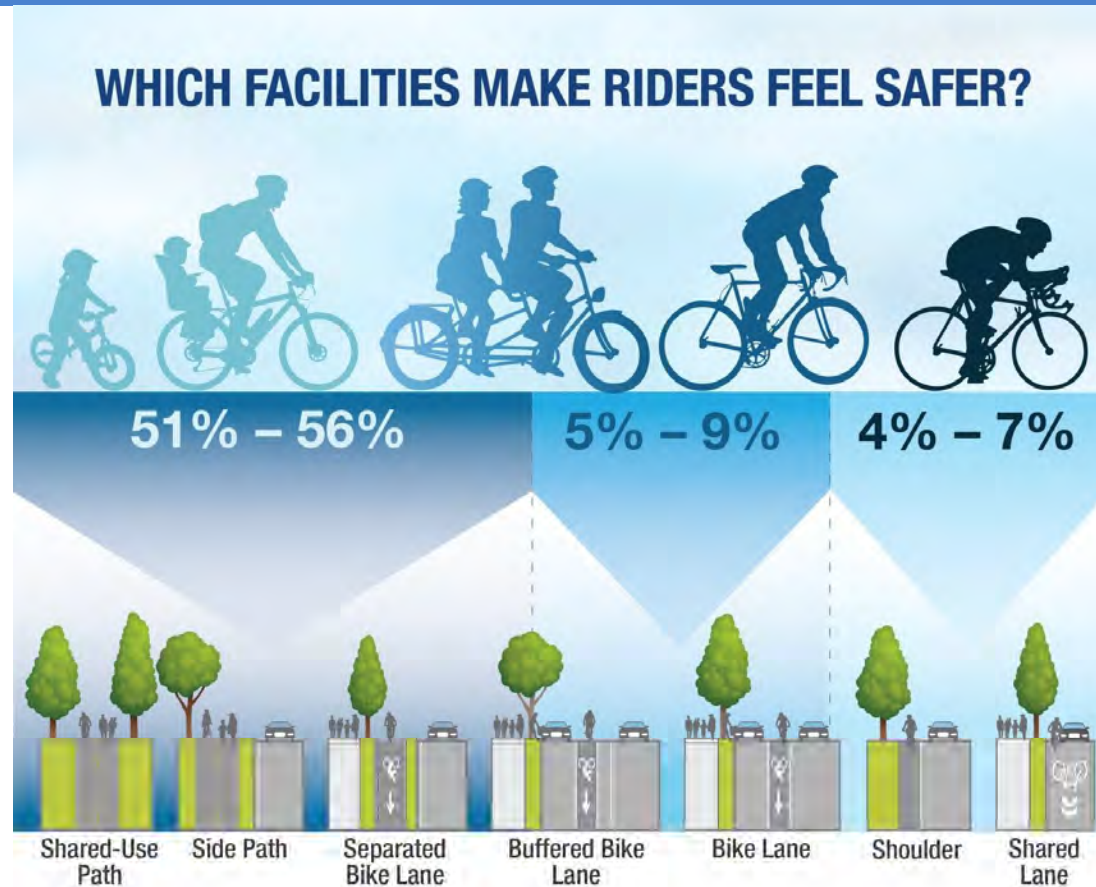


Trail Improvements

- TH 246 from Anderson Dr to north (east side)



Bikeway Improvements



Note: Percentages represent the level of comfort that people feel bicycling, according to peer-reviewed surveys as recently as 2016.

Source: FHWA Bikeway Selection Guide: https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf

For more information, please visit FHWA's Bicycle and Pedestrian Program webpage: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/



Bikeway Improvements

- Maple Street/Nevada Street
- Prairie Street
- Heritage Drive
- Lincoln Street
- Adams Street
- Roosevelt Street



Bikeway Examples



Bike Boulevard



Protected Two-Way
Bikeway



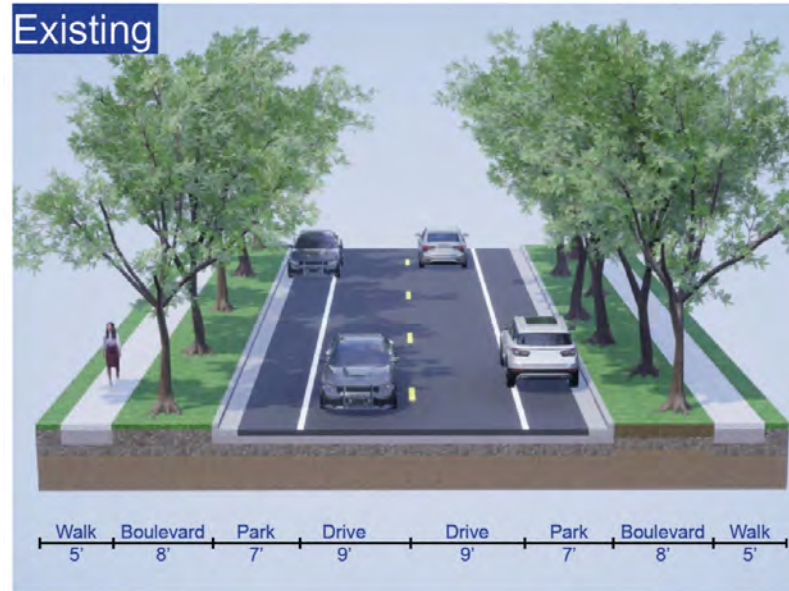
Off-Street Two-Way
Bikeway / Shared
Use Path

