FORM APPROVED COUNTY COUNSEL

SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

909



FROM: Riverside County Department of Waste Resources

SUBMITTAL DATE: August 18, 2015

SUBJECT: Approval of Contract Documents including Specifications for the Construction of Site Drainage Improvements at the Lamb Canyon Sanitary Landfill, District 5. [\$0 – Department of Waste Resources Enterprise Funds], CEQA Exempt.

RECOMMENDED MOTION: That the Board of Supervisors:

- 1. Find that the Project is exempt from the California Environmental Quality Act (CEQA) pursuant to State CEQA Guidelines Sections 15061(b)(3) (General Rule for Exemption), and categorically exempt pursuant to Section 15301 (Existing Facilities) and Section 15304 (Minor Alterations of Land); and
- 2. Approve the Contract Documents for the Construction of Site Drainage Improvements at the Lamb Canyon Sanitary Landfill; and
- 3. Authorize the General Manager-Chief Engineer of the Riverside County Department of Waste Resources (Department) to advertise for bids.

BACKGROUND: Summary

(continued)

Departmental Concurrence

Positions Added

Change Order

4/5 Vote

Hans Kernkamp

General Manager-Chief Engineer

FINANCIAL DATA	Curre	ent Fiscal Year:	Next Fis	scal Year:	T	otal Cost:	Oı	ngoing Cost:	115423	er Exec. Office)
COST	\$	0	\$	0	\$	0	\$	0	Cons	ent □ Policy □
NET COUNTY COST	\$	0	\$	0	\$	0	\$	_0	00113	ent - Tolley -
SOURCE OF FUNDS: Department of Waste Resources Enterprise Budget Adjustment: No										
Funds								For Fiscal Year:		15/16

C.E.O. RECOMMENDATION:

APPROVE

County Executive Office Signature

Steven C. Horn

MINUTES OF THE BOARD OF SUPERVISORS

	COUNTY

Prev. Agn. Ref.:

District: 5

Agenda Number:

12-1c

SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA FORM 11 Approval of Contract Documents including Specifications for the Construction of Site Drainage Improvements at the Lamb Canyon Sanitary Landfill, District 5. [\$0 – Department of Waste Resources Enterprise Funds], CEQA Exempt.

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BACKGROUND: (cont.)

The project covered by this contract involves construction work that will augment the existing surface drainage system at the Lamb Canyon Landfill (LCL) by implementing several erosion controls and Best Management Practices (BMPs) measures throughout the site.

This construction project represents an integral part of the Department's on-going efforts to reduce the introduction of pollutants which affect the quality of storm water discharges associated with landfill operations at the LCL. As part of the National Pollutant Discharge and Elimination System (NPDES) statewide general permit to regulate industrial storm water discharges, the Department is responsible for the installation and maintenance of BMPs, including drainage structures that collect runoff from the landfill property and channel it offsite to the downstream waterways.

Based on the performance of the existing drainage system and BMPs, Department engineering staff believes more permanent structures would proactively address the recent regulatory changes related to drainage and erosion control at all industrial facilities, including sanitary landfill sites. The installation of asphalt- and shotcrete-lined drainage structures, aggregate base roadways, a percolation basin, and erosion control measures such as hydroseeding application are part of this construction project. These additional measures should reduce the risk of non-compliance with regulatory requirements, as well as third party litigation related to runoff pollution. These measures will also reduce Department's labor and equipment costs associated with repairs and routine site maintenance activities.

The contract documents have been prepared by the Department's engineering staff in response to the new Industrial General Permit (IGP) for Storm Water Dischargers Associated with Industrial Activities. The IGP was adopted in 2014 by the California State Water Resource Control Board, and it became effective on July 1, 2015. The IGP requires the implementation of numerous "minimum BMPs," including good housekeeping requirements, preventative maintenance, material handling and waste management, erosion and sediment controls, and employee training programs. Additional "advanced BMPs," including exposure minimization, storm water containment, discharge reduction, and treatment control BMPs, must also be implemented as necessary to reduce or prevent pollutant discharge. Non-compliance with the benchmarks established by the IGP will trigger increasing levels of required actions and treatment controls. If benchmark exceedance occurs, the Department would be required to implement various and costly corrective measures. The contract documents recommended for approval today intend to avoid those exceedances in a proactive manner.

California Environmental Quality Act (CEQA) Findings

The Project is exempt from CEQA pursuant to the State CEQA Guidelines Section 15061(b)(3) (General Rule for Exemption), and categorically exempt from CEQA pursuant to Section 15301 Existing Facilities and Section 15304 Minor Alterations of Land. The Project contemplated in this Form 11 involves approval of a contract identifying proposed drainage improvements at the Lamb Canyon Landfill. The Contract Documents including Specifications will be advertised, and ultimately, a contractor will be selected to complete the work (under a separate Board action). The work identified in the Contract Documents including Specifications involves site drainage improvements and repairs, which includes installation of asphalt and shotcrete-lined drainage structures, aggregate base roadways, a percolation basin, and deployment of erosion control measures. The site drainage improvement activities occur within permitted landfill disturbance areas. The drainage improvements involve no expansion of approved uses. This work would not have a direct, indirect, or cumulatively significant effect on the environment. A Notice of Exemption (NOE) to this effect will be filed with the County Clerk upon Project approval.

SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA FORM 11 Approval of Contract Documents including Specifications for the Construction of Site Drainage Improvements at the Lamb Canyon Sanitary Landfill, District 5. [\$0 – Department of Waste Resources Enterprise Funds], CEQA Exempt.

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Impact on Citizens and Businesses

None

Additional Fiscal Information

The project contemplated in this Form-11 merely approves contract documents identifying proposed work at the LCL, as well as authorizes the Department to advertise said contract documents. No expenses will be incurred in FY 15/16 as a result of this action.

Price Reasonableness

The Engineer's estimate for this project is \$1,400,000 and the action today, if approved, will authorize the Department to pursue competitive bids through the California Public Works Contract process. The Department will then return to the Board of Supervisors to seek approval to award the Contract to the lowest responsible bidder.



CONTRACT DOCUMENTS

FOR

THE CONSTRUCTION OF

SITE DRAINAGE IMPROVEMENTS

AT THE

LAMB CANYON SANITARY LANDFILL

AUGUST 2015

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PROJECT DRAWINGS

NOTICE TO CONTRACTORS

The Riverside County Department of Waste Resources, hereinafter called "County," invites sealed bids for

The Construction of Site Drainage Improvements At the Lamb Canyon Sanitary Landfill

Contract Documents may be examined at the County's office at 14310 Frederick Street, Moreno Valley, California, and may be obtained upon payment to the County of \$30 per set, received at the County's office and \$45 per set if mailed by U.S. mail (mailing cost does not apply when using recipient's mailing account number). No refund will be made.

The Project Drawings are also available electronically in digital Microstation (.dgn) format. The digital files will be available by email or FTP. No refund will be made. This digital data was created using Microstation software, and will be made available only in the Microstation (.dgn) format. This digital data is to be used at the Contractor's own discretion. The County is not responsible for the manner in which the Contractor chooses to use the digital data. The County is not responsible for how this digital data might be converted by the Contractor to another format. The Contractor is solely responsible for its use of this digital data.

Each proposal must be accompanied by a certified or cashier's check or bid bond equal to ten percent (10%) of the amount bid, payable to the County of Riverside as a guarantee that the Contractor will, if awarded the contract, execute a satisfactory contract and furnish the required bonds and provide the required certificates of insurance.

Proposals must be placed in a sealed envelope clearly marked "Contractor's Proposal". Proposals must be in accordance with the instructions and filed with the County by 11:00 am on Monday, September 21, 2015 at 14310 Frederick Street, Moreno Valley, CA 92553 which time and place are fixed for the public opening of bids. A mandatory pre-bid site review will be conducted at the Lamb Canyon Sanitary Landfill on Thursday, September 10, 2015, at 10:00 am. The Lamb Canyon Sanitary Landfill site address is 16411 Lamb Canyon Road, Beaumont, CA. All questions must be submitted in writing by 5:00 pm on Monday, September 14, 2015 to Mr. Fouad Mina via e-mail to "fmina@co.riverside.ca.us" or fax no. (951)486-3250.

General prevailing rate of per diem wages and general prevailing rate of per diem wages for holiday and overtime work, including employer payments for health and welfare, pension, vacation, apprentices and similar purposes for each craft, classification or type of workman needed for execution of contracts under the jurisdiction of the County have been obtained by the County from the Director of Industrial Relations of the State of California for the area where the work is to be done. These are on file at the County's office, and will be made available to any interested person upon request.

Contractors submitting proposals for this project shall have a Class <u>A</u> Contractors license from the State of California in order to be considered eligible for the contract award.

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BIDDER QUALIFICATIONS:

A bidder must satisfy the following requirements to bid on this project:

- 1. Within the last five years, the Contractor and/or subcontractor shall have successfully completed an earthwork construction project with at least 50,000 CY of engineered fill including soil material processing, placement, compaction, and grading per plan.
- 2. Within the last five years, the Contractor and/or subcontractor shall have successfully completed an earthwork construction project with at least 100,000 CY of excavation to line and grade.
- 3. Within the last five years, the Contractor and/or subcontractor shall have successfully completed a construction project with at least 25,000 square feet of reinforced shotcrete drainage structures.
- 4. Within the last five years, the Contractor and/or subcontractor shall have successfully completed a construction project with at least 25,000 square feet of asphalt drainage structures.
- 5. Within the last five years, the Contractor and/or subcontractor shall have successfully completed a construction project with at least 20 acres of hydroseeding.

SUBMITTAL REQUIREMENTS:

With the submittal of the Proposal, the Contractor shall submit for approval by the County documented evidence of satisfaction of all of the Bidder Qualifications listed above, including the name and experience of the superintendent and lead personnel that will be responsible for each category of work listed under the preceding paragraph "Bidder Qualifications" (this includes: earthwork, concrete, asphalt, and hydroseeding). As part of this submittal, a project reference list shall be provided indicating at a minimum, the name, address, and phone number of the project owner and owner's representative, the location of the project, the amount of material installed, and completion date.

Dated:	
	Hans W. Kernkamp, General Manager - Chief Engineer

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INSTRUCTIONS TO BIDDERS

QUANTITIES: The amount of work to be done or materials to be furnished by the Contractor as stated in the proposal (except for lump sum items) are only estimates and are not to be taken as an expressed or implied statement that the actual amount of work or materials will correspond to the estimate. The County reserves the right to increase or decrease or to entirely eliminate certain items from the work or materials if found desirable or expedient. The Contractor will be allowed no claims for anticipated profits, loss of profits or for any damages of any sort because of any difference between the estimated and the actual amounts of work done, or materials furnished or used in the completed project. The Contractor is cautioned against unbalancing of its bid by including its overhead into one or two items only when there are a number of items on the schedule. The overhead and indirect charges should be prorated on all items in the schedule.

DISCREPANCIES AND OMISSIONS: Discrepancies, omissions, ambiguities, or requirements likely to cause disputes shall be immediately brought to the attention of the County. When appropriate, Addenda will be issued by the County. No communication by anyone except by an Addendum affects the meaning or requirements of the Contract Documents. If at any time (before or after submittal of its bid) the Contractor is of the opinion that there is or may be a discrepancy or inconsistency in the plans, drawings, specifications or other Contract Documents, it shall immediately report this in writing to the County and shall not proceed with any related work until ordered so to do.

WITHDRAWAL OF PROPOSALS: Any proposal may be withdrawn at any time prior to the hour fixed in the Notice to Contractors for the opening of proposals, provided that a request in writing, executed by the bidder or its duly authorized representative, for the withdrawal of such proposal, is filed with the County. The withdrawal of a proposal shall not prejudice the right of a bidder to file a new proposal.

AGREEMENT OF FIGURES: If the unit prices and the total amounts named by the bidder in the proposal do not agree, the unit prices alone will be considered as representing the bidder's intention.

INVALID PROPOSALS: Proposals submitted by fax or e-mail and those which fail to reach the place fixed for opening of proposals prior to the date and hour set for opening same will not be considered.

INSPECTION OF SITE AND UNDERSTANDING OF CONTRACT

PROVISIONS: Prior to submission of a bid, bidders must have examined the site and fully acquainted themselves with all conditions affecting the work. Information derived from maps, plans or specifications, or from the County, will not relieve the successful bidder from properly carrying out all the terms of the written contract. By the submittal of a proposal, the bidder will be held to have personally examined the site and the drawings, to have carefully read all of the specifications and other Contract Documents, and to have satisfied itself as to its ability to meet all the difficulties attending the execution of the work. The bidder agrees that if it is awarded the contract it will make no claim against the County based on ignorance or misunderstanding of the contract provisions; and

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that the bidder fully understands the payment method for the work.

QUALIFICATIONS OF BIDDERS: No proposal will be accepted from a Contractor who is not licensed under laws of California, as evidenced by the submittal of the Statement of Licensure. No award will be made to any bidder who cannot give satisfactory assurance to the County as to its ability to carry out the contract, both from its financial standing and by reason of its previous experience as a Contractor on work of the nature contemplated in the contract.

VENDOR REGISTRATION: Contractors must be registered with the County in order to be considered eligible for the Contract award. To register, Contractors may utilize "Vendor Self-Registration" web site at http://www.purchasing.co.riverside.ca.us and complete the on-line registration form.

Information needed in order to register:

- 1. User name (This person will be responsible for original registration and any future change.)
- 2. User Password
- 3. Company information including:
 - a. All Addresses (Corporate, Remit to, Sales, etc)
 - b. Company type (Corporation, partnership, sole proprietorship, etc)
 - c. Tax Identification Number (or social security number for individuals)
 - d. Status (women, minority, Disabled Veteran owned, etc)
 - e. Qualification as a local Riverside County business
 - f. Banking Information for future electronic payment processes
- 4. Contact Information including:
 - a. Names
 - b. Titles/Positions
 - c. Contact Numbers (Phone, Fax, Cell phone, etc
 - d. E-Mail address for future correspondences
- 5. List of items/services you wish to provide to the County.

PROPOSAL FORMS: Attention of all bidders is called to the proposal affidavit forms attached hereto and bidders are cautioned that all proposals submitted must be accompanied by the proper affidavit, properly executed. Proposals must be made on the form furnished by the County.

REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES

OR IRREGULARITIES: Proposals may be rejected if they show any alterations of form, additions not called for, conditional proposals, incomplete proposals, erasures, or irregularities of any kind. Erasures or interlineations in the proposal must be explained or noted over the signature of the bidder.

PUBLIC OPENING OF PROPOSALS: Proposals will be opened and read publicly at the time and place indicated in the Notice to Contractors. Bidders or their authorized agents are invited to be present.

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DISQUALIFICATION OF BIDDERS: More than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different names will not be considered. Reasonable ground for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is any reason for believing that collusion exists among the bidders, none of the participants in such collusion will be considered in awarding the contract. Proposals in which the prices appear to be unbalanced may be rejected.

ADDENDA: County reserves the right to issue Addenda to the Contract Documents at any time prior to the time set to open bids. Each potential bidder shall leave with the County its name, address, and fax number for the purpose of receiving Addenda. To be considered, a Contractor's proposal must list and take into account all issued Addenda.

AWARD OF CONTRACT: The County reserves the right to reject any and all proposals or to waive technical defects as the best interests of the County may require. Prior to award of the contract, and if requested by County, the Contractor agrees to meet with the County to review the details and calculations of the Contractor's proposal and the Contractor's understanding of any aspect of the work. The award of the Contract, if it be awarded, will be to the lowest responsible and qualified bidder based upon all bid items including optional bid item no. 26. The award, if made, will be made within approximately fourteen (14) to thirty (30) days after the opening of the proposals.

BIDDER'S CHECK OR BOND: Each proposal must be accompanied by a certified or cashier's check, or by a bid bond only on the form supplied by the County, drawn in favor of the County in an amount not less than ten percent (10%) of the total bid. This check or bond shall be given as a guarantee that the bidder, if awarded the contract, will execute and deliver the Agreement, the required Payment and Performance Bonds, and the required certificates of insurance in accordance with the bid accepted by the County. In default of execution of the Agreement upon award and/or delivery of said Payment and Performance Bonds and certificates of insurance, such Bid Bond or check shall be held subject to payment to the County for the difference in money between the amount of the contract with another party to perform the work, together with the cost to the County of redrafting, redrawing and publishing documents and papers necessary to obtain new bids on said work. The check or bond shall, in addition, be held subject to all other actual damages suffered by the County. The check or bond will be returned upon the close of the period mentioned in these instructions below and to the successful bidder upon execution of the Agreement. NO BONDS WILL BE ACCEPTED UNLESS SUBMITTED ON THE FORM SUPPLIED BY THE COUNTY.

FORFEITURE FOR FAILURE TO POST SECURITY AND EXECUTE

AGREEMENT: In the event the bidder, to whom an award is made, fails or refuses to post the required bonds and provide the required certificates of insurance and fails to return executed copies of the Agreement within five (5) calendar days after the prescribed forms are presented to it for signature, the County may declare the bidder's bid deposit or bond forfeited as damages caused by the failure of the bidder to post such security and execute such copies of the Agreement and may award the work to the next lowest responsible bidder, or may call for new bids.

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RETURN OF PROPOSAL GUARANTEES: Within ten (10) business days after the award of the contract, the County will return the proposal guarantees accompanying those proposals that are not considered in making the award. All other proposal guarantees will be held until the contract has been fully executed and the required bonds and certificates of insurance have been provided, after which they will be returned to the respective bidders whose proposal they accompany.

CONTRACT BONDS: The Contractor shall furnish two (2) surety bonds in duplicate, one as a security for the faithful performance of the contract in the amount equal to one hundred percent (100%) of the contract price, and one as security for the payment of all persons performing labor and furnishing materials in connection with the contract in an amount equal to one hundred percent (100%) of the contract price. All bonds must be submitted on forms provided by the County. Bonds submitted in any other form will not be accepted. Should any surety on the Payment Bond or Performance Bond be deemed unsatisfactory by the County, Contractor shall upon notice promptly substitute new bonds satisfactory to the County. All bonds must be issued by sureties which are licensed by the State of California to issue such bonds.

SUBLETTING AND SUBCONTRACTING: Bidders are required, pursuant to the Subletting and Subcontracting Fair Practices Act (commencing with Section 4100 of the Public Contract Code), to list in their proposal the name and location of place of business of each subcontractor who will perform work or labor or render services in or about the construction of the work or improvement or a subcontractor who specially fabricates and installs a portion of the work or improvement, in excess of one-half (½) of one percent (1%) of the prime Contractor's total bid. Failure to list a subcontractor for a portion of the work means that the prime contractor will do that portion of the work.

"OR EQUAL": Pursuant to Division 2, Chapter 3, Article 5, commencing at Section 3400 of the Public Contract Code, all specifications shall be deemed to include the words "or equal," provided, however, that permissible exceptions or other requirements shall be specifically noted in the specifications. Any "equal" proposed by the Contractor must be described in the Contractor's Proposal.

