# DEPARTMENT OF TRANSPORTATION

# Minnesota Highway 19 Reconstruction Project PROJECT DESCRIPTION

2023 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program



Project Name: Minnesota Highway 19 Reconstruction Project
Project Type: Rural Capital Project - Road, Repair/Rehabilitation
Total Project Cost: \$29.09M
2023 RAISE Funds Requested: \$15.39M

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Supporting Information can be found at: https://www.srfconsulting.com/mn-th19-raise-grant/



2023 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program

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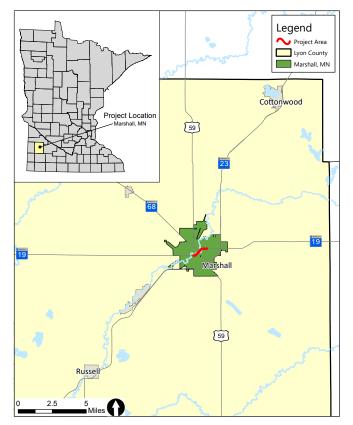
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### **PROJECT DESCRIPTION**

The Minnesota Department of Transportation (MnDOT) is submitting this 2023 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program request for \$15.39 million in federal funds. The requested funds will be used towards Highway 19/College Drive Reconstruction Project (herein known as the Project) in the city of Marshall, MN. It is the largest community in Southwestern Minnesota and an economic, educational, and recreational hub for the region. The Project's total future eligible cost is \$29.09 million and complies with the requirements of rural capital project.

#### Figure 1 Project Location



Minnesota Highway (MN) 19, also known as College Drive, is an east-west minor arterial roadway in Marshall (Figure 1). MN 19 spans 208 miles from the South Dakota border in the west to its eastern terminus at the intersection of US Highway (US) 61 in Red Wing, MN with annual average daily traffic (AADT) volumes ranging from 2,900 to 9,500 vehicles

per day (vpd) in the Project area. The Project extends along MN 19 through downtown Marshall and will completely reconstruct 1.25 miles of MN 19 from Bruce Street to South 4th Street, anticipated to be constructed in 2025. In addition, a 0.27-mile segment of MN 19, from S. 4th Street to Marlene Street, will be rehabilitated using mill and overlay along with enhancements to the pedestrian infrastructure, which will include additional replacement or upgrades to sidewalk and pedestrian ramps. Further, an additional 0.322 miles of bike lane striping will be added from Marlene Street to Camden Regional Trail Crossing along MN 19, beyond the limits of the reconstruction and rehabilitation segments, in order to connect the bicycle infrastructure to the 14-milelong multiuse Camden Regional Trail.

As a regional center, Marshall is served by four state highways, US 59, MN 23, MN 19, and MN 68. These state highways connect Marshall to southwest Minnesota and beyond. Regional county roads and city streets provide local access in and around the city. Marshall is located less than 200 miles from urban centers such as Minneapolis-St. Paul, Mankato, and Rochester in Minnesota and Sioux Falls in South Dakota. The Project is less than a mile away from the Marshall-Southwest Regional Airport-Marshall/ Ryan Field Airport.

Within the Project corridor, MN 19 is a two-lane urban roadway between Marlene and Saratoga Street and a three-lane urban roadway between Saratoga Street and Bruce Street (see Figure 3). It is classified as a minor arterial roadway with a posted speed limit of 30 miles per hour (mph). There are currently five signalized intersections and fifteen minor street stop-controlled intersections along MN 19 within the Project limits. There is on-street parallel parking on both sides of the street for most of the Project area. There are several key origins and destinations along the Project corridor such as Liberty Park, Memorial Park, Southwest Minnesota State University, Marshall Area Christian School, Marshall High School, Avera Marshall Regional Medical Center, restaurants, Schwan Food Company, major employers, civic centers, and convenience stores.

### CURRENT TRANSPORTATION **CHALLENGES**

The proposed Project improvements address the existing transportation challenges of:

- inadequate traffic operations leading to congestion through the downtown area,
- safety concerns along the corridor for both motorist and non-motorists,
- lack of Americans with Disabilities Act (ADA) compliant pedestrian/bicyclist infrastructure, and
- poor state of existing pavement condition.

Further challenges have been identified by MnDOT as the Project is located within a historic downtown area and needs to consider right-of-way impacts and access to/from surrounding business and residences, during construction. The corridor is narrow with buildings in close proximity to the sidewalks and curb and gutter. The Project crosses the Redwood River three times in the Project area, twice in the reconstruction segment and once in the pedestrian improvement segment. Shallow groundwater (depths less than 15 feet below grade) occurs within the project limits. Additionally, the Project is in a commercial area of Marshall where businesses that generate and store petroleum and/ or hazardous chemicals have been present for many years. Therefore, environmentally sustainable solutions are a significant requirement, in order to effectively mitigate the risk of contamination and protect groundwater. Lastly, the

community is very engaged in the Project and have expressed their needs and challenges with current conditions. MnDOT has connected with the public, stakeholders, and partners since 2019, to implement a cost-effective solution that the community supports.

