

# MEMORANDUM

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**To:** SFSWMA Joint Powers Board Members  
**From:** Randall Kippenbrock, P.E., Executive Director RLK  
**Date:** August 12, 2014  
**Subject:** Request for Approval of Amendment No. 4 to the Professional Services Agreement with CDM Smith Inc. of Albuquerque, NM, for Engineering Design and Permitting Services for Permit Renewal, Permit Modification, Landfill Vertical and Lateral Expansion, and Cell 5B/6B Design for the Caja del Rio Landfill in the Amount of \$125,602.00.

## BACKGROUND AND SUMMARY:

On February 23, 2012, the Board approved a Professional Services Agreement (Agreement) to CDM Smith, Inc. of Albuquerque, NM, for the engineering design and permitting services to include permit renewal and modification, landfill vertical and lateral expansion, and Cell 5B/6B design and construction quality assurance for the Caja del Rio Landfill in the amount of \$590,455.00 (RFP No. '12/06/P).

On January 24, 2013, the Board approved Amendment No. 1 to extend the Agreement to January 24, 2014. As per Article 5 of the Agreement, the Agreement can be extended for additional time upon the approval by the Board for each extension and renewal not to exceed four years.

On April 18, 2013, the Board approved Amendment No. 2 to include tasks related to Cell 5B/6B blasting permit assistance, construction quality assurance, seismic monitoring, design and bidding, NEPA documentation assistance for landfill activities related to the production and sale of crushed rock, a noise study, and revised hourly billing rates for 2013/2014. The amendment also increased the Agreement in the amount of \$163,581.00 for a total not-to-exceed amount of \$754,036.00.

On January 16, 2014, the Board approved Amendment No. 3 to close out completed tasks with a remaining budget of \$95,718.00. The remaining balance was reallocated to address NMED comments on the draft Permit Modification and Renewal Application. Furthermore, the Agency completed the public notice of the permit application submittal and it is not part of the Agreement.

Amendment No. 4 will include Task 17.4 for CQA services during the Cell 5B liner construction. The services include:

- Project management;
- Engineering services during construction;
- Construction quality assurance (CQA); and
- Engineering certification report.

The amendment will also extend the Agreement to June 30, 2015. As per Article 5 of the Agreement, the Agreement can be extended for additional time upon the approval by the Board for each extension and renewal not to exceed four years.

Amendment No. 4 will increase the Agreement in the amount of \$125,602.00 for a total not-to-exceed amount of \$879,638.00.

Funding is available in the Operating Fund.

**ACTION REQUESTED:**

The Agency is requesting the Board to approve Amendment No. 4 to the Professional Services Agreement with CDM Smith for CQA services for the Cell 5B liner construction project in the amount of \$125,602.

The Agency also requests approval of a budget increase to 52510.572960 (WIP - Design) from 5500.100700 (Operating Fund Cash) in the amount of \$125,602.00.

- Attachments:
- 1) Budget Adjustment Request
  - 2) Professional Services Agreement – Amendment No. 4
  - 3) Professional Services Agreement – Amendment No. 3
  - 4) Professional Services Agreement – Amendment No. 2
  - 5) Professional Services Agreement – Amendment No. 1
  - 6) Professional Services Agreement

**ATTACHMENT**

Budget Adjustment Request

# City of Santa Fe, New Mexico

## BUDGET ADJUSTMENT REQUEST (BAR)

# \_\_\_\_\_

DEPARTMENT / DIVISION / SECTION / UNIT NAME <b>SANTA FE SOLID WASTE MANAGEMENT AGENCY</b>				DATE		
ITEM DESCRIPTION	BU / LINE ITEM	<--(Finance Dept Use Only)-->		INCREASE	DECREASE	
		SUBLEDGER / SUBSIDIARY	DR / (CR)			
Operating Fund	52501.700150	5507	DR	125,602.00		
Cell Development	51507.600150	5500	(CR)	(125,602.00)		
WIP Design (CQA-5B Liner project)	52510.572960		DR	125,602.00		
<b>JUSTIFICATION:</b> (use additional page if needed) --Attach supporting documentation/memo				<b>TOTAL</b>	125,602.00	-

BAR to transfer cash from 5500.100700 (Operating Fund Cash) to 5507.100700 (Cell Development Reserve Fund) for

Amendment 4 to CDM for -Task 17.4 Phase II (Liner) CQA Services-Approved at JPB Meeting of August 21, 2014

Angelica G. Salazar _____ Date	<b>CITY COUNCIL APPROVAL</b>		Budget Officer _____ Date	
	City Council Approval Required <input type="checkbox"/>	_____ City Council Approval Date		Finance Director _____ Date
	Agenda Item #: _____			
Randall Kippenbrock, P.E. Exec Director _____ Date				

**ATTACHMENT**

Professional Services Agreement - Amendment No. 4

**SANTA FE SOLID WASTE MANAGEMENT AGENCY  
AMENDMENT No. 4  
PROFESSIONAL SERVICES AGREEMENT  
(Landfill Permitting - 2012)**

This AMENDMENT No. 4 (the "Amendment") to the PROFESSIONAL SERVICES AGREEMENT, dated February 23, 2012 (the "Agreement"), is made and entered into between the Santa Fe Solid Waste Management Agency (the "Agency") and CDM Smith Inc. (the "Contractor"). The Amendment shall be effective as of the date this Amendment is executed by the Agency.

**RECITALS**

Under the terms of the Agreement, the Contractor has agreed to provide engineering design and permitting services to the Agency.

Pursuant to Article 18, Amendment of the Agreement, and for good and valuable consideration, the receipt and sufficiency of which are acknowledged by the parties, the Agency and the Contractor agree as follows:

**1. SCOPE OF SERVICES**

Article 1, Scope of Services of the Agreement is hereby amended to include the Scope of Work for CQA services for the Cell 5B liner construction project attached hereto as Exhibit A.

**2. COMPENSATION**

Article 3, Compensation of the Agreement is hereby amended to increase the amount of compensation by a total of One Hundred Twenty-Five Thousand Six Hundred Two Dollars and No Cents (\$125,602.00) so that Article 3 reads in its entirety as follows:

A. The Agency shall pay to Contractor in full payment for services rendered, including applicable gross receipts taxes, a sum not to exceed Eight Hundred Seventy-Nine

Thousand Two Hundred Fifteen Dollars and No Cents (\$879,215.00).

DESCRIPTION	AMOUNT
ORIGINAL CONTRACT	\$590,455.00
AMENDMENT NO. 1	\$0.00
AMENDMENT NO. 2	\$163,158.00
AMENDMENT NO. 3	\$0.00
AMENDMENT NO. 4	\$125,602.00
CONTRACT TO DATE	\$879,215.00

B. Contractor shall be responsible for payment of gross receipts taxes levied by the State of New Mexico on the sums payable under this Agreement.

C. Payment shall be made upon receipt and approval by the Agency of detailed statements containing a report of services completed. Compensation shall be paid only for services actually performed in accordance with the fee schedule set forth in the Scope of Work hereto attached in Exhibit A.

D. Detailed statements containing reimbursement expenses shall be itemized.

**3. TERM AND EFFECTIVE DATE**

Article 5, Term and Effective Date of the Agreement is amended to define the term of the Agreement, so that Article 5 reads in its entirety as follows:

A. This Agreement shall be effective when signed by the Agency and terminate on June 30, 2015, unless it is terminated sooner pursuant to Article 6 below.

B. Pursuant to the limitations on multi-term contracts for professional services codified in NMSA 1978 § 13-1-150, this Agreement may not exceed four years, including

all extensions and renewals. Subject to that limitation, the Agreement can be renewed annually, if agreed upon by the Agency and Contractor and approved by the Joint Powers Board.

**4. AGREEMENT IN FULL FORCE**

Except as specifically provided in this Amendment, the Agreement remains and shall remain in full force and effect, in accordance with its terms.

IN WITNESS WHEREOF, the parties have executed this AMENDMENT No.4 to the Professional Services Agreement as of the dates set forth below.

SANTA FE SOLID WASTE  
MANAGEMENT AGENCY:

\_\_\_\_\_  
Miguel Chavez  
Chairperson

\_\_\_\_\_  
Date:

ATTEST:

\_\_\_\_\_  
Geraldine Salazar  
Santa Fe County Clerk

CDM SMITH INC.:

\_\_\_\_\_  
Paul A. Karas  
Associate, Client Service Manager

\_\_\_\_\_  
Date:

APPROVED AS TO FORM:

\_\_\_\_\_  
Justin W. Miller  
Agency Attorney

\_\_\_\_\_  
Date:



**EXHIBIT A**

CDM Smith Inc.

Scope of Work  
for  
Amendment No. 4

RFP No. '12/06/P



6000 Uptown Blvd. NE, Suite 200  
Albuquerque, NM 87110  
tel: 505 243-3200  
fax: 505 243-2700

July 31, 2014

Mr. Randall Kippenbrock, P.E.  
Executive Director  
Santa Fe Solid Waste Management Agency  
149 Wildlife Way  
Santa Fe, New Mexico 87506-8342

Subject: Caja del Rio Landfill Permit Modification and Renewal  
Cell 5B/6B Design and Contractor Coordination Services  
Amendment 4 to SFSWMA PO# 11128449-000-OP  
CDM Smith Project No.: 10679-91151/91152

Dear Mr. Kippenbrock:

CDM Smith Inc. (CDM Smith) is pleased to provide the Santa Fe Solid Waste Management Agency (SFSWMA) with this proposed scope, schedule, and fee for Amendment 4 to our "Caja del Rio Landfill Permit Modification and Renewal and Cell 5B/6B Design and Contractor Coordination Services" contract [SFSWMA PO# 11128449-000-OP, dated March 21, 2012] for the following additional services that have been requested by SFSWMA:

- [REVISED] Task 17: Cell 5B/6B Engineering Services During Construction
  - [CLOSED\*] Subtask 17.1: Blasting Permit Assistance
  - [CLOSED\*] Subtask 17.2: Phase I (Blasting) Construction Quality Assurance (CQA) Services
  - [CLOSED\*] Subtask 17.3: Seismic Monitoring
  - [NEW] Subtask 17.4: Phase II (Liner) CQA Services

The scope of this additional service (Subtask 17.4), along with the estimated cost, schedule, and deliverables, is detailed herein.

***\*Note: Subtasks 17.1, 17.2, and 17.3 were approved under Amendment 3 and have since been completed by CDM Smith.***

### **Subtask 17.4: Cell 5B/6B Construction – Phase II (Liner) Construction Quality Assurance (CQA) Services**

The design and construction of Cells 5B and 6B at the Caja del Rio Landfill was originally envisioned as one task in the original contract. However, upon further direction from SFSWMA, the activities to complete Cells 5B/6B were divided into multiple tasks to accommodate a Phase 1 (Blasting) and Phase 2 (Cell Development).





Mr. Randall Kippenbrock, P.E.  
July 31, 2014  
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The Phase I blasting design and construction activities, as well as the Phase 2 cell development drawings and specifications were completed under the original contract budget, so this task addresses the CQA activities to be performed by CDM Smith during the Cell 5B development (Liner) activities, as described herein.

### **Project Management**

CDM Smith will provide project management for the project, including management of labor costs for project engineering and subcontractors, document control and filing, invoicing, project status reports (with each invoice), and close out activities.

### **Engineering Services during Construction**

CDM Smith will perform general engineering services during construction of Cell 5B, including:

- Providing three (3) copies of the conformed contract documents to the contractor for project execution
- Attending one (1) Pre-construction Meeting
- Reviewing shop drawing submittals
- Processing contractor requests for information (RFI) and change orders
- Reviewing contractor's pay request applications
- Maintaining project files

As a subcontractor to CDM Smith, Kleinfelder will provide onsite CQA services during the construction of Cell 5B and the improvements associated with development of the cell. CDM Smith staff will also visit the site on a periodic basis to attend project meetings, inspect the work, and/or provide recommendations to the SFSWMA. Details regarding these CQA are described below.

### **Construction Quality Assurance (CQA)**

CDM Smith and/or our subcontractor, Kleinfelder, will perform the following CQA services during construction of Cell 5B:

- Attending up to three (3) Construction Progress Meetings; approximately one (1) meeting per month
- CQA Monitoring:
  - Subgrade preparation
  - Geosynthetic liner system



Mr. Randall Kippenbrock, P.E.  
July 31, 2014  
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- Leachate collection system
- Drainage material
- Communicating with SFSWMA staff (as required)
- Coordinating soil testing and surveying activities
- Coordinating contractor activities with daily operational activities
- Conducting one (1) Substantial Completion site walk-through and providing the contractor a punch-list for remaining work items
- Conducting one (1) Final Completion site walk-through to confirm project completion

CDM Smith, with Kleinfelder as our subcontractor, will monitor and review subgrade, liner, leachate system, and drainage material testing performed by the contractor. Our monitoring will verify compliance with the project drawings and specifications, NMED regulations, as well as the permit and design requirements.

CDM Smith will perform periodic oversight of survey services and field density testing (conducted by a third-party via the awarded contractor using a nuclear density meter) to confirm that the geotechnical materials installation and soil compaction meets the design specifications. In addition, full-time monitoring will be provided by Kleinfelder during the liner system (GCL and HDPE materials) and drainage layer installations for observation of non-destructive seam testing (vacuum and air pressure testing), destructive seam testing, and field testing.

Upon completion of the construction, CDM Smith will prepare record drawings and one Engineering Certification Report\*\* based upon testing information provided by the contractor. The Engineering Certification Report will document that the geotechnical materials, liner, and leachate collection system, as applicable, were installed in accordance with the current permit and contract documents (design drawings and specifications).

***\*\*Note that the Engineering Certification Report will be completed by CDM Smith concurrently with the construction activities.***

CDM Smith proposes that construction observation activities, to be performed by Kleinfelder, will consist of the following:

- CQA Soils Technician:
  - Subgrade preparation: up to three (3) inspections (est. 12 hours total; three 4-hour days)
  - Drainage material observation: three (3) weeks (est. 150 hours total; 10-hour days)



Mr. Randall Kippenbrock, P.E.  
July 31, 2014  
Page 4

- CQA Liner and Leachate Technician: on-site full-time
  - Liner and leachate collection system installation observation: four (4) weeks (est. 200 hours total; 10-hour days)

### **Assumptions**

In addition to those stated above, the following assumptions have been made for this Proposal.

- Construction activities will commence by September 8, 2014.
- Construction activities will be completed within three (3) months or by December 8, 2014.
- Up to fifteen (15) contractor submittals will be reviewed.
- Up to ten (10) RFIs and/or change orders will be reviewed.
- Up to four (4) contractor's pay request applications will be reviewed.
- As-built surveying will be conducted by the contractor and has not been included in this scope/fee.
- All geotechnical and liner quality control testing will be performed by the contractor and has not been included in this scope/fee.
- All meetings will be held at the offices of SFSWMA.
- Kleinfelder will perform construction observation services under the direction and training (if applicable) of CDM Smith.
- Travel/per-diem costs have been included for CDM Smith-Albuquerque staff only and are based upon approved GSA rates. CDM Smith will combine as many meetings/ inspections/ walk-throughs as applicable to reduce travel and per diem costs to the SFSWMA. Costs assumptions include:
  - Per-diem for one (1) project manager, project engineer, or inspector for five (5) meetings/site visits/walk-throughs;
  - Round-trip travel by car at 130 miles per trip: one (1) pre-construction meeting, three (3) site inspection and progress meeting visits, and one (1) Substantial/Final Completion walk-through.
- One (1) copy of the draft Engineering Certification Report will be transmitted to the SFSWMA for review and comment prior to final submittal to NMED.
- CDM Smith senior technical specialists will be utilized to review the CQA documents prior to release to NMED.
- Up to three (3) hard-copies and three (3) electronic copies (CD) of the final Engineering Certification Report will be transmitted to the SFSWMA and NMED.



Mr. Randall Kippenbrock, P.E.  
July 31, 2014  
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### Schedule

These services will be performed upon written notice to proceed as directed by the SFSWMA. Based upon a Notice to Proceed date of August 25, 2014, the work to be performed under this scope of services will be completed by December 31, 2014, unless approved otherwise by the SFSWMA.

### Estimated Fee

CDM Smith is requesting compensation for this task in accordance with the terms and conditions of the original contract (SFSWMA PO# 11128449-000-OP). The estimated cost for the additional services is summarized below. Detail regarding our cost estimate is provided in **Attachment A**.

Summary of Proposed Project Costs

Additional Service Task	Estimated Cost* (without NMGR)	Total Estimated Cost* (with 7.0% NMGR)
<b>[REVISED] Task 17: Cell 5B/6B Engineering Services During Construction</b>		
[CLOSED*] Subtask 17.1: Blasting Permit Assistance	(\$4,645)	(\$4,970)
[CLOSED*] Subtask 17.2: Cell 5B/6B Construction – Phase I (Blasting) Construction Quality Assurance Services	(\$67,349)	(\$72,063)
[CLOSED*] Subtask 17.3: Seismic Monitoring	Estimated Costs for this Subtask are included in Subtask 17.2 Estimated Costs	
<b>[NEW] Subtask 17.4: Phase II (Liner) CQA Services</b>	<b>\$117,385</b>	<b>\$125,602</b>
<b>Total*</b>	<b>\$270,265</b>	<b>\$289,183</b>

\*Note: Subtasks 17.1, 17.2, and 17.3 were approved under Amendment 3 and have since been completed by CDM Smith.

In summary, and based upon the proposed project scope, CDM Smith proposes a fee of \$125,602, which includes NMGR (\$8,217 at the current rate of 7 percent), to be invoiced on a not-to-exceed billing rate basis.

