## REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT

Date: 11/23/04

Project Name & Nu	mber: Cre	eek Drive Brid	ige Replacement – S	T05-1241		CIP#:	50309
-	constru	ct water-mair	per bridge structure wan crossing for future n	ith concrete stru orth-south conn	cture, grade appro ection.	aches & chanr	iel, and
Project Description: Replacement of timber bridge structure with concrete structure, grade approaches & channel, and construct water-main crossing for future north-south connection.  Consultant: CETEC Engineering, Inc.  Original Contract Amount: \$ 99,915.00 Original Completion Date: February 15, 2006  Amendment Number:  Amendment Description:  Current Contract Amount: Current Completion Date: Change Requested: New Contract Amount: \$0.00 New Completion Date:  Funding Source This Request:  Amount Dept. Line Item Comments  \$4,585.00 933 4223 Water Main Creek Crossing \$18,036.00 8910 4223 Bridge Funds (20% match) \$77,294.00 SDDOT SDDOT \$5150 - Urban STP Funds (ROW), \$72,144 - Bridge Funds (80%)  Agreement Review & Approvals  11/23/04 Date Division Rampher Date  Agreement Review & Approvals  11/23/04 Am A A A A A A A A A A A A A A A A A A							
Original Contract A	Amount: 3	p 99,910.00	Origina	ii completion b	ate. Tebluary	J, 2000	
Amendment Numb	er:						
Amendment Descri	iption:						
-				Current Corr	pletion Date:		***************************************
Cł	nange Reque	ested:					
New	Contract Am	ount:	\$0.00	New Com	npletion Date:		
Funding Source Th	nis Request	:	I				
Amount	Dept.	Line Item		Co	mments		
\$4,585.00	933						
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<u>\$77,294.00</u>	SDDOT	SDDOT	\$5150 - Urban STF	Funds (ROW)	), \$72,144 - Bridgi	e Funds (80%	<u>,)                                    </u>
\$99 915 00	Total	<u></u>	<u> </u>				
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Finance Office -	<ul> <li>Retain one origina</li> </ul>	ıl	•	te to Finance: Please write			
Project Manager - Retain second original for delivery to Consultant cc: Public Works				nrongotion	1,17		

Cash Flow

cc: Public Works Engineering Project Manager

> REQUEST AUTHORIZATION (Rev. 5/02)



cetec@rushmore.com

# **AUTHORIZATION AND AGREEMENT FOR SERVICES**

Date: November 24, 2004	
CLIENT - OWNER - INFORMATION	
Name: City of Rapid City	
Billing Address: 300 6th Street City/State/Zip Code: Rat	oid City, South Dakota, 57701-2724
Contact Person/Title: Klare Schroeder, PE	
Phone: 605-394-5377 Ext. 222 Fax:	605-394-6636
Project Title: <u>Utility Plans and Details for Creek Drive Bridge Rep</u> (City of Rapid City Project No. ST04-1241)	lacement
Scope of Services: Engineering services per Attachment 1.	
Job Location - City: Rapid City, SD County:	Pennington
Estimated Completion Date: Schedule per Attachmen	at 1.
Contract Amount: <u>Maximum Limiting Fee of \$4,568.37 per Attach</u>	
CLIENT AGREES TO THE GENERAL TERMS AND CONDITIONS AT THIS AGREEMENT. PLEASE READ, SIGN AND RETURN ONE COTHE ADDRESS BELOW. WORK WILL NOT COMMENCE OR BEST COPIES RETURNED. THIS INSTRUMENT SHALL NOT CONSTITUTE BETWEEN THE PARTIES UNTIL EXECUTED BY CETEC ENGINE	OPY TO CETEC ENGINEERING AT SCHEDULED UNTIL SIGNED AND JTE AN AGREEMENT OR CONTRACT
I HEREBY APPROVE AND ACCEPT THIS AGREEMENT AND HAV	E RECEIVED COPY OF SAME.
Accepted: City of Rapid City, South Dakota	
By:Mayor	Date:
Attested:City Finance Officer	Date:
Accepted: Engineering Division	
	Date:
By: Project Manager	
Accepted by CETEC: Sandy Sauter, P.E., Project Manager	Date: 1/-24-04



cetec@rushmore.com

November 24, 2004

Mr. Klare Schroeder, P.E. City of Rapid City, Engineering Division 300 6<sup>th</sup> Street Rapid City, SD 57701

Attachment 1 to Authorization and Agreement for Services

Re: Utility Plan and Details Proposal for Creek Drive Bridge Replacement City of Rapid City Project No. ST04-1241, CIP #50309 SDDOT Project No. BRO8052 (), PCEMS H100

#### Dear Klare:

CETEC Engineering hereby submits our proposal (per our November 23, 2004, conversation) for engineering services for the referenced project utility plans and details.

