URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET

DATE: 2/28/2024

PRIORITY# 2 Regional: N Urban Roads: Y

City: Minot Street: 16th Street SW

County: Ward Length: 3,045 feet from Burdick Expressway to 2nd Avenue SW

Proposed Improvement: Total replacement of the asphalt sections of 16th Street with new curb & gutter and non-reinforced concrete pavement (project limits are defined as Burdick Expressway to 2nd Ave). Convert 4-lane section to 3-lane section. Storm sewer replacement along the corridor. Sidewalk replacement with ADA upgrades. Install shared use path or bike lanes along the corridor. Improve location of pedestrian push buttons at signal crossings to comply with ADA and MUTCD standards. Replace water transmission mains and sanitary sewer under 16th Street from 7th Ave SW to 3rd Ave SW. Replace all street lighting with new standards and luminaires. Replace 16th St SW traffic signals at 2nd Ave SW. Potentially install roundabouts or other traffic capacity improvements.

Cost Estimates Breakdown (in $1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
400	1,064	430	0	7,192		2,571	11,657

Present Road: Surface Width? 45' average Surface Type? Asphalt and Concrete

On Street Parking Allowed? No Present: (No)
Proposed: (No)

Proposed Improvements

ADT Present: 11,605 Yr: 2023 Travel Way Width : 45'

ADT Design: 14,440 Design year: 2045 No. of Lanes: 3

Design Speed: 25 to 40 mph Roadway Width: 40' to 49' depending on options

Maximum Curve: Unknown – To Be Determined Min. R/W Width: 66'

Maximum Grade: Unknown – To Be Determined

Right of Way

Will Additional ROW or easement be acquired? YES ROW acquisition by: City

Has any ROW easements been acquired since 7-1-72: YES ROW Condemnation by: City

Est. No. of occupied family dwelling to be displaced? 0 to 2 homes depending on options

Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): No additional impacts are anticipated

Will there be any impacts to 4(f) or 6(f) properties: No

Airports: No Public Hearings: Yes, public input meeting was held

Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex

Transportation Enhancements: ADA Upgrades, Sidewalk and Shared Use Path replacements, Replace pedestrian push buttons at crossings, potential bike lanes, potential roundabouts

Intermodal: No

Pedestrian Needs: ADA Upgrades, Sidewalk and Shared Use Path replacement, replacement of pedestrian push buttons at crossing, potential bike lanes.

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF	1	2 Underpass				
CP	1	1 Underpass				

Purpose and Need Statement:

Purpose of Project

The purpose of this project is to:

- Restore the structural and functional condition of the existing asphalt pavement segments, by reconstructing 16th Street SW to concrete pavement from:
  - Burdick Expressway to 2nd Avenue
- Replace deficient and obsolete portions of the City watermain and sanitary sewer system.
- Provide acceptable traffic operations within the corridor.
- Provide storm sewer upgrades and allow for adequate drainage.

- Improve pedestrian and bicycle facilities along the corridor and ensure that they meet ADA requirements.

Need for Project

16th Street SW is typically a 4-lane roadway section within the project corridor, with two travel lanes in each direction and occasional dedicated turn lanes at intersections.

- The existing asphalt pavement (located from 7th Avenue SW to 5th Avenue SW) has exceeded its useful life and needs to be replaced.
- Concrete pavement repair is necessary on some isolated panels in the concrete pavement portions of the project corridor.
- No dedicated left turn lanes exist in the segment between the Burdick Expwy and 2nd Avenue SW intersections, requiring left-turning vehicles in each direction to turn from the inside thru lane.
- The 5th Avenue SW intersection is currently configured at an offset with both legs located on a sharp curve. This configuration combined with the lack of left turn lanes on 16th Street SW, creates sight distance issues and a high number of intersection conflicts at these two full-access intersections.
- Portions of the City utility infrastructure within the project corridor are constructed with older materials, such as cast iron or vitrified clay, and need to be replaced.
- Existing sidewalks and curbs do not meet ADA requirements.
- No on-street or off-street bicycle facilities exist north of 7th Avenue SW.
- The existing traffic signal system at 2nd Avenue is deteriorating and in need of replacement.
- The existing lighting system throughout the corridor is deteriorating and in need of replacement.

