

**AMENDMENT NO. 2 TO LAKE BERRYESSA RESORT  
IMPROVEMENT DISTRICT AGREEMENT NO. 240306B (LBRID)  
PROFESSIONAL SERVICES AGREEMENT**

**THIS AMENDMENT NO. 2 TO LAKE BERRYESSA RESORT IMPROVEMENT DISTRICT AGREEMENT NO. 240306B (LBRID)** is made and entered into effective as of the 12<sup>th</sup> day of November 2024, by and between the LAKE BERRYESSA RESORT IMPROVEMENT DISTRICT, a special district of the State of California, hereinafter referred to as “DISTRICT,” and GHD, Inc., a California corporation whose business address is 2235 Mercury Way, Suite 150, Santa Rosa, CA 95407, hereinafter referred to as “CONTRACTOR.” DISTRICT and CONTRACTOR may be referred to below individually as “Party” and collectively as “Parties.”

**RECITALS**

**WHEREAS**, on March 26, 2024, DISTRICT and CONTRACTOR entered into Agreement No. 240306B (Agreement) for specialized services related to CONTRACTOR’s prior work initiated in 2017 when the Central Valley Regional Water Quality Control Board issued DISTRICT a Notice of Violation regarding insufficient wastewater system capacity during winter months; and

**WHEREAS**, DISTRICT anticipated CONTRACTOR performing additional services related to the wastewater ponds (Project) once financial assistance for the work was approved through the Clean Water State Revolving Fund (CWSRF) program, including updating and completing partial plans and specifications prepared by CONTRACTOR in 2018; and

**WHEREAS**, on July 2, 2024, DISTRICT received the fully executed CWSRF funding agreement; and

**WHEREAS**, on July 23, 2024, the Parties entered into Amendment No. 1 to the Agreement for CONTRACTOR to update and finalize the plans and specifications for the Project, addressing requirements of the funding agreement and minor reworking of certain design elements added to the Project during the extended funding application period; and

**WHEREAS**, the Project was advertised for construction bids on August 20, 2024 and bids were opened on October 10, 2024; and

**WHEREAS**, the DISTRICT requires construction management and inspection services to ensure the Project is constructed according to CONTRACTOR’s design, and CONTRACTOR’s familiarity with the Project makes them the most qualified to oversee construction activities, perform required field testing during construction, and ensure the Project is built per the construction drawings and specifications; and

**WHEREAS**, the Parties now wish to amend the Agreement to modify and increase the scope of CONTRACTOR’s services, and increase the maximum compensation payable under the Agreement by \$126,499 to reflect such changes;

**NOW, THEREFORE**, for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereby amend LBRID Agreement No. 240306B as follows:

### **TERMS**

1. Paragraph 2 of the Agreement is amended to read in full as follows:

2. **Scope of Services.** CONTRACTOR shall perform additional geotechnical design work to investigate existing subsurface conditions in and around the Ponds 1 – 3 earthen berms holding and biologically treating wastewater discharged into the community sewer collection system. A Geotechnical Report shall be the basis of design for upgrading the berms to comply with Central Valley Regional Water Quality Control Board facility guidelines, as further set forth in Exhibit “A” attached hereto and hereby incorporated by reference. CONTRACTOR shall also revise the construction drawings and specifications for the Project as further described in Exhibit “A-1” and its attachments, attached hereto and hereby incorporated by reference. CONTRACTOR shall also furnish full-time construction management and inspection services as further described in Exhibit “A-2” and its attachments, attached hereto and hereby incorporated by reference.

2. Paragraph 3 of the Agreement is amended to read in full as follows:

3. **Compensation.**

(a) Rates. In consideration of CONTRACTOR's fulfillment of the promised work, DISTRICT shall pay CONTRACTOR at the rates set forth in Exhibit “B” attached hereto and hereby incorporated by reference. In consideration of Contractor’s fulfillment of the scope of services in Exhibit “A-1,” DISTRICT shall pay CONTRACTOR at the rates set forth in Attachment 2 to Exhibit “A-1.” In consideration of Contractor’s fulfillment of the scope of services in Exhibit “A-2,” DISTRICT shall pay CONTRACTOR at the rates set forth in Attachment 2 to Exhibit “A-2.”

