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March 17, 2016

Mr. Terry Hudson
Procurement Director
Cochise County Procurement Department
1415 Melody Lane, Building C
Bisbee, Arizona 85603

Re: Western Regional Landfill – Request for Proposal

Dear Mr. Hudson:

Cornerstone Environmental Group, LLC (Cornerstone) is pleased to provide Cochise County (County) with this proposal to provide cost estimates for the four landfill renovation tasks described in the Request for Proposal dated February 2, 2016 for the Western Regional Landfill (WRLF).

The following sections outline the proposed tasks to provide these services to Cochise County:

Project Scope

Task 1 – Estimate to Renovate/Upgrade Leachate Collection and Recovery System

Under this task, Cornerstone will travel to WRLF to inspect and assess the existing leachate collection and pumping/piping system. Based on this assessment, Cornerstone will provide a cost estimate for repairing/replacing system components and developing an Operations and Maintenance (O&M) Manual for the system. In addition, the cost estimate will include a proposed cost for contracting with the County to perform the O&M on the leachate system for a period of five years.

Based on Cornerstone's experience with leachate management at landfills throughout Arizona, we believe that it is likely that a simpler system would provide sufficient leachate management for the WRLF at a much lower cost than rehabilitating the existing system. Therefore, our cost estimate will include an optional line item for the costs to install and maintain a system more similar to those used throughout Arizona.

Task 2 –Type III Change Request – Alternative Daily Cover

Under this task, Cornerstone will prepare and submit a Type III Change Request to the Arizona Department of Environmental Quality (ADEQ) for several additional alternative daily cover (ADC) materials to be used at the WRLF. We propose to discuss possible ADC's with WRLF staff and choose several materials which are commonly permitted and used in similar Arizona landfills. This is a routine task for Cornerstone as we have obtained approval for several Type III changes for WRLF previously and routinely do this for other Arizona landfills as well. This estimate includes costs to prepare a change request letter for submittal to ADEQ along with the comprehensive application and a \$750 initial review fee (if the initial fee is expended by ADEQ, an additional review fee could be charged depending on the complexity of the review and cannot be determined at this point. However, it is likely that the review fees would be limited to the initial fee assessed). This also includes revising the relevant portions of the Solid Waste Facility Plan (SWFP) (in the body of the text as well as in any relevant appendices). A draft of the letter will be submitted to WRLF for review prior to submitting to ADEQ. Cornerstone will address comments from ADEQ as necessary to obtain approval. Based on previous experience with similar Type III change requests submitted to ADEQ, we anticipate that the revisions to address ADEQ comments will be minor clarifications and will require one resubmittal to ADEQ.

Task 3 - Cell 4 Design and Construction Cost Comparison for Cell 4A and 4 A+B

As part of this task, Cornerstone will provide a side-by-side cost comparison of the projects described in Tasks 3A and 3B below. Cornerstone has previously developed a conceptual design for Cell 4 as part of our prior project for Cell 3B. We assume that this conceptual design will be reviewed with the current WRLF staff and minor changes will be incorporated in response to County comments to be used in further development of cost estimates for final design and construction of Cell 4. In addition to the cost comparison, Cornerstone will provide a list of pros and cons regarding the full build-out versus the 50 percent build-out.

Task 3A - Cost Estimate for design and construction of Cell 4A

In Task 3A, Cornerstone will prepare a cost estimate for the design and construction of the 50 percent build-out of Cell 4 (Cell 4A). The estimate will include costs for developing Cell 4A construction plans, preparing technical specifications, excavation costs, liner materials, testing, and installation costs, and construction quality assurance (CQA) costs. In addition to the cost estimate, a Unit Rate table will be provided showing staff category and hourly rates for personnel expected to be involved in the design of this project.

Task 3B – Cost Estimate for design and construction of Cell 4A+B

In Task 3B, Cornerstone will prepare a cost estimate for the design and construction of the 100 percent build-out of Cell 4. The estimate will include costs for designing Cell 4 construction plans, preparing technical specifications, excavation costs, liner materials, testing, and installation costs, and CQA costs. In addition to the cost estimate, a Unit Rate table will be provided showing staff category and hourly rates for personnel expected to be involved in the design of this project.

