MARSHALL

CULTIVATING THE BEST IN US

FEASIBILITY REPORT

Project ST-023

W. Lyon St. Reconstruction Project

March 8, 2022

Table of Contents

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

By: Jason R. Anderson, P.E.
Digitally signed by Jason R. Anderson, P.E.
Date: 2022.03.04 09:02:28 -06'00'

Jason R. Anderson, P.E.
Registration No. 53322

FEASIBILITY REPORT

PROJECT ST-023
W. LYON ST. RECONSTRUCTION PROJECT

CITY OF
MARSHALL, MINNESOTA

1.0 SCOPE

This Feasibility Report as authorized by the City Council, covers the following proposed improvements: reconstruction and utility replacement on West Lyon Street between East College Drive and North 1st Street. Utilities will be installed, including watermain and sanitary sewer, on West Lyon Street. Other items of work included in this project are pavement removal, aggregate base, concrete surfacing, sidewalks, curb and gutter and other minor work.

2.0 BACKGROUND / EXISTING CONDITIONS

Street

City records indicate that this street was originally constructed in 1956. The existing pavement surface is beginning to show its age with considerable cracking and pavement degradation.

The existing segment of West Lyon Street measures approximately 56-FT as measured from the back of curb to the back of curb. Currently, the existing segment of West Lyon Street is wide enough to accommodate two travel lanes and angled parking on both sides of the street, similar to West Lyon Street north of East College Drive.

There is currently 5-FT wide sidewalk on the east side of West Lyon Street made up partially of square pavers and typical concrete walk, and 4.5-FT wide sidewalk on the west side of the street with significant cracking observed. Much of the existing walk does not comply with current ADA accessibility standards.

Utilities

There is currently no existing watermain or sanitary sewer along this segment of West Lyon Street. Properties adjacent to the north side of West Lyon Street are serviced by aging service lines in the alleyway between West Lyon Street and West Redwood Street. The existing water services are in poor

condition. The existing sanitary main in the alleyway is 6" vitrified clay pipe (VCP) and is in poor condition. There are no segments of storm sewer on this block of West Lyon Street. Storm water runs mainly to catch basins installed at the intersection of West Lyon Street and North 1st Street. A short segment of West Lyon Street drains northwesterly to East College Drive.

3.0 PROPOSED IMPROVEMENTS

Street

A concrete pavement section will be proposed and discussed in this feasibility report. Staff is proposing a street section comprised of a 6" thick concrete surfacing, a 4" thick section of Class 5 aggregate base, and a 12" thick section of Select Granular subbase on West Lyon Street. A geotextile fabric will be placed on the subgrade prior to the placement of the subbase. A 6" perforated drain tile shall be installed at the back of the curb below the aggregate base to provide subsurface drainage for the street section.

The proposed roadway on West Lyon Street (as measured from curb face to curb face) will be 57-FT. The project proposes two 13-FT travel lanes and two 15.5-FT, 9.5'-wide, 45-degree angled parking lanes. The purpose for the 45-degree angled parking is to accommodate for the demand for parking for the potential commercial development of Block 11 as well as potential future development of the north side of West Lyon Street. It is the opinion of staff that the proposed road width will be adequate to serve the corridor.

A 5-FT sidewalk with a 1-FT grass buffer is proposed on the north side of West Lyon Street. This would replace the existing 5-FT sidewalk on this side of the street. A 8-FT sidewalk is proposed on the south side of West Lyon Street adjacent to the Block 11 development area. This replaces existing sidewalk adjacent to the south side of West Lyon Street where there is currently sidewalk.

Utilities

The proposed utility improvements include installing new sanitary sewer and watermain throughout the block with service lines extended into the adjacent properties.

The watermain improvements will consist of installing new 8" Polyvinyl Chloride (PVC) watermain pipe. Watermain improvements are planned in close coordination with MMU staff input. The new 8" PVC watermain pipe will connecting to the new main on North 1st Street and extend to the MnDOT right-of-way at E. College Drive for future connection to the watermain under College Drive in 2025. This will allow for services to adjacent properties off of a new watermain under West Lyon Street and for watermain looping to better meet MMU water system goals.

The sanitary sewer system improvements will include installing new manholes, sewer main, and sewer services along West Lyon Street. Generally, the main will be new 8" PVC main. New sewer services will be installed to the right-of-way (ROW) with a minimum 4" pipe size. No storm sewer work is anticipated to be included in the project.

4.0 STATEMENT OF PROBABLE COST

The estimated costs to complete the proposed improvements are shown below. The estimated construction costs include a 10% allowance for contingencies and a 16% allowance for administrative and engineering costs. The unit prices for each item of work used in determining the estimated cost of construction is based on previous projects similar in nature and is subject to change.

