

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

Date: June 23, 2014

Project Name & Number: Cells 15 & 16 Landfill Liner and Leachate Collection
Project No. LF11-1974

CIP #: 50888

Project Description: To provide professional engineering services

Consultant: Burns and McDonnell Engineering Co.

Original Contract Amount: \$229,467.00 Original Contract Date: January 17, 2012 Original Completion Date:

Addendum No: 4


Amendment Description: Permit modification required due to 2013 winter shut down of project (paid for through contractor CO deduct); add'l geosynthetics testing required; add'l time and effort due to winter shut down of project from fall of 2013 to spring of 2014. See details attached.


Current Contract Amount:	\$623,204.42	Current Completion Date:	July 1, 2014
Change Requested:	\$45,912.00		
New Contract Amount:	\$669,116.42	New Completion Date:	July 17, 2014

Funding Source This Request:


Amount	Dept.	Line Item	Fund	Comments
\$45,912.00	7102	4223	0615	
	Total			

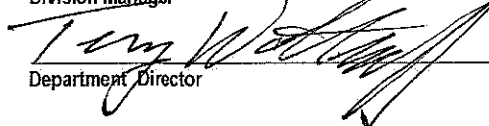
Agreement Review & Approvals


Project Manager 6-23-14
Date


Compliance Specialist 6/23/14
Date

City Attorney Date


Division Manager 6-23-14
Date


Department Director 6-24-14
Date

ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.
Finance Office - Retain one original
Project Manager - Retain second original for delivery to Consultant
cc: Public Works
Engineering
Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

Date	Initials	Approved
6/24/14	JD	LY N
		Y N

Appropriation
Cash Flow

AMENDMENT NO. 4
To
AGREEMENT For PROFESSIONAL ENGINEERING SERVICES
Between
BURNS & McDONNELL ENGINEERING COMPANY, INC.
Centennial, Colorado
and
CITY OF RAPID CITY, SOUTH DAKOTA

This Contract amendment is made by and between Burns & McDonnell Engineering Company, Inc., a Missouri Corporation (Burns & McDonnell) and the City of Rapid City, South Dakota, (City) this ___ day of June, 2014, for the Rapid City Landfill Cell 16 Landfill Liner and Leachate Collection System Construction Management and Documentation (LF11-1974)

Whereas, it is the mutual desire of the parties hereto to amend the AGREEMENT for PROFESSIONAL ENGINEERING SERVICES entered into on the 7th day of January 2012, hereinafter called the Existing Agreement, amended on the 2nd of October, 2012, hereinafter called Amendment No. 1, amended on the 29th day of April, 2013, hereinafter called Amendment No. 2., amended on the 15th day of July, 2013, hereinafter called Amendment No. 3, and amended on the ___ day of June, 2014, hereinafter called Amendment No. 4.

Therefore, it is hereby agreed that the Existing Agreement be amended as follows:

1. Winter Shutdown
 - a. The winter shutdown required a permit modification for a vertical expansion in Cell 17. A value of \$10,000 was agreed to prior to commencing the permit modification effort. Burns & McDonnell successfully negotiated with the South Dakota Department of Environment and Natural Resources a vertical expansion for Cell 17. Costs incurred for this effort totaled \$9,984.
2. Texas Research International Environmental, Inc. (TRI) Testing
 - a. Amendment No. 3 included \$6,500 for geosynthetic testing based on proposals from TRI. The TRI cost did not include all the required testing and frequency of testing per the project specifications and regulatory requirements. The TRI invoices are available upon request. Amendment No. 3 included \$580 for shipping costs for the materials.
 - b. The Amendment No. 3 budget and the actual number of tests required per project quantities and testing frequency are summarized below:

Material	Test	Test Method	Budgeted No. of Tests	Required No. of Tests	Sample Cost	Budgeted Cost	Actual Cost
60 mil Geomembrane (1/50,000 square feet)							
Total Area (square feet):	Peel & Shear Testing	ASTM D6392	50	49	\$ 20.00	\$ 1,000	\$ 980
482,000	Density	ASTM D1505	10	10	\$ 15.00	\$ 150	\$ 150
	Carbon Black Content	ASTM D1603	10	10	\$ 25.00	\$ 250	\$ 250
	Carbon Black Dispersion	ASTM D5596	10	10	\$ 25.00	\$ 250	\$ 250
	Thickness	ASTM D5199/S994	10	10	\$ 10.00	\$ 100	\$ 100
	Tensile Properties	ASTM D638	10	10	\$ 45.00	\$ 450	\$ 450
	Tear Resistance	ASTM D1004	10	10	\$ 45.00	\$ 450	\$ 450
	Puncture Resistance	ASTM D4833	10	10	\$ 40.00	\$ 400	\$ 400
	Interface Friction	ASTM D5321	1	1	\$ 650.00	\$ 650	\$ 650
	Lab Sample Hours		8		\$ 40.00	\$ 320	
Geosynthetic Clay Liner (1/40,000 square feet) (GCL)							
Total Area (square feet):	Swell Index	ASTM D5890	5	12	\$ 75.00	\$ 375	\$ 900
477,000	Mass/Unit Area	ASTM D5993	5	12	\$ 30.00	\$ 150	\$ 360
	Moisture Content	ASTM D2216	5	12	\$ 20.00	\$ 100	\$ 240
	Fluid Loss	ASTM D5891	5	12	\$ 75.00	\$ 375	\$ 900
	Hydraulic Conductivity	ASTM D5887	5	12	\$ 180.00	\$ 900	\$ 2,160
	Interface Friction	ASTM D5321	0	1	\$ 650.00	\$ -	\$ 650
Geocomposite (1/50,000 square feet)							
Total Area (square feet):	GN Mass/Unit Area	ASTM D5261	0	10	\$ 20.00	\$ -	\$ 200
477,000	GN Tensile	ASTM D5035	0	10	\$ 45.00	\$ -	\$ 450
	GN Thickness	ASTM D5199	0	10	\$ 10.00	\$ -	\$ 100
	GN Carbon Black	ASTM D1603	0	10	\$ 25.00	\$ -	\$ 250
	GC Transmissivity - Index	ASTM D4716	0	10	\$ 75.00	\$ -	\$ 750
	GC Peel	ASTM D 413/F904	0	10	\$ 45.00	\$ -	\$ 450
	Shipping					\$ 580	
Total:						\$ 6,500	\$ 11,090
Extra cost for required testing:							\$ 4,590

c. The total cost for testing was \$11,090.00, a difference of \$4,590 above the original budgeted amount.