ANTI-DISCRIMINATION: It is the policy of the County that, in connection with all work performed under this Contract, there be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, marital status, or sexual preference. The Contractor agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment Practice Act, beginning with Labor Code Section 1410, and Labor Code Section 1735. In addition, the Contractor agrees to require like compliance by any subcontractors employed on the work.

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CONTRACTOR'S PROPOSAL

TO THE BOARD OF SUPERVISORS OF THE COUNTY OF RIVERSIDE:

The undersigned hereby declares:

following:	(a) That the only persons or parties interested in this proposal as principals are the
president, secopartnership	e Contractor is a corporation, give the name of the corporation and the name of its cretary, treasurer, and manager. If a co-partnership, give the name under which the does business, and the names and addresses of all copartners. If an individual, state address under which the contract is to be drawn.)
corporation.	(b) That this proposal is made without collusion with any other person, firm or
and has fami	(c) That the Contractor has carefully examined the location of the proposed work, liarized itself with all of the physical, climatic or other conditions related to the work.
other Contrac	(d) That the Contractor has carefully examined all of the specifications, plans, and et Documents, and makes this proposal in accordance therewith.
contract with	(e) That, if this proposal is accepted, the Contractor will enter into a written the County of Riverside.
the quantities only and fina	(f) That the Contractor proposes to enter into such contract and to accept in full the work actually done the prices shown in the attached schedule. It is understood that is listed (except for those shown as "Final" or "Lump Sum (L.S.)") are but estimates all payment will be based on actual quantities whatever they may be, subject to such and alterations as elsewhere provided for in the Contract Documents.
the order of t	Accompanying this proposal is a certified or cashier's check or bid bond payable to he County of Riverside in the sum of
	Dollars (\$).

THE REQUIRED REFERENCES AND OTHER REQUIRED DOCUMENTS MUST BE ATTACHED TO THIS PROPOSAL

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Contractor bids as follows for The Construction of <u>Site Drainage Improvements at the Lamb Canyon Sanitary Landfill</u> located in Beaumont, Riverside County, California:

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
1	Mobilization & Demobilization	LS	1		
2	Construct Asphalt Drainage Structures	Tons	210		
3	Construct Asphalt Vehicle Crossing	SF	6,200		
4	Construct Shotcrete Drainage Structures	SF	1,750		
5	Saw Cut, Remove, & Replace 6" Thick Asphalt Roadway Section	SF	1,000		
6	Repair Drainage Bench and Furnish & Install 20-mil LDPE Drainage Channel	SF	30,050		
7	Construct 20-mil LDPE Drainage Channel	SF	12,750		
8	Construct Aggregate Base Roadway, 3" thick Class II Base over 6" thick Aggregate Base	SF	161,900		
9	Construct Aggregate Base Equipment Crossing	SF	1,300		
10	Construct Asphalt Concrete Speed Bumps	LF	75		
11	Prepare Slopes for Hydroseeding & Posi-Cube Applications	AC	26		
12	Repair Slope Erosion on Landfill Toe Berm	AC	2		
13	Apply Hydroseed on Side Slopes	AC	18		
14	Apply Posi-Cube on Side Slopes	AC	11		
15	Remove Sediment & Re- Grade Sedimentation Basin	CY	12,500		
16	Sedimentation Basin Outlet Improvements	LS	1		

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17	Apply Processed Greenwaste	SF	27,450		
18	Construct Earthen Diversion Berms	LF	755		
19	Construct Grouted Rip-Rap Slope Protection	SF	315		
20	Construct Asphalt Dike	LF	100		
21	Furnish & Install S-Fence	LF	16,600		
22	Furnish & Install Sandbags	EA	2,700		
23	Furnish & Install Fiber Rolls	LF	3,450		
24	Furnish & Install Bollards	EA	3		
25	Time and Material	LS	1	\$75,000	\$75,000
Optional 26	Construct Percolation Basin and Appurtenances	LS	1		

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LIST OF SUBCONTRACTORS

The name and the location of the place of business of each subcontractor who will perform work or labor or render service to the Prime Contractor in or about the construction of the work or improvement, or a subcontractor who specially fabricates and installs a portion of the work or improvement, in an amount in excess of one-half ($\frac{1}{2}$) of one percent (1%) of the Prime Contractor's total bid and the portion of the work which will be done by each such subcontractor is as follows:

Item No. (s)
Name of Subcontractor -
Phone and Fax Numbers -
Address –
Subcontractor's License No. and Classification:
Department of Industrial Relations (DIR) Registration Number:
Item No. (s)
Name of Subcontractor -
Phone and Fax Numbers -
Address –
Subcontractor's License No. and Classification:
Department of Industrial Relations (DIR) Registration Number:
Item No. (s)
Name of Subcontractor -
Phone and Fax Numbers -
Address –
Subcontractor's License No. and Classification:
Department of Industrial Relations (DIR) Registration Number:
Item No. (s)
Name of Subcontractor -
Phone and Fax Numbers -
Address –

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Subcontractor's License No. and Classification:				
Department of Industrial Relations (DIR) Registration Number:				
Item No. (s)				
Name of Subcontractor -				
Phone and Fax Numbers -				
Address –				
Subcontractor's License No. and Classification:				
Department of Industrial Relations (DIR) Registration Number:				

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STATEMENT OF LICENSURE

Pursuant to California Public Contract Code (commencing with Section 3300), the undersigned does certify as follows:

1.	1	ertificate of licensure I have presented to County as of this being State of California Contractors License No. ;
2.	That said Contractors Lic	cense is current and valid; and
3.		cense is of a classification appropriate to the work to be Class license.
I declare und true and corr		the laws of the State of California that the foregoing is
Dated:		Signature:
		Name:
		Title:

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AFFIDAVIT FOR INDIVIDUAL CONTRACTORS

STATE OF CALIFORNIA)	
COUNTY OF RIVERSIDE)	
, being first duly	y sworn, deposes and says:
the interest of, or on behalf of, any undisciplination, or corporation; that the bid is general not directly or indirectly induced or solicited an not directly or indirectly colluded, conspired, coput in a sham bid, or that anyone shall refrain fredirectly or indirectly, sought by agreement, comprise of the bidder or any other bidder, or to fe price, or of that of any other bidder, or to see Department of Waste Resources or anyone intercontained in the bid are true; and, further, that the or her bid price or any breakdown thereof, or the relative thereto, or paid, and will not pay, as	oregoing proposal or bid; that the bid is not made in losed person, partnership, company, association, naine and not collusive or sham; that the bidder has by other bidder to put in a false or sham bid, and has bonnived, or agreed with any bidder or anyone else to from bidding; that the bidder has not in any manner, munication, or conference with anyone to fix the bid ix any overhead, profit, or cost element of the bid cure any advantage against the Riverside County brested in the proposed contract; that all statements the bidder has not, directly or indirectly, submitted his ne contents thereof, or divulged information or data my fee to any corporation, partnership, company my member or agent thereof to effectuate a collusive
Subscribed and sworn to before me	
this day of	
	Signature of officer administering oath

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AFFIDAVIT FOR JOINT VENTURE OR COPARTNERSHIP CONTRACTOR

STATE OF CALIFORNIA)	a.
COUNTY OF RIVERSIDE)	S
	being first duly sworn, deposes and says:
That he or she is a member of the joint	venture or copartnership firm designated as
on behalf of, any undisclosed persocorporation; that the bid is genuine and indirectly induced or solicited any other indirectly colluded, conspired, conniver bid, or that anyone shall refrain from beindirectly, sought by agreement, commethe bidder or any other bidder, or to fix that of any other bidder, or to secure at Waste Resources or anyone interested is bid are true; and, further, that the bidder or any breakdown thereof, or the content paid, and will not pay, any fee to any collider or any breakdown thereof.	g proposal or bid; that the bid is not made in the interest of, or on, partnership, company, association, organization, or d not collusive or sham; that the bidder has not directly or r bidder to put in a false or sham bid, and has not directly or d, or agreed with any bidder or anyone else to put in a sham bidding; that the bidder has not in any manner, directly or function, or conference with anyone to fix the bid price of any overhead, profit, or cost element of the bid price, or of any advantage against the Riverside County Department of the proposed contract; that all statements contained in the r has not, directly or indirectly, submitted his or her bid price to thereof, or divulged information or data relative thereto, or or or proration, partnership, company association, organization, gent thereof to effectuate a collusive or sham bid.
who constitute the other members of th	ne joint venture or copartnership.
Subscribed and sworn to before me	
this day of	, 20
	Signature of officer administering oath

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AFFIDAVIT FOR CORPORATE CONTRACTOR

STATE O	F CALIFORNIA)	
COUNTY	SS OF RIVERSIDE)	
		, being first duly sworn, deposes and says:
Th	at he or she is	
of		he foregoing proposal or bid; that the bid is not made in the
or corpora indirectly indirectly bid, or tha indirectly, the bidder that of any Waste Res bid are tru or any brea paid, and	ation; that the bid is genuine and induced or solicited any other colluded, conspired, connived, at anyone shall refrain from bit sought by agreement, communior any other bidder, or to fix any other bidder, or to secure any sources or anyone interested in e; and, further, that the bidder had akdown thereof, or the contents will not pay, any fee to any cor	ed person, partnership, company, association, organization, d not collusive or sham; that the bidder has not directly or bidder to put in a false or sham bid, and has not directly or or agreed with any bidder or anyone else to put in a sham dding; that the bidder has not in any manner, directly or nication, or conference with anyone to fix the bid price of my overhead, profit, or cost element of the bid price, or of y advantage against the Riverside County Department of the proposed contract; that all statements contained in the has not, directly or indirectly, submitted his or her bid price thereof, or divulged information or data relative thereto, or poration, partnership, company association, organization, not thereof to effectuate a collusive or sham bid.
Subscribe	d and sworn to before me	
this	day of	, 20
		Signature of officer administering oath

PD#176492/v1 -XVI-

BID BOND

Recitals:	
the County of Riverside, by and for the Departm	Contractor) has submitted its Contractor's Proposal to nent of Waste Resources, for the construction of the Site Drainage Improvements at the Lamb Canyon to Contractors dated
2	a corporation, ond.
hereafter called Surety, is the surety on this Bo	ond.
Agreement: We, Contractor as principal and Surfollows:	rety as surety, jointly and severally agree and state as
1. The amount of the obligation of the Proposal and inures to the benefit of County.	is Bond is 10% of the amount of the Contractor's
said Proposal is accepted, Contractor execut certificates of insurance as agreed to in its Proposal	nty rejecting said Proposal or, in the alternate, (2) if tes the Agreement and furnishes the Bonds and osal, otherwise it remains in full force and effect for ounty resulting from failure of Contractor to act as
way be impaired or affected by any extension of and waives notice of any such extension.	and agrees that its obligations hereunder shall in no fitime within which County may accept the Proposal xecutors, administrators, successors and assigns.
Dated:	
By:	By:
Title:	Title:
(Surety)	(Contractor)

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledged by a notary (attach acknowledgments).

PD#176492/v1 -XVII-

AGREEMENT

THIS AGREEMENT is made as of	and is
between the COUNTY OF RIVERSIDE (County) and	
(Contractor).	
IT IS AGREED BY THE PARTIES AS FOLLOWS:	
1. The Work. Contractor shall furnish all tools, equipmen and material necessary to perform the work for the project, The Comprovements at the Lamb Canyon Sanitary Landfill, in exact con Documents, subject to such inspection as County deems appropria	onstruction of <u>Site Drainage</u> formity with the Contract
 Contract Documents. The Contract Documents for the (a) Notice to Contractors; (b) Instructions To Bidders; (c) Contractor's Proposal; (d) Agreement; (e) Bid Bond; (f) Performance Bond; (g) Payment Bond; (h) General Provisions; (i) Special Provisions for Site Drainage Improvements Landfill; (j) Project Drawings for Site Drainage Improvements Landfill; (k) Appendix A – Landfill Site Rules; (l) Standard Specifications for Public Works Cons Amendments; (m) any other documents included in or incorporated int (n) Addenda Nos; (o) orders, instructions, drawings and plans issued by Cwork in accordance with the provisions of the Contract Description of the Contract Description	at the Lamb Canyon Sanitary at the Lamb Canyon Sanitary struction, 2015 Edition, with to the Contract Documents; County during the course of the

Each of the above-mentioned documents presently in existence are by this reference incorporated into this Agreement and each of these documents not now in existence are incorporated herein as of the time of their issuance.

3. Contract Price - Payment. Exhibit A is attached to and incorporated into this Agreement and states the basis for full payment to Contractor. Contractor represents that it fully understands the payment method for the work.

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RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES 14310 Frederick Street Moreno Valley, CA 92553

By:
Hans W. Kernkamp
General Manager - Chief Engineer
COUNTY OF RIVERSIDE
By:
By: Chairman, Board of Supervisors
ATTEST:
By:
Kecia Harper-Ihem, Clerk of the Board
By:
Deputy
(Seal)
Contractor
By:
Name:
Title:
(If corporation, attach corporate seal)

PD#176492/v1 -XIX-

EXHIBIT A

(To Agreement for the Riverside County Department of Waste Resources, <u>The Construction of Site Drainage Improvements at the Lamb Canyon Sanitary Landfill</u>, located in Beaumont, Riverside County, California.)

It is understood that the quantities listed (except for those shown as "Final" or "Lump Sum (L.S.)") are but estimates only and final payment will be based on actual quantities whatever they may be, subject to such adjustments and alterations as elsewhere provided for in the Contract Documents.

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
1	Mobilization & Demobilization	LS	1		
2	Construct Asphalt Drainage Structures	Tons	210		
3	Construct Asphalt Vehicle Crossing	SF	6,200		
4	Construct Shotcrete Drainage Structures	SF	1,750		
5	Saw Cut, Remove, & Replace 6" Thick Asphalt Roadway Section	SF	1,000		
6	Repair Drainage Bench and Furnish & Install 20-mil LDPE Drainage Channel	SF	30,050		
7	Construct 20-mil LDPE Drainage Channel	SF	12,750		
8	Construct Aggregate Base Roadway, 3" thick Class II Base over 6" thick Aggregate Base	SF	161,900		
9	Construct Aggregate Base Equipment Crossing	SF	1,300		
10	Construct Asphalt Concrete Speed Bumps	LF	75		
11	Prepare Slopes for Hydroseeding & Posi-Cube Applications	AC	26	_	
12	Repair Slope Erosion on Landfill Toe Berm	AC	2		

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13	Apply Hydroseed on Side Slopes	AC	18		
14	Apply Posi-Cube on Side Slopes	AC	11		
15	Remove Sediment & Re- Grade Sedimentation Basin	CY	12,500		
16	Sedimentation Basin Outlet Improvements	LS	1		
17	Apply Processed Greenwaste	SF	27,450		
18	Construct Earthen Diversion Berms	LF	755		
19	Construct Grouted Rip-Rap Slope Protection	SF	315		
20	Construct Asphalt Dike	LF	100		
21	Furnish & Install S-Fence	LF	16,600		
22	Furnish & Install Sandbags	EA	2,700		
23	Furnish & Install Fiber Rolls	LF	3,450		
24	Furnish & Install Bollards	EA	3		
25	Time and Material	LS	1	\$75,000	\$75,000
Optional 26	Construct Percolation Basin and Appurtenances	LS	1		

TOTAL COST	\$
------------	----

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PERFORMANCE BOND

Recitals:	
1(Contractor) has entered into an Agreement of RIVERSIDE (County) for construction of the Drainage Improvements at the Lamb Canyon Sa	lated with the COUNTY OF public work known as The Construction of <u>Site</u> anitary Landfill (Project).
2, a corp	oration (Surety), is the surety under this Bond.
Agreement: We, Contractor as principal, and Surare bound unto County, as obligee, as follows:	rety as surety, jointly and severally agree, state, and
1. The amount of the obligation of the Project of \$	nis Bond is 100% of the estimated contract price forand inures to the benefit of County.
in strict conformance with the Contract Docume	actor doing all things to be kept and performed by it nts for the Project, otherwise it remains in full force and expense of County resulting from failure of ments are incorporated herein.
3. This obligation is binding on our	successors and assigns.
prepayment to Contractor, alteration or additional Documents or the work to be performed thereund notice as to such matters, except the total contract without approval of Surety. (If the total contract	plates and agrees that no change, time extension, on to the terms and requirements of the Contract der shall affect its obligations hereunder and waives ract price cannot be increased by more than 25% price is inadvertently increased by more than 25% bond will remain in effect for that portion of the
THIS BOND is executed as of	
By:	By:
Title:	Title:
(Surety)	(Contractor)

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledged by a notary (attach acknowledgments)

PD#176492/v1 -XXII-

PAYMENT BOND

(Public Work - Civil Code, Section 3247 et seq.)

The makers of this Bond are	as Principal
and Contractor and	a corporation, authorized to
issue surety bonds in California, as Surety, and	this bond is issued in conjunction with that certain
public works contract dated	, between Principal and the COUNTY OF
RIVERSIDE (County), a public entity, for \$ _	, the total amount payable.
THE AMOUNT OF THIS BOND IS 100 PERC	ENT OF SAID SUM. Said contract is for the public
work generally consisting of The Construction	of Site Drainage Improvements at the Lamb Canyon
Sanitary Landfill. The beneficiaries of this Box	nd are as is stated in Section 3248 of the Civil Code
and Sections 3248, 3249, 3250 and 3252 of said	Code. Without notice, Surety consents to extension
of time for performance, change in requirements	s, amount of compensation, or prepayment under said
contract.	
Dated:	
By:	By:
TT: d	TO: 1
Title:	Title:
(Surety)	(Contractor)

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledged by a notary (attach acknowledgments).

PD#176492/v1 -XXIII-



GENERAL PROVISIONS

FOR

THE CONSTRUCTION OF SITE DRAINAGE IMPROVEMENTS

AT THE

LAMB CANYON SANITARY LANDFILL

AUGUST 2015

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1. SECTION 1 - DEFINITION OF TERMS

1.1. TERMS

Whenever in these specifications, or in any documents or instruments where these specifications govern, the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

- a) AGENCY: Whenever used in the Standard Specifications shall refer to County.
- b) BOARD OF SUPERVISORS: The Board of Supervisors of the County, also sometimes referred to as the Board.
- c) DEPARTMENT, COUNTY, OR OWNER: The County of Riverside, by and for the Department of Waste Resources.
- d) ENGINEER: The General Manager Chief Engineer of the Riverside County Department of Waste Resources, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.
- e) LABORATORY: The laboratories authorized by the County to test materials and work involved in the contract.
- f) BIDDER: Any individual, firm or corporation submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.
- g) CONTRACTOR: The person or persons, co-partnership or corporation, private or municipal, who have entered into the Agreement with the County, or his or their legal representatives.
- h) SUPERINTENDENT: The executive representative of the Contractor, present on the work at all times during progress, authorized to receive and execute instruction from the County.
- i) PLANS or PROJECT DRAWINGS: The official plans, profiles, typical cross sections, general cross sections, working drawings, and supplemental drawings, or exact reproductions thereof, approved by the County, which show the location, character, dimension and details of the work to be done, and which are to be considered a part of the Contract Documents.
- j) SPECIFICATIONS: The directions, provisions, and requirements contained in the Contract Documents as to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under the contract.
- k) CONTRACT: The written Agreement covering the work.
- l) CONTRACT PRICE: Shall mean either the lump sum, unit price, or unit prices named in the Agreement, or the total of all payments under the contract at the lump sum, unit price, or unit prices, as the case may be.
- m) SURETY OR SURETIES: The bondsmen or party or parties, approved by the County, who may guarantee the fulfillment of the contract by bond, and whose signatures are attached to said bond.
- n) RIGHT OF WAY: The whole right of way which is reserved for and secured for use

in constructing the improvement.

o) THE WORK: All the work specified in the Contract Documents.