(b) Expenses. No travel or other expenses will be reimbursed by DISTRICT.

(c) Maximum Amount. Notwithstanding subparagraphs (a) and (b), the maximum payments under this Agreement shall not exceed a total of Three Hundred Twelve Thousand, Five Hundred Seventy Dollars (\$312,570) for professional services, including all transportation expenses and tax; provided, however, that such amount shall not be construed as a guaranteed sum, and compensation shall be based upon services actually rendered and reimbursable expenses actually incurred.

3. Exhibit “A-2” and its Attachments listed here are attached hereto and hereby incorporated by reference:

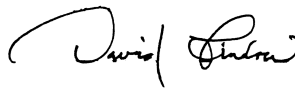
- Attachment 1 to Exhibit “A-2”: Proposal for LBRID Groundwater Inflow Mitigation Project Construction Management and Observation from GHD dated October 21, 2024.
- Attachment 2 to Exhibit “A-2”: Project Fee Estimating Sheet from GHD dated October 21, 2024.

4. This Amendment No. 2 represents all the changes to the Agreement agreed to by the Parties. No enforceable oral representations or other agreements have been made by the Parties except as specifically stated herein. All other provisions of the Agreement and prior amendments not addressed in this Amendment No. 2 shall remain in full force and effect.

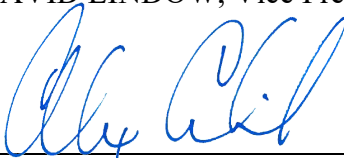
5. This Amendment No. 2 may be executed in counterparts, which when taken together, shall constitute a single signed original as though all parties had executed the same page.

**IN WITNESS WHEREOF**, this Amendment No. 2 is executed by the Lake Berryessa Resort Improvement District, acting by and through the Chair of the Governing Board, and by the Contractor through its duly authorized officers.

GHD INC



By \_\_\_\_\_  
DAVID LINDOW, Vice President



By \_\_\_\_\_  
ALEX CULICK, Vice President

LAKE BERRYESSA RESORT IMPROVEMENT DISTRICT, a Special District of the State of California

By: \_\_\_\_\_  
JOELLE GALLAGHER, Chair of the Governing Board of Lake Berryessa Resort Improvement District

<p>APPROVED AS TO FORM Office of County Counsel</p> <p>By: <u>Thomas C. Zeleny</u> Chief Deputy County Counsel</p> <p>Date: <u>October 30, 2024</u> PL Doc. No. 122141</p>	<p>APPROVED BY THE BOARD OF SUPERVISORS, AS THE GOVERNING BOARD OF THE LAKE BERRYESSA RESORT IMPROVEMENT DISTRICT</p> <p>Date: _____</p> <p>Processed By: _____</p> <p>Deputy Secretary of the District</p>	<p>ATTEST: NEHA HOSKINS Secretary of the District</p> <p>By: _____</p>
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## **EXHIBIT “A-2”**

### **SCOPE OF SERVICES AND COMPENSATION**

#### **I. SCOPE OF SERVICES**

CONTRACTOR shall provide construction management and observation during construction of the LBRID Groundwater Inflow Mitigation Project (also known as the LBRID WWTP Vertical Trench Drain, Inlet Piping Replacement, Surface Drainage Improvements and Dike Reconstruction Design Project). For itemization of the scope of services, refer to GHD, Inc. proposal dated October 21, 2024, attached hereto and incorporated by reference as Attachment 1 to this Exhibit. The services covered under this amendment are professional services and will be performed under the responsible charge of a Registered Engineer in the State of California.

#### **II. COMPENSATION**

For the scope of services described in this Exhibit, CONTRACTOR shall be compensated on a time and materials basis at the rates set forth in CONTRACTOR’s Project Fee Estimating Sheet dated October 21, 2024, attached hereto and incorporated by reference as Attachment 2 to this Exhibit.

ATTACHMENT 1

Our ref: 11183685

October 21, 2024

Christopher Silke, PE  
Engineering Manager – Water Resources  
County of Napa  
Flood Control and Water Conservation District  
804 First Street  
Napa, CA 94559

## **Proposal for LBRID Groundwater Inflow Mitigation Project Construction Management and Observation**

Dear Mr. Silke:

Per your request and based on our recent discussions, GHD is pleased to present this proposal to provide construction management and observation for the Groundwater Inflow Mitigation Project. GHD proposes the following tasks:

### **Task 1 Project Management**

#### ***Task 1.1 – Provide Management of GHD Services***

GHD project management will include project set up, preparation and maintenance of budgets and schedules for GHD services, instructions to the GHD Team and preparation of field safety instructions.

