## Shaw Environmental, Inc.



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June 4, 2009 Proposal

Mr. Trent Cave Napa-Vallejo Waste Management Authority 1195 Third St – Room 101 Napa, CA 94559-3082

Subject: Flare and Compressor Station Power Upgrade Installation

Dear Mr. Cave:

Shaw Environmental, Inc. (Shaw) is pleased to submit this proposal to the Napa-Vallejo Waste Management Authority (Authority) for the implementation of the flare/compressor station power upgrade at the American Canyon Sanitary Landfill. This upgrade is required as the flare and compressor station share a common electrical feed line and as a result the flare will not operate if the plant has a fault. This proposal includes engineering design, permitting, equipment procurement and installation to separate the incoming electrical feed line by installing a new switchgear panel to allow operation of either the plant and/or the flare. The separation of electrical switchgear and additional electrical power feeds will allow these components to remain on line regardless of the engine plant operation and/or condition.

# **SCOPE OF WORK**

# A. Engineering and Procurement Support

- 1. Generate electrical and construction drawings for county/city permit and inspection (Drawings will be provided to the Authority for approval prior to permit submittal)
- 2. Submit application and obtain building permit for construction
- 3. Coordinate PG&E installation activities
- 4. Coordinate subcontractor activities
- 5. Coordinate system testing
- 6. Generate site as-built drawings

# B. Electric Service Pad & Bollards

This task consists of installing a 6ft x 18ft x 9" concrete pad for the meter/distribution equipment and protective bollards for the electric service equipment and PG&E transformer.

- 1. Lay out switch gear pad and protective bollards.
- 2. Form up, set steel and pour the switchgear pad.
- 3. Drill out bollard post holes; 1ft diameter x 3ft for fixed and 4ft for removable.
- 4. Set bollards in holes and pour concrete.

# C. Electric Service Equipment

This task consists of installing a PG&E transformer pad, electrical meter/distribution equipment and pad conduit as identified below and conductors.

1. Perform primary and secondary PG&E conduit trenching and backfill.

- 2. (1) 4" PVC conduit for 12kV from power pole to PG&E transformer. PG&E will furnish and install wire. (Estimated 30' run).
- 3. (1) 5" PVC conduit from the PG&E transformer to the electric service panel per PG&E specifications. PG&E will furnish, install and terminate wire. (Estimated 20'run)
- 4. Provide & install the meter main & distribution switchboard 'MSB'-400A-480V, 3 PH. Terminate grounding per NEC and PG&E requirements
- 5. Install PG&E transformer and electric service equipment grounding electrodes consisting of service equipment bonding, the ground rods and Ufer-ground (concrete re-bar/steel connection) installation and terminations.
- 6. Perform, schedule and meet all PG&E and city/county inspection requirements.

#### D. Distribution Conduits & Wire

The following task is to be performed for the purposes of installing underground and above grade conduits for power and communications to the LFG flare auto-dialer panel.

#### 1. LFG Pretreatment Skid Feed

- a. Install 2" GRC above grade conduit from the switch gear to the LFG pretreatment skid and one 1" PVC for phone/communication from the pretreatment skid to the flare. A minimum of 3' GRC with 20 mil tape or PVC jacket will be below grade at the above/below grade transition.
- b. Pull (3) conductor 2/0 THHN copper with a #6 ground from the switch gear to the LFG pretreatment skid and terminate each end.
- c. Pull (2) 4/C #18 shielded cables from the pretreatment skid to the flare control panel and terminate.

# 2. Leachate Power Feed

- a. 100A distribution for future expanded leachate system
- b. Power shall be terminated at the existing temporary distribution/starter panel for (2) 480V, 10 HP pumps
- c. Trench (30" deep x 12" wide) 300 feet from the new LFG pretreatment system electrical service to the leachate system sub circuit panel.
- d. Install one 2" PVC for power and one 1" PVC for phone/communication from the flare to the leachate circuit panel (Underground).
- e. Pull in 3 conductor #1 THHN copper with a #6 ground from the switch gear to the existing leachate control panel and terminate.
- f. Pull (2) 4/C #18 shielded cables from the pretreatment skid to the flare control panel and terminate.
- g. Backfill trenches

#### 3. Flare Power Feed

- a. Install 2" GRC above grade conduit from the switch gear to the LFG flare skid. A minimum of 3' GRC with 20 mil tape or PVC jacket will be below grade at the above/below grade transition.
- b. Pull in 3 conductor #1 THHN copper with a #6 ground from the switch gear to the flare control panel and terminate.