#### DESCRIPTION OF PROJECT

The City of Rapid City proposes to reconstruct the Creek Drive Bridge (SDDOT bridge #52-432-308). This bridge is located across Rapid Creek on Creek Drive south of SD Highway 44 and 0.4 mile north of St. Patrick Street. Included with the bridge replacement is a 12" water-main creek crossing. This proposal is for the water-main creek crossing. The bridge and roadway portion of the project will be accomplished under a SDDOT work order.

Design criteria for this utility project shall include the various City of Rapid City design criteria manuals, the City of Rapid City Standard Specifications, the Ten State Standards and others.

The following items are anticipated with respect to the project:

- Plans and specifications will be per typical practice for urban systems projects. The plans will be incorporated into the SDDOT bridge replacement plans.
- The design for the 12" water main creek crossing is for the crossing only. The existing water mains off the bridge ends will not be extended to connect to the crossing at this time.
- Utility permits are included.
- SDDOT will handle the bid letting.

SDDOT will perform construction administration and observation. The need
for the Consultant to provide construction monitoring services will be
evaluated at a later date. The design contract may be amended to include
these services.

#### SCOPE OF SERVICES

Based on the above description.

#### 1. PRELIMINARY DESIGN PHASE

- 1.1 Survey data will be from the bridge replacement project.
- 1.2 Determine preliminary location and details of the water main crossing.
- 1.3 Coordinate with private utilities.
- 1.4 Prepare preliminary opinion of probable construction costs.
- 1.5 Prepare Preliminary Design Report with recommendations for review and comment by City staff.

#### 2. FINAL DESIGN

- 2.1 Provide complete plans and specifications for a unit price construction contract. Plan sheets shall be prepared utilizing the latest State and City Drafting Standards using AutoCAD software. Plan sheets will be incorporated into the SDDOT bridge replacement plans.
- 2.2 Provide general sequence of construction requirements in order to ensure no interruption of service to users, etc.
- 2.3 Provide Detailed Specifications supplementing the current City of Rapid City Standard Specifications as necessary.
- 2.4 Prepare opinion of probable construction cost (engineer's estimate) for the project.
  - 2.5 Prepare any permits required, e.g. Utility Permit.
  - 2.6 Deliver the following:
    - Construction plans on 11"x17" paper for printing by the SDDOT.
    - Construction plans drawings on CD in AutoCAD Release 14 format or
    - All topographic, control, and design points in the .dwg file and in tabular format, both on disk and on a hard copy print-out
    - Complete specifications on disk in Word 97 format for printing by the SDDOT
    - A unit price cost estimate on disk in Excel 97 format
  - 2.7 Answer questions during bidding phase.

2.8 Review and take action on shop drawings.

#### 3. BIDDING PHASE

Bidding phase services not included except for small amount of time included for answering plans questions during bidding phase (time included under final design above.)

#### 4. CONSTRUCTION PHASE

Shop drawing review is included under final design phase.

Provide construction management services as negotiated, which may include:

- Attend pre-construction conference and periodic progress meetings
- Prepare revised plans drawing and specifications when necessary to accommodate construction changes necessary to the timely completion of the project
- Issuance of the statement of substantial completion will be performed by the City
- Prepare 1 set of as-built drawings & provide a copy of the revised drawings in CD form.

It is anticipated that SDDOT will provide the construction administration and observation for the project. The need for consultant to provide construction-monitoring services will be evaluated at a later date. The design contract may be amended to include these services.

### 5. MEETINGS AND SUBMITTALS

- 5.1 Project team members will include:
  - 5.1.1 The Consultant
  - 5.1.2 City Engineering Division staff
    - Project management
    - Design
    - Construction coordination
  - 5.1.3 Operations Division staff
    - Utility maintenance
    - Fire Department
    - Police Department
  - 5.1.4 SDDOT LGA and other staff
- 5.2 Meetings requiring the Consultant's participation will include:

- Kick-off Meeting
- Preliminary Design Report Presentation and Discussion
- Utility companies coordination meeting
- 60% Plans and Specifications Review
- 95% Plans and Specifications Review
- Pre-bid Conference
- Pre-construction Conference (as negotiated later)
- Construction Progress Meetings (as negotiated later)
- 5.3 Submittals required during the design phase include:
  - Preliminary Design Report
  - 60% Plans and Specifications
  - 95% Plans and Specifications
  - 100% Plans and Specifications

#### 6. PROJECT SCHEDULE

•	61	Preliminary	Design	Submittal	for TS&L	March 31,	2005
•	U. 1	t reminimum y	TO COLETT	Subinitian	TOT TOWN	141011011 21,	2000

6.3 Final Hydraulic Data Sheet
 30 days after receipt of TS&L

summary letter

• 6.4 95% Final Design Submittal January 1, 2006

• 6.5 100% P&S Submittal February 15, 2006

The proposed maximum limiting fee is per the attached break-out of hours and expenses for the project.