Maple Street/Nevada Street Bikeway

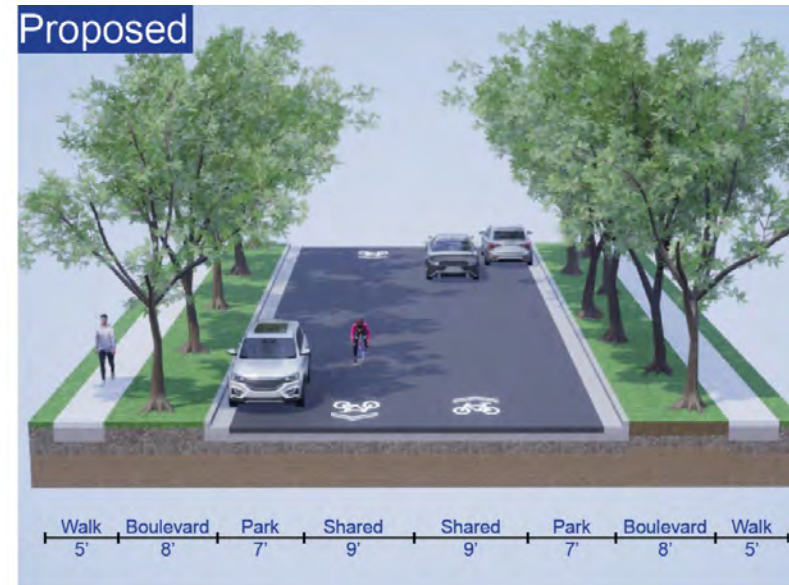
Fourth St to Woodley St:
Bike Boulevard



Existing



Proposed

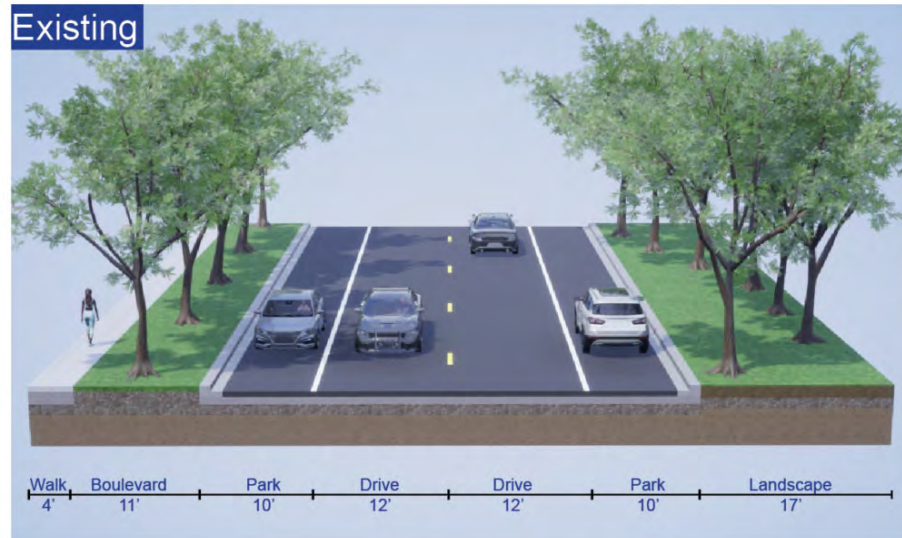


Maple Street/Nevada Street Bikeway

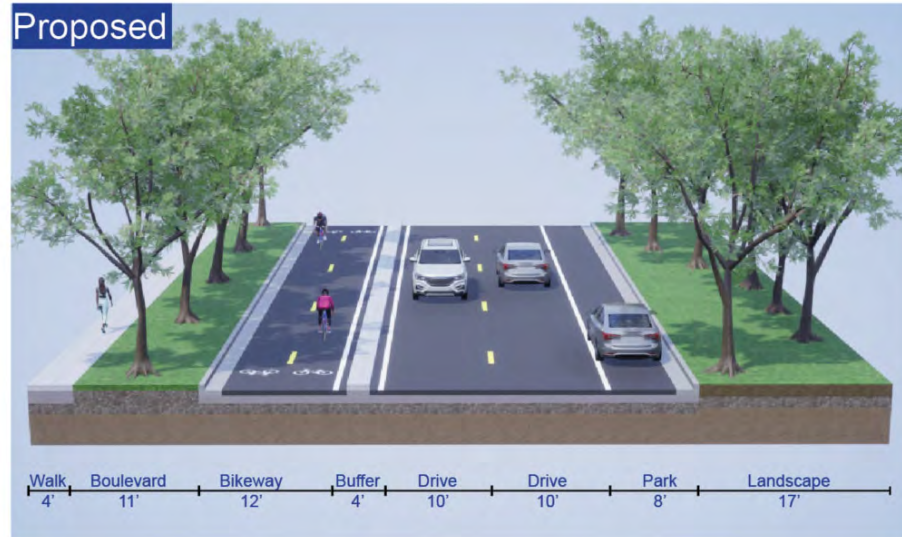
Woodley St to Ames St &
Meadowview Dr to
Jefferson Pkwy:
**Protected Two-Way
Bikeway**



