# CITY OF CORPUS CHRISTI AMENDMENT NO. 1 CONTRACT FOR PROFESSIONAL SERVICES

The City of Corpus Christi, Texas hereinafter called "City", and SCS FIELD SERVICES hereinafter called "Engineer", agree to the following amendments to the Contract for Engineering Services for J. C. Elliott Landfill Gas Collection and Control System Repairs (Project No. E12108), as authorized and administratively amended by:

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Original Contract	October 9, 2012	Ordinance No. 029645	\$100.400.00
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In the Original Contract, Exhibit "A", Section 2. Scope of Services, shall be amended to include Three Task as follows:

- 1. Repair Leak in GCCS in the vicinity of Sump 5
- 2. Wellhead Assessment and Replacement Activities
- 3. Sump 3 Replacement

In the Original Contract, Exhibit "A", Section 5. Fees, Fee Estimate shall be modified and is attached as Amend No. 1 Exhibit "A" for a fee not to exceed \$77,000.00 (Seventy Seven Thousand Dollars and Zero Cents), for a total restated fee not to exceed \$177,400.00 (One Hundred Seventy Seven Thousand Four Hundred Dollars and Zero Cents). Monthly invoices will be submitted in accordance with Exhibit "B".

All other terms and conditions of the October 9, 2012 contract between the City and Engineer, and of any amendments to that contract, which are not specifically addressed herein shall remain in full force and effect.

CITY OF CORPUS CHRISTI

Oscar R. Martinez Assistant City Manager

Date

Date

RECOMMENDED

Daniel Biles, P. E.,

Director of Engineering Services

Operating Department

04.08.20

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SOS FIELD SERVICES

David Mezzacappa, P.E.

Project Director Vice President 1901 Central Drive, Suite 550

Bedford, TX 76021-5872

(361) 571-2288 Office

(361) 571-2188 Fax

AMEND. NO. 1 Page 1 of 2

### **APPROVED AS TO FORM**

City Attorney	Date
Office of Management and Budget	Date

### **ATTEST**

Armando Chapa, City Secretary

Project Number: <u>E12108</u>
Funding Source: <u>550950-3362-00000-E12108</u>
Fund Name: <u>Sanitary Landfill CIP 2006</u>

Encumbrance Number:

MAR 2 5 2013

**CONTRACT MANAGERS** 

AMEND. NO. 1 Page 2 of 2

# SCS FIELD SERVICES















# Landfill Gas Collection and Control System Repairs

J.C. Elliott Landfill



Presented To:

### CITY OF CORPUS CHRISTI

Department of Engineering Services City of Corpus Christi 1201 Leopard Street Corpus Christi, Texas 78401

Presented By:

## SCS FIELD SERVICES

1901 Central Drive Suite 550 Bedford, Texas 76021

March 12, 2013

Offices Nationwide www.scsengineers.com

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## 1 INTRODUCTION

With the City of Corpus Christi (City) moving forward with a beneficial landfill gas project, and to avoid problems that can arise due to oxygen being introduced into the waste, SCS Engineers (SCS) recommended that a detailed assessment be performed of the wellfield to determine where damaged wells, header and/or piping exists. This Landfill Gas Collection and Control System (GCCS) Assessment was completed by SCS and presented to the City in June 2012. As a result of that report, several GCCS corrective actions were approved in October 2012 and implemented by SCS Field Services (SCS-FS) in late 2012 and early 2013. Upon completion of this first phase of corrective actions, several new issues impacting the operation of the GCCS were identified and suggested for repair as part of the post-construction report. The proposal is being presented to satisfy those newly identified issues.

The scope of services provided in the next section has been divided into three (3) tasks to accomplish the next phase of recommended GCCS repairs for the J.C Elliott Landfill (Site). The time-and-material estimated costs for each task found in the following scope of work are located in a table which can be found in the Cost section of this document.

# 2 SCOPE OF SERVICES

SCS-FS is proposing to implement the corrective actions as described below to address the deficiencies discovered in the Site's GCCS after completion of Phase I construction activities associated with the 2012 corrective actions proposal.

# TASK 1 - REPAIR LEAK IN GCCS IN THE VICINITY OF SUMP 5

After repairing Sump 5 and returning vacuum to the southwest section of the 12-inch header, a leak was detected in this area which resulted in the introduction of air into the system. This leak was previously undetectable during the initial site investigations since that portion of the header had been temporarily decommissioned due to the issues with Sump 5. Since the leak was a major contributor to high oxygen in the gas stream, SCS-FS temporarily isolated this section of the GCCS until an investigation of the problem could be conducted.

In February of 2013, an SCS-FS technician added several monitoring ports to the southwest header and used vacuum manipulation techniques in conjunction with GEM readings to further isolate the source of the atmospheric intrusion along this section of header. Using these techniques, the location of the leak was traced to a section of header between Sump 5 and a main header valve located in the vicinity of EW-26.