CDM Smith appreciates the opportunity to submit this proposal for Cell 5B Phase II (Liner) CQA Services for the Caja del Rio Landfill. If you have any questions, please contact us at (505) 243-3200.

Sincerely,

Kerrie L. Greenfelder, PE, BCEE  
Project Manager  
CDM Smith Inc.

Paul A. Karas, CPG, CHMM  
Vice President, Client Service Leader  
CDM Smith Inc.

Attachment A: Proposed Cost Estimate Summary

cc: Kelly Collins, CDM Smith  
Tom Parker, CDM Smith  
File



SFSWMA: Caja del Rio Landfill Cell 5B Phase II (Liner) CQA Services

Labor													Total Hours	Total Labor Costs
Category:	Contract Officer	Sr. Tech Specialist	Sr. Tech Specialist	Project Manager - Sr. Prof	Staff Engineer - Engr IV	Staff Engineer - Engr V	Staff Engineer - Engr I	Staff Support (CADD)	Field Tech II	Clerical (Financial)	Clerical (Admin)			
Hourly Rate:	Karas \$200.00	Parker \$200.00	Gabel \$200.00	Greenfelder \$165.00	Baricevich \$125.00	Kadambala \$140.00	Rempkowski \$90.00	Doak \$105.00	McHugh \$85.00	Hilland \$100.00	Fitch \$70.00			
<b>[Subtask 17.4] Project Management</b>	4	0	0	40	0	0	0	0	0	8	0	52	\$8,200	
Project Management	4			40						8		52	\$8,200	
<b>[Subtask 17.4] Engineering Services During Construction</b>	1	1	1	16	17	48	32	18	0	0	14	148	\$17,835	
Contract Document Conformance				2	4	8	4	8			8	34	\$3,710	
Pre-Construction Meeting (qty 1)				8	1		2	2			2	15	\$1,975	
Submittal, RFI, Change Order, Pay App Reviews				4	12	40	26	8			4	94	\$11,220	
ESDC QA/QC	1	1	1	2								5	\$930	
<b>[Subtask 17.4] Construction Quality Assurance (CQA)</b>	1	4	6	38	24	40	60	32	6	0	24	235	\$28,020	
Progress Meetings (qty 3), Site Walk-Throughs (qty 1)				24	2	2	28					56	\$7,010	
Subgrade/Drainage Material CQA			1	1	2	2			1			7	\$980	
Liner/Leachate System CQA			1	1	2	2			1			7	\$980	
CQA Construction Observation				2	2	2			2			8	\$1,030	
CQA Report				6	16	32	32	32	2		24	144	\$15,560	
CQA QA/QC	1	4	4	4								13	\$2,460	
<b>Total Hours:</b>	6	5	7	94	41	88	92	50	6	8	38	435		
<b>Cost:</b>	\$1,200	\$1,000	\$1,400	\$15,510	\$5,125	\$12,320	\$8,280	\$5,250	\$510	\$800	\$2,660		\$54,055	

SFSWMA: Caja del Rio Landfill Cell 5B Phase II (Liner) CQA Services

Other Direct Costs										Total
Units:	Air Travel	Copies No.	Mylars Bluelines Repro	Phone Fax Shipping	Meals Incidentals	Equipment Rental	Lodging	Mileage (130 mi RT)		
Unit Cost:	Dollars	\$0.08	Dollars	Dollars	Days	Dollars	Days	Miles		
<b>[Subtask 17.4] Project Management</b>	0	250	0	25	0	0	0	0	\$45	
Project Management		250		25					\$45	
<b>[Subtask 17.4] Engineering Services During Construction</b>	0	1825	150	50	2	0	0	130	\$493	
Contract Document Conformance		1000	100	50					\$230	
Pre-Construction Meeting (qty 1)		50			2			130	\$151	
Submittal, RFI, Change Order, Pay App Reviews		750	50						\$110	
ESDC QA/QC		25							\$2	
<b>[Subtask 17.4] Construction Quality Assurance (CQA)</b>	0	2025	225	200	8	0	0	520	\$1,174	
Progress Meetings (qty 3), Site Walk-Throughs (qty 1)		750	25		8			520	\$672	
Subgrade/Drainage Material CQA		25							\$2	
Liner/Leachate System CQA		25							\$2	
CQA Construction Observation		200							\$16	
CQA Report		1000	200	200					\$480	
CQA QA/QC		25							\$2	
<b>Total Units:</b>	0	4100	375	275	10	0	0	650	\$1,712	
<b>Cost:</b>	\$0.00	\$328.00	\$375.00	\$275.00	\$370.00	\$0.00	\$0.00	\$364.00		



SFSWMA: Caja del Rio Landfill Cell 5B Phase II (Liner) CQA Services

Subconsultants				
	Kleinfelder (Subgrade Inspection)	Kleinfelder (Liner Inspection)	Kleinfelder (Drainage Material Inspection)	Total
Units:	Dollars	Dollars	Dollars	
Unit Cost (including 10% mark-up):	\$1,942.00	\$1,535.00	\$1,476.00	
<b>[Subtask 17.4] Project Management</b>	0	0	1	\$1,476
Project Management			1	\$1,476
<b>[Subtask 17.4] Engineering Services During Construction</b>	0	0	0	\$0
Contract Document Conformance				\$0
Pre-Construction Meeting (qty 1)				\$0
Submittal, RFI, Change Order, Pay App Reviews				\$0
ESDC QA/QC				\$0
<b>[Subtask 17.4] Construction Quality Assurance (CQA)</b>	3	20	16	\$60,142
Progress Meetings (qty 3), Site Walk-Throughs (qty 1)				\$0
Subgrade/Drainage Material CQA	3			\$5,826
Liner/Leachate System CQA		20	15	\$52,840
CQA Construction Observation				\$0
CQA Report			1	\$1,476
CQA QA/QC				\$0
Total Hours:	3	20	17	
Cost:	\$5,826.00	\$30,700.00	\$25,092.00	\$61,618

SFSWMA: Caja del Rio Landfill Cell 5B Phase II (Liner) CQA Services

Total Costs							
	Estimated Manhours	Labor	Other Direct Costs	Sub- Consult Costs	Subtotal Cost	NMGRT (7.0 percent)	Total Project Cost
<b>[Subtask 17.4] Project Management</b>	52	\$8,200	\$45	\$1,476	\$9,721.00	\$680.47	\$10,401.47
Project Management	52	\$8,200	\$45	\$1,476	\$9,721.00	\$680.47	\$10,401.47
<b>[Subtask 17.4] Engineering Services During Construction</b>	148	\$17,835	\$493	\$0	\$18,327.80	\$1,282.95	\$19,610.75
[Subtask 17.4] Engineering Services During Construction	34	\$3,710	\$230	\$0	\$3,940.00	\$275.80	\$4,215.80
Contract Document Conformance	15	\$1,975	\$151	\$0	\$2,125.80	\$148.81	\$2,274.61
Pre-Construction Meeting (qty 1)	94	\$11,220	\$110	\$0	\$11,330.00	\$793.10	\$12,123.10
Submittal, RFI, Change Order, Pay App Reviews	5	\$930	\$2	\$0	\$932.00	\$65.24	\$997.24
<b>[Subtask 17.4] Construction Quality Assurance (CQA)</b>	235	\$28,020	\$1,174	\$60,142	\$89,336.20	\$6,253.53	\$95,589.73
Progress Meetings (qty 3), Site Walk-Throughs (qty 1)	56	\$7,010	\$672	\$0	\$7,682.20	\$537.75	\$8,219.95
Subgrade/Drainage Material CQA	7	\$980	\$2	\$5,826	\$6,808.00	\$476.56	\$7,284.56
Liner/Leachate System CQA	7	\$980	\$2	\$52,840	\$53,822.00	\$3,767.54	\$57,589.54
CQA Construction Observation	8	\$1,030	\$16	\$0	\$1,046.00	\$73.22	\$1,119.22
CQA Report	144	\$15,560	\$480	\$1,476	\$17,516.00	\$1,226.12	\$18,742.12
CQA QA/QC	13	\$2,460	\$2	\$0	\$2,462.00	\$172.34	\$2,634.34
<b>Total Project Cost</b>	<b>435</b>	<b>\$54,055</b>	<b>\$1,712</b>	<b>\$61,618</b>	<b>\$117,385.00</b>	<b>\$8,216.95</b>	<b>\$125,601.95</b>



**ATTACHMENT**

Professional Services Agreement - Amendment No. 3

**SANTA FE SOLID WASTE MANAGEMENT AGENCY  
AMENDMENT No. 3  
PROFESSIONAL SERVICES AGREEMENT  
(Landfill Permitting - 2012)**

This AMENDMENT No. 3 (the "Amendment") to the PROFESSIONAL SERVICES AGREEMENT, dated February 23, 2012 (the "Agreement"), is made and entered into between the Santa Fe Solid Waste Management Agency (the "Agency") and CDM Smith Inc. (the "Contractor"). The Amendment shall be effective as of the date this Amendment is executed by the Agency.

**RECITALS**

Under the terms of the Agreement, the Contractor has agreed to provide engineering design and permitting services to the Agency.

Pursuant to Article 18, Amendment of the Agreement, and for good and valuable consideration, the receipt and sufficiency of which are acknowledged by the parties, the Agency and the Contractor agree as follows:

**1. SCOPE OF SERVICES**

Article 1, Scope of Services of the Agreement is hereby amended to include the Scope of Work for reallocation of tasks attached hereto as Exhibit A.

**2. TERM AND EFFECTIVE DATE**

Article 5, Term and Effective Date of the Agreement is amended to define the term of the Agreement, so that Article 5 reads in its entirety as follows:

This Agreement shall be effective when signed by the Agency and shall terminate on January 16, 2015, unless terminated sooner pursuant to Article 6 below.


B. Pursuant to the limitations on multi-term contracts for professional services codified in NMSA 1978 § 13-1-150, this Agreement may not exceed four years, including all extensions and renewals. Subject to that limitation, the Agreement can be renewed annually, if agreed upon by the Agency and the Contractor and approved by the Joint Powers Board.

3. AGREEMENT IN FULL FORCE

Except as specifically provided in this Amendment, the Agreement remains and shall remain in full force and effect, in accordance with its terms.

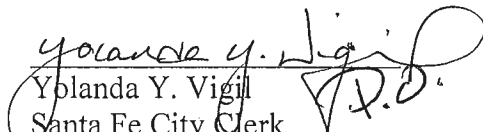
IN WITNESS WHEREOF, the parties have executed this AMENDMENT No.3 to the Professional Services Agreement as of the dates set forth below.

SANTA FE SOLID WASTE  
MANAGEMENT AGENCY:

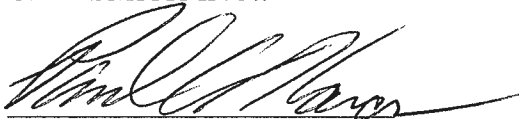
  
\_\_\_\_\_  
Peter Ives  
Chairperson

1-16-14  
Date:

ATTEST:

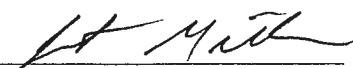
  
Yolanda Y. Vigil  
Santa Fe City Clerk

CDM SMITH INC.:

  
\_\_\_\_\_  
Paul A. Karas  
Associate, Client Service Manager

01/20/2014  
Date:

APPROVED AS TO FORM:

  
Justin W. Miller  
Agency Attorney

1/16/14  
Date:

**EXHIBIT A**

CDM Smith Inc.

Scope of Work  
for  
Amendment No. 3

Engineering Design and Permitting Services  
for  
Permit Renewal, Permit Modification, Landfill Vertical and Lateral Expansion,  
and  
Cell 5B/6B Design  
for the  
Caja del Rio Landfill

RFP No. '12/06/P



6000 Uptown Blvd. NE, Suite 200  
Albuquerque, NM 87110  
tel: 505 243-3200  
fax: 505 243-2700

January 9, 2014

Mr. Randall Kippenbrock, P.E.  
Executive Director  
Santa Fe Solid Waste Management Agency  
149 Wildlife Way  
Santa Fe, New Mexico 87506-8342

Subject: Caja del Rio Landfill Permit Modification and Renewal  
Cell 5B/6B Design and Contractor Coordination Services  
Amendment 3 to SFSWMA PO# 11128449-000-OP  
CDM Smith Project No.: 10679-91151/91152

Dear Mr. Kippenbrock:

CDM Smith Inc. (CDM Smith) is pleased to provide the Santa Fe Solid Waste Management Agency (SFSWMA) with this proposed scope, schedule, and fee for Amendment 3 to our *"Caja del Rio Landfill Permit Modification and Renewal and Cell 5B/6B Design and Contractor Coordination Services"* contract [SFSWMA PO# 11128449-000-OP, dated March 21, 2012]. This contract amendment includes closing tasks that have been completed and adding Task 15, which had been indicated as a "future" task in the original contract. Additionally, Amendment 3 extends the contract term for one year.

The draft Caja del Rio Landfill Permit Modification and Renewal was submitted to the New Mexico Environment Department on November 7, 2013. We request that the following tasks in our contract be closed because they are complete:

- Task 1 Permit Application Project Meetings / Workshops and Project Management
- Task 2 Supplemental Surveying / Mapping
- Task 3 Site Masterplan and Implementation Schedule
- Task 4 Vulnerable Area Assessment & Community Meeting
- Task 5 Environmental and Traffic Study Updates
- Task 6 Miscellaneous Figures and Attachments
- Task 7 Permit Drawings
- Task 8 Engineering Calculations and Compatibility Information
- Task 9 Operational Plans
- Task 10 HELP Model Analysis (Update)
- Task 11 Financial Assurance





Mr. Randall Kippenbrock, P.E.  
January 9, 2014  
Page 2

## Task 12 Permit Preparation and Submission to NMED

These tasks were budgeted for \$475,780 (exclusive of NMGR), but were completed for a total of \$380,063. The budgeted amount remaining after completion of Tasks 1 through 12 is \$95,718.

The original contract included future tasks 14 and 15:

- Task 14: Public Notice of Permit Modification and Renewal Application Submittal. This task is being completed by SFSWMA staff and will not be included in our contract.
- Task 15: Address NMED Comments. The scope, schedule, and fee for this future task were to be determined after submittal of the draft Permit Modification and Renewal Application and receipt of comments from the NMED. SFSWMA has requested this contract amendment to add Task 15 to the contract and extend the contract term.

No changes are being requested in:

- Tasks 13- Cell 5B/6B Design and Contractor Coordination
- Task 17 - Cell 5B/6B Engineering Services During Construction
- Task 18 - Other Permitting Assistance (Noise Study and NEPA Assistance)

## Task 15: Address NMED Comments

### 15.1 Purpose

CDM Smith will provide a written response to permit application Request for Additional Information (RAI) from the NMED.

### 15.2 Approach

Upon submission of the permit modification and renewal application to the NMED, the agency has 120 days to issue the RAI. For the Caja del Rio Landfill, the RAI is expected to be available on or about March 7, 2014. CDM Smith will assess the comments and rank with respect to the effort required to revise the application. The scale will range from 1, meaning an explanatory response will be prepared but no revision to the permit application will be required to 5 which will indicate a revision that will require a major effort (changes to all portions of the application). A meeting with SFSWMA will be held to discuss the ranked comments and CDM Smith's proposed responses. With SFSWMA consensus on the responses, CDM Smith will prepare a response document and revised Permit Modification and Renewal Application for SFSWMA review and approval.

### Estimated Fee

CDM Smith is requesting that the remaining budgeted funding from Tasks 1 through 12 (\$95,000) be applied Task 15. The effort to complete Task 15 will not be known until the RAI is received. However, based on our previous experience, the cost of responding to the RAI and revising the permit application is not expected to exceed the remaining funding. The work will be completed





Mr. Randall Kippenbrock, P.E.  
January 9, 2014  
Page 3

using the rate sheet included with our contract Amendment 2 (Attachment A) which was approved by the SFSWMA Board on April 18, 2013.

In summary, CDM Smith proposes that the budget that was not expended on Tasks 1 through 12 be applied to Task 15, a fee of \$95,000 (plus NMGRT of \$6,650 at the current rate of 7 percent) for a total of \$101,650, to be billed on a not-to-exceed time and materials basis.

### Contract Term Extension

The current contract term will expire on February 23, 2014. An extension is necessary to allow for receipt and response to comments from the NMED in accordance with the timelines established by the New Mexico Solid Waste Regulations. Amendment 3 will extend the contract term to February 23, 2015.

CDM Smith appreciates the opportunity to submit this amendment to our contract for the permit modification and renewal application development for the Caja del Rio Landfill. If you have any questions, please contact us at (505) 243-3200.

Sincerely,

Paul A. Karas, CPG, CHMM  
Associate, Client Service Manager  
CDM Smith Inc.

KELLY COLLINS, P.G., BLES  
Project Manager  
CDM Smith Inc.

cc: Greg Larson, CDM Smith  
Tom Parker, CDM Smith  
File







## City of Santa Fe Summary of Contracts, Agreements, & Amendments

**Section to be completed by department for each contract or contract amendment**

1 **FOR: ORIGINAL CONTRACT**  or **CONTRACT AMENDMENT**

2 Name of Contractor CDM Smith

3 Complete information requested  Plus GRT  
 Inclusive of GRT

Original Contract Amount: \$590,455.00

Termination Date: February 23, 2013

Approved by JPB Date: February 23, 2012

or by SFSWMA Director Date: \_\_\_\_\_

**Contract is for:** Engineering design and permitting services for landfill permit renewal, permit modification, landfill vertical and lateral expansion, and Cell 5B/6B design and CQA.