Existing

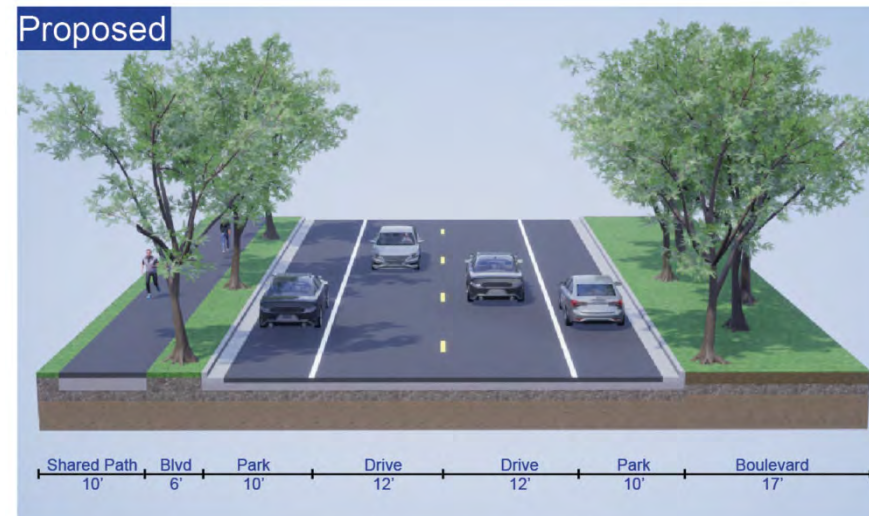
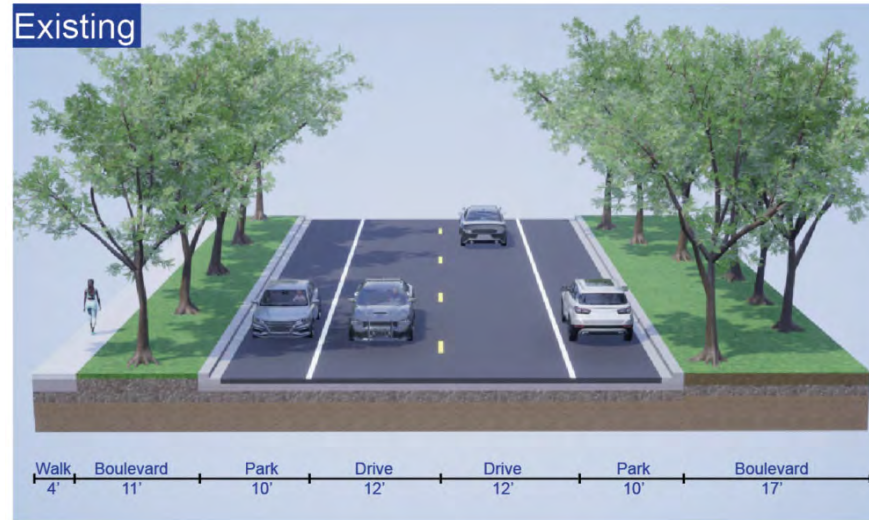


