

MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee
FROM: Eric Williams, Natural Resources Planner
DATE: July 2, 2019
SUBJECT: Platte River Bridge Trail Project
Professional Services Agreement

The District is acting as the lead agency according to an Interlocal Agreement with Bellevue, Plattsmouth, Lower Platte South NRD, Sarpy County, Cass County, and working in collaboration with the Nebraska Department of Transportation (NDOT), and the Metropolitan Area Planning Agency (MAPA) to design and construct this project. The trail and bridge will run parallel to US Highway 34/75 over the Platte River, see the attached map.

In January, the District entered into a Program Agreement with NDOT for this project, and in March notification was sent to NDOT to begin negotiations with Schemmer for Professional Engineering services. NDOT has now provided the Professional Services Agreement including the scope, schedule, and fee for design of this project. Sections of the agreement are attached to highlight the details on those aspects of the agreement.

Schemmer will provide survey, right-of-way survey, final bridge design, final box culvert design, trail design, hydraulic analysis, right-of-way design, geotechnical investigation, and opinion of probable cost. Work is expected to begin in July 2019, and continue up to an expected project letting in November 2021. Total project design costs for this agreement will be \$228,536.63.

- **Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the proposed Professional Services Agreement for Preliminary Engineering with Schemmer & Associates for the Platte River Bridge Trail project, with cost not to exceed \$228,536.63, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.**

Attachment 1, US Highway 34 Bike and Walking Trail



Location



Sarpy County GIS



1210 Golden Gate Dr.
Suite 1130
Papillion, NE 68046
maps.sarpy.com

Legend

Project location
shown in green

1: 4,800



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the source records and information sources to ascertain the usability of the information.

EXHIBIT "A"

Scope of Services

Project Name: Platte River Bridge Trail Phase 2

Project No. MAPA-77(62)

CN: 22770

Engineering Design Services

PROJECT DESCRIPTION

The scope of services for this project involves engineering design services required to produce final construction plans and specifications for the following:

Project description: The purpose of this project is to provide a recreation and active transportation connectivity across the Platte River along the US Highway 34/75 bridge from Allied Road to Beach Road.

The project will include the following: survey, right-of-way survey, final bridge design, final box culvert design, trail design, hydraulic analysis, right-of-way design, geotechnical investigation and opinion of probable cost.

TASKS AND TASK ASSIGNMENTS

Projects located in the jurisdictional area of the Metropolitan Area Planning Agency, Omaha (MAPA) and a Responsible Charge (RC) who is an employee of the respective Local Public Agency will manage the jurisdictional area of the Metropolitan Area Planning Agency (MAPA). Projects located outside of MAPA and a RC who is an employee of the Nebraska Department of Transportation (NDOT) will manage the project.

It is anticipated the project will require the following major tasks:

- a. Environmental Documents and coordination (Design Consultant/NEPA Consultant)
- b. Project Management and Quality Control
- c. Preliminary Field Survey

- d. Roadway Design (including Right-of-Way Design)
- e. Hydrology and Hydraulic Design
- f. Bridge Design and Concrete Box Culvert Design.
- g. When NDOT is the Responsible Charge (RC) the National Pollutant Discharge Elimination System/ and the Storm water Pollution Prevention Plan/SWPPP will be prepared by the NDOT's Roadside Stabilization Unit. The erosion control plans will be designed by the Design Consultant. NDOT's Roadside Stabilization Unit will submit the Notice of Intent, NPDES permit and the SWPPP.
- h. PS&E Submittals
- i. Project Meetings (Kick off meeting, Progress, Plan in Hand (PIH) meeting and Utility meeting)
- j. Public Involvement
- k. Geological Studies

APPLICABLE PUBLICATIONS

Overview: Work shall be done in accordance with the most current version of the following materials. The most current versions of the NDOT materials can be obtained from the NDOT Website.

- 1) LPA Guidelines Manual for Federal-Aid Projects. NDOT April 2009
- 2) A Policy on Geometric Design of Highways and Streets 2011 (AASHTO)
- 3) Federal Emergency Management Agency (F.E.M.A.) National Flood Insurance, Flood Boundary and Floodway Map, and Flood Insurance Study (FIS)
- 4) Manual on Uniform Traffic Control Devices (FHWA), 2009 Edition
- 5) MUTCD - Nebraska 2011 Supplement to the MUTCD
- 6) Nebraska Minimum Design Standards – Counties, Municipalities, State - 2016 (or most current) (Nebraska Administrative Code Title 428; Rules and Regulations of the Board of Public Roads Classifications and Standards
- 7) Nebraska State Plane Coordinate System Datum Adjustment Computations Lambert Conformal System Manual
- 8) Roadside Design Guide, 2011 (AASHTO)

