



Legislation Text

File #: Res. 2020-006, **Version:** 1

City Council Meeting Date: January 7, 2020

To: Mayor and City Council
City Administrator

From: Sean Simonson, Engineering Manager
David Bennett, P.E., Public Works Director/City Engineer

Consider Ordering the Improvement for the 2020 Mill and Overlay Project.

Action Requested:

The Northfield City Council approves the attached Resolution - Ordering the Improvement for the 2020 Mill and Overlay Project (STRT2020-A45). **A supermajority vote (6 of 7) is required for approval of the resolution in accordance with Minnesota State Statute Chapter 429.**

Summary Report:

The City Council is being asked to consider a resolution ordering the 2020 Mill and Overlay Project. **Per Minnesota State Statute, this resolution requires a supermajority (6 of 7) for approval.** Staff is recommending Council order the improvement. The consideration of this action relates only to whether the City Council supports completing a 2020 mill and overlay project that would include a project area with streets defined in the resolution. Staff believes the neighborhood meeting, property owner questionnaires, Council discussion on bikeways and sidewalks, and the Feasibility Report have identified and provided enough clarity for this approval to order an overall improvement to move forward at this stage.

The final plans and design details, including areas under further review, will be discussed with Council at the January 14, 2020 Work Session. Staff plans on providing some limited updates and a recap of current designs at this January 7th meeting. However, we are intending to save discussion until more information is available and presented at the January 14th worksession. At the January 14 Work Session, staff will share additional information on the bumpouts at Third Street and Oak Street, and Water Street and Seventh Street, drainage analysis, and draft final plans. Adjustments can be made to the final plans, which is scheduled for Council approval on January 21, 2020.

The mill and overlay project includes the following streets: (Attachment 2)

- First Street - College Street to Maple Street
- Second Street - Washington Street to Oak Street
- Third Street - Washington Street to Oak Street
- Fourth Street - Nevada Street to Prairie Street
- Union Street - First Street to Second Street

- College Street - First Street to Third Street
- Winona Street - First Street to Fourth Street
- Nevada Street - First Street to Fourth Street
- Maple Street - First Street to Fourth Street
- Elm Street - Second Street to Fifth Street
- Oak Street - Second Street to Fourth Street
- Heritage Drive - TH 3 to Hidden Valley Apartments
- Jefferson Road - Hidden Valley Road to Heritage Drive
- Seventh Street - Water Street to West dead end
- Eight Street - Water Street to Linden Street

The actions requested above are required by Minnesota Statutes Chapter 429, which specifies the actions that must be taken to assess property owners for the cost of local improvements. The City Council has moved this project forward to this point with the actions shown in the attached project process (Attachment 3). Staff held an Improvement Hearing at the December 3, 2019 City Council meeting. Below in the summary report are questions and answers from the Improvement Hearing.

Questions from the Public Hearing 12/3/19

- *Q: Do the proposed street layouts meet design standards?*

A: All typical sections (street layouts) proposed for the project meet the design standards for lane widths and separation from bicycle facilities, including the proposed layout on Second Street.

- *Q: How will snow removal be handled with new bicycle facilities and/or bumpouts installed?*

A: Maintenance of roadways with new bicycle facilities will remain the same as it is today with regards to snow removal/snow plowing. Any proposed bumpouts would also be snow plowed around but may require separate equipment to clean up remaining snow after the initial pass from the snow plows, similar to other bumpouts within the City.

- *Q: Why are parking lanes being replaced with bicycle facilities?*

A: Streets where bicycle facilities will be reducing the available on-street parking will still have available parking options on adjacent side streets. The removal of parking on these streets is necessary to accommodate a street layout that provides a balanced use with a more family-oriented bicycle facility that appeals to a wider range of users. This vision aligns with the direction set forth in the City of Northfield Pedestrian, Bike, and Trail System plan with amendments that were just approved in 2019. The City is working to provide more walkable and bikeable streets that are community friendly. We also work to find balance that provides a design appropriate to the context of the area including local neighborhood considerations as well as a well-planned and interconnected transportation network across the city.