Proposed



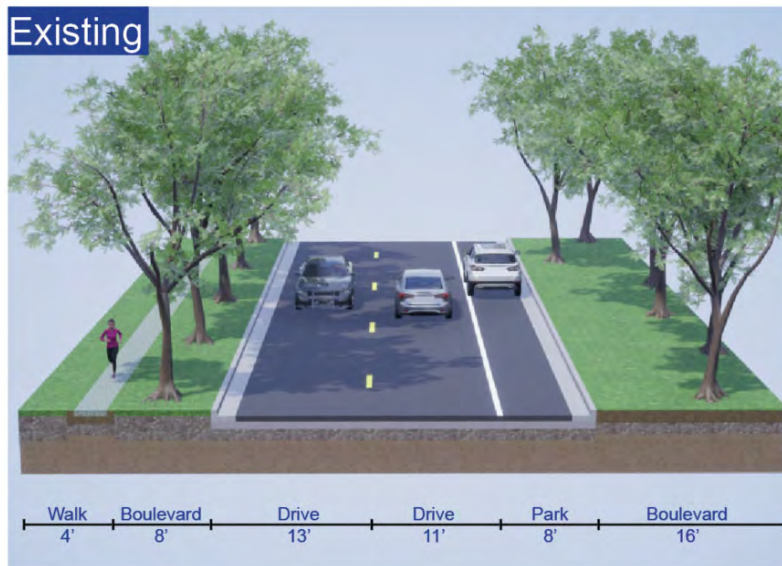
Maple Street/Nevada Street Bikeway

Ames St to Meadowview Dr:
Off-Street Shared Use Path

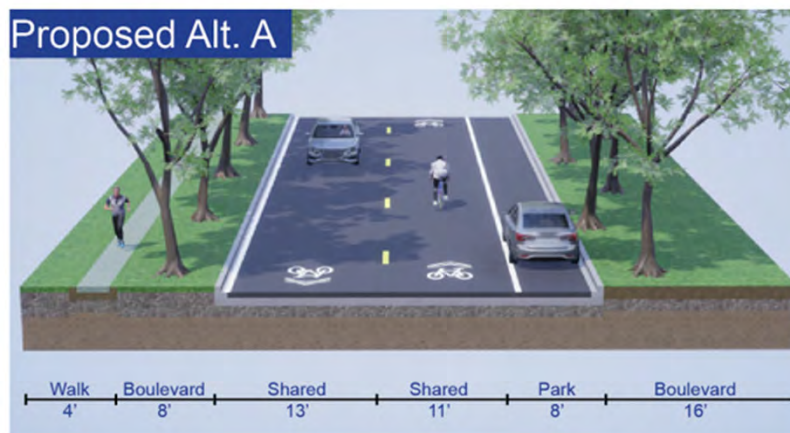


Prairie Street Bikeway – Alternative A

Fourth St to Woodley St:
Bike Boulevard



Bike Boulevard

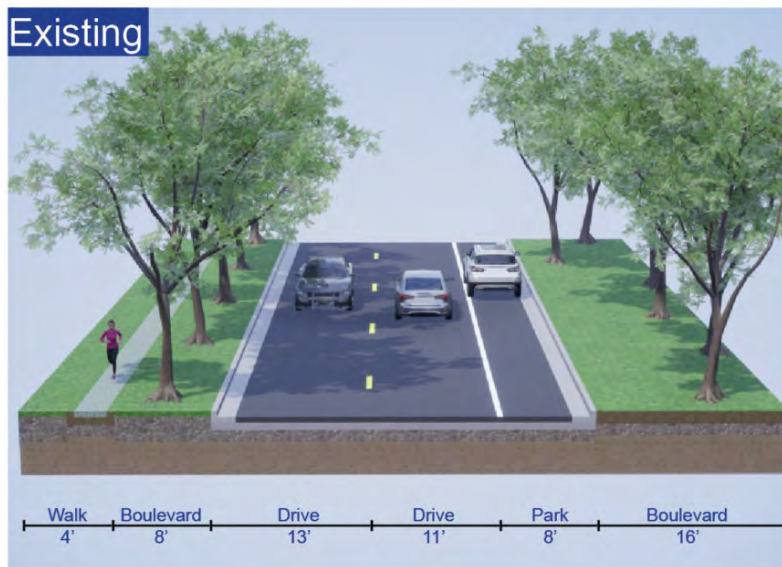


Prairie Street Bikeway – Alternative B

Fourth St to Woodley St:
**Protected Two-Way
Bikeway**

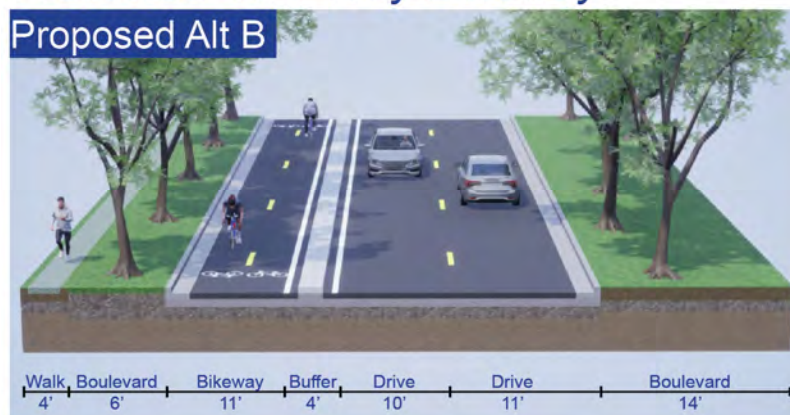


Existing



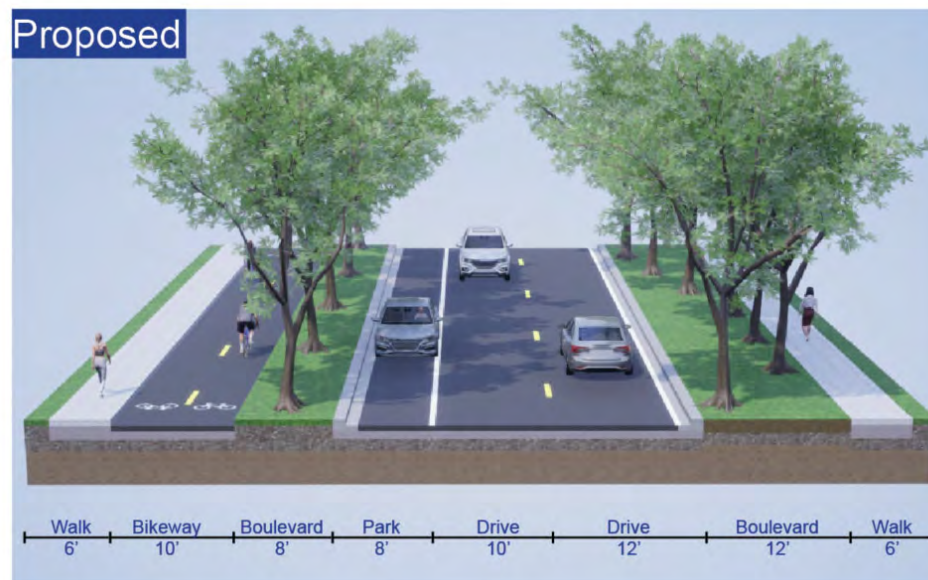
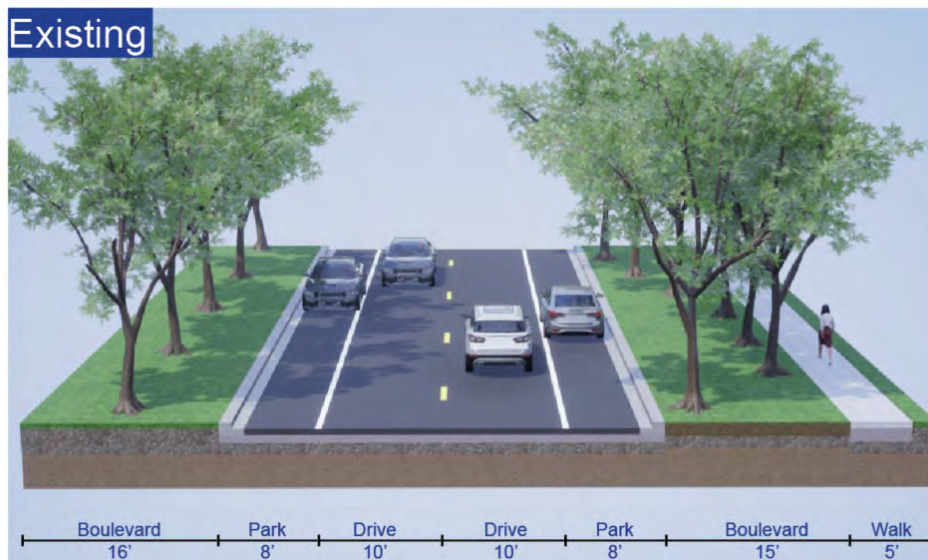
Protected Two-Way Bikeway