#### The primary needs for the project are,

- a deteriorating pavement section, safety improvements along the corridor, and
- deficient ADA facilities (Figure 2).

#### The secondary needs for the project include,

- choosing the optimal intersection type,
- enhancing pedestrian routes and facilities,
- re-configuring side street connections for greater benefit.
- access management,
- adding boulevard and lighting amenities to improve aesthetic value,
- maintaining large truck turning movements and accommodating oversize/overweight (OSOW) loads at key nodes, and
- improving surface/subsurface infrastructure typically associated with reconstruction involving urban engineering design.



#### Figure 2 Existing Dilapidated Infrastructure



### PROPOSED IMPROVEMENTS

MnDOT's vision for MN 19 in Marshall is to develop and construct long-term solutions that will improve the existing safety and congestion issues as well as provide a better quality of life to local communities. The proposed improvements (Figure 3) include:

- Reconstruction of 1.25-mile segment of MN 19 to improve the deteriorated pavement conditions and improve the flow of traffic from Bruce Street to S. 4th Street.
- Reconstruction of 1.52 miles of sidewalks on both sides of MN 19 with width varying from 6 feet to 15 feet from Bruce Street to Marlene Street to fill existing gaps and provide safer non-motorized user connections,
- Rehabilitation of 0.27-mile segment of MN 19, using mill and overlay, to improve the deteriorating pavement from Marlene Street to S. 4th Street,
- Addition of 0.322 miles of bike lane striping from Marlene Street to Camden Regional Trail Crossing along MN 19 to provide access and connections to the 14-mile Camden Regional Trail Network,
- Construction of a single lane roundabout at the intersection of Country Club Drive/S. 2nd Street/MN 19 to enhance safety and reduce traffic delays at this intersection,
- Removal of access at Artillery Drive to eliminate conflict points and improve safety,
- Reconfiguration of Timmerman Drive at the proposed roundabout to a one-way roadway with additional parking capacity for improved access management,
- Replacement of the existing traffic signal systems along MN 19 at Saratoga Street, Main Street, and Bruce Street with upgraded traffic signal that include pedestrian level timing improvements,
- Removal of the existing traffic signal at Lyon Street intersection and replacement with a minor street stop control to improve traffic flow,
- Change the intersection control at Schwan Memorial Drive and Marshall Street from full access to right-in/right-out (RI/RO) access to enhance safety by reducing crashes,
- Removal of dedicated right turn lanes along MN 19 at Saratoga Street to shorten pedestrian crossing distances,

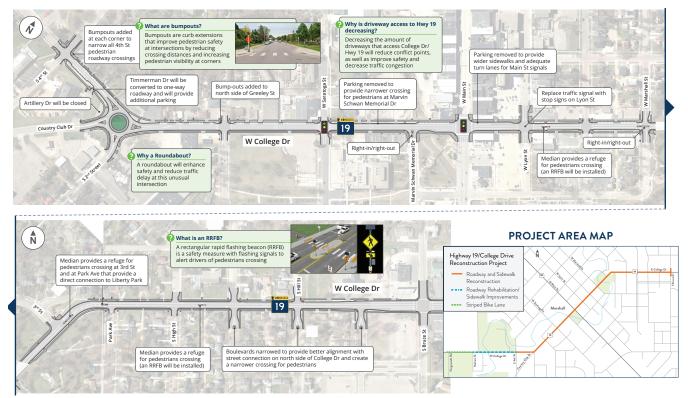
- · Reconfiguration of roadway geometrics such as removal of parking, redesigning of curb radii etc. to facilitate safe turning of freight and OSOW vehicles,
- Replacement of stormwater infrastructure to expand capacity to resolve flooding along the corridor,
- Replacement of city utilities (sanitary sewer, water main, and storm sewer) to upgrade to modern standards and provide an improved infrastructure,
- Replacement of landscaping and streetlighting along MN 19 to improve aesthetics in the area,
- Addition of one 150 kW DC fast charger, either at Avera Medical Center parking lot or west of Bella Cucino, to facilitate access and reliability for electric vehicle drivers in rural Minnesota, and
- Several pedestrian and bicycle enhancements with ADA upgrades along 15 intersections to eliminate conflict points and accommodate safer pedestrian movements. These improvements include
  - » traffic bumpouts, raised medians, and pedestrian refuge islands to reduce pedestrian crossing distances,
  - » narrowing of boulevards to provide improved alignment with street connections,
  - » rectangular rapid flashing beacons (RRFB) to alert motorists of pedestrian crossing, and
  - » marked crosswalks to provide safe crossing zones for pedestrians and bicyclists.