Existing Conditions:

1. When was the current street section built? Has there been any additional maintenance to the street section?
   This area was originally platted in the late 1950's and early 1960's. The first record of asphalt paving of the area states 1964. With multiple reconstructions throughout localized areas of the section. With the most recent section being constructed in concrete in 2002 and 2018/2019 for sections from 2nd Ave to 200' south of 3rd Ave SW and 7th Ave SW to W Burdick Expressway, respectively.

2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes?
   Four 11-foot wide driving lanes with left-turn lanes included at signaled intersections. Signaled intersections have four 12-foot wide lanes with an additional 12-foot wide left-turn lane.

3. What is the condition of the pavement section?

   A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting?
   B. If the pavement section is concrete, are there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

Asphalt section has rutting, longitudinal cracking, and transverse cracking. The section also has localized alligator cracking and raveling. The section has been patch on numerous occasions.
Concrete sections of the pavement are in fair to new condition. CPR and diamond grinding will be needed on existing concrete surfaces.

4. Any existing geometric concerns?
Geometric concerns include the curves on 16th St SW from 3rd Ave SW to W Burdick Expressway, as well as the absence of a two-way left-turn lane throughout the section.

5. Are there any access points to adjoining properties that present a special concern?
Access to and from 5th Ave SW is offset and located on a curve.

6. Are there any existing sidewalks or shared use path in place?
Yes, sidewalks need to have some curb ramps constructed for compliance. Sidewalks need to be replaced due to condition.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Existing storm sewer is in fair condition, but is undersized. The storm sewer will be upsized to meet current requirements and will align with the new road improvements.

8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
Sanitary sewer and watermains must be replaced. Their condition does not allow for other methods of construction.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
The existing lighting is HPS, the proposed project will upgrade the lighting to LED. Current light standards are City of Minot Type "C" which is a 40 Ft light standard with a 6 Ft davit arm. The whole system will have to be replaced.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
There are currently traffic signals along 16th St SW at 2nd Ave SW, and W Burdick Expressway. Per the NDDOT High Crash Location List, none of these intersections are high accident rate locations. No additional lanes are anticipated to be added/needed.

Remarks:

_____

_____

City Engineer: _____ Date: 2/28/2024

District Engineer: _____ Date: _____

Note: ***Please attach a map showing location and extent of the project and any additional supporting documents.***

Study Area

Arrowhead Shopping Center

16th St SW

2nd Ave SW

CP Railroad

Phase 2 - Burdick to 2nd Ave

Perkett Elementary School

5th Ave SW

Mouse River

BNSF Railroad

Phase Line

Jack Hoeven Wee Links Golf Park

Minot Water Treatment Plant

Minot High School - Magic City Campus

Burdick Expy W

11th Ave SW

Phase 1 - Burdick to 14th Ave

14th Ave SW

16th Street SW

N

Minot City Limits

City of Minot

NORTH Dakota | Transportation

Be Legendary.

Project Location Map

Project No: SU-4-989(134) PCN: 23860

City of Minot Project 4780

16th Street SW Reconstruction

14th Ave SW to 2nd Ave SW

16th Street SW

RECONSTRUCTION PROJECT

Project Costs

2028 – 16th St Reconstruction: Burdick Expressway to 2nd Avenue SW (Phase 2)

Cost Breakdown:	
Federal Participating Road Costs:	$ 5,602,000
Federal Participating Drainage Costs:	$ 1,590,000
City Costs (Engineering, Right of Way, Water/Sewer)	$ 4,465,400
Total	$11,657,400

Revenue Share:	
Federal Cost Share	$ 5,376,400
City Funds	$ 6,281,000
Total	$11,657,400