



**BOLTON  
& MENK**

Real People. Real Solutions.



## 2020 MILL & OVERLAY PROJECT



**CITY COUNCIL MEETING  
IMPROVEMENT HEARING  
12/03/2019**

# 2020 Project Scope



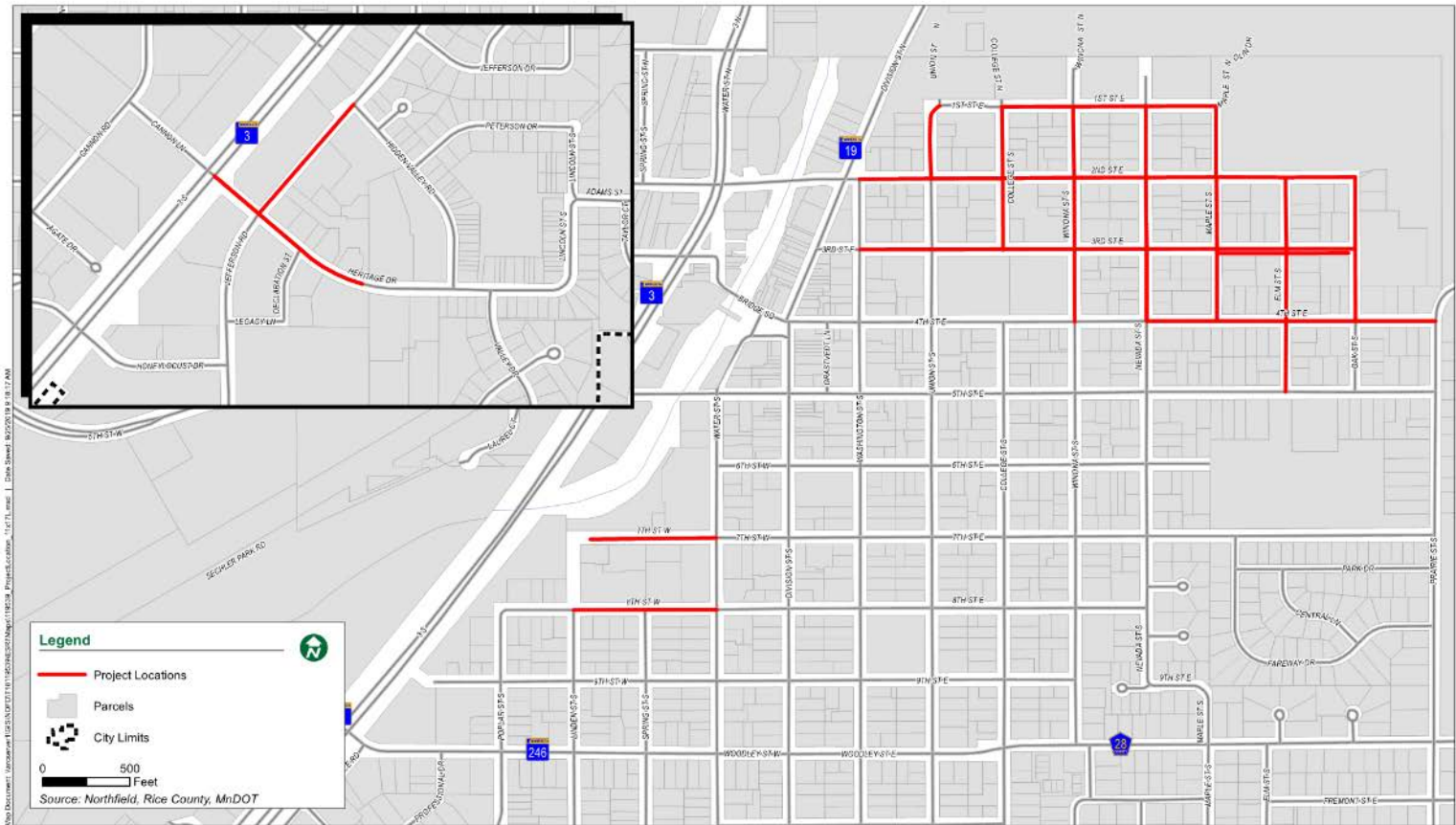
- **Mill & Overlay – pavement life extended by 15 years**
- **Concrete Curb and Gutter Spot Repairs**
- **Sidewalk Spot Repairs**
- **ADA Upgrades to Existing Pedestrian Ramps**
- **Intersection Bump-out Analysis**
- **Bikeways Construction**
- **Storm Sewer, Sanitary Sewer, & Watermain Adjustments**
- **Storm Sewer Analysis & Relocations As Necessary**

# Project Location



2020 Mill & Overlay Project  
City of Northfield, MN

Figure 1: Project Location  
September 2019



# Drainage Analysis



- **Paving will correct potholes and flat X-Slope roads that hold water by re-establishing the crown in the road**
  - This Cross Slope will help drain water to the curb line
- **Spot replacement of curb & gutter will correct settlements and cracks that hold water**
  - This corrected grade will help drain water to the catch basins
- **Final design will be analyzed for remaining drainage issues**
  - Catch Basins will be added near existing CB's to improve slow drainage, where possible
  - Existing flatter streets will still have slow drainage during freeze/thaw cycles and when leaves build up in the gutters

# Intersections Bump-out Analysis



- **Bump-outs Increase Pedestrian Safety and Traffic Calming**
- **Intersection Crosswalks Pedestrian Flow Observation**
  - Intersections Categorized by Observed Crossing Density
- **Limitations - Bikeway Conflicts, Delivery Routes, etc.**
- **Eliminated: low-density crossings, streets with limitations, and intersections not completely within project area**
- **Not financially feasible to include at all appropriate locations**
- **Prioritized locations near specific destinations based on O-D trip generation: institutions, schools, parks, etc. and high children %**
  - Input from residents and City considered
- **Storm Sewer Relocation Necessary to Accommodate**
  
