



City of Grand Forks  
Staff Report  
Committee of the Whole – October 24, 2022  
City Council – November 7, 2022

**APPROVED & ACCEPTED**  
by City Council  
11/07/2022  
*Maureen Storstad*  
Maureen Storstad  
City Auditor

---

**Agenda Item:** Plans & Specifications for City Project No. 8359 – Urban Signal Rehab

---

**Submitted by:** Engineering Department, David Kuharenko, PE (Assistant City Engineer)  
Christian Danielson, PE (Civil Engineer, Principal)

---

**Staff Recommended Action:** **Approve Plans & Specifications and authorize staff to direct NDDOT with advertising for bids for City Project No. 8359 – Urban Signal Rehab**

---

**Committee Recommended Action: Motion by Kvamme, second by Vein**  
**Motion carried unanimously**

---

**Council Action:**  
Motion by Sande, second by Weigel to approve on consent agenda.  
Motion carried unanimously.

---

**BACKGROUND:**

This project includes rehabilitating the signal systems at 12 intersections citywide utilizing approximately \$2.36m of federal funding through the Department of Transportation (NDDOT) during the 2023 construction season. The federal funding is being provided through the Urban Roads Program. The project is proposed to include various levels of rehabilitation and reconstruction techniques to prolong the life of City traffic signals. Techniques expected to be used include but are not limited to: sandblasting & painting, new cable & conduit, new controllers, new signal heads, new camera equipment, and entirely new signal systems where financially feasible.

Due to rising costs on materials and labor, the construction estimate for this project is projecting costs to exceed the 2023 budgeted amount. To allow flexibility, this project is anticipated to be bid with a base bid that includes 10 of the 12 total signals and an alternate that includes all 12 signals. The City would then have the option of awarding either a reduced project scope or the full project scope depending on the bid prices.

This project has been considered at several previous Council/Committee/Public meetings, some of which are as follows:

- November 13, 2017 – Committee of the Whole received an informational item regarding the URP and the proposed project.

- February 5, 2018 – Council approved a Federal Transportation Request which included this project.
- April 4, 2022 – Council approved an Engineering Agreement with SRF for Design Services in the amount of \$359,767.25

**ANALYSIS AND FINDINGS OF FACT:**

- This project has a funding split of approximately 80% Federal and 20% Local, with a cap of \$2,360,000 on eligible project expenses.
- The current estimated total project costs, including design engineering, construction engineering, and construction are as follows:

	<u>Total Cost</u>	<u>Federal</u>	<u>Local</u>	<u>Budget Year</u>
Design Engineering (C)	\$359,767	\$0	\$359,767	2022
Construction (E)	\$3,318,746	\$2,360,000	\$958,746	2023
Construction Engineering (E)	\$497,812	\$0	\$497,812	2023
<b>Total Project Costs</b>	<b>\$4,176,325</b>	<b>\$2,360,000</b>	<b>\$1,816,325</b>	

(C) Contract Cost  
(E) Estimated Cost

- Funding for the City share on this project will be from Street/Infrastructure Fund 4815 where \$590,000 was budgeted for 2023.
- 2023 expenses for the base bid plus alternate which includes construction and construction engineering are projected to total approximately \$1,457,000.
- Given the shortfall between the 2023 expenditures and budget, it is likely that a budget amendment will be requested at the time of awarding bids.
- The project is expected to be bid with an alternate giving the option to reduce the amount of work, saving approximately \$650,000 in local funding.
- Bids are planned to be opened in February of 2023 at the NDDOT in Bismarck, ND.
- It is expected that this project will again be placed on upcoming Committee of the Whole agendas, some of which are as follows:
  - February 2023 – Award of Bids
  - Early Spring 2023 – Construction Engineering Agreement
- Construction is currently anticipated to take place during the 2023 construction season.