Proposed Alt B



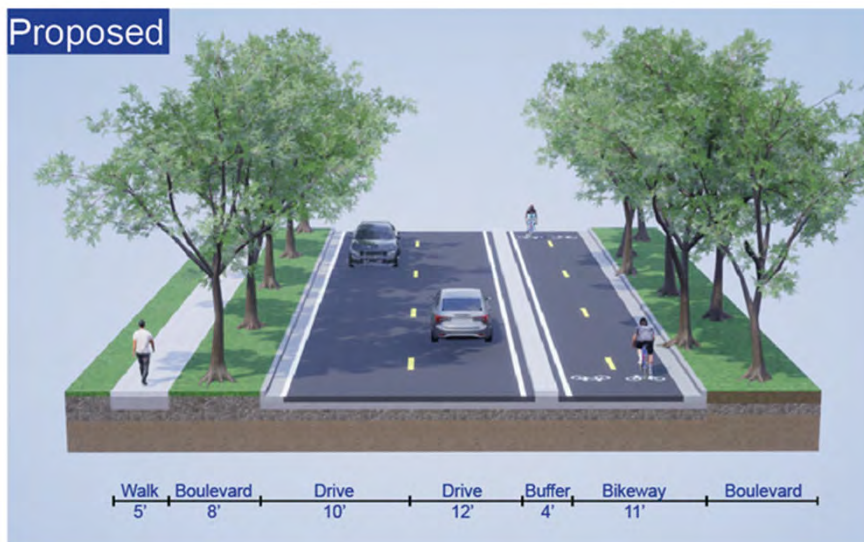
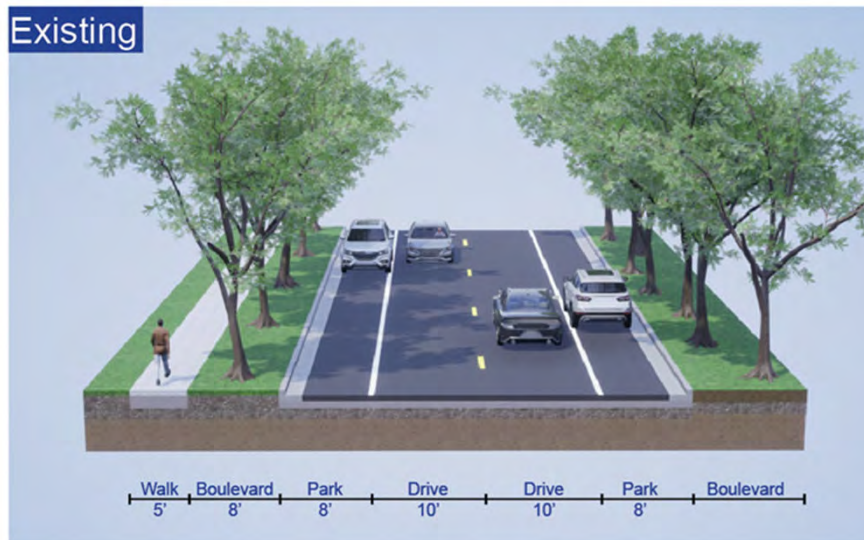
Heritage Drive/Lincoln Street/Adams Street Bikeway

