



City of Grand Forks
Staff Report
Committee of the Whole – August 12, 2019
City Council – August 19, 2019

APPROVED & ACCEPTED

by City Council

08/19/19

Maureen Storstad
Maureen Storstad
City Auditor

Agenda Item: Amendment No. 1 to Engineering Services Agreement with CPS for City Project No. 8028 - Mill and Overlay University Avenue (N 3rd to State Street)

Submitted by: Engineering Department, Mark S. Walker, PE (Assistant City Engineer)
Mike Yavarow, PE (Civil Engineer Principal)

Staff Recommended Action: **Approve Amendment No. 1 with CPS for Design Services in the amount of \$209,308.00 for City Project No. 8028 - Mill and Overlay University Avenue (N 3rd to State Street)**

Committee Recommended Action: Refer to City Council with the recommendation to approve.

Council Action: Approved unanimously on consent agenda.

BACKGROUND:

This project includes milling and overlaying University Avenue utilizing approximately \$2.2M of federal funding through the North Dakota Department of Transportation (NDDOT). An Engineering Agreement was previously approved which was for Preliminary Design Engineering services associated with the project which included a number of tasks necessary to be able to utilize federal funding for the project. The next step in project development is to begin the Final Design phase which is the purpose of this Amendment No. 1. The Final Design work will include preparation of the plans, specifications, and other bidding documents, easement acquisitions, and other necessary design related tasks. The original Engineering Services Agreement was intended to include only Preliminary Engineering Services and was not intended to include Final Design engineering services. As presently scheduled, the project is proposed to be bid on February 7, 2020 and constructed in the 2020 construction season.

Although the project description includes from N 3rd to State Street, the segment from Columbia Road to the English Coulee will not be included in this project as it is currently being reconstructed.

This section of University Avenue was originally constructed in multiple segments at different time periods. The year of construction of some segments is unknown and some of the segments were originally constructed in the 1920's or 1930's. The segment from 3rd to 10th Street was originally constructed in 1950 and the segment from 21st to State Street was widened in 1969. In addition, a number of asphalt overlays and seal coats have been installed on the various segments with the first overlay occurring in 1951 and the most recent overlay occurring in 2002 with a subsequent seal coat in 2009. The roadway surface is in rather poor condition with a large number of pot holes. Some sections of street were in such poor condition that smaller areas of the street had to be spot milled and overlaid last year.

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

- This project has been programmed for several years and has been included on the NDDOT's listing for projects eligible for Federal Highway Urban Funding
- December 15, 2014 – Council approved a Federal Transportation Funding Request which included this project
- August 11, 2015 – Committee of the Whole received an update indicating that the project was not selected for federal funding
- November 16, 2015 - Council again approved a Federal Transportation Funding Request which included this project
- February 19, 2019 – Council approved an Agreement with CPS for Preliminary Engineering Services in the amount of \$89,042.50.
- In addition, this project has been previously reviewed at a number of various committee meetings

ANALYSIS AND FINDINGS OF FACT:

- The original Engineering Services Agreement was intended to include only necessary preliminary design engineering work following NDDOT procedures and included preliminary surveys, environmental permitting, project cost estimating, and other preliminary design considerations, and was not intended to include the final design engineering services considered by this Amendment No. 1.
- The additional funds requested by this Amendment are intended to pay for final design engineering services following NDDOT procedures, including preparation of plans and specifications, easement acquisition, development of final bid quantities and the final cost estimate, and other miscellaneous engineering services through the bidding process.
- The amount of the original Agreement was \$89,042.50.
- The proposed amendment amount is for \$209,308.00 bringing the new contract amount to 298,350.50.
- Construction Engineering is not included in the original Agreement or Amendment No. 1 but is intended to be added by a future Agreement.
- The original Agreement and proposed Amendment are on an hourly not-to-exceed contract.
- In addition to milling and overlaying the street, all of the sidewalk handicap ramps along the corridor that do not currently meet ADA compliance regulations will be removed and reconstructed to comply with ADA regulations.
- It is worth noting that the NDDOT is now requiring that temporary easements be acquired from properties adjacent to sidewalks and handicap ramps that are intended to be removed and replaced. It is estimated that temporary easements will need to be obtained from approximately 60 different properties and approximately \$75,000 of the cost of this Agreement is associated with acquisition of these easements.