- **Bump-outs Suggested for 3 Intersections:**
  - Third Street & Oak Street (Near Laura Baker Services Association)
  - Third Street & Winona Street (near Central Park)
  - Third Street & College Street (near Weitz Center)

# Bump-out Selection Map



## 2020 Mill and Overlay Project Bumpout Selection Map

[www.ci.northfield.mn.us/1313/2020-Mill-and-Overlay-Project](http://www.ci.northfield.mn.us/1313/2020-Mill-and-Overlay-Project)

### Intersections were eliminated because...



Low density of pedestrian crossings observed



The street did not have parking lanes OR the street has proposed bikeways or other design restrictions



The intersection was on the edge of project limits

### Selected intersections

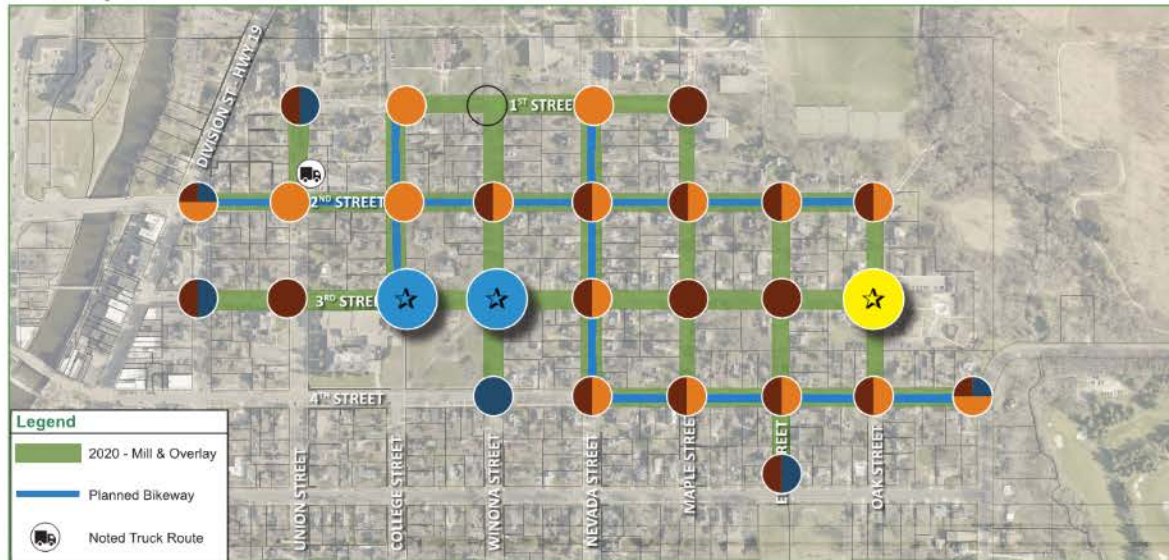


Intersections prioritized based on nearby attractions and assumed userbase



Intersections prioritized based on feedback from residents and city council

#### North Project Area



#### South Project Area



#### 8th Street Area



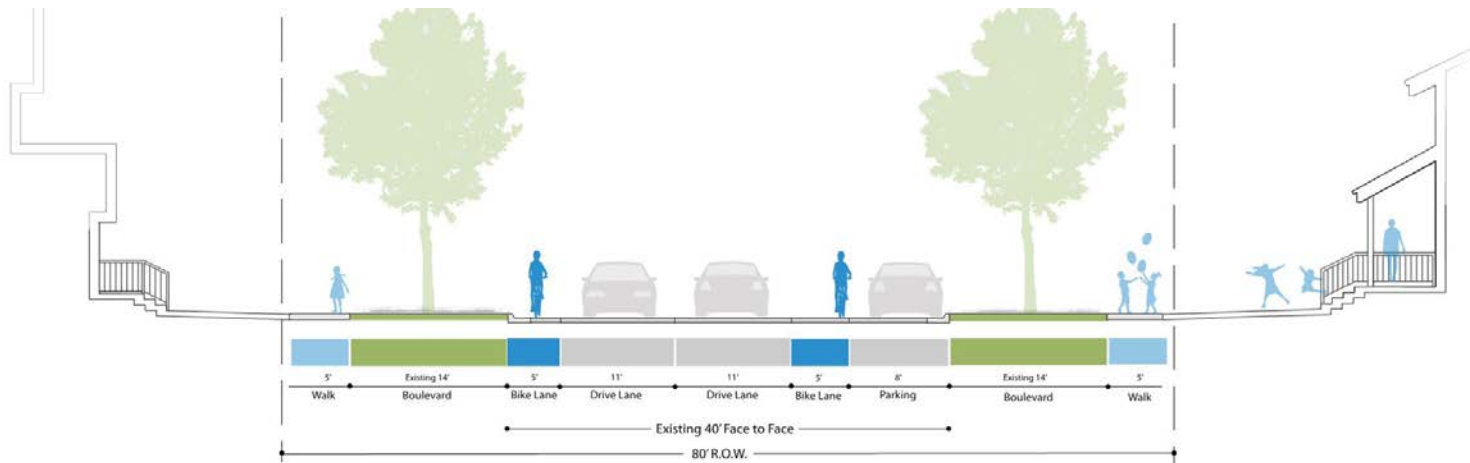
# Bikeway Improvements



- **Bike facilities will be implemented with the Mill & Overlay project**
  - Locations identified per City of Northfield Pedestrian, Bike, and Trail System Report
  - Design follows City of Northfield Complete Streets Policy
- **Bikeway additions are only portions of the overall planned bikeway system**
- **Considerations on how each option will fit and/or transition to existing and future improvements**