Off-Street Two-Way Bikeway



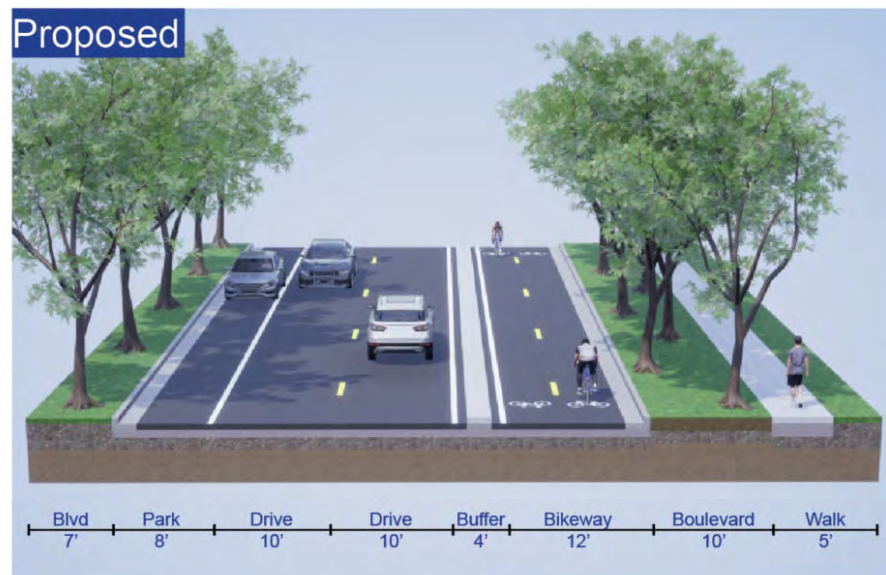
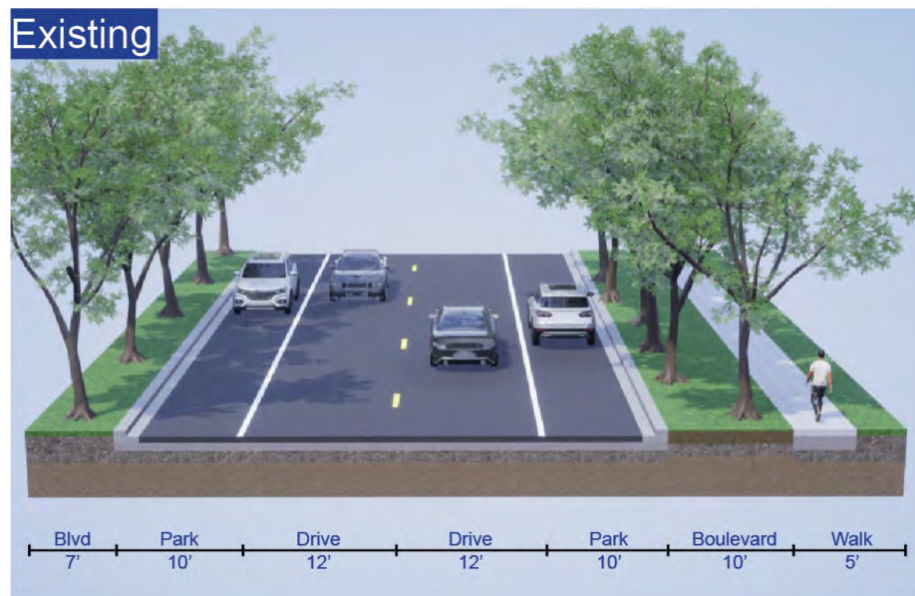
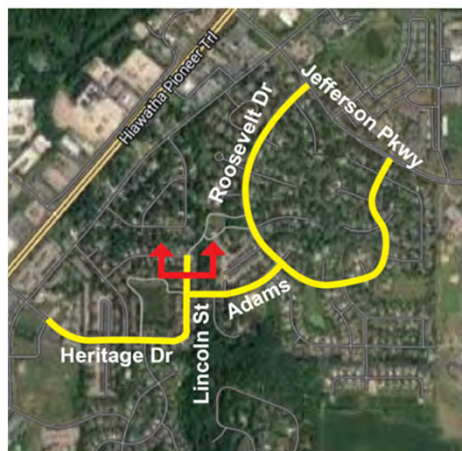
Lincoln Street Bikeway