Amendment # 3 to the Original Contract# 12-0133

Increase/(Decrease) Amount \$ \$0.00

Extend Termination Date to: January 16, 2015

Approved by JPB Date: January 16, 2014

or by SFSWMA Director Date: \_\_\_\_\_

**Amendment is for:** Reallocation of tasks and extend term.

4 **History of Contract & Amendments:** (option: attach spreadsheet if multiple amendments)  Plus GRT  
 Inclusive of GRT

Amount \$ 590,455.00 of original Contract# 12-0133 Termination Date: 2/23/2013

Reason: Landfill design and permitting services - first year of 4-year contract.

Amount \$ 0.00 amendment # 1 Termination Date: 1/24/2014

Reason: Extend Contract for one additional year (Year 2).

Amount \$ 163,158.00 amendment # 2 Termination Date: 1/24/2014

Reason: Additional services

Amount \$ 0.00 amendment # 3 Termination Date: 1/16/2015

Reason: Reallocation of tasks and extend term (Year 3).

Total of Original Contract plus all amendments: \$ 754,036.00



# City of Santa Fe Summary of Contracts, Agreements, & Amendments

**5 Procurement Method of Original Contract:** (complete one of the lines)

RFP# 12/06/P Date: October 21, 2011

RFQ  \_\_\_\_\_ Date: \_\_\_\_\_

Sole Source  \_\_\_\_\_ Date: \_\_\_\_\_

Other \_\_\_\_\_

**6 Procurement History:** 3rd year of a 4 year contract.  
example: (First year of 4-year contract)

**7 Funding Source:** 52521-572950 and 52510.572960 **BU/Line Item:** \_\_\_\_\_

**8 Any out-of-the ordinary or unusual issues or concerns:**  
\_\_\_\_\_  
(Memo may be attached to explain detail.)

**9 Staff Contact who completed this form:** Randall Kippenbrock

Phone # 424-1850 x 100

**10 Certificate of Insurance attached.** (if original Contract)

**Submit to City Attorney for review/signature**  
**Forward to Finance Director for review/signature**  
**Return to originating Department for Committee(s) review or forward to City Manager for review and approval (depending on dollar level).**

**To be recorded by City Clerk:**

Contract # \_\_\_\_\_

Date of contract Executed (i.e., signed by all parties): \_\_\_\_\_

Note: If further information needs to be included, attach a separate memo.

**Comments:**

**ATTACHMENT**

Professional Services Agreement - Amendment No. 2

**SANTA FE SOLID WASTE MANAGEMENT AGENCY  
AMENDMENT No. 2  
PROFESSIONAL SERVICES AGREEMENT  
(Landfill Permitting - 2012)**

This AMENDMENT No. 2 (the "Amendment") to the PROFESSIONAL SERVICES AGREEMENT, dated February 23, 2012 (the "Agreement"), is made and entered into between the Santa Fe Solid Waste Management Agency (the "Agency") and CDM Smith Inc. (the "Contractor"). The Amendment shall be effective as of the date this Amendment is executed by the Agency.

**RECITALS**

Under the terms of the Agreement, the Contractor has agreed to provide engineering design and permitting services to the Agency.

Pursuant to Article 18, Amendment of the Agreement, and for good and valuable consideration, the receipt and sufficiency of which are acknowledged by the parties, the Agency and the Contractor agree as follows:

**1. SCOPE OF SERVICES**

Article 1, Scope of Services of the Agreement is hereby amended to include the Scope of Work for additional services attached hereto as Exhibit A.

**2. COMPENSATION**

Article 3, Compensation of the Agreement is hereby amended to increase the amount of compensation by a total of One Hundred Sixty-Three Thousand One Fifty-Eight Dollars and No Cents (\$163,158.00) so that Article 3 reads in its entirety as follows:

A. The Agency shall pay to the Contractor in full payment for services rendered, a sum not to exceed Seven Hundred Fifty-Four Thousand Thirty-Six Dollars and No Cents (\$754,036.00), including applicable gross receipts taxes.

DESCRIPTION	AMOUNT
ORIGINAL CONTRACT	\$590,455.00
AMENDMENT NO. 1	\$0.00
AMENDMENT NO. 2	\$163,158.00
CONTRACT TO DATE	\$754,036.00

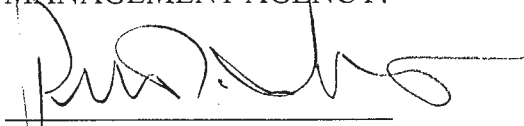
B. Payment shall be made upon receipt and approval by the Agency of reasonably detailed invoices/statements describing the services performed. Invoices/statements shall be rendered no more than once each month. Compensation shall be paid only for services actually performed.

3. **AGREEMENT IN FULL FORCE**

Except as specifically provided in this Amendment, the Agreement remains and shall remain in full force and effect, in accordance with its terms.

IN WITNESS WHEREOF, the parties have executed this AMENDMENT No.2 to the Professional Services Agreement as of the dates set forth below.

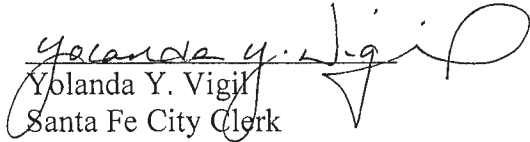
SANTA FE SOLID WASTE  
MANAGEMENT AGENCY:



Peter Ives  
~~Vice~~-Chairperson

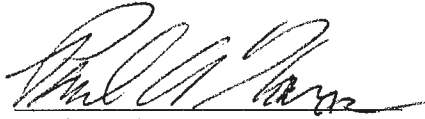
4/18/13  
Date:

ATTEST:



Yolanda Y. Vigil  
Santa Fe City Clerk

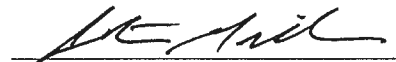
CDM SMITH INC.:



Paul A. Karas  
Associate, Client Service Manager

4/19/13  
Date:

APPROVED AS TO FORM:



Justin W. Miller  
Agency Attorney

4/18/13  
Date:

**EXHIBIT A**

**CDM Smith**

**Scope of Work  
(Amendment No. 2)**

**for**

**Engineering Design and Permitting**

**for**

**Caja del Rio Landfill**

**RFP #'12/06/P**



6000 Uptown Blvd. NE, Suite 200  
Albuquerque, NM 87110  
tel: 505 243-3200  
fax: 505 243-2700

April 10, 2013

Mr. Randall Kippenbrock, P.E.  
Executive Director  
Santa Fe Solid Waste Management Agency  
149 Wildlife Way  
Santa Fe, New Mexico 87506-8342

Subject: Caja del Rio Landfill Permit Modification and Renewal  
Cell 5B/6B Design and Contractor Coordination Services  
Amendment 2 to SFSWMA PO# 11128449-000-OP  
CDM Smith Project No.: 10679-91151/91152

Dear Mr. Kippenbrock:

CDM Smith Inc. (CDM Smith) is pleased to provide the Santa Fe Solid Waste Management Agency (SFSWMA) with this proposed scope, schedule, and fee for Amendment 2 to our "*Caja del Rio Landfill Permit Modification and Renewal and Cell 5B/6B Design and Contractor Coordination Services*" contract [SFSWMA PO# 11128449-000-OP, dated March 21, 2012] for the following additional services that have been requested by SFSWMA:

- [NEW] Task 17: Cell 5B/6B Engineering Services During Construction
  - Subtask 17.1: Blasting Permit Assistance
  - Subtask 17.2: Phase I (Blasting) Construction Quality Assurance (CQA) Services
  - Subtask 17.3: Seismic Monitoring
- [NEW] Task 18: Other Permitting Assistance
  - Subtask 18.1: Noise Study
  - Subtask 18.2: NEPA Assistance
- [REVISED] Task 13: Cell 5B/6B Design and Contractor Coordination Services
  - Task 13B: Phase II (Cell Development) Design and Bidding Assistance Services

The scope of each of these additional services, along with the estimated cost, schedule, and deliverables, is detailed herein.

Additionally, revised hourly billing rates for 2013/2014 have been included with this Amendment 2 and are provided in **Attachment A**. These rates shall be considered valid for one year from contract execution.





### **Subtask 17.1: Blasting Permit Assistance**

As a part of the new *Task 17: Cell 5B/6B Engineering Services During Construction*, the activities for Subtask 17.1 in Santa Fe County must be conducted under a blasting permit issued by the County. CDM Smith will meet with the Santa Fe County Land Use Department about the blasting permit requirements. The permit requirements will be included in the blasting contract (Subtask 17.2) to ensure all information necessary for completing the permit application will be available. CDM Smith will complete the application, respond to questions or concerns posed by the Santa Fe County Land Use Department, and track the progress of the permit through the approval process.

The permit application will be completed within five days of receipt of the documents required by contract from the blasting contractor. The application review and approval process at the County is expected to take approximately 15 days.

### **Subtask 17.2: Cell 5B/6B Construction – Phase I (Blasting) Construction Quality Assurance (CQA) Services and Subtask 17.3: Seismic Monitoring**

The design and construction of Cells 5B and 6B at the Caja del Rio Landfill was originally envisioned as one task in the original contract. However, upon further direction from SFSWMA, the activities to complete Cell 5B/6B are now divided into two separate tasks:

1. [Subtask 17.2] Cell 5B/6B Construction – Phase I (Blasting): drawings, specifications, and construction quality assurance; and
2. [Task 13B] Task Cell 5B/6B Construction – Phase 2 (Cell Development): drawings, specifications, bidding assistance, and CQA.

The Phase I blasting drawings and specifications have been completed under the original contract budget, so this task addresses the CQA activities to be performed by CDM Smith during the basalt blasting, excavation, and removal activities.

As a part of the new *Task 17: Cell 5B/6B Engineering Services During Construction*, CDM Smith will perform the following services during blasting of Cell 5B/6B for Subtask 17.2:

- Attending a Pre-construction Meeting, three monthly site inspections, and one final site walk-through
- Reviewing Shop Drawing Submittals
- Processing Contractor Requests for Information (RFI) and Change Orders
- Reviewing Contractor's Pay Application/Requests

Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 3

- Completing a post-blast topographic survey (50-foot grid pattern) and preparing as-built drawings
- Communicating with SFSWMA staff (as required)
- Maintaining Project Files

As a part of *Task 17: Cell 5B/6B Engineering Services During Construction*, CDM Smith will provide seismic monitoring of all blasting activities by our subcontractor, Dr. Catherine Aimone-Martin of Aimone-Martin Associates, LLC for Subtask 17.3. The seismic monitoring will estimate the ground vibration and air overpressure properties for developing the blasting plan and will provide assurance to landfill neighbors regarding the vibrations associated with blasting. The proposal from Dr. Aimone-Martin is provided as **Attachment B** to this amendment. Deliverables related to the seismic monitoring are described in detail in the attachment.

Assuming that the blasting activities will be completed by September 30, 2013, CDM Smith proposes to complete the Subtask 17.1 and Subtask 17.2 activities by November 15, 2013.

CDM Smith also assumes the following:

- Up to ten contractor submittals will be reviewed.
- Up to six RFIs and/or change orders will be reviewed.
- Up to four contractor's pay request applications will be reviewed.
- All meetings will be held at the offices of SFSWMA and/or at the Caja del Rio Landfill.
- Travel costs have been included for CDM Smith-Albuquerque staff only.
- One electronic copy and one hard-copy of the as-built drawings will be provided to SFSWMA.
- CDM Smith senior technical specialists will be utilized to review project documentation.

### **Subtask 18.1: Noise Study**

As a part of the new *Task 18: Other Permitting Assistance*, the activities for Subtask 18.1 are detailed herein. The residents living nearest to the Caja del Rio Landfill expressed their concerns about increased noise that might accompany the lateral and vertical expansion of the landfill. A noise study has been requested to measure the noise level associated with current landfill operations and to estimate the changes in noise with the landfill expansion. The three subtasks for this additional services are described below.

Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 4

### **Noise Measurements**

CDM Smith will perform noise measurements at the landfill. Based on public concerns regarding noise from trucks, heavy equipment, bird cannon, and crushing operations at the landfill, noise measurements will be collected to characterize various operations at the landfill. CDM Smith will attempt to coordinate noise measurements with the Santa Fe County Sheriff, the authority charged with enforcement of the Santa Fe County noise ordinance.

#### ***Activities***

- Noise measurements will be taken from various landfill operations for 20 minutes, or less if the activity is of a short nature, at the fenceline closest to the activity. Measured landfill operations will include:
  - Truck traffic;
  - Unloading of waste from trucks;
  - Placing waste in active layer by heavy equipment;
  - Compacting waste by heavy equipment;
  - Placing cover by heavy equipment;
  - Crushing operations; and
  - Bird cannons.
- Up to five 20-minute ambient noise measurements at the east fenceline of the landfill will be collected during the landfill's normal operating hours.
- Up to five 20-minute ambient noise measurements will be collected within 25 feet of the nearest residential property.
- Assess traffic noise from Caja del Rio Road.

### **Calculate Future Noise**

CDM Smith will calculate future noise levels at the nearest residences due to vertical and lateral landfill expansion.

#### ***Activities***

- Based on noise measurements taken at the landfill, determine existing noise levels at the nearest residences.
- Calculate future noise levels at the nearest residences based on future landfill design (vertical and lateral expansion).



Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 5

- Although noise from the landfill during normal operations and permitted crushing activities would be exempt from the noise limits in the Santa Fe County Noise Control and Public Nuisance Ordinance (Ordinance No. 2009-11), these limits will be used to assess the magnitude of noise at the noise sensitive units.

### **Technical Memo**

CDM Smith will prepare a technical memorandum summarizing measured and calculated noise levels.

### ***Activities***

- Prepare a technical memorandum that presents the measured noise levels, existing noise levels at the nearest residences, and predicted noise levels at the nearest residences due to expansion of the landfill.

### ***Assumptions***

- Noise measurements will be taken between 6:00 a.m. and 6:00 p.m. based on public complaints and the landfill's operational hours.
- Noise measurements will be taken for each landfill operation listed above, assuming they will be coordinated with scheduled field measurements.
- Short-term ambient noise measurements (20-minutes each) at the east fenceline of the landfill and at the nearest noise sensitive unit will be collected at different times of the day up to five (5) times at each location.
- One noise meter will be used.
- Field work schedule and cost are based on a 3-day (2-nights) travel from Sacramento, CA.
- Noise measurement dates are subject to weather (wind speed less than 12 mph, no precipitation, no snow accumulation).
- Noise from landfill operation is limited to between Monday and Saturday 6:00 a.m. to 6:00 p.m.
- Location of the nearest noise sensitive units are assumed to be the same in the future (i.e. east of the landfill and Caja del Rio Road).
- Landfill operations in the future will be comparable to existing operations.
- The report will be prepared in draft and final format for review by SFSWMA.
- The SFSWMA will provide comments within 7 days.



Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 6

- CDM Smith will provide response to comments within 7 days.
- The draft and final technical memorandum will be distributed in electronic format.
- Travel for any meetings to present the study results is not included.

### ***Schedule***

The noise study field measurements can be initiated within 3 weeks of Notice to Proceed. The field measurements will be conducted over one week. A draft report will be provided to SFSWMA for review within 3 weeks of the completion of field measurements. A final report will be submitted one week after receipt of SFSWMA comments.

### **Subtask 18.2: NEPA Assistance**

As a part of the new *Task 18: Other Permitting Assistance*, the activities for Subtask 18.2 are detailed herein. The Bureau of Land Management (BLM) is requiring a completed National Environmental Policy Act (NEPA) document for landfill activities related to the production and sale of crushed rock. The level of NEPA documentation is expected to be an Environmental Assessment (EA). The BLM will issue a contract to complete the EA. It is anticipated that the BLM contractor will require assistance in collecting the information and data necessary to prepare the EA. CDM Smith will provide 50 hours of staff engineer time to compile data and information as requested by the BLM contractor. At the completion of the draft EA, CDM Smith will provide a senior environmental specialist to review the draft EA on behalf of SFSWMA and provide comments to the BLM.

This task will begin when the BLM NEPA contractor has been issued a Notice to Proceed and requests information and data. Review comments on the draft EA will be submitted to SFSWMA for approval within three weeks of the Notice of Availability for the draft EA.

### **Task 13B: Cell 5B/6B Construction – Phase II (Cell Development) Design and Bidding Assistance Services**

This additional service task was combined with Cell 5B/6B blasting in the original contract. As described under Subtask 17.2, separating the Cell 5B/6B blasting and cell completion requires additional effort by CDM Smith than for completing these same services as a single task. As such, as part of the revised *Task 13: Cell 5B/6B Design and Contractor Coordination Services*, CDM Smith will provide services for Task 13B as detailed herein. This Task will consist of preparing the construction drawings, technical specifications, and the applicable contract documents for the completion of Cells 5B and 6B at the Caja del Rio Landfill. Bidding assistance services will also be provided under this Task 13B as described herein.

The construction drawings will include plans related to the overall site and subgrade, as well as liner and leachate collection details. The specifications will include front-end documentation,



Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 7

general and technical specifications. CDM Smith will provide SFSWMA with 90-percent complete construction drawings and contract documents for review and comment. CDM Smith will then address SFSWMA's comments and finalize the construction drawings and contract documents for bidding and construction. CDM Smith will also provide contractor coordination services, which will consist of providing a contractor pre-bid/coordination meeting, answer contractor questions, and review bids.

The proposed engineering services will be provided as follows, in chronological order:

- Cell 5B/6B Project Meetings/Project Management
- Design Development
- Contract Documents and Technical Specifications
- Opinion of Probable Cost Estimates
- Contractor Coordination

Each of these services is described in detail below.