- The total project cost is currently estimated at \$2.65M.
- The maximum amount of federal funding available for the project is currently capped at \$2.209M.
- Although the federal funding participation rate is 80.93/19.07 for “eligible items” there are ineligible items such as the preliminary and design engineering expenses, utility relocation expenses, and land acquisition costs that must be paid entirely as a local cost.
- The current estimated total project costs are as follows:

	Total Cost	Federal	Local
Construction	\$2,122,700	\$1,717,900	\$404,800
Preliminary Engineering	\$ 89,043	\$ 0	\$ 89,043
Design Engineering	\$ 209,308	\$ 0	\$209,308
Construction Engineering	\$ 212,300	\$ 171,800	\$ 40,500
<u>Easements</u>	<u>\$ 20,000</u>	<u>\$ 0</u>	<u>\$ 20,000</u>
Total Project Costs	\$2,653,351	\$1,889,700	\$763,651

- Funding for the local share will be from Street/Infrastructure Fund 4815.
- Construction is currently anticipated to take place during the 2020 construction season.

SUPPORT MATERIALS:

- Proposed Amendment 1 to Task Order Amendment (4 pages)
- Consultant Rate Sheet (1 page)
- Supporting Documentation showing Engineering tasks, hours, and cost breakdown (1 page)
- Project Location Map (1 page)

This is **EXHIBIT K**, consisting of 4 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated March 7, 2016.

Amendment 1 To Task Order No. 8028

1. Background Data:

- a. Effective Date of Original Task Order: February 19, 2019
- b. Effective Date of this Amendment: August 5, 2019
- c. Owner: City of Grand Forks, North Dakota
- d. Engineer: CPS, Ltd.
- e. Specific Project #8028 - Mill & Overlay University Avenue (3rd to State St.)
Project: Design Engineering Services

2. Description of Modifications

- a. Engineer shall perform the following Design Engineering Services.

Final Design Phase (Exhibit A, Paragraph A1.03)

- 1) Plans: Prepared in accordance with the North Dakota Department of Transportation's (NDDOT): Design Manual, CADD Manual (including Geopak Design Software), and Plan Preparation Guide (PPG).
- 2) Specifications: The NDDOT Standard Construction Specifications for Road and Bridge Construction, 2014 Edition, Supplemental Specifications, and the City of Grand Forks Special Provisions incorporated as applicable as plan notes; will be used for the Project.
- 3) Plan Preparation: Develop detailed base design files and plan sheet files for the following plan sections:

Task 200 CIVIL ENGINEERING

220:160 Right-of-Way (R|W): Prepare acquisition documentation and obtain temporary construction easements necessary for curb ramp construction. Acquisition procedures shall follow Right of Way Local Public Agency Manual (LPA Manual) "Right of Way Acquisition Procedures for Local Public Agency Federal Aid Projects", where applicable. Estimated 60 properties to acquire temporary construction easements from. Coordinate with NDDOT, Owner, and property owner(s) regarding project reviews, acquisition documents, and meetings. Appraisal Value and Waiver Valuation of each property to be prepared by the Owner (City Assessor).

251:502 001 - Title Sheet

251:504 002 - Table of Contents

251:506 004 - Scope of Work: Prepare construction scope of work to provide an overview of the proposed improvements.

251:508 006 - Notes: Prepare plan notes to supplement NDDOT Standard Construction Specifications for Road and Bridge Construction, 2014 Edition and current supplemental specifications.