1.2. SIMILARITY OF WORDS

Wherever in the specifications or upon the plans the words directed, required, permitted, ordered, designated, prescribed, or words of like import are used, it will be understood that the direction, requirements, permission, order, designation, or prescription of the County is intended, and similarly the words approved, acceptable, satisfactory, or works of like import, shall mean approved by, or acceptable to, or satisfactory to, the County, unless otherwise expressly stated.

2. SECTION 2 - SCOPE OF WORK

2.1. WORK TO BE DONE

The Contractor shall provide all labor, power, light, water, materials, equipment, tools, scaffolding, machinery, transportation, insurance, permits, bonds, temporary protection, watchmen, and superintendence necessary to construct and complete all work, and to furnish all materials included in the contract, except those furnished by the County as specifically stated in the Contract Documents.

The Contract Documents are complementary, and the work called for by any one shall be as binding as if called for by all.

2.2. CONSTRUCTION SCHEDULE

The Contractor shall submit to the County at least Monthly, or at such times as may be requested by the County, a schedule which shall show the order and dates in which the Contractor proposes to carry on the various parts of the work, including estimated completion dates. The County's receipt of such schedule(s) shall not indicate any concurrence by the County in the items or dates described in the schedule(s).

2.3. Drawings And Specifications On The Work

The Contractor shall keep one copy of all drawings and specifications on the work, in good order, available to the County and its representatives.

2.4. ESTIMATE OF QUANTITIES

It is understood that the quantities listed (except for those shown as "Final" or "Lump Sum") are but estimates only and final payment will be based on actual quantities for the work whatever they may be, subject to such adjustments and alterations as elsewhere provided for in the Contract Documents. The County is not to be held responsible for the accuracy of the estimate of quantities. The Contractor shall judge for himself, after considering all circumstances and conditions, the costs and quantities of materials involved in the work.

The Contractor shall not at any time assert that there was any misunderstanding in regard to the nature of the work or the kind or amount of materials to be furnished for the work. The Contractor shall not ask, demand, sue for, or seek to recover compensation in excess of the costs or charges for the work as stated in the Agreement.

2.5. PROTESTS

If the Contractor considers any work demanded of it to be outside of the requirements of the contract, the Contractor shall immediately and before the start of such work state this in writing to the County. In such writing, the Contractor shall clearly and in detail state the basis of its protest. Except for such protests as are made of record in the manner herein specified, the records, rulings, instruction, or decisions of the County shall be final and conclusive. Written protest by the Contractor shall not in any way relieve the Contractor from proceeding with the work as directed by the County.

2.6. ALTERATIONS

The Contractor agrees that reasonable alterations and modifications may be made by the County and that this may be done without notice to the sureties on the Contractor's bonds. If such changes result in increased or decreased quantities under the items specified in the Agreement, the Contractor will be paid on the basis of actual quantities as measured by the County; and such changes shall not affect the unit prices bid by the Contractor.

2.7. EXTRA WORK

2.7.1. General

The County reserves and shall have the right to revise the details of the contemplated work, or to add work of a different character or function, and have the Contractor perform such revised or added work as "Extra Work", when such extra work is considered by the County to be appurtenant to the satisfactory completion of the project. "Extra Work" is defined as added work of a different character or function and for which no basis for payment is prescribed; or that work which is indeterminate at the time of advertising and is specifically designated as extra work. The signing of the contract by the Contractor will be deemed to be an agreement on his part to perform extra work, as and when ordered by the County. If required extra work results in delay to the work, the Contractor will be given an appropriate extension of time.

Should the total increase in cost due to extra work exceed ten (10) percent of the contract price in contracts where the contract price is under \$250,000, or exceed \$25,000 in contracts where the contract price is over \$250,000, approval of the Board of Supervisors to exceed these limitations must be obtained before such work is authorized to be done.

2.7.2. Procedure for Extra Work

Extra work may not be done by the Contractor without prior request and proper written approval by the County. Upon decision of the County to have extra work performed, the County will so inform the Contractor, acquainting it with the details of the new work. The Contractor shall thereupon present in writing a price for said work to the County, whose written approval shall be secured before work is started; except that the County may order the Contractor to proceed with extra work in advance of the submission of such prices provided that preliminary estimates show that the cost will not exceed \$1,000.

Prices for extra work shall be prepared by the Contractor on one or both of the following methods, as requested by the County, and submitted to the County for approval:

For a stated unit price or lump sum amount based upon current prevailing fair prices for materials, labor, plant, overhead and profit.

On a cost plus 15 percent basis (force account by the Contractor). The cost of all work done by the Contractor on a cost plus 15 percent basis will be computed in the manner described in Section 7, and the compensation thus provided shall be full payment to the Contractor related to the extra work.

Upon receipt of the Contractor's price, the County will make an analysis thereof and in its discretion adopt one of the following procedures:

Accept the Contractor's price for lump sum or unit price amount in the original or amended form and direct it to proceed with the work; or direct it to perform the work on a cost plus 15 percent basis.

Have the work performed by County's forces or by separate contract.

Direct the Contractor to proceed with the work and accept payment therefore in the amount as adjudicated later in a court of law.

The price agreed to by the Contractor for the extra work shall be full compensation to the Contractor for all labor, materials, equipment or other costs related to the extra work.

2.8. PAYMENT FOR EXTRA WORK

At the end of each month the Contractor shall make and deliver to the County a statement of the cost of the extra work completed during the current month, itemized and in a form satisfactory to the County. Payment for extra work shall be added to the monthly partial payment made in accordance with Section 7.5 of the General Provisions.

2.9. RIGHTS OF WAY

The County shall provide the rights of way as specifically described in the Contract Documents upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his material, together with right of access to same.

2.10. CLEANING UP

The Contractor shall, as directed by the County, remove from the County's right of way and from all public and private property, at its own expense, all temporary structures, rubbish and waste materials resulting from its operations.

3. CONTROL OF THE WORK

3.1. AUTHORITY OF THE COUNTY

The County shall have general supervision of the contract under authority of the Board of Supervisors. The County has the authority to stop the work whenever such stoppage may be necessary to ensure the proper execution of the contract. The County shall decide all questions which may arise as to the quality or acceptability of materials furnished, work performed, and rate or progress of the work; all questions which may arise as to the interpretation of the plans and specifications; all questions as to the acceptable fulfillment of the contract on the part of the Contractor; and all questions as to compensation. The County's determination and decision thereon shall be final and conclusive.

3.2. DETAIL DRAWINGS

The approved plans shall be supplemented by such working drawings as are necessary to control the work adequately. All authorized alterations affecting the requirement and information given on the approved plans shall be in writing. No changes shall be made to any plan or drawing after the same has been approved by the County, except by its written direction.

Approval by the County of the Contractor's working drawings (or other documents) does not relieve the Contractor of responsibility for accuracy of dimensions, details or other requirements of the Contract Documents. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of his working drawings with the approved plans and specifications. Full compensation for furnishing all working drawings shall be considered as included in the prices paid for the various contract items of work, and no additional allowance will be made therefore.

3.3. CONFORMITY WITH PLANS AND ALL ALLOWABLE DEVIATIONS

Except as otherwise specifically stated in the Contract Documents, finished surfaces in all cases shall conform exactly with the elevations, lines, grades, cross-sections, and dimensions shown or described in the Contract Documents. Any deviations must be authorized in advance in writing by the County.

3.4. INTERPRETATION OF PLANS AND SPECIFICATIONS

Should it appear that the work to be done is not sufficiently detailed or explained in the Contract Documents, the Contractor must bring this to the County's attention in writing prior to submittal of the Contractor's Proposal.

In the event of any discrepancy between any drawings and the figures written thereon, the figures shall be taken as correct. The Contractor will not be allowed to take advantage of errors and omissions in the drawings and specifications. When errors or omissions are found, they shall immediately be brought to the attention of the other party in writing.

3.5. SUPERINTENDENCE

The Contractor shall keep on his work, continually during its progress, a competent Superintendent responsible for the construction of the work, as well as any necessary assistants. All such persons shall be acceptable to the County continuously throughout the duration of the

project. The Superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.

3.6. LINES AND GRADES

The Contractor shall provide opportunities and facilities for setting points and making measurements as requested by the County or otherwise as reasonably required. The Contractor shall not proceed until it has made timely demand upon the County for, and has received from the County, such lines and grades as may be necessary as the work progresses. The work shall be done in strict conformity with such lines and grades.

The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, the Contractor shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their loss or disturbance.

3.7. Inspection Of Work

The County and its representatives shall at all times have access to the work and shall be furnished with every reasonable opportunity for ascertaining that the materials and workmanship are in accordance with the requirements of the Contract Documents. All work done and all materials furnished shall be subject to the County's inspection and approval.

The inspection of the work by any County representatives shall not relieve the Contractor of any of its obligations to fulfill the requirements of the Contract Documents. Defective work or unsuitable materials may be rejected, notwithstanding that such work or materials may have been previously overlooked by County representatives, accepted, or estimated for payment.

3.8. REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

All work which has been rejected shall be remedied or removed and replaced by the Contractor in an acceptable manner; and no compensation will be allowed for such removal or replacement. Any work done beyond the lines and grades as described by the Contract Documents, or any extra work done without proper written authority, will be considered as unauthorized and will not be paid for. Work so done may be ordered removed at the Contractor's expense. Upon failure on the part of the Contractor to comply, the County shall have authority to cause defective or unauthorized work to be remedied, or removed and replaced, and to deduct the costs for this work from any monies due or to become due the Contractor.

3.9. EQUIPMENT AND PLANT

Equipment not suitable to produce the quality of work required will not be permitted to operate on the project. Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient material to carry the work to completion within the time limit. The Contractor shall provide adequate and suitable equipment and plant to meet these requirements and, when ordered by the County, shall immediately remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants. No worn or obsolete equipment shall be used, and in no case shall the maker's rating of the capacity for any equipment be exceeded. All vehicles used to haul materials over existing highways shall be equipped with pneumatic tires.

3.10. FINAL INSPECTION

The County will not make the final inspection until all the work provided for and contemplated by the contract has been fully completed and the final clean up has been performed.

4. CONTROL OF MATERIAL

4.1. COUNTY FURNISHED MATERIALS

The Contractor shall furnish all materials required to complete the work, except those specified in the Contract Documents to be furnished by the County. Any materials furnished by the County will be delivered to the Contractor at the points specified in the Contract Documents. The Contractor will be held responsible for all materials so delivered to him, and deductions will be made from any monies due Contractor to make good any shortages and deficiencies, from any cause whatsoever, which may occur after such delivery, or for any demurrage charges due to delinquency in unloading.

4.2. SOURCE OF SUPPLY AND QUALITY OF MATERIALS

At the option of the County the source of supply of any materials shall be approved by the County before the delivery is started. Only materials conforming to the exact requirements of the Contract Documents and approved by the County shall be used in the work. All materials proposed for use may be inspected or tested by the County at any time during their preparation and use. If it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. No material which, after approval, subsequently becomes unfit for use shall be used in the work.

Wherever the name, or brand, or manufacturer of an item is specified, it is used as a measure of quality and utility or a standard. Except in those instances where the product is designated to match others presently in use, or as otherwise stated in the Contract Documents, specifications 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 the Contractor may propose in the Contractor's bid any equal material, product, thing or service. If the Contractor desires to use any other brand or manufacturer of equal quality or utility to that specified, he shall list definite particulars of that which it considers equivalent to the specified item in its bid. The County will then determine whether or not the proposed name brand or article is equal in quality and utility to that specified, and the County's determination in that regard shall be final and binding upon the Contractor.

4.3. SAMPLES AND TESTS

All tests of materials furnished by the Contractor shall be made by the County in accordance with commonly recognized standards of national organizations for this type of landfill project, and such special methods and tests as are in use at the County's approved laboratory or otherwise determined by the County to be needed. The County shall determine what testing is needed.

Field tests of materials will be made by the County or its representative when deemed necessary as determined by the County; and these tests shall be made in accordance with standard practices of the County or as otherwise needed.

The Contractor shall furnish samples of all materials as requested by the County without charge. No material shall be used until it has been approved by the County. Samples will be secured and tested whenever necessary as determined by the County to determine the quality of the material.

Promptly after the approval of the contract, the Contractor shall notify the County of the proposed sources of supply of all materials to be furnished by it, using a form which will be supplied by the County upon request.

Whenever reference is made to standard tests or requirements of the County, the American Society for Testing Materials, the American Railway Engineering Association or the American Association of State Highway Officials, the reference shall be construed to mean the standards that are in effect at the date the Agreement is signed with subsequent amendments, changes, or additions as thereafter adopted and published by the organization referred to.

None of the provisions stated in this section shall relieve the Contractor of its obligations as stated elsewhere in the Contract Documents.

4.4. STORAGE OF MATERIALS

Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary by the County, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. They shall be placed under cover when so directed by the County. Stored materials shall be so located as to facilitate prompt inspection.

4.5. DEFECTIVE MATERIALS

All materials not conforming to the exact requirements of the Contract Documents shall be considered as defective; and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the County. Upon failure on the part of the Contractor to comply forthwith with any order of the County made under the provisions of this article, the County shall have authority to remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

4.6. ASSIGNMENT OF CLAIMS

In submitting a bid on this public works project, or any subcontractor agreeing to supply goods, services, or materials, and entering a contract pursuant thereto, the Contractor and/or subcontractors do offer and agree to assign to the County 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. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of 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.

5. LEGAL RELATIONS AND RESPONSIBILITY

5.1. LAWS TO BE OBSERVED

5.1.1. Compliance with Applicable Law

Reference to and/or incorporation into the Contract Documents of a particular law, statute, ordinance, rule or regulation is not, nor is it intended to be, a definitive statement of the law applicable to the Contract Documents and the accomplishment of the work. Contractor must keep informed as to all such applicable laws - Federal, State, County, Municipal - as they affect the conduct of the work and comply with such law, including, but not limited to, having requisite licenses, obtaining necessary permits, paying necessary fees and taxes, posting notices and installing, operating and maintaining safety precautions and facilities. It is likewise Contractor's responsibility to see to it that its subcontractors also fully comply with such applicable laws. Contractor shall protect and defend County, its officers, agents, employees and contractors against any claim or liability arising from or based upon any alleged violation of such applicable law.

5.1.2. Labor Code

The Contractor shall comply with all applicable requirements of the California Labor Code. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here set forth in full. The parties recognize that said Chapter 1 deals with, among other things, discrimination, penalties and forfeitures, their disposition and enforcement, wages, working hours and securing workers' compensation insurance and directly affect the method of prosecution of the work by Contractor and subject it under certain conditions to penalties and forfeitures. Execution of the Agreement by the parties constitutes their agreement to abide by said Chapter 1. Their stipulation as to all matters which they are required to stipulate to by the provisions of said Chapter 1, constitutes Contractor's certification that he is aware of the provisions of said Chapter 1 and will comply with them and further constitutes Contractor's certification as follows: "I am aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' 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." Contractor and his subcontractors shall comply with the provisions of the Labor Code regarding apprentices. Contractor shall post at each job site during the course of the work a copy of County's "Determination of Prevailing Wage Rate". Copies of this Determination are available from County for this purpose.

5.1.3. Equal Employment Opportunity

The Contractor shall comply with all applicable non-discrimination and equal employment laws. The Contractor shall not discriminate in his recruiting, hiring, promotion, demotion or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age or physical handicap in the performance of this contract and shall comply with the provisions of the California Fair Employment Practice Act (commencing with S1410 of the Labor Code), the Federal Civil Rights Act of 1964 (P.L.

88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), as amended, and all administrative rules and regulations issued pursuant to said Acts and Order. See particularly 41 Code of Federal Regulation (CFR) Chapter 60.

Contractor shall require each of its subcontractors to comply with the preceding paragraph and shall include in each subcontract language similar to the preceding paragraph.

Contractor shall permit access to its records of employment, employment advertisement, application forms and other pertinent data and records (including but not limited to certified payroll information) by County and any state or federal agency having jurisdiction for the purpose of investigation to ascertain compliance with this Section.

County may assign an affirmative action representative to monitor Contractor and his subcontractor(s) conduct required by this section, including the right of entry to the construction site for the purpose of obtaining information from persons performing work on the project providing such inspection does not interfere with the progress of the work.

Elsewhere in the Contract Documents more specific requirements may be contained covering the same subject matter of this Section. If so, such more specific requirements prevail over this section in case of conflict.

Transactions of \$10,000 or under - Contracts and subcontracts not exceeding \$10,000 are exempt from the requirements of this section. No Contractor or subcontractor shall procure supplies and/or services in less than usual quantities to avoid applicability of this section. With respect to contract and subcontracts for indefinite quantities, this section applies unless the amount required in any one year under such contract will reasonably be expected not to exceed \$10,000.

Transactions in Excess of \$10,000, but less than \$50,000 - At County's request, Contractor shall certify that he has in effect an affirmative action plan and agrees to comply with all state and federal laws and regulations regarding Fair Employment Practices. Contractor shall maintain a written copy of his affirmative action plan and furnish County a copy of the Plan upon request. County may require Contractor to complete an Affirmative Action Compliance Report, on a form furnished by County, setting forth definite goals during the term of this contract.

Transactions of \$50,000 or more - If Contractor has 50 or more employees and a contract for \$50,000 or more, he shall develop and submit to County within 30 days after award, a written affirmative action compliance program providing in detail specific steps to guarantee equal employment opportunity. Contractor shall include in his affirmative action program a table of job classifications, which table shall include but need not be limited to job titles, duties and rates of pay.

Contractor shall in each subcontract let to do a portion of the work covered hereunder, where the subcontractor involved has 50 or more employees and the subcontract is for \$50,000 or more, impose in the subcontract the above requirements.

For the purpose of determining the number of employees, the average of the Contractor's or his subcontractor's employees from the 12 month period immediately prior to award, or the total number of employees contractor or its subcontractor will have when performing this contract, whichever is higher, shall be used.