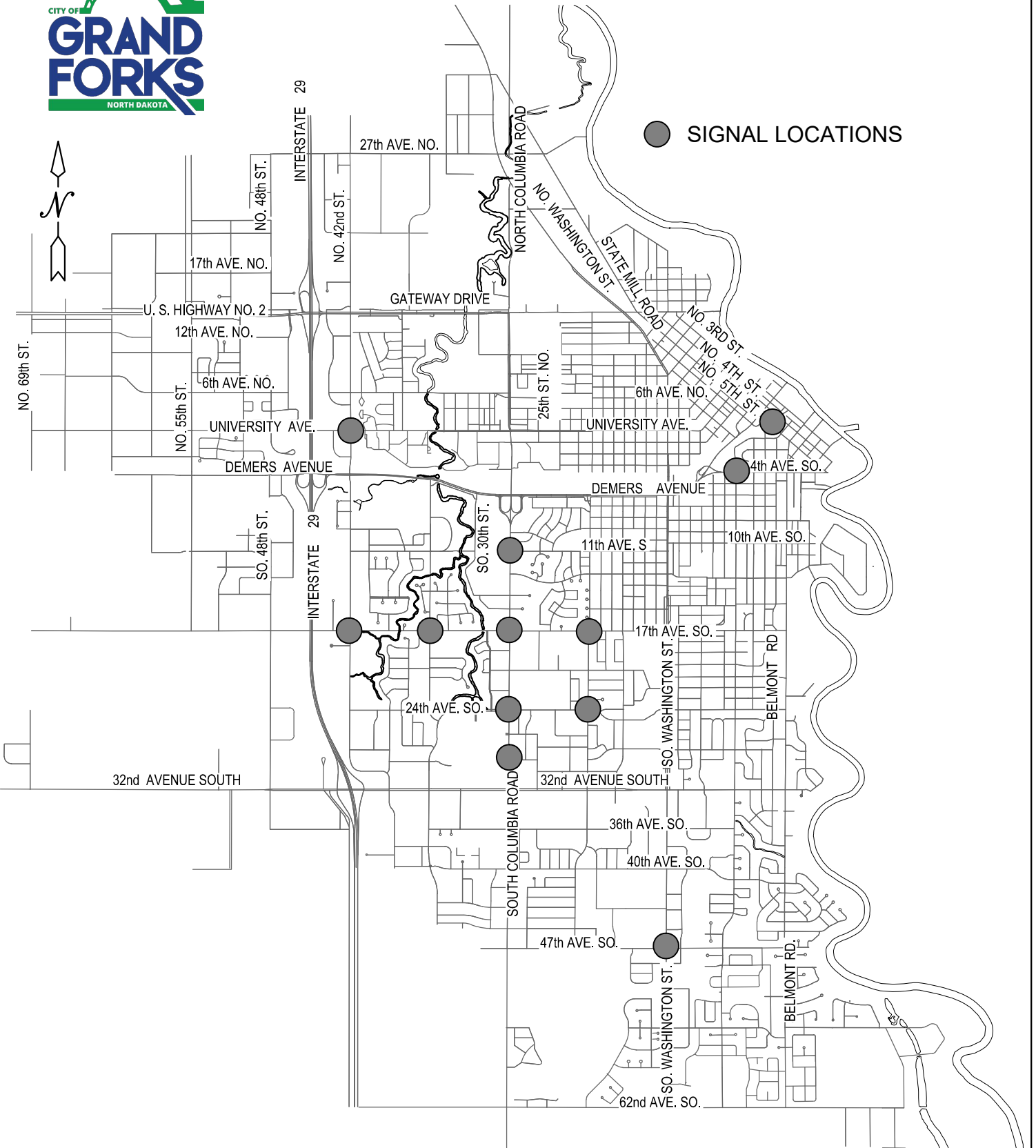
**SUPPORT MATERIALS:**

- Project Location Map (1 page)
- Page 510 of the 2022 City Budget showing the 6-Year CIP and programmed amount for this project (1 page)