### **Task 2 Contract Management**

GHD's Construction Management Team (CMT) will act as an extension / adjunct of LBRID staff. The CMT will coordinate with LBRID to discuss project details, review schedules, provide drafts for review and produce final documentation ready for LBRID signature. The CMT will provide periodic updates, coordinate meetings and telephone calls, promptly transcribe meeting notes, and distribute meeting notes through Procore.

The CMT will perform the following services:

#### ***Task 2.1 – Provide Project Coordination***

Coordinate with LBRID staff to discuss and address issues with the project. Coordinate with the contractor and on GHD's site observation and materials testing sub as needed throughout project construction.

#### ***Task 2.2 – Prepare and Conduct Pre-Construction Meeting***

The pre-construction meeting will include LBRID, the Design Engineer, contractor, and any subcontractors. The CM will prepare the agenda and meeting minutes. Prior to the Pre-Construction Meeting, the CM will prepare a draft contact list including GHD staff, LBRID staff, contractor and others as appropriate. Contact information will be identified for key personnel from each agency to be contacted in the event of an emergency. The list will be updated, finalized and distributed to all participants after the meeting.

#### ***Task 2.3 – Conduct and Document Project Meetings***

Conduct weekly progress meetings and other special technical meetings throughout the project as needed. The CM will prepare the agenda, describing key issues, schedule status, and potential change orders, and distribute notes to meeting participants through Procore.

***Task 2.4 – Review Contractors Construction Schedule***

Review the Contractor’s project schedule for conformance with the specifications and for reasonableness of activity durations and sequence. The CM will perform the following activities:

- Coordinate review comments by LBRID and Design Engineer and transmit review comments to the contractor.
- Meet with the contractor to discuss and clarify any significant issues. Review revised schedules. Review work progress as compared to the as-planned schedule and notify contractor of schedule slippage.
- Review schedule to determine impact of the weather and change orders on the construction schedule. Review contractor’s updates of the construction schedule that incorporates actual progress, weather delays, and change order impacts.

***Task 2.5 – Maintain Project Records***

Maintain project records, including daily logs, weekly report of working days, inspection reports, compliance testing results, photos, measurement of quantities, schedules, submittals, RFIs, RFCs, PCOs, change orders, monthly pay requests, issues, and correspondence. Project records will be maintained in an organized manner for quick reference utilizing Pro Core.

***Task 2.6 – Review and Evaluate Monthly Progress Payments***

Review and evaluate monthly progress payment requests submitted by the Contractor, negotiate differences over payment, and recommend payment to LBRID. Quantity vouchers will be checked and signed independently by the CM to monitor quantities paid against estimated quantities.

***Task 2.7 – Respond to Requests for Information (RFIs) and Issue Requests for Clarifications (RFCs)***

Coordinate, evaluate, and manage the process of responding to RFIs and issuing RFCs. This effort includes receiving the RFI from the Contractor or transmitting the RFC to the Contractor, logging into the system, transmitting them to the Design Engineer for response, coordinating with the Design Engineer on field status, tracking progress, reviewing responses, and transmitting responses to the Contractor.

***Task 2.8 – Prepare Potential Change Orders (PCOs) and Change Orders***

Coordinate and manage the change order process, including logging, reviewing them in conjunction with Design Engineer and LBRID, assisting with determination of changed conditions and scope definition as needed, developing independent cost estimates, assisting with negotiation, and incorporating change orders into the construction contract.

***Task 2.9 – Coordinate Submittal and Shop Drawing Review Process***

Coordinate the submittal and shop drawing review process, including logging submittals from the Contractor, transmitting to Design Engineer for response, coordinating with Design Engineer on field status, tracking progress, reviewing responses, and transmitting responses to the Contractor. Incomplete submittals will be returned to the contractor prior to being submitted to the Design Engineer.