Federally Assisted Construction - If this project is a federally assisted construction project, then the contract provisions contained 41 CFR S60-1.4(b) are incorporated herein and Contractor shall likewise incorporate said provisions in each subcontract entered into by Contractor to perform the work. Federally assisted construction is identified as such in the Notice Inviting Bids.

5.1.4. Registration of Contractors

In order to be considered, a prospective bidder must be licensed in accordance with Division 3, Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

5.1.5. Accident Prevention

Particular attention shall be given to relevant Division of Industrial Safety Construction and Electrical Safety Orders. Said Orders are contained in Title 8 of the California Code of Regulations, Chapter 4, Subchapters 4 and 5. Specific attention shall be taken of the California Occupational Safety and Health Act of 1973 (commencing with Section 6300 of the Labor Code) and the Federal Occupational Safety and Health Act of 1970 (P.L. 91-596) and rules and regulations issued pursuant to said Acts. Specific reference is made to Article 6 of said Construction Safety Orders. Contractor shall submit to County, in advance of excavation a detailed plan showing the design of shoring, bracing, sloping of the sides of trenches, or other provisions to be made for protection of personnel during earthwork operations. In event the Contractor's plan does not conform to the shoring system requirement of Article 6, the contractor's proposed shoring design shall be prepared and signed by a civil or structural engineer registered in the State of California. The Contractor shall also impose these requirements on all subcontractors involved and enforce compliance therewith. The duties here set forth are nondelegable by Contractor.

5.2. CONTRACTOR'S RESPONSIBILITY

Contractor is under the absolute duty in fulfilling his contractual obligations hereunder to proceed, and cause his subcontractors to proceed, in a safe, workmanlike manner, with adequate safeguards for the protection of the public, the workmen and persons from time to time inspecting the work. If at any time Contractor finds any of his subcontractors are allowing work to proceed in an unsafe manner or contrary to the terms of the Contract Documents, Contractor shall immediately cause such action to stop and immediately take all action necessary to protect workmen, inspectors and the general public and cause the work to proceed in a safe manner or in accordance with the terms of the Contract Documents.

5.3. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the formal final acceptance of the completed work by the County, the Contractor shall have the charge and care of the work and shall bear the risk of injury or damage to any part of the work by the action of the weather or from any other cause, whether or not arising from the execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work.

5.4. PROPERTY RIGHTS IN MATERIALS

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil. All such materials shall become the property of the County upon being so attached or affixed.

5.5. PERMITS AND LICENSES

The Contractor shall procure all permits and licenses (including but not limited to: National Pollution Discharge Elimination System (NPDES) and South Coast Air Quality Management District (AQMD) permit requirements), pay all charges and fees, and give all notices necessary and incident to prosecution of the work.

5.6. ROYALTIES AND PATENTS

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and agrees to indemnify and save harmless the County and its duly authorized representatives, from all suits at law, or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

5.7. SANITARY PROVISIONS

Necessary conveniences, properly secluded from public observation, shall be provided by the Contractor where needed for the use of laborers on the work. Their location, construction and maintenance shall be subject to the approval of the County. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the State Department of Health or other authorities having jurisdiction.

5.8. Public Safety

The Contractor at its own expense shall furnish, erect, and maintain such fences, barriers, lights, and signs as are necessary to give adequate warning to the public at all times that the work is under construction; and the Contractor shall erect such warning and directional signs and employ such flagmen as are required and shall maintain same throughout the construction period. Full compensation for the work involved in carrying out the precautionary measures above specified shall be considered as included in the prices paid for the various contract items of work and no additional payment will be made therefore.

5.9. USE OF EXPLOSIVES

When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property. All explosives shall be stored in accordance with the provisions of Division II Part I, Chapter 3, of the Health and Safety Code of the State of California and other applicable laws or regulations.

5.10. Provisions For Emergencies

Unusual conditions may arise on the work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life or property, and it

is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as its operations make necessary to protect the public from danger or damage, or loss of life or property.

Whenever work is undertaken pursuant to this Section, Contractor shall promptly file with County a verified report setting forth the nature of the emergency and the action taken by the Contractor by reason of the emergency.

Whenever, in the opinion of the County, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured or damaged because of the Contractor's work; and, in the opinion of the County, immediate action shall be considered necessary in order to protect public or private, personal or real property interests, or prevent likely loss of human life or damage; then the County may provide suitable protection to said interests by causing such work to be done and material to be furnished as, in the opinion of the County, may seem reasonable and necessary. The cost and expense of all such emergency work shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefore, duly certified by the County, then said cost and expense will be paid by the County and shall thereafter by deducted from any amounts due or which may become due said Contractor. Failure of the County, however, to take such precautionary measures, shall not relieve the Contractor of its full responsibility for public safety.

5.11. Unforeseen Difficulties

The risk of all loss or damage, except as noted in Section 8.4, arising out of the work, or from any unforeseen obstructions or difficulties which may be encountered during the progress of the work, or from the action of the weather, or from encumbrances in the line of work, shall be the responsibility of the Contractor.

5.12. ACCESS TO THE WORK

Unless provided for in the Special Provisions, access to the work from existing roads shall be provided by the Contractor at its expense and maintained in a manner so as not to create a public nuisance. The County assumes no responsibility for the condition or maintenance of any existing road or structure thereon that may be used by the Contractor for performing the work or for traveling to and from the site of the work. No additional payment will be made to the Contractor for constructing any temporary road used for construction operations or for improving, repairing, or maintaining any existing road or structure thereon that may be used by the Contractor for performance of the work under these specifications. The cost of all work described in this paragraph shall be included in the prices bid in the schedule for other items of construction work.

5.13. GUARANTEE OF WORK

All work shall be guaranteed by Contractor for a period of two (2) years from the recordation of the Notice of Completion against any defects, including but not limited to those resulting from the use of inferior materials, equipment, or workmanship. Upon notice from County, Contractor shall promptly remedy such defects at its expense, including payment to County of its expenses in connection with such defects; otherwise County shall proceed to remedy such defects and Contractor shall reimburse County for its expenses.

This guarantee is in addition to any specific guarantee(s) provided for elsewhere in the Contract Documents or provided by manufacturers or suppliers.

5.14. SURETY OF GUARANTEE

The performance of guarantee and conditions specified in Section 5.13., shall be secured by a surety bond which shall be delivered by the Contractor to the County prior to the date on which final payment is made to the Contractor. Said bond shall be in an approved form and executed by a surety company or companies satisfactory to the County, in the amount of 10 percent of the final contract price. Said bond shall remain in force for the duration of the guarantee period specified in Section 5.13. Instead of providing such a bond as described above, the Contractor may, at its option, provide for the performance bond furnished under the contract to remain in force for said amount until the expiration of said guarantee period; and the amount of said performance bond may be reduced to 10 percent of the final contract price beginning at the time of recordation of the Notice of Completion.

5.15. DAMAGES BY ACT OF GOD

If the construction of the project herein is damaged, which damage is determined to have been proximately caused by an act of God, in excess of 5% of the contract amount, provided that the work damaged is built in accordance with applicable building standards and the plans and specifications, then the County may, without prejudice to any other right or remedy, terminate the contract.

6. PROSECUTION AND PROGRESS

6.1. PROGRESS OF THE WORK

The Contractor shall begin the work within ten (10) calendar days after the date of receipt by Contractor of notice to proceed from the County and shall <u>diligently and continuously</u> prosecute the same to completion within the time limit provided in the Special Provisions.

6.2. OVERTIME WORK AND WORK AT NIGHT

The Contractor shall conduct the work on a five (5) day, forty (40) hour work week with no work on legal holidays (as further described in the Special Provisions). If the Contractor feels it is necessary to work more than the normal 40 hour work week, he will make a written request for permission from the County, outlining the reasons for such request. The decision of granting permission for overtime work shall be in the sole discretion of the County; and the decision of the County shall be final. If granted, a condition will be imposed requiring the Contractor to pay the County the cost incurred at overtime rates for additional inspection and engineering time required in connection with the overtime work.

When any work is performed at night, only such classes of work shall be done as can be properly inspected. Adequate light must be provided for the safety of the workers and for proper inspection.

6.3. SUBCONTRACTING

Reference is made to the Subletting and Subcontracting Fair Practice Act contained in the California Public Contract Code (commencing with Section 4100). By this reference, said Act is incorporated herein with like effect as if it were here set forth in full and the parties shall abide by its terms and substitution shall be only as allowed by that Act. County reserves the right to approve all subcontractors whether or not they are required to be listed in the Contractor's Proposal.

Contractor shall be responsible for the acts and omissions of its subcontractors and shall make certain that at all times its subcontractors comply with the terms of the Contract Documents and applicable law. Where a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the County, the subcontractor shall be removed immediately on the request of the County and shall not again be employed on the work.

The Contractor shall give its personal attention to the fulfillment of the contract and shall keep the work under its control. The Contractor shall perform with its own organization work of a value amounting to not less than 50 percent of the remainder obtained by subtracting from the total original contract value the sum of any item designated herein or in the Special Provisions as Specialty Items. The furnishing and placing of reinforcing steel, when placing is performed by the supplier, will be considered as a Specialty Item for this purpose; however, he shall be designated in the list of subcontractors. The value of the work subcontracted will be based on the contract item bid price, if any subdivision of a contract unit is subcontracted, the entire unit shall be considered as subcontracted.

6.4. CHARACTER OF WORKMEN

If any subcontractor or person employed by the Contractor shall fail or refuse to carry out the directions of the County or shall appear to the County to be incompetent or to act in a disorderly or improper manner, he/she shall be discharged immediately upon the request of the County and such person shall not again be employed on this work.

6.5. TEMPORARY SUSPENSION OF THE WORK

The County shall have the authority to suspend the work wholly or in part, for such period as the County may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as the County may deem necessary due to the failure on the part of the Contractor to properly perform the work. The Contractor shall immediately comply with the order of the County to suspend the work wholly or in part. The work shall be resumed when conditions are favorable or methods are corrected, as ordered or approved by the County.

6.6. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall complete the work called for under the contract in all parts and requirements within the number of working days specified in the Special Provisions. Liquidated damages shall apply as stated in the Special Provisions.

A working day is hereby defined as any day (except Saturdays, Sundays, legal holidays, and days on which the Contractor is specifically required by the Special Provisions to suspend construction operations) on which the Contractor is not prevented by inclement weather or resulting conditions from proceeding with at least 60 percent of the normal labor and equipment force engaged in the controlling operation or operations for at least five hours.

The County will furnish the Contractor a weekly statement showing the number of working days charged to the contract for the preceding week, the number of working days specified for completion of the contract, and the number of working days remaining to complete the contract. The Contractor will be allowed one week in which to file a written protest setting forth in what respects the weekly statement is incorrect, otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

The following holidays will be considered as legal holidays: New Year's Day; Martin Luther King Jr. Birthday, Lincoln's Birthday; Washington's Birthday (observed); Memorial Day; Independence Day; Labor Day; Columbus Day; Veteran's Day; Thanksgiving Day; Christmas; and such other days as are declared County holidays by ordinance passed by the Board of Supervisors. Please refer to specific holiday dates listed in the Special Provisions.

Contractor acknowledges that failure to perform in strict accordance with the Contract Documents and within the time limits specified in the Special Provisions will cause County to suffer special damages in addition to cost of completion of the work in accordance with the provisions of the Contract Documents. Such special damage could include, but is not limited to, lease and rental cost, additional salaries and overhead, interest during construction, attorney expense, additional engineering, inspection expense, cost of maintaining or constructing alternate facilities, and injury to the property of the County or others. Such special damage could also include penalties assessed against the County by other governmental agencies for failure to have

the project completed in a timely manner or as required by law. The County may withhold from any money due or that may become due the Contractor under the contract such amount as the County may elect to offset the damages incurred. Any withholding or failure to withhold shall not in any way limit recovery for damages actually incurred.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the County (in its sole discretion) shall have the right to extend the time for completion or not. If the County decides to extend the time limit for the completion of the contract, the County shall further have the right to charge to the Contractor and to deduct from the Contractor's payment all or any part of the actual cost of engineering, inspection, superintendence, and other related expenses caused by the Contractor's failure to complete the project as required. In such case, liquidated damages shall not apply as stated in the Special Provisions.

6.7. DELAYS AND EXTENSION OF TIME

If delays are caused by unforeseen causes beyond the control of either the Contractor or the County, such as war, strikes, fire, floods, or other action of the elements, such delays will entitle the Contractor to an equivalent extension of time for the completion of the contract but not damages or additional payments over the contract price. Furthermore, if the Contractor suffers any delay caused by the failure of the County to furnish the necessary right of way or materials agreed to be furnished by it, or by failure to supply necessary plans or instructions concerning the work to be done after written request therefore has been made, the Contractor shall be entitled to an extension of time equivalent to the time lost for any of the above-mentioned reasons but shall not be entitled to any damages for such delay.

6.8. ASSIGNMENT

The contract may be assigned only upon prior written consent of the County. Such written consent to sublet, assign or otherwise dispose of any portion of the contract, shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

6.9. TERMINATION OF CONTRACT

If the Contractor fails to begin delivery of material and equipment or to commence work within the time specified herein, or to maintain the rates of delivery of materials, or to execute the work in the proper manner, written notice by the County may be served upon the Contractor demanding compliance with the contract. If the Contractor refuses or neglects to comply with such notice within five (5) working days after receipt of the notice, then the County may take possession of the work, together with all material and equipment thereon, and may complete the work itself in the manner the County determines to be appropriate. The cost of the completion of the work shall be charged against the Contractor and its surety and may be deducted from any money due to the Contractor; and if the sums due under the contract are insufficient, the Contractor and/or its surety shall pay to the County within five (5) working days after the completion of the work all of such cost in excess of the contract price.

7. PAYMENT

7.1. SCOPE OF PAYMENTS

The compensation described in the Agreement shall be complete and full payment to the Contractor for furnishing all materials, labor, tools, equipment and related items necessary to complete the work; and for all obligations imposed upon the Contractor pursuant to the Contract Documents. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

7.1.1. Measurement and Computation of Quantities

Unless otherwise stated, all items of the work to be paid for at a contract price per unit of measurement will be measured by the County in accordance with United States Standard Measures. A ton shall mean 2,000 pounds, avoirdupois. Except as otherwise expressly provided in the specifications, the methods of measurement and computation of quantities will be determined by the County.

The weights of metalwork, and other metal parts to be paid for by weight will be determined by the County on the basis of handbook weights, scale weights, or manufacturer's catalog weights, or in the absence of any of the foregoing, on the basis of estimated weights; provided, that weights of nonmetallic coatings will be excluded.

7.1.2. Payment at Contract Prices

The contract price for an item of the work shall include full compensation for all costs of that item, including the costs of any work, materials and equipment incidental to the item but not specifically shown or described in the Contract Documents.

The contract prices shall include full compensation for all costs of any work, materials, and equipment required by the Contract Documents, but not covered by a contract price or otherwise expressly made the subject of direct payment.

7.2. PAYMENT AND COMPENSATION FOR ALTERED QUANTITIES

When alterations in plans or quantities of work are ordered and performed, the Contractor agrees to accept payment in full at the contract unit price for the actual quantities of work done; and no additional payment will be made for anticipated profits.

7.3. FORCE ACCOUNT PAYMENT

When extra work is to be paid for on a force account basis, compensation will be determined as follows:

7.3.1. Work Performed by Contractor

The Contractor will be paid for labor, materials, and equipment rental as hereinafter provided, except where agreement has been reached to pay in accordance with Section 7.3.2. Only materials incorporated in the work will be paid for.

To the total computed as provided in Section 7.3.1.1, 7.3.1.2 and 7.3.1.3 will be added the following percentages:

Labor -- 24 percent Materials -- 15 percent Equipment Rental -- 15 percent

It is understood labor, materials, and equipment may be furnished by the Contractor or by the subcontractor or by others on behalf of the Contractor.

When extra work paid for on a force account basis is performed by forces other than the Contractor's organization, the Contractor shall reach agreement with such other forces as to the distribution of the payment made by the County for such work and no additional payment therefore will be made by the County.

7.3.1.1. Labor

The Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the County), used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be the sum of the following:

7.3.1.1.1.Actual Wages

The actual wages paid shall include any employer payments to or on behalf of the workmen for health and welfare, pension, vacation, and similar purposes.

7.3.1.1.2.Labor Surcharge

To the actual wages as defined in Section 7.3.1.1.1., will be added a labor surcharge set forth in the Special Provisions, which labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 7.3.1.1.1 and subsistence and travel allowance as specified in Section 7.3.1.1.3.

7.3.1.1.3. Subsistence and Travel Allowance

Subsistence and travel allowance paid to such workmen as required by collective bargaining agreements.

7.3.1.2. Materials

The cost of materials incorporated in the work will be the cost to the purchaser, whether Contractor, subcontractor or other forces, from the supplier thereof, except as the following are applicable:

(a) If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to the County notwithstanding the fact that such discount may not have been taken.

- (b) If the materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the County. No markup except for actual costs incurred in the handling of such materials will be permitted.
- (c) If the materials are obtained from a supply or source owned wholly or in part by the purchaser, payment therefore will not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or on the current wholesale price for such materials delivered to the job site whichever price is lower.
- (d) If the cost of such materials is, in the opinion of the County, excessive, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided in Section 7.3.1.2(a).
- (e) If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost shall then be determined in accordance with Section 7.3.1.2(d).

The County reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and profit on such materials.

7.3.1.3. Equipment Rental

The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Special Provisions regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the County to use equipment not listed in the Special Provisions, a suitable rental rate for such equipment will be established by the County. The Contractor may furnish any cost data which might assist the County in the establishment of such rental rate.

The rental rates paid as above provided shall include the cost of fuel, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Operators of rented equipment will be paid for as provided under Section 7.3.1.1

All equipment shall, in the opinion of the County, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools having a replacement value of \$25.00 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

In computing the rental time of equipment, less than 30 minutes shall be considered ½ hour.

7.3.1.3.1. Equipment on the Work

The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed, and in addition, shall include the time required to move the equipment to location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.

7.3.1.3.2. Equipment not on the Work

For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Special Provisions or as agreed to as provided in Section 7.3.1.3 and for the cost of transporting the equipment to the location of the work and its return to its original locations, all in accordance with the following provisions:

- (i) The original location of the equipment to be hauled to the location of the work shall be agreed to by the County in advance.
- (ii) The County will pay the costs of loading and unloading such equipment.
- (iii) The cost of transporting equipment on low bed trailers shall not exceed the hourly rates charged by established haulers.
- (iv) The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.
- (v) The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and legal holidays unless the extra work is performed on such days, and shall terminate at the end of the day on which the County directs the Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

Hours In	Hours to be Paid
0	4
0.5	4.25
1	4.5
1.5	4.75
2	5
2.5	5.25
3	5.5
3.5	5.75
4	6
4.5	6.25
5	6.5
5.5	6.75
6	7
6.5	7.25
7	7.75
8	8
Over 8	Hours in operation

When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.

When daily rates are listed, payment for ½ day will be made if the equipment is not used. If the equipment is used, payment will be made for one day.

