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

DEPT:	PUBL	IC WORKS	gr	<u></u>	BOARD AGENDA	# *C-1	
l	Jrgent	Routine			AGENDA DATE	AUGUST	14, 2001
CEO Concurs	with	Recommendation		NOtion Attached)	4/5 Vote Requ	ired YES	NO_/_
SUBJECT:	LAND	FILL GAS COLLE	CTION	AND CONTRO	FRUCTION, INC., FRO L SYSTEM PROJECT ONTRACT TO THE NE	T AT THE F	INK ROAD
STAFF RECOMMEN- DATIONS:	1.	PREPARATION COLLECTION A AND APPROVE WITHDRAW ITS RELEASE OF IT	OF ITS ND CON THE BID E BID B AWARD ION AN	S BID FOR C NTROL SYSTEM REQUEST B DUE TO THE OND; THE CONTRA ID CONTROL	ON, INC., MADE A CLE CONSTRUCTION OF M PROJECT AT THE I Y ECOLOGY CONS CLERICAL ERROR A CT FOR CONSTRUCT SYSTEM PROJECT CORP.; AND,	THE LAND FINK ROAD STRUCTION, AND AUTHO TION OF THE	DFILL GAS LANDFILL, INC. TO DRIZE THE
FISCAL IMPACT:	The \$	3758,286.80 for this	s project	t is accounted fo	or within the Fink Road	Landfill bud	get.
BOARD ACTIO	ON AS	FOLLOWS:			No. 2001	-614	
and approve Ayes: Super Noes: Super Excused or Abstaining: 1) X A	ed by the visors: rvisors: Absent Supervale Denied	ne following vote, Mayfield, Blom, Sim None Supervisors: None	non, Caru	iso, and Chair Pa	conded by Supervisor_E		

pristaie Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

SUBJECT: APPROVAL TO RELIEVE ECOLOGY CONSTRUCTION, INC., FROM ITS BID FOR

THE LANDFILL GAS COLLECTION AND CONTROL SYSTEM PROJECT AT THE FINK ROAD LANDFILL. AND APPROVAL TO AWARD A CONTRACT TO THE NEXT

LOW BIDDER

PAGE: 2

STAFF RECOMMEN-DATIONS

(Continued) 3. AUTHORIZE THE PURCHASING AGENT TO ISSUE A CONTRACT WITH

GRIFFITH DEWATERING CORP. IN THE AMOUNT OF \$758,286.80.

DISCUSSION: On July 11, 2001, two bids were received for the Landfill Gas Collection and

Control System project. A summary of the bids received is as follows:

Ecology Construction, Inc. \$587,756.00 Griffin Dewatering Corp. \$758,286.80

It is requested that the Board find that Ecology Construction, Inc. made a clerical error in the preparation of its bid that was submitted, and that approval be granted for this bidder to withdraw its bid and authorize the release of its bid bond.

This action makes the bid submitted by Griffin Dewatering Corp. the lowest responsive bid received and is therefore being recommended for the award of the contract.

POLICY

ISSUE: This action is consistent with the Board's policy of providing a safe, healthy

community.

STAFFING

IMPACT: There is no staffing impact associated with this action.

RG:la

H:\Ron Grider\Landfill Gas CollectionBOS.wpd

BOARD OF SUPERVISORS



Pat Paul, 1st District Thomas W. Mayfield, 2nd District Nick W. Blom, 3rd District Raymond Clark Simon, 4th District Paul W. Caruso, 5th District

1010 Tenth Street, Suite 6500, Modesto, CA 95354 Phone: 209.525.4494 Fax: 209.525.4410

October 4, 2001

Carroll Lane
Griffin Dewatering Corporation
536 E. Maitland St.
Ontario CA91761

IN RE: Landfill Gas Collection and Control System at the Fink Road Landfill

To Whom It Concerns:

Enclosed is your completed contract for the above-mentioned project. This is your Official Notice to Proceed.

Yours truly,

SUZI SEIBERT, Deputy Clerk of the Board of Supervisors of the County of Stanislaus, State of California

Enclosure

CONTRACT DOCUMENTS FOR

LANDFILL GAS COLLECTION AND CONTROL SYSTEM AT THE FINK ROAD LANDFILL

CONTRACT DOCUMENTS AND SPECIAL PROVISION

Prepared for County of Stanislaus February 2001

Prepared by

EMCON/OWT Solid Waste Services

1921 Ringwood Avenue San Jose, California 95131 (408) 453-7300 Project 809722



DEPARTMENT OF PUBLIC WORKS

George Stillman Director

1716 Morgan Road, Modesto, CA 95358 Phone: 209.525.4130

ADDENDUM NO. 1

TO PLANS AND SPECIFICATIONS FOR

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

IN

STANISLAUS COUNTY

GEORGE STILLMAN DIRECTOR

By

DAVE NORDELL ASSISTANT DIRECTOR, OPERATIONS

JUNE 25, 2001 ADDENDUM NO. 1

Our records indicate that you are a plan holder for the above mentioned project. The following clarifications, changes, additions, or subtractions are attached to and become a part of the plans and specifications for the above mentioned project.

The general contractor and his subcontractors are to take cognizance of and to govern their bid according to the plans and specifications as set forth hereinafter.

AS A RESULT OF QUESTIONS RAISED AT THE PREBID METING HELD ON TUESDAY, JUNE 19, 2001, STANISLAUS COUNTY IS ISSUING THIS ADDENDUM NO. 1 TO THE CONTRACT DOCUMENTS AND SPECIFICATIONS FOR LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL. THIS ADDENDUM RESPONDS TO QUESTIONS FROM THE MEETING, AS WELL AS REVISING THE SCOPE OF THE WORK TO POSTPONE CONSTRUCTION OF ELEMENTS PLANNED FOR FUTURE USE, INDEFINITELY.

THE BID OPENING DAY WAS SCHEDULED FOR JUNE 27, 2001 PRIOR TO 2:45 P.M. THE BID DATE **HAS BEEN RESCHEDULED FOR JULY 11, 2001** PRIOR TO 2:45 P.M.

ALL WORK SHOWN ON DRAWING 1 (LF-2 SITE PLAN) HAS BEEN REMOVED FROM PROJECT WORK. THE CHANGES ARE MADE UNDER THE "PIPELINE INSTALLATION". PLEASE USE THE REVISED ENGINEER'S ESTIMATE.

ENGINEER ESTIMATE

Item <u>No.</u>	Item Description	Unit of Measure	Estimated Quantity	Unit Price (In figures)	Total (In Figures)
1.	Mobilization and Demobilization	L.S.	L.S.	\$	\$
	LFG BLOWER/FLARE FACILITY				
2.	Earthwork, including Clearing & Grubbing	L.S.	L.S.	\$	\$ <u>·</u>
3.	Area Grading and Surfacing	L.S.	L.S.	\$	\$
4.	Cast-In-Place Reinforced Concrete for LFG Equipment Foundation, Condensate Storage Tank Foundation and Containment Wall	L.S.	L.S.	\$	\$
5.	Fence and Gates	L.S.	L.S.	\$	\$
	VERTICAL LFG EXTRACTION WELLS				
6.	Well Drilling, 4" Vertical Pipe Installation, and Well Completion, including on-site Disposal/Trucking of Well Cuttings	L.F.	950	\$	\$
7.	Wellhead Piping, Flexible Hose, Fittings, Valves, and Monitoring Ports	Each.	22	\$	\$
	PIPELINE INSTALLATION				
8.	1-1/2" Air Header and Fittings, Below Ground Installation, Same Trench as LFG Pipeline	L.F.	40	\$	\$
9.	2" Force Main Pipe and Fittings, Below Ground Installation, Same Trench as LFG Pipeline		40		
10.	4" LFG Pipe and Fittings, Above Ground Installation, Including Road Crossing	L.F.	1,100	\$	\$
11.	6" LFG Pipe and Fittings, Above Ground Installation, Including Road Crossing	L.F.	3,000	\$	\$
12.	8" LFG Pipe and Fittings, Above Ground Installation	L.F.	240	\$	\$
13.	8" LFG Pipe Fittings, Below Ground Trench Installation, Including Road Crossing	L.F.	150	\$	\$
14.	12" LFG Pipe, Fittings, and Sand Bedding, Below Ground Trench Installation	L.F.	45	\$	\$

ADDENDUM NO. 1 PAGE 3 OF PAGE 6

ENGINEER ESTIMATE (Continued Page 2)

item No.	Item Description	Unit of Measure	Estimated Quantity	Unit Price (In figures)	Total (In Figures)
	ISOLATION VALVES				
15.	6" Isolation Valve, Above Ground	Each	3	\$	\$ <u>·</u>
16.	8" Isolation Valve, Below Ground, Including Vault, Stem Extension and Casing, and Backfill Material and Placement	Each		\$	\$
	CONDENSATE SYSTEM				
17.	Condensate Sump, Including Pump, Piping Fitting, Appurtenances, Valve Box, Backfill, Bentonite Seal, Delivery, and Installation	Each	• 1	\$	\$
18.	15 HP Air Compressor and Air Refrigerant Dryer, Including Piping, Fittings, Gauges, Appurtenances, Delivery, and Installation	Each	1	\$	\$
19.	Condensate Injection System	Each	1	\$	\$
20.	1100 Gallon Condensate Storage Tank, Including Piping, Fittings, Valves, Gauges, Appurtenances, Pipe Supports, Delivery and Installation	Each	1	\$	\$
	LFG BLOWER AND FLARE UNITS				
21.	Enclosed 1200 cfm Flare Unit Including Main Control Rack, Flow Meter, Fail Close Valve, Piping, Fittings, Valves, Appurtenances, Delivery and Installation Estimated at 7% of Pipeline Cost to be Provided at Cost Plus 10%	Each	1	\$	\$
22.	Blower Ski with Two Identical Blowers and Flow Meter, Piping, Fittings, Valves, Appurtenances, Delivery and Installation	Each	1	\$	\$
23.	Startup and Testing	Days	4	\$	\$

ENGINEER ESTIMATE (Continued Page 3)

Item No.	Item Description	Unit of Measure	Estimated Quantity	Unit Price (In figures)	Total (In Figures)
	LFG ELECTRICAL SYSTEM				
24.	Power, Lighting, Grounding, and Communications	L.S.	L.S.	\$	\$
25.	Testing	Days	4	\$	\$
	ENGINEERING DOCUMENTATION				
26.	Surveying (Staking and As Built)	L.S.	L.Ş.	\$	\$
27.	As Built Plans 12" (in vault)	L.S.	L.S.	\$	\$
	SUPPLEMENTAL FUNDS				\$ <u>80,000.00</u>
			PROJE	CT TOTAL	\$
ADDEI	NDUM NO DATED	DATE REC	CEIVED	INIT	IALS
ADDE	NDUM NO DATED	DATE RECEIVED INITIALS_			IALS
		DATE RECEIVED INITIAL			IALS
	RACTOR				
	ESS				
PHON	E () FAX ()			

TECHNICAL SPECIFICATIONS:

SECTION 01010, SUMMARY OF WORK

Modify Paragraph 1.06.C. to read as follows:

"C. Onsite water is <u>not</u> available for fire or dust control. Contractor shall provide 10,000 gallon water truck for fire and dust control. Water truck shall be filled when not in use for dust control and be readily available (within 1,000 feet by roadway) to all work sites in dry grass."

SECTION 16050, BASIC ELECTRICAL REQUIREMENTS

Add to Paragraph 1.02.C. as follows:

"Nearest utility-owed pole is approximately 200 feet west of proposed flare skid location. Nearest utility-owned secondary distribution is approximately 400 feet north of the nearest pole. OWNER/ENGINEER will notify PG&E of power requirements and submit preliminary application for service, to reduce procurement lead-time. CONTRACTOR shall pay fees and coordinate final design approvals and installation of service.

DRAWINGS

DRAWING 1 (LF-2 SITE PLAN):

Drawing LF-2 has been removed from Project Work, and is now Not-in-Contract.

DRAWING 2:

The new limit of work on the LF-2 main header shall be installation of a 12-inch blind flange on a buried, east-facing 12-inch stub out from the main blower-skid inlet pipe, at invert elevation 250 msl.

DRAWING 9:

Details 13 and 17 (Horizontal LFG Collector and Flanged Header Stub-out), with associated section views, are Not-in-Contract.

NOTE: THIS ADDENDUM MUST ACCOMPANY THE BID AND BE ACKNOWLEDGED ON THE BID SHEET.

ADDENDUM NO. 1 PAGE 6 0F 6

CONTRACT DOCUMENTS

AND SPECIFICATIONS FOR

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

IN

STANISLAUS COUNTY

OWNER - STANISLAUS COUNTY

BOARD OF SUPERVISORS

PAT PAUL, CHAIR	DISTRICT NO. 1
THOMAS W. MAYFIELD	DISTRICT NO. 2
NICK W. BLOM	DISTRICT NO. 3
RAY SIMON	DISTRICT NO. 4
PAUL CARUSO	DISTRICT NO. 5

REAGAN WILSON -- CHIEF EXECUTIVE OFFICER
GEORGE STILLMAN -- DIRECTOR OF PUBLIC WORKS

MAY, 2001

LANDFILL GAS COLLECTION AND CONTROL SYSTEM

AT THE FINK ROAD LANDFILL

The Special Provisions contained herein have been prepared by or under the direction of the following registered person.

Signature

Date



NOTICE TO CONTRACTORS

Contractors are invited to submit written, formal bids for

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

Bids envelopes must be delivered to the Clerk of the Board of Supervisors, Tenth Street Place, Joint Stanislaus County/City of Modesto Administration Building, 1010 10th Street, Modesto, CA located on the Sixth Floor of Tenth Street Place, **PRIOR TO 2:45 P.M. ON JUNE 6, 2001**, as evidenced by the date/time stamp on the envelope by the Clerk. After bid opening, the bids will be publicly opened and read by the Clerk in the Lobby Conference Room located on the Sixth Floor of Tenth Street Place.

Bid shall be submitted in sealed envelopes on the forms provided with the plans and specifications for that purpose. Envelopes shall be addressed to the Clerk of the Board of Supervisors, Tenth Street Place, Joint Stanislaus County/City of Modesto Administration Building, 1010 10th Street, Sixth Floor, Modesto, CA 95354, and plainly marked:

"LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION"

The work consists of construction of for the Landfill Gas Collection and Control System includes a site preparation for the construction of the Blower/Flare Facility. Construction of vertical landfill gas extraction wells; installation of landfill gas collection and control system piping, blower/flare facility, condensate collection, and disposal system

Proposal, Plans, and Specifications are available at the Department of Public Works Office, 1716 Morgan Road, Modesto, CA 95358, upon the receipt of \$10.00 (NON-REFUNDABLE) fee (make checks payable to: "STANISLAUS COUNTY PUBLIC WORKS") during the office hours of 7:30 a.m. to 12:00 and from 1:00 p.m. to 5:00 p.m., Monday through Friday. For any questions, please call the Public Works, ENGINEERING DIVISION AT (209) 525-4193. For technical questions, please contact Michael Franck at the Public Works, Fink Road Landfill Division. County of Stanislaus. Crows Landing, CA at (209) 837-4804.

Your particular attention is directed to the "Information for Bidders" and "General Conditions" included in the specifications, which is to be followed in all respects. In particular, your attention is directed to the handicapped, non-discrimination clause contained in the General Conditions, Section 2.47, which complies with Section 504 of the Rehabilitation Act of 1973. A bidders bond or its equivalent will be required.

Pursuant to Sections 1770 and 1773 of the Labor Code, the Board of Supervisors has ascertained the general prevailing rate of per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday, and holiday work. These wage rates are set forth by the Director of the Department of Industrial Relations now on file with the Department of Public Works, and which are a part of the contract.

By order of the Board of Supervisors of the County of Stanislaus, State of California, made and entered this May 15, 2001

ATTEST	CHRISTINE FERRERO TALLMAN, Clerk of the Board of Supervisors, of the Stanislaus County, State of California		
	Ву		
	Deputy Clerk		

1.00 INFORMATION FOR BIDDERS.

1.01 DATE AND PLACE FOR OPENING PROPOSALS. Pursuant to the "Invitation to Bidders", sealed proposals for performing the work will be received by the Purchasing Agent of Stanislaus County.

At the place and time set forth in said notice, they will be publicly opened and read. Said Board of Supervisors, if awarded, will make the awarding of the contract, as soon thereafter as practicable.

1.02 PRINTED FORM OF PROPOSALS. All proposals must be made upon the blank Form of Proposal attached hereto, and should give the price data in figures, and must be signed by the bidder. In accordance with the directions in the Form of Proposal, in order to insure consideration the proposal should be enclosed in a return envelope furnished by the bidder, and plainly marked: Proposal For

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

and addressed to the Board of Supervisors of Stanislaus County, City/County Administration Building, 1010 10th Street, Modesto, California 95354. No bid may be withdrawn within 30 days after time of opening.