# Fourth Street Bikeway Improvements

Nevada Street – Prairie Street



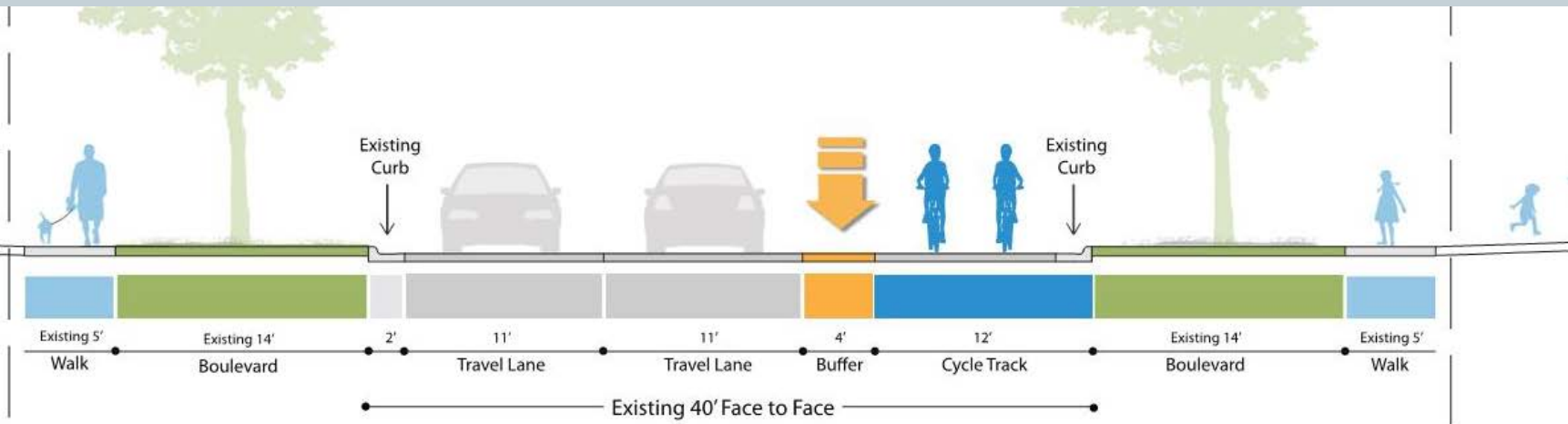
Existing Street Configuration



# Fourth Street Bikeway

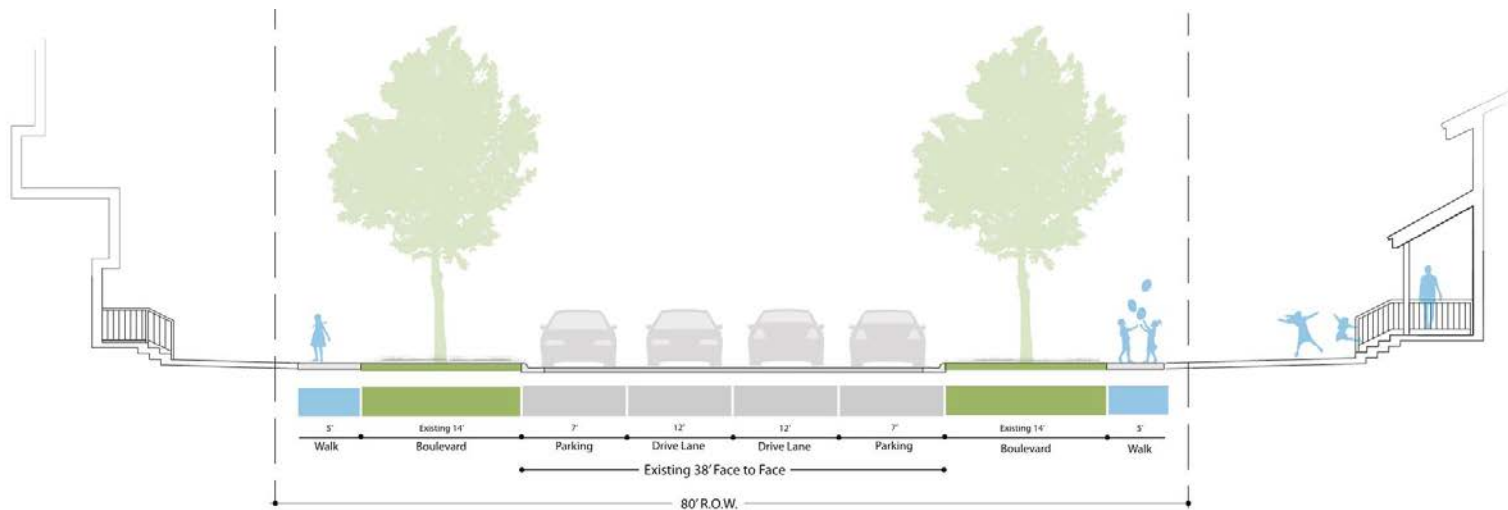
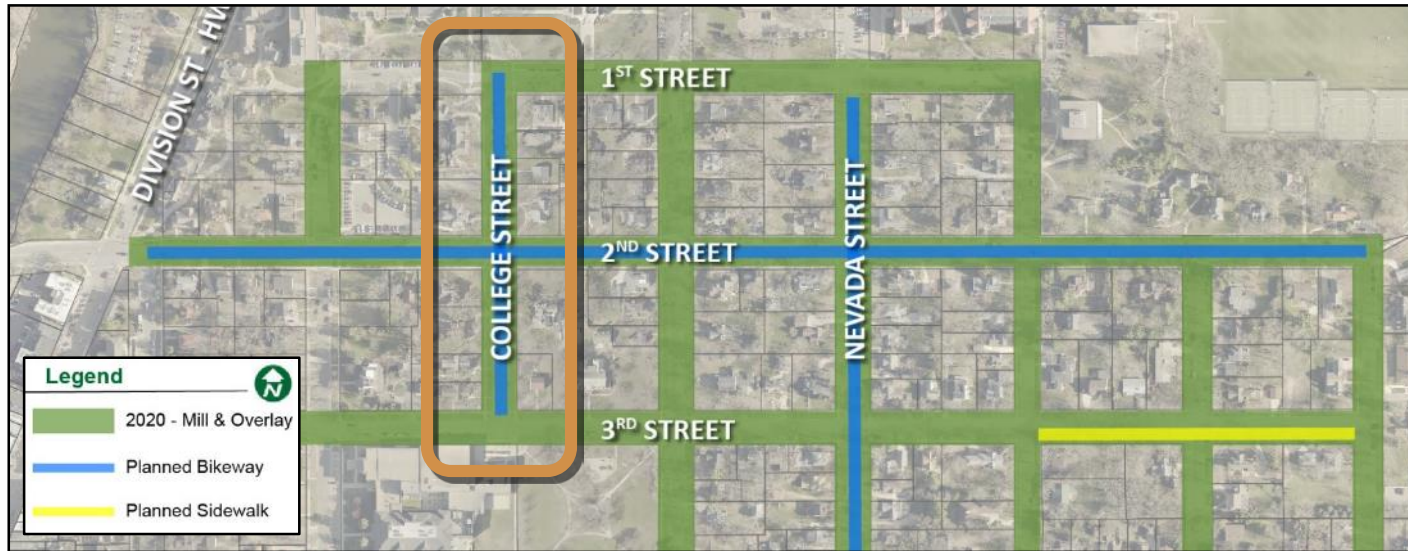