The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

- (i) Should the Contractor desire the return of the equipment to a location other than its original location, the County will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.
- (ii) Payment for transporting, loading and unloading equipment, as above provided, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.

7.3.2. Work Performed by Special Forces or Other Special Services

When the County and the Contractor, by advance agreement, determine that a special service or an item of extra work cannot be performed by the forces of the Contractor or those of any of his subcontractors, such service or extra work item may be performed by a specialist. Invoices for such service or item of extra work on the basis of the current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization.

In those instances wherein a Contractor is required to perform extra work necessitating a fabrication or machining process in a fabrication or machine shop facility away from the job site, the charges for that portion of the extra work performed in such facility may, by agreement, be accepted as a specialist billing.

To the specialist invoice price, less a credit to the County for any cash or trade discount offered or available, whether or not such discount may have been taken, will be added 15 percent in lieu of the percentages provided in Section 7.3.1.

7.3.3. Records

The Contractor shall maintain his records in such manner as to provide a clear distinction between the direct costs of extra work paid for on a force account basis and the costs of other operations.

The Contractor shall furnish the County (on a form provided by the County) report sheets in duplicate of each day's extra work paid for on a force account basis no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct costs of labor and the charges for equipment rental, whether furnished by the Contractor, subcontractor, or other forces, except for charges described in Section 7.3.2. The daily report sheets shall provide names or identifications and classifications of workmen, the hourly rate of pay and hours worked, and also the size, type and identification number of equipment, and hours operated.

Materials charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily report sheets, or if not available, they shall be submitted with subsequent daily report sheets. Should said vendor's invoices not be submitted within 15 days after acceptance of the work, the County reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available in the quantities concerned delivered to the location or the work, less any discounts provided in Section 7.3.1.2 (a).

Daily report sheets shall be signed by the Contractor or its authorized agent.

The County will compare its records with the daily report sheets furnished by the Contractor, make any necessary adjustments, and compile the costs of work paid for on a force account basis on daily extra work report forms furnished by the County. When these daily extra work reports are agreed upon and signed by both parties, they shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit.

The Contractor's cost records pertaining to work paid for on a force account basis shall be open to inspection or audit by representatives of the County, during the life of the contract and for a period of not less than 18 months after the date of acceptance thereof, and the Contractor shall retain such records for that period. Where payment for materials or labor is based on the cost thereof to forces other than the Contractor, the Contractor expressly guarantees that the cost records of such other forces shall be open to inspection

and audit by representatives of the County on the same terms and conditions as the cost records of the Contractor. If an audit is to be commenced more than 60 days after the acceptance date of the contract, the Contractor will be given a reasonable notice of the time when such audit is to begin.

7.3.4. Payment

Payment as provided above in Sections 7.3.1 and 7.3.2 shall constitute full compensation to the Contractor for performance of work paid for on a force account basis and no additional compensation will be allowed therefore.

7.4. ACCEPTANCE

The work shall be inspected for final acceptance by the County promptly upon receipt of notice in writing from the Contractor that the completed work is ready for such inspection.

7.5. PARTIAL PAYMENTS

On or about the last day of each month, the County shall make an estimate in writing of the total amount of work done by the Contractor to the time of such estimate and the value thereof. The County shall retain 5 percent (5%) of such estimated value of the work or partial payment for the fulfillment of the contract by the Contractor.

After deducting all previous payments and all sums to be kept or retained under the provisions of the contract or applicable law, the County shall make monthly progress payments to the Contractor. No such estimate or payment shall be required to be made when, in the judgment of the County, the work is not proceeding properly. No payment shall be required to be made by the County unless and until all required submittals have been delivered to the County, including but not limited to the following: certified payroll information, construction schedule updates as listed in Section 2.2, and National Pollution Discharge and Elimination System permit requirements as stated in Special Provisions.

In accordance with Public Contract Code Section 22300 and other applicable law, the Contractor may substitute securities for any monies withheld to ensure performance under the contract. Such substitution shall be made only upon a separate agreement between the County Board of Supervisors and the Contractor which contains terms and conditions in compliance with all laws applicable to monies withheld under the contract.

7.6. DELAYED PAYMENTS

All the monies due the Contractor under the contract will be paid by the Treasurer of the County of Riverside, prepared and approved as required by law; and it is understood that any delay in the preparation, approval and payment of these demands will not constitute a breach of the County's obligations.

7.7. FINAL PAYMENT

The County, after completion of the work, and submittal of any and all final documents or reports required by the Special Provisions, shall make a final estimate in writing to the County Board of Supervisors of the amount of work done and the value of such work; and pursuant to order of the Board of Supervisors the County shall pay the sum found to be due after deducting

therefrom all previous payments and all amounts to be kept and retained under the provisions of the contract or applicable law. All prior partial estimates and payments shall be subject to correction in the final estimate and payment. The withheld retention funds shall not be due and payable to the Contractor until the expiration of thirty-five (35) days after the date of approval by the Board of Supervisors and recordation of the notice of completion.

The Contractor agrees that no certificate given or payments made under the contract except the final payment and approval by the Board of Supervisors shall be conclusive evidence of the performance of the contract. No payment shall be construed to be an acceptance of any defective work or improper materials.

The Contractor agrees that payment of the final amount due under the contract will be withheld until the guarantee of work as required in Section 5.14 herein is accepted by the County in approved form.

The Contractor's agreement to the final payment shall release the County, including its officers, employees, agents and contractors, from any and all claims from the Contractor for further or additional compensation related to the work.

7.8. CLAIMS RESOLUTION

In accordance with Public Contract Code Section 20104 - 20104.8 and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and the County shall be resolved following the statutory procedure unless the County has elected to resolve the dispute pursuant to Public Contract Code 10240 et seq.

7.8.1. Submission of Claims

All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed before processing of the final payment unless other notice requirements are provided in the contract. "Claim" means a separate demand by the claimant for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by the County.

7.8.1.1. Claims Under \$50,000.00

The County shall respond in writing to the claim within 45 days of receipt of the claim, or, the County may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the County may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of the County and the claimant. The County's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.

7.8.1.2. Claims over \$50,000.00 but less than or equal to \$375,000.00

The County shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims the County may have against the claimant. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between the County and the claimant. The County's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater.

7.8.2. Meet and Confer

If the claimant disputes the County's response, or if the County fails to respond within the statutory time period, the claimant may so notify the County within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, the County shall schedule a meet and confer conference within 30 days.

7.8.3. Filing of Claims

If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code 900 et seq. and Government Code 910 et seq.

7.8.4. Mediation and Judicial Arbitration

If a civil action is filed to resolve any claim, the provisions of Public Contract Code 20104.4 shall be followed providing for nonbinding mediation and judicial arbitration.

7.8.5. Location for Filing of Claims, Jurisdiction

Any legal action related to the performance of the work or the terms of the Contract Documents shall be filed only in the Superior Court of the State of California located in Riverside, California.

8. GENERAL

8.1. COOPERATION BETWEEN CONTRACTORS

The Contractor shall fully cooperate and coordinate its work with all utility and public agency representatives engaged in construction, relocation, altering or otherwise rearranging any facilities interfering with the progress of the work, and with any other contractors working at or near the project site. Full compensation for any delay or inconvenience to the Contractor's operation due to such operations shall be considered included in the prices for the other items of work and no additional allowance will be made therefore.

8.2. Insurance - Hold Harmless

Contractor shall not commence work under this contract until it has obtained the insurance required hereunder and satisfactory proof of said insurance has been submitted to County and has been approved as to form by County's Counsel.

Compensation Insurance - Contractor shall procure and maintain during the life of the contract Workers' Compensation Insurance as required by the State of California. Contractor shall further require each of its subcontractors to procure Workers' Compensation Insurance as required by the State while working on the project.

General Liability and Motor Vehicle Insurance - Contractor shall take out and maintain during the course of the work combined single limit liability insurance covering bodily injury and property damage insurance and blanket contractual coverage as to the work and obligations covered hereunder in an amount not less than \$1,000,000 per occurrence, \$2,000,000 aggregate, or the equivalent thereof. This policy shall name "County of Riverside and the Riverside County Waste Resources Management District and their elected or appointed officials, employees, and This insurance must be modified by endorsement. agents" as additional insureds, verbatim. This endorsement must include the following as additional insureds as respects to the work covered hereunder, "County of Riverside and the Riverside County Waste Resources Management District and their elected or appointed officials, employees, and agents", and any property owner identified in the Special Provisions where the work is conducted and any municipal corporation in which the work is to be accomplished. This insurance must not contain, as respects the work covered hereunder, any exclusions as to bodily injury or death or property damage arising out of blasting, explosion, or underground damage to wire, pipes, conduits, mains, sewers, tank tunnels or any similar property, i.e., the so-called "x c u" exclusions. The insurance certificate evidencing such insurance must affirmatively state that the insurance carrier(s) will give County thirty (30) days written notice prior to cancellation of the insurance or a reduction in coverage, must state that the "x c u" exclusions are waived or do not exist in the policy(s); and that the above stated entities are named as additional insureds.

In the alternate to naming the County of Riverside, any property owner identified in the Special Provisions where the work is conducted and any municipal corporation in which the work is to be accomplished, as additional insured, Contractor may take out and maintain during the course of the work and until acceptance by County, Owner's Protective Liability Insurance amount not less than \$1,000,000 per occurrence, \$2,000,000 aggregate covering the County of Riverside, any property owner identified in the Special Provisions where the work is conducted and any municipal corporation in which the work is to be accomplished.

The cost of this insurance shall be included in the prices bid for the various items of work and no additional compensation will be made therefore. All insurance must be provided by companies licensed to issue such insurance in the State of California.

Hold Harmless - Contractor shall hold the County, any property owner, and any municipal corporation in which the work is to be accomplished, together with the officers, agents, employees and contractors of each, free and harmless from any liability, damage, claim or action whatsoever (including but not limited to wrongful death) based or asserted upon any act or omission of Contractor, its officers, agents, employees or subcontractors, relating to or in any way connected with or arising from the accomplishment of the work; and Contractor agrees to protect and defend, including attorney fees and other expenses, each of the foregoing entities and persons in any legal action based or asserted upon any such acts or omissions.

8.3. Public Utilities

The locations of all pipelines, power lines, communication lines and other utility components known to County to exist within the limits of the work, are indicated on the drawings and may be the subject of a specific section in the Special Provisions. Size, location and characteristics of such utilities are based upon information made available to County, generally from the owner of the utility in question. The exactness of such information is not guaranteed but may be assumed to have been accomplished with reasonable accuracy.

In addition to the drawings and any such provision regarding utilities, Contractor is under a duty to take into account the location of service laterals or other appurtenances which can be inferred from the presence of facilities such as buildings, meter, junction boxes or similar items in or about the limits of the work.

Unless otherwise directed by the Contract Documents, all existing utilities, whether shown or described or not, shall be left in place and Contractor must conduct its operations so that such utilities are protected from damage at all times during the course of the work; and the work must be accomplished so as to give such utilities proper protection and support upon completion of the work by Contractor.

If during the course of the work, Contractor discovers underground utility components not indicated in the drawings or elsewhere in the Contract Documents, Contractor must immediately notify, in writing, the County and the utility company (public or private) involved, stating with exactness the condition found.

If Contractor encounters a utility not shown or described in the Contract Documents, Contractor shall cease all work which would disturb such utility and its support until given specific instructions as to how to proceed regarding such utility by County.

All work needed to protect existing utilities shown or described in the Contract Documents, or which can be reasonably inferred from the presence of other visible facilities, is to be done at Contractor's expense.

Contractor's cost of locating and repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating utility components and facilities not indicated in the

drawings or elsewhere in the Contract Documents, and for equipment on the project necessarily idled during such work shall be paid Contractor as Extra Work.

County may direct the Contractor to do such repair or relocation work as required. When such repair or relocation work is not elsewhere provided for in these Contract Documents, or reasonably inferred therefrom, Contractor shall be compensated for such work as Extra Work.

8.4. PROTECTION OF EXISTING STREET FACILITIES

The Contractor shall be responsible for the protection of existing signs, fences, concrete curbs, gutters and other facilities or structures. The Contractor shall be responsible to repair or replace any such items which are damaged.

Excavation within the street right of way shall be conducted in a manner to cause the least interruption to traffic. Where traffic must cross open trenches, the Contractor shall provide suitable bridges at street intersections and driveways. Hydrants under pressure, valve pipe covers, valve boxes, curb stop boxes, fire or police call boxes, or other utility controls shall be left unobstructed and accessible during construction.

8.5. DIVERSION AND CONTROL OF WATER

Unless otherwise provided in the Agreement, no separate or additional payment will be made for diversion or control of surface or groundwater. All costs incidental to maintaining dry working areas shall be the responsibility of the Contractor and shall be included in the unit prices paid for other items of work.

8.6. DUST ABATEMENT

During the performance of all work, the Contractor shall take the necessary precautions to avoid any loss or damage resulting from its operations that raise or produce dust. The Contractor will be required to have a positive and continuous method of dust control which is satisfactory to the County. The methods to be used for controlling dust in the construction area and along haul roads shall be approved by the County prior to starting any of the work. All costs incidental to dust control shall be included in the unit prices paid for other items of work.

8.7. PROJECT SIGNS

The Contractor shall erect a maximum of two project signs at the locations designated by the County. The signs will be furnished by the County. The signs shall be erected as soon as possible and within 15 days after date of Notice to Proceed. The signs are 4 feet by 8 feet in size, with two 4" x 4" x 12' posts. The sign posts shall be set 5.0 feet in good solid ground and the backfill carefully tamped into place.

8.8. EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT, AND SITE OF WORK

The Contractor shall examine fully and carefully the site of the work, the plans, the specifications, and any other Contract Documents prior to submitting its bid. The submission of a bid shall be conclusive evidence that the Contractor has investigated the site and is satisfied as to the conditions and requirements of the work to be performed.

Where the County has made investigations of subsurface conditions in areas where work is to be performed, or in other areas, such investigations are made only for the purpose of study and design. Where such investigations have been made, bidders may, upon request, inspect the records of the County as to such investigations. The records of such investigations are not a part of the contract and are solely for the convenience of the bidders. It is expressly understood and agreed that the County assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof; or of the interpretations set forth therein or made by the County in its use thereof and there is no warranty or guarantee, either express or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered. No information derived from inspection of such records will in any way relieve the Contractor from its obligations under the Contract Documents.

9. WATERING

9.1. DESCRIPTION

This work shall include providing a water supply for all water required for the work. The application of the water shall be subject to the approval of the County at all times and shall be applied in the necessary amounts and at the necessary locations subject to the approval of the County.

At least one mobile unit of at least 1,000-gallon capacity for applying water shall be available on the project at all times.

Water for compacting embankment material and for dust control shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses with nozzles that will ensure a uniform application of water.

10. PUBLIC CONVENIENCE, TRAFFIC CONTROL AND DETOURS

10.1. GENERAL

The Contractor shall so conduct its operations as to offer the least possible obstruction and inconvenience to the public and it shall have under construction no greater length or amount of work than it can prosecute properly with due regard to the rights of the public.

Unless otherwise provided in the Special Provisions, all public traffic shall be permitted to pass through or near the work with as little inconvenience and delay as possible.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately at the Contractor's expense.

Construction operations shall be conducted in such a manner as to cause as little inconvenience and annoyance as possible to abutting and nearby property owners.

Convenient access to driveways, houses and buildings along or near the work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition.

10.2. SIGNS

It shall be the responsibility of the Contractor to provide and maintain all traffic control, lights, barricades and signs, both on and off the site of work, subject to approval of the County; and all such devices shall be of a type approved by the County.

If, in any case, the County finds it necessary to replace, add to or erect said barricades, signs, or lights when the Contractor fails to do so, the Contractor shall be billed for all costs thereof.

10.3. MATERIALS STORAGE

Storing or stockpiling of excavated material, imported backfill material or construction materials on any street or highway will not be permitted except as approved in advance in writing by the County.



SPECIAL PROVISIONS

FOR

THE CONSTRUCTION OF

SITE DRAINAGE IMPROVEMENTS

AT THE

LAMB CANYON SANITARY LANDFILL

AUGUST 2015



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SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SITE DRAINAGE IMPROVEMENTS AT THE LAMB CANYON SANITARY LANDFILL

SECTION 1 - GENERAL

1.1 INTRODUCTION

These Special Provisions are for The Construction of Site Drainage Improvements at the Lamb Canyon Sanitary Landfill in Riverside County, California. This project is designated as "The Construction of Site Drainage Improvements" (Project).

The main items of work required by this Project shall include but are not limited to: construction of aggregate base roadways, construction of drainage structures, installation of various Best Management Practices (BMPs) measures, repairing slope and bench erosions, removing accumulated sediment and re-grading sedimentation basin, adjusting the elevation of an existing skimmer assembly, and construction of a percolation basin which is an optional bid item (refer to SECTION 19 - Percolation Basin). All work to be implemented under this contract shall consist of furnishing equipment, superintendence, labor, skills, materials, and all other items necessary for the execution of the Project and shall conform to the Contract Documents for this Project.

The Contractor shall be aware that the Lamb Canyon landfill is an active landfill site. The Contractor's work relating to the project shall not impede or interrupt daily landfill operations. Full cooperation of the Contractor and its forces is required to assure safe working conditions. Therefore, it is necessary to emphasize that the County will have full authority to eject any of the Contractor's employees or subcontractors who do not immediately abide by the landfill site rules or the directions of the County.

1.2 DEFINITION OF TERMS

Cubic Yard

Unless otherwise specified in these specifications, where the term cubic yard appears it shall mean bank (bulk) volume in the case of excavation; and compacted volume yielding the specified relative compaction, moisture content, and hydraulic conductivity, if required, in the case of engineered fill.

HDPE

HDPE is the high-density polyethylene material used in the manufacturing of piping and flexible membrane liners.

Leachate

This term is defined as liquid that has come in contact with or percolated through waste materials.

LDPE

LDPE is low-density polyethylene material (20-mil) used in the manufacturing of flexible membrane liners.

Leachate Collection and Removal System (LCRS)

LCRS is a system that collects and removes leachate. It also controls leachate head within the liner system during landfill operation.

Protective Soil Layer

This term is defined as a soil layer that overlies the drainage layer or geotextile and comes into direct contact with placed waste. This term is also referred to as the Operation Layer.

Relative Compaction

This term is defined as the ratio of field compacted dry density to the maximum dry density as determined by the Moisture Density Relationship Test, ASTM D1557.

Side-Slope Liner

This term is defined as geosynthetic clay liner (GCL), high-density polyethylene flexible membrane liner (HDPE-FML), and Geotextile, which creates part of the landfill lining system.

Slope

Slope is described in terms of horizontal distance to vertical distance (H:V) where V is generally fixed as unity. It is also expressed as a percent (%) equal to the vertical distance divided by the horizontal distance, and multiplied by 100.

Subgrade

This term refers to native, engineered fill, or constructed stable base material, on which all construction elements of this project shall be placed.