- **1.03 OMISSIONS AND DISCREPANCIES.** Should a bidder find discrepancies in, or omissions from, the drawings or other contract documents, or should he be in doubt as to their meaning, he should at once notify the Engineer who may send a written instruction to all bidders.
- **1.04 ACCEPTANCE OR REJECTION OF PROPOSALS.** The Board of Supervisors reserves the right to reject any or all proposals. Without limiting the generality of the foregoing, any proposal, which is incomplete, obscure, or irregular, may be rejected. Any proposal having erasures or corrections in the price sheet may be rejected. Any proposal, which omits a bid on any one or more items in the price sheet, may be rejected. Any proposal in which unit prices are obviously unbalanced may be rejected. Any proposal accompanied by an insufficient or irregular bidder's bond may be rejected. Any proposal, which does not include and have attached a list of all subcontractors, complete with names and addresses, may be rejected.

Also, the Board of Supervisors reserves the right to reject the proposal any bidder who is not responsible. The successful bidder shall be licensed by the State of California to perform the work required by the plans and specifications and shall endorse his license number on the proposal. The Board may require additional evidence of experience, financial responsibility, or corporate existence, at its option. Each bidder shall endorse his address to, which notices hereunder may be directed on the proposal.

A bidder may be deemed not to be responsible and his bid rejected if a listed subcontractor is not responsible. Responsibility of any bidder or of any listed subcontractor shall be determined at the sole discretion of the Board.

- 1.05 CASH, CERTIFIED CHECK, CASHIER'S CHECK OR BIDDER'S BOND. All proposals shall be accompanied by cash, a certified check, certified to by some responsible bank or banker, a cashier's check on a bank, or a bidder's bond prepared and guaranteed by an admitted corporate surety made payable to the "County of Stanislaus" in the amount of ten percent (10%) of the total bid, unless otherwise specified. All such cash or checks will be returned to the respective bidder within ten (10) days after the proposals are opened, except those, which the Board of Supervisors elects to hold until the successful bidder has executed the contract. Thereafter, all remaining cash or checks, including that of the successful bidder, will be returned within five (5) days.
- 1.06 ACCEPTANCE OF PROPOSALS AND ITS EFFECT. Within 30 days after the opening of the proposals, the Board of Supervisors will act upon them. The acceptance of a proposal will be notice in writing signed by a duly authorized representative of the Board of Supervisors and no other act of the Board of Supervisors shall constitute the acceptance of a proposal. The acceptance of a proposal shall bind the successful bidder to execute the contract and to be responsible for liquidated damages, as provided in Paragraph 1.07. The rights and obligations provided for in the contract shall become effective and binding upon the parties only with its formal execution by the Board of Supervisors.
- 1.07 TIME FOR EXECUTING CONTRACT AND DAMAGES FOR FAILURE TO EXECUTE. Any bidder whose proposal shall be accepted will be required to execute the contract within 15 days after the date that the contract documents are mailed to him by the Department of Public Works. Failure or neglect to do so shall constitute a breach of the agreement effected by the acceptance of the proposal.

The damages to the County for such breach will include loss from interference with its construction program and other items whose accurate amount will be difficult or impossible to compute. The amount of the cash, certified check, cashier's check or bidder's bond accompanying the proposal of such bidder shall be forfeited and applied by the Board of Supervisors as liquidated damages for such breach. In the event any bidder whose proposal shall be accepted shall fail or refuse to execute the contract as accepted as hereinbefore provided, the Board of Supervisors may, at its option, determine that such bidder has abandoned the contract and thereupon his proposal and the acceptance thereof shall be null and void and the County shall be entitled to liquidated damages as provided in the General Conditions. In such event, the Board of Supervisors may award the contract to the next low responsible bidder or bidders.

1.08 DETERMINATION OF LOW BIDDER. Except where the Board of Supervisors exercises the right reserved herein to reject any or all proposals, the contract will be awarded by said Board of Supervisors to the bidder who has submitted the lowest responsible bid determined by lowest unit price based on the quantities given in the schedule. Quantities are approximate, only being as a basis for the

comparison of bids. The Board of Supervisors reserves the right to increase, decrease or omit portions of the work as may be deemed necessary or advisable by the Engineer.

- **1.09 TIME FOR BEGINNING AND COMPLETING THE WORK.** The Contractor shall commence the work within five (5) calendar days after the date specified in the Notice to Proceed given to him by the Board of Supervisors to commence work, and he shall complete the work within the specified time. The date of the Notice to Proceed shall constitute the first working day.
- **1.10 PRICES.** The prices are to include the furnishing of all materials, plant, equipment, tools, scaffolds, and all other facilities, and the performance of all labor and services necessary for proper completion of the work, except such as may be otherwise expressly provided in the contract documents.
- **1.11 INTERPRETATION OF ADDENDA.** Oral interpretations shall not be made to any bidder as to the meaning of any of the contract documents, or be effective to modify any of the provisions of the contract documents. Every request for an interpretation shall be made in writing, addressed and forwarded to the Director of Public Works, 1010 10th Street, Modesto, California 95354.
- **1.12 RIGHT TO MAKE CORRECTIONS.** The Engineer/Architect shall have the right to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the specifications. The Contractor shall be responsible for calling apparent errors or omissions to the attention of the Engineer/Architect for his corrections and/or interpretation. The Contractor shall not take advantage of said apparent errors or omissions.
- 1.13 SUBSTITUTIONS OF SECURITIES FOR WITHHELD PAYMENTS. Except as otherwise prohibited by law, the Contractor may elect to receive all payments due under the contract pursuant to Section 2.13 without any retention. If the Contractor so elects, he shall deposit with the County securities with a value equal to the monies, which would otherwise be withheld by the County. Said securities shall be as provided in Section 22300 of the Public Contract Code and shall be approved by the County as to both sufficiency and form.

FORM OF PROPOSAL

HONORABLE BOARD OF SUPERVISORS STANISLAUS COUNTY, CALIFORNIA

The undersigned bidder has examined the site and all of the documents, plans and specifications for

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

The bidder will perform all work and provide all labor, equipment and materials for the completion and operation of the project for which this proposal is made, all as set forth on the plans and in the specifications, provided by the Director of the Department of Public Works or other specified agent of the Stanislaus County Board of Supervisors, at bid amounts as stated attached:

Jun 26 01 09:43a Stanislaus County PW Dept (209)525-4188 P.4

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

ENGINEER ESTIMATE

item No.	ltem Description	Unit of	Estimeted Quantity	Unit Price	Total
				(in figures)	(In Figures)
1.	Mobilization and Demobilization	L,S.	L.S.	5 63,026	\$ 63,026.00
	LFG BLOWER/FLARE FACILITY				
2.	Earthwork, including Clearing & Grubbing	L.\$.	L.S.	5 2306	\$ 2,306.00
3.	Area Grading and Surfacing	L.S.	L. S .	<u> 1953 -</u>	\$ 1963.00
4.	Cast-In-Place Reinforced Concrete for LFG Equipment Foundation, Condensate Storage Tank Foundation and Containment Wall	L.S,	L.\$.	\$ <u>36,877</u>	\$ 36,877.00
5.	Fence and Gates	L.S.	L.S.	5 13,660-	5 13,660,00
	VERTICAL LFG EXTRACTION WELLS		•		
6.	Well Drilling, 4" Vertical Pipe Installation, and Well Completion, including on-site Disposal/Trucking of Well Cuttings	L.F.	950	\$ 68.93	s <u>65,+83</u> .50
7.	Wellhead Piping, Flexible Hose, Fittings, Valves, and Monitoring Ports	Each.	22	\$ 859 .28	s_18904.16
	PIPELINE INSTALLATION				
8,	1-1/2" Air Header and Fittings, Below Ground Installation, Same Trench as LFG Pipeline	L.F.	40	s 25.1B	\$ 1007.20
9	2" Force Main Pipe and Fittings, Below Ground Installation, Same Trench as LFG Pipeline		40	18.46	738.40
10.	4" LFG Pipe and Fittings, Above Ground Installation, Including Road Crossing	L.F.	1,100	\$ 12.24	5 13,464.00
11.	6" LFG Pipe and Fittings, Above Ground Installation, Including Road Crossing	Ł.F.	3,000	s 9.75	\$ 29,250.00
12.	8" LFG Pipe and Fittings, Above Ground Installation	L.F.	240	\$ 13.94	\$ 3,345.60
13.	8" LFG Pipe Fittings, Below Ground Trench Installation, Including Road Grossing	L.F.	150	<u>\$ 45.13</u>	\$ 6769.50
14.	12" LFG Pipe, Fittings, and Sand Bedding, Below Ground Trench Installation	L.F.	45	s 227.90	<u> </u>

ADDENDUM NO. 1 PAGE 3 OF PAGE 6 Jun 26 01 09:43a Stanislaus County PW Dept (209)525-4188 p.5

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

ENGINEER ESTIMATE (Continued Page 2)

Item No.	item Description	Unit of	Estimated Quantity	Unit Price (in figures)	Total (in Figures)
	SOLATION VALVES				
15.	6" Isolation Valve, Above Ground	Each	3	s 1,435.44	\$ 4,306.32
16.	8" Isolation Valve, Below Ground, Including Vault, Stem Extension and Casing, and Backfill Material and Placement	Each	1	s <u>4,u28,7</u> 5	s_U,428.75
	CONDENSATE SYSTEM				
17.	Condensate Sump, Including Pump, Piping Fitting, Appurtonances, Valve Box, Backfill, Bentonite Seal, Delivery, and Installation	Each	, 1	5 <u>18,896</u> 52	s 18,896.52
18.	15 HP Air Compressor and Air Refrigerant Dryer, Including Piping, Fittings, Gauges, Appurtenances, Delivery, and Installation	Each	1	\$ 20,656.20	<u>s_20,656.20</u>
19.	Condensate Injection System	Each	1	\$ 13,433.07	\$ 13633.08
20.	1100 Gallon Condensate Storage Tank, Including Piping, Fittings, Valves, Gauges, Appurtenances, Pipe Supports, Delivery and Installation	Each	1	\$11,153.09	<u>5_11,153.</u> 09
	LFG BLOWER AND FLARE UNITS				
21.	Enclosed 1200 cfm Flare Unit Including Main Control Rack, Flow Meter, Fall Close Valve, Piping, Fittings, Valves, Appurtenances, Delivery and Installation Estimated at 7% of Pipeline Cost to be Provided at Cost Plus 10%	Each	1	\$ <u>128,274.6</u> 4	5_128,276.64
22	Blower Ski with Two Identical Blowers and Flow Meter, Piping, Fittings, Valves, Appurtenances, Delivery and Installation	Each	1	\$ 140,860.96	5 140,860.96
23.	Startup and Testing	Days	4	s 6,601,59	s 6,601,59

Jun 26 01 09:43a Stanislaus County PW Dept (209)525-4188 p.6

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

ENGINEER ESTIMATE (Continued Page 3)

item No.	Item Description	Unit of Measure	Estimated Quantity	Unit Price (In figures)	Total (in Figures)
	LFG ELECTRICAL SYSTEM				
24	Power, Lighting, Grounding, and Communications	L.S.	L.S.	s 32,331,20	4 s 32,331.29
25.	Testing	Days	4	\$ 259.47	\$ <u>1,037.</u> 28
	ENGINEERING DOCUMENTATION				
26.	Surveying (Staking and As Built)	L.S.	L.S.	\$ 2490.95	s 2490.95
2 7.	As Built Plans 12" (in vault)	L. S .	L.S.		\$ 6768,00
	SUPPLEMENTAL FUNDS				\$_80,000.00

PROJECT TOTAL

\$ 738,482.03

ADDENDUM	NO	DATED 6-26.	DATE R	ECEIVED 6	26-01	INITIALS	3.8
ADDENDUM	NO	DATED	DATE R	ECEIVED _	·	INITIALS_	
ADDENDUM	NO	DATED	DATE R	ECEIVED _		INITIALS_	
ADDRESS	531	Fin David E. Ma 498 FAX 92	tland	Sti	Ontar	us, UA	91761

The undersigned also agrees as follows:

- 1. Within eight (8) working days from date of the notice of acceptance of proposal, the Contractor shall execute the contract and furnish to the Purchasing Agent of Stanislaus County satisfactory insurance and contract bonds guaranteeing the faithful performance of the work and General Conditions thereto.
- 2. To begin work on the date specified in the Notice to Proceed and to prosecute said work in such a manner as to complete it within

"ONE HUNDRED AND TWENTY (120) WORKING DAYS"

The work shall be so scheduled that existing facilities shall not be disrupted, but shall remain in continuous operation on present schedules.

Accompanying this proposal is a bidder's bond issued by a California admitted surety, certified or cashier's check, or cash in the amount of ten percent (10%) of the proposal, made payable to Stanislaus County, which bond or check is to be retained as liquidated damages should the undersigned be awarded the contract and fail to execute the contract and furnish satisfactory bonds according to the conditions herein specified; otherwise said bidder's bond or check will be returned.

Dated: July 10, 2001
Bidder: Griffin Davatering Corporation
By Ginoll Lane
Address: 536 E. Maitland St.
Ontario, UA 91761
Telephone (709) 986-4498 Classification A License 448878
License Expiration Date 11-30 - 200 (

If incorporated, President, Secretary or Treasurer should sign as such. If partnership, by all partners thereto.

Each proposal shall have listed therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of half of one percent of his total bid or \$10,000, whichever is greater, in accordance with the subletting and Subcontracting Fair Practices Act, commencing the Section 4100 of the Public Contract Code. The Bidder's attention is invited to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

TYPE OF SUBCONT	TRACT LICENSE NO.	NAME & ADDRE	SS OF SUBCONTRAC	STOR
1. Hectrice	al 289683	Walther	Electric Co.	Ceres CA
2. Concre	te 31729	2 H. Max	Lee Inc.	Lodi, CA
3.				
4.				
5.				
6.				····
9				
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11				
12				
13				
	(Signed)	well free	e	
•	Co	ntractor		
			Ne.	
	Pri	nted or Typed Name	e	

STANISLAUS COUNTY

NON-DISCRIMINATION OF THE HANDICAPPED

POLICY STATEMENT

In compliance with Section 51.55, Office of Revenue Sharing, Department of the Treasury, it is the policy of Stanislaus County that it will not aid or perpetuate discrimination against a qualified handicapped individual by funding an agency, organization, or person that discriminates on the basis of handicap in providing any aid, benefit, or service to beneficiaries of the program or activity.

The County is committed to provide access to all County services, programs and meetings open to the public to people with disabilities.

In this regard, County and all of its contractors and subcontractors will take all reasonable steps in accordance with GRS Section 51.55 to ensure that handicapped individuals have the maximum opportunity for the same level of aid, benefit or service as any other individual.

CERTIFICATION

Each agency, organization, or person seeking a bid, contract or agreement with Stanislaus County shall sign a Certification of Compliance with Section 504 of the Rehabilitation Act of 1973 as incorporated in the Revenue Sharing Act.

CERTIFICATION OF BIDDER REGARDING NON-DISCRIMINATION OF THE HANDICAPPED

The bidder hereby certifies that he/she/it is in compliance with Section 504 of the Rehabilitation Act of 1973 as incorporated in the Revenue Sharing Act, the applicable administrative requirements promulgated in response thereto, and any other applicable Federal laws and regulations relating to handicap discrimination and participation.

Name of Bidder Griffin Dewater	ines Corp
Business Address 536 E. Ma. + lan +	St. Telephone 909) 986-4498
City, State, Zip Code Ontario, UA	91761
By Pancel Law	Title Branch · Manager
(Signature)	Ø
Printed Name <u>Patroll Lane</u> Date 7-10-6,	

To the County of Stanislaus, Public Works Department,

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

(Title 23 United States Code Section 112 and Public Contract Code Section 7106)

In accordance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly on indirectly colluded, conspired, connived or agreed with any bidder or anyone else to put in a sham bid or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of any one interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Non-collusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Non-collusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

AGREEMENT

		This Agr	eement, made this _	August	14,	, 20 01,	
by	and	between	Griffin DeWateri	ng Corpo	oration		, hereinafter
call	ed "C	ontractor".	and the County of S	tanislaus,	State of California,	hereinafter called "	County".

WITNESSETH

ARTICLE I

The Contractor will provide all the materials, tools, equipment and labor and perform all the work necessary to complete in a good workmanlike manner

LANDFILL GAS COLLECTION AND CONTROL SYSTEM CONSTRUCTION AT THE FINK ROAD LANDFILL

as set forth in the Proposal of the Contractor and in accordance with the bid, Notice to Bidders, Information for Bidders, General Conditions, plans and specifications, bonds, addenda, and any documents particularly required or provided, all of which are attached hereto and made a part hereof. All of the foregoing documents, together with this Agreement, comprise the contract.

ARTICLE II

All of the work included in this contract is to be performed under the direction of the County, and in conformity with the true construction and meaning of the contract, as determined solely by the County.

ARTICLE III

No alterations in the work shall be made except upon written order of the County. The amount to be paid by the County or to be deducted from the contract price by virtue of such alterations shall be stated in said order and shall be approved in writing by the County and the Contractor.

Changes, additions, and alterations in the work, which do not, exceed \$500.00, may be ordered in writing by the Director of the Department of Public Works of the County of Stanislaus.

