

Public Works Dept Engineering Division Phone: 763-569-3340 FAX: 763-569-3440

# **FEASIBILITY REPORT**

# 67<sup>TH</sup> AVENUE AND JAMES AVENUE MILL & OVERLAY

IMPROVEMENT PROJECT NO. 2025-02

# CITY OF BROOKLYN CENTER, MINNESOTA

**SEPTEMBER 23, 2024** 

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

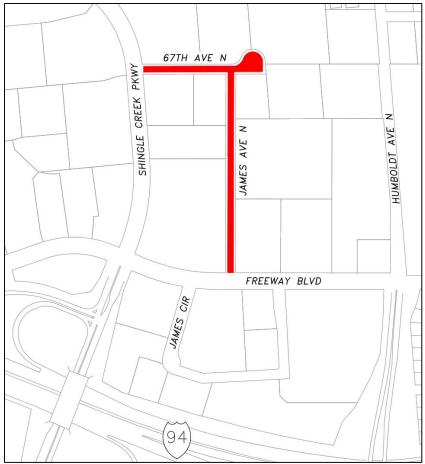
nor Lydia M Ener. P.E.

Reg. No. 57221 September 23, 2024

# I. BACKGROUND

The City's Capital Improvement Program (CIP) identifies the 67<sup>th</sup> Avenue N and James Avenue N project area as a mill and overlay for 2025. The proposed project includes a bituminous mill and overlay, minor concrete curb repairs, and minor utility improvements within the project limits. The project area extends on 67<sup>th</sup> Avenue N from Shingle Creek Parkway to the east cul-de-sac, and on James Avenue N from Freeway Boulevard to 67<sup>th</sup> Avenue N.

The 2025 mill and overlay project area consists of approximately 2,063 lineal feet of roadway. Within this area, there are eleven industrial properties adjacent to the roadway.



**Figure 1: Project Area** 

# II. STREET IMPROVEMENTS

#### A. EXISTING CONDITIONS

The proposed project area roadways, 67<sup>th</sup> Avenue N and James Avenue N, were reconstructed most recently in 1998. The existing streets are generally 44-feet wide with concrete curb and gutter. An existing pavement evaluation was conducted. Within the project, the road surface shows signs of deterioration such as lateral cracking, alligator cracking, and moderate potholes throughout the proposed improvement area.

Soil borings and pavement core measurements were conducted within the project area. These measurements revealed that the existing pavement sections within project area consist of 6 inches to 8 inches of bituminous pavement and aggregate base to a depth of 6 inches to 10 inches. The underlying pavement structure is generally stable for the majority of the roadway. Additionally, limited sections of deteriorated concrete curb and gutter were identified within the project area.

#### **B. PROPOSED STREET IMPROVEMENTS**

Based on the age, condition, and maintenance needs of the existing bituminous asphalt pavement surface, the recommended pavement improvements consist of a mill and overlay rehabilitation of the existing pavement. The existing concrete curb and gutter throughout the project area has not exceeded its life expectancy and can be suitably rehabilitated with spot repairs. Approximately 30 percent of the concrete curb and gutter and concrete driveway aprons are estimated to be replaced due to drainage issues and as warranted or impacted by other construction (e.g. public utility repairs).

Disturbed boulevard areas will be restored with topsoil and sod.

# III. STREET LIGHTING SYSTEM

#### A. EXISTING CONDITIONS

The street improvement program has historically included the replacement of wooden free-standing street lights located within the project area, or those past their useful lifespan. Free-standing street lights are defined as lights mounted on poles which do not contain any other overhead utilities attached to them. The existing street light system throughout the project consists of fiberglass poles still in useful and working condition.

#### **B. PROPOSED STREET LIGHTING IMPROVEMENTS**

No street light improvements are proposed as part of this project.

# IV. STORM DRAINAGE AND TREATMENT SYSTEM

#### A. EXISTING CONDITIONS

The project area is located within the Shingle Creek Watershed Management Commission area and ultimately flows to the Mississippi River. The existing storm drainage system in the project area consists of a network of storm sewer pipes installed in 1970 and 1974 and range in size from 15 to 36-inch diameter reinforced concrete pipes. Televising of the storm sewer in this area was conducted and pipes were found to be generally in good condition.