Construction Manager and inspectors will also review submittals of shop drawings, materials, test reports, and manufacturer cut-sheets to understand installation requirements and identify potential issues.

***Task 2.10 – Perform Claims Management***

Analyse potential claims for additional compensation submitted during the construction period and make recommendations to LBRID for resolution. Coordinate and monitor claims response preparation, logging and tracking status. The Construction Manager will monitor and assist in mitigating any potential project claim, support in defending any construction claims will be negotiated as an extra service.

### **Task 3 Construction Observation/Materials Testing**

GHD will provide on site construction observation and will perform the following services:

#### ***Task 3.1 – Provide Field Inspection / Observation***

GHD will provide an on-site construction inspector / observer to monitor the contractor's work for compliance with the contract documents, submittals, RFIs and change orders. Per LBRID request, Crawford will provide on site construction observation full time for excavation and installation of the drain for an estimated three week period. In addition, GHD will provide an on-site construction inspector as needed and an estimated one day per week when the contractor is on site and will overlap during the day as necessary to coordinate with the design team and LBRID staff. Daily effort is assumed to be 8 hours per day for a typical full day including travel time to the site. The project schedule is based on 120 working days over 24 Weeks it is assumed that there will be 24 weeks of required construction observation over the life of the project construction with a budgeted 24 site visits. The estimated 24 site visits will be made as required and generally for inspection of the bypass and tie in to the gravity system.

The Inspector/Observer will prepare daily observation reports. Reports will include: employee names and labor classification, equipment identification, hours that were work and equipment utilized, weather conditions, and issues, observations, and significant conversations between the inspector and the contractor and public. The daily reports will have photographs and material tags as applicable and necessary.

#### ***Task 3.2– Prepare Photograph or Video Documentation***

Document initial site conditions prior to contractor's commencement of construction using either still photographs or video and will provide additional photos of construction progress periodically throughout construction.

#### ***Task 3.3 – Materials Testing/Coordinate Materials Testing***

Coordinate with Crawford & Associates who will be performing quality assurance testing in accordance with the contract documents. Crawford & Associates proposed services for on site observation and materials testing are included with this proposal.

#### ***Task 3.4 – Develop Punch List***

Develop a preliminary punch list for the project and maintain a running punch list through the course of the project. The CMT will schedule LBRID and Design Engineer to conduct final completion inspections and issue final punch lists.

#### ***Task 3.5 – Compile Final Records***

Provide LBRID with a complete set of project records of the project, indexed and filed, and a listing of warranties provided under the project including the items covered and the warranty duration. The documentation will be all in electronic format.

#### ***Task 3.6 – Prepare Final Pay Estimates***

Prepare the final pay estimate and balancing change orders, prepare the Notice of Completion if required, and coordinate retention release at the conclusion of construction.

#### **Assumptions:**

The scope of work is based on the following assumptions:

1. **Means and Methods.** The Contractor is responsible for the means and methods on the project.
2. **Control of Contractor's Work.** The Construction Management Team (CMT) does not supervise and direct the Work of the Contractor. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters.



3. **Site Safety.** The Contractor shall be solely responsible for site safety.
4. **Compliance with Contract Requirements.** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the CMT in the CMT's administration of the Contract, or by tests, inspections, or approvals required or performed by persons other than the Contractor.
5. It is assumed Crawford & Associates will be contracted during construction to provide the necessary site visits, testing and monitoring as recommended in the project geotechnical report. We have included Crawford & Associates proposal with this proposal.
6. No additional work will be required other than that referenced in this proposal.

**Fee**

GHD can provide the above-described scope of services for an estimated time and materials fee of \$126,499. We look forward to working with you on this project. If you have any questions, please feel free to contact me at (707) 599-6936.