ARTICLE IV

The Contractor shall commence the work within five (5) calendar days after the date specified in the Notice to Proceed given to him, and shall prosecute said work in a prompt, diligent and workmanlike manner. The Contractor shall complete the work within

"ONE HUNDRED AND TWENTY (120) WORKING DAYS"

of the date of the Notice to Proceed, unless extension or suspension of the work is agreed to in writing by the County. Time is of the essence in this Agreement.

ARTICLE V

The County agrees to pay and the Contractor agrees to receive and accept the unit prices contained in his proposal as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this agreement.

The County shall pay to the Contractor in due course and at the usual time for payment of County obligations after the last day of each month, ninety percent (90%) of the cost of the work completed and material properly stored on the job site, which cost shall be determined by the County. A final payment of ten percent (10%) of the contract price shall be due the Contractor 35 days after acceptance of the work, provided that the Contractor furnishes to the County satisfactory evidence that all obligations for labor and materials have been satisfactorily fulfilled within the said 35 day period, and further provided that no payment shall be construed to be an acceptance of defective work or improper materials.

Except as otherwise prohibited by law, the Contractor may elect to receive all payments due under the contract without any retention. If the Contractor so elects, he shall deposit with the County securities with a value equal to the monies, which would otherwise be withheld by the County. Said securities shall be as provided in Section 22300 of the Public Contract Code and shall be approved by the County as to both sufficiency and form.

ARTICLE VI

Prior to commencing the work, the Contractor shall file a bond issued by a surety company, approved by the County, and in the form acceptable to the County in the amount of one hundred percent (100%) of the contract price for the faithful payment and satisfaction of all lawful claims of all persons for labor and materials furnished in the prosecution of the contract work. Prior to commencing the work, the Contractor shall file a bond issued by a surety company, approved by the County, and in the form acceptable to the County in the amount of one hundred percent (100%) of the contract price to guarantee the faithful performance of the contract.

ARTICLE VII

The Contractor shall take out, and maintain during the life of the contract, insurance policies as described in Section 2.16 of the General Conditions of the contract documents.

ARTICLE VIII

The Contractor shall indemnify, defend, and save harmless Stanislaus County and all officers and employees thereof connected with the work from all claims, suits or actions of every name, kind and description, brought forth or on account of injuries to or death of any person, including, but not limited to, workmen and the public, or damage to property resulting from the

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performance of the contract, except as otherwise provided by statute. The duty of the Contractor to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

The Contractor waives any and all rights to any type of express or implied indemnity against the County, its officers or employees.

ARTICLE IX

When the work is completed and ready for final inspection, the Contractor shall notify the County, which shall make such final inspection within five (5) days after notice.

If the County shall approve the work and find that the work is complete and ready for acceptance and shall accept the same, the final payment of the contract price shall be due as provided in Article V, hereof.

ARTICLE X

The Contractor shall comply with all the provisions of state and local laws relating to contracts for the prosecution of public works, and Sections 2.13, 2.18, 2.19, 2.20, 2.21, and 2.22 of the General Conditions are hereby referred to and incorporated herein as if fully set forth. Pursuant to law, the County has ascertained the general prevailing rate of per diem wages in the locality of the work for each craft or type of workman required for performance of the contract, which rates are as stated in the Invitation to Bidders, and the Contractor shall be required to pay not less than said prevailing rates.

ARTICLE XI

Whenever any act is directed to be done or notice directed to be given by or to the County hereof, the same may be done or given by or to the Director of the Department of Public Works.

ARTICLE XII

The Contractor shall not assign the contract or sublet it as a whole without the written consent of the County, nor shall the Contractor assign any monies due or to become due to him hereunder without the previous written consent of the County. This contract shall be binding upon the parties hereto, their heirs, successors, assigns, subcontractors, and legal representatives.

ARTICLE XIII

Any alteration or alterations made in this contract, or any part hereof, shall not operate to release any surety from liability of any bond given pursuant to the provisions of this

contract and the consent of such surety to such alteration or alterations is hereby given, the surety expressly waiving hereby the provisions of Section 2819 of the Civil Code.

ARTICLE XIV

Neither the final certificate nor payment, nor any provision of the related documents, shall relieve the Contractor of responsibility for faulty workmanship or materials, and less otherwise specified, he shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of filing Notice of Completion. The County shall give notice of observed defects with reasonable promptness. The Director of the Department of Public Works shall decide all questions arising under this Article.

In Witness Whereof, the parties have hereunto set their hands the day and year first above written.

CONTRACTOR

Griffin DeWatering Corporation

By Courolf Jane

Branch Manager

(Title)

Federal Employer ID No.

63-0826062

COUNTY OF STANISLAUS

CHAIR, Board of Supervisors

ATTEST:

CHRISTINE FERRERO TALLMAN, Clerk of the Board of Supervisors of the County of Stanislaus. State of California

Ву

Deputy Oferk of the Board

APPROVE AS TO FORM MICHAEL H. KRAUSNICK

Rv

DEPUTY COUNTY COUNSEL

John P. Doering
Deputy County Counsel

(NOTE: The Contractor must acknowledge the agreement before a Notary Public.)

ALL-PURPOSE ACKNOWLEDGEMENT

State of California County of Piverside	}ss.
On A 7 O before me, personally appeared Carro	Dendy Fox, Notany Public Lane
OFFICIAL SEAL WENDY FOX NOTARY PUBLIC CALIFORNIA ECOMM. NO. 1276120 MY COMM. EXP. JULY 8, 2004	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
The information below is not required by law. However edgement to an unauthorized document.	WITNESS my hand and official seal. We will be a support of the section of the se
CAPACITY CLAIMED BY SIGNER (PRINCIPAL) INDIVIDUAL	DESCRIPTION OF ATTACHED DOCUMENT
CORPORATE OFFICER TITLE(S)	TITLE OR TYPE OF DOCUMENT
PARTNER(S) ATTORNEY-IN-FACT TRUSTEE(S)	NUMBER OF PAGES
GUARDIAN/CONSERVATOR OTHER:	DATE OF DOCUMENT
	OTHER
SIGNER IS REPRESENTING: NAME OF PERSON(S) OR ENTITY(IES)	RIGHT THUMBPRINT OF SIGNER SIGNER

- 2.00 GENERAL CONDITIONS.
- **2.01 OWNER.** The term "Owner", where used herein, shall mean the County of Stanislaus, a political subdivision of the State of California.
- **BOARD.** The term "Board", where used herein, shall mean the Board of Supervisors of the County of Stanislaus, California.
- **2.03 ENGINEER.** The Director of Public Works shall supervise and be responsible for the work, and whenever the word "Director" or the word "Engineer" is used herein, it shall mean the Director of Public Works of Stanislaus County, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.
- **2.04 CONTRACTOR.** The term "Contractor", where used herein, shall mean the Contractor to whom the contract for the work described and specified herein has been awarded to by the Board.
- **2.05 SUBCONTRACTOR.** The term "Subcontractor", where used herein, includes only those having a direct contract with the Contractor for the work or portion of the work described and specified herein.
- **2.06 WORK.** The term "Work", where used herein, includes all labor, materials and any necessary equipment required for complete performance of the contract.
- **2.07 CONTRACT DOCUMENTS.** The term "Contract Documents", where used herein, includes the following: The Notice to Bidders, the Instructions to Bidders, the General Conditions, the plans and specifications, the bid, the Agreement, the general bond and insurance certificates. The contract documents are complementary, and what is called for by one shall be as binding as if called for by all.
- 2.08 DOCUMENT CLARITY. The Contractor's attention is directed to the following requirement:

Government Code 27361.7 - Requirement that document will reproduce readable photographic record substitution of legible original document or preparation of true copy of first document:

Whenever the text of a document presented for record may be made out but is not sufficiently legible to reproduce a readable photographic record, the Recorder may require the person presenting it for record to substitute a legible copy of the first document by handwriting or typewriting and attach the same to the original as part of the document for making the permanent photographic record. The handwritten or typewritten legible copy shall be certified by the party creating the copy under penalty of perjury as being a true copy of the original. As used in this section, the word "text" includes the notary seal, certificates and other appendices, thereto.

- **2.09 COMPLETE CONTRACT.** The complete contract consists of all of the contract documents.
- **2.10 PLANS AND SPECIFICATIONS.** The term "Plans and Specifications", where used herein, shall mean and include all specifications and provisions of any kind, whether general, detailed or otherwise, relating to the labor, equipment, material or work in the installation thereof, and the plans and drawings, if any, accompanying same which are made a part hereof.
- **2.11 AGREEMENT.** The Contractor to whom the work is awarded shall, within eight days after receipt of the contract documents as mailed by the Department of Public Works, enter into an agreement with the Owner. The form of agreement is attached herein and made a part of these General Conditions.
- **2.12 MATERIAL, LABOR, EQUIPMENT AND OTHER FACILITIES.** Unless otherwise provided, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, lights, power, transportation and other facilities necessary for the execution and completion of the work.
- **2.13 PERMITS AND LICENSES.** All permits and licenses necessary for the prosecution of the work shall be secured and paid for by the Contractor, except those secured by Stanislaus County and so noted.
- 2.14 INSPECTION OF WORK. A representative of the Owner shall, at all times, have access to the work and the Contractor shall provide proper facilities for such access and for inspection. The Contractor's attention is directed to Government Code Section 1126 and Stanislaus County Department of Public Works regulations wherein the County's representative is prohibited from accepting from the Contractor, his employees, and subcontractors any gratuity, gift, service or material of any value or use of equipment or facilities, and agrees to abide by the section and regulations.
- **2.15 BONDS.** The Contractor shall furnish and deliver to the Board a surety bond in the amount equal to one hundred percent (100%) of the contract price to guarantee the faithful performance of the contract, and a surety bond in an amount equal to one hundred percent (100%) of the contract price for the faithful payment and satisfaction of all lawful claims of all persons for labor and material furnished and the prosecution of the contract. The contractor shall furnish a bid bond with his proposal equal in value to ten (10%) of his total bid. Such surety bonds shall be issued by a corporation duly and legally licensed to transact surety business in the State of California and approved by the Board. All participating signatures on the bonds shall be notarized.

2-16 INSURANCE. A PARTIE DE COMPANIO DE CO

A. Indemnity

The Contractor shall indemnify, defend, and save harmless the County of Stanislaus, its officers, agents, and employees, from any and all claims, demands, suits, and legal actions of any kind or nature including all costs, attorneys' fees, and expenses incurred therefrom; whether arising before or after final acceptance of this contract/ agreement; and whether in any manner directly or indirectly caused, occasioned, or contributed to in whole or in part by reason of any act, omission, active or passive negligence of the Contractor or of anyone acting under the Contractor's direction and control. The Contractor's aforesaid indemnity and hold harmless agreement shall not be applicable to any said liability caused solely by the negligence of the County of Stanislaus.

B. <u>Minimum Scope of Insurance:</u>

Insurance coverage shall be at least as broad as:

1. General Liability:

\$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to any act or omission to act by Contractor under this Agreement or the general aggregate limit shall be twice the required occurrence limit.

2. Automobile Liability Insurance:

Owned/Non-owned automobile liability insurance providing combined single limits covering bodily injury liability with limits of no less than One Million Dollars (\$1,000,000) per accident, and providing property damage liability of no less than One Hundred Thousand Dollars (\$100,000) per accident.

3. Workers' Compensation Insurance:

Workers' Compensation insurance as required by the Labor Code of the State of California

C. Labor Code Certification:

In signing this contract, the Contractor makes the following certification, required by Section 1861 of the California Labor Code. I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workmen's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

D. Deductibles, Self-Insured Retentions, Named Insureds:

Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds; or the Consultant shall provide a bond, cash or letter of credit guaranteeing payment of the self-insured retention, deductible, or payment of any and all costs, losses, related investigations, claim administration and defense expenses.

E. Other Insurance Provisions:

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

- a. The Contractor shall provide a specific endorsement naming the County and County's officers, officials, employees, and volunteers as insureds regarding: liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Contractor, including the insured's general supervision of the Contractor; services, products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; and automobiles owned, leased, hired or borrowed by the Contractor.
- b. The Contractor's insurance coverage shall be primary insurance regarding the County and County's officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County or County's officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with Contractor's insurance.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to County or County's officers, officials, employees, or volunteers.
- d. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. Workers' Compensation and Employers Liability Coverage:

The insurer shall agree to waive all rights of subrogation against the County and County's officers, officials, employees, and volunteers for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Contractor.

3. All Coverages:

Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to County.

F. Acceptability of Insurers:

Insurance is to be placed with California admitted insurers (licensed to do business in California) with a Best's rating of no less than A-:VII.

G. Verification of Coverage:

At the time required for the submittal of executed bonds and signed agreement, Contractor shall furnish County with certificates of insurance and with original endorsements effecting coverage required by this section. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

H. Subcontractors:

Contractor shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional named insureds under its insurance policies.

I. Insurance Limits Do Not Limit Contractor Liability:

The limits of insurance described herein shall not limit the liability of the Contractor and Contractor's agents, representatives, employees or subcontractors.

- **2.17 ASSIGNMENT OF CONTRACT.** The Contractor shall not assign the contract or sublet it as a whole without written consent of the Owner, nor shall the Contractor assign any monies due or to become due to him hereunder without the written consent of the Owner.
- 2.18 EIGHT-HOUR DAY. The time of service of any laborer, workman, or mechanic employed upon any of the work herein specified is limited and restricted to eight (8) hours during any one calendar day, and 40 hours during any one calendar week, except that work performed by employees of contractors in excess of eight (8) hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of eight (8) hours per day and not less than one and one-half (1-1/2) times the basic rate of pay.

The Contractor shall forfeit, as a penalty to the owner \$25.00 for each laborer, workman or mechanic employed in the execution of this contract by him or by any subcontractor under him, upon any public work herein specified for each calendar day or week during which any laborer, workman or mechanic is required or permitted to labor more than eight (8) hours in any one calendar day or 40 hours in any one calendar week in violation of the provisions of Article 3 of Chapter 1, Part 7, Division 2 of the Labor Code of the State of California, and said sums and amount which shall have been so forfeited pursuant to this paragraph and said provisions of said Labor Code shall be withheld and retained from payment due to the Contractor under this contract, pursuant to this contract and the said terms of said Code; but no

sums shall be so withheld, retained, or forfeited except from the final payment without a full investigation by either the Division of Labor Law Enforcement of the State Department of Industrial Relations or by said Board.

2.19 PREVAILING WAGES. The Contractor shall comply with Labor Code Section 1775. In accordance with said Section 1775, the Contractor shall forfeit, as a penalty to the County of Stanislaus, \$25.00 for each calendar day or portion thereof for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the contract by him or by any subcontractor under him. In addition to said penalty, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Contractor.

Pursuant to Sections 1770 and 1773 of the Labor Code, the Board of Supervisors has ascertained the general prevailing rate of per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday and holiday work. These wage rates, which are set forth by the Director of the Department of Industrial Relations, are now on file with the Department of Public Works and are a part of the contract. The Contractor is required to post a copy of these prevailing wage rates on the job site.

The County will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth as provided herein. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the County on the contract.

- **2.20 PAYROLLS AND BASIC RECORDS.** The Contractor shall meet the requirements of Section 7-1.01A(3), "Payroll Records", of the State of California Standard Specifications. The Contractor shall be responsible for compliance by his subcontractors.
- **2.21 REQUIRED LISTING OF PROPOSED SUBCONTRACTORS.** Each proposal shall have listed therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in the amount of 1/2 of one percent of his total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractor or by making unauthorized substitutions.

A sheet for listing the subcontractors, as required herein, is included in the Proposal.

STANDARD SPECIFICATIONS AND CODES. All work herein specified shall be performed in accordance with applicable sections of the following Standard Specifications or Codes, which are herein, named and hereby made a portion of these specifications. In a case of conflict between these specifications and said Standards, these specifications shall be paramount.

Stanislaus County Ordinance Code Title 16 (Uniform Plumbing Code, 1991 Edition)

Stanislaus County Ordinance Code Title 16 (National Electric Code, 1990 Edition)

Stanislaus County Ordinance Code Title 16 (Uniform Mechanical Code, 1992 Edition)

Standard Specifications of the California Business and Transportation Agency, Department of Transportation, July, 1992

Stanislaus County Improvement Standards

Title 24 Cal State Building Code

- **2.23 TAXES.** Any federal, state or city tax payable on articles furnished by the Contractor under the contract shall be included in the contract price paid by the Contractor.
- 2.24 TIME FOR COMPLETION AND LIQUIDATED DAMAGES. The work to be performed under this contract shall be completed within

"ONE HUNDRED AND TWENTY (120) WORKING DAYS"

from the date of Notice to Proceed. Should the Contractor fail to complete this contract and the work provided for therein within the fixed time for such completion, the parties hereto agree that it would be impracticable or extremely difficult to fix the actual damage, and therefore agree that the Contractor shall be liable to the Owner and may be assessed by the Owner in the sum of **ONE THOUSAND DOLLARS (\$1,000.00) per day** for each calendar day this contract is delayed beyond the time of completion above agreed upon by failure of the Contractor to complete the contract as specified. Such payment shall be construed to be liquidated damages by the Contractor in lieu of any other claim for damage because of such delay, and shall not be construed as a penalty.