#### **B. PROPOSED DRAINAGE IMPROVEMENTS**

Storm sewer improvements will be made to the existing system that includes replacing manhole and catch basins castings and adjustments as necessary within the project area.

# V. SANITARY SEWER SYSTEM

#### A. EXISTING CONDITIONS

The existing sanitary sewer throughout the project area is 8-inch diameter polyvinyl chloride (PVC) that was installed in 1970. All public sanitary sewer pipes were inspected with remote televising equipment and found to be in satisfactory condition.

#### **B. PROPOSED SANITARY SEWER IMPROVEMENTS**

Sanitary sewer improvements will be made to the existing system that includes replacing manhole castings and lids within the project area. The replacement of the castings with external seals will help minimize inflow and infiltration of rainwater into the sanitary sewer system.

## VI. WATER SYSTEM

#### A. EXISTING CONDITIONS

The existing water main in the project area is 8-inch diameter cast iron pipe (CIP) installed in 1970. There is no record of water main breaks in the area and the water main is still within its useful life cycle

#### **B. PROPOSED WATER MAIN IMPROVEMENTS**

Water main improvements include replacement of approximately half the valves and hydrants in the project area.

# VII. RIGHT-OF-WAY AND EASEMENTS

Generally, all public infrastructure owned, maintained and operated by the City throughout the project area is located within City easements and/or right-of-way. It is not anticipated that the City will need to obtain any additional easements for any existing or proposed improvement located within the roadway. If necessary, any identified easement needs during final design will be further coordinated with the City Attorney and the identified property owners.

# VIII. PROPERTY OWNER ENGAGEMENT

An open house was held for the adjacent properties and property owners on August 29, 2024. Due to the commercial and industrial property uses, the meeting was held midday over the typical lunch hours rather than in the evening. Six property owners provided responses, with five attending in person, representing five properties of the eleven adjacent to the project. Each attendee was able to discuss how

the project would impact their business and access, as well as voice any concerns that could be addressed with the project. The majority of questions asked related to truck parking, access for shipments during construction, and the assessment process. All attendees seemed satisfied with having their questions answered, and many expressed intertest in personal follow-up when construction begins.

## IX. ESTIMATED COSTS AND FUNDING CONSIDERATIONS

The total estimated cost of the proposed project is \$790,000. Table 1 provides a summary of the estimated project costs and recommended funding amounts from the various sources as indicated. Funding for the project is further described below.

#### A. FUNDING FOR STREET IMPROVEMENTS

The estimated project cost of roadway improvements for all streets in this project area is \$560,000. This preliminary estimate includes the cost for project administration, legal, engineering and construction contingency. Special assessments for street improvements are proposed in accordance with the 2025 rates. The commercial and industrial properties within the project area are proposed to be assessed on an area basis. An "A" zone benefit includes the area abutting the street to be improved, extended to the depth of 200-feet and a "B" zone of lesser benefit for the remainder of the property area. The "A" zone rate is based on assessing 70 percent of the total street project cost deemed to benefit the property and the "B" zone rate is based on 30 percent. Based on cost estimates for the street improvements, the unit rate has been determined to be "A" zone rate of \$0.3453 per square foot and a "B" zone rate of \$0.1480 per square foot. It should be noted that historically the assessments have been levied based on estimated costs rather than actual costs, understanding that the project costs are levied at a reduced percentage (70 and 30 percent as indicated above). The remaining street construction costs would be funded from the Street Reconstruction Fund. A summary of the proposed special assessments for street improvements is provided in Appendix A.

#### **B. FUNDING FOR UTILITY IMPROVEMENTS**

The estimated cost of storm drainage improvements is \$110,000; the estimated cost of sanitary sewer improvements is \$30,000; and the estimated cost for water main improvements is \$90,000. As previously noted, these total cost estimates include the costs for project administration, engineering, legal and construction contingency. All costs for water and sanitary sewer improvements will be funded by their respective utility funds in accordance with established policy for such improvements.