- *Q: Why are bicycle facilities proposed parallel to one another on both Second Street & Fourth Street?*

A: Bicycle facilities are proposed on both Second Street and Fourth Street because they were identified in the updated Pedestrian, Bike, and Trail System plan to provide connectivity to the entire bike system. Second Street has the ability to connect east and west through the City because it leads to the traffic

light/pedestrian signal at Highway 3, providing the ability to cross the highway. Second Street could also connect to adjacent potential future trails that have been identified and ties into the college. Fourth Street is identified as a local route for the Mill Towns State Trail, identified to draw interest to downtown and provide connectivity to Spring Creek Road.

- *Q: Will the materials installed have adequate strength to withstand traffic for the design life of the pavement?*

A: From Braun Intertec's Geotechnical Evaluation Report for the project, it is stated that "the streets in the City of Northfield 2020 project area generally appear to be suitable for mill and overlay based on their visually assessed HMA material condition, HMA thickness, and their current PCI rating." Braun recommends "milling the pavement in accordance with MnDOT Specification 2232" and installing a "replacement mix meeting SPWEA240B for local streets" indicating these materials are of sufficient strength for the design life of these streets.

- *Q: How much are adjacent properties being assessed for the project, and how do the rates compare for different types of properties?*

A: The proposed assessment amount for properties is not currently available which is standard procedure in the street design and financing process. However, it will be available in the future and there will be a separate hearing for property owners related to the assessment amount. A Benefit Appraisal is being completed for this project, which will provide the assessment rates for each type of property (single-family, multi-family, commercial, institutional, etc.). These assessment rates are used to calculate the Assessment Roll for the project. The final Assessment Roll is made public, so the assessment rates/totals will be available to the public once the Benefit Appraisal is completed.

- *Q: Can bumpouts be installed at the intersection of Third Street & Oak Street?*

- A: Bumpouts are not recommended at the Third Street and Oak Street intersection due to delivery turning movement conflicts that were analyzed for accessing the Laura Baker Services Association. Oak Street is an existing 30-foot wide road, which is already narrower than many of the surrounding streets. Third Street is an existing 38-foot road that has more space for bumpouts, however, delivery truck access is already difficult because of the offset entrance to Laura Baker from the intersection. The addition of bumpouts would require delivery trucks to back over the bumpouts in order to make deliveries. Backing up over a pedestrian facility is a safety issue with pedestrians that should be avoided.

The truck turning movement diagrams will be shared and further discussed with Council at the January 14, 2020 work session.

- *Q: Can bumpouts be installed at the intersection of Seventh Street & Water Street?*

A: Bumpouts are possible at the Seventh and Water Street intersection but would cause problems for delivery trucks creating conflict areas with other vehicles and pedestrians based on analyzed turning movements. With the existing intersection layout, delivery trucks must overturn (a wide turn over multiple adjacent lanes) into one opposing lane. With bumpouts, delivery trucks would require overturning into two opposing lanes and trailers would have to pull over the potential bumpouts to make

the turn. The bumpout corners would require concrete over the entire curb extension to accommodate truck trailers, which would add additional costs. This is the case for bumpouts crossing Seventh Street and for bumpouts crossing Water Street. Bumpouts in both directions at this intersection would not be recommended, as it would generate too many conflict areas. Other options could be considered, such as a mid-block crossing on Water Street, Rectangular Rapid-Flashing Beacons (RRFBs or pedestrian crossing beacons), etc. to provide a better balance between pedestrian safety/accessibility and maintaining functionality for delivery trucks.

The truck turning movement diagrams will be shared and further discussion with Council at the January 14, 2020 work session.