- **2.25 PREFERENCES.** Price and quality being equal, preference shall be given by the Contractor to Stanislaus County products.
- **2.26 DEFECTS IN WORK.** The Contractor shall be responsible for and must make good any defects through faulty, improper or inferior workmanship or materials arising or discovered in any part of this work within one (1) year after the completion and acceptance of the same.

- **2.27 DEVIATION FROM PLANS AND SPECIFICATIONS.** No deviation shall be made from the plans and specifications. If the Contractor shall vary from the plans and specifications in the form of quality or in the work or the amount or value of the materials herein provided for, the Owner shall have the right to order such improper work or materials removed, remade or replaced. In the event that the work is ordered changed, any other work disturbed or damaged by such alteration shall be made good at the Contractor's expense.
- **2.28 BRANDS.** Wherever the name or brand of a manufacturer or an article is specified herein, it is used as a measure of quality and utility or a standard. If the Contractor desires to use any other brand or manufacturer of equal quality and utility to that specified, he shall make application to the Owner in writing and submit samples, if requested. The Contractor shall have 35 days after the award of the contract for submission of data substantiating any such request for substitution of "equal" items. The Owners will then determine whether or not the name brand or article is equal in quality and utility to that specified, and its decision shall be final.

Except in those instances in which the product is designated to match others presently in use, specifications herein calling for a designated material, product, thing or service by specific brand or trade name shall be deemed to be followed by the words "or equal" so that bidders may furnish any equal material, product, thing or service. The successful bidder shall have thirty-five (35) days after award of the contract for submission of data substantiating a request for a substitution of "an equal" item, pursuant to Section 3400 of the Public Contract Code.

- **2.29 NEW MATERIALS.** All materials used in the work shall be new and the best market quality, unless specified or shown otherwise. All labor used on this contract shall be competent and skilled for the work. All work executed under this contract shall be done in the best, most thorough substantial and workmanlike manner. All material and labor shall be subject to the approval of the Engineer as to quality and fitness, and shall be immediately removed if it does not meet with his approval.
- 2.30 ABANDONMENT OF WORK. Should the Contractor abandon the work called for under the plans and specifications and contract documents, or assign his contract, or if the Contractor unnecessarily and unreasonably delays the work, or if the Contractor willfully violates any of the conditions of the plans and specifications or contract documents, or performs the work in bad faith, the Owner shall have the power to notify the Contractor to discontinue all work or any part thereof under this contract, and thereupon the Contractor shall cease to continue said work or such part thereof as the Owner may designate, and the Owner shall thereupon have the power to employ such persons as it may consider desirable, and to obtain by contract, purchase, hire or otherwise, such implements, tools, material or materials as the Owner may deem advisable to work at and be used to complete the work herein described, or such part thereof as shall have not been completed, and to use such material as it may find upon the site of said work, and to charge the expense of such labor and material, implements and tools to the Contractor, and the expense so charged shall be deducted and paid by the Owner out of such monies as may be either due, or may at any time thereafter become due to the Contractor hereunder and by virtue of the contract.

In the case such expense is less than the sum which would have been payable under the contract, if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such expense shall exceed the last said amount, then the Contractor or his bondsman shall pay the amount of such excess to the Owner on notice to either from the Owner the excess so due.

- 2.31 OCCUPANCY OF BUILDING. The Owner reserves the right to occupy or use any part or parts or the entirety of the building or project upon which the work is to be performed during the performance of the work. The exercising of this right shall in no way constitute an acceptance of such part or parts of the work, nor shall it in any way effect the date and time when the work is to be completed, nor shall it in any way prejudice the Owner's rights in the Contractor any bond guaranteeing the same; this contract is to be deemed completed only when all of the work contracted for shall be duly and properly performed and accepted by the Board.
- **2.32 EXTENSION OF TIME.** If it appears to the Contractor that he will not complete the work herein specified in the time agreed, he shall make written application to the Owner at least five (5) calendar days prior to the expiration of the time for completion, stating the reasons why and the amount of extension which he believes he should be granted. The Owner may then, in its discretion, grant or deny such extension.
- **2.33 SUSPENSION OF WORK.** Should the Owner, for any cause, authorize a suspension of work, the time of such suspension will be added to the time allowed for completion. Suspension of work by order of the Board shall not be deemed a waiver of the claim of the Owner for damages for noncompletion of the work as above required.
- 2.34 JUSTIFIABLE DELAYS. The Contractor shall not be held responsible for delays in the completion of the work caused by strikes, labor disturbances, lack or failure of transportation, war, inability to obtain materials due to war conditions, perils of the sea, insurrection, riot, acts of any government, whether foreign or domestic, federal or state, and/or any other causes similar to the foregoing which are beyond the control of and are not the fault of the Contractor, or if prevented by conditions directly resulting from the execution of contracts or the placing of orders by the Federal government or its authorized agencies or representatives, which are required by law to be given priority, but provided that whenever the Contractor shall claim that delays are due to any or all of the above named cause or causes of delay, request an extension of time in accordance with paragraph 2.31 of these General Conditions, and if the Board finds that such cause or causes of delay exist, it shall grant him an extension of time equal to the delay resulting from such cause or causes, or the Board may at its option, rescind said contract and pay said Contractor for the reasonable value of the work completed and let a new contract for the completion of the remainder of the work herein specified.
- **2.35 PATENTS AND ROYALTIES.** If any material, composition, process or any other thing called for or required by the plans and specifications heretofore adopted by the Owner is covered by letter

patent, all royalties and expenses thereof, all litigation therefrom, or other things whatsoever, which may develop as a cost from the use of such material, composition, process or any other thing which is covered by letter patents shall be borne by the Contractor. The Contractor shall pay all license and/or royalty fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof.

- **2.36 EXAMINATION OF SITE.** The Contractor shall be held to have examined the site, compared it with the drawings and specifications, and to have satisfied himself as to the conditions under which the work is to be performed. No allowance or claims on his behalf will be made for any expense to which he may be put as a result or failure on his part to thoroughly acquaint himself with conditions at the site.
- **2.37 DAMAGE TO OTHERS.** The Contractor shall exercise due caution during his operations so as not to damage the property of others or Owner's property not directly involved under the plans and specifications, and shall be responsible for the protection of this property and shall replace any and all such property to its former condition as a result of his failure to provide protection or exercise due caution during his operations.
- **2.38 SURVEYS AND GRADES.** The Engineer shall establish permanent type reference monuments or posts for the alignment and elevations of all work. For structures, he will provide said monuments for reference data only. For general engineering contracts he shall provide the usual stakes sufficient for construction. The Contractor shall be charged with the responsibility of adequately protecting said stakes and monuments. The Contractor shall be requested to set supplemental posts for detailed construction needs.
- **2.39 SHOP DRAWINGS.** The Contractor shall furnish two (2) copies of shop drawings for all steel, miscellaneous iron, electrical and sheet metal work at such time as to cause no delay in his own or other person's work. The Engineer shall, with reasonable promptness, check the drawings, making corrections, and return them for fabrication; two (2) copies of the corrected drawings used for fabrication shall be returned to the Engineer. The drawings shall not relieve the Contractor from any errors made in fabrication or deviation from original plans and specifications unless such deviation has been specifically permitted in writing by the Director of the Department of Public Works.
- 2.40 CORRECTION OF WORK AFTER FINAL PAYMENT. Neither the final certificate nor final payment, nor any provision of the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship, and unless otherwise specified, he shall remedy any defects due thereto and shall pay for any damage or other work resulting therefrom which shall appear within a period of one year from the date of substantial completion. The Owner shall give notice of observed defects with reasonable promptness. All questions arising under this article shall be decided by the Director of Public Works.

2.41 CHANGES IN WORK. The Owner, without invalidating the contract, may order extra work or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly. All such work shall be performed under the conditions of the contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering the change. The Engineer shall have authority to make minor changes not involving extra cost and not inconsistent with the purpose of the project.

The value of such extra work or change shall be determined in one or more of the following ways:

- A. By estimate and acceptance in a lump sum;
- B. By unit prices named in the contract or subsequently agreed upon;
- C. By cost and percentage and fixed fee.

Should conditions below surface of the ground be at variance with the conditions indicated by the drawings and specifications, the contract sum shall be equitably adjusted upon claim by either party made within a reasonable time after first observation of conditions.

The amount agreed upon as the value of any extra work resulting from any change order shall constitute full and complete compensation for all overhead, labor, material, tools, and equipment furnished in the performance of work required by that change order. Furthermore, the amount agreed upon as the value of extra work for any change order shall be accepted by the Contractor as full and complete compensation for any and all claims of any nature whatsoever, including, but not limited to, any actual or alleged claims for compensation by Contractor, or any subcontractor of Contractor for delays occasioned by or in any way arising out of stoppage of the work, coordination of the work with others, or processing of that change order.

- **2.42 CLEANING UP.** Contractor shall at all times keep the premises free from accumulations of waste material or rubbish as a result of this operation. Upon completion of work he shall remove all rubbish, material and his equipment from the job and shall leave the job site in a "broom clean" or equivalent condition. In case of a dispute regarding this item, the Owner may remove rubbish or material and charge the cost to the several contractors, as the authorized representative shall deem just.
- **2.43 SUPERVISION.** The Contractor shall, at all times during the working hours of the contract, have a competent foreman or superintendent on the job who shall be authorized to act as an agent of the Contractor. Such agent shall be familiar with the type of work hereunder and be aware of the hazards and the safety rules relating to this particular type of construction. Ignorance or incompetence of a foreman shall be due cause for his removal from the job and cessation of work under this contract until the intent of this paragraph is fulfilled, without recourse by the Contractor for any extension of the time of completion as a result of the removal of such unsatisfactory agent.

- **2.44 APPRENTICESHIP STANDARDS.** This contract is subject to the provisions in Sections 1777.5 (Chapter 1411, Statutes of 1968) and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him. Section 1777.5, as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the Joint Apprenticeship Committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the contract. The ratio of apprentices to journeymen in such cases shall not be less than one to five, except:
- A. When unemployment in the area of coverage by the Joint Apprenticeship Committee has exceeded an average of fifteen percent (15%) in the 90 days prior to the request for certificate; or
 - B. When the number of apprentices in training in the area exceeds a ratio of one to five; or
- C. When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally; or
- D. When the Contractor provides evidence that he employs registered apprentices on all of his contracts on an annual average of not less than one apprentice to eight journeymen.

The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employees registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

The Contractor and any subcontractor under him shall comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

- 2.45 ASSIGNMENT OF ANTI-TRUST ACTIONS AND UNFAIR BUSINESS PRACTICE CLAIMS. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S. C. Sec. 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700) or Part 2 of Division 7 of the Business and Professions Code, arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.
- **2.46 EQUAL EMPLOYMENT OPPORTUNITY.** Contractor agrees for the duration of this contract that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap. The Contractor

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will take affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

The Contractor will send to each labor union or other representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the workers' representative of the Contractor commitments under this agreement.

The Contractor agrees that it will comply with the provisions of Titles VI and VII of the Civil Rights Act, Revenue Sharing Act Title 31, U.S. Code Section 2716, and California Government Code Section 12990.

The Contractor agrees that it will assist and cooperate with the County, the State of California and the United States Government in obtaining compliance with the equal opportunity clause, rules, regulations, and relevant orders of the State of California and United States Government issued pursuant to the Acts.

In the event of the Contractor's non-compliance with the discrimination clause, the affirmative action plan of this contract, or with any of the said rules, regulations or orders, this contract may be canceled, terminated, or suspended in whole or in part by the County.

- **2.47 HANDICAPPED NON-DISCRIMINATION.** This project is subject to Section 504 of the Rehabilitation Act of 1973 as amended, (29 U.S.C. 794), and all requirements imposed by the applicable office of Revenue Sharing Regulations (31CFR Part 51) and all guidelines and interpretations issued thereto. In this regard, the County and all of its contractors and subcontractors will take all reasonable steps to ensure that handicapped individuals have the maximum opportunity for the same level of aid, benefit or service as any other individual.
- 2.48 FAIR EMPLOYMENT AND HOUSING ACT ADDENDUM. In the performance of this contract, the Contractor will not discriminate against any employee or applicant for employment because of race, sex, color, religion, ancestry, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, sex, color, religion, ancestry, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, promotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the State or local agency setting forth the provisions of this Fair Employment and Housing Section.

The Contractor will permit access to his records of employment, employment advertisements, application forms, and other pertinent data and records by the State Fair Employment and Housing Commission, or any other agency of the State of California designated by the awarding authority, for the purposes of investigation to ascertain compliance with the Fair Employment and Housing section of this contract.

Remedies for willful violation:

- A. The State or local agency may determine a willful violation of the Fair Employment and Housing provision to have occurred upon receipt of a final judgement having that effect from a court in an action to which Contractor was a party; or upon receipt of a written notice from the Fair Employment and Housing Commission that it has investigated and determined that the Contractor has violated the Fair Employment and Housing Act and has issued an order or obtained an injunction under Government Code Section 12900, et seq.
- B. For willful violation of this Fair Employment and Housing provision the State or local agency shall have the right to terminate this contract either in whole or in part, and any loss or damage sustained by the State or local agency in securing the goods or services hereunder shall be borne and paid for by the Contractor and by his surety under the performance bond, if any, and the State or local agency may deduct from any monies due or that thereafter may become due to the Contractor, the difference between the price named in the contract and the actual cost thereof to the State or local agency.

2.49 CONTRACTS WHICH INVOLVE DIGGING TRENCHES OR EXCAVATIONS.

Note the required language in Public Contract Code Section 7104 concerning contracts, which involve digging trenches or excavations;

Any Public Works contract of a local public entity, which involves digging trenches or other excavations that extend deeper than four feet below the surface, shall contain a clause, which provides the following:

- A. That the Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:
- 1. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
 - Subsurface or latent physical conditions at the site differing from those indicated.
- 3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

- B. That the public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the contract.
- C. That, in the event that a dispute arises between the public entity and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The Contractor shall retain any and all rights provided either by contract or by law, which pertain to the resolution of disputes and protests between the contracting parties.
- **2.50 ARBITRATION** The last paragraph in Section 9-1.10, "Arbitration," of the Standard Specifications is amended to read.

Arbitration shall be initiated by a Complaint in Arbitration made in compliance with the requirements of said regulations. A Complaint in Arbitration by the Contractor shall be made not later than 180 days after the date of service in person or by mail on the Contractor of the final written decision by the Department on the claim.

- **2.51 NOTICE OF POTENTIAL CLAIM** Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications is amended to read:
- 9-1.04 Notice of Potential Claim The Contractor shall not be entitled to the payment of any additional compensation for any act, or failure to act, by the Engineer, including failure or refusal to issue a change order, or for the happening of any event, thing, occurrence, or other cause, unless he shall have given the Engineer due written notice of potential claim as hereinafter specified. Compliance with this Section 9-1.04 shall not be a prerequisite as to matters within the scope of the protest provisions in Section 4-1.03, "Changes," or Section 8-1.06, "Time of Completion," or the notice provisions in Section 5-1.116, "Differing Site Conditions," or Section 8-1.07, "Liquidated Damages," or Section 8-1.10, "Utility and Non-Highway Facilities," nor to any claim which is based on differences in measurements or errors of computation as to contract quantities.

The written notice of potential claim shall be submitted to the Engineer prior to the time that the Contractor performs the work giving rise to the potential claim for additional compensation, if based on an act or failure to act by the Engineer, or in all other cases within 15 days after the happening of the event, thing, occurrence, or other cause, giving rise to the potential claim.

The written notice of potential claim shall be submitted on Form CEM-6201 furnished by the Department and shall be certified with reference to the California False Claims Act, Government Code Sections 12650 - 12655. The notice shall set forth the reasons for which the Contractor believes additional compensation will or may be due and the nature of the costs involved. Unless the amount of

the potential claim has been stated in the written notice, the Contractor shall, within 15 days of submitting said notice, furnish an estimate of the cost of the affected work and impacts, if any, on project completion. Said estimate of costs may be changed or updated by the Contractor when conditions have changed. When the affected work is completed, the Contractor shall submit substantiation of his actual costs. Failure to do so shall be sufficient cause for denial of any claim subsequently filed on the basis of said notice of potential claim.

It is the intention of this Section 9-1.04 that differences between the parties arising under and by virtue of the contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was filed.

Should the Contractor, in connection with or subsequent to the assertion of a potential claim, request inspection and copying of documents or records in the possession of the Department that pertain to the potential claim, Contractor shall make its records of the project, as deemed by the Department to be pertinent to the potential claim, available to the Department for inspection and copying.

2.52 FINAL PAYMENT AND CLAIMS Section 9-1.07B, "Final Payment and Claims," of the Standard Specifications is amended to read:

9-1.07B Final Payment and Claims. -- After acceptance by the Director, the Engineer will make a proposed final estimate in writing of the total amount payable to the Contractor, including therein an itemization of said amount, segregated as to contract item quantities, extra work and any other basis for payment, and shall also show therein all deductions made or to be made for prior payments and amounts to be kept or retained under the provisions of the contract. All prior estimates and payments shall be subject to correction in the proposed final estimate. The Contractor shall submit written approval of the proposed final estimate or a written statement of all claims arising under or by virtue of the contract so that the Engineer receives such written approval or statement of claims no later than close of business of the thirtieth day after receiving the proposed final estimate. If the thirtieth day falls on a Saturday, Sunday or legal holiday, then receipt of such written approval or statement of claims by the Engineer shall not be later than close of business of the next business day. No claim will be considered that was not included in the written statement of claims, nor will any claim be allowed as to which a notice or protest is required under the provisions in Sections 4-1.03, "Changes," 8-1.06, "Time of Completion," 8-1.07, "Liquidated Damages," 5-1.116, "Differing Site Conditions," 8-1.10, "Utility and Non-Highway Facilities," and 9-1.04, "Notice of Potential Claim," unless the Contractor has complied with the notice or protest requirements in said sections.