# PROJECT LOCATION MAP

## GRAND FORKS, NORTH DAKOTA

### URBAN SIGNAL REHAB PROJECT



City of Grand Forks  
2022 City Budget

CIP (Continued)  
Street Infrastructure Multi-Year Plan

	2022	2023	2024	2025	2026	2027
<b>SOURCES OF FUNDS:</b>						
Highway Users Tax	\$ 3,084,801	\$ 3,146,497	\$ 3,209,427	\$ 3,273,616	\$ 3,339,088	\$ 3,405,870
Sales Tax Revenue	3,102,928	3,164,987	3,228,287	3,292,853	3,358,710	3,425,884
Additional 1/2% Sales Tax - Street Portion	3,207,539	3,271,690	3,337,124	3,403,866	3,471,943	3,541,382
Prairie Dog Funding	-	-	-	2,155,000	2,500,000	5,174,657
Transfer from American Rescue Plan Grant Fund (2190)	543,782	-	-	-	-	-
Interest	103,150	95,214	74,348	54,317	48,936	20,309
Estimated Yearly Revenue	10,042,200	9,678,388	9,849,186	12,179,651	12,718,678	15,568,102
Use of Bridge Reserve Cash (1)	400,000	500,000	1,700,000	-	-	-
Use of Bond Reserve (2)	-	-	-	-	-	-
Est Carryover Beginning Yr	10,314,962	9,521,392	7,434,840	5,431,681	4,893,640	2,030,874
Available for Expenditure	20,757,162	19,699,780	18,984,026	17,611,332	17,612,318	17,598,976
<b>USES OF FUNDS:</b>						
<b>PRIORITY A</b>						
<b>ANNUAL NON-PROJECT OPERATING COSTS</b>						
Interdepartmental Charges/Federal Match	611,727	630,079	648,981	668,451	688,504	709,159
Street Mtce (General Fund)	1,300,000	1,339,000	1,379,170	1,420,545	1,463,161	1,507,056
Property Management	292,293	301,062	310,094	319,396	328,978	338,848
Set Aside Reserve for Bridge/Underpass Project	100,000	100,000	100,000	100,000	100,000	100,000
Debt Service (2021) (2)	-	-	-	-	-	-
<b>Sub-total Ongoing Obligations</b>	2,304,020	2,370,141	2,438,245	2,508,392	2,580,644	2,655,063
<b>PRIORITY B</b>						
<b>PROJECTS WITH FEDERAL FUNING</b>						
Bikepath Development	-	250,000	-	250,000	-	250,000
N 4th St (Demers Ave to 1st Ave N)	800,000	-	-	-	-	-
N Wash Reconst (5th Ave S to 1st Ave N- Inc. Underpass)	900,000	-	-	-	-	-
N Washington Reconstruct - (Portion from Bridge Res) (1)	400,000	-	-	-	-	-
Mill Rd Mill & Overlay COVID Funding	215,350	-	-	-	-	-
N 5th St (Gateway Dr to Demers Ave) Chip Seal	10,000	-	-	-	-	-
Demers Ave Overpass Rehab	200,000	-	-	-	-	-
Traffic Signal Maintenance (Urban System)	-	590,000	-	-	-	-
Columbia Rd Overpass (Use of Bridge Reserve Funds) (1)	-	500,000	1,700,000	-	-	-
Traffic Signal Maintenance (Regional System)	-	-	750,000	-	-	-
32nd Ave (I-29 to Washington) CPR & Microseal	-	-	-	350,000	-	-
Future Urban Grant Program Project TBD (2025)	-	-	-	500,000	-	-
Columbia Rd (University Ave to 8th Ave N)	-	-	-	840,000	1,300,000	-
Future Regional Road Project (2026)	-	-	-	-	500,000	-
Point Bridge Rehabilitation	-	-	-	-	200,000	-
S Washington St (Demers to Hammerling) Reconstruct (2028)	-	-	-	-	-	200,000
Future Urban Roads Project (2027)	-	-	-	-	-	400,000
Future Urban Grant Program Project TBD (2027)	-	-	-	-	-	500,000
Future Regional Project TBD (2027)	-	-	-	-	-	500,000
<b>Sub-total Projects With Federal Funding</b>	2,525,350	1,340,000	2,450,000	1,940,000	2,000,000	1,850,000
<b>PRIORITY C</b>						
<b>OPERATION AND MAINTENANCE</b>						
Bikeway Capital & Mtce	50,000	100,000	100,000	100,000	100,000	100,000
Street Maintenance Program	2,000,000	2,000,000	3,000,000	3,120,000	3,245,000	3,375,000
S 20th St (20th Ave S to 24th Ave S)	910,400	-	-	-	-	-
Downtown Alley Reconstruct	200,000	-	-	-	-	-
S 20th St (17th Ave S to 20th Ave S)	-	910,400	-	-	-	-
Industrial Park Rehabilitation	50,000	50,000	50,000	50,000	50,000	50,000
Belmont (47th to Rivers Edge)	1,144,000	-	-	-	-	-
Street Mtce includes: Traffic signal maint; minor street repair; mtce lights; minor intersection; diamond grade signs; ADA; batteries)	800,000	839,700	856,200	872,800	889,600	903,600
LED Street Light Replacement Program	60,000	-	60,000	-	60,000	-
Centracs Traffic Signal Software Renewal	20,000	20,000	20,000	20,000	20,000	20,000
Pavement Management	10,000	10,000	10,000	175,000	10,000	10,000
Arterial Street Lightning Maintenance (Conductors and Fixtures)	-	100,000	-	100,000	-	100,000
Traffic Signal and School Beacon Interconnect	50,000	-	-	-	-	-
Intelligent Transportation System	90,000	90,000	90,000	90,000	90,000	90,000
Transportation Studies	-	80,000	-	80,000	-	-
Consulting Assistance	50,000	-	50,000	-	50,000	50,000
Quiet Zone Redundancy	50,000	50,000	-	-	-	-
Contingency	100,000	100,000	100,000	100,000	100,000	100,000
<b>Sub-total Operations and Maintenance</b>	5,584,400	4,350,100	4,336,200	4,707,800	4,614,600	4,798,600
<b>PRIORITY D</b>						
<b>SUPPORTING EXPANDING DEVELOPMENT</b>						
S 20th St (62nd Ave S to 66th Ave S)	672,000	-	-	-	-	-
47th Ave S (Columbia Rd to S 34th St) Temporary	-	460,000	-	-	-	-
Cherry St (62nd Ave S to 66th ave S)	-	739,200	-	-	-	-
S 48th St (32nd Ave S to 36th Ave S)	-	500,000	580,800	-	-	-
S 34th St (45th Ave S to 47th Ave S)	-	-	-	-	504,000	-
6th Ave (55th to 58th)	-	-	-	-	-	875,200
S Washington St (SED to 55th Ave S)	-	-	-	-	-	5,250,000
S 38th St (43rd to 47th Ave S)	-	-	-	-	-	760,320