Exhibit K – Amendment to Task Order

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- 251:510 008 - Estimate of Quantities: Prepare quantity tabulation of all project bid items. Develop and create Axiom links for referenced bid item listing on each plan sheet.
- 251:512 010 - Basis of Estimate: Prepare basis of estimate to show computations and assumptions made for bid quantities including milling, HBP paving, chip/fog or microsurfacing, cored samples and pavement marking.
- 251:516 020 - General Details: Prepare general details for paving transitions, pavement items, utilities, erosion and sediment control, and other applicable details not already provided for in NDDOT's standard drawings.
- 251:518 030 - Typical Sections: Prepare existing and proposed typical roadway sections.
- 251:520 040 - Removals: Prepare plan sheets designating location, items, etc. required to be removed.
- 251:522 050 - Inlet & Manhole Summary: Provide plan sheet information indicating adjustments of valve boxes, curb boxes, castings, and other city utility appurtenances required to facilitate construction.
- 251:532 076 - Temporary Erosion Control: Prepare plan sheets for layout of temporary sediment and erosion control devices of all disturbed areas.
- 251:534 077 - Permanent Erosion Control: Prepare plan sheets for layout of permanent seeding areas of all disturbed landscaped areas.
- 251:536 080 - Miscellaneous Layouts: Prepare plan sheets for layout of curb ramp reconstruction.
- 251:544 090 - Paving & Jointing: Prepare plan sheets for layout of mill and overlay work areas. Include areas of proposed curb and gutter removal and replacement in addition to inlet or catch basin repair work.
- 251:546 100 - Work Zone Traffic Control: Prepare plan sheets and details for staging and phasing plans showing detailed layouts for all construction work zone sequences.
- 251:550 120 - Pavement Marking: Prepare plan sheets and details indicating permanent pavement markings.
- 290:001 Project Management: Project setup for plan development, develop and update project bar chart schedule, Owner | Engineer contract(s), and correspondence. Prepare a bi-weekly project status report and submit to City of Grand Forks and NDDOT representatives. Report will provide project schedule, percent complete for various project tasks, work completed to date, and project issues.
- 290.005 Meeting: Project meetings with Owner, Inter-Office, NDDOT, Utility Companies and General Public. Prepare and distribute PS&E Plans prior to PS&E Plan Review Meeting. Prepare for, conduct and participate in PS&E Plan Review meeting and prepare meeting review comment responses.
- 251:090 Plan Revisions: Revise construction documents in accordance to PS&E Plan Review and Final Office Plan Review comments received from the City of Grand Forks and/or NDDOT.
- 290.006 Coordination:
 - a) Coordinate Plan Development with the Owner and NDDOT.
 - b) Coordinate contract documents necessary for work adjacent to BNSF railroad.
 - c) Provide certification letters to the Owner for the following plan development requirements: Design, Utility, Right of Way, Railroad, and Responsible Charge
 - d) Prepare and distribute electronic version of the Final Plans, Electronic Plan Checklists, Special Provisions, Opinion of Probable Construction Costs, and all other required deliverables in Adobe PDF format to the Owner and the NDDOT.

- 290.070 Engineer's Estimate: Update preliminary opinion of probable cost estimates for PS&E and Final Plan submittals to Owner and NDDOT. Engineer shall prepare an updated Opinion of Probable Construction Costs for the project based on the information contained in the Study and Report Phase documents and any adjustments to total project cost known to Engineer thru the Design Phase.
- 290:090 CE QC | QA: Review project deliverables prior to submittal and distribution to City of Grand Forks and/or NDDOT.
- 4) Final Plan Submittal to NDDOT is November 29, 2019.
- 5) Project bid opening date is February 7, 2020.
- 6) Reimbursable Expense Estimate
 - 220:160 Travel Vehicle (RW Acquisition): Mileage for meeting with property owners regarding Right of Way Acquisition.
 - 220:160 Postage: Postage for project related correspondence relative to Right of Way Coordination and Acquisition.
 - 220:160 Title Opinion (Reis Law Firm): Fees related to preparing Title Opinion for each property regarding Right of Way Acquisition.
 - 290:001 Travel Vehicle (Design): Mileage for project site visits to verify field conditions with respect to proposed design layout(s).