# E. Notes

- 1. All required application and permit fees will be passed through to the Authority in order to avoid markup fees.
- 2. Scope of work does not include construction site fill and grading.
- 3. Shaw assumes all existing equipment is in good working order. Shaw will provide and estimate for any equipment needing to be replaced.
- 4. No phone coordination or installation is included. It is assumed that the any trouble alarms will connect through the existing auto-dialer located in the LFG flare.
- 5. Ground rods to be driven manually. If rock is encountered, there may an increase in cost should equipment be required.
- 6. USA (Underground Service Alert) will be contacted prior to any drilling or excavation.

- a. Any unmarked or incorrectly located substructures damaged will be repaired at an additional cost.
- b. Shaw and subcontractors are not responsible for any uncovered or disturbed hazardous materials.
- Re-routing trenching and conduit path due to unknown below grade obstructions may incur additional cost.
- 7. Warranties on the provided equipment will be the manufacturer standard.

# **COMPENSATION**

The electrical upgrade services, as described above, will be performed on a **time and materials** basis in accordance with the attached Schedule of Charges. Shaw suggests a budget of \$113,327 to cover the power service upgrade.

As needed, Shaw will provide the Authority with a not-to-exceed estimate for additional specific system corrective repair or maintenance work. This work will then proceed only upon written or emailed authorization from the Authority.

Shaw appreciates the opportunity to present this proposal to the Authority. If you approve, please issue an Agreement reflecting this Scope of Work as Exhibit A and the Schedule of Charges below as Exhibit B for our review and execution. If you have any comments or questions, please call David Laski at (925) 288-2189.

Sincerely,

SHAW ENVIRONMENTAL, Inc.

David Laski Project Manager

Attachments: A – Schedule of Charges

# Attachment A Schedule of Charges

# 2009 Category Rate Schedule

Category Number	Typical Category Function	Commercial Rate
1	Assistant Environmental Technician	\$47.00
	Driller/Field/Administrative Support	
2	Environmental Technician I	\$55.00
	Administrative Support II	
3	Environmental Technician II	\$67.00
	Technical Assistant	
	CAD Operator I	
	Assistant Driller	
4	Staff Engineer/Scientist	\$80.00
	Environmental Technician III	·
	Project/Laboratory Administrator I	
	Driller/Equipment Operator I	
5	Project Engineer/Scientist I	\$89.00
Č	Operations Supervisor I	Ψ00.00
	Senior Laboratory/Environmental Technician	
	Cost Estimator I	
	CAD Operator II	
	Equipment Operator II	
6	Project Engineer/Scientist II	\$101.00
	Project/Laboratory Administrator II	Ψ101.00
	Health & Safety/QA-QC Specialist I	
	Field Analytical Specialist/Field Project Engineer I	
	Foreman/Operations Supervisor II	
	Subcontracts Administrator II	
7	Driller II/Equipment Operator III	¢112.00
7	Project Engineer/Scientist III	\$113.00
	Field Analytical Specialist/Field Project Engineer II	
	Cost Estimator II	
	Subcontracts Administrator III	
	Senior Operations Supervisor/Master Driller	<b>A</b> 400.00
8	Project Engineer/Scientist IV	\$123.00
	Project/Laboratory Administrator III	
	Senior Field Project Engineer	
	Field Analytical Specialist III	
	Data Management Specialist I	
9	Project Engineer/Scientist V	\$132.00
	Senior Field Analytical Specialist	
	Data Management Specialist II	
	Health & Safety/QA-QC Specialist II	
	Superintendent	
10	Project/Laboratory Manager I	\$141.00
	Senior Project Engineer/Scientist	
	Senior Laboratory/Project Administrator	
	Senior Data Management Specialist	
	Senior Cost Engineer	
11	Project/Laboratory Manager II	\$152.00
	Client Program Manager II	
	Staff Consultant	
	General Superintendent	
	Senior Health & Safety/QA-QC Specialist	
12	Senior Project/Laboratory Manager	\$171.00
	Client Program Manager III	