Project Manager

The Project Manager is the designated representative of the County responsible for the project.

Resident Engineer

The Resident Engineer will serve as the Project Manager's on-site representative. All coordination, reporting, and issues related to non-compliance will be directed to the Project Manager through the Resident Engineer. In addition, the Resident Engineer will participate with the Project Manager in all decisions related to design issues which arise during the course of construction.

Contractor's Surveyor

The Contractor's Surveyor is responsible to perform horizontal and vertical control of the actual construction, based on benchmarks established by County's Surveyor.

County's Surveyor

Surveyor representing the County shall establish reference benchmarks for construction. County's Surveyor shall also perform surveys to check line, grade, and calculate volumes, as required.

1.3 SUMMARY OF WORK

The work to be performed by the contractor under this contract includes furnishing all labor, materials, vehicles, tools, equipment, power, and incidentals necessary for the construction of the Project. The items of work to be performed shall conform to all of the Contract Documents, including but not limited to the General Provisions, Project Drawings, Referenced Specifications and Documents, and these Special Provisions.

The major features of the work to be performed shall include, but are not limited to:

- A. Provide project survey per Section 1.9
- B. Provide and implement a site safety plan per Section 1.16
- C. Construction of aggregate base roadway and equipment crossing
- D. Furnishing and installing BMP measures including s-fences, sandbag checkdams, fiber rolls, and sediment traps.
- E. Applying hydroseeding and PosiCube on side slopes
- F. Construction of asphalt concrete, shotcrete, 20-mil LDPE, and aggregate base surface drainage structures.
- G. Removal of accumulated sediment and re-grading the existing sedimentation basin at the site and re-establish its original design grades. Adjusting the elevation of the existing skimmer assembly at the outlet of the sedimentation basin.
- H. Construction of a percolation basin (optional bid item).
- I. Repair drainage bench using protective cover soil (PCS) and re-construct 20-mil LDPE drainage structure.
- J. Repair erosion rills along slopes.
- K. Construction of miscellaneous items including earthen diversion berms, asphalt concrete dikes, grouted rip-rap slope protection, and installation of steel bollards.

1.4 REFERENCED SPECIFICATIONS AND DOCUMENTS

The following specifications and documents shall apply as specifically referenced in the Contract Documents:

Standard Specifications

The term Standard Specifications is a direct reference to the publication entitled "Standard Specifications for Public Works Construction" (2015 edition, and all subsequent amendments, supplements, and additions) written and promulgated by the Joint Cooperative Committee of the Southern California Chapter American Public Works Association and Southern California Departments Associated General Contractors of California. This publication is also known as the "Green book."

State Standard Specifications

The "State Standard Specifications" are the Standard Specifications of the State of California, Department of Transportation, 2010 edition.

ASTM Specifications

The latest revised specifications or tentative specifications of the American Society for Testing and Materials.

Standard Drawings

Unless otherwise noted on the Project Drawings, the Standard Drawings shall be those of the Riverside County Flood Control and Water Conservation District, the Riverside County Transportation Department and Standard Plans of the State Department of Transportation (Caltrans).

Plans or Project Drawings

The Plans or Drawings are the contract Project Drawings specifically prepared for this project.

1.5 PRECEDENCE OF CONTRACT DOCUMENTS

In case of conflict between the Contract Documents, the following order of governing documents shall be followed (with the first listed document controlling):

- A. Permits from other agencies as may be required by law
- B. Special Provisions
- C. General Provisions
- D. Project Drawings (specific details supersede general plan)
- E. Standard Drawings
- F. Standard Specifications
- G. State Standard Specifications

1.6 WORKING DAY DEFINITION

Unless otherwise approved in writing by the County, the working day shall be as set forth in Section 6.6 of the General Provisions. The length of each working day shall be from 7:00 AM to 3:30 PM, including half hour for lunch break, Monday through Friday.

1.7 HOLIDAYS

The Contractor shall not be permitted to work on the following days designated by the County as holidays:

January 1st New Year's Day

Third Monday in January Martin Luther King, Jr. Day

February 12th Lincoln's Birthday

Third Monday in February President's Day
Last Monday in May Memorial Day

July 4th Independence Day

First Monday in September Labor Day

Second Monday in October Columbus Day

November 11th Veteran's Day

Fourth Thursday in November Thanksgiving Day

Fourth Friday in November Friday following Thanksgiving Day

December 25th Christmas Day

1.8 TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall diligently and continuously prosecute the <u>entire</u> project to final completion before the expiration of <u>Sixty (60)</u> working days from the date of the Contractor's receipt of the Notice to Proceed.

In case the work called for and all the conditions and requirements of the Contract Documents are not completed within the number of working days specified above, liquidated damages of **Five Hundred Dollars** (\$500) per day for each additional working day required to properly complete the work in excess of the allowed number of working days shall be paid by the Contractor to the County. The County may also deduct this amount from payments due to the Contractor.

1.9 SURVEY CONTROL OF WORK

The County surveyors will establish external primary survey control points on firm ground outside the limits of the work to be used throughout the construction period for the Contractor's work. Survey control is shown on the Project Drawings. In addition, the County surveyors will make verification surveys as various stages of the work are completed and survey for preparation of pay quantities. The Contractor's surveyor is responsible for setting line and grade for the earthwork and any other related construction activities. The Contractor's surveyors are also responsible for ensuring that all construction conforms to the requirements of the Contract Documents.

The Contractor shall provide County representatives with access to the completed portions of the work before they are covered by subsequent construction to allow County representatives to verify that all construction conforms to the requirements of the

Contract Documents. The Contractor shall allow for at least one (1) working day for County survey work or any other inspection to be completed. All construction items shall be subject to verification by the County.

1.10 TESTS AND INSPECTIONS

The Contractor shall comply with requests by the County to alter the work sequence or uncover materials to facilitate testing, inspection, or observation, or for the collection of samples or data. The Contractor shall provide the County with safe and suitable access to the work area for testing, inspection, or observation. **The Contractor is required to submit all materials at least five (5) days before they are scheduled to be integrated into the project**, in order to give the County and adequate time to review, test, and approve the materials.

It is understood that observation and testing of a material at the time of its incorporation into the work shall in no way be considered as a guarantee of continued acceptance of material presumed to be similar to that upon which observations and tests have been made, and that observation and testing performed by the County shall not relieve the Contractor or its suppliers of the responsibility for quality control or to fully comply with the requirements of the Contract Documents.

1.11 LABOR SURCHARGE

Attention is directed to the provisions of Section 7.3.1.1.2. of the General Provisions. The labor surcharge percentage to be applied to the regular hourly wages paid as defined in Section 7.3.1.1. shall be twelve percent (12%). The labor surcharge percentage to be applied to the overtime hourly wages paid as defined in Section 7.3.1.1. shall be twelve percent (12%).

1.12 EQUIPMENT RENTAL

Attention is directed to the provisions of Section 7.3.1.3, of the General Provisions. The equipment rental rates to be applied shall be the rates that are in effect at the time of the award of the contract, as published by the California Department of Transportation. A copy of said equipment rental rates is on file at the County office.

1.13 CONSTRUCTION SCHEDULE

Upon receipt of the Notice to Proceed, or at an earlier time if mutually agreed upon, the County shall arrange a pre-construction meeting to be attended by the County, the Contractor's Project Manager and Project Superintendent, major subcontractors, and other individuals involved in the execution of the work. During the pre-construction meeting the *Contractor shall be issued five* (5) *complete copies of the Contract Documents* (which includes the technical specifications and the project drawings).

Within **five** (5) **business days** of the award of contract by the Riverside County Board of Supervisors, or sooner, the Contractor shall prepare and submit to the County a construction schedule including but not limited to the following: task description, task

start and end dates, percent completion, task relationships (predecessors and successors), work hours, and sequence of construction.

The construction schedule shall be prepared by using either Microsoft Office Project 2010 software (or a later version) or an equivalent computer application, and shall be updated by the Contractor bi-weekly and each time a change in work occurs that will delay a critical path item of the project. Each updated schedule shall be submitted to the County in two format, digitally and hard copy, for review and acceptance. The updated schedule shall show the actual progress of work and the work remaining. Progress payments will be withheld by the County if the Contractor fails to provide acceptable schedules as required.

The Contractor shall be responsible for the coordination and cooperation of all subcontractors, material suppliers, utilities, and any required testing agencies, so that all components are properly integrated into the construction, and so there are no resulting delays in the progress of the project. The Contractor shall be responsible for cooperating with all County staff. Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.14 CONTRACTOR'S QUALIFICATIONS

In addition to the Bidder's Qualifications that are listed under the "Notice To Contractors" of these Contract Documents, the Contractor shall have, or be able to obtain, all the personnel, equipment, and materials necessary to perform the work specified in the scope of work, and be able to keep the needed equipment at the job site for the duration of the work. The bidder may meet these requirements by using subcontractors, or forming a partnership, joint venture, or other legal arrangement. If the qualifications are met by the formation of a partnership, joint venture or other legal arrangement; then each separate legal entity shall be required to sign the contract and accept joint and several liabilities. The Contractor, or the Contractor's personnel shall hold appropriate certificates, licenses, and permits necessary to perform the work described in the scope of work.

The Contractor shall present all licenses held, the certificate numbers, and in whose name the license is issued in his bid response. The Contractor shall demonstrate prior experience in performing and completing drainage system and BMP improvement construction projects in his bid response. In the Contractor Proposal, the Contractor shall present specific projects, dates, locations, clients, project costs, a project summary description, and the Contractor's role in each project. The Contractor shall present a reference list of clients that includes a contact person and phone number. The Contractor shall also possess a Class A Contractor's License.

The Contractor shall demonstrate that his project manager, equipment operators, and other responsible individuals performing work on site have appropriate experience and capability. The Contractor shall present personal resumes that document education, training, work experience, and licenses and certificates held in his bid response.

1.15 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall identify to the County, in writing, the name of the representative who shall have complete authority to act for this project. The Contractor shall also furnish to the County a telephone number where the Contractor or his representative may be contacted 24 hours a day. The Contractor shall examine the Contract Documents, and shall be aware of conditions at the site that may affect execution of the work. These conditions include, but are not limited to, the following:

- A. Applicable health and safety regulations. All activities shall be conducted in such a manner as to avoid hazards and injury or damage to any person or properties.
- B. Transportation and access conditions
- C. Availability of utilities
- D. Surface and subsurface conditions
- E. Location, availability, and condition of construction materials
- F. Climate
- G. On-site soil characteristics of soil to be used in construction, including but not limited to size and type variation, location of excavation and stockpile areas, etc.
- H. General construction conditions at the site
- I. The Contractor shall adhere to the Storm Water Pollution Prevention Plan (SWPPP) for LCL to prevent erosion and control sediment from work areas
- J. Spill prevention, proper clean-up and disposal of contaminants, and handling/storage of hazardous materials delivered to or produced on-site from the Contractor's operation
- K. The Contractor shall assume full responsibility for any theft or vandalism occurring to the Contractor's equipment, tools, materials, supplies, and construction (prior to final acceptance of the entire project by the County), and shall take appropriate measures necessary to eliminate their occurrences.
- L. The Contractor shall maintain internal access roads utilized by the Contractor during the Project. The Contractor shall not use existing paved roadways or those used for daily landfill traffic.
- M. The Contractor shall adhere to the posted speed limits within the internal landfill site.
- N. The Contractor shall continuously develop and maintain a reasonably graded surface within the Project excavation and stockpiling areas in order to maintain positive drainage condition and prevent ponding.
- O. At the end of the project, the ground shall be smoothed and graded to drain by the Contractor as required by the Contract Documents and as directed by the County.
- P. The Contractor shall be aware that the County and its representatives will conduct periodic inspections, and testing of the work area. The Contractor

- shall allow access to work areas as requested by the County or its representatives.
- Q. Prior to the start of work, or at any other time during the project as reasonably requested by the County, the Contractor shall meet with the County to understand all County operations in progress at the Lamb Canyon Landfill and the Contractor shall take these County concurrent operations into consideration in performance of the work.
- R. The Contractor is responsible for setting line and grade for the excavation work and any other related construction activities. Electronic copies of the existing ground contours and any required design grades are available to the Contractor upon request in a MicroStation or AutoCAD format.

Until County final acceptance of the entire project, the Contractor shall retain full responsibility for the work.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.16 SITE SAFETY PLAN

Within ten (10) working days of execution of the Agreement by both parties, and prior to delivering equipment to the construction site, the Contractor shall submit a Site Safety Plan to the County for review and acceptance. Acceptance of the Site Safety Plan does not release the Contractor of liability in the event of an accident or injury, nor does it place any liability on the County or any County employee. The Site Safety Plan must, at a minimum, meet all the requirements of Federal and State regulations regarding all construction activities. The Contractor shall be solely responsible for adherence to the Site Safety Plan at all times.

It is the responsibility of the Contractor to confirm compliance with all relevant health and safety regulations. The Contractor shall take proper safety and health precautions to protect the work, the public, and County employees. The Contractor shall be responsible for providing all items necessary for health and safety, including but not limited to dust control, personal protective equipment, decontamination equipment if required, and collection and disposal of rinse waters, in accordance with applicable Federal and State regulations. The County will reserve the right to direct removal of any of the Contractor's employees or subcontractors who are not adhering to or meeting the requirements of the law and the Site Safety Plan or applicable regulations.

Where necessary, trenches, pits, and other excavations shall be properly sheathed and braced to furnish safe and acceptable working conditions. Any damage occurring from earth pressures, slides, cave-ins, or other causes due to failure to provide proper sheeting or bracing, or through other negligence or fault of the Contractor, shall be repaired at the Contractor's sole expense. The manner of bracing for excavations shall be as set forth in the rules, orders, and regulations of the Division of Industrial Safety of the State of California or OSHA; whichever is more restrictive. Reference is made to Section 5.1.5 "Accident Prevention" of the General Provisions, in which the Contractor is required to

submit to the County a detailed plan showing the design of shoring, bracing, sloping of the sides of trenches, or other provisions to be made for the protection of personnel during earthwork operations in advance of any such operation.

The Site Safety Plan shall include procedures that address Contractor's response in the event of a spill. Any accidental spills or spills that are produced during routine equipment maintenance shall be cleaned up by removing all the contaminants and the contaminated soil, disposing of it at an approved facility, and replacing the removed contaminated soil volume with clean soil material. The Contractor must submit to the County all documentation showing proper containment and removal of any toxic materials or contaminated soil that the Contractor has introduced or produced on-site.

The Site Safety Plan shall also include a traffic control plan that addresses the procedures for approaching or crossing public access roads internal to the landfill during the Project. The traffic control plan shall be shown on a site map and shall include but not limited to delineation of the proposed haul routes, traffic direction, signs, lane closures, and traffic control devices. All planned signs, traffic control devices shall be industry standard and shall conform to the Work Area Traffic Control Handbook (WATCH), latest edition, and the California Manual on Uniform Traffic Control Devices 2012 Edition (FHWA's MUTCD 2009 Edition as amended for use in California), also called the California MUTCD, by the State of California Department of Transportation, Temporary Traffic Control, latest edition. Signs and traffic control devices along public access or landfill operation routes shall be removed and stored or covered during periods of time when they are not needed (such as at the end of each working day, weekends, and any time when no construction work is being performed).

The Contractor shall be responsible for holding mandatory weekly safety meetings at the site. The Contractor shall notify the County of the time and place of all meetings and allow the County to participate. Meetings shall reiterate all safety measures to be taken and shall discuss any violations committed and preventive measures to avoid subsequent violations. The Contractor shall provide the County with a copy of the minutes and the attendance of the safety meetings.

The Contractor shall under no circumstances deviate from the Site Safety Plan requirements and shall be responsible for any violation of the rules and regulations in effect. The County shall issue an order to stop all work and the Contractor shall not be entitled to any extension of the time or any claim for damage or to any compensation for either the directive or the work suspension order.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.17 ENVIRONMENTAL REQUIREMENTS

The Contractor shall at all times keep the sites neat, tidy, and free of refuse resulting from work. Toxic materials, including oil, fuel oil, gasoline, coolant, fluid filters, and other contaminants, shall be transported off site and disposed of at an approved facility.

Containers temporarily holding these toxic materials shall be covered and have no leaks, and shall be removed from the site as quickly as is reasonably possible.

Any accidental spills or leaks that are produced during routine equipment maintenance shall be cleaned up by removing all the contaminants and the contaminated soil, disposing of it at an approved facility, and replacing the removed contaminated soil volume with clean soil material. The Contractor shall also be responsible for any spills caused by any of the Contractor's subcontractors or suppliers. The Site Safety Plan, required under Section 1.16 shall include the procedure the Contractor shall follow in the event there is a spill. The County may require documentation showing proper containment, removal, and disposal of any toxic materials or contaminated soil that the Contractor has introduced or produced on site.

Payment for complying with this section shall be considered as included in the various items of the work, and no additional compensation shall be allowed.

1.18 PERMITS

The Contractor is responsible for implementing the necessary mitigation measures to ensure compliance with regulatory thresholds relating to air quality including but not limited to South Coast Air Quality Management District (SCAQMD) Rule 403 Fugitive Dust Control Requirements. The County shall have the authority to immediately suspend all construction operations if, in the County's opinion, the Contractor fails to adequately provide for dust control.

The County complies with the State NPDES through regular inspections, monitoring, and implementation of Best Management Practices (BMPs) as described in the LCL Storm Water Pollution Prevention Plan (SWPPP). The LC SWPPP has been prepared by the County pursuant to the new Industrial General Permit (IGP) which became effective July 1, 2015. A copy of this SWPPP can be made available to the Contractor upon request. In order to comply with the requirements of the new IGP and the sites' SWPPP, the contractor shall be required to implement minimum BMPs within the Contractor's staging area and stockpile areas as directed by the County.

Payment for complying with this section shall be considered as included in the various items of the work, and no additional compensation shall be allowed.

1.19 DETAIL DRAWINGS AND SUBMITTALS

Unless specified otherwise in these Special Provisions, two (2) hard copies and one (1) digital copy of all shop drawings and submittals of documentation and samples of materials shall be submitted by the Contractor to the County for review and approval, at least two (2) weeks prior to fabrication or installation of any work pertaining to them.

The review and approval of shop drawings, samples, submittals, specifications and descriptive literature submitted by the Contractor will be only for general conformance with design concept, and shall not be construed as:

- A. Permitting any deviation from the contract requirements
- B. Relieving the Contractor of the responsibility for any error in detail dimensions or otherwise that may exist in such submittals
- C. Constituting a blanket approval of dimensions, quantities or details of the material or equipment shown
- D. Approving deviations from additional details or instructions previously furnished by the County.