#### ***Cell 5B/6B Project Meetings/ Project Management***

Two design project meetings (one to be held as a 90-percent design document review meeting; one to be held as a pre-bid meeting) will be directed by CDM Smith with SFSWMA's staff in attendance. The meetings will be held at SFSWMA or CDM Smith offices and will be attended by our Project Manager and Project Engineer. CDM Smith will prepare electronic summaries of these meetings. This task also includes labor costs for project setup, document control and filing, invoicing, and close out.

#### ***Design Development***

CDM Smith will provide engineering services for the preparation of construction plans for final subgrade elevations and installation of the liner and leachate collection system for Cell 5B/6B at the Caja del Rio Landfill. The CDM Smith design will include provisions for preparation of the subgrade (post-basalt blasting) prior to the installation of the composite liner system. It is assumed that the composite liner system will consist of a Geosynthetic Clay Liner (GCL) overlain by a 60-mil HDPE geomembrane, and geotextile fabric for protection of HDPE geomembrane. Two feet of drainage material (basalt and/or glass cullet) will be included for installation above the composite liner system.

Engineering drawings will be based upon the current NMED Solid Waste Bureau (SWB) approved permit drawings. The drawing set will include (at a minimum) the following:

- Title Sheet

Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 8

- Overall Site Plan
- Cell 5B/6B Liner Grades
- Liner and Leachate Collection System Plan
- Liner Details
- Leachate Collection System Details
- Stormwater Management Details

CDM Smith will transmit three copies of the full-size (24" x 36") contract drawings and bound technical specifications at the completion of the 90-percent design to SFSWMA for review and comment. CDM Smith will meet and discuss comments with SFSWMA. Concurrently, CDM Smith's senior technical staff will review the documents for quality control/quality assurance, as well as adherence to the project scope.

Comments will be incorporated by CDM Smith and ten full-size copies of the final "for construction" drawings and bound technical specifications will be transmitted to SFSWMA for use in bidding.

#### ***Contract Documents and Technical Specifications***

CDM Smith will prepare contract documents in accordance with the SFSWMA procurement procedures. The documents will include, at a minimum, requirements for general conditions (per the SFSWMA), measurement and payment, summary of work, earthwork, subgrade preparation, GCL, 60-mil HDPE, 2' thick drainage material layer (basalt and/or glass cullet material), geotextile fabric, gravel, and leachate collection system piping.

Contract documents will be submitted to the SFSWMA for review and approval at the 90-percent completion phase. CDM Smith will incorporate comments into the final "for construction" document set and submit to SFSWMA the final documents.

#### ***Opinion of Probable Cost Estimates***

CDM Smith will develop two engineer's opinions of probable cost for construction of Cell 5B/6B based on CDM Smith's 90-percent and final "for construction" design documents. The engineer's opinions of probable construction cost will include applicable New Mexico Gross Receipts Tax (NMGRT) and appropriate levels of contingency.

#### ***Contractor Coordination***

CDM Smith will assist the SFSWMA with contractor coordination services by conducting a contractor coordination meeting, responding to contractor's questions, reviewing bids, preparing a bid tabulation between the engineer's opinion of probable cost and the bids. Note that the



Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 9

coordination activities will be based on the "Contract Documents and Technical Specifications" documentation provided by CDM Smith.

CDM Smith will provide SFSWMA with a set of contract documents (full-size drawings and bound specifications) signed and sealed by a registered New Mexico Professional Engineer.

### ***Assumptions***

The following assumptions have been made for Task 13B:

- The drawing set for the construction of Caja del Rio Landfill Cell 5B/6B is assumed to consist of up to seven drawings and one title sheet.
- Subgrade survey information from the Cell 5B/6B Construction – Phase I (Blasting) project will be utilized during drawing development for this project. As such, additional subgrade survey will not be required to complete the design activities.
- CDM Smith senior technical staff will be utilized to review the design documents prior to release for construction.
- CDM Smith will provide ten sets of bidding documents for construction.
- CDM Smith will not advertise the project.
- No leachate collection system pumps or other equipment will be required. Leachate collection piping installed as part of this project will be interconnected with existing leachate collection system components.
- SFSWMA will provide geotechnical information for drainage material (basalt and glass cullet) prior to finalization of design.
- All blasting for rough grading, fine grading and compaction will have been completed in accordance with the CDM Smith design under the Phase I construction project. As such, additional blasting will not be required to complete the design activities.
- CDM Smith will perform CQA services during the Phase II Cell 5B/6B construction; however, the scope and fee for these services are not included herein and will be defined in a separate contract amendment.

### ***Schedule***

These services will be performed upon written notice to proceed (NTP) as directed by SFSWMA. Cell 5B/6B design will be completed within four months of NTP and bidding assistance services will be completed within two months of the bid date.







Mr. Randall Kippenbrock, P.E.  
 April 10, 2013  
 Page 10

**Estimated Fee**

CDM Smith is requesting compensation for these five tasks in accordance with the terms and conditions of the original contract (SFSWMA PO# 11128449-000-OP). The estimated cost for each of the additional services is summarized below. Detail regarding our cost estimate is provided in Attachment C.

**Summary of Proposed Project Costs**

Additional Service Task	Estimated Cost* (without NMGR)	Total Estimated Cost* (with 7.0% NMGR)
<b>[NEW] Task 17: Cell 5B/6B Engineering Services During Construction</b>		
Subtask 17.1: Blasting Permit Assistance	\$4,645	\$4,970
Subtask 17.2: Cell 5B/6B Construction – Phase I (Blasting) Construction Quality Assurance Services	\$67,349	\$72,063
Subtask 17.3: Seismic Monitoring	Estimated Costs for this Subtask are included in Subtask 17.2 Estimated Costs	
<b>[NEW] Task 18: Additional Permitting Assistance</b>		
Subtask 18.1: Noise Study	\$12,997	\$13,907
Subtask 18.2: NEPA Assistance	\$11,176	\$11,958
<b>[REVISED] Task 13: Cell 5B/6B Design and Contractor Coordination Services</b>		
Task 13B: Cell 5B/6B Construction – Phase II (Cell Completion) Design and Bidding Assistance Services	\$56,713	\$60,683
<b>Total</b>	<b>\$152,880</b>	<b>\$163,581</b>

\*Estimated costs are based upon the revised 2013/2014 hourly billing rates (refer to Attachment A).

In summary, and based upon the proposed project scope, CDM Smith proposes a fee of \$152,880, which includes NMGR (\$10,702 at the current rate of 7 percent), to be billed on a not-to-exceed time and materials basis.

CDM Smith appreciates the opportunity to submit this proposal for the permit modification and renewal application development; and Cell 5B/6B design and contractor coordination for the Caja del Rio Landfill. If you have any questions, please contact us at (505) 243-3200.

Sincerely,

Paul A. Karas, CPG, CHMM  
 Associate, Client Service Manager  
 CDM Smith Inc.

Kerrie L. Greenfelder, PE  
 Project Manager  
 CDM Smith Inc.





Mr. Randall Kippenbrock, P.E.  
April 10, 2013  
Page 11

**Attachments**

Attachment A: Schedule of 2013/2014 Hourly Billing Rates

Attachment B: Seismic Monitoring Proposal, Aimone-Martin Associates, LLC

Attachment C: Proposed Cost Estimate Summary

cc: Kelly Collins, CDM Smith Project Manager  
Danita Boettner, CDM Smith  
Greg Larson, CDM Smith  
Tom Parker, CDM Smith  
File





## SCHEDULE OF 2013/2014 HOURLY BILLING RATES

<u>CATEGORIES</u>	<u>HOURLY RATES</u>
<u>TECHNICAL/PROFESSIONAL SERVICES</u>	
FIELD TECHNICIAN I	\$ 75.00
FIELD TECHNICIAN II	\$ 85.00
ENGR/SCI PROFESSIONAL I	\$ 90.00
ENGR/SCI PROFESSIONAL II	\$ 100.00
ENGR/SCI PROFESSIONAL III	\$ 110.00
ENGR/SCI PROFESSIONAL IV	\$ 125.00
ENGR/SCI PROFESSIONAL V	\$ 140.00
ENGR/SCI PROFESSIONAL VI	\$ 155.00
SENIOR ENGR/SCI/PROFESSIONAL	\$ 165.00
PRINCIPAL/ASSOCIATE/SR TECHNICAL SPECIALIST	\$ 195.00
SENIOR TECHNICAL CONSULTANT	\$ 200.00
CONTRACT OFFICER	\$ 200.00
<u>PROFESSIONAL SUPPORT SERVICES</u>	
CLERICAL (ADMIN)	\$ 70.00
CONTRACT ADMIN/FINANCIAL	\$ 100.00
STAFF SUPPORT SERVICES (CADD DESIGNER)	\$ 105.00
SENIOR SUPPORT SERVICES (CADD DESIGNER)	\$ 125.00

Notes:

- (1) Subconsultants and subcontractors will be invoiced at cost plus 10% unless otherwise stipulated in writing.
- (2) Other direct expenses (e.g., travel, postage, equipment, supplies) will be invoiced at cost.
- (3) Mileage will be billed at a rate of \$0.565/mile.
- (4) CDM Smith reserves the right to propose revised rates annually.

**Aimone-Martin Associates, LLC**  
 Corporate: 1005 Bullock Avenue Socorro, New Mexico 87801  
 Hawaii Office: 112 Walaka St #303 Kihei, HI 96753  
 New York/New Jersey Office: 37 W 14th St Bayonne, NJ 07002  
 phone (575) 838-2229 • fax (575) 835-3863 • cell: (505) 980-9949 • toll free (877) 750-2229  
 e-mail cathy@aimonemartin.com • Website: www.aimonemartin.com  
 Aimone-Martin Associates, LLC is DBE Certified with the New Mexico Unified Certification Program (NMUCP) and  
 NMDOT DBE Program, Certificate No. 08-11-305

### Cost Estimate


**Submitted to:**  
 Kerrie Greenfelder, P.E.  
 CDM Smith  
 6000 Uptown Boulevard NE, Suite 200  
 Albuquerque, NM 87110  
 505.243.3200  
 505.206.0800  
 greenfelderkl@cdmsmith.com

**Date:** March 28, 2013  
**Project:** Caja del Rio Landfill  
 Cell 5B/6B

Item	Description	No.	Unit	Total Amount
<b>1</b>	<b>ON-SITE VIBRATION MONITORING: Attenuation Modeling</b>			
1.1	Vibration Monitoring using multiple seismographs for first two test blasts	2	\$1,800	\$3,600.00
	Multiple seismographs placed in a linear array to develop site attenuation models for ground vibration and air overpressure properties, analysis and report; to be used by blasting company for blast design and off-site vibration control			
1.2	Mileage - 340 mi RT, 2 trips	680	\$0.55	\$374.00
<b>2</b>	<b>REMOTE VIBRATION MONITORING AND REPORTING - two (2) units</b>			
2.1	Telemetry-based seismograph rental - monthly, 2 units for three months	2	\$400	\$2,400.00
	Two telemetry-enabled seismographs; one placed on-site at landfill property perimeter in the direction of off-site structures; one placed at the closest off-site property of a cooperating property owner			
2.2	Monitoring & reporting - lump sum for each blast day, 30 blasts estimated	30	\$400	\$12,000.00
	Vibration and air overpressure remote monitoring of daily blasting, download and reporting; blaster must supply blast details within 24 hrs of blast(s) to include charge weight per delay and GPS of blast			
2.3	Initial Installation and removal of equipment - two trips, lump sum	2	\$500	\$1,000.00
<b>3</b>	<b>AD HOC CONSULTING - TBD</b>			
3.1	Dr. Aimone-Martin - blast consulting services as needed		\$250	
3.2	Vibration Engineer - as needed		\$150	
3.4	Travel expenses - as needed			
	Services include responding to complaints, performing structure surveys and reports, moving seismographs			
<b>4</b>	<b>ADMINISTRATION</b>			
			12%	\$2,324.88
		<b>TOTAL ESTIMATE</b>		<b>\$21,698.88</b>

**Terms and Conditions:**

All TBD (to be determined) costs are additional to this cost estimate.  
 As of January 1, 2013, New Mexico gross receipts taxes for construction projects will no longer be collected by Aimone-Martin Associates, LLC. A non-taxation certificate, type 6, must be supplied to Aimone-Martin Associates, LLC by the CDM Smith to proceed with his work.  
 Payment is due 30 days of invoice receipt and is past due fifteen (15) days thereafter. A finance charge of 1.5% per month on the unpaid amount of this invoice will be charged on past due accounts after 15 days.

  
 3/28/2013  
 Dr. Catherine Aimone-Martin      Date  
 President





**ATTACHMENT**

Professional Services Agreement - Amendment No. 1

**SANTA FE SOLID WASTE MANAGEMENT AGENCY  
AMENDMENT No. 1  
PROFESSIONAL SERVICES AGREEMENT  
(Landfill Permitting - 2012)**

This AMENDMENT No. 1 (the "Amendment") to the PROFESSIONAL SERVICES AGREEMENT, dated February 23, 2012 (the "Agreement"), is made and entered into between the Santa Fe Solid Waste Management Agency (the "Agency") and CDM Smith Inc. (the "Contractor"). The Amendment shall be effective as of the date this Amendment is executed by the Agency.

**RECITALS**

Under the terms of the Agreement, the Contractor has agreed to provide engineering design and permitting services to the Agency.

Pursuant to Article 17, Amendment of the Agreement, and for good and valuable consideration, the receipt and sufficiency of which are acknowledged by the parties, the Agency and the Contractor agree as follows:

**1. TERM AND EFFECTIVE DATE**

Article 5, Terms and Effective Date of the Agreement is amended to define the term of the Agreement, so that Article 5 reads in its entirety as follows:

- A. This Agreement shall be effective when signed by the Agency and shall terminate on January 24, 2014, unless terminated sooner pursuant to Article 6 below.
- B. Pursuant to the limitations on multi-term contracts for professional services codified in NMSA 1978 § 13-1-150, this Agreement may not exceed four



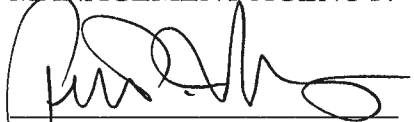
years, including all extensions and renewals. Subject to that limitation, the Agreement can be renewed annually, if agreed upon by the Agency and the Contractor and approved by the Joint Powers Board.

**2. AGREEMENT IN FULL FORCE**

Except as specifically provided in this Amendment, the Agreement remains and shall remain in full force and effect, in accordance with its terms.

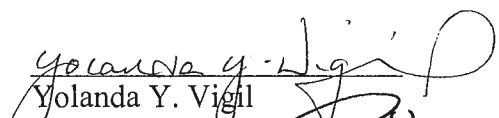
IN WITNESS WHEREOF, the parties have executed this AMENDMENT No.1 to the Professional Services Agreement as of the dates set forth below.

SANTA FE SOLID WASTE  
MANAGEMENT AGENCY:

  
Peter Ives  
Vice-Chairperson

1-24-13  
Date:

ATTEST:

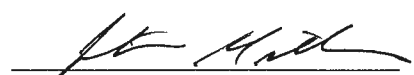
  
Yolanda Y. Vigil  
Santa Fe City Clerk

CDM SMITH INC.:

  
Paul A. Karas  
Associate, Client Service Manager

1/28/13  
Date:

APPROVED AS TO FORM:

  
Justin W. Miller  
Agency Attorney

1/24/13  
Date:

**ATTACHMENT**

Professional Services Agreement

**SANTA FE SOLID WASTE MANAGEMENT AGENCY  
PROFESSIONAL SERVICES AGREEMENT  
(Landfill Permitting - 2012)**

This PROFESSIONAL SERVICES AGREEMENT (“Agreement”) is made and entered into by and between the Santa Fe Solid Waste Management Agency (“the Agency”) and CDM Smith Inc. of Albuquerque, NM (the “Contractor”) for Engineering Design and Permitting Services for Permit Renewal, Permit Modification, Landfill Vertical and Lateral Expansion, and Cell 5B/6B Design and Construction Quality Assurance for the Caja del Rio Landfill (RFP No. ‘12/06/P) as described in Exhibit A and below. The Agreement shall be effective as of the date this Agreement is executed by the Agency.

1. SCOPE OF SERVICES

The professional services subject to this Agreement are set forth in the Scope of Work attached hereto as Exhibit A.

2. STANDARDS OF PERFORMANCE; LICENSES

A. Contractor represents that it possesses the experience and knowledge necessary to perform the services described in this Agreement.

B. Contractor agrees to obtain and maintain throughout the term of this Agreement all applicable professional and business licenses required by law for itself and its employees, agents, representatives and subcontractors.

3. COMPENSATION

A. The Agency shall pay to Contractor in full payment for services rendered, including applicable gross receipts taxes, a sum not to exceed Five Hundred Ninety Thousand Four Hundred Fifty-Five Dollars and No Cents (\$590,455.00).

B. Contractor shall be responsible for payment of gross receipts taxes levied by the State of New Mexico on the sums payable under this Agreement.

C. Payment shall be made upon receipt and approval by the Agency of detailed statements containing a report of services completed. Compensation shall be paid only for services actually performed in accordance with the fee schedule set forth in the Scope of Work hereto attached in Exhibit A.

D. Detailed statements containing reimbursement expenses shall be itemized.

4. APPROPRIATIONS

The terms of this Agreement are contingent upon sufficient appropriations to and authorization from the Joint Powers Board for the Agency for the performance of this Agreement. If sufficient appropriations are not made or authorization provided, this Agreement shall terminate upon written notice from the Agency to Contractor. The Agency shall be responsible for charges incurred up to the date of notification under this Section per Section 6 of this Agreement. The Agency's decision as to whether sufficient appropriations are available shall be accepted by Contractor and shall be final.