Sincerely,

CETEC Engineering Services, Inc.

Randy Refunday

Randy R. Sauter, P.E.

attachment

## CETEC Engineering LABOR ESTIMATE

Utility Plans and Details for Creek Drive Bridge Construction Project, City of Rapid City Project ST04-1241, BRO8052(), PCEMS H100 Project:

Prepared By: CETEC Engineering Services, Inc. Date: November 23, 2004

TASK	Proj. Manager Rdwy & Bridge Engineer, RS	Project Utilities&Check Engineer, TS	Project Technician RF	Project Surveyor KP	Survey Assistant JM	Clerical SF	Consultants	Expenses	
Utility Plans and Details									
Othity Flans and Details	<del>-</del>						<del></del>		
Preliminary Design Phase						-			
Preliminary water main creek crossing		6	8						
Coordinate private utilities		1	_						
Opinion of probable construction cost		1	1						
Preliminary design report		2				1			
Meetings-kickoff, prelim design(TS&L), utility coord.		2							
CETEC Totals Preliminary Design Phase (hrs)	0	12	9	0	0	1			
CETEC Direct Hourly Rates	30.29	30.29	21.00	21 16	13.50	17.50			
CETEC Hourly Rate Extension	0.00	363.48	189.00	0.00	0.00	17.50			
CETEC Total Direct Labor									569.98
CETEC Combined General Overhead (105.00%)					]				598.48
CETEC Direct Labor and Overhead	i								1168.46
CETEC Cost of Money (0.26% on Direct Labor)									1.48
CETEC Profit (13% on Direct Labor and OH)			_						151.90
CETEC Fee									1321 84
Total Preliminary Design Phase Fee									\$1,321.84
Final Design Phase				<u>                                     </u>					
riidi Desigii Filase				<del>                                     </del>	ļ				
Utility plans and details		16	16						
Sequence of construction		2	1						
Detailed specifications		2				1			
Utility permits		2	4	1					
Opinion of probable construction cost		1	1						
Meetings60%, 95%		2							
Revisions		2	2	<u> </u>	ļ <u>-</u>		ļ		
Answer questions during bidding phase		1 1			<u> </u>			1	
Shop drawing review	<b>_</b>	1							
		29	24	0	0	1			
CETEC Totals Final Design Phase (hrs)	0 0					17.50		<u> </u>	<del> </del>
CETEC Direct Hourly Rates	30.29	30.29	21.00 504.00	21.16	13 50 0.00	17.50			
CETEC Hourly Rate Extension	0.00	878.41	504,00	0.00	0.00	17.50	<u> </u>	<u></u>	

CETEC Engineering LABOR ESTIMATE

Utility Plans and Details for Creek Drive Bridge Construction Project, City of Rapid City Project ST04-1241, BRO8052(), PCEMS H100 Project: Utility Plans and Details for Creek D Prepared By: CETEC Engineering Services, Inc. Date. November 23, 2004

TASK	Proj. Manager	Project	Project	Project	Survey	Clerical	Consultants	Expenses	
		Utilities&Check		Surveyor	Assistant	0=			
	Engineer, RS	Engineer, TS	RF	KP	JM	SF			
CETEC Total Direct Labor									1399.9 <sup>-</sup>
CETEC Combined General Overhead (105.00%)									1469.9°
CETEC Direct Labor and Overhead									2869.82
CETEC Cost of Money (0.26% on Direct Labor)									3.64
CETEC Profit (13% on Direct Labor and OH)									373 08
CETEC Fee									3246.53
Total Final Design Phase Fee									\$3,246.53
Total Fee Through Final Design PhaseUtility Pla	ns and Details								\$4,568.37
Bidding Phase	Not included in	contract except f	or time to answe	er questions duri	ng bidding phase	(time included u	nder final design)		
Construction Phase	As negotiated—	can provide any	or all services (C	ontract amendn	ent required exc	ept for shop draw	ing review).		
Shop drawing review	Included under	final design							
		<u> </u>	<u> </u>						
Construction management services		-can provide any							
Preconstruction conference		As negotiatedcan provide any or all services.							
Progress meetings	As negotiatedcan provide any or all services.								
Construction observation	As negotiatedcan provide any or all services.								
Issue statement of substantial completion		As negotiatedcan provide any or all services.							
Prepare as-built plans drawings in CD form	As negotiated-	-can provide any	or all services.						
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