3. Extended Contract Duration

a. A total construction length of 23 weeks was assumed in the original proposal. To date, the construction contract has been approximately 45 weeks. Little to no construction occurred in the period between the October 4, 2013 snow storm and the winter shutdown commencement date of November 20, 2013 (original construction completion date). However, during this period, significant effort by Burns & McDonnell and CETEC Engineering Services, Inc. (CETEC) was put forth to continue field documentation of project winterization activities and to draft and review letters related to options for contract change orders and potential liquidated damages. Contract Change Order Number 2 (CO2) modified the completion date to June 20, 2014.

b. Due to weather delays this spring, the geosynthetic liner installation was completed on June 2, 2014, approximately two and half weeks after the scheduled milestone date of May 15, 2014. Therefore, the estimated completion date of June 20, 2014 has been pushed back to mid to late July (currently, July 17, 2014). Due to the uncertainty of a yet defined final completion date, we have included a contingency within our estimated hours to finish the project.

c. Burns & McDonnell's estimated hours to complete are summarized below:

- i. 24 hours to finalize the CQA report and submit to DENR including incorporating the contractor's redline edits, survey information and testing documentation.
 - ii. 40 hours to complete the remaining fieldwork, assuming five hours per week for eight weeks through contract completion, including closeout.
 - iii. Total: \$9,524
 - d. CETEC's estimated hours to complete are summarized below:
 - i. CETEC is estimating 233 hours to complete field work assuming four hours per work day commencing on May 26 and assuming a completion date of July 25, 2014.
 - ii. CETEC also estimates 40 hours for contractor pay request, meetings, and contractor closeout.
 - iii. Total: \$21,814
4. Total Contract Amendment request: \$45,912

<i>Item</i>	<i>Cost</i>
Vertical Expansion Permit Modification	\$9,984
Geosynthetic Testing	\$4,590
Burns & McDonnell Remaining Effort	\$9,524
CETEC Remaining Effort	\$21,814
Total	\$45,912

ASSUMPTIONS

Engineer has assumed that the final completion date for Construction Activities will be July 17, 2014.

SCHEDULE

Revise Amendment 3 Schedule as follows:

Construction Phase Services shall extend not more than 30 days beyond the construction final completion date for final delivery of the Construction Documentation Report.

FEE

Revise as follows:

“5.2. The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed Six Hundred and Sixty Nine Thousand One Hundred and Sixteen dollars and Forty Two cents (\$669,116.42) unless the scope of the project is changed as outlined in Section 4. If expenses exceed the maximum amount, the Engineer shall complete the design as agreed upon here without any additional compensation. Sub task dollar amounts may be reallocated to other tasks as long as the total fee is not exceeded.

- a. Exhibit F of Amendment 4 presents the detailed Professional Engineering Services Fee Estimate for Scope Items listed in Amendment 4. Tasks 1 through 2 total Forty Five Thousand Nine Hundred and Twelve Dollars and no cents: \$45,912.00).

This amendment will be deemed a part of, and be subject to, all terms and conditions of the Existing Agreement. Except as modified above, the Existing Agreement will remain in full force and effect.

END OF AMENDMENT NO. 4

**EXHIBIT F
AMENDMENT NO. 4 COST ESTIMATE**

**Cost Estimate
on a per Task Basis**

(fill in green boxes)

**City of Rapid City
66080
Rapid City Landfill**

Task No.	Task Description	Category	Hourly		Hours	Cost	EXPENSES											
			Rate				Item	Quantity	Unit	Cost per Unit	Bare Cost	Percent Markup	Total Cost					
1.0	Cell 16 Construction Project Finish	Associate (15)	\$213.00															
	-Complete remaining construction activities	Associate (14)	\$201.00															
	-Finalize CQA Report	Senior (13)	\$188.00															
	-Closeout project	Senior (12)	\$173.00															
	-Geosynthetic testing	Staff (11)	\$158.00		40	\$6,320.00												
	-Winter Shutdown/Vertical Expansion Permit	Staff (10)	\$143.00															
		Assistant (9)	\$130.00															
		Assistant (8)	\$117.00		24	\$2,808.00												
		Assistant (7)	\$84.00															
		Technician (6)	\$72.00															
		General Office	\$61.00															
	Task Subtotals				64	\$8,128.00												
	Task Total																	
2.0	Winter Shutdown/Vertical Expansion Per	Associate (15)	\$213.00		6	\$1,278.00												
		Associate (14)	\$201.00															
		Senior (13)	\$188.00															
		Senior (12)	\$173.00		24	\$3,792.00												
		Staff (11)	\$158.00															
		Staff (10)	\$143.00															
		Assistant (9)	\$130.00															
		Assistant (8)	\$117.00		42	\$4,914.00												
		Assistant (7)	\$84.00															
		Technician (6)	\$72.00															
		General Office	\$61.00															
	Task Subtotals				72	\$9,984.00												
	Task Total																	
	Project Total																	