5. TERM AND EFFECTIVE DATE

A. This Agreement shall be effective when signed by the Agency and terminate on February 23, 2013, unless it is terminated sooner pursuant to Article 6 below.

B. Pursuant to the limitations on multi-term contracts for professional services codified in NMSA 1978 § 13-1-150, this Agreement may not exceed four years, including all extensions and renewals. Subject to that limitation, the Agreement can be renewed annually, if agreed upon by the Agency and Contractor and approved by the Joint Powers Board.

6. TERMINATION

The Agency may terminate this Agreement upon ten (10) days written notice to Contractor. If the Agency terminates the Agreement:

- 1) Contractor shall render a final report of the services performed up to the date of termination and shall turn over to the Agency original copies of all work product, research, or papers prepared for the services covered by this Agreement. The Agency shall pay Contractor for services rendered and expenses incurred under this Section, including for preparation of the final report.
- 2) If compensation is not based upon hourly rates for services rendered, the Agency shall pay Contractor for the reasonable value of services satisfactorily performed through the date Contractor receives notice of such termination for which compensation has not already been paid.
- 3) If compensation is based upon hourly rates and expenses, Contractor shall be paid for services rendered and expenses incurred through the date Contractor receives notice of such termination.

7. STATUS OF CONTRACTOR; RESPONSIBILITY FOR PAYMENT OF EMPLOYEES AND SUBCONTRACTORS

- A. Contractor, its agents, and its employees are independent contractors performing professional services for the Agency and are not employees of the Agency.
- B. Contractor, its agents, and its employees shall not accrue leave, retirement, insurance, bonding, or any other benefits afforded to employees of the Agency, and shall not be permitted to use Agency vehicles in the performance of this Agreement.

C. Contractor shall be solely responsible for payment of wages, salaries, and benefits to any and all employees or subcontractors Contractor retains to perform any of its obligations pursuant to this Agreement.

8. CONFIDENTIALITY

Any confidential information provided to or developed by Contractor in the performance of this Agreement shall be kept confidential, and shall not be made available to any individual or organization by Contractor without the Agency's prior written approval unless that information becomes public through no fault of CDM Smith, or is required to be disclosed pursuant to a court or administrative order. The Agency will identify that information which it considers to be confidential.

9. CONFLICT OF INTEREST

Contractor warrants that it presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with its performance of its obligations pursuant to this Agreement. Contractor further agrees that it shall not employ or contract with anyone in the performance of this Agreement that has any such conflict of interest.

10. ASSIGNMENT; SUBCONTRACTING

Contractor shall not assign or transfer any rights, privileges, obligations or other interests under this Agreement, including any claims for money due, without the Agency's prior written consent. Contractor shall not subcontract any portion of the services to be performed under this Agreement without the Agency's prior written approval.

11. RELEASE

Contractor, upon acceptance of final payment of the amount due under this Agreement, releases the Agency, its officers, and its employees from all liabilities, claims, and obligations

whatsoever arising from or under this Agreement. Contractor agrees not to purport to bind the Agency to any obligation not assumed herein by the Agency unless Contractor has express written authority to do so, and then only within the strict limits of that authority.

12. INSURANCE

A. Contractor, at its own cost and expense, shall carry and maintain in full force and effect during the term of this Agreement professional liability insurance of \$2,000,000 for each claim, comprehensive general liability insurance of \$2,000,000 for each occurrence and \$2,000,000 in general aggregate coverage for bodily injury and property damage liability, in a form and with an insurance company acceptable to the Agency. The Agency shall be named as an additional insured under the insurance policy, and the policy shall provide that the Agency will be notified no less than 30 days before the policy is cancelled for any reason. Contractor has furnished the Agency with a copy of a Certificate of Insurance or other evidence of Contractor's compliance with the provisions of this section as a condition of entering into this Agreement.

B. Contractor shall carry and maintain Workers' Compensation insurance in accordance with New Mexico law to provide coverage for Contractor's employees throughout the term of this Agreement. Contractor shall provide the Agency with evidence demonstrating that appropriate Workers' Compensation insurance has been obtained.

C. Contractor shall also carry and maintain sufficient automobile liability insurance throughout the term of this Agreement to cover no less than \$2,000,000 combined single limit for each accident.

13. INDEMNIFICATION

Contractor shall indemnify and hold harmless the Agency from all losses, damages, claims or judgments, including payment of all attorneys' fees and costs on account of any suit, judgment, execution, claim, action, or demand whatsoever to the extent arising from the negligent acts, errors, or omissions, or willful and reckless disregard of obligations under this Agreement, in the performance of any services covered by this Agreement, whether occurring on Agency managed or owned property or otherwise, by Contractor or its employees, agents, representatives, or subcontractors, excepting only such liability that arises out of the Agency's negligence.

14. NEW MEXICO TORT CLAIMS ACT

Any liability incurred by the Agency in connection with this Agreement is subject to the immunities and limitations set forth in the New Mexico Tort Claims Act, NMSA 1978 §§ 41-4-1 to 41-4-27. The Agency and its employees do not waive sovereign immunity, any available defense, or any limitation of liability recognized by law. No provision in this Agreement modifies or waives any provision of the New Mexico Tort Claims Act.

15. THIRD PARTY BENEFICIARIES

By entering into this Agreement, the parties do not intend to create any right, title, or interest in, or for the benefit of, any person other than the Agency and Contractor. No person shall claim any right, title or interest under this Agreement or seek to enforce this Agreement as a third party beneficiary.

16. RECORDS AND AUDIT

Contractor shall maintain throughout the term of this Agreement and for a period of three years thereafter detailed records that indicate the date, time, and nature of services rendered. These records shall be subject to inspection by the Agency, the City of Santa Fe Finance Department, and



the State Auditor. The Agency shall have the right to audit the billing both before and after payment. Payment under this Agreement shall not foreclose the right of the Agency to recover excessive or illegal payments.

17. APPLICABLE LAW; CHOICE OF LAW; VENUE

Contractor shall abide by all applicable federal and state laws and regulations, and all ordinances, rules and regulations of the Agency. In any action, suit, or legal dispute arising from this Agreement, Contractor agrees that the laws of the State of New Mexico shall govern. The parties agree that any action or suit arising from this Agreement shall be commenced in a federal or state court of competent jurisdiction in New Mexico. Any action or suit commenced in the courts of the State of New Mexico shall be brought in the First Judicial District Court.

18. AMENDMENT

This Agreement shall not be altered, changed, or modified except by an amendment in writing executed by the parties.

19. SCOPE OF AGREEMENT

This Agreement expresses the entire agreement and understanding between the parties with respect to the services set forth in the Scope of Work attached hereto as Exhibit A. No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Agreement.

20. NON-DISCRIMINATION

During the term of this Agreement, Contractor shall not discriminate against any employee or applicant for an employment position to be used in the performance of the services Contractor undertakes pursuant to this Agreement on the basis of ethnicity, race, age, religion,

creed, color, national origin, ancestry, sex, gender, sexual orientation, physical or mental disability, medical condition, or citizenship status.

21. SEVERABILITY

If one or more of the provisions of this Agreement or any application thereof is found to be invalid, illegal, or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions of the Agreement and any other application thereof shall not in any way be affected or impaired.

22. NOTICES

Any notices required to be given under this Agreement shall be in writing and served by personal delivery or by mail, postage prepaid, to the parties at the following addresses:

AGENCY: Mr. Randall Kippenbrock, P.E.  
Executive Director  
Santa Fe Solid Waste Management Agency  
149 Wildlife Way  
Santa Fe, NM 87506

CONTRACTOR: Mr. Paul A. Karas, CPG, CHMM  
Associate, Client Service Manager  
CDM Smith Inc.  
6000 Uptown Blvd NE, Suite 200  
Albuquerque, NM 87110

IN WITNESS WHEREOF, the parties have executed this Agreement on the date set forth below.

SANTA FE SOLID WASTE  
MANAGEMENT AGENCY:

Rosemary Romero

Rosemary Romero  
Chairperson

2/23/12  
Date:

ATTEST:

Yolanda Y. Vigil  
Yolanda Y. Vigil  
Santa Fe City Clerk *YV*

CDM SMITH INC.:

Paul A. Karas

Paul A. Karas  
Associate, Client Service Manager

2/27/12  
Date:

APPROVED AS TO FORM:

Justin W. Miller

Justin W. Miller  
Agency Attorney

2/23/12  
Date:

**EXHIBIT A**

**CDM Smith**

**Scope of Work  
(Tasks 1 through 13)  
for  
Engineering Design and Permitting  
for  
Caja del Rio Landfill**

**RFP #12/06/P**



6000 Uptown Blvd NE, Suite 200  
Albuquerque, NM 87110  
tel: 505 243-3200  
fax: 505 243-2700

February 15, 2012

Mr. Randall Kippenbrock, P.E.  
Executive Director  
Santa Fe Solid Waste Management Agency  
149 Wildlife Way  
Santa Fe, New Mexico 87506-8342

Re: Caja del Rio Landfill Permit Modification and Renewal  
Cell 5B/6B Design and Contractor Coordination Services  
REVISED Scope of Services and Estimated Engineering Cost  
SFSWMA RFP No. '12/06/P

Dear Mr. Kippenbrock,

CDM Smith Inc. (CDM Smith) is pleased to provide the Santa Fe Solid Waste Management Agency (SFSWMA) with this revised proposed scope, schedule, and fee for the development of the permit modification and renewal; and Cell 5B/6B design and contractor coordination for the Caja del Rio Landfill. Outlined within these proposal documents is our understanding of the scope of work, assumptions, proposed schedule, estimated fee, and contracting details, based on the referenced Request for Proposals (RFP), our knowledge of the Caja del Rio Landfill, discussions with landfill management, and our understanding of the New Mexico Solid Waste Management Regulations.

This proposal replaces the scope of services and estimated engineering cost submitted to SFSWMA in two separate proposals on February 3, 2012 and again in a single proposal on February 10, 2012. At the direction of SFSWMA, certain elements of the RFP scope of services have been removed from the current proposal to be authorized later under separate scope and fee proposal(s) under the same contract. Specifically, costs for the "*Public Notification of Permit Modification and Renewal Application Submittal*," "*Address NMED Comments*," "*Final Permit Application Submittal*," and "*Cell 5B/6B Engineering Services During Construction*" tasks are not included in the current proposal.

The proposed scope of services is provided as **Attachment 1** and the proposed fee proposal is provided as **Attachment 2**. Our schedule of hourly billing rates for the project is included as **Attachment 3**.

These services will be performed upon written notice to proceed as directed by SFSWMA. Assuming notice to proceed is received by March 15, 2012, all components required for the submittal of the permit modification and renewal application to the NMED SWB will be completed by June 30, 2013, unless approved otherwise by SFSWMA. The NMED comments as described in Task 15 will be





Mr. Randall Kippenbrock  
February 15, 2012

Page 2

addressed by June 30, 2014 (under a separate authorization). This will allow adequate time for a subsequent round of comments to be addressed prior to the permit expiration date.

Cell 5B/6B design will be completed by July 31, 2012 and will provide contractor coordination through August 31, 2012. This will allow adequate time for the SFSWMA to obtain the funds necessary to complete the construction of Cell 5B/6B in 2013.

### ESTIMATED FEE

The following is a summary of the engineering fee required to perform this work. A detailed estimate has been attached (refer to **Attachment 2**). Hourly billing rates valid for one year from contract execution are included in **Attachment 3**.

**Summary of Proposed Project Costs**

Task Description	Subtotal Cost	NMGRT <sup>1</sup> (7 percent)	Total Project Cost
Task 1: Permit Application Project Meetings/Workshops and Project Management	\$60,160	\$4,211	<b>\$64,371</b>
Task 2: Supplemental Surveying/Mapping	\$29,271	\$2,049	<b>\$31,320</b>
Task 3: Site Masterplan and Implementation Schedule	\$27,415	\$1,919	<b>\$29,334</b>
Task 4: Vulnerable Area Assessment & Community Meeting	\$32,255	\$2,258	<b>\$34,513</b>
Task 5: Environmental and Traffic Study Updates	\$9,690	\$678	<b>\$10,368</b>
Task 6: Miscellaneous Figures and Attachments	\$22,910	\$1,604	<b>\$24,514</b>
Task 7: Permit Drawings	\$67,940	\$4,756	<b>\$72,696</b>
Task 8: Engineering Calculations & Compatibility Information	\$38,535	\$2,697	<b>\$41,232</b>
Task 9: Operational Plans	\$92,275	\$6,459	<b>\$98,734</b>
Task 10: HELP Model Analysis [Update]	\$16,380	\$1,147	<b>\$17,527</b>
Task 11: Financial Assurance	\$5,180	\$363	<b>\$5,543</b>
Task 12: Permit Preparation and Submission to NMED	\$73,770	\$5,164	<b>\$78,934</b>
Task 13: Cell 5B/6B Design and Contractor Coordination	\$76,046	\$5,323	<b>\$81,369</b>
Task 14 (FUTURE): Public Notification of Permit Modification and Renewal Application Submittal	\$0	\$0	<b>\$0</b>
Task 15 (FUTURE): Address NMED Comments	\$0	\$0	<b>\$0</b>
Task 16 (FUTURE): Final Permit Application Submittal	\$0	\$0	<b>\$0</b>
Task 17 (FUTURE): Cell 5B/6B Engineering Services During Construction	\$0	\$0	<b>\$0</b>
<b>Total Project Cost</b>	<b>\$551,827</b>	<b>\$38,628</b>	<b>\$590,455</b>

Note 1: NMGRT will be invoiced at the current rate in effect at the time of invoicing.



Mr. Randall Kippenbrock  
February 15, 2012

Page 3

In summary, and based upon the proposed project scope, CDM Smith proposes a fee of \$590,455, which includes NMGRT (\$38,628 at the current rate of 7 percent), to be billed on a not-to-exceed time and materials basis.

CDM Smith appreciates the opportunity to submit this proposal for the permit modification and renewal application development; and Cell 5B/6B design and contractor coordination for the Caja del Rio Landfill. If you have any questions, please contact us at (505) 243-3200.

Sincerely,

Thomas D. Parker, P.E.  
Associate, Project Manager  
CDM Smith Inc.

Paul A. Karas, CPG, CHMM  
Associate, Client Service Manager  
CDM Smith Inc.

Attachments

cc: Danita Boettner, PE, CDM Smith  
Kerrie Greenfelder, PE, CDM Smith

**ATTACHMENT 1**

**PROPOSED SCOPE OF SERVICES**



**Attachment 1**  
**Proposed Scope of Services**  
**Caja del Rio Landfill Permit Modification and Renewal**  
**Cell 5B/6B Design and Contractor Coordination Services**  
**SFSWMA RFP No. '12/06/P**  
**REVISED Scope of Services**

**OBJECTIVE**

CDM Smith is assisting the SFSWMA with the development of a permit modification and renewal application for both a vertical and lateral expansion at the Caja del Rio landfill to provide additional airspace. The vertical and lateral expansion will address cell over filling and expansion into an area that has more favorable geologic and hydrogeologic conditions for constructing a municipal solid waste (MSW) landfill. The lateral expansion may eliminate the need for future blasting activities for the construction of additional landfill cells at the facility. In addition, the sideslopes along current Cells 6A/6B and the “wedge” created between the current and future BLM area will be evaluated for MSW disposal.

Site stormwater management will be modified by CDM Smith to accommodate the “wedge” and lateral expansion.

The referenced RFP also requires completion of design and performance of construction quality assurance (CQA) for the previously-permitted Cells 5B/6B and a “wedge” area immediately south of 6A/6B. However, upon discussion during the first negotiation meeting with landfill management, CQA will be performed as an amendment to the contract. To accomplish the objectives of this project, CDM Smith proposes a project delivery approach which will allow for completion of the engineering and contractor coordination prior to construction activities in a cost-effective and time-sensitive manner.

The proposed engineering services for Cells 5B/6B will be provided in the following phases:

- Phase 1: Engineering and Design Services
- Phase 2: Contractor Coordination

The New Mexico Environment Department (NMED) Solid Waste Bureau (SWB) permit modification and renewal application for a MSW landfill will be submitted as a single application to the NMED SWB. It is CDM Smith’s experience that a typical permit modification and renewal document requires approximately 12 months to compile for submission to the NMED SWB for review. Subsequently, the NMED SWB generally requires between 12 to 18 months for completing their review, conducting a public hearing, and granting approval. Based upon the date of the original permit application (December 20, 1994) for the Caja del Rio Landfill, the new permit modification and renewal application must be approved by December 20, 2014. As such, the permit modification and renewal application must be submitted to the NMED SWB no later than June 2013. Descriptions of the tasks necessary to complete the permit application document are presented below.