MnDOT will partner with the USDOT to address critical safety concerns in the city of Marshall, accelerate economic development of the region, reduce inequity by providing multimodal access to educational, recreational, and commercial opportunities, tackle climate crisis through sustainable solutions, and partner responsibly with local stakeholders.



Source: MN DEED, Quarterly Census of Employment & Wages, 2<sup>nd</sup> Quarter 2022

#### Figure 3 Project Layout



### STATEMENT OF WORK/DESIGN **STATUS**

The Project is currently in the preliminary engineering design phase. The project layout was approved in July 2021, along with an additional approval in September 2022 for work on Bruce Street. In addition, the environmental documentation is 80 percent complete. The project cost estimates are based on 30 percent engineering design. MnDOT has hired an engineering consultant to work on developing the preliminary design for the project including environmental documentation. So far MnDOT has spent \$1.29 million, in state funds, on the corridor study, environmental assessment, and preliminary design of the Project.

Final project plans and specifications will be prepared in accordance with MnDOT Design Manuals, Standards, and as otherwise indicated in the Request for Proposals issued for this work. Final design engineering will include preparation of 60 percent, 90 percent, and 100 percent construction plans, cost estimates, signal, signing, and lighting designs, traffic management plans, right-of-way acquisition plans, and risk management plans, among others. MnDOT will hire

contractors to construct the Project in accordance with its workforce and labor development plans. MnDOT will be responsible for facilitating the coordination of all activities necessary for implementation of the Project. MnDOT will cover the maintenance costs upon completion of the Project.

### PROJECT HISTORY

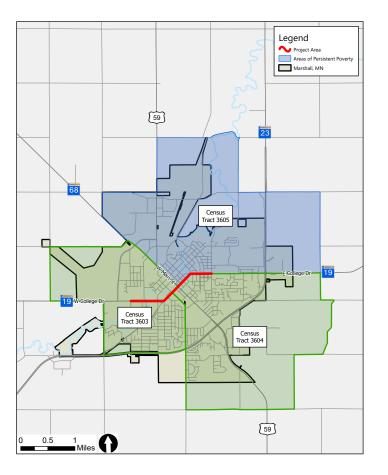
As MN 19 travels through downtown Marshall, it provides a key connection to important community destinations such as schools, churches, parks, shopping centers, dining, and other businesses. In addition, MN 19 serves as a corridor and node for large freight vehicles. Planning for full reconstruction of an important rural connector and minor arterial like MN 19 requires an approach focused around understanding current and future roadway use; even more importantly, it must fully consider the needs of people who live, work and drive along the corridor every day. Careful planning of improvements that integrates stakeholder feedback is key to identifying design solutions and gaining support from the broader community.

The roadway within the Project area was originally built in 1920. Between 1955 and 1956, base widening and bitumen seal coating was performed. Signals were added at the intersection of Main Street, West Lyon Street, Whitney Street, and Bruce Street between 1971 and 1974; and resurfacing was performed in 1978. The most recent pavement rehabilitation

occurred in 2016 where the surface was micro-milled and an ultra-thin bonded wearing course (UTBWC) was applied. Even though there have been a number of attempts to secure funding for the Project, no funds have been spent on resurfacing/improvements on the corridor since 2016.

# **PROJECT LOCATION**

#### Figure 4 Project Location in Regional Context



The Project runs approximately 1.84 miles in length along MN 19 College Drive bound by Fairgrounds Road to the west and Bruce Street to the east. MN 19 is intersected by 20 cross streets within the project limits.

The city of Marshall is the county seat for Lyon County and a vital economic hub for southwestern Minnesota. According to the Lyon County Labor Study Report, the County has a lower median household income than the state of Minnesota, and a higher percentage of households with incomes below \$50,000. Marshall has a population of nearly 13,700 residents as per the 2019 American Community Survey (ACS) estimates. The city is located near many small communities with populations of typically less than 5,000 people.

According to the RAISE grant mapping tool, the Project is located within a rural area, and therefore, is designated as a rural capital project. The Project sits across three census tracts (3603, 3604, and 3605), of which one (3605) is designated as the only Area of Persistent Poverty (APP) in Lyon County (Figure 4). Census tract 3605 is also designated as a Qualified Opportunity Zone and Disadvantaged tract according

to Justice40 Climate and Economic Justice Screening Tool, version 1. The Project is not located in a Historically Disadvantaged Community (HDC), Empowerment Zones, Promise Zones, or Choice Neighborhoods.

### SUPPORTING DOCUMENTS

All supporting documents and the RAISE grant application narrative are also available to view at the following webpage: https://www.srfconsulting.com/mn-th19-raise-grant/