

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Environmental Resources *SM*

BOARD AGENDA # *B=8

Urgent Routine

AGENDA DATE November 25, 2008

CEO Concurs with Recommendation YES NO
gh
(Information Attached)

4/5 Vote Required YES NO

SUBJECT:

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and Operations, Maintenance, and Monitoring Services at Geer Road Landfill

STAFF RECOMMENDATIONS:

1. Approve an amendment to the Master Agreement with Stearns, Conrad and Schmidt, Consulting Engineers, Inc., dba SCS Engineers, to increase the total not to exceed amount to \$1,751,755 for additional environmental monitoring, testing, and reporting services at the Fink Road and Geer Road Landfills, and operations, maintenance, and monitoring services at Geer Road Landfill for Fiscal Years 2008-2010.
2. Authorize the Chairman of the Board of Supervisors to amend the Master Agreement number A00625.
3. Authorize the Director of Environmental Resources, or her designee to sign Project Authorization PA 08-004-SMG for an amount not to exceed \$115,868.

(Continued on Page 2)

FISCAL IMPACT:

There is no fiscal impact to the County General Fund. If the proposed amendment to this agreement is approved, the maximum amount to be paid for services provided by Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., under this agreement will not exceed \$1,751,755. This total equates to \$1,347,448 from the original Master Agreement, plus \$193,688 in four (4) current proposals for required work, an estimated \$100,000 for a corrective action workplan, an operation and maintenance plan,

(Continued on Page 2)

BOARD ACTION AS FOLLOWS:

No. 2008-803

On motion of Supervisor O'Brien and seconded by Supervisor Grover
and approved by the following vote,

Ayes: Supervisors: O'Brien, Grover, Monteith, and Vice Chairman DeMartini

Noes: Supervisors: None

Excused or Absent: Supervisors: Mayfield

Abstaining: Supervisor: None

1) Approved as recommended

2) Denied

3) Approved as amended

4) Other:

MOTION:

ATTEST:

Christine Ferraro
CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and Operations, Maintenance, and Monitoring Services at Geer Road Landfill

STAFF RECOMMENDATIONS: (Continued)

4. Authorize the Director of Environmental Resources, or her designee, to sign additional individual Project Authorizations during Fiscal Years 2008-2010, up to \$100,000, but not to exceed the total contract amount of \$1,751,755.
5. Direct the Auditor-Controller to increase appropriations in the amount of \$404,307 as detailed in the attached Budget Journal.

FISCAL IMPACT: (Continued)

and a construction report, which are required between March and October 2009, an additional \$57,883 in operations, maintenance, and monitoring services, plus a maximum of 15% in allowable contract changes or \$52,736. Funds for this purpose are available in the Fink Road Landfill fund balance to cover these costs.

DISCUSSION:

The Department of Environmental Resources (Department), Landfill Division, operates and maintains the Fink Road and Geer Road Landfills. Currently, only the Fink Road Landfill is in active operation. This facility is located at 4000 Fink Road, Crows Landing, in western Stanislaus County. The Fink Road Landfill provides landfill services for Class III municipal solid waste for all of Stanislaus County. Landfill services are also provided for the combustion ash that results from the incineration of municipal solid waste at the adjacent Waste-to-Energy Plant.

The Geer Road Landfill is no longer an active landfill. Located at 750 Geer Road, Modesto, it has been closed since 1990 in accordance with State requirements and is in a post-closure monitoring and maintenance mode.

Although the day-to-day operation and maintenance of these landfills is performed with in-house staff, specialized services and expertise are needed in the area of environmental monitoring, testing, analyzing, and reporting for both landfills and for closure and post-closure maintenance at the Geer Road Landfill. Following a competitive procurement process in 2007, SCS Engineers (SCS) was awarded a three-year agreement to provide these specialized services for the County.

At the time the contract was approved on August 28, 2007, \$175,754 in allowable contract changes was available. Since this date, the Regional Water Quality Control Board (RWQCB) has required that the following items be completed

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and Operations, Maintenance, and Monitoring Services at Geer Road Landfill

which are not part of the County's contract for routine environmental monitoring, testing, analyzing, and reporting for both landfills:

Project Location	Type of Work	Cost
Fink Road LF	MTBE Work Plan	\$ 12,520
Geer Road LF	Report of Waste Discharge & Waste Discharge Req. Revision	\$ 24,560
Geer Road LF	Groundwater Extraction & Treatment System Evaluation	\$ 58,104
Geer Road LF	Design & Oversight of LF Gas Extraction Wells	\$ 32,500
Geer Road LF	Oversee Installation of 2 new Monitoring Wells	\$ 23,500
Fink Road LF	Inorganics Work Plan	\$ 19,847
TOTAL		\$171,031 (leaves \$4,723)

With only \$4,723 remaining in allowable contract changes, the Department is unable to complete the following projects that are currently being required by the RWQCB without a contract amendment, as follows:

1. Uploading historical data into the state's GeoTracker database for both landfills. This work must be completed for Geer Road Landfill by January 31, 2009, and will soon be required for Fink Road Landfill as well. Proposed cost: \$18,140.
2. Preparing a feasibility study for expanding the corrective action measures at Geer Road Landfill, which is due January 30, 2009. Proposed cost: \$59,680.
3. For the Fink Road Landfill, preparing a site investigation report, installing two new groundwater monitoring wells, conducting sampling of these new wells, performing additional MTBE testing, and preparing an addendum to the site investigation report that must include four consecutive quarters of MTBE sampling, are due at various times between May 29, 2009, and December 31, 2009. Proposed cost: \$115,868.
4. As the result of the feasibility study at Geer Road Landfill (item #2), we must submit a corrective action workplan, an operation and maintenance plan, and a construction report between March 31, 2009, and October 30, 2009. Estimated cost: \$100,000.

The above items pertain to the environmental monitoring, testing, and reporting services at the Fink Road and Geer Road Landfills. From the Master Agreement, \$385,320 were allocated to operations, maintenance, and monitoring services

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and Operations, Maintenance, and Monitoring Services at Geer Road Landfill

(O&M) at Geer Road Landfill. At present, we are nearing the half-way point in the three-year Agreement but have spent more than one-half of the allocation for the following reasons:

1. At the time the Master Agreement became effective, there were outstanding unpaid invoices which had not been paid because the Purchase Orders had been canceled given that the Agreement was being finalized. These charges totaled: \$34,883 for both routine and non-routine maintenance and repairs.
2. Since the contract has been in place, several additional non-routine maintenance items not covered by the contract have been necessary including: responding to landfill gas (LFG) and groundwater extraction and treatment system (GWETS) emergency call-outs, extra GWETS maintenance prior to the recent upgrades, GWETS and LFG compressor repairs, LFG flare actuator valve replacement and emergency compressor set up, vandalism repairs at GWETS including a new flowmeter, and repair of LFG condensate sumps. Total charges: Approximately \$23,000.

These O&M services total \$57,883 and are monies that will be needed to cover the routine O&M services for the remainder of the three-year contract, therefore, staff is requesting that these funds be included in the amended agreement as well.

The total cost of these projects is estimated to be \$351,571. An additional 15% in allowable contract changes, or \$52,736 has been included which brings the total amount to increase the Agreement by \$404,307 and the total not to exceed amount of the agreement to \$1,751,755. The Master Agreement with SCS is for a period of three (3) years, through June 30, 2010. The proposed amendment to the agreement is included as Attachment "A."

POLICY ISSUE:

The Board of Supervisors should determine if amending the agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for environmental monitoring, testing, and reporting services at the Fink Road and Geer Road Landfills is consistent with the Board's priorities of the efficient delivery of public services, a safe community, a healthy community, and a well-planned infrastructure system.

STAFFING IMPACTS:

There are no staffing impacts associated with this item.

**County of Stanislaus: Auditor-Controller
Legal Budget Journal**

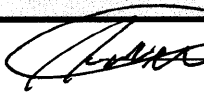

Database
Set of Books

FMS11IDB.CO.STANISLAUS.CA.US.PROD
County of Stanislaus

Balance Type	Budget
Category	* List - Text Budget - Upload
Source	* List - Text
Currency	* List - Text USD
Budget Name	List - Text LEGAL BUDGET
Batch Name	Text
Journal Name	Text
Journal Description	Text Transfer of Appropriations
Journal Reference	Text Fink Road Landfill
Organization	List - Text Stanislaus Budget Org

Upl	Fund	Org	Acc't	GL Proj	Loc	Misc	Other	Debit	Credit	Period	Line Description
								incr appropriations decr est revenue (format > number > general)	decr appropriations incr est revenue	Upper case MMM-YY LIST - TEXT	TEXT
	4	/	0	/	0	0	0				
FD	4021	0041100	63280	0000000	000000	000000	00000	404307		Nov-08	Increase Contracts
Totals:								404307	0		

Explanation: Increase appropriations in Fink Road Landfill Budget for SCS contract.

Requesting Department		CEO	Data Entry		Auditors Office Only
Lillie Farriester		Raul Mendez	Keyed by	Prepared By	
Signature		Signature			Approved By
6/25/ 2008		6/26/2008			11-17-08
Date		Date	Date	Date	Date



DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C
Modesto, CA 95358
Phone: (209) 525-6770
Fax: (209) 525-6773

AMENDMENT NO. 1

TO

INDEPENDENT CONTRACTOR AGREEMENT

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

This Amendment No. 1 to the Agreement for Independent Contractor Services ("Amendment No. 1") by and between the COUNTY OF STANISLAUS ("County") and STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC. d/b/a SCS ENGINEERS ("Contractor") is made and entered into on _____.