Task 4 – Final Cell Design and CQA

In Task 4, Cornerstone will develop the design of the 50 or 100 percent expansion of Cell 4, as determined by the County. Cornerstone will utilize the as-built drawings from the Cell 3B expansion, as well as a current survey of the expansion area to develop a construction level set of drawings that may be used to construct the desired portion of Cell 4. The cell will be designed as an expansion of Cell 3B and will include liner and leachate system details as well as stormwater controls. An access ramp will be incorporated into the design. The cell liner will tie directly into the liner of the adjacent Cell 3B, which is located south of the proposed Cell 4 area.

Cell 4 will have one lined slope, on the western edge, as well as liner on the floor area. The leachate collection and recovery system (LCRS) will not tie into the Cell 3B LCRS, as there is a berm and a change of slope at the boundary of Cell 3B and Cell 4; therefore, a new sump will be designed and incorporated into Cell 4. Stormwater management features will be designed to manage non-leachate stormwater from the Cell 4 area originating below the surrounding natural grades. Cornerstone will coordinate with WRLF to develop the design basis to be used to size the stormwater retention basins.

In addition to the construction drawings, Cornerstone will develop a set of technical specifications to be used in conjunction with the construction drawings for use in selecting a contractor and conducting the construction of either the full Cell 4 or the reduced size Cell 4A. Cornerstone proposes to update the technical specifications prepared by Cornerstone, which were used in the construction of Cell 3B. The specifications will be updated to incorporate the revised liner system which was approved by ADEQ in 2015. It is also anticipated that this update will consider incorporation of exceptions, revisions, and clarifications to previous specifications developed for the site which were encountered during bidding, negotiation, and construction of the previous cell.

Cornerstone will develop construction plans for the selected project in sufficient detail and description to enable qualified contractors to perform the necessary work. The plans will thoroughly describe the necessary elements of the work to be performed, including the necessary survey control, line and grade, development areas, stockpile areas, liner layouts,

and LCRS according to the approved SWFP. These plans will be suitable for bidding and will also thoroughly describe the work deemed necessary by Cornerstone and WRLF.

In addition to preparing construction documents for the project, Cornerstone will assist the County during bidding and contractor selection portions of the project and perform CQA services during construction of the cell. Cornerstone proposes to have a CQA monitor on site on a periodic basis to observe excavation activities and fill placement until the excavation approaches design base grades. Once the excavation is completed, the CQA monitor will be on site full time to observe the subgrade preparation and confirm soil density via proof-rolling. The full time CQA monitor will observe, monitor and document the deployment of geosynthetic liner materials and leachate pipe. In addition, the CQA monitor or CQA officer will perform Project Management tasks, such as reviewing and approving submittals, coordinating with the geotechnical and geosynthetics testing firms, and leading scheduled meetings and special meetings. The final Construction Certification Report will be prepared under this task as well. This Construction Certification Report would include record drawings depicting the construction work. It is assumed that the surveying for these record drawings will be provided by the contractor's surveyor as part of the construction contract.

Since the scope of the construction work has not been fully defined at this time, nor is there a contractor selected to provide an estimated construction schedule for excavation or geosynthetics installation, the incurred cost for this task cannot be identified at this time. In addition, one of the primary deliverables of Task 3, as described above, will be a more defined cost estimate for the final design, bid assistance, and CQA for the selected configuration of Cell 4. However, for budgetary purposes, we have included an estimated cost for this task of \$52,600 based on typical cost for a landfill expansion design and an assumed duration of liner installation of four weeks. Pending the selection of one of the preceding tasks, Cornerstone will develop a detailed scope of work and budget for this task, based on the Contractor's proposed work schedule and will request a contract change if there are material differences between the detailed budget for this task and the current budgetary estimate. We propose to conduct this work on a time and materials (T&M) basis, invoicing the County for actual time and expenses as outlined on the attached schedule of charges.

Budget

Cornerstone has developed a project budget as shown on the attached Table 1, based on our experience with the site and the scope of work proposed. We propose to perform the work for Tasks 1 through 4 on a T&M basis based on the unit rates shown on the attached Table 2.

We propose to invoice expenses as reimbursables based on actual incurred costs plus a five percent markup to cover administrative costs associated with procuring these items. Reimbursables for this project would include:

- Mileage for meetings or site visits (billed at Internal Revenue Service [IRS] standard rates); and
- Reproduction charges for large format drawing copies by outside vendors.

The estimated cost and proposed scope of work are based on information available to Cornerstone at this time. If conditions change, unforeseen circumstances are encountered, or work efforts are redirected, the cost estimate may require modification.

Schedule

Cornerstone is prepared to begin work on this project immediately upon notice to proceed from County. This proposal is valid for 60 days.