- Nevada Street to Prairie Street
- On-Street Cycle Track
  - Fits in Existing Street Footprint
  - Painted Buffer but No Physical Barrier
  - Eliminates Parking



# College Street Bikeway Improvements

First Street – Third Street

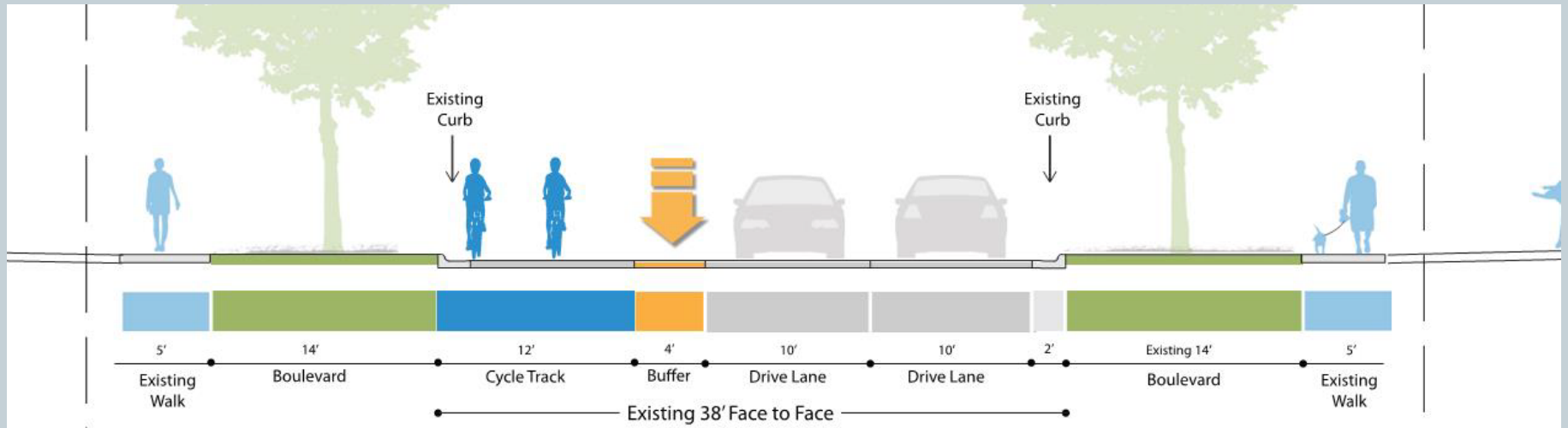


Existing Street Configuration

# College Street Bikeway

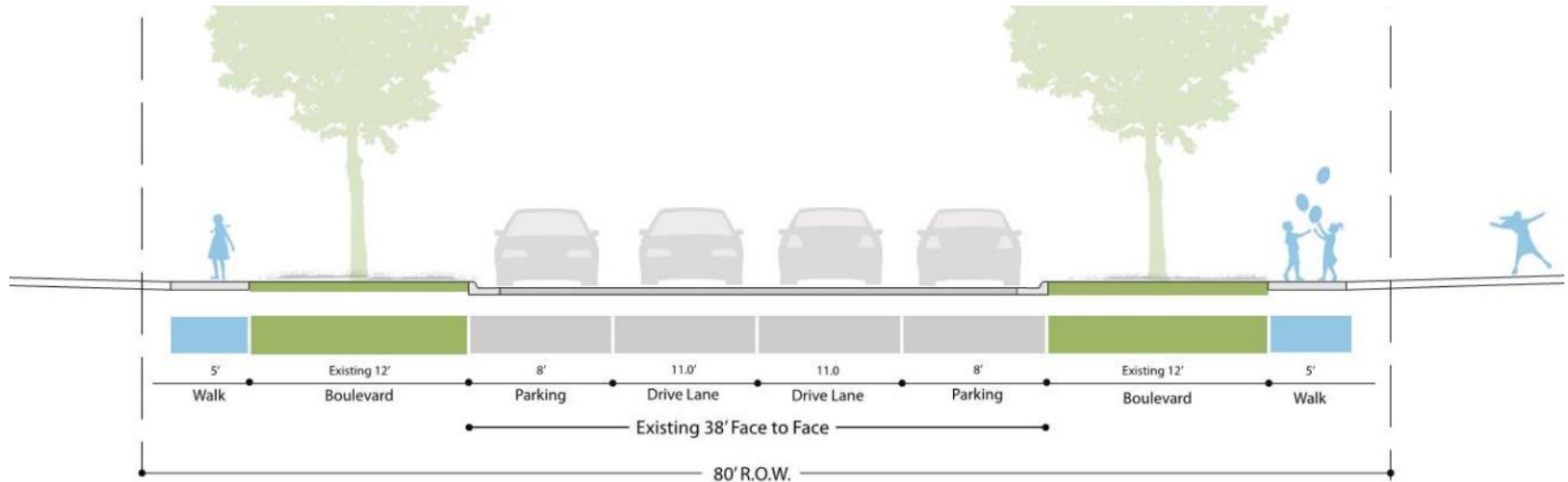


- **First Street to Third Street**
- **On-Street Cycle Track (funded by Carleton College)**
  - Fits in Existing Street Footprint
  - Painted Buffer but No Physical Barrier
  - Eliminates Parking