- 9) Standard Specifications for Highway Construction 2017 (or latest edition) (NDOT)
- 10) NDOT Hydraulic Analysis Guidelines for Consultant
- 11) NDOT Roadway Design Manual & Drainage Design and Erosion Control Manual
- 12) Bridge Office Policies and Procedures Manual
- 13) Uniform Relocation Assistance and Real Property Acquisition Act (the Uniform Act)
- 14) The NDOT Right-of-Way Manual.
- 15) Evidencing Nebraska Land Titles (Nebraska Land Title Association)
- 16) So you Want Access to the Highway (March 2008)

SOFTWARE AND EQUIPMENT REQUIREMENTS

1. The Consultant's design and drafting software and design files must be compatible with NDOT's design and drafting software. Information on NDOT's design protocol can be found on NDOT's website on the Roadway Design page; <http://roads.nebraska.gov/business-center/design-consultant/>.
2. The Consultant's design must be accomplished using the design software GEOPAK version SS4 or later but no later than that in use by NDOT. The consultant's design must follow NDOT's drafting procedures, guidelines, and file naming convention using the appropriate version of MicroStation dgn. Format CAD software. Consultant's use of an earlier version of GEOPAK OpenRoads may be approved for specific activities with written permission of NDOT and at NDOT's sole discretion.
3. In many cases, projects will require that a 3D model be generated using GEOPAK OpenRoads technology.
4. Reports and documents must be submitted in a form compatible with Microsoft Office products unless otherwise directed.
5. The Consultant will provide all software and computer equipment required to complete the work including any analysis software required to perform the bridge design work.
6. The Consultant is required to complete work (CAD/Geopak files) within the ProjectWise environment. All project document submittals (non CAD/Geopak) are to be uploaded into OnBase. Modeling files to be located within ProjectWise.

Schedule

Project Timeline. The Design Consultant shall prepare a schedule for project milestone dates and the schedule will be updated quarterly or if dates change. The Design Consultant will show old dates with the updated schedule dates. The schedule will be printed on a separate document as well as included in the agreement. The document will include the project name, the project number, project control number Design Consultant firm name, project manager and date.

Notice to Proceed for PE	July 15, 2019
Submit 30% Plans with LOC's and existing ROW	January 15, 2020
Start NEPA	February 3, 2020
Submit 60% Plans	October 21, 2020
Complete NEPA	January 13, 2021
Submit Draft PS&E (90%) plans	March 24, 2021
PS&E Turn in	June 10, 2021
Let Project	November 4, 2021

Preliminary and Final Design

Project Cost

Project Name: Platte River Bridge Trail - Phase 2

Project Number: MAPA-77(62)

Control Number: 22770

LPA Name and County: Papio-Missouri River NRD, Sarpy County

Firm Name: Schemmer

Consultant Project Manager: Matt Shimerdla

Phone/Email: 402-488-2500, mshimerdla@schemmer.com

LPA Project Liaison: Eric Williams

Phone/Email: ewilliams@papionrd.org

NDOR Project Coordinator: _____

Phone/Email: _____

Date: _____

Direct Labor Costs:	Hours	Rate	Amount
Personnel Classification			
Principal	40	\$61.24	\$2,449.60
Registered Land Suveyor	16	\$40.81	\$652.96
Environmental Scientist			
Project Manager	395	\$53.00	\$20,935.00
Senior Engineer	186	\$52.30	\$9,727.80
Engineer	411	\$41.86	\$17,204.46
Senior Designer/Technician	554	\$31.54	\$17,473.16
Administrative	4	\$20.00	\$80.00
Survey Party Chief	44	\$29.25	\$1,287.00
Surveyor I	44	\$18.93	\$832.92
Lab Tech	26	\$20.88	\$542.88
TOTALS	1720		\$71,185.78

Direct Expenses:	Amount
Subconsultants	\$4,380.00
Printing and Reproduction Costs	\$1,500.00
Mileage/Travel	\$527.80
Lodging/ Meals	
Other Miscellaneous Costs	
TOTALS	\$6,407.80

Total Project Costs:	Amount
Direct Labor Costs	\$71,185.78
Overhead @ 175.70%	\$125,073.42
Total Labor Costs	\$196,259.20
Fixed Fee @ 13.00%	\$25,513.70
Facility Capital Cost of Money (FCCM) @ 0.50% (direct labor cost x FCCM%)	\$355.93
Direct Expenses	\$6,407.80
PROJECT COST	\$228,536.63

Consultant Independent Cost Estimate

Project Cost