Terms and Conditions/Approval

We appreciate the opportunity to present this proposal for your review and approval. If this proposal is acceptable, please provide us with a copy of your contract form for this project for our signature, or if preferred, extend the contract language used in our previous contract for Cell 3B liner construction. Do not hesitate to contact us if you have any questions or comments or require additional information. We look forward to providing the County with these services.

If you have any questions or need additional information, please do not hesitate to call or e-mail.

Sincerely,

Cornerstone Environmental Group, LLC



Garth R. Bowers, P.E.
Senior Operations Director



Carl Bueter, P.E.
Project Manager

Enclosure: Table 1 - Project Task Budget
2016 Schedule of Staff Category and Rates/Hour
Attachment 1 - Signed Proposal Submittal Form

cc: proposal file

Table 1 - Project Task Budget

**Cell 4 Design and CQA for
Cochise County Western Regional Landfill**

Task	Total Task Cost (\$)
1 - Leachate System Assessment	4,200
1A - Leachate System Alternative	540
2 - Type III Change Request for ADC	2,125
3A - Cell 4A Cost Estimate	2,130
3B - Cell 4 A+B Cost Estimate	1,700
4 - Cell 4 Design and CQA	52,600
Total	\$ 63,295



100 Crystal Run Road, Suite 101, Middletown, NY 10941
Phone: 845-695-0200 – Fax: 845-692-5894

2016 SCHEDULE OF CHARGES

PERSONNEL CHARGES

<u>Professional</u>	<u>Rate Per Hour</u>
Senior Project Manager/Technical Review	\$ 115 - 225/hr
Senior Project Staff/Project Manager	\$ 80 - 145/hr
Project Staff	\$ 50 - 125/hr

<u>Technical</u>	
CAD Operator/Designer	\$ 70 - 130/hr
Field Technician/Field Manager	\$ 45 - 125/hr

<u>Support Services</u>	
Administrative	\$ 45 - 75/hr

Depositions and expert witness testimony, including preparation time, will be charged at 150% - 200% of the above rates.

Travel time will be charged in accordance with the above rates, up to a maximum of 8 hours per day.

OUTSIDE SERVICES

Charges for special outside services, equipment, and facilities not furnished directly by Cornerstone will be billed at cost plus 15%.

COMMUNICATIONS

The cost of communications including telephone charges, facsimile, postage and routine copying costs will be charged at a flat rate of 3% of total gross labor charges.

DIRECT CHARGES

Reproduction (letter & legal) - black and white, per sheet	\$ 0.10
Reproduction (letter & legal) - color, per sheet	\$ 1.25
CAD Plots/Reproduction – black and white, per square foot	\$ 0.35
CAD Laser Plots - color, per square foot.....	\$ 2.00
CAD Laser Plots – black and white, Vellum, per square foot	\$ 2.00
CAD Laser Plots – black and white, Mylar, per square foot	\$ 4.00
Auto per mile	Current government rate
Pickup truck per day	\$ 125.00

Rate Changes
Rates are subject to maximum 3% increase per year.

Payment
Monthly invoices are to be paid within 30 days from invoice date. Interest on late payments will be charged at a rate of 18% per annum.

ATTACHMENT A
PROPOSAL SUBMITTAL

Task One (1): Estimate for necessary renovation/upgrading of the existing leachate collection and pumping system.

 \$4,740 , unit price including any applicable taxes.

Task Two (2): Develop type III change request for alternative daily covers (ADC's)

 \$2,125 , unit price including any applicable taxes.

Task Three (3): Design and construction cost estimates for CCWRL cell 4

 \$2,130 , unit price for option cell 4A, 50% expansion of cell 4, including any applicable taxes.

 \$1,700 , unit price for option cell 4B, 100% expansion of cell 4, including any applicable taxes.

Task Four (4): Final cell design, needed construction observation/testing, as bulit drawings, construction certificate report.

 \$52,600 , unit price including any applicable taxes.

For clarification of this offer contact:

Cornerstone Environmental Group, LLC
Name of Firm

Carl Bueter, P.E.
Name (print)

17 West Wetmore Drive, Suite 310
Mailing Address

Project Manager
Title

Tucson, AZ 85705
City, State and Zip Code

Signature of Person Authorized to Sign Offer:

(630) 633-5816
Phone Number


Signature

carl.bueter@cornerstoneeg.com
E-mail

Garth Bowers, P.E.
Printed Name