# Second Street Bikeway Improvements

Washington Street – Oak Street

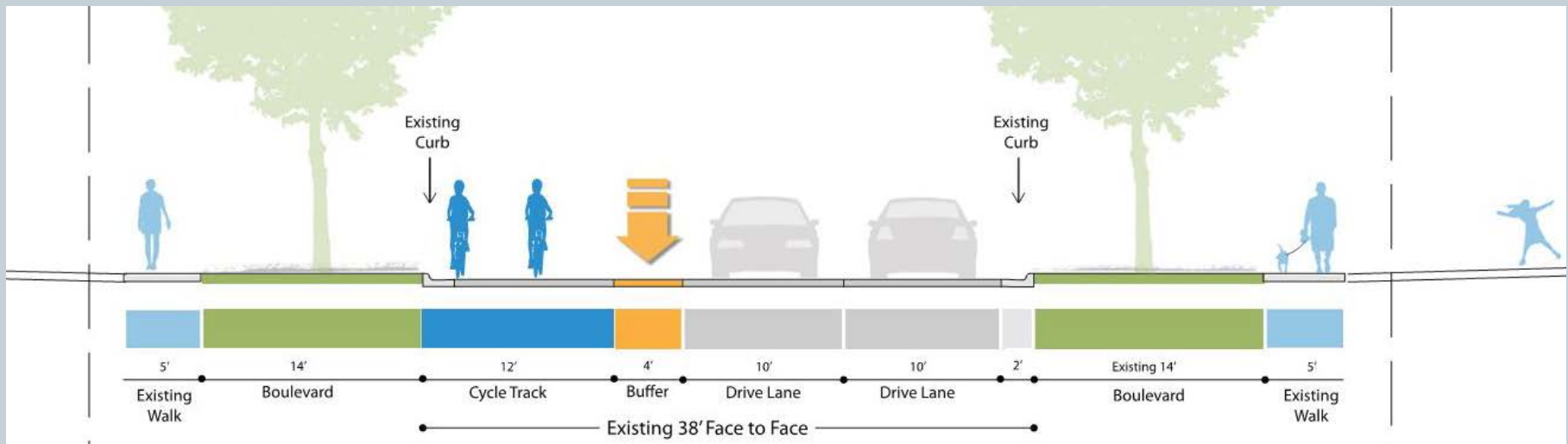


Existing Street Configuration

# Second Street Bikeway

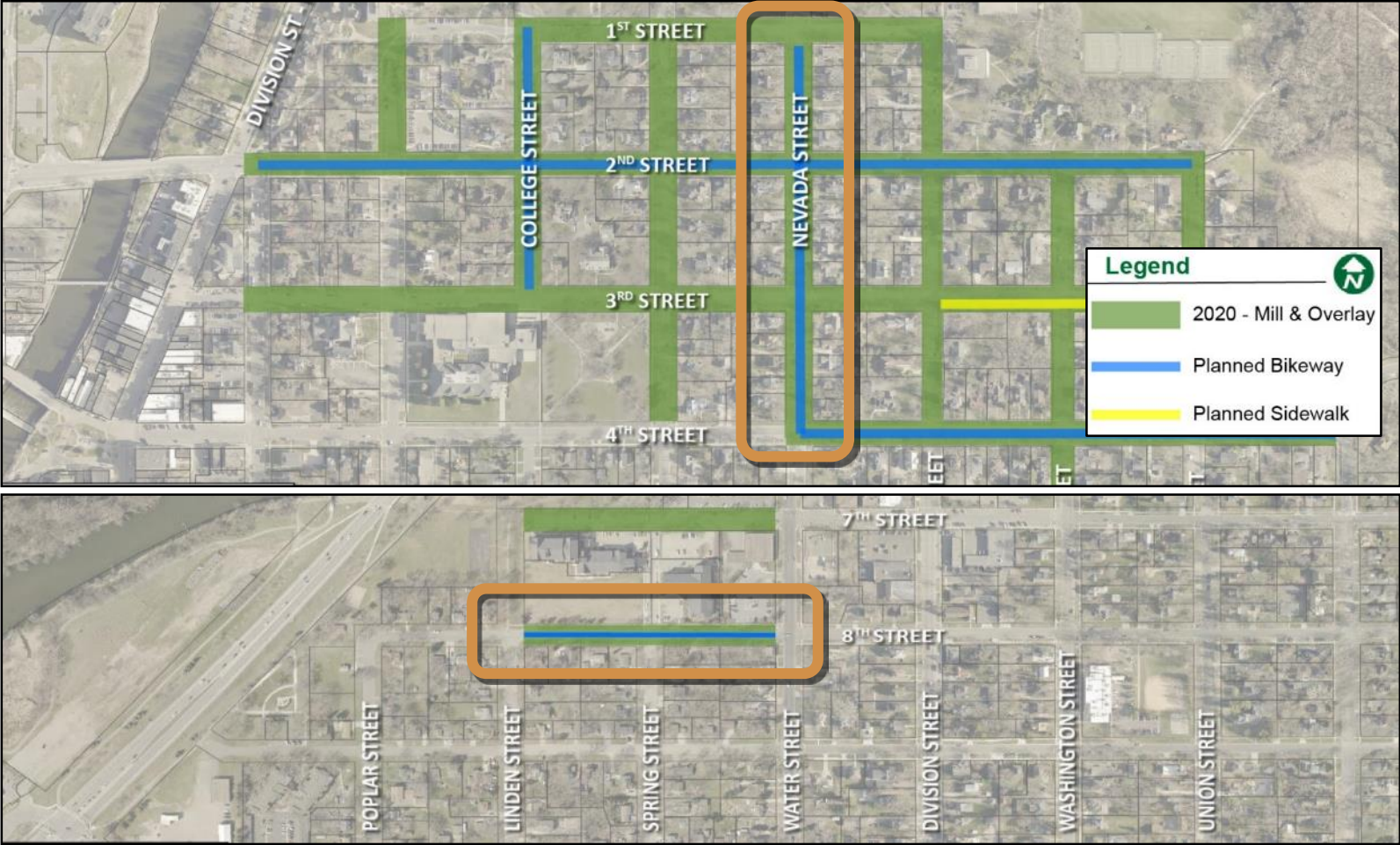


- **Washington Street to Oak Street**
- **On-Street Cycle Track**
  - Fits in Existing Street Footprint
  - Painted Buffer but No Physical Barrier