On the Contractors approval, or if he files no claim within said period of 30 days, the Engineer will issue a final estimate in writing in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the State will pay the entire sum so found to be due. Such final estimate and payment thereon shall be conclusive and binding against both parties to the contract on all

questions relating to the amount of work done and the compensation payable therefor, except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

If the Contractor within said period of 30 days files claims, the Engineer will issue a semifinal estimate in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the State will pay the sum so found to be due. Such semifinal estimate and payment thereon shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefor, except insofar as affected by the claims filed within the time and in the manner required hereunder and except as otherwise provided in Sections 9-1.03C. "Records." and 9-1.09. "Clerical Errors."

Claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. If additional information or details are required by the Engineer to determine the basis and amount of said claims, the Contractor shall furnish such further information or details so that the Engineer receives the information or details no later than the fifteenth day after receipt of the written request from the Engineer. If the fifteenth day falls on a Saturday, Sunday or legal holiday, then receipt of such information or details by the Engineer shall not be later than close of business of the next business day. Failure to submit such information and details to the Engineer within the time specified will be sufficient cause for denying the claim.

The Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated claim investigator or auditor shall have access to those records and any other records as may be required by the Engineer to determine the facts or contentions involved in the claims. Failure to permit access to such records shall be sufficient cause for denving the claims.

Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et. seq., the undersigned,

(name)	
(title)	of
(company)	

hereby certifies that the claim for the additional compensation and time, if any, made herein for the work on this contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the contract between parties.

Dated	
Subscribed and sworn before me this of	day
Notary Public My Commission Expires	

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead type expenses or costs, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the State at its discretion.

Any costs or expenses incurred by the State in reviewing or auditing any claims that are not supported by the Contractor's cost accounting or other records shall be deemed to be damages incurred by the State within the meaning of the California False Claims Act.

The District Director of the District, which administers the contract, will make the final determination of any claims, which remain in dispute after completion of claim review by the Engineer. A board or person designated by said District Director will review such claims and make a written recommendation thereon to the District Director. The Contractor may meet with the review board or person to make a presentation in support of such claims.

Upon final determination of the claims, the Engineer will then make and issue his final estimate in writing and within 30 days thereafter the State will pay the entire sum, if any, found due thereon. Such final estimate shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefor, except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

2.53 SUPPLEMENTAL WORK A Supplemental Work item may be included in the contract to cover modifications to the work necessitated by field conditions. The amount of expenditure under this item may vary from zero to the total amount of the item. This amount may constitute the sum of several modifications. The engineer will notify the Contractor in writing when portion of the work being performed will be paid for under this item.

SECTION 3. (BLANK)

SECTION 4. (BLANK)

SECTION 5. (BLANK)

SECTION 6. (BLANK)

SECTION 7. (BLANK)

SECTION 8. MATERIALS

SECTION 8-1. MISCELLANEOUS

SECTION 8-2 TESTING

8-2.00 COMPACTION. Relative compaction shall be determined by Calif. Test 231 utilizing the nuclear gauge. Calif. Test 231 shall be modified to use 30-second counts or one-minute counts at the option of the Engineer. Five 30-second warm-up counts shall be used instead of ten one-minute warm up counts for testing with 30-second counts.

Section "B" of Calif. Test 231 shall be amended as follows:

At the discretion of the Engineer, a guide plate measuring approximately 9-3/4" x 14" x 3/16" may be substituted for the standard plate. Additionally, a sliding sleeve impact hammer which incorporates a 13/16" diameter pin, and is manufactured specifically for use with a nuclear gauge and guide plate, may be used in lieu of Standard driving pin.

Part 2 of Calif. Test 216 shall be modified as follows:

- 1. An automatic compactor may be used in lieu of standard hand compaction methods. The compactive effort in either case shall be the same.
- 2. A split cylindrical mold that is 1' 3" in height may be substituted for the standard mold.

CONSTRUCTION DRAWINGS

	COVER SHEET
1	LF - 2 SITE PLAN
2	LF - 1 SITE PLAN
3	BLOWER/FLARE FACILITY PLAN
4	BLOWER/FLARE SKID (PLAN & ELEVATION)
5	FLARE DETAILS
6	WELL DETAILS
7	CONDENSATE COLLECTION DETAILS
8	FOUNDATIONS & DETAILS
9	LF – 2 DETAILS
10	BLOWER/FLARE SKID P&ID
11	ELECTRICAL
12	ELECTRICAL DETAILS

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SECTION 01010 SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Related sections
- B. Project location and access
- C. Scope of work
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1.02 RELATED SECTIONS

- A. Section 01019 Mobilization and Demobilization
- B. Section 01090 References
- C. Section 01190 Health and Safety
- D. Section 01630 Product Options and Substitutions
- E. Section 01720 Project Record Documents
- F. Section 01730 Installation, Operation, and Maintenance Instructions
- G. Section 02221 Excavating, Backfilling, Compacting, and Grading
- H. Section 02687 Landfill Gas Wells and Wellheads
- I. Section 02830 Chain Link Fences
- J. Section 03300 Cast-In-Place Concrete
- K. Section 09910 Painting
- L. Section 11000 Equipment
- M. Section 15480 Piping
- N. Section 16050 Basic Electrical Requirements
- O. Section 16100 Basic Electrical Materials and Methods
- P. Section 16500 Lighting
- Q. Section 16910 Control Panels

1.03 PROJECT LOCATION AND SITE ACCESS

- A. The project site is the Fink Road Landfill, which is located at the intersection of Fink Road (a.k.a. Crows Landing Road) and Interstate Highway 5, west of Crows Landing, Stanislaus County, California.
- B. Access to the work area is via the Landfill's main entrance road.

1.04 SCOPE OF WORK

A. General: The Work included in the contract consists primarily of construction of a landfill gas collection and control system, including a blower/flare facility. The Work is more fully detailed in the Specifications and Contract Drawings included herein.

B. Principal Features:

- 1. Mobilization and demobilization of equipment, labor, and construction of temporary facilities.
- 2. Site preparation for the construction of the blower/flare facility.
- 3. Construction of vertical landfill gas extraction wells.
- 4. Installation of landfill gas collection and control system piping.
- 5. Installation of a blower/flare facility.
- 6. Installation of a condensate collection and disposal system.
- C. The above description of the Work is for general information only, and does not limit the responsibility of the CONTRACTOR to accomplish the Work in strict accordance with the Contract Drawings and Specifications.
- D. The Work shall be performed in strict accordance with the applicable requirements of the state and local agencies having jurisdiction, and in accordance with the requirements of the Special Provisions, Technical Specifications, and the Contract Drawings. The CONTRACTOR will provide a site specific Health and Safety Plan (HASP) for OWNER\ENGINEER approval. It will be the CONTRACTOR's responsibility to be fully appraised of site conditions and to follow the approved HASP.

1.05 CONSTRUCTION SEQUENCE

- A. Meetings will be conducted between the OWNER/ENGINEER and CONTRACTOR prior to starting each sequence of construction. The intent of these meetings is to review and discuss specification requirements for that particular sequence of construction. During these meetings, the CONTRACTOR shall present a construction plan for each construction sequence, as applicable, outlining and detailing the equipment, personnel, schedule and materials required, including source, transportation, excavation, placement, and compaction of proposed materials.
- B. Periodically, as determined by the OWNER/ENGINEER, the CONTRACTOR will be required to attend and participate in construction coordination meetings. The purpose of these meetings is to bring the Specification requirements to the attention of the CONTRACTOR, including quality control, as well as safety consideration of a particular phase of the Work prior to initiation of the activities. The CONTRACTOR will be notified of the item(s) to be discussed and shall attend the meetings and be prepared to outline the approach to the Work, the time frame involved, both calendar time and shifts, the type and number of personnel and equipment to be used, and any special material required. The OWNER/ENGINEER will review the Specifications, quality control requirements, and safety concerns involved with the CONTRACTOR.
- C. The CONTRACTOR shall cooperate fully and coordinate his activities with other construction CONTRACTORs and the OWNER/ENGINEER to ensure adequate notification and suitable access to other construction areas.
- D. The CONTRACTOR shall begin construction within twenty (20) days of receiving the OWNER's "Notice To Proceed".

1.06 EXISTING SITE CONDITIONS

- A. The CONTRACTOR is advised that the construction of this project at the Fink Road Landfill will entail working in, on, and adjacent to buried solid wastes and refuse. As buried organic materials decompose anaerobically, they generate landfill gas (LFG). This LFG (or biogas) normally consists of about 45 percent carbon dioxide (CO₂), 55 percent methane (CH₄) and other gases, depending on the composition of the buried materials. Occasionally hydrogen sulfide (H₂S) or other toxic gases have been encountered at some landfills even though the site was not classified as a hazardous waste disposal site.
- B. The CONTRACTOR shall provide all other services necessary to the completion of the work, including but not limited to construction water, potable water, utilities, and site security.
- C. Onsite water is available from an onsite well/tank for fire and dust control.

1.07 CONSTRUCTION DRAWINGS

- A. A list of Construction Drawings and Titles is given in the Table of Contents of these Contract Documents under "Contract Drawings".
- B. Where "as shown," "as detailed," "as noted," or words of like meaning are used in the Contract Documents, it shall be understood that reference is being made to the Contract Drawings unless otherwise specified.

1.08 QUALITY ASSURANCE

- A. When plans or specifications call for material or construction of a better quality or larger size or capacity than may be required by applicable codes or standards, the provisions of the Contract Drawings and/or Specifications shall take precedence over the requirements of the code or standard. If there is any other conflict between the Contract Drawings or Specifications and the requirements of applicable codes and standards, the more stringent provisions shall govern.
- B. All equipment shall be designed, constructed, and installed in accordance with all applicable codes for seismic requirements for the project site region.
- C. Shop and field work shall be performed by mechanics and workers skilled and experienced in the fabrication and installation of the work feature involved. All Work under this Contract shall be performed in accordance with the best practices of the various trades involved and in accordance with the Contract Drawings, reviewed shop drawings, and these Specifications.
- D. All Work shall be erected and installed plumb, level, square and true, or true to indicated angle, and in proper alignment and relationship to the work of other trades. All finished Work shall be free from defects and damage.
- E. The OWNER/ENGINEER reserves the right to reject any materials and work which are not considered to be up to the general standards of the various trades involved. Such inferior material or work quality shall be repaired or replaced, as directed, at no additional cost to the OWNER.
- F. The CONTRACTOR shall secure all field measurements required for proper and accurate fabrication and installation of the Work included in this Contract. Exact measurements are the CONTRACTOR's responsibility. The CONTRACTOR shall also furnish or obtain all templates, patterns, and setting instructions required for the installation of all Work. All dimensions shall be verified by the CONTRACTOR in the field.

1.09 MANUFACTURERS' SPECIFICATIONS AND INSTRUCTIONS

A. Unless otherwise indicated or specified, all manufactured materials, products, processes, equipment, or the like shall be installed or applied in accordance with the manufacturers' drawings, instructions, directions, or specifications. Said installation or application shall be in accordance with printed instructions furnished by the manufacturer of the material or equipment concerned for use under conditions similar to those at the job site. Copies of such instructions and specifications shall be furnished to the OWNER/ENGINEER and his acceptance thereof obtained before work is begun.

1.10 TESTING LABORATORY

A. The CONTRACTOR will coordinate and conduct compaction testing using a certified laboratory approved by the OWNER/ENGINEER. Compaction testing will be performed on engineered fill. The CONTRACTOR will coordinate and perform concrete testing using a certified laboratory approved by the OWNER/ENGINEER, take concrete test cylinders and perform strength tests on concrete. The costs of concrete coring, retests or additional testing caused by the CONTRACTOR's operations will be the responsibility of the CONTRACTOR.

B. The CONTRACTOR will be responsible for notifying the OWNER/ENGINEER at least 24 hours in advance so that the OWNER/ENGINEER may be present during testing.

1.11 SURVEYING

- A. The CONTRACTOR will provide the surveying services necessary to complete the work, including but not limited to, initial system layout, construction staking, measurement for payment, and record drawings.
- B. All surveys for measurement for payment and record drawings shall be performed and sealed by a Professional Land Surveyor registered in the State of California.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Separate measurement for payment will not be made for the work or materials specified in this Section.

4.02 PAYMENT

A. Separate payment will not be made for work or materials specified in this Section. All costs associated with the requirements of this Section will be considered subsidiary to the applicable related item in the Bid Schedule, or incidental to the Contract.

END OF SECTION

SECTION 01019 MOBILIZATION AND DEMOBILIZATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Mobilization of all construction equipment, materials, supplies, appurtenances, and the like, manned and ready for commencing and performing the Work. Assembly and delivery to the site of plant, equipment, materials, and supplies necessary for the performance of the Work but which are not intended to be incorporated in the Work; preparation of the CONTRACTOR's work area; complete assembly, and in working order, of equipment necessary to perform the required work; personnel services preparatory to commencing actual work; and all other preparatory work required to permit commencement of actual work on construction items for which payment is provided under the Contract.
- B. Subsequent removal from the site of all construction plants, equipment, materials (excluding surplus materials specified to remain on site), supplies, appurtenances, and the like; and cleaning and restoration of the site as directed by OWNER/ENGINEER upon completion of the Work.

1.02 RELATED SECTIONS

- A. Section 01010 Summary of Work
- B. Section 01090 References

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Mobilization: Measurement for payment for mobilization will be by lump sum basis.
- B. Demobilization: Separate measurement for payment will not be made for demobilization.

4.02 PAYMENT

- A. Mobilization: Payment for work and materials specified for Mobilization shall be made for the lump sum price bid for "Mobilization and Demobilization" in the Bid Schedule, and shall include all items specified herein. Progress payment shall be made based on the percentage of Work Completed as specified in this Section at the time of invoicing.
- B. Demobilization: Separate payment will not be made for work or materials associated with demobilization. All costs associated with demobilization will be considered subsidiary to the lump sum price bid for "Mobilization and Demobilization" in the Bid Schedule.

END OF SECTION

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the requirements specified in the General Conditions and Supplementary Conditions. If the requirements of this section and conditions noted above conflict, the CONTRACTOR shall adhere to the more stringent requirement as determined by the OWNER.
- B. Section Includes: General requirements for measurement and payment as they apply to this Contract.
- C. Measurement methods specified in the individual Sections of these Specifications shall govern if they differ from methods specified in this Section.
- D. The CONTRACTOR will compute all quantities. Where necessary, such computations will be based upon surveys performed by the CONTRACTOR.

1.02 RELATED SECTIONS

- A. General Conditions
- B. Supplementary Conditions
- C. Section 01052 Layout of Work and Surveys
- D. Section 01300 Submittals: Progress Payment Schedule

1.03 MEASUREMENT OF QUANTITIES

A. Measurement Standards: All work to be paid for at a Contract price per unit of measurement will be in accordance with United States Standard Measures.

B. Measurement by Weight:

- Material to be measured and paid for by scale weight shall be weighed on accurate, approved scales.
 Platform scales of sufficient size and capacity shall be used to permit the entire vehicle or combination
 of vehicles to rest on the scale platform while being weighed. Combination vehicles may be weighed as
 separate units provided they are disconnected while being weighed. All scales shall be inspected and
 certified as often as the OWNER/ENGINEER may deem necessary to ascertain accuracy.
- 2. The OWNER/ENGINEER may be present to witness the weighing and to check and compile the daily record of such scale weights; however, in any case, the OWNER/ENGINEER will require that the CONTRACTOR furnish weigh slips and daily summary weigh sheets. A duplicate weigh slip or a load slip for each vehicle weighed shall be delivered to the OWNER/ENGINEER at the point of delivery of the material.
- 3. Trucks used to haul material being paid for by weight, shall be weighed empty daily and at such additional times as the OWNER/ENGINEER may require. Each truck shall bear a plainly legible identification mark. The OWNER/ENGINEER may require the weight of the material verified by weighing empty and loaded trucks on such other scales as the OWNER/ENGINEER may designate.

C. Measurement by Volume:

- 1. Measurement by volume will be by the cubic dimension listed or indicated in the Bid Schedule. Method of volume measurement will be as determined or directed by the OWNER/ENGINEER.
- 2. When material is to be measured and paid for on a volume basis and it is impractical to determine the volume by the specified method of measurement, or when requested by the CONTRACTOR in writing and accepted by the OWNER/ENGINEER in writing, the material will be weighed in accordance with the requirements specified for weight measurement. Such weights will be converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the OWNER/ENGINEER and shall be agreed to by the CONTRACTOR before such method of measurement of pay quantities will be accepted.
- D. Measurement by Area: Measurement by area will be by the square dimension listed or indicated in the Bid Schedule. Method of square measurement will be as determined or directed by the OWNER/ENGINEER.
- E. Linear Measurement: Linear measurement will be by the linear dimension listed or indicated in the Bid Schedule. Method of linear measurement will be as determined or directed by the OWNER/ENGINEER. Generally, items, components, or work to be measured will be measured at the centerline of the item in place.