Technical Consultant

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Project/Laboratory/Program Director Senior Staff Consultant Senior Technical Consultant \$200.00

# TIME AND MATERIALS PRICING TERMS

# 1.0 Personnel Charges

- 1.1 Personnel time charges for technical, management, and direct project clerical and administrative support activities will be invoiced according to the applicable Category Rate.
- 1.2 All time is rounded to the nearest one-half hour.
- 1.3 The Category Rate Schedule is revised periodically; Shaw E&I will provide written notice of a revision thirty (30) days prior to the effective date thereof.
- 1.4 All field labor and equipment are subject to a four (4) hour minimum charge and are charged portal-to-portal, Shaw E&l's facility.
- 1.5 All temporary (contract) personnel located at Shaw E&I facilities or working under Shaw E&I supervision will be charged at the applicable Category Rate.
- 1.6 Personnel time charges for travel within the continental United States are invoiced at the applicable Category Rate up to a maximum of eight (8) hours per day each way. International travel is charged at the actual time incurred.

# 2.0 Premium Charges

- 2.1 The Category Rate Schedule applies for all hours worked by exempt (salaried) personnel.
- 2.2 The Category Rate Schedule applies to the first eight (8) hours worked by salaried non-exempt and hourly personnel between 0700 hours and 1700 hours, Monday through Friday.
  - 2.2.1 A premium equal to 30% of the applicable Category Rate will be charged for all hours worked by salaried non-exempt and hourly personnel:
    - & Exceeding eight (8) hours per day; or
    - & Exceeding forty (40) hours per week; or
    - Between 1700 hours one day and 0700 hours the next day; or
  - 2.2.2 A premium equal to 70% of the applicable Category Rate will be charged for all hours worked by salaried non-exempt and hourly personnel on Saturdays and holidays (9 holidays per year defined annually by Shaw E&I policy or holidays per applicable union agreements).
- 2.3 Emergency Response Premium All emergency response personnel time (salaried and hourly) is charged at 1.5 times the applicable Category Rate.
- 2.4 Expert testimony, including testimony about the nature or extent of Shaw E&l's services, preparation, and standby is charged at 2.0 times the applicable Category Rate
- 2.5 After the applicable premium is applied, the Category Rates are rounded to the nearest dollar.

# 3.0 Travel and Living Expenses

- 3.1 Travel expenses for transportation (including mileage reimbursement) and lodging expenses will be charged at cost plus 15%.
- 3.2 Meals and incidental expenses will be charged at a predetermined daily rate (based on location) plus 15%.
- 3.3 Long-term, on-site project personnel are permitted to return home every three (3) weeks. These travel expenses will be invoiced at cost plus 15%.

## 4.0 Other Charges

- 4.1 Microcomputer and text processing equipment is invoiced at \$15 per connect hour, rounded to the nearest half hour.
- 4.2 Charges for other equipment will be invoiced in accordance with Shaw E&l's Equipment Rate Schedule.
- 4.3 Special services such as computer/CAD design services, reprographics, and drilling are available and pricing will be provided upon request.

#### 5.0 Reimbursable Expenses

All project-related expenses including materials, purchased equipment, subcontractor costs, fees, duties, deposits, tolls, weight certificates, special permits, and applicable federal, state, county, city taxes or surcharges and other costs incurred specifically for the project will be invoiced at cost plus 15%.

# 6.0 Invoicing and Terms of Payment

- 6.1 Intentionally deleted
- 6.2 Payment for services is due within 30 days receipt of the invoice.