  - Eliminates Parking



# Nevada Street & Eighth Street Bikeway Improvements

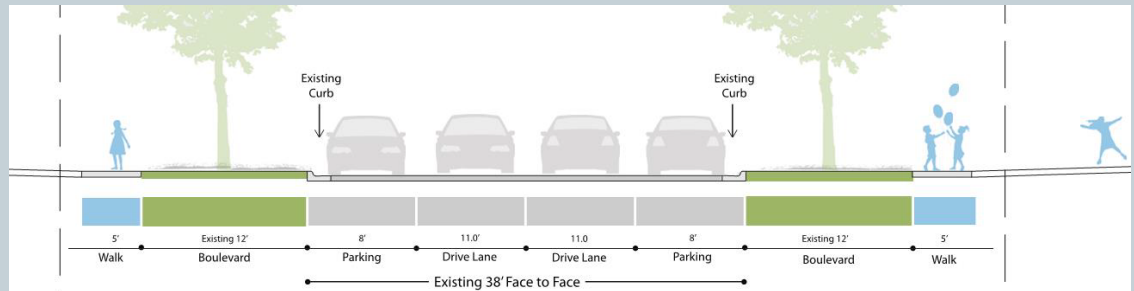
First Street – Fourth Street  
Linden Street – Water Street



# Nevada Street & Eighth Street Bikeway



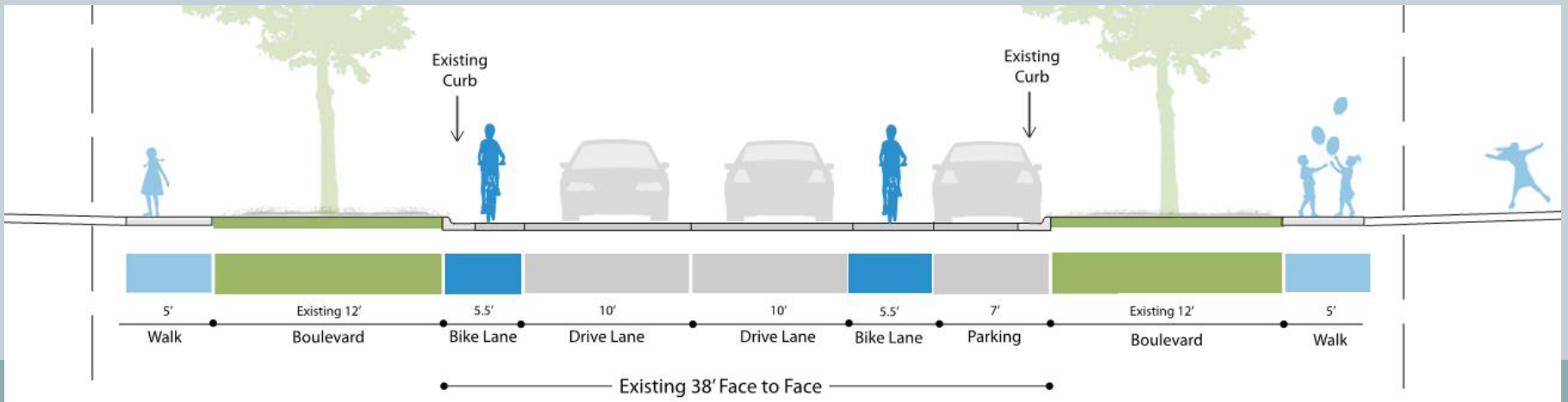
- **First St to Fourth St & Linden St to Water St**