# Table 1: Cost and Funding

	Streets	Storm Drainage	Sanitary Sewer	Water Main	Estimated Total	
Estimated Expenditures						
Estimated Construction Cost	\$424,000.00	\$80,000.00	\$24,000.00	\$68,000.00	\$600,000.00	
Contingencies (10%)	\$42,000.00	\$8,000.00	\$2,000.00	\$7,000.00	\$60,000.00	
Admin., Eng., Legal (20%)	\$93,000.00	\$18,000.00	\$5,000.00	\$15,000.00	\$130,000.00	
Total Estimated Project Costs	\$560,000.00	\$110,000.00	\$30,000.00	\$90,000.00	\$790,000.00	
Estimated Revenue						
Street Special Assessments	\$379,980.46				\$379,980.46	
Storm Special Assessments		\$0.00			\$0.00	
Sanitary Sewer Utility Fund			\$30,000.00		\$30,000.00	
Water Utility Fund				\$90,000.00	\$90,000.00	
Storm Drainage Utility Fund		\$110,000.00			\$110,000.00	
Street Reconstruction Fund	\$180,019.54				\$180,019.54	
Total Estimated Revenue	\$560,000.00	\$110,000.00	\$30,000.00	\$90,000.00	\$790,000.00	

# X. RECOMMENDED PROJECT SCHEDULE

The proposed project is anticipated to be begin design during the winter of 2024/2025, with construction occurring during the 2025 season, the preliminary schedule for the project can be found in Table 2.

Action	Target Date		
City Council Receives Feasibility Report, Declares Cost to be Assessed and Calls for Public Hearings	September 23, 2024		
City Council Holds Public Hearing, Authorizes the Project and Orders Preparation of Plans and Specifications	October 28, 2024		
City Council Approves Plans and Specs and Authorizes Advertisement for Bids	January 2025		
City Receives and Opens Project Bids	February 2025		
City Council Considers Award of Contract	March 2025		
Start Project Construction	June 2025		
Construction Substantially Complete	September 2025		

### **Table 2: Anticipated Project Schedule**

# XI. CONCLUSIONS AND RECOMMENDATIONS

The overall condition of the City's street and utility infrastructure systems is critical to the operation, safety, welfare and economic health of the entire community. As a result of the infrastructure needs described, the proposed solutions, and the estimated costs provided in this report, the proposed project is considered to be necessary, cost effective and feasible.

# Appendix A

DRAFT Proposed Pending Assessment Roll DRAFT Proposed Assessment Map

#### CITY OF BROOKLYN CENTER PROPOSED PENDING ASSESSMENT ROLL September 23, 2024 2025 67TH AND JAMES MILL AND OVERLAY PROJECT IMPROVEMENT PROJECT NO. 2025-02

						NOTES				
PROPERTY ID	HOUSE	STREET NAME	LEVY#	STREET	ZONING		(SF)		(SF)	
3511921110012	1600	67th Avenue North	26001	\$	66,888.23	MX-B	(A)	61,450.00	(B)	308,578.00
3511921110013	1700	67th Avenue North	26001	\$	38,407.76	MX-B	(A)	67,215.00	(B)	102,692.00
3511921140014	1601	67th Avenue North	26001	\$	18,220.67	MX-B	(A)	12,031.00	(B)	95,043.00
3511921140002	22	Address Unassigned	26001	\$	17,889.30	MX-B	(A)	51,808.00	(B)	
3511921140008	1800	Freeway Boulevard	26001	\$	41,698.92	MX-B	(A)	116,264.00	(B)	10,493.00
3511921140016	1700	Freeway Boulevard	26001	\$	25,128.72	MX-B	(A)	69,002.00	(B)	8,799.50
3511921140003	6530	James Avenue North	26001	\$	60,469.43	MX-B	(A)	96,612.00	(B)	183,171.00
3511921140005	6645	James Avenue North	26001	\$	20,873.39	MX-B	(A)	60,450.00	(B)	
3511921140006	6660	Shingle Creek Parkway	26001	\$	14,254.99	MX-B	(A)	39,307.00	(B)	4,610.00
3511921120015	6800	Shingle Creek Parkway	26001	\$	61,355.75	MX-B	(A)	53,038.00	(B)	290,822.50
3511921140007	6540	Shingle Creek Parkway	26001	\$	14,793.31	MX-B	(A)	40,000.00	(B)	6,630.50
	Total Assessments			\$	379,980.46					