F. Lump-Sum Measurement:

1. Lump-sum measurement will be for the entire item, unit of work, structure, or combination thereof, as listed or indicated in the Bid Schedule.

1.04 FIELD MEASUREMENT FOR PAYMENT

A. The CONTRACTOR shall compute all quantities of Work performed or materials and equipment delivered and installed for payment purposes.

1.05 PAYMENT

- A. Payment will be full compensation for furnishing all labor, materials, tools, equipment, transportation, services, and incidentals, as specified, and for performing all work necessary for completing the erection or installation of the item or work classification, including all adjusting and balancing, testing, cleaning, and all other incidental work.
- B. Full compensation for all expense involved in conforming to the requirements for measuring materials or work shall be considered as included in the unit or lump-sum prices paid for the materials or work being measured, and no additional compensation will be permitted.

1.06 VALUES OF UNIT PRICES

- A. The number of units and quantities contained in the Bid Schedule are approximate only, and final payment will be made for the actual number of units and quantities which are incorporated in or made necessary by the Work included in this Contract.
- B. In the event that work and materials or equipment are required to be furnished to a greater or lesser extent than is indicated by the Contract Drawings and Specifications, such work and materials or equipment shall be furnished in greater or lesser quantities.

1.07 CHANGES AND EXTRA WORK

A. Changes and extra work ordered by the OWNER will be measured and paid for in accordance with the requirements of the General Conditions and Supplementary Conditions.

1.08 REJECTED MATERIALS

A. Quantities of material wasted or disposed of in a manner not called for under the Contract; rejected loads of material, including material rejected after it has been placed by reasons of the failure of the CONTRACTOR to conform to the provisions of the Contract; material not unloaded from the transporting vehicle; material placed outside the limits indicated on the Drawings or established by the OWNER/ENGINEER; or material remaining on hand after completion of the Work, will not be paid for, and such quantities shall not be included in the final total quantities. No compensation will be permitted for loading, hauling, and disposing of rejected material.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

(Not Used)

END OF SECTION

SECTION 01052 LAYOUT OF WORK AND SURVEYS

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the requirements specified in the General Conditions and Supplementary Conditions. If the requirements of this section and conditions noted above conflict, the CONTRACTOR shall adhere to the more stringent requirement as determined by the OWNER.
- B. Section Includes: General requirements for survey work to be performed by the CONTRACTOR for layout of work features, for performance of work, and for field measurements of work quantities for payment purposes.
- C. Before commencing any surveys, the CONTRACTOR shall give the OWNER/ENGINEER 2 working days written notice in advance so that the OWNER/ENGINEER may witness such work.

1.02 RELATED SECTIONS

- A. General Conditions
- B. Supplementary Conditions

1.03 DESCRIPTION

- A. Reference Points: The reference points are shown on the Contract Drawings and may include referenced monuments and elevation bench marks in the vicinity of the project. If displaced, replacement of these reference points will be at the expense of the CONTRACTOR. All other necessary reference points shall be established by the CONTRACTOR.
- B. The CONTRACTOR shall furnish all necessary detail surveys including all lines, grades, and appropriate surveys as specified.
- C. The OWNER reserves the right to perform any desired checking and correction of the CONTRACTOR's surveys but this shall not relieve the CONTRACTOR of the responsibility for adequate performance of the work.
- D. Equipment and Personnel: The CONTRACTOR's instruments and other survey equipment shall be accurate, suitable for the surveys required in accordance with recognized professional standards, and in proper condition and adjustment at all times. Surveys shall be performed under the direct supervision of a licensed surveyor.
- E. Field Notes and Records: The CONTRACTOR shall record surveys in duplicate page field notebooks. The original pages of such records shall be furnished to the OWNER/ENGINEER at intervals required by the OWNER/ENGINEER. A duplicate of each field notebook shall be furnished to the OWNER/ENGINEER when filled or completed.
- F. Use by the OWNER/ENGINEER: The OWNER/ENGINEER may at any time use line and grade points and markers established by the CONTRACTOR. The CONTRACTOR's surveys are a part of the Work and may be checked by the OWNER/ENGINEER or representatives of the OWNER/ENGINEER at any time. The CONTRACTOR shall be responsible for (1) any lines, grades, or measurements which do not comply with specified or proper tolerances, or which are otherwise defective, and (2) for any resultant

defects in the Work. The CONTRACTOR will be required to conduct resurveys or check surveys to correct errors indicated by review of the field notebooks or otherwise detected.

1.04 SURVEYS FOR LAYOUT AND PERFORMANCE OF WORK

A. The CONTRACTOR shall perform all surveys for layout and performance of the Work, reduce the field notes, make necessary calculations, and prepare drawings necessary to carry out such work.

1.05 SURVEYS FOR MEASUREMENT FOR PAYMENT

A. When the Specifications or the OWNER/ENGINEER require Bid Schedule items of work to be measured by surveying methods, the CONTRACTOR shall perform the surveys. All such surveys, including control surveys run for establishing the measurement reference lines, shall be performed in the presence of the OWNER/ENGINEER (or a representative of the OWNER/ENGINEER) who will witness the surveying operation by signing the field notes or keeping duplicate field notes, at the OWNER/ENGINEER's option. The CONTRACTOR will reduce the field notes and calculate final quantities for payment purposes. A duplicate of the note reductions and calculations will be given to the OWNER/ENGINEER.

1.6 SURVEYING ACCURACY AND TOLERANCES IN SETTING OF SURVEY STAKES

- A. Control traverse field surveys and computations shall be performed to an accuracy of at least 1:25000.
- B. The tolerances generally applicable in setting survey stakes shall be as set forth below. Such tolerances shall not supersede stricter tolerances required by the Drawings or Specifications, and shall not otherwise relieve the CONTRACTOR of responsibility for measurements in compliance therewith.

Type of Line or Mark	Horizontal Position	Elevation
Permanent reference points	1 in 10,000	± 0.01 ft.
General excavation and earthwork	1 in 2,000	<u>+</u> 0.10 ft.

C. Tolerances for designed thicknesses shown on Contract Drawings and for elevations shown on the Contract Drawings shall be + 0.10 foot.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

A. Separate measurement for payment will not be made for work required under this Section.

4.2 PAYMENT

A. Separate payment will not be made for work required under this Section. All costs in connection with the work specified herein will be considered to be included in the applicable related item of work in the Bid Schedule, or incidental to the Contract.

END OF SECTION

SECTION 01090 REFERENCES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Related Sections
- B. References
- C. Abbreviations

1.02 RELATED SECTIONS

- A. Section 01010 Summary of Work
- B. Section 01019 Mobilization and Demobilization
- C. Section 01190 Health and Safety
- D. Section 01630 Product Options and Substitutions
- E. Section 01720 Project Record Documents
- F. Section 01730 Installation, Operation, and Maintenance Instructions
- G. Section 02221 Excavating, Backfilling, Compacting, and Grading
- H. Section 02687 Landfill Gas Wells and Well Heads
- I. Section 02830 Chain Link Fences
- J. Section 03300 Cast-In-Place Concrete
- K. Section 09910 Painting
- L. Section 11000 Equipment
- M. Section 15480 Piping
- N. Section 16050 Basic Electrical Requirements
- O. Section 16100 Basic Electrical Materials and Methods
- P. Section 16500 Lighting
- Q. Section 16910 Control Panels

1.03 REFERENCES

- A. The Contract Documents contain references to various standard specifications, codes, practices, and requirements for materials, workmanship, installation inspections, and tests, which references are published and issued by the organizations, societies, and associations listed below by abbreviation and name. Such references are hereby made a part of the Contract Documents to the extent cited.
- B. Any material, method, or procedure specified by reference to the number, symbol, or title of a specific specification or standard, such as a Commercial Standard, American National Standard, Federal or State Specification, Industry or Government Code, a trade association code or standard, or other similar standard, shall comply with the requirements in the latest revision thereof and any amendments or supplements thereto in effect on the date of Award of the Contract.
- C. The code, specification, or standard referred to, except as modified in these Specifications, shall have full force and effect as though printed in these Specifications. These Specifications and standards are not furnished to bidders since manufacturers and trades involved are assumed to be familiar with their requirements. The OWNER/ENGINEER will furnish, upon request, information as to how copies of the referenced specifications and standards may be obtained.
- D. Whenever the abbreviation is specified, it shall be understood to mean the full name of the respective organization as listed in paragraph 1.03 of this Section.

1.04 ABBREVIATIONS

A. Whenever the abbreviation is specified, it shall be understood to mean the full name of the respective organization as listed below.

AASHTO American Association of State Highway and Transportation Officials

ACI American Concrete Institute

AGA American Gas Association

AI Asphalt Institute

AIA American Institute of Architects

AICHE American Institute of Chemical Engineers

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

ANSI American National Standards Institute

API American Petroleum Institute

AREA American Railway Engineering Association
ARI Air-Conditioning and Refrigeration Institute

ASCE American Society of Civil Engineers

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers

ASME American Society of Mechanical Engineers

ASQC American Society for Quality Control

ASTM American Society for Testing and Materials

AWS American Welding Society

AWWA American Water Works Association

CALTRANS State of California Department of Transportation

CBM Certified Ballast Manufacturers
CGA Compressed Gas Association

CRSI Concrete Reinforced Steel Institute
EPA Environmental Protection Agency

ETL Electrical Testing Laboratories

FS Federal Specification

IEEE Institute of Electrical and Electronics Engineers

IES Illuminating Engineering Society

IPCEA Insulated Power Cable Engineer Association

ISA Instrument Society of America

ITL Independent Testing Laboratories

MIL U.S. Military Specification

NEC National Electrical Code

NEMA National Electrical Manufacturers Association

NETA International Electrical Testing Association

NFPA National Fire Protection Association

NSF National Sanitation Foundation

OSHA Occupational Safety and Health Administration

PPI Plastics Pipe Institute

SMACNA Sheet Metal and Air Conditioning Contractor's National Association

SSPC Steel Structures Painting Council

SWANA Solid Waste Association of North America

UBC Uniform Building Code

UL Underwriters Laboratories

UMC Uniform Mechanical Code

UPC Uniform Plumbing Code

USSPWC Uniform Standard Specifications for Public Works Construction

USBR U.S. Bureau of Reclamation

WCRSI Western Concrete Reinforcing Steel Institute

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

(Not Used)

END OF SECTION

SECTION 01190 HEALTH AND SAFETY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General requirements for the protection of Health and Safety of personnel involved in the construction of the Project.
- B. General requirements for furnishing services of a Safety Monitor.
- C. Preparation of Safety Program.

1.02 RELATED SECTIONS

- A. Section 01010 Summary of Work
- B. Section 01090 References
- C. Section 02221 Excavating, Backfilling, Compacting, and Grading

1.03 REFERENCES

A. The CONTRACTOR shall be familiar with the Safety Guidelines as prepared by the Solid Waste Association of North America (SWANA) National Landfill Gas Committee in December 1983. Copies may be obtained by writing to SWANA, 8750 Georgia Avenue, Suite 140, Silver Spring, Maryland 20910, telephone number (301) 585-2898.

1.04 QUALITY ASSURANCE

A. Nothing in this Section shall preclude the CONTRACTOR from complying with the more stringent requirements of the applicable Federal, State, County, OWNER and Industry Standards, rules, and regulations.

1.05 HAZARDOUS SITE CONDITIONS

- A. The CONTRACTOR is advised that the construction of this project is being performed over and adjacent to buried wastes and refuse. As these buried materials decompose anaerobically, they will generate landfill gas (LFG), which normally consists of carbon dioxide (CO₂); methane (CH₄), and occasionally hydrogen sulfide (H₂S) and other gases, depending on the composition of the buried materials. These gases usually vent to the atmosphere through the cover soil, but may migrate laterally over 1,000 feet to adjacent areas depending on site and weather conditions.
- B. The following landfill and LFG related information is included to assist the CONTRACTOR in developing his Safety Program and is not intended to encompass all steps that may be necessary to protect the workers or to comply with applicable regulations. A copy of the Safety Program shall be submitted to the OWNER and to the ENGINEER for approval seven (7) days prior to beginning construction.
 - 1. Landfill gases usually vent to the atmosphere through the cover soils, but may migrate laterally to adjacent areas depending on site and weather conditions.
 - 2. Landfills have the potential to create hazardous conditions if working conditions are not controlled or recognized. Some of the hazards are:
 - a. Fires may start spontaneously from exposed and/or decomposing refuse.

- b. Fires and explosions may occur from the presence of methane gas.
- c. Landfill gases may cause an oxygen deficiency in underground trenches, vaults, conduits, and structures.
- d. Hydrogen sulfide, a highly toxic and flammable gas, or other toxic gas may be present.
- e. Possible caving of trenches and excavations when working over or in refuse fills.
- f. Splash hazards associated with landfill leachate and LFG condensate.

1.06 SAFETY MONITOR

- A. The CONTRACTOR shall provide a person who will be designated as the LFG Safety Monitor. The Safety Monitor shall be thoroughly trained in rescue procedures, and in the use of safety equipment and gas detectors. He shall be present at all times during working hours whenever open trenches or excavations are greater than 2 feet in depth, when refuse is exposed, or when LFG is likely to be present.
- B. The Safety Monitor shall have appropriate instruments (detector[s]) to test for oxygen deficiency and for the presence of methane gas and hydrogen sulfide gas. A personal gas monitor (such as Lumidor Safety Products PGM13, Gas Tech GX-82, Model 1641, or similar unit[s]) shall be available for this purpose. The Safety Monitor shall periodically calibrate his instruments and regularly test the excavation areas, and other work space for safe working conditions and ensure that appropriate safety equipment is available at the site.
- C. The Safety Monitor shall have the delegated authority to order workers on the project site to comply with the LFG safety requirements. Failure to observe his order shall be cause for removal of the worker from the project.

1.07 SAFETY PROGRAM

A. Supplemental to the CONTRACTOR's regular safety program, the CONTRACTOR shall develop and institute a Site Safety Plan to inform all workers and site visitors of the potential for the presence of methane and other landfill gases emanating from the natural decomposition of refuse buried at or near the job site and the importance of safety precautions to ensure the safety of workers and the public. The CONTRACTOR shall also instruct all workers and maintain strict control of construction activities to protect and maintain the integrity of the work features as they are installed.

1.08 SAFETY PRECAUTIONS

- A. CONTRACTOR shall carry a current Cal-OSHA trench permit for all trenching and excavation activities greater than five (5) feet in depth.
- B. In addition to conforming to the safety rules and regulations of governmental authorities having jurisdiction, the CONTRACTOR shall take the following precautionary measures:
 - Periodically during construction, the work space should be monitored for concentrations of methane, oxygen
 and hydrogen sulfide. Workers shall not be permitted to enter a workspace where there is an oxygen
 deficiency or a combustible mixture of gases without appropriate protection. Positive fan-forced ventilation to
 dilute gas mixtures and avoid oxygen deficiency should be provided when work is necessary in any
 workspace.
 - 2. Smoking shall be prohibited on site at all times.
 - 3. In the event toxic gases are present at concentrations hazardous to the workers or the general public, the CONTRACTOR shall immediately evacuate all persons from the area until the area is determined safe by the Safety Monitor.
 - 4. Soil shall be stockpiled adjacent to the work space in areas of exposed refuse for fire-fighting purposes.
 - 5. The use of explosives or firearms shall not be permitted on the site.
 - 6. If refuse is exposed during construction activities, it shall be covered as soon as possible after exposure with at least a 6-inch layer of soil. In no event shall the refuse remain exposed overnight, unless otherwise approved by the OWNER/ENGINEER and/or the local health authorities.