Existing Street Configuration

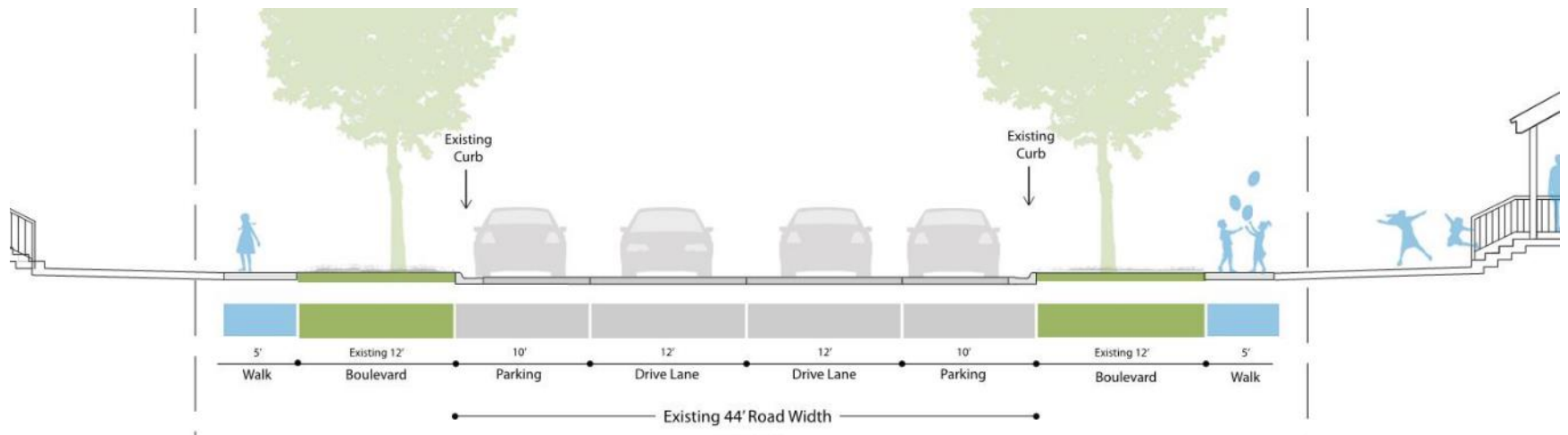
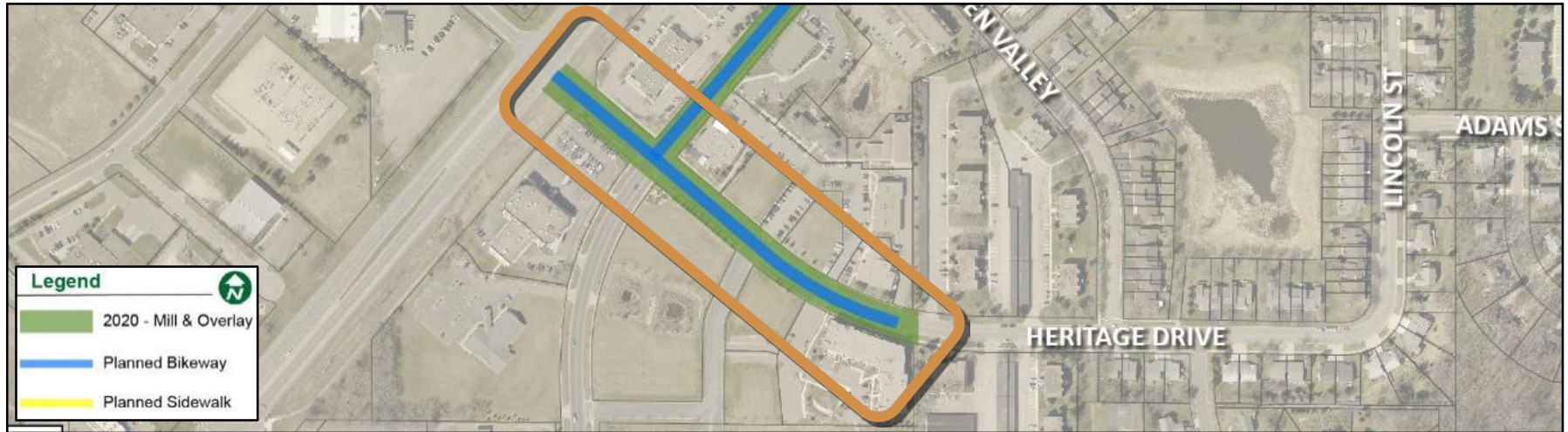
- **On-Street Bike Lanes**

- Fits in Existing Street Footprint
- No Buffer (Commuter Accommodation)
- Maintains Parking on One Side