Such check or review shall not relieve the Contractor of the full responsibility of meeting all of the requirements of the Contract Documents.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.20 STORAGE OF MATERIALS

An area for the storage of the Contractor's materials is delineated on the Project Drawings. All imported materials shall be stored in the designated area, unless the Contractor obtains the County's written approval for an additional area. All imported materials to be used in construction shall be unloaded, stored, and handled in accordance with manufacturer and supplier recommendations to prevent damage to the material. When delivery of a material occurs, the Contractor shall promptly observe shipments to assure that the material complies with requirements, that quantities are correct, and that the material is undamaged. The Contractor shall take full responsibility for any delay caused by a supplier or manufacturer. The storage area shall be accessible to the County so that they may observe, verify, and document the presence and condition of materials being stored.

The Contractor shall protect materials from sun, rain, mud, soil, and debris. Care shall be taken to protect manufactured materials against damage from misuse, mishandling, or accident. The Contractor shall store materials and maintain construction operations within limits indicated by applicable laws, ordinances, and permits, and as outlined by the County. Care shall be exercised to avoid blocking roads, interfering with County operations, or presenting a hazard to County personnel and equipment, or to the public.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.21 EQUIPMENT STAGING AREA

An area for the storage of the Contractor's equipment is delineated on the Project Drawings. The storage area shall be accessible to the County so that they may verify the presence and condition of equipment being stored. The stored equipment shall be placed in accordance with the Project Drawings or as directed by the County. The Contractor shall confine equipment and maintain construction operations within limits indicated by applicable laws, ordinances, and permits, and as outlined by the County. The Contractor shall make certain that the storage of equipment in any area does not interfere with or

otherwise disrupt County operations at the site. Care shall be exercised to avoid blocking roads, interfering with County operations, or presenting a hazard to County personnel and equipment, or to the public.

The maximum allowable time that a piece of equipment shall remain on site, in a condition that makes it incapable of performing its designed function, shall be four (4) working days. Any equipment needing further maintenance shall be moved off site for repairs, at the full expense of the Contractor. Equipment no longer needed for the job shall also be removed within four (4) working days of its last use.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.22 SUSPENSION AND RESUMPTION OF OPERATIONS

The Contractor shall suspend construction operations when, in the County's opinion, the conditions for such operations are unsatisfactory due to rain, wind, or any other reason. The Contractor shall not be compensated monetarily for any such delays caused by the suspension of operations. Working days shall be charged as appropriate in accordance with the Contract Documents.

Whenever operations have been suspended, the effect of rain, wind, or other adverse conditions shall be assessed by the County before approval to resume construction is given. Equipment will not be allowed to travel on the landfill site until the ground has dried sufficiently to prevent excessive rutting and to allow the equipment to be operated satisfactorily. If rutting occurs, the Contractor shall re-level, scarify, and re-compact the materials to whatever depth is required to repair the damage to pre-existing conditions as directed by the County at the Contractor's expense. If temporary access and internal haul roads need repair, the Contractor shall repair them as required at the Contractor's expense.

1.23 DIVERSION AND CONTROL OF WATER

It is anticipated that nuisance or other water, such as rainfall or surface water run-off, may be encountered within the construction site during the period of construction under this contract. The Contractor, by submitting a bid, will be held to have investigated the risks arising from such waters and to have made this bid in accordance therewith. The Contractor shall construct, and maintain all temporary diversion and protective works to divert run-off around the work areas and material storage areas, and to protect persons and property downstream of the work. The County may require the Contractor to implement additional protection measures. Excavation and stockpile areas shall be graded and properly maintained to provide adequate drainage at all times. The Contractor shall provide berms or other measures as necessary and/or required to prevent run-off from flowing onto completed areas and to avert erosion.

All nuisances or other water shall be disposed of at the Contractor's expense, in a manner that will not damage public or private property, create a nuisance or health menace, and comply with all applicable regulations. The Contractor shall furnish, install, and operate

pumps, hoses, pipes, or other equipment of a sufficient capacity to keep all construction excavations free from water until the excavation is backfilled. Water, if odorless and uncontaminated, may be discharged in a manner approved by the County. When required by the County, a means of desilting the water before discharging it shall be provided. Work shall be suspended when the site is wet, muddy, or in any other condition that interferes with proper operation and construction procedures.

The County has a National Pollutant Discharge and Elimination System (NPDES) permit for storm water associated with industrial activity (under which construction activities are covered) and has developed a SWPPP for LCL. The Contractor shall comply with all the provisions of each site's SWPPP. The Contractor shall assist and cooperate with County personnel in fulfilling the provisions for construction monitoring requirements.

Payment for complying with this section relating to storm water shall be included in the various items of work, and no additional compensation shall be allowed.

1.24 DUST ABATEMENT

Dust control operations shall be performed by the Contractor at the time, location, and in the amount required and as often as necessary to prevent all excavations, stockpiling or other activities from producing dust in amounts harmful to persons or causing a nuisance to persons living nearby or occupying buildings in the vicinity of the work. The Contractor is responsible for compliance with Rule 403 Fugitive Dust Regulations issued by the South Coast Air Quality Management District (SCAQMD) and any other applicable regulations.

Control of dust shall include but not be limited to: sprinkling of water, use of approved dust suppressants, modifications of operations or any other means acceptable to the County, the California Regional Water Quality Control Board (CRWQCB), the SCAQMD, and any agency having jurisdiction over the facility. The County shall have the authority to suspend all construction operations if, in the County's opinion, the Contractor fails to adequately provide for dust control.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.25 WATER SUPPLY

The Contractor shall have the option to establish a water source for its operation, or may elect to draw water from the County's offsite water tower <u>provided that</u> the contractor provides and implements any necessary measures to prevent track-out and drainage issues resulting from its operation. The preventative measures and maintenance of the water tower area may include but not be limited to re-grading the area to ensure positive drainage, furnishing and installing new rock material, cleaning rumble rack sections, and street sweeping if deemed necessary by the County. The County's off site water tower for LCL is located at 1st Street in the City of Beaumont, approximately three (3) miles north of the entrance to the landfill site, as shown on the Project Drawings. The Contractor shall provide all labor and equipment to collect, load, transport, apply, and dispose water

as necessary for dust control, excavation, grading, and other project purposes. Contractor's use of water and/or tower must be coordinated with LCL operation supervisory staff and shall not impact landfill operations. Water shall be clean and free from objectionable deleterious amounts of acids, alkalis, salts, or organic materials.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

1.26 PROTECTION OF ADJACENT LANDFILL OPERATIONS

The Contractor shall be aware that LCL is an active landfill site. The Contractor's work relating to the Project shall not impede or interrupt daily landfill operations. Full cooperation of the Contractor and its forces is required to assure safe working conditions. Therefore, it is necessary to emphasize that the County will have full authority to eject any of the Contractor's employees or subcontractors who do not immediately abide by the landfill site rules (Appendix - A) or the directions of the County.

The Contractor must obtain in advance the County's written approval for the locations and construction of temporary haul roads. No Contractor's equipment shall be allowed to travel on internal paved access roads or other roads designated for landfill traffic; therefore, all access roads that are proposed to be used by the Contractor's equipment will need to be prepared and maintained by the Contractor and must be pre-approved by the County in writing.

Payment for complying with this section shall be considered as included in the various items of work, and no additional compensation shall be allowed.

END OF SECTION

SECTION 2 - MOBILIZATION AND DEMOBILIZATION

2.1 GENERAL

This contract item shall consist of expenditures for all preparatory work and operations, including but not limited to: bond and insurance costs; those costs necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site as well as the related demobilization costs at the completion of the project. Demobilization shall include but not be limited to cleaning installations and the removal of temporary structures as required by the County. Throughout all phases of construction, including suspension of work and until final acceptance of the project, the Contractor shall keep the work areas clean and free of refuse generated as a result of the Contractor's operations. Any such refuse shall be disposed of in the designated disposal area or as directed by the County.

2.2 MATERIALS

The Contractor shall provide adequate number of portable toilets for its staff within the project's staging area. These portable toilets shall be equipped with secondary containment structures and tie-downs shall be supplied so as to prevent the displacement of the portable toilets during high winds. All sanitary facilities shall include twice-perweek servicing.

The Contractor shall provide fire extinguishers and first-aid kits within the vicinity of their work area to provide adequate protection to all personnel anticipated to be onsite. A fire extinguisher shall also be maintained in the construction area at all times.

2.3 EXECUTION

- A. Upon receipt of the Notice to Proceed, the Contractor shall furnish, mobilize, and install such temporary works, materials, equipment, supplies, and personnel, as necessary for the successful completion of the work. The Contractor shall also operate and maintain temporary works, equipment, throughout the duration of construction. All temporary works, such as sanitation facilities, shall fully comply with applicable rules and regulations of governing authorities.
- B. The Contractor shall remove and properly dispose of all refuse from the construction site. Any hydrocarbon-impacted soils found at the site as a result of the construction operation, such as equipment maintenance, shall be removed and properly disposed of at the Contractor's expense.
- C. The Contractor shall obtain all necessary permits and permission to utilize public roads for mobilization, demobilization, and access to the site. Access to the site is available through existing public roads during the hours stated in Section 1.6 of these Special Provisions.

2.4 MEASURMENT AND PAYMENT

A. The following schedule will be used to determine **measurement** of mobilization and demobilization and disbursement of the bid price (less retention) for mobilization and demobilization:

Percent of Contract Work Completed (\$ Expended/\$ total bid price)	Percent of Mobilization and Demobilization Considered to be Complete
More Than 5%	50%
More Than 25%	70%
More Than 50%	80%
More Than 75%	90%
Upon County's acceptance of work including complete demobilization	100%

B. Payment of mobilization and demobilization shall be made at the contract lump sum price as stated in the Contractor's Proposal for **Bid Item No. 1** – "**Mobilization and Demobilization**". Payments shall constitute full compensation for all labor, material, equipment, and all other items necessary and incidental to completion of this item of work. The deletion of work or the addition of extra work shall not affect the price paid for mobilization and demobilization.

END OF SECTION

SECTION 3 - ASPHALT STRUCTURES

3.1 GENERAL

The work covered in this section shall consist of furnishing all necessary labor, materials, equipment, tools, and supervision for the construction of Asphalt Concrete (A.C.) Structures which shall include, but is not limited to: drainage channels, equipment crossings, transitions, inlet and outlet structures, lined asphalt berms, speed bumps, dikes, and road repair work. The work shall include subgrade preparation and installation of A.C. pavement to the specified lines and grades and at the locations shown on the Project Drawings, as required by the Contract Document, and as directed by the County.

3.2 SUBMITTALS

- A. The Contractor shall submit Certificates of Compliance for bituminous materials used in asphalt concrete pavement and asphaltic emulsion mixes proposed for this project. The certificates shall be signed by the manufacturer of the materials and shall state that materials involved shall comply in all respects with the requirements of these specifications.
- B. The Contractor shall prepare and submit a mix design to the County for review and approval at least two (2) weeks prior to beginning placement of A.C. pavement for each mix design incorporated for use in this project.
- C. Asphalt Concrete delivery load tickets

Each and every asphalt concrete load ticket shall be submitted to the County by the Contractor at the point of delivery. The plant shall supply delivery ticket for each load of asphalt. Delivery tickets shall show following:

- i. Name of plant
- ii. Serial number
- iii. Date and truck number
- iv. Name of Contractor
- v. Name and location of job
- vi. Specific designation of asphalt in conformance with that required in job specification
- vii. Amount of asphalt in tons
- viii. Time loaded

3.3 MATERIALS

- A. A.C. pavement shall consist of hot mineral aggregate uniformly mixed with hot bituminous material.
- B. Asphalt paving material for all asphalt structures shall be D1-PG 70-10, and shall conform to Part 2, Sections 203-6 and 400-4 of the Standard Specifications.
- C. A.C. for Type A Dike shall be D1-PG 70-10 and shall conform to Section 203-6 and 400-4 of the Standard Specifications.

- D. Tack Coat: Tack Coat shall conform to Section 302-5.4, "Tack Coat" of the Standard Specifications and shall be PG 70-10 paving asphalt, or SS-1h emulsified asphalt applied at the rates as specified.
- E. Class II aggregate base material for the asphalt crossing shall conform to the specifications and requirements stated in SECTION 6 Aggregate Base Roadway and Crossings.

3.4 EXECUTION

- A. The Contractor shall arrange and conduct a pre-job paving meeting no later than 48 hours prior to the scheduled paving date. The General Contractor, the Paving Subcontractor, and County personnel shall attend this meeting. Discussion topics shall include Contractor-proposed: paving machine and asphalt roller equipment spread, methodology for paving pass sequence, paving pass widths, longitudinal joint locations, and traffic control plan implementation and maintenance specific to each paving operation.
- B. Prior to repairing any damage structures for Bid Item No. 5 "Saw Cut, Remove, and Replace 6" Thick Asphalt Roadway Section", County staff shall identify and mark the portions of asphalt roadway that need to be removed and repaired. The Contractor shall evenly saw cut the asphalt along the specific lines marked by County staff to a depth of 6" as shown on the Project Drawings and as directed by the County. The Contractor shall transport all generated asphalt material to a designated salvage material area within the site as directed by the County. After the saw cutting operation is complete, the Contractor shall clean the surface of the remaining in-place asphalt to ensure an adequate bonding surface between the existing asphalt and new asphalt. A tack coat shall be applied to the areas receiving pavement in accordance with Section 302-5.4,"Tack Coat" of the Standard Specifications. The supply and installation of asphalt material for this repair work shall be in accordance with the Contract Documents.
- C. Contractor shall remove the existing LDPE drain where applicable, as shown on the Project Drawings, and salvage material as directed by the County.
- D. The subgrade for all asphalt structures in this project, prepared either by excavation or engineered fill, shall conform to the locations and cross sections as shown on the Project Drawings or as directed by the County. Where the structures are in native cut, the upper six (6) inches of subgrade shall be compacted to a minimum of 90 percent (or as otherwise noted on the Project Drawings) of the maximum density as determined per ASTM D1557. This shall be achieved by scarifying the exposed surface to a depth of six (6) inches and re-compacting. For areas requiring engineered fill, the finished subgrade shall be firm and suitable for placement of asphalt pavement, and shall be compacted to a minimum of 90 percent (or as otherwise noted on the Project Drawings) of the maximum density within the upper one foot, as determined by ASTM D1557.

- E. Prior to pavement application, surface preparation shall consist of cleaning the underlying course of foreign or objectionable matter with power blowers or brooms where necessary. A tack coat shall be applied to the areas receiving pavement in accordance with Section 302-5.4, "Tack Coat" of the Standard Specifications.
- F. Distribution and spreading shall conform to the requirements of Section 302-5.5, "Distribution and Spreading" of the Standard Specifications. All transitions and edges shall be feathered to conform to the existing surface and provide a smooth transition. The Contractor shall install 2"x4" wooden headers using 12"-2"x4" stakes set a maximum of 6-foot on center at all locations where the vertical edges of new asphalt pavement are not in contact with an existing pavement or permanent structures. Wooden headers shall remain in place upon completion of work.
- G. Rolling shall conform to the requirements of Section 302-5.6, "Rolling" of the Standard Specifications. Hand and mechanical tampers will not be permitted for compaction of road way section.
- H. The asphalt pavement for the dike shall be placed on the existing or repaired paved asphalt pads and shall conform to the cross sections and locations as shown on the Project Drawings or as directed by the County. Surface preparation shall consist of removing any existing damaged dike as directed by the County and cleaning the underlying surface of foreign or objectionable matter where necessary. A tack coat shall be applied to the areas receiving pavement in accordance with Section 302-5.4,"Tack Coat" of the Standard Specifications.
- I. The asphalt pavement for the earthen diversion berms shall be placed on the inside face of the diversion berms and shall conform to the cross sections and locations as shown on the Project Drawings or as directed by the County. Surface preparation shall consist of cleaning the underlying surface of foreign or objectionable matter where necessary. A tack coat shall be applied to the areas receiving pavement in accordance with Section 302-5.4,"Tack Coat" of the Standard Specifications. Earthen diversion berms shall be constructed and paid for in accordance with SECTION 11 Earthen Diversion Berm.
- J. The asphalt pavement for the speed bumps shall be placed on the existing paved asphalt access road and shall conform to the cross sections and locations as shown on the Project Drawings or as directed by the County. Surface preparation shall consist of grinding the existing roadway section, and cleaning the underlying surface of foreign or objectionable matter where necessary. A tack coat shall be applied to the areas receiving pavement in accordance with Section 302-5.4,"Tack Coat" of the Standard Specifications.

3.5 MEASURMENT AND PAYMENT

A. The **measurement** of the final quantity for **Bid Item No. 2 "Construct Asphalt Drainage Structures"** shall be based on the pertinent details required by the Contract Documents as verified by the County through field

- measurements of these asphalt structures that include drainage swales, downdrains, inlets, and asphalt placed over earthen diversion berms. **Payment** for asphalt drainage structures shall be at the contract unit price per ton, as stated in the Contractor's Proposal, **Bid Item No. 2.** Each and every asphalt concrete load ticket shall be submitted to the County by the Contractor at the point of delivery.
- B. The **measurement** of the final quantity for **Bid Item No. 3 "Construct Asphalt Vehicle Crossing"** shall be based on the pertinent details required by the Contract Documents as verified by the County through field measurements of these structures. **Payment** for Asphalt Equipment Crossings shall be at the contract unit price per square foot, as stated in the Contractor's Proposal, **Bid Item No. 3.** Each and every asphalt concrete load ticket shall be submitted to the County by the Contractor at the point of delivery.
- C. The measurement of the final quantity for <u>Bid Item No. 5</u> "Saw Cut, <u>Remove, and Replace 6" Thick Asphalt Roadway Section"</u> shall be based on the pertinent details required by the Contract Documents as verified by the County through field measurements of the actual repaired roadway section. The total quantity of 1,000 square feet in the Contract Documents is an estimate and subject to change. Approximately 600 square feet of the total 1,000 square feet is guaranteed to be utilized in this Contract and the remaining 400 square feet may or may not be eliminated from this Contract. **Payment** for saw cutting, removing, and replacing asphalt roadway section shall be at the contract unit price per square foot, as stated in the Contractor's Proposal, **Bid Item No. 5** and shall include saw cutting and removal of existing asphalt, subgrade surface preparation, and the supply and installation of asphalt material as specified and required by the Contract Documents.
- D. The **measurement** of the final quantity for **Bid Item No. 10 "Construct Asphalt Concrete Speed Bumps"** shall be based on the pertinent details required by the Contract Documents as verified by the County through field measurements of the axial length (linear feet) along the centerline of the asphalt speed bumps. **Payment** for all Asphalt Speed bumps shall be at the contract unit price per linear foot as stated in the Contractor's Proposal, **Bid Item No. 10** and shall include surface preparation of existing roadway section, supply and application of tack coat, supply and installation of asphalt material as specified and required by the Contract Documents.
- E. The **measurement** of the final quantity for <u>Bid Item No. 20 "Construct Asphalt Dike"</u> shall be based on the pertinent details required by the Contract Documents as verified by the County through field measurements of these structures. **Payment** for 6-inch Cal-Trans Type A Dike shall be at the contract unit price per linear foot, as stated in the Contractor's Proposal, **Bid Item No. 20**. Each and every asphalt concrete load ticket shall be delivered to the County by the Contractor at the point of delivery.
- F. **Payment** quantities for all asphalt concrete drainage structures, equipment crossing, roadway repair, speed bumps, and dikes shall be based upon the limits and dimensions shown on the Project Drawings, adjusted by the amount

of any change ordered by the County. Payment for all asphalt bid items shall include subgrade preparation where applicable as specified in the Contract Documents and indicated on the Project Drawings. No payment will be made for any asphalt placed outside the specified limits and dimensions unless otherwise ordered in writing by the County. Payment shall include full compensation for furnishing all labor, material including class II aggregate base material for crossings, tools, equipment, and incidentals, and for doing all the work related to and involved in constructing the asphalt drainage structures, equipment crossing, roadway repair, speed bumps, and dikes completed in place.