## PROJECT DELIVERY APPROACH AND SCOPE OF WORK

To accomplish the objectives of this project, CDM Smith proposes a multi-task project delivery approach that will allow for completion of the permit modification and renewal application; and 5B/6B cell design and contractor coordination activities in a cost-effective and time-sensitive manner. The engineering services that will be completed for this contract have been divided into 17 proposed tasks. Tasks 1-13 will be authorized under the current scope of services and fee proposal. Tasks 14 - 17 will be negotiated at a later date when sufficient information is available to develop a specific scope of services, assumptions and fee proposal for those tasks. A list of the 17 proposed tasks follows:

- Task 1: Permit Application Project Meetings/Workshops and Project Management
- Task 2: Supplemental Surveying/Mapping
- Task 3: Site Masterplan and Implementation Schedule
- Task 4: Vulnerable Area Assessment and Community Meeting
- Task 5: Environmental and Traffic Study Updates
  - Threatened and Endangered Species [Update for Critical Habitat]
  - Archeological Study Report Evaluation
  - Transportation Analysis Impact Study [Update]
- Task 6: Miscellaneous Figures and Attachments
- Task 7: Permit Drawings
- Task 8: Engineering Calculations and Compatibility Information
  - Soil Erosion Loss [Wind and Rain]
  - Anchor Trench Pullout
  - Leachate Collection Pipe Capacity and Pipe Strength
  - Material Compatibility Information for HDPE, GCL, PVC/HDPE Pipe, and Aggregate
  - Geotechnical Report [BLM Property]
    - Slope Stability
    - Settlement Analysis
    - Seismicity
- Task 9: Operational Plans
  - Stormwater Management Plan

- Operations Plan
  - Contingency Plan
  - Closure and Post-Closure Care Plan
  - Special Waste Handling Plans
    - o Petroleum Contaminated Soils (PCS)
    - o Sludge
    - o Disposal of Special Waste Not Otherwise Specified
  - Construction Quality Assurance Plan (CQAP)
  - Leachate Management Plan
  - Alternative Waste Handling Plan
  - Regulated Hazardous or Unauthorized Waste Screening Plan and Personnel Training Program
  - Methane Monitoring Plan
  - Groundwater Monitoring System Plan Update
- Task 10: HELP Model Analysis [Update]
  - Task 11: Financial Assurance
  - Task 12: Permit Preparation and Submission to NMED
  - Task 13: Cell 5B/6B Design and Contractor Coordination
  - *Task 14 (FUTURE): Public Notification of Permit Modification and Renewal Application Submittal*
  - *Task 15 (FUTURE): Address NMED Comments*
  - *Task 16 (FUTURE): Final Permit Application Submittal*
  - *Task 17 (FUTURE): Cell 5B/6B Engineering Services During Construction*

Details regarding each task are described below.

## **Task 1: Permit Application Project Meetings/Workshops and Project Management**

### **1.1 Purpose**

For Task 1, CDM Smith will provide management and coordination of meetings and project tasks including subconsultant management, managing resources, project and NMED SWB meetings, and project communications.

## 1.2 Approach

A project kick-off meeting will be held at the offices of SFSWMA to establish specific project goals for the successful completion of the permit modification and renewal project. The meeting will include two (2) CDM Smith project team members and SFSWMA staff. At such time, CDM Smith will submit to the SFSWMA a work plan which will include the anticipated schedule, an outline of the levels of responsibility, communication procedures, document filing procedures, field work requirements, major project deliverables, and quality control/quality assurance procedures. CDM Smith will prepare a kick-off meeting summary and submit electronically to the SFSWMA.

CDM Smith will facilitate two (2) workshops for a total of ten (10) hours during the masterplanning activities to establish design parameters, such as height restrictions, cell depth, base and final sideslope grades, relocation of buildings and/or composting areas, and storm water management. These workshops will be held at the offices of CDM Smith in Albuquerque, NM. CDM Smith will provide electronic summaries of these meetings (2 total) and submit to the SFSWMA.

CDM Smith will conduct a total of three (3) project progress meetings with the SFSWMA staff. These meetings will be held at the offices of CDM Smith in Albuquerque, NM. CDM Smith will prepare electronic summaries of these meetings, as well as project status reports (3 total) for SFSWMA. An updated project schedule will be presented at each project meeting (3 total).

A total of three (3) NMED meetings will be directed by CDM Smith with SFSWMA and NMED SWB staff in attendance. These meetings serve as a communication tool to streamline the development of the permit and minimize comments on the overall submittal of the application. CDM Smith will prepare electronic summaries (3 total) of these meetings and submit to the SFSWMA and NMED SWB.

CDM Smith will set up an independently-hosted project website to facilitate dissemination of permitting information to the public. The site will provide the opportunity to submit questions or comments electronically. The website will be updated monthly throughout the permitting process (up to 18 updates) with content provided by or approved by the SFSWMA. The website will be discontinued at the termination of the project.

CDM Smith will attend one (1) joint powers board (JPB) meeting to present the results of the masterplanning activities. CDM Smith will prepare presentation materials and handouts for use at the JPB meeting. CDM Smith will utilize viewshed renderings developed as part of Task 4 during the presentation to the JPB.

This task includes labor costs for project setup, document control and filing, invoicing, and close out.

### ***Assumptions***

- CDM Smith's project manager and project engineer will attend one (1) project kick-off meeting and three (3) project progress meetings in Santa Fe, NM. A total of four (4) summaries and schedules will be prepared for each of these meetings.
- CDM Smith will provide project status reports (three (3) total) during the project progress meetings subsequent to the project kick-off meeting.
- CDM Smith's project manager and project engineer will host and attend two (2) workshops in Albuquerque, NM. A total of two (2) summaries will be prepared for each workshop.
- CDM Smith's project manager and project engineer will host and attend three (3) NMED meetings in Albuquerque, NM. A total of three (3) summaries will be prepared for each of these meetings.
- CDM Smith's project manager and project engineer will attend one (1) meeting with the JPB in Santa Fe, NM.
- The viewshed renderings will be comprised of colored still images mounted on 36-inch by 36-inch foamboard. Video or animated materials will also be developed by CDM Smith for this task (a total of 60 hours have been allotted for 3D model, video, and animation development; model to be used for all related video/animation tasks).

## **Task 2: Supplemental Surveying/Mapping**

### **2.1 Purpose**

For Task 2, CDM Smith will provide topographic surveying/mapping as required to meet the requirements of *20.9.3.8 NMAC*.

### **2.2 Approach**

#### **2.2.1 Aerial Survey**

CDM Smith will acquire nominal 1:6,000 black and white negative aerial photography (2 flight lines and 11 exposures) of the Caja del Rio Landfill property. Topographic/planimetric mapping will be performed for the portions of the property located within Section 21, 22, 27, and 28, T17N, R8E. CDM Smith will provide from the 1:6,000 flight DTM and planimetric digital data in the form of the following deliverables: CADD edited files of the planimetric digital data and contour digital data created from the DTM digital data; and, a black and white digital orthophoto mosaic of the project areas. The DTM digital data will be prepared in DCA format with the planimetric digital data and the contour digital data created from the DTM digital data in AutoCAD format at a final scale of 1"=100' (1:1200) with 1' contours in the active lined cell area and 2' contours for the remaining portion of the landfill property (extending to 300 feet beyond the property boundary). Topographic mapping will comply with National Map Accuracy Standards. The survey will be tied into the New Mexico State Plane Coordinate System.

## 2.2.2 Ground Based Survey

### ***Set Panel Control Points***

CDM Smith will set the project control points, including monumentation, paneling, panel maintenance, and acquisition of horizontal and vertical survey data for fourteen (14) control points to support the aerial survey work.

### ***Other Site Features Survey***

CDM Smith will perform field survey work to obtain horizontal and vertical data for the following:

- Stormwater Culvert Invert Elevations
- Detention Pond Outlet Pipe (invert elevation)
- Detention Pond Emergency Spillway (invert elevation)
- Active LFG Collection System and Condensate Wells
- Underground Utility Lines
- Three (3) existing groundwater monitoring wells (top of casing and ground elevations for MW-1, MW-2R, and MW-4R), including the location of the two (2) existing piezometers (P-3 and P-5)
- Fifteen (15) active landfill gas collection wells and associated condensate wells

*Note: The recorded boundary plat surveys will be utilized by CDM Smith for establishment of property boundary and associated easements for the designated landfill property (Sections 21, 22, 27, and 28).*

### ***Assumptions***

- CDM Smith will set fourteen (14) control points.
- CDM Smith will perform an aerial survey of SFSWMA property located within Sections 21, 22, 27, and 28, T17N, R8E.
- CDM Smith will survey all permanent groundwater monitoring wells (3 total), active gas collection wells (15 total) and associated condensate wells.
- Additional other site features will be provided by CDM Smith on the base survey including, stormwater culvert inlets and outlets, detention pond outlet, detention pond emergency spillway, active LFG collection wells, LFG flare station, LFG system appurtenances, and underground utilities.

- The survey data will be provided in AutoCAD drawing format. CDM Smith will provide the quality control documentation for all field survey work.
- Additional ground based survey upon completion of the topographic survey will require a maximum of three (3) mobilizations of the survey crew.

### **Task 3: Site Masterplan and Implementation Schedule**

#### **3.1 Purpose**

For Task 3, CDM Smith will develop the overall site masterplan for build-out and material handling, cell construction and usage sequencing, leachate collection system layout, benefit analysis, project schedule baseline that illustrates field work activities, permitting activities, review periods, and NMED timelines.

#### **3.2 Approach**

CDM Smith will provide overall site masterplanning assistance related to build-out and material handling; cell construction and usage sequencing; and leachate collection system layout. As part of the masterplanning activities a cost benefit analysis for the current cell development plan of Cell 5B/6B, vertical expansion within the currently lined cells, lateral expansion into the BLM tract, and incorporation of the "wedge" along the eastern and southern perimeter of the currently lined landfill will be performed. CDM Smith will submit a "draft" letter report describing a summary of the cost benefits of each of the options described above for SFSWMA review and approval. Review comments, if any, will be incorporated prior to final submittal to the SFSWMA.

CDM Smith will prepare a schedule for development of future landfill cells and associated closure for the current and future landfill areas. As part of the kick-off meeting (refer to Task 1), a draft site *Masterplan and Implementation Schedule* will be developed to include critical deadline dates identified for the following tasks:

- Engineering Field Work
- Permit Renewal Application and Modification Submission to NMED
- NMED Permit Application Approval
- Design Needs
- Projected Landfill Cell Construction and Closure

CDM Smith will update the schedule for presentation at the project progress meetings as described under Task 1.

#### **Assumptions**

- CDM Smith will develop the schedule using Microsoft Project scheduling software.

- CDM Smith will utilize the Volumetric Evaluation performed as part of Task 13.2.3 to estimate cell development and closure activity timelines.
- Up to three (3) updates to the *Masterplan and Implementation Schedule* will be provided to SFSWMA.

## **Task 4: Vulnerable Area Assessment and Community Meeting**

### **4.1 Purpose**

For Task 4, CDM Smith will conduct the vulnerable area assessment as defined by 20.9.2.7.V (3) NMAC. Regardless of whether or not a facility is located within a vulnerable area, NMED SWB recommends soliciting the community for input by holding a community meeting. PK Public Relations will provide facilitation and assistance for the community meeting.

### **4.2 Approach**

#### **4.2.1 Vulnerable Area Assessment**

CDM Smith will develop a vulnerable area assessment in accordance with NMED requirements and include, at a minimum, the following:

- An evaluation of the percentage of economically stressed households greater than the state percentage based upon the most recent actual census bureau data within any square mile of the 4-mile radius surrounding the facility.
- An evaluation of the population within the 4-mile radius surrounding the landfill.
- An evaluation of the regulated facilities, not including the SFSWMA's facilities, within the 4-mile radius.

#### ***Assumptions:***

- CDM Smith assumes that the facility is **not** located within a vulnerable area and CDM Smith will obtain NMED SWB concurrence upon completion of the vulnerable area assessment. Should NMED concurrence not be obtained, additional work related to the development of a community impact assessment will be provided by CDM Smith under a separate scope and fee, if required.
- CDM Smith will submit one (1) copy of the assessment to NMED for approval on SFSWMA's behalf. One (1) copy of the assessment will be provided to the SFSWMA for record.
- NMED will approve the vulnerable area assessment with minor comments, if any.

#### **4.2.2 Community Meeting**

CDM Smith will hold one (1) community meeting to obtain public input regarding the planned permit modification (based upon the masterplan of the permit modification and renewal). CDM Smith will prepare a meeting presentation; develop meeting handouts/fact



sheets/viewshed renderings; PK Public Relations will coordinate meeting logistics, including established date, time, and location; drafting announcements for publication of the meeting; and CDM Smith, with the assistance of PK Public Relations, will compile a meeting summary for inclusion in the application.

### ***Assumptions***

- CDM Smith, with the assistance of PK Public Relations, will prepare materials for the meeting, including presentation, handouts/ fact sheets, and comment cards.
- CDM Smith's project manager and project engineer will make one (1) trip to Santa Fe, NM for the meeting.
- SFSWMA will provide the meeting space.
- CDM Smith will provide the SFSWMA with the public service announcement. SFSWMA will be responsible for publishing and posting the meeting announcement.
- The viewshed renderings will be comprised of colored still images mounted on 36-inch by 36-inch foamboard.
- Video or animated materials will also be developed by CDM Smith for this task. Viewshed renderings will be developed along Caja del Rio road. Photos of the vantage point will be taken during the project kickoff meeting held at the Caja del Rio Landfill.
- Based upon the interest at the community meeting, additional community meetings will be negotiated under a separate scope and fee.

## **Task 5: Environmental and Traffic Impact Study Updates**

### **5.1 Purpose**

For Task 5, CDM Smith will provide the necessary updates to the previously completed *Threatened and Endangered Plant and Animal Species Study, Archeological Study Reports*, as well as the *Caja del Rio Road Improvement Study and Transportation Analysis*.

### **5.2 Approach**

CDM Smith will evaluate the existing *Threatened and Endangered Plant and Animal Species Study* report and provide an update based upon the most current published New Mexico Game and Fish studies to determine if critical habitats may be present within the Caja del Rio Landfill property boundary. Upon completion of this update, CDM Smith will make a recommendation as to whether a more in-depth study is necessary to clear and/or make recommendations related to relocation or protection of any species potentially identified.

CDM Smith will evaluate the *Archeological Study Reports* to determine whether additional study is necessary. Should additional study require a professional archeologist (as suggested for Site 347 in the letter dated July 12, 1993 from the State of New Mexico, Office

of Cultural Affairs, Historic Preservation Division), CDM Smith will provide these additional services to SFSWMA under a separate scope of work.

Upon County approval, CDM Smith will evaluate the *Caja del Rio Road Improvement Study Transportation Analysis* report completed by Bohannon Huston to determine the necessary updates related to current and proposed traffic volumes for the SFSWMA facility. Updates provided as part of the application will be focused on newly constructed bridges, modified haul routes, or other roads used for hauling waste to the facility (if any). The update will include the NMED-required documentation that infrastructure has been constructed to handle the current number of haul trucks, frequency of trips to the landfill, typical type, and associated weights. Notification and concurrence of the New Mexico Department of Transportation (NMDOT) will be included in this task.

### ***Assumptions***

- If additional threatened or endangered plant or animal species, archeological field work and/or studies are required, CDM Smith will provide these services to SFSWMA under a separate scope and fee estimate.
- CDM Smith assumes that the *Archeological Study Reports* provided in the original permit will not require an update. The *Archeological Study Reports* will be reviewed in detail upon execution of the contract.
- Updating the *Threatened and Endangered Plant and Animal Species Study* will not require travel.
- CDM Smith will submit draft letter reports of the updates (up to 3 total - Threatened and Endangered Species, Archeological, and Traffic) to the SFSWMA for review and approval prior to submittal to NMED.
- CDM Smith assumes notification to the NMDOT will be required.

## **Task 6: Miscellaneous Figures and Attachments**

### **6.1 Purpose**

For Task 6, CDM Smith will develop the miscellaneous figures and attachments required as part of a permit application, as described in *20.9.3.8 NMAC*.

### **6.2 Approach**

CDM Smith will prepare miscellaneous figures and attachments for inclusion in the application. At a minimum, the following items will be developed as part of this task:

- Vicinity Map
- USGS Map with Existing Utilities and Structures Map

Attachment 1: Proposed Scope of Services  
SFSWMA RFP No. '12/06/P  
REVISED Scope of Services

- Current FEMA 100-year Floodplain Map
- Facility Survey Plat and Deed
- Current Wind Rose Diagram
- Agency Solid Waste Ordinances
- Adjacent Public and Private Wells Map
- Mines, Mills, and Quarries Map
- Seismic Impact Zone Map
- Airport Location Map
- Current Land Use and Zoning Maps
- Hydrogeological Cross Sections

CDM Smith will utilize existing figures and attachments developed for the original permit application; however, it may be necessary to update the listed maps and information based upon newly published studies, documents, or maps for the area.

Necessary figures and notification forms will be provided to the Federal Aviation Administration (FAA) for concurrence and approval for both air navigation clearance and wildlife hazards to aircraft.

***Assumptions***

- CDM Smith assumes notification to the FAA will be required.
- The facility's current hydrogeological report will not require supplemental investigations or updates to meet the requirements of the NMED regulations.
- CDM Smith will submit electronically one (1) draft copy of each figure to the SFSWMA for review and approval prior to submittal to NMED.

**Task 7: Permit Drawings**

**7.1 Purpose**

For Task 7, CDM Smith will develop the permit drawings to address the requirements of *20.9.2 through 20.9.10 NMAC*.

## 7.2 Approach

CDM Smith will prepare permit-level design drawings for the Caja del Rio Landfill for inclusion in the application. The design will be based on the build-out of the “wedge” and BLM areas of the SFSWMA facility. At a minimum, the following drawings will be developed:

- Overall Site Layout
- Current Topography
- Base Grade Drawings
- Final Grade Drawings
- Landfill Sections
- Miscellaneous Civil Details
- Final Cap Details
- Stormwater Run-on/Run-off Control Plan and Details
- Liner and Leachate Collection System Plan and Details
- Active Landfill Gas (LFG) Collection System Plan and Details
- Fill and Closure Phasing Plans
- Methane Monitoring Well Installation Details

The application drawings will identify cell layout, the location of access roads and drainage crossings, buildings, utilities, permanent fences, gates, stormwater structures, active landfill gas collection system, and related facilities. Fill and closure phasing will be projected based upon the compaction determined during annual volumetric evaluations, summarized under Task 13.2.3. In addition, CDM Smith will develop a soil balance spreadsheet for the “wedge” and BLM areas of the SFSWMA facility.