Regards

**Alex Culick**  
Managing Principal  
+1 707 599-6936  
alex.culick@ghd.com

ATTACHMENT 2

**PROJECT FEE ESTIMATING SHEET**

PROJECT NAME: LBRID GW Inflow Mitigation Project

PROJECT # 11183685

SHT # 1 of 1

PREPARED BY: AJC

Date 10/21/2024

On-Site Inspector Cy Penry

CLIENT: LBRID

Project Director/CM Alex Culick

Final Opinion of Probable Construction Cost  
\$ 650,000

LABOR CATEGORY> RATE> TASK					FEE COMPUTATION			120 Working Days 4 month Construction period 24 week Inspection period	Sub M/U: 15%
	Const Manager \$340 /HR	Proj Coord \$130 /HR	Inspector \$225 /HR	TOTAL HOURS/ GHD fee	Subconsultant Services	Subconsultant MU & Other Direct Costs* \$6.5/hr office \$11.5/hr field	TOTAL FEE		
<b>Task 1 Project Management</b>									
Task 1.0 Preconstruction Assistance Project Initiation	8 \$ 2,720	2 \$ 260	- \$ -	10 \$ 2,980		65 \$	3,045 \$		
<b>Sub-Total</b>	8 \$ 2,720	2 \$ 260	- \$ -	10 \$ 2,980	- \$ -	65 \$	<b>3,045</b> \$		
<b>Task 2 Contract Management</b>									
Task 2.1 Provide Project Coordination	24 \$ 5,400	- \$ -	- \$ -	24 \$ 5,400		156 \$	5,556 \$	24 weekly 1 hrs CM	
Task 2.2 Meeting	4 \$ 1,360	1 \$ 130	2 \$ 450	7 \$ 1,940		46 \$	1,986 \$		
Task 2.3 Conduct and Document Project Meetings	32 \$ 10,880	- \$ -	- \$ -	32 \$ 10,880		208 \$	11,088 \$	24 weekly contractor & other meetings, Prep, Minutes	
Task 2.4 Review Contractors Construction Schedule	2 \$ 680	- \$ -	- \$ -	2 \$ 680		13 \$	693 \$	2 monthly update 1 hrs each CM	
Task 2.5 Maintain Project Records	- \$ -	4 \$ 520	- \$ -	4 \$ 520		26 \$	546 \$	24 weekly hrs PC	
Task 2.6 Payments	4 \$ 1,360	- \$ -	- \$ -	4 \$ 1,360		26 \$	1,386 \$	4 pay requests, including final 1 hrs each	
Task 2.7 Respond to RFI's	8 \$ 2,720	- \$ -	- \$ -	8 \$ 2,720		52 \$	2,772 \$	16 Assumed Number of RFI's/RFC's 0.5 hrs CM	
Task 2.8 Prepare PCO's and Change Orders	2 \$ 680	- \$ -	- \$ -	2 \$ 680		13 \$	693 \$	2 Assumed Number of PCO's 1 hrs each CM	
Task 2.9 Review	8 \$ 2,720	- \$ -	- \$ -	8 \$ 2,720		52 \$	2,772 \$	6 Assumed Number of shop drawings/submittals hrs CM Hr PC	
Task 2.10 Perform Claims Management	- \$ -	- \$ -	4 \$ 900	4 \$ 900		26 \$	926 \$	Assumes no formal claims. Time is for meetings & communication to resolve field issues	
<b>Sub-Total</b>	84 \$ 25,800	5 \$ 650	6 \$ 1,350	95 \$ 27,800	- \$ -	618 \$	28,418 \$		
<b>Task 3: Field Inspection/Observation</b>									
Task 3.1 Rpts	- \$ -	- \$ -	192 \$ 43,200	192 \$ 43,200		2,208 \$	45,408 \$	8.0 avg hrs per day inspection 21 Site Visits(1/week for 24 weeks)	
Task 3.2 Documentation	- \$ -	- \$ -	4 \$ 900	4 \$ 900		46 \$	946 \$	Prior to Pre-construction and at Completion	
Task 3.3 Inspection/Compaction Testing	- \$ -	- \$ -	- \$ -	- \$ -	\$35,135	5,270 \$	40,405 \$	Material testing/Full Time while excavating drain Coord time included in Task 3.1	
Task 3.4 Develop Punchlists/review	2 \$ 680	- \$ -	4 \$ 900	6 \$ 1,580		69 \$	1,649 \$		
Task 3.5 Compile Final Documents/Close-out	4 \$ 1,360	- \$ -	4 \$ 900	8 \$ 2,260		92 \$	2,352 \$	Record Drawings, warranty items Documentation ready for audit	
Task 3.6 Prepare Final Pay Estimate	2 \$ 680	- \$ -	2 \$ 450	4 \$ 1,130		46 \$	1,176 \$	Final pay request, coordinate retention release Notice of Completion	
<b>Sub-Total</b>	8 \$ 2,720	- \$ -	206 \$ 46,350	214 \$ 49,070	35,135 \$	7,731 \$	91,936 \$	91936 check	
<b>Project Vehicle, Travel &amp; Misc Expenses</b>						\$3,100	<b>3,100</b>	\$ 100 estimated wkly travel expenses insp & CM	
<b>Project Totals</b>	100 \$ 31,240	7 \$ 910	212 \$ 47,700	319 \$ 79,850	35,135 \$	8,414 \$	126,499 \$		