Adams to Peterson:
**Protected Two-Way
Bikeway**



Roosevelt Drive Bikeway

Jefferson Pkwy to
Jefferson Pkwy:
**Protected Two-Way
Bikeway**



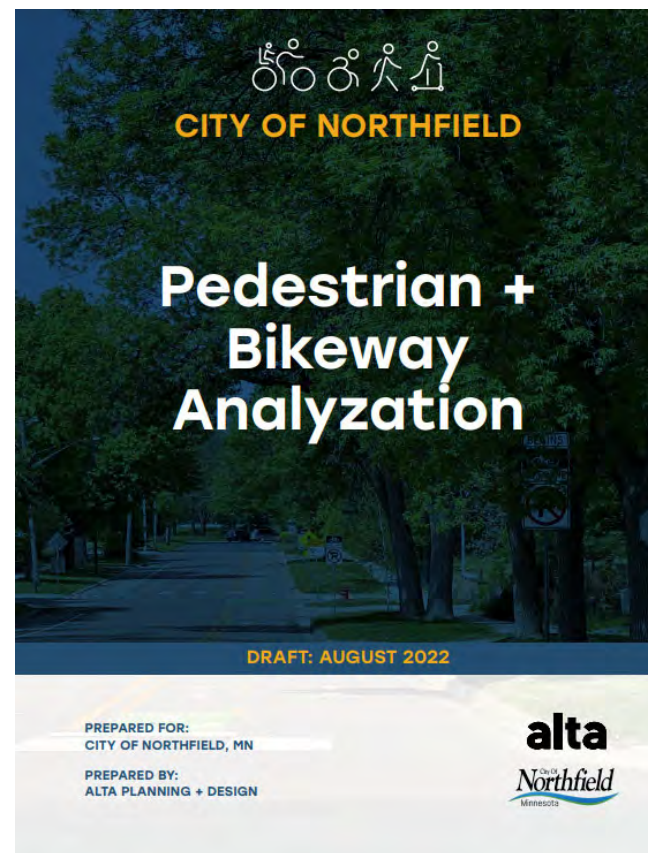
Pedestrian Crossing Safety Enhancements

Pedestrian and Bikeway Analyzation Study:

- Completed pedestrian origin-destination analysis
- Identified potential pedestrian crossing improvement locations City-wide

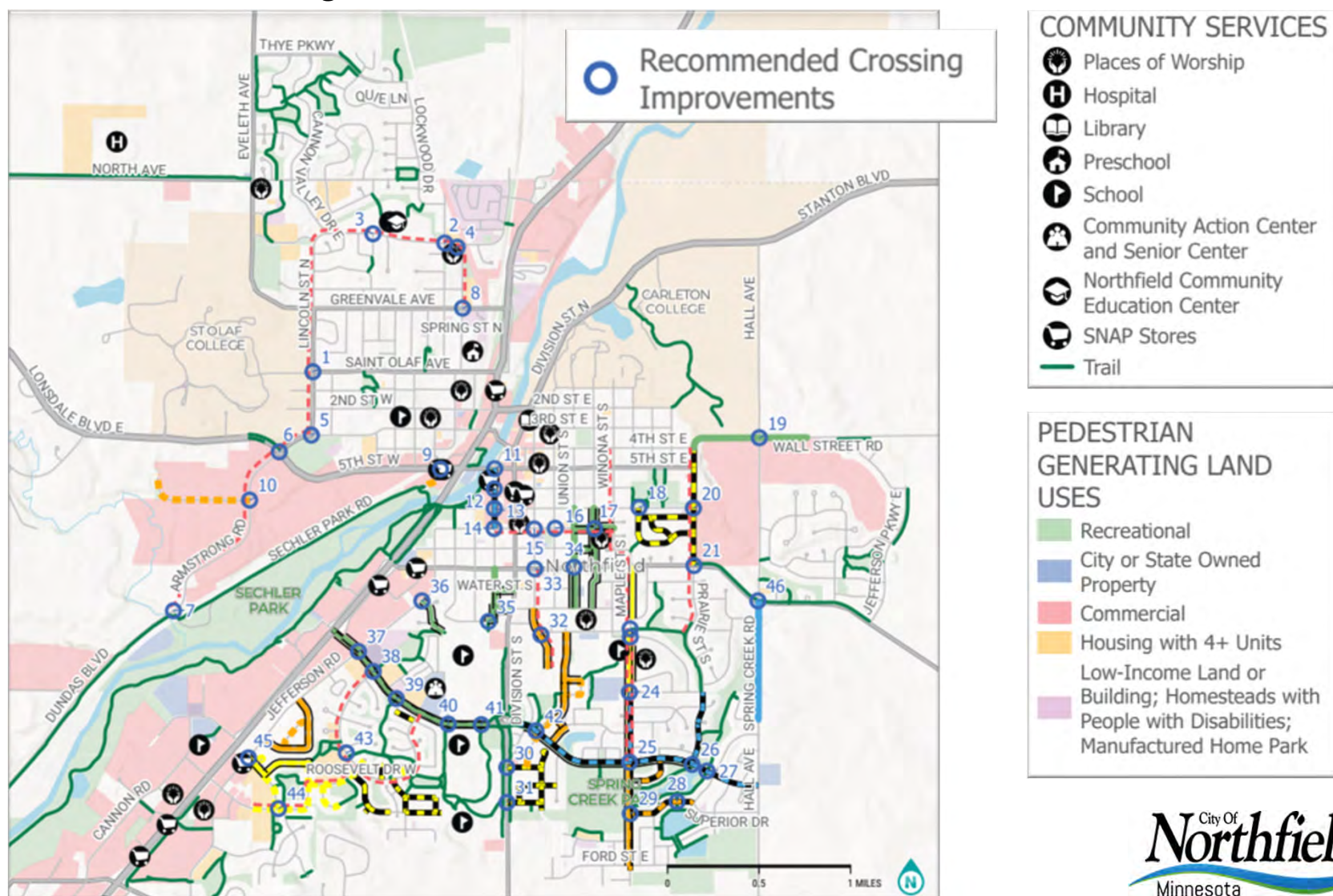
Goals:

- Identify opportunities to reduce pedestrian barriers
- Improve pedestrian comfort
- Improve safety at intersections and trail crossings