Bidding or Negotiating Phase (Exhibit A, Paragraph A1.04)

- 1) The bidding phase of the project will be conducted by the NDDOT on behalf of the Owner and will be responsible for the following tasks: advertising for bids; distribution of bid documents, maintaining records of prospective bidders to which bidding documents have been issued, issuing addenda, and conducting the bid opening.
- 2) Perform or provide the following additional design tasks or deliverables:

Task 200 CIVIL ENGINEERING

- 210:083 Addenda: Develop plan and/or specification revisions necessary for issuance of project addendum(s) as appropriate to clarify, correct, or change the bidding documents. Includes submittal letter and addenda forms required as part of the bidding documents.
- 290:590 Bidding: Address contractor and/or vendor questions and provide responses to questions received from potential bidders and vendors during the bidding phase.
- 3) After acceptance by Owner of the bidding documents and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, Engineer shall:
 - a) Provide information or assistance needed by Owner in the course of any negotiations with prospective contractors.
 - b) If bidding documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by bidders, but subject to the provisions of paragraph A2.02.A.2 of Exhibit A.
- 4) The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective contractors (except as may be required if Exhibit F is a part of this Agreement).
- 5) The review and approval of project material submittals (Shop Drawings) and certifications is NOT INCLUDED in the Engineer's Scope of Services and shall be considered part of the Work for Construction Engineering Phase Services.

3. Payments to Engineer

Detailed estimate of hours and expenses and consultant rate schedule is provided in Exhibits A and B.

Description	Cost
Original Contract Amount	\$89,042.50
Amount Previous Amendment(s)	\$0.00
<i>Amount This Amendment</i>	<i>\$209,308.00</i>
New Contract Amount	\$298,350.50

Owner and Engineer hereby agree to modify the above-referenced Task Order as set forth in this Amendment. All provisions of the Agreement and Task Order not modified by this or previous Amendments remain in effect.

OWNER: City of Grand Forks

ENGINEER: CPS, Ltd.

By: _____
Dr. Michael Brown

By: _____
Michael K. Korman

Title: Mayor

Title: President

Date: _____

Date: _____

Attest: _____

Attest: _____

Title: Finance Director

Title: Vice President of Engineering

**CPS 2019 SCHEDULE OF RATES**

Period: January 1, 2019 to December 31, 2019

Hourly Rate for Various Employee ClassificationsAdministrative

\$60 Administrative Asst. 1 (AA1)
 \$70 Administrative Asst. 2 (AA2)

Engineers

\$110 Engineer 1 (E1)
 \$125 Engineer 2 (E2)
 \$140 Engineer 3 (E3)
 \$150 Engineer 4 (E4)
 \$160 Engineer 5 (E5)
 \$170 Engineer 6 (E6)

Engineering Technicians

\$70 Engineering Asst. 1 (EA1)
 \$75 Engineering Asst. 2 (EA2)
 \$75 Engineering Tech 1 (ET1)
 \$90 Engineering Tech 2 (ET2)
 \$110 Engineering Tech 3 (ET3)
 \$120 Engineering Tech 4 (ET4)
 \$130 Engineering Tech 5 (ET5)
 \$135 Engineering Tech 6 (ET6)

Surveyors

\$70 Surveyor Asst. 1 (SA1)
 \$75 Surveyor Asst. 2 (SA2)
 \$110 Land Surveyor 1 (LS1)
 \$115 Land Surveyor 2 (LS2)
 \$125 Land Surveyor 3 (LS3)
 \$135 Land Surveyor 4 (LS4)

Environmental Scientist

\$160 Environmental Scientist 2

Reimbursable ExpensesPrinting (Per Copy)