SCS-FS is now proposing the following course of action to repair the source of this atmospheric intrusion so that this section of header can be restored to use:

• Excavation of the 12-inch header at selected intervals for installation of monitoring ports between Sump 5 and the isolation valve to further isolate leak.

- Utilization of a pipe inspection camera to visually inspect the suspect section of header and determine the exact location required for excavation.
- Excavate the damaged section of header identified during the video inspection and make the repairs necessary to correct the issues.

SCS-FS is estimating between one (1) and two (2) days to further isolate the section of header requiring repairs, with the actual time required to repair the leak taking between two (2) to four (4) days depending on the extent of the damage encountered.

In Addition, a \$10,000 accrual for cap repairs that could possibly be required has been added to the cost estimate for this task. It is hoped that no such repairs will be needed, or that they will be limited in scope. However, until the actual location of the problem and its relationship to the cap are positively known, we cannot be sure of the extent of the repairs or ultimate cost that may be required. This ultimate fee will also include SCS observation of all repairs and a short report on the repairs for your files.

# TASK 2 - WELLHEAD ASSESSMENT AND REPLACEMENT ACTIVITIES

During the post-construction tuning performed by SCS-FS, problems with many of the wellheads were detected which affected their ability to accurately control the applied vacuum to the well. These issues were basically related to stuck gate valves or gate valves that could not be operated through their full range of motion. It is estimated that approximately 17 to 20 wellheads have inoperable gate valves and will require replacement of the entire wellhead in order to regain tuning capabilities. Currently many of these wellhead locations are contributing to the higher than normal levels of oxygen that are found in the gas stream. This is occurring because the supplied vacuum cannot be effectively controlled to eliminate the over-pulling of the offending wells.

SCS-FS is proposing to have a qualified technician perform both a visual and operational inspection of each wellhead at the site. During this inspection, the individual wellheads will be inspected to verify valve operation and to notate any other deficiencies affecting LFG collection. After completion of the assessment, an accurate count of wellheads requiring replacement will be made utilizing the technician's notes. The required number of well heads will then be ordered for each location identified and a technician can return to the Site to perform the selected replacements. At this time any other deficiencies noted during the inspection can be addressed as well.

For the purposes of this proposal, SCS-FS is assuming that a maximum of 20 Landtec wellheads will require replacement. A budget maximum of \$500 for sundry wellhead replacement parts is also being assumed for correcting any other deficiencies noted during the wellhead inspection.

#### TASK 3 - SUMP 3 REPLACEMENT

During the 2012 J.C. Elliott Phase I Corrective Actions project Sump 3 was found to be non-operational and causing a severe vacuum restriction on the west side of the landfill. At that time,

SCS-FS proceeded with the installation of a new AP4 pump at this location and agitated the sediment which had collected in the sump bottom. The combination of these two activities improved the operational effectiveness of Sump 3 and has temporarily returned it to partial operation. It is believed however, that over time this sump will lose its ability to remove condensate from the system resulting in a complete vacuum restriction.

Due to the inherent problems with the current Sump 3 design, SCS-FS is proposing a complete replacement of this sump rather than repair of the existing components. To complete this task, SCS-FS will excavate and remove the existing sump and replace it with a more efficient field fabricated stacked tee design. The new sump can then be connected to the existing 16-inch header utilizing electro-fusion couplers and the pump re-installed. This solution was previously used to correct an identical problem with Sump 1 encountered during the recent Phase I Construction project.

In addition, a \$9,000 accrual has been added to this task to cover the necessary repairs that will be required for the cap in the immediate vicinity of Sump 3 after the above work is completed. However, SCS-FS cannot be sure of the full extent of the repairs that will be needed or ultimate cost that may be required. This cap repair fee will also include SCS observation of all repairs and a short report on the repairs for your files.

### 3 SCHEDULE

SCS is prepared to commence the scope of services described in this proposal within six weeks of receiving authorization to proceed from the City. Assuming acceptance of all 3 tasks, the entire project should be completed within 3 weeks of the commencement of on-site activities.

## 4 ASSUMPTIONS AND CONDITIONS

In preparing this proposal, SCS offers the following assumptions and conditions:

- 1. The City will provide and deliver to the site sand from their stockpiles for use by SCS-FS in the bedding and re-grading activities for the 12-inch header and sump 3 task.
- 2. Any waste generated from excavation activities will be placed back into the excavation/trench and recovered during backfill activities.
- 3. No regularly scheduled meetings between the City and SCS have been accounted for in this scope of services. However, it is anticipated that SCS technicians may meet with City personnel on site when performing services.
- 4. SCS-FS takes no responsibility for the overall quality of the LFG collected from the LFG collection systems in regards to trace components.
- 5. The City will coordinate any approvals required from TCEQ relating to cap disturbance during SCS-FS' work.