- 7. If refuse is excavated during construction activities, it shall be disposed of as directed by the OWNER/ENGINEER. Refuse may be temporarily stockpiled if covered with a 6-inch layer of soil, provided local health authorities approve. Refuse stockpiles shall be removed from the work site before the end of work each day.
- 8. CONTRACTOR will be responsible for disposal of all drill cuttings that result from the construction of the work specified in the Contract Drawings and Specifications.
- 9. Arrangements for waste disposal must be coordinated by the CONTRACTOR. The cost of handling and transporting refuse to the nearest point of disposal shall be considered as included in the contract price for the pay item with which they are used.
- 10. No welding shall be permitted in trenches, enclosed areas, or over refuse unless performed in areas of the site tested and approved by the Safety Monitor.
- 11. Combustion engine powered construction equipment used in excavating activities and/or refuse removal operations shall be equipped with vertical exhaust and spark arrestors.
- 12. Electric motors and controls utilized in excavation areas and in below ground work spaces shall be explosion-proof.
- 13. As construction progresses, all pipe openings and valves shall be closed as soon as installed to prevent the migration of gases through the pipeline systems.
- C. If not already included in the standard safety practices, the CONTRACTOR should include Occupational Health and Safety Act (OSHA) training (29 CFR 1910) and the following measures in his safety program:
 - 1. For all excavations and trenches, the CONTRACTOR shall comply with OSHA regulation, 29 CFR Part 1926, Subpart P for trench safety.
 - 2. Inhalation of landfill gases shall be avoided. Such gases or oxygen-deficient air may cause nausea and dizziness, which could lead to accidents. Work upwind of the excavation where possible, unless the excavation is constantly monitored and declared safe.
 - 3. Workers shall avoid contact with exposed refuse, condensate, or leachate. Irritants or hazardous materials may be present.
 - 4. No excavation or drilled hole greater than 2 feet deep shall be left unattended or left open at any time unless it is securely covered in a safe manner acceptable to the OWNER/ENGINEER or regulatory agency having jurisdiction.
 - 5. Fire extinguishers with a rating of at least A, B, and C shall be available at all times on the site.
 - 6. Startup and shutdown of equipment shall be avoided in areas of exposed refuse.
 - 7. Personnel, when in an open excavation or in the presence of landfill gas, shall be fully clothed with non-sparking cloth, wear shoes with non-metallic soles, and wear a hard hat and safety goggles or glasses. The excavation shall be monitored continuously in a manner satisfactory to the Safety Monitor for the presence of methane, hydrogen sulfide, and oxygen for the duration that personnel are in an excavation. Workers should immediately vacate an excavation if methane, hydrogen sulfide, or oxygen deficiency is detected therein, and shall not be permitted to re-enter the excavation unless satisfactory precautionary measures for a safe work environment are implemented.
 - 8. Assembly of construction work shall be performed outside of trenches or excavations. Prefabricated items shall be lowered into excavations. Only final connections may be made within trenches with the necessary precautions stated.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Trench Safety: Separate measurement for payment will not be made for Trench Safety
- B. Site Safety: Separate measurement for payment will not be made for Site Safety.

4.02 PAYMENT

- A. Trench Safety: Separate payment will not be made for work or materials associated with Trench Safety. All costs associated with Trench Safety will be considered subsidiary to the applicable item in the Bid Schedule, or incidental to the Contract.
- B. Site Safety: Separate payment will not be made for work or materials associated with Site Safety. All costs with Site Safety will be considered subsidiary to the applicable item in the Bid Schedule, or incidental to the Contract.

END OF SECTION

SECTION 01300 SUBMITTALS

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the requirements specified in the General and Supplementary Conditions. If the requirements of this section and the conditions noted above conflict with each other, the CONTRACTOR shall adhere to the more stringent requirement as determined by the OWNER/ENGINEER.
- B. Section Includes: General requirements for the preparation and submission of the following submittals required for the completion of the Work of the Contract:
 - 1. Technical Submittals:

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- a. Schedule of Technical Submittals
- b. Shop Drawings
- c. Samples
- d. Product and Performance Data
- e. Manufacturer's Instructions
- f. Design Calculations and Design Drawings
- General Submittals:
 - a. Schedule of General Submittals
 - b. Project Construction Schedule
 - c. Progress Payment Schedule
 - d. Equipment List and Labor Rates
 - e. Monthly Progress Reports
 - f. Safety Program
- 3. Submittals Not Requiring Approval:
 - a. Weekly Status Reports
 - b. Weekly Manhour Reports/Employee Roster
 - c. Monthly Schedule Updates
 - d. Safety Program
- C. All submittals shall be in English.
- D. The CONTRACTOR shall submit all submittals to the OWNER/ENGINEER.
- E. Technical and General Submittals shall be numerically serialized by type, Technical Submittal with a "T" prefix (T-1, T-2, T-3, etc.) and General Submittals with a "G" prefix (G-1, G-2, G-3, etc.).
- F. The CONTRACTOR shall submit the number of copies of each submittal that the CONTRACTOR requires to be returned, plus four (4) copies that will be retained by the OWNER/ENGINEER.
- G. The OWNER/ENGINEER will clearly label the submittals as follows and return to the CONTRACTOR:
 - 1. Approved

- 2. Approved as Noted
- 3. Revised and Resubmit
- 4. Rejected
- 5. Information Only
- H. When submittals are returned marked with either "Revise and Resubmit" or "Rejected" the CONTRACTOR shall make such revisions and corrections as required and resubmit the submittal with the same submittal number followed by R1 (Revision One). Example: T-5 R1.

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1.02 RELATED SECTIONS

- A. General Conditions
- B. General Conditions
- C. Section 01025 Measurement and Payment
- D. Section 01190 Health and Safety
- E. Section 01400 Quality Control
- F. Section 1630 Product Options & Substitutions
- G. Section 01720 Project Record Documents

1.03 TECHNICAL SUBMITTALS

A. Schedule of Technical Submittals:

- 1. The CONTRACTOR shall prepare and submit a Technical Submittals Schedule listing all technical submittals required by this Section.
- 2. The Technical Submittals Schedule shall separate submittals by major specification section. This Schedule shall include submittal delivery dates, required return dates, material delivery dates, and other pertinent data required to ensure that the project schedule is met by the CONTRACTOR.
- 3. This Schedule shall be monthly updates to reflect progress and any additions or deletions to the submittal schedule. Copies of the updated schedule shall be furnished to the OWNER/ENGINEER during the first week of each calendar month.

B. Shop Drawings:

- 1. Shop drawings shall establish the actual detail of all manufactured or fabricated items, indicate proper relation of adjoining work, and incorporate minor changes of design or construction to suit actual conditions. Shop drawings shall be drawn to scale and shall be completely dimensioned.
- 2. Sheet sizes of shop drawings shall be 8 1/2 inches x 11 inches, 11 inches x 17 inches, 17 inches by 22 inches, 22 inches x 23 inches, or 34 inches x 44 inches.
- 3. A clear space of 3 inches by 3 inches shall be provided on each drawing for the OWNER/ENGINEER's review stamp and comments.
- 4. Shop drawings shall be submitted to the OWNER/ENGINEER in the form of a reproducible transparency, in addition to the copies required by Article 1.01F.
- 5. After the OWNER/ENGINEER has completed his review of shop drawings, he will return copies to the CONTRACTOR indicating the approval status as described in Article 1.01.G.
- 6. The OWNER/ENGINEER will review and generally return shop drawings within ten (10) days of receipt by the OWNER/ENGINEER.

C. Samples:

- 1. The CONTRACTOR shall furnish the OWNER/ENGINEER at least three (3) samples of each of the various materials, except field samples, together with the finish thereon, as specified for and intended to be used on or in the work.
- 2. The CONTRACTOR shall submit all samples to the OWNER/ENGINEER at least 10 days before purchasing, fabricating, applying, or installing such materials and finishes, unless otherwise stated. The OWNER/ENGINEER will review the samples for visual aspects such as kind, color, pattern, and texture, and will approve or ask for resubmittal of samples generally within 10 days of the CONTRACTOR's submittal. Approvals of samples will be given by the OWNER/ENGINEER in writing.
- 3. Unless otherwise specified in the various sections of these Specifications, the CONTRACTOR shall submit all samples, other than field samples, in triplicate. A cover letter shall accompany the sample and shall list all items being transmitted, designating their particular usage and location in the project.
- 4. After the OWNER/ENGINEER has performed his review and analysis of samples, two samples will be retained and the remaining sample will be returned to the CONTRACTOR, with the OWNER/ENGINEER's comments.
- 5. Samples shall be submitted and resubmitted until approved as satisfactory. Each change in manufacturing process or batch shall require submittal of samples for approval. Approval of a sample shall not be taken in itself to change or modify any contract requirement. All materials, color, pattern and texture in the completed building or structure shall be equal in every respect to that of the approved samples.
- 6. Each sample shall be identified completely as to product, color, manufacturer, trade name, lot, style, model, location of use, and Contract Document reference, as well as the names of the CONTRACTOR, Supplier, Project and OWNER.
- 7. Test samples, as designated by the OWNER/ENGINEER, may also be selected from the materials or equipment delivered by the CONTRACTOR to the site for use in the work. If any test sample fails to meet the specification requirements, such materials or equipment which fail the testing, shall be removed and replaced by the CONTRACTOR with materials or equipment meeting the Specification requirements.
- 8. Field samples shall be prepared at the site by the CONTRACTOR in the manner and number as specified in these Specifications. Affected finish work shall not be commenced until the OWNER/ENGINEER has approved the field samples, in writing.

D. Product and Performance Data:

- 1. Each copy shall be marked to identify applicable products, models, options, performance and other data; manufacturers' standard data shall be supplemented to provide information unique to the work.
- 2. The CONTRACTOR shall submit the number of copies which the CONTRACTOR requires to be returned, plus four (4) copies which will be retained by the OWNER/ENGINEER.
- E. Manufacturer's Instructions: When required by the manufacturer's warranty requirements, the CONTRACTOR shall submit manufacturer's printed instructions for delivery, storage, shelf life, assembly, installation, adjusting, and finishing.

F. Design Calculations and Design Drawings:

 Design Calculations: When specified in the Specifications or the Contract Drawings, or requested by the OWNER/ENGINEER, design calculations shall be submitted to the OWNER/ENGINEER for review with all pertinent data, assumptions, objective, criteria, applicable codes, standards and references. The calculations shall be on 8-1/2 by 11-inch or 11 by 17-inch sheets. Each design calculation set shall bear page numbers, titles, revision numbers, date and calculation number. Where multiple number of items are designed in a particular system, the calculations shall be preceded by a table of contents.

2. Design Drawings:

- a. When specified in the Specifications or the Contract Drawings, or requested by the OWNER/ENGINEER, design drawings shall be submitted to the OWNER/ENGINEER or review.
- b. Pertinent requirements of Article 1.03.B of this Section shall be applicable for submittal of design drawings.

G. Certificates of Compliance:

- 1. The CONTRACTOR shall submit certificates of compliance for certain materials and products in lieu of the specified sampling and testing procedures as specified in each Specification section. Submit certificates required for demonstrating proof of compliance of materials with specification requirements in duplicate with each lot of material delivered to the Work. The lot so certified shall be clearly identified by the certificate. Certificates shall be signed by an authorized representative of the producer or manufacturer and shall state that the material complies in all respects with the requirements of the Contract Documents. In the case of multiple shipments, each shipment shall be accompanied by a certificate of compliance.
- 2. The certificate of compliance shall be accompanied by a certified copy of test results or shall state that such test results are on file with the producer or manufacturer and shall be furnished to the ENGINEER on request. The certificate shall give the information specified for samples in Paragraph C above, the name and address of the organization performing the tests, the date of the tests, and the quantity of material shipped.
- 3. Materials used on the basis of a certificate of compliance may be sampled and tested at any time. The fact that material is used on the basis of a certificate of compliance shall not relieve the CONTRACTOR of responsibility for incorporating material in the Work that conforms to the requirements of the Contract and any such material not conforming to such requirements will be submit to rejection, whether in place or not.
- 4. The ENGINEER reserves the right to refuse to permit the use of certain materials on the basis of a certificate of compliance.

1.04 GENERAL SUBMITTALS

A. Schedule of General Submittals: The CONTRACTOR shall prepare and submit a Schedule of General Submittals listing all General Submittals required by this Section.

A. Schedules and Reports:

1. The CONTRACTOR shall prepare and submit Schedules and Reports in accordance with the requirements of this Section.

- 2. The schedules and reports shall describe the CONTRACTOR's work plan in sufficient detail as delineated below to provide:
 - a. Assurance to the OWNER/ENGINEER that the finished work complies accurately with the Contract Documents.
 - b. A basis for determining the progress of the work.
 - c. A basis for the OWNER's internal planning activities.
- 3. Within ten calendar days after Notice to Proceed, the CONTRACTOR shall provide the OWNER/ENGINEER with initial copies of the General Submittals specified in this Section.
- 4. The schedules shall be in a reproducible form, prepared to the same scale or may be combined as approved by the OWNER/ENGINEER.
- 5. Unless otherwise specified, the schedules shall be presented in graphic format and shall be updated for each construction meeting at least monthly, and transmitted to the OWNER/ENGINEER.
- 6. The CONTRACTOR shall obtain approval of the various schedules specified in this Section before submitting the first application for payment. Schedule revisions also require OWNER/ENGINEER approval.

B. Project Construction Schedule:

- 1. Scheduling: A preliminary issue of the Project Construction Schedule shall be prepared by the CONTRACTOR and submitted with the bid. Ten (10) days after receipt of Notice to Proceed the CONTRACTOR shall submit the Project Construction Schedule for approval and issue the approved Project Construction Schedule ten days after receipt of approval and comments from the OWNER/ENGINEER.
- 2. Format: The Project Construction Schedule shall consist of the following items, each compatible with the other and developed from the same basis:
 - a. Schedule: Bar Chart or Critical Path Method (CPM)
 - b. Critical Milestone Dates as listed below.
 - 1) Start/complete mobilization.
 - 2) Start/complete earthwork for blower/flare facility
 - 3) Start/complete construction of concrete foundations
 - 4) Start/complete installation of the blowers, flare, and piping
 - 5) Start/complete installation of a condensate collection and disposal system
 - 6) Start/complete installation of the vertical landfill gas extraction
 - 7) Start/complete landfill gas collection and controls system piping
 - 8) Start/complete system start-up
 - 9) Start/complete final inspection
 - 10) Start/complete demobilization
- 3. Computer Generated Schedule: The CONTRACTOR may generate the CPM Schedule manually or by using a computer. The CPM Schedule shall include all significant items of Work.
- 4. Comments Incorporated: The CONTRACTOR shall incorporate the OWNER/ENGINEER's comments into revisions of the Project Construction Schedule, adjust the manpower loading as

required and resubmit the schedule to the OWNER/ENGINEER for approval along with a summary of the changes.

5. Revised schedule, if required, will be given a new revision number and submitted to the OWNER/ENGINEER for approval.

C. Progress Payment Schedule:

- Progress Payment Schedule: The CONTRACTOR shall submit a proposed Progress Payment Schedule which coincides with the Project Construction Schedule. The Progress Payment Schedule shall b by month and shall total the contract price as awarded. A proposed schedule will be required a the pre-construction conference.
- 2. The Schedule of Payments will be subject to modification by, and approval of, the OWNER/ENGINEER. If the Schedule is unbalanced beyond reasonable consideration, the CONTRACTOR will be required to revise the Schedule within reasonable consideration, the CONTRACTOR will be required to revise the Schedule within reasonable limits as directed.
- 3. Modifications: Changes shall be made and submitted with each Schedule Revision and/or each executed Contract Price change in accordance with the requirements of the General Conditions.
- E. Equipment List and Labor Rates: The CONTRACTOR shall submit Equipment List and Labor Rates Schedule for use in conjunction with any Force Account Work done on a time and material basis, to determine compensation to the CONTRACTOR. The schedule shall include all equipment and personnel that the CONTRACTOR expects to use on this project. It shall also include any other equipment and personnel that the CONTRACTOR has available that may be used on the Project. The rate shall include all costs and constitute full payment to the CONTRACTOR for use of operated equipment and personnel. This list shall be submitted with the bid.

D. Monthly Progress Reports:

- 1. The CONTRACTOR shall submit a Monthly Progress Report, listing all construction activities and their schedule completion dates. Activities shall show the percent of completion and the days required for completion, and shall include milestone events that occurred during the month.
- 2. A Monthly Progress Report format shall be furnished by the CONTRACTOR for approval by the OWNER/ENGINEER at the preconstruction conference.
- 3. Three copies of each Monthly Progress Report shall be forwarded to the OWNER/ENGINEER no later than the fifth working day after the last working day the Report is based on.
- 4. Other Requirements: Requests for progress payments shall be accompanied by the latest pertinent report.
- G. Safety Program: A preliminary Safety Program shall be prepared by the CONTRACTOR for presentation and discussion at the preconstruction meeting. The CONTRACTOR's Safety Monitor shall be named and be present at the preconstruction meeting. Although the Safety Program will not be formally approved, the OWNER will review and comment on its adequacy.

1.05 SUBMITTALS NOT REQUIRING APPROVAL

A. The CONTRACTOR shall furnish the following submittals for information only. These submittals will not be approved and returned to the CONTRACTOR.

- Weekly Status Reports: The CONTRACTOR shall submit a Weekly Status Report to the OWNER/ENGINEER by Friday noon. The report shall be on a form satisfactory to the OWNER/ENGINEER, and shall include items such as a Summary of Work completed and a Two-Week Look Ahead Bar Chart.
- 2. Weekly Manhour Reports/Employee Roster: The CONTRACTOR shall provide a weekly employee roster listing all CONTRACTOR and subcontractor employees. The subcontractor shall also tabulate total manhours worked each week including manhours spent by subcontractor's personnel, craft, supervision, and management, and submit this information to the OWNER/ENGINEER. The manhour report shall include separate totals for each craft and administrative classification.
- 3. Monthly Schedule Updates: The CONTRACTOR shall submit an updated schedule, with the Critical Milestone clearly identified, by the first of each month. The status of the Schedule shall indicate percent complete by activity and remaining duration of in-progress activities.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

- 4.01 SUMMARY
 - A. Separate measurement for payment will not be made for work required under this Section
- 4.02 PAYMENT
 - A. Separate payment will not be made for work required under this Section. All costs in connection therewith shall be considered to be incidental to the applicable related items of Work to which they pertain.