\* Associated Project Costs (APC) - consumables and technology not included in wage or overhead calculations

October 18, 2024

Alex Culick  
Federal Program Manager  
GHD  
2235 Mercury Way, Suite 150  
Santa Rosa, CA 95407  
Email: [alex.culick@ghd.com](mailto:alex.culick@ghd.com)

**Subject: Construction Materials Testing and Inspection Services**  
LBRID Groundwater Mitigation Project  
Pope Valley , California

Crawford and Associates, Inc (Crawford) Crawford is pleased to submit this proposal to provide construction materials testing services for LBRID Groundwater Mitigation Project.

The purpose of our services will be to provide GHD with field data and information in order to assess compliance with the project plans and specifications. We welcome the opportunity to be part of the Project Team. The following proposal presents: our understanding of the project, the scope of services we anticipate providing and an estimate of our fees.

## **PROJECT UNDERSTANDING**

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We understand that the project will consist of the installation of a new underground perforated drain into existing bedrock to manage groundwater flows.

Our understanding of the project is based on our experience with similar projects and a cursory review of the project documents.

## **SCOPE OF SERVICES**

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Crawford will perform the following services:

- **Earthwork Observation and Testing:** Crawford & Associates will provide an engineering technician on a period bases to perform materials sampling and testing, including density testing to evaluate conformance with the project plans, specifications, and recommendations of the geotechnical report. These services will be performed during excavation of drainage trenches into bedrock and density on trench backfill at road crossings.
- **Engineering During Construction:** Crawford & Associates will provide geotechnical engineering consultation during the excavation of the test potholes for verification of depth of bedrock and to provide construction recommendations as needed.
- **Construction Materials Laboratory Testing:** Laboratory testing of construction materials in conjunction with the above-described field inspections and testing will be conducted in accordance with the project plans, specifications, and jurisdictional requirements to evaluate the materials are in compliance with the project requirements.

## **DELIVERABLES**

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Corporate Office:  
4701 Freeport Boulevard  
Sacramento, CA 95822



Main:  
(916) 455-4225



[www.crawford-inc.com](http://www.crawford-inc.com)

- Daily Field Reports reviewed by a Crawford project manager.
- Final Summary Letter if required.

Crawford will provide all necessary personnel, subconsultants, equipment, and time to complete the project as requested by GHD.

## **ASSUMPTIONS**

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During the preparation of this proposal, Crawford & Associates have made the following assumptions:

- This project will be subject to California Prevailing Wage Law
- We assume the project schedule will be based on an 8-hour workday, five days a week, Monday through Friday including travel time. Weekends, swing shifts and night shifts are not anticipated.
- The anticipated work will be conducted during typical construction hours of 6:00am to 4:00pm.

## **FEES**

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Based on our construction experience and the project size, visits for testing and observation will likely be a full day including travel time portal to portal. The costs are based on our experience with similar projects. Actual costs will depend on the actual construction schedule, process, and number of tests required. Based on our experience, our fee could be as much as 35% lower or higher than our estimate due to the contractor's actual scheduling, size of grading crews, construction delays, expanded scope and other items not known at this time.

We will only invoice you for the time required to complete the project. We will notify you in a timely manner if we expect to exceed the estimated fee due to contractor's schedule or required retesting. All laboratory testing will be per Caltrans procedures.

Over-time rates (rate x 1.5) may apply for site visits requested before 7:00 a.m. or after 4:00 p.m.; site visits requested with less than 24-hours' notice; and same-day schedule changes. Site visits on Sundays or holidays will be billed at the straight-time hourly rate times two.

Crawford will perform the construction observation and materials testing services in accordance with the attached rate schedule.