Whereas, the County and Contractor entered into an Agreement for Independent Contractor Services dated August 28, 2007 ("the Agreement"), and

Whereas, Exhibit A, Section H – Limit of Expenditure, stipulates that the maximum amount to be paid by the County for services shall not to exceed \$1,347,448.00 and

Whereas, the County desires to increase this Agreement by \$404,307.00 due to unforeseen expenses due to vandalism, and regulatory requirements, and

Whereas this amendment is for the mutual benefit of County and Contractor;


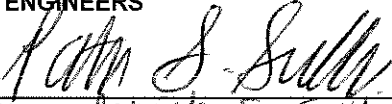
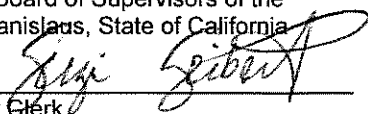
Now, therefore, the County and Contractor agree as follows:

- 1. Exhibit A, Section H is amended as follows:

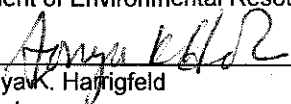

"LIMIT OF EXPENDITURE: The maximum amount to be paid by the County for services provided shall not exceed \$1,751,755.00 including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

- 2. Except as stated herein, all other terms and conditions of the Agreement remain unchanged.

In witness whereof, the parties have executed this Amendment on the date written above.

<p>COUNTY OF STANISLAUS</p> <p>By: <u></u> Jim DeMartini Vice-Chair of The Board of Supervisors</p> <p>Date: <u>DEC 05 2008</u></p> <p style="text-align: center;">"County"</p>	<p>SCS ENGINEERS</p> <p>By: <u></u> Name <u>Patrick S. Sullivan</u> Title <u>Senior Vice President</u></p> <p>Date: <u>11-20-08</u></p> <p style="text-align: center;">"Contractor"</p>
<p>ATTEST: Christine Ferraro Tallman Clerk of the Board of Supervisors of the County of Stanislaus, State of California</p> <p>By: <u></u> Deputy Clerk</p> <p>Date: <u>12.5.08</u></p>	

(signatures on the next page)

<p>APPROVED AS TO CONTENT: Department of Environmental Resources</p> <p>By: <u></u> Sonya K. Harrigfeld Director</p> <p>Date: <u>11/21/08</u></p>	
<p>APPROVED AS TO FORM: John P. Doering County Counsel</p> <p>By: <u></u> Thomas Boze Deputy County Counsel</p> <p>Date: _____</p>	



DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358
Phone: (209) 525-6770
Fax: (209) 525-6773

Groundwater Investigation for Fink Road Landfill

Project Number 08-004-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

The Fink Road Landfill is located approximately six miles south of the town of Patterson, on the west side of Interstate Highway 5, in western Stanislaus County. The Landfill is owned and operated by the County.

Groundwater monitoring has been conducted on-site since 1983; however, the current monitoring well network has historic monitoring data beginning in 1988 or later. Currently, 13 wells are used to monitor groundwater on a quarterly basis. These are designated MW-9 through MW-14 and MW-15 through MW-22.

Wells MW-17, MW-20, and MW-21 are located along the southern boundary of the landfill, south of Waste Management Unit LF-3, cells #3 through #6. Cells #4 through #6 have not yet received waste and are designated for future disposal. All cells in LF-3 are designated for disposal of ash generated at the Waste to Energy (WTE) plant located onsite. MW-20 is the farthest west and nearest the WTE facility. MW-21 is east of MW-20, and MW-17 is east of MW-21. These wells are not located downgradient of an active landfill cell, or known landfill release; however methyl tert-butyl ether (MTBE) has been reported in MW-17 and MW-21, although not currently present in these wells. Also, increasing inorganic concentration trends leading to one or more constituents exceeding the statistical control limits established in SCS's *Revised Water Quality Protection Standard Report*, dated July 10, 2008, have been observed in all three wells.

Regional Water Quality Control Board (RWQCB) has issued new WDRs for the Fink Road Landfill (Order No. R5-2008-0144). The WDRs required the discharger to submit a site investigation work plan "to determine if MTBE and the increased/sporadic concentrations of chloride, sulfate, and TDS (total dissolved solids) at MW-17, MW-20, and MW-21 are from the landfill or from an off-site source." Contractor prepared a Groundwater Investigation Work Plan, dated October 30, 2008, on behalf of the County, to satisfy the WDR requirement.

The October 30, 2008 work plan suggested previous MTBE detections and increasing inorganic concentrations do not appear to be a landfill release, and a number of influences may be affecting groundwater chemistry in the vicinity of these wells. Although no amount of investigation may be able to determine the causes for previous MTBE detections or variability in inorganics, Contractor proposed historic data evaluation, installation of new wells, and additional sampling activities to study possible sources.

C. Scope of Work

Contractor shall provide all the labor, material, equipment and tools to perform the following tasks:

Task 1 – Historic Data Evaluation

Contractor shall compile additional historic data and evaluate the data in an effort to determine possible influences on inorganic groundwater chemistry and possible groundwater impacts. Contractor shall research the availability and order historic aerial photographs to evaluate land topography prior to landfill operations and land use changes. Contractor shall research if historic water level data is available, request the data (if available), tabulate, graph, and analyze whether changes in water levels correlate to either the 1996 leachate spill and/or other events that may affect groundwater quality. Additionally, Contractor shall compile historic inorganic analytical results and generate time-specific iso-concentration plots for selected inorganic constituents over time, to determine whether special trends can be seen across the site over time.

Task 2 – Well Installation

The County shall retain a drilling contractor to install new groundwater monitoring wells, which shall help assess potential MTBE sources and groundwater chemistry south of the landfill. Contractor shall coordinate with the County and a licensed drilling contractor and oversee the installation of at least two new groundwater monitoring wells per Contractor's October 30, 2008 workplan. MW-23 shall be installed southwest of MW-20 and south of the WTE plant and MW-24 shall be installed east and immediately adjacent to the WTE plant. If perched water is observed during the drilling of either well, one additional well may be installed at each location (MW-23P and MW-24P) to monitor perched groundwater.

A drilling contractor shall be retained by the County and shall mobilize to the Site. A Hollow Stem Auger (HSA) drill rig shall be used by the drilling contractor to advance 8-inch diameter boreholes at each proposed drilling location. The Contractor's geologist shall be onsite to oversee drilling activities, and shall record blow counts, log the subsurface material type, moisture content, color, and record other observations, paying careful attention to the depth of the groundwater table. Contractor shall follow the Site Specific Safety Plan included in the October 30, 2008 work plan.

A split-spoon sampler shall be used by Contractor to collect soil samples during the drilling of each borehole for logging purposes only. Samples shall be collected continuously by Contractor, at least until groundwater is reached, in order to identify whether any perched groundwater zones exist. The onsite Contractor's geologist shall determine whether and when continuous sampling is no longer necessary in each borehole, based on observations and drilling conditions. Soil samples shall not be retained for laboratory analysis. Drill cutting shall be spread on the ground surface, either near the wellhead or at a location designated by the County.

Drilling shall be advanced by the drilling contractor to a point approximately 20 feet below the top of the saturated zone (upper aquifer). The estimated total depth for each well is between 75 and 95 feet below ground surface (bgs). Once the total depth is reached, a 2-inch diameter monitoring well shall be constructed at each location by the drilling contractor. The new wells will be constructed according to the monitoring well design submitted in the October 30, 2008 work plan.

If a significant perched zone is noted during the drilling of either monitoring well, the drilling contractor's drill rig will complete the water-table well then move over approximately 5-10 feet and complete a well in the perched zone. These perched zone wells, if installed, will be designated MW-23P and/or MW-24P. The perched wells will be completed in the same manner as the water-table wells except that the screened zone will be limited to the thickness of the identified perched zone. Drilling contractor shall also install a layer of bentonite below the screen, at the bottom of the perched zone, to ensure a bottom seal.

Well development shall occur no sooner than 48 hours after each well seal has been set and shall be

conducted according to the October 30, 2008 work plan. If perched zone wells are installed, these are not likely to develop to the same standards as the water-table wells. Development shall be limited to bailing water from the well while measuring field parameters. Water removed from the wells during development will be contained in 55-gallon drums and transported to one of the lined surface impoundments located at the landfill.

The County shall arrange for surveying of the completed wells to determine horizontal locations to +/- 1 foot (approximately) and vertical elevations of the measuring points to +/- 0.01 feet. This surveying may be done by County crews (if available), or by an independent surveyor.

Cost estimates assume a driller cost of \$24,000. This is an engineer's estimate and actual bids may be higher or lower. Cost estimates also assume that special wellhead completions, such as traffic bollards or fencing to protect wells from livestock, are not included.

Task 3 – Additional Sampling

New Wells

Contractor shall sample the newly installed wells MW-23 and MW-24 (as well as MW-23P and MW-24P, if installed) for four consecutive events, to occur during the site's regular quarterly groundwater monitoring.

The following are the sample methods the Contractor shall perform:

For each sampling event, depth to water measurements shall be collected, the sample shall be analyzed in the field for temperature, turbidity, electrical conductivity, and pH using a Horiba meter or similar device, and a sample will be collected using a portable Grundfos pump and retained for laboratory analysis.

Laboratory analysis shall be completed by various EPA methods for General Chemistry constituents (total dissolved solids, carbonate alkalinity, bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, magnesium, potassium, and sodium) and by EPA method 8260 for VOCs.

For the first sampling event, one trip blank will be submitted for each day of sampling. A blind duplicate sample for each well shall be collected and analyzed by the same EPA Methods for General Chemistry constituents and by EPA Method 8260 for VOCs. Following the initial sampling, duplicate samples shall be collected in accordance with the existing Sampling and Analysis Plan.

Samples shall be stored on ice and transported to BC Laboratories or another State certified laboratory under proper chain-of-custody controls.

Sampling results shall help confirm whether MTBE is present; determine the extent of high/increasing inorganics; determine the local groundwater gradient in relation to the wells; and for MW-23, evaluate the possible influence from Crow Creek and the water trough area.