CDM Smith will submit draft drawings of the proposed facility modifications for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

### ***Assumptions***

- The permit drawings will be developed by CDM Smith to the appropriate level for approval by NMED and will not be suitable for bidding and/or construction purposes.

- SFSWMA will provide necessary tonnage and soil usage estimates for developing fill and closure phasing and related soil balance.
- CDM Smith will develop up to twenty (20) permit drawings.
- CDM Smith will develop a soil balance spreadsheet to determine the availability of onsite cover material.
- CDM Smith will submit up to two (2) draft copies of the drawings to the SFSWMA for review and approval prior to submittal to NMED.

## **Task 8: Engineering Calculations and Compatibility Information**

### **8.1 Purpose**

For Task 8, CDM Smith will develop engineering calculations in support of the design drawings and obtain compatibility information as applicable to *20.9.4.13.E(2)(a)*, *20.9.4.15.A(3)*, and *20.9.4.15.A(4)* NMAC.

### **8.2 Approach**

CDM Smith will prepare design calculations and compile material compatibility information for the following items:

- Soil Erosion Loss (Wind and Rain)
- Anchor Trench Pullout
- Leachate Collection Pipe Capacity and Pipe Strength
- Material Compatibility Information for HDPE, GCL, PVC/HDPE Pipe, and Aggregate
- Supplemental Geotechnical Report (BLM Property)
  - Slope Stability
  - Settlement Analysis
  - Seismicity

CDM Smith will include this information in the application. The supplemental geotechnical report will utilize geotechnical information previously obtained by Kleinfelder to provide the basis for the proposed sideslope and liner system detailed as part of Task 7.

#### ***Assumptions***

- CDM Smith assumes that the SFSWMA will not review calculations or supplemental information prior to compilation of the draft application for SFSWMA review prior to submittal to NMED.

- There will be no additional fieldwork necessary to complete the supplemental geotechnical report (BLM Property).

## **Task 9: Operational Plans**

### **9.1 Purpose**

NMED requires that all plans be updated according to the most recent New Mexico Solid Waste Management Regulations. Therefore, for Task 9, CDM Smith will develop and update all operational related plans to meet the requirements of 20.9.2 through 20.9.10 NMAC.

### **9.2 Approach**

CDM Smith will prepare and update operational plans that meet the requirements of 20.9.2 through 20.9.10 NMAC. CDM Smith will coordinate with SFSWMA staff to collect current operational practices for the facility. The operational plans to be developed are described in detail below.

#### **9.2.1 Drainage Plan**

CDM Smith will prepare a drainage plan for entire landfill site, including the “wedge” and BLM areas of the SFSWMA facility in accordance with 20.9.6.9 NMAC. The design components of the drainage plan will be included in the permit drawings (refer to Task 7).

CDM Smith will prepare a drainage plan for the facility by evaluating both existing and final drainage conditions for the facility. As part of this evaluation, CDM Smith will size and specify material types for various new and existing drainage structures used for the control of run-on and run-off of peak stormwater flows. In compiling the drainage study, CDM Smith will use the preferred methodology specified for the calculation of peak flows (25-year and 100-year storm events). Based upon the calculations performed under this task, channel sizing and slope requirements in relation to blasting activities will be detailed as part of the Cell 5B/6B scope of services. However, the details created as part of Cell 5B/6B activities will be utilized as part of this drainage plan. A draft report outlining the peak flow calculations, drainage structures, and erosion control measures for the landfill site will be prepared.

CDM Smith will submit the draft report for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### ***Assumptions***

- CDM Smith will be required to develop one (1) drainage plan for the entire site.
- Upon approval of the application by NMED, “for construction” drawings will be developed under a separate scope and fee.
- CDM Smith will provide analysis associated with two (2) peak storm flows (25-year and 100-year storm events).

- CDM Smith will submit one (1) draft copy of the report to the SFSWMA for review and approval prior to submittal to NMED.

### 9.2.2 Operations Plan

CDM Smith will update and compile an operations plan in accordance with *20.9.3.8.C(6)* and *20.9.5 NMAC*.

As part of the development of the application, CDM Smith will update the existing Operations Plan in accordance with *20.9.5 NMAC*. The plan will address general solid waste facility operating requirements; management and control of litter, odor, and leachate; construction and demolition (C&D) waste acceptance and operation requirements; and commercial hauler operating requirements for the facility. As part of these efforts, waste projections (MSW, construction and demolition debris [C&D], and each type of special waste), site soil balances, landfill life estimates and impacts, and cell development will be evaluated.

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### *Assumptions*

- CDM Smith will provide an operations plan for managing MSW and C&D waste streams.
- The operations plan does not include special waste disposal management. This will be included as part of the material specific disposal management plan (DMP) as described under Task 9.2.5 of this scope of work.
- CDM Smith will submit one (1) draft copy of the report to the SFSWMA for review and approval prior to submittal to NMED.

### 9.2.3 Contingency Plan

CDM Smith will revise the NMED previously approved Contingency Plan for the facility to meet the requirements of *20.9.5.15 NMAC*. The revised plan will address concerns related to the function of the primary and secondary coordinator; provide a listing of emergency equipment available at the site; provide an evaluation of expected contaminants; provide a recommended evacuation plan; address the manner in which an emergency at the facility would be documented; and address other related issues.

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### *Assumptions*

- CDM Smith will submit one (1) draft copy of the report to the SFSWMA for review and approval prior to submittal to NMED.

#### 9.2.4 Closure and Post-Closure Care Plan

CDM Smith will revise and update the closure and post-closure care plans for the facility in accordance with *20.9.6 NMAC*. The Closure and Post-closure Care Plan will include the "wedge" and BLM areas of the SFSWMA facility.

As part of this task, CDM Smith will evaluate the use of an alternative cover system to allow the use of a native soil cap. The closure plan will include details related to phased closure, stormwater control, and landfill gas system management.

CDM Smith will update the post-closure care plan which will include the required methane sampling, groundwater and leachate monitoring, final cover inspection, stormwater structure inspections, fence/gate inspections, and reporting procedures.

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

##### ***Assumptions***

- CDM Smith assumes the current facility groundwater monitoring and system plan are adequate for the facility. Therefore, revision to this plan is not required.
- HELP modeling related to the design, and therefore development of this plan, will be performed under Task 10 of this scope of work.
- CDM Smith will provide one (1) closure and post-closure care plan for the entire facility, including the new "wedge" and BLM areas of the SFSWMA facility.
- Drawings associated with the development of the plan will be prepared under Task 7 of this scope of work.
- CDM Smith will submit one (1) draft copy of the plan to the SFSWMA for review and approval prior to submittal to NMED.

#### 9.2.5 Special Waste Disposal Management Plans

CDM Smith will prepare and update the current special waste disposal management plans in accordance with *20.9.8 NMAC* for the following types of special waste:

- Petroleum Contaminated Soils (PCS)
- Sludge
- Disposal of Special Waste Not Otherwise Specified

Each disposal management plan for the associated waste stream will be reviewed and developed in accordance with *20.9.8 NMAC* and will include the following:



- A description of methods to identify the various special wastes, including the use of test parameters in *20.9.8.11 NMAC*;
- Disposition procedures for incoming special wastes;
- Procedures for notifying the department in the event wastes either fail the tests listed in *20.9.8.11 NMAC*;
- The tracking system to be used to:
  - Compile and record the amounts and types of wastes received;
  - Identify the area or disposal coordinates where the waste was placed in the disposal cell; and
  - Complete the manifest requirements of *20.9.8.19 NMAC*.
- Emergency and mitigation measures in case of a spill or leak.
- Revision of the contingency plan to include a description of clean-up methodology necessary due to an accident occurring during transport or disposal.

CDM Smith will submit the draft plans for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

### ***Assumptions***

- The petroleum contaminated soils (PCS) disposal management plan will be reviewed and updated as necessary to meet the requirements of the NMED regulations.
- The sludge disposal management plan was developed by others and approved by NMED; however, CDM Smith will review and update the plan to confirm consistency with other disposal management plans submitted as part of the application.
- The “Special Waste Otherwise Not Specified” disposal management plan will be developed in its entirety by CDM Smith.
- CDM Smith will submit one (1) draft copy of each plan to the SFSWMA for review and approval prior to submittal to NMED.

### **9.2.6 Construction Quality Assurance Plan (CQAP)**

CDM Smith will revise the previously prepared construction quality assurance plan (CQAP) in accordance with *20.9.4.14 NMAC*, which requires that a site specific CQAP be submitted and approved by the NMED prior to commencement of any construction activity.

The CQAP will provide guidance and the requirements necessary to determine whether:

- Critical materials are supplied and installed in accordance with the source, design and performance criteria.
- CQA reports, samples, and test results are substantiated and maintained as proof to the quality of construction.
- Each party involved has a clear understanding of what is required for each component of the construction; therefore, decreasing the possibility for confusion over the minimum acceptable requirements during construction.

Therefore, the CQAP prepared by CDM Smith will address the following elements related to liner and final cover installation:

- Overall responsibility and authority
- CQA personnel qualifications
- Inspection and documentation requirements

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

***Assumptions***

- CDM Smith will submit one (1) draft copy of the plan to the SFSWMA for review and approval prior to submittal to NMED.

**9.2.7 Leachate Management Plan**

CDM Smith will prepare a leachate management plan in accordance with *20.9.4.15 NMAC*. The plan will include:

- A description of the existing and future leachate collection system
- Estimation of the quantity of leachate that will be generated
- Leachate monitoring and disposal procedures
- Recordkeeping requirements

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

***Assumptions***

- Drawings related to the existing and future leachate collection system will be developed under Task 7 of this scope of work.

- CDM Smith will submit one (1) draft copy of the plan to the SFSWMA for review and approval prior to submittal to NMED

#### **9.2.8 Alternative Waste Handling Plan**

CDM Smith will prepare an alternative waste handling plan to describe the procedures to be followed in case of a disruption in normal operation, such as an equipment breakdown or natural catastrophe, in accordance with *20.9.3.8.C (6)(d) NMAC*. The plan will include discussions related to:

- Significant equipment breakdown and maintenance
- Operational hours adjustments
- Waste diversion options

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### ***Assumptions***

- CDM Smith will submit one (1) draft copy of the plan to the SFSWMA for review and approval prior to submittal to NMED.

#### **9.2.9 Regulated Hazardous or Unauthorized Waste Screening Plan and Personnel Training Program**

CDM Smith will update the current *SFSWMA Solid Waste Screening Personnel Training Program* dated January 11, 2005, to meet the requirements of *20.9.5.8.B(2) NMAC*. The program will include discussions related to:

- Waste screening objectives
- Discussion of prohibited and special wastes
- Type of waste accepted by the SFSWMA
- Types of inspections and frequency
- Waste screening methods
- Recordkeeping and notification requirements

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### ***Assumptions***

- CDM Smith will utilize the basemap information (refer to Task 2) to complete figures related to this task.

- CDM Smith will submit one (1) draft copy of the plan to the SFSWMA for review and approval prior to submittal to NMED.

#### **9.2.10 Methane Monitoring Plan**

CDM Smith will develop the methane monitoring plan in accordance with *20.9.5.9 NMAC*. The plan will be developed to monitor for lateral LFG migration off site. The plan will describe measures for:

- Routine perimeter monitoring in proximity to the waste envelope and at the perimeter of the facility.
- Regular monitoring in and around structures to measure the potential accumulation of gas in potentially explosive concentrations.
- Modifying monitoring procedures in the event that gas is detected in excess of regulatory thresholds within facility structures or at the property boundary.

CDM Smith will submit the draft plan for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### ***Assumptions***

- CDM Smith will utilize basemap information (refer to Task 2) to develop maps related to LFG monitoring.
- No LFG monitoring wells, or associated LFG control systems, will be installed at the SFSWMA facility. If deemed necessary, CDM Smith will provide to the SFSWMA a separate scope and fee for the design/installation of monitoring wells, control systems, or monitoring plan updates.
- CDM Smith will submit one (1) draft copy of the plan to the SFSWMA for review and approval prior to submittal to NMED.

#### **9.2.11 Groundwater Monitoring System Plan Update**

CDM Smith will develop a letter amendment to attach to the existing Caja del Rio Landfill groundwater monitoring system plan. The amendment will address the addition of monitoring wells as a result of expanding into the BLM property and incorporating the "wedge" area.

CDM Smith will submit the draft letter amendment for SFSWMA review and approval. Review comments, if any, will be incorporated prior to submittal to NMED.

#### ***Assumptions***

- CDM Smith will utilize basemap information (refer to Task 2) to develop maps related changes to the groundwater monitoring system.

- CDM Smith will submit one (1) draft copy of the amendment to the SFSWMA for review and approval prior to submittal to NMED.

## **Task 10: HELP Model Analysis Update**

### **10.1 Purpose**

For Task 10, CDM Smith will update the United States Environmental Protection Agency's (USEPA) Hydrogeologic Evaluation of Landfill Parameters (HELP) model in accordance with the current NMED SWB Guidance Document to simulate the performance of the leachate/liner and cover system performance.

### **10.2 Approach**

CDM Smith will provide an update to the original permit liner and leachate collection system study for the site. This study will take into consideration the subsurface conditions encountered in the geotechnical investigation performed during the development of the original permit. CDM Smith will update the existing USEPA HELP model calculations for the evaluation of similar liner and leachate collection system materials, including those that have been utilized for Cells 1, 2A/2B, 3A/3B, 4A/4B, 5A, and 6A.

Leachate collection alternatives will be evaluated (including leachate recirculation), with regards to the amount and quality of leachate for the climatologic conditions anticipated at the site.

CDM Smith will utilize construction quality control test results from the drainage sand installation from the construction of Cells 1, 2A/2B, 3A/3B, 4A/4B, 5A, and 6A during the modeling activities. The HELP model will be performed in accordance with NMED SWB guidance document.

The current approved and permitted final cover configuration will be modeled as part of the evaluation.

A draft report summarizing the CDM Smith's findings will be submitted to the SFSWMA for review and comment prior to submittal to NMED. The report and its recommendations will be finalized and included in application documents.

#### ***Assumptions***

- CDM Smith will perform HELP modeling in accordance with NMED's guidance document.
- CDM Smith will submit one (1) copy of the report to the SFSWMA for review and approval prior to submittal to NMED.

## **Task 11: Financial Assurance**

### **11.1 Purpose**

For Task 11, CDM Smith will provide a summary of financial assurance to meet the requirements of *20.9.10 NMAC*.

### **11.2 Approach**

CDM Smith will provide the SFSWMA assistance in coordinating the financial assurance information provided by the SFSWMA into the introductory portion of the permit. In addition, CDM Smith will provide input to the unit rates used by the SFSWMA in developing the required estimates.

#### ***Assumptions***

- SFSWMA will provide CDM Smith with the following:
  - An NMED approved financial assurance estimate summary for the current landfill configuration and build out of the “wedge”/BLM areas of the SFSWMA facility for closure, post-closure, Phase I and Phase II assessments, and corrective action.
  - The status and revised annual contribution amount to the funding mechanism (i.e. Reserve Fund).
  - A statement from auditors validating that the financial cost information is accurate.

## **Task 12: Permit Preparation and Submission to NMED**

### **12.1 Purpose**

For Task 12, CDM Smith will assemble and submit the completed permit application in accordance with the New Mexico Solid Waste Management Regulations (*20.9 NMAC*).

### **12.2 Approach**

CDM Smith will meet with NMED staff a total of three (3) times during the development of the permit modification and renewal application as indicated in Task 1. These meetings will be for the purpose of discussing the contents and evolution of the application and to clarify any aspects of the application that might be in question.

CDM Smith will prepare the application in accordance with *20.9.2* through *20.9.10 NMAC*. In addition to the work previously performed, CDM Smith will provide affirmative and directional responses to each applicable part of *20.9.2* through *20.9.10 NMAC* in the front of the permit application. The application will be prepared to allow NMED staff the ability to easily understand and review the information prepared on behalf of SFSWMA. When assembling the document and associated plans, CDM Smith will prepare the application by utilizing work performed under the tasks described herein.

A complete draft of the permit modification and renewal application will be transmitted to the SFSWMA for review and comment. CDM Smith will meet with SFSWMA to discuss

comments on the application and incorporate review comments, if any, into the final application document. By previously providing each component of the application to the SFSWMA in draft format, CDM Smith assumes that the SFSWMA will have only minor comments on the draft document.

CDM Smith will assemble the application in accordance with 20.9.2 through 20.9.10 NMAC and submit the final application to the NMED for review.

### ***Assumptions***

- Only minor SFSWMA comments will be received on the draft submittal.
- CDM Smith will submit one (1) draft copy to the SFSWMA for approval prior to submittal to NMED.
- CDM Smith will provide three (3) final copies of the permit modification and renewal application to NMED for review and four (4) copies to the SFSWMA for the record.
- SFSWMA will be responsible for paying the applicable application fees in accordance with 20.9.3.39 NMAC.