Sincerely,

Robert Hill  
Director of Construction Services – Materials Testing



**Task 1 Project Management / Coordination**

DESCRIPTION	QUANTITY	UNIT	UNIT COST	MULT	TOTAL
Mileage	100	Mile	\$ 0.74	1	\$ 74.00
Vehicle Charge	1	Day	\$ 25.00	1	\$ 25.00
			\$ -	1	\$ -
			\$ -	1	\$ -
			\$ -	1	\$ -

**Task 1 ODC Total: \$ 99.00**

**Task 2 Construction Observation and Testing**

DESCRIPTION	QUANTITY	UNIT	UNIT COST	MULT	TOTAL
Mileage	2200	Mile	\$ 0.74	1	\$ 1,628.00
Vehicle Charge	22	Day	\$ 25.00	1	\$ 550.00
Nuclear Density Tests	10	Each	\$ 10.00	1	\$ 100.00
6" Mold Compaction Curve	1	Each	\$ 510.00	1	\$ 510.00
					\$ -
					\$ -

**Task 2 ODC Total: \$ 2,788.00**

<b>TOTAL OTHER DIRECT COSTS</b>	<b>\$ 2,887.00</b>
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### 2024 STANDARD FEE SCHEDULE

PROFESSIONAL TITLE		RATE	CONSTRUCTION/EQUIPMENT		RATE	DETAIL
Principal		\$ 260.00	Traffic Control - Major (Non-DBE, Prevailing Wage) *	\$ 2,500.00		DAY
Senior Project Manager		\$ 240.00	Traffic Control - Major (Non-DBE, Prevailing Wage) *	\$ 1,500.00		HALF DAY
Project Manager		\$ 200.00	Traffic Control - Major (Non-DBE, Non-Prevailing Wage)	\$ 1,700.00		DAY
Senior Engineer / Geologist		\$ 170.00	Traffic Control - Major (Non-DBE, Non-Prevailing Wage)	\$ 1,020.00		HALF DAY
Project Engineer II / Geologist		\$ 150.00	Traffic Control Sign Board	\$ 650.00		DAY
Project Engineer I / Geologist		\$ 140.00	Traffic Control Equipment (Shoulder signs, cones, etc)	\$ 200.00		DAY
Project Engineer I / Geologist - OT		\$ 210.00	Seismic Refraction (12 Channel)	\$ 1,300.00		DAY
Staff Engineer / Geologist		\$ 135.00	Core Machine with Generator **	\$ 2,600.00		DAY
Staff Engineer / Geologist - OT		\$ 202.50	Core Machine Bit	\$ 3.00		INCH
Drafter		\$ 120.00	Core Box	\$ 17.25		EACH
Project Coordinator		\$ 127.00	Hot Mix Asphalt Patching (1st Core) **	\$ 1,000.00		FIRST
Administrative Assistant		\$ 110.00	Hot Mix Asphalt Patching (2 or More) **	\$ 500.00		EACH AFTER
Special Inspector		\$ 160.00	Wildcat DCP Equipment **	\$ 750.00		DAY
Senior Technician		\$ 135.00	Wildcat DCP Tip	\$ 20.00		EACH
Senior Technician - OT		\$ 190.00	Survey Equipment (Tripod, Level, Rod)	\$ 150.00		DAY
Staff Technician		\$ 125.00	Survey Equipment (Liquid Level)	\$ 150.00		DAY
Staff Technician - OT		\$ 175.00	Infiltration / Percolation Testing Equipment	\$ 200.00		DAY
<b>PREVAILING WAGE CLASSIFICATIONS **</b>		<b>RATE</b>	Hand Auger **	\$ 200.00		DAY
Group 1 - Masonry Technician		\$ 190.00	Backfill	\$ 8.00		BAG
Group 1 - Masonry Technician - OT		\$ 220.00	Steel Liners (MCAL)	\$ 10.00		EACH
Group 2 - Welding Technician		\$ 185.00	Nuclear Density Test **	\$ 10.00		EACH
Group 2 - Welding Technician - OT		\$ 215.00	Classification Equipment	\$ 65.00		CT539/ASTMC172, CT556/ASTMC143, CT540/ASTMC31, CT551/ASTMC1064