END OF SECTION

SECTION 4 - REINFORCED SHOTCRETE STRUCTURES

4.1 GENERAL

The work covered by this section shall consist of furnishing all necessary labor, materials, tools, equipment, facilities, transportation, services, coordination, supervision, and all other items necessary for the construction of reinforced shotcrete drainage structures to the elevations, lines and grades, and at the locations shown on the Project Drawings or as directed by the County including but not limited to:

- a. Prepare subgrade for shotcrete drainage structures
- b. Supply and install welded wire mesh reinforcement
- c. Supply, install, and finish air-placed concrete (shotcrete)
- d. Supply and apply concrete curing compounds
- e. Excavate or backfill any necessary soil to achieve finished elevations adjacent to the shotcrete drainage structures

4.2 REFERENCES

Reference Standards and Specifications: The following standards and specifications, including documents referenced therein, form part of these Special Provisions and are incorporated herein by reference.

American Society for Testing Materials (ASTM)

- A615 Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- C33 Standard Specification for Concrete Aggregates
- C94 Standard Specification for Ready Mixed Concrete
- C131 Standard Test Method for Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- C150 Standard Specification for Portland Cement
- D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
- D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction

4.3 SUBMITTALS

A. Mix design and certifications

The Contractor shall submit a mix design and certifications to the County for review and acceptance at least two (2) weeks prior to beginning placement of concrete.

B. Concrete delivery load tickets

Each and every shotcrete load ticket shall be delivered to the County by truck drivers at the point of delivery. The mix plant shall supply delivery ticket for each batch of shotcrete. The Contractor shall submit delivery tickets to the County. Delivery tickets shall show following:

ix. Name of ready-mix batch plant

- x. Serial number
- xi. Date and truck number
- xii. Name of Contractor
- xiii. Name and location of job
- xiv. Specific classes or designation of shotcrete in conformance with that required in job specification
- xv. Amount of concrete
- xvi. Time loaded
- xvii. Type, name, and amount of admixtures used
- xviii. Amount and type of cement
- xix. Total water content
- xx. Water added by receiver of concrete with his or her signature initials

C. Concrete Reinforcing Steel

The Contractor shall provide mill certificates to the County for approval prior to delivery of material to the job site.

D. Concrete Curing Compounds

The Contractor shall submit the manufacturer's product data and installation instructions.

4.4 MATERIALS

A. REINFORCED SHOTCRETE

Shotcrete materials shall be of primary quality and of domestic manufacture and shall conform to Section 201, "Concrete, Mortar and Related Materials" requirements of the Standard Specifications.

- a. Portland cement, fine aggregates, admixtures, and water shall be in accordance with Section 15.3.1 of this specification.
- b. Compressive Strength Concrete mix classification shall be Class 650-D-3250 and shall be air-placed in conformance with Part 3, Section 303-2, Method B (Shotcrete) of the Standard Specifications.
- c. Shotcrete shall consist of concrete or mortar pneumatically applied onto surface. Shotcrete shall be applied by the wet-mix (shotcrete) process and the Contractor, subject to County approval, may have the option to cast-in-place structural concrete in accordance with this specification in lieu of shotcrete. The substitution of shotcrete for cast-in-place structural concrete will not warrant additional compensation.
- d. Welded wire mesh reinforcement shall be as specified on the Project Drawings and shall conform to Part 2, Section 201-2.2 of the Standard Specifications.

B. REINFORCEMENT

Reinforcing steel shall conform to ASTM A615 requirements and also conform to Section 201-2.2.1, "Reinforcing Steel" requirements of the Standard Specifications. Reinforcing steel shall be Grade 60 and have identification inscriptions and also conform to ASTM A 615-89, "Specification for Deformed & Plain Billet-Steel Bars for Concrete Reinforcement" requirements. Reinforcing steel shall be free of rust, scale, or other bond-reducing coatings.

C. PATCHING

If patching is necessary and approved by the County, a bonding agent such as Weld-Crete as manufactured by Larsen Products, or approved equal, shall be used.

D. CURING COMPOUND

Concrete curing compound shall be Type 1-D – Clear or translucent with fugitive dye and shall conform to Section 201-4.1, "Membrane Curing Compounds" requirements of the Standard Specifications.

4.5 EXECUTION

- A. The subgrade for Reinforced Shotcrete Drainage Structures shall be prepared either by excavating or filling, and shall conform to lines, grades, and cross sections and be located as shown on the Project Drawings. Where the structures are in native cut, the upper six (6) inches of subgrade shall be compacted to a minimum of 90% (or as otherwise noted on the Project Drawings) of the maximum density as determined per ASTM D1557. This shall be achieved by scarifying the exposed surface to a depth of six (6) inches and re-compacting it as required by the Specifications. For areas requiring Engineered Fill the finished subgrade shall be firm and unyielding and suitable for placement of Reinforced Shotcrete Drainage Structures, and shall be compacted to a minimum of 90% (or as otherwise noted on the Project Drawings) of the maximum density as determined per ASTM D1557. Clearing, grubbing, and excavation for the Reinforced Shotcrete Drainage Structures shall comply with the provisions of sub-section 300-7 of the Standard Specifications.
- B. Forms and ground wires for Reinforced Shotcrete Drainage Structures shall be installed in accordance with sub-section 303-2.7 of the Standard Specifications. Ground wires shall be placed at approximately 5-foot intervals.
- C. Welded wire mesh shall be spliced not less than two meshes. Mortar blocks with wire ties, or other mean acceptable to the County shall be used to secure the reinforcement firmly in the position shown on the Project Drawings.
- D. Concrete placement for Reinforced Shotcrete Drainage Structures shall be in accordance with Part 3, Section 303-2.1 of the Standard Specifications. Nozzle shall be directed in such a manner as to result in minimum rebound of the shotcrete. The velocity of the material as it leaves the nozzle shall maintained uniform and at a rate determined for the given job conditions.
- E. Materials that have been mixed for more than 90 minutes shall not be used.
- F. Weakened plane joints for downdrains shall be installed perpendicular to the water flow direction at ten (10) foot intervals along the water flow direction and as directed by the County. Weakened plane joints for platforms shall be installed in two perpendicular directions at ten (10) foot intervals and as directed by the County. Depth of joints shall be one (1) inch.
- G. After the shotcrete has been placed as nearly as practicable to the required depth, the surface shall be checked with a straightedge, and any low spots or

depressions shall be brought to grade by placing additional shotcrete in such a manner that the finished surface will be reasonably smooth and uniform for the type of work involved. Loose areas of shotcrete shall be removed and replaced by the Contractor at the Contractor's expense.

- H. Curing compound in accordance with Section above of this specification shall be applied.
- I. The County may elect to take concrete test cylinders on each day that concrete installation work occurs or as deemed necessary by the County. Cylinder breaks will be performed at the direction of the County to ensure that in-place materials meet full design strength.

J. Sequencing and Scheduling

The Contractor shall allow County to verify locations, grades, subgrade preparation, installation of embedded concrete components, and shall notify the County at least two (2) working days prior to the placement of concrete.

K. Curing Compound

All concrete shall be cured after the completion of the specified finishing operations and as soon as the condition of the concrete will permit without damaging the concrete. All exposed surfaces of concrete shall be protected from premature drying and freshly placed concrete shall be protected against wash by rain.

All exposed surface of concrete shall be cured by application of curing compound as required by Section 201-4.1, "Membrane Curing Compound" of the Standard Specifications and the manufacturer's recommendations and application instructions.

L. Concrete Tolerances

ACI Standards shall govern concrete work except where specified differently. Variation in Thickness: ¼" to ½" standard

M. Clean Up

Upon completion of all concrete work and before final acceptance, Contractor shall remove all tools, surplus materials, apparatus, debris, etc., from the site and the site shall be left in a clean, neat, and acceptable condition to the County. Hardened concrete material accumulated in the designated washout area for this project shall be disposed of by the Contractor at the Lamb Canyon Landfill site as directed by the County.

N. Defective Concrete

Concrete that is not in accordance with these specifications, out of line, level, or plumb; showing structural cracks, rock pockets, voids, spalls, honeycombing, exposed reinforcing or other damaged surfaces shall be considered as defective concrete. Non repairable defective concrete shall be removed and replaced at the Contractor's expense.

All fines and irregularities shall be removed from exposed concrete surfaces while the concrete is still green. Where patching is required and approved by the County, all loose and uniform concrete shall be removed prior to patching.

4.6 MEASUREMENT AND PAYMENT

Measurement and Payment for the Construction of Reinforced Shotcrete Drainage Structures, including, but not limited to; subgrade preparation, over-excavation, formwork, reinforcing steel, grounding wires, shotcrete, finishing, and curing compound shall be made after County acceptance, at the unit price per square foot (true area including slope surface area) as stated in the Contractor's proposal **Bid Item No. 4** – **"Construct Shotcrete Drainage Structures"**. The final quantities shall be verified and determined by the County's field measurements within the limits specified by the Contract Documents.

END OF SECTION

SECTION 5 - POLYETHYLENE DRAINAGE CHANNELS

5.1 GENERAL

The work covered by this section shall consist of furnishing all necessary labor, materials, equipment, tools and supervision for the repair of the drainage bench and existing damaged 20-mil drainage channel, and construction of new 20-mil LDPE drainage channel. The work shall include but not be limited to: remove existing LDPE channel, repair drainage bench with PCS, repair existing drainage channel, subgrade preparation, construct new 20-mil LDPE to the elevations, lines, and grades, and at the locations shown on the Project Drawings or as directed by the County. This work shall also include any cut or backfill necessary to achieve finished elevations adjacent to the structures once construction of LDPE channels are complete.

5.2 SUBMITTALS

Prior to delivery of materials, the Contractor shall submit product data sheet, engineered drawings, material specifications and manufacturer's application instructions for all materials to the County for approval. The Contractor shall submit written certification by the low-density polyethylene (LDPE) Manufacturer that the LDPE material conforms to the requirements of the Contract Documents.

5.3 MATERIALS

- A. The Contractor may utilize the salvaged 20-mil material from the drainage bench to construct the new 20-mil drains if the material is free of holes, pin holes, bubbles, or other visible damage. The suitability of all salvaged 20-mil material to be used shall be subject to the approval of the County prior to use.
- B. Membrane drain shall consist of a flexible LDPE. Membrane shall contain a minimum carbon black content of two (2) percent and manufactured from virgin resins, containing no plasticizers. The material shall have or exceed the following Minimum Average Roll Values (MARV):

PROPERTY	TEST METHOD	UNITS	MIMIMUM ROLL AVERAGES	TYPICAL ROLL AVERAGES
Thickness	ASTM D5199	Mils	20	21
Density	ASTM D1505	g/cm ³	.939 max	939 max
1" strip tensile	ASTM D638	Lbf.	76	104
Tensile elongation	ASTM D638	%	800	875
Hydrostatic Resistance	ASTM D751	psi.	118	122
Puncture Resistance	ASTM D4833	Lbf.	30	44
Tear Resistance	ASTM D1004	Lbf.	11	14
Carbon Black	ASTM D1603	%	2.0	2.5
Bonded Seam Strength	ASTM D4545*	Lbf/inch	40	45
Seam Peel Adhesion	ASTM D4545*	Lbf/inch	30	36

^{*}Seam testing performed at 12" per minute

- C. LDPE material shall be free from holes, pin holes, bubbles, blisters, excessive gels, undispersed resins and/or carbon black, or other contaminants. LDPE material shall be supplied in panels which shall be of size to provide no field seams parallel to the flow direction of the drainage channels. Factory seams shall be thermal sealed with a minimum seam width of 1 ½ inch. Labels on panels shall identify the thickness, length, width, lot, panel numbers, and name of manufacturer. Membrane shall be Rufco 2000B as manufactured by Raven Industries or approved equal.
- D. Onsite soils for repair of damaged subgrade and preparation of new subgrade shall be procured from screened one-inch minus earthen material through the onsite County representative.

5.4 EXECUTION

- A. Storage and Handling
- i. The LDPE panels shall be accordion folded and rolled on a cardboard core. Rolled panels shall be wrapped in a protective layer for shipment. LDPE material shall be shipped, stored, and handled in accordance with the manufacturer's recommendations and as stated in the Contract Documents. Contractor shall be completely responsible for shipping, storage, and handling of all LDPE material. The LDPE material shall be delivered to the site only after the County receives and approves the required submittals.

- ii. The LDPE material delivered to the site shall be inspected for damage and unloaded and stored with minimal handling. Damaged rolls shall be separated from undamaged rolls until proper disposition of material is determined by the County. The County will be the final authority on the determination of damage. No hooks, tongs, or other sharp tools or instruments shall be used for handling the membrane. Contractor shall use cloth chokers and spreader bars for loading and unloading and spreader bars and roll bars for deployment. The LDPE rolls shall not be dragged along the ground.
- iii. The LDPE shall be protected from storm water, sun, soil, mud, dirt, debris, puncture, cutting, or other damaging or deleterious conditions.
- iv. All damaged surfaces resulting from abuse of any kind caused by the Contractor in performance of the work shall be repaired at the Contractor's expense.
 - B. Drainage Bench Repair and 20-mil LDPE Drain Installation
- i. Contractor shall remove the existing 20-mil LDPE drain from the drainage bench and salvage material as directed by the County. The Contractor may utilize this salvaged material to construct the new 20-mil drains if the material is free of holes, pin holes, bubbles, or other visible damage. The suitability of all salvaged 20-mil material to be used shall be subject to the approval of the County prior to use.
- ii. The subgrade for LDPE Drainage Structures shall conform to the locations and cross sections as shown on the Project Drawings or as directed by the County.
- iii. Contractor shall repair the existing erosion damage along the entire drainage bench using PCS that is stockpiled at the designated location shown on the Project Drawings. The PCS shall be placed in 12-inch thick lifts to achieve a thickness of at least 24 inches after grading and applying reasonable compaction efforts as directed by the County and as specified on the Project Drawings. Wheeled equipment shall operate on no less than two feet (2') of PCS.
- iv. Only low ground pressure type compaction equipment shall be used, operating on no less than twelve inches (12") of soil cover above any geosynthetics. The protective soil layer on the benches shall be placed, graded, and compacted to 85% relative compaction. Compaction of the protective layer on the drainage bench shall be achieved by track walking over the entire surface.
- v. The minimum thickness of the protective soil layer over the composite liner system shall be 2 feet thick. If damage occurs to the geotextile, FML, or GCL during the spreading or compaction operation, the protective soil layer material shall be removed from the damaged area and the damaged liner layer(s) shall be repaired by the Contractor at no additional cost to the County. In this case, the County will provide the repair work plan and procedures to the Contractor for execution.
- vi. LDPE seams perpendicular to the flow directions shall be lap fusion welded using single or double wedge welder to create a watertight seal. Edges overlapping the LDPE material shall be fusion welded or other method

- approved by the County to provide a watertight connection. Field seams parallel to the direction of flow in the drainage channel are not allowed.
- vii. Contractor shall secure edges of the LDPE material in trenches as shown in details on the Project Drawings. Unsecure edges along the existing liner slope shall be placed underneath the existing 8-mil protective membrane layer with a minimum overlap distance of three (3) feet vertically up the slope and held down with the existing sandbag ropes as shown in the Project Drawings.
 - C. 20-mil LDPE Drain Installation
 - i. The subgrade for the 20-mil LDPE Drainage Structures shall conform to the locations and cross sections as shown on the Project Drawings or as directed by the County.
- ii. LDPE seams perpendicular to the flow directions shall be lap fusion welded using single or double wedge welder to create a watertight seal. Edges overlapping the LDPE material shall be fusion welded or other method approved by the County to provide a watertight connection. Field seams parallel to the direction of flow in the drainage channel are not allowed.
- iii. Contractor shall secure edges of the LDPE material in trenches as shown in details on the Project Drawings.

5.5 MEASUREMENT AND PAYMENT

- A. The **measurement** of the final quantity for **Bid Item No. 6 "Repair Drainage Bench and Furnish & Install 20-mil LDPE Drainage Channel"** shall be determined by the County based on field measurements of the square footage (true area including slope surface area) of 20-mil LDPE drainage structure constructed at the locations and to the dimensions shown on the Project Drawings. **Payment** for the removal of existing drain, preparation of subgrade along drainage bench using PCS material, and construction of 20-mil LDPE drainage structure shall be at the contract unit price per square foot as stated in the Contractor's Proposal, **Bid Item No. 6**.
- B. Payment quantities for all LDPE drainage structure shall be based upon the specified limits and dimensions on the Project Drawings, adjusted by the amount of any change ordered by the County. Payment for all LDPE drainage structures shall include, but not limited to, transporting PCS material from the designated stockpile to the drainage bench, subgrade preparation with PCS material, supply and install 20-mil LDPE, fusion welding field seams, and anchor trenches, as specified in the Contract Documents and indicated in the Project Drawings. No payment will be made for any 20-mil LDPE material placed outside the specified limits and dimensions unless otherwise ordered in writing by the County. Payment shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals, and for doing all the work related to and involved in constructing the Polyethylene Drainage Channel completed in place.
- C. The **measurement** of the final quantity for **Bid Item No. 7 "Construct 20- mil LDPE Drainage Channel"** shall be determined by the County based on

field measurements of the square footage (true area including slope surface area) of 20-mil LDPE drainage structure constructed at the locations and to the dimensions shown on the Project Drawings. **Payment** for the preparation of subgrade along drainage alignment and construction of 20-mil LDPE drainage structure shall be at the contract unit price per square foot as stated in the Contractor's Proposal, **Bid Item No. 7**.

D. Payment quantities for all LDPE drainage structure shall be based upon the specified limits and dimensions on the Project Drawings, adjusted by the amount of any change ordered by the County. Payment for all HDPE drainage structures shall include, but not limited to, subgrade preparation, supply and install 20-mil LDPE, fusion welding field seams, and anchor trenches, as specified in the Contract Documents and indicated in the Project Drawings. No payment will be made for any 20-mil LDPE material placed outside the specified limits and dimensions unless otherwise ordered in writing by the County. Payment shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals, and for doing all the work related to and involved in constructing the Polyethylene Drainage Channel completed in place.

END OF SECTION