6. This proposal is valid for 60 days from the date of this submittal. This proposal is confidential and for City's use only. If awarded the work, this proposal will become part of a mutually acceptable contract or purchase order.

## 5 COST ESTIMATE

SCS proposes to perform the above described tasks on a time-and-material basis for the estimated amounts shown in the table below. These estimates include costs for labor, project administration and management, equipment, materials, travel and per-diem assumed necessary for the completion of the task as described in the scope of work.

Task Number	Type of Service	Duration (days)	Estimated Cost
1	Repair Leak in GCCS in the Vicinity of Sump 5	7	\$33,000
2	Wellhead Assessment and Replacement Activities	4	\$18,000
3	Sump 3 Replacement	5	\$26,000
		Total	\$77,000

# 6 CONCLUSION

SCS-FS appreciates the opportunity to present this proposal to the City of Corpus Christi, J.C. Elliott Landfill. Please feel free to contact Jason Lewallen at 817-680-2264 if you have any questions regarding this proposal.

# COMPLETE PROJECT NAME Project No. E11088 Invoice No. 12345 Invoice Date:

				Total	Amount	Amount Previous	Total	Percent
Basic Services:	Contract		Amd No. 1 Amd No. 2	Contract	Invoiced	Invoice	Invoice	Complete
Preliminary Phase	\$15,117	0\$	\$0	\$15,117	0\$	\$1,000	\$1,000	%/
Design Phase	20,818	0	0	20,818	1,000	200	1,500	4.2
Bid Phase	0	0	0	0	0 .	0	0	0 n/a
Report Phase	14,166	0	0	14,166	0	0	0	%0
Construction Phase	0	0	0	0	0	0	0	0 n/a
Subtotal Basic Services	\$50,101	0\$	\$0	\$50,101	\$750	\$1,500	\$2,500	2%
Additional Sentions:								
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Permitting	\$0	<b>\$</b> 0	\$0	\$0	\$0	\$0	\$0 n/a	<i>ال</i> ام
Warranty Phase	0	0	0	0	0	0	0	0 n/a
Inspection	9,011	0	0	9,011	0	0	0	%0
Platting Survey	29,090	0	0	29,090	0	0	0	%0
Reporting	1,294	0	0	1,294	0	0	0	%0
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	0	%0
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	%0
Subtotal Additional Services	\$39,395	\$0	\$0	\$39,395	\$0	\$0	0\$	%0
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Summary of Fees								
Basic Services Fees	\$50,101	\$0	\$0	\$50,101	\$750	\$1,500	\$2,500	2%
Additional Services Fees	39,395	0	0	39,395	0	0	0	%0
Total of Fees	\$89,496	0\$	0\$	\$89,496	\$750	\$1,500	\$2,500	3%

AMD. NO. 1 EXHIBIT "B" Page 1 of 1



City of Corpus Christi

# CITY OF CORPUS CHRISTI DISCLOSURE OF INTEREST

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA". See reverse side for Filing Requirements, Certifications and definitions.

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FILING REQUIREMENTS

If a person who requests official action on a matter knows that the requested action will confer an economic benefit on any City official or employee that is distinguishable from the effect that the economic benefit on any City official or employee that is distinguishable from the effect that the action will have on members of the public in general or a substantial segment thereof, you shall disclose that fact in a signed writing to the City official, employee or body that has been requested to act in the matter, unless the interest of the City official or employee in the matter is apparent. The disclosure shall also be made in a signed writing filed with the City Secretary. [Ethics Ordinance Section 2-349 (d)]

CERTIFICATION

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

Certifying Person:

Signature of Certifying Person:

- a. "Board member." A member of any board, commission, or committee appointed by the City Council of the City of Corpus Christi, Texas.
- b. "Economic benefit". An action that is likely to affect an economic interest if it is likely to have an effect on that interest that is distinguishable from its effect on members of the public in general or a substantial segment thereof.
- c. "Employee." Any person employed by the City of Corpus Christi, Texas either on a full or part-time basis, but not as an independent contractor.
- d, "Firm." Any entity operated for economic gain, whether professional, industrial or commercial, and whether established to produce or deal with a product or service, including but not limited to, entities operated in the form of sole proprietorship, as self-employed person, partnership, corporation, joint stock company, joint venture, receivership or trust, and entities which for purposes of taxation are treated as non-profit organizations.
- The Mayor, members of the City Council, City Manager, Deputy City Manager, Assistant City Managers, Department and Division Heads, and Municipal Court Judges of the City of Corpus Christi, Texas.
- f. "Ownership Interest." Legal or equitable interest, whether actually or constructively held. in a firm, including when such interest is held through an agent, trust, estate, or holding entity. "Constructively held" refers to holdings or control established through voting trusts, proxies, or special terms of venture or partnership agreements."
- g. "Consultant." Any person or firm, such as engineers and architects, hired by the City of Corpus Christi for the purpose of professional consultation and recommendation.