<b>WORKING HOURS AND PREMIUM TIME</b>		<b>RATE</b>	<b>CLASSIFICATION TESTING</b>			
A Regular Workday is the first 8 hours between 6:00am to 6:00pm, Monday through Friday.			#200 Wash	\$ 120.00		ASTM D1140
Overtime: Weekdays & Saturdays (first 8 hours)	1.5 x Hourly Rate		Grain Size Analysis to #200 (Sieve Analysis)	\$ 160.00		ASTM D6913
Overtime: Saturdays (over 8 hours) and Sundays (first 8 hours)	2 x Hourly Rate		Mass Grain Size (Scour)	\$ 2,200.00		ASTM D6913
Overtime: Sundays (over 8 hours) and Holidays	3 x Hourly Rate		Grain Size with Hydrometer	\$ 245.00		ASTM D6913, D7928
Night Shift: Work performed between 2:00 am and 4:00 am	15% / Hour Add'l to Hourly Rate		Grain Size Analysis	\$ 210.00		CT 202
<b>REIMBURSABLES</b>		<b>RATE</b>	Hydrometer Analysis	\$ 210.00		ASTM D7928
Mileage	\$ 0.74 / Mile		Moisture & Density	\$ 80.00		ASTM D2216, D7263
Vehicle Charge	\$ 25.00 / Day		Moisture Content	\$ 55.00		ASTM D2216, CT 226
Outside Costs	15% Markup		Non-Plastic Index Result	\$ 125.00		ASTM D4318
Permit Fees (City/County)	15% Markup		Plasticity Index	\$ 260.00		ASTM D4318
Per Diem (Lodging & Meals)	\$ 350 / Day		Landscape Suitability	\$ 125.00		
Rush Testing	50% Markup		<b>STRENGTH TESTING</b>			
** Indicates Prevailing Wage Classifications/Work			California Impact	\$ 350.00		CT 216
			Compaction Curve (4" Mold)	\$ 455.00		ASTM D698/D1557
			Compaction Curve (6" Mold)	\$ 510.00		ASTM D698/D1557
			Compaction Curve Checkpoint (4" Mold)	\$ 125.00		ASTM D698/D1557
			Compaction Curve Checkpoint (6" Mold)	\$ 125.00		ASTM D698/D1557
			Compression (Rock)	\$ 275.00		ASTM 7012
			Compressive Strength of Cylinders (6x12)	\$ 40.00		CT 39, CT 521
			Compressive Strength of Cylinders (4x8)	\$ 37.00		CT 39, CT 521
			Direct Shear (CD 3pt) Peak Only	\$ 500.00		ASTM D3080
			Point Load (Rock)	\$ 65.00		ASTM D5731
			R-Value	\$ 450.00		ASTM D2844, CAL 301
			Triaxial Shear-UU	\$ 175.00		ASTM D2850
			Triaxial Staged-UU	\$ 290.00		ASTM D2850
			Unconfined Compression (Rock)	\$ 230.00		ASTM D7012
			Unconfined Compression (Soil)	\$ 180.00		ASTM D2166
			<b>CONSOLIDATION &amp; EXPANSION</b>			
			1-D Consolidation	\$ 400.00		ASTM D2435
			1-D Consolidation (Time Rate) / Per Point	\$ 100.00		ASTM D2435
			Expansion Index	\$ 275.00		ASTM D4829
			<b>CORROSIIVITY TESTING</b>			
			pH, Resistivity, Sulfate, Chloride Content	\$ 240.00		CT 417,422,643
			pH, Resistivity, Sulfate, Chloride, Redox Potential	\$ 350.00		CT 417,422,643, ASTM G200M
			<b>PAVEMENT TESTING</b>			
			Asphalt Ignition Calibration	\$ 460.00		CT 382
			Percent Asphalt Ignition Oven	\$ 225.00		CT 382
			Sand Equivalent	\$ 135.00		CT 217
			Stabilometer Value	\$ 225.00		CT 366
			Theoretical Max Specific Gravity/Density	\$ 225.00		CT 309
			Mix Design	\$ 2,000.00		ASTM D1557, D1633
			<b>SEISMIC ANALYSIS</b>			
			EZ Frisk Software Use	\$ 2,250.00		PER LOCATION