\$0.10 B/W Letter
 \$0.25 Color Letter
 \$0.20 B/W 11"X17"
 \$0.50 Color 11"X17"
 \$0.50 BW Lg. Format (SF)
 \$4.00 Color Lg. Format (SF)

\$0.60/Mile Travel Vehicle
 \$0.75/Mile Heavy Duty Pickup
 \$100/Day UTV

Equipment

\$50/Hr. RTK GPS
 \$60/Hr. Robotic TS

Survey Field Supplies

\$7/EA Property Monuments
 \$20/EA Fence Posts
 \$25/EA Carsonite Witness Post
 \$28/EA Carsonite Drainage Post
 \$45/100 Lath
 \$35/100 Hubs

Rates are Adjusted Each Year on January 1

Exhibit A: Estimate of Project Hours and Reimbursable Expenses

Project: Mill & Overlay University Avenue (3rd to State Street) - Design, Bidding and Negotiating Phase
 Prepared By: Deon Wawrzyniak
 Date: July 17, 2019
 City Project No. 8028



Task	Hours By Employee Classification							Total
	Engineer 5	Engineer 1	Engineering Assistant 1	Land Surveyor 4	Land Surveyor 2	Engineering Technician 4	Engineering Technician 3	
(2019 Hourly Rates)	\$ 160	\$ 110	\$ 70	\$ 135	\$ 115	\$ 120	\$ 110	
200 CIVIL ENGINEERING								
Final Design Phase	372	560	336	30	6	180	152	\$ 187,700
220:160 Right-of-Way (R W) (Est. 60 Properties)	120	60	120	30		180		
251:502 001 - Title Sheet	1	4						
251:504 002 - Table of Contents	1	2						
251:506 004 - Scope of Work	1	4						
251:508 006 - Notes	8	2						
251:510 008 - Estimate of Quantities	4	24	12				12	
251:512 010 - Basis of Estimate	2	12	4					
251:516 020 - General Details	2	12						
251:518 030 - Typical Sections	1	4						
251:520 040 - Removals	8	50					12	
251:522 050 - Inlet & Manhole Summary	8	40			4		4	
251:532 076 - Temporary Erosion Control	1	12						
251:534 077 - Permanent Erosion Control	1	16						
251:536 080 - Miscellaneous Layouts	20	80	80				40	
251:544 090 - Paving & Jointing	6	20	20				20	
251:546 100 - Work Zone Traffic Control	10	40	80					
251:550 120 - Pavement Marking	4	40	12					
290.001 Project Management	48							
290.005 Meeting	42	30	8		2		10	
251:090 Plan Revisions	30	60					30	
290.006 Coordination	30	16						
290.070 Engineer's Estimate	12	12					4	
290.090 CE QC QA	12	20					20	
Bidding or Negotiating Phase	22	12					12	\$ 6,160
210:083 Adedenda	16	12					12	
290:590 Bidding	6							
Subtotal Hours	394	572	336	30	6	180	164	1,682
Subtotal Labor	\$ 63,040	\$ 62,920	\$ 23,520	\$ 4,050	\$ 690	\$ 21,600	\$ 18,040	\$ 193,860.00
Direct Expenses								
220:160 Travel Vehicle (RW Acquisition)				500	miles @	\$ 0.60	per mile =	\$ 300.00
220:160 Postage				1	each	\$ 100.00	lump sum	\$ 100.00
220:160 Title Opinion (Reis Law Firm)				60	each	\$ 250.00	lump sum	\$ 15,000.00
290:001 Travel Vehicle (Design)				80	miles @	\$ 0.60	per mile =	\$ 48.00
Subtotal - Direct Expenses								\$ 15,448.00
Total Project Estimated Fee (Labor + Direct Expenses)								\$ 209,308.00

PROJECT LOCATION MAP GRAND FORKS, NORTH DAKOTA

UNIVERSITY AVENUE - STATE STREET TO NORTH 3RD STREET
(MILL AND OVERLAY)



PROJECT #

8028