# Heritage Drive Bikeway Improvements

Hwy 3 – 500 ft west of Hidden Valley Rd



Existing Street Configuration

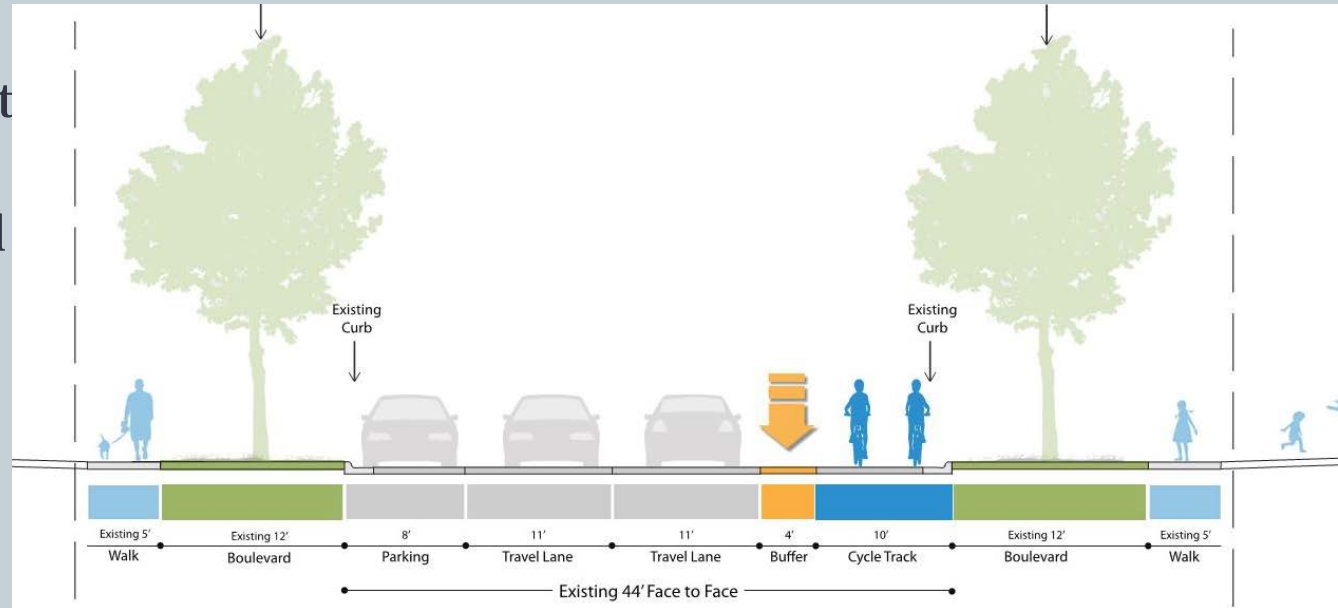


# Heritage Drive Bikeway



- TH 3 to 500 ft. west of Hidden Valley Road
- On-Street Cycle Track

- Fits in Existing Street Footprint
- Painted Buffer but No Physical Barrier
- Maintains Parking on One Side



- Jefferson Road (Heritage Dr to Hidden Valley Rd) will match Existing Bikeway Layout

# Estimated Project Costs



<b>ESTIMATED TOTAL PROJECT COSTS</b>	
	<b>ESTIMATED COSTS</b>
Street	\$2,881,327
Storm Sewer	\$230,490
Sanitary Sewer	\$27,550
Watermain	\$14,575
<i>Subtotal</i>	<i>\$3,153,942</i>
<i>Art (1%)</i>	<i>\$31,539</i>
<i>Subtotal with Art</i>	<i>\$3,185,481</i>
Contingency (10%)	\$318,548
<i>Construction Total</i>	<i>\$3,504,029</i>
<i>Overhead (20%)</i>	<i>\$700,806</i>
<b>PROJECT COSTS</b>	<b>\$4,204,835</b>

# Estimated Project Funding



<b>TOTAL PROJECT FUNDING</b>	
<b>FUNDING SOURCE</b>	<b>ESTIMATED FUNDING</b>
Bonding	\$2,995,552
Assessments	\$848,559
Storm Fund	\$304,984
Sanitary Fund	\$36,454
Water Fund	\$19,286
<b>TOTAL FUNDING</b>	<b>\$4,204,835</b>

# Project Process



- *Aug 20, 2019* - *Order Preparation of Feasibility Report/Approve Scope of Services Contract*
- *Oct 2, 2019* - *Neighborhood Meeting #1*
- *Oct 15, 2019* - *Council Direction on Bikeway & Sidewalk Concepts*
- *Nov 5, 2019* - *Accept Feasibility Report & Call for Improvement Hearing & Order Preparation of Plans & Specifications*
- **Dec 3, 2019** - **Public Improvement Hearing & Order Improvements**
- *Jan 7, 2020* - *Order Improvement*
- *Jan 8, 2020* - *Neighborhood Meeting #2*
- *Jan 14, 2020* - *Council Work Session on Final Plans*
- *Jan 21, 2020* - *Approve Final Plans/Specs & Order Advertisements for Bids*
- *Feb 20, 2020* - *Bid Opening*
- *March 10, 2020* - *Accept Bids & Award Contract*
- *April 14, 2020* - *Declare Amount to be Assessed/Call for Assessment Hearing*
- *April 2020* - *Property Owner Meetings*
- *May 5, 2020* - *Assessment Hearing/Adopt Assessment Roll*
- *June to Oct 2020* - *Construction*
- *June 2021* - *Accept Improvements & Authorize Final Payment*



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Questions / Comments



## Project Website:

[https://www.ci.northfield.mn.us/1313/  
2020-Mill-and-Overlay-Project](https://www.ci.northfield.mn.us/1313/2020-Mill-and-Overlay-Project)