Street and Curb and Gutter	*$190,000.00*
Watermain Replacement	*$65,000.00*
Sanitary Sewer Replacement	*$83,000.00*
Subtotal Estimated Construction Cost	*$338,000.00*
Contingencies (10%)	*$34,000.00*
Total Estimated Construction Cost	*$372,000.00*
Estimated Engineering, & Administration (16%)	*$60,000.00*
Total Estimated Project Cost	*$432,000.00*

5.0 PROPOSED ASSESSMENTS

The adjacent properties will not be assessed for the watermain improvements. All costs for watermain and related work will be paid by MMU.

The adjacent properties will not be assessed for sanitary sewer main improvements. All costs for sanitary sewer main will be paid by the City of Marshall Wastewater Department. Sanitary sewer service lines and connection points to the main will be assessed to the adjacent property owners according to current sanitary sewer assessment procedures.

Costs for the street replacements will be partially assessed to the adjacent property owners in accordance with the most recent Special Assessment Policy and partially funded by the Wastewater Department, and MMU.

A preliminary assessment roll showing the estimated assessments for each benefiting parcel, City Participation, and utility participation will be prepared at a later date for consideration by the City Council in accordance with the most recent Special Assessment Policy.

6.0 FEASIBILITY/CONDITIONS/QUALIFICATIONS

The proposed improvements as described in this report are necessary, cost-effective, and feasible from an engineering standpoint. The feasibility of this project is contingent upon the findings of the City Council pertaining to project financing and public input.

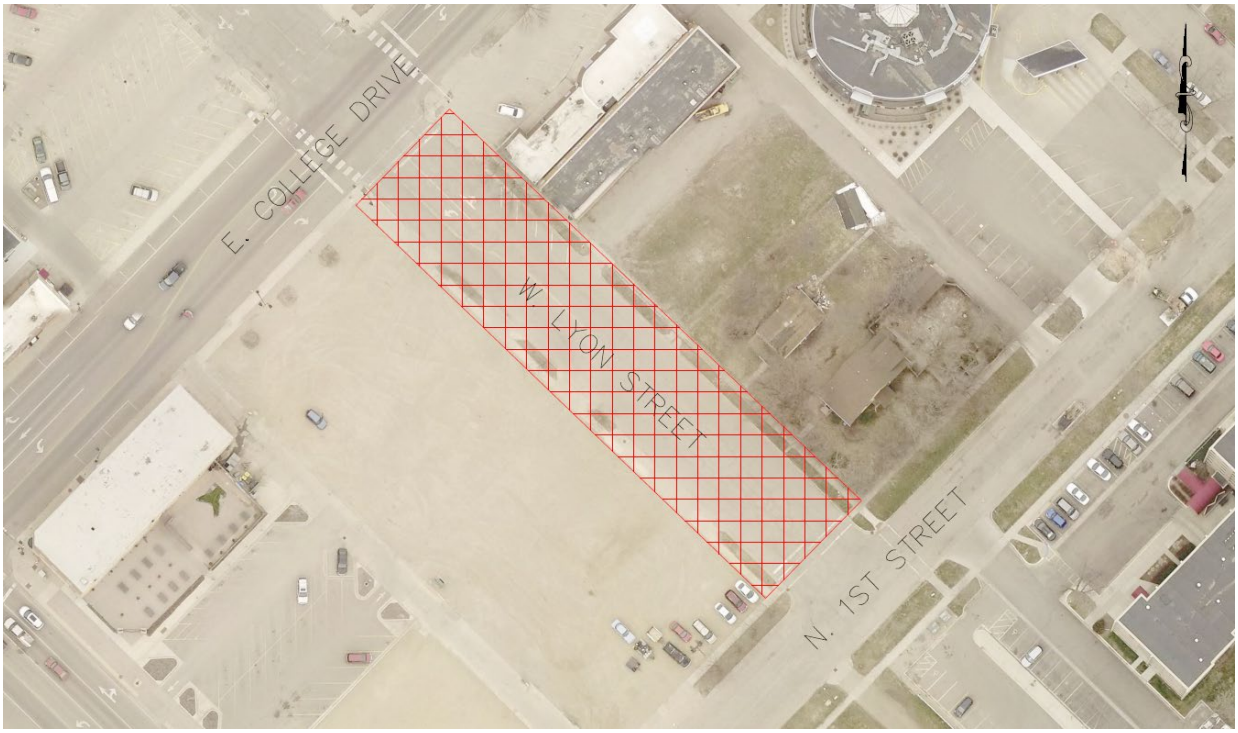
7.0 PROPOSED PROJECT SCHEDULE

The following is the anticipated schedule for the project, assuming the City Council elects to proceed with the proposed improvements.

March 8, 2022	Accept Feasibility Report & Call for Hearing on Improvement
April 12, 2022	Public Hearing on Improvement/Order Plans & Specs
April 12, 2022	Approve Plans & Specs/Authorize Call for Bids
April 14, 2022	Advertise for Bids
May 5, 2022	Bid Opening Date
May 10, 2022	Award Contract
May 23, 2022	Notice to Proceed
June 2022	Begin Construction
October 2022	Public Hearing on Assessment/Adopt Assessment
October 2022	End Construction

APPENDIX

PROJECT LIMITS



PROJECT LAYOUT