SECTION 01400 QUALITY CONTROL

PART 1 GENERAL

1.01 SUMMARY

This section supplements the requirements specified in the General and Supplementary Conditions. If the requirements between this section and the conditions noted above conflict with each other, the CONTRACTOR shall adhere to the more stringent requirement as determined by the OWNER/ENGINEER.

A. Section Includes:

- 1. Acceptance testing by the OWNER/ENGINEER
- 2. Control testing by the CONTRACTOR, and
- 3. Certificates of compliance

B. Related Sections:

- 1. General Conditions
- 2. Supplementary Conditions
- 3. Submittals

1.02 SOURCE OF MATERIALS

A. The CONTRACTOR shall notify the OWNER/ENGINEER in writing of the sources from which he proposes to obtain material requiring approval, ,certification, or testing. Such notification shall be made as soon as possible after award of Contract but no later than 15 days after receipt of the Notice to Proceed.

1.03 ACCEPTANCE TESTING

- A. Acceptance testing is the testing of materials prior to their use in the work and also any testing deemed necessary by the OWNER/ENGINEER for acceptance of the completed work. The OWNER/ENGINEER will perform acceptance testing of materials and workmanship in accordance with the Contract Documents and reserves the right to perform additional testing at any time to determine conformance with the Contract Documents.
- B. Acceptance testing by the OWNER/ENGINEER is not to be considered as a replacement for control testing conducted by the CONTRACTOR or a manufacturer producing materials for the CONTRACTOR. Acceptance testing will be at the expense of the OWNER.

1.04 CONTROL TESTING

A. Control testing is the testing of materials prior to their delivery from a manufacturer, or during construction, such as soils tests before and after compaction, concrete tests during placement, except for concrete strength tests which will be performed by the OWNER/ENGINEER, and such other tests as are specified in the various sections of the Specifications to ensure compliance with the Contract Documents. The CONTRACTOR shall assume full responsibility for control testing and give sufficient notice to the

- OWNER/ENGINEER to permit him to witness the tests. Control testing shall be at the expense of the CONTRACTOR and shall be performed by an independent testing firm.
- B. The CONTRACTOR shall submit the name, address, and qualifications, together with the scope of proposed services, of the proposed testing firm to the OWNER/ENGINEER for approval at least 15 days prior to the scheduled commencement of any work involving such testing. Should the CONTRACTOR desire to use more than one firm for control testing, the required information shall be submitted for each proposed firm as specified herein.

1.05 TEST REPORTS

A. Within 5 days after completion of testing performed by or for the CONTRACTOR, the test results shall be submitted to the OWNER/ENGINEER. Test reports shall be identified with the information specified for samples in Section 01300 and additionally, the name and address of the organization performing the test, and the date of the tests.

1.06 CERTIFICATES OF COMPLIANCE

- A. The CONTRACTOR may use certificates of compliance for certain materials and products in lieu of the specified sampling and testing procedures. Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be submitted in duplicate with each lot of material delivered to the work. The lot so certified shall be clearly identified by the certificate. Certificates shall be signed by an authorized representative of the producer or manufacturer and shall state that the material complies in all respects with the Contract requirements. In the case of multiple shipments, each shipment shall be accompanied by a certificate of compliance.
- B. The certificate of compliance shall be accompanied by a certified copy of test results or shall state that such test results are on file with the producer or manufacturer and shall be furnished to the OWNER/ENGINEER on request. The certificate shall give the information specified for samples in Section 01300, the name and address of the organization performing the tests, the date of the tests, ad the quantity of material shipped.
- C. Materials used on the basis of a certificate of compliance may be sampled and tested at any time. The fact that material is used on the basis of a certificate of compliance shall not relieve the CONTRACTOR of responsibility for incorporating material in the work which conforms to the requirements of the Contract and any such material not conforming to such requirements will be subject to rejection, whether in place or not.
- D. The OWNER/ENGINEER reserves the right to refuse to permit the use of certain materials on the basis of a certificate of compliance.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

- 4.01 MEASUREMENT AND PAYMENT
 - A. Separate measurement or payment will not be made for work required under this section. All costs in connection therewith will be considered incidental to the item or items of work to which they pertain.

SECTION 01500 CONSTRUCTION FACILITIES

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the requirements specified in the General and Supplementary Conditions. If the requirements of this section and the conditions noted above conflict with each other, the CONTRACTOR shall adhere to the more stringent requirement as determined by the OWNER/ENGINEER.
- B. Section Includes: Construction facilities (temporary facilities) required for the construction of the permanent facilities specified under the Scope of Work of this Contract.
- A. Construction facilities shall include furnishing of all equipment, materials, tools, accessories, incidentals, labor, and performing all work for the installation of equipment and for construction of facilities, including their maintenance, operation, and removal, if required, at the completion of the Work under the Contract.

1.02 RELATED SECTIONS

- A. General Conditions
- B. Supplementary Conditions
- C. Section 01019 Mobilization and Demobilization
- D. Section 01560 Temporary Controls

1.01 DESCRIPTION

- A. Construction facilities shall include, but not be limited to the following temporary offices, utilities, equipment, materials, facilities, and services:
 - 1. Field Office
 - 2. Parking Areas
 - 3. Temporary Access Roads
 - 4. Storage of Materials and Equipment
 - 5. Construction Equipment
 - 6. Temporary Sanitary Facilities
 - 7. Temporary Electric Power
 - 8. Temporary Water
 - 9. Temporary Heating and Cooling
 - 10. Temporary Telephone Service

- 11. First Aid Facilities
- 12. Security
- 13. Trash receptacles

1.04 REFERENCES

A. Construction facilities shall also be constructed/installed, maintained and operated in accordance with the applicable Federal, State, County, and Utility laws, rules, permits and regulations. Notwithstanding contrary provisions of General Conditions, Supplementary Conditions, and Standard Specifications, nothing in the Contract Drawings and Specifications shall be construed to permit work not conforming to the above.

1.05 GENERAL REQUIREMENTS

- A. The CONTRACTOR shall be responsible for furnishing, installing, constructing, operating, maintaining, removing and disposing of the facilities, as specified in this Specification, and as required by the OWNER/ENGINEER for the completion of the Work under the Contract.
- B. Construction facilities shall be located as approved by the OWNER, and maintained in a clean, safe and sanitary condition at all times until completion of the Contract. Construction facilities shall not interfere with ongoing site operations or other construction activities.
- C. Upon completion of the Contract, areas impacted by construction facilities shall be restored in the status specified in Article 1.20 of this Section.
- D. The requirements specified herein are in addition to any requirements specified elsewhere in the Contract Documents. Construction facilities shall meet the requirements for all-weather service.
- E. Land disturbances related to the construction facilities shall be minimized to the greatest extent possible and the land restored to the extent practical, to its original contours by grading to provide positive drainage and by seeding the area to match with existing vegetation.
- F. Utilities shall be designed and constructed to provide uninterrupted service.

1.06 FIELD OFFICE

- A. CONTRACTOR shall provide an office for his own staff.
- B. The CONTRACTOR shall meet with the OWNER and discuss field office requirements prior to mobilizing such facilities at the site.

1.07 PARKING AREAS

A. CONTRACTOR shall provide parking area for maintenance and delivery vehicles, the OWNER/ENGINEER's and CONTRACTOR's representatives, and for other authorized visitors, as approved by the OWNER.

1.08 ACCESS ROADS

A. Existing access roads shall be used for the convenience of the CONTRACTOR in the performance of the Work under this Contract. Construction vehicles are prohibited from traveling on the face of landfill slopes, except when specifically approved the OWNER/ENGINEER.

1.09 STORAGE OF MATERIALS AND EQUIPMENT

- A. CONTRACTOR shall make arrangements for storage areas for materials, equipment, and debris. Locations and configurations of such facilities shall be subject to the approval of the OWNER/ENGINEER.
- B. All operations of the CONTRACTOR, including storage of materials, shall be confined to approved areas. CONTRACTOR shall be liable for any and all damage caused by him during such use by him of property of the OWNER or other parties. Materials shall be stored in accordance with manufacturer's instructions as applicable.
- C. CONTRACTOR shall store construction materials and equipment within boundaries of designated areas. Storage of gasoline or similar fuels shall conform to the requirements specified in Article 1.05 of Section 01560.

1.10 CONSTRUCTION EQUIPMENT

- A. CONTRACTOR shall erect, equip, and maintain all construction equipment in accordance with all applicable statutes, laws, ordinances, rules and regulations of the OWNER or other authority having jurisdiction.
- B. Scaffolding, staging, runways, hoists, barricades, and similar equipment required for performance of the Contract shall be provided and maintained by the CONTRACTOR. Hoists or similar equipment shall be provided with operators and signals, as required.
- C. CONTRACTOR shall provide, maintain, and remove upon completion of the Work, all temporary rigging, scaffolding, hoisting equipment, debris boxes, barricades around openings and excavations, fences, ladders, and all other temporary work, as required for all work hereunder unless otherwise directed by the OWNER/ENGINEER.
- D. Construction equipment and temporary work shall conform to all the requirements of state, county, and local authorities, OSHA, and underwriters, which pertain to operation, safety, and fire hazard. CONTRACTOR shall furnish and install all items necessary for conformity with such requirements, whether or not called for under separate sections of these Specifications.

1.11 TEMPORARY SANITARY FACILITIES

- A. CONTRACTOR shall provide temporary sanitary facilities for use by all employees and persons engaged in the Work, including lower-tier subcontractors, their employees, and authorized visitors.
- B. Sanitary facilities include enclosed chemical toilets and washing facilities. The facilities shall meet the requirements of local public health standards. Open pit or trench latrines will not be permitted.
- C. Sanitary facilities shall be located as approved by the OWNER/ENGINEER, and shall be maintained in a sanitary condition during the entire course of the Work.

1.12 TEMPORARY ELECTRIC POWER

A. The CONTRACTOR shall provide and maintain during the course and progress of the Work all electrical power and wiring requirements to facilitate the work of all trades and services associated with the Work. The CONTRACTOR shall make arrangements with the applicable serving utility company or provide generators and shall pay all charges for providing and maintaining electrical service including usage costs at the site. All temporary wiring, feeders, and connections shall be furnished by the CONTRACTOR.

- B. Routing of temporary conductors, including welding leads, shall not create a safety hazard nor interfere with operation and maintenance of existing facilities.
- C. All temporary wiring installed by the CONTRACTOR shall be accomplished in accordance with the applicable requirements of the local electrical code.

1.13 TEMPORARY WATER

- A. Drinking Water: CONTRACTOR shall provide drinking water in bottles from an approved source at no additional cost to the OWNER.
- B. Construction Water: The CONTRACTOR is responsible for providing any additional water required to complete the work in accordance with the Contract Documents.

1.14 TEMPORARY HEATING AND COOLING

(Not Used)

1.15 FIRST AID FACILITIES

A. First aid equipment and supplies shall be provided to serve all personnel at the site. The first aid facilities shall be equipped as required by authorities having jurisdiction.

1.16 TRASH RECEPTACLES

A. The CONTRACTOR shall meet with the OWNER and discuss options for trash receptacles prior to mobilizing such facilities at the site.

1.17 SECURITY

A. The CONTRACTOR shall make all necessary provisions and be responsible for the security of the Work and the Site until final inspection and acceptance of the Work.

1.18 SHUT-DOWN TIME OF SERVICES

A. The CONTRACTOR shall not disconnect or shut down any part of the existing utilities and services, except by express permission of the OWNER/ENGINEER. The CONTRACTOR shall submit a schedule of estimated shut-down time in order to obtain such permission, and shall notify all interested parties, as required.

1.19 MAINTENANCE

A. General: CONTRACTOR shall maintain all construction facilities, utilities, temporary roads, services, and the like in good working condition as required by the OWNER/ENGINEER during the term of the Contract.

1.20 STATUS AT COMPLETION

- A. Upon completion of the Work, or prior thereto, when so required by the OWNER/ENGINEER, the CONTRACTOR shall:
 - 1. Repair damage to existing access road caused or resulting from the CONTRACTOR's work.

- 2. Remove and dispose of all construction facilities including office trailers, and other facilities and utilities including all concrete foundations. Similarly, all areas utilized for temporary facilities shall be returned to substantially their neat original, natural state, or as otherwise indicated or directed.
- 3. Obliterate temporary roads built for CONTRACTOR's convenience and restore the area to near original conditions to the extent practicable.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

- 4.01 MEASUREMENT
 - A. Separate measurement for payment will not be made for work specified in this Section.
- 4.02 PAYMENT
 - A. Separate payment will not be made for work specified in this Section. Full compensation for such work will be considered to be included in the lump sum price quoted for mobilization in the Bid Schedule.

SECTION 01561 CONSTRUCTION CLEANING

PART 1 GENERAL

1.01 SUMMARY

This section supplements the requirements specified in the General and Supplementary Conditions.

- A. Section Includes.
 - 1. Cleanup during construction, and
 - 2. Final cleaning of the site prior to acceptance of the Project by the OWNER.

1.02 RELATED SECTIONS

- A. General Conditions
- B. Supplementary Conditions
- C. Section 01500 Construction Facilities

1.03 GENERAL

- A. It is required that the entire site be kept in a neat and orderly condition, and the OWNER or his representative may, at any time during construction, order a general cleanup of the site as a part of the work under this Section.
- B. CONTRACTOR shall dispose of waste, trash, and debris in a safe, acceptable manner, in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. The CONTRACTOR shall be required to discuss methods of waste disposal with the OWNER and comply with the requirements and conditions determined by the OWNER. Burning of trash and debris on the site will not be permitted.

1.04 CLEANUP DURING CONSTRUCTION

- A. Cleanup: The CONTRACTOR will be required to clean up construction work areas including all office facilities and dispose of waste material as specified in Article 1.03B. Cleanup of construction work areas will be required on a daily basis. At the close of each day's work all small quantities of waste and debris resulting from construction activities and from office facilities shall be gathered up and disposed of. Waste and debris shall not be allowed to accumulate in such quantities as to crease an unsightly appearance, or safety or fire hazard, nor shall it interfere in any way with free access to, and operation of existing facilities.
- B. Waste Disposal: The CONTRACTOR shall provide suitable receptacles for all construction office waste material such as wrapping paper, discarded containers, scrap lumber, scrap metals, etc. as specified in Article 1.03B.

1.05 FINAL SITE CLEANUP

A. Prior to final inspection, the entire site shall be thoroughly cleaned and shall be put into a neat, acceptable condition. All construction waste and unused materials, loose rock and stones, excess earth, and debris of any description resulting for the Work shall be removed from the entire site.

- B. All pavements and paved walks shall be hosed down and scrubbed clean where necessary.
- C. Mortar droppings shall be thoroughly removed from concrete slabs and pavements. All concrete flatwork and exposed vertical surfaces of concrete and masonry shall be hosed down and scrubbed clean.
- D. All construction areas shall be thoroughly cleaned to the satisfaction of the OWNER/ENGINEER prior to final acceptance of the completed Contract.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT AND PAYMENT

A. Separate measurement or payment will not be made for work required under this section. All costs in connection with the work specified herein will be considered incidental to the Contract.

SECTION 01600 MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 SUMMARY

This section supplements the requirements specified in the General and Supplementary Conditions. If the requirements of this section and the conditions noted above conflict with each other, the CONTRACTOR shall adhere to the more stringent requirement.

A. Section Includes: General requirements for materials and equipment including handling, transportation, and storage thereof.

1.02 RELATED SECTIONS

- A. General Conditions
- B. Supplementary Conditions
- C. Section 01300 Submittals
- D. Section 01400 Quality Control
- E. Section 01630 Product Options and Substitutions

1.03 QUALITY OF MATERIALS

- A. Materials and equipment provided shall be new, except as may be indicated in the Specifications or the Contract Drawings.
- B. The materials and equipment shall be manufactured, handled, transported, stored and used in accordance with the requirement of the manufacturer and to ensure completed work meets the requirements of the Contract Documents.

1.04 HANDLING AND TRANSPORTATION

A. Handling:

- 1. Avoid bending, scraping, or overstressing materials and equipment. Protect projecting parts by blocking with wood, by providing bracing, or by other approved methods.
- 2. Materials and equipment shall be protected from soiling and moisture by wrapping or by other approved means.
- 3. Small parts of equipment and accessories shall be packaged in containers such as boxes, crates or barrels to avoid dispersal and loss. Firmly secure an itemized list and description of contents to each such container.
- B. Transportation: Loading, transporting, unloading and storage of all materials and equipment shall be conducted such that they are kept clean and free from damage.

1.05 STORAGE AND PROTECTION

- A. Provide sheltered, weathertight or heated weathertight storage as required for materials and equipment subject to weather damage.
- B. Provide blocking, platforms or skids for materials and equipment subject to damage by contact with ground.
- C. Store packaged materials in their original unbroken package or container.
- D. Protect materials and equipment from damage during warehousing operations.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT AND PAYMENT

A. Separate measurement or payment will not be made for work required under this section. All costs in connection therewith will be considered incidental to the time of work to which they pertain.

END OF SECTION

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