Existing Wells MW-E2 through MW-E16

The fifteen wells installed west of the landfill during the previous 1998 through 2000 Kleinfelder Investigation include wells MW-E2 (MW-2s and MW-2d), MW-E4, MW-E5, MW-E6, MW-E7, MW-E8, MW-E9, MW-E10, MW-E11, MW-E12, MW-E13, MW-E14, MW-E15, and MW-E16. These wells shall be sampled during four consecutive quarterly groundwater monitoring events, by the Contractor, unless any of the wells are found to be inaccessible, non-operational, or dry (these wells will not be sampled). Sampling at these wells shall include collection of depth to water measurements using a depth to water meter prior to purging the well, field analysis for parameters (temperature, turbidity, electrical conductivity, and pH) using a Horiba meter or similar device, and sample collection using a portable Grundfos pump or disposable bailer.

Samples shall be collected and handled as described above for the new monitoring wells, and in compliance with the existing Sampling and Analysis Plan. Samples shall be analyzed for field parameters and for laboratory analysis by various EPA Methods for General Chemistry constituents (total dissolved

solids, carbonate alkalinity, bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, magnesium, potassium, and sodium), plus MTBE by Method 8260.

For each sampling event, one trip blank per day of sampling and one blind duplicate sample will be collected and analyzed by various EPA Methods for General Chemistry constituents and analyzed for MTBE by Method 8260.

Data from these wells will be used to assess groundwater flow directions and gradients for the area upgradient of the landfill, evaluate groundwater chemistry ranges and trends (if possible), and to determine whether groundwater chemistry has spatial variability.

Sample Pump House Discharge

A sample shall be collected from the pump house domestic well located south of the WTE plant by the Contractor, at a frequency of once per quarter, for a period of one year. Water from this domestic well is currently pumped to the water trough area. Sampling shall include analysis for field parameters (temperature, turbidity, electrical conductivity, and pH) using a Horiba meter or similar device, and a sample collected for laboratory analysis by Various EPA Methods for General Chemistry constituents (total dissolved solids, carbonate alkalinity, bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, magnesium, potassium, and sodium) and EPA Method 8260 for MTBE.

Data from these samples shall be compared to groundwater results from the existing wells along the property boundary, newly installed wells MW-23 and MW-24, and surface water samples collected in the water trough area.

Sample Water Trough Area and Southern Ditch

Surface water sampling shall be conducted at the water trough area located southwest of wells MW-17, MW-20, and MW-21 by the Contractor. The water trough is an area where standing surface water is observed year round; therefore, it is proposed that this area be sampled quarterly for a period of one year. If one pond exists, one sample shall be collected. If multiple ponds exist, samples will be collected from each pond. If more than one sample is collected, the field sampler will be sure to record detailed field notes as to how many ponds were observed, the location of each pond, and which sample was collected from which pond.

Sampling shall be conducted as grab sampling from individual standing ponds. Analyses shall include field parameters (temperature, turbidity, electrical conductivity, and pH) using a Horiba meter or similar device, and sampling collection for laboratory analysis by various EPA Methods for General Chemistry constituents (total dissolved solids, carbonate alkalinity, bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, magnesium, potassium, and sodium) and EPA Method 8260 for MTBE.

The County shall collect surface water samples from a point along the southern landfill boundary ditch if there is sufficient rain to produce flow in the ditch. A sample shall be collected at the upstream (western) end of the ditch at the southwest corner of LF-3 Cell 6. A second sample shall be collected at the farthest downstream (eastern) end where flow exists adjacent to LF-3. Samples shall be collected for each rainfall event in the winter of 2008-2009 that produces flow, beginning when the October 30, 2008 work plan is approved and work authorized by the County. Samples shall be collected by County personnel.

Samples shall be analyzed by County personnel for field parameters (temperature, turbidity, electrical conductivity, and pH) using a Horiba meter or similar device. Samples shall then be shipped to a state certified laboratory for general chemistry analysis (total dissolved solids, carbonate alkalinity, bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, magnesium, potassium, and sodium) and EPA Method 8260 for MTBE.

Contractor shall correspond with the County with regards to the ditch sampling activity.

Sample Perched Zone on Sidewall of Landfill Excavation and New Perched Wells

During the winter of 2008-2009, the County shall monitor the landfill for evidence of perched zones in site excavations. If a perched zone is identified, County personnel will mark the location and attempt to collect a grab sample from the zone. If the perched zone is observed, the bottom of the perched zone will be marked and later surveyed for location and elevation. If possible, multiple locations will be marked and surveyed to provide the orientation of the zone. The perched zone will be sampled by the County when first observed and quarterly thereafter, provided discharges (seeps) are still observed. It is not expected that the Contractor shall need to be onsite to assist the County in sample collection. However Contractor shall assist as necessary, regarding sample collection procedures and laboratory analysis.

Contractor shall be onsite to collect samples from new perched zone wells MW-23P and MW-24P, if installed. These wells shall be sampled quarterly, provided water exists in the wells. These shall be sampled using a bailer with minimal purging, since the wells shall almost certainly go dry. These wells shall be sampled quarterly, provided water exists in the wells.

Samples collected from MW-23P and MW-24P will be analyzed for general chemistry analysis (total dissolved solids, carbonate alkalinity, bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, magnesium, potassium, and sodium) and EPA Method 8260 for MTBE. If sufficient sample volume is collected, samples will also be analyzed for field parameters (temperature, turbidity, electrical conductivity, and pH).

Task 4 – Reporting

Contractor shall submit a Site Investigation Report on May 29, 2009 and an Addendum to the report on December 31, 2009. The Site Investigation Report will include all activities and results that can be initiated by that time, and at a minimum:

- Results of historic data review and evaluations;
- Identification and sampling results for the perched zone, if observed;
- Initial sampling and analysis results for existing wells west of the site and the pump house, including comparisons to existing monitoring well data;
- Initial sampling and analysis results for surface water sampling at the water trough area and southern perimeter ditch; and,
- Observations and conclusions, if available, regarding the presence of MTBE and inorganic concentrations in new sampling locations, compared to existing monitoring well data.

The Addendum shall include all data, results, and conclusions based on four consecutive quarters of sampling.

D. Project Authorization Period

Services will commence on or about December 1, 2008 and end December 31, 2009.

Contractor's tasks may be completed according to the following schedule, based on timely authorization to proceed. Note that some tasks will be performed concurrently.

	<u>Time Period</u>
Task 1 – Historic Data Evaluation	December 2008 – March 2009
Task 2 – Well Installation	January 2009 (if weather permits)
Task 3 – Additional Sampling	Quarterly - 1Q2009 – 4Q2009
Task 4 – Reporting	May 2009 & December 2009
TOTAL ELAPSED TIME	12/15/08 to 12/31/09

In order to meet the mandated reporting deadlines of May 29, 2009 and December 31, 2009, authorization to proceed must be received from the County no later than December 15, 2008, and the new monitoring wells must be installed no later than January 31, 2009.

E. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given calendar year. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses.

	<u>Not to Exceed Limits</u>
Task 1 – Historic Data Evaluation	\$ 16,520
Task 2 – Well Installation	\$ 17,060
Task 3 – Additional Sampling	\$ 48,008
<u>Task 4 – Reporting</u>	<u>\$ 31,400</u>
Subtotal	\$112,988
 TOTAL NOT TO EXCEED	 \$115,868*

*Note: This not to exceed amount includes a allotment for County to utilize Contractor’s services to review drilling quote responses and respond to participate in the Pre-quote conference if requested by the County.

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement. The County shall not reimburse Contractor for faxes, phone, postage or freight or 15% markup on items such as materials & supplies, etc.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$115,868.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

F. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice shall include but not be limited to the following information: hours worked by Contractor’s Staff, the title of the Staff, billable rate, and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services. Copies of actual invoices from the subcontractor’s such as laboratories, shall accompany the invoice submitted by the Contractor.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
 Department of Environmental Resources Landfill
 Attention: Accounting
 4000 Fink Road
 Crows Landing, California,

G. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

H. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

I. Patent Rights

Contractor represents that professional services provided by Contractor pursuant to this Agreement does not infringe on any other copyrighted work. Contractor shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

IN WITNESS WHEREOF, the parties have executed this Project No. 08-004-SMG on _____, 2008.

COUNTY OF STANISLAUS
Department of Environmental Resources

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: _____
Sonya K. Harrigfeld
Director


By: _____
Name: _____
(Printed)
Title: _____

"County"

"Contractor"

APPROVED AS TO FORM:

John P. Doering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
 3800 Cornucopia Way, Suite C, Modesto, CA 95358
 Phone: (209) 525-6770
 Fax: (209) 525-6773

Perform Geer Road Landfill Engineering Feasibility Study

Project Number 08-005-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

Geer Road Landfill (GRLF) is owned by Stanislaus County (County) and is managed by the Department of Environmental Resources. The landfill was operated from 1972 to 1990 serving the City of Modesto and parts of the County. The permitted, closed landfill is located in Section 34, Township 3 South, Range 10 East, and Section 3, Township 4 South, Range 10 East, MDB&M. The center of the site is located at approximately latitude 37° 34.32' and longitude 120° 51.05'. The physical address is 750 Geer Road, Modesto, California.

The landfill ceased operation on January 1, 1990. The footprint of the site encompasses 144 acres. Two hundred fifty thousand (250,000) tons of wastes are in place. GRLF is referenced as site No. 50-AA-0002 in the (California Integrated Waste Management Board (CIWMB's) Solid Waste Information System (SWIS) database.

The site has been regulated by California Regional Water Quality Control Board (RWQCB) since closure under Waste Discharge Requirements (WDRs) Order No. R5-00-087 for post-closure maintenance of an unlined Class III landfill, and for corrective action of volatile organic compounds (VOCs) in groundwater including the associated landfill gas (LFG). As part of the corrective actions already taken at the site, the County has installed a cap, a groundwater extraction and treatment system (GWETS), and an LFG extraction and treatment system. In 2006, RWQCB required the County to further investigate VOC concentrations in LFG and groundwater. In response, the County prepared a site investigation (SI) workplan, implemented the SI work plan, and submitted the SI Report for the south area of the GRLF (Kleinfelder, May 23, 2007).