Pedestrian Crossing Safety Improvements

Pedestrian Origins and Destinations



Pedestrian Crossing Safety Improvements Options

Enhanced
Signing/Striping



Bumpout



Pedestrian Refuge Island



Raised Crosswalk

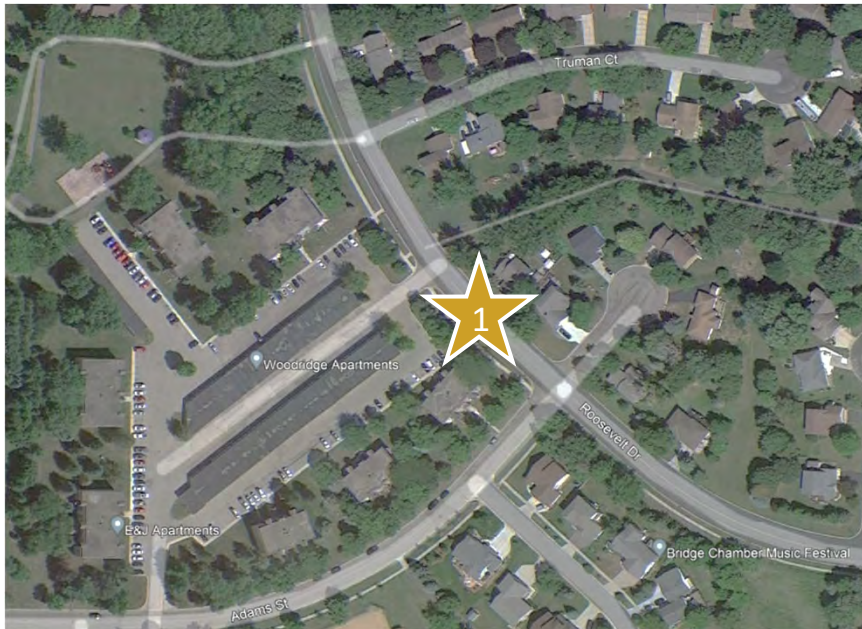


Pedestrian Crossing Safety Improvements

Roosevelt Drive near Woodridge Apartments: Enhanced Signing and Striping

Decision Factors:

- Nominally favored at Open House
- Currently no signing/striping in place
- Planned on-street bikeway precludes other options



Pedestrian Crossing Safety Improvements

Adams Street at Roosevelt Park: Bumpout (north side) and Enhanced Signing and Striping

Decision Factors:

- Bumpout provides enhanced traffic calming and shortens crossing distance
- Enhanced signing/striping improves crossing visibility



Pedestrian Crossing Safety Improvements

Heritage Drive at Hidden Valley Rd (Heritage Park): Raised Crosswalk, Bumpout (north side), and Enhanced Signing and Striping

Decision Factors:

- Raised crosswalk nominally favored during Open House
- Provides traffic calming
- Raised crosswalks shown to reduce pedestrian crashes by 45%
- Provides opportunity to implement new treatment to understand its effectiveness and future applications

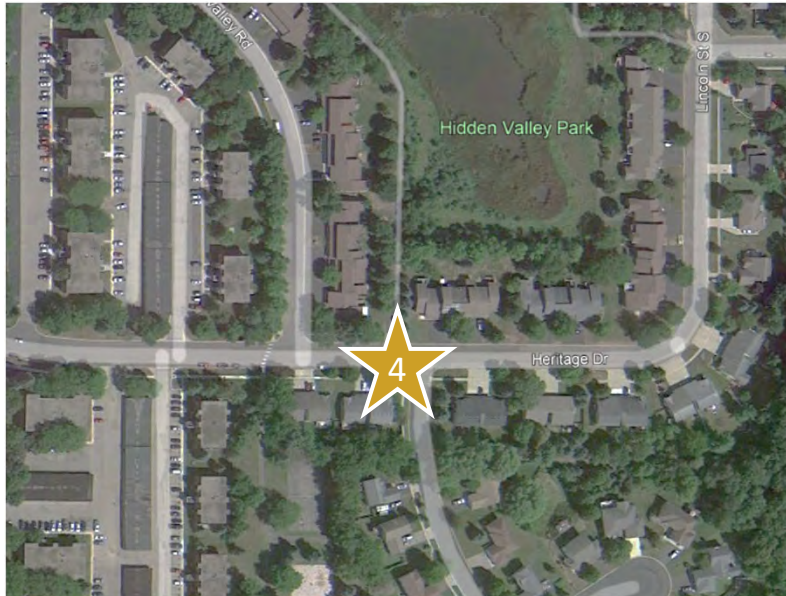


Pedestrian Crossing Safety Improvements

Heritage Drive at Valley Dr (Hidden Valley Park): Bumpout (north side) and Enhanced Signing and Striping

Decision Factors:

- Bumpout provides enhanced traffic calming and shortens crossing distance
- Enhanced signing/striping improves crossing visibility



Pedestrian Crossing Safety Improvements

7th Street at Fareway Drive (Old Memorial Park): Bumpout (SE Quadrant) and Enhanced Signing and Striping

Decision Factors:

- Bumpout provides enhanced traffic calming and shortens crossing distance
- Enhanced signing/striping improves crossing visibility
- Verbal feedback at Open House indicated no strong preference for either option



Pedestrian Crossing Safety Improvements

7th Street at Prairie Street (West Approach): Enhanced Signing and Striping

Decision Factors:

- Nominally favored at Open House
- Currently no signing in place
- Enhanced signing/striping improves crossing visibility



Thank You!

For more information on the project, visit:

<https://www.northfieldmn.gov/1520/2023-Reclamation-and-Overlay-Project>