- *Q: Other than previously recommended bumpout locations that were removed from the project, what locations would bumpouts be potential candidates for?*

A: The following locations were not provided in the initial recommendation of prioritized bumpout locations, but meet the base criteria for the installation of bumpouts and due to feedback received are being presented as potential candidates for bumpouts:

- South side of Third & Winona east-west crossing (identified to provide a safer east-west crossing to Central Park because it is uncontrolled, whereas the north-south crossings are stop controlled).
- North side of Third & Winona east-west crossing (this location was outside the initial project limits but is identified to provide a safer crossing to Central Park by extending the limits).
- West & east sides of First & Winona north-south crossings (identified to help mitigate vehicle speed concerns on First Street).
- West & east sides of First & Nevada north-south crossings (identified to help mitigate vehicle speed concerns on 1st Street).

Proposed Improvements/Pavement Conditions

The 2020 Mill & Overlay Project will utilize a 2-inch mill and overlay to rehabilitate the existing street system. Geotechnical results show the existing bituminous to be in generally good condition with sufficient thickness averaging about 4-inches. The existing aggregate base had a variable thickness and the subsurface soils had ranging conditions but were generally fair to good. The geotechnical report indicated that the overall conditions of the streets evaluated in the project area are suitable for a mill and overlay rehabilitation of the streets. It did indicate that deeper repairs and potential subgrade corrections may be required in isolated areas where severe distresses are present.

A mill and overlay is considered a maintenance operation that involves the removal of the top layer of pavement and installation of a new wearing surface that prolongs the expected life of the pavement by 15 years. This maintenance ensures continued serviceability to users and keeps the road's entire life cycle cost low. Spot concrete curb and gutter will be replaced if it is severely damaged or settled/heaved and not allowing proper drainage.

Alternative Options:

It is important that we stay on schedule for the approval schedule related to the bid environment. We would be concerned that any delays in the schedule could place additional risk of getting adequate bids from construction

companies. Delays could lead to significant cost increases and possibly delay of the project being completed per the current schedule. Therefore, we do not support any alternatives that would not authorize the resolution this evening. Choosing not to complete a project in 2020 will lead to further deterioration and require more pothole repair, and additionally cause either requirement for pushing projects out further in the capital plan.

1. There has been some interest expressed by the City Council to consider removing some of the streets included in the project area, such as College Street from First Street to Third Street. The City Council could choose to consider approving ordering the improvements without some sections. However, as summarized in the project memo the mill and overlay for this entire area is appropriate and also well planned in conjunction with covering an area. We would have concern removing some sections that would later have to be repaired. Additionally, we believe that any interest to explore possibly vacating College Street in the project area has many implications and whether that would be wise is an unknown. Therefore, we believe it is more appropriate to proceed with the project and if there is interest in vacating to explore that in the future, ideally well in advance of the reconstruction of the street would be completed.

Staff does not recommend Council remove any sections from the project area but that is an alternative option.

Financial Impacts:

The estimated total project costs indicate there is enough funding available to complete this project. The funding tables are below:

ESTIMATED TOTAL PROJECT COSTS	
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Street	\$2,881,327
Storm Sewer	\$230,490
Sanitary Sewer	\$27,550
Watermain	\$14,575
Subtotal	\$3,153,942
<i>Art (1%)</i>	<i>\$31,539</i>
Subtotal with Art	\$3,185,481
Contingency (10%)	\$318,548
Construction Total	\$3,504,030
<i>Overhead (20%)</i>	<i>\$700,806</i>
PROJECT COSTS	\$4,204,835

TOTAL PROJECT FUNDING	
FUNDING SOURCE	ESTIMATED FUNDING
Bonding	\$2,995,552
Assessments	\$848,559
Storm Fund	\$304,984
Sanitary Fund	\$36,454
Water Fund	\$19,286

TOTAL FUNDING	\$4,204,835
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Tentative Timelines:

The project process (Attachment 5) accounts for all the required actions by City Council to ensure that Minnesota Statute Chapter 429 procedures are followed so that assessments for local improvements may be levied to abutting benefitting properties.