As a result of the study conducted by Kleinfelder, RWQCB is now requiring that the County expand corrective action measures in the south area of GRLF, including additional groundwater monitoring points near the Tuolumne River. Currently, projects are underway to install two new deep-zone monitoring wells near the Tuolumne River, and to install 8-10 new vadose zone LFG extraction wells.

In May 2008, Contractor conducted a study of the GWETS following system upgrades and maintenance work. The results of the GWETS study were reported in *GWETS Aquifer Test, Geer Road Landfill, Stanislaus County, California*, June 30, 2008. This report concluded that the existing GWETS did not produce a substantial influence on the aquifer and was capturing a relatively low quantity of VOCs. In a letter dated September 18, 2008, RWQCB responded to the GWETS Aquifer Test Report and ordered specific actions to be taken, the first of which is completion of an Engineering Feasibility Study (EFS) to be submitted to RWQCB by **January 30, 2009**. This document must discuss facility background and environmental setting; define the nature and extent of impacts; define contaminant fate and transport; identify remedial action objectives; describe remedial action alternatives; evaluate remedial action alternatives; estimate project impacts and schedules; and select one or more preferred alternatives. The

EFS should also produce detailed costing of the preferred alternative(s) so as to provide the County with estimates of future capital expenditures and ongoing operation and maintenance costs.

RWQCB has stated that failure to meet the deadline for the EFS, or subsequent deadlines for a corrective action work plan and implementation of the corrective action will result in issuance of a Clean-up and Abatement Order.

C. Scope of Work

Contractor shall provide all the labor, material, equipment and tools to perform and provide the County an Engineering Feasibility study which includes the following tasks:

Task 1 – Background Data Collection and Evaluation

Contractor shall compile existing facility data to include site history, geology, hydrogeology, surface water, land use, and results of previous investigations. Contractor shall also define the nature and extent of known impacts including contaminant mobility, toxicity, and possible receptors. Contractor shall use historic data, as available, to define changes of impacts over time.

Contractor shall also estimate the contaminant loading and flow through the aquifer system at the down-gradient edge of the property. This shall be required in order to evaluate the effectiveness of different remedial action alternatives.

Task 2 – Develop Remedial Action Objectives

Contractor shall develop objectives to be used for evaluation of remedial action alternatives. The Remedial Action Objectives (RAOs) will include objectives for controlling the concentrations and migration of VOCs in groundwater, and objectives for limiting exposures to contaminants that may exist in the groundwater.

Task 3 – Identification and Screening of Remedial Action Alternatives

Contractor shall develop a list of all remedial action alternatives that may be reasonably considered for the site. These shall include expansion of the existing pump and treat system; evaluation and expansion of the LFG collection system; application of new remedial alternatives, either as stand-alone actions or combine with the existing GWETS; and natural attenuation (no further action).

Following initial identification of these remedial action alternatives, Contractor shall complete a screening of possible alternatives in terms of meeting the objectives defined in Task 2. Rough costs shall also be developed and considered in the screening process so that alternatives that are financially impractical for this site (e.g., clean closure) are screened out of the process.

At the completion of this task, Contractor shall prepare a Technical Memorandum summarizing the RAOs developed in Task 2, and the alternatives identified and screened in Task 3. The Technical Memorandum shall identify those alternatives that pass the screening evaluation and shall be considered for more detailed evaluation. This Technical Memorandum shall be submitted to the County and RWQCB for comment. The intent is to allow RWQCB a chance to add alternatives to the process if they feel some potentially viable alternatives are not being considered.

Task 4 – Evaluation of Selected Alternatives

Following screening of alternatives in Task 3 and selection of possible viable alternatives by the County, Contractor and the RWQCB, the Contractor shall complete detailed evaluation of the alternatives. This evaluation shall include:

- Protection of human health and the environment;
- Compliance with laws and regulations;
- Long-term effectiveness;
- Short-term effectiveness;
- Reduction of toxicity, mobility, volume and concentration;
- Implementability;

- Cost;
- Time to meet water quality and background objectives;
- State and community acceptance.

Contractor shall also evaluate the potential impacts of remedial actions and develop a project schedule for each of the viable alternatives.

On the basis of the remedial action evaluation, Contractor shall recommend a preferred alternative that involves one or more of the viable remedial actions.

Task 5 – Prepare Engineering Feasibility Study (EFS)

Contractor shall prepare a draft Engineering Feasibility Report discussing the results of Tasks 1 through 4, including recommendations for a preferred alternative. The EFS draft will be sent to the County for review and comment.

Following receipt of County comments, SCS will prepare a Final version of the EFS Report and deliver the report to RWQCB on or before the due date of January 30, 2009.

D. Project Authorization Period

Services will commence on or about December 1, 2008 and end January 30, 2009.

The EFS shall be completed according to the following schedule in elapsed time from the approval date of the Work Authorization to proceed. Note that some tasks will be performed concurrently.

	<u>Weeks</u>
Task 1 – Background Data Collection	1-4
Task 2 – Develop RAOs	2-3
Task 3 – Identification and Screening of Alternatives	3-5
Task 4 – Evaluation of Alternatives	6-8
<u>Task 5 – Prepare Engineering Feasibility Report</u>	<u>8-11</u>
 TOTAL ELAPSED TIME (Weeks)	 11

E. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given calendar year. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses.

A breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
Task 1 – Background Data Collection and Evaluation	\$ 11,000
Task 2 – Develop RAOs	\$ 5,820
Task 3 – Identification and Screening of Alternatives	\$ 18,280
Task 4 – Evaluation of Alternatives	\$ 10,400
<u>Task 5 – Prepare Engineering Feasibility Report</u>	<u>\$ 14,020</u>
 TOTAL	 \$ 59,520

1. The aforementioned not to exceed limits, include reimbursable items for printing/CAD and travel.
Project No. 08-005-SMG Page 3

The Contractor shall be reimbursed for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement.

2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$59,520.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

F. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Contractor's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
Department of Environmental Resources Landfill
Attention: Accounting
4000 Fink Road
Crows Landing, California,

G. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

H. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

I. Patent Rights

Contractor represents that professional services provided by Contractor pursuant to this Agreement does not infringe on any other copyrighted work. Contractor shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

J. Documents

In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished documents, data studies, drawings, maps and reports, shall be delivered to the County within ten (10) days of delivery of termination notice to Consultant, at no cost to County. Any use of uncompleted documents without specific written authorization from Consultant shall be at County's sole risk and without liability or legal expense to Consultant.

K. Responsibility for Errors

Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

L. Ownership of Documents

Any interest, including copyright interests, of Consultant or its contractors or subconsultants in studies, reports, memoranda, computational sheets, drawings, plans or any other documents, including electronic data, prepared in connection with the Services, shall be the property of County. To the extent permitted by law, work product produced under this Agreement shall be deemed works for hire and all copyrights in such works shall be the property of the County. In the event that it is ever determined that any works created by Consultant or its subconsultants under this Agreement are not works for hire, Consultant hereby assigns to County all copyrights to such works. With the County's prior written approval, Consultant may retain and use copies of such works for reference and as documentation of experience and capabilities.

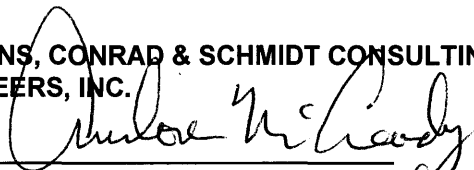
IN WITNESS WHEREOF, the parties have executed this Project No. 08-005-SMG on Dec. 1, 2008.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfeld
Director

"County"

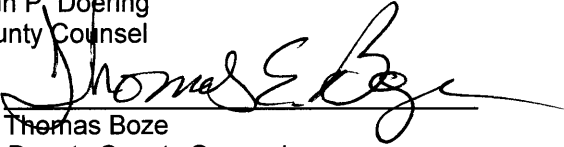
STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: 
Name: Ambrose McCready
(Printed)
Title: Vice President

"Contractor"

APPROVED AS TO FORM:

John P. Doering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358
Phone: (209) 525-6770
Fax: (209) 525-6773

**Establish Geo Tracker Uploads
Fink Road Landfill**

Project Number 08-006-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

The Fink Road Landfill is located approximately six miles south of the town of Patterson, on the west side of Interstate Highway 5, in western Stanislaus County. The Landfill is owned and operated by Stanislaus County (County).

The Contractor performs regular groundwater monitoring at the site on a quarterly basis for wells MW-9 through MW-14 and MW-15 through MW-22. The Regional Water Resources Control Board (RWQCB) requires that data be uploaded to the GeoTracker database, and currently no data has been submitted for the site. This Project Authorization addresses initial GeoTracker uploads only. After initial uploads are completed, quarterly updates shall be completed under the approved amounts under the existing monitoring contract with Contractor.

C. Scope of Work

Contractor shall provide all the labor, material, equipment and tools to perform the following tasks:

Task 1 – Establish GeoTracker Uploads

The site is already listed in the GeoTracker database. Contractor shall request to be an authorized representative agent to upload for the site. Upon approval, Contractor shall gather and upload required information including boring logs, site map, field point names and information, and survey information, as well as groundwater monitoring results since Contractor has been performing groundwater monitoring at the site (third quarter 2006), including groundwater levels and laboratory files (must be in EDF format).

Contractor shall coordinate with the laboratory to retrieve EDF formatted files that can be uploaded for past groundwater monitoring events in which Contractor was overseeing. Following this initial data uploading, routine uploads for the site will be performed for each monitoring event as part of the already authorized groundwater monitoring work.

D. Project Authorization Period

Contractor shall complete work by February 27, 2009, based on timely authorization to proceed (no later than December 15, 2008).

Services will commence on or about December 1, 2008 and end February 27, 2009.

E. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given calendar year. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses that have been agreed to by the both parties. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on this Project Authorization.

A breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
Task 1 – Establish GeoTracker Uploads	\$ 8,480.00
TOTAL	\$ 8,480.00

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$8,480.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

F. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Contractor's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
 Department of Environmental Resources Landfill
 Attention: Accounting
 4000 Fink Road
 Crows Landing, California,

G. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

H. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities
Project No. 08-006-SMG Page 2

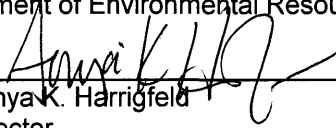
performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

I. Responsibility for Errors

Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

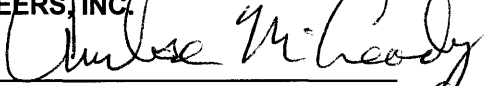
IN WITNESS WHEREOF, the parties have executed this Project No. 08-006-SMG on Dec. 1, 2008.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfield
Director

"County"

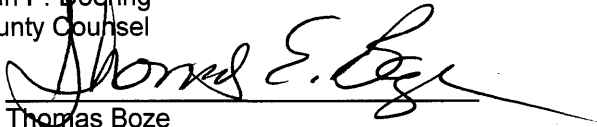
STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: 
Name: Ambrose McCreehy
(Printed)
Title: Vice president

"Contractor"

APPROVED AS TO FORM:

John P. Doering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358
Phone: (209) 525-6770
Fax: (209) 525-6773

**Establish Geo Tracker Uploads
Geer Road Landfill**

Project Number 08-007-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

The Geer Road Landfill is located in Stanislaus County, California, approximately 10 miles southeast of the City of Modesto. The Landfill is closed and is owned and operated by Stanislaus County (County).

Contractor performs regular groundwater monitoring at the site on a semi-annual basis for a network of thirty-two monitoring wells. The Regional Water Resources Control Board (RWQCB) requires that data be uploaded to the GeoTracker database, and currently no data has been submitted for the site. This Project Authorization addresses initial GeoTracker uploads only. After initial uploads are completed, semi-annual updates shall be completed under the approved amounts within the existing monitoring contract with Contractor.

C. Scope of Work

Contractor shall provide all the labor, material, equipment and tools to perform the following tasks:

Task 1 – Establish GeoTracker Uploads

The site is already listed in the GeoTracker database. Contractor shall request to be an authorized representative agent to upload for the site. Upon approval, Contractor shall gather and upload required information including boring logs, site map, field point names and information, and survey information, as well as groundwater monitoring results since Contractor has been performing groundwater monitoring at the site (third quarter 2006), including groundwater levels and laboratory files (must be in EDF format).

Contractor shall coordinate with the laboratory to retrieve EDF formatted files that can be uploaded for past groundwater monitoring events in which Contractor was overseeing. Following this initial data uploading, routine uploads for the site will be performed for each monitoring event as part of the already authorized groundwater monitoring work.

D. Project Authorization Period

Contractor shall complete work by January 30, 2009, based on timely authorization to proceed (no later than December 15, 2008).

Services will commence on or about December 1, 2008 and end January 30, 2009.

E. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given calendar year. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses that have been agreed to by the both parties. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on this Project Authorization.

A breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
<u>Task 1 – Establish GeoTracker Uploads</u>	<u>\$ 8,480.00</u>
TOTAL	\$ 8,480.00

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$8,480.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

F. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Contractor's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
 Department of Environmental Resources Landfill
 Attention: Accounting
 4000 Fink Road
 Crows Landing, California,

G. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

H. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities
 Project No. 08-007-SMG

performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

I. Responsibility for Errors

Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

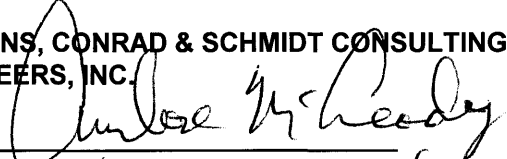
IN WITNESS WHEREOF, the parties have executed this Project No. 08-007-SMG on Dec. 1, 2008.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfeld
Director

"County"

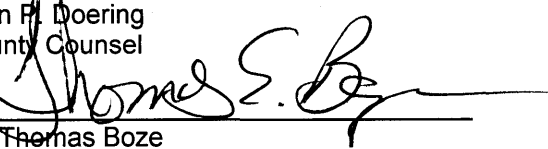
STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: 
Name: Ambrose McCready
(Printed)
Title: Vice President

"Contractor"

APPROVED AS TO FORM:

John P. Doering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358
Phone: (209) 525-6770
Fax: (209) 525-6773

**Operation, Maintenance and Repair Services
At
Geer Road Landfill**

Amendment 1 to Project No. 07-003-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

Whereas, the County and Contractor entered into Project Authorization Number 07-003-SMG dated August 30, 2007 against Master Agreement for Independent Contractor Services dated May 14, 2007 ("the Agreement"), and

Whereas the County and Contractor mutually agreed to amend the Master Agreement to increase the "Not to Exceed Amount" of the Master Agreement to \$1,751,755.00 ("Amendment 1"), and

Whereas, Project Authorization Number 07-003-SMG, Section D – Compensation, item 2, stipulates that the maximum amount to be paid by the County for services authorized by this Project Authorization shall not to exceed \$385,320.00 and

Whereas, the County desires to increase the "not to exceed" amount of this Project Authorization by \$57,883.00 due to unforeseen expenses due to vandalism, and regulatory requirements, and

Whereas this amendment is for the mutual benefit of County and Contractor;

Now, therefore, the County and Contractor agree as follows:

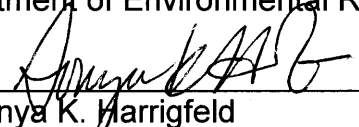
1. Project Authorization Number 07-003-SMG, Section D – Compensation, item 2 is amended as follows:

"The parties hereto acknowledge the maximum amount to be paid by the

County for services provided shall **not exceed \$443,203.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement."

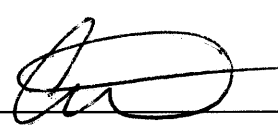
IN WITNESS WHEREOF, the parties have executed this Project Authorization No. 07-003-SMG Amendment 1 on February 4, 2009.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfeld
Director


"County"

SCS ENGINEERS

By: 
Name: Arthur E Jones Jr
(Printed)
Title: Project Manager

"Contractor"

APPROVED AS TO FORM:
Michael H. Krausnick
County Counsel

By: 
for Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
 3800 Cornucopia Way, Suite C, Modesto, CA 95358
 Phone: (209) 525-6770
 Fax: (209) 525-6773

Perform Aquifer Test Study – Part 1 Geer Road Landfill

Project Number 09-001-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

The Geer Road Landfill (GRLF) is located in Stanislaus County, California, approximately 10 miles southeast of the City of Modesto. The Landfill is closed and is owned and operated by Stanislaus County (County). The landfill was operated from 1970 to 1990 serving the City of Modesto and parts of the County. The permitted, closed landfill is located in Section 34, Township 3 South, Range 10 East, and Section 3, Township 4 south, Range 10 East, MDB&M. The center of the site is located at approximately latitude 37° 34.32' and longitude 120° 51.05'. The physical address is 750 Geer Road, Modesto, California.

The landfill ceased operation on January 1, 1990. The footprint of the site encompasses 144 acres. An estimated two hundred and fifty thousand (250,000) tons of wastes are in place. GRLF is referenced as site No. 50-AA-0002 in the CIWMB's Solid Waste Information System (SWIS) database.

The site was regulated by RWQCB since April 2000 under Waste Discharge Requirements (WDRs) Order No. 5-00-087 for post-closure maintenance of an unlined Class III landfill, and for corrective action of volatile organic compounds (VOCs) in groundwater including the associated landfill gas (LFG). As part of the corrective actions already taken at the site, the County has installed a cap, a groundwater extraction and treatment system (GWETS), and a LFG extraction and treatment system.

Several evaluations of the existing GWETS, including a study conducted by SCS Engineers in 2008, concluded that the system was effective in removing VOC from groundwater, but the pumping systems were insufficient to create an effective barrier to VOCs moving in groundwater from under the landfill to the southwest. The pumping systems currently pump approximately 50-70 GPM from 12 extraction wells. These wells are only screened in the shallow groundwater zone.

Following the 2008 GWETS study, the RWQCB required the County to complete an Engineering Feasibility Study (EFS) to evaluate alternatives for improving corrective actions for VOCs in groundwater. The EFS concluded that two options should be pursued; (1) installation of ten new vadose zone landfill gas (LFG) extraction wells and (2) implementation of a more rigorous groundwater extraction and pumping system. The conceptual model was to install 20 dual zone extraction wells capable of pumping 20 gallon per minute (GPM) each, treatment of the water to include metals and VOC removal, and disposal of the water on the County-owned property northwest of the landfill. This equates to water extraction and treatment at 400 GPM, or about 576,000 gallons per day.

In April 2009, new WDRs/MRP for the site were issued as Order No. R5-2009-0051. In the new order, several key compliance dates were established specifically regarding the recommended groundwater corrective action in the southern part of the landfill. These include:

- Submit a Corrective Action Work Plan.....October 31, 2010
- Submit an Operations & Maintenance PlanJuly 29, 2011
- Submit a Construction and Start-up Report.....October 31, 2011

In order to proceed with the groundwater extraction corrective actions plans and eventual installation of the system in early 2011, several tasks must first be completed to test various aspects of the extraction, treatment and disposal systems. This information is critical to support proper system design and construction.

There are three aspects of the system that need to be researched and tested:

1. Testing of aquifer characteristics for both the shallow and deep zones to establish aquifer parameters, and testing of the new extraction well design for extraction performance;
2. Evaluation of treatment options to determine the best options for pre-treatment and VOC removal at the predicted flow rates; and,
3. Testing of the water disposal area to determine if the property can accept the volume of water predicted, and the best means for water disposal.

Because of the magnitude of these studies, differing time constraints and different scopes of work, these three evaluations are divided into separate work authorization proposals. This proposal is for the first evaluation – aquifer testing and evaluation.