## **Task 13: Cell 5B/6B Design and Contractor Coordination**

### **13.1 Purpose**

To accomplish the objectives of Task 13, the proposed design engineering services will be provided as follows, in chronological order:

- Phase 1: Cell 5B/6B and "Wedge" Area Engineering and Design Services
- Phase 2: Contractor Coordination

### **13.2 Approach**

The Engineering and Design Phase services will consist of preparing construction drawings, technical specifications, and the applicable contract documents for the construction of Cell 5B/6B. The contract documents will be prepared in accordance with previously prepared SFSWMA landfill construction projects and will serve as the basis of negotiations between the SFSWMA and contractor, Del Hur Industries (DHI), for bid preparation. The construction drawings will include plans related to the overall site and subgrade, as well as liner and leachate collection details. It is important to note that the basalt blasting activities for Cell 5B/6B will be provided by others, but will be performed in accordance with the CDM Smith subgrade design drawings prepared during this phase.

The specifications will include front-end documentation, general and technical specifications. These will be supplemented by the New Mexico State Highway and Transportation Department's (now referred to as the New Mexico Department of Transportation) Standard Specifications, 2007 edition.

CDM Smith will provide SFSWMA with 90-percent complete construction drawings and contract documents for review and comment. CDM Smith will then address comments, finalize the construction drawings and contract documents for bidding and construction by DHI.

The Contractor Coordination services will consist of providing the bid tab to DHI for quantity take offs and pricing. In addition, CDM Smith will conduct a contractor coordination meeting, answer contractor questions, and review DHI's bid.

### **13.2.1 Cell 5B/6B Project Meetings/ Project Management**

CDM Smith will meet with SFSWMA staff at the Caja del Rio Landfill for a project kick-off meeting to establish specific project goals for the successful completion of the Cell 5B/6B design. The meeting will include the CDM Smith Project Manager, the CDM Smith Project Engineer, and SFSWMA staff. CDM Smith will provide the meeting agenda, anticipated project schedule, an outline of the responsibilities of CDM Smith and SFSWMA staff, communication procedures, document filing procedures, applicable field reconnaissance work, major project deliverables, and the quality control/quality assurance requirements. CDM Smith will prepare a kick-off meeting summary for electronic submittal to the SFSWMA.

Two additional design project meetings (one to be held as a 90-percent design document review meeting; one to be held as a pre-bid meeting) will be directed by CDM Smith with SFSWMA's staff in attendance. The meetings will be held at SFSWMA offices and will be attended by CDM Smith's Project Engineer. CDM Smith will prepare summaries of these meetings, as well as submit to the SFSWMA project status reports (two total). An updated project schedule will be presented at each project meeting (a total of three).

This task also includes labor costs for project setup, document control and filing, invoicing, and close out.

### **13.2.2 Surveying**

Aerial survey information obtained as part Task 2 will be used to design Cells 5B/6B. However, Morris Surveying Engineering, LLC (Morris), under contract with CDM Smith, will perform ground survey to verify edge of existing liner points (Cells 4B, 5A, and 6A), and leachate collection connections (estimated 8 man-hours total) for confirmation during design. CDM Smith will compare the information obtained by Morris to previous survey data. In addition, Morris will perform a topographic survey after blasting and rock excavation is complete (refer also to task 13.2.4) to assist the SFSWMA in calculating the material quantities removed for payment to DHI (estimated 16 man-hours total). Upon completion of each survey mobilization, Morris will provide survey data electronically to CDM Smith for evaluation and approval.

### **13.2.3 Volumetric Analysis**

CDM Smith will utilize topographical survey information obtained as part of the Permit Modification and Renewal task to perform a volumetric analysis to determine remaining



airspace for all permitted areas. This information will also be utilized for calculating compaction density, and estimating landfill life for operational, financial, and planning purposes. In addition, the analysis will provide data and locations of the required cuts and fills to bring the existing surface to permitted top of waste grades for Cells 1, 2A/2B, 3A/3B, 4A/4B, 5A, and 6A.

CDM Smith will prepare and submit one (1) copy of the following information along with a brief summary for compaction density and landfill life estimates:

- Topographic Grading Plan (Cells 1, 2A/2B, 3A/3B, 4A/4B, 5A, 6A)
- Cross-sections showing final grading, existing surface, survey grades, and cell subgrades (estimated 4 drawings)
- Cut and fill data

#### **13.2.4 Design Development**

CDM Smith will provide engineering services for the preparation of construction plans for subgrade elevations and installation of the liner and leachate collection system for Cell 5B/6B (to be used upon New Mexico Environment Department, NMED, approval of the Permit Modification and Renewal) at the Caja del Rio Landfill. The CDM Smith design will include provisions for preparation of the subgrade (basalt blasting/compacted subgrade) prior to installation of the composite liner system. It is assumed that the composite liner system will consist of a Geosynthetic Clay Liner (GCL) overlain by a 60-mil HDPE geomembrane, and geotextile fabric for protection of HDPE geomembrane. Two feet of drainage material (basalt/glass cullet) will be included for installation above the composite liner system.

Engineering drawings will be based upon the current NMED Solid Waste Bureau (SWB) approved permit drawings, with the addition of the as-of-yet unpermitted areas adjacent to Cells 5B/6B. The drawing set will include (at a minimum) the following:

- Title Sheet
- Overall Site Plan
- Cell 5B/6B Liner Grades
- Liner and Leachate Collection System Plan
- Liner Details
- Leachate Collection System Details
- Stormwater Management Details

As a part of this Task, CDM Smith will review the existing solid waste permit drawings, alternative liner options, and current operating conditions. In conjunction with the kick-off meeting (refer to 13.2.1), CDM Smith will inspect the Cell 5B/6B footprint and soil conditions, as well as the perimeter drainage system along the existing site boundaries. CDM Smith will also provide notification to NMED-SWB at the start and completion of cell construction.

CDM Smith will transmit three (3) copies of the full-size (24" x 36") contract drawings and bound technical specifications at the completion of the 90-percent design to SFSWMA for review and comment. CDM Smith will meet and discuss comments with SFSWMA (refer to 13.2.1). Concurrently, CDM Smith's senior technical staff will review the documents for quality control/quality assurance, as well as adherence to the project scope.

Comments will be incorporated by CDM Smith and ten (10) full-size copies of the final "for construction" drawings and bound technical specifications will be transmitted to SFSWMA.

#### **13.2.5 Contract Documents and Technical Specifications**

CDM Smith will prepare contract documents in accordance with the SFSWMA procurement procedures. The documents will include, at a minimum, requirements for general conditions (per the SFSWMA), measurement and payment, summary of work, earthwork, subgrade preparation, GCL, 60-mil HDPE, 2' thick drainage material layer (basalt and glass cullet material), geotextile fabric, gravel, and leachate collection system piping. CDM Smith will update the Construction Quality Assurance (CQA) Plan for Construction in accordance with NMED SWB regulations (2007).

Contract documents will be submitted to the SFSWMA for review and approval at the 90-percent completion phase. CDM Smith will incorporate comments into the final "for construction" document set and submit the final documents as described in 13.2.4.

#### **13.2.6 Opinion of Probable Cost Estimates**

CDM Smith will develop two engineer's opinions of probable cost for construction of Cell 5B/6B based on CDM Smith's 90-percent and final "for construction" design documents. The engineer's opinions of probable construction cost will include applicable New Mexico Gross Receipts Tax (NMGR) and appropriate levels of contingency.

#### **13.2.7 Contractor Coordination**

CDM Smith will assist the SFSWMA with contractor coordination services by conducting a contractor coordination meeting (refer to 13.2.1), responding to contractor's questions, reviewing DHI bid, preparing a bid tabulation between the engineers opinion of probable cost and the DHI bid. Note that the coordination activities will be based on the documents provided by CDM Smith under 13.2.4.

CDM Smith will provide SFSWMA with a set of contract documents (full-size drawings and bound specifications) signed and sealed by a registered New Mexico Professional Engineer.

### ***Assumptions***

In addition to those stated above, the following assumptions have been made for this Proposal:

- The drawing set for the construction of Caja del Rio Landfill Cell 5B/6B is assumed to consist of up to seven (7) drawings and one (1) title sheet.
- CDM Smith senior technical staff will be utilized to review the design documents prior to release for construction.
- Information provided as part of the aerial survey and mapping task described as part of the Permit Modification and Renewal will be performed concurrently with this proposal.
- CDM Smith will provide ten (10) sets of bidding documents for construction.
- CDM Smith will not advertise the project.
- As-built surveying will be conducted by DHI. CDM Smith to confirm thickness on 50-foot grid pattern.
- No leachate collection system pumps or other equipment will be required. Leachate collection piping installed as part of this project will be interconnected with existing leachate collection system components.
- SFSWMA will provide geotechnical information for drainage material (basalt) prior to finalization of design.
- Contractor will perform all blasting for rough grading, fine grading and compaction in accordance with the CDM Smith design.

## ***Task 14 (FUTURE): Public Notifications of Permit Modification and Renewal Application Submittal***

### **14.1 Purpose**

For future Task 14, CDM Smith will develop the Notice of Filing for NMED approval prior to public notification of application. Public notification will be performed in accordance with 20.9.3.8.G NMAC. In addition, CDM Smith will provide engineering support during the notification period to address concerns from the public. In addition, PK Public Relations will assist with public involvement by creating public service announcements upon submittal of the permit application to NMED.

### **14.2 Approach**

CDM Smith will develop the Notice of Filing (English language) for review and approval by the NMED SWB. Upon approval, the Notice of Filing will be translated (Spanish language)

and transmitted by certified mail to the owners of record, as shown by the most recent property tax schedule and tax exempt entities to all parties located within either 100 feet or 0.5 miles of the property boundary. In addition, notification will be provided to all municipalities and counties in which the facility is located and to the governing body of any county, municipality, Indian tribe or pueblo within ten miles of the facility.

A complete scope of services and associated fee for this future Task 14 will be provided to SFSWMA under separate cover at a later date.

### ***Task 15 (FUTURE): Address NMED Comments***

#### **15.1 Purpose**

For future Task 15, CDM Smith will provide a written response to permit application Request for Additional Information (RAI) from the NMED.

#### **15.2 Approach**

Upon submission of the permit modification and renewal application to the NMED, CDM Smith will be available to address questions and/or concerns made known by the NMED during their review of the document. CDM Smith will provide a response to the NMED RAI and make necessary changes to the permit application, as applicable.

A complete scope of services and associated fee for this future Task 15 will be provided to SFSWMA under separate cover at a later date.

### ***Task 16 (FUTURE): Final Permit Application Submittal***

#### **16.1 Purpose**

For future Task 16, CDM Smith will provide conformed permit documents in accordance with 20.9.3.17.C NMAC for submittal to NMED and the SFSWMA.

#### **16.2 Approach**

Within fourteen (14) days after the application is deemed administratively complete, CDM Smith will submit six (6) complete new copies of the application to the NMED and four (4) copies to the SFSWMA; and an updated list of all property owners as specified in 20.9.3.8.G NMAC. The list of properties will be date stamped by the appropriate county agent, or certified as accurate by CDM Smith as of the date the application is deemed complete.

A complete scope of services and associated fee for this future Task 16 will be provided to SFSWMA under separate cover at a later date.

### ***Task 17 (FUTURE): Cell 5B/6B Engineering Services during Construction***

#### **17.1 Purpose**

For future Task 17, CDM Smith will provide engineering and construction quality assurance (CQA) services during the construction of Cell 5B/6B.

## 17.2 Approach

CDM Smith will perform general services during construction of Cell 5B/6B, including:

- Conforming the Contract Documents to the successful bidder for execution
- Attending a Pre-construction Meeting
- Reviewing Shop Drawing Submittals
- Processing Contractor Requests for Information (RFI) and Change Orders
- Reviewing Contractor's Pay Requests
- Maintaining Project Files

CDM Smith will perform CQA services during construction of Cell 5B/6B. CDM Smith's responsibilities will include the following:

- Attending Construction Progress Meetings
- Monitoring Contractor's Work
- Geosynthetic Liner System CQA
- Leachate Collection System CQA
- Drainage Material CQA
- Communicating with Caja del Rio Landfill Staff (as required)
- Coordinating Soil Testing and Surveying Activities
- Coordinating Contractor Activities with Daily Operational Activities

CDM Smith will collect soil samples of the subgrade liner materials and perform laboratory testing to ensure compliance with NMED regulations and permit and design requirements. CDM Smith will perform the tests, under the guidance of the CQA Soils Technician, on the prepared subgrade and the 2-foot thick drainage layer. We will perform field density testing using a nuclear density meter to ensure compaction meets project specifications.

Upon completion of the construction, CDM Smith will prepare record drawings and an Engineering Certification Report that documents that the liner and leachate collection system were installed in accordance with the requirements outlined in the permit, contract documents, and the approved CQA Plan.

A complete scope of services and associated fee for this future Task 17 will be provided to SFSWMA under separate cover at a later date.

**ATTACHMENT 2**

**PROPOSED COST ESTIMATE SUMMARY**









SFSWMA: Caja del Rio Landfill Permit Modification and Renewal; Cell 5B/6B Design and Contractor Coordination Services

Task	Estimated Manhours	Other Direct Costs	Sub-Contract Costs	Total Project Costs	Manhours	Total Project Costs
<b>Total Costs</b>	<b>419</b>	<b>\$52,779</b>	<b>\$9,959</b>	<b>\$62,738</b>	<b>64,251</b>	<b>\$62,738</b>
Task 1: Permit Application Project Meetings/Workshops and Project Management	272	2,979	0	2,979	2,964	\$29,304
Task 2: Background Information/Mapping	17	2,069	0	2,069	1,697	\$24,887
Task 3: Site Maps/Plans and Implementation Schedule	226	\$27,158	\$2,895	\$29,053	\$1,818	\$29,334
Task 4: Vulnerable Area Assessment & Community Meeting	268	\$27,786	\$425	\$28,211	\$2,296	\$28,211
Task 5: Environmental and Traffic Study/Updates	82	\$6,549	\$158	\$6,707	\$478	\$6,707
Task 6: Environmental Impact Statements	46	2,028	75	2,103	1,615	\$22,815
Task 7: Permit Drawings	594	\$57,688	\$5,488	\$63,176	\$5,028	\$63,176
Task 8: Engineering Calculations & Compliance Information	77	\$4,125	\$178	\$4,303	\$2,677	\$4,303
Task 9: Operational Plans	829	\$86,780	\$2,375	\$89,155	\$6,499	\$89,155
Task 10: HELP Model Analysis (1/24/20)	149	\$16,180	\$789	\$16,969	\$1,447	\$16,969
Task 11: HELP Model Analysis (1/24/20)	149	\$16,180	\$789	\$16,969	\$1,447	\$16,969
Task 12: Permit Preparation and Submission to NIED	678	\$77,150	\$1,829	\$78,979	\$6,422	\$78,979
Task 13: Cell 5B/6B Design and Contractor Coordination	614	\$68,389	\$1,538	\$69,927	\$5,622	\$69,927
Task 14: (FUTURE) Public Notification of Permit Modification and Renewal Application Submittal	0	\$0	\$0	\$0	\$0	\$0
Task 15: (FUTURE) Address NIED Comments	0	\$0	\$0	\$0	\$0	\$0
Task 16: (FUTURE) Final Permit Application Submittal	0	\$0	\$0	\$0	\$0	\$0
Task 17: (FUTURE) Cell 5B/6B Engineering Services During Construction	0	\$0	\$0	\$0	\$0	\$0
Task 18: (FUTURE) Construction Quality Assurance	0	\$0	\$0	\$0	\$0	\$0
Task 19: (FUTURE) Progress Cell Tracking	0	\$0	\$0	\$0	\$0	\$0
Task 20: (FUTURE) Engineering Certification Report	0	\$0	\$0	\$0	\$0	\$0
<b>Total Project Cost</b>	<b>419</b>	<b>\$52,745</b>	<b>\$9,925</b>	<b>\$62,670</b>	<b>64,217</b>	<b>\$62,670</b>

**ATTACHMENT 3**

**SCHEDULE OF 2012/2013 HOURLY BILLING RATES**



## SCHEDULE OF 2012/2013 HOURLY BILLING RATES

<u>CATEGORIES</u>	<u>HOURLY RATES</u>
<u>TECHNICAL/PROFESSIONAL SERVICES</u>	
FIELD TECHNICIAN I	\$ 75.00
FIELD TECHNICIAN II	\$ 85.00
ENGR/SCI PROFESSIONAL I	\$ 90.00
ENGR/SCI PROFESSIONAL II	\$ 100.00
ENGR/SCI PROFESSIONAL III	\$ 110.00
ENGR/SCI PROFESSIONAL IV	\$ 125.00
ENGR/SCI PROFESSIONAL V	\$ 140.00
ENGR/SCI PROFESSIONAL VI	\$ 155.00
SENIOR ENGR/SCI/PROFESSIONAL	\$ 165.00
PRINCIPAL/ASSOCIATE/SR TECHNICAL SPECIALIST	\$ 185.00
SENIOR TECHNICAL CONSULTANT	\$ 200.00
CONTRACT OFFICER	\$ 190.00
<u>PROFESSIONAL SUPPORT SERVICES</u>	
CLERICAL (ADMIN)	\$ 65.00
CONTRACT ADMIN/FINANCIAL	\$ 95.00
STAFF SUPPORT SERVICES (CADD DESIGNER)	\$ 95.00
SENIOR SUPPORT SERVICES (CADD DESIGNER)	\$ 115.00

Notes:

- (1) Subconsultants and subcontractors will be invoiced at cost plus 10% unless otherwise stipulated in writing.
- (2) Other direct expenses (e.g., travel, postage, equipment, supplies) will be invoiced at cost.
- (3) Mileage will be billed at a rate of \$0.51/mile.
- (4) CDM Smith reserves the right to propose revised rates annually.