C. Scope of Work

General Approach to Aquifer Test

There are two phases to the test that Contractor shall perform. This Project Authorization is for the phase 1 of the aquifer test. In the first phase of the aquifer test, Contractor shall prepare plans and specifications for a County-retained driller to drill, install and construct two test wells and four observation wells, install the test pumps and assist the Contractor with testing by maintaining the pumps and assuring they are working properly during the test. Contractor shall test the two-aquifer zones to determine the characteristics. This is phase 1. The stopping point for phase 1 is after Contractor completes and submits the aquifer test report, designs the extraction wells using the aquifer test data, and prepares draft plans, specifications, and other necessary documents for the County to solicit a drilling contractor for the drilling work required in phase 2. At this point the County shall retain the driller for drilling of the excavation wells in part 2 and issue the second Project Authorization to Contractor. Part 2 shall include Contractor's oversight, inspection and observation of the County-retained drilling contractor installation and construction of the extraction well and include Contractor testing of the extraction well to ensure it is working properly, as designed.

Contractor shall provide County with electronic and hard copy engineer stamped plans, specifications, engineers estimate and materials list for County's use in bidding the drilling, installation and construction, of the wells and assistance with testing. Contractor shall be available, as needed, for an onsite County facilitated pre-bid meeting with the prospective bidders. Contractor shall provide the County answers to any technical questions pertaining to the drilling, installation and completion of the pumping and observation wells during the County's bid process. Contractor shall provide the County engineer stamped plans and specification issued for construction. The plans and specifications shall be submitted to the County in electronic and hard copy format. Contractor shall assist County with review of bid responses and provide the County input as to the technical acceptance of bid response. Contractor shall observe the wells; test both groundwater zones (shallow and deep) through pumping and water level measurements; and complete applicable aquifer test analyses and reporting.

In the initial test plan the County-retained driller shall install two pumping test wells – one in the shallow groundwater zone and one in the deeper zone. The wells installed by the County-retained driller shall be drilled and installed near an existing monitoring well pair (such as MW-2S and MW-2D) so these existing wells can be used as observation points. The County-retained driller shall install two wells in separate boreholes to ensure proper isolation in the two-groundwater zones. In addition, the County-retained driller shall install two pairs of observation wells (4 total) near the new test wells. These shall be small diameter piezometers with the shallow and deep piezometers installed in a single borehole. The three observation points for each zone (one existing monitoring well pair and two observation piezometer pairs) shall be at

different radii from the pumping test wells. This is necessary to provide adequate data for aquifer test analysis.

Contractor shall complete testing by installing pressure sensors in the wells and pumping each test well independently for at least 72 hours (draw down test), followed by a recovery test of 24-48 hours. During pumping, water pumped from the wells shall be disposed of by the Contractor by tapping into the existing GWETS facilities. Existing GWETS wells shall be shut down by the Contractor during the aquifer testing, so sufficient capacity for treatment shall exist onsite and no interferences shall occur from the existing extractions wells.

Contractor shall evaluate data from the tests using various aquifer test evaluation methods to determine the Transmissivity (T) and Storage Coefficient (s) of the two-groundwater zones, plus other aquifer responses such as deep zone confinement, delayed release from storage, and boundary influences. These are critical values used to design long-term pumping options. Contractor shall prepare a report summarizing the aquifer testing. This report shall also include necessary documents for Part 2 of the aquifer testing.

Contractor shall provide all the labor, material, equipment and tools to perform the following tasks:

Task 1 – Aquifer Testing Work Plan, Design Driller, Safety Plan

Contractor shall prepare several documents necessary for the aquifer test planning. Contractor shall complete a final Work Plan for the aquifer test, including the location and depth of the pumping and observation wells, test periods, test methods, etc. Contractor shall provide County with electronic and hard copy engineer stamped plans, specifications, engineers estimate and materials list for County's use in bidding the drilling, installation and construction, of the wells, and assist assistance with testing. Contractor shall be available, as needed, for an onsite County facilitated pre-bid meeting with the prospective bidders. Contractor shall provide the County answers to any technical questions pertaining to the drilling, installation and completion of the pumping and observation wells during the County's bid process. Contractor shall provide the County engineer stamped plans and specification issued for construction. The plans and specifications shall be submitted to the County in electronic and hard copy format. Contractor shall assist County with review of bid responses and provide the County input as to the technical acceptance of bid response. Contractor shall also prepare a Site Specific Safety Plan to cover the aquifer testing activities.

Task 2 – Oversight of Drilling, Installation, & Development of Test Wells

Once the County has retained a qualified driller, Contractor shall coordinate with the County-retained drilling contractor and Contractor shall oversee the installation of the test wells. Contractor shall submit an application for, and obtain, required well permits prior to start of drilling. Contractor's geologist shall be onsite to oversee drilling activities and document well drilling progress. The Contractor's geologist shall log the subsurface material type, moisture content, depth to groundwater table, color, and other observations. Contractor shall collect soil samples during drilling for logging purposes only. Soil samples shall be collected at intervals of no greater than every five feet during the drilling of boreholes. Additional samples may be collected at the discretion of the geologist and this may be done at depths near the groundwater table or where a confining layer is observed (clay). If possible, depending on the drilling technique, continuous sampling shall be conducted. Soil samples shall not be retained for laboratory analysis. Drill cuttings shall be spread on the ground surface by the County-retained driller, either near the wellhead or at a location designated by the County.

Contractor shall also oversee the well development to be performed by the County-retained drilling contractor. Well development shall occur no sooner than 48 hours after each well seal has been set. Well development shall be performed using multiple techniques, including surge and bail and pumping. Contractor shall be onsite during well development to monitor water conditions using field equipment, and shall record water levels, the volume of water removed, pH, specific conductivity, temperature, and turbidity. These shall be recorded on groundwater well development logs. The goal of well development is to achieve maximum discharge capability for the pumping wells, turbidity readings of less than 5 NTU, or observe stable field parameters (+/- 10%). To the maximum extent possible, water removed from the wells during development will be pumped into the GWETS.

The County shall arrange for surveying of the completed wells to determine horizontal locations to +/- 1 foot (approximately) and vertical elevations of the measuring points to +/- 0.01 feet. This surveying may be done by County crews (if available), or by an independent surveyor. Time is of the essence for this surveying as all aquifer test water levels and analyses shall be dependant on having the vertical elevation data.

Task 3 – Aquifer Testing

Contractor shall perform aquifer testing using the newly installed extraction wells. The County-retained drilling contractor shall be responsible for supplying power for the pumps and ensuring the power unit and pumps are working continuously during the tests. Groundwater drawdown shall be monitored in the extraction wells, newly installed observation wells, and all nearby monitoring wells. A stepped-drawdown test and/or constant rate test shall be performed separately for each of the two-aquifer test wells. The drawdown and recovery in the pumping wells and observation wells shall be monitored for each test. Pumping shall continue until the system comes to steady-state conditions and drawdown has stabilized.

The GWETS shall be shut down during testing to prevent groundwater interference from the extraction wells. Effluent water produced during testing will be disposed of through the GWETS. Contractor Field Services will set up the necessary plumbing prior to testing. Contractor will rent approximately 10-12 pressure transducers for data collection in extraction and observation wells. Temporary pumps used for water extraction will be provided and installed by the drilling subcontractor.

Contractor estimates testing shall require one week of fieldwork per extraction well test. Up to an additional week of fieldwork may be necessary for test set-up and installing/removing testing equipment in the wells. The price for this additional week of fieldwork is included in the total not to exceed Agreement price identified in Section E – Compensation, item 2 of this Project Authorization.

During test drawdown and recovery periods, Contractor's geologist shall be onsite continuously during the first 24 hours of each test to check ongoing testing and equipment. For the remaining periods of the drawdown and recovery tests, Contractor's geologist shall be onsite as needed to check on the status of the test. A representative from the County-retained driller may also be onsite to oversee pumping equipment during the test. During the test and times immediately before and after the tests, site security may be required in order to protect the equipment from theft or vandalism. The County shall retain a security firm to meet this need.

Task 4 – Data Analysis & Extraction Test Design

Following completion of the aquifer tests, Contractor shall determine aquifer parameters for the shallow and deep zones based on aquifer testing data collected. Contractor shall convert depth to water and pressure transducer field data to an electronic format, import the data into Aqtesolv® or similar software, and obtain hydraulic conductivity values for the shallow and deep zones. Drawdown curves shall be analyzed by any number of methods depending on the type of aquifer (unconfined or confined), plus other factors like delayed release from storage or lateral boundary conditions. These analyses shall produce values for Transmissivity (T) and Storage Coefficient (s) from which the extraction and treatment system alternative can be properly evaluated and designed.

Based on the aquifer parameters determined, Contractor shall select the best approach for the permanent extraction wells and pumps, and complete a proposed well schematic for the installation of one test extraction well.

Task 5 – Reporting, Extraction Test Work Plan, Drilling RFB

Contractor shall summarize the activities and results for Tasks 1 through 4 in an Aquifer Test Report. The report shall include a description of all drilling and well installation activities with borehole logs and well development logs. The report shall also present aquifer and pumping test data and results. Based on test conclusions, the report shall include a well schematic drawing of the proposed groundwater extraction wells.

The Aquifer Test Report shall also include a work plan for the next step in the conceptual design testing. Based on the extraction well approach completed under Task 4, Contractor shall prepare a well

installation and testing program for one extraction well as part of phase 2 of the aquifer testing. Phase 2 shall include installation of the extraction well and testing to ensure it is working properly, as designed. Cost for Phase 2 work is not included in the not to exceed amount of this Project Authorization.

The draft Aquifer Test Report shall be sent to the County for review and comment. Following receipt of County comments, Contractor shall prepare a Final version of the Aquifer Test Report and deliver the report to the County and RWQCB.

Contractor shall also prepare a scope of work and shall provide County with electronic and hard copy engineer stamped plans, specifications, engineers estimate and materials list for County's use in bidding the drilling, installation, and construction of the extraction test well and assistance in the beginning with the extraction test as part of the Phase 1 Scope of Work. Phase 2 shall include the following which is not included as part of the Scope of Work for this Project Authorization: 1) Contractor shall be available, as needed, for an onsite County facilitated pre-bid meeting with the prospective extraction well drilling bidders, 2) Contractor shall provide the County answers to any technical questions pertaining to the drilling, installation and completion of the pumping and observation wells during the County's bid process, 3) Contractor shall provide the County engineer stamped plans and specifications issued for construction, 4) The plans and specifications shall be submitted to the County in electronic and hard copy format, 5) Contractor shall assist County with review of bid responses and provide the County input as to the technical acceptance of bid response, 6) Contractor shall oversee, inspect and observe installation of the extraction wells, 7) Contractor shall implement the extraction test, analyze the test results, and 8) Prepare a preliminary design of the complete extraction system. Phase 2 work and costs are not included in this Project Authorization

D. Project Authorization Period

Contractor shall complete work by February 26, 2010, based on timely authorization to proceed.

Services will commence on or about August 14, 2009, and end March 31, 2010.

E. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given project. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses that have been agreed to by the both parties. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on this Project Authorization.

A breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
Task 1 – Aquifer Test Design, plans, specifications etc, SSP	\$10,000
Task 2 – Well Drilling, Installation, Development	\$19,320
Task 3 – Aquifer Testing	\$32,760
Task 4 – Data Evaluation, Extraction Well Plan	\$ 8,560
Task 5 – Report, Extraction Work Plan (Part 2), Draft Driller Plans, Specifications, Engineers Estimate, etc.	<u>\$11,580</u>
TOTAL	\$82,220

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$82,220.00**, including, without limitation, the cost of any

subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

F. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Contractor's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the not to exceed amount of this Project Authorization.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
Department of Environmental Resources Landfill
Attention: Accounting
4000 Fink Road
Crows Landing, California,

G. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

H. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

I. Responsibility for Errors

Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

(signatures on the next page)

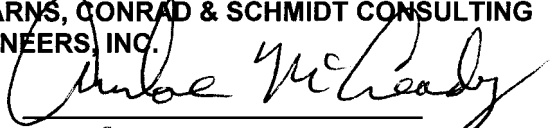
IN WITNESS WHEREOF, the parties have executed this Project No. 09-001-SMG on August 19, 2009.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harigfeld
Director

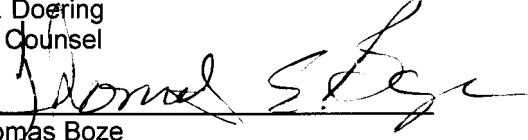
"County"

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: 
Name: Ambrose McCready
(Printed)
Title: Vice President

"Contractor"

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
 3800 Cornucopia Way, Suite C, Modesto, CA 95358
 Phone: (209) 525-6770
 Fax: (209) 525-6773

Perform Groundwater Disposal Study Geer Road Landfill

Project Number 09-002-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

The Geer Road Landfill (GRLF) is located in Stanislaus County, California, approximately 10 miles southeast of the City of Modesto. The Landfill is closed and is owned and operated by Stanislaus County (County). The landfill was operated from 1970 to 1990 serving the City of Modesto and parts of the County. The permitted, closed landfill is located in Section 34, Township 3 South, Range 10 East, and Section 3, Township 4 south, Range 10 East, MDB&M. The center of the site is located at approximately latitude 37° 34.32' and longitude 120° 51.05'. The physical address is 751 Geer Road, Modesto, California.

The landfill ceased operation on January 1, 1990. The footprint of the site encompasses 144 acres. An estimated two hundred and fifty thousand (250,000) tons of wastes are in place. GRLF is referenced as site No. 50-AA-0002 in the CIWMB's Solid Waste Information System (SWIS) database.

The site was regulated by RWQCB since April 2000 under Waste Discharge Requirements (WDRs) Order No. 5-00-087 for post-closure maintenance of an unlined Class III landfill, and for corrective action of volatile organic compounds (VOCs) in groundwater including the associated landfill gas (LFG). As part of the corrective actions already taken at the site, the County has installed a cap, a groundwater extraction and treatment system (GWETS), and a LFG extraction and treatment system.

Several evaluations of the existing GWETS, including a study conducted by CONTRACTOR Engineers in 2008, concluded that the system was effective in removing VOC from groundwater, but the pumping systems were insufficient to create an effective barrier to VOCs moving in groundwater from under the landfill to the southwest. The pumping systems currently pump approximately 50-70 GPM from 12 extraction wells. These wells are only screened in the shallow groundwater zone.

Following the 2008 GWETS study, the RWQCB required the County to complete an Engineering Feasibility Study (EFS) to evaluate alternatives for improving corrective actions for VOCs in groundwater. The EFS concluded that two options should be pursued; (1) installation of ten new vadose zone landfill gas (LFG) extraction wells and (2) implementation of a more rigorous groundwater extraction and pumping system to install 20 dual zone extraction wells capable of pumping 20 gallon per minute (GPM) each, treatment of the water to include metals and VOC removal, and disposal of the water on the County-owned property northwest of the landfill. This equates to water extraction and treatment at 400 GPM, or about 576,000 gallons per day.

In April 2009, new WDRs/MRP for the site were issued as Order No. R5-2009-0051. In the new order, several key compliance dates were established specifically regarding the recommended groundwater corrective action in the southern part of the landfill. These include:

- Submit a Corrective Action Work Plan.....October 31, 2010
- Submit an Operations & Maintenance PlanJuly 29, 2011
- Submit a Construction and Start-up Report.....October 31, 2011

In order to proceed with the groundwater extraction corrective actions plans and eventual installation of the system in early 2011, several tasks must first be completed to test various aspects of the extraction, treatment and disposal systems. This information is critical to support proper system design and construction.

There are three aspects of the system that need to be researched and tested:

1. Testing of aquifer characteristics for both the shallow and deep zones to establish aquifer parameters, and testing of the new extraction well design for extraction performance;
2. Evaluation of treatment options to determine the best options for pre-treatment and VOC removal at the predicted flow rates; and,
3. Testing of the water disposal area to determine if the property can accept the volume of water predicted, and the best means for water disposal.

Because of the magnitude of these studies, differing time constraints and different scopes of work, these three evaluations are divided into separate work authorizations. This Project Authorization is for the third evaluation – groundwater disposal study.

C. Scope of Work

Contractor shall provide all the labor, material, equipment and tools to perform the following tasks:

Task 1 – Preparation of Work Plan and Driller Bid Documents

Contractor shall prepare a work plan that outlines onsite soil infiltration tests on the 85 acre parcel of land owned by the County that is west of the north landfill area. The land slopes to the west from the edge of the landfill downward toward the Tuolumne River. It appears to be suitable for disposal of the estimated 400 gpm that will be developed in the treatment process. The Contractor shall submit a draft work plan to the County for review prior to finalization and submittal to RWQCB.

Contractor shall provide County with electronic and hard copy engineer stamped plans, specifications, engineers estimate and materials list for County's use in bidding the construction, drilling and installation of the approved borings, infiltration wells, and piezometers. Contractor shall be available, as needed, for an onsite County facilitated pre-bid meeting with the prospective bidders. Contractor shall provide the County answers to any technical questions pertaining to the drilling, installation and completion of the borings, infiltration wells, and piezometers during the County's bid process. Contractor shall provide the County engineer stamped plans and specification issued for construction. The plans and specifications shall be submitted to the County in electronic and hard copy format. Contractor shall assist County with review of bid responses and provide the County input as to the technical acceptance of bid response.

Task 2 – Installation and Infiltration Testing

Contractor shall oversee and document the soil borings that shall be drilled on the parcel as outlined in the work plan. It is anticipated that as many as 12 borings shall be drilled and constructed by the County-retained drilling contractor, as either infiltration wells or piezometers for monitoring of groundwater levels over the test period. The County-retained drilling contractor shall ensure: 1) the borings are relatively shallow (20 feet or less); 2) the infiltration wells are completed with gravel packs and perforated 4-inch casing; and 3) the piezometers are 1-inch casing and shall be equipped with water level recording devices that shall be read monthly, or more frequently, during the test by the Contractor.

Contractor shall perform infiltration tests during dry and wet weather to determine the effects on the soil's ability to absorb water. The Contractor shall perform the dry weather test before winter 2009-2010 rains begin and the wet weather test shall be performed in early 2010. Water for the test shall be supplied by a 3,000 gallon water truck or by using water from an agricultural supply well (Streeter) if available.

Task 3 – Monitoring of Groundwater Piezometers

During the test period, the piezometers shall be recording water levels to document the normal water level patterns and the two infiltration test periods. Contractor shall outfit piezometers with water level sensors and sensors shall record levels at least daily, and more frequently during test events. Once a month the data collected by the sensors shall be downloaded by the Contractor to confirm the sensors are functioning properly and to evaluate data collected. The water level information shall be used in Contractor’s assessment of whether treated water can be disposed onsite at the proposed rate. This rate is determined by the amount of water estimated to be disposed of –400 gpm and is included in the total not to exceed cost of this Agreement.

Task 4 – Evaluation of Data and Report

The infiltration test results shall be evaluated by Contractor to determine if the proposed volume of treated water can be disposed onsite in the proposed location (85 acre parcel of land owned by the County). Contractor shall look at the yearly variability of groundwater depths and potential effects on the Tuolumne River, or groundwater fluctuations caused by the River. The outcome of Contractor’s evaluation shall be a determination of whether infiltration wells can be used, or whether trenches are needed to handle the high discharge rate.

Contractor shall prepare an infiltration study report including a preliminary design of the infiltration wells or trenches including a layout of locations and details. The report and design shall be submitted to the County for review and discussion prior to submittal to RWQCB.

D. Schedule

Contractor shall complete the work according to the following schedule in elapsed time from the approval date of the Work Authorization to proceed. Note that some of the tasks may be completed concurrently. In order for the first infiltration test to be completed prior to this upcoming rainy season, authorization to proceed will be needed by approximately August 7, 2009, and County hiring of the driller will need to occur by mid-September.

	<u>Weeks</u>
Task 1 – Prepare Work Plan and Driller Bid Documents	1-2
Task 2 – Installation and Infiltration Testing	12-26
Task 3 – Monitoring of Groundwater Piezometers	12-46
Task 4 – Evaluation of Data and Report	26-46
 TOTAL ELAPSED TIME (Weeks)	 46

E. Project Authorization Period

Contractor shall complete work by June 30, 2010, based on timely authorization to proceed.

Services will commence on or about August 17, 2009, and end June 30, 2010.

F. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given project. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses that have been agreed to by the both parties. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on this Project Authorization.

A breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
Task 1 – Prepare Work Plan	\$ 5,740
Task 2 – Installation and Testing	\$17,840
Task 3 – Monitoring of Piezometers	\$19,860
Task 4 – Evaluation of Data and Report	<u>\$10,400</u>
 TOTAL	 \$53,840

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$53,840.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

G. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Contractor's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
 Department of Environmental Resources Landfill
 Attention: Jami Aggers
 3800 Cornucopia Way, Suite C
 Modesto, California 95358

H. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

I. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

J. Responsibility for Errors

Consultant shall be responsible for its work and results under this Agreement. Consultant, when

requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.


IN WITNESS WHEREOF, the parties have executed this Project No. 09-002-SMG on August 19, 2009.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfeld
Director

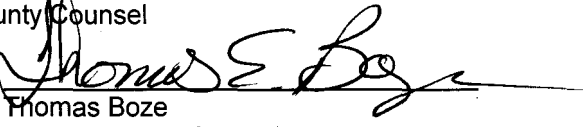
"County"

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC

By: 
Name: Ambrose McCready
(Printed)
Title: Vice President

"Contractor"

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
 3800 Cornucopia Way, Suite C, Modesto, CA 95358
 Phone: (209) 525-6770
 Fax: (209) 525-6773

Perform Oversight and Reporting for New Monitoring Well Installations and Well Decommissioning at Fink Road Landfill

Project Number 09-003-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on May 14, 2007.

B. Background

The Fink Road Landfill is located approximately six miles south of the town of Patterson, on the west side of Interstate Highway 5, in western Stanislaus County. The Landfill is owned and operated by the County. The original landfill unit, LF-1, has been closed since 1993. This was replaced by Unit LF-2, which is being constructed as a series of cells that are constructed, as needed, to meet waste disposal capacity. Plans are currently underway to develop Cell #5 of LF-2. Two existing monitoring wells, MW-10 and MW-11 are located in the cell development area. These wells shall be decommissioned and replaced with new monitoring wells to be located at the eastern side of the new cell. A well installation and decommissioning plan was submitted to Regional Water Quality Control Board (RWQCB).

C. Scope of Work

Contractor shall provide all the labor, material, and equipment to oversee the decommissioning of two (2) existing monitoring wells, MW-10 and MW-11, and installation of the new wells MW -25 and MW-26, and document these activities in a Monitoring Well Installation Report to be submitted to RWQCB. Contractor shall provide a geologist to log the well installation and provide other personnel necessary to oversee development and sample the wells.

The Contractor shall perform the following tasks:

Task 1 – Oversee Well Installation, Construction, Development, and Well Decommissioning

Contractor shall meet with the County contracted drilling contractor at the site to go over the work to be performed. Contractor shall oversee the drilling and installation of the two new monitoring wells in accordance with the approved Work Plan and Permits. During drilling, the Contractor's geologist shall log soil cuttings or samples in accordance with the Unified Soil Classification System (USCS). Based on geologic conditions encountered, the Contractor's geologist shall select the screen depth for each well. Well construction shall be documented including materials and procedures used.

During field activities, the Contractor's geologist shall have the authority to stop work if it is determined that the drilling contractor is not following procedures in the approved Work Plan or is working in an unsafe manner. In the case of a stop work order, Contractor shall immediately contact the designated County staff member to notify them of the stop work. The reasons for the stop work order shall be documented in the daily log maintained by the Contractor's geologist.

Following well construction by the County contracted drilling contractor, and at least 48-hours after setting the well seal, Contractor shall oversee well development activities in accordance with the approved Work

Plan. The Contractor's geologist shall monitor field parameters during development activities, including pH, temperature, electrical conductivity, and turbidity. The goal of well development shall be to achieve turbidity less than or equal to 5 NTU. If this cannot be attained, Contractor shall document well development activities until all field-monitoring parameters are stable and suspended sediments are removed.

Contractor shall also oversee and document the decommissioning of monitoring wells MW-10 and MW-11 in accordance with the approved Work Plan.

Task 2 – Prepare Well Installation Report

After completion of overseeing the well installations and well decommissioning, and after receiving required survey data for the new wells from the County, Contractor shall prepare the Monitoring Well Installation Report in accordance with RWQCB requirements. The report shall include well construction diagrams and details, well development procedures, and well survey data.

Contractor shall prepare a draft version (electronic) of the Report for County review and comment. Following incorporation of County comments, Contractor shall produce five (5) copies of the Final Report and deliver one (1) of the copies to RWQCB under County-signed cover letter.

Permits

DeSilva Gates is responsible to obtain the required County permits for the installation of the wells.

Surveying

After installation of the new wells, DeSilva Gates the Contractor contracted by the County to perform the construction of Cell 5 shall arrange for the surveying to be accomplished. Surveying shall be conducted in a manner that meets RWQCB requirements and surveying data shall be provided to Contractor for inclusion in the report.

D. Schedule

The well installation and development, and well decommissioning will require approximately six field days for Contractor to complete. The following schedule is an estimate of the time needed to complete this project in weeks from the time that field work begins:

	<u>Weeks</u>
• Task 1 – Oversight Well Installation, Decommissioning	1
• County Surveying and Reporting to SCS	2-3
• Task 2 – Monitoring Well Installation Report	4-5
• Submittal of Report to RWQCB	6
 TOTAL ELAPSED TIME (Weeks)	 6

E. Project Authorization Period

Contractor shall complete work by October 21, 2009, based on timely authorization to proceed.

Services will commence on or about September 3, 2009, and end November 30, 2009.

F. Compensation

The Contractor shall be compensated for the services provided under the Agreement and this scope of work as follows:

Project Price

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given project. The Contractor shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum

Total Task Price includes fees and reimbursable expenses that have been agreed to by the both parties. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on this Project Authorization.

A breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
Task 1 – Oversight Well Installation, Decommissioning	\$ 8,780
Task 2 – Monitoring Well Installation Report	<u>\$ 5,760</u>
TOTAL	\$14,540

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor in connection with the services and in accordance with the Master Agreement.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$14,540.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

G. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Contractor's Staff, the title of the Staff, billable rate, actual copies of equipment rental invoices, detailed information on equipment being rented, and reimbursable items that are reasonable, necessary and actually incurred by the Contractor in connection with the services.
3. Contractor shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Contractor 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County
 Department of Environmental Resources Landfill
 Attention: Jami Aggers
 3800 Cornucopia Way, Suite C
 Modesto, California 95358

H. Representatives

The County's representative is Michael Franck, Operations Manager (209) 837-4804. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

I. Duty to Cooperate

Each party shall notify the other party immediately in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Contractor shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

J. Responsibility for Errors

Consultant shall be responsible for its work and results under this Agreement. Consultant, when
 Project No. 09-003-SMG


requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

K. Counterparts

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

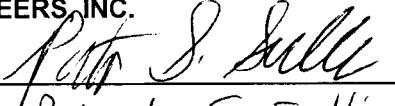
IN WITNESS WHEREOF, the parties have executed this Project No. 09-003-SMG on September 3, 2009.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfeld
Director

"County"

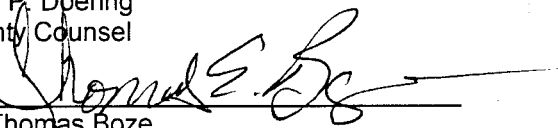
STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: 
Name: Patrick S. Sullivan
(Printed)
Title: Senior VP

"Contractor"

APPROVED AS TO FORM:

John P. Dpering
County Counsel

By: 
Thomas Boze
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358
Phone: (209) 525-6770
Fax: (209) 525-6773

Perform Aquifer Test Study – Part 1
Geer Road Landfill

AMENDMENT 1
Project Number 09-001-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on August 28, 2007.

Whereas, the County and Contractor entered into Project Authorization Number 09-001-SMG dated August 19, 2009 against Master Agreement for Independent Contractor Services dated August 28, 2007 ("the Agreement"), and

Whereas, Project Authorization Number 09-001-SMG, Section D – Project Authorization Period, stipulates that the Contractor shall complete work by February 26, 2010 based on timely authorization to proceed and that the Project Authorization period shall end on March 31, 2010; and

Whereas the County has a need to extend the term of Project Authorization period because the work for drilling was delayed due to adverse weather conditions; and

Whereas this amendment is for the mutual benefit of County and Contractor;

Now, therefore, the County and Contractor agree as follows:

Project Authorization Number 09-001-SMG, Section D – Project Authorization Period, the end date is amended as follows:

"... and end June 30, 2010."

IN WITNESS WHEREOF, the parties have executed this Project Authorization No. 09-001-SMG Amendment 1 on February 17, 2010.

COUNTY OF STANISLAUS
Department of Environmental Resources
By: [Signature]
Sonya K. Harrigfeld
Director

"County"

SCS ENGINEERS
By: [Signature]
Name: Ambrose McCreedy
(Printed)
Title: vice president

"Contractor"

APPROVED AS TO FORM:
John P. Doering
County Counsel
By: [Signature]
Alice